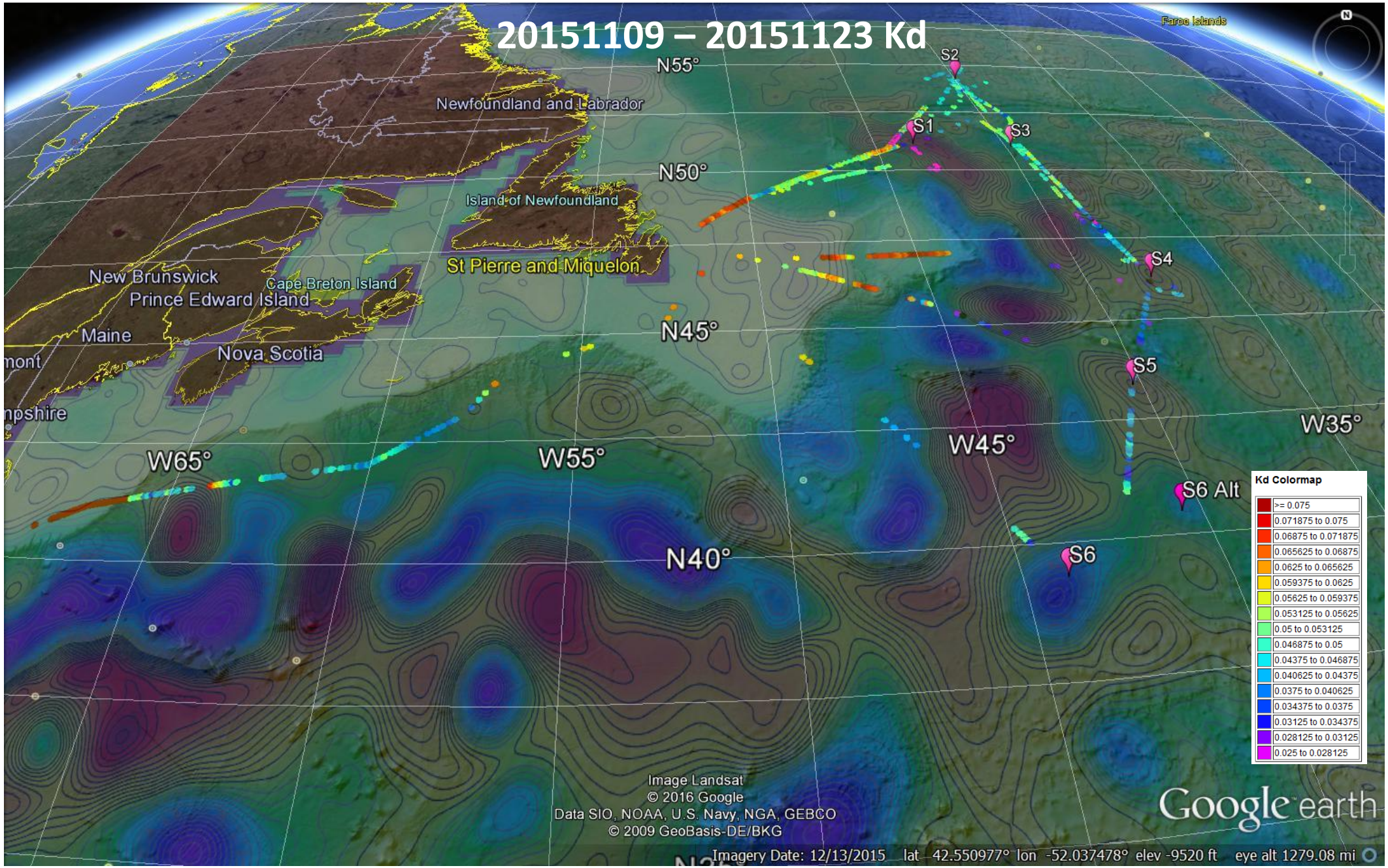
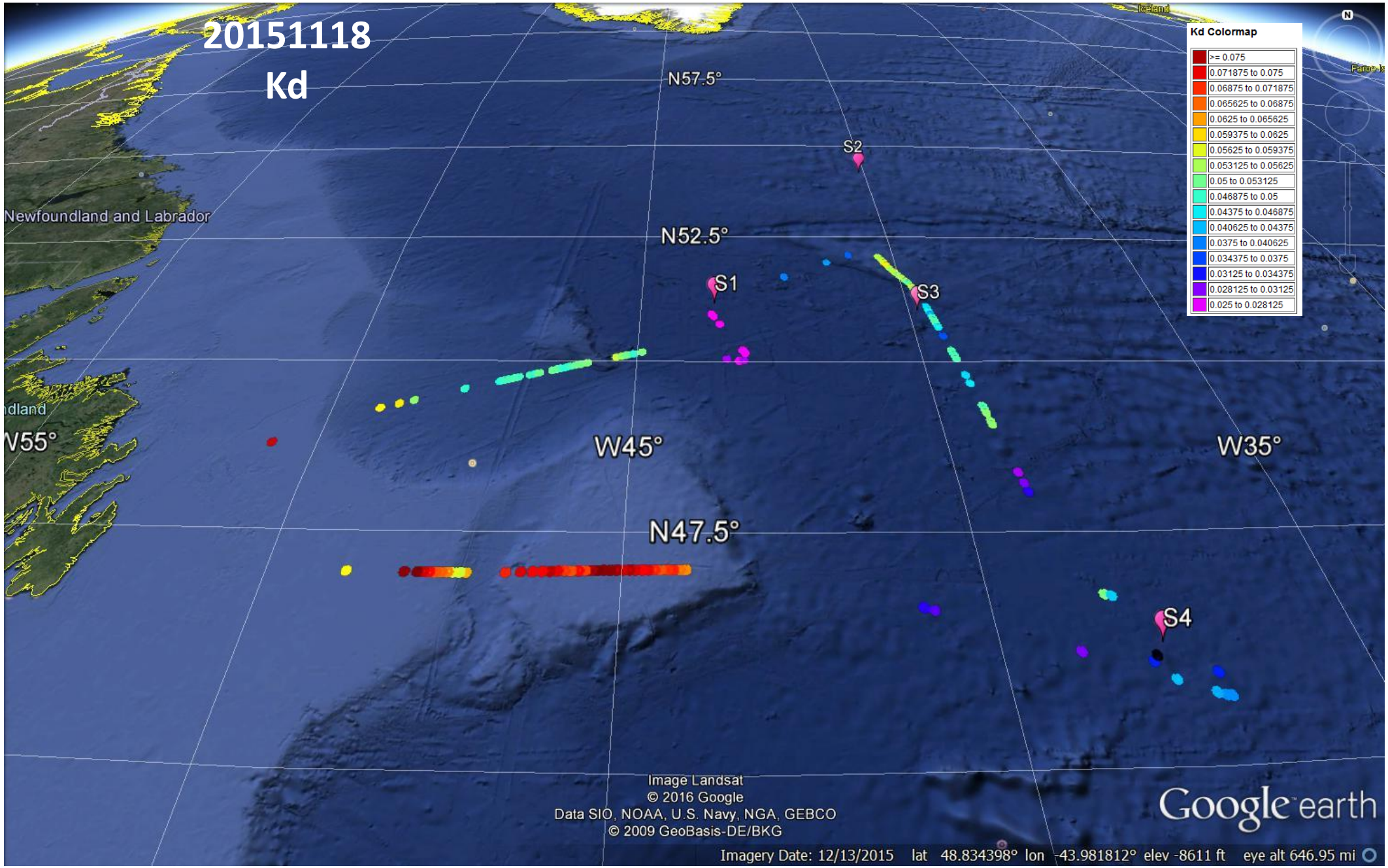
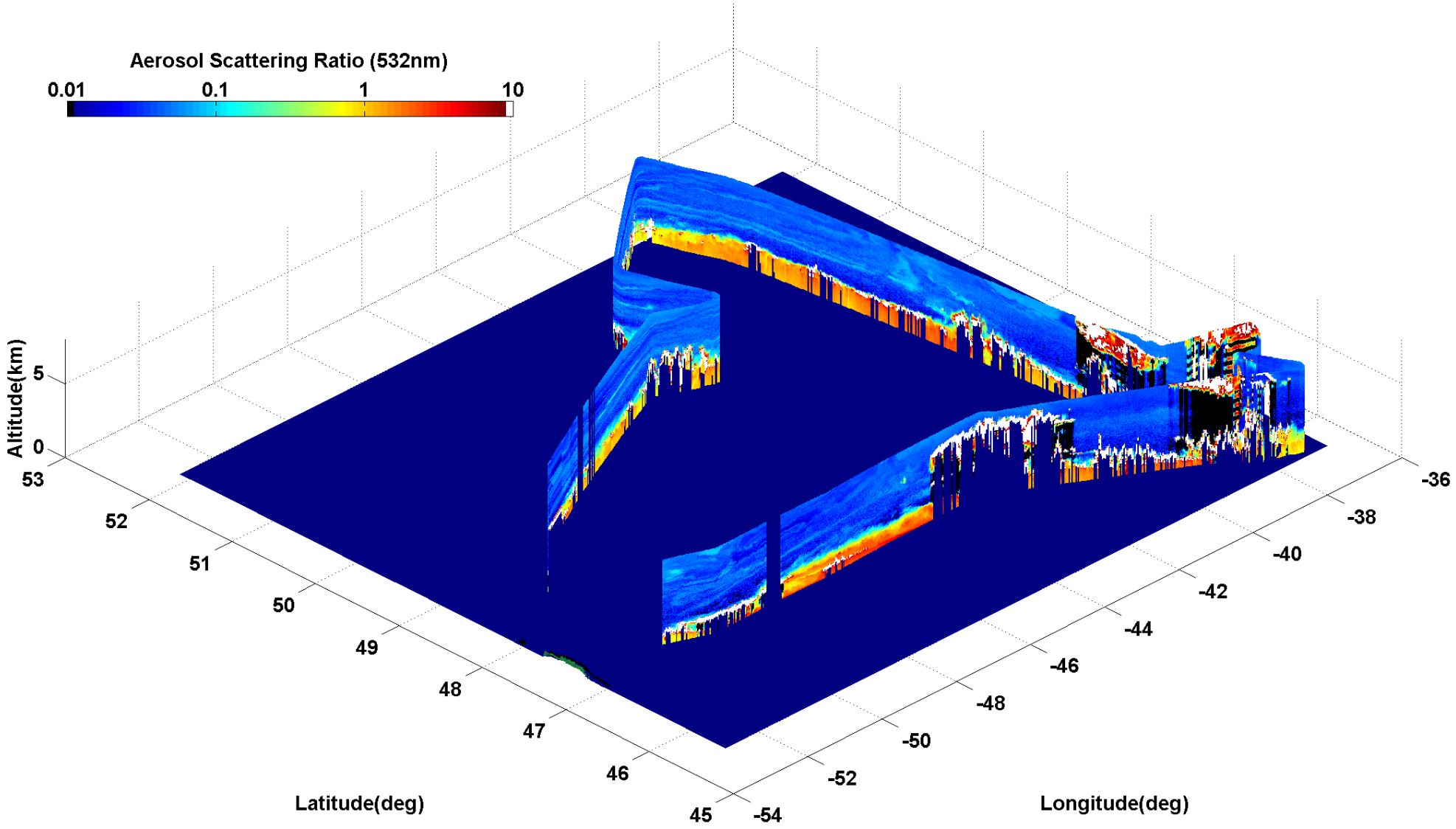
