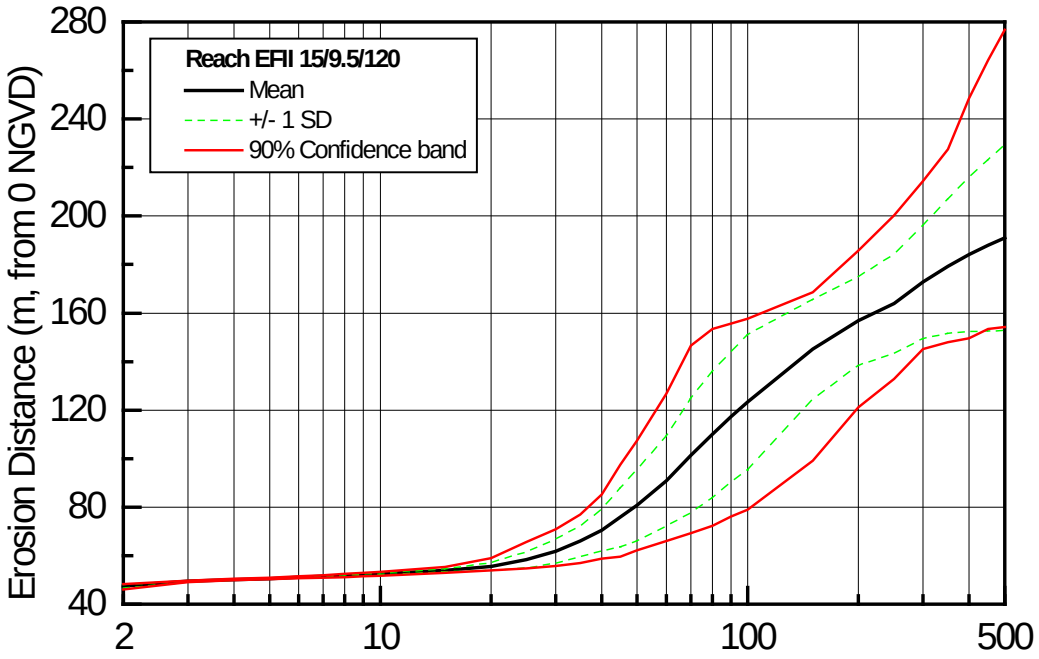
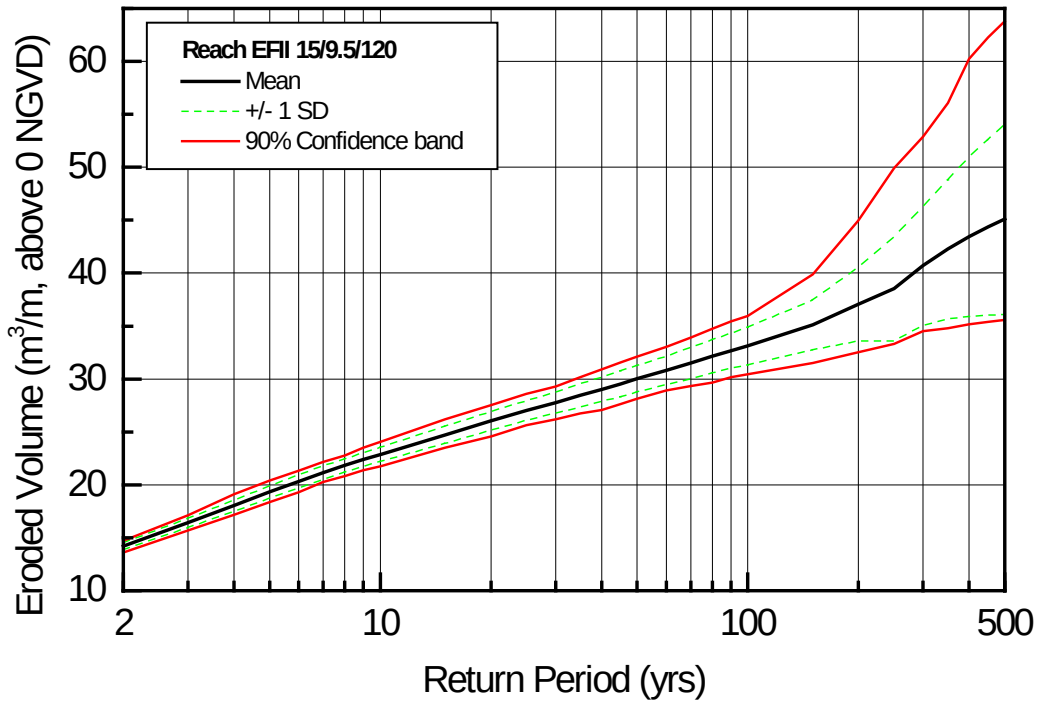
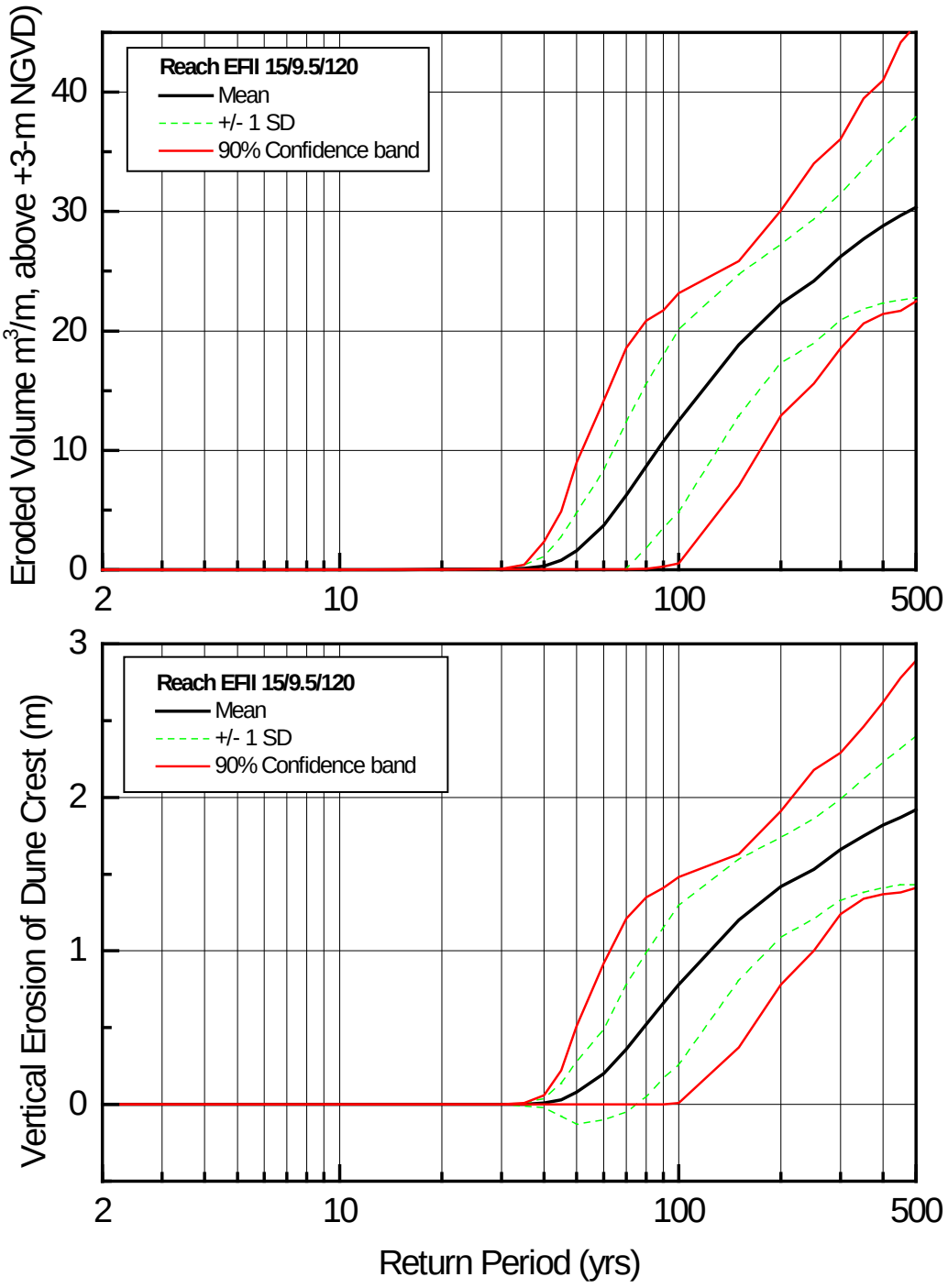
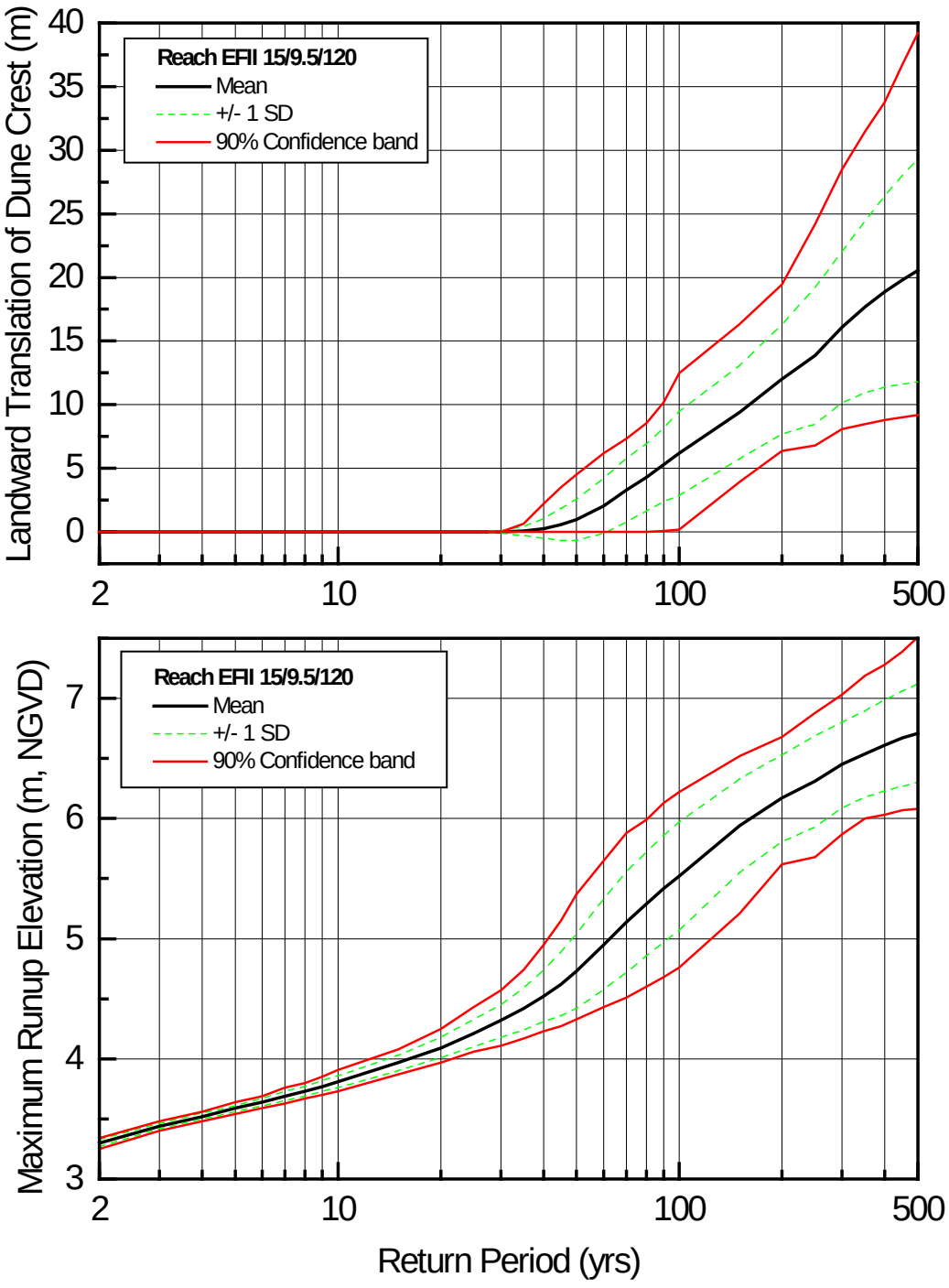
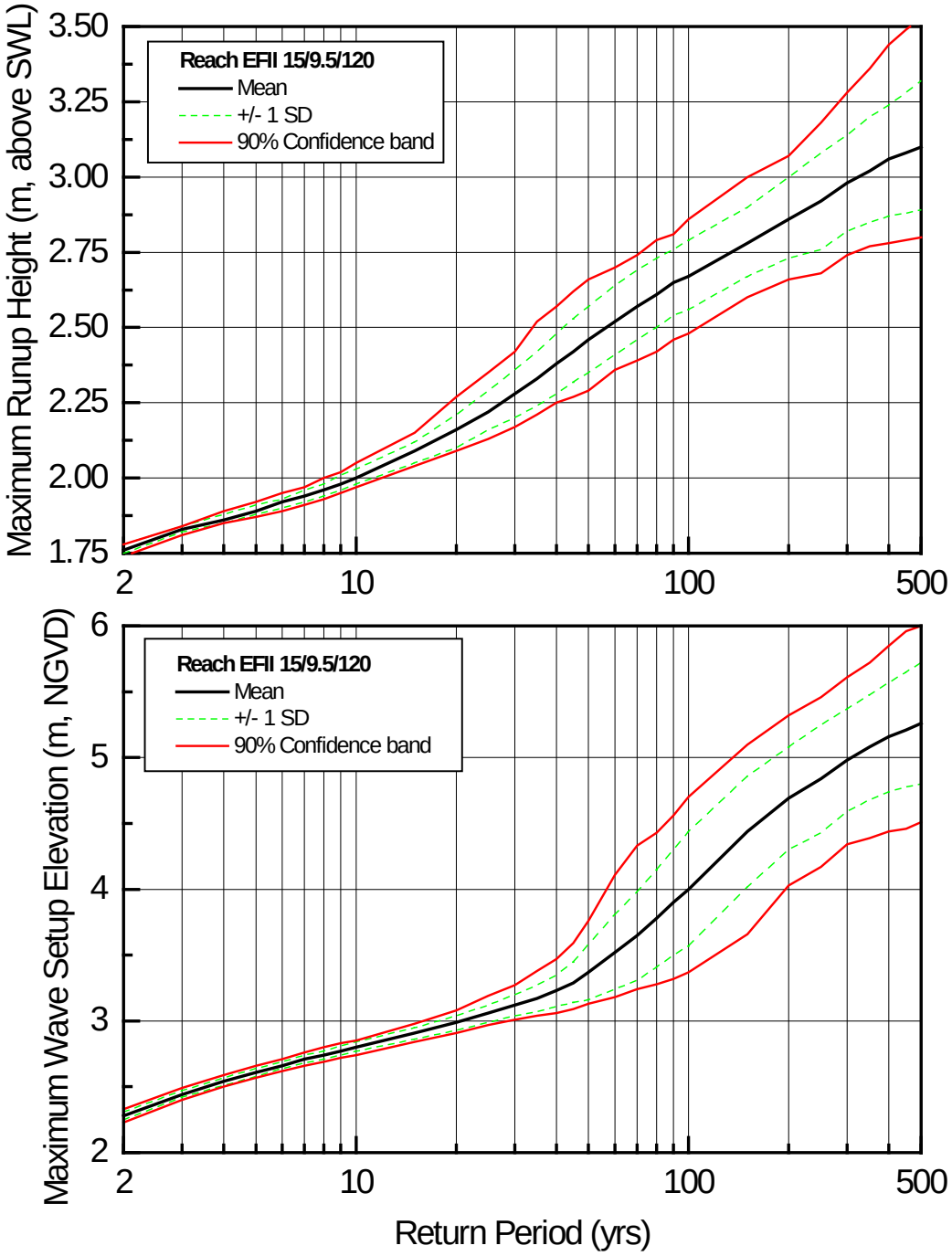
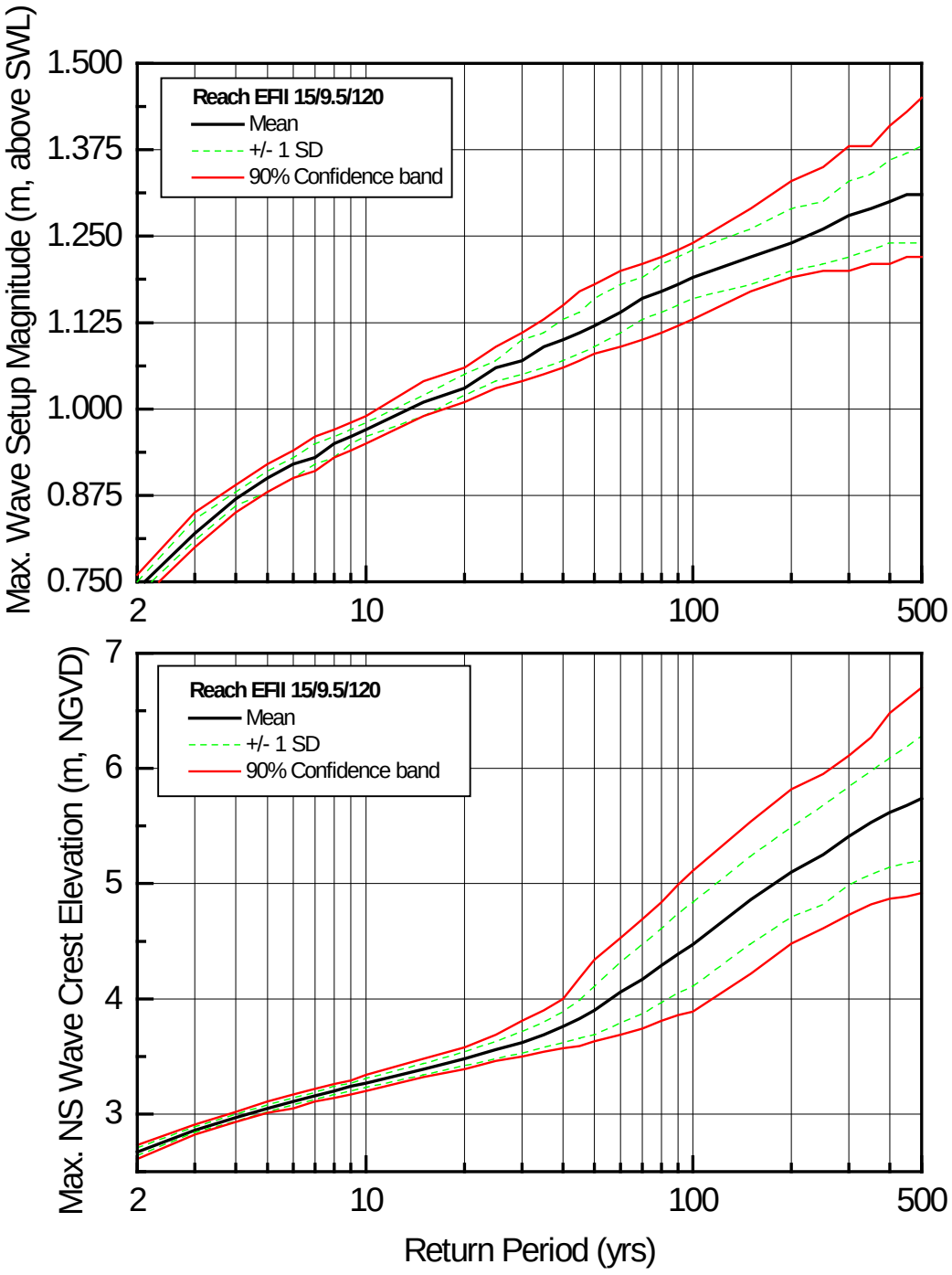

Reach EFII 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
280
240
200
160
120
80
40
2
10
100
500

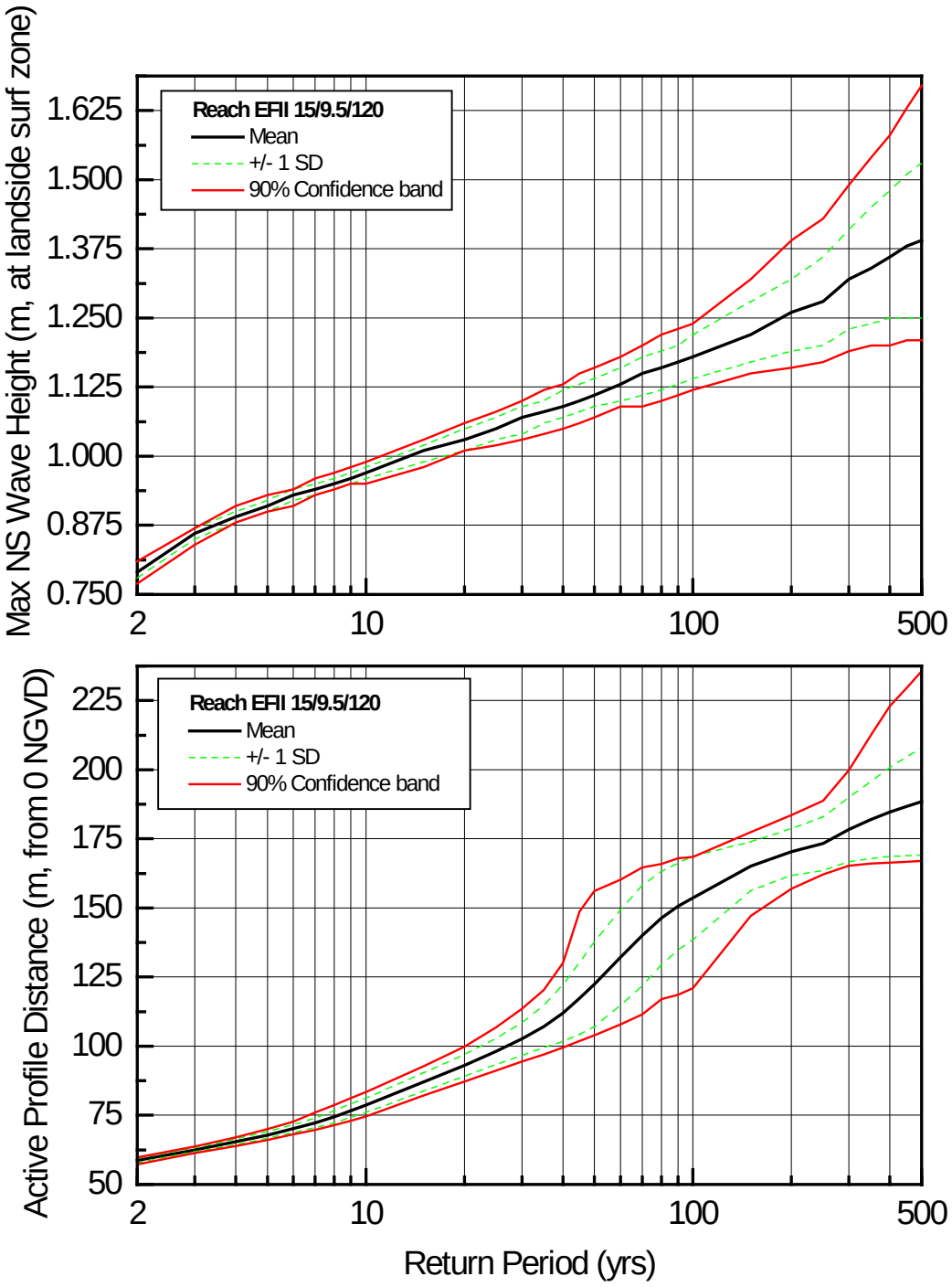

Reach EFII 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
20
10
2
10
100
500
Return Period (yrs)

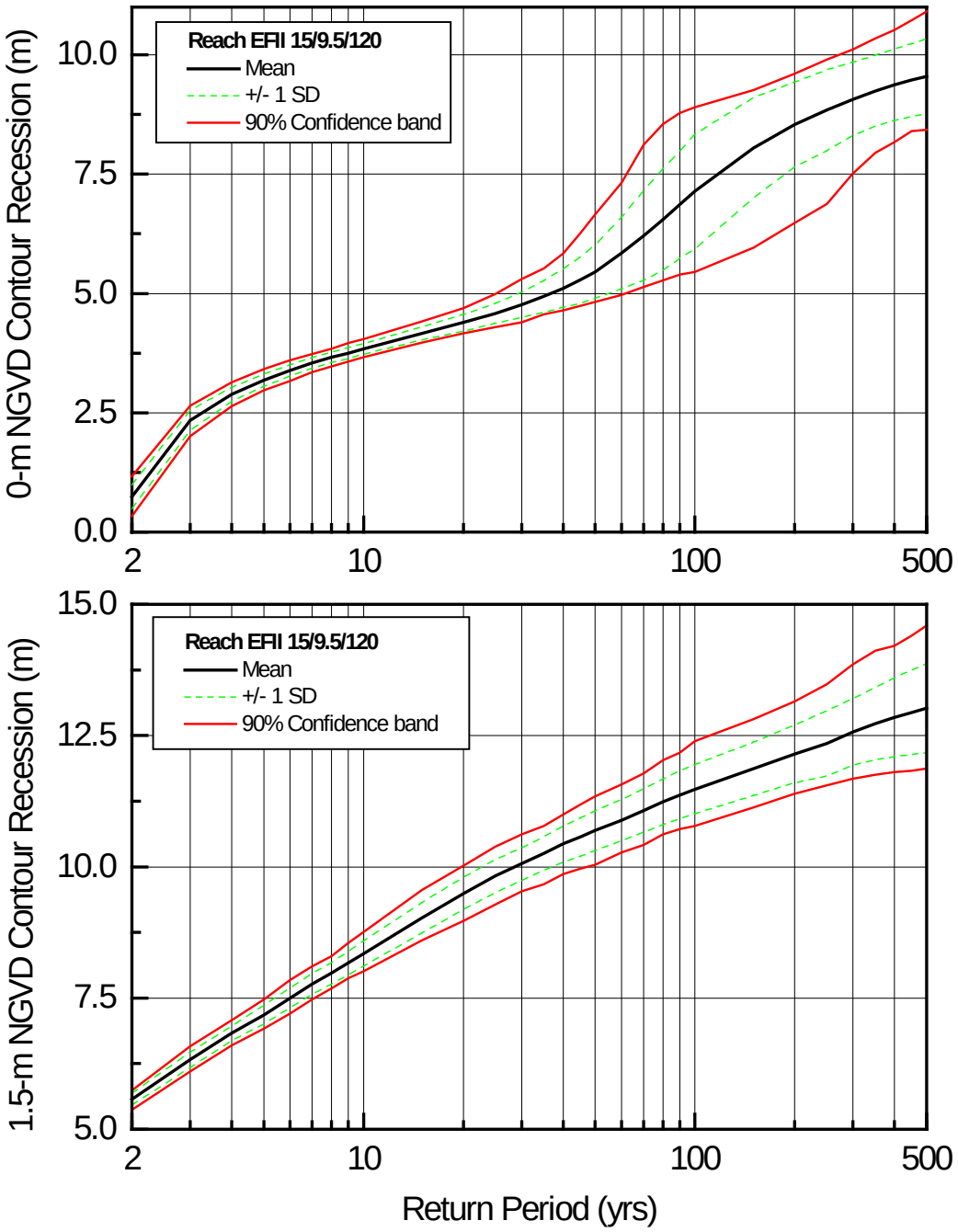

Reach EFII 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach EFII 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

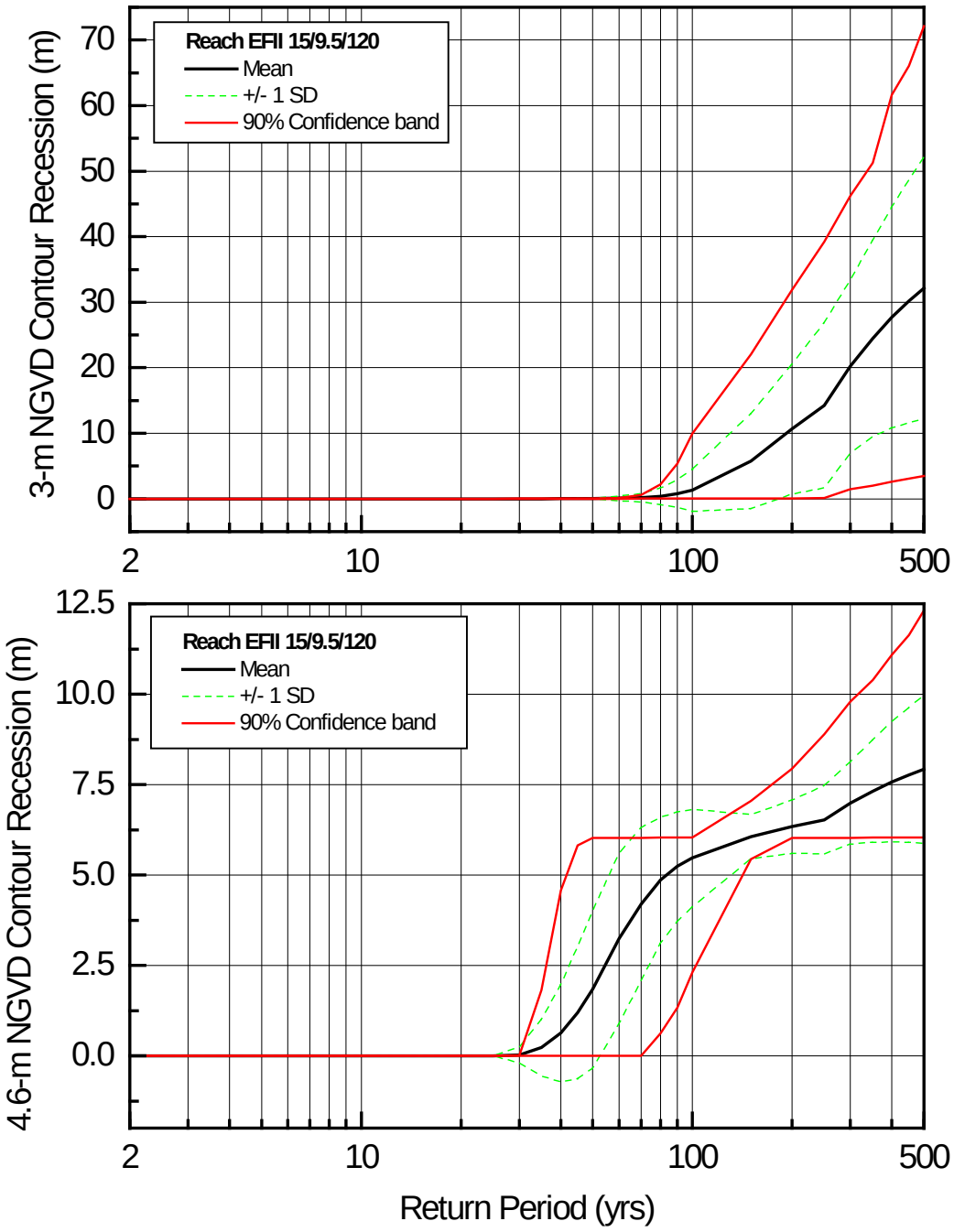

Reach EFII 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
5
10
15
20
25
30
35
40
2
10
100
500
Reach EFII 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
2
10
100
500
Return Period (yrs)

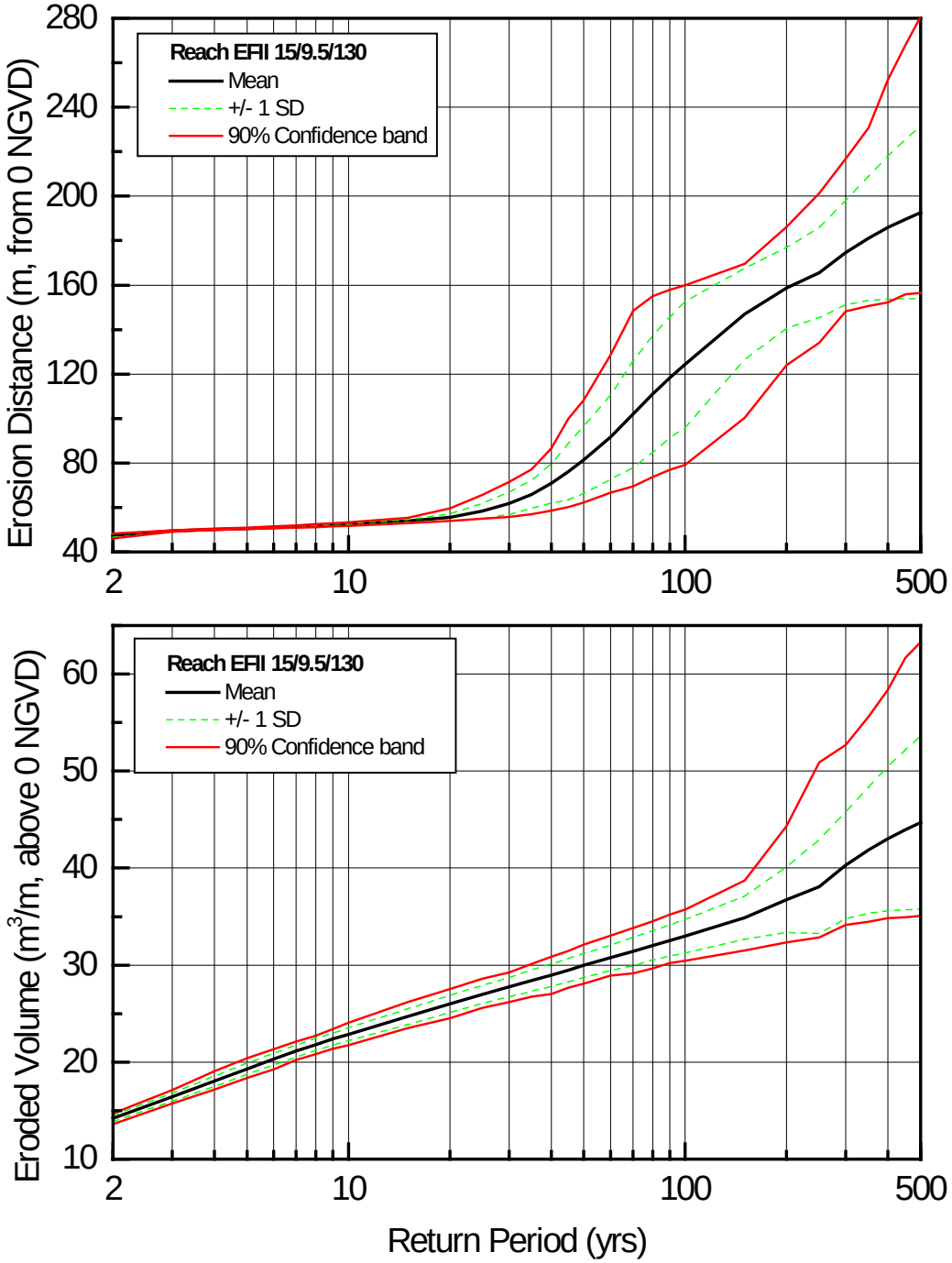

Maximum Runup Height (m, above SWL)
3.50
3.25
3.00
2.75
2.50
2.25
2.00
1.75
Reach EFII 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
Reach EFII 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

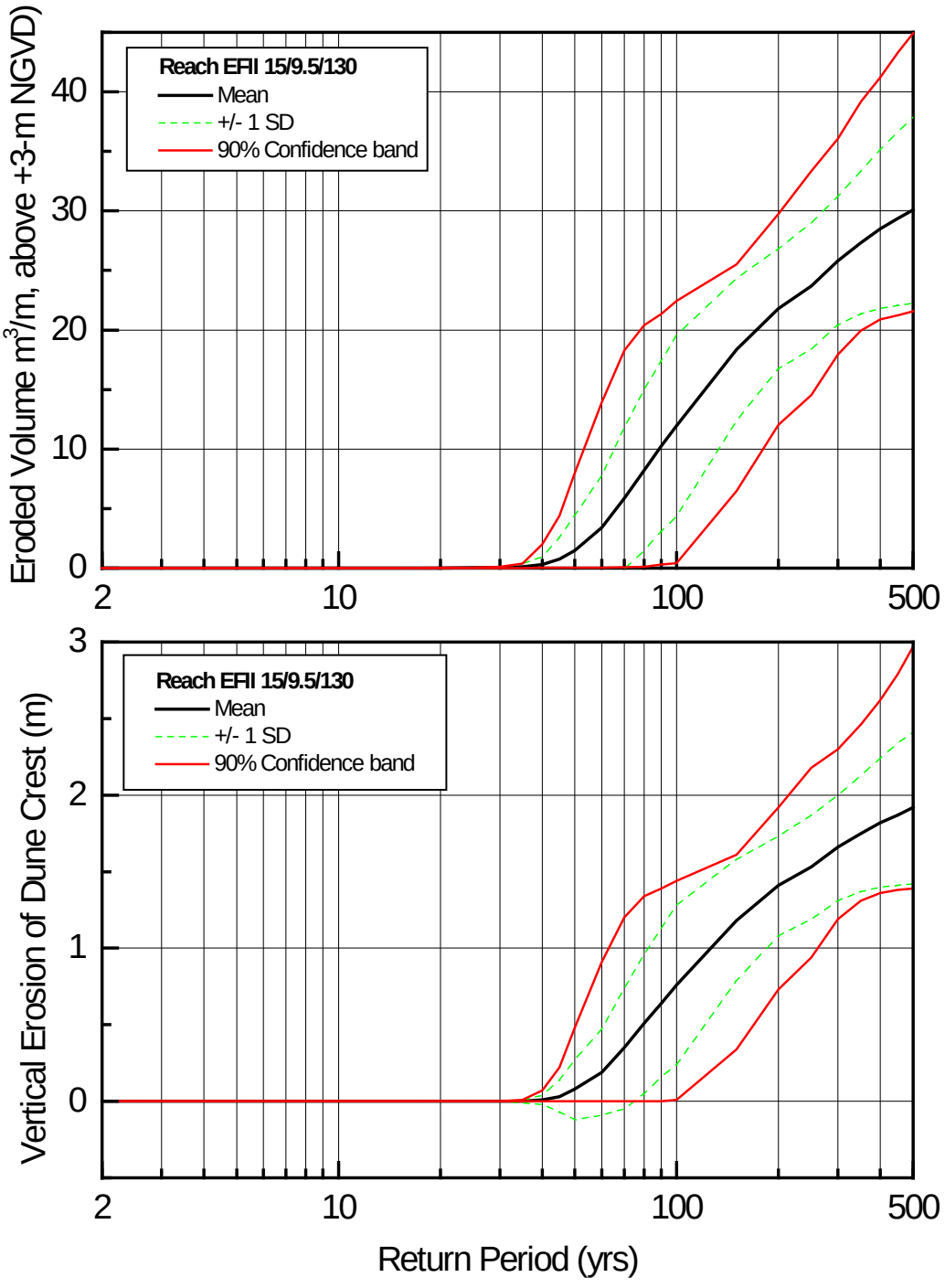

Max. Wave Setup Magnitude (m, above SWL)
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach EFII 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach EFII 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

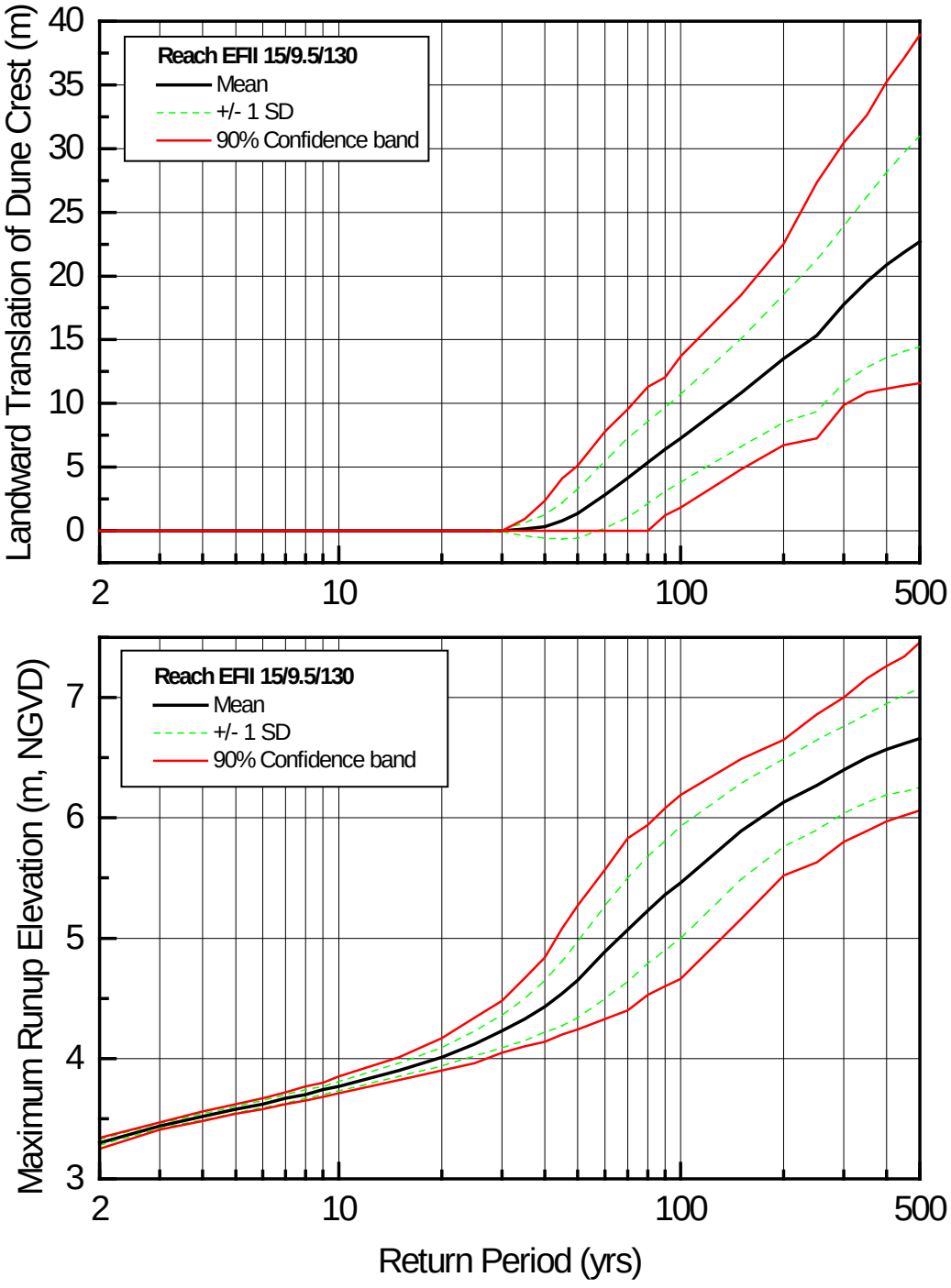

Reach EFII 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Max NS Wave Height (m, at landside surf zone)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
2
10
100
500
Reach EFII 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Active Profile Distance (m, from 0 NGVD)
225
200
175
150
125
100
75
50
2
10
100
500
Return Period (yrs)

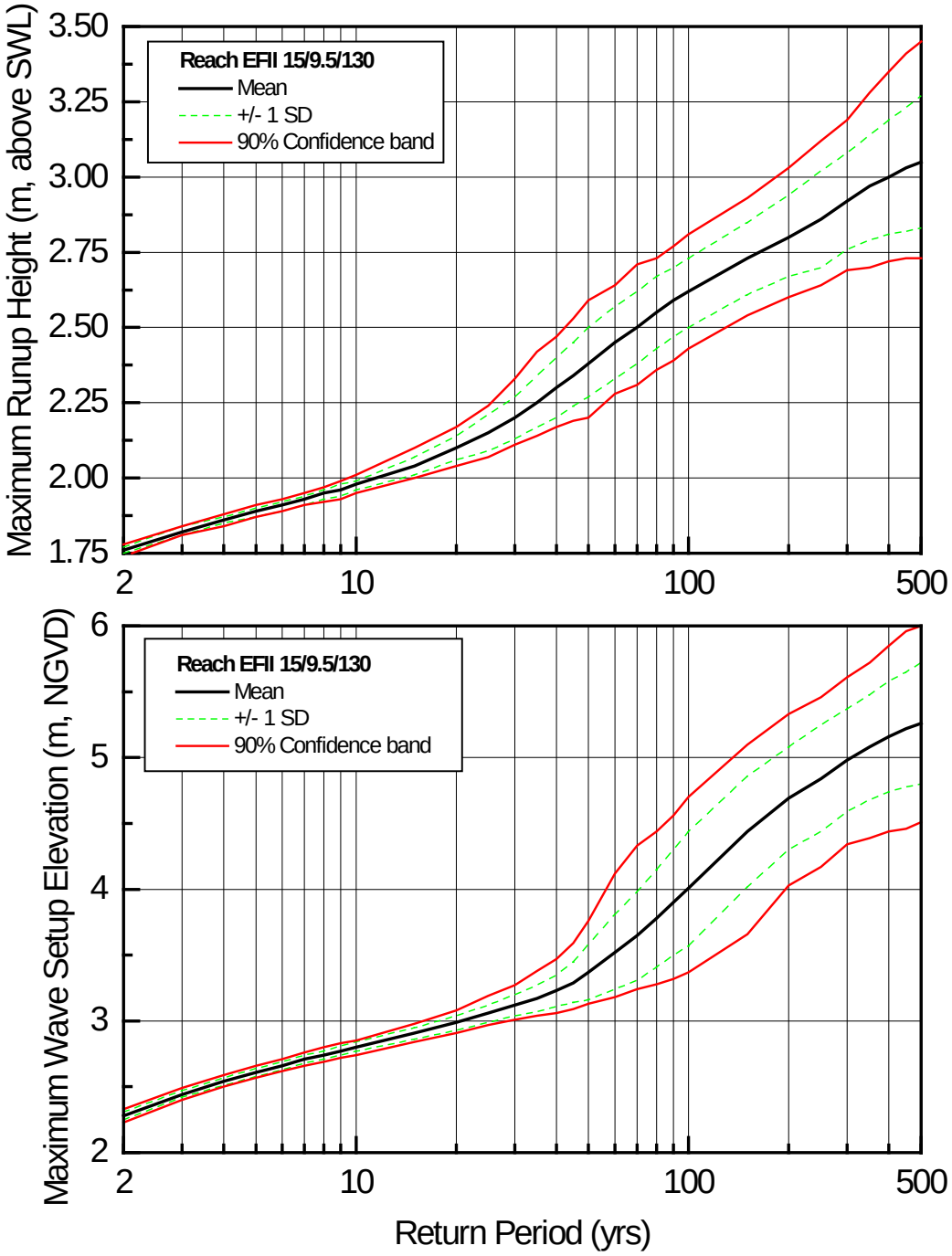

Reach EFII 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Reach EFII 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
15.0
12.5
10.0
7.5
5.0
2
10
100
500
Return Period (yrs)

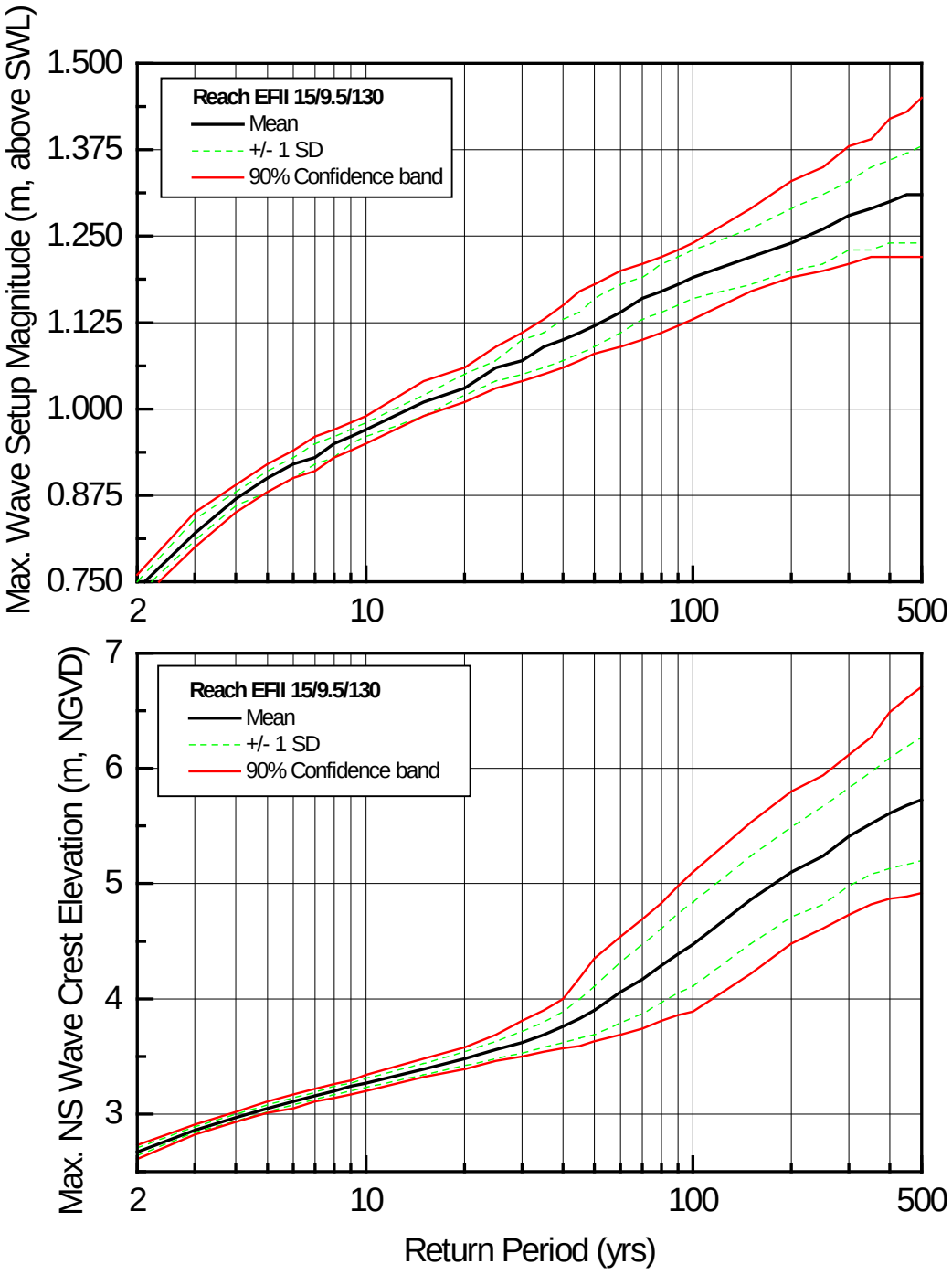

Reach EFII 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
70
60
50
40
30
20
10
0
2
10
100
500
Reach EFII 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
12.5
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Return Period (yrs)

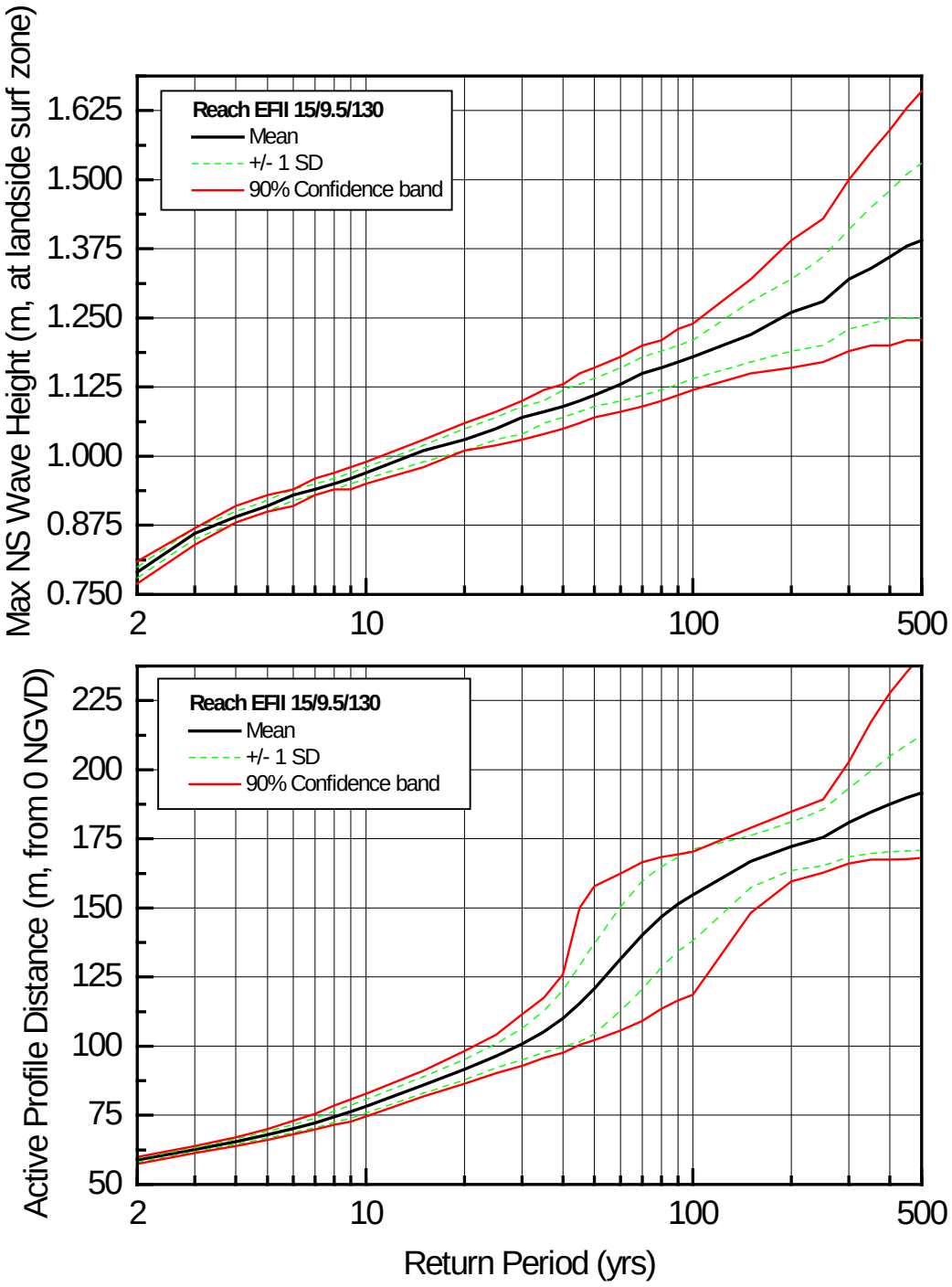

Reach EFII 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
280
240
200
160
120
80
40
2
10
100
500
Reach EFII 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
20
10
2
10
100
500
Return Period (yrs)

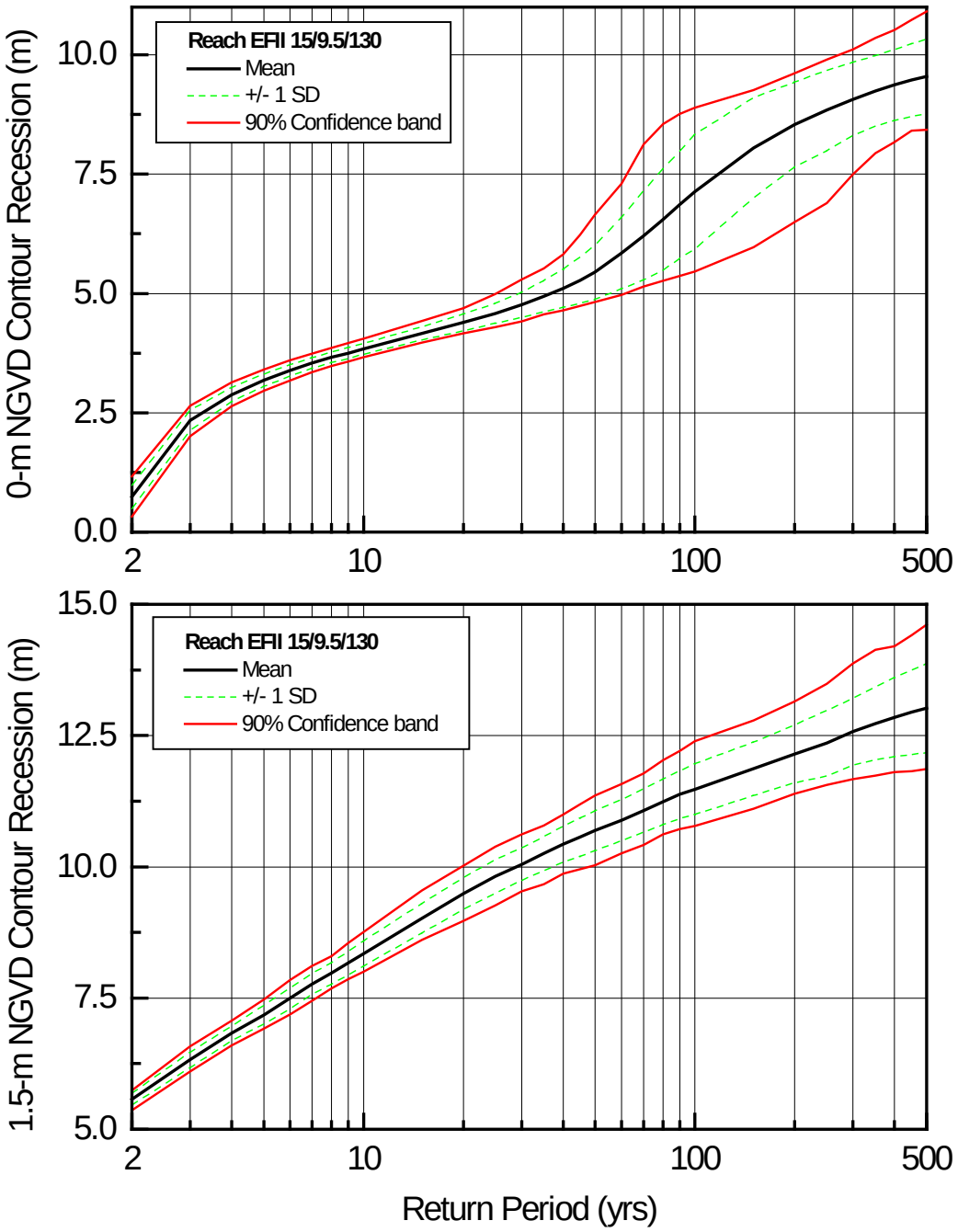

Reach EFII 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach EFII 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

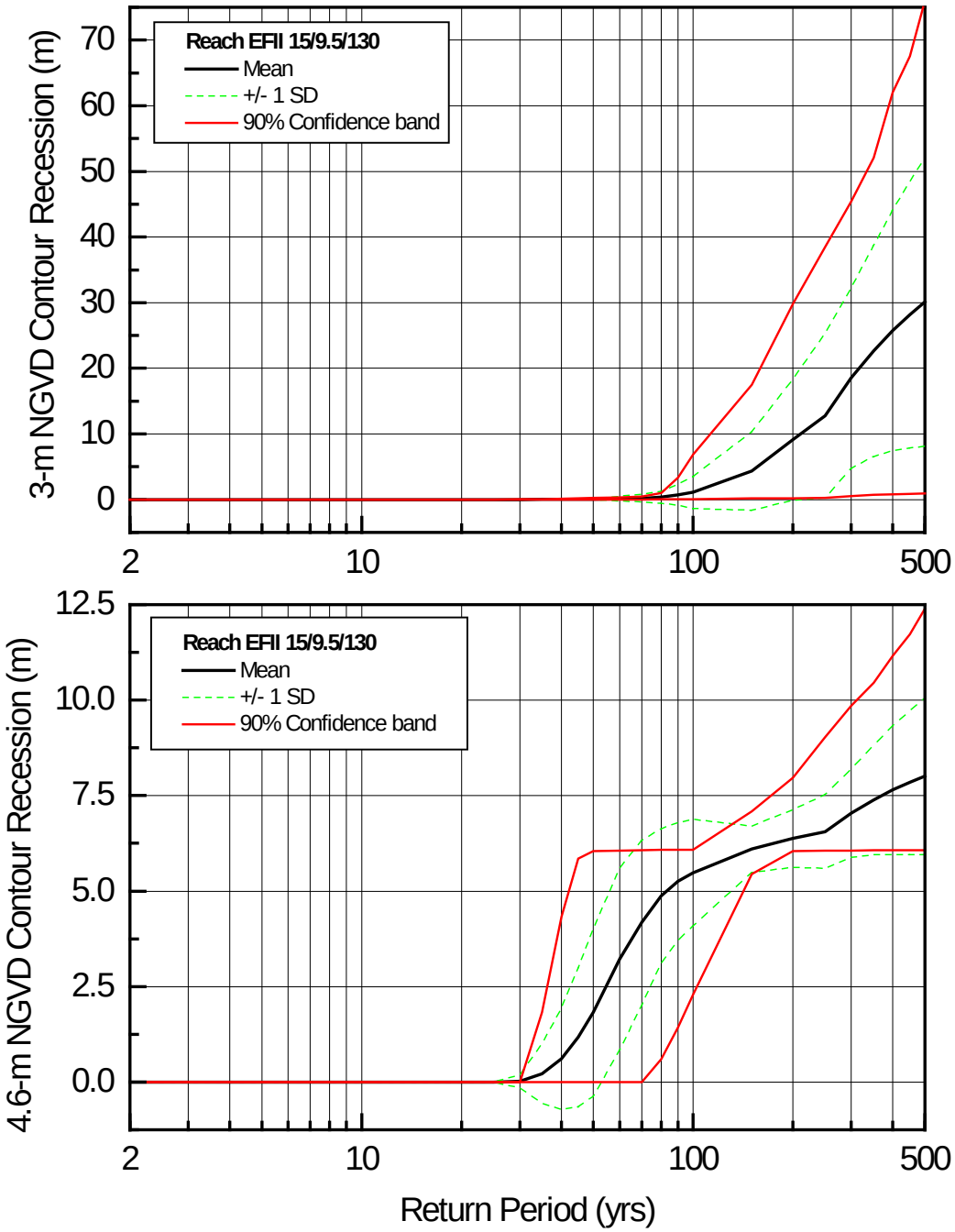

Reach EFII 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
5
10
15
20
25
30
35
40
2
10
100
500
Reach EFII 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
2
10
100
500
Return Period (yrs)

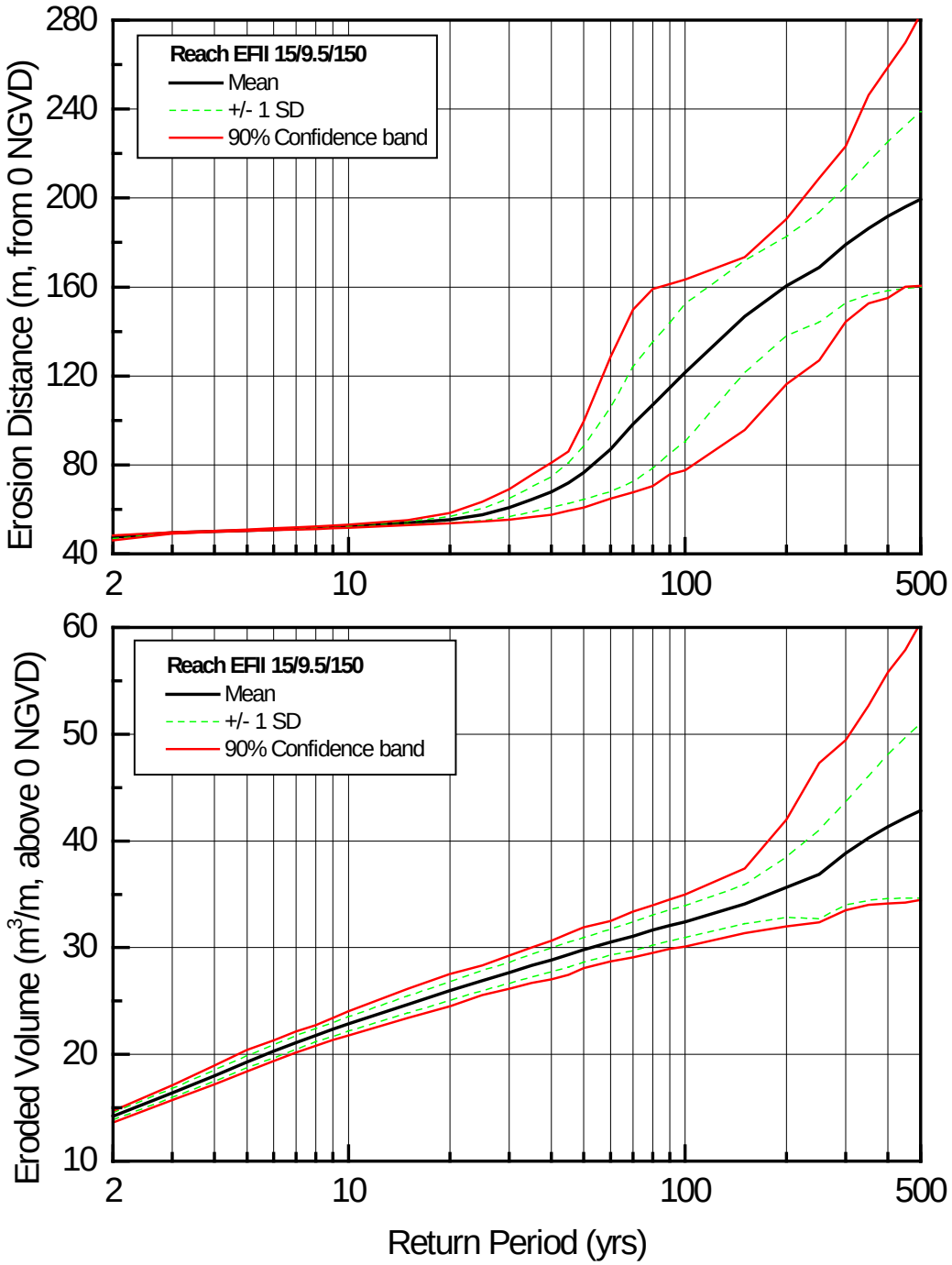

Maximum Runup Height (m, above SWL)
3.50
3.25
3.00
2.75
2.50
2.25
2.00
1.75
Reach EFII 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
Reach EFII 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

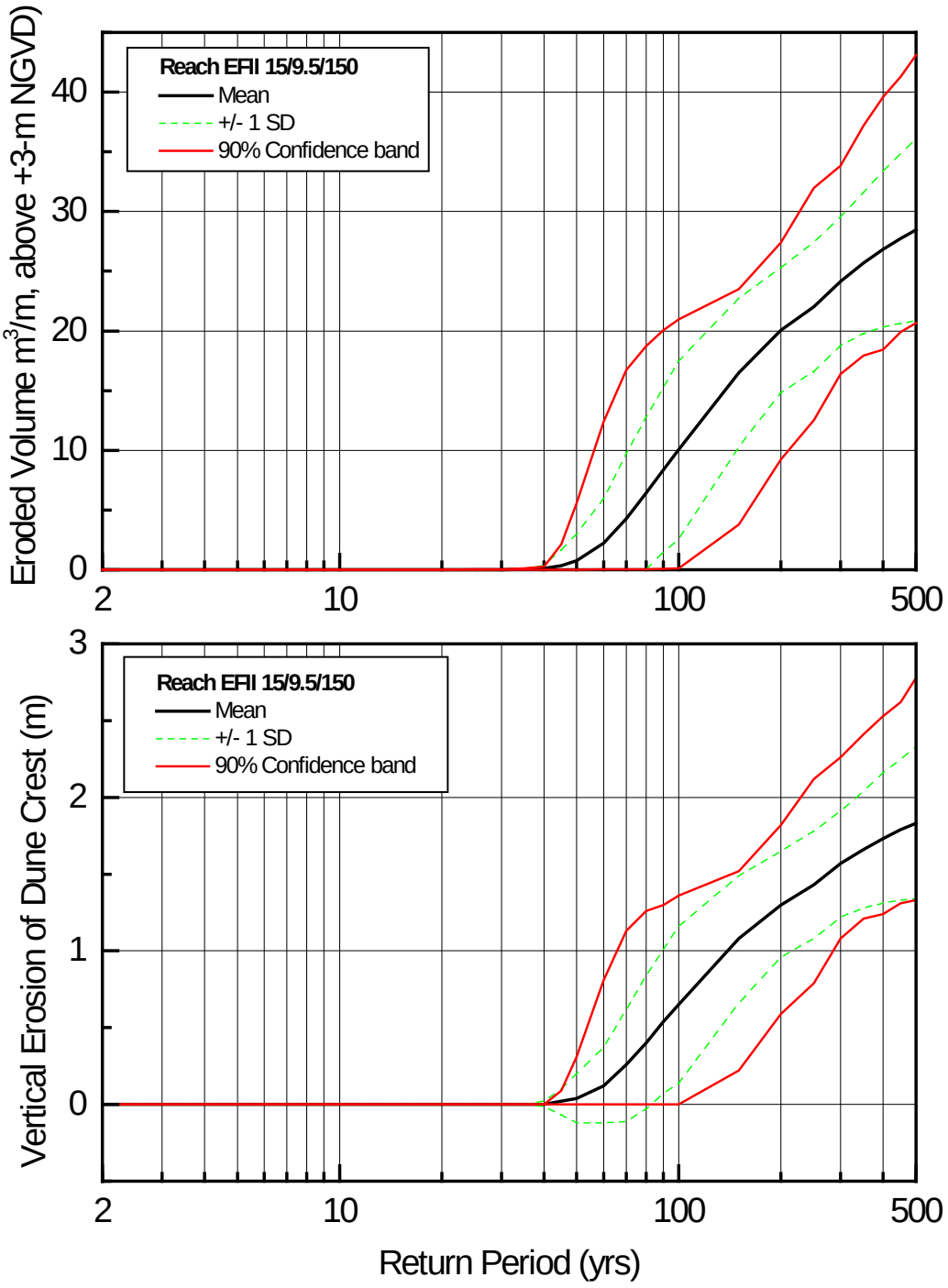

Max. Wave Setup Magnitude (m, above SWL)
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach EFII 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach EFII 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

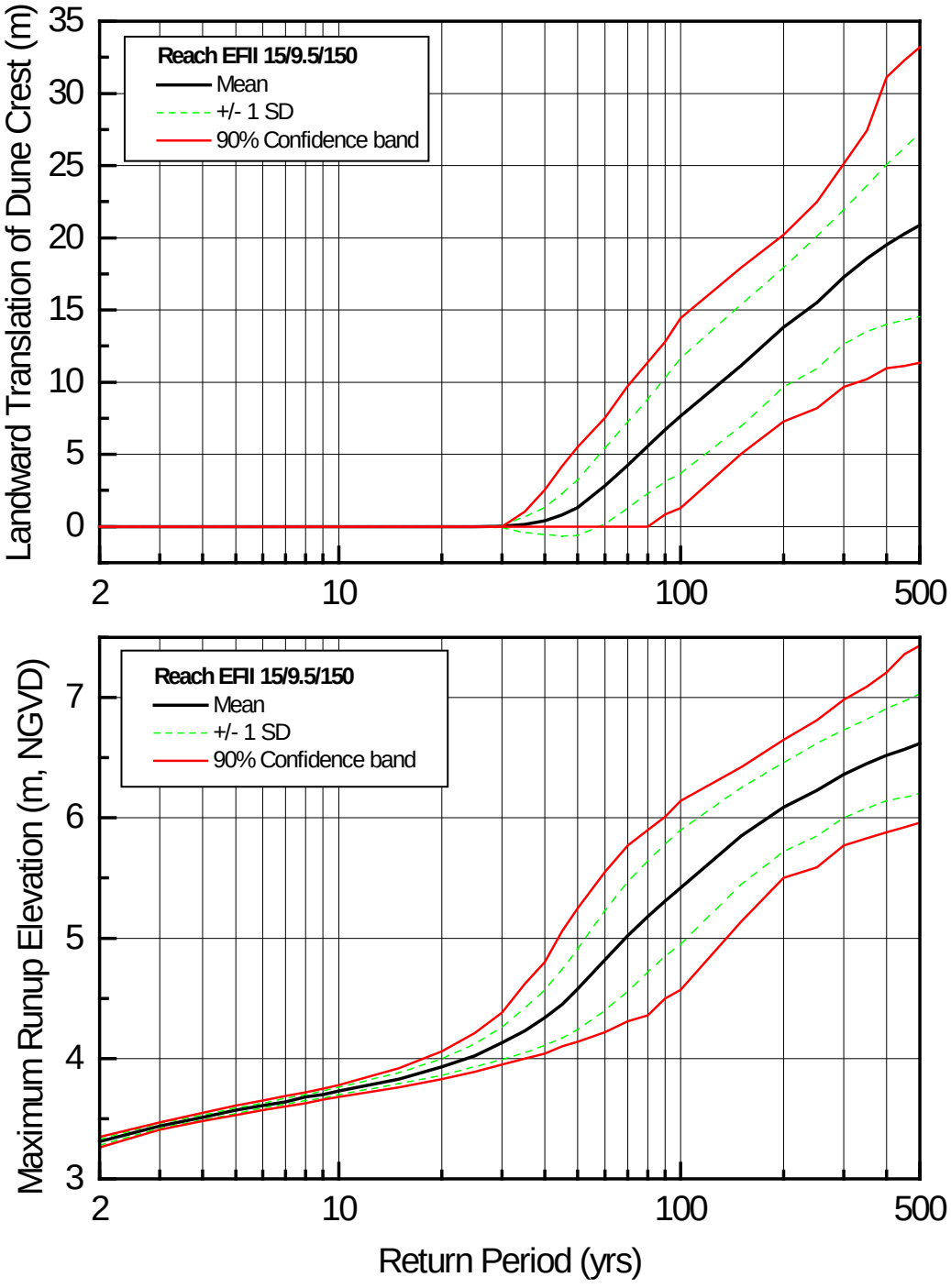

Max NS Wave Height (m, at landside surf zone)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach EFII 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
225
200
175
150
125
100
75
50
Reach EFII 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

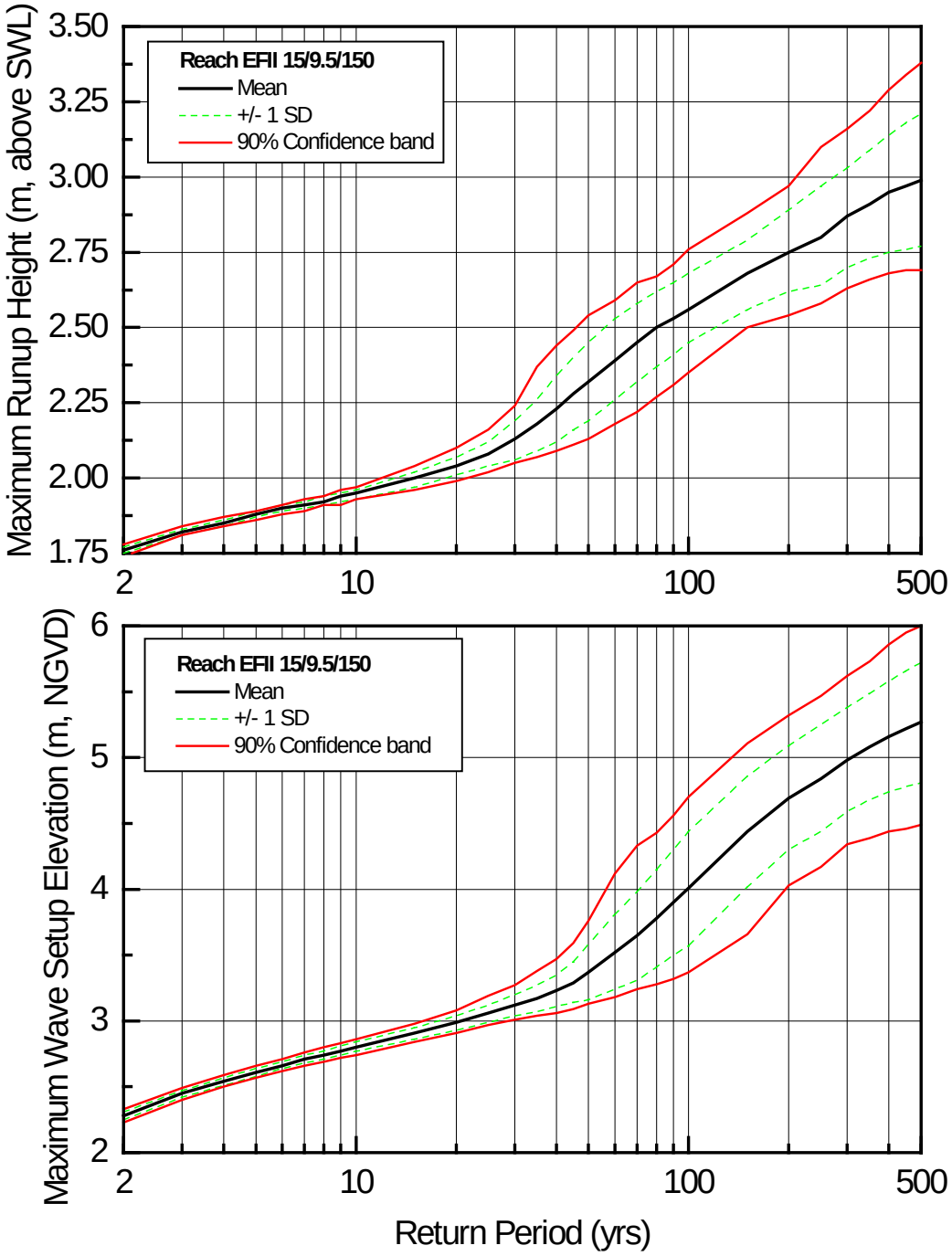

Reach EFII 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Reach EFII 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
15.0
12.5
10.0
7.5
5.0
2
10
100
500
Return Period (yrs)

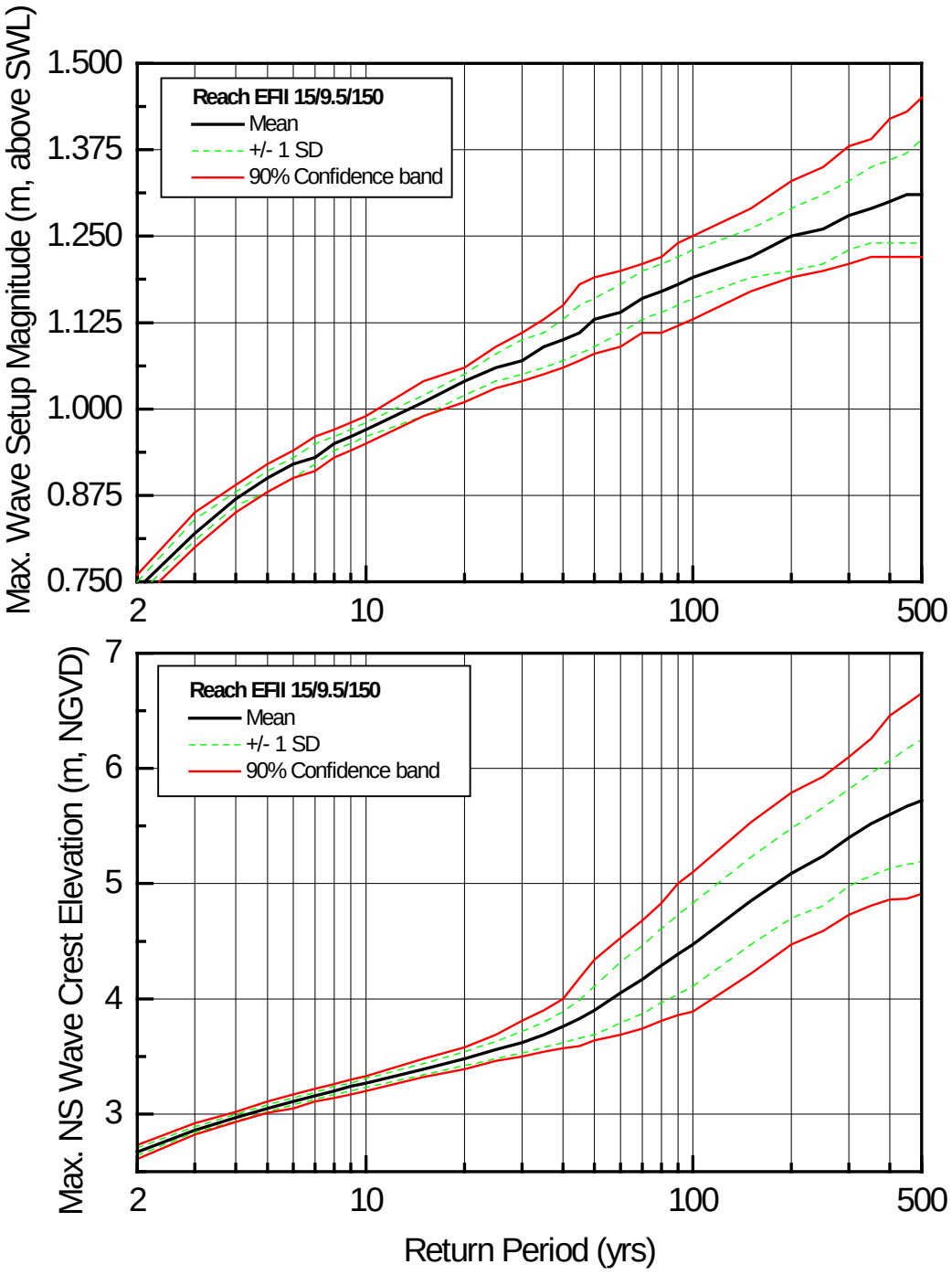

Reach EFII 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
70
60
50
40
30
20
10
0
2
10
100
500
Reach EFII 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
12.5
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Return Period (yrs)

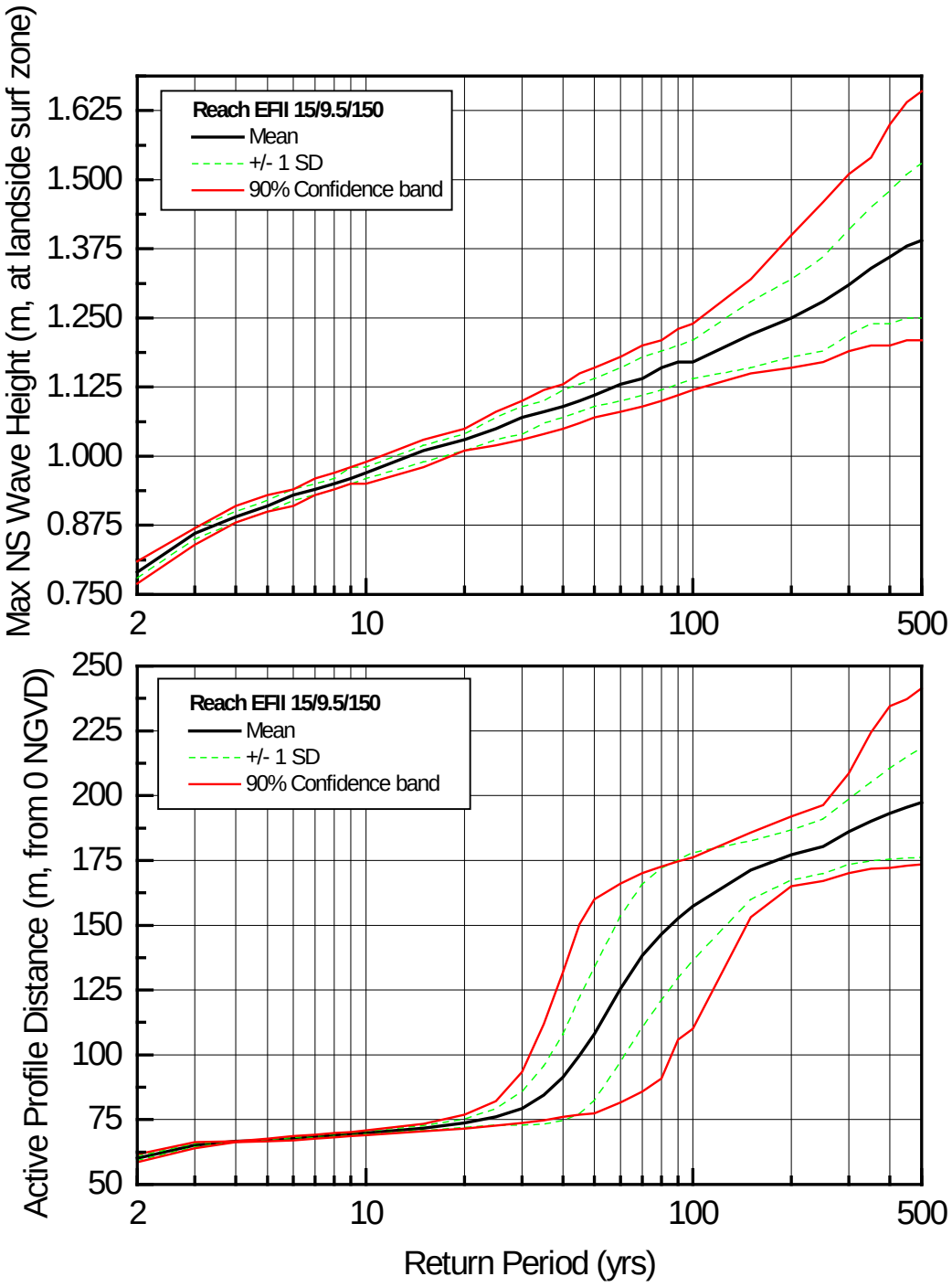

Reach EFII 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
280
240
200
160
120
80
40
2
10
100
500
Reach EFII 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
20
10
2
10
100
500
Return Period (yrs)

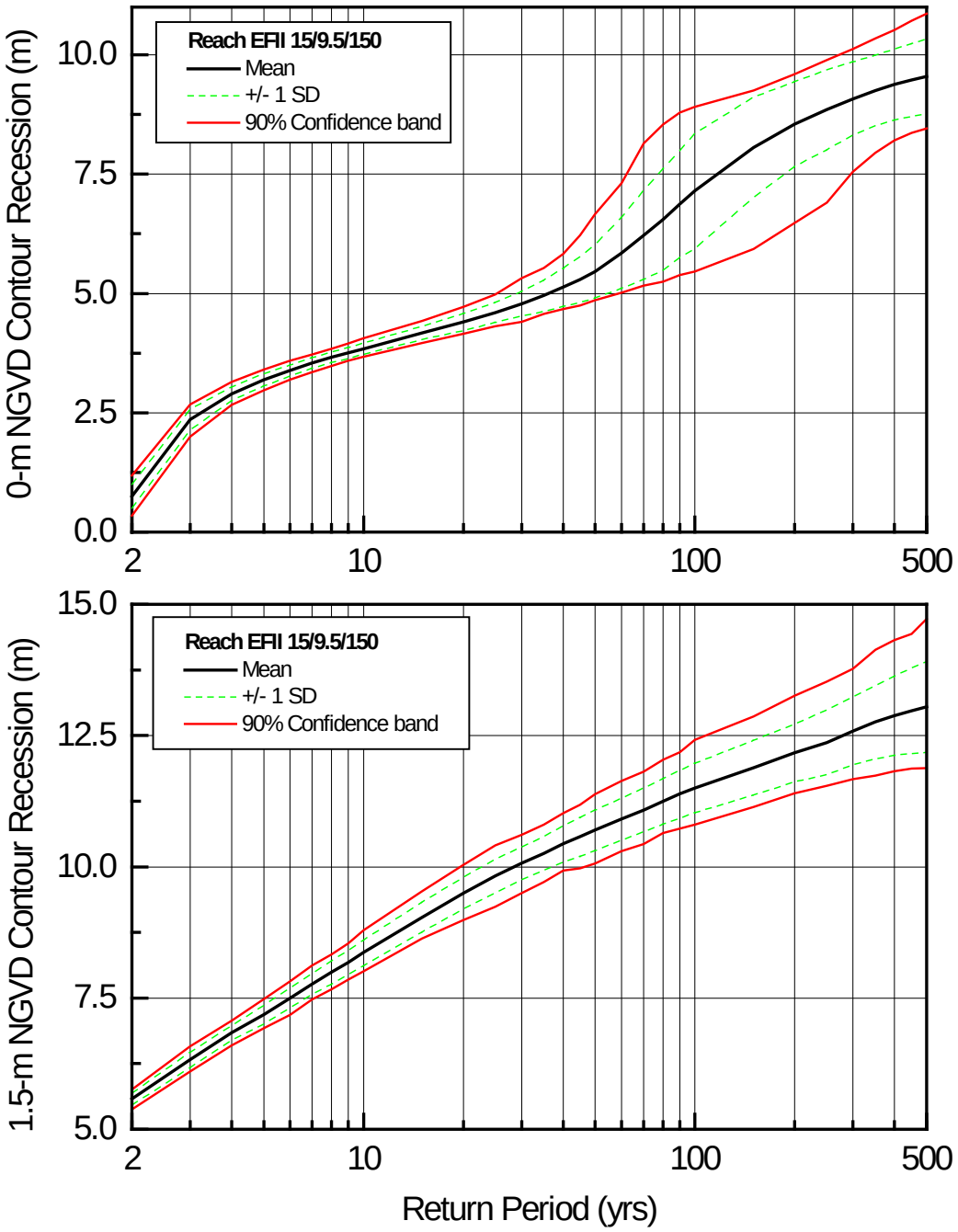

Reach EFII 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach EFII 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

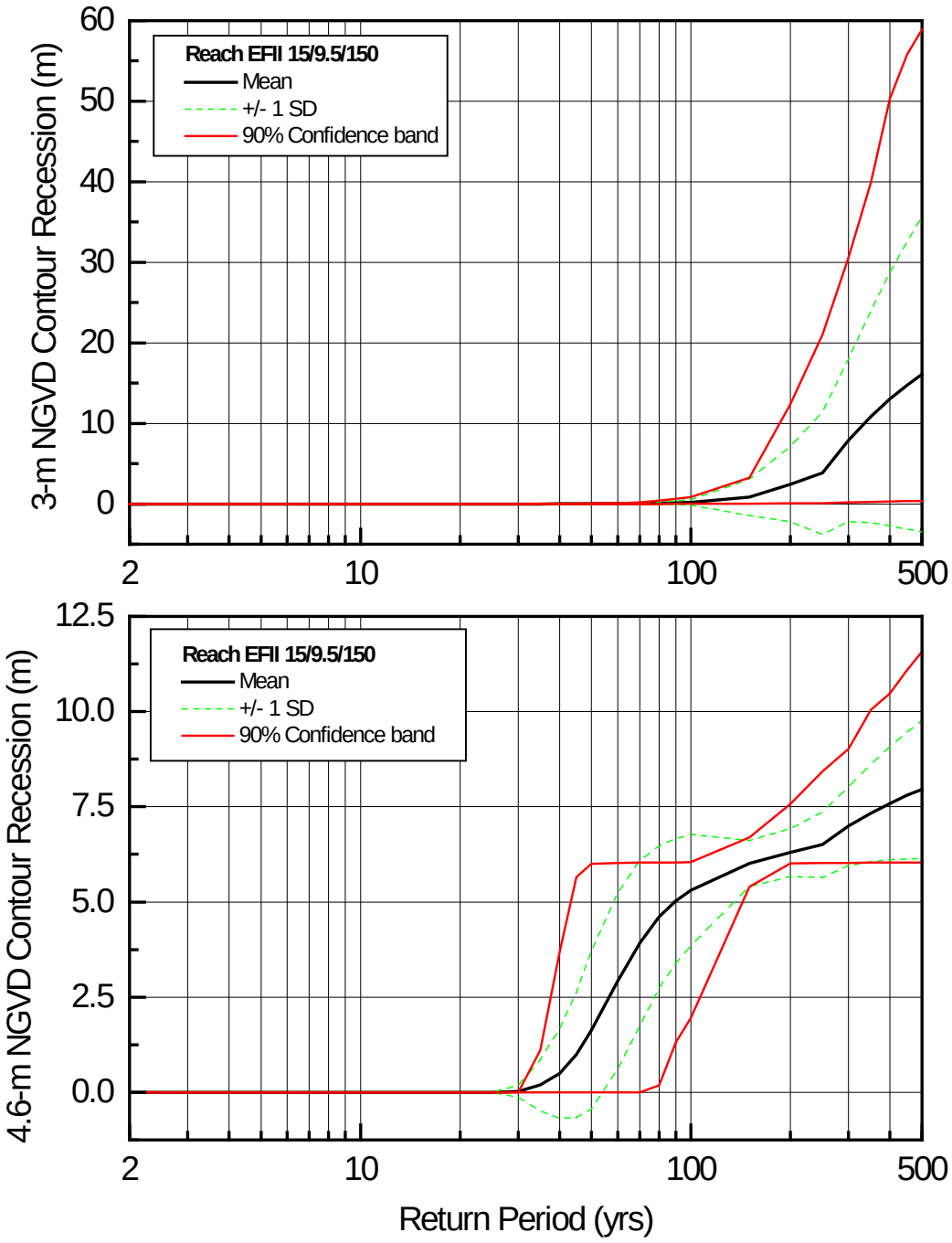

Reach EFII 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
5
10
15
20
25
30
35
2
10
100
500
Reach EFII 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
2
10
100
500
Return Period (yrs)

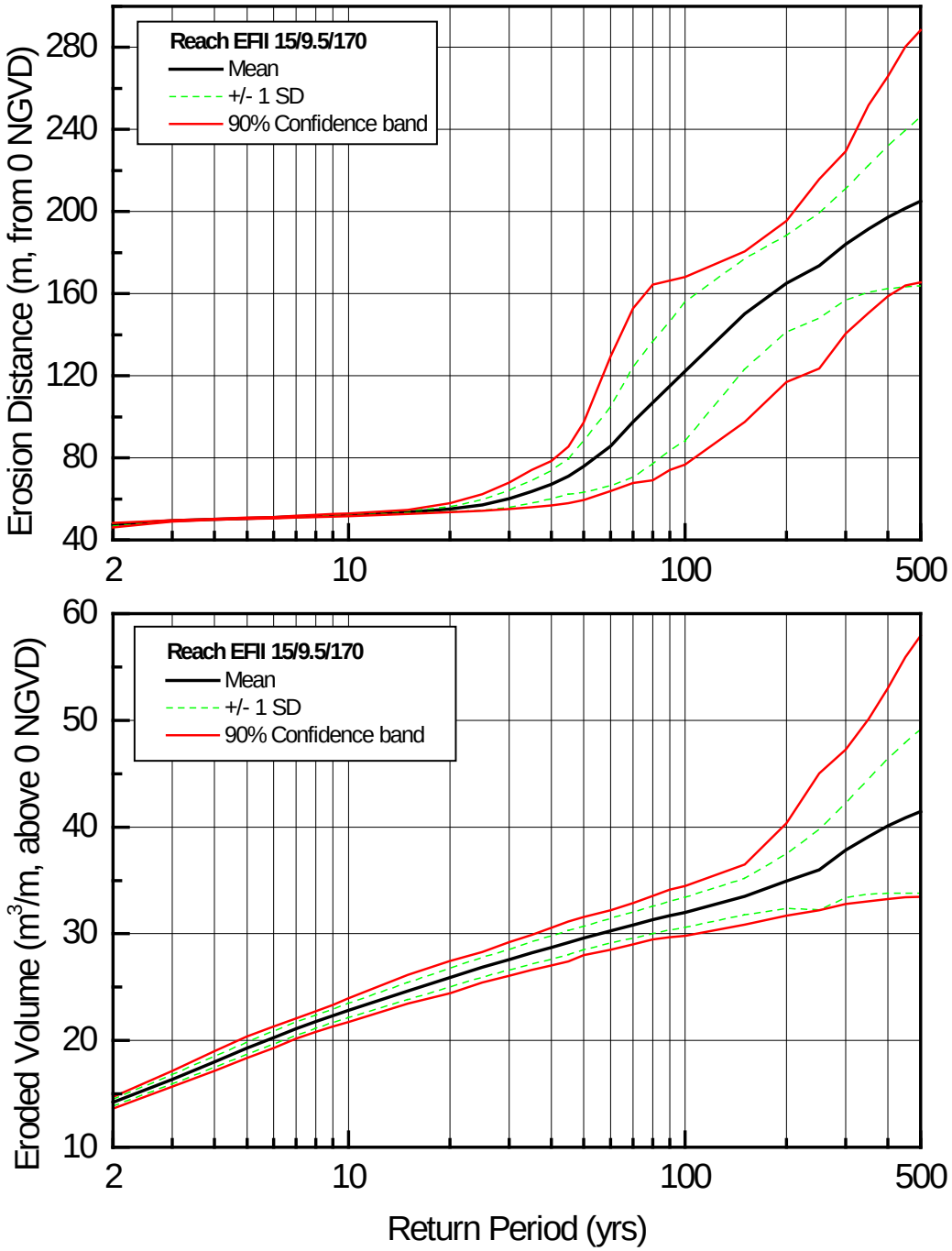

Maximum Runup Height (m, above SWL)
3.50
3.25
3.00
2.75
2.50
2.25
2.00
1.75
2
10
100
500
Reach EFII 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)
Reach EFII 15/9.5/150
Mean
+/- 1 SD
90% Confidence band

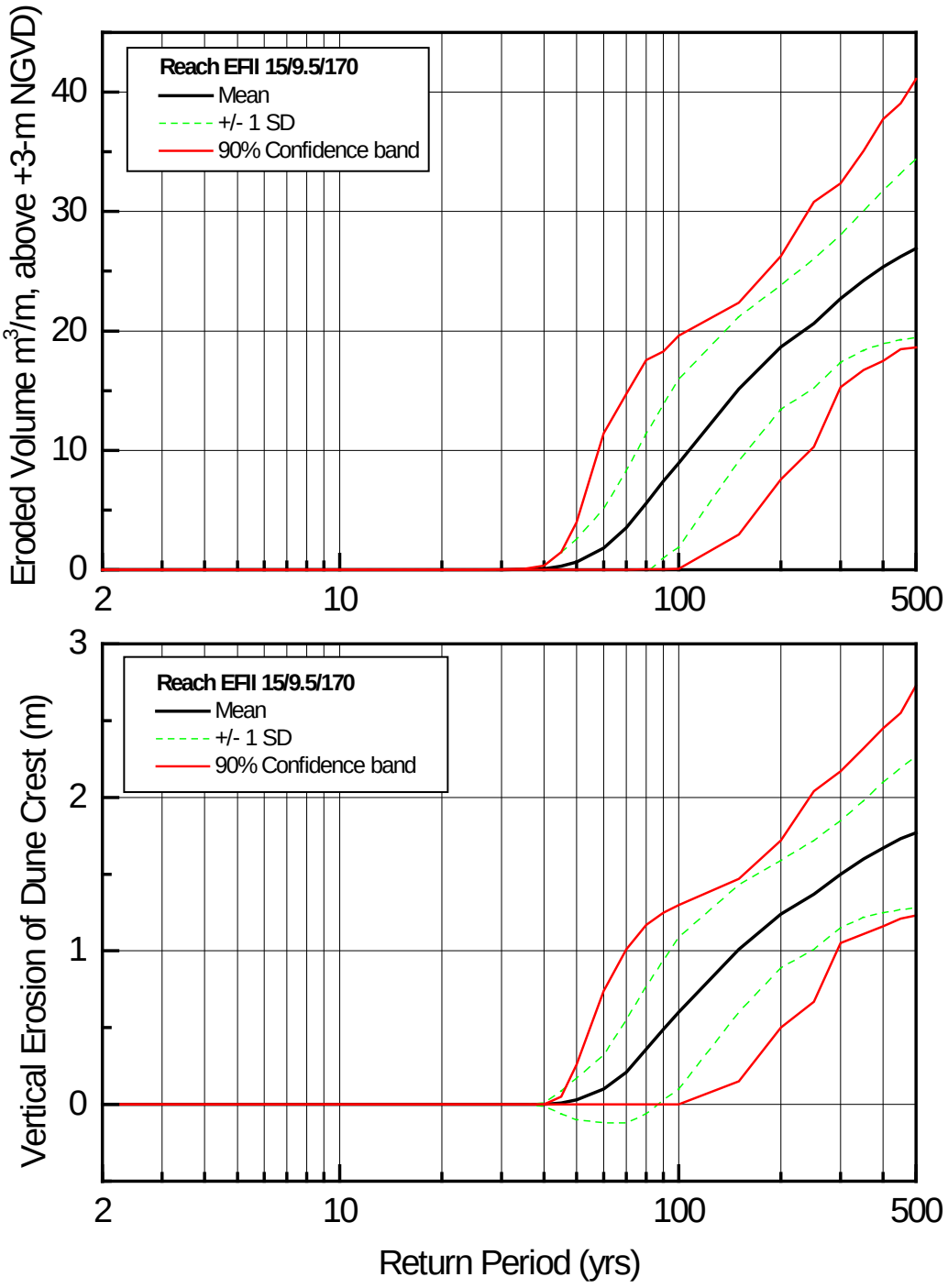

Max. Wave Setup Magnitude (m, above SWL)
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach EFII 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach EFII 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

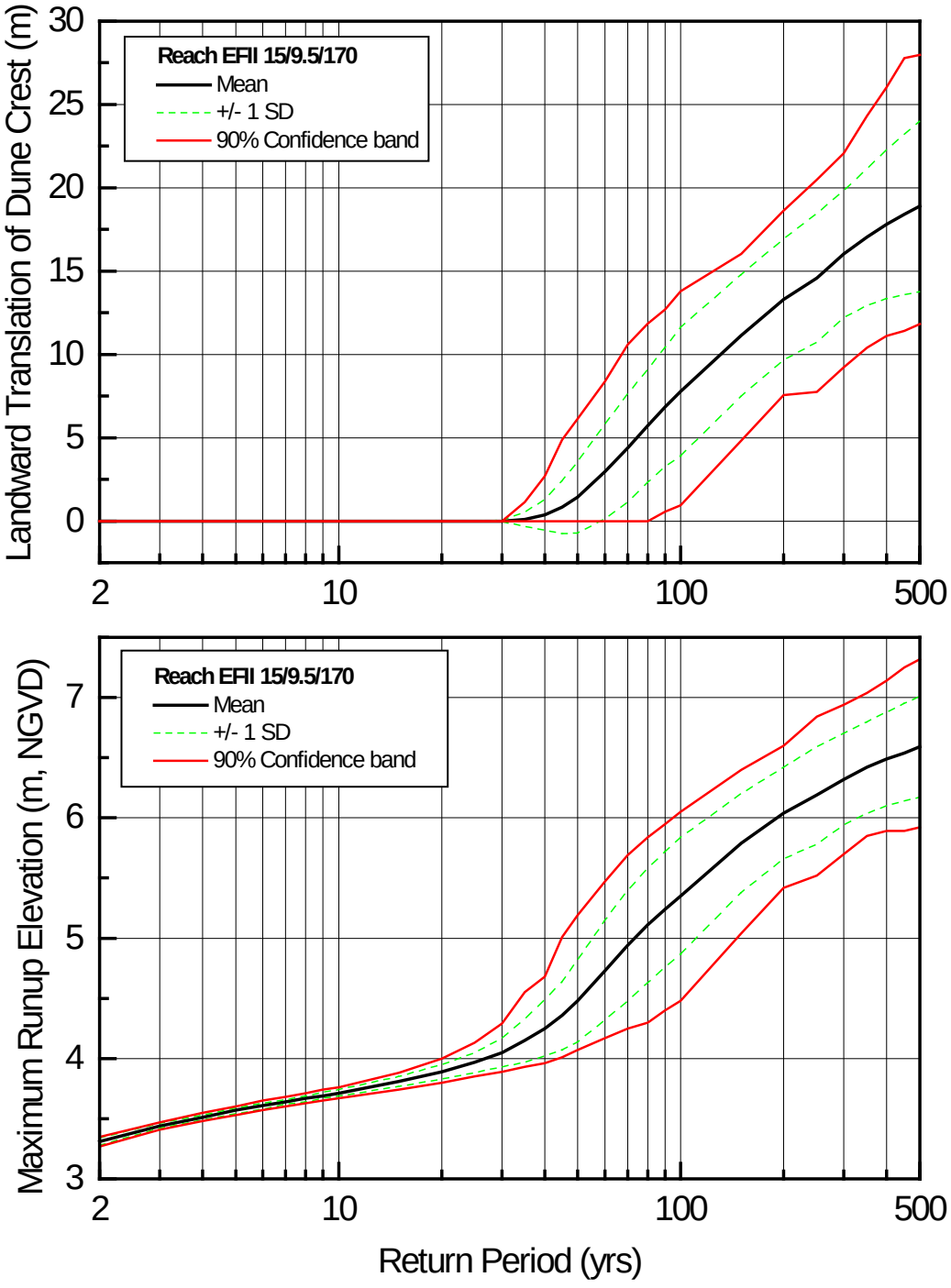

Max NS Wave Height (m, at landside surf zone)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach EFII 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
250
225
200
175
150
125
100
75
50
Reach EFII 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

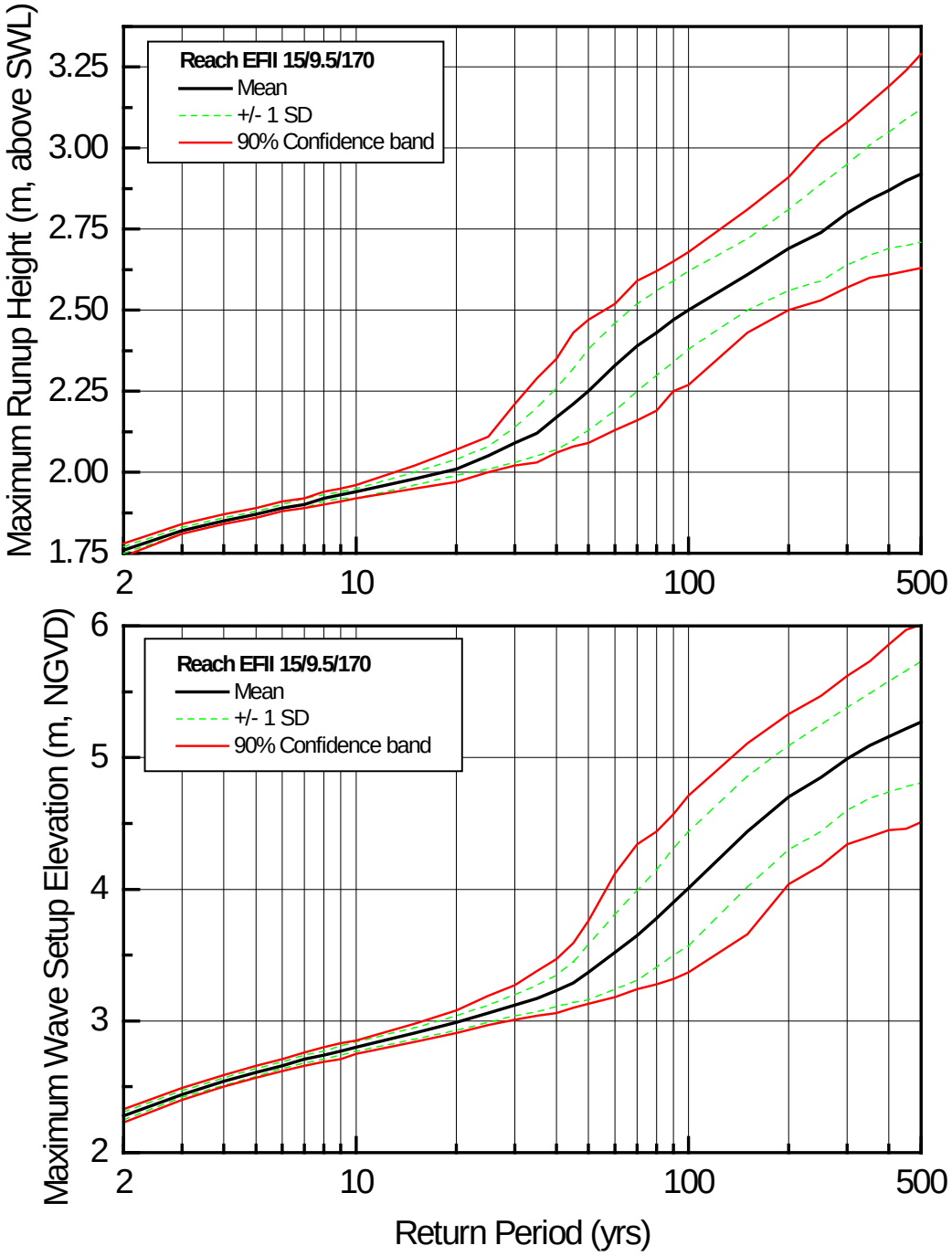

Reach EFII 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Reach EFII 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
15.0
12.5
10.0
7.5
5.0
2
10
100
500
Return Period (yrs)

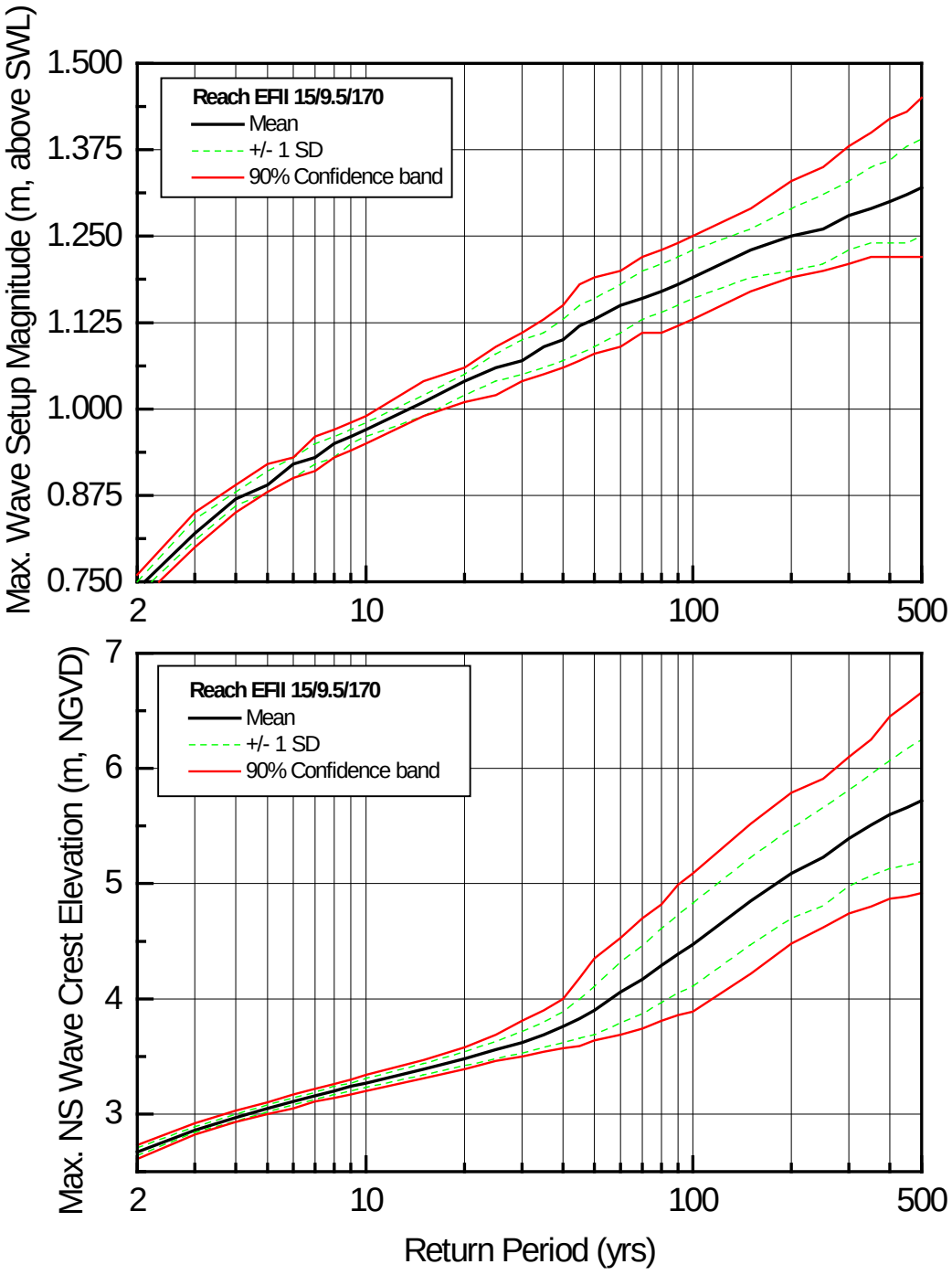

Reach EFII 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
60
50
40
30
20
10
0
2
10
100
500
Reach EFII 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
12.5
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Return Period (yrs)

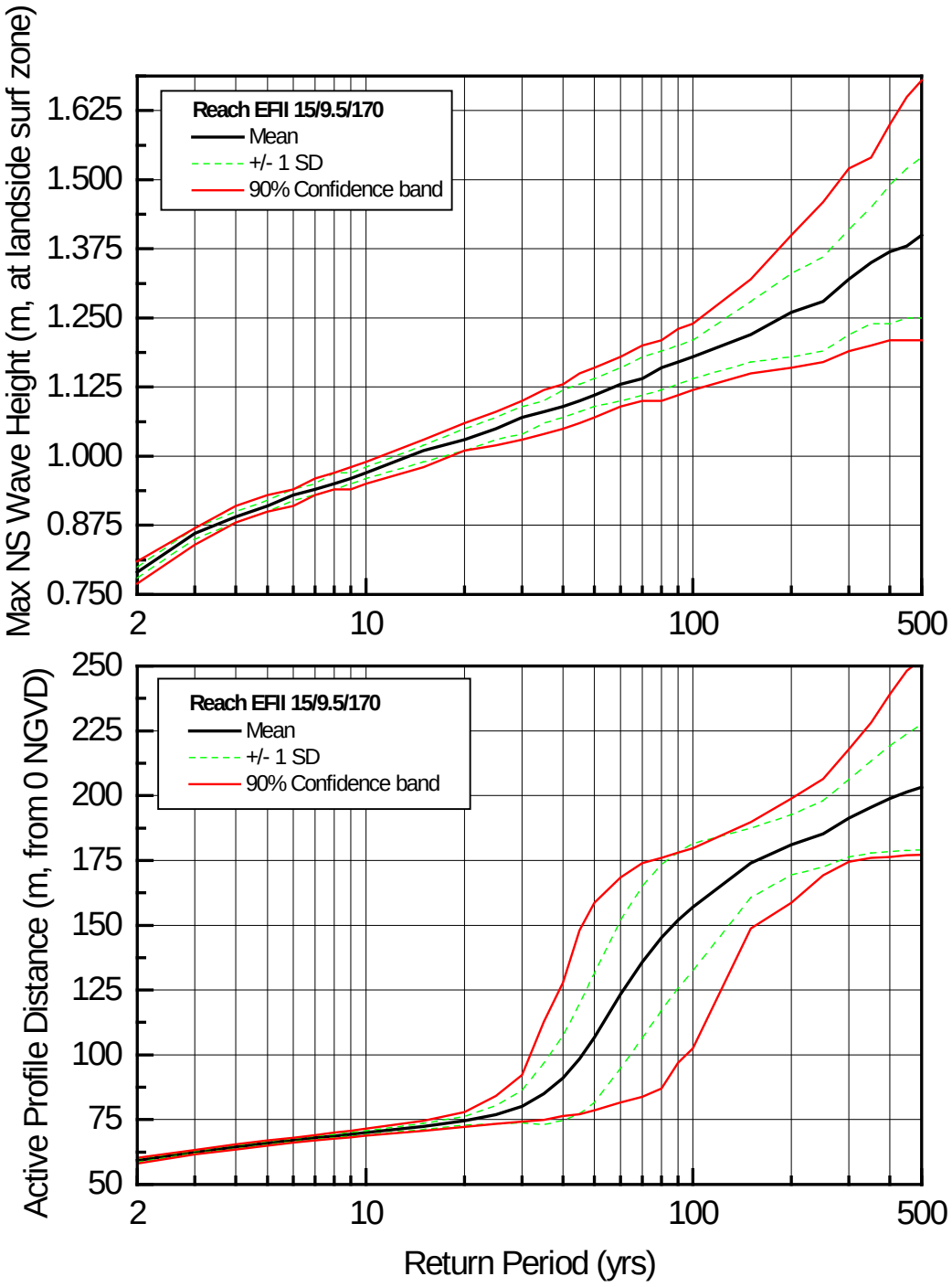

Reach EFII 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
280
240
200
160
120
80
40
2
10
100
500
Reach EFII 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
20
10
2
10
100
500
Return Period (yrs)

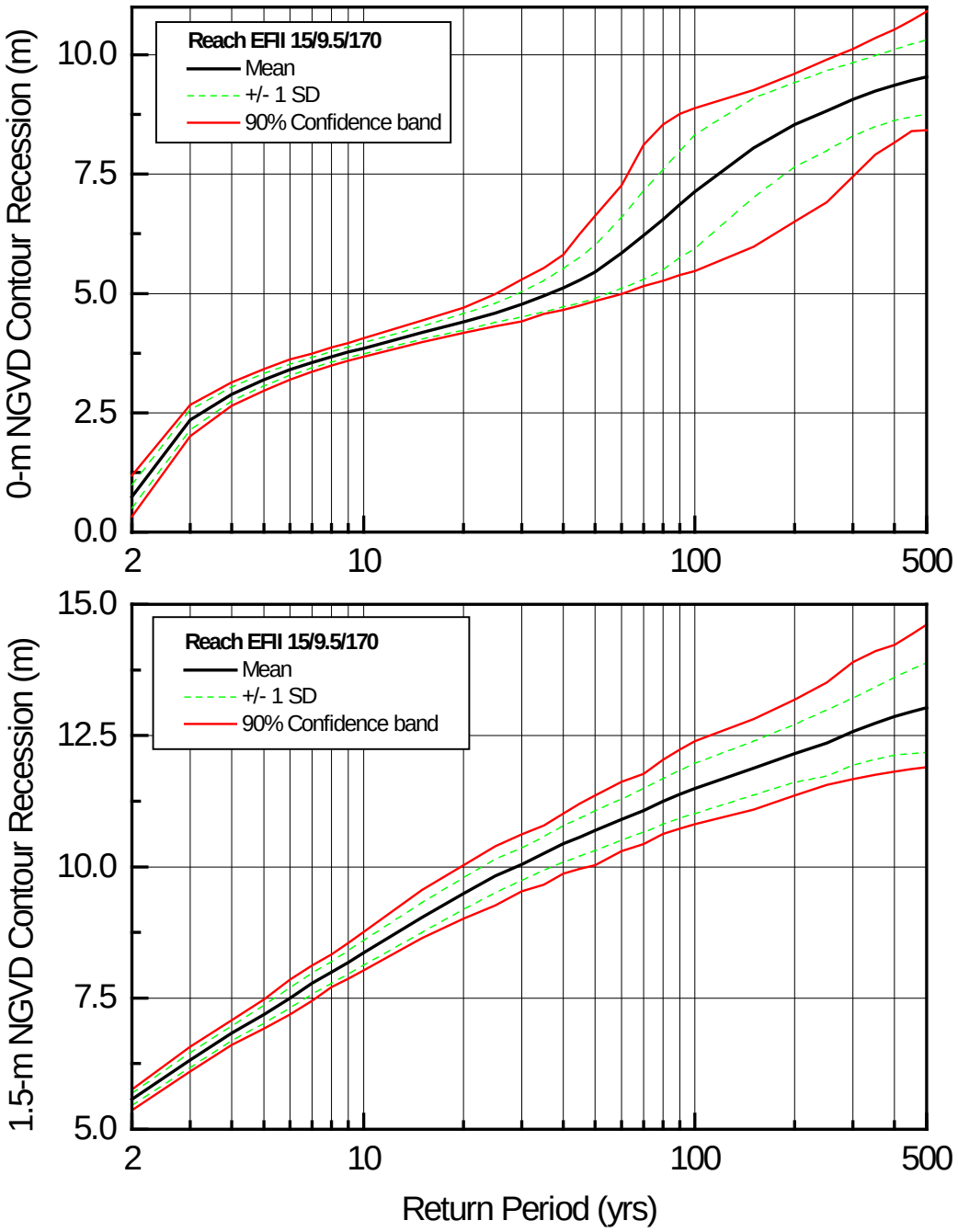

Reach EFII 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach EFII 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

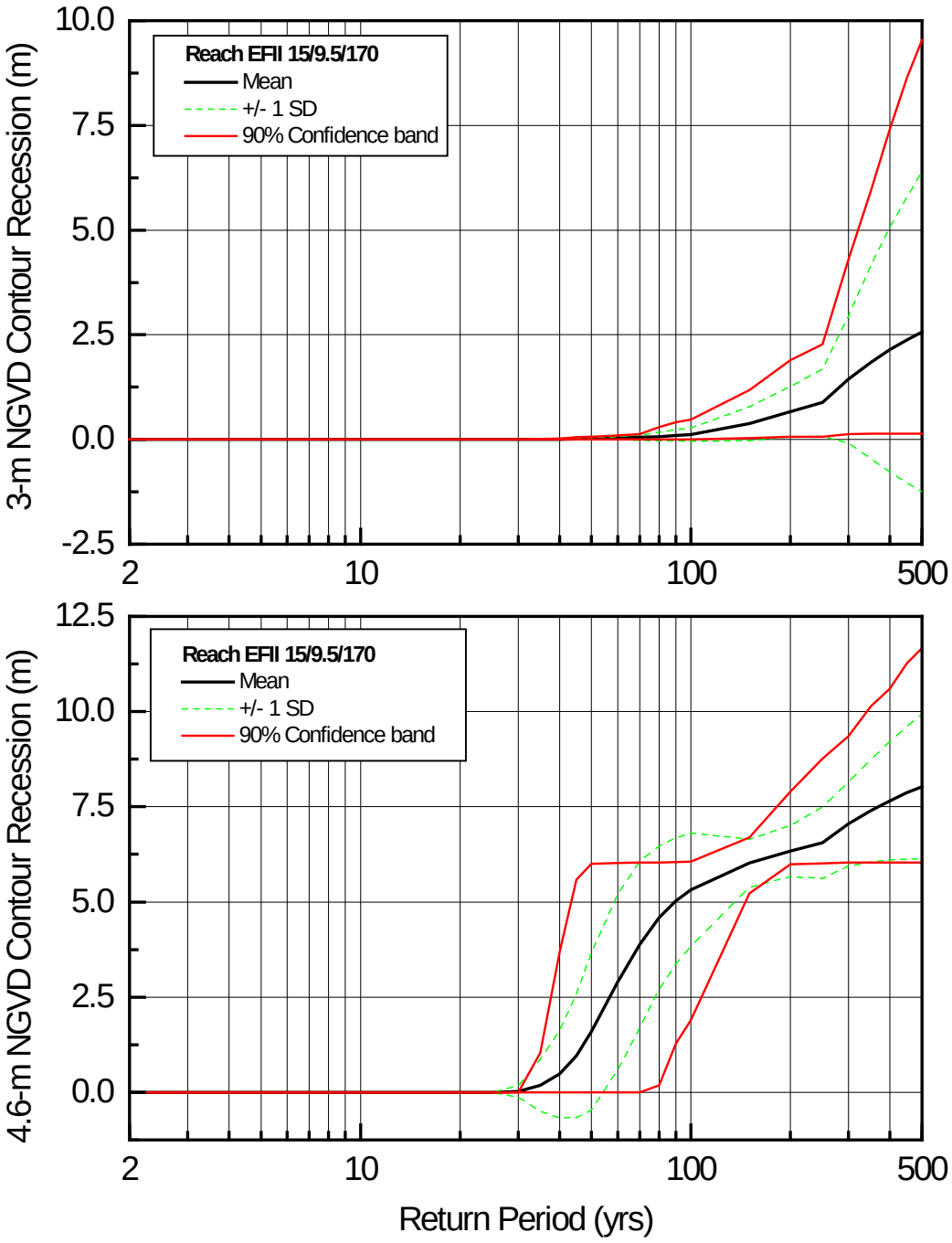

Reach EFII 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
30
25
20
15
10
5
0
2
10
100
500
Reach EFII 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
7
6
5
4
3
2
10
100
500
Return Period (yrs)

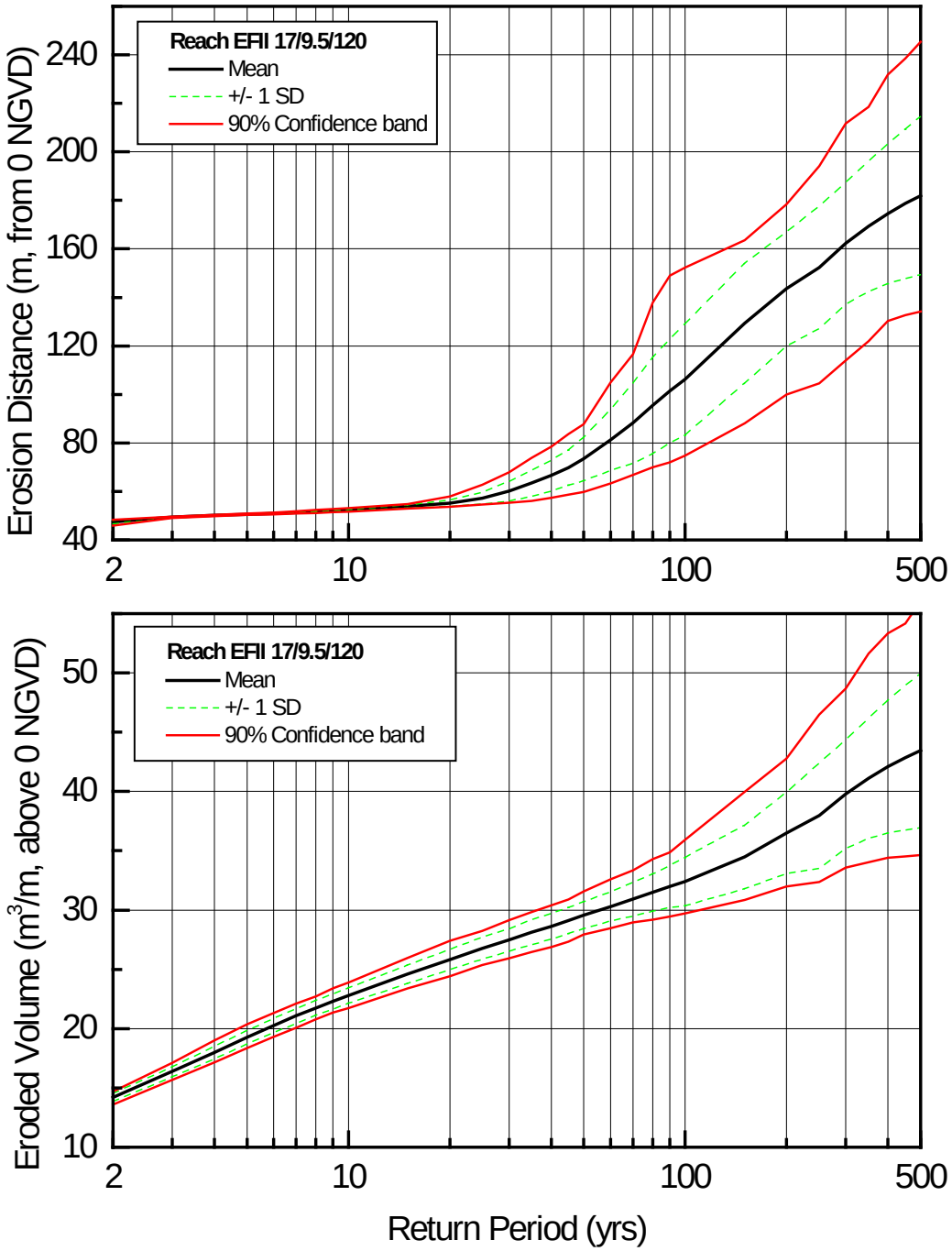

Reach EFII 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
3.25
3.00
2.75
2.50
2.25
2.00
1.75
2
10
100
500
Reach EFII 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

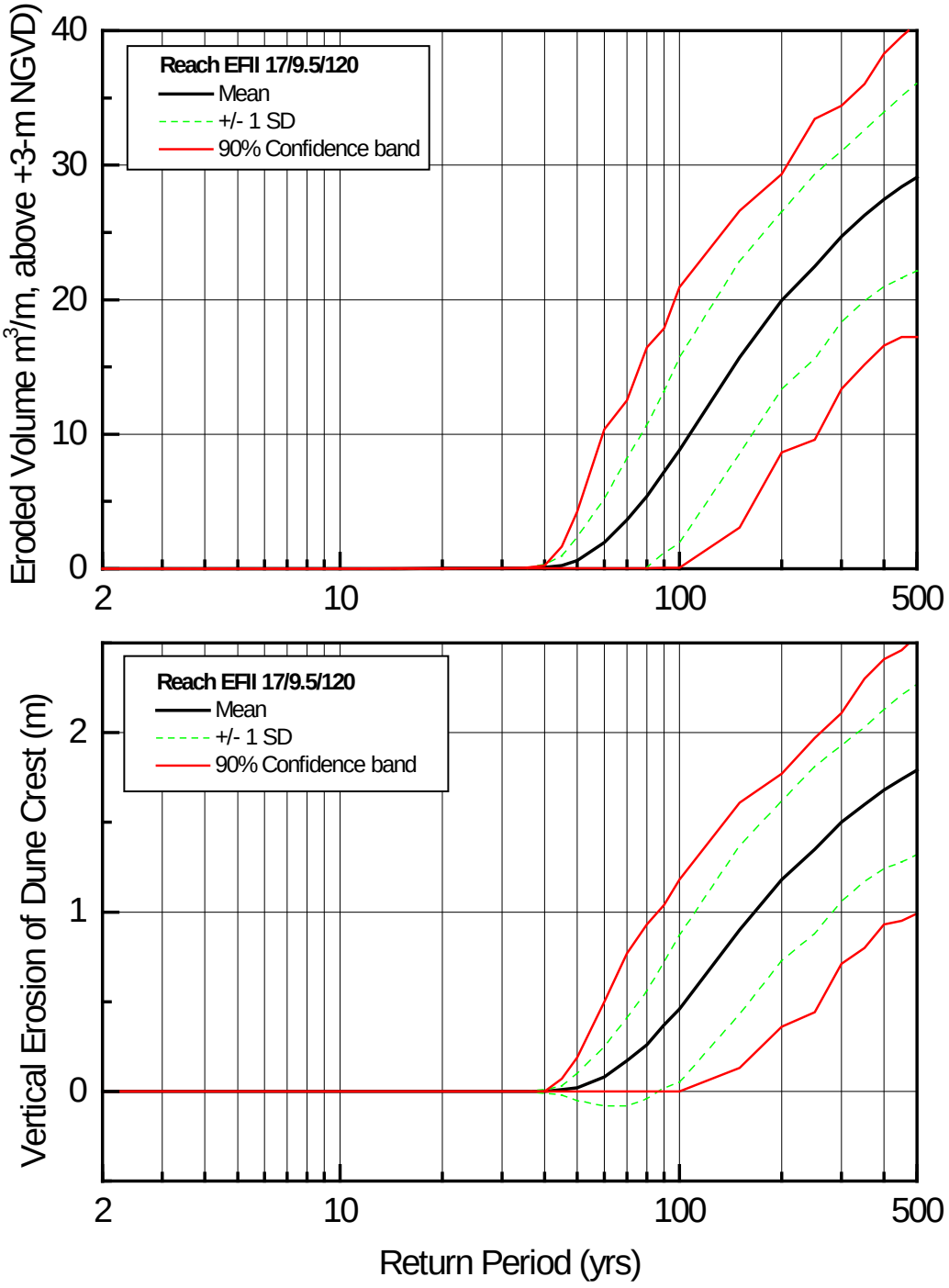

Max. Wave Setup Magnitude (m, above SWL)
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach EFII 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach EFII 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

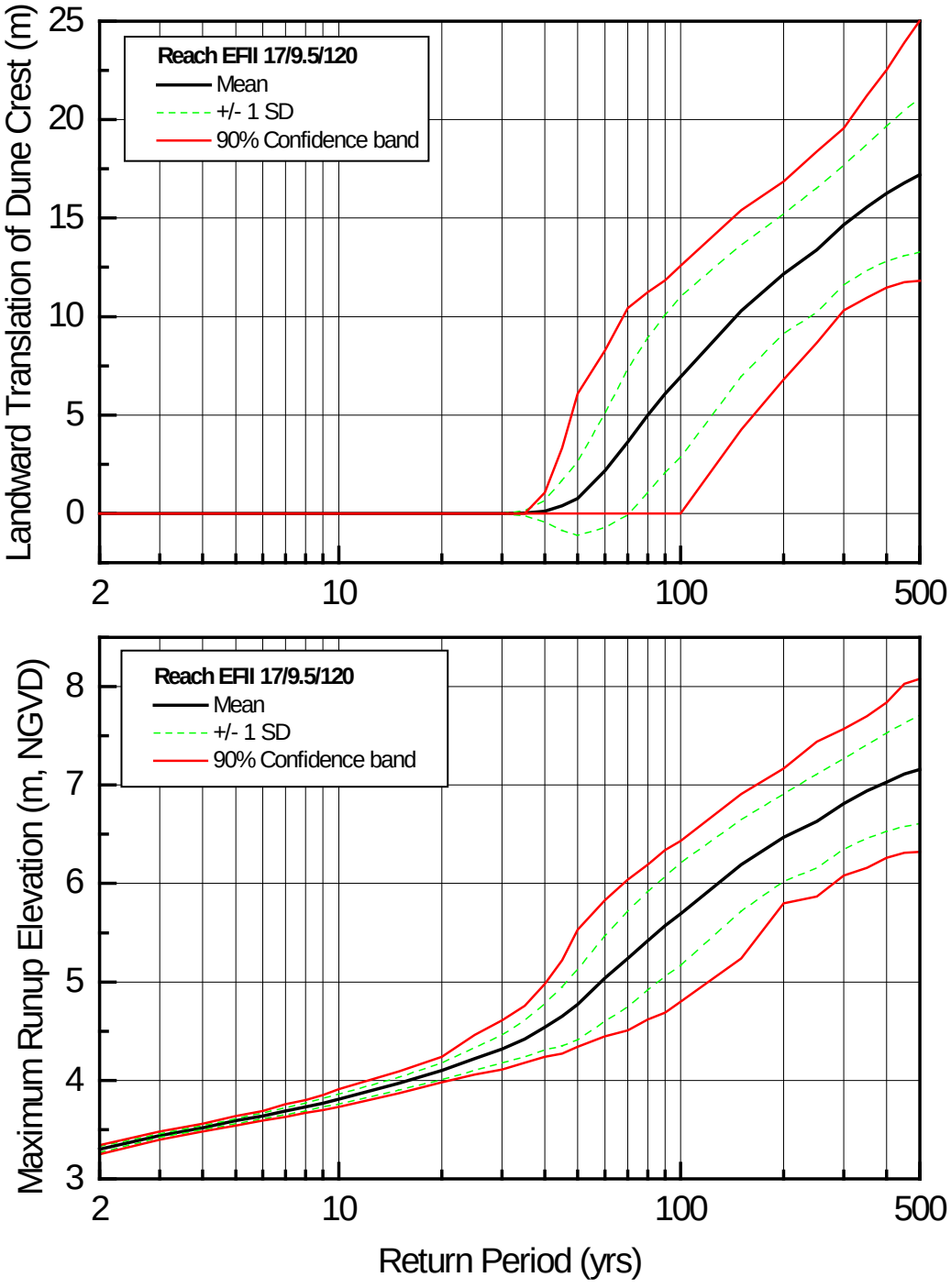

Reach EFII 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Max NS Wave Height (m, at landside surf zone)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
2
10
100
500
Reach EFII 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Active Profile Distance (m, from 0 NGVD)
250
225
200
175
150
125
100
75
50
2
10
100
500
Return Period (yrs)

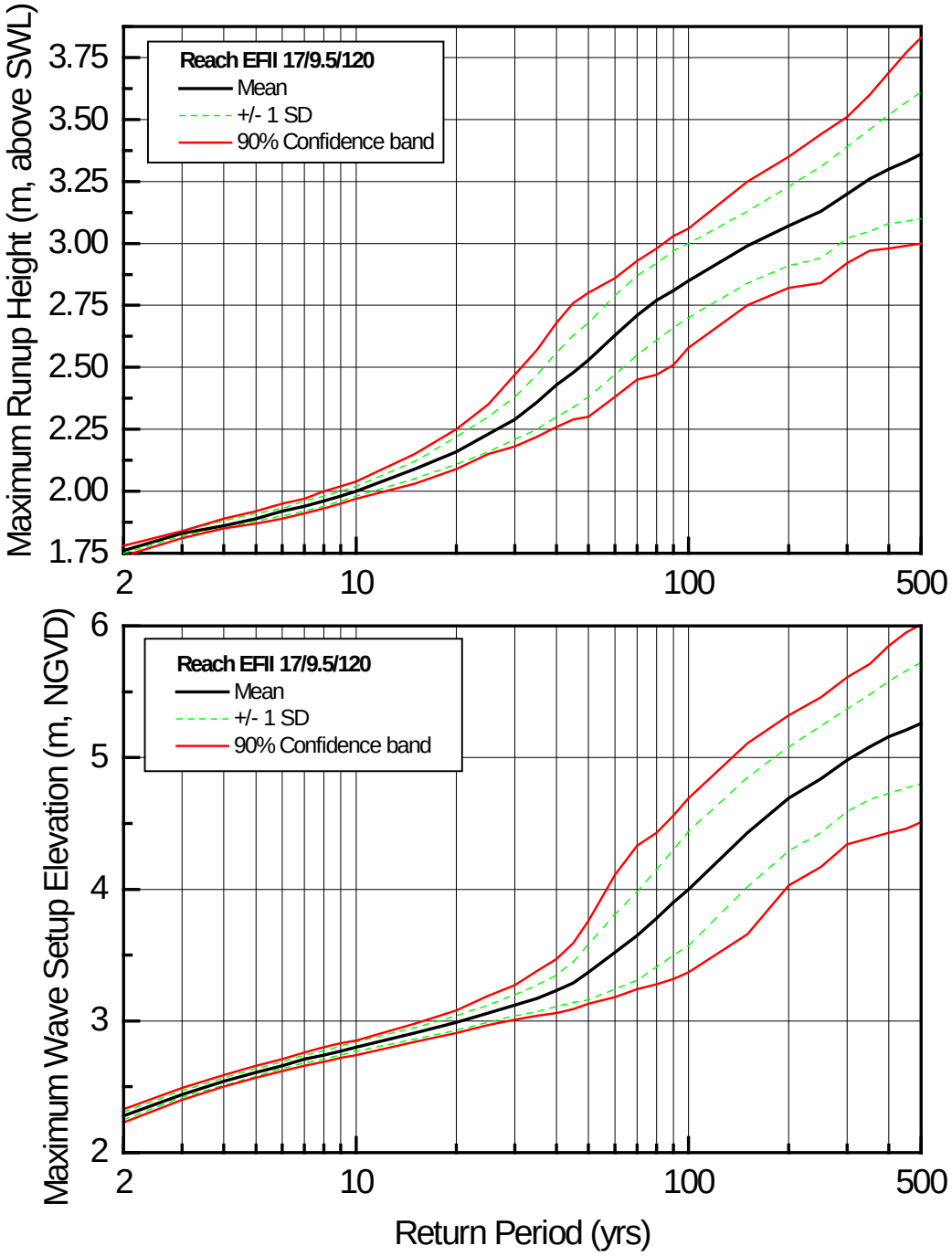

Reach EFII 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Reach EFII 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
15.0
12.5
10.0
7.5
5.0
2
10
100
500
Return Period (yrs)

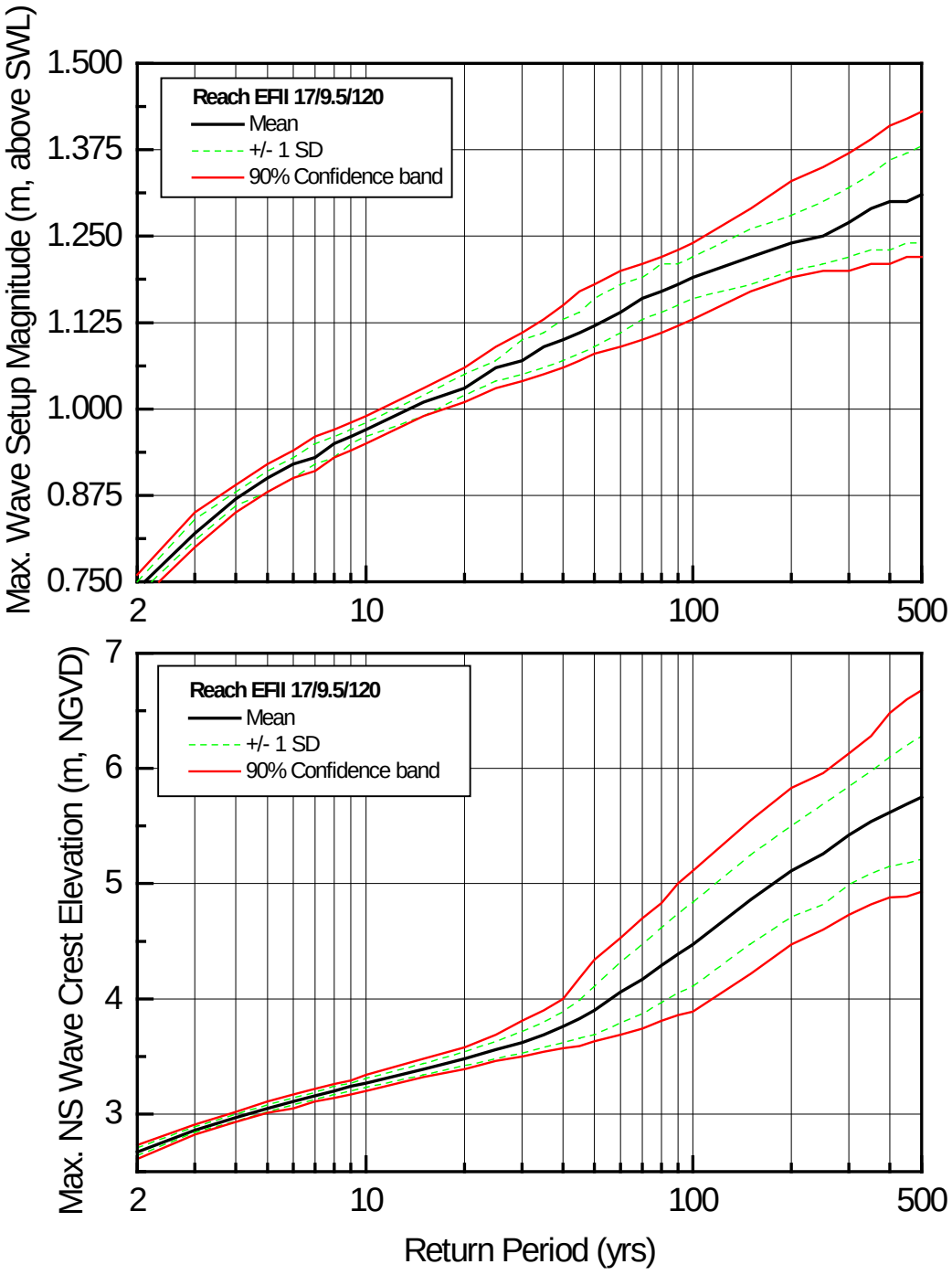

Reach EFII 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
10.0
7.5
5.0
2.5
0.0
-2.5
2
10
100
500
Reach EFII 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
12.5
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Return Period (yrs)

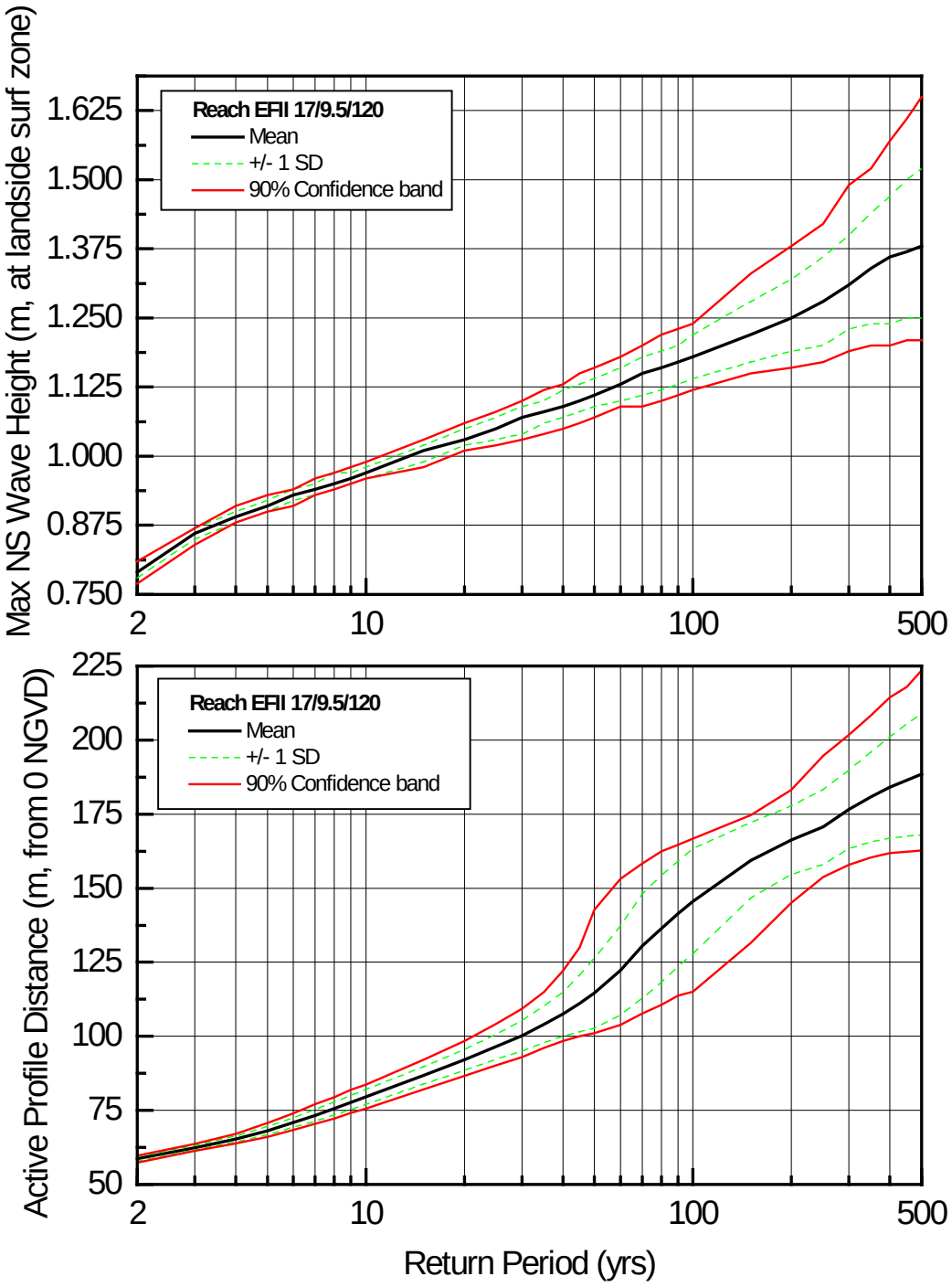

Reach EFII 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
240
200
160
120
80
40
2
10
100
500
Reach EFII 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
50
40
30
20
10
2
10
100
500
Return Period (yrs)

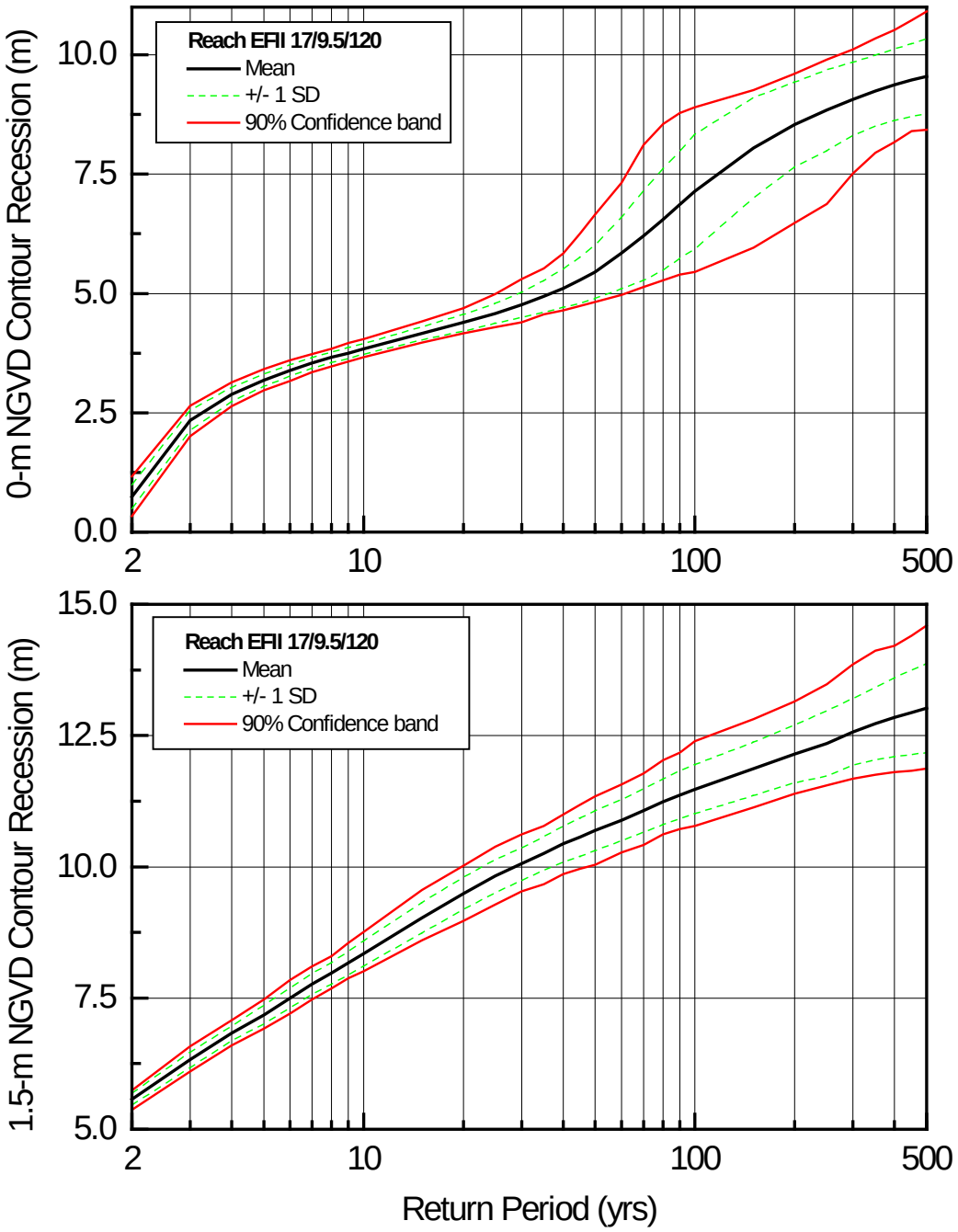

Reach EFII 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach EFII 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
2
10
100
500
Return Period (yrs)

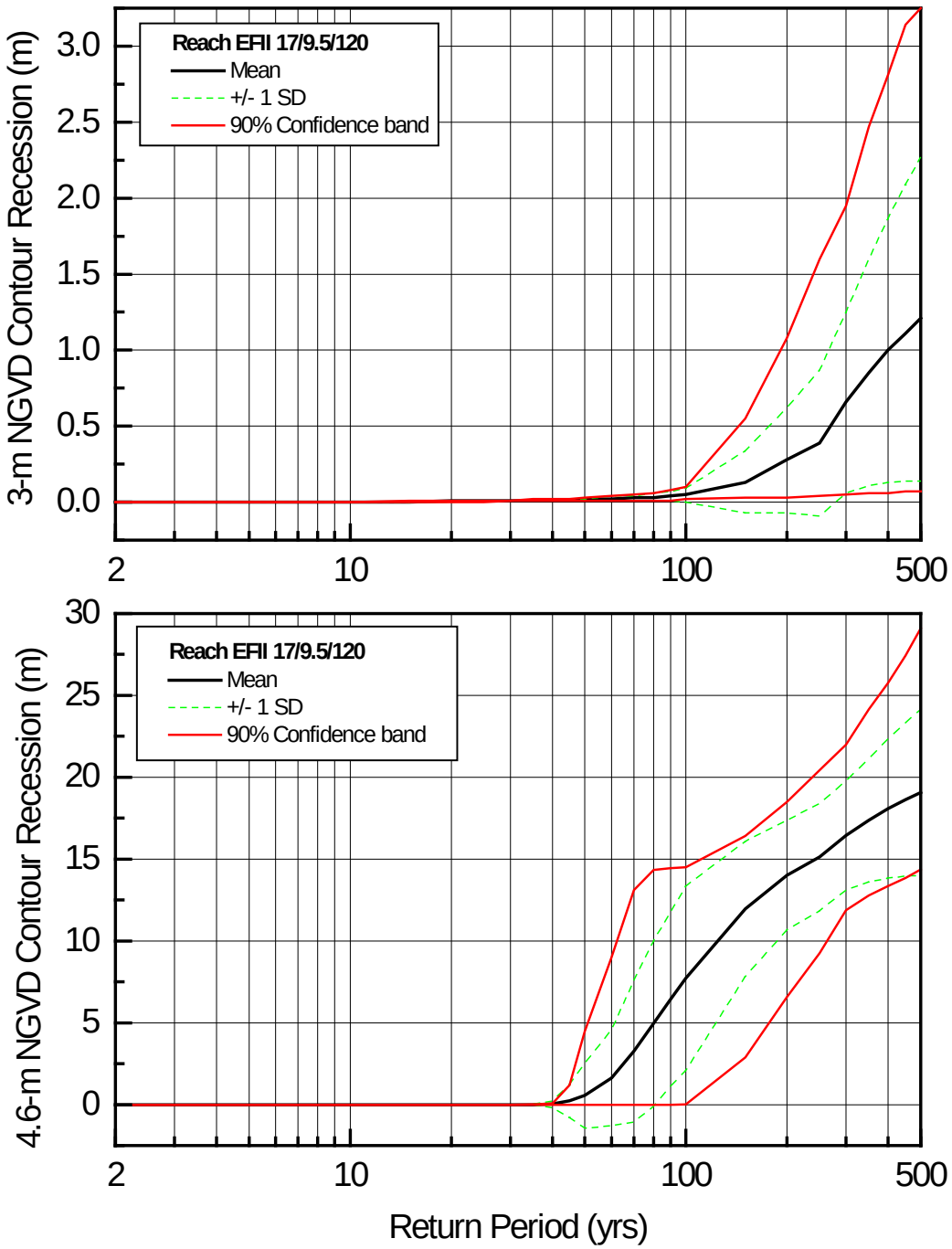

Reach EFII 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
25
20
15
10
5
0
2
10
100
500
Reach EFII 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
3
2
10
100
500
Return Period (yrs)

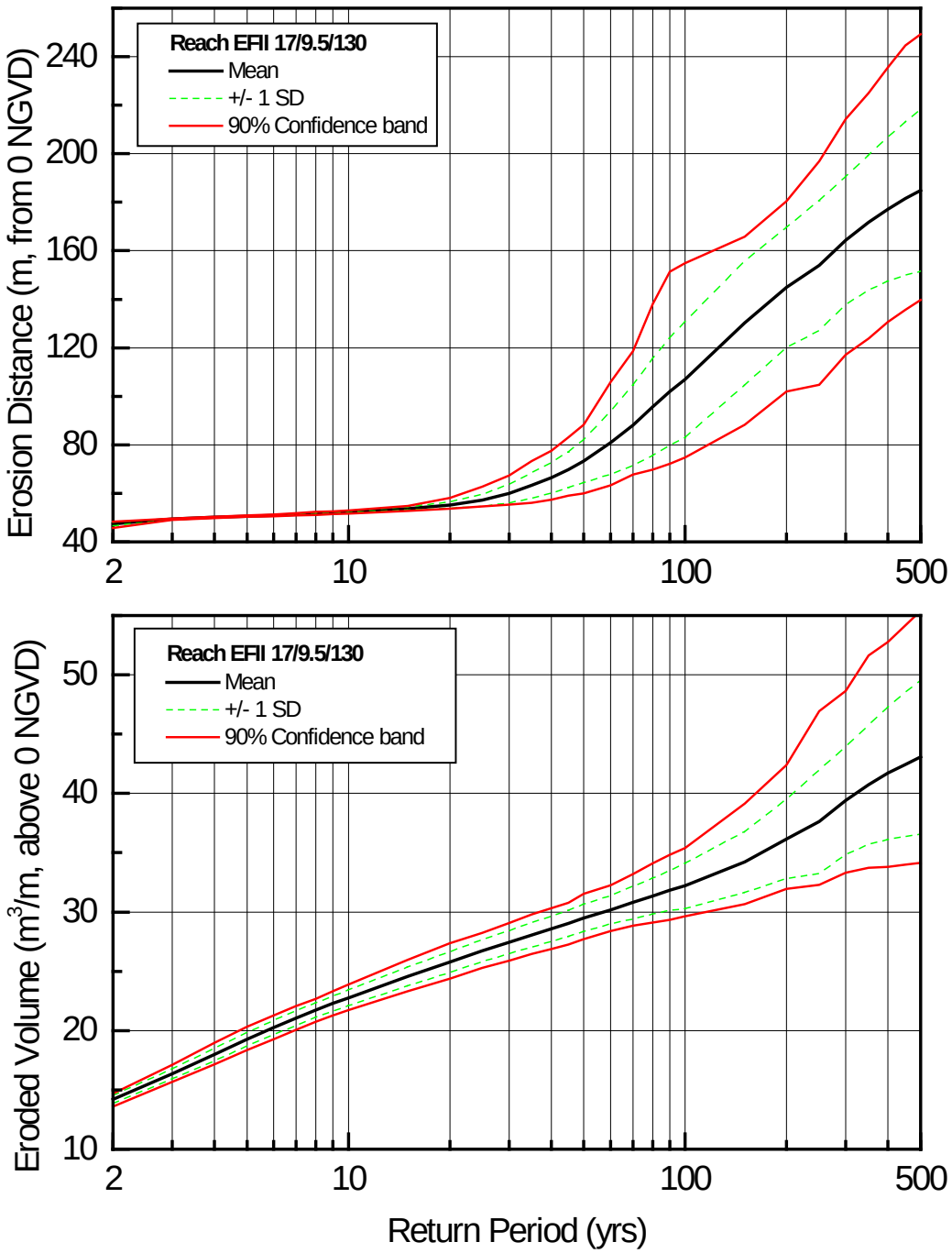

Reach EFII 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
3.75
3.50
3.25
3.00
2.75
2.50
2.25
2.00
1.75
2
10
100
500
Reach EFII 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

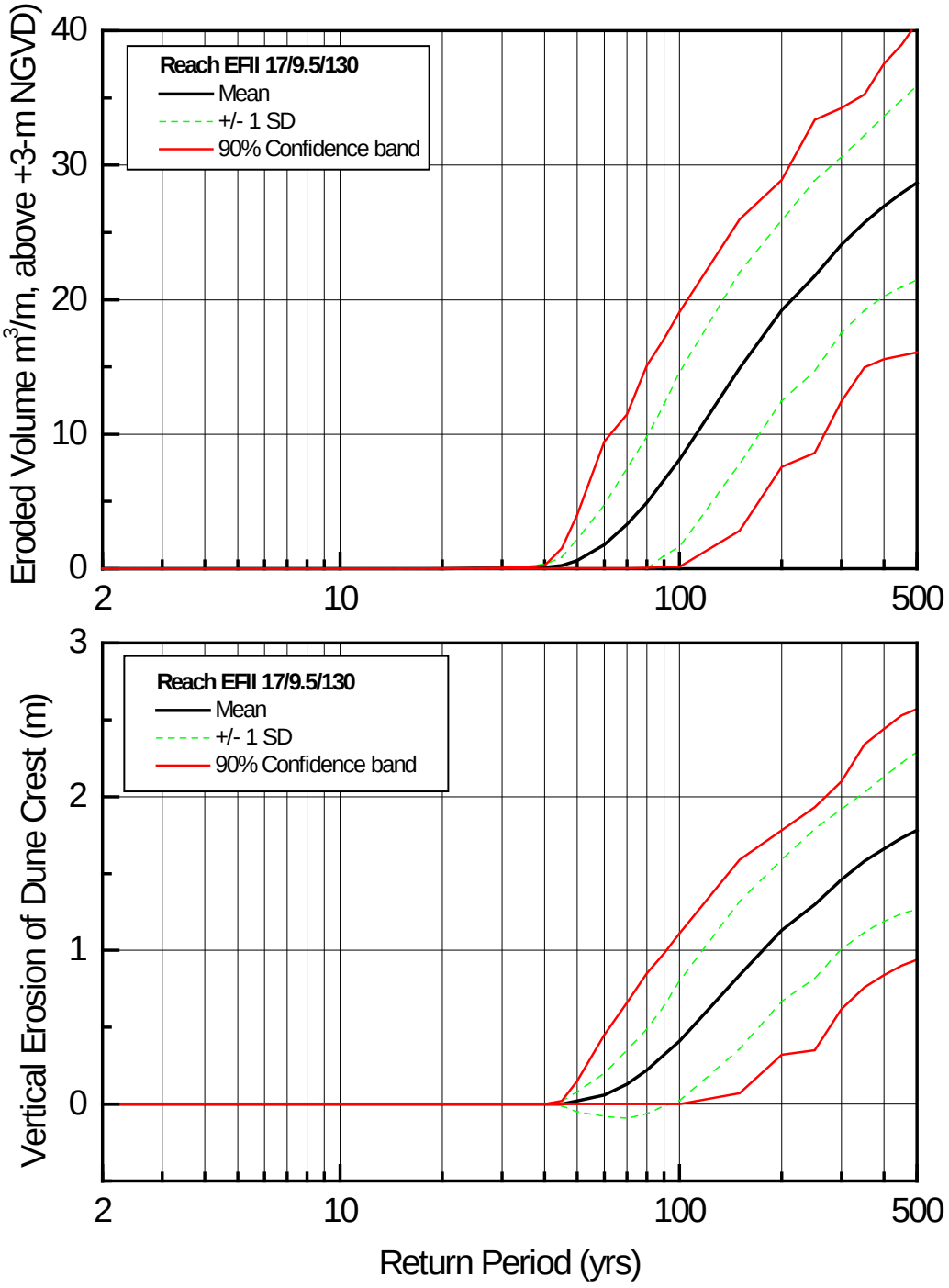

Max. Wave Setup Magnitude (m, above SWL)
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach EFII 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach EFII 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

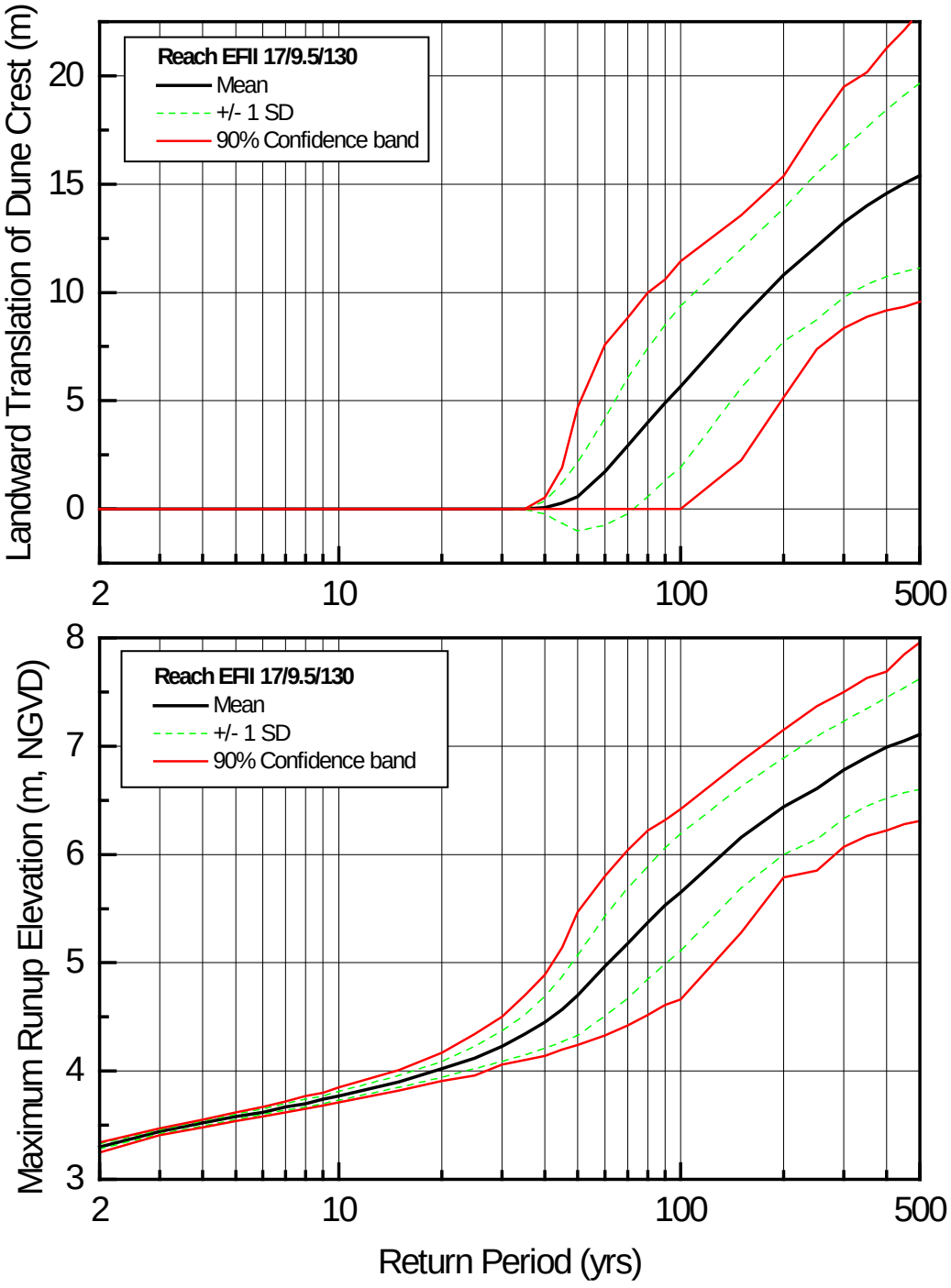

Max NS Wave Height (m, at landside surf zone)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach EFII 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
225
200
175
150
125
100
75
50
Reach EFII 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

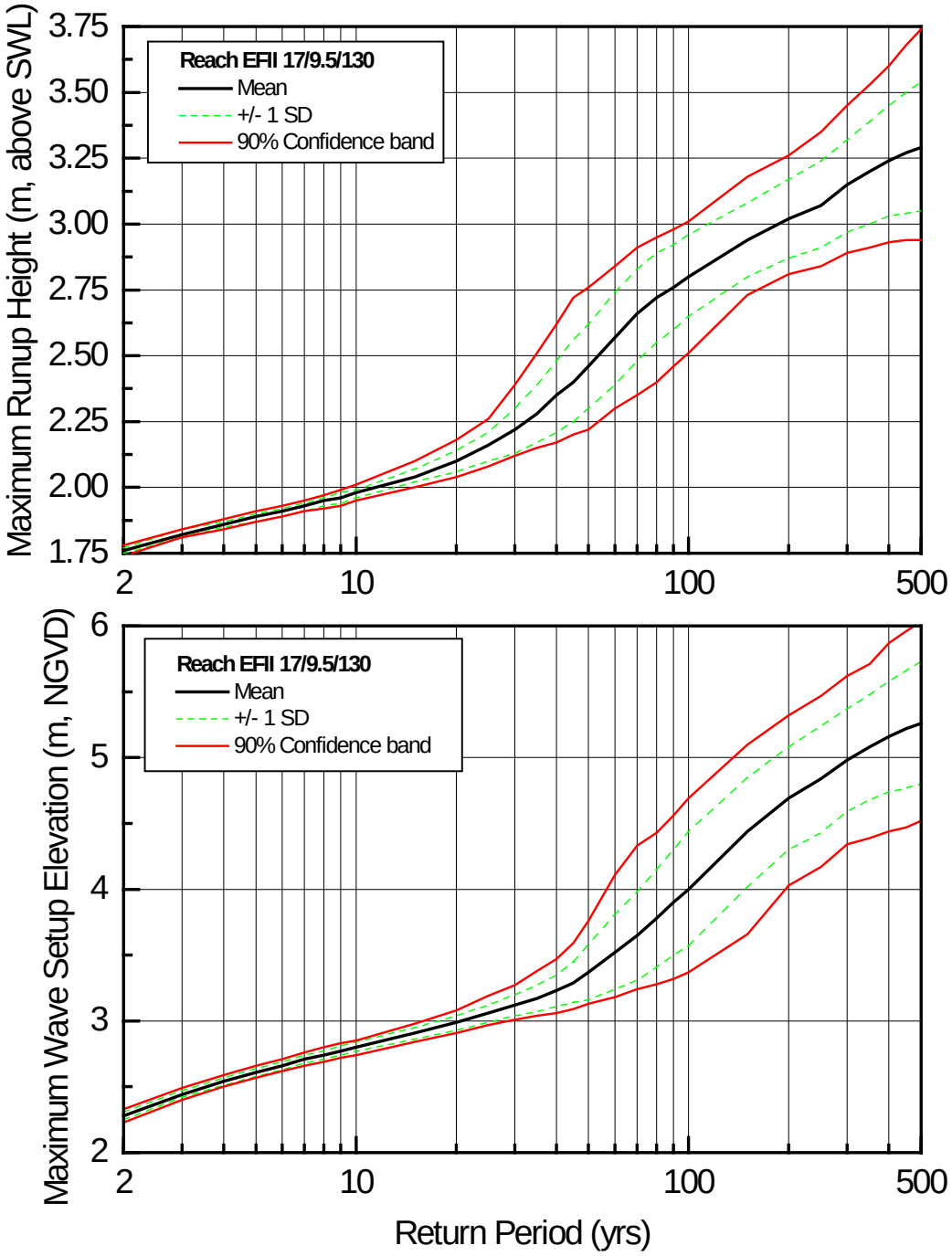

Reach EFII 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Reach EFII 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
15.0
12.5
10.0
7.5
5.0
2
10
100
500
Return Period (yrs)

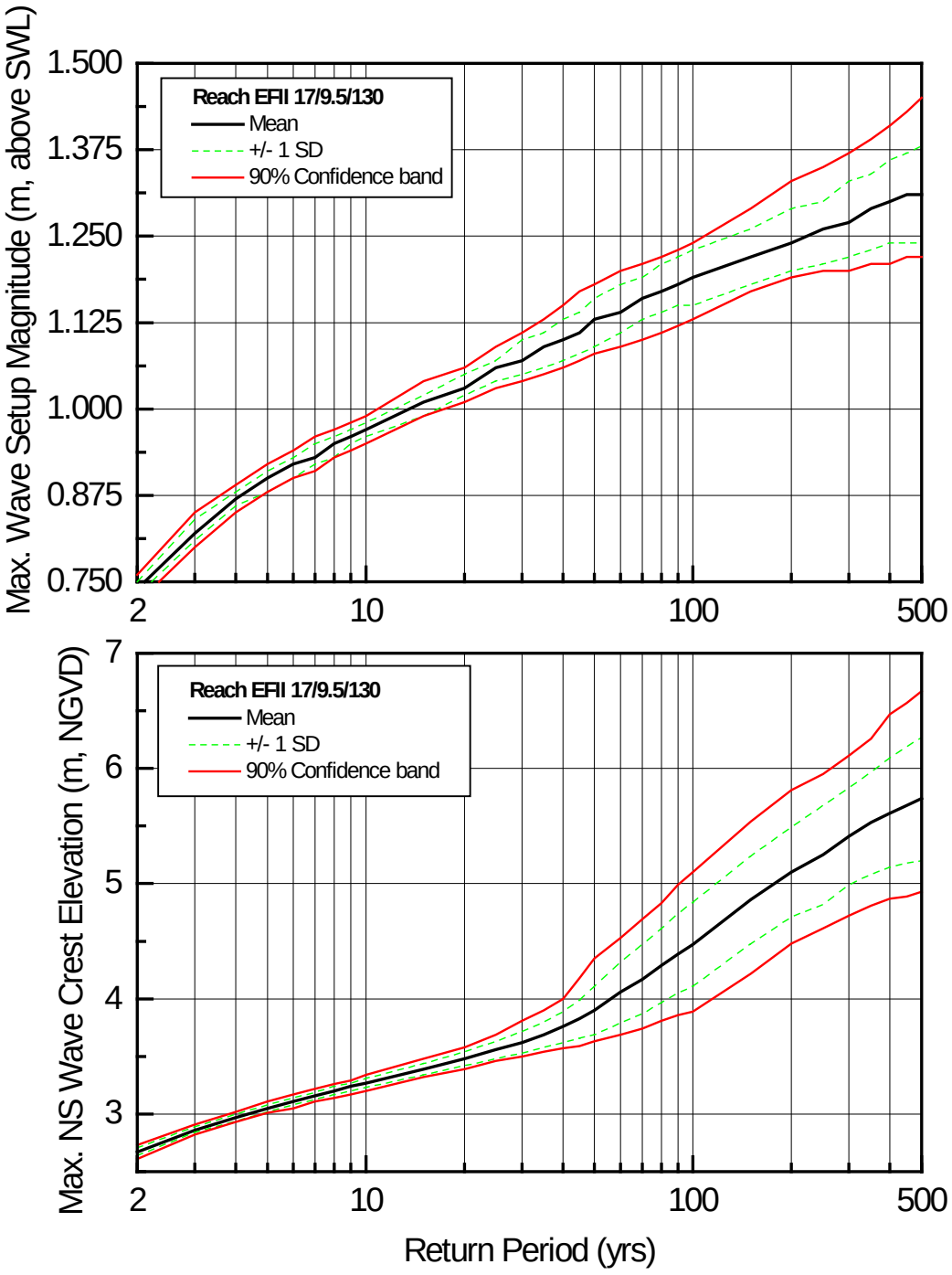

Reach EFII 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach EFII 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

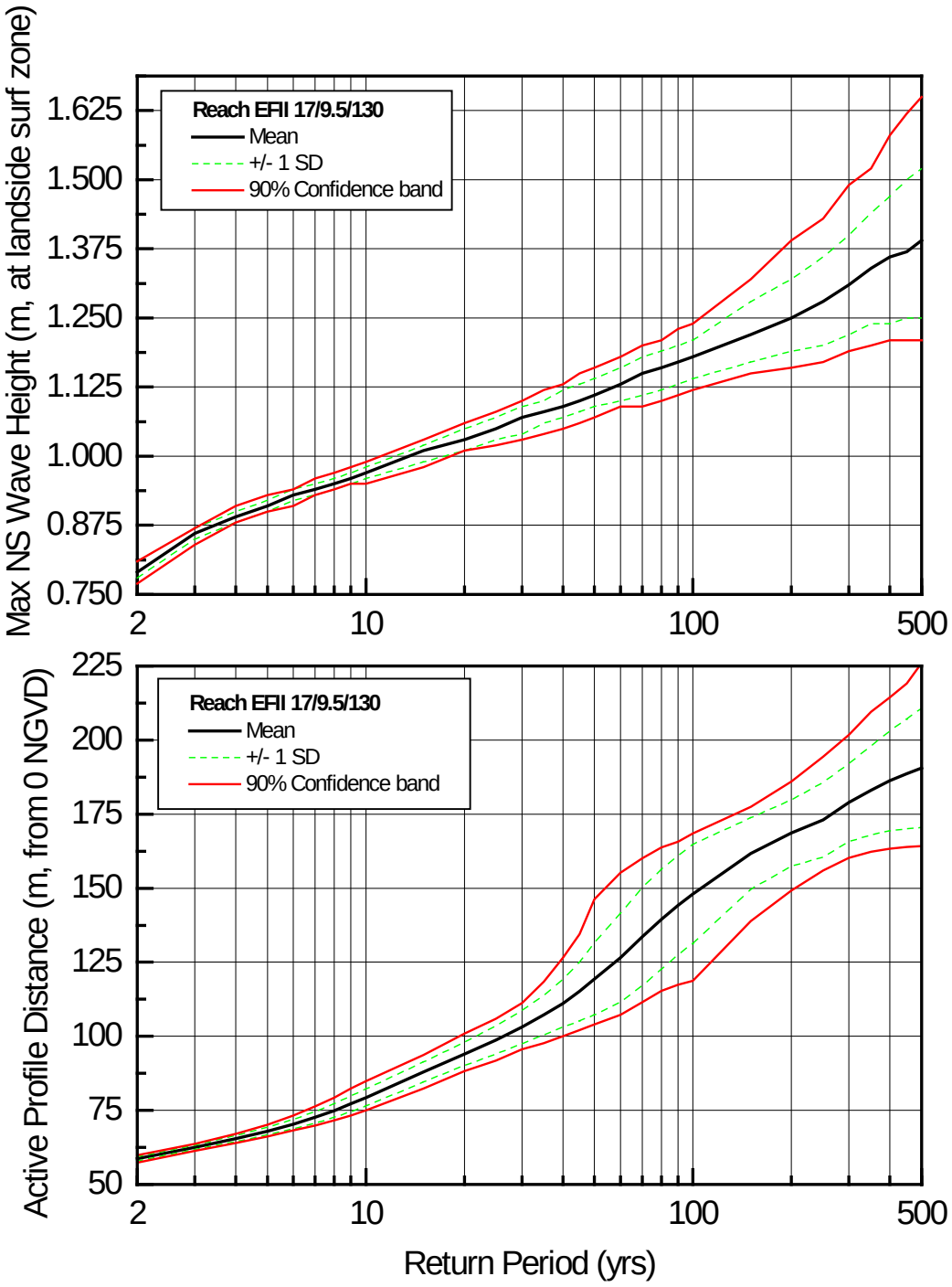

Reach EFII 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
240
200
160
120
80
40
2
10
100
500
Reach EFII 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
50
40
30
20
10
2
10
100
500
Return Period (yrs)

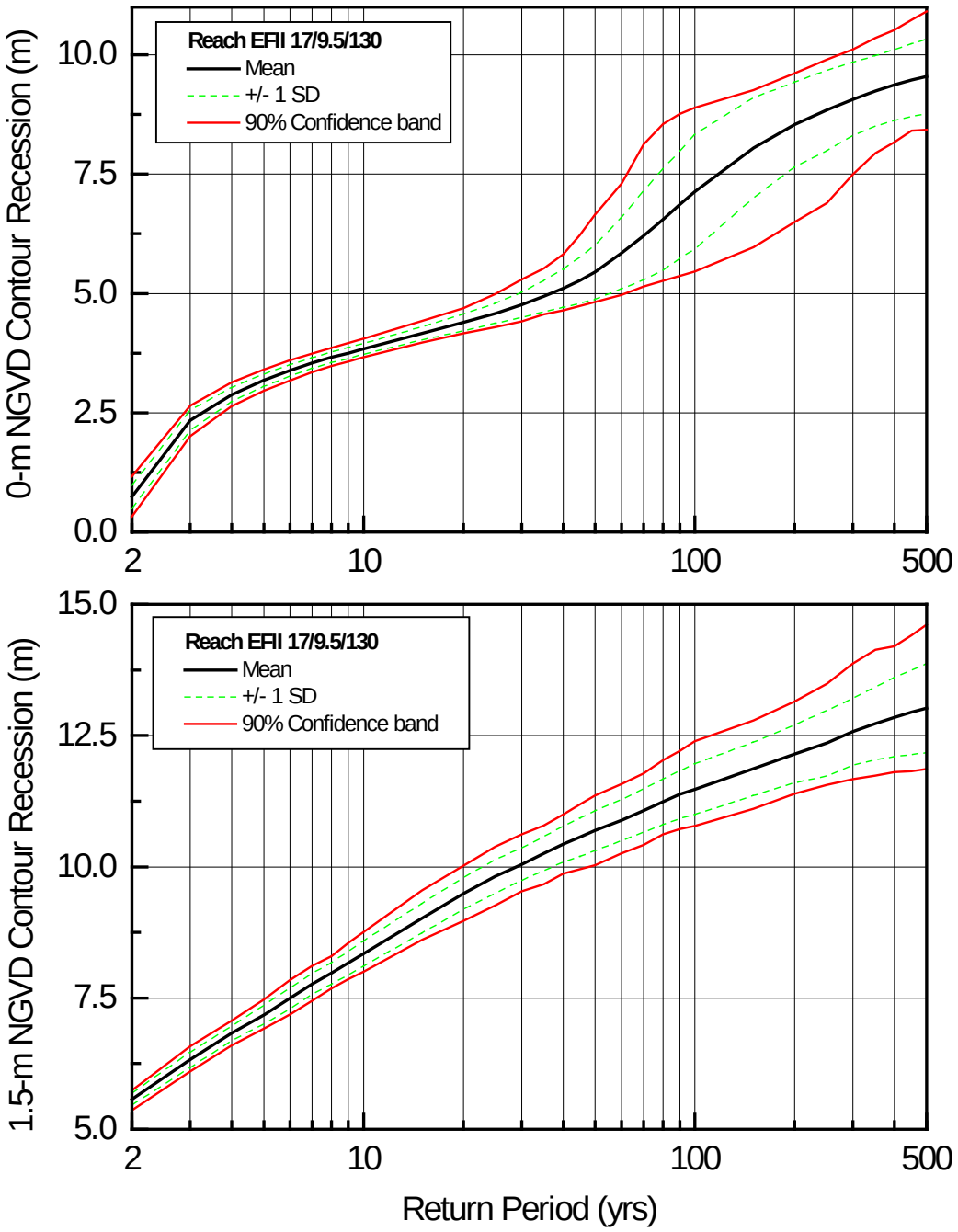

Reach EFII 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach EFII 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

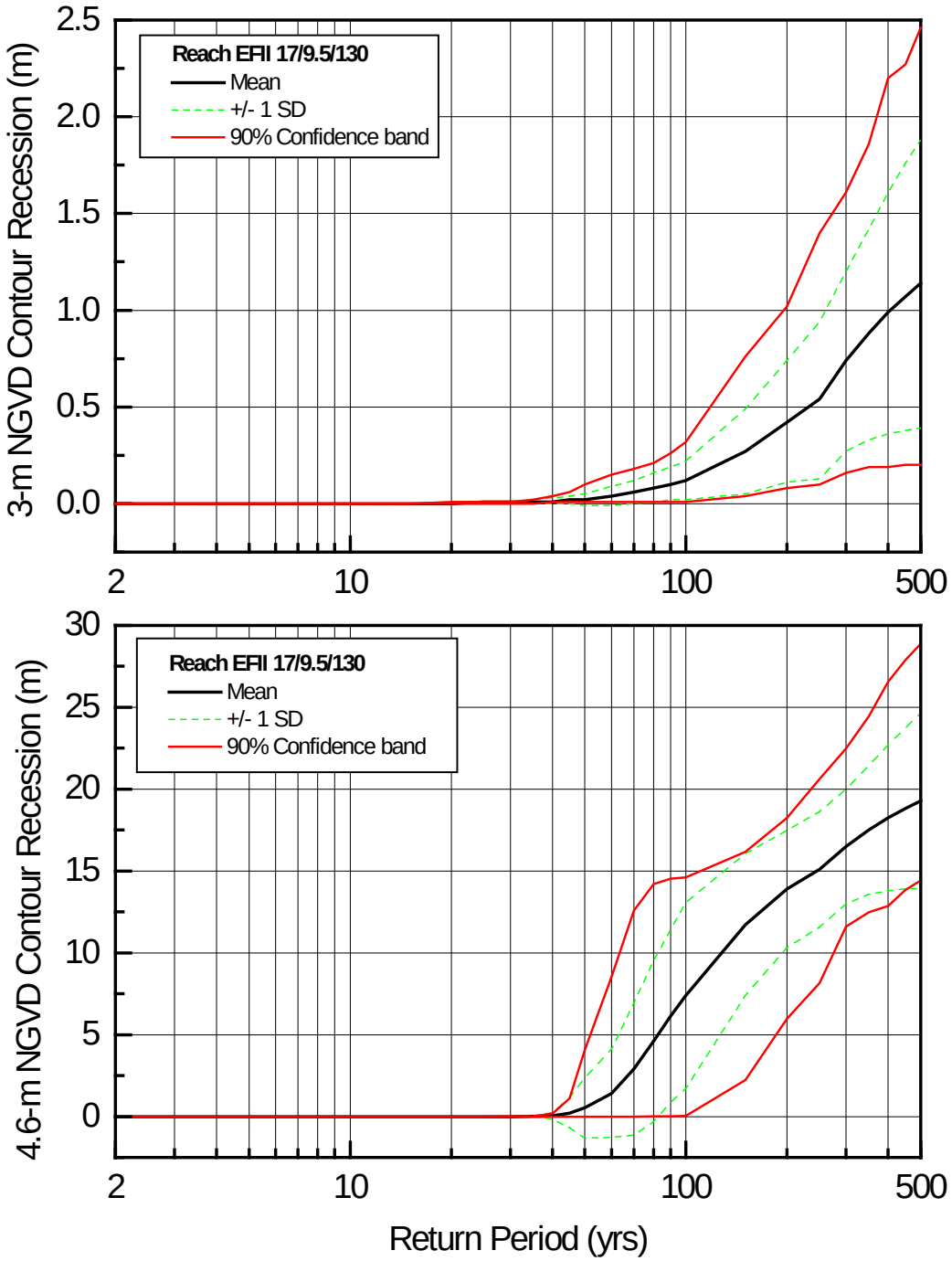

Reach EFII 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
5
10
15
20
2
10
100
500
Reach EFII 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
8
2
10
100
500
Return Period (yrs)

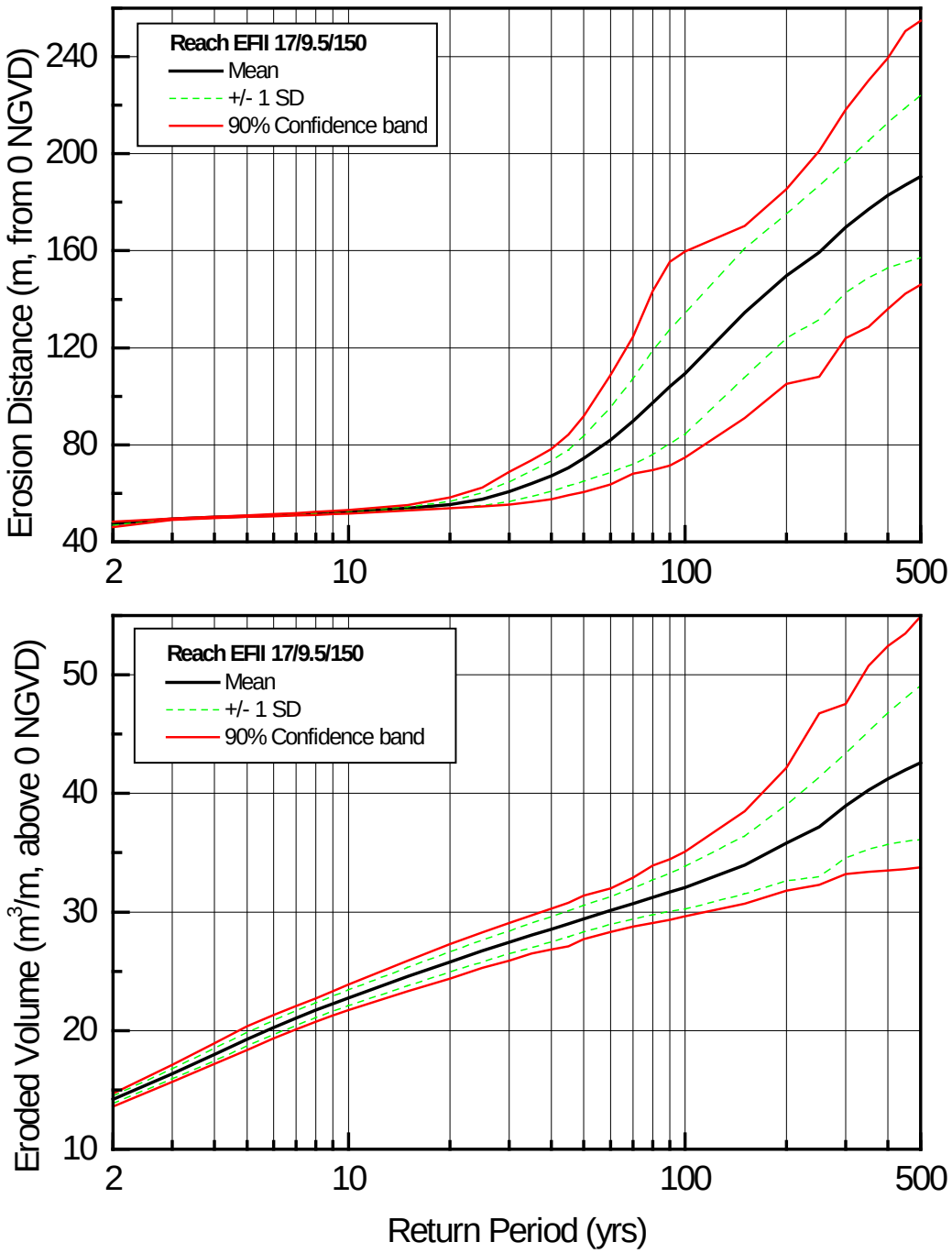

Reach EFII 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
3.75
3.50
3.25
3.00
2.75
2.50
2.25
2.00
1.75
2
10
100
500
Reach EFII 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

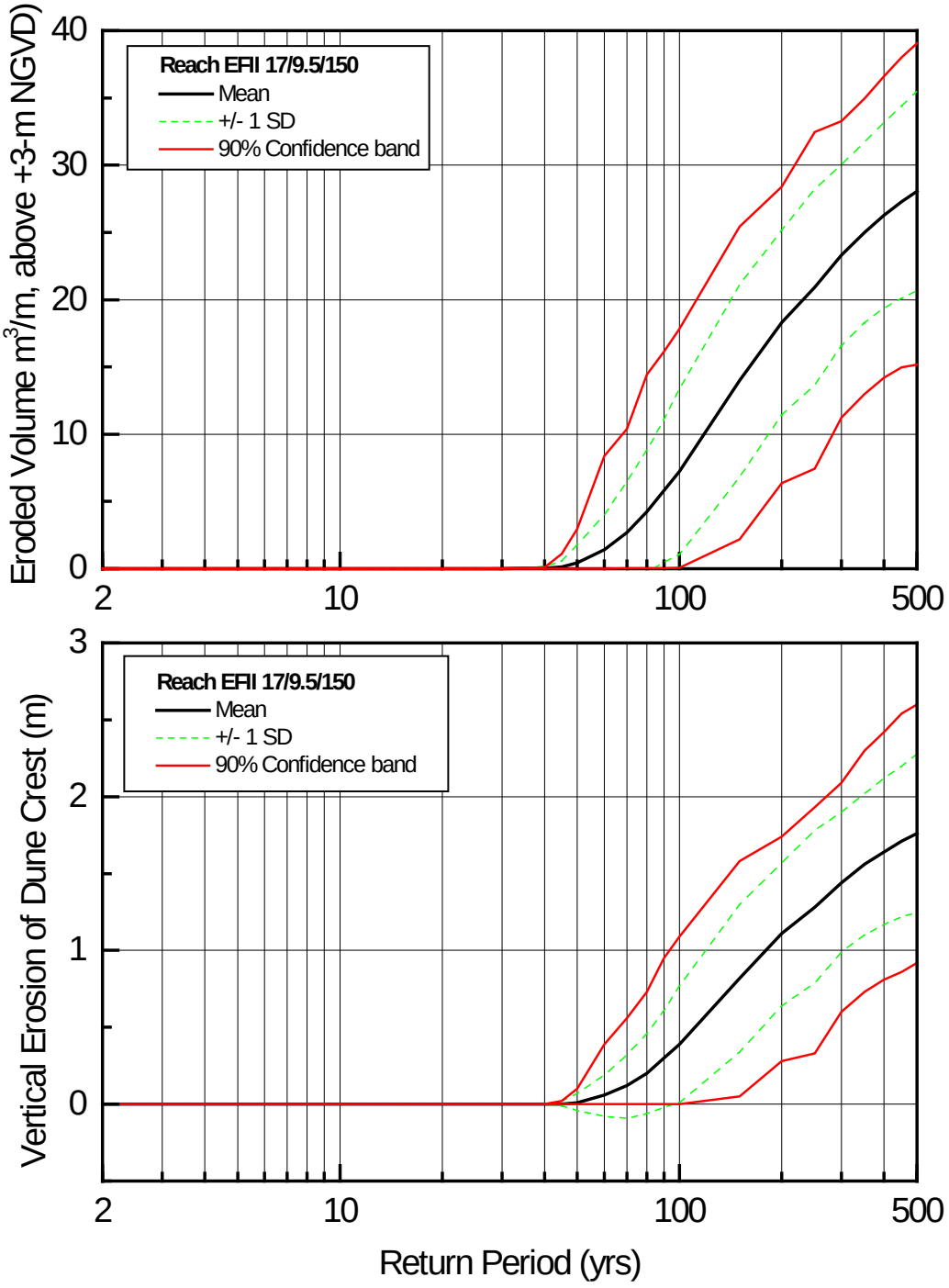

Max. Wave Setup Magnitude (m, above SWL)
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach EFII 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach EFII 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

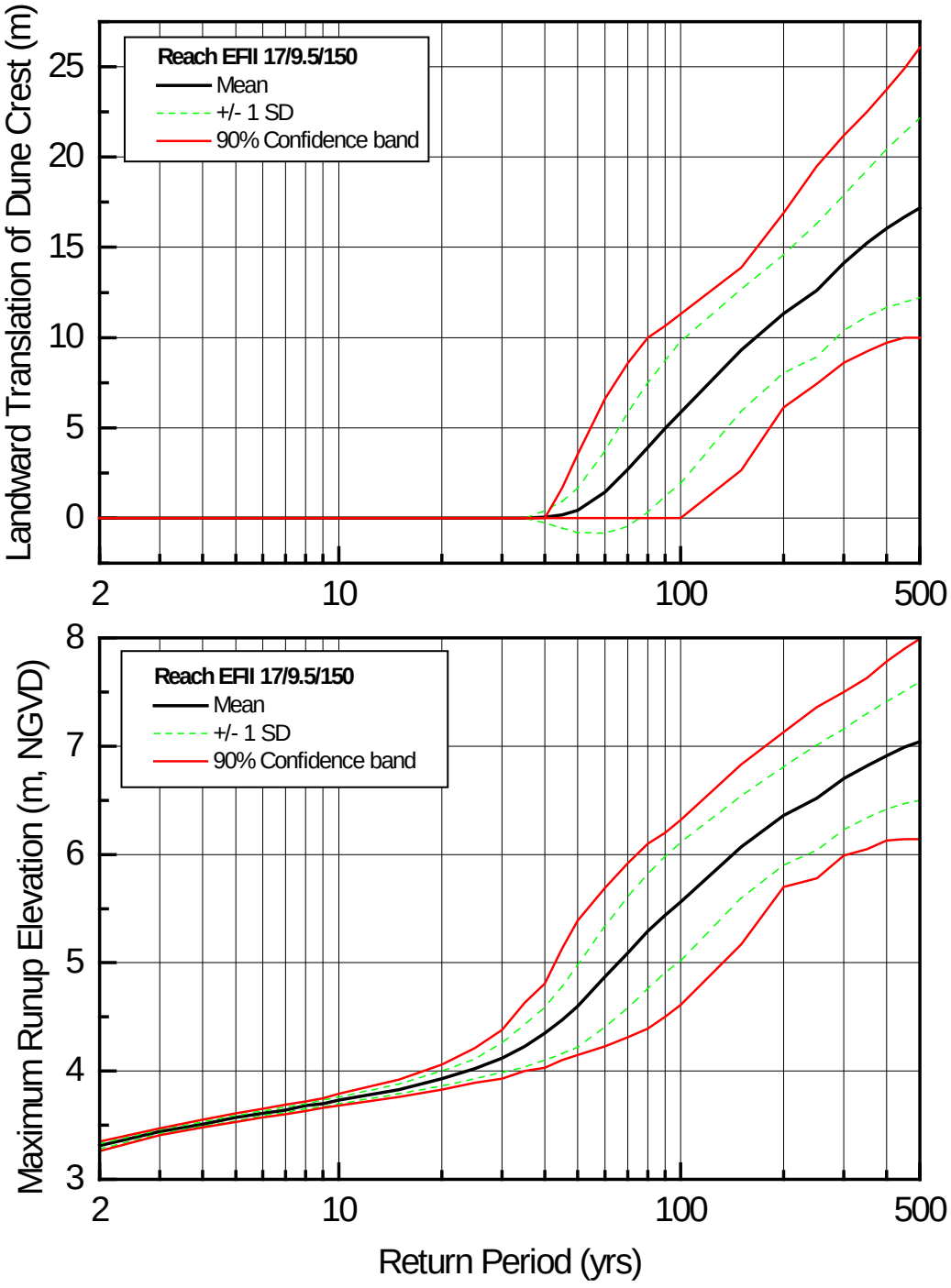

Max NS Wave Height (m, at landside surf zone)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach EFII 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
225
200
175
150
125
100
75
50
Reach EFII 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

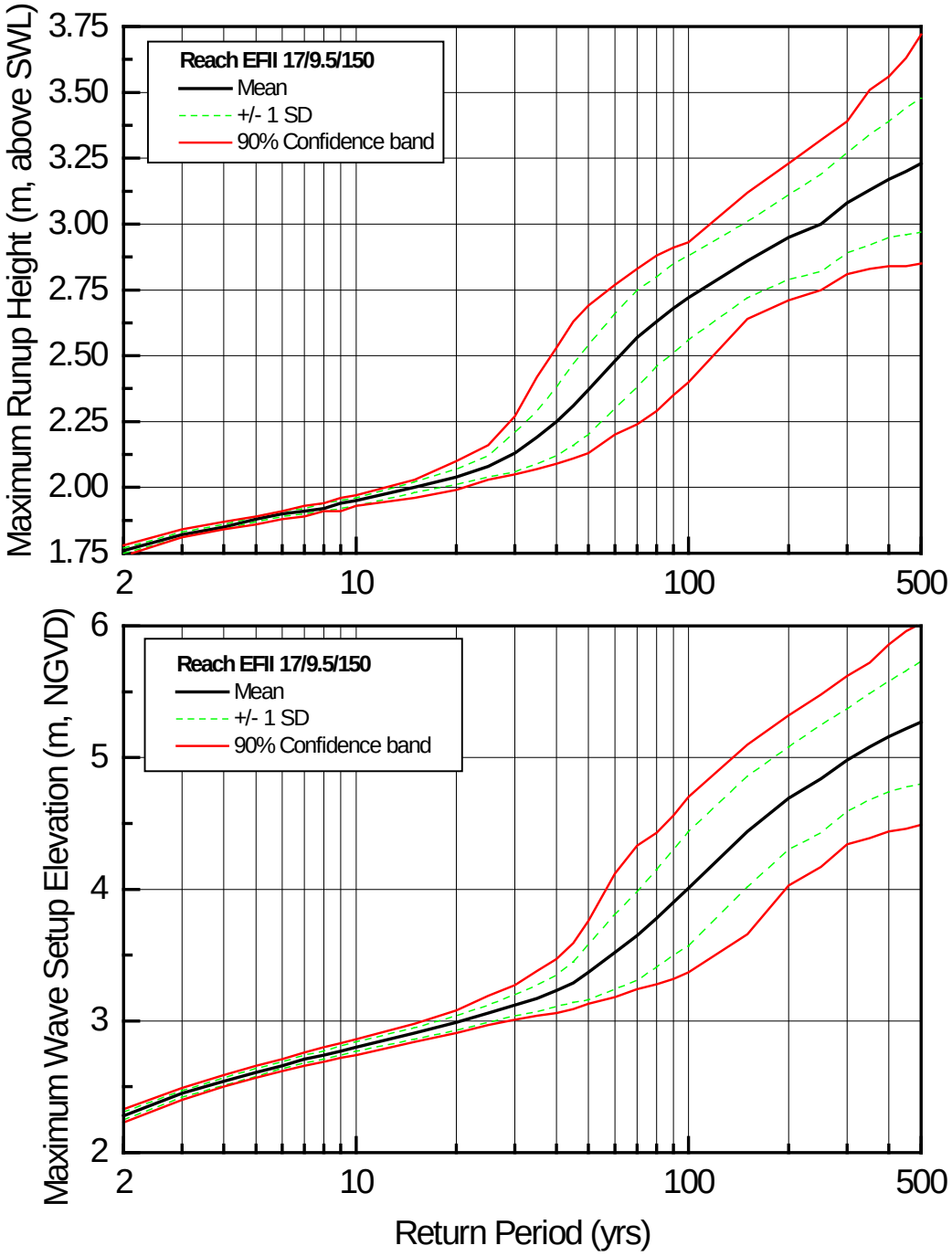

Reach EFII 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Reach EFII 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
15.0
12.5
10.0
7.5
5.0
2
10
100
500
Return Period (yrs)

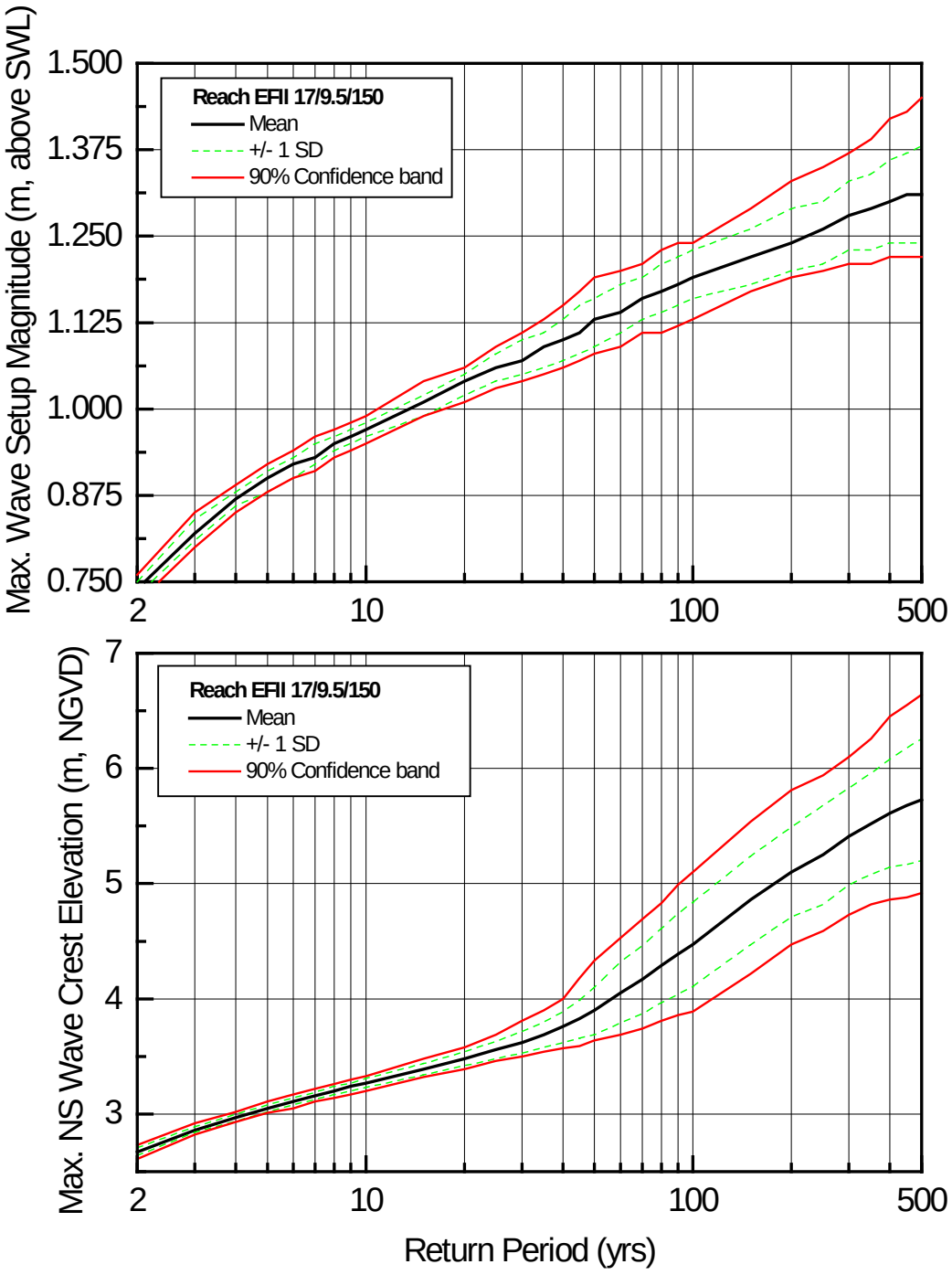

Reach EFII 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach EFII 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

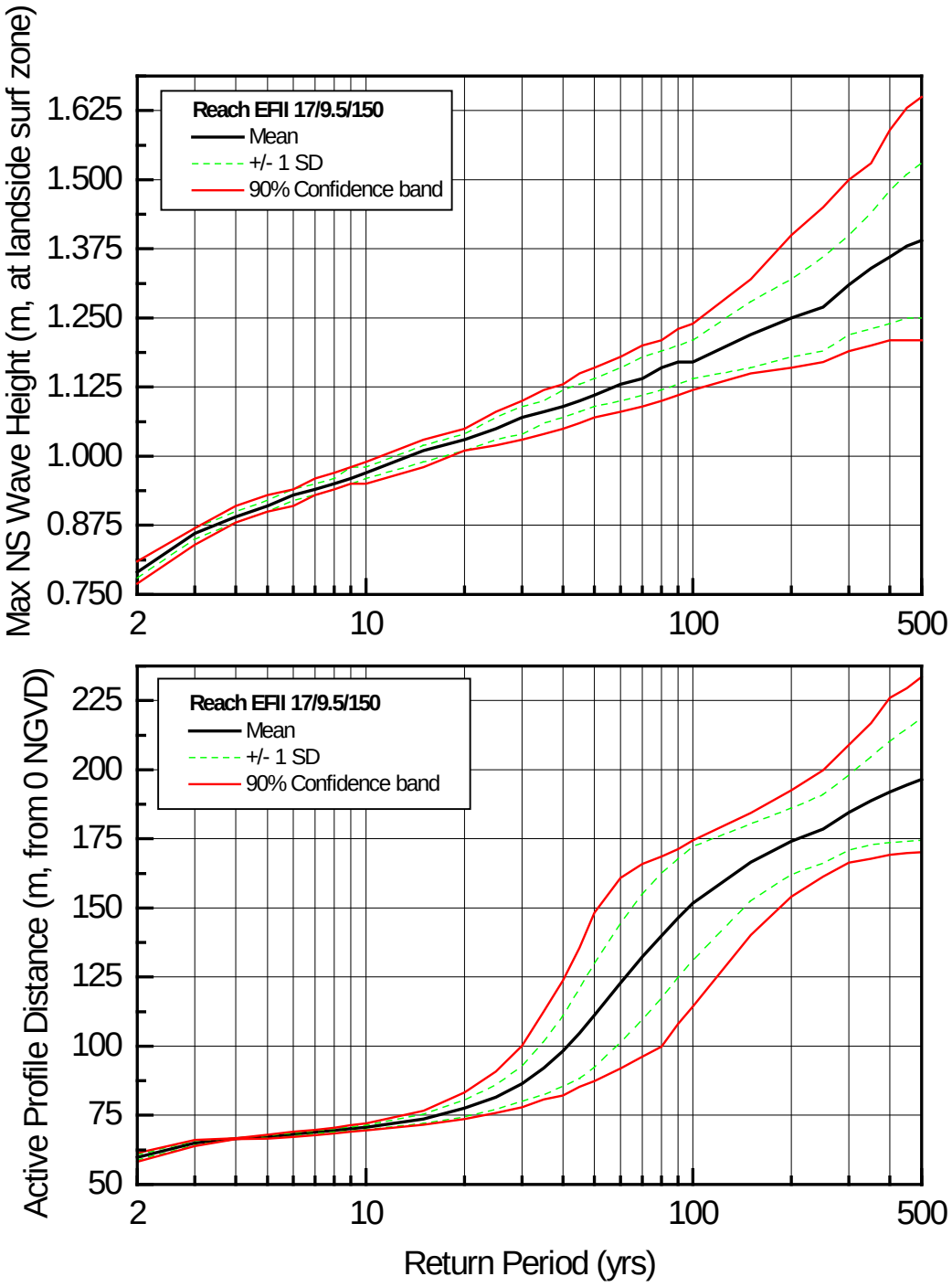

Reach EFII 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
240
200
160
120
80
40
2
10
100
500
Reach EFII 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
50
40
30
20
10
2
10
100
500
Return Period (yrs)

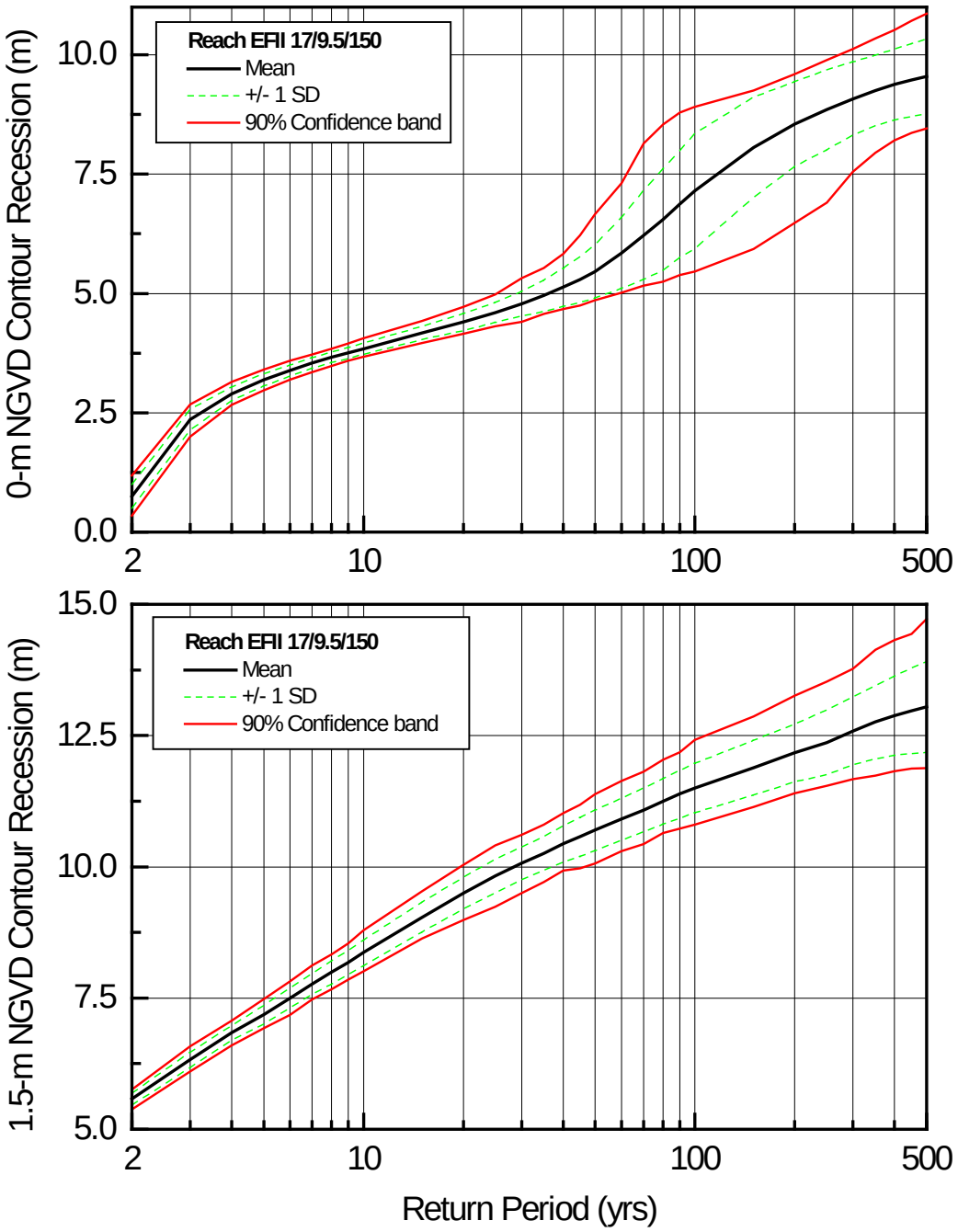

Reach EFII 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach EFII 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

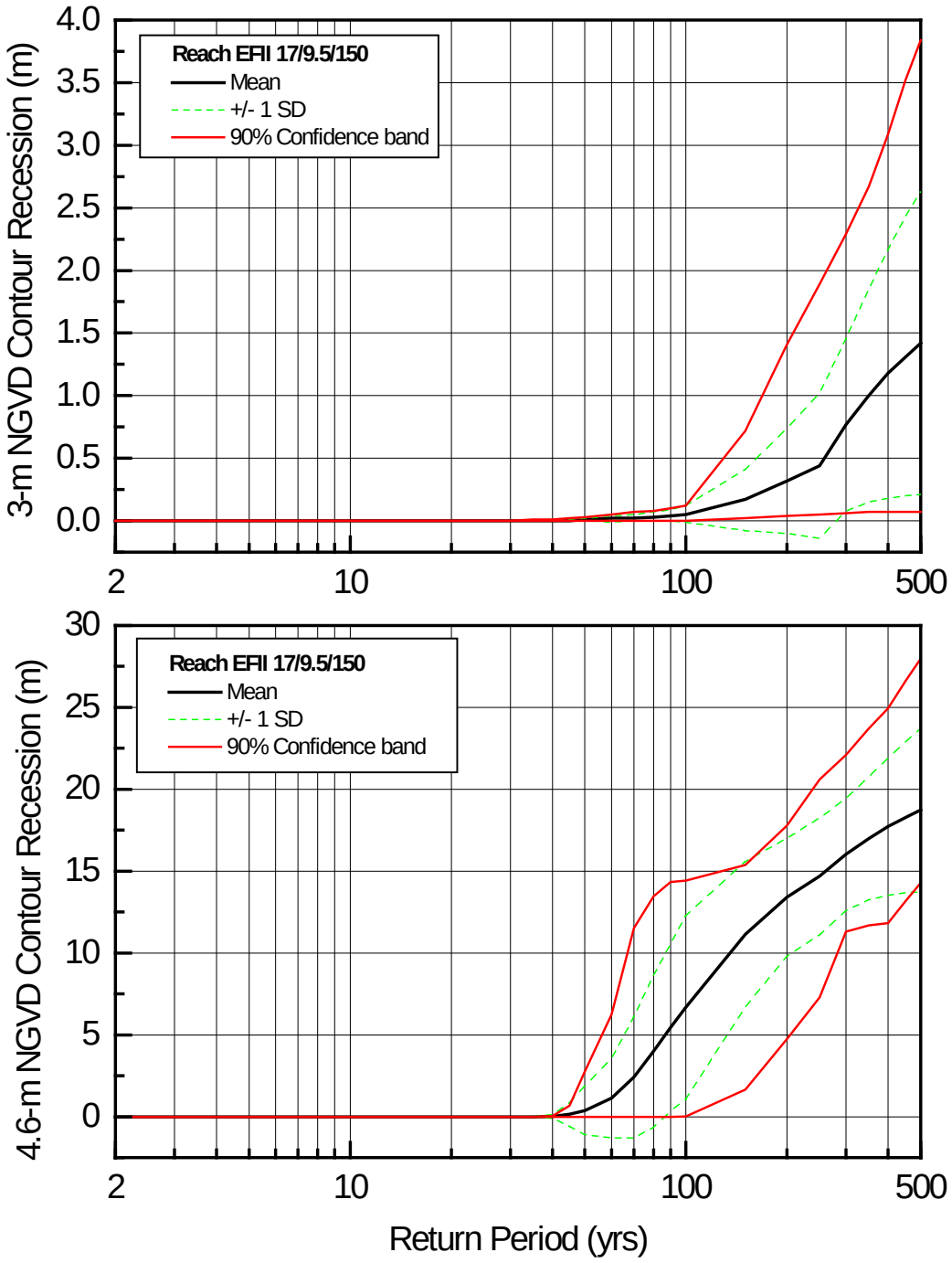

Reach EFII 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
5
10
15
20
25
2
10
100
500
Reach EFII 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
8
2
10
100
500
Return Period (yrs)

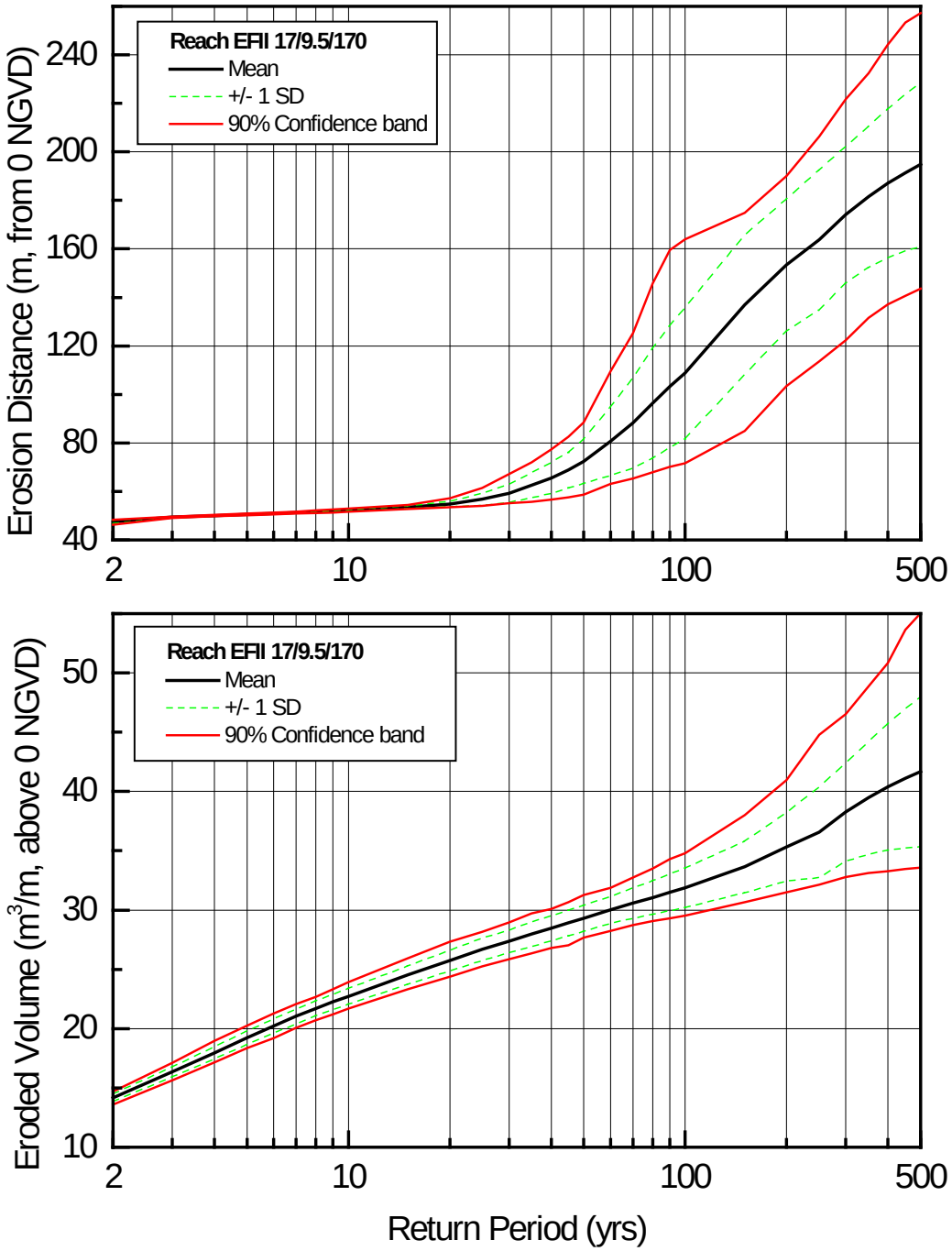

Maximum Runup Height (m, above SWL)
3.75
3.50
3.25
3.00
2.75
2.50
2.25
2.00
1.75
Reach EFII 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
Reach EFII 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

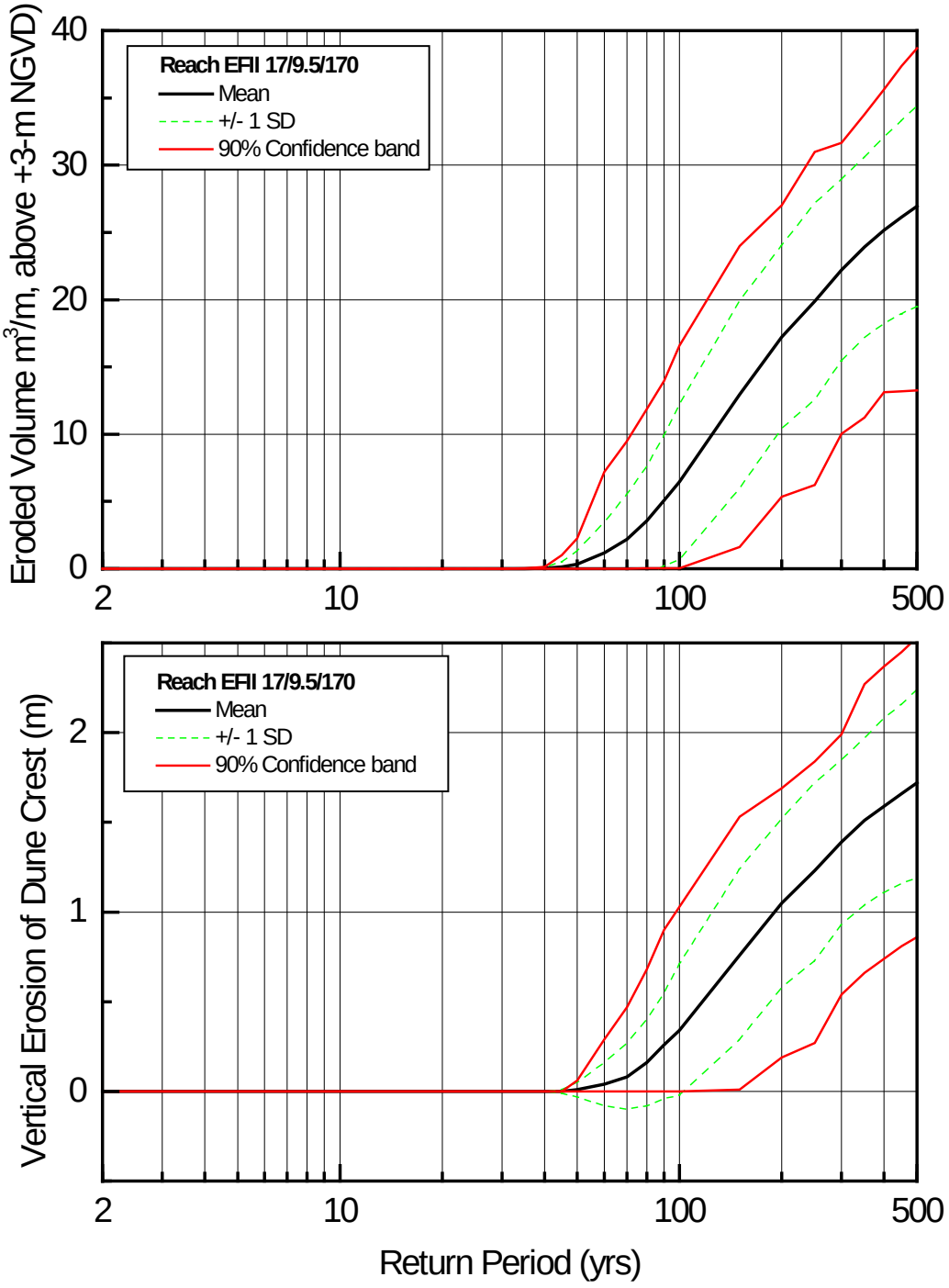

Max. Wave Setup Magnitude (m, above SWL)
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach EFII 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach EFII 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

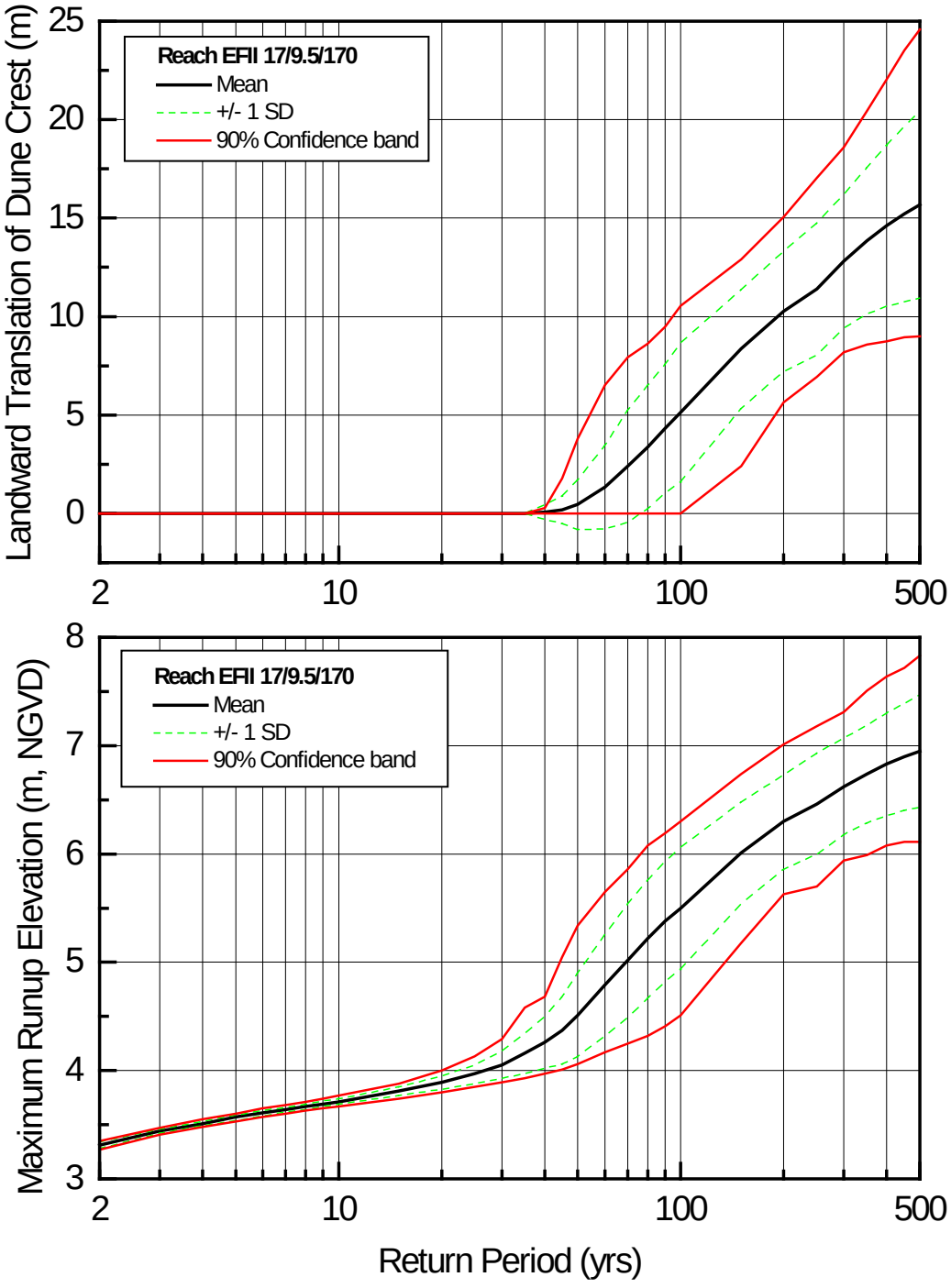

Reach EFII 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Max NS Wave Height (m, at landside surf zone)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
2
10
100
500
Reach EFII 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Active Profile Distance (m, from 0 NGVD)
225
200
175
150
125
100
75
50
2
10
100
500
Return Period (yrs)

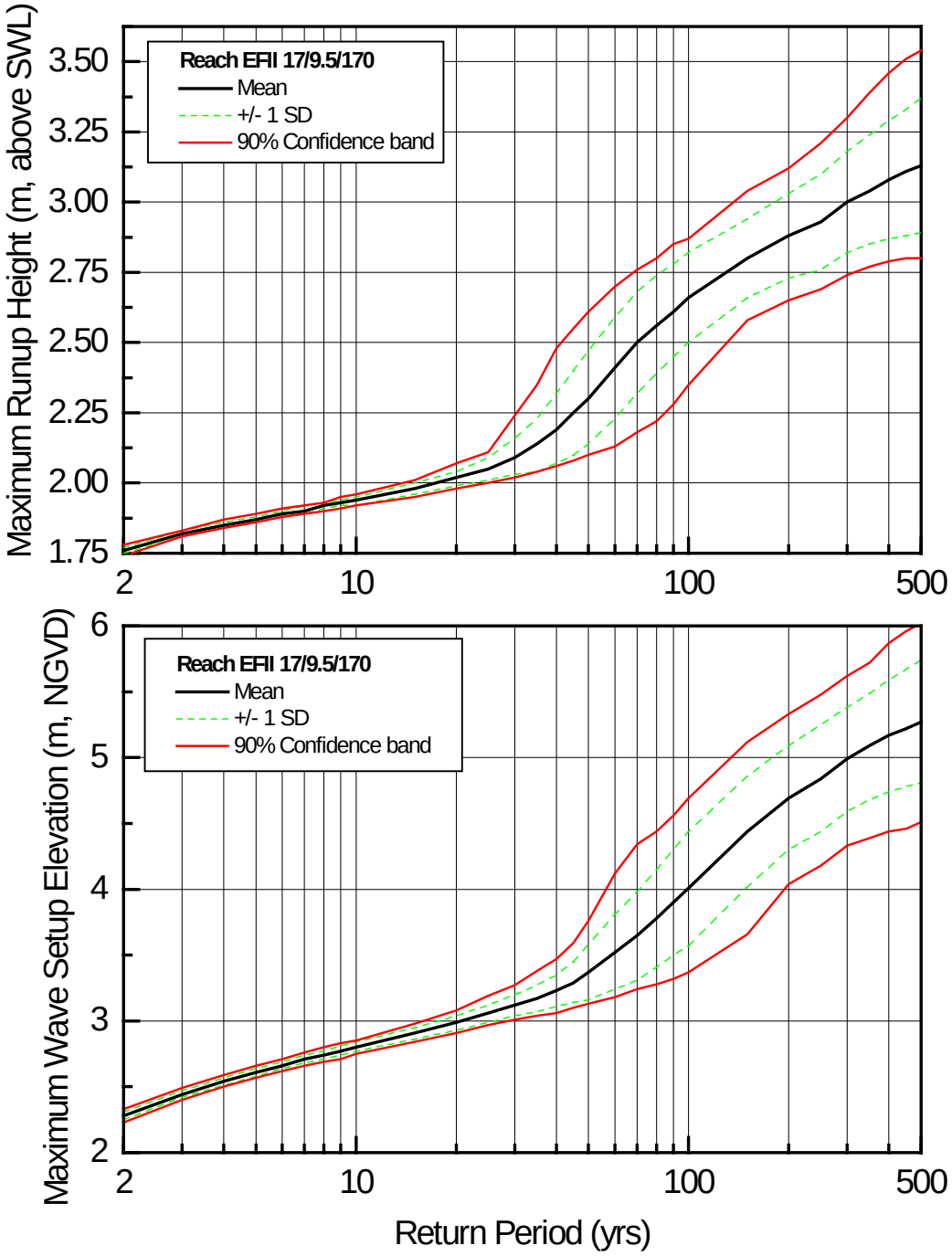

Reach EFII 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Reach EFII 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
15.0
12.5
10.0
7.5
5.0
2
10
100
500
Return Period (yrs)

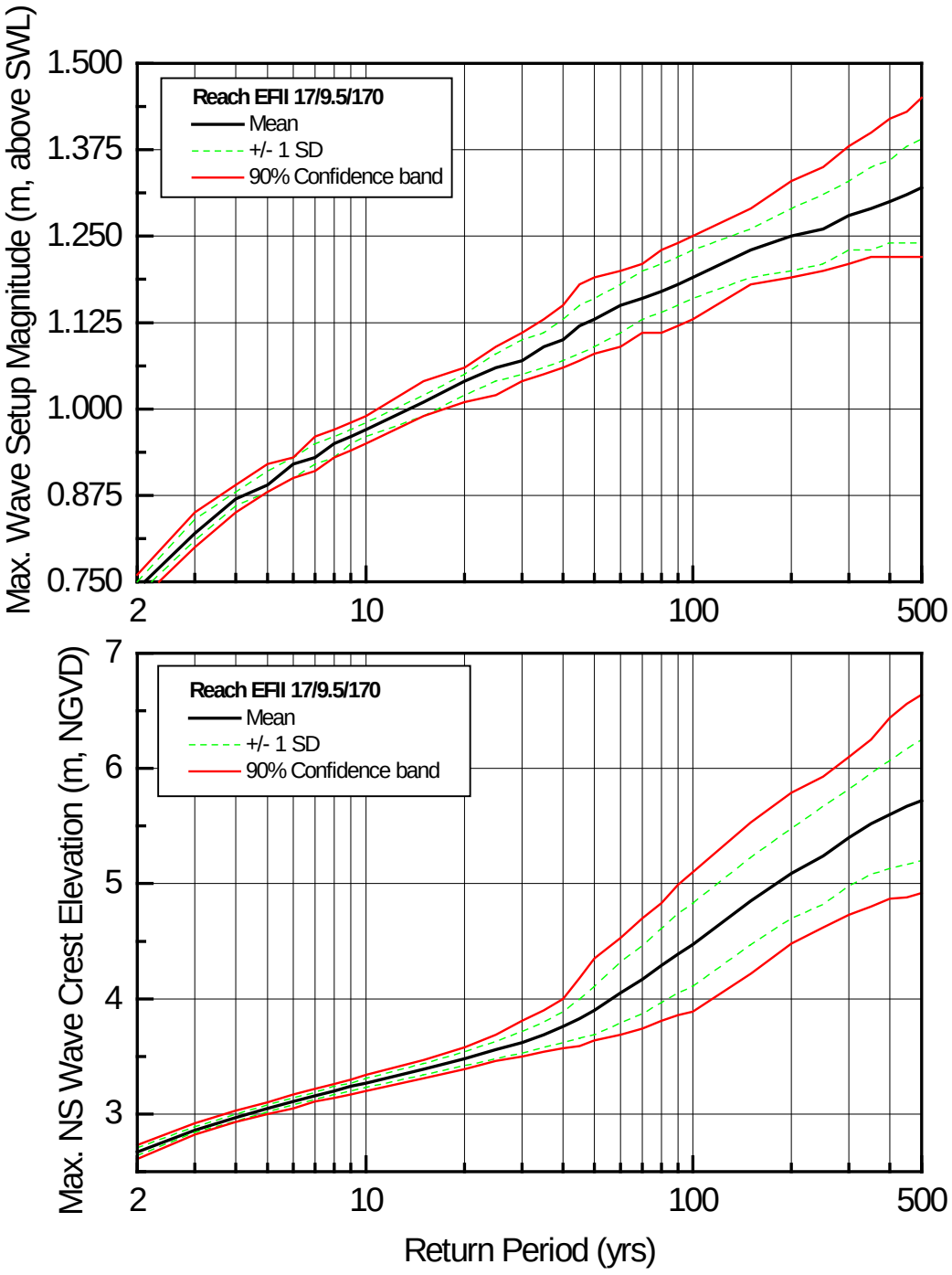

Reach EFII 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach EFII 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

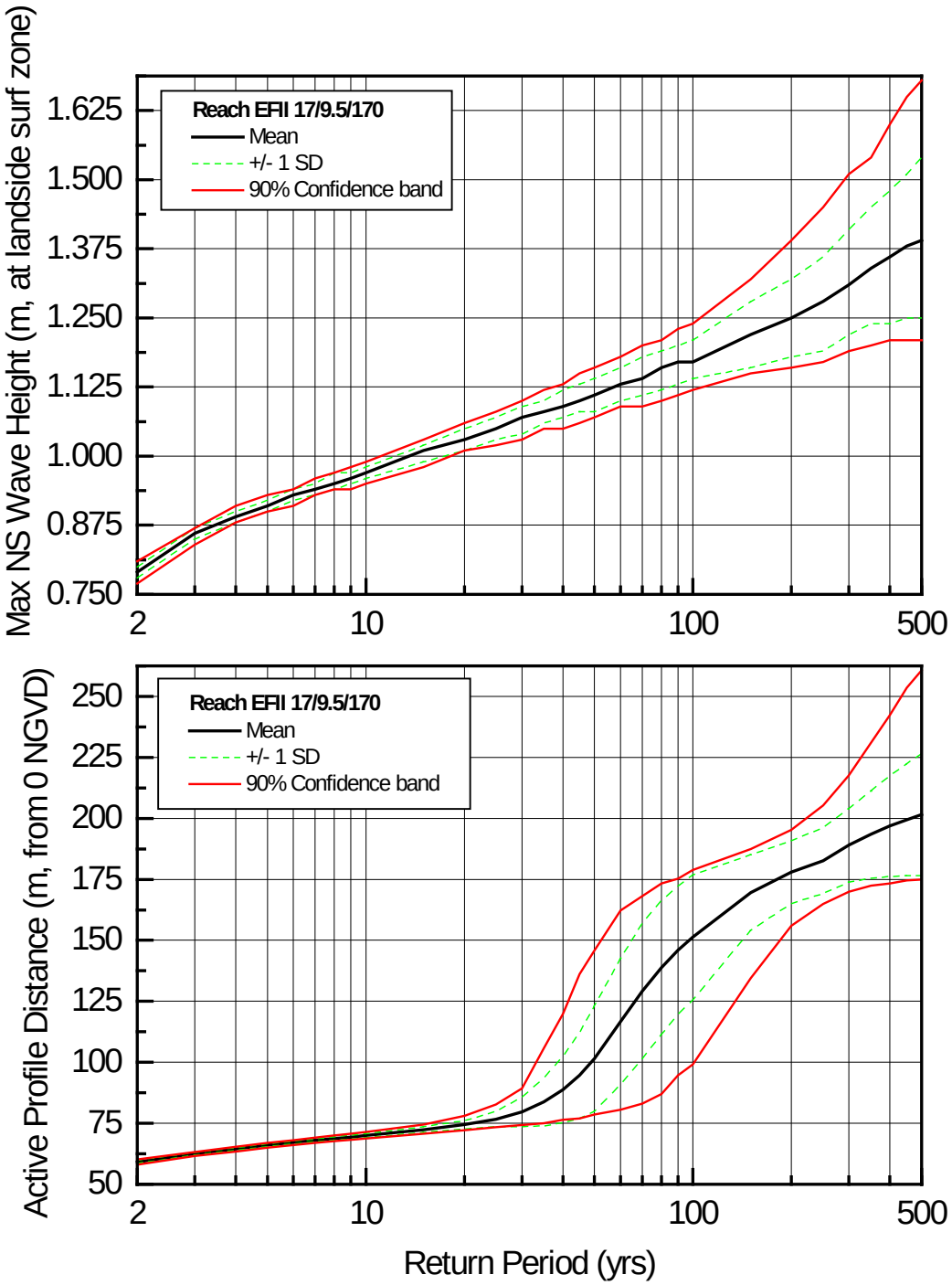

Reach EFII 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
240
200
160
120
80
40
2
10
100
500
Reach EFII 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
50
40
30
20
10
2
10
100
500
Return Period (yrs)

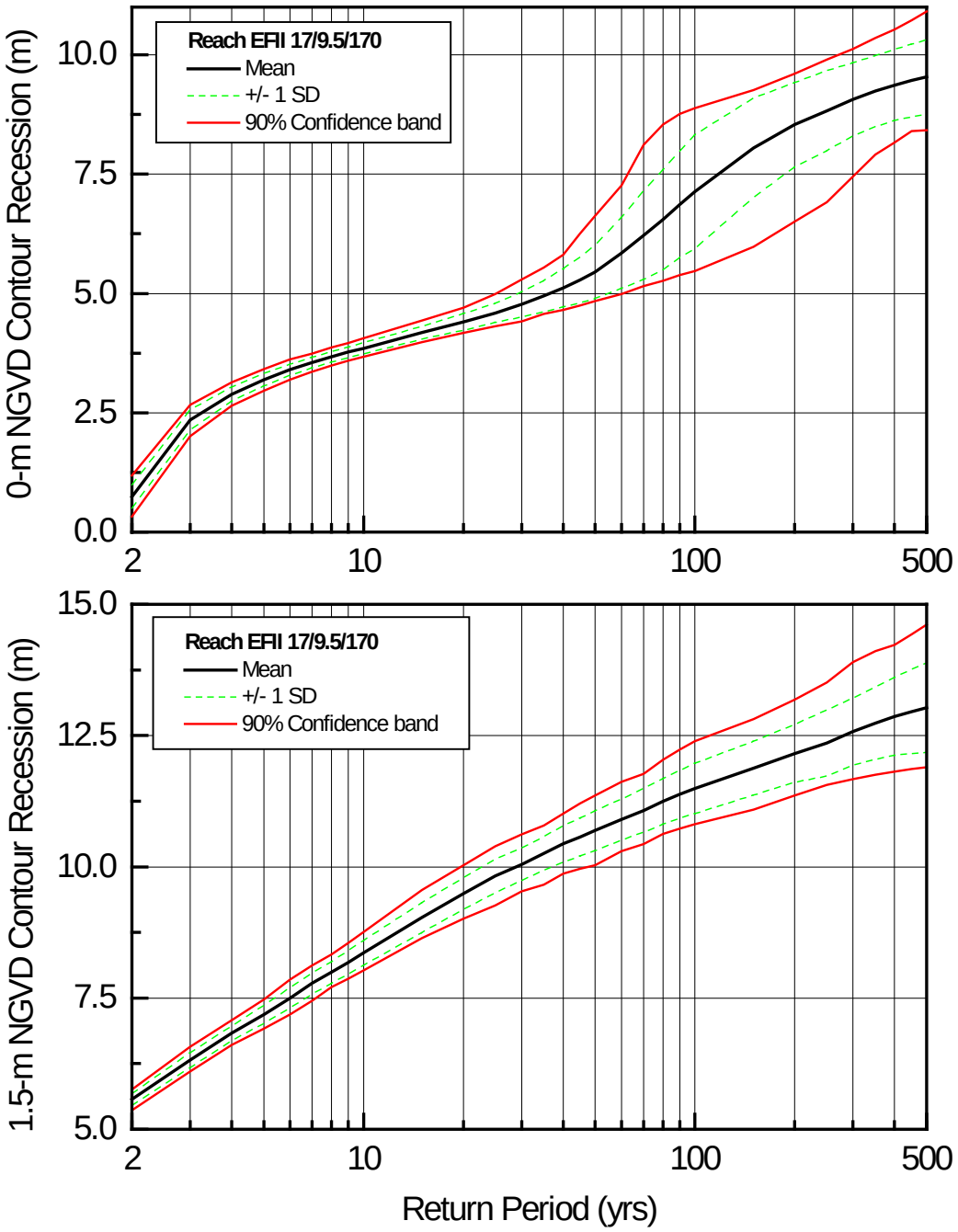

Reach EFII 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach EFII 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
2
10
100
500
Return Period (yrs)

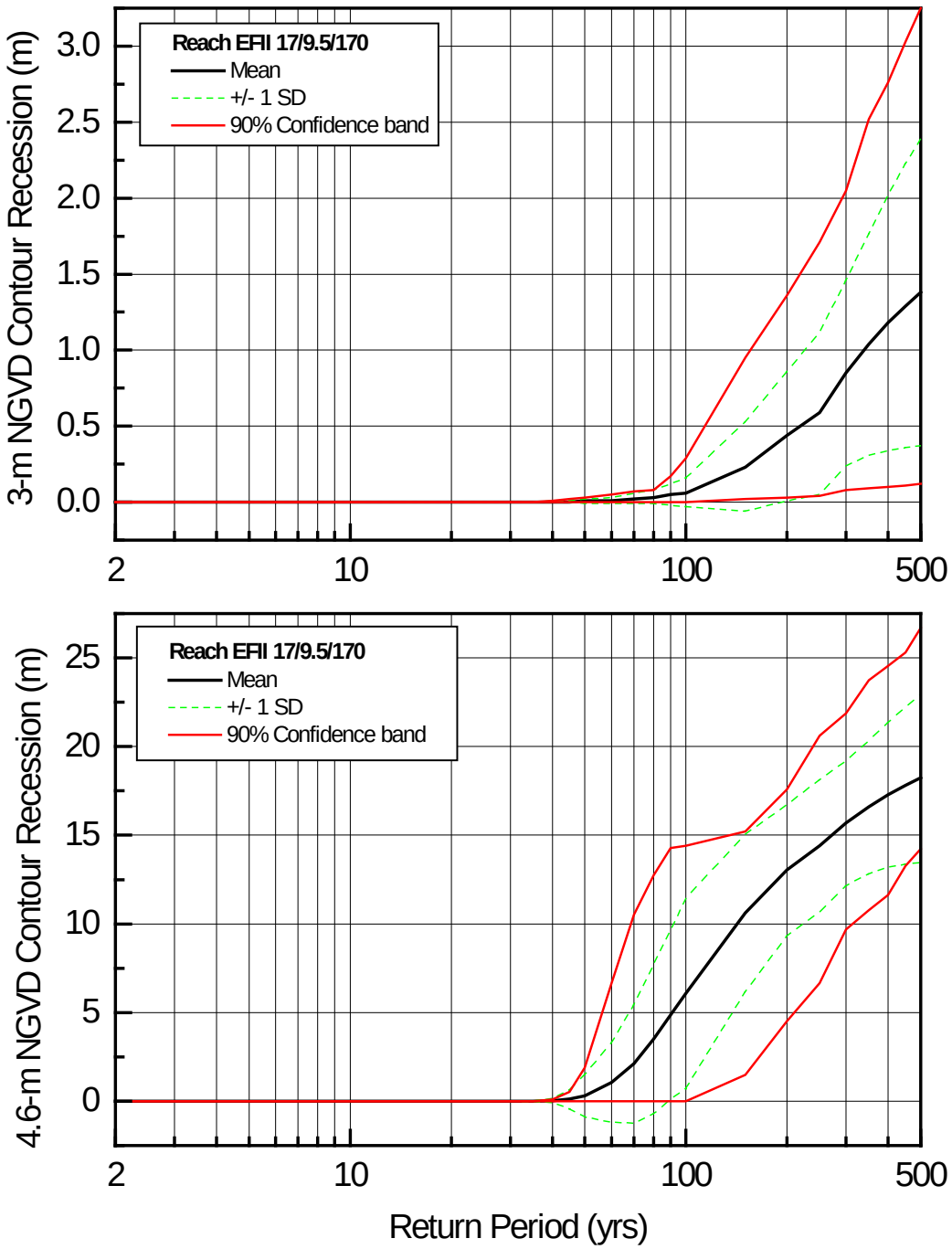

Reach EFII 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
25
20
15
10
5
0
2
10
100
500
Reach EFII 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
3
2
10
100
500
Return Period (yrs)

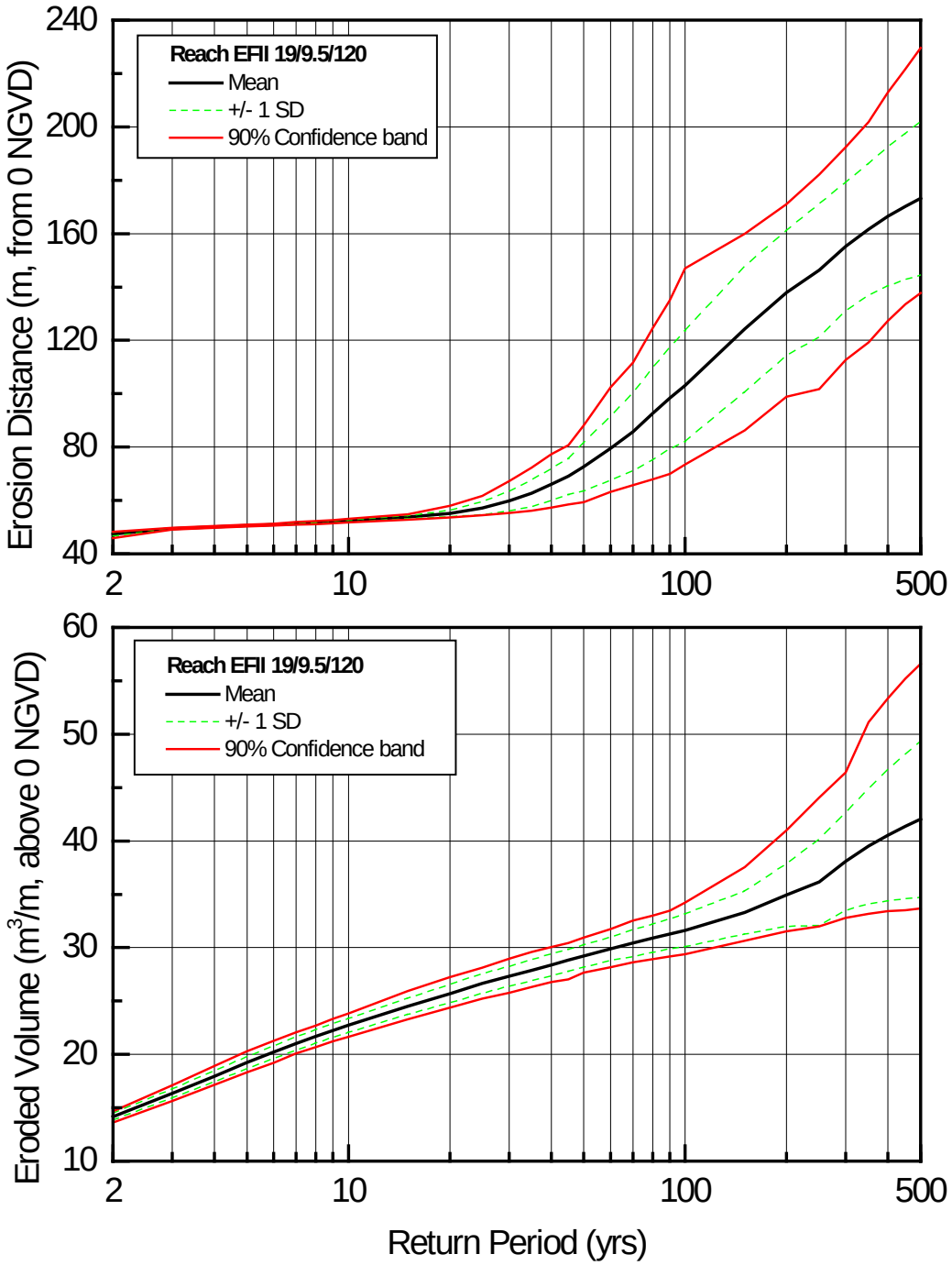

Reach EFII 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
3.50
3.25
3.00
2.75
2.50
2.25
2.00
1.75
2
10
100
500
Reach EFII 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

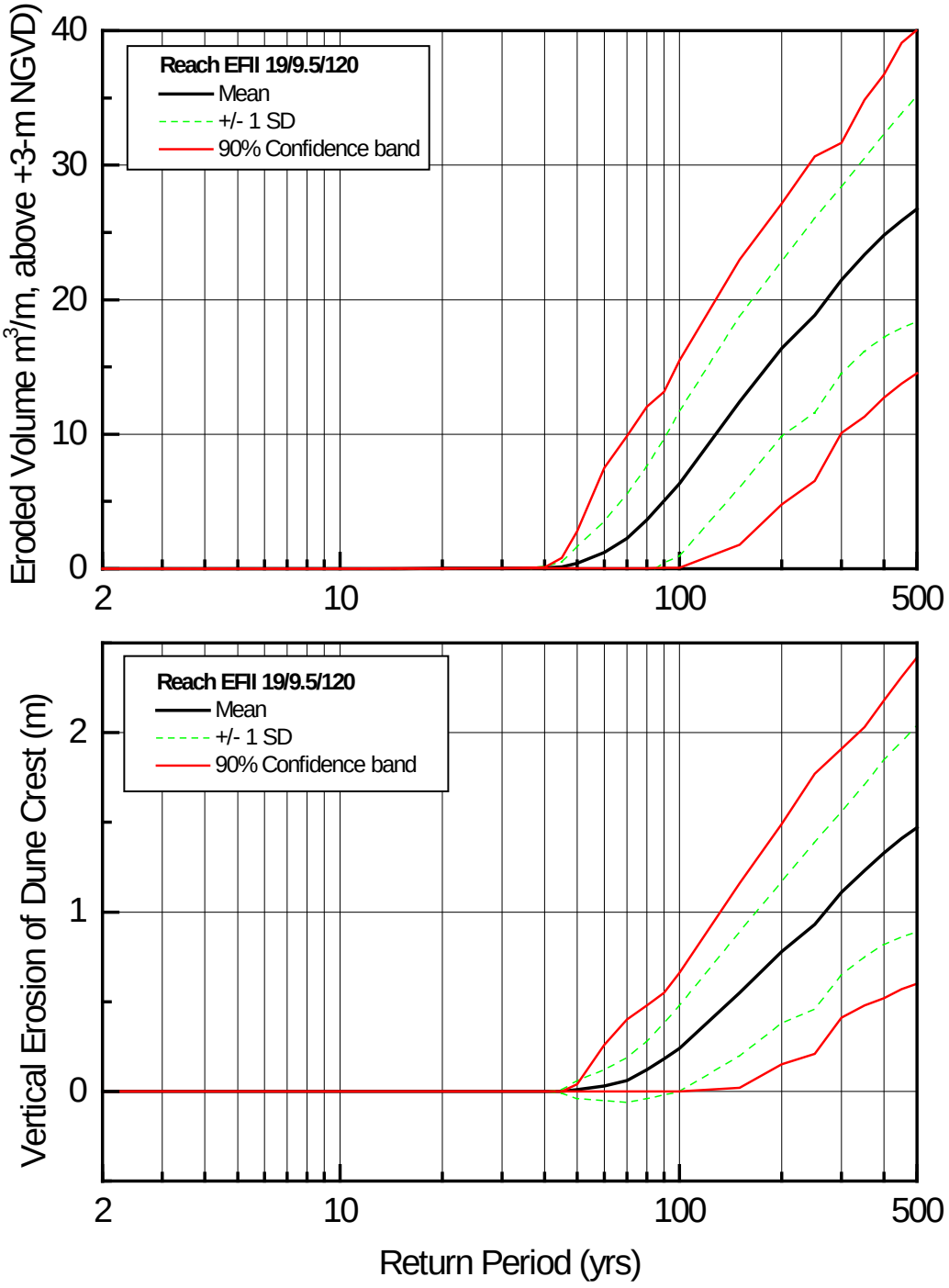

Max. Wave Setup Magnitude (m, above SWL)
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach EFII 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach EFII 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

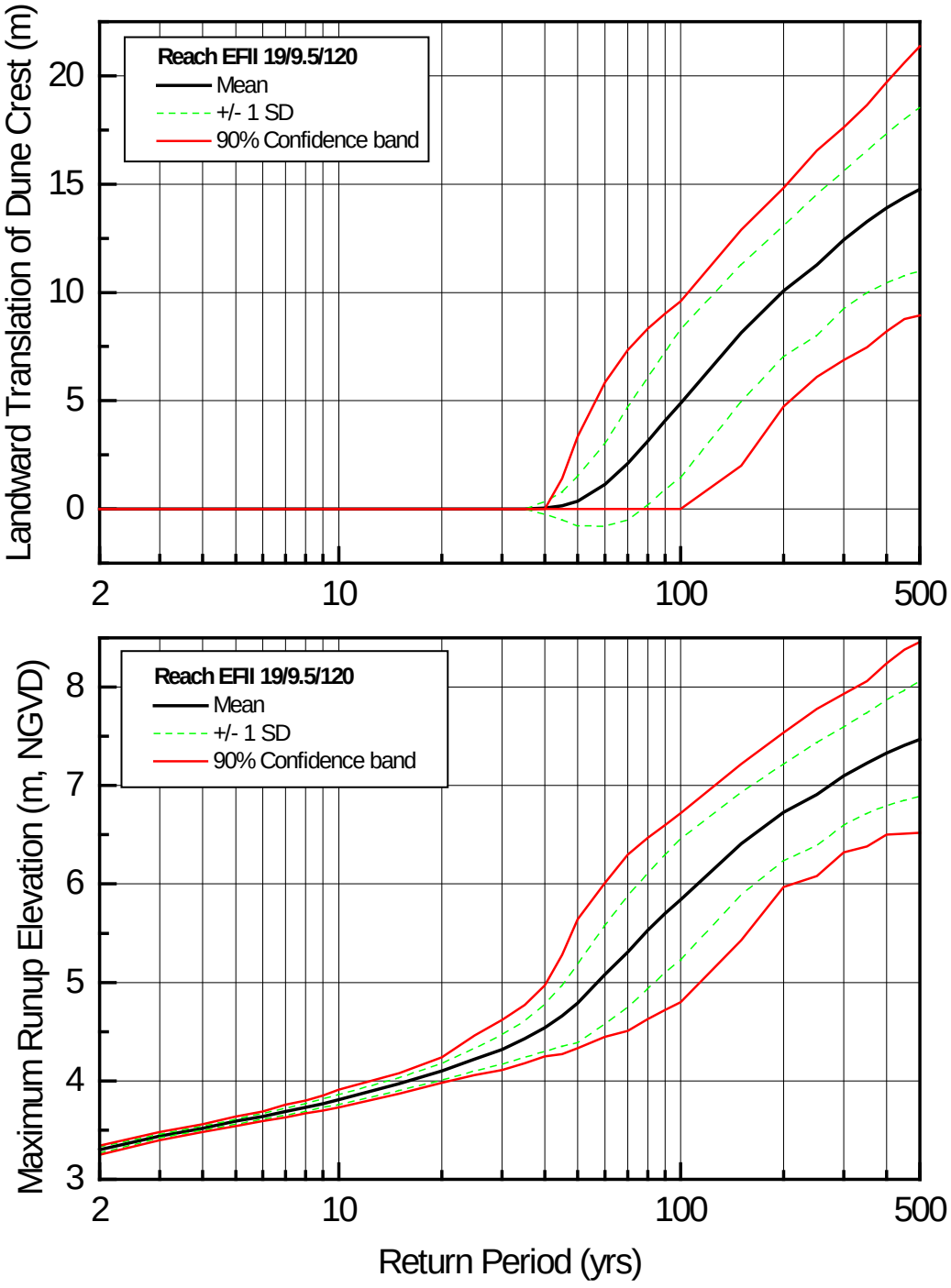

Reach EFII 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Max NS Wave Height (m, at landside surf zone)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
2
10
100
500
Reach EFII 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Active Profile Distance (m, from 0 NGVD)
250
225
200
175
150
125
100
75
50
2
10
100
500
Return Period (yrs)

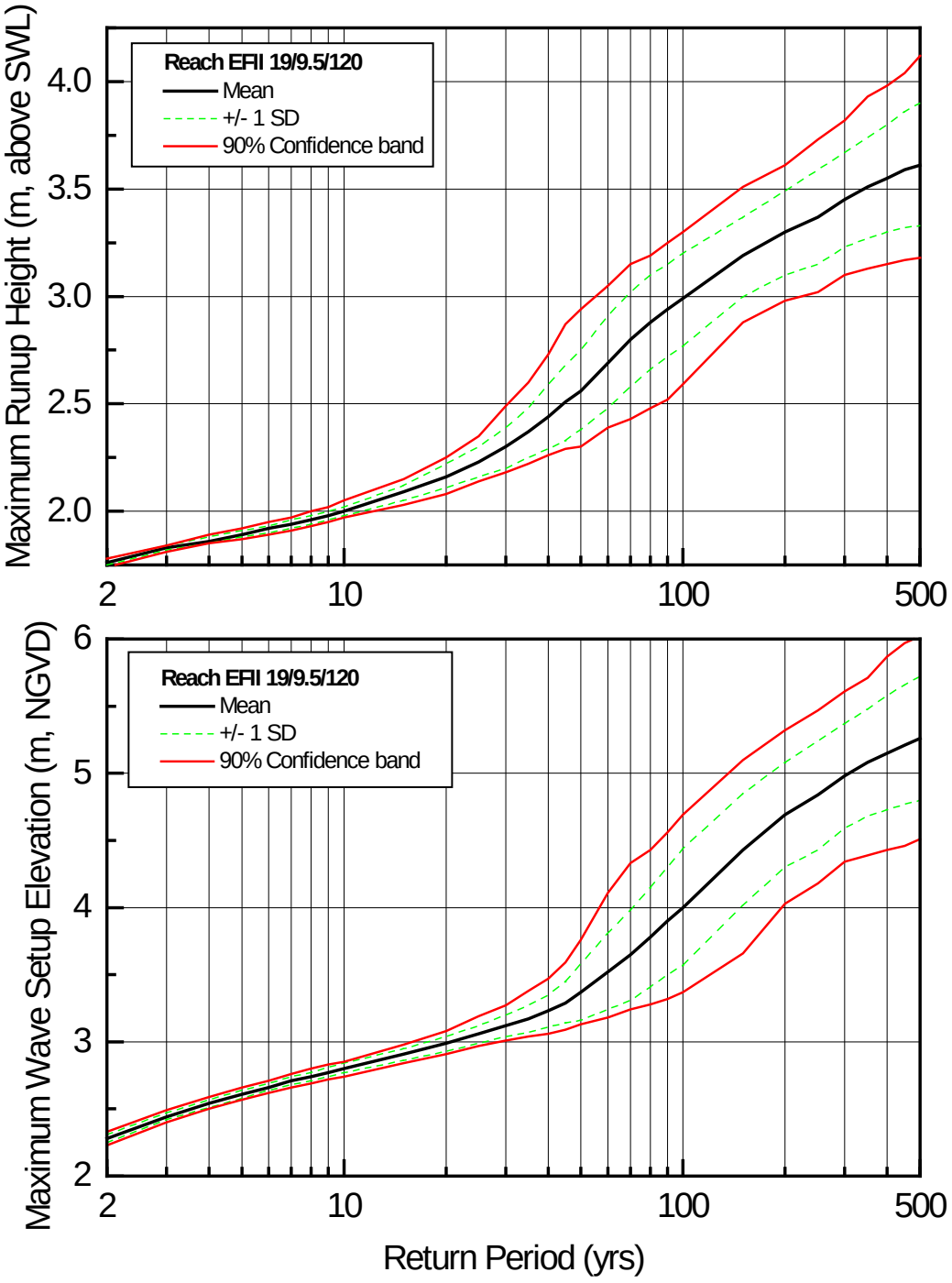

Reach EFII 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Reach EFII 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
15.0
12.5
10.0
7.5
5.0
2
10
100
500
Return Period (yrs)

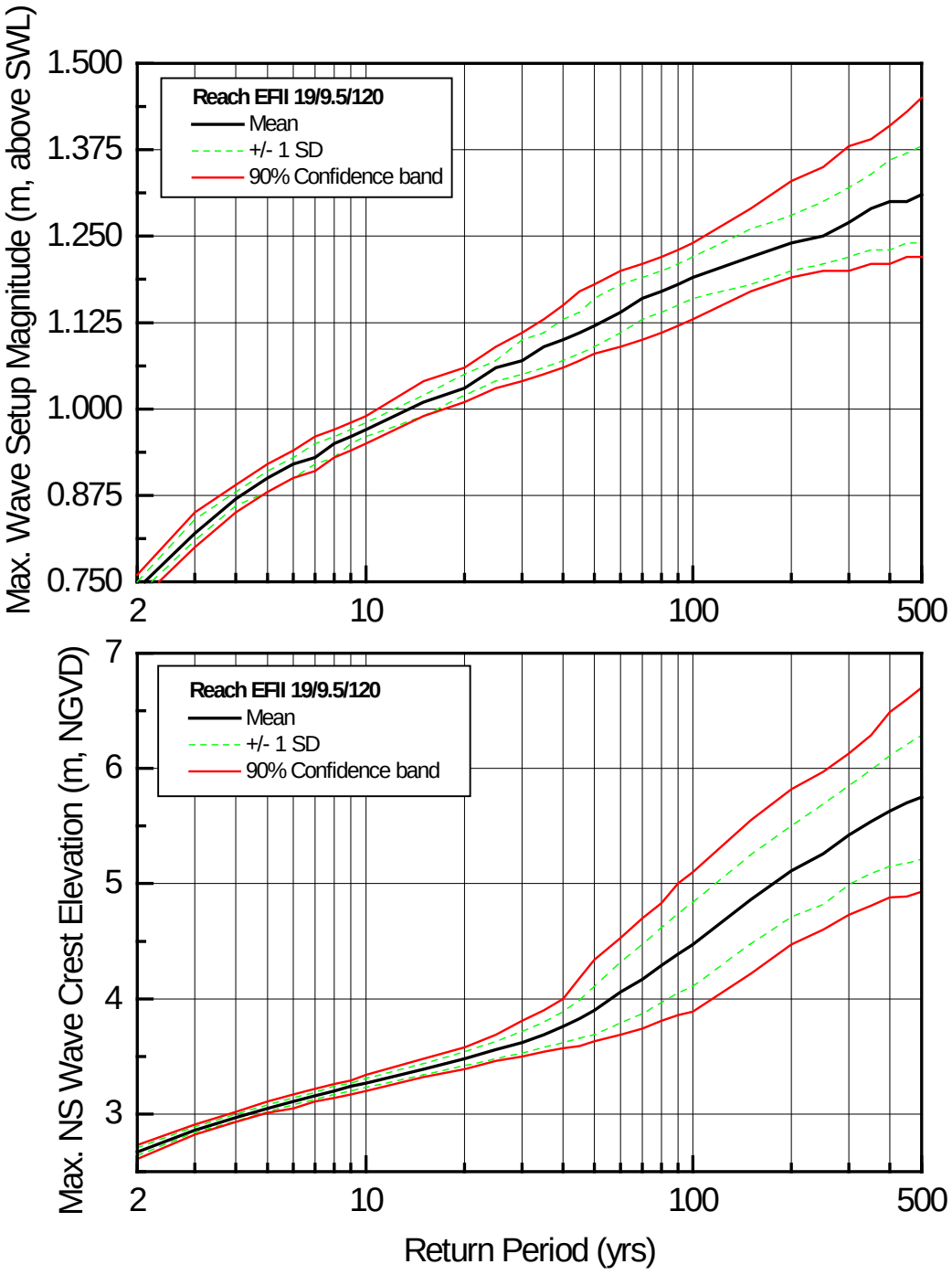

Reach EFII 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach EFII 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

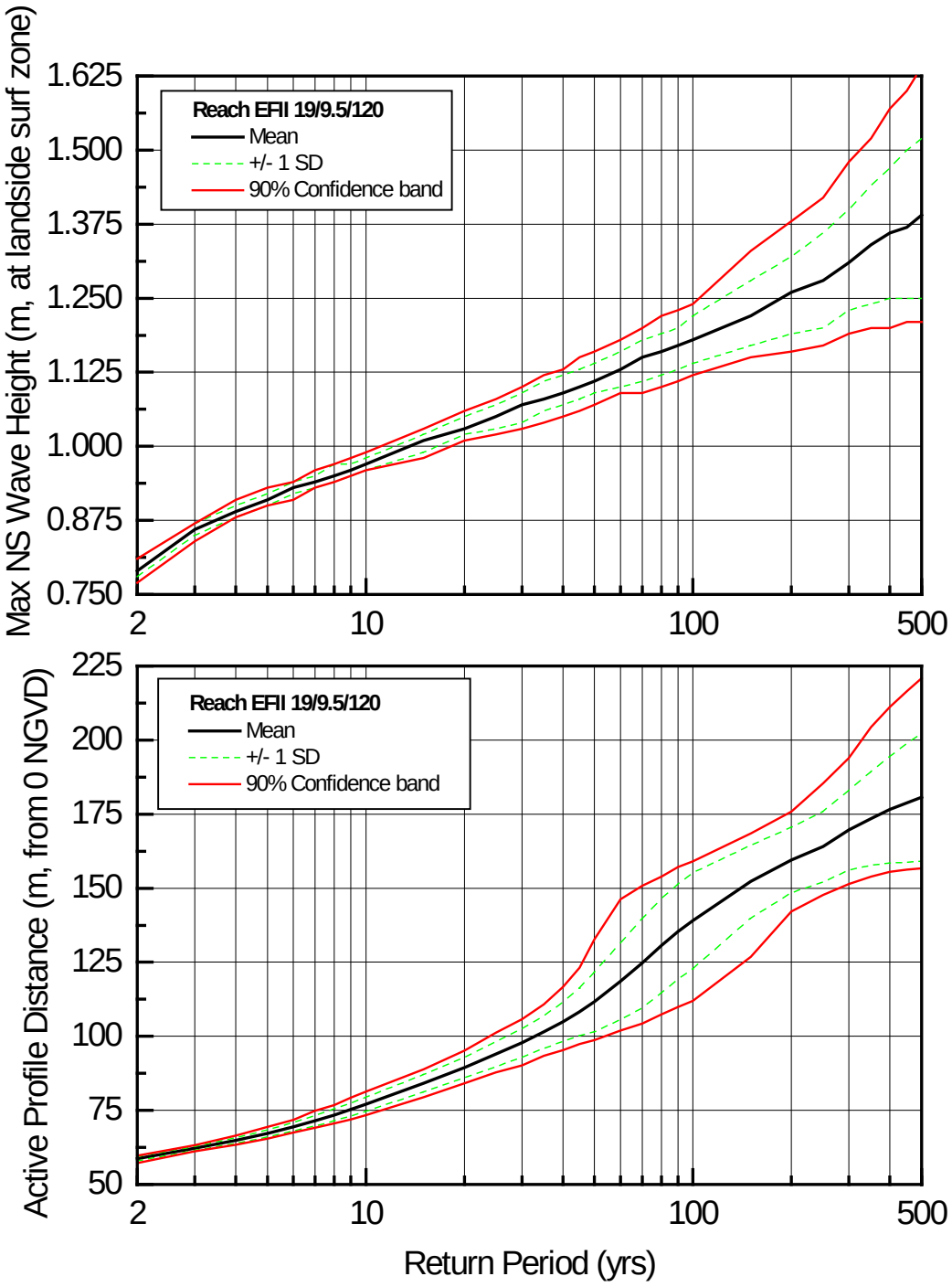

Reach EFII 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
240
200
160
120
80
40
2
10
100
500
Reach EFII 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
20
10
2
10
100
500
Return Period (yrs)

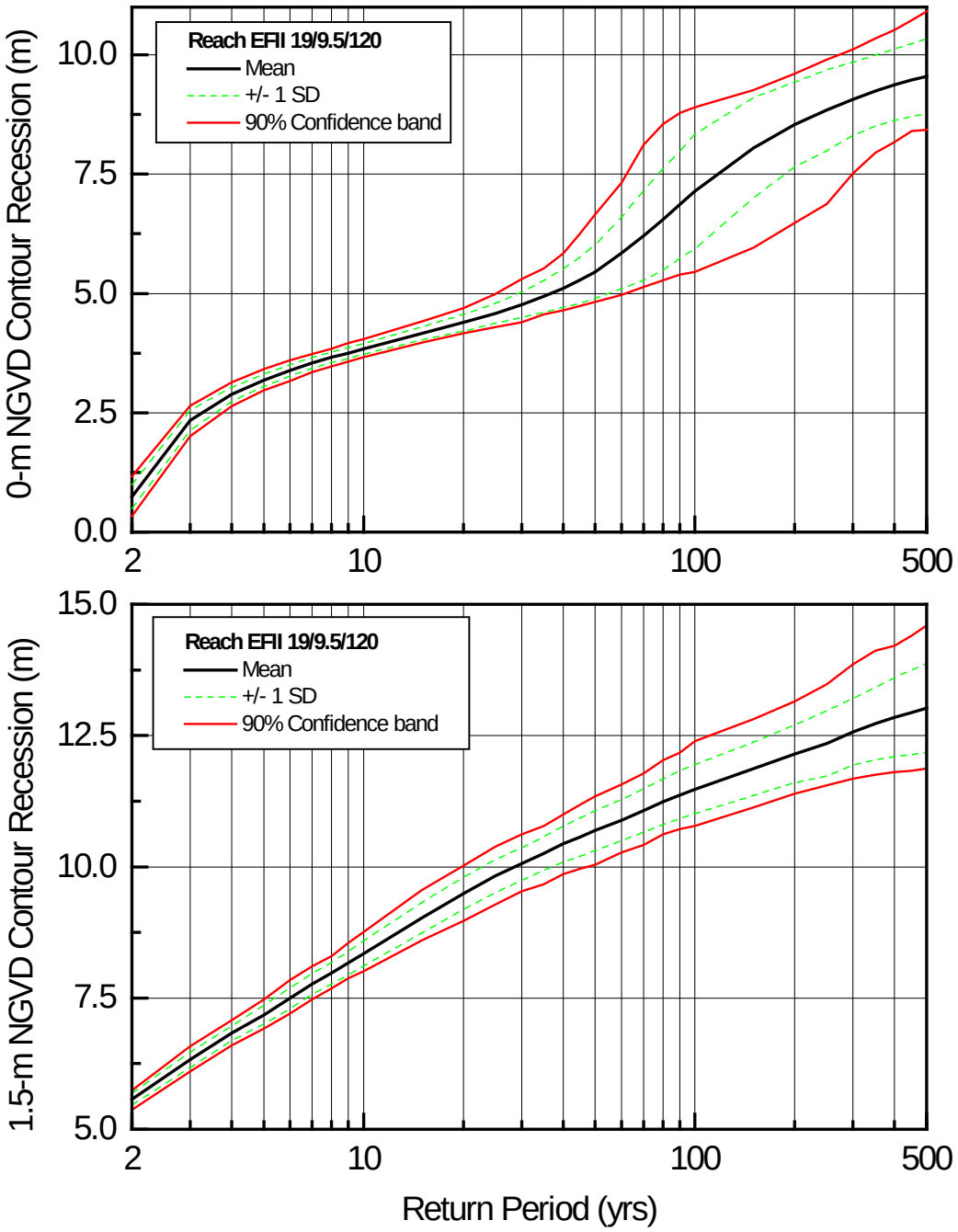

Reach EFII 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach EFII 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
2
10
100
500
Return Period (yrs)

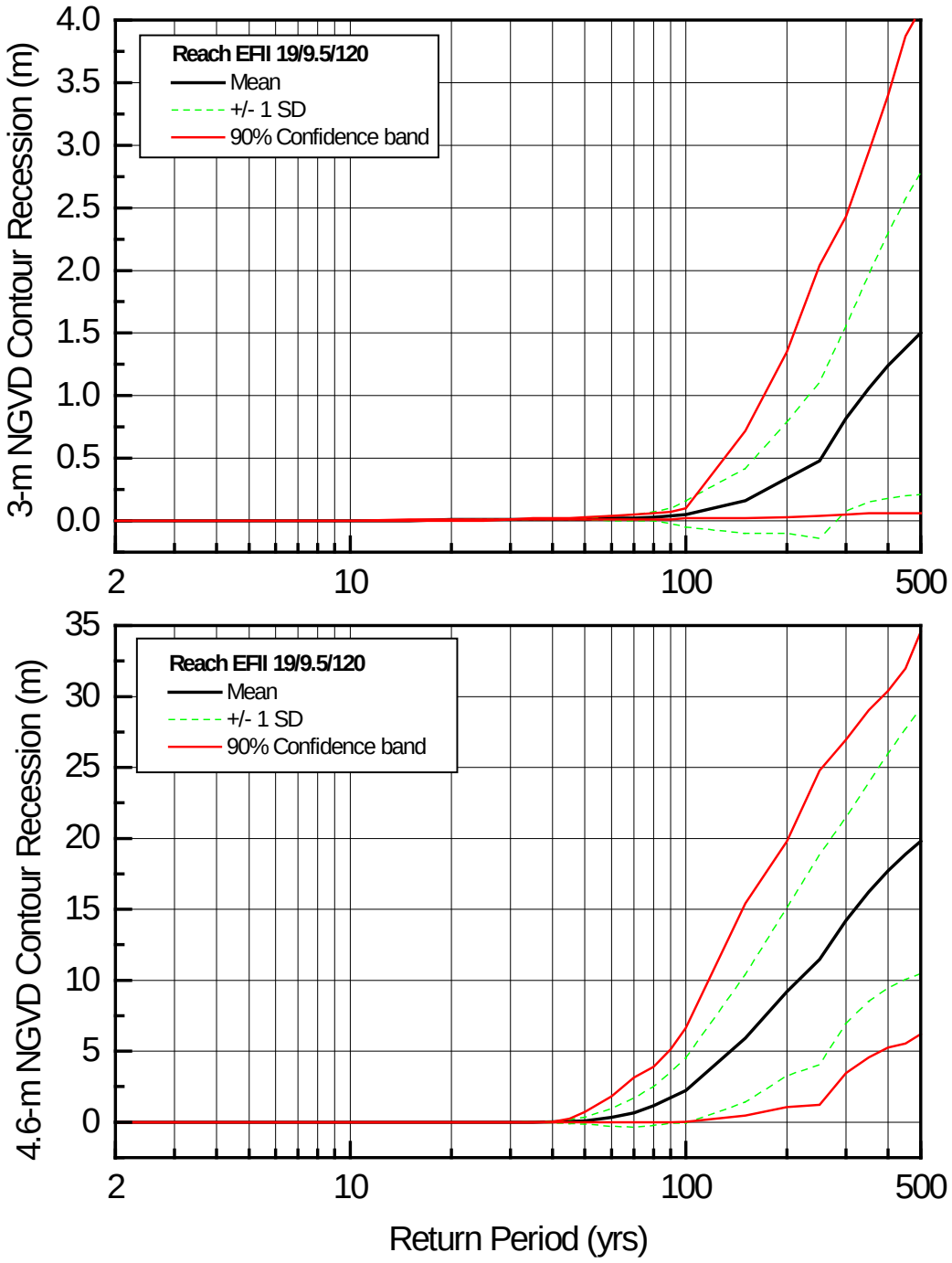

Reach EFII 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
5
10
15
20
2
10
100
500
Reach EFII 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
8
2
10
100
500
Return Period (yrs)

