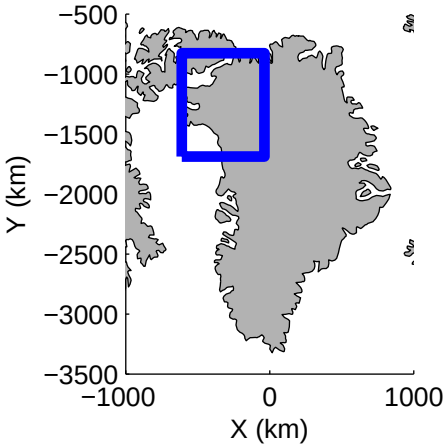
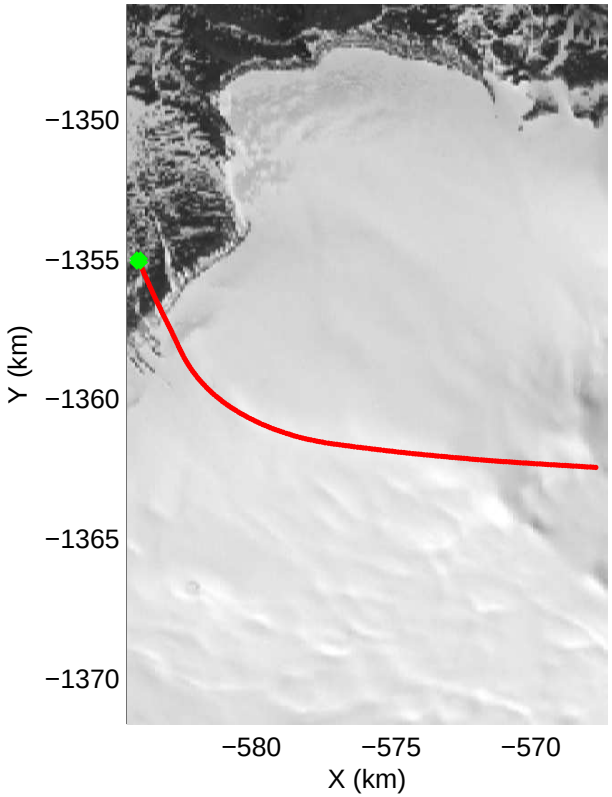
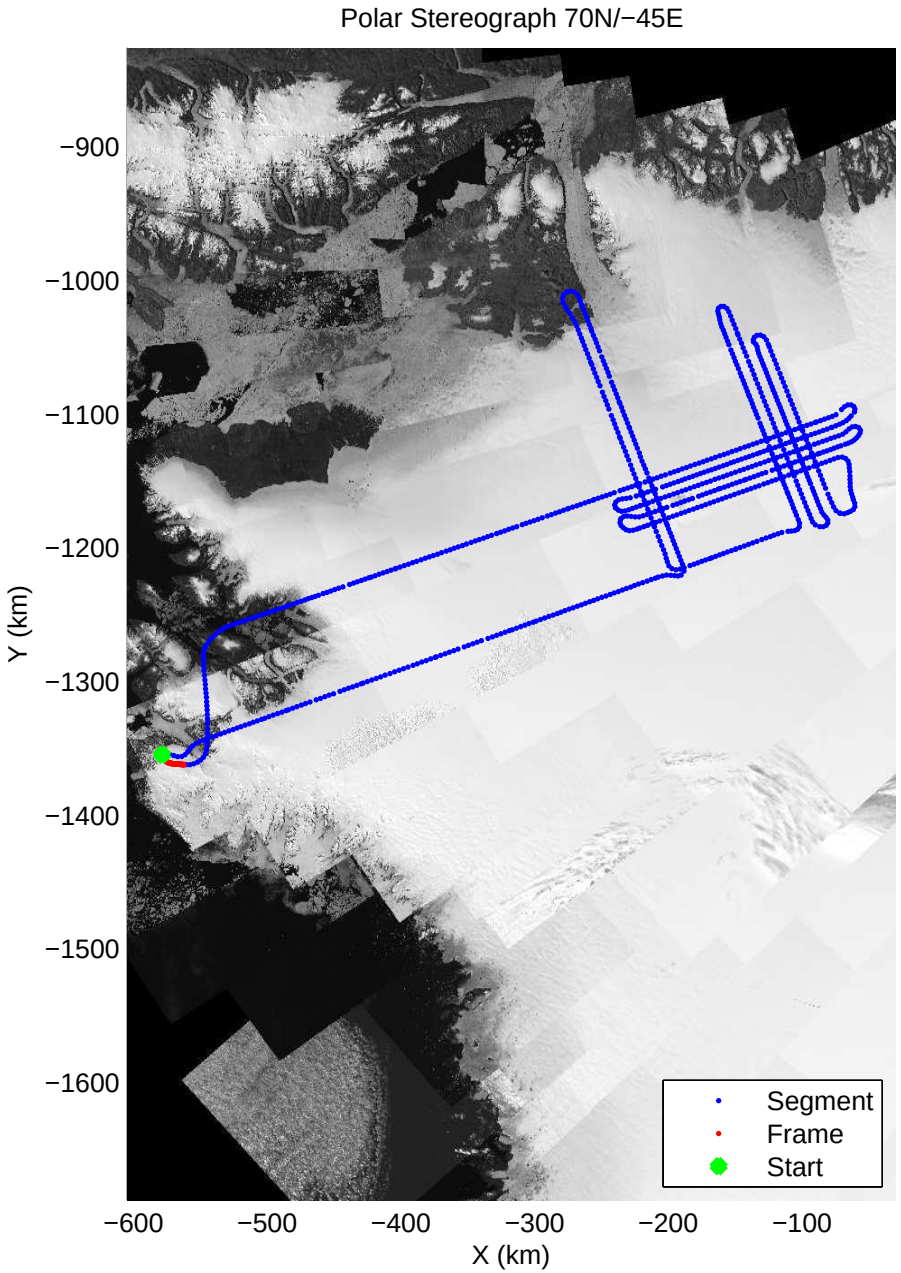
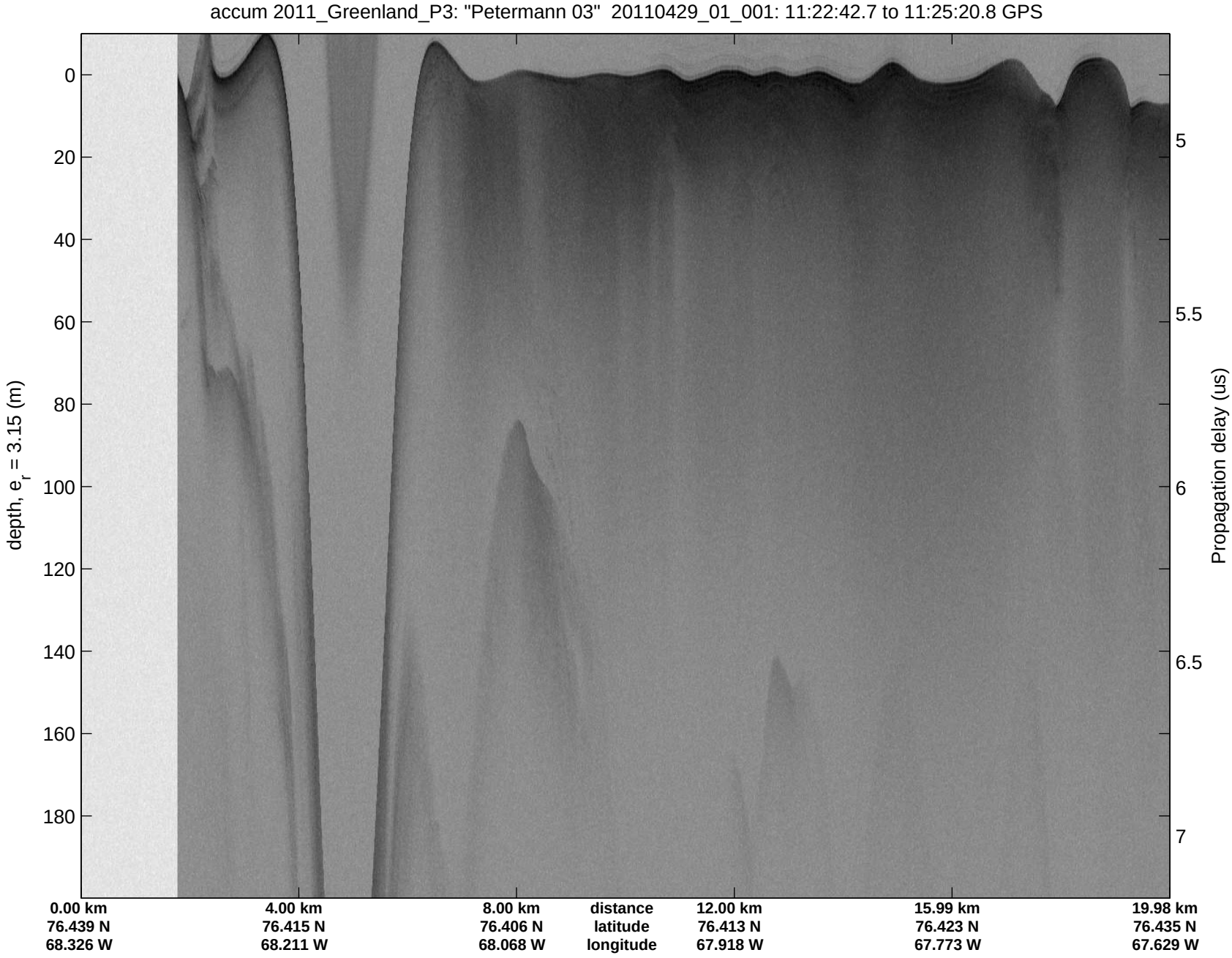
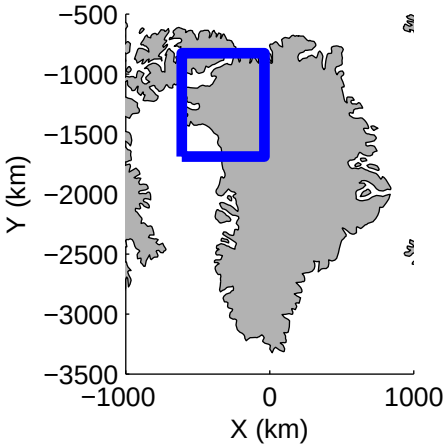
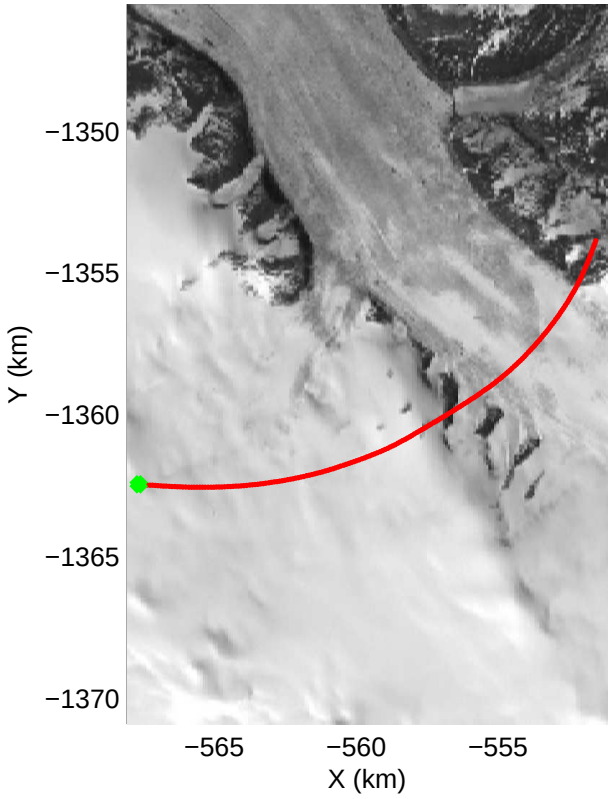

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

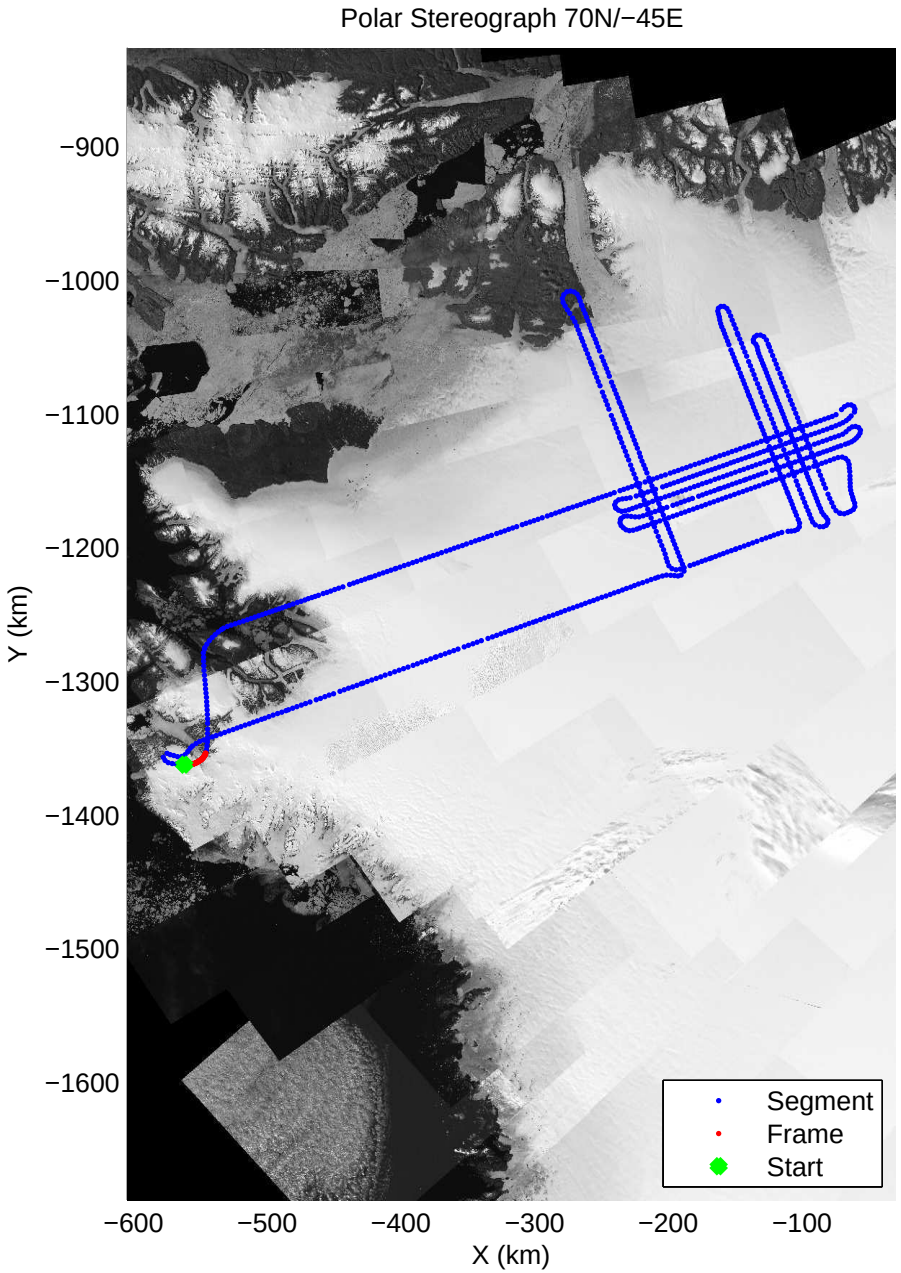

−1350
−1355
−1360
−1365
−1370
Y (km)
−580
−575
−570
X (km)

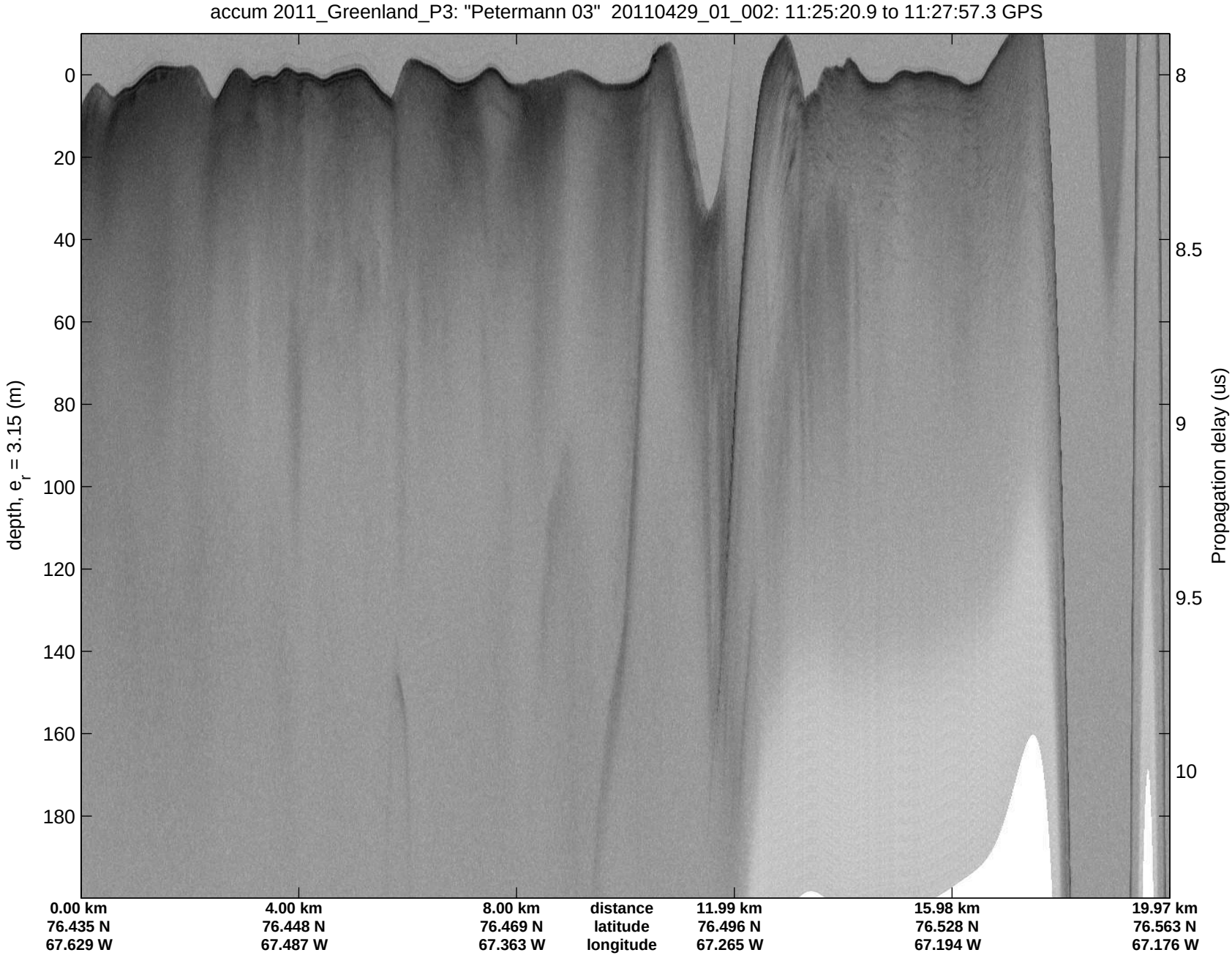

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

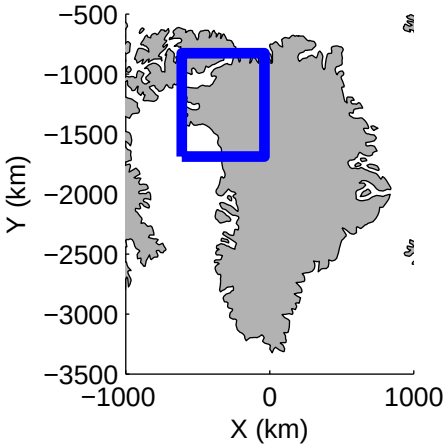

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_001: 11:22:42.7 to 11:25:20.8 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
5
5.5
6
6.5
7
0.00 km
76.439 N
68.326 W
4.00 km
76.415 N
68.211 W
8.00 km
76.406 N
68.068 W
distance
latitude
longitude
12.00 km
76.413 N
67.918 W
15.99 km
76.423 N
67.773 W
19.98 km
76.435 N
67.629 W

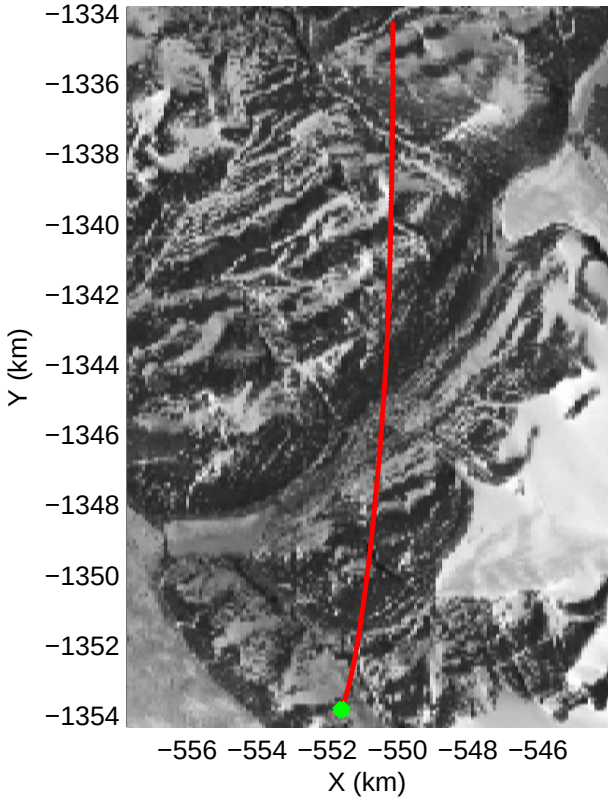

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

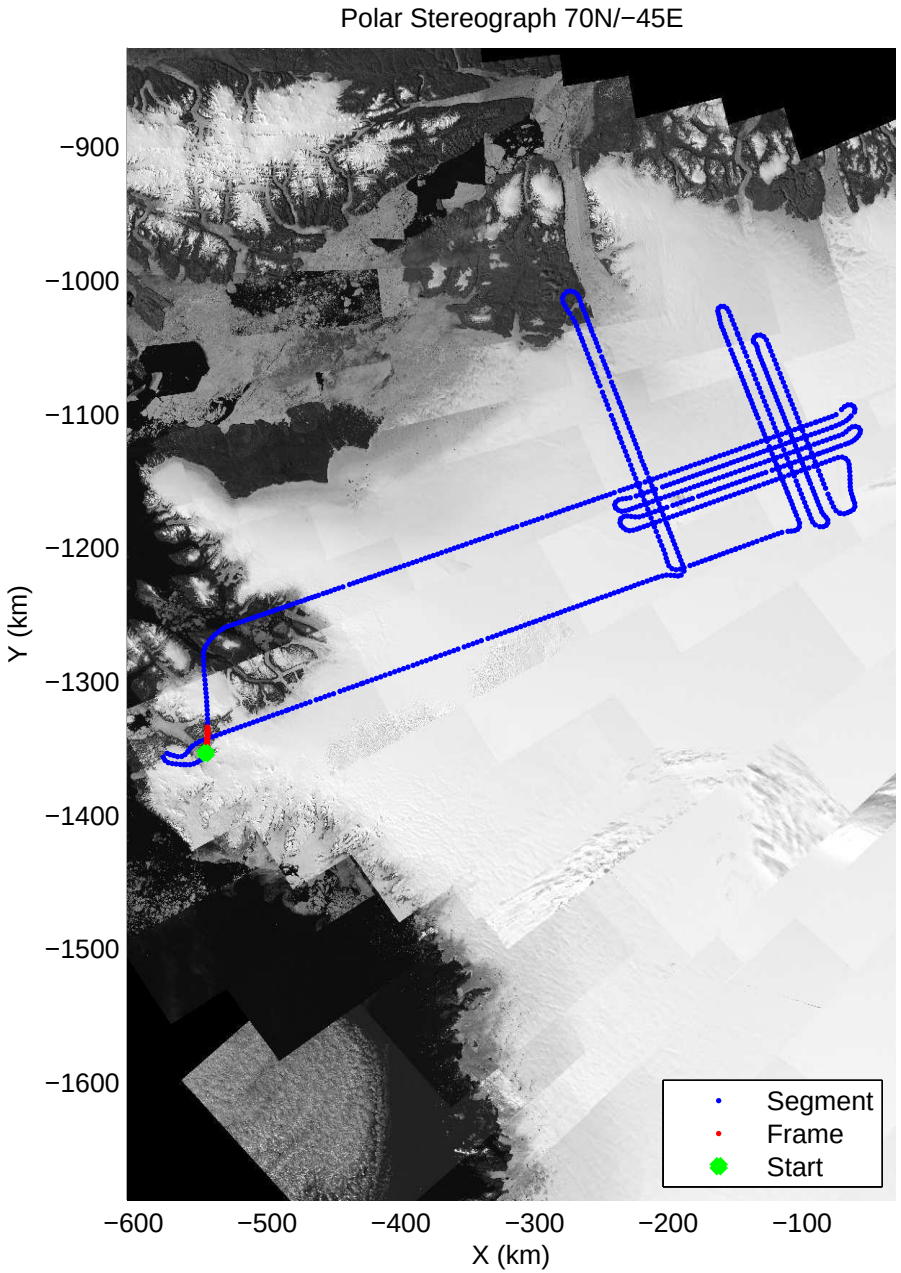

−1350
−1355
−1360
−1365
−1370
Y (km)
−565
−560
−555
X (km)

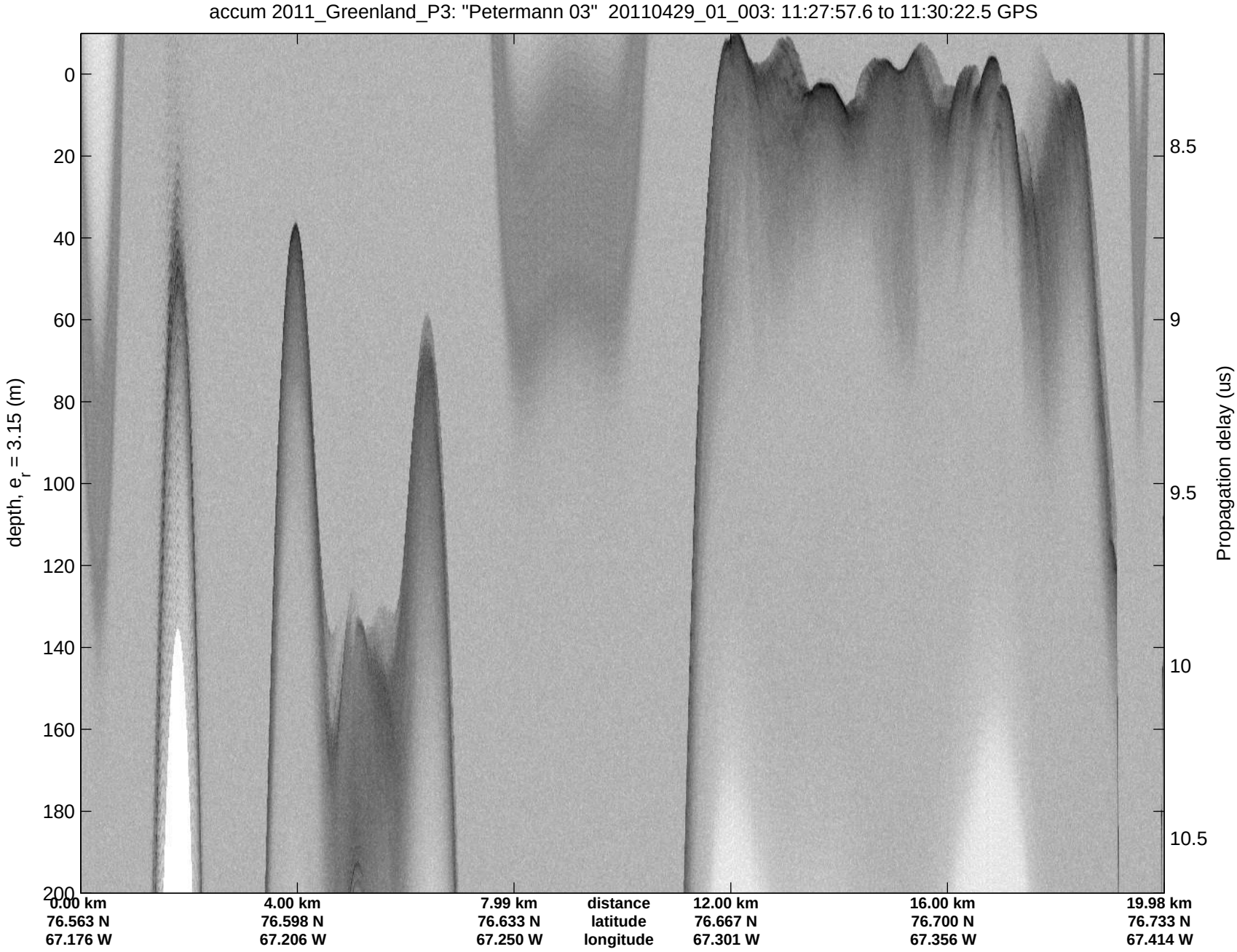

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

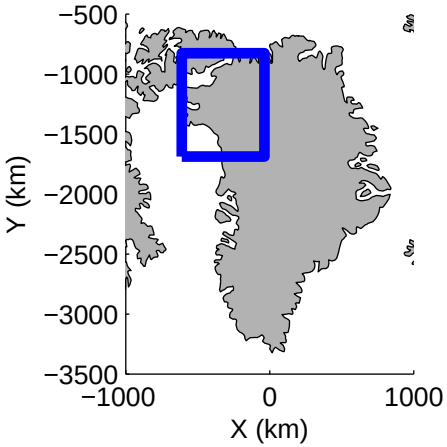

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_002: 11:25:20.9 to 11:27:57.3 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
8
8.5
9
9.5
10
0.00 km
76.435 N
67.629 W
4.00 km
76.448 N
67.487 W
8.00 km
76.469 N
67.363 W
distance
latitude
longitude
11.99 km
76.496 N
67.265 W
15.98 km
76.528 N
67.194 W
19.97 km
76.563 N
67.176 W