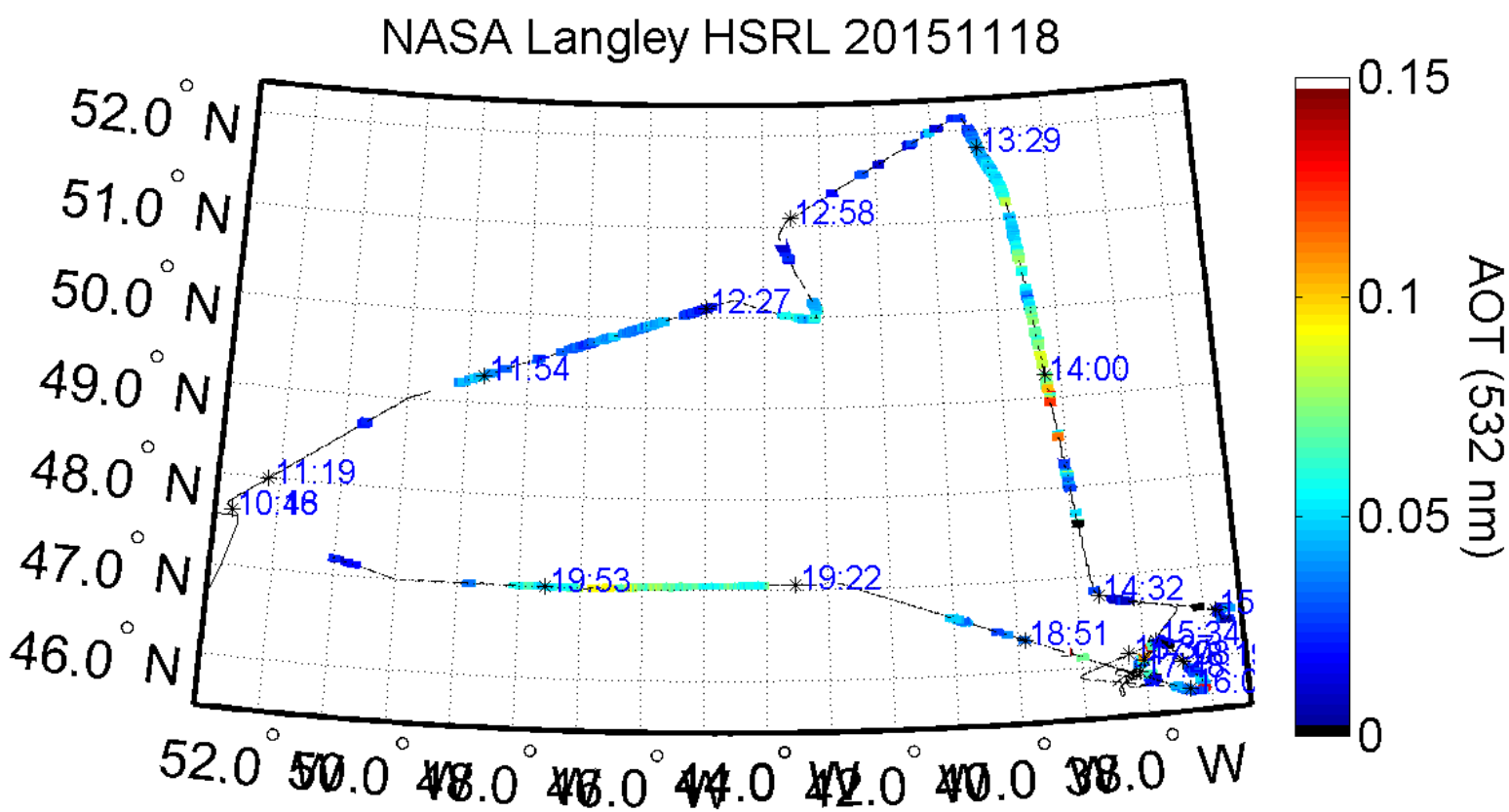
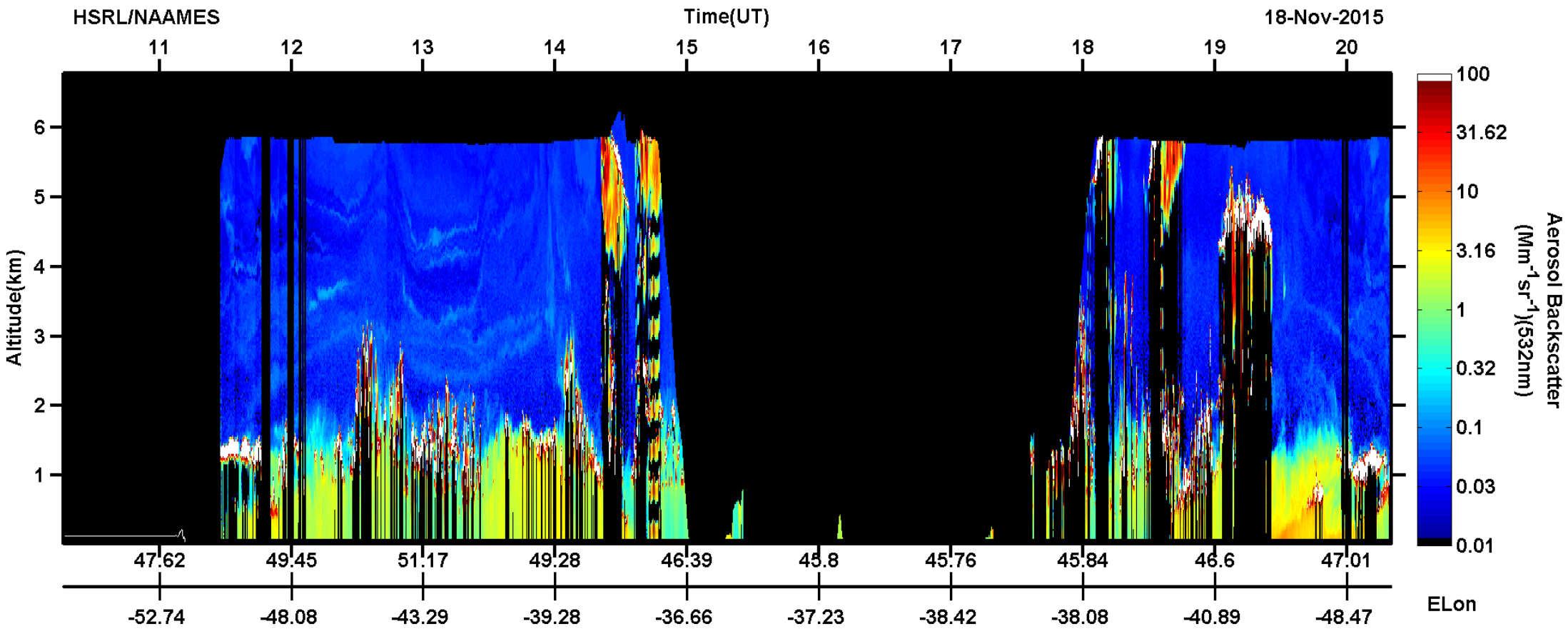
# 20151109 – 20151123 Kd