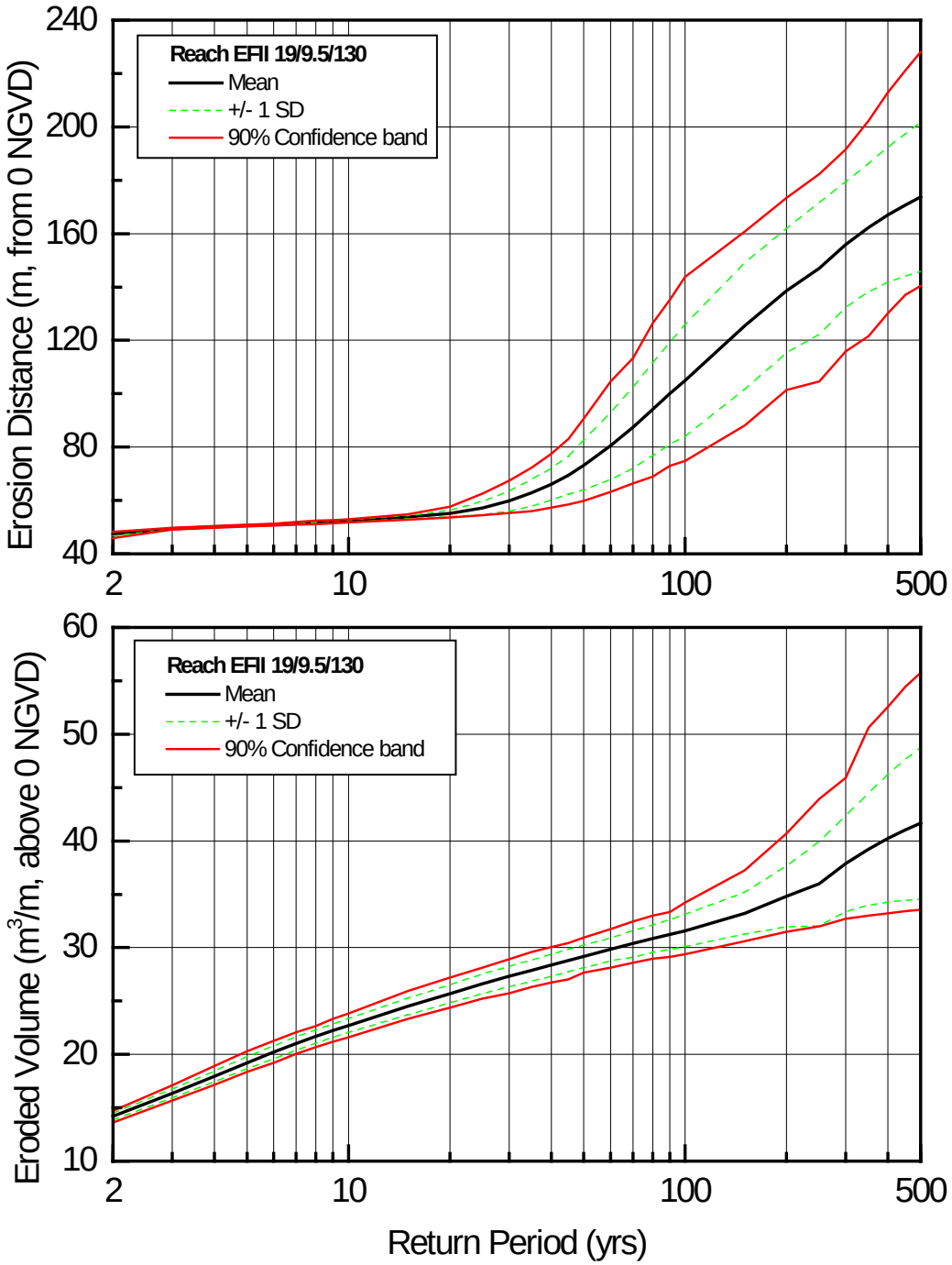

Reach EFII 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach EFII 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

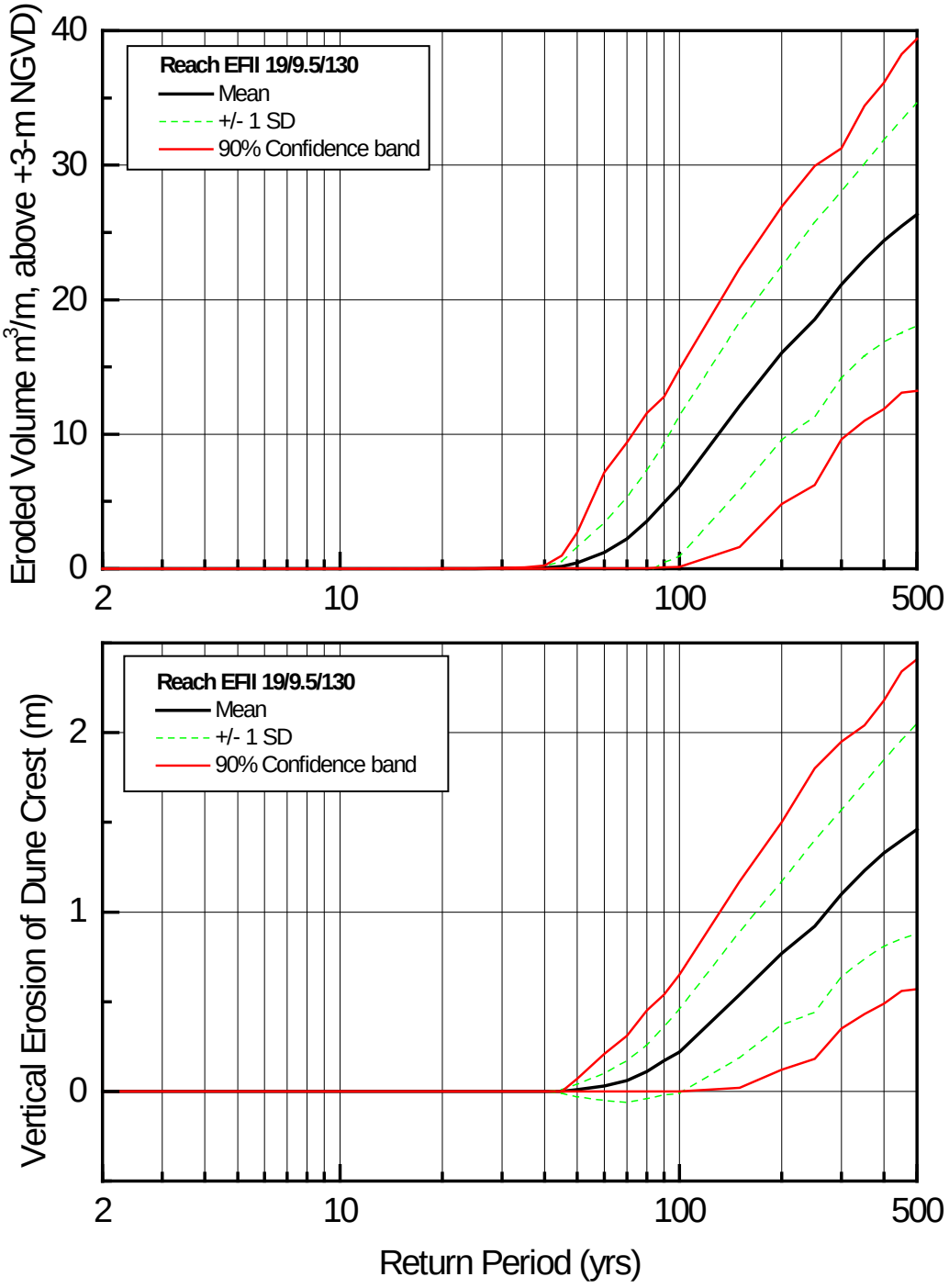

Max. Wave Setup Magnitude (m, above SWL)
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach EFII 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach EFII 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

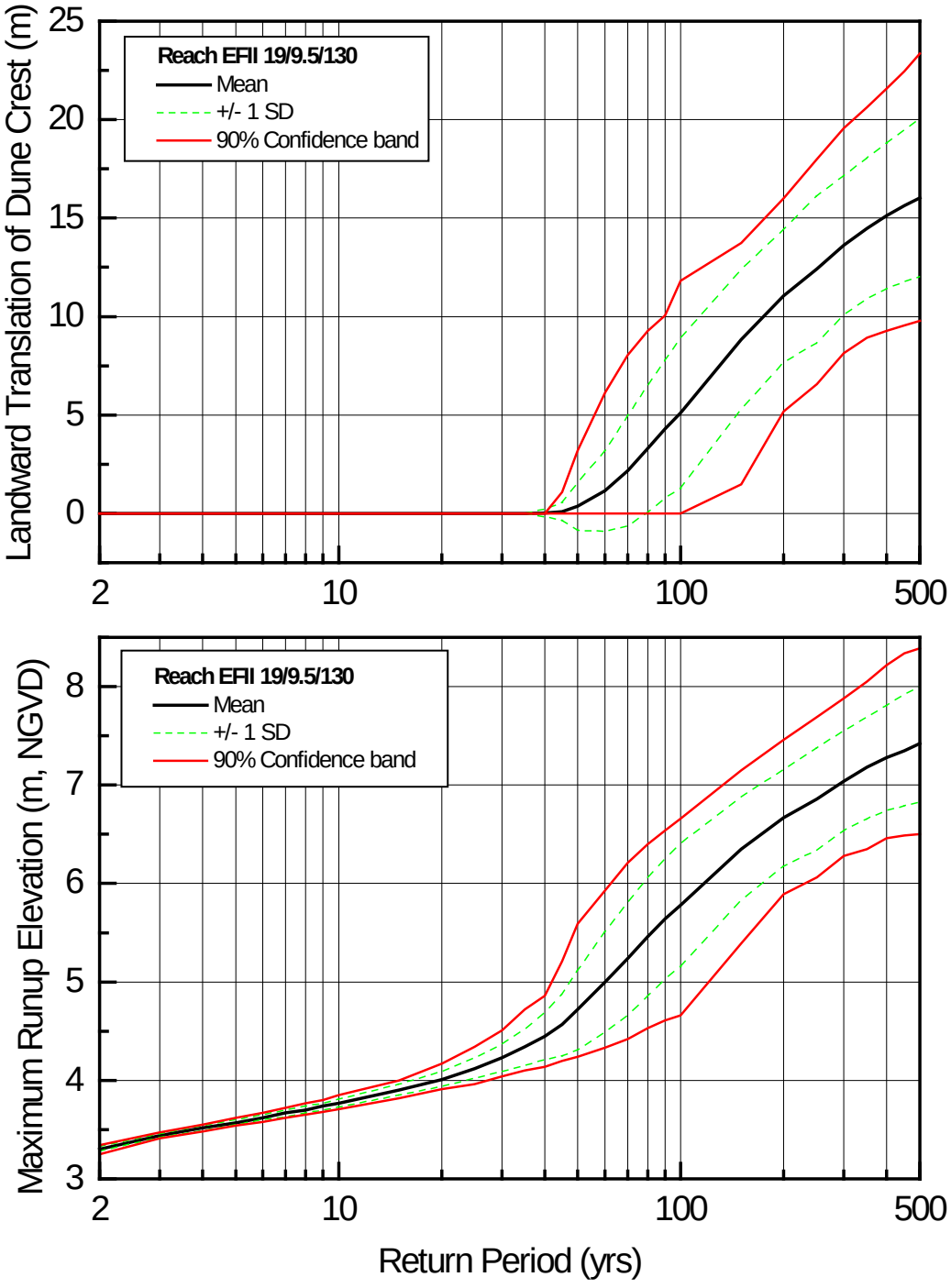

Max NS Wave Height (m, at landside surf zone)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach EFII 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
225
200
175
150
125
100
75
50
Reach EFII 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

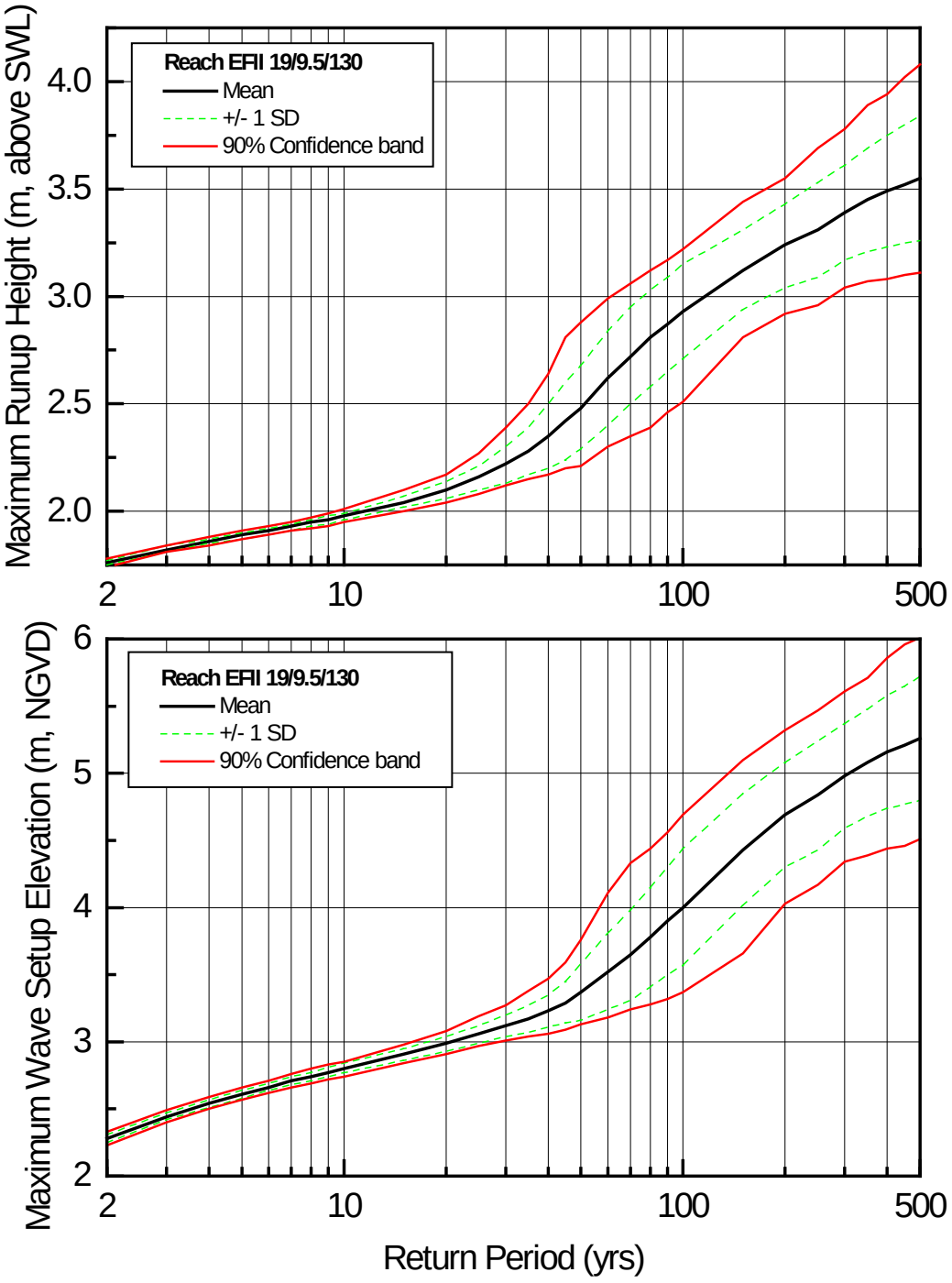

Reach EFII 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Reach EFII 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
15.0
12.5
10.0
7.5
5.0
2
10
100
500
Return Period (yrs)

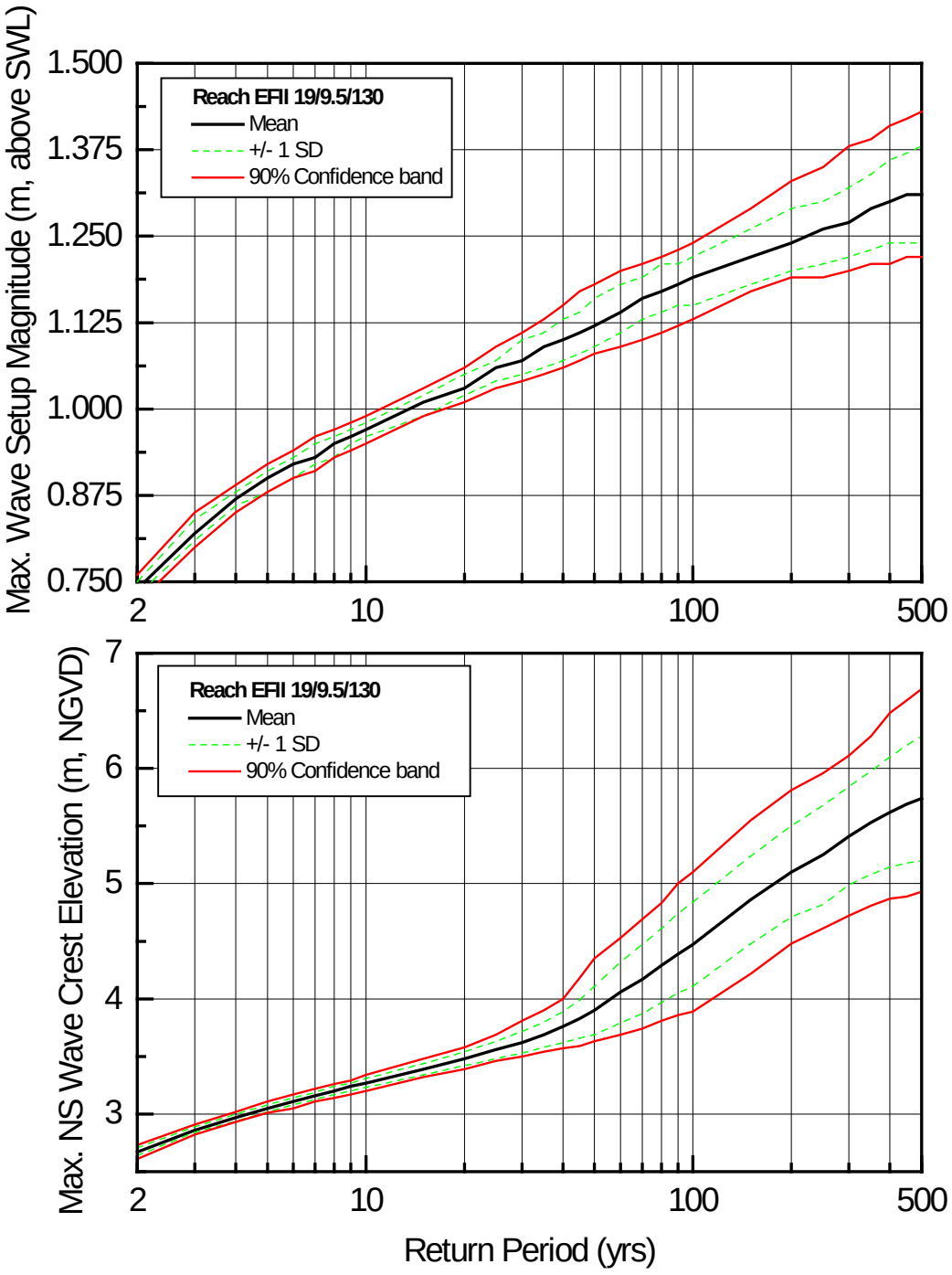

Reach EFII 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach EFII 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
35
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

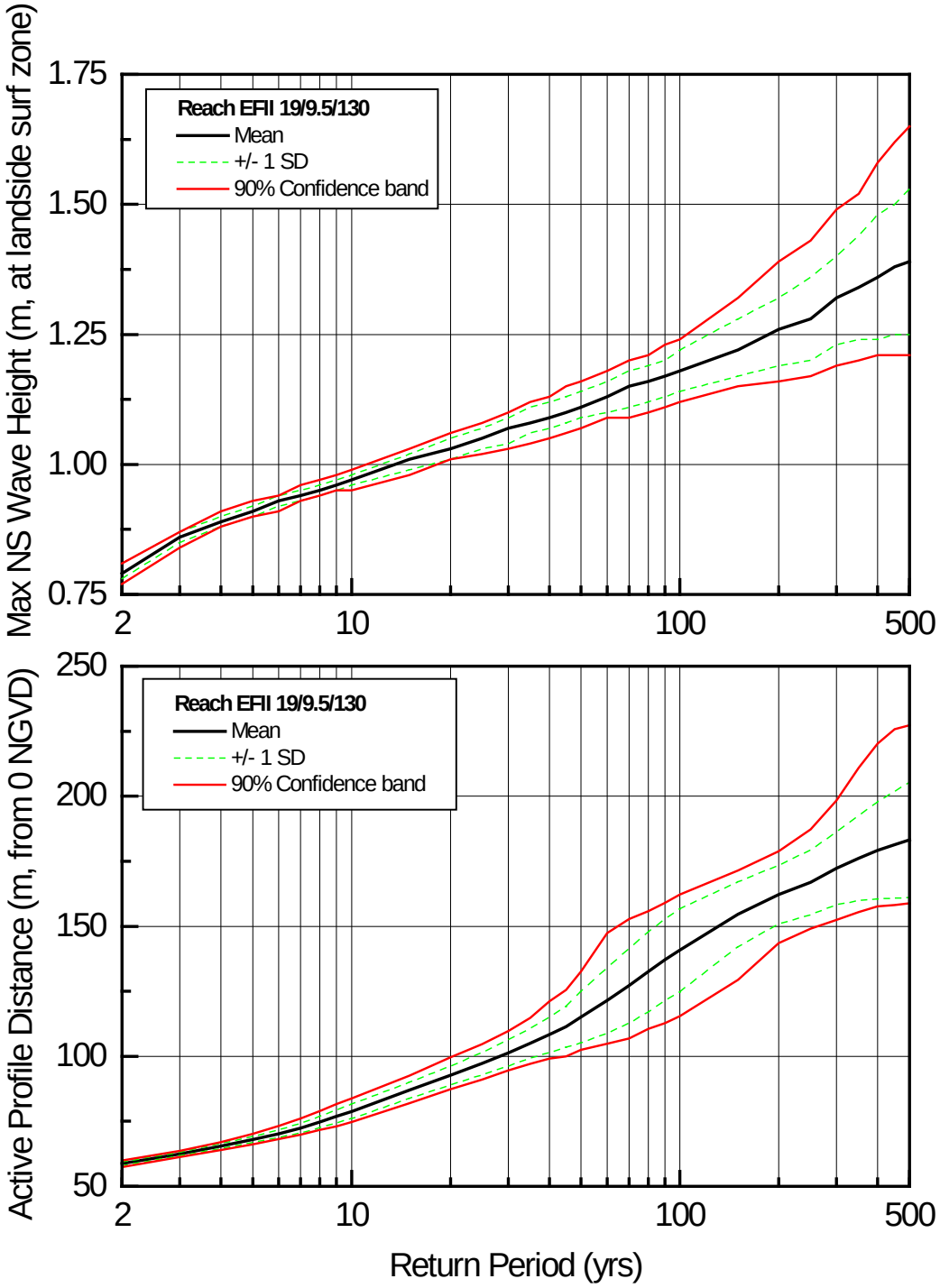

Reach EFII 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
240
200
160
120
80
40
2
10
100
500
Reach EFII 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
20
10
2
10
100
500
Return Period (yrs)

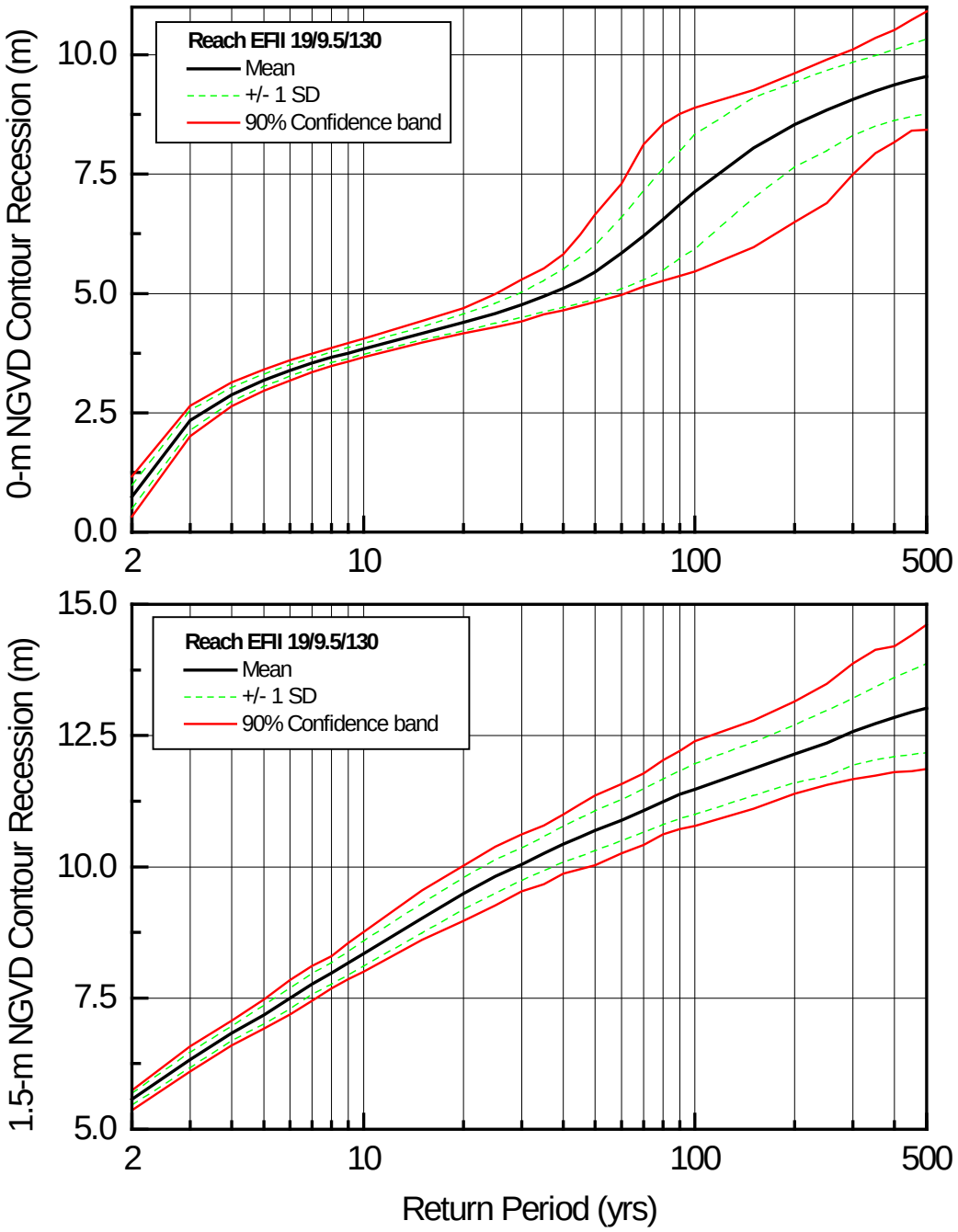

Reach EFII 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach EFII 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
2
10
100
500
Return Period (yrs)

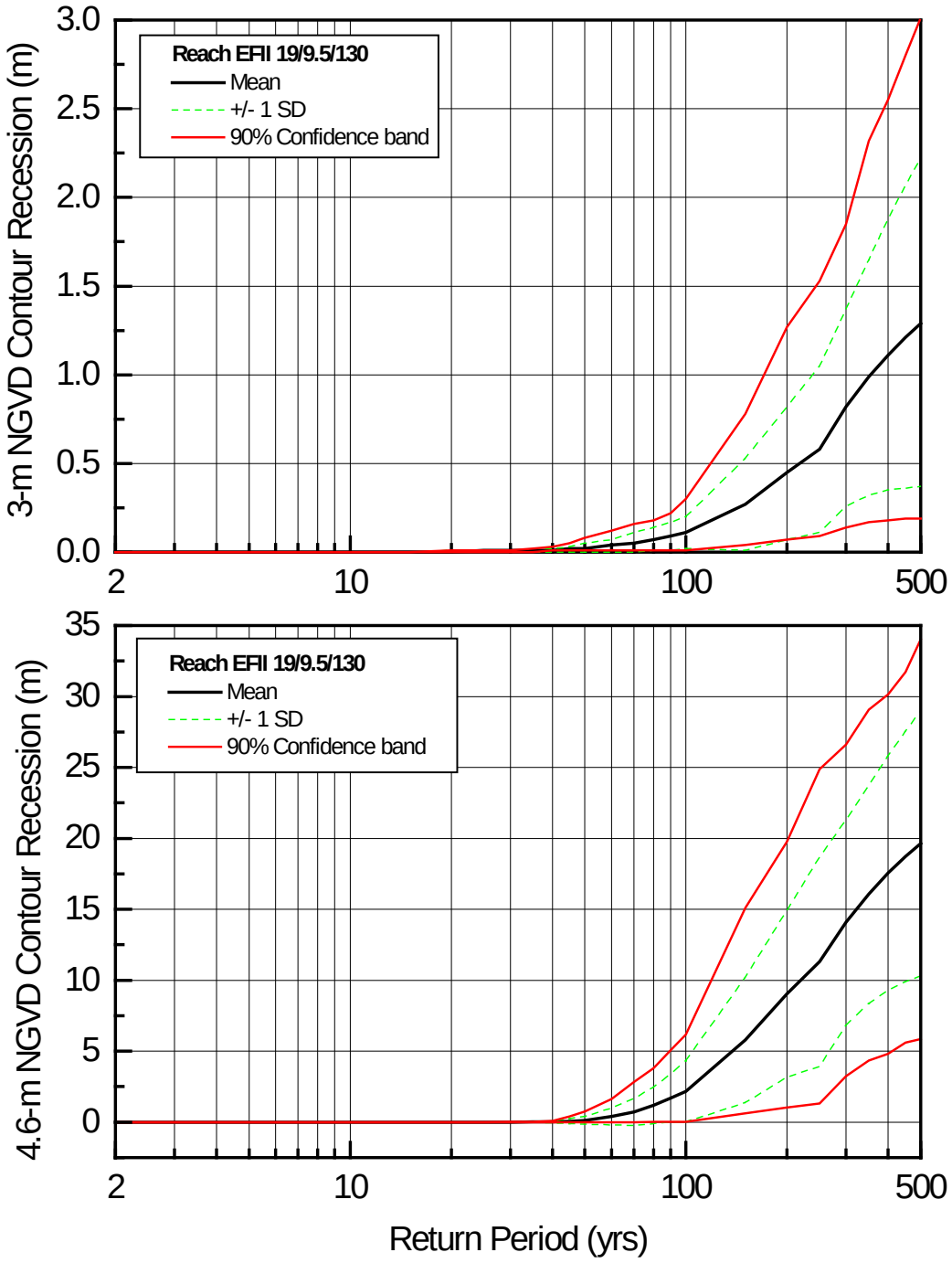

Reach EFII 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
25
20
15
10
5
0
2
10
100
500
Reach EFII 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
3
2
10
100
500
Return Period (yrs)

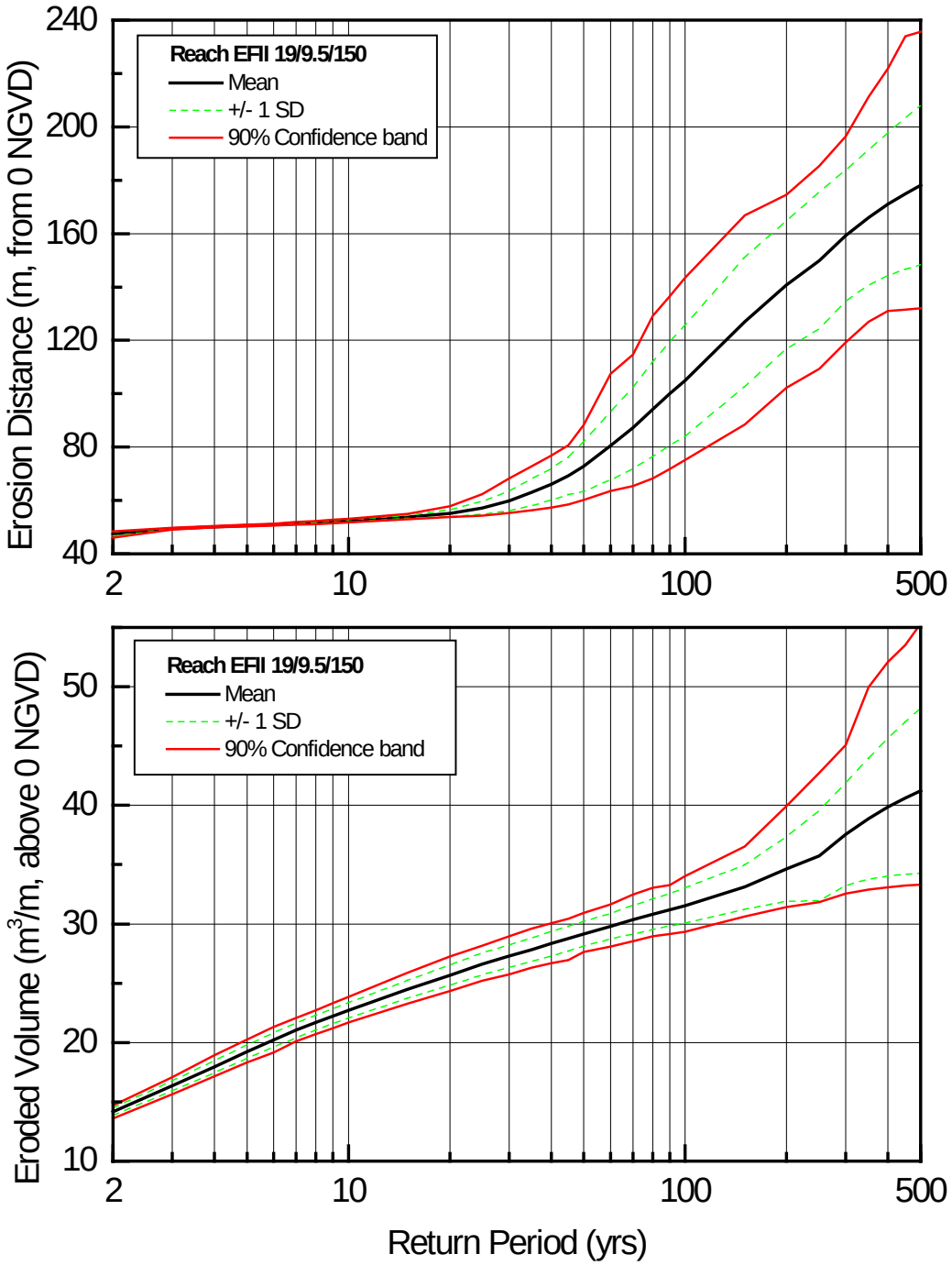

Reach EFII 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach EFII 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

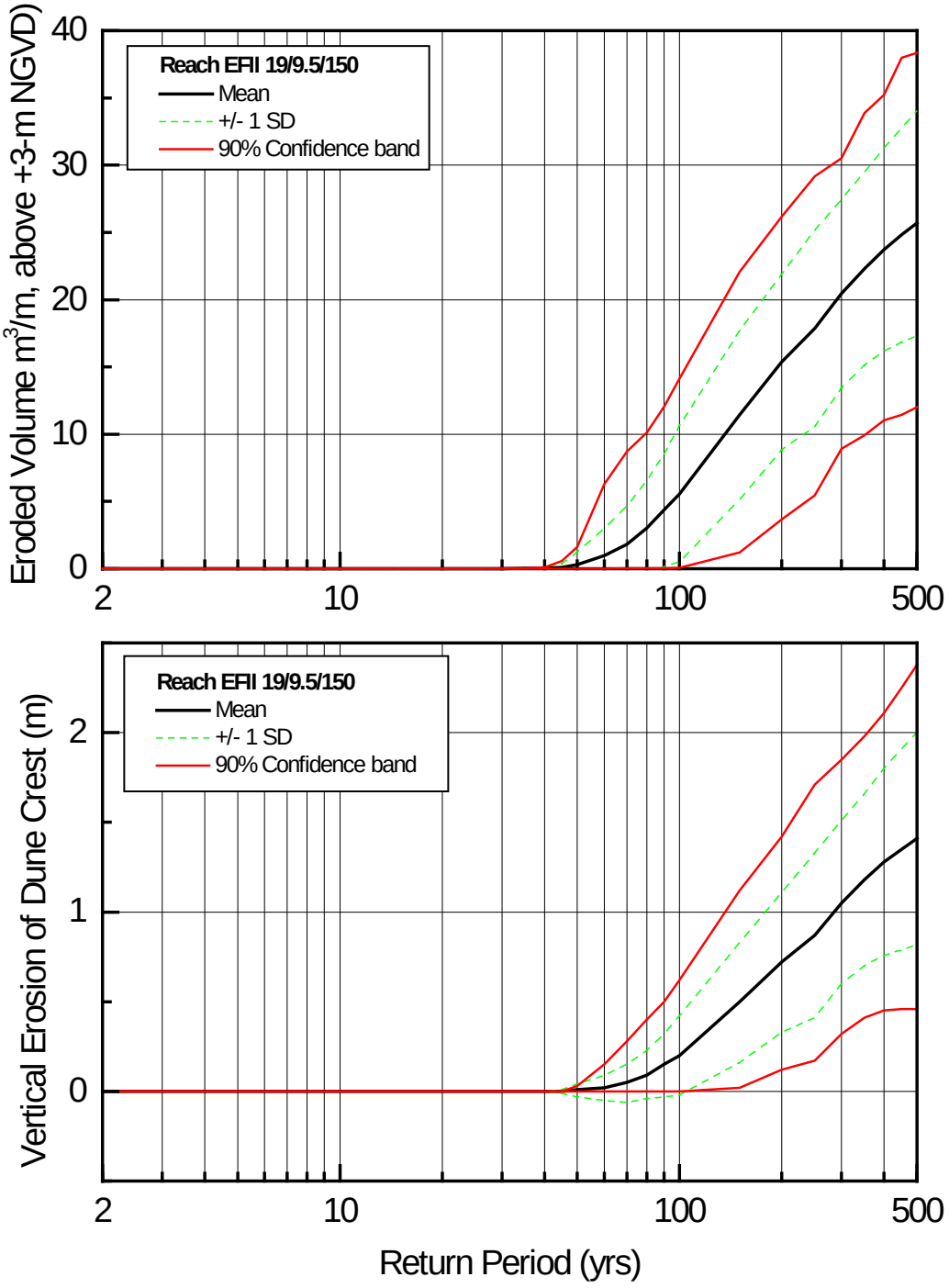

Max. Wave Setup Magnitude (m, above SWL)
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach EFII 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach EFII 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

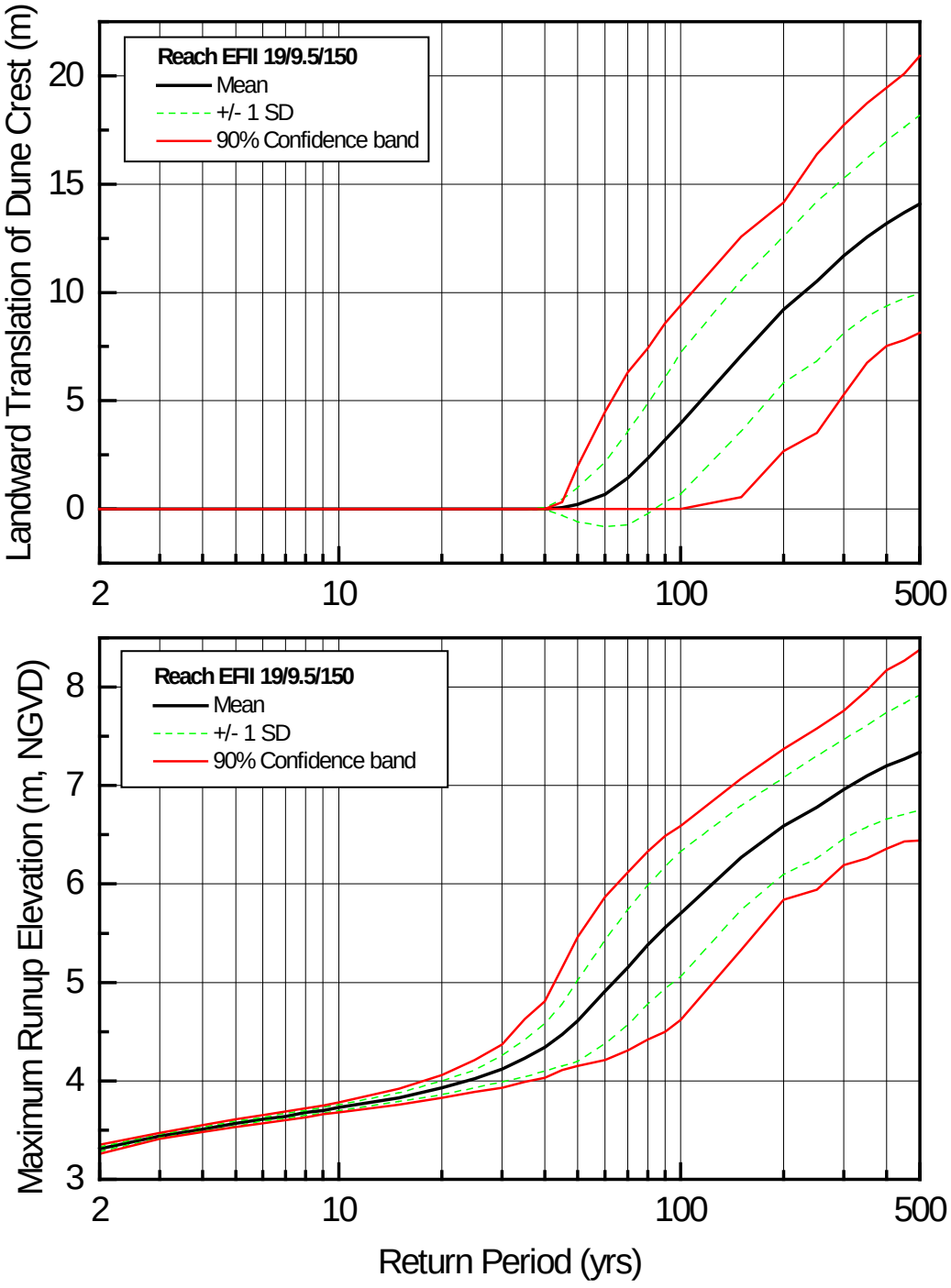

Max NS Wave Height (m, at landside surf zone)
1.75
1.50
1.25
1.00
0.75
Reach EFII 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
250
200
150
100
50
Reach EFII 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

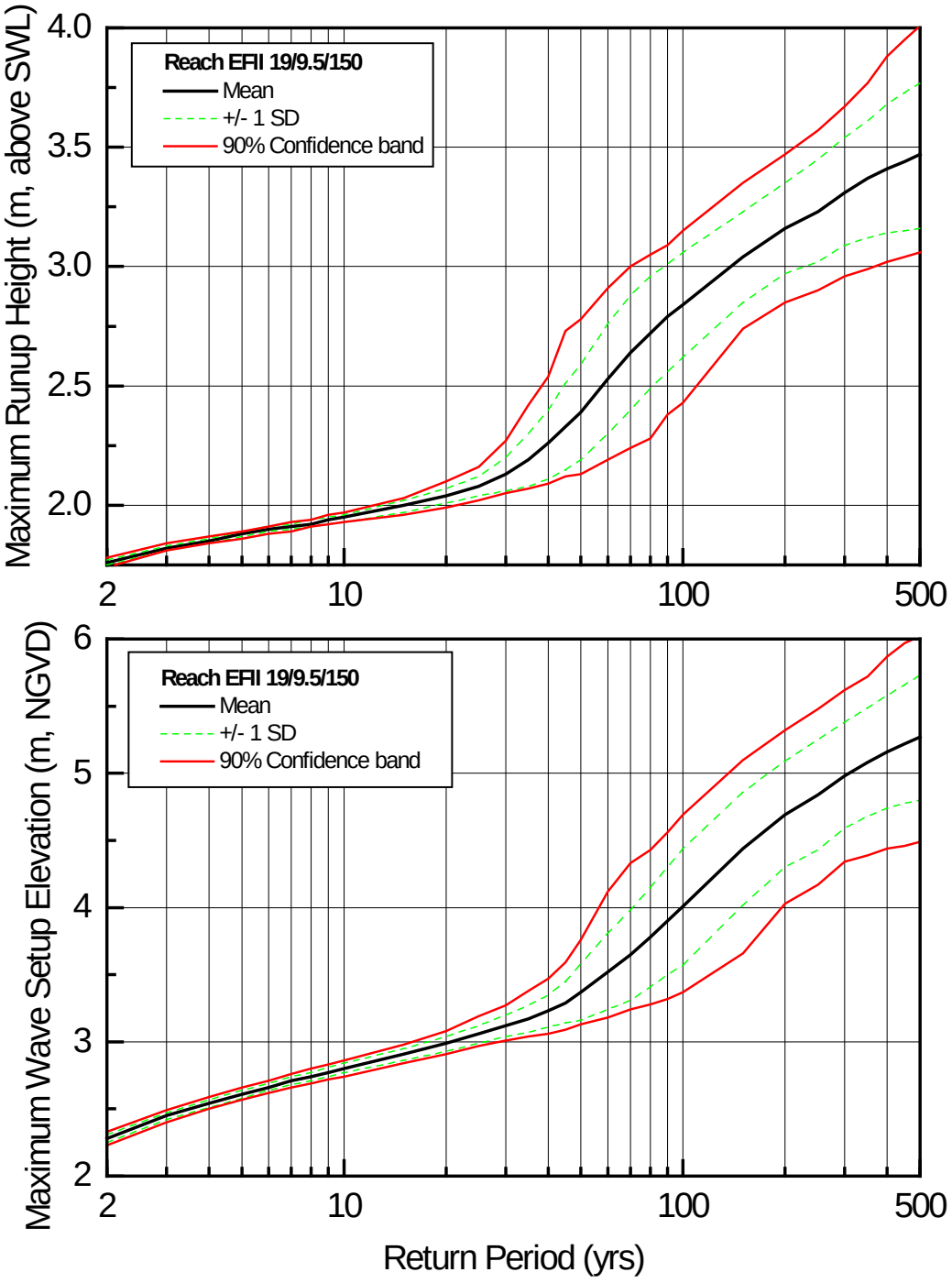

Reach EFII 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Reach EFII 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
15.0
12.5
10.0
7.5
5.0
2
10
100
500
Return Period (yrs)

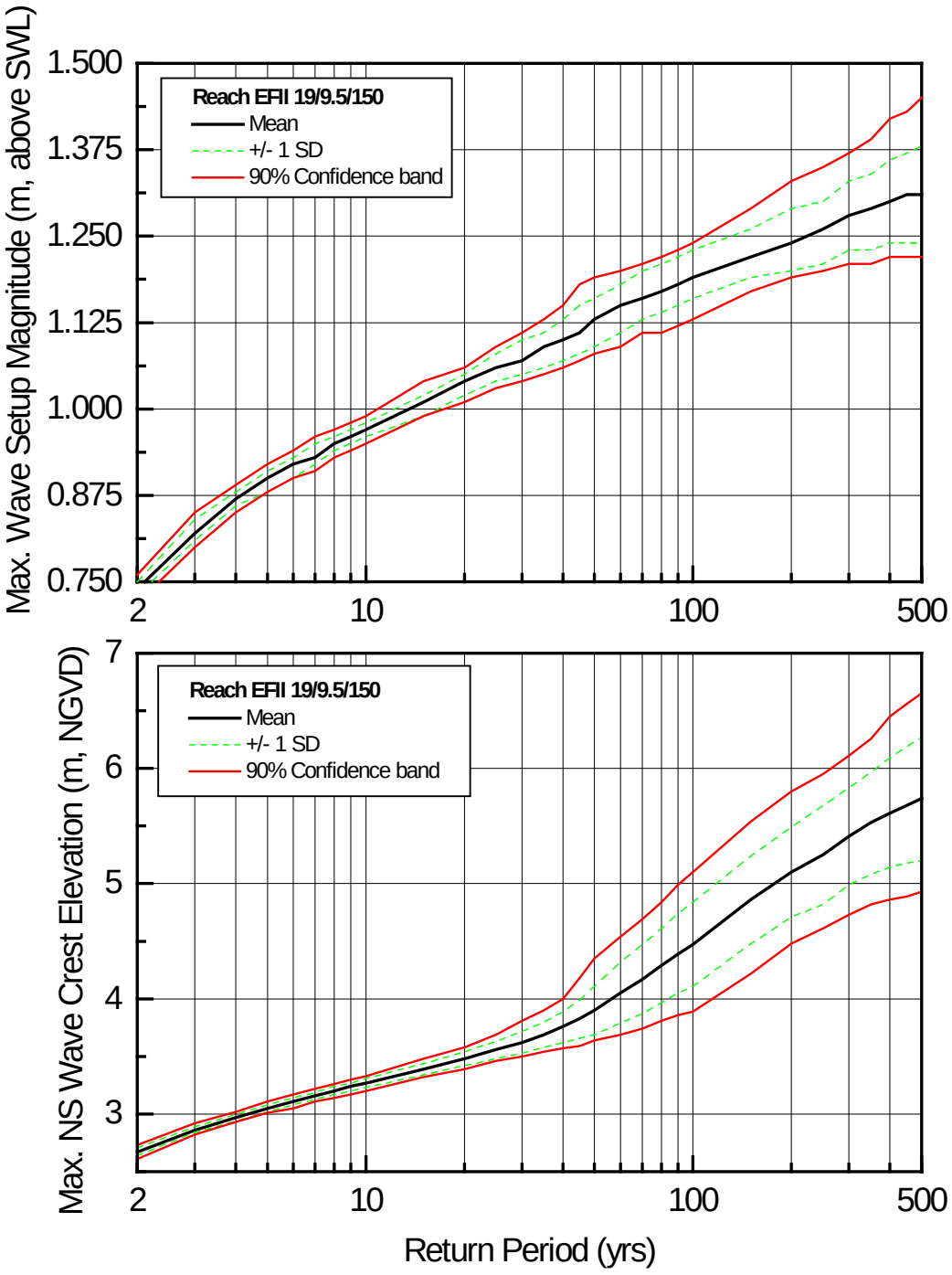

Reach EFII 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach EFII 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
35
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

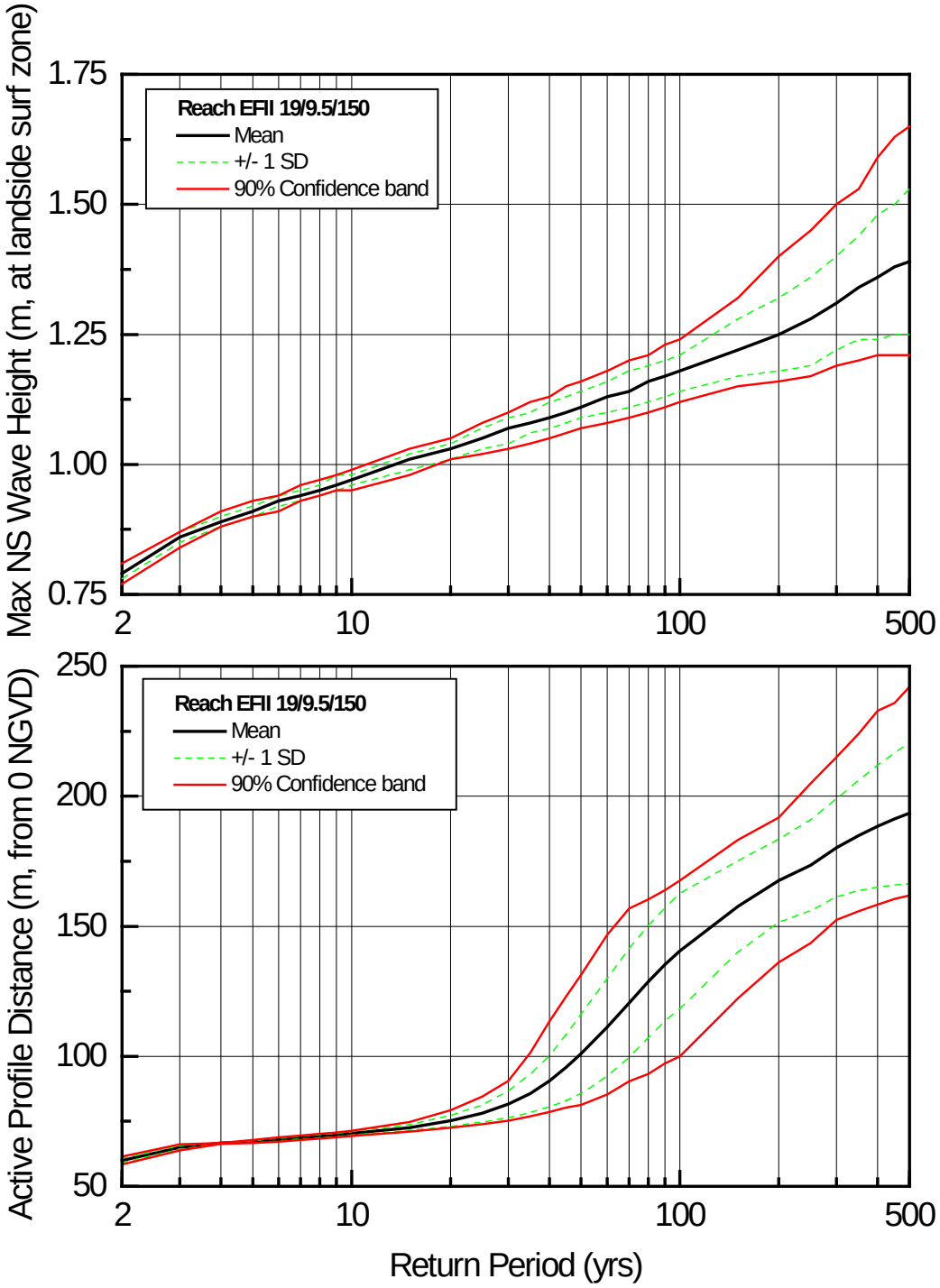

Reach EFII 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
240
200
160
120
80
40
2
10
100
500
Reach EFII 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
50
40
30
20
10
2
10
100
500
Return Period (yrs)

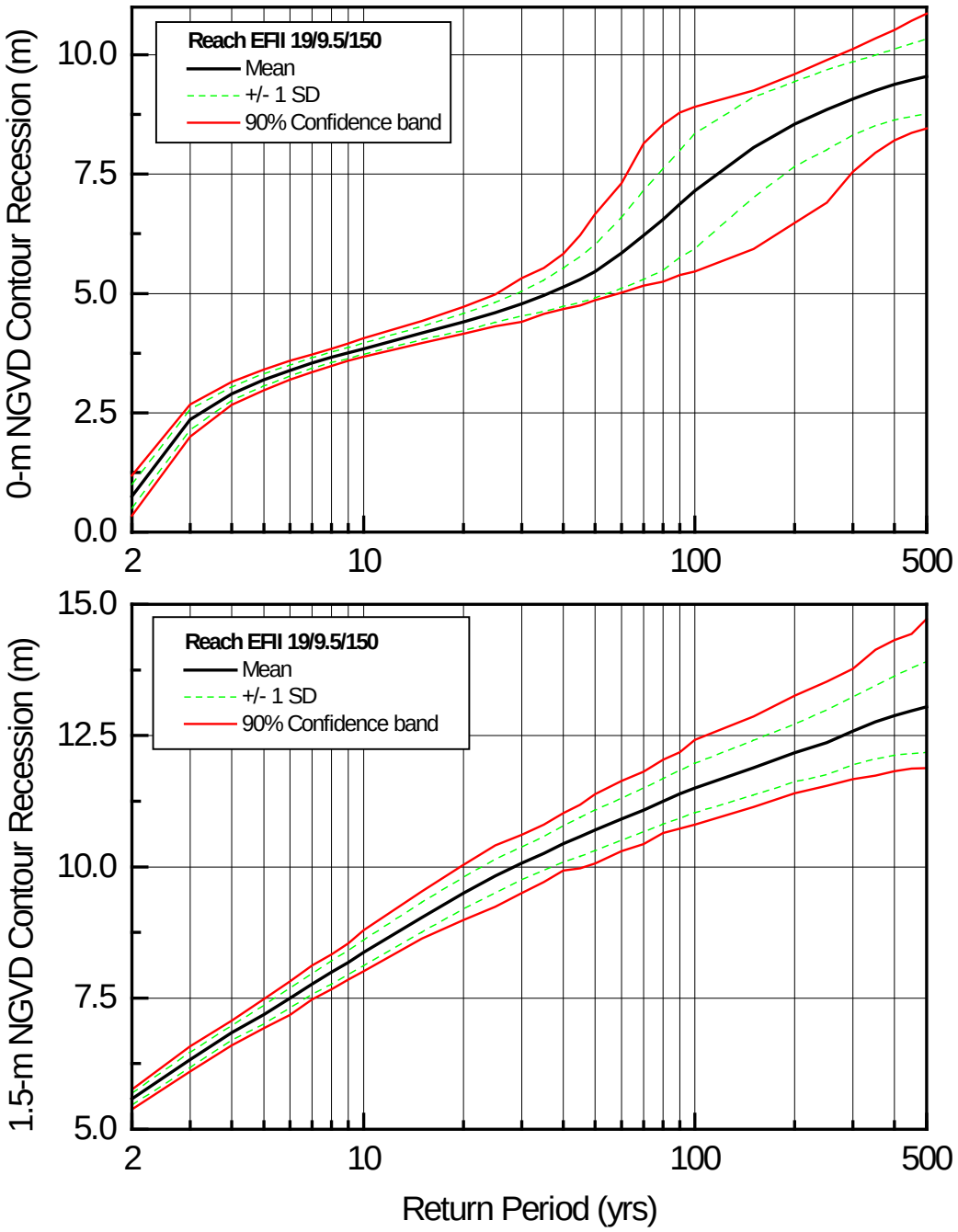

Reach EFII 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach EFII 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
2
10
100
500
Return Period (yrs)

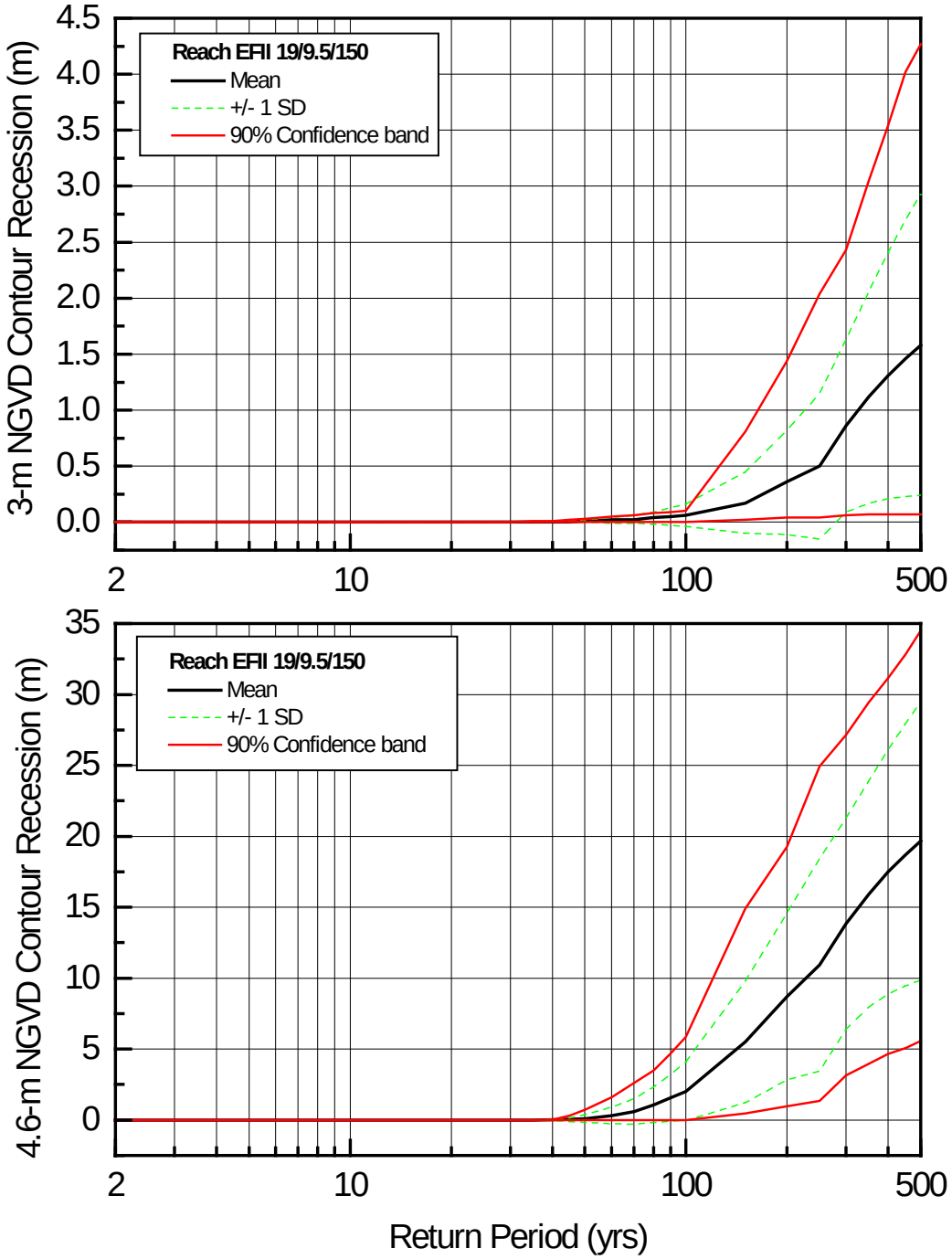

Reach EFII 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
5
10
15
20
2
10
100
500
Reach EFII 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
8
2
10
100
500
Return Period (yrs)

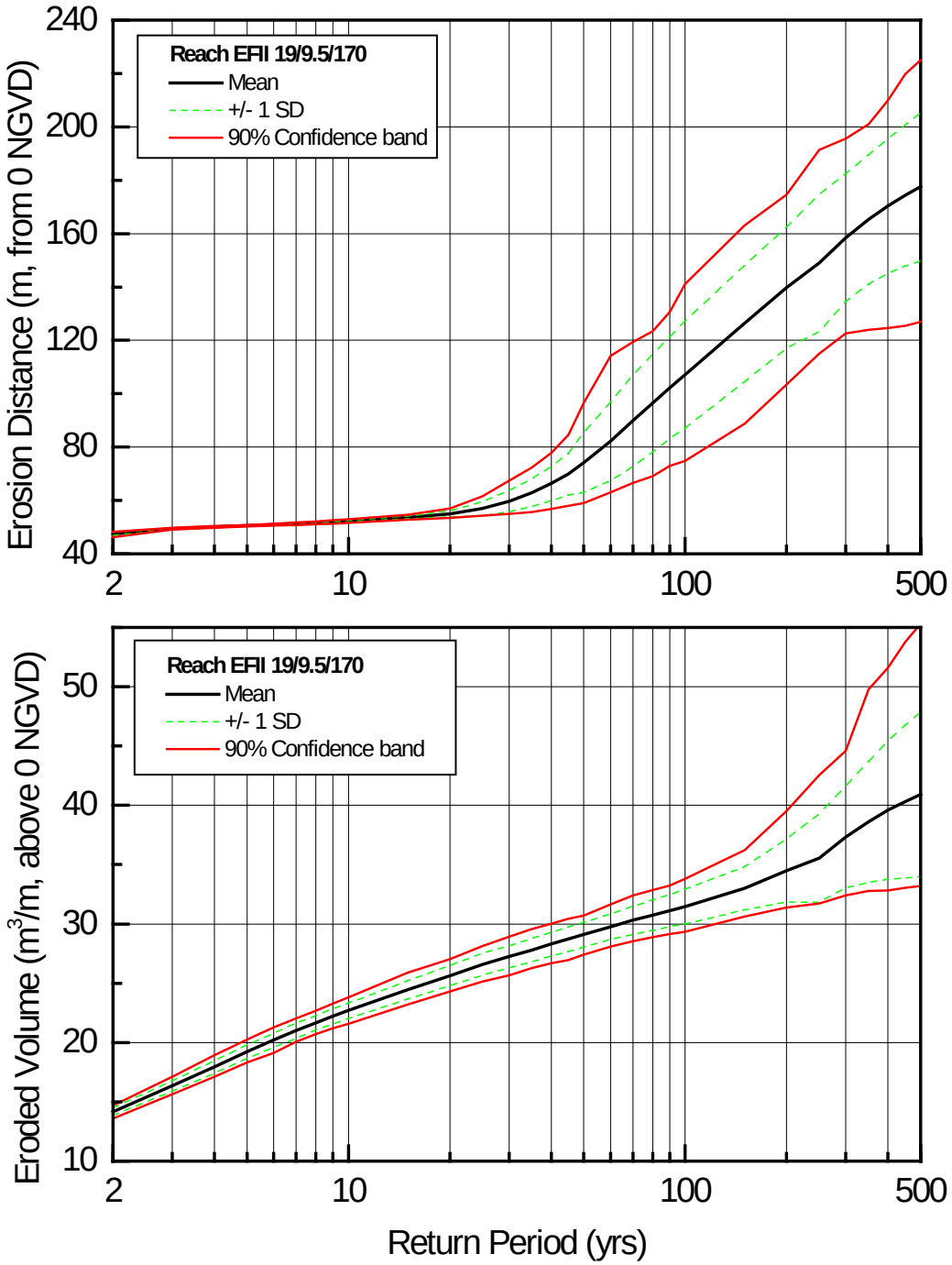

Maximum Runup Height (m, above SWL)
4.0
3.5
3.0
2.5
2.0
Reach EFII 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
Reach EFII 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

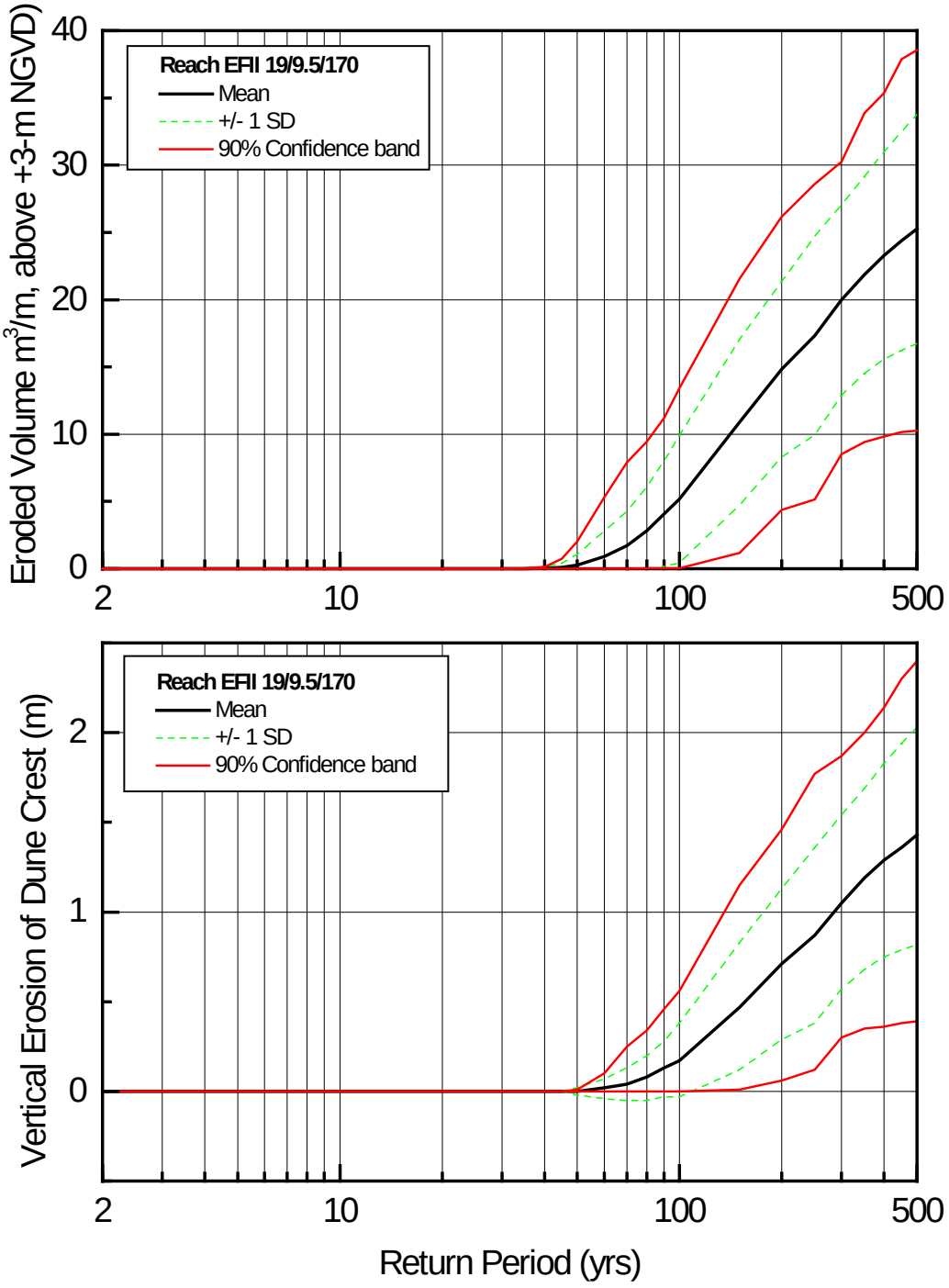

Max. Wave Setup Magnitude (m, above SWL)
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach EFII 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach EFII 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

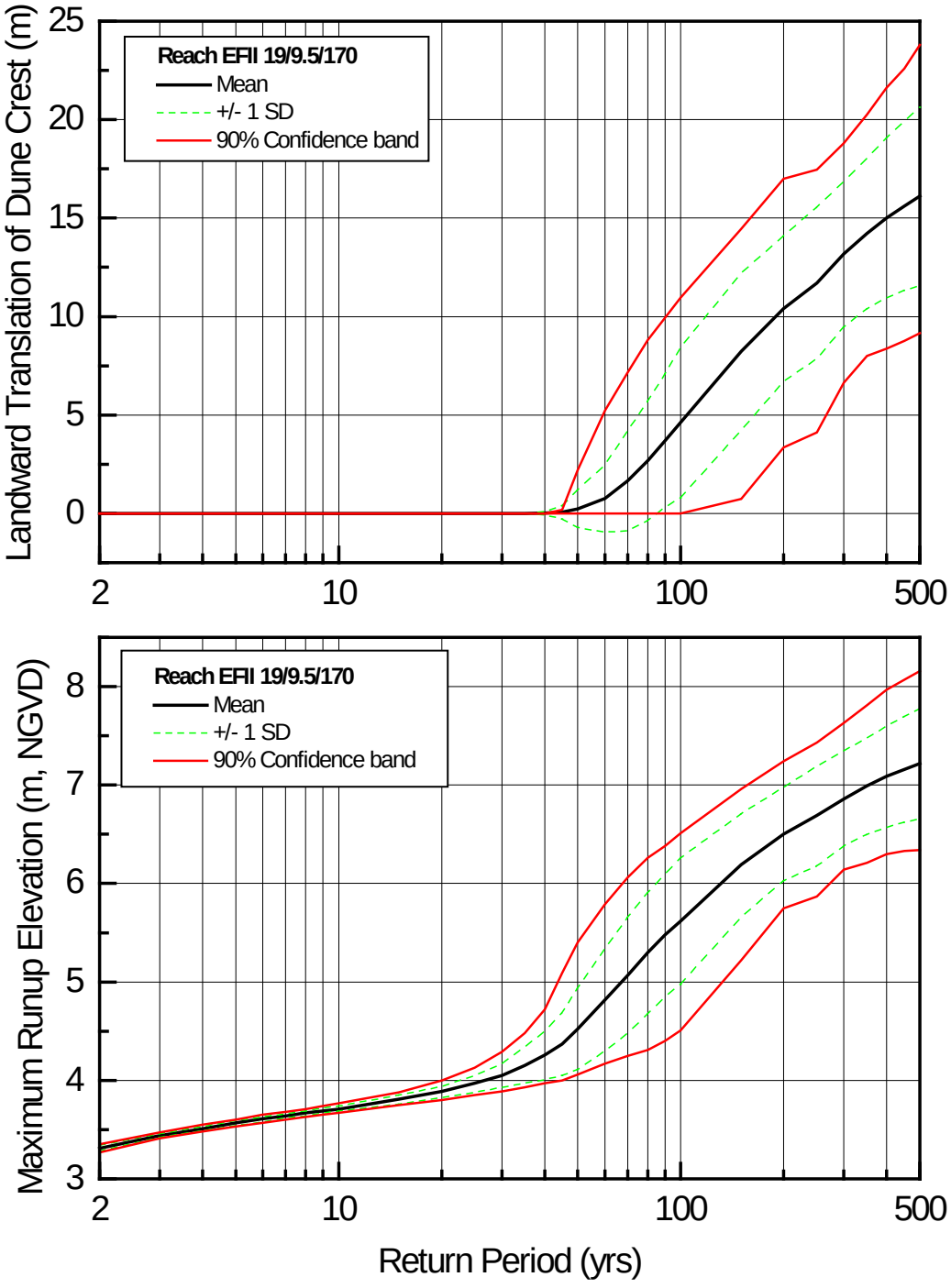

Max NS Wave Height (m, at landside surf zone)
1.75
1.50
1.25
1.00
0.75
Reach EFII 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
250
200
150
100
50
Reach EFII 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

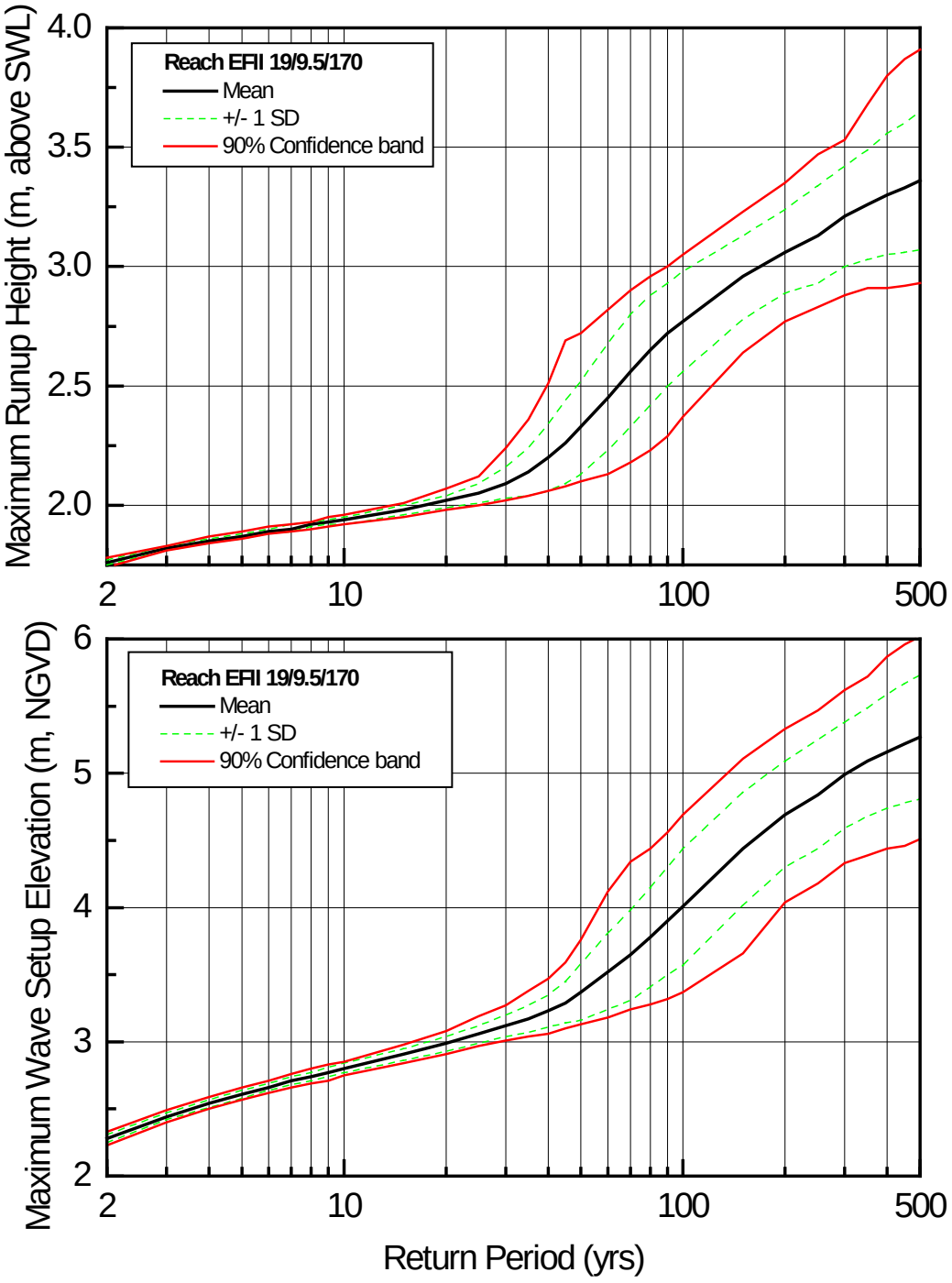

Reach EFII 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Reach EFII 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
15.0
12.5
10.0
7.5
5.0
2
10
100
500
Return Period (yrs)

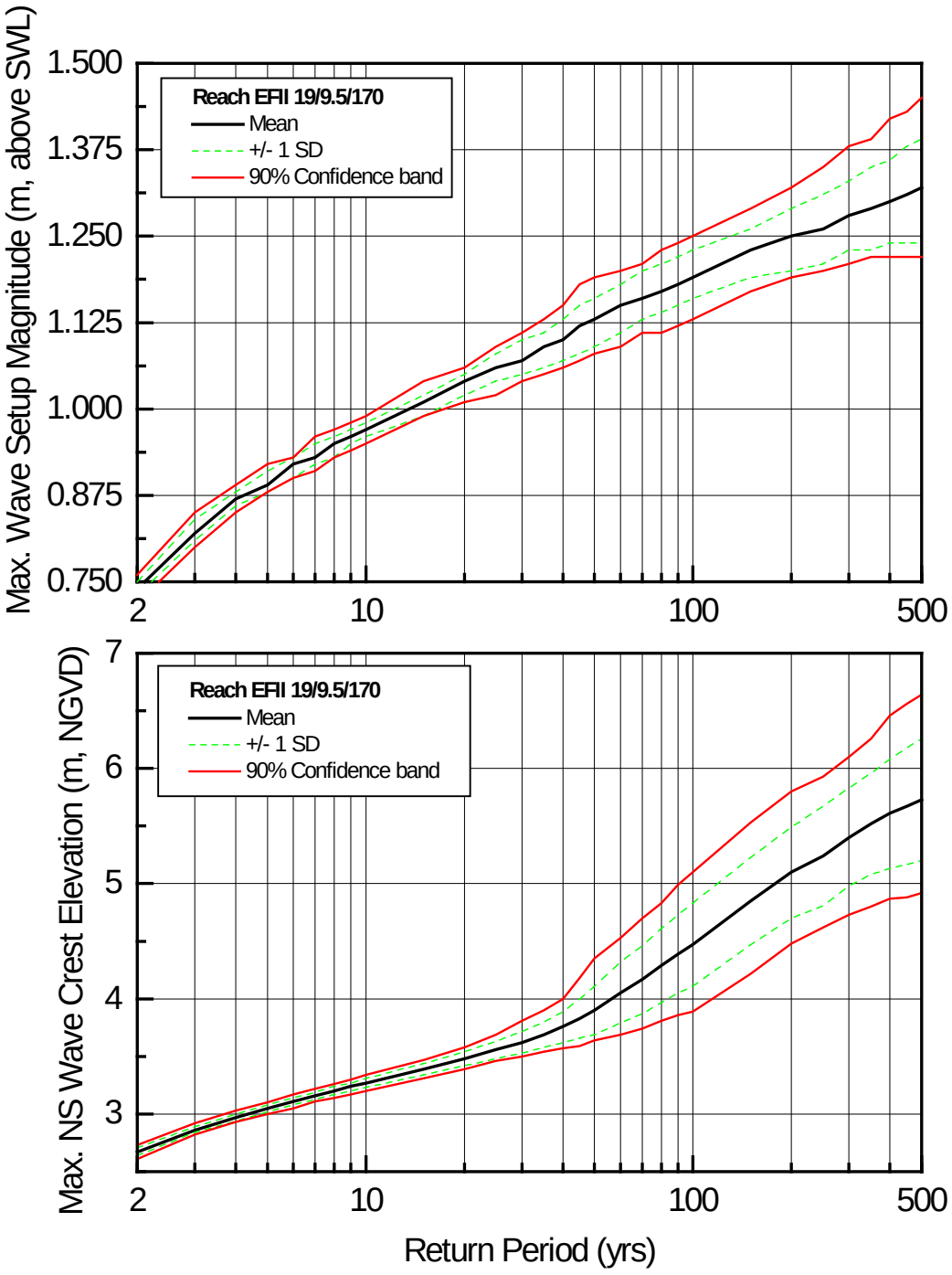

Reach EFII 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach EFII 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
35
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

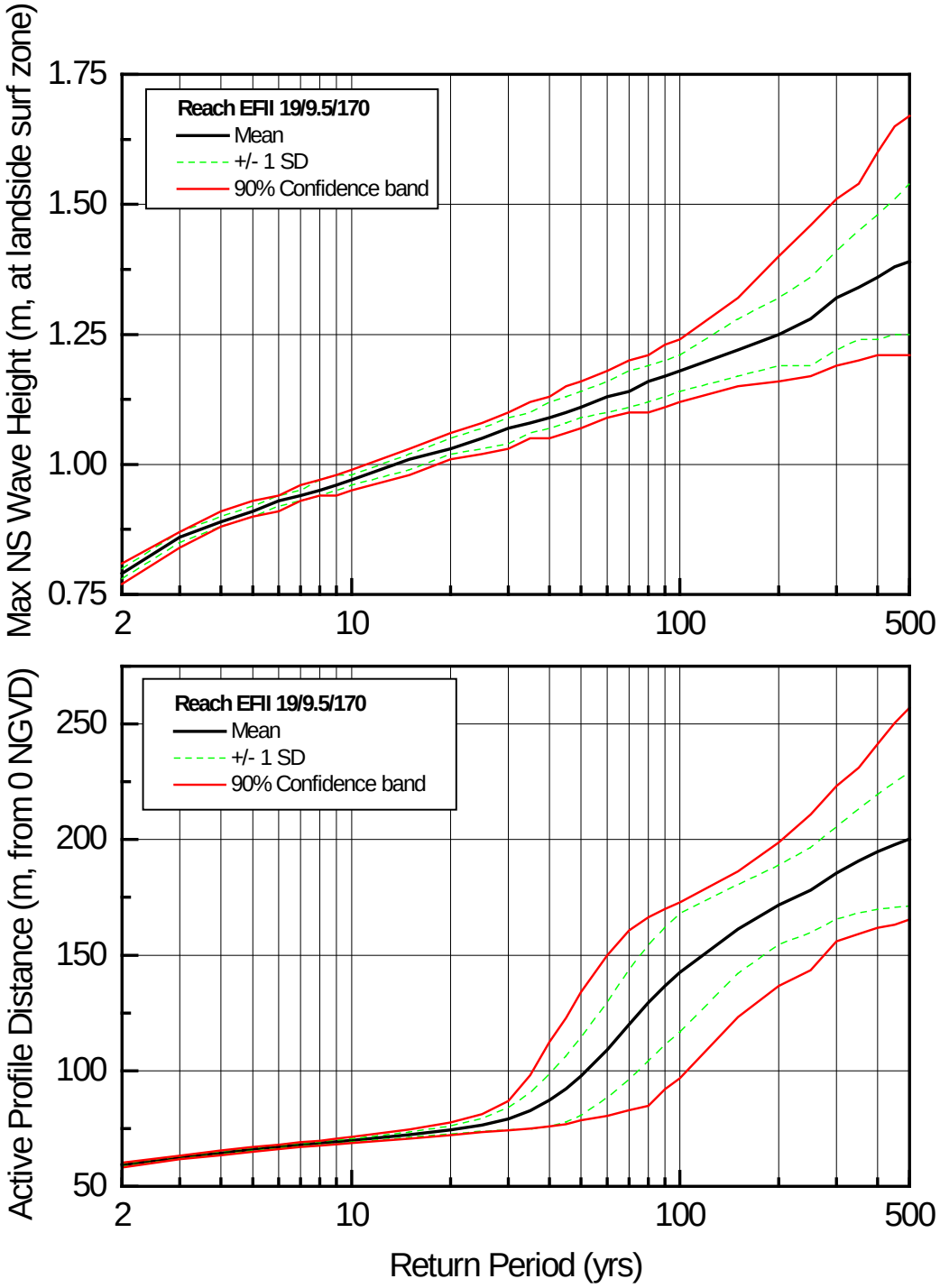

Reach EFII 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
240
200
160
120
80
40
2
10
100
500
Reach EFII 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
50
40
30
20
10
2
10
100
500
Return Period (yrs)

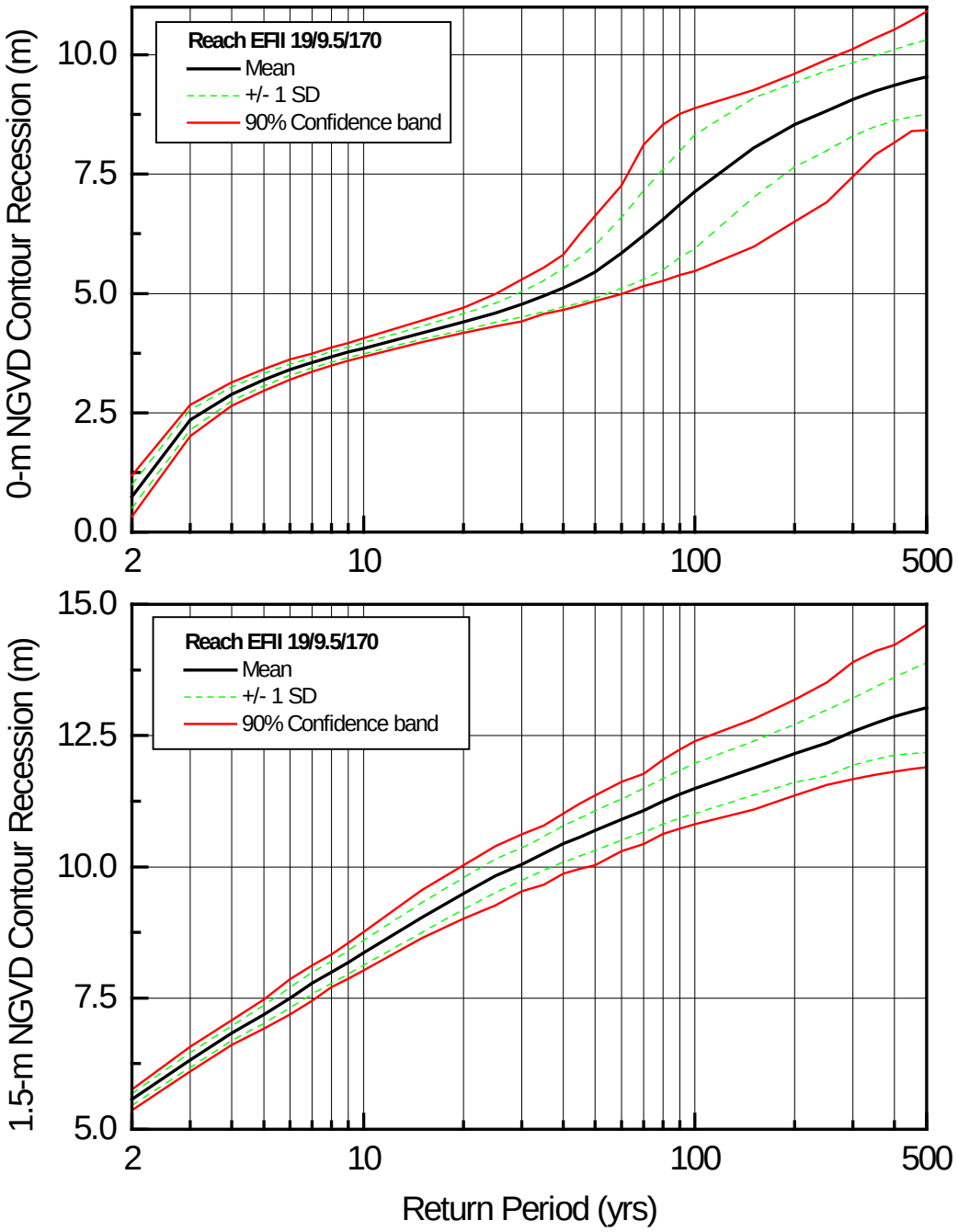

Reach EFII 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach EFII 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
2
10
100
500
Return Period (yrs)

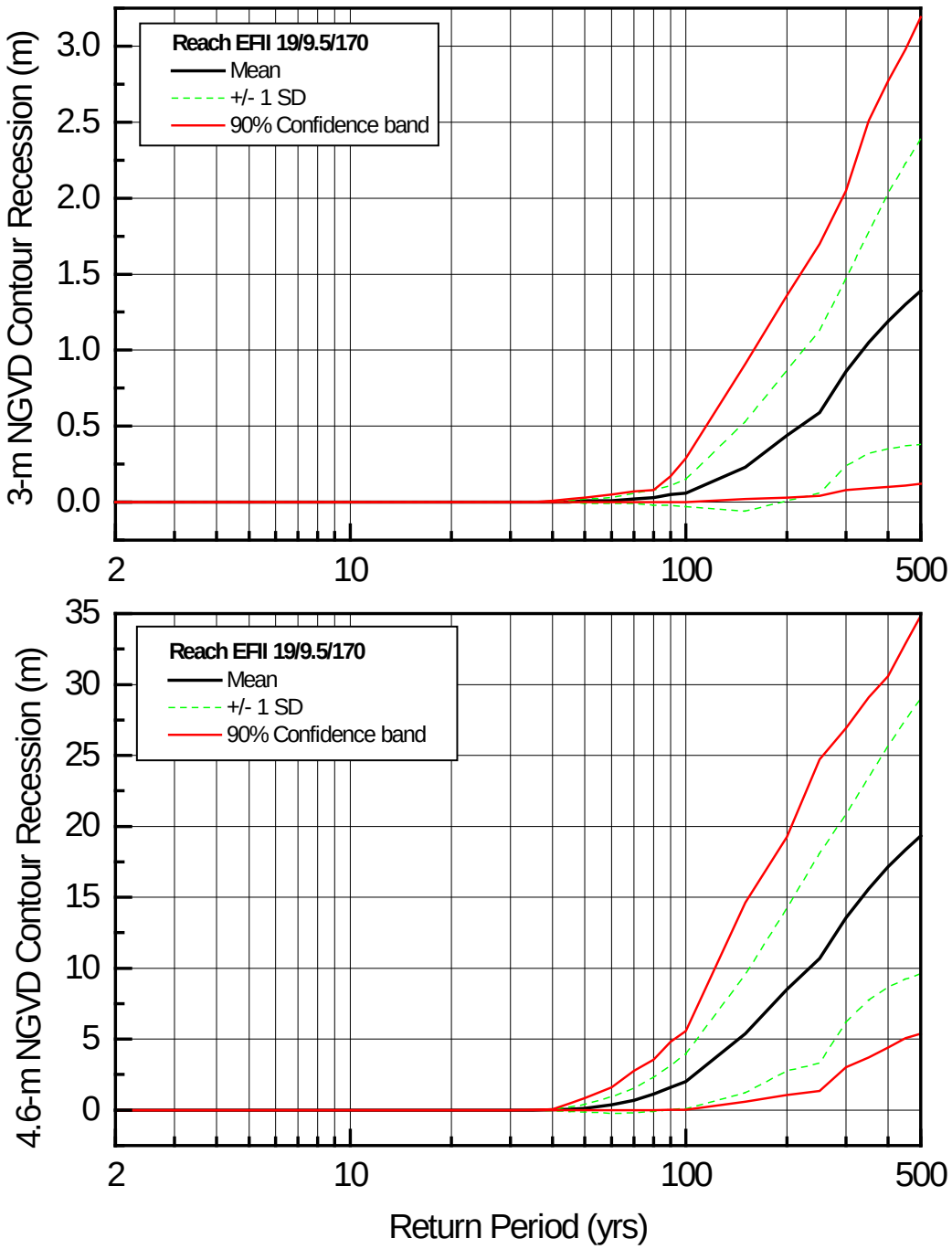

Reach EFII 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
25
20
15
10
5
0
2
10
100
500
Reach EFII 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
3
2
10
100
500
Return Period (yrs)

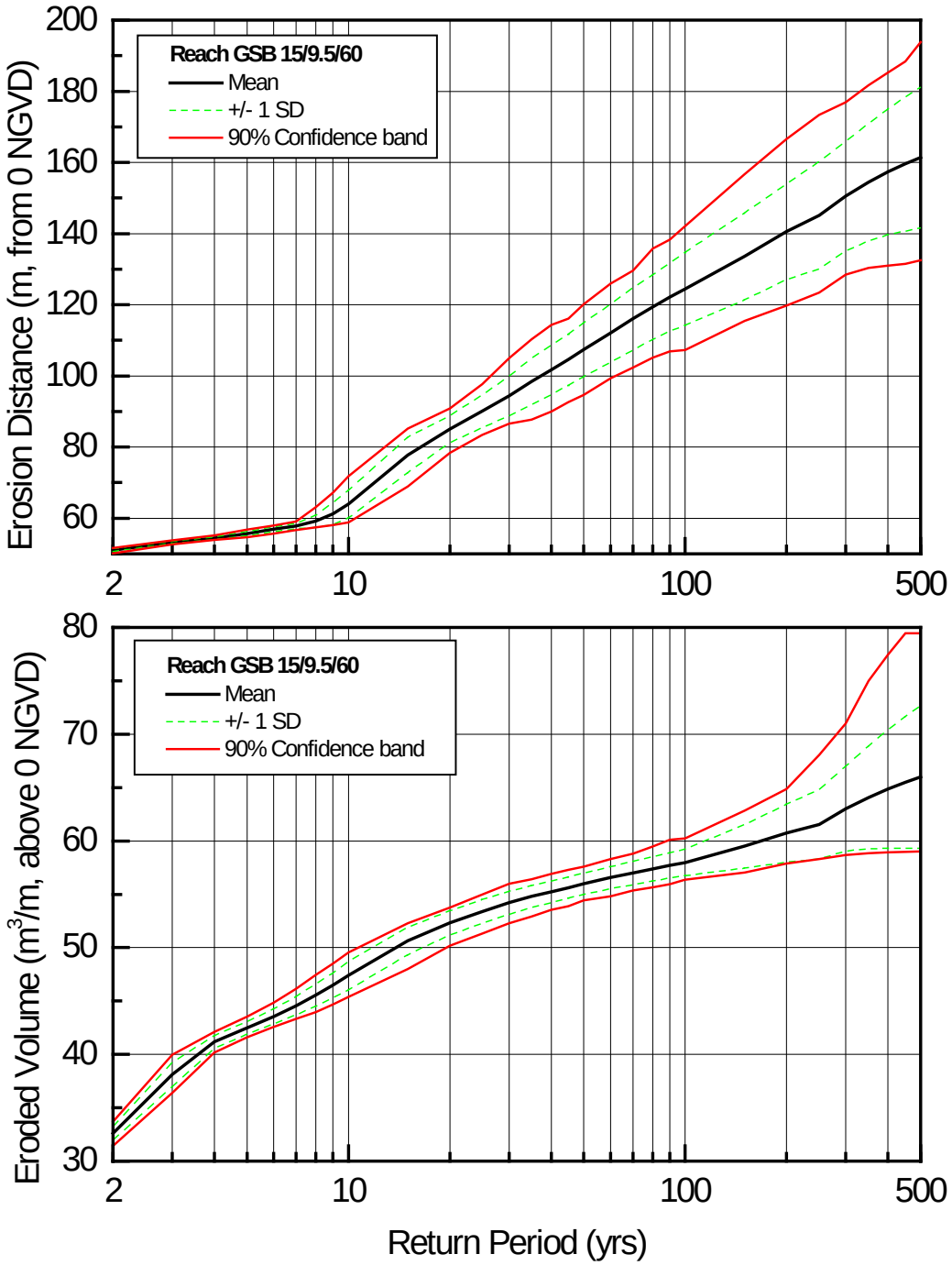

Maximum Runup Height (m, above SWL)
4.0
3.5
3.0
2.5
2.0
Reach EFII 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
Reach EFII 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

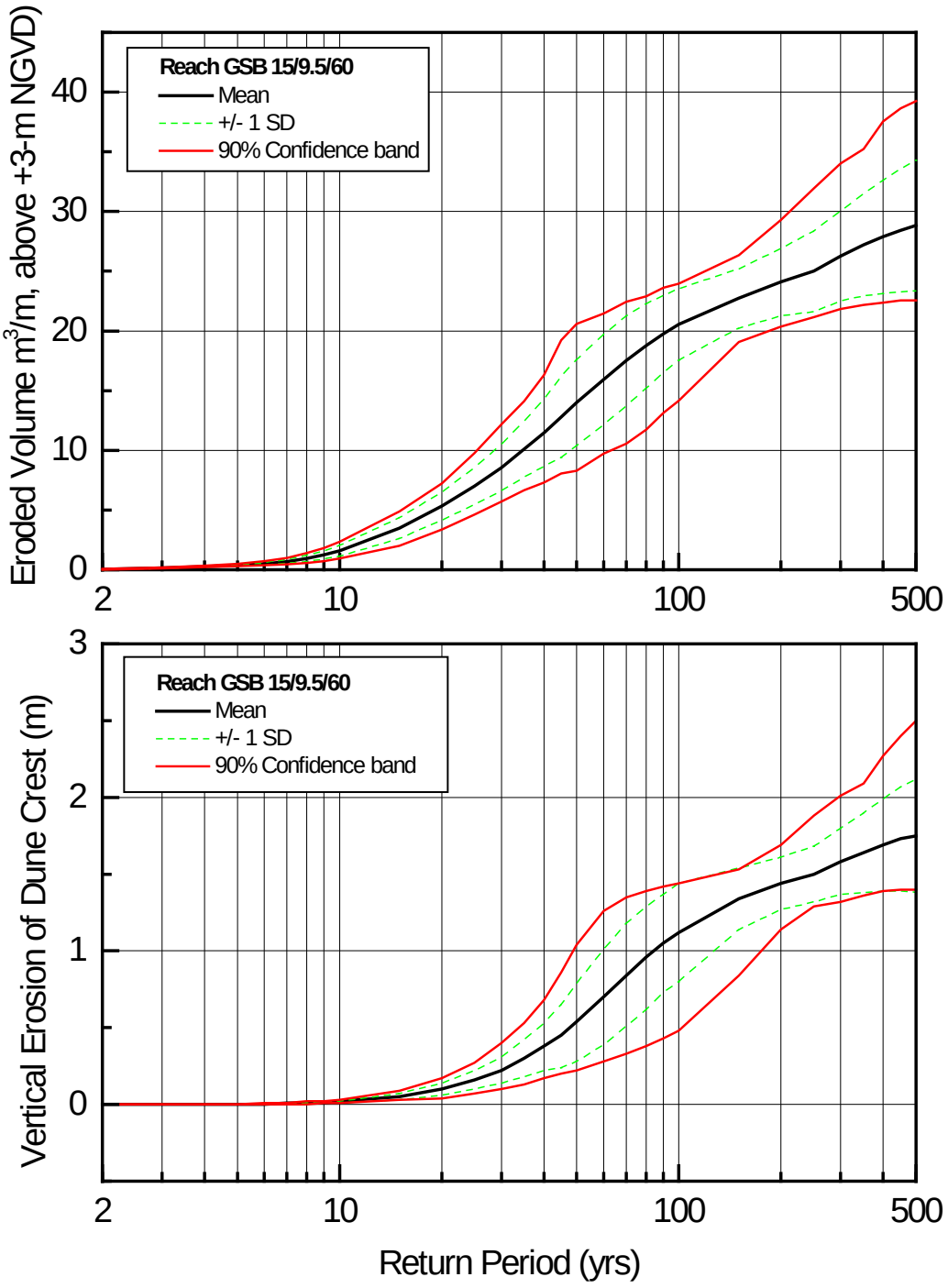

Max. Wave Setup Magnitude (m, above SWL)
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach EFII 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach EFII 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

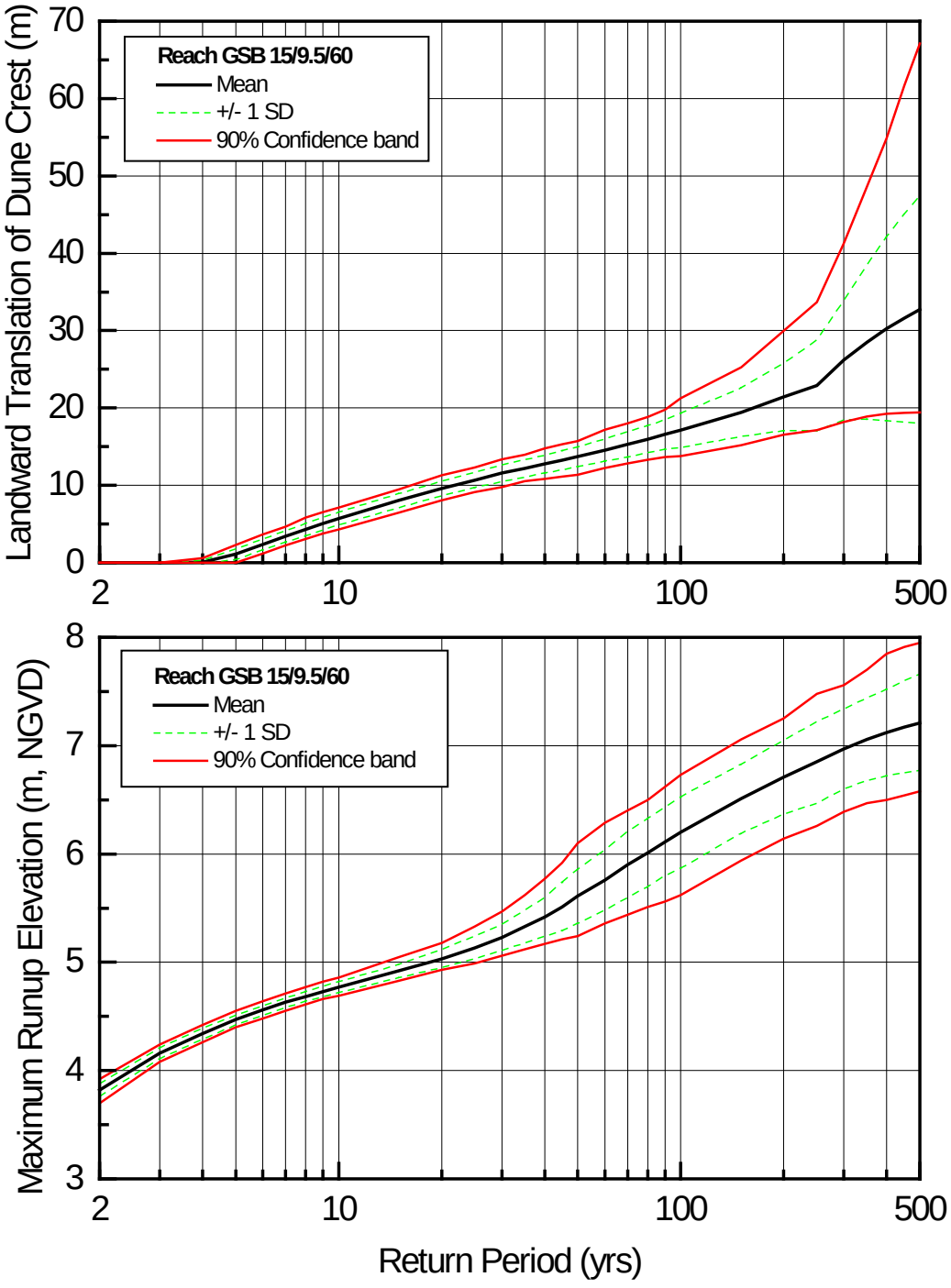

Max NS Wave Height (m, at landside surf zone)
1.75
1.50
1.25
1.00
0.75
Reach EFII 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
250
200
150
100
50
Reach EFII 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

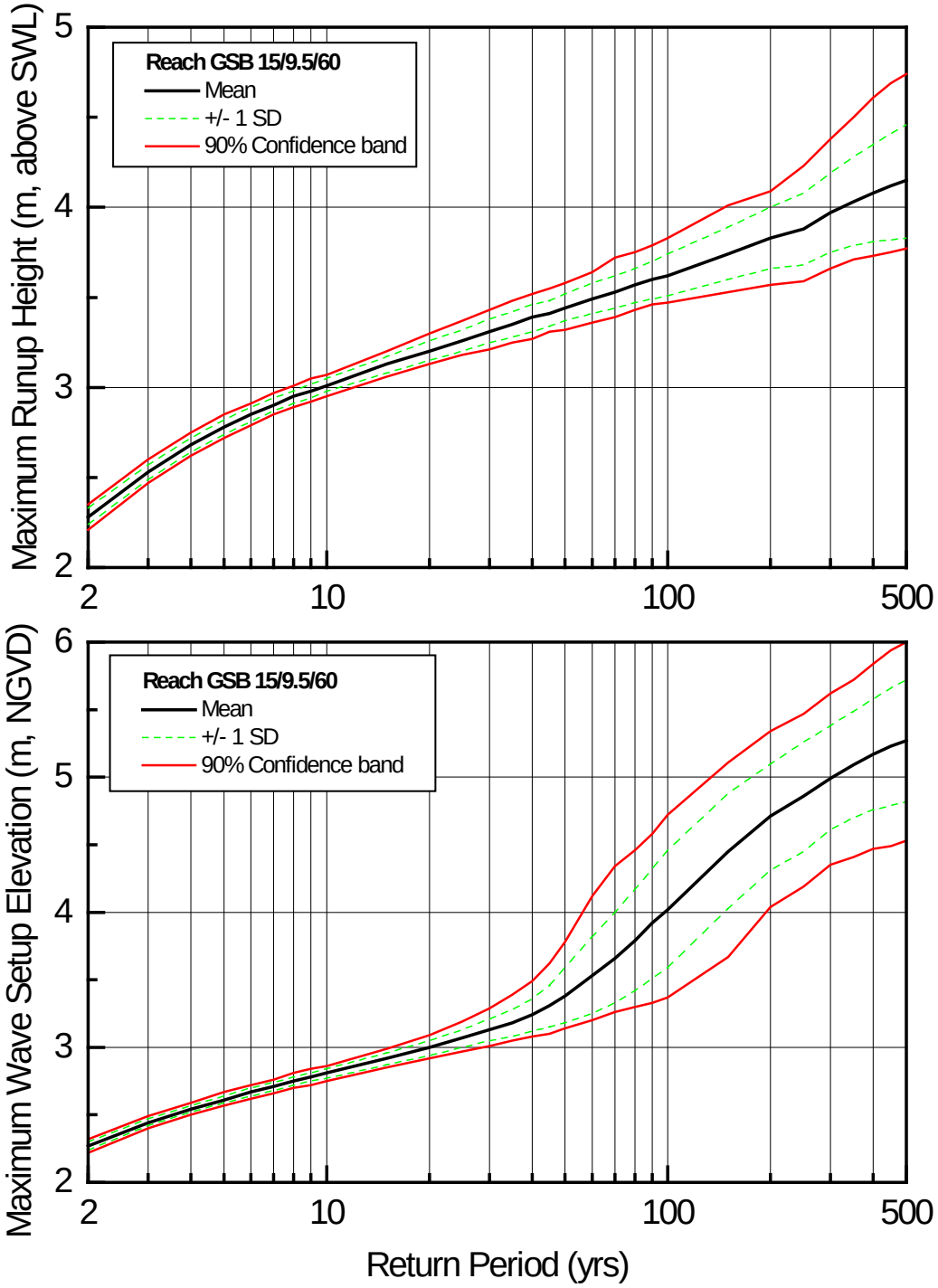

Reach EFII 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Reach EFII 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
15.0
12.5
10.0
7.5
5.0
2
10
100
500
Return Period (yrs)

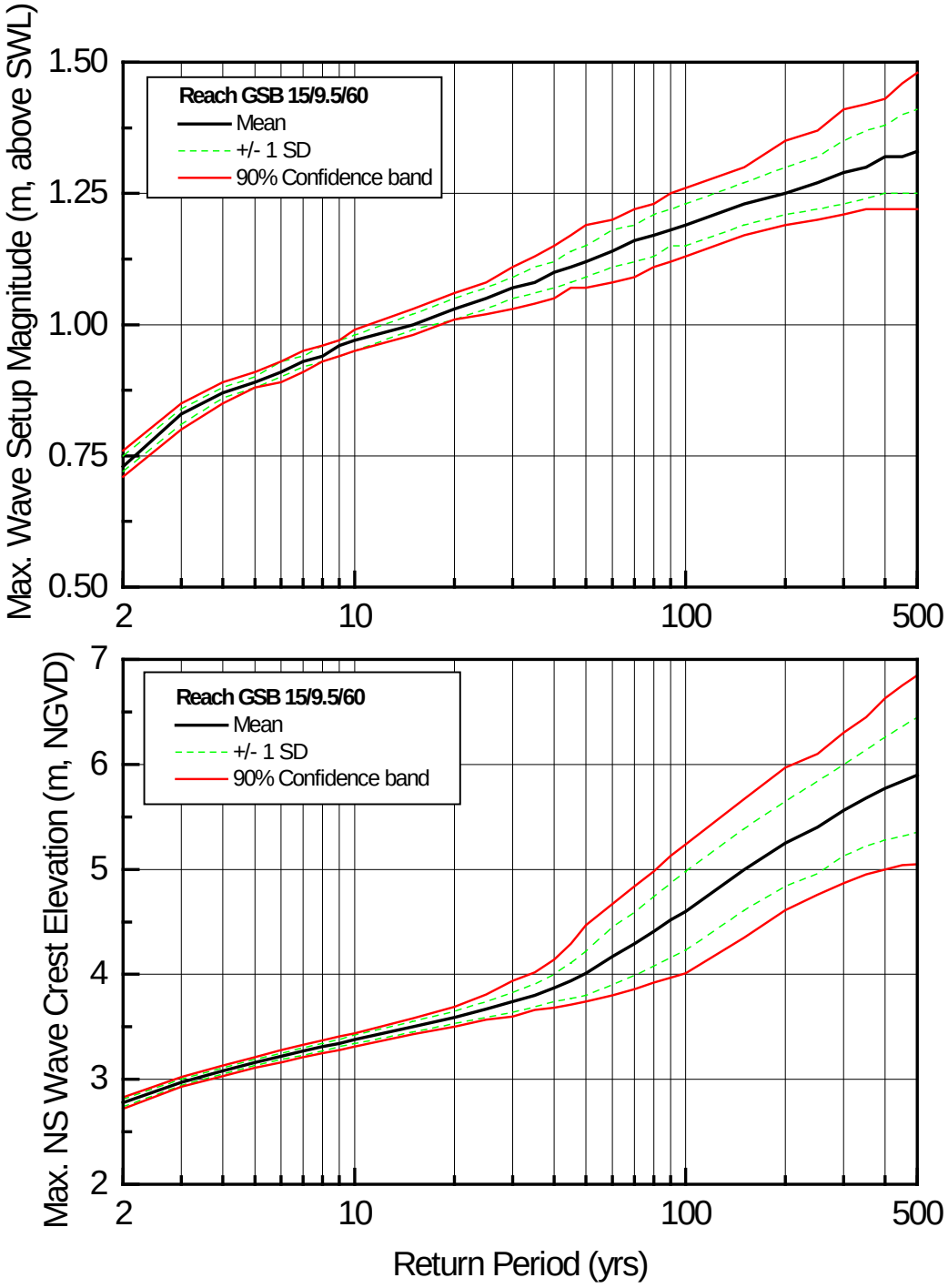

Reach EFII 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach EFII 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
35
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

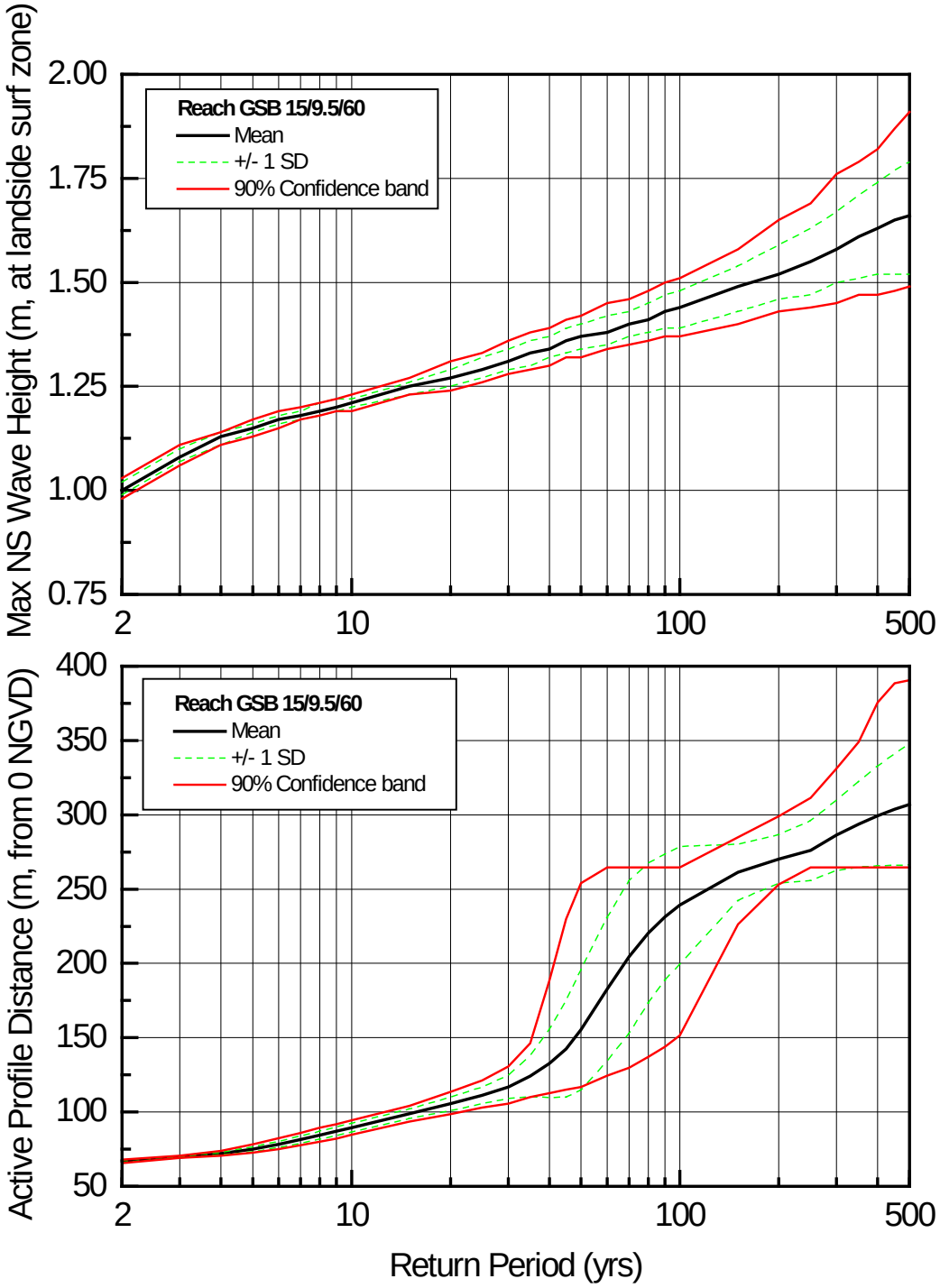

Reach GSB 15/9.5/60
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
200
180
160
140
120
100
80
60
2
10
100
500
Reach GSB 15/9.5/60
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

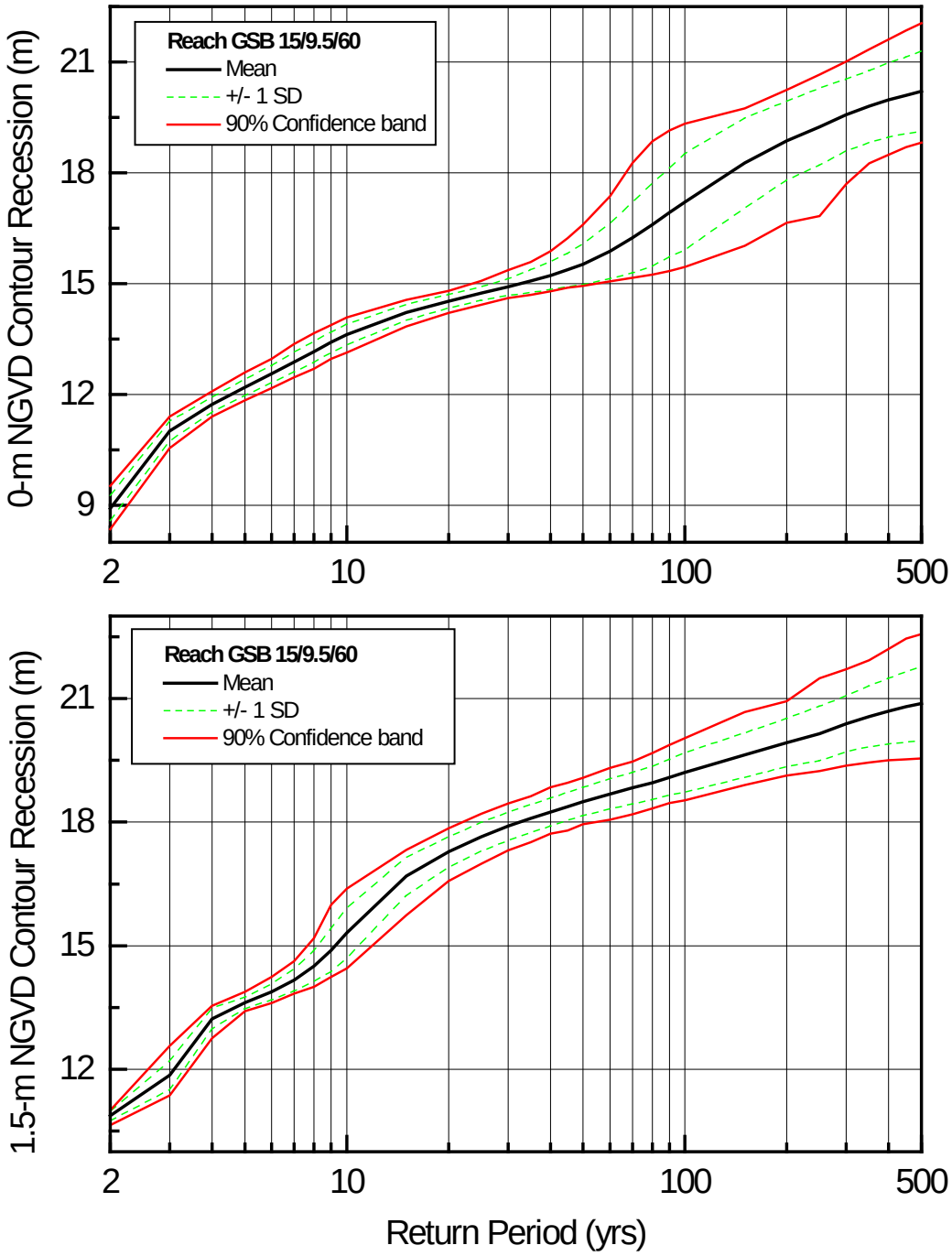

Reach GSB 15/9.5/60
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach GSB 15/9.5/60
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

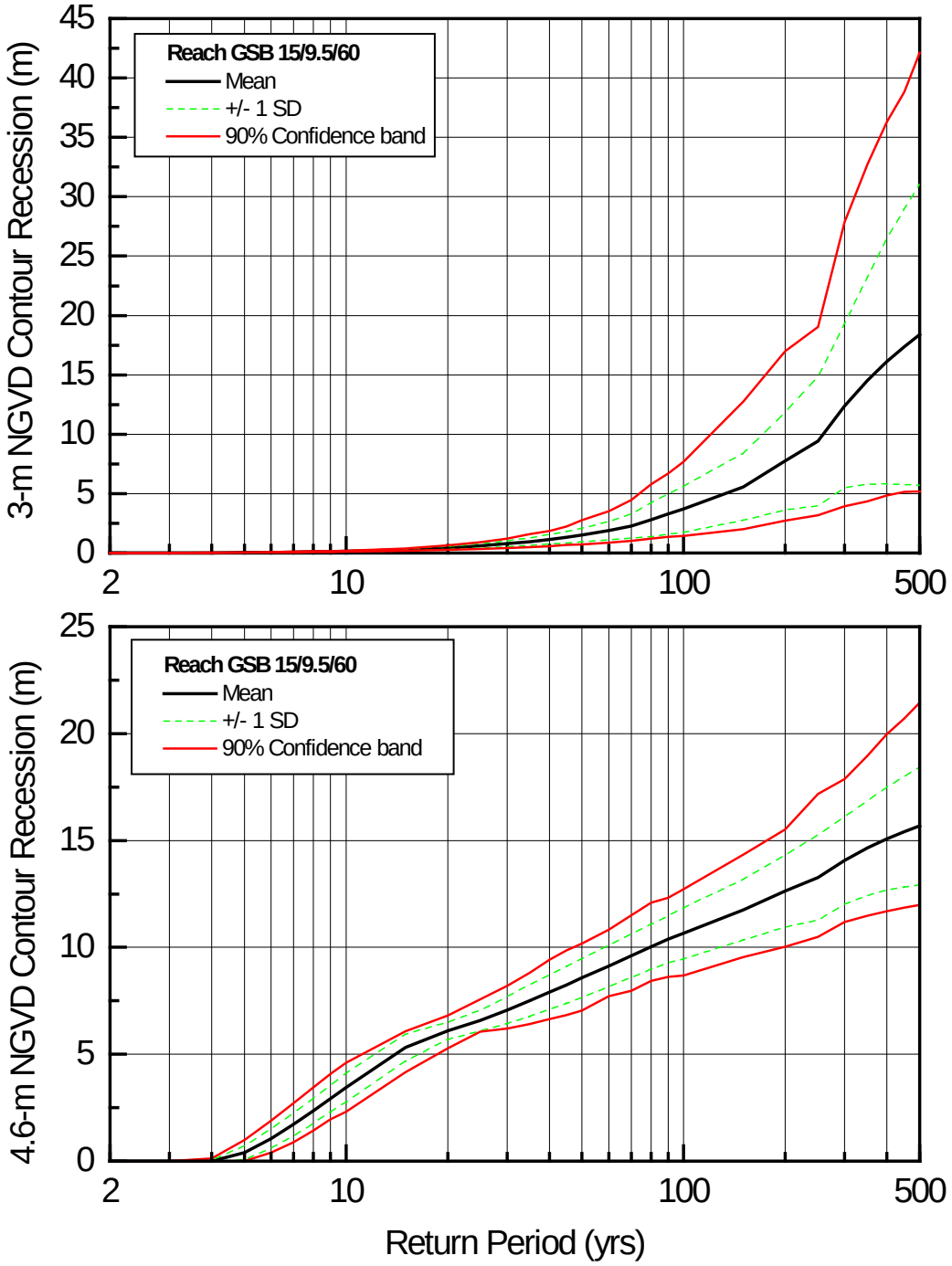

Reach GSB 15/9.5/60
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
30
40
50
60
70
2
10
100
500
Reach GSB 15/9.5/60
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
8
2
10
100
500
Return Period (yrs)

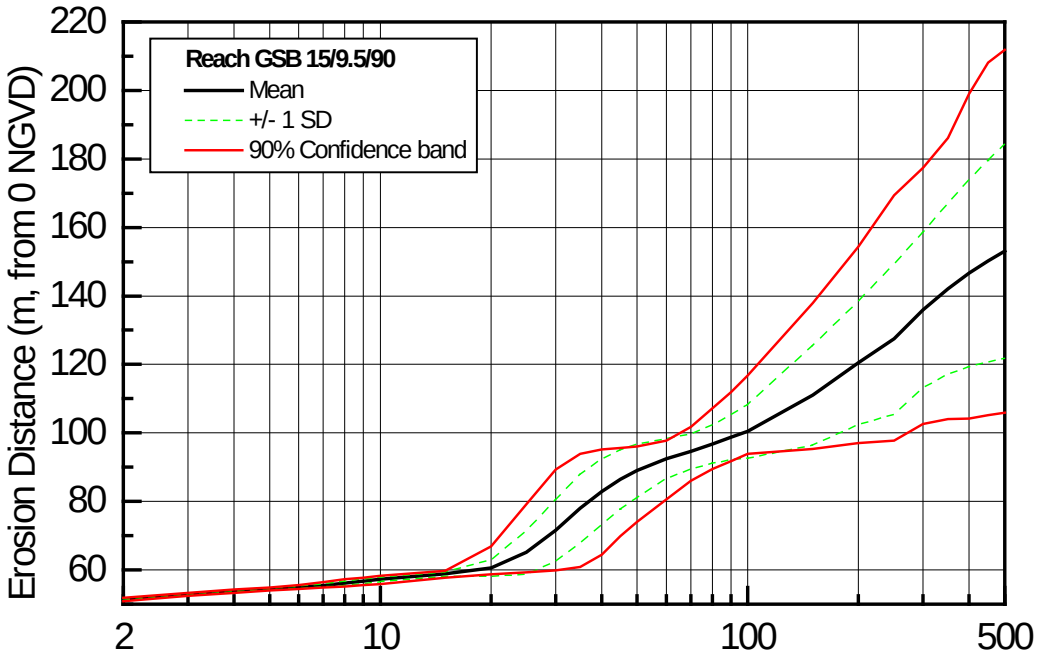

Reach GSB 15/9.5/60
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5
4
3
2
2
10
100
500
Reach GSB 15/9.5/60
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

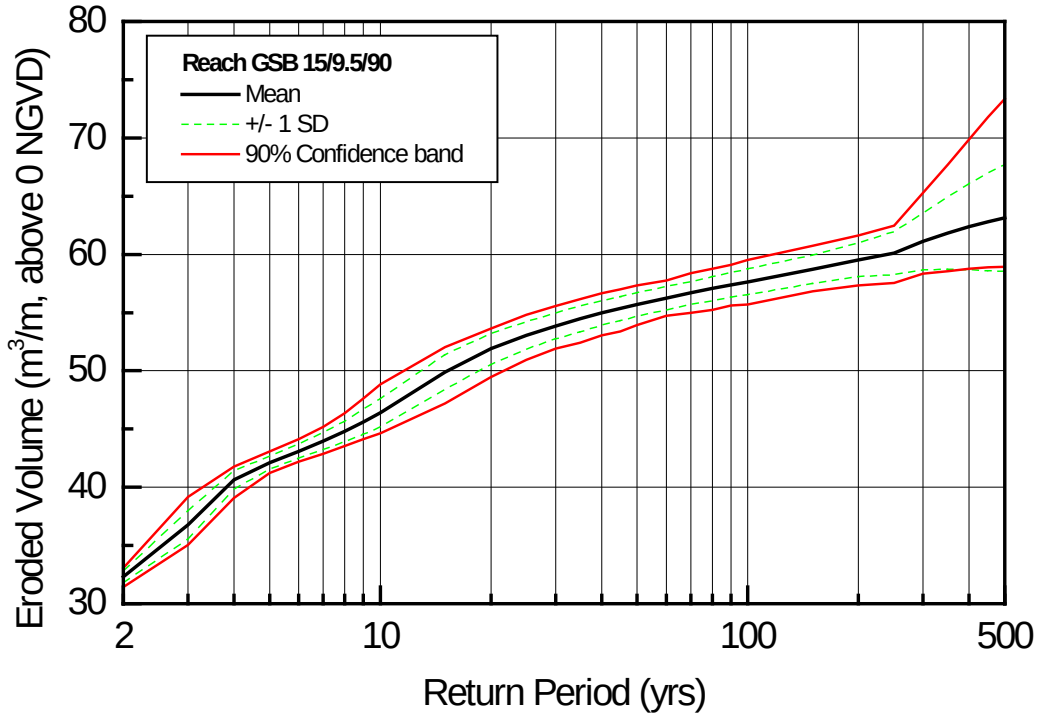

Max. Wave Setup Magnitude (m, above SWL)
1.50
1.25
1.00
0.75
0.50
Reach GSB 15/9.5/60
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
2
Reach GSB 15/9.5/60
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

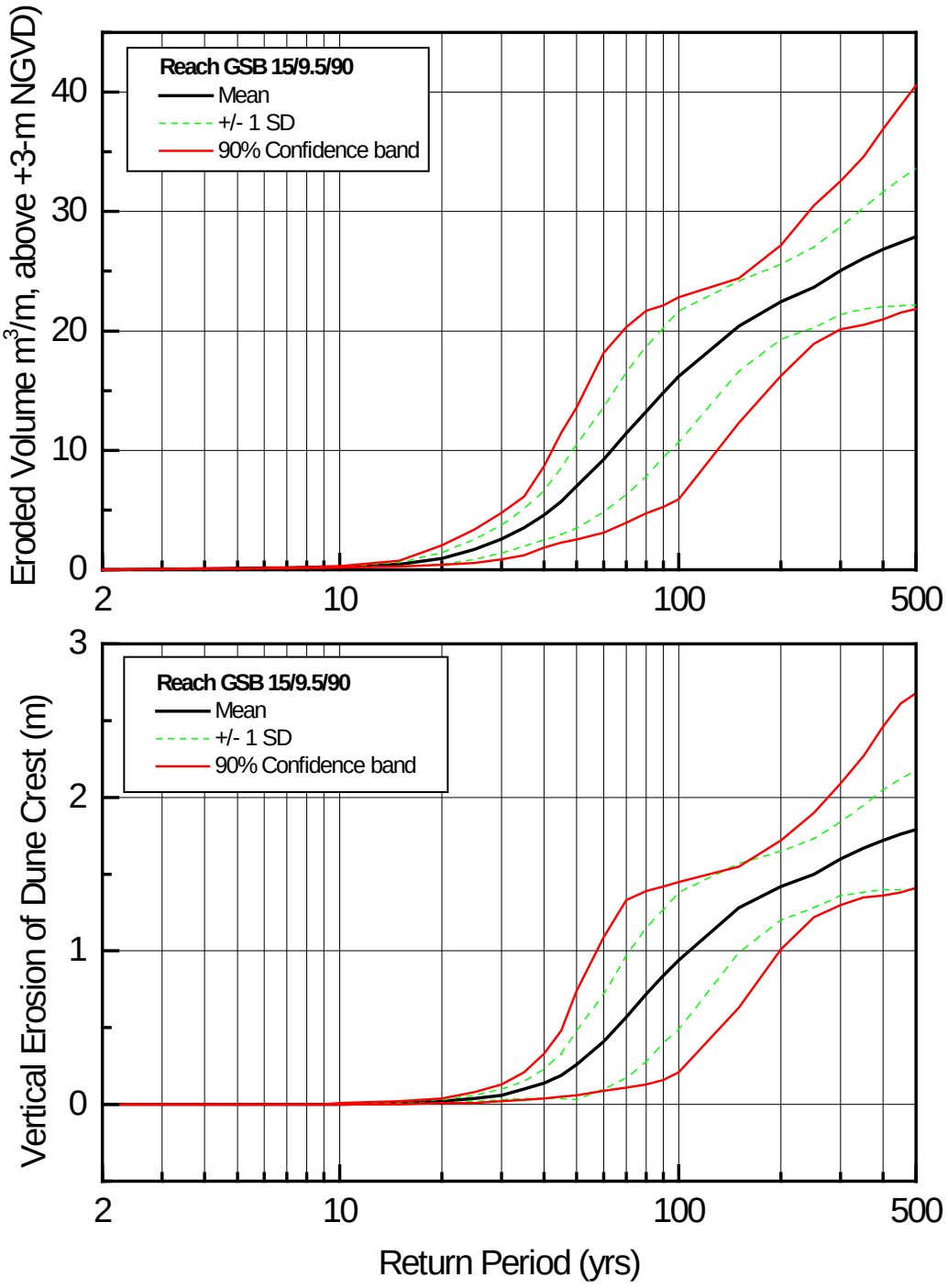

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
0.75
Reach GSB 15/9.5/60
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
350
300
250
200
150
100
50
Reach GSB 15/9.5/60
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

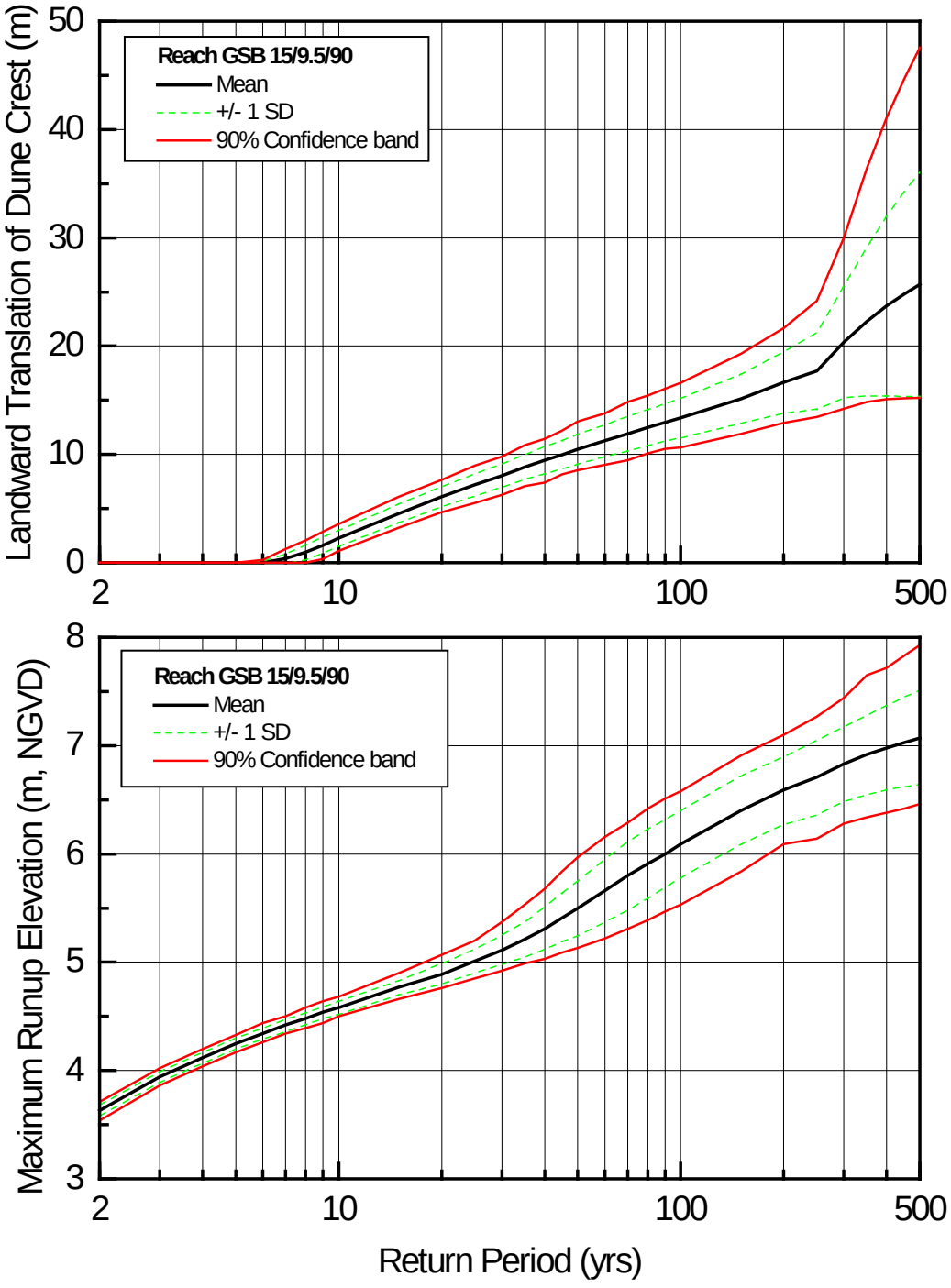

Reach GSB 15/9.5/60
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
21
18
15
12
9
2
10
100
500
Reach GSB 15/9.5/60
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
21
18
15
12
2
10
100
500
Return Period (yrs)

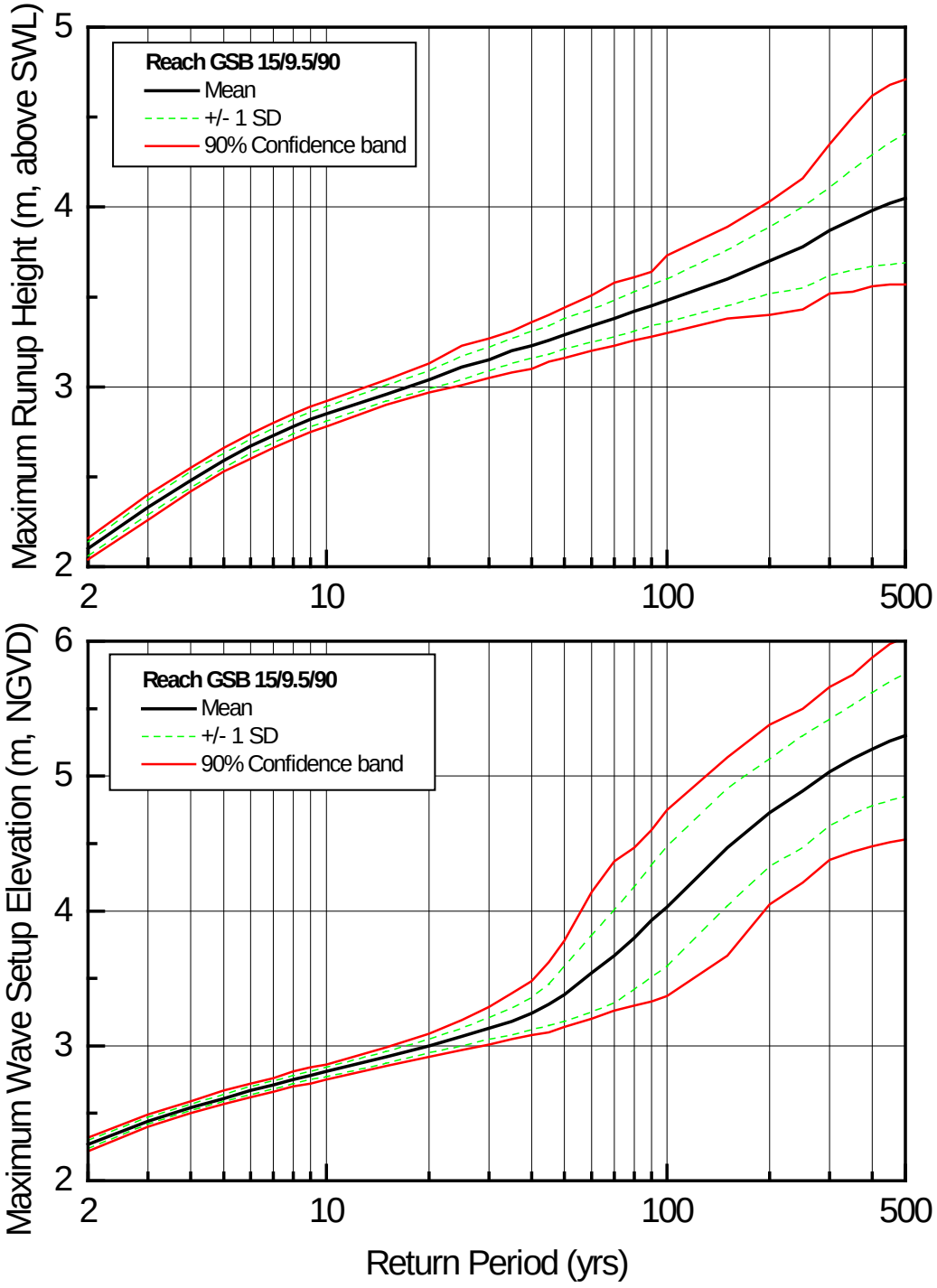

Reach GSB 15/9.5/60
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
0
5
10
15
20
25
30
35
40
45
2
10
100
500
Reach GSB 15/9.5/60
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
0
5
10
15
20
25
2
10
100
500
Return Period (yrs)

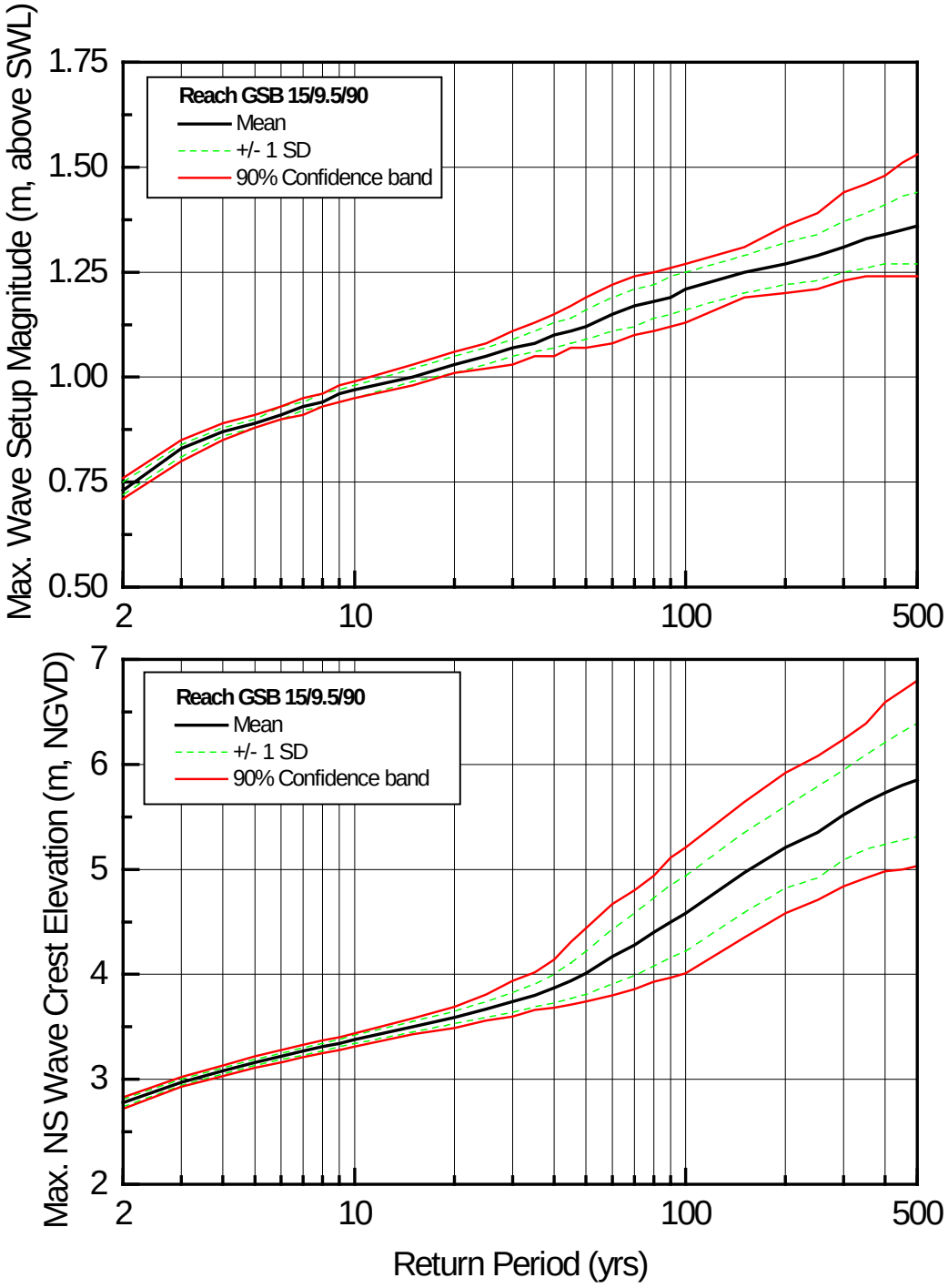

Reach GSB 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
220
200
180
160
140
120
100
80
60
2
10
100
500

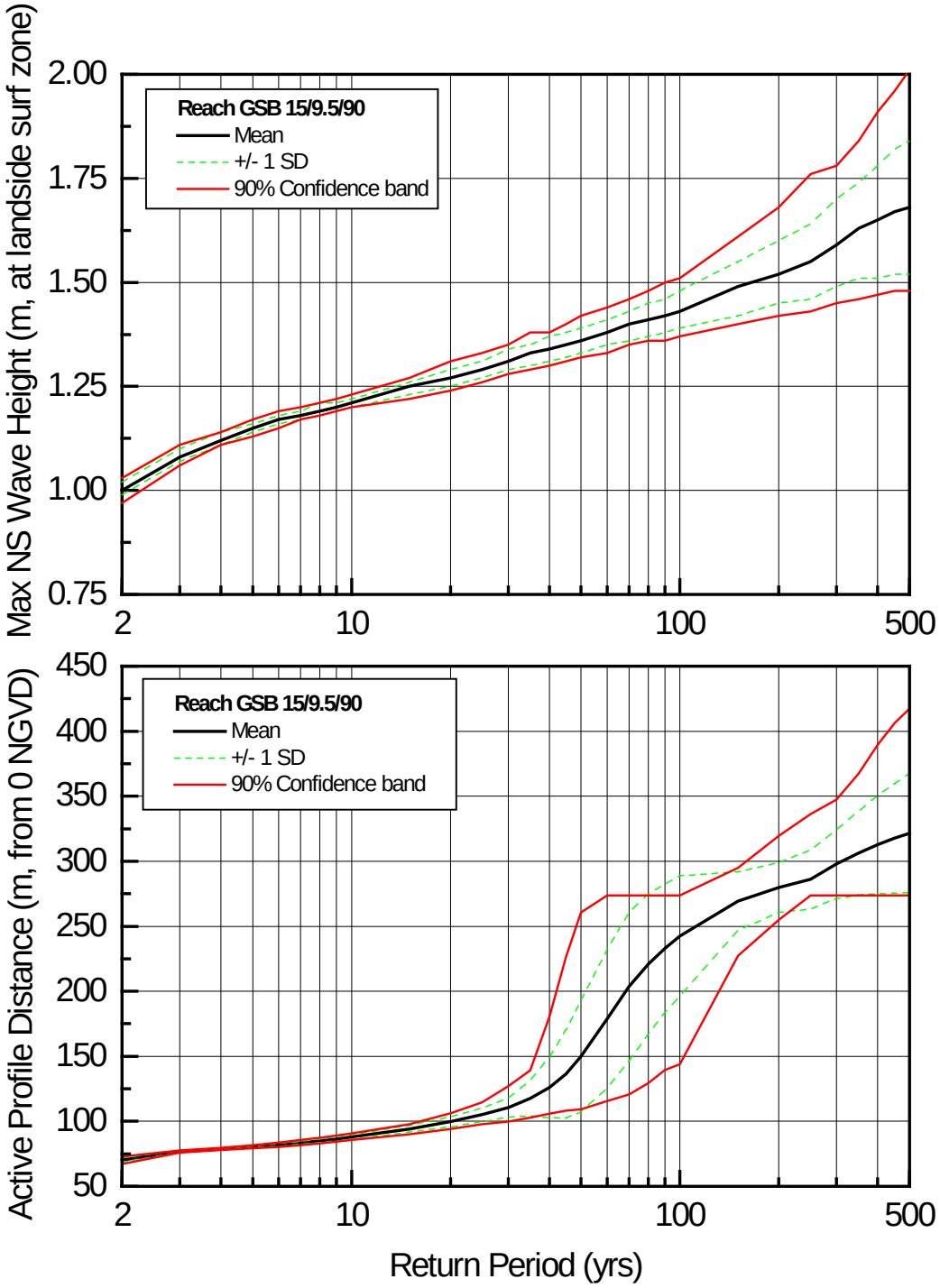

Reach GSB 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

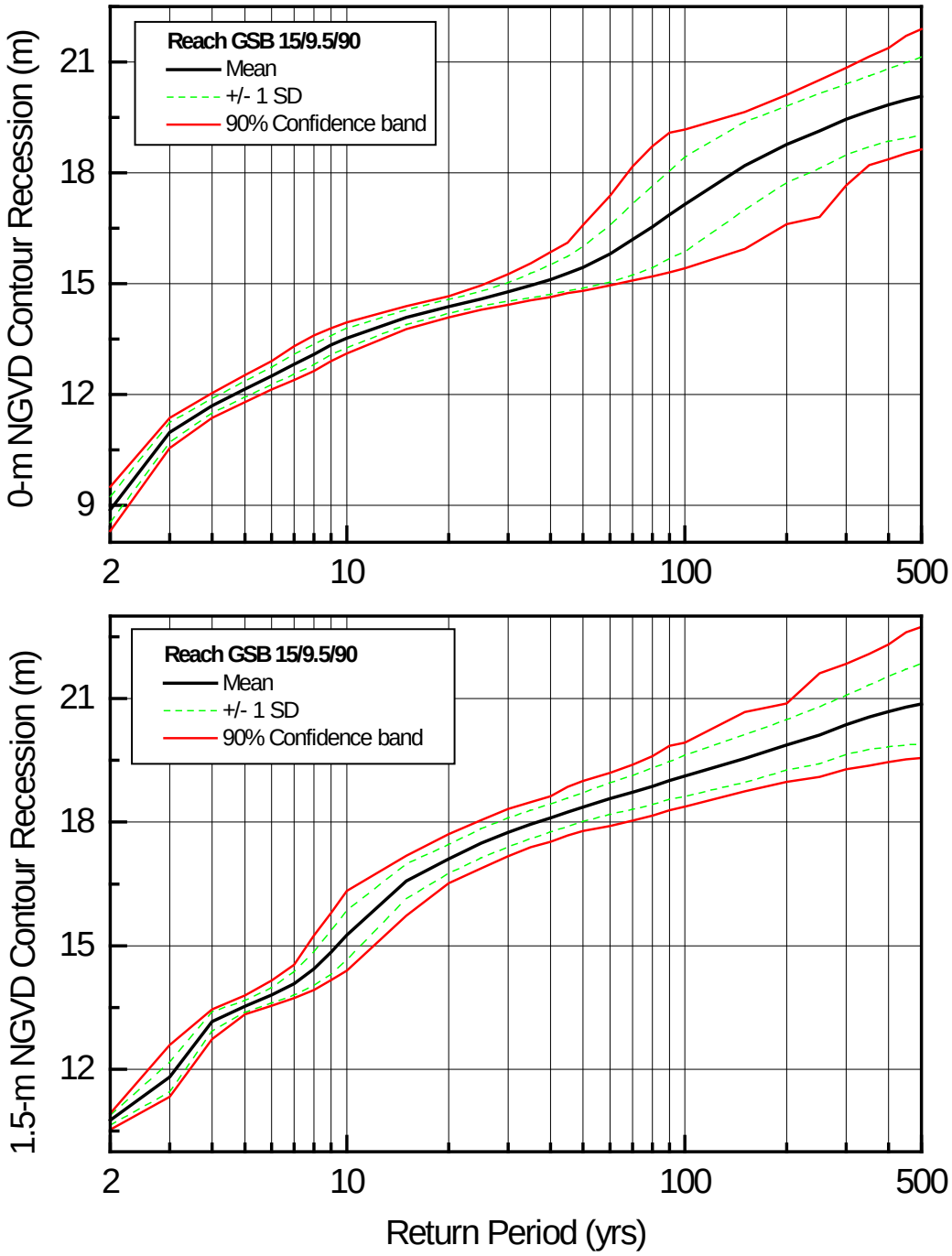

Reach GSB 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach GSB 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

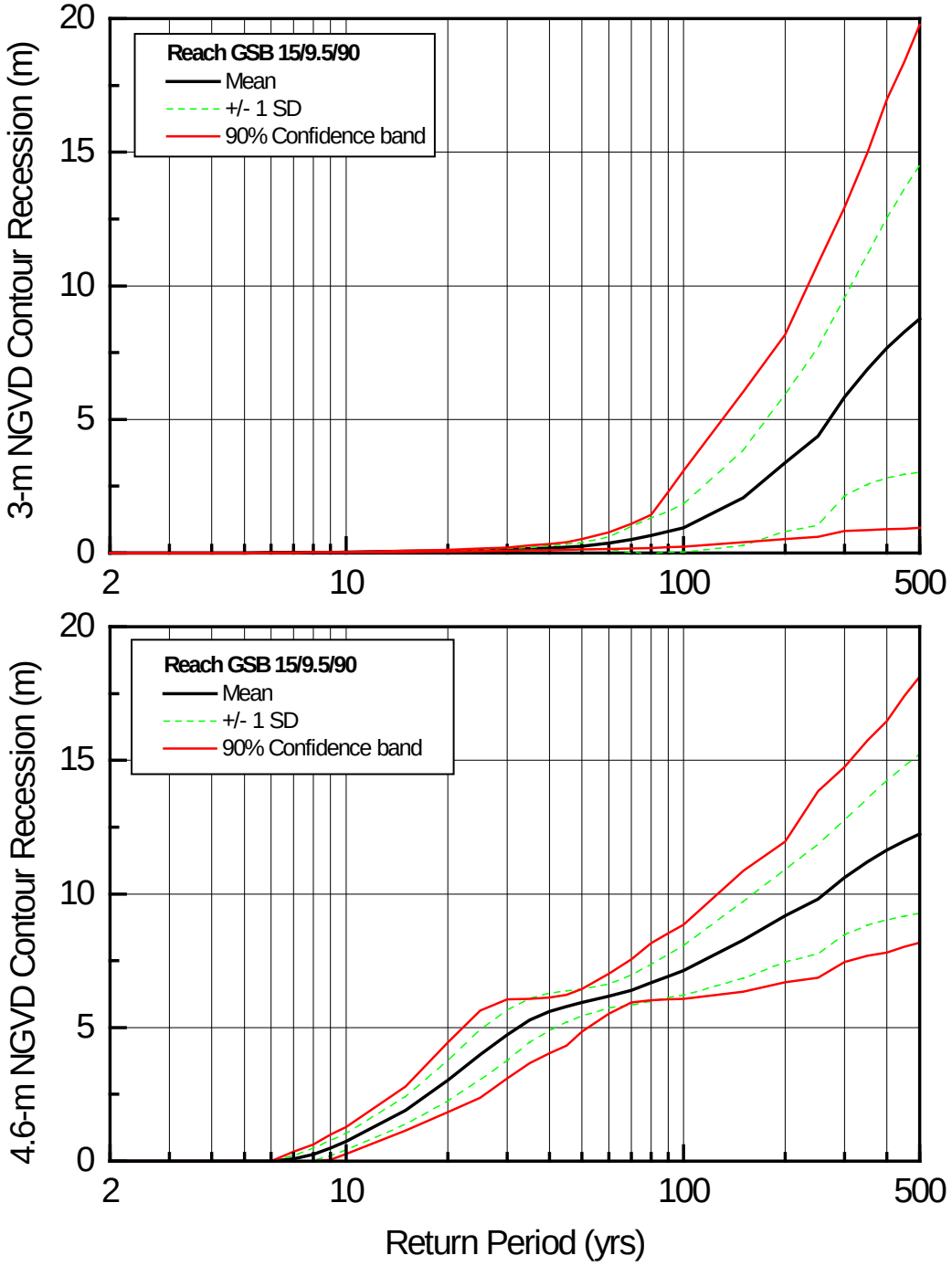

Reach GSB 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
30
40
50
2
10
100
500
Reach GSB 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
8
2
10
100
500
Return Period (yrs)

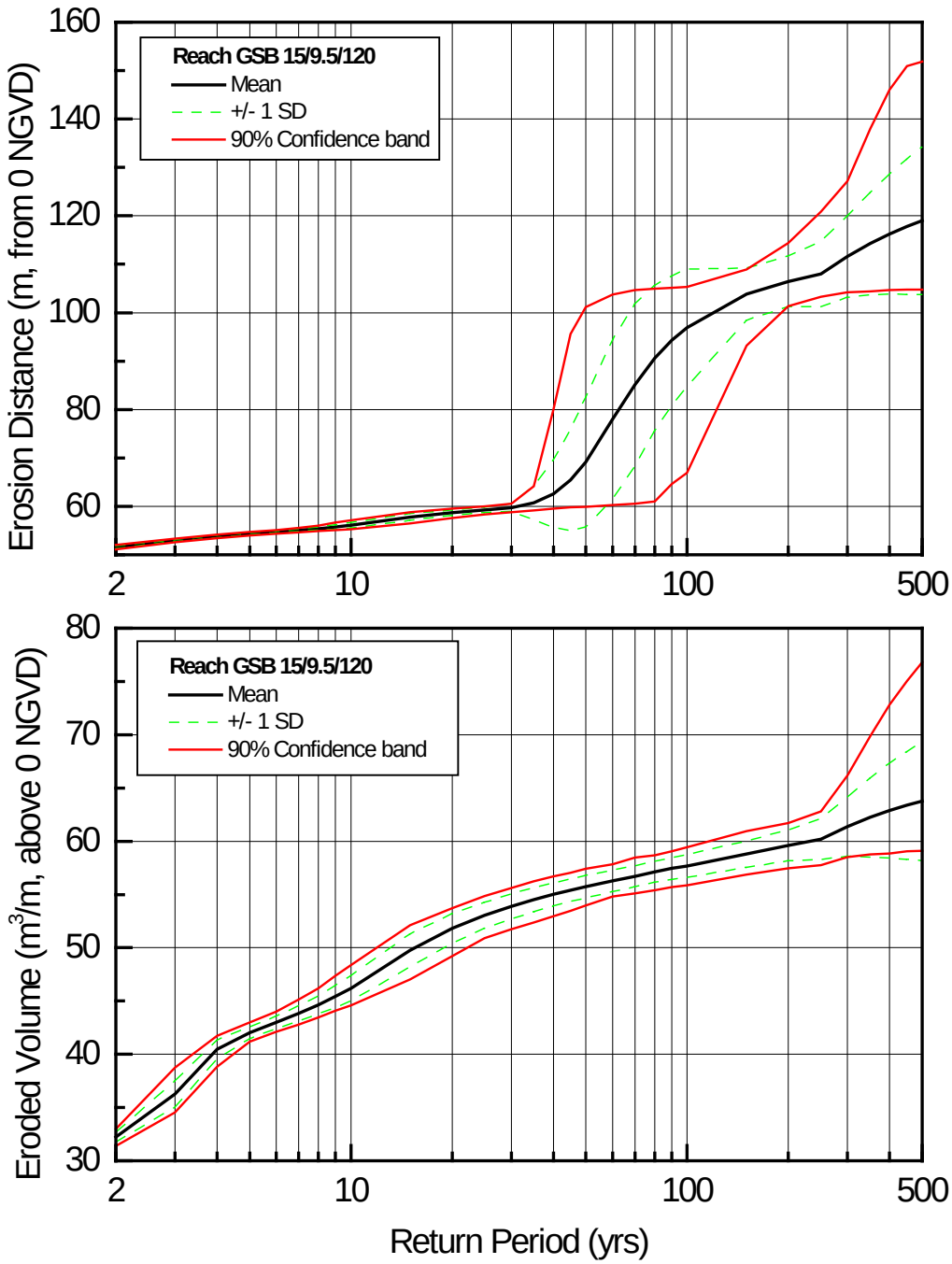

Reach GSB 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5
4
3
2
2
10
100
500
Reach GSB 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

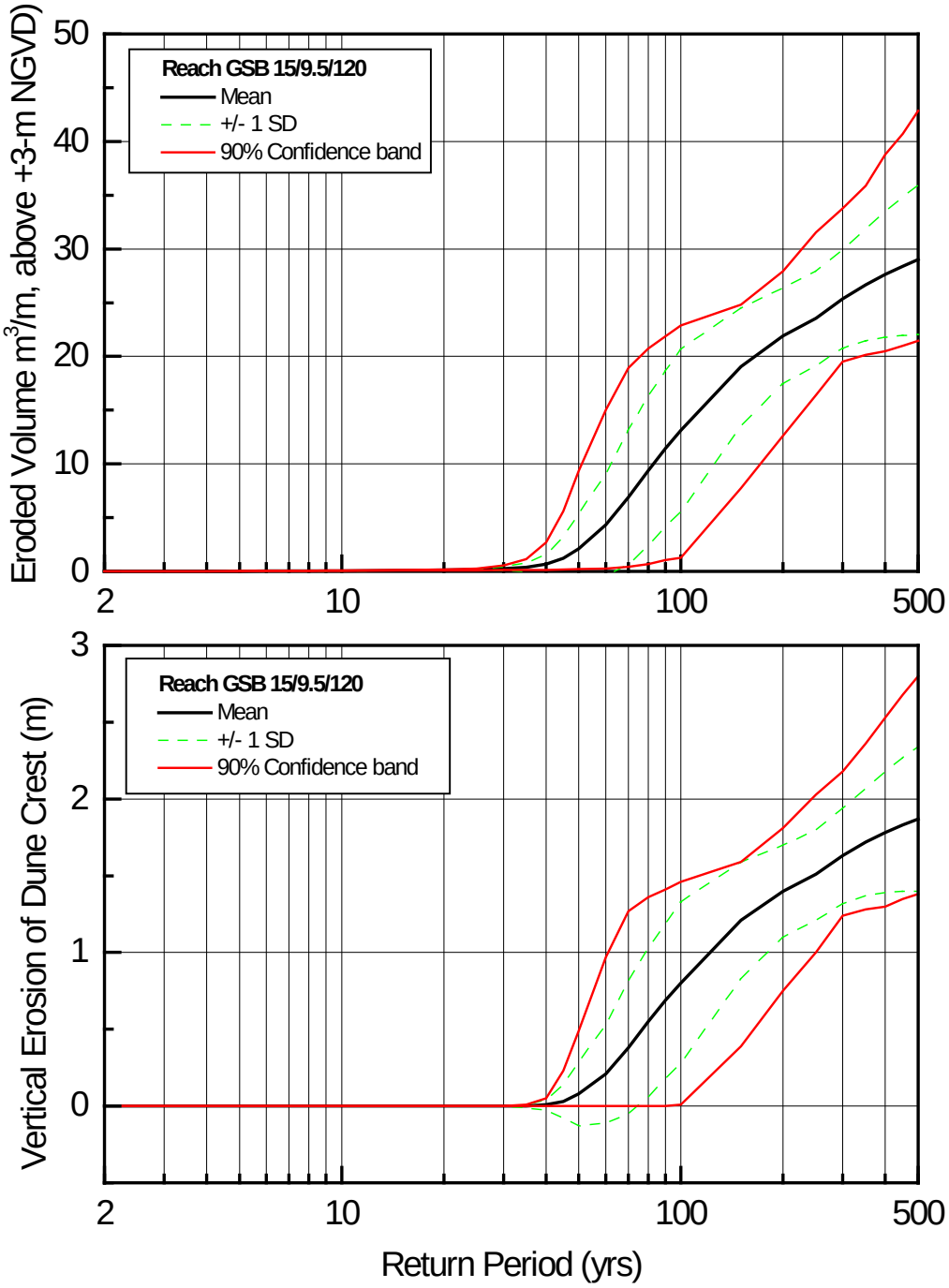

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach GSB 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
2
Reach GSB 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

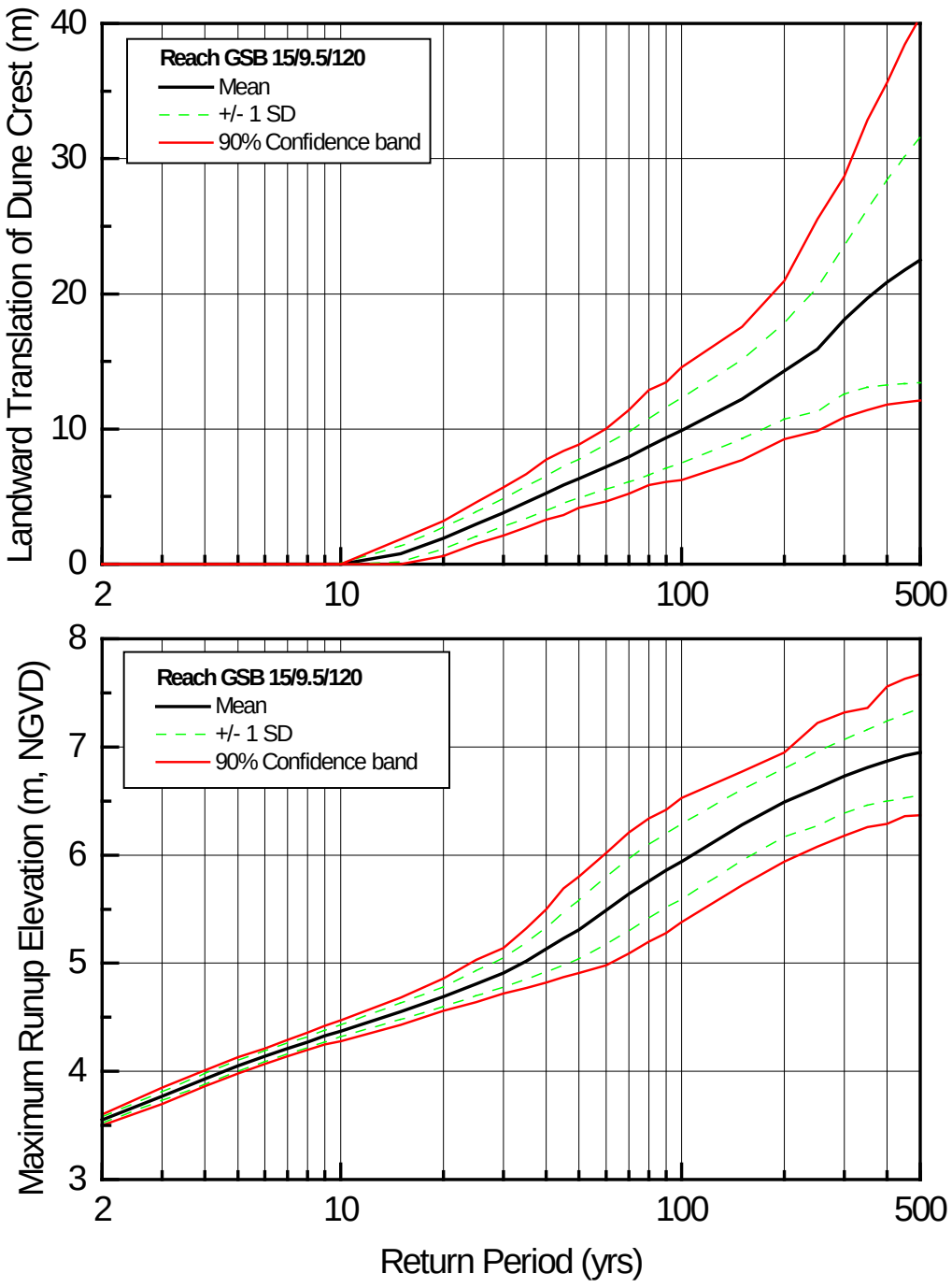

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
0.75
Reach GSB 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
450
400
350
300
250
200
150
100
50
Reach GSB 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

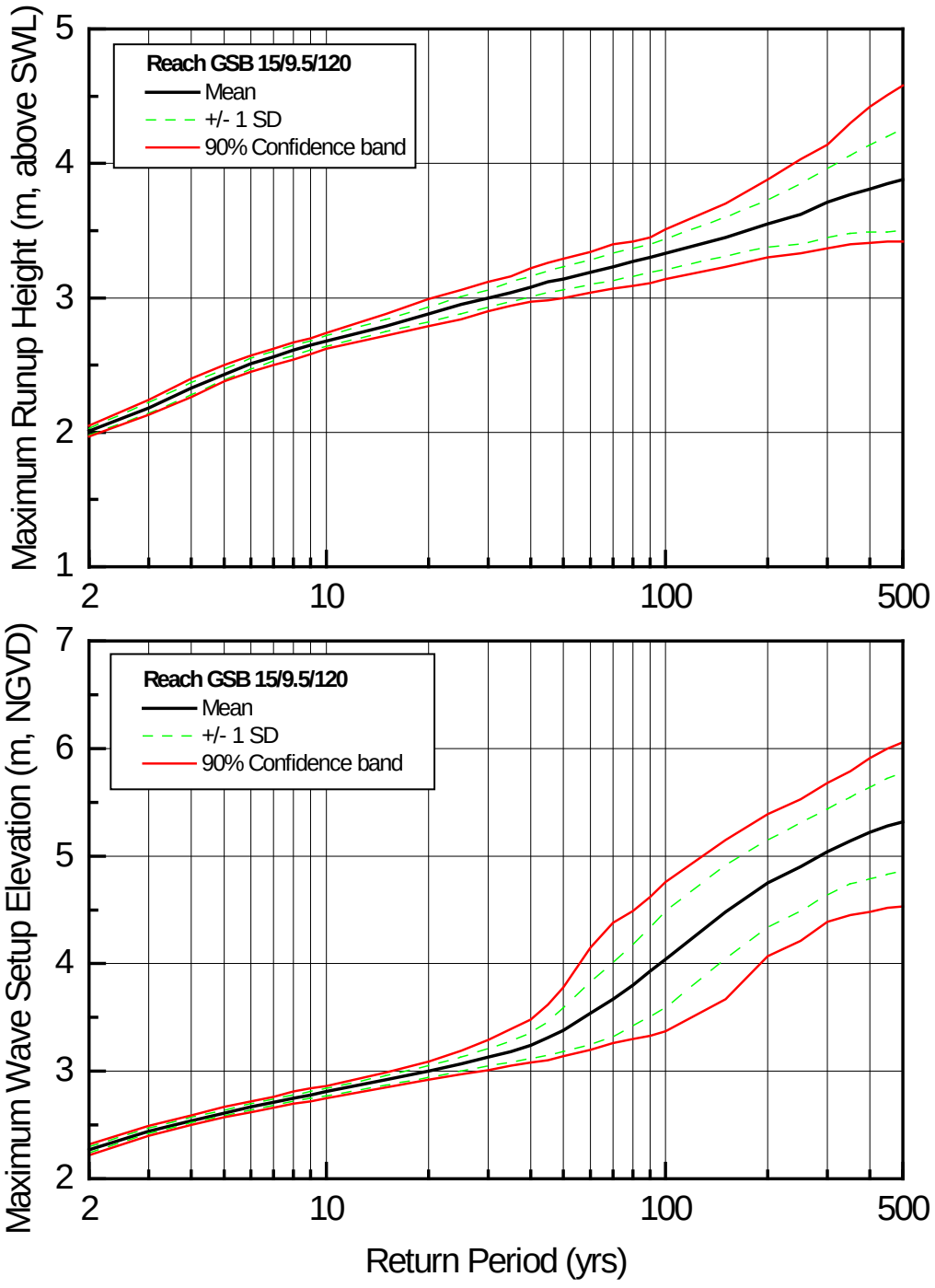

Reach GSB 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
21
18
15
12
9
2
10
100
500
Reach GSB 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
21
18
15
12
2
10
100
500
Return Period (yrs)

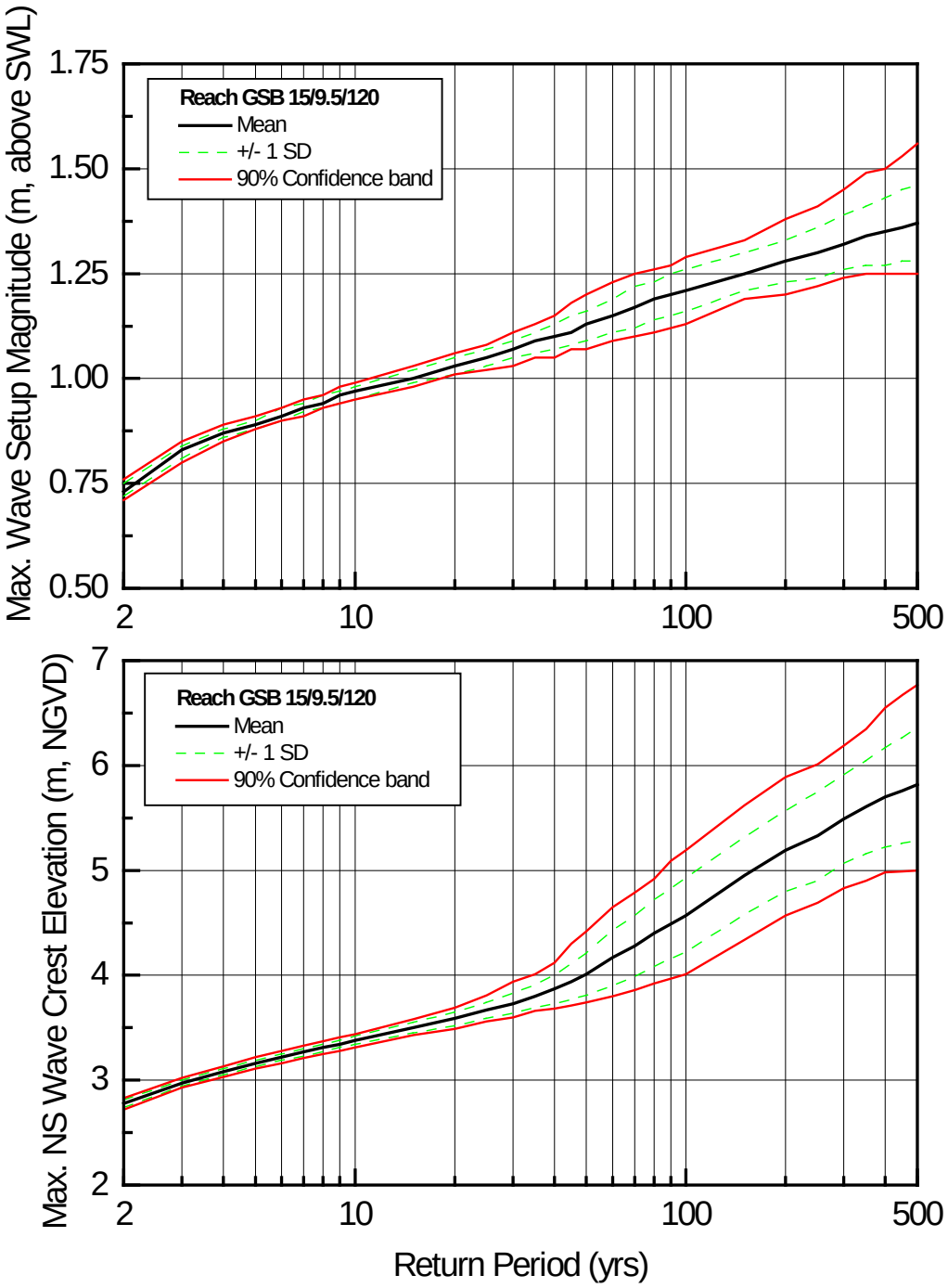

Reach GSB 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
20
15
10
5
0
2
10
100
500
Reach GSB 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
20
15
10
5
0
2
10
100
500
Return Period (yrs)

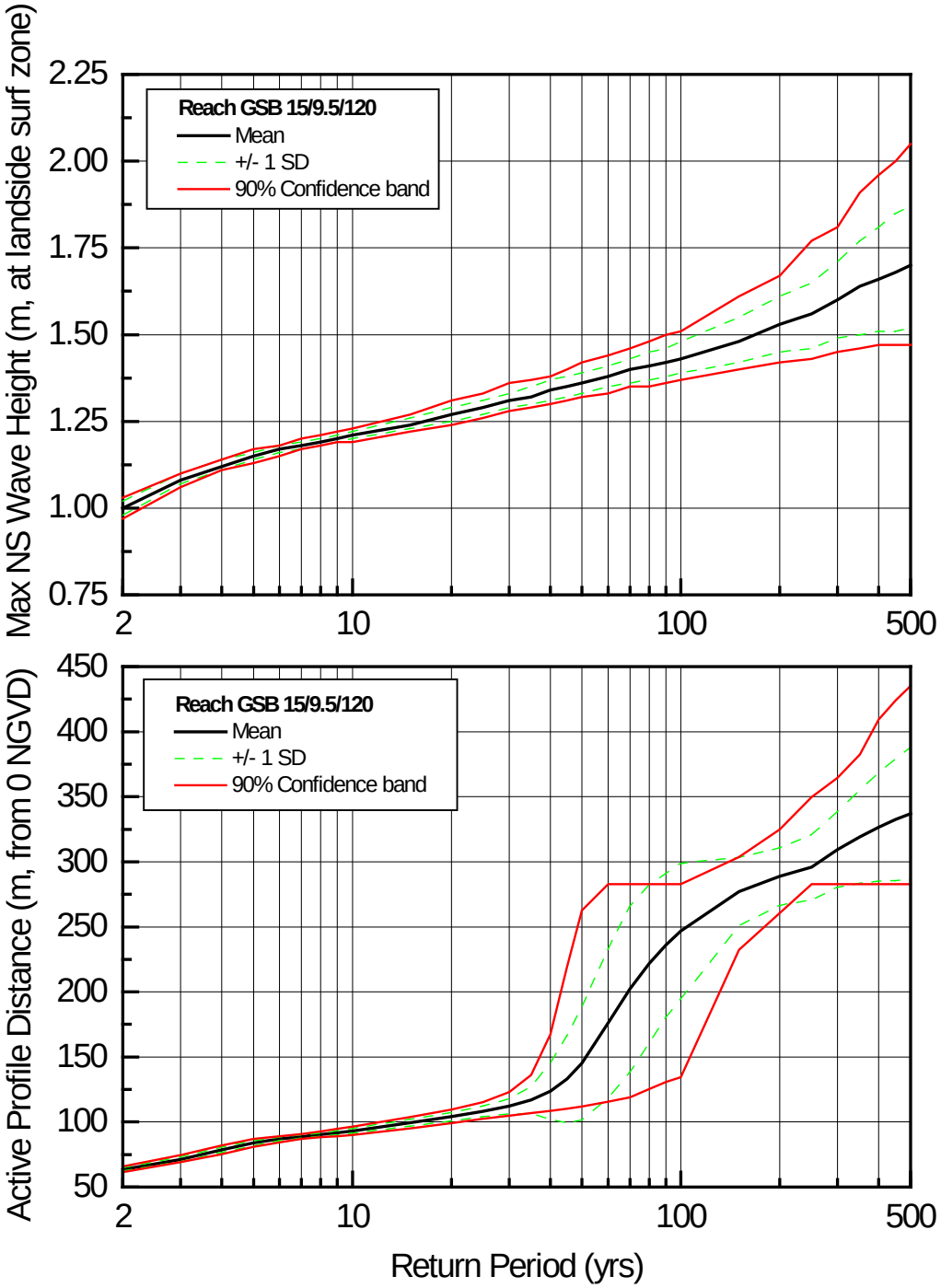

Reach GSB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
160
140
120
100
80
60
2
10
100
500
Reach GSB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

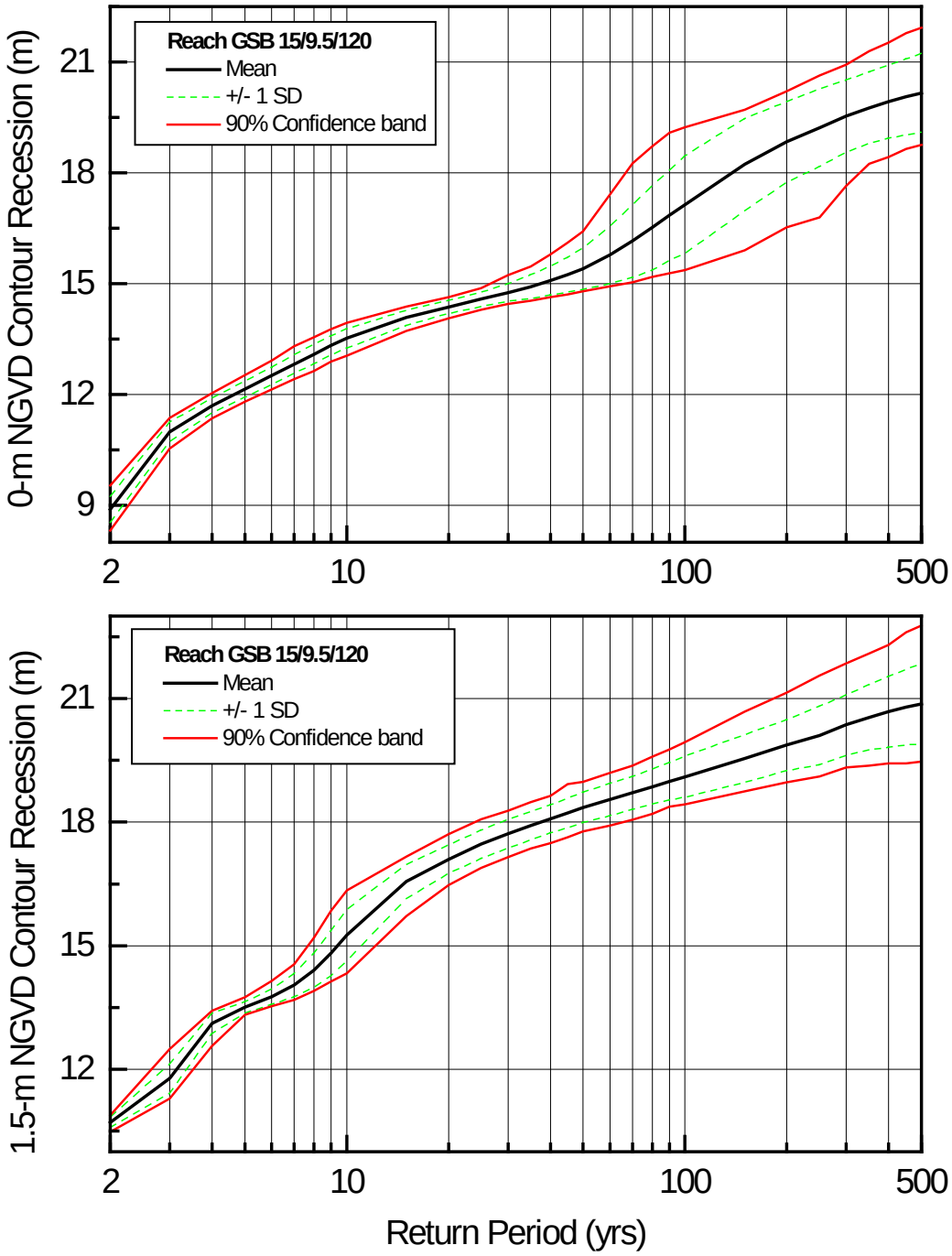

Reach GSB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
50
2
10
100
500
Reach GSB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

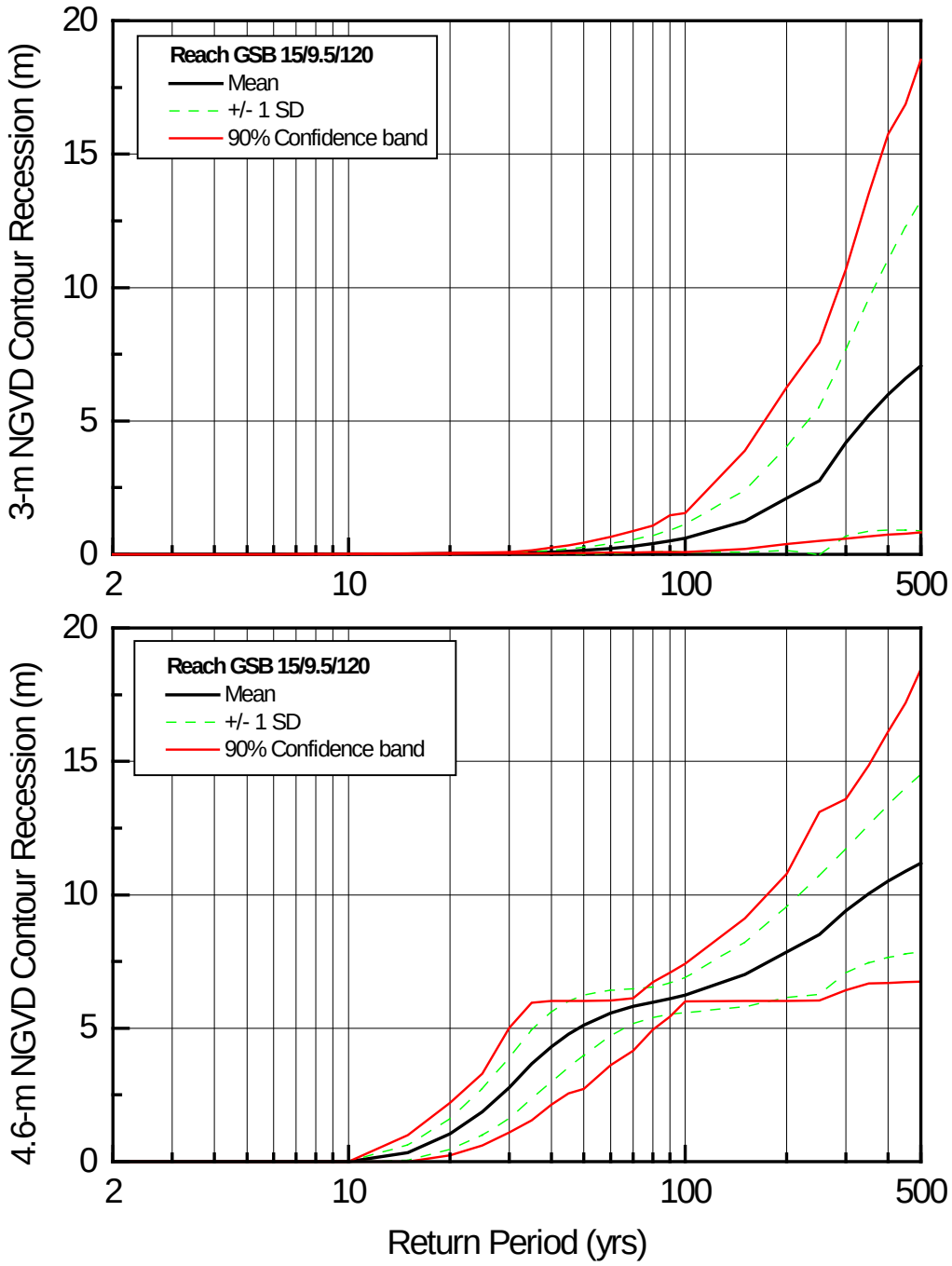

Reach GSB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
30
40
2
10
100
500
Reach GSB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
8
2
10
100
500
Return Period (yrs)

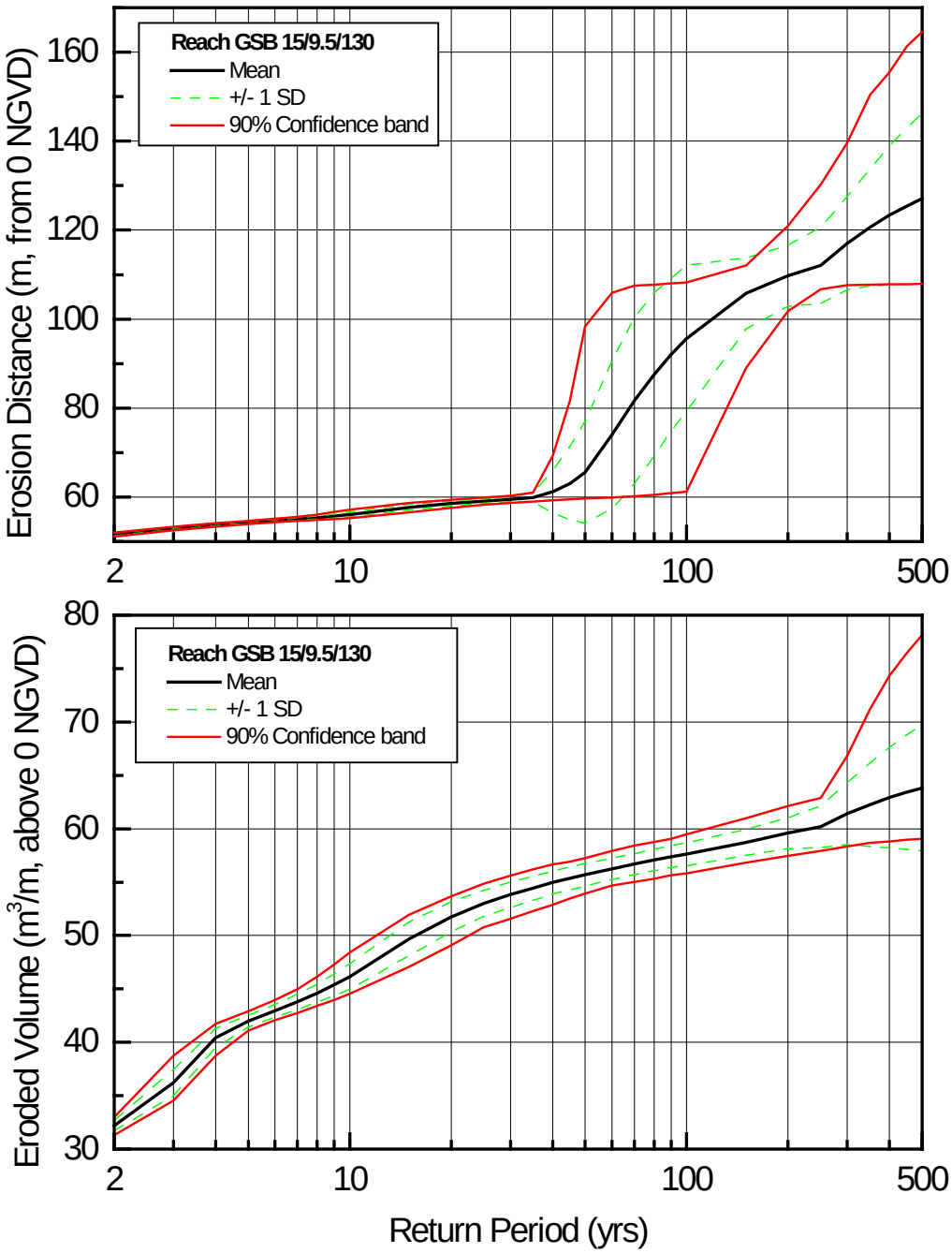

Reach GSB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
1
2
3
4
5
2
10
100
500
Reach GSB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
2
3
4
5
6
7
2
10
100
500
Return Period (yrs)

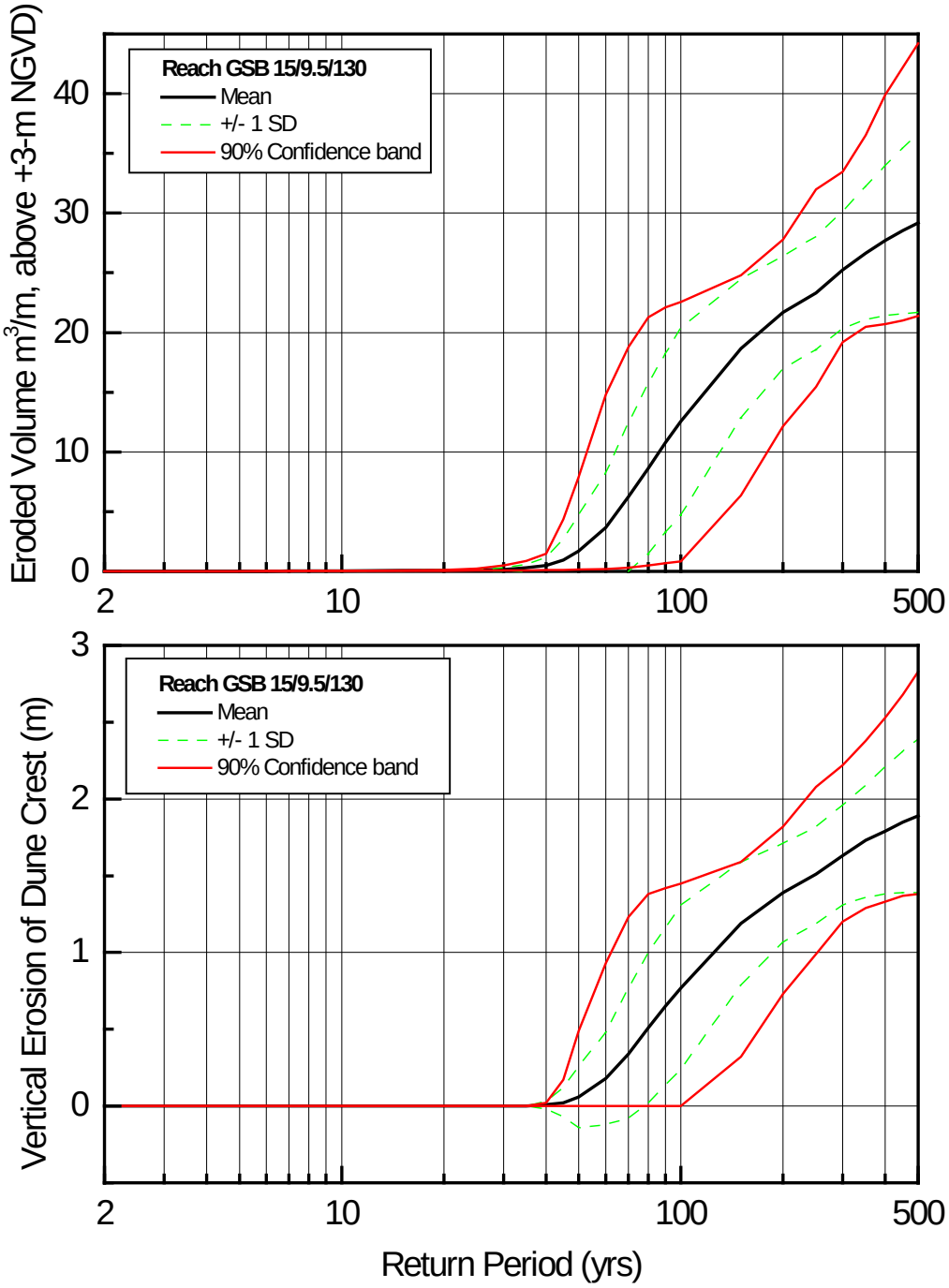

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach GSB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
2
Reach GSB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

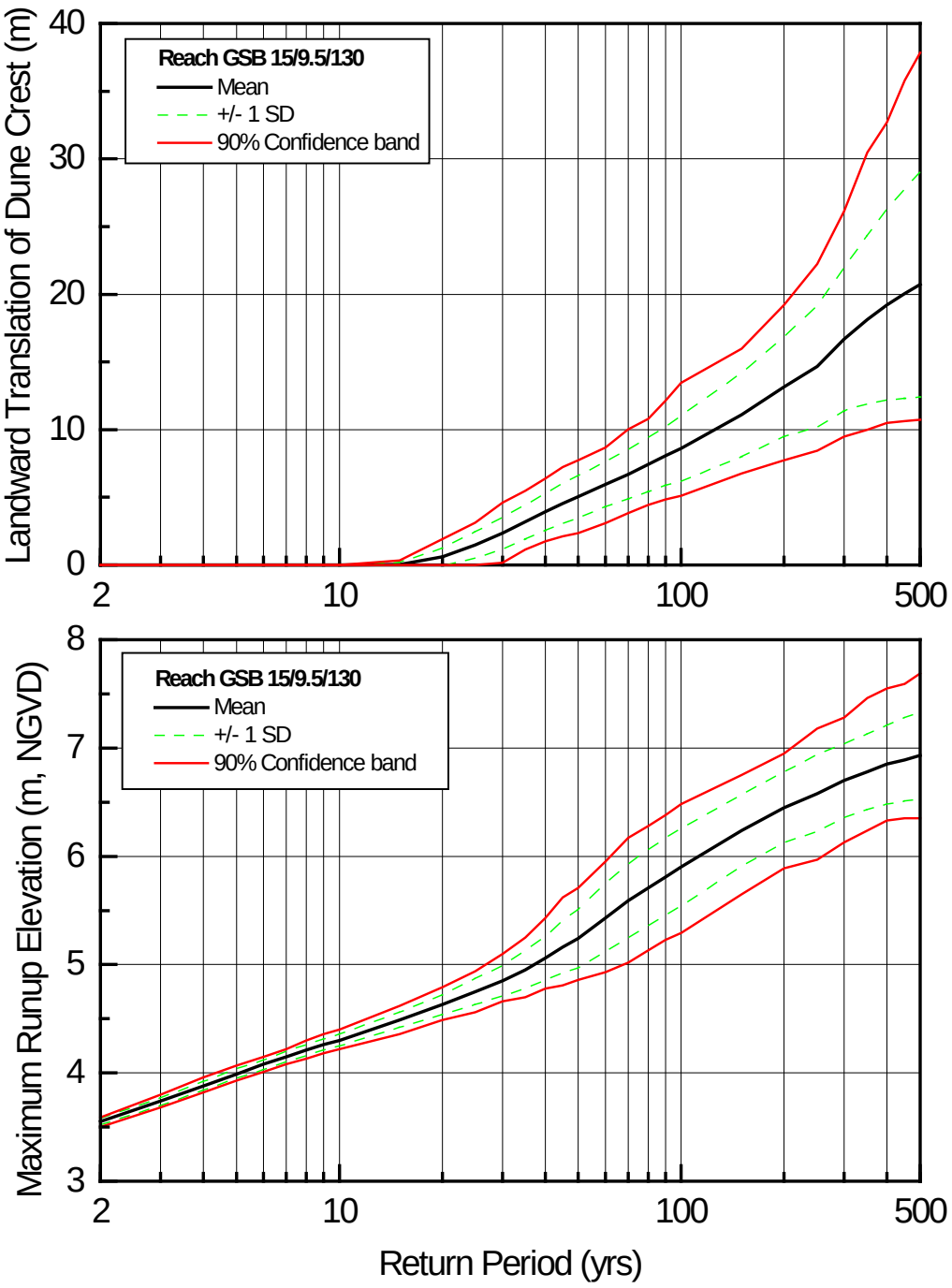

Max NS Wave Height (m, at landside surf zone)
2.25
2.00
1.75
1.50
1.25
1.00
0.75
Reach GSB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
450
400
350
300
250
200
150
100
50
Reach GSB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

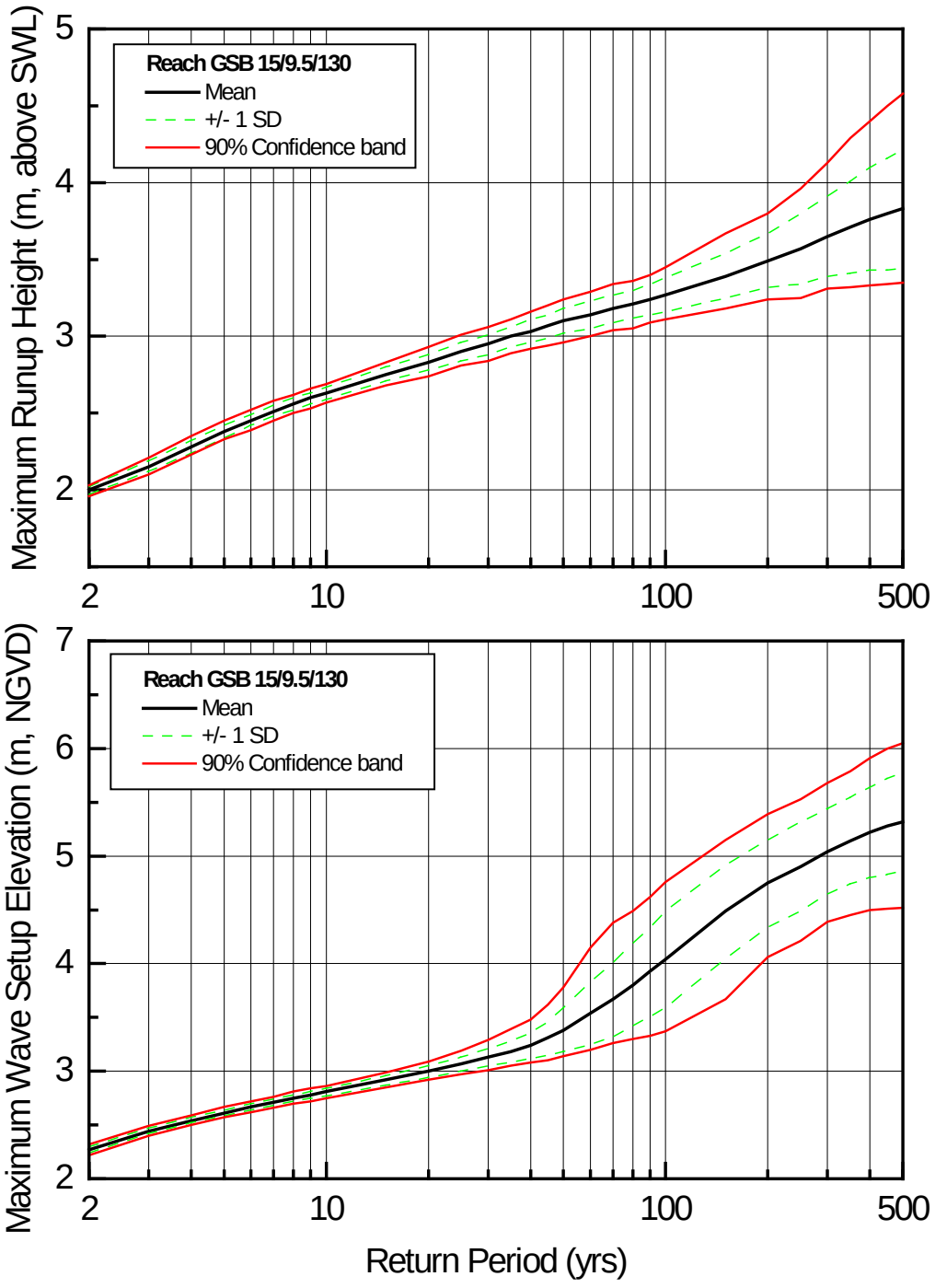

Reach GSB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
21
18
15
12
9
2
10
100
500
Reach GSB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
21
18
15
12
2
10
100
500
Return Period (yrs)

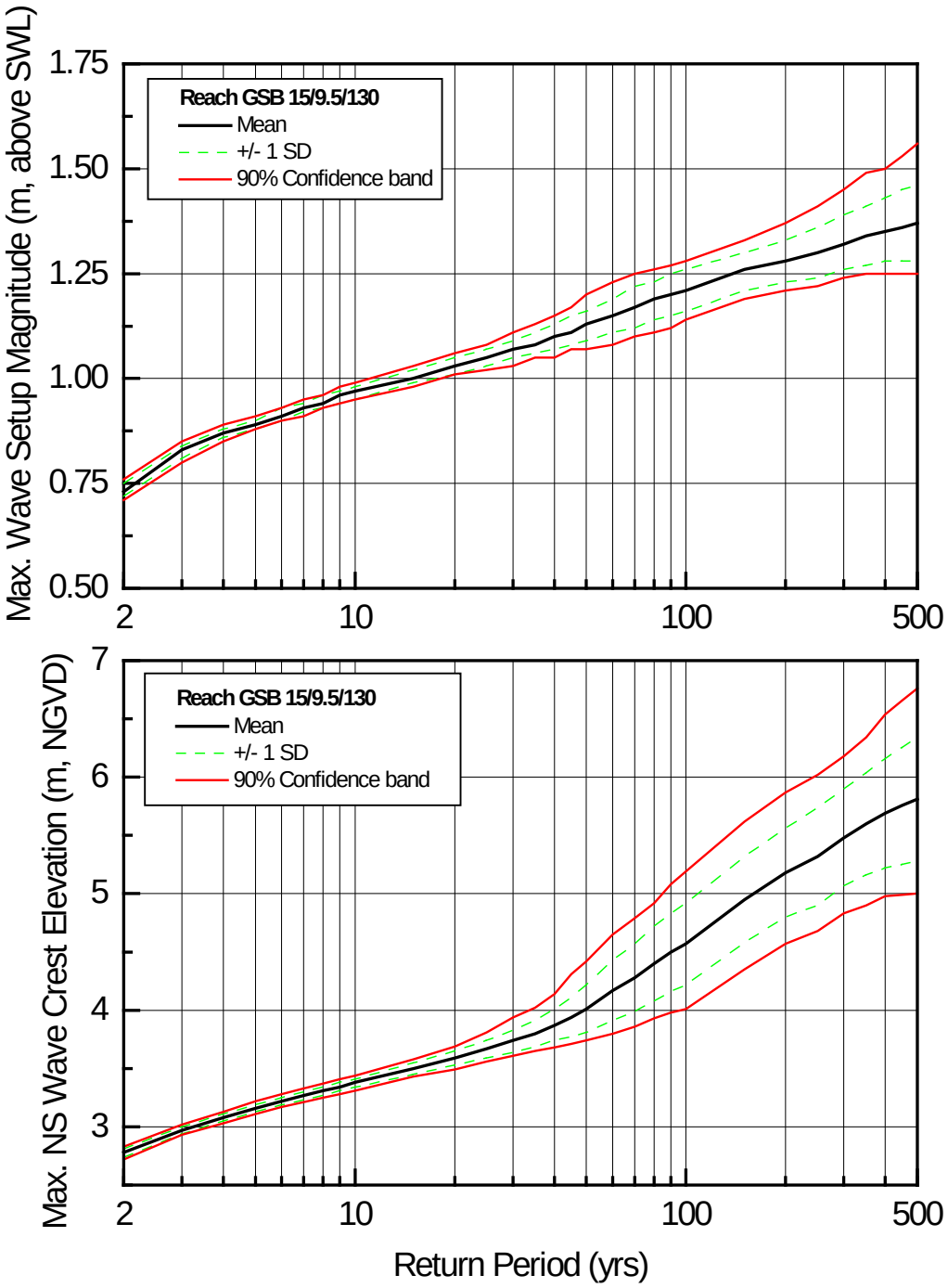

Reach GSB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
20
15
10
5
0
2
10
100
500
Reach GSB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
20
15
10
5
0
2
10
100
500
Return Period (yrs)

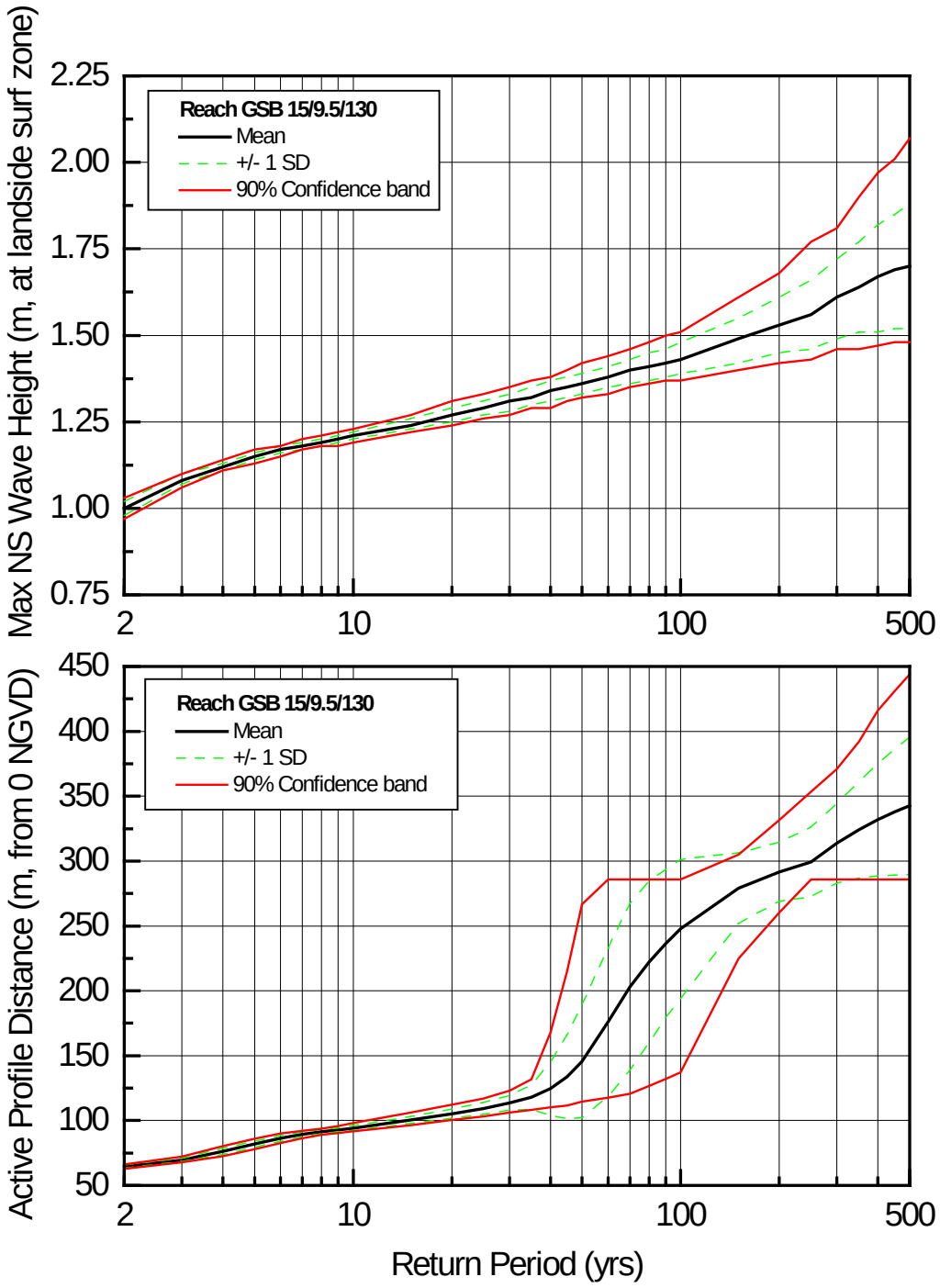

Reach GSB 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
160
140
120
100
80
60
2
10
100
500
Reach GSB 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

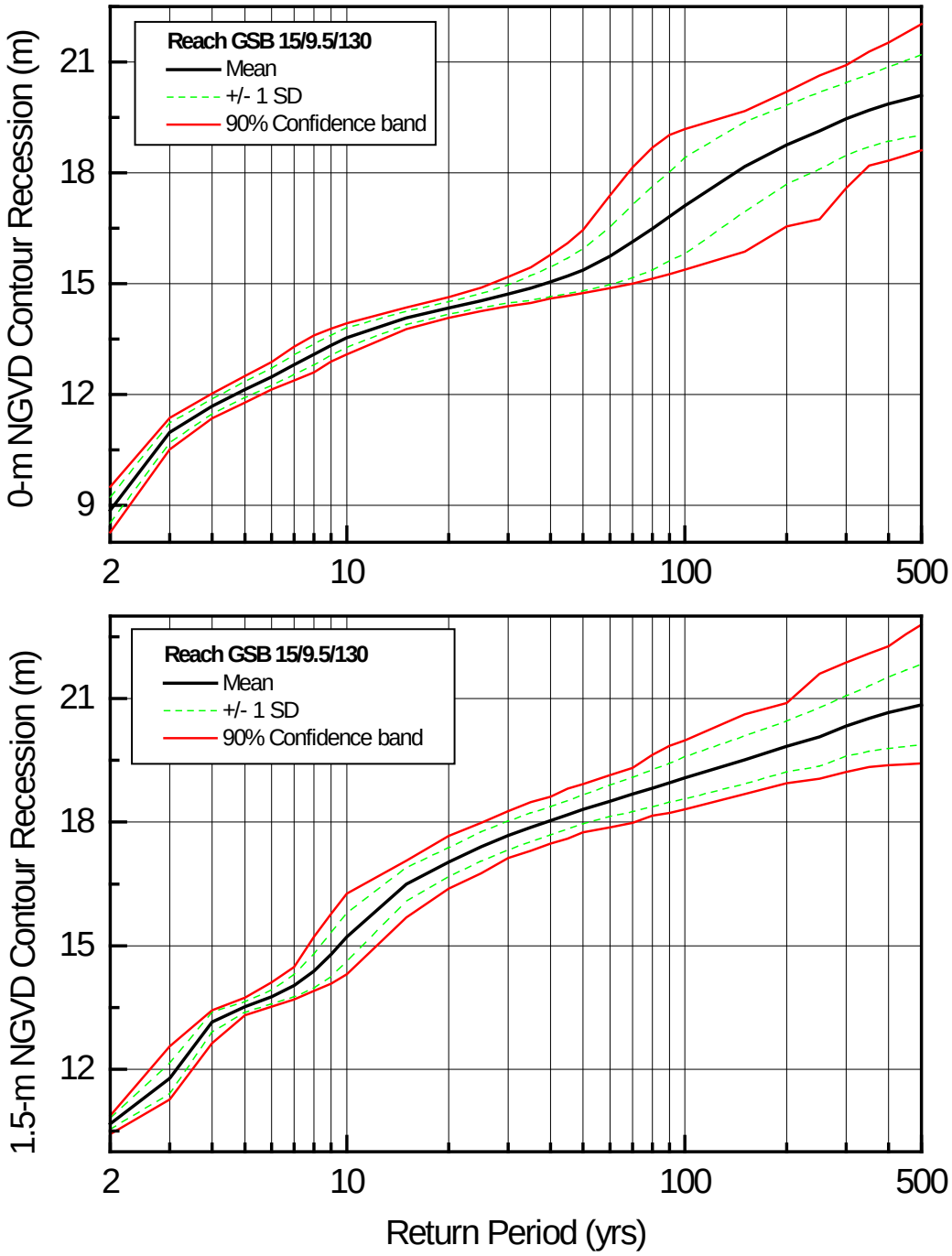

Reach GSB 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach GSB 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

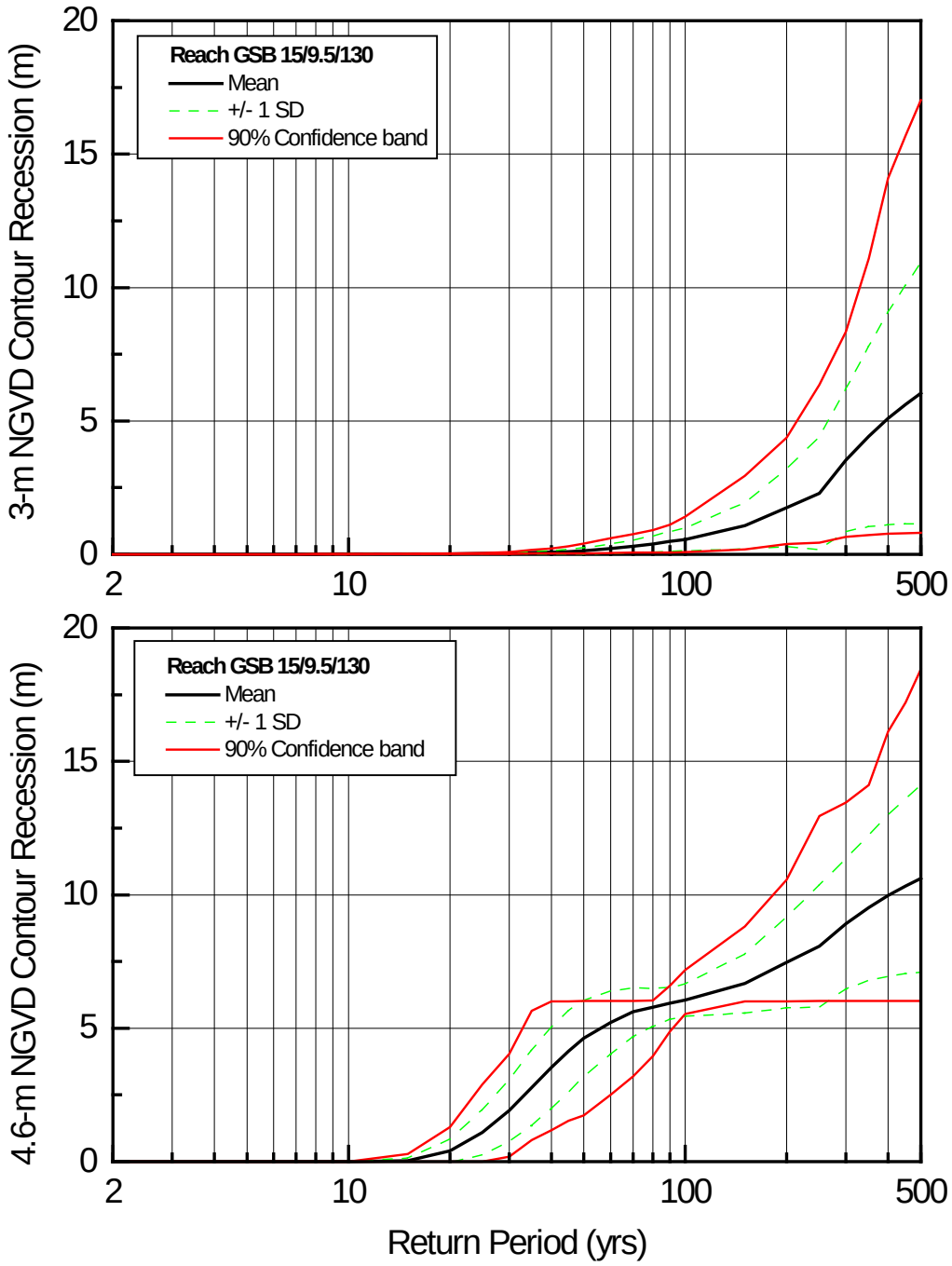

Reach GSB 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
30
40
2
10
100
500
Reach GSB 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
8
2
10
100
500
Return Period (yrs)

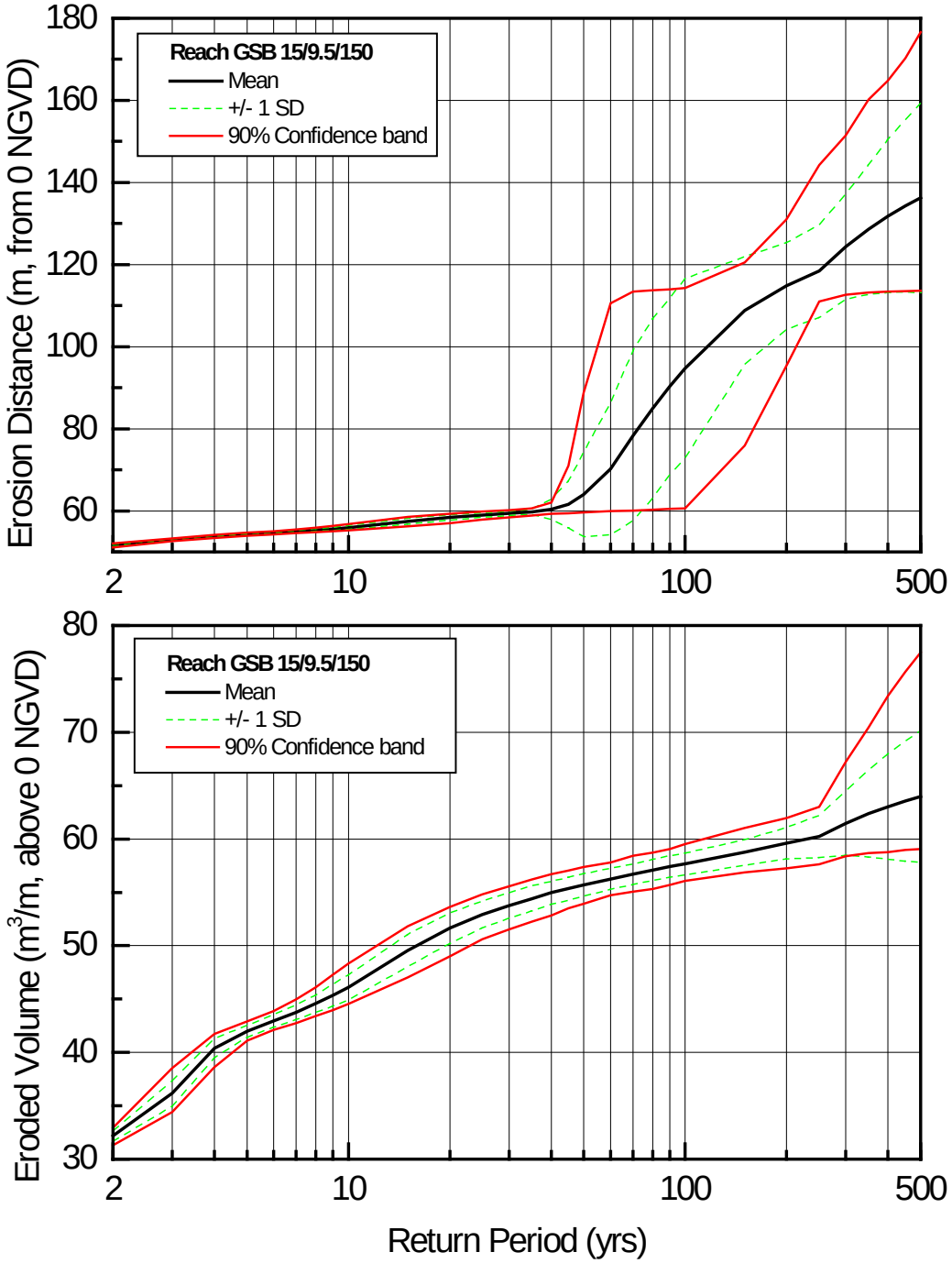

Reach GSB 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5
4
3
2
2
10
100
500
Reach GSB 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
7
6
5
4
3
2
2
10
100
500
Return Period (yrs)

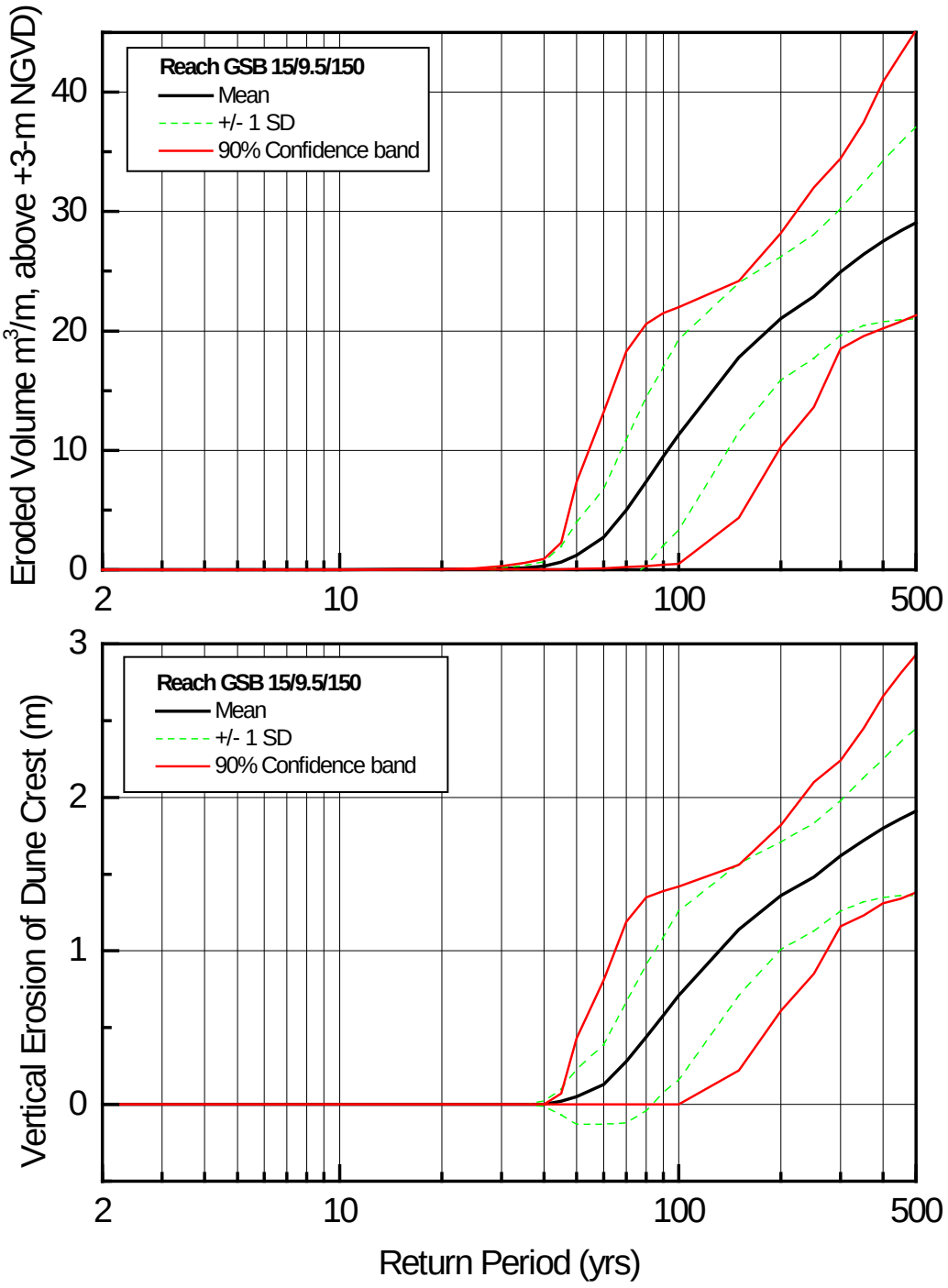

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach GSB 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach GSB 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

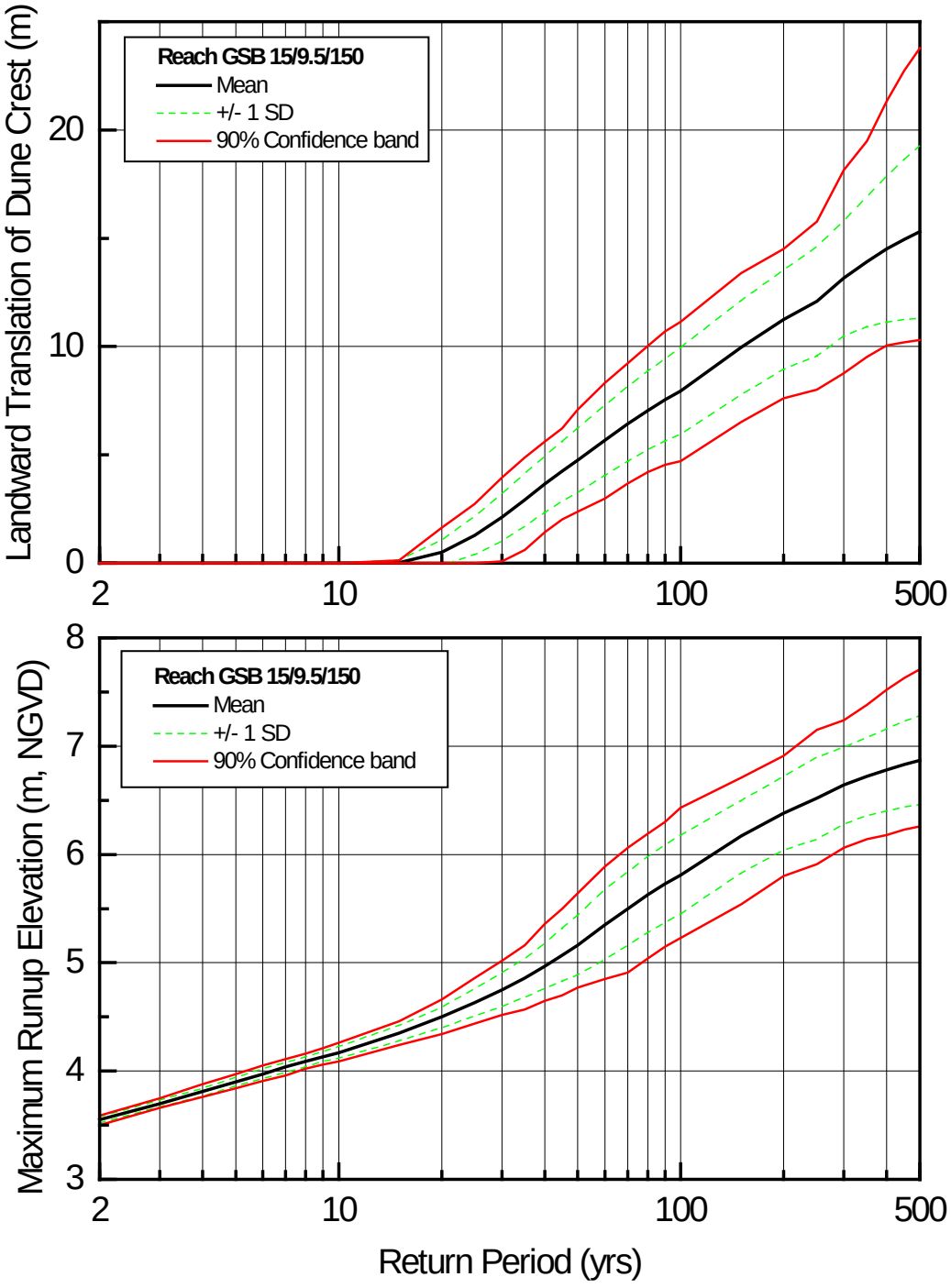

Max NS Wave Height (m, at landside surf zone)
2.25
2.00
1.75
1.50
1.25
1.00
0.75
Reach GSB 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
450
400
350
300
250
200
150
100
50
Reach GSB 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

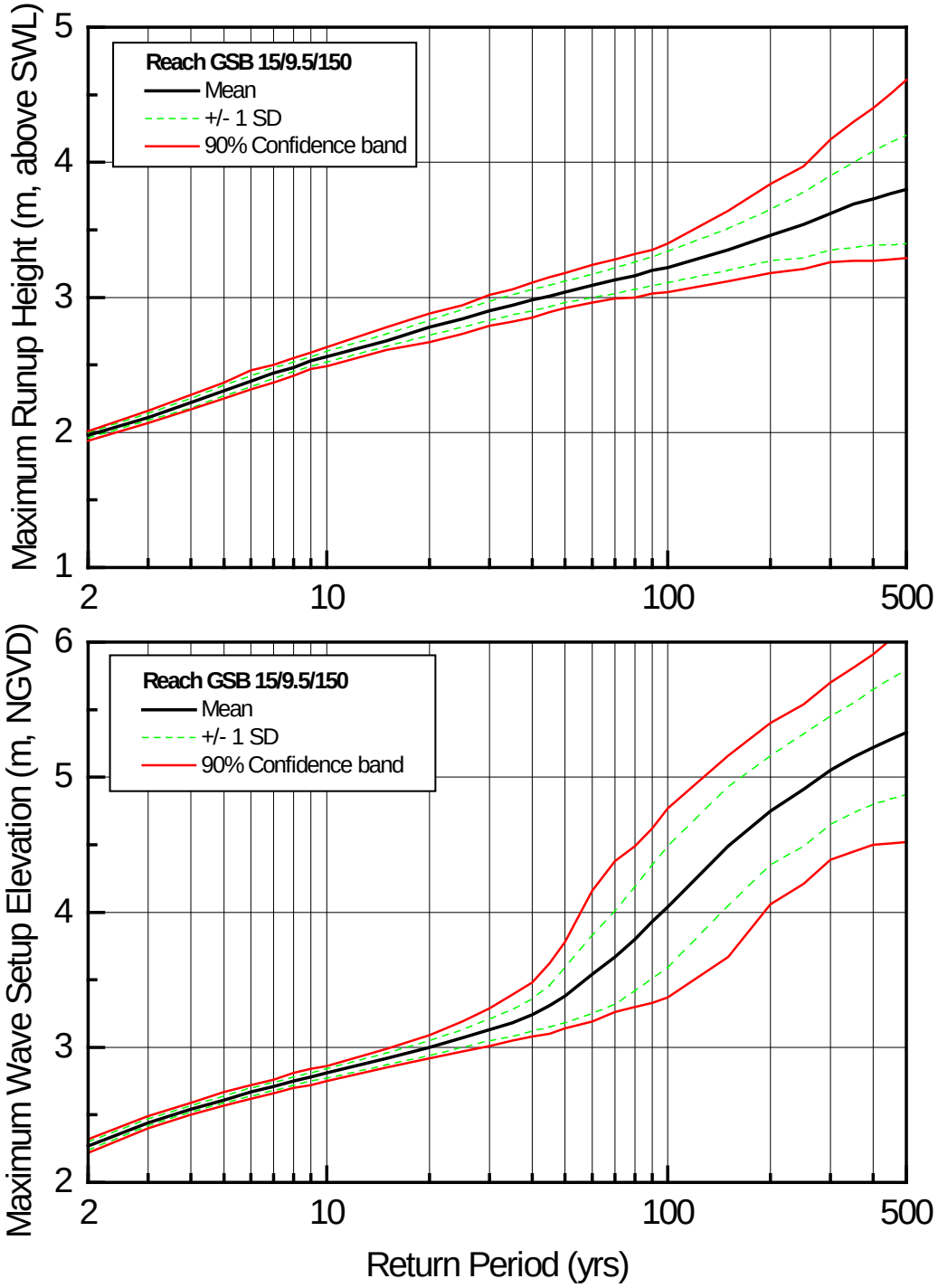

Reach GSB 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
21
18
15
12
9
2
10
100
500
Reach GSB 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
21
18
15
12
2
10
100
500
Return Period (yrs)

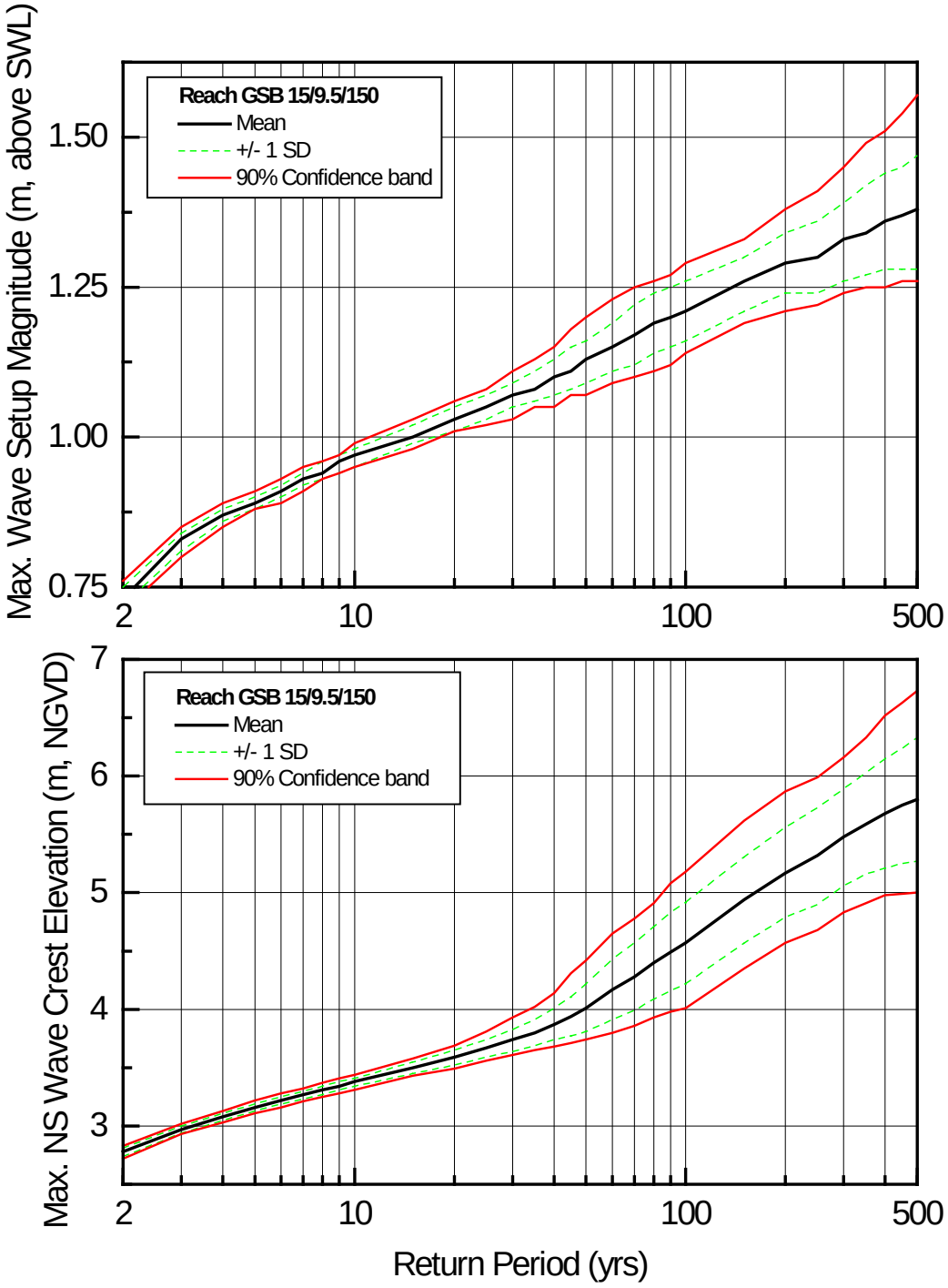

Reach GSB 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
20
15
10
5
0
2
10
100
500
Reach GSB 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
20
15
10
5
0
2
10
100
500
Return Period (yrs)

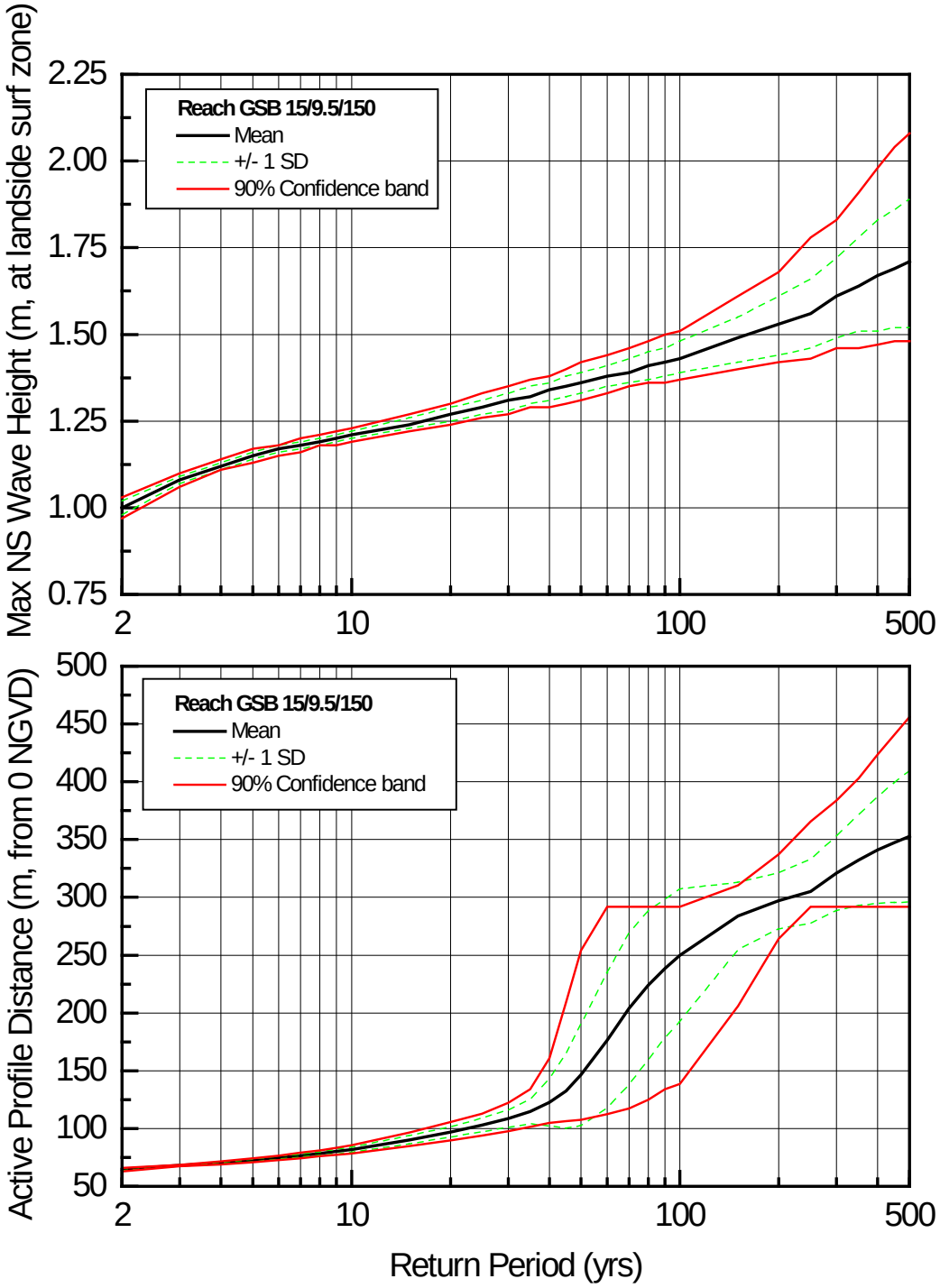

Reach GSB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
160
140
120
100
80
60
2
10
100
500
Reach GSB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

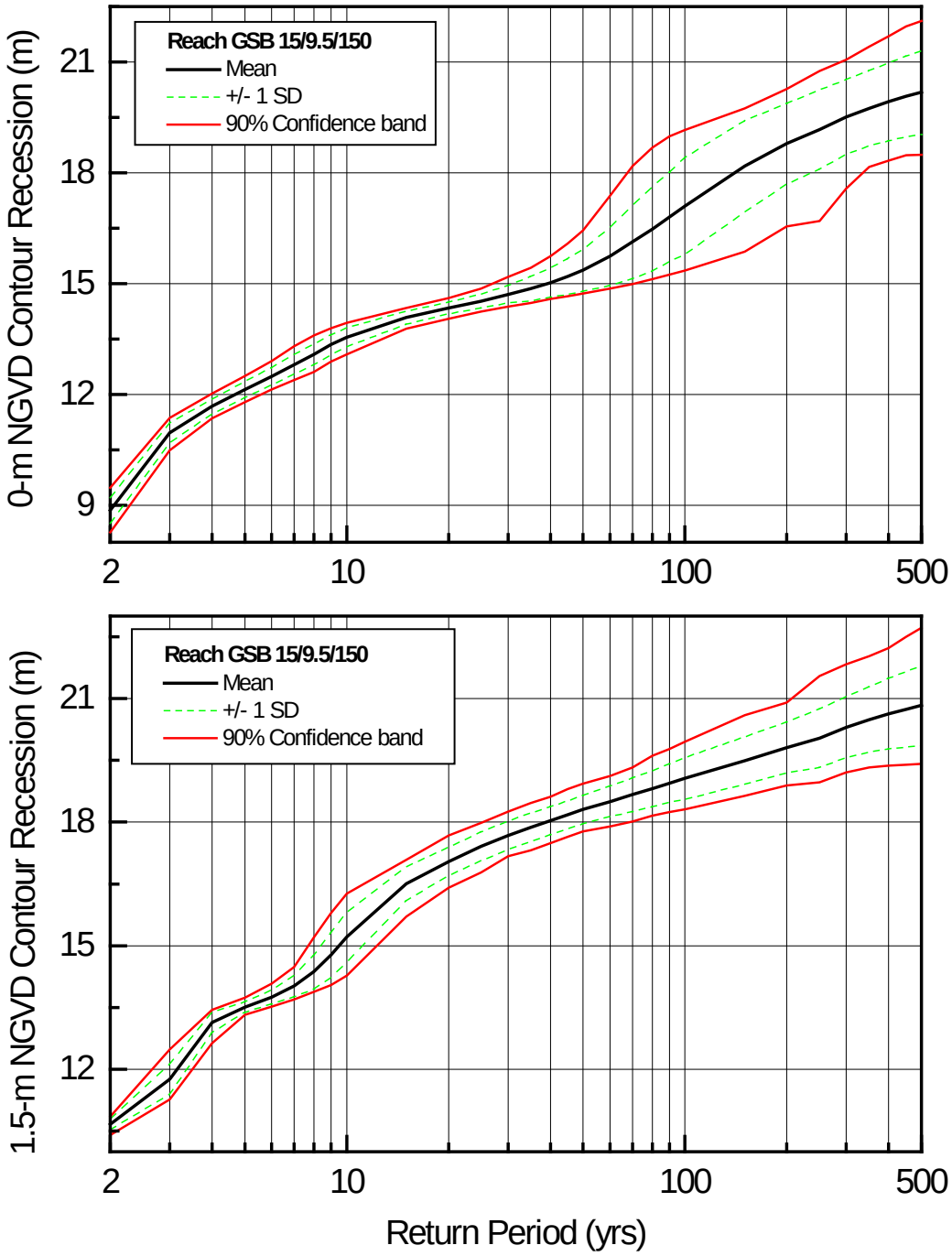

Reach GSB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach GSB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

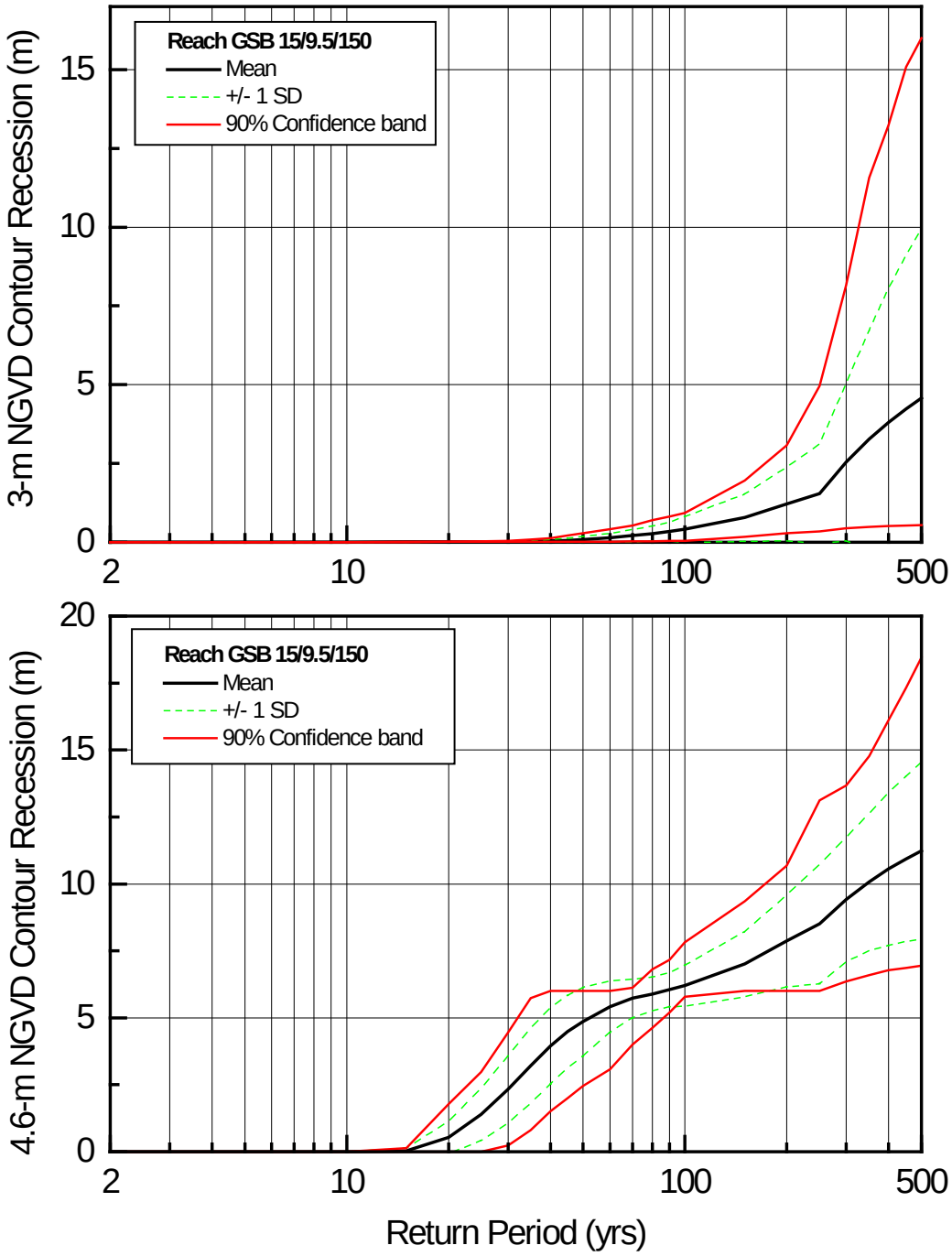

Reach GSB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
2
10
100
500
Reach GSB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
8
2
10
100
500
Return Period (yrs)

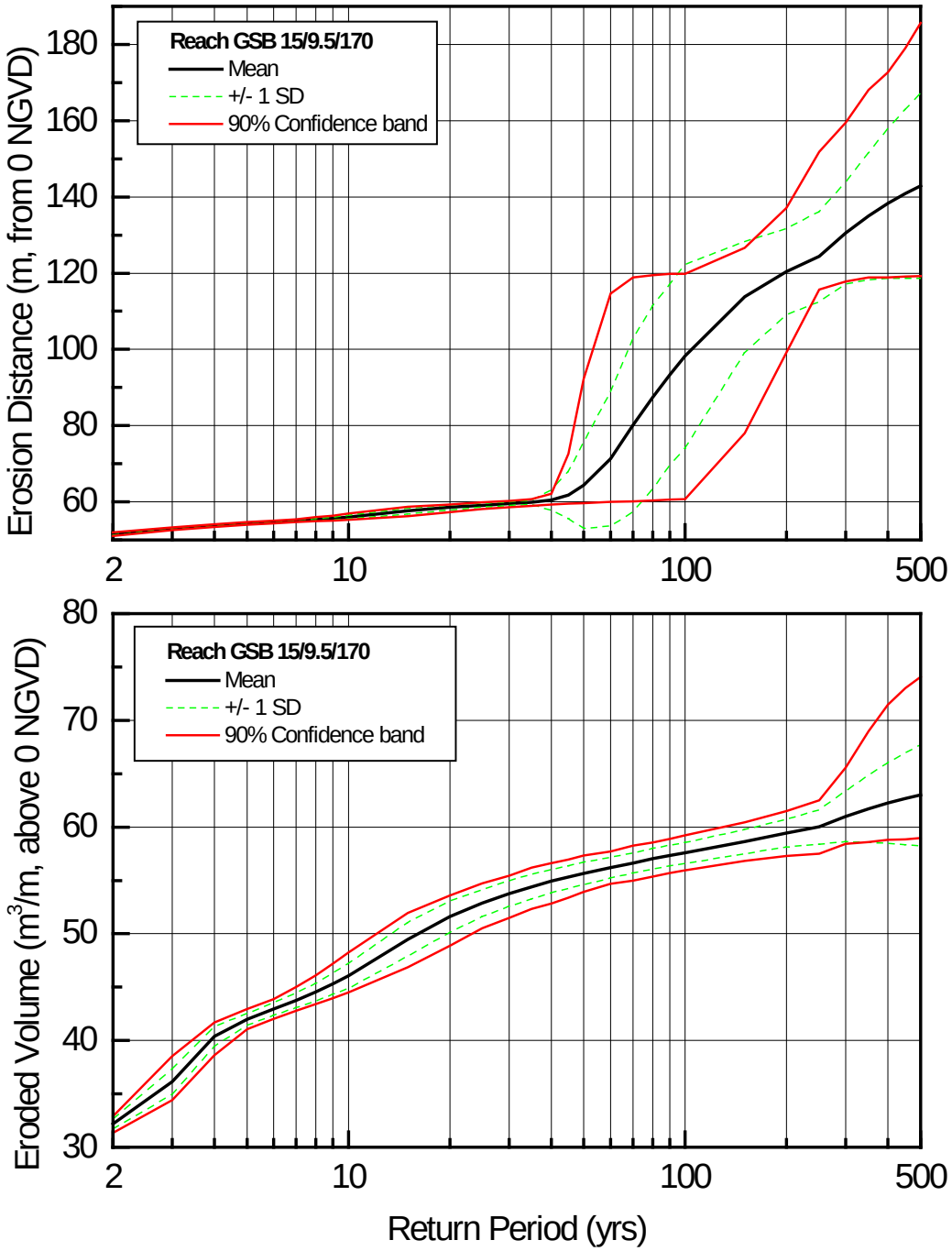

Reach GSB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
1
2
3
4
5
2
10
100
500
Reach GSB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
2
3
4
5
6
2
10
100
500
Return Period (yrs)

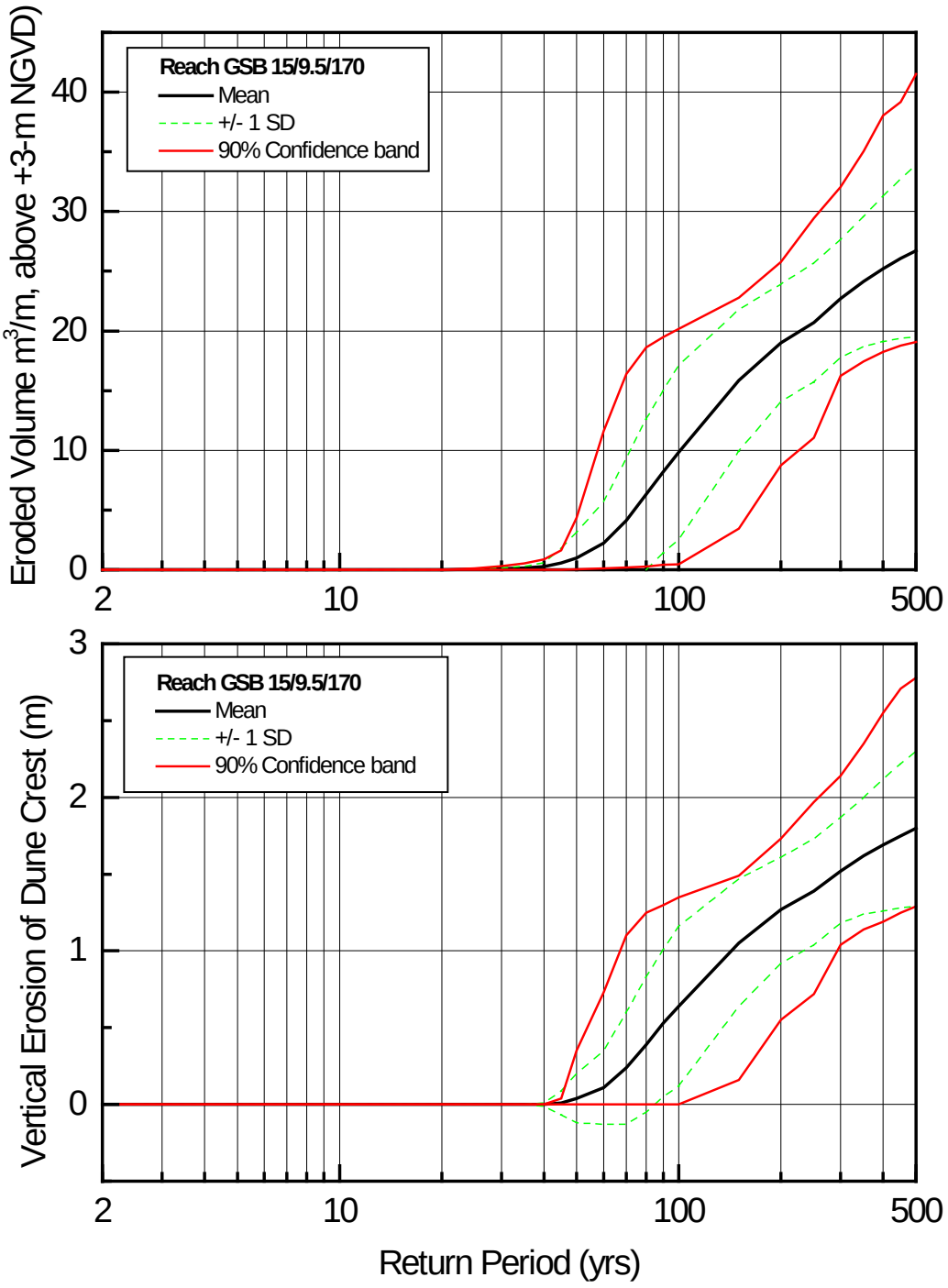

Reach GSB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Max. Wave Setup Magnitude (m, above SWL)
1.50
1.25
1.00
0.75
2
10
100
500
Reach GSB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
2
10
100
500
Return Period (yrs)

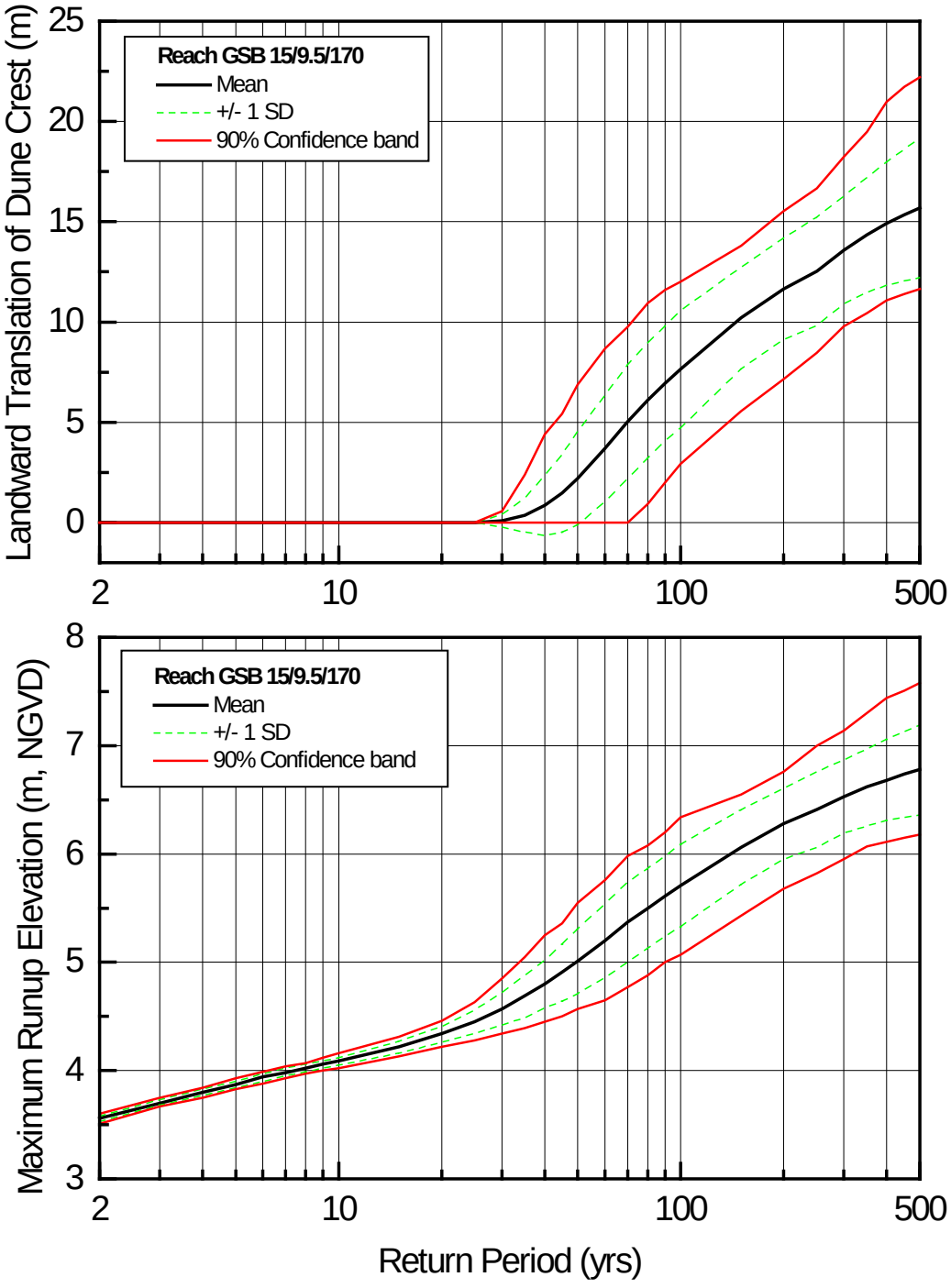

Reach GSB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Max NS Wave Height (m, at landside surf zone)
2.25
2.00
1.75
1.50
1.25
1.00
0.75
2
10
100
500
Reach GSB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Active Profile Distance (m, from 0 NGVD)
500
450
400
350
300
250
200
150
100
50
2
10
100
500
Return Period (yrs)

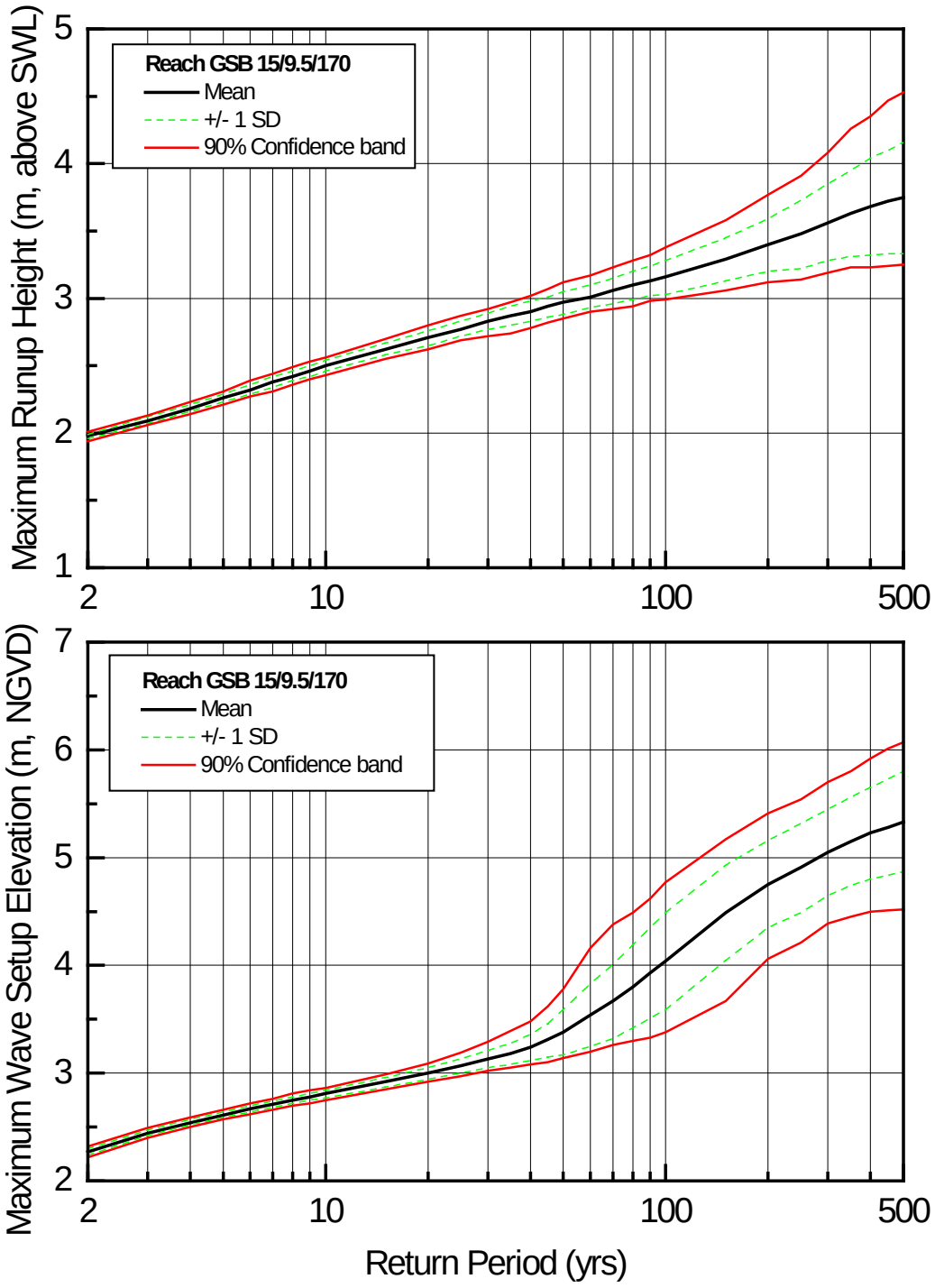

Reach GSB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
21
18
15
12
9
2
10
100
500
Reach GSB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
21
18
15
12
2
10
100
500
Return Period (yrs)

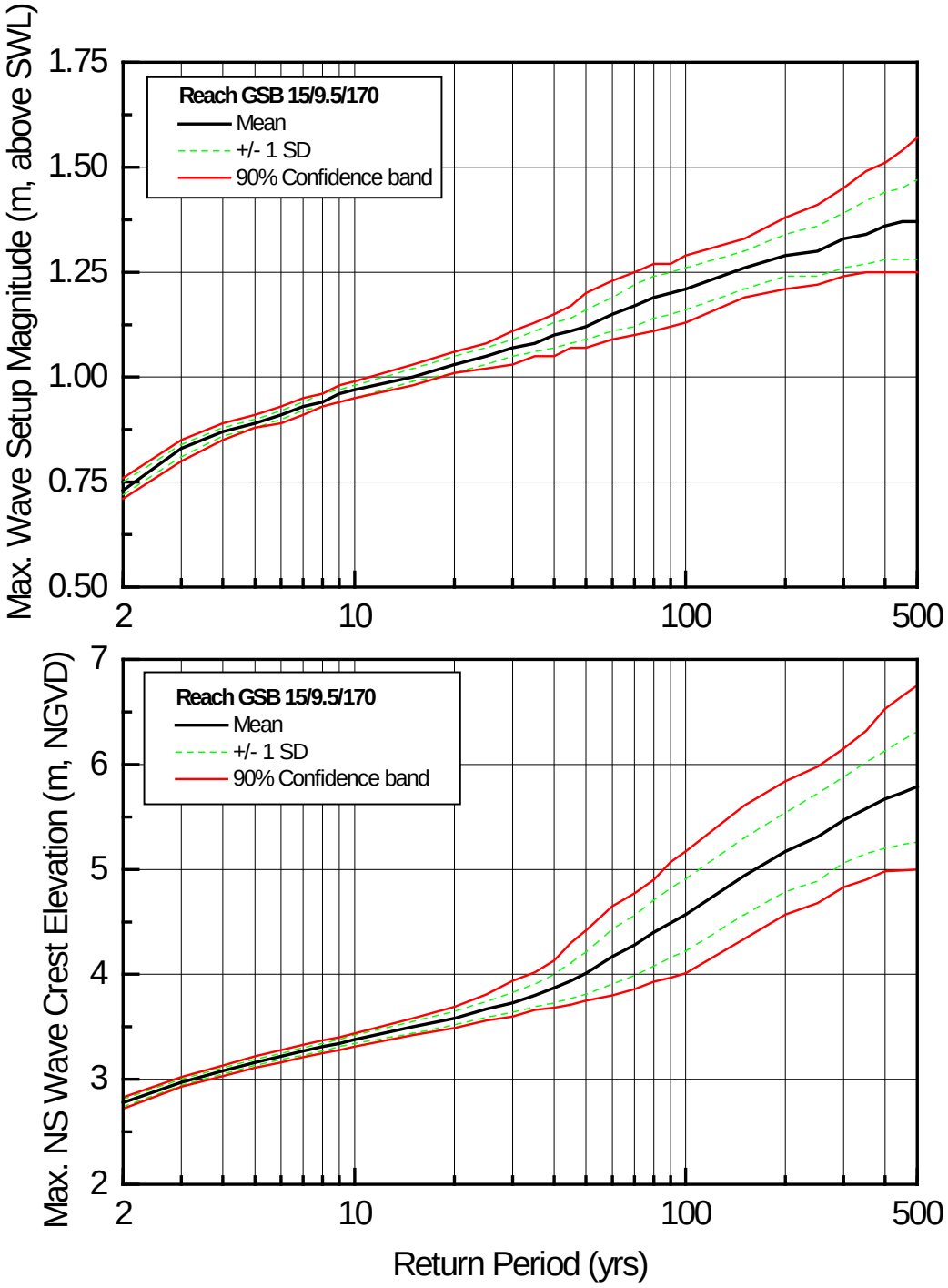

Reach GSB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
0
5
10
15
2
10
100
500
Reach GSB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
0
5
10
15
20
2
10
100
500
Return Period (yrs)

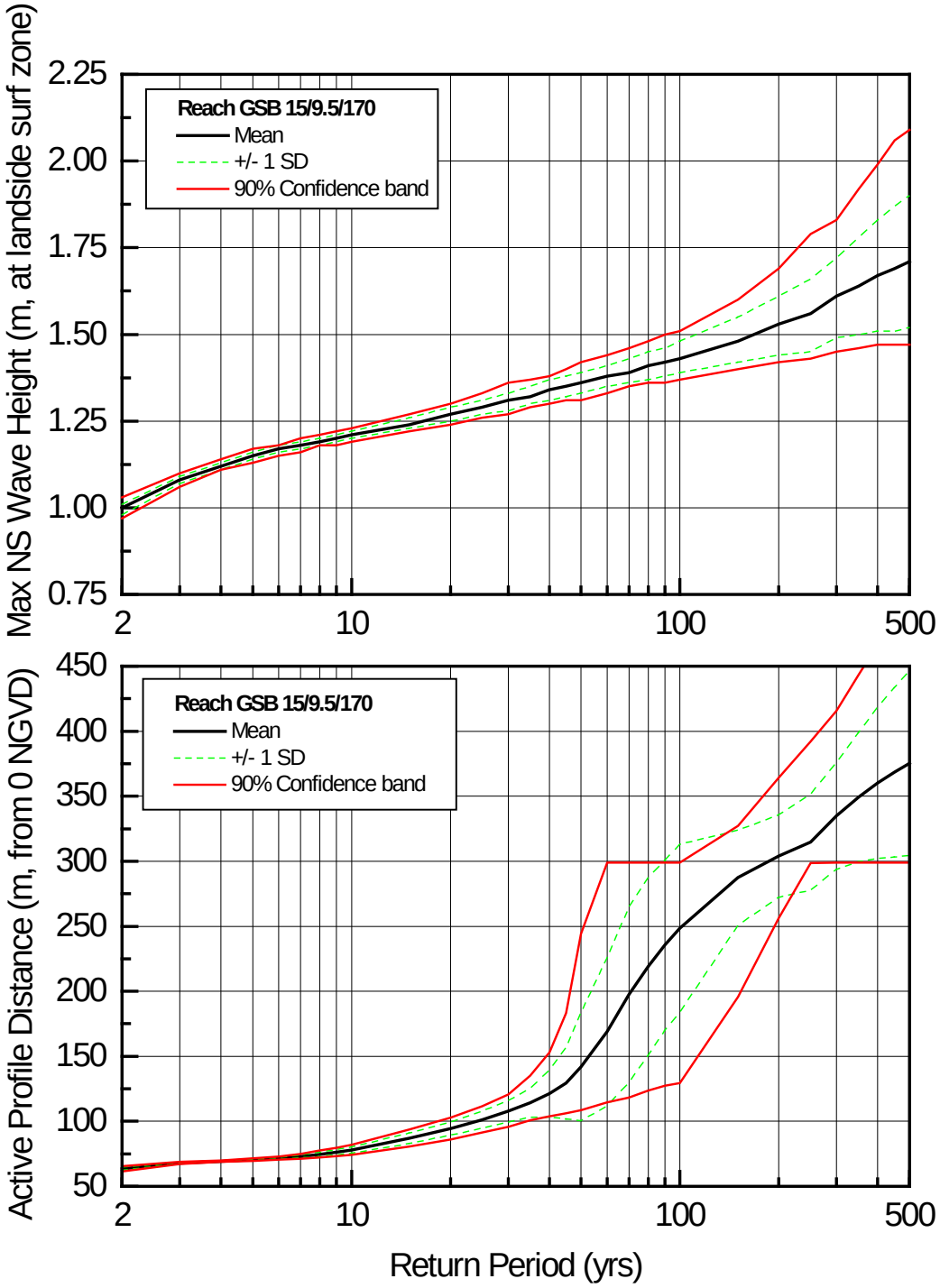

Reach GSB 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
160
140
120
100
80
60
2
10
100
500
Reach GSB 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

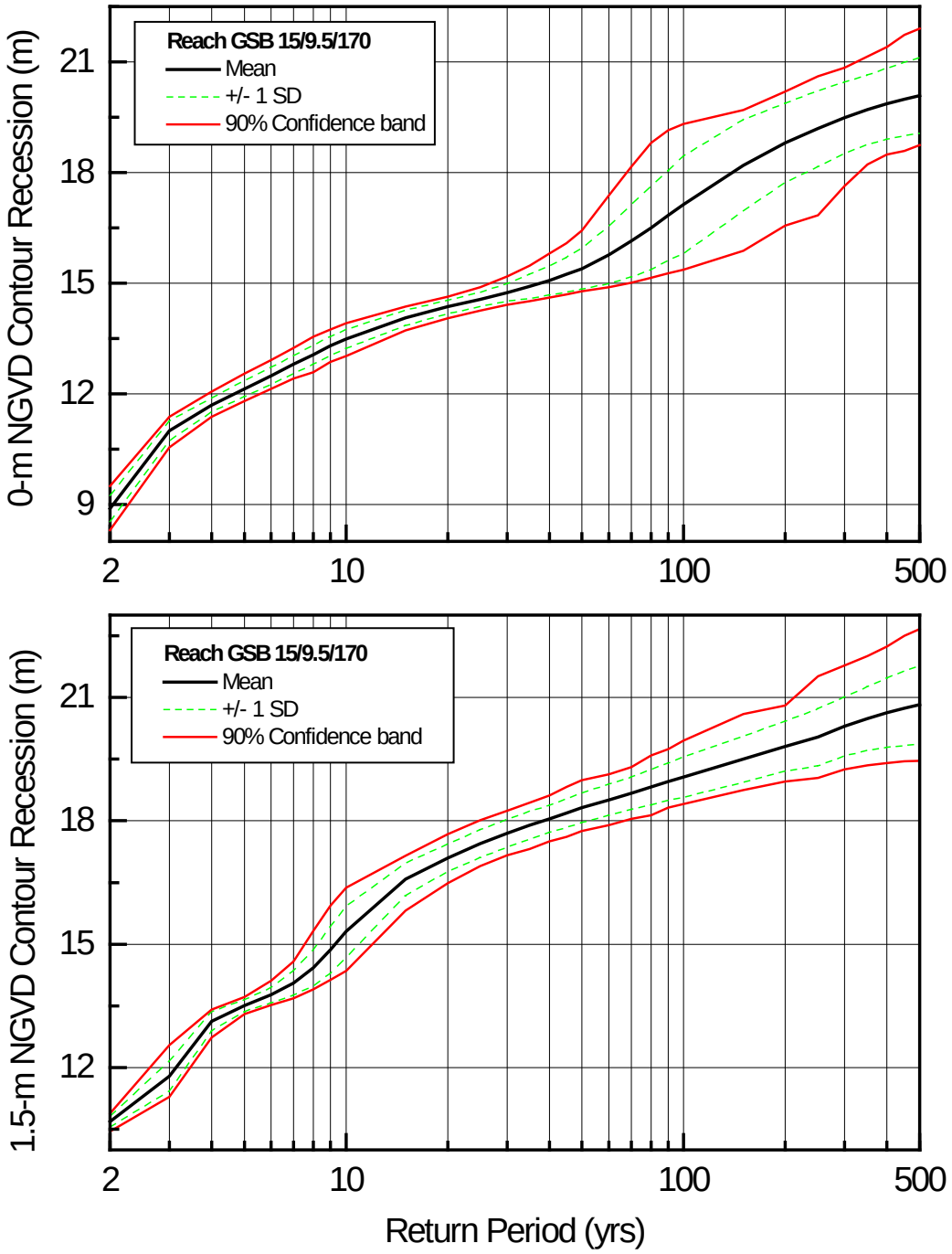

Reach GSB 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach GSB 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

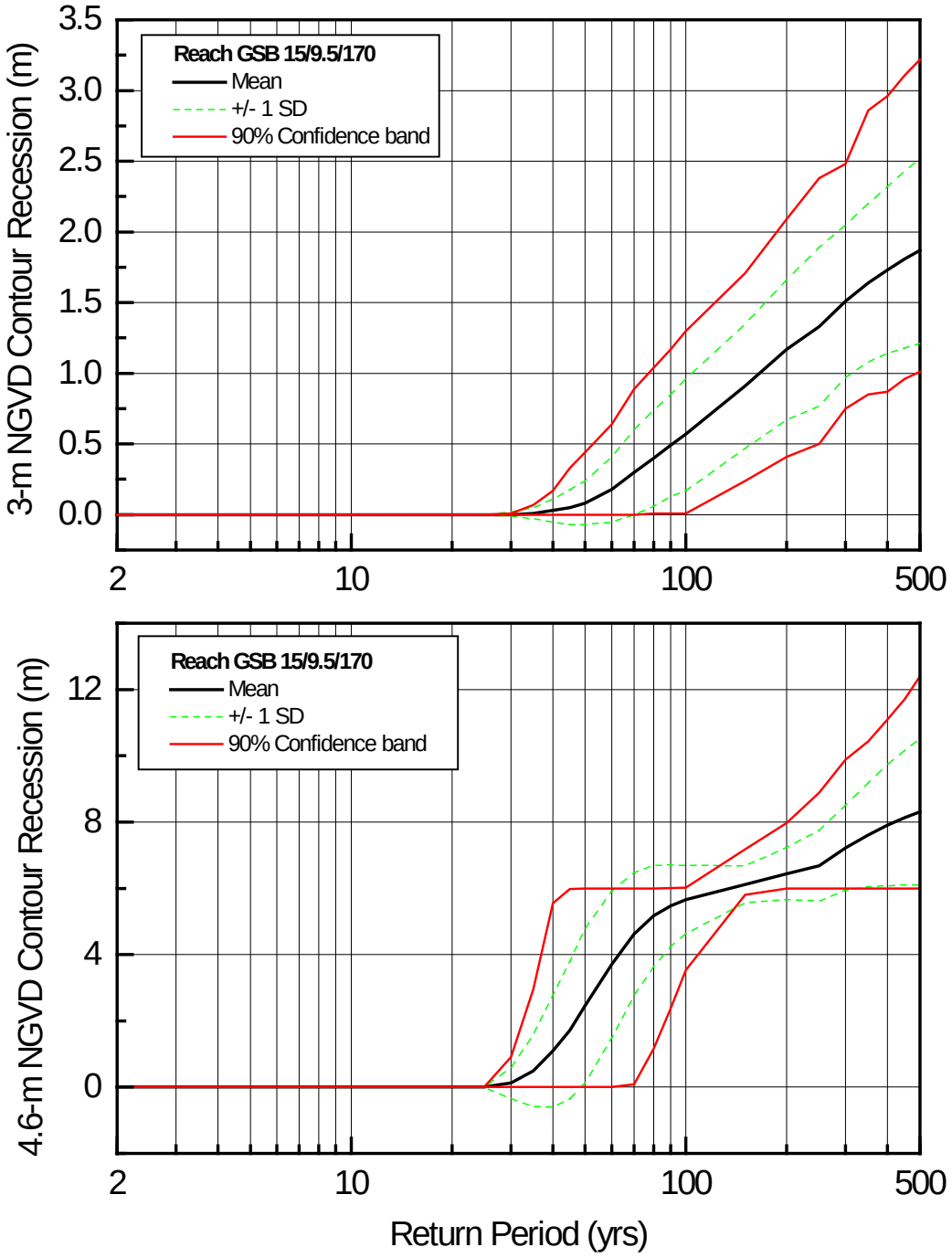

Reach GSB 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
25
20
15
10
5
0
2
10
100
500
Reach GSB 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
3
2
10
100
500
Return Period (yrs)

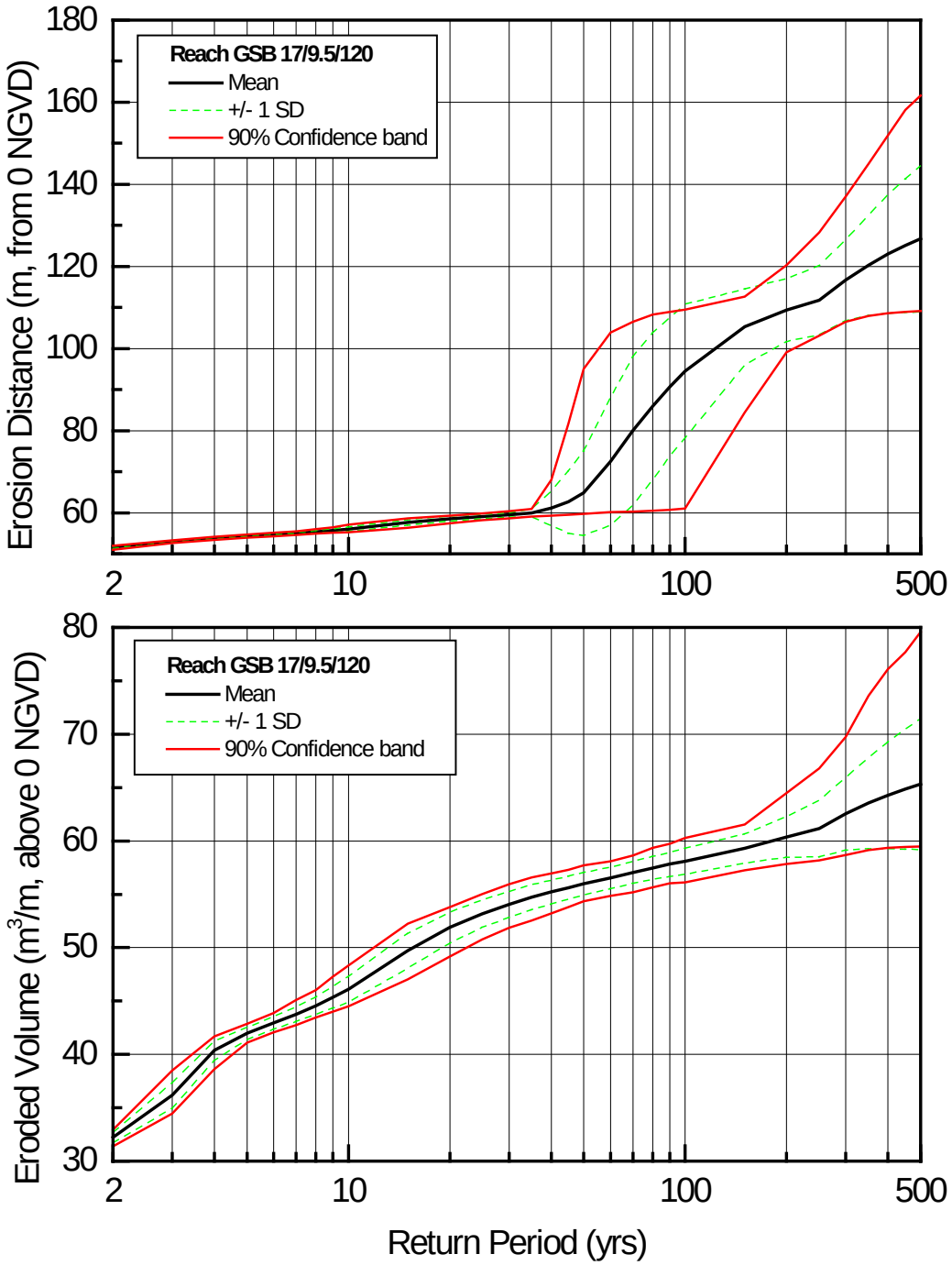

Reach GSB 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
1
2
3
4
5
2
10
100
500
Reach GSB 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
2
3
4
5
6
7
2
10
100
500
Return Period (yrs)