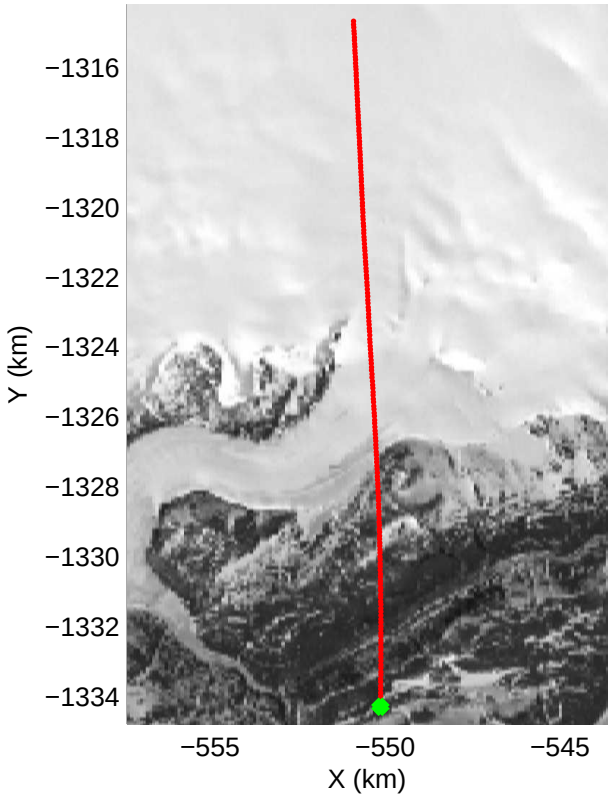

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

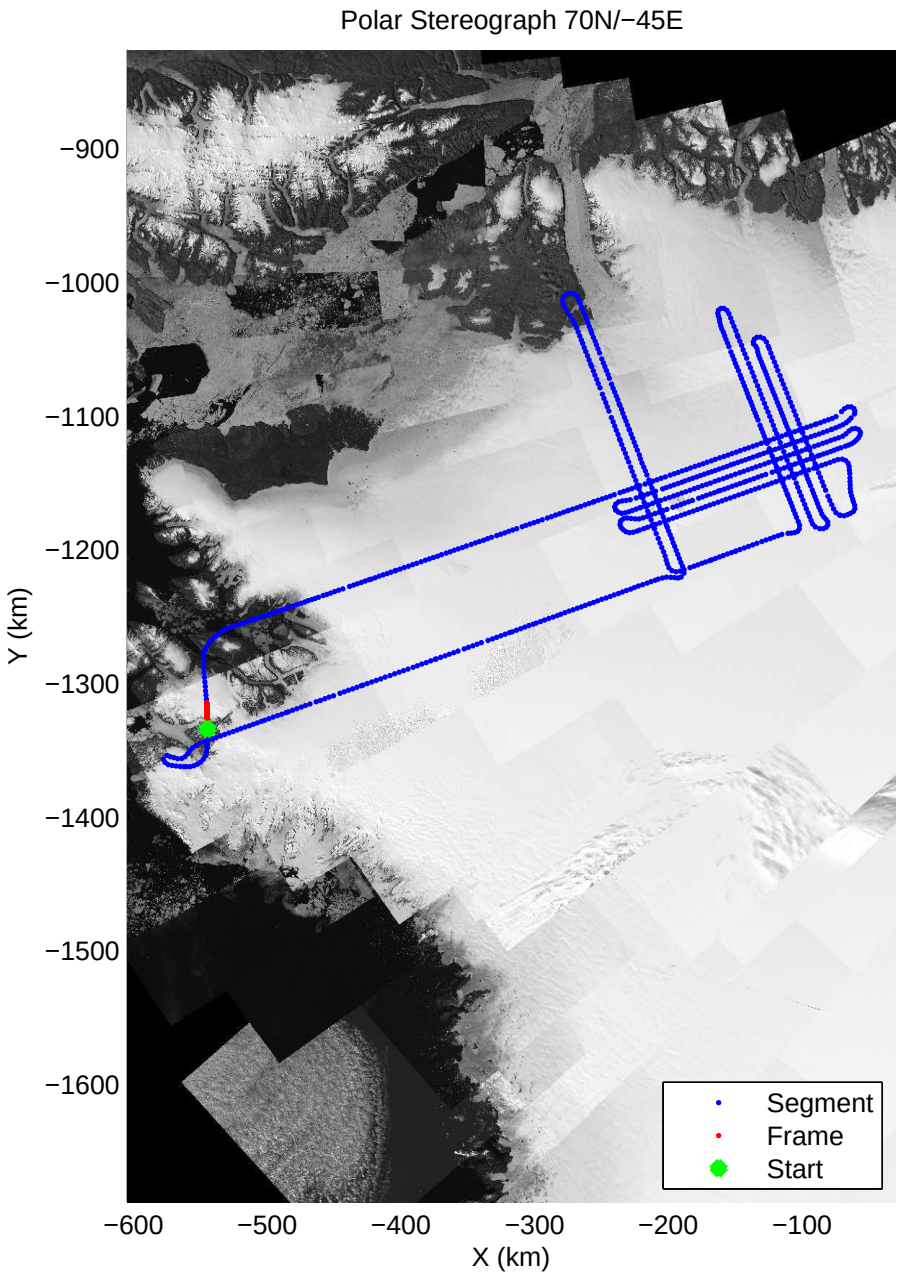

−1334
−1336
−1338
−1340
−1342
−1344
−1346
−1348
−1350
−1352
−1354
Y (km)
−556 −554 −552 −550 −548 −546
X (km)

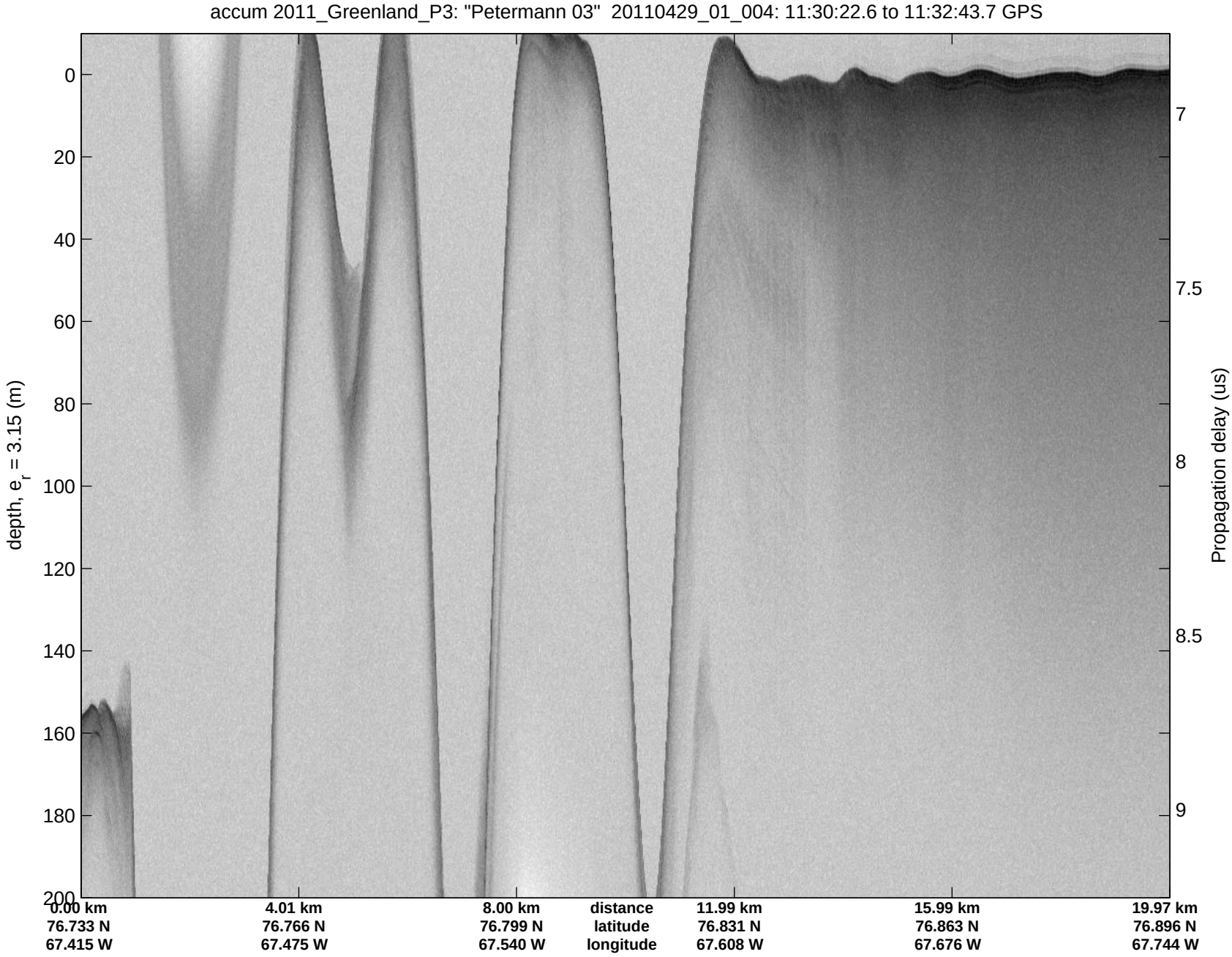

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600 −500 −400 −300 −200 −100
X (km)
Segment
Frame
Start

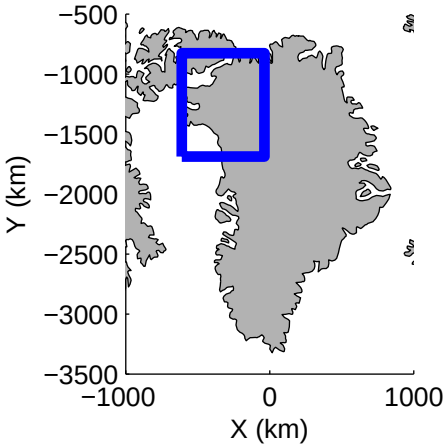

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_003: 11:27:57.6 to 11:30:22.5 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
8.5
9
9.5
10
10.5
0.00 km
76.563 N
67.176 W
4.00 km
76.598 N
67.206 W
7.99 km
76.633 N
67.250 W
distance
latitude
longitude
12.00 km
76.667 N
67.301 W
16.00 km
76.700 N
67.356 W
19.98 km
76.733 N
67.414 W

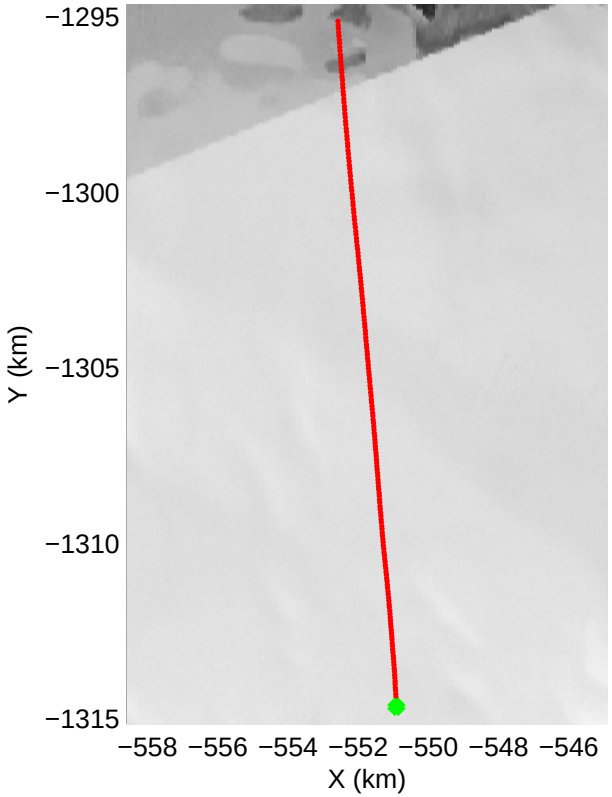

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

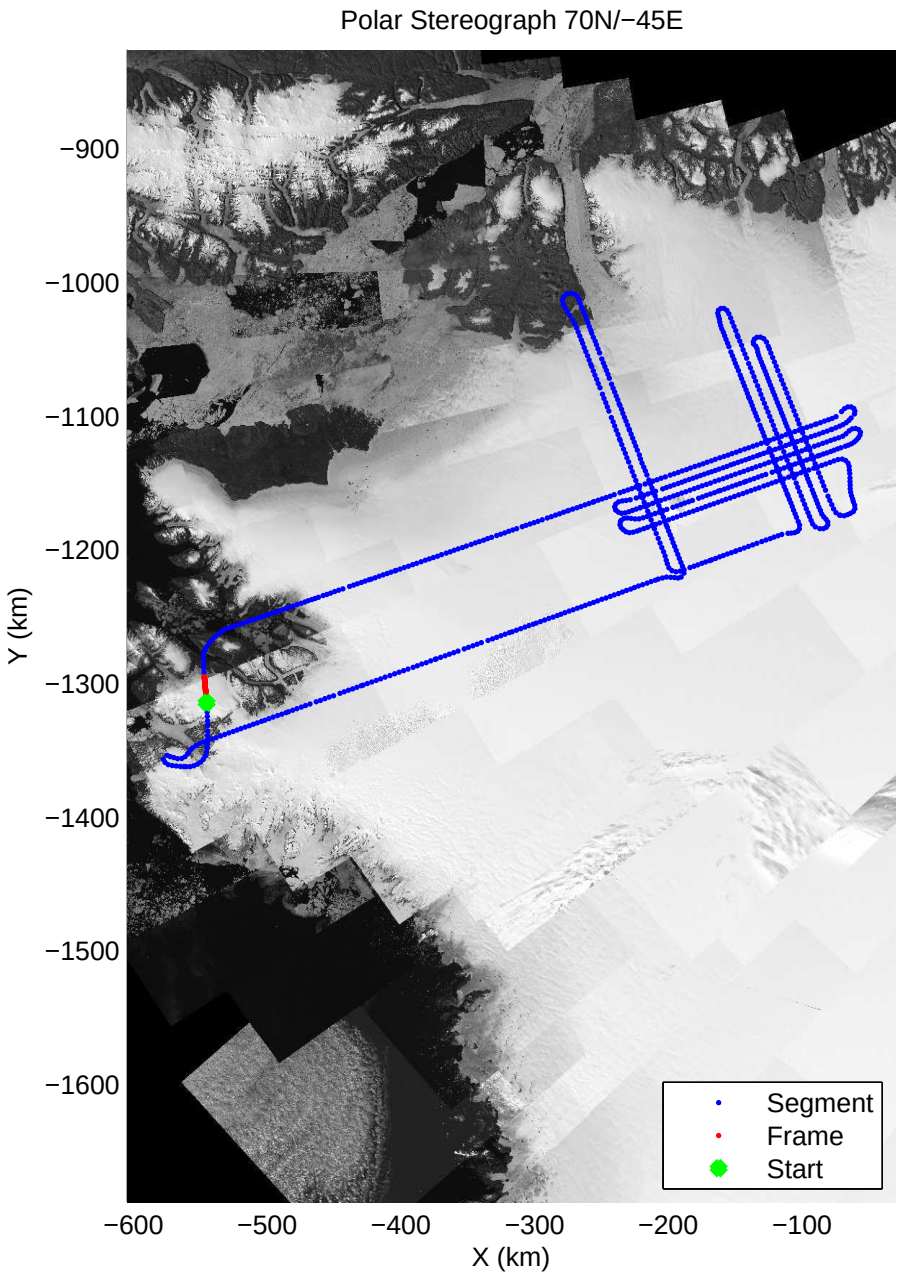

−1316
−1318
−1320
−1322
−1324
−1326
−1328
−1330
−1332
−1334
Y (km)
−555
−550
−545
X (km)

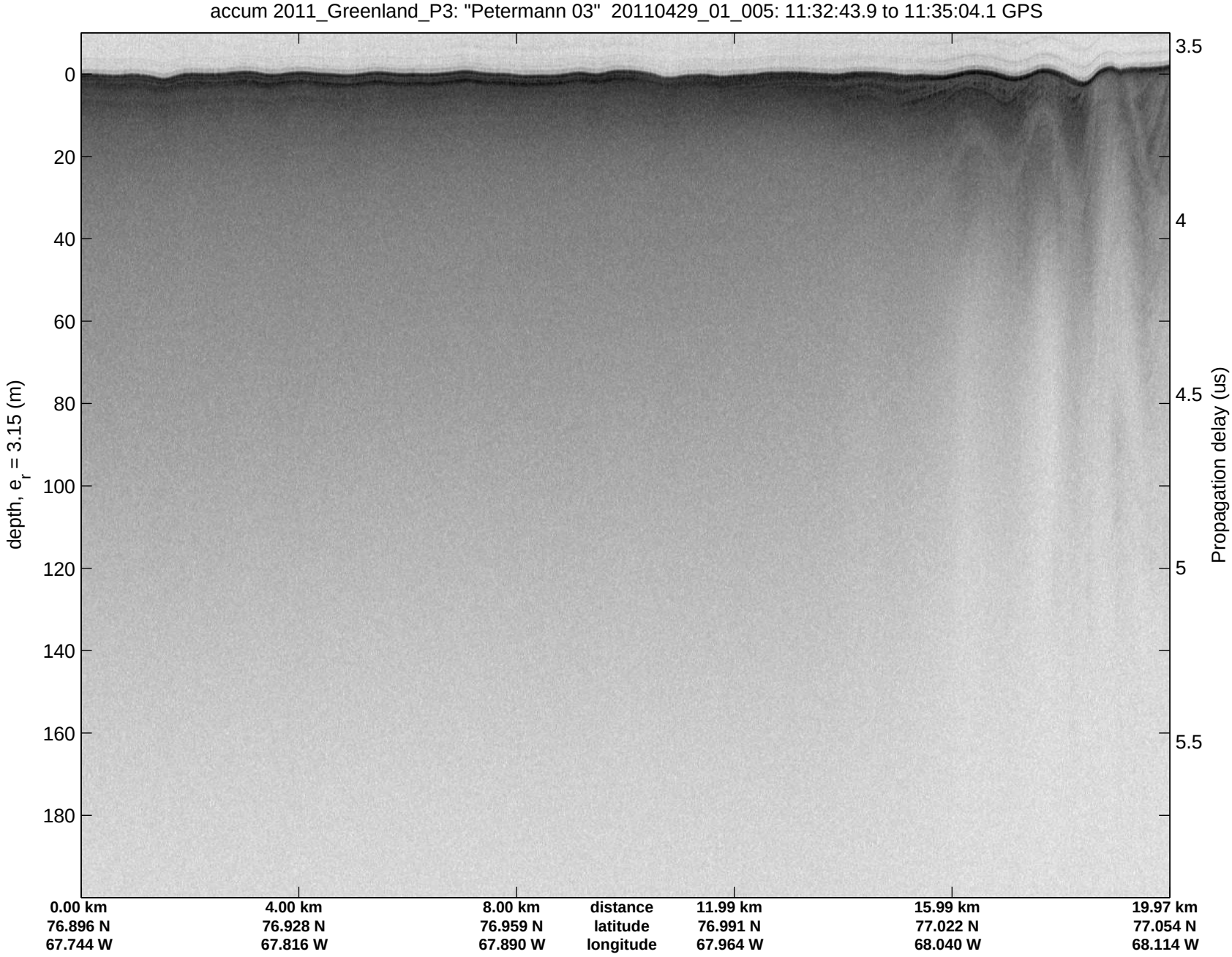

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

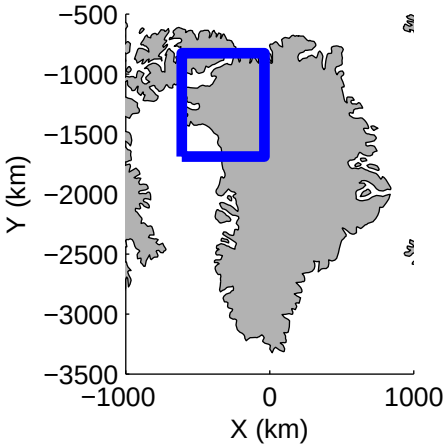

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_004: 11:30:22.6 to 11:32:43.7 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
7
7.5
8
8.5
9
0.00 km
76.733 N
67.415 W
4.01 km
76.766 N
67.475 W
8.00 km
76.799 N
67.540 W
distance
latitude
longitude
11.99 km
76.831 N
67.608 W
15.99 km
76.863 N
67.676 W
19.97 km
76.896 N
67.744 W

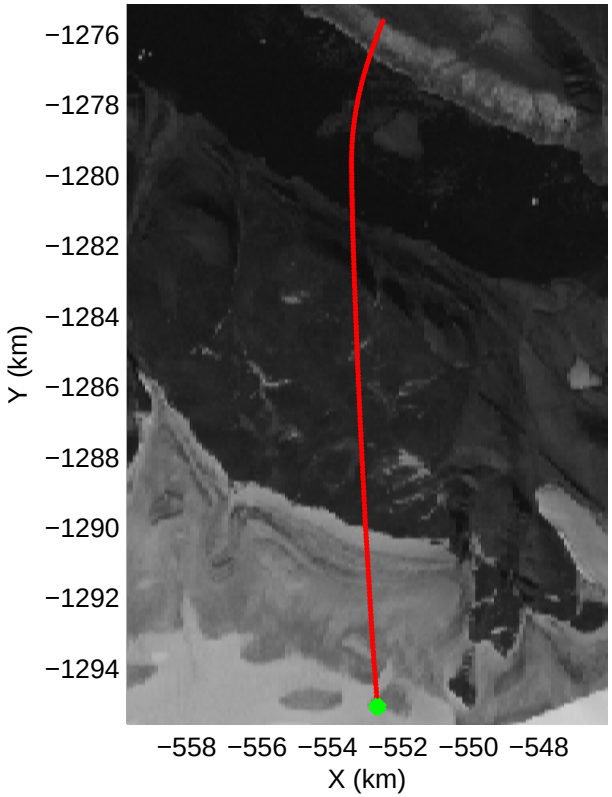

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

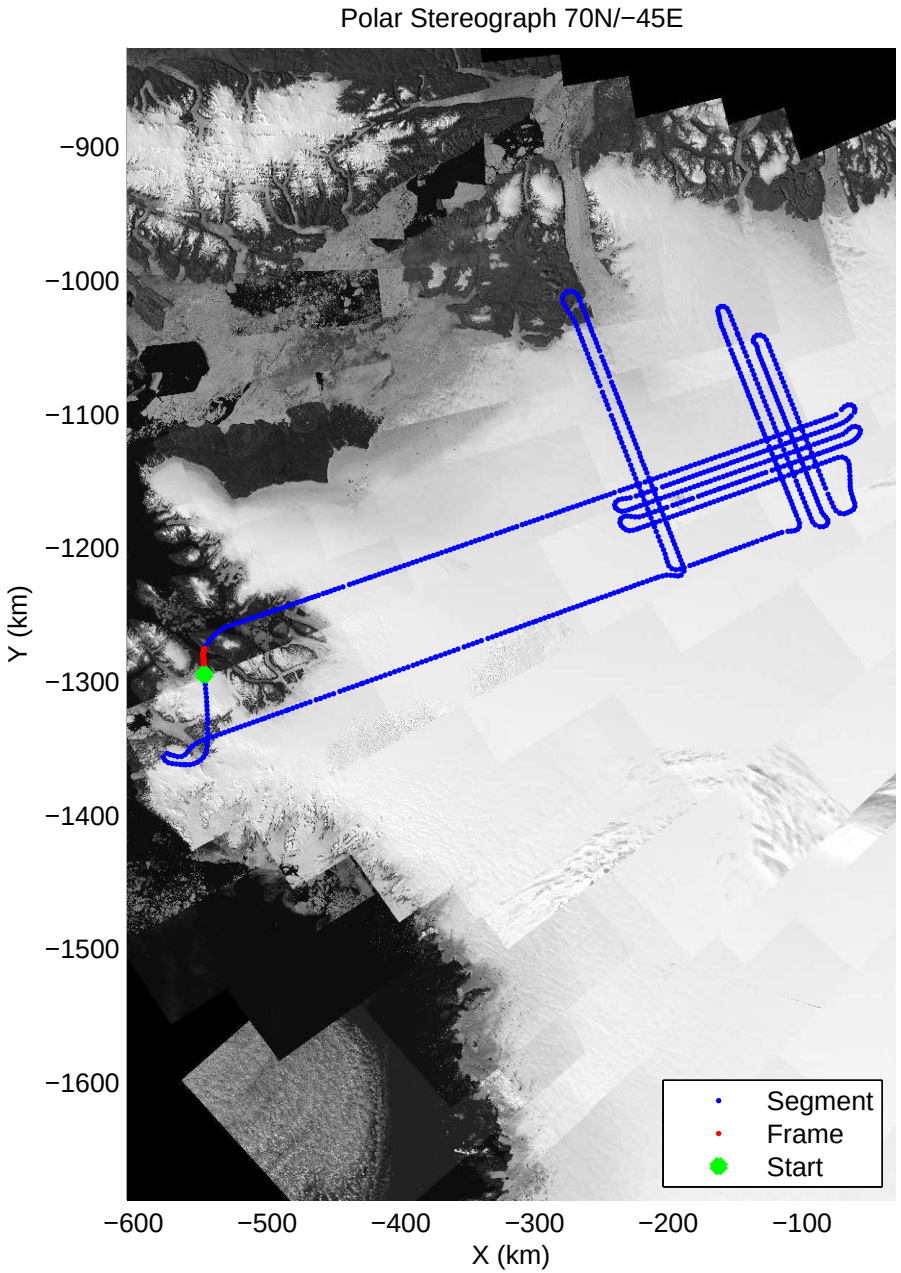

−1295
−1300
−1305
−1310
−1315
Y (km)
−558 −556 −554 −552 −550 −548 −546
X (km)

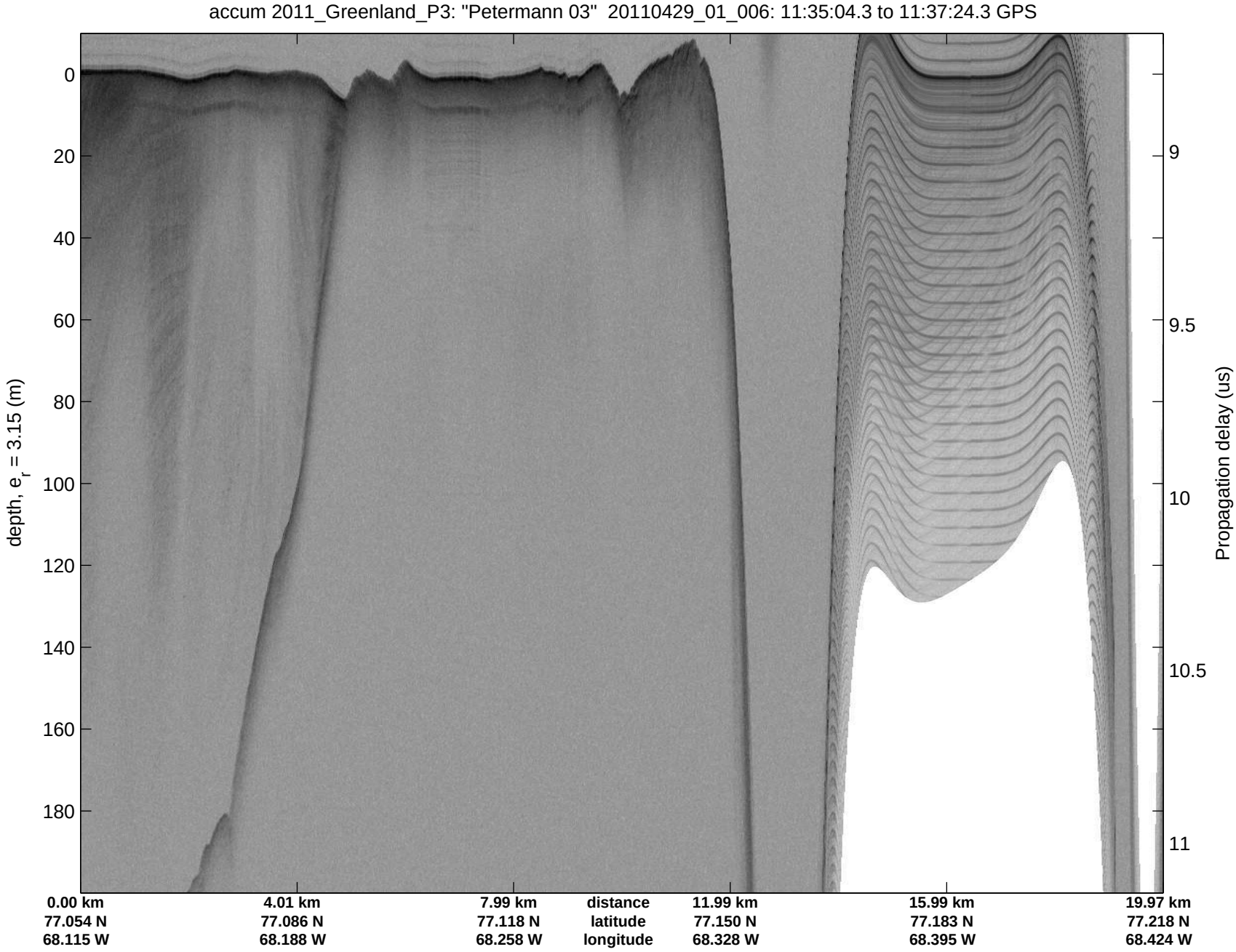

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

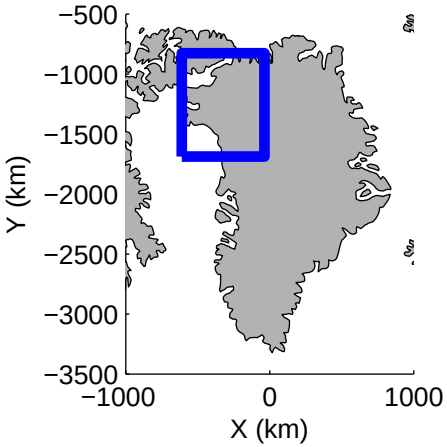

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_005: 11:32:43.9 to 11:35:04.1 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
3.5
4
4.5
5
5.5
Propagation delay (us)
0.00 km
76.896 N
67.744 W
4.00 km
76.928 N
67.816 W
8.00 km
76.959 N
67.890 W
distance
latitude
longitude
11.99 km
76.991 N
67.964 W
15.99 km
77.022 N
68.040 W
19.97 km
77.054 N
68.114 W

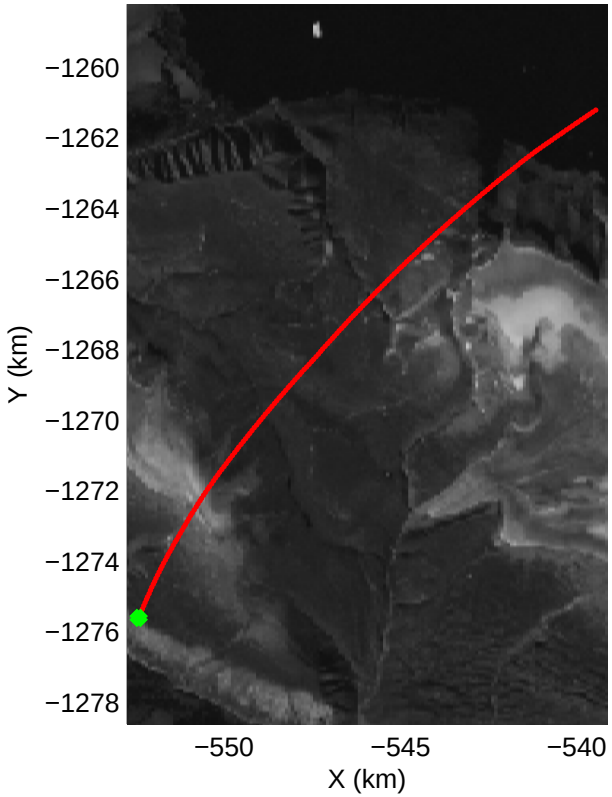

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

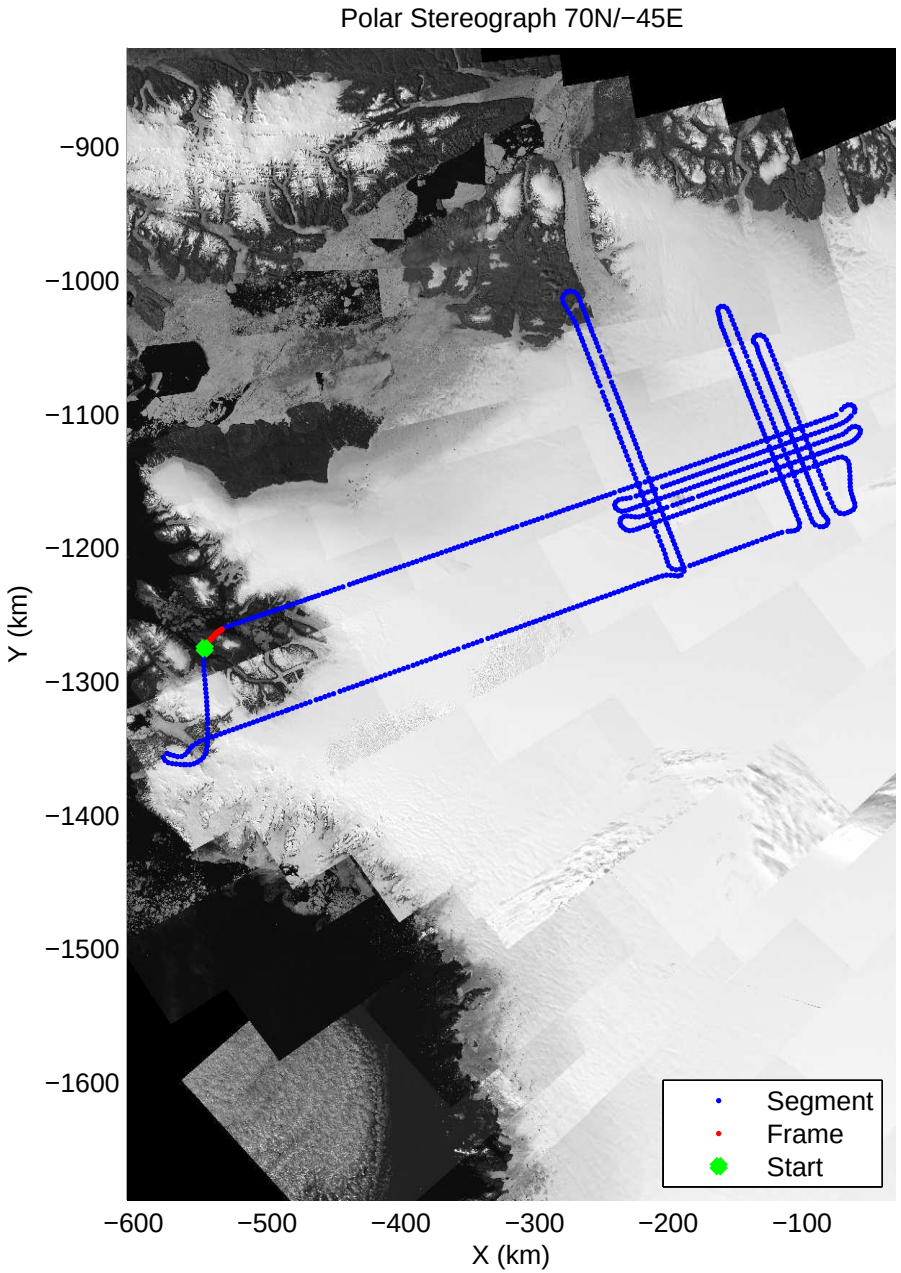

−1276
−1278
−1280
−1282
−1284
−1286
−1288
−1290
−1292
−1294
Y (km)
−558 −556 −554 −552 −550 −548
X (km)