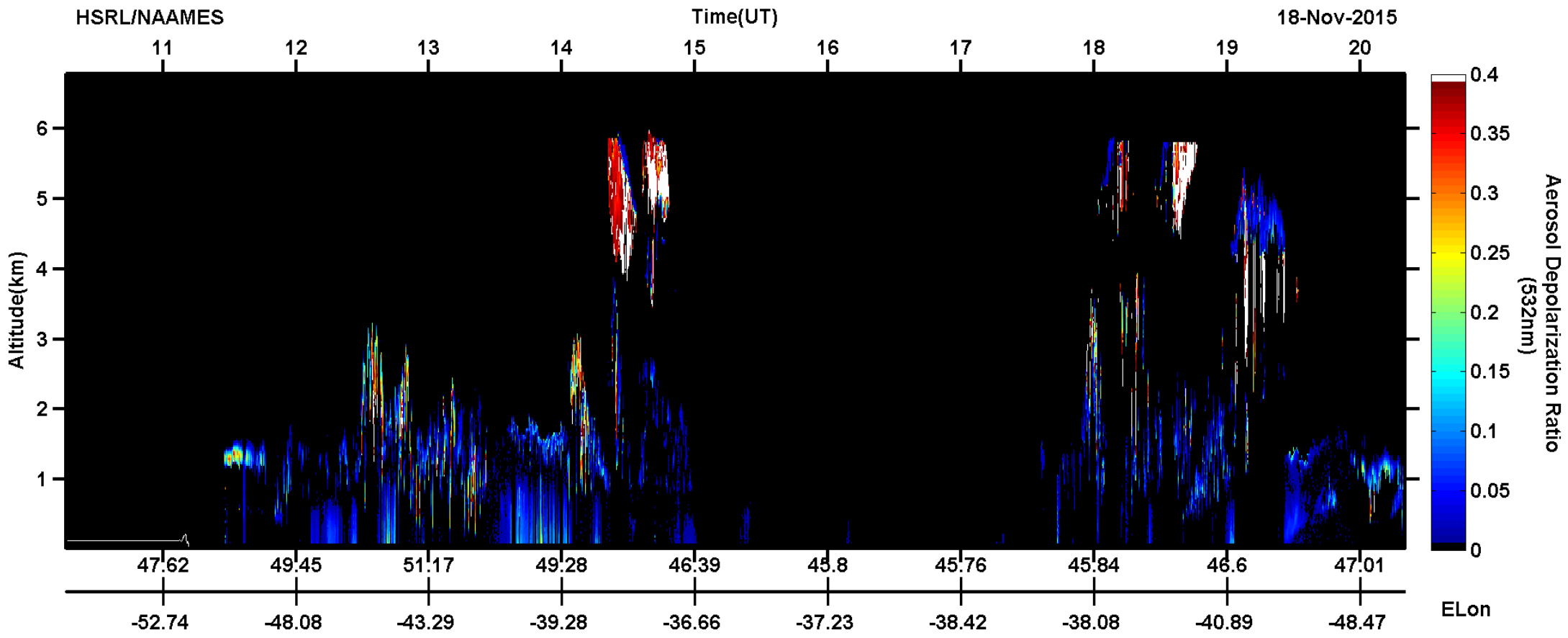


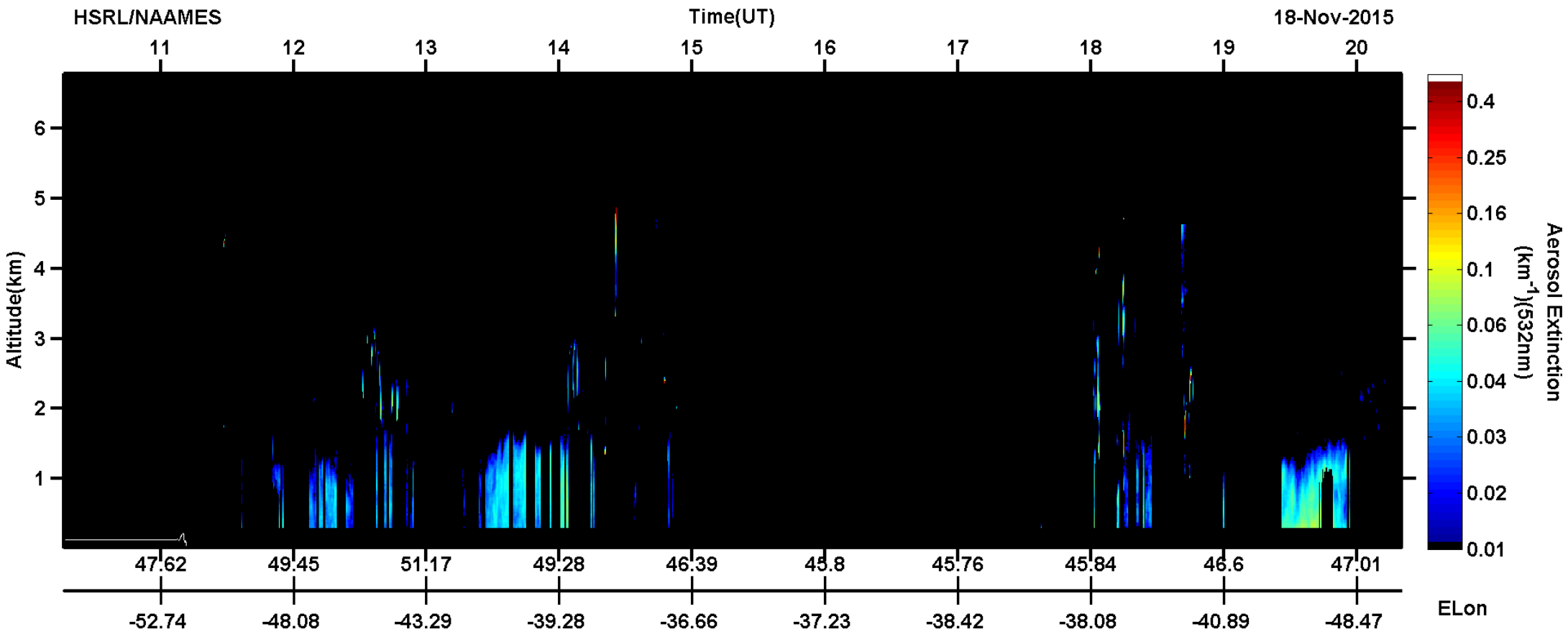

20151118
Kd
N57.5°
N52.5°
N47.5°
W55°
W45°
W35°
Newfoundland and Labrador
S1
S2
S3
S4
Kd Colormap
>= 0.075
0.071875 to 0.075
0.06875 to 0.071875
0.065625 to 0.06875
0.0625 to 0.065625
0.059375 to 0.0625
0.05625 to 0.059375
0.053125 to 0.05625
0.05 to 0.053125
0.046875 to 0.05
0.04375 to 0.046875
0.040625 to 0.04375
0.0375 to 0.040625
0.034375 to 0.0375
0.03125 to 0.034375
0.028125 to 0.03125
0.025 to 0.028125
Image Landsat
© 2016 Google
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
© 2009 GeoBasis-DE/BKG
Google earth
Imagery Date: 12/13/2015 lat 48.834398° lon -43.981812° elev -8611 ft eye alt 646.95 mi