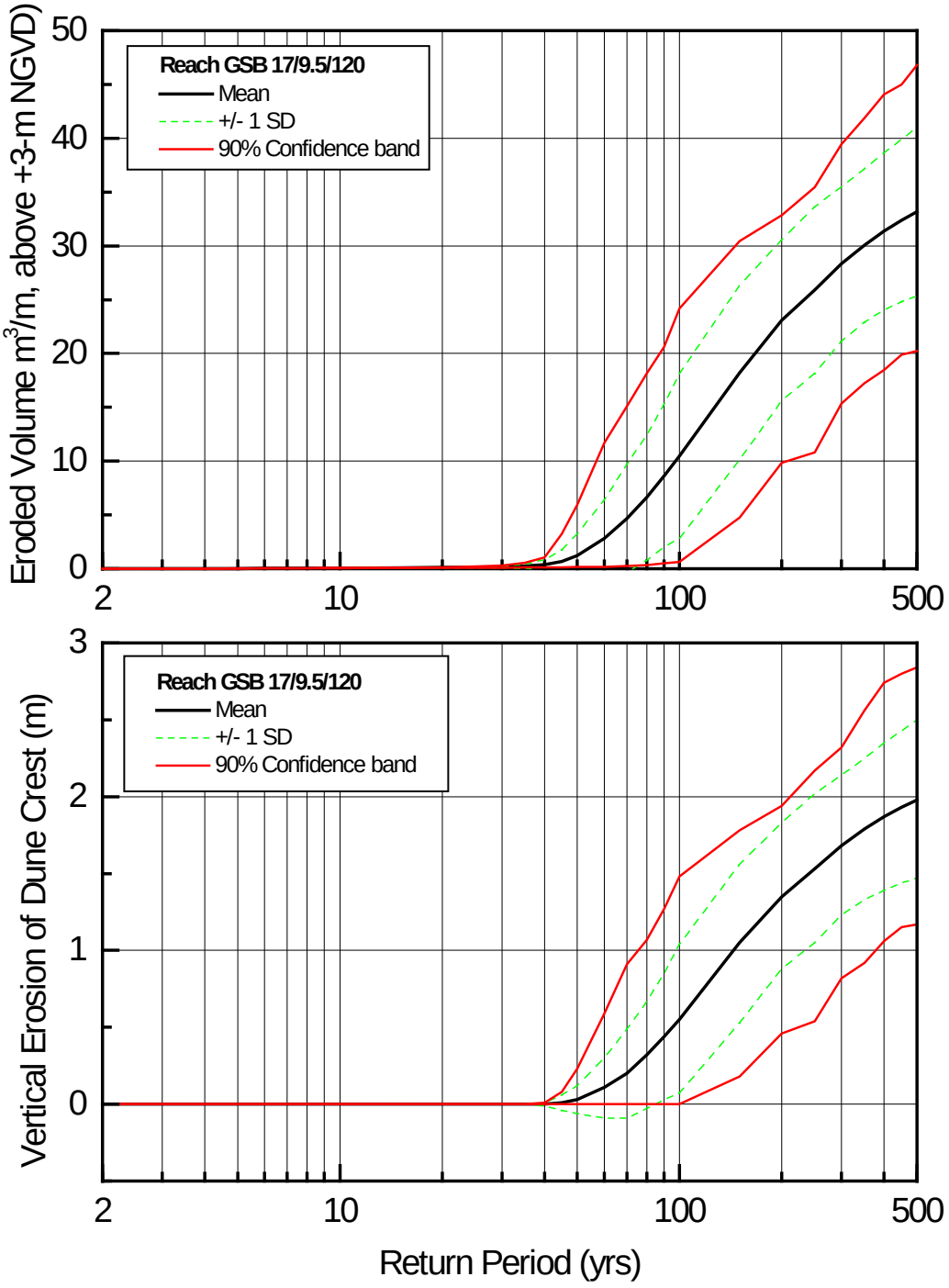

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach GSB 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
2
Reach GSB 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

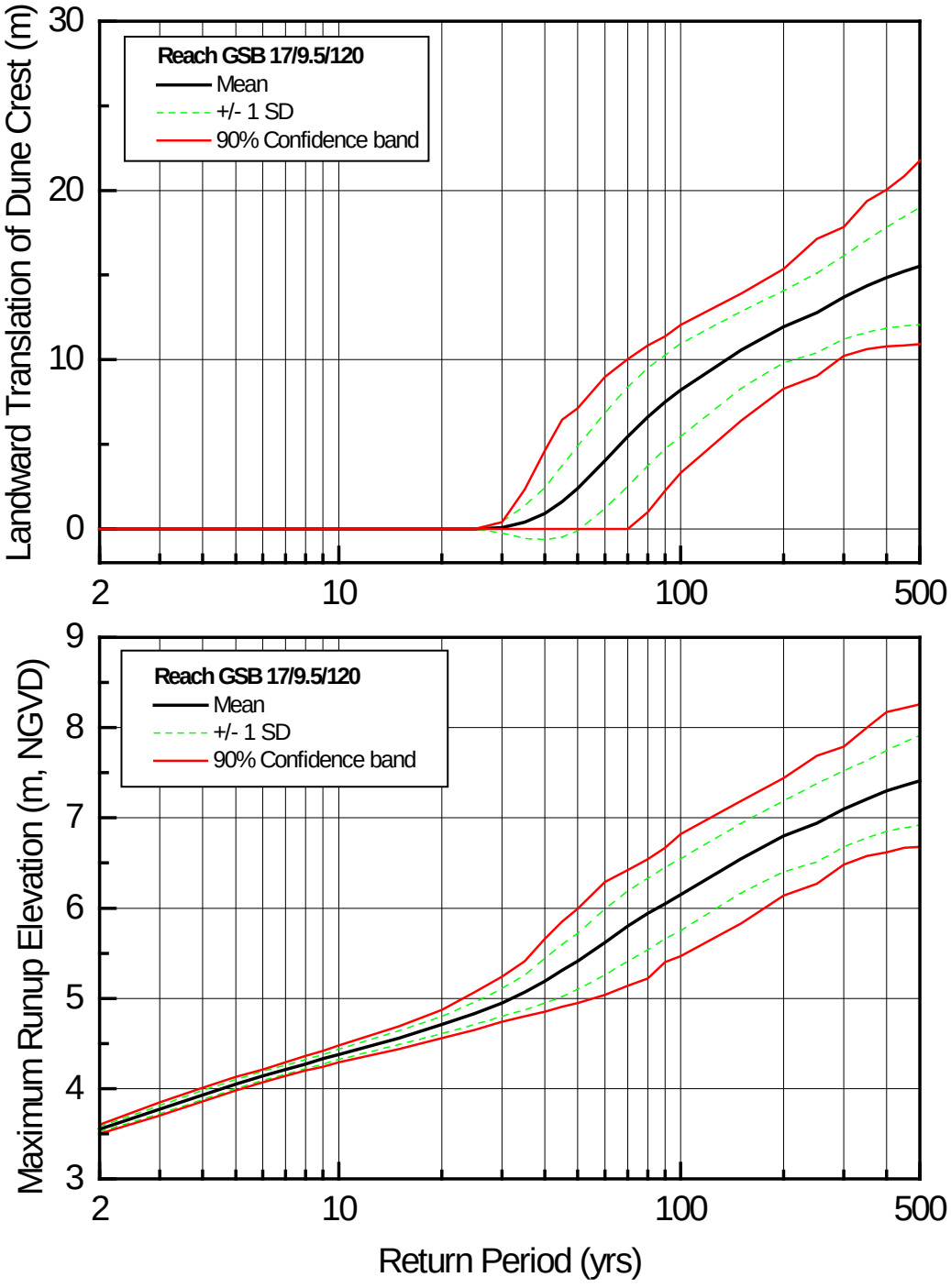

Max NS Wave Height (m, at landside surf zone)
2.25
2.00
1.75
1.50
1.25
1.00
0.75
Reach GSB 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
450
400
350
300
250
200
150
100
50
Reach GSB 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

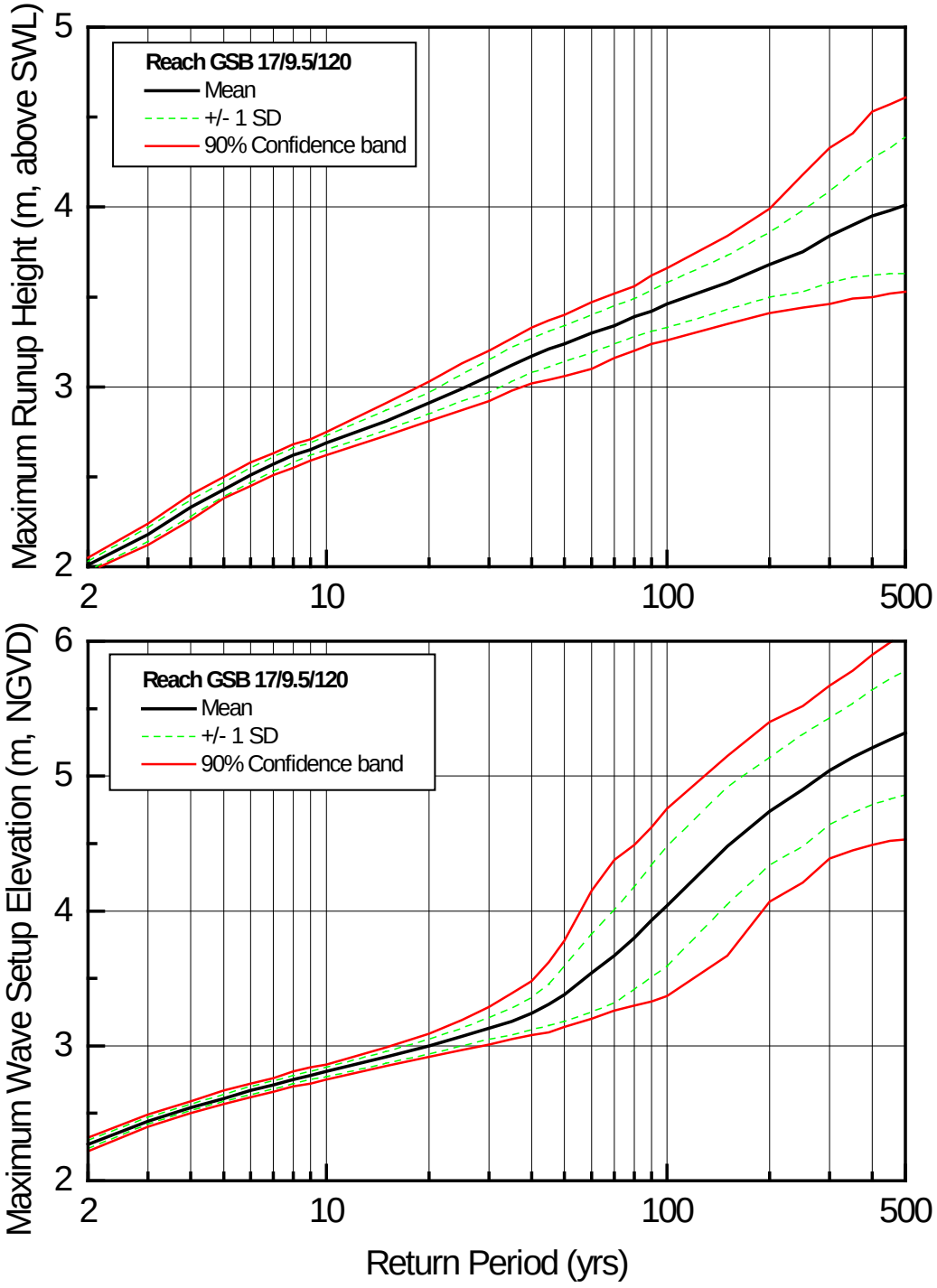

Reach GSB 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
21
18
15
12
9
2
10
100
500
Reach GSB 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
21
18
15
12
2
10
100
500
Return Period (yrs)

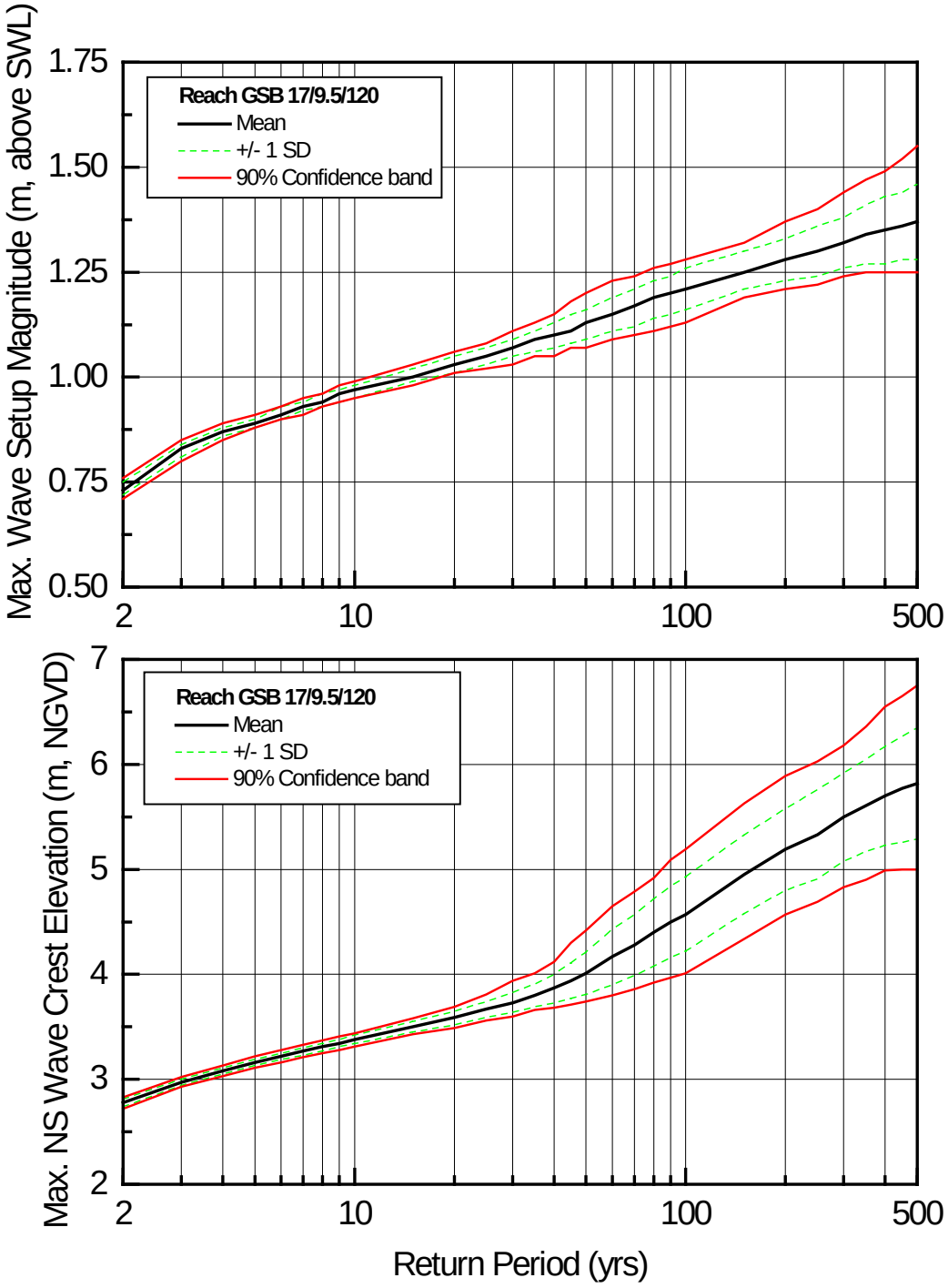

Reach GSB 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach GSB 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
12
8
4
0
2
10
100
500
Return Period (yrs)

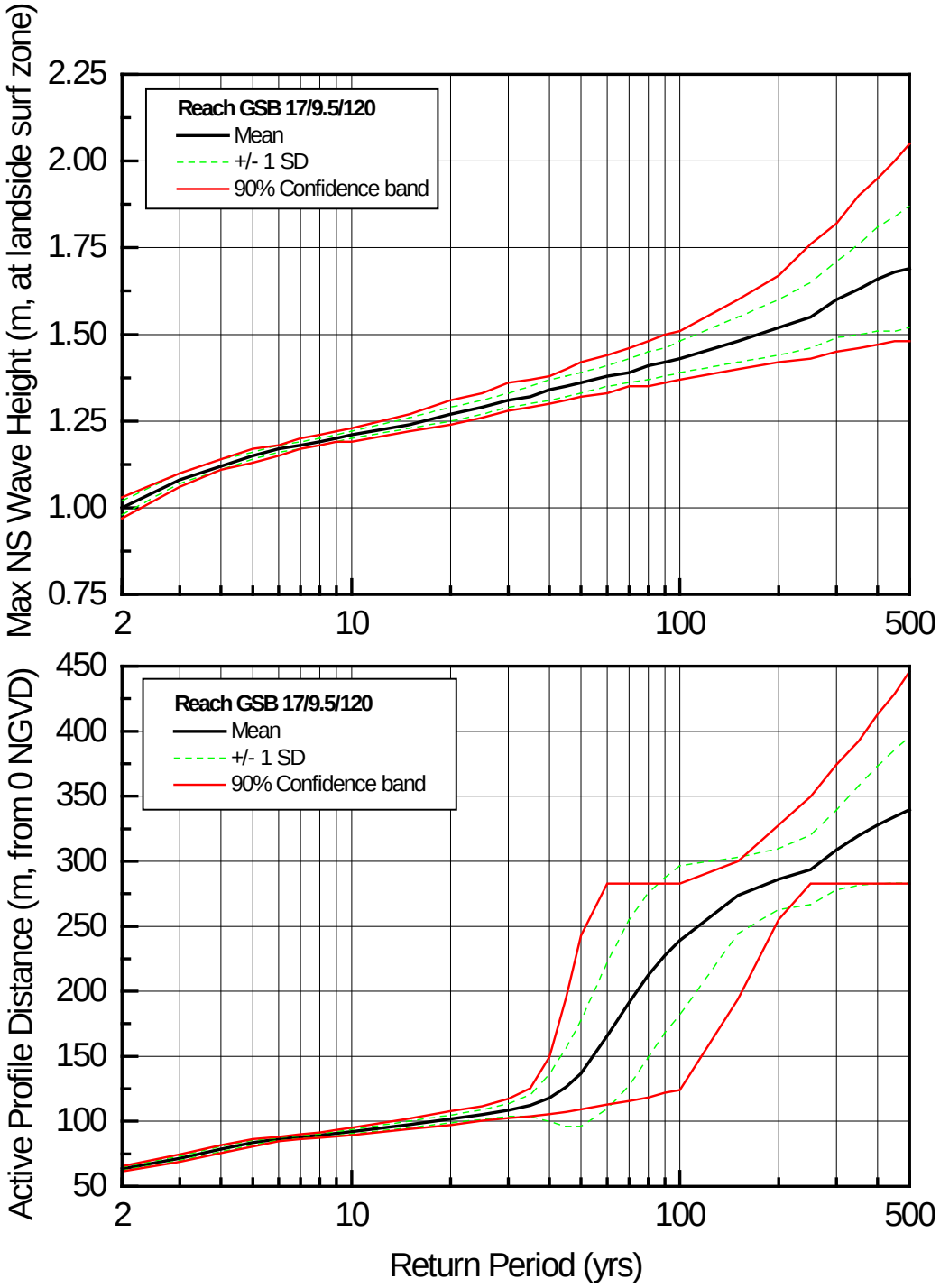

Reach GSB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
160
140
120
100
80
60
2
10
100
500
Reach GSB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

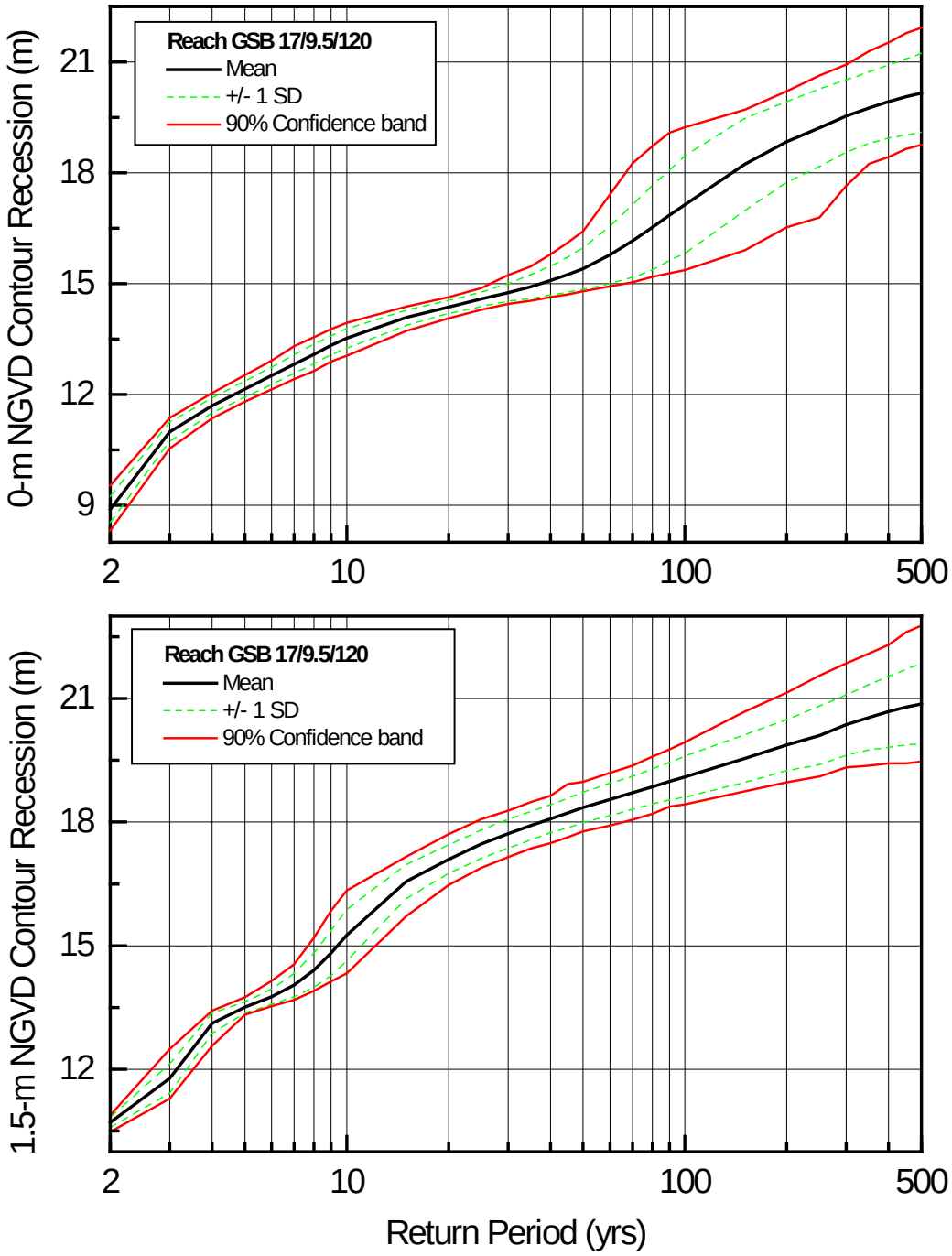

Reach GSB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
50
2
10
100
500
Reach GSB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

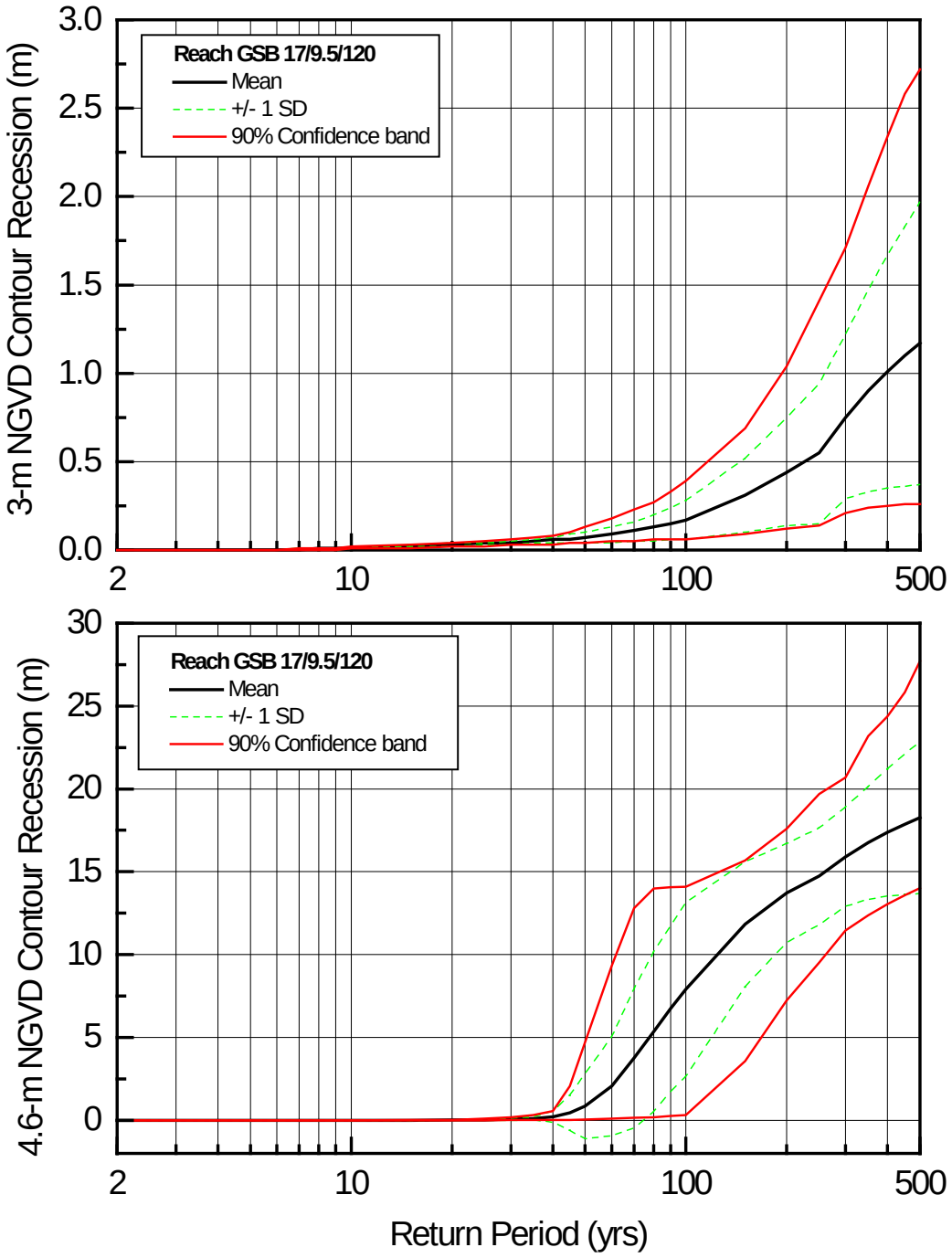

Reach GSB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
30
20
10
0
2
10
100
500
Reach GSB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
9
8
7
6
5
4
3
2
10
100
500
Return Period (yrs)

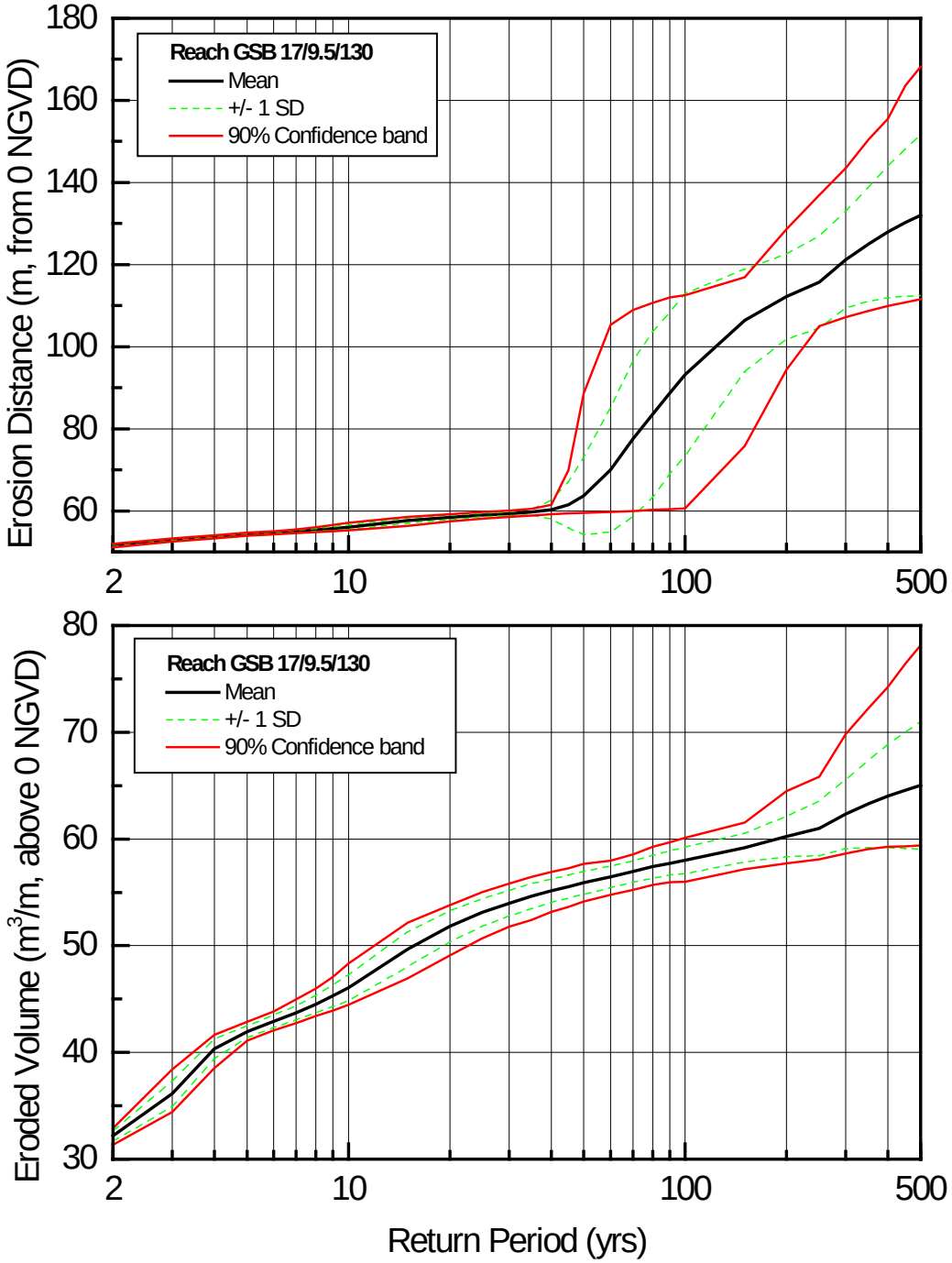

Reach GSB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5
4
3
2
2
10
100
500
Reach GSB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

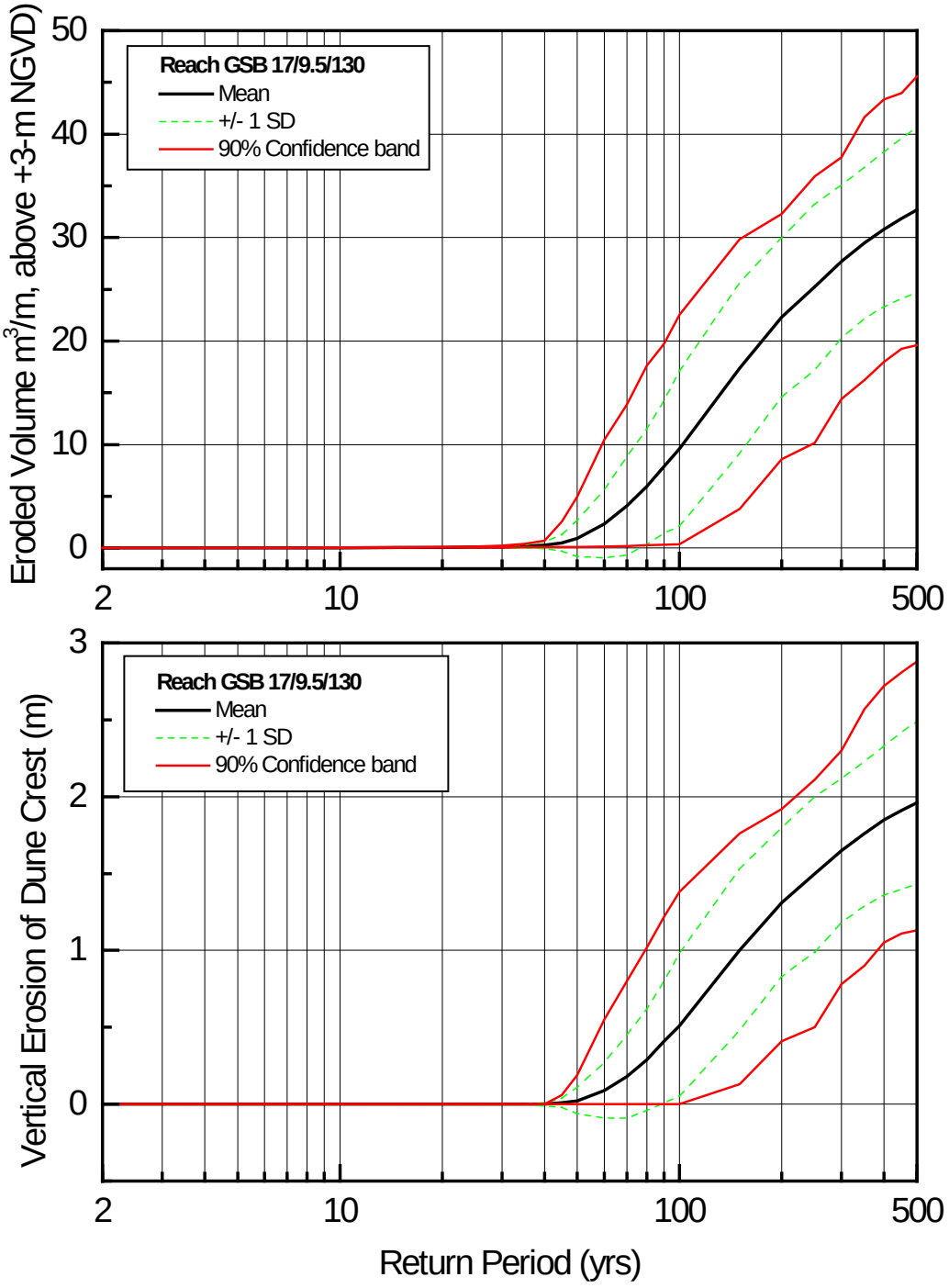

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach GSB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
2
Reach GSB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

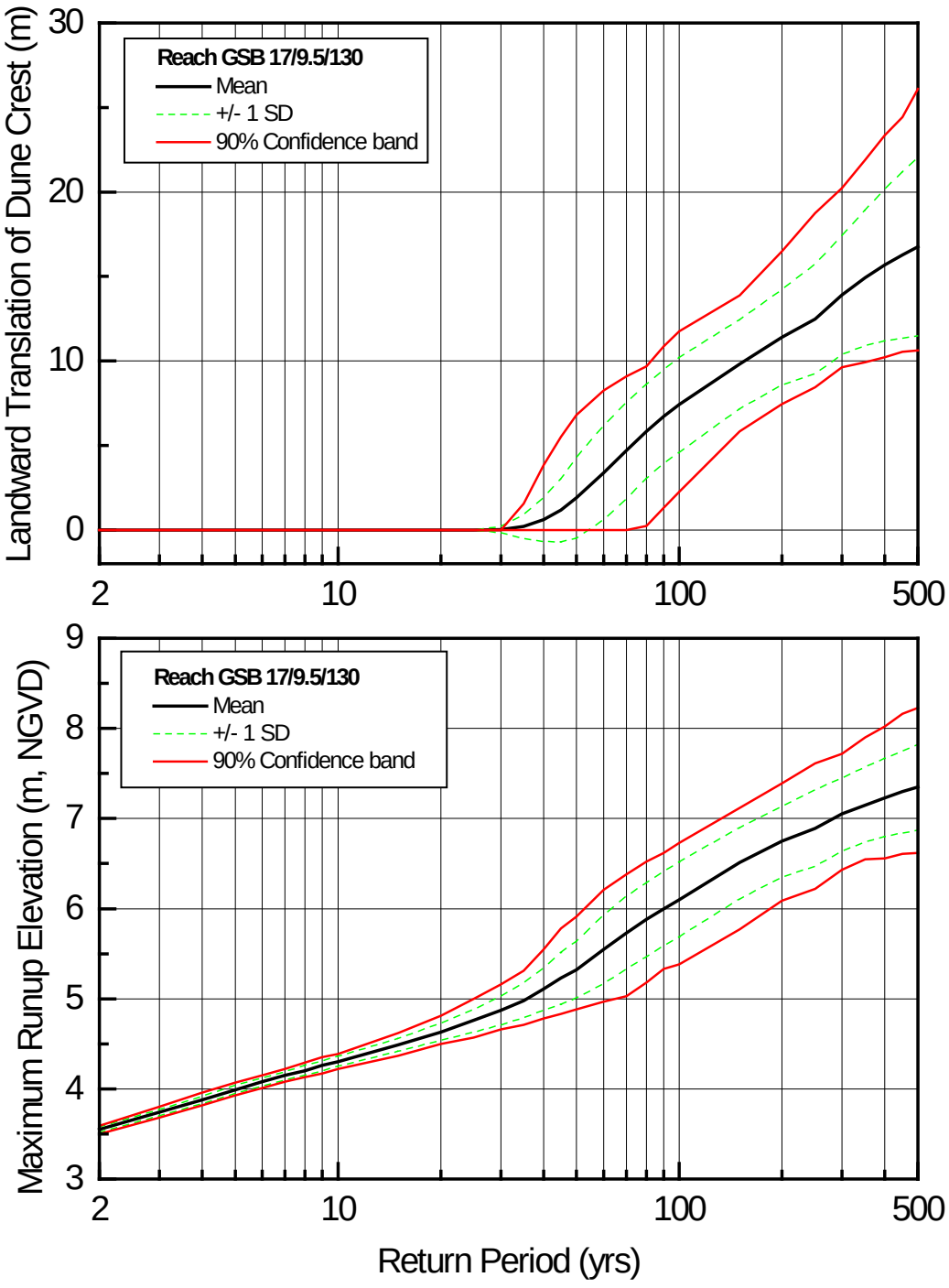

Reach GSB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Max NS Wave Height (m, at landside surf zone)
2.25
2.00
1.75
1.50
1.25
1.00
0.75
2
10
100
500
Reach GSB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Active Profile Distance (m, from 0 NGVD)
450
400
350
300
250
200
150
100
50
2
10
100
500
Return Period (yrs)

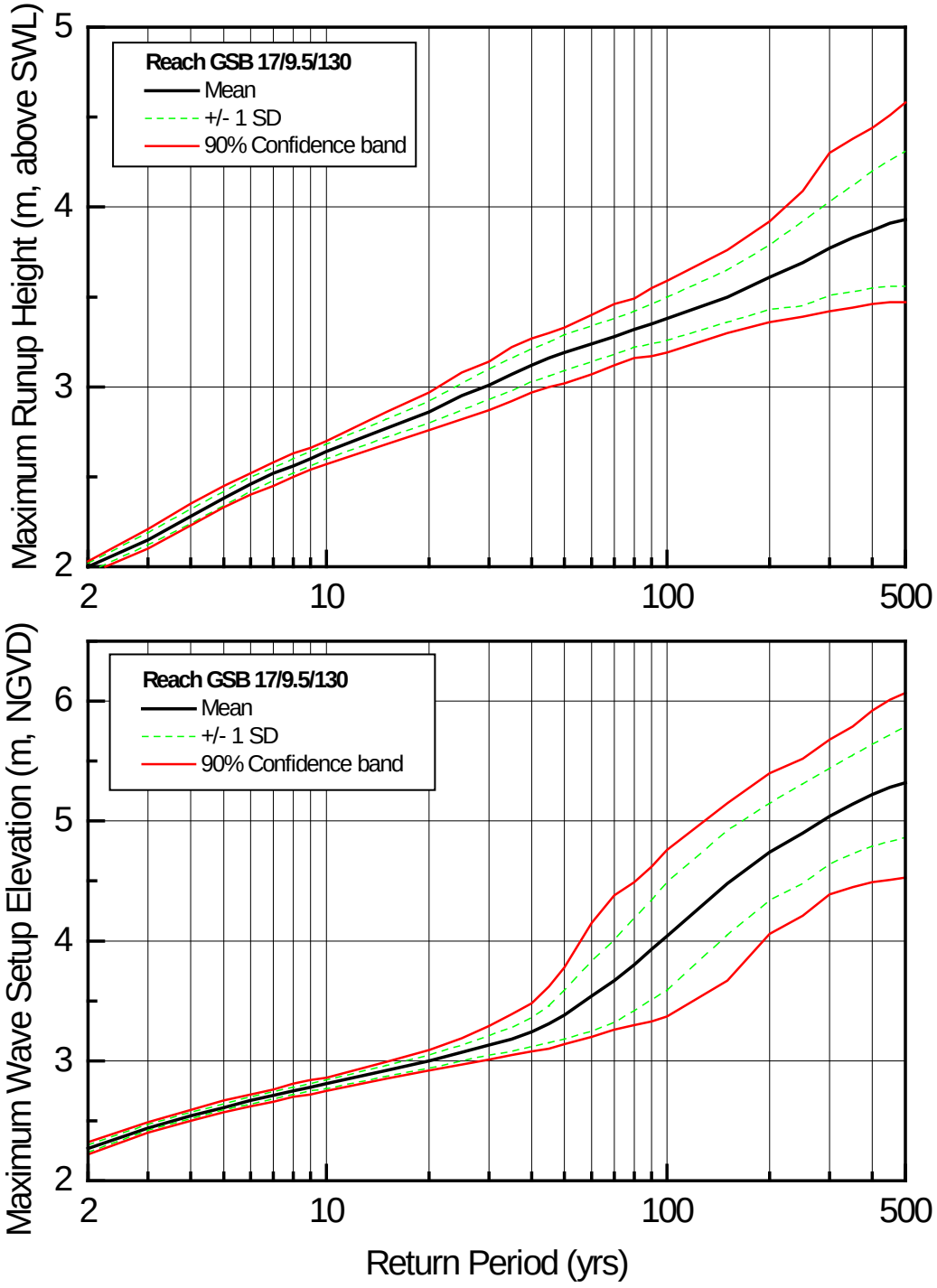

Reach GSB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
21
18
15
12
9
2
10
100
500
Reach GSB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
21
18
15
12
2
10
100
500
Return Period (yrs)

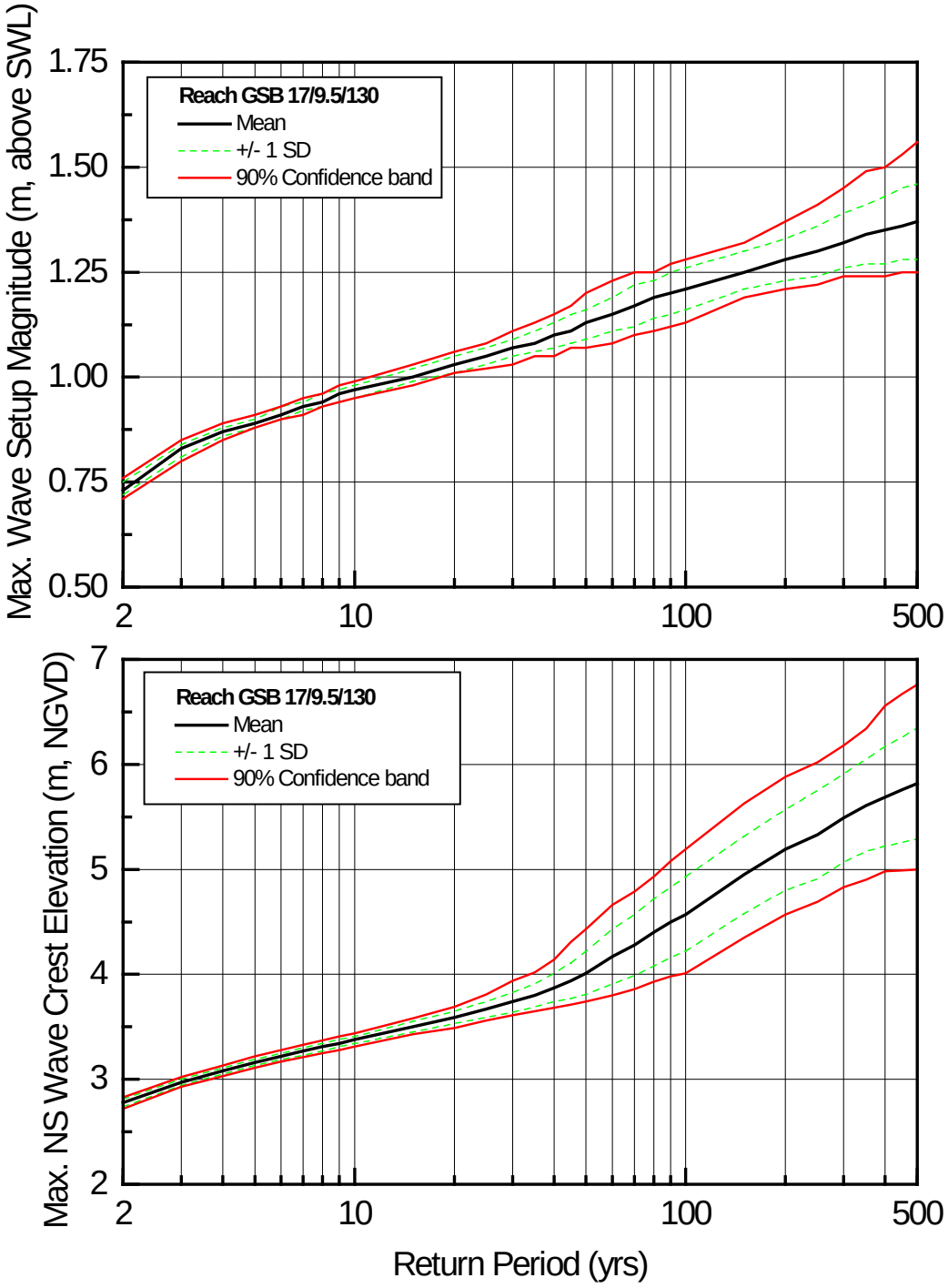

Reach GSB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach GSB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

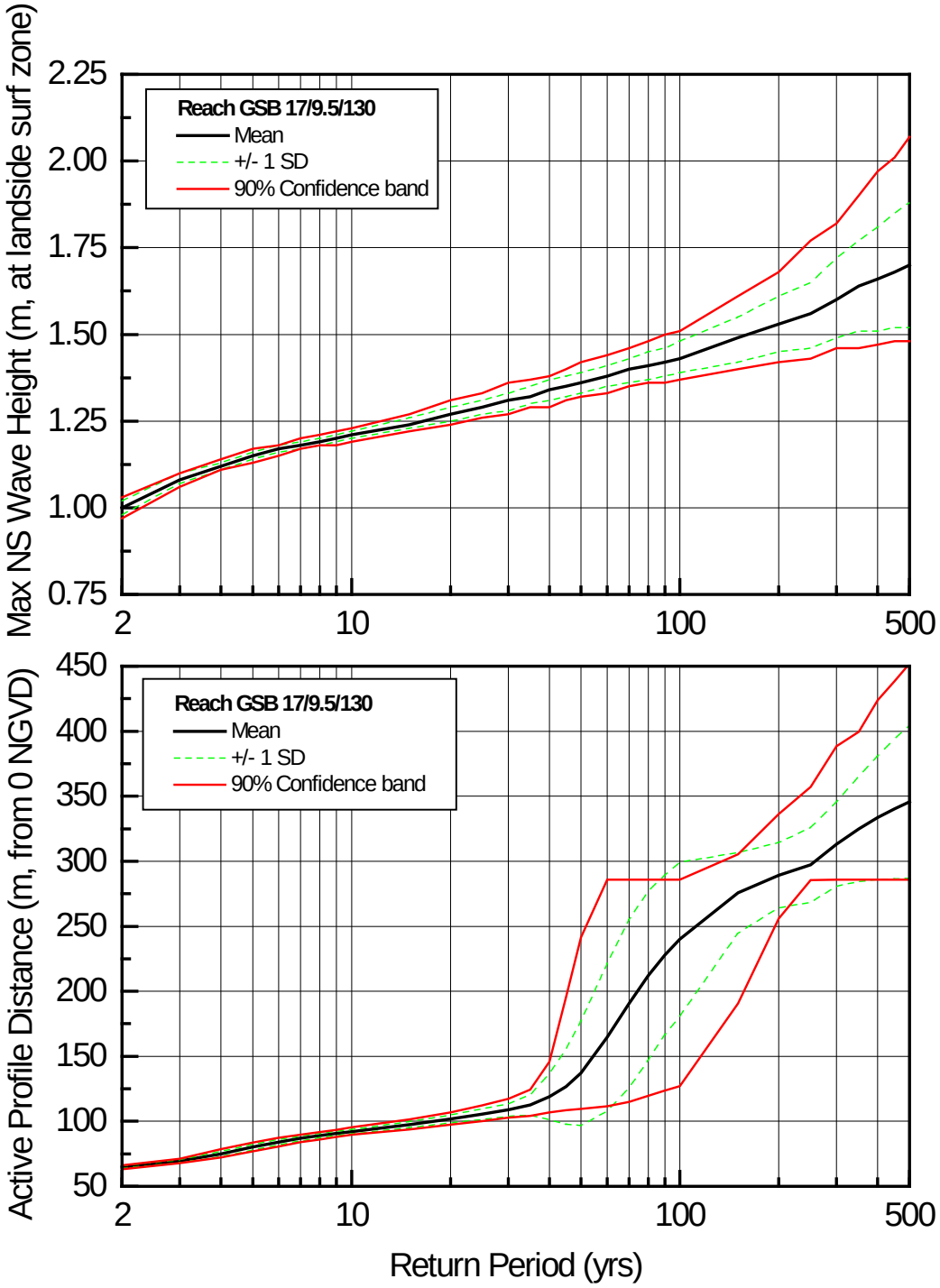

Reach GSB 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
160
140
120
100
80
60
2
10
100
500
Reach GSB 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

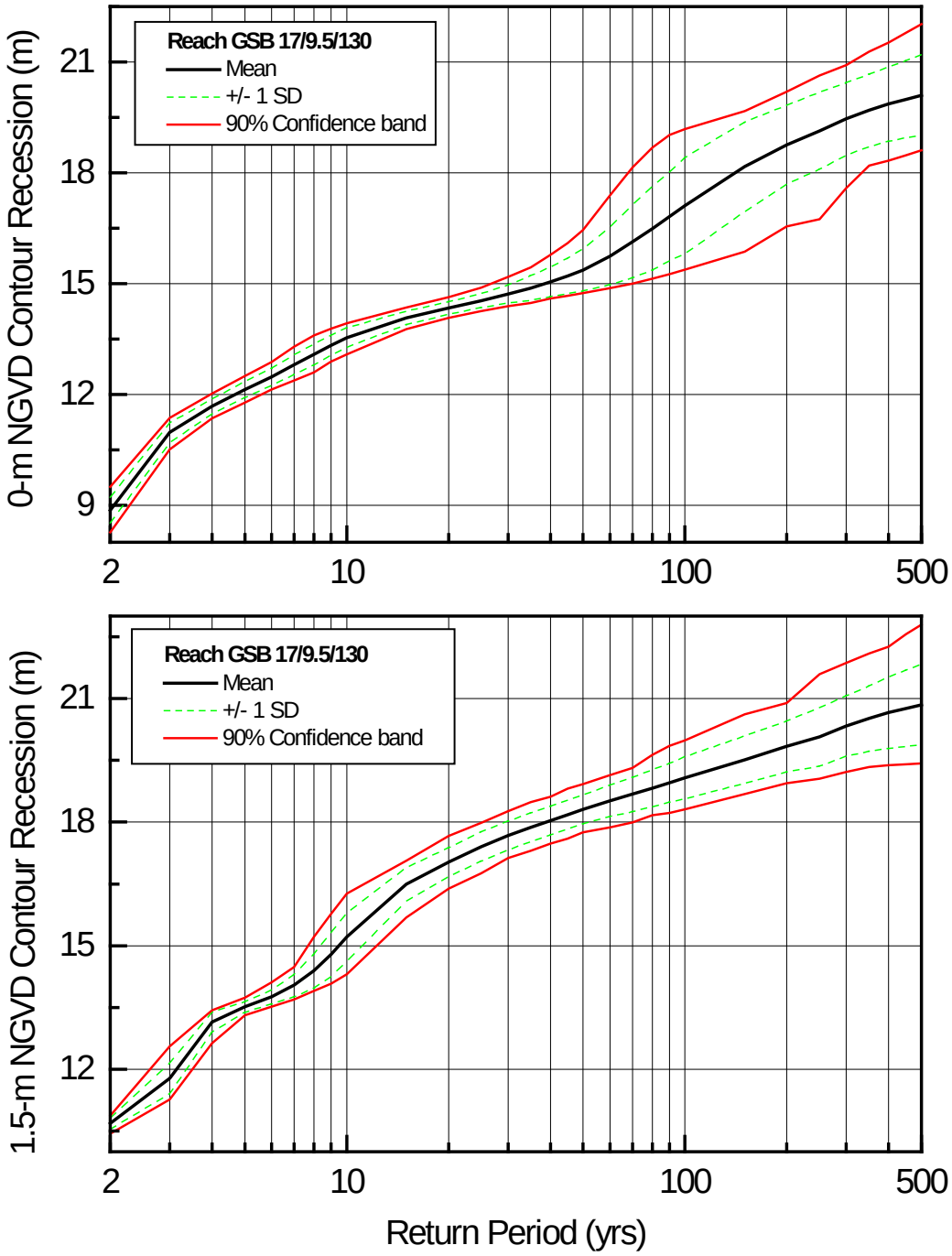

Reach GSB 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
50
40
30
20
10
0
2
10
100
500
Reach GSB 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
3
2
1
0
2
10
100
500
Return Period (yrs)

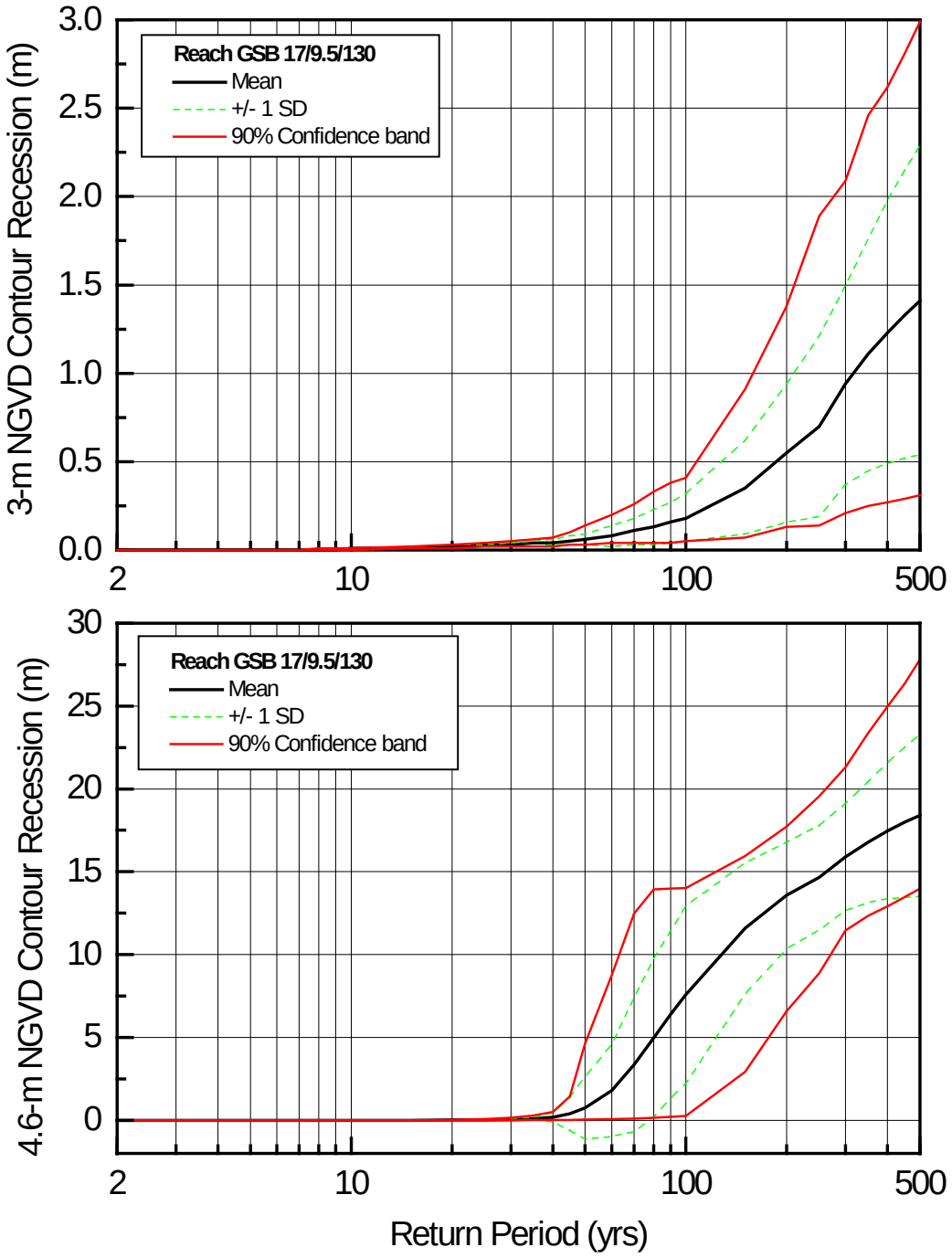

Reach GSB 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
30
20
10
0
2
10
100
500
Reach GSB 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
9
8
7
6
5
4
3
2
10
100
500
Return Period (yrs)

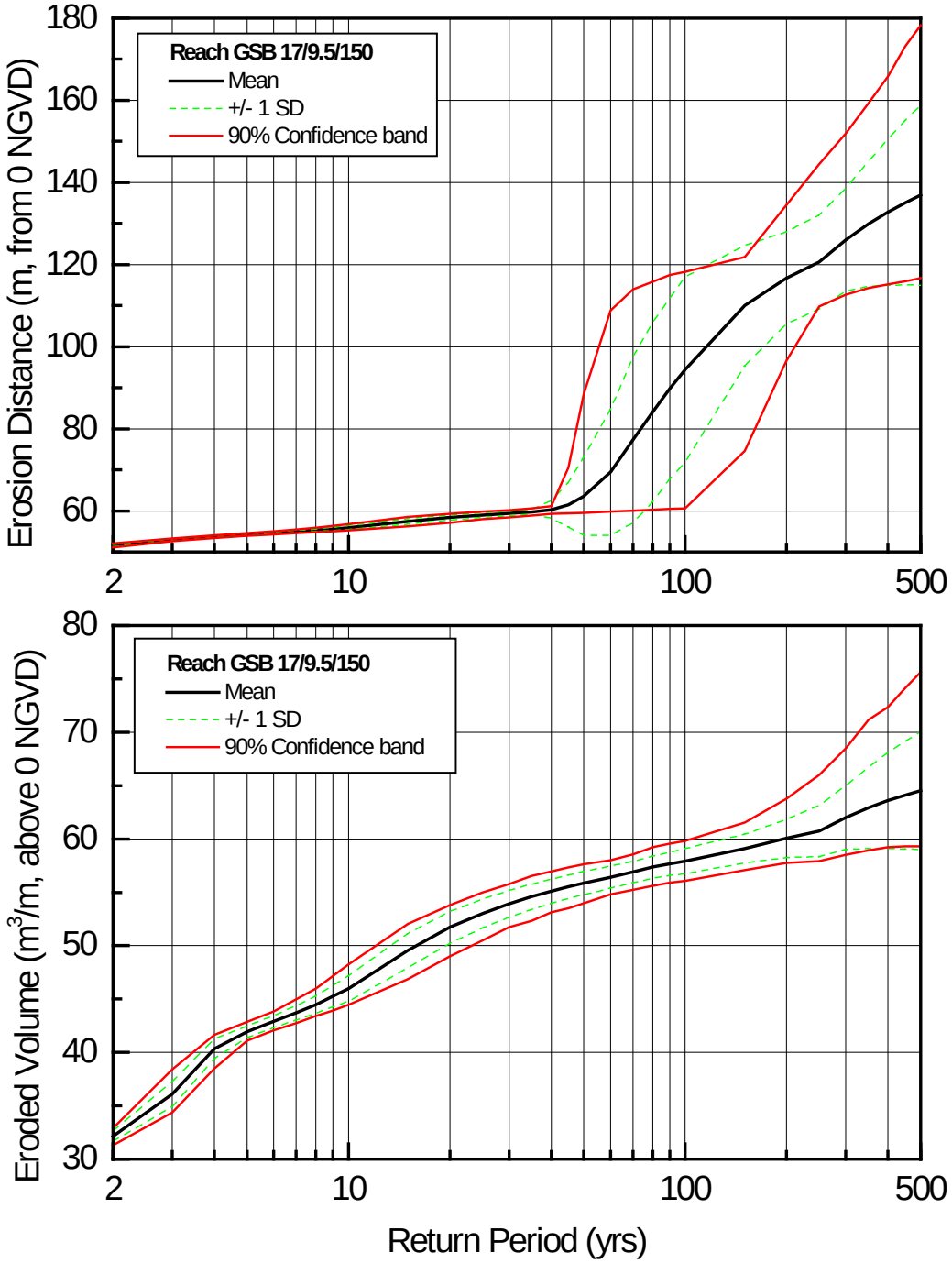

Reach GSB 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5
4
3
2
2
10
100
500
Reach GSB 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

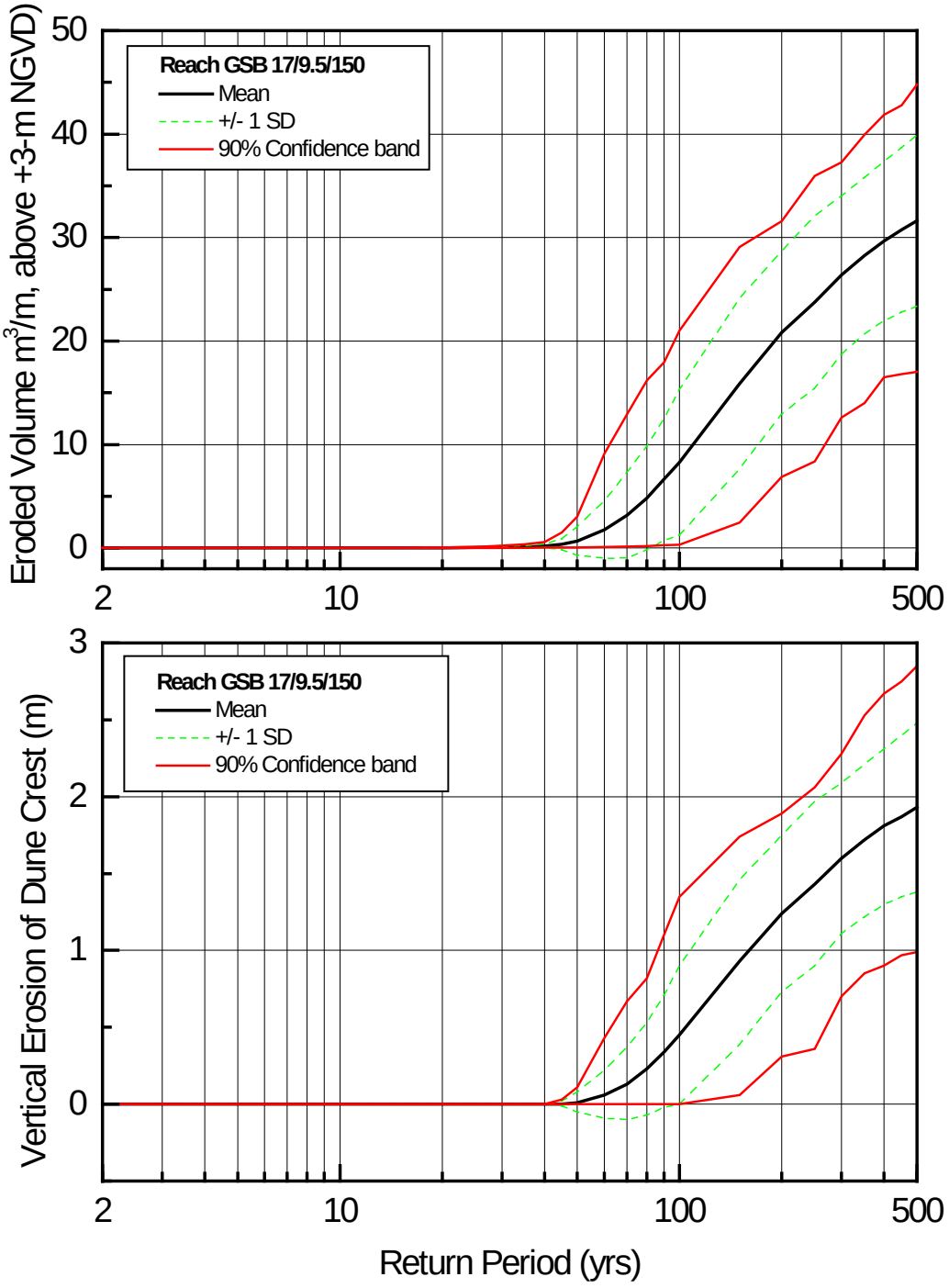

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach GSB 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
2
Reach GSB 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

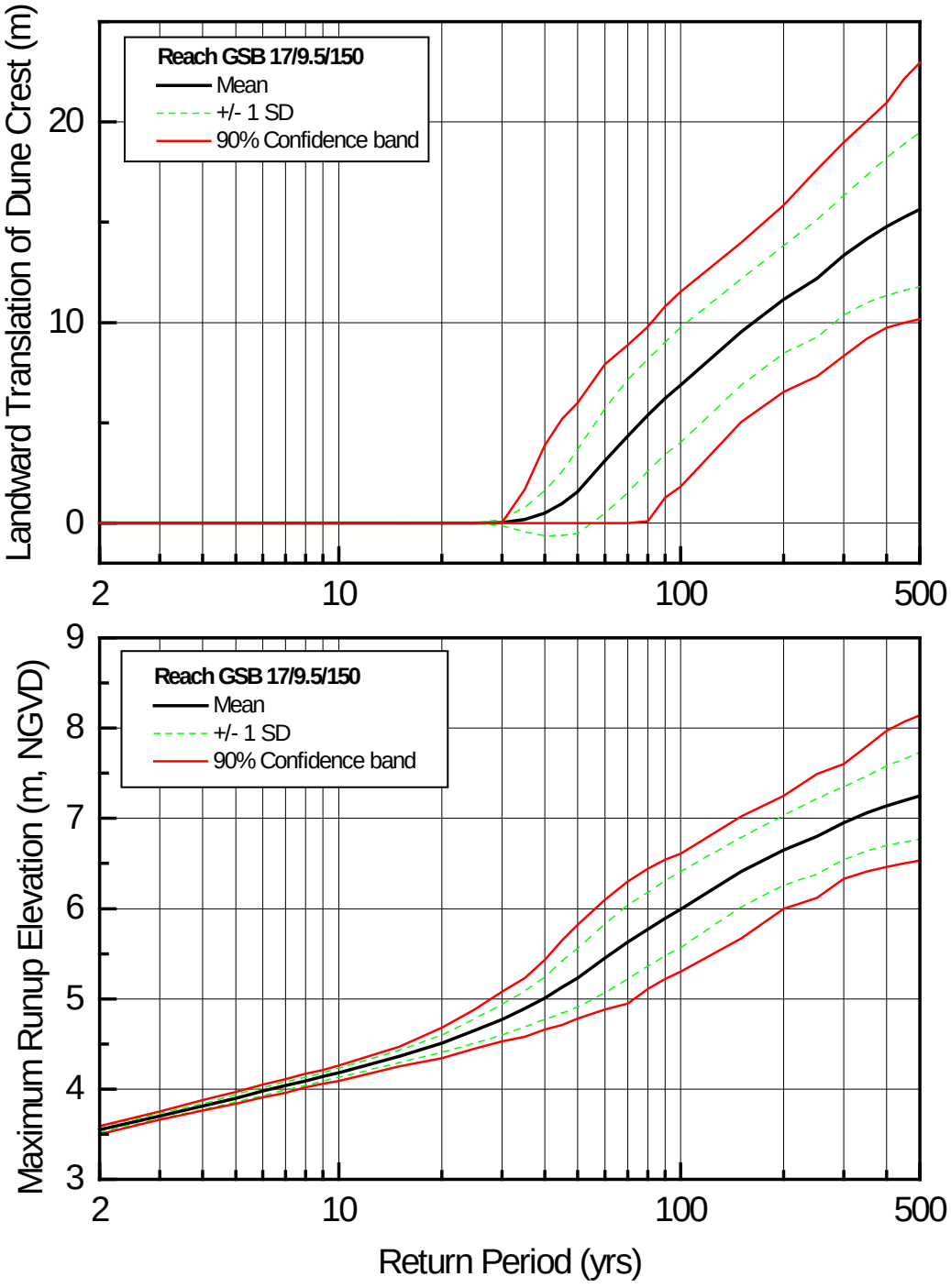

Reach GSB 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Max NS Wave Height (m, at landside surf zone)
2.25
2.00
1.75
1.50
1.25
1.00
0.75
2
10
100
500
Reach GSB 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Active Profile Distance (m, from 0 NGVD)
450
400
350
300
250
200
150
100
50
2
10
100
500
Return Period (yrs)

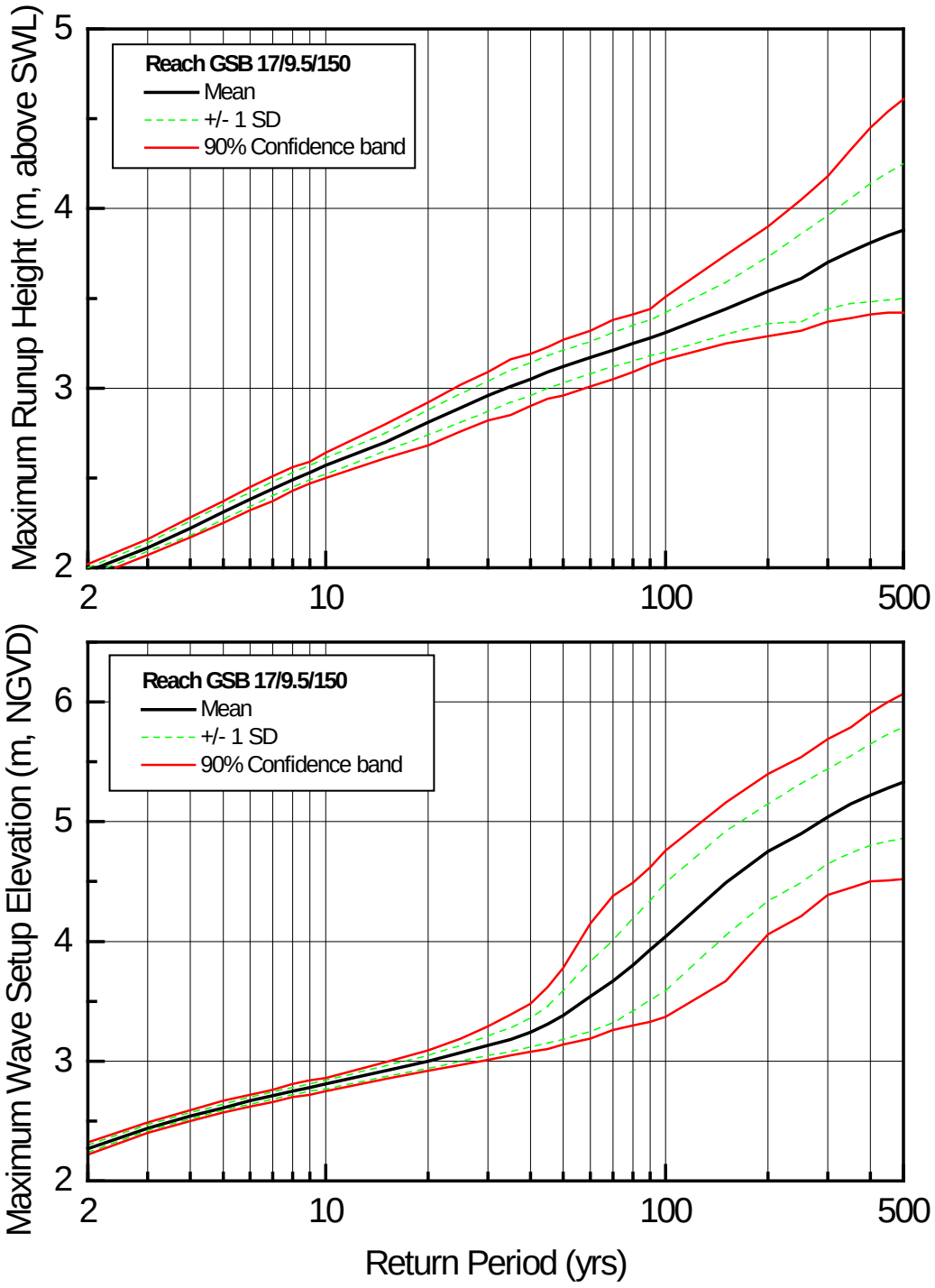

Reach GSB 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
21
18
15
12
9
2
10
100
500
Reach GSB 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
21
18
15
12
2
10
100
500
Return Period (yrs)

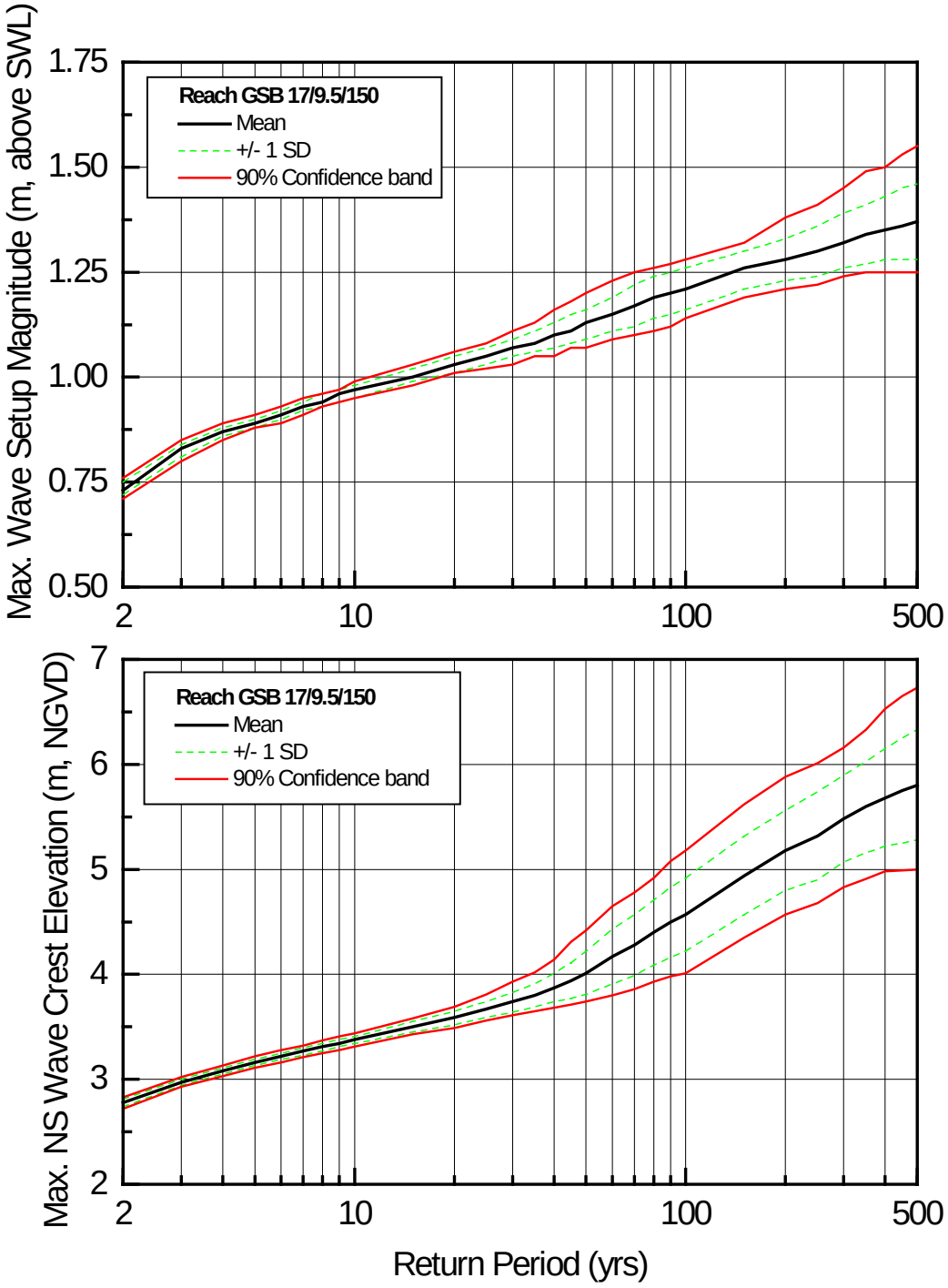

Reach GSB 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach GSB 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

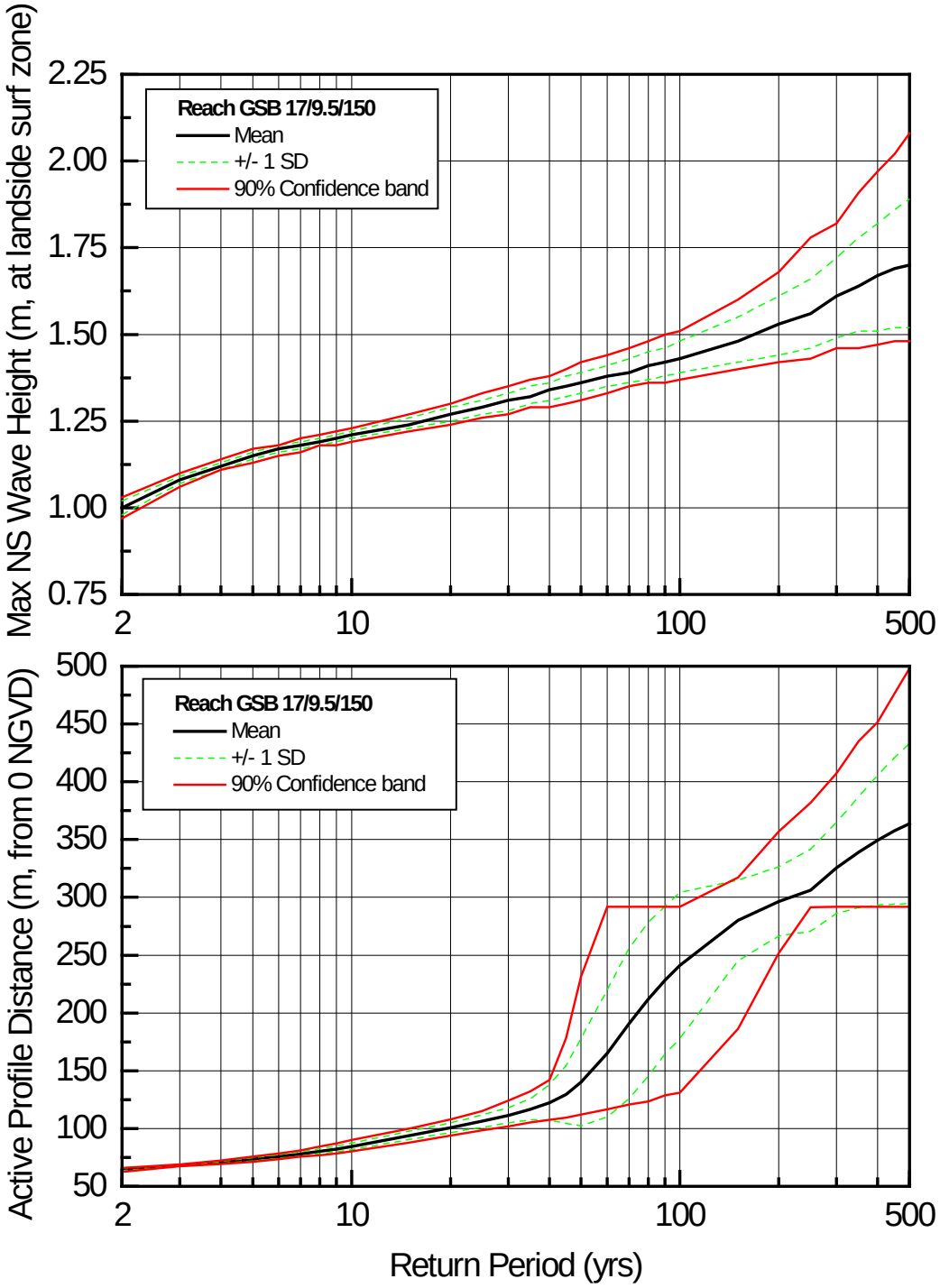

Reach GSB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
160
140
120
100
80
60
2
10
100
500
Reach GSB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

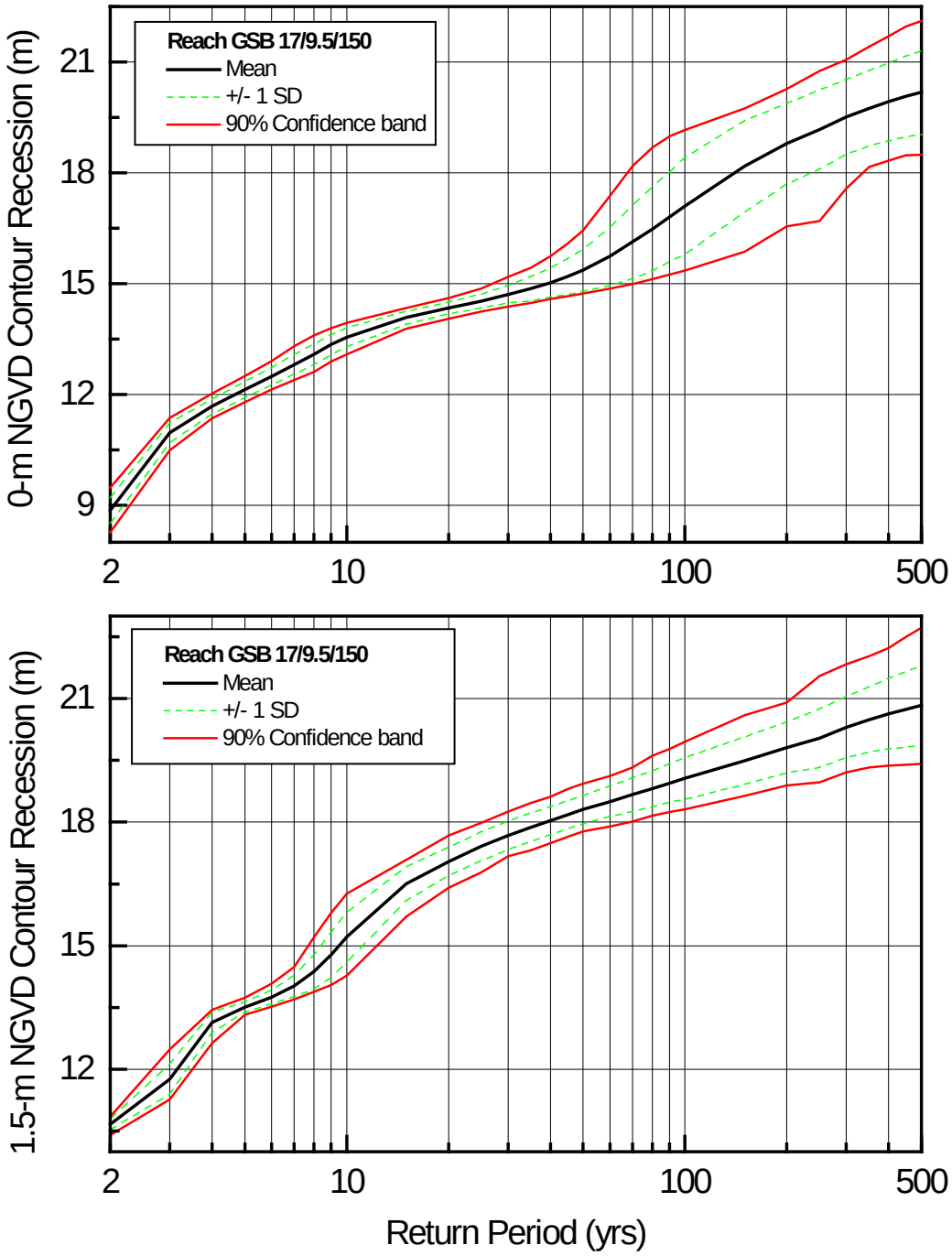

Reach GSB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
50
40
30
20
10
0
2
10
100
500
Reach GSB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
3
2
1
0
2
10
100
500
Return Period (yrs)

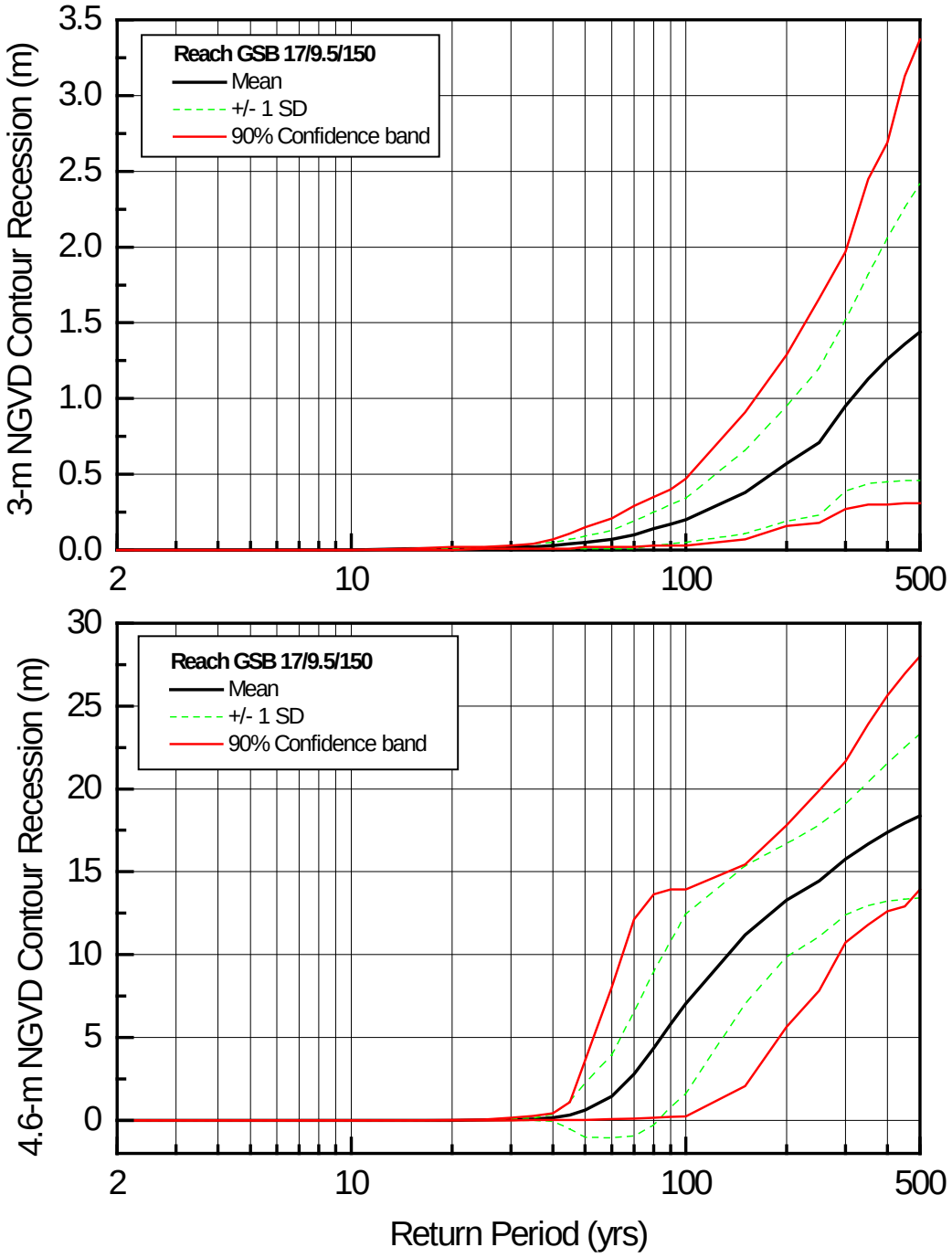

Reach GSB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
2
10
100
500
Reach GSB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
8
9
2
10
100
500
Return Period (yrs)

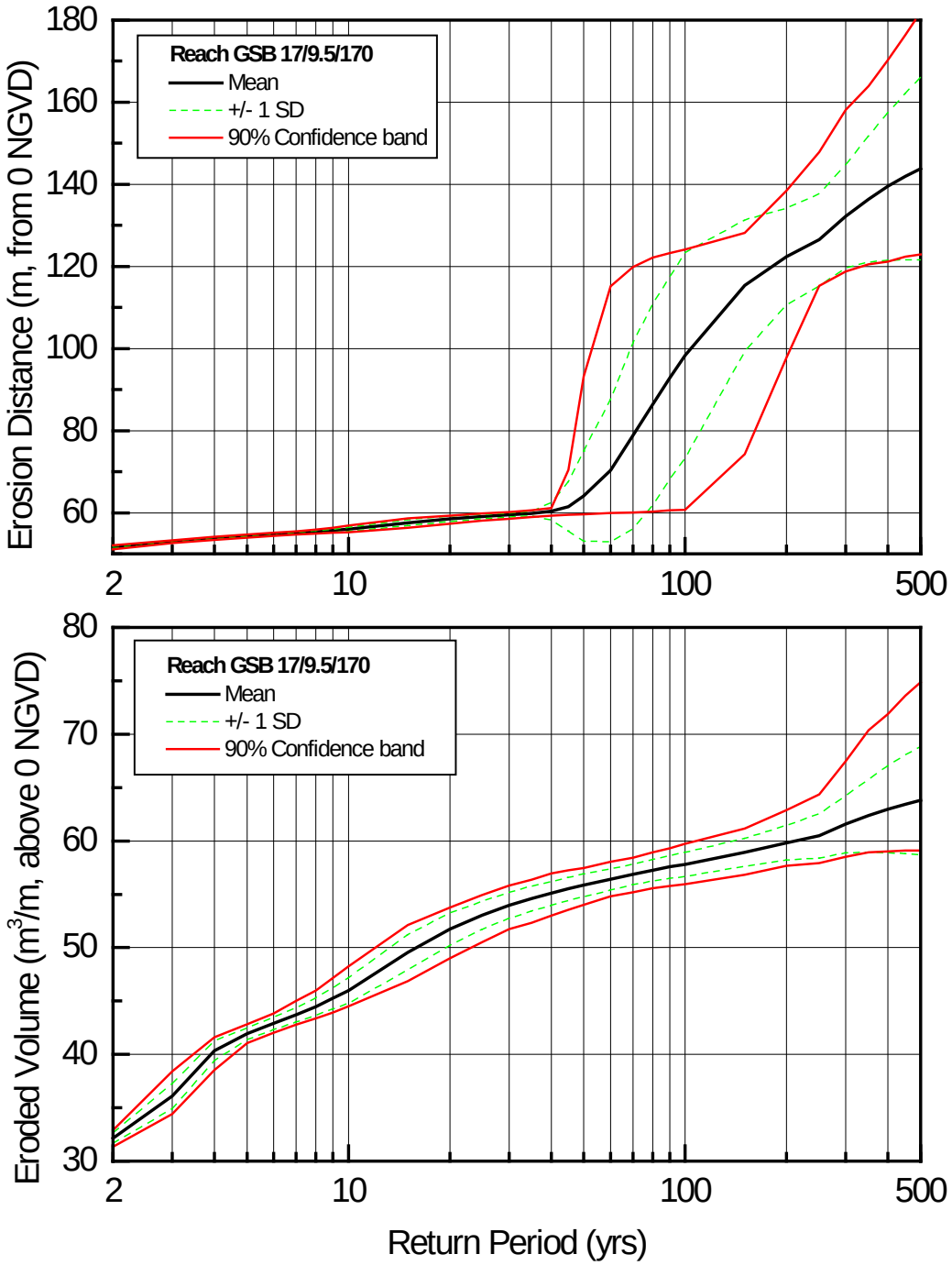

Reach GSB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5
4
3
2
2
10
100
500
Reach GSB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

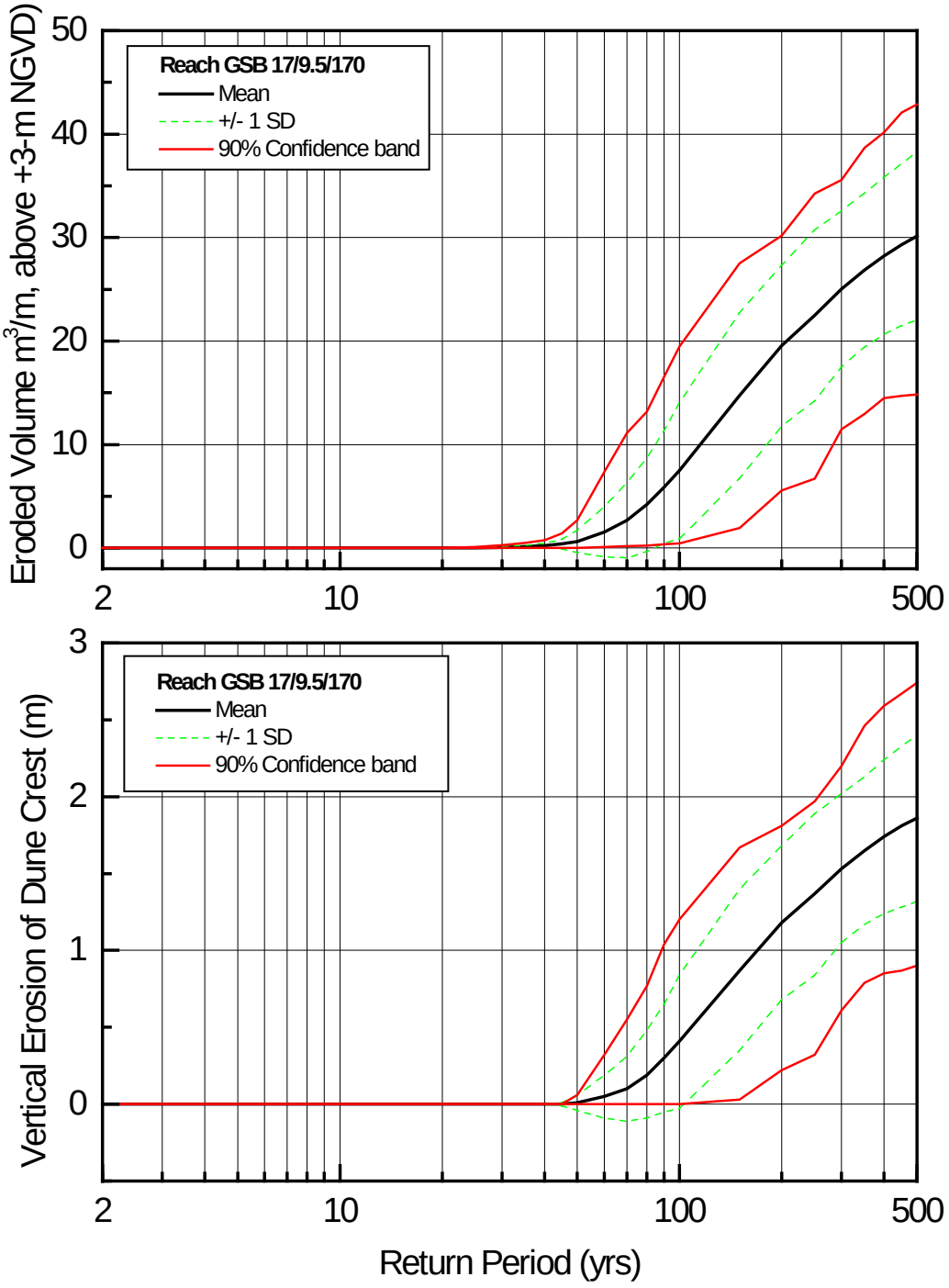

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach GSB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
2
Reach GSB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

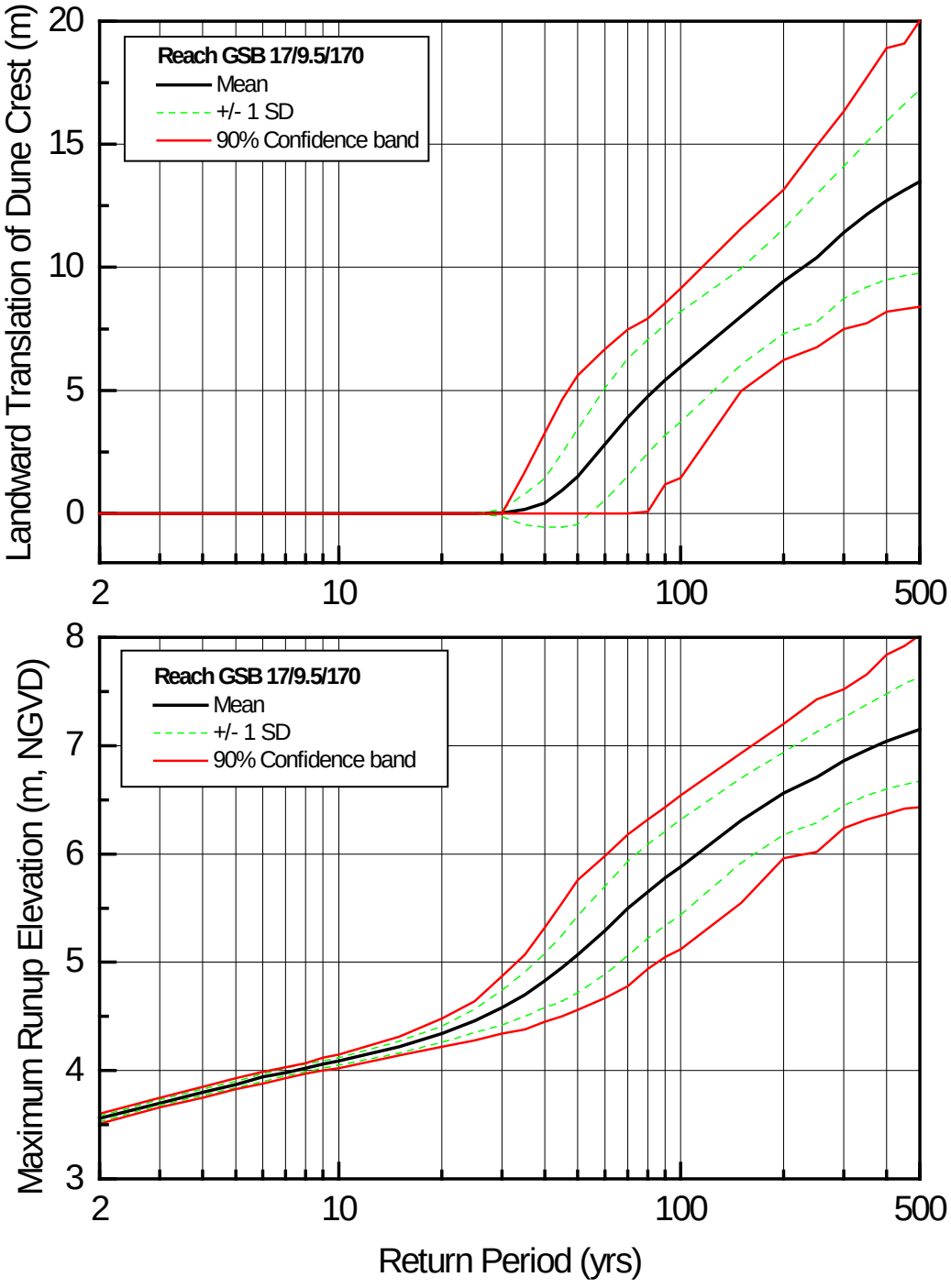

Max NS Wave Height (m, at landside surf zone)
2.25
2.00
1.75
1.50
1.25
1.00
0.75
Reach GSB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
500
450
400
350
300
250
200
150
100
50
Reach GSB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

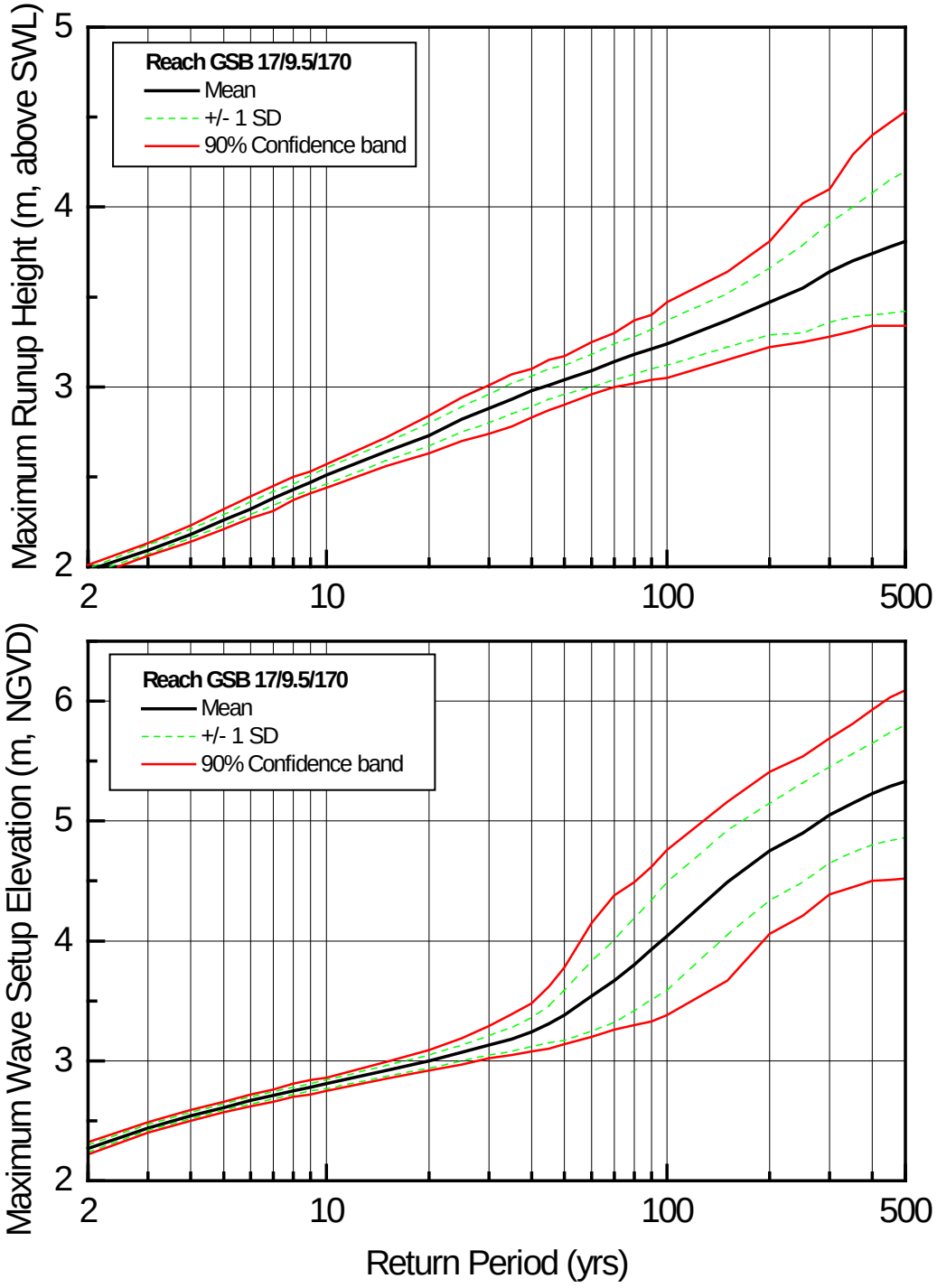

Reach GSB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
21
18
15
12
9
2
10
100
500
Reach GSB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
21
18
15
12
2
10
100
500
Return Period (yrs)

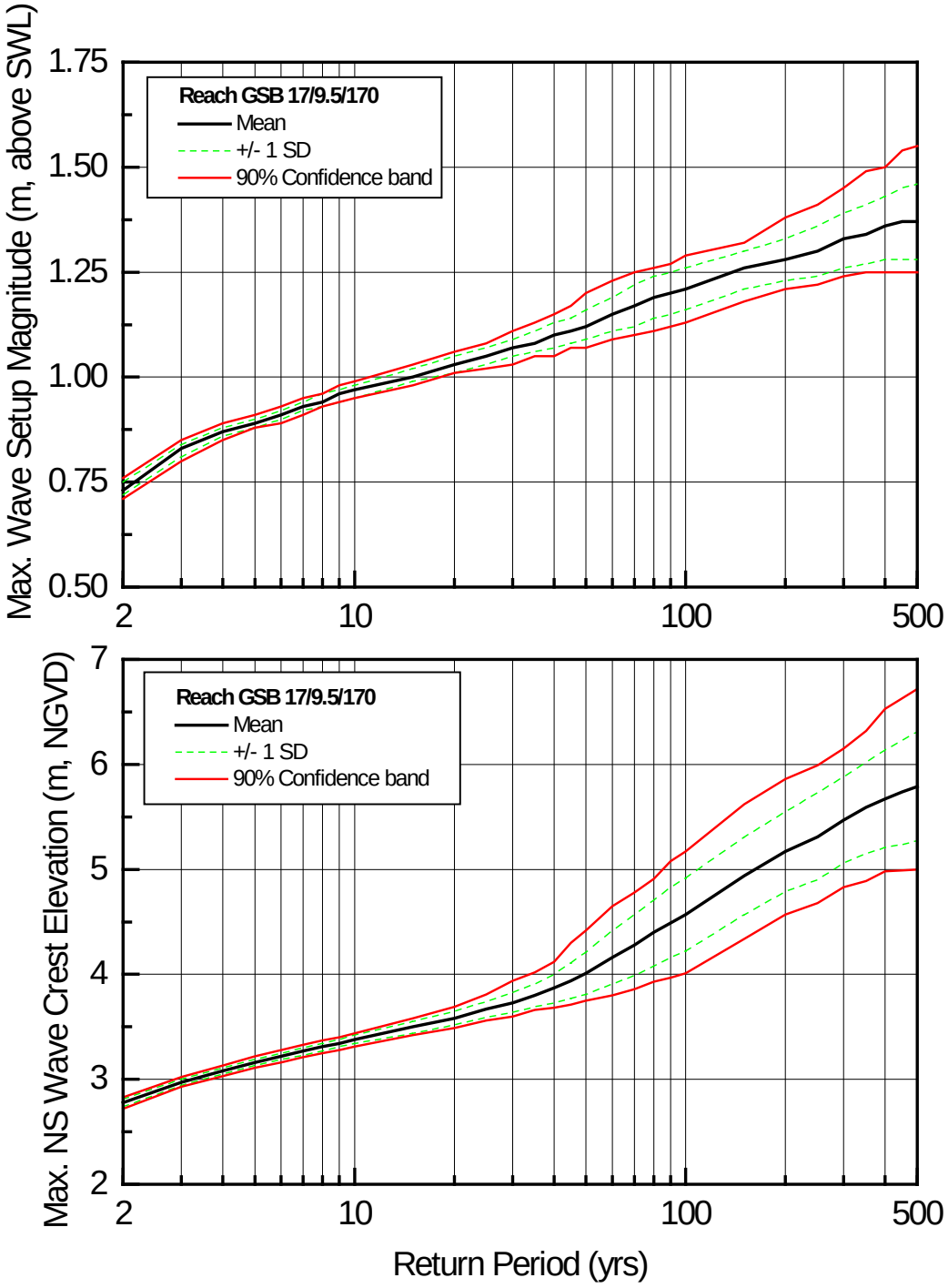

Reach GSB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach GSB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

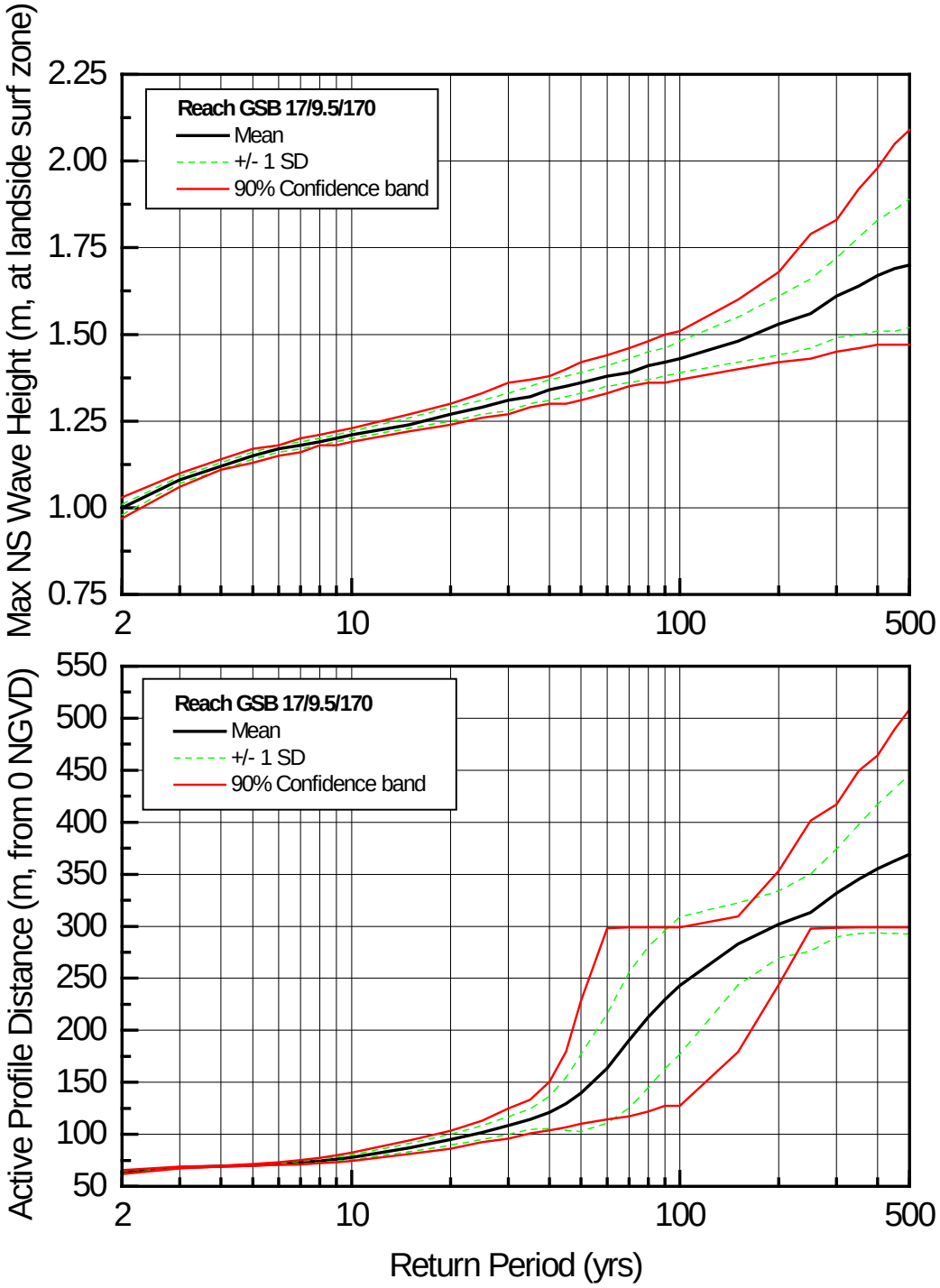

Reach GSB 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
160
140
120
100
80
60
2
10
100
500
Reach GSB 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

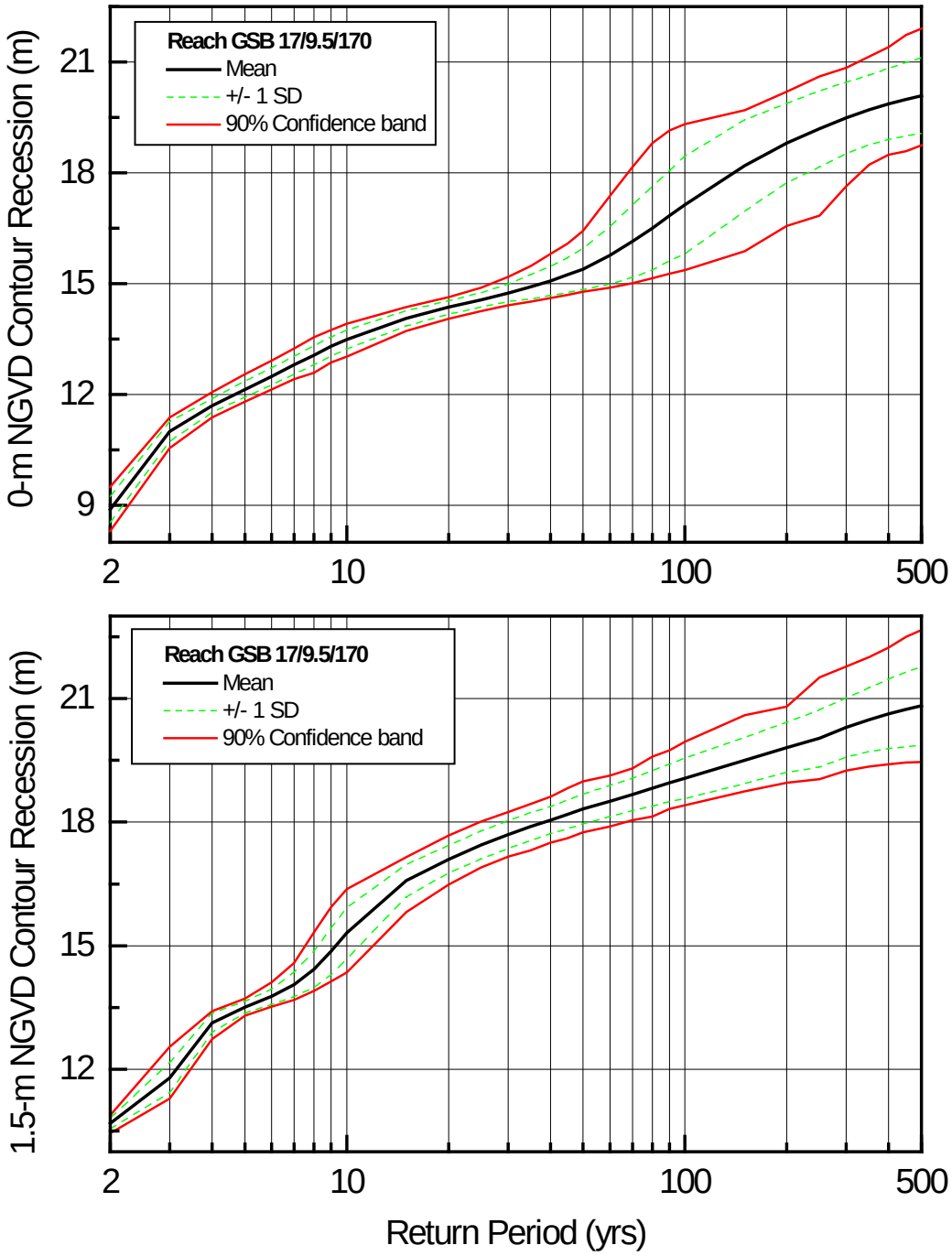

Reach GSB 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
50
40
30
20
10
0
2
10
100
500
Reach GSB 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
3
2
1
0
2
10
100
500
Return Period (yrs)

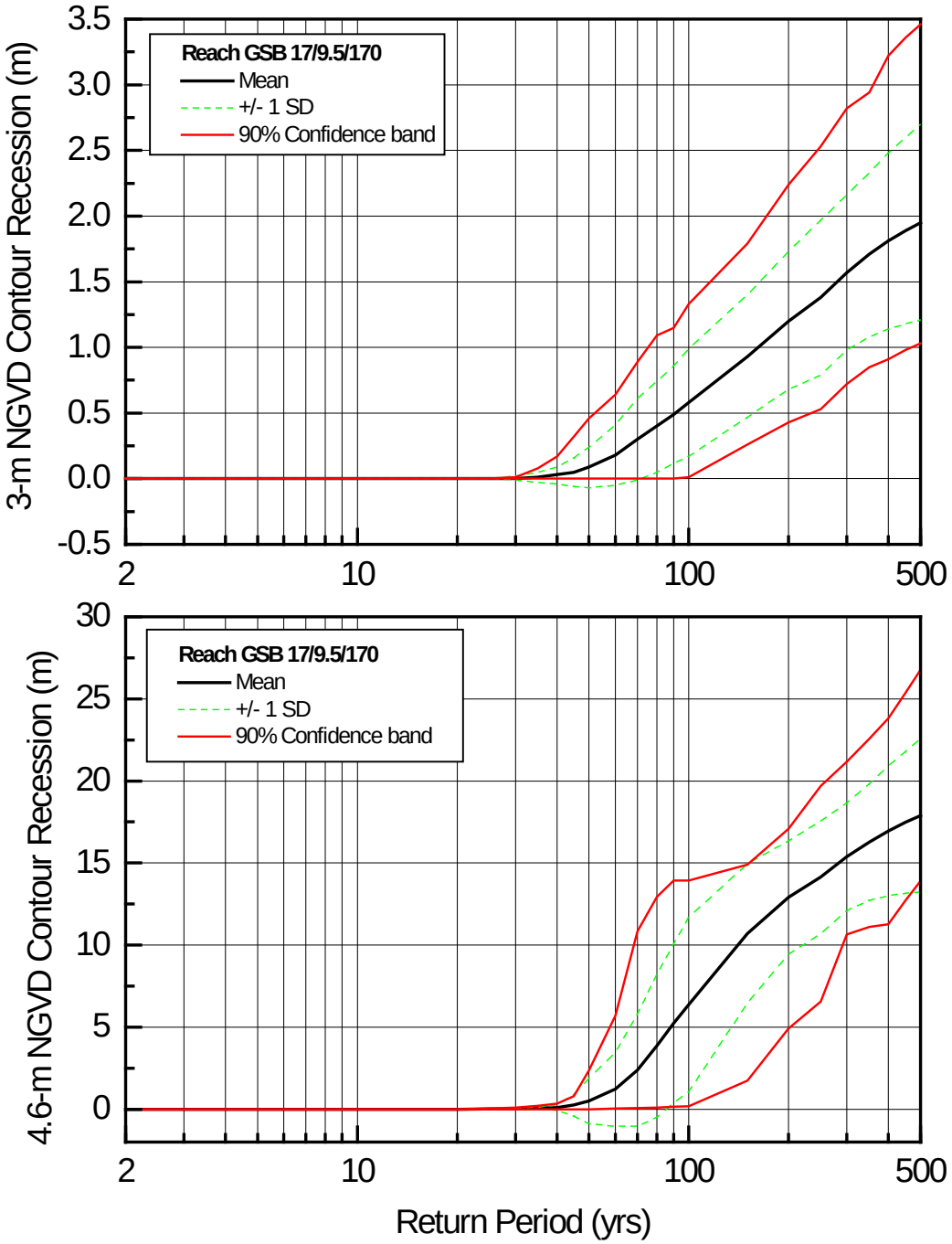

Reach GSB 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
20
15
10
5
0
2
10
100
500
Reach GSB 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
3
2
10
100
500
Return Period (yrs)

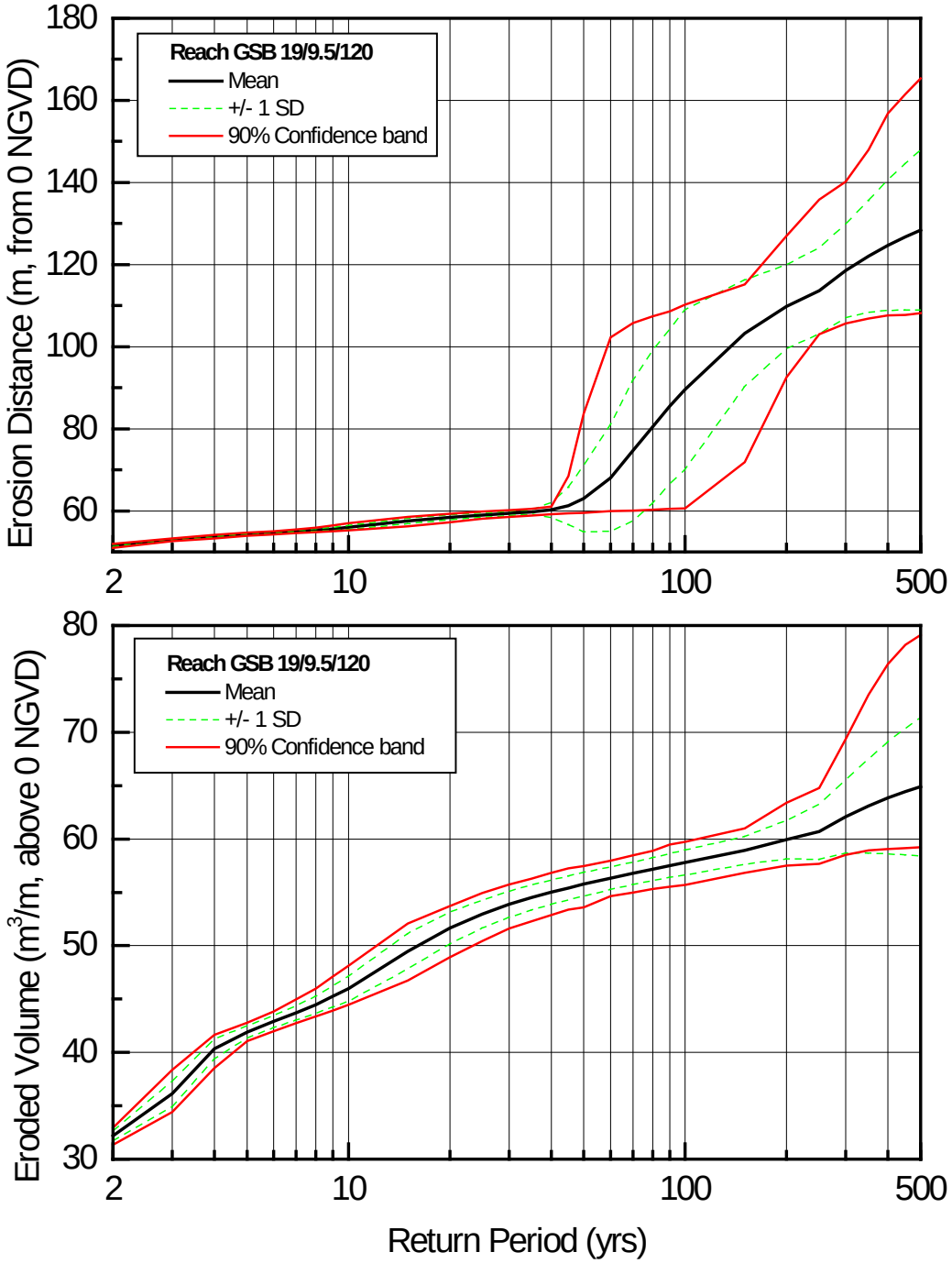

Reach GSB 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5
4
3
2
2
10
100
500
Reach GSB 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

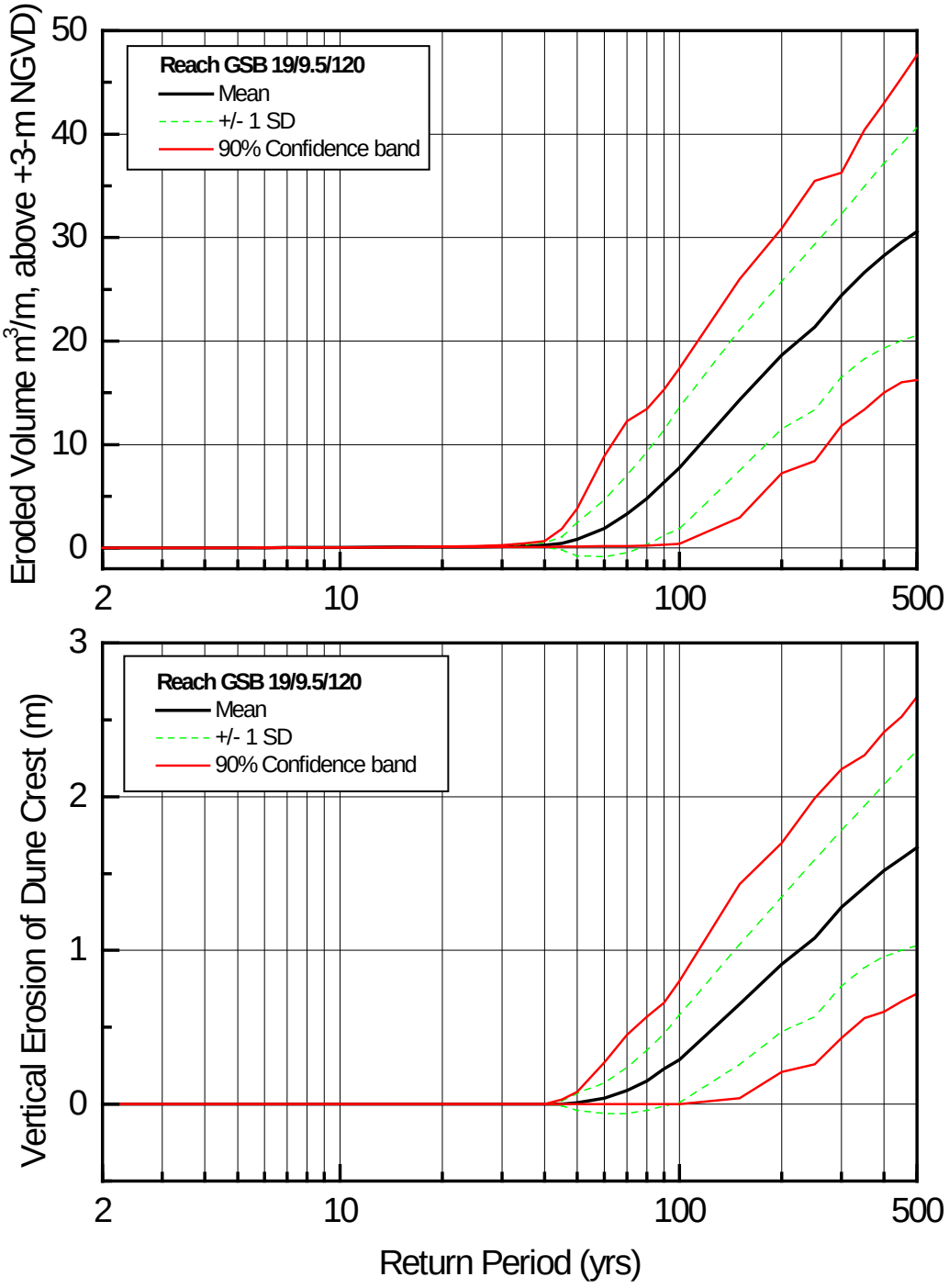

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach GSB 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
2
Reach GSB 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

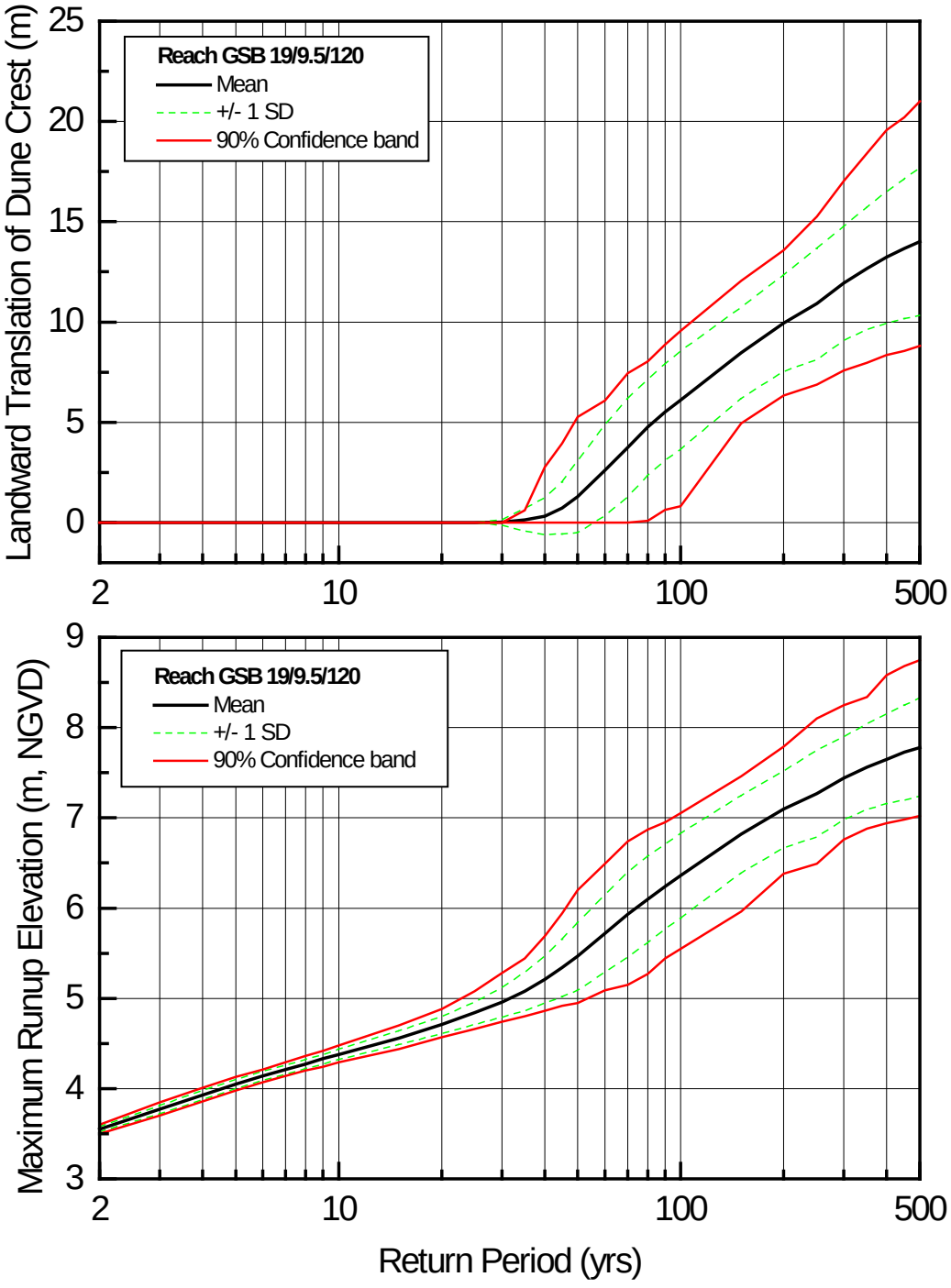

Reach GSB 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Max NS Wave Height (m, at landside surf zone)
2.25
2.00
1.75
1.50
1.25
1.00
0.75
2
10
100
500
Reach GSB 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Active Profile Distance (m, from 0 NGVD)
550
500
450
400
350
300
250
200
150
100
50
2
10
100
500
Return Period (yrs)

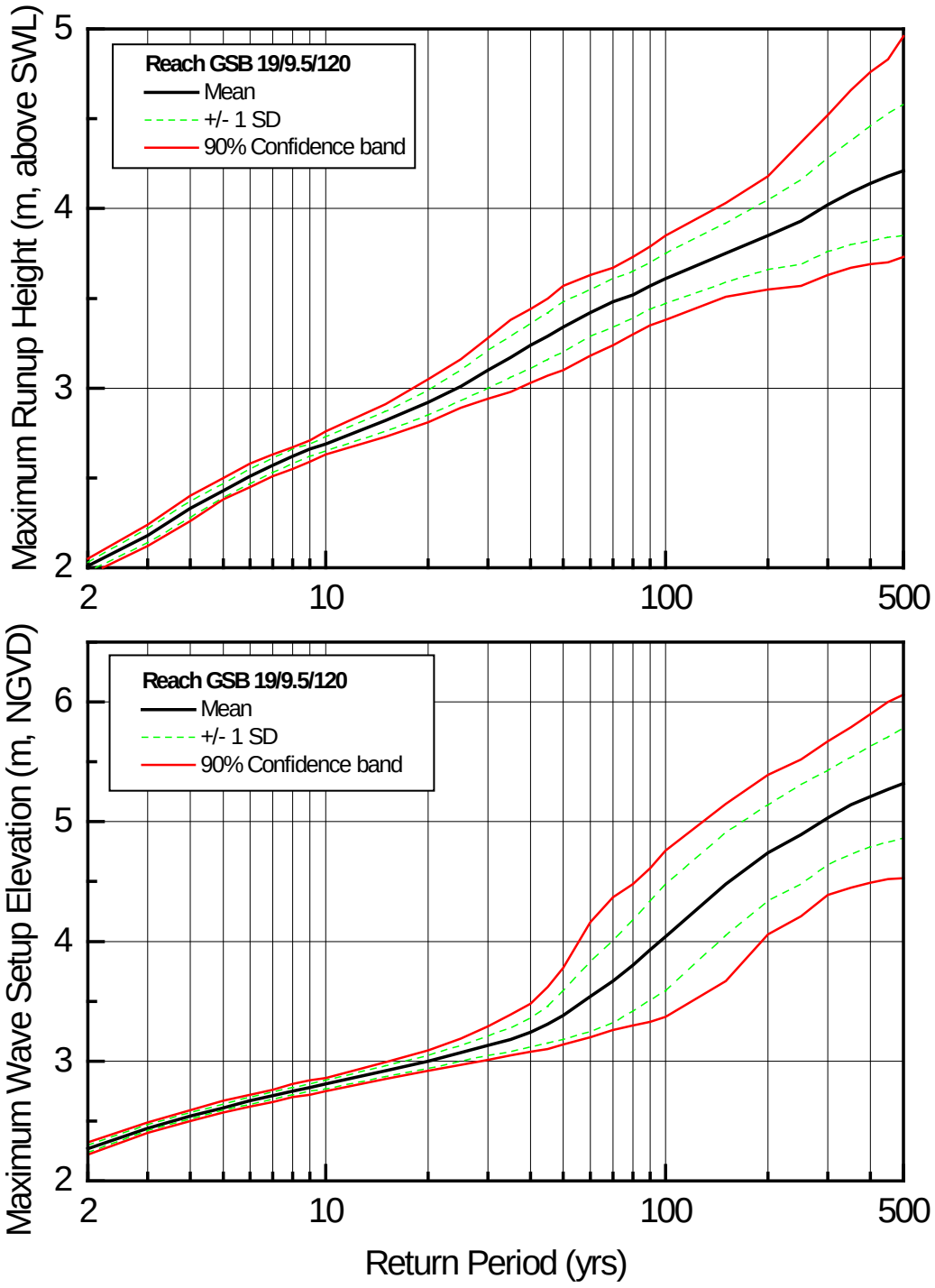

Reach GSB 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
21
18
15
12
9
2
10
100
500
Reach GSB 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
21
18
15
12
2
10
100
500
Return Period (yrs)

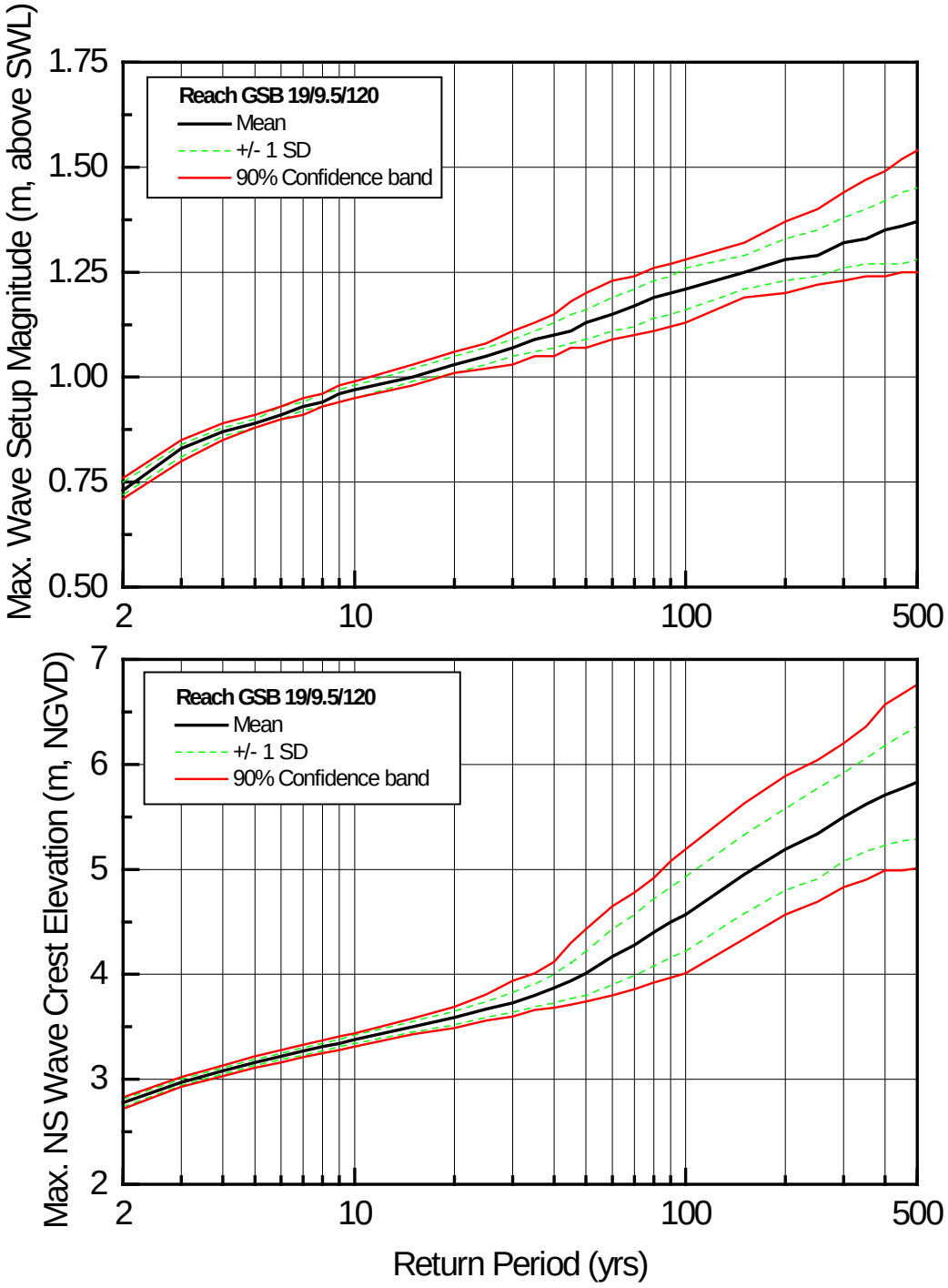

Reach GSB 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
2
10
100
500
Reach GSB 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

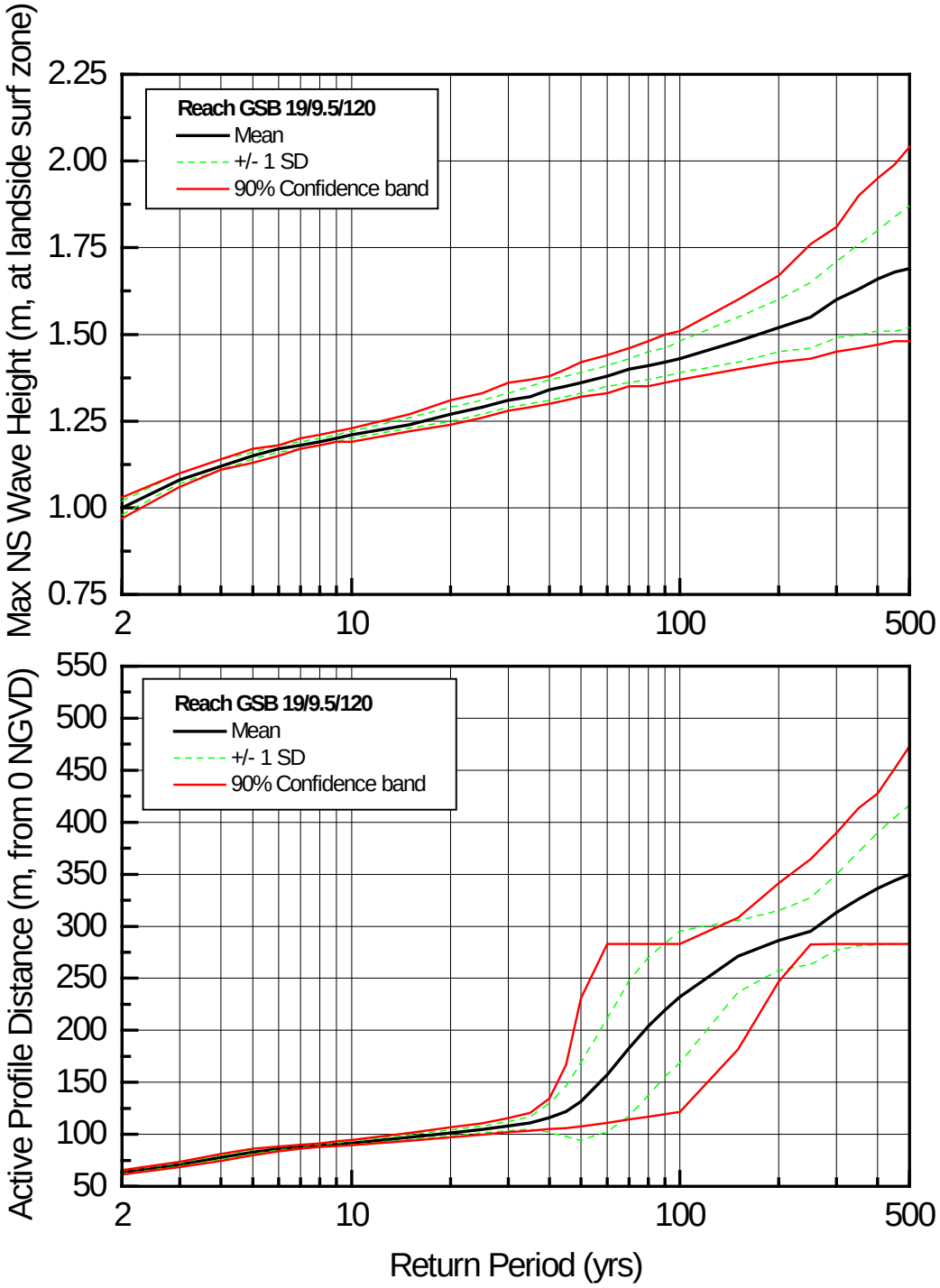

Reach GSB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
160
140
120
100
80
60
2
10
100
500
Reach GSB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

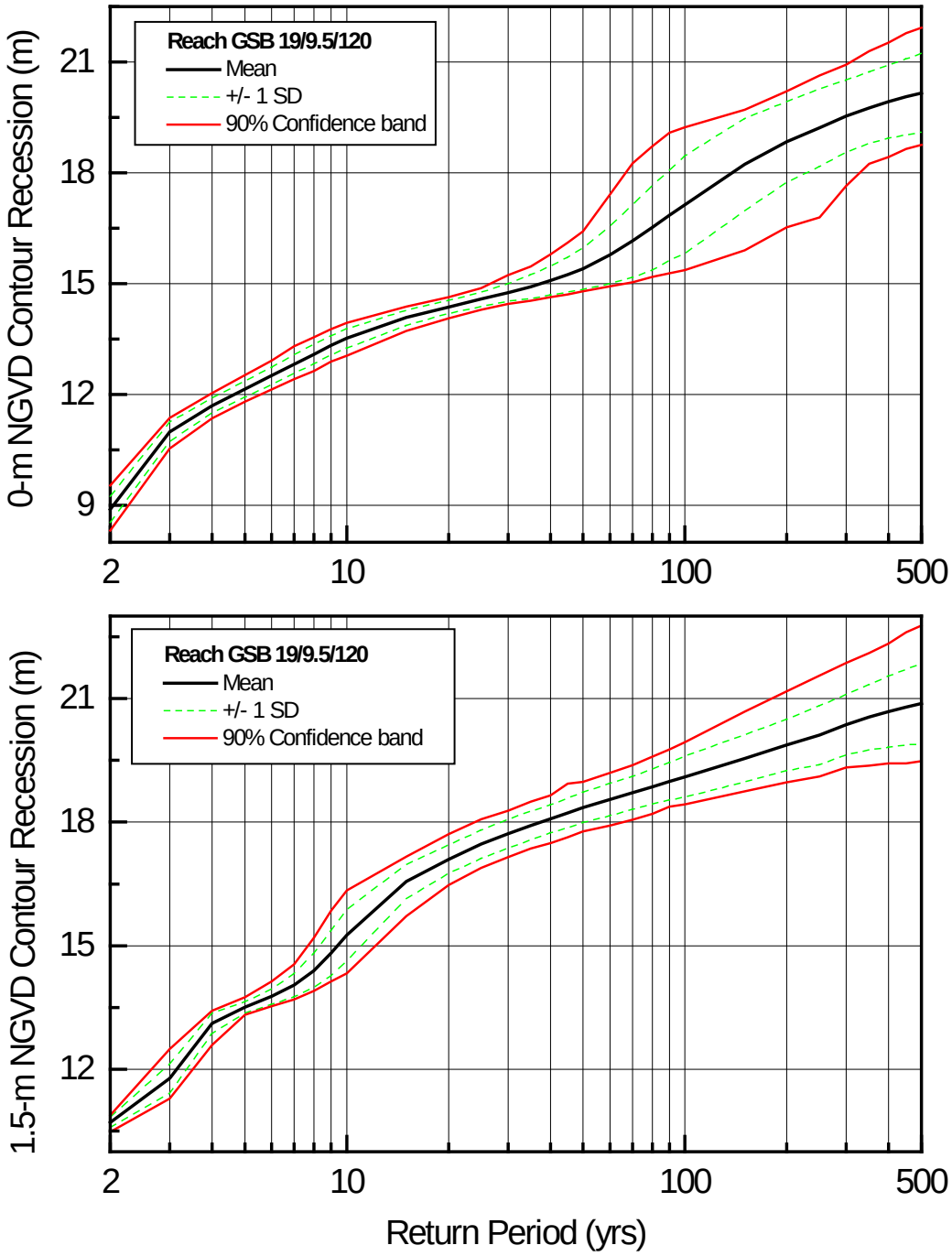

Reach GSB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
50
40
30
20
10
0
2
10
100
500
Reach GSB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
3
2
1
0
2
10
100
500
Return Period (yrs)

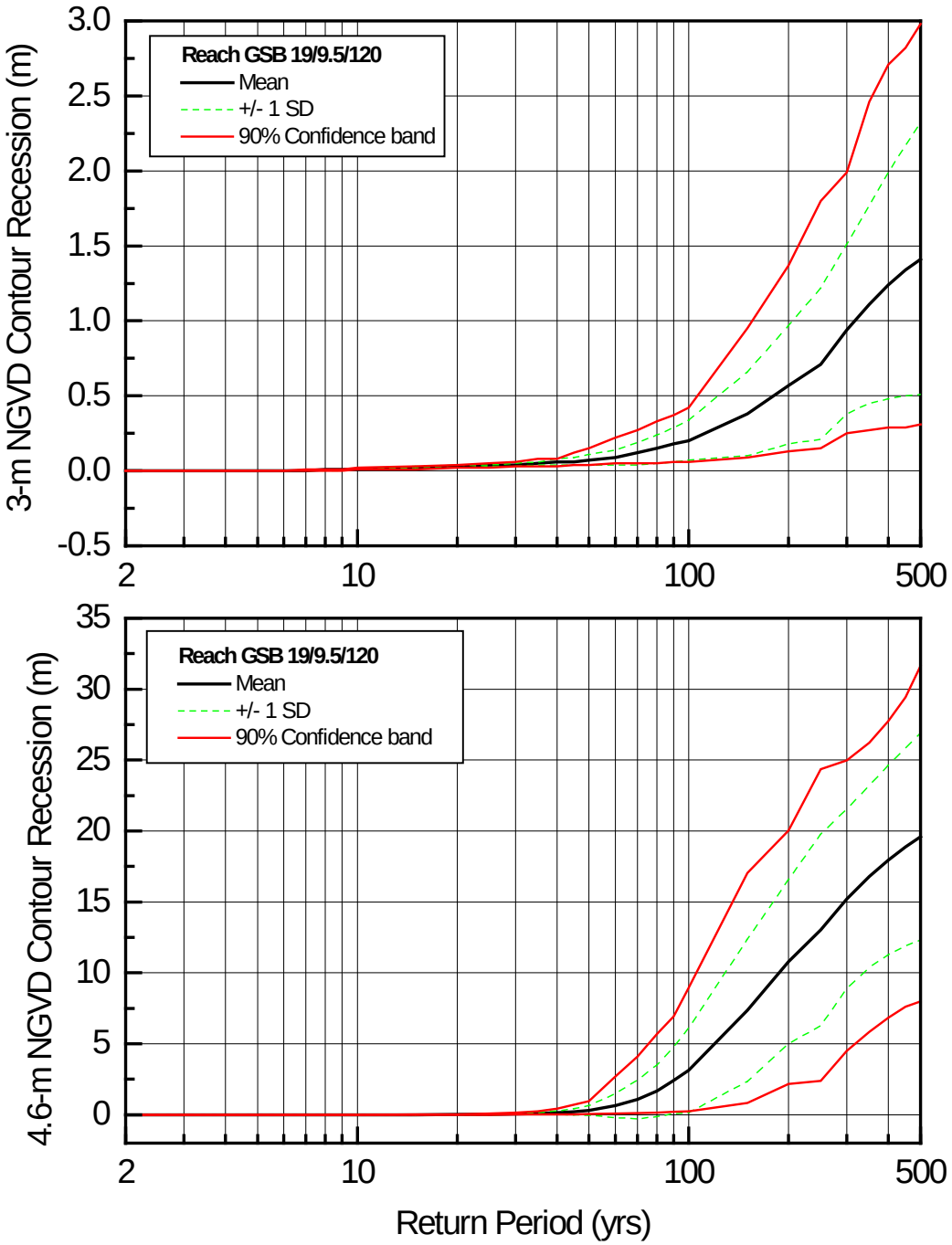

Reach GSB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
25
20
15
10
5
0
2
10
100
500
Reach GSB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
9
8
7
6
5
4
3
2
10
100
500
Return Period (yrs)

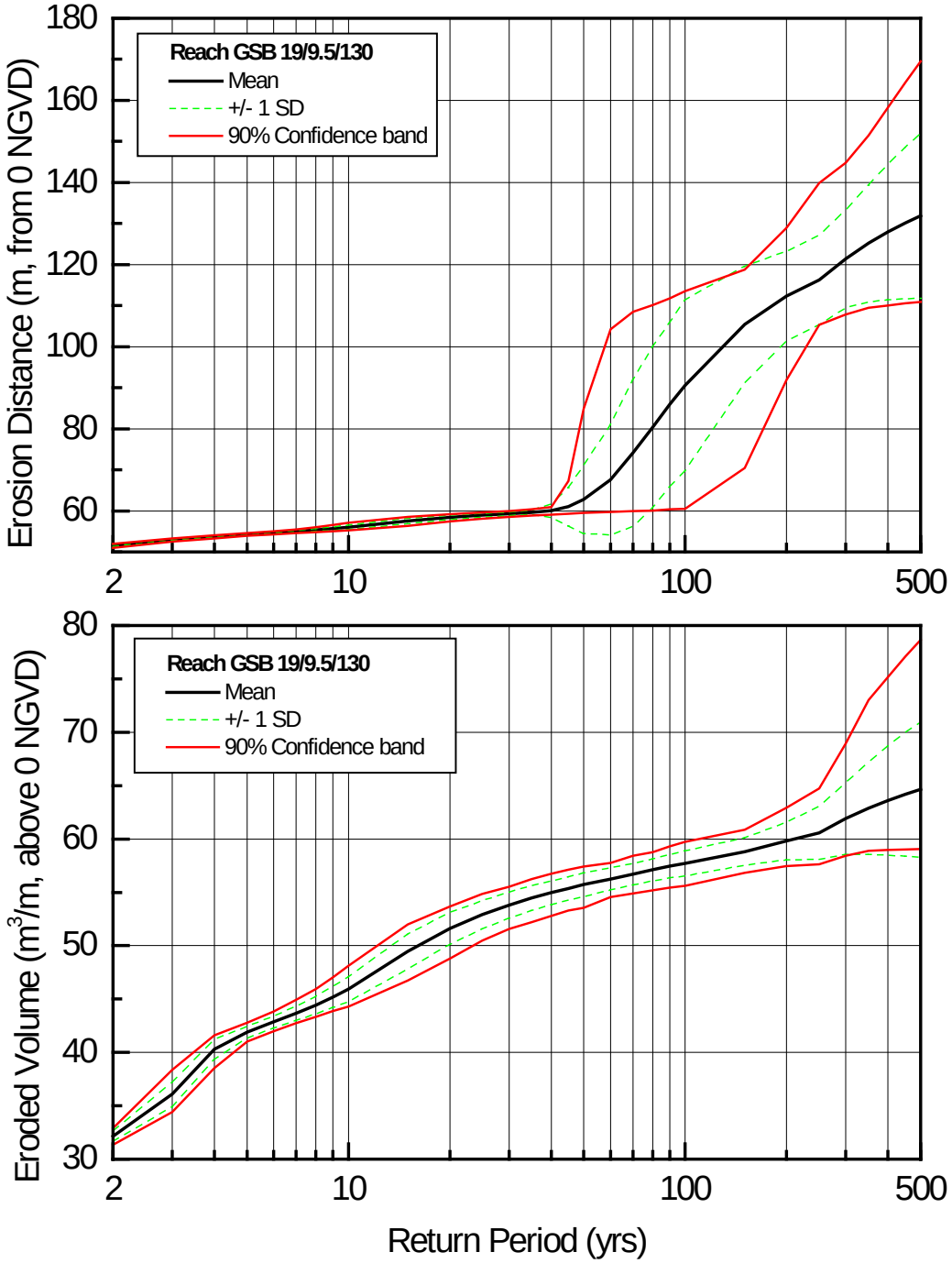

Reach GSB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5
4
3
2
2
10
100
500
Reach GSB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

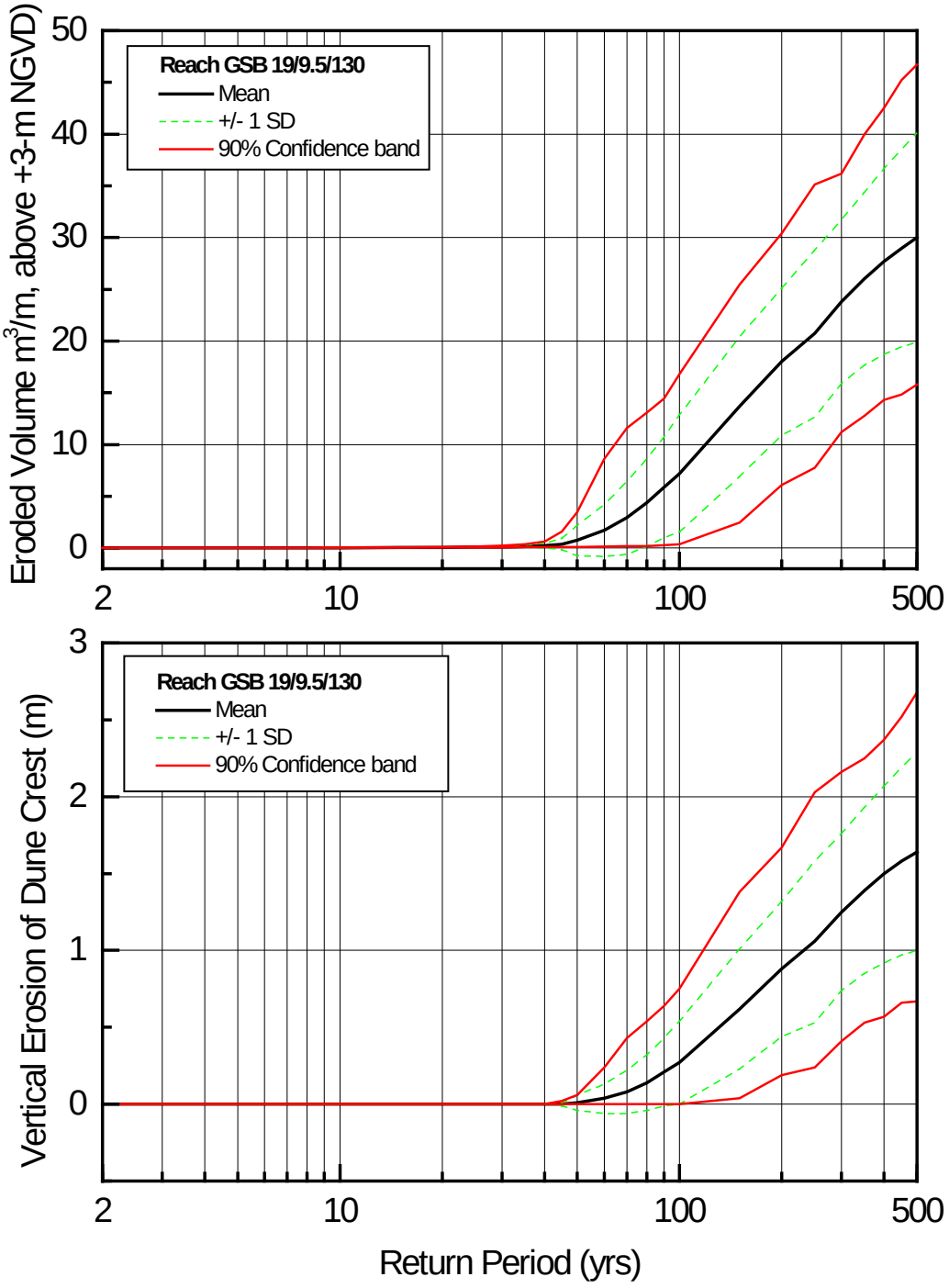

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach GSB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
2
Reach GSB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

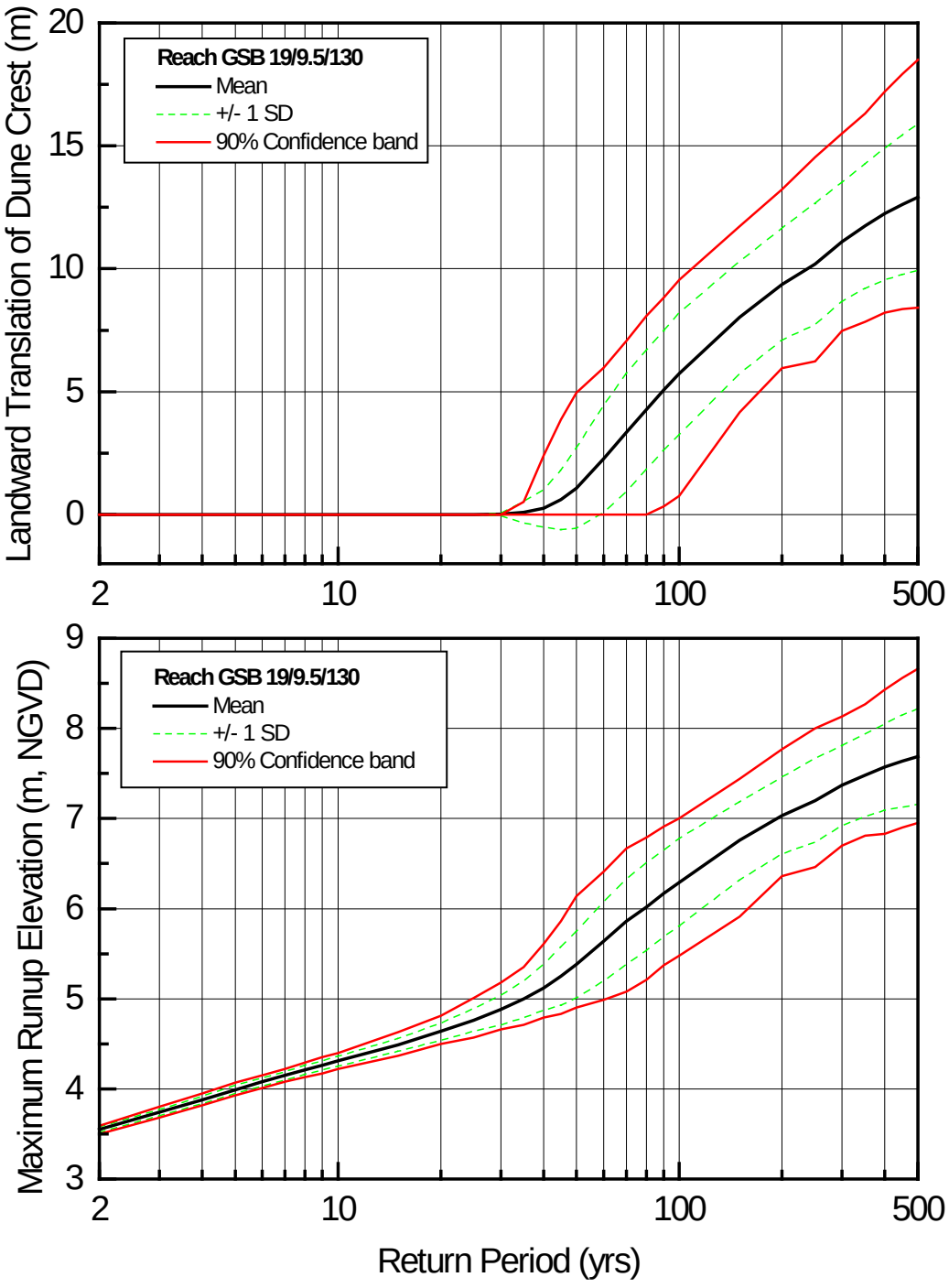

Max NS Wave Height (m, at landside surf zone)
2.25
2.00
1.75
1.50
1.25
1.00
0.75
Reach GSB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
550
500
450
400
350
300
250
200
150
100
50
Reach GSB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

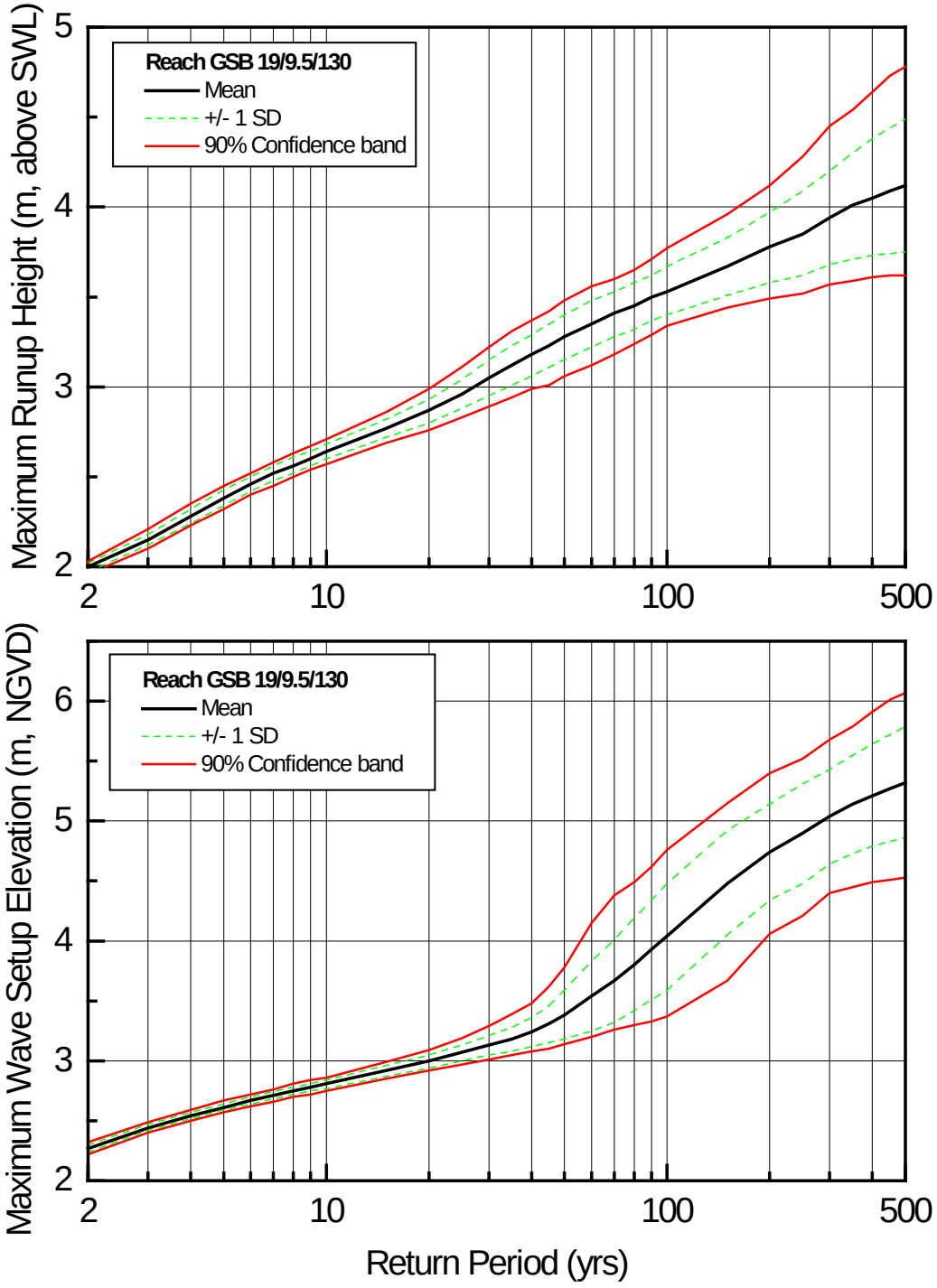

Reach GSB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
21
18
15
12
9
2
10
100
500
Reach GSB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
21
18
15
12
2
10
100
500
Return Period (yrs)

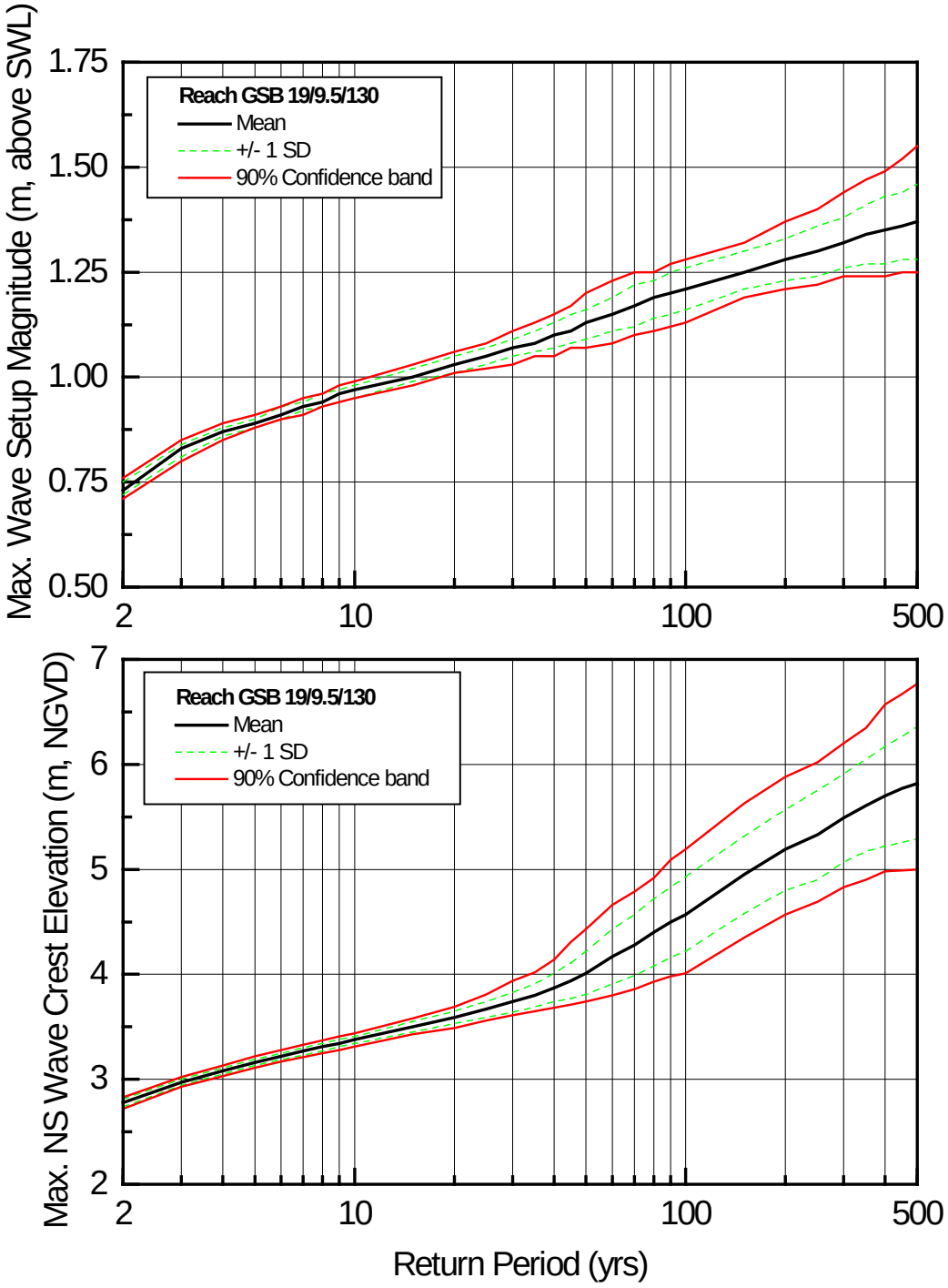

Reach GSB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
2
10
100
500
Reach GSB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
35
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

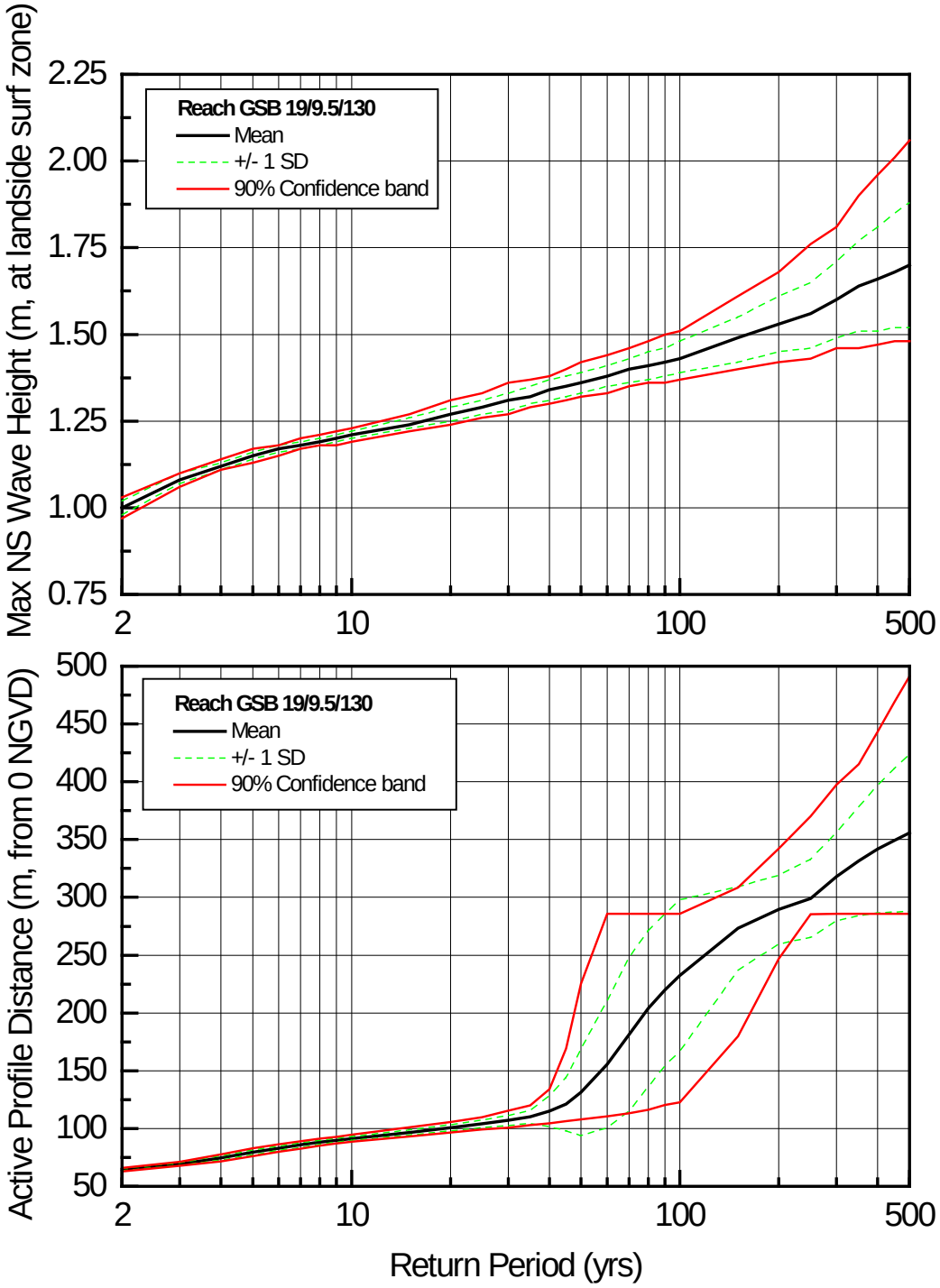

Reach GSB 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
160
140
120
100
80
60
2
10
100
500
Reach GSB 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

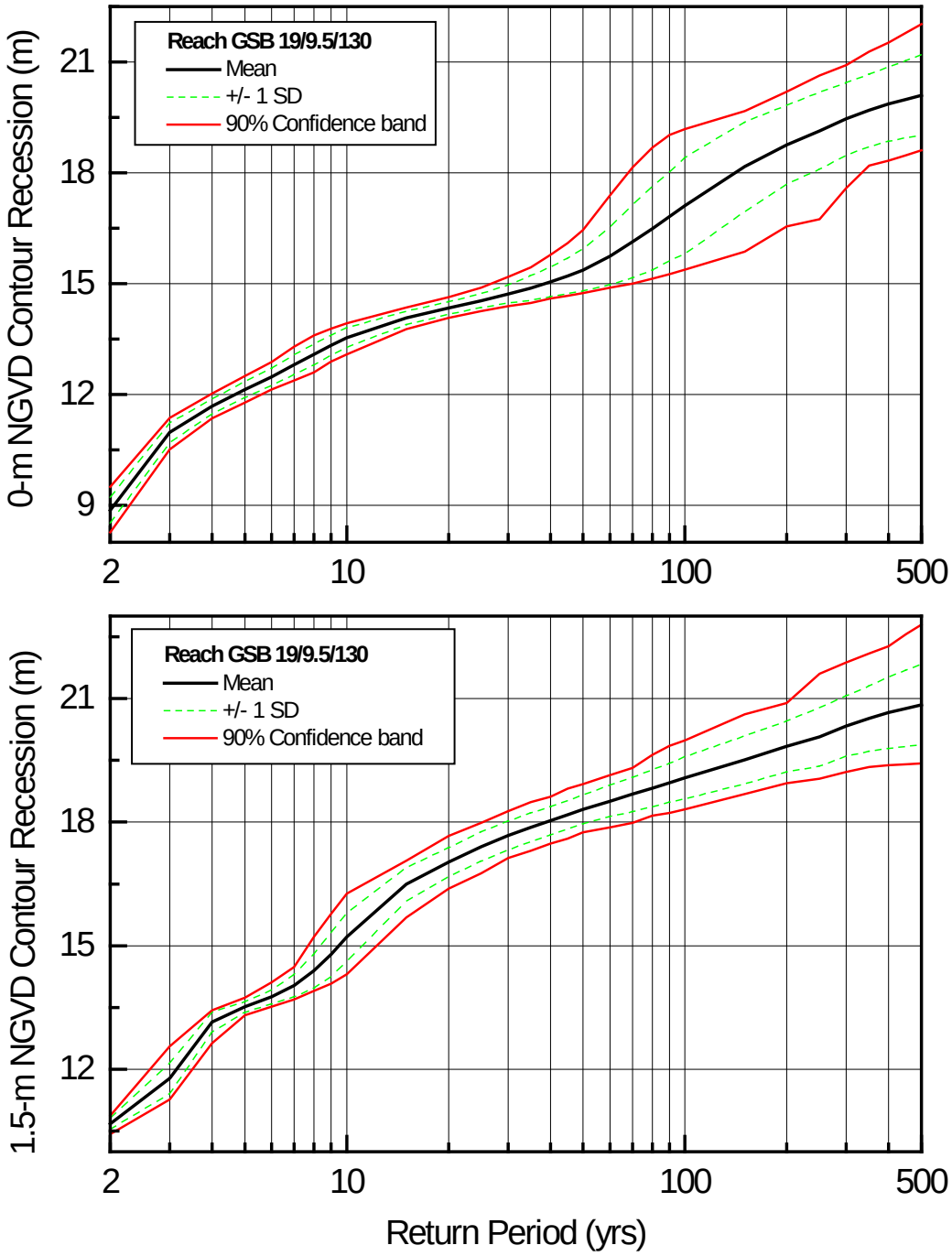

Reach GSB 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
50
40
30
20
10
0
2
10
100
500
Reach GSB 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
3
2
1
0
2
10
100
500
Return Period (yrs)

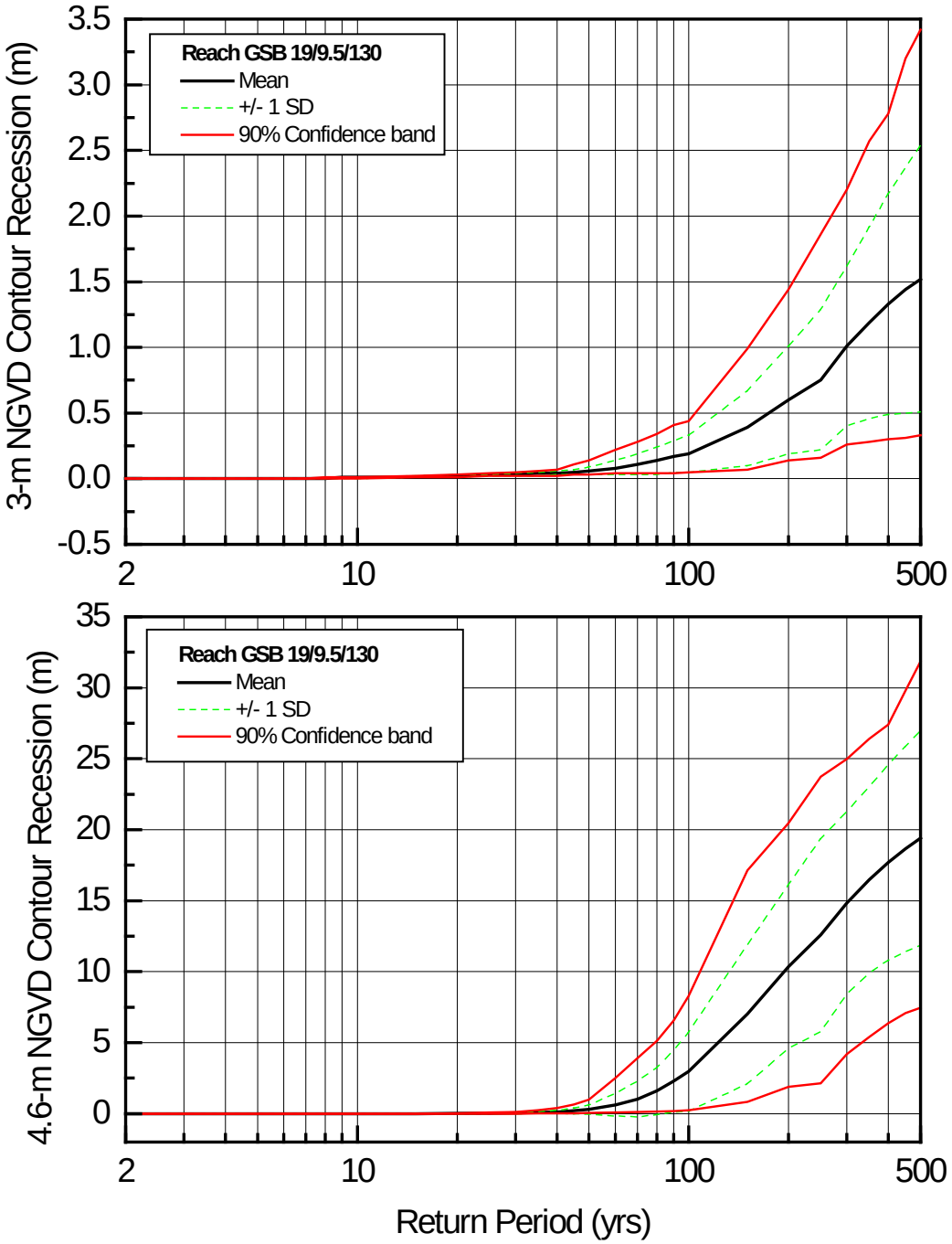

Reach GSB 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
20
15
10
5
0
2
10
100
500
Reach GSB 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
9
8
7
6
5
4
3
2
10
100
500
Return Period (yrs)

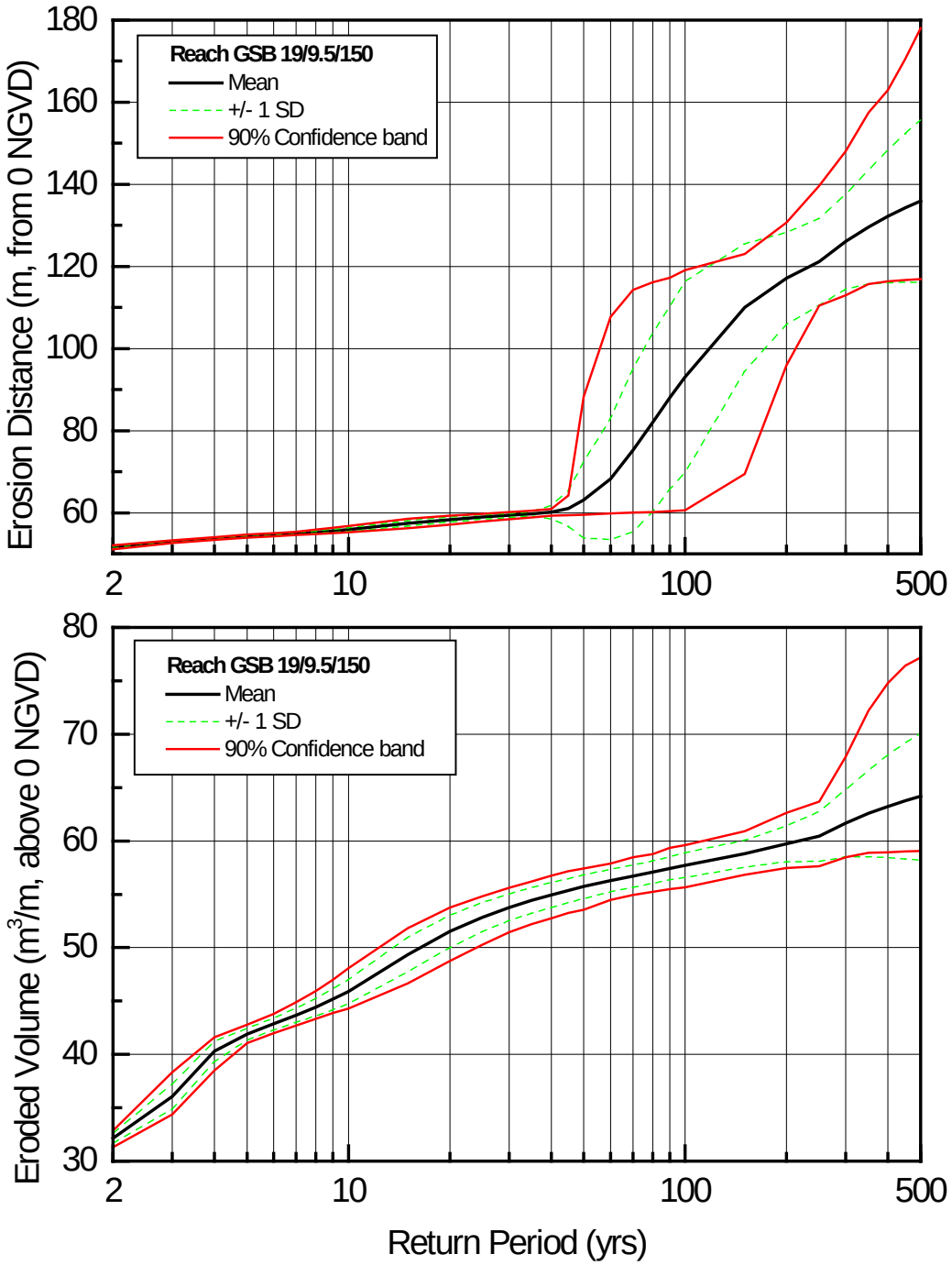

Reach GSB 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5
4
3
2
2
10
100
500
Reach GSB 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

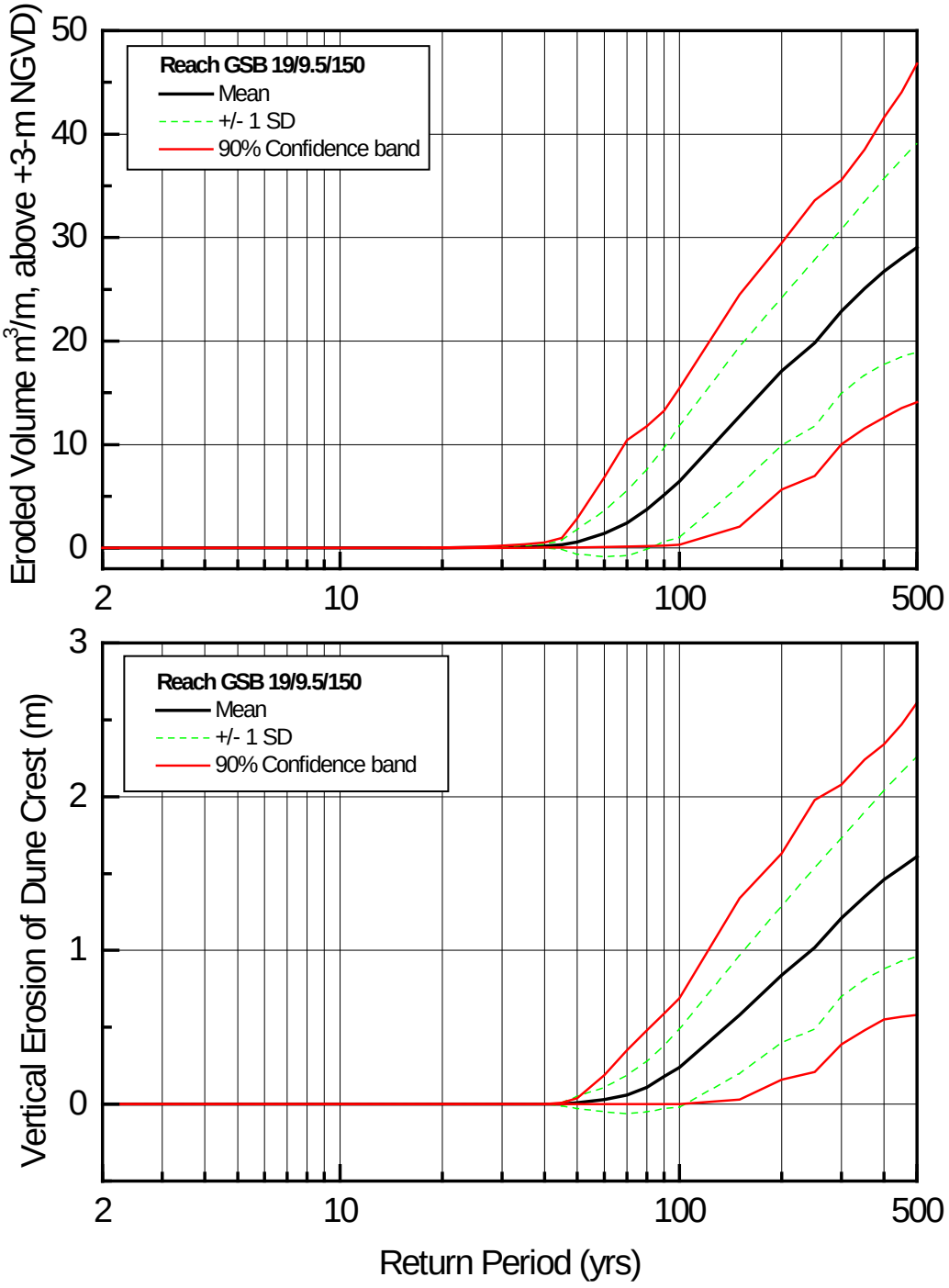

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach GSB 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
2
Reach GSB 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

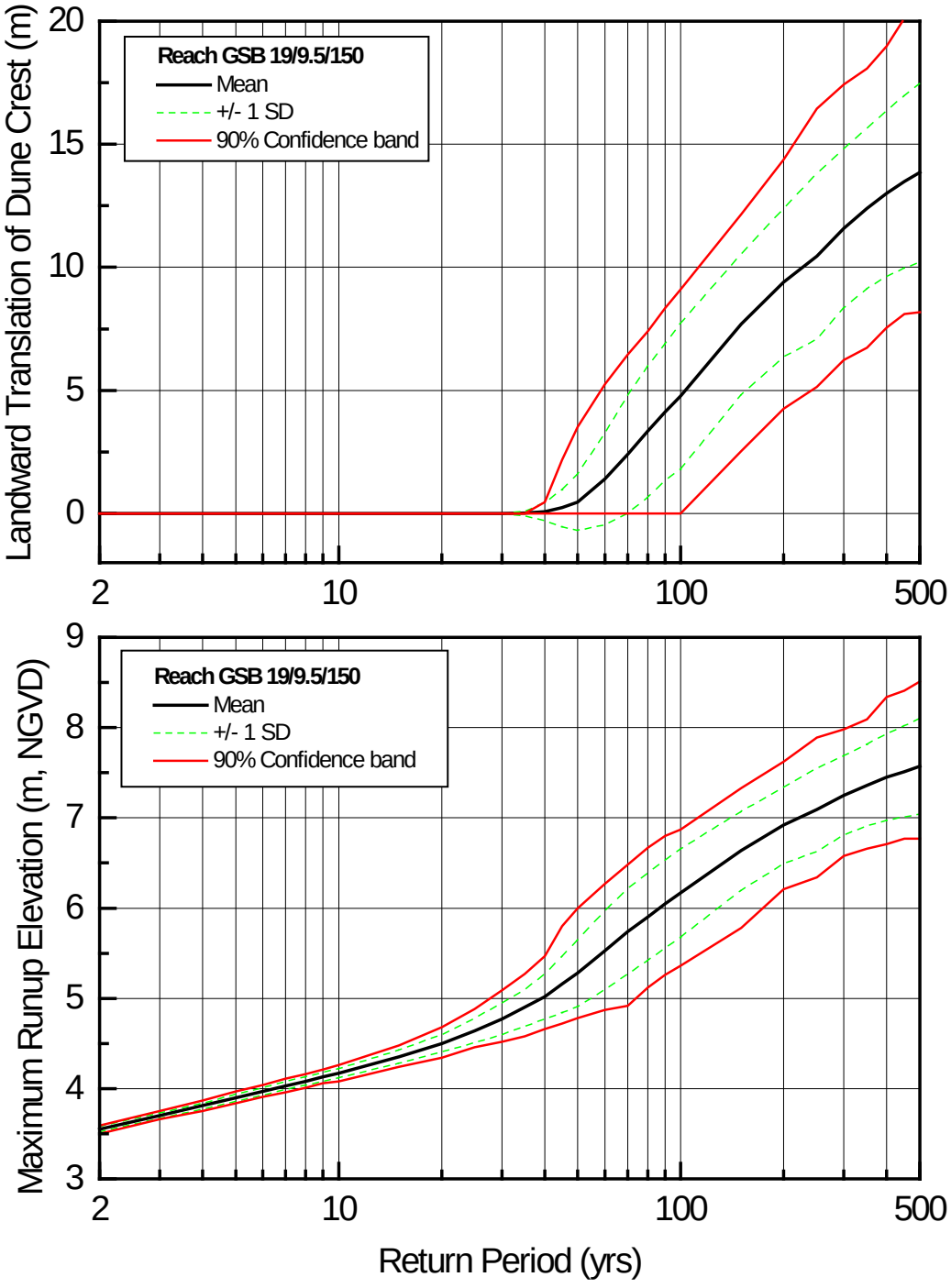

Reach GSB 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Max NS Wave Height (m, at landside surf zone)
2.25
2.00
1.75
1.50
1.25
1.00
0.75
2
10
100
500
Reach GSB 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Active Profile Distance (m, from 0 NGVD)
500
450
400
350
300
250
200
150
100
50
2
10
100
500
Return Period (yrs)

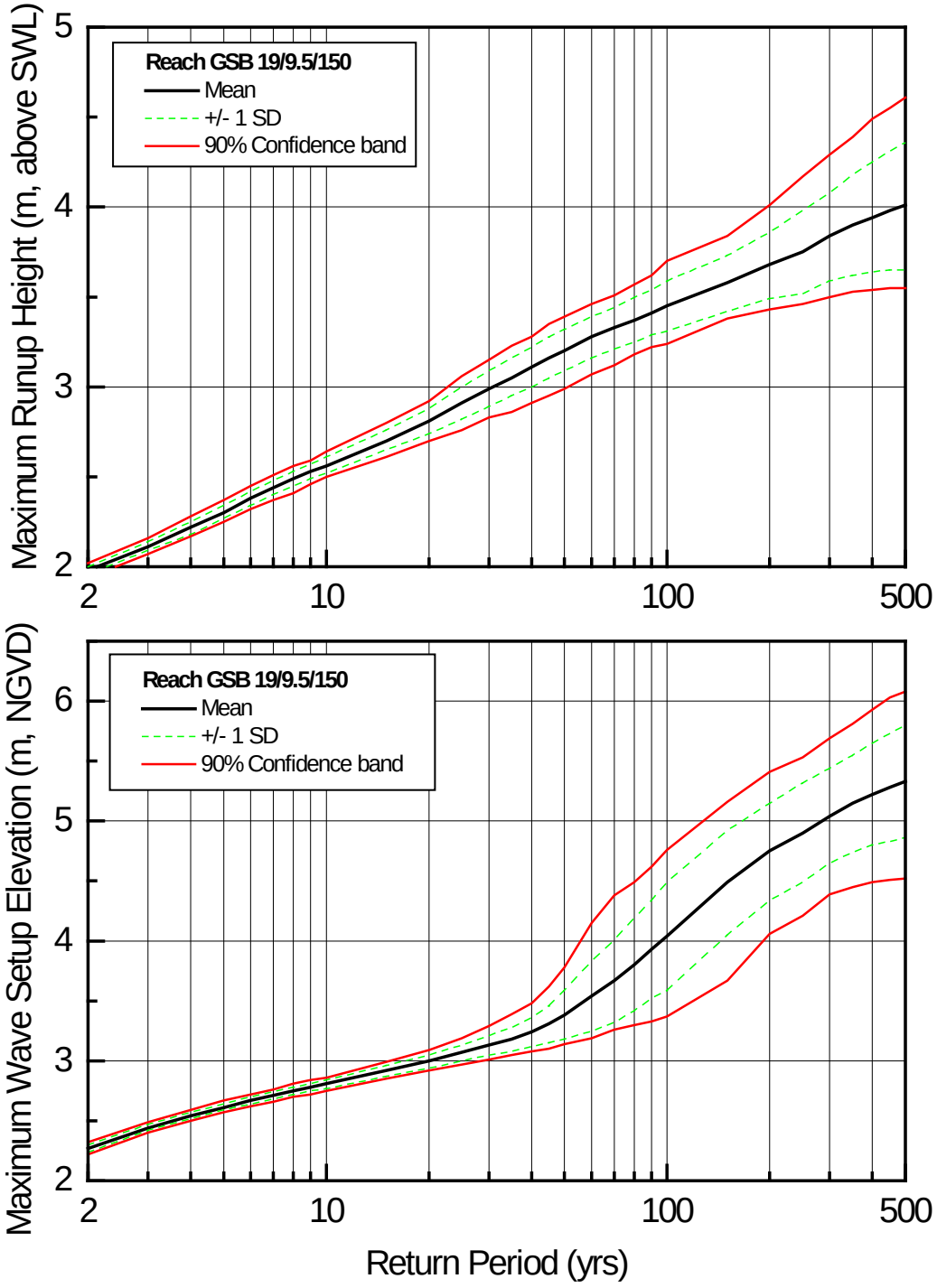

Reach GSB 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
21
18
15
12
9
2
10
100
500
Reach GSB 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
21
18
15
12
2
10
100
500
Return Period (yrs)

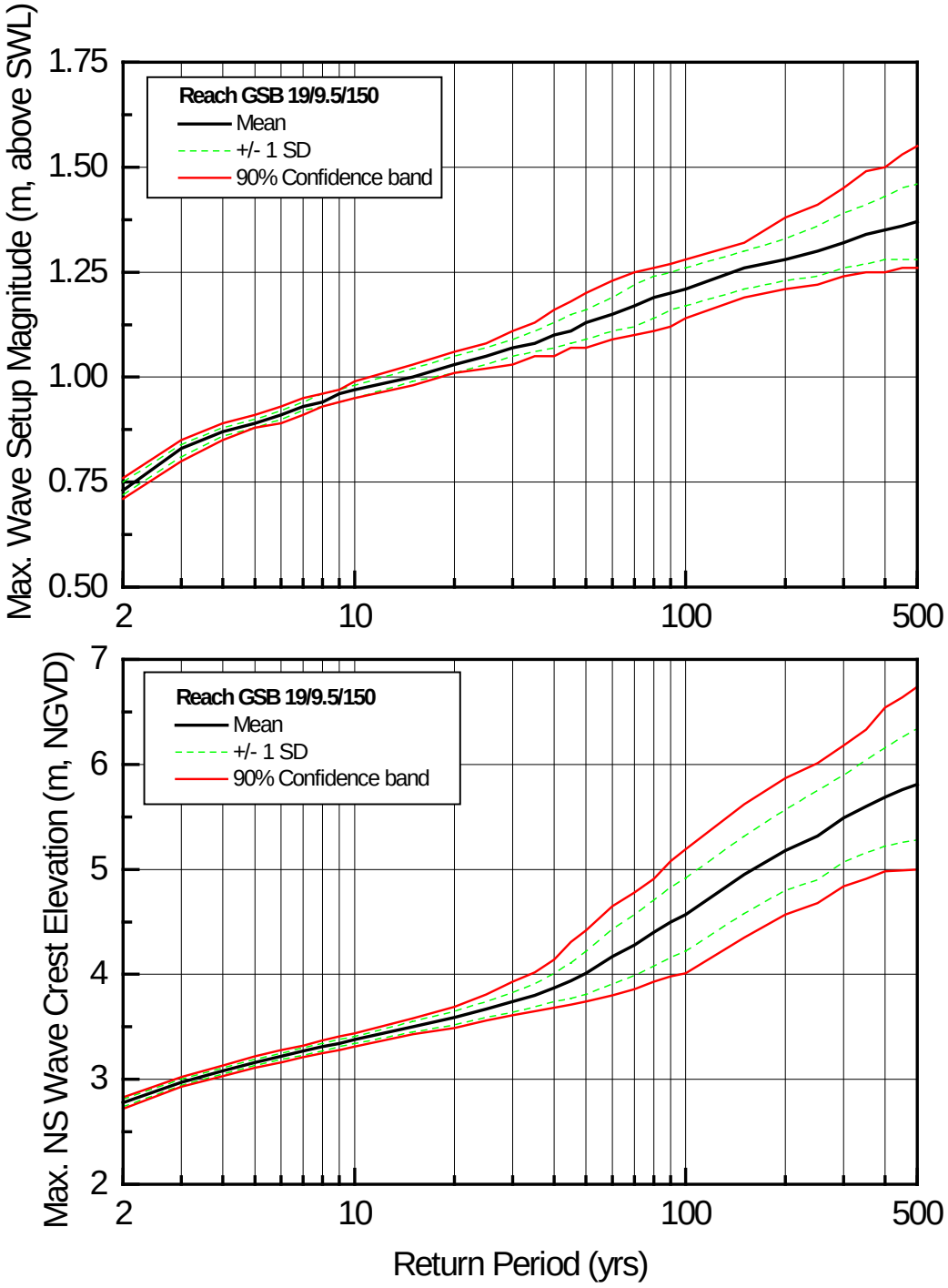

Reach GSB 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
2
10
100
500
Reach GSB 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
35
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

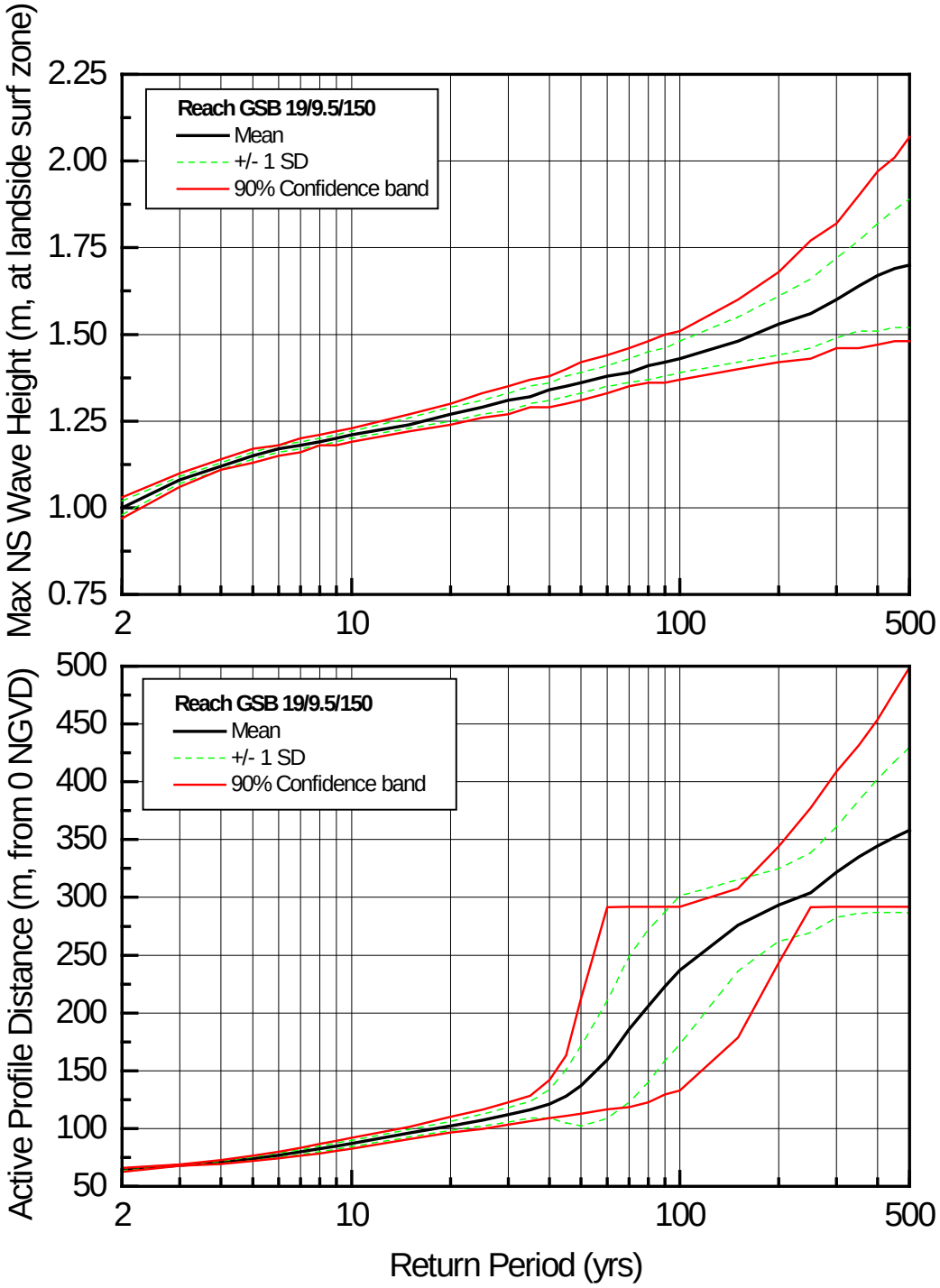

Reach GSB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
160
140
120
100
80
60
2
10
100
500
Reach GSB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

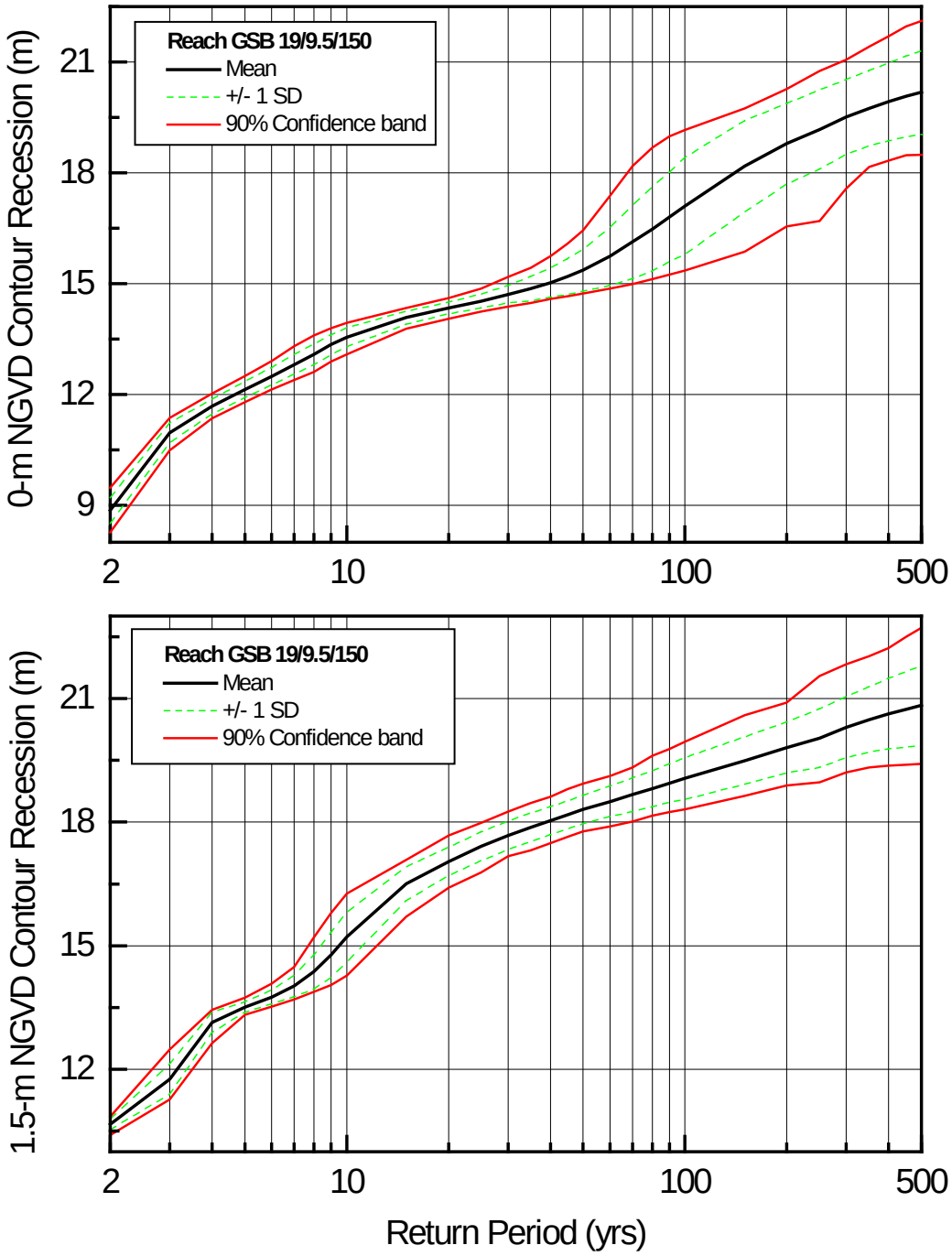

Reach GSB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
50
40
30
20
10
0
2
10
100
500
Reach GSB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
3
2
1
0
2
10
100
500
Return Period (yrs)

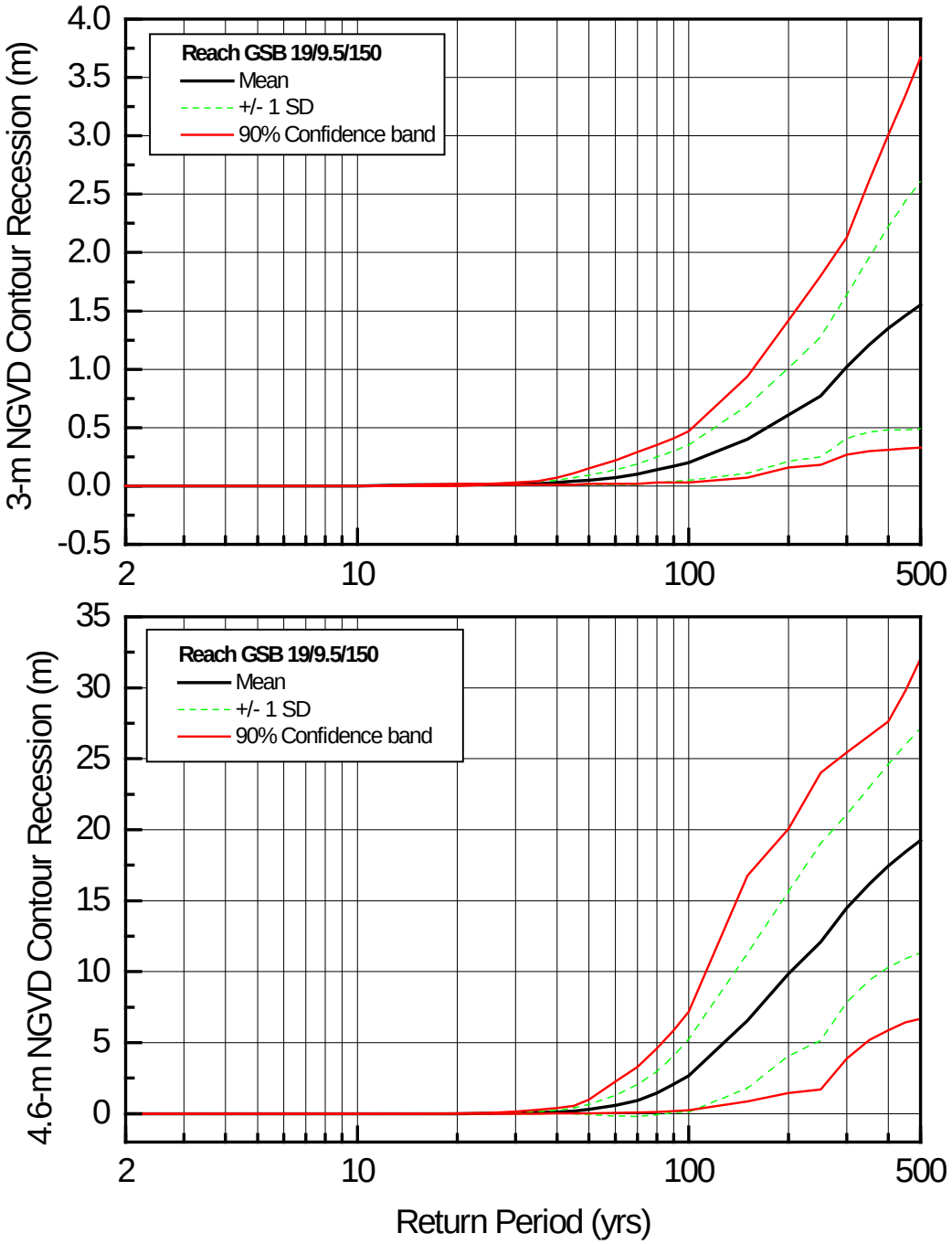

Reach GSB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
20
15
10
5
0
2
10
100
500
Reach GSB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
9
8
7
6
5
4
3
2
10
100
500
Return Period (yrs)

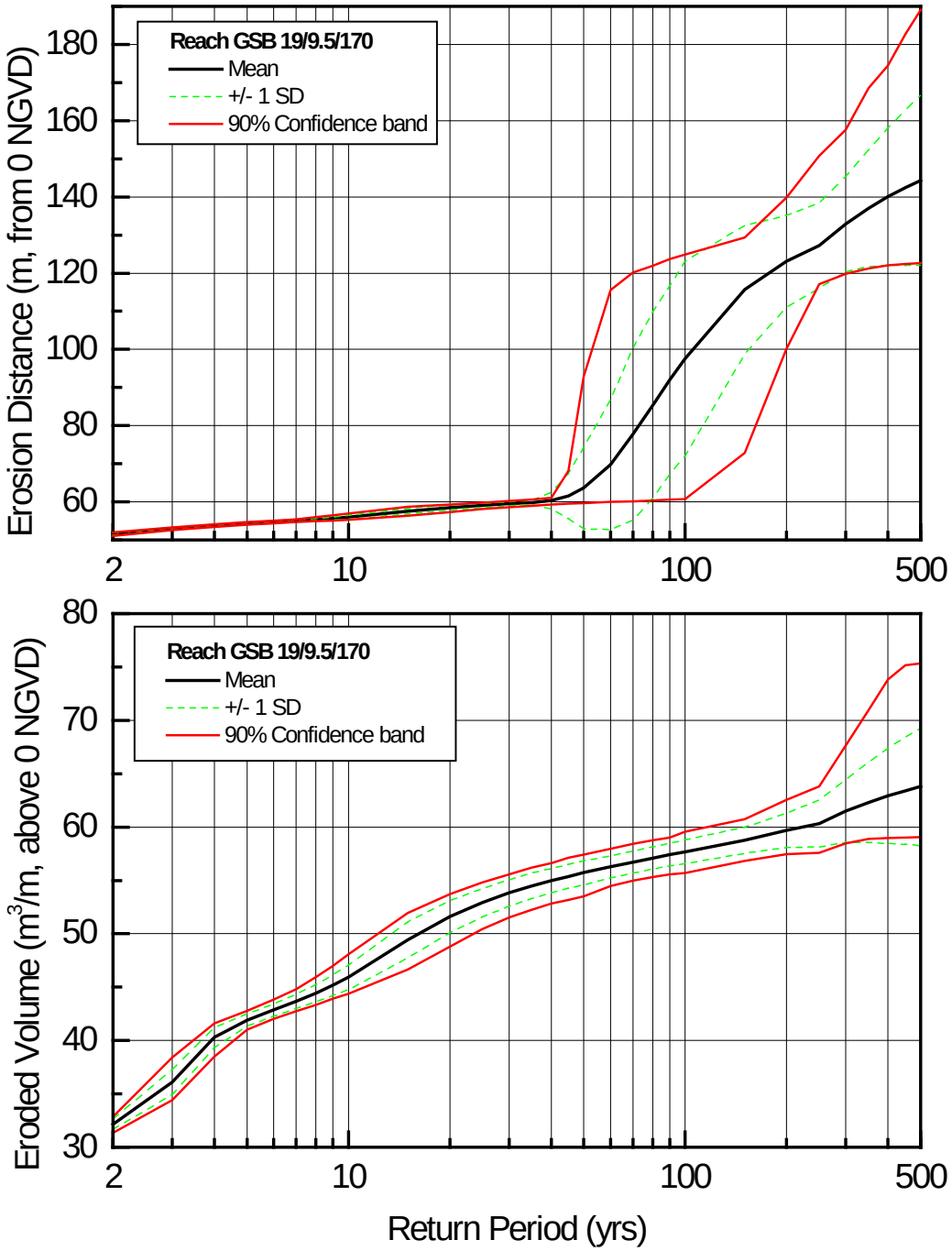

Reach GSB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5
4
3
2
2
10
100
500
Reach GSB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

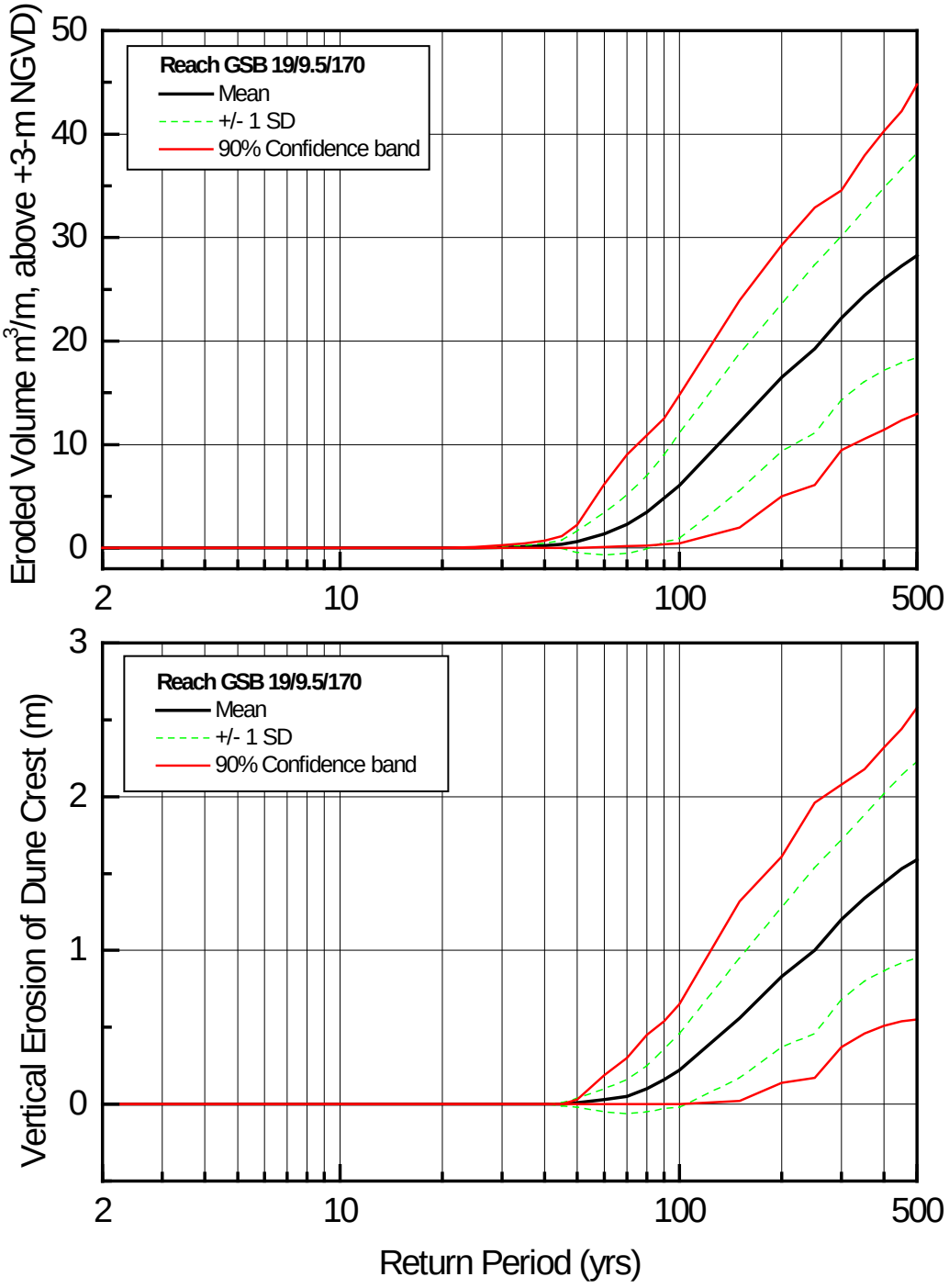

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach GSB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
2
Reach GSB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

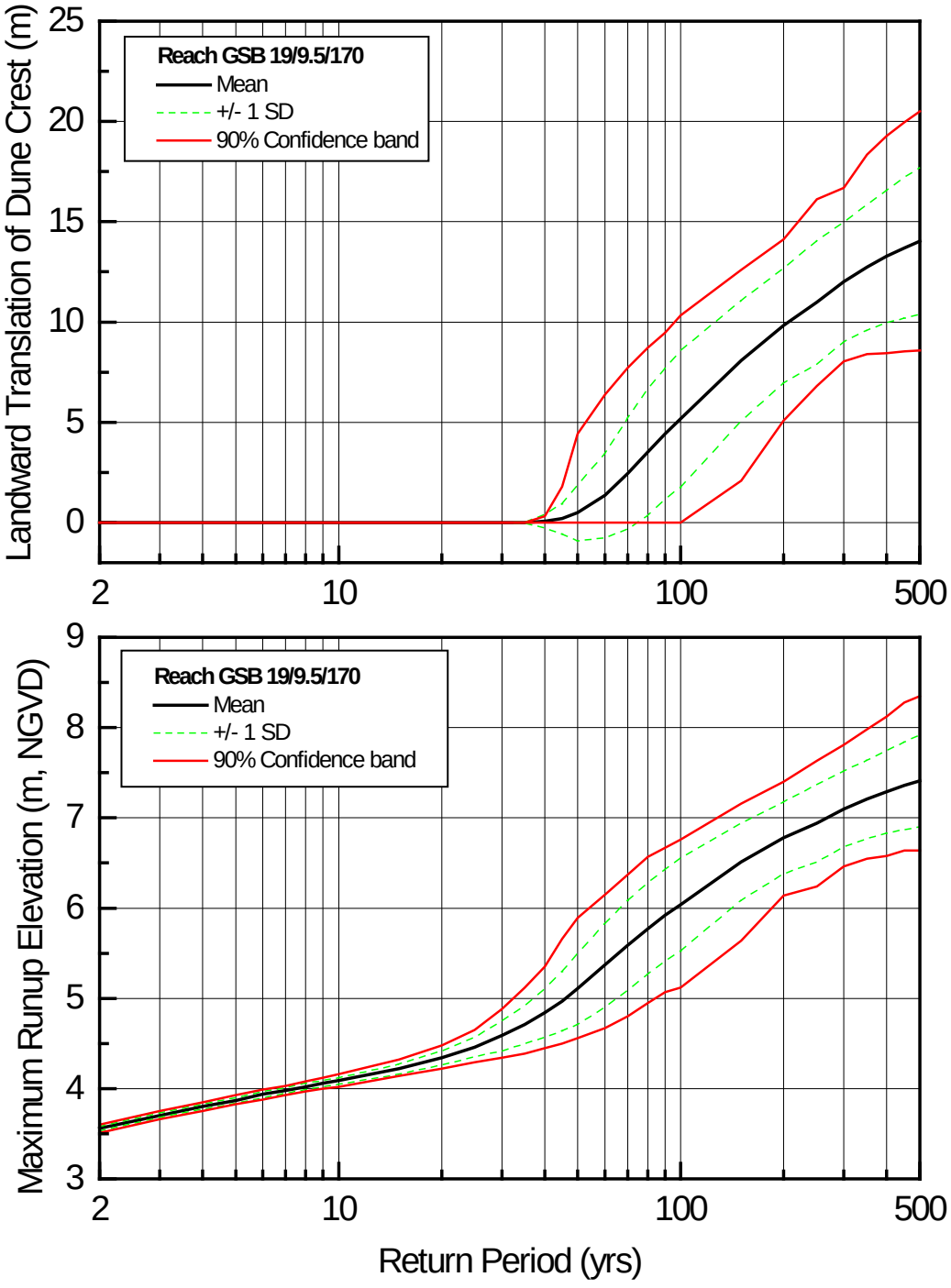

Reach GSB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Max NS Wave Height (m, at landside surf zone)
2.25
2.00
1.75
1.50
1.25
1.00
0.75
2
10
100
500
Reach GSB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Active Profile Distance (m, from 0 NGVD)
500
450
400
350
300
250
200
150
100
50
2
10
100
500
Return Period (yrs)

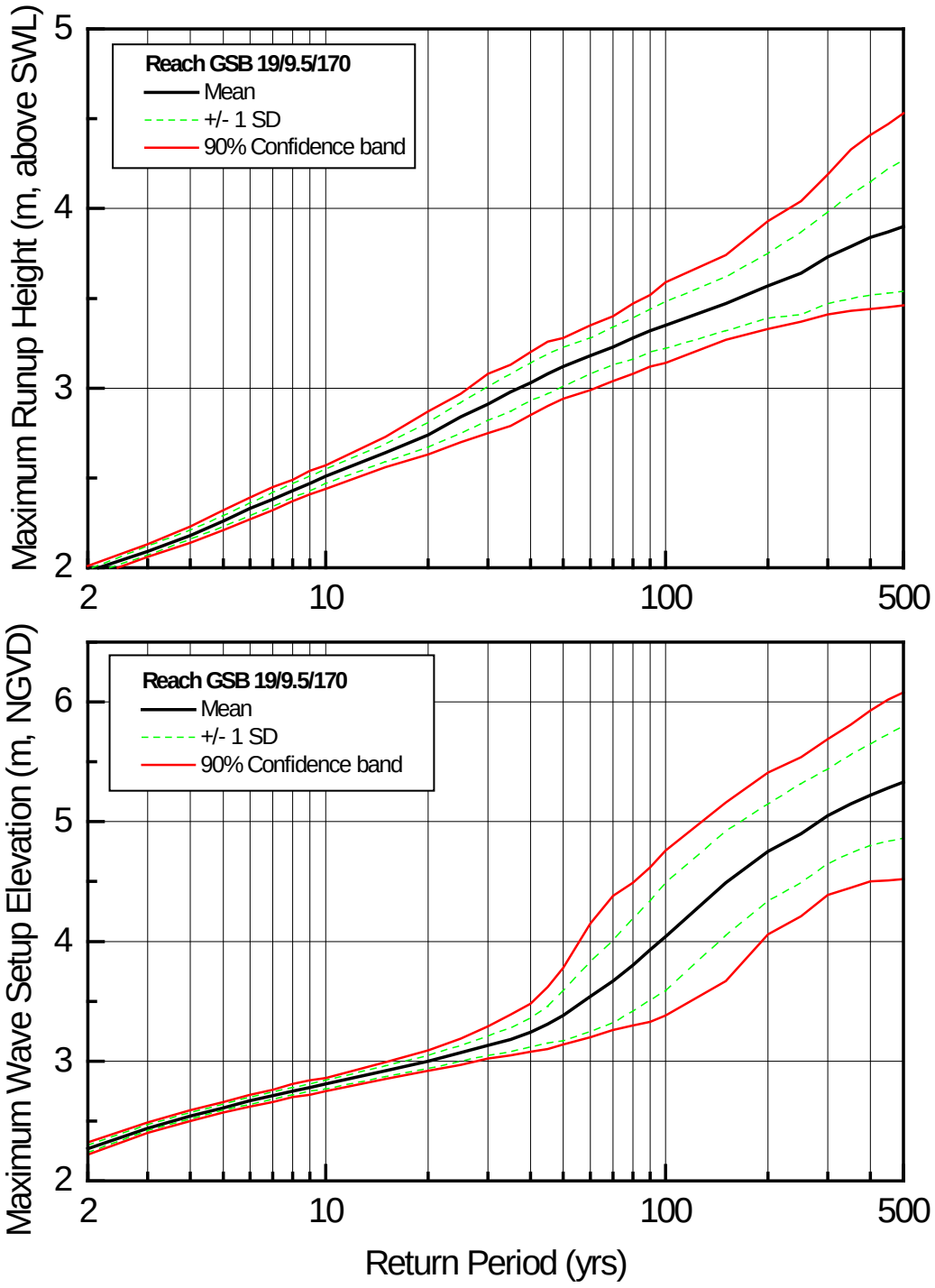

Reach GSB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
21
18
15
12
9
2
10
100
500
Reach GSB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
21
18
15
12
2
10
100
500
Return Period (yrs)

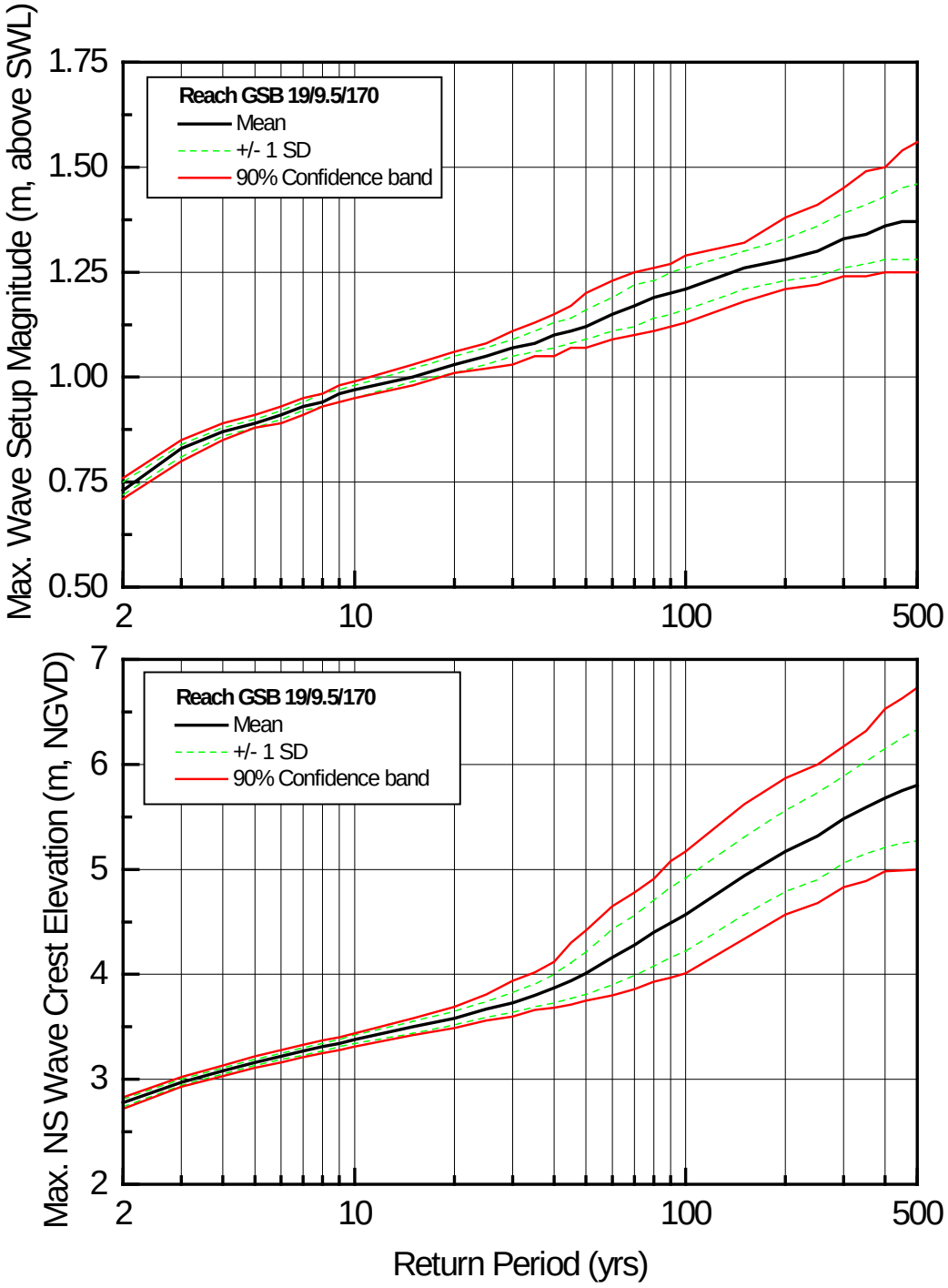

Reach GSB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
2
10
100
500
Reach GSB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
35
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

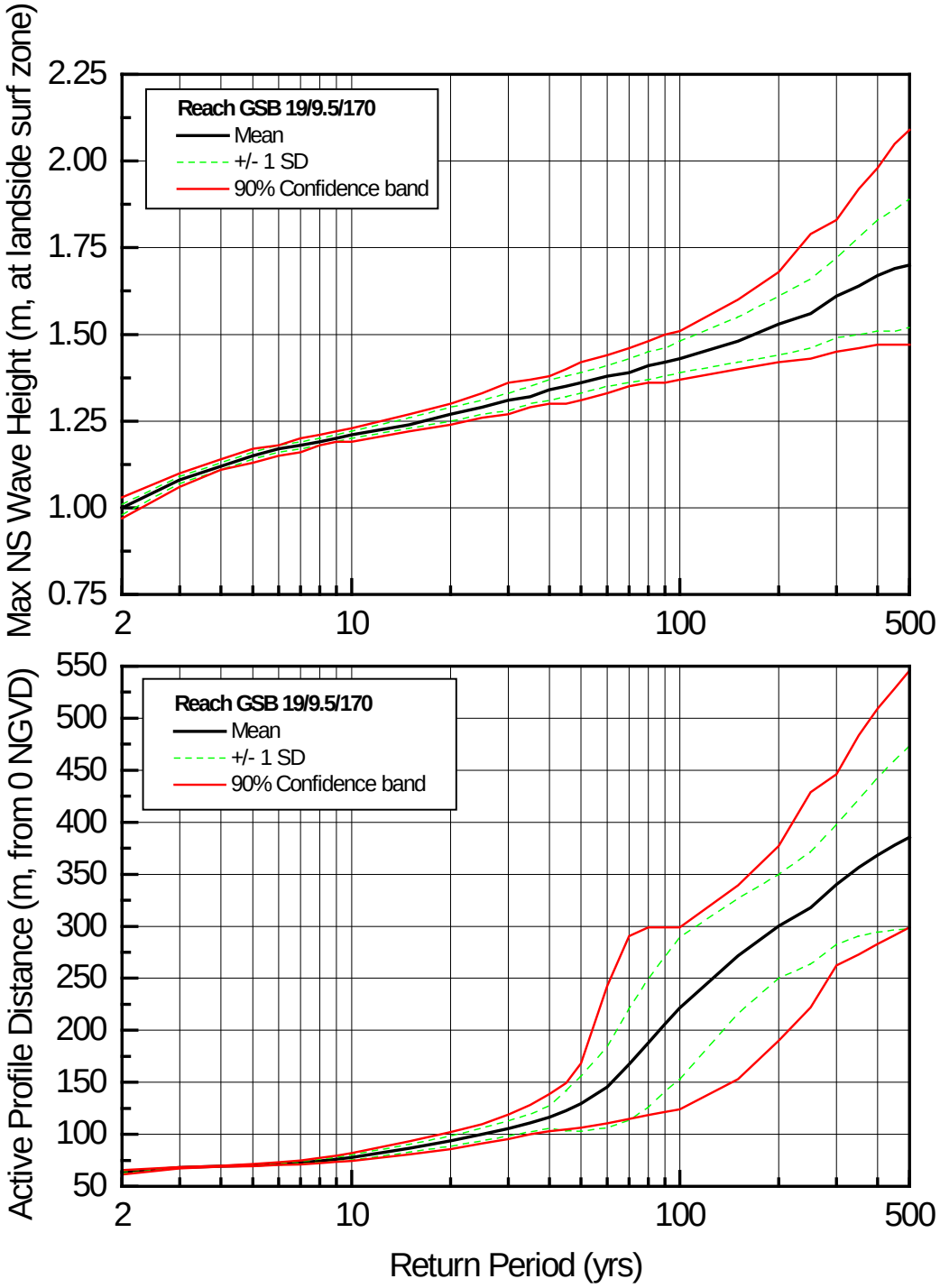

Reach GSB 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
160
140
120
100
80
60
2
10
100
500
Reach GSB 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

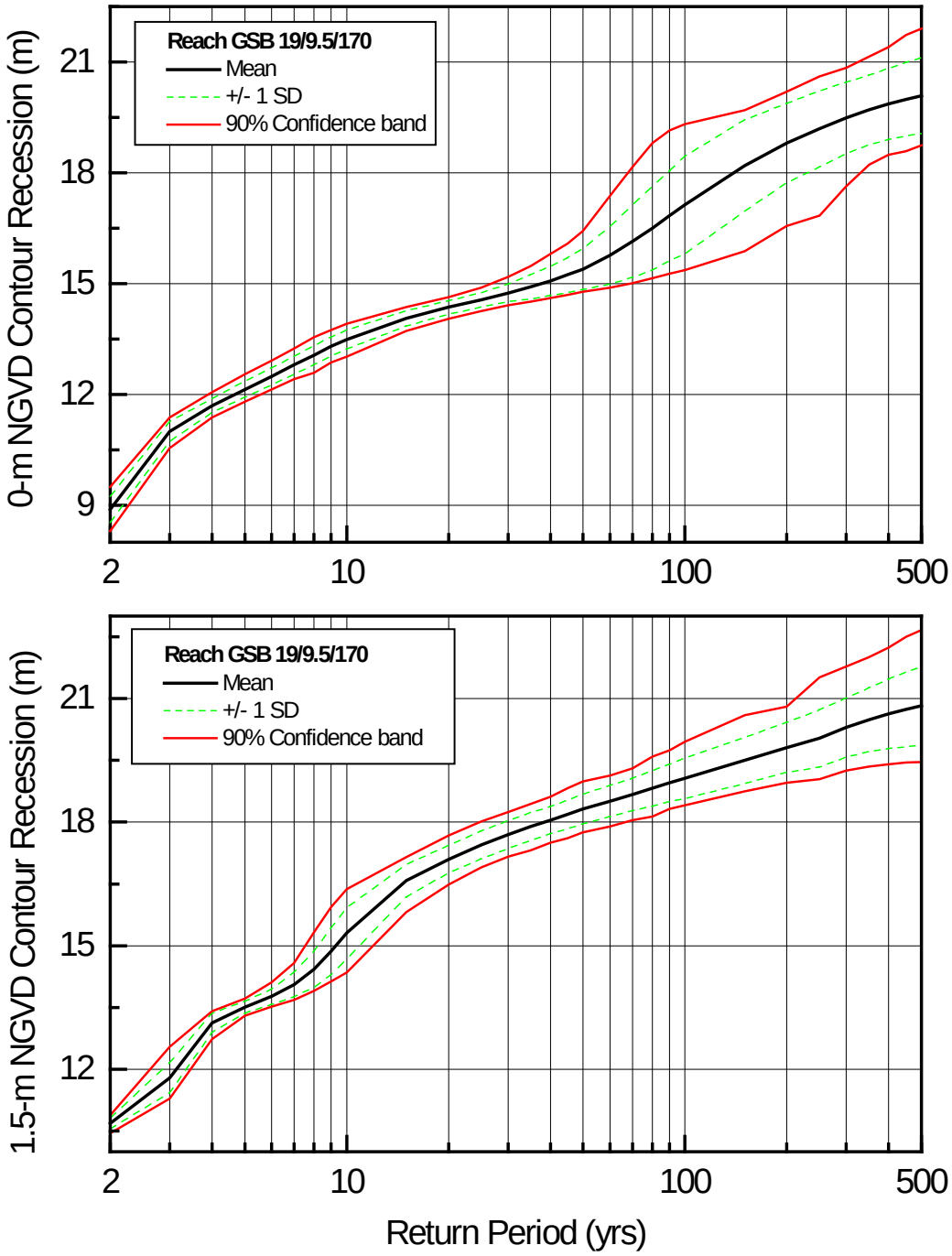

Reach GSB 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
50
40
30
20
10
0
2
10
100
500
Reach GSB 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
3
2
1
0
2
10
100
500
Return Period (yrs)

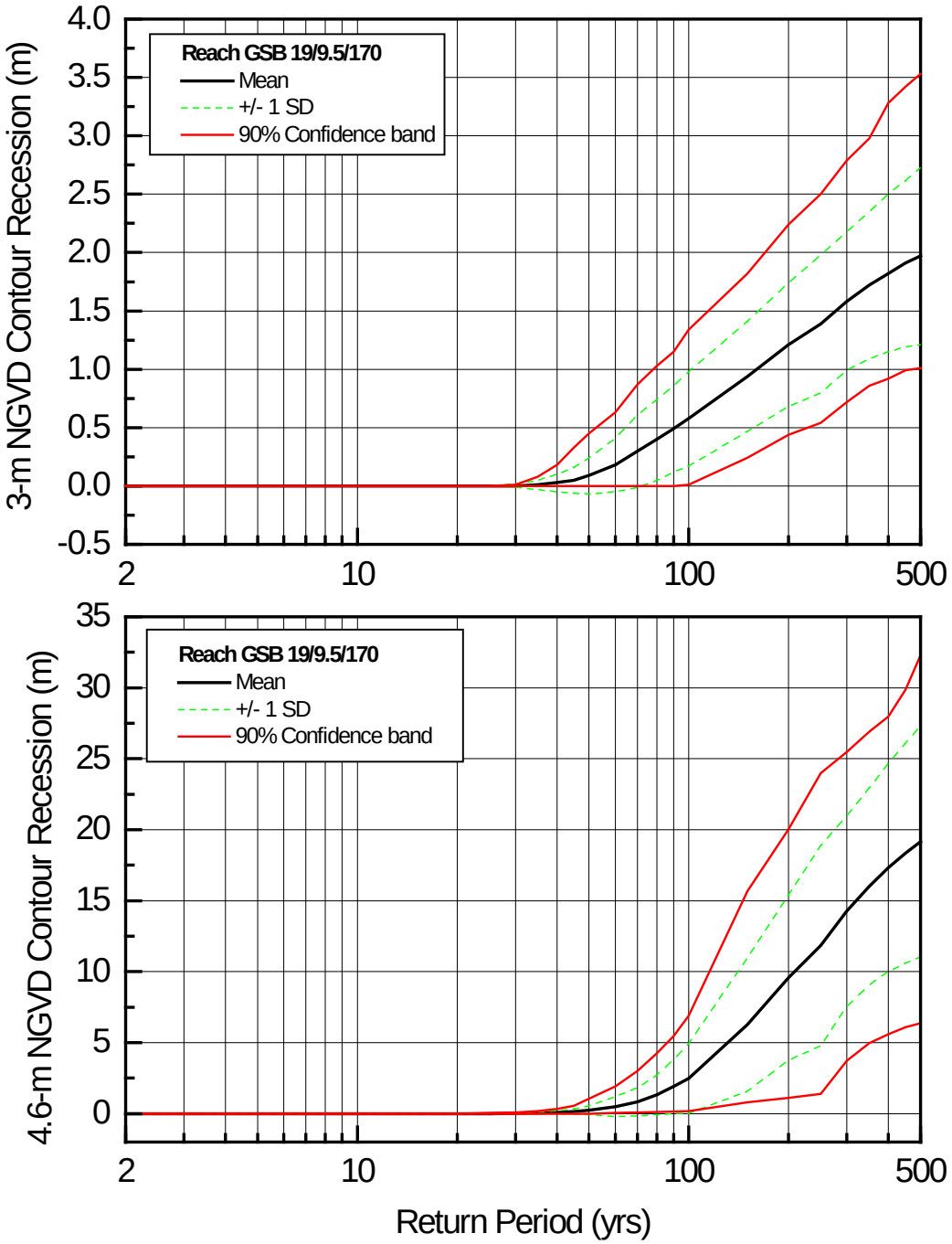

Reach GSB 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
25
20
15
10
5
0
2
10
100
500
Reach GSB 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
9
8
7
6
5
4
3
2
10
100
500
Return Period (yrs)

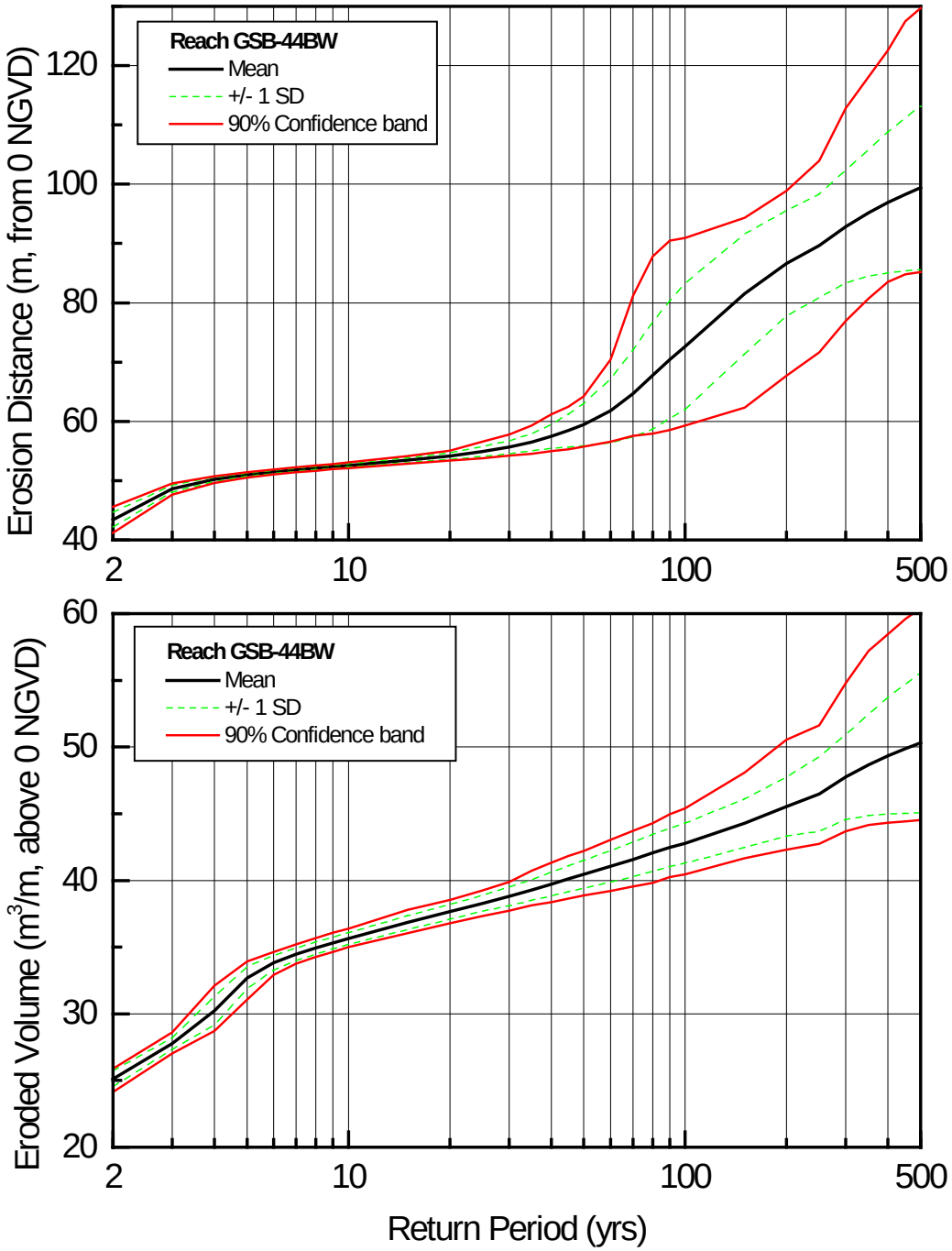

Reach GSB 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5
4
3
2
2
10
100
500
Reach GSB 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

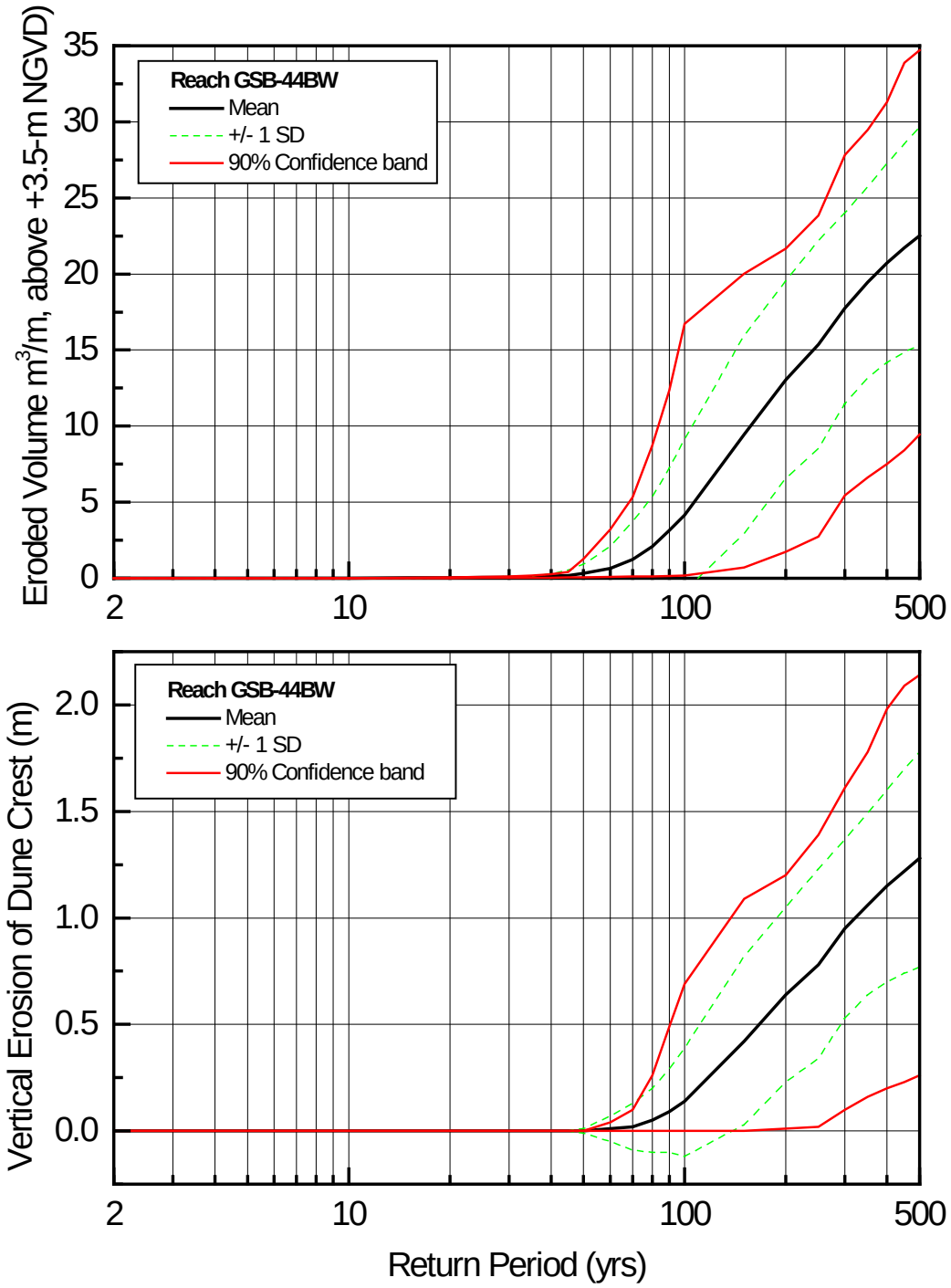

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach GSB 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
2
Reach GSB 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

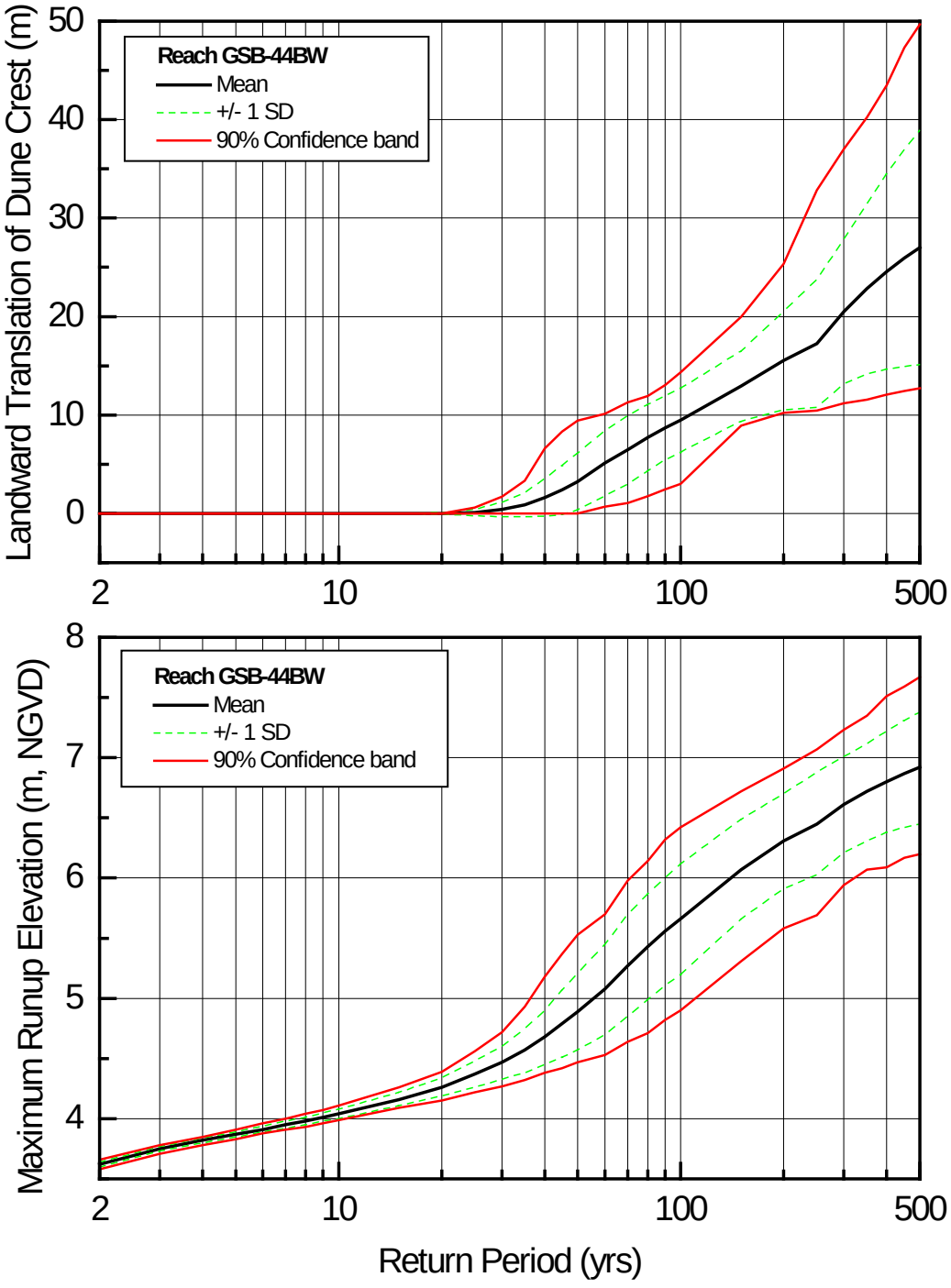

Reach GSB 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Max NS Wave Height (m, at landside surf zone)
2.25
2.00
1.75
1.50
1.25
1.00
0.75
2
10
100
500
Reach GSB 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Active Profile Distance (m, from 0 NGVD)
550
500
450
400
350
300
250
200
150
100
50
2
10
100
500
Return Period (yrs)

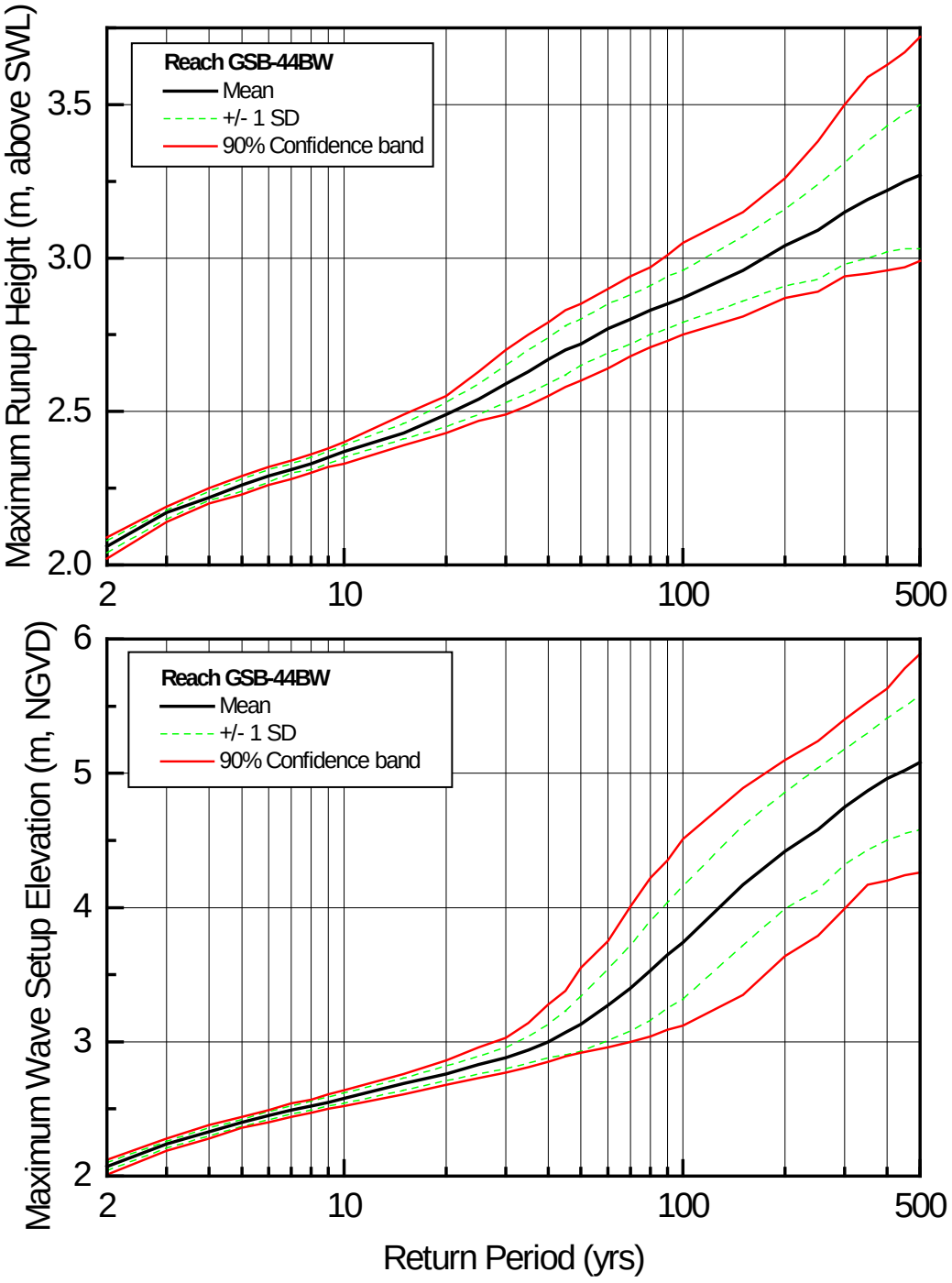

Reach GSB 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
21
18
15
12
9
2
10
100
500
Reach GSB 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
21
18
15
12
2
10
100
500
Return Period (yrs)

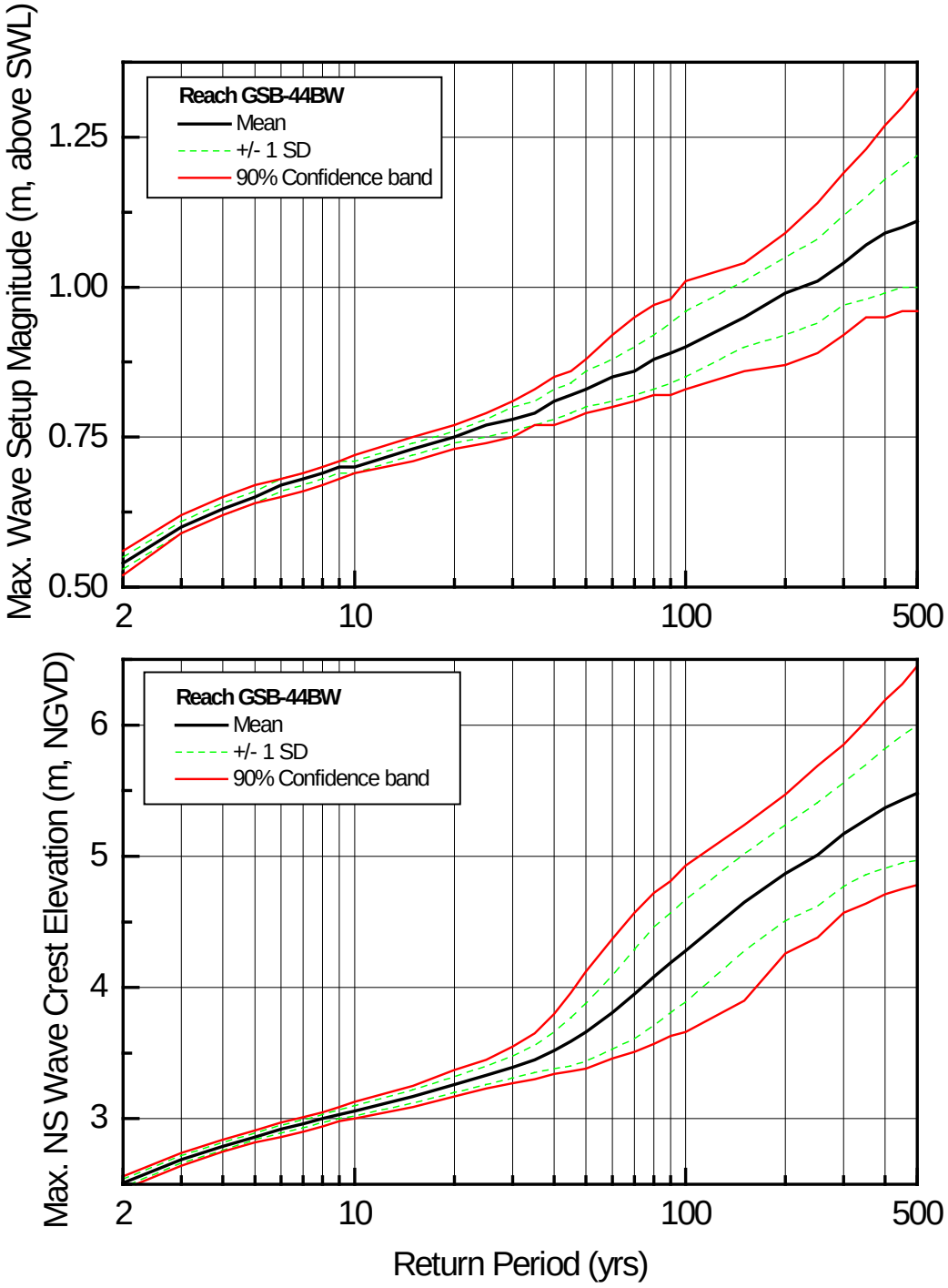

Reach GSB 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
2
10
100
500
Reach GSB 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
35
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

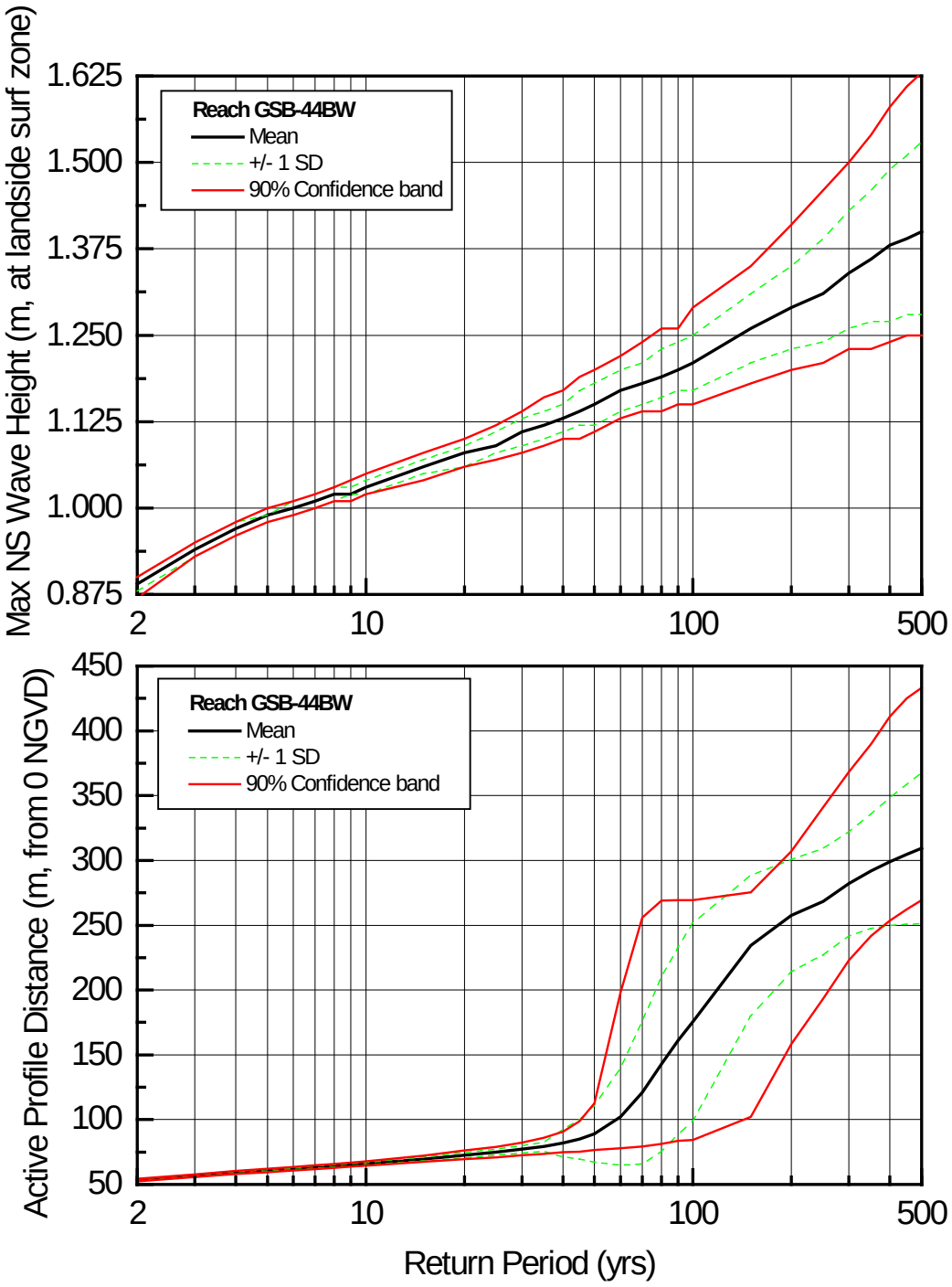

Reach GSB-44BW
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
120
100
80
60
40
2
10
100
500
Reach GSB-44BW
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
20
2
10
100
500
Return Period (yrs)

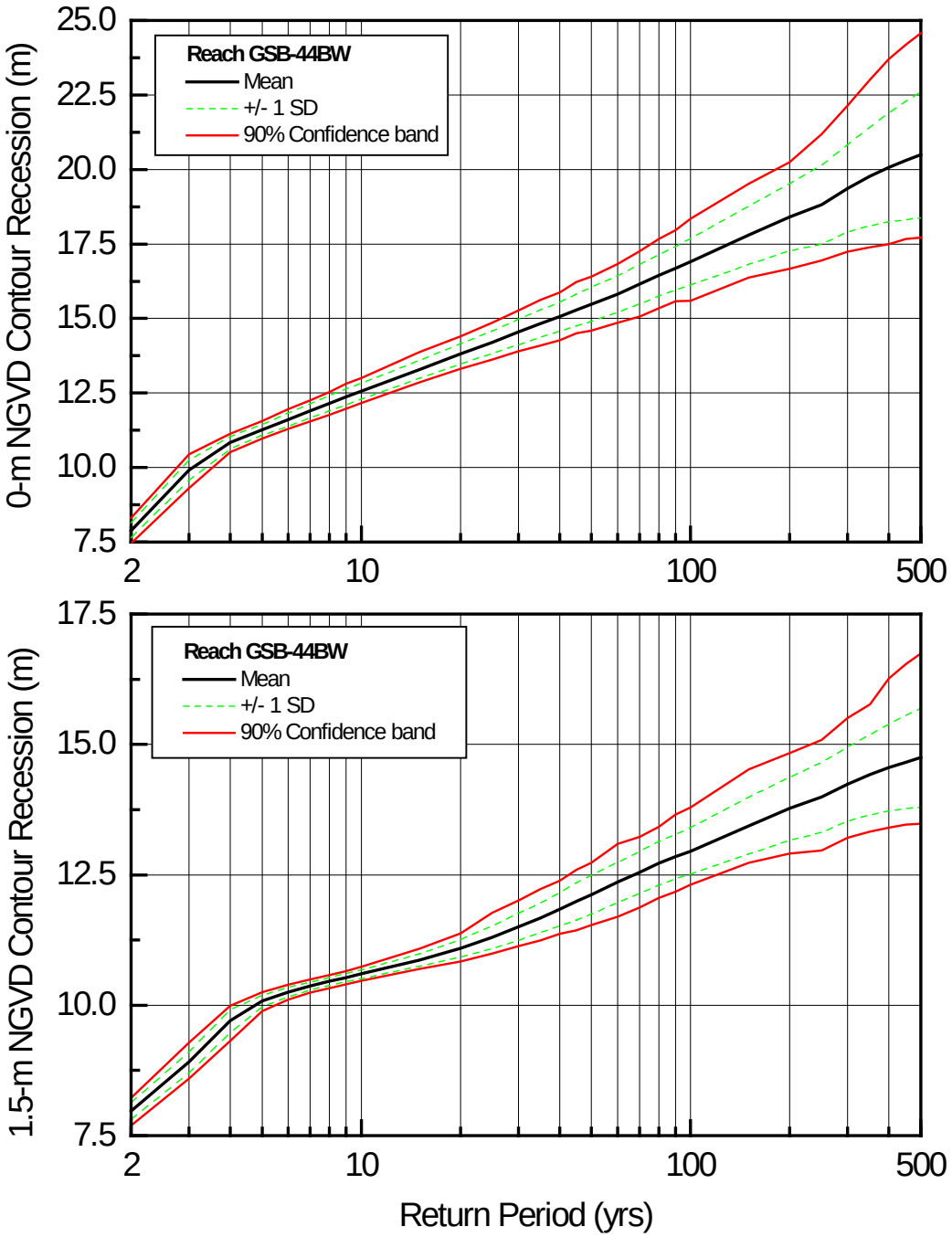

Reach GSB-44BW
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3.5-m NGVD)
0
5
10
15
20
25
30
35
2
10
100
500
Reach GSB-44BW
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2
10
100
500
Return Period (yrs)

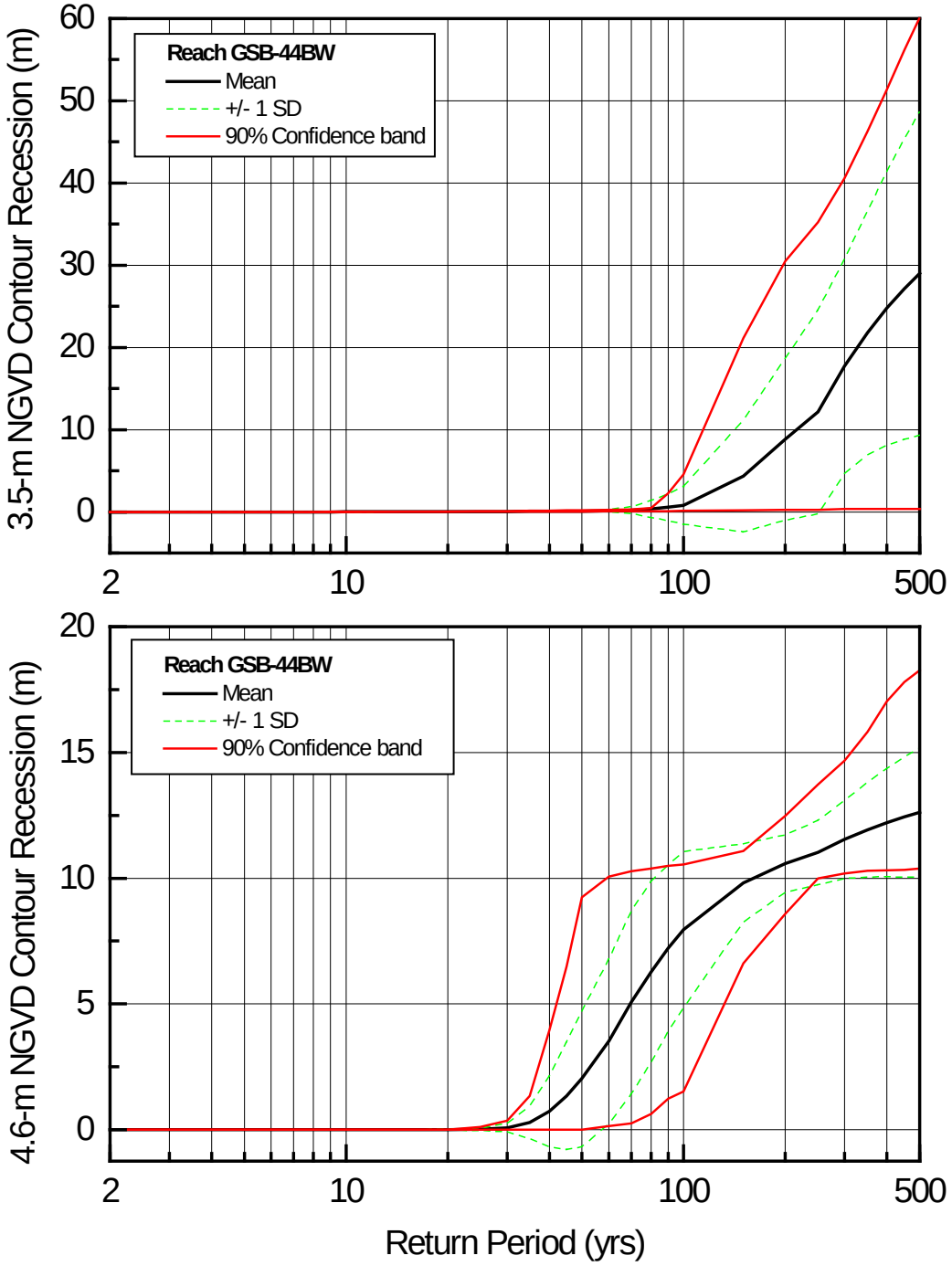

Reach GSB-44BW
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
30
40
50
2
10
100
500
Reach GSB-44BW
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
4
5
6
7
8
2
10
100
500
Return Period (yrs)

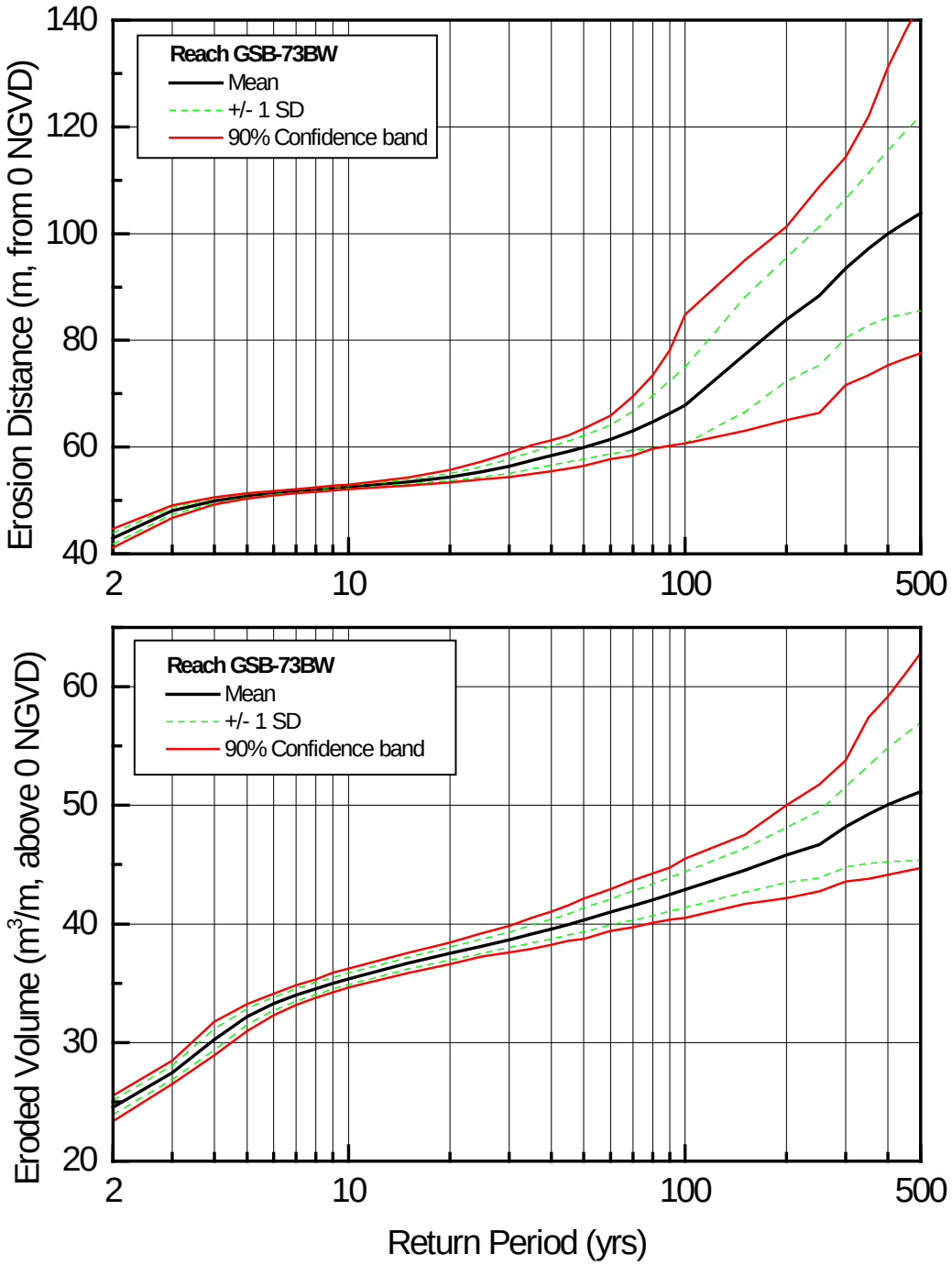

Reach GSB-44BW
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
2.0
2.5
3.0
3.5
2
10
100
500
Reach GSB-44BW
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
2
3
4
5
6
2
10
100
500
Return Period (yrs)