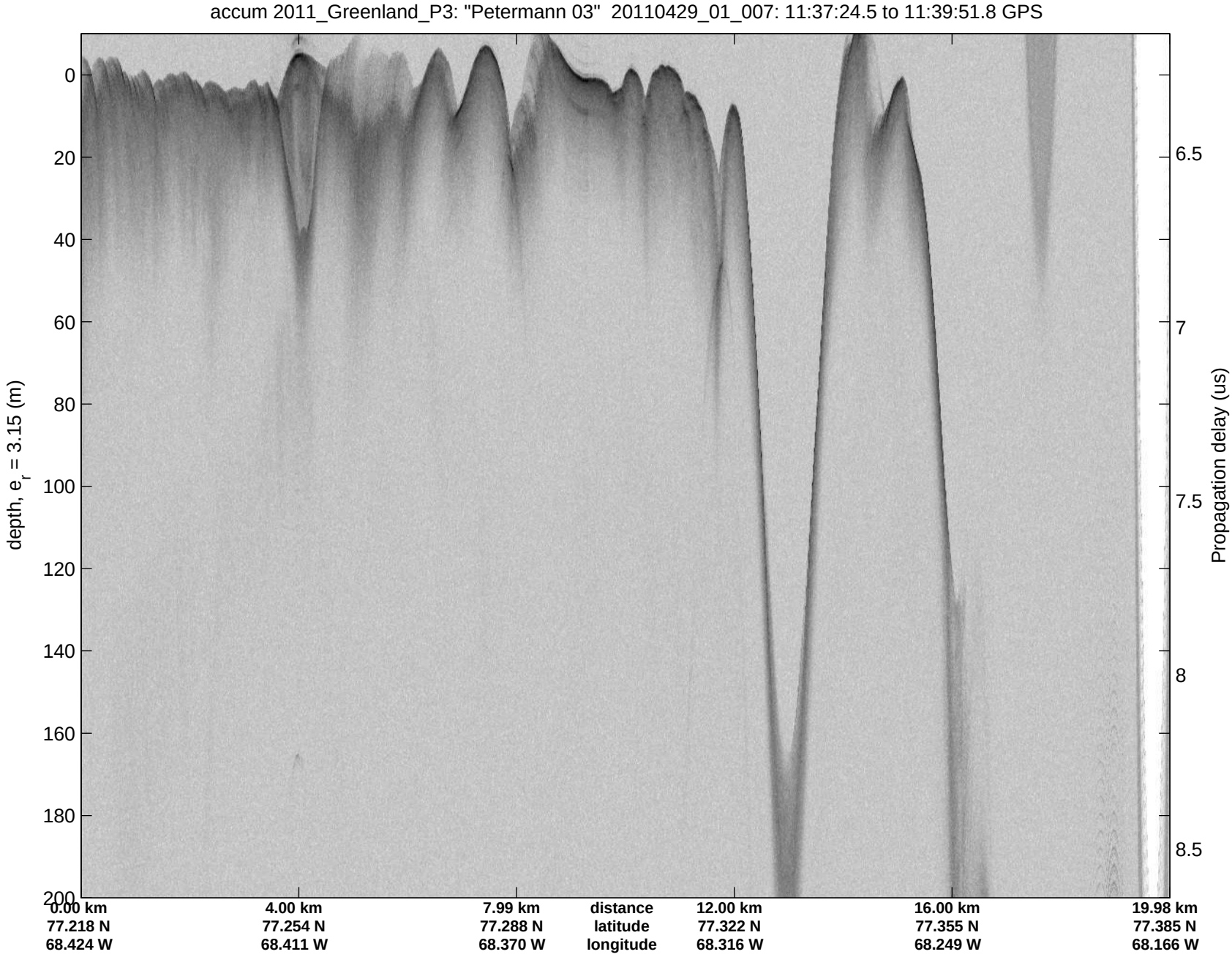

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

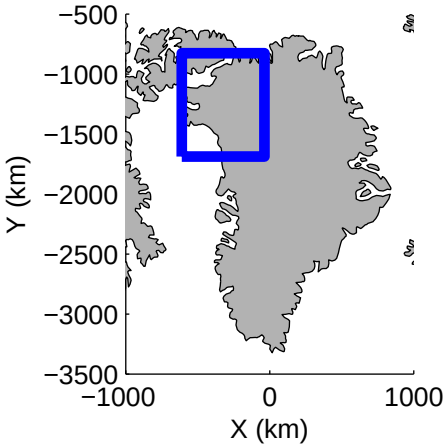

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_006: 11:35:04.3 to 11:37:24.3 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
9
9.5
10
10.5
11
0.00 km
77.054 N
68.115 W
4.01 km
77.086 N
68.188 W
7.99 km
77.118 N
68.258 W
distance
latitude
longitude
11.99 km
77.150 N
68.328 W
15.99 km
77.183 N
68.395 W
19.97 km
77.218 N
68.424 W

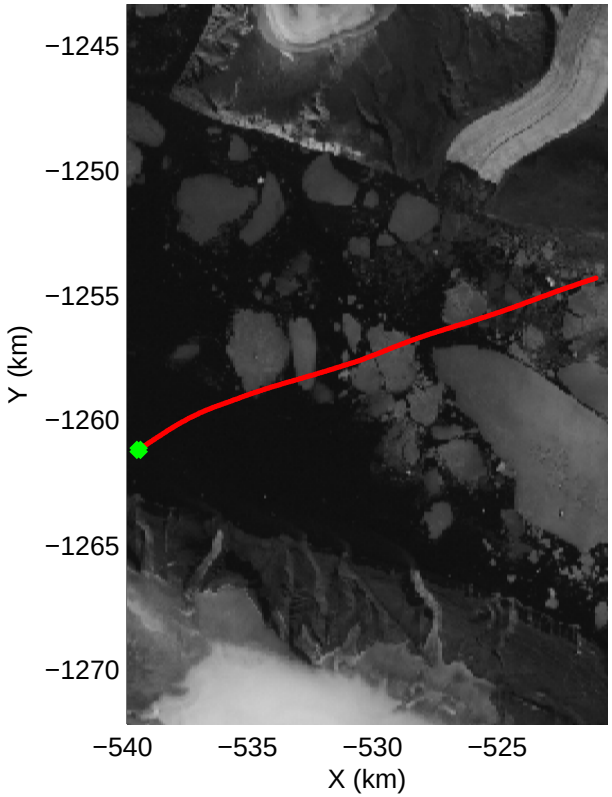

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

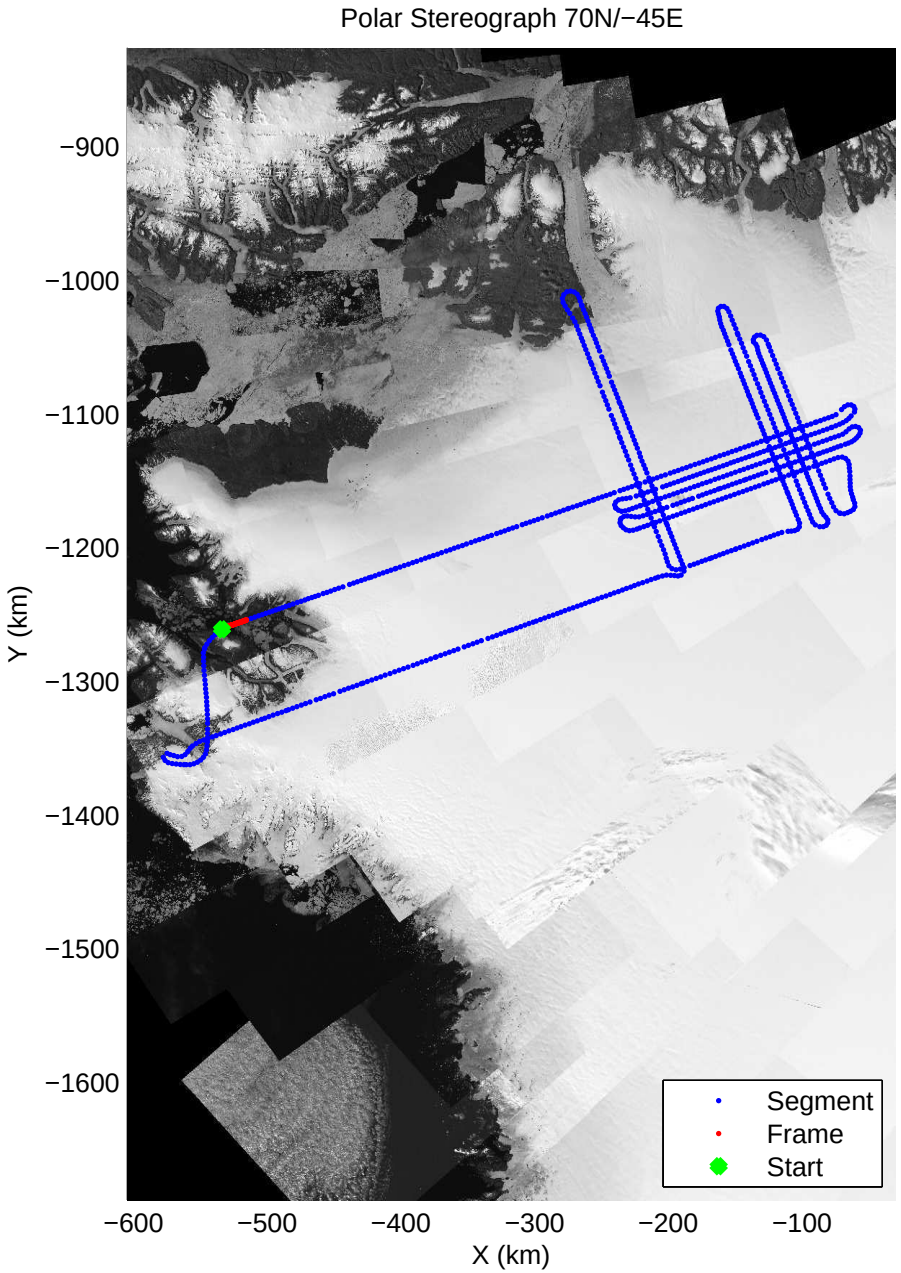

−1260
−1262
−1264
−1266
−1268
−1270
−1272
−1274
−1276
−1278
Y (km)
−550
−545
−540
X (km)

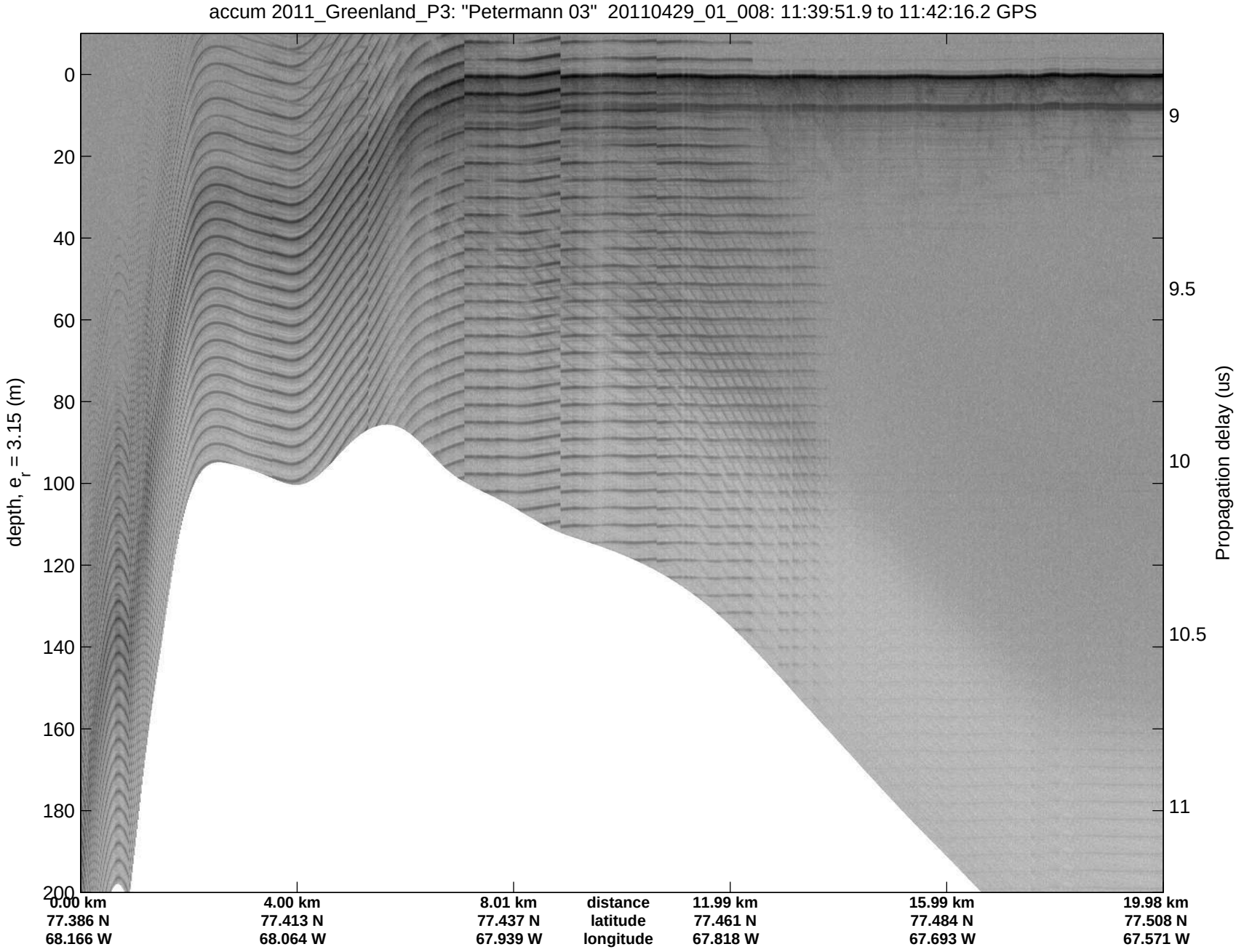

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

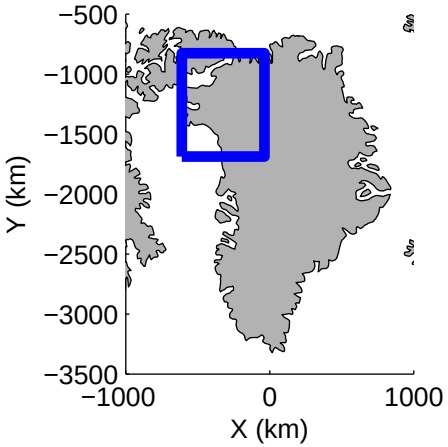

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_007: 11:37:24.5 to 11:39:51.8 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
6.5
7
7.5
8
8.5
0.00 km
77.218 N
68.424 W
4.00 km
77.254 N
68.411 W
7.99 km
77.288 N
68.370 W
distance
latitude
longitude
12.00 km
77.322 N
68.316 W
16.00 km
77.355 N
68.249 W
19.98 km
77.385 N
68.166 W

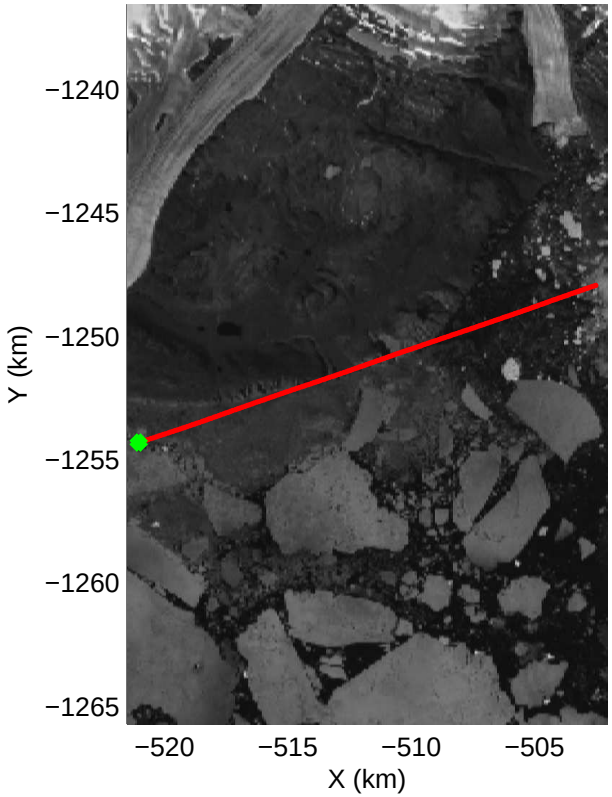

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

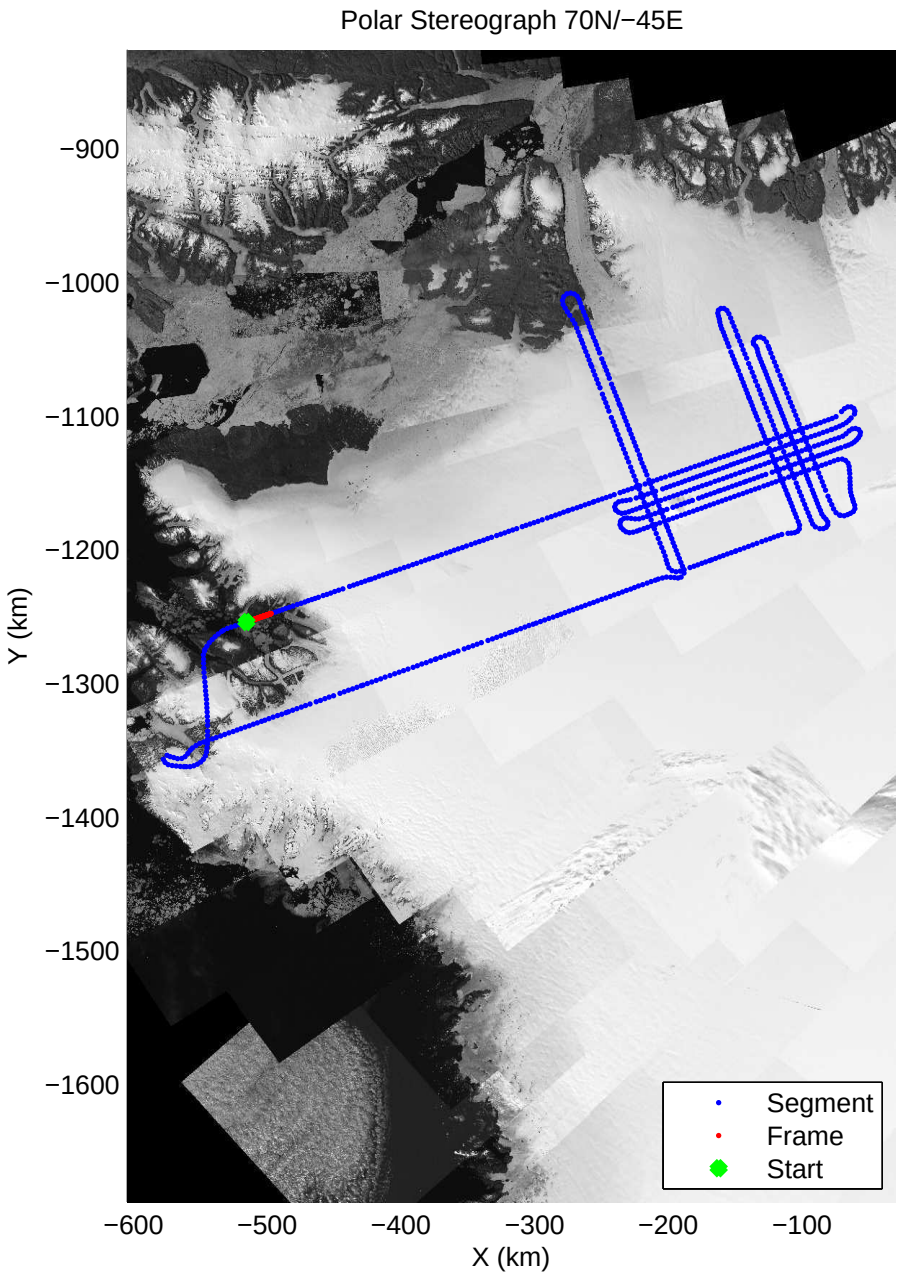

−1245
−1250
−1255
−1260
−1265
−1270
Y (km)
−540
−535
−530
−525
X (km)

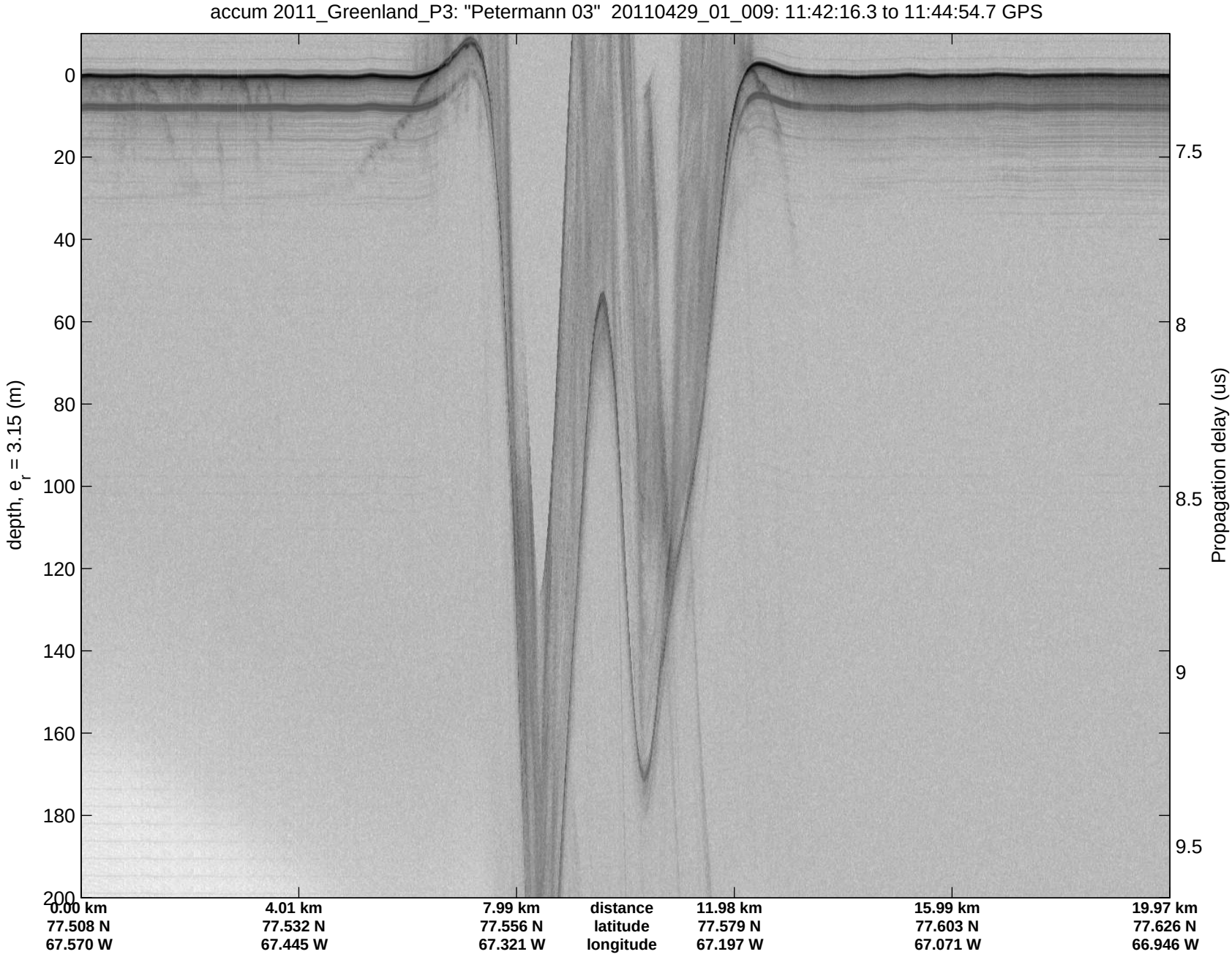

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

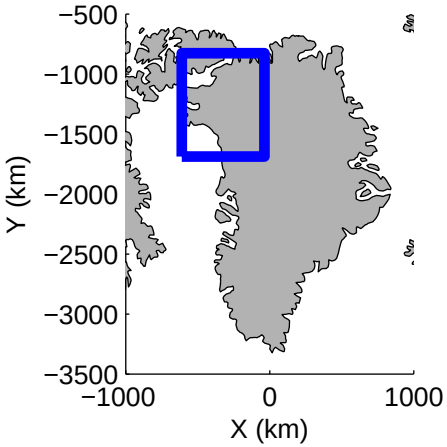

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_008: 11:39:51.9 to 11:42:16.2 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
9
9.5
10
10.5
11
0.00 km
77.386 N
68.166 W
4.00 km
77.413 N
68.064 W
8.01 km
77.437 N
67.939 W
distance
latitude
longitude
11.99 km
77.461 N
67.818 W
15.99 km
77.484 N
67.693 W
19.98 km
77.508 N
67.571 W

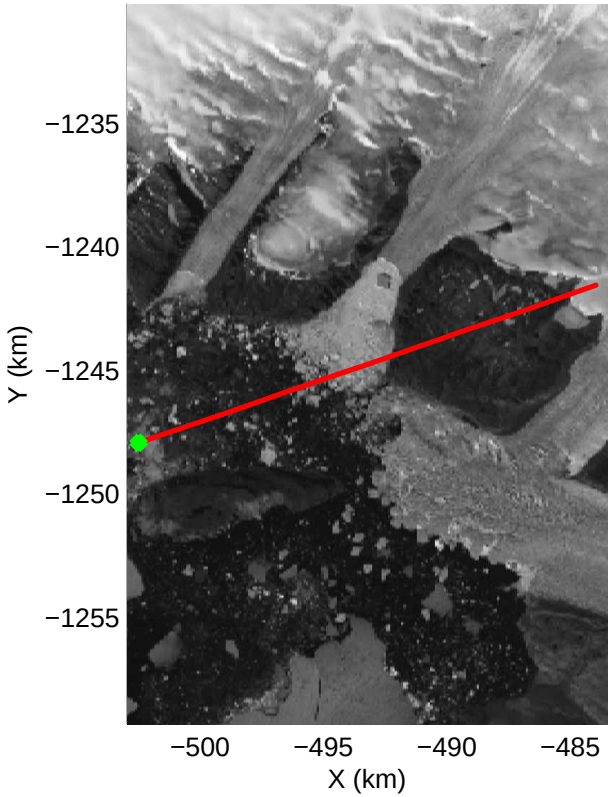

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

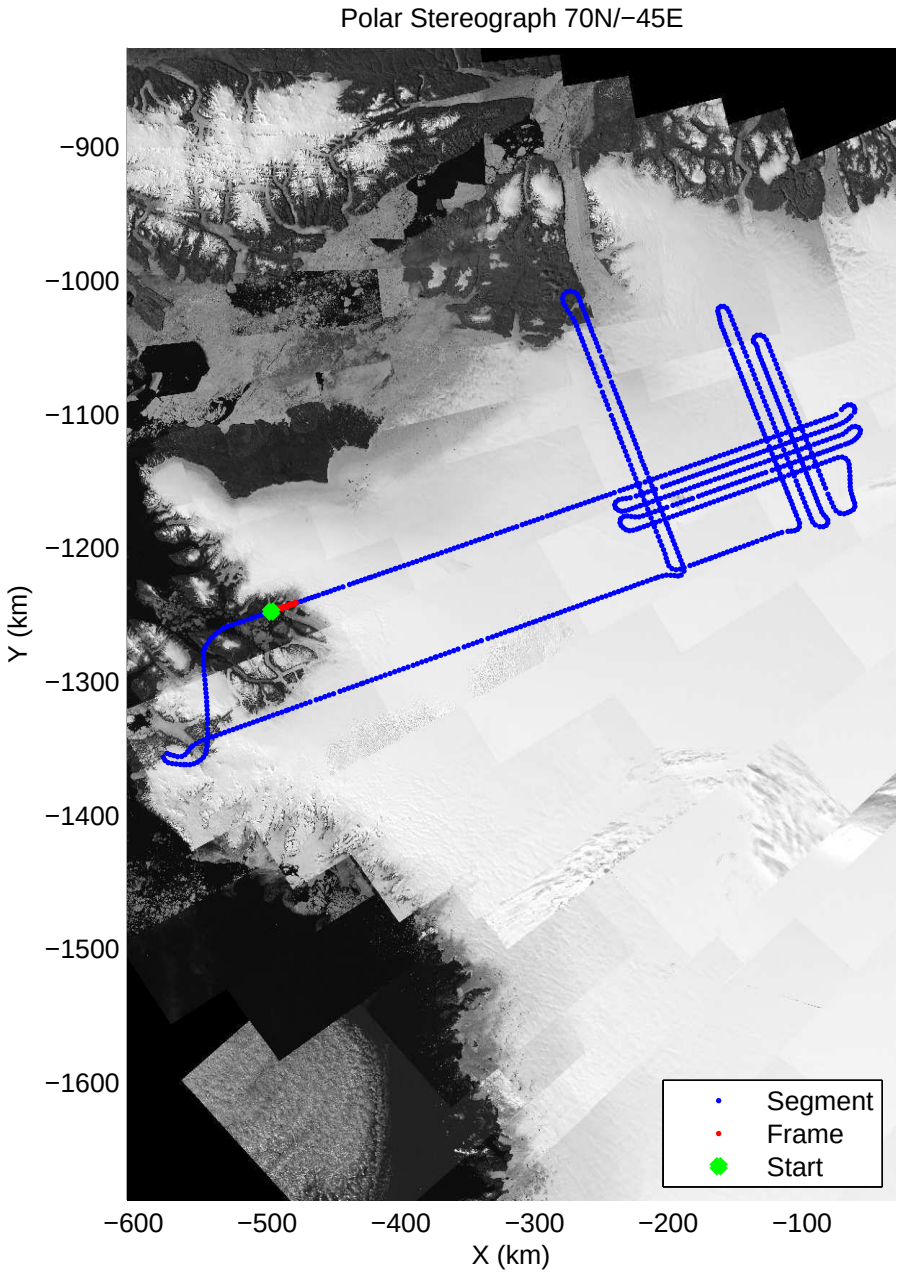

−1240
−1245
−1250
−1255
−1260
−1265
Y (km)
−520
−515
−510
−505
X (km)

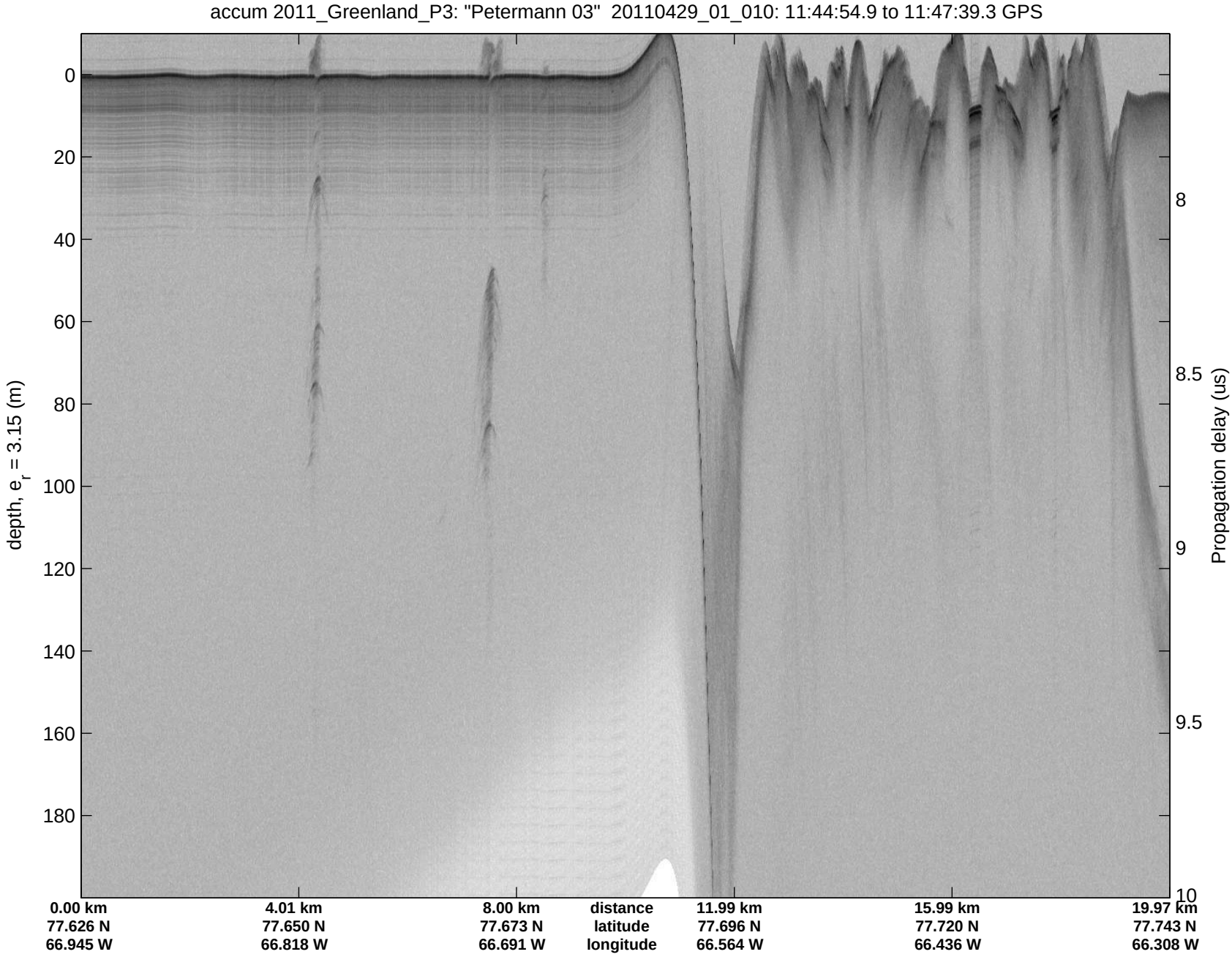

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

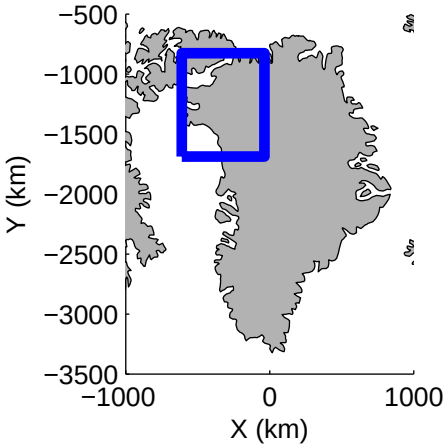

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_009: 11:42:16.3 to 11:44:54.7 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
7.5
8
8.5
9
9.5
0.00 km
77.508 N
67.570 W
4.01 km
77.532 N
67.445 W
7.99 km
77.556 N
67.321 W
distance
latitude
longitude
11.98 km
77.579 N
67.197 W
15.99 km
77.603 N
67.071 W
19.97 km
77.626 N
66.946 W