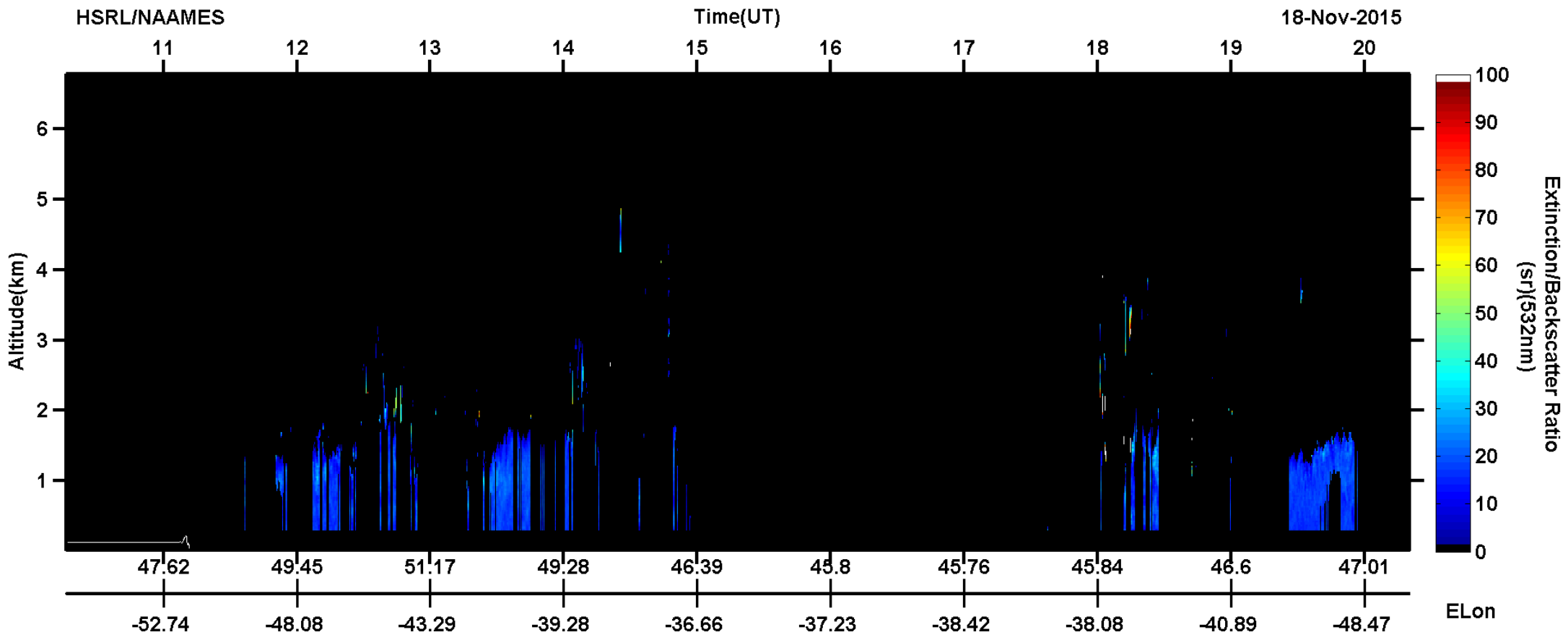

Aerosol Scattering Ratio (532nm)
0.01
0.1
1
10
Altitude(km)
5
0
53
52
51
50
49
48
47
46
45
Latitude(deg)
-54
-52
-50
-48
-46
-44
-42
-40
-38
-36
Longitude(deg)

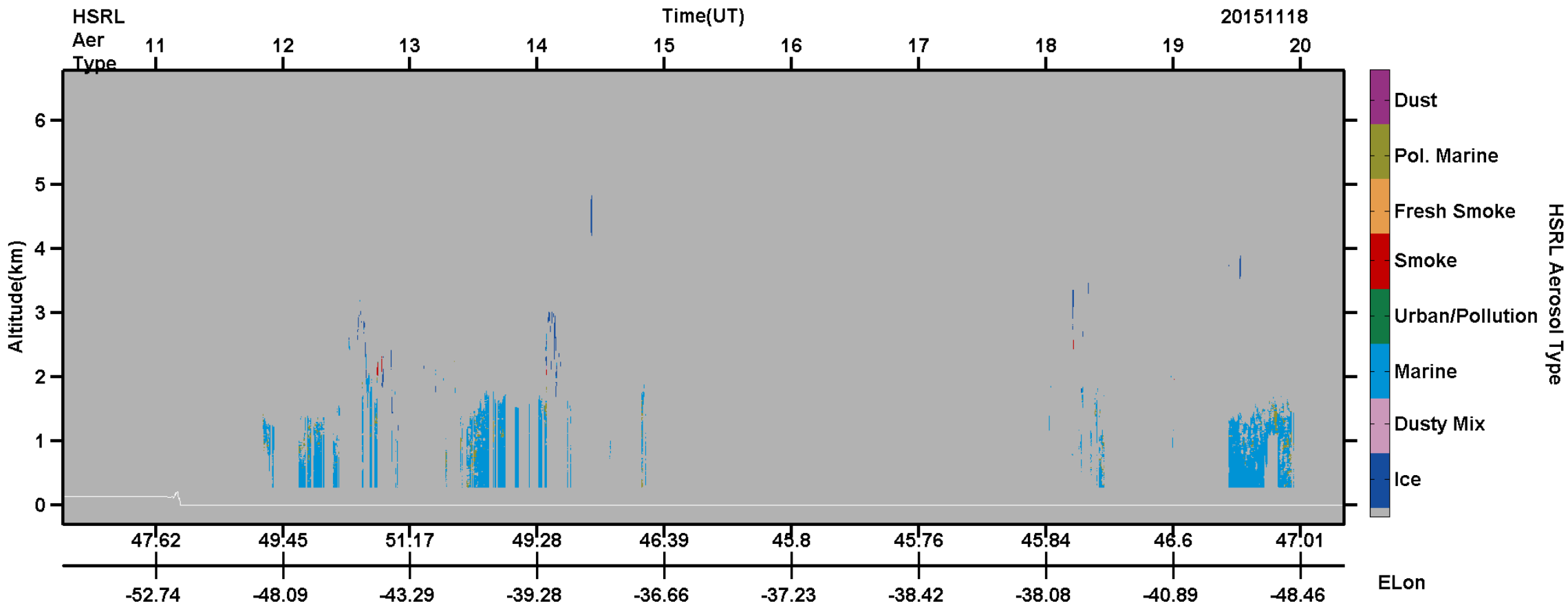

NASA Langley HSRL 20151118
52.0° N
51.0° N
50.0° N
49.0° N
48.0° N
47.0° N
46.0° N
52.0° 50.0° 48.0° 46.0° 44.0° 42.0° 40.0° 38.0° W
10:48
11:19
11:54
12:27
12:58
13:29
14:00
14:32
15:34
18:51
19:22
19:53
0.15
0.1
0.05
0
AOT (532 nm)