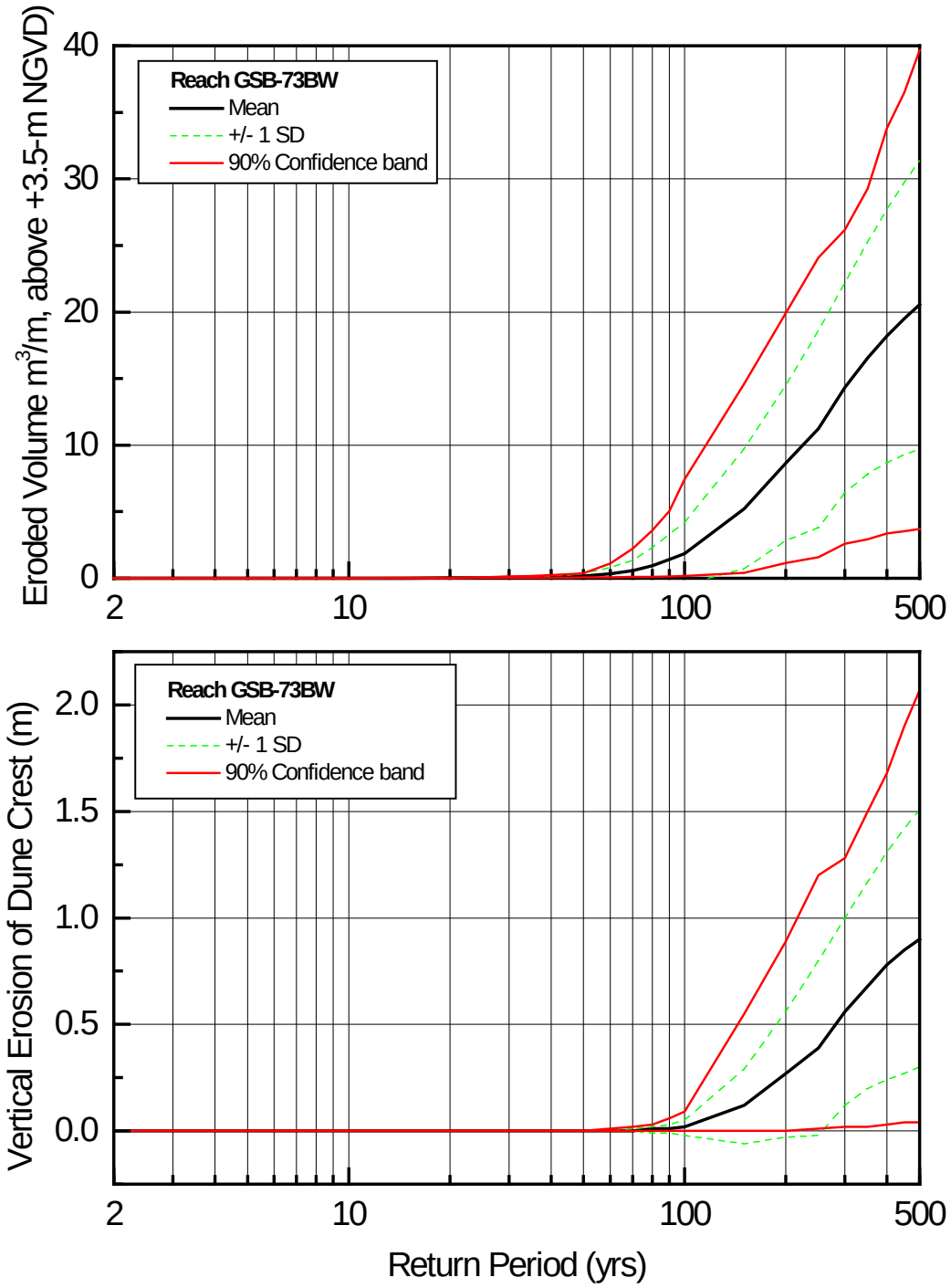

Reach GSB-44BW
Mean
+/- 1 SD
90% Confidence band
Max. Wave Setup Magnitude (m, above SWL)
1.25
1.00
0.75
0.50
2
10
100
500
Reach GSB-44BW
Mean
+/- 1 SD
90% Confidence band
Max. NS Wave Crest Elevation (m, NGVD)
6
5
4
3
2
10
100
500
Return Period (yrs)

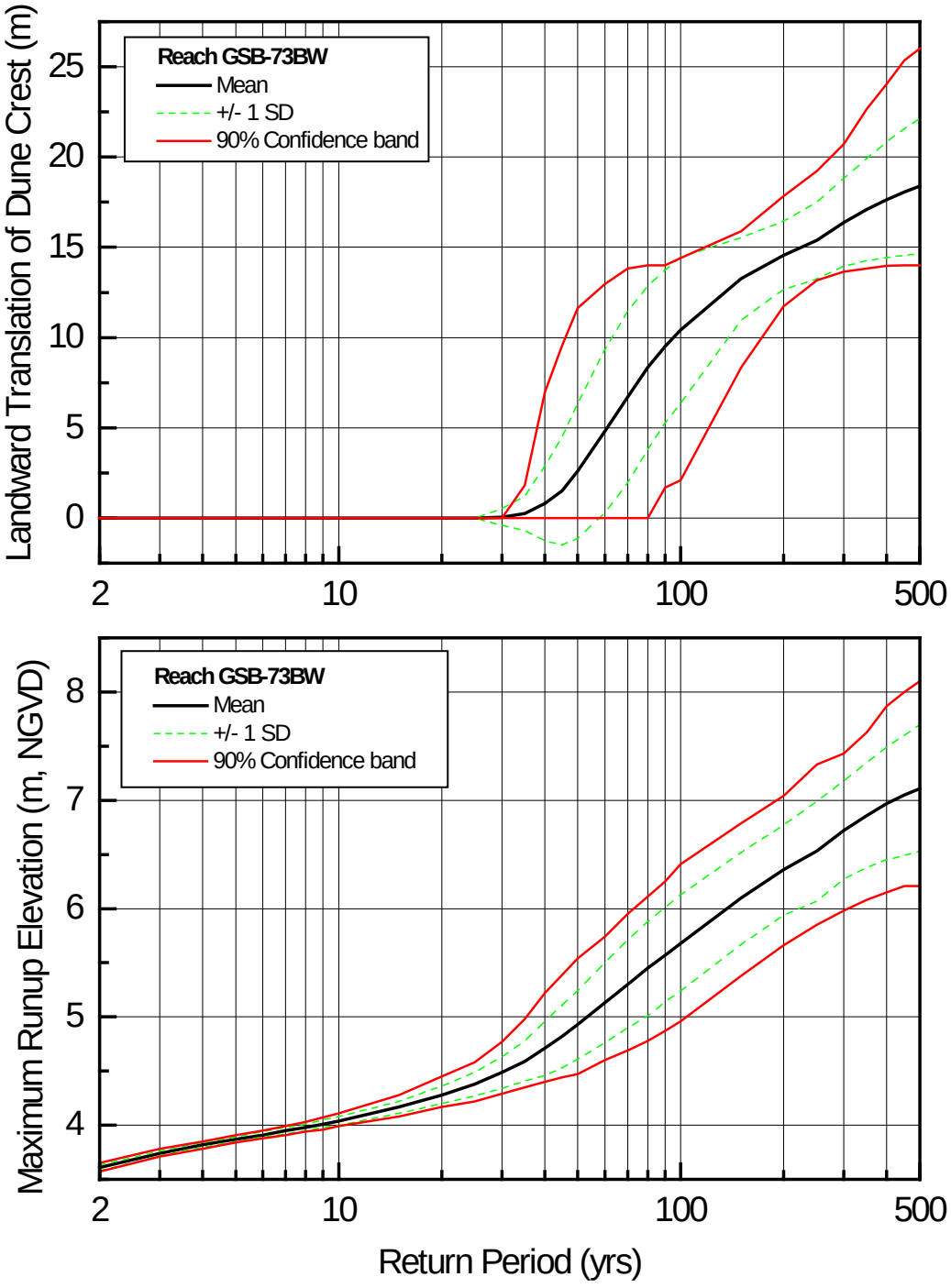

Max NS Wave Height (m, at landside surf zone)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
Reach GSB-44BW
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
450
400
350
300
250
200
150
100
50
Reach GSB-44BW
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

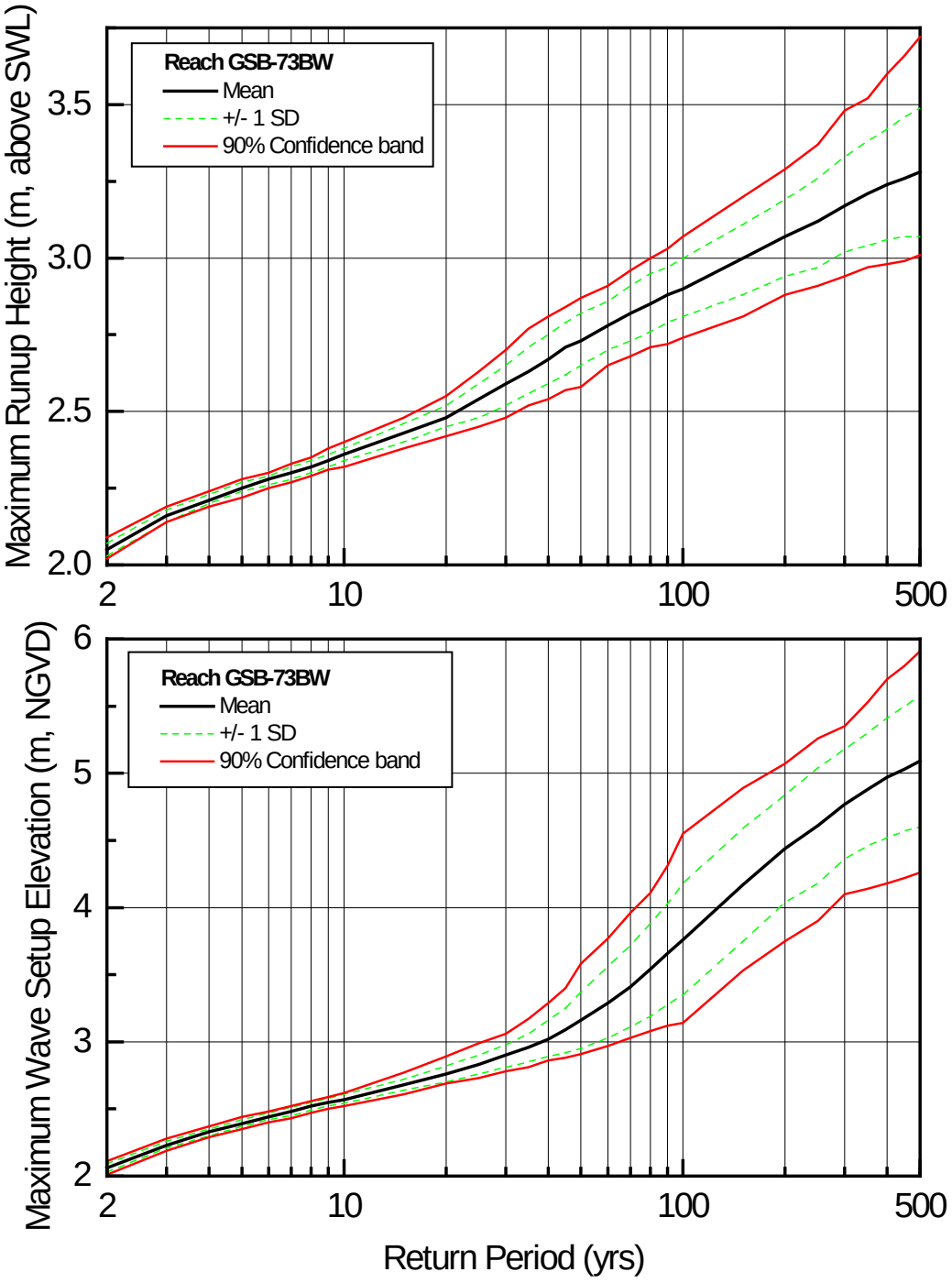

Reach GSB-44BW
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
2
10
100
500
Reach GSB-44BW
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
17.5
15.0
12.5
10.0
7.5
2
10
100
500
Return Period (yrs)

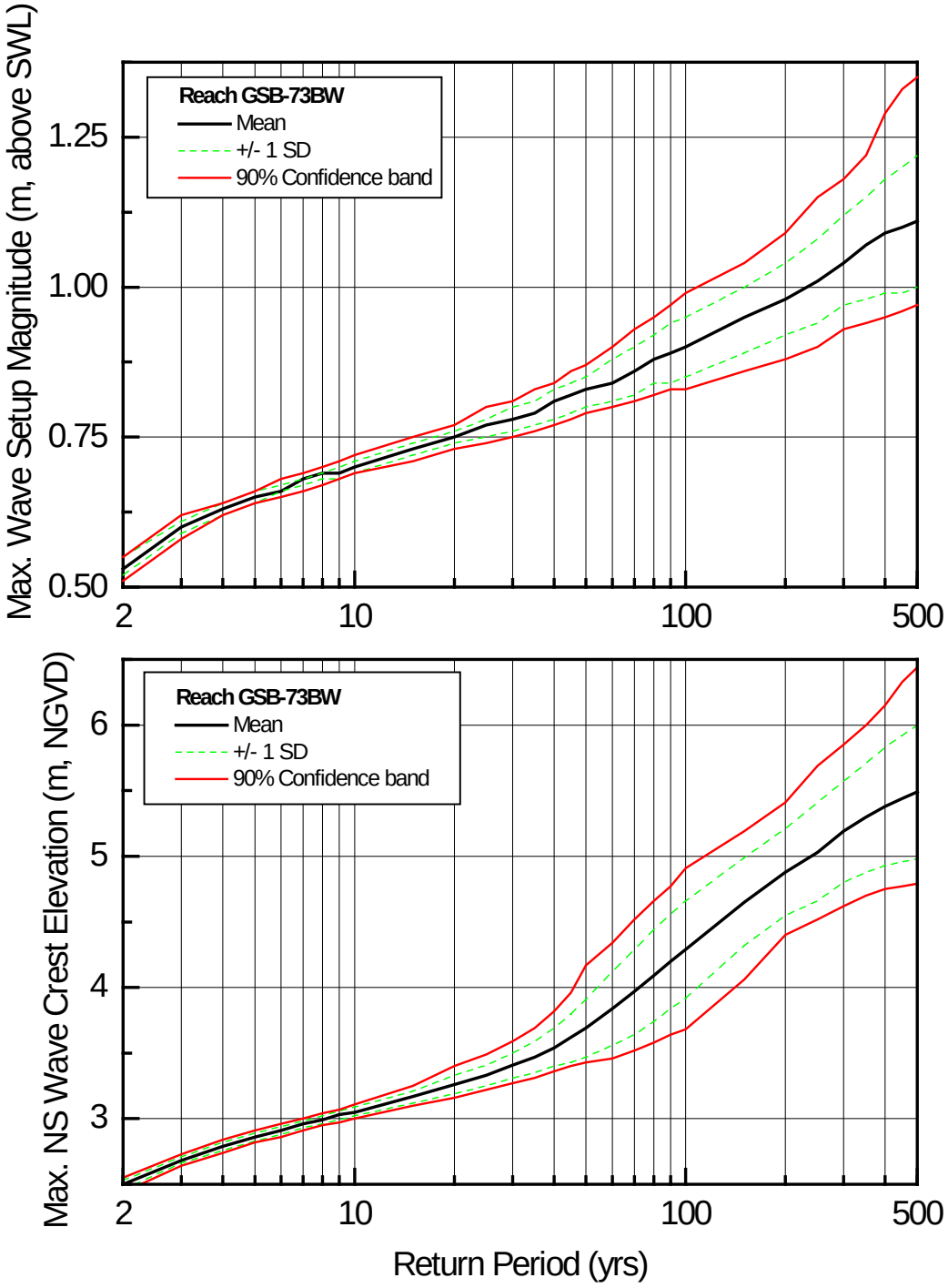

Reach GSB-44BW
Mean
+/- 1 SD
90% Confidence band
3.5-m NGVD Contour Recession (m)
60
50
40
30
20
10
0
2
10
100
500
Reach GSB-44BW
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
20
15
10
5
0
2
10
100
500
Return Period (yrs)

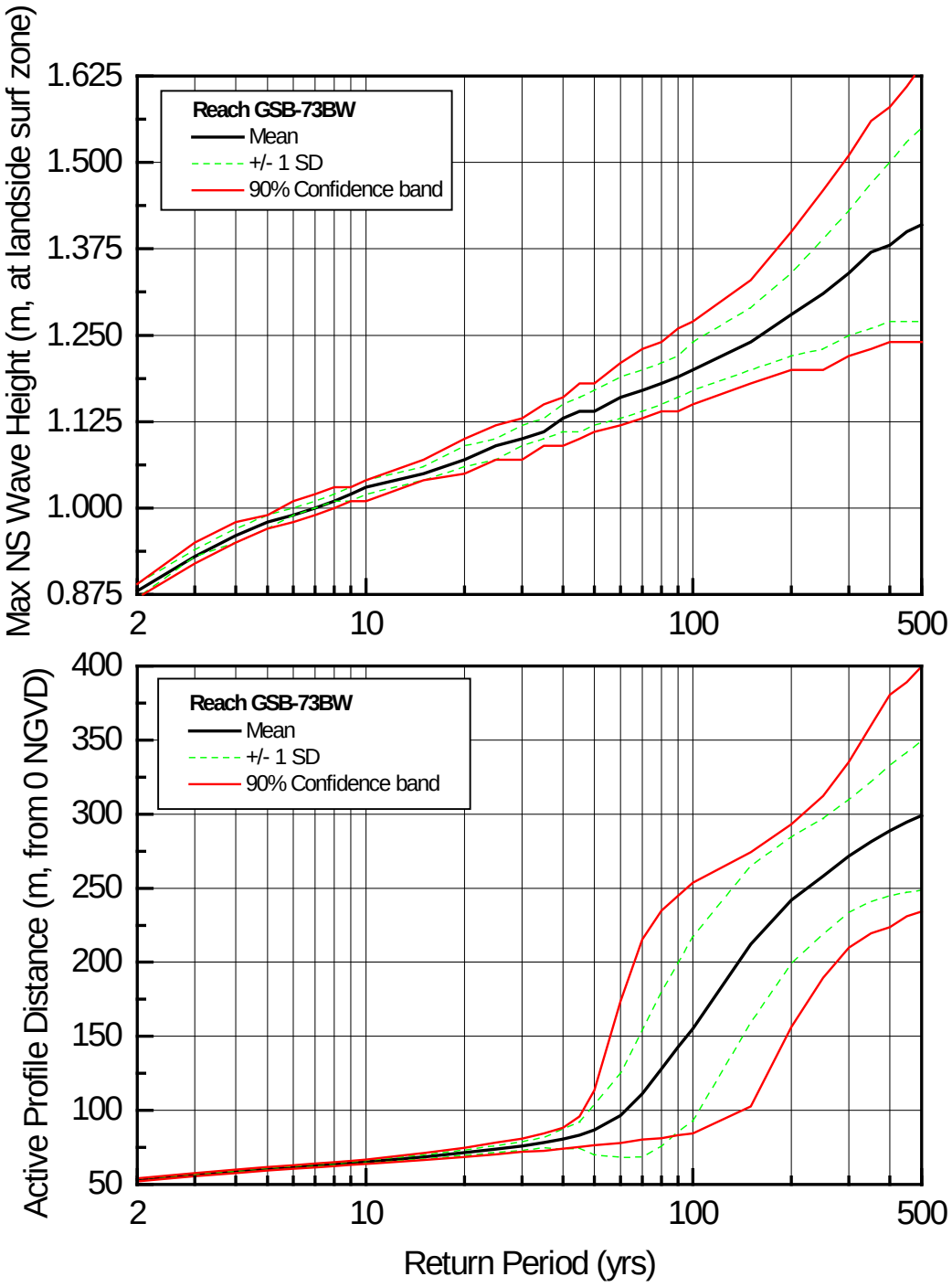

Reach GSB-73BW
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
140
120
100
80
60
40
2
10
100
500
Reach GSB-73BW
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
20
2
10
100
500
Return Period (yrs)

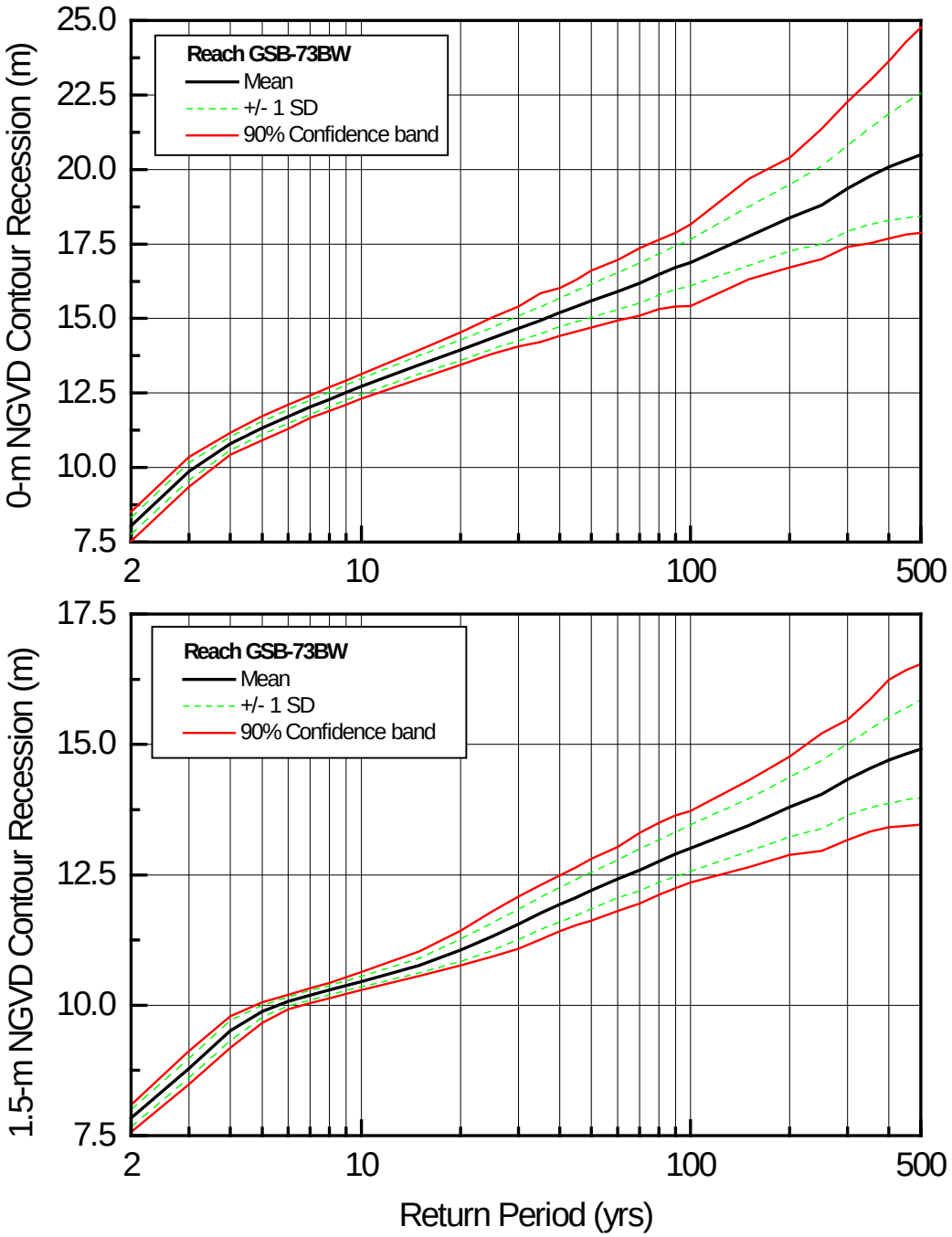

Reach GSB-73BW
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3.5-m NGVD)
0
10
20
30
40
2
10
100
500
Reach GSB-73BW
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2
10
100
500
Return Period (yrs)

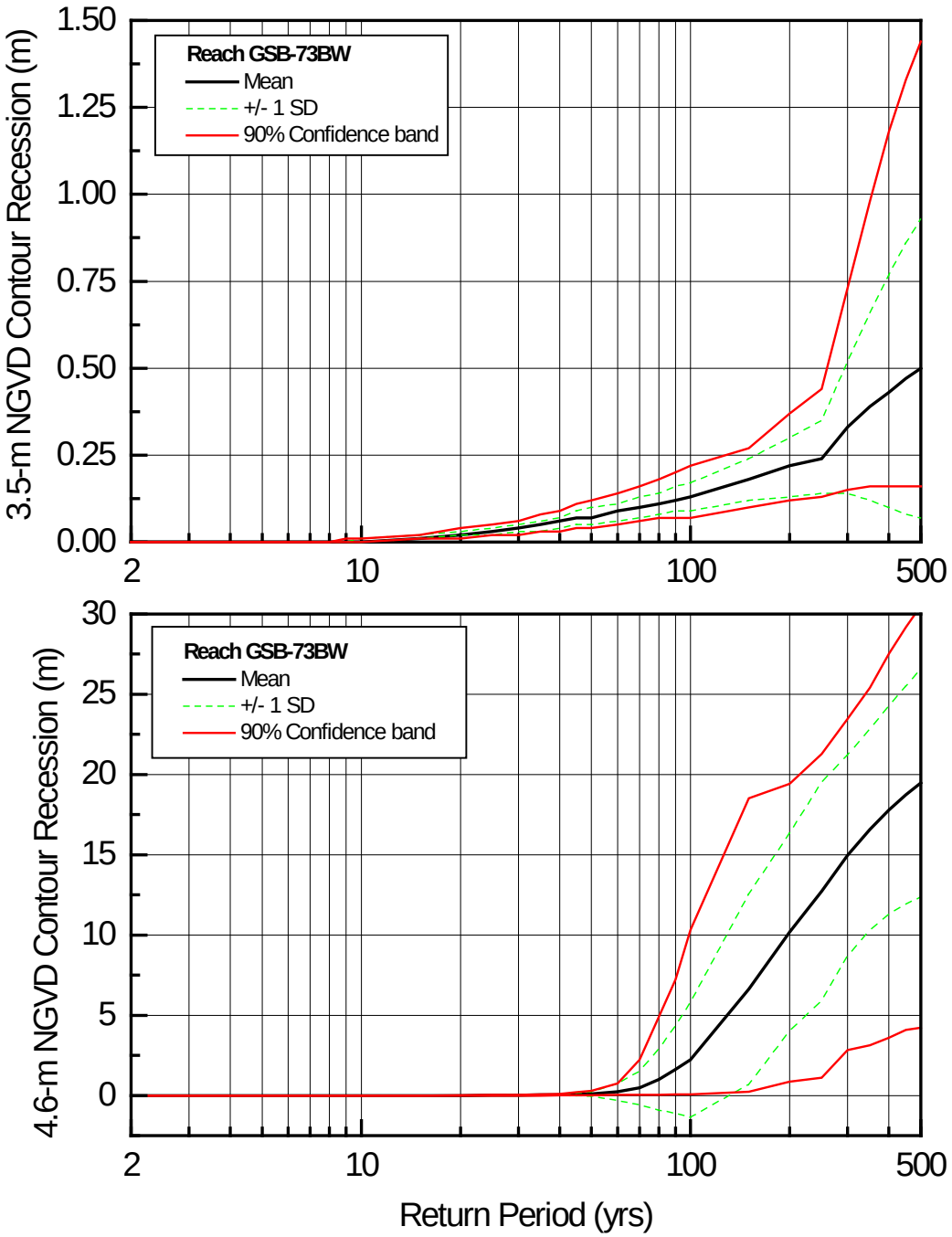

Reach GSB-73BW
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
25
20
15
10
5
0
2
10
100
500
Reach GSB-73BW
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
2
10
100
500
Return Period (yrs)

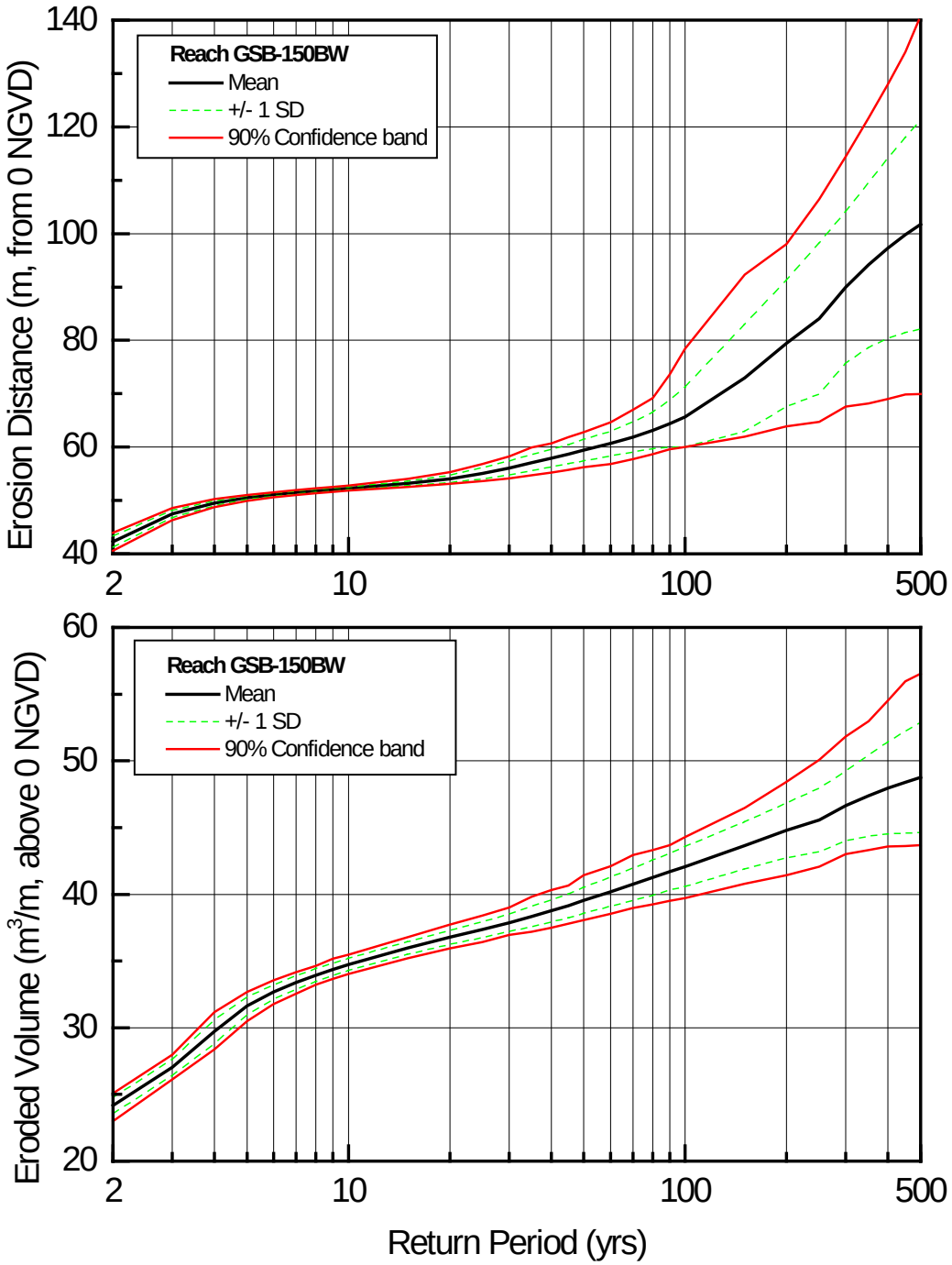

Reach GSB-73BW
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
2.0
2.5
3.0
3.5
2
10
100
500
Reach GSB-73BW
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
2
3
4
5
6
2
10
100
500
Return Period (yrs)

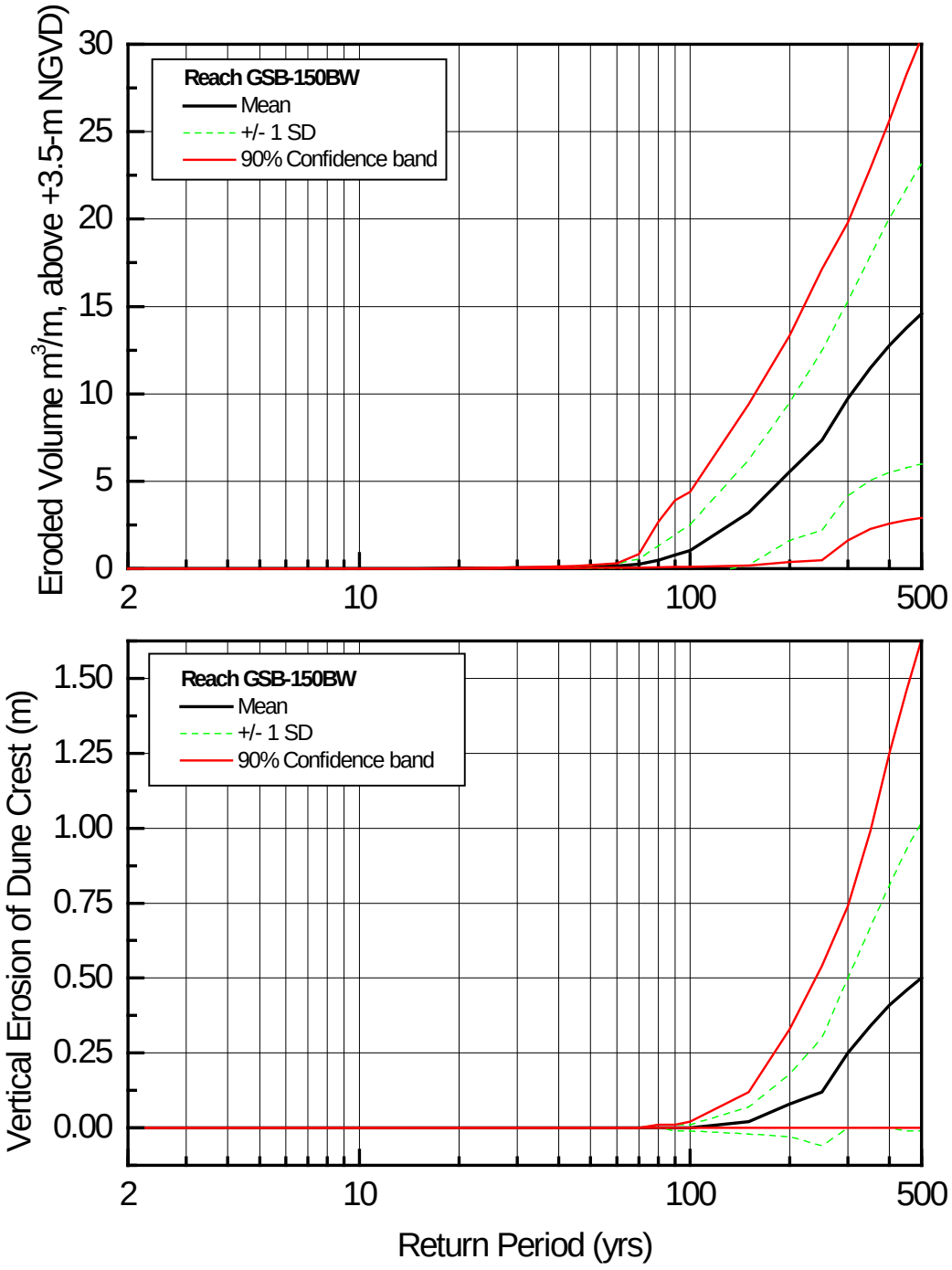

Reach GSB-73BW
Mean
+/- 1 SD
90% Confidence band
Max. Wave Setup Magnitude (m, above SWL)
1.25
1.00
0.75
0.50
2
10
100
500
Reach GSB-73BW
Mean
+/- 1 SD
90% Confidence band
Max. NS Wave Crest Elevation (m, NGVD)
6
5
4
3
2
10
100
500
Return Period (yrs)

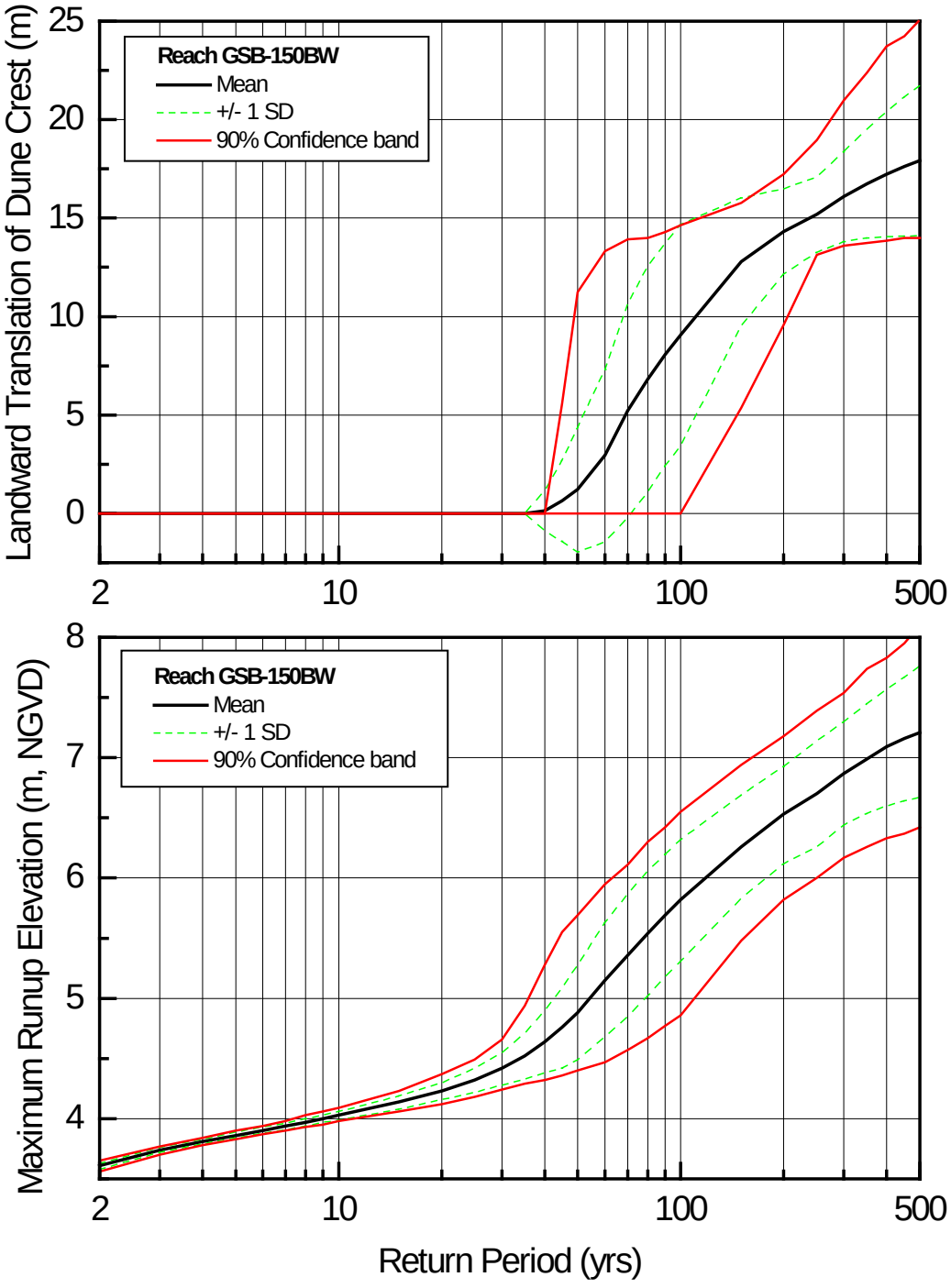

Max NS Wave Height (m, at landside surf zone)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
Reach GSB-73BW
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
350
300
250
200
150
100
50
Reach GSB-73BW
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

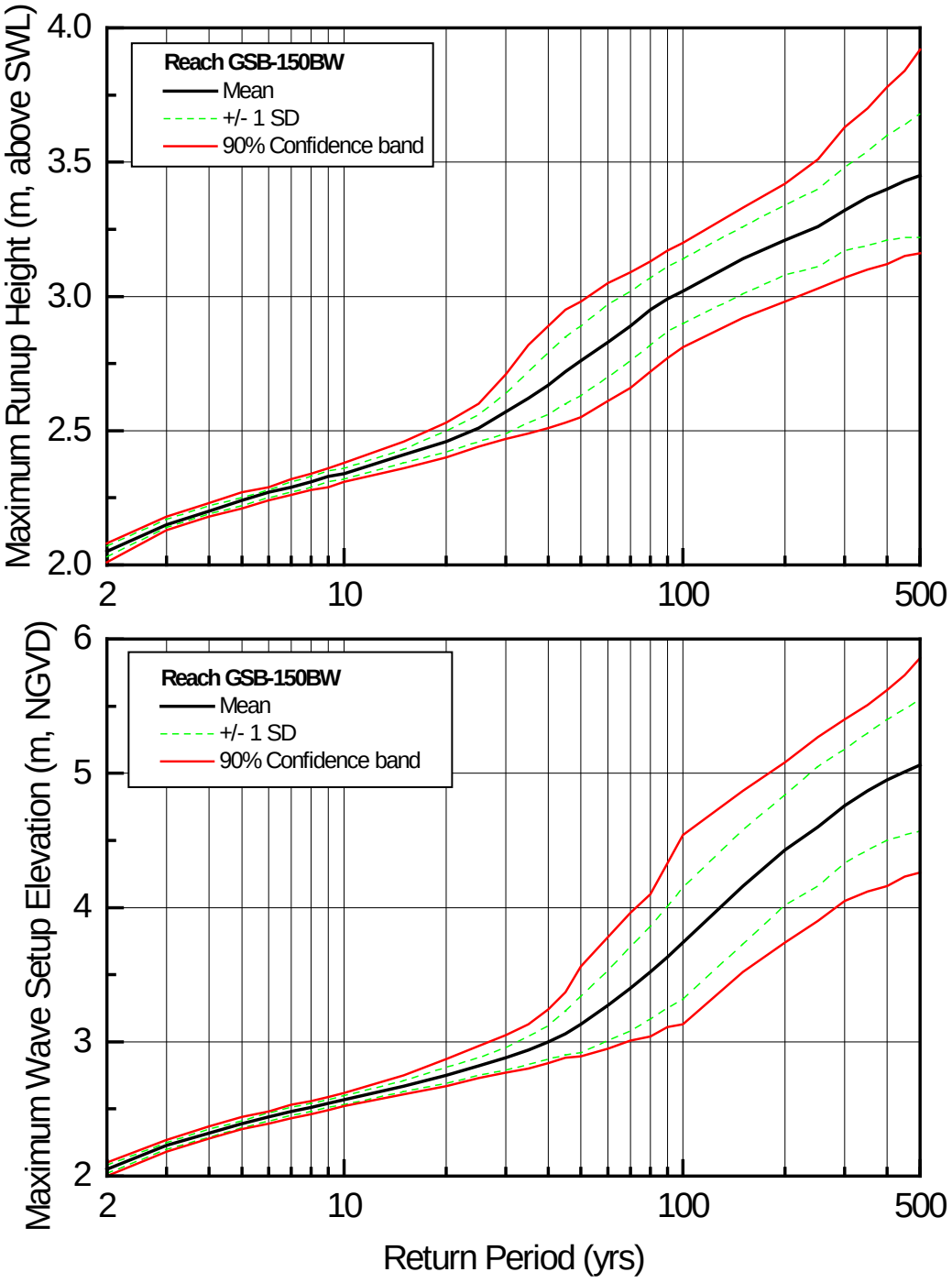

Reach GSB-73BW
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
2
10
100
500
Reach GSB-73BW
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
17.5
15.0
12.5
10.0
7.5
2
10
100
500
Return Period (yrs)

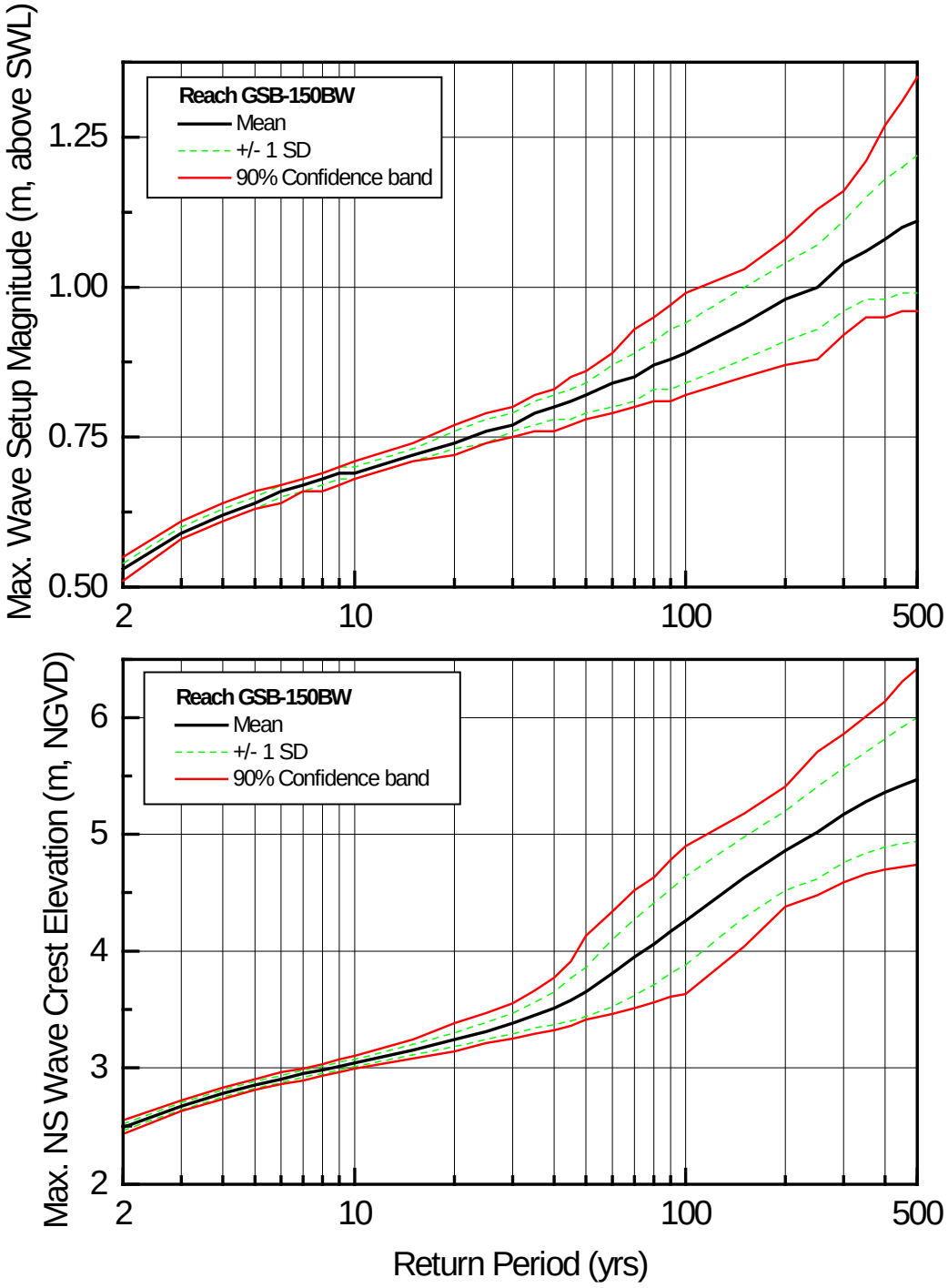

Reach GSB-73BW
Mean
+/- 1 SD
90% Confidence band
3.5-m NGVD Contour Recession (m)
1.50
1.25
1.00
0.75
0.50
0.25
0.00
2
10
100
500
Reach GSB-73BW
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

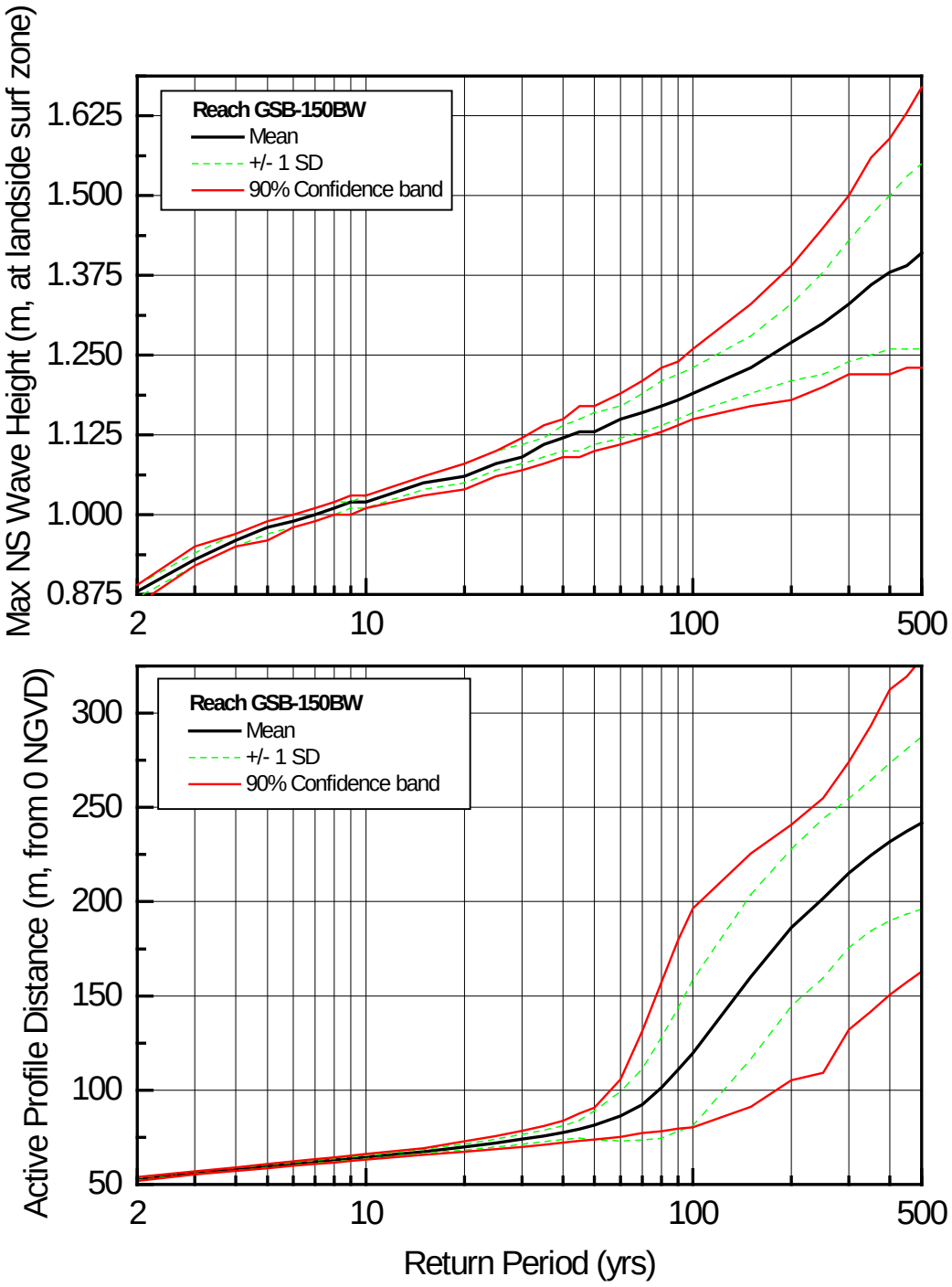

Reach GSB-150BW
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
140
120
100
80
60
40
2
10
100
500
Reach GSB-150BW
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
20
2
10
100
500
Return Period (yrs)

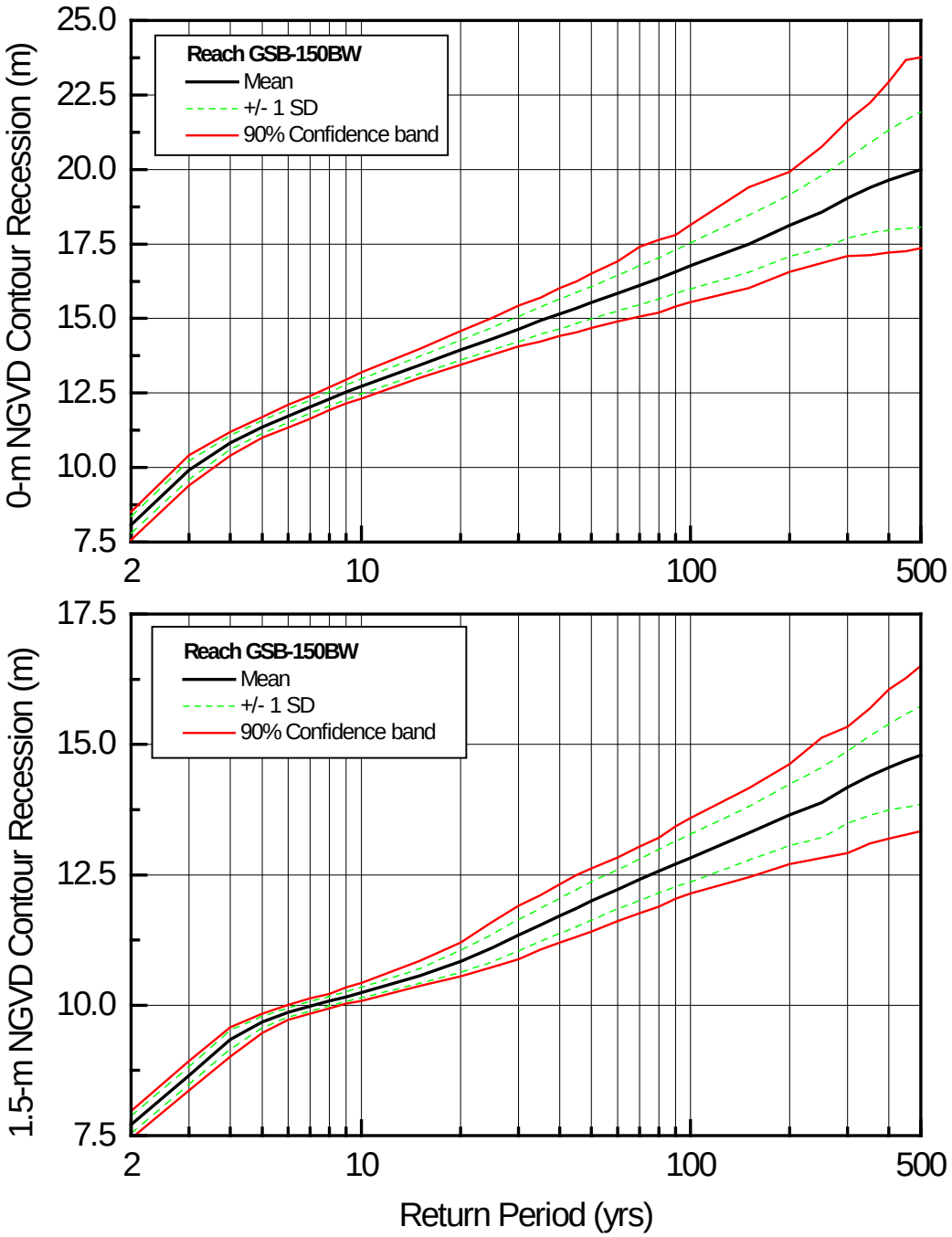

Reach GSB-150BW
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3.5-m NGVD)
0
5
10
15
20
25
30
2
10
100
500
Reach GSB-150BW
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.00
0.25
0.50
0.75
1.00
1.25
1.50
2
10
100
500
Return Period (yrs)

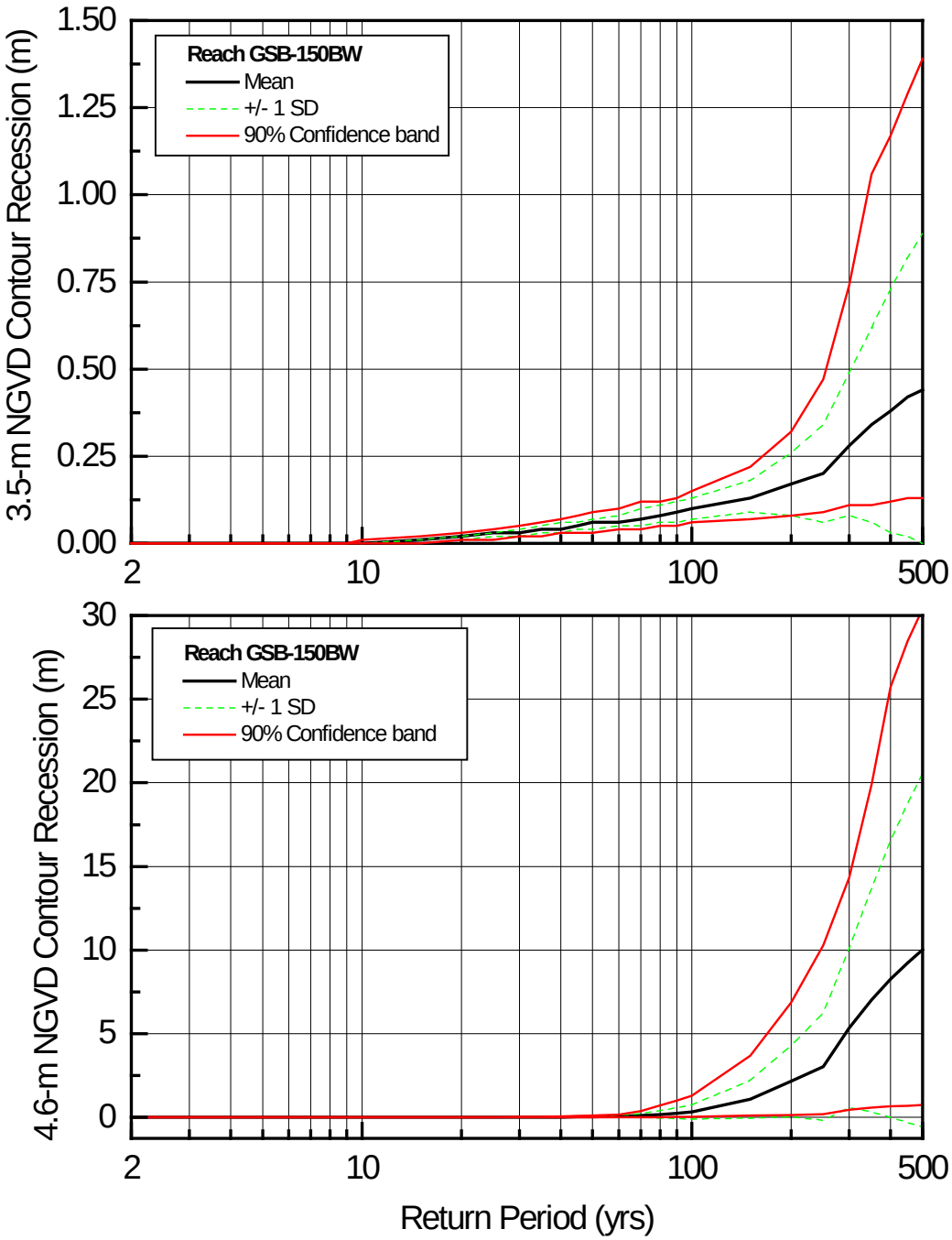

Reach GSB-150BW
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
25
20
15
10
5
0
2
10
100
500
Reach GSB-150BW
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
2
10
100
500
Return Period (yrs)

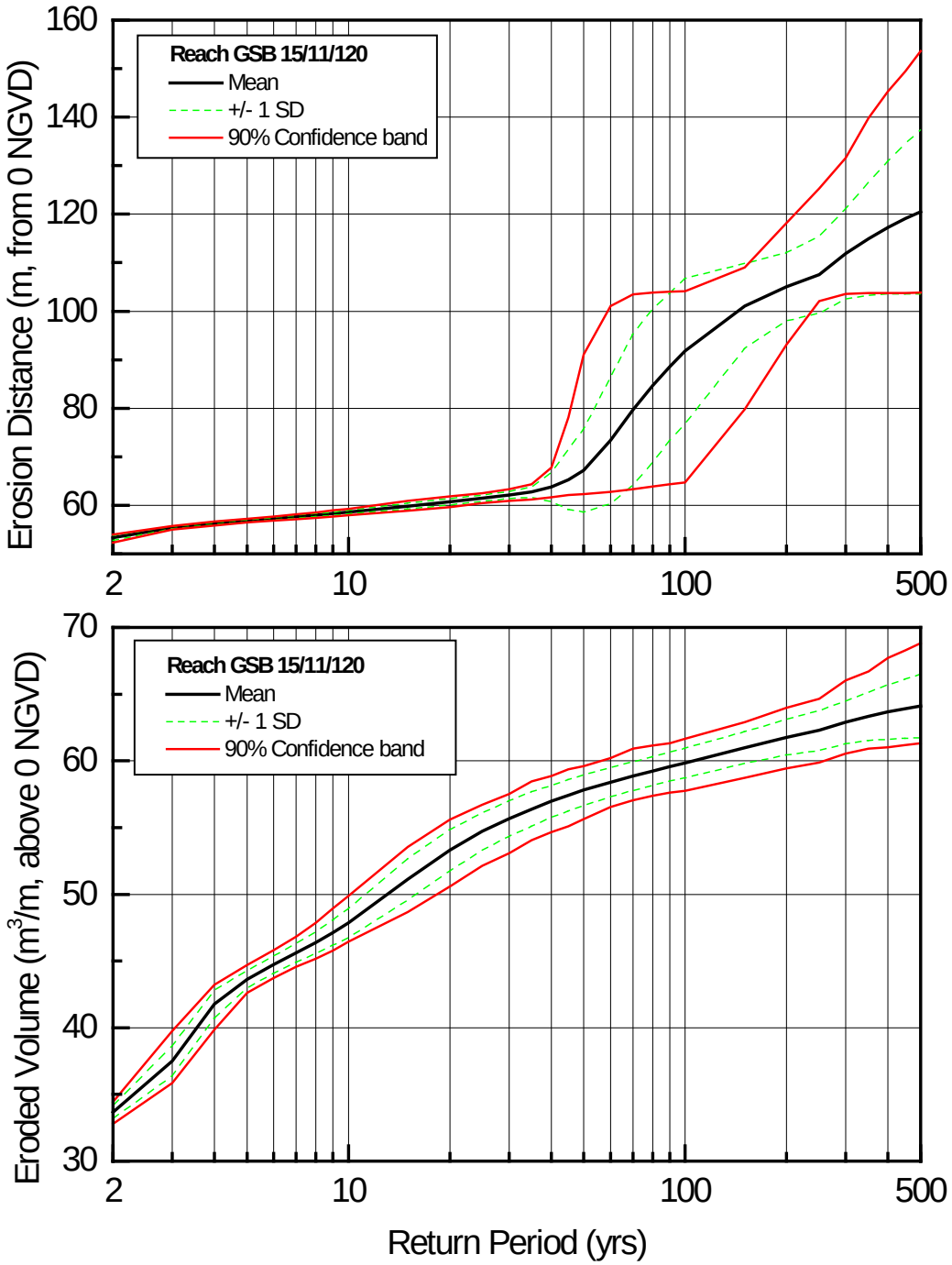

Reach GSB-150BW
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach GSB-150BW
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

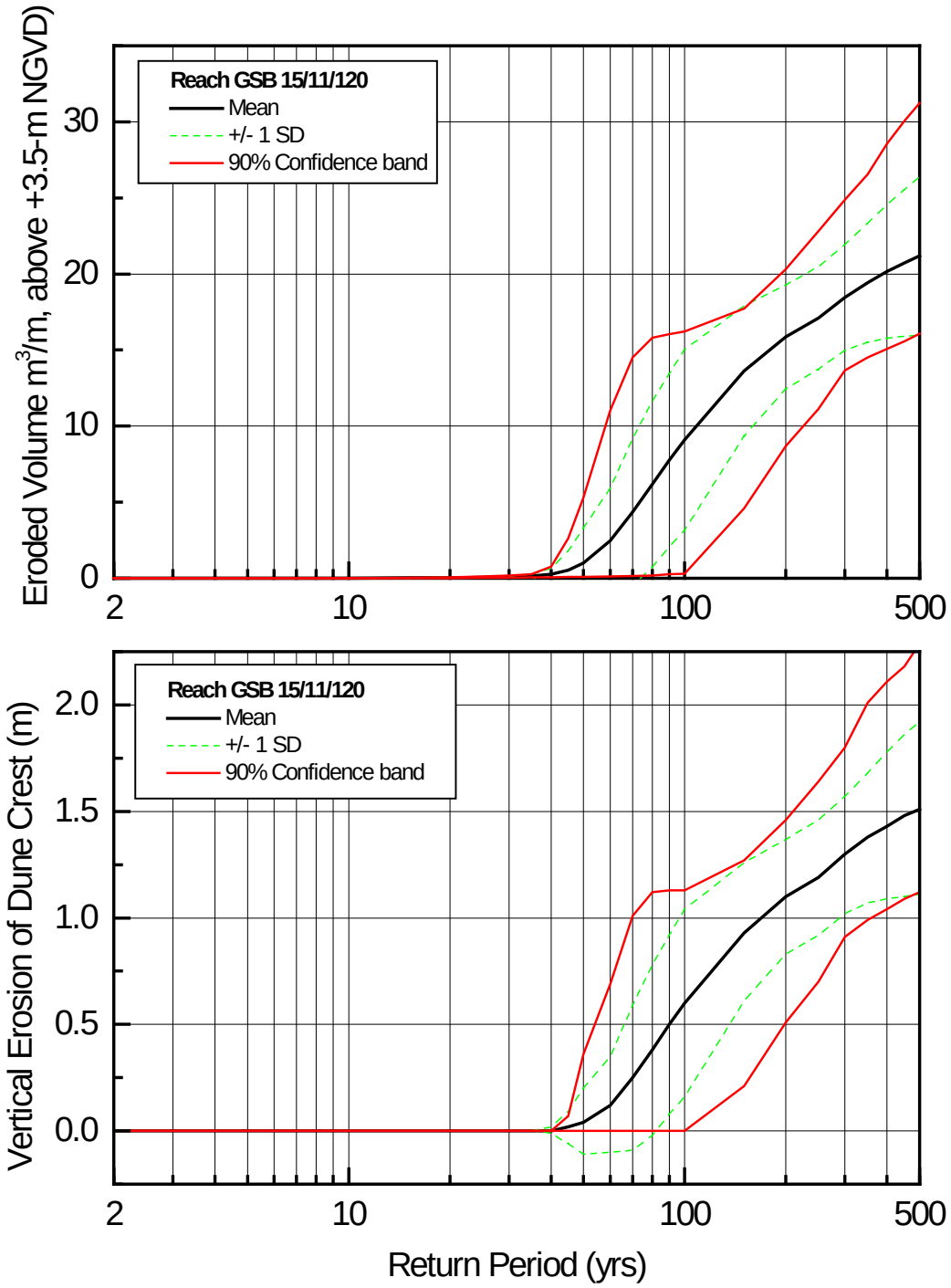

Reach GSB-150BW
Mean
+/- 1 SD
90% Confidence band
Max. Wave Setup Magnitude (m, above SWL)
1.25
1.00
0.75
0.50
2
10
100
500
Reach GSB-150BW
Mean
+/- 1 SD
90% Confidence band
Max. NS Wave Crest Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

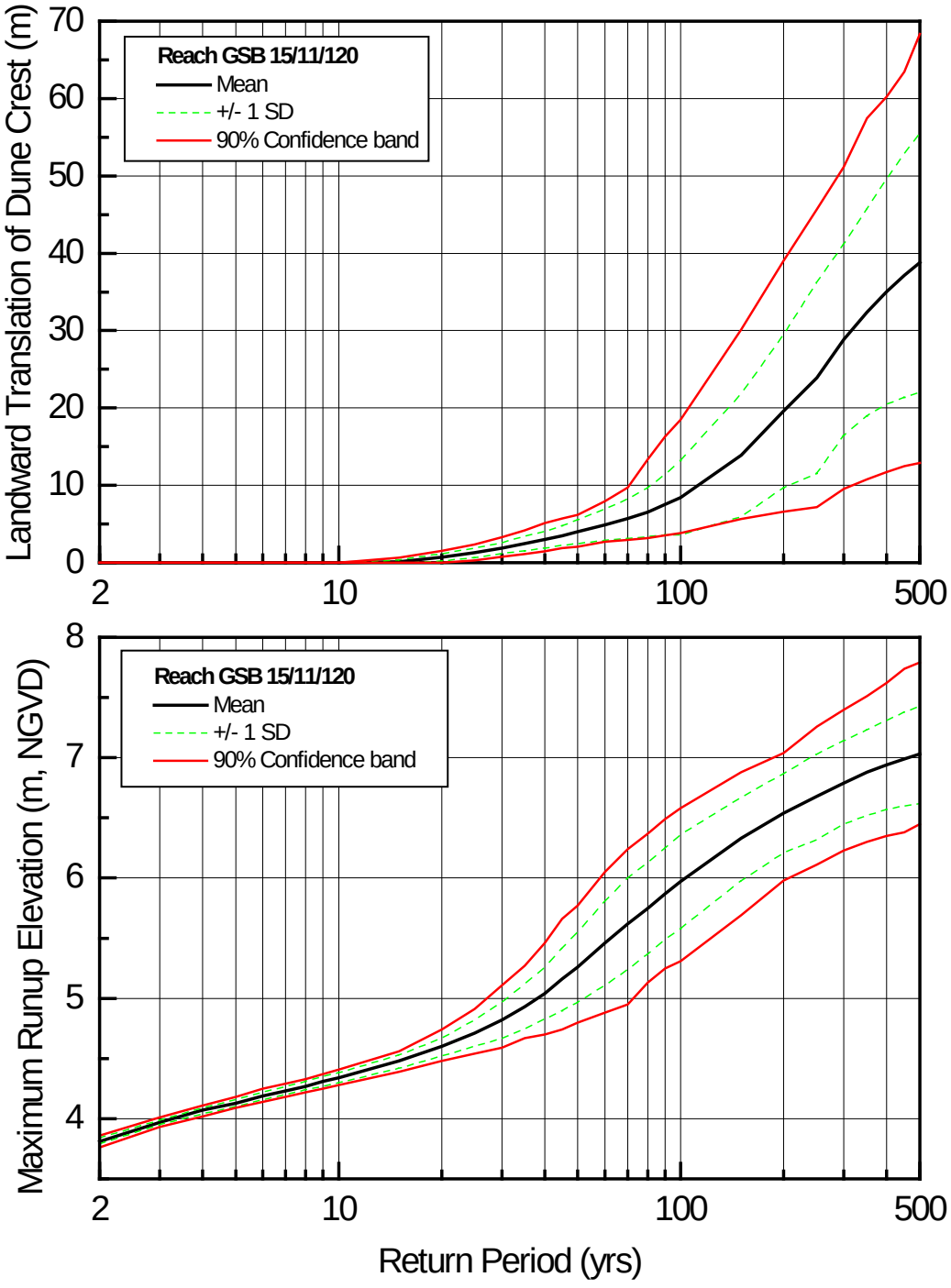

Max NS Wave Height (m, at landside surf zone)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
Reach GSB-150BW
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
300
250
200
150
100
50
Reach GSB-150BW
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

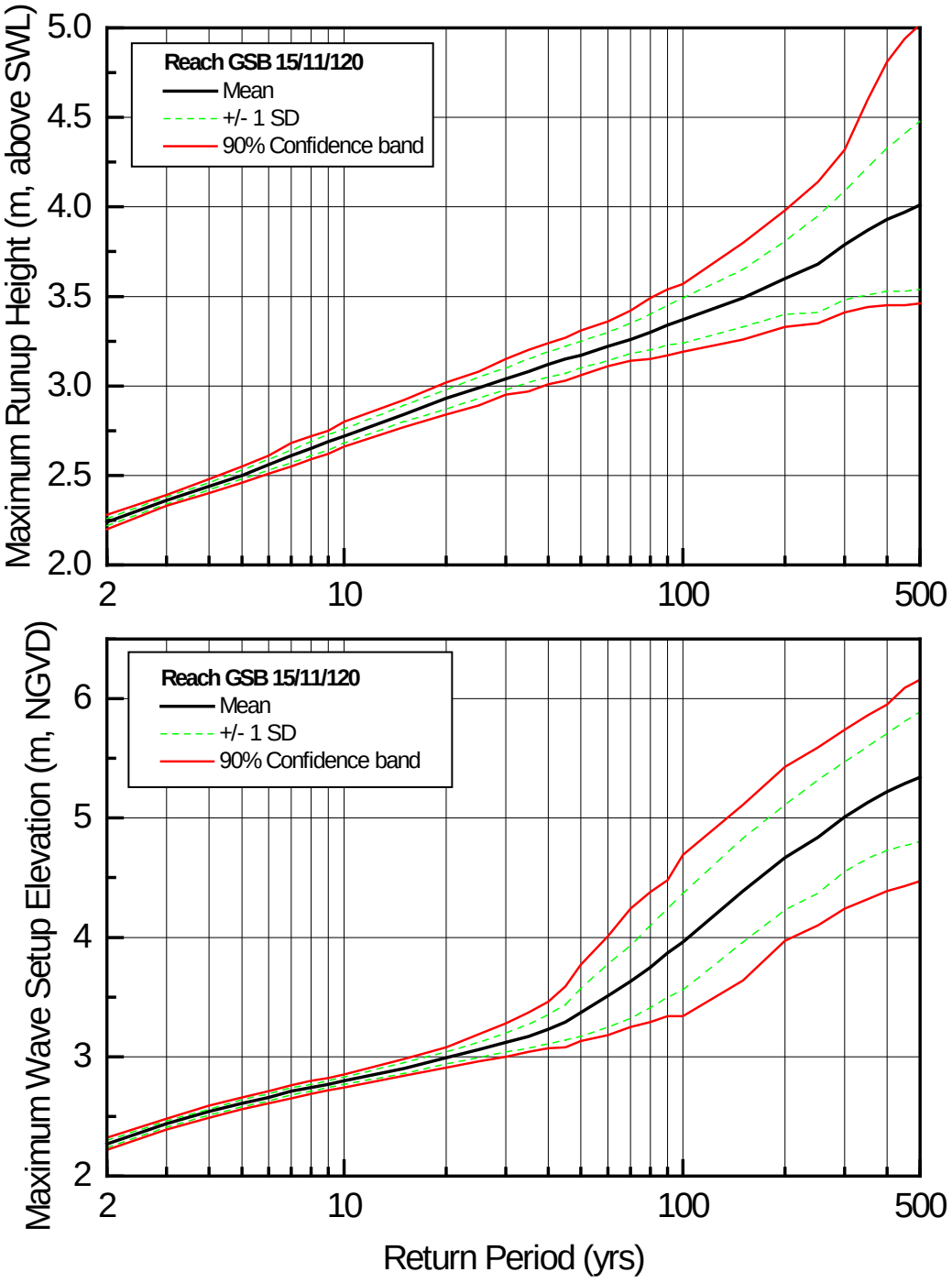

Reach GSB-150BW
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
2
10
100
500
Reach GSB-150BW
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
17.5
15.0
12.5
10.0
7.5
2
10
100
500
Return Period (yrs)

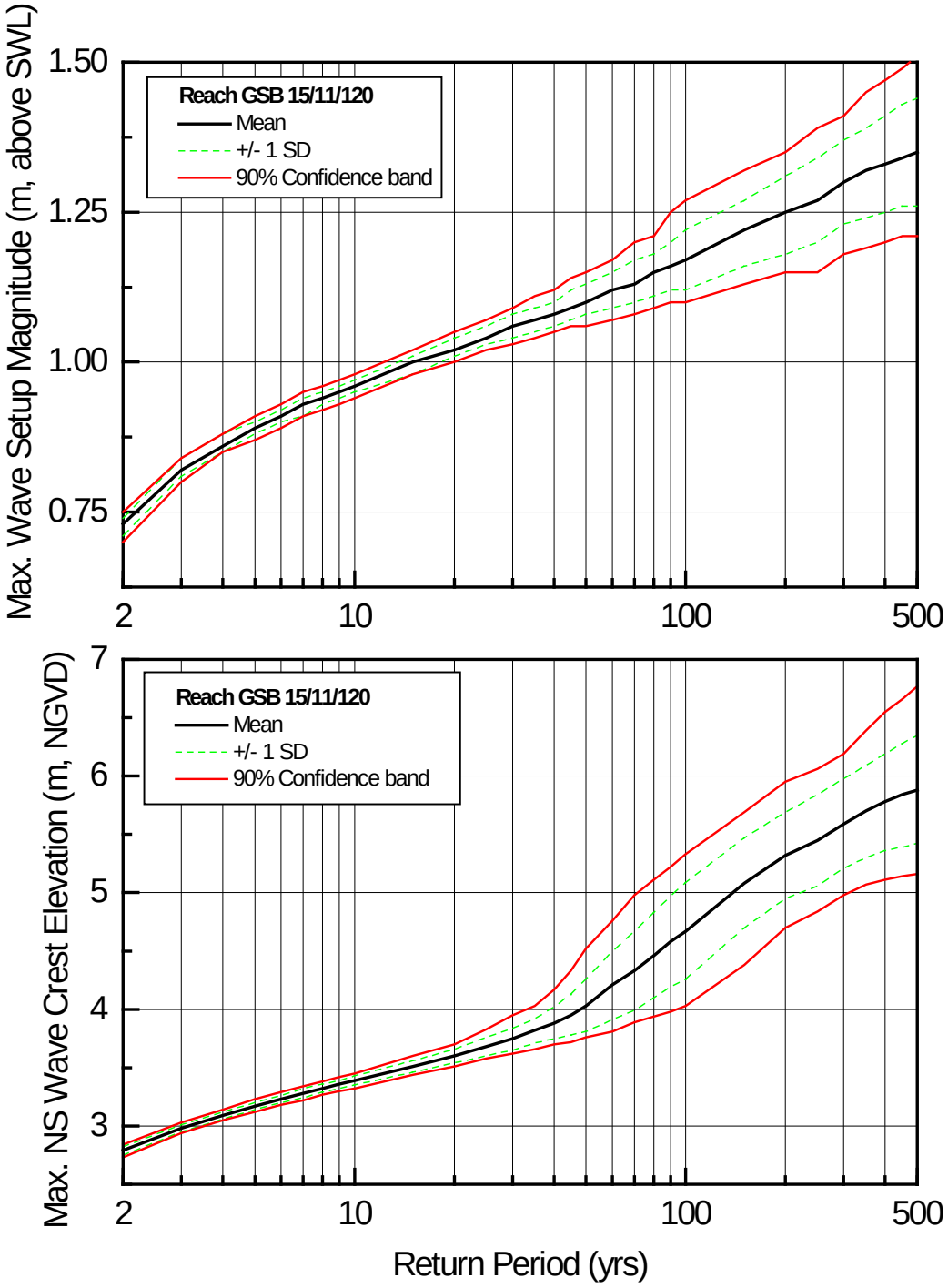

Reach GSB-150BW
Mean
+/- 1 SD
90% Confidence band
3.5-m NGVD Contour Recession (m)
1.50
1.25
1.00
0.75
0.50
0.25
0.00
2
10
100
500
Reach GSB-150BW
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

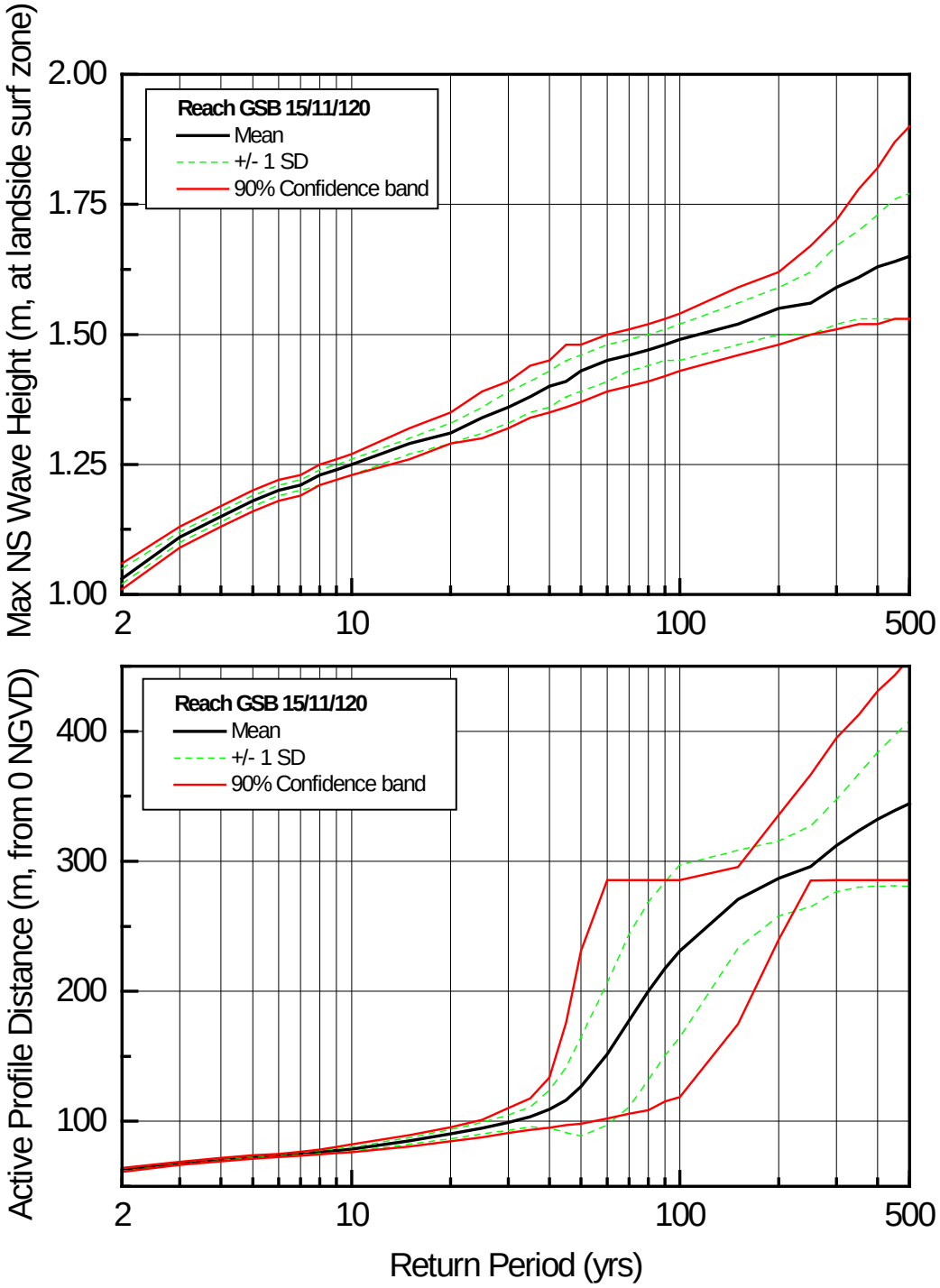

Reach GSB 15/11/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
160
140
120
100
80
60
2
10
100
500
Reach GSB 15/11/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
70
60
50
40
30
2
10
100
500
Return Period (yrs)

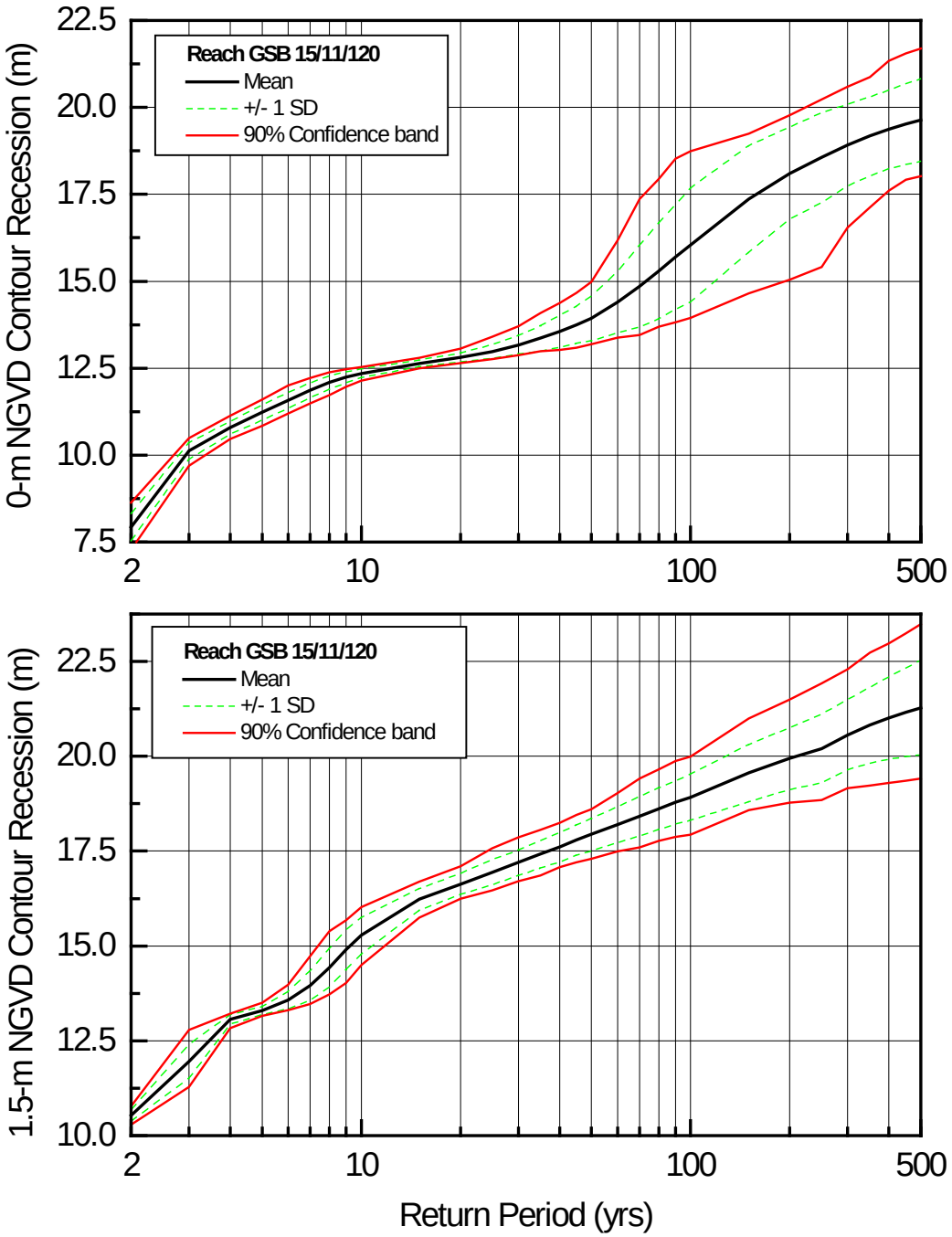

Reach GSB 15/11/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3.5-m NGVD)
0
10
20
30
2
10
100
500
Reach GSB 15/11/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2
10
100
500
Return Period (yrs)

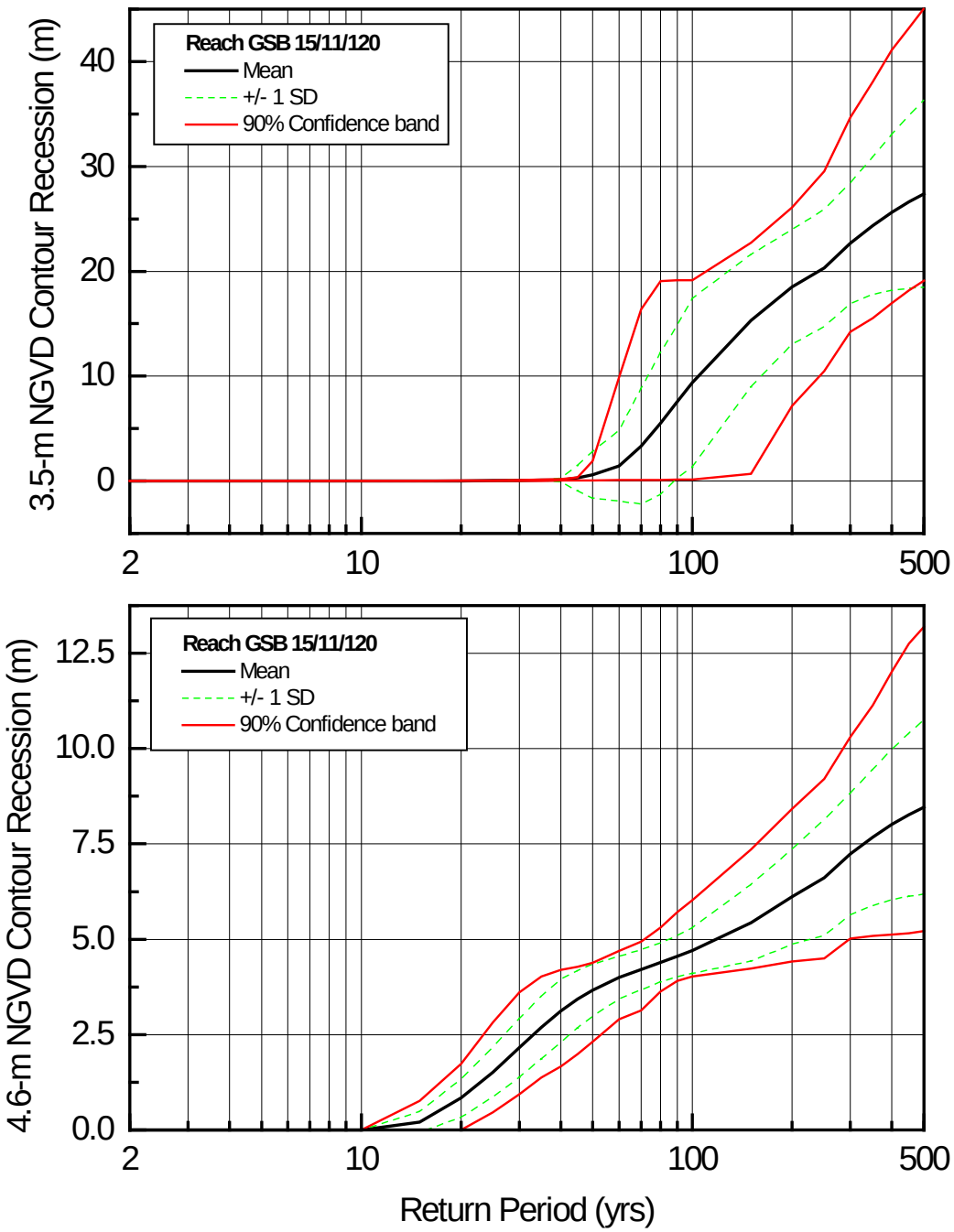

Reach GSB 15/11/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
30
40
50
60
70
2
10
100
500
Reach GSB 15/11/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
4
5
6
7
8
2
10
100
500
Return Period (yrs)

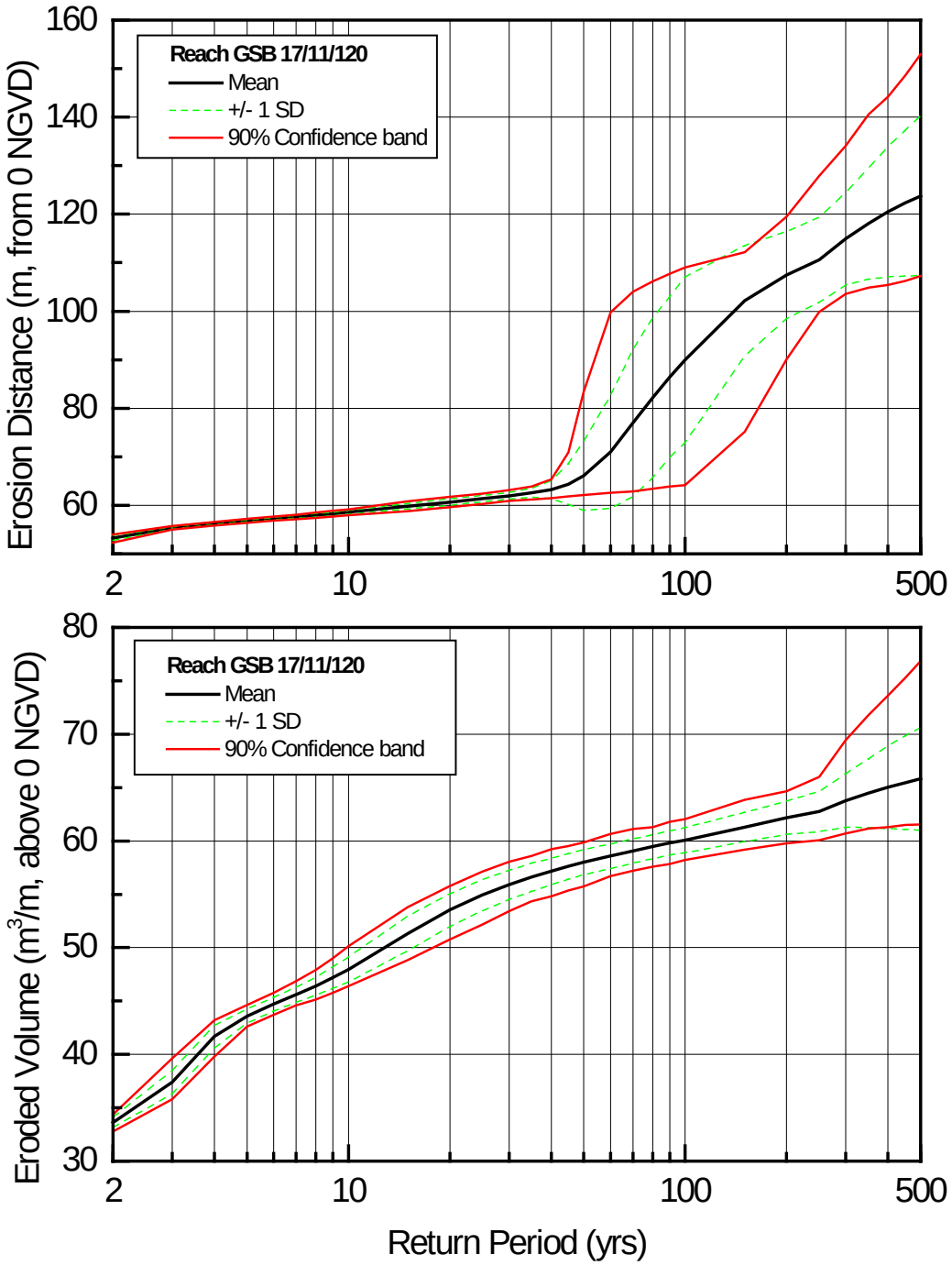

Reach GSB 15/11/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach GSB 15/11/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

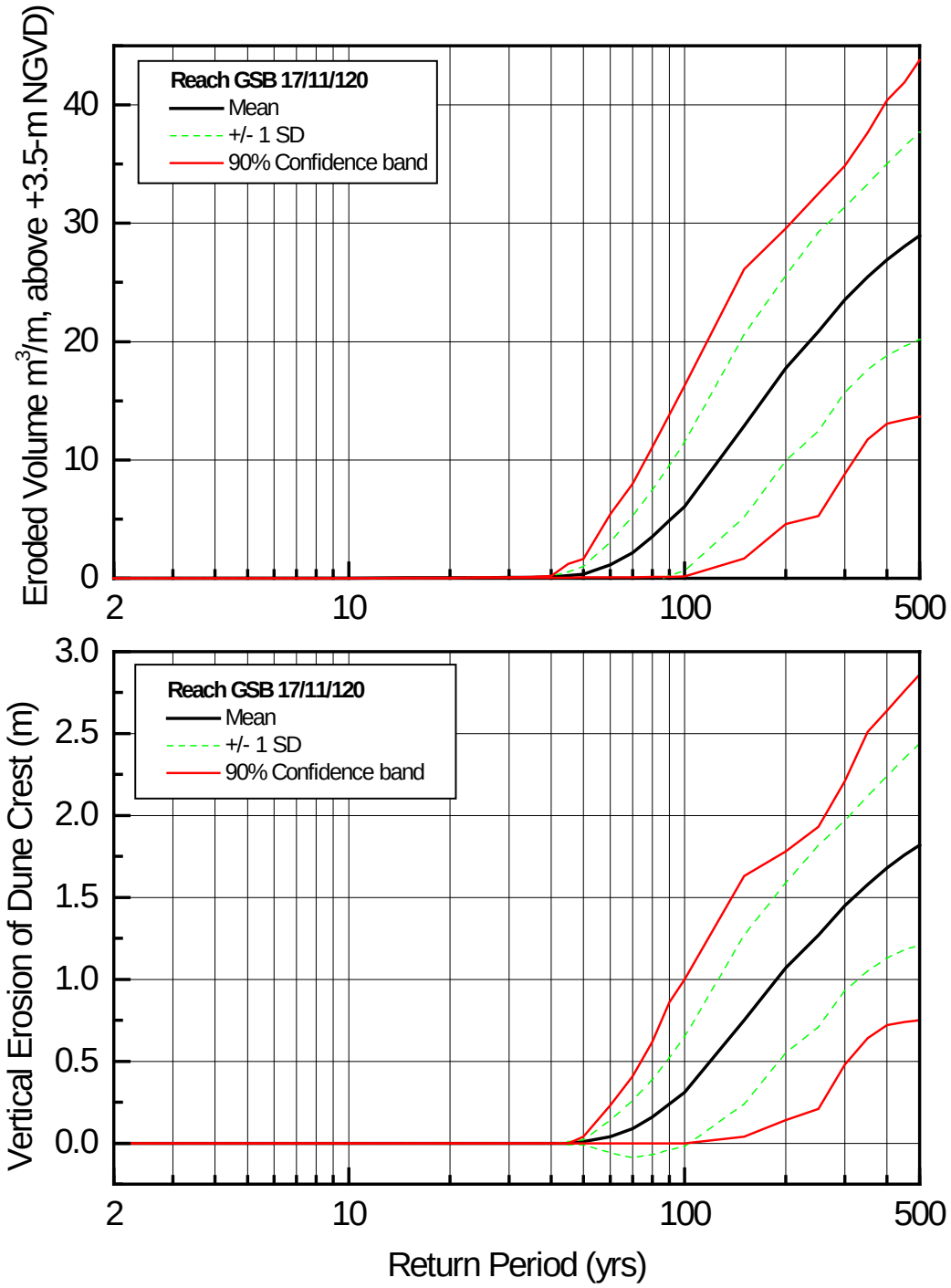

Max. Wave Setup Magnitude (m, above SWL)
1.50
1.25
1.00
0.75
Reach GSB 15/11/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach GSB 15/11/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

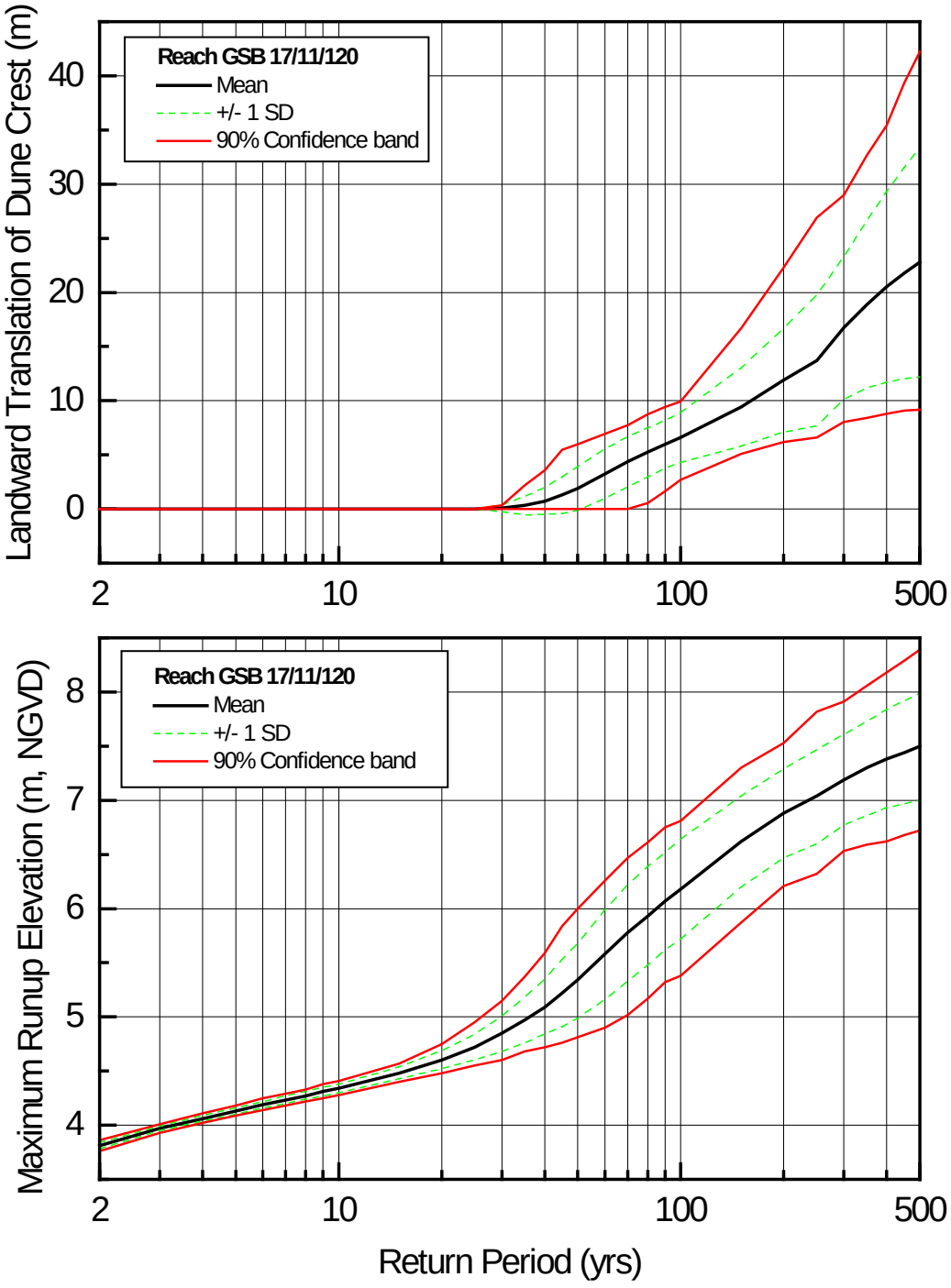

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach GSB 15/11/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
300
200
100
Reach GSB 15/11/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

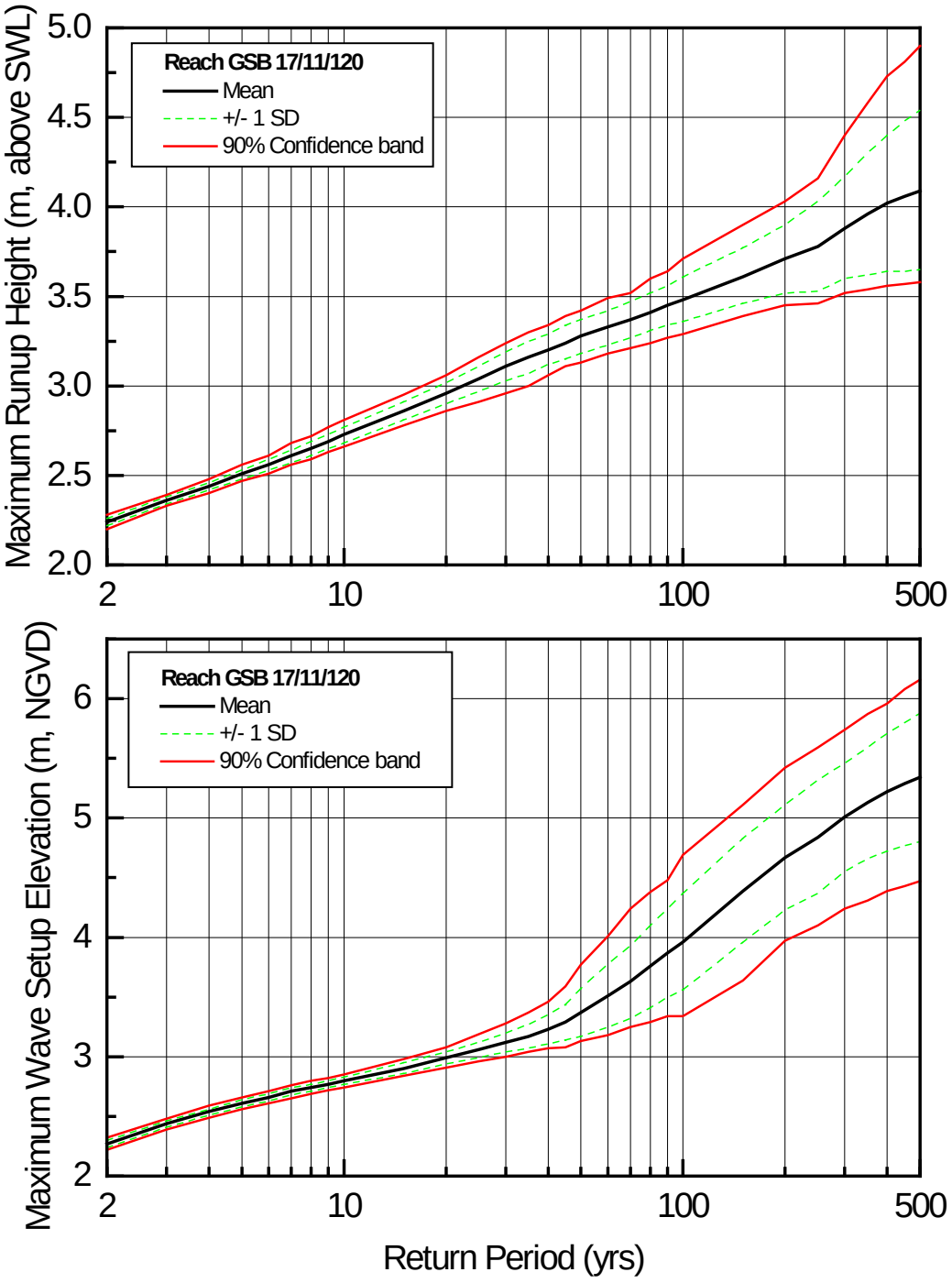

Reach GSB 15/11/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
22.5
20.0
17.5
15.0
12.5
10.0
7.5
2
10
100
500
Reach GSB 15/11/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
22.5
20.0
17.5
15.0
12.5
10.0
2
10
100
500
Return Period (yrs)

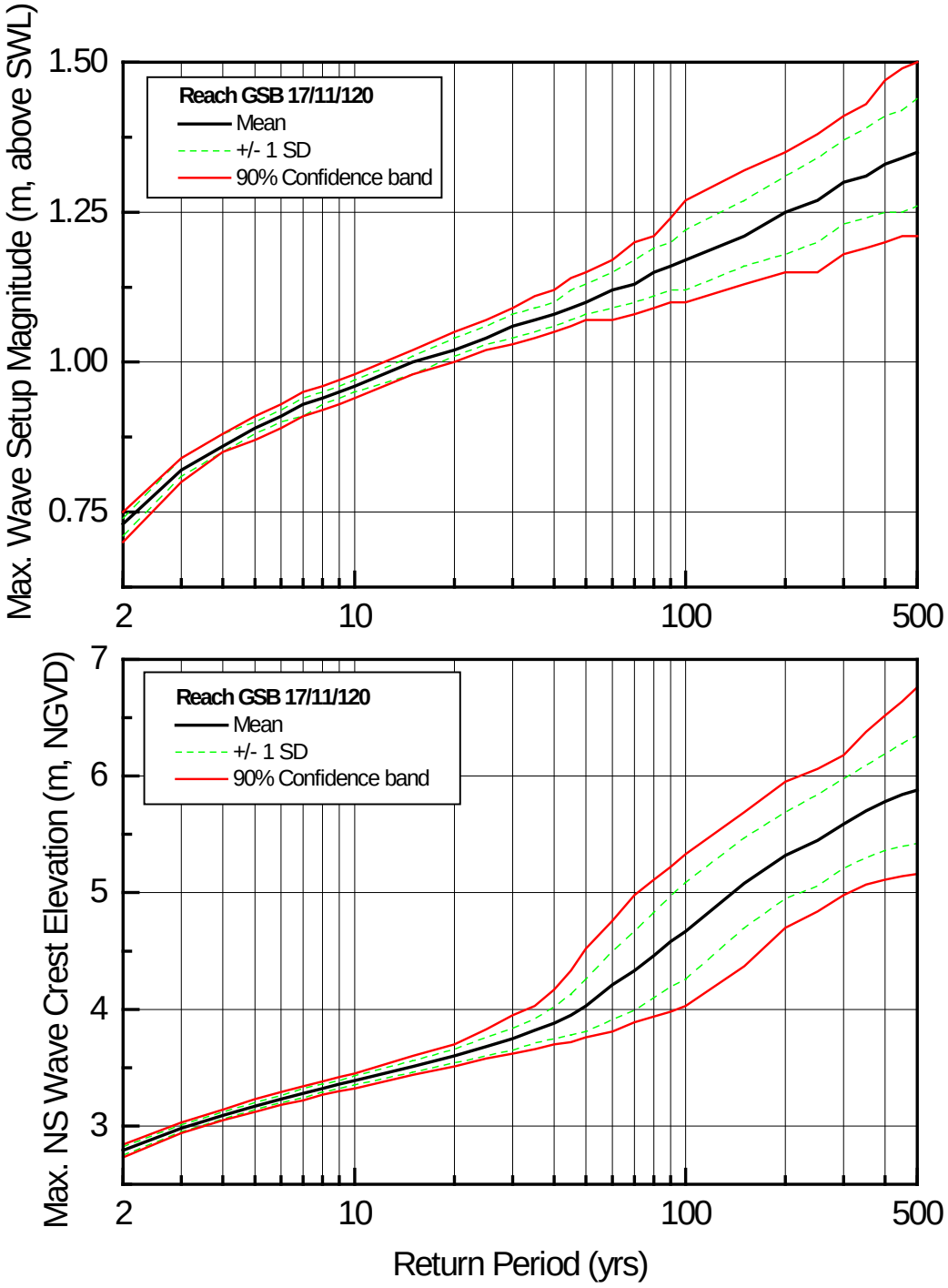

Reach GSB 15/11/120
Mean
+/- 1 SD
90% Confidence band
3.5-m NGVD Contour Recession (m)
0
10
20
30
40
2
10
100
500
Reach GSB 15/11/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
0.0
2.5
5.0
7.5
10.0
12.5
2
10
100
500
Return Period (yrs)

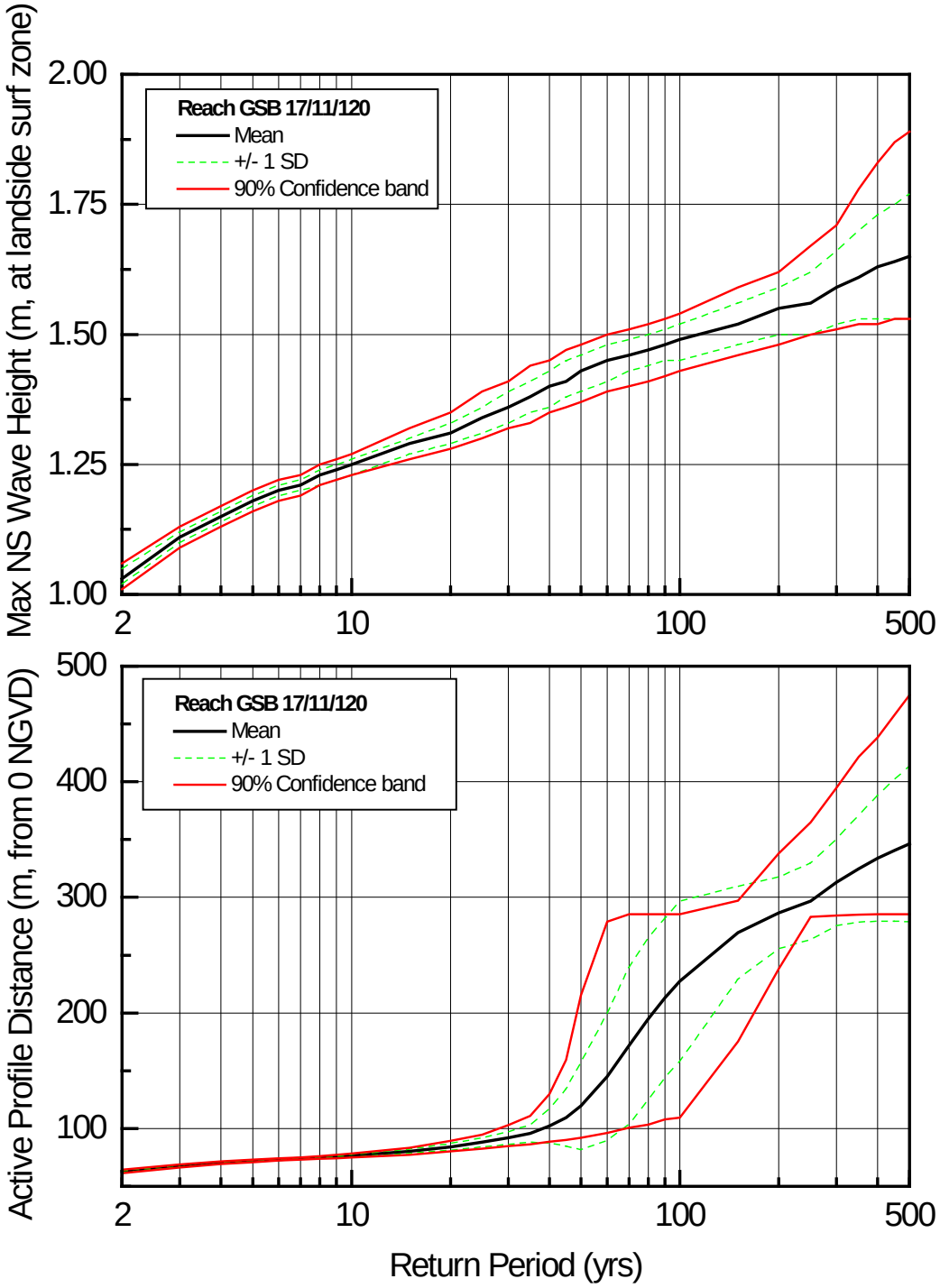

Reach GSB 17/11/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
160
140
120
100
80
60
2
10
100
500
Reach GSB 17/11/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

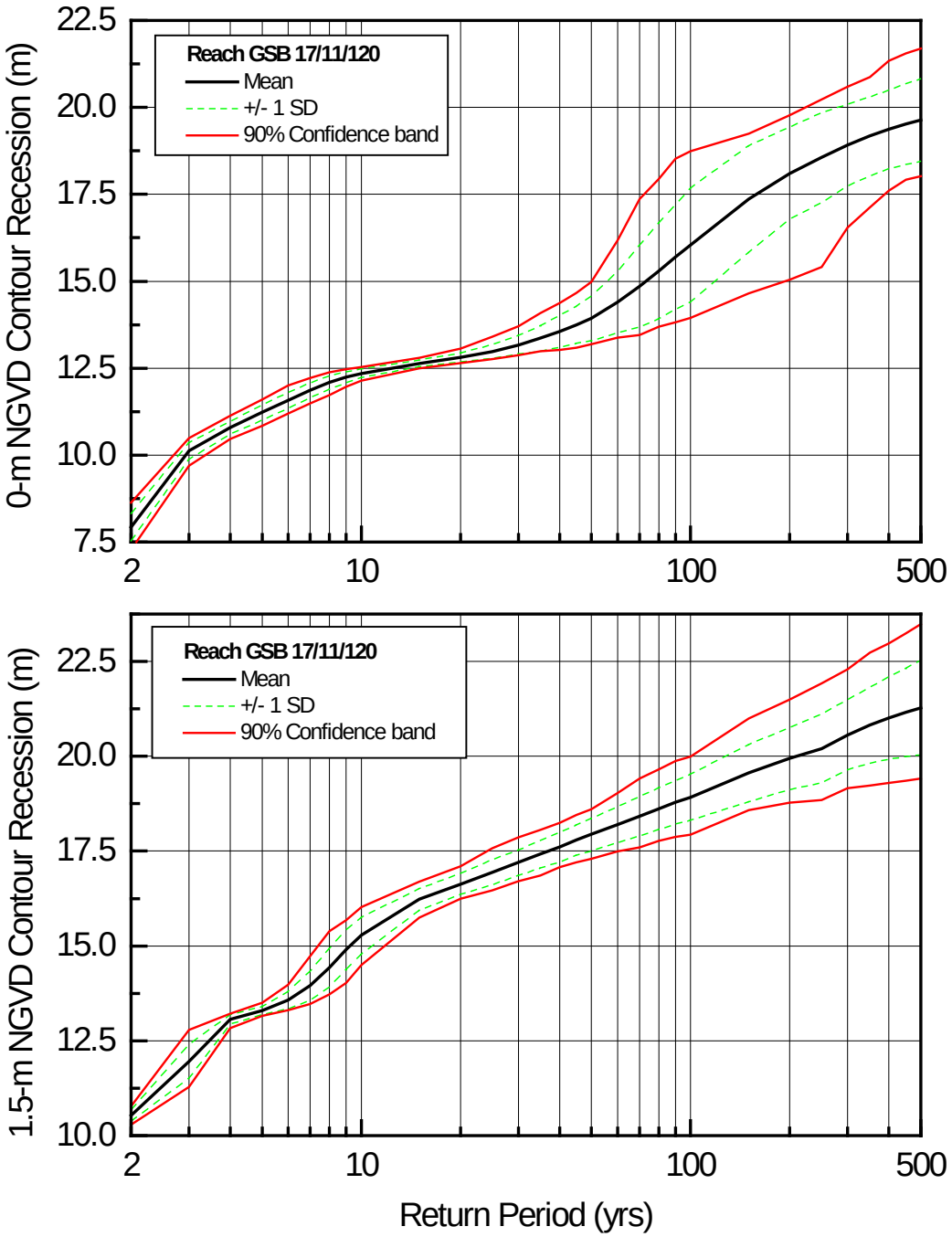

Reach GSB 17/11/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3.5-m NGVD)
0
10
20
30
40
2
10
100
500
Reach GSB 17/11/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
2
10
100
500
Return Period (yrs)

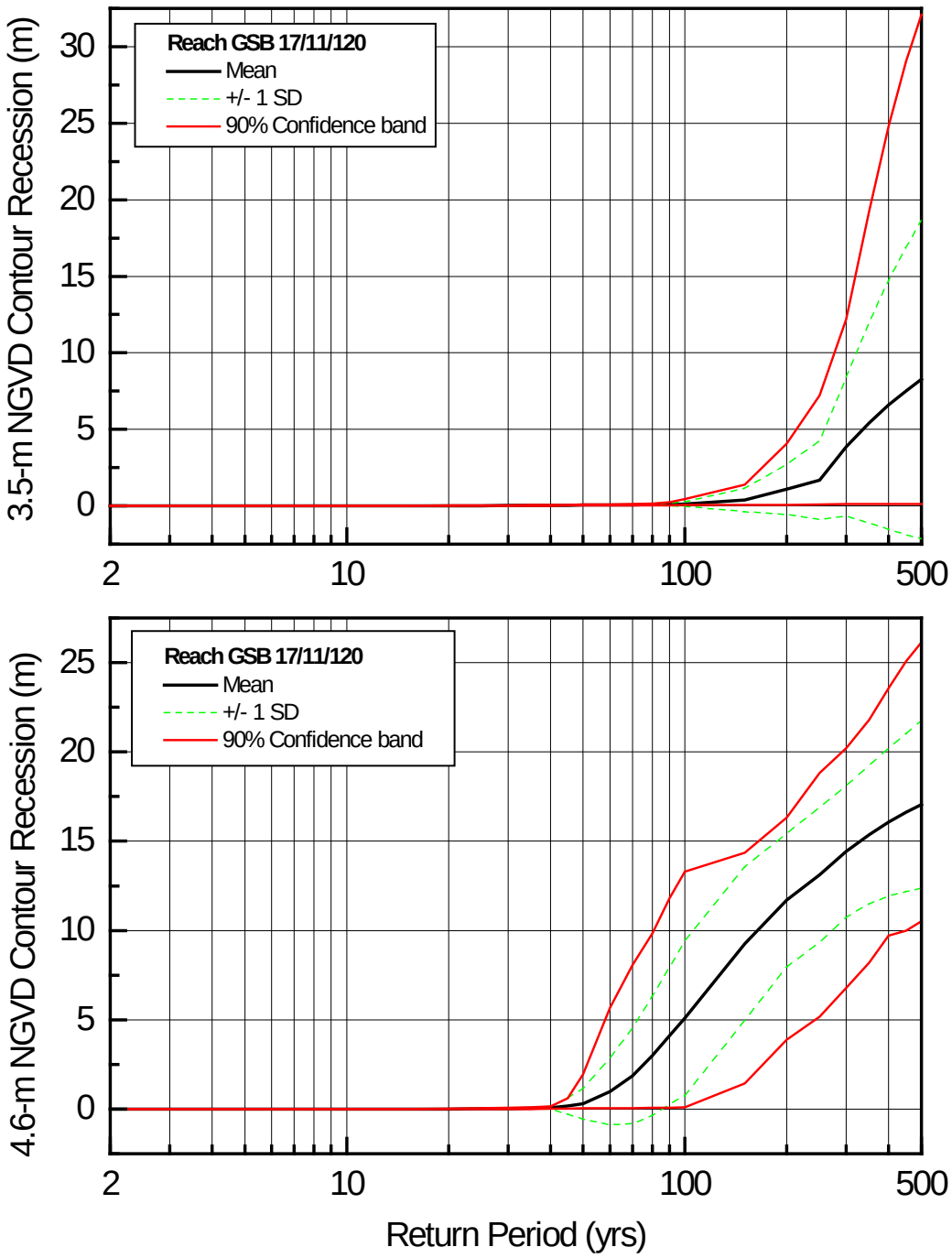

Reach GSB 17/11/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
30
40
2
10
100
500
Reach GSB 17/11/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
4
5
6
7
8
2
10
100
500
Return Period (yrs)

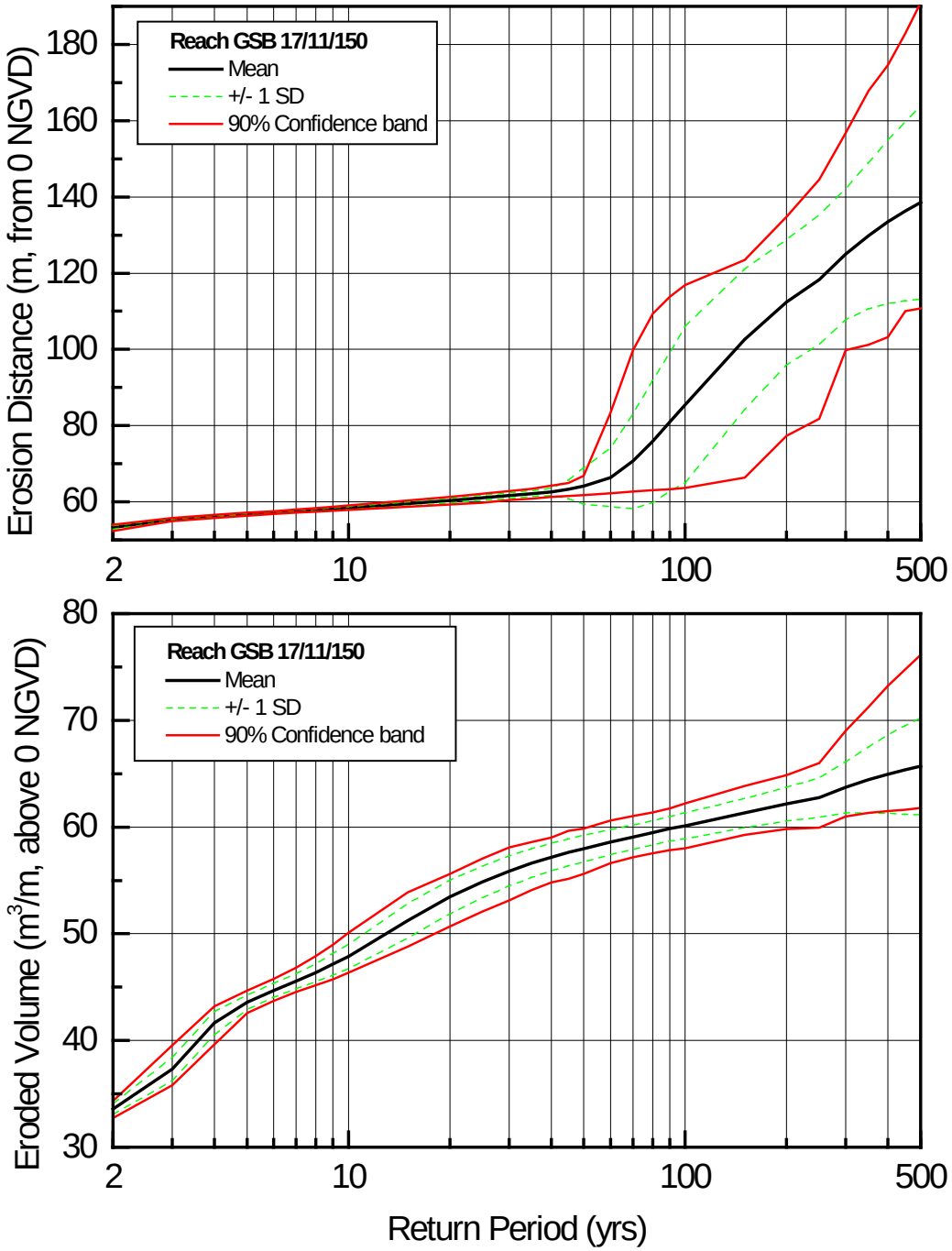

Reach GSB 17/11/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach GSB 17/11/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

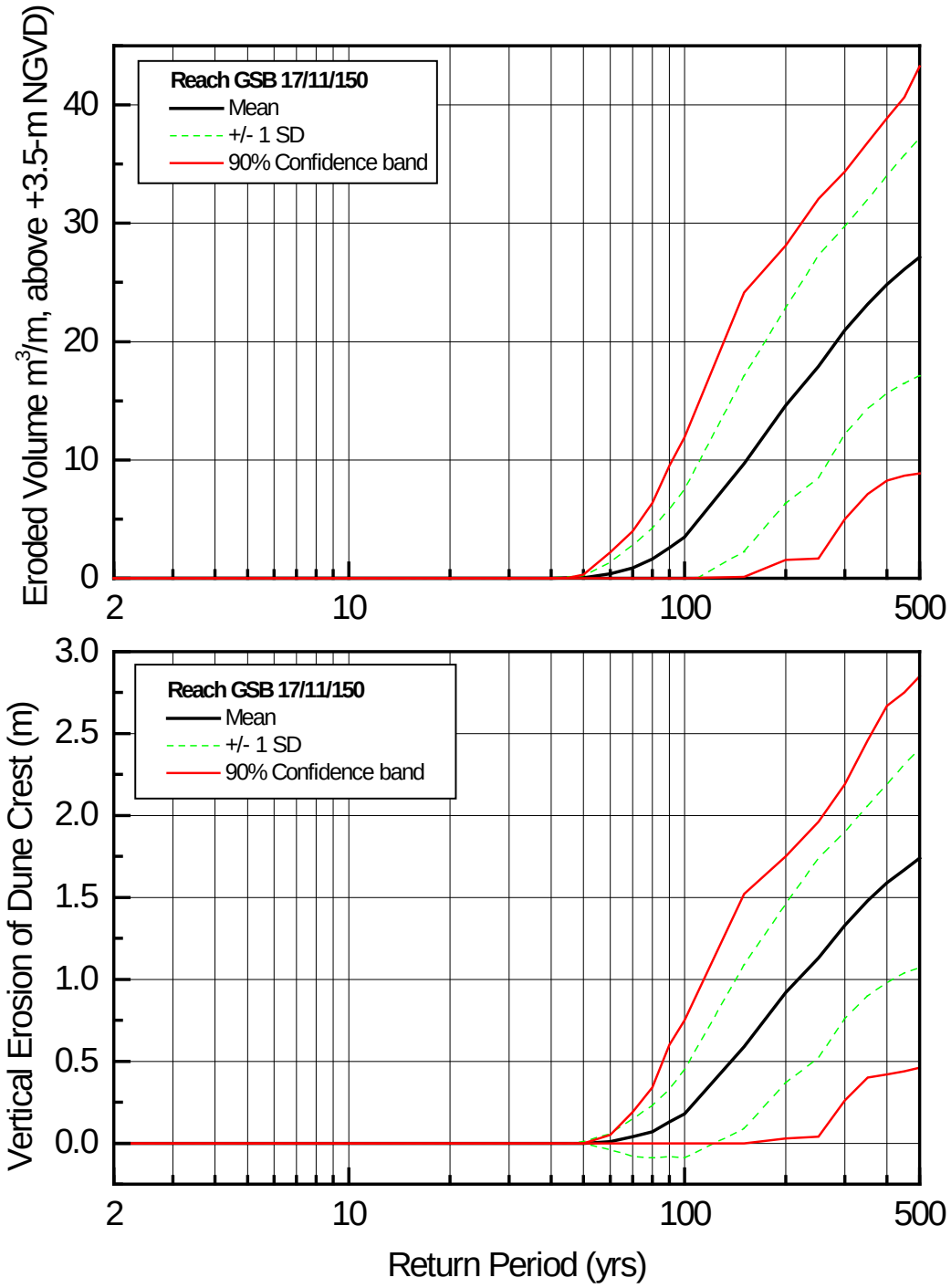

Max. Wave Setup Magnitude (m, above SWL)
1.50
1.25
1.00
0.75
Reach GSB 17/11/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach GSB 17/11/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

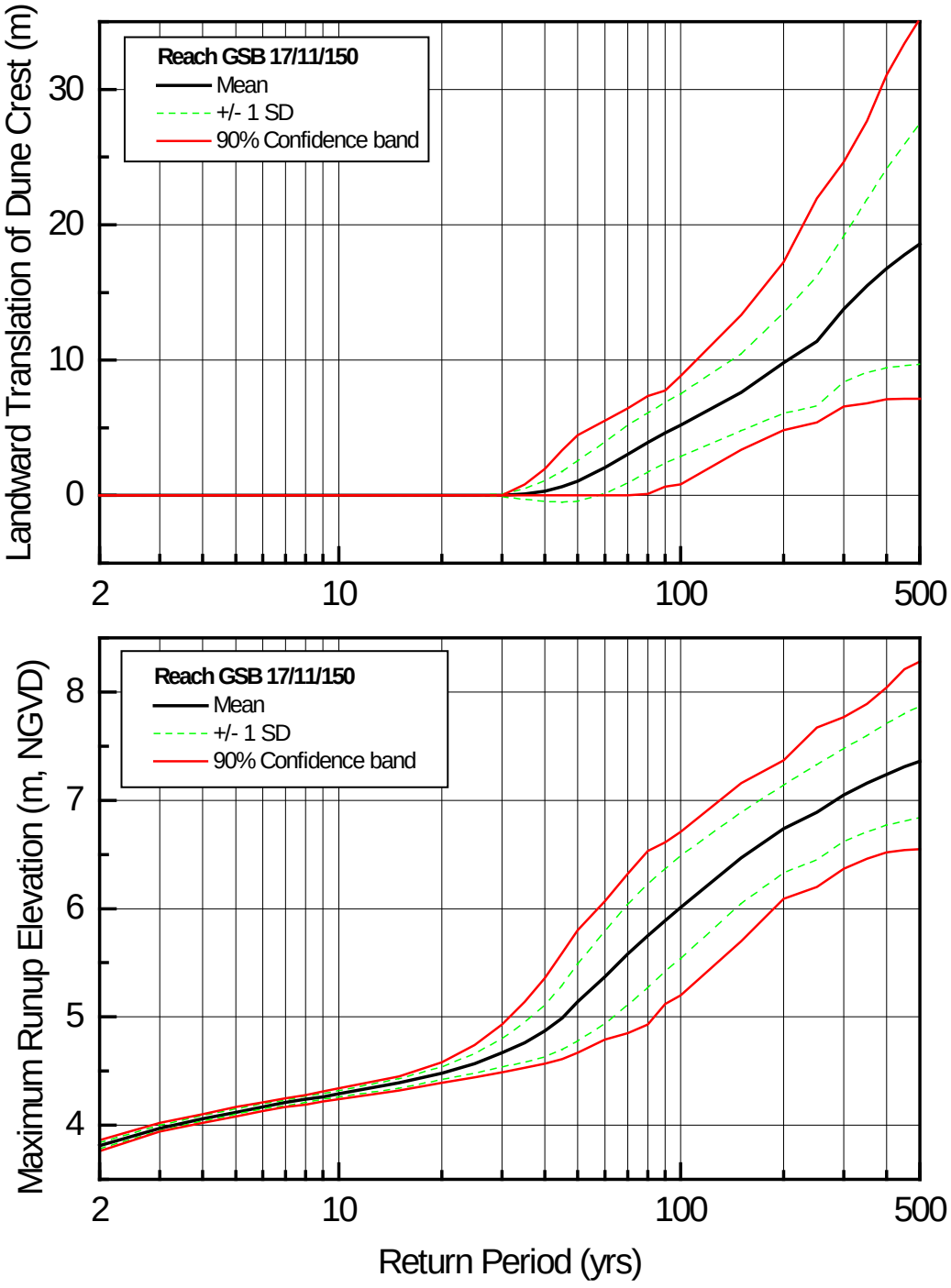

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach GSB 17/11/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
500
400
300
200
100
Reach GSB 17/11/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

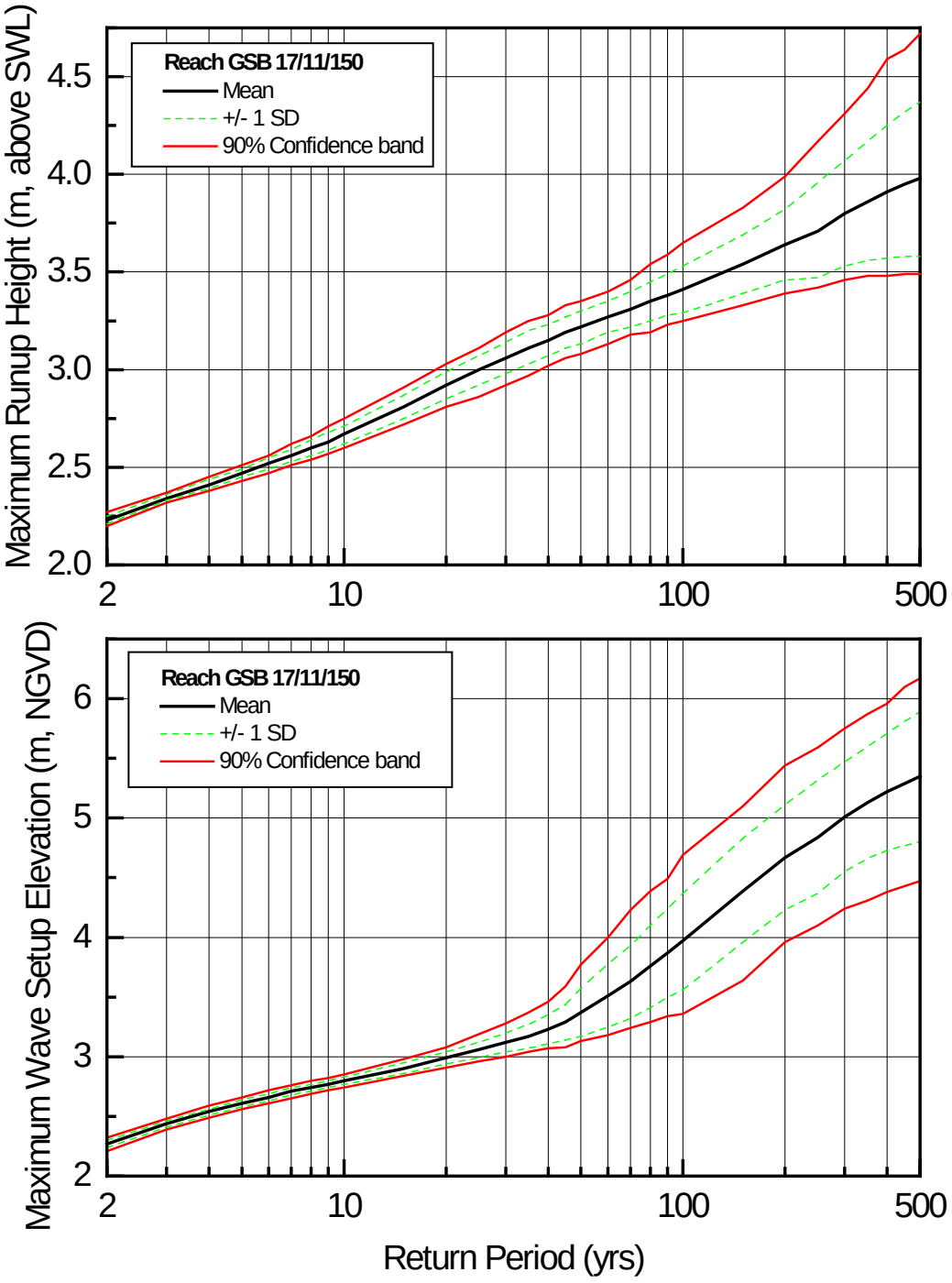

Reach GSB 17/11/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
22.5
20.0
17.5
15.0
12.5
10.0
7.5
2
10
100
500
Reach GSB 17/11/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
22.5
20.0
17.5
15.0
12.5
10.0
2
10
100
500
Return Period (yrs)

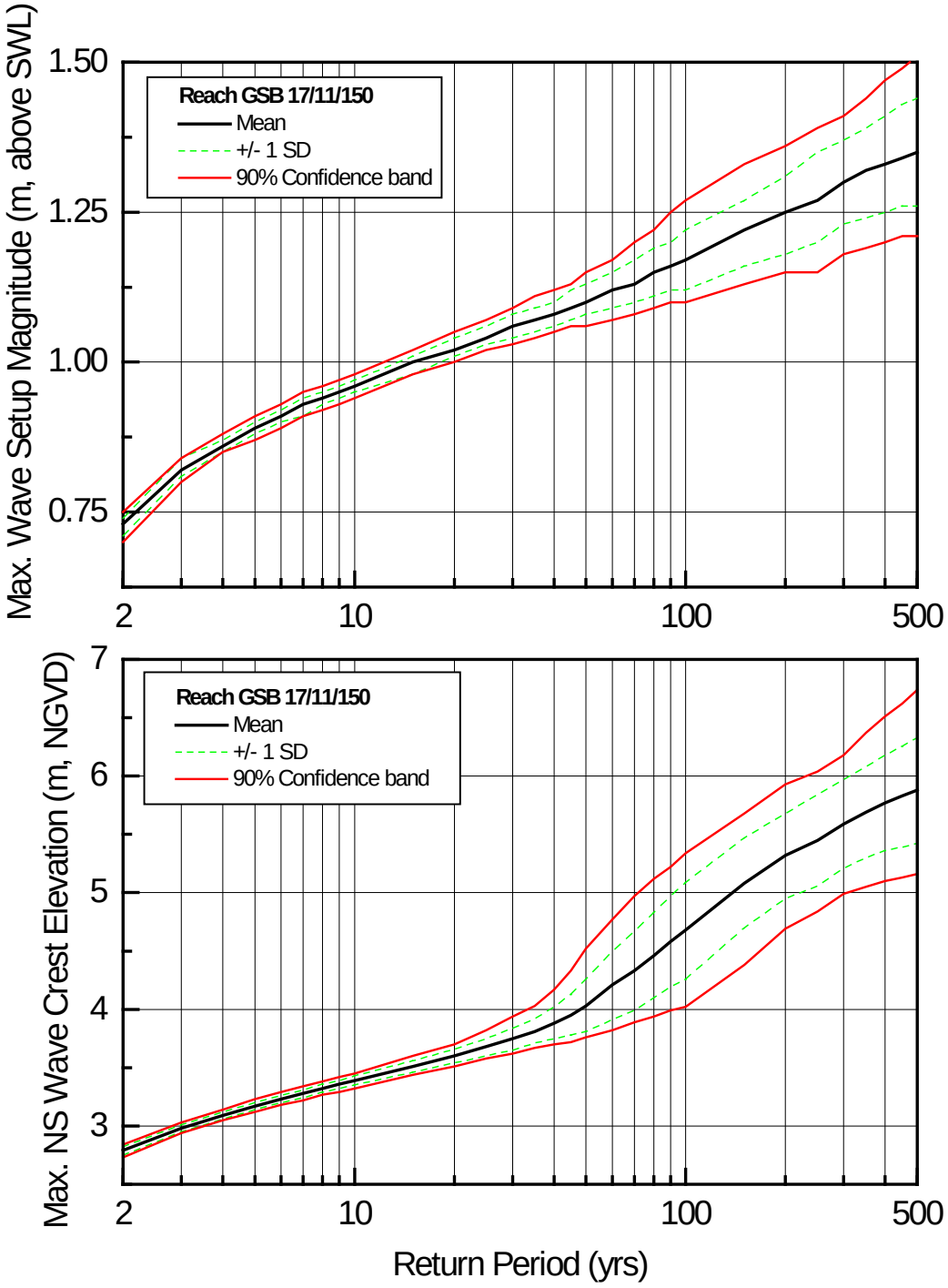

Reach GSB 17/11/120
Mean
+/- 1 SD
90% Confidence band
3.5-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Reach GSB 17/11/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

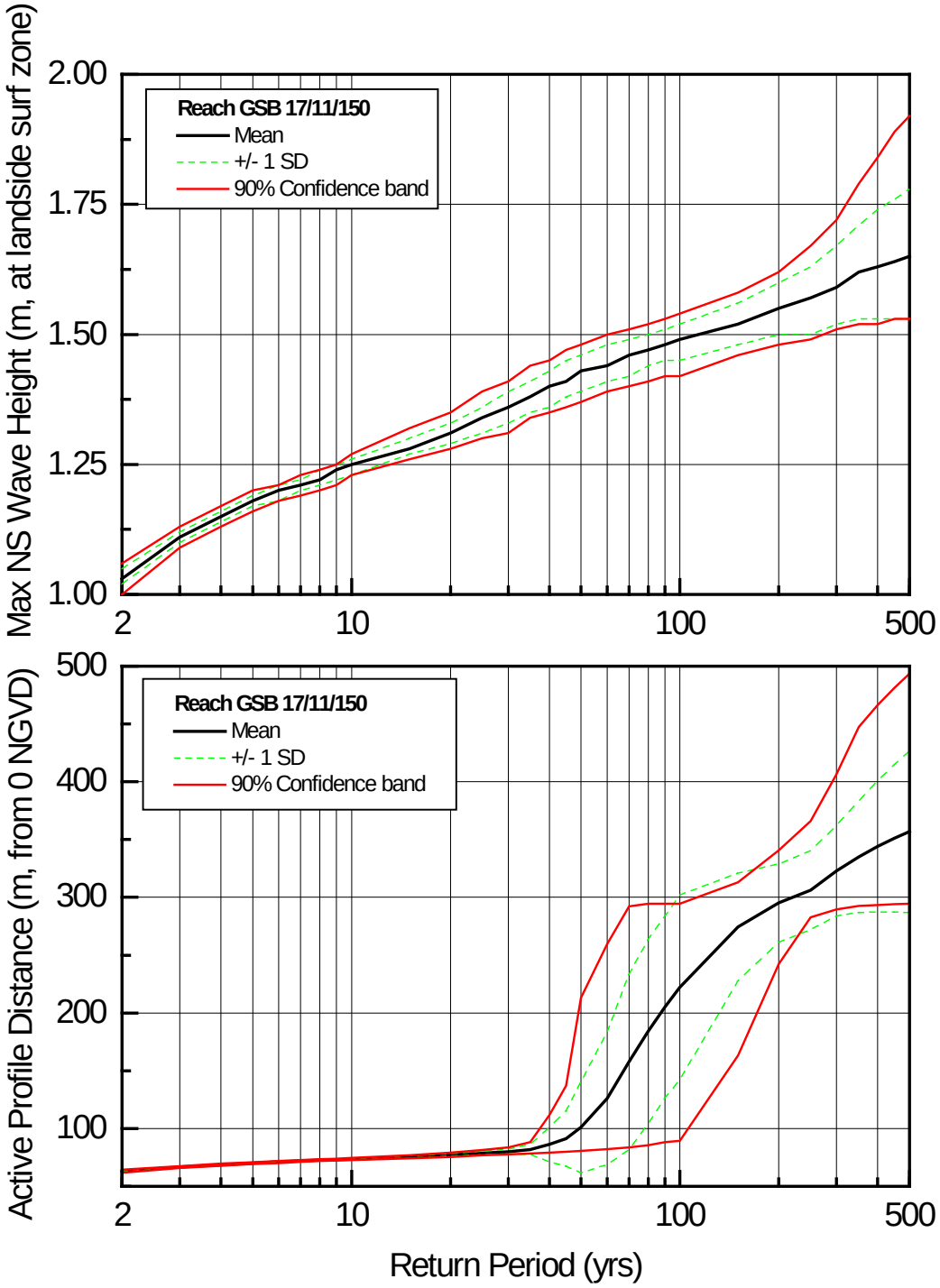

Reach GSB 17/11/150
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
160
140
120
100
80
60
2
10
100
500
Reach GSB 17/11/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

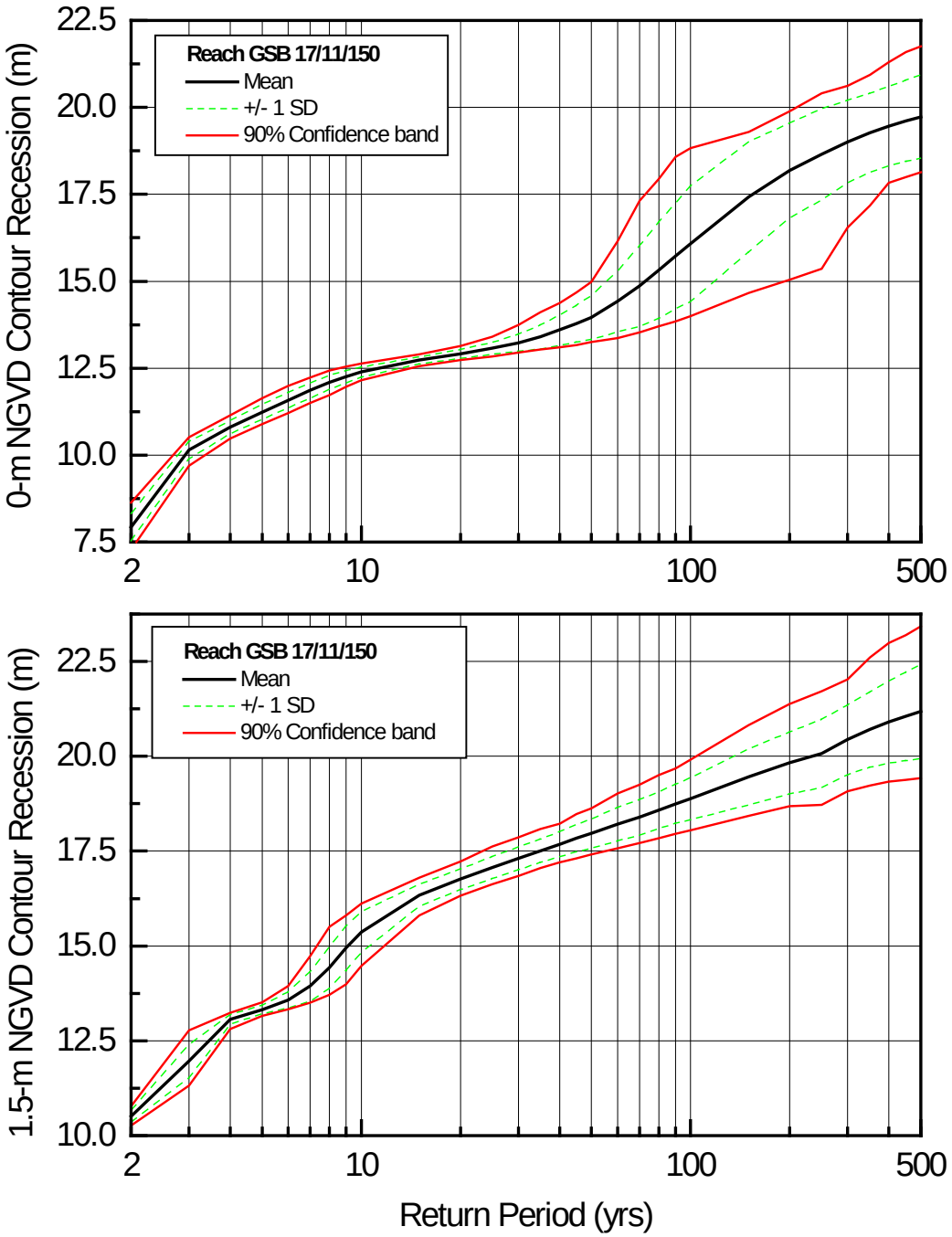

Reach GSB 17/11/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3.5-m NGVD)
0
10
20
30
40
2
10
100
500
Reach GSB 17/11/150
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
2
10
100
500
Return Period (yrs)

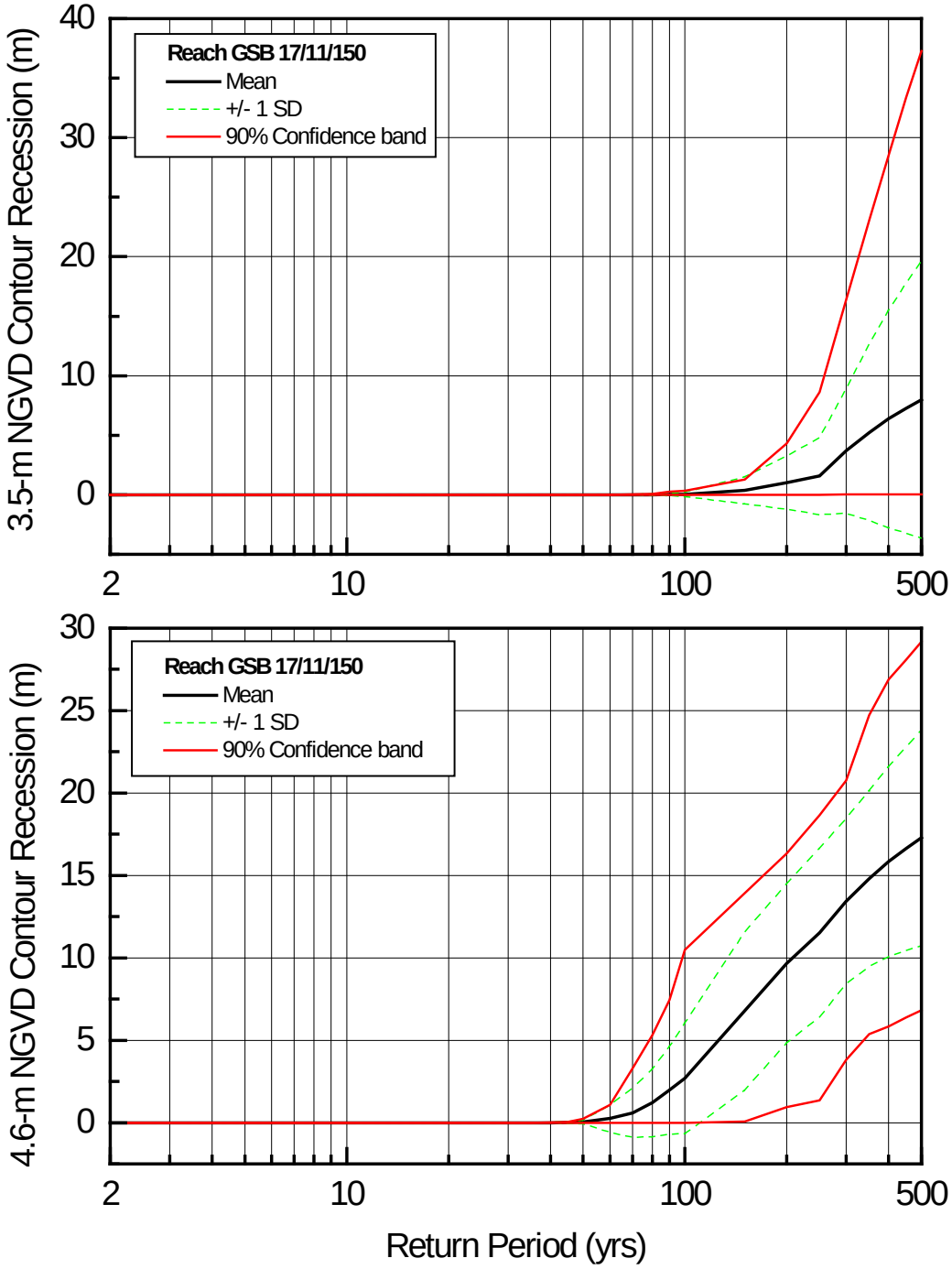

Reach GSB 17/11/150
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
30
2
10
100
500
Reach GSB 17/11/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
4
5
6
7
8
2
10
100
500
Return Period (yrs)

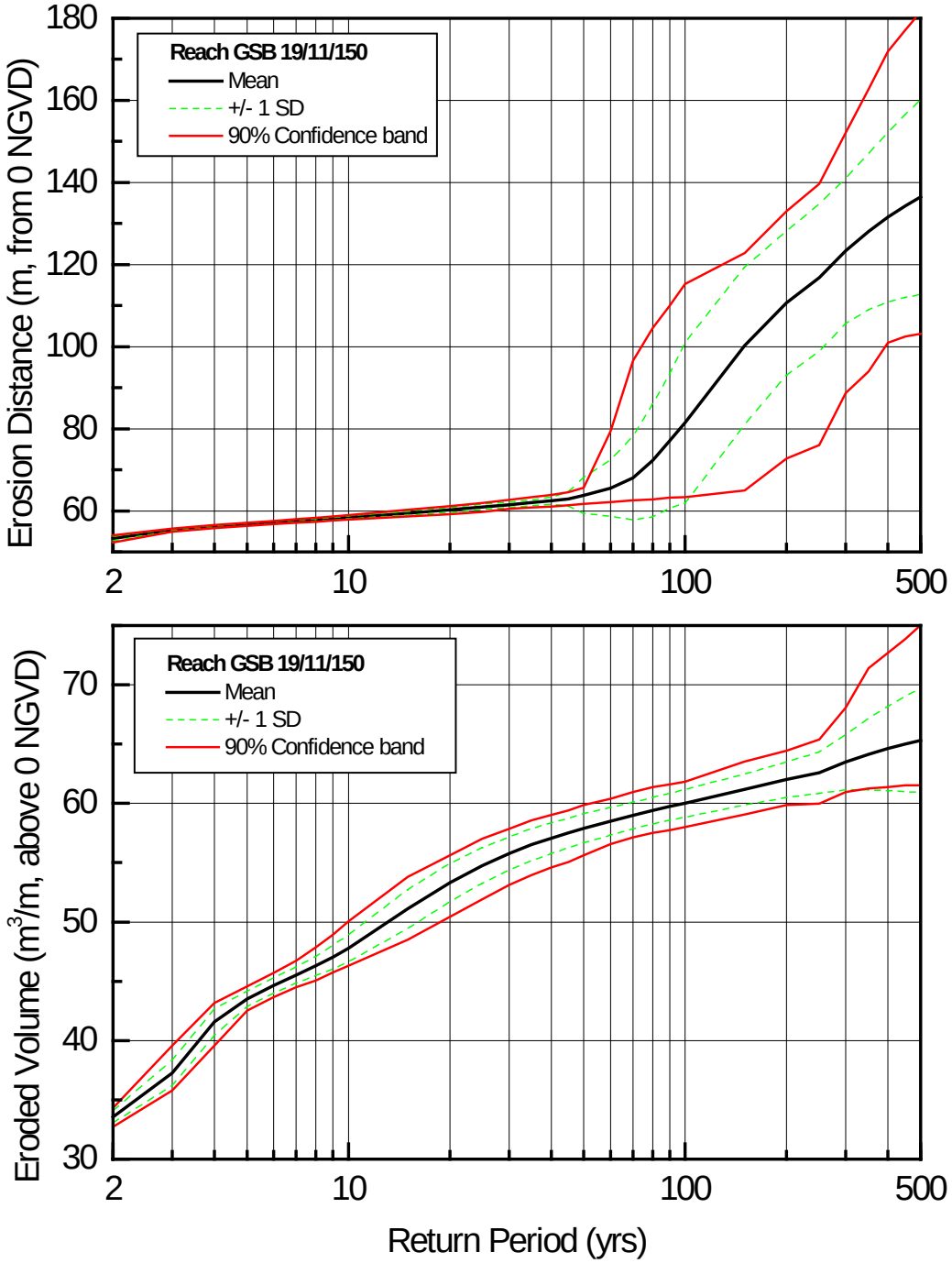

Reach GSB 17/11/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach GSB 17/11/150
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

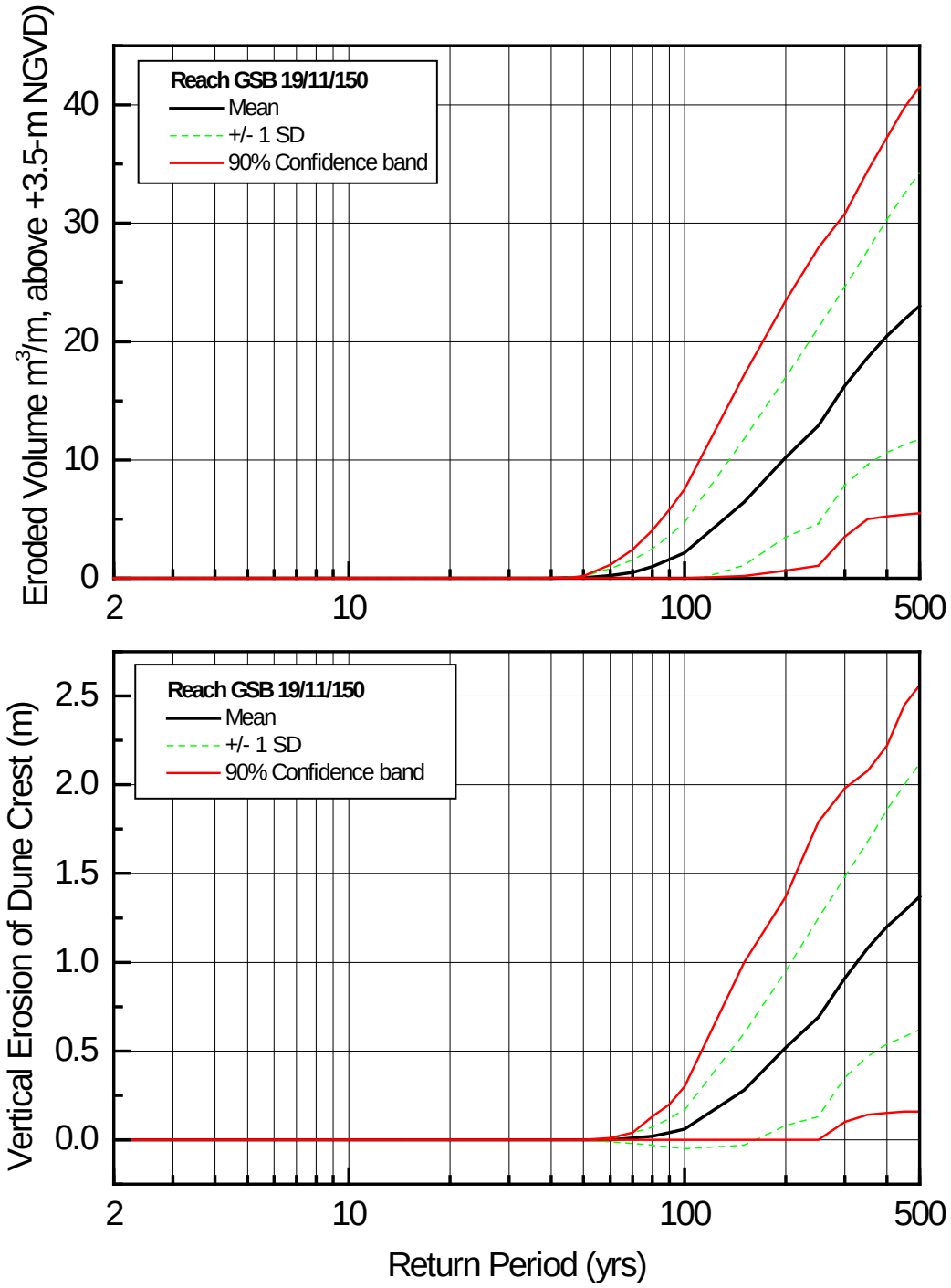

Max. Wave Setup Magnitude (m, above SWL)
1.50
1.25
1.00
0.75
Reach GSB 17/11/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach GSB 17/11/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

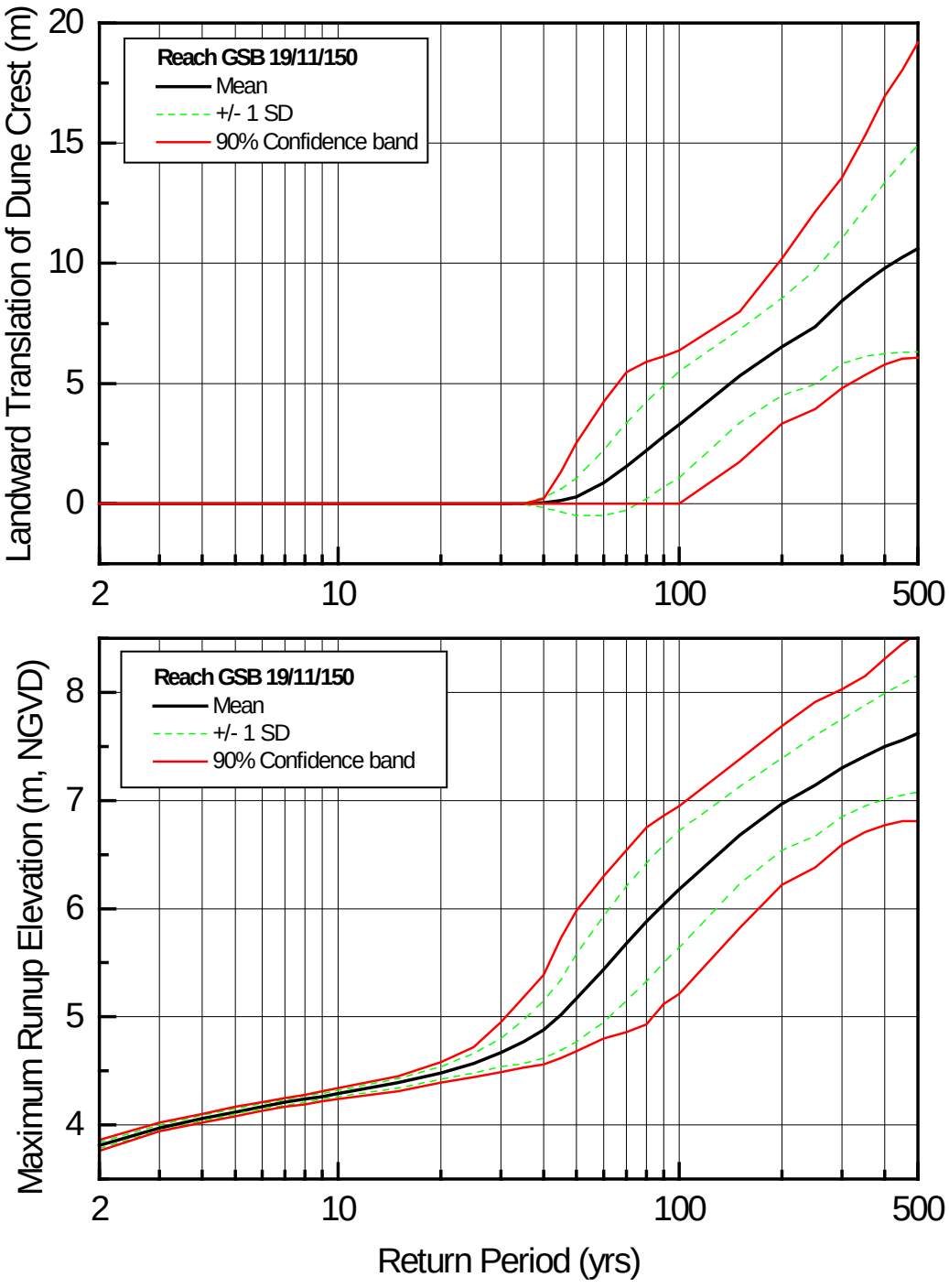

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach GSB 17/11/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
500
400
300
200
100
Reach GSB 17/11/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

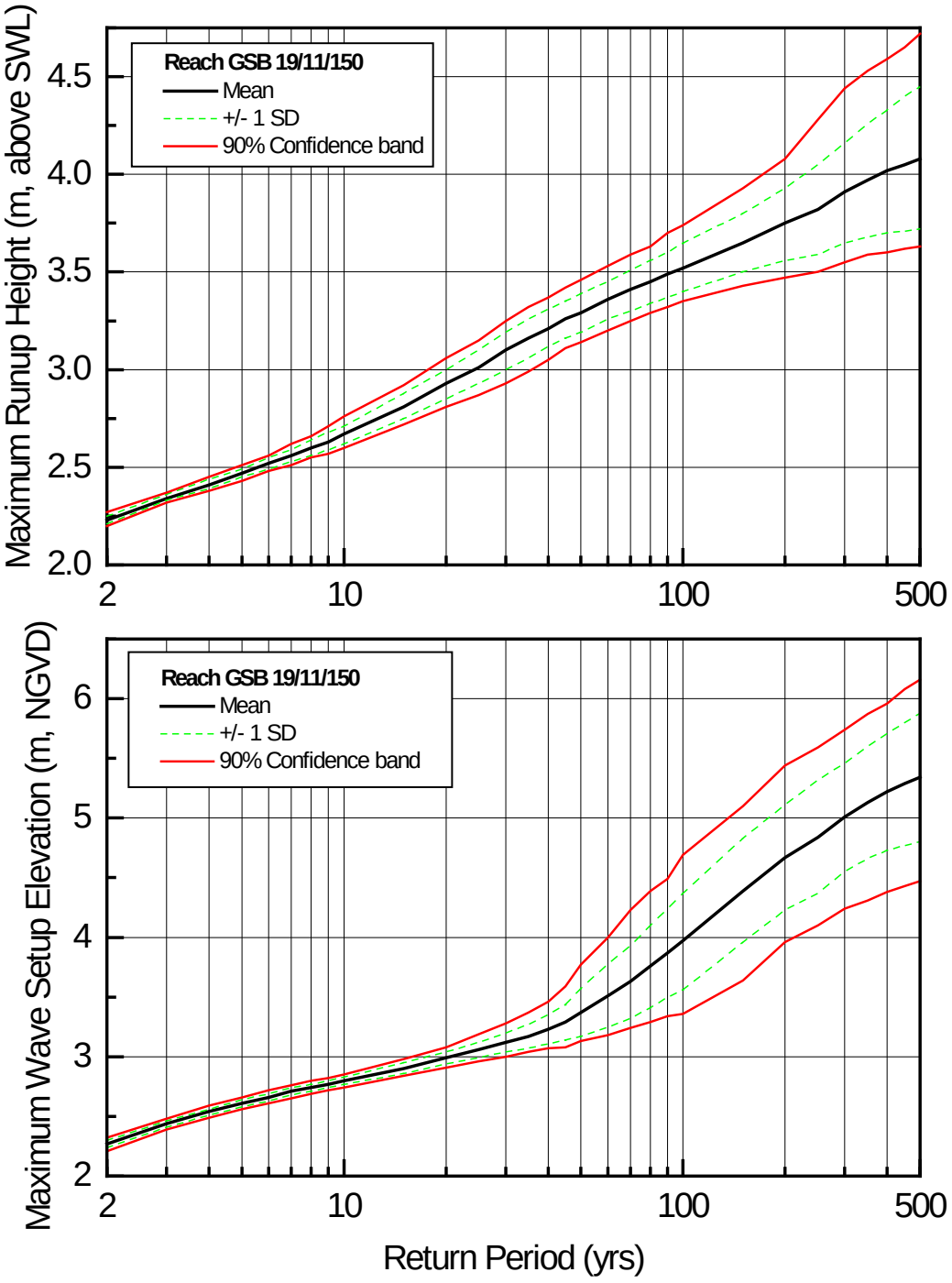

Reach GSB 17/11/150
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
22.5
20.0
17.5
15.0
12.5
10.0
7.5
2
10
100
500
Reach GSB 17/11/150
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
22.5
20.0
17.5
15.0
12.5
10.0
2
10
100
500
Return Period (yrs)

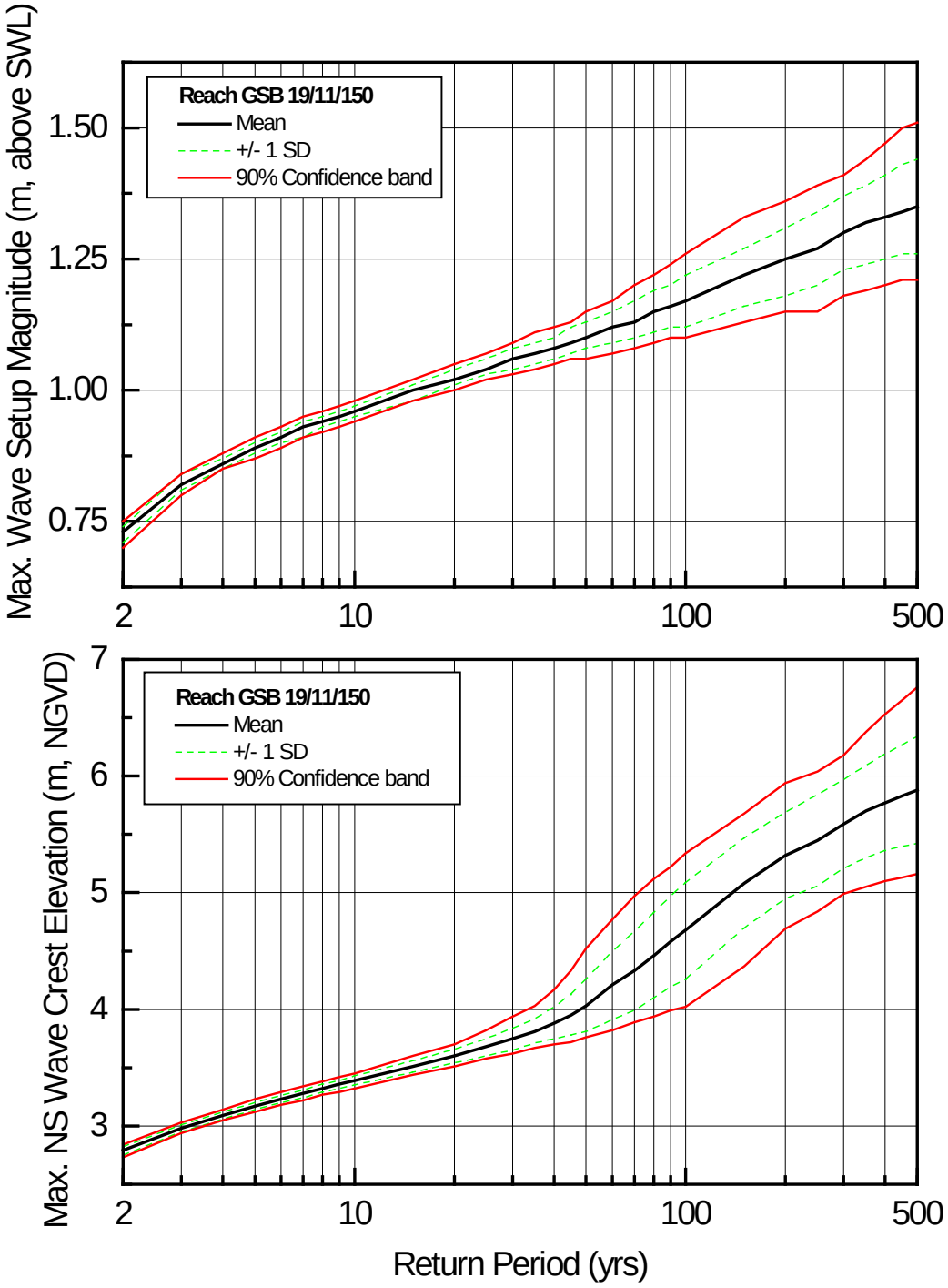

Reach GSB 17/11/150
Mean
+/- 1 SD
90% Confidence band
3.5-m NGVD Contour Recession (m)
40
30
20
10
0
2
10
100
500
Reach GSB 17/11/150
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

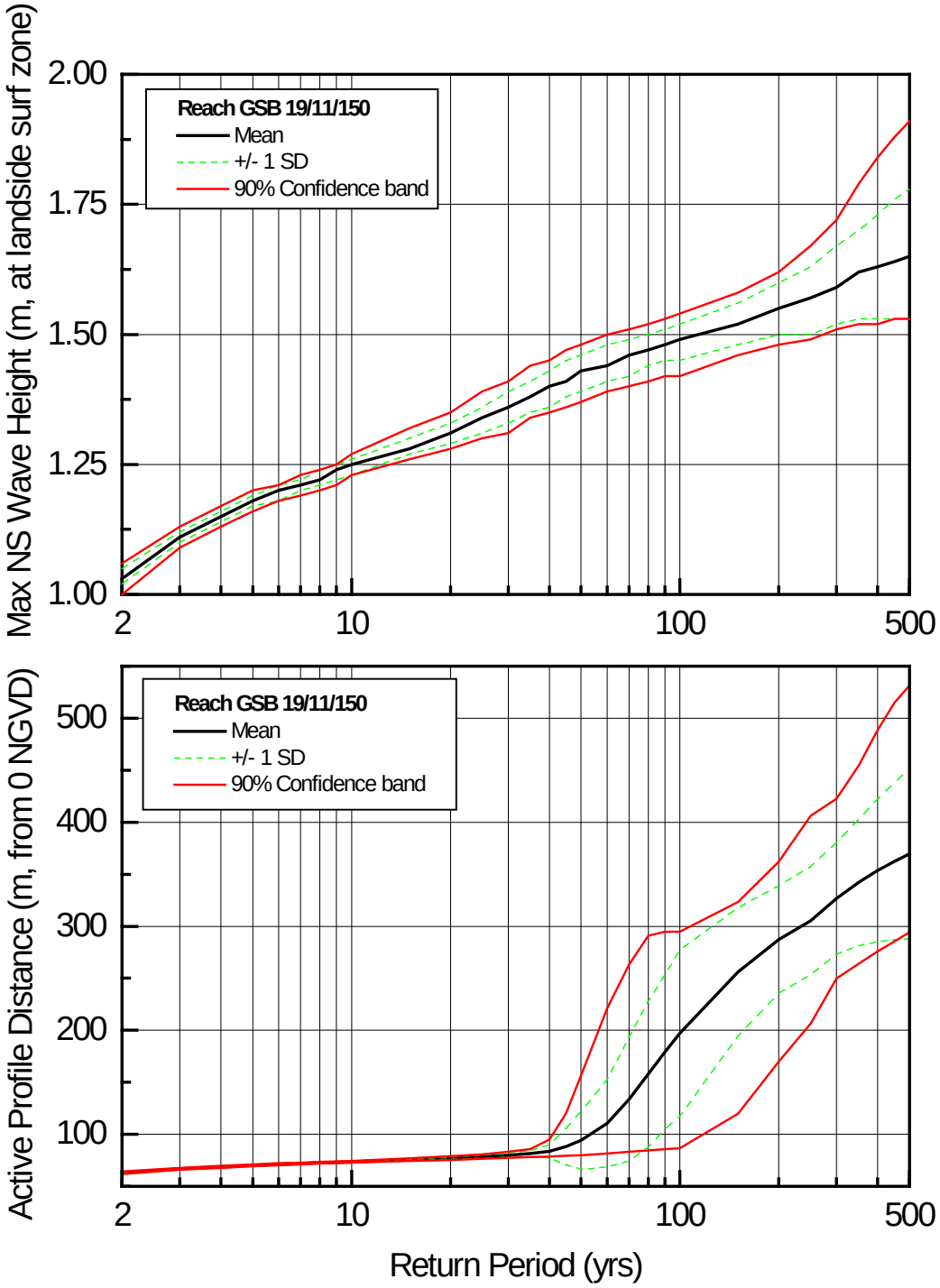

Reach GSB 19/11/150
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
160
140
120
100
80
60
2
10
100
500
Reach GSB 19/11/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
70
60
50
40
30
2
10
100
500
Return Period (yrs)

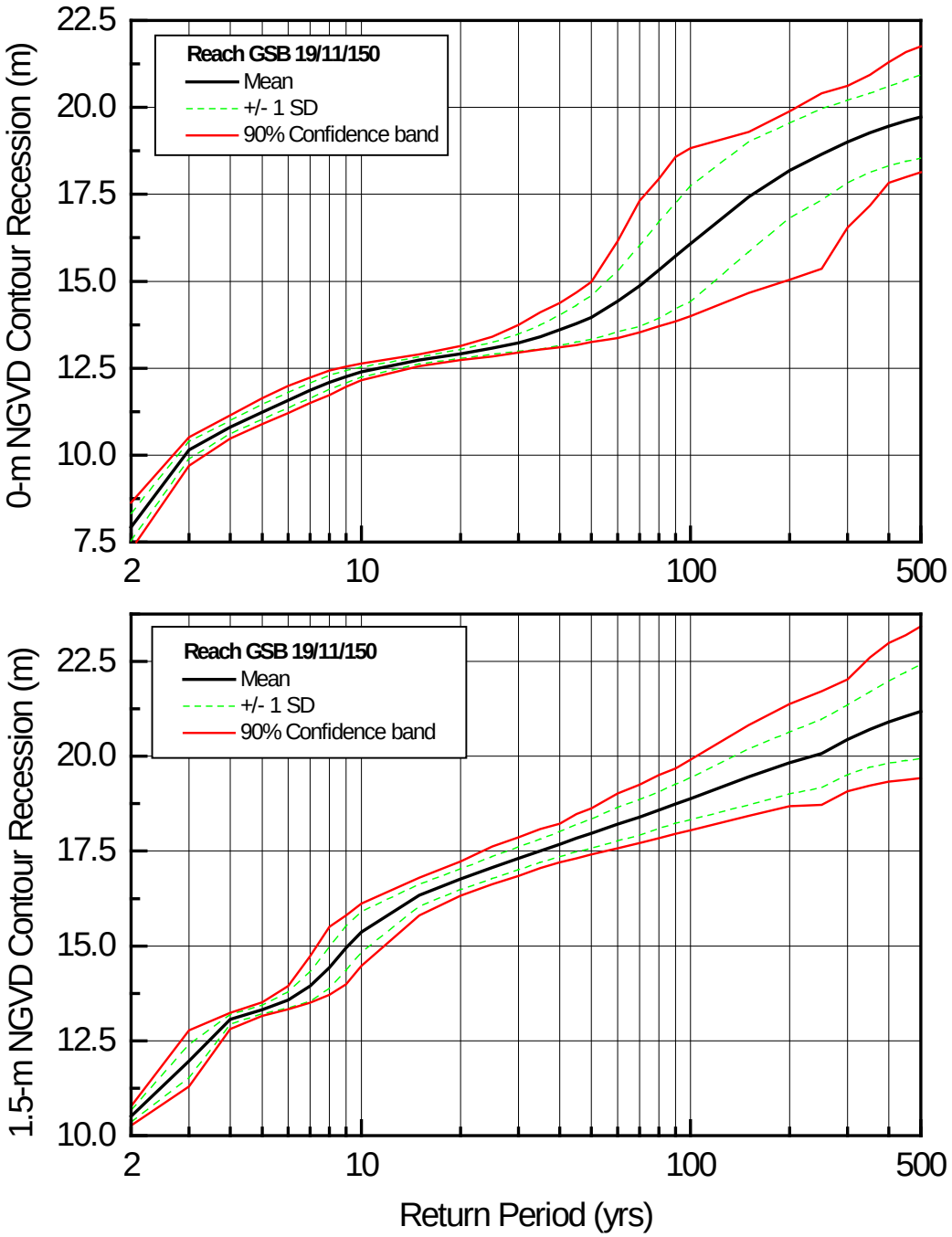

Reach GSB 19/11/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3.5-m NGVD)
0
10
20
30
40
2
10
100
500
Reach GSB 19/11/150
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2.5
2
10
100
500
Return Period (yrs)

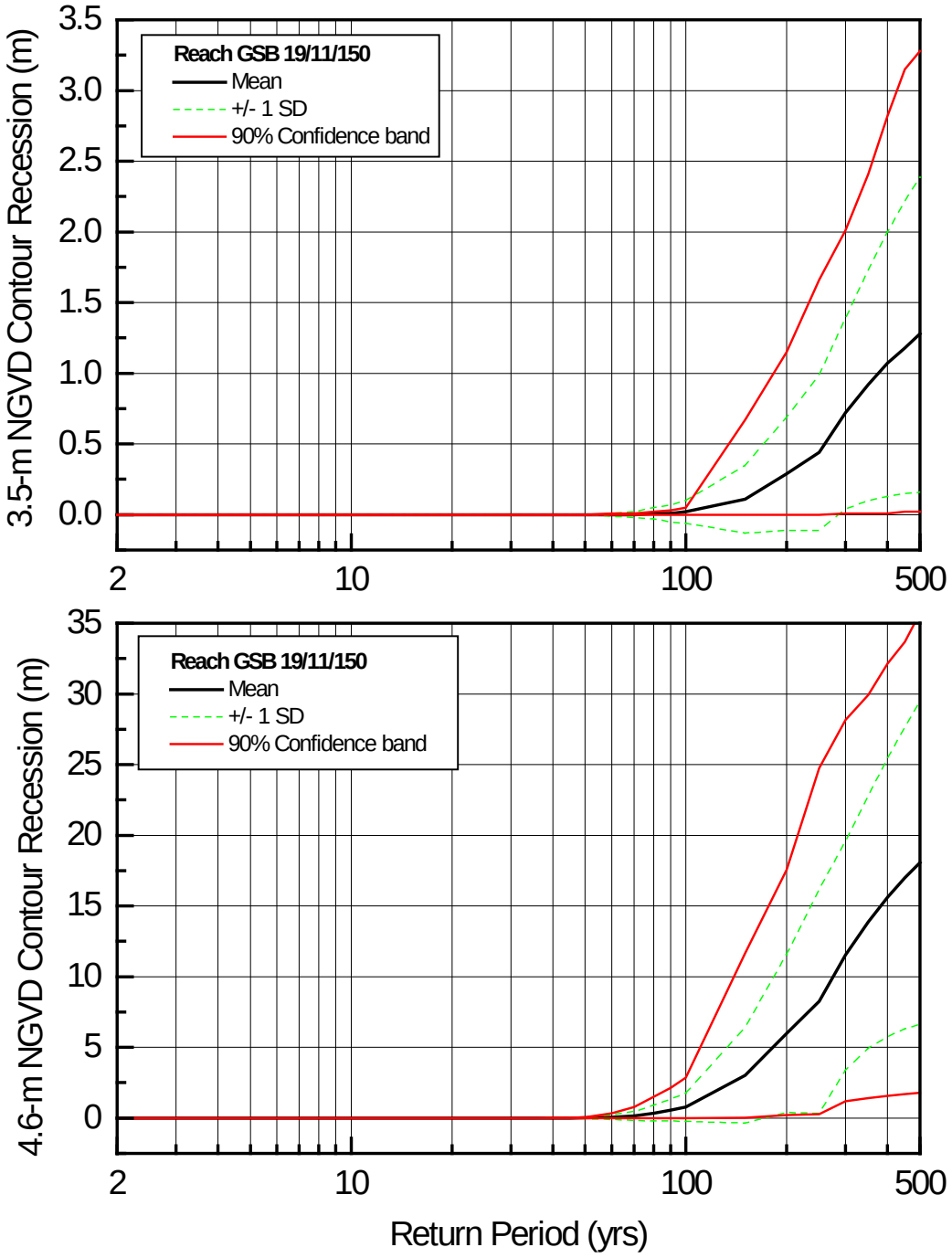

Reach GSB 19/11/150
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
20
15
10
5
0
2
10
100
500
Reach GSB 19/11/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
2
10
100
500
Return Period (yrs)

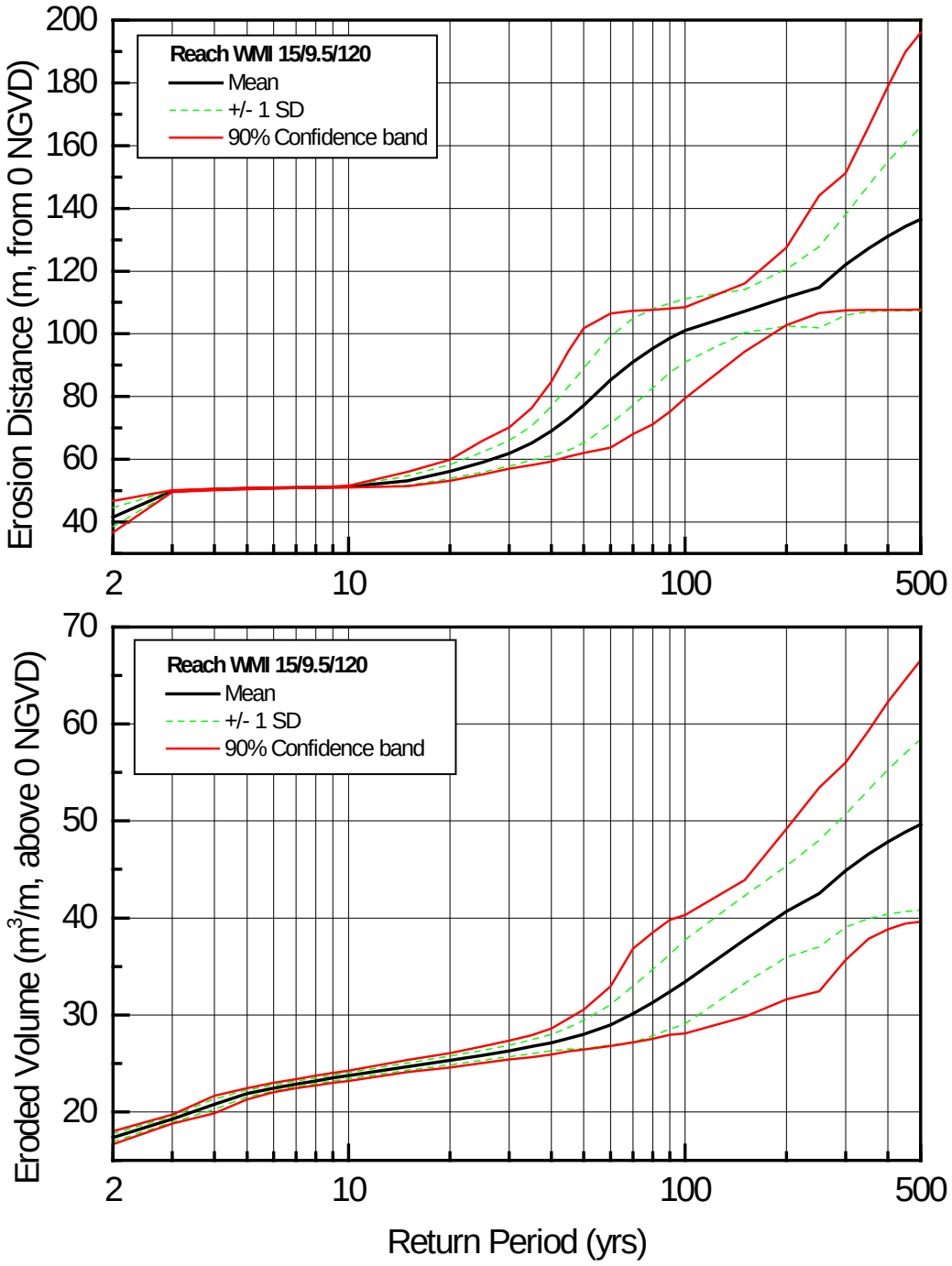

Reach GSB 19/11/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach GSB 19/11/150
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6
5
4
3
2
2
10
100
500
Return Period (yrs)

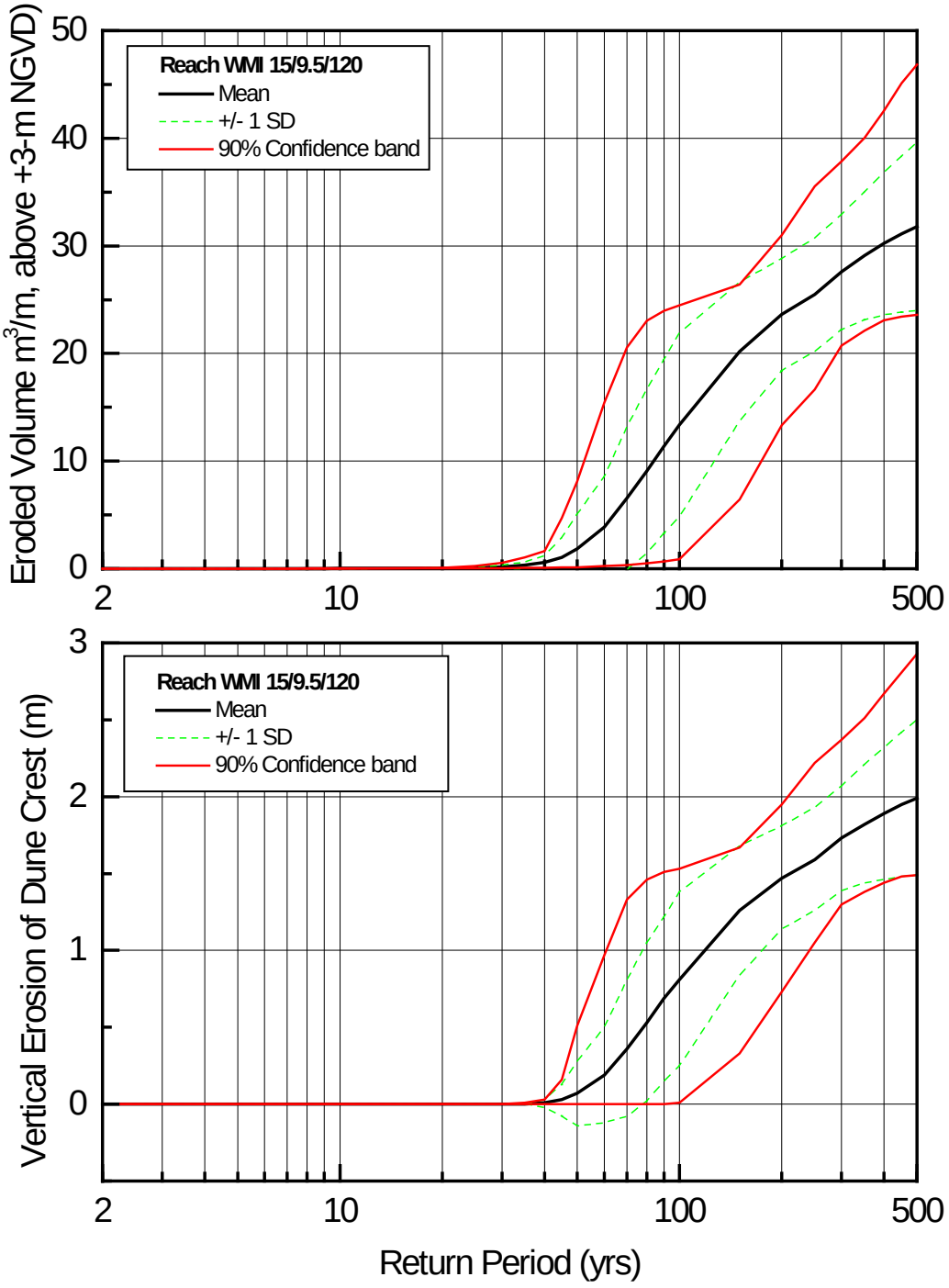

Reach GSB 19/11/150
Mean
+/- 1 SD
90% Confidence band
Max. Wave Setup Magnitude (m, above SWL)
1.50
1.25
1.00
0.75
2
10
100
500
Reach GSB 19/11/150
Mean
+/- 1 SD
90% Confidence band
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
2
10
100
500
Return Period (yrs)

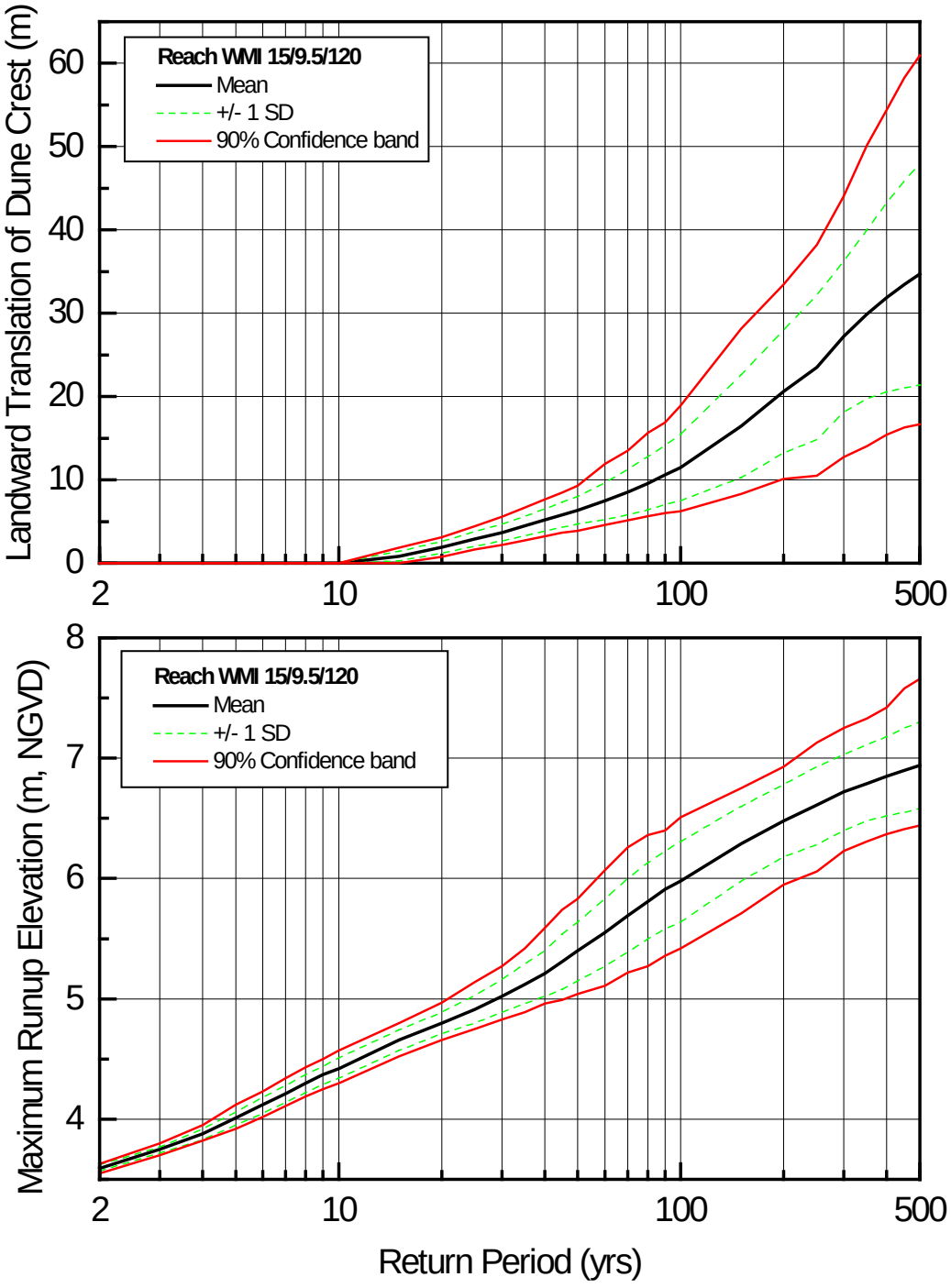

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach GSB 19/11/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
500
400
300
200
100
Reach GSB 19/11/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

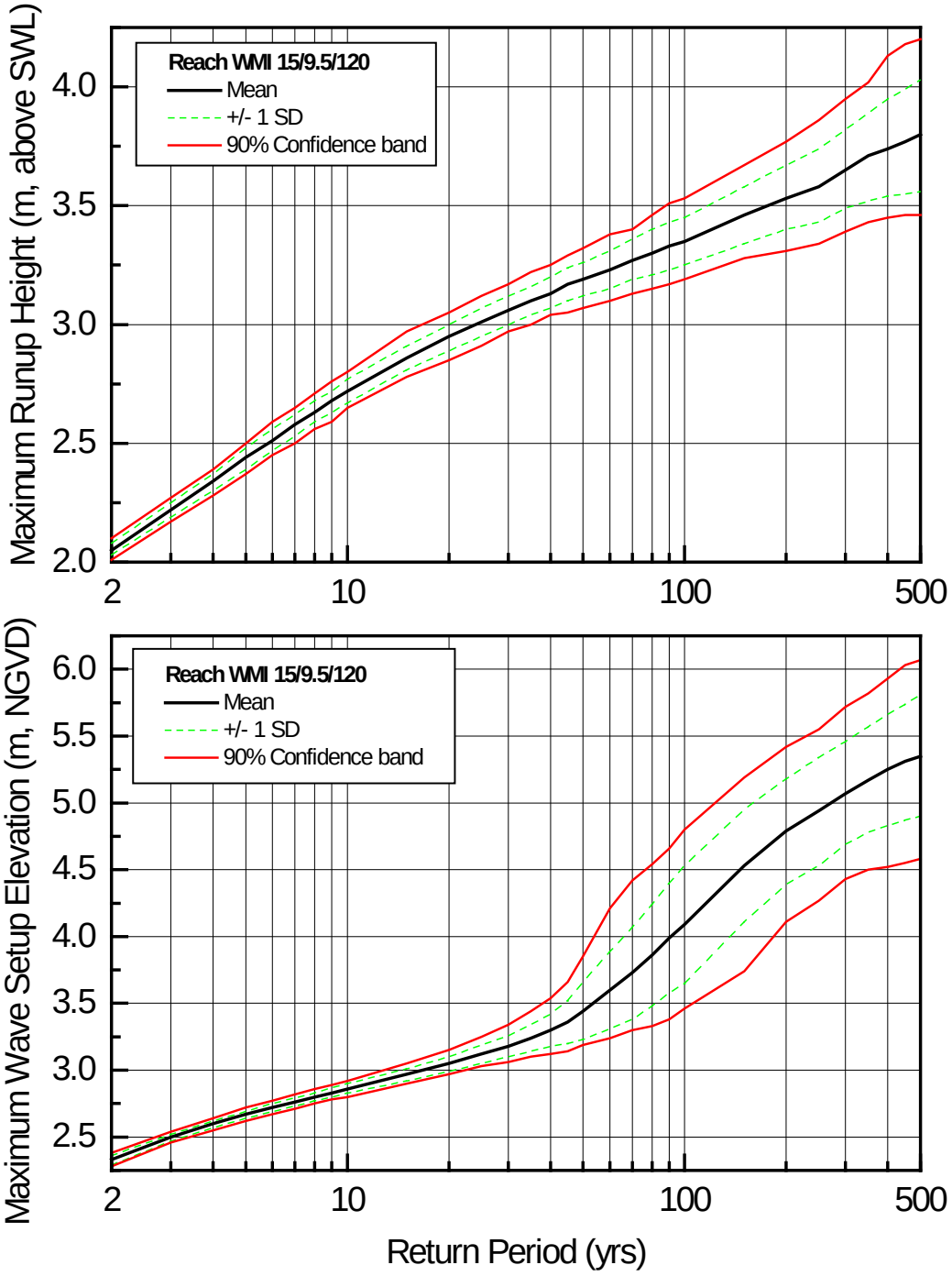

Reach GSB 19/11/150
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
22.5
20.0
17.5
15.0
12.5
10.0
7.5
2
10
100
500
Reach GSB 19/11/150
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
22.5
20.0
17.5
15.0
12.5
10.0
2
10
100
500
Return Period (yrs)

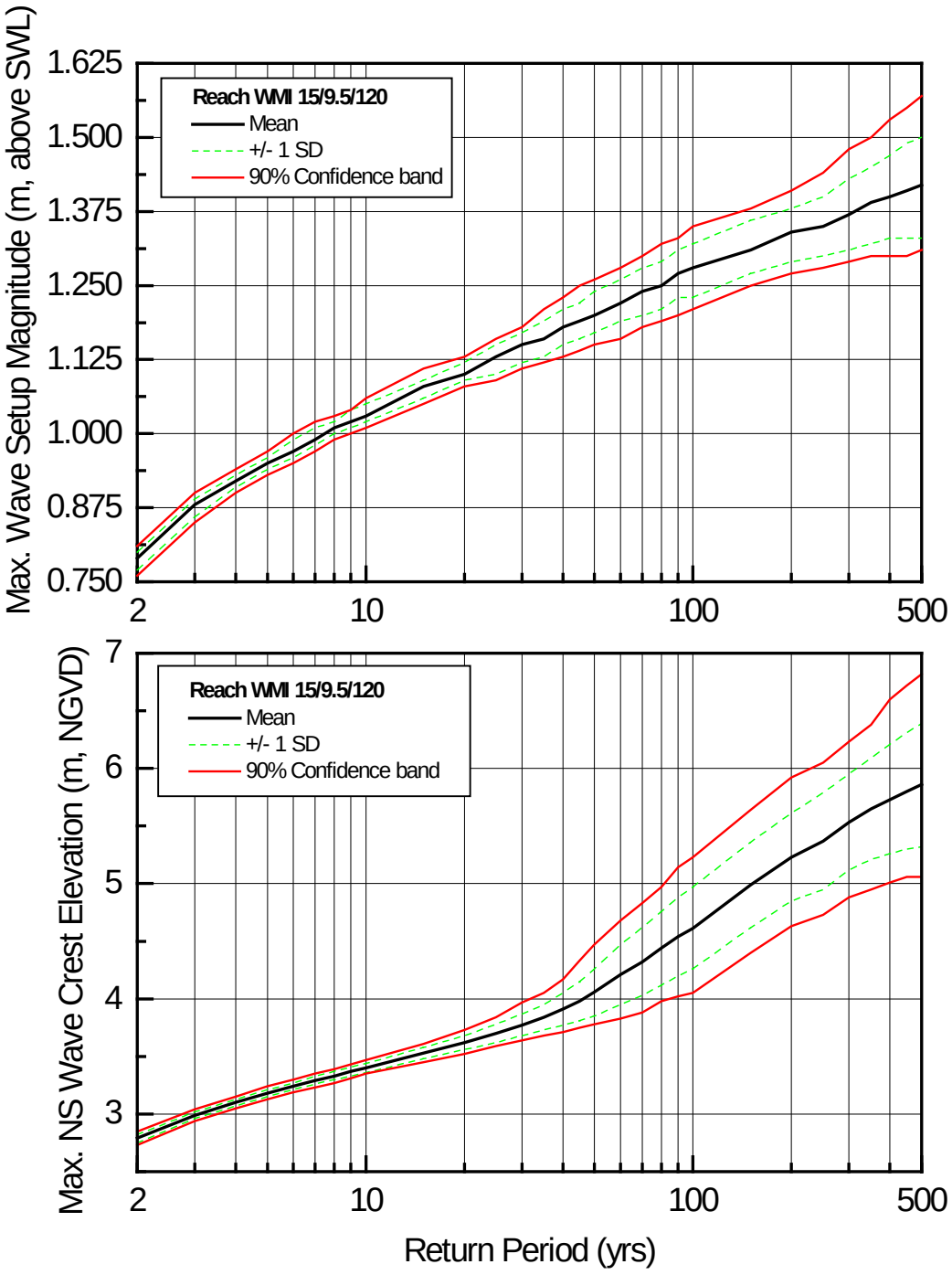

Reach GSB 19/11/150
Mean
+/- 1 SD
90% Confidence band
3.5-m NGVD Contour Recession (m)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach GSB 19/11/150
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
35
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

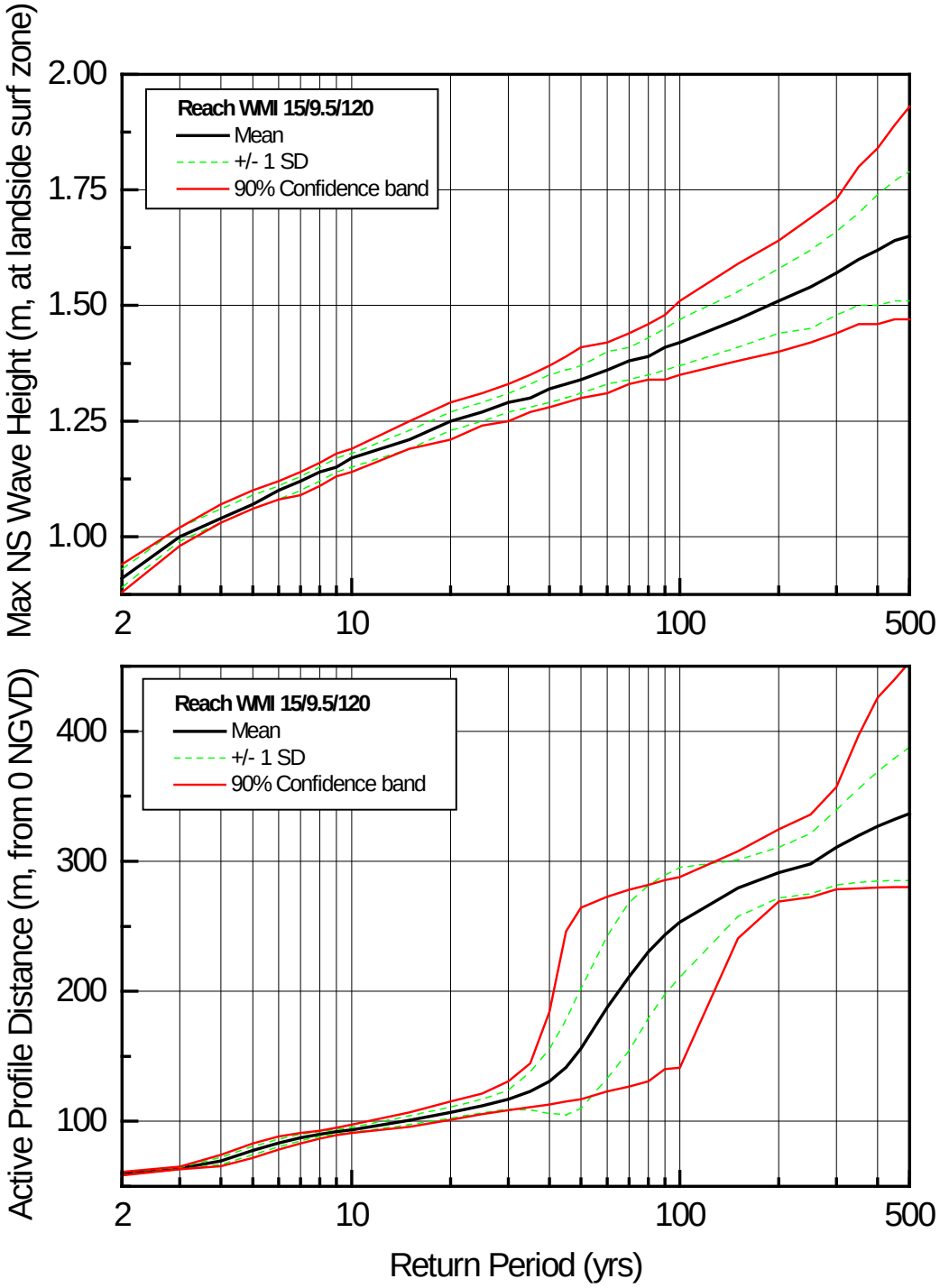

Reach WMI 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
200
180
160
140
120
100
80
60
40
2
10
100
500
Reach WMI 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
70
60
50
40
30
20
2
10
100
500
Return Period (yrs)

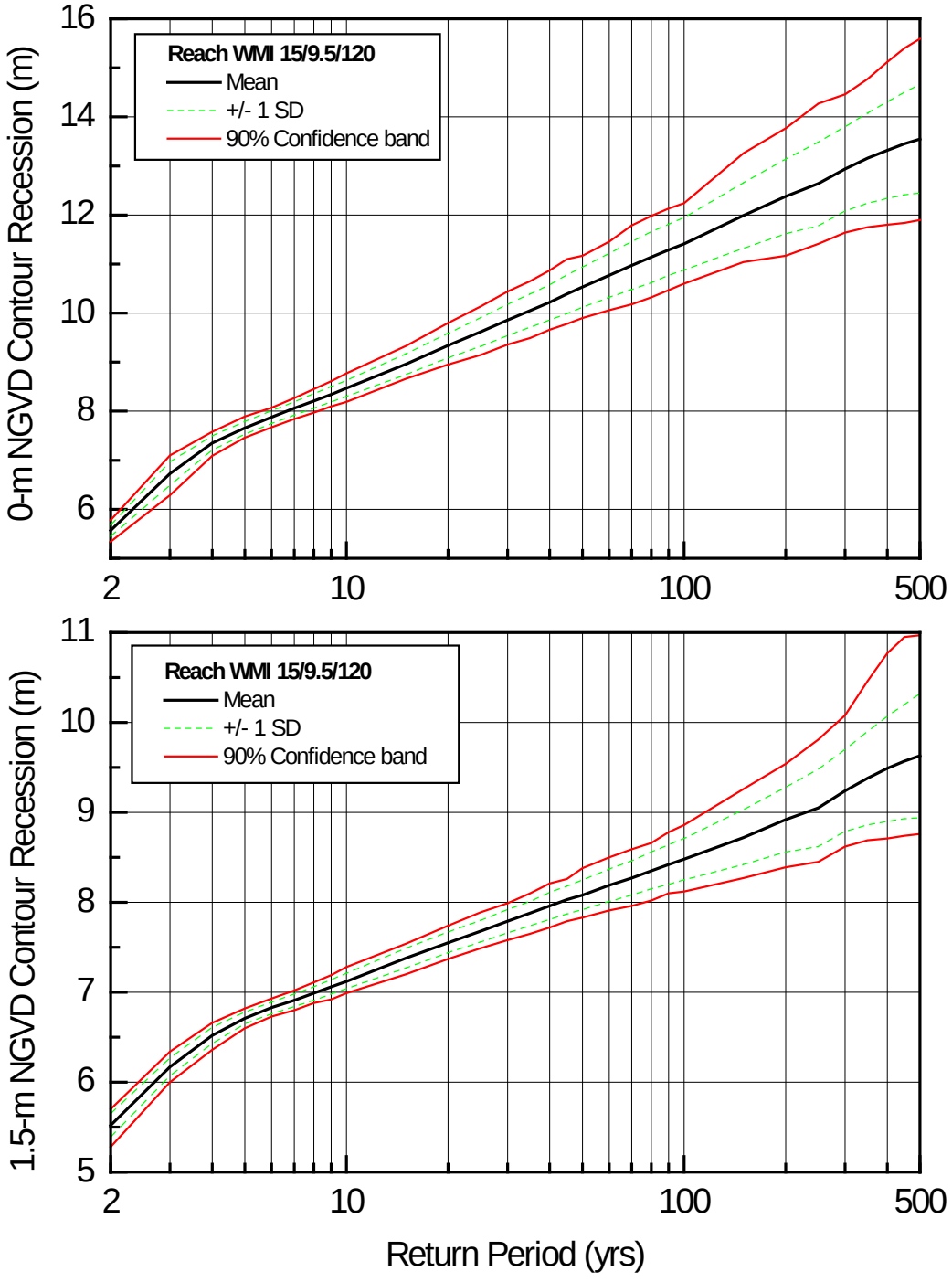

Reach WMI 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
50
2
10
100
500
Reach WMI 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

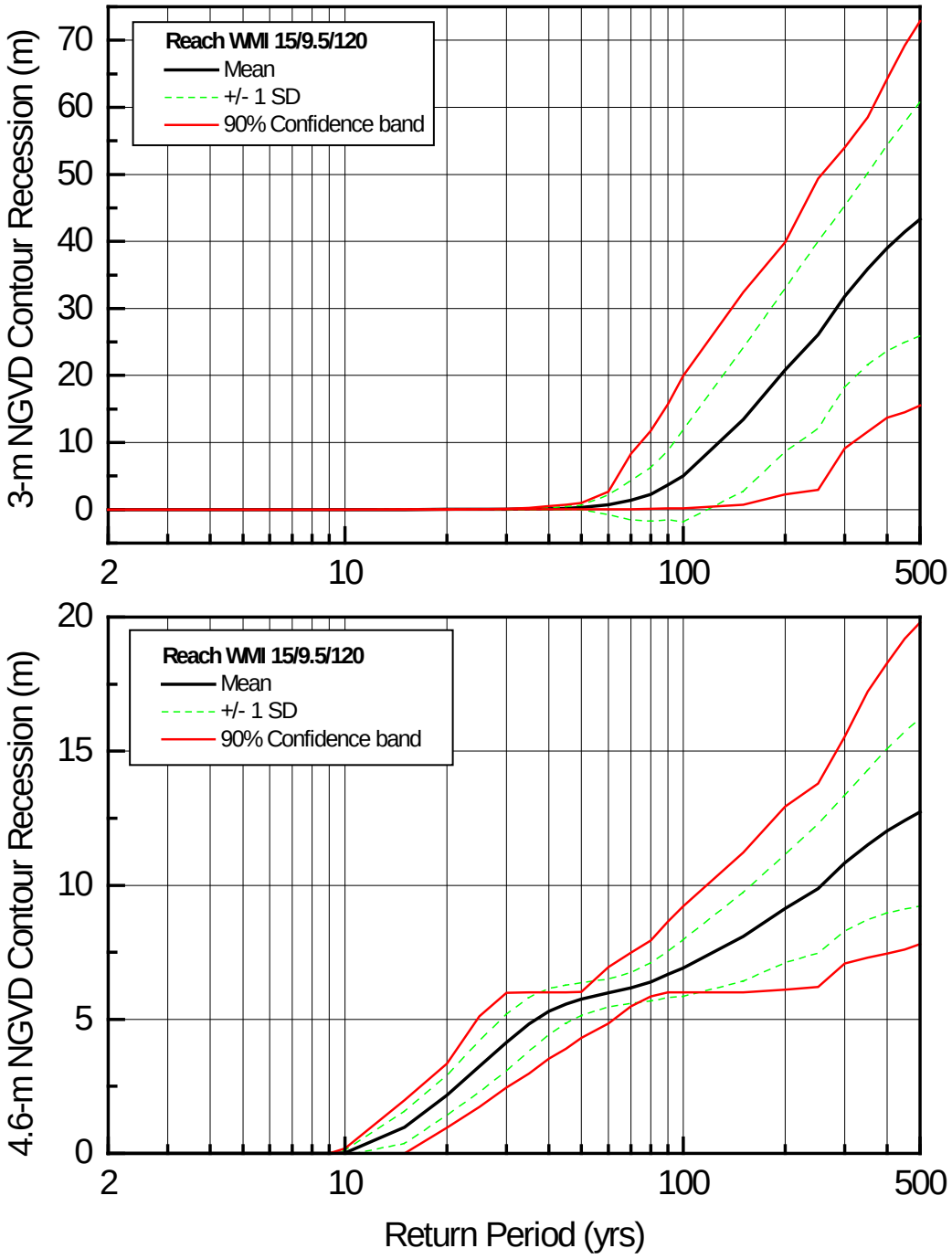

Reach WMI 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
30
40
50
60
2
10
100
500
Reach WMI 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
4
5
6
7
8
2
10
100
500
Return Period (yrs)

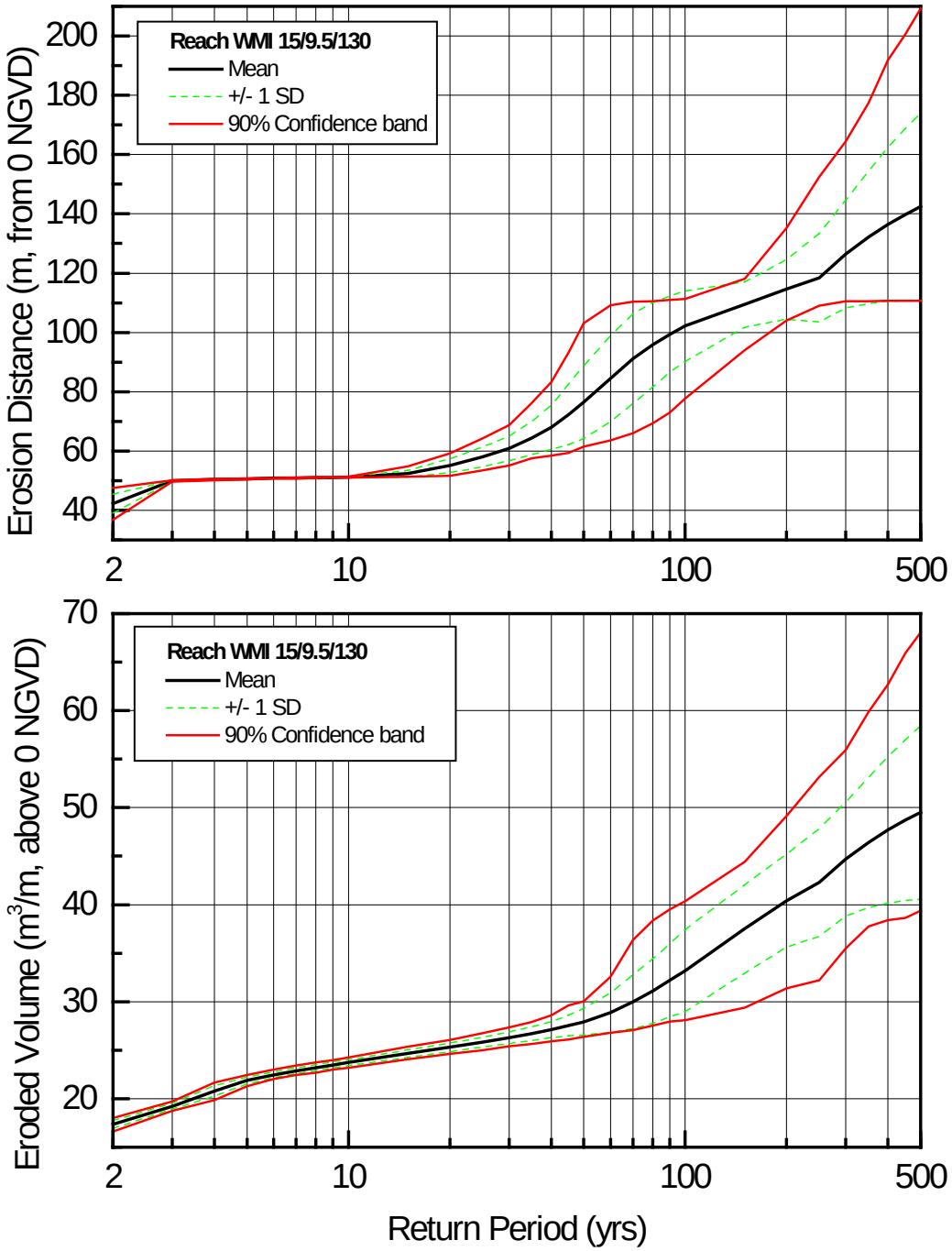

Reach WMI 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach WMI 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2
10
100
500
Return Period (yrs)

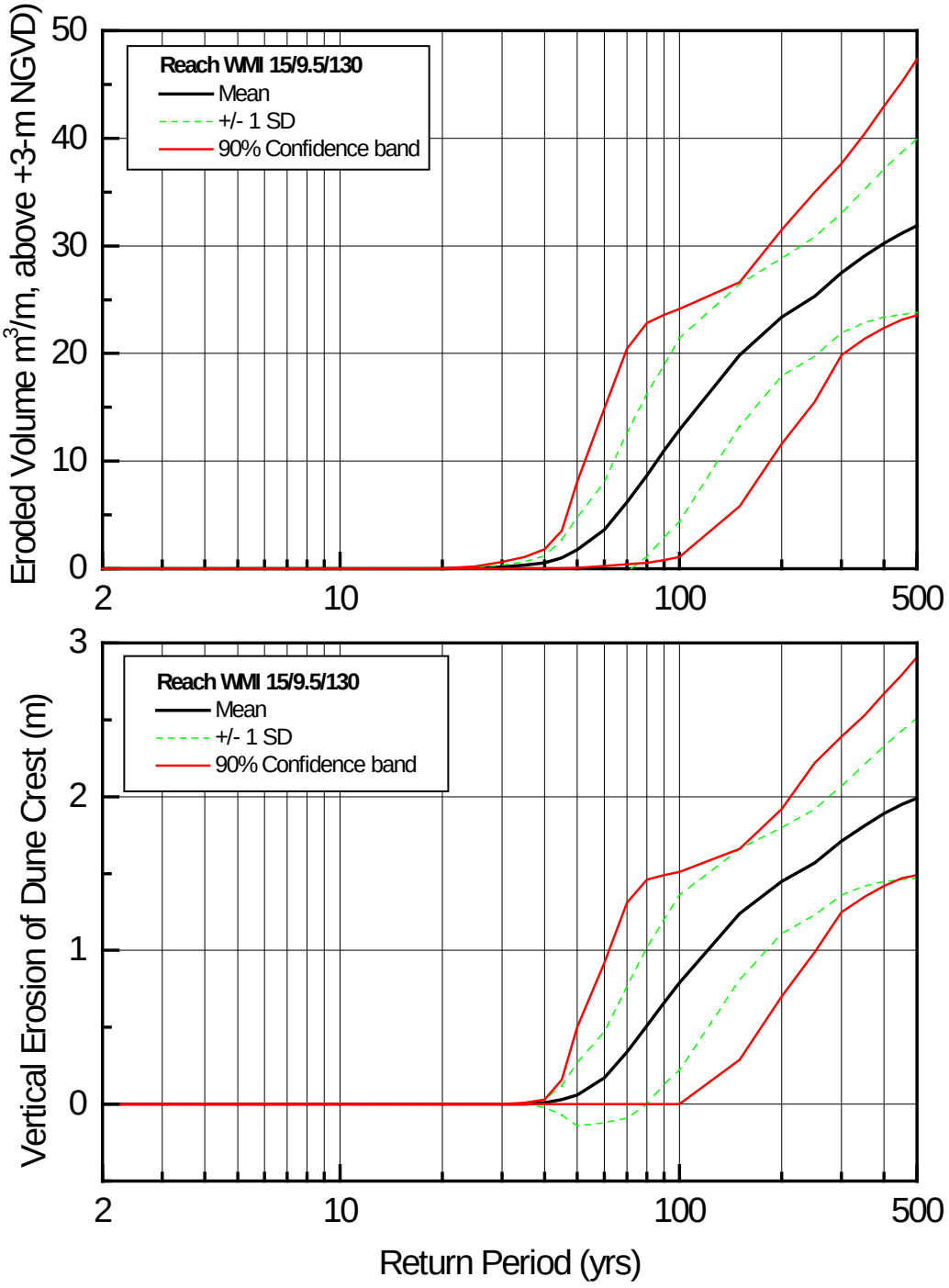

Max. Wave Setup Magnitude (m, above SWL)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach WMI 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach WMI 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

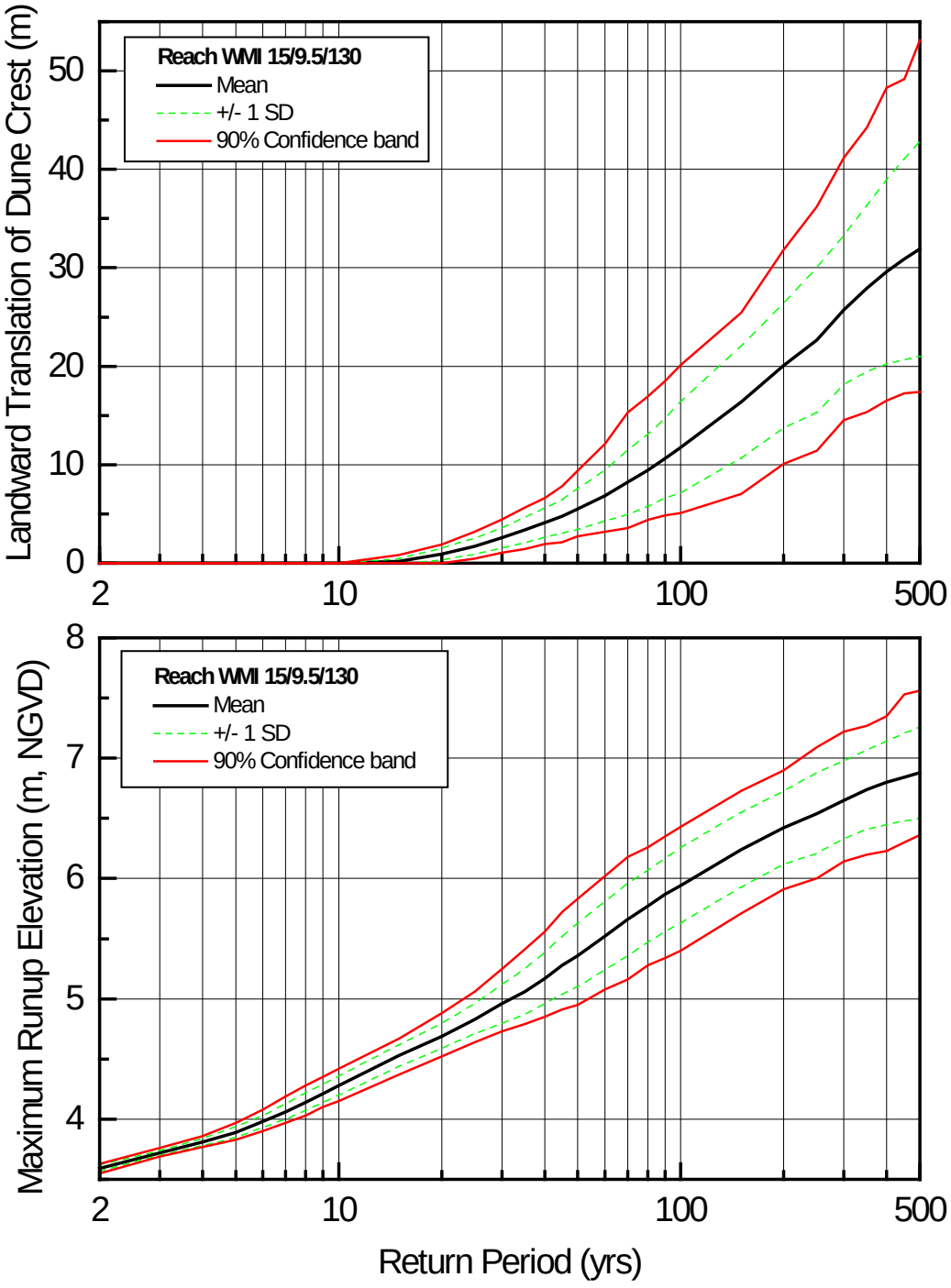

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach WMI 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
300
200
100
Reach WMI 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

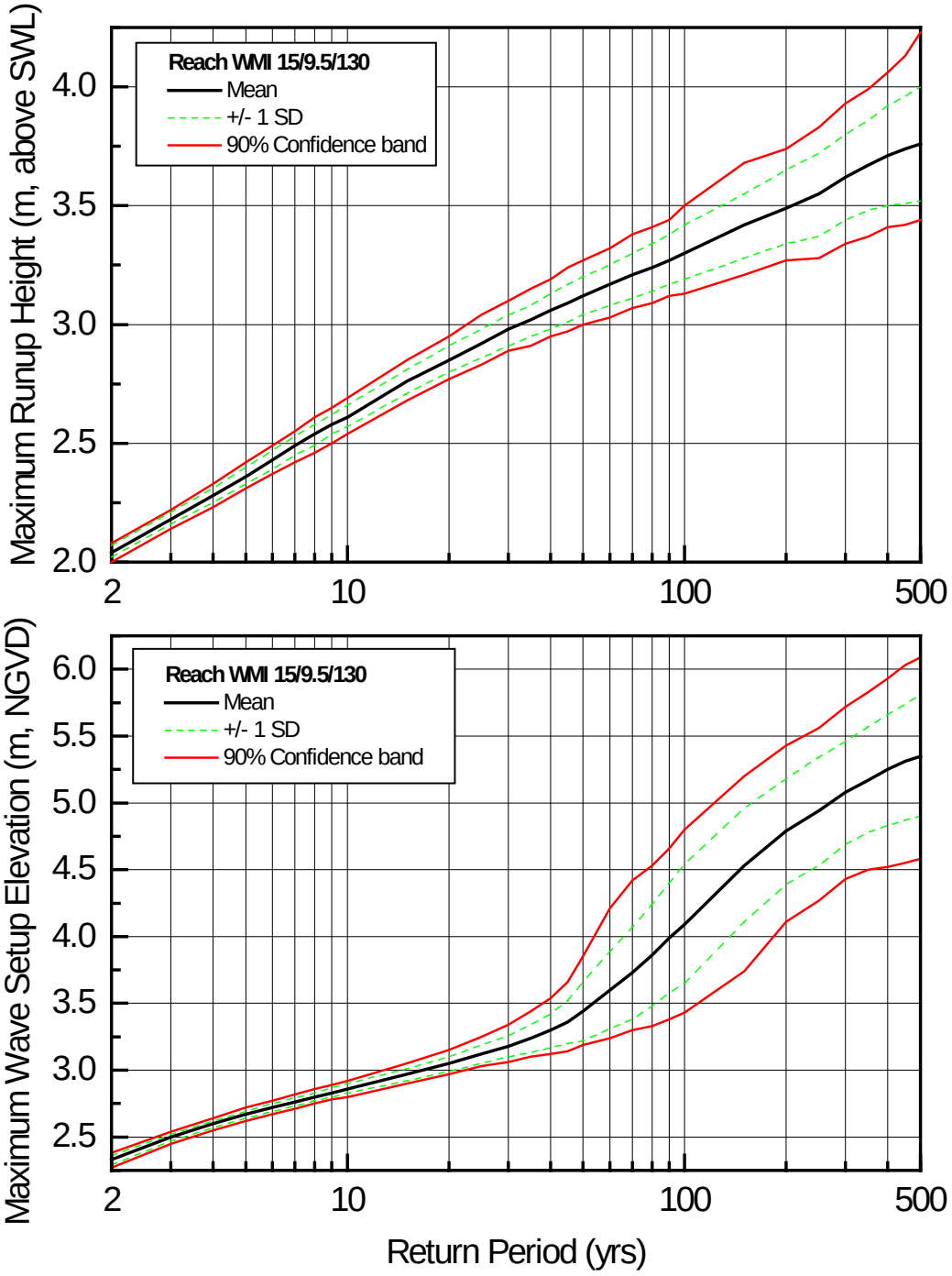

Reach WMI 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
16
14
12
10
8
6
2
10
100
500
Reach WMI 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
11
10
9
8
7
6
5
2
10
100
500
Return Period (yrs)

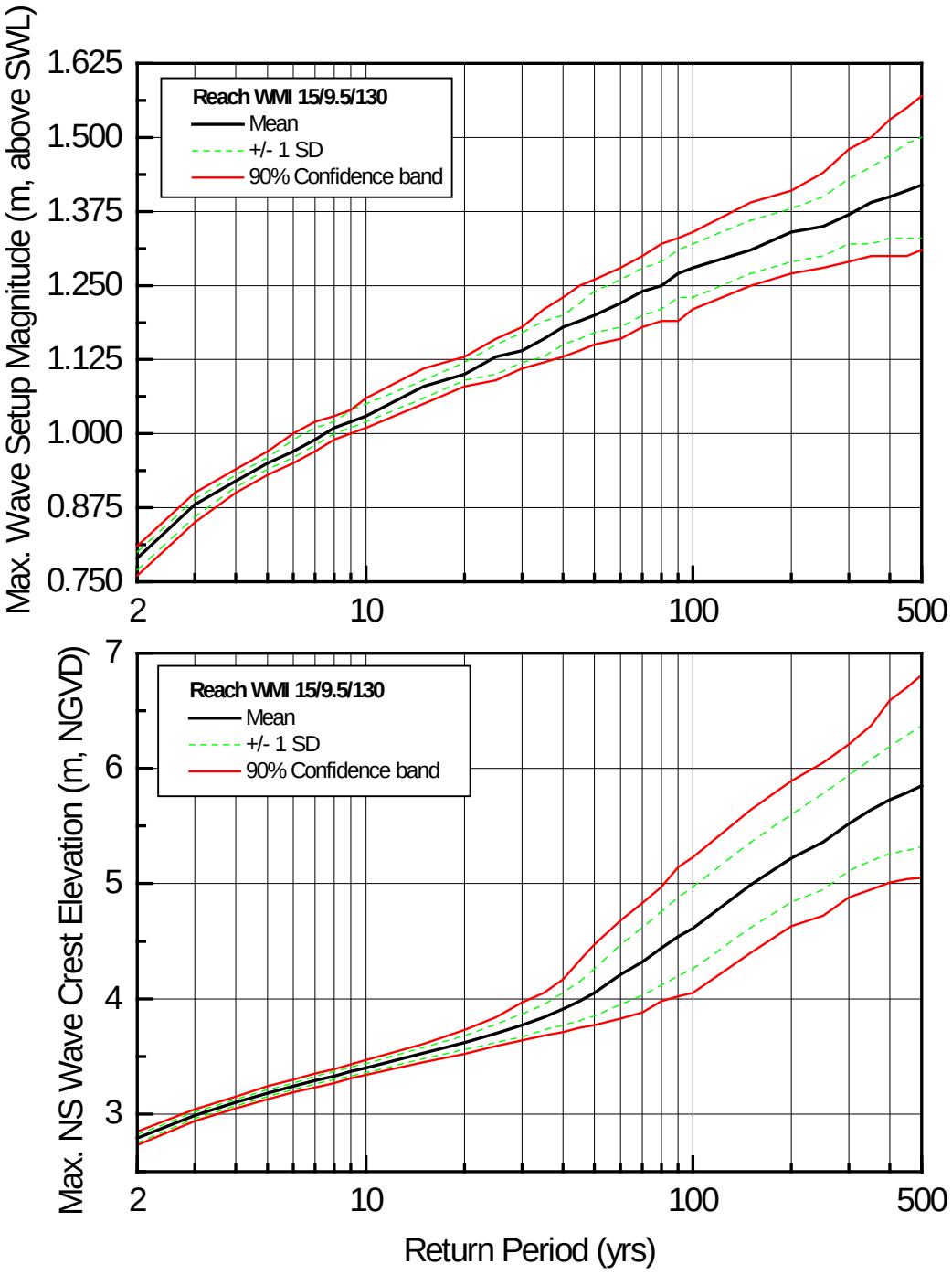

Reach WMI 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
0
10
20
30
40
50
60
70
2
10
100
500
Reach WMI 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
0
5
10
15
20
2
10
100
500
Return Period (yrs)

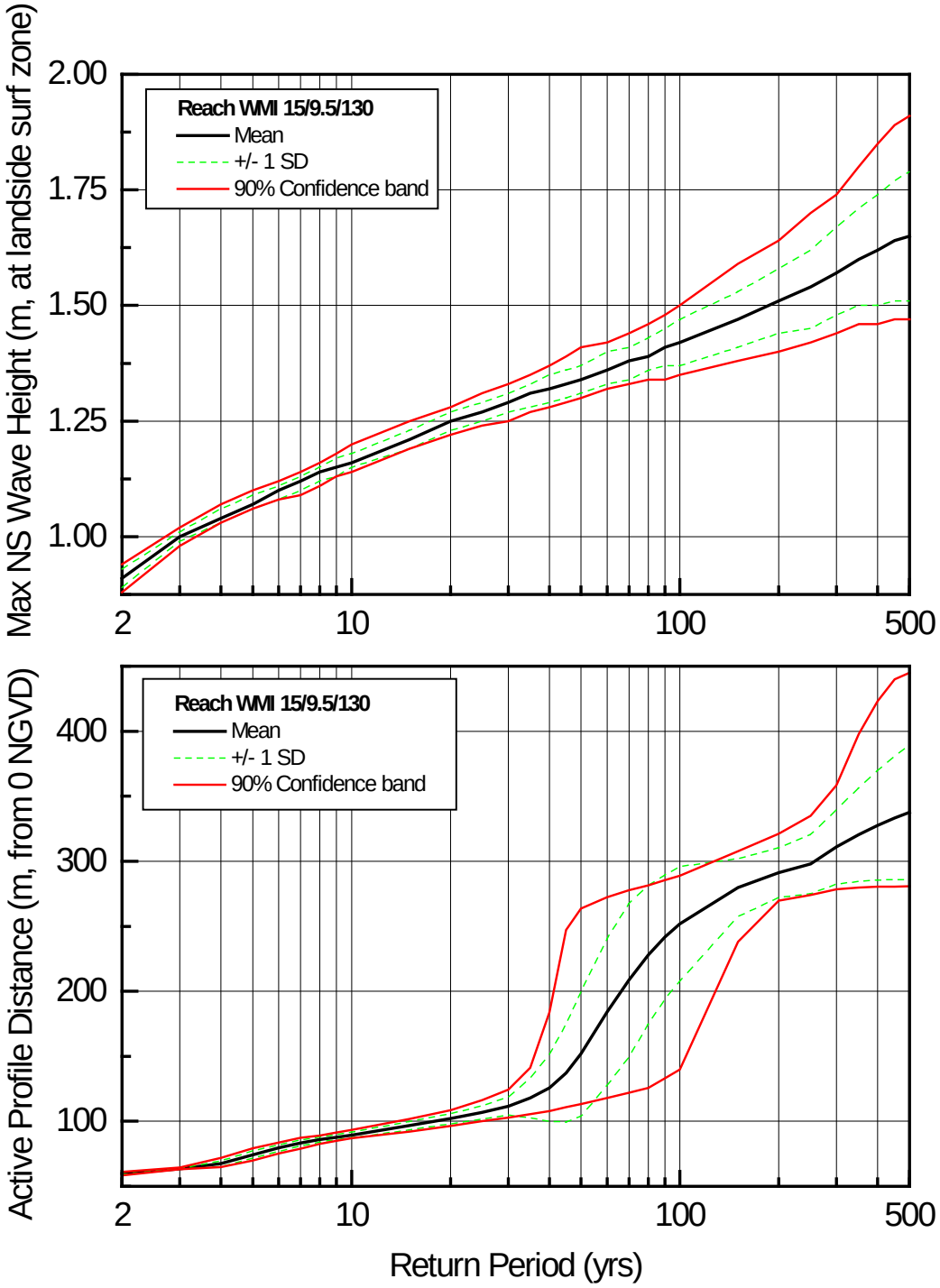

Reach WMI 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
200
180
160
140
120
100
80
60
40
2
10
100
500
Reach WMI 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
70
60
50
40
30
20
2
10
100
500
Return Period (yrs)

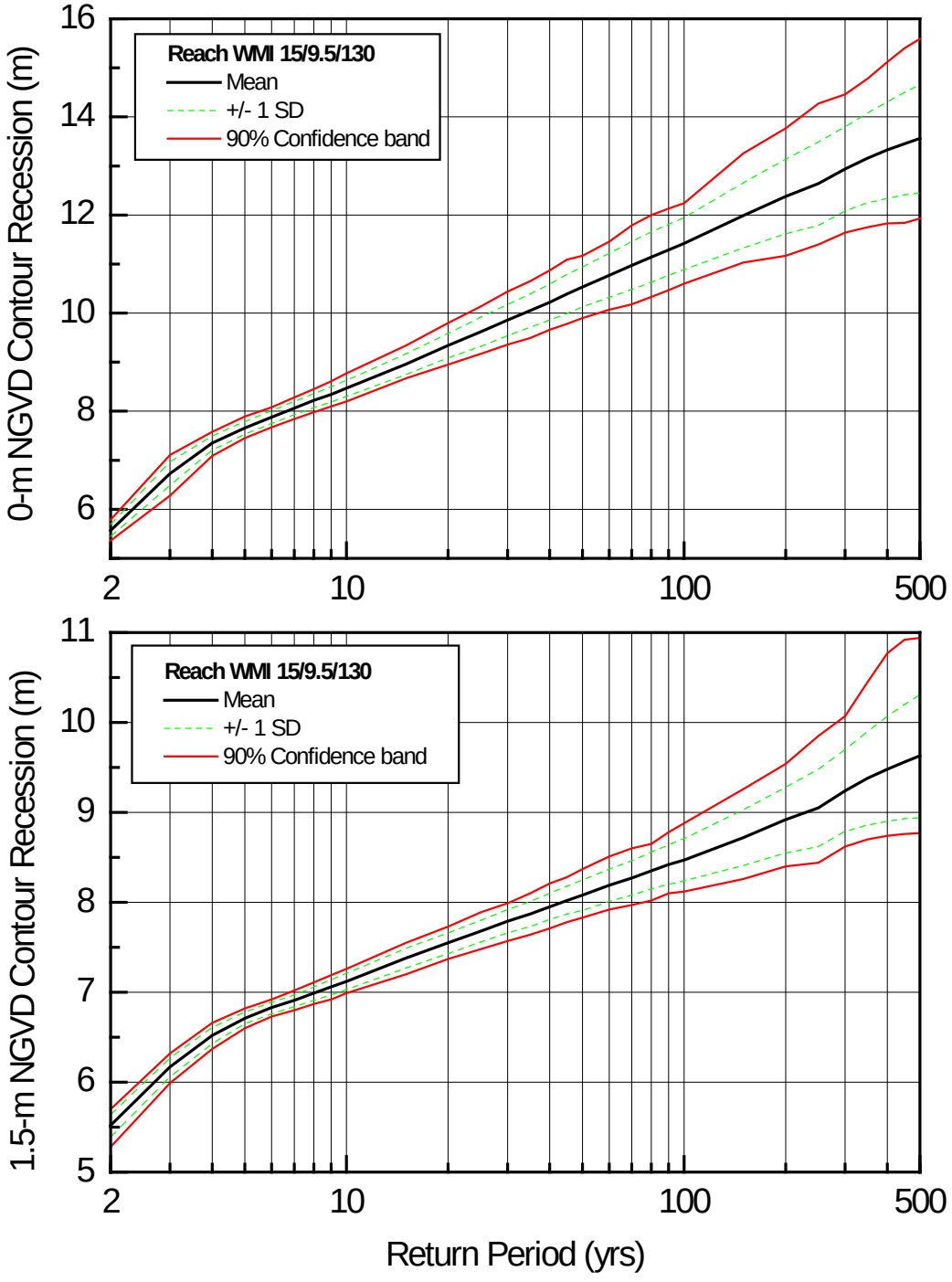

Reach WMI 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
50
2
10
100
500
Reach WMI 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

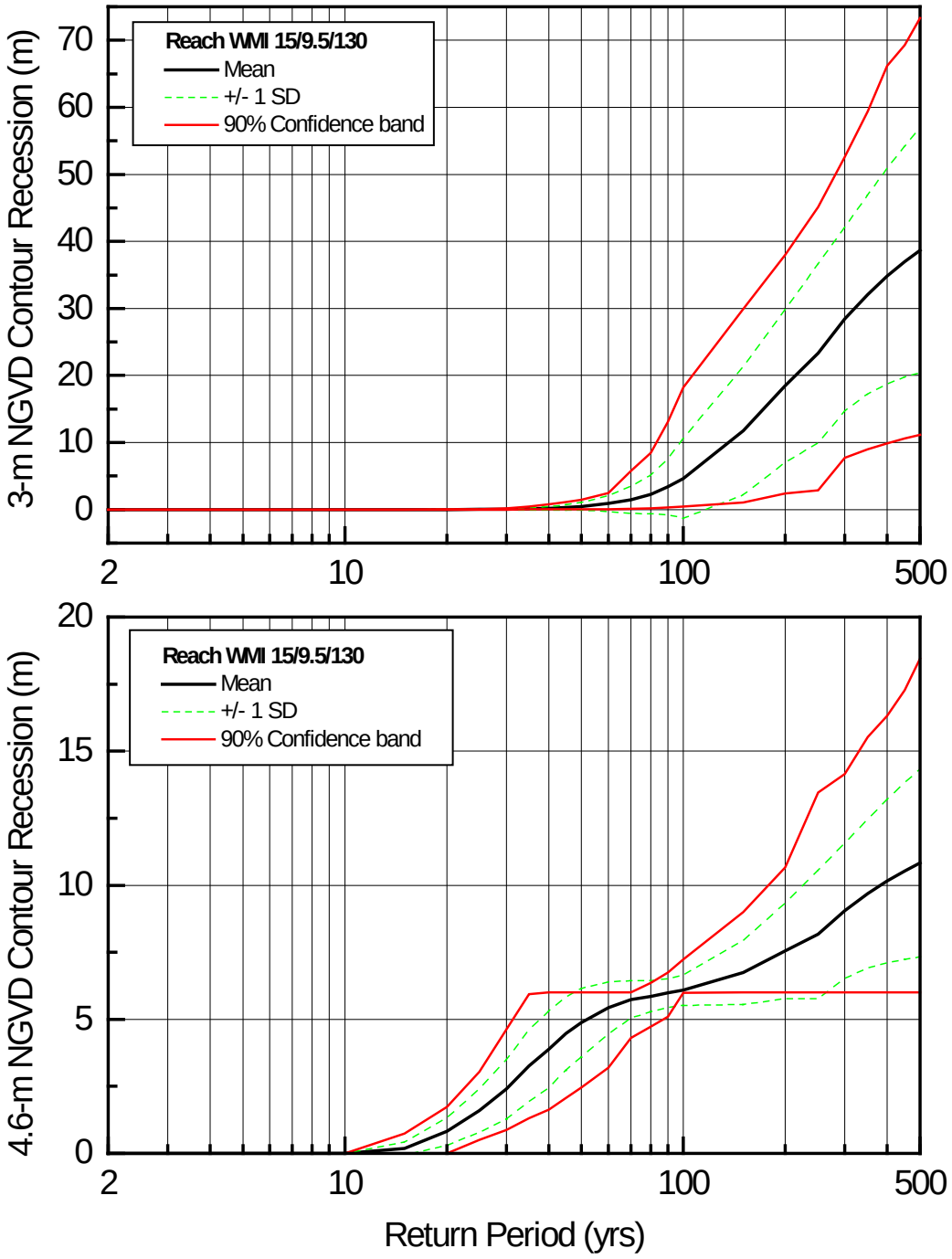

Reach WMI 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
30
40
50
2
10
100
500
Reach WMI 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
4
5
6
7
8
2
10
100
500
Return Period (yrs)

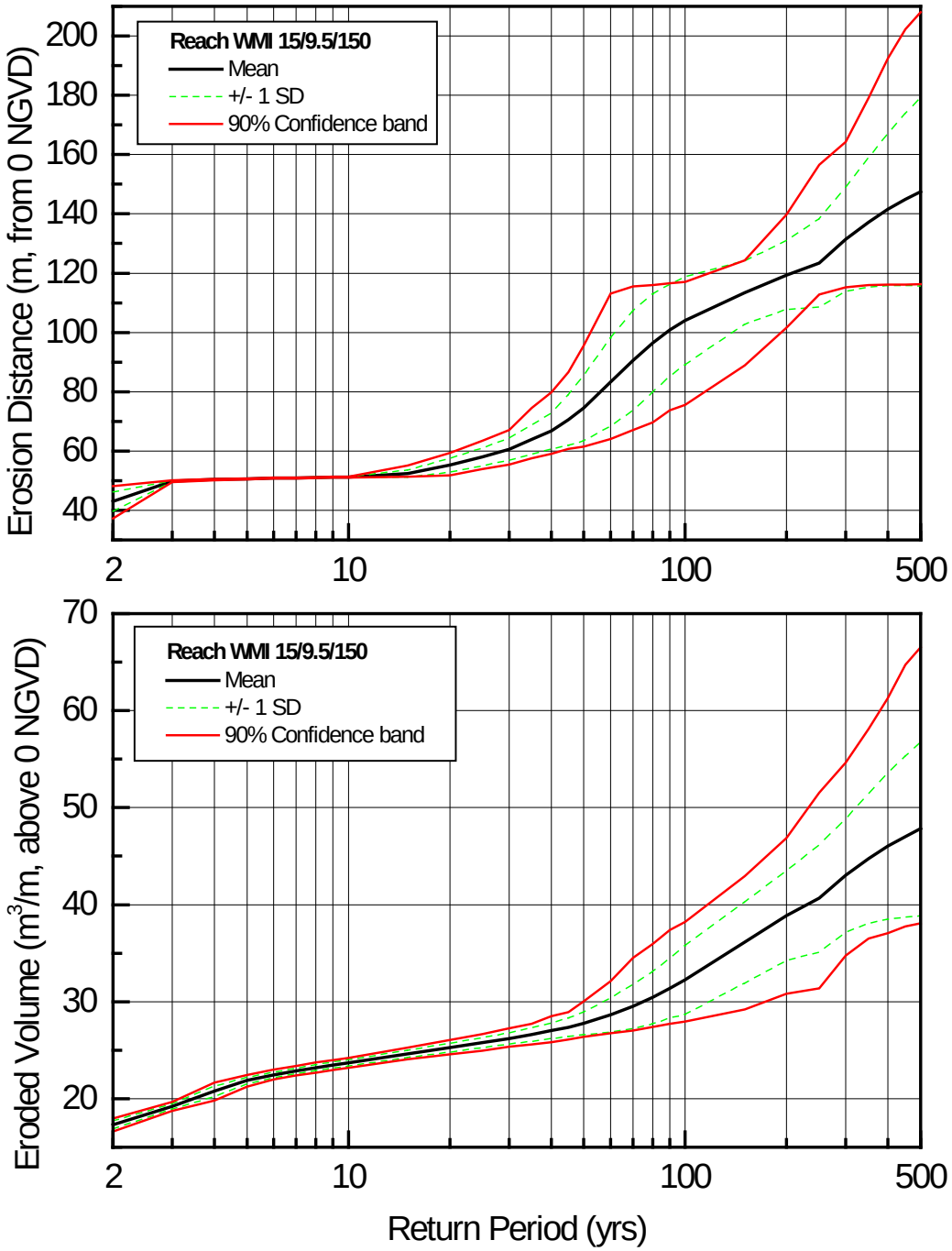

Reach WMI 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach WMI 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2
10
100
500
Return Period (yrs)

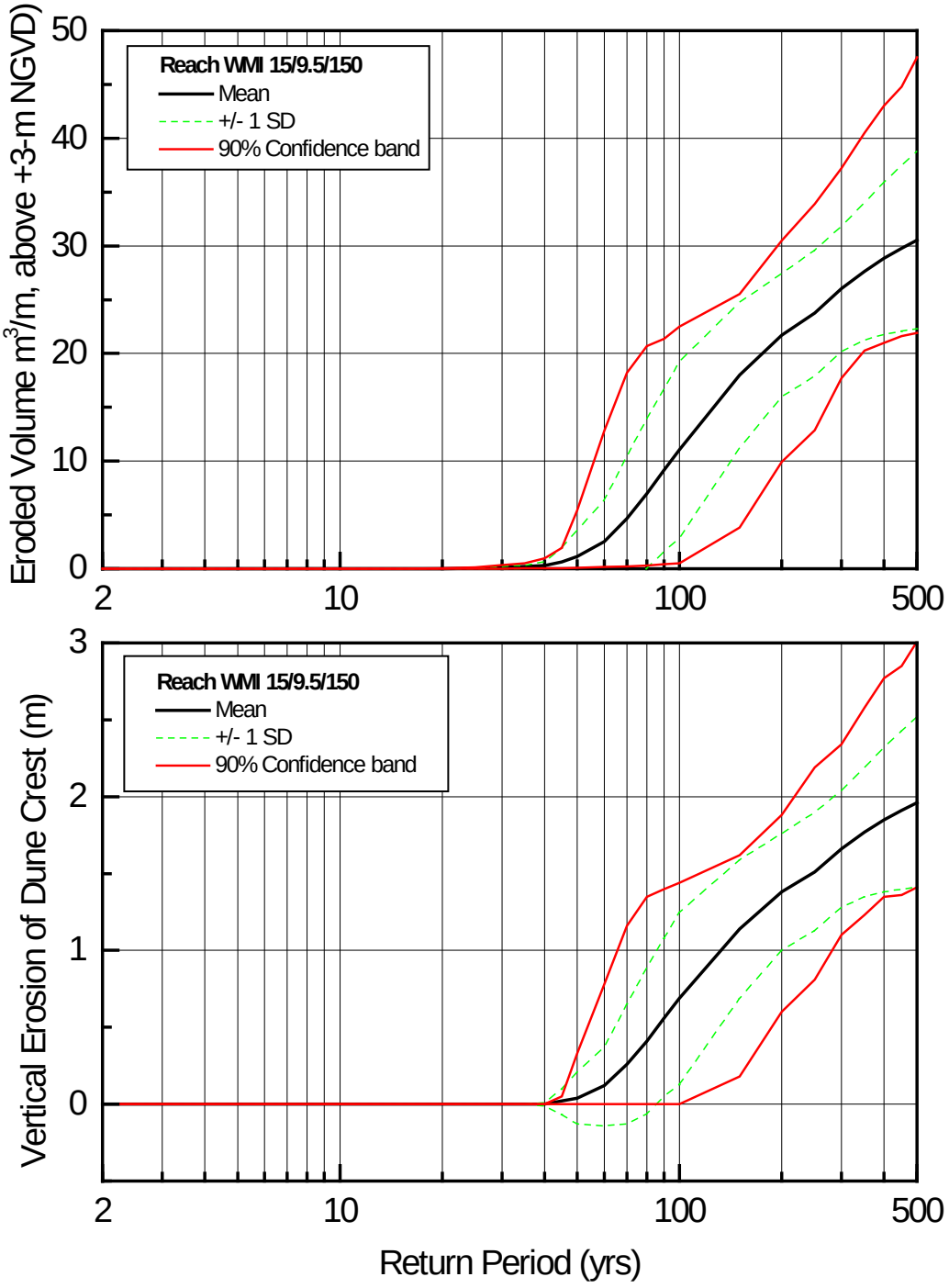

Max. Wave Setup Magnitude (m, above SWL)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach WMI 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach WMI 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

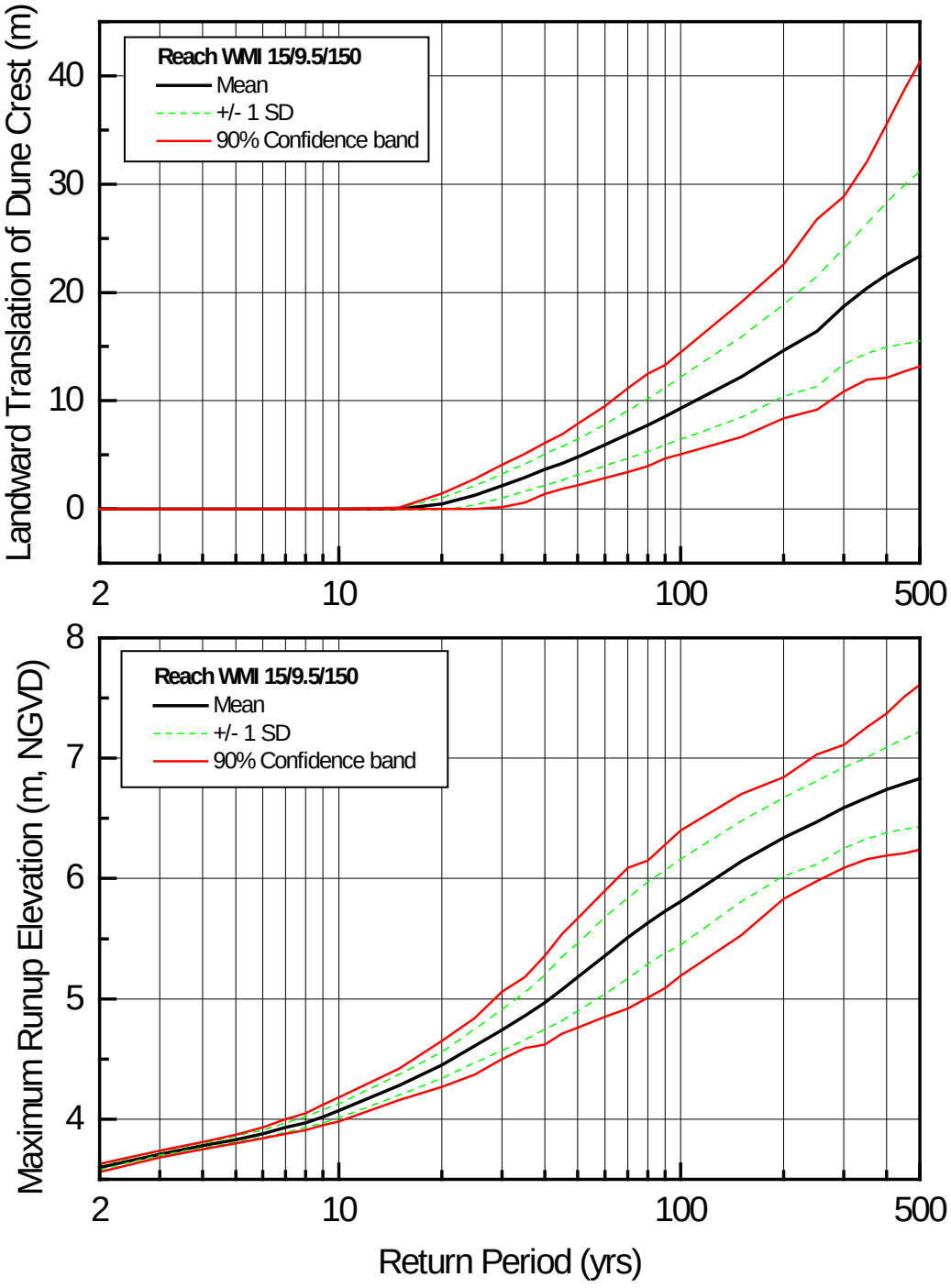

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach WMI 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
300
200
100
Reach WMI 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

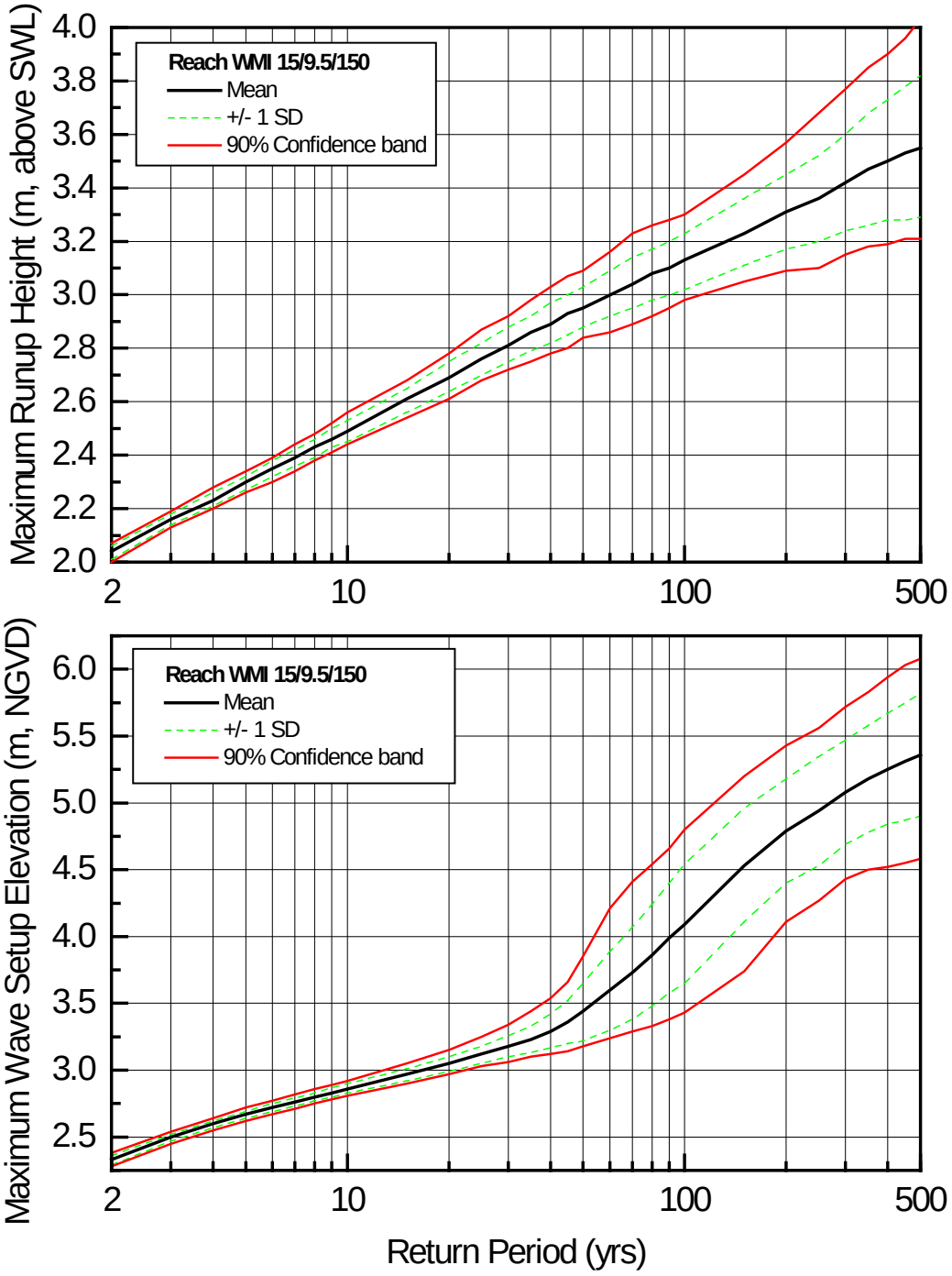

Reach WMI 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
16
14
12
10
8
6
2
10
100
500
Reach WMI 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
11
10
9
8
7
6
5
2
10
100
500
Return Period (yrs)

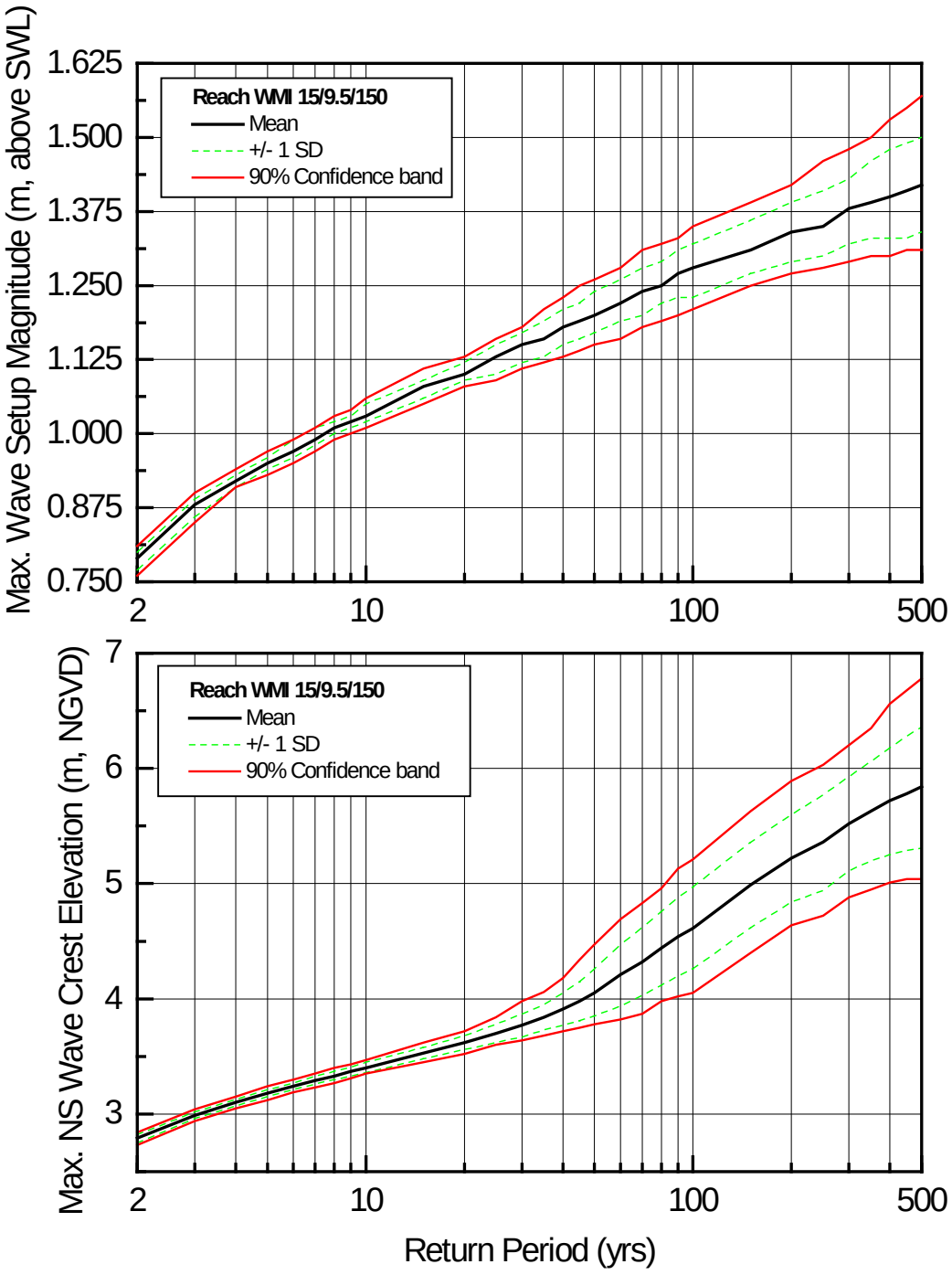

Reach WMI 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
0
10
20
30
40
50
60
70
2
10
100
500
Reach WMI 15/9.5/130
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
0
5
10
15
20
2
10
100
500
Return Period (yrs)

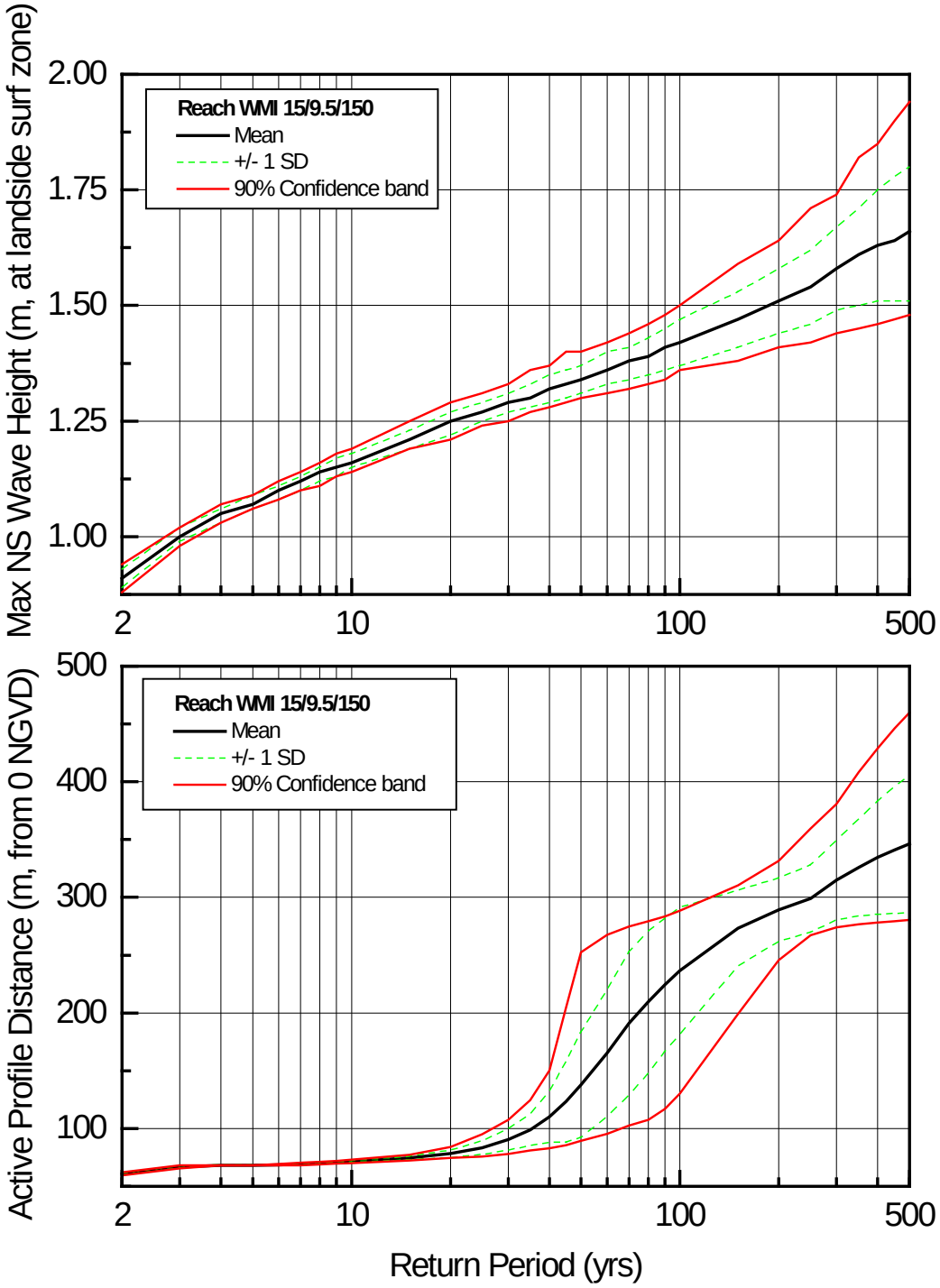

Reach WMI 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
200
180
160
140
120
100
80
60
40
2
10
100
500
Reach WMI 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
70
60
50
40
30
20
2
10
100
500
Return Period (yrs)

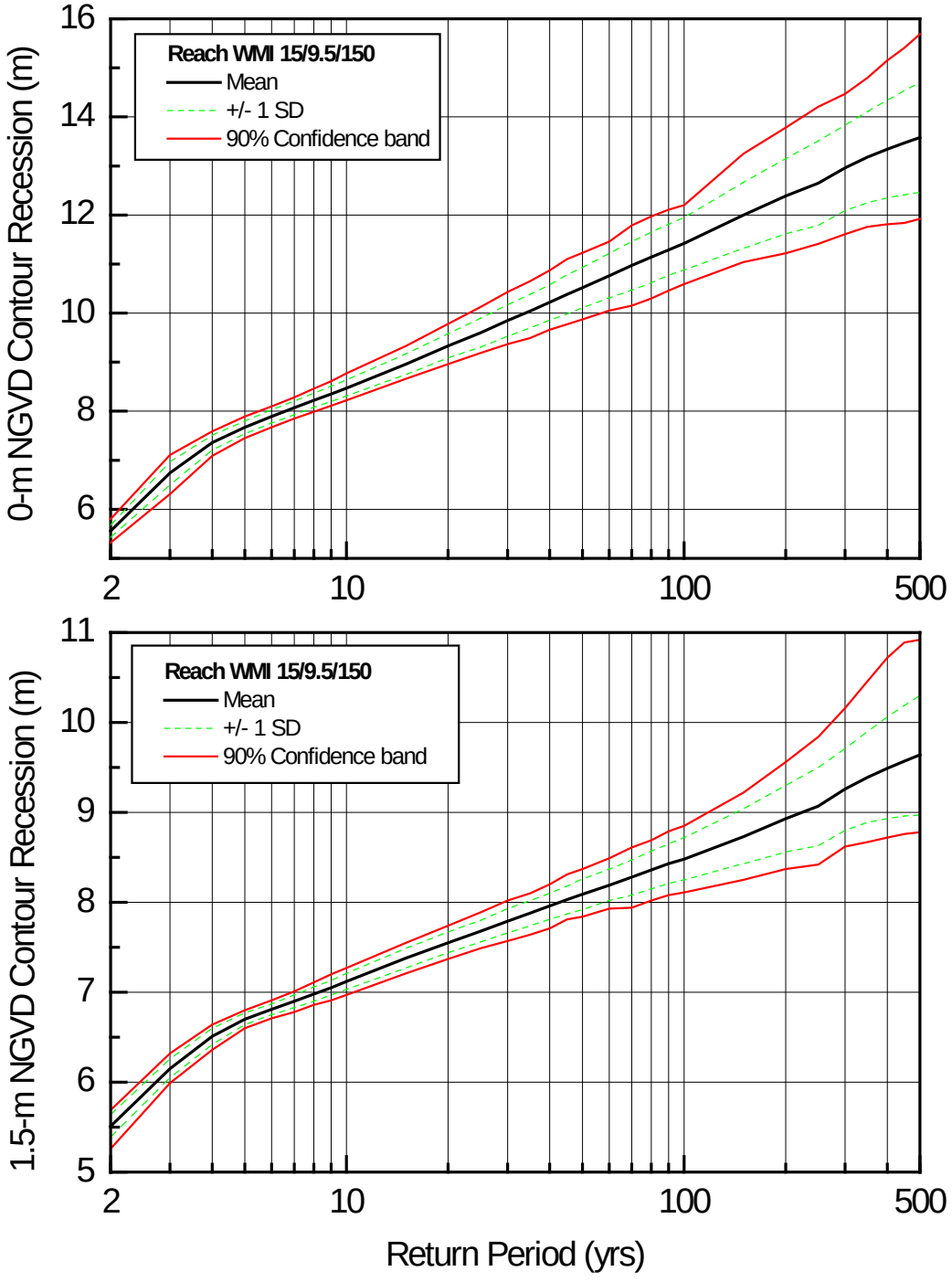

Reach WMI 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
50
2
10
100
500
Reach WMI 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

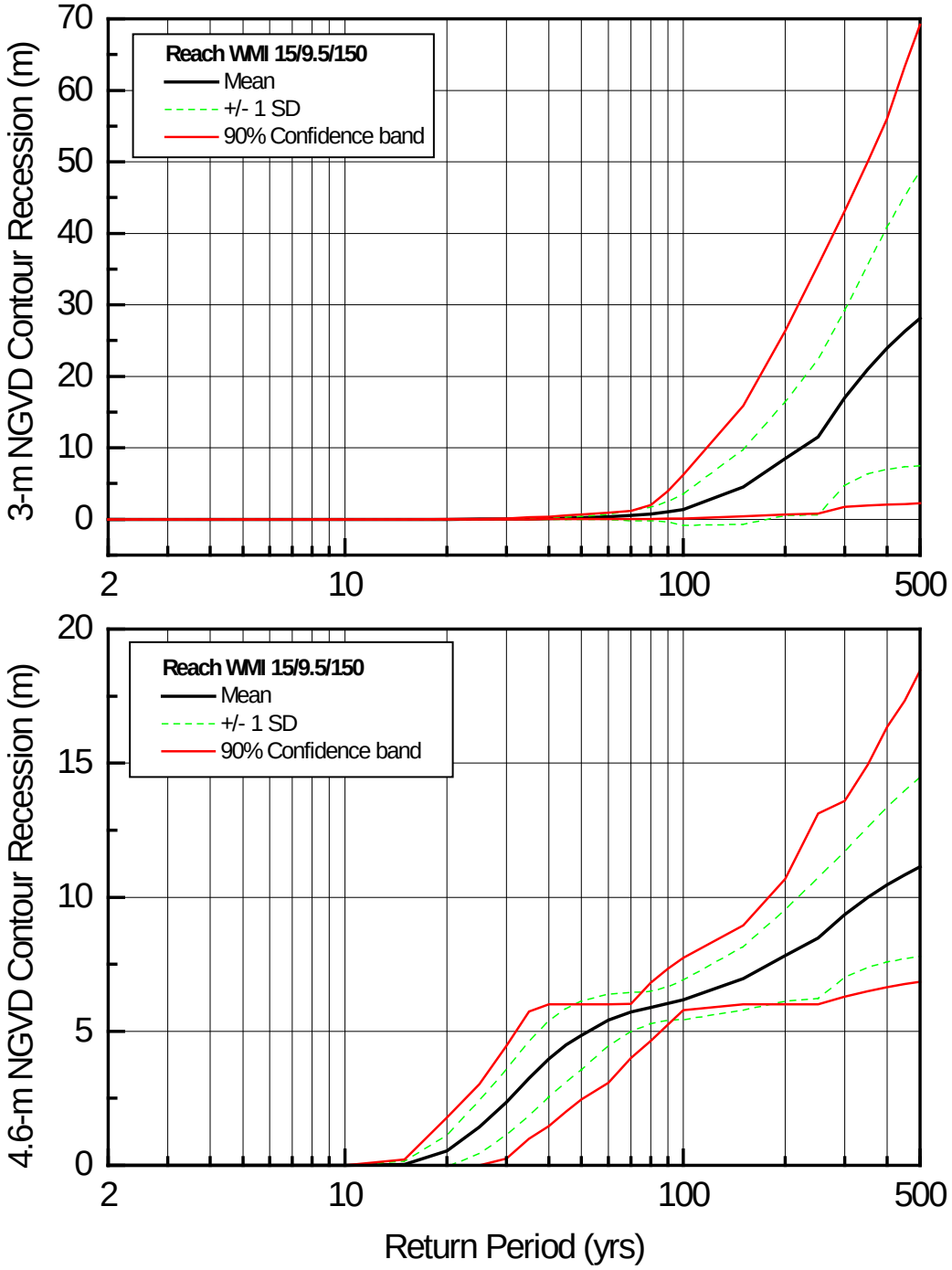

Reach WMI 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
30
40
2
10
100
500
Reach WMI 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
4
5
6
7
8
2
10
100
500
Return Period (yrs)

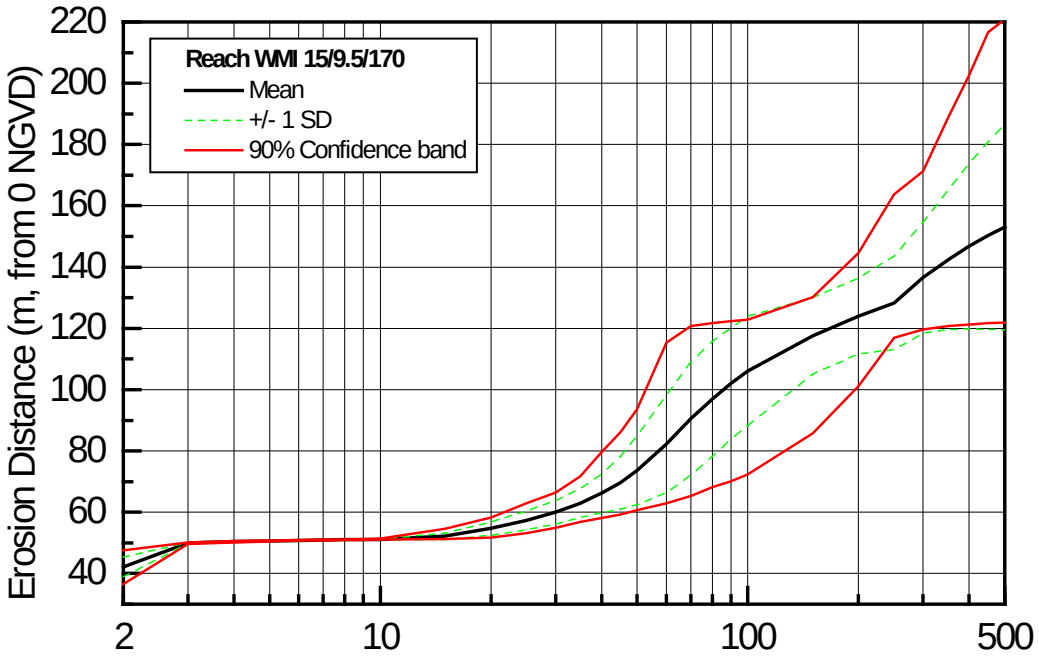

Reach WMI 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
4.0
3.8
3.6
3.4
3.2
3.0
2.8
2.6
2.4
2.2
2.0
2
10
100
500
Reach WMI 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2
10
100
500
Return Period (yrs)