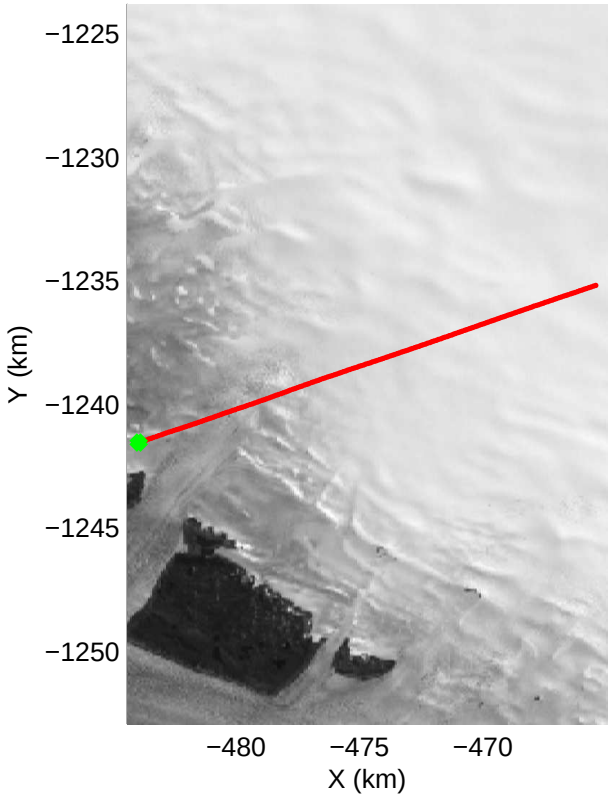

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

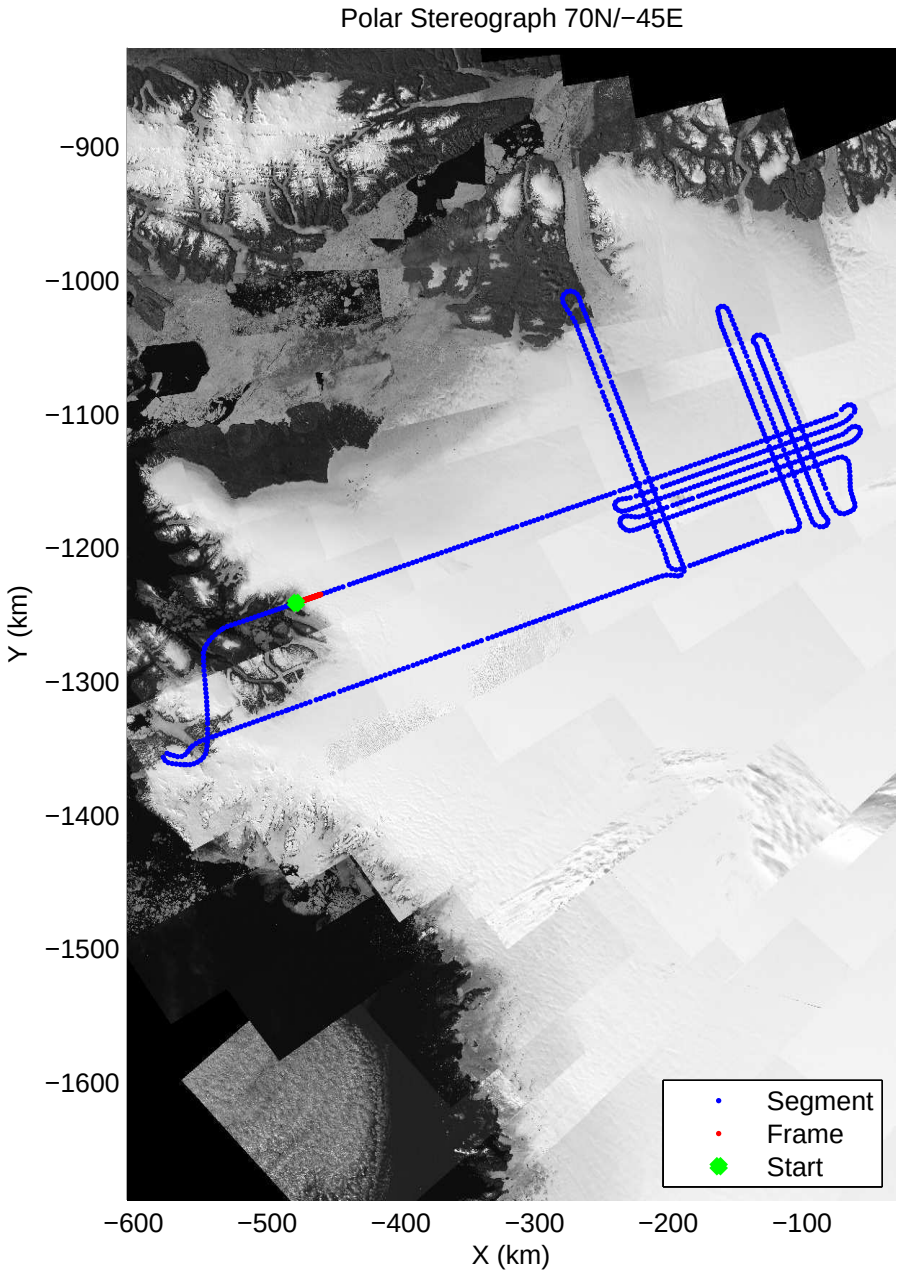

−1235
−1240
−1245
−1250
−1255
Y (km)
−500
−495
−490
−485
X (km)

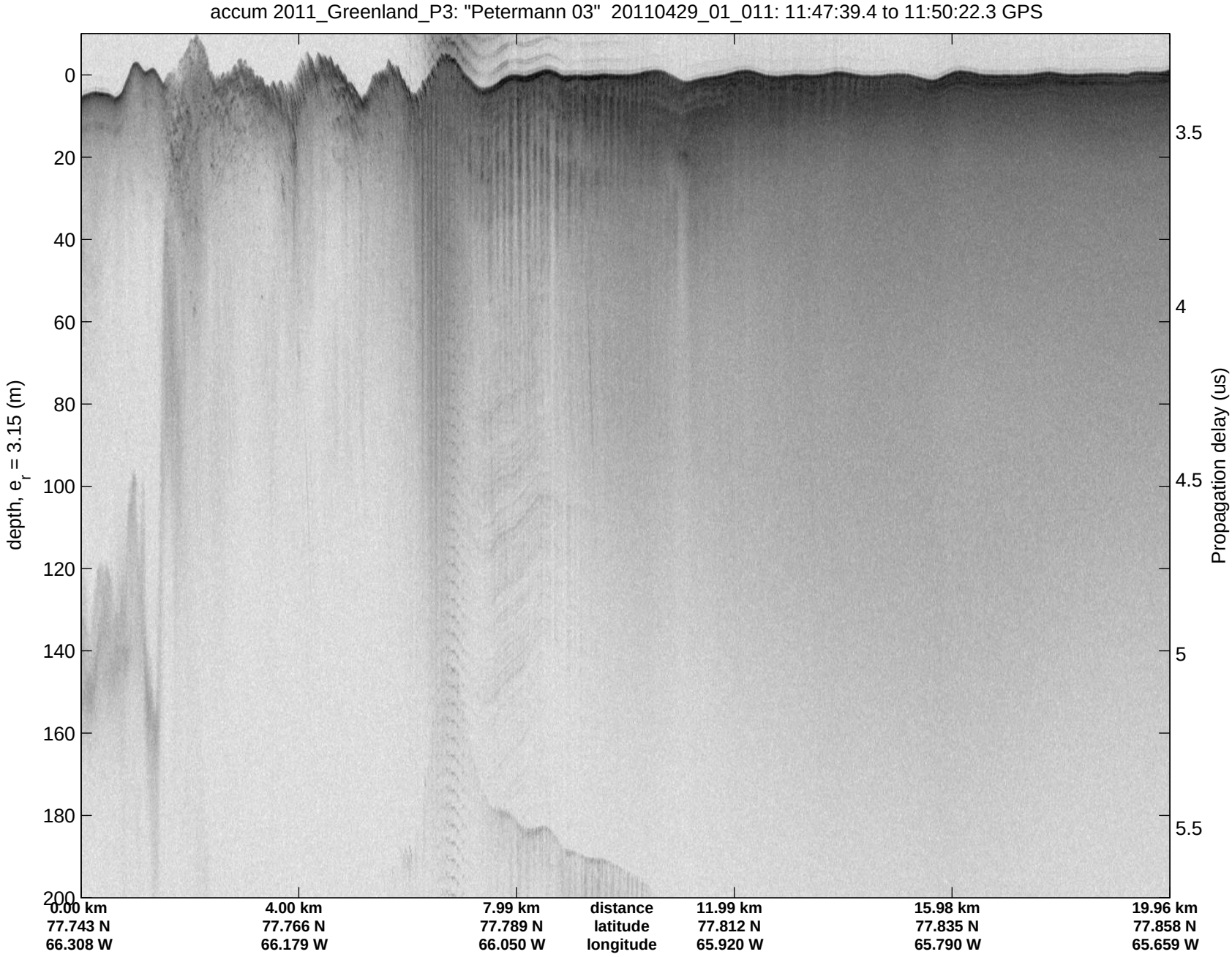

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

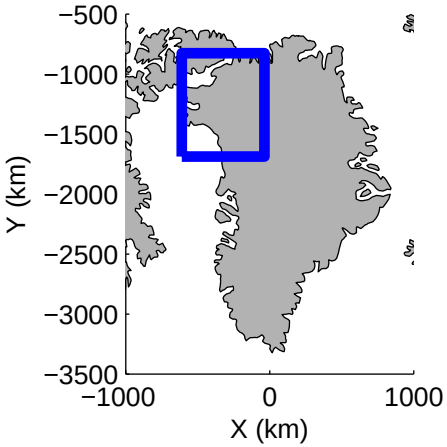

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_010: 11:44:54.9 to 11:47:39.3 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
8
8.5
9
9.5
10
0.00 km
77.626 N
66.945 W
4.01 km
77.650 N
66.818 W
8.00 km
77.673 N
66.691 W
distance
latitude
longitude
11.99 km
77.696 N
66.564 W
15.99 km
77.720 N
66.436 W
19.97 km
77.743 N
66.308 W

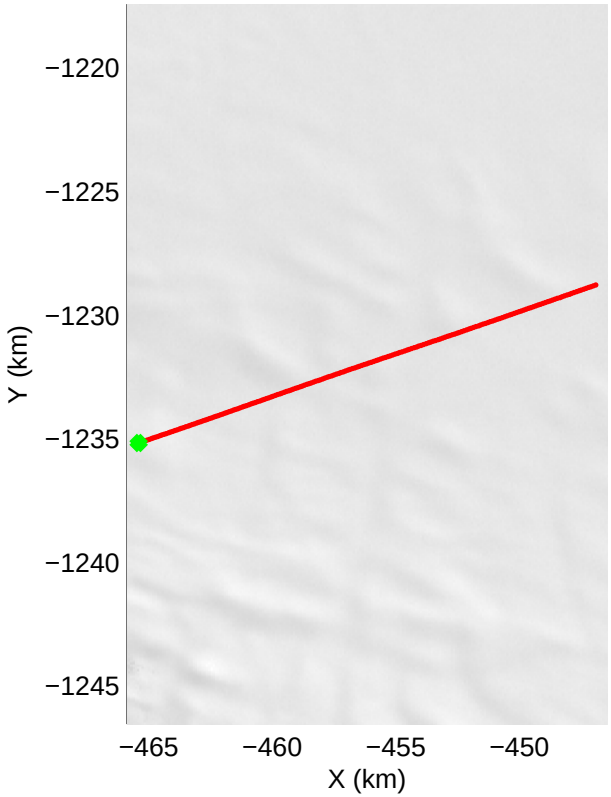

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

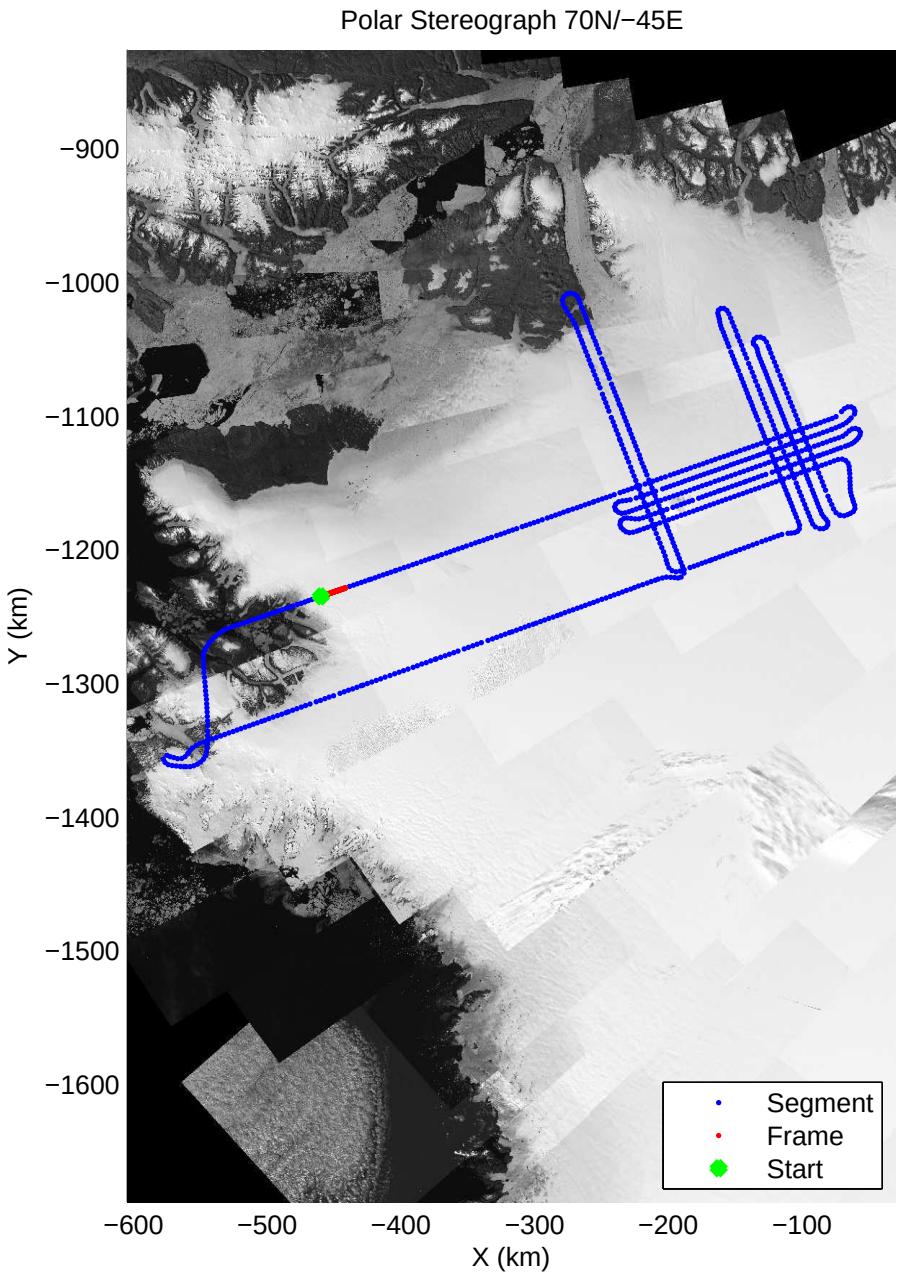

−1225
−1230
−1235
−1240
−1245
−1250
Y (km)
−480
−475
−470
X (km)

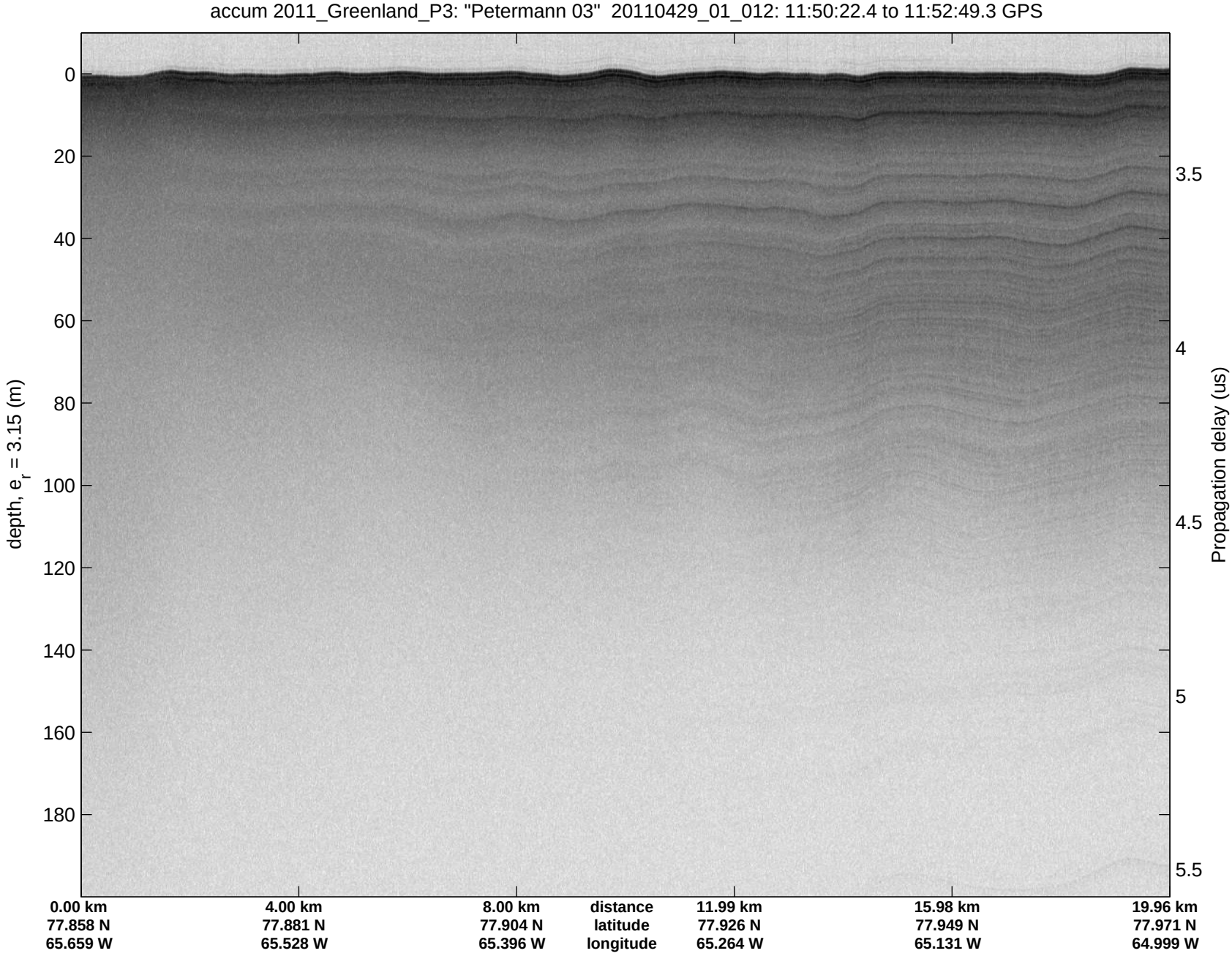

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

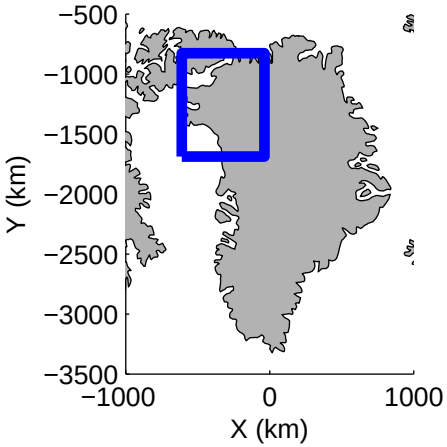

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_011: 11:47:39.4 to 11:50:22.3 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
77.743 N
66.308 W
4.00 km
77.766 N
66.179 W
7.99 km
77.789 N
66.050 W
distance
latitude
longitude
11.99 km
77.812 N
65.920 W
15.98 km
77.835 N
65.790 W
19.96 km
77.858 N
65.659 W

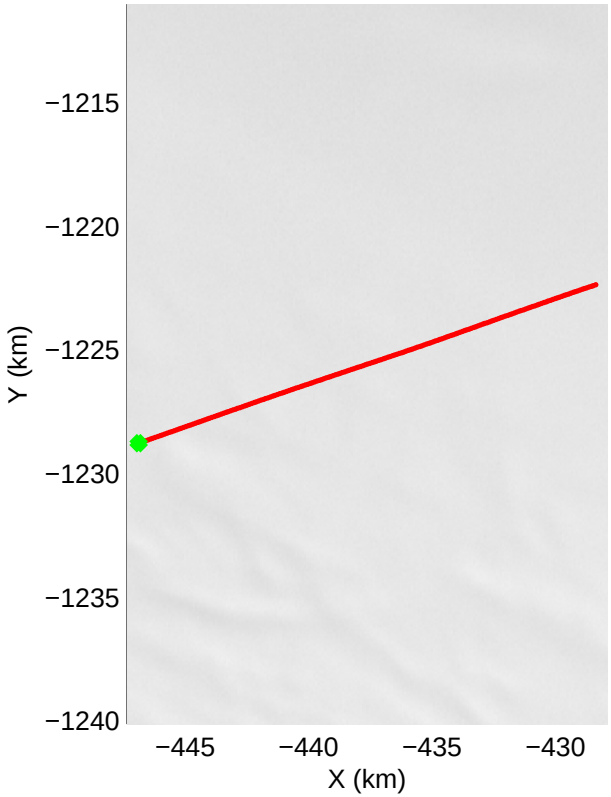

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

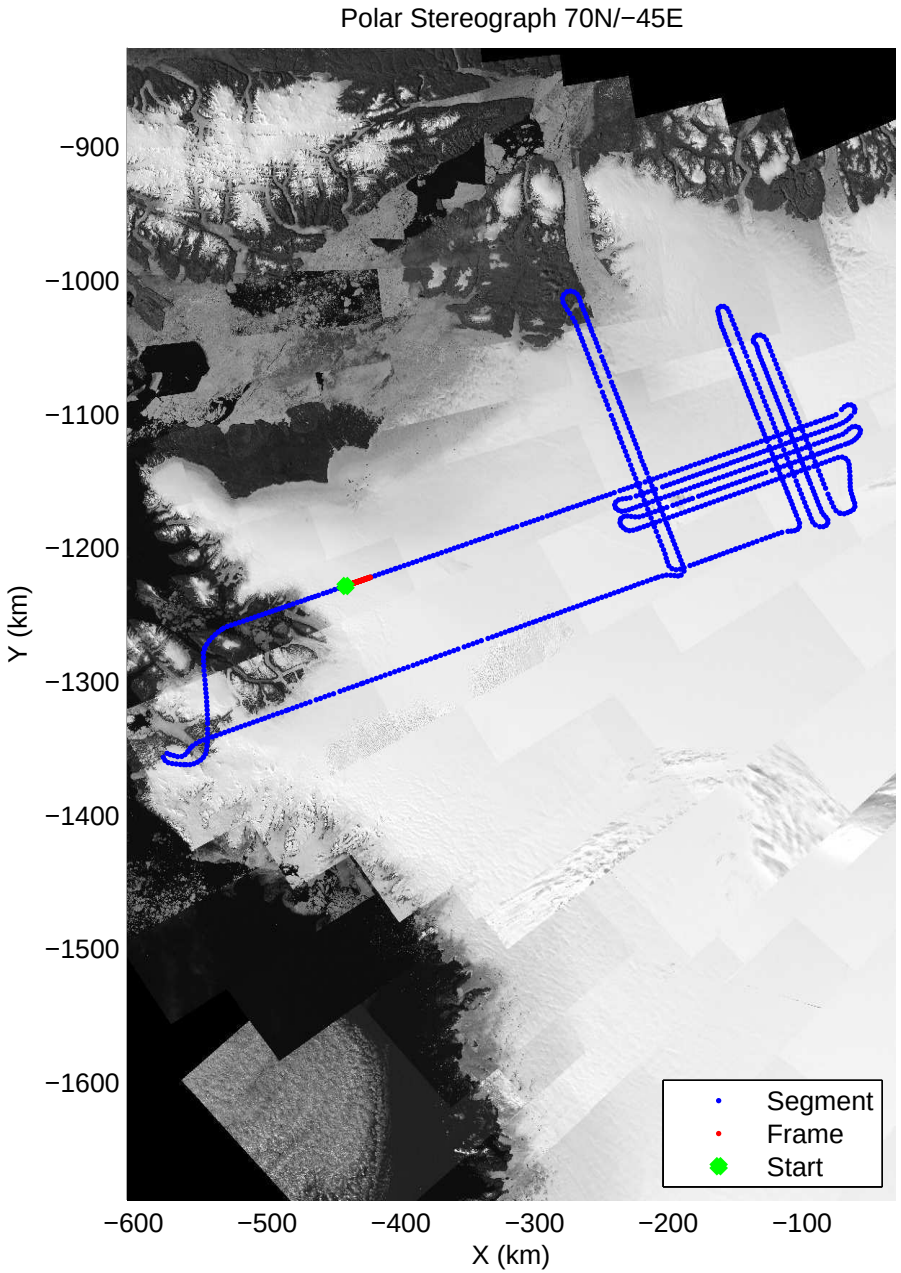

−1220
−1225
−1230
−1235
−1240
−1245
Y (km)
−465
−460
−455
−450
X (km)

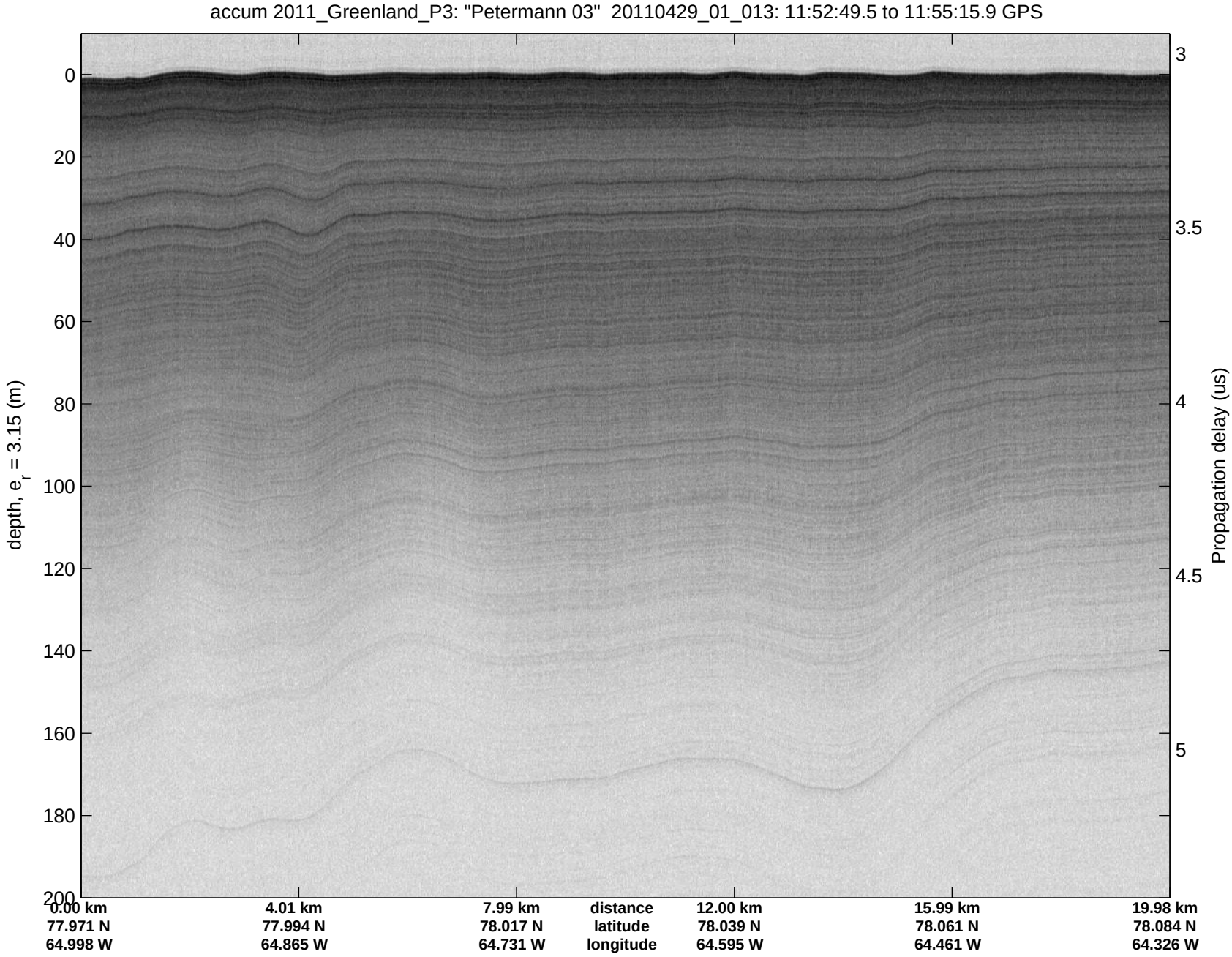

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

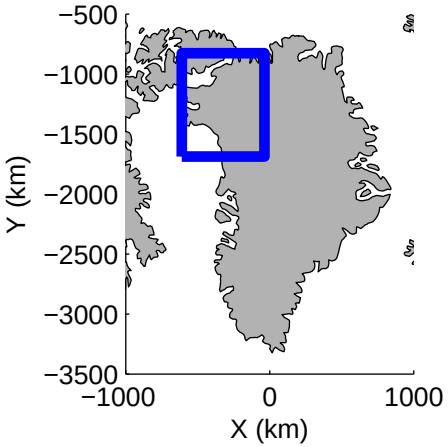

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_012: 11:50:22.4 to 11:52:49.3 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
77.858 N
65.659 W
4.00 km
77.881 N
65.528 W
8.00 km
77.904 N
65.396 W
distance
latitude
longitude
11.99 km
77.926 N
65.264 W
15.98 km
77.949 N
65.131 W
19.96 km
77.971 N
64.999 W