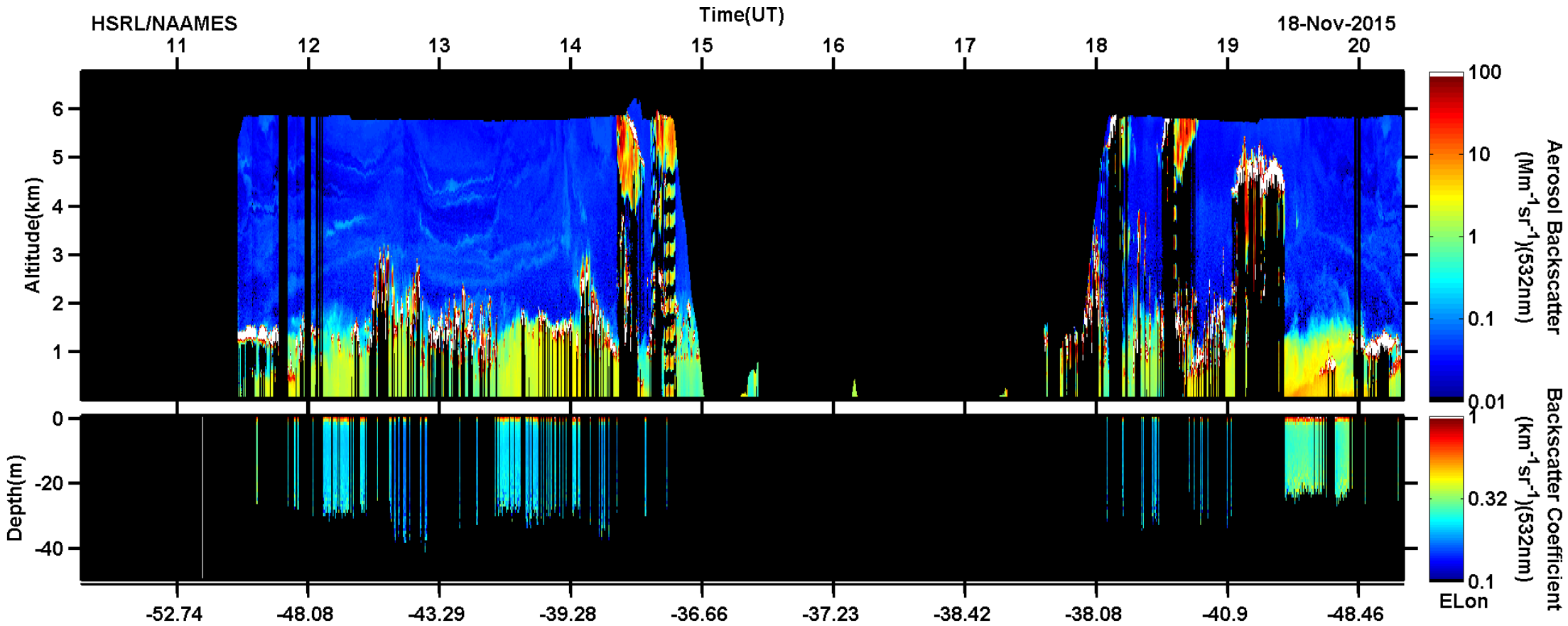

HSRL/NAAMES
Time(UT)
18-Nov-2015
11
12
13
14
15
16
17
18
19
20
Altitude(km)
6
5
4
3
2
1
47.62
49.45
51.17
49.28
46.39
45.8
45.76
45.84
46.6
47.01
-52.74
-48.08
-43.29
-39.28
-36.66
-37.23
-38.42
-38.08
-40.89
-48.47
ELon
100
31.62
10
3.16
1
0.32
0.1
0.03
0.01
Aerosol Backscatter
(Mm-1sr-1)(532nm)

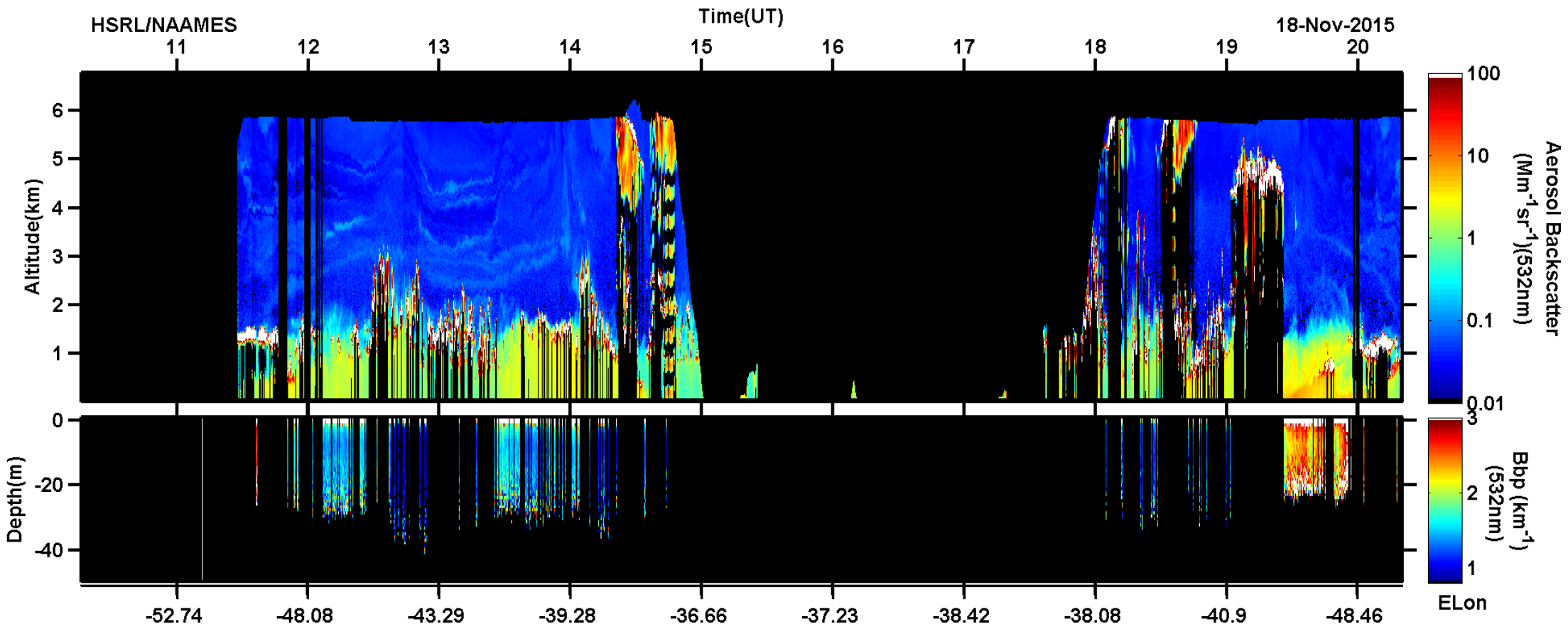

HSRL/NAAMES
Time(UT)
18-Nov-2015
11
12
13
14
15
16
17
18
19
20
Altitude(km)
6
5
4
3
2
1
47.62
49.45
51.17
49.28
46.39
45.8
45.76
45.84
46.6
47.01
-52.74
-48.08
-43.29
-39.28
-36.66
-37.23
-38.42
-38.08
-40.89
-48.47
ELon
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
Aerosol Depolarization Ratio
(532nm)