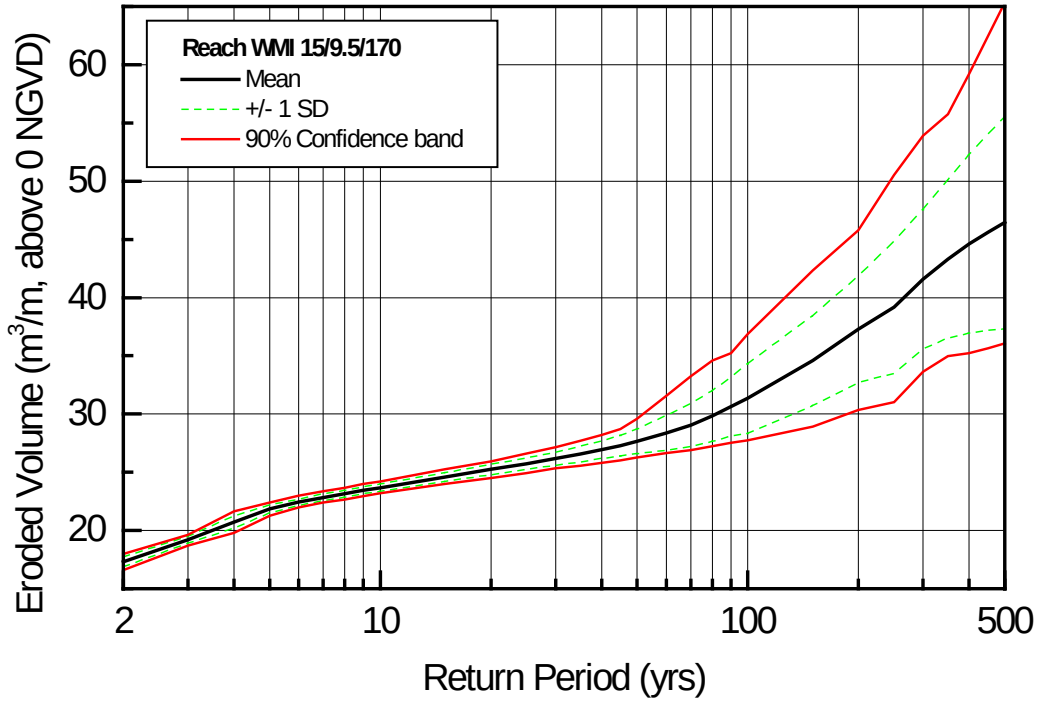

Max. Wave Setup Magnitude (m, above SWL)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach WMI 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach WMI 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

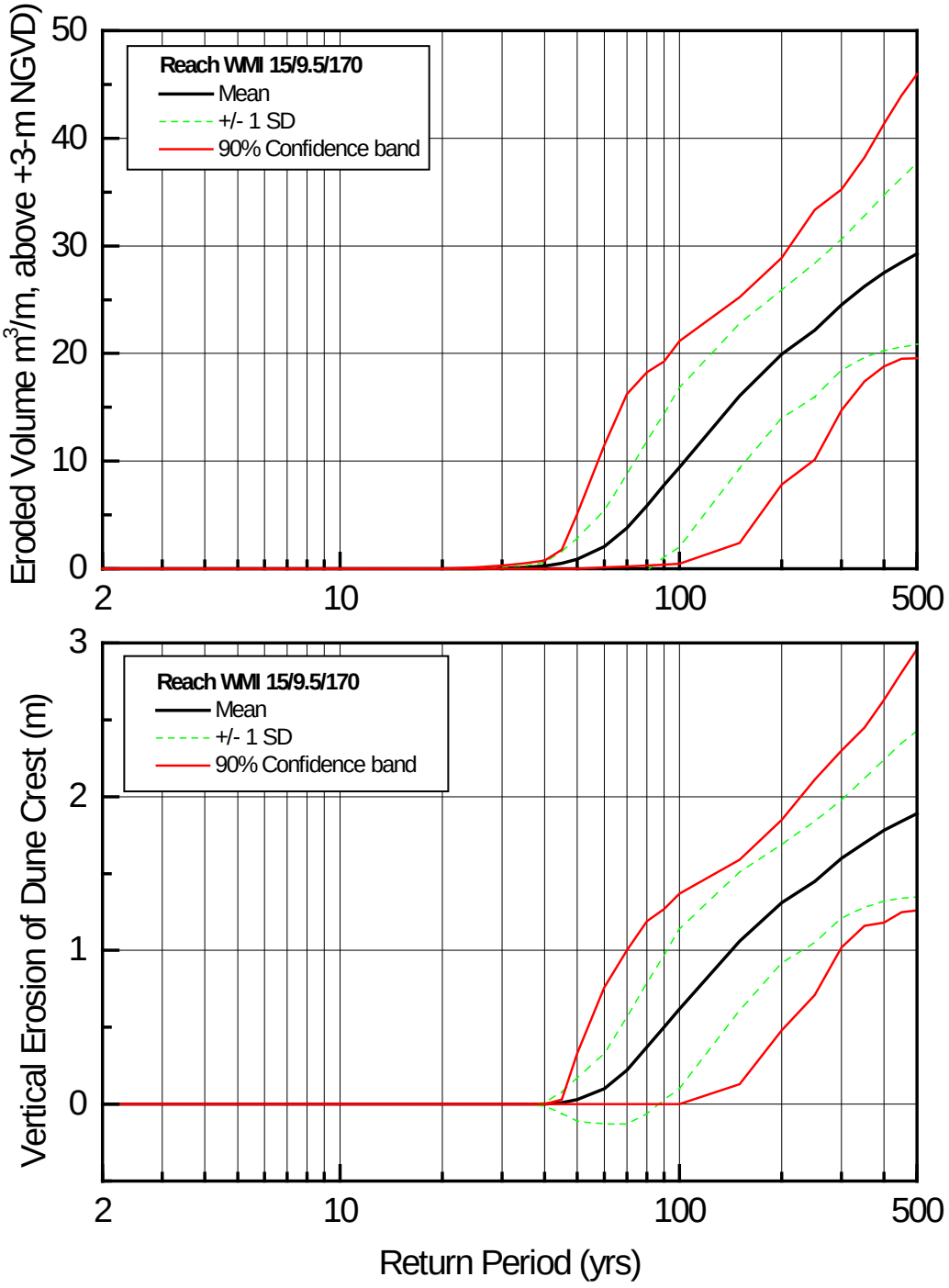

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach WMI 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
500
400
300
200
100
Reach WMI 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

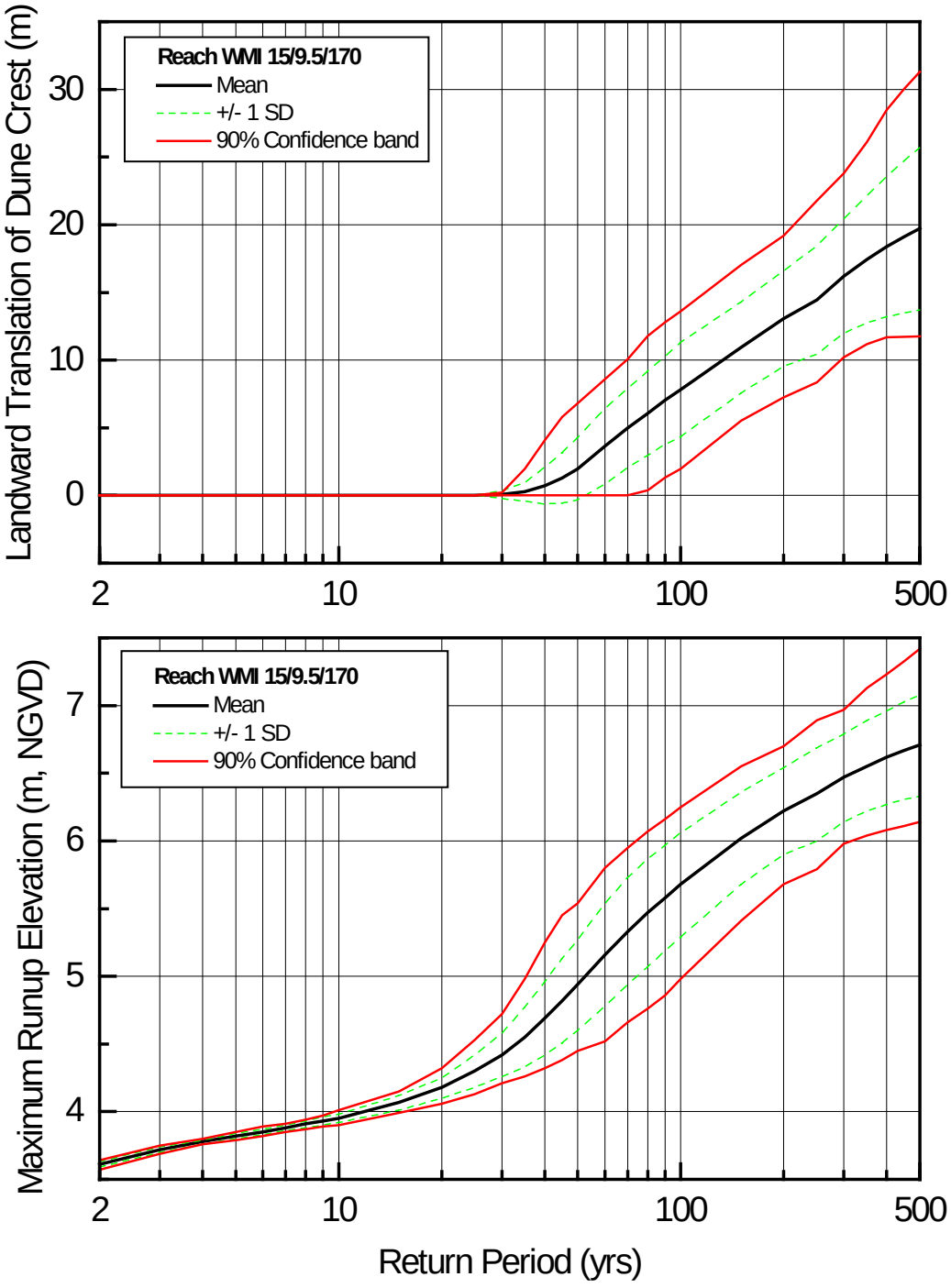

Reach WMI 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
16
14
12
10
8
6
2
10
100
500
Reach WMI 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
11
10
9
8
7
6
5
2
10
100
500
Return Period (yrs)

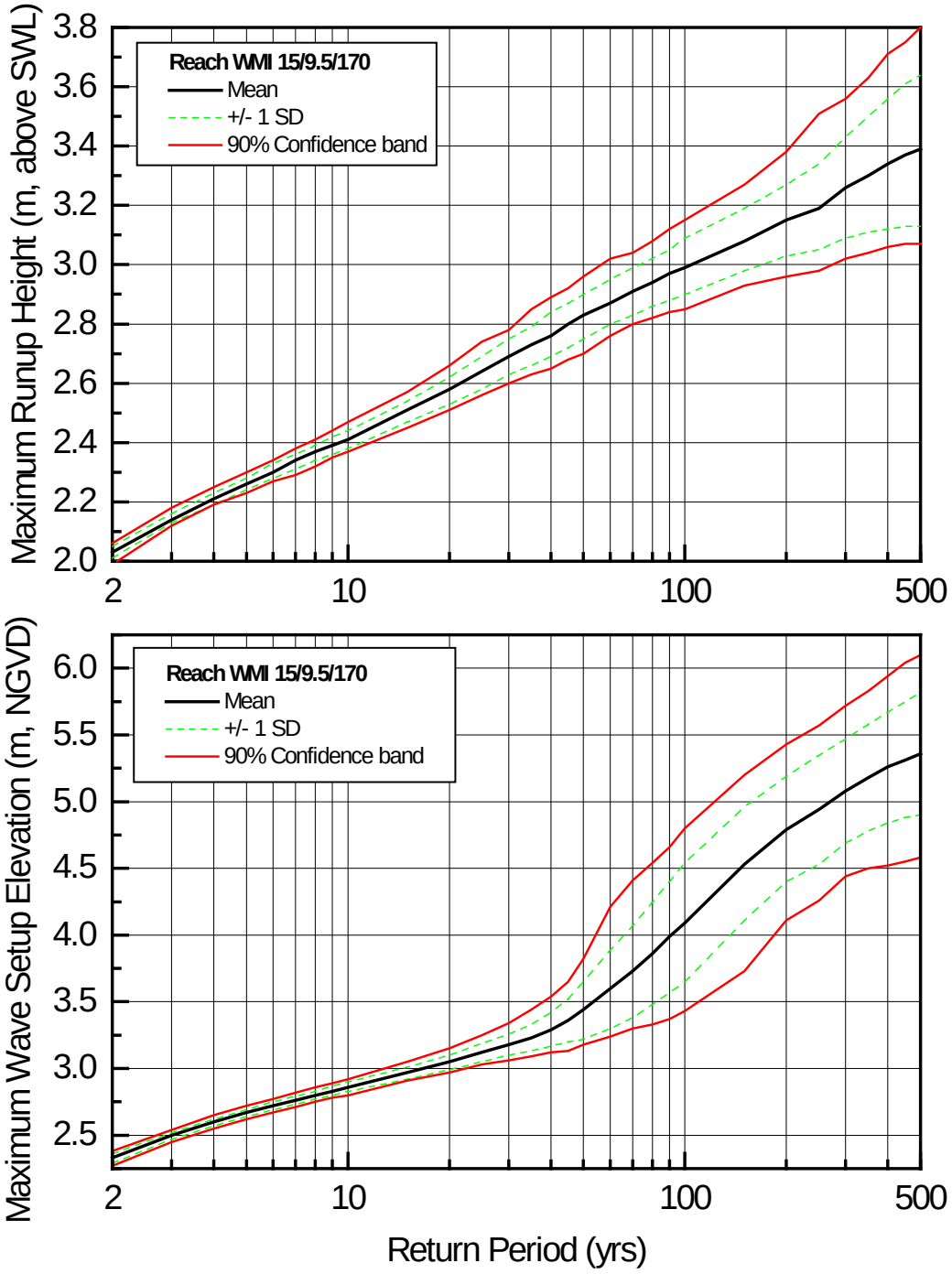

Reach WMI 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
70
60
50
40
30
20
10
0
2
10
100
500
Reach WMI 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
20
15
10
5
0
2
10
100
500
Return Period (yrs)

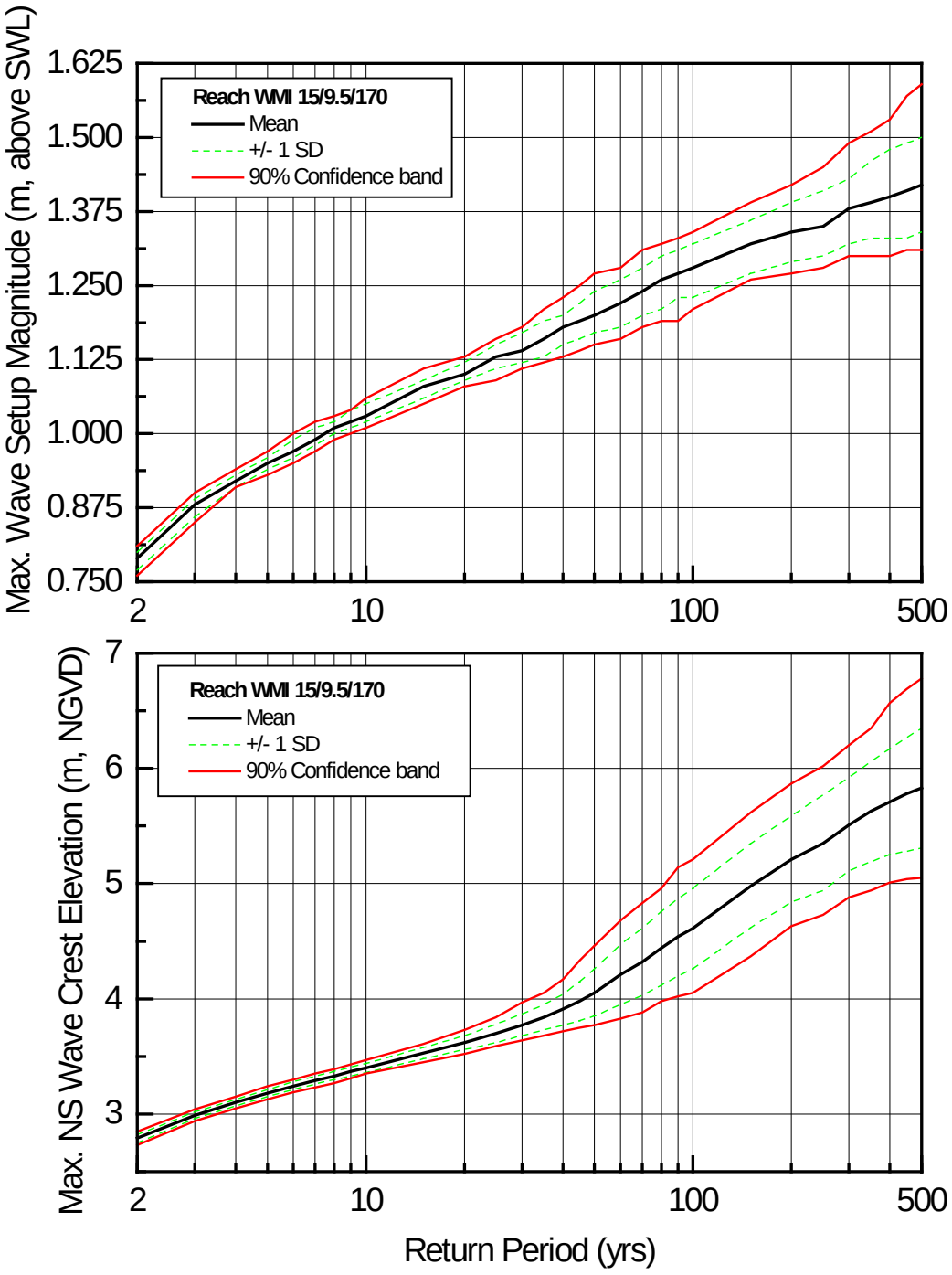

Reach WMI 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
220
200
180
160
140
120
100
80
60
40
2
10
100
500

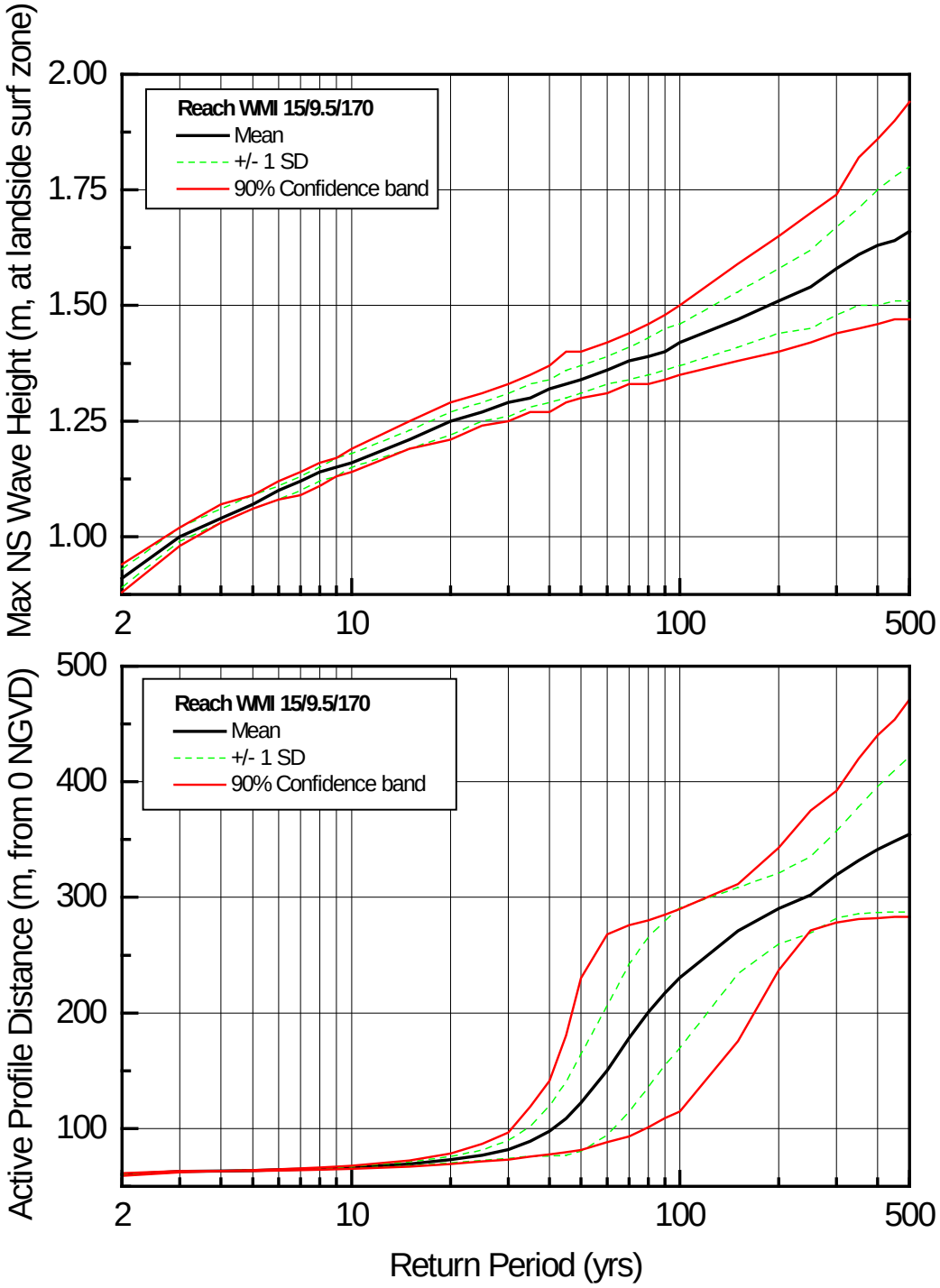

Reach WMI 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
20
2
10
100
500
Return Period (yrs)

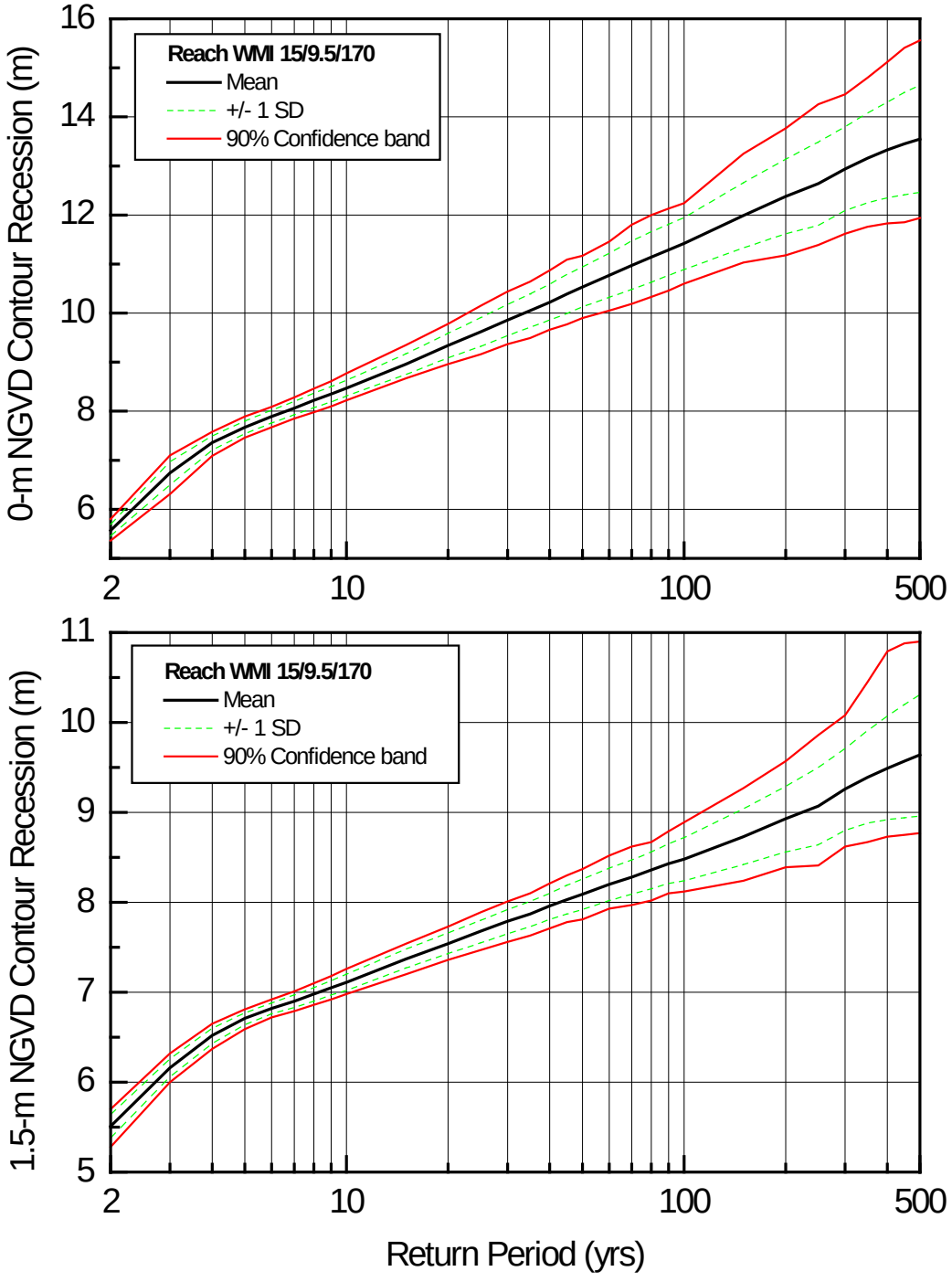

Reach WMI 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
50
2
10
100
500
Reach WMI 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

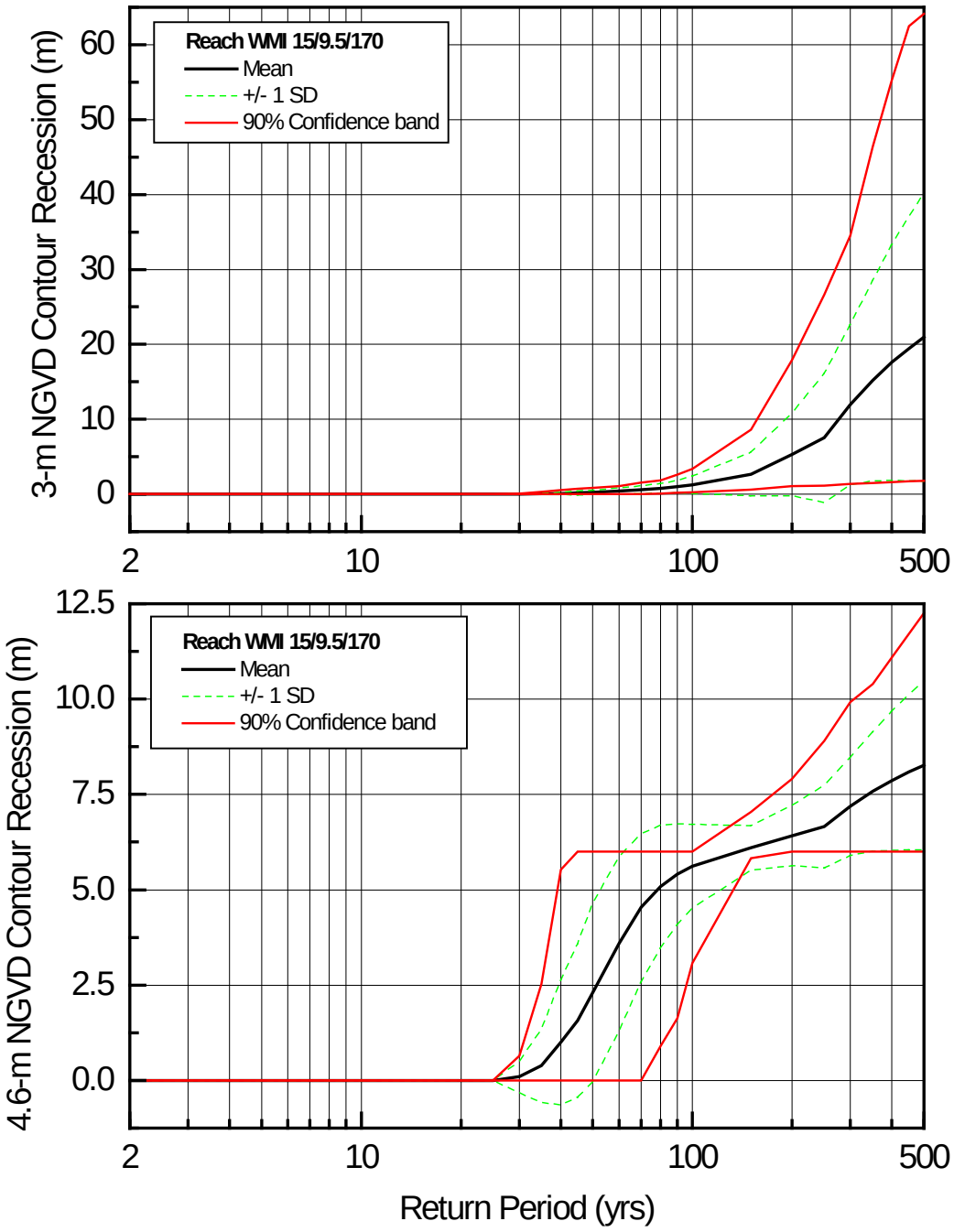

Reach WMI 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
30
2
10
100
500
Reach WMI 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
4
5
6
7
2
10
100
500
Return Period (yrs)

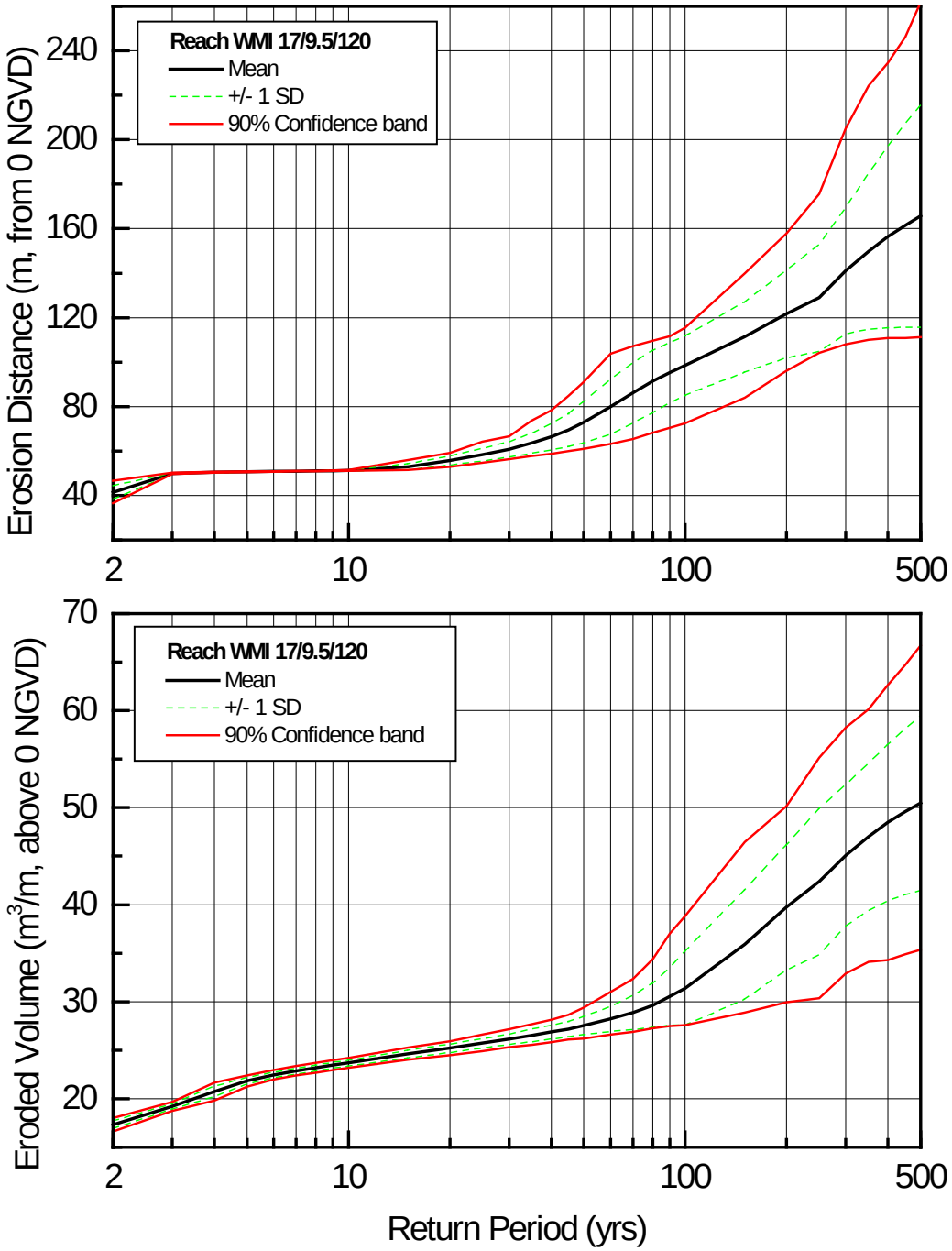

Reach WMI 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
3.8
3.6
3.4
3.2
3.0
2.8
2.6
2.4
2.2
2.0
2
10
100
500
Reach WMI 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2
10
100
500
Return Period (yrs)

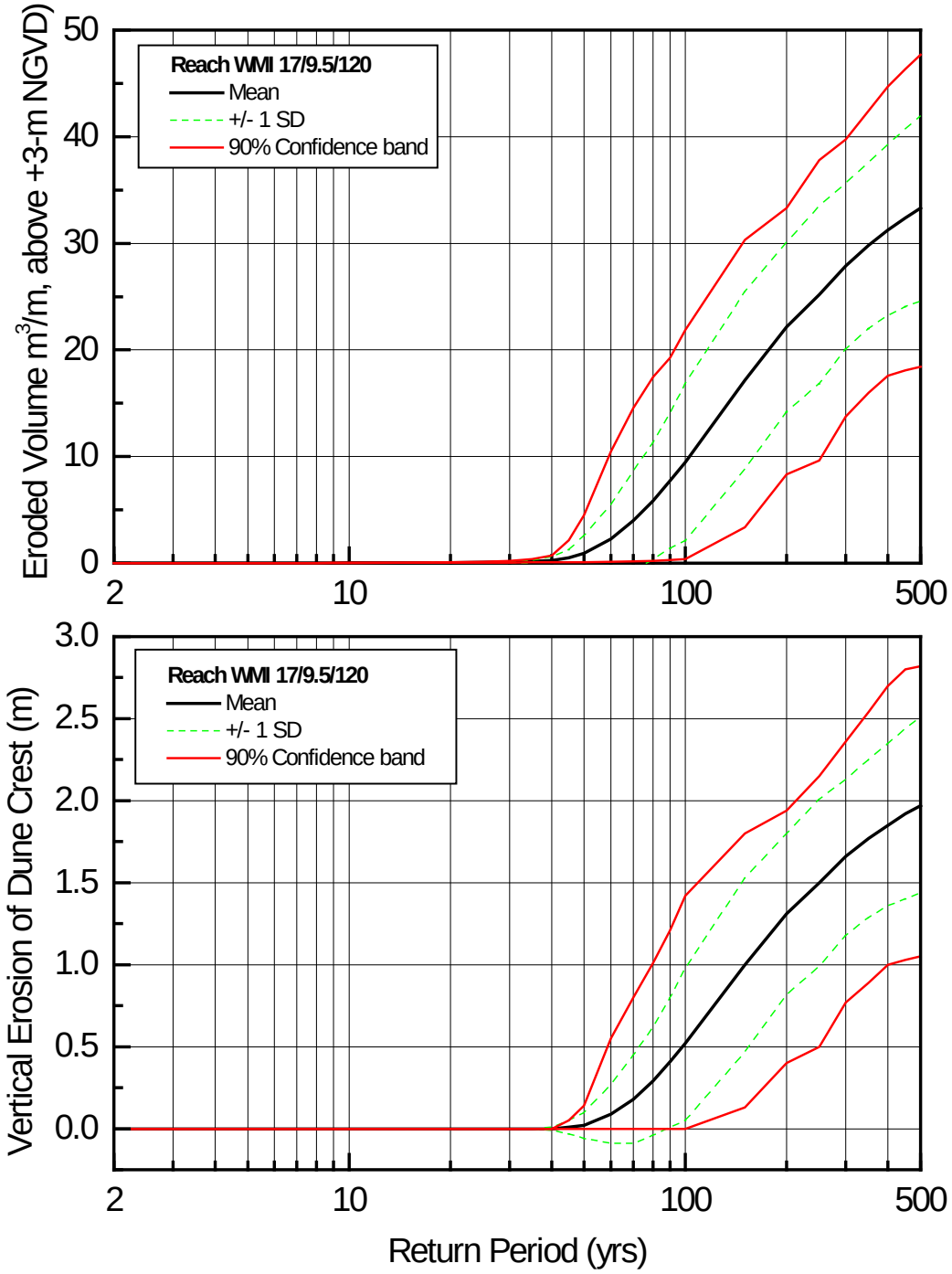

Max. Wave Setup Magnitude (m, above SWL)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach WMI 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach WMI 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

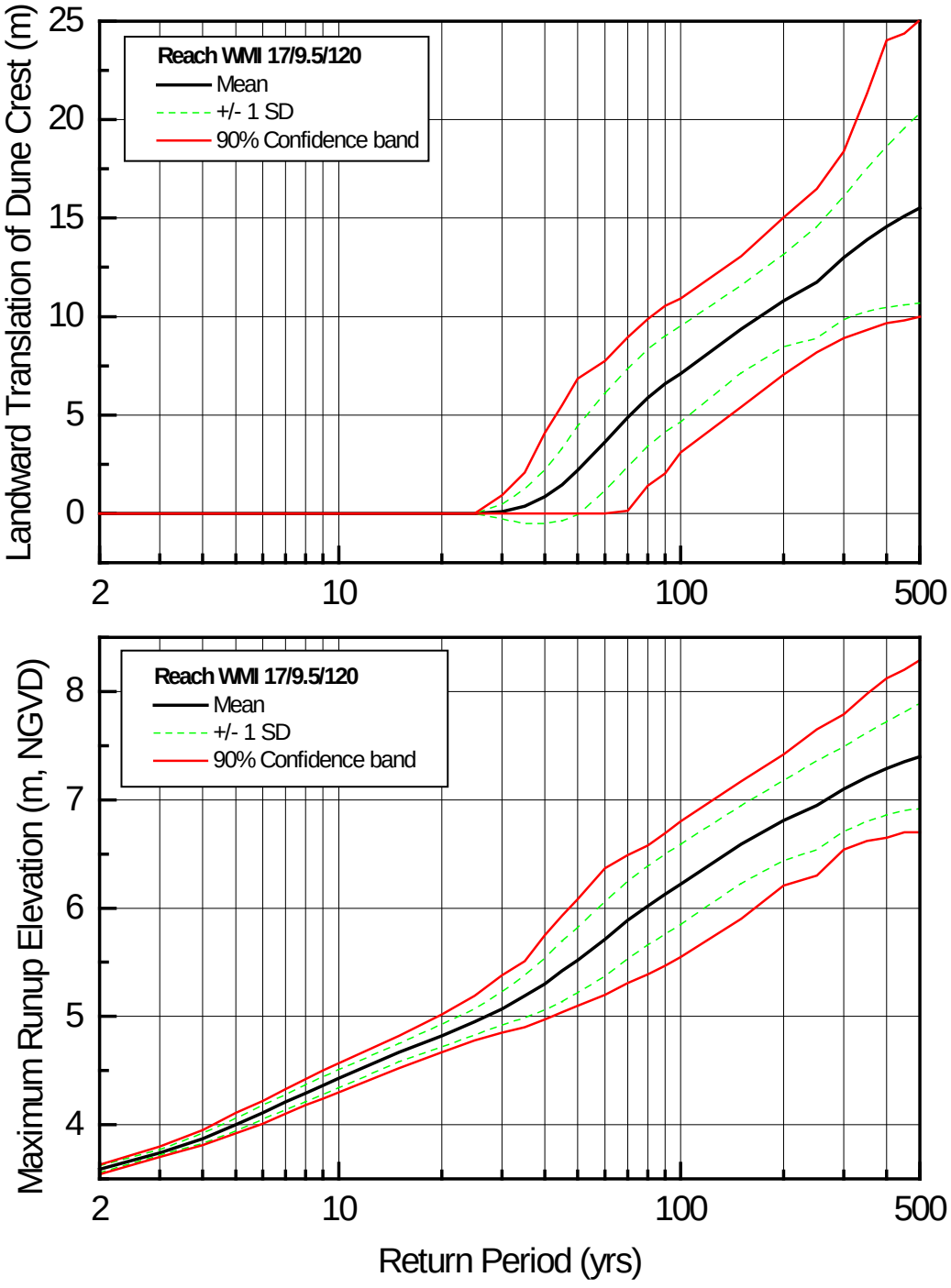

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach WMI 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
500
400
300
200
100
Reach WMI 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

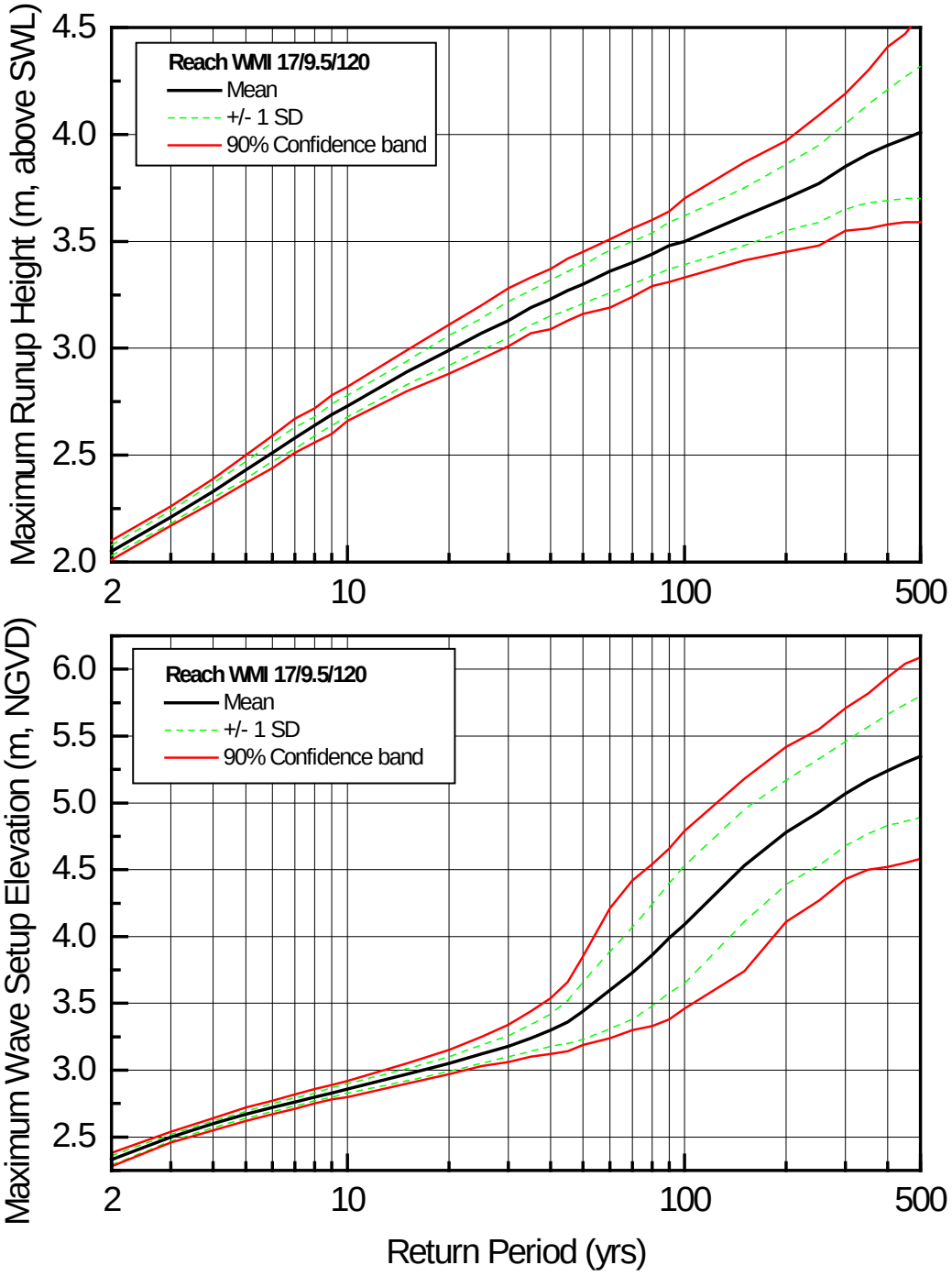

Reach WMI 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
16
14
12
10
8
6
2
10
100
500
Reach WMI 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
11
10
9
8
7
6
5
2
10
100
500
Return Period (yrs)

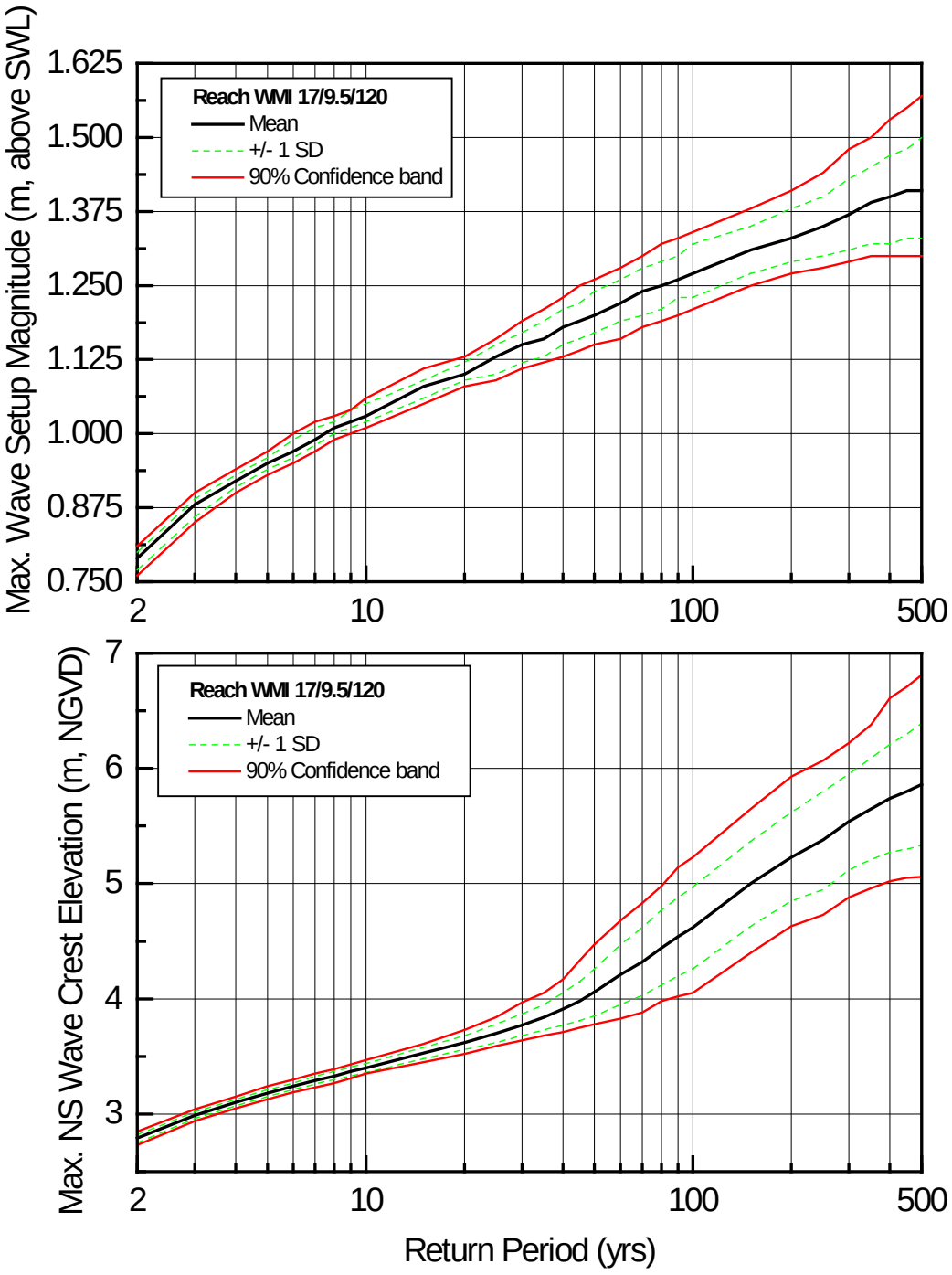

Reach WMI 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
0
10
20
30
40
50
60
2
10
100
500
Reach WMI 15/9.5/170
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
0.0
2.5
5.0
7.5
10.0
12.5
2
10
100
500
Return Period (yrs)

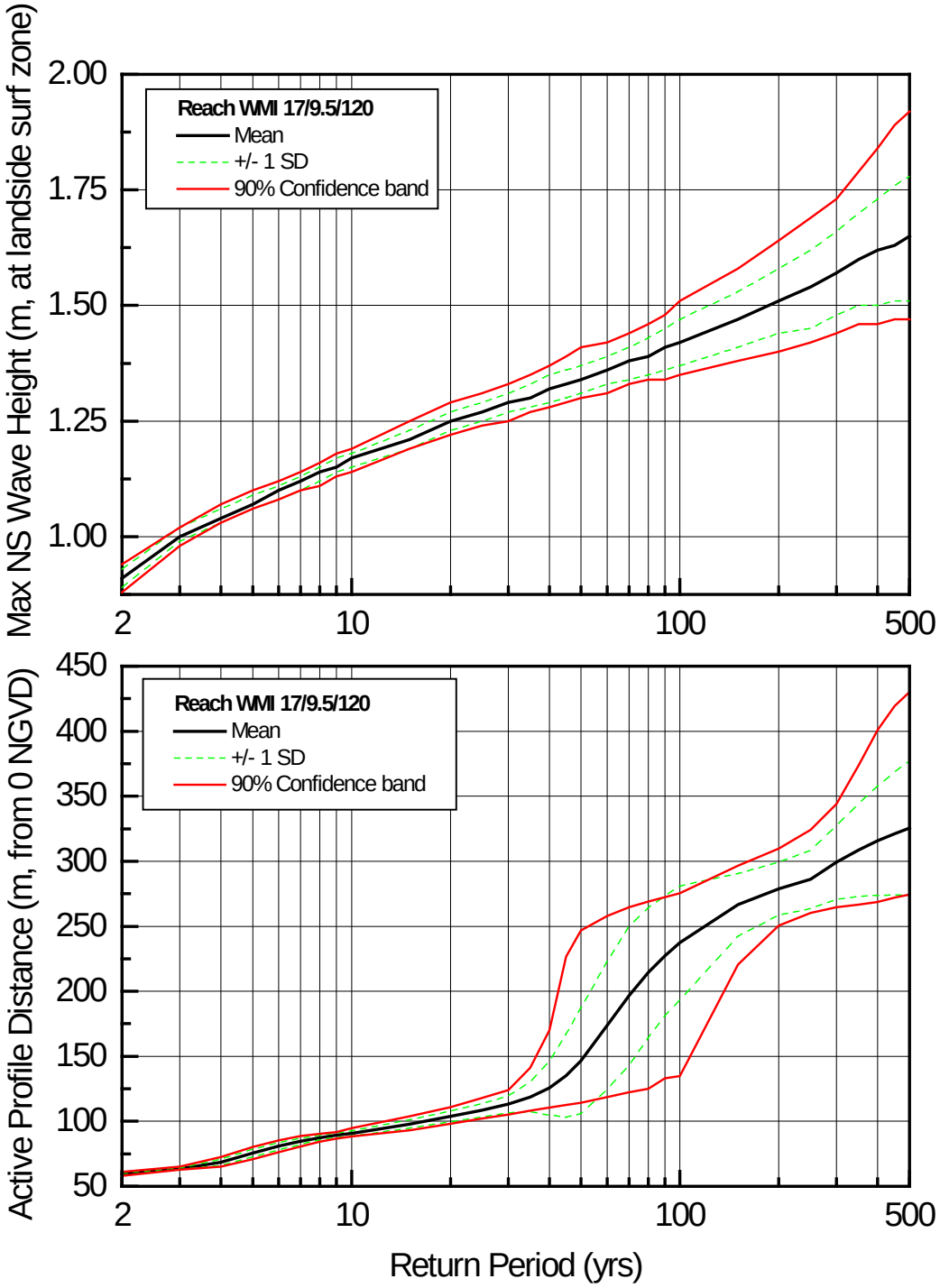

Reach WMI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
240
200
160
120
80
40
2
10
100
500
Reach WMI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
70
60
50
40
30
20
2
10
100
500
Return Period (yrs)

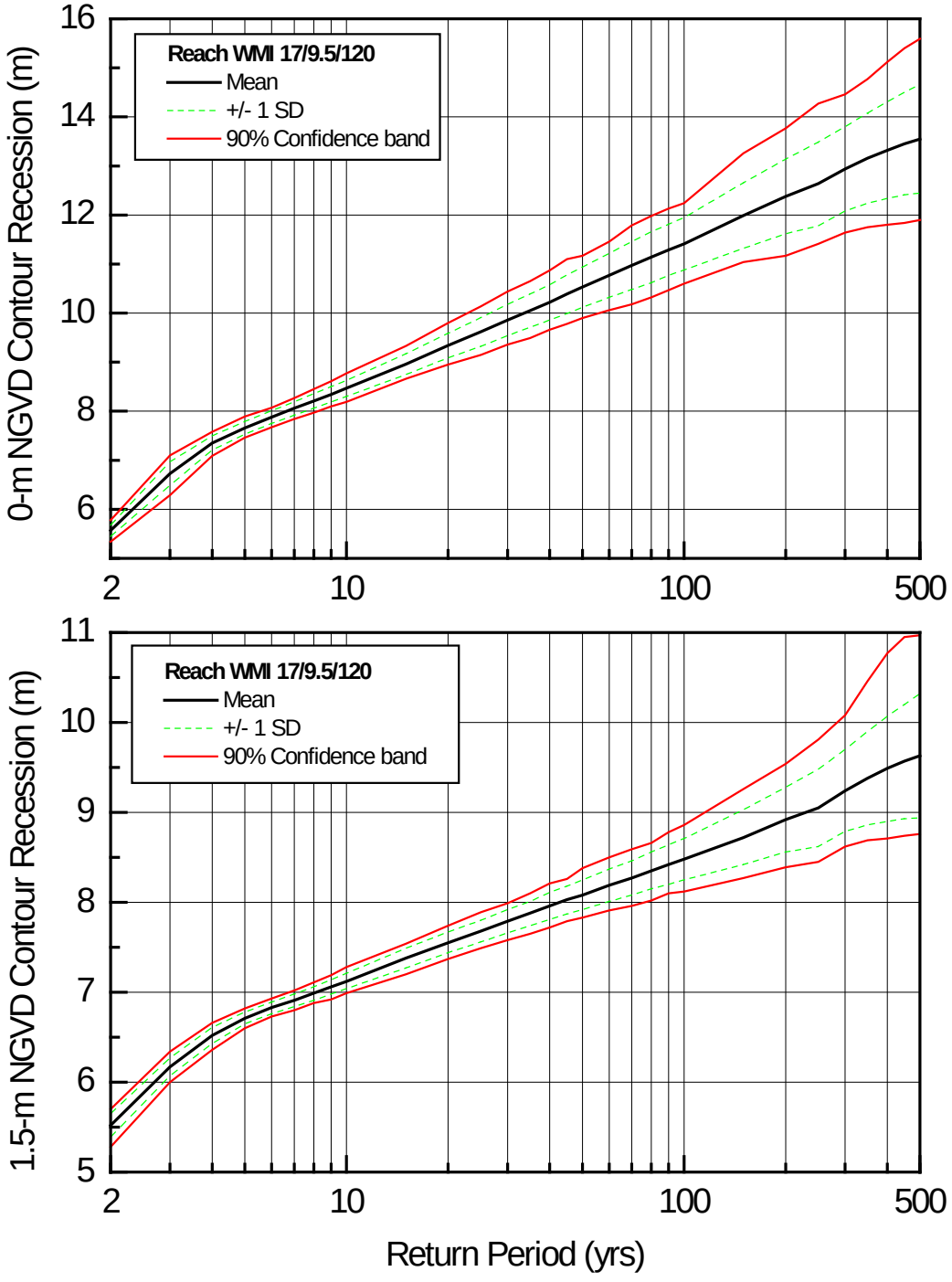

Reach WMI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
50
2
10
100
500
Reach WMI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
2
10
100
500
Return Period (yrs)

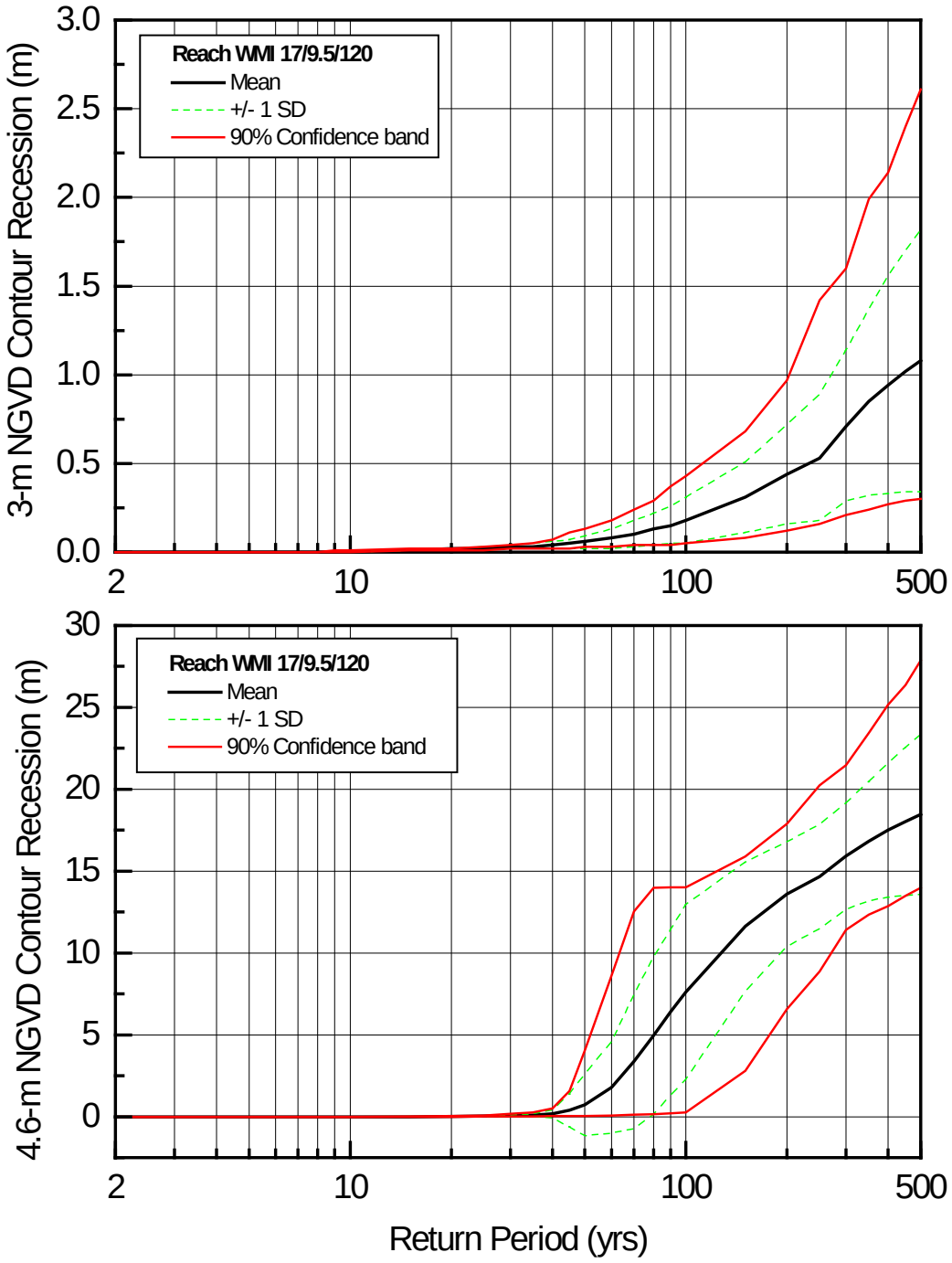

Reach WMI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
25
20
15
10
5
0
2
10
100
500
Reach WMI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
2
10
100
500
Return Period (yrs)

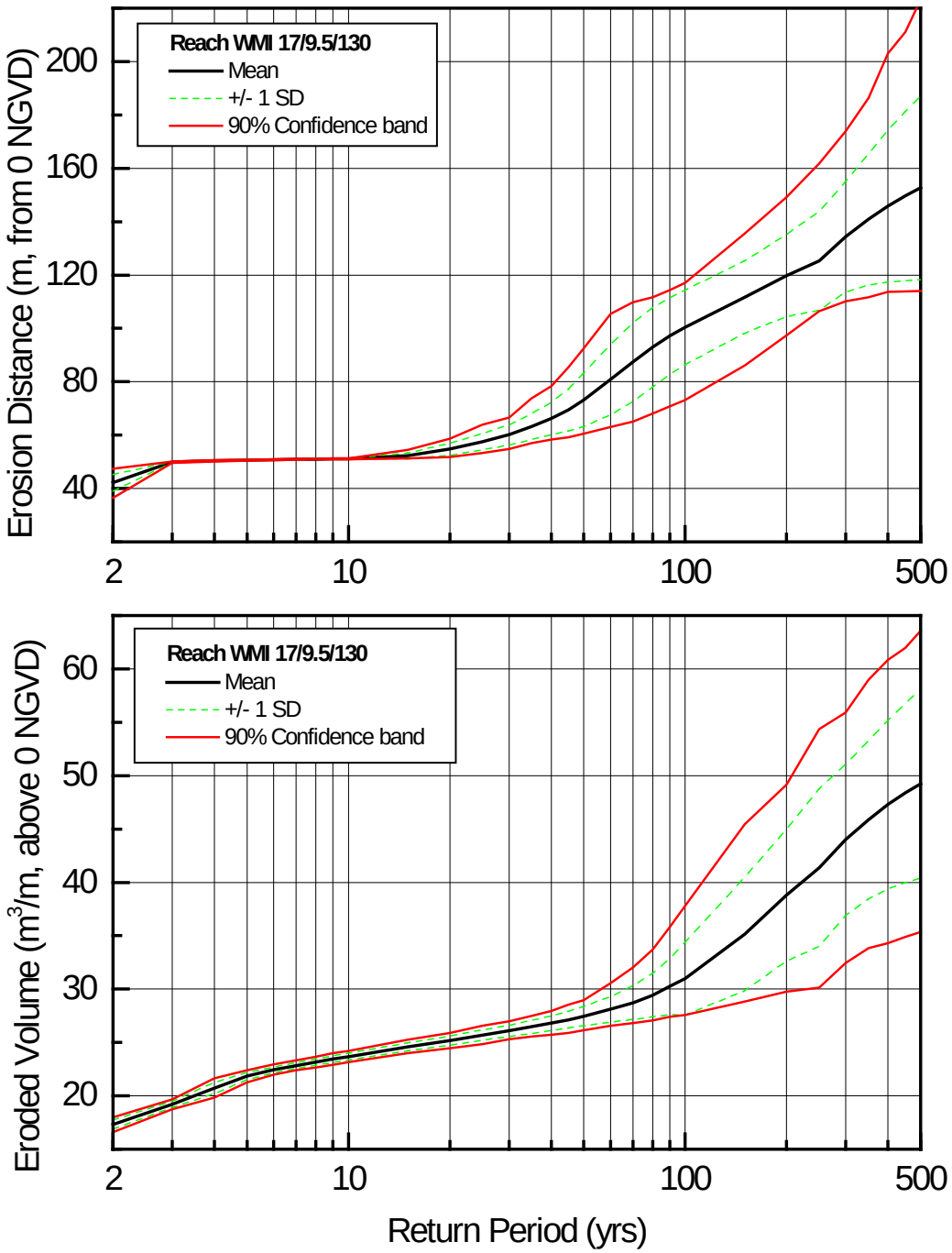

Reach WMI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach WMI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2
10
100
500
Return Period (yrs)

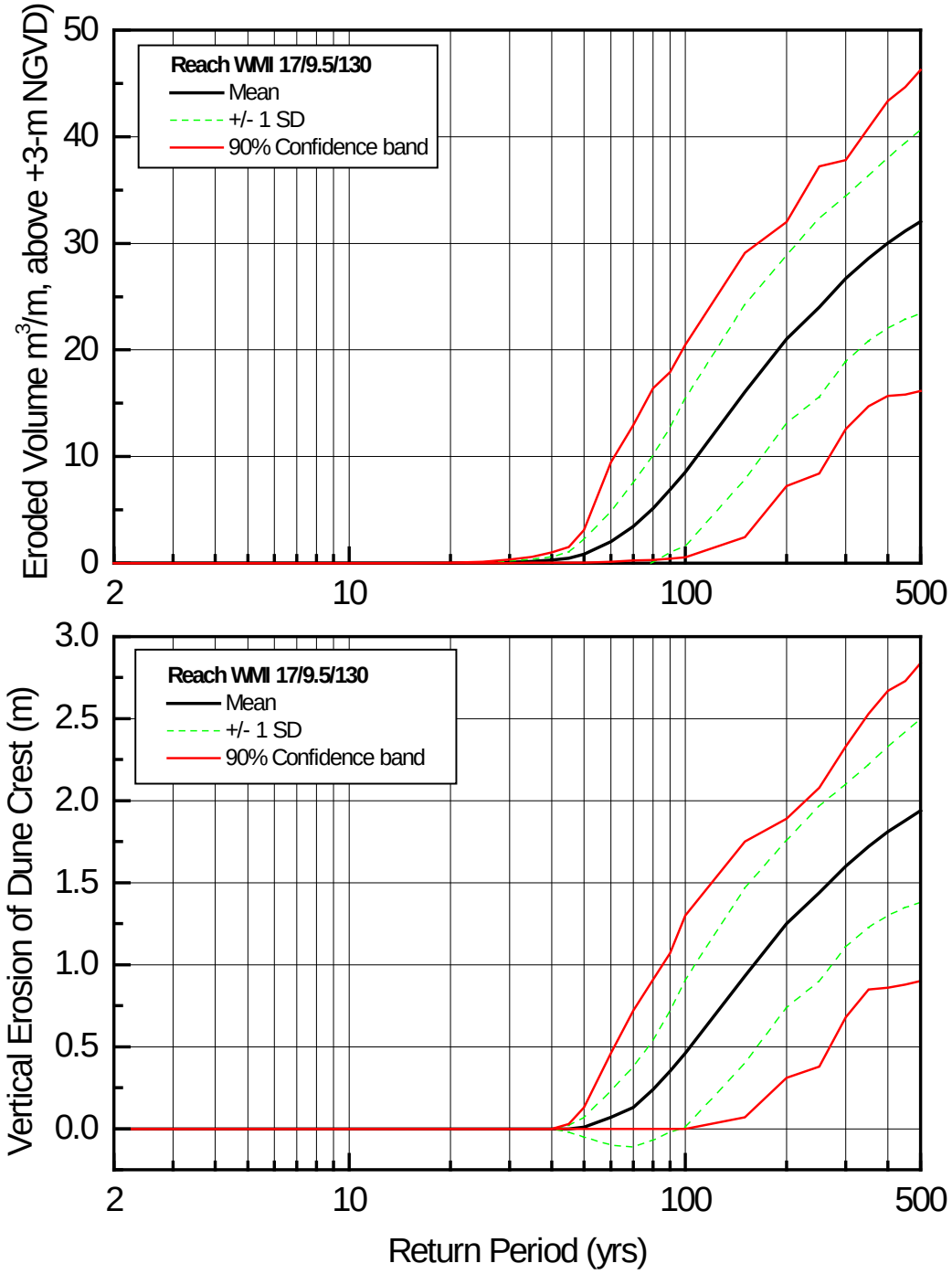

Max. Wave Setup Magnitude (m, above SWL)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach WMI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach WMI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

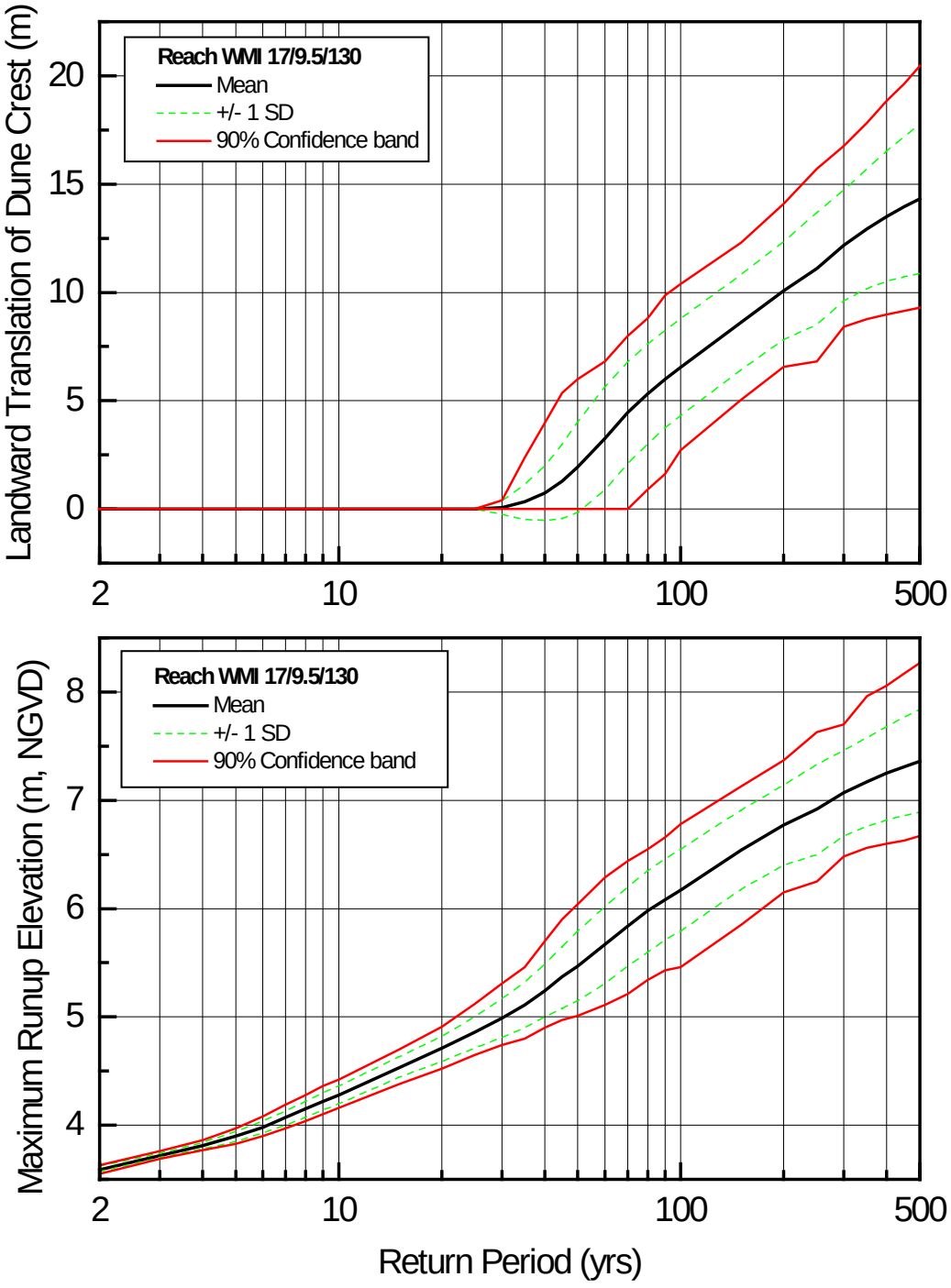

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach WMI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
450
400
350
300
250
200
150
100
50
Reach WMI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

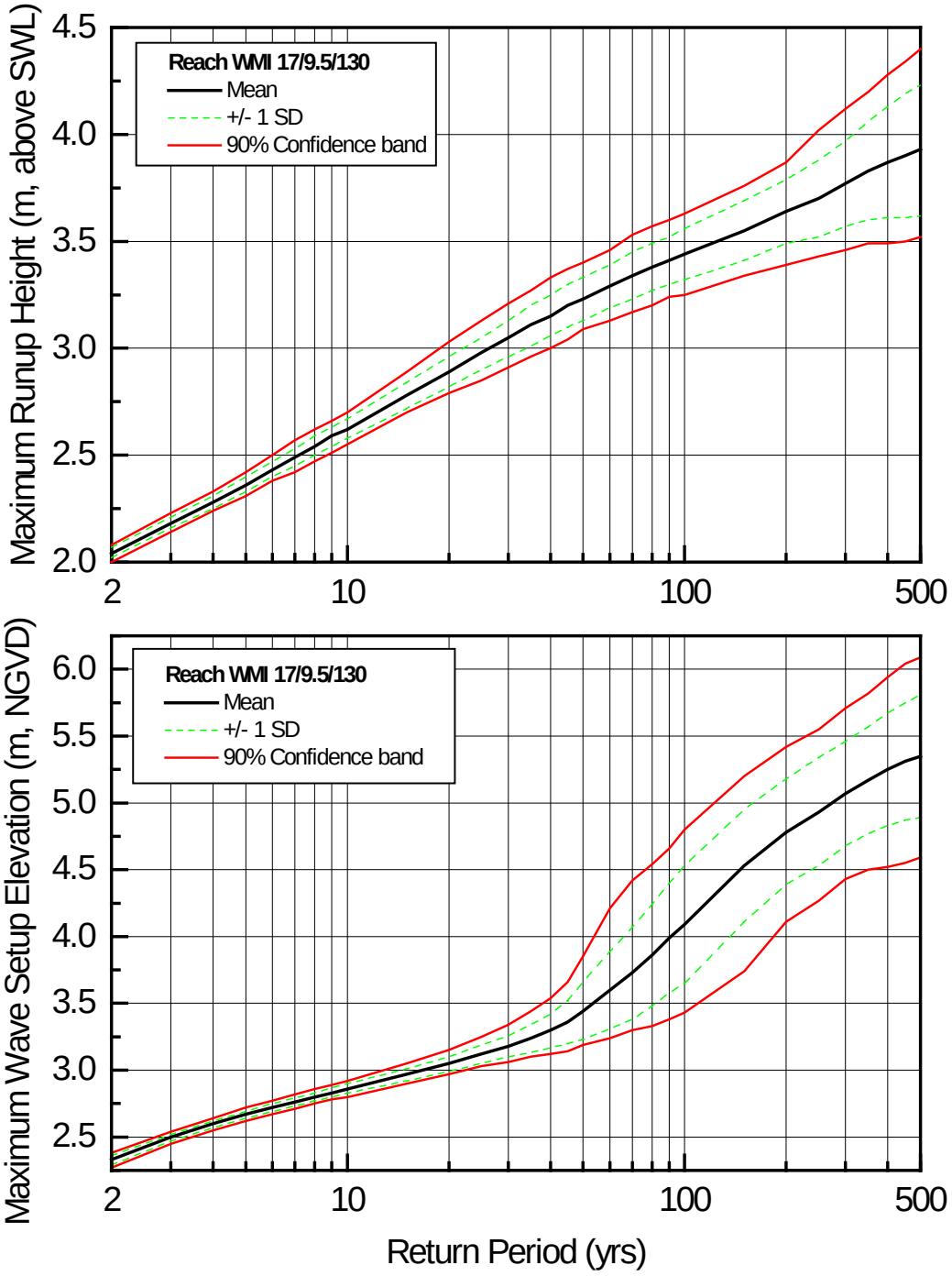

Reach WMI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
16
14
12
10
8
6
2
10
100
500
Reach WMI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
11
10
9
8
7
6
5
2
10
100
500
Return Period (yrs)

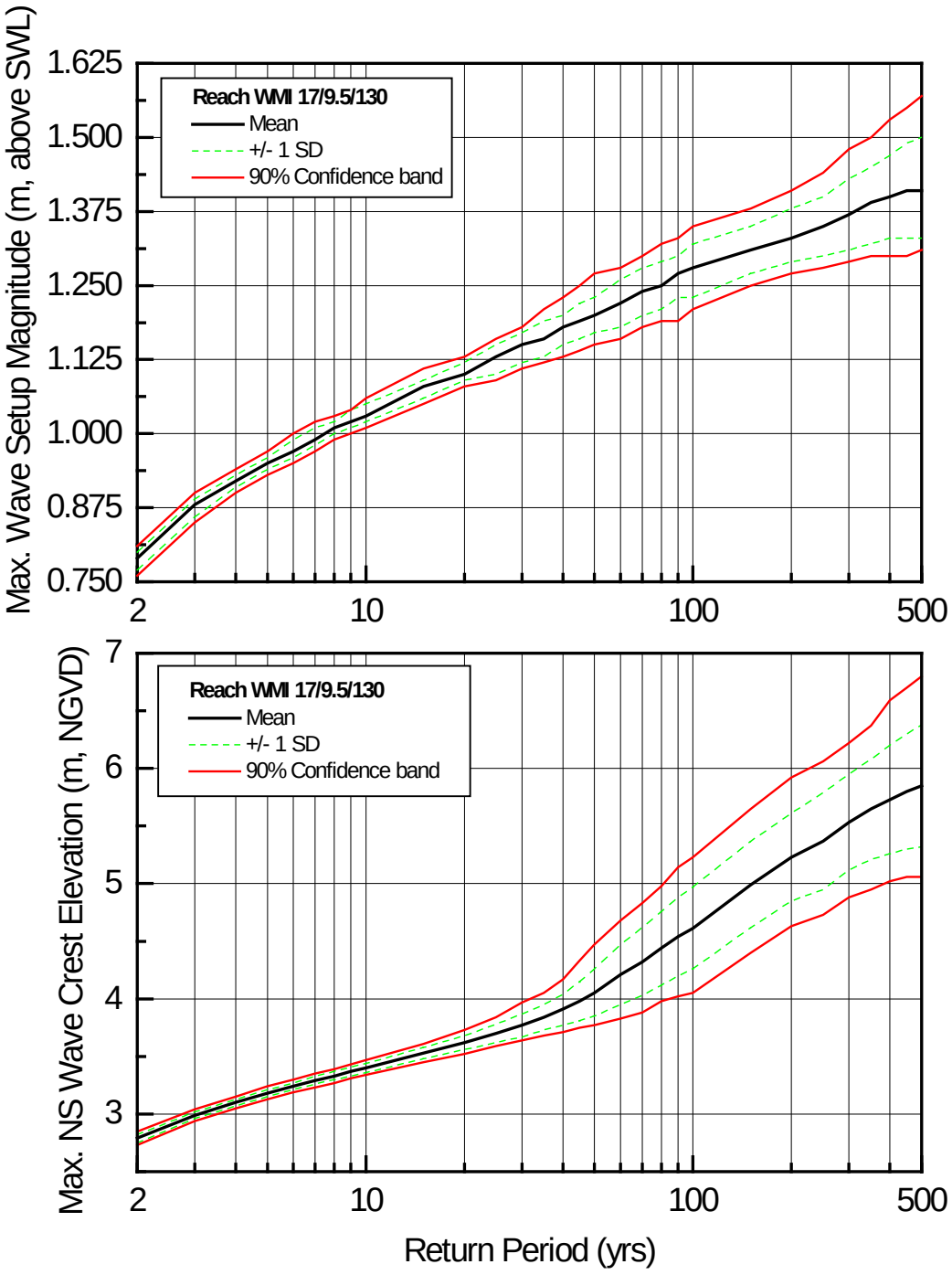

Reach WMI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach WMI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

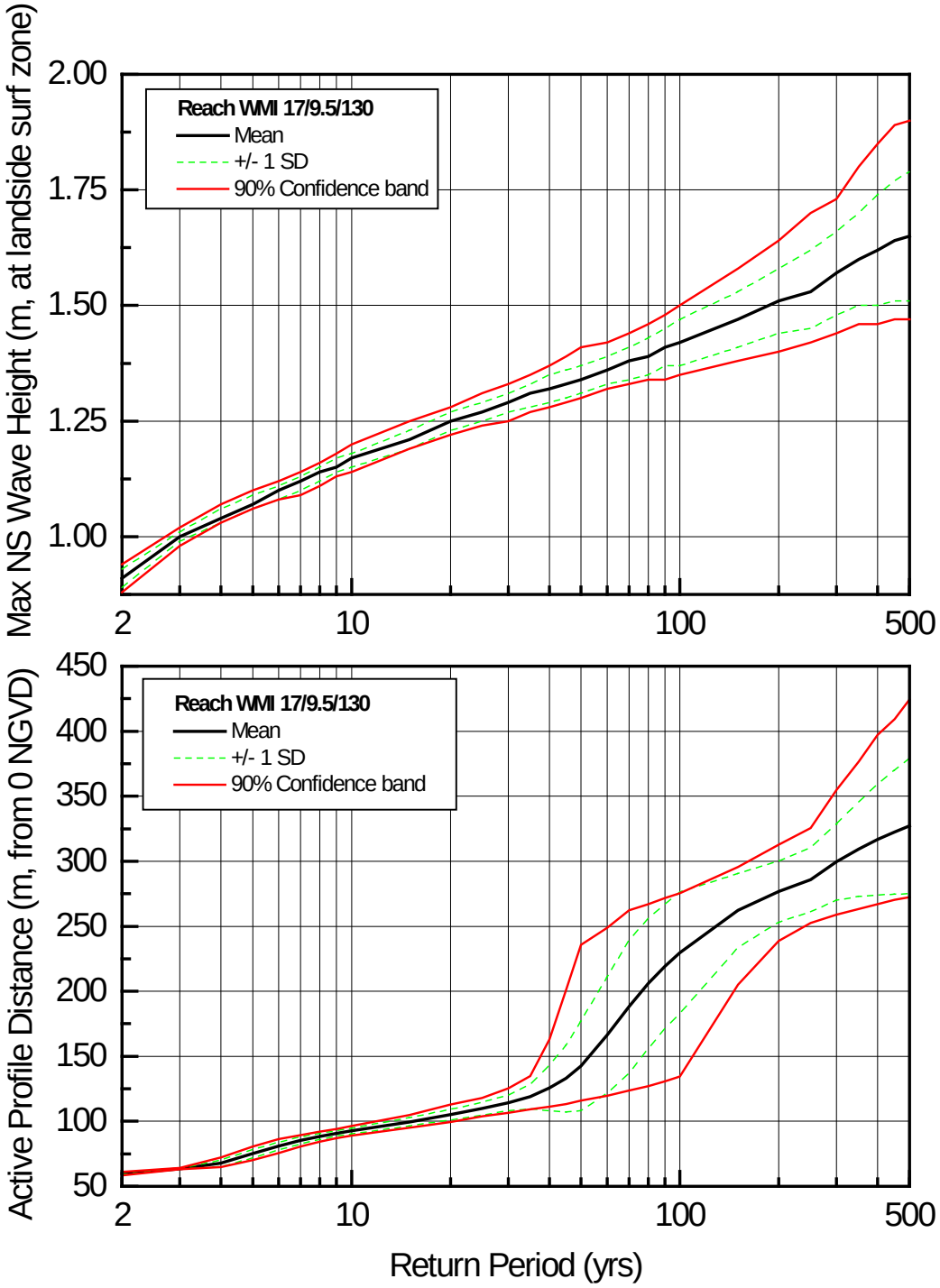

Reach WMI 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
200
160
120
80
40
2
10
100
500
Reach WMI 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
20
2
10
100
500
Return Period (yrs)

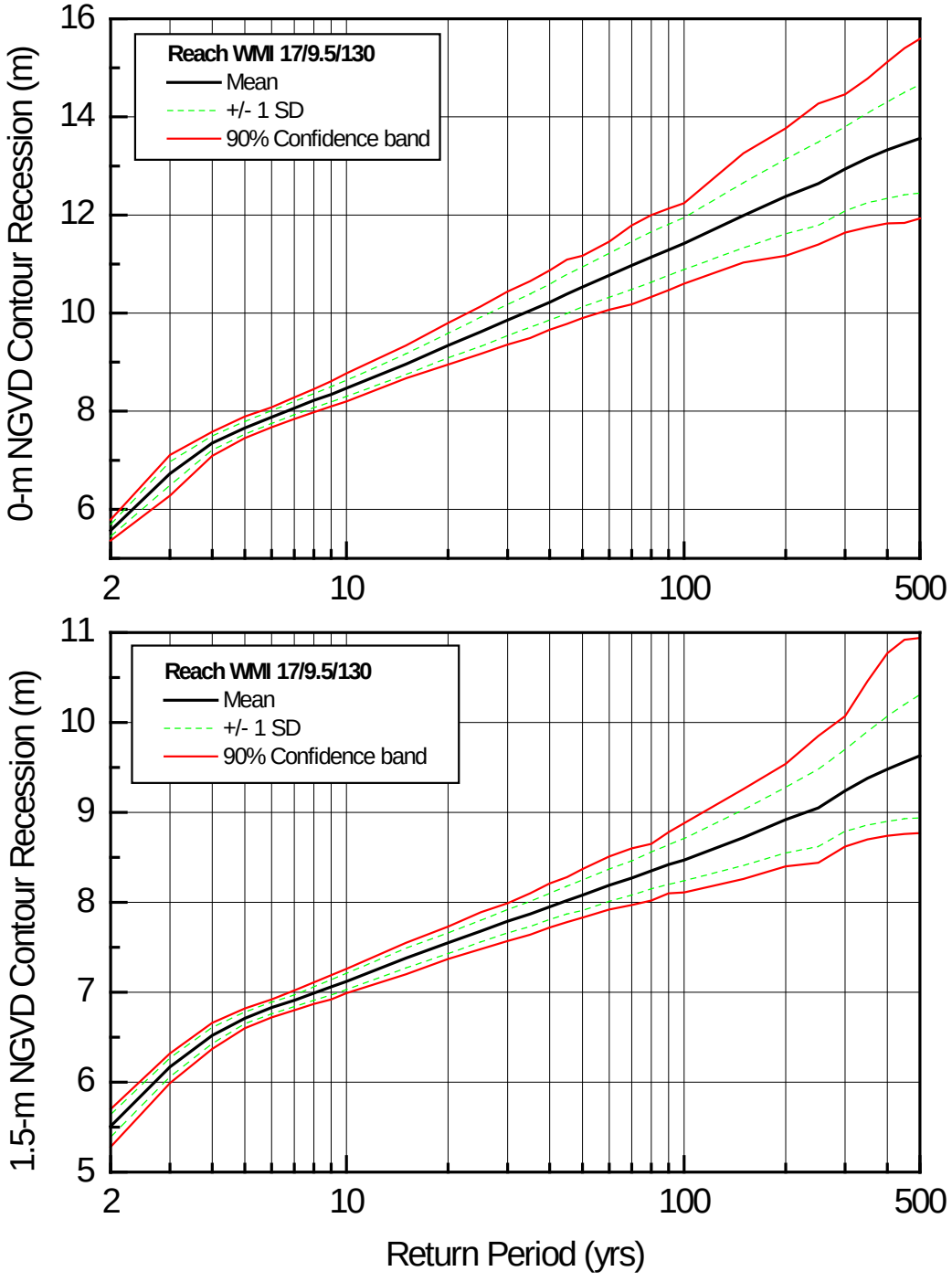

Reach WMI 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
50
2
10
100
500
Reach WMI 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
2
10
100
500
Return Period (yrs)

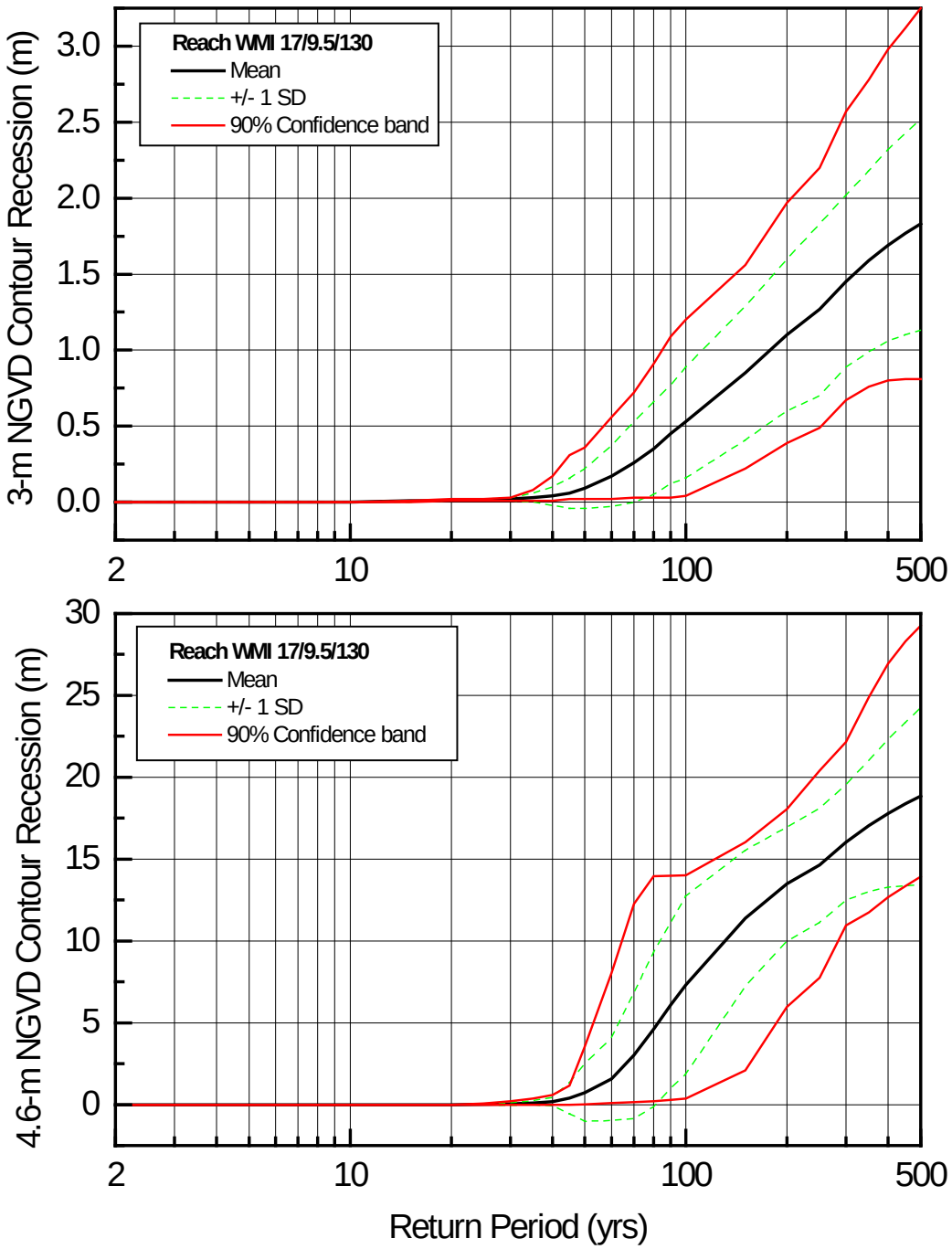

Reach WMI 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
5
10
15
20
2
10
100
500
Reach WMI 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
4
5
6
7
8
2
10
100
500
Return Period (yrs)

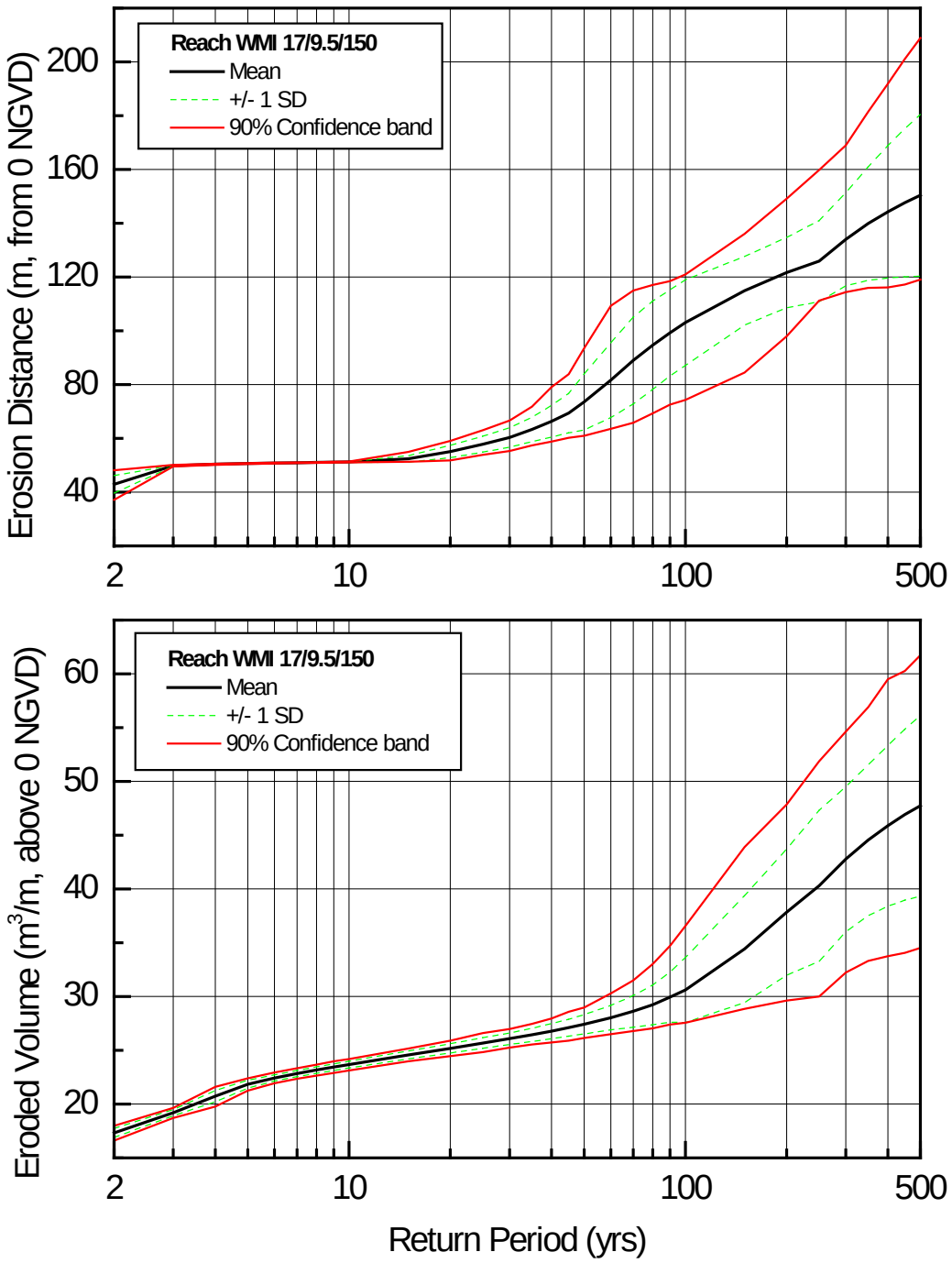

Reach WMI 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach WMI 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2
10
100
500
Return Period (yrs)

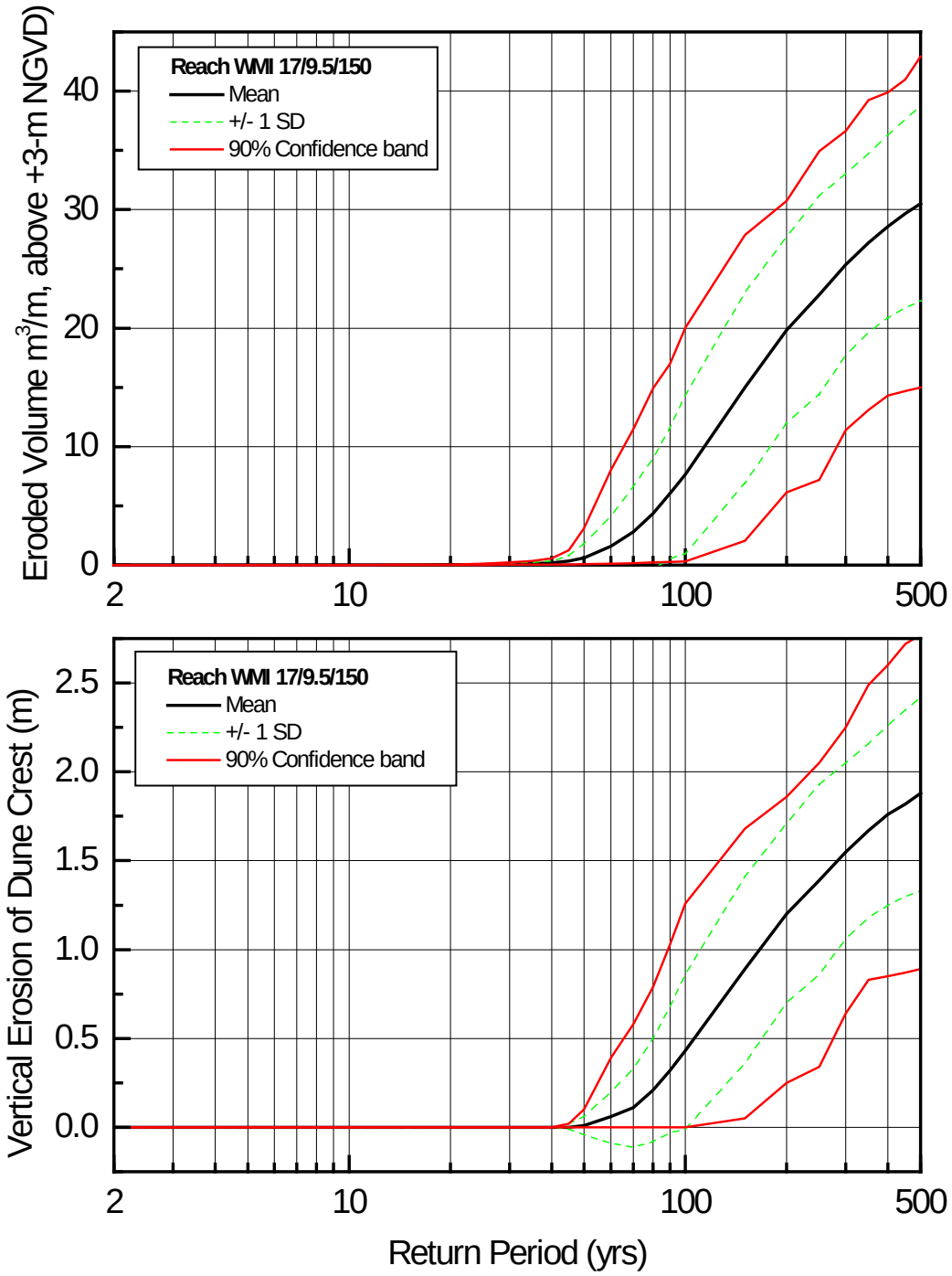

Max. Wave Setup Magnitude (m, above SWL)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
2
10
100
500
Reach WMI 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
2
10
100
500
Return Period (yrs)
Reach WMI 17/9.5/130
Mean
+/- 1 SD
90% Confidence band

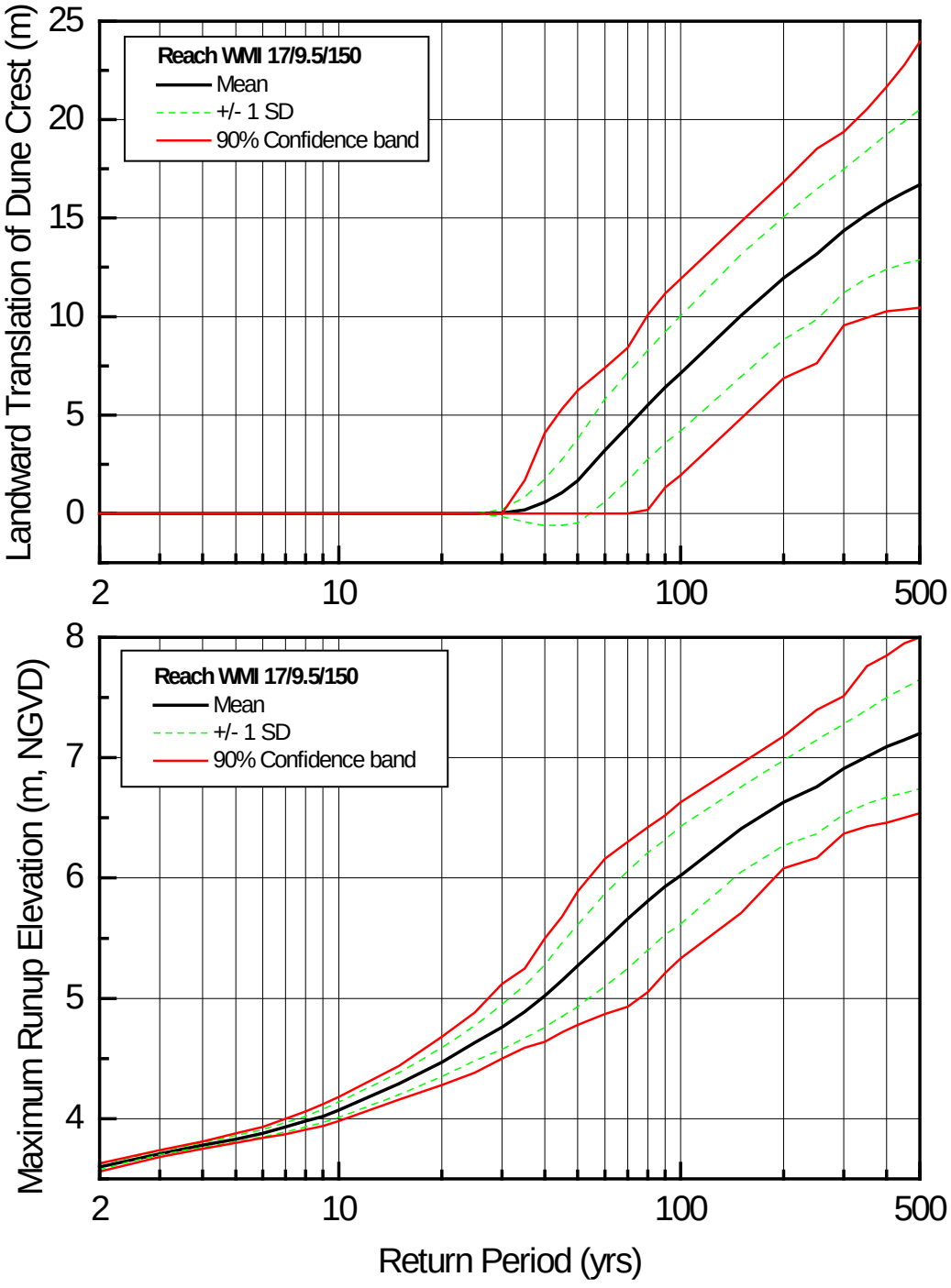

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach WMI 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
450
400
350
300
250
200
150
100
50
Reach WMI 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

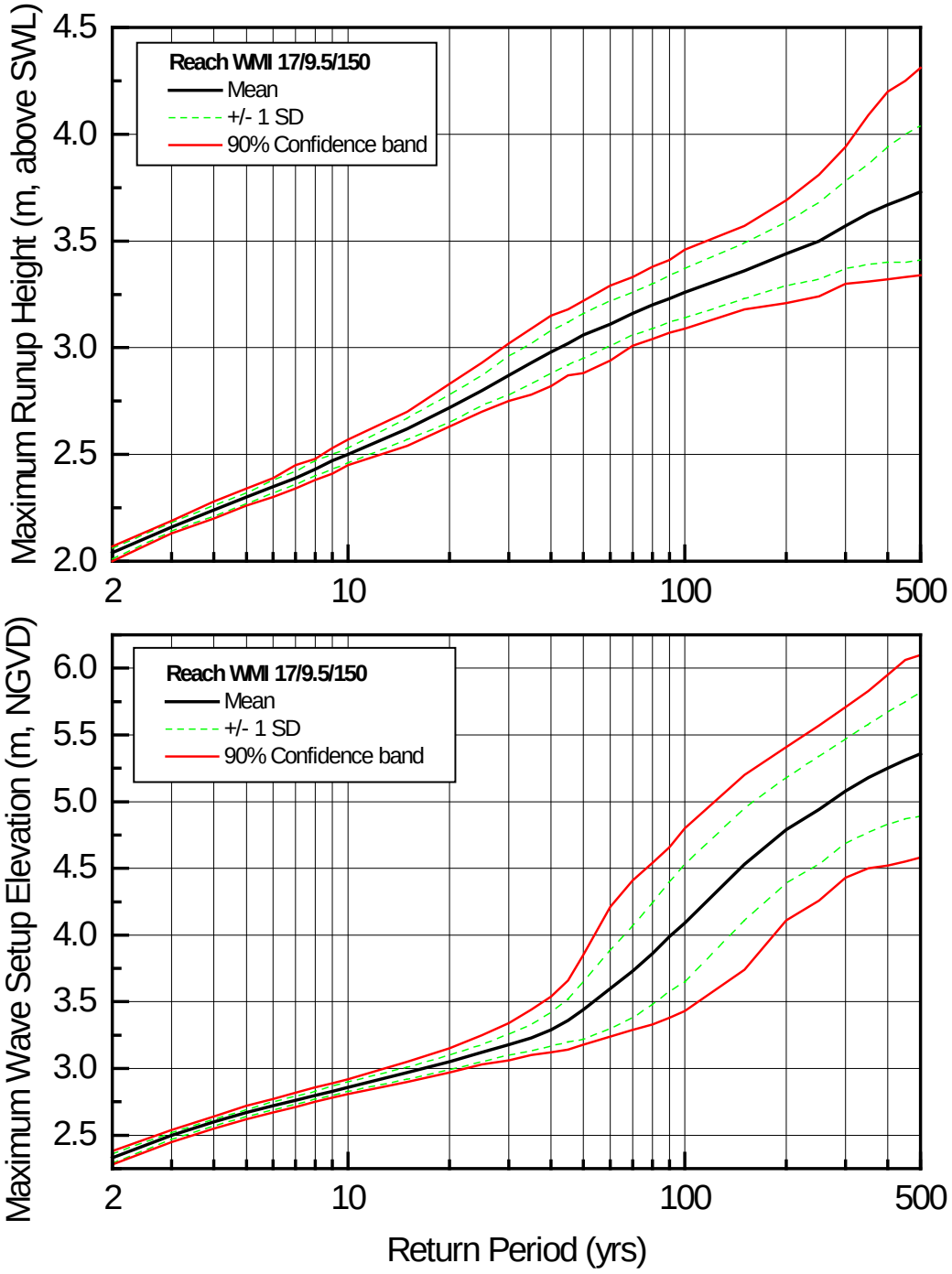

Reach WMI 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
16
14
12
10
8
6
2
10
100
500
Reach WMI 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
11
10
9
8
7
6
5
2
10
100
500
Return Period (yrs)

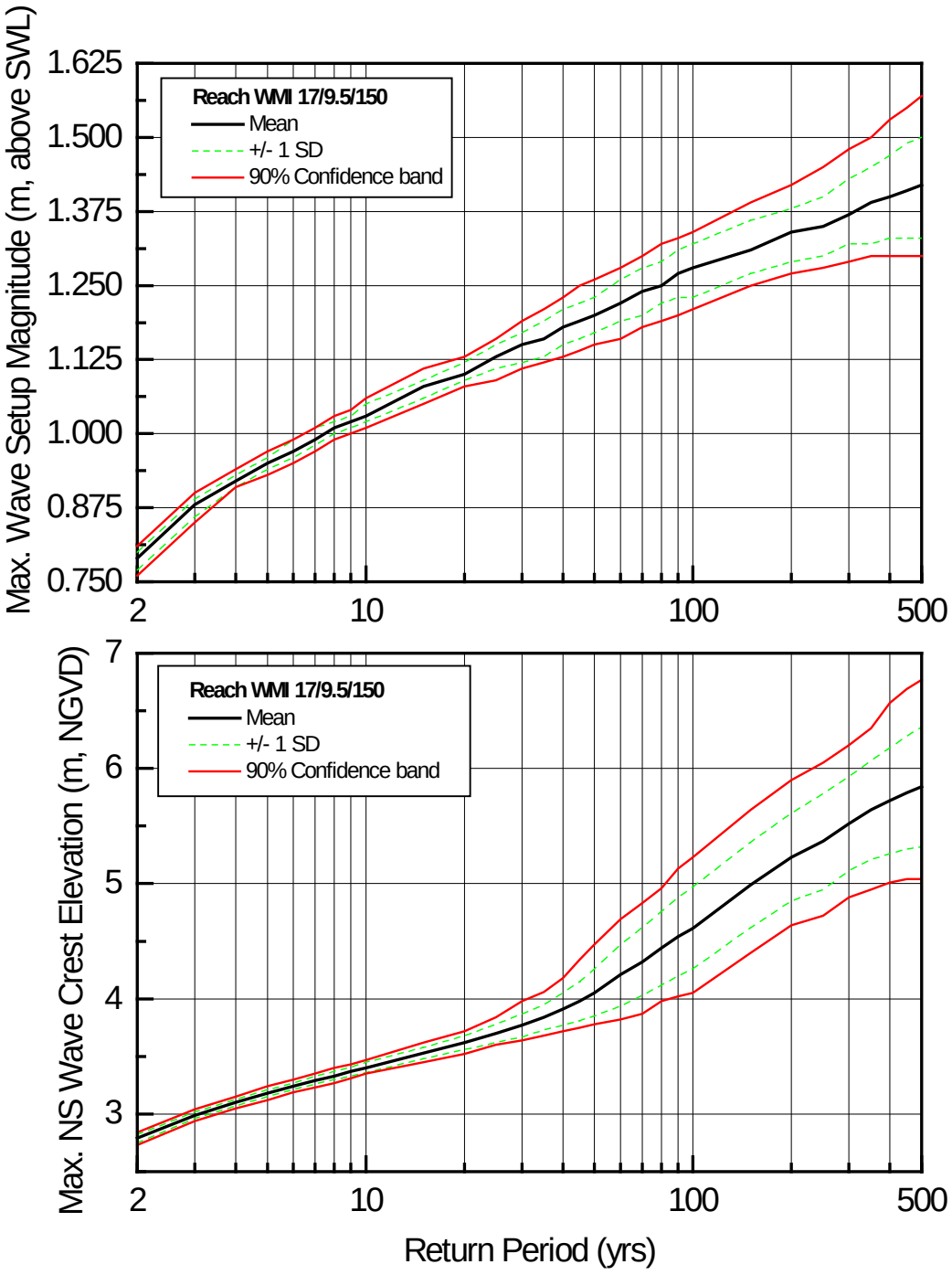

Reach WMI 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach WMI 17/9.5/130
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

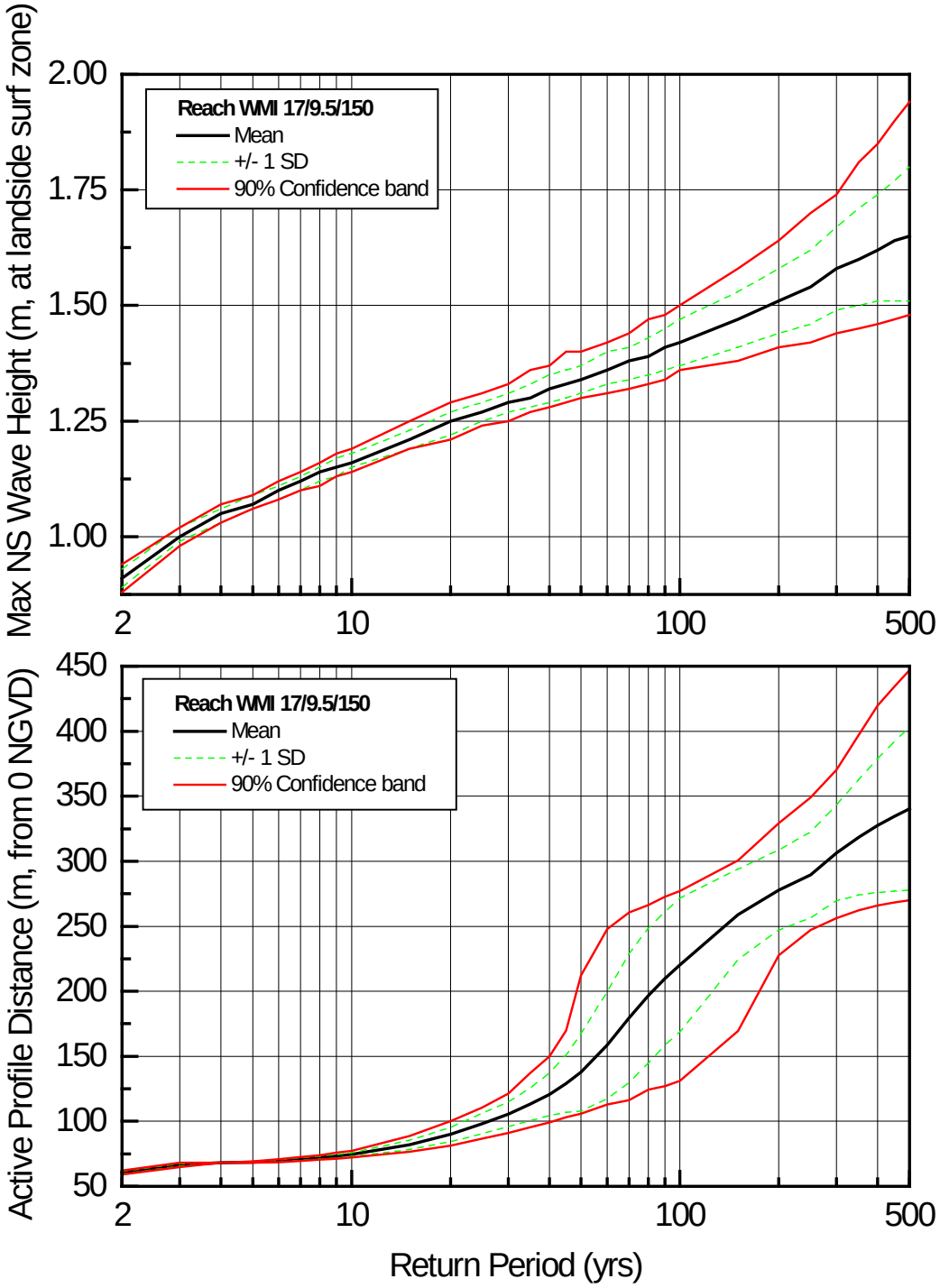

Reach WMI 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
200
160
120
80
40
2
10
100
500
Reach WMI 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
20
2
10
100
500
Return Period (yrs)

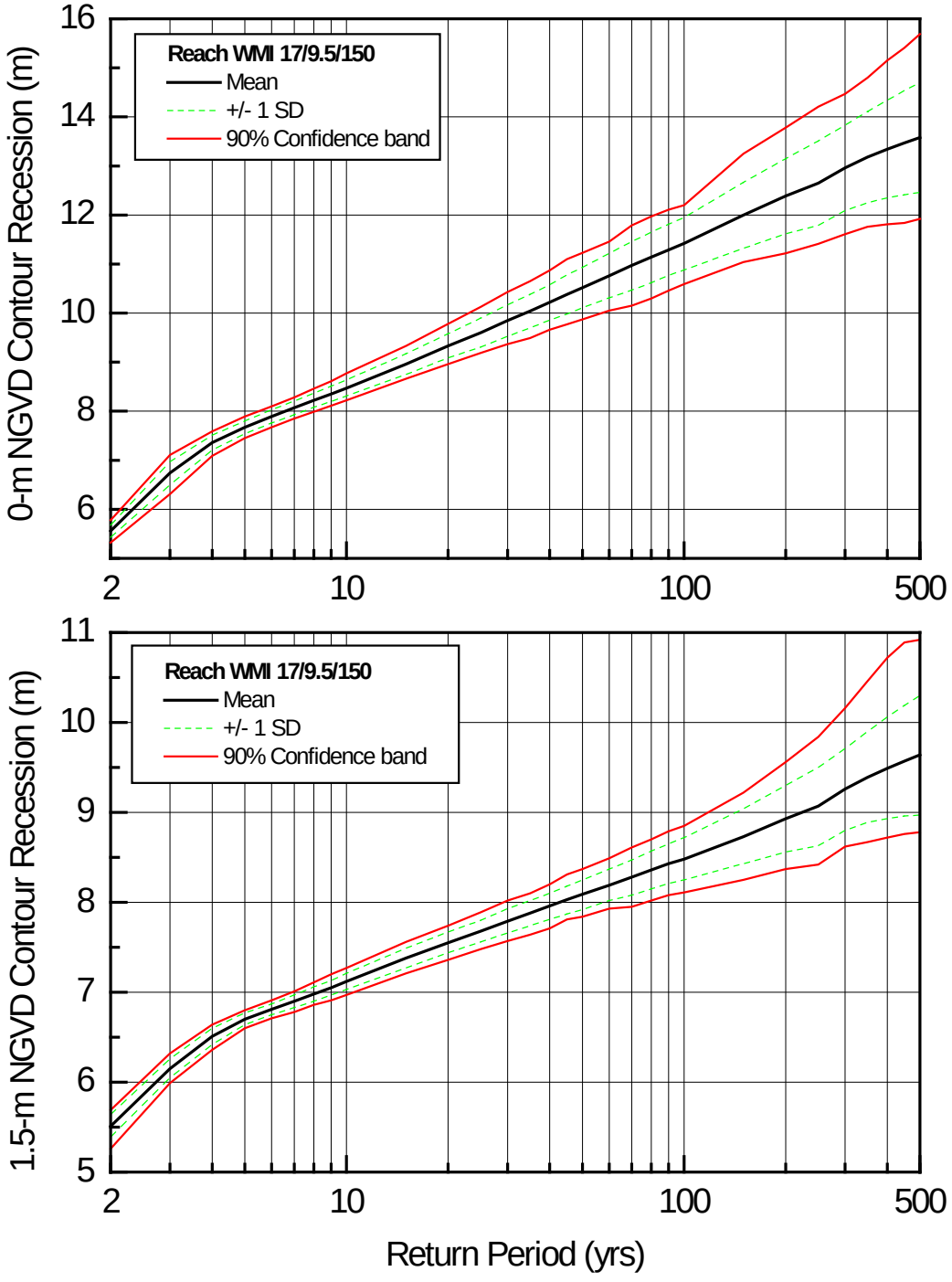

Reach WMI 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach WMI 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2.5
2
10
100
500
Return Period (yrs)

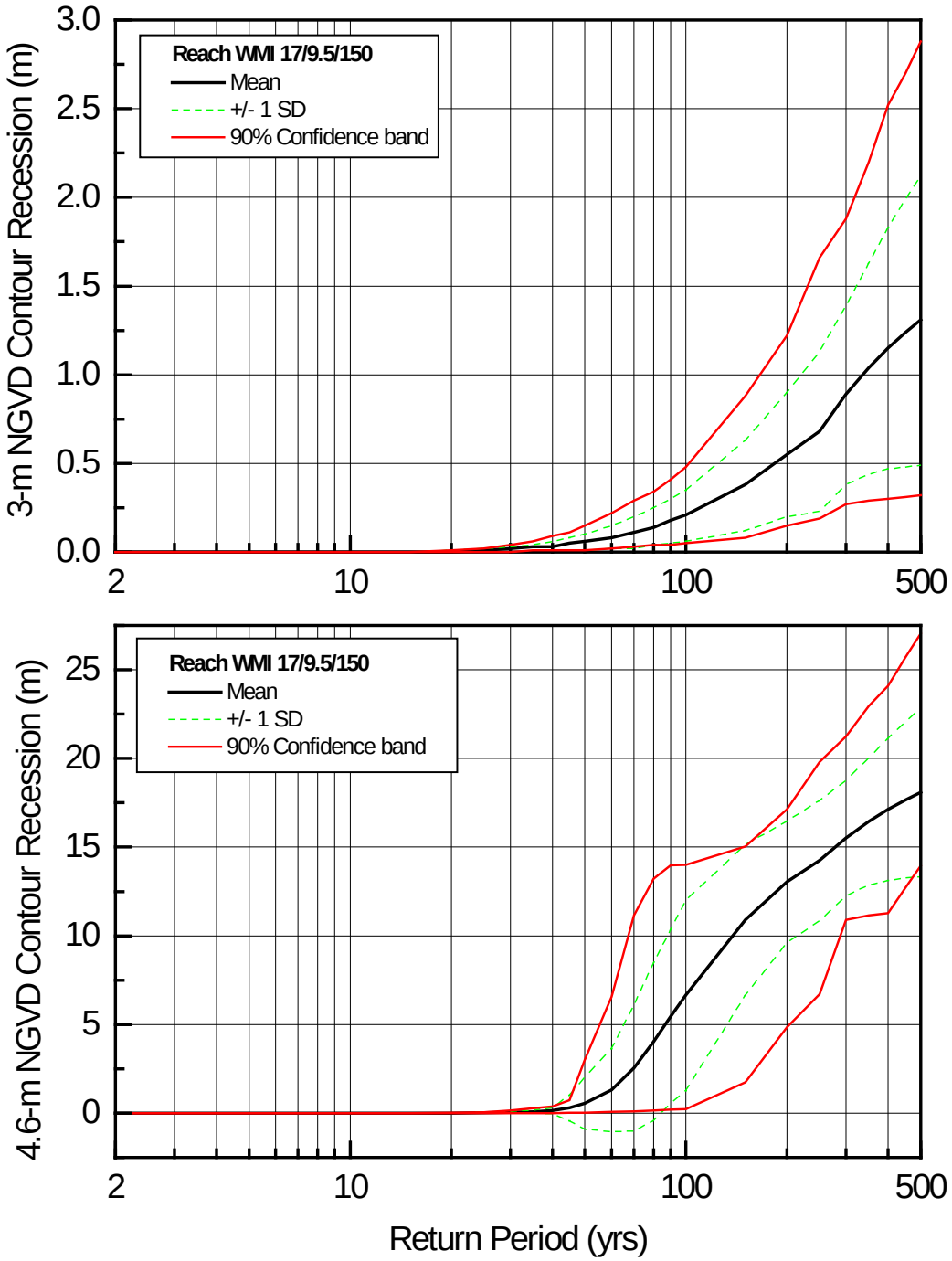

Reach WMI 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
25
20
15
10
5
0
2
10
100
500
Reach WMI 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
2
10
100
500
Return Period (yrs)

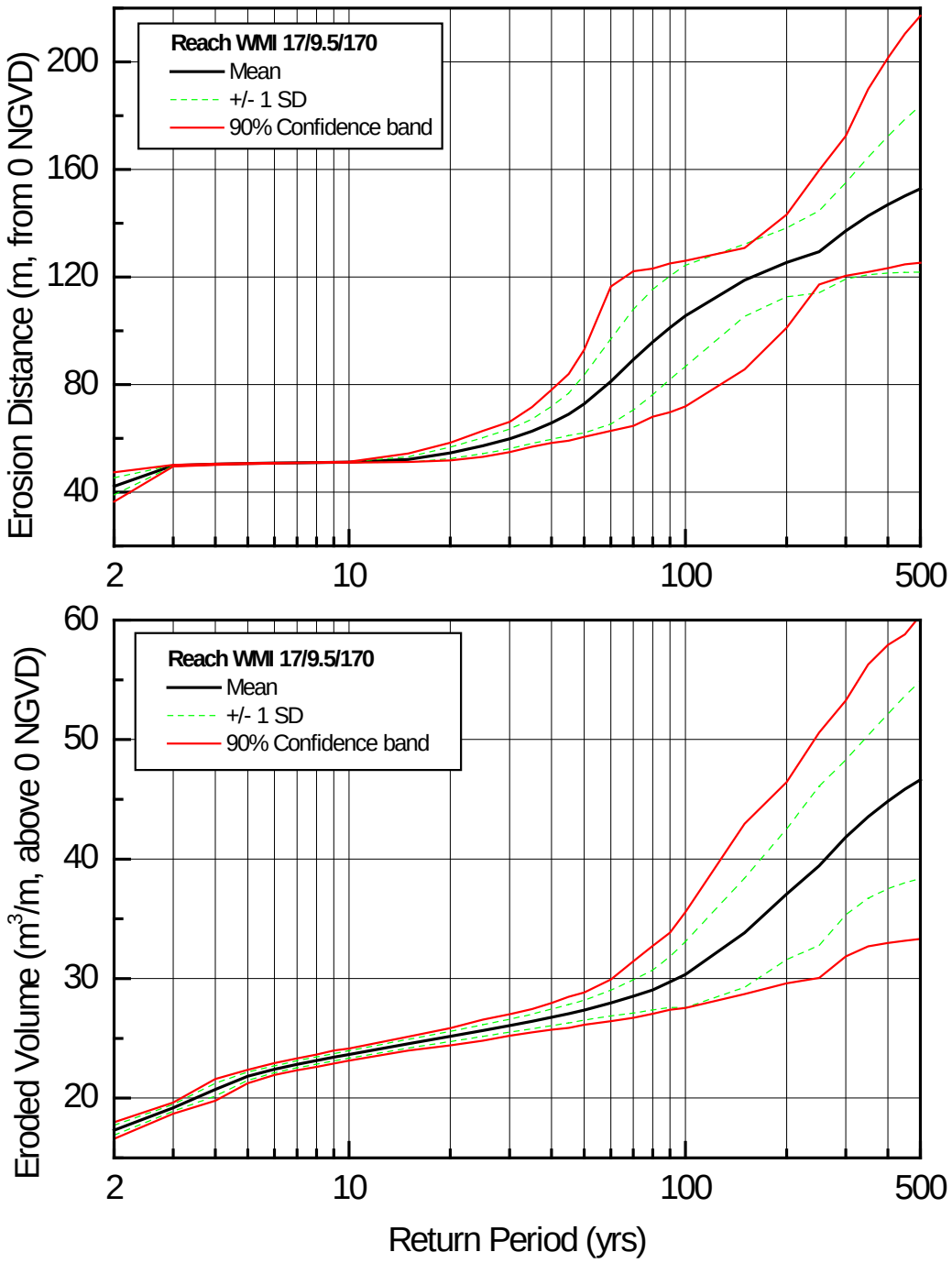

Reach WMI 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach WMI 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2
10
100
500
Return Period (yrs)

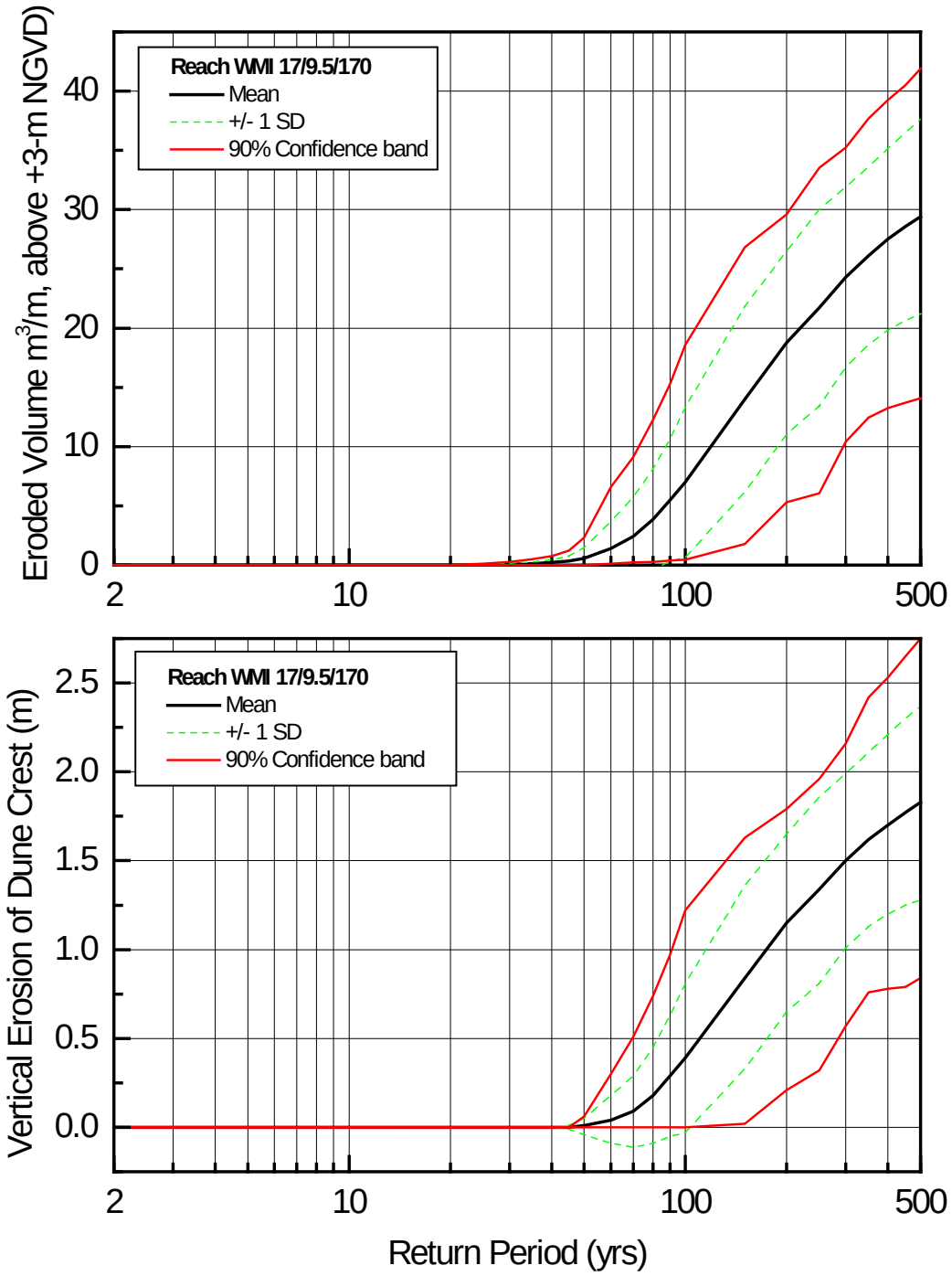

Max. Wave Setup Magnitude (m, above SWL)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach WMI 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach WMI 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

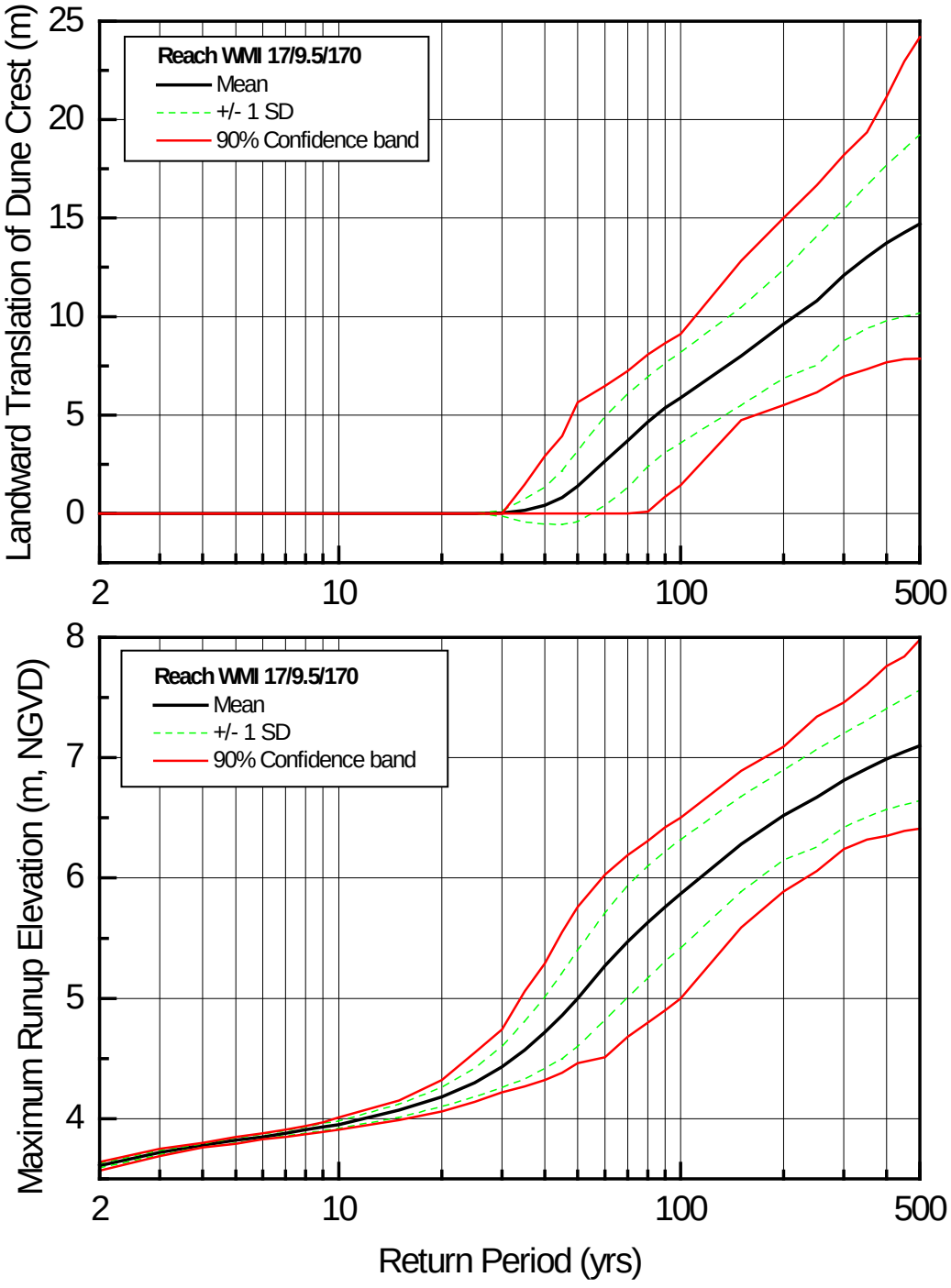

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach WMI 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
450
400
350
300
250
200
150
100
50
Reach WMI 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

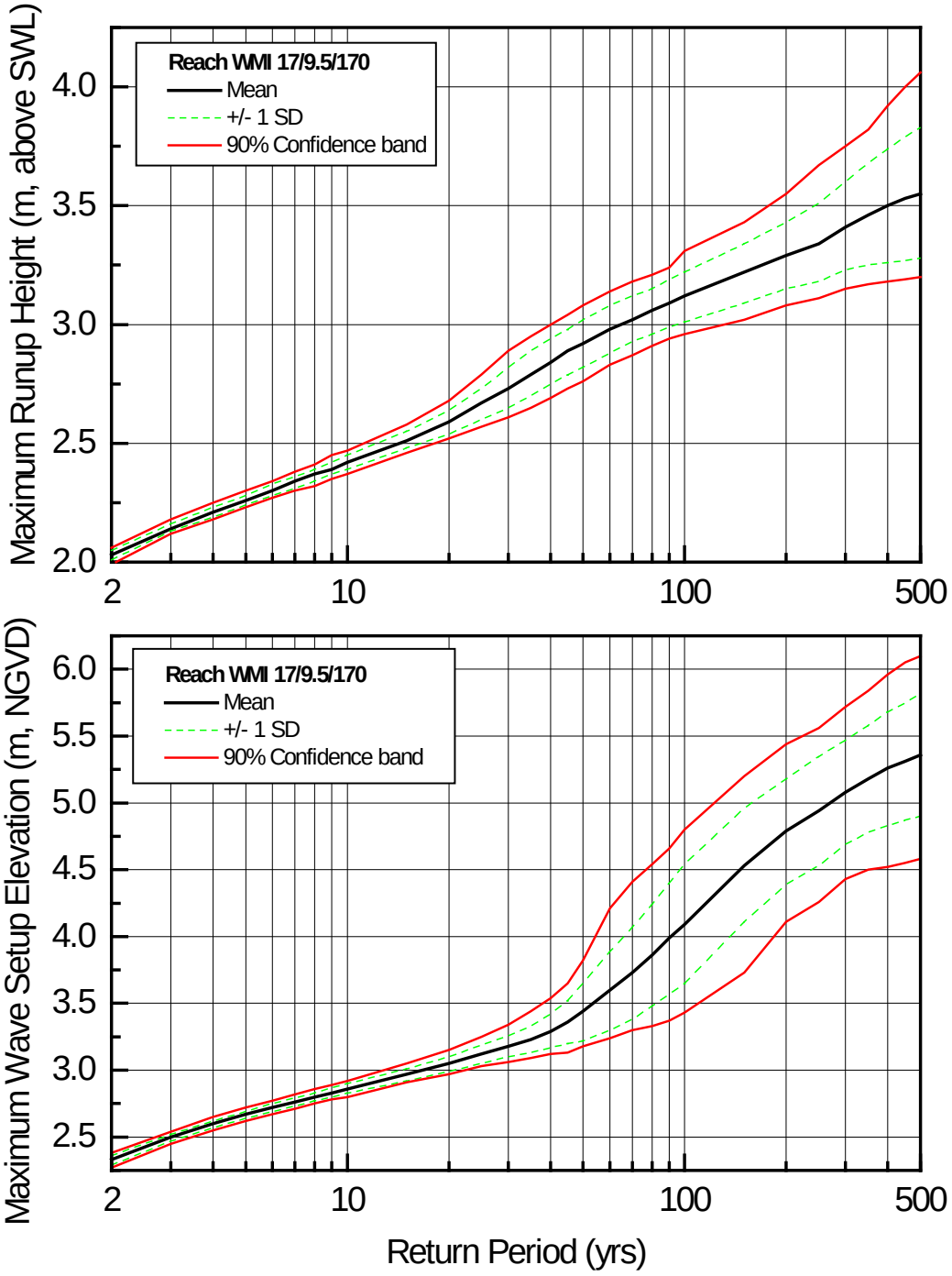

Reach WMI 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
16
14
12
10
8
6
2
10
100
500
Reach WMI 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
11
10
9
8
7
6
5
2
10
100
500
Return Period (yrs)

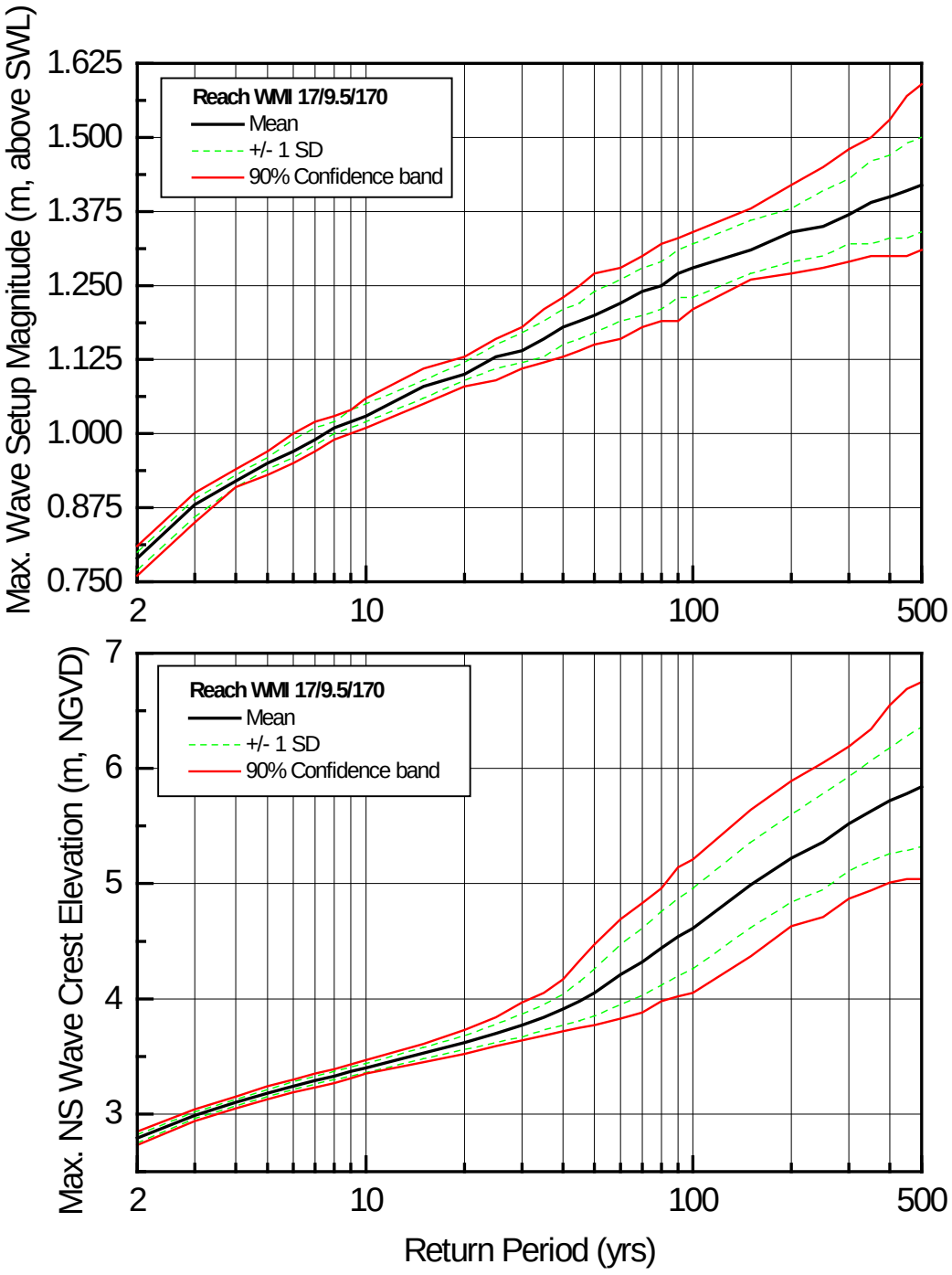

Reach WMI 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach WMI 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

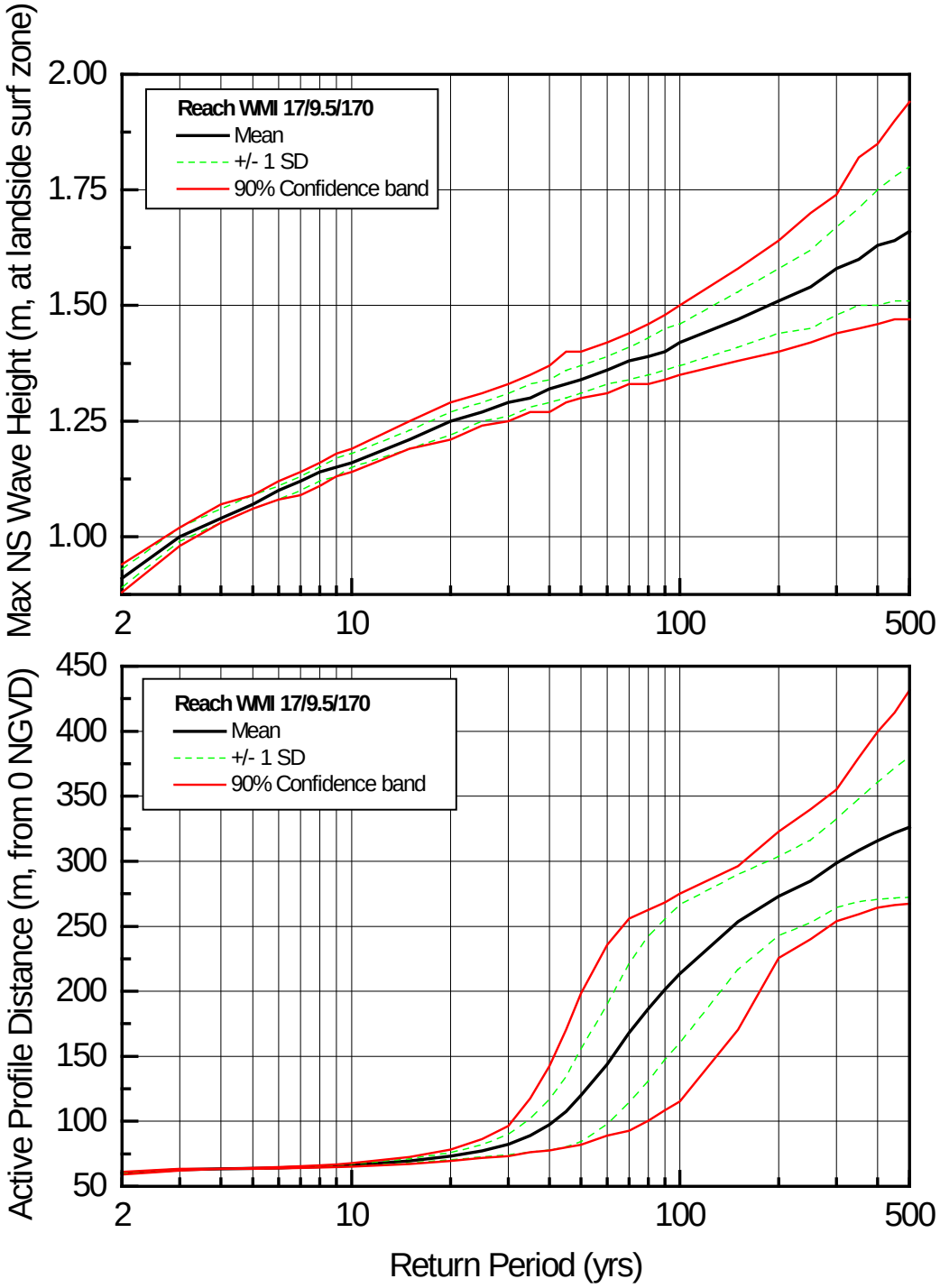

Reach WMI 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
200
160
120
80
40
2
10
100
500
Reach WMI 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
20
2
10
100
500
Return Period (yrs)

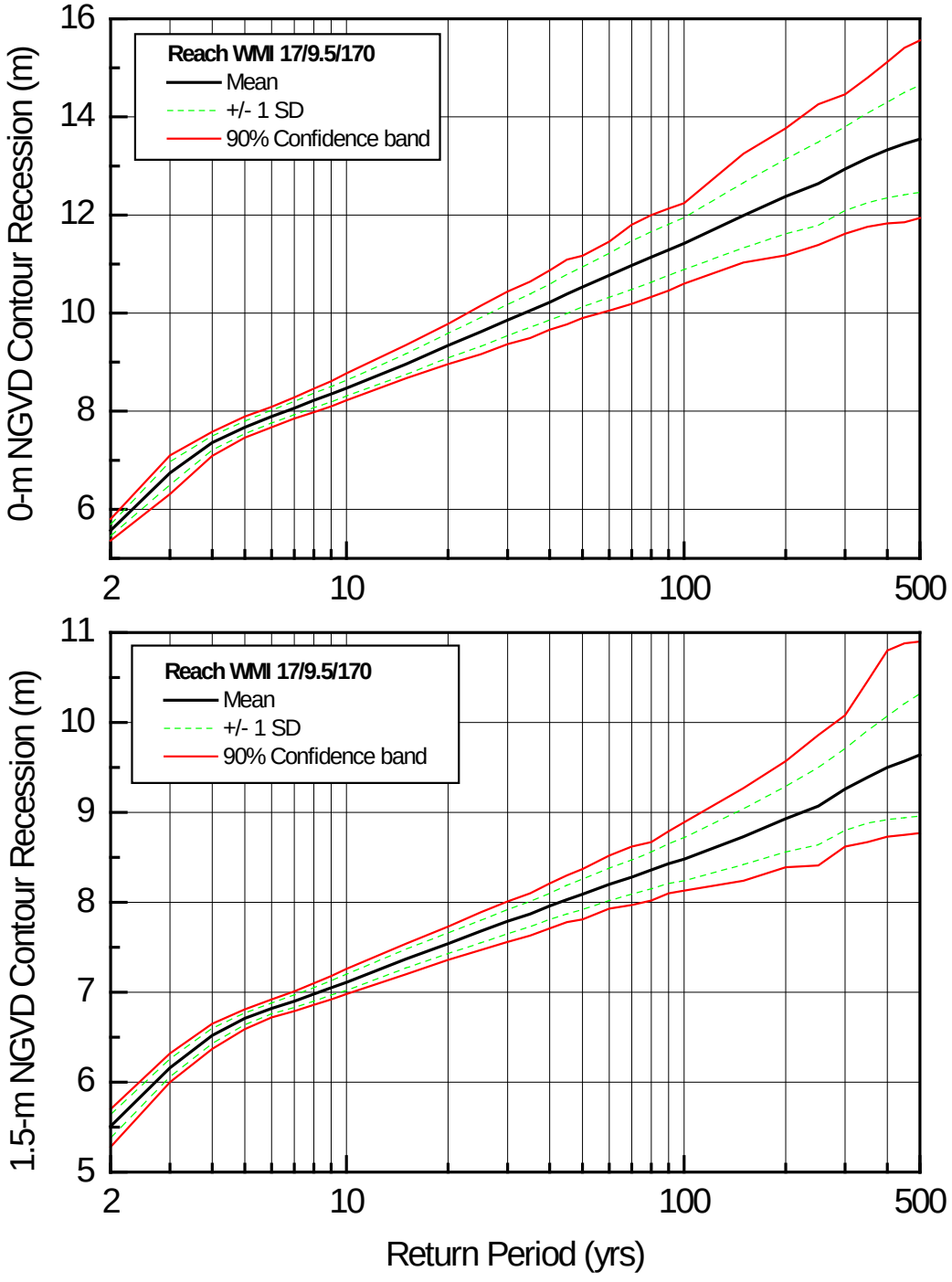

Reach WMI 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach WMI 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2.5
2
10
100
500
Return Period (yrs)

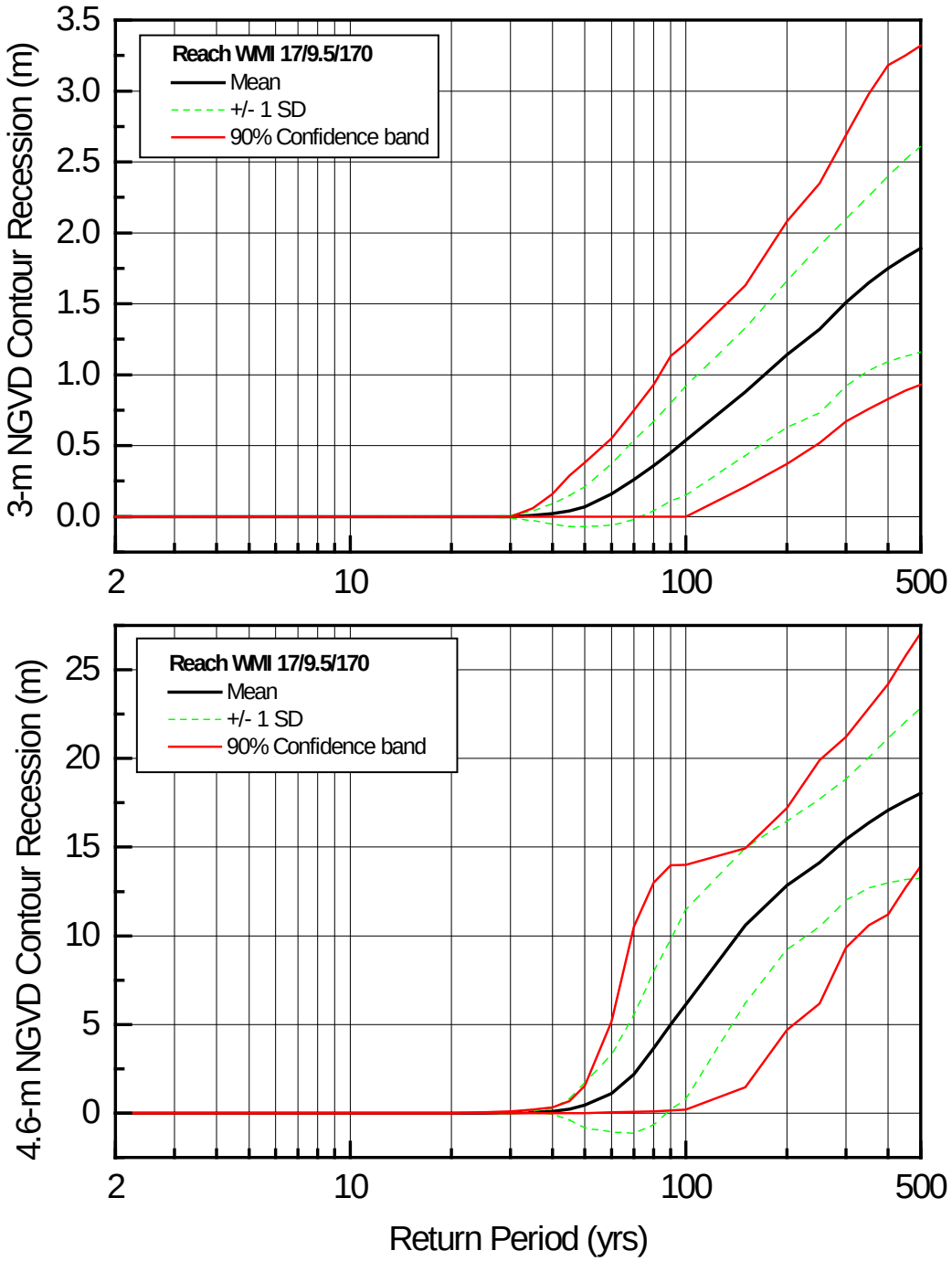

Reach WMI 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
25
20
15
10
5
0
2
10
100
500
Reach WMI 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
2
10
100
500
Return Period (yrs)

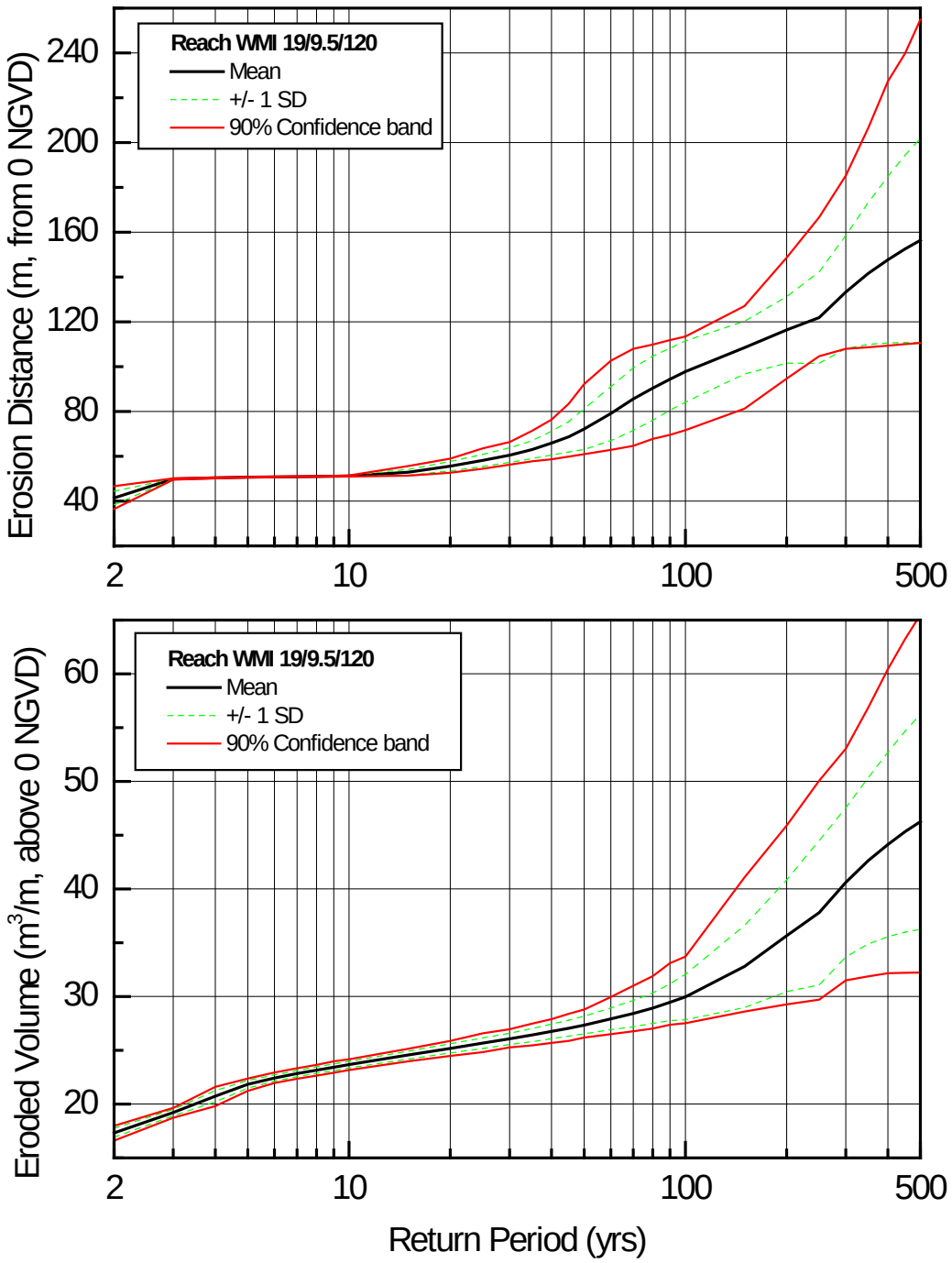

Reach WMI 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach WMI 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2
10
100
500
Return Period (yrs)

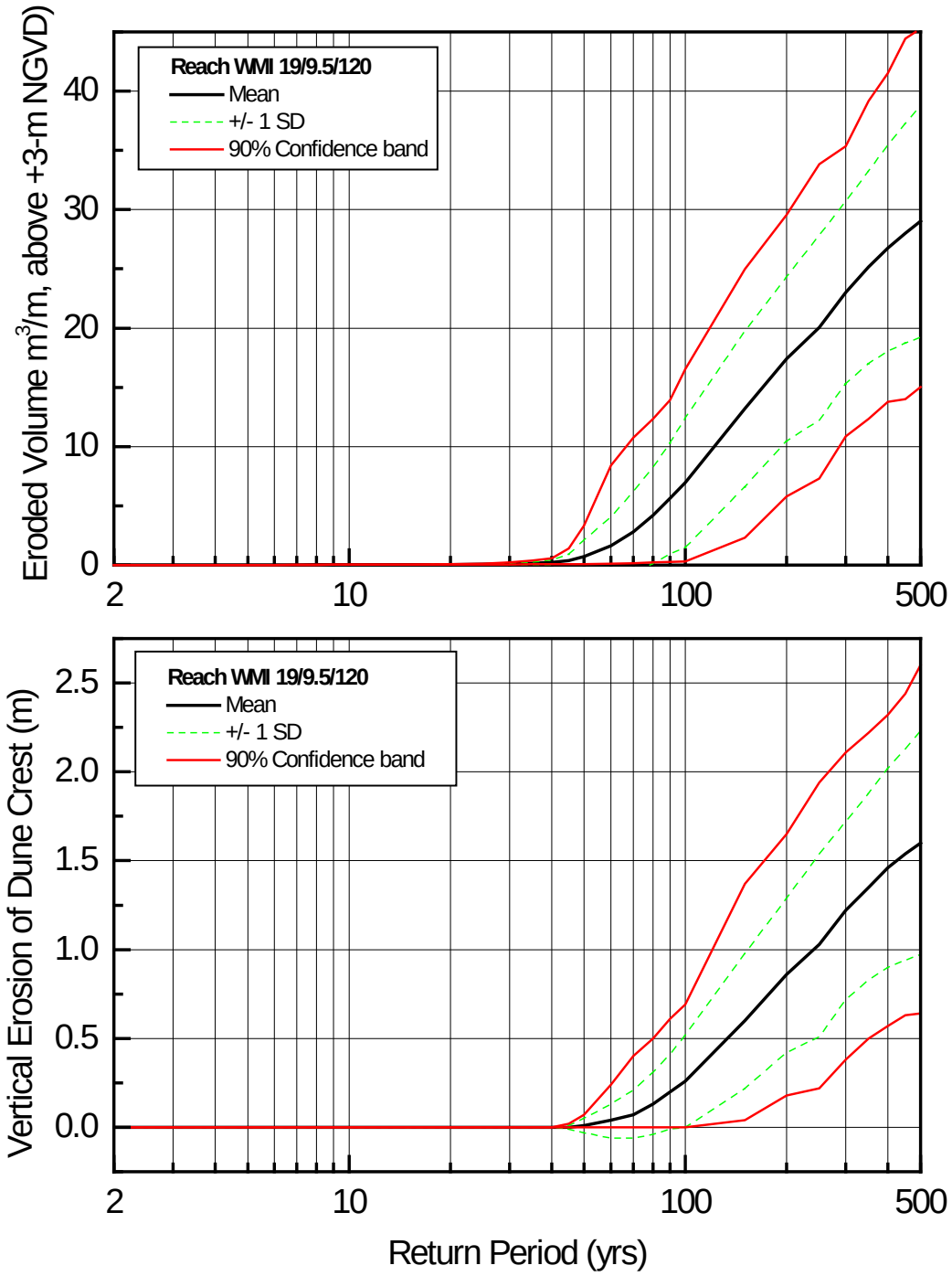

Max. Wave Setup Magnitude (m, above SWL)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach WMI 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach WMI 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

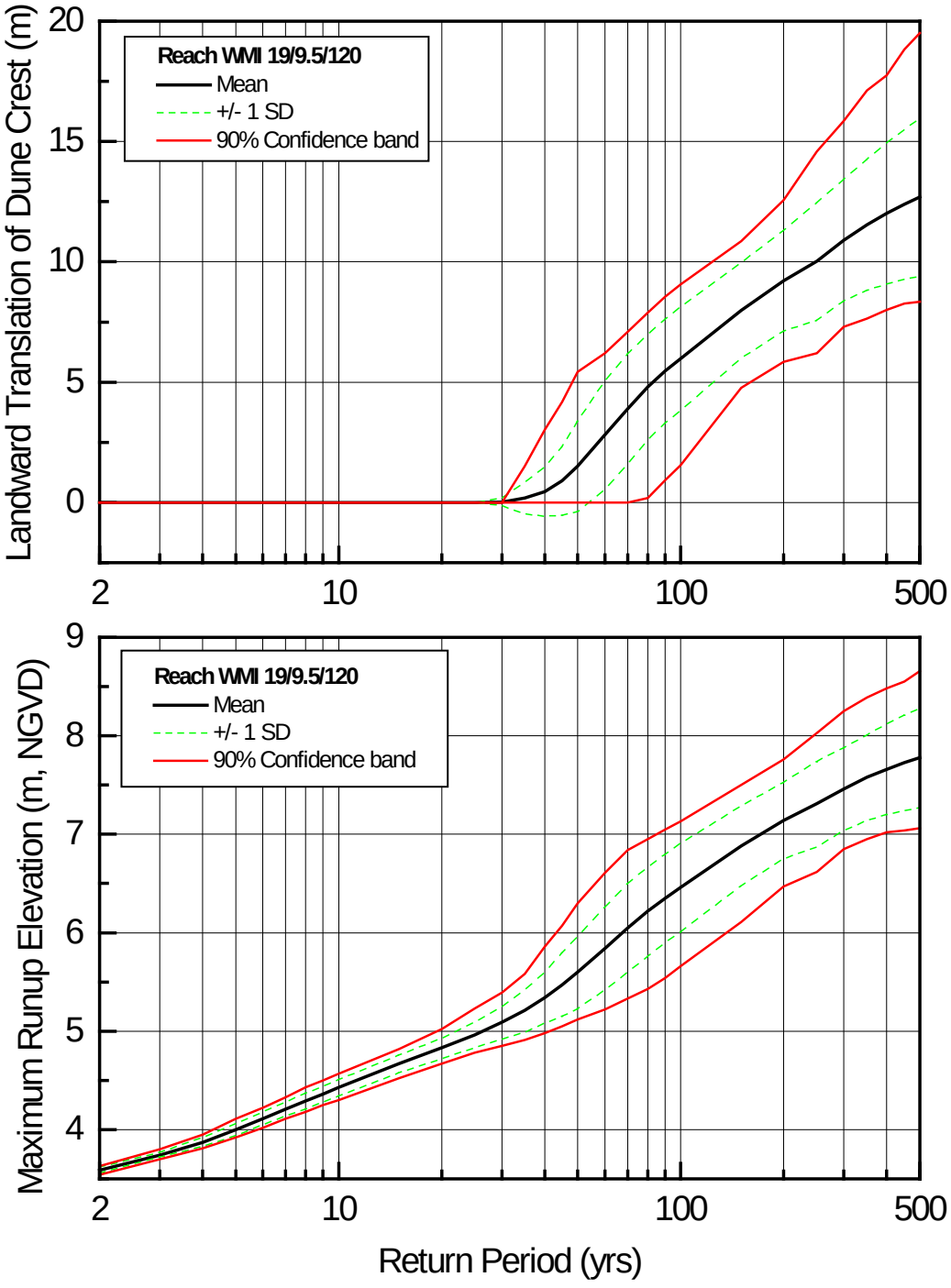

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach WMI 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
450
400
350
300
250
200
150
100
50
Reach WMI 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

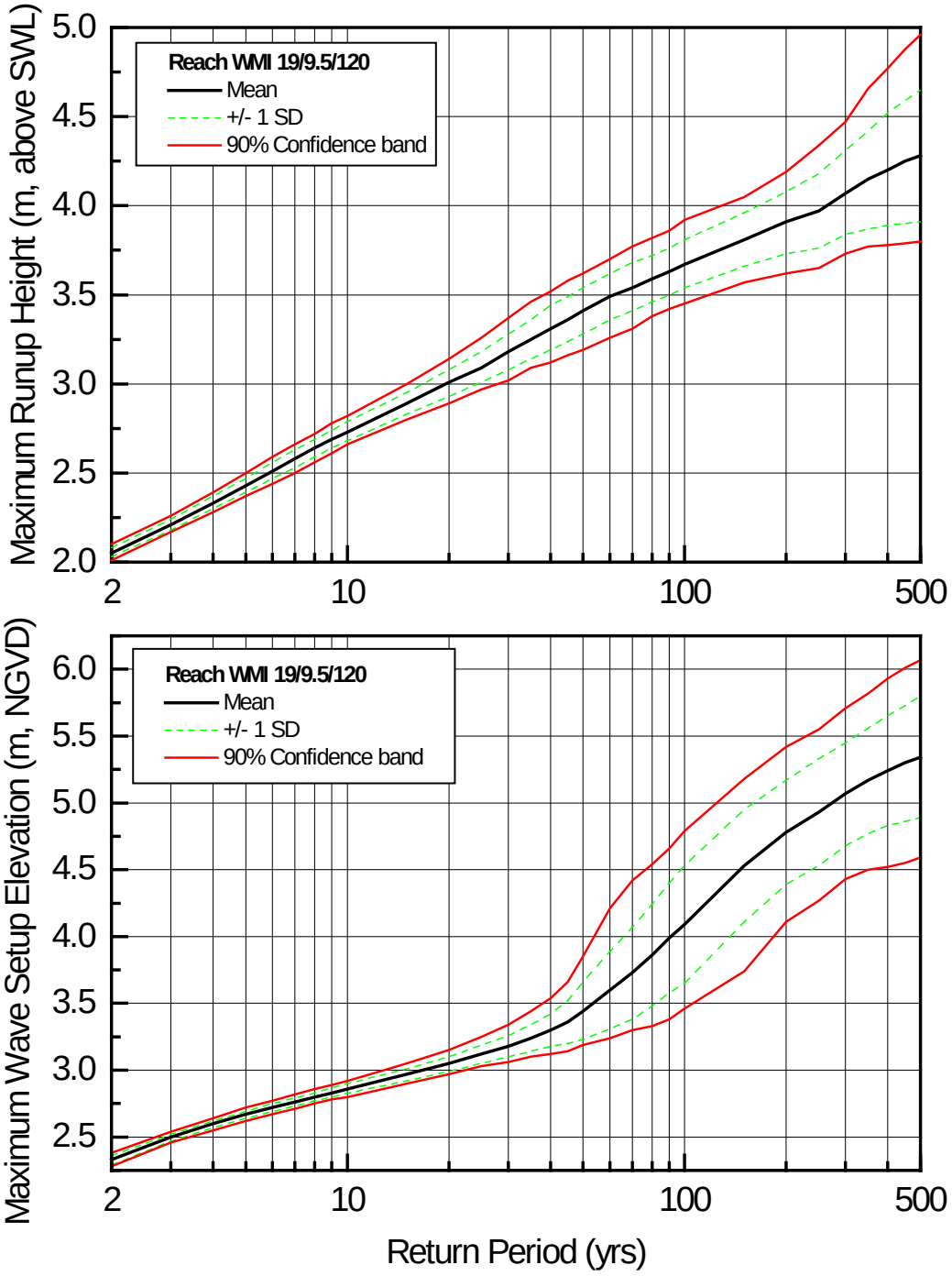

Reach WMI 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
16
14
12
10
8
6
2
10
100
500
Reach WMI 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
11
10
9
8
7
6
5
2
10
100
500
Return Period (yrs)

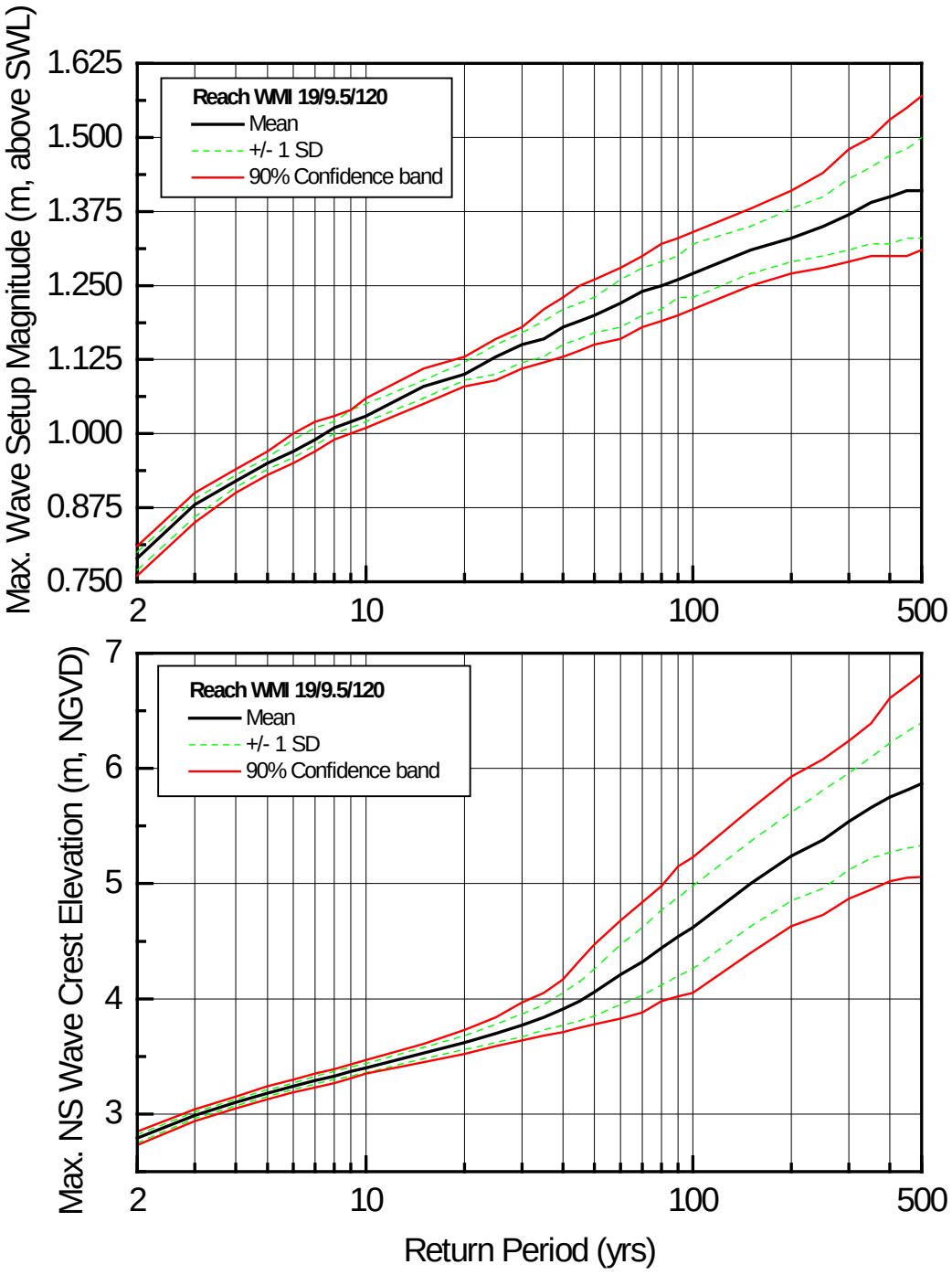

Reach WMI 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach WMI 17/9.5/170
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

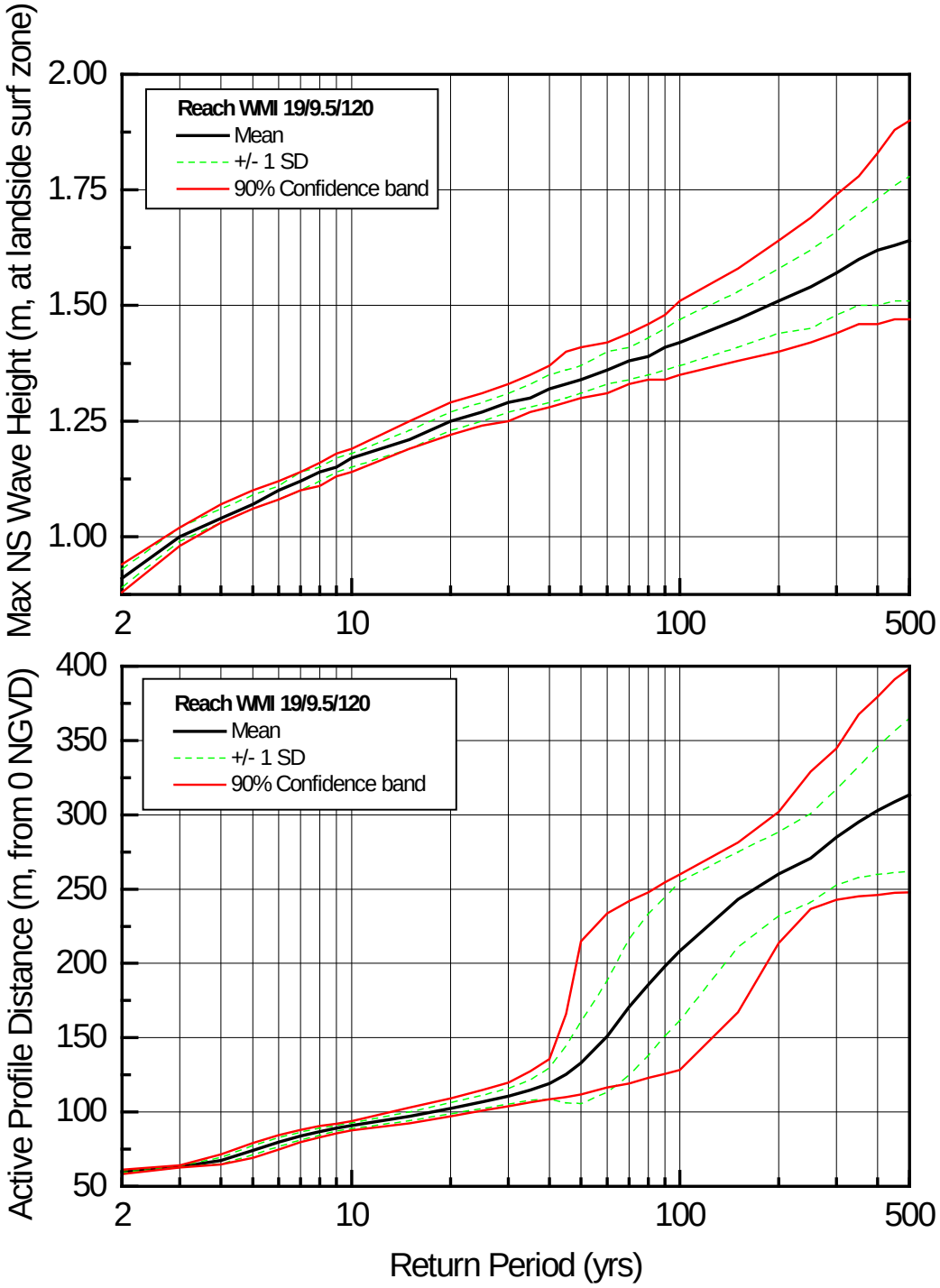

Reach WMI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
240
200
160
120
80
40
2
10
100
500
Reach WMI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
20
2
10
100
500
Return Period (yrs)

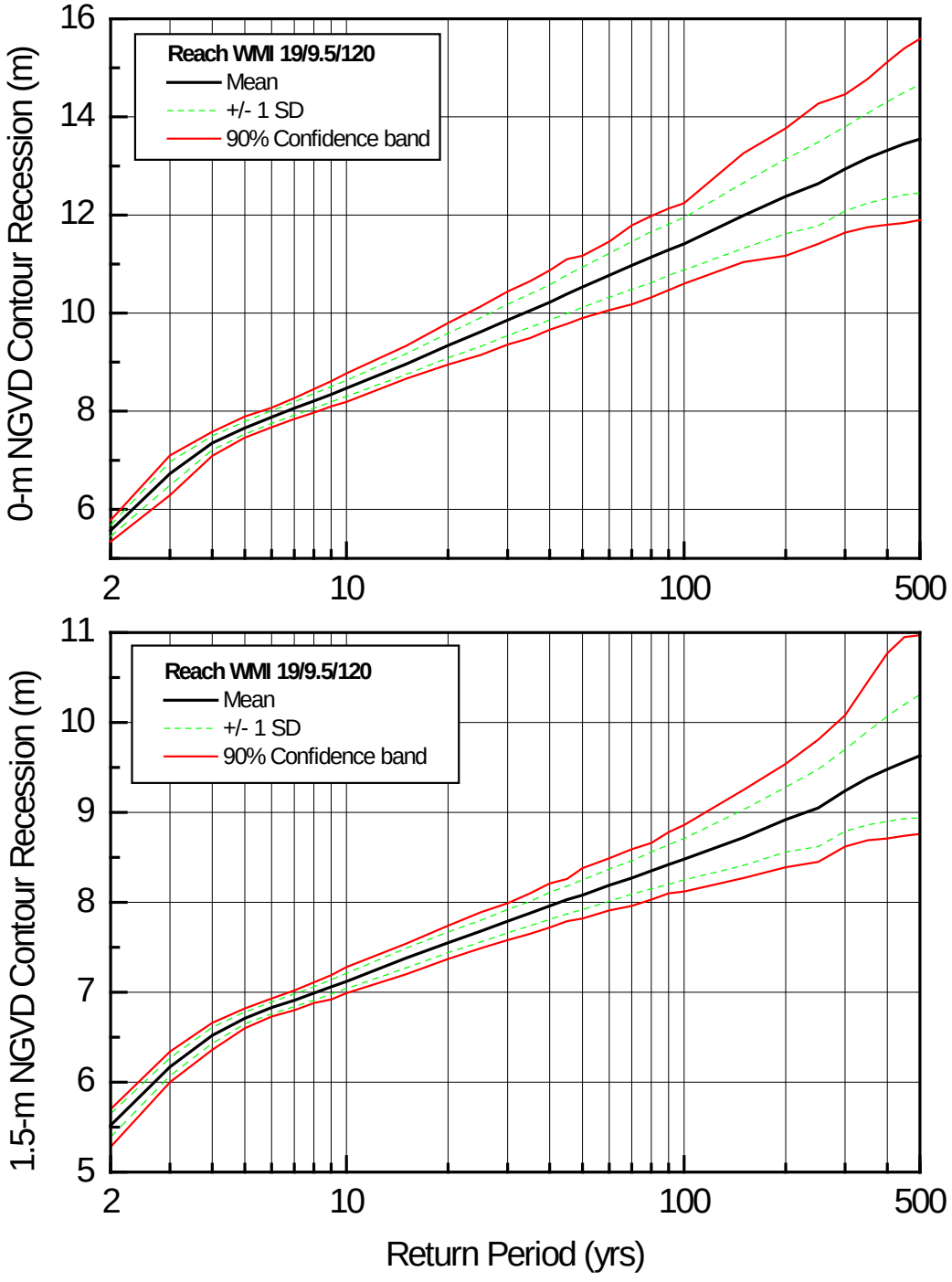

Reach WMI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach WMI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2.5
2
10
100
500
Return Period (yrs)

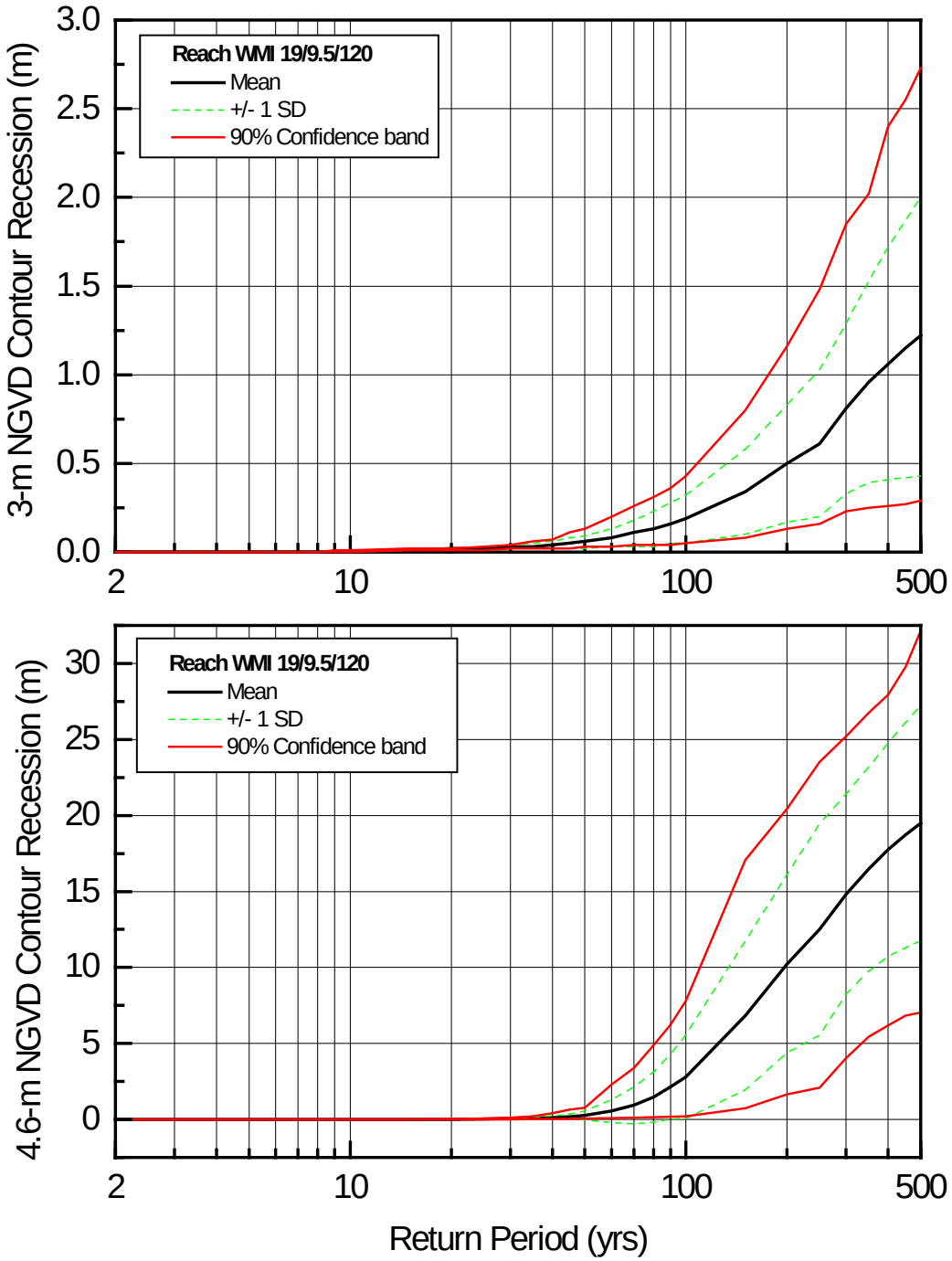

Reach WMI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
20
15
10
5
0
2
10
100
500
Reach WMI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
9
8
7
6
5
4
2
10
100
500
Return Period (yrs)

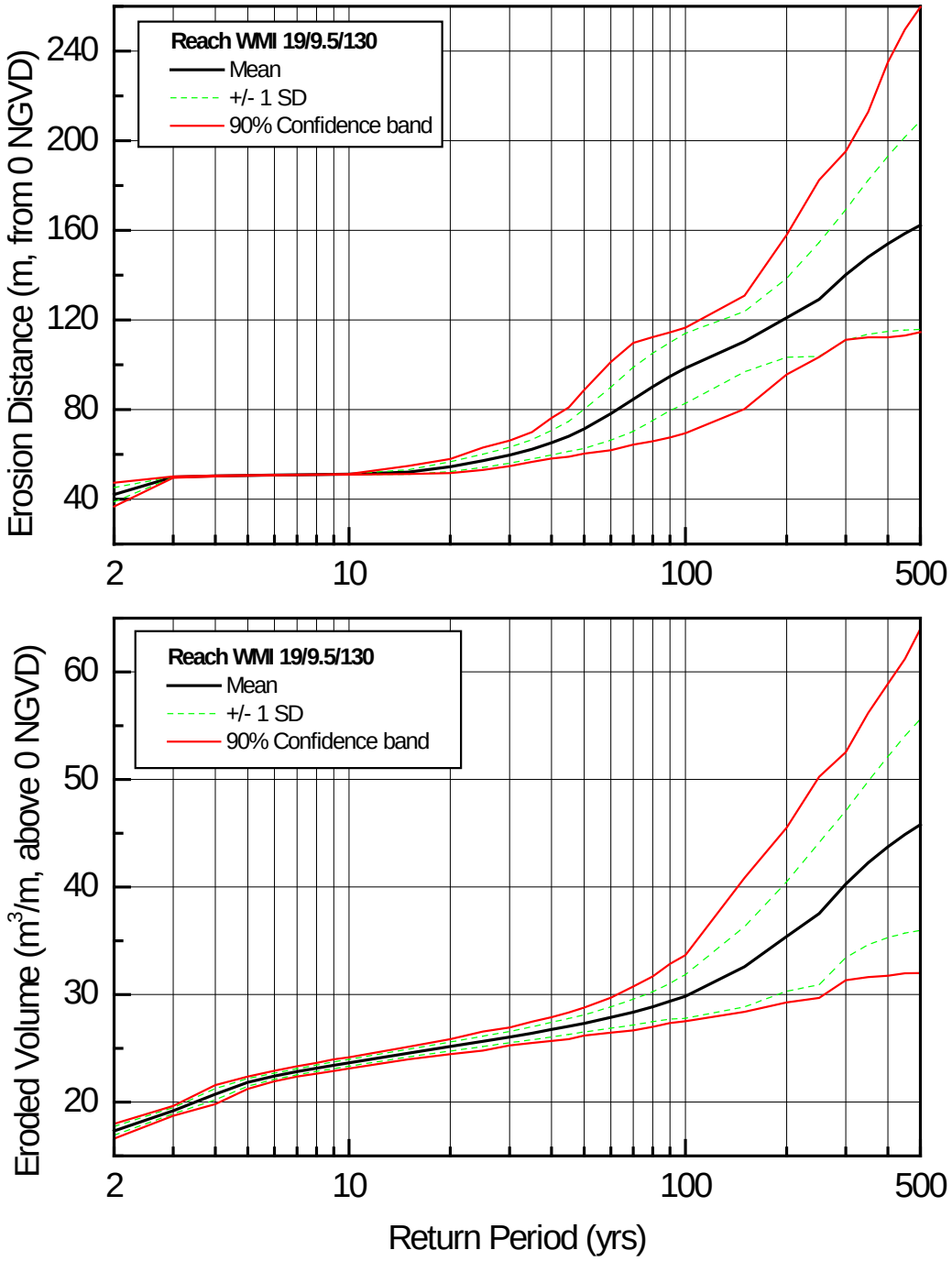

Reach WMI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach WMI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2
10
100
500
Return Period (yrs)

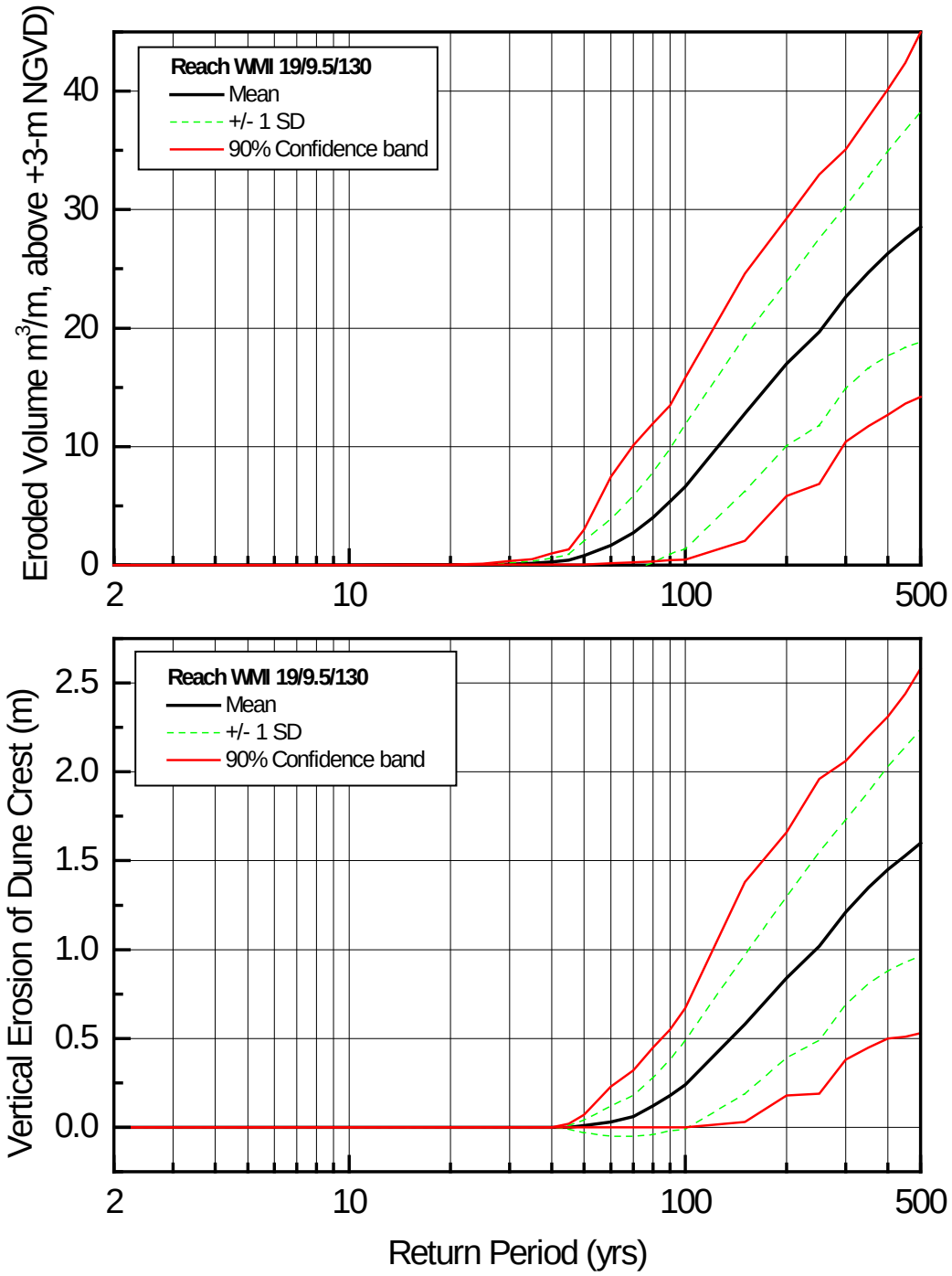

Max. Wave Setup Magnitude (m, above SWL)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach WMI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach WMI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

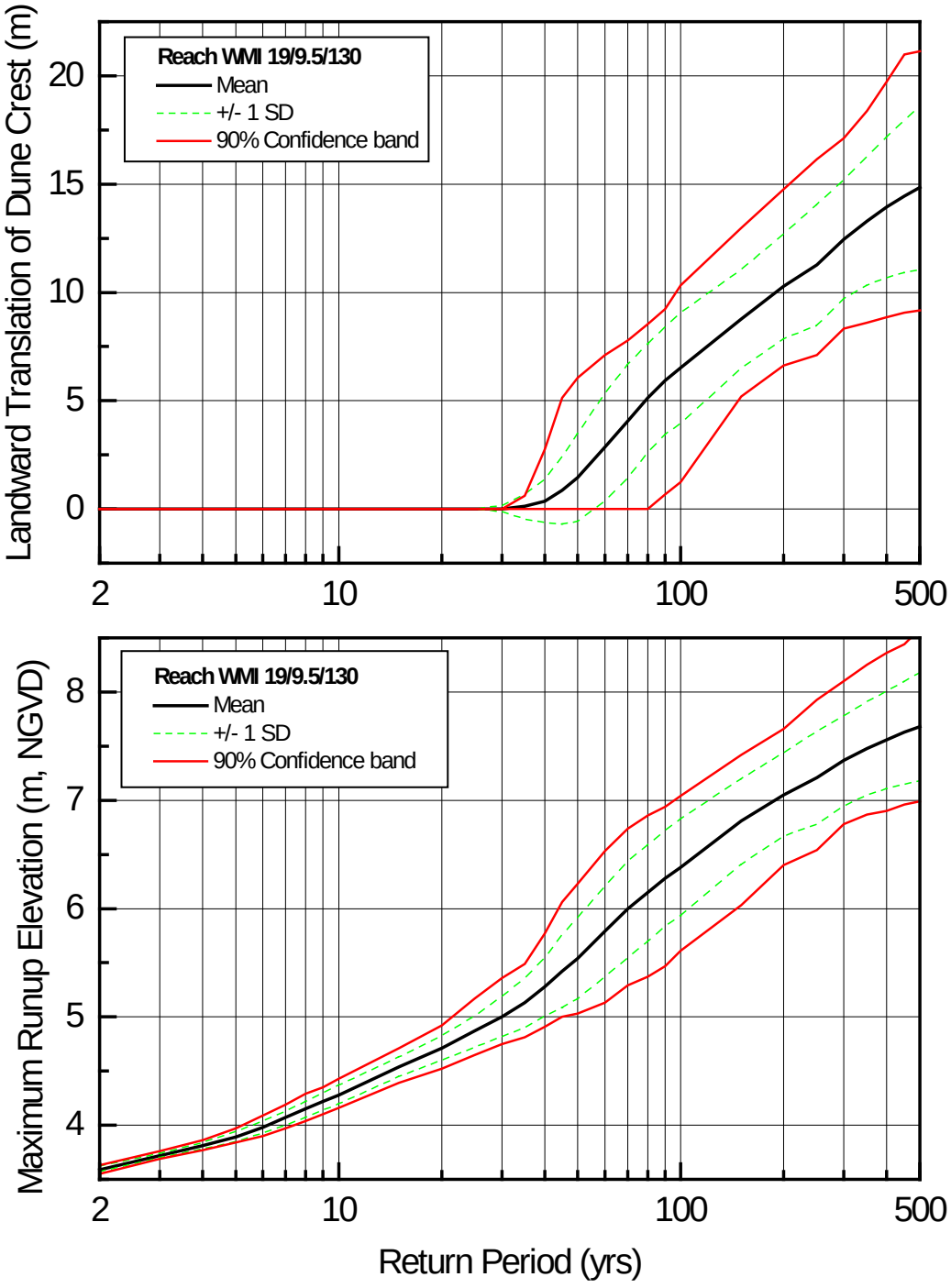

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach WMI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
350
300
250
200
150
100
50
Reach WMI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

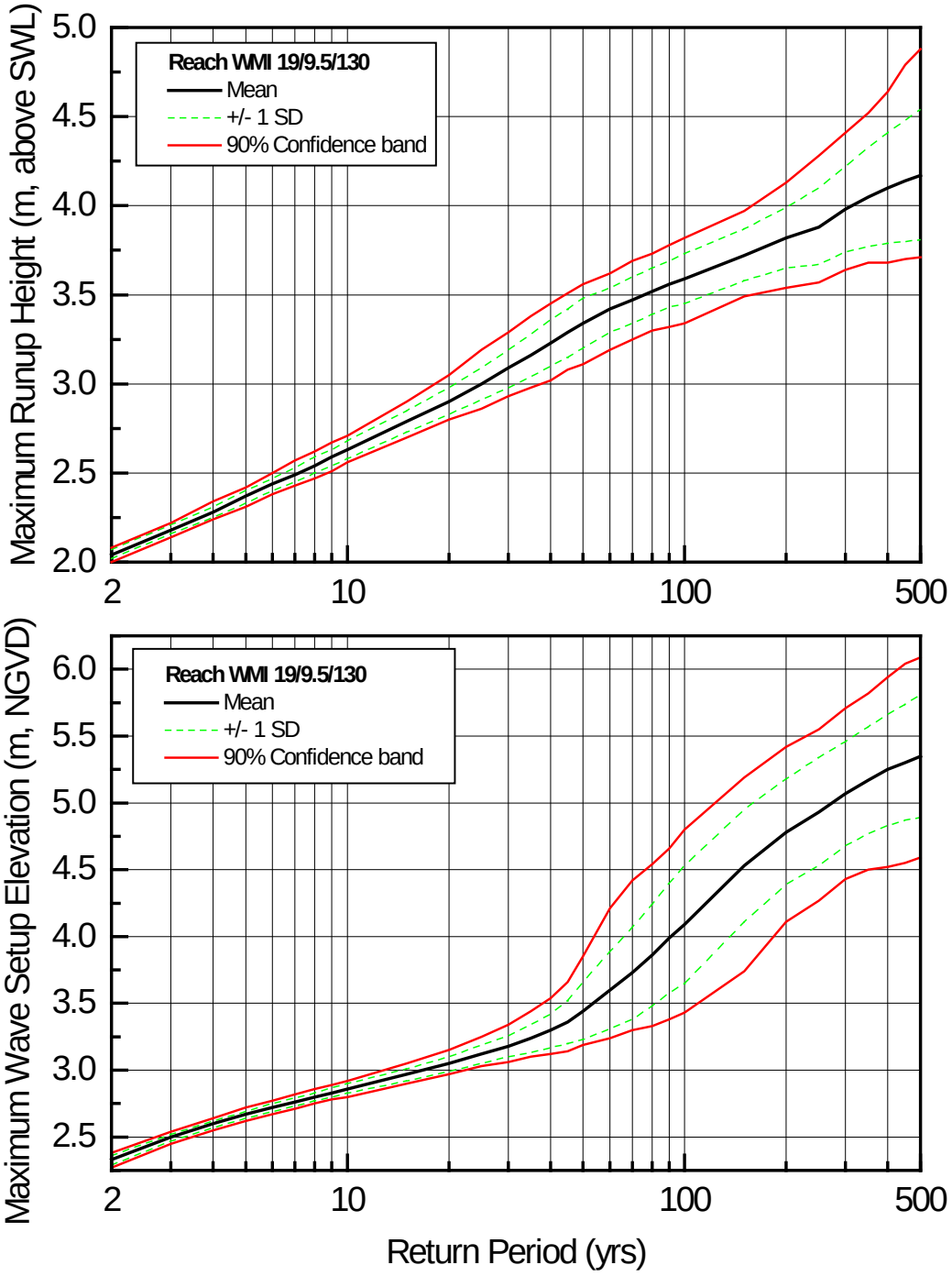

Reach WMI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
16
14
12
10
8
6
2
10
100
500
Reach WMI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
11
10
9
8
7
6
5
2
10
100
500
Return Period (yrs)

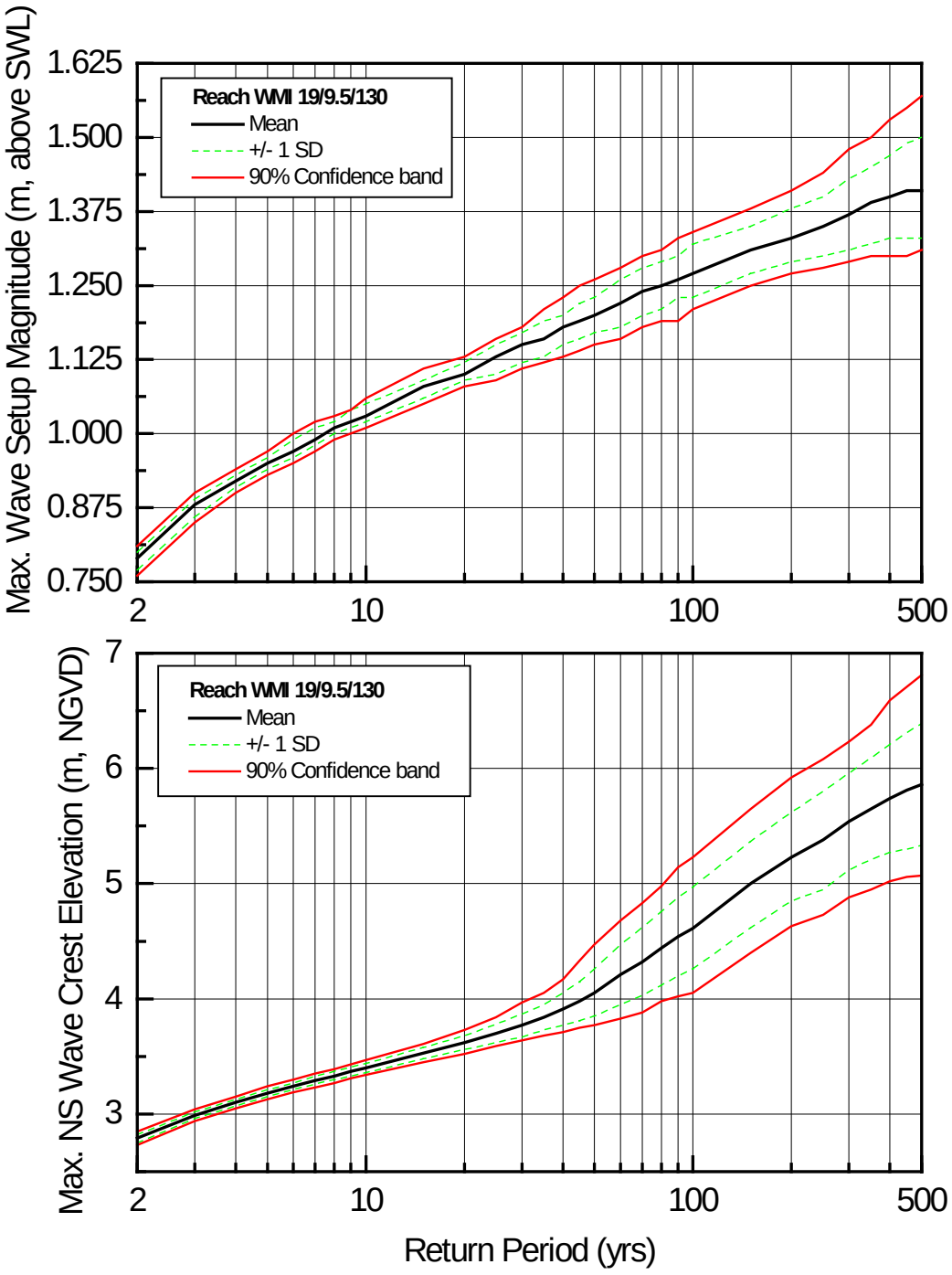

Reach WMI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach WMI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

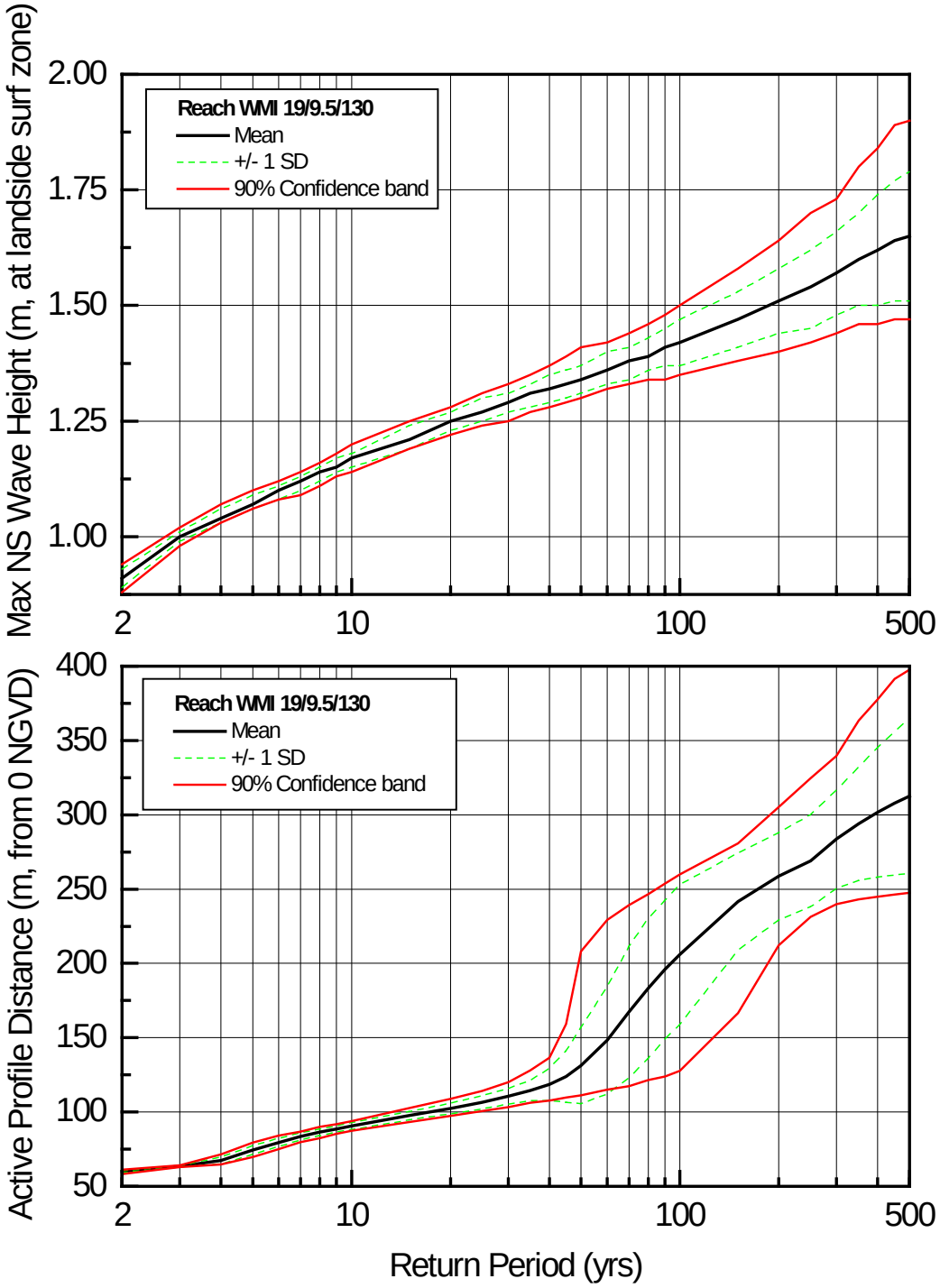

Reach WMI 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
240
200
160
120
80
40
2
10
100
500
Reach WMI 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
20
2
10
100
500
Return Period (yrs)

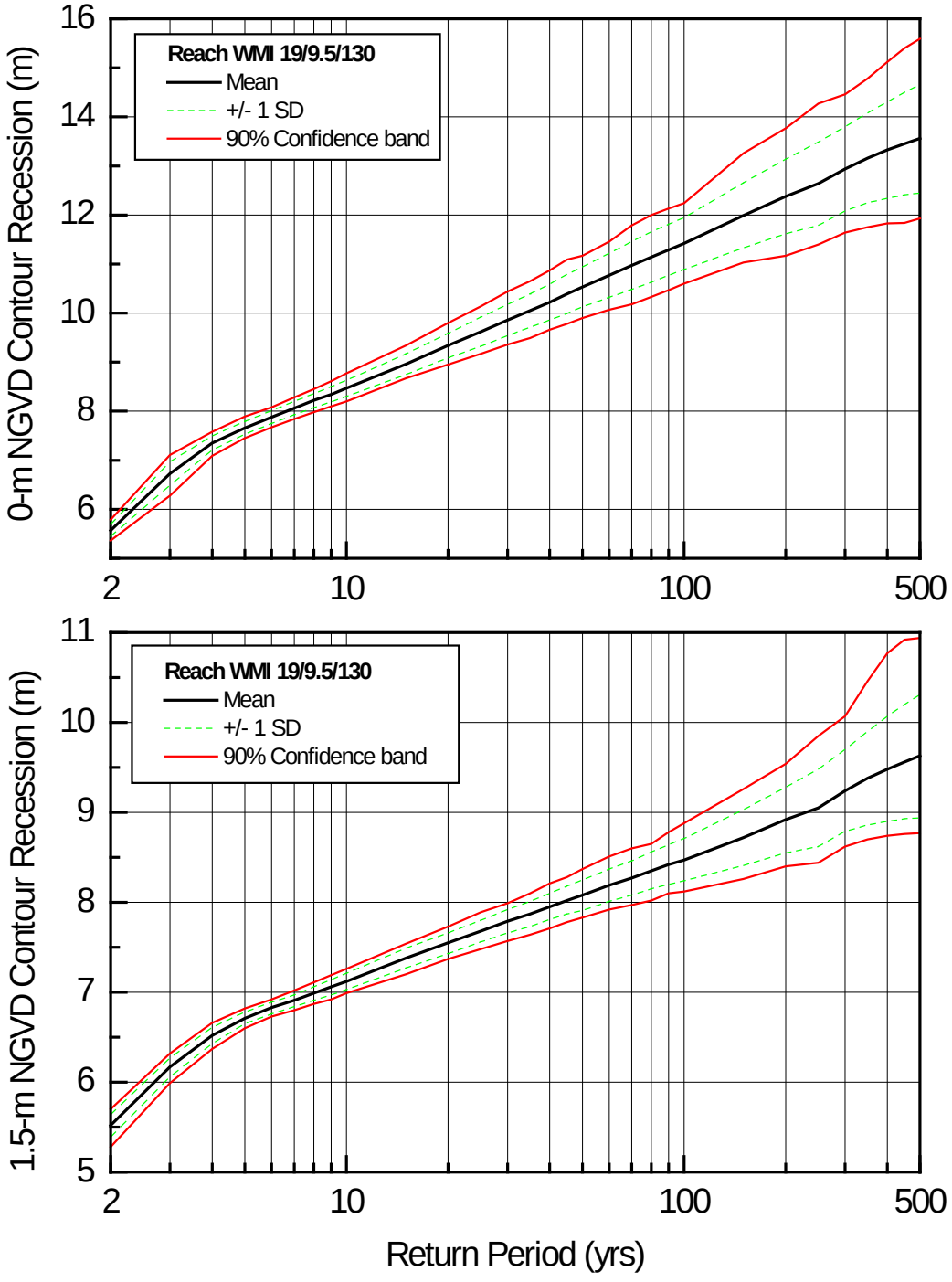

Reach WMI 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach WMI 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2.5
2
10
100
500
Return Period (yrs)

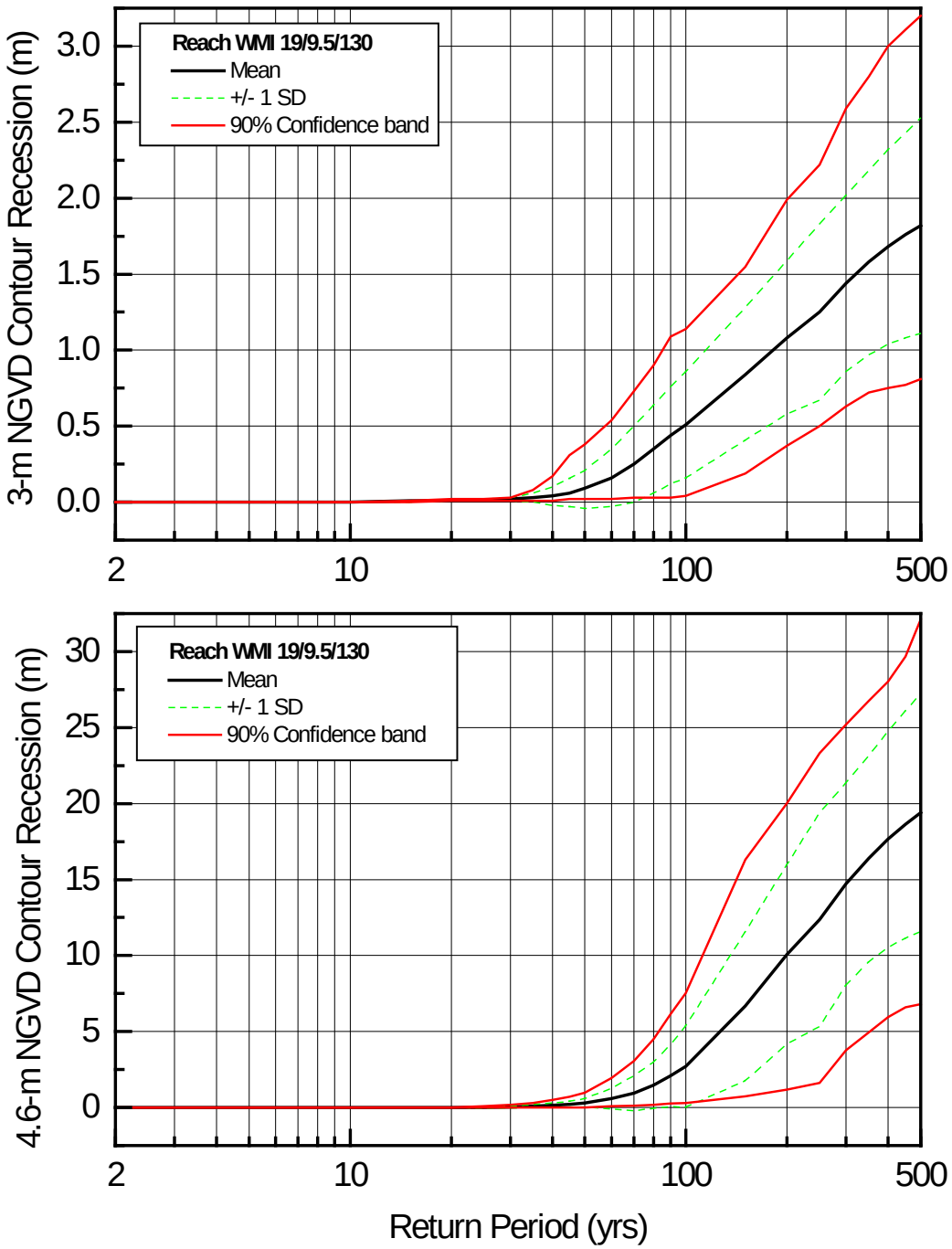

Reach WMI 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
5
10
15
20
2
10
100
500
Reach WMI 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
4
5
6
7
8
2
10
100
500
Return Period (yrs)

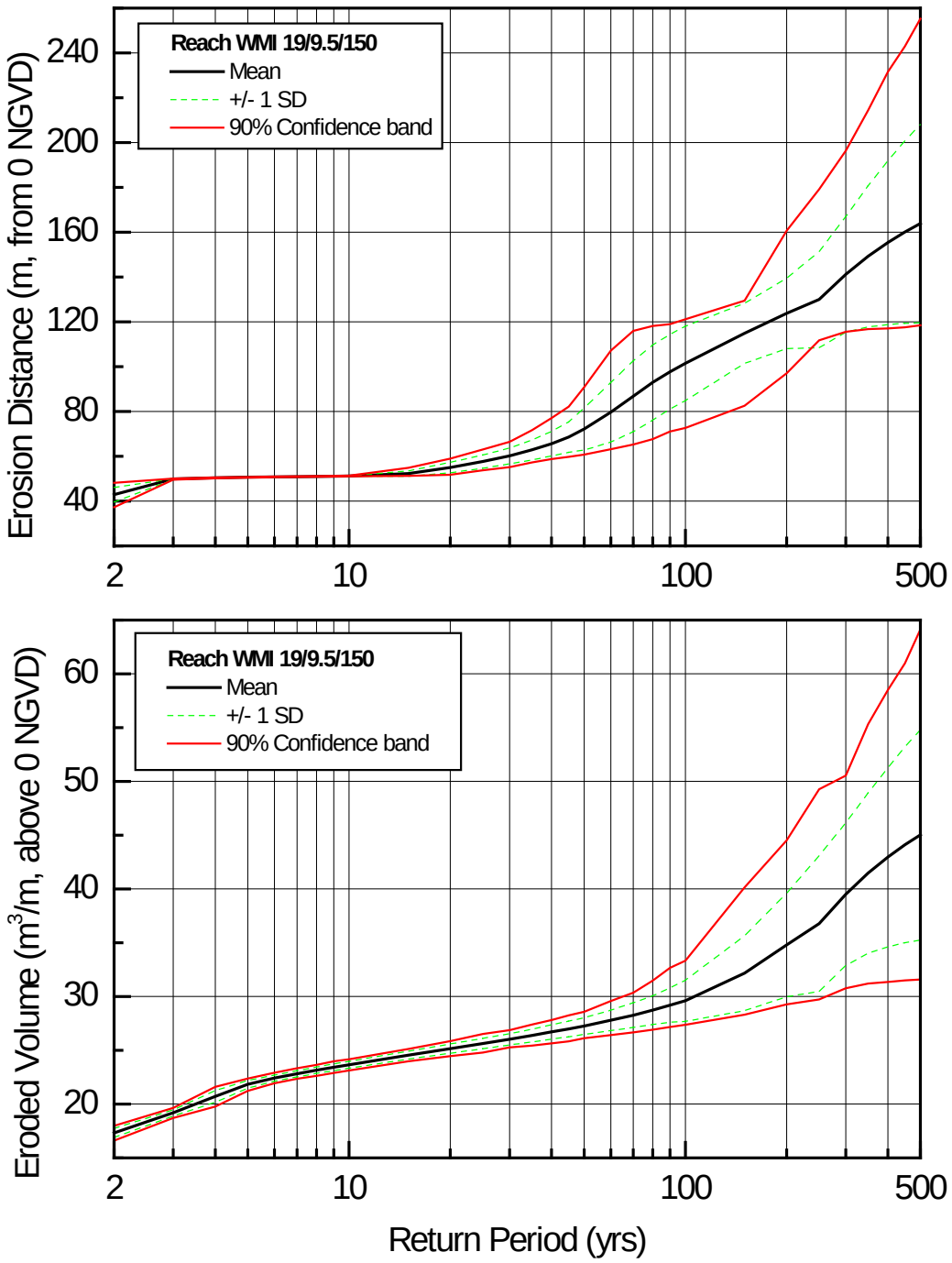

Reach WMI 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach WMI 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2
10
100
500
Return Period (yrs)

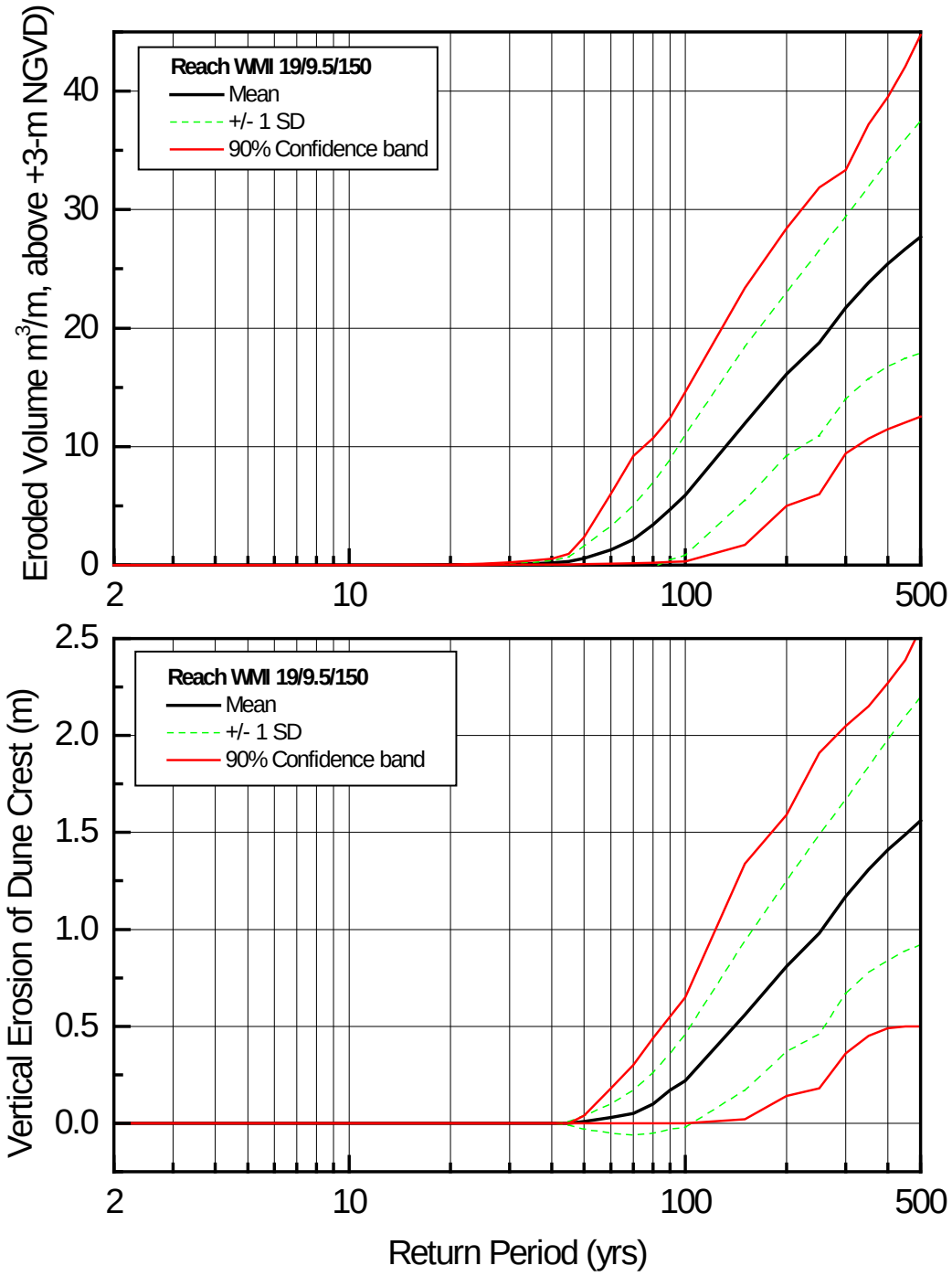

Max. Wave Setup Magnitude (m, above SWL)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach WMI 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach WMI 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

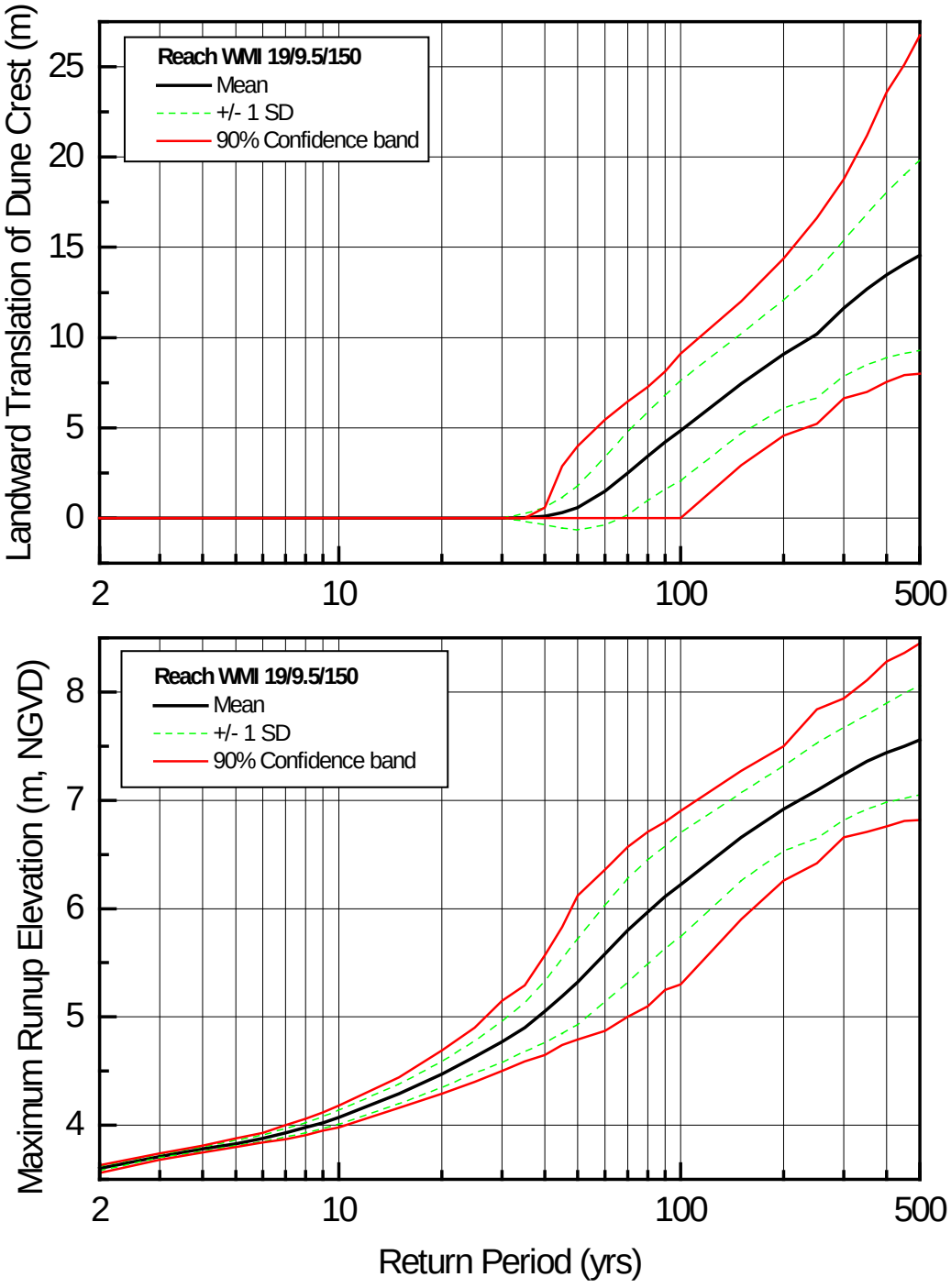

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach WMI 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
350
300
250
200
150
100
50
Reach WMI 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

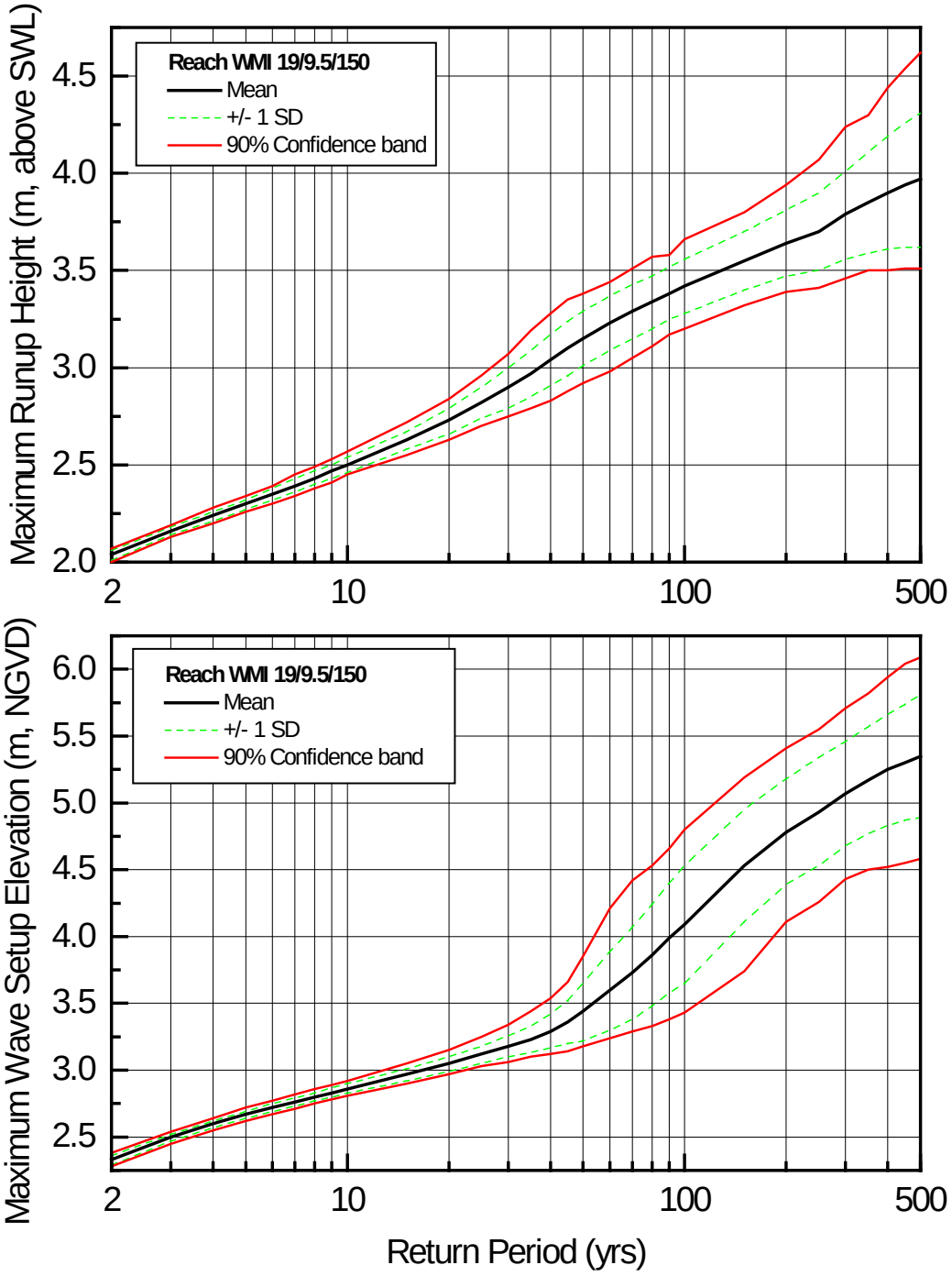

Reach WMI 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
16
14
12
10
8
6
2
10
100
500
Reach WMI 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
11
10
9
8
7
6
5
2
10
100
500
Return Period (yrs)

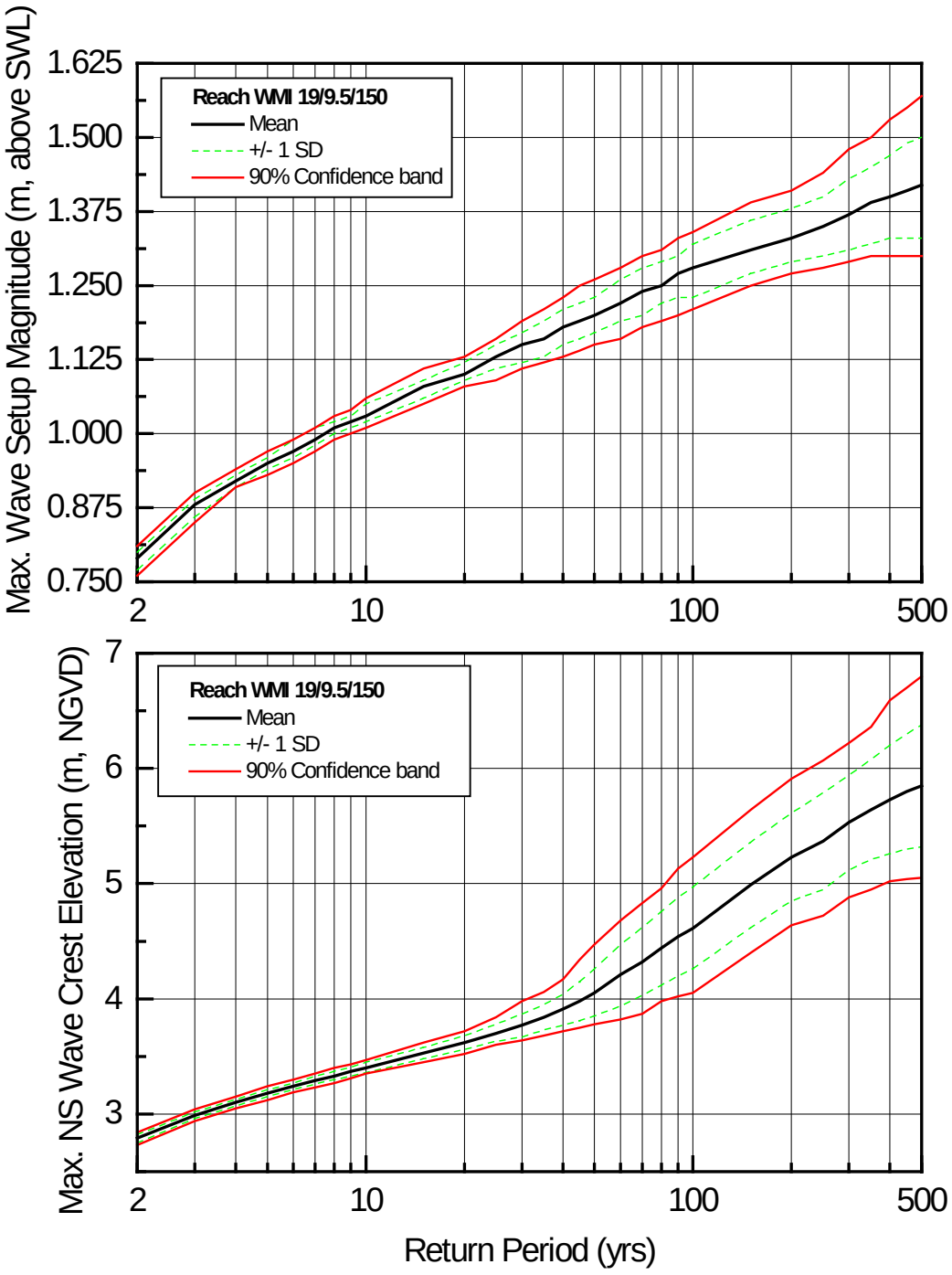

Reach WMI 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach WMI 19/9.5/130
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

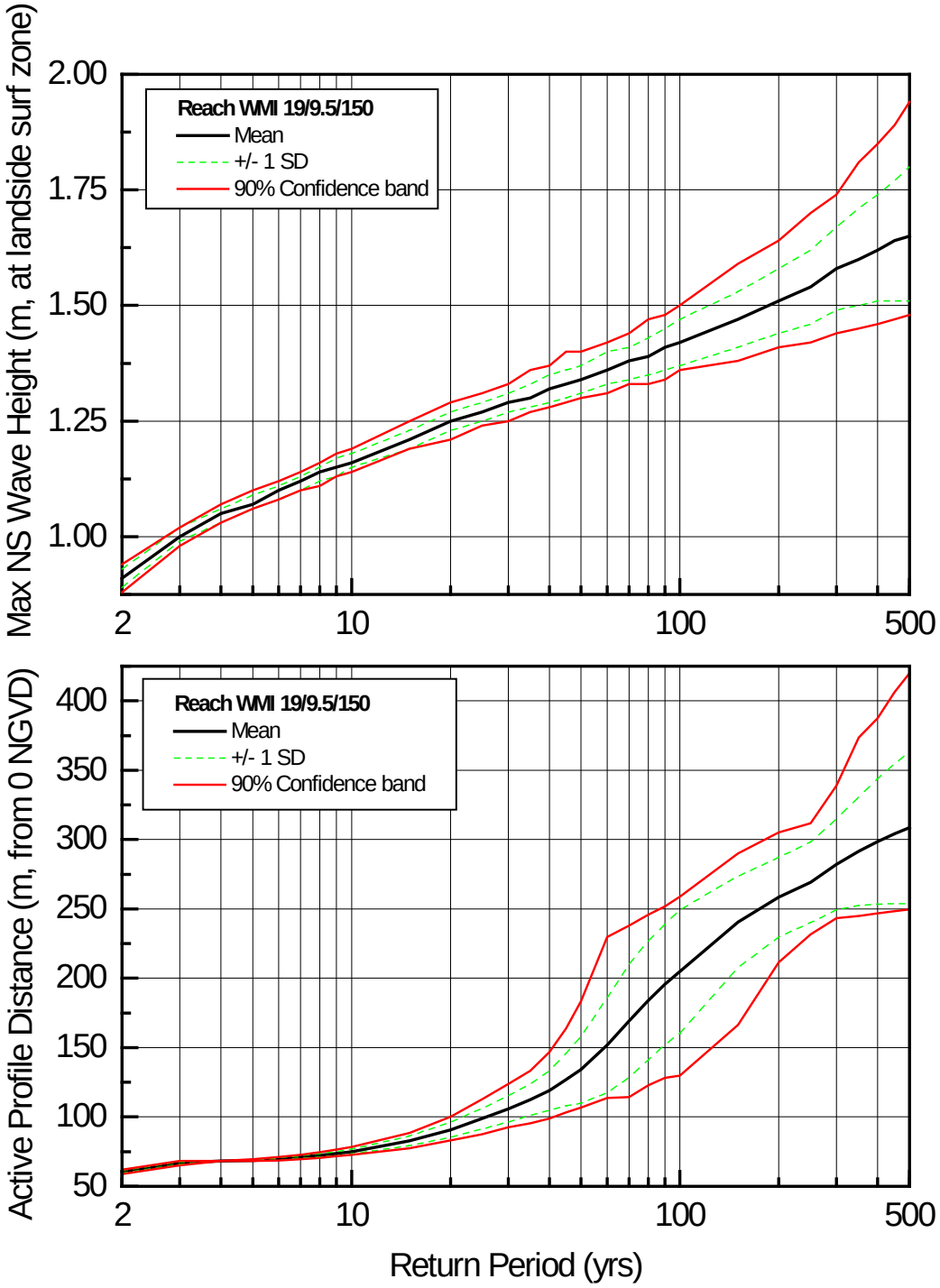

Reach WMI 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
240
200
160
120
80
40
2
10
100
500
Reach WMI 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
20
2
10
100
500
Return Period (yrs)

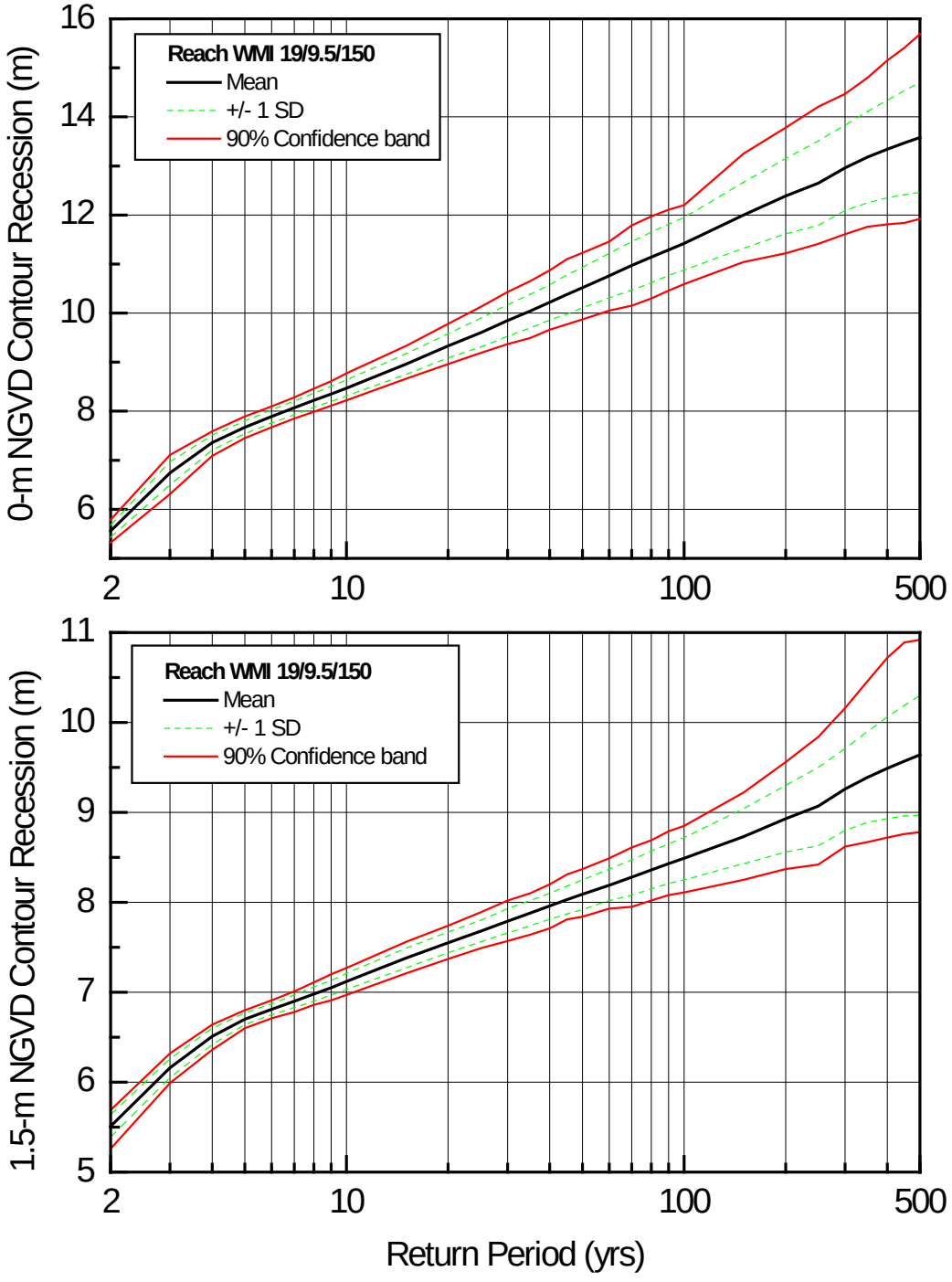

Reach WMI 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach WMI 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2.5
2
10
100
500
Return Period (yrs)

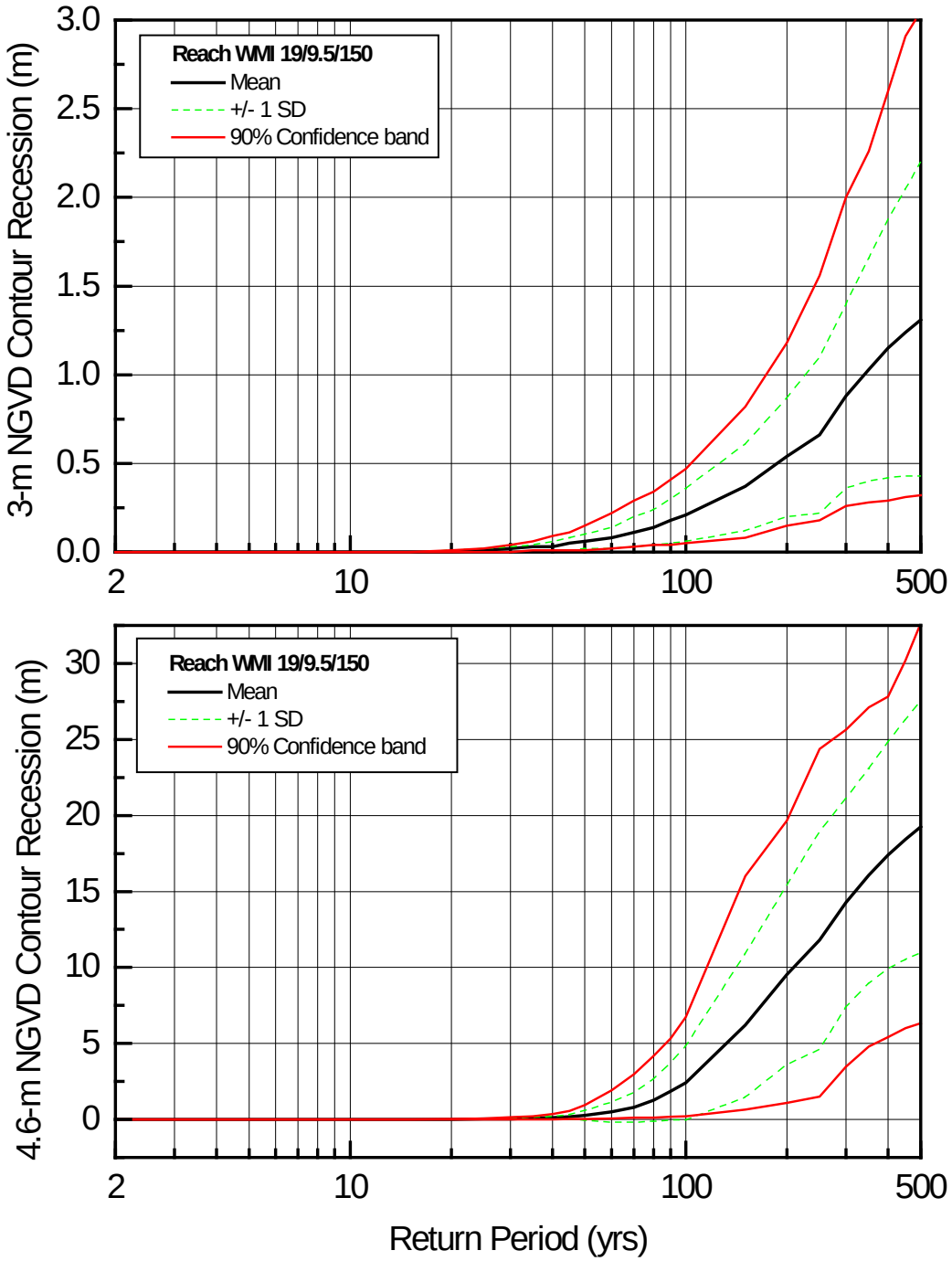

Reach WMI 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
25
20
15
10
5
0
2
10
100
500
Reach WMI 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
2
10
100
500
Return Period (yrs)

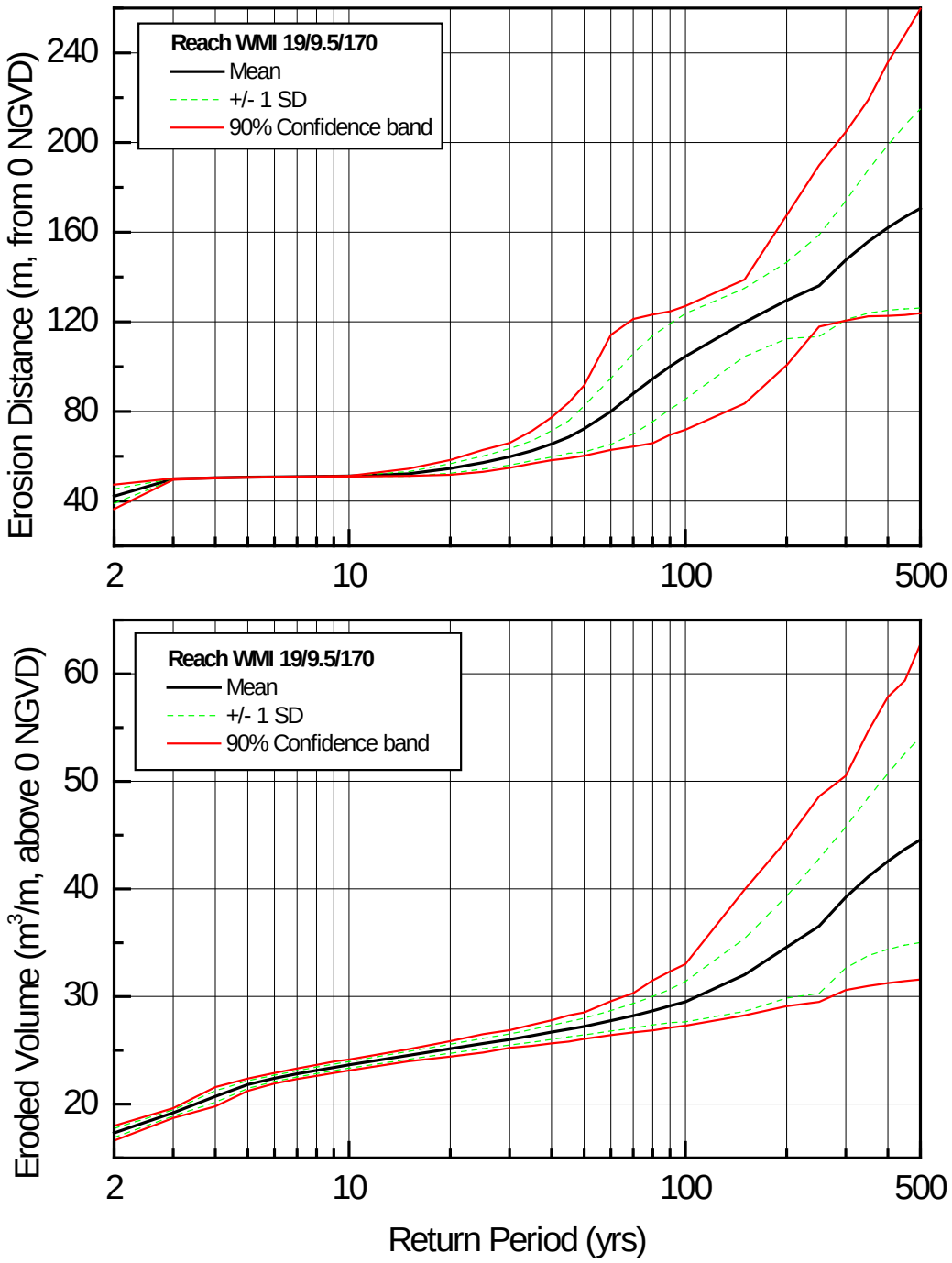

Reach WMI 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach WMI 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2
10
100
500
Return Period (yrs)

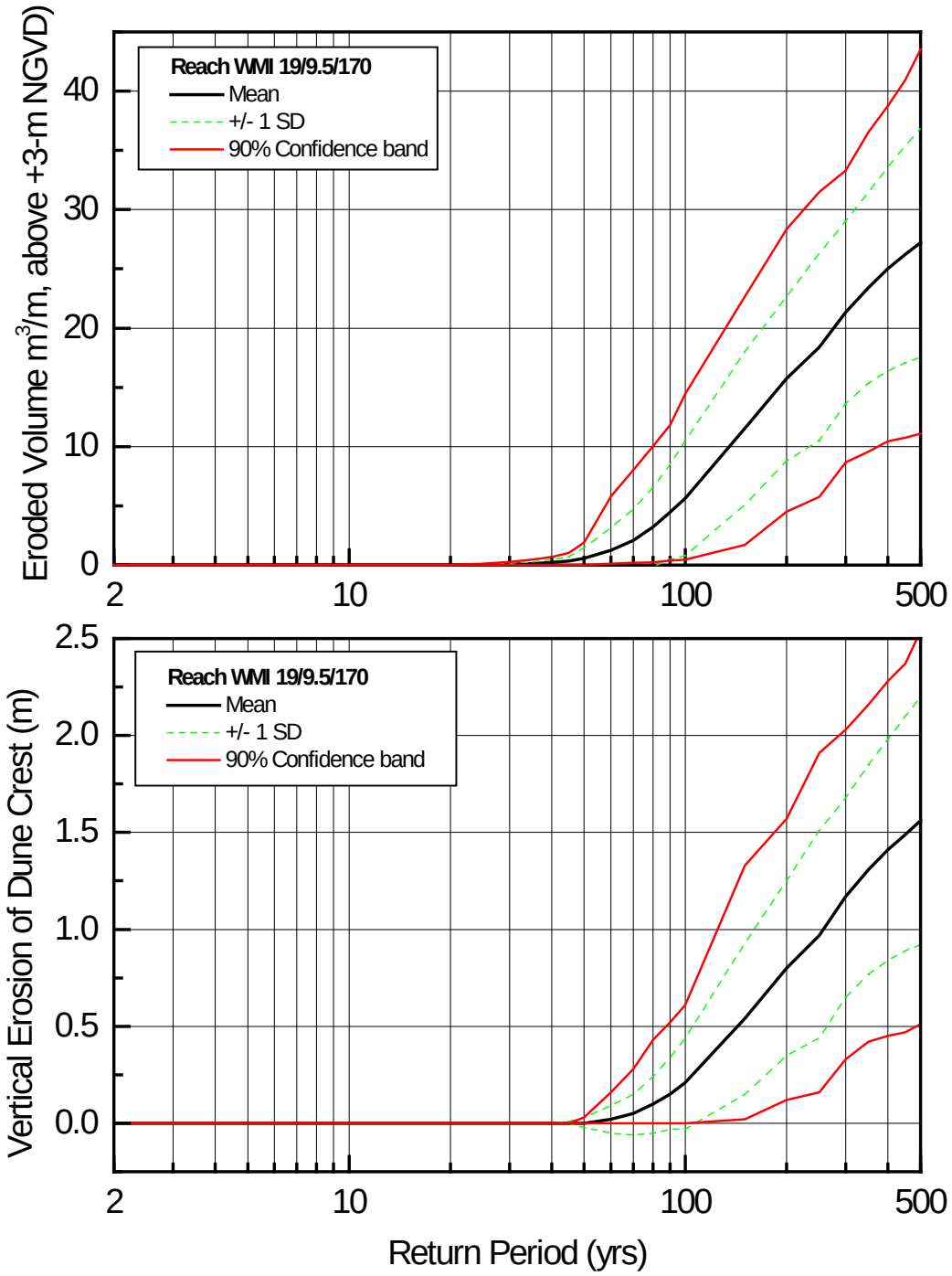

Max. Wave Setup Magnitude (m, above SWL)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach WMI 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach WMI 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

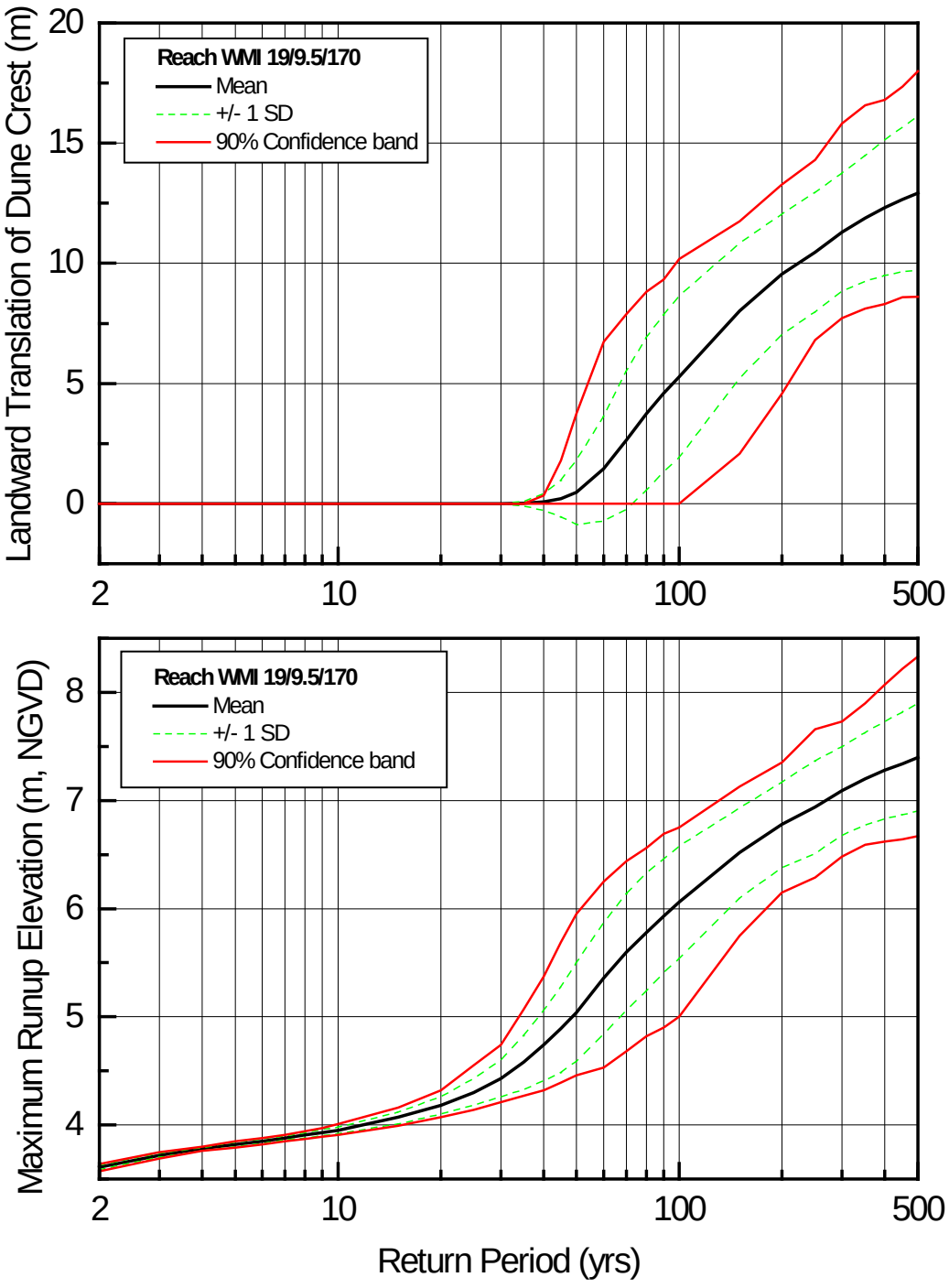

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach WMI 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
350
300
250
200
150
100
50
Reach WMI 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

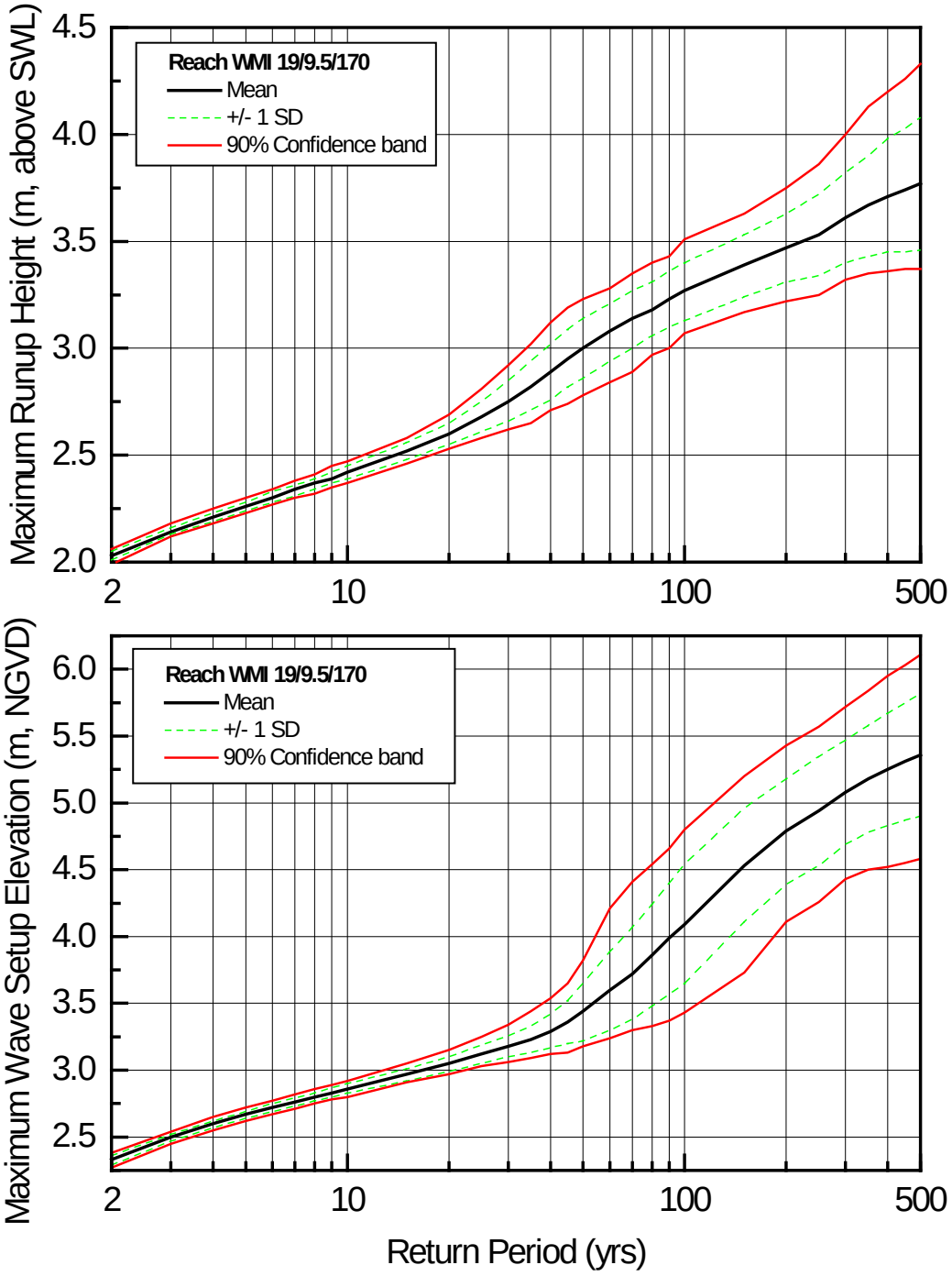

Reach WMI 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
16
14
12
10
8
6
2
10
100
500
Reach WMI 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
11
10
9
8
7
6
5
2
10
100
500
Return Period (yrs)

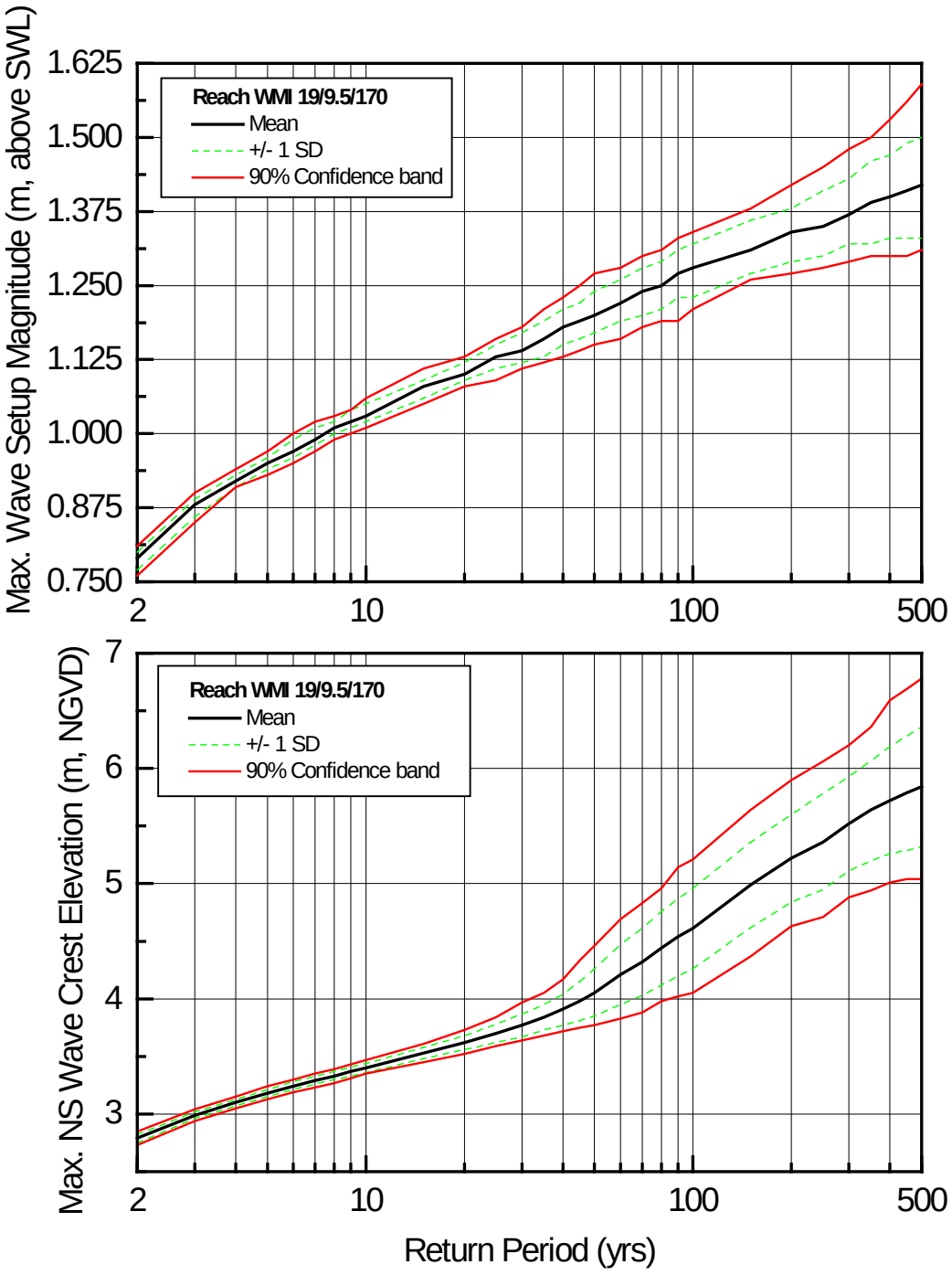

Reach WMI 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach WMI 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

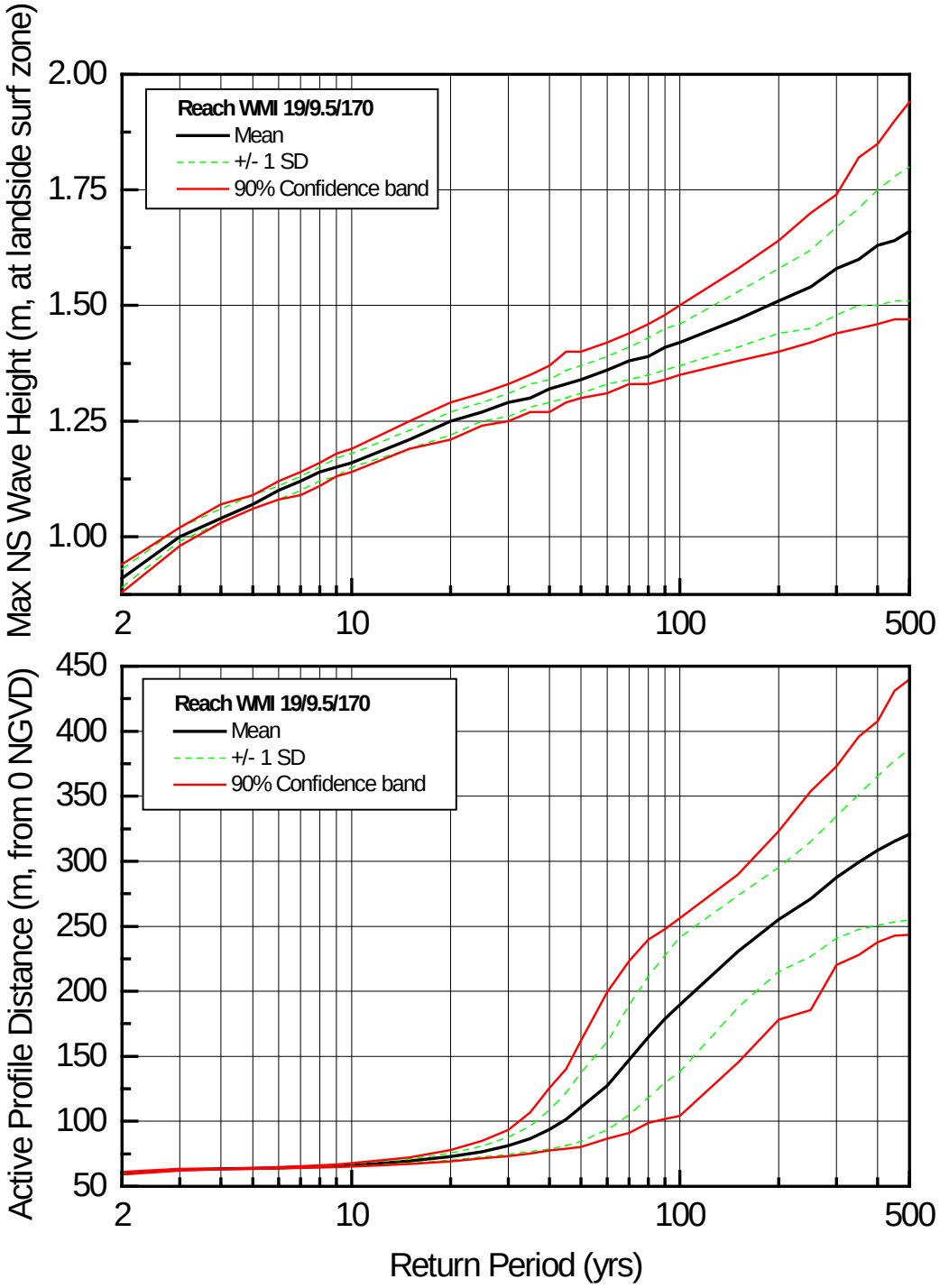

Reach WMI 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
240
200
160
120
80
40
2
10
100
500
Reach WMI 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
20
2
10
100
500
Return Period (yrs)

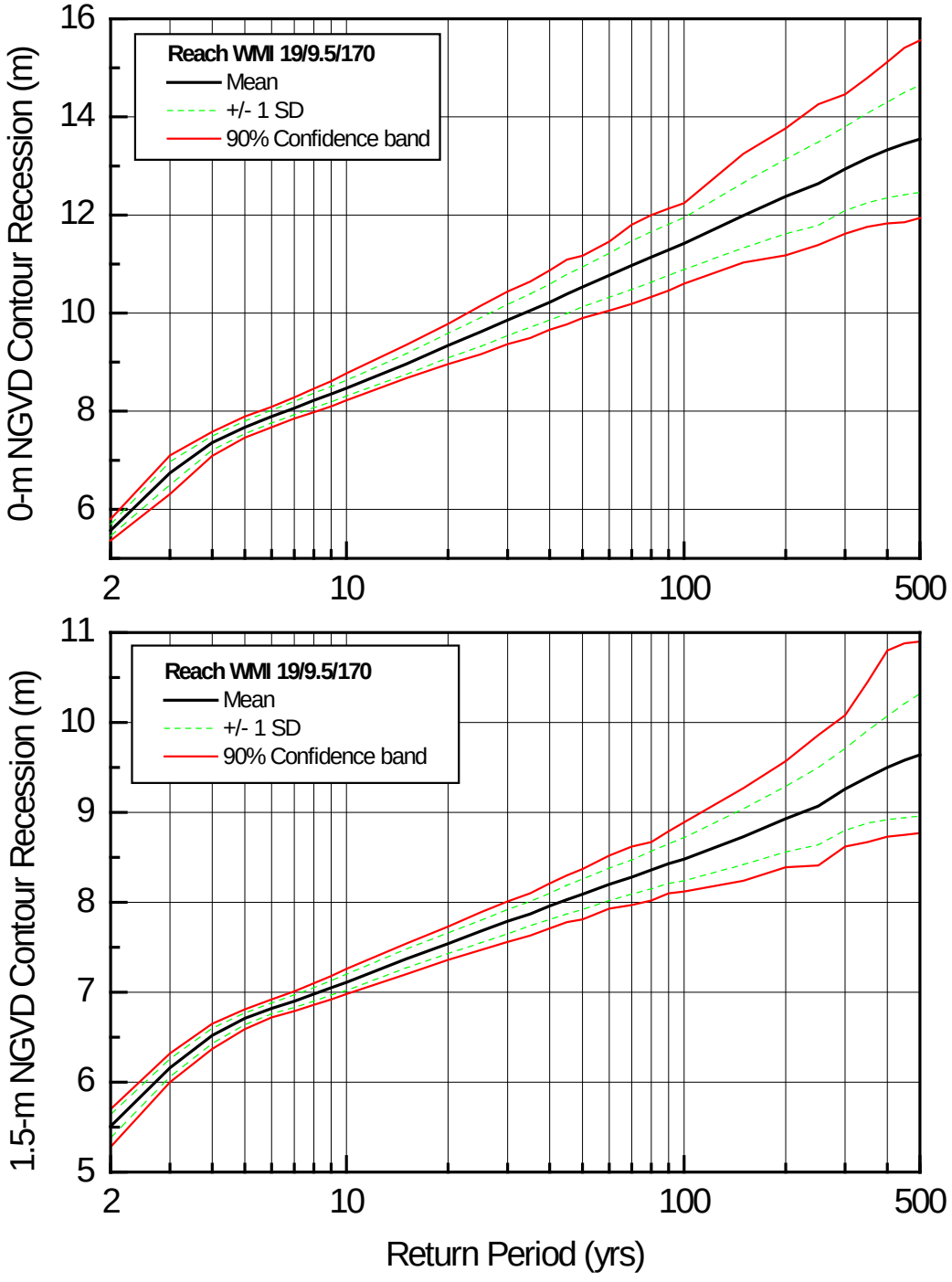

Reach WMI 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach WMI 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2.5
2
10
100
500
Return Period (yrs)

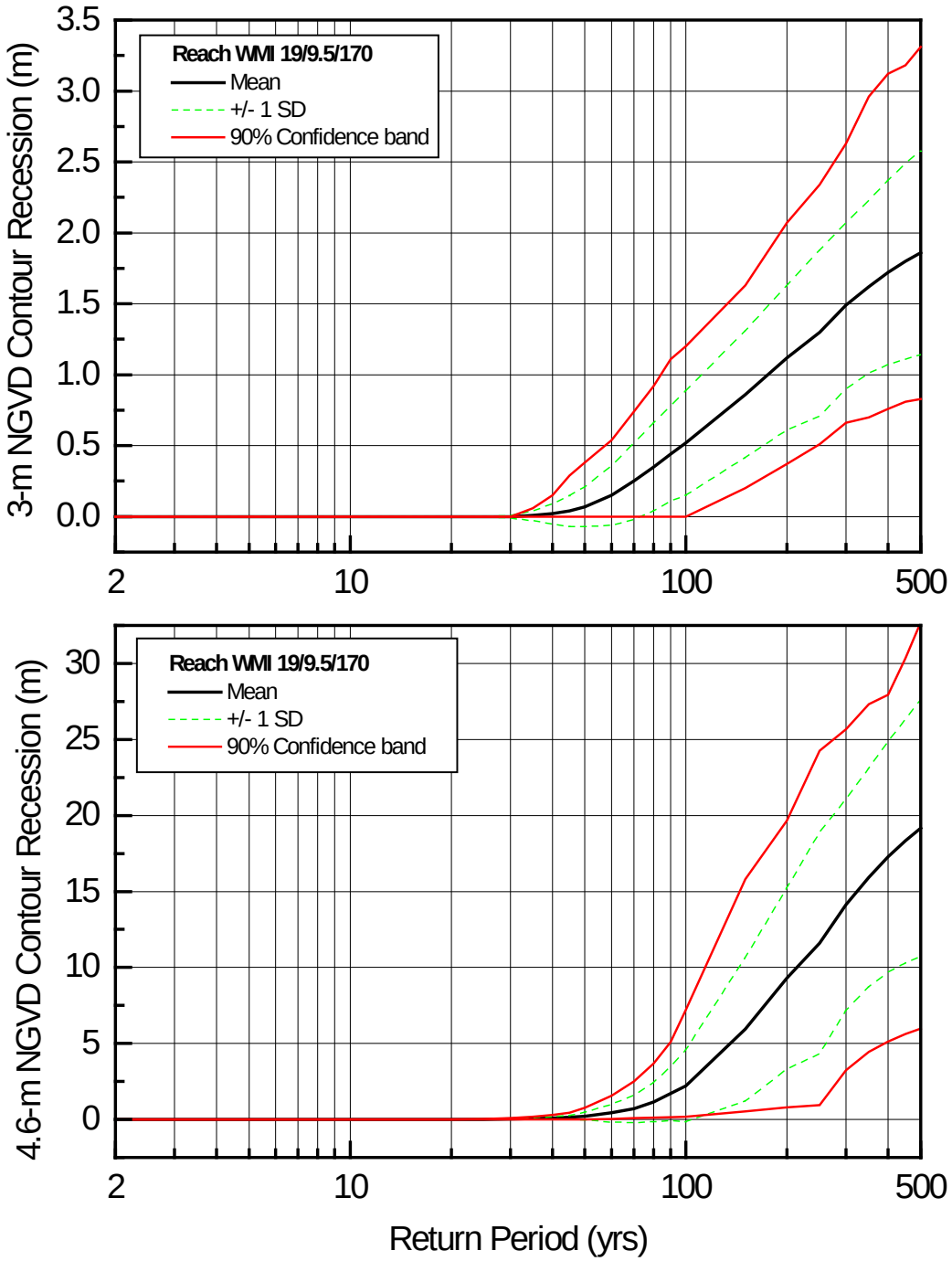

Reach WMI 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
20
15
10
5
0
2
10
100
500
Reach WMI 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
2
10
100
500
Return Period (yrs)

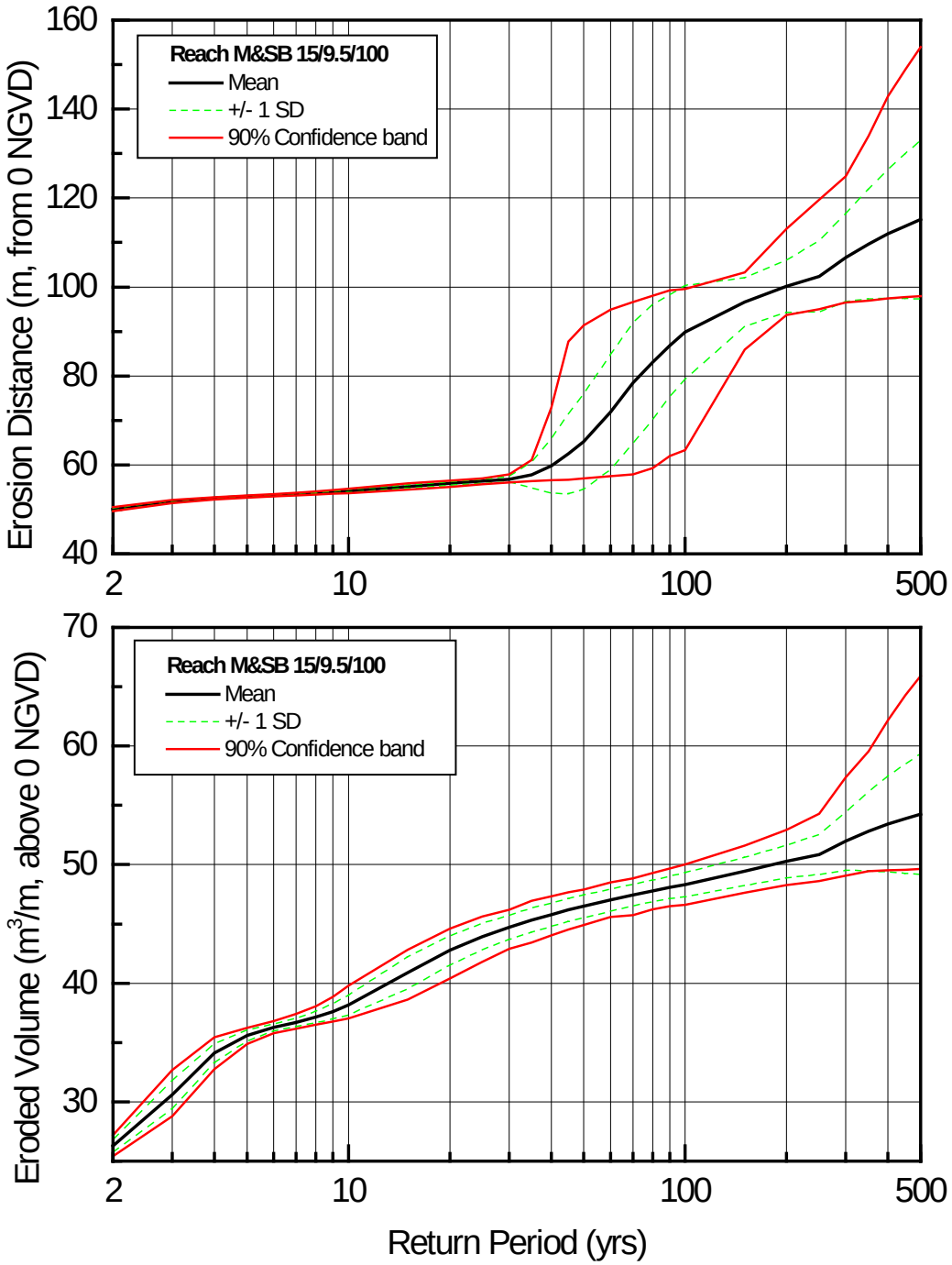

Reach WMI 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach WMI 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2
10
100
500
Return Period (yrs)