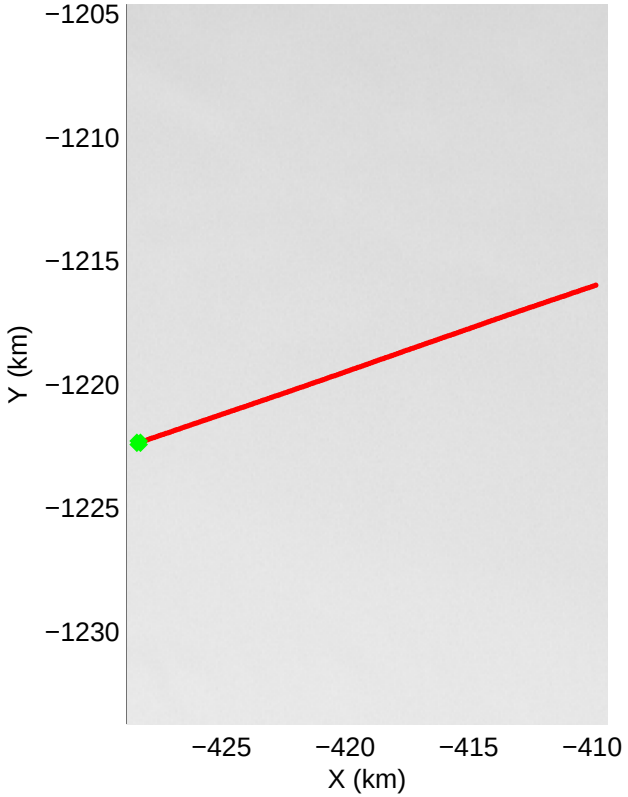

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

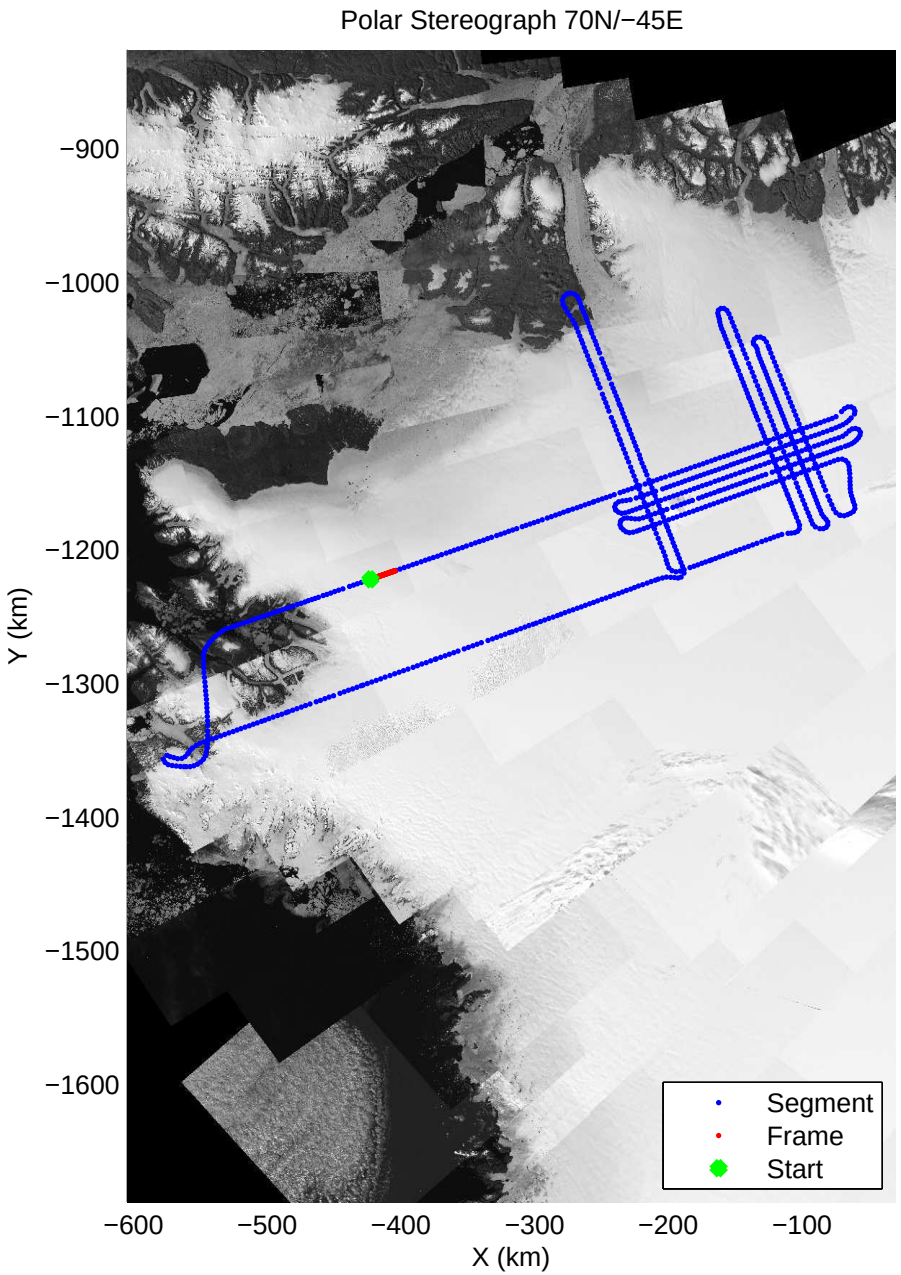

−1215
−1220
−1225
−1230
−1235
−1240
Y (km)
−445
−440
−435
−430
X (km)

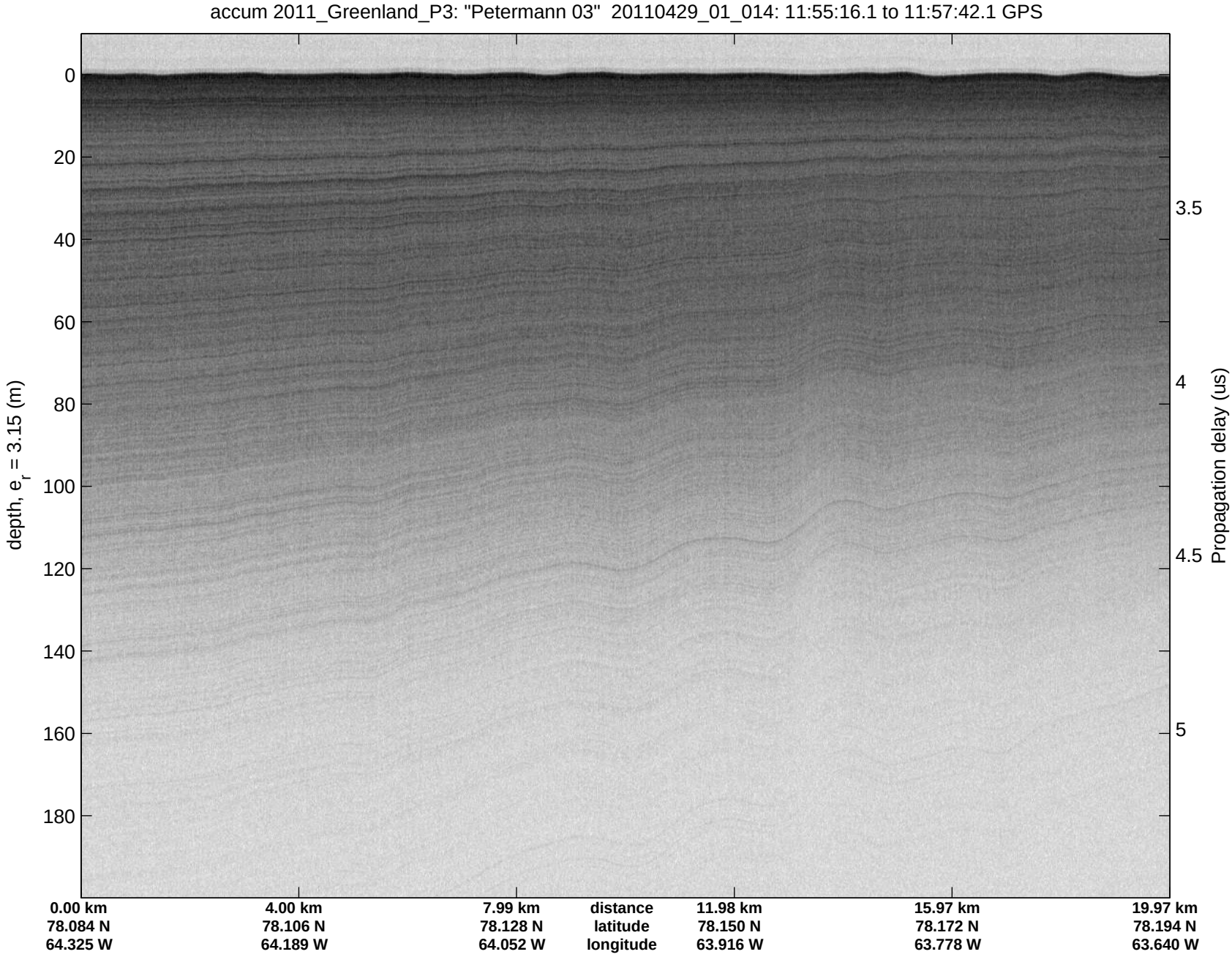

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

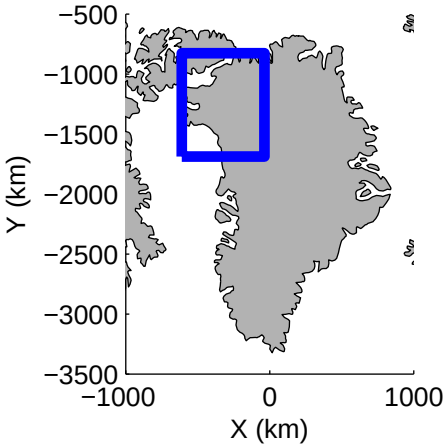

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_013: 11:52:49.5 to 11:55:15.9 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
77.971 N
64.998 W
4.01 km
77.994 N
64.865 W
7.99 km
78.017 N
64.731 W
distance
latitude
longitude
12.00 km
78.039 N
64.595 W
15.99 km
78.061 N
64.461 W
19.98 km
78.084 N
64.326 W

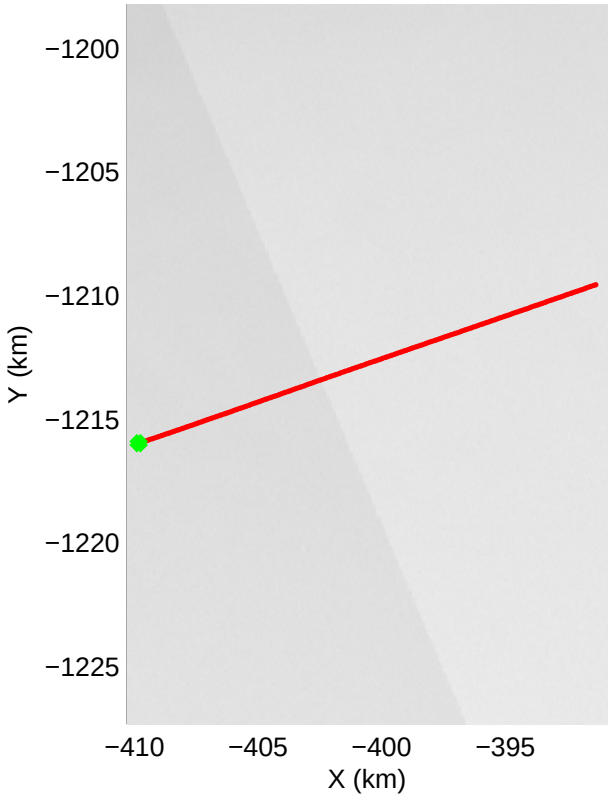

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

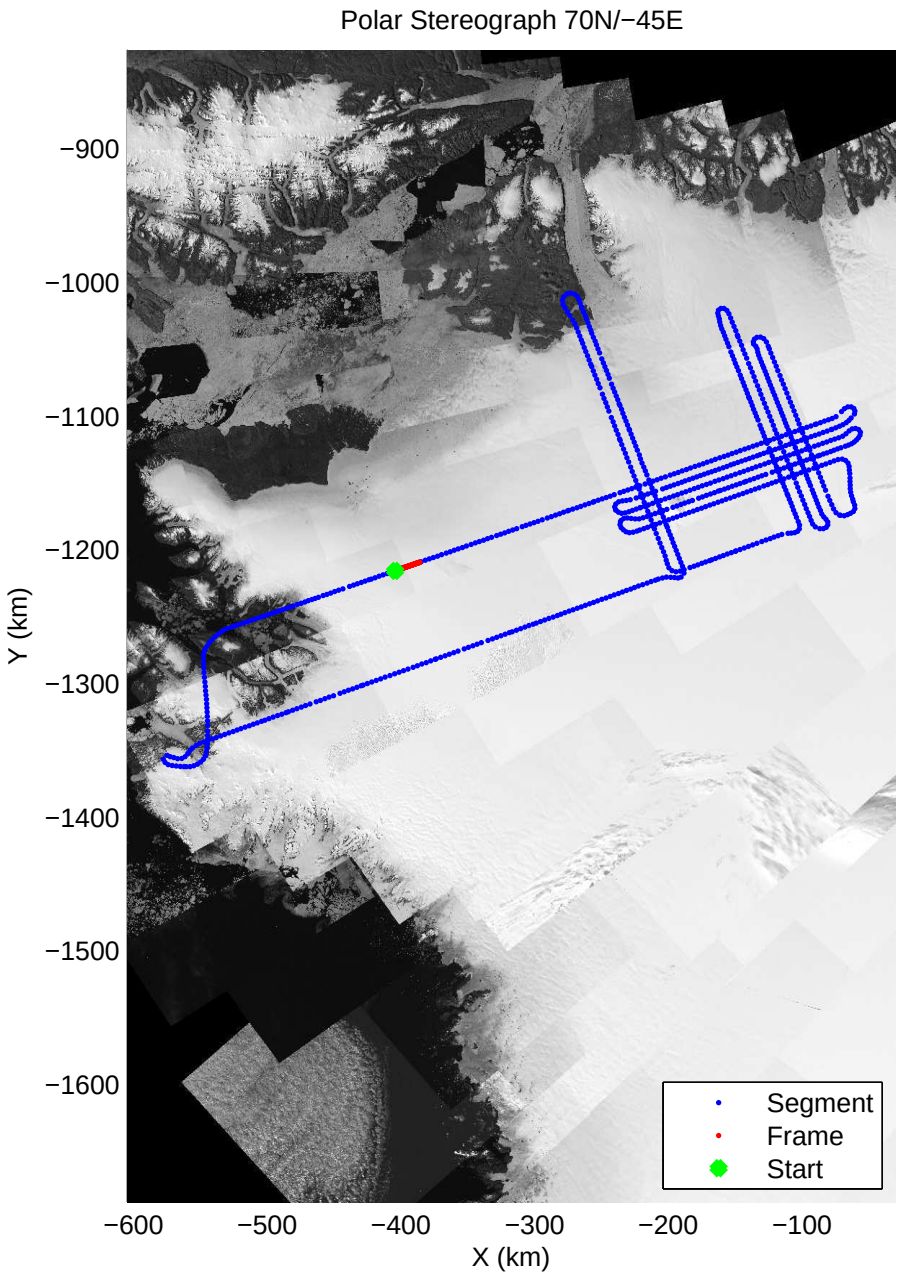

−1205
−1210
−1215
−1220
−1225
−1230
Y (km)
−425
−420
−415
−410
X (km)

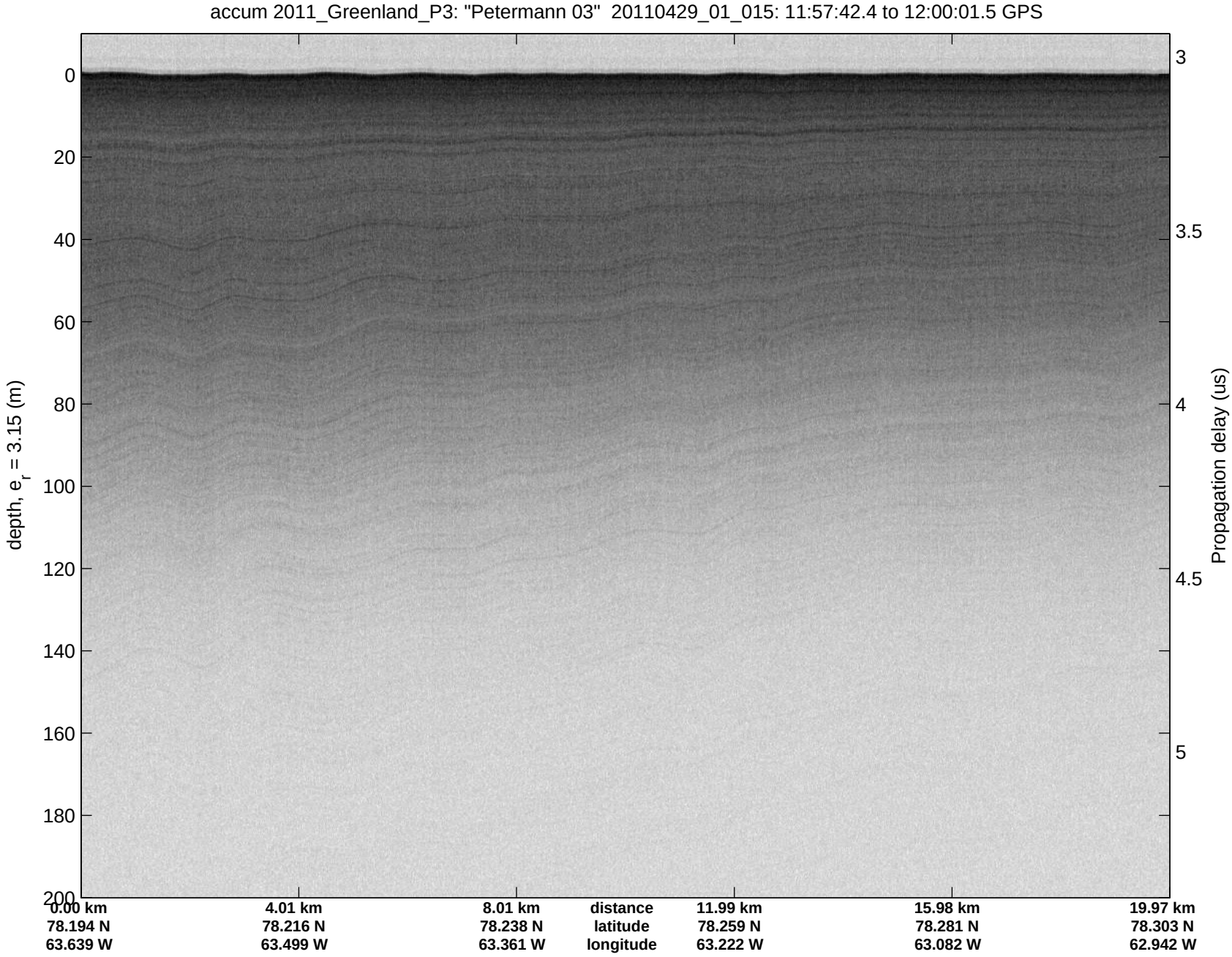

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

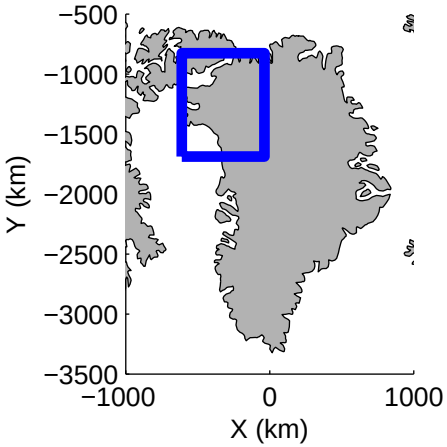

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_014: 11:55:16.1 to 11:57:42.1 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
0.00 km
78.084 N
64.325 W
4.00 km
78.106 N
64.189 W
7.99 km
78.128 N
64.052 W
distance
latitude
longitude
11.98 km
78.150 N
63.916 W
15.97 km
78.172 N
63.778 W
19.97 km
78.194 N
63.640 W

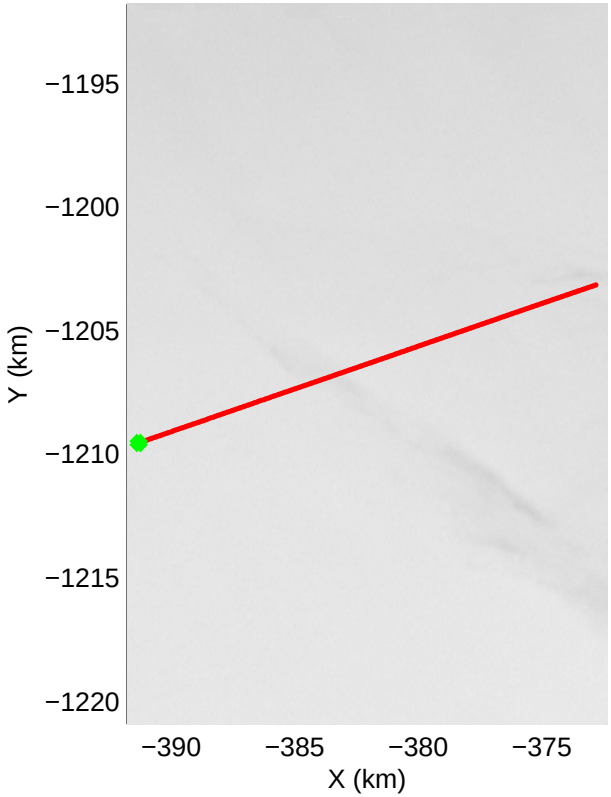

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

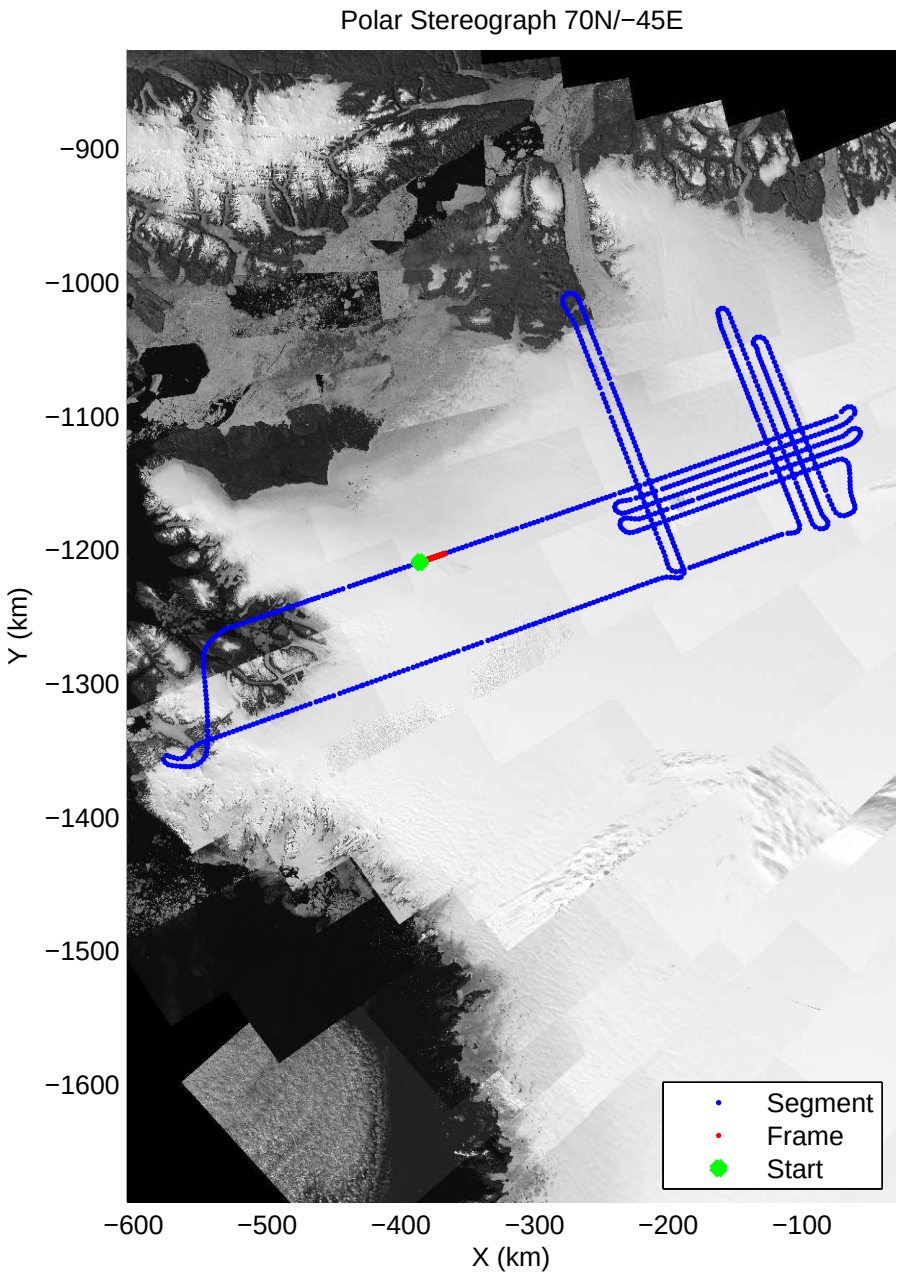

−1200
−1205
−1210
−1215
−1220
−1225
Y (km)
−410
−405
−400
−395
X (km)

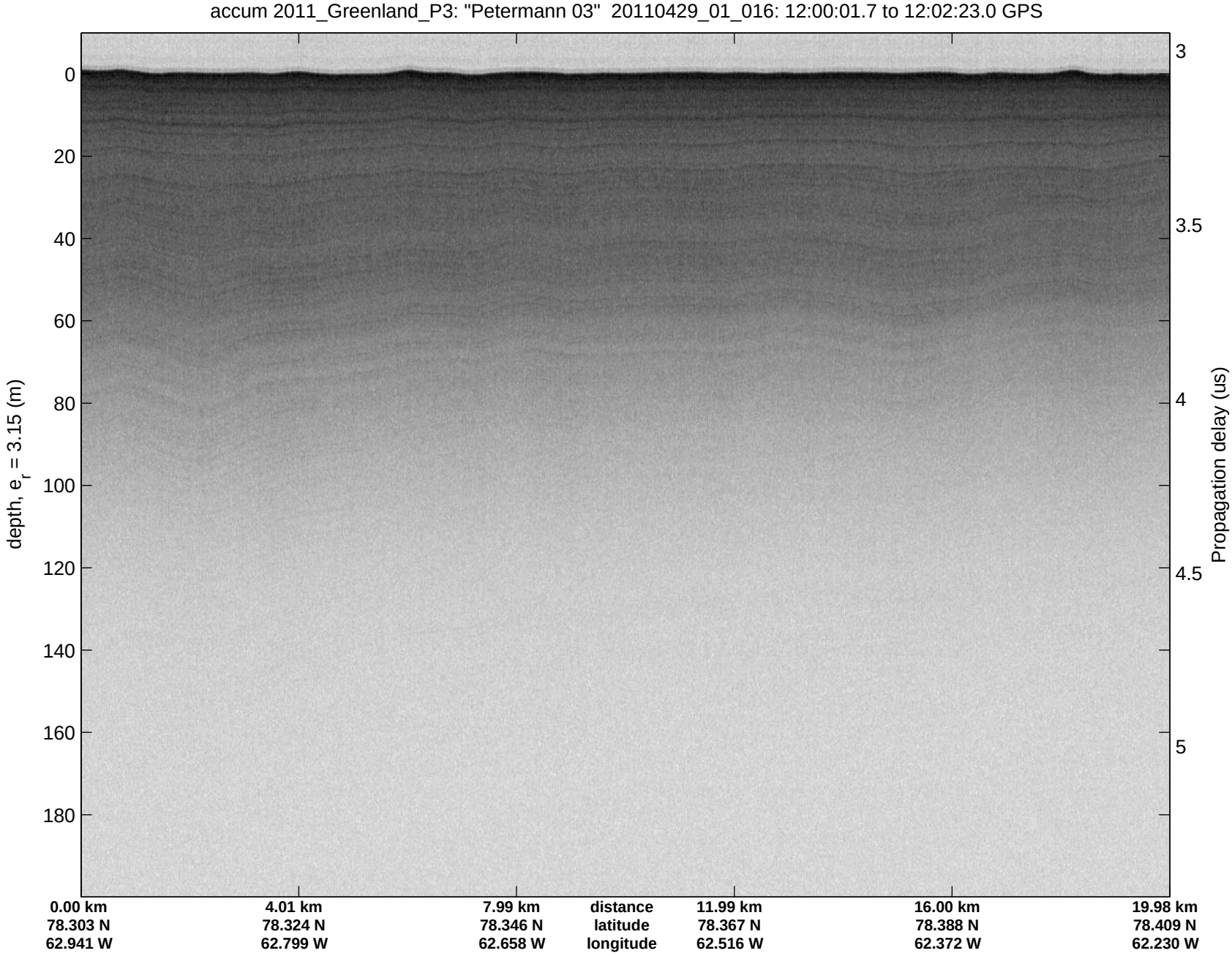

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

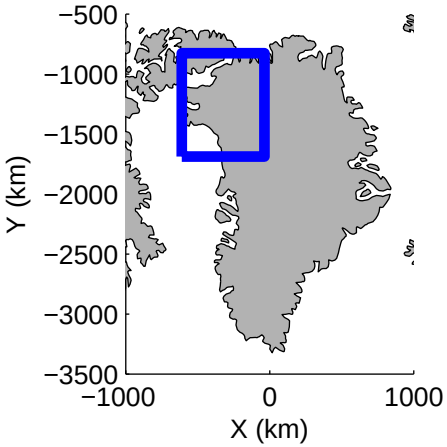

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_015: 11:57:42.4 to 12:00:01.5 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
78.194 N
63.639 W
4.01 km
78.216 N
63.499 W
8.01 km
78.238 N
63.361 W
distance
latitude
longitude
11.99 km
78.259 N
63.222 W
15.98 km
78.281 N
63.082 W
19.97 km
78.303 N
62.942 W

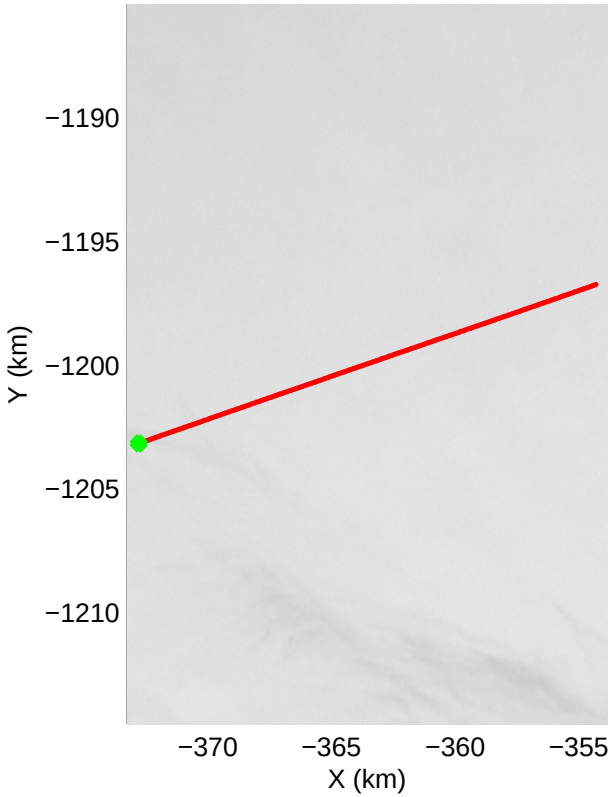

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

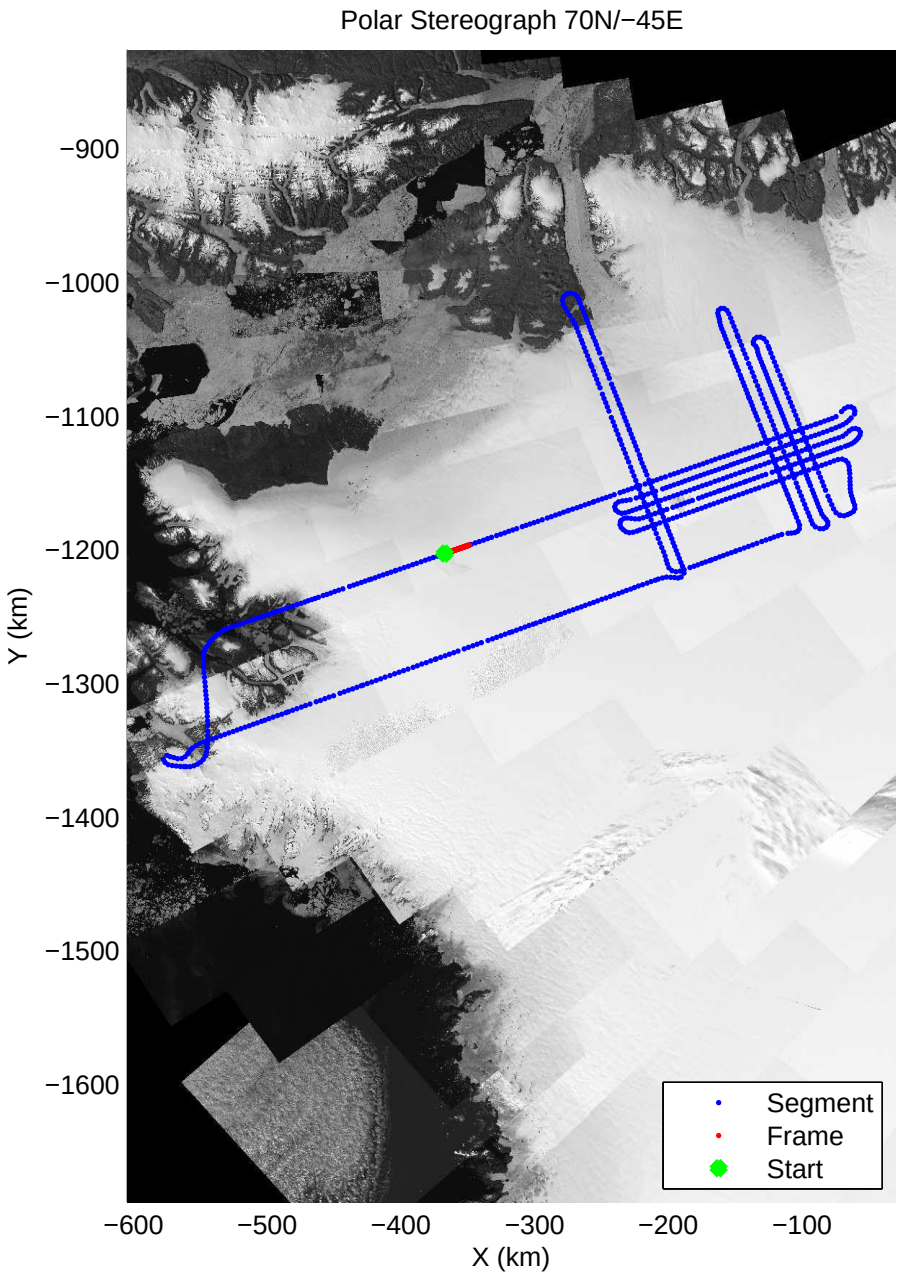

−1195
−1200
−1205
−1210
−1215
−1220
Y (km)
−390
−385
−380
−375
X (km)