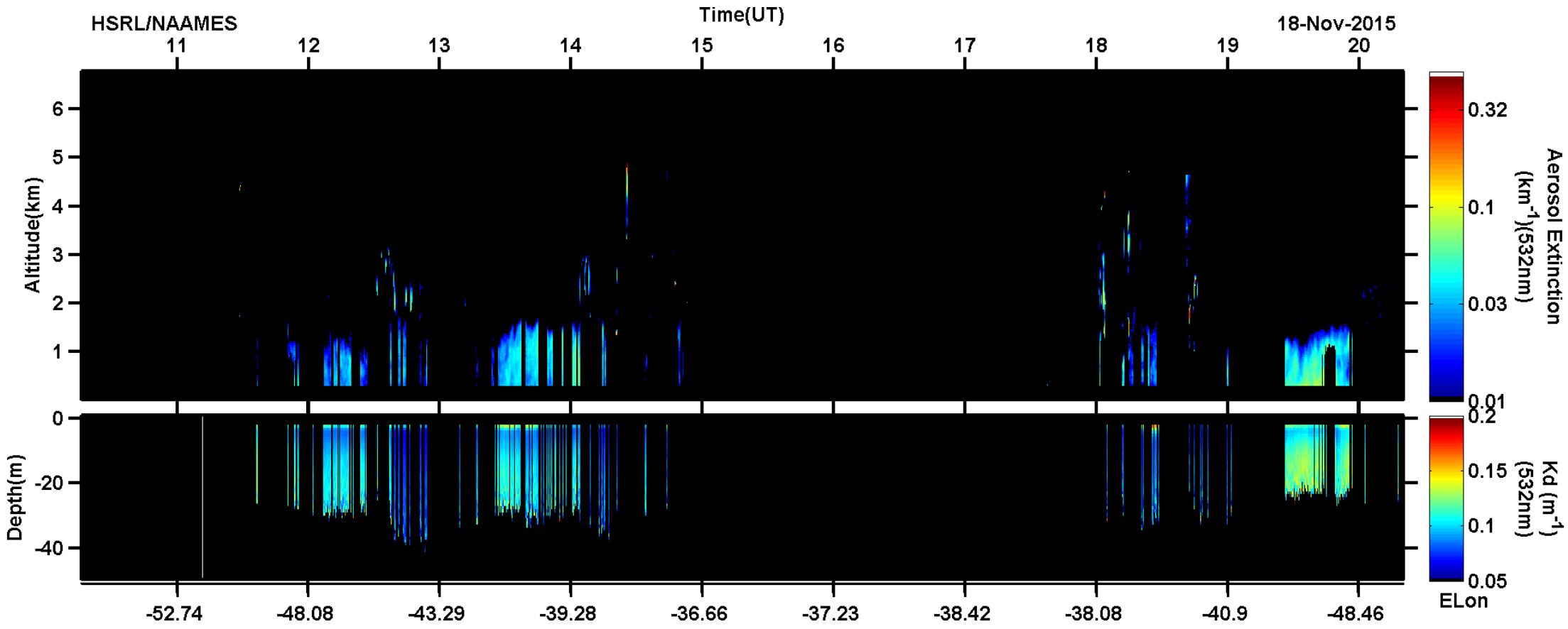

HSRL/NAAMES
Time(UT)
18-Nov-2015
11
12
13
14
15
16
17
18
19
20
Altitude(km)
6
5
4
3
2
1
47.62
49.45
51.17
49.28
46.39
45.8
45.76
45.84
46.6
47.01
-52.74
-48.08
-43.29
-39.28
-36.66
-37.23
-38.42
-38.08
-40.89
-48.47
ELon
Aerosol Extinction
(km-1)(532nm)
0.4
0.25
0.16
0.1
0.06
0.04
0.03
0.02
0.01

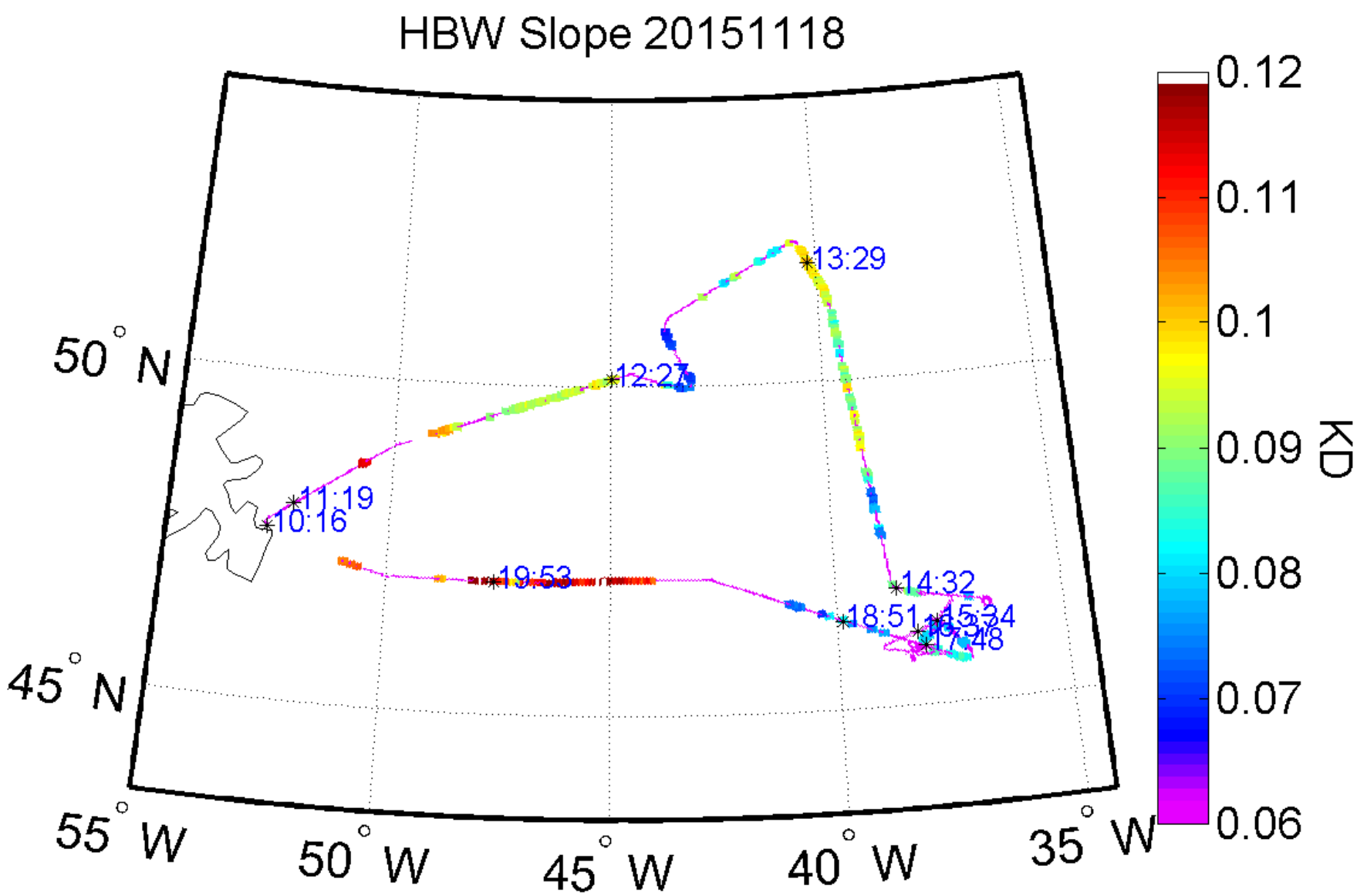

HSRL/NAAMES
Time(UT)
18-Nov-2015
11
12
13
14
15
16
17
18
19
20
Altitude(km)
6
5
4
3
2
1
47.62
49.45
51.17
49.28
46.39
45.8
45.76
45.84
46.6
47.01
-52.74
-48.08
-43.29
-39.28
-36.66
-37.23
-38.42
-38.08
-40.89
-48.47
ELon
100
90
80
70
60
50
40
30
20
10
0
Extinction/Backscatter Ratio
(sr)(532nm)