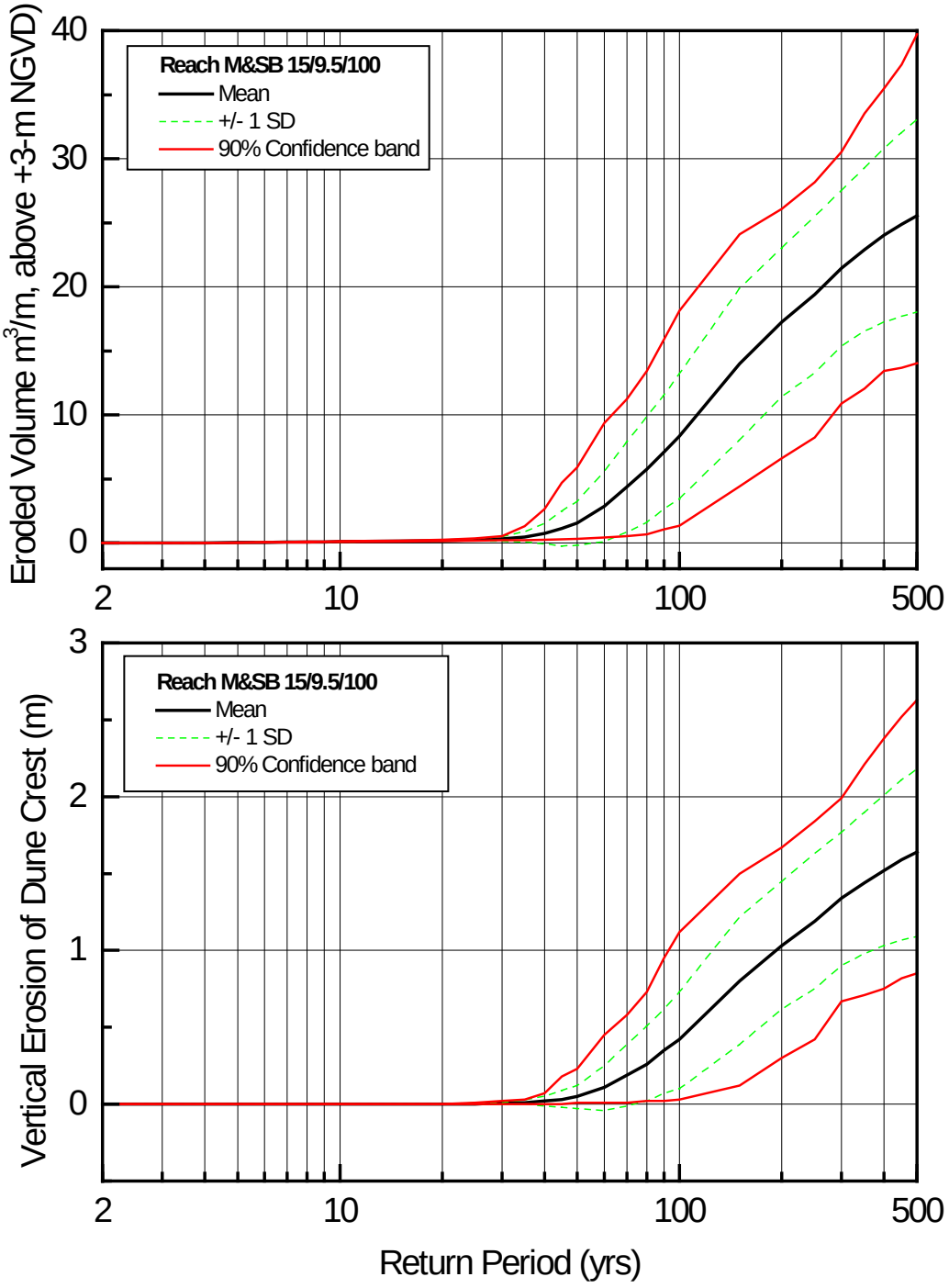

Max. Wave Setup Magnitude (m, above SWL)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach WMI 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
7
6
5
4
3
Reach WMI 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

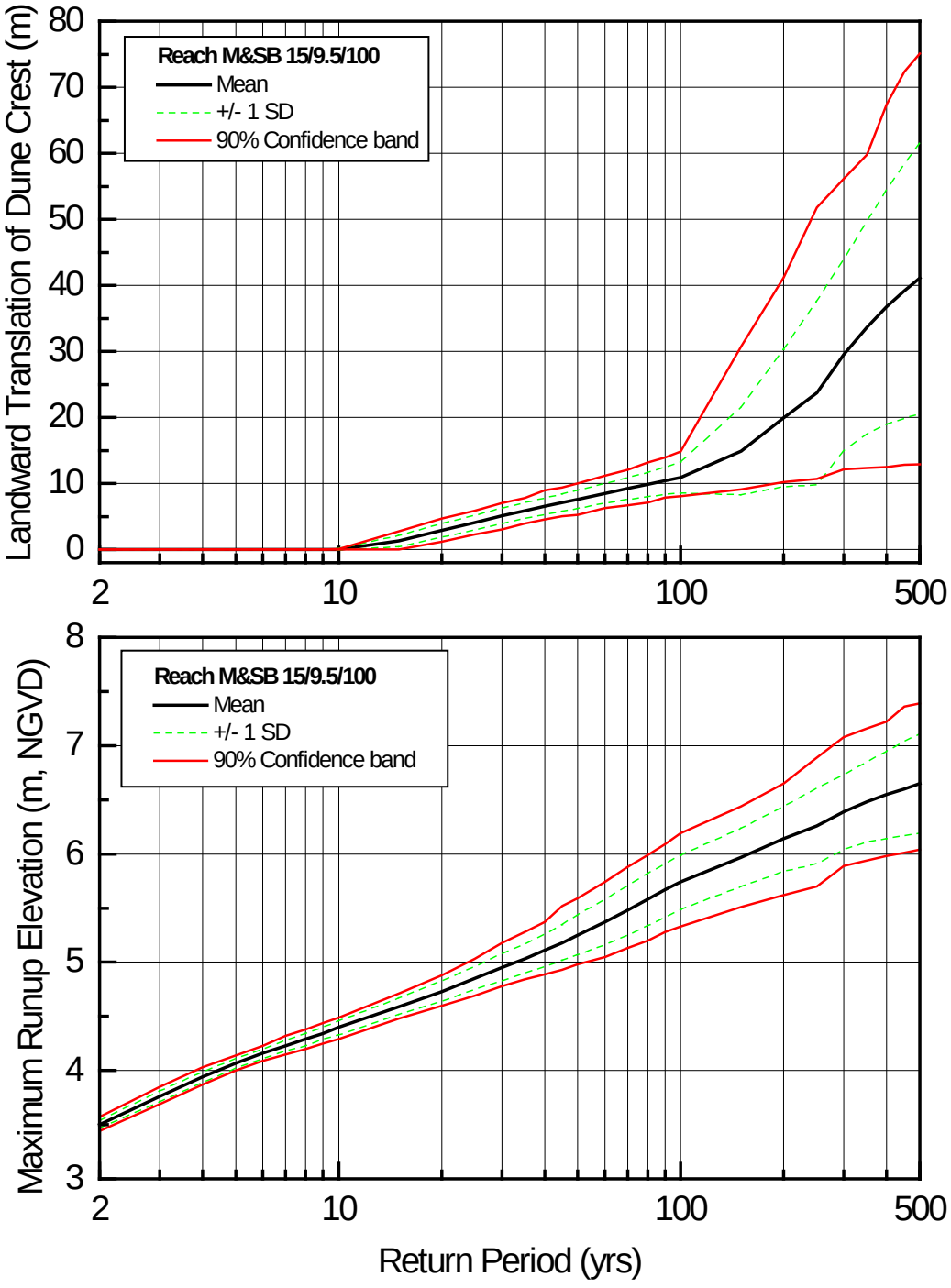

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach WMI 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
450
400
350
300
250
200
150
100
50
Reach WMI 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

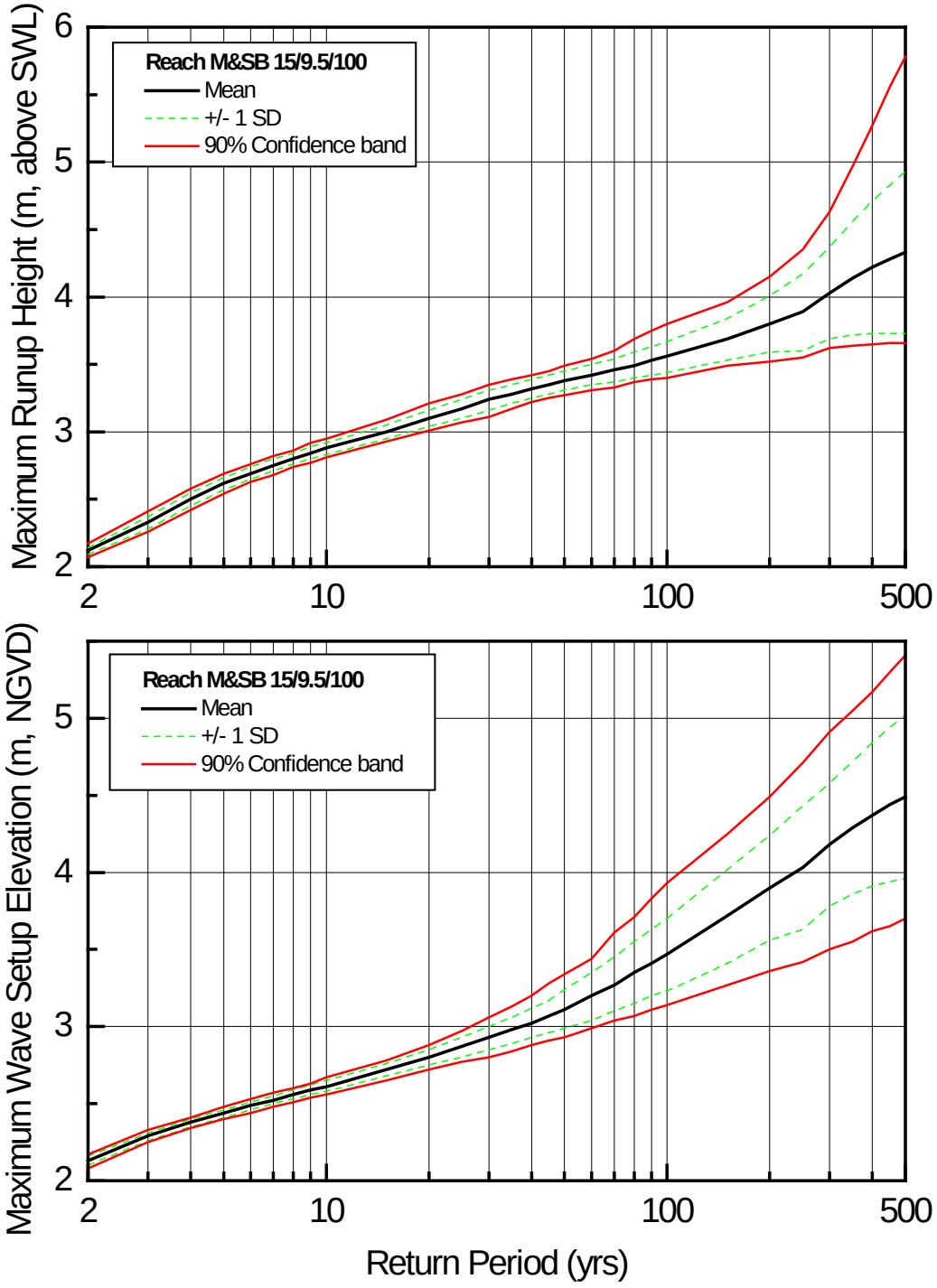

Reach WMI 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
16
14
12
10
8
6
2
10
100
500
Reach WMI 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
11
10
9
8
7
6
5
2
10
100
500
Return Period (yrs)

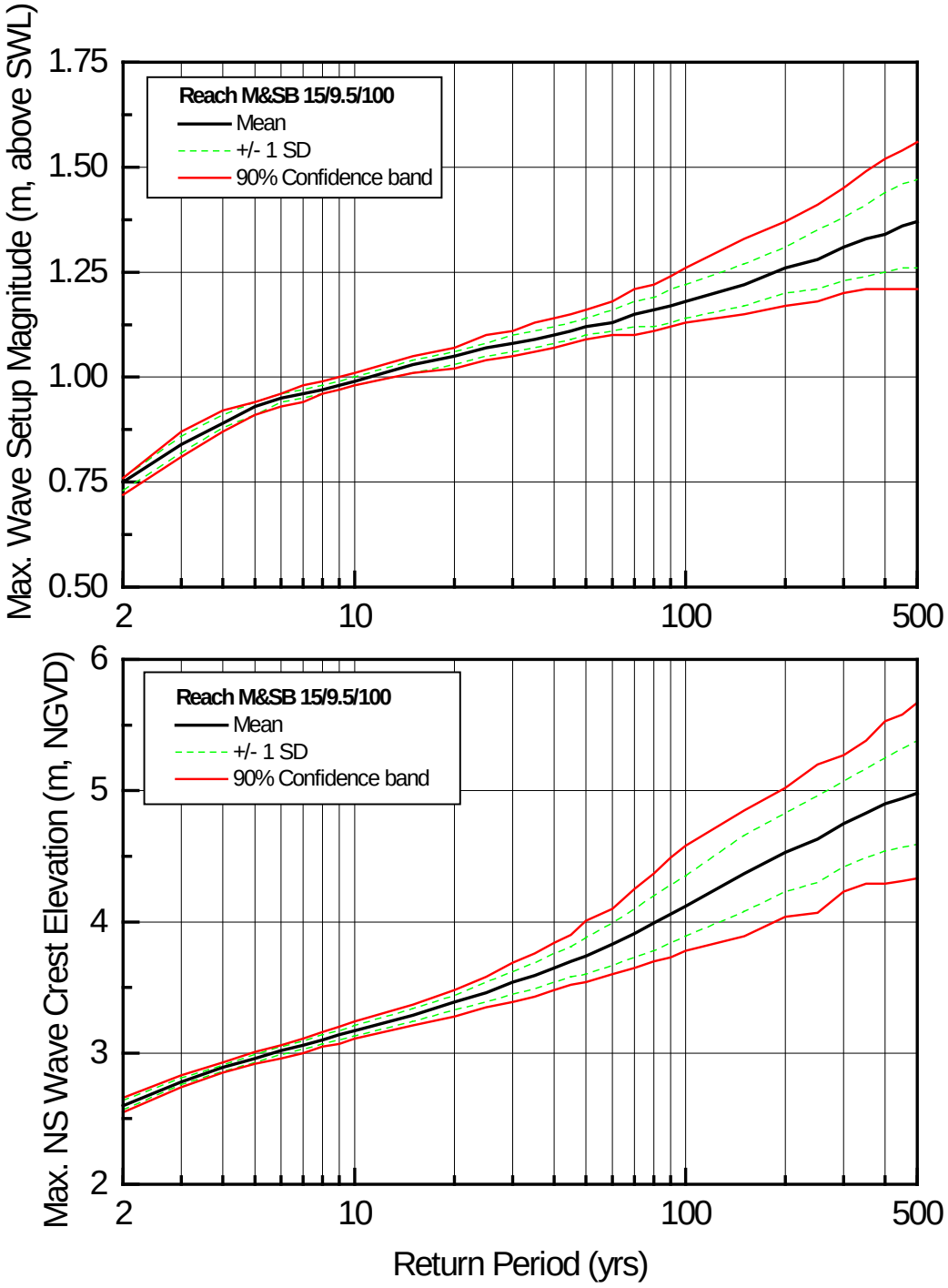

Reach WMI 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach WMI 19/9.5/170
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

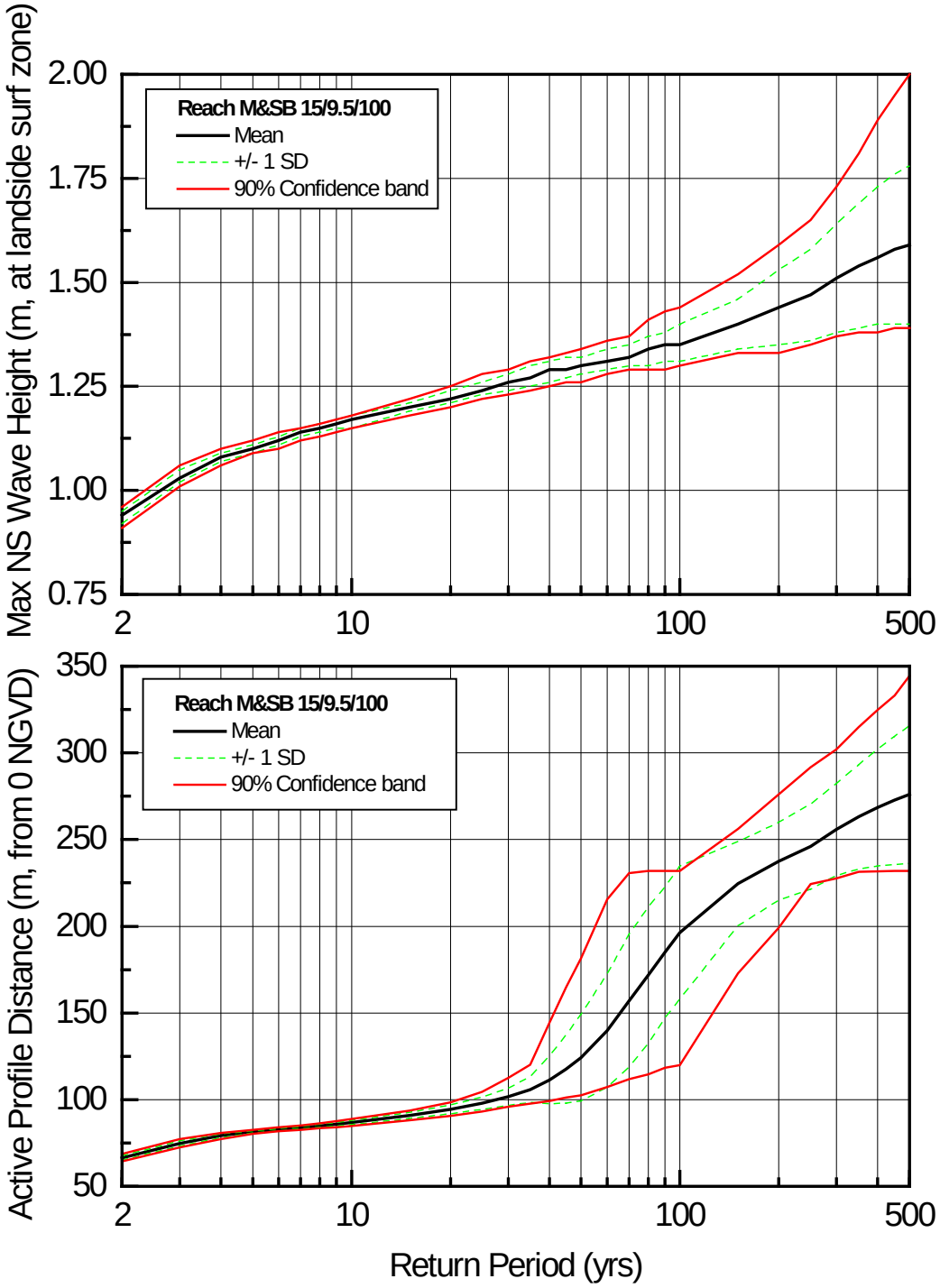

Reach M&SB 15/9.5/100
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
160
140
120
100
80
60
40
2
10
100
500
Reach M&SB 15/9.5/100
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
70
60
50
40
30
2
10
100
500
Return Period (yrs)

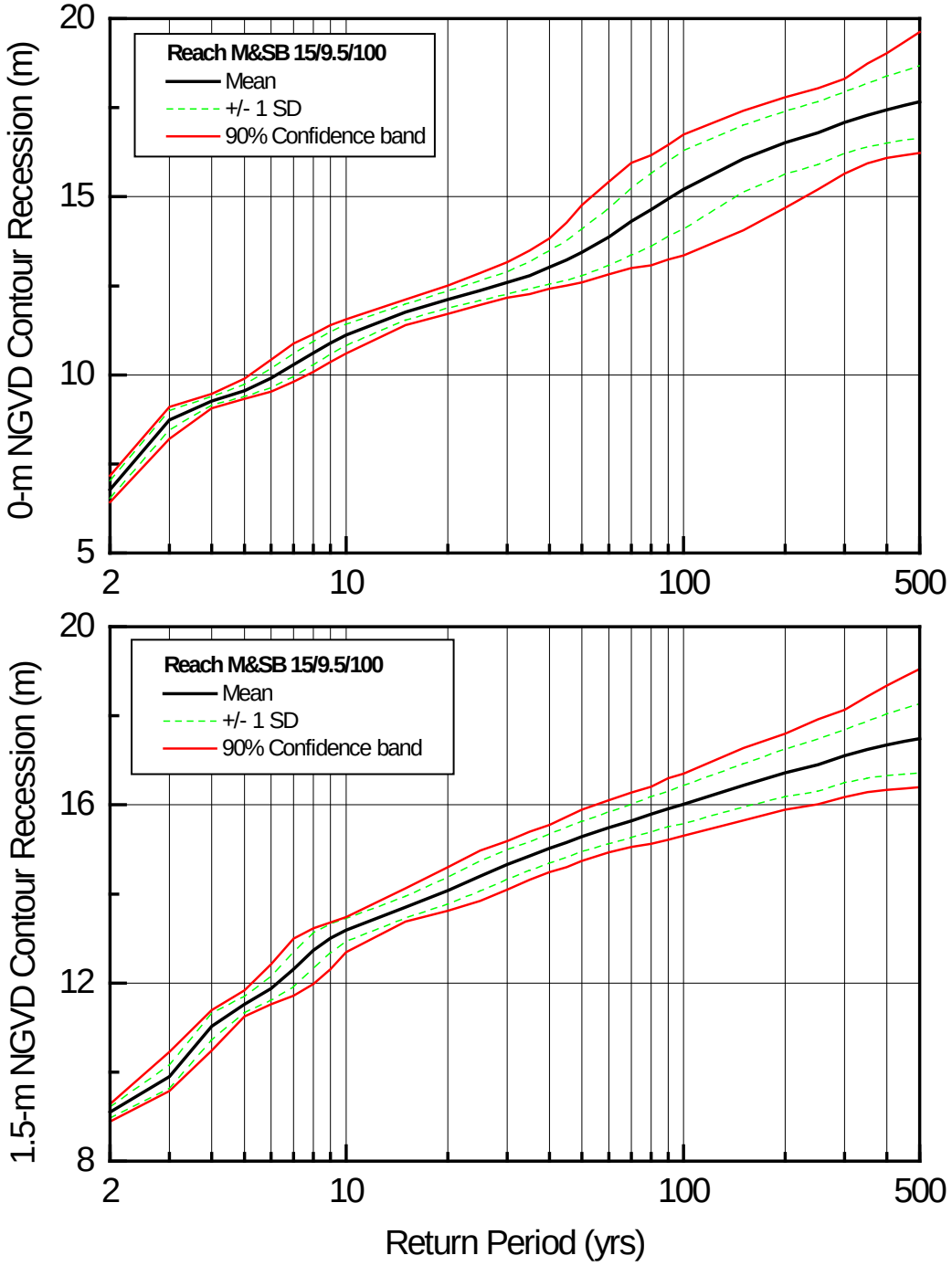

Reach M&SB 15/9.5/100
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
40
30
20
10
0
2
10
100
500
Reach M&SB 15/9.5/100
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
3
2
1
0
2
10
100
500
Return Period (yrs)

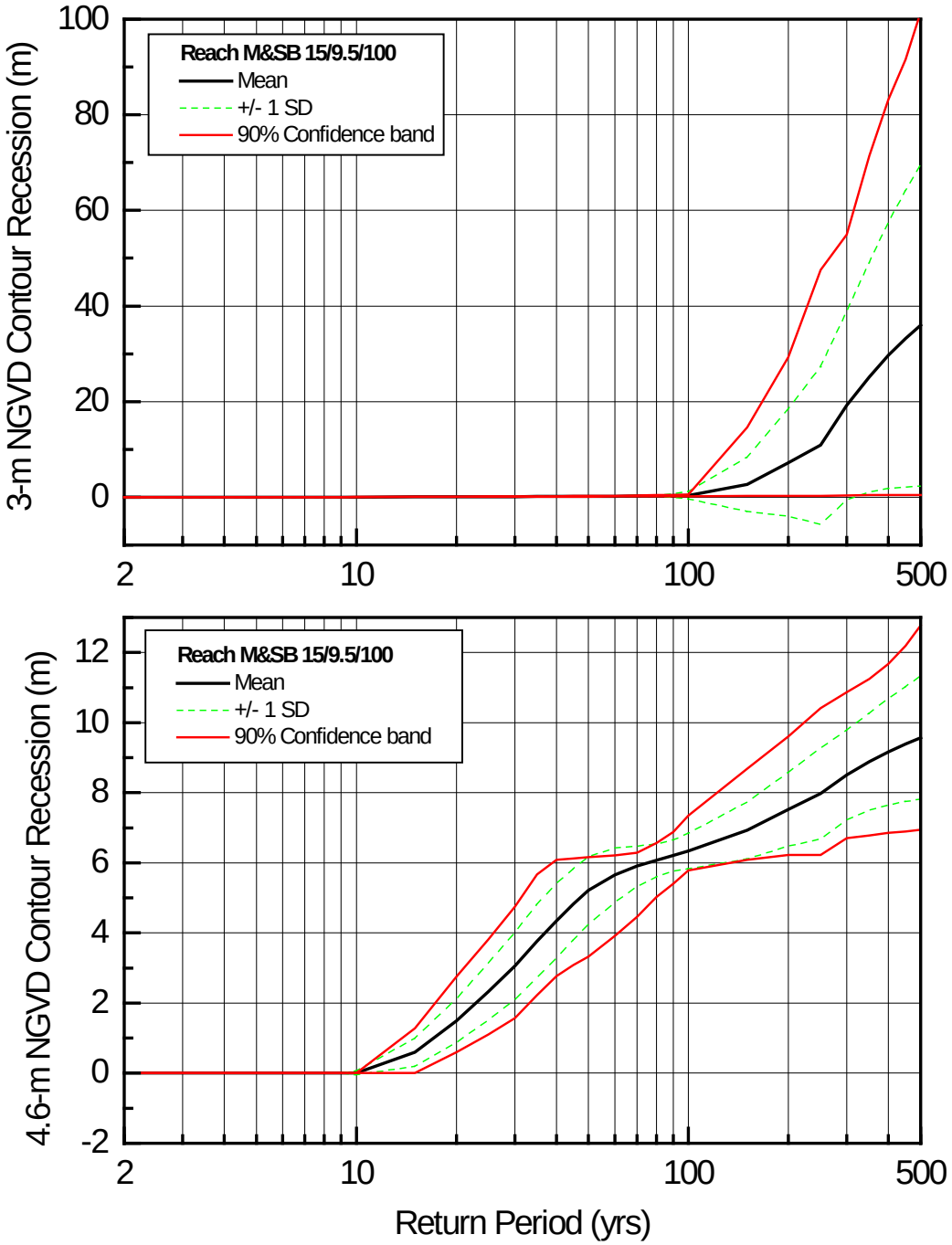

Reach M&SB 15/9.5/100
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
30
40
50
60
70
80
2
10
100
500
Reach M&SB 15/9.5/100
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
8
2
10
100
500
Return Period (yrs)

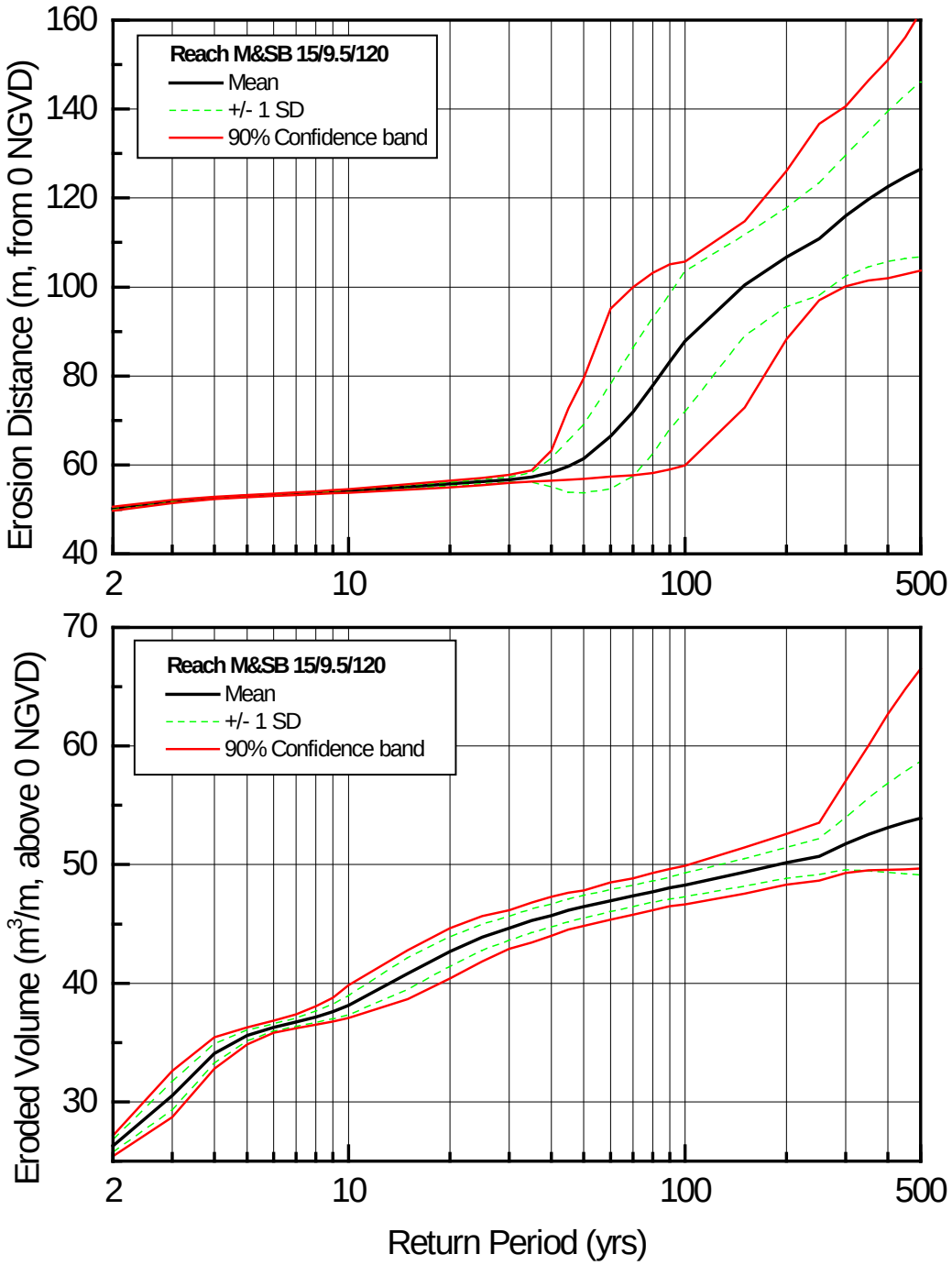

Maximum Runup Height (m, above SWL)
Reach M&SB 15/9.5/100
Mean
+/- 1 SD
90% Confidence band
6
5
4
3
2
2
10
100
500
Maximum Wave Setup Elevation (m, NGVD)
Reach M&SB 15/9.5/100
Mean
+/- 1 SD
90% Confidence band
5
4
3
2
2
10
100
500
Return Period (yrs)

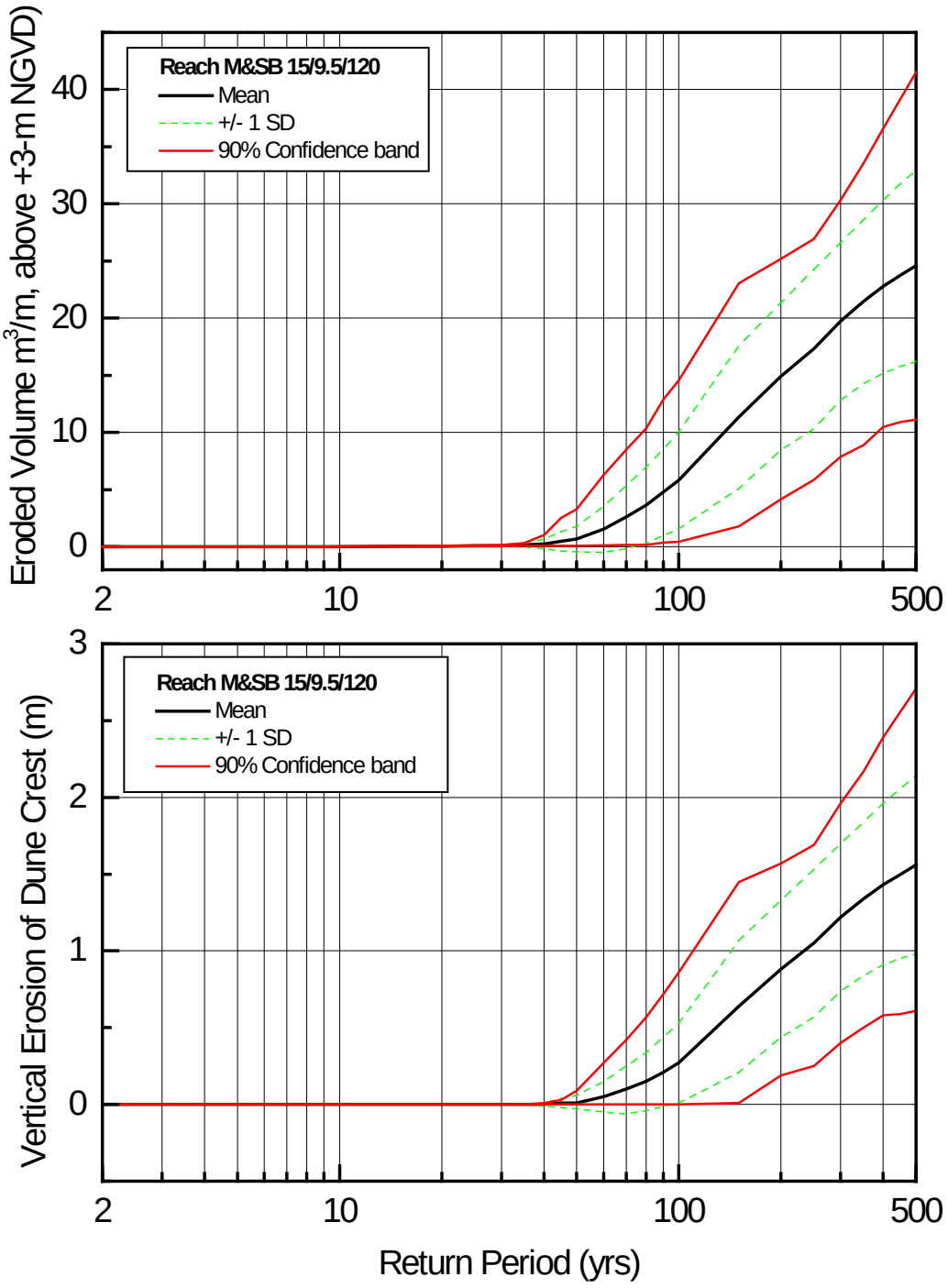

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach M&SB 15/9.5/100
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
6
5
4
3
2
Reach M&SB 15/9.5/100
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

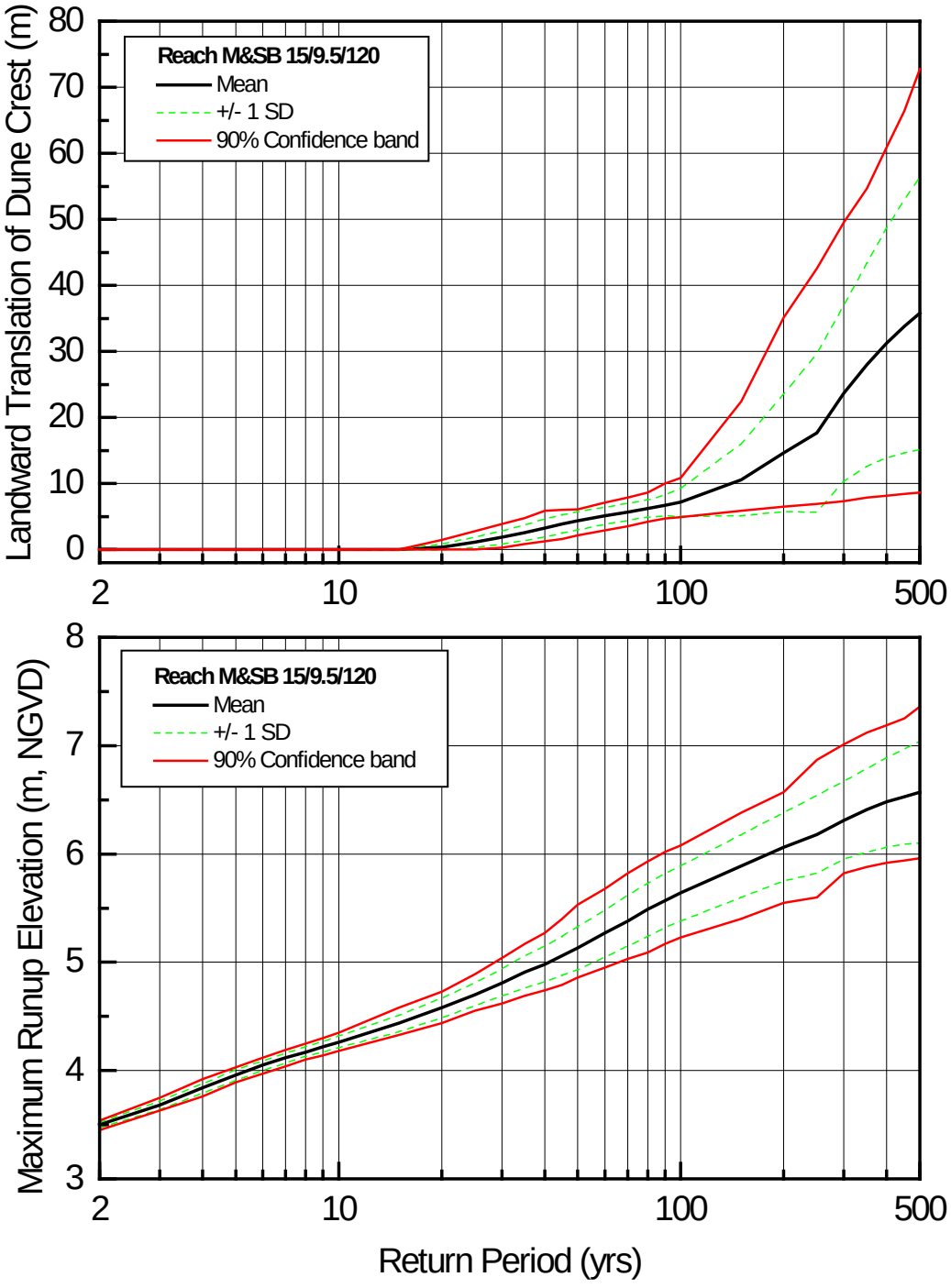

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
0.75
Reach M&SB 15/9.5/100
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
350
300
250
200
150
100
50
Reach M&SB 15/9.5/100
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

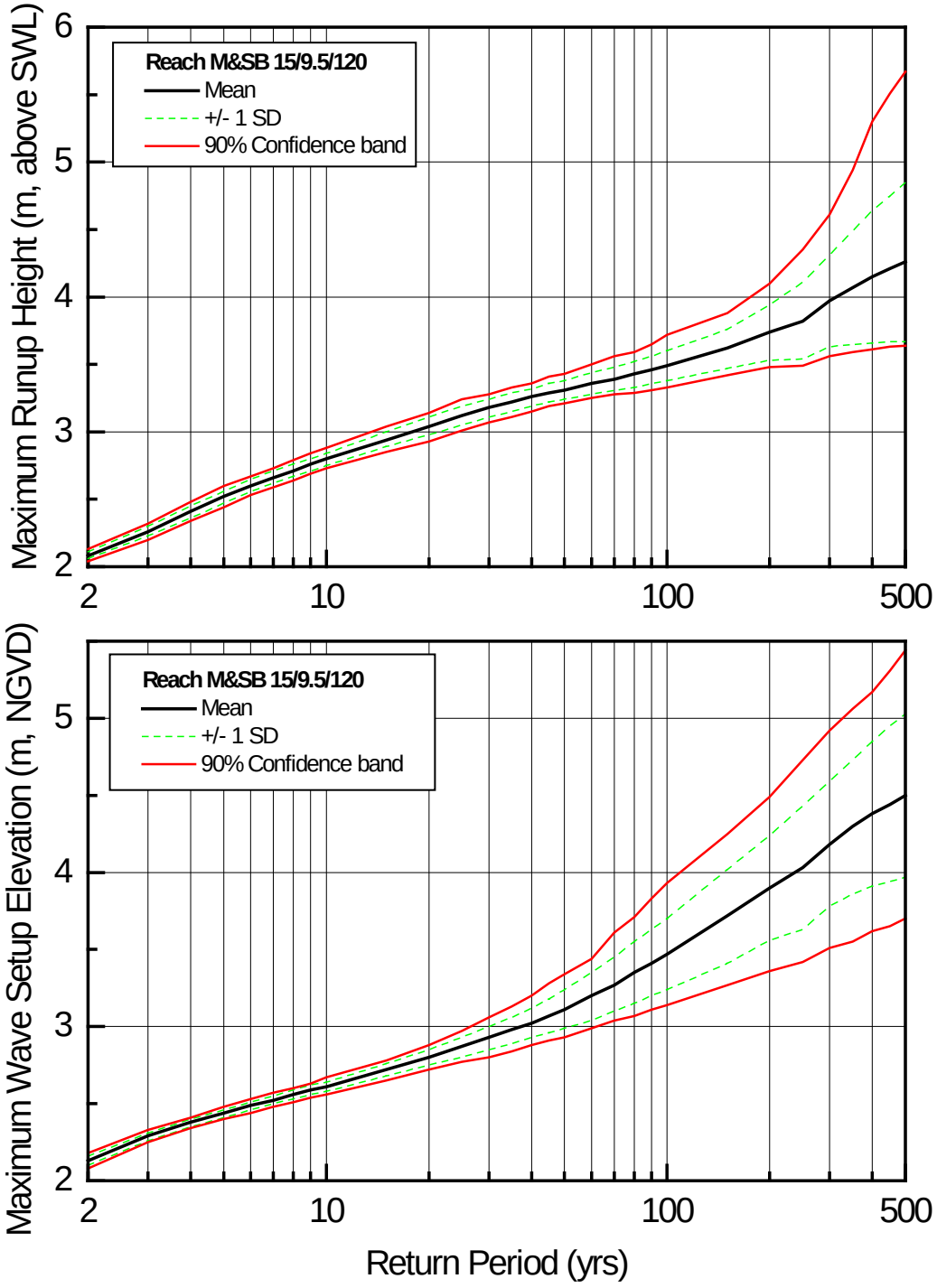

Reach M&SB 15/9.5/100
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
15
10
5
2
10
100
500
Reach M&SB 15/9.5/100
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20
16
12
8
2
10
100
500
Return Period (yrs)

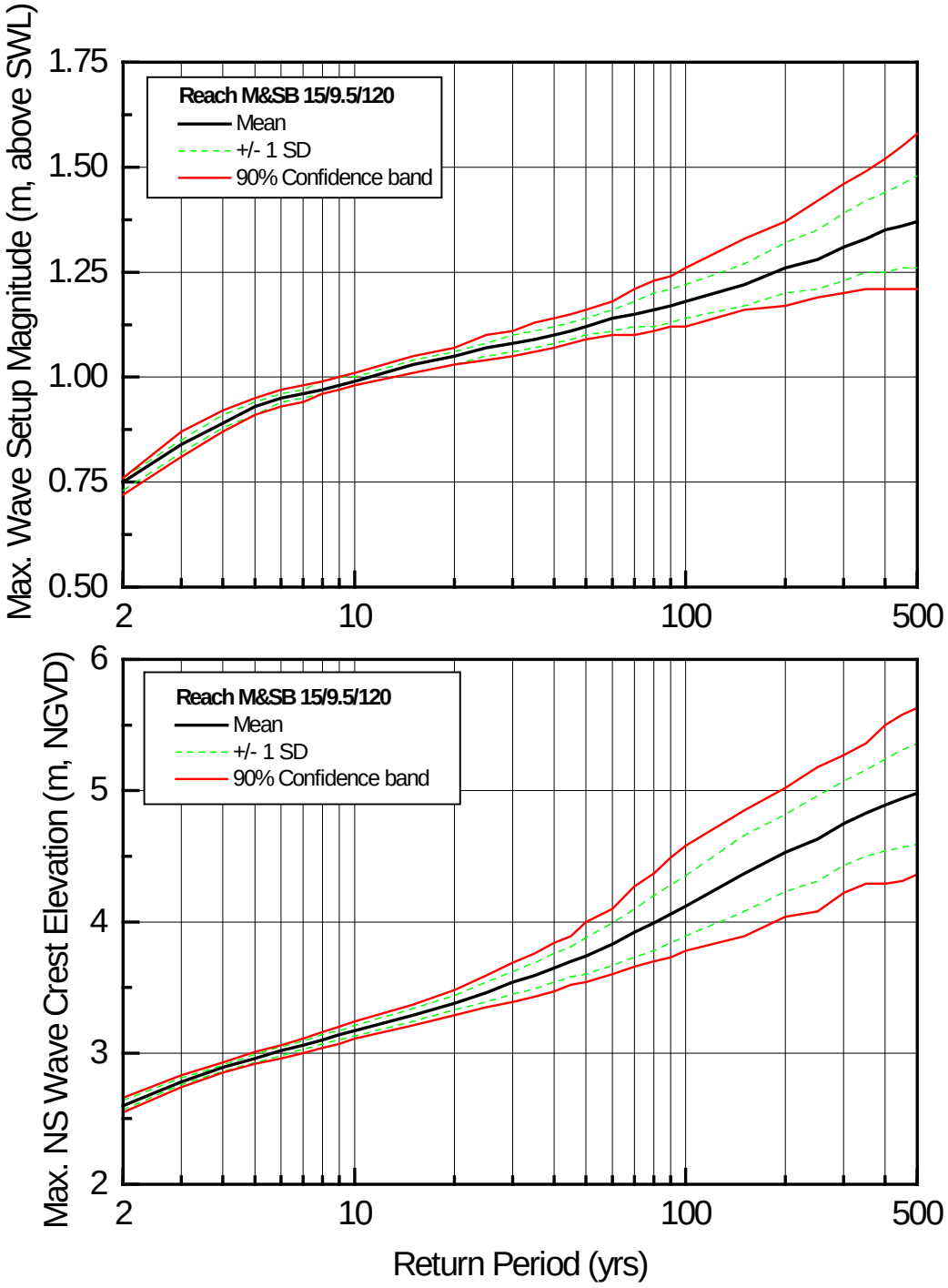

Reach M&SB 15/9.5/100
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
100
80
60
40
20
0
2
10
100
500
Reach M&SB 15/9.5/100
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
12
10
8
6
4
2
0
-2
2
10
100
500
Return Period (yrs)

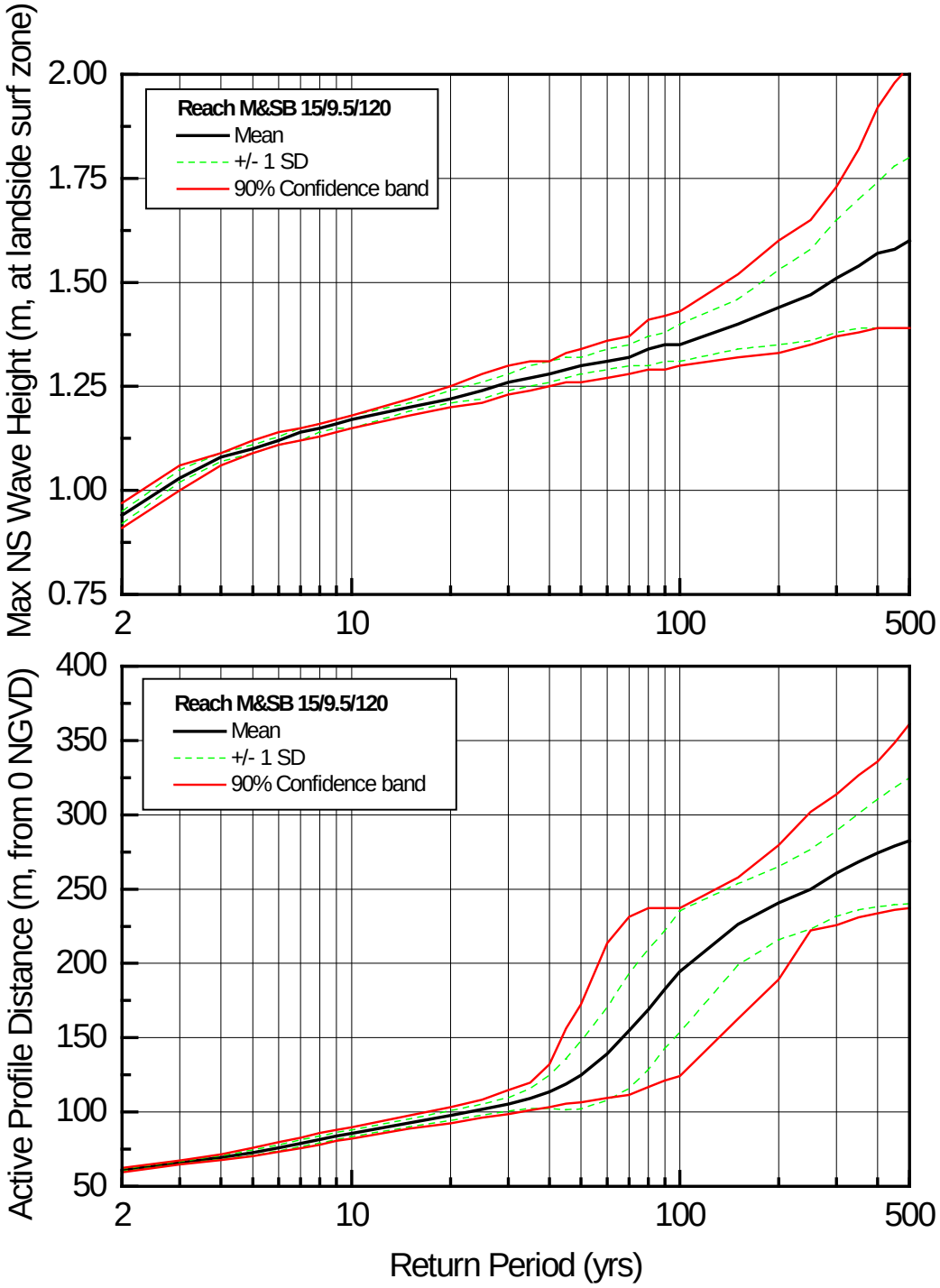

Reach M&SB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
160
140
120
100
80
60
40
2
10
100
500
Reach M&SB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
70
60
50
40
30
2
10
100
500
Return Period (yrs)

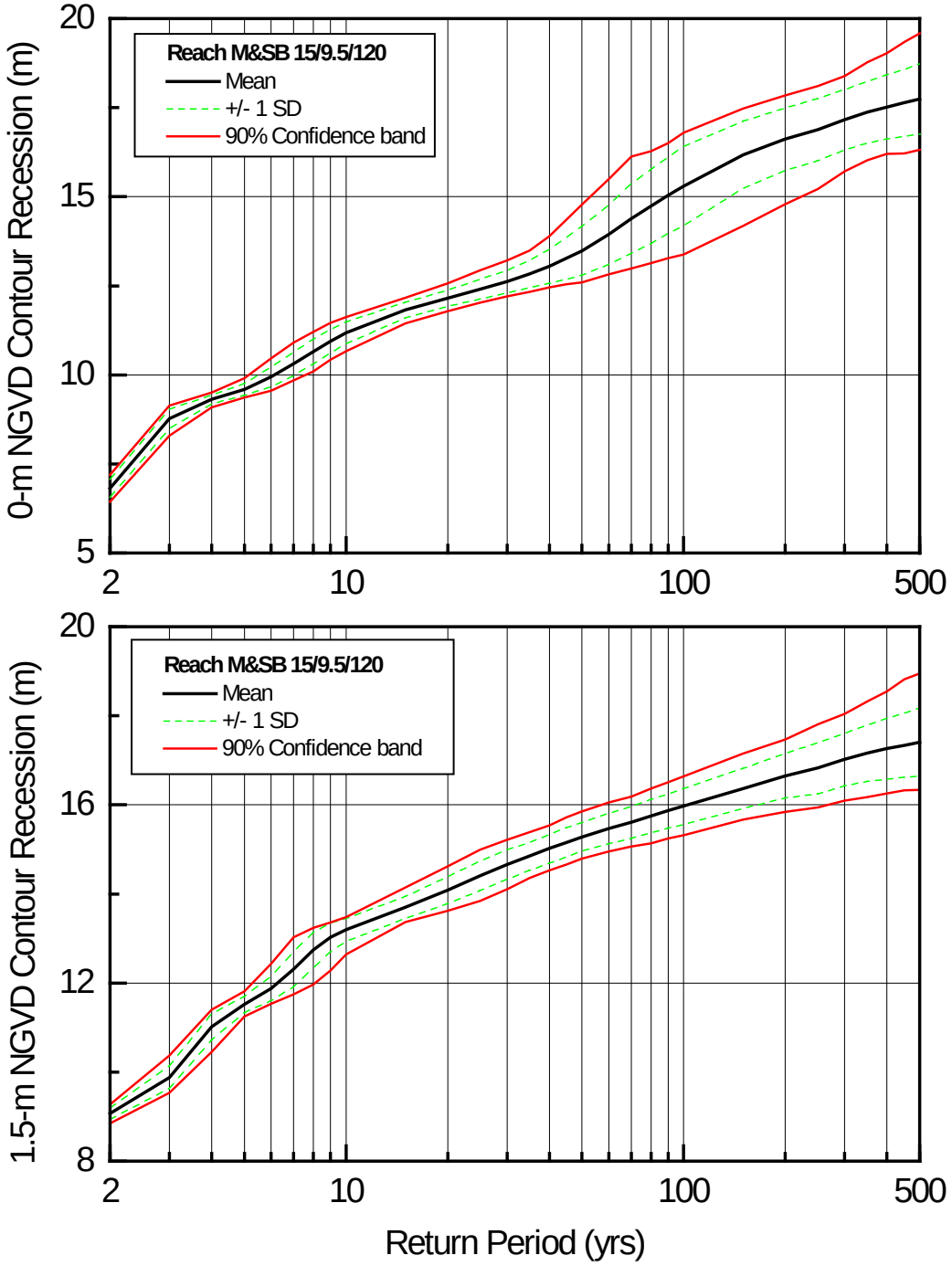

Reach M&SB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach M&SB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

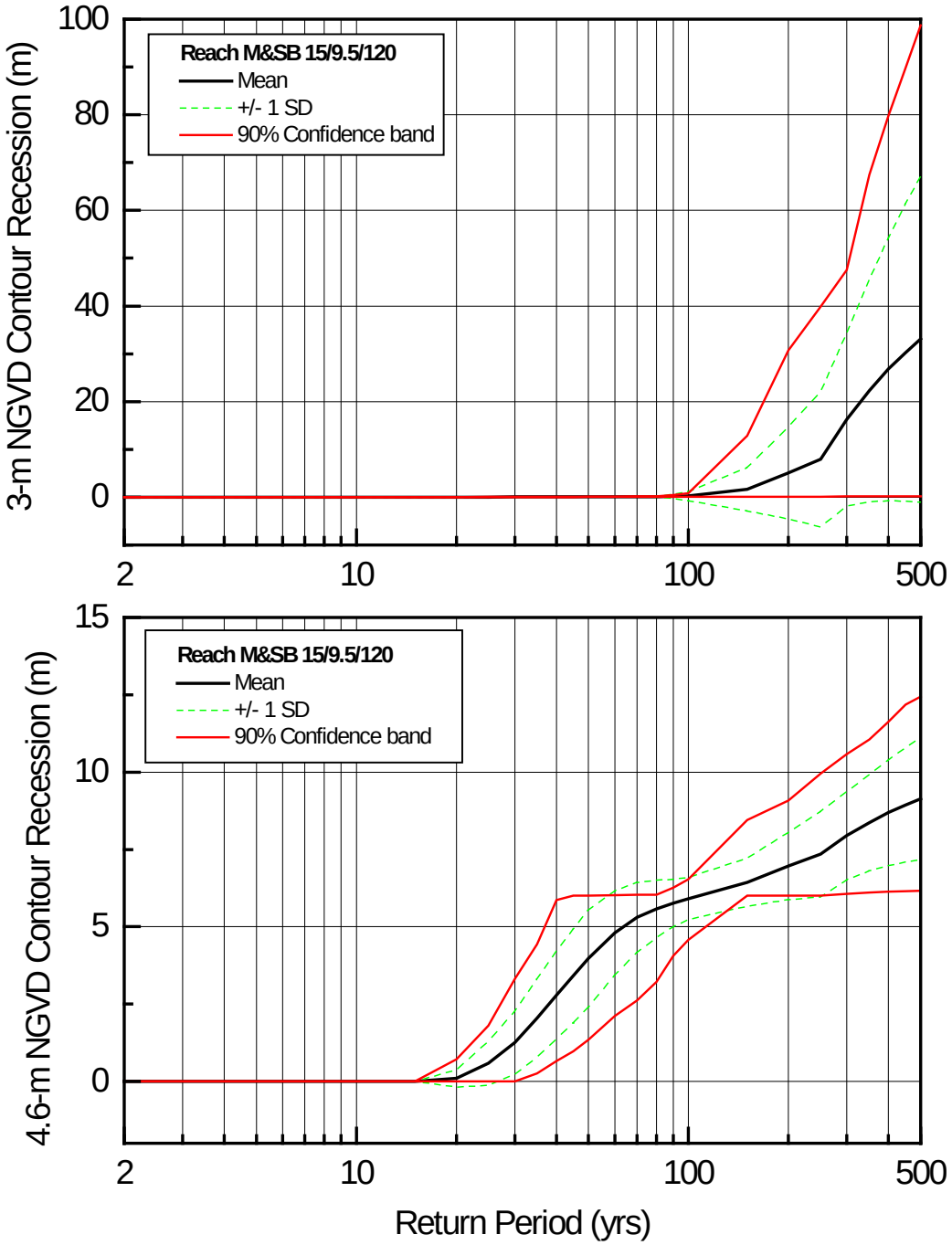

Reach M&SB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
30
40
50
60
70
80
2
10
100
500
Reach M&SB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
8
2
10
100
500
Return Period (yrs)

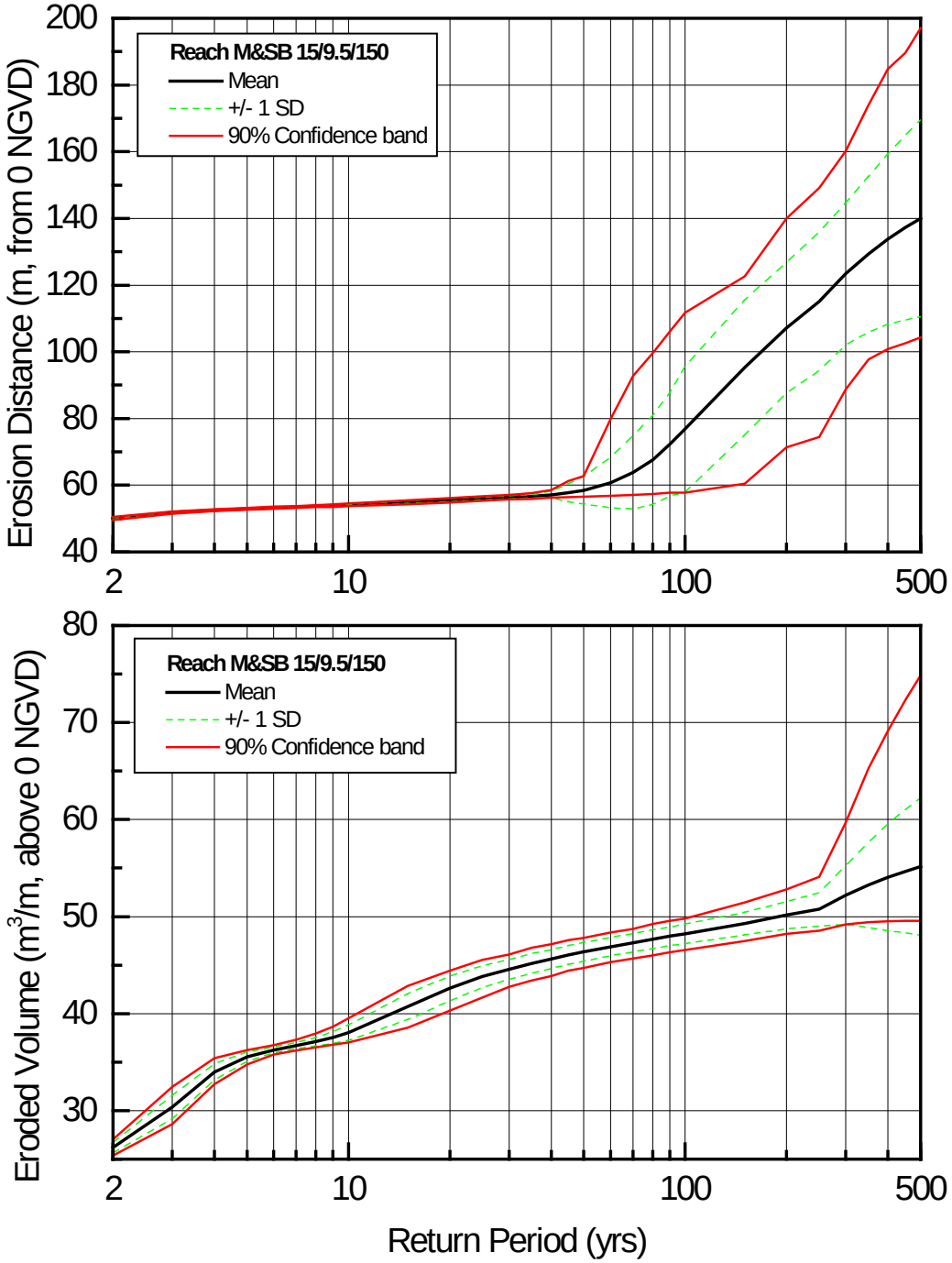

Reach M&SB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
6
5
4
3
2
2
10
100
500
Reach M&SB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5
4
3
2
2
10
100
500
Return Period (yrs)

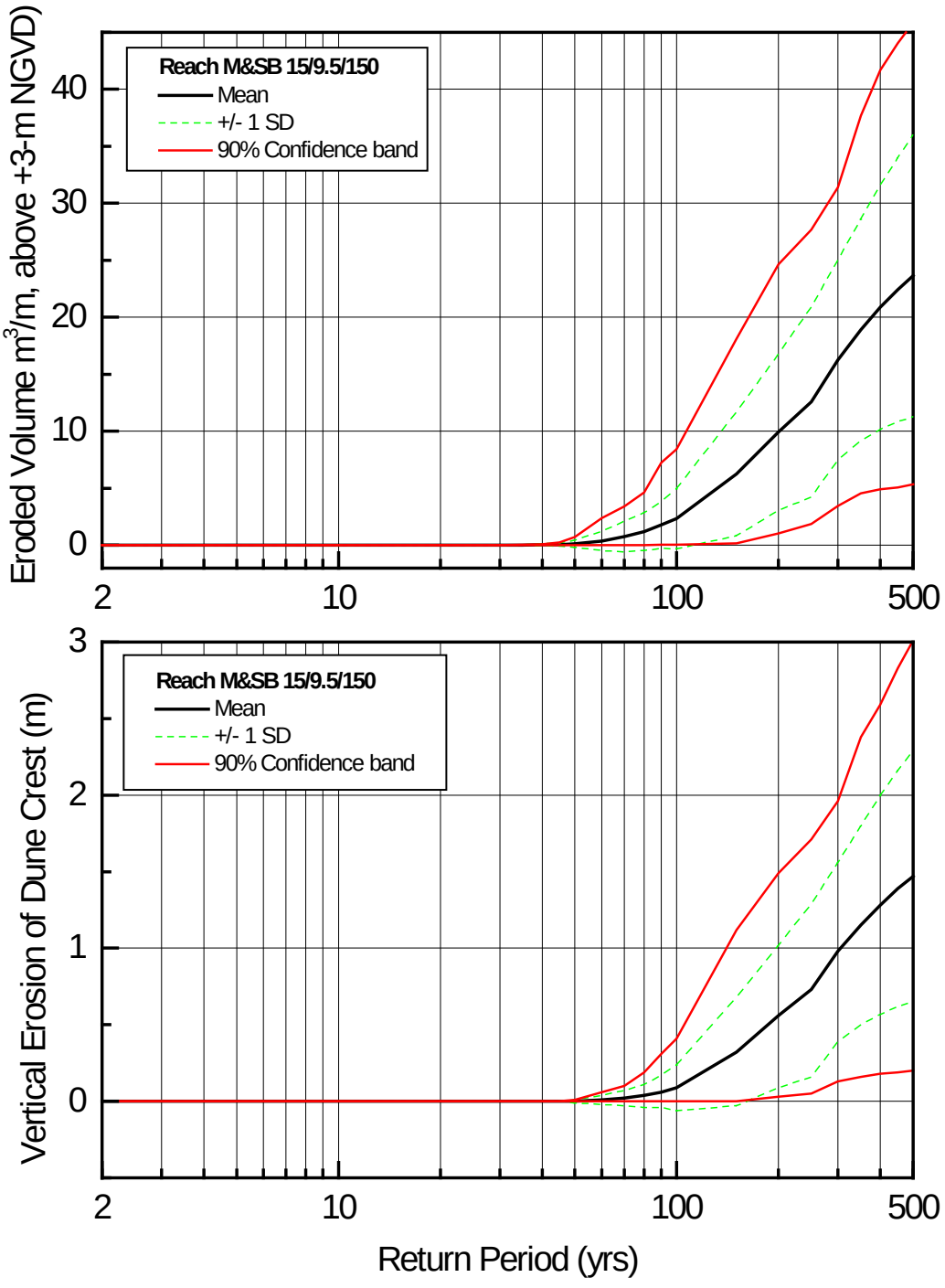

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach M&SB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
6
5
4
3
2
Reach M&SB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

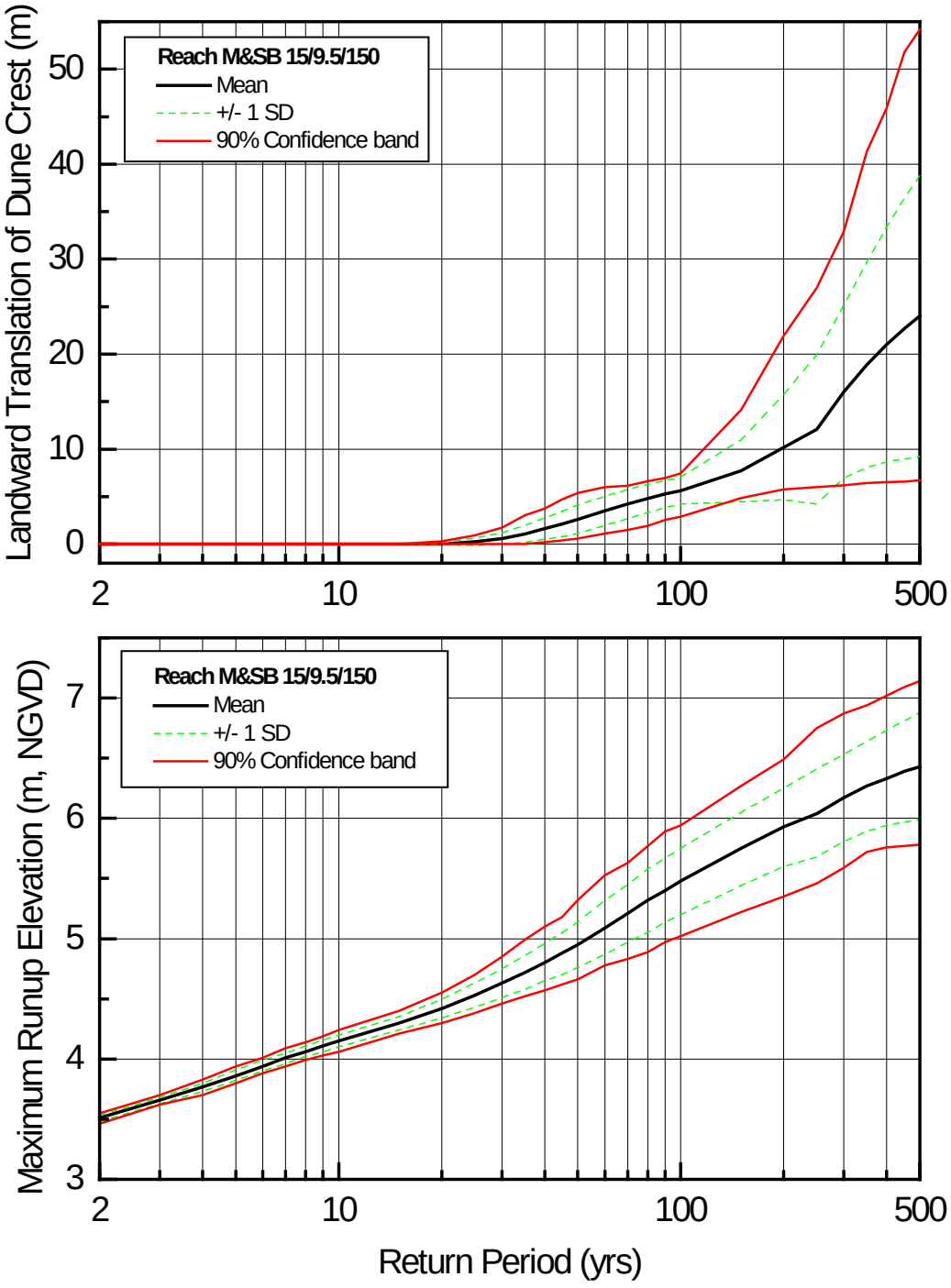

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
0.75
Reach M&SB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
350
300
250
200
150
100
50
Reach M&SB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

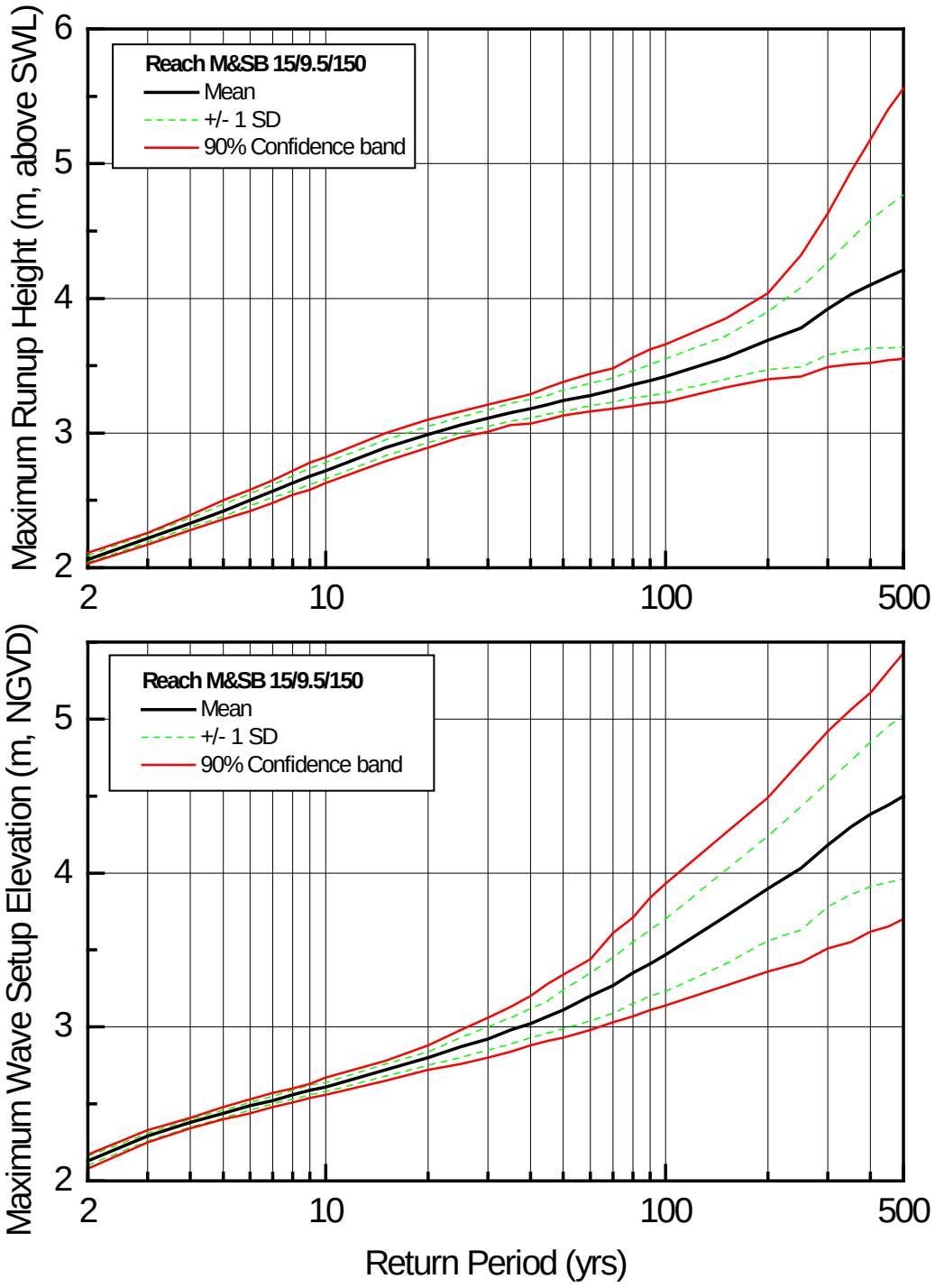

Reach M&SB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
15
10
5
2
10
100
500
Reach M&SB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20
16
12
8
2
10
100
500
Return Period (yrs)

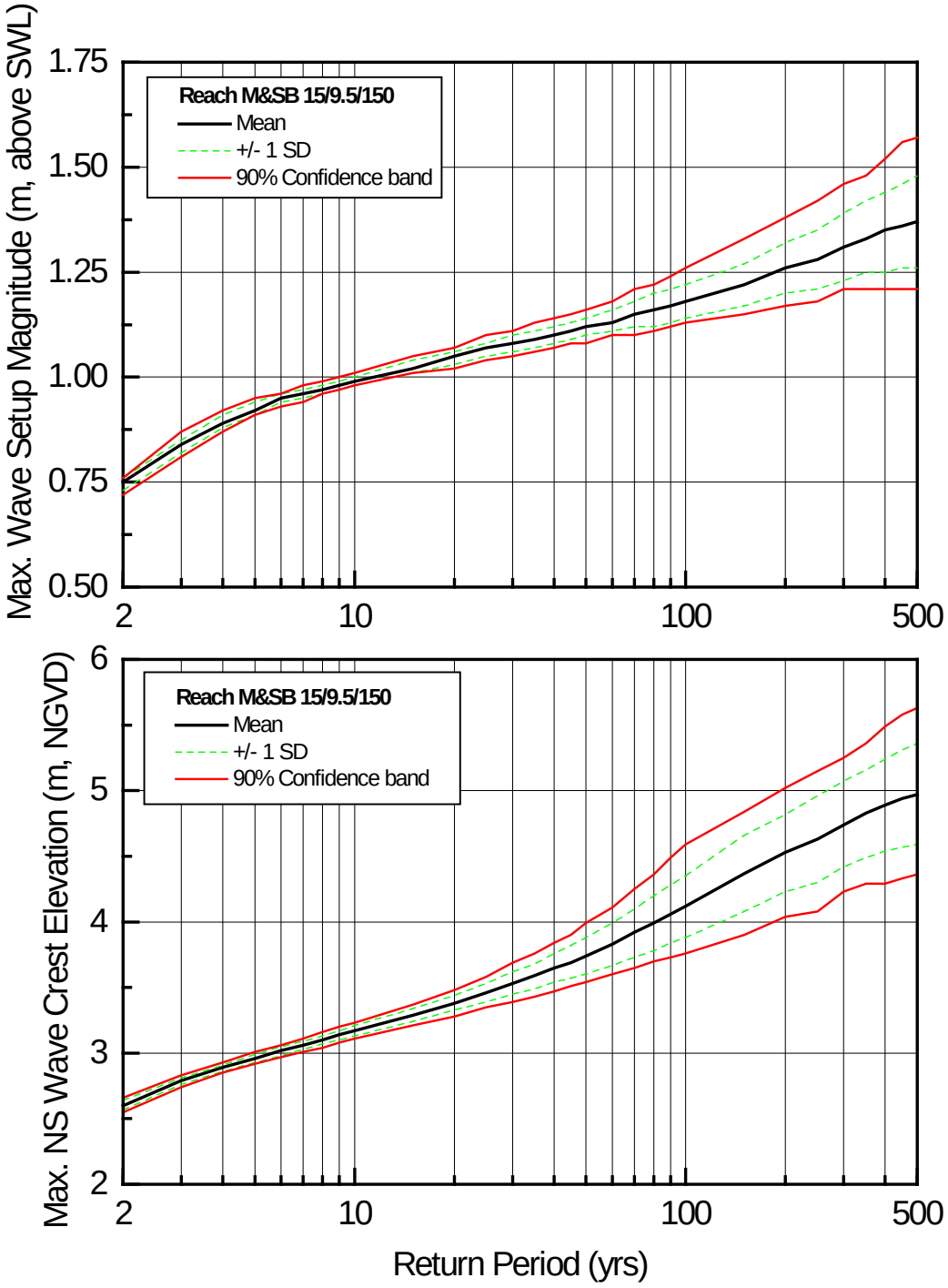

Reach M&SB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
100
80
60
40
20
0
2
10
100
500
Reach M&SB 15/9.5/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
15
10
5
0
2
10
100
500
Return Period (yrs)

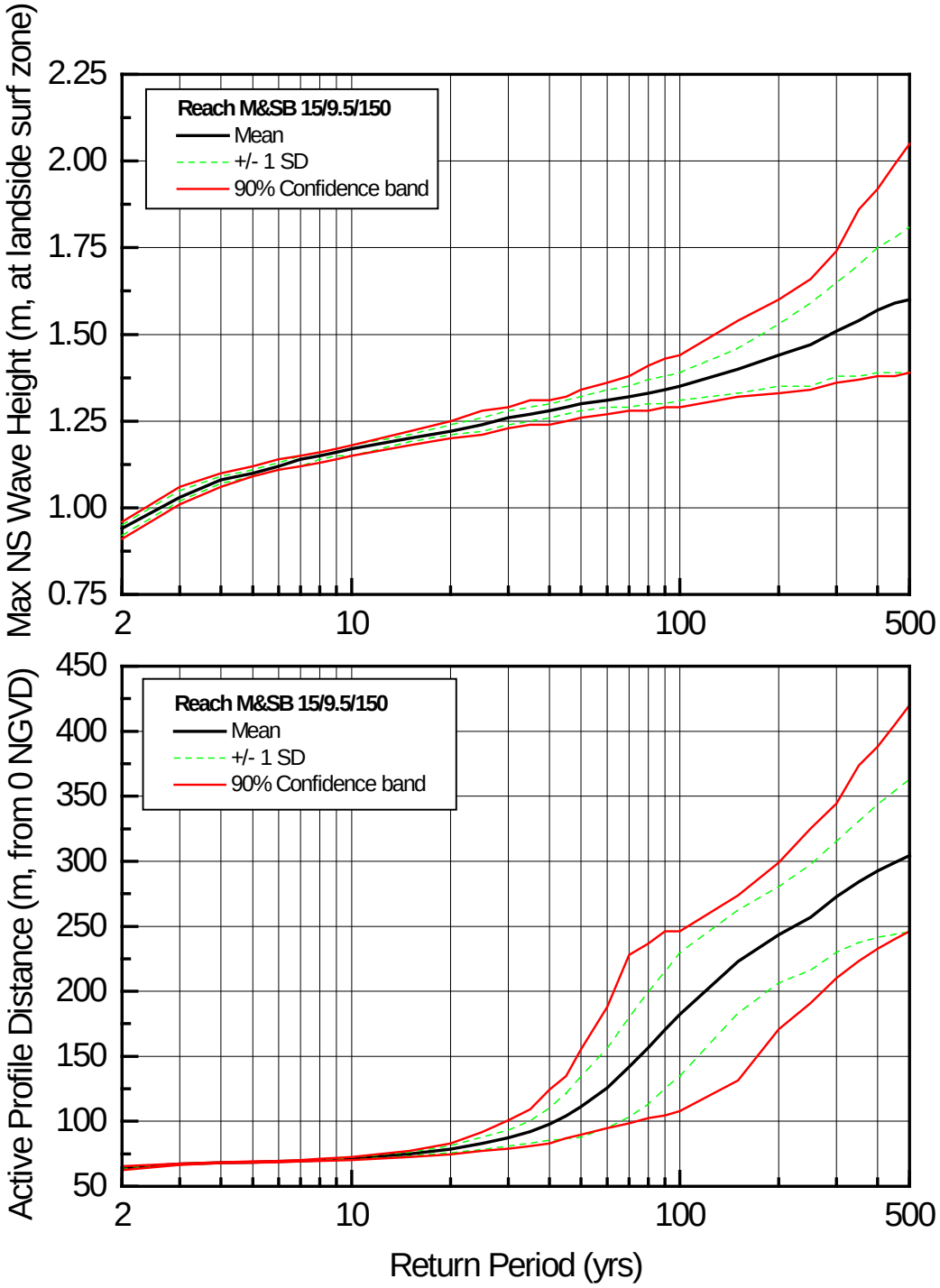

Reach M&SB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
200
180
160
140
120
100
80
60
40
2
10
100
500
Reach M&SB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

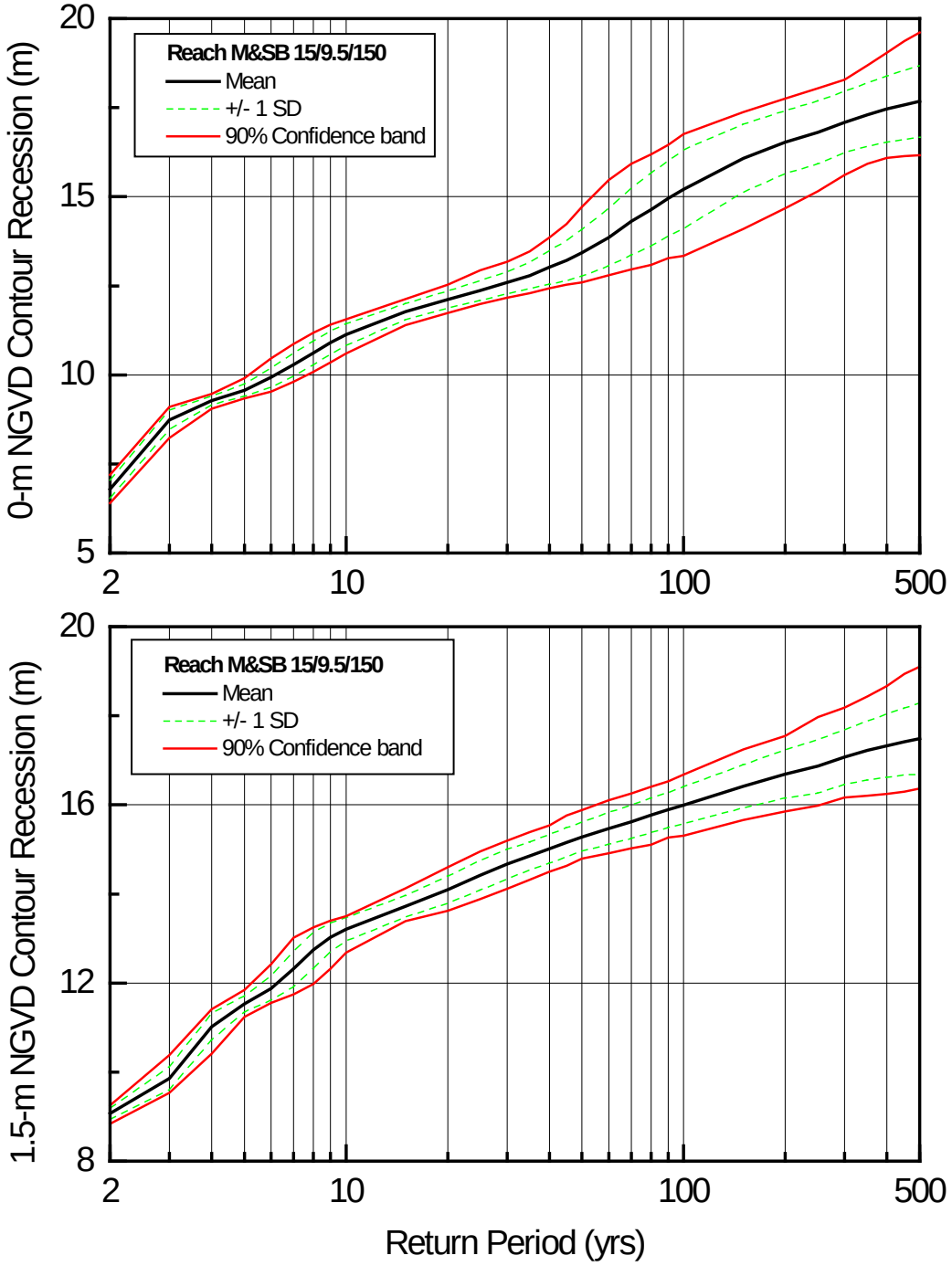

Reach M&SB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach M&SB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

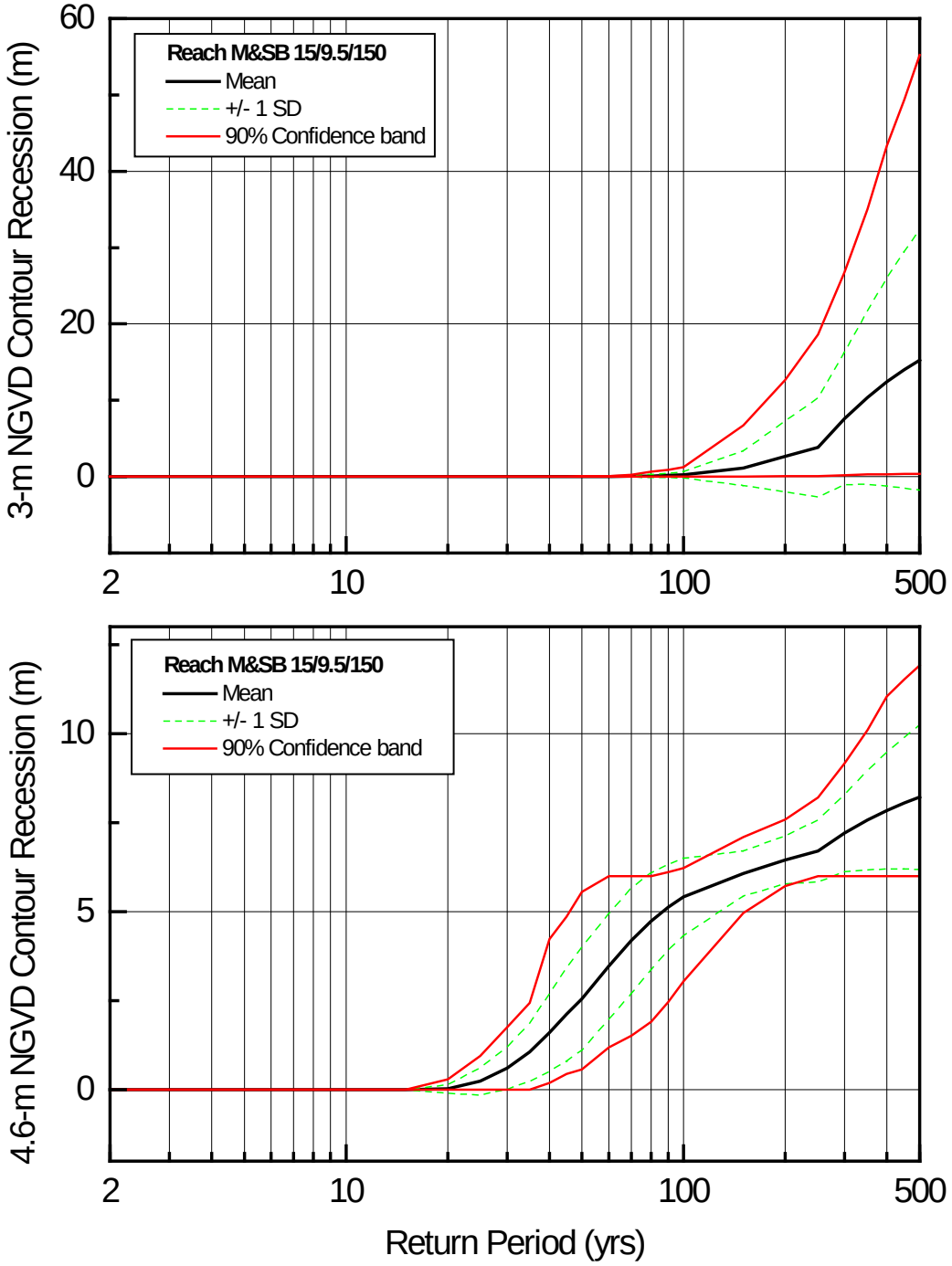

Reach M&SB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
30
40
50
2
10
100
500
Reach M&SB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
2
10
100
500
Return Period (yrs)

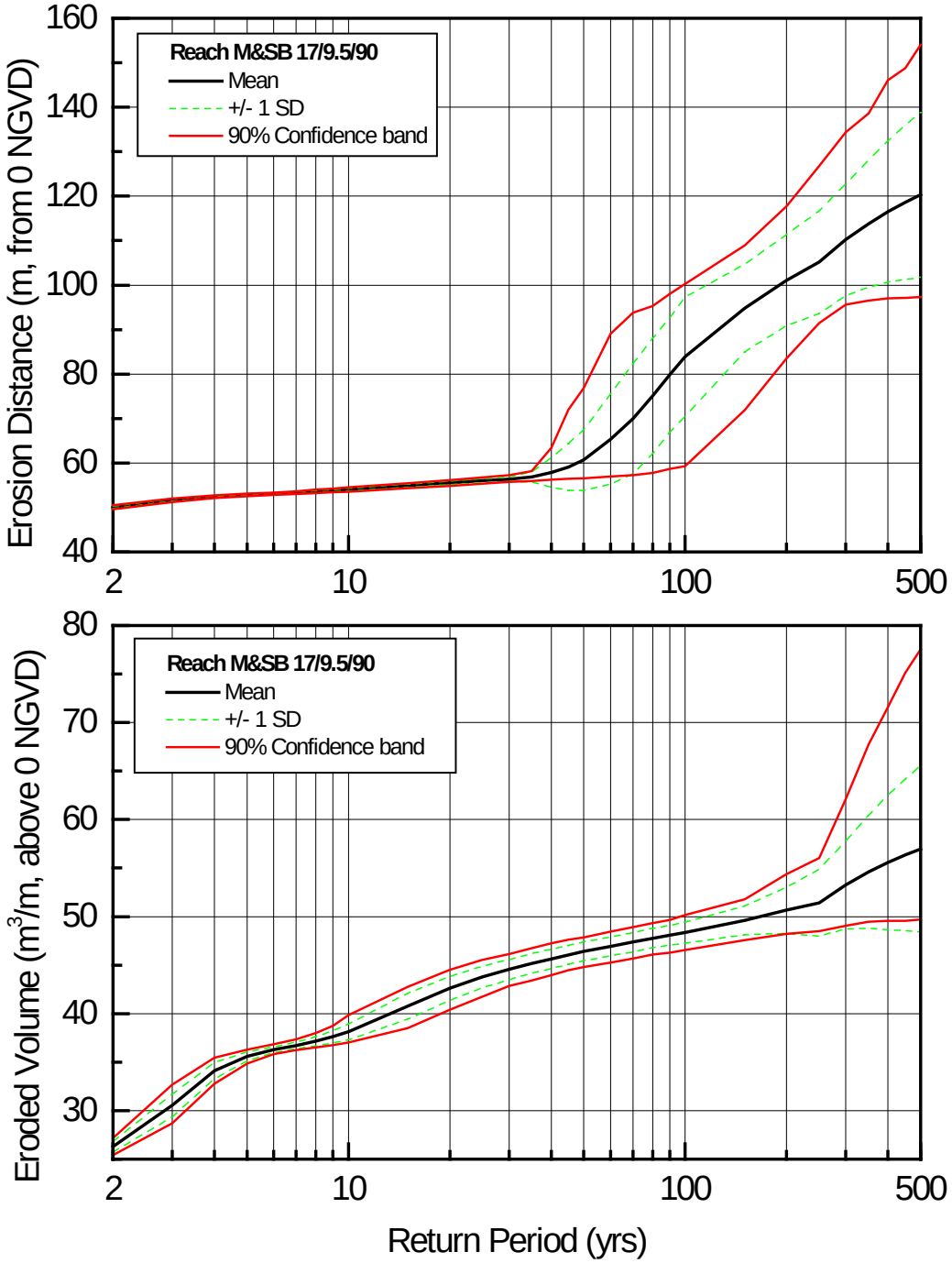

Reach M&SB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
6
5
4
3
2
2
10
100
500
Reach M&SB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5
4
3
2
2
10
100
500
Return Period (yrs)

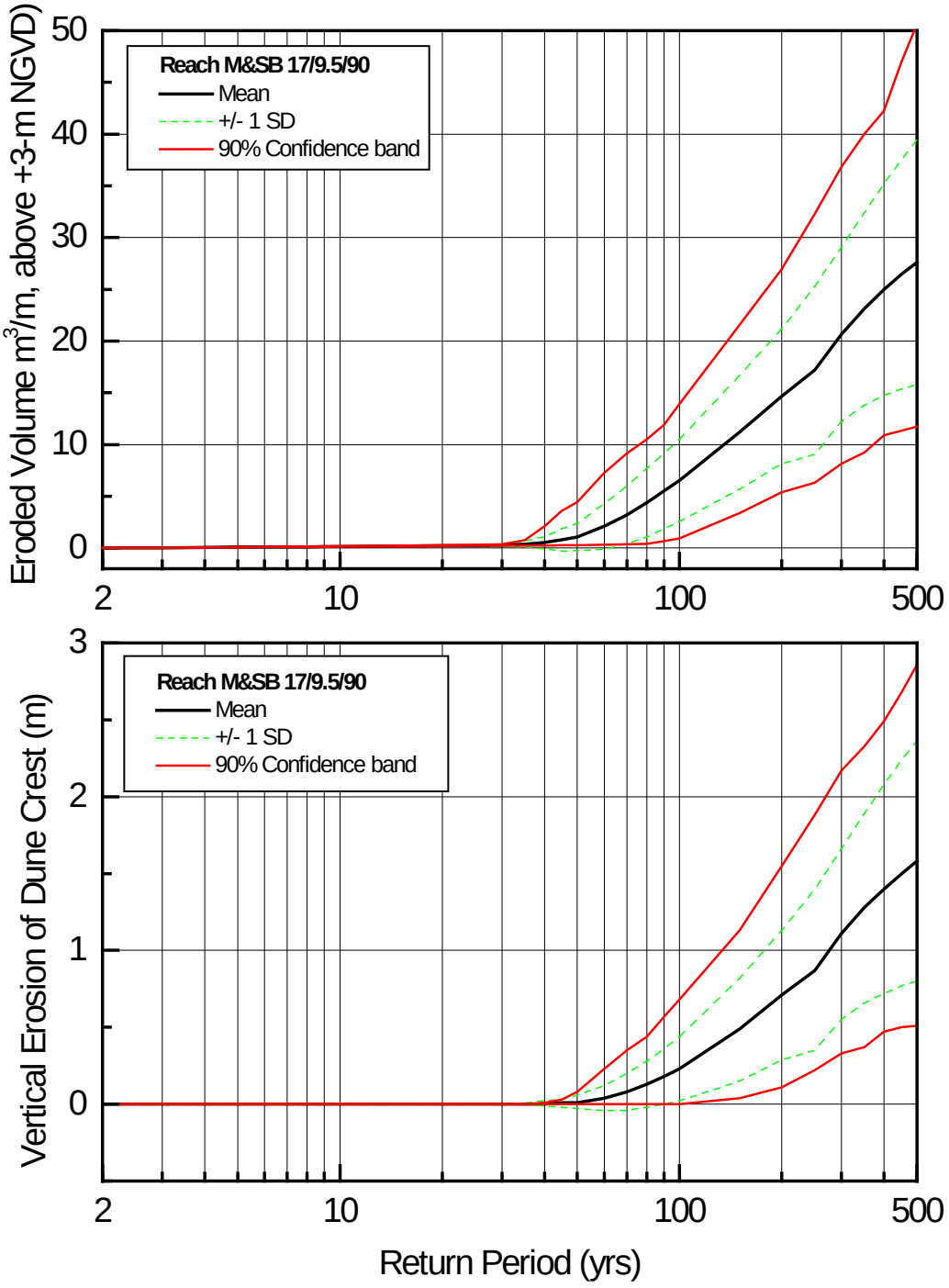

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach M&SB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
6
5
4
3
2
Reach M&SB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

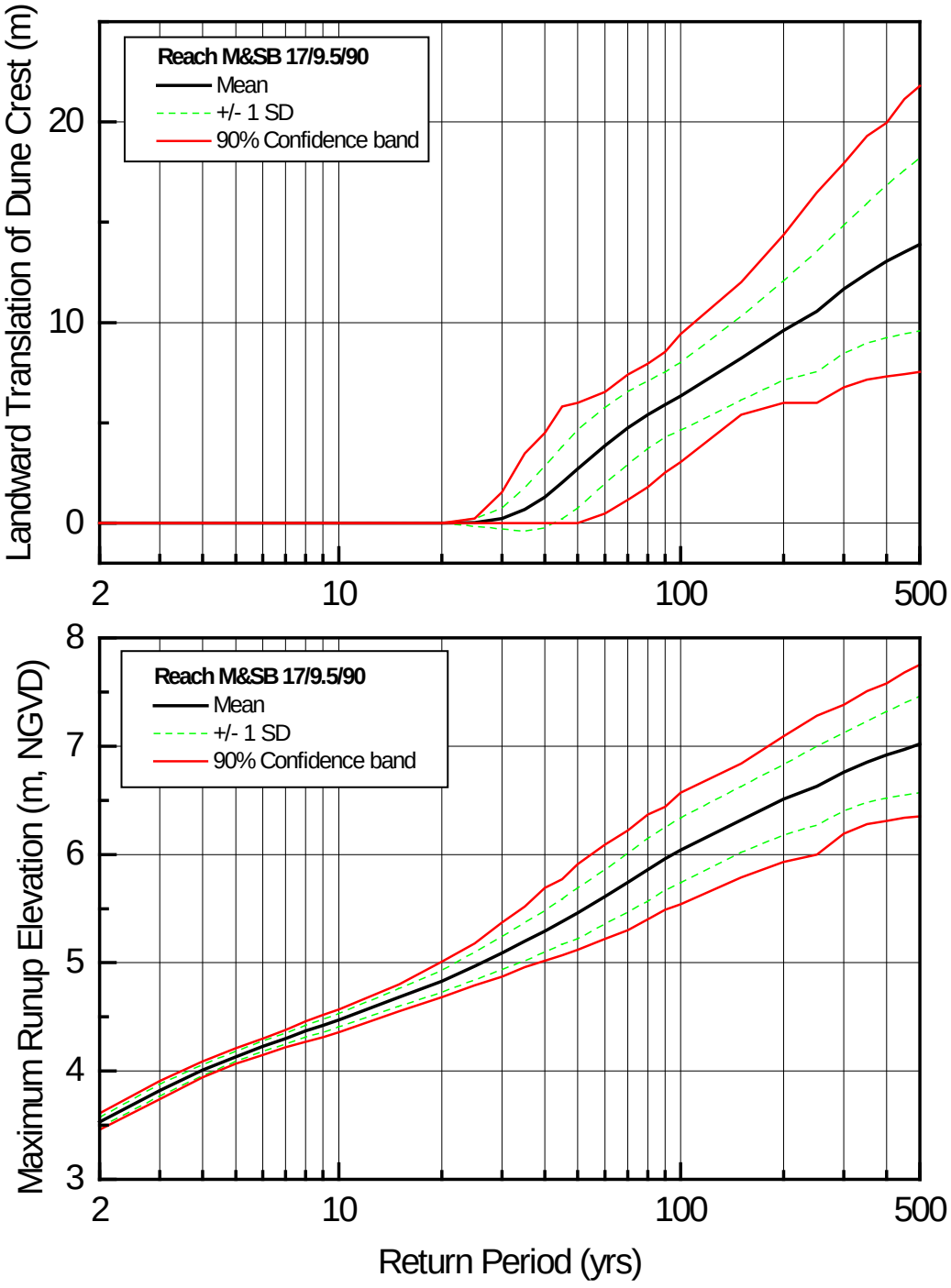

Max NS Wave Height (m, at landside surf zone)
2.25
2.00
1.75
1.50
1.25
1.00
0.75
Reach M&SB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
450
400
350
300
250
200
150
100
50
Reach M&SB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

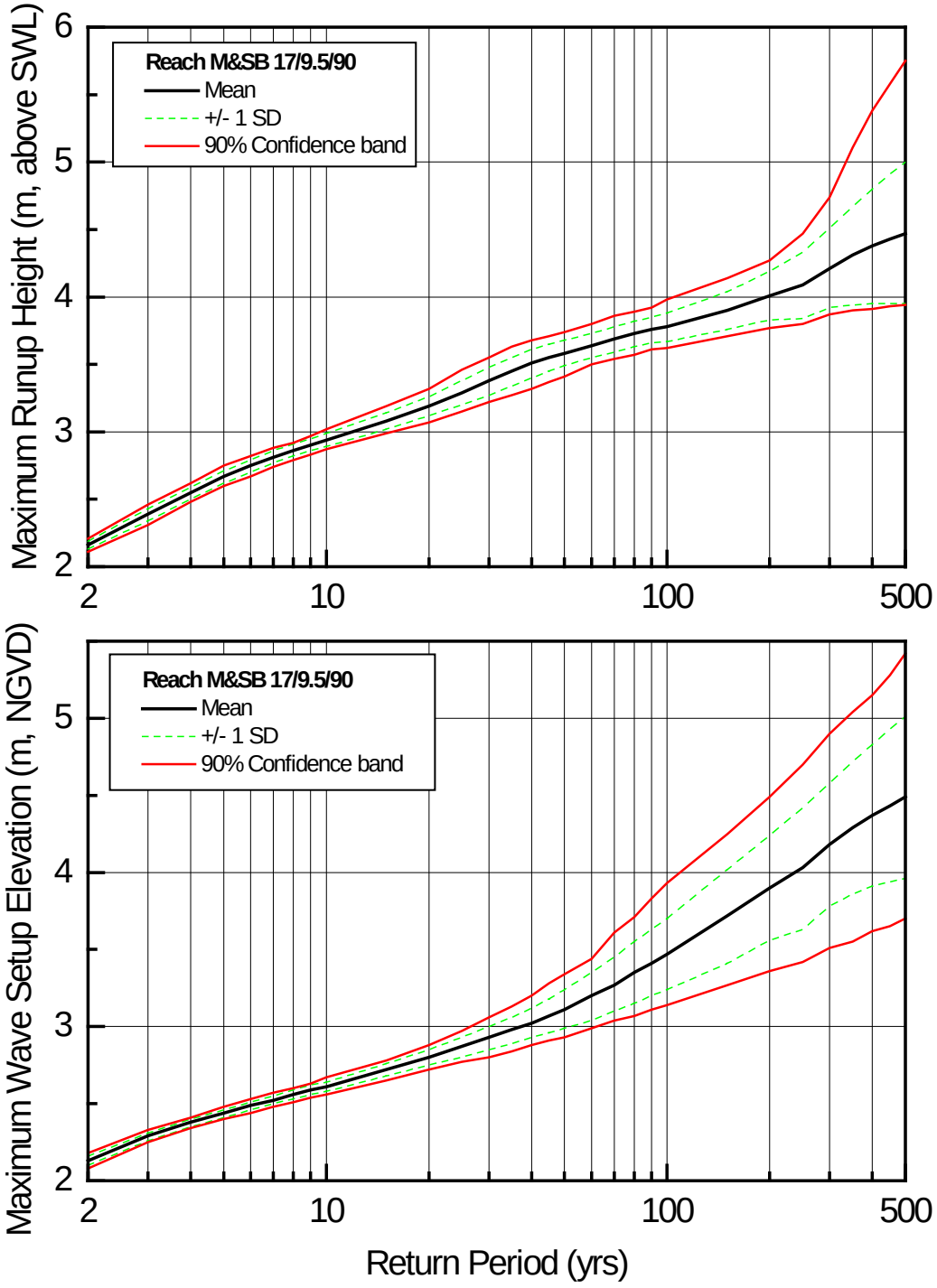

Reach M&SB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
15
10
5
2
10
100
500
Reach M&SB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20
16
12
8
2
10
100
500
Return Period (yrs)

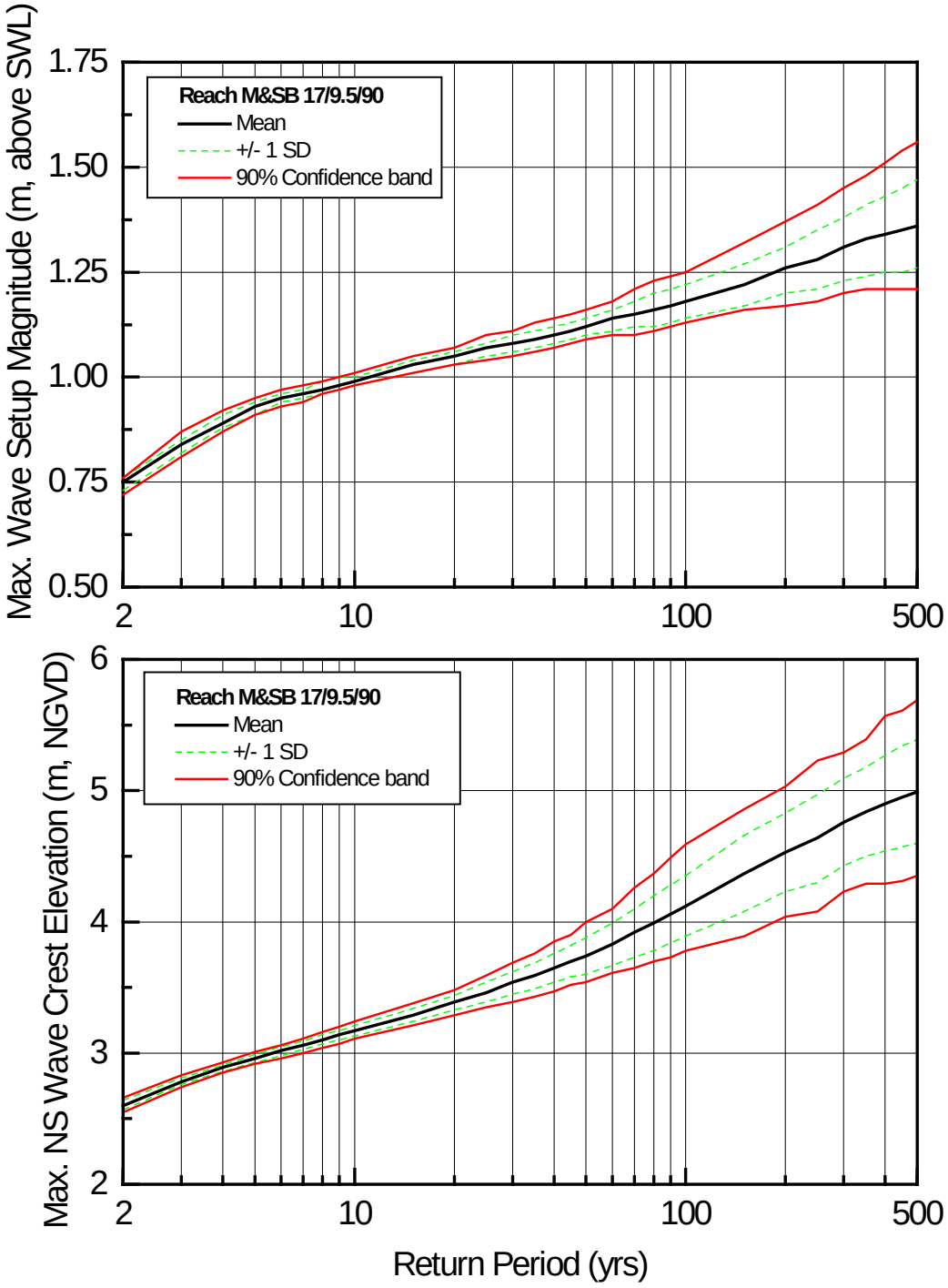

Reach M&SB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
60
40
20
0
2
10
100
500
Reach M&SB 15/9.5/150
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
10
5
0
2
10
100
500
Return Period (yrs)

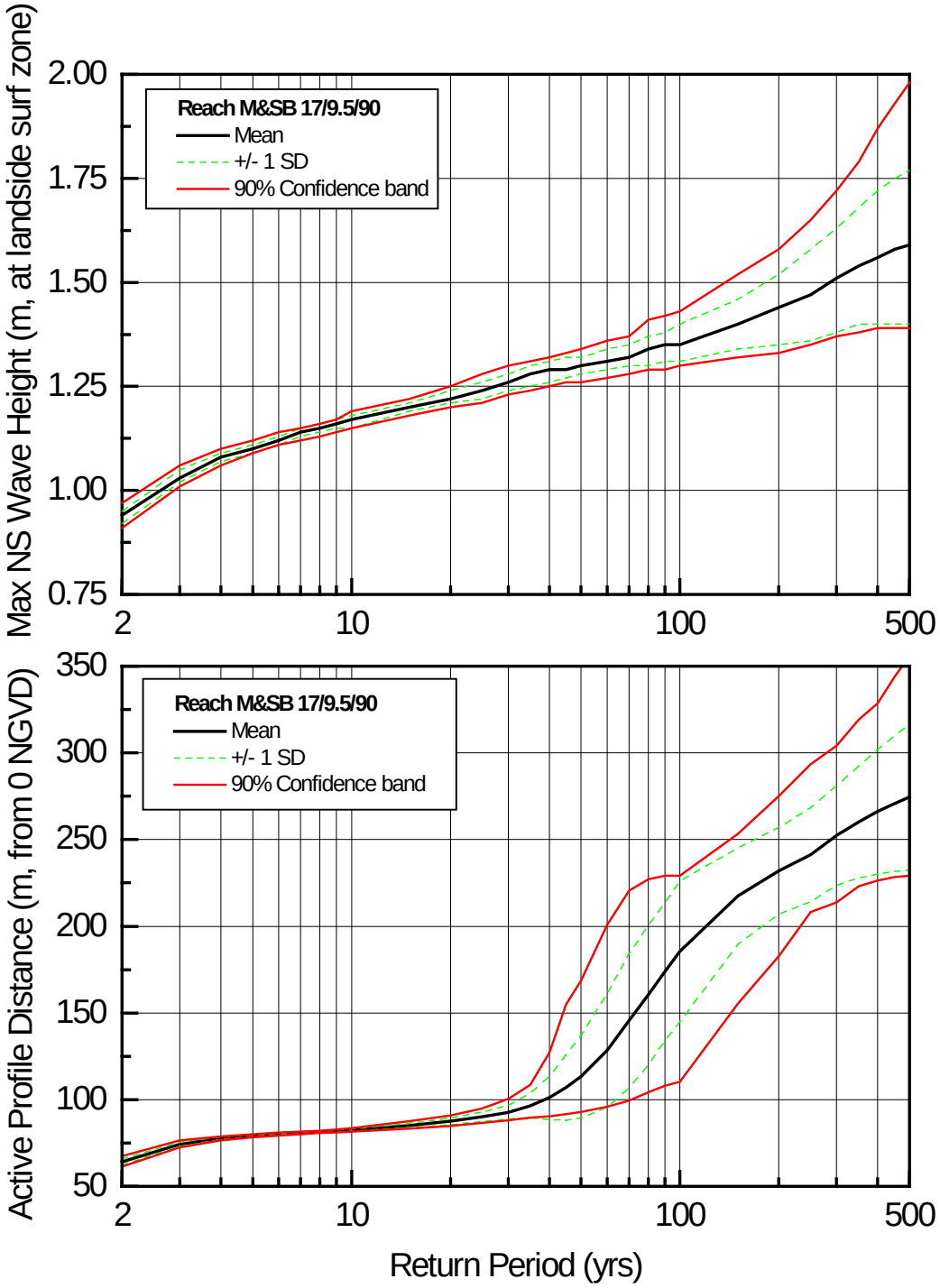

Reach M&SB 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
160
140
120
100
80
60
40
2
10
100
500
Reach M&SB 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

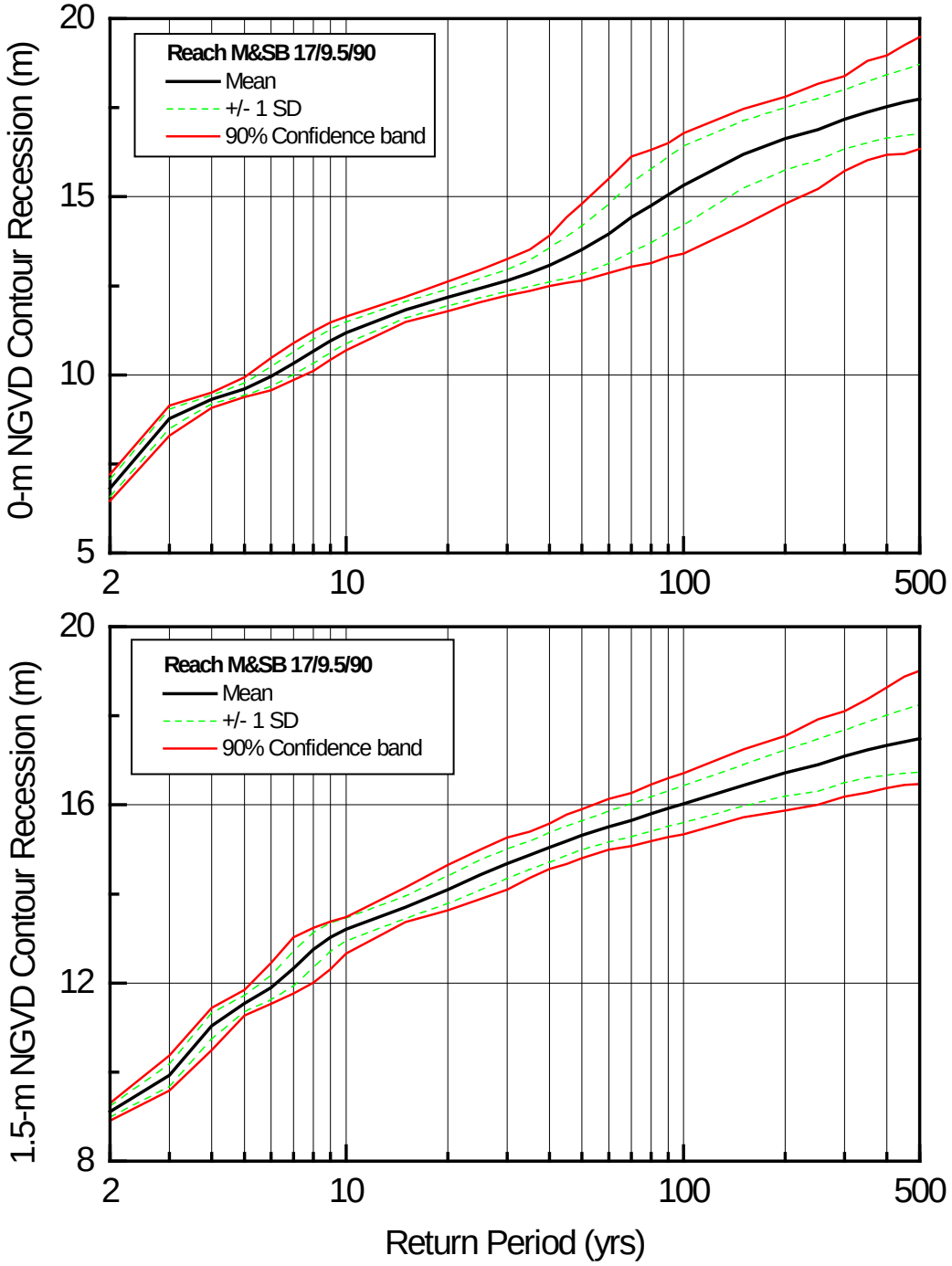

Reach M&SB 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
50
2
10
100
500
Reach M&SB 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

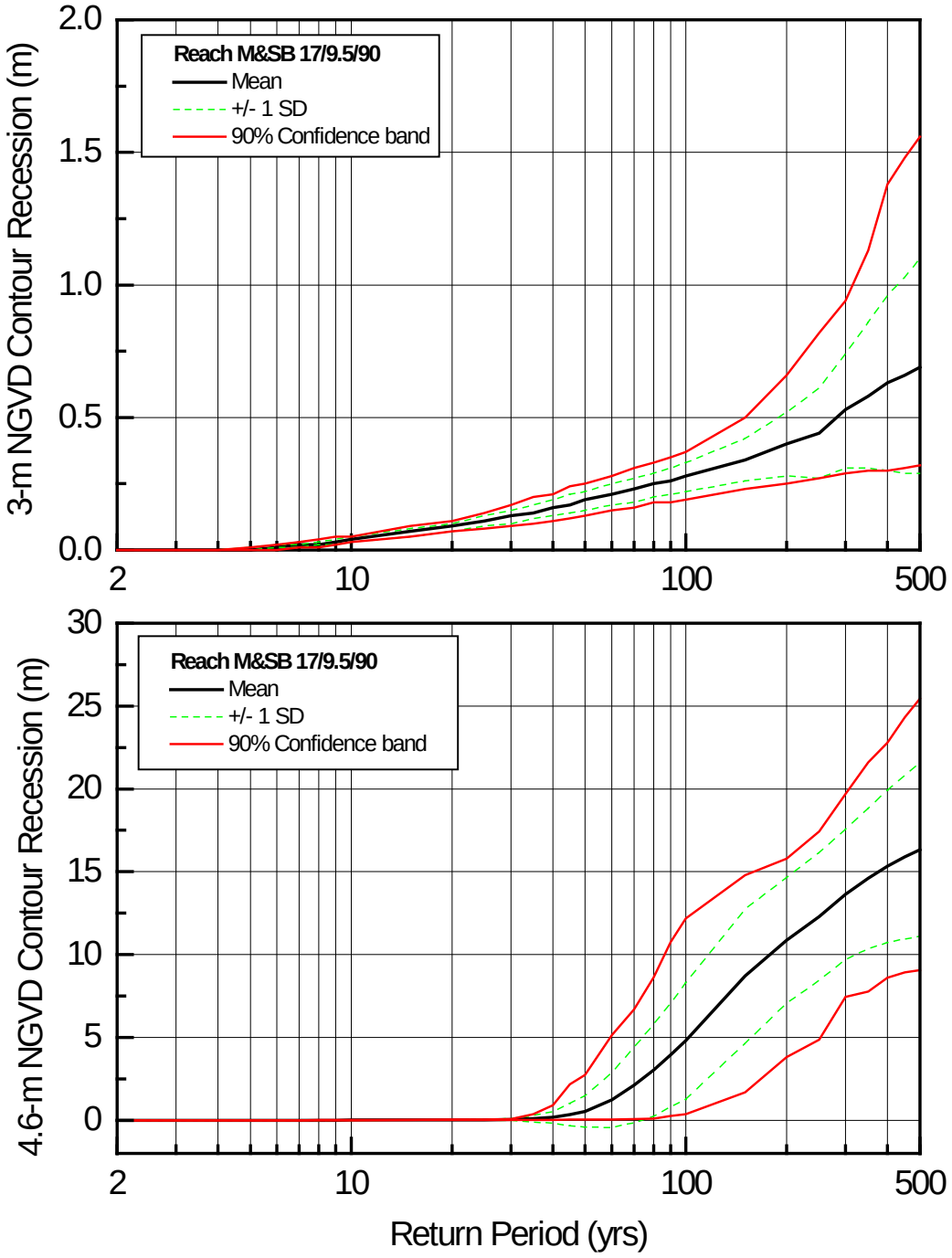

Reach M&SB 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
2
10
100
500
Reach M&SB 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
8
2
10
100
500
Return Period (yrs)

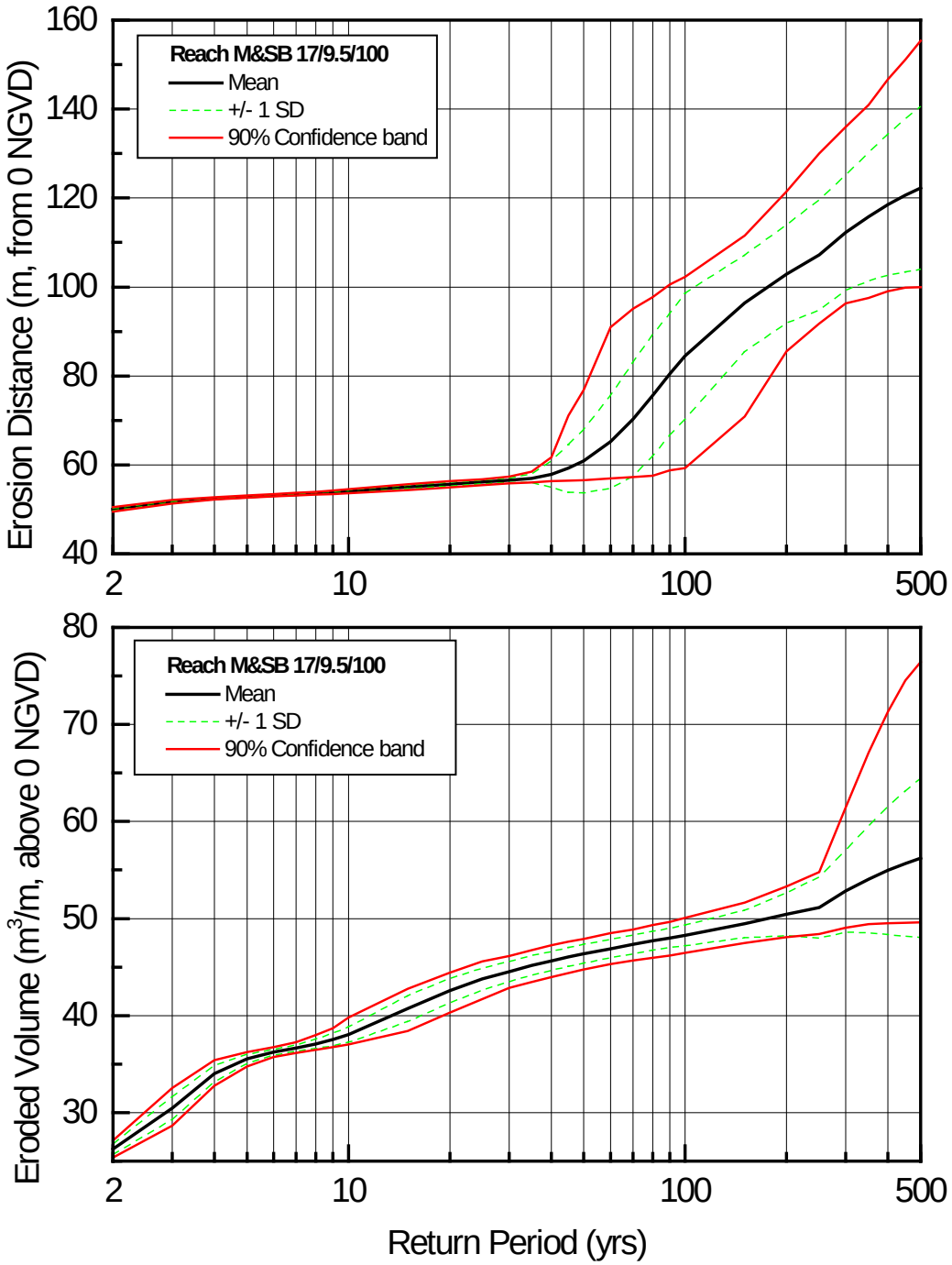

Reach M&SB 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
6
5
4
3
2
2
10
100
500
Reach M&SB 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5
4
3
2
2
10
100
500
Return Period (yrs)

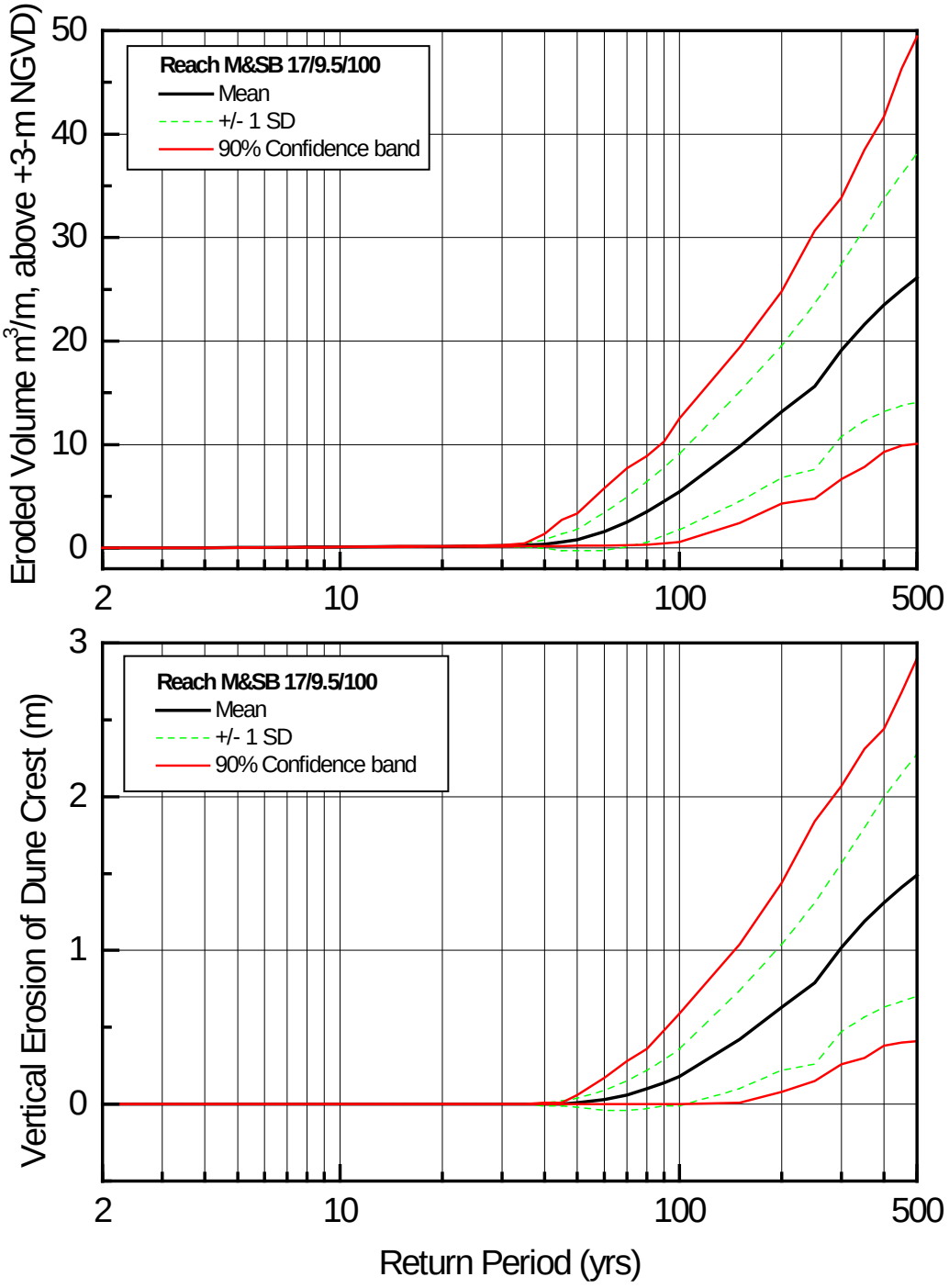

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach M&SB 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
6
5
4
3
2
Reach M&SB 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

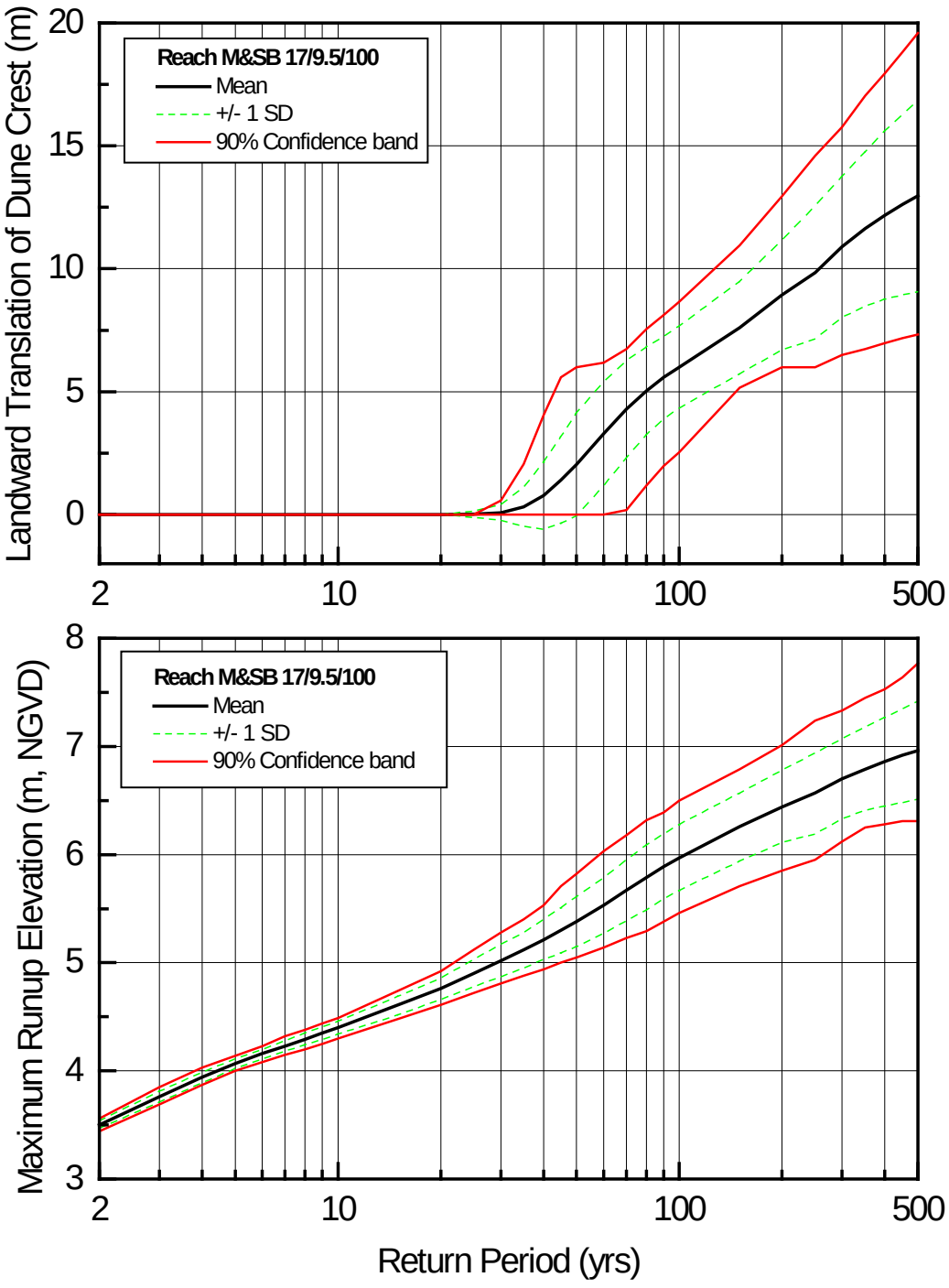

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
0.75
Reach M&SB 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
350
300
250
200
150
100
50
Reach M&SB 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

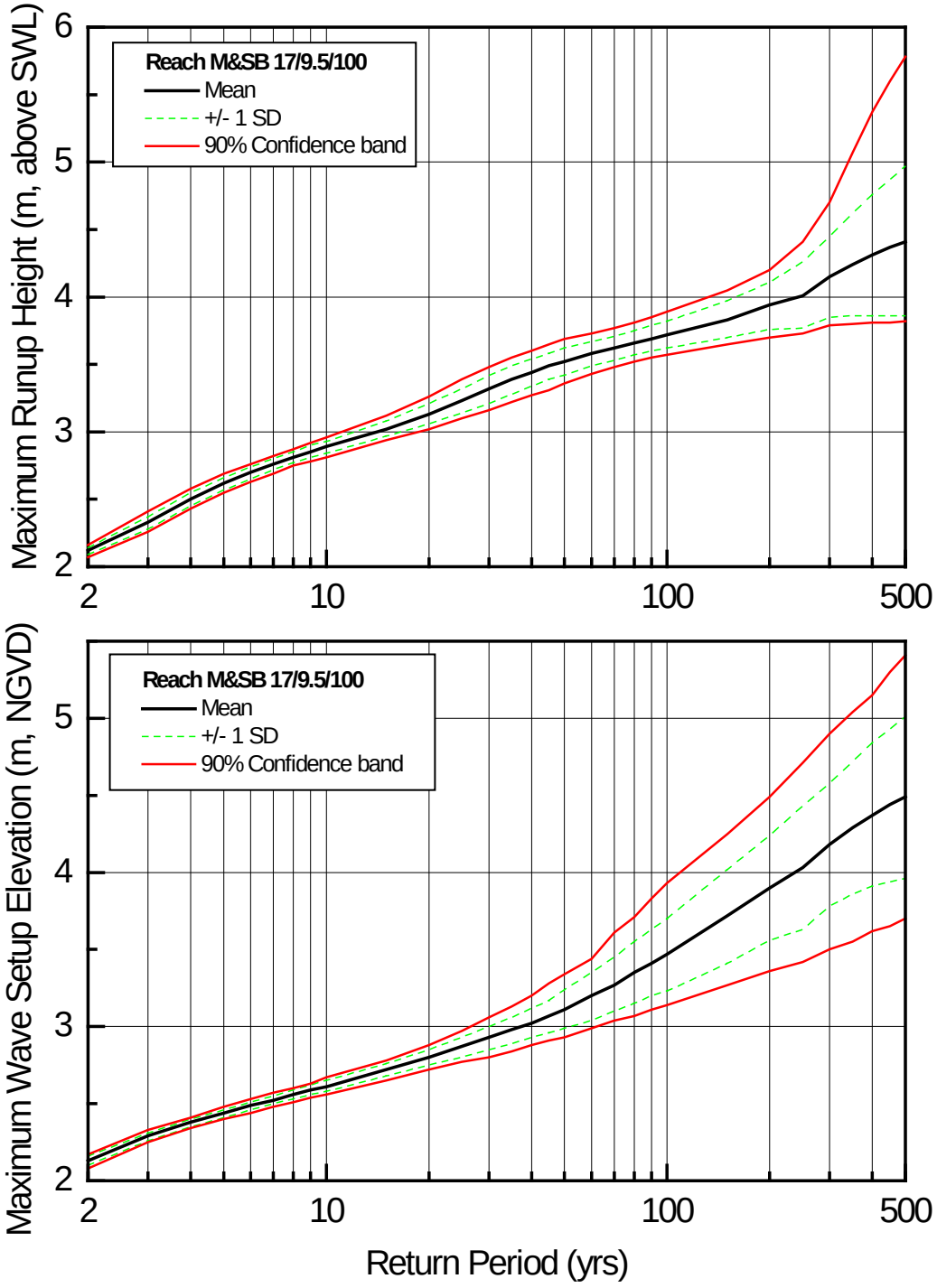

Reach M&SB 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
15
10
5
2
10
100
500
Reach M&SB 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20
16
12
8
2
10
100
500
Return Period (yrs)

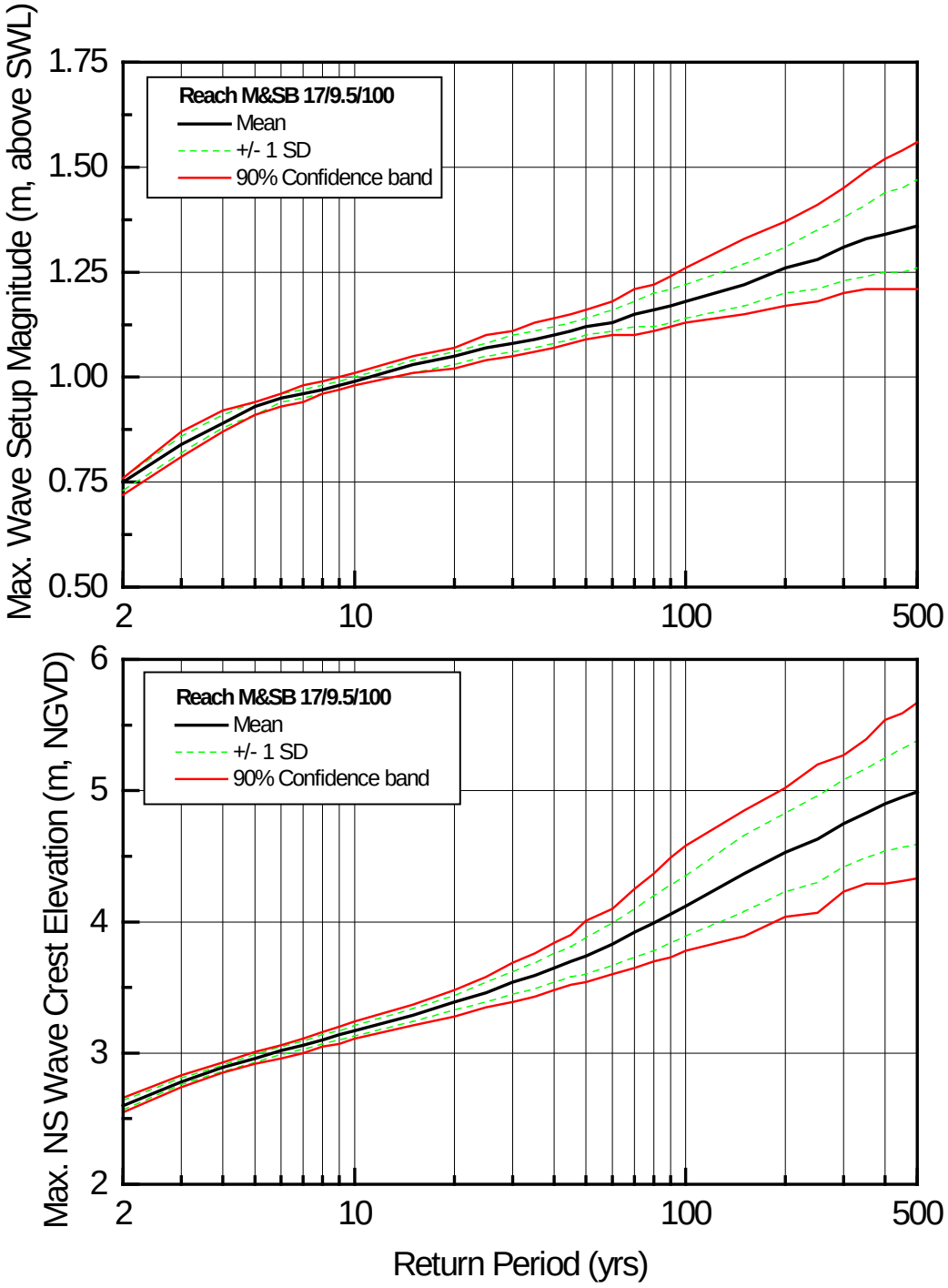

Reach M&SB 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach M&SB 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

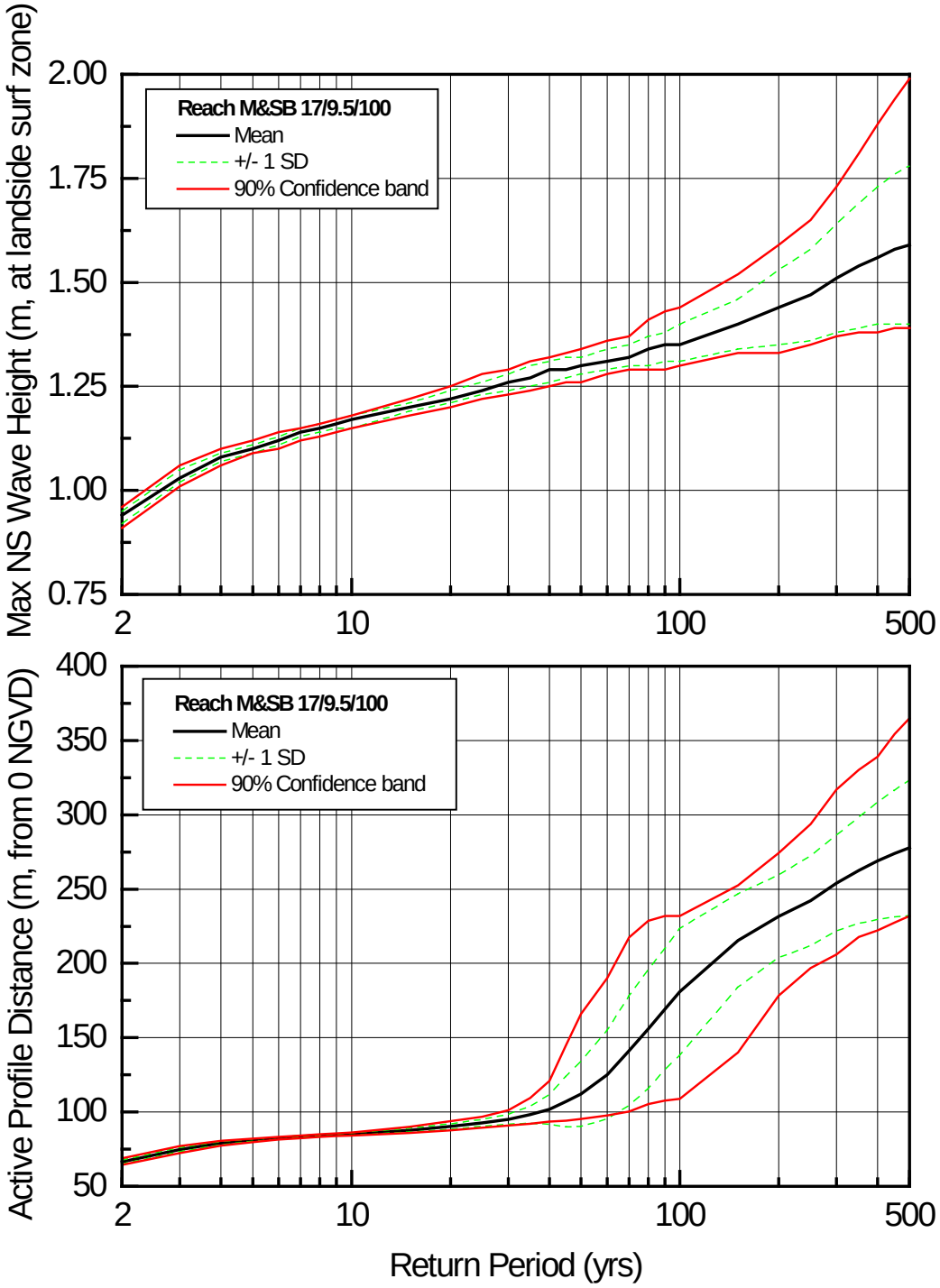

Reach M&SB 17/9.5/100
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
160
140
120
100
80
60
40
2
10
100
500
Reach M&SB 17/9.5/100
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

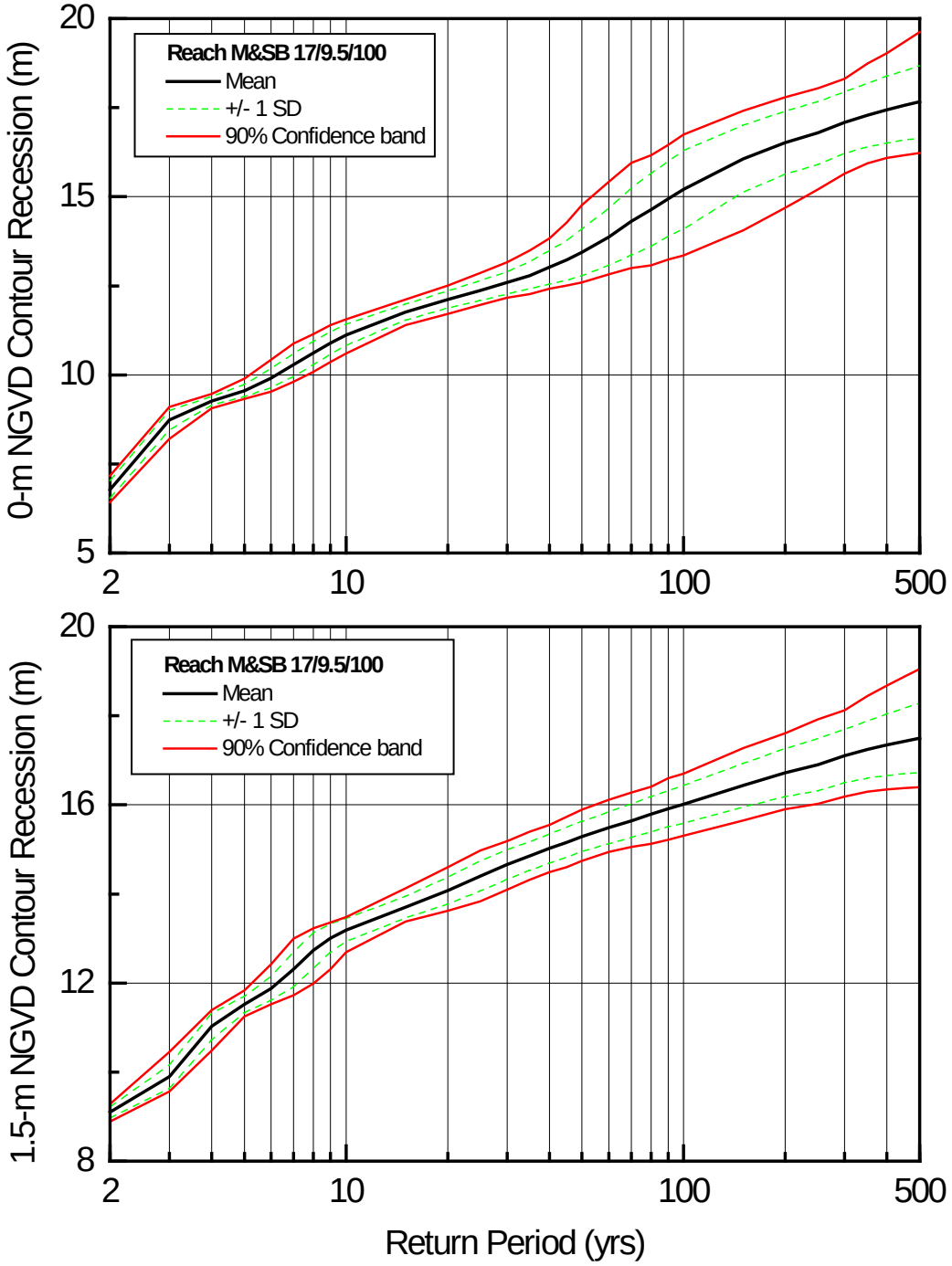

Reach M&SB 17/9.5/100
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
50
2
10
100
500
Reach M&SB 17/9.5/100
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

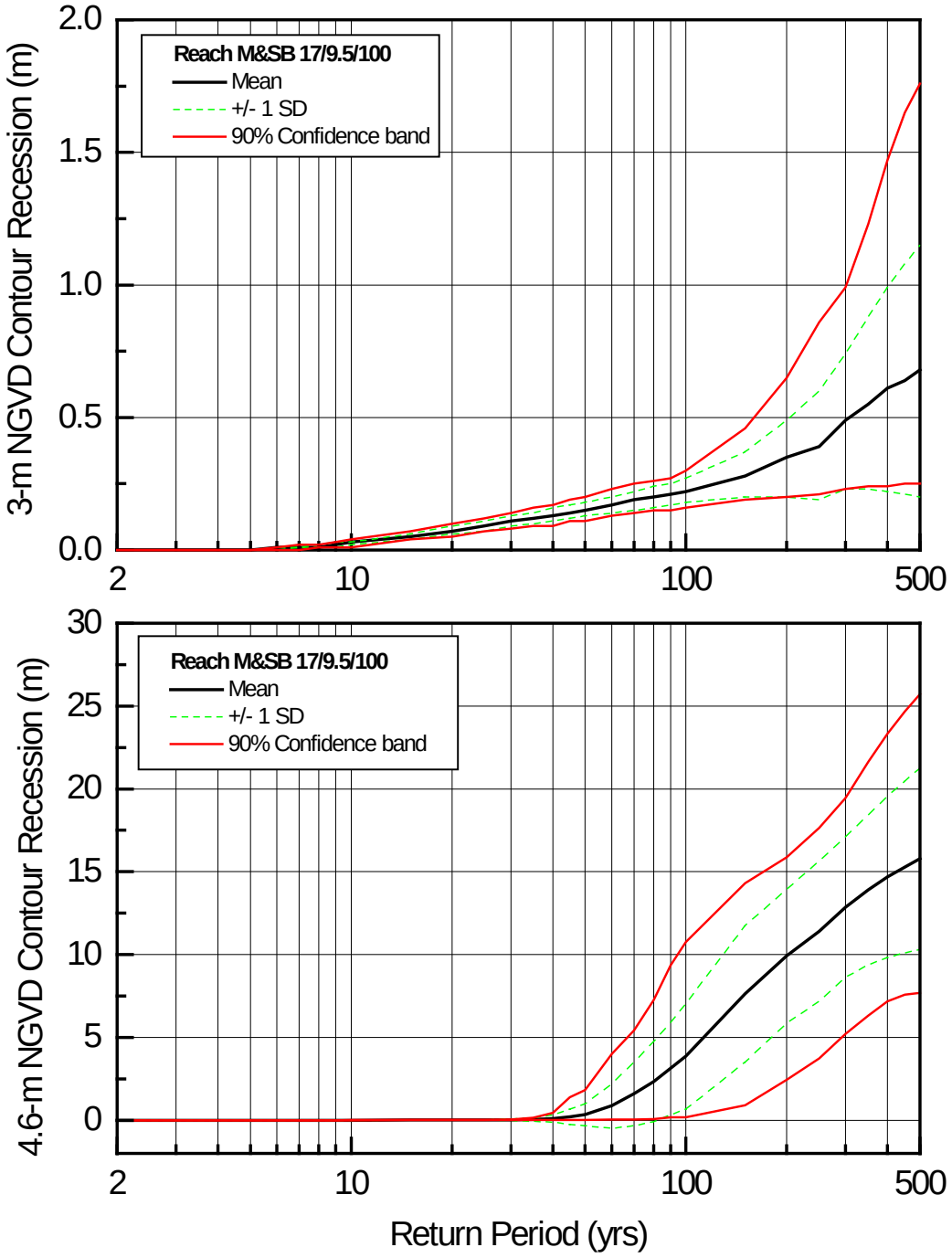

Reach M&SB 17/9.5/100
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
20
15
10
5
0
2
10
100
500
Reach M&SB 17/9.5/100
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
3
2
10
100
500
Return Period (yrs)

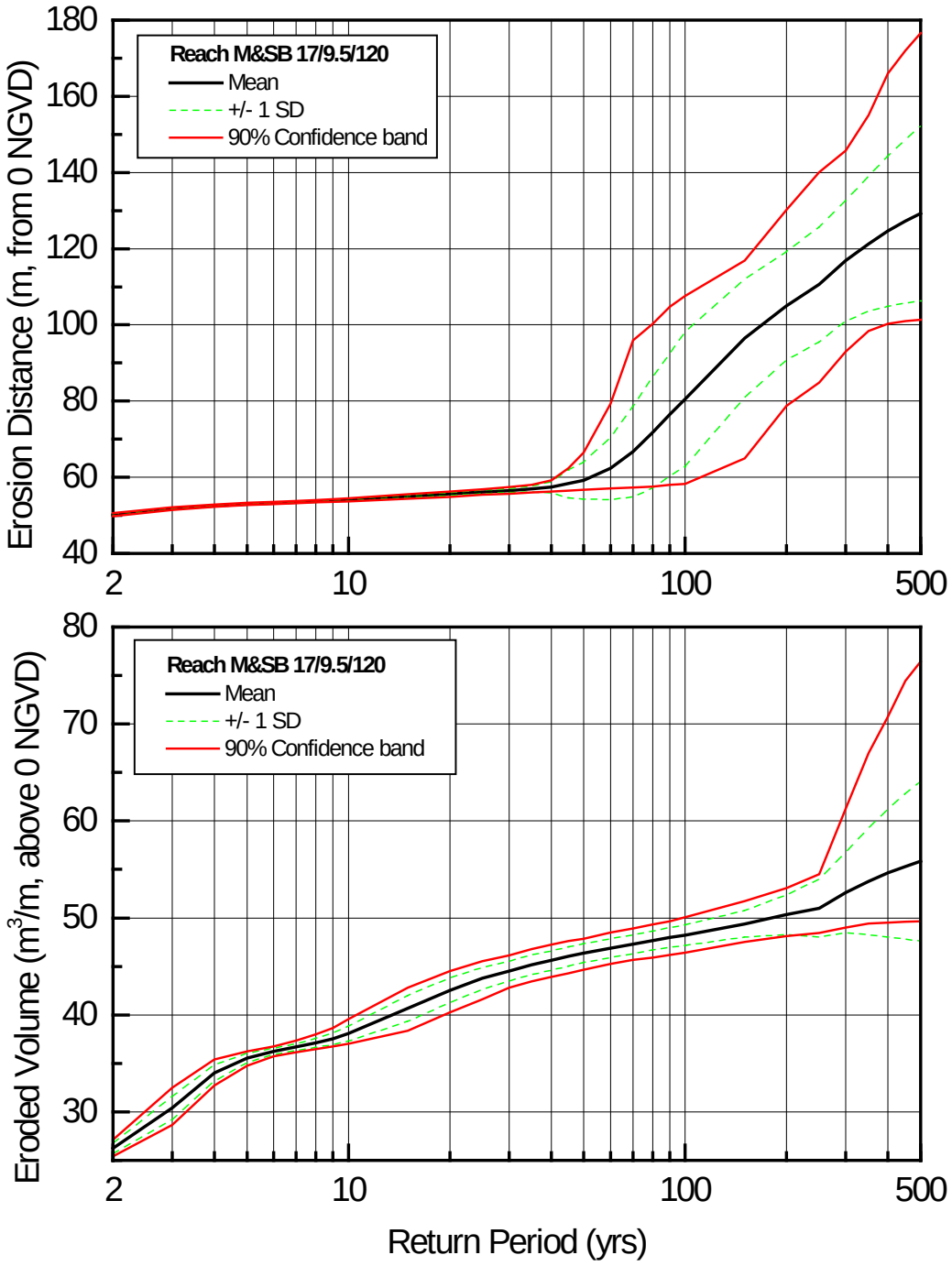

Reach M&SB 17/9.5/100
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
6
5
4
3
2
2
10
100
500
Reach M&SB 17/9.5/100
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5
4
3
2
2
10
100
500
Return Period (yrs)

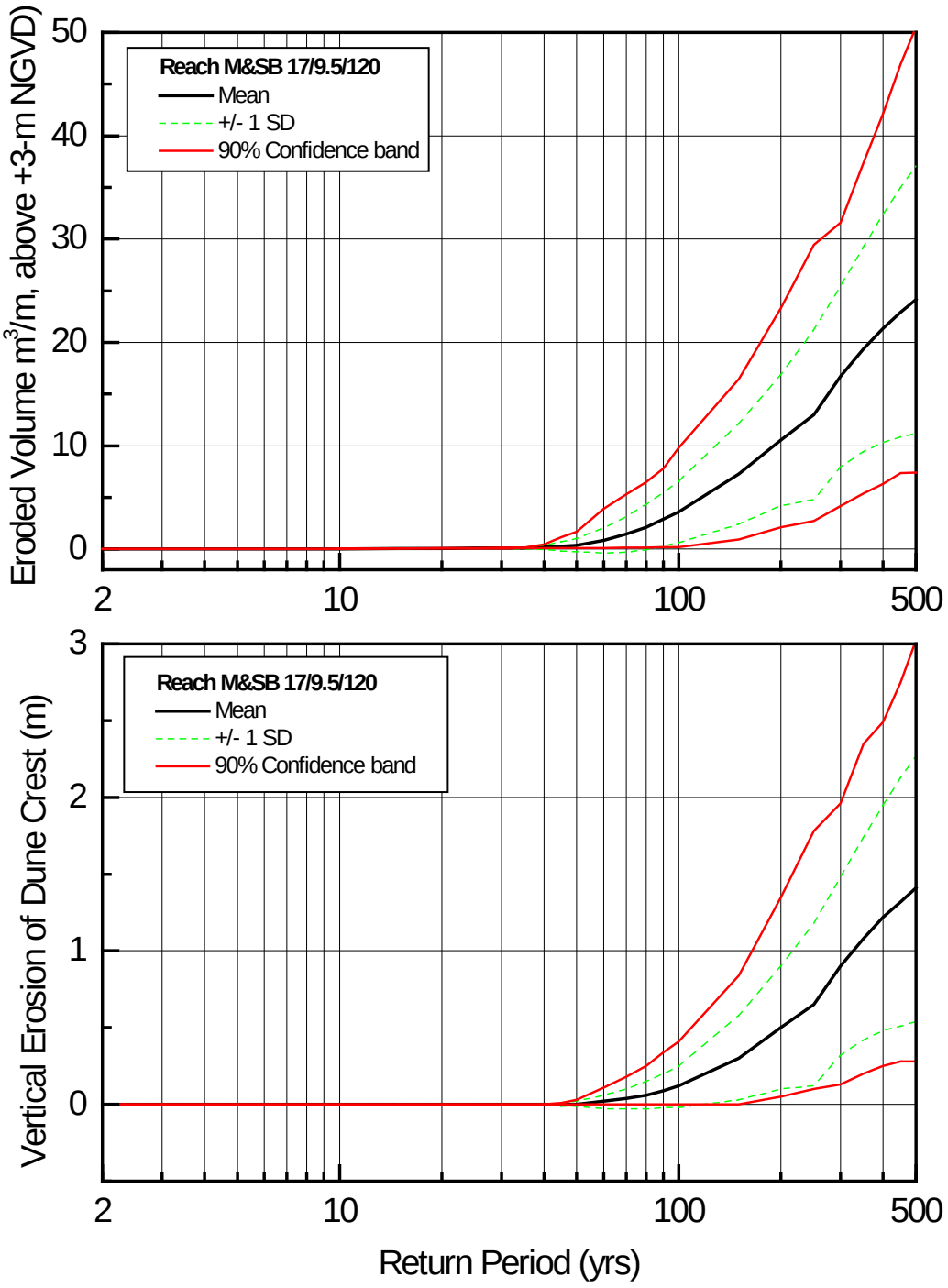

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach M&SB 17/9.5/100
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
6
5
4
3
2
Reach M&SB 17/9.5/100
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

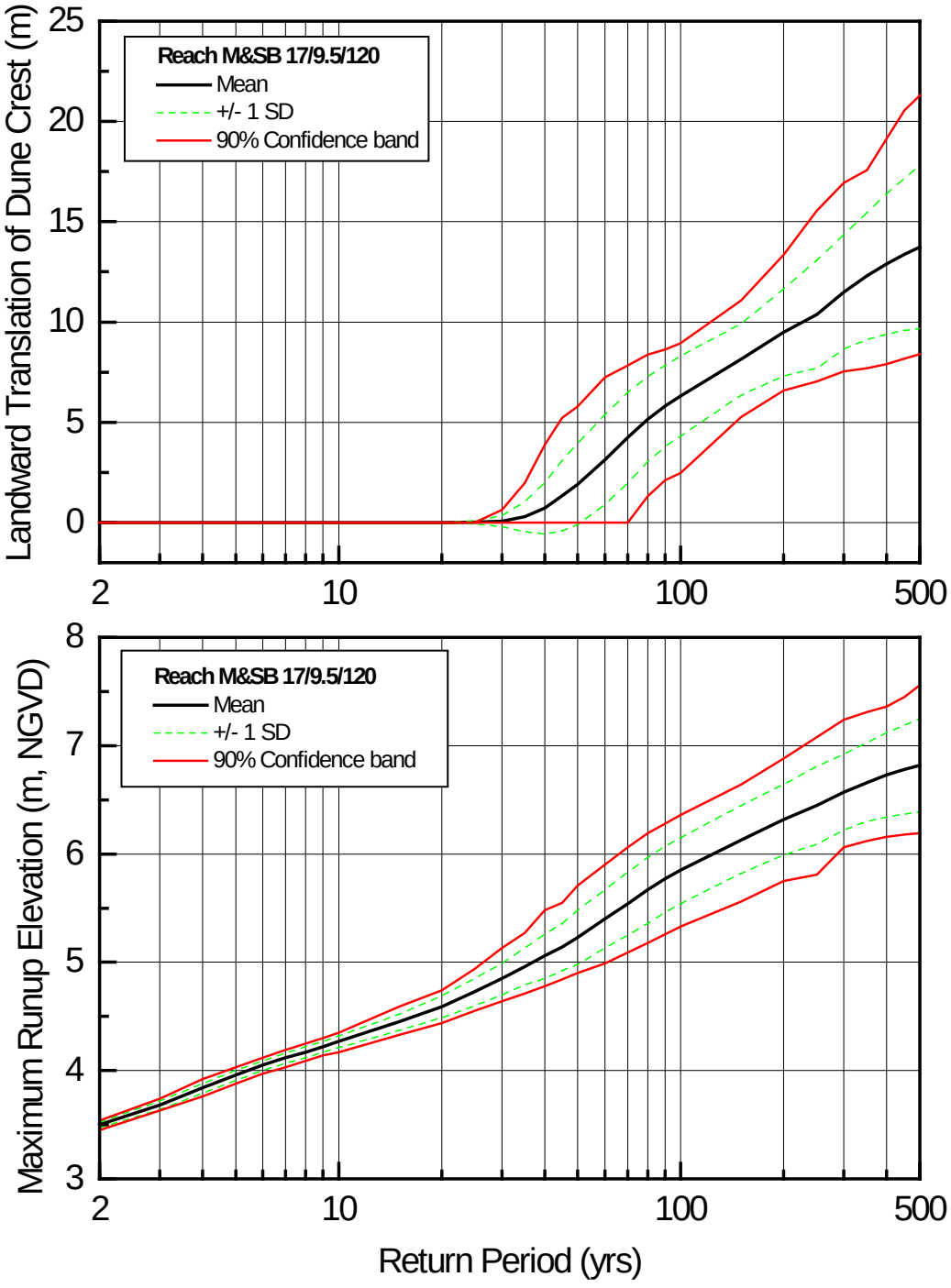

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
0.75
Reach M&SB 17/9.5/100
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
350
300
250
200
150
100
50
Reach M&SB 17/9.5/100
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

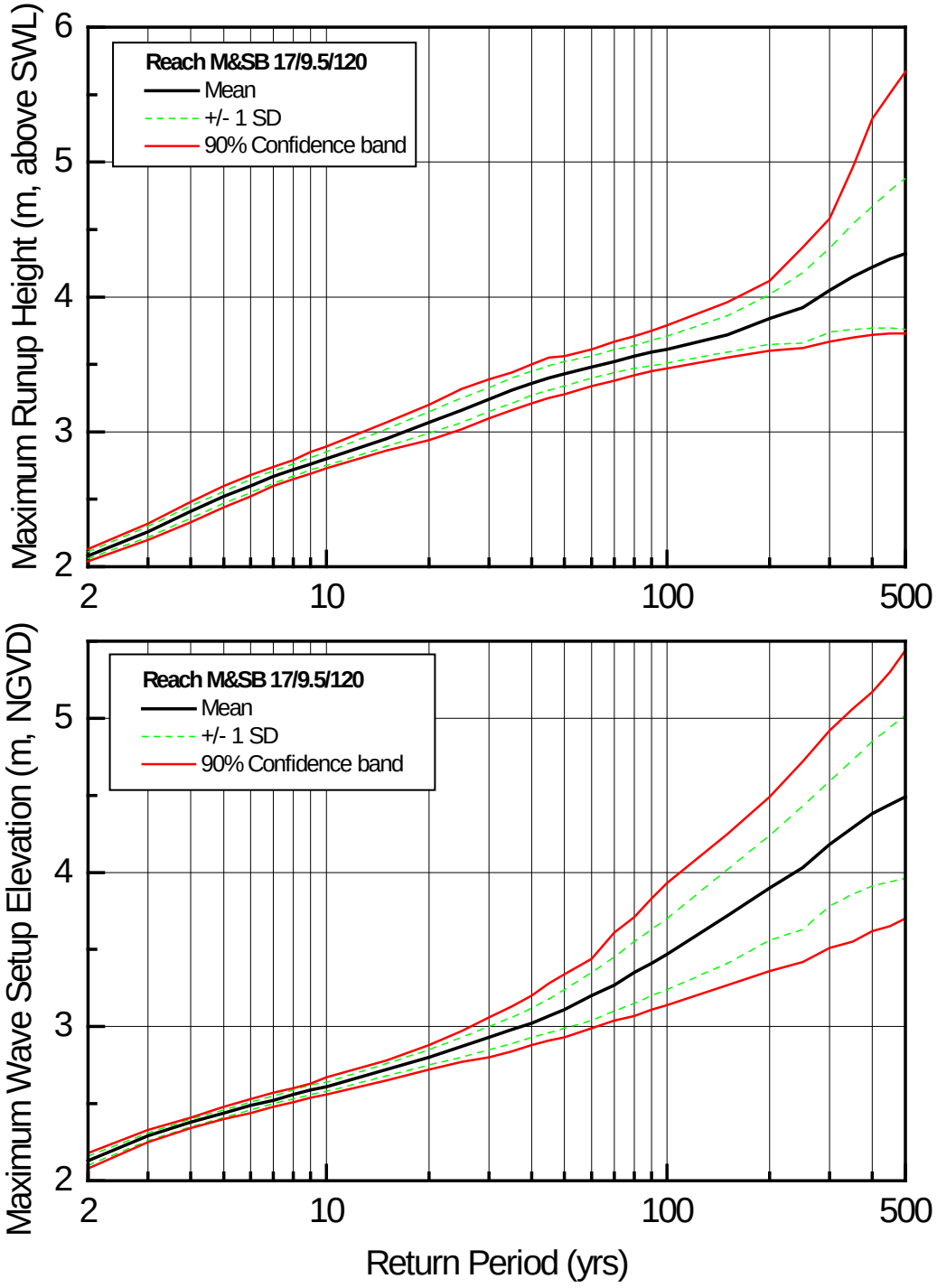

Reach M&SB 17/9.5/100
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
15
10
5
2
10
100
500
Reach M&SB 17/9.5/100
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20
16
12
8
2
10
100
500
Return Period (yrs)

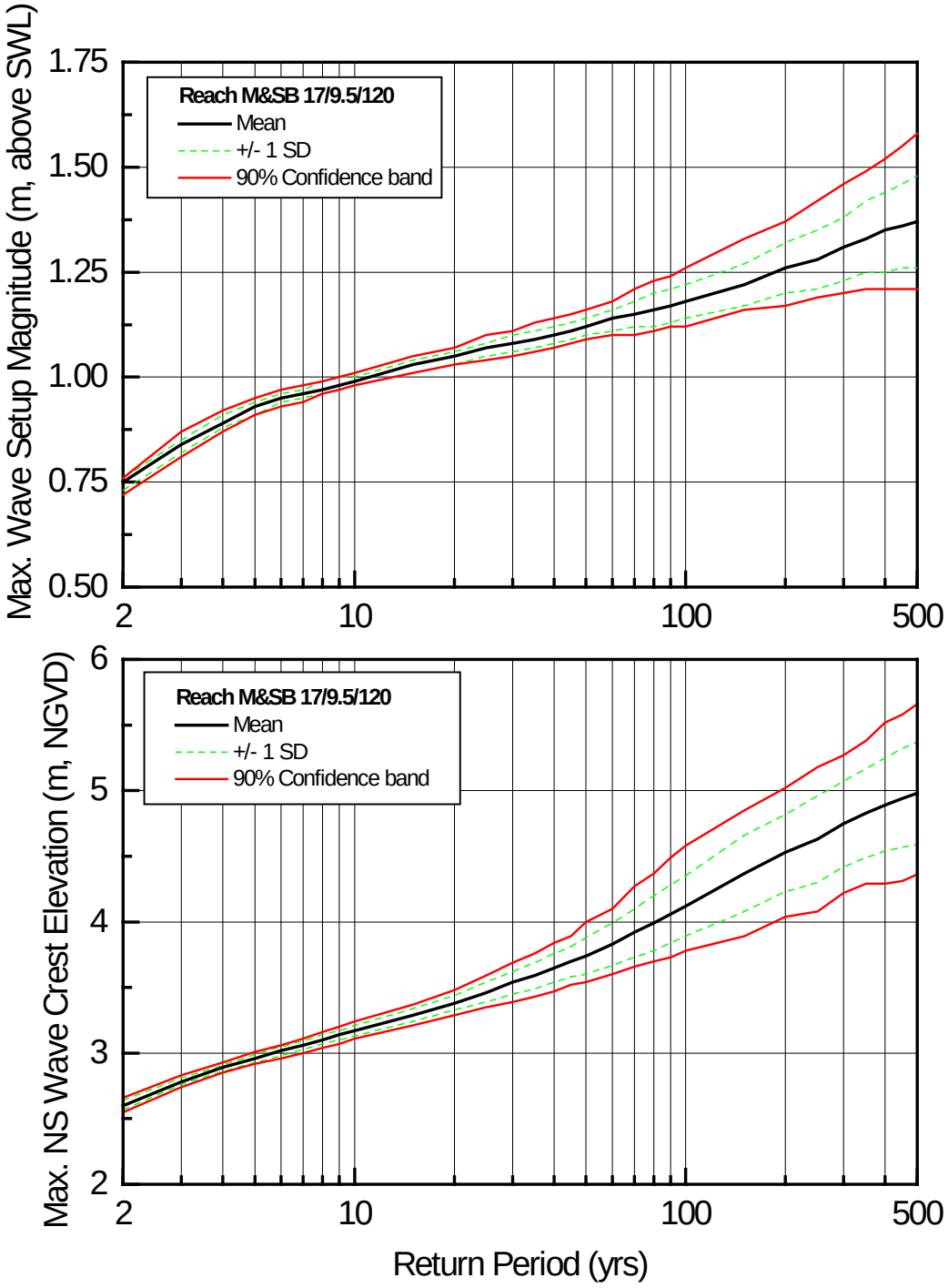

Reach M&SB 17/9.5/100
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach M&SB 17/9.5/100
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

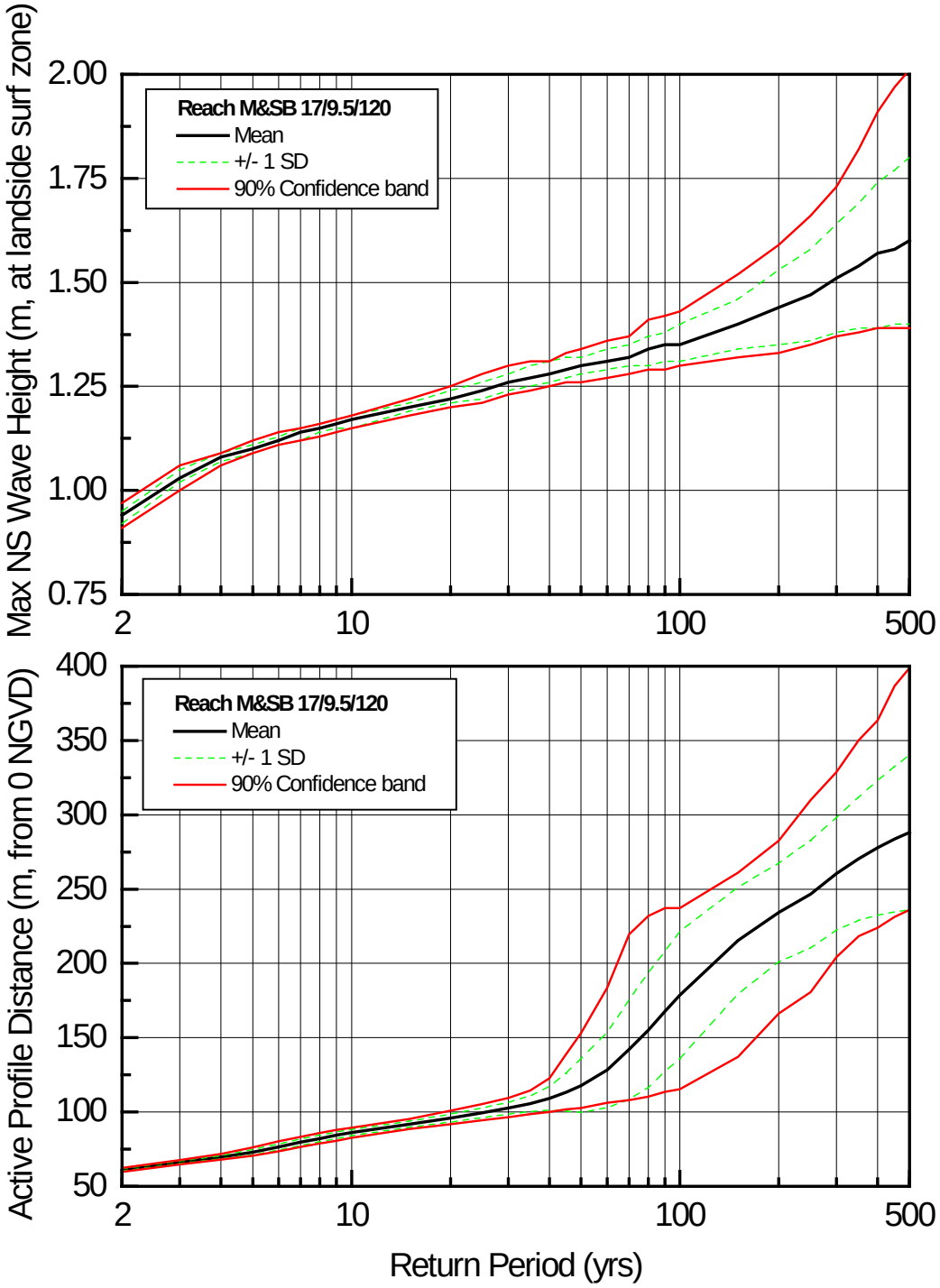

Reach M&SB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
160
140
120
100
80
60
40
2
10
100
500
Reach M&SB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

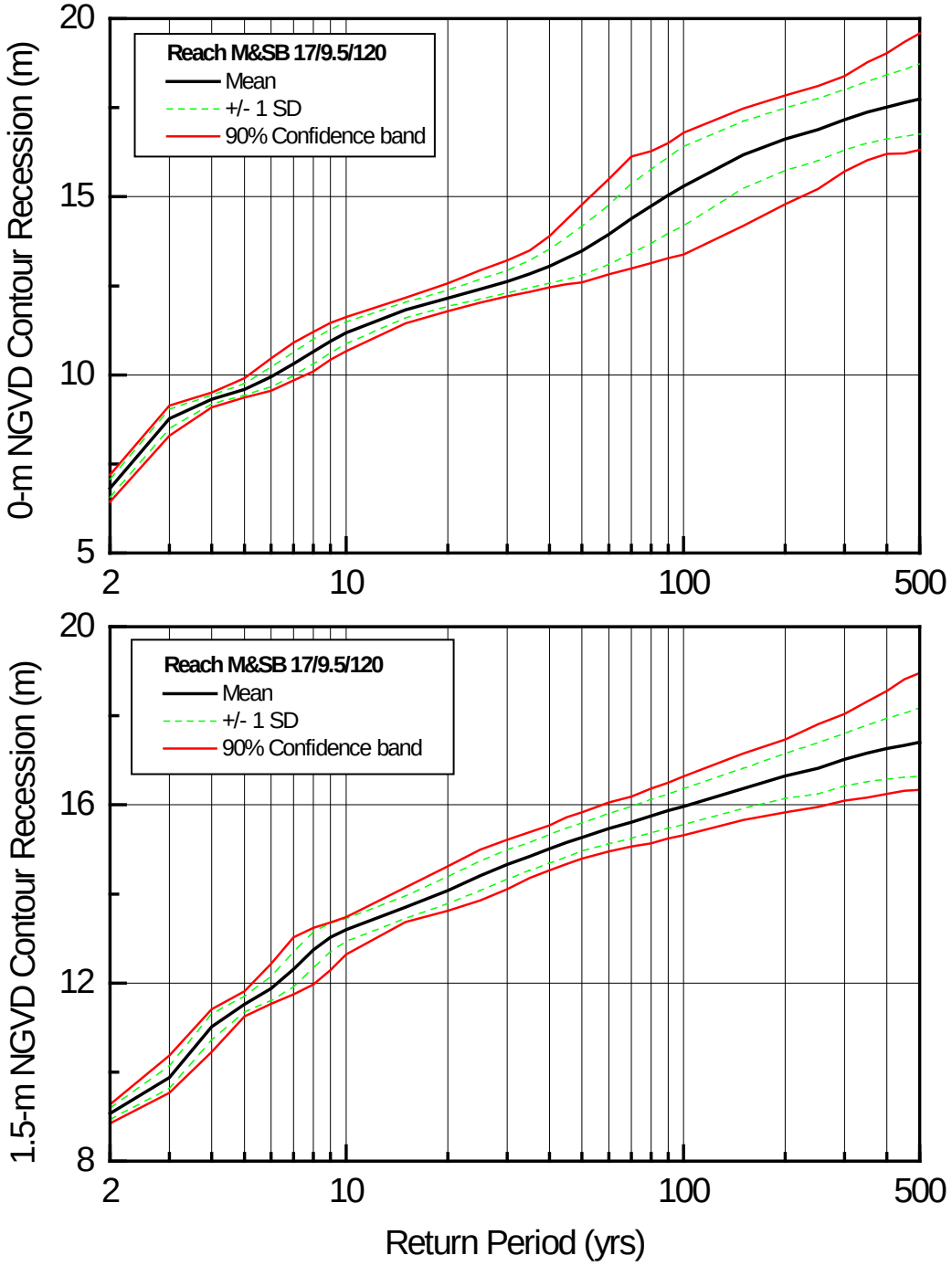

Reach M&SB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
50
2
10
100
500
Reach M&SB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
3
2
10
100
500
Return Period (yrs)

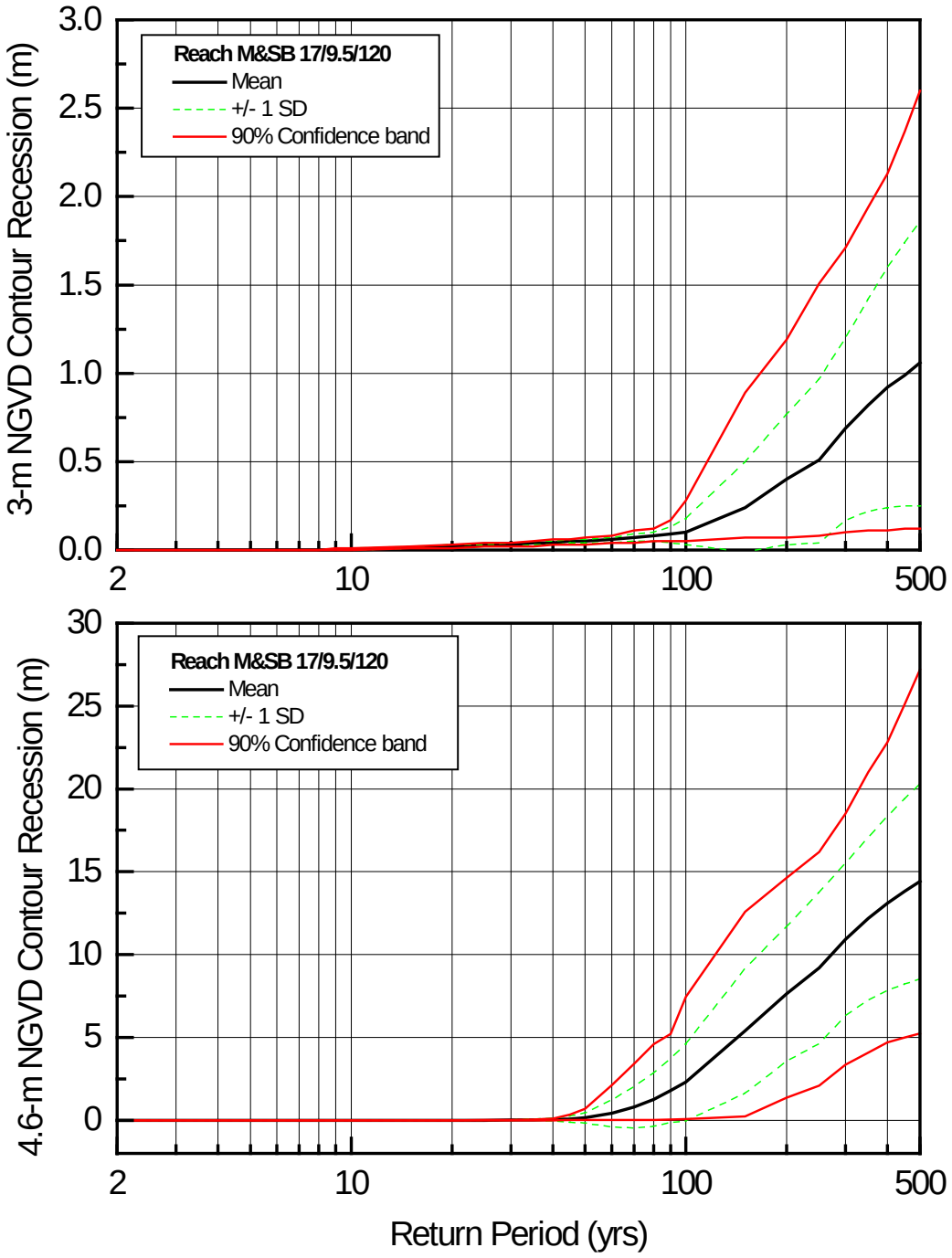

Reach M&SB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
25
20
15
10
5
0
2
10
100
500
Reach M&SB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
3
2
10
100
500
Return Period (yrs)

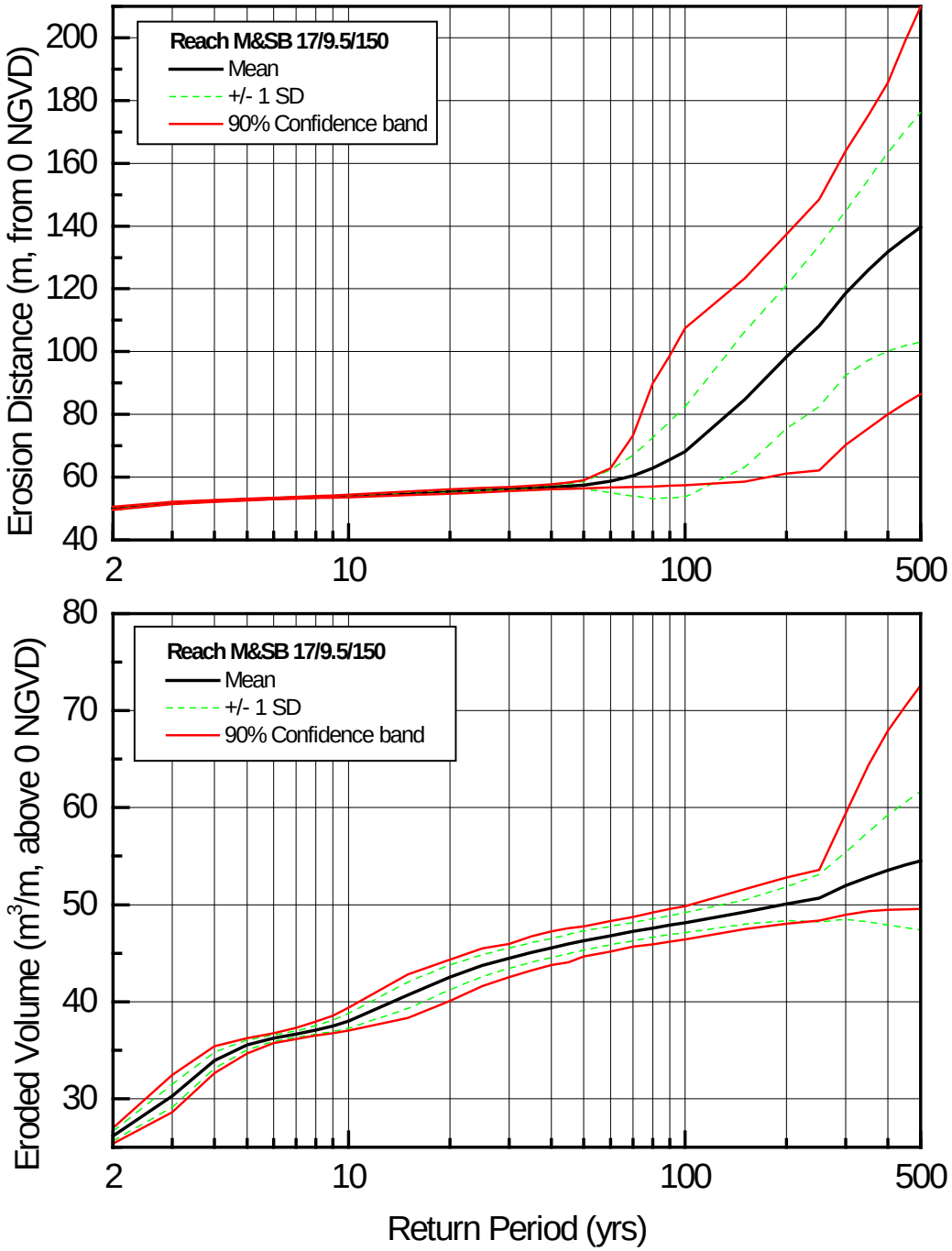

Reach M&SB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
6
5
4
3
2
2
10
100
500
Reach M&SB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5
4
3
2
2
10
100
500
Return Period (yrs)

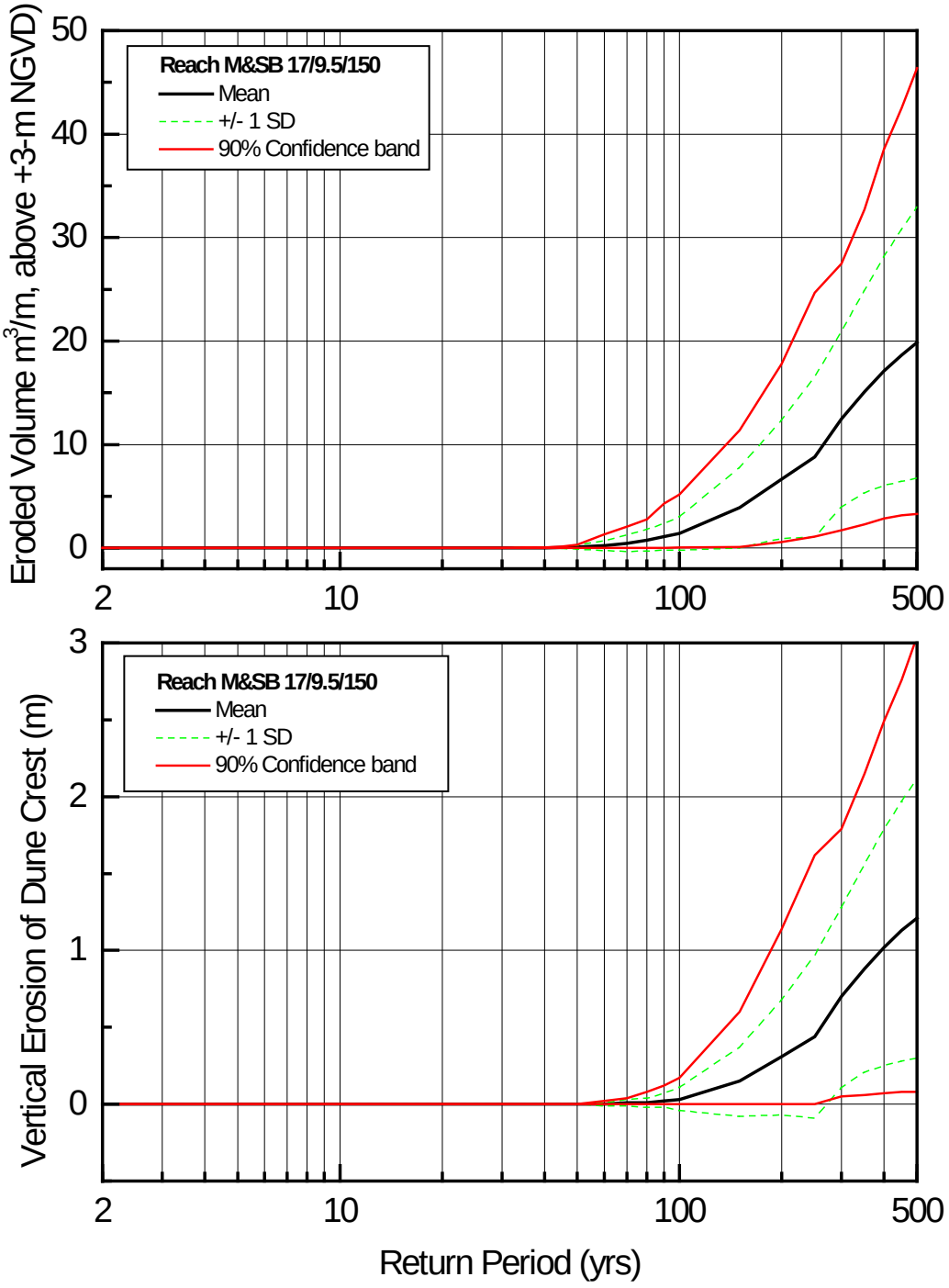

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach M&SB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
6
5
4
3
2
Reach M&SB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

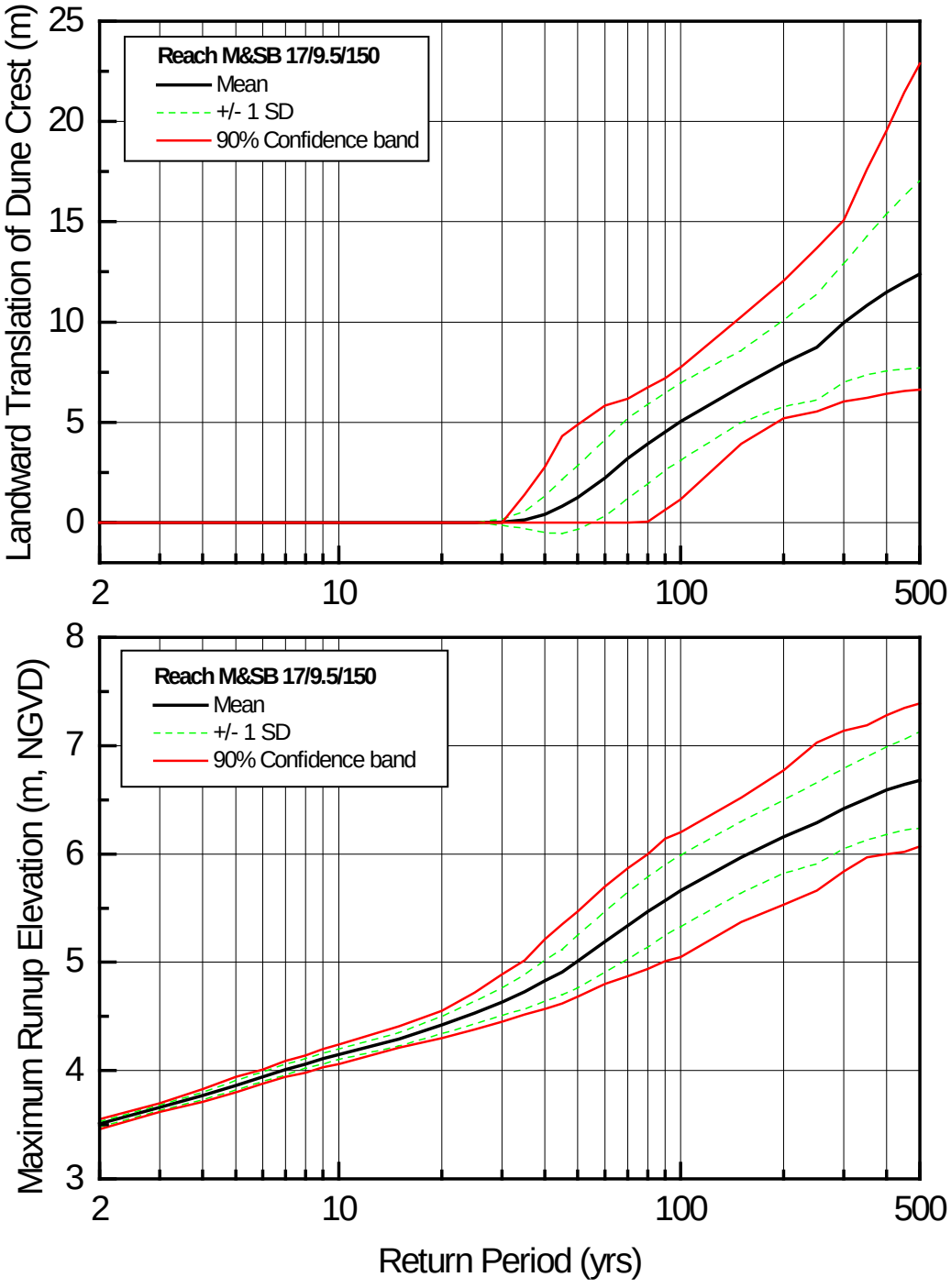

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
0.75
Reach M&SB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
350
300
250
200
150
100
50
Reach M&SB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

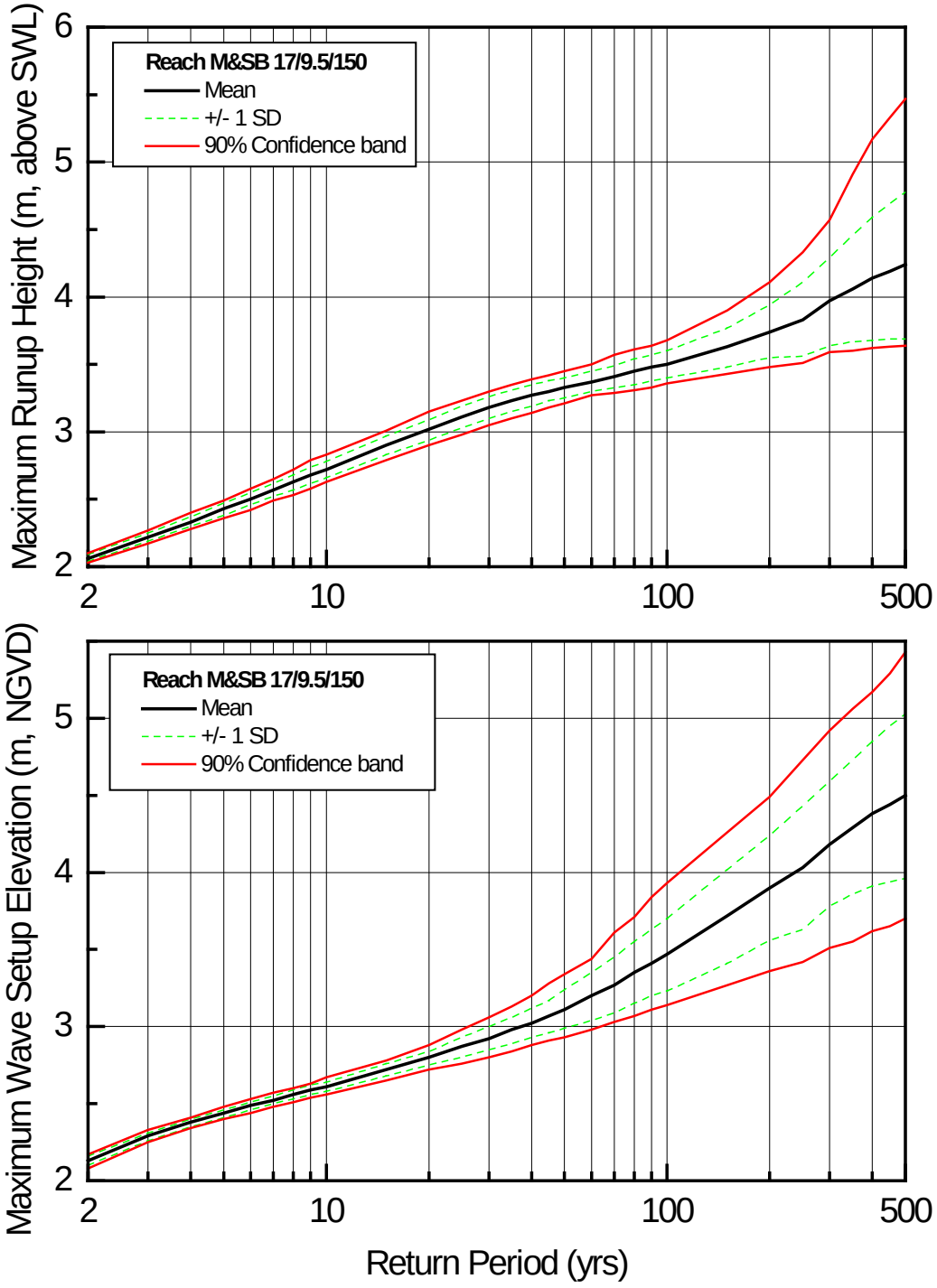

Reach M&SB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
15
10
5
2
10
100
500
Reach M&SB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20
16
12
8
2
10
100
500
Return Period (yrs)

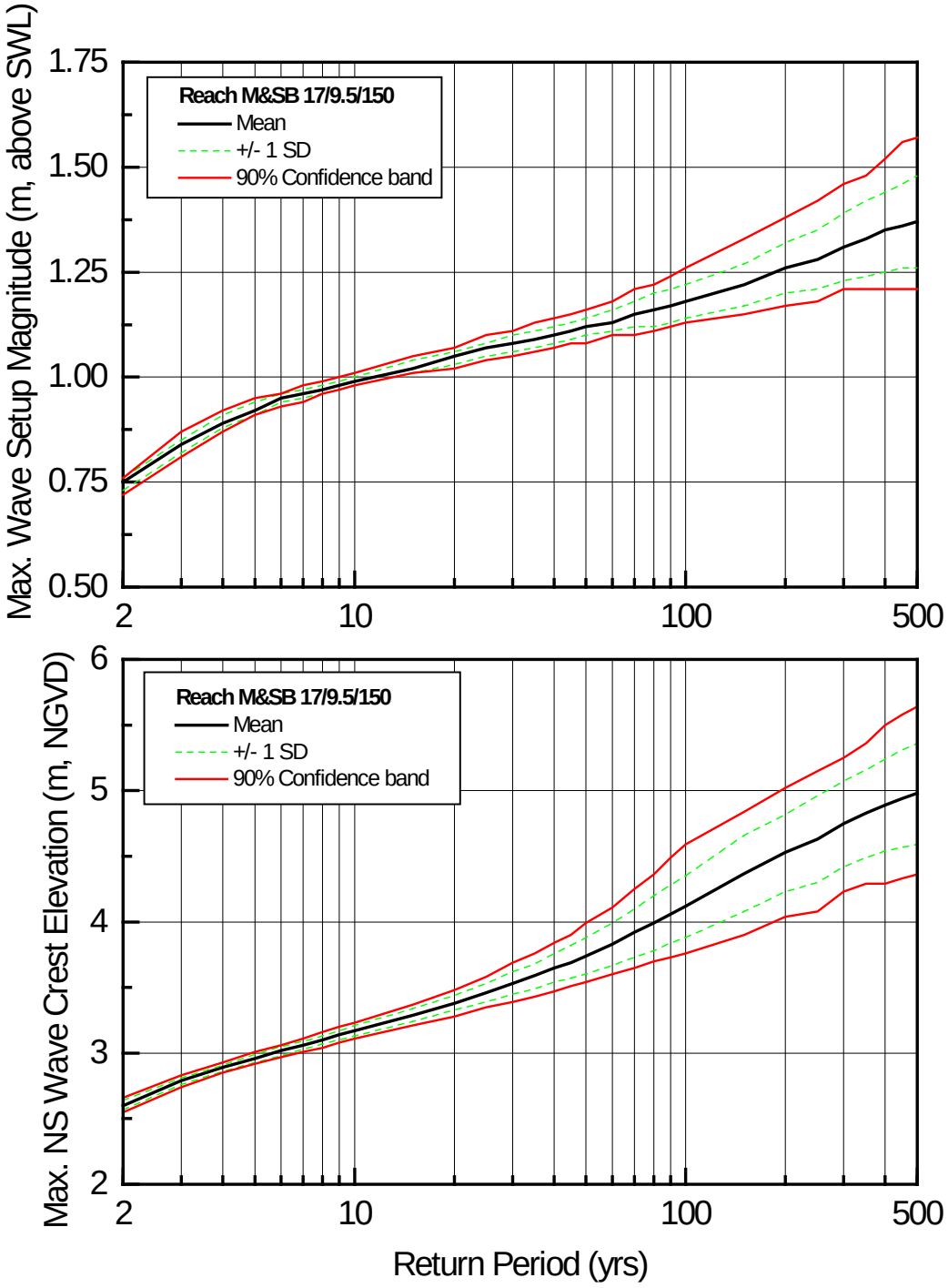

Reach M&SB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach M&SB 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

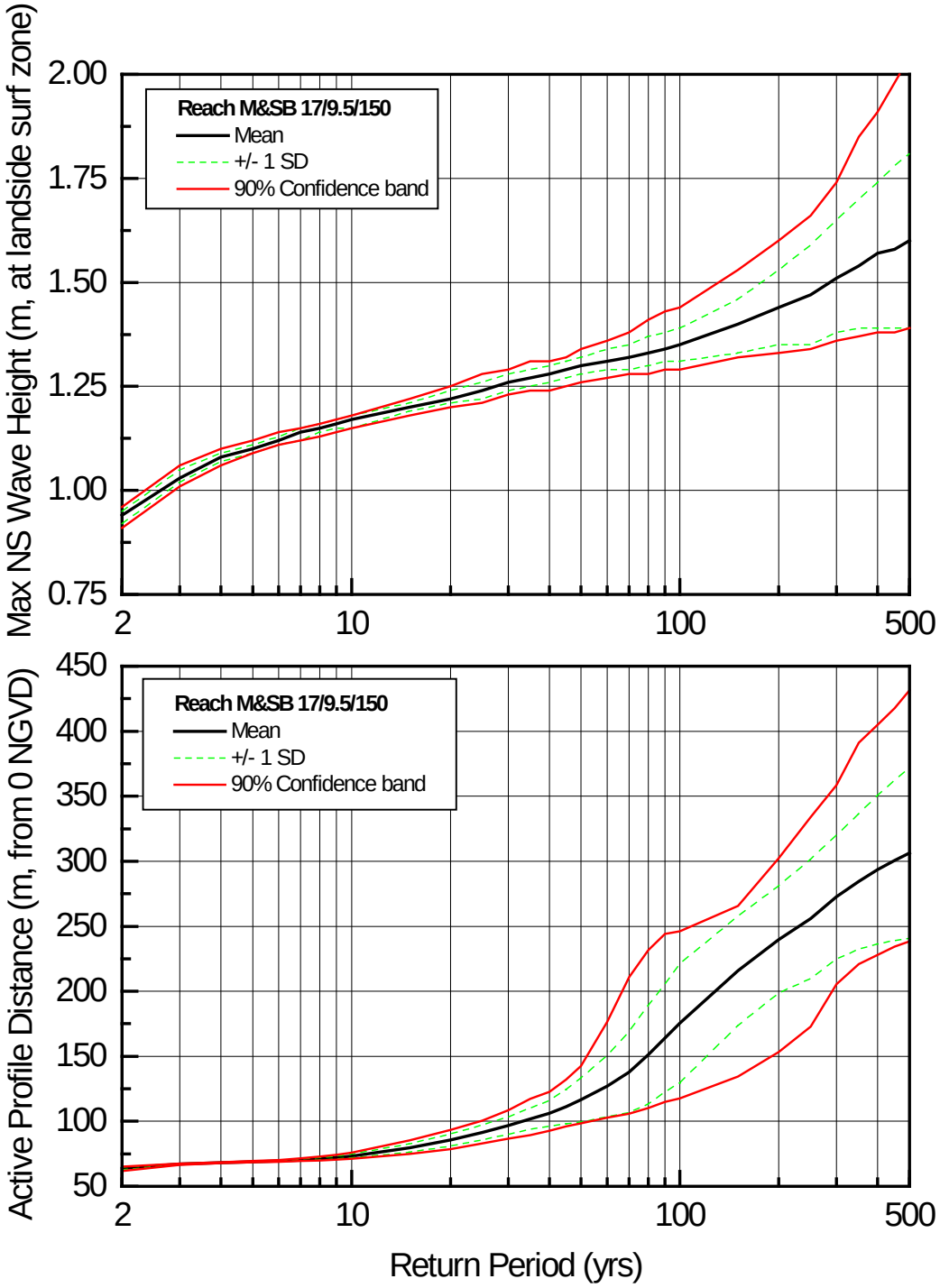

Reach M&SB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
200
180
160
140
120
100
80
60
40
2
10
100
500
Reach M&SB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

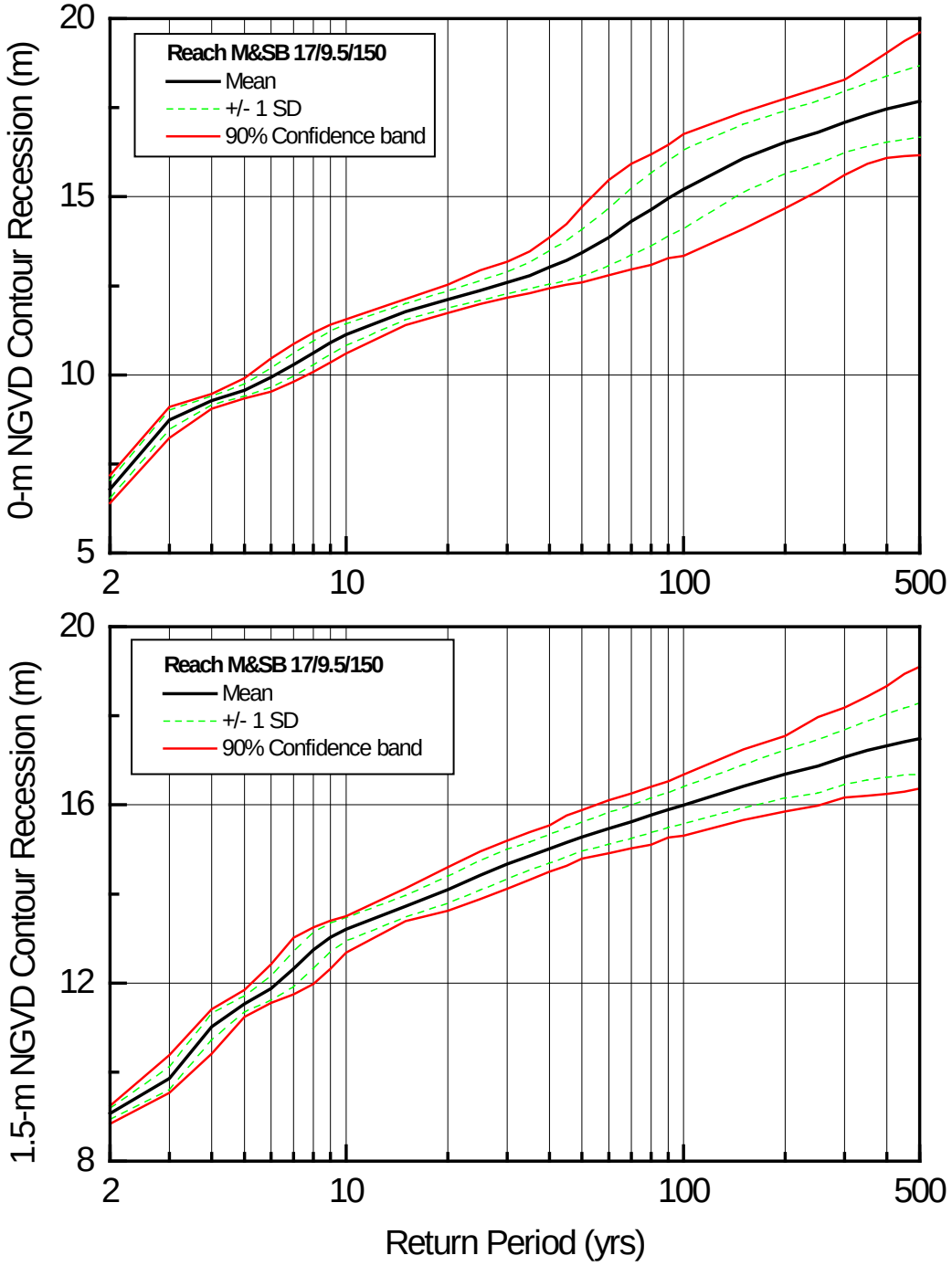

Reach M&SB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
50
40
30
20
10
0
2
10
100
500
Reach M&SB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
3
2
1
0
2
10
100
500
Return Period (yrs)

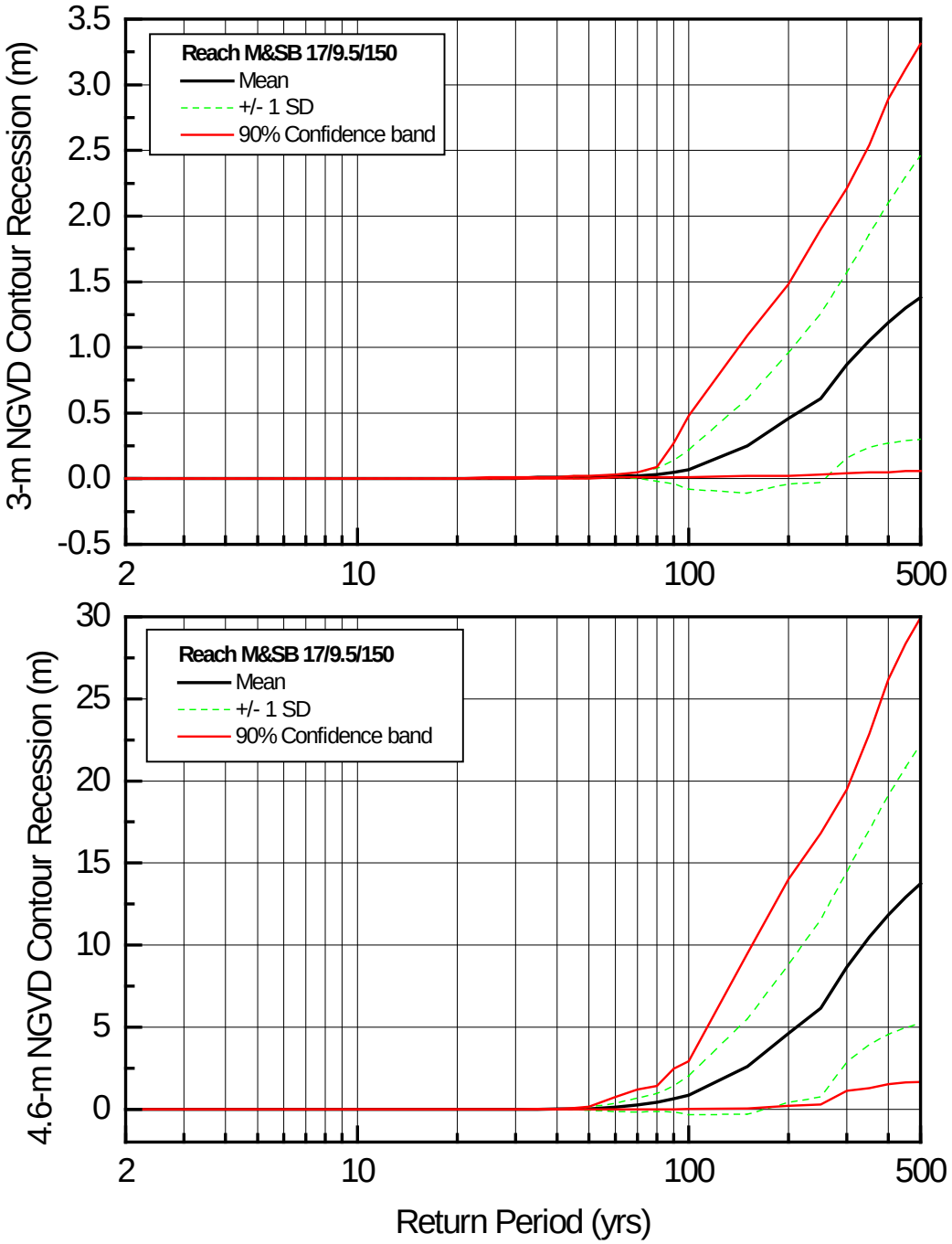

Reach M&SB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
25
20
15
10
5
0
2
10
100
500
Reach M&SB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
3
2
10
100
500
Return Period (yrs)

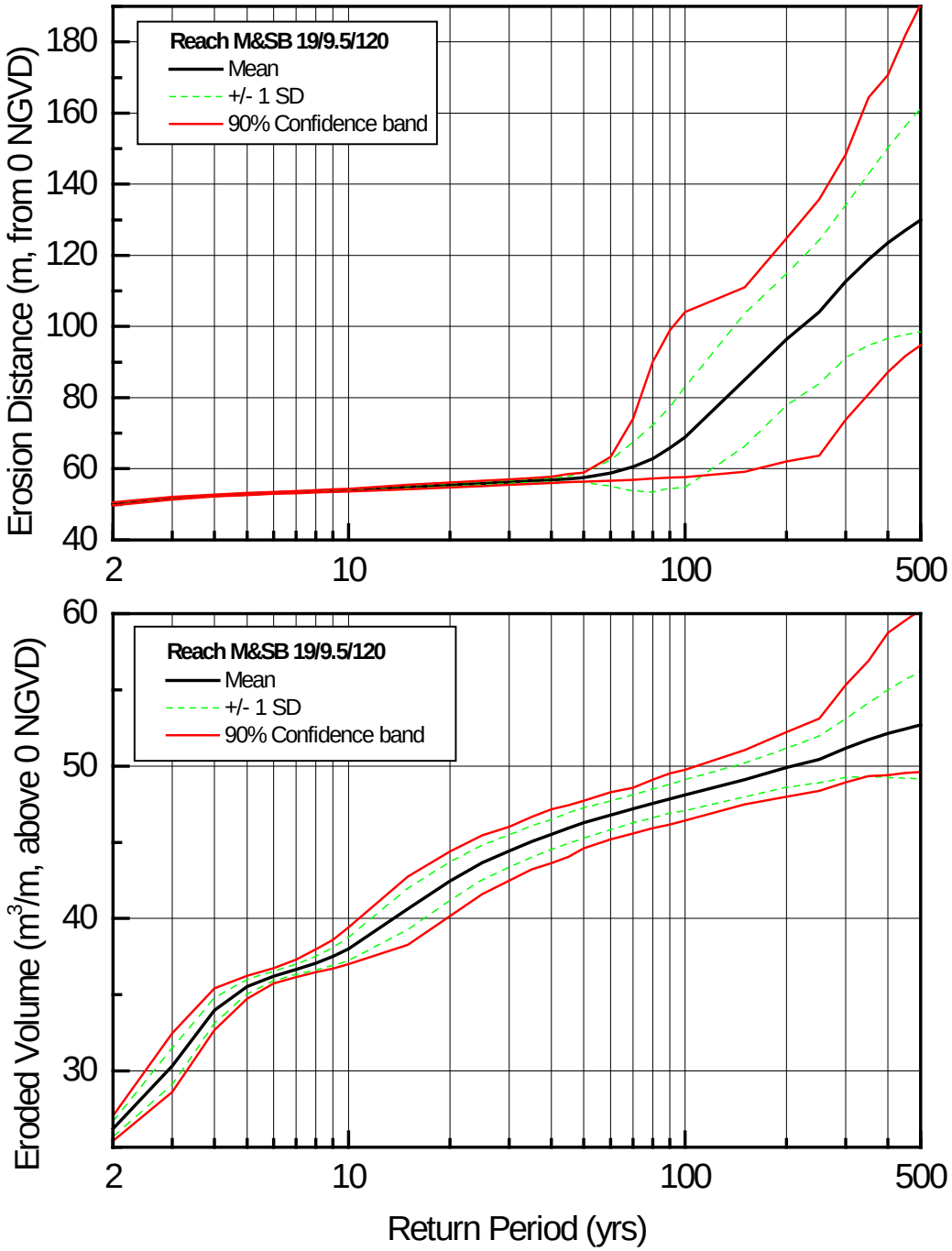

Reach M&SB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
6
5
4
3
2
2
10
100
500
Reach M&SB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5
4
3
2
2
10
100
500
Return Period (yrs)

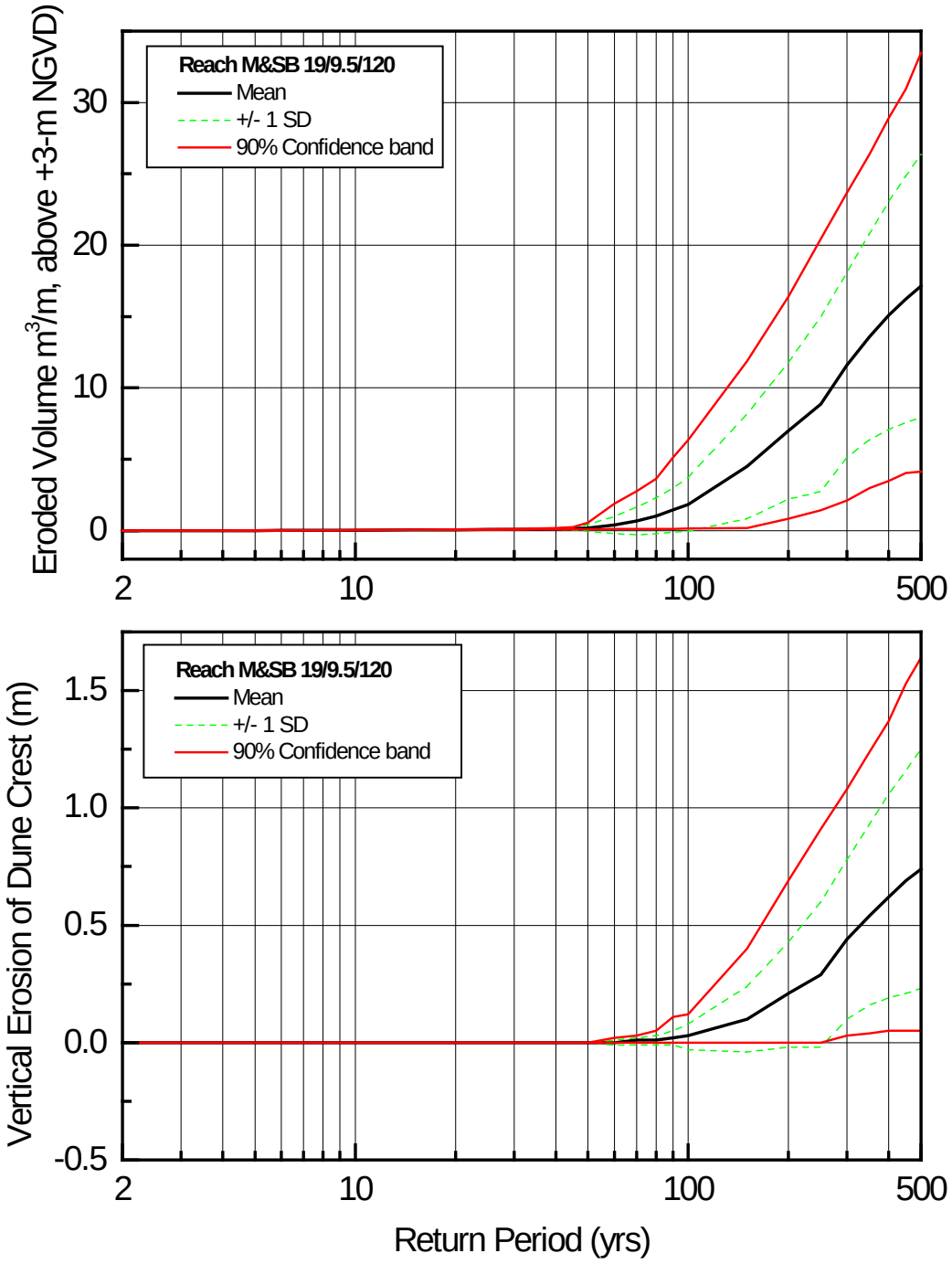

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach M&SB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
6
5
4
3
2
Reach M&SB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

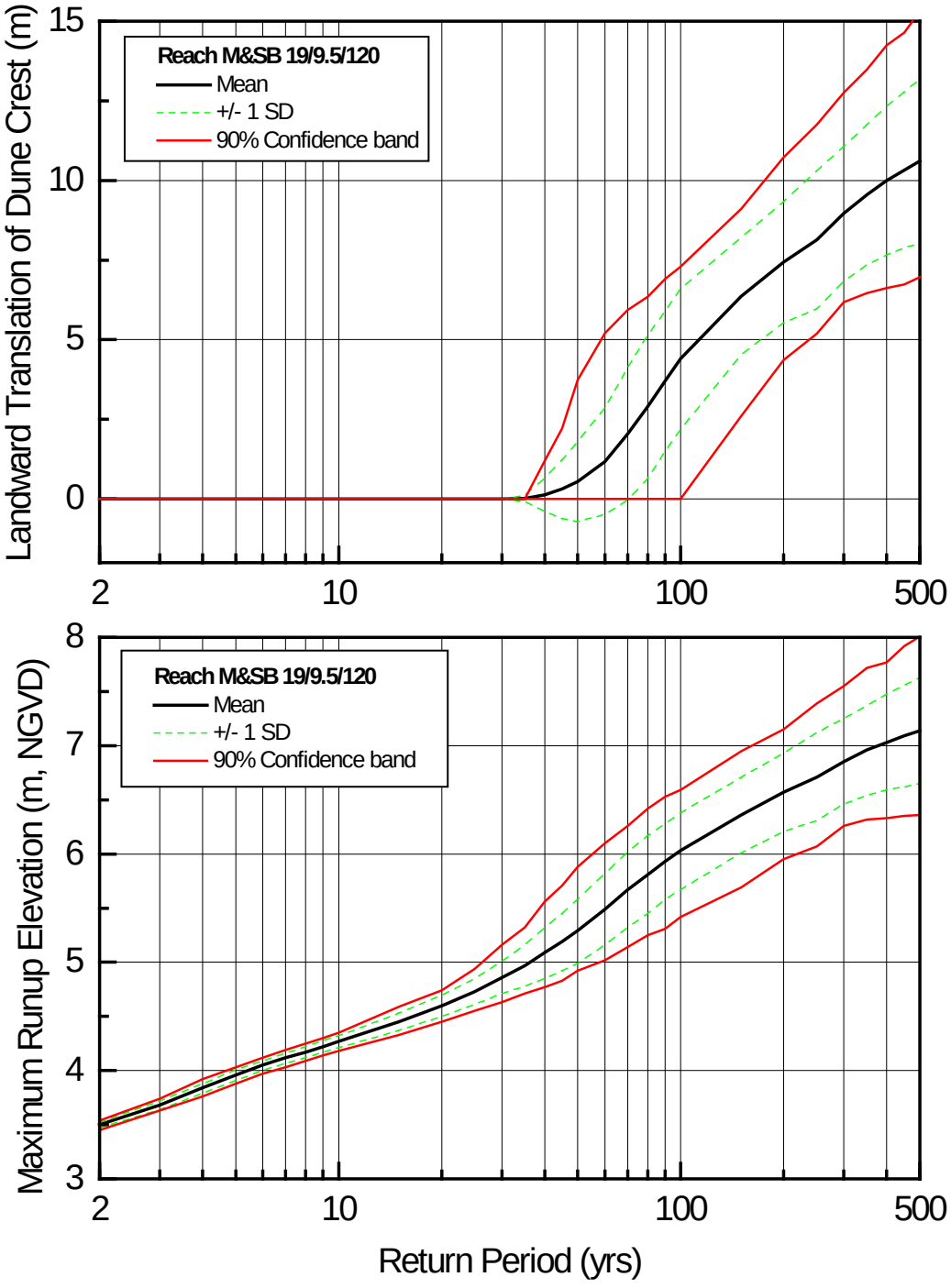

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
0.75
Reach M&SB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
450
400
350
300
250
200
150
100
50
Reach M&SB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

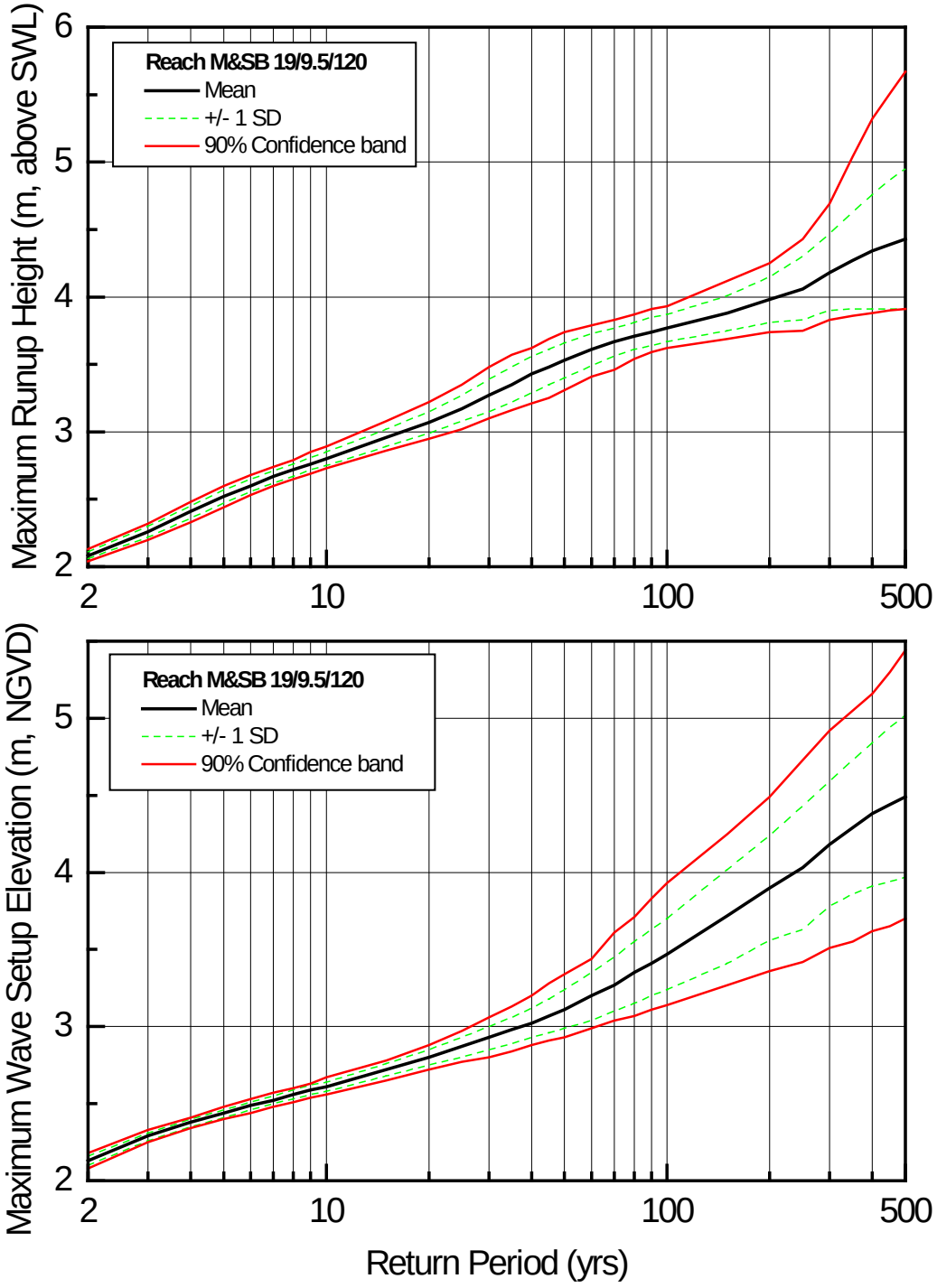

Reach M&SB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
15
10
5
2
10
100
500
Reach M&SB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20
16
12
8
2
10
100
500
Return Period (yrs)

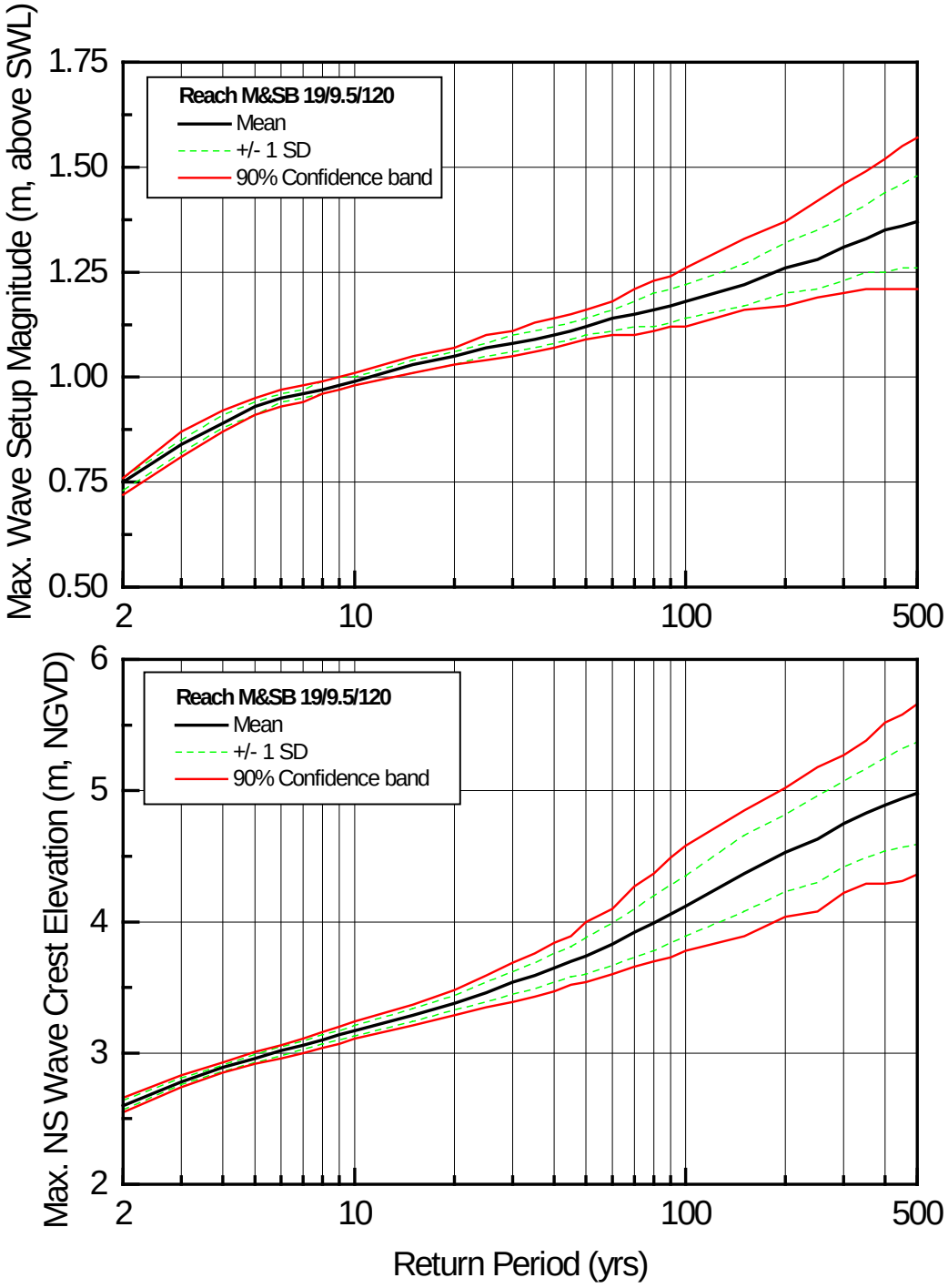

Reach M&SB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
2
10
100
500
Reach M&SB 17/9.5/150
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

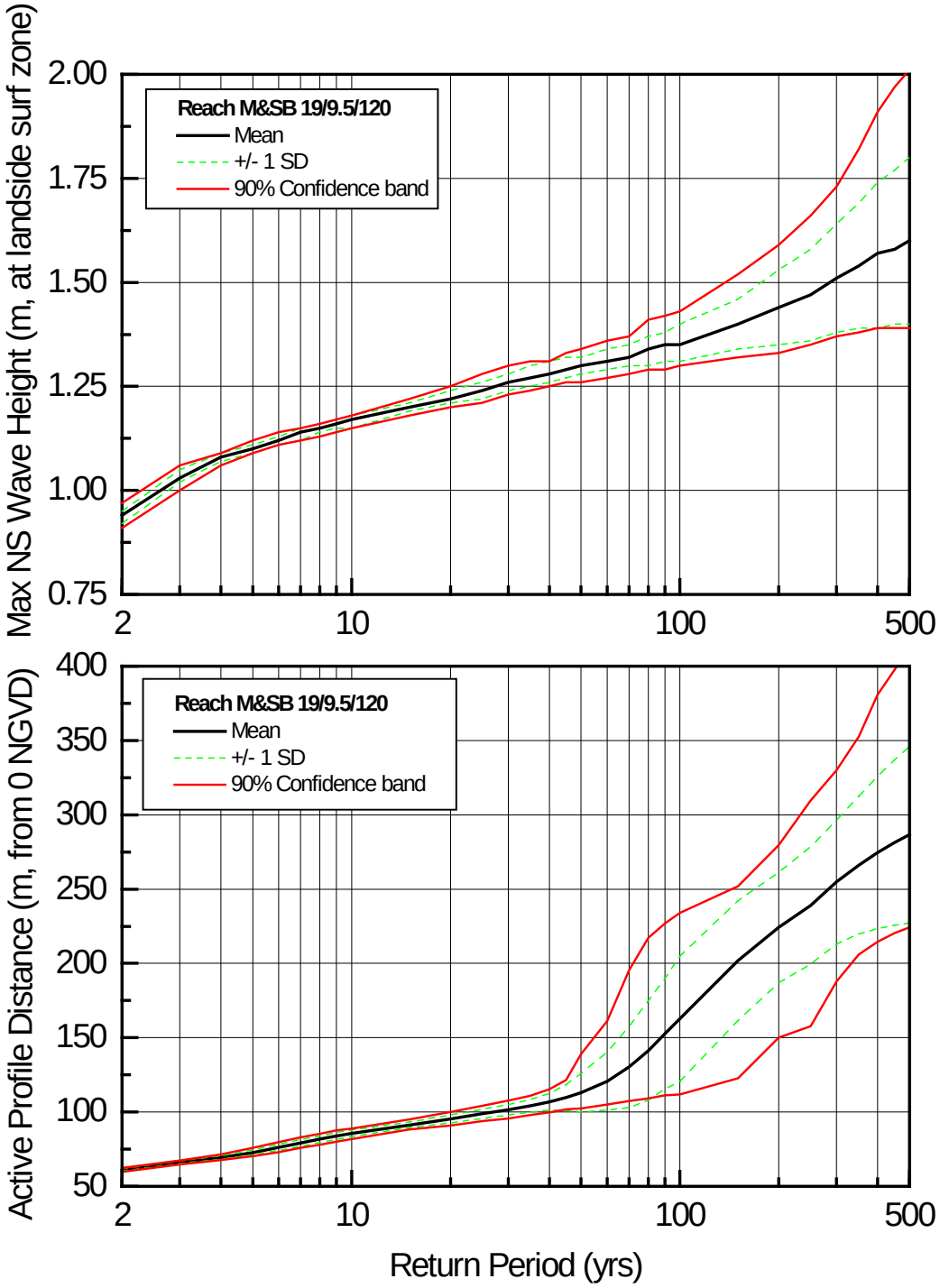

Reach M&SB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
160
140
120
100
80
60
40
2
10
100
500
Reach M&SB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
2
10
100
500
Return Period (yrs)

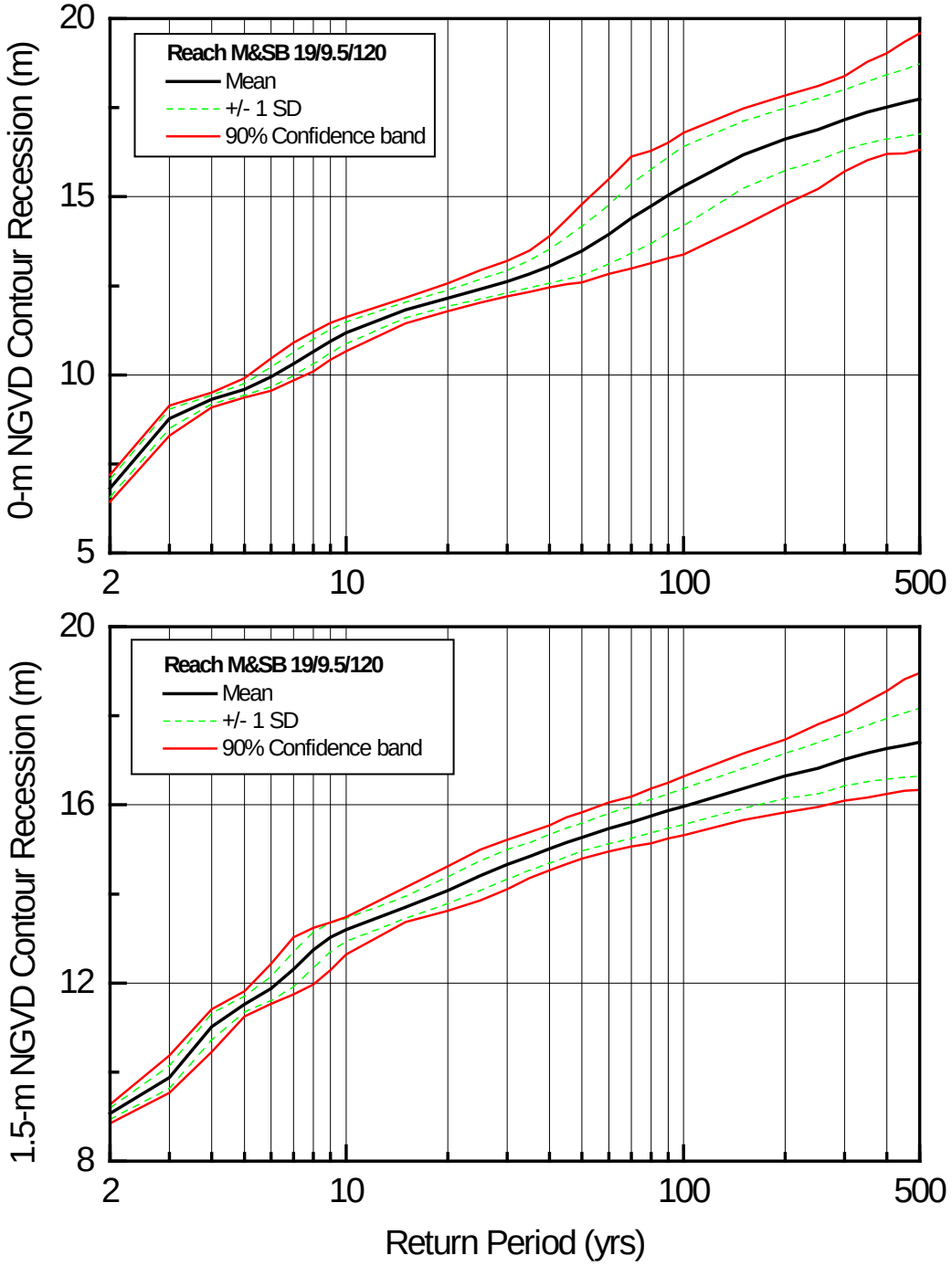

Reach M&SB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
30
20
10
0
2
10
100
500
Reach M&SB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
1.5
1.0
0.5
0.0
-0.5
2
10
100
500
Return Period (yrs)

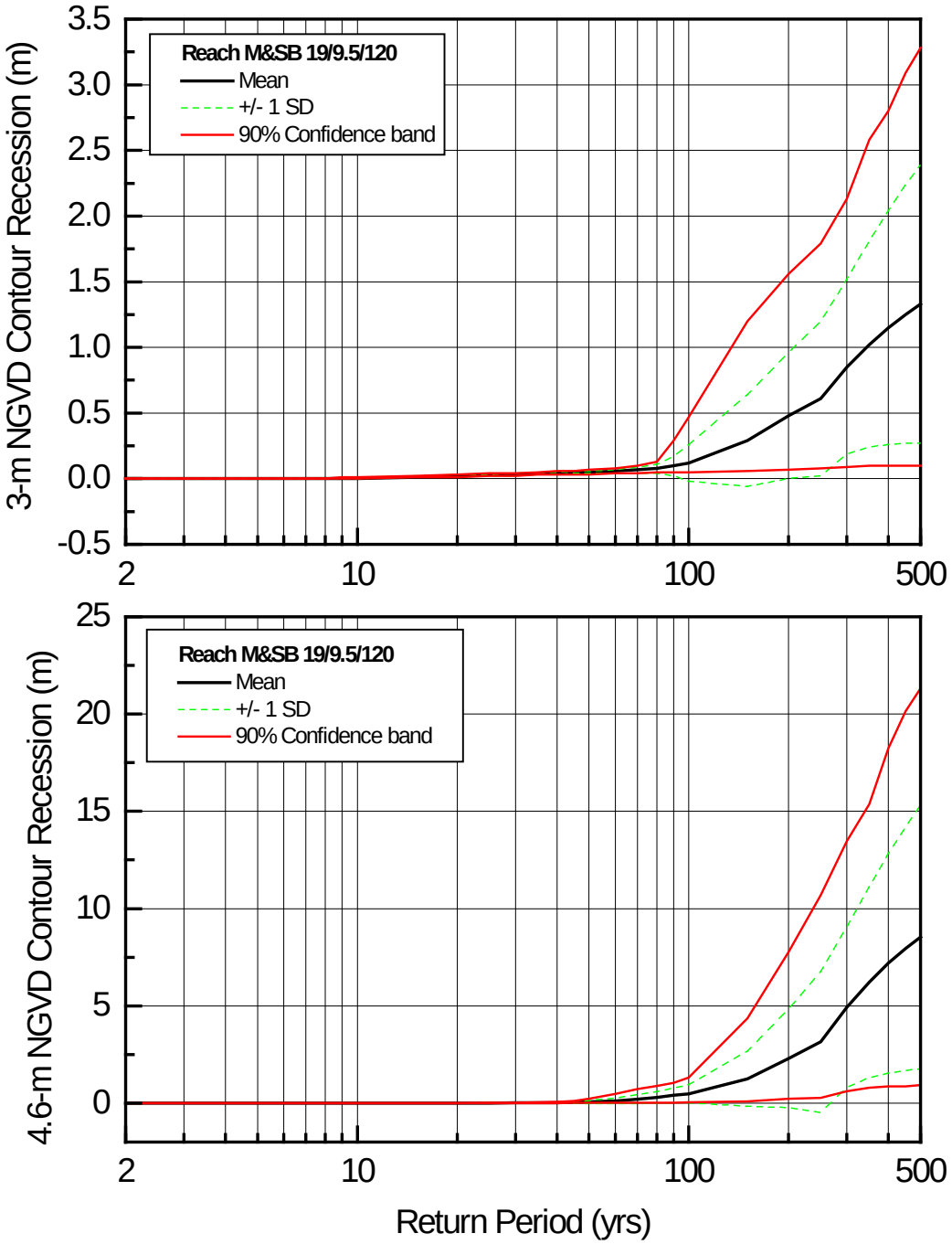

Reach M&SB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
15
10
5
0
2
10
100
500
Reach M&SB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
3
2
10
100
500
Return Period (yrs)

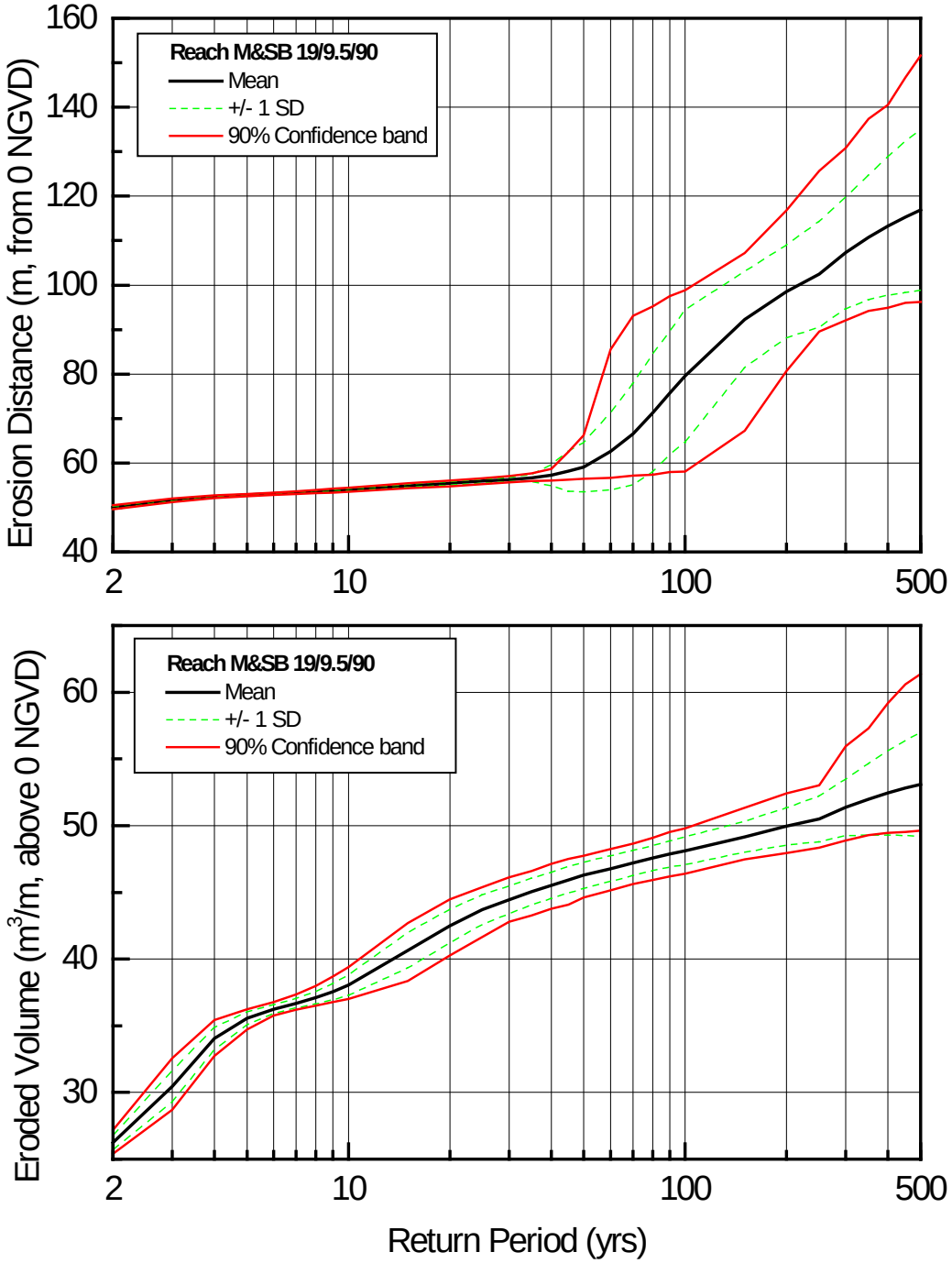

Reach M&SB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
6
5
4
3
2
2
10
100
500
Reach M&SB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5
4
3
2
2
10
100
500
Return Period (yrs)

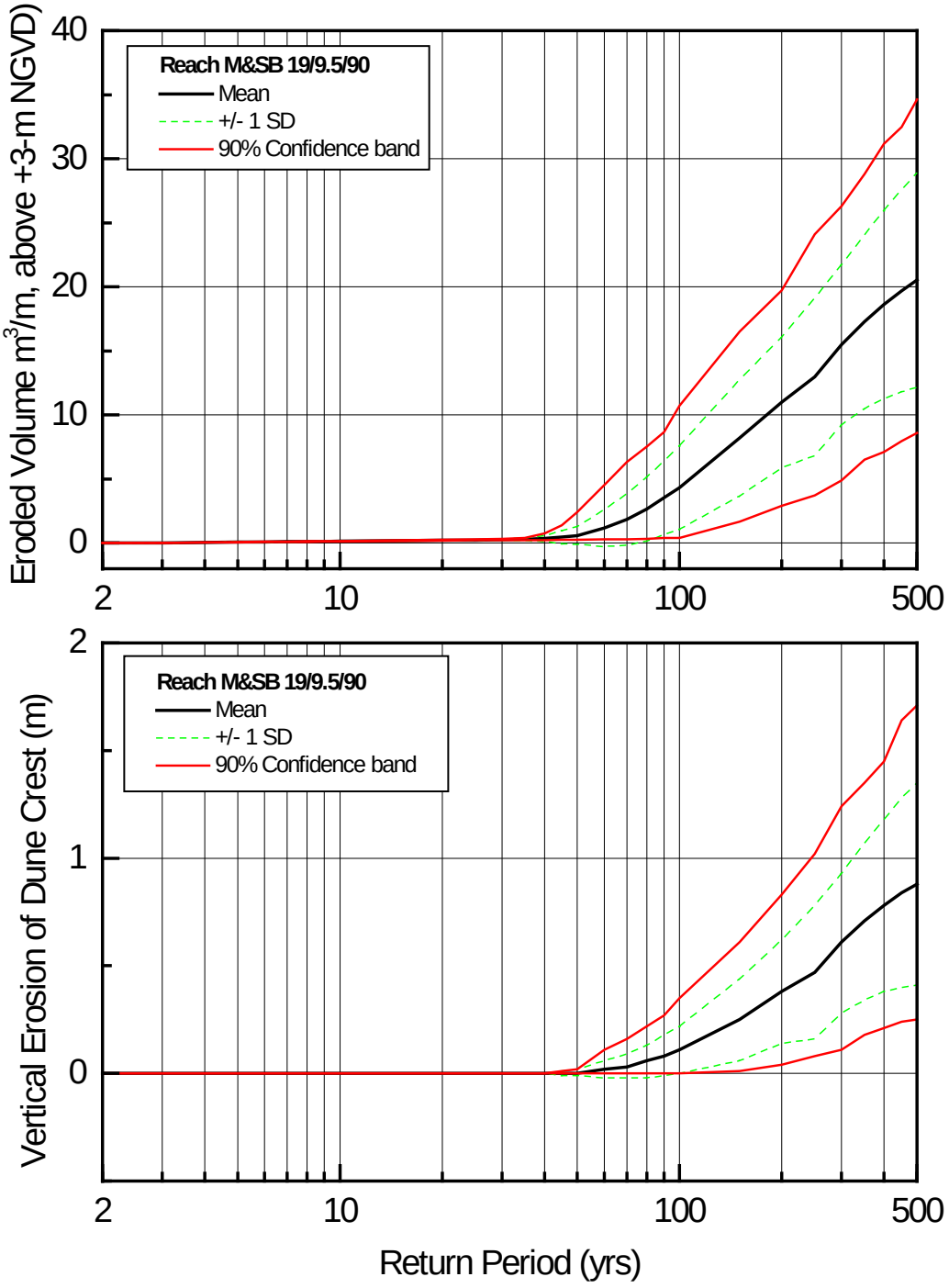

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach M&SB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
6
5
4
3
2
Reach M&SB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

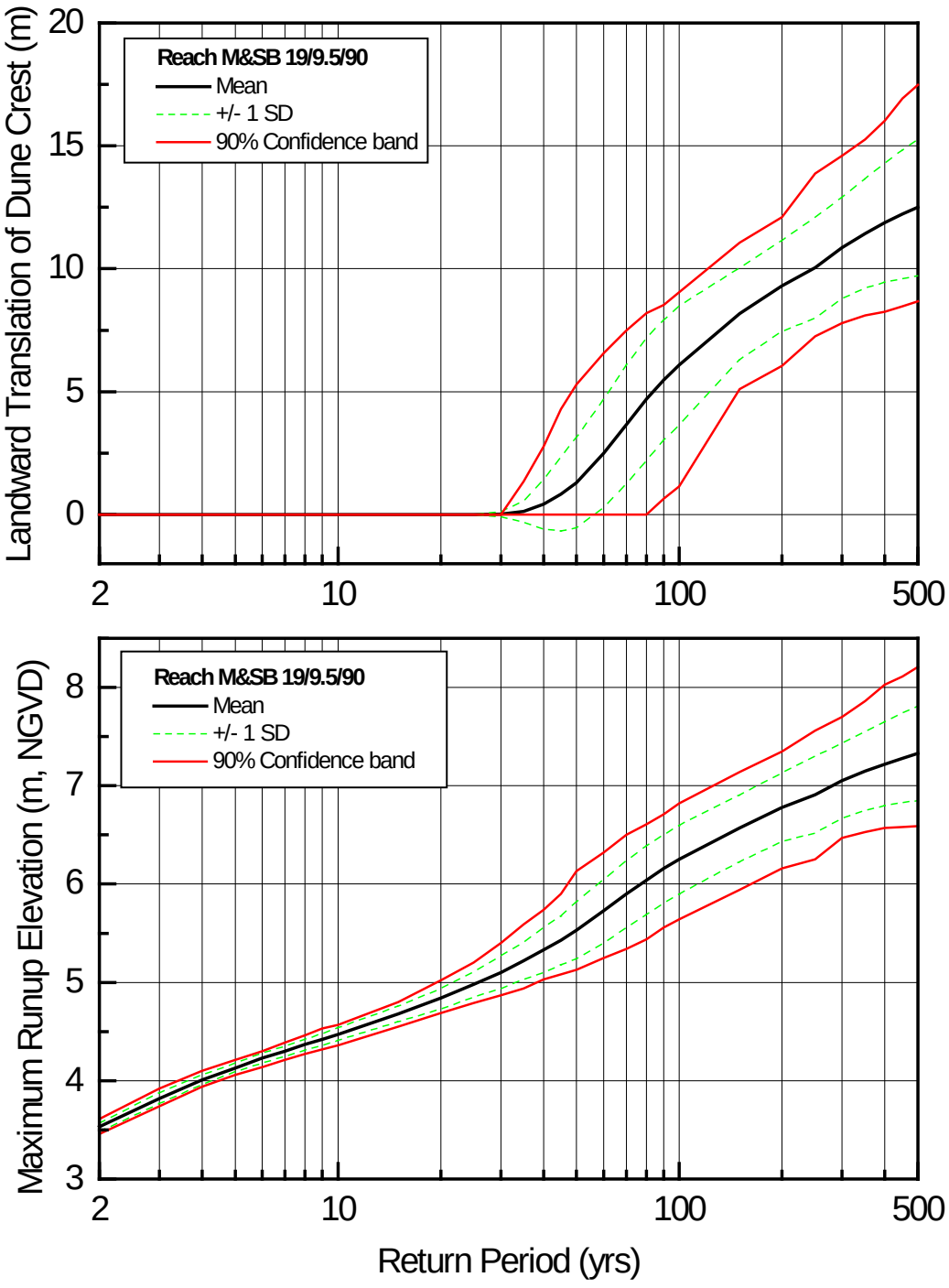

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
0.75
Reach M&SB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
350
300
250
200
150
100
50
Reach M&SB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

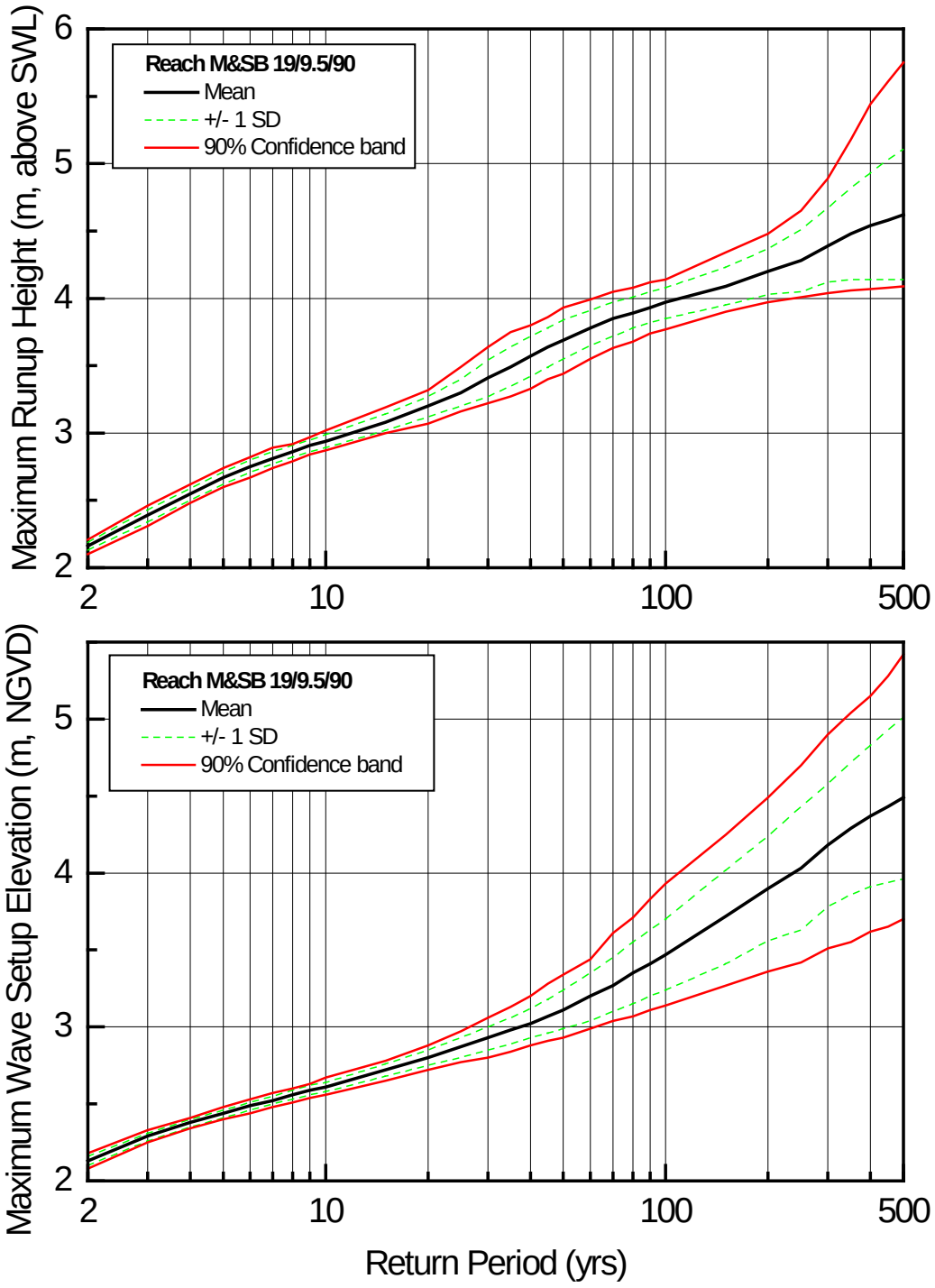

Reach M&SB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
15
10
5
2
10
100
500
Reach M&SB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20
16
12
8
2
10
100
500
Return Period (yrs)

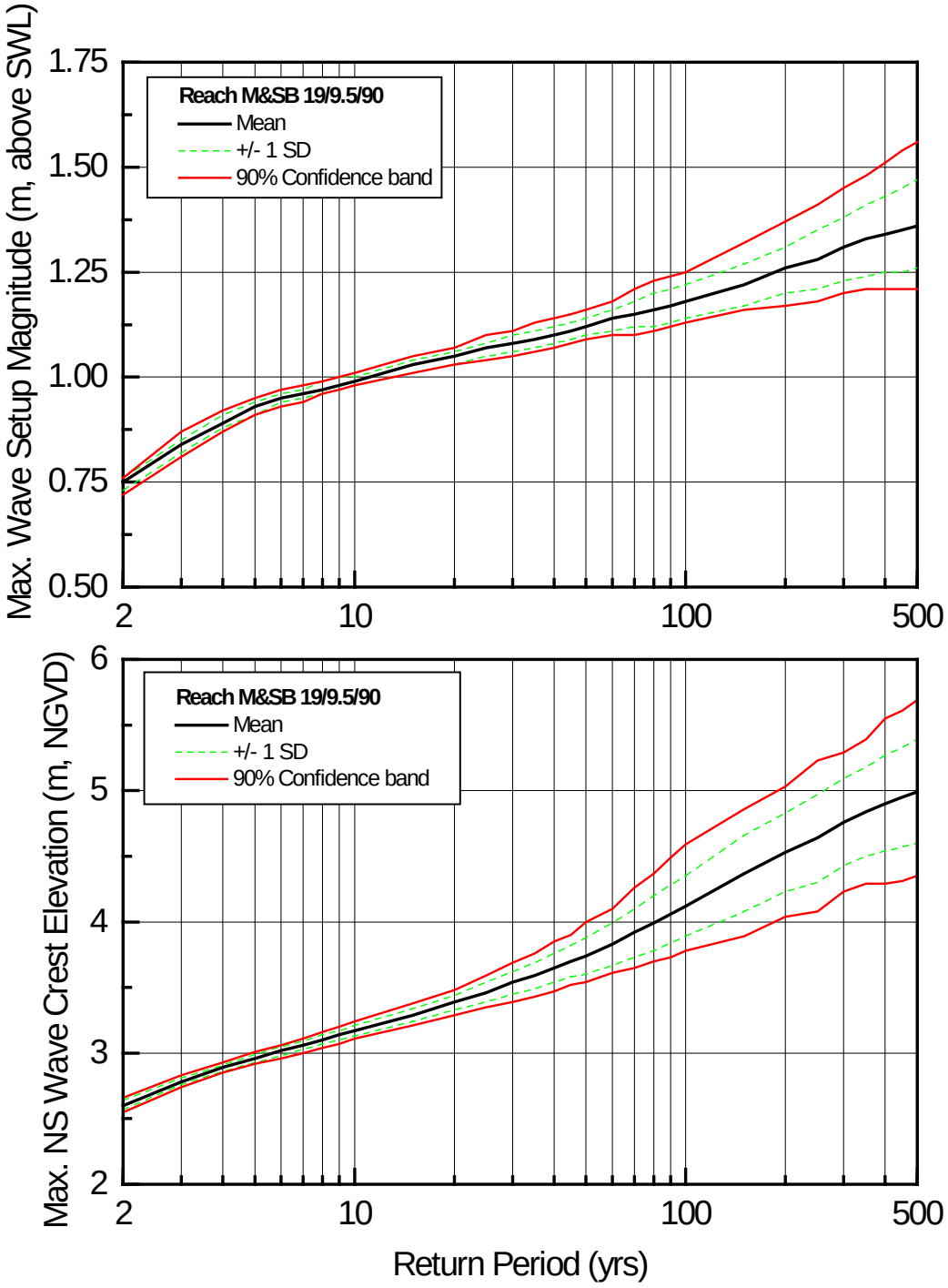

Reach M&SB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
2
10
100
500
Reach M&SB 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

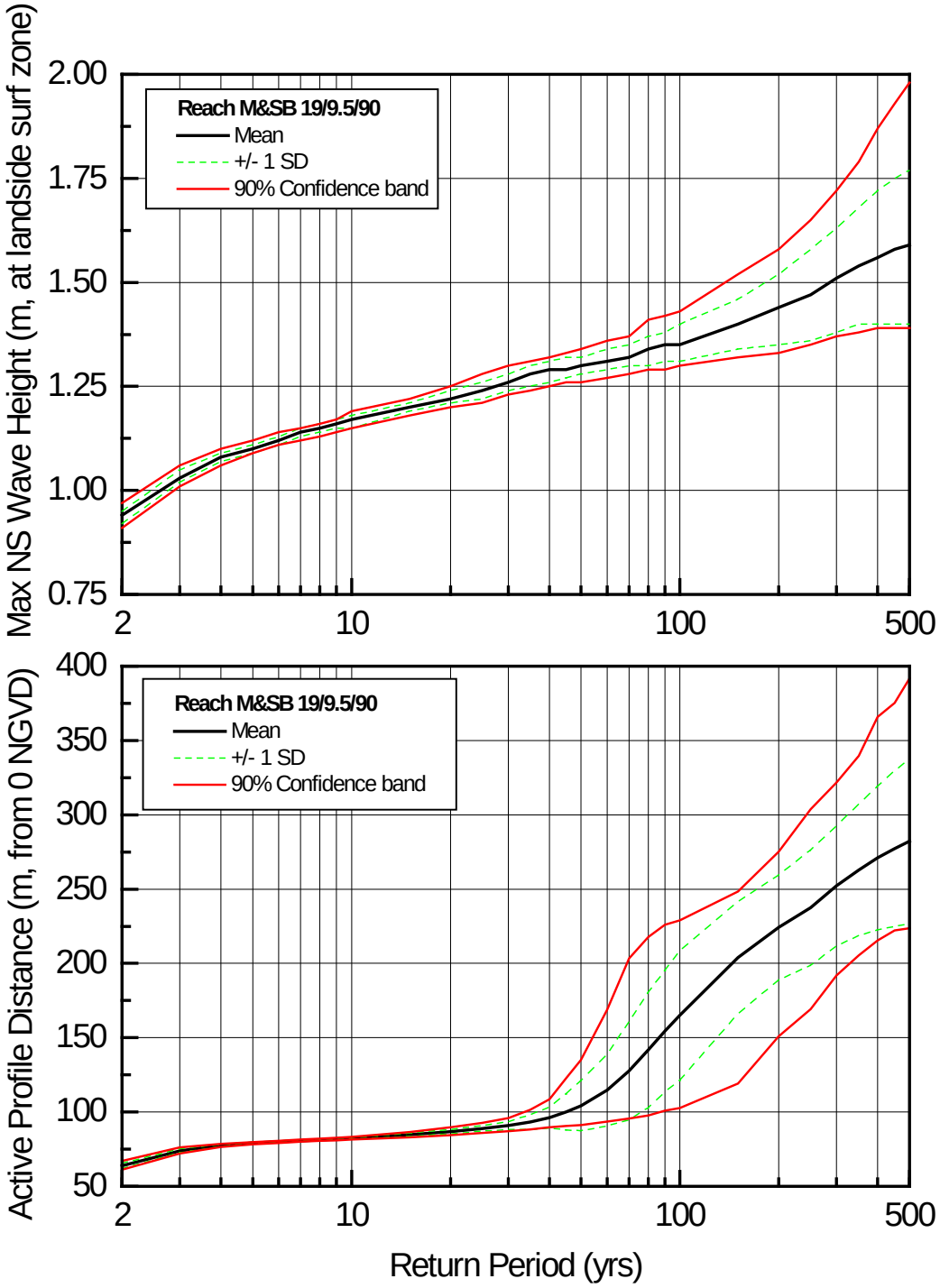

Reach M&SB 19/9.5/90
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
160
140
120
100
80
60
40
2
10
100
500
Reach M&SB 19/9.5/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
2
10
100
500
Return Period (yrs)

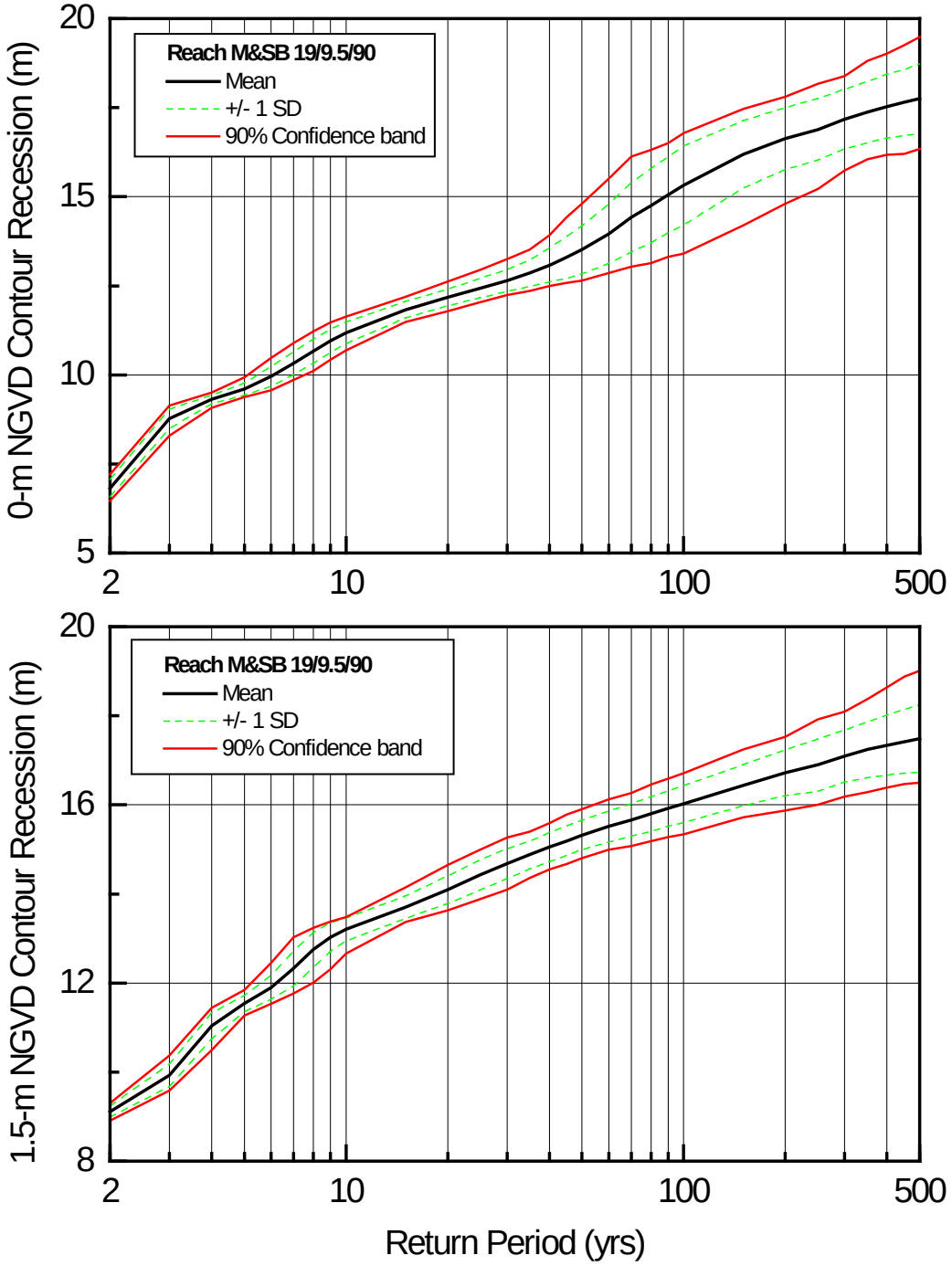

Reach M&SB 19/9.5/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach M&SB 19/9.5/90
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0
1
2
2
10
100
500
Return Period (yrs)

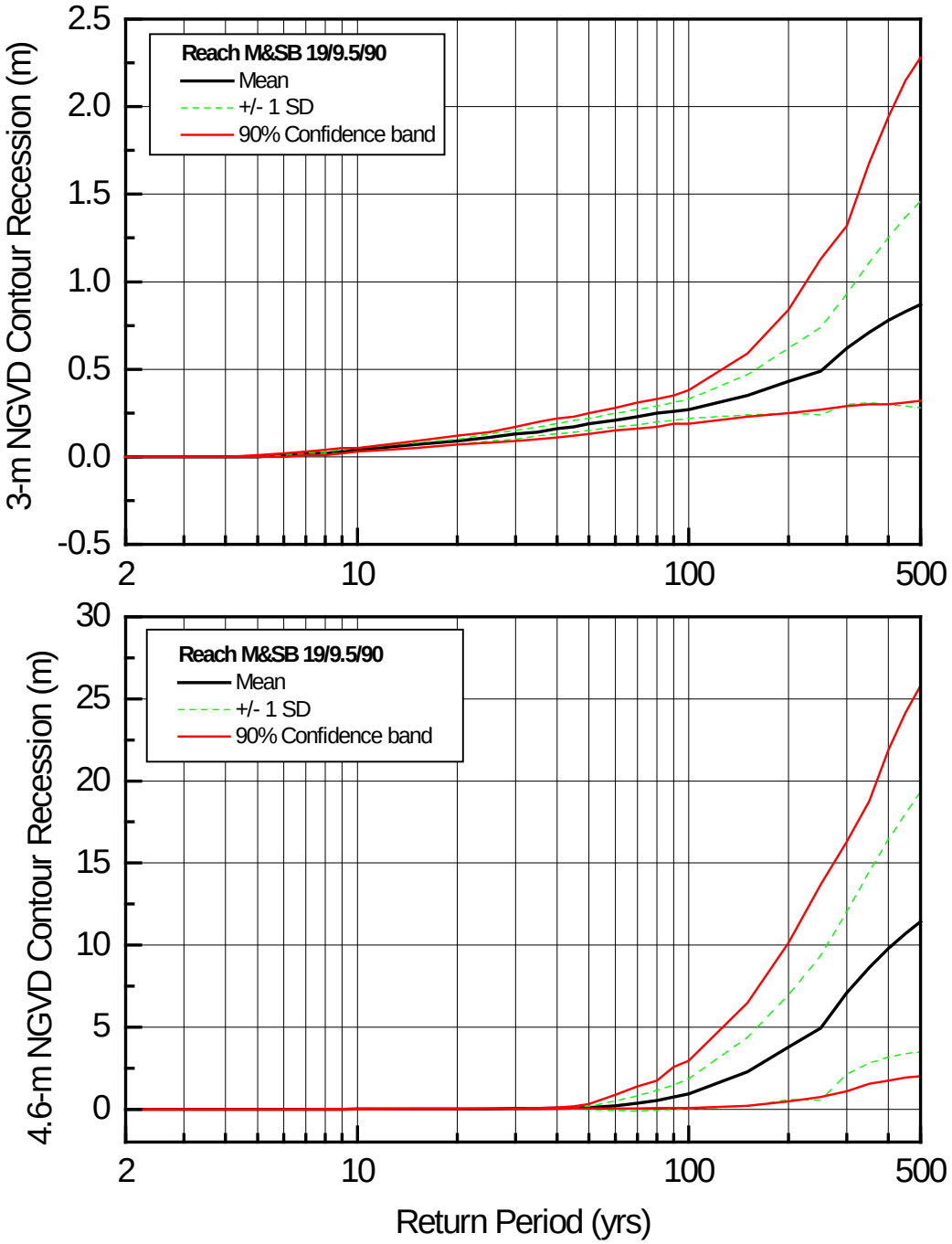

Reach M&SB 19/9.5/90
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
20
15
10
5
0
2
10
100
500
Reach M&SB 19/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
3
2
10
100
500
Return Period (yrs)

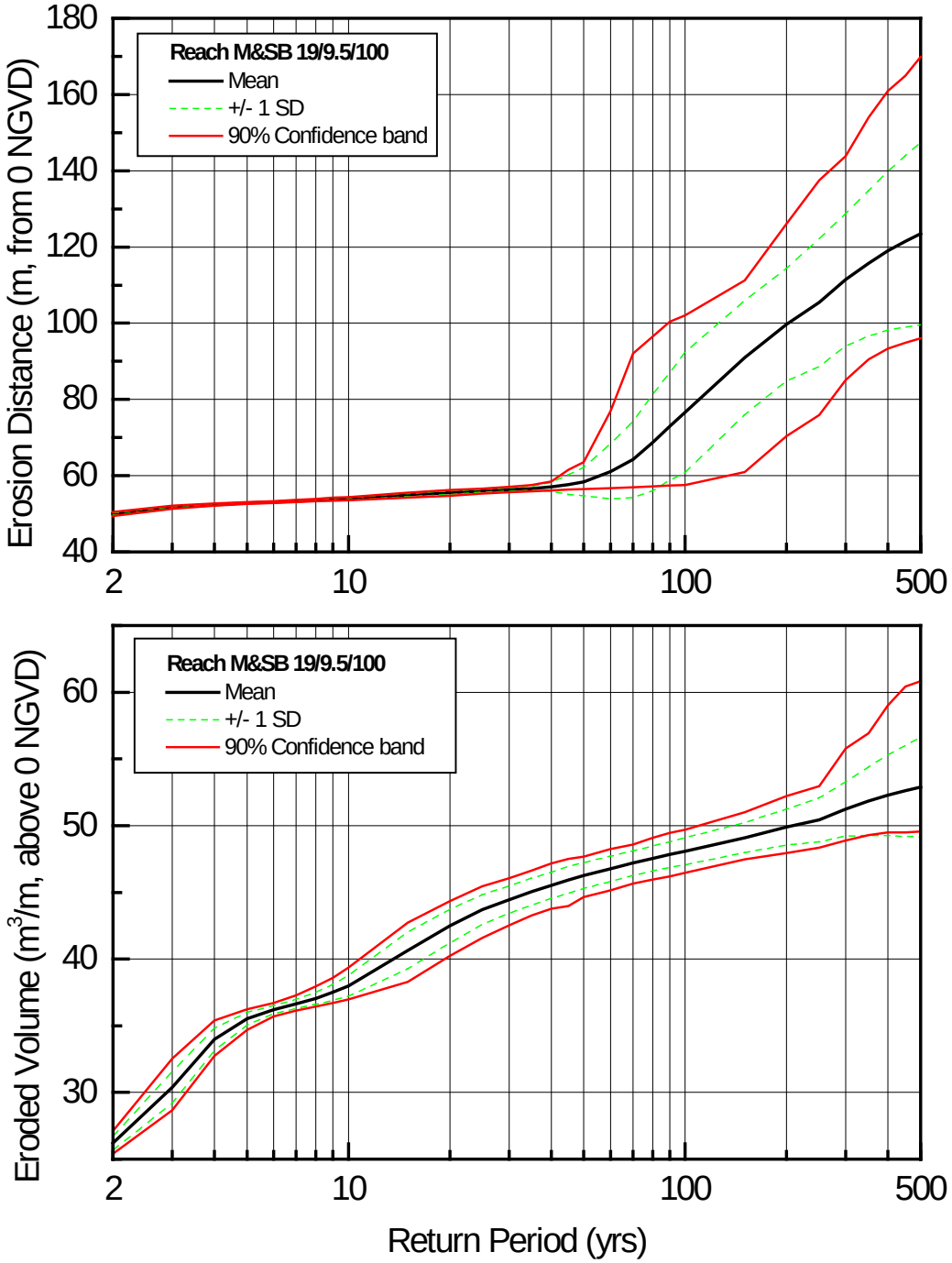

Reach M&SB 19/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
6
5
4
3
2
2
10
100
500
Reach M&SB 19/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5
4
3
2
2
10
100
500
Return Period (yrs)