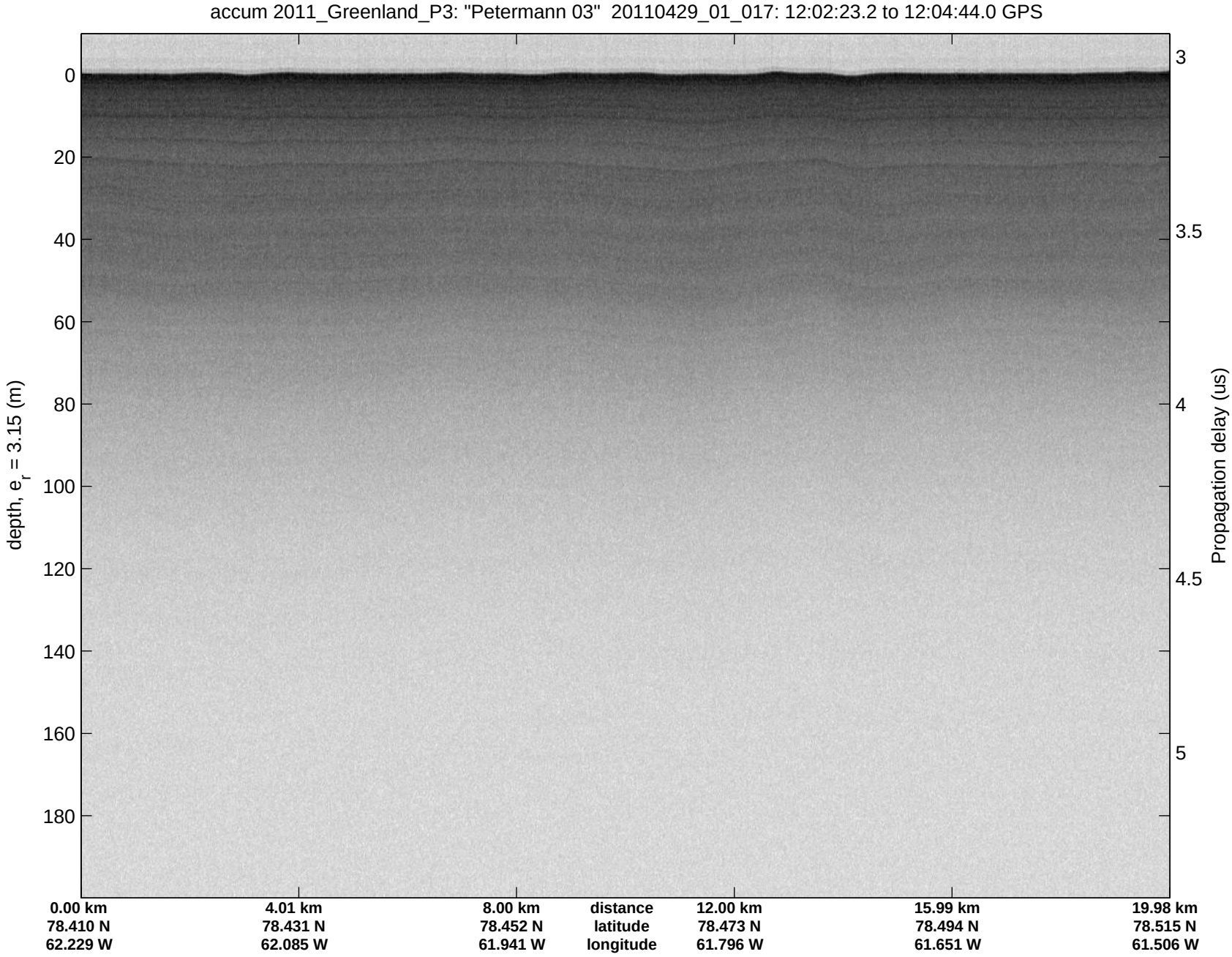

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

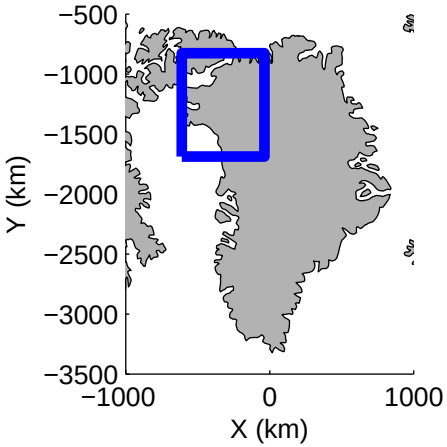

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_016: 12:00:01.7 to 12:02:23.0 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
78.303 N
62.941 W
4.01 km
78.324 N
62.799 W
7.99 km
78.346 N
62.658 W
distance
latitude
longitude
11.99 km
78.367 N
62.516 W
16.00 km
78.388 N
62.372 W
19.98 km
78.409 N
62.230 W

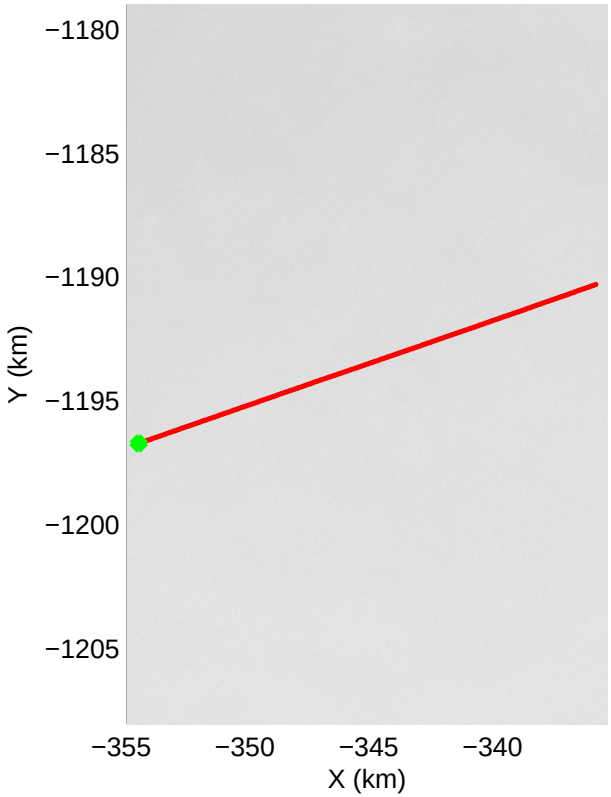

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

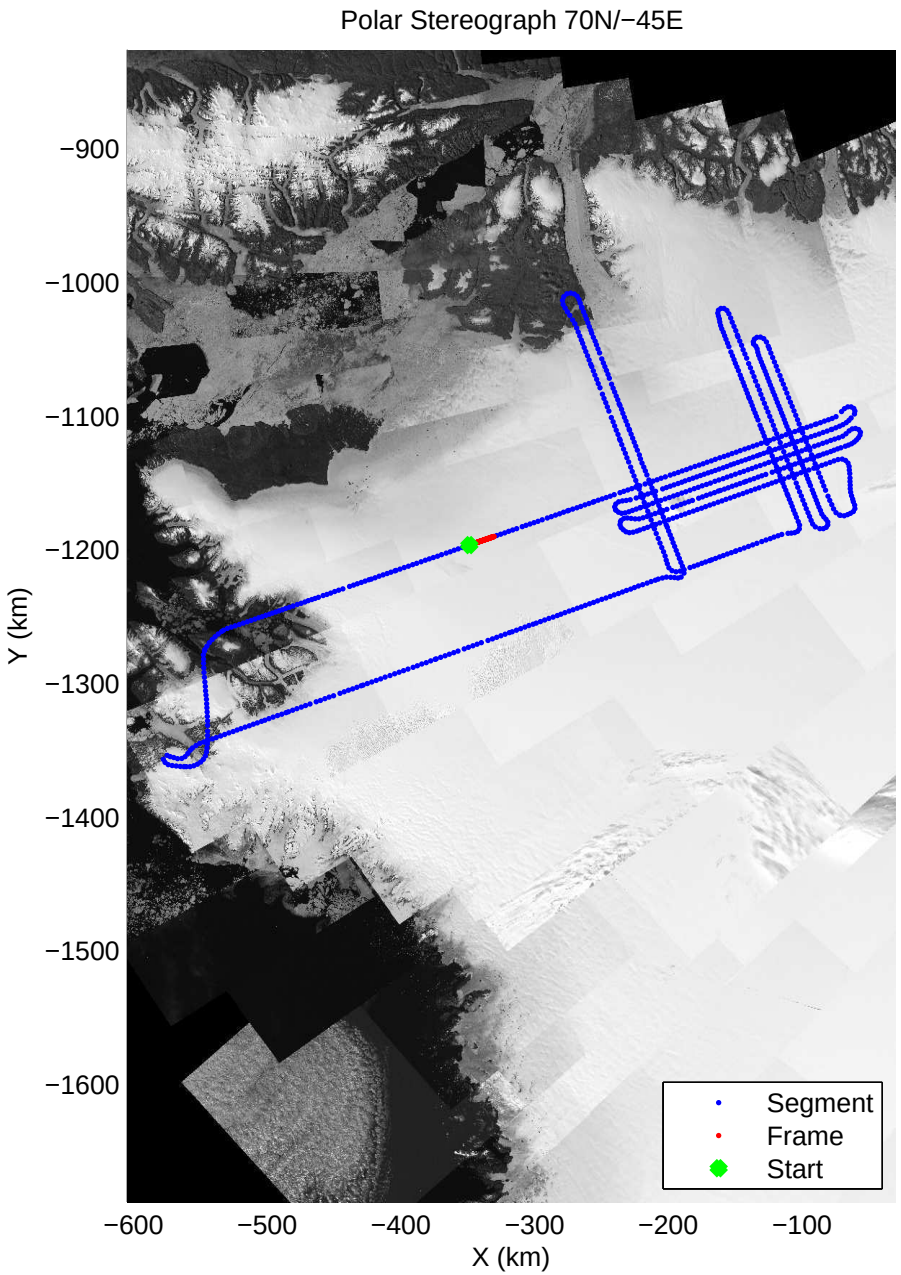

−1190
−1195
−1200
−1205
−1210
Y (km)
−370
−365
−360
−355
X (km)

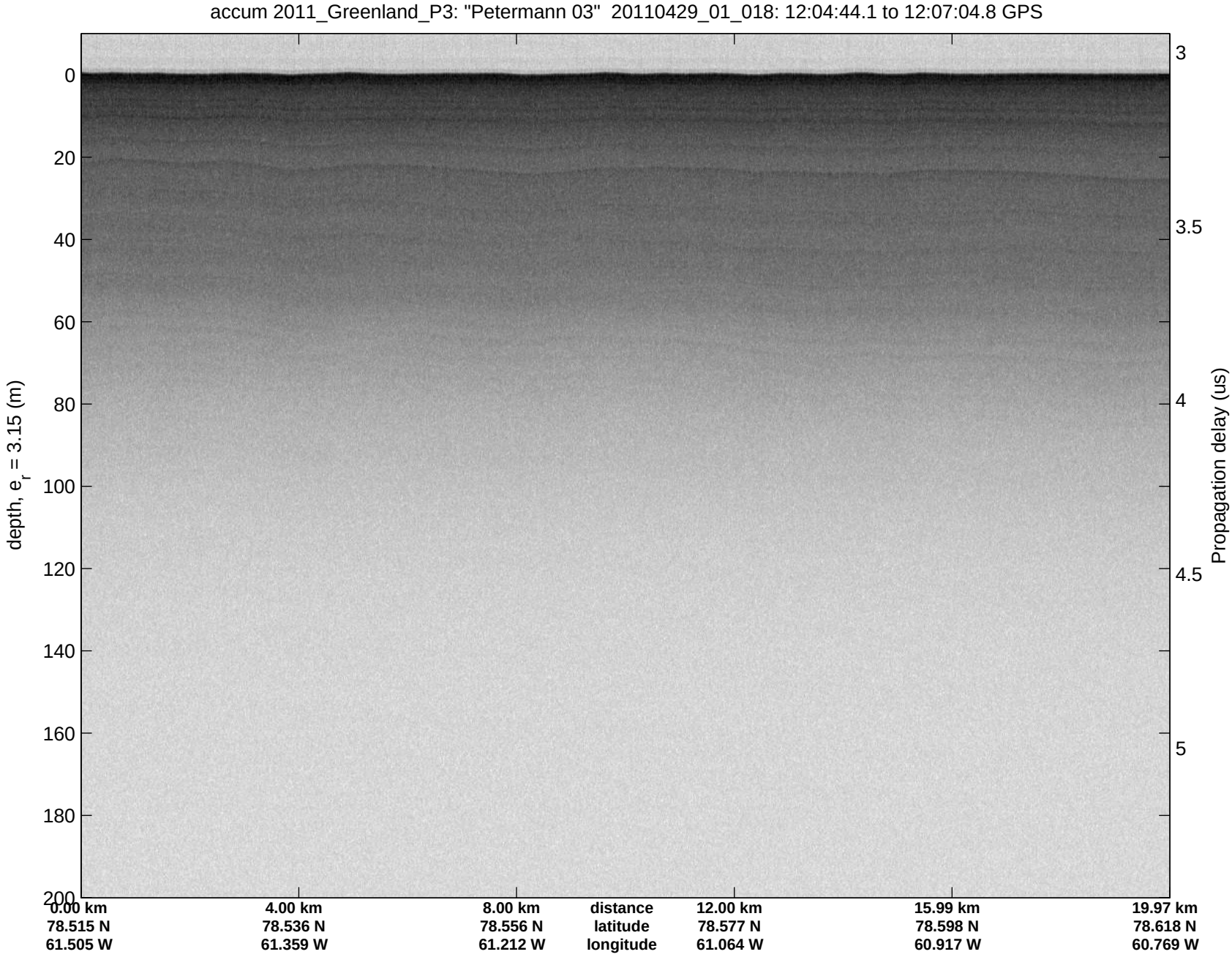

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

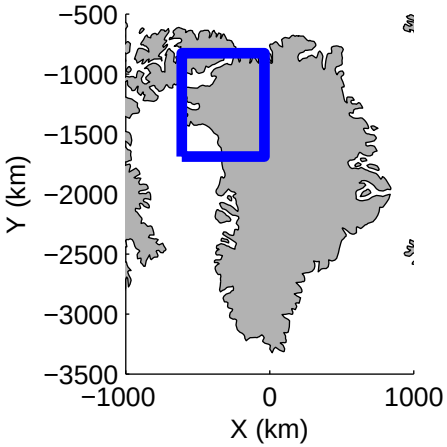

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_017: 12:02:23.2 to 12:04:44.0 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
78.410 N
62.229 W
4.01 km
78.431 N
62.085 W
8.00 km
78.452 N
61.941 W
distance
latitude
longitude
12.00 km
78.473 N
61.796 W
15.99 km
78.494 N
61.651 W
19.98 km
78.515 N
61.506 W

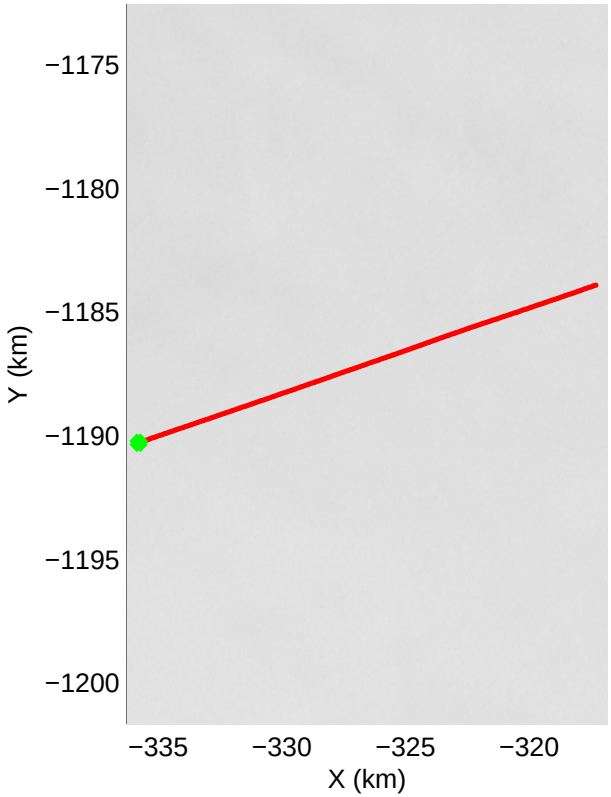

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

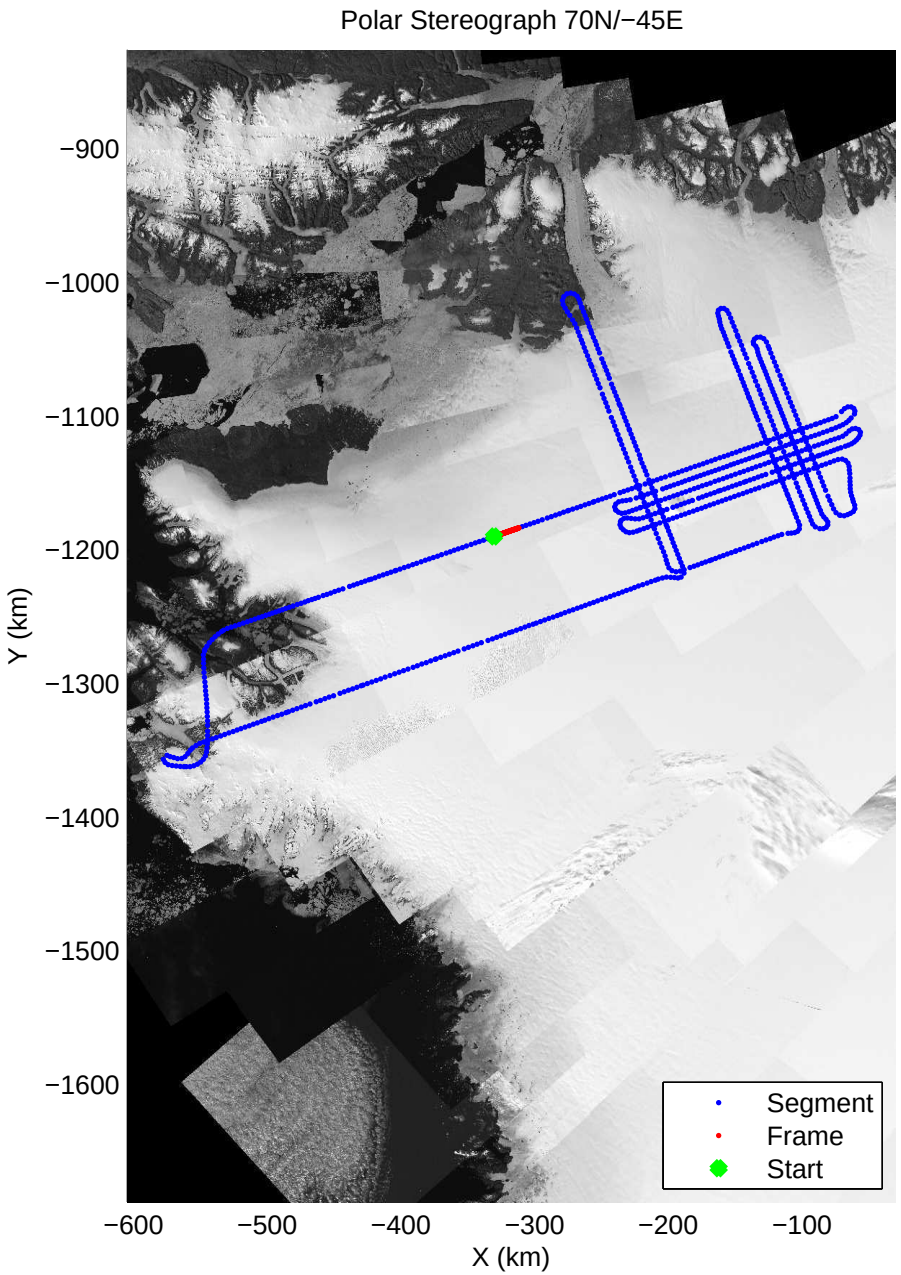

−1180
−1185
−1190
−1195
−1200
−1205
Y (km)
−355
−350
−345
−340
X (km)

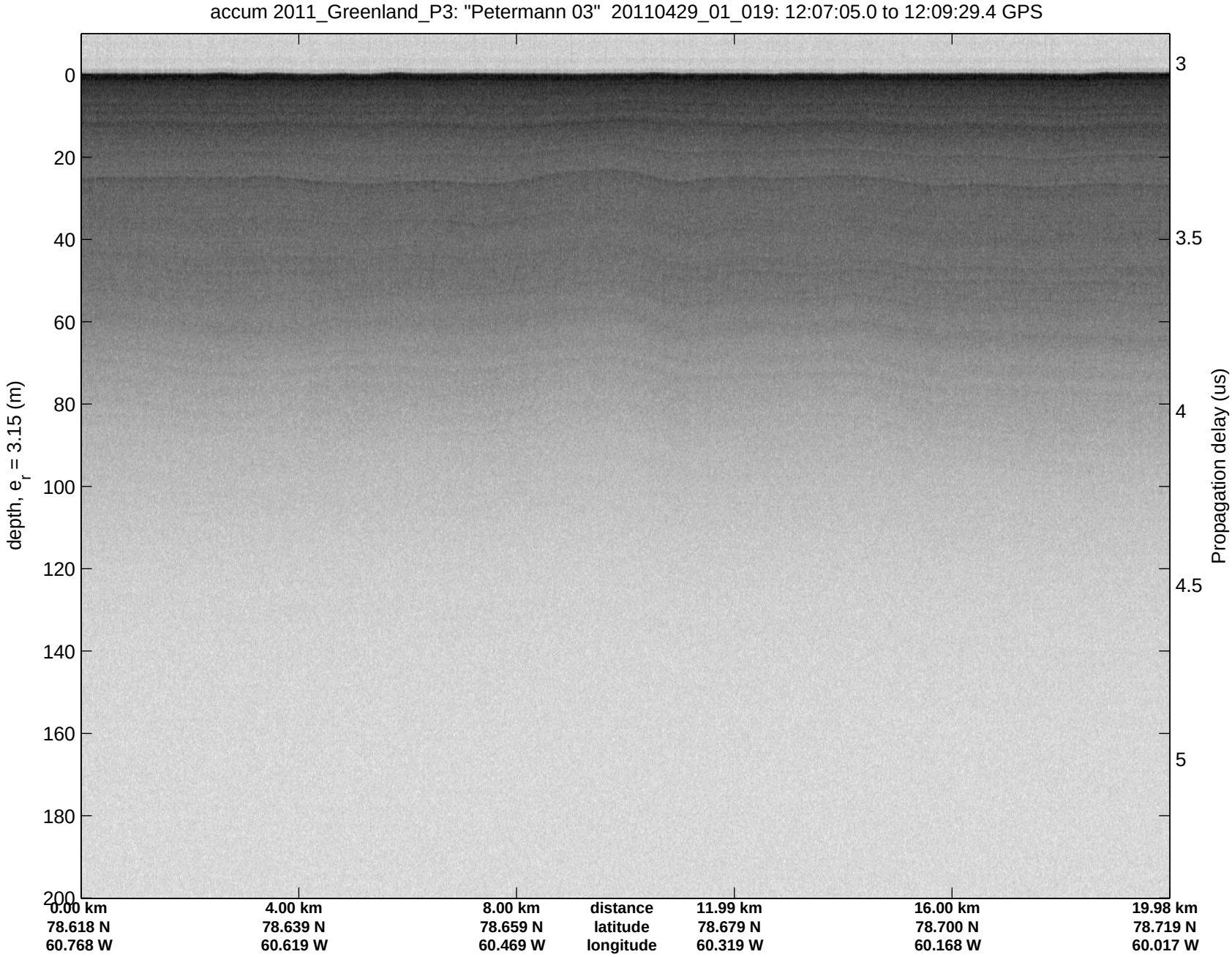

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

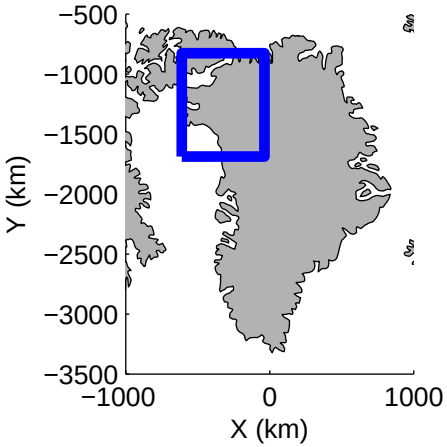

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_018: 12:04:44.1 to 12:07:04.8 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
78.515 N
61.505 W
4.00 km
78.536 N
61.359 W
8.00 km
78.556 N
61.212 W
distance
latitude
longitude
12.00 km
78.577 N
61.064 W
15.99 km
78.598 N
60.917 W
19.97 km
78.618 N
60.769 W

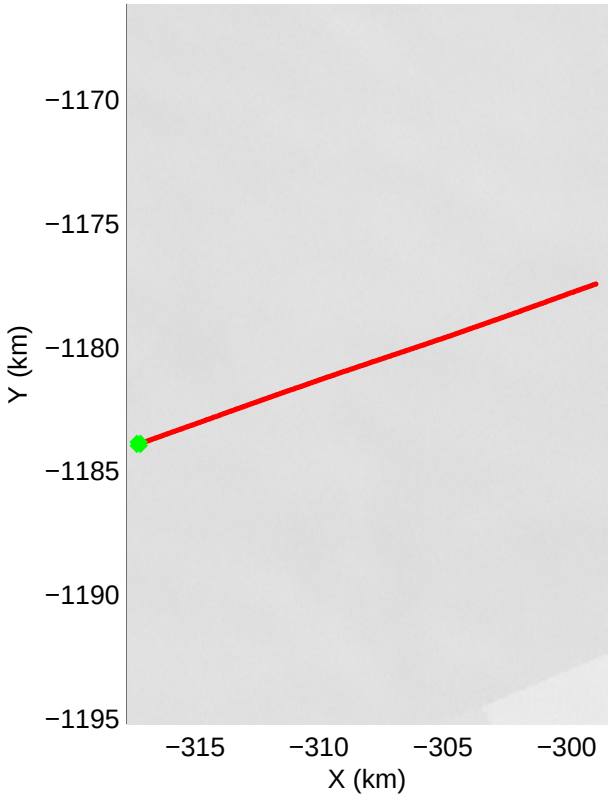

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

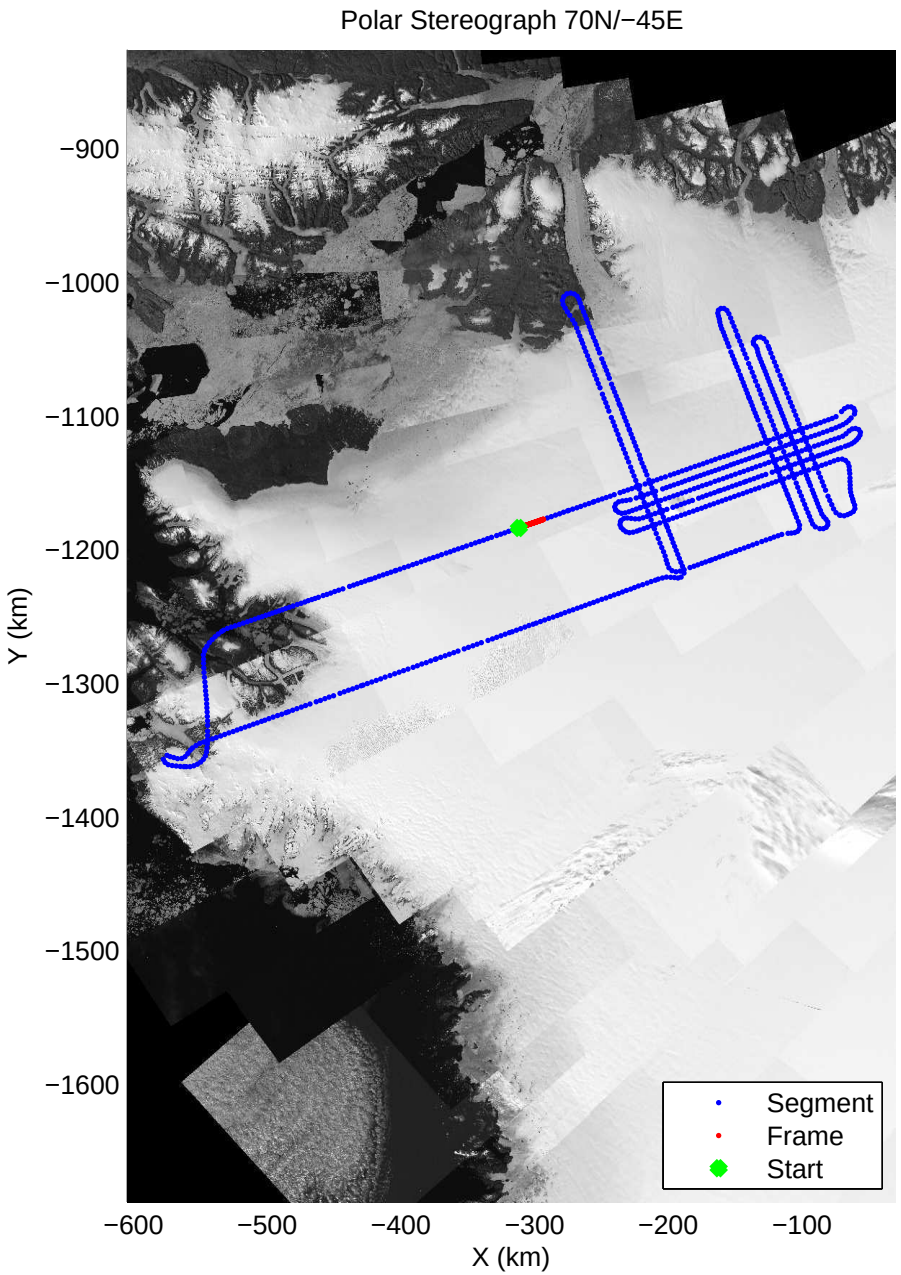

−1175
−1180
−1185
−1190
−1195
−1200
Y (km)
−335
−330
−325
−320
X (km)