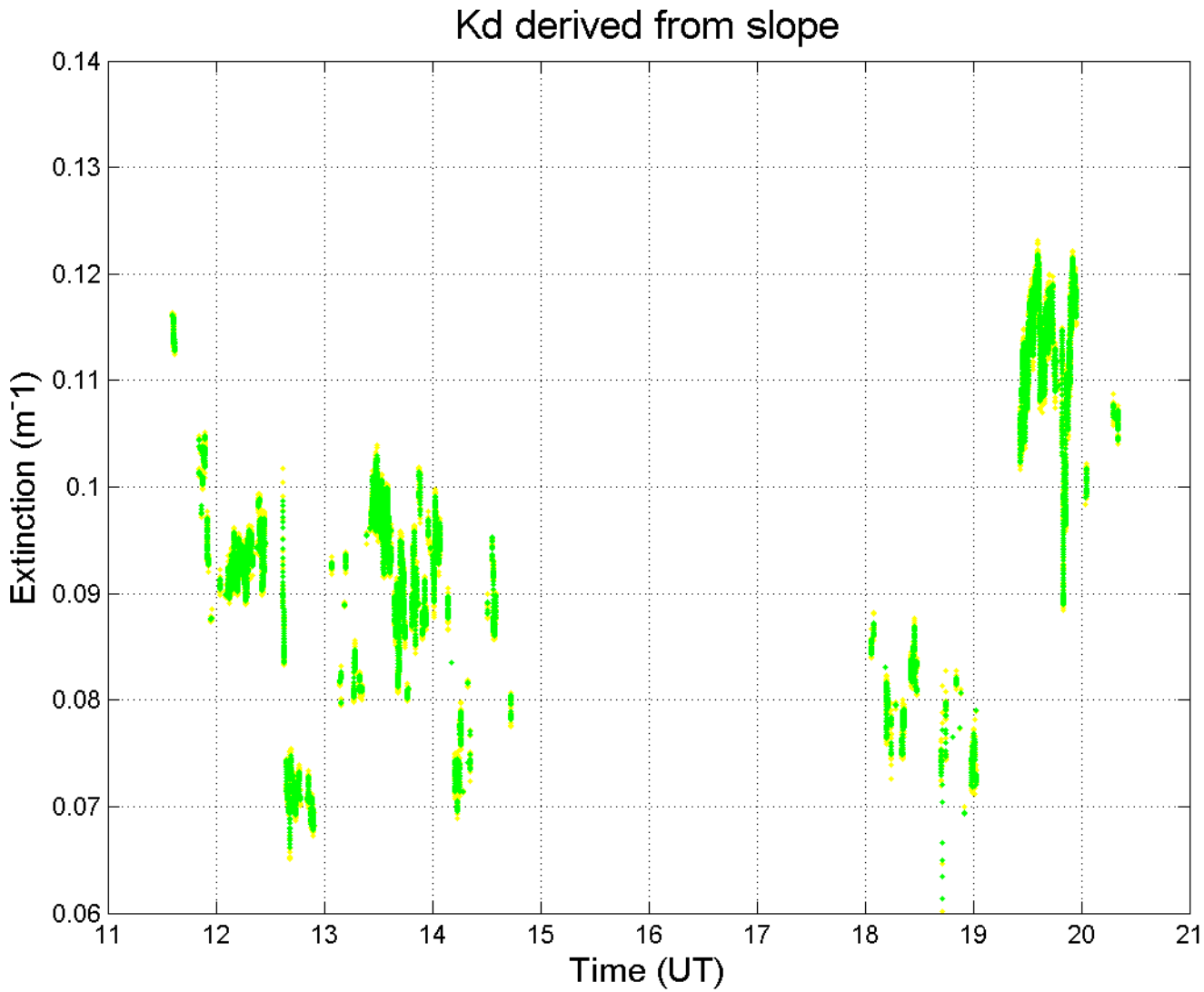

HSRL
Aer
Type
Time(UT)
20151118
11
12
13
14
15
16
17
18
19
20
Altitude(km)
0
1
2
3
4
5
6
47.62
49.45
51.17
49.28
46.39
45.8
45.76
45.84
46.6
47.01
-52.74
-48.09
-43.29
-39.28
-36.66
-37.23
-38.42
-38.08
-40.89
-48.46
ELon
Dust
Pol. Marine
Fresh Smoke
Smoke
Urban/Pollution
Marine
Dusty Mix
Ice
HSRL Aerosol Type

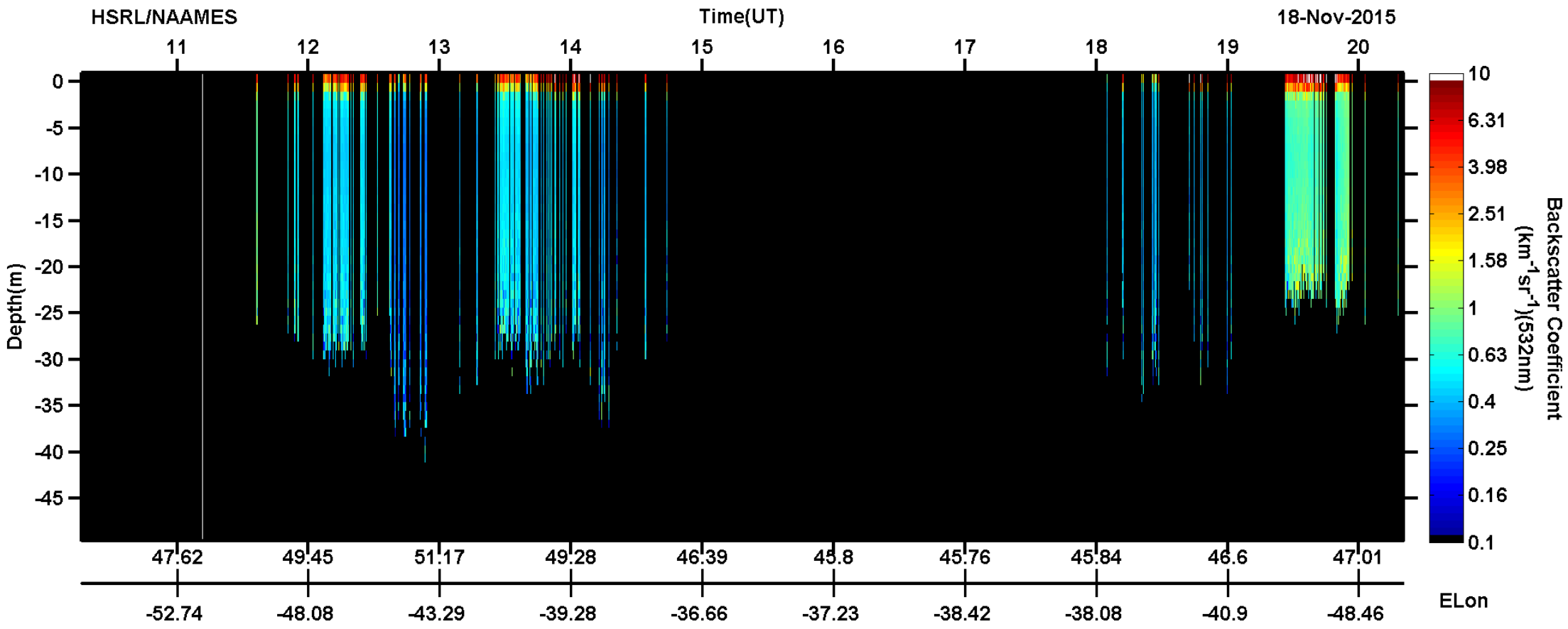

HSRL/NAAMES
Time(UT)
18-Nov-2015
11
12
13
14
15
16
17
18
19
20
Altitude(km)
6
5
4
3
2
1
Depth(m)
0
-20
-40
-52.74
-48.08
-43.29
-39.28
-36.66
-37.23
-38.42
-38.08
-40.9
-48.46
ELon
100
10
1
0.1
0.01
Aerosol Backscatter
(Mm-1sr-1)(532nm)
1
0.32
0.1
Backscatter Coefficient
(km-1sr-1)(532nm)