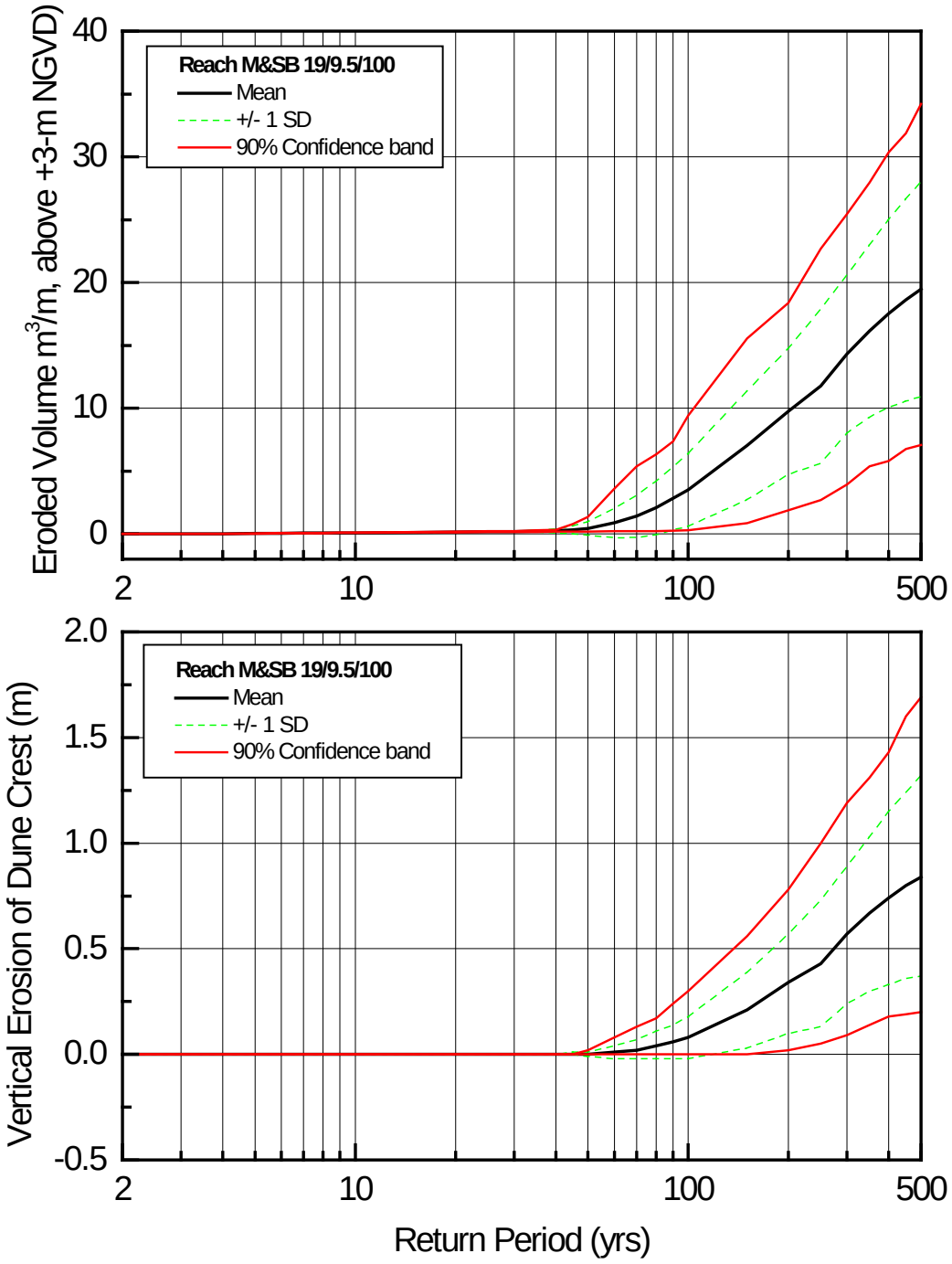

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach M&SB 19/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
6
5
4
3
2
Reach M&SB 19/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

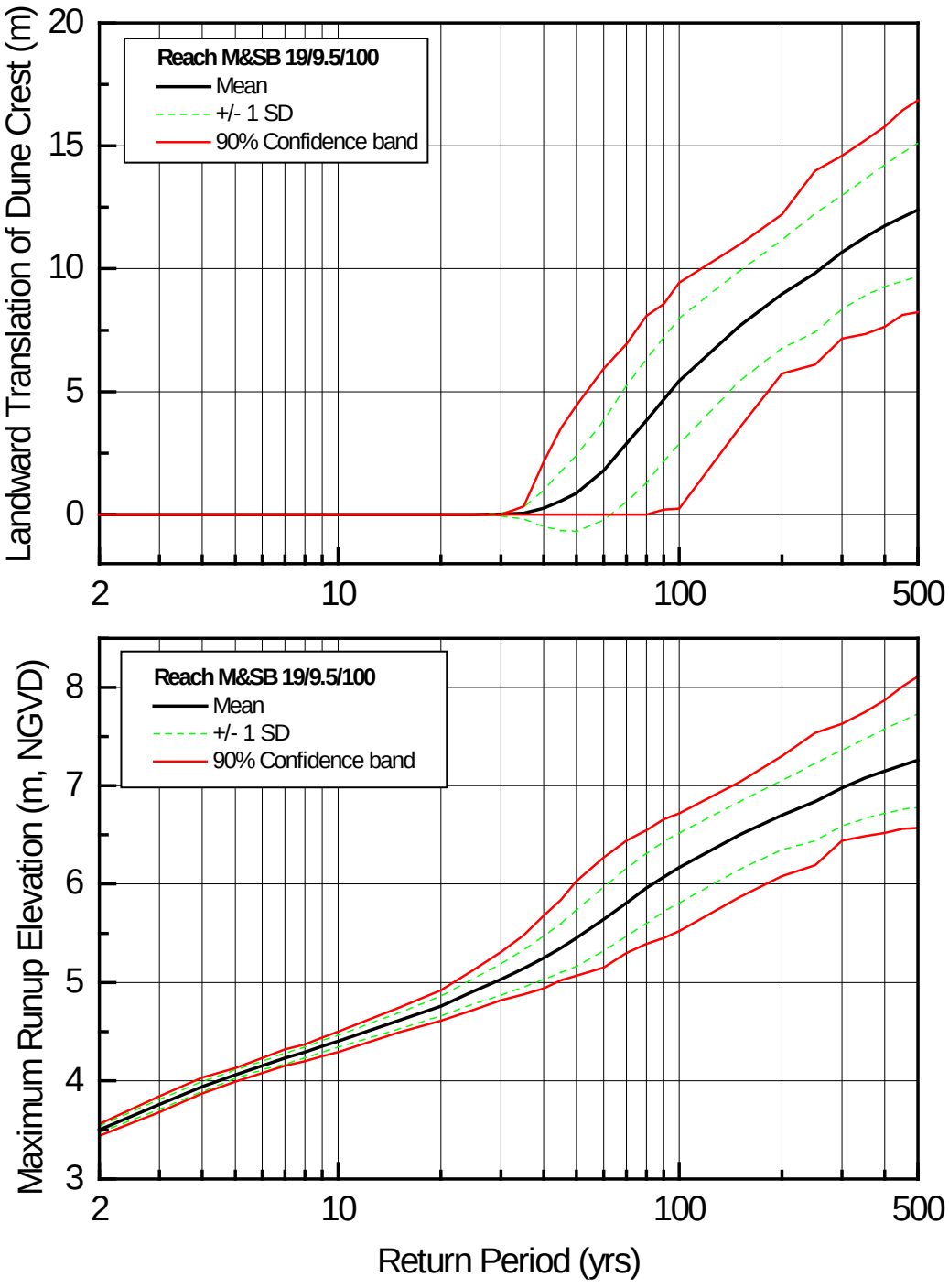

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
0.75
Reach M&SB 19/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
350
300
250
200
150
100
50
Reach M&SB 19/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

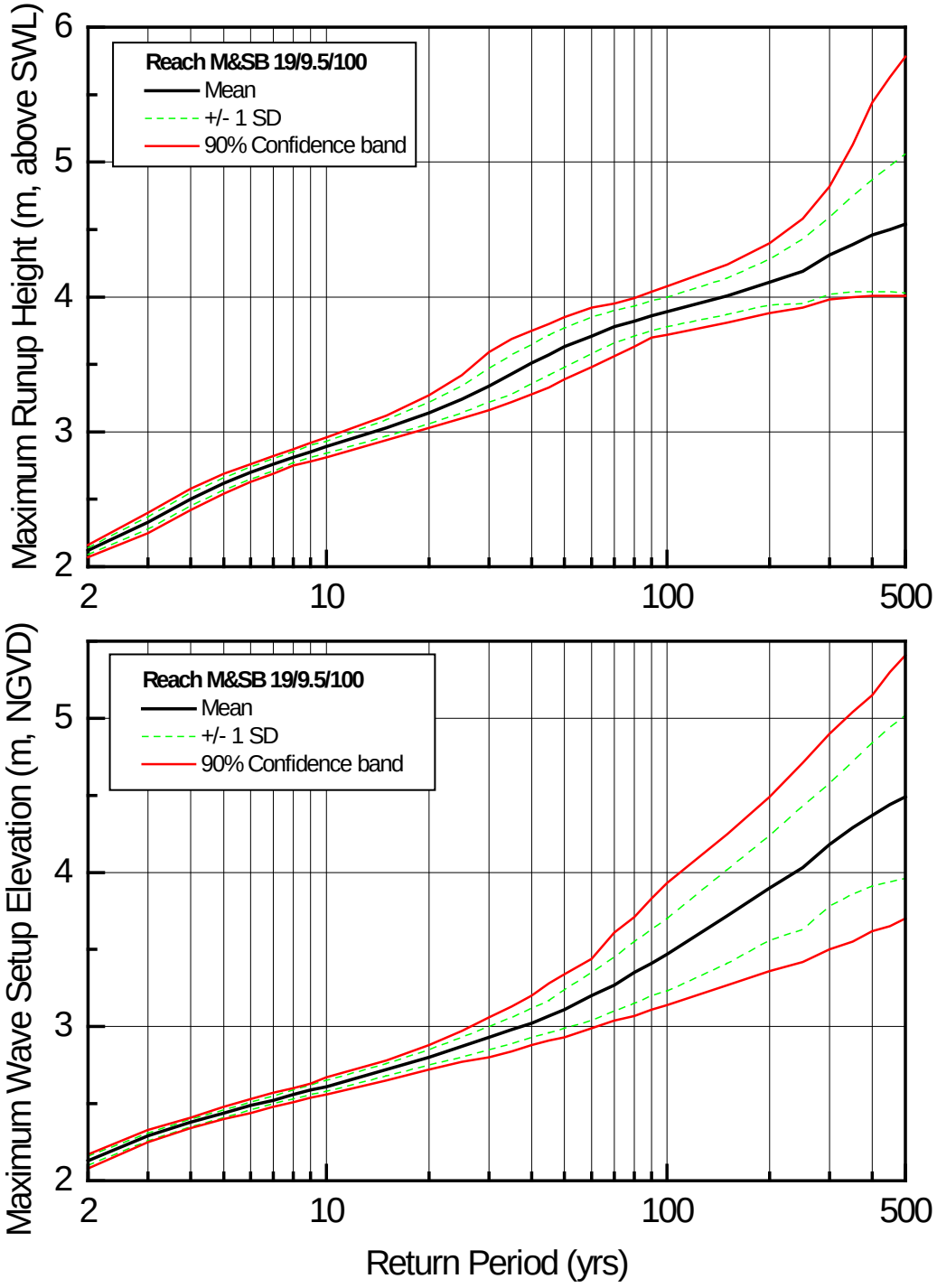

Reach M&SB 19/9.5/90
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
15
10
5
2
10
100
500
Reach M&SB 19/9.5/90
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20
16
12
8
2
10
100
500
Return Period (yrs)

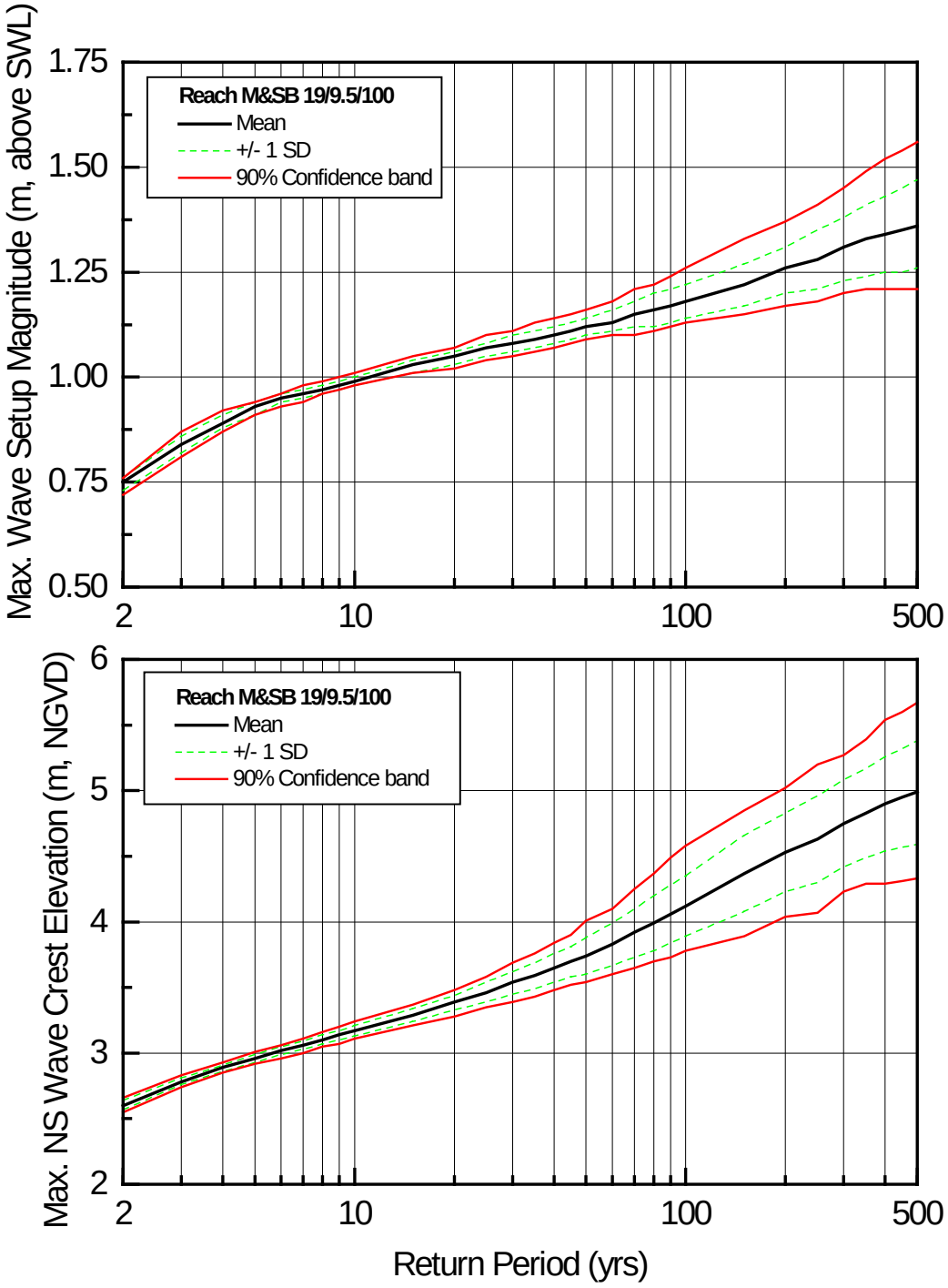

Reach M&SB 19/9.5/90
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
2
10
100
500
Reach M&SB 19/9.5/90
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
30
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

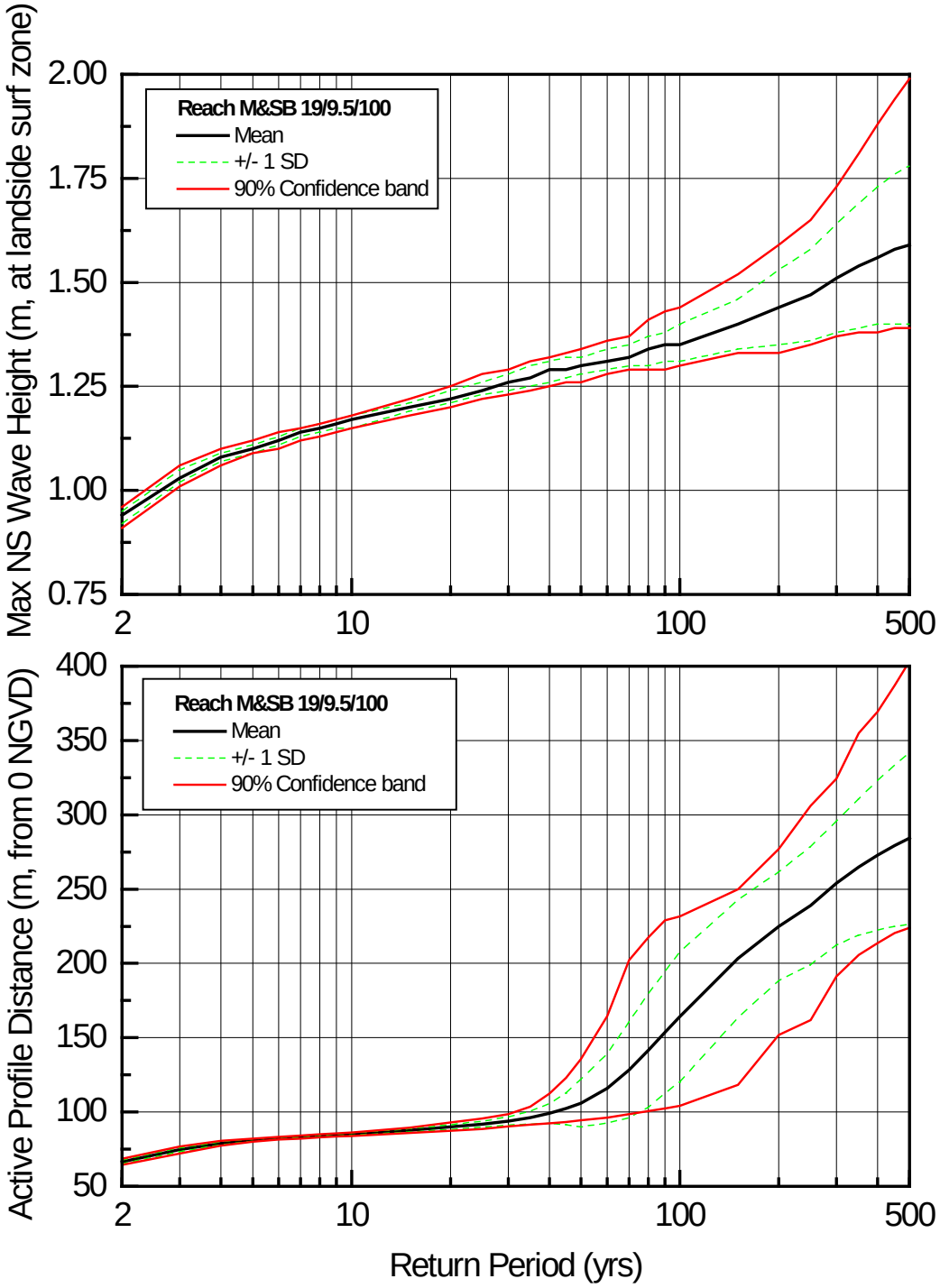

Reach M&SB 19/9.5/100
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
160
140
120
100
80
60
40
2
10
100
500
Reach M&SB 19/9.5/100
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
2
10
100
500
Return Period (yrs)

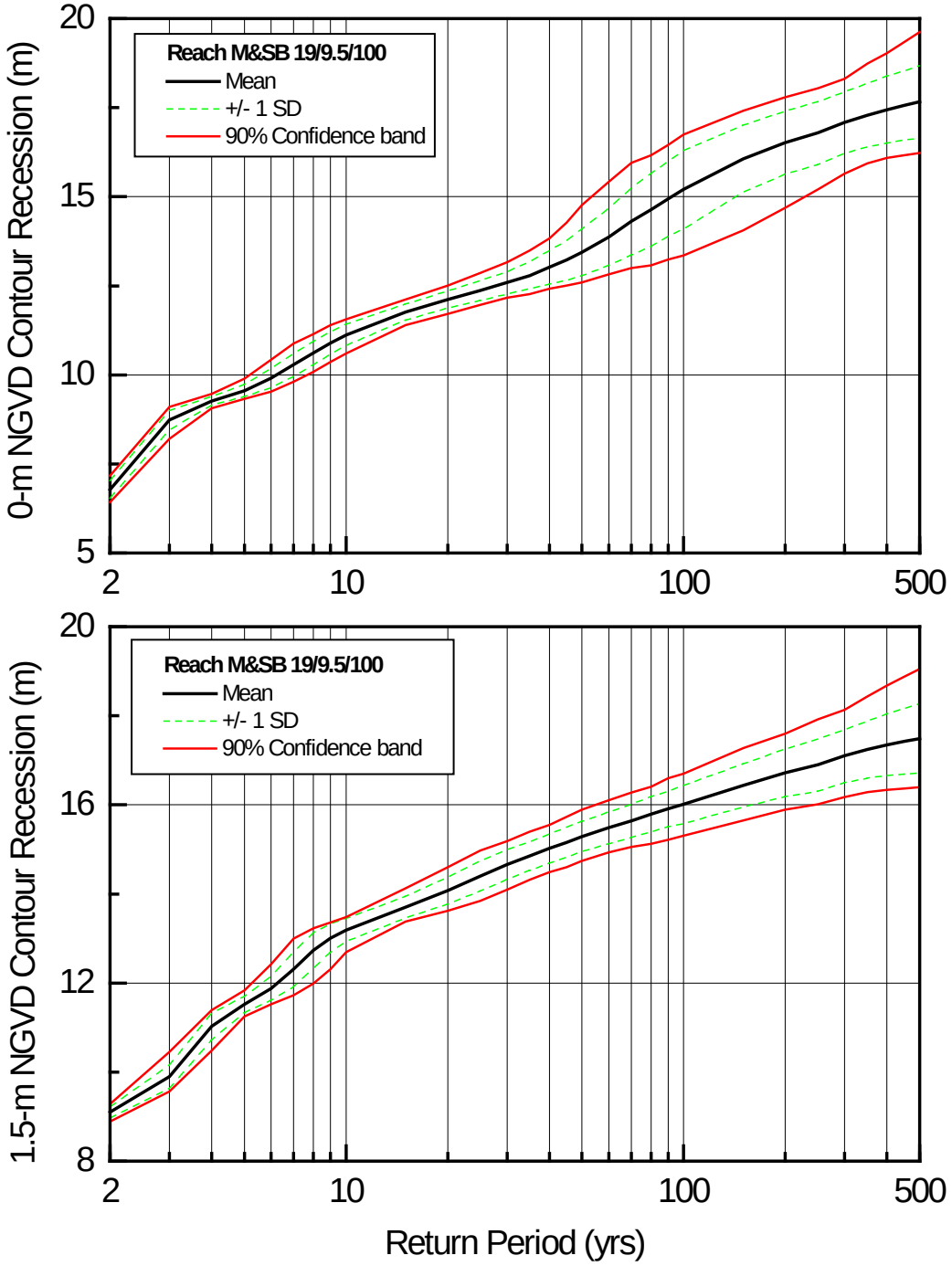

Reach M&SB 19/9.5/100
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
40
30
20
10
0
2
10
100
500
Reach M&SB 19/9.5/100
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
2.0
1.5
1.0
0.5
0.0
-0.5
2
10
100
500
Return Period (yrs)

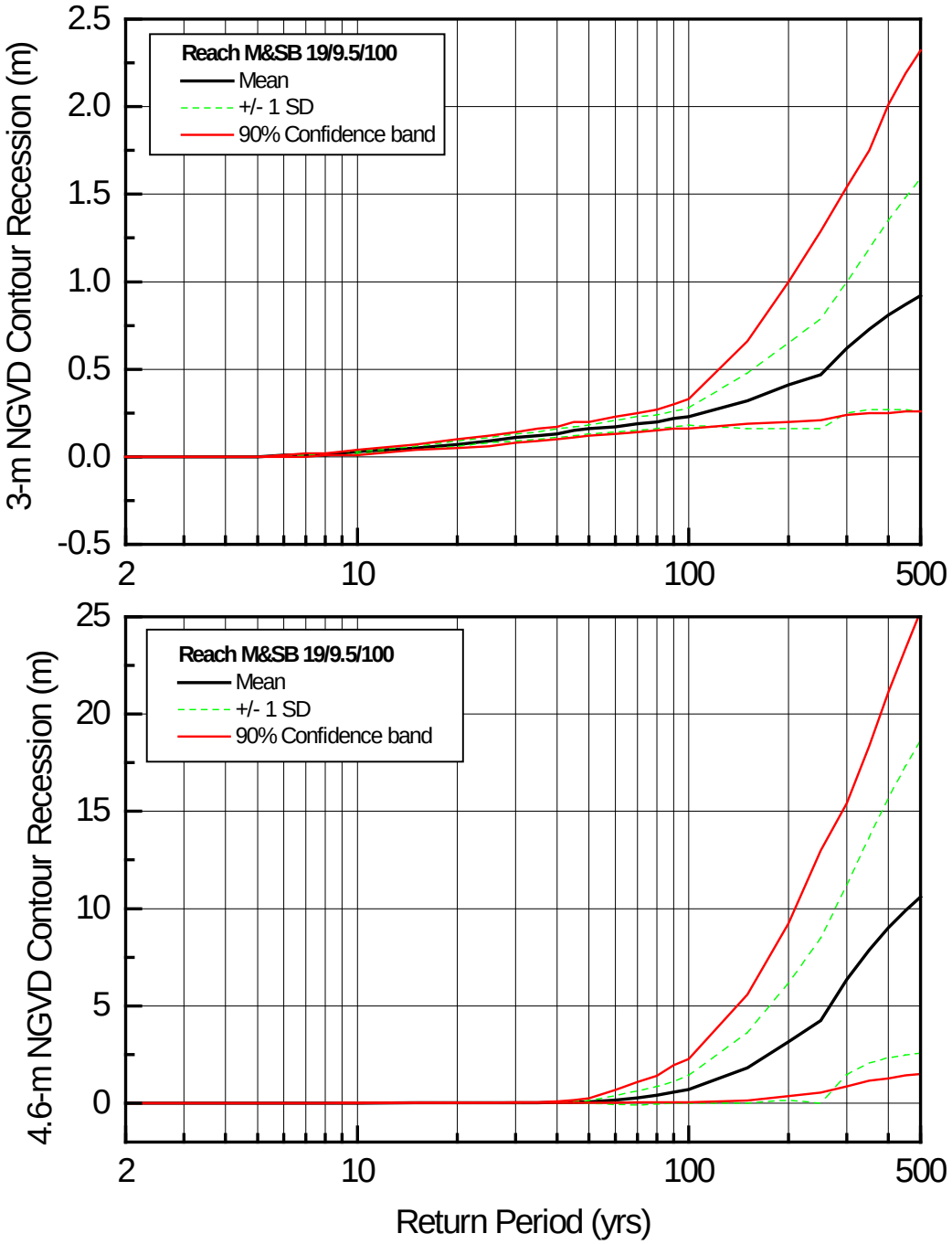

Reach M&SB 19/9.5/100
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
20
15
10
5
0
2
10
100
500
Reach M&SB 19/9.5/100
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
3
2
10
100
500
Return Period (yrs)

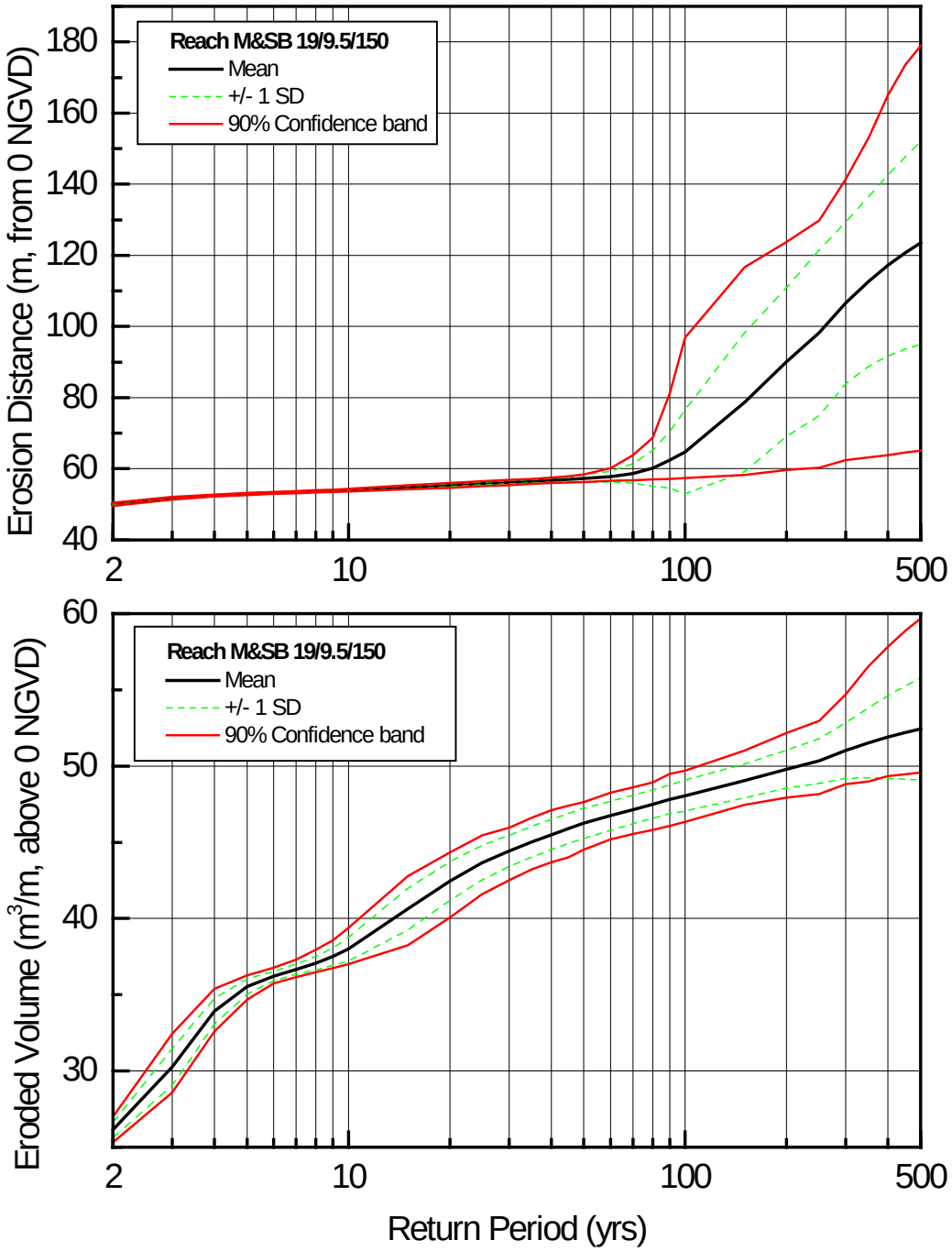

Reach M&SB 19/9.5/100
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
6
5
4
3
2
2
10
100
500
Reach M&SB 19/9.5/100
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5
4
3
2
2
10
100
500
Return Period (yrs)

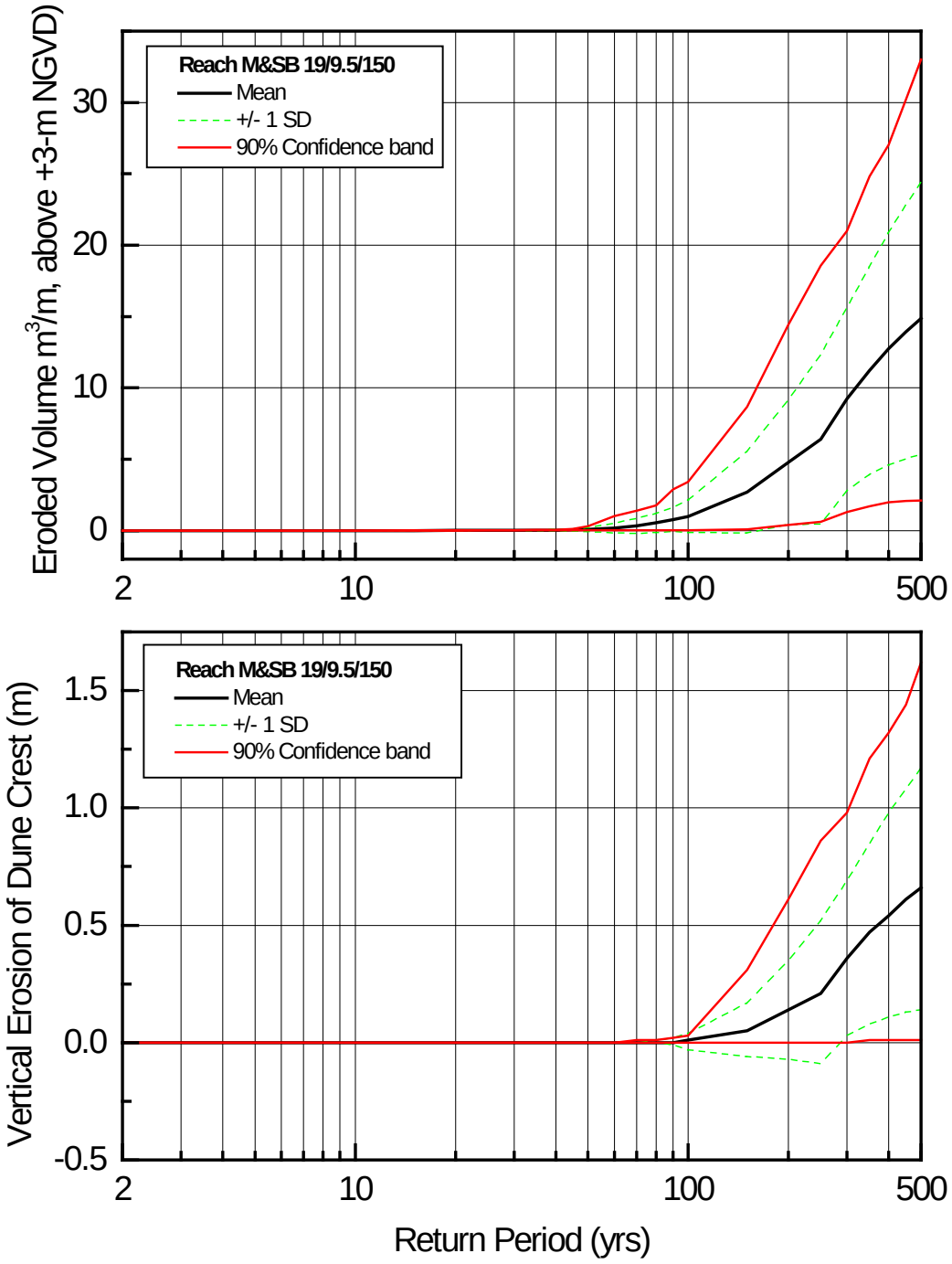

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach M&SB 19/9.5/100
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
6
5
4
3
2
Reach M&SB 19/9.5/100
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

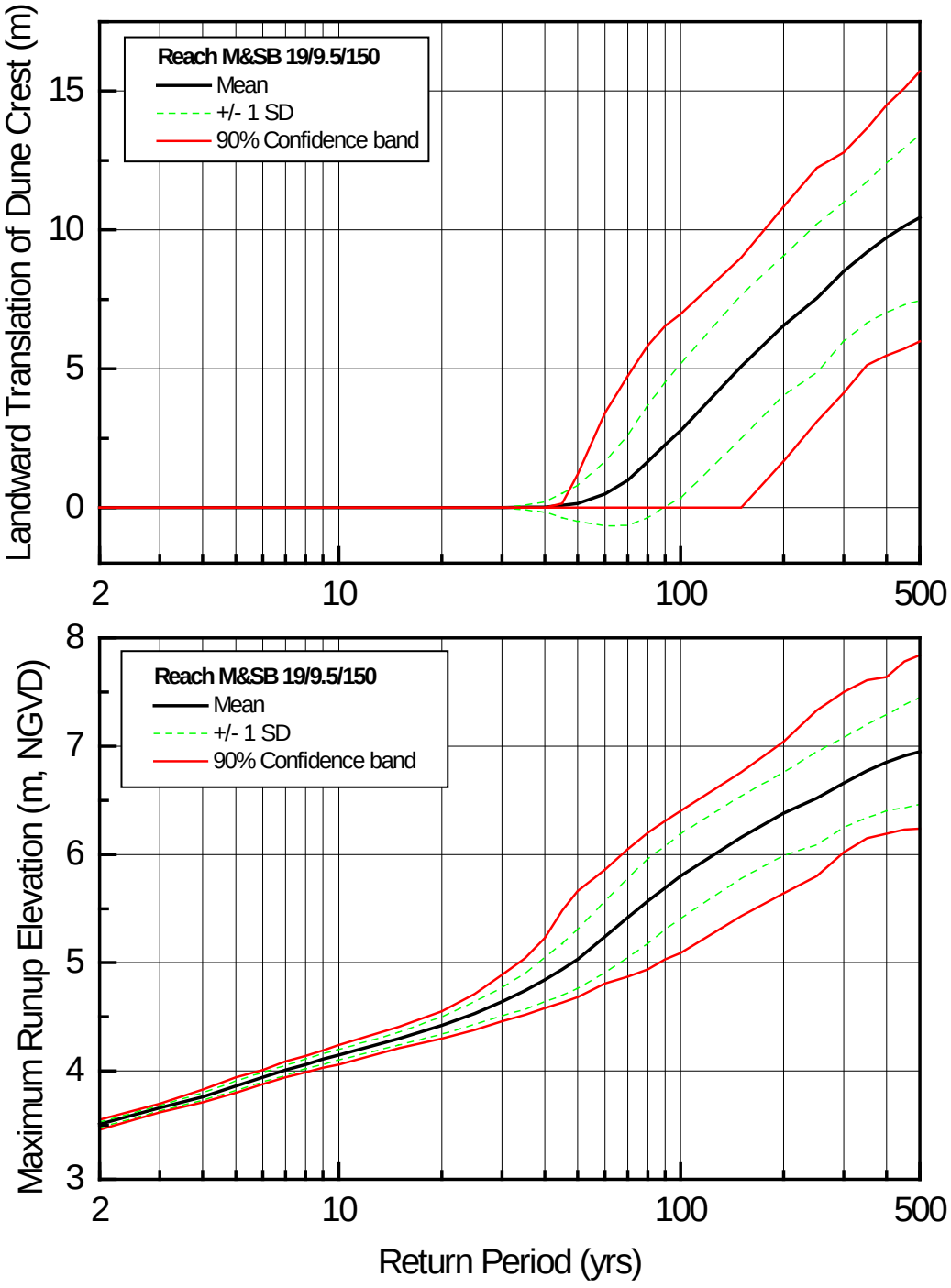

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
0.75
Reach M&SB 19/9.5/100
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
350
300
250
200
150
100
50
Reach M&SB 19/9.5/100
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

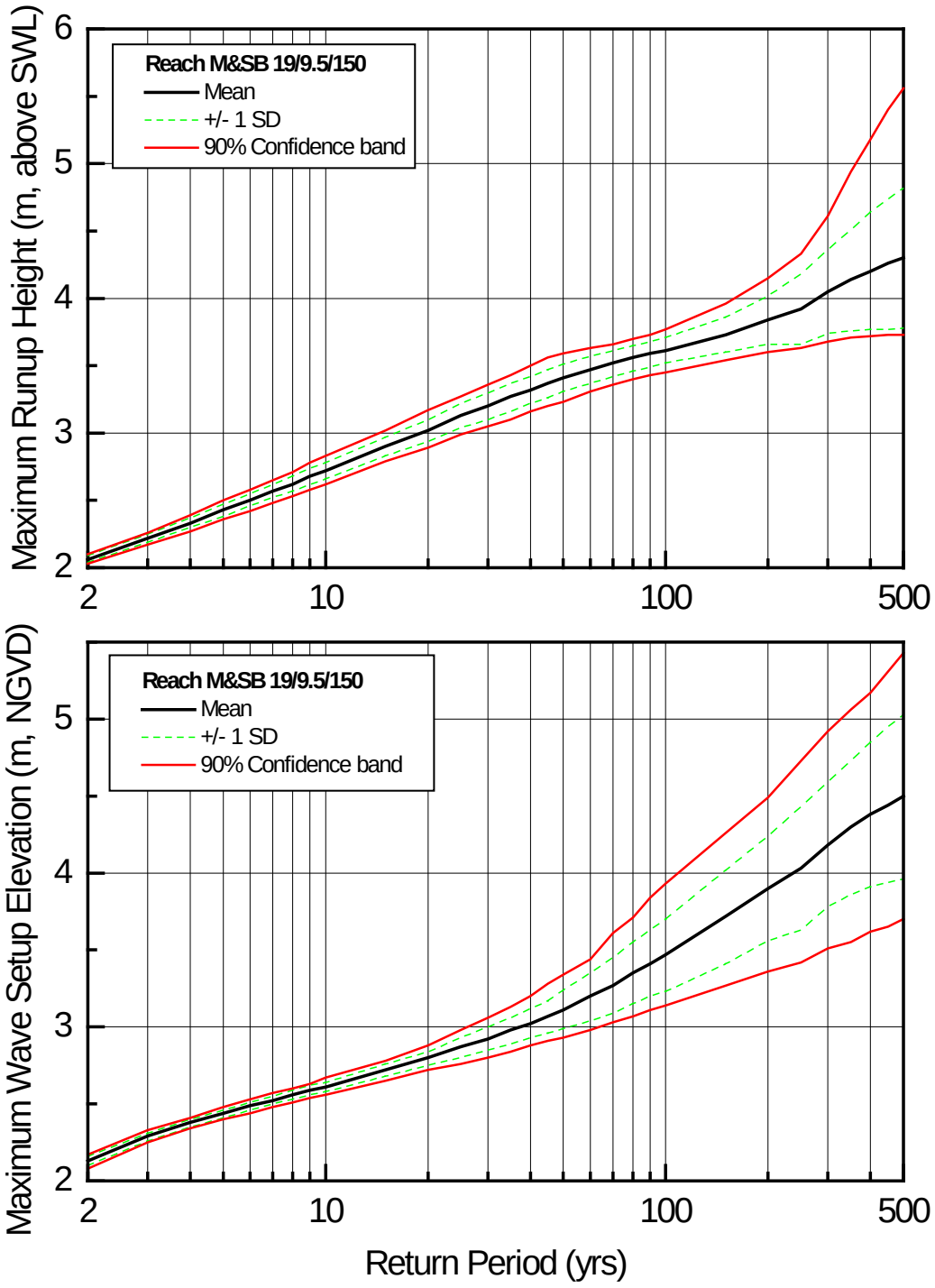

Reach M&SB 19/9.5/100
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
15
10
5
2
10
100
500
Reach M&SB 19/9.5/100
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20
16
12
8
2
10
100
500
Return Period (yrs)

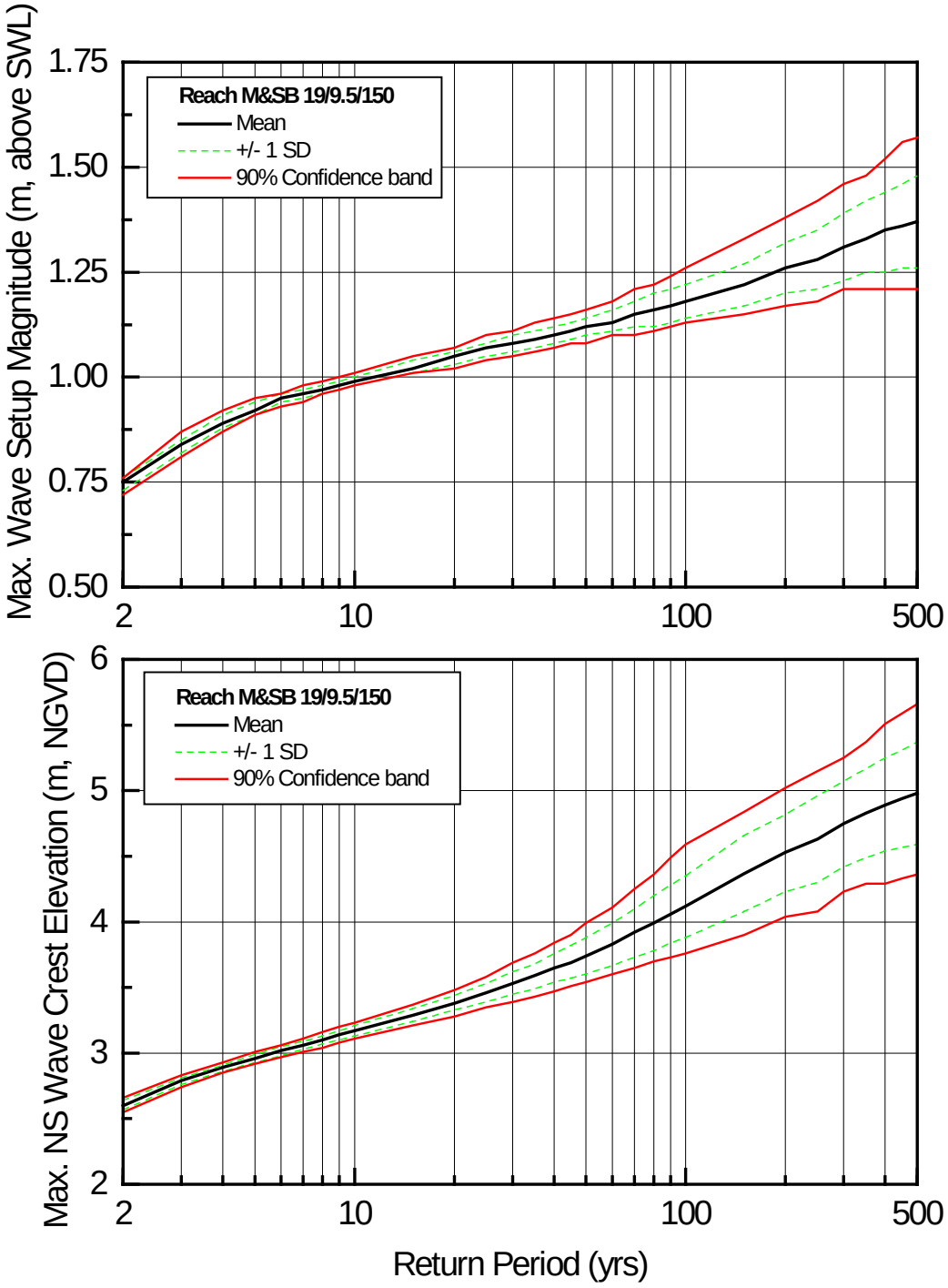

Reach M&SB 19/9.5/100
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
2
10
100
500
Reach M&SB 19/9.5/100
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

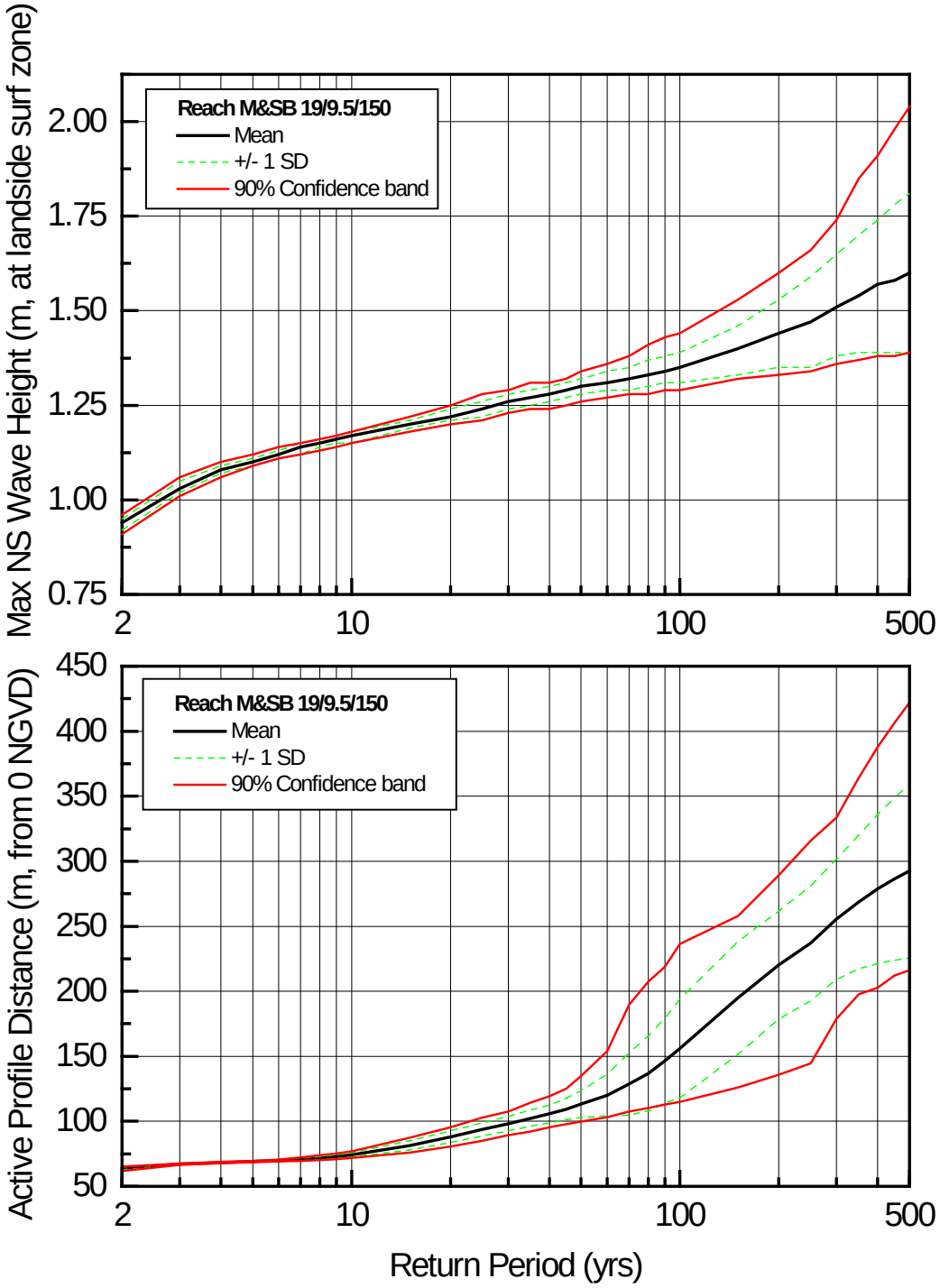

Reach M&SB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
160
140
120
100
80
60
40
2
10
100
500
Reach M&SB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
2
10
100
500
Return Period (yrs)

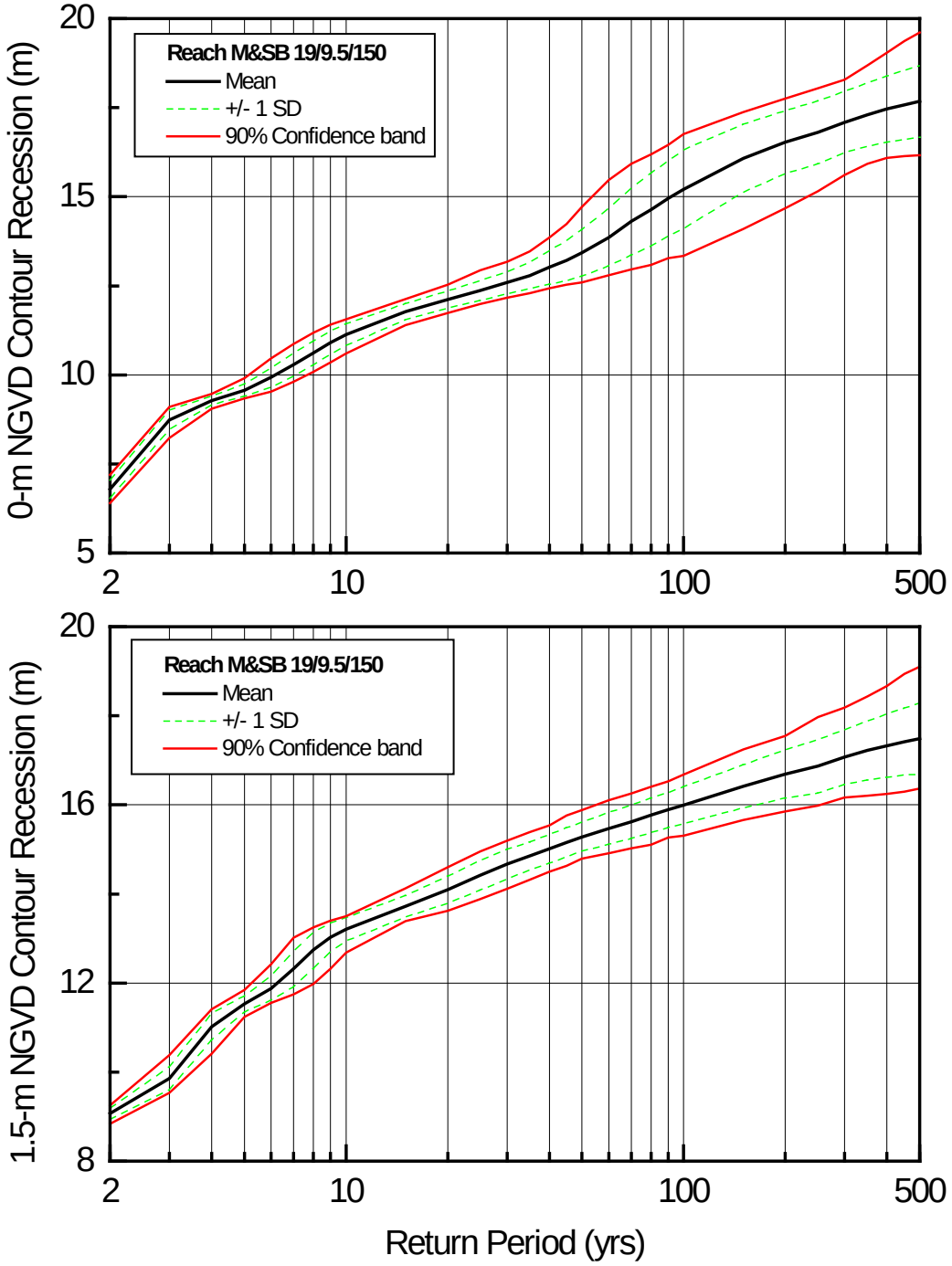

Reach M&SB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
30
20
10
0
2
10
100
500
Reach M&SB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
1.5
1.0
0.5
0.0
-0.5
2
10
100
500
Return Period (yrs)

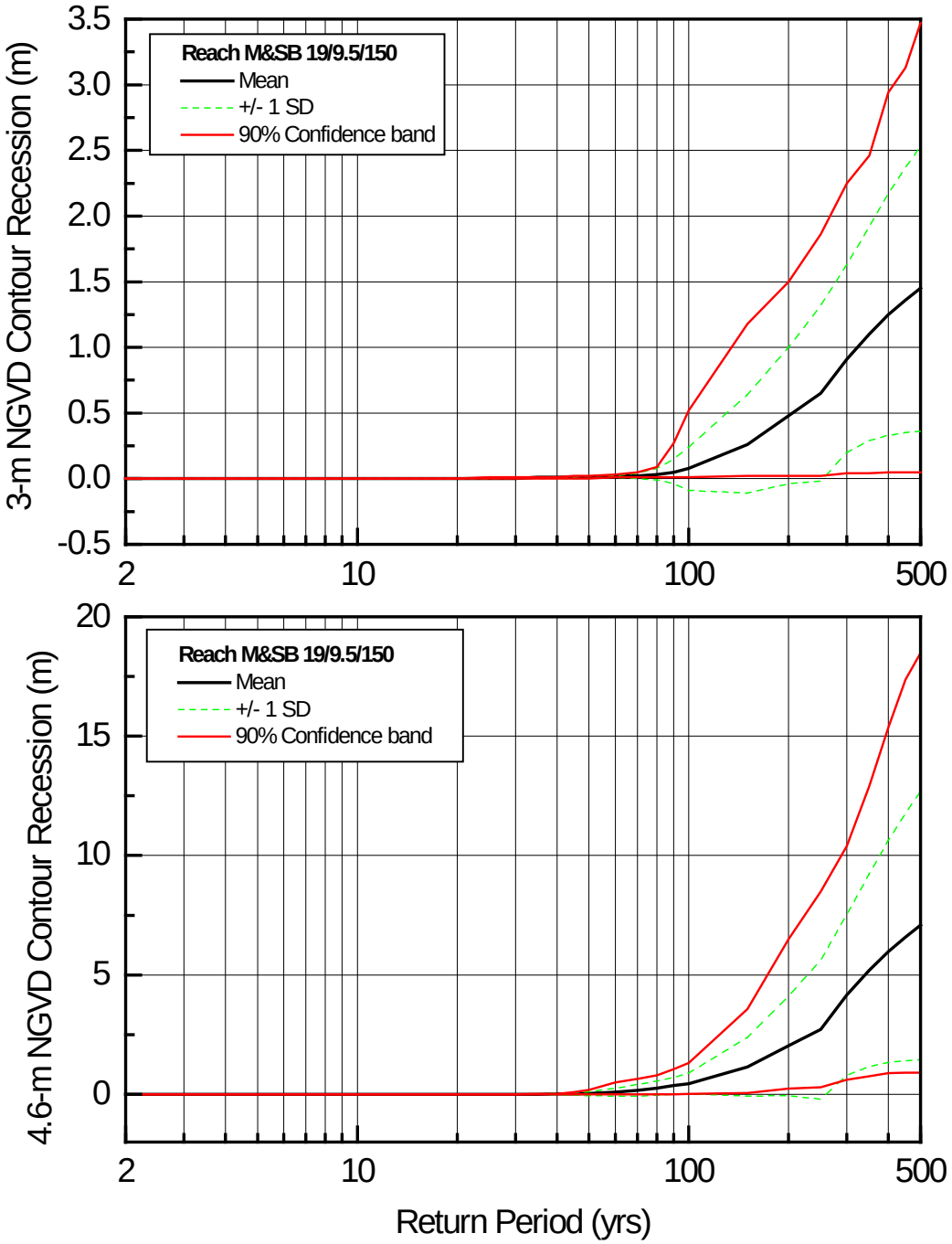

Reach M&SB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
5
10
15
2
10
100
500
Reach M&SB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
8
2
10
100
500
Return Period (yrs)

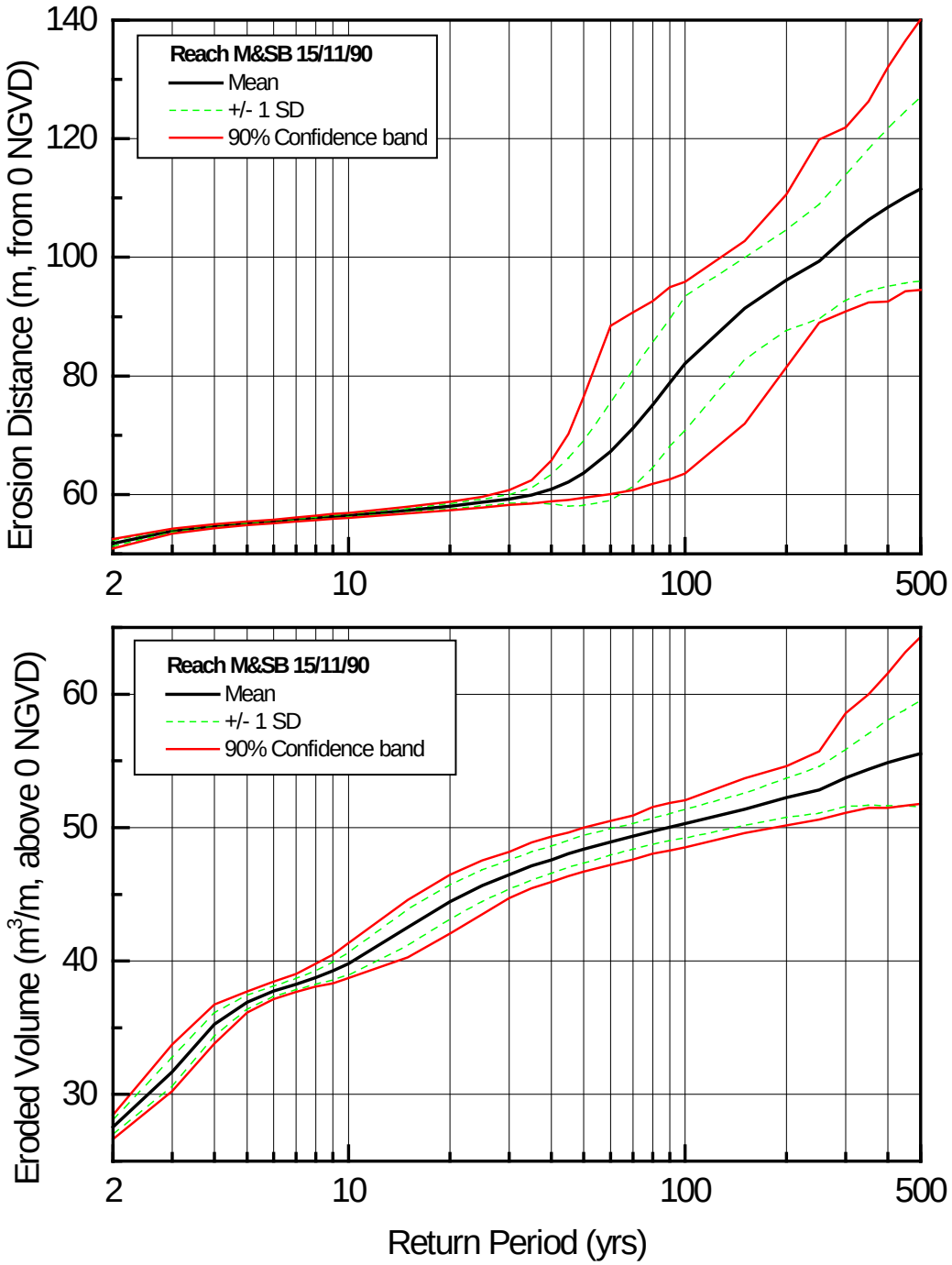

Reach M&SB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
6
5
4
3
2
2
10
100
500
Reach M&SB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5
4
3
2
2
10
100
500
Return Period (yrs)

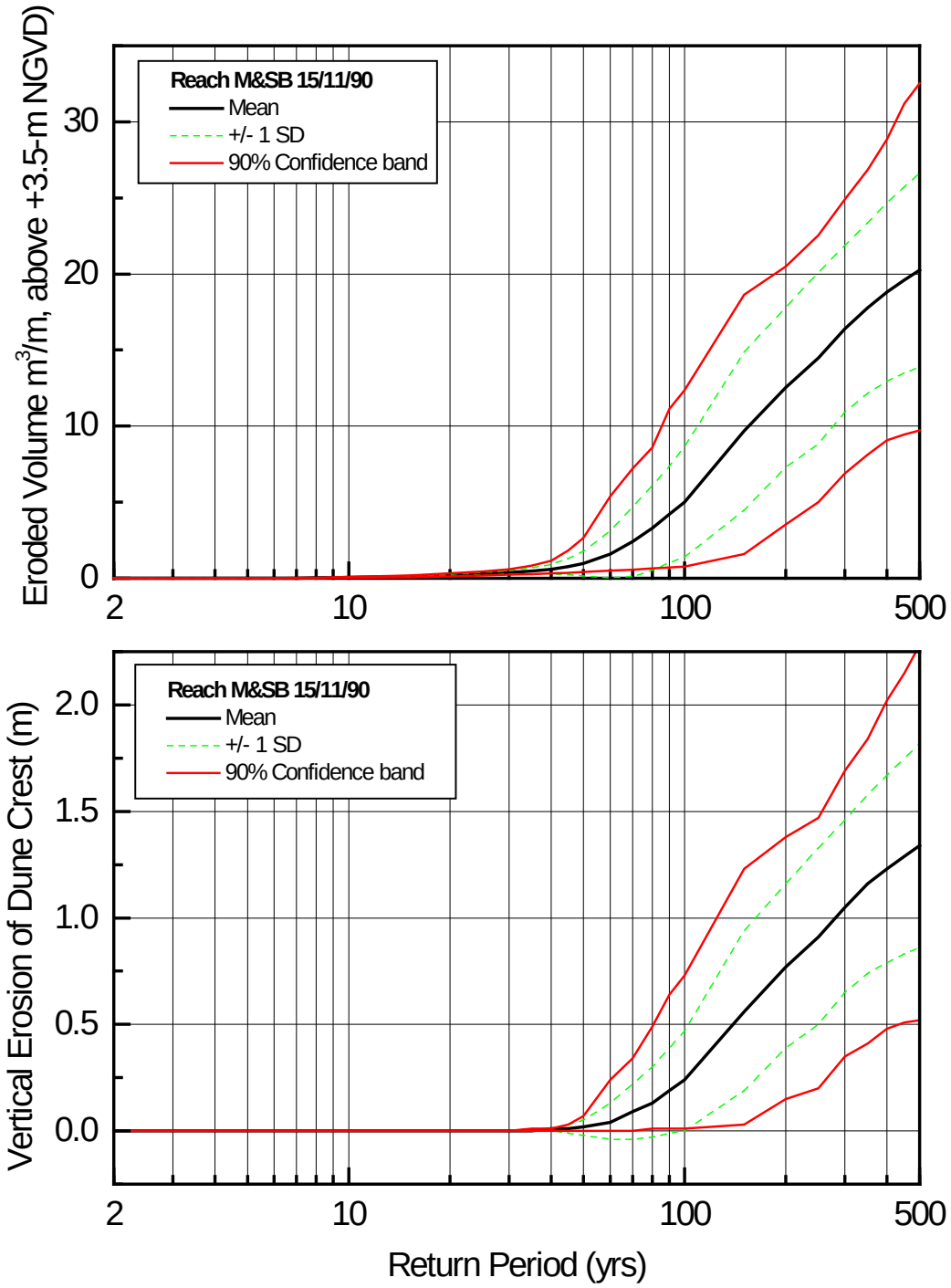

Max. Wave Setup Magnitude (m, above SWL)
1.75
1.50
1.25
1.00
0.75
0.50
Reach M&SB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
6
5
4
3
2
Reach M&SB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

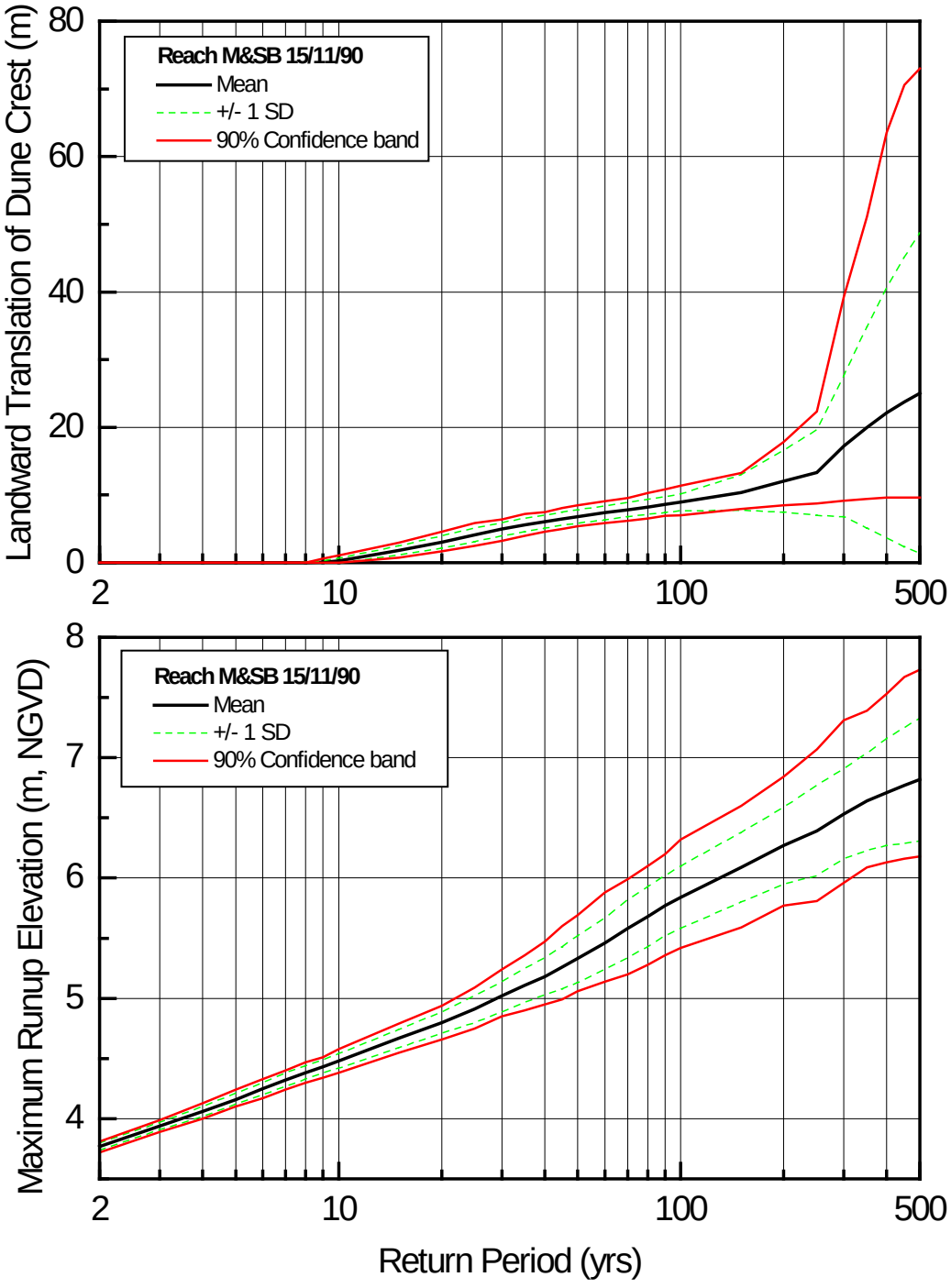

Reach M&SB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
0.75
2
10
100
500
Reach M&SB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
Active Profile Distance (m, from 0 NGVD)
450
400
350
300
250
200
150
100
50
2
10
100
500
Return Period (yrs)

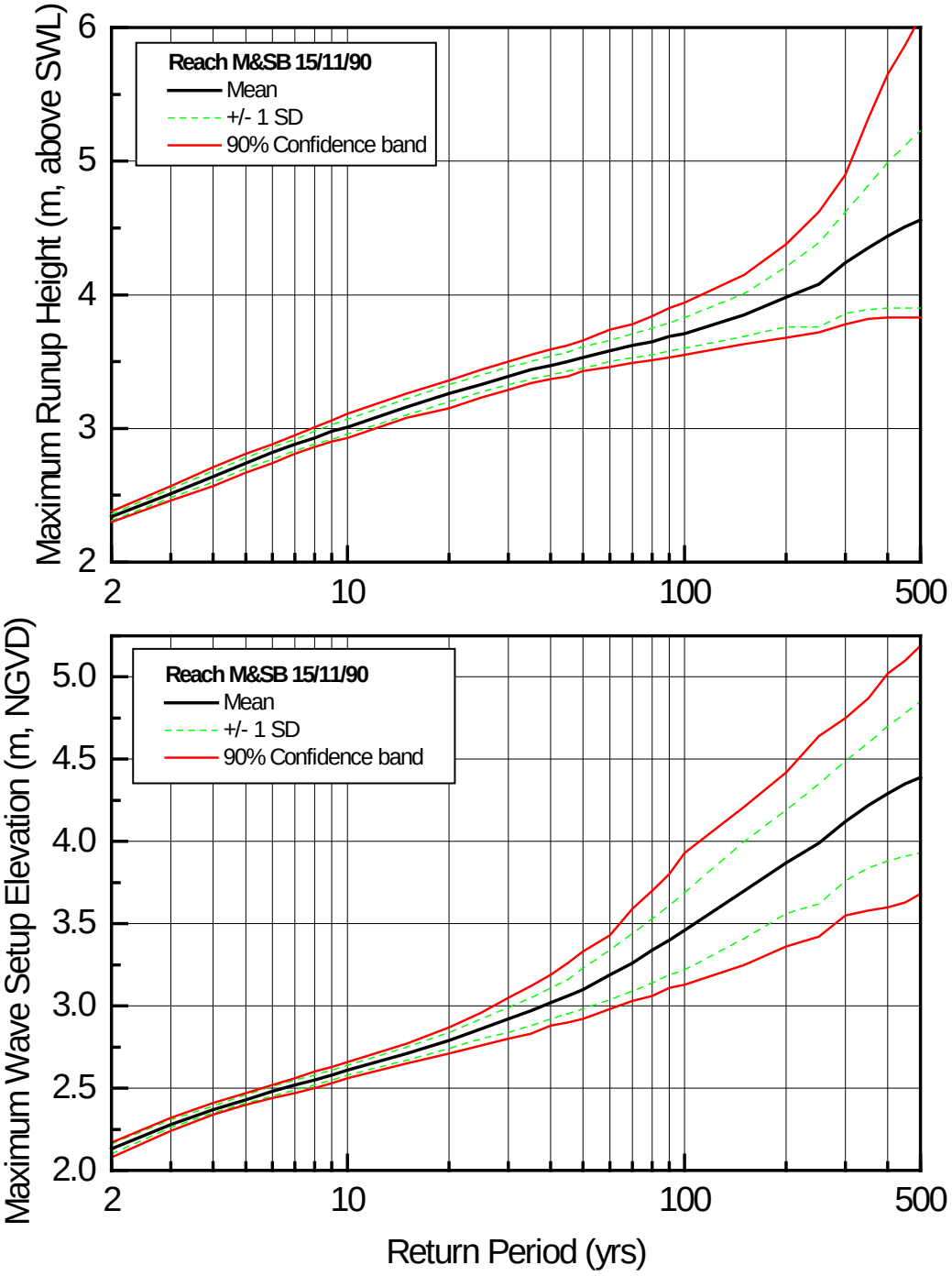

Reach M&SB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
15
10
5
2
10
100
500
Reach M&SB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20
16
12
8
2
10
100
500
Return Period (yrs)

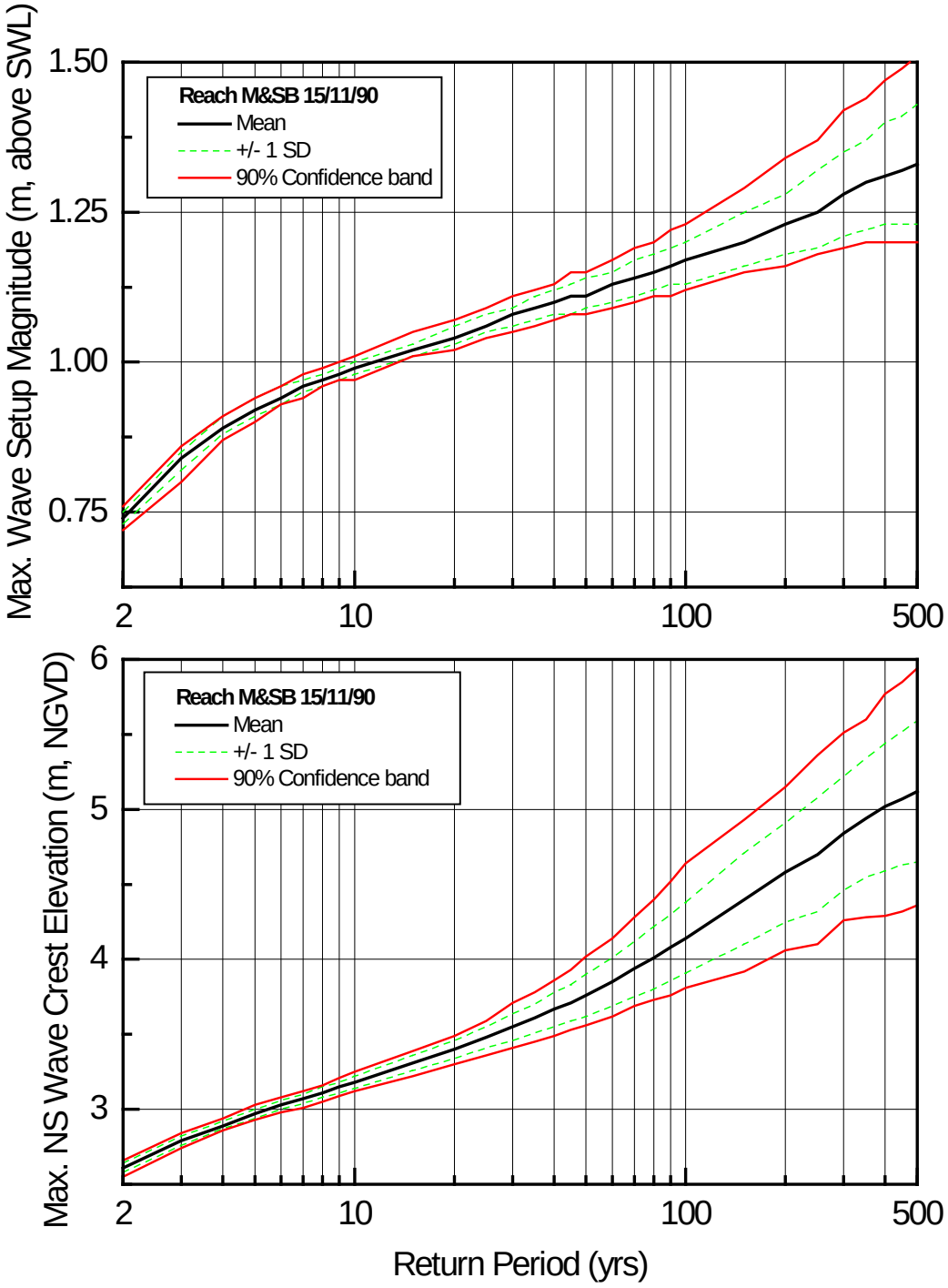

Reach M&SB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
2
10
100
500
Reach M&SB 19/9.5/150
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
20
15
10
5
0
2
10
100
500
Return Period (yrs)

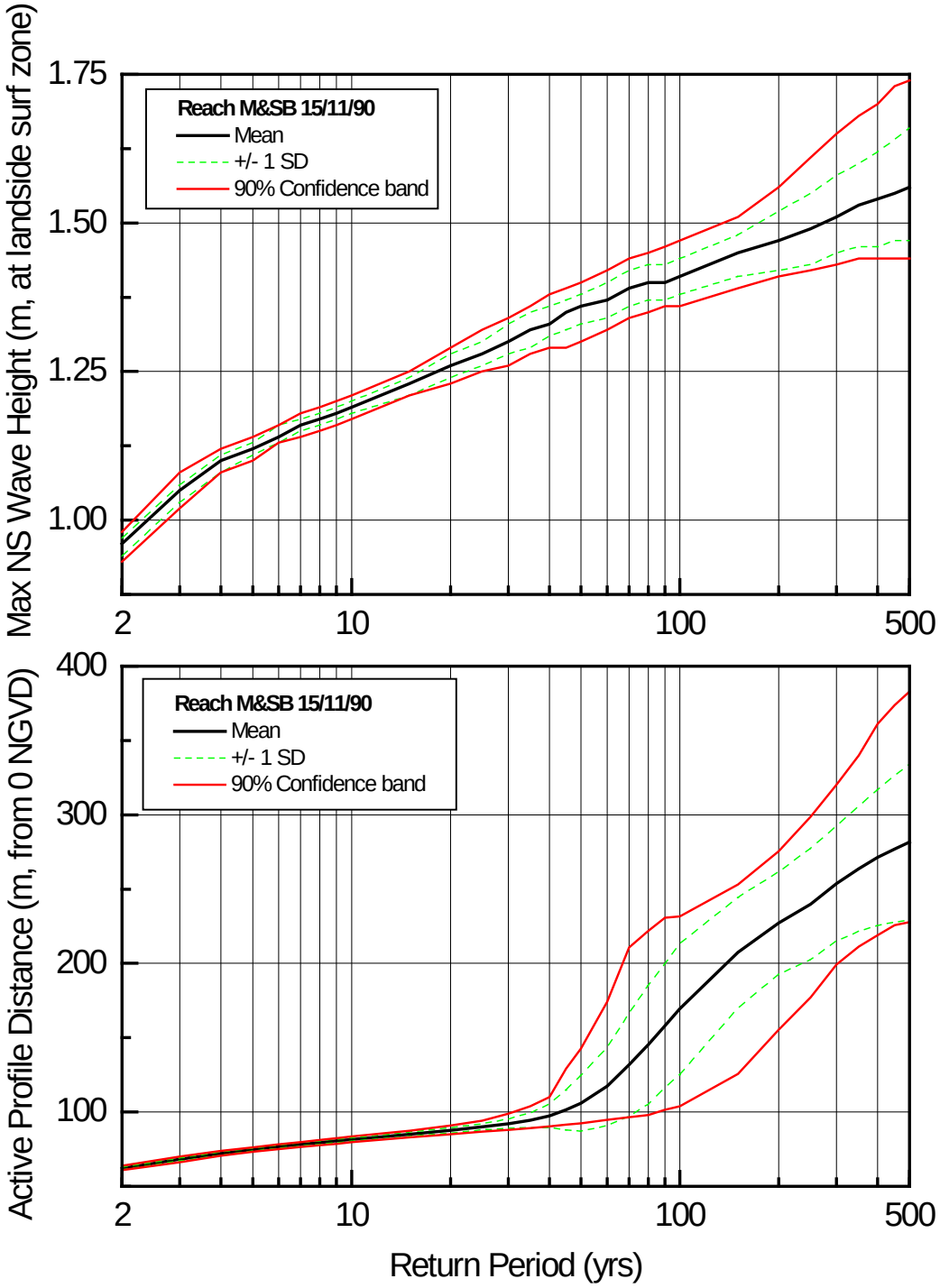

Reach M&SB 15/11/90
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
140
120
100
80
60
2
10
100
500
Reach M&SB 15/11/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
2
10
100
500
Return Period (yrs)

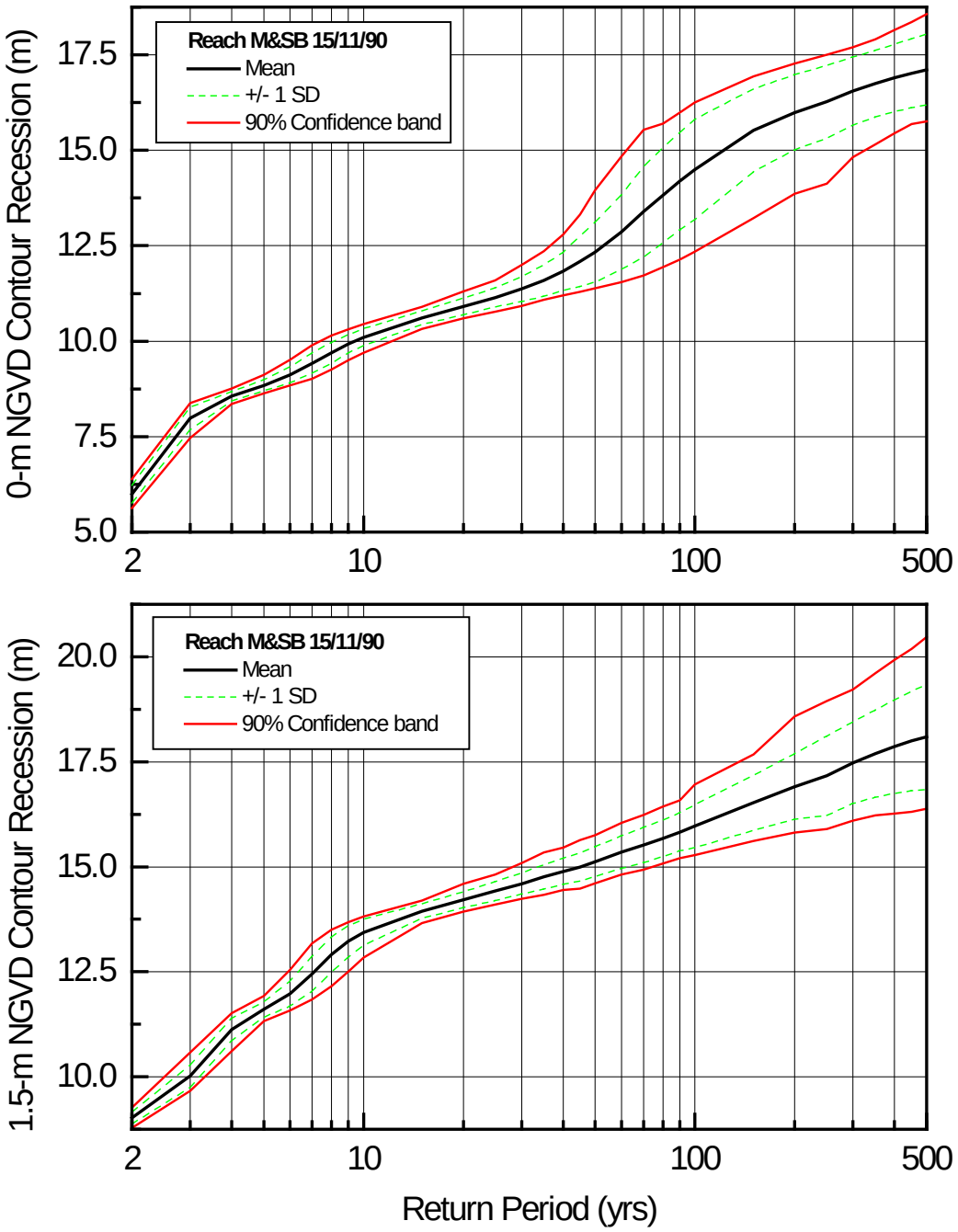

Reach M&SB 15/11/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3.5-m NGVD)
0
10
20
30
2
10
100
500
Reach M&SB 15/11/90
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2
10
100
500
Return Period (yrs)

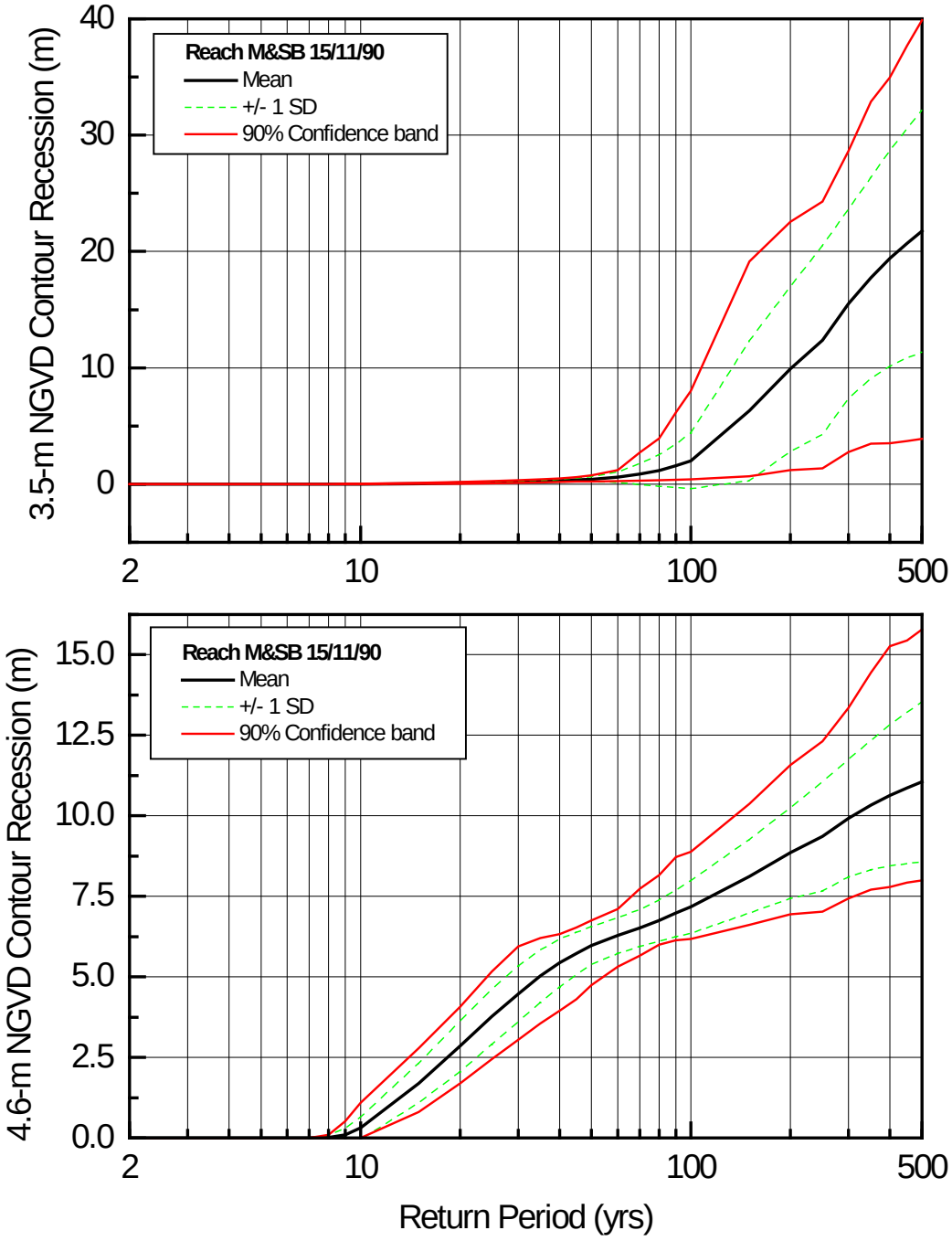

Reach M&SB 15/11/90
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
20
40
60
80
2
10
100
500
Reach M&SB 15/11/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
4
5
6
7
8
2
10
100
500
Return Period (yrs)

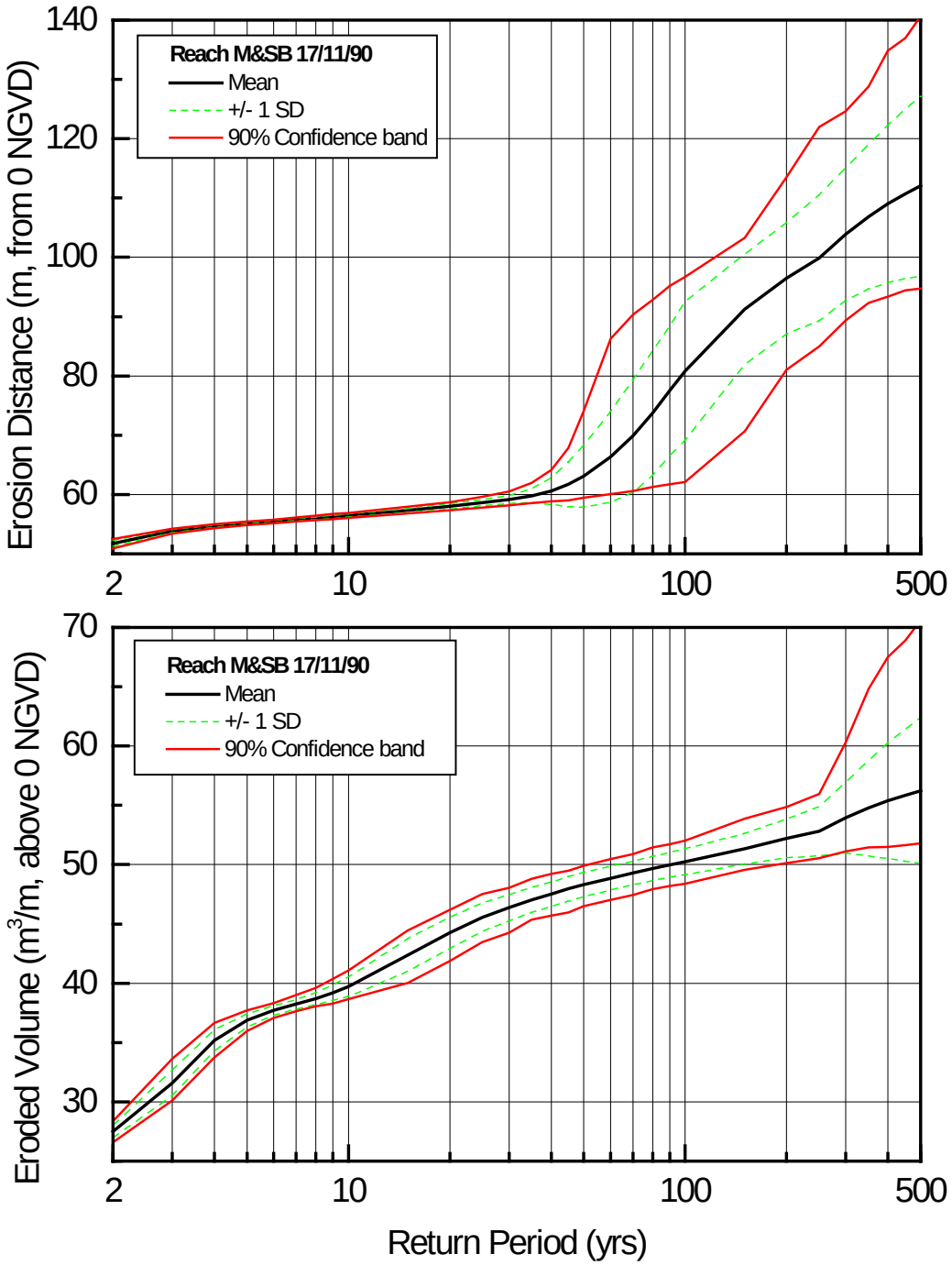

Reach M&SB 15/11/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
6
5
4
3
2
2
10
100
500
Reach M&SB 15/11/90
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Return Period (yrs)

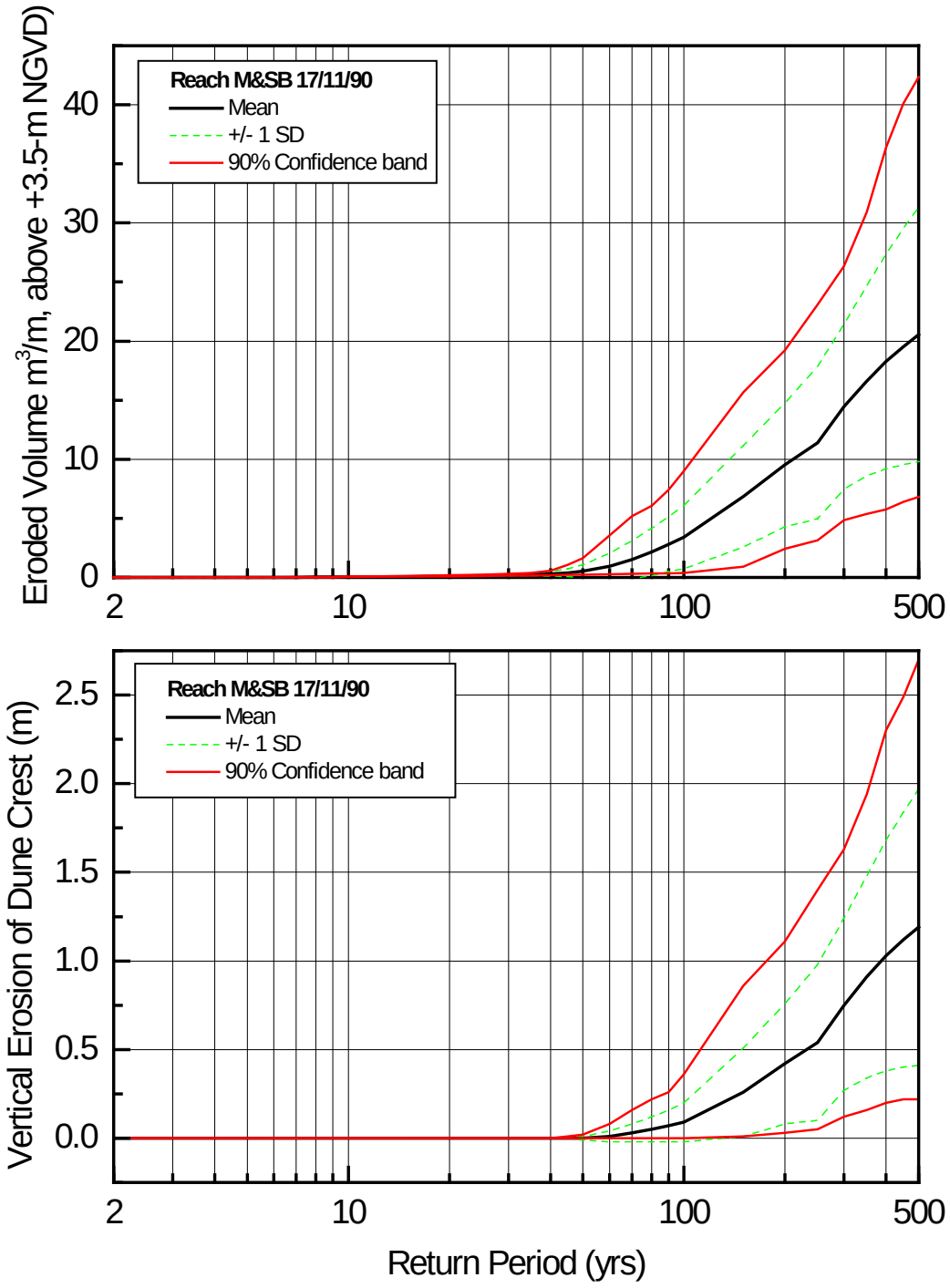

Max. Wave Setup Magnitude (m, above SWL)
1.50
1.25
1.00
0.75
Reach M&SB 15/11/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
6
5
4
3
Reach M&SB 15/11/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

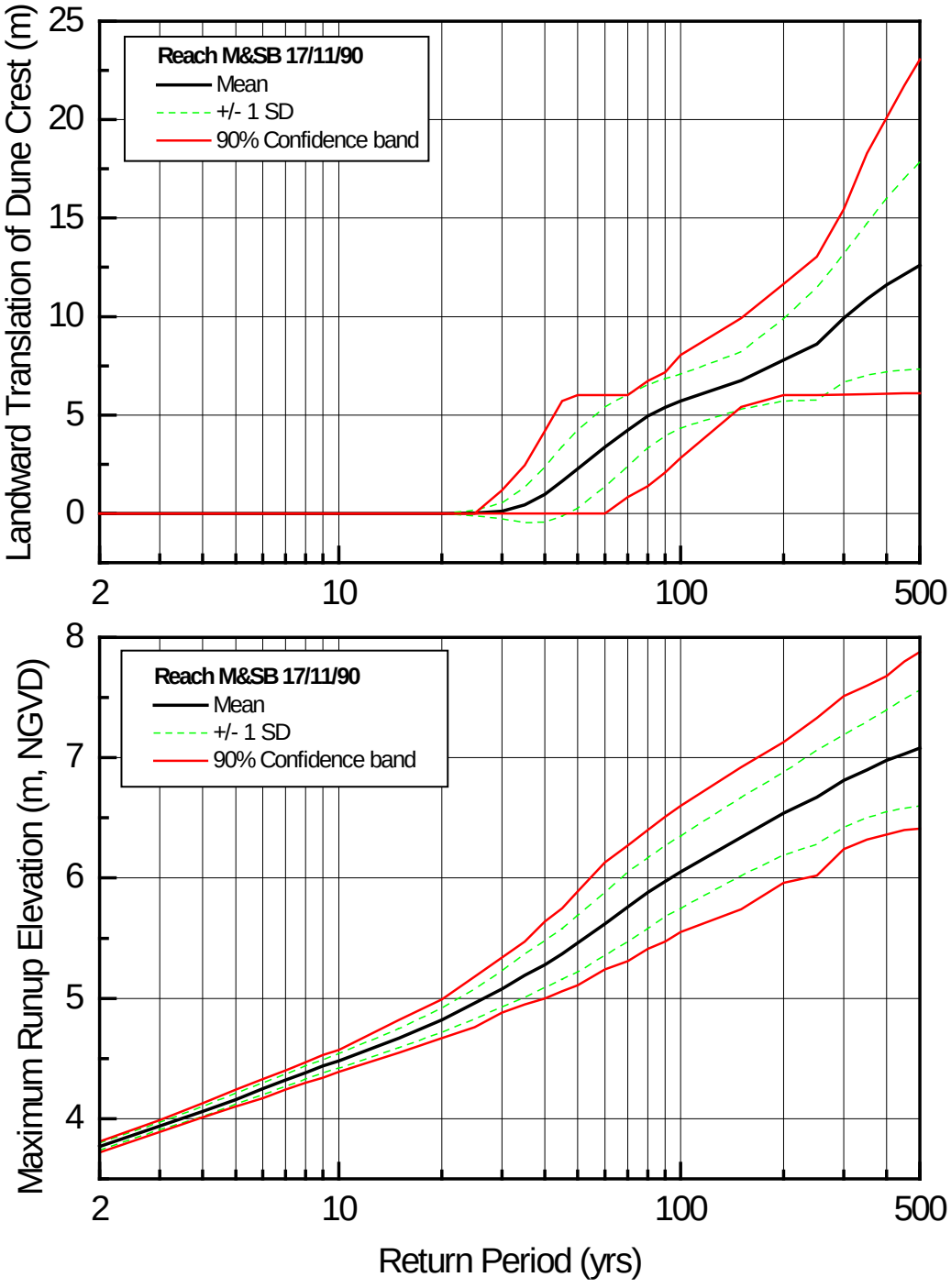

Max NS Wave Height (m, at landside surf zone)
1.75
1.50
1.25
1.00
Reach M&SB 15/11/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
300
200
100
Reach M&SB 15/11/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

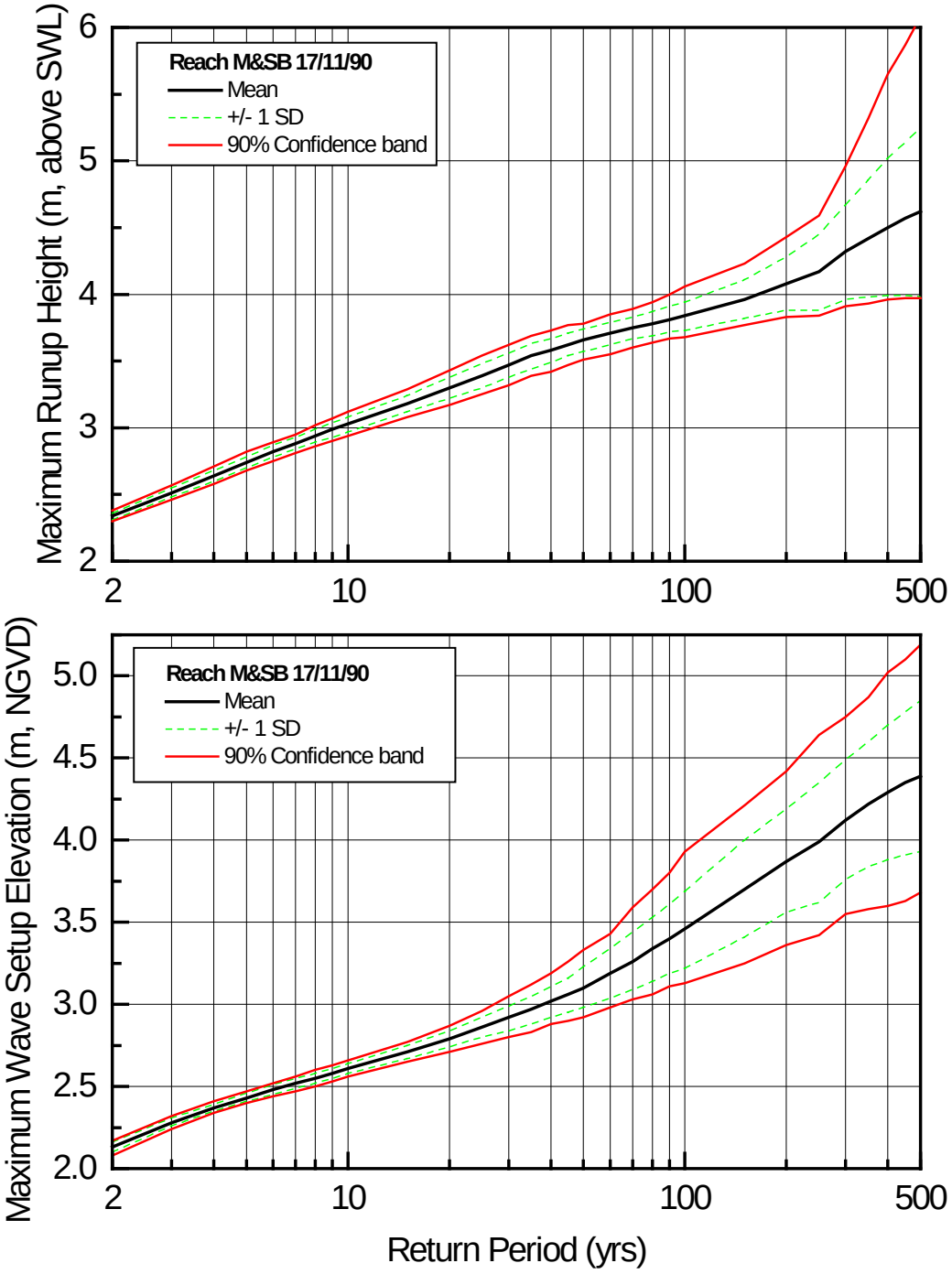

Reach M&SB 15/11/90
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
17.5
15.0
12.5
10.0
7.5
5.0
2
10
100
500
Reach M&SB 15/11/90
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20.0
17.5
15.0
12.5
10.0
2
10
100
500
Return Period (yrs)

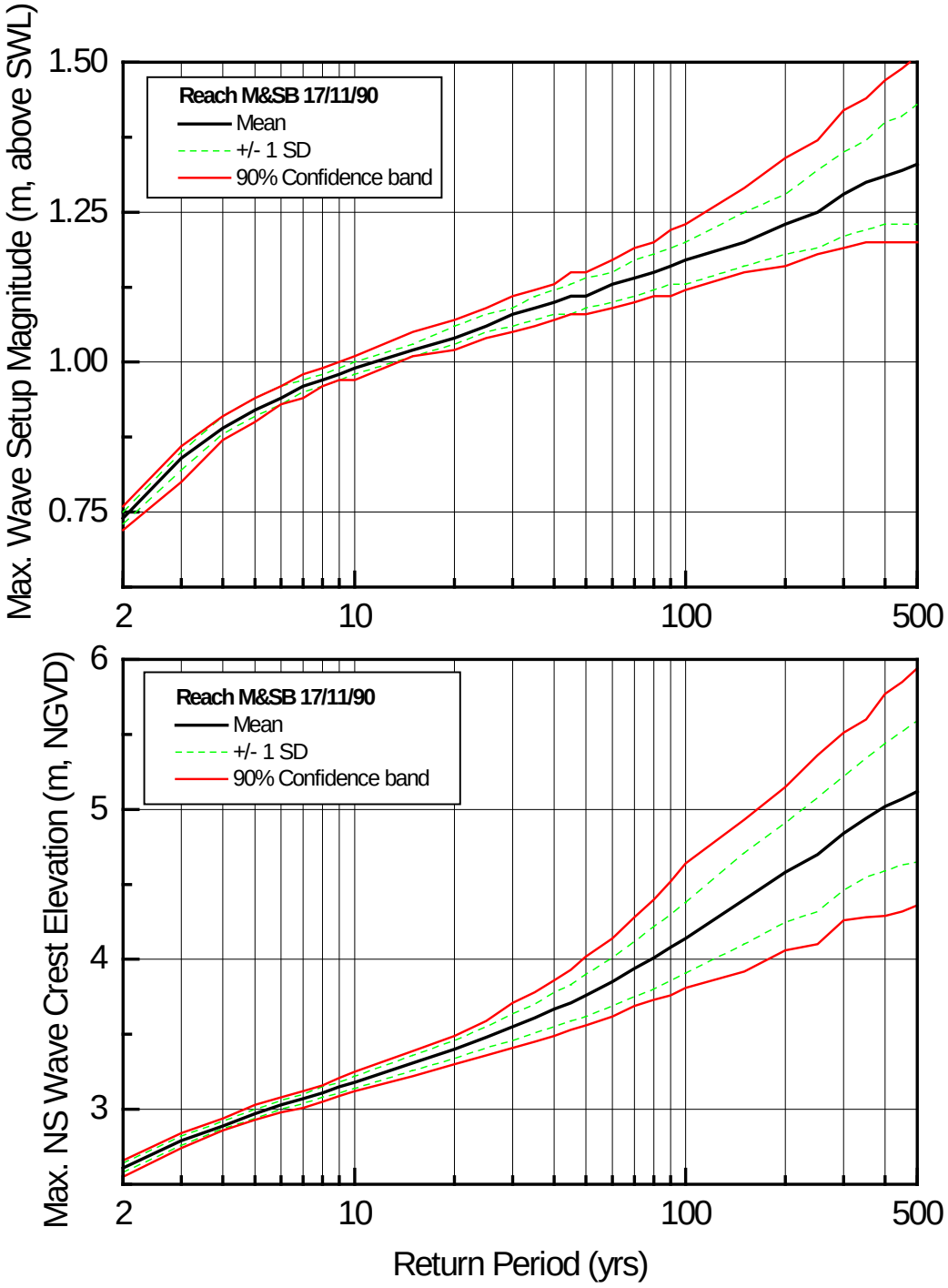

Reach M&SB 15/11/90
Mean
+/- 1 SD
90% Confidence band
3.5-m NGVD Contour Recession (m)
40
30
20
10
0
2
10
100
500
Reach M&SB 15/11/90
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Return Period (yrs)

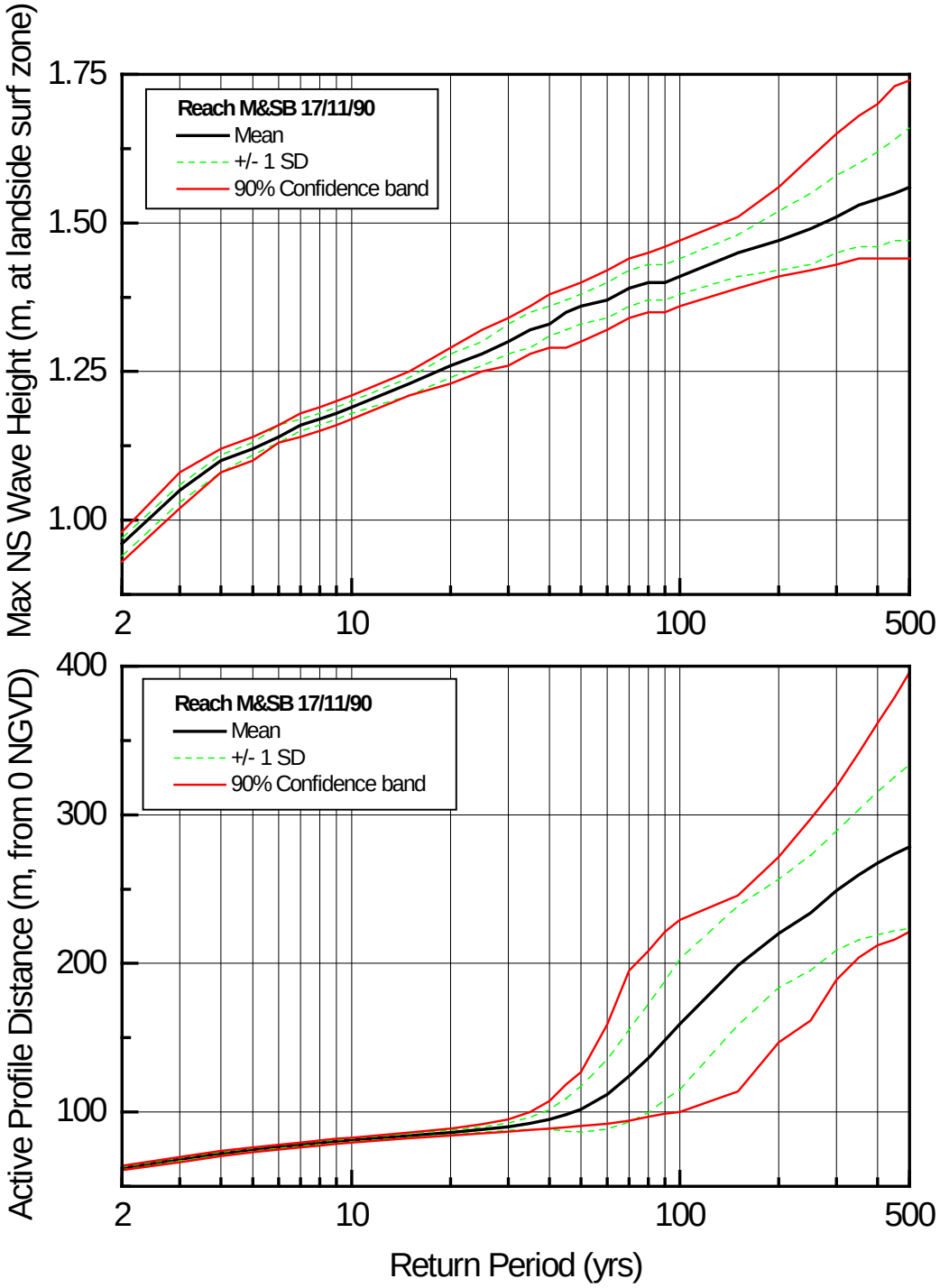

Reach M&SB 17/11/90
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
140
120
100
80
60
2
10
100
500
Reach M&SB 17/11/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
70
60
50
40
30
2
10
100
500
Return Period (yrs)

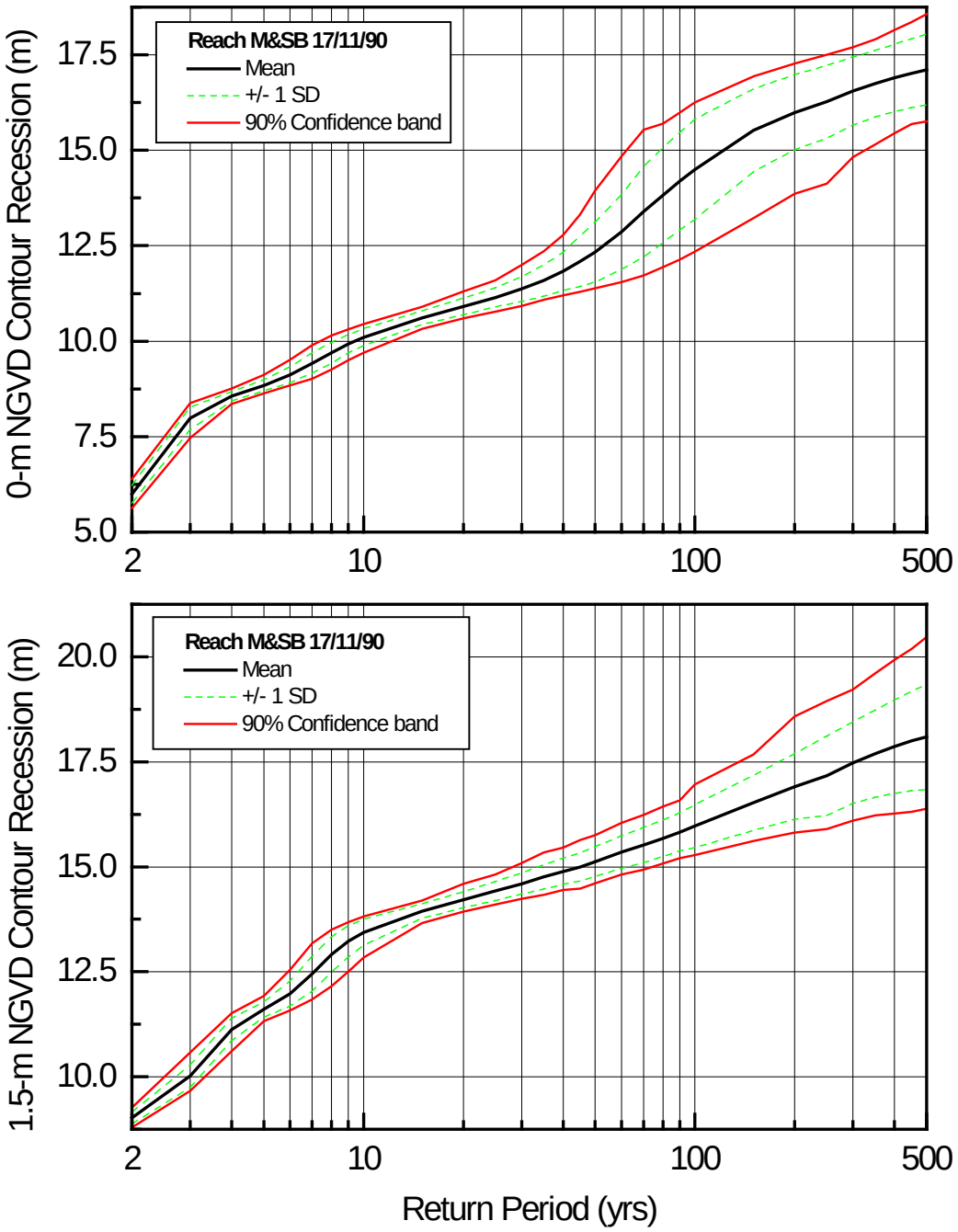

Reach M&SB 17/11/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3.5-m NGVD)
0
10
20
30
40
2
10
100
500
Reach M&SB 17/11/90
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2.5
2
10
100
500
Return Period (yrs)

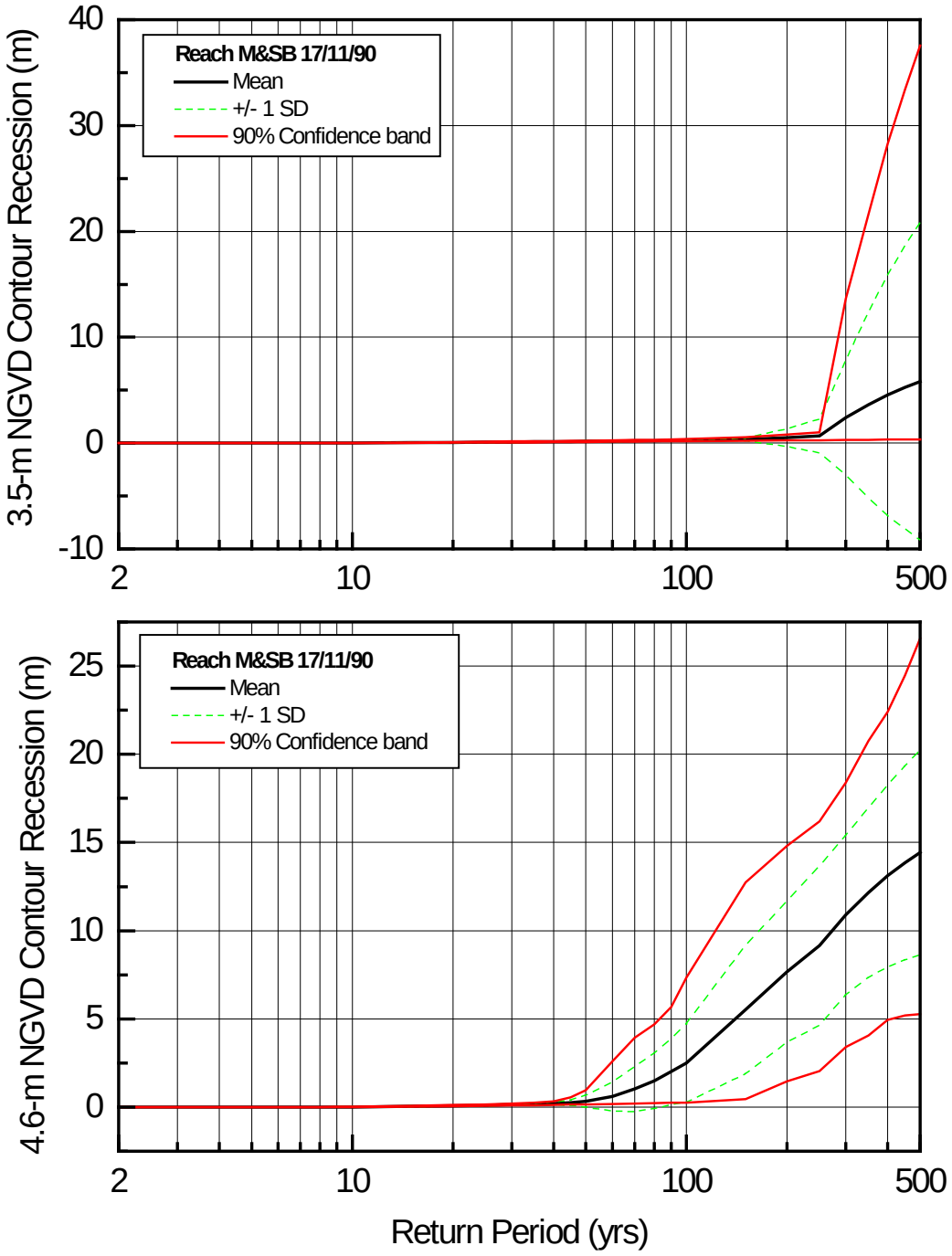

Reach M&SB 17/11/90
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
5
10
15
20
25
2
10
100
500
Reach M&SB 17/11/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
4
5
6
7
8
2
10
100
500
Return Period (yrs)

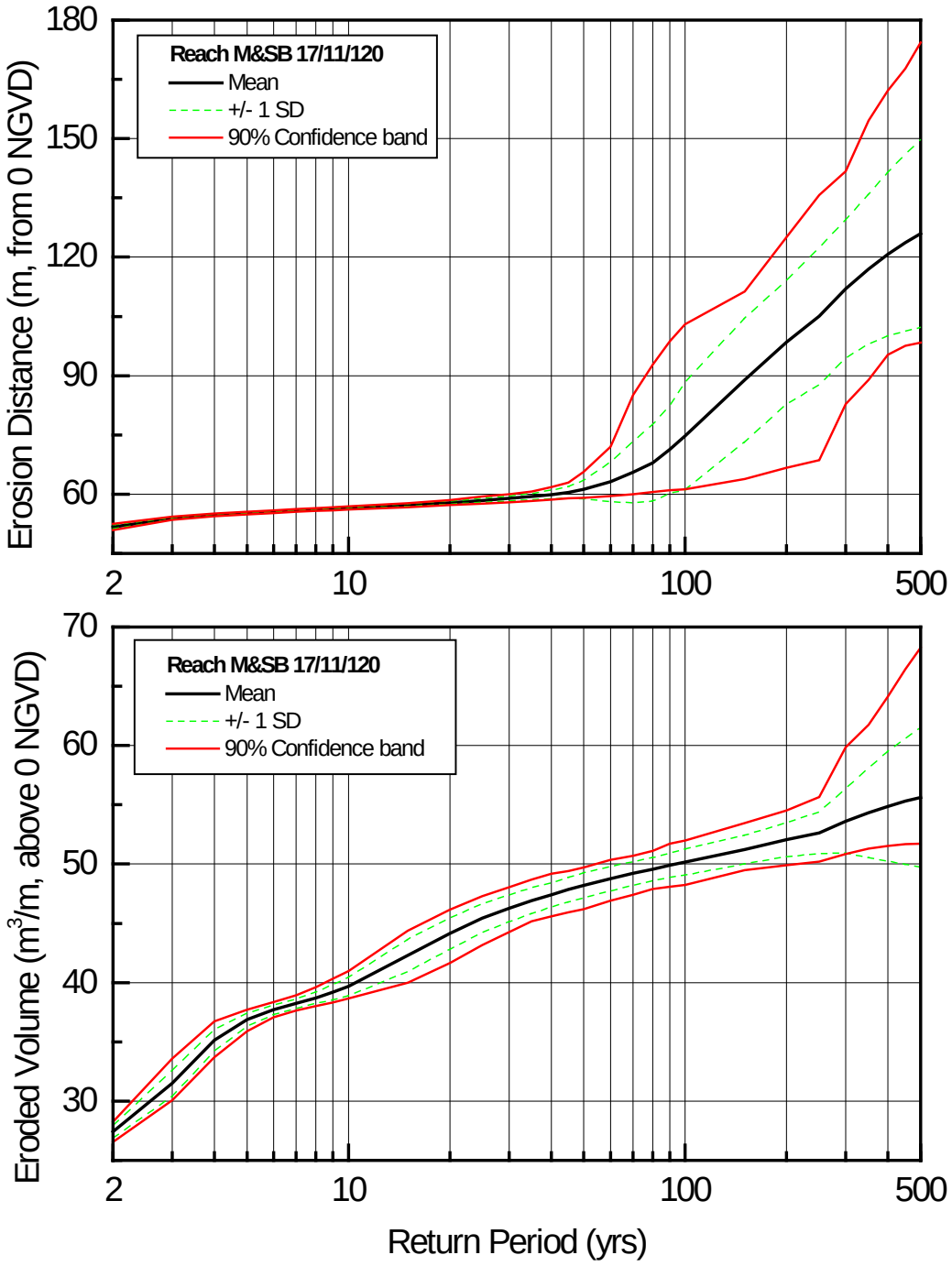

Reach M&SB 17/11/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
6
5
4
3
2
2
10
100
500
Reach M&SB 17/11/90
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Return Period (yrs)

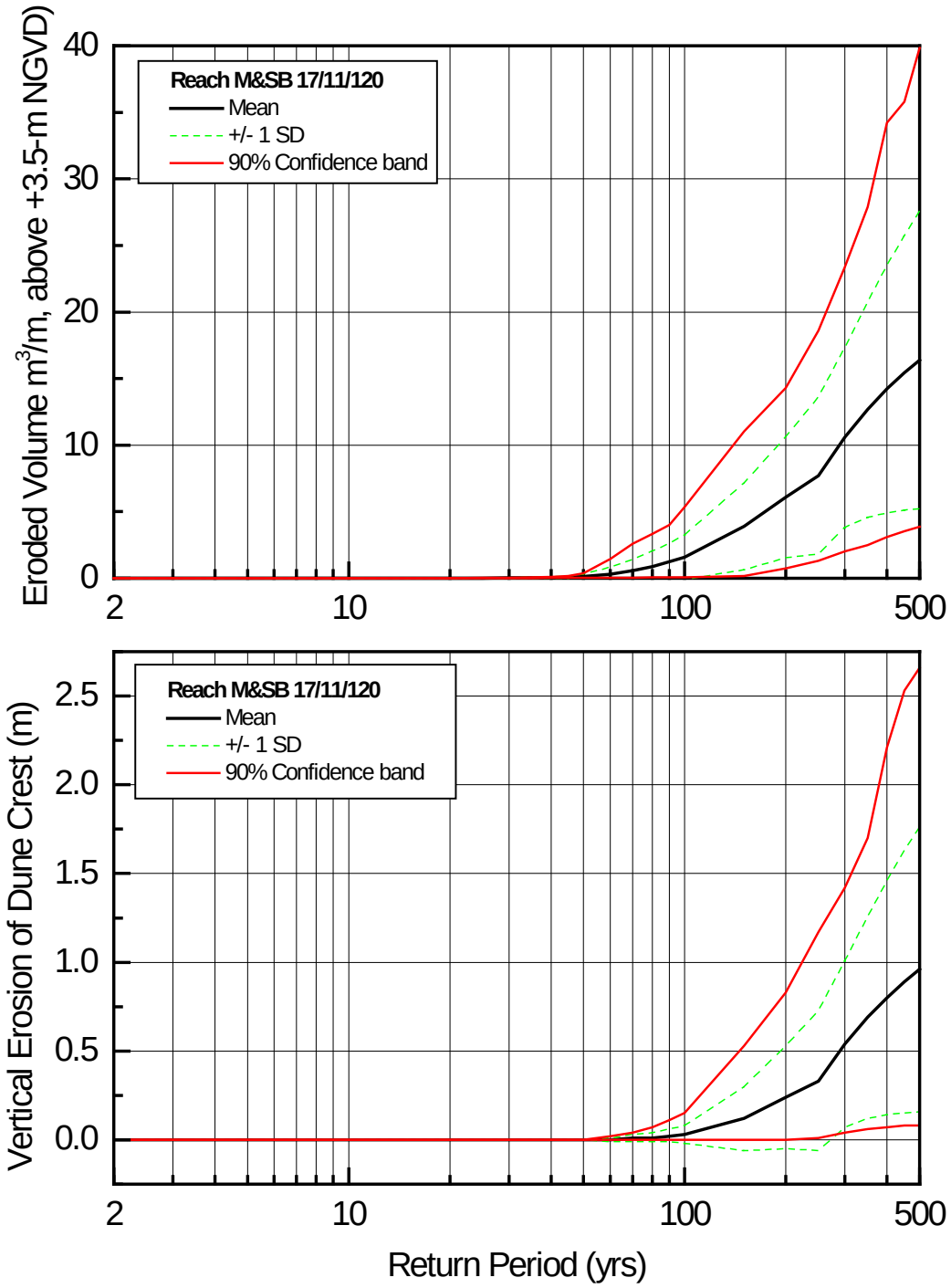

Max. Wave Setup Magnitude (m, above SWL)
1.50
1.25
1.00
0.75
Reach M&SB 17/11/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
6
5
4
3
Reach M&SB 17/11/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

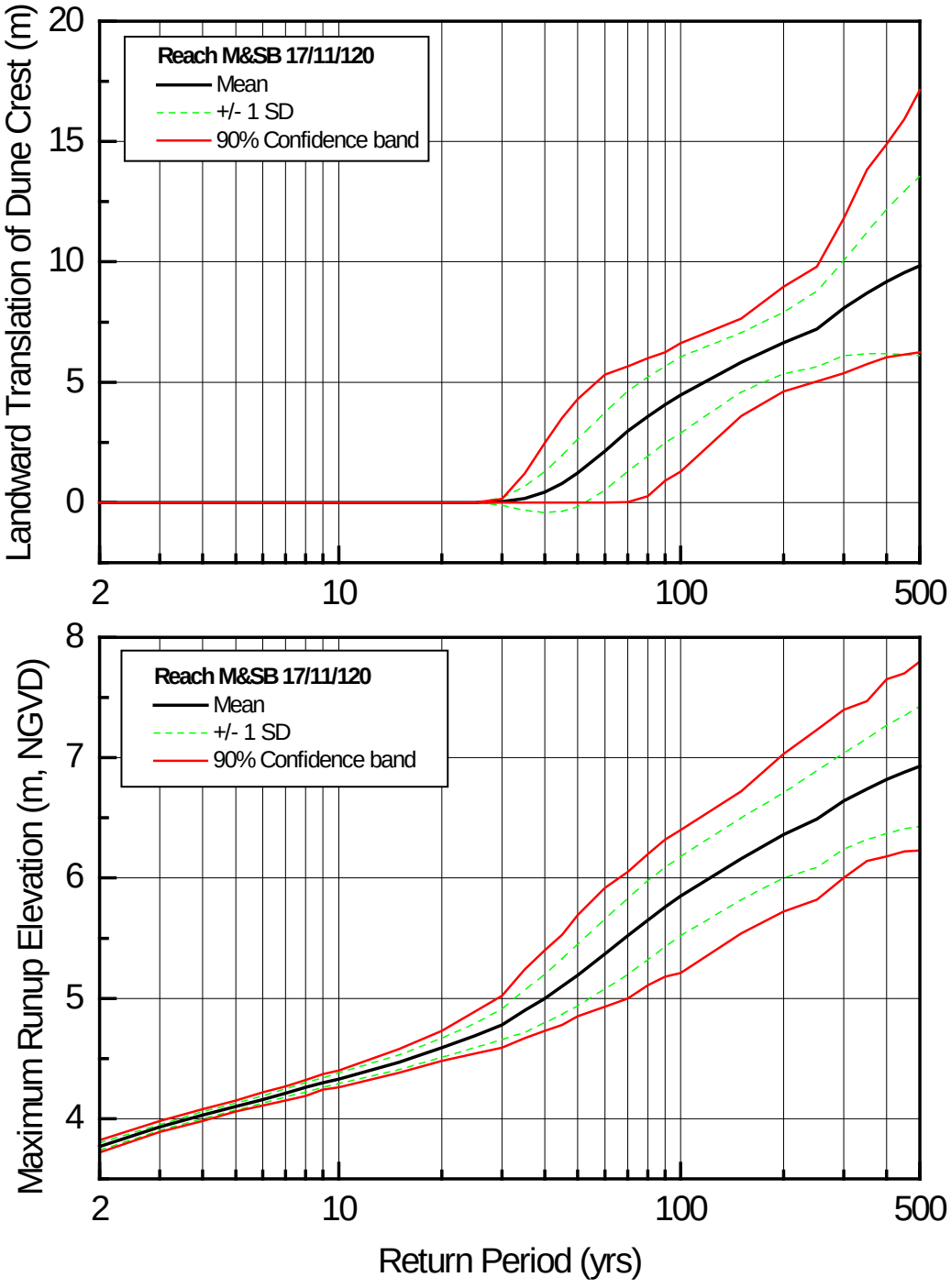

Max NS Wave Height (m, at landside surf zone)
1.75
1.50
1.25
1.00
Reach M&SB 17/11/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
300
200
100
Reach M&SB 17/11/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

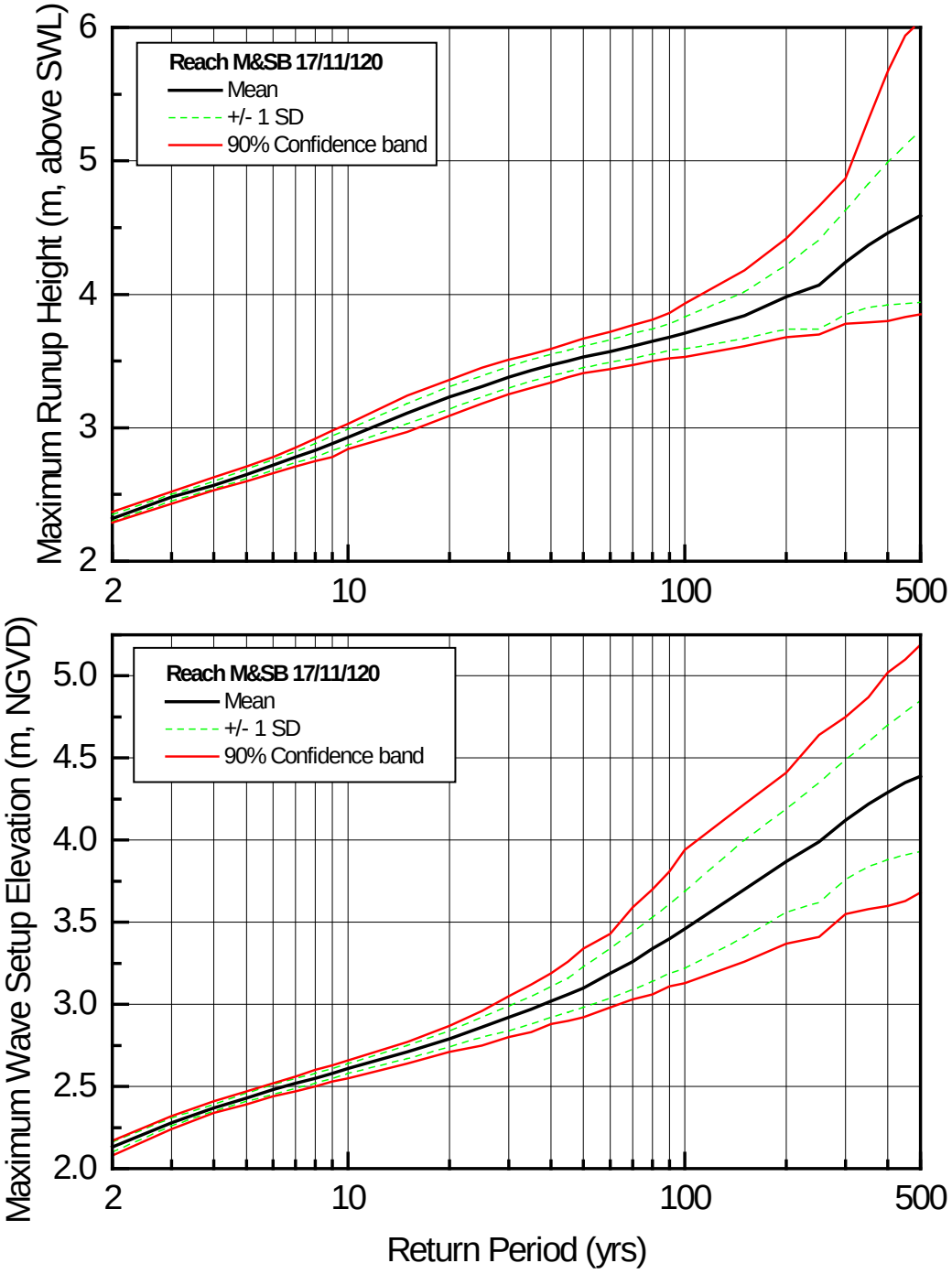

Reach M&SB 17/11/90
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
17.5
15.0
12.5
10.0
7.5
5.0
2
10
100
500
Reach M&SB 17/11/90
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20.0
17.5
15.0
12.5
10.0
2
10
100
500
Return Period (yrs)

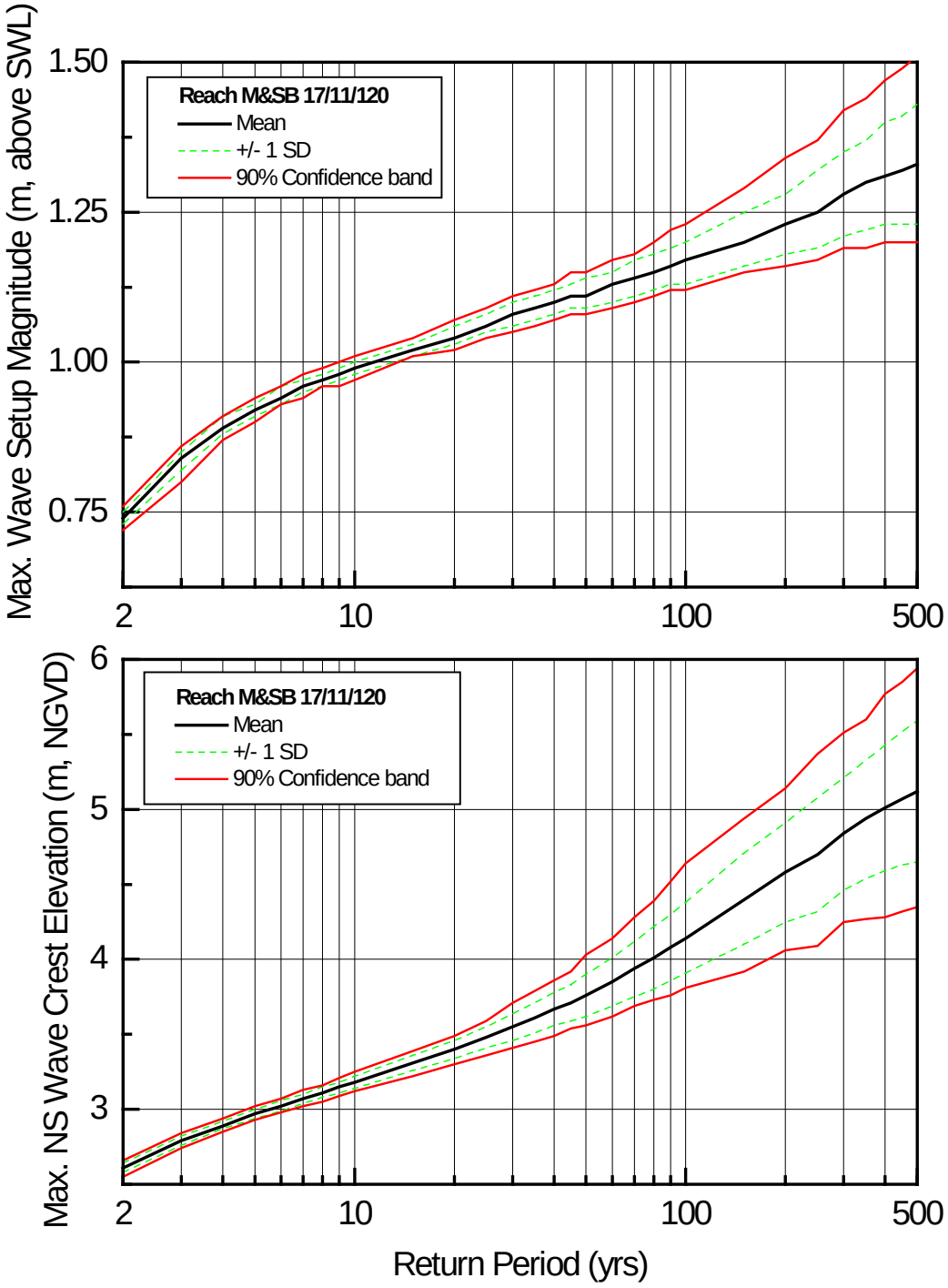

Reach M&SB 17/11/90
Mean
+/- 1 SD
90% Confidence band
3.5-m NGVD Contour Recession (m)
40
30
20
10
0
-10
2
10
100
500
Reach M&SB 17/11/90
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

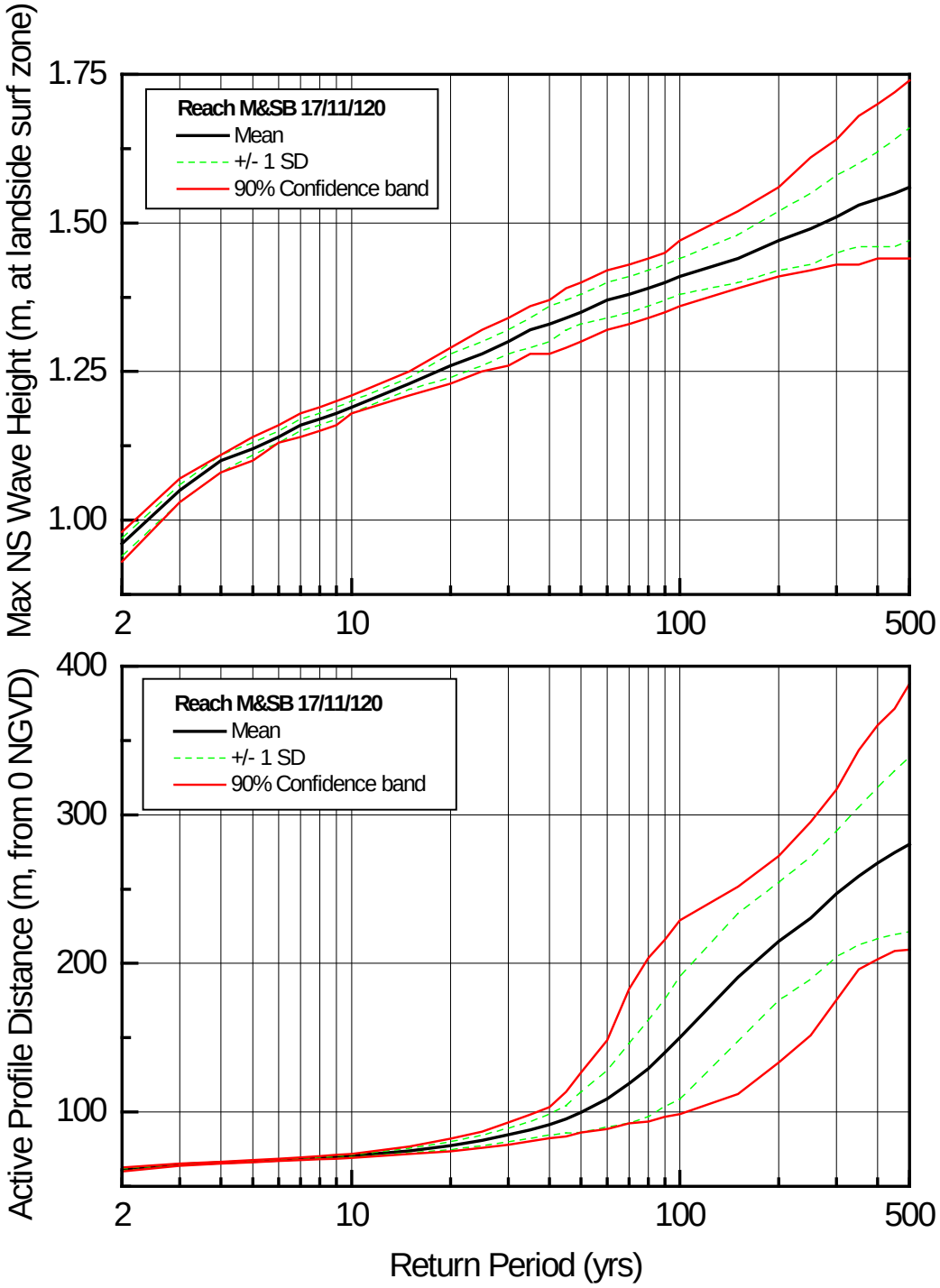

Reach M&SB 17/11/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
150
120
90
60
2
10
100
500
Reach M&SB 17/11/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
70
60
50
40
30
2
10
100
500
Return Period (yrs)

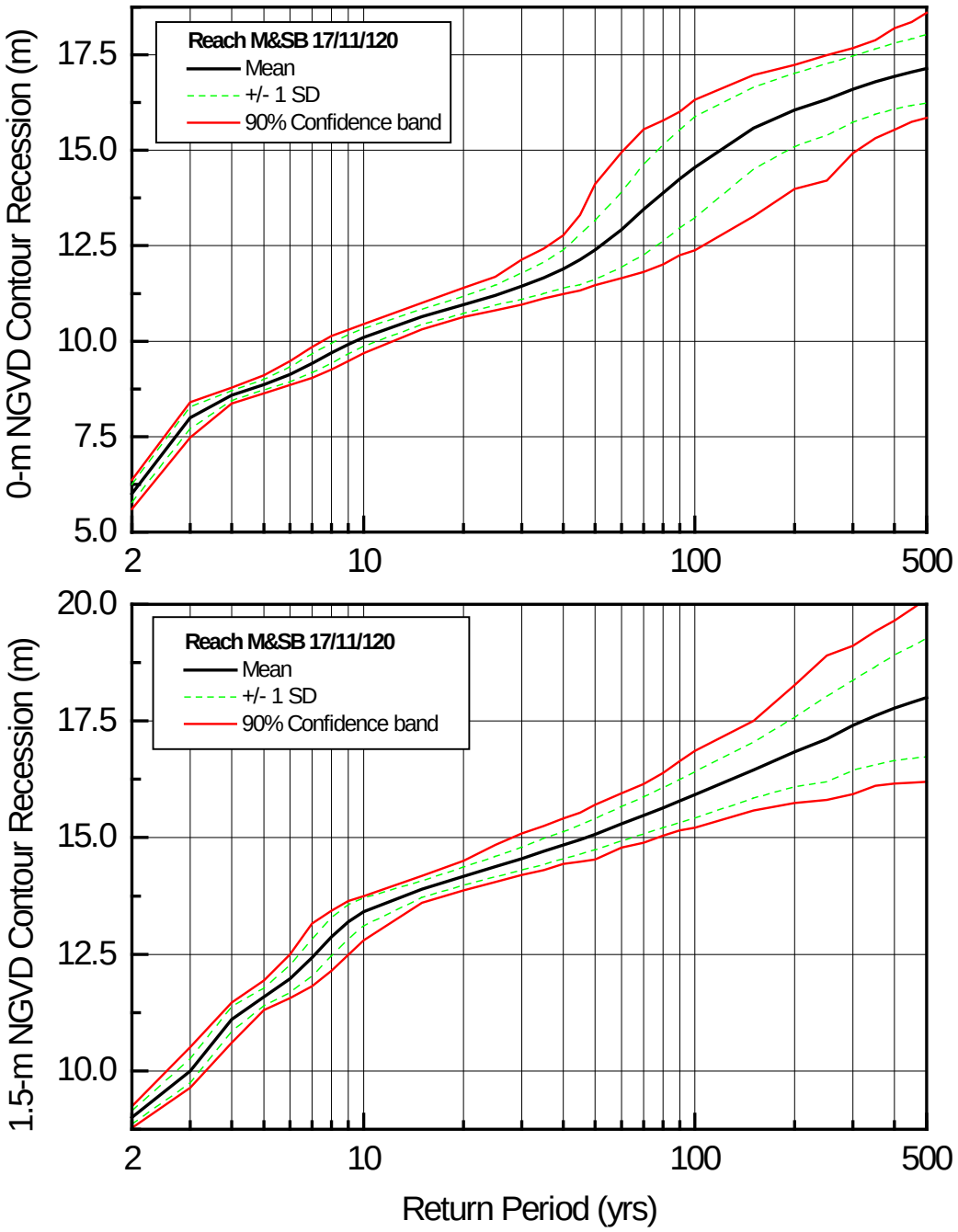

Reach M&SB 17/11/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3.5-m NGVD)
0
10
20
30
40
2
10
100
500
Reach M&SB 17/11/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2.5
2
10
100
500
Return Period (yrs)

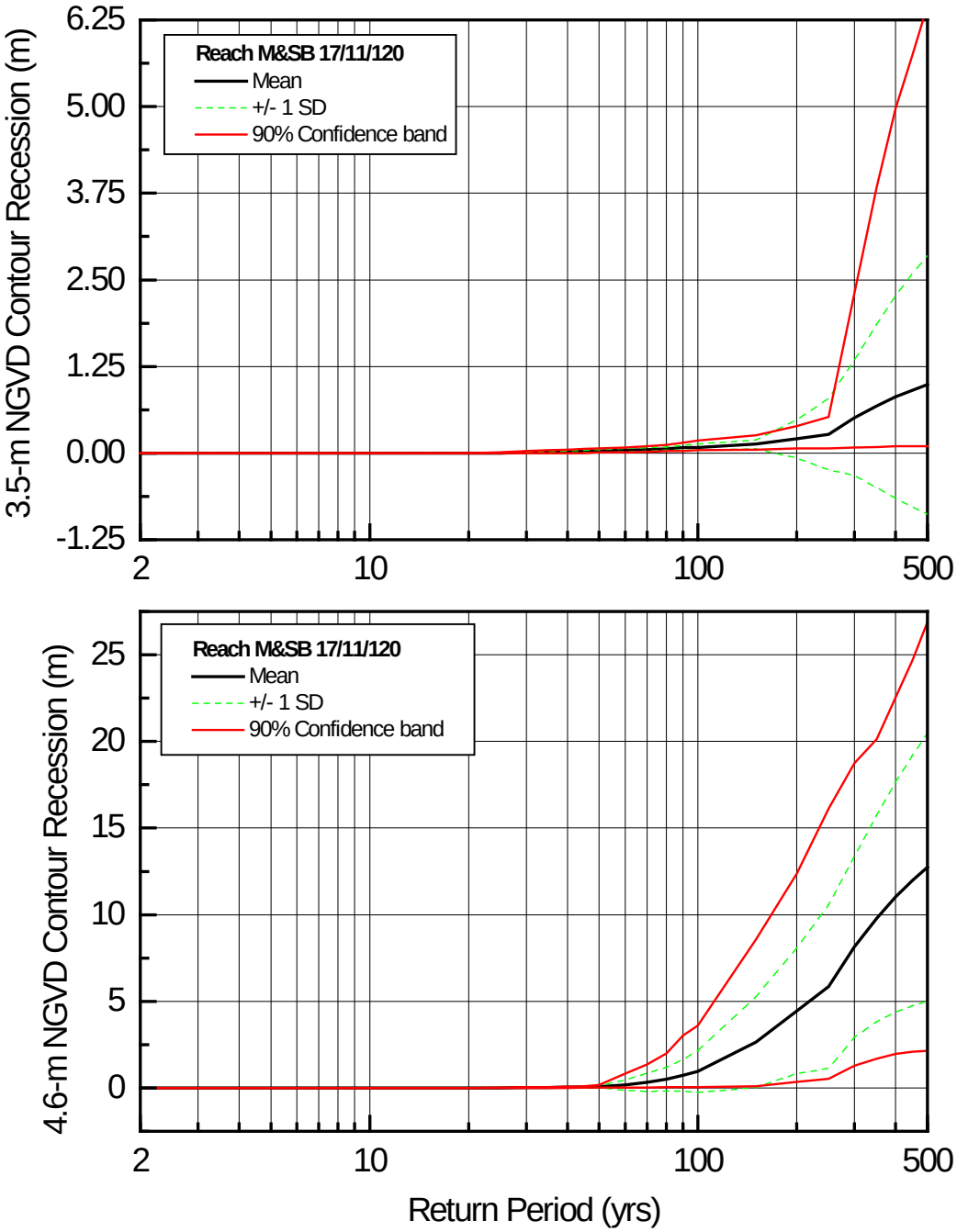

Reach M&SB 17/11/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
20
15
10
5
0
2
10
100
500
Reach M&SB 17/11/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
2
10
100
500
Return Period (yrs)

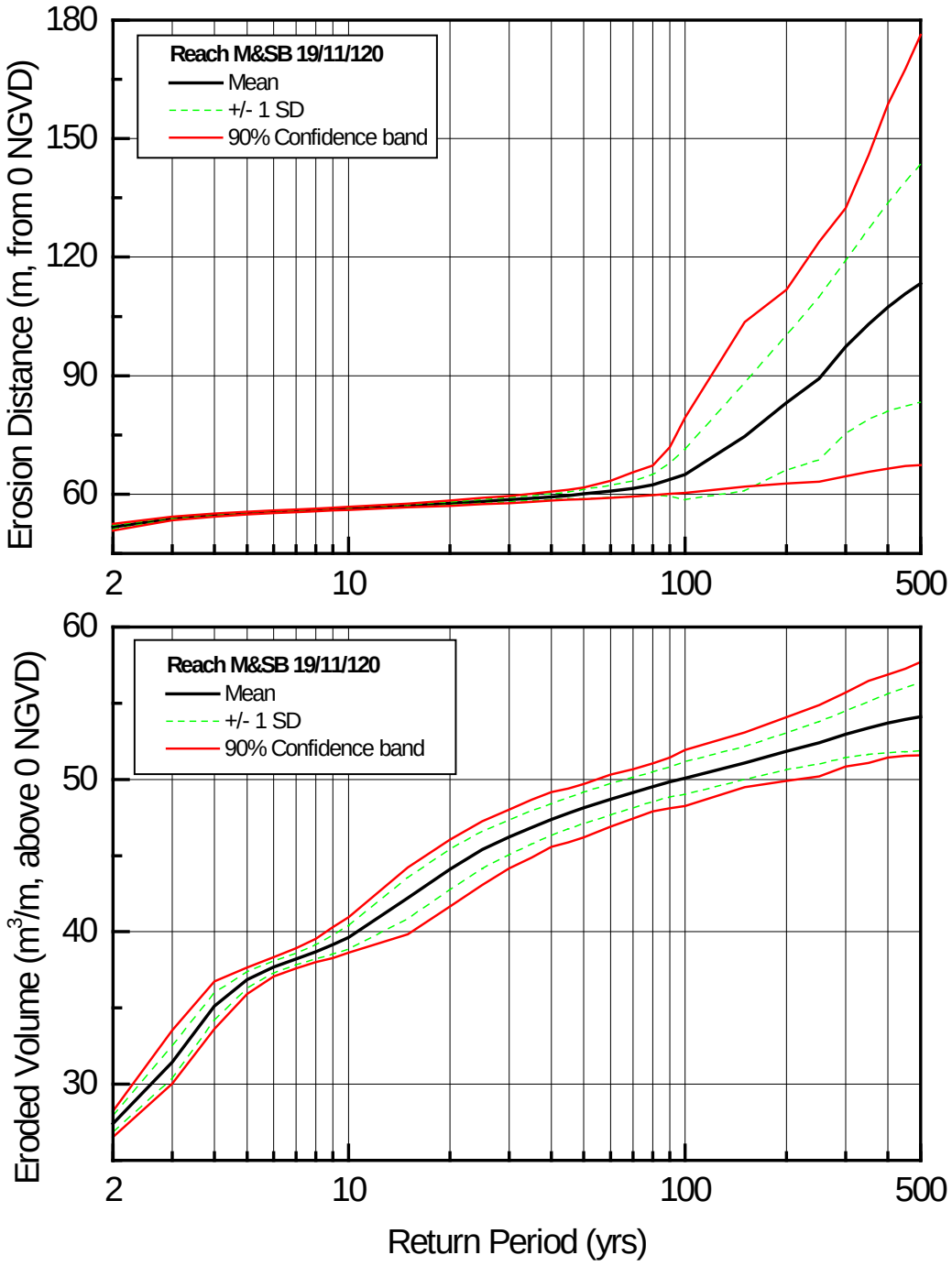

Reach M&SB 17/11/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
6
5
4
3
2
2
10
100
500
Reach M&SB 17/11/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Return Period (yrs)

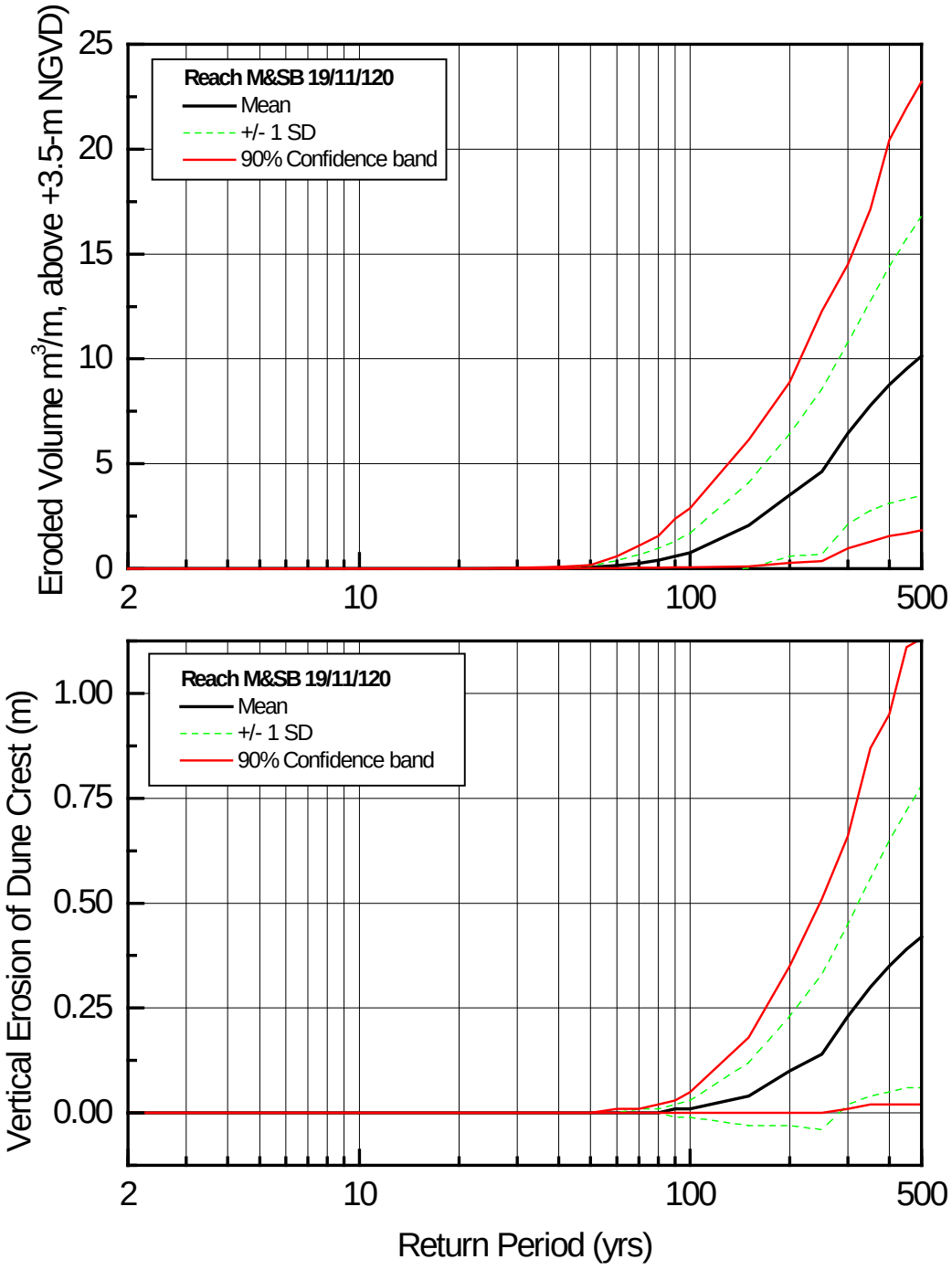

Max. Wave Setup Magnitude (m, above SWL)
1.50
1.25
1.00
0.75
Reach M&SB 17/11/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
6
5
4
3
Reach M&SB 17/11/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

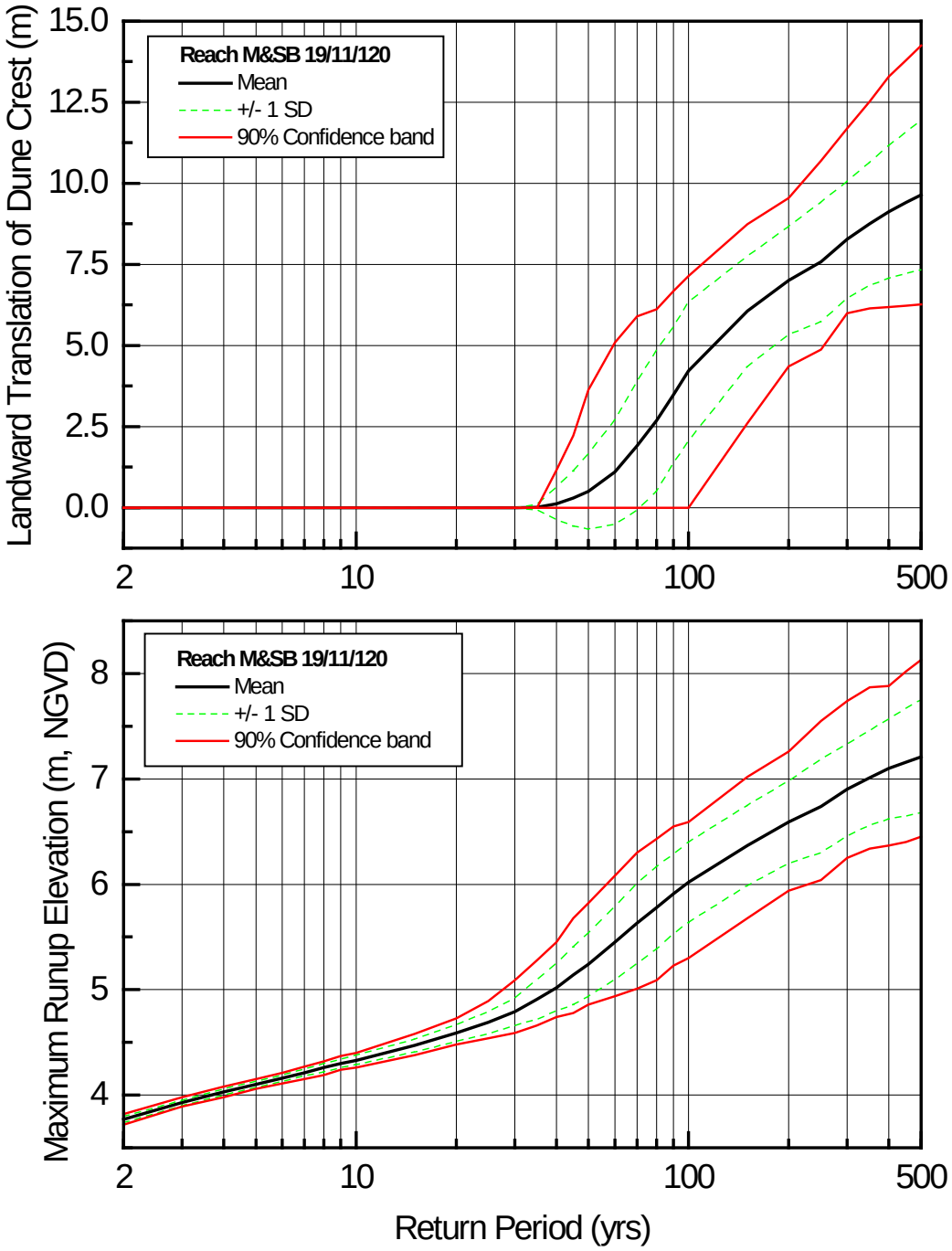

Max NS Wave Height (m, at landside surf zone)
1.75
1.50
1.25
1.00
Reach M&SB 17/11/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
300
200
100
Reach M&SB 17/11/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

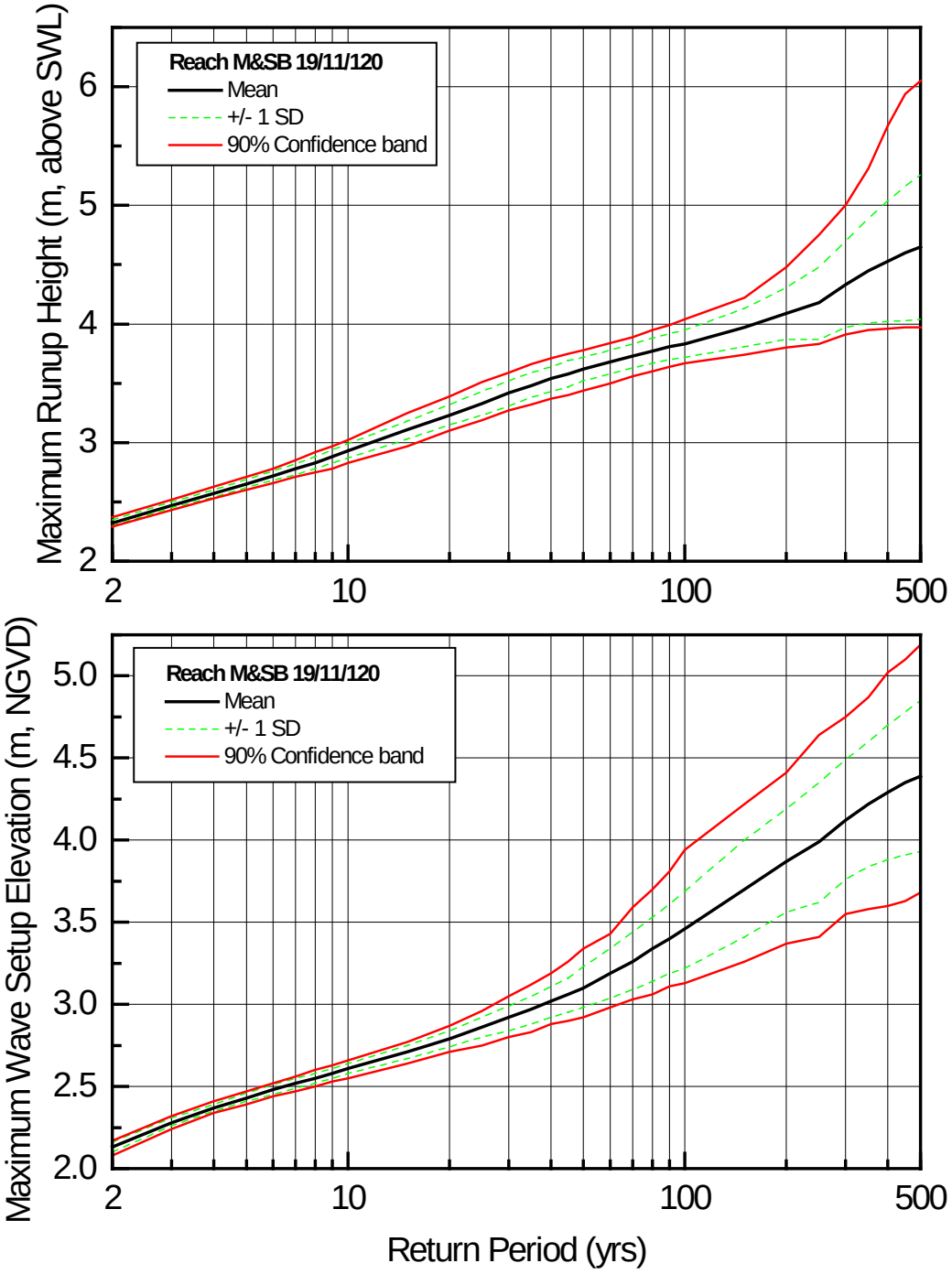

Reach M&SB 17/11/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
17.5
15.0
12.5
10.0
7.5
5.0
2
10
100
500
Reach M&SB 17/11/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20.0
17.5
15.0
12.5
10.0
2
10
100
500
Return Period (yrs)

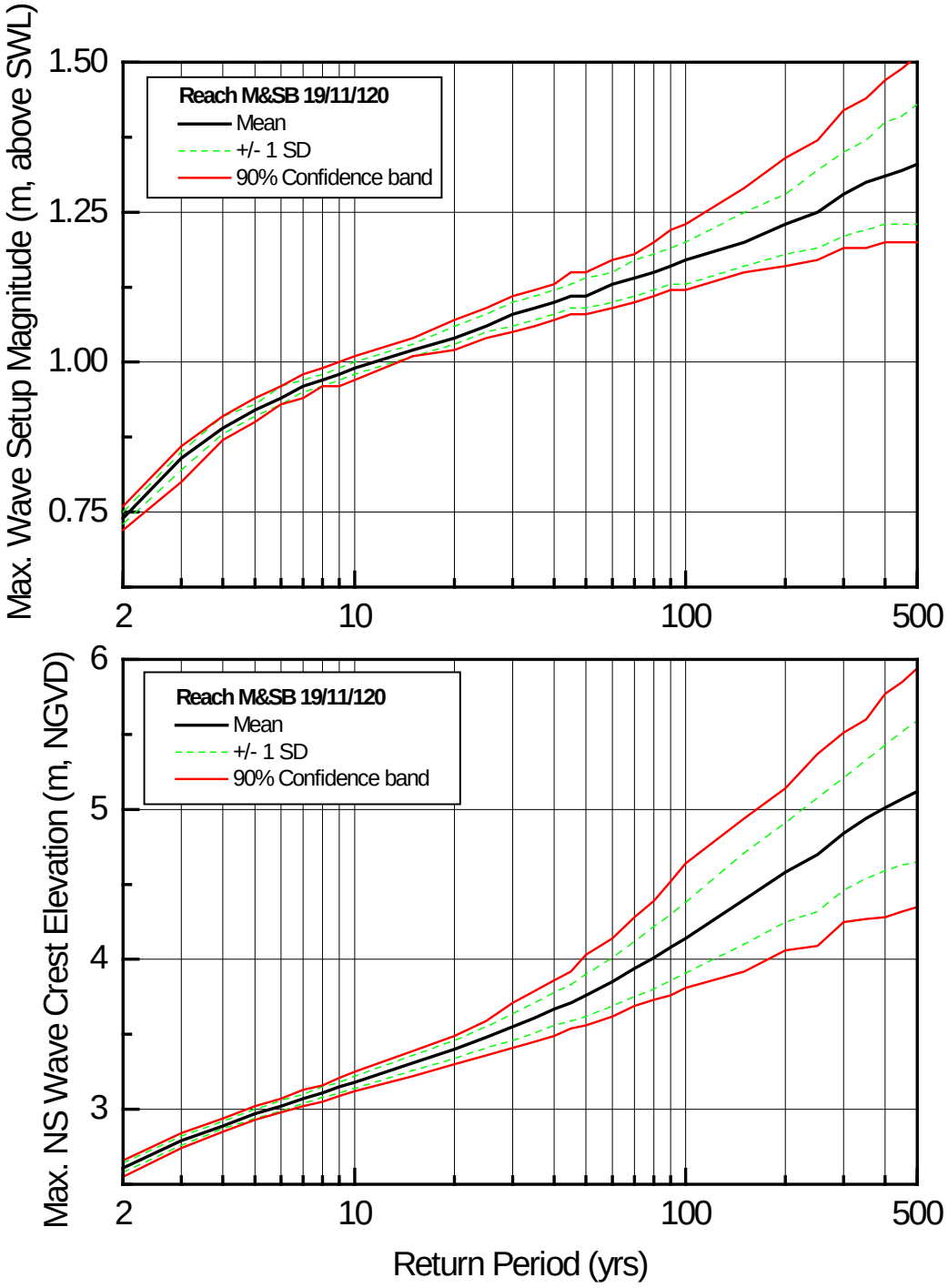

Reach M&SB 17/11/120
Mean
+/- 1 SD
90% Confidence band
3.5-m NGVD Contour Recession (m)
6.25
5.00
3.75
2.50
1.25
0.00
-1.25
2
10
100
500
Reach M&SB 17/11/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

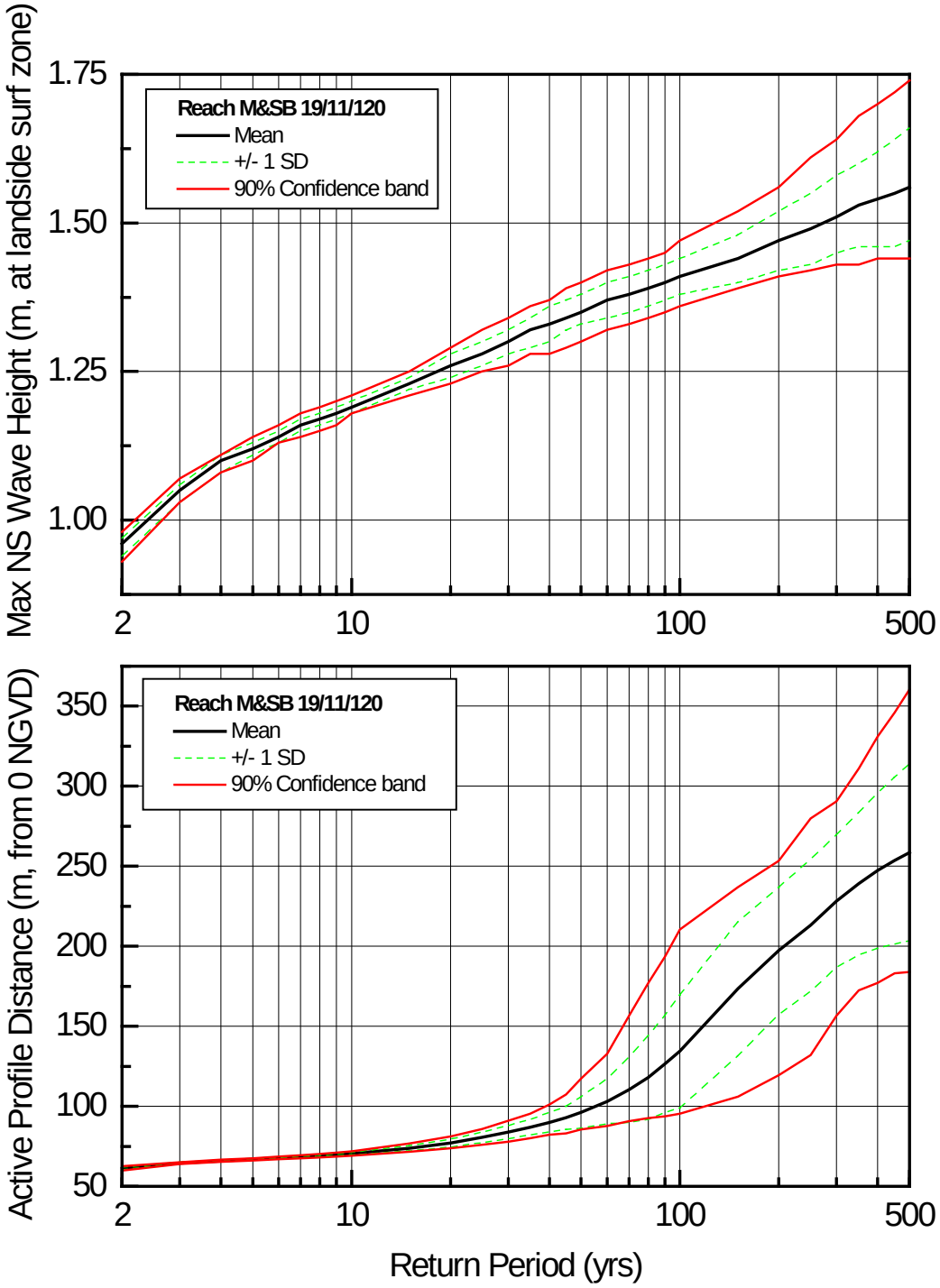

Reach M&SB 19/11/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
150
120
90
60
2
10
100
500
Reach M&SB 19/11/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
2
10
100
500
Return Period (yrs)

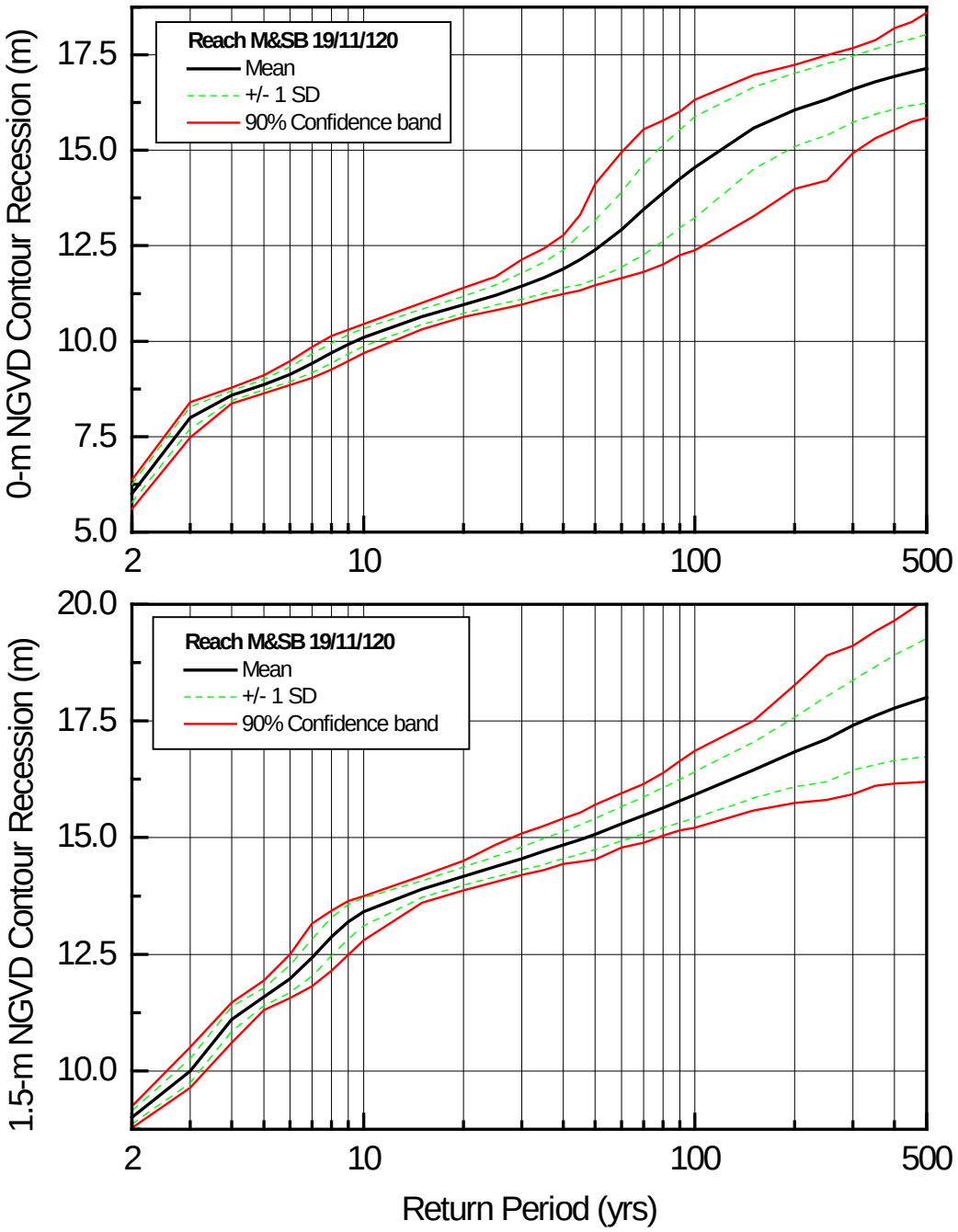

Reach M&SB 19/11/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3.5-m NGVD)
0
5
10
15
20
25
2
10
100
500
Reach M&SB 19/11/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.00
0.25
0.50
0.75
1.00
2
10
100
500
Return Period (yrs)

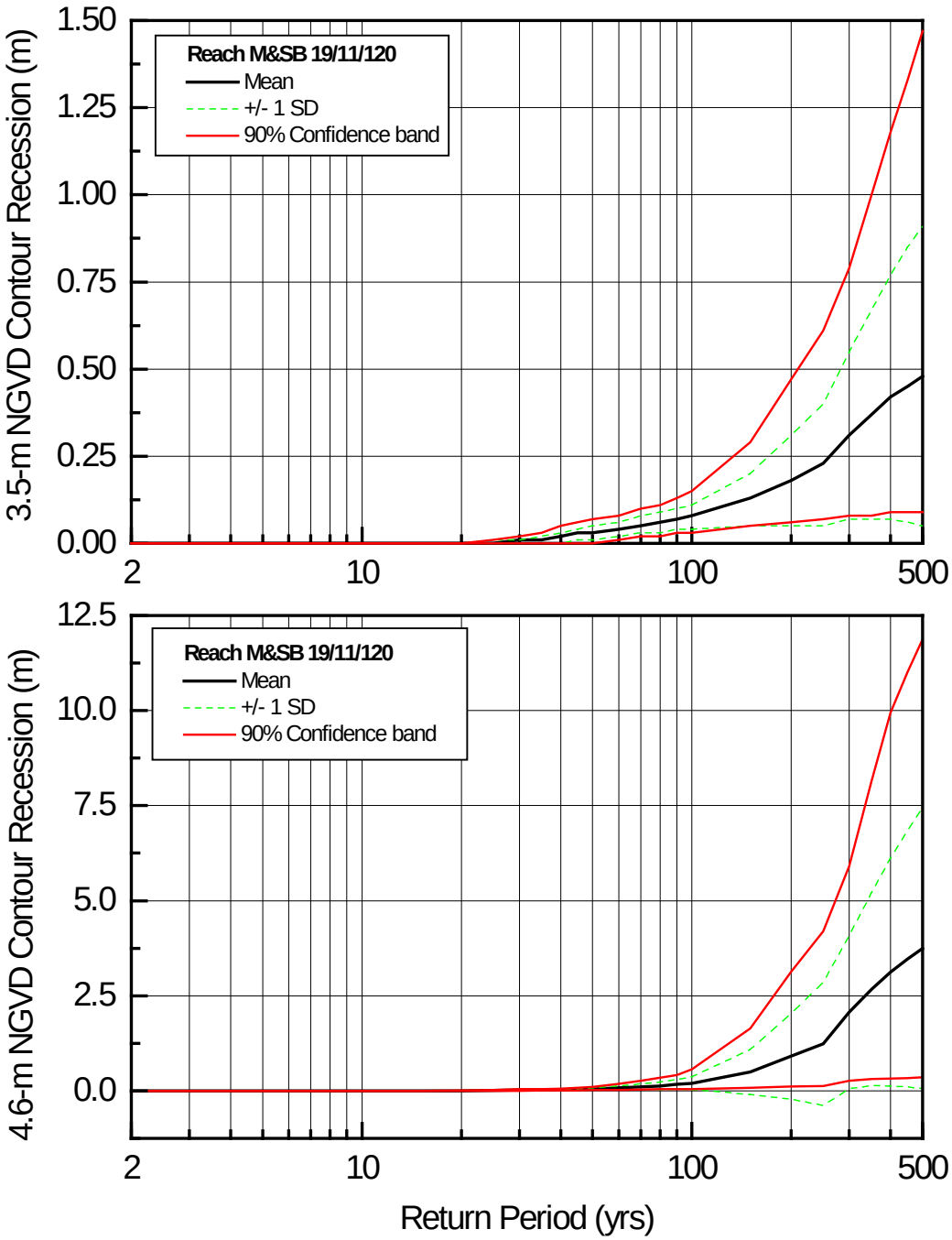

Landward Translation of Dune Crest (m)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
Reach M&SB 19/11/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
Reach M&SB 19/11/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

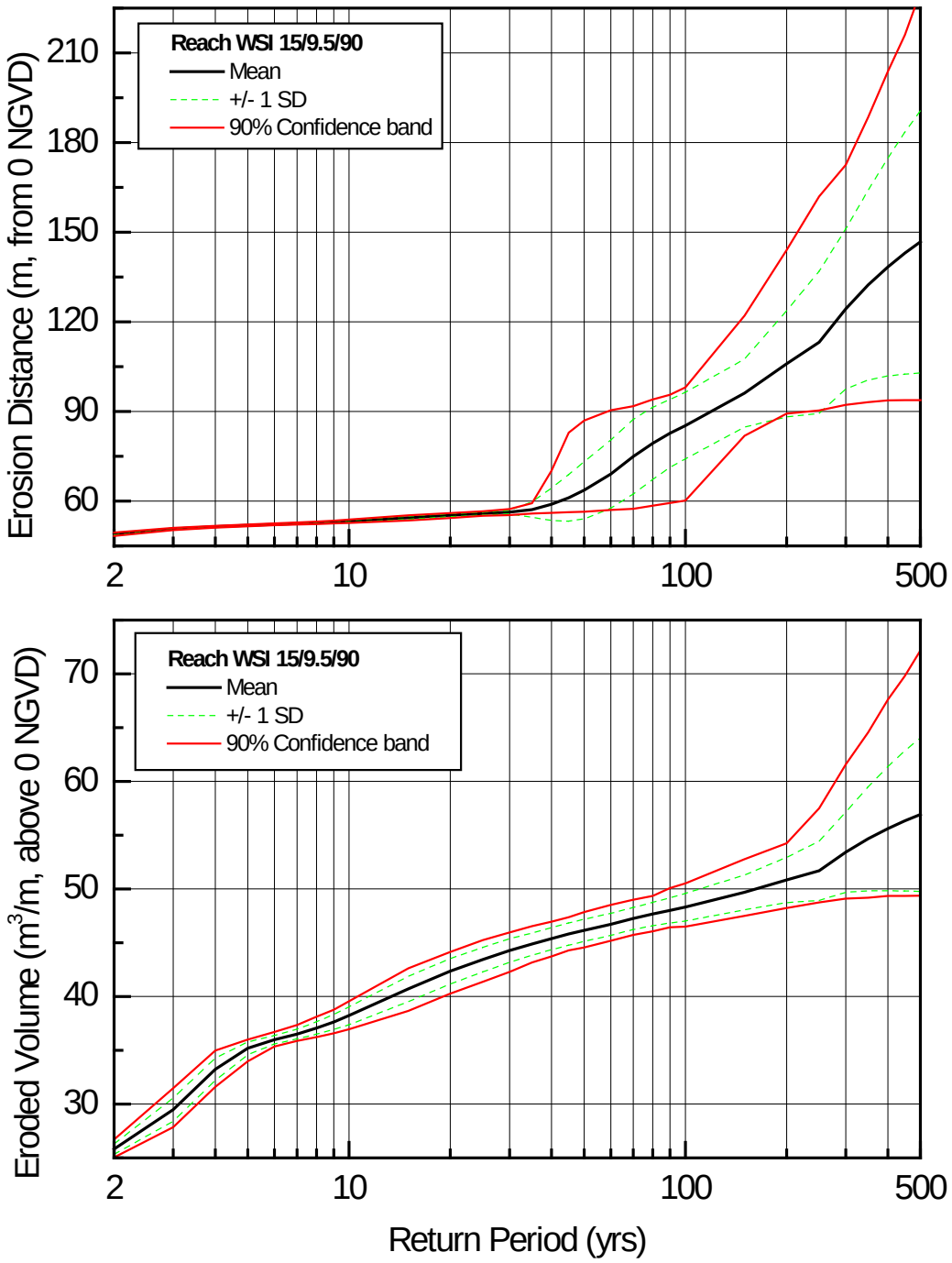

Reach M&SB 19/11/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
2
3
4
5
6
2
10
100
500
Reach M&SB 19/11/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
2.0
2.5
3.0
3.5
4.0
4.5
5.0
2
10
100
500
Return Period (yrs)

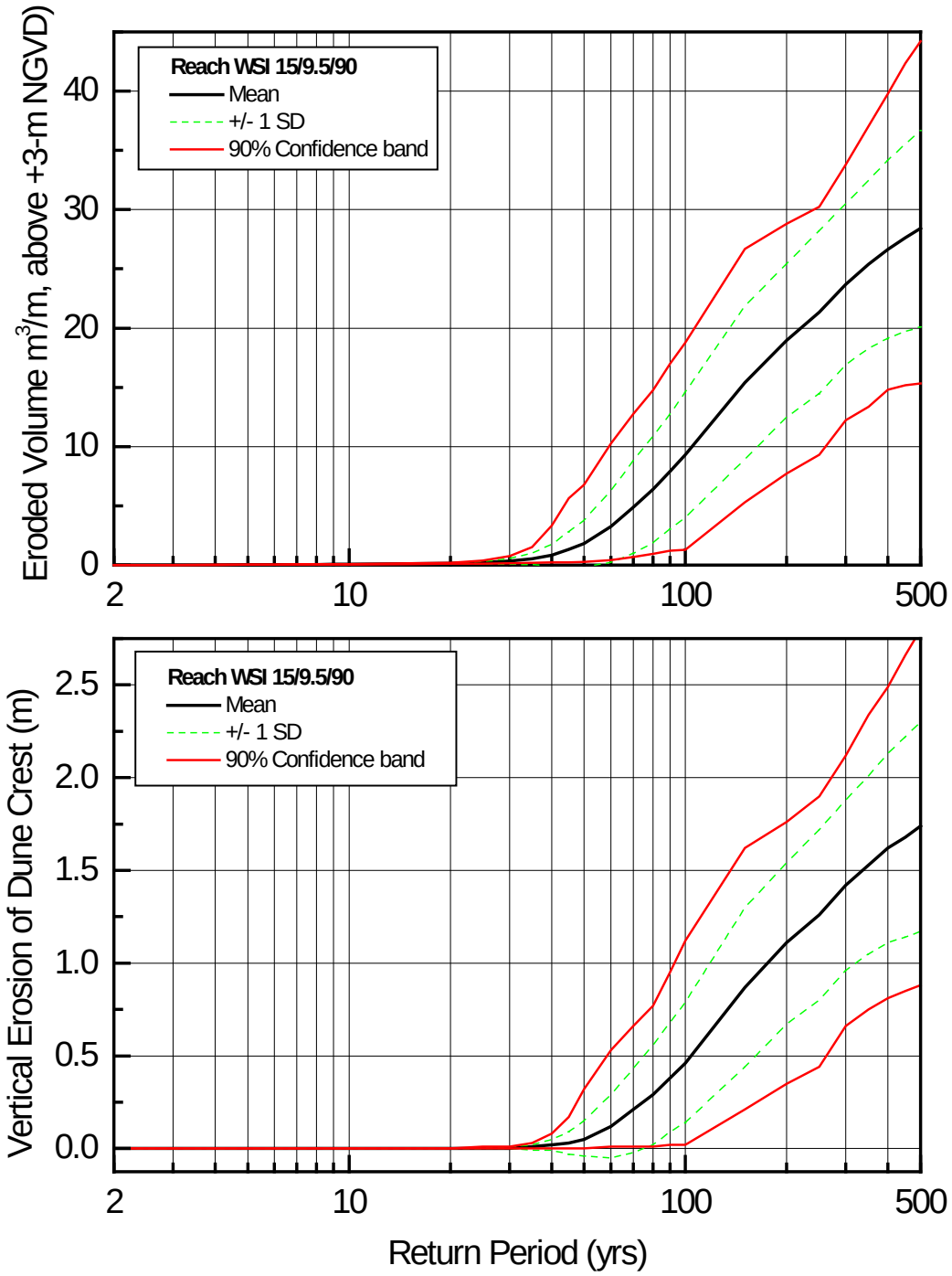

Max. Wave Setup Magnitude (m, above SWL)
1.50
1.25
1.00
0.75
Reach M&SB 19/11/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
6
5
4
3
Reach M&SB 19/11/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

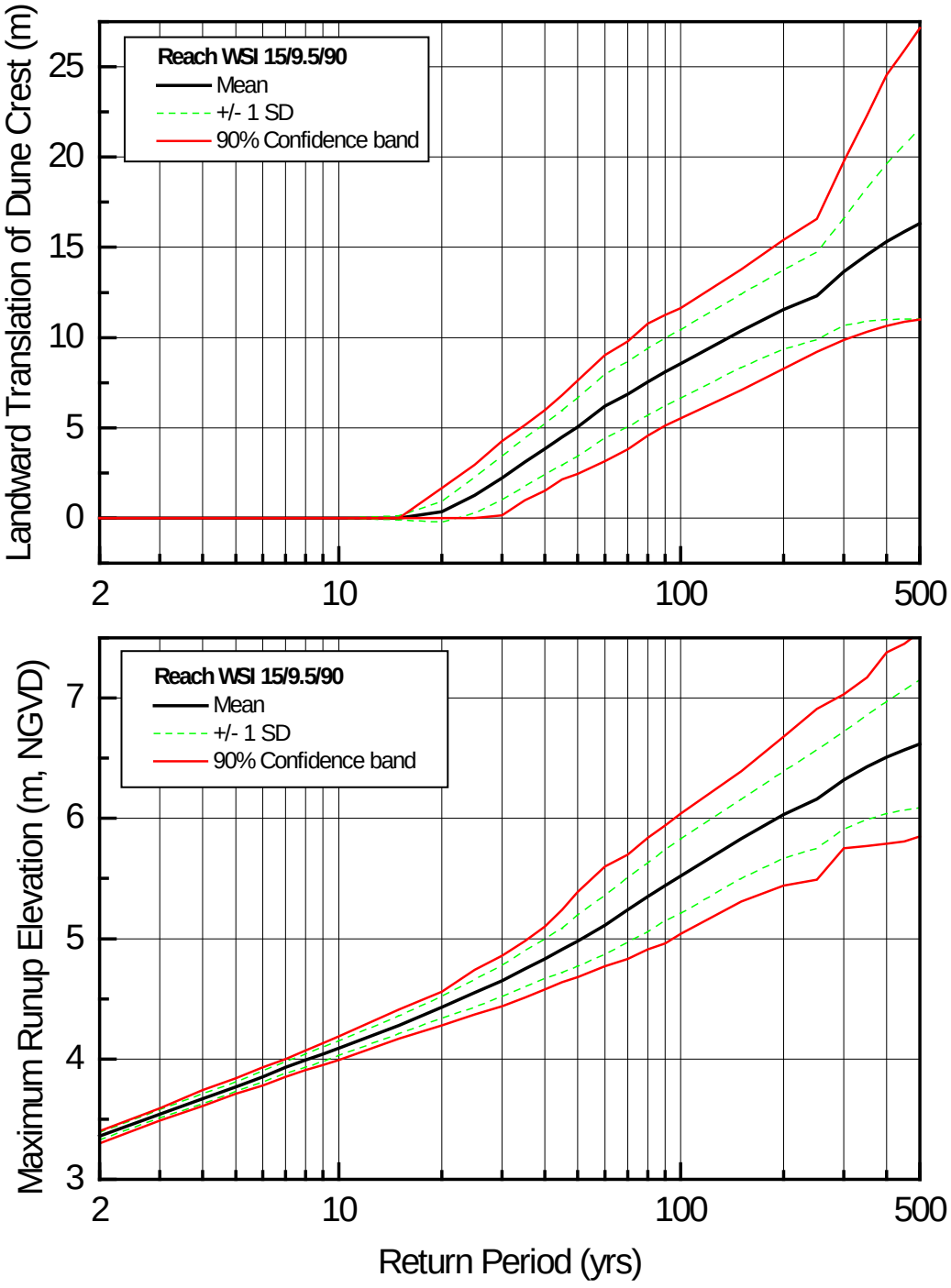

Max NS Wave Height (m, at landside surf zone)
1.75
1.50
1.25
1.00
Reach M&SB 19/11/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
350
300
250
200
150
100
50
Reach M&SB 19/11/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

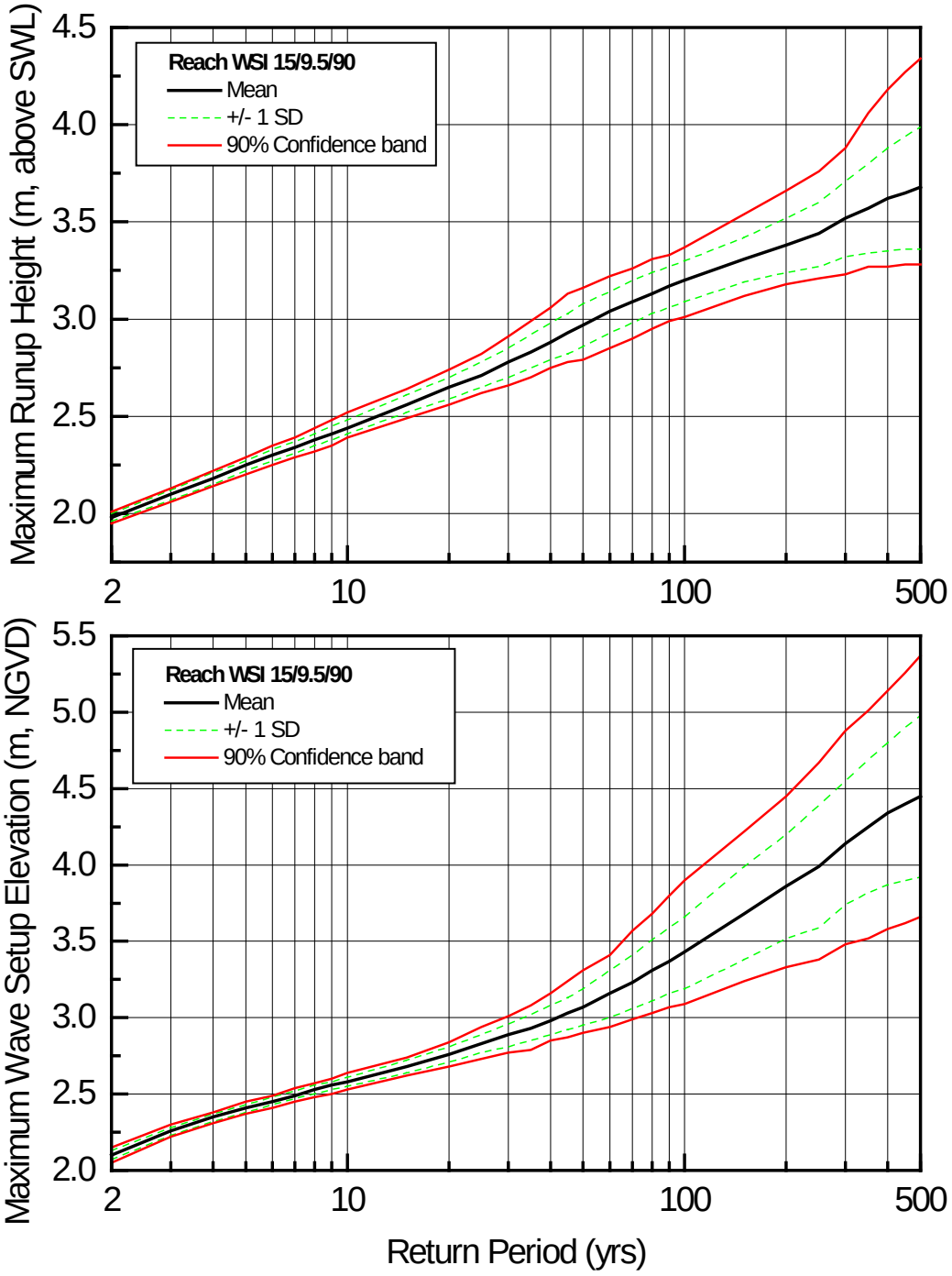

Reach M&SB 19/11/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
17.5
15.0
12.5
10.0
7.5
5.0
2
10
100
500
Reach M&SB 19/11/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20.0
17.5
15.0
12.5
10.0
2
10
100
500
Return Period (yrs)

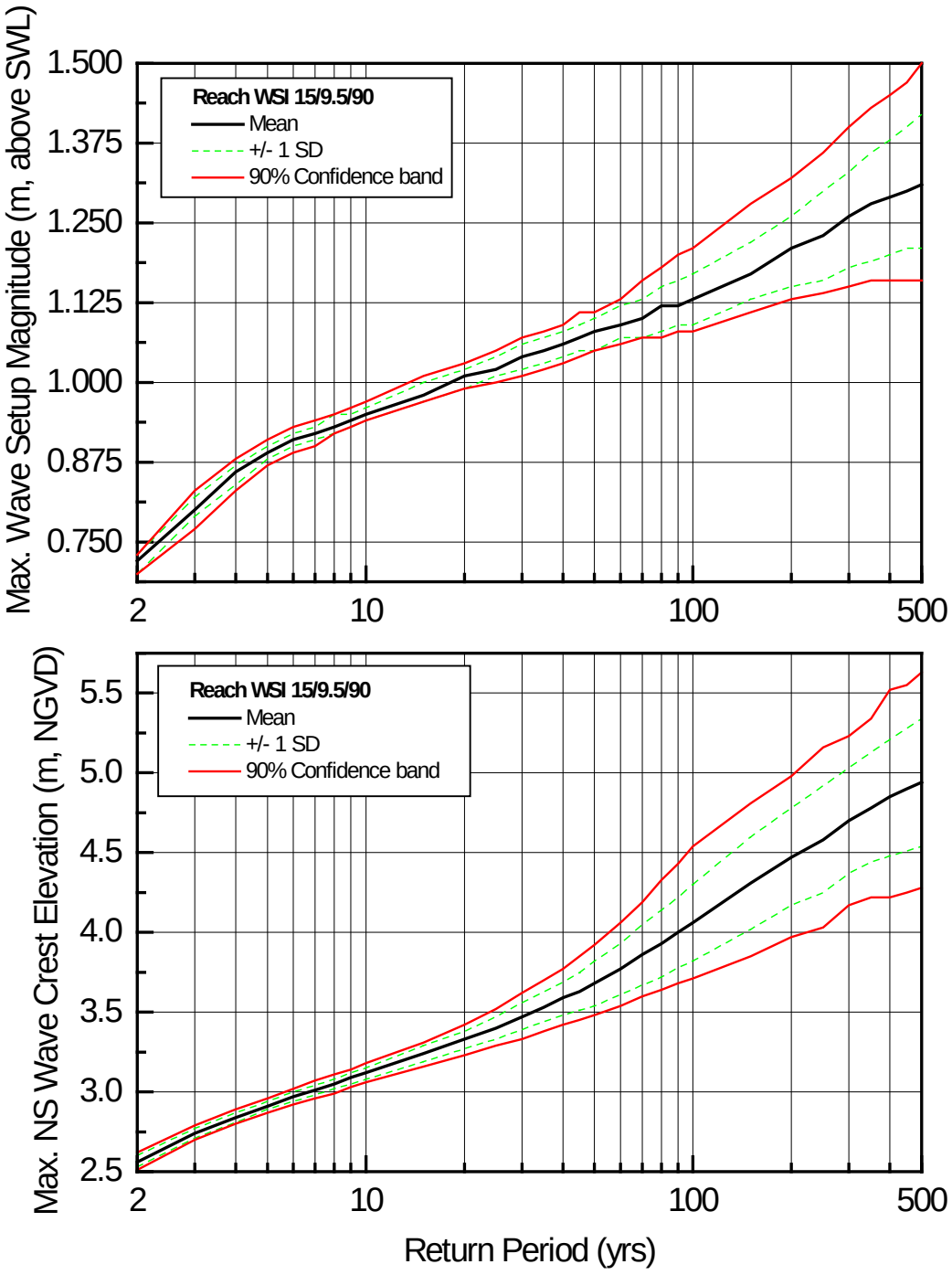

Reach M&SB 19/11/120
Mean
+/- 1 SD
90% Confidence band
3.5-m NGVD Contour Recession (m)
1.50
1.25
1.00
0.75
0.50
0.25
0.00
2
10
100
500
Reach M&SB 19/11/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
12.5
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Return Period (yrs)

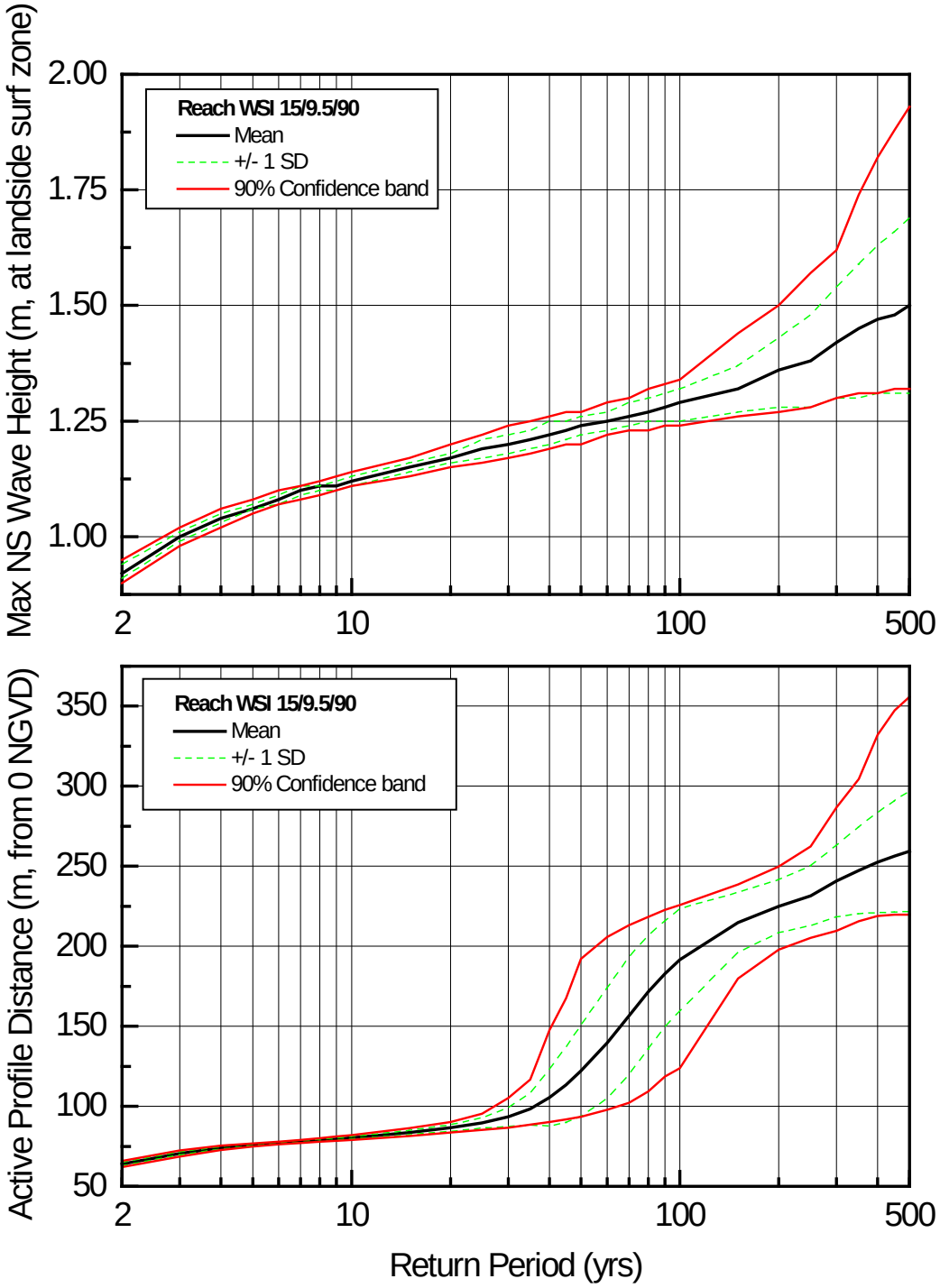

Reach WSI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
210
180
150
120
90
60
2
10
100
500
Reach WSI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
70
60
50
40
30
2
10
100
500
Return Period (yrs)

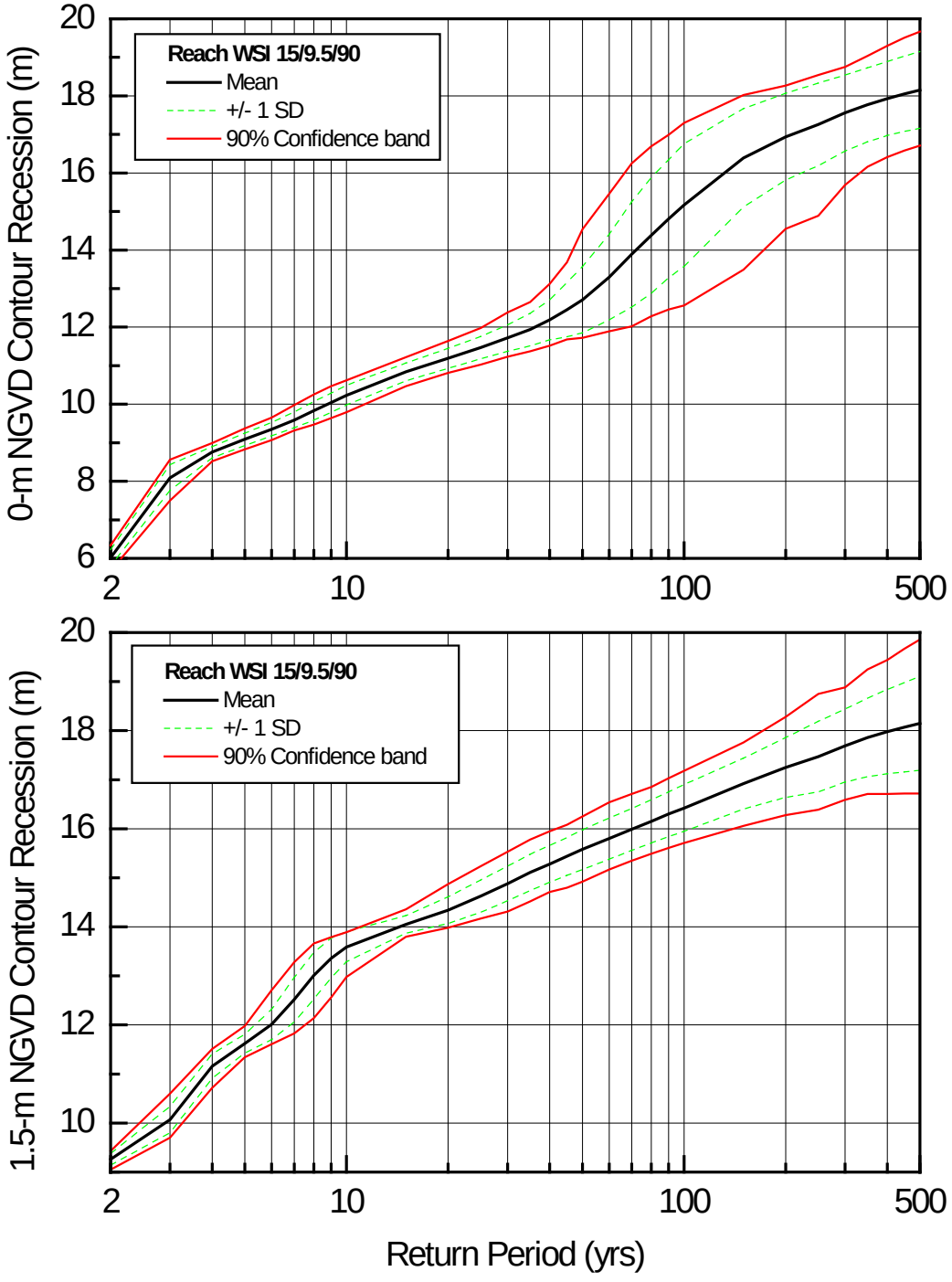

Reach WSI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach WSI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2.5
2
10
100
500
Return Period (yrs)

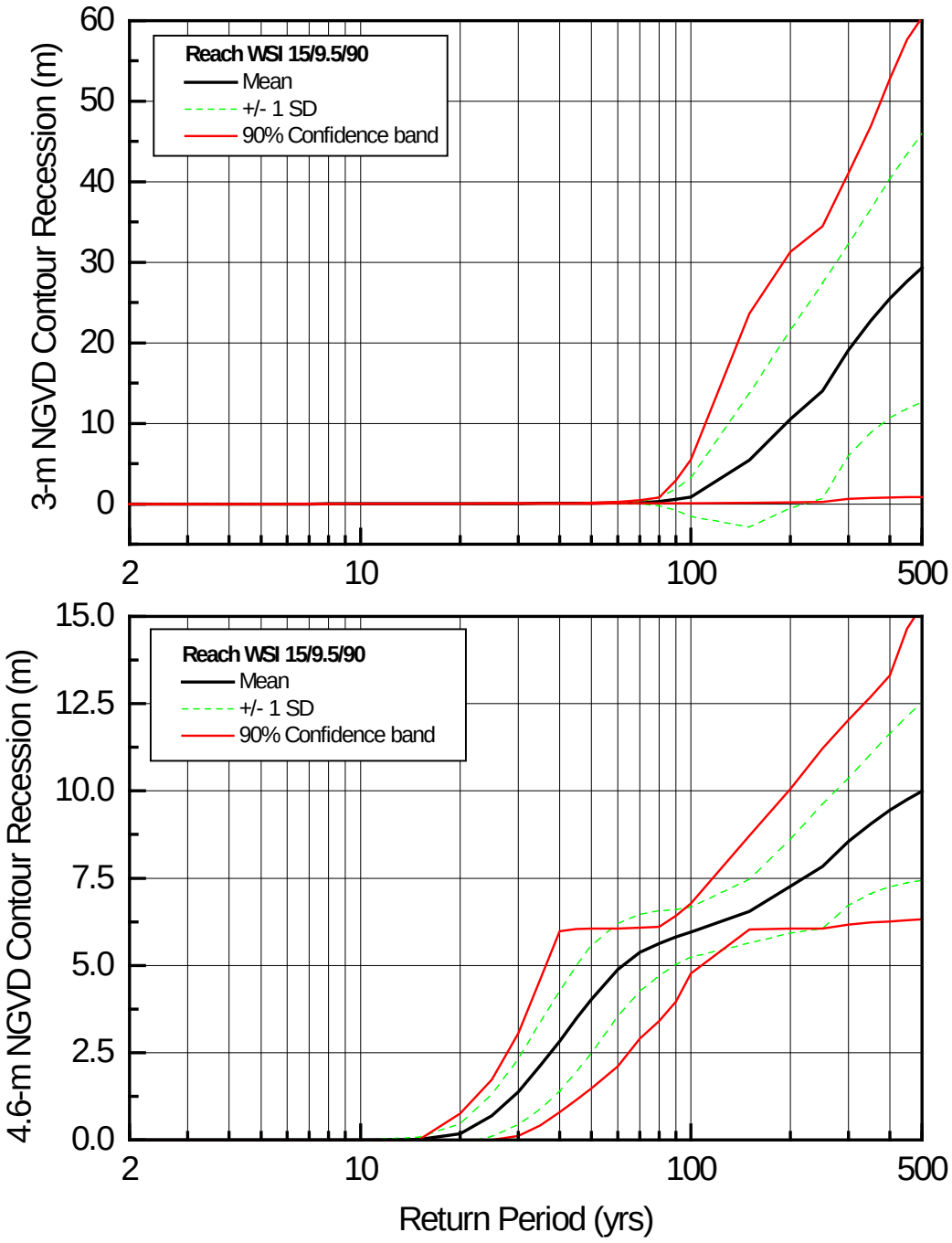

Reach WSI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
5
10
15
20
25
2
10
100
500
Reach WSI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
2
10
100
500
Return Period (yrs)

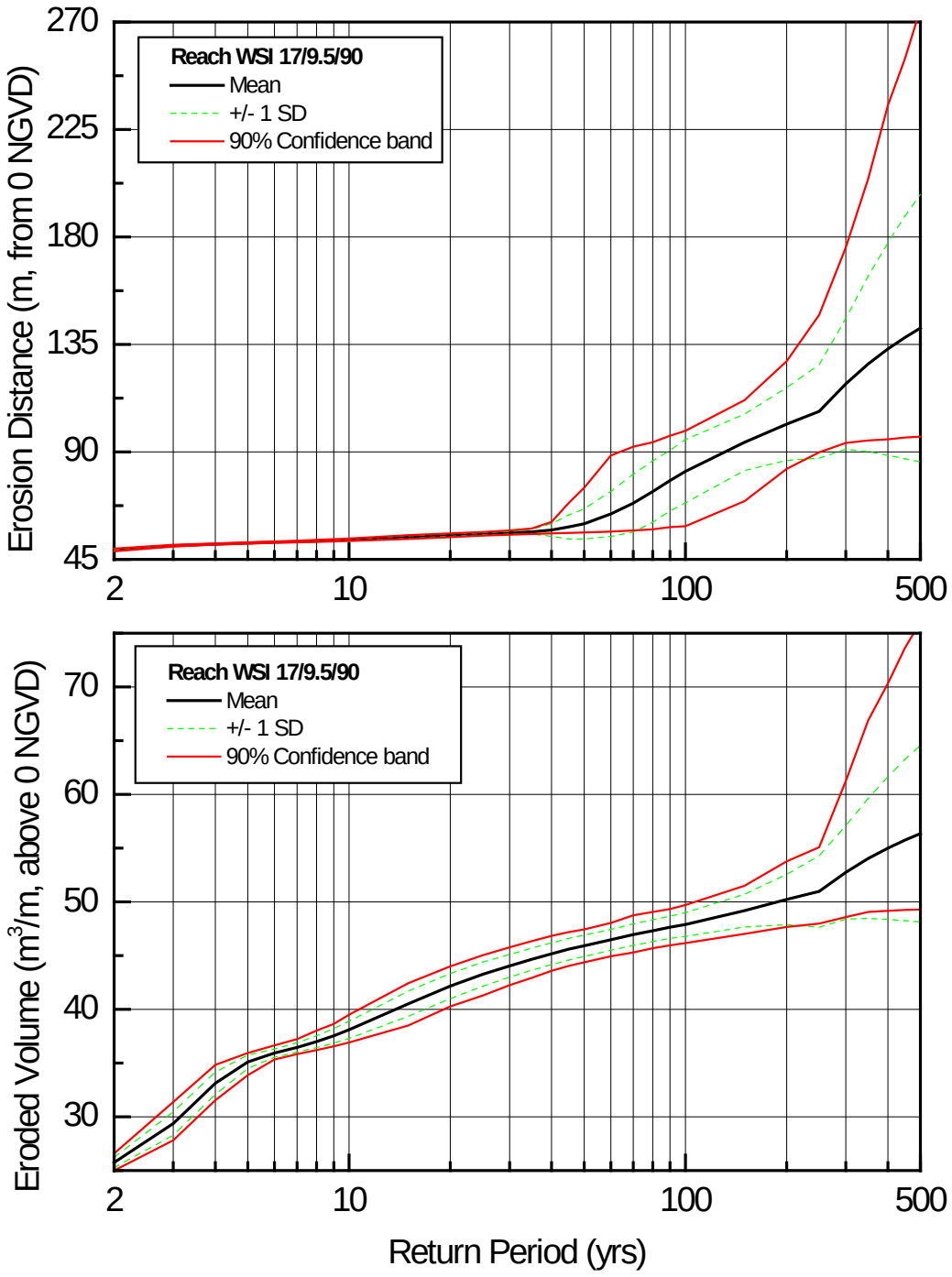

Reach WSI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach WSI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Return Period (yrs)

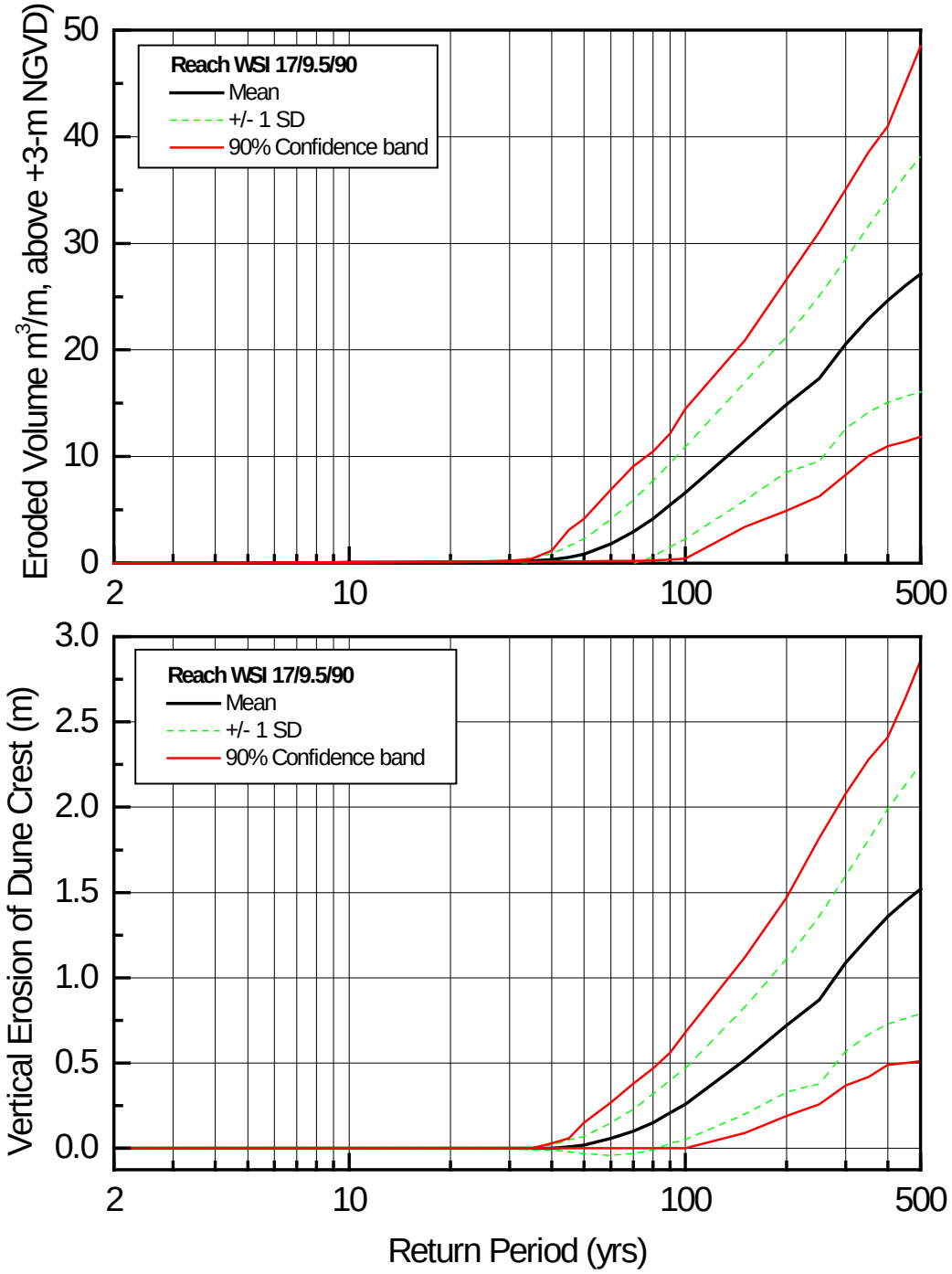

Max. Wave Setup Magnitude (m, above SWL)
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach WSI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
Reach WSI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

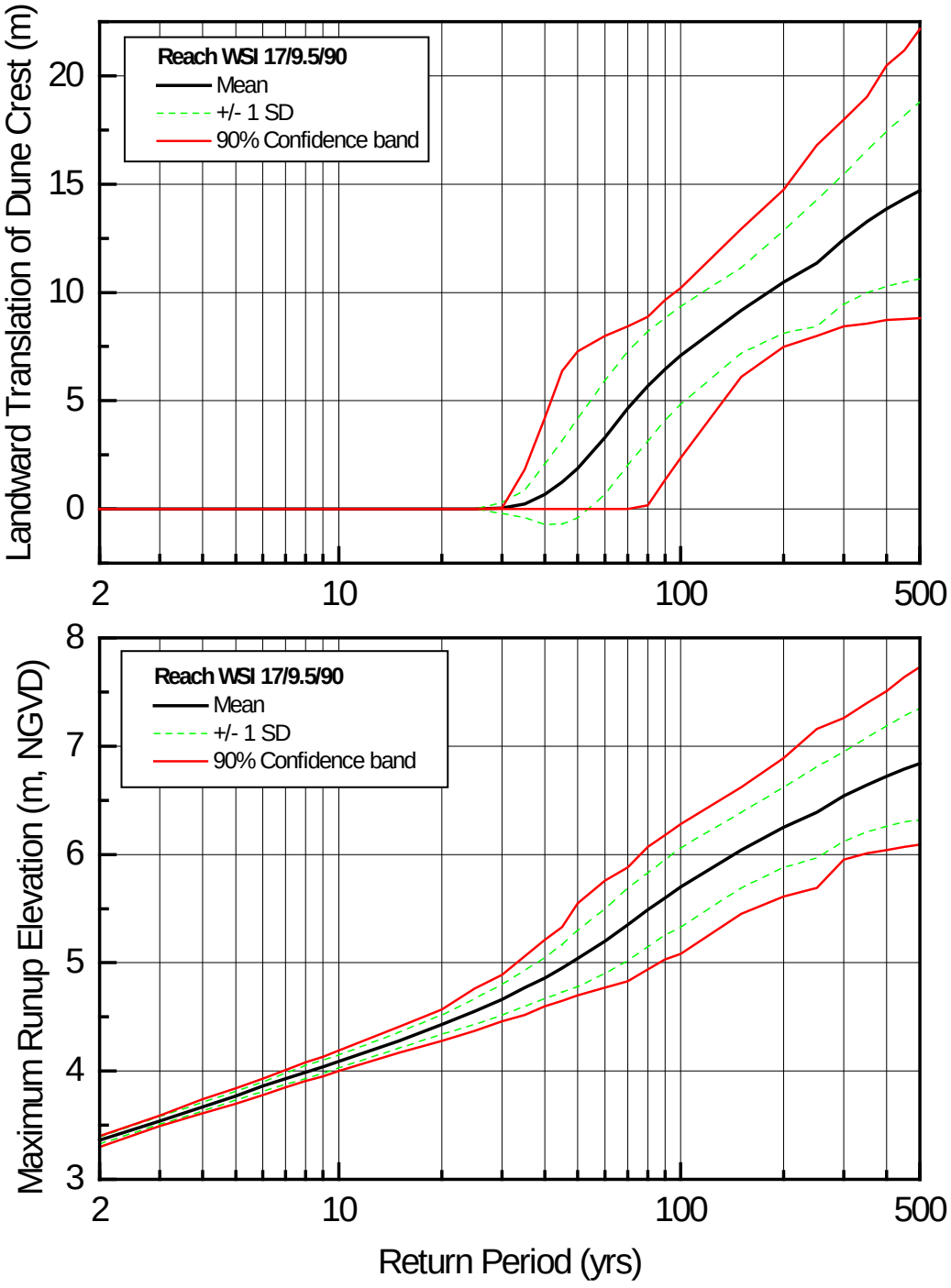

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach WSI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
350
300
250
200
150
100
50
Reach WSI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

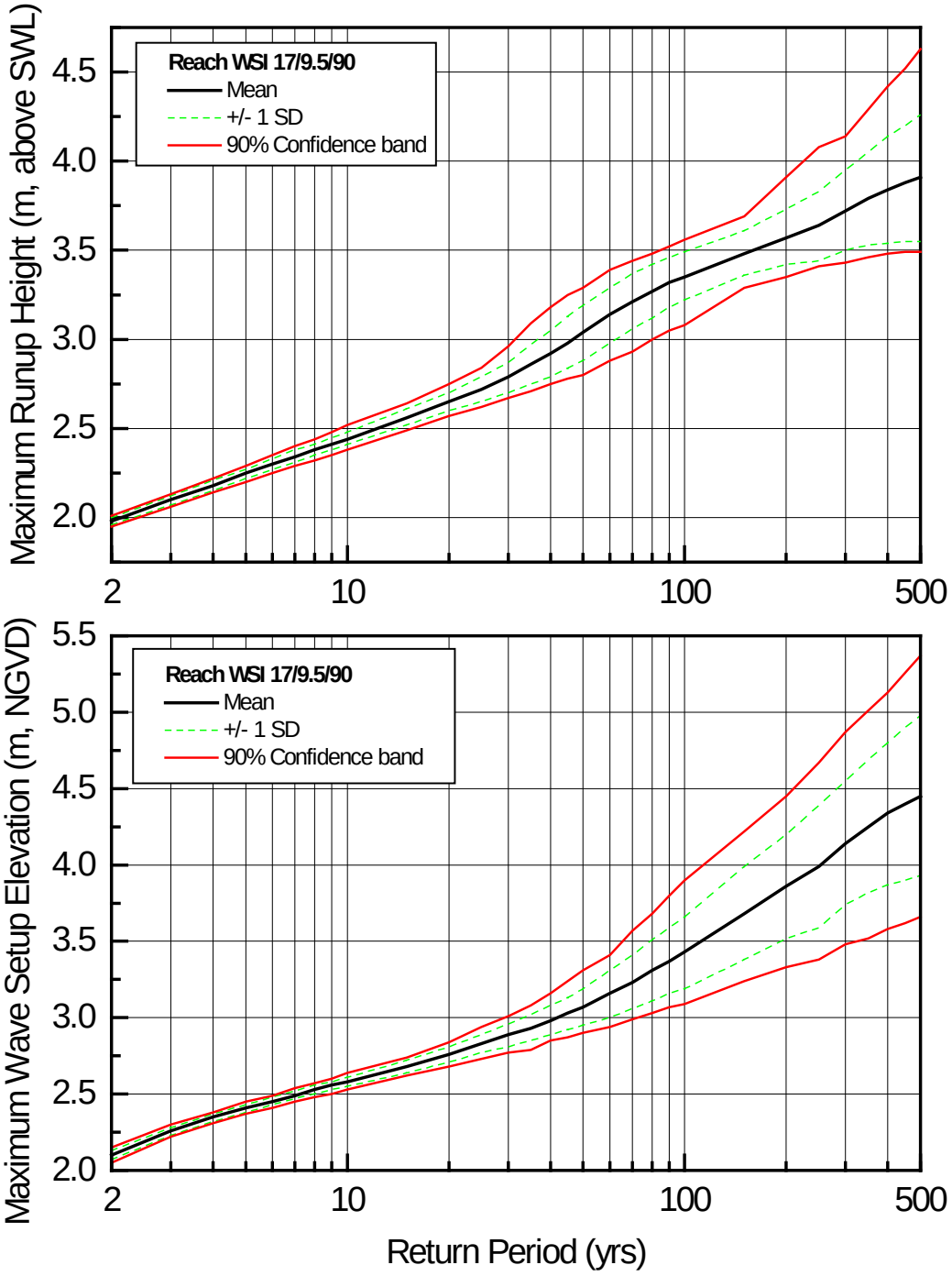

Reach WSI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
18
16
14
12
10
8
6
2
10
100
500
Reach WSI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20
18
16
14
12
10
2
10
100
500
Return Period (yrs)

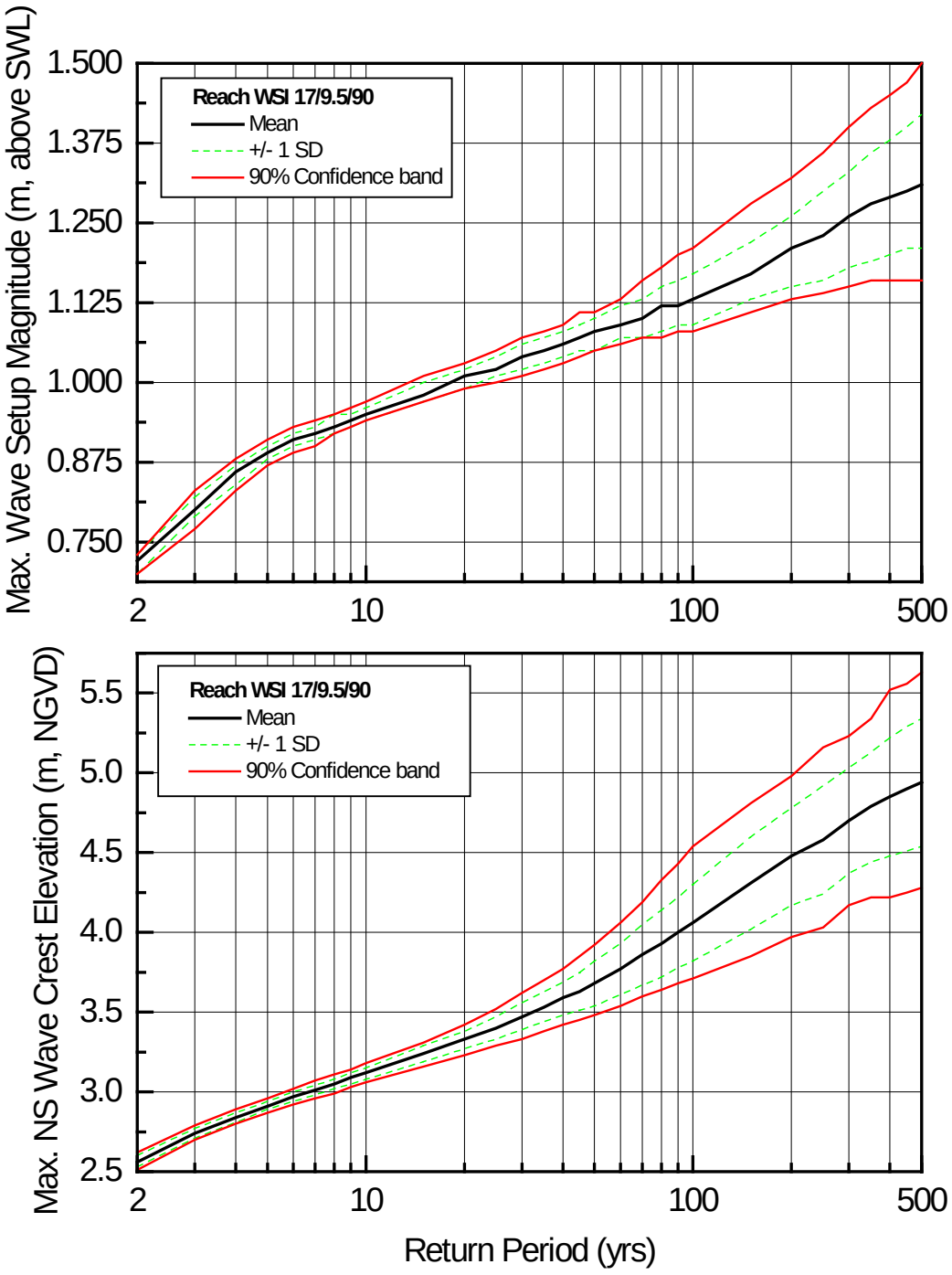

Reach WSI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
60
50
40
30
20
10
0
2
10
100
500
Reach WSI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Return Period (yrs)

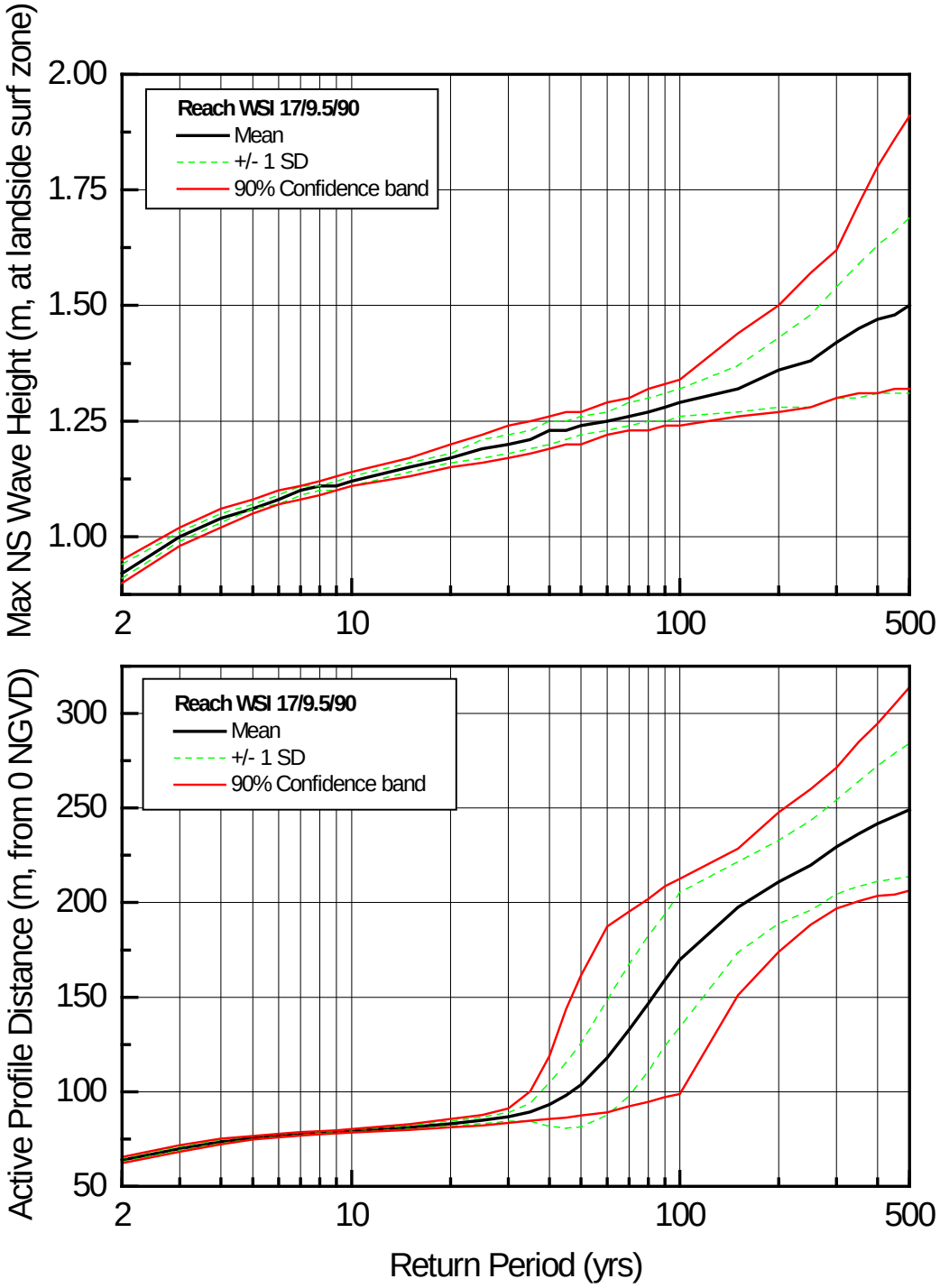

Reach WSI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
270
225
180
135
90
45
2
10
100
500
Reach WSI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
70
60
50
40
30
2
10
100
500
Return Period (yrs)

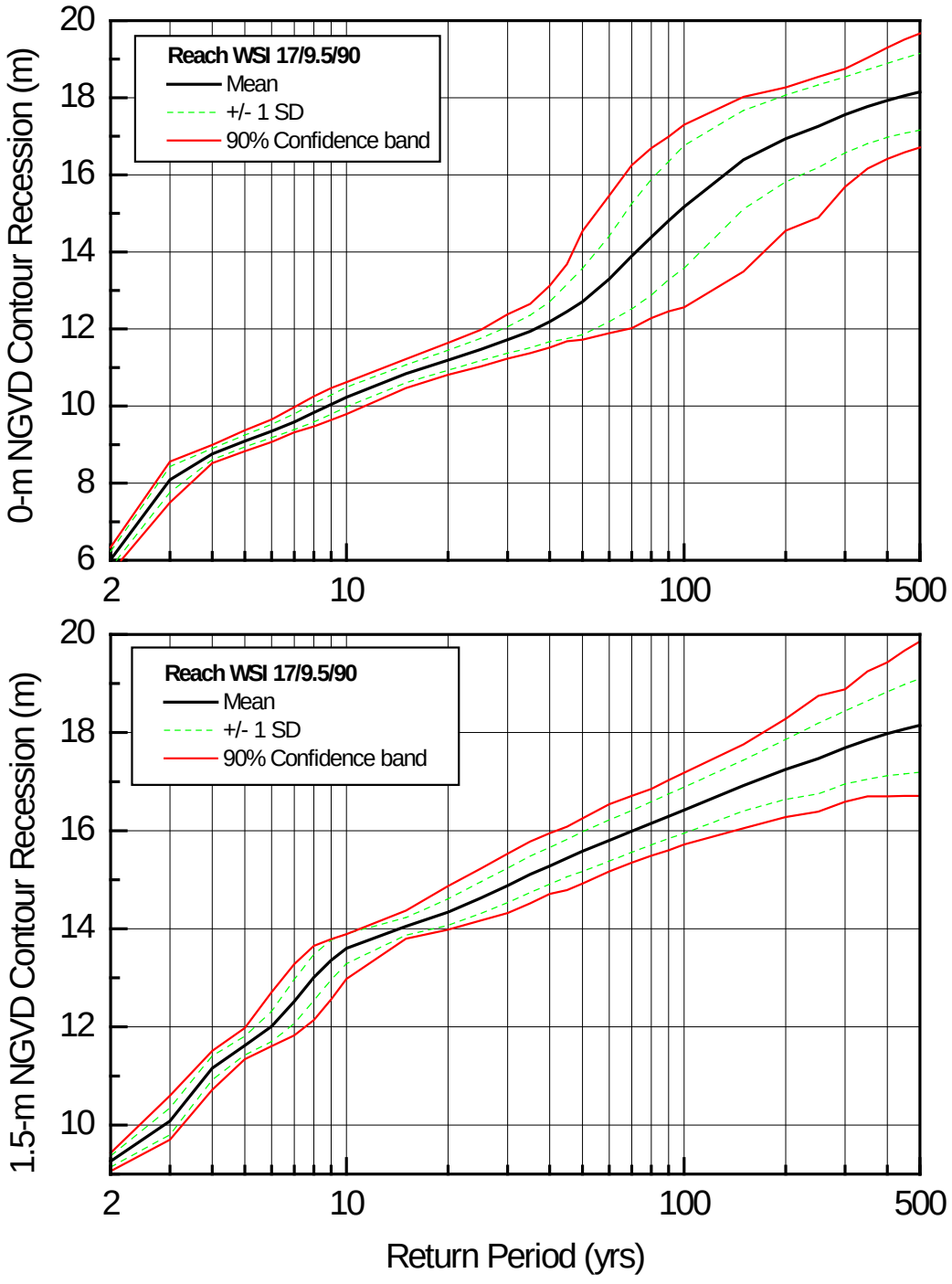

Reach WSI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
50
2
10
100
500
Reach WSI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
2
10
100
500
Return Period (yrs)

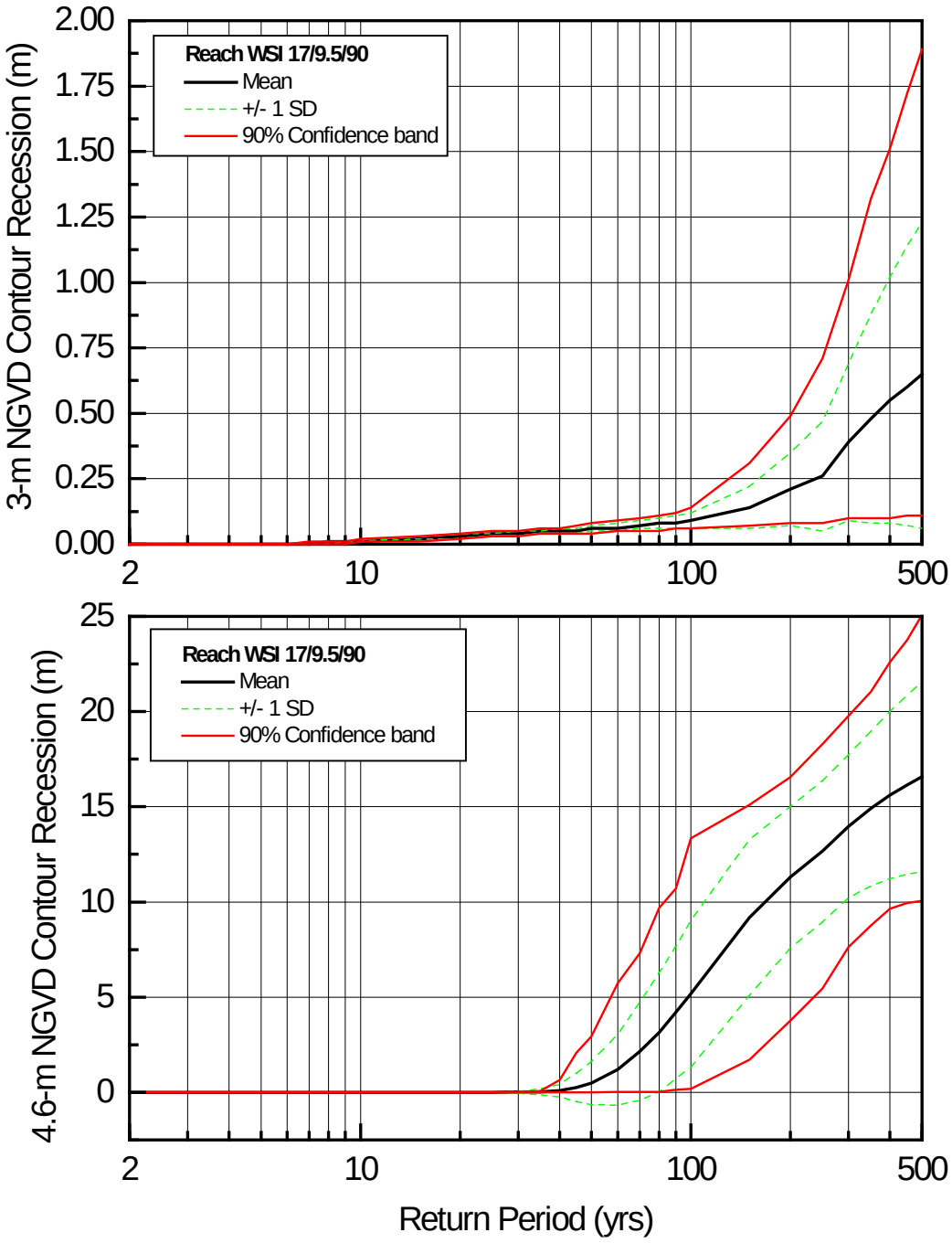

Reach WSI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
5
10
15
20
2
10
100
500
Reach WSI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
8
2
10
100
500
Return Period (yrs)

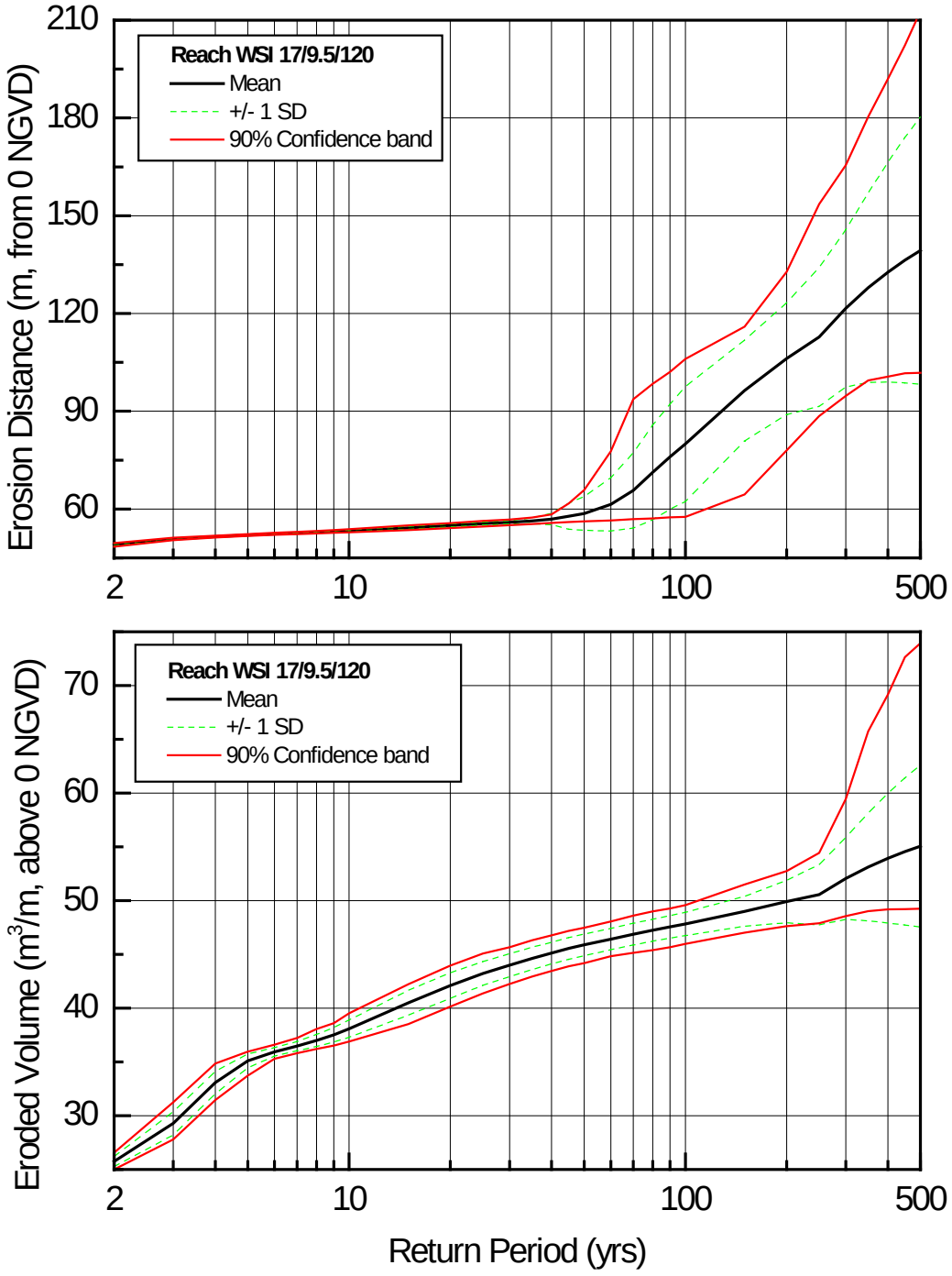

Reach WSI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach WSI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Return Period (yrs)

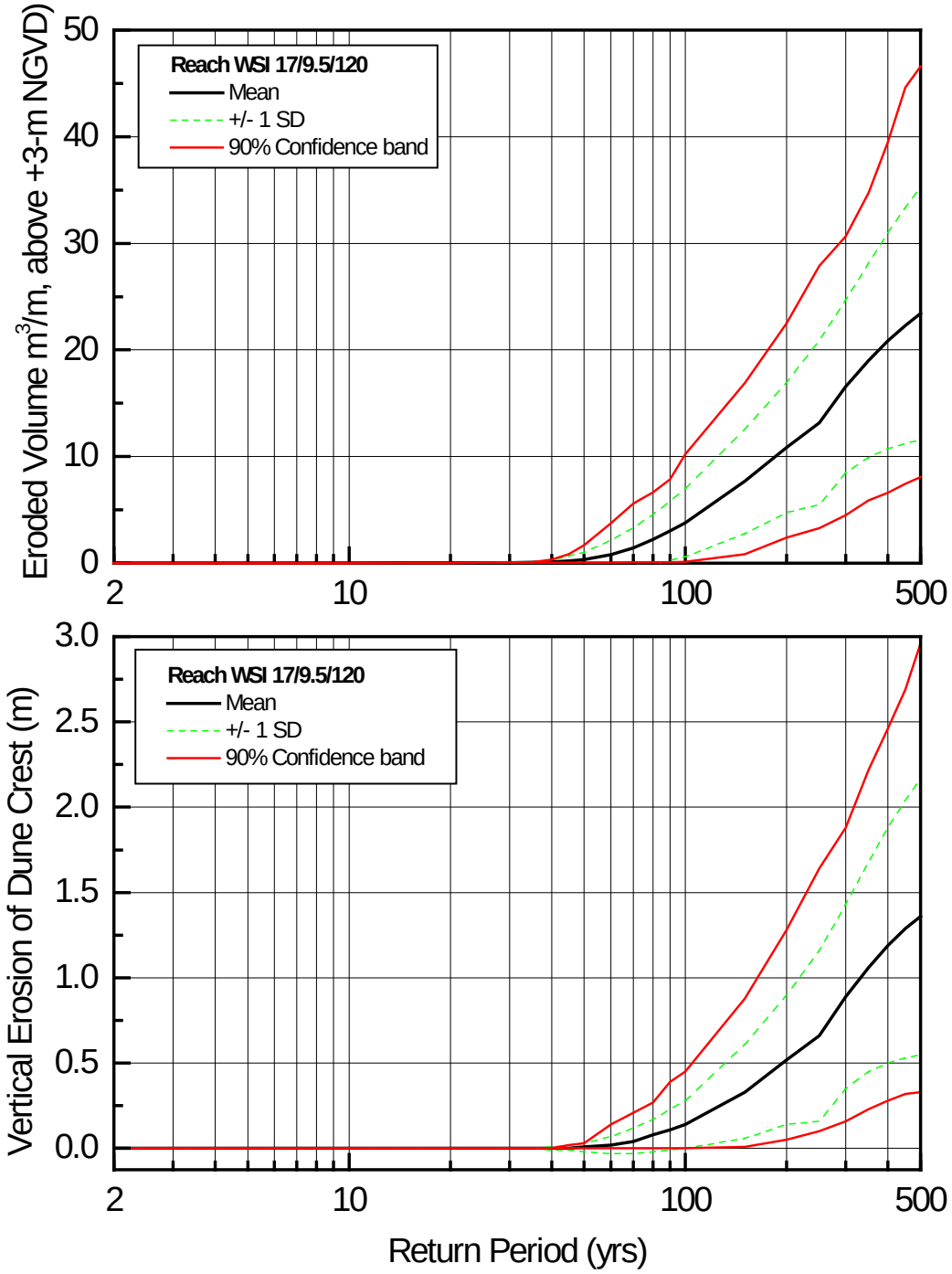

Max. Wave Setup Magnitude (m, above SWL)
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach WSI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
Reach WSI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

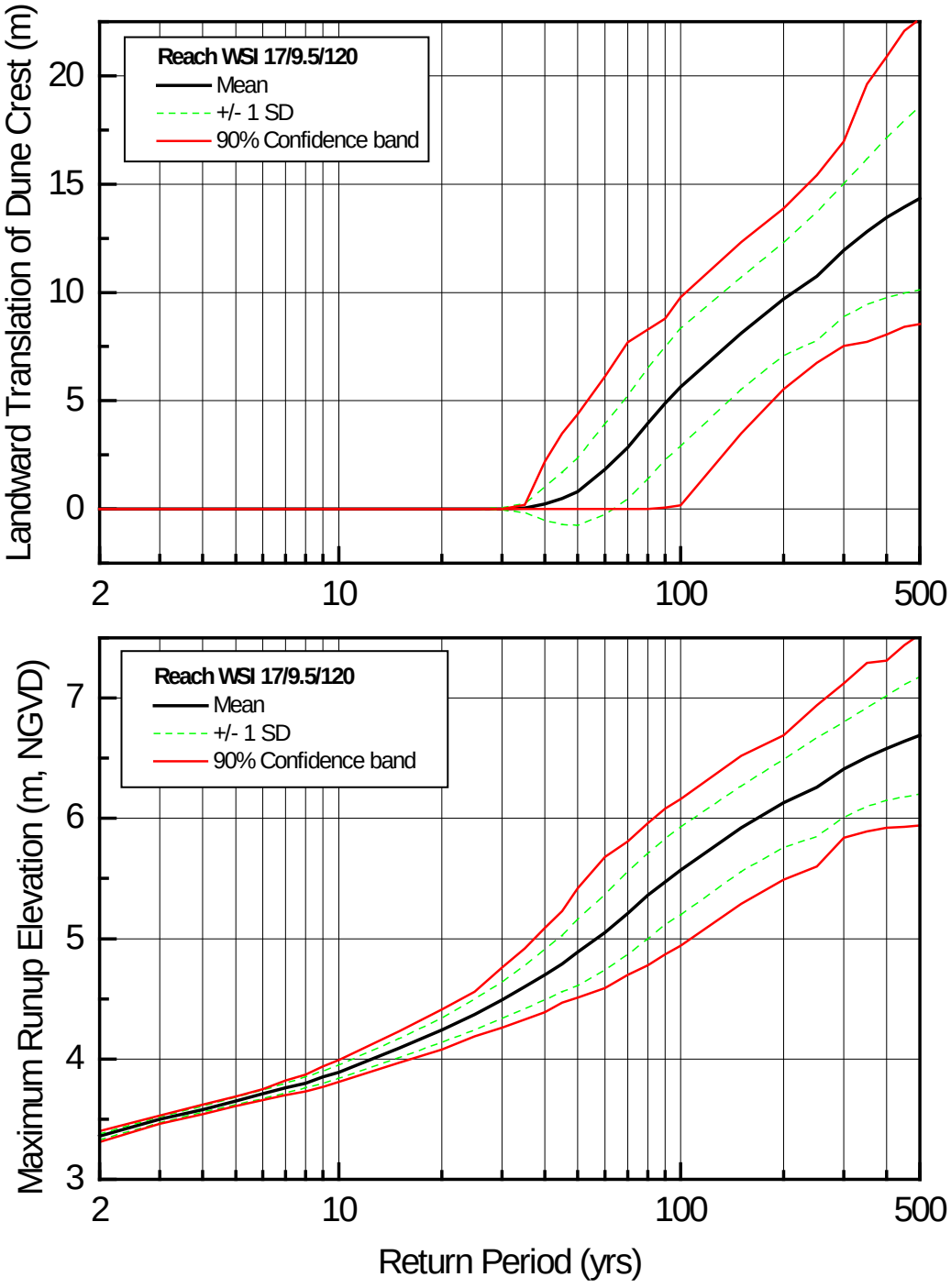

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach WSI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
300
250
200
150
100
50
Reach WSI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

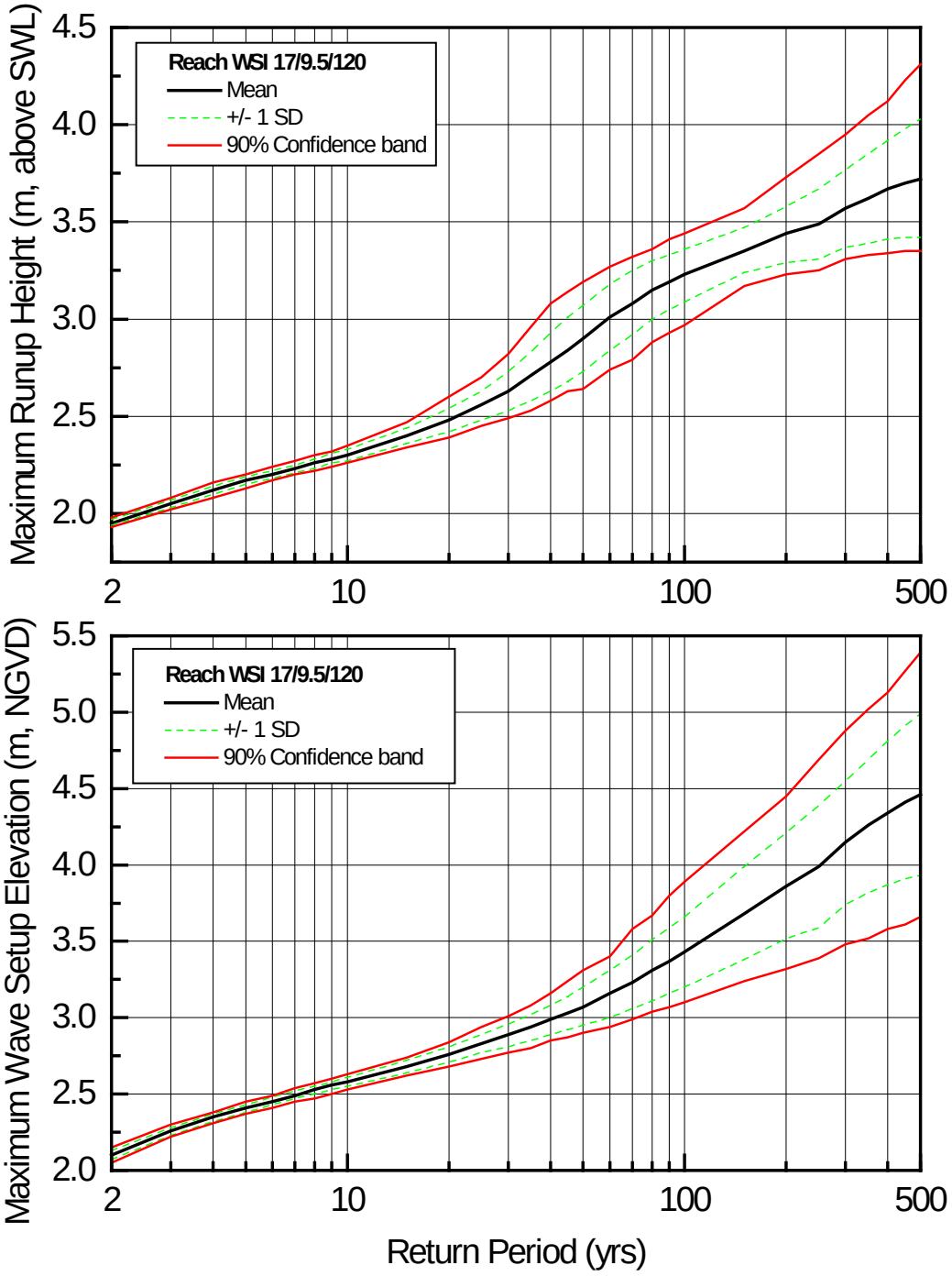

Reach WSI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
18
16
14
12
10
8
6
2
10
100
500
Reach WSI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20
18
16
14
12
10
2
10
100
500
Return Period (yrs)

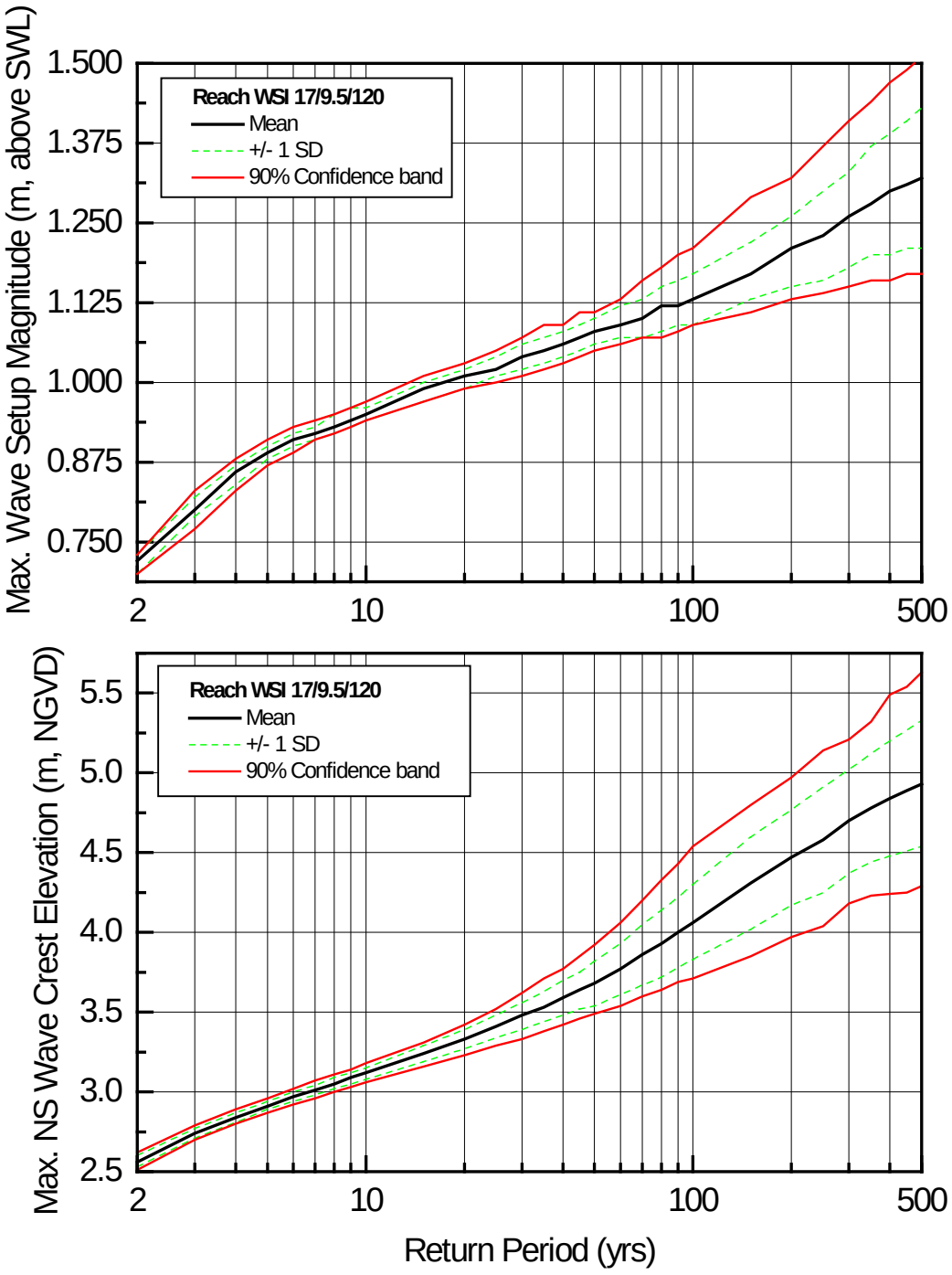

Reach WSI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
2
10
100
500
Reach WSI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

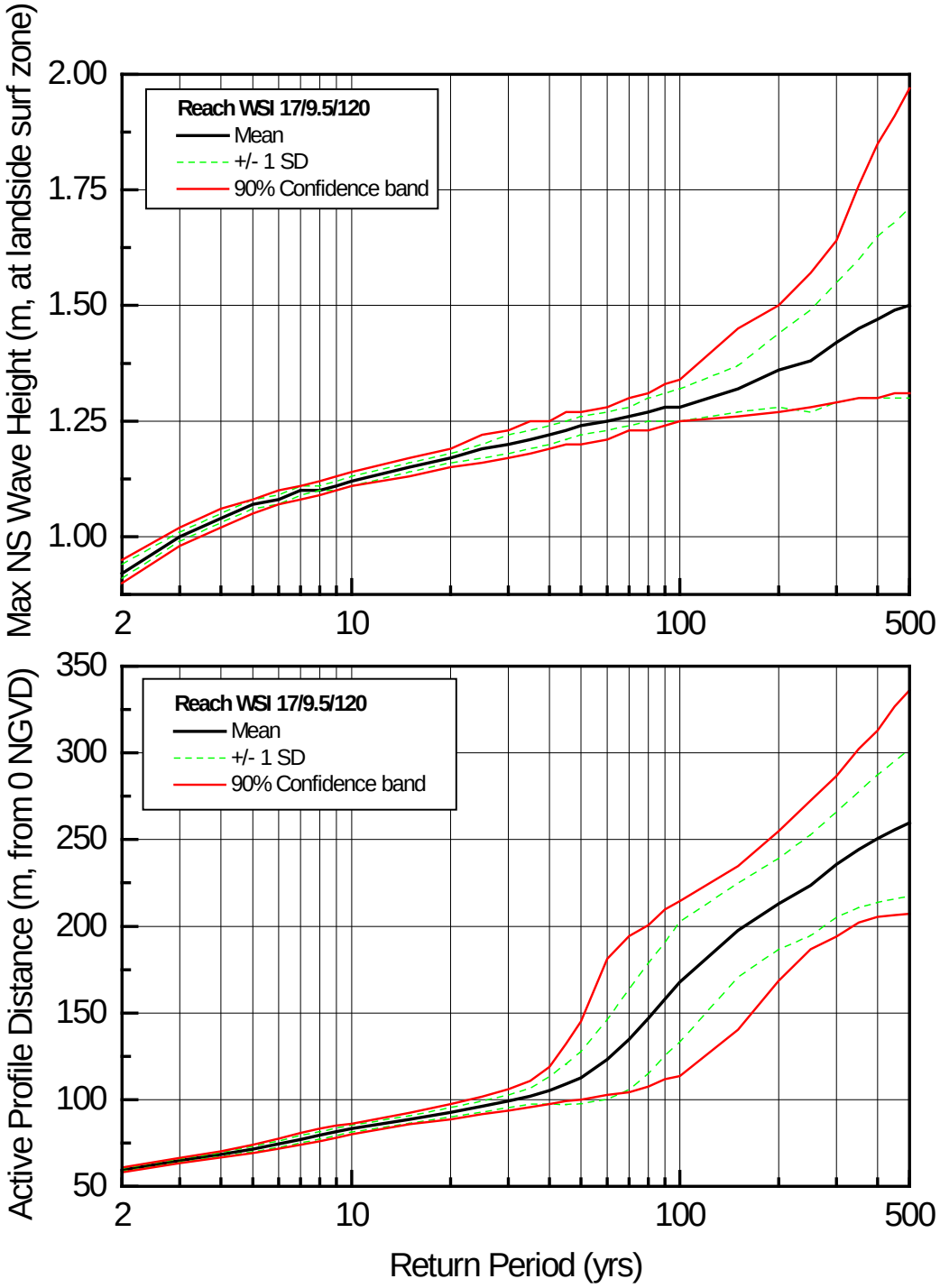

Reach WSI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
210
180
150
120
90
60
2
10
100
500
Reach WSI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
70
60
50
40
30
2
10
100
500
Return Period (yrs)

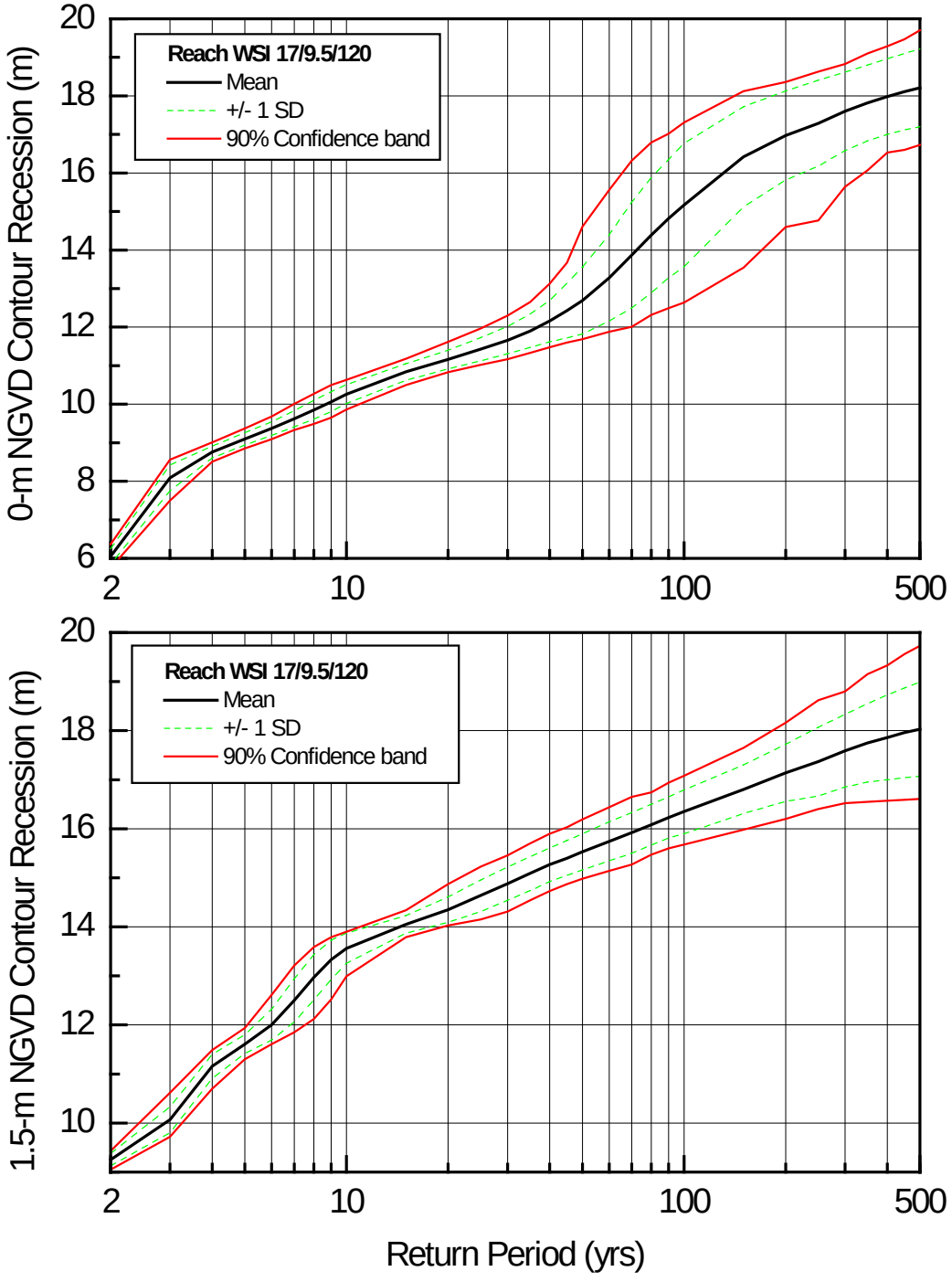

Reach WSI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
50
2
10
100
500
Reach WSI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
2
10
100
500
Return Period (yrs)

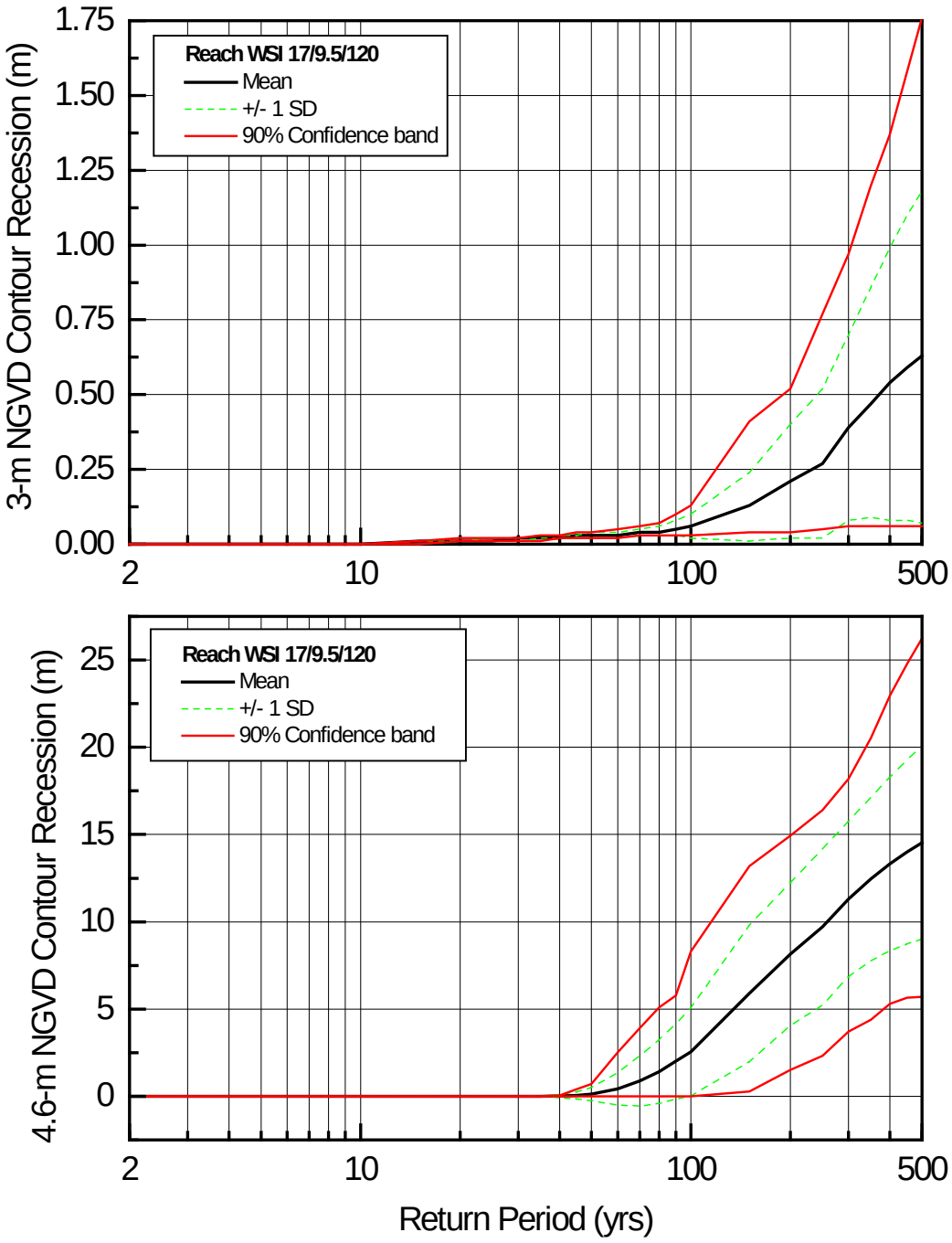

Reach WSI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
5
10
15
20
2
10
100
500
Reach WSI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
3
4
5
6
7
2
10
100
500
Return Period (yrs)