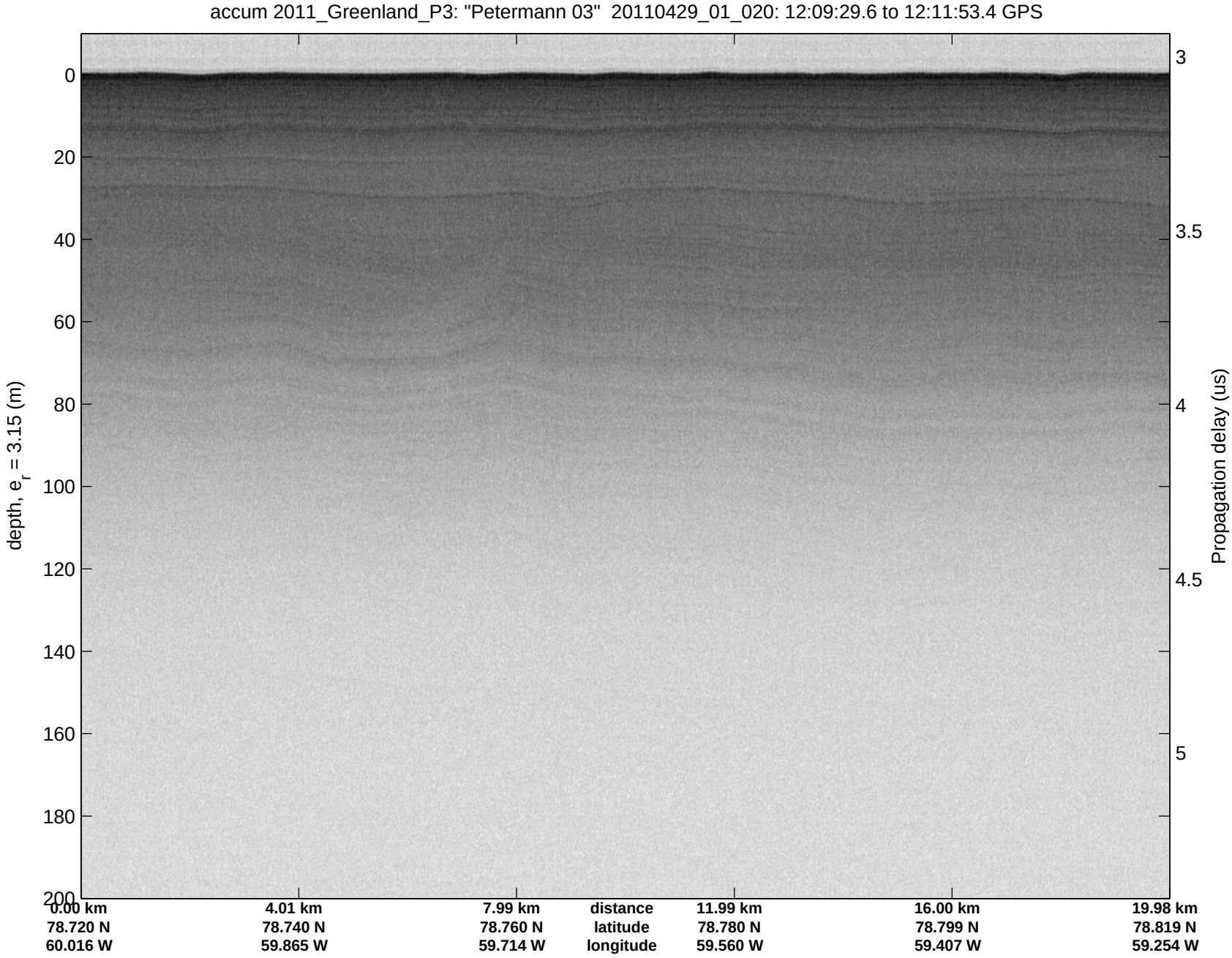

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

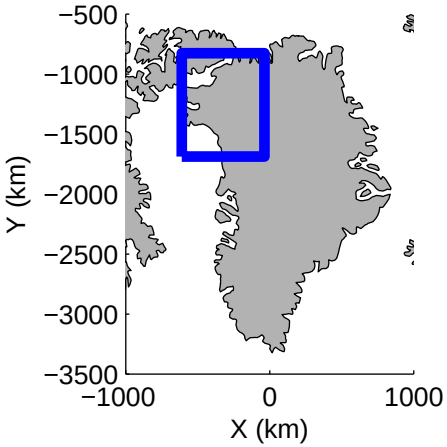

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_019: 12:07:05.0 to 12:09:29.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
78.618 N
60.768 W
4.00 km
78.639 N
60.619 W
8.00 km
78.659 N
60.469 W
distance
latitude
longitude
11.99 km
78.679 N
60.319 W
16.00 km
78.700 N
60.168 W
19.98 km
78.719 N
60.017 W

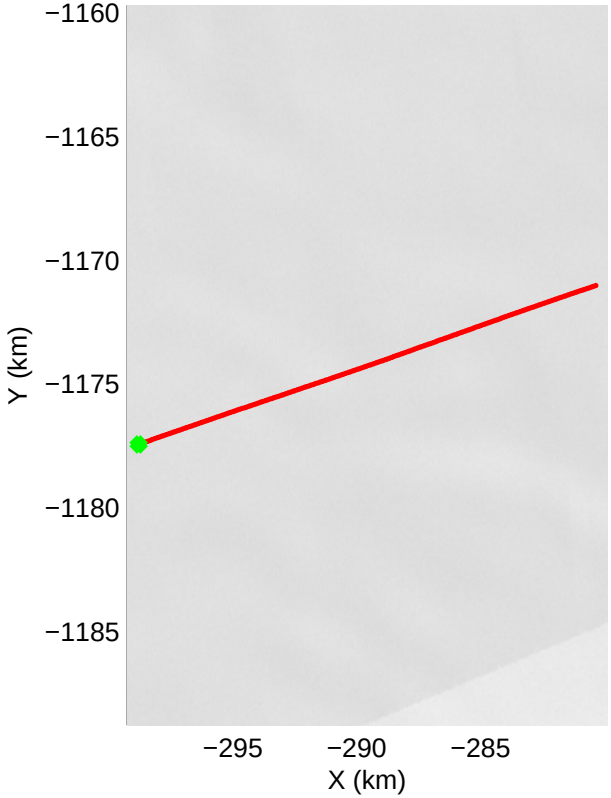

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

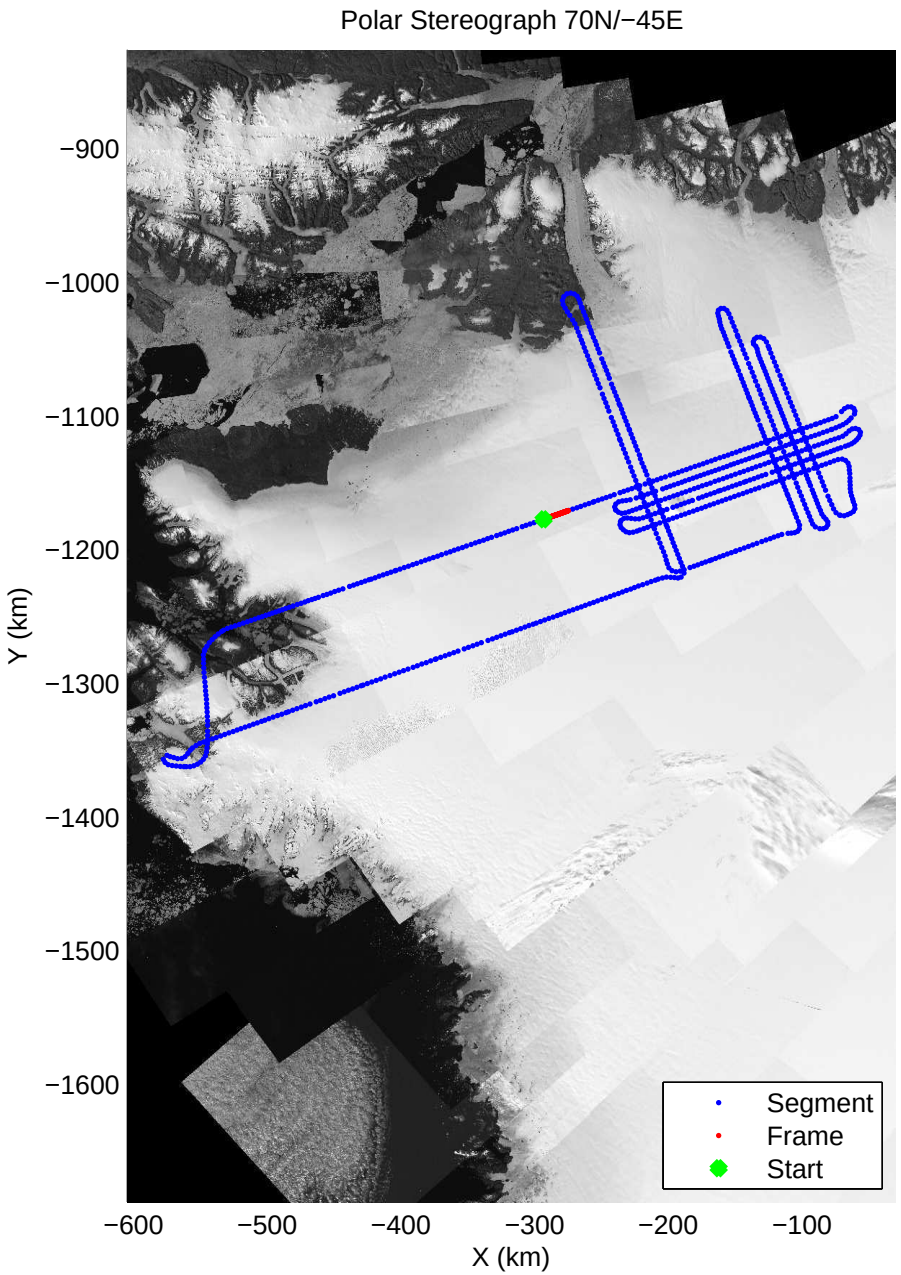

−1170
−1175
−1180
−1185
−1190
−1195
Y (km)
−315
−310
−305
−300
X (km)

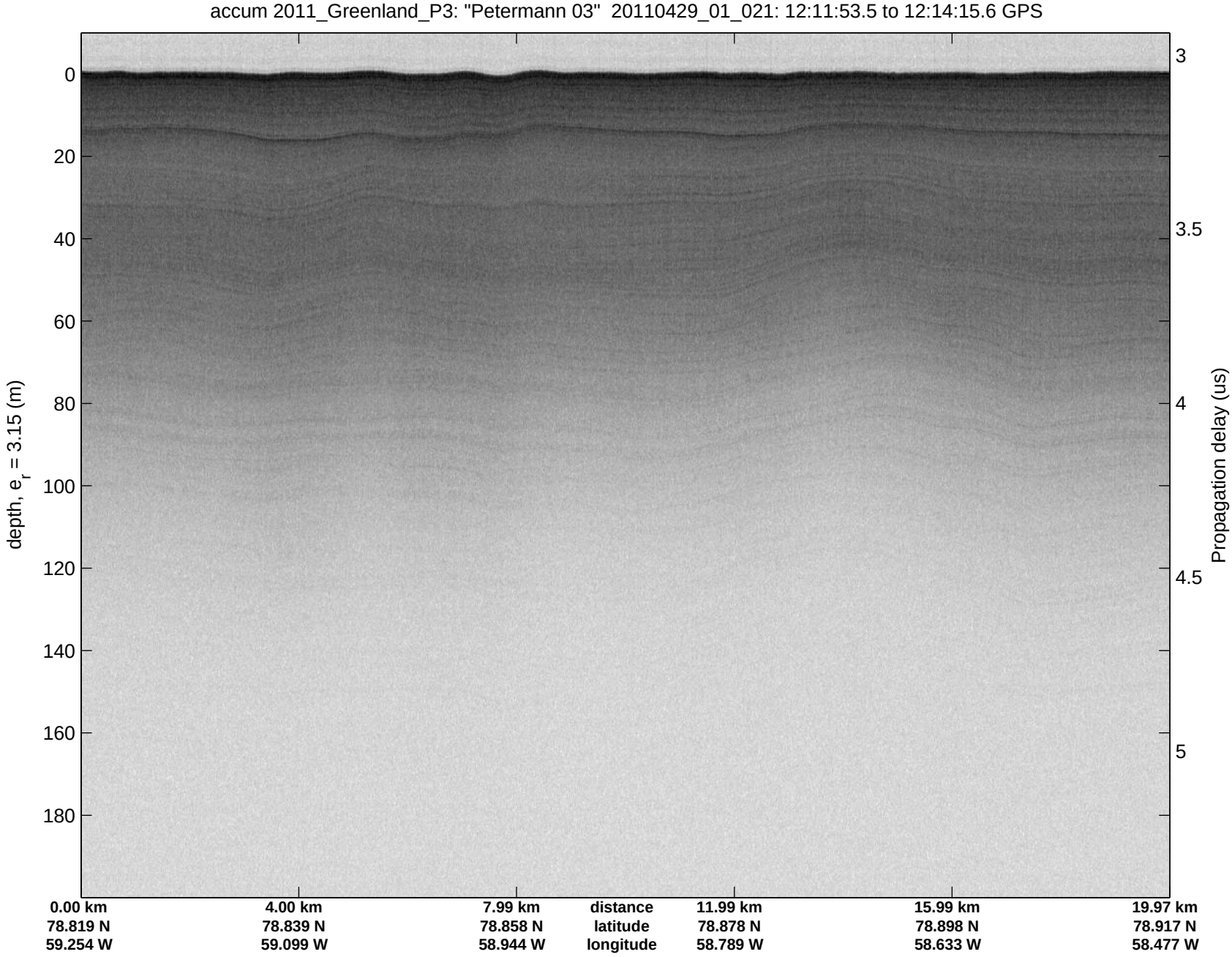

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

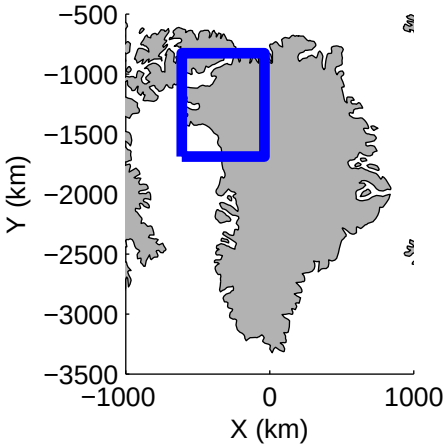

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_020: 12:09:29.6 to 12:11:53.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
78.720 N
60.016 W
4.01 km
78.740 N
59.865 W
7.99 km
78.760 N
59.714 W
distance
latitude
longitude
11.99 km
78.780 N
59.560 W
16.00 km
78.799 N
59.407 W
19.98 km
78.819 N
59.254 W

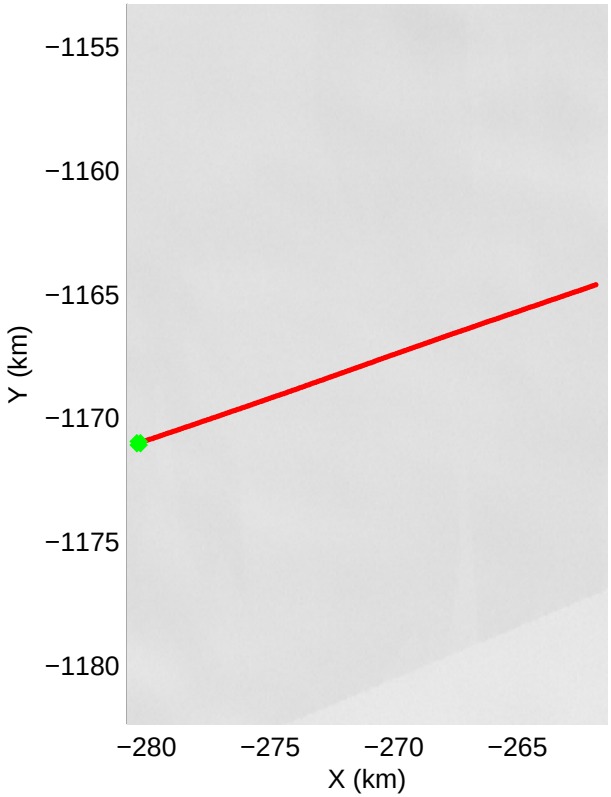

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

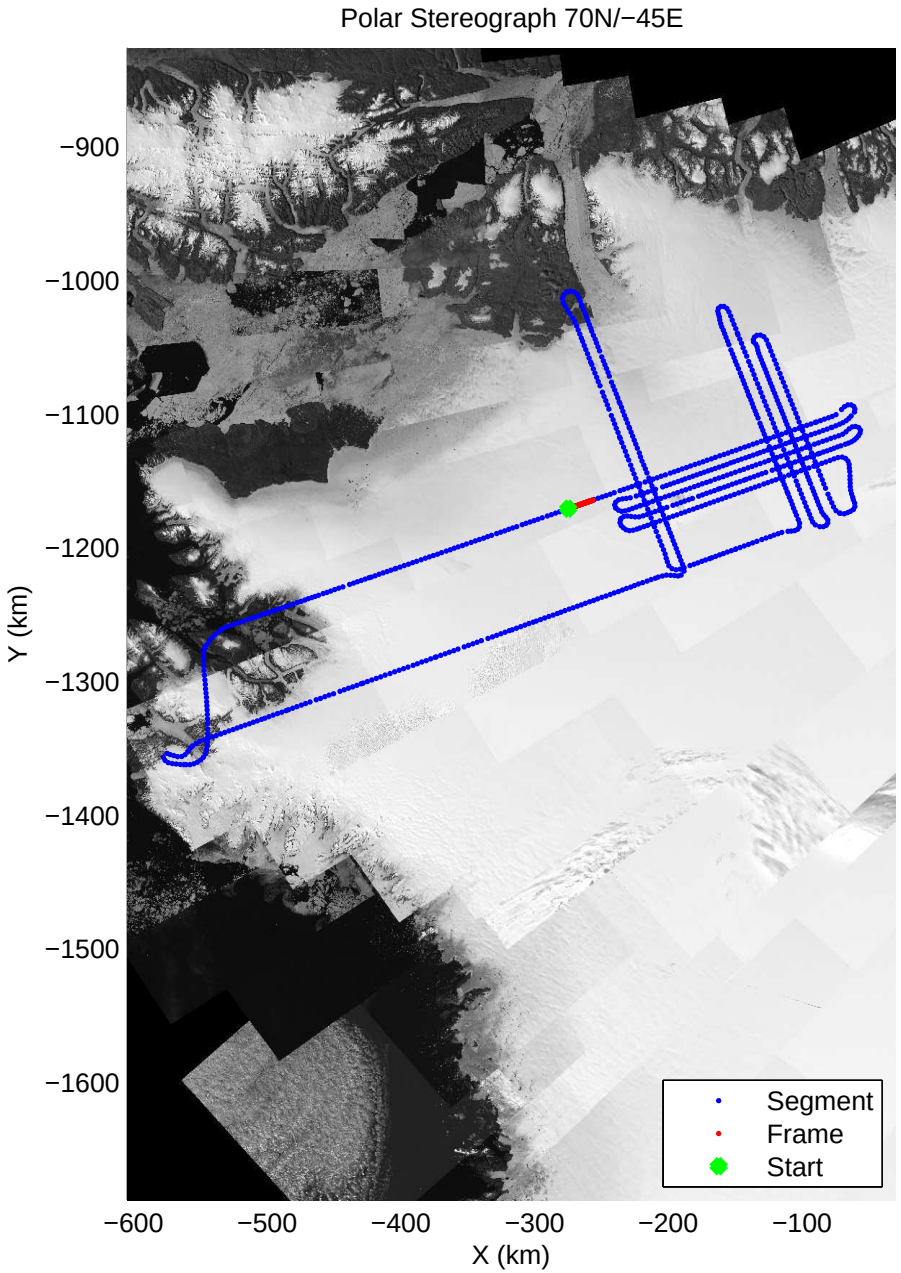

−1160
−1165
−1170
−1175
−1180
−1185
Y (km)
−295
−290
−285
X (km)

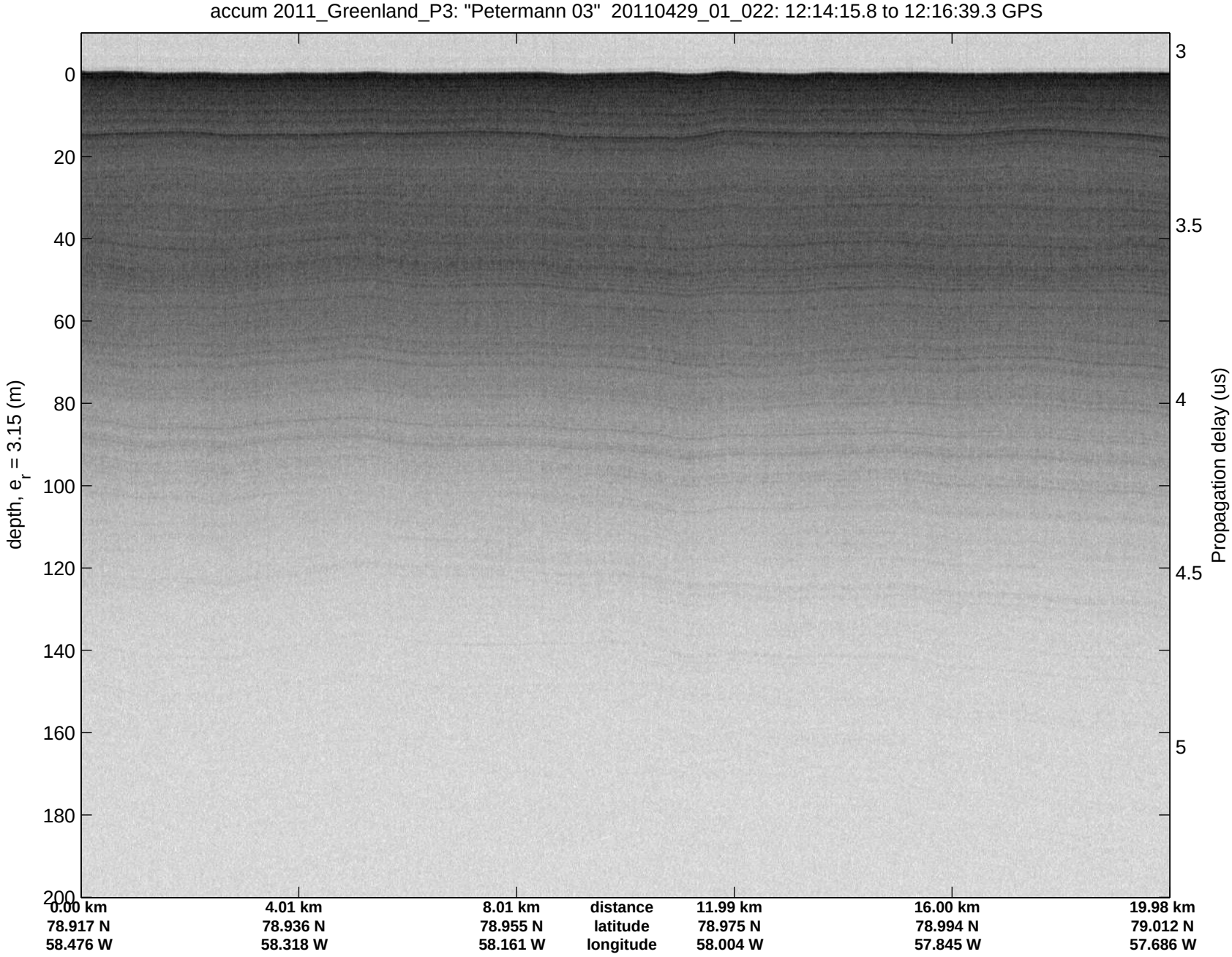

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

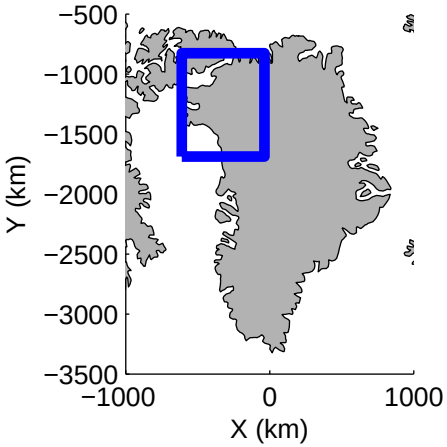

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_021: 12:11:53.5 to 12:14:15.6 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
78.819 N
59.254 W
4.00 km
78.839 N
59.099 W
7.99 km
78.858 N
58.944 W
distance
latitude
longitude
11.99 km
78.878 N
58.789 W
15.99 km
78.898 N
58.633 W
19.97 km
78.917 N
58.477 W

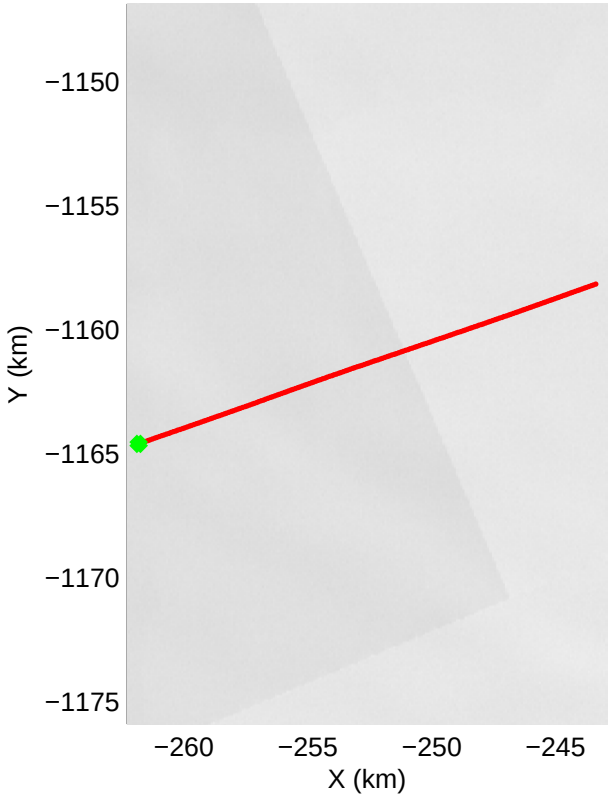

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

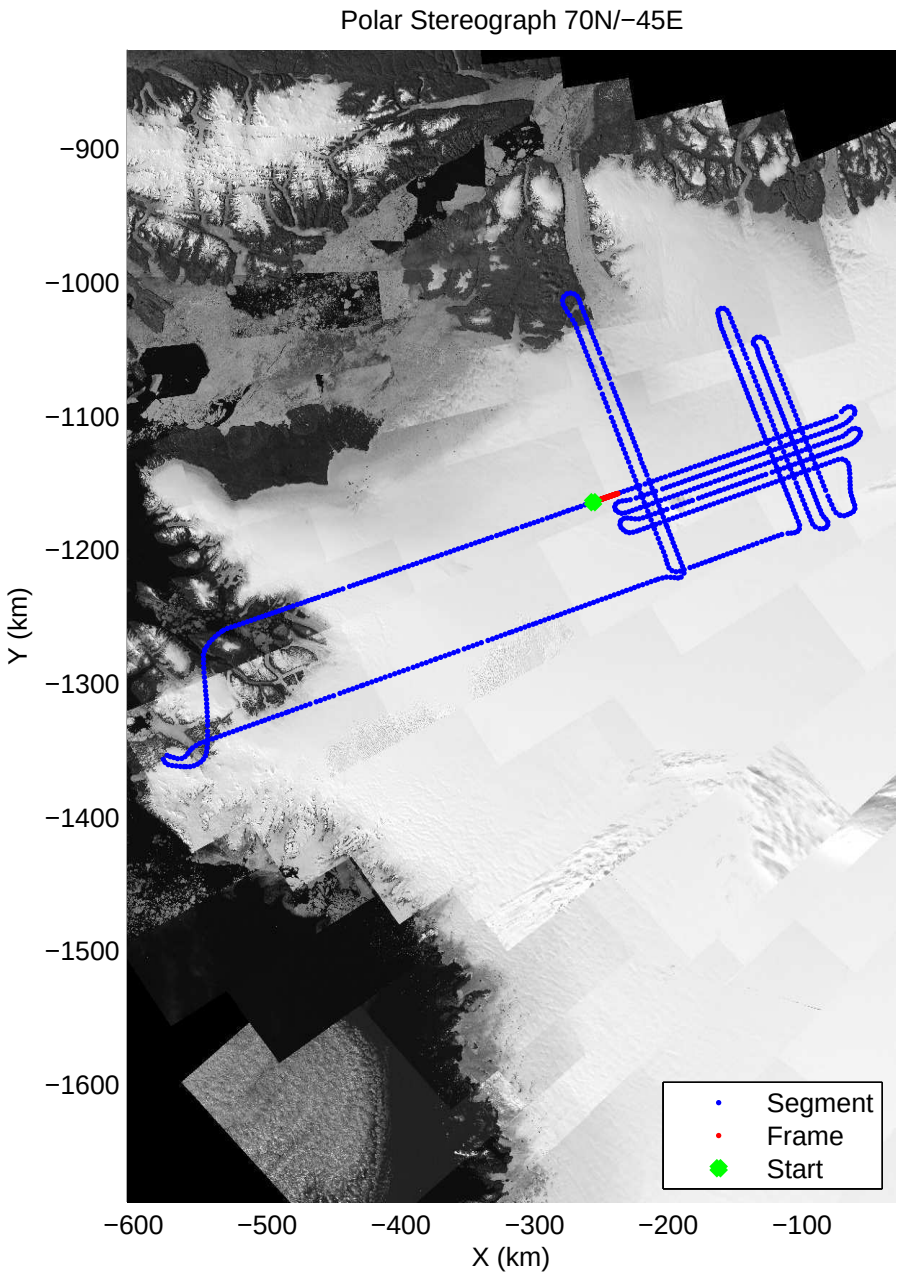

−1155
−1160
−1165
−1170
−1175
−1180
Y (km)
−280
−275
−270
−265
X (km)

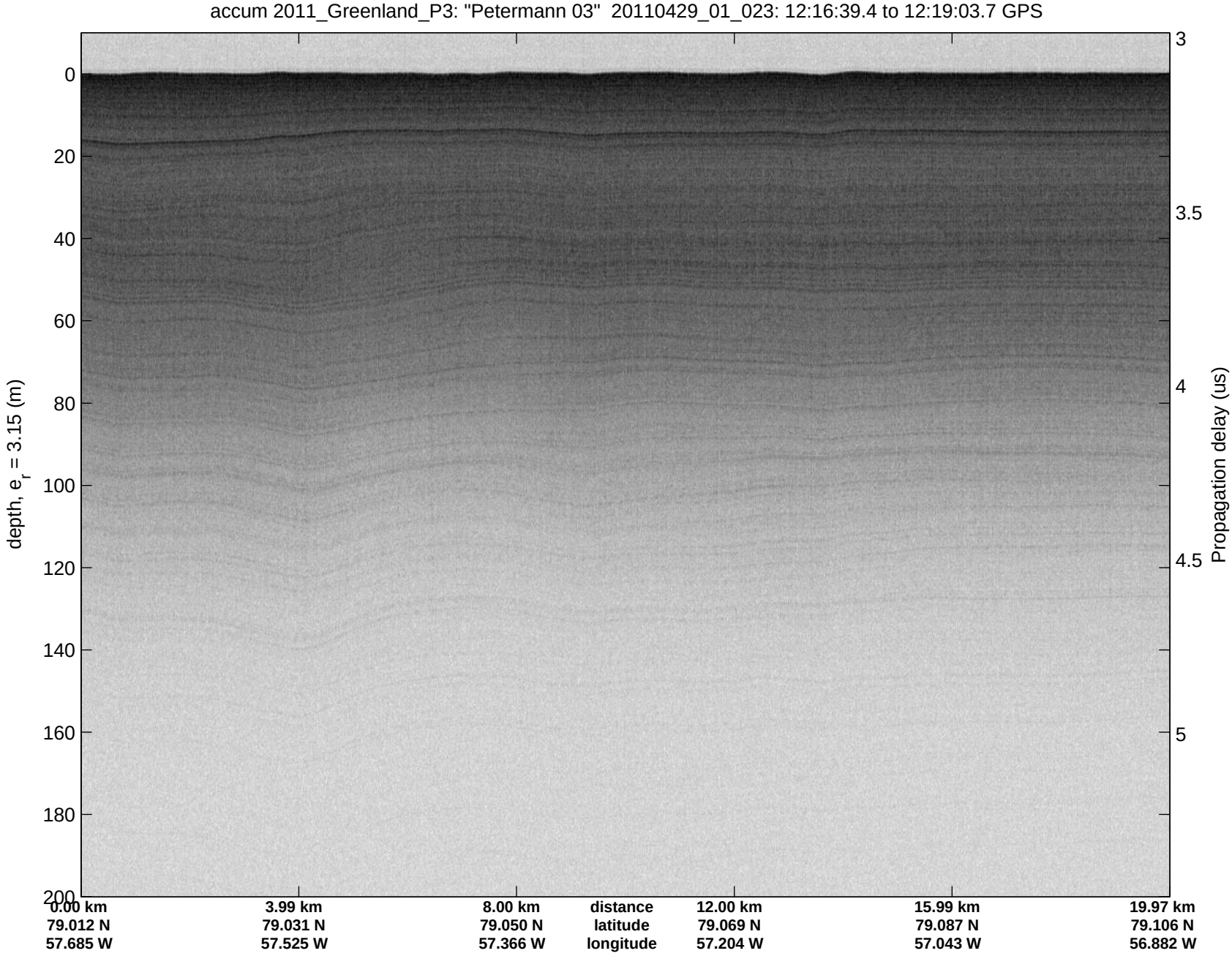

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

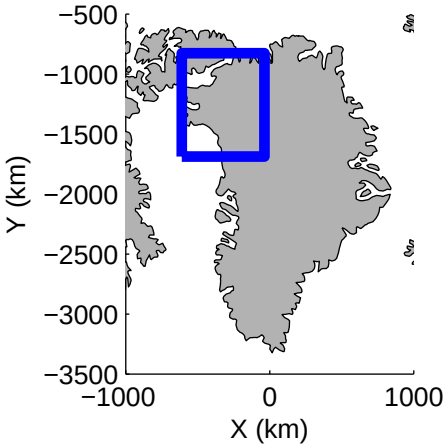

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_022: 12:14:15.8 to 12:16:39.3 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
78.917 N
58.476 W
4.01 km
78.936 N
58.318 W
8.01 km
78.955 N
58.161 W
distance
latitude
longitude
11.99 km
78.975 N
58.004 W
16.00 km
78.994 N
57.845 W
19.98 km
79.012 N
57.686 W