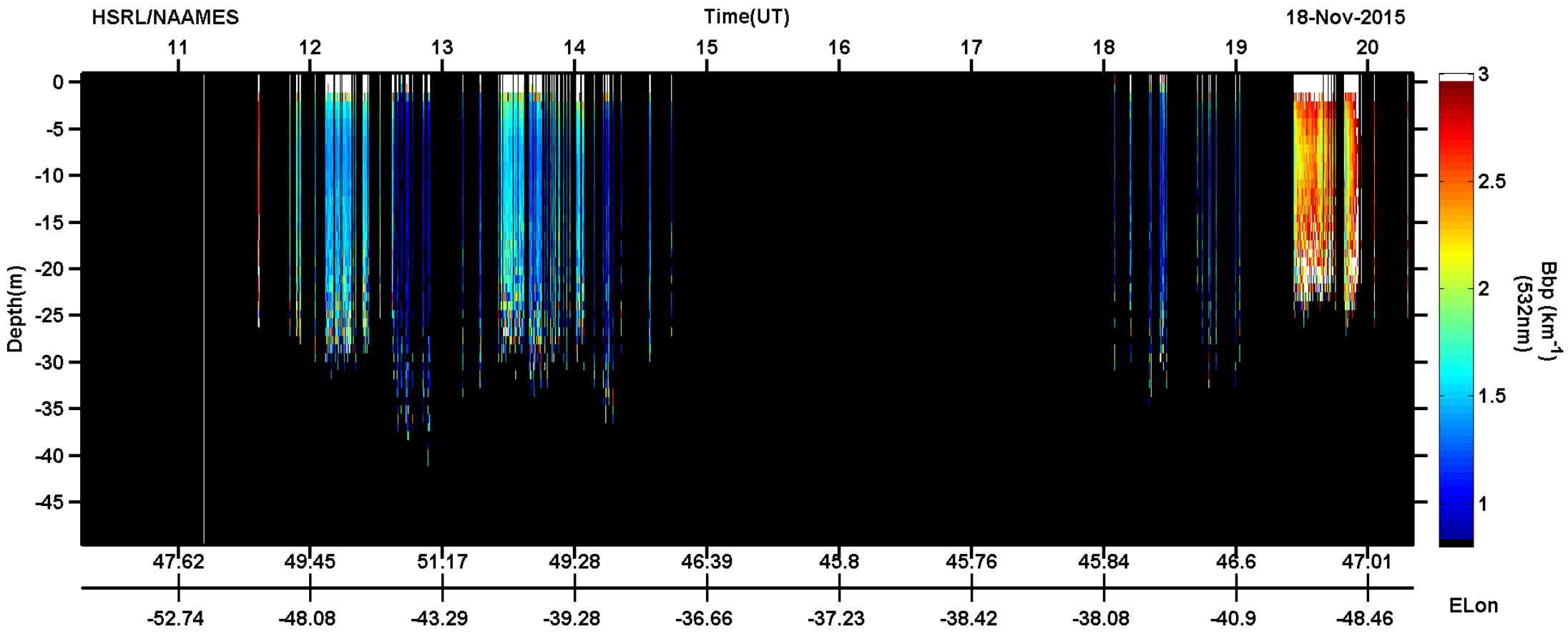

HSRL/NAAMES
Time(UT)
18-Nov-2015
11
12
13
14
15
16
17
18
19
20
Altitude(km)
6
5
4
3
2
1
Depth(m)
0
-20
-40
-52.74
-48.08
-43.29
-39.28
-36.66
-37.23
-38.42
-38.08
-40.9
-48.46
ELon
100
10
1
0.1
0.01
Aerosol Backscatter
(Mm-1sr-1)(532nm)
3
2
1
Bbp (km-1)
(532nm)

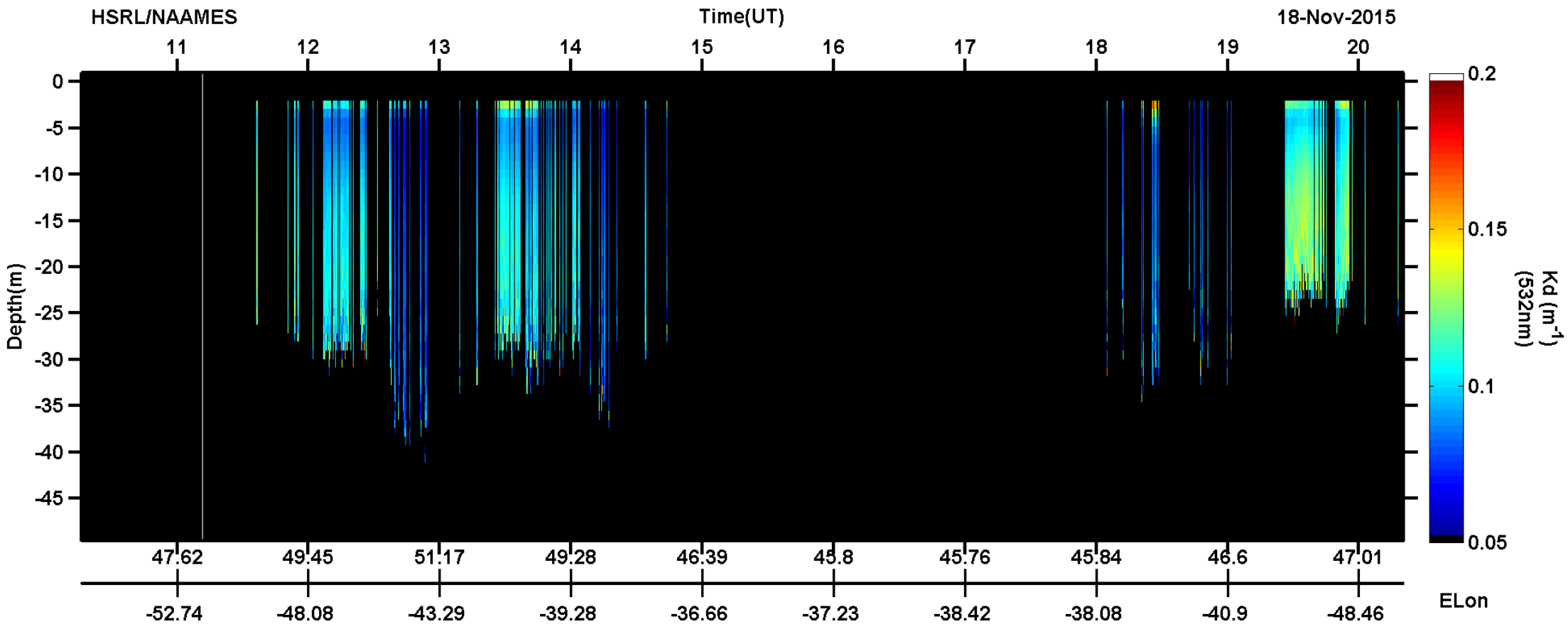

HSRL/NAAMES
Time(UT)
18-Nov-2015
11
12
13
14
15
16
17
18
19
20
Altitude(km)
6
5
4
3
2
1
Aerosol Extinction
(km-1)(532nm)
0.32
0.1
0.03
0.01
Depth(m)
0
-20
-40
Kd (m-1)
(532nm)
0.2
0.15
0.1
0.05
ELon
-52.74
-48.08
-43.29
-39.28
-36.66
-37.23
-38.42
-38.08
-40.9
-48.46


HBW Slope 20151118
50° N
45° N
55° W
50° W
45° W
40° W
35° W
13:29
12:27
11:19
10:16
19:53
14:32
18:51
15:34
17:48
0.12
0.11
0.1
0.09
0.08
0.07
0.06
KD


Kd derived from slope
Extinction (m^-1)
0.14
0.13
0.12
0.11
0.1
0.09
0.08
0.07
0.06
11
12
13
14
15
16
17
18
19
20
21
Time (UT)


HSRL/NAAMES
Time(UT)
18-Nov-2015
11
12
13
14
15
16
17
18
19
20
Depth(m)
0
-5
-10
-15
-20
-25
-30
-35
-40
-45
47.62
49.45
51.17
49.28
46.39
45.8
45.76
45.84
46.6
47.01
-52.74
-48.08
-43.29
-39.28
-36.66
-37.23
-38.42
-38.08
-40.9
-48.46
ELon
Backscatter Coefficient
(km-1sr-1)(532nm)
10
6.31
3.98
2.51
1.58
1
0.63
0.4
0.25
0.16
0.1


HSRL/NAAMES
Time(UT)
18-Nov-2015
11
12
13
14
15
16
17
18
19
20
Depth(m)
0
-5
-10
-15
-20
-25
-30
-35
-40
-45
47.62
49.45
51.17
49.28
46.39
45.8
45.76
45.84
46.6
47.01
-52.74
-48.08
-43.29
-39.28
-36.66
-37.23
-38.42
-38.08
-40.9
-48.46
ELon
3
2.5
2
1.5
1
Bbp (km-1)
(532nm)


HSRL/NAAMES
Time(UT)
18-Nov-2015
11
12
13
14
15
16
17
18
19
20
Depth(m)
0
-5
-10
-15
-20
-25
-30
-35
-40
-45
47.62
49.45
51.17
49.28
46.39
45.8
45.76
45.84
46.6
47.01
-52.74
-48.08
-43.29
-39.28
-36.66
-37.23
-38.42
-38.08
-40.9
-48.46
ELon
0.2
0.15
0.1
0.05
Kd (m-1) (532nm)