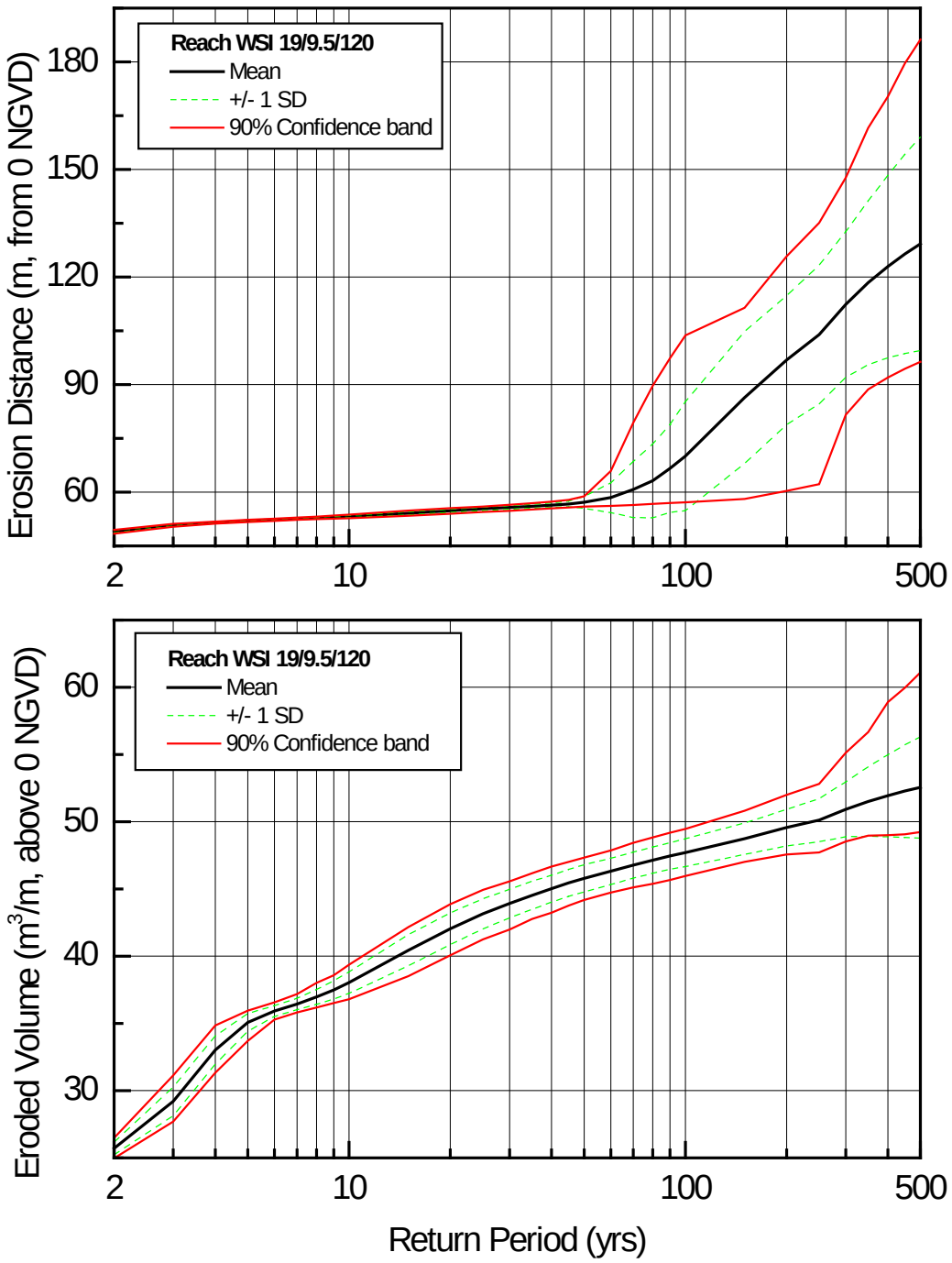

Reach WSI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach WSI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Return Period (yrs)

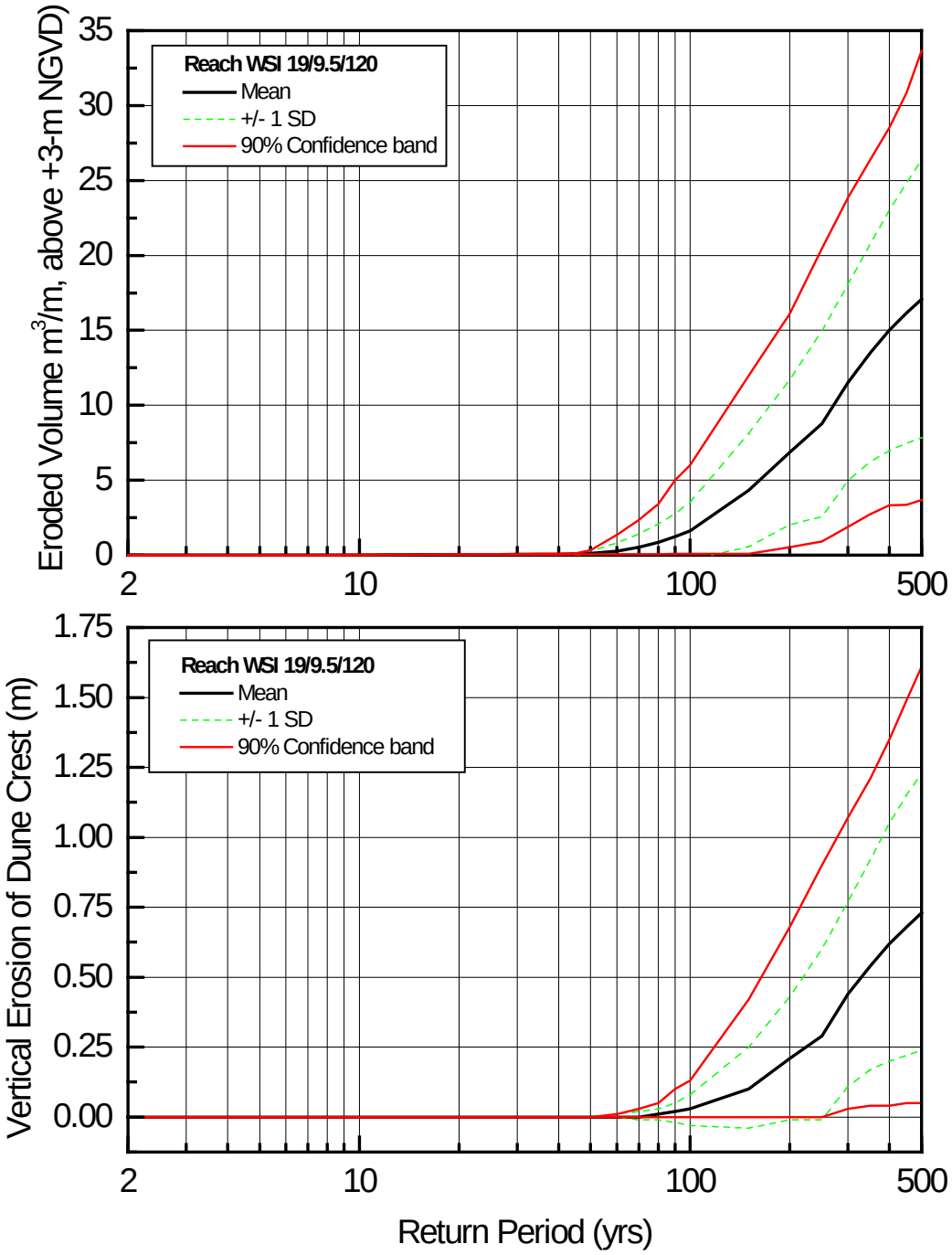

Max. Wave Setup Magnitude (m, above SWL)
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach WSI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
Reach WSI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

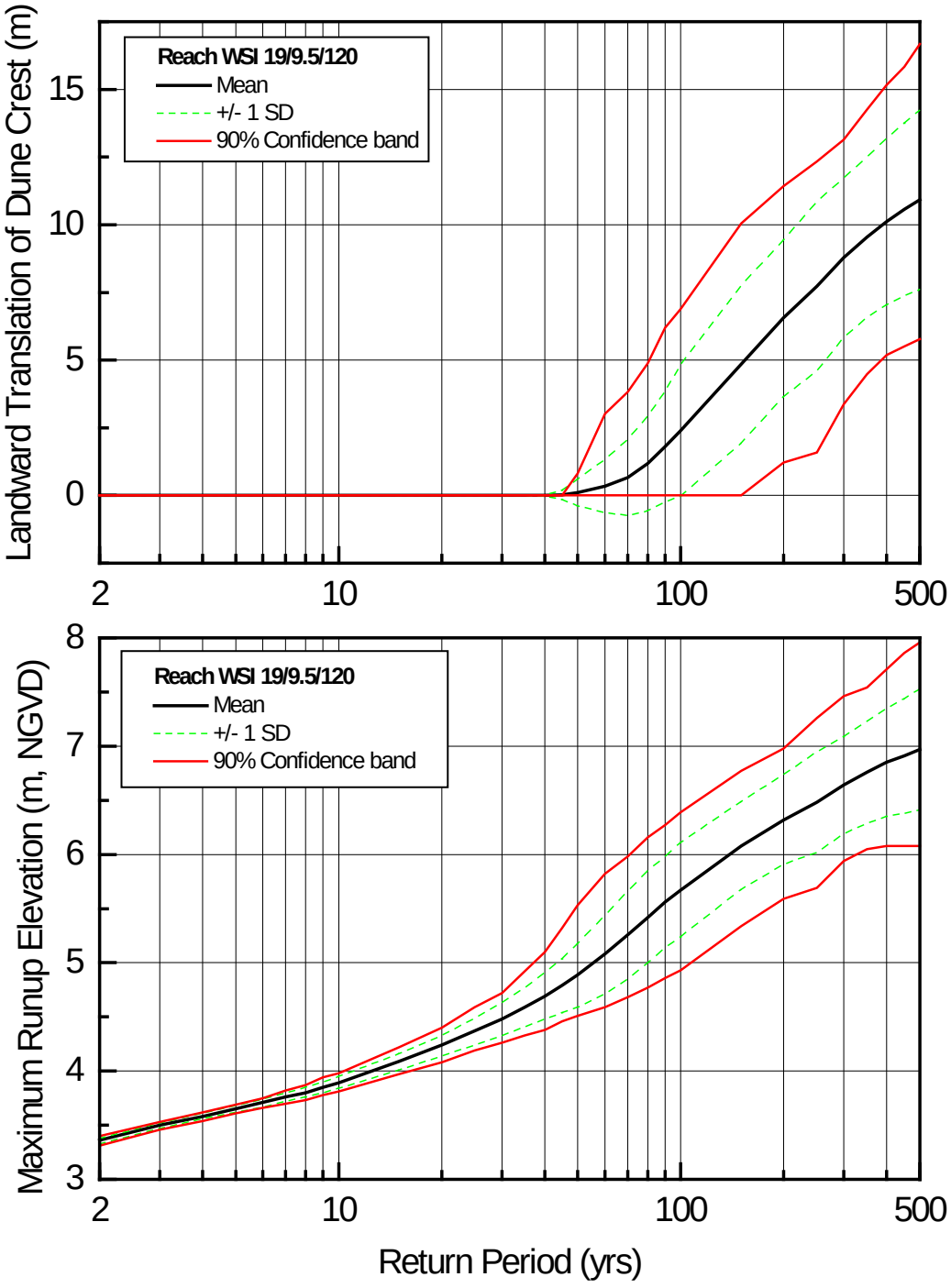

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach WSI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
350
300
250
200
150
100
50
Reach WSI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

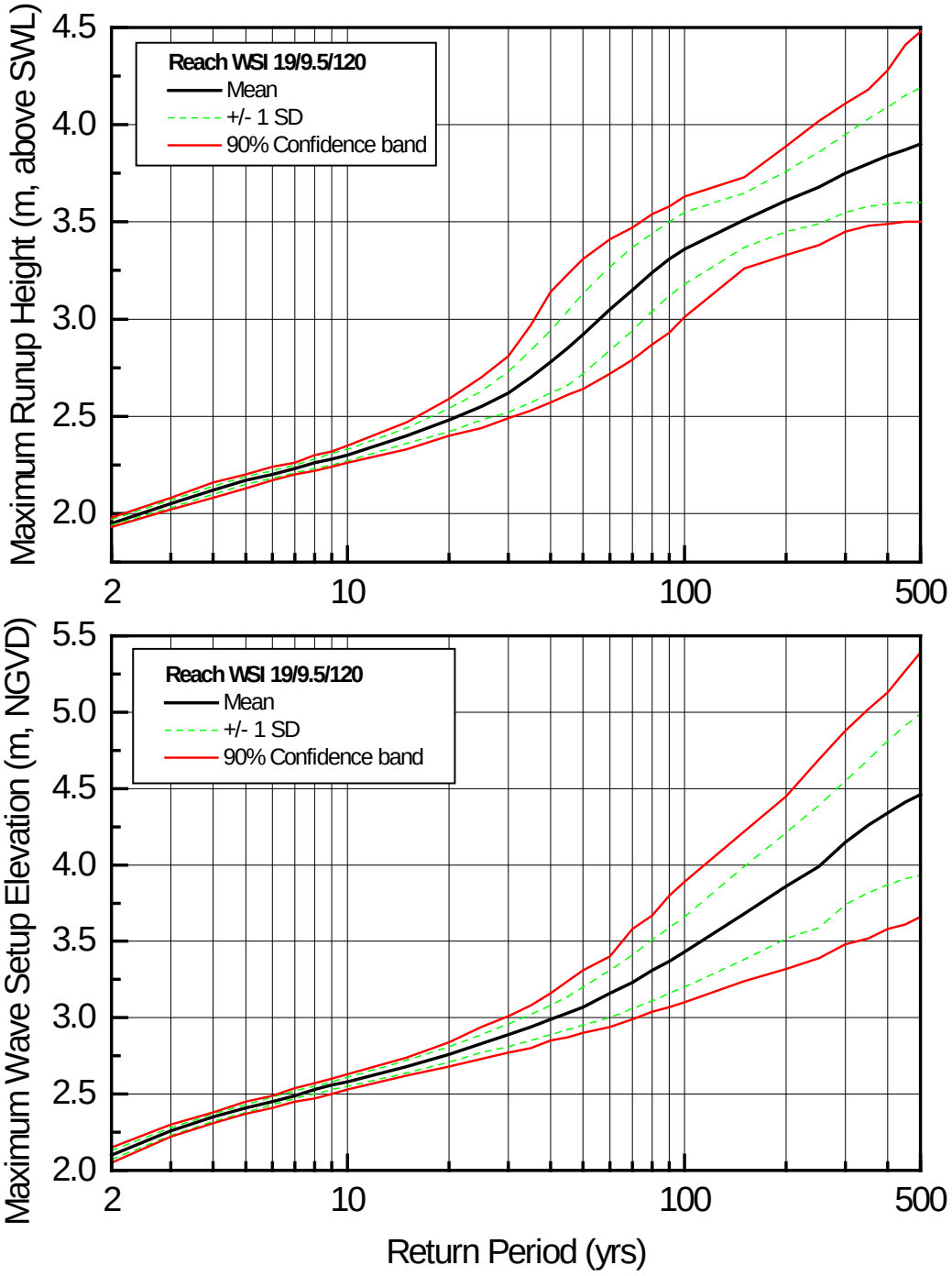

Reach WSI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
18
16
14
12
10
8
6
2
10
100
500
Reach WSI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20
18
16
14
12
10
2
10
100
500
Return Period (yrs)

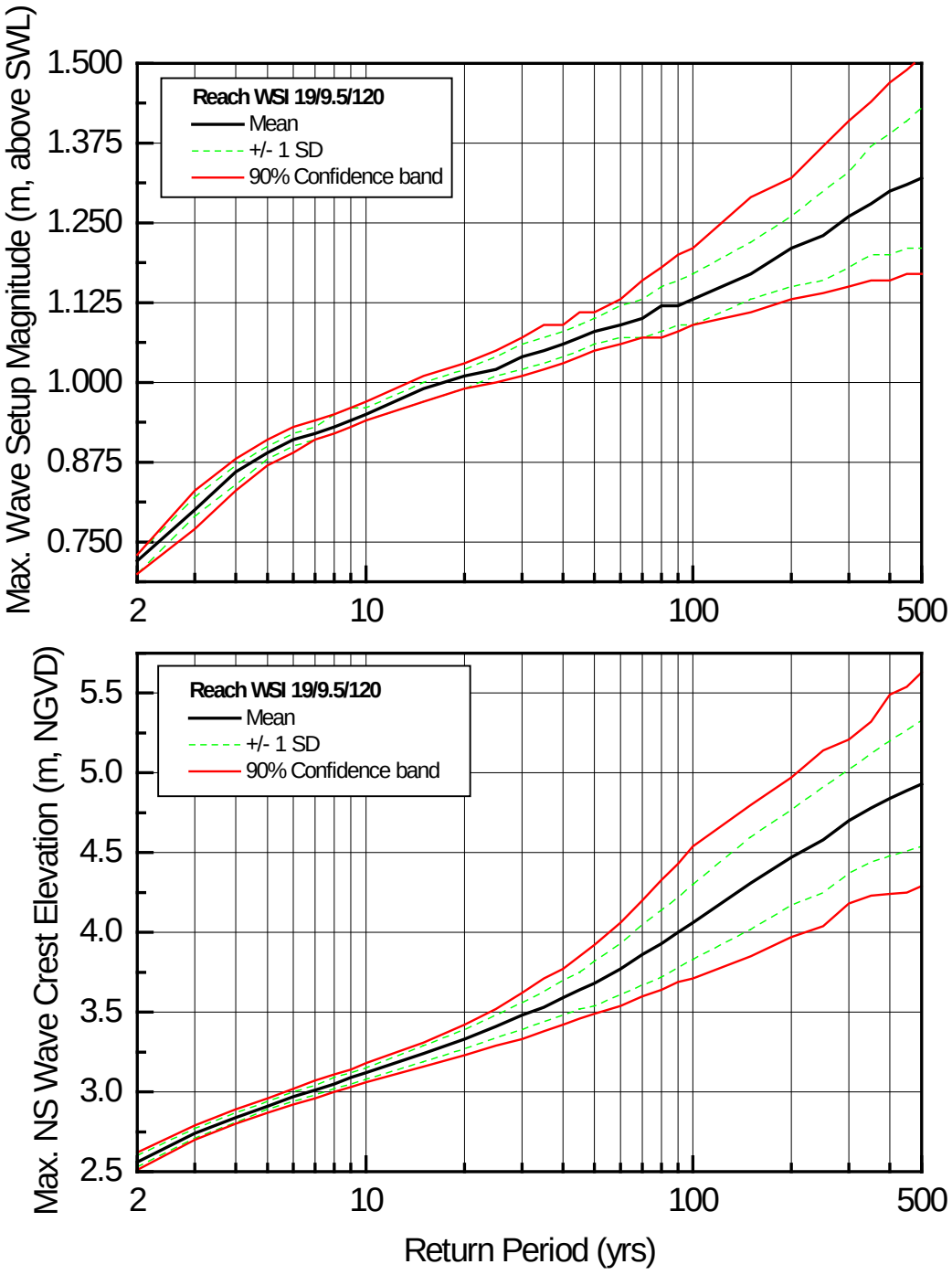

Reach WSI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
2
10
100
500
Reach WSI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

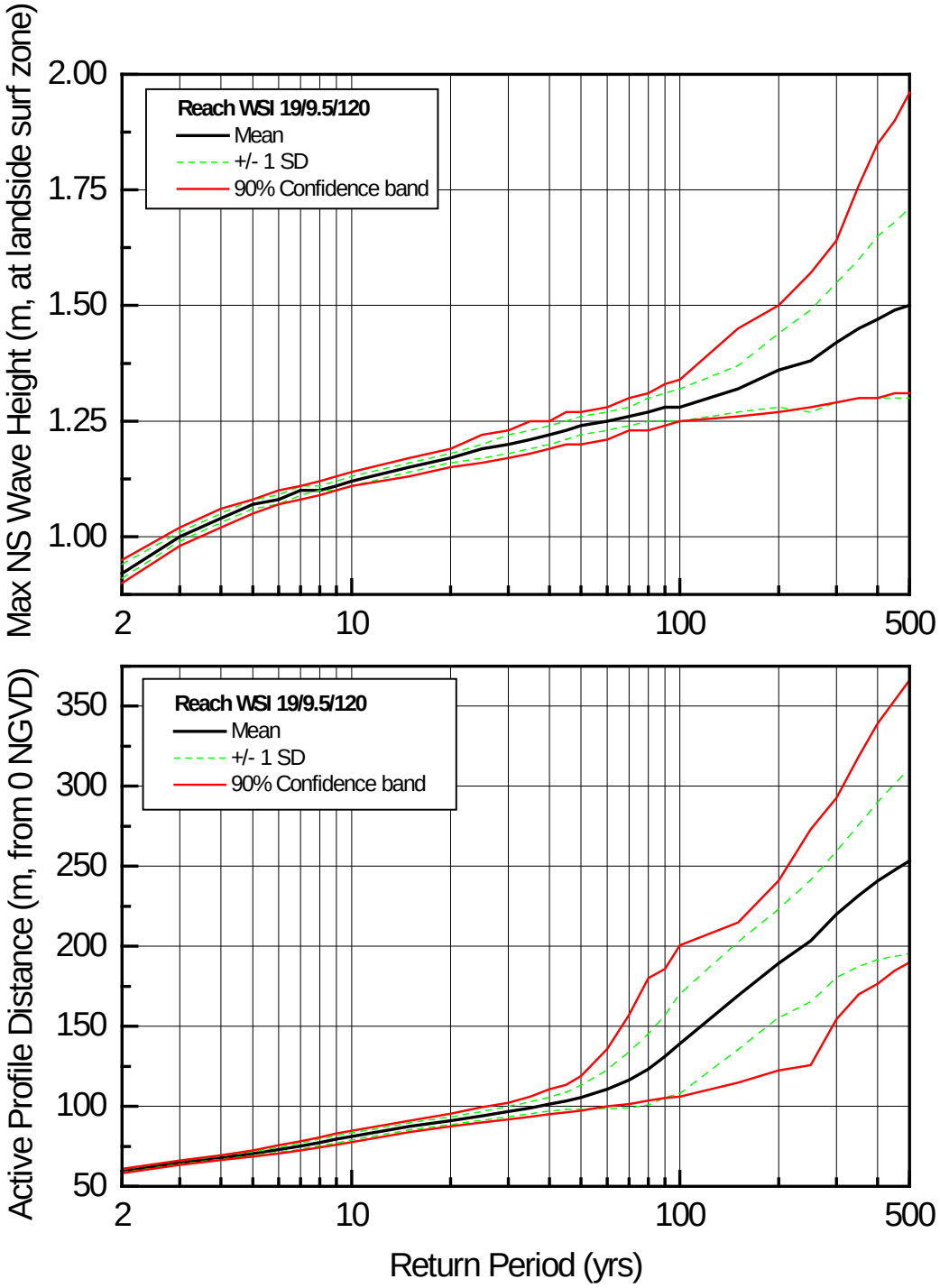

Reach WSI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
150
120
90
60
2
10
100
500
Reach WSI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
2
10
100
500
Return Period (yrs)

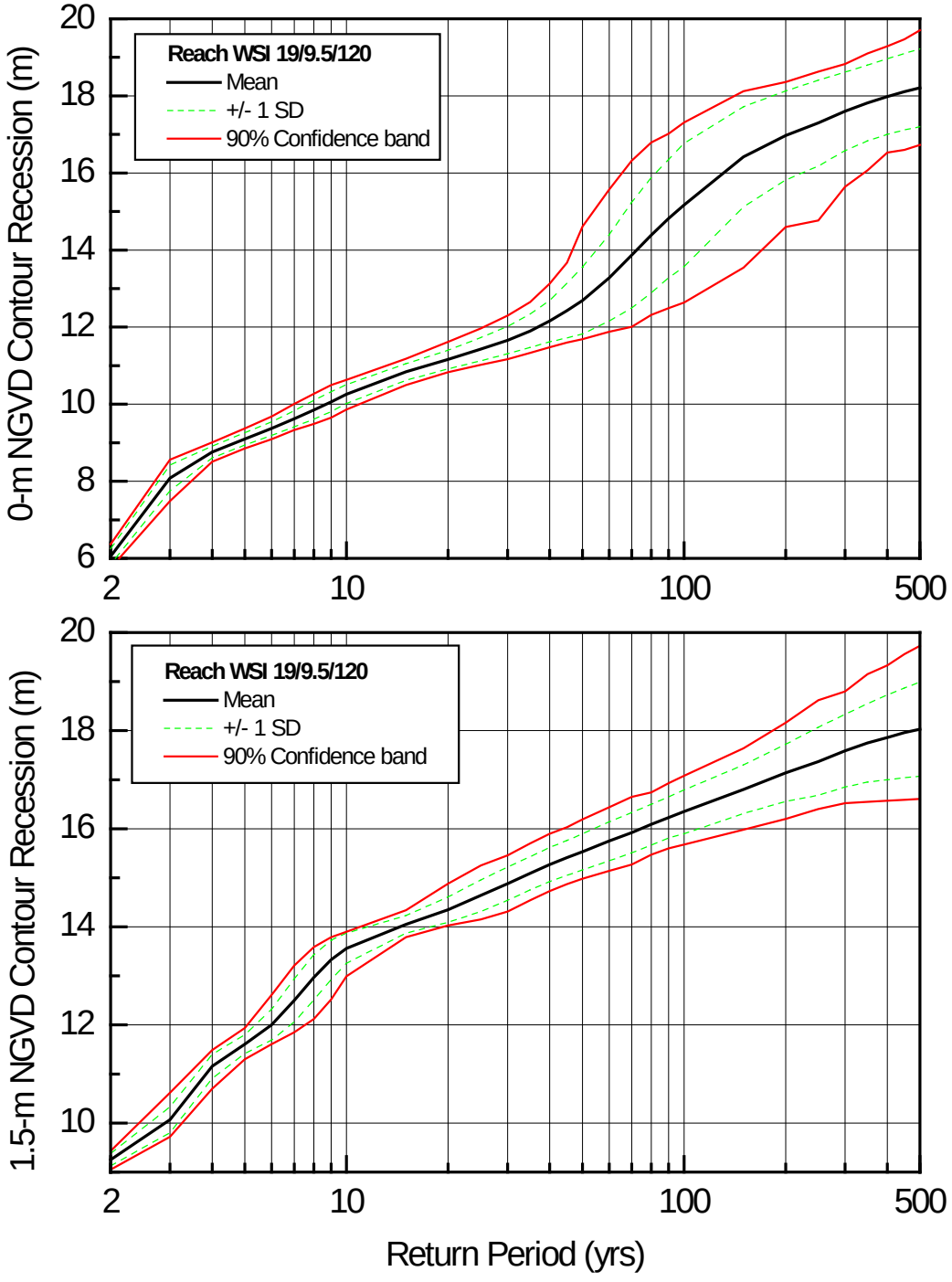

Reach WSI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
5
10
15
20
25
30
35
2
10
100
500
Reach WSI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
2
10
100
500
Return Period (yrs)

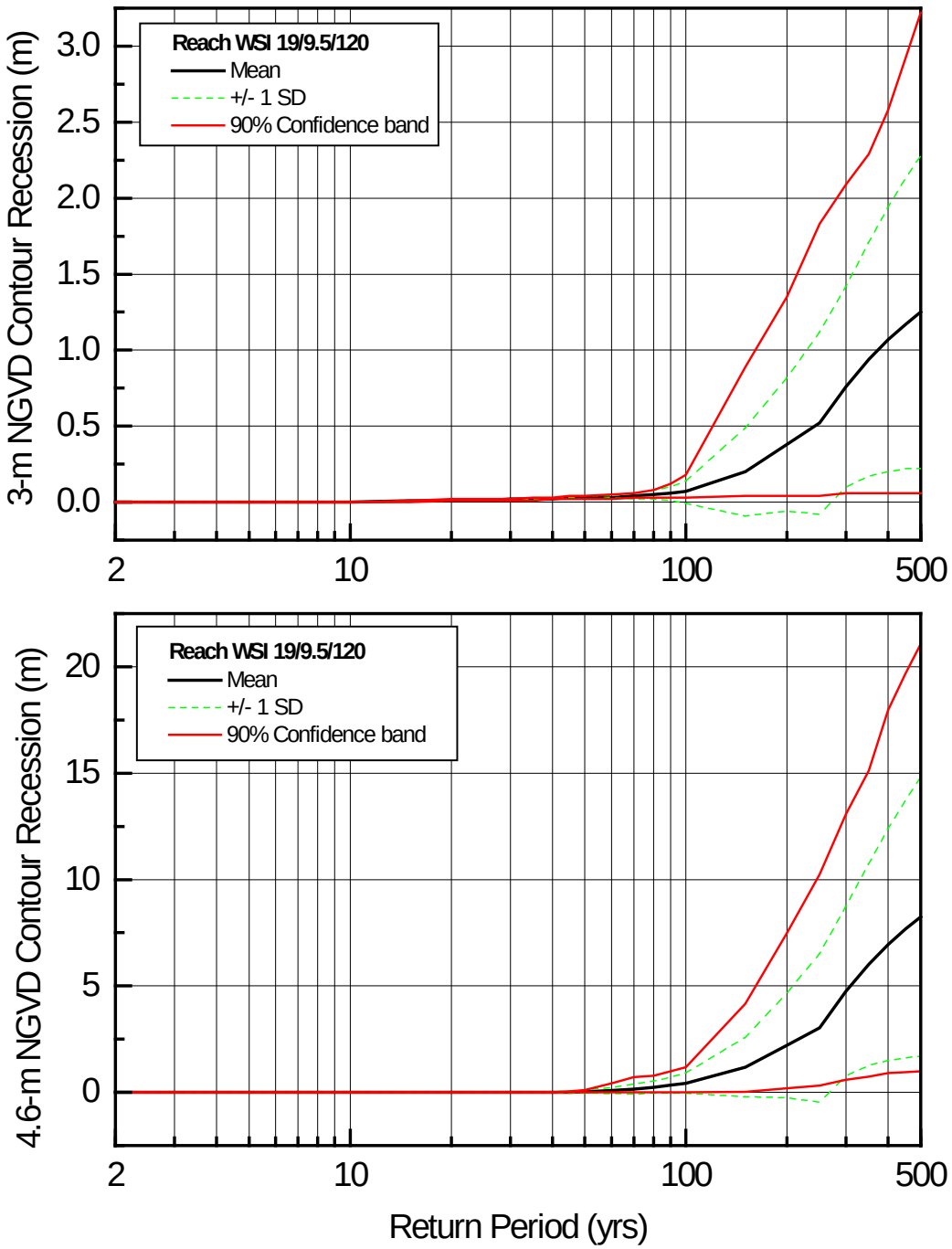

Reach WSI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
15
10
5
0
2
10
100
500
Reach WSI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
3
2
10
100
500
Return Period (yrs)

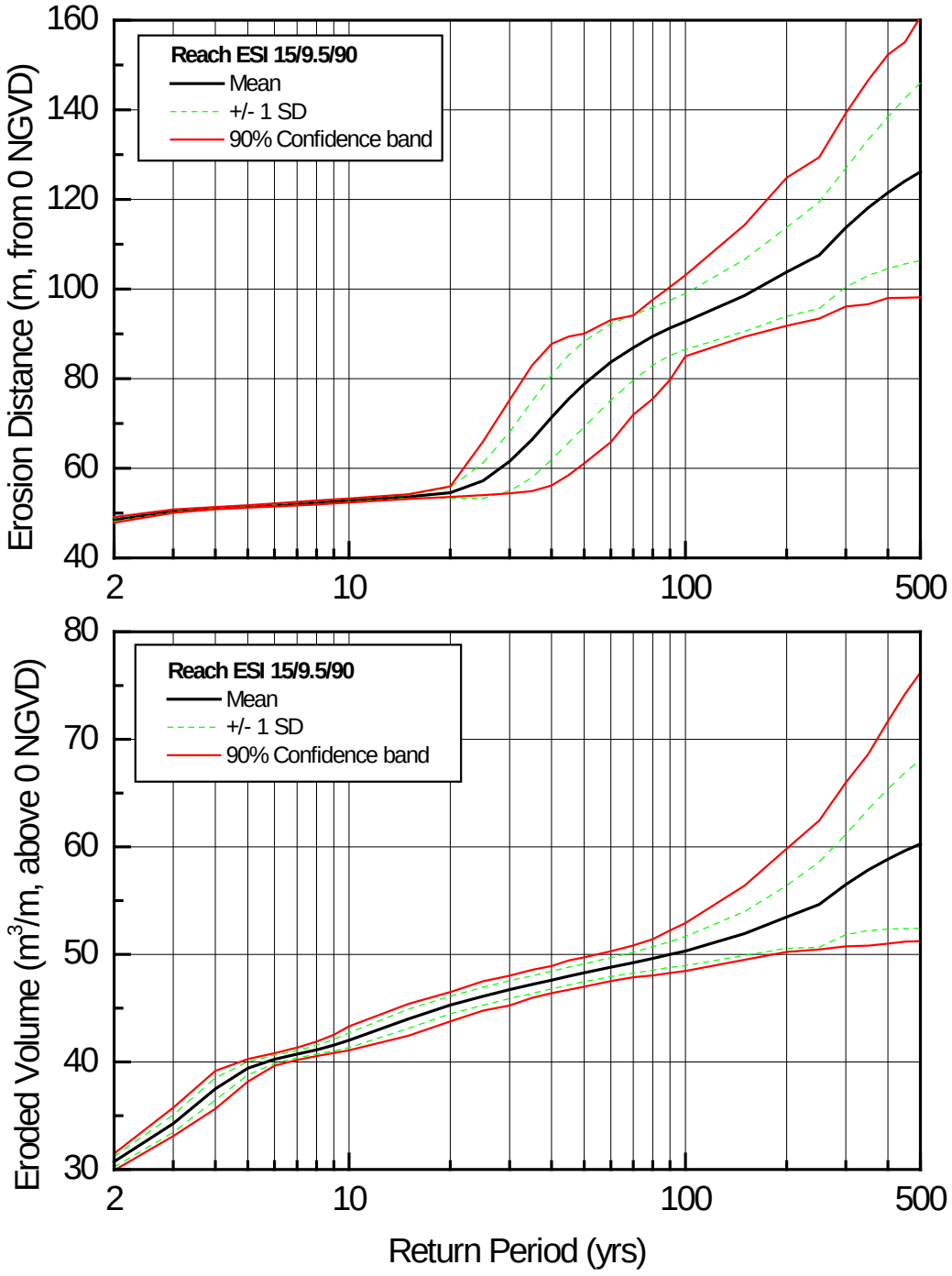

Reach WSI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach WSI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Return Period (yrs)

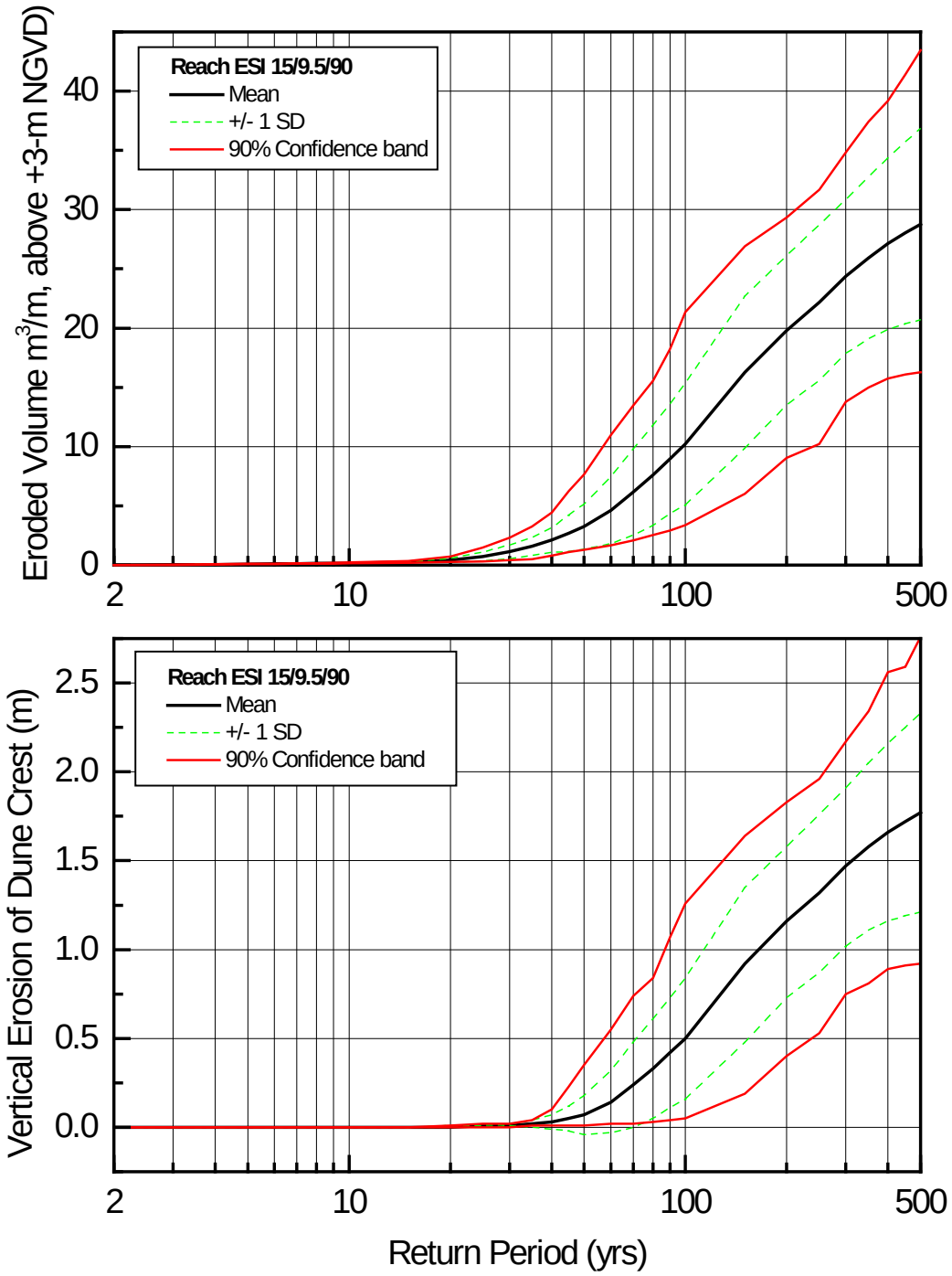

Max. Wave Setup Magnitude (m, above SWL)
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach WSI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
Reach WSI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

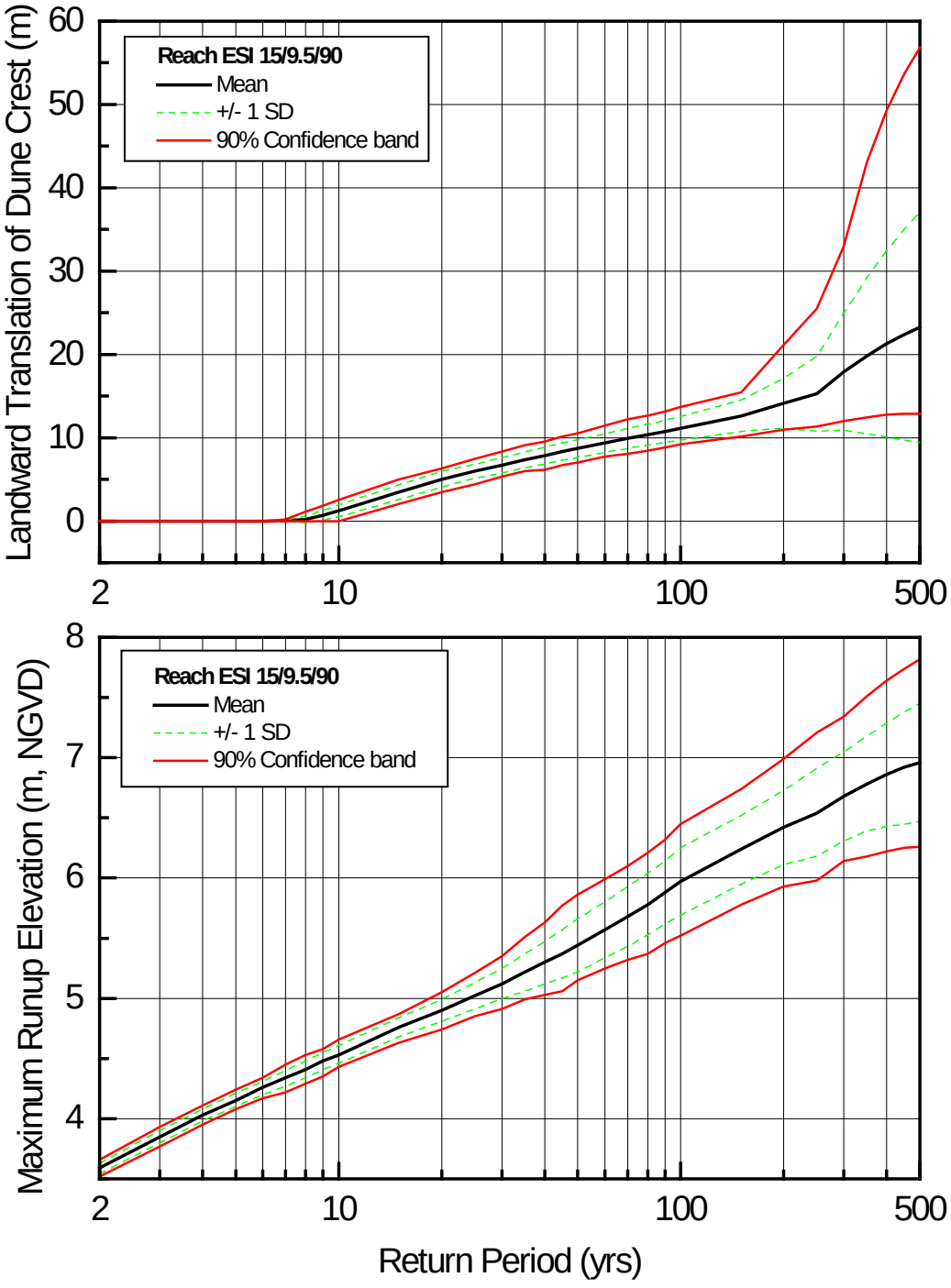

Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
Reach WSI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
350
300
250
200
150
100
50
Reach WSI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

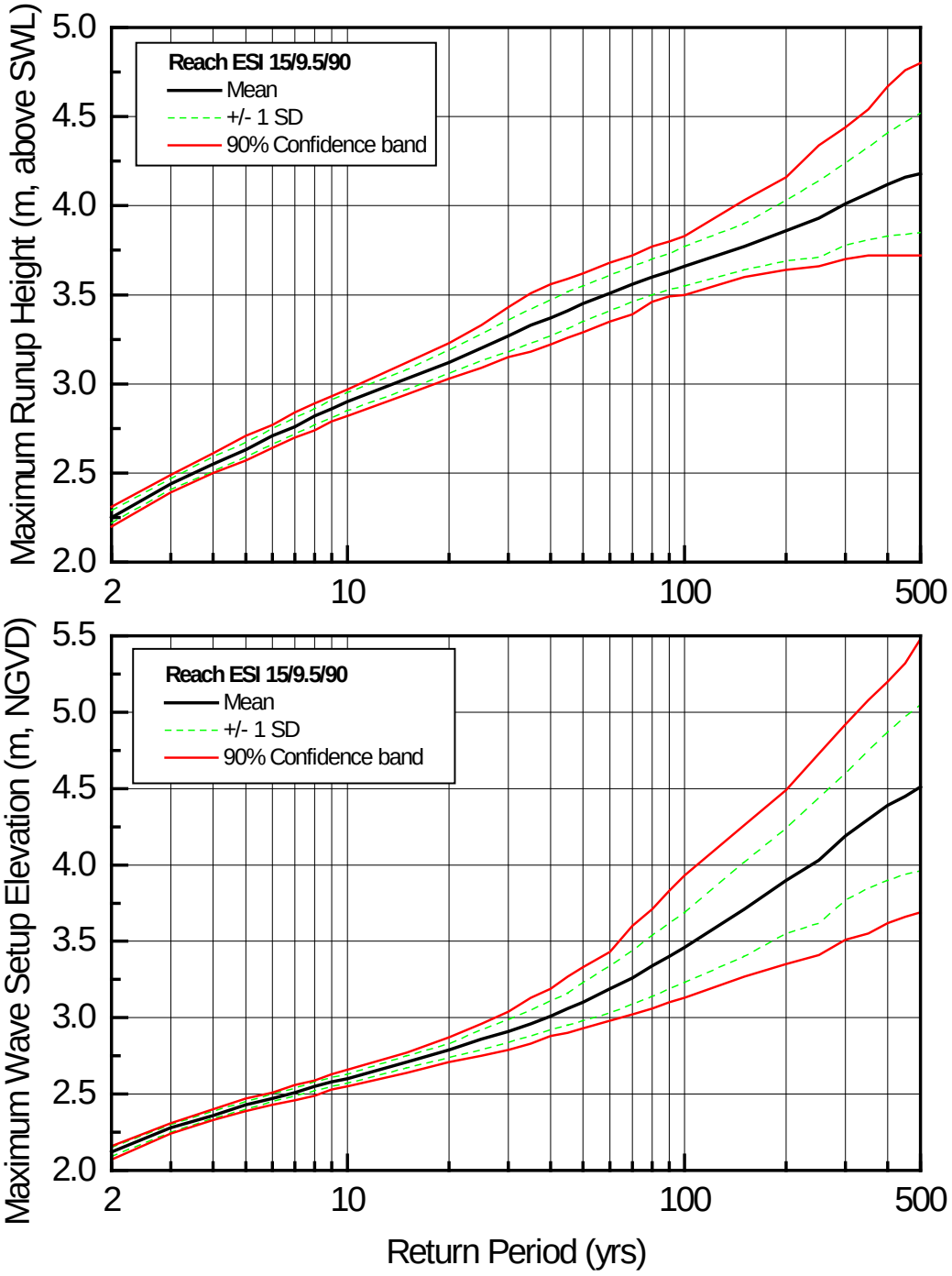

Reach WSI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
18
16
14
12
10
8
6
2
10
100
500
Reach WSI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20
18
16
14
12
10
2
10
100
500
Return Period (yrs)

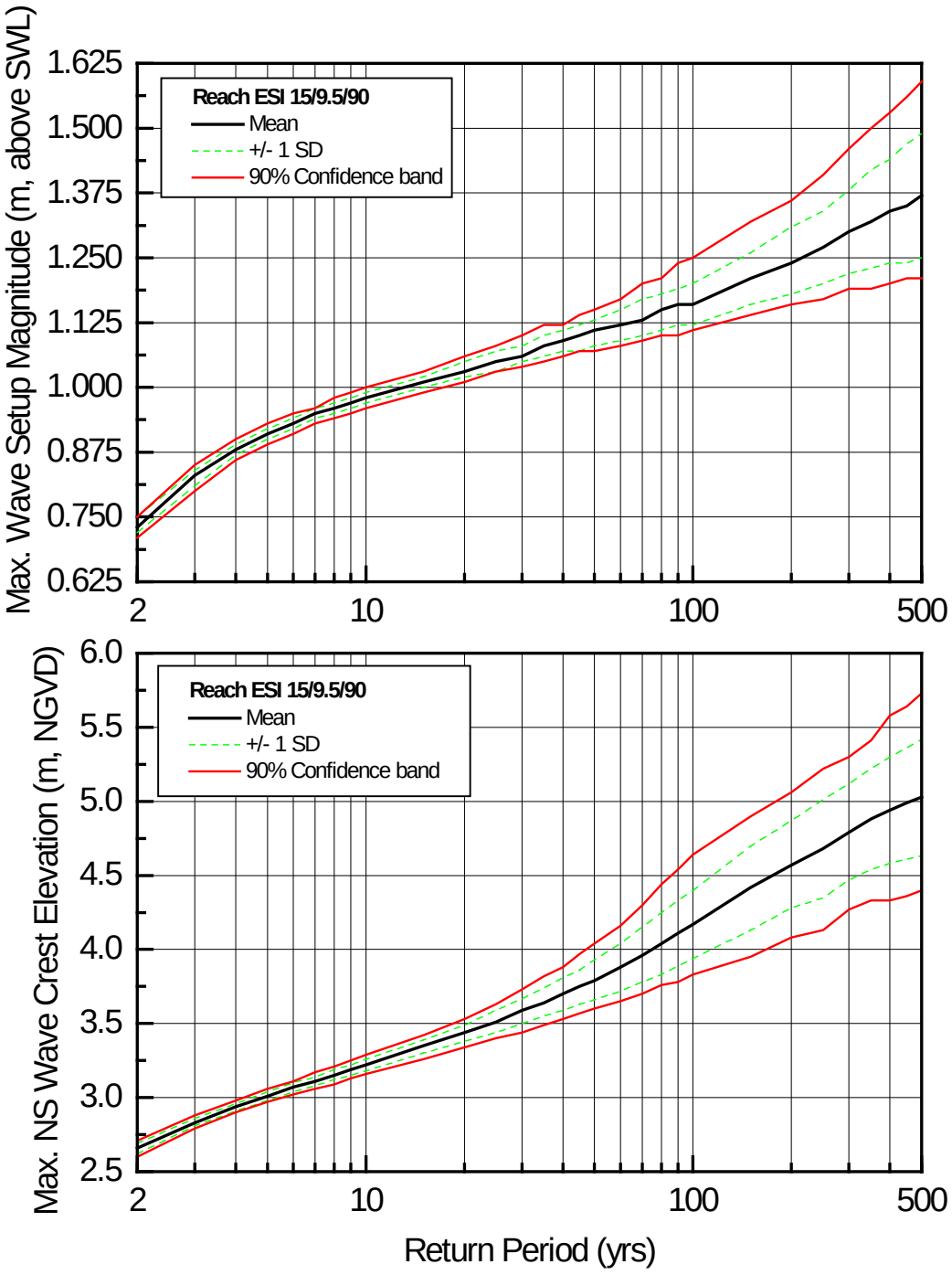

Reach WSI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach WSI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
20
15
10
5
0
2
10
100
500
Return Period (yrs)

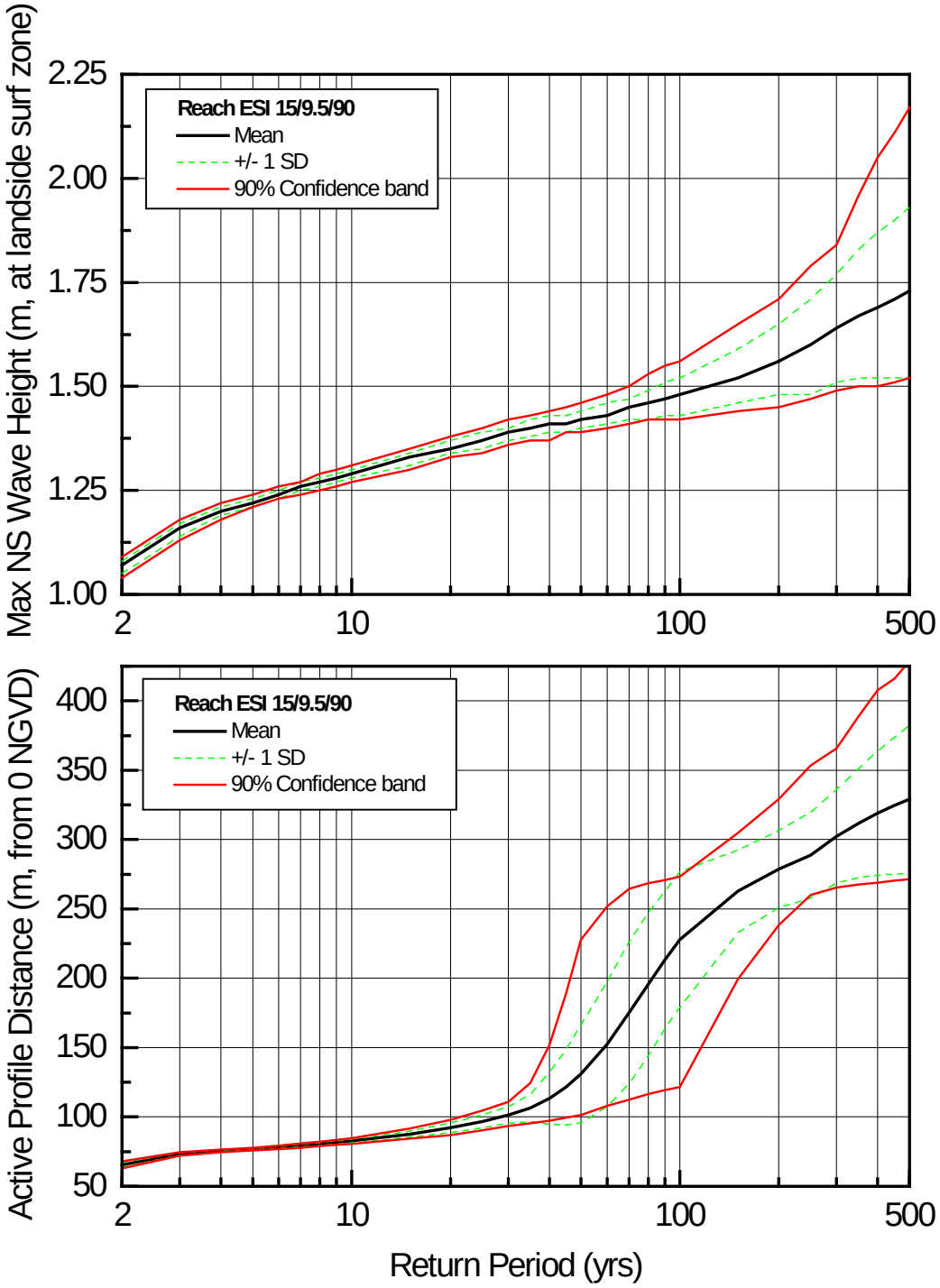

Reach ESI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
160
140
120
100
80
60
40
2
10
100
500
Reach ESI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

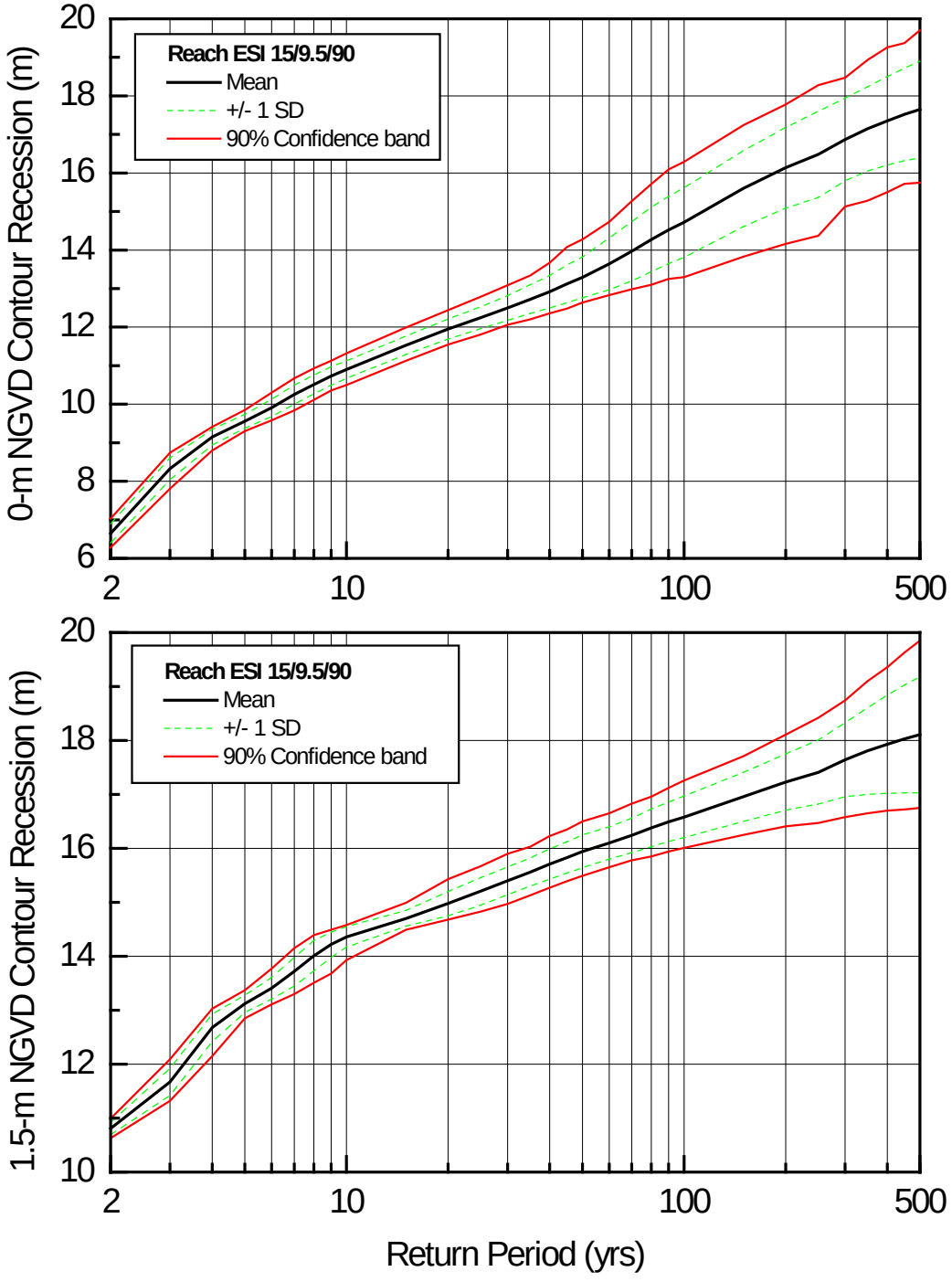

Reach ESI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
2
10
100
500
Reach ESI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2.5
2
10
100
500
Return Period (yrs)

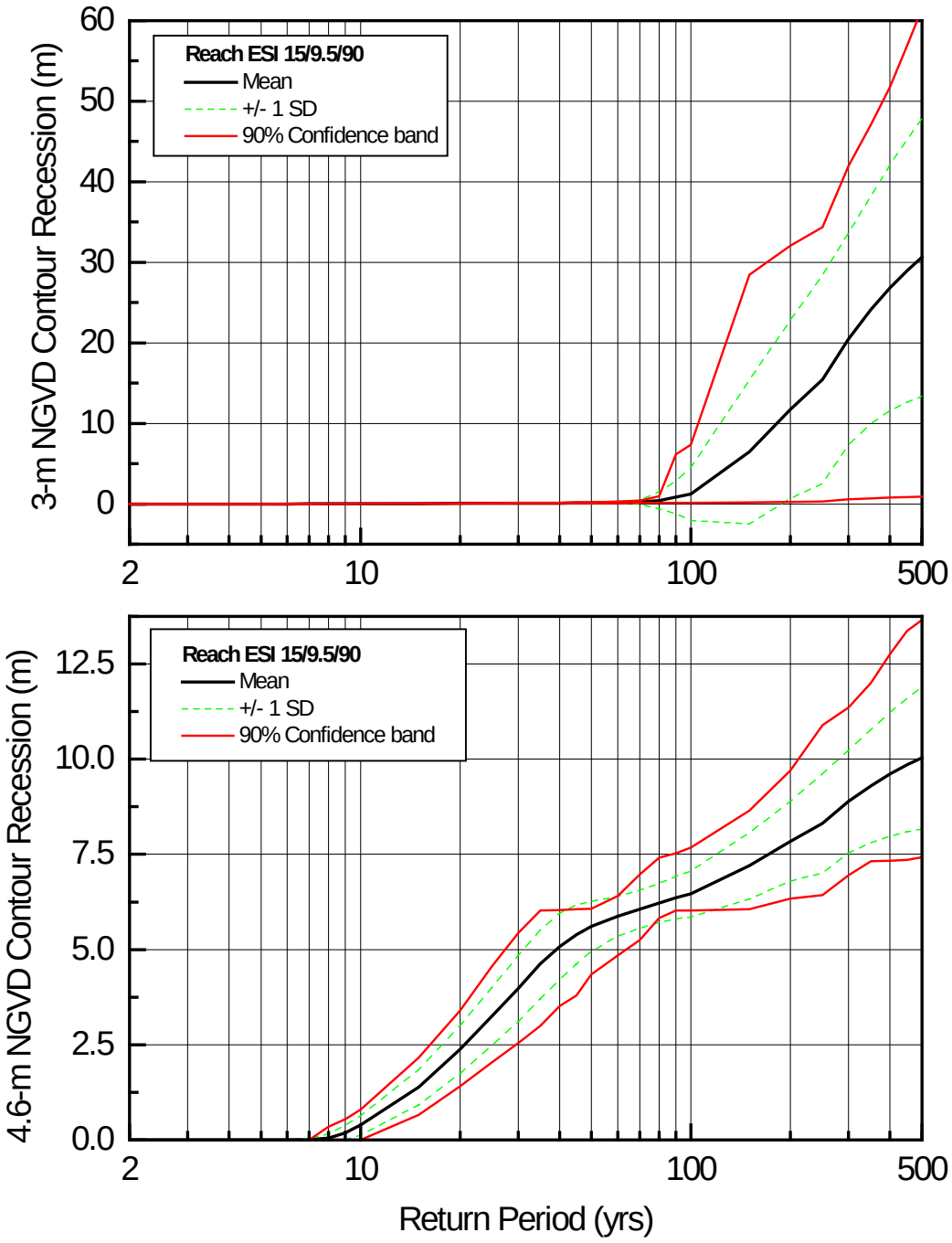

Reach ESI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
30
40
50
60
2
10
100
500
Reach ESI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
4
5
6
7
8
2
10
100
500
Return Period (yrs)

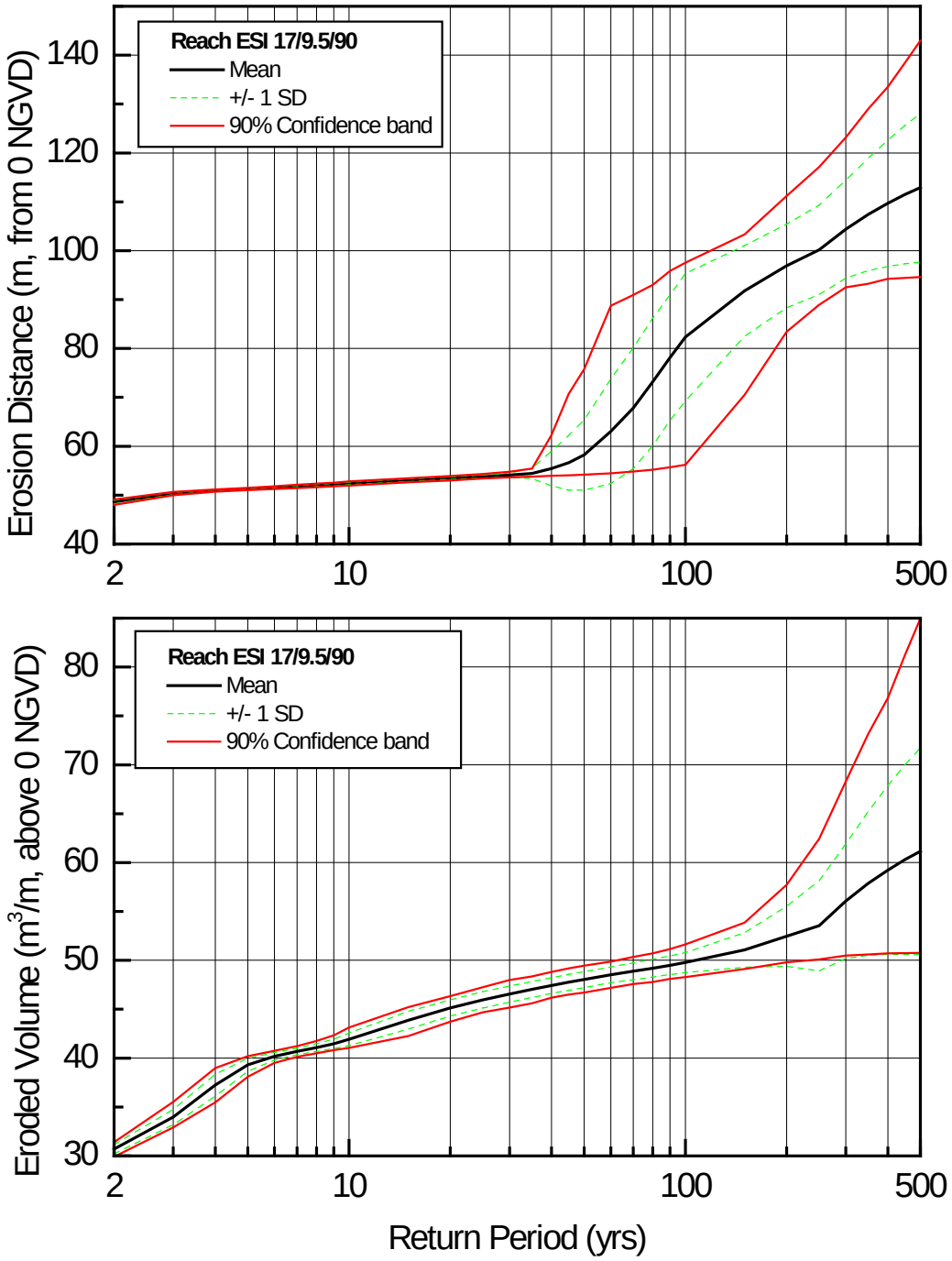

Reach ESI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach ESI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Return Period (yrs)

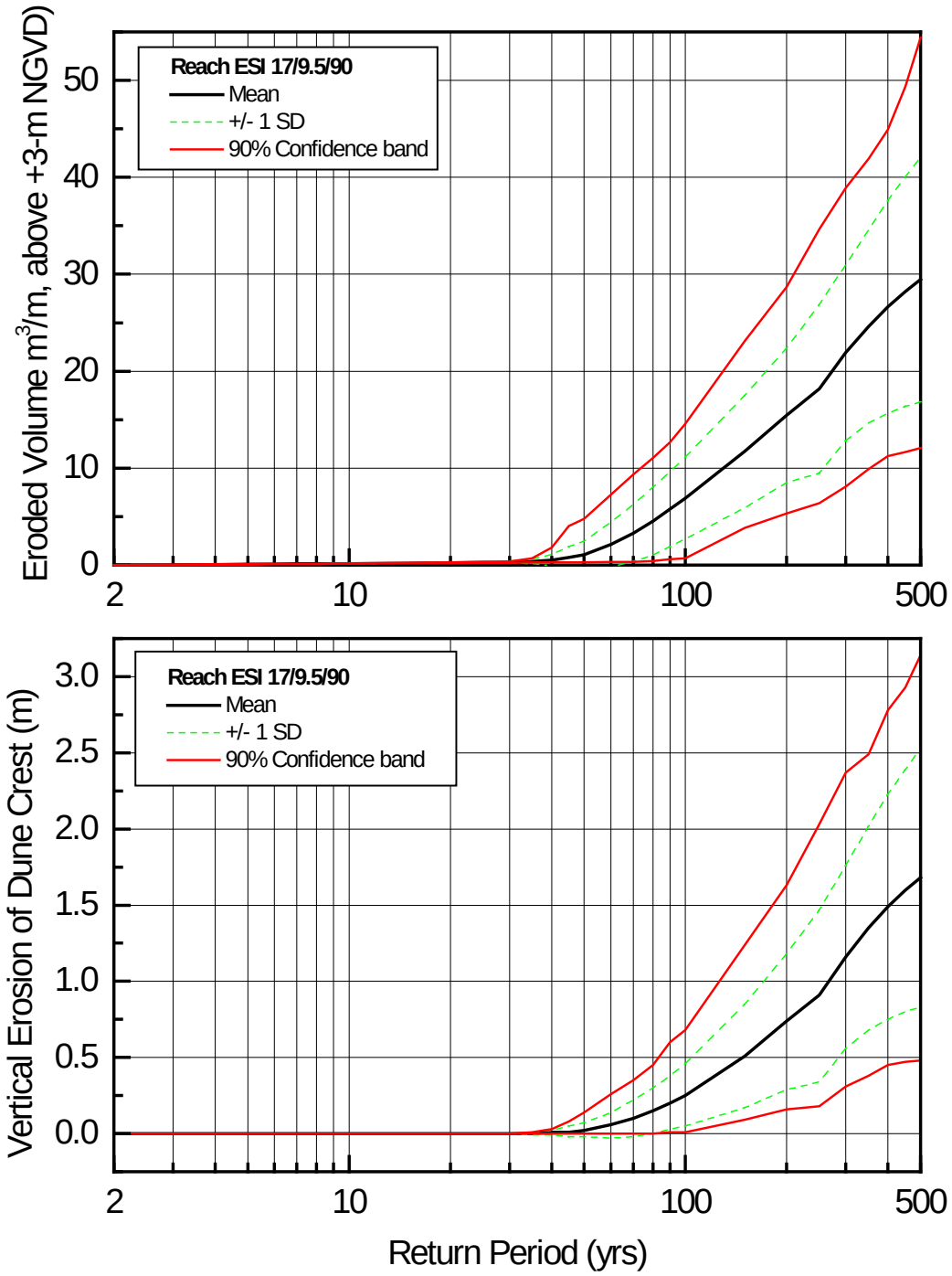

Max. Wave Setup Magnitude (m, above SWL)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
0.625
Reach ESI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
Reach ESI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

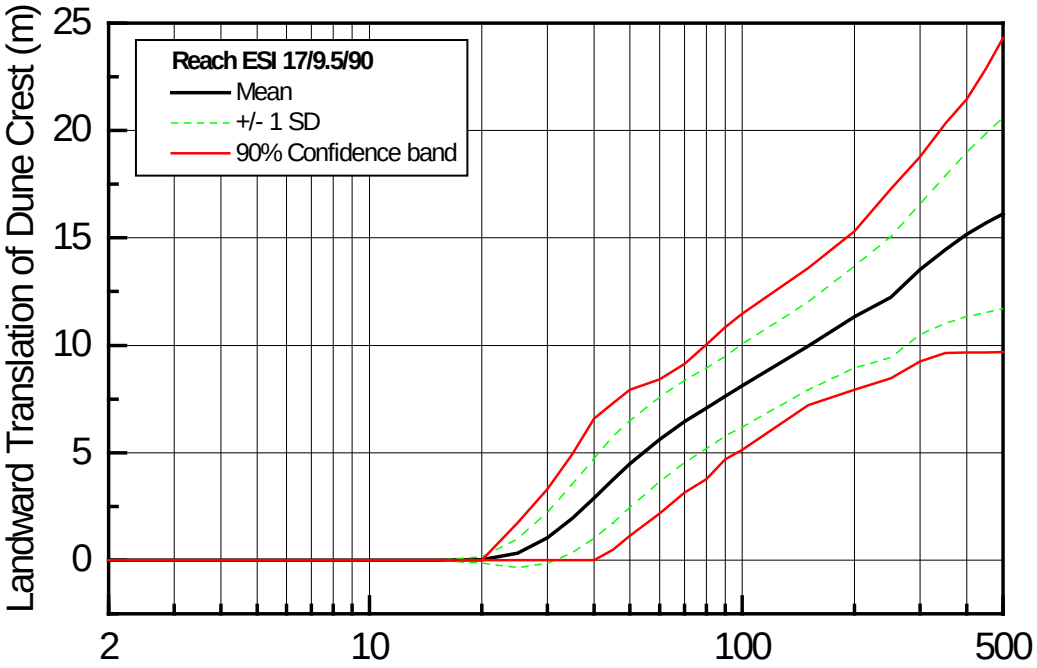

Max NS Wave Height (m, at landside surf zone)
2.25
2.00
1.75
1.50
1.25
1.00
Reach ESI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
350
300
250
200
150
100
50
Reach ESI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

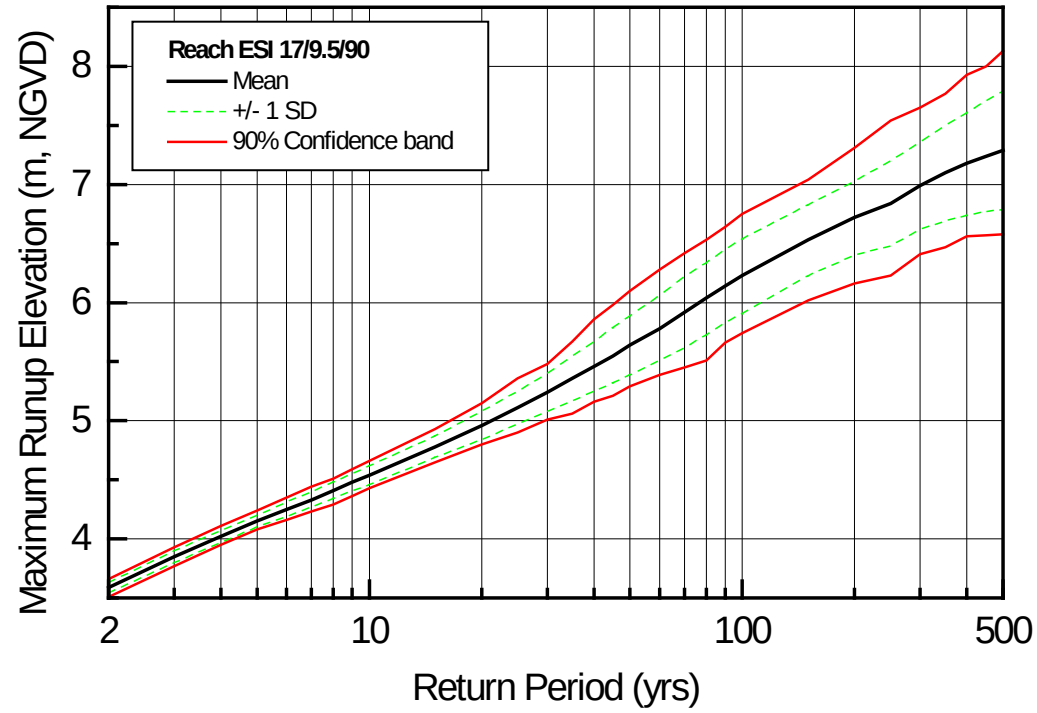

Reach ESI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
18
16
14
12
10
8
6
2
10
100
500
Reach ESI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20
18
16
14
12
10
2
10
100
500
Return Period (yrs)

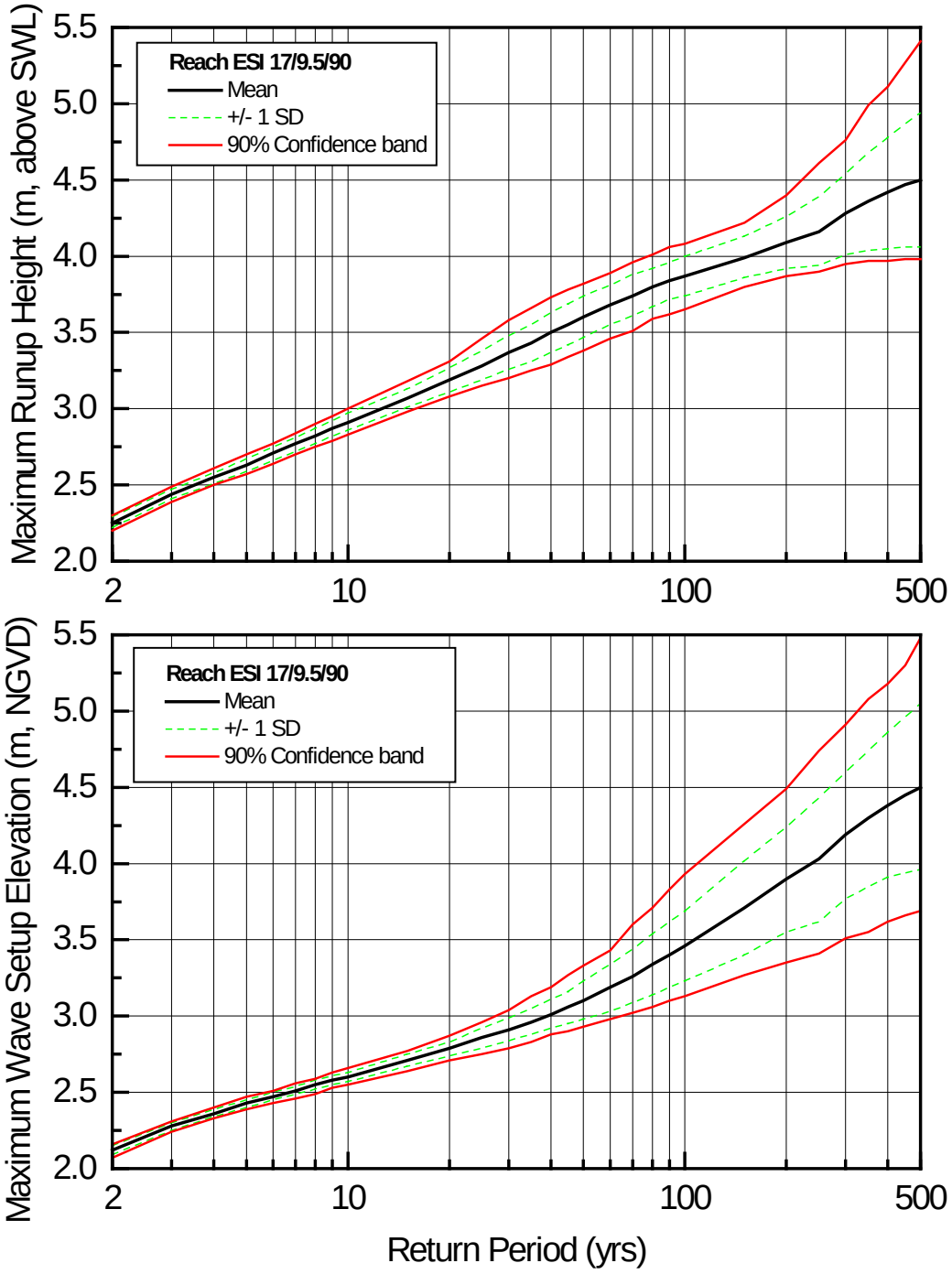

Reach ESI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
60
50
40
30
20
10
0
2
10
100
500
Reach ESI 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
12.5
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Return Period (yrs)

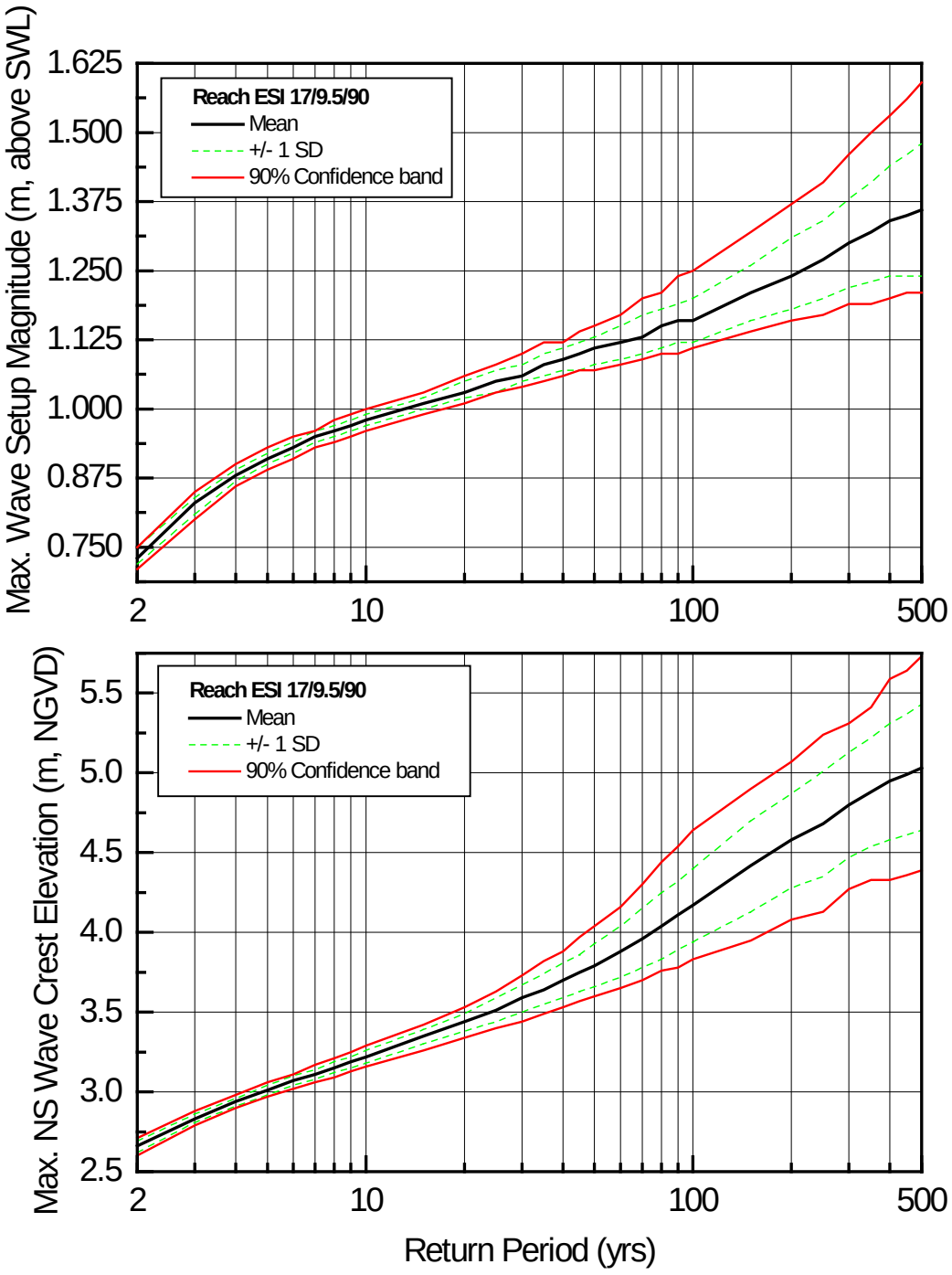

Reach ESI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
140
120
100
80
60
40
2
10
100
500
Reach ESI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

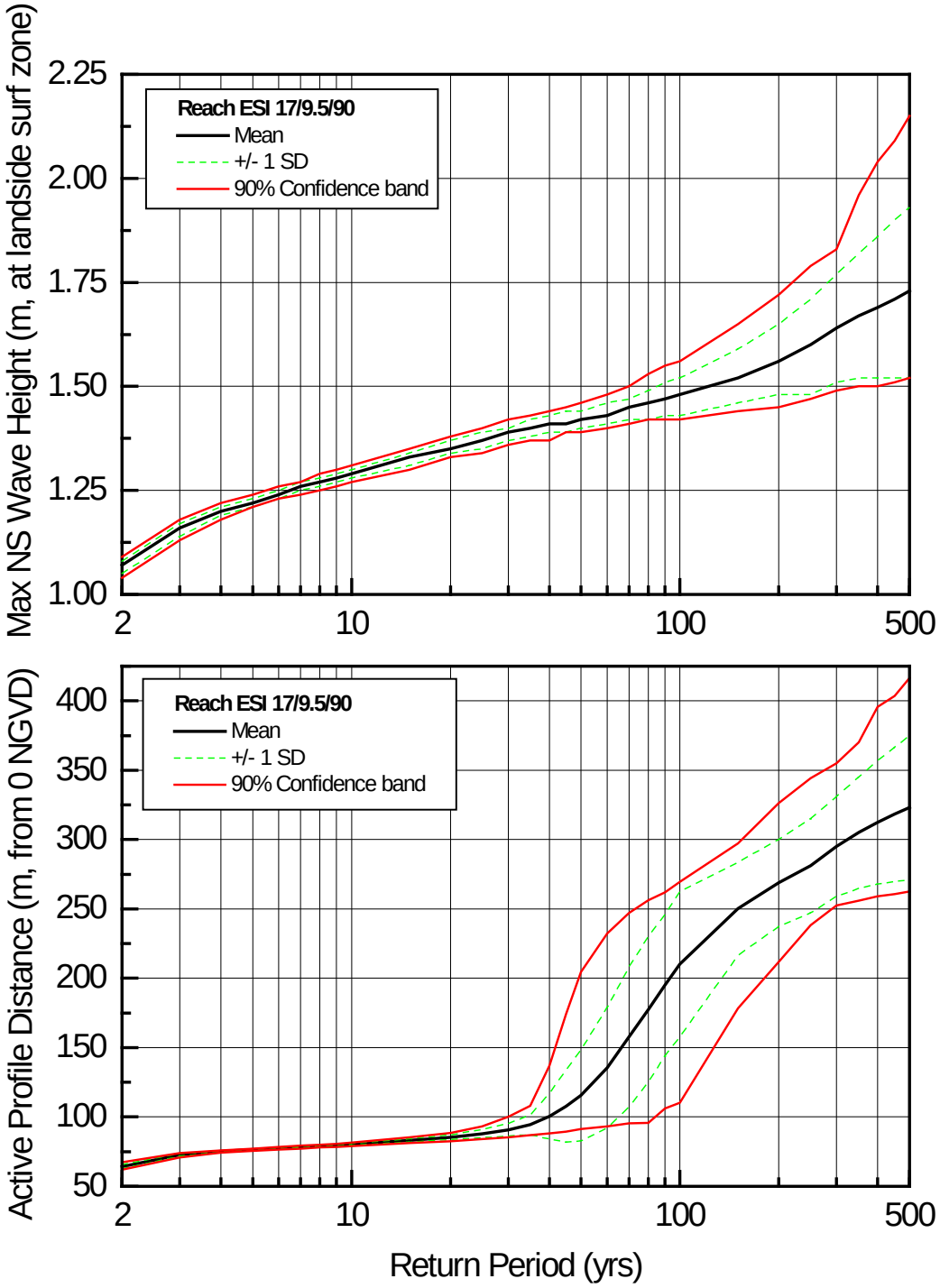

Reach ESI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
50
2
10
100
500
Reach ESI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
2
10
100
500
Return Period (yrs)

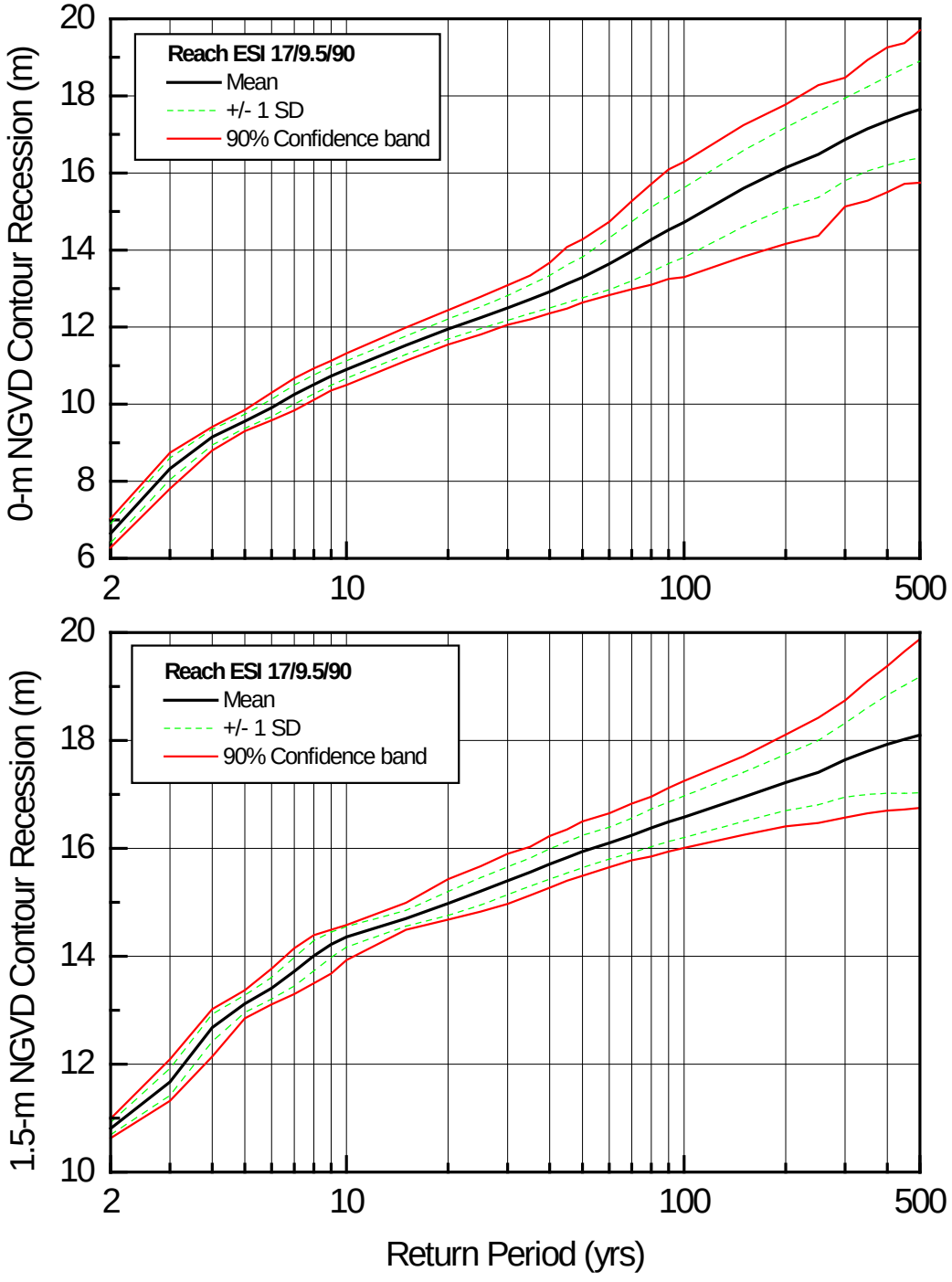

Reach ESI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
25
20
15
10
5
0
2
10
100
500

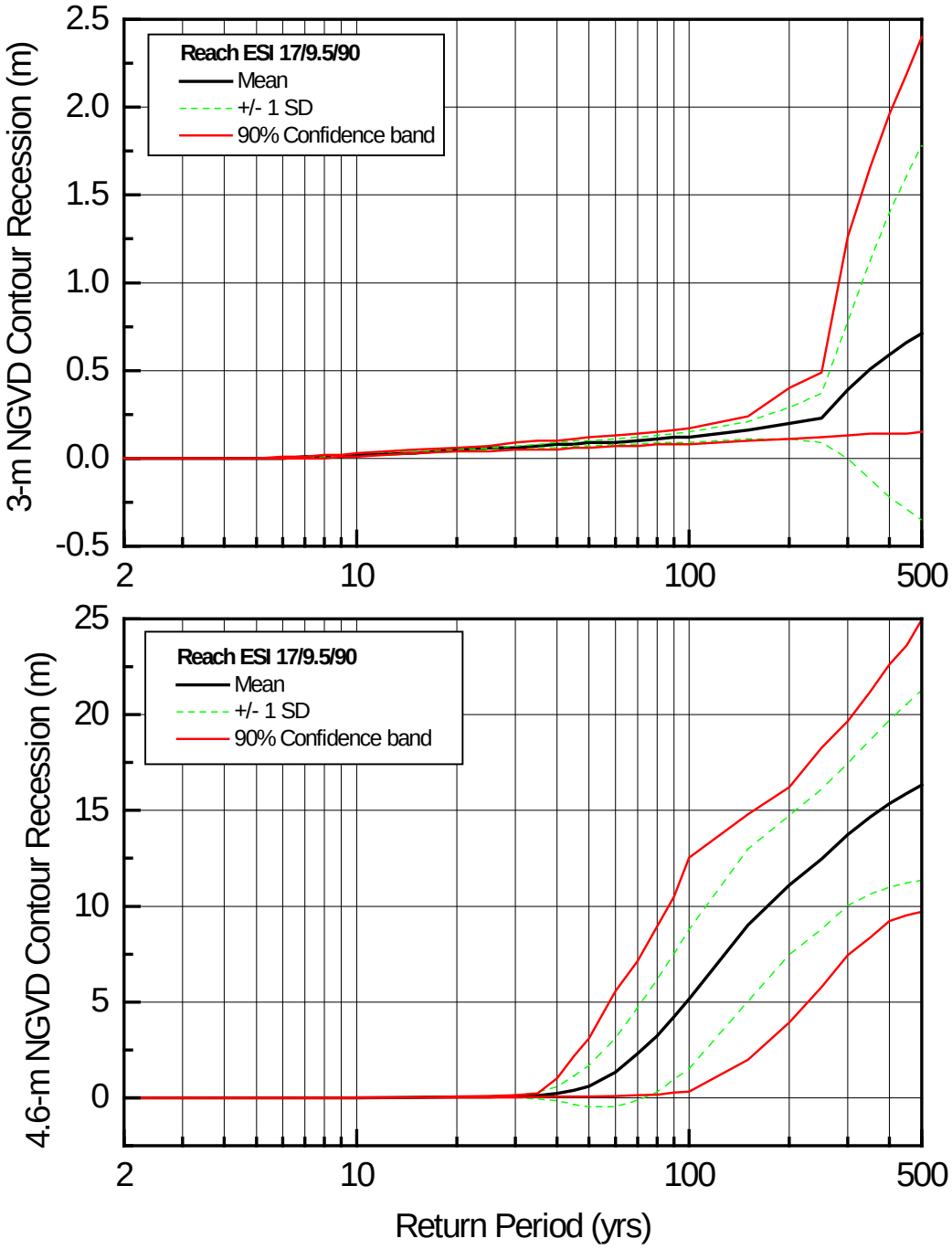

Reach ESI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
2
10
100
500
Return Period (yrs)

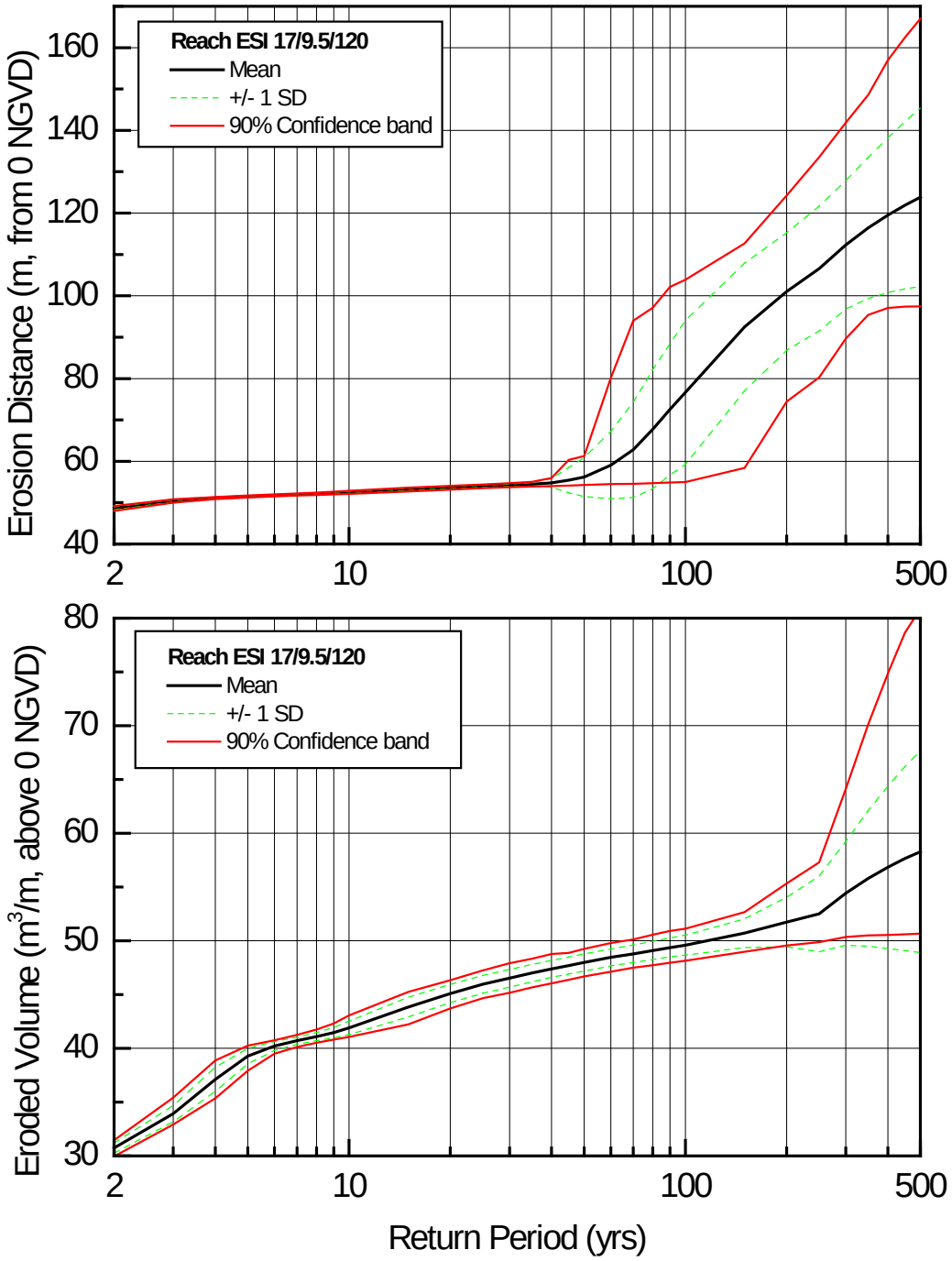

Reach ESI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach ESI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Return Period (yrs)

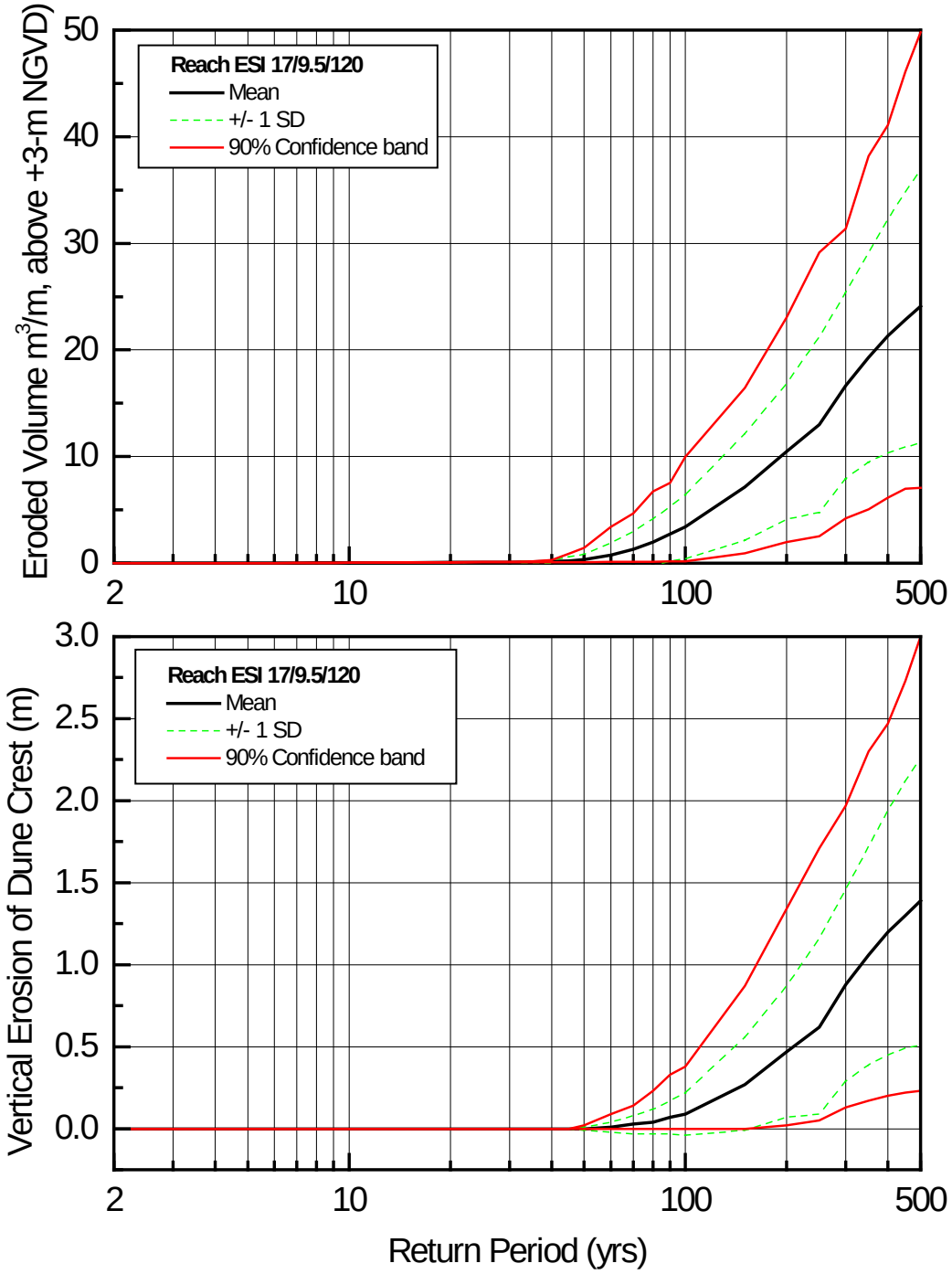

Max. Wave Setup Magnitude (m, above SWL)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach ESI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
Reach ESI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

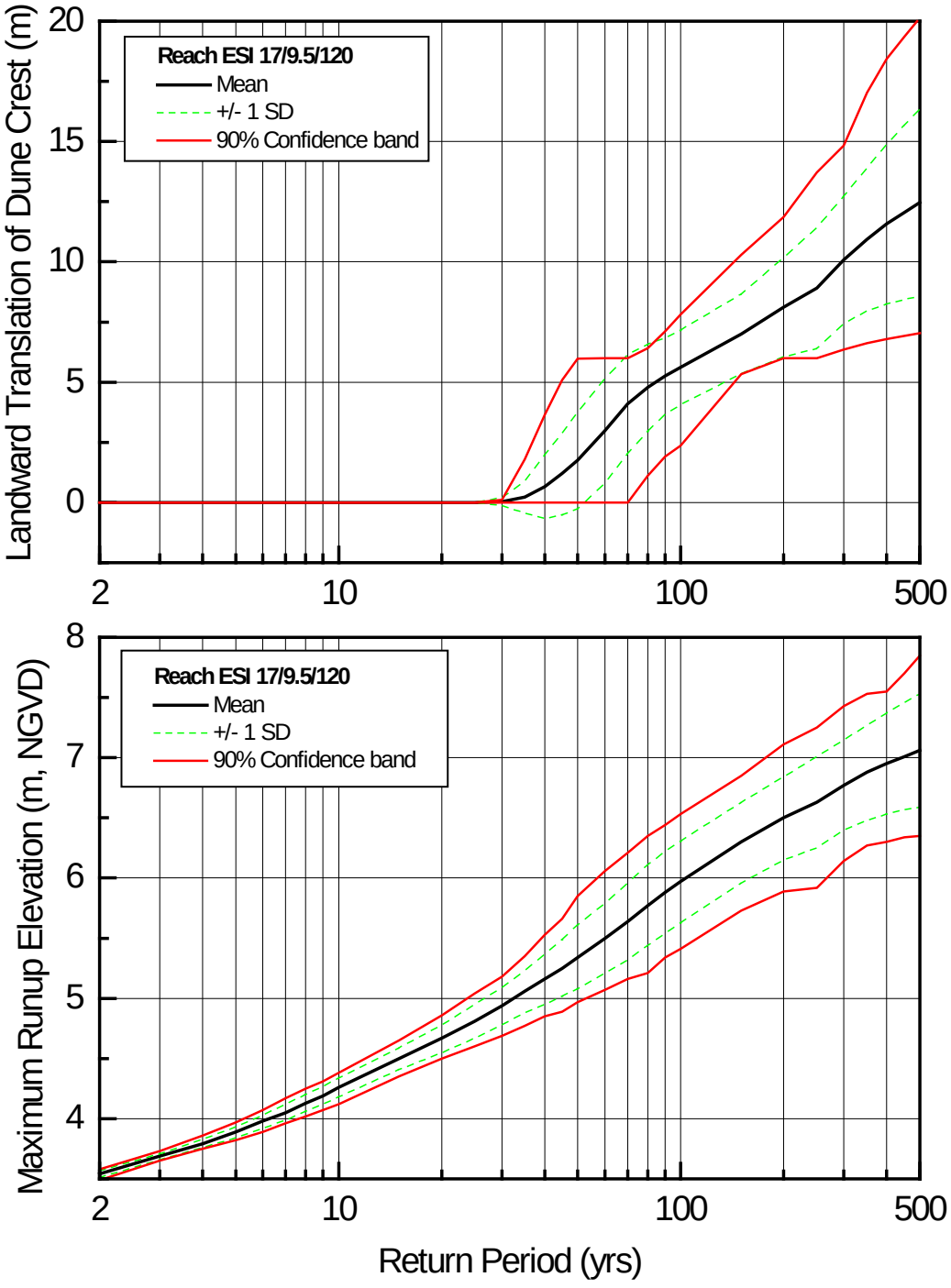

Max NS Wave Height (m, at landside surf zone)
2.25
2.00
1.75
1.50
1.25
1.00
Reach ESI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
350
300
250
200
150
100
50
Reach ESI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

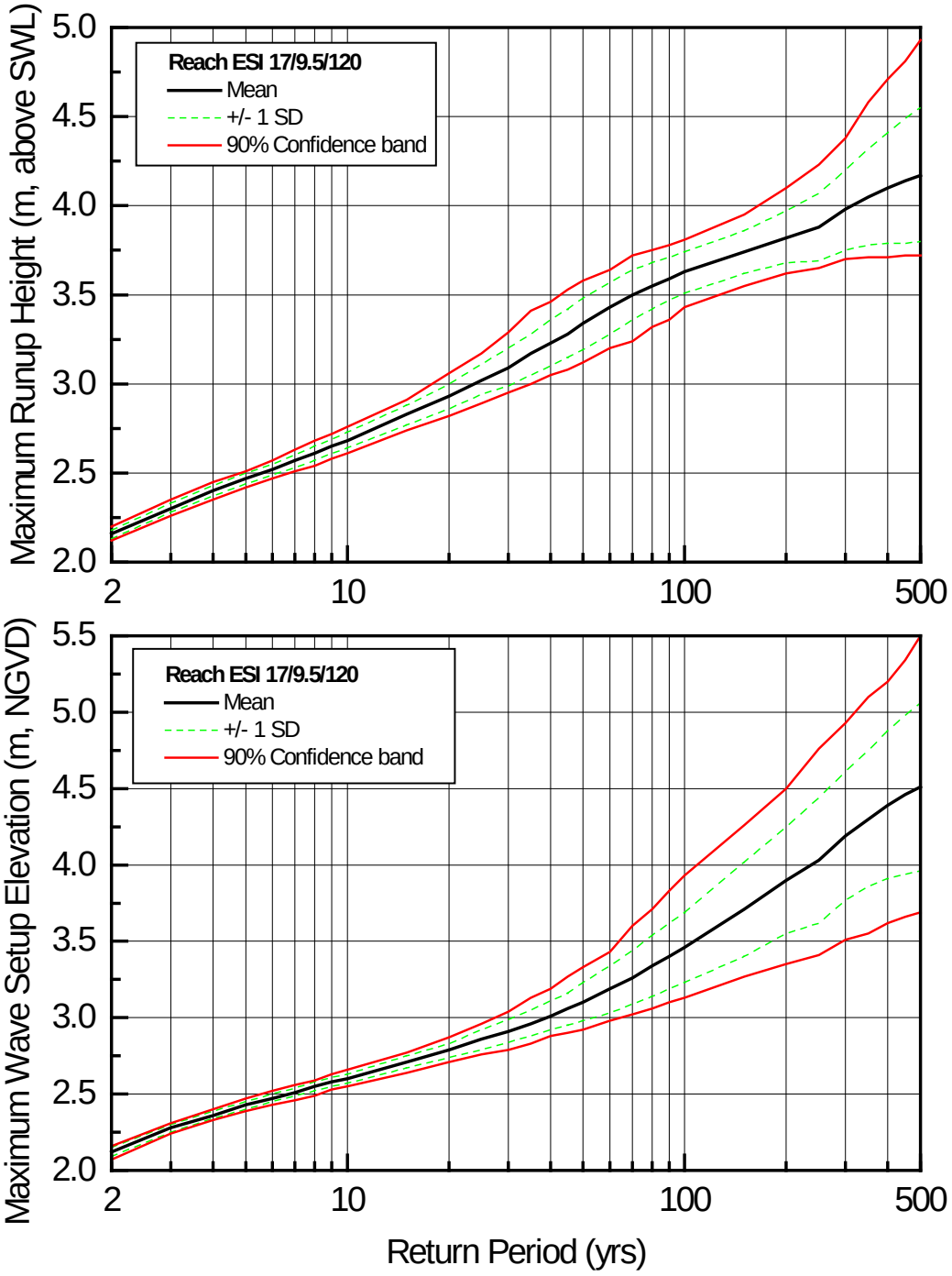

Reach ESI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
18
16
14
12
10
8
6
2
10
100
500
Reach ESI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20
18
16
14
12
10
2
10
100
500
Return Period (yrs)

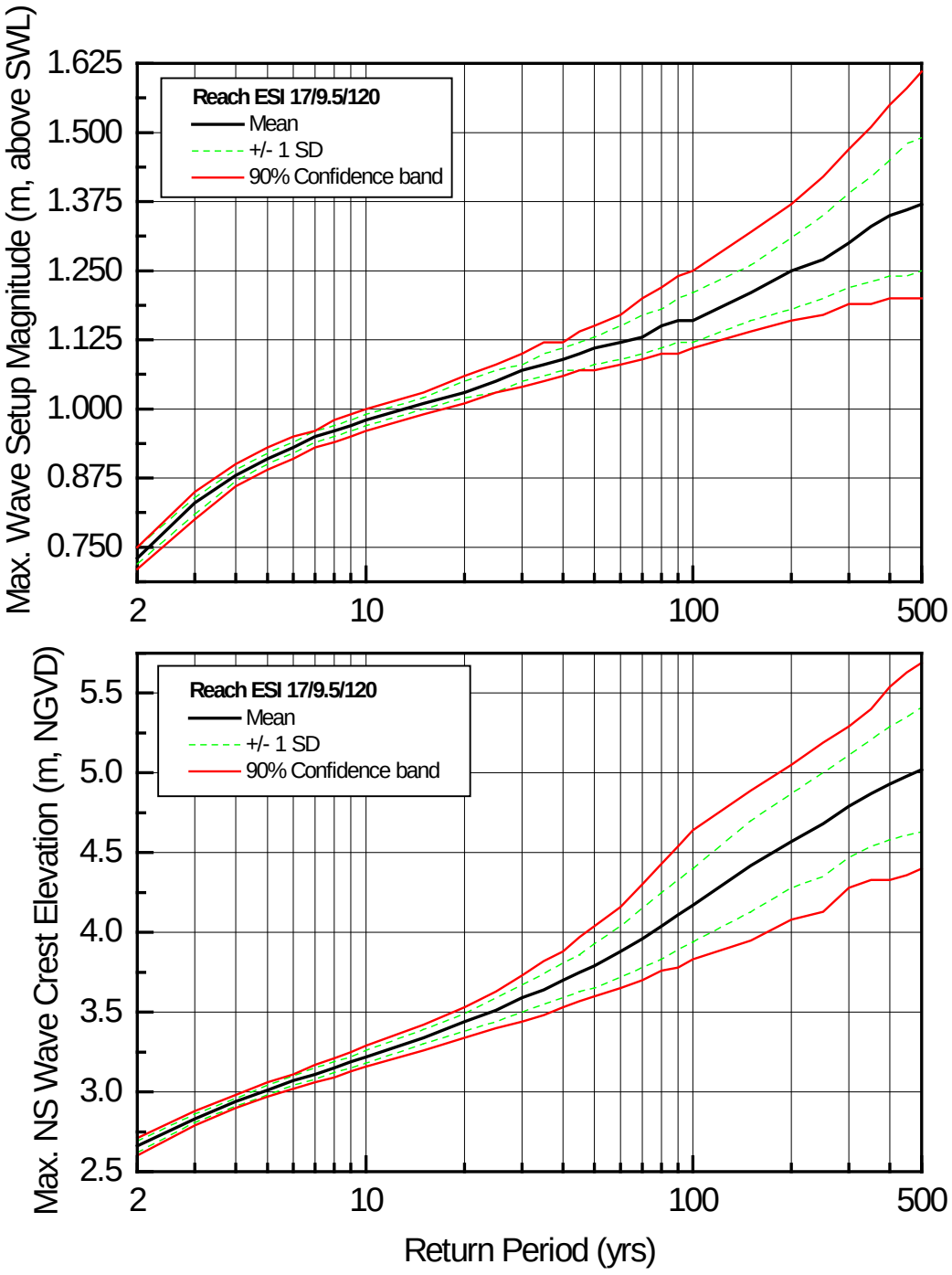

Reach ESI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
2
10
100
500
Reach ESI 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

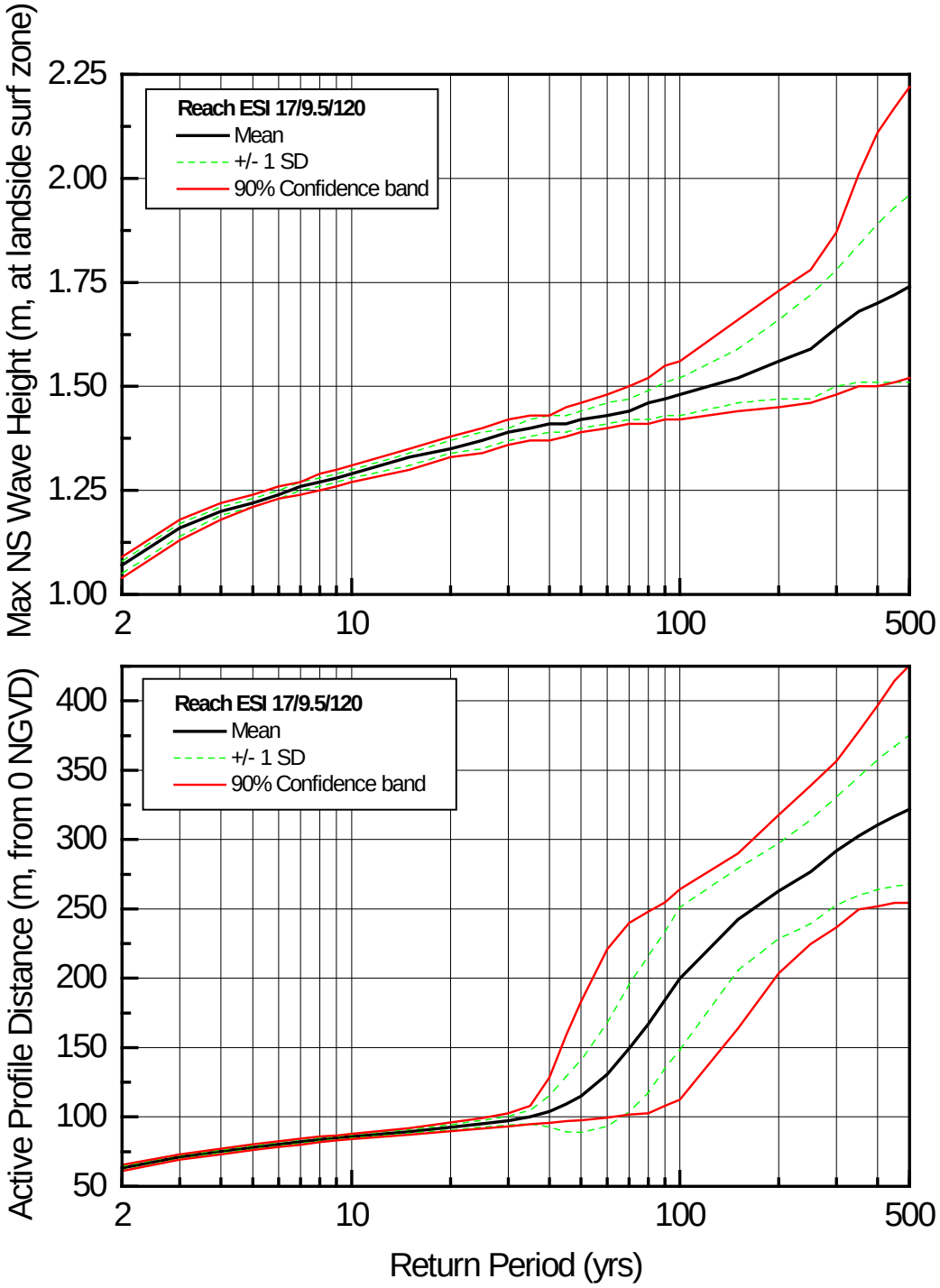

Reach ESI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
160
140
120
100
80
60
40
2
10
100
500
Reach ESI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
80
70
60
50
40
30
2
10
100
500
Return Period (yrs)

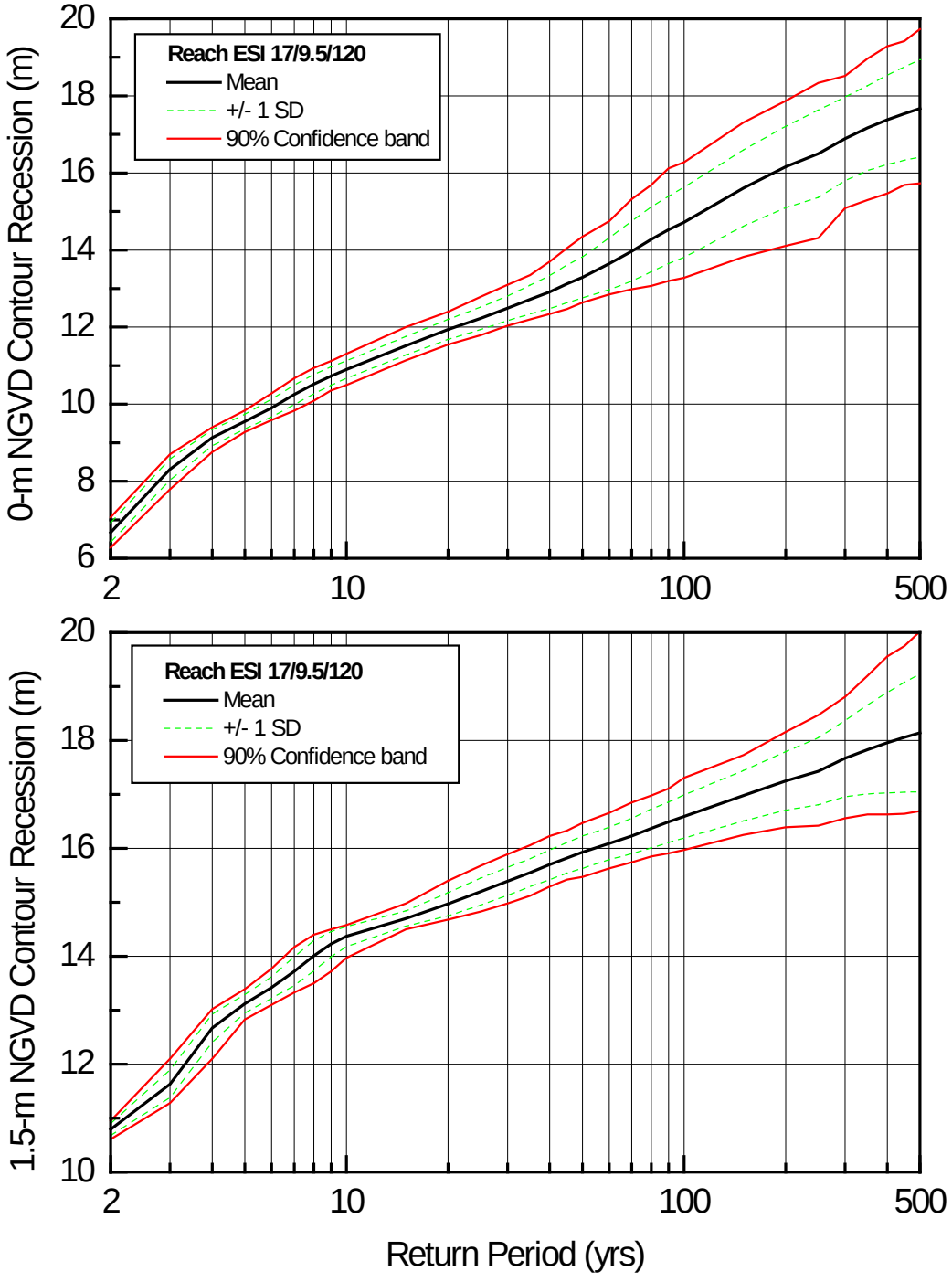

Reach ESI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
10
20
30
40
50
2
10
100
500
Reach ESI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
2
10
100
500
Return Period (yrs)

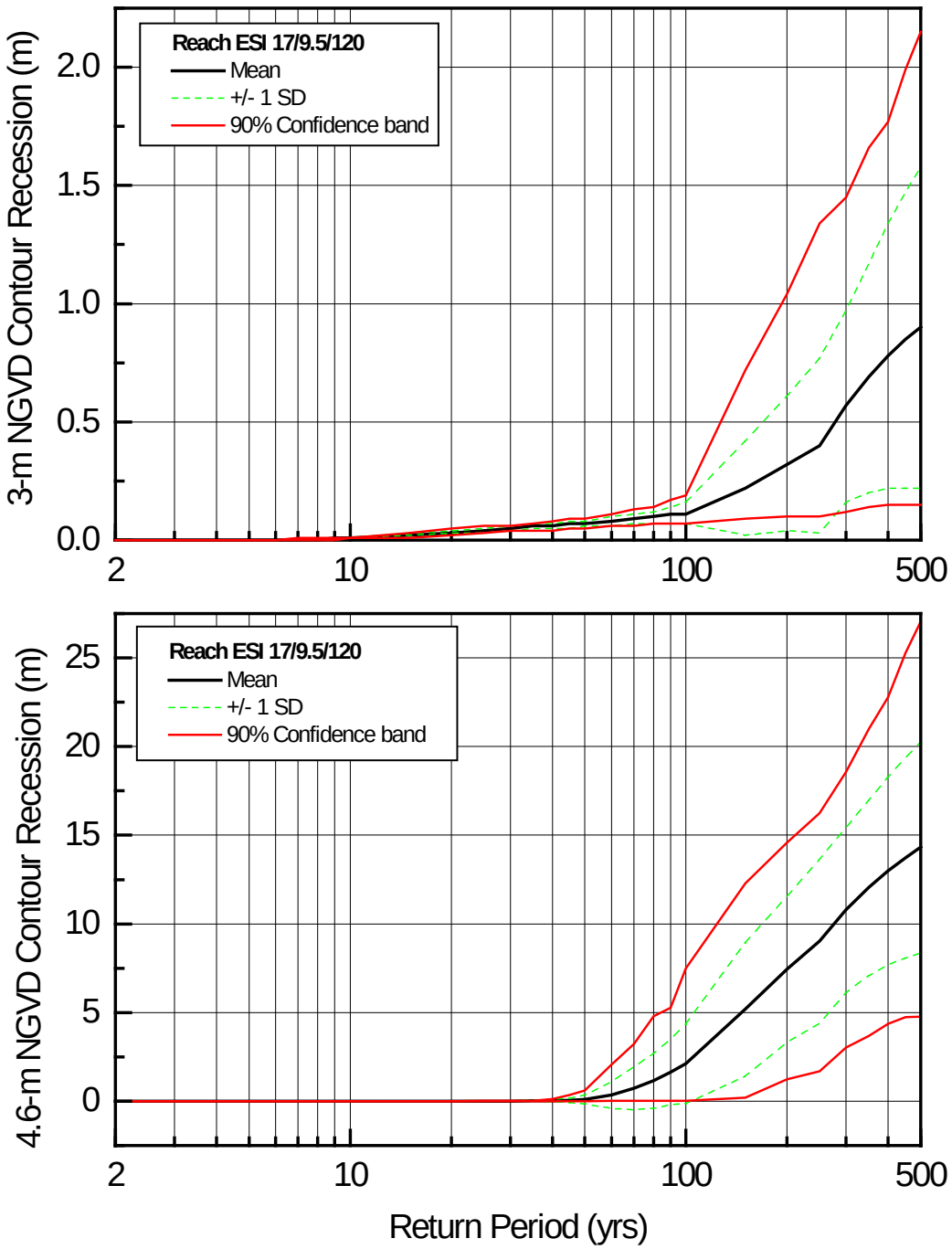

Reach ESI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
20
15
10
5
0
2
10
100
500
Reach ESI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
2
10
100
500
Return Period (yrs)

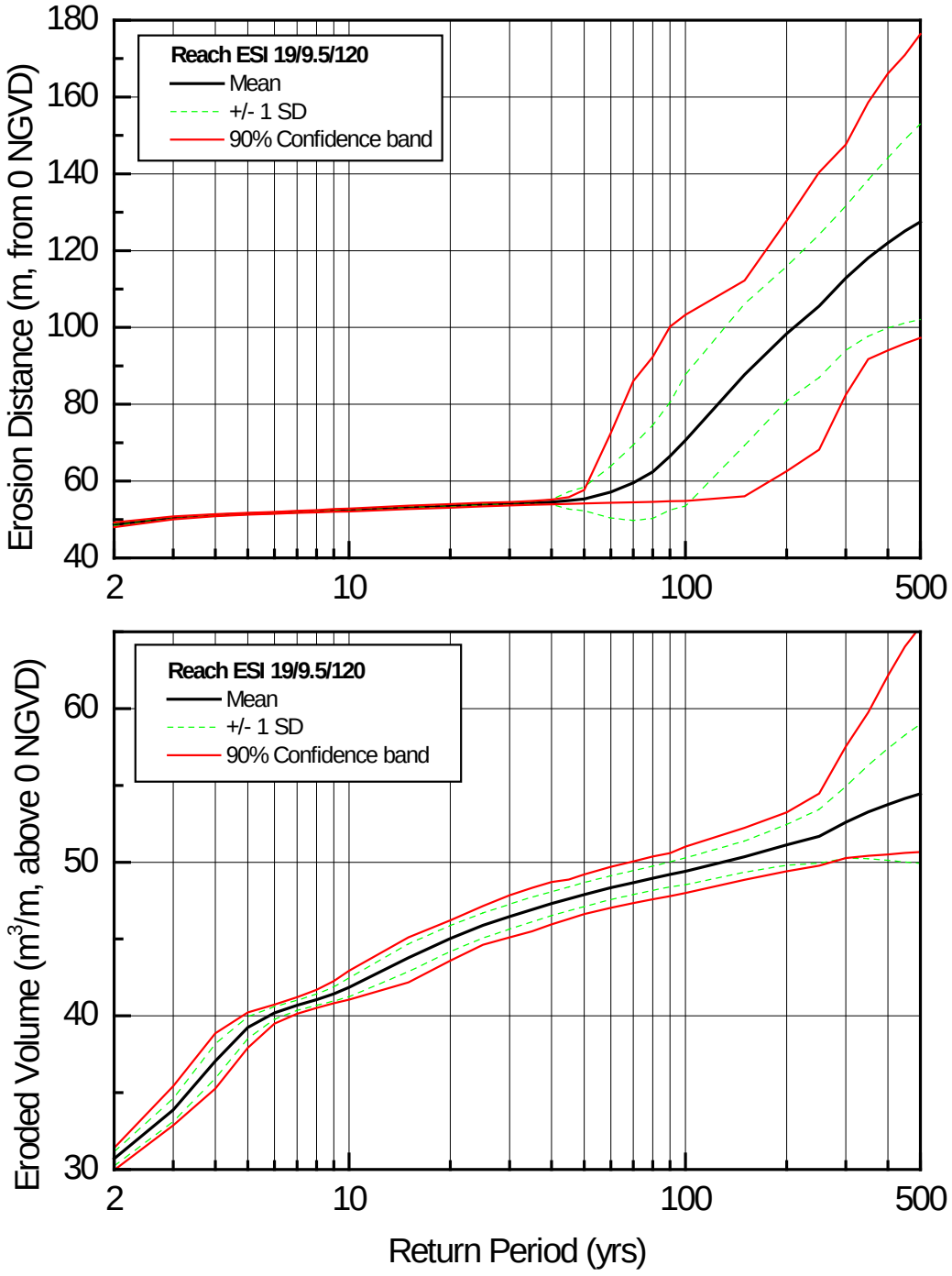

Reach ESI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach ESI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Return Period (yrs)

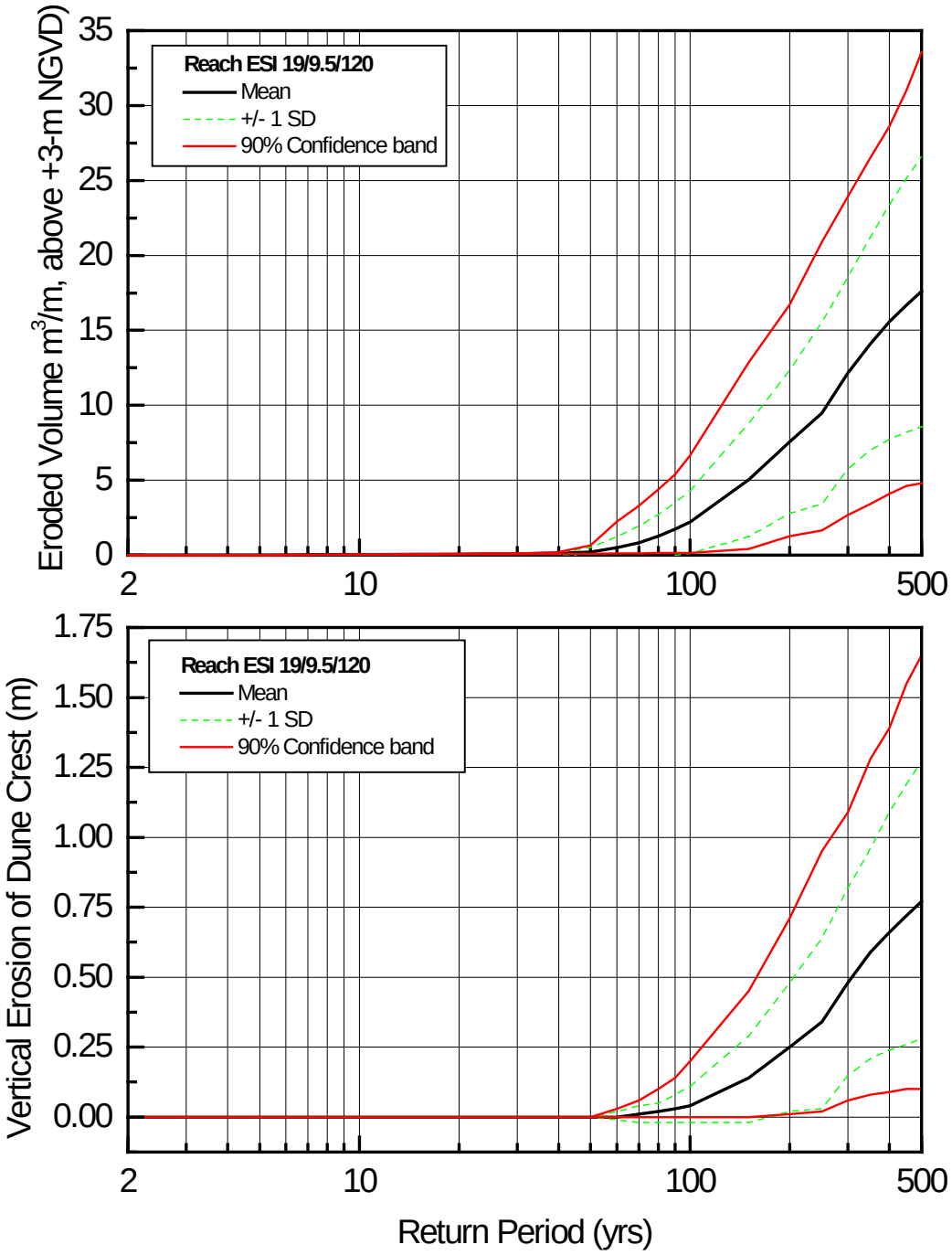

Max. Wave Setup Magnitude (m, above SWL)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach ESI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
Reach ESI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

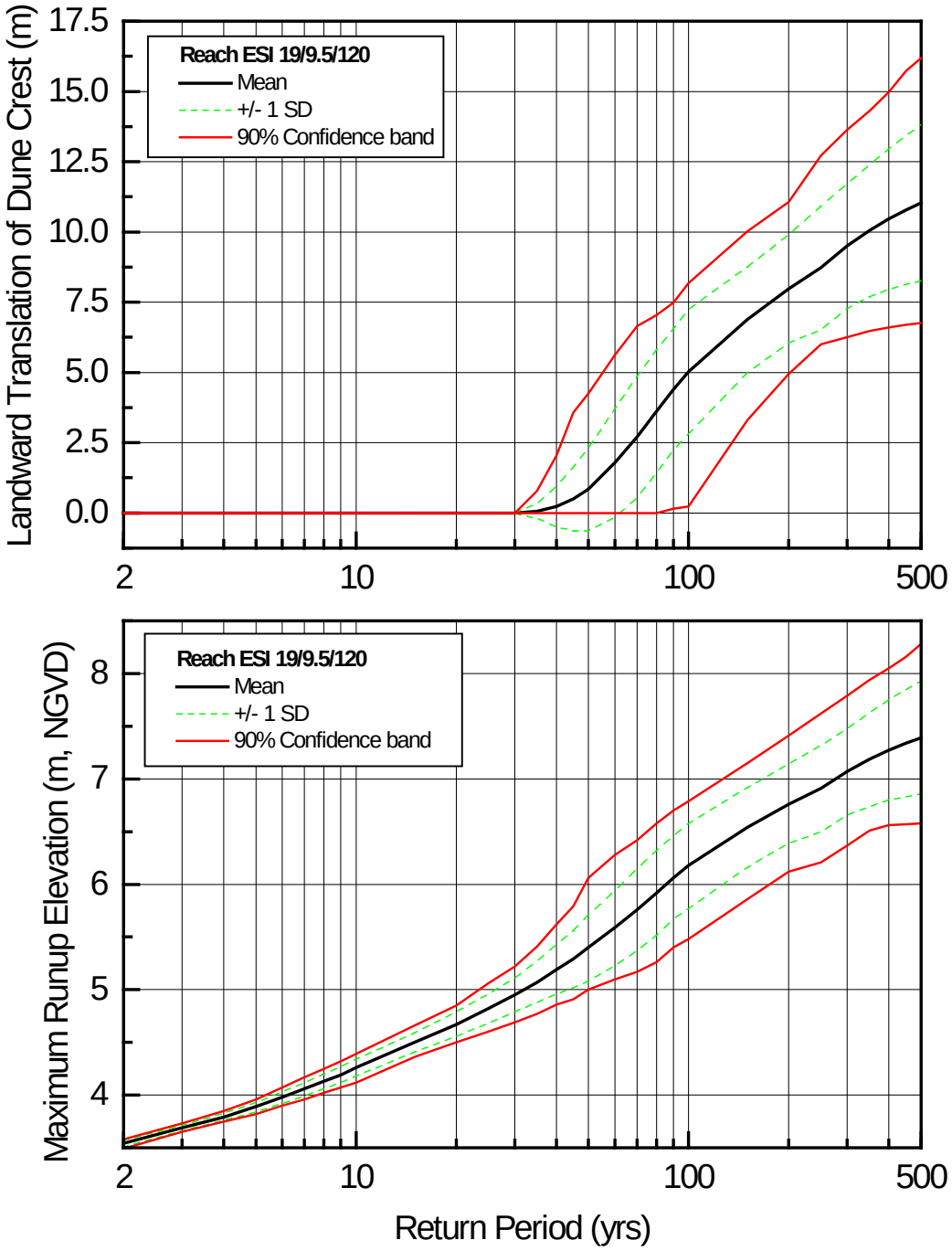

Reach ESI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Max NS Wave Height (m, at landside surf zone)
2.25
2.00
1.75
1.50
1.25
1.00
2
10
100
500
Reach ESI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Active Profile Distance (m, from 0 NGVD)
400
350
300
250
200
150
100
50
2
10
100
500
Return Period (yrs)

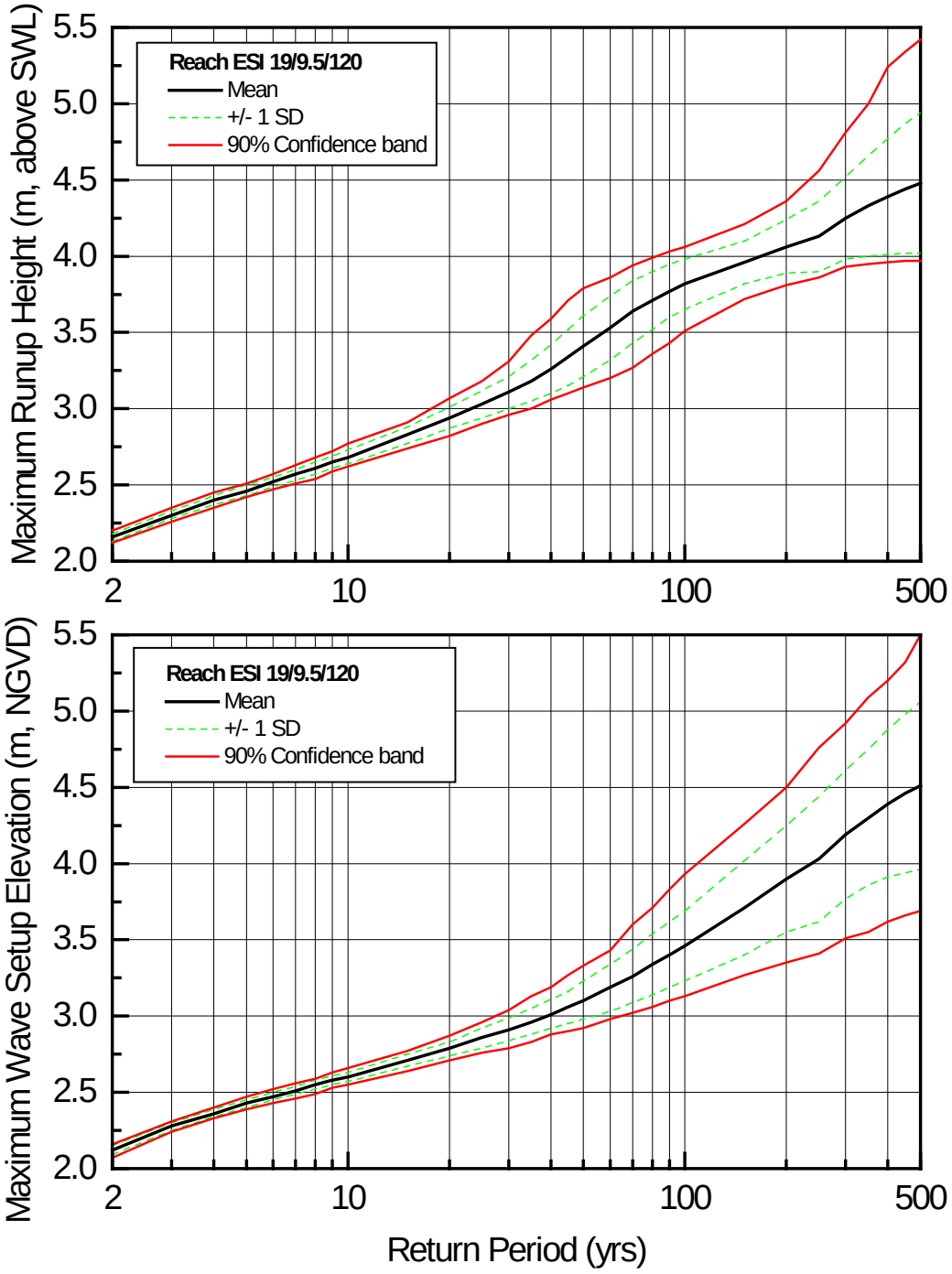

Reach ESI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
18
16
14
12
10
8
6
2
10
100
500
Reach ESI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20
18
16
14
12
10
2
10
100
500
Return Period (yrs)

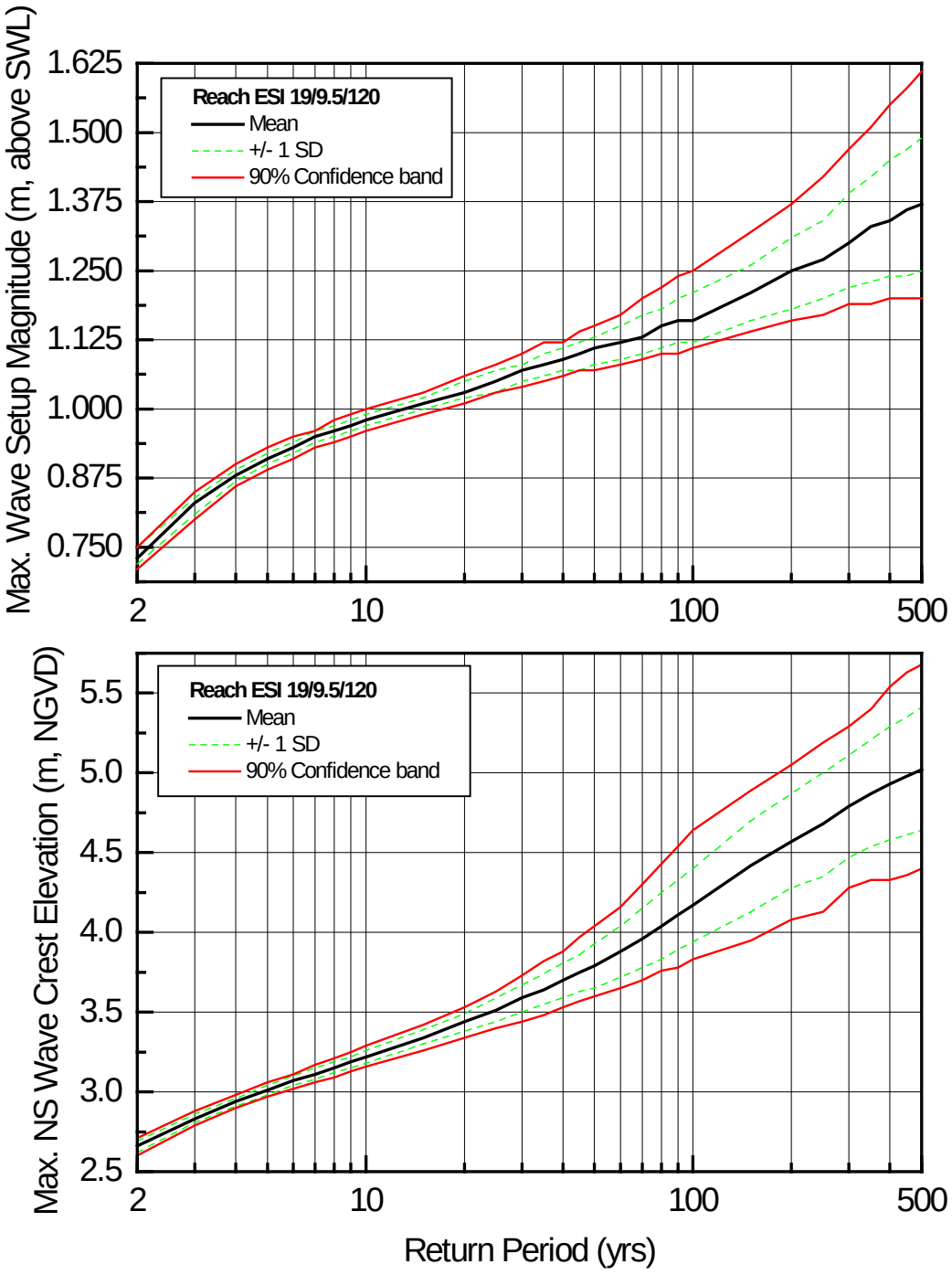

Reach ESI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
0.0
0.5
1.0
1.5
2.0
2
10
100
500
Reach ESI 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
0
5
10
15
20
25
2
10
100
500
Return Period (yrs)

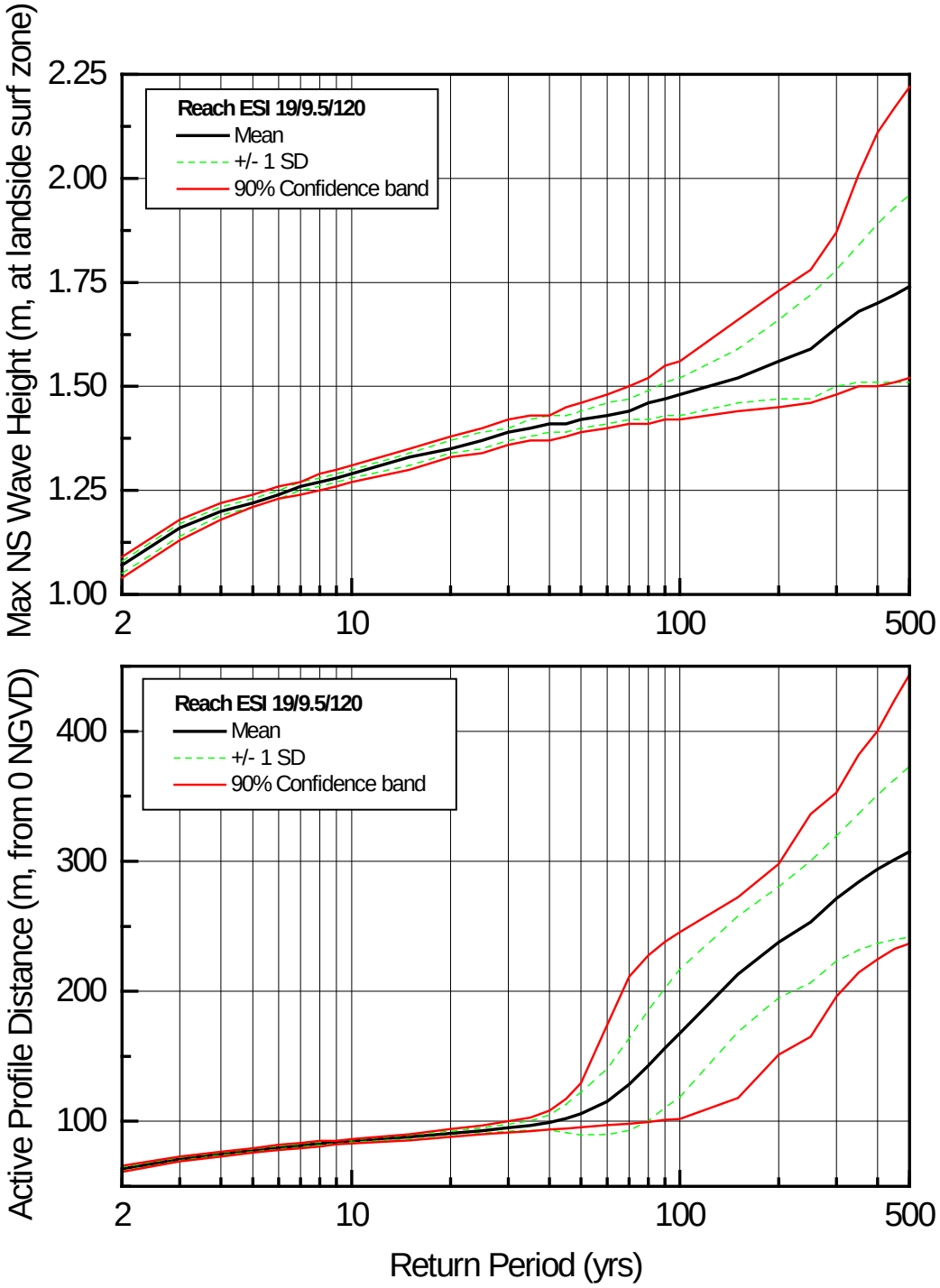

Reach ESI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
160
140
120
100
80
60
40
2
10
100
500
Reach ESI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
60
50
40
30
2
10
100
500
Return Period (yrs)

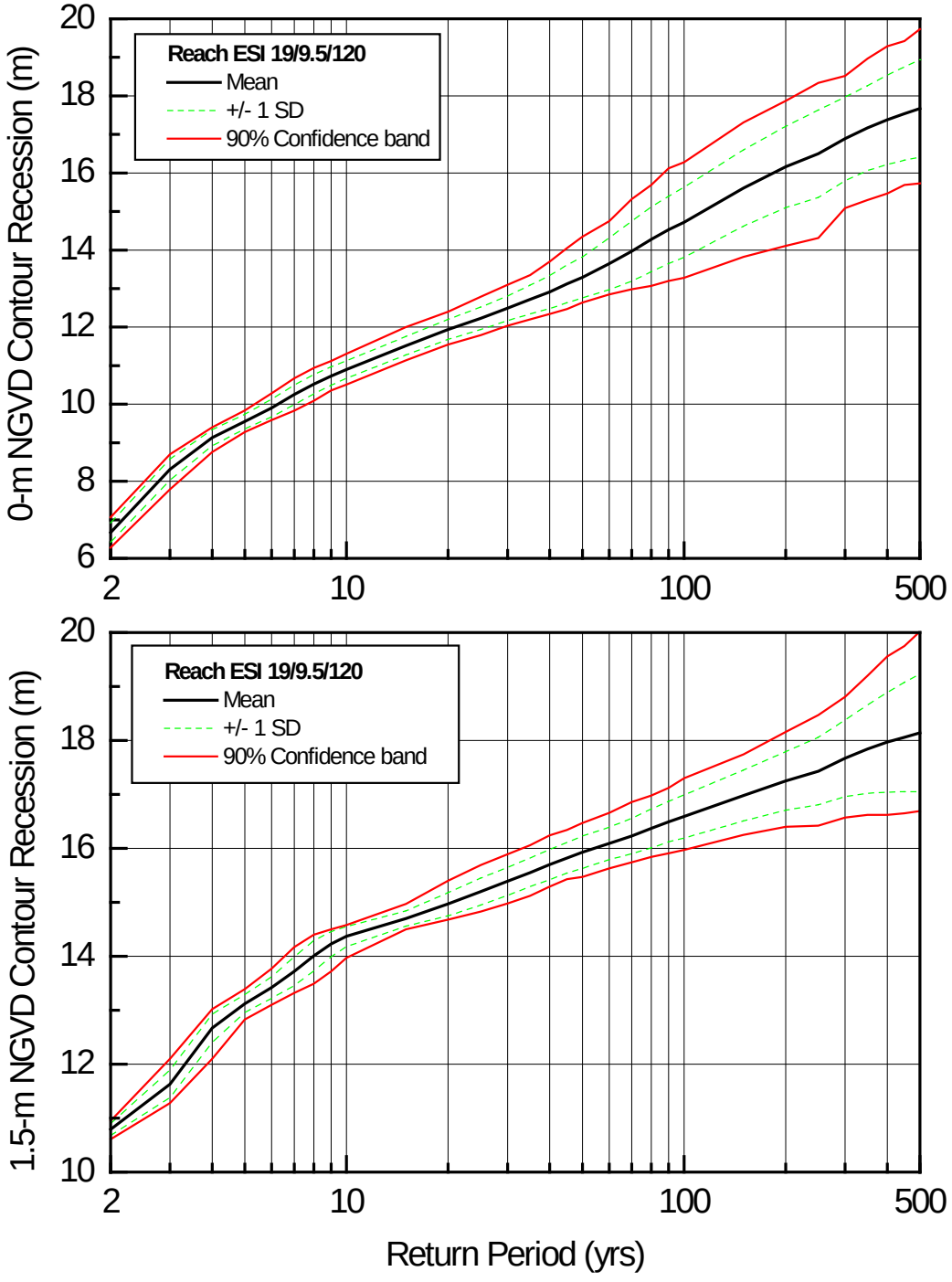

Reach ESI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
5
10
15
20
25
30
35
2
10
100
500
Reach ESI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
2
10
100
500
Return Period (yrs)

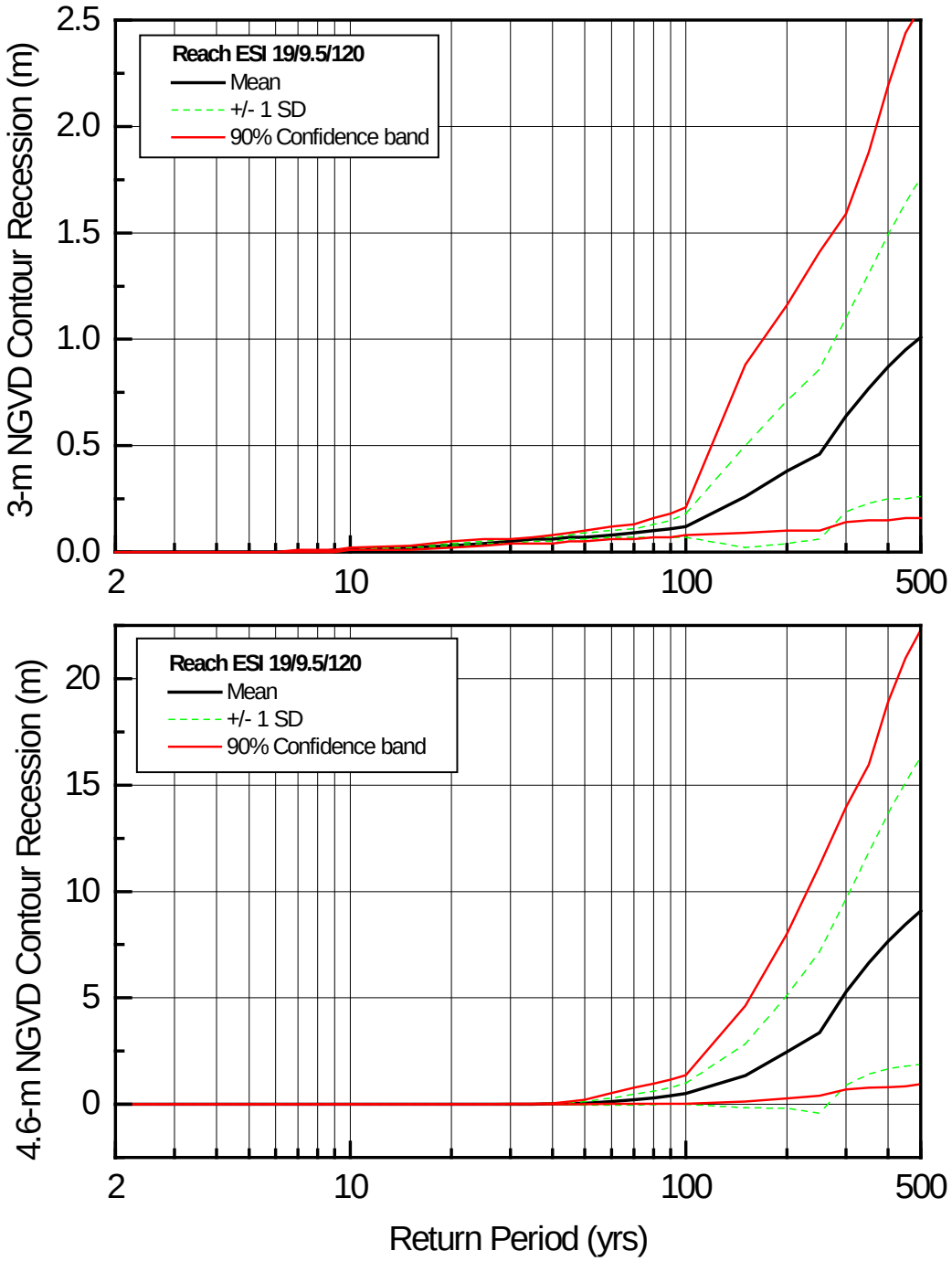

Reach ESI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Reach ESI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
2
10
100
500
Return Period (yrs)

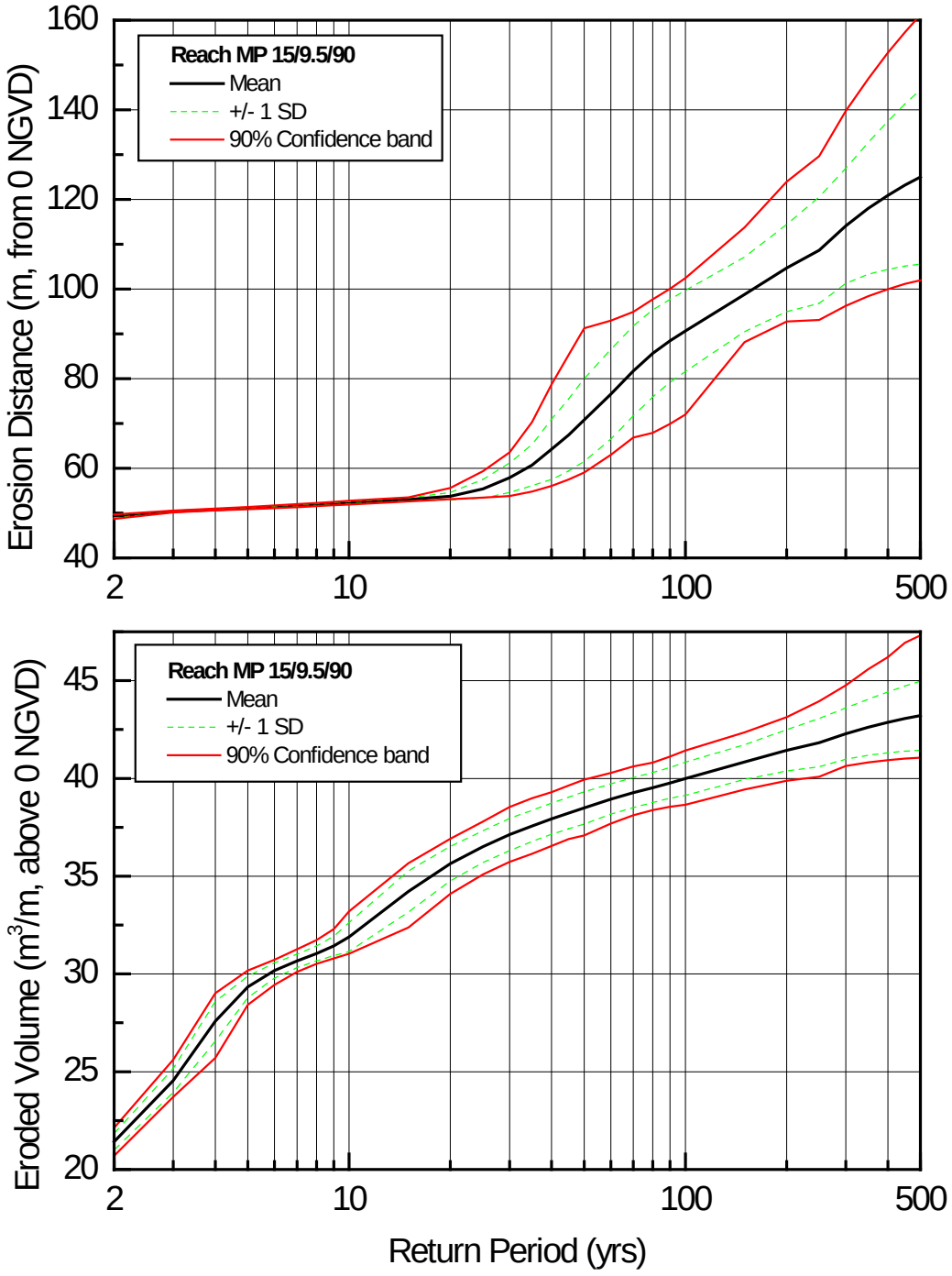

Reach ESI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach ESI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Return Period (yrs)

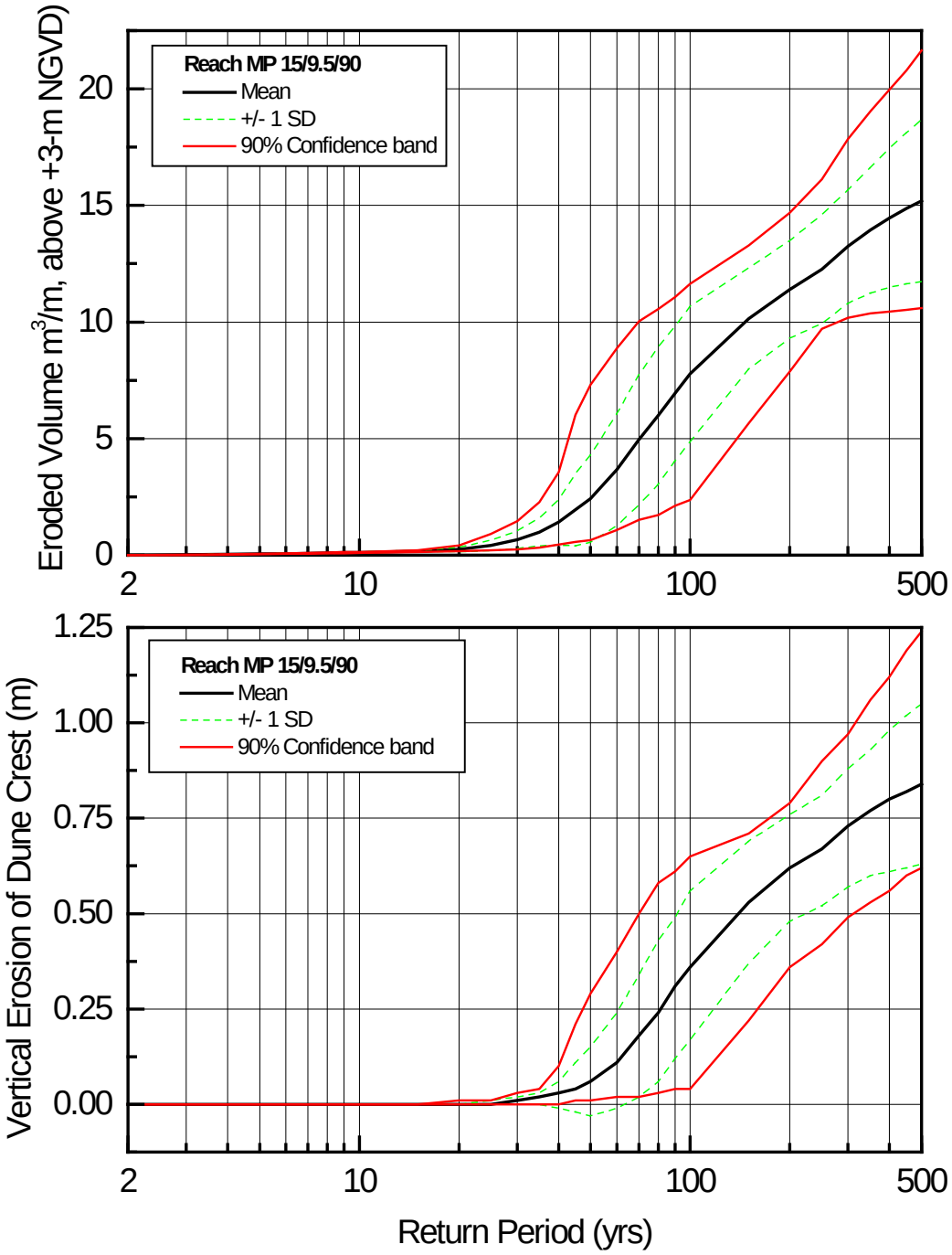

Max. Wave Setup Magnitude (m, above SWL)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach ESI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
Reach ESI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

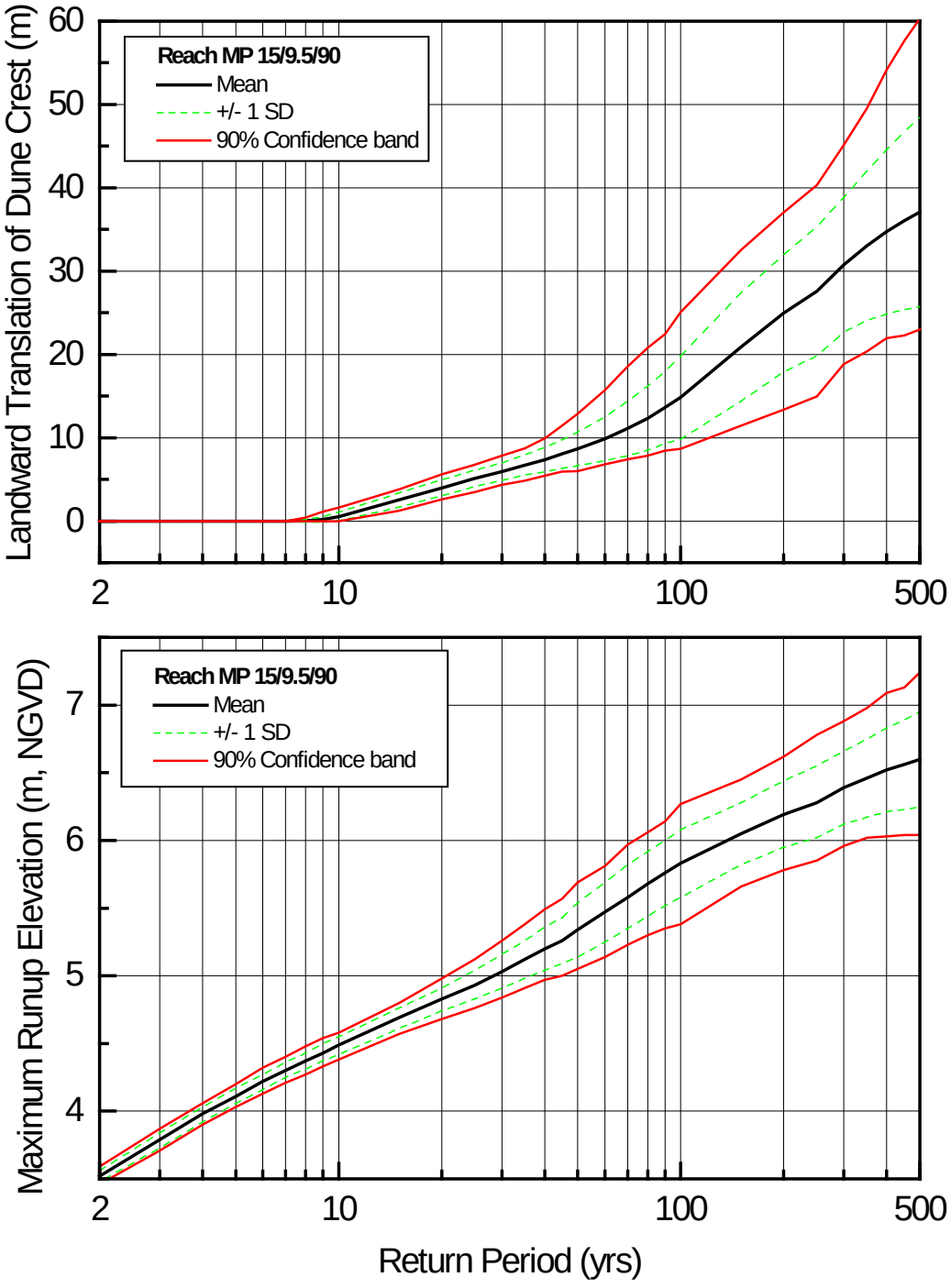

Max NS Wave Height (m, at landside surf zone)
2.25
2.00
1.75
1.50
1.25
1.00
Reach ESI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Active Profile Distance (m, from 0 NGVD)
400
300
200
100
Reach ESI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

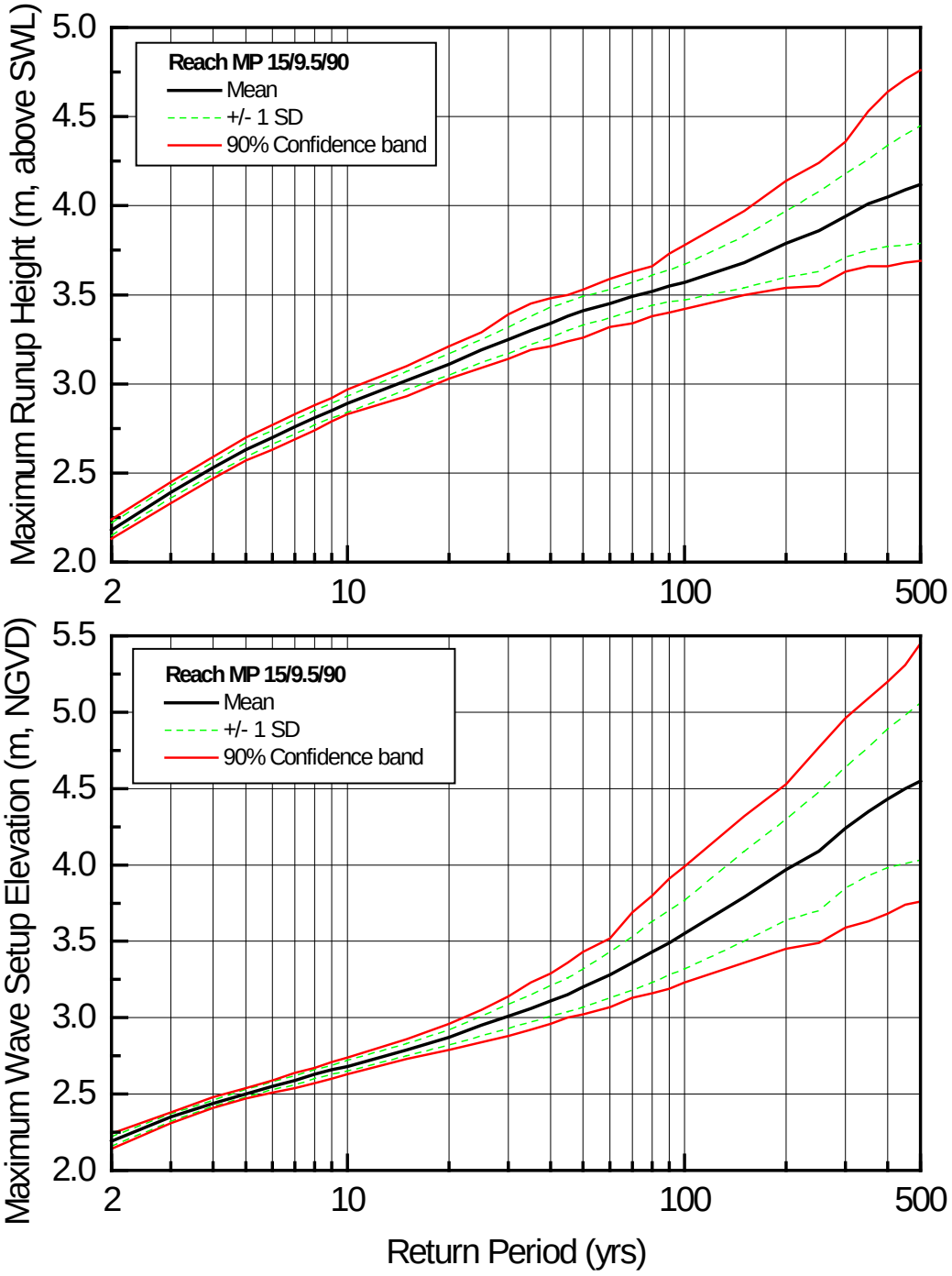

Reach ESI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
18
16
14
12
10
8
6
2
10
100
500
Reach ESI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
20
18
16
14
12
10
2
10
100
500
Return Period (yrs)

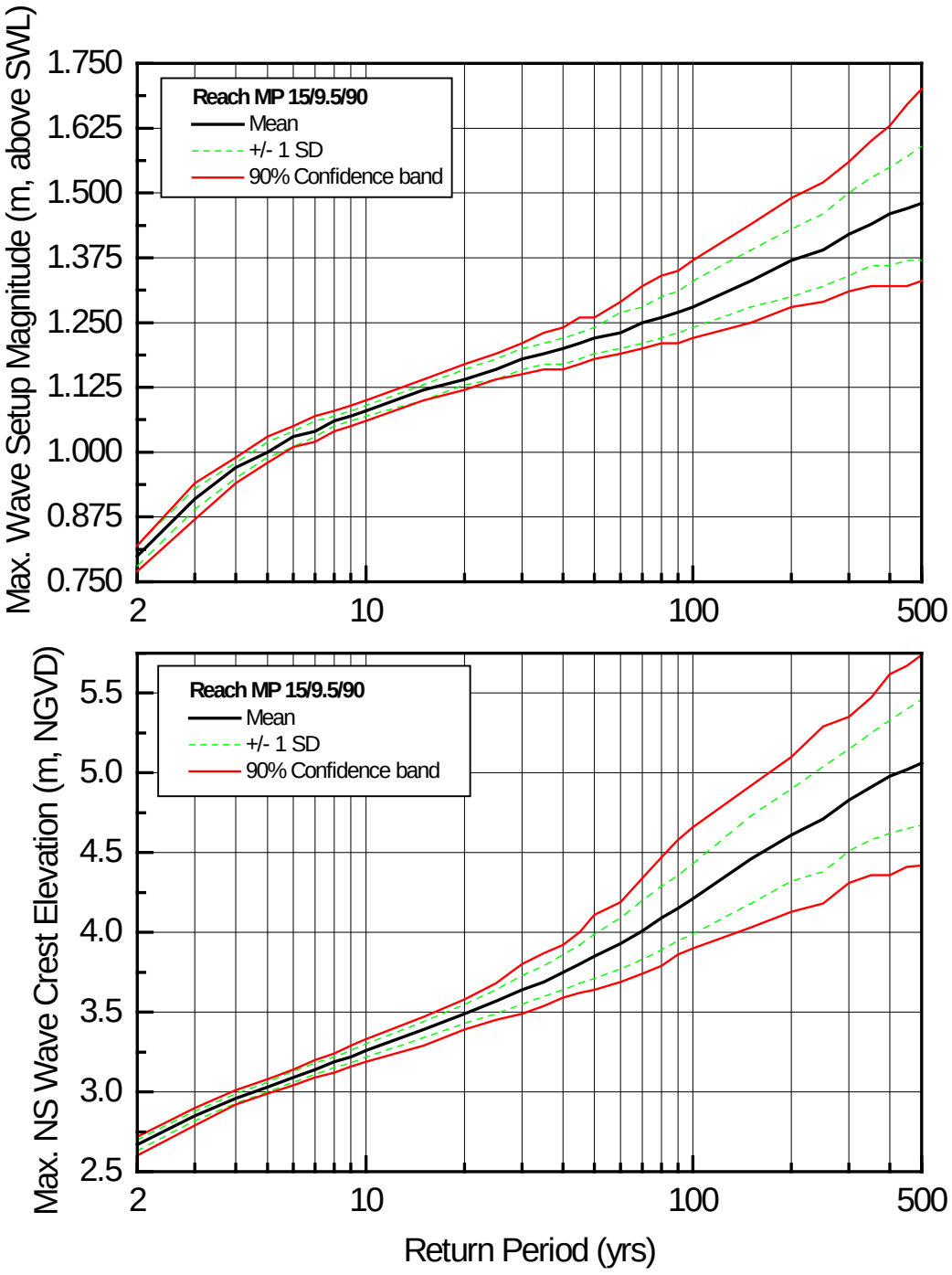

Reach ESI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach ESI 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
20
15
10
5
0
2
10
100
500
Return Period (yrs)

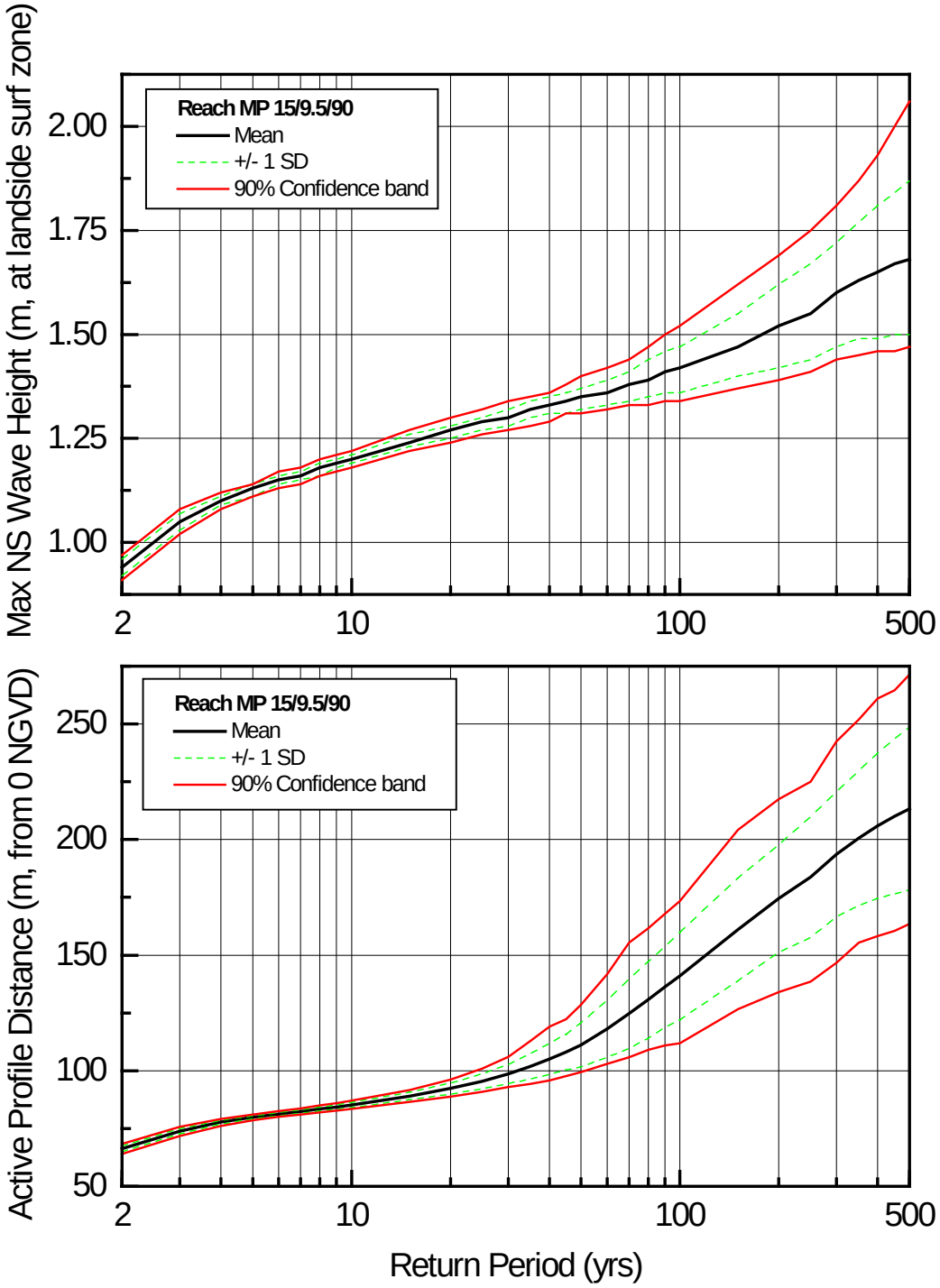

Reach MP 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
160
140
120
100
80
60
40
2
10
100
500
Reach MP 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
45
40
35
30
25
20
2
10
100
500
Return Period (yrs)

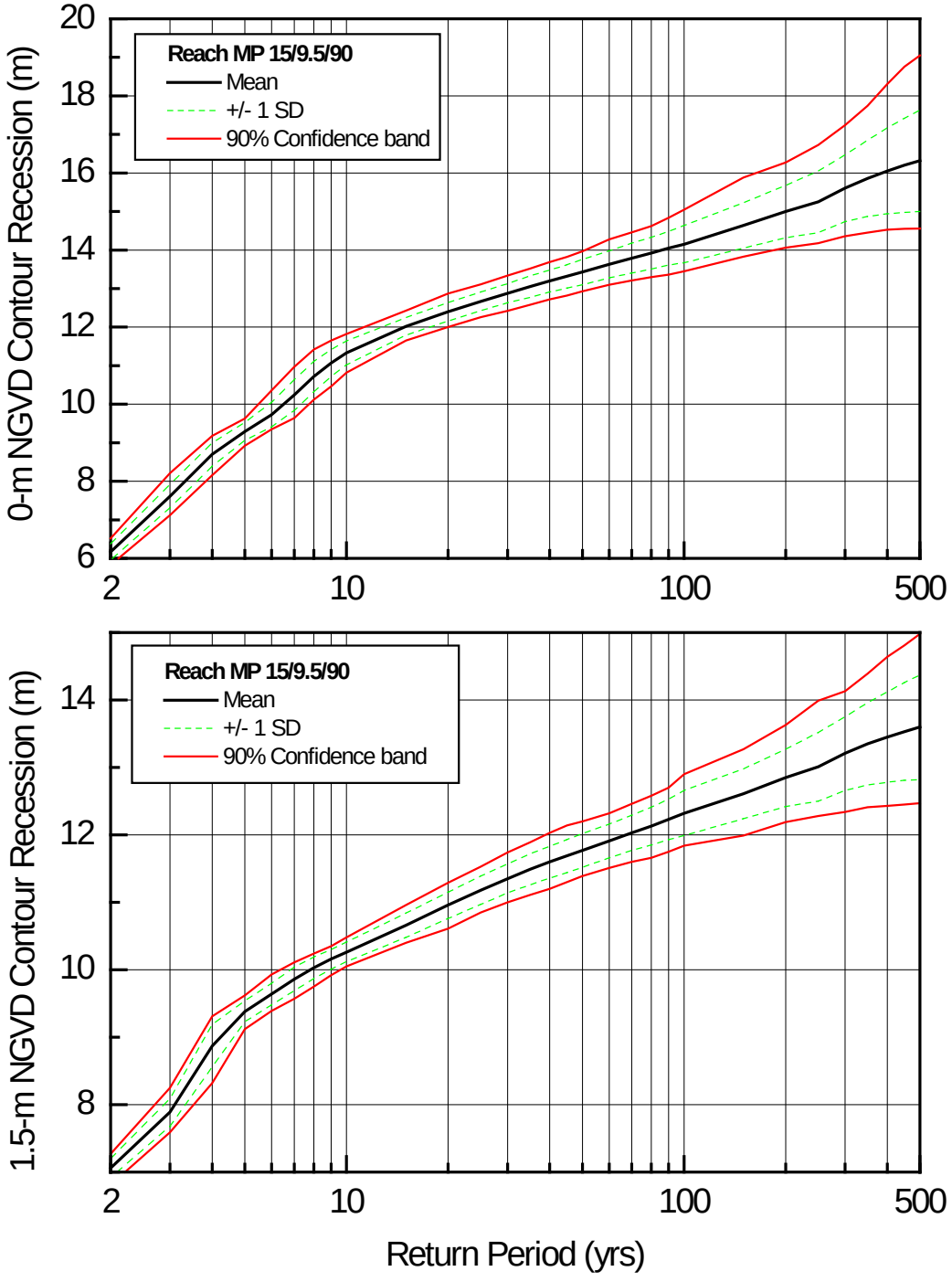

Reach MP 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
5
10
15
20
2
10
100
500
Reach MP 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.00
0.25
0.50
0.75
1.00
1.25
2
10
100
500
Return Period (yrs)

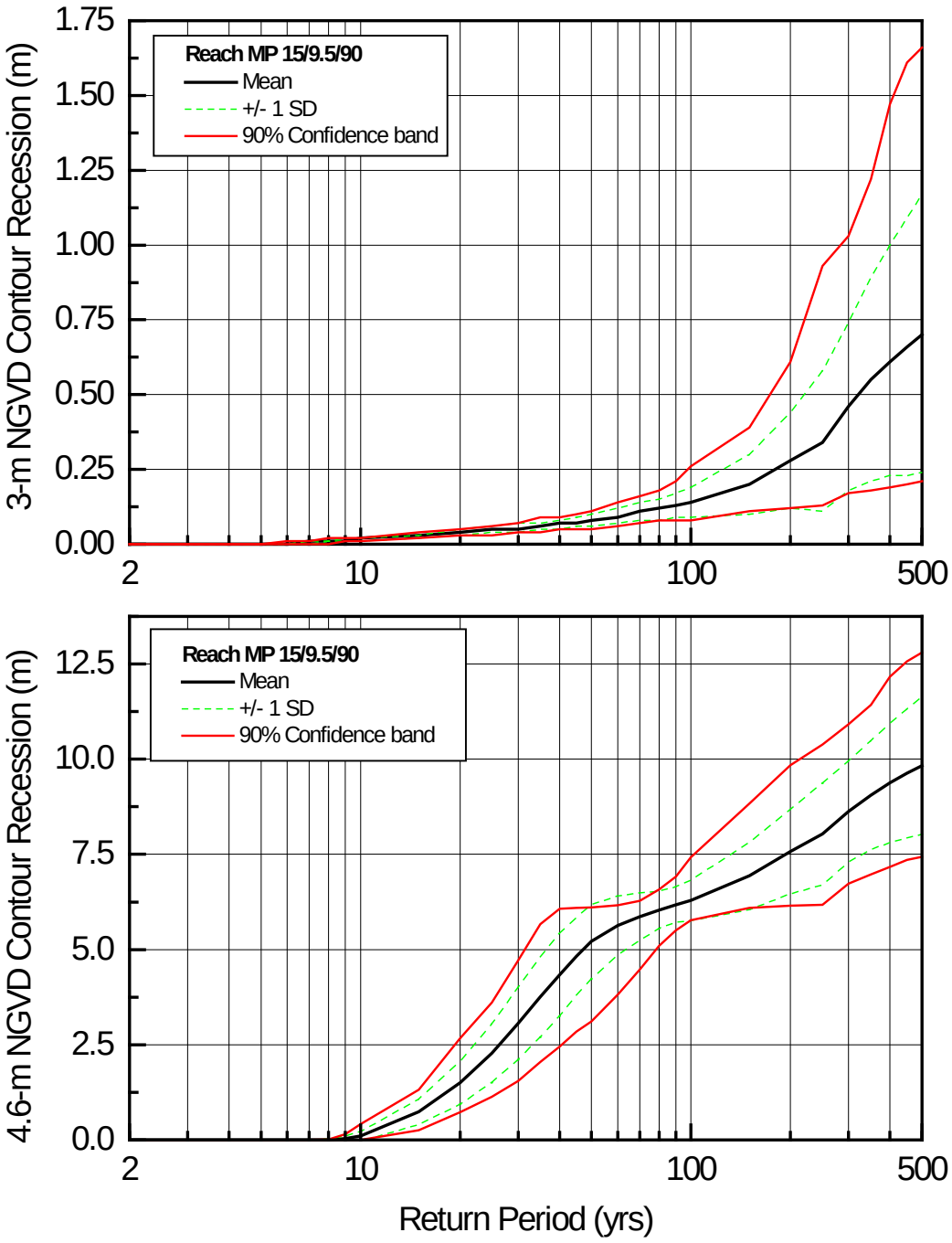

Reach MP 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
30
40
50
60
2
10
100
500
Reach MP 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
4
5
6
7
2
10
100
500
Return Period (yrs)

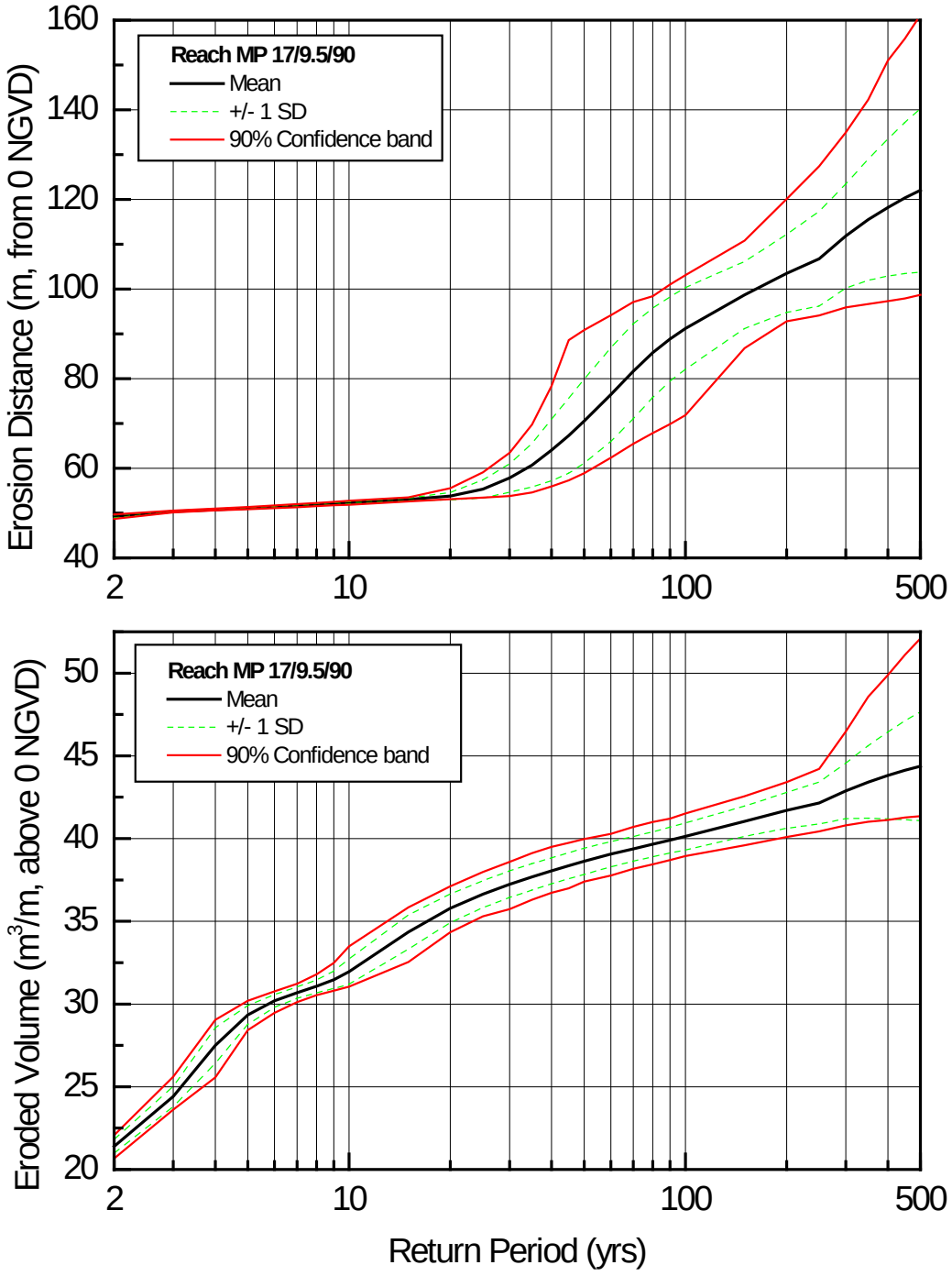

Reach MP 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach MP 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Return Period (yrs)

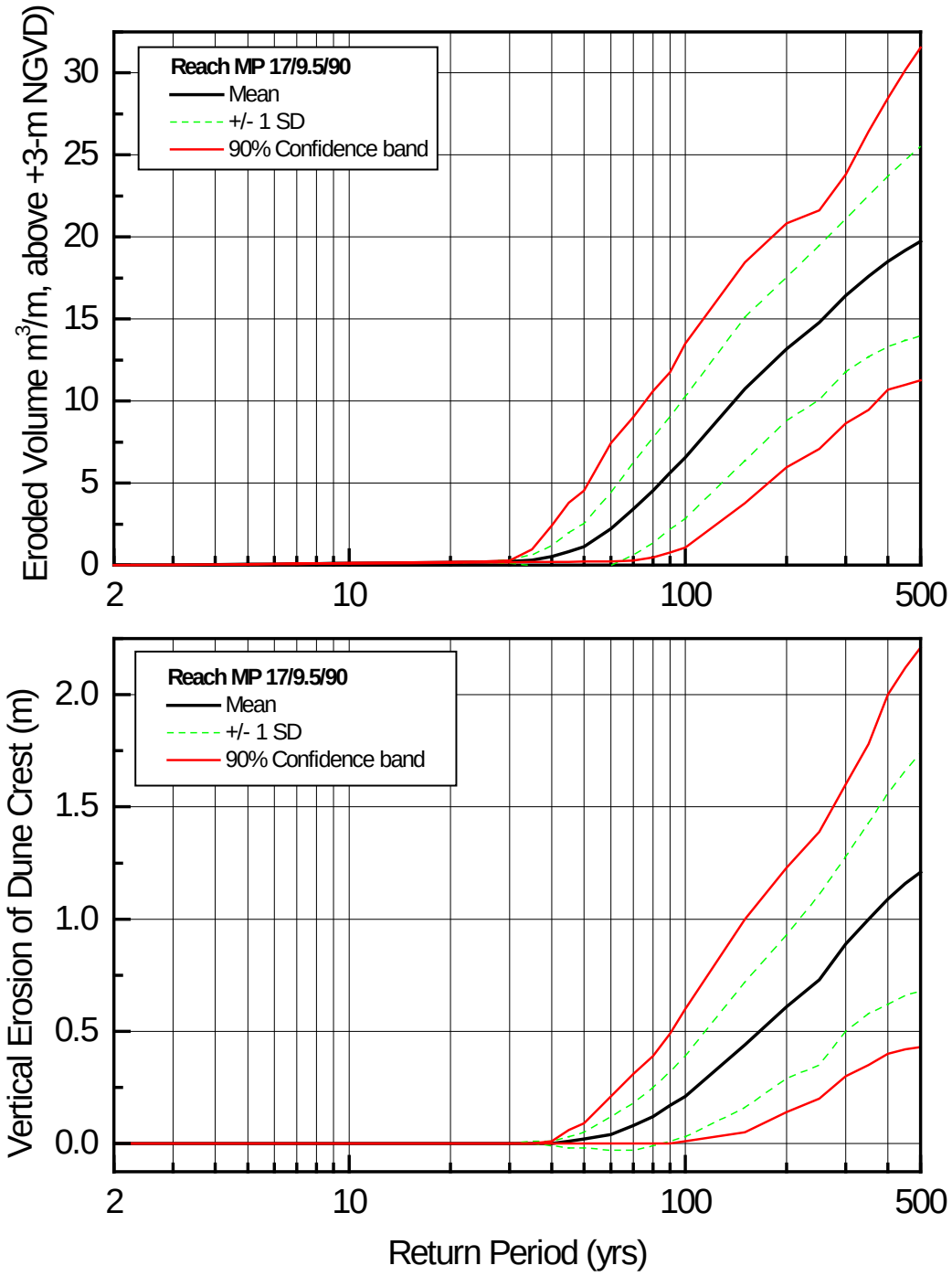

Max. Wave Setup Magnitude (m, above SWL)
1.750
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach MP 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
Reach MP 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

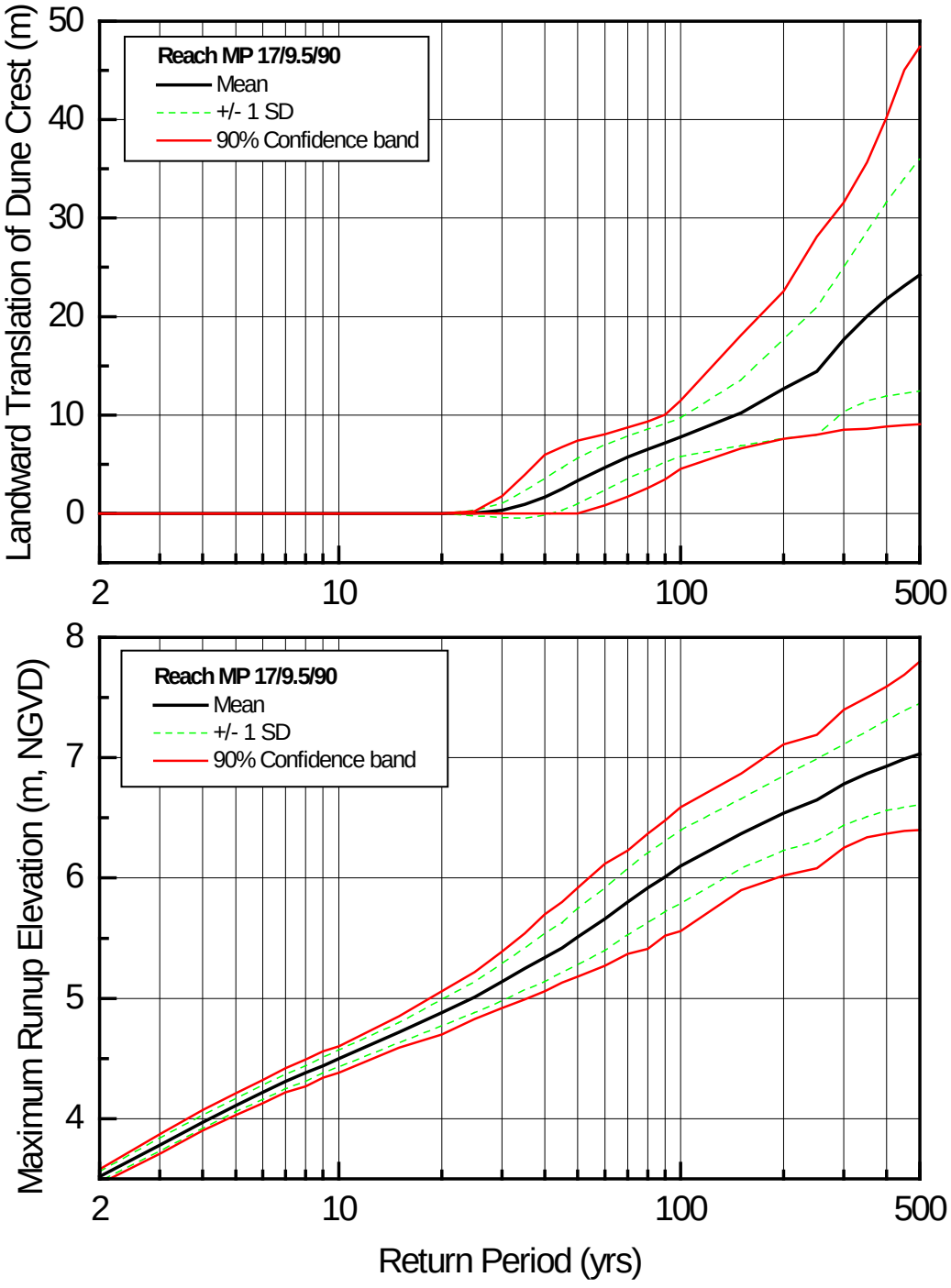

Reach MP 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
2
10
100
500
Reach MP 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
Active Profile Distance (m, from 0 NGVD)
250
200
150
100
50
2
10
100
500
Return Period (yrs)

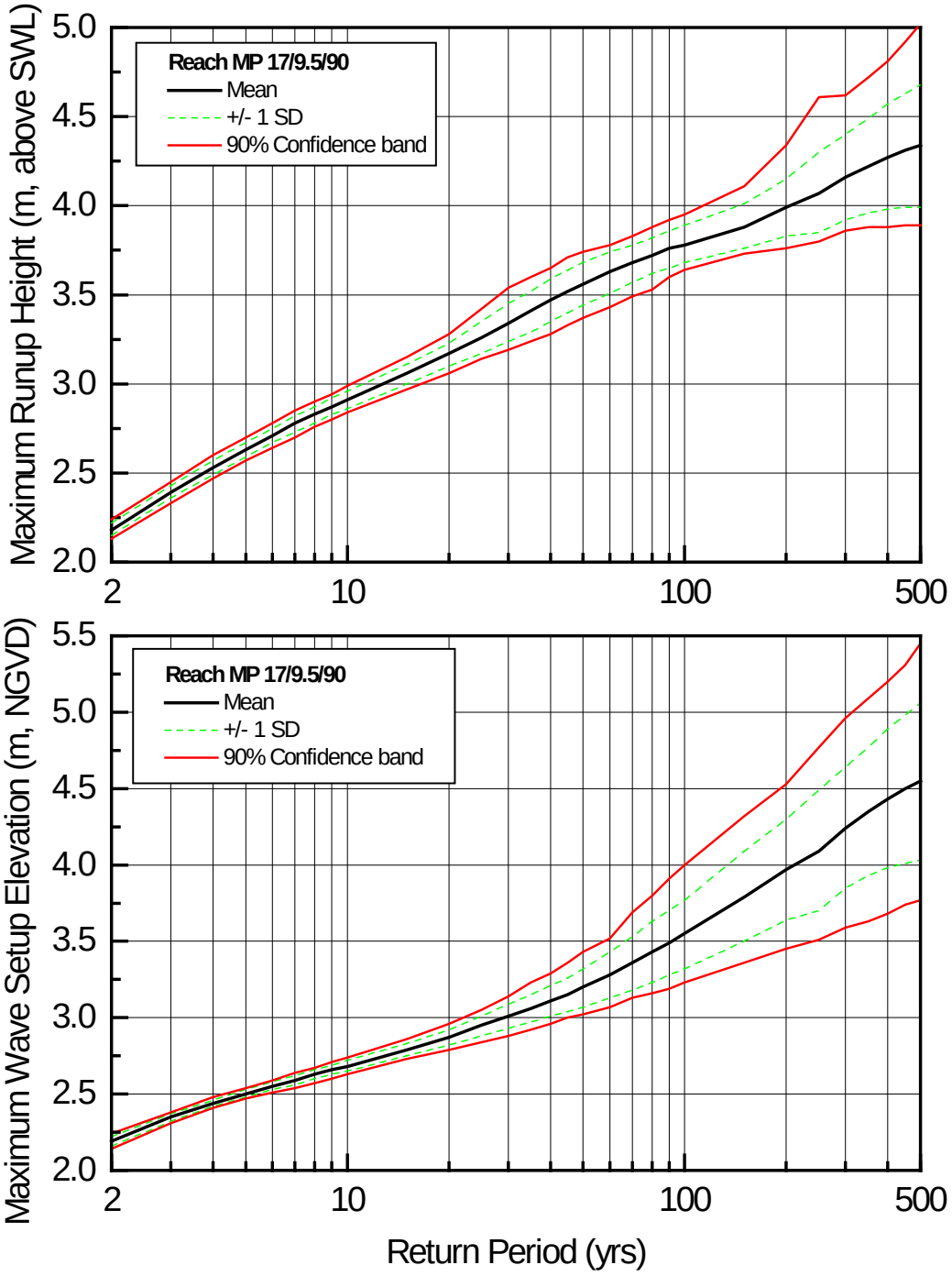

Reach MP 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
20
18
16
14
12
10
8
6
2
10
100
500
Reach MP 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
14
12
10
8
2
10
100
500
Return Period (yrs)

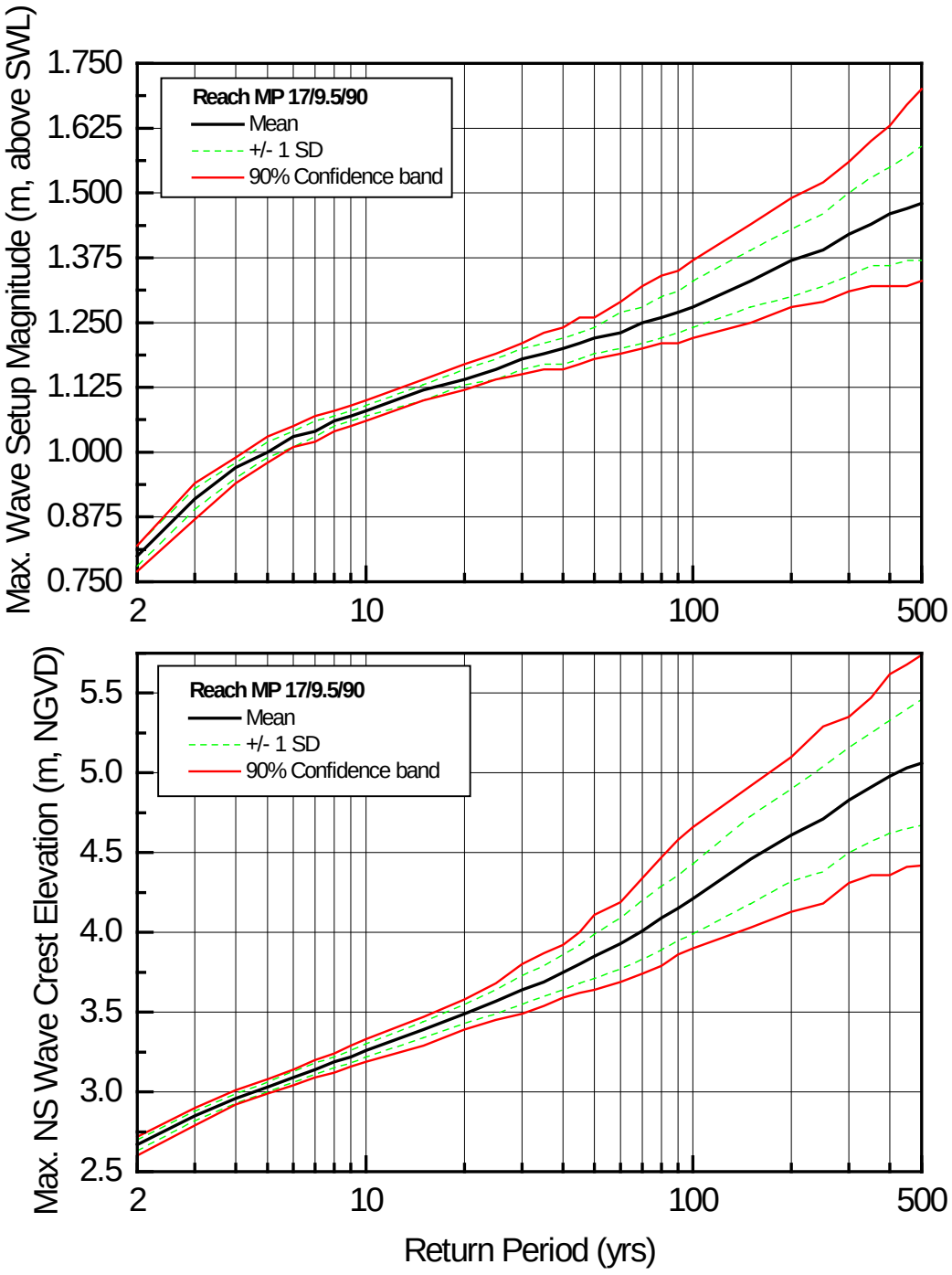

Reach MP 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
2
10
100
500
Reach MP 15/9.5/90
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
12.5
10.0
7.5
5.0
2.5
0.0
2
10
100
500
Return Period (yrs)

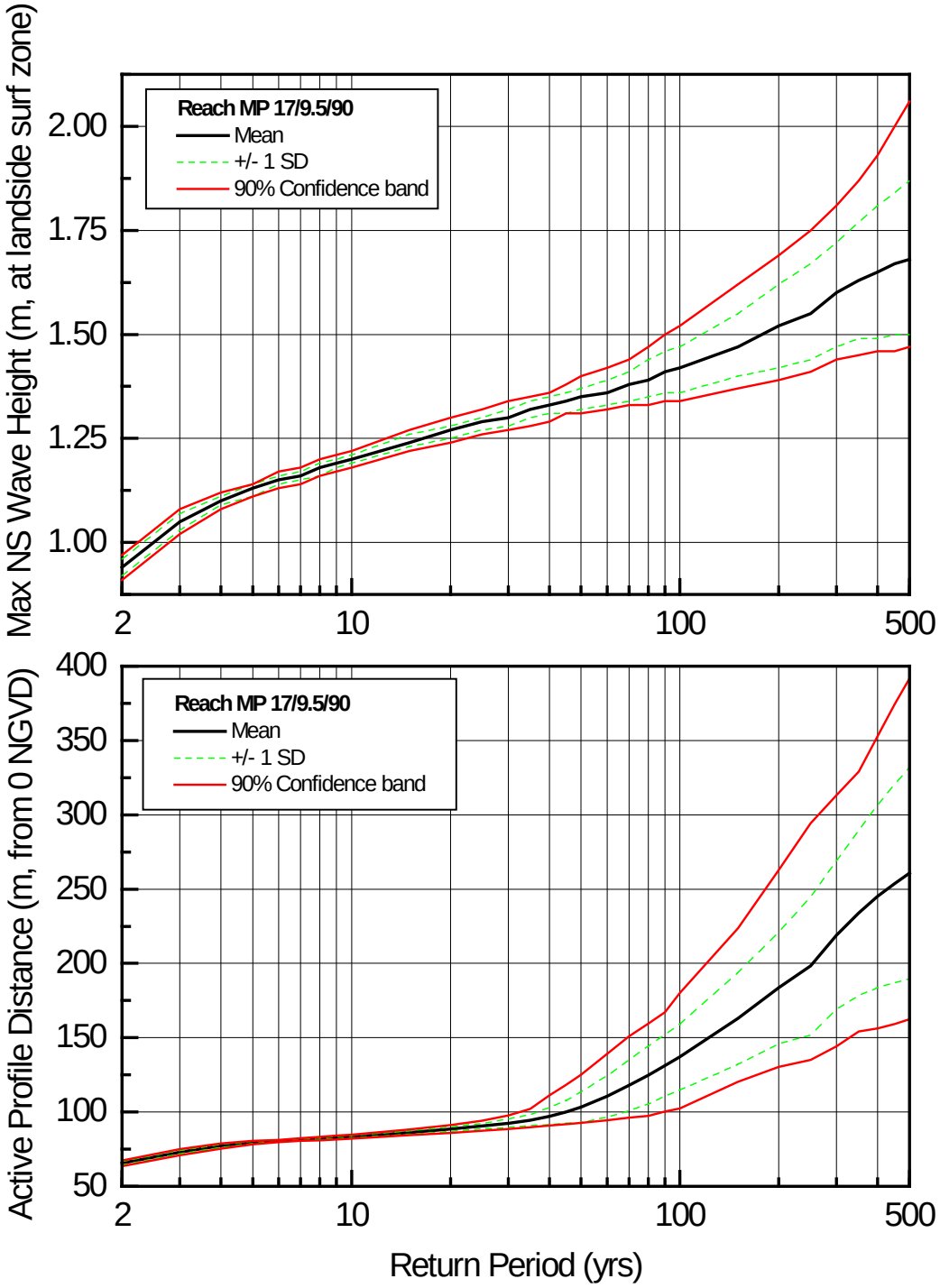

Reach MP 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
160
140
120
100
80
60
40
2
10
100
500
Reach MP 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
50
45
40
35
30
25
20
2
10
100
500
Return Period (yrs)

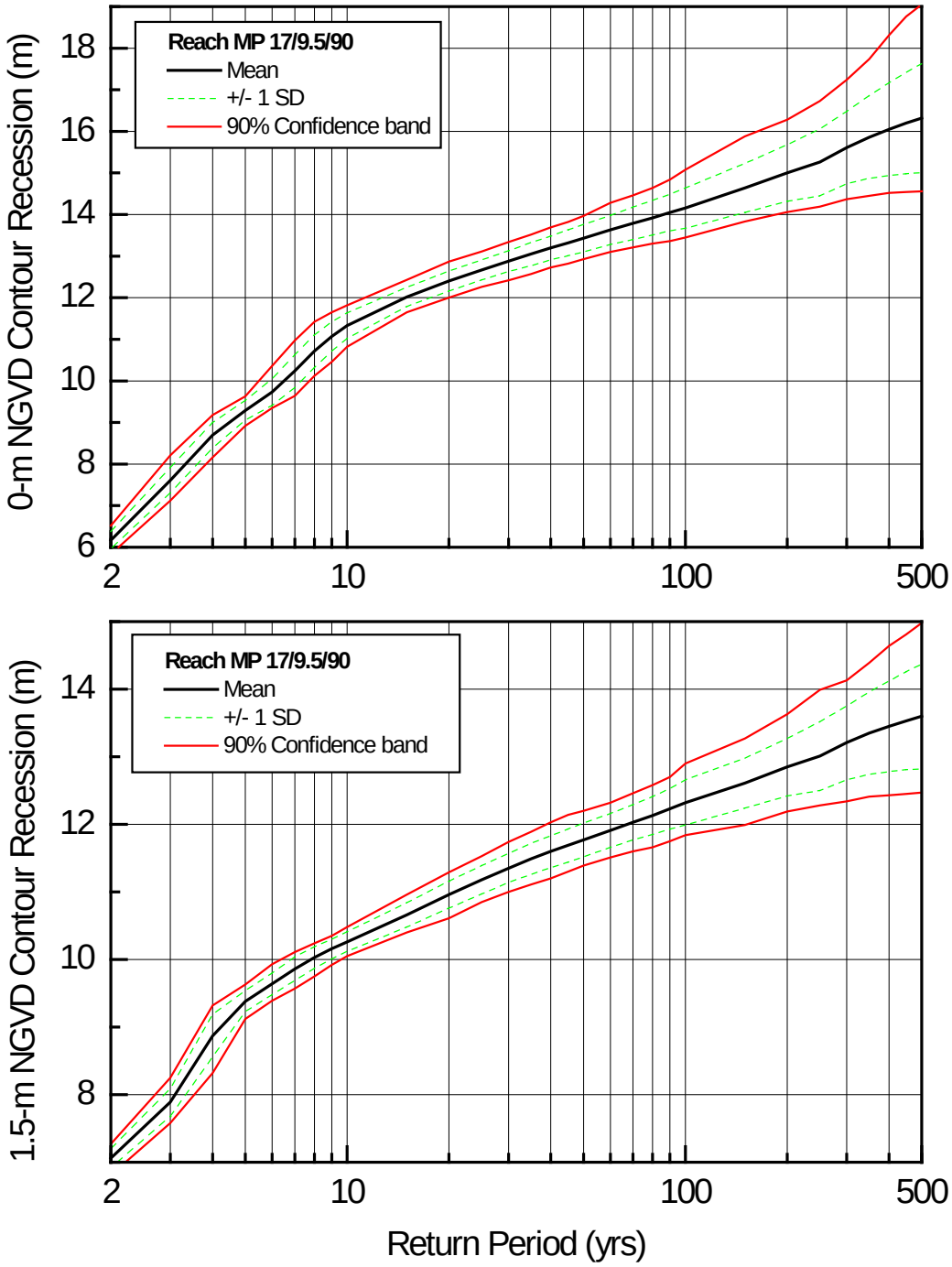

Reach MP 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
5
10
15
20
25
30
2
10
100
500
Reach MP 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2
10
100
500
Return Period (yrs)

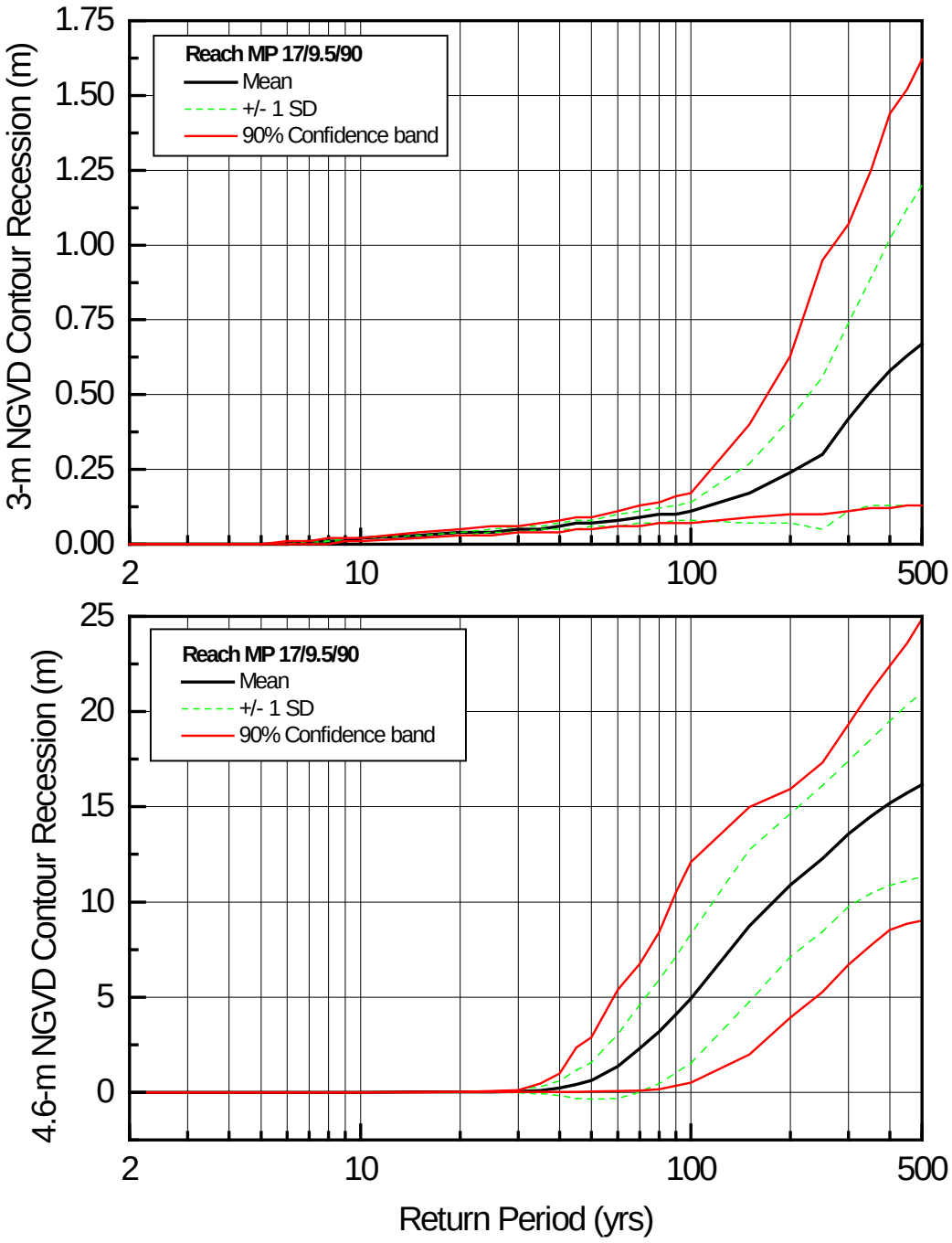

Reach MP 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
0
10
20
30
40
50
2
10
100
500
Reach MP 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
4
5
6
7
8
2
10
100
500
Return Period (yrs)

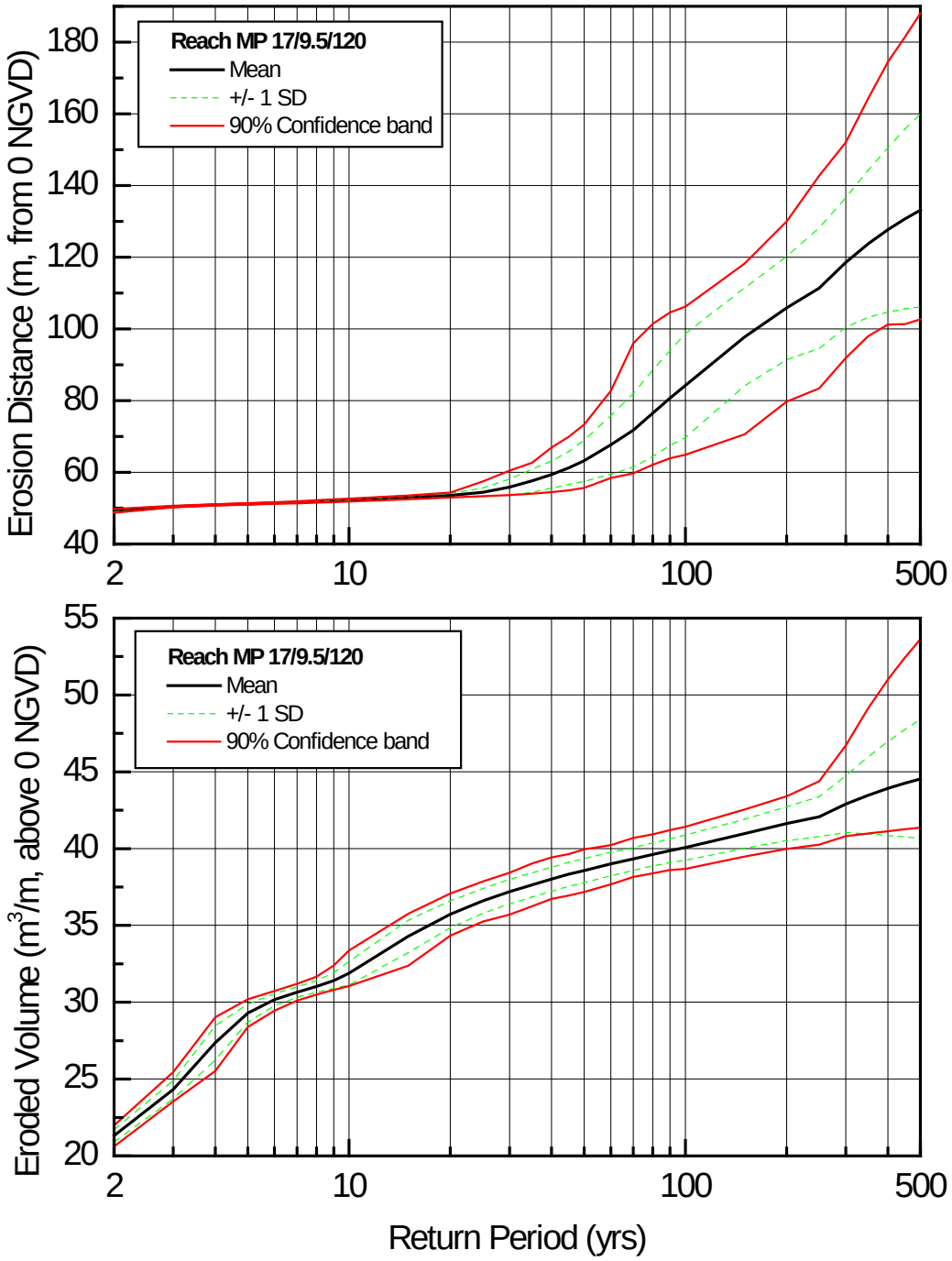

Reach MP 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach MP 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Return Period (yrs)

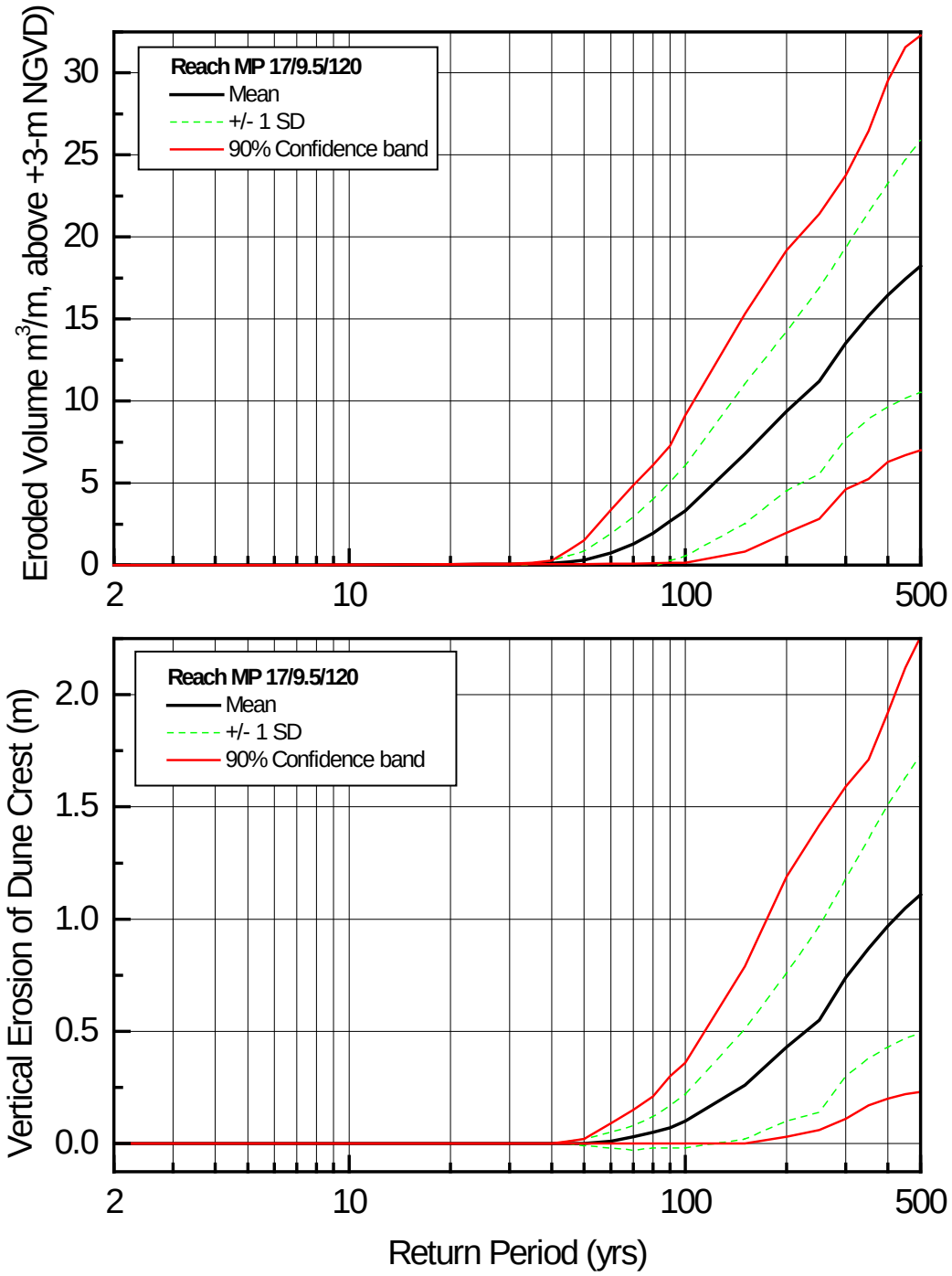

Max. Wave Setup Magnitude (m, above SWL)
1.750
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach MP 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
Reach MP 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

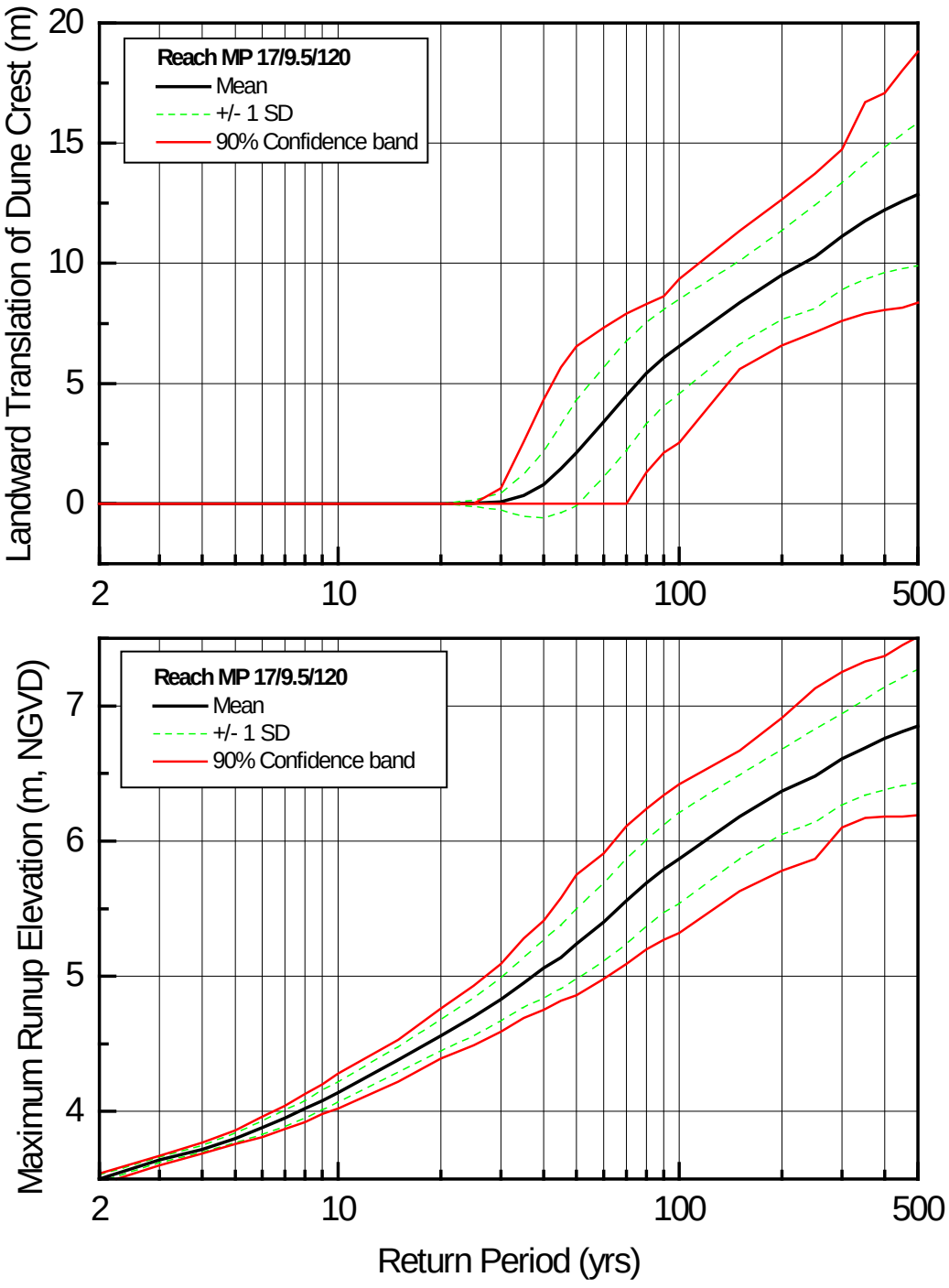

Reach MP 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
2
10
100
500
Reach MP 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
Active Profile Distance (m, from 0 NGVD)
400
350
300
250
200
150
100
50
2
10
100
500
Return Period (yrs)

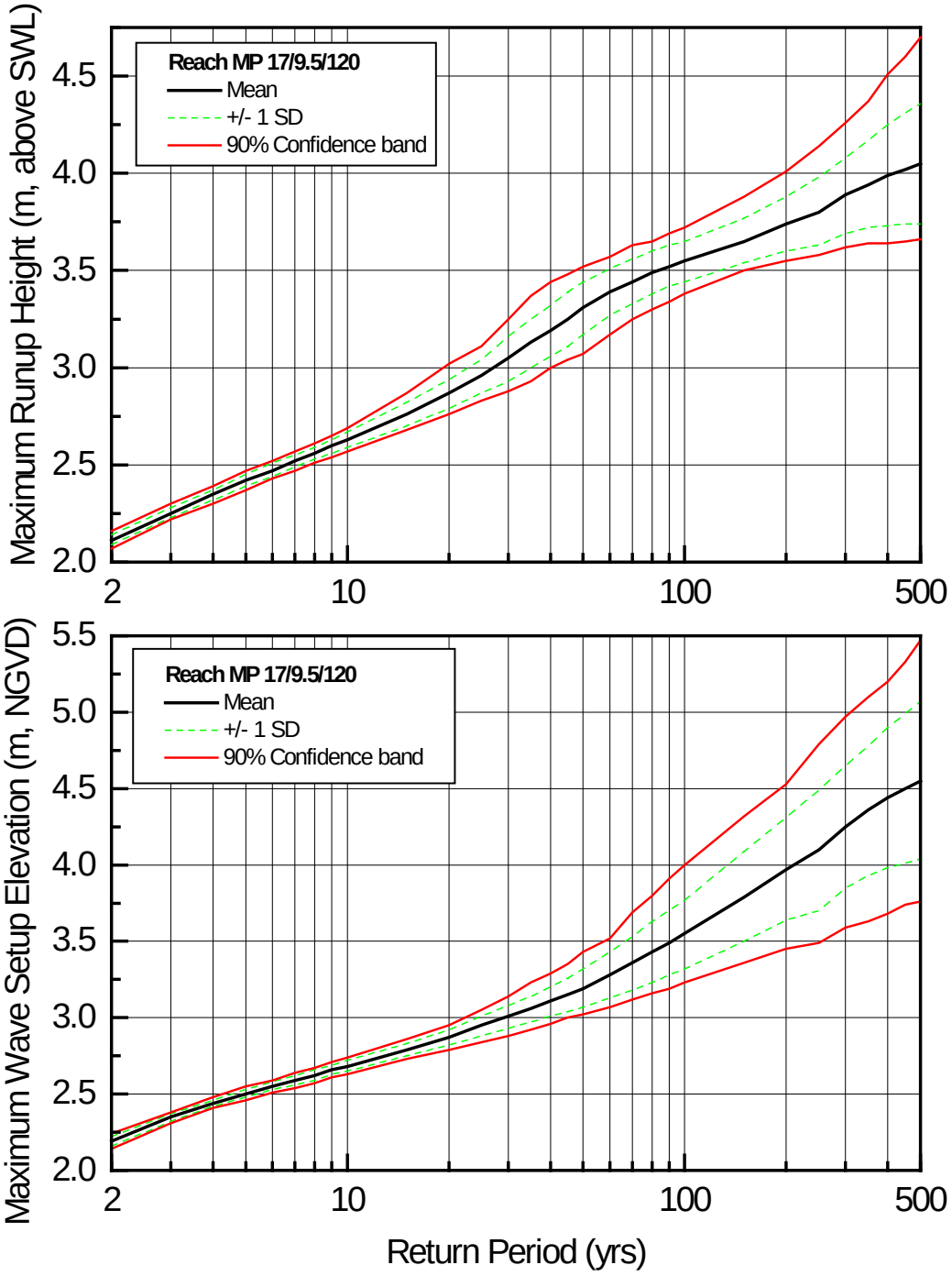

Reach MP 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
18
16
14
12
10
8
6
2
10
100
500
Reach MP 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
14
12
10
8
2
10
100
500
Return Period (yrs)

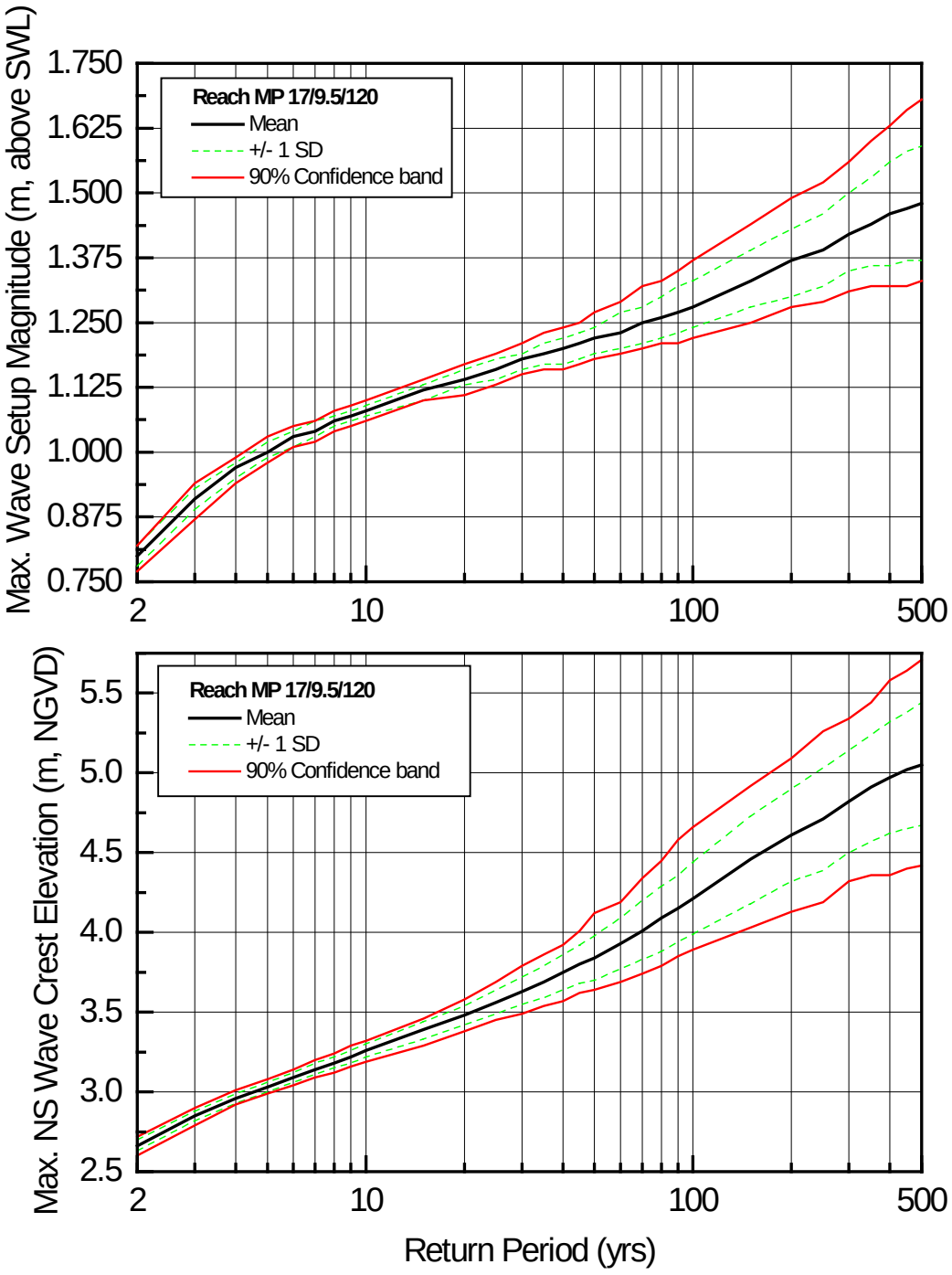

Reach MP 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
2
10
100
500
Reach MP 17/9.5/90
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

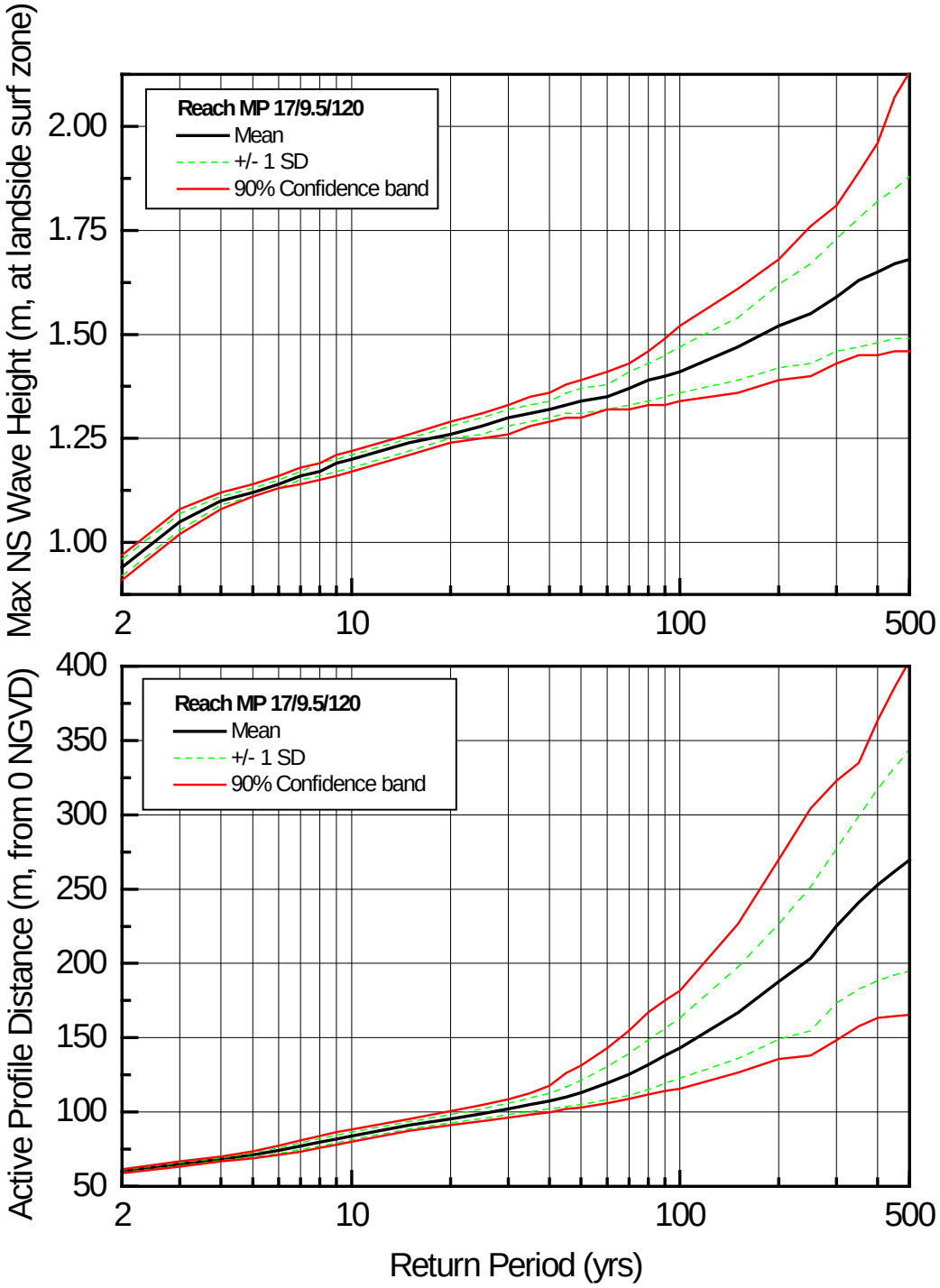

Reach MP 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
180
160
140
120
100
80
60
40
2
10
100
500
Reach MP 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
55
50
45
40
35
30
25
20
2
10
100
500
Return Period (yrs)

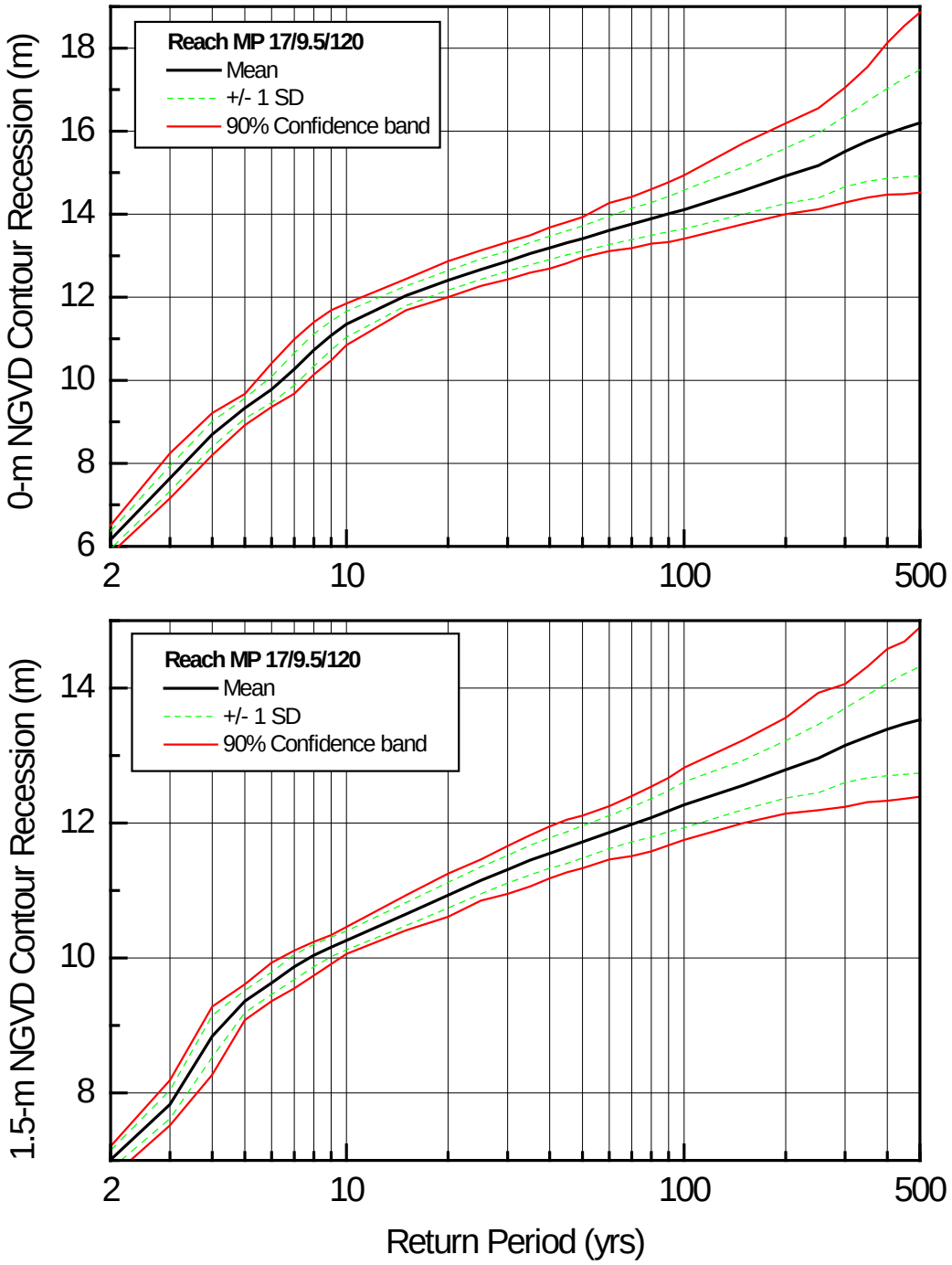

Reach MP 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
5
10
15
20
25
30
2
10
100
500
Reach MP 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.0
0.5
1.0
1.5
2.0
2
10
100
500
Return Period (yrs)

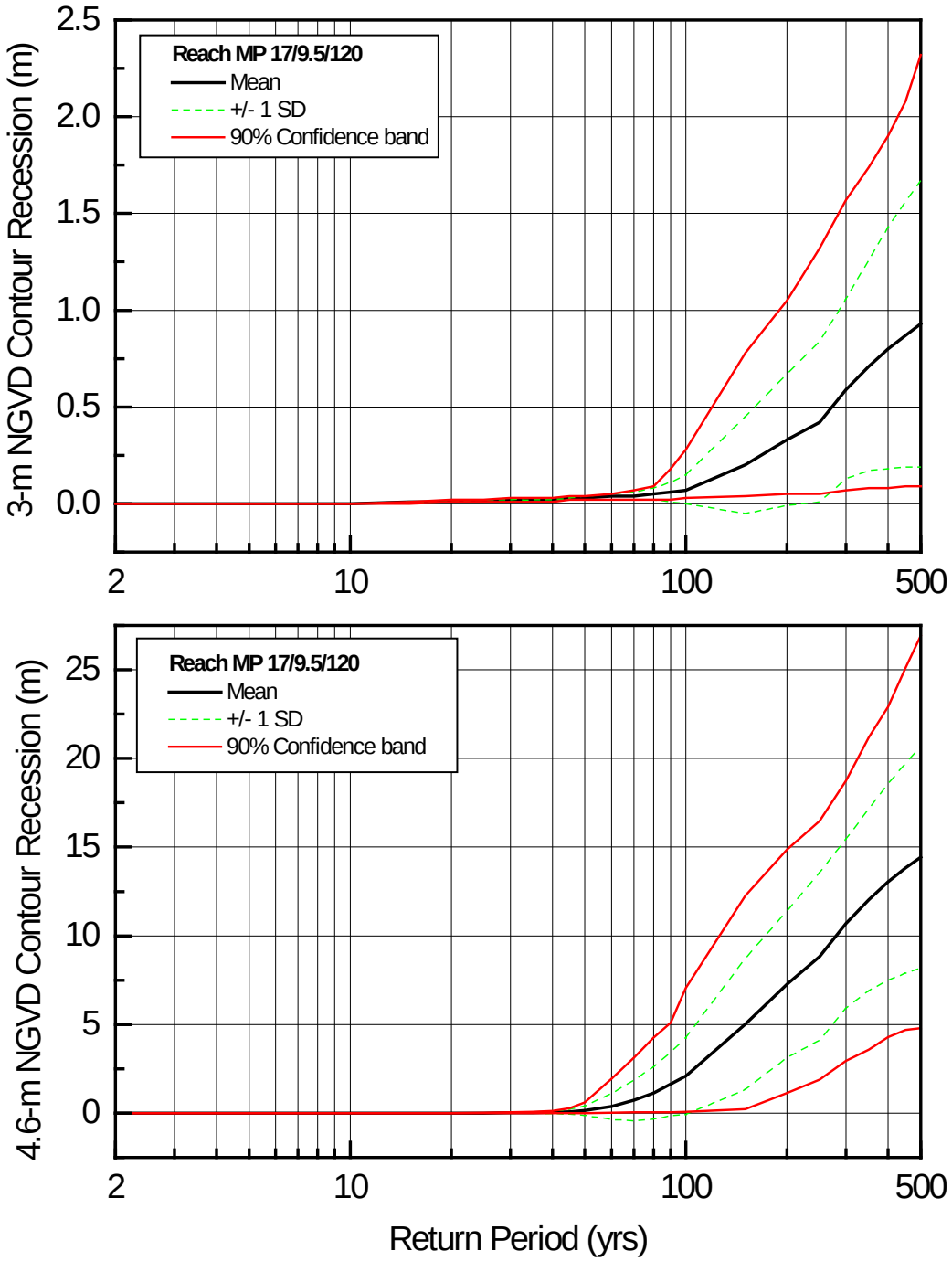

Reach MP 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
20
15
10
5
0
2
10
100
500
Reach MP 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
7
6
5
4
2
10
100
500
Return Period (yrs)

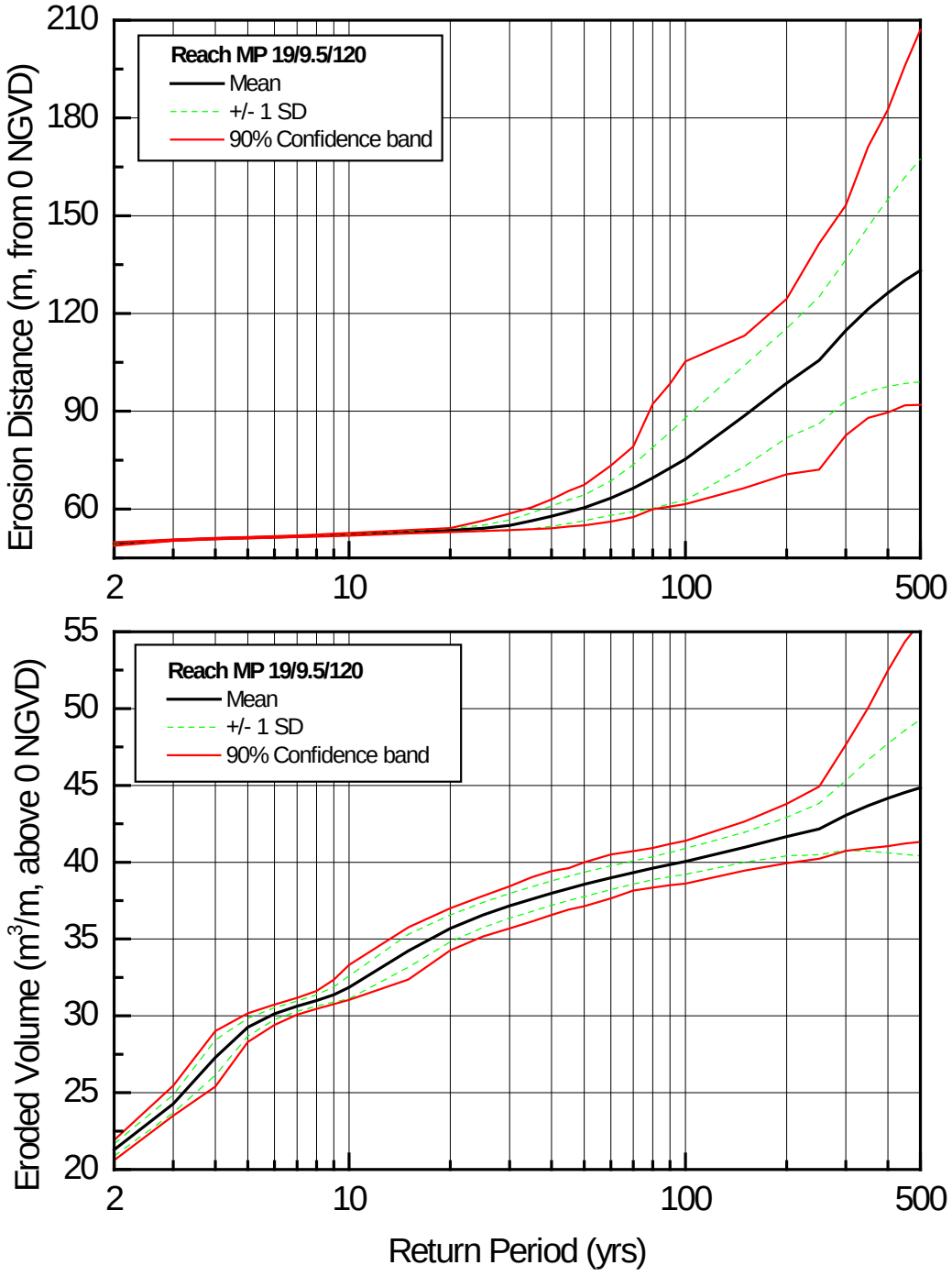

Reach MP 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach MP 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Return Period (yrs)

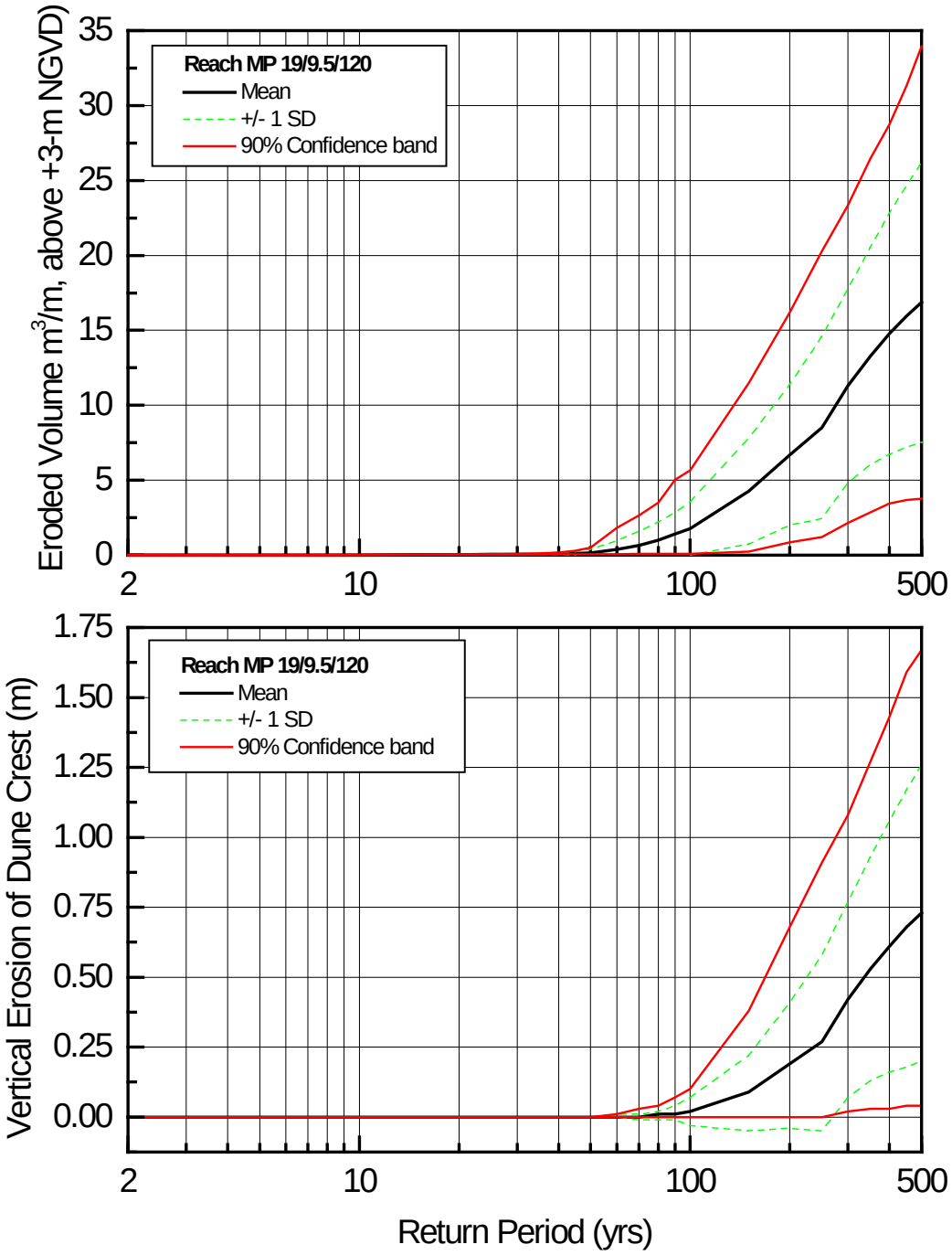

Max. Wave Setup Magnitude (m, above SWL)
1.750
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
Reach MP 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Max. NS Wave Crest Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
Reach MP 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
2
10
100
500
Return Period (yrs)

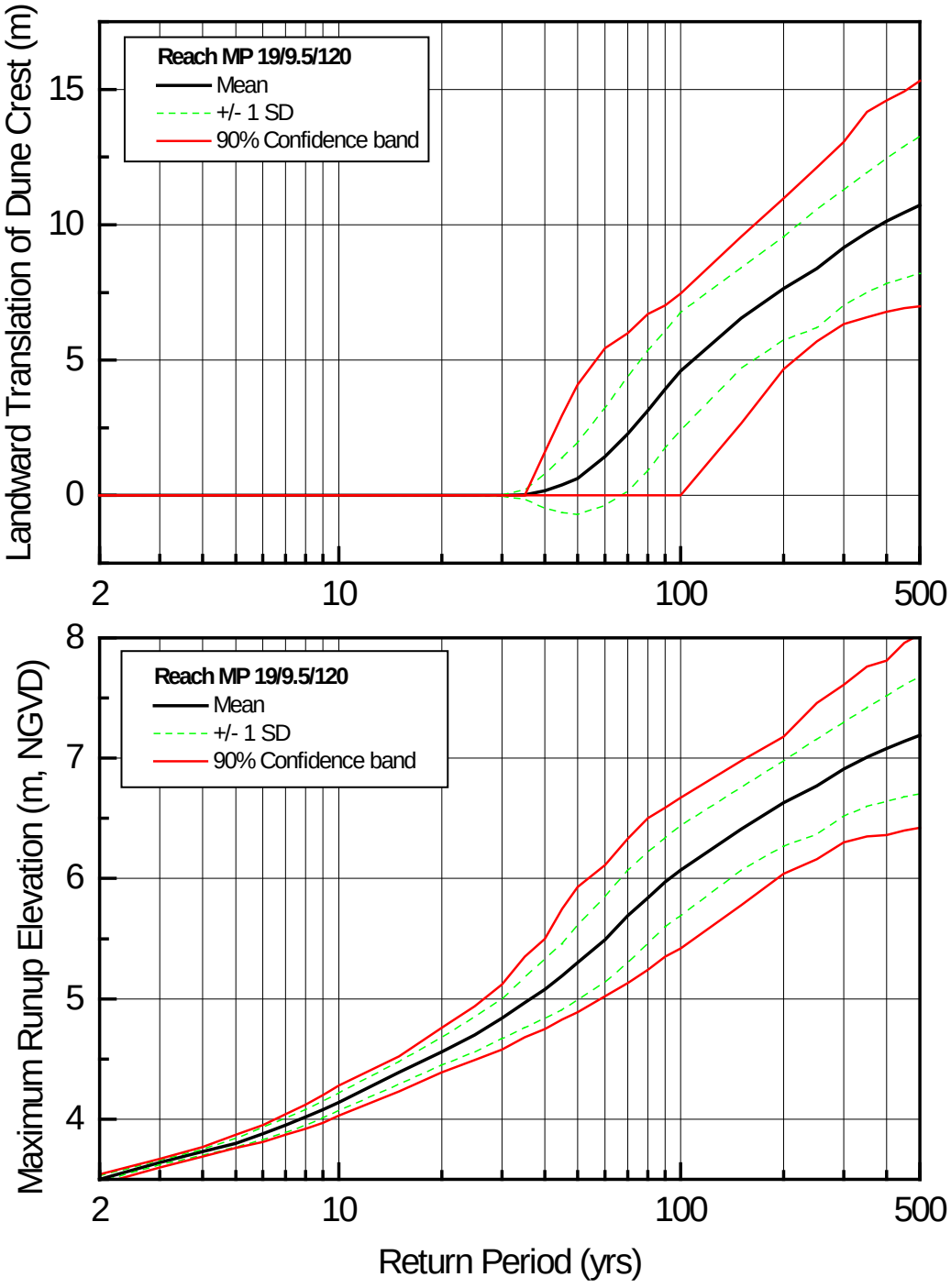

Reach MP 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
2
10
100
500
Reach MP 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
Active Profile Distance (m, from 0 NGVD)
400
350
300
250
200
150
100
50
2
10
100
500
Return Period (yrs)

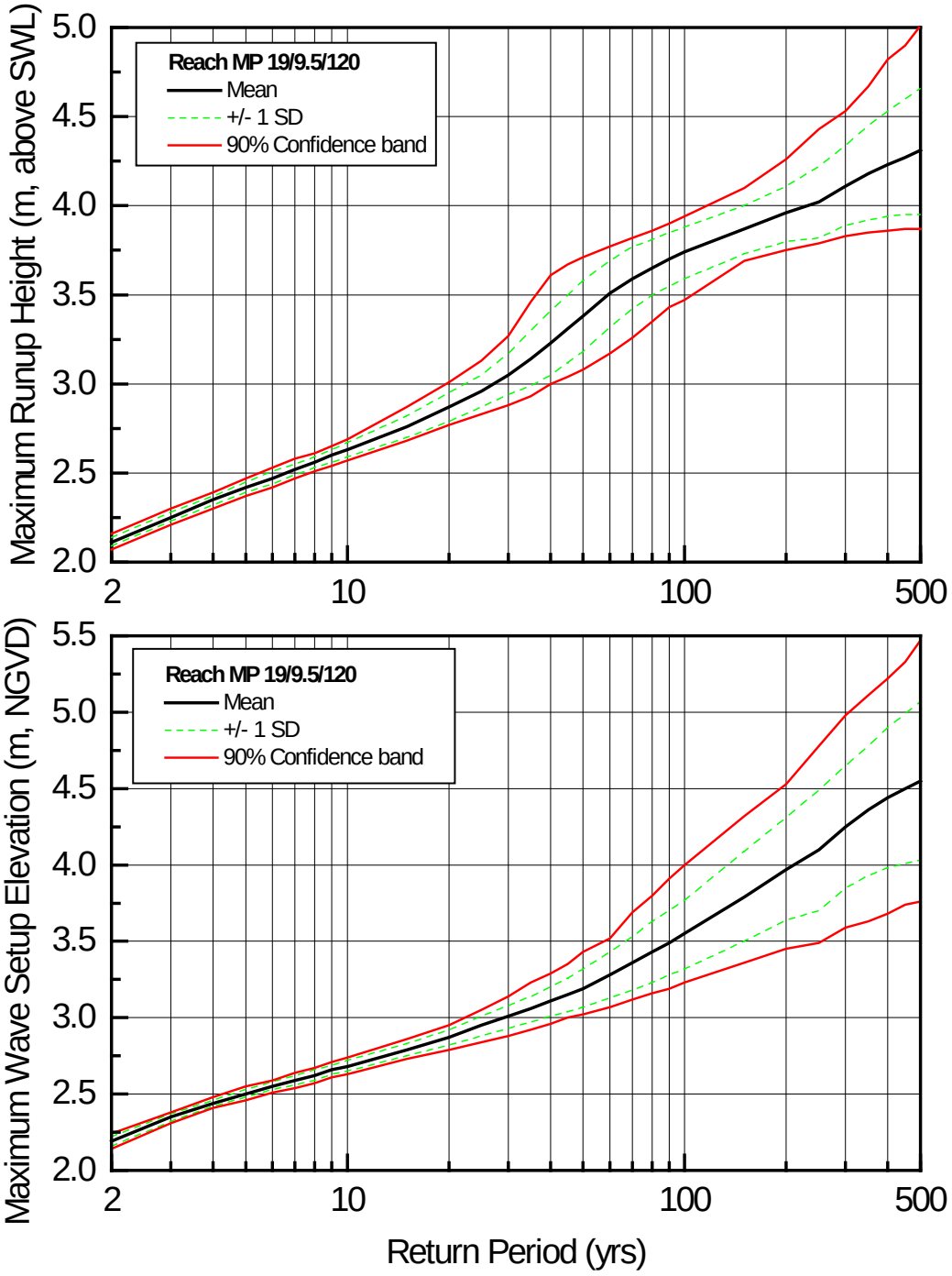

Reach MP 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
18
16
14
12
10
8
6
2
10
100
500
Reach MP 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
14
12
10
8
2
10
100
500
Return Period (yrs)

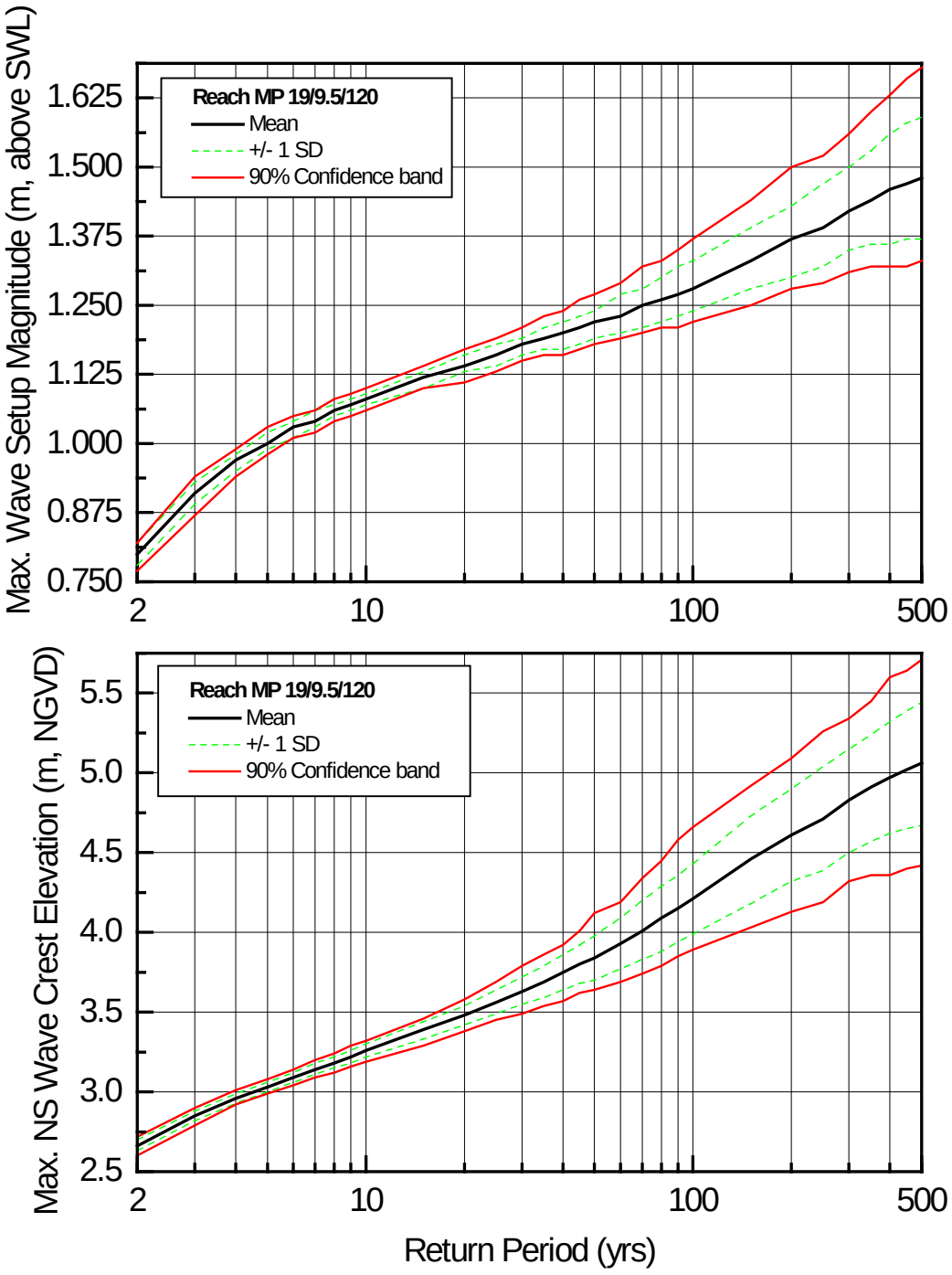

Reach MP 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach MP 17/9.5/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
25
20
15
10
5
0
2
10
100
500
Return Period (yrs)

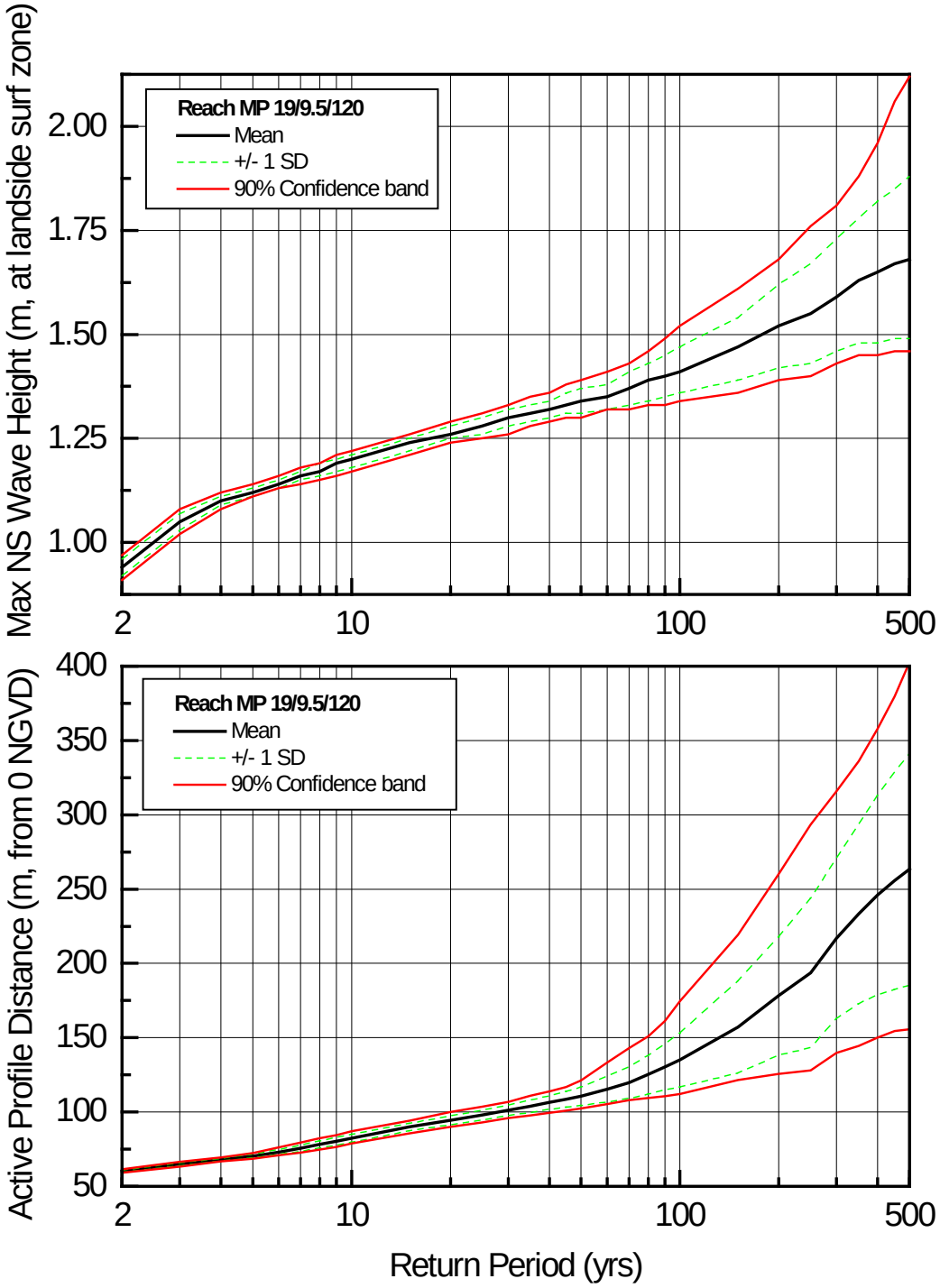

Reach MP 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Erosion Distance (m, from 0 NGVD)
210
180
150
120
90
60
2
10
100
500
Reach MP 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume (m3/m, above 0 NGVD)
55
50
45
40
35
30
25
20
2
10
100
500
Return Period (yrs)

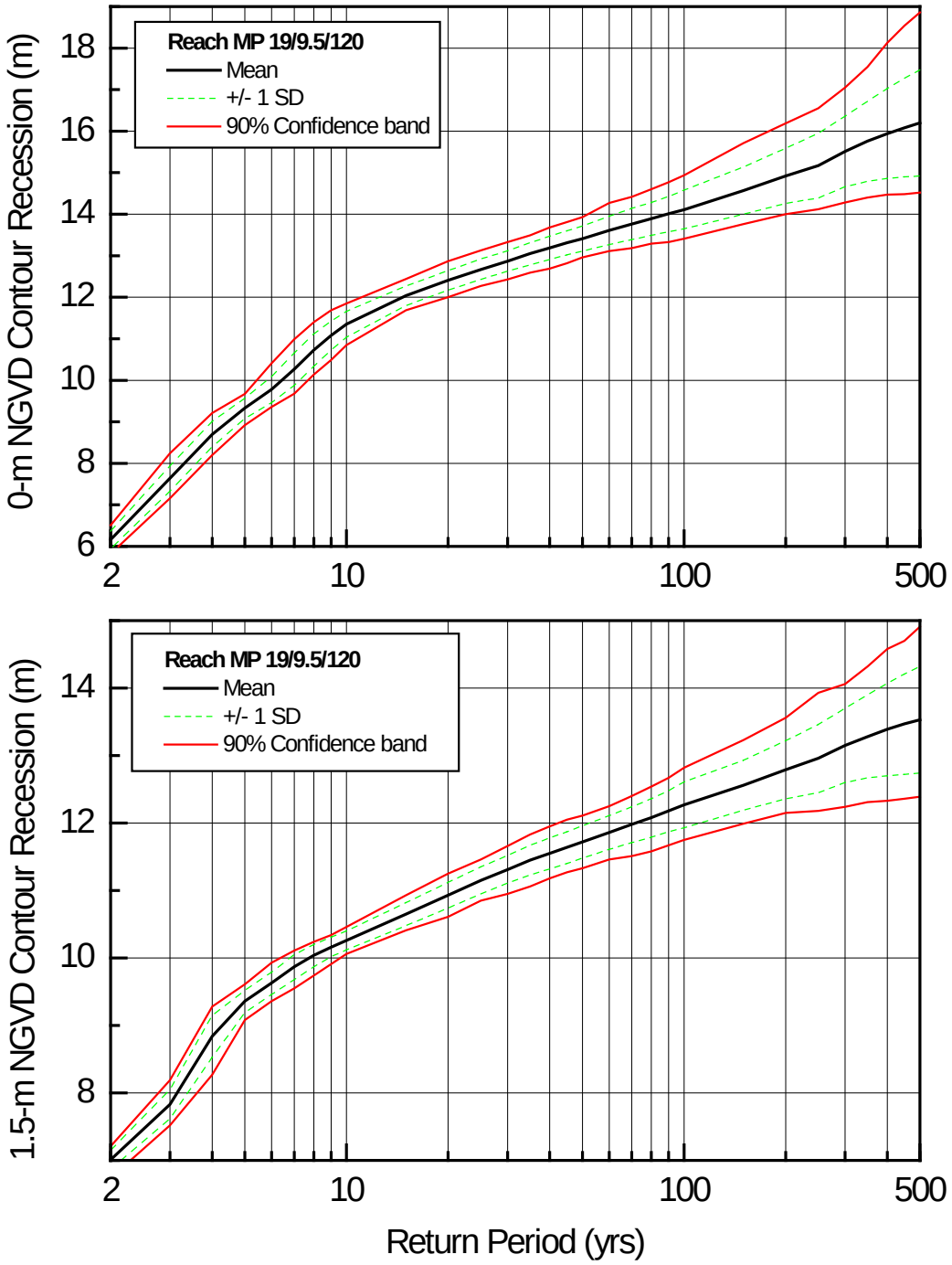

Reach MP 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Eroded Volume m3/m, above +3-m NGVD)
0
5
10
15
20
25
30
35
2
10
100
500
Reach MP 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Vertical Erosion of Dune Crest (m)
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
2
10
100
500
Return Period (yrs)

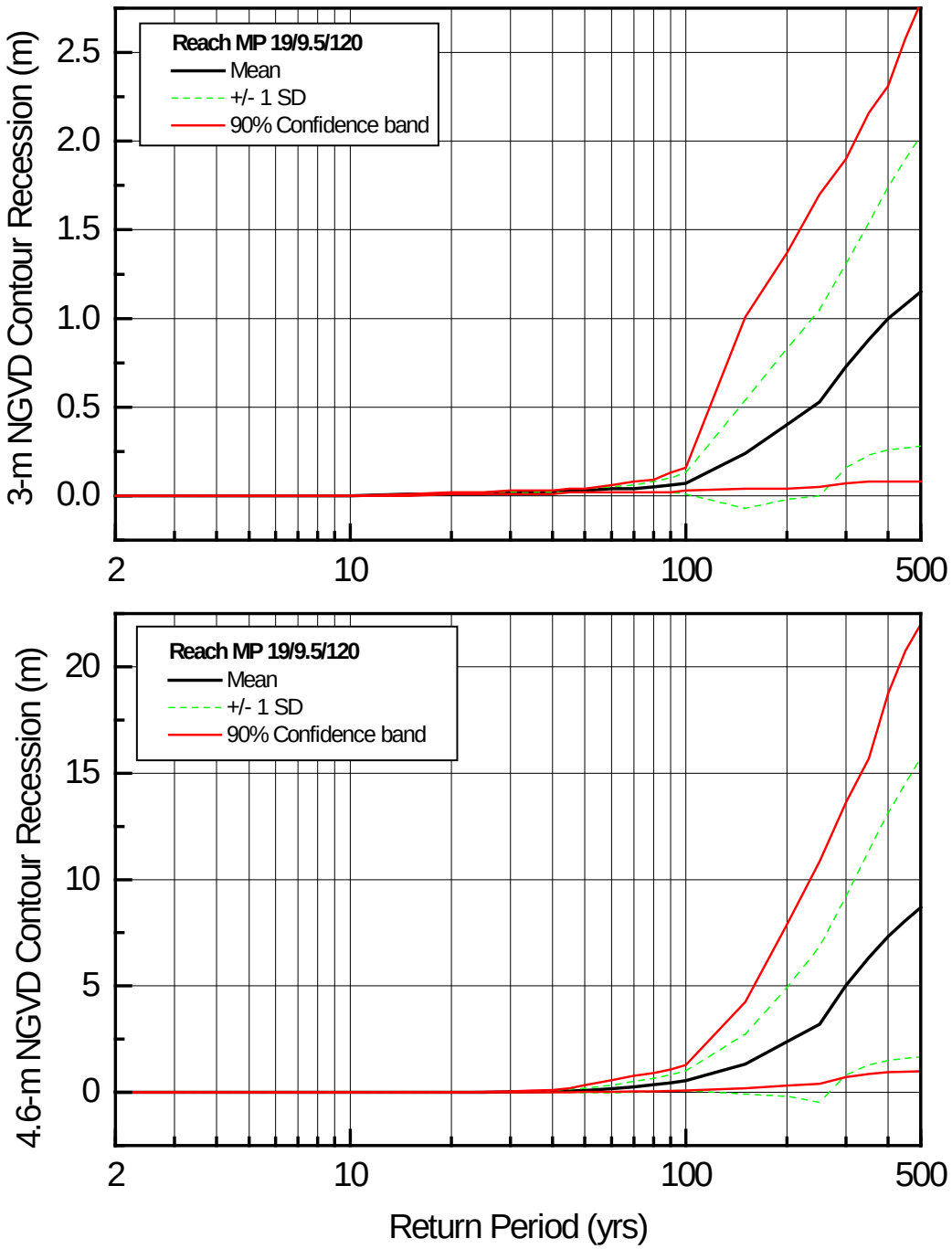

Reach MP 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Landward Translation of Dune Crest (m)
15
10
5
0
2
10
100
500
Reach MP 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Elevation (m, NGVD)
8
7
6
5
4
2
10
100
500
Return Period (yrs)


Reach MP 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Runup Height (m, above SWL)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Reach MP 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Maximum Wave Setup Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2
10
100
500
Return Period (yrs)


Reach MP 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Max. Wave Setup Magnitude (m, above SWL)
1.625
1.500
1.375
1.250
1.125
1.000
0.875
0.750
2
10
100
500
Reach MP 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Max. NS Wave Crest Elevation (m, NGVD)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2
10
100
500
Return Period (yrs)


Reach MP 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Max NS Wave Height (m, at landside surf zone)
2.00
1.75
1.50
1.25
1.00
2
10
100
500
Reach MP 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
Active Profile Distance (m, from 0 NGVD)
400
350
300
250
200
150
100
50
2
10
100
500
Return Period (yrs)


Reach MP 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
0-m NGVD Contour Recession (m)
18
16
14
12
10
8
6
2
10
100
500
Reach MP 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
1.5-m NGVD Contour Recession (m)
14
12
10
8
2
10
100
500
Return Period (yrs)


Reach MP 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
3-m NGVD Contour Recession (m)
2.5
2.0
1.5
1.0
0.5
0.0
2
10
100
500
Reach MP 19/9.5/120
Mean
+/- 1 SD
90% Confidence band
4.6-m NGVD Contour Recession (m)
20
15
10
5
0
2
10
100
500
Return Period (yrs)