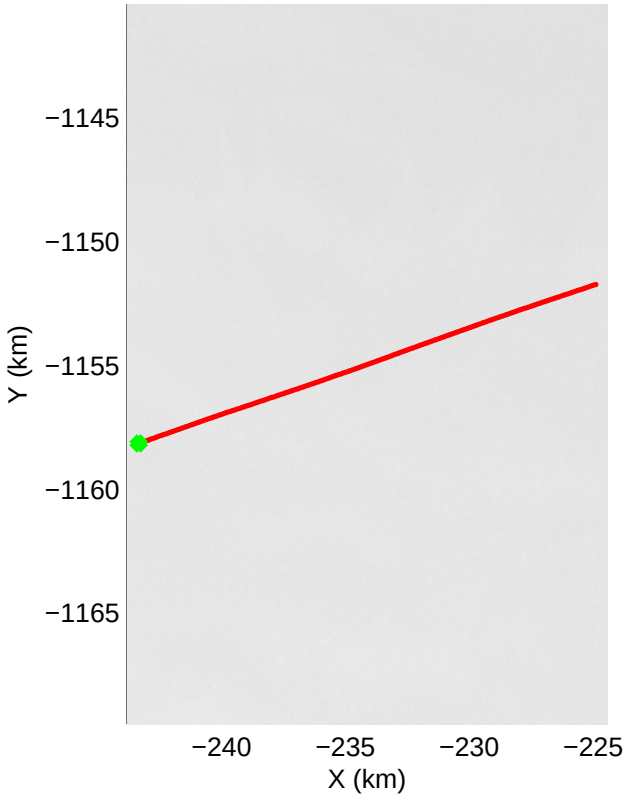

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

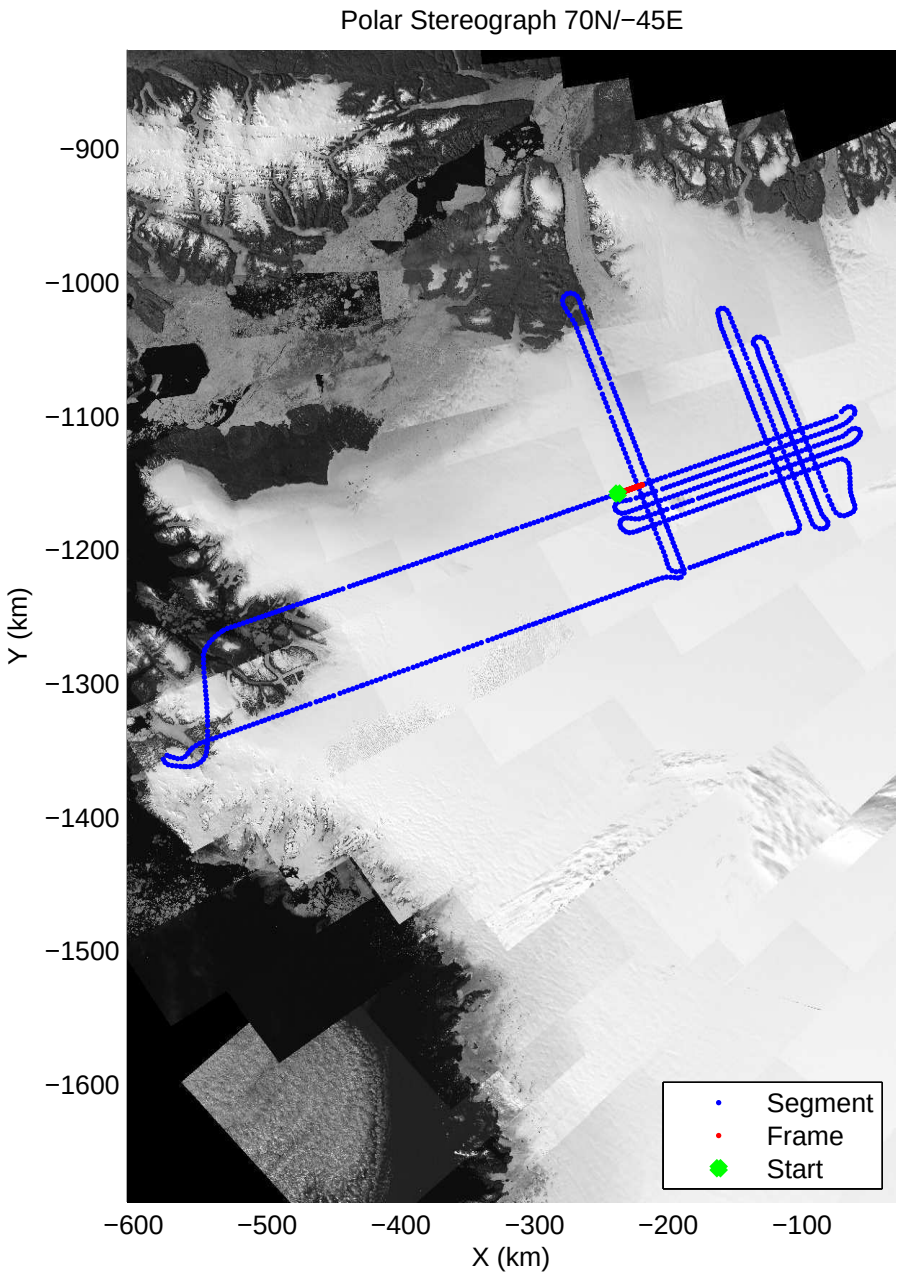

−1150
−1155
−1160
−1165
−1170
−1175
Y (km)
−260
−255
−250
−245
X (km)

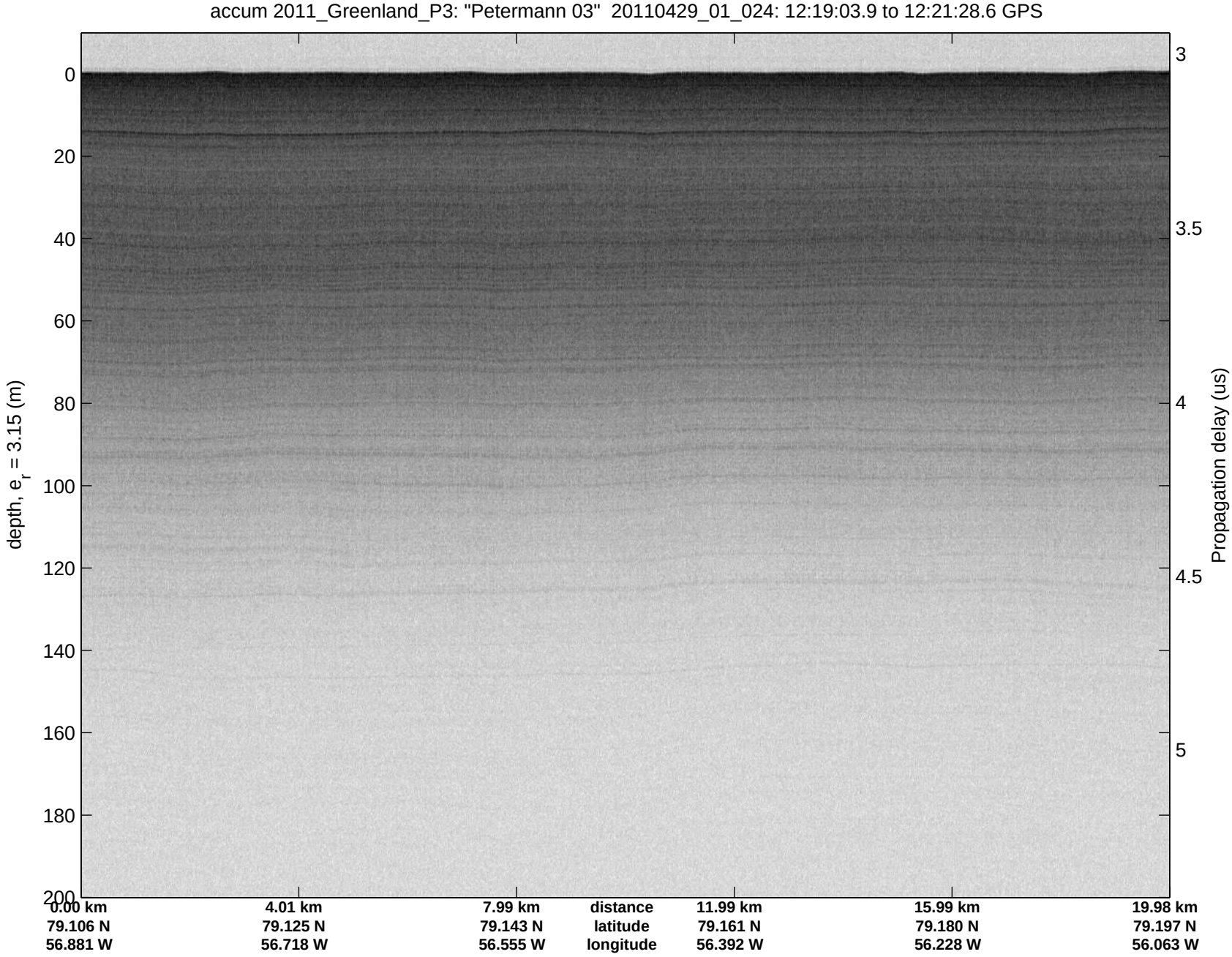

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

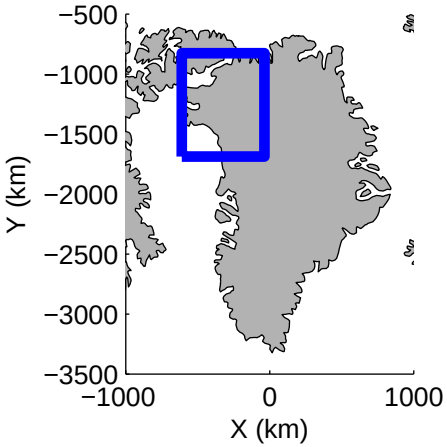

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_023: 12:16:39.4 to 12:19:03.7 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
79.012 N
57.685 W
3.99 km
79.031 N
57.525 W
8.00 km
79.050 N
57.366 W
distance
latitude
longitude
12.00 km
79.069 N
57.204 W
15.99 km
79.087 N
57.043 W
19.97 km
79.106 N
56.882 W

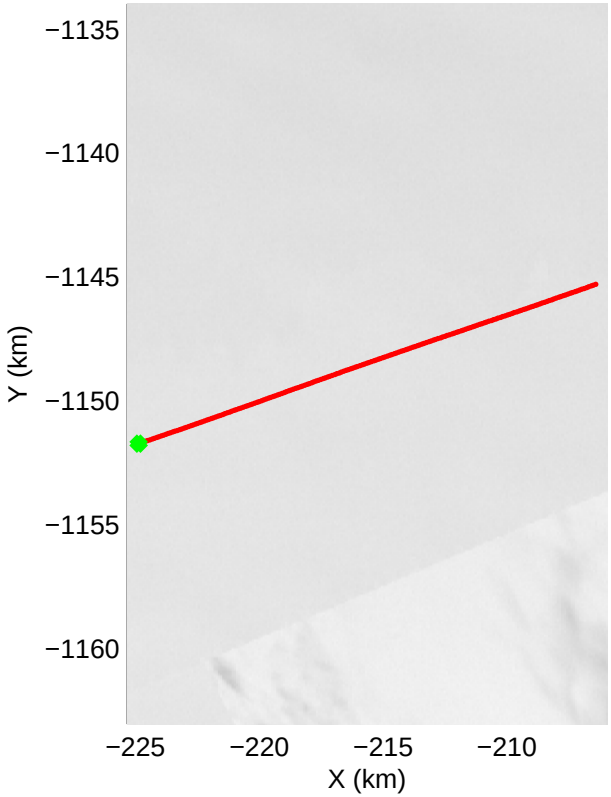

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

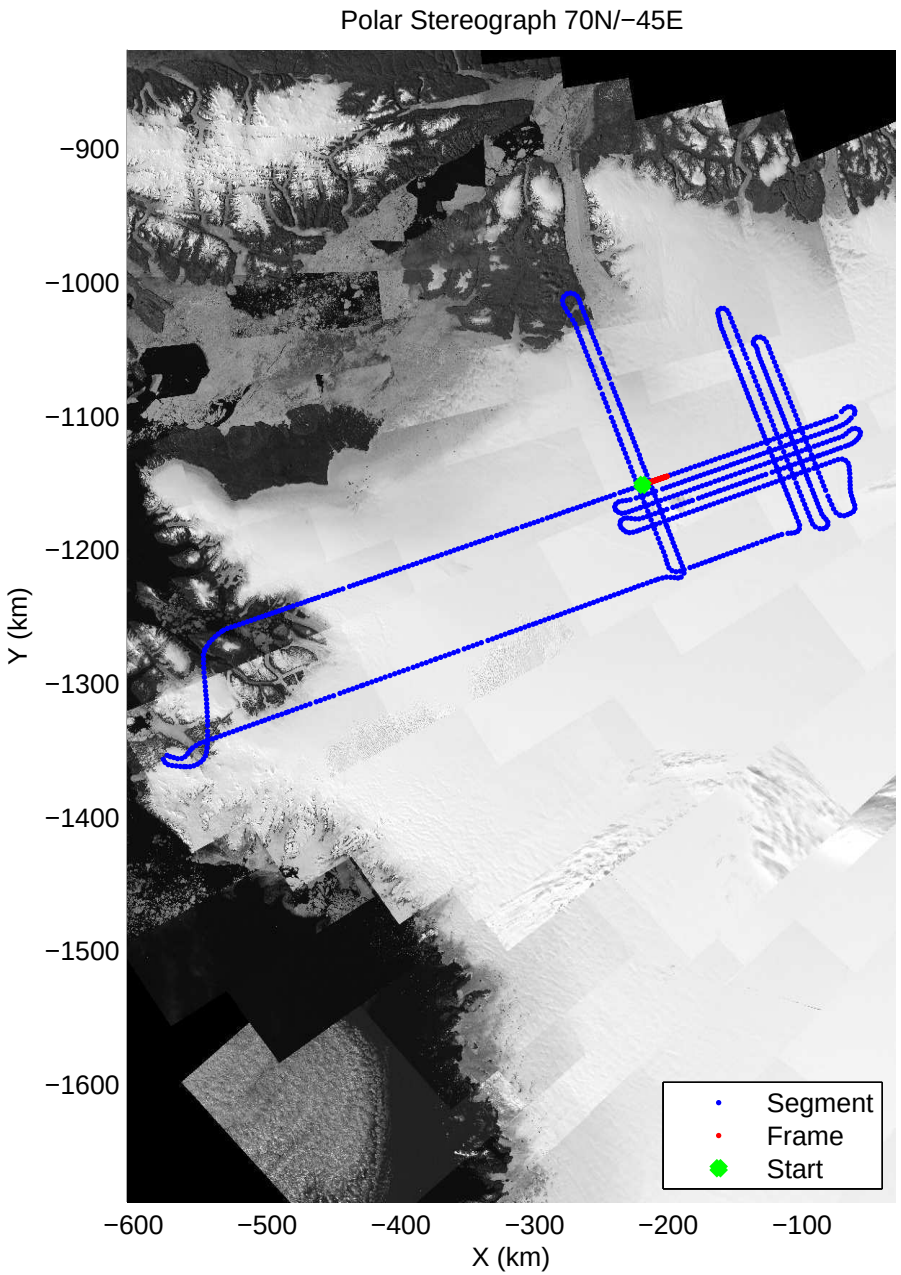

−1145
−1150
−1155
−1160
−1165
Y (km)
−240
−235
−230
−225
X (km)

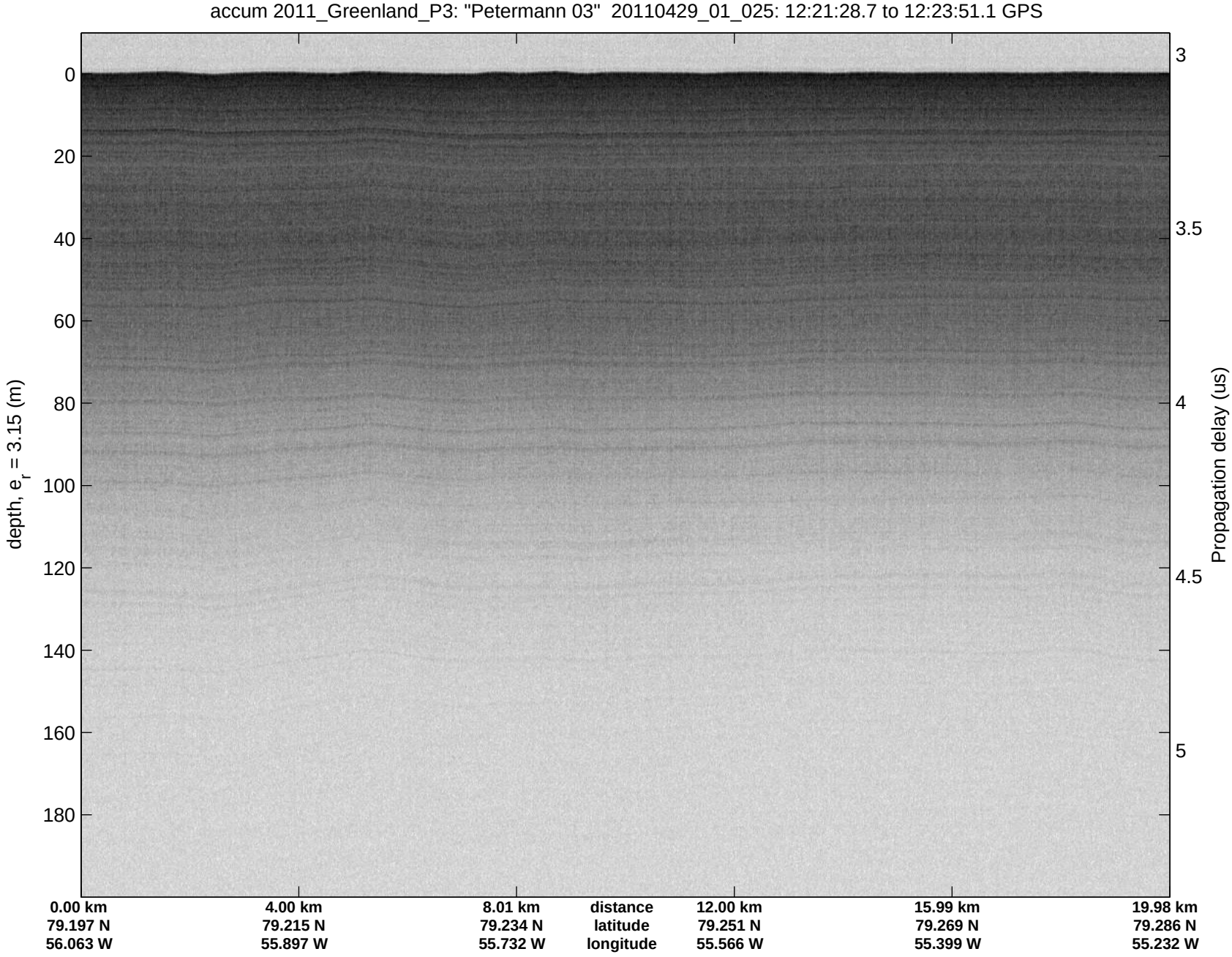

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

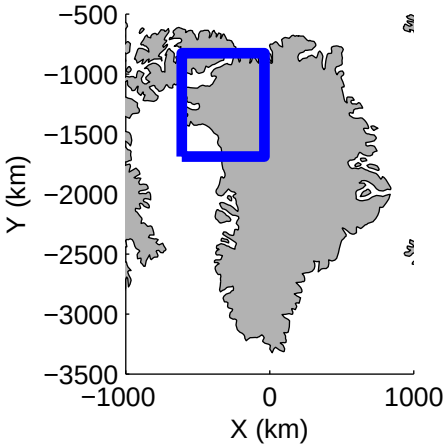

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_024: 12:19:03.9 to 12:21:28.6 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.106 N
56.881 W
4.01 km
79.125 N
56.718 W
7.99 km
79.143 N
56.555 W
distance
latitude
longitude
11.99 km
79.161 N
56.392 W
15.99 km
79.180 N
56.228 W
19.98 km
79.197 N
56.063 W

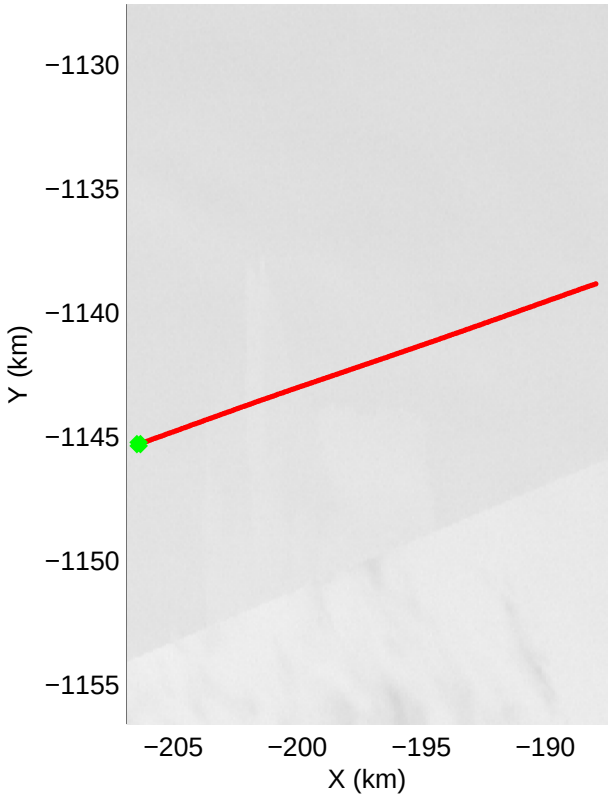

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

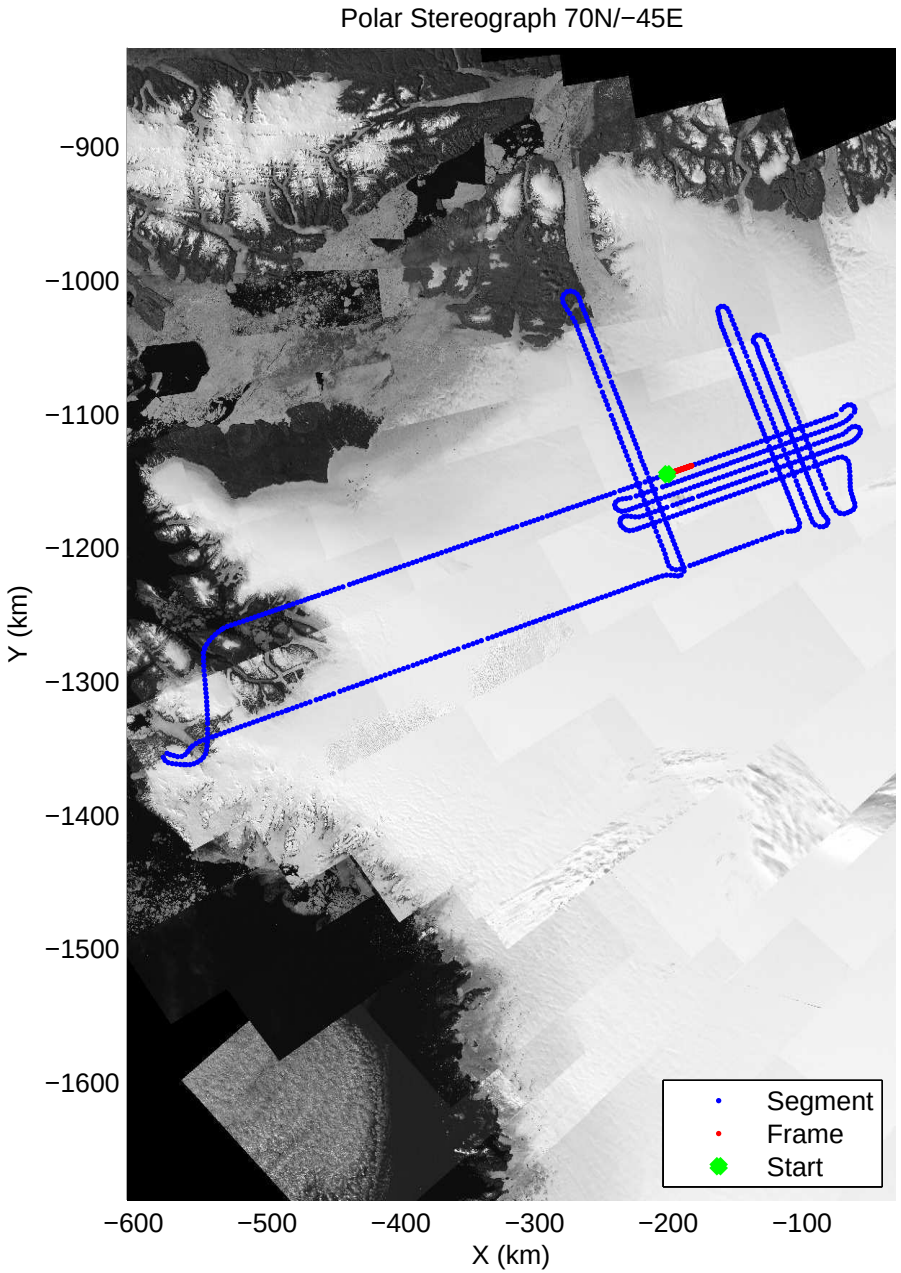

−1135
−1140
−1145
−1150
−1155
−1160
Y (km)
−225
−220
−215
−210
X (km)

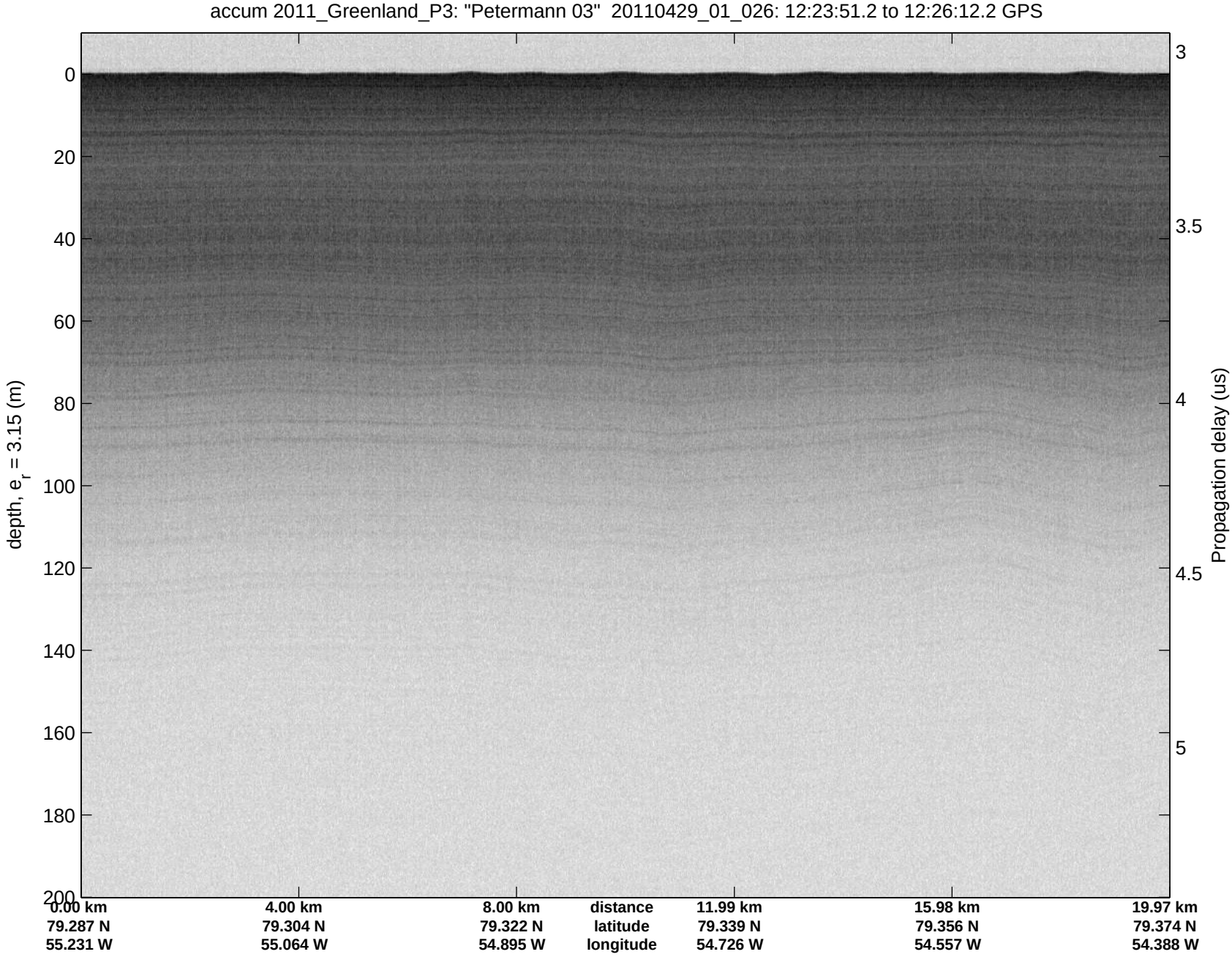

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

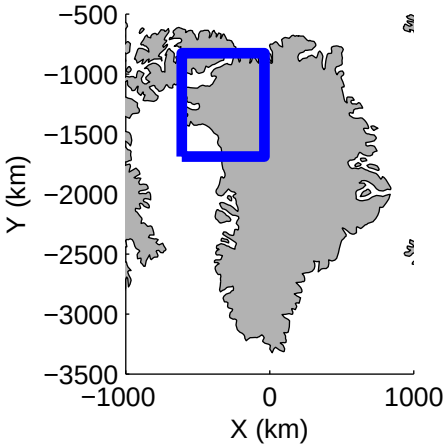

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_025: 12:21:28.7 to 12:23:51.1 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.197 N
56.063 W
4.00 km
79.215 N
55.897 W
8.01 km
79.234 N
55.732 W
distance
latitude
longitude
12.00 km
79.251 N
55.566 W
15.99 km
79.269 N
55.399 W
19.98 km
79.286 N
55.232 W

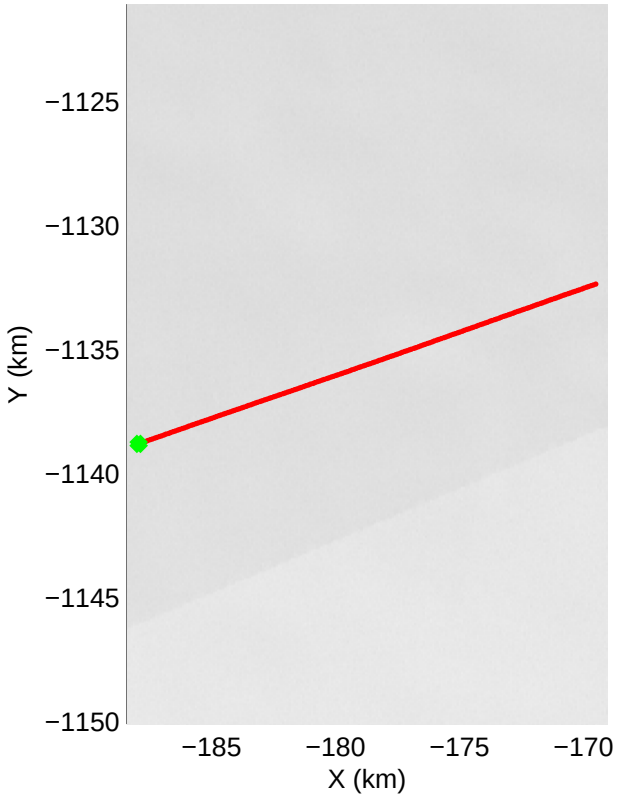

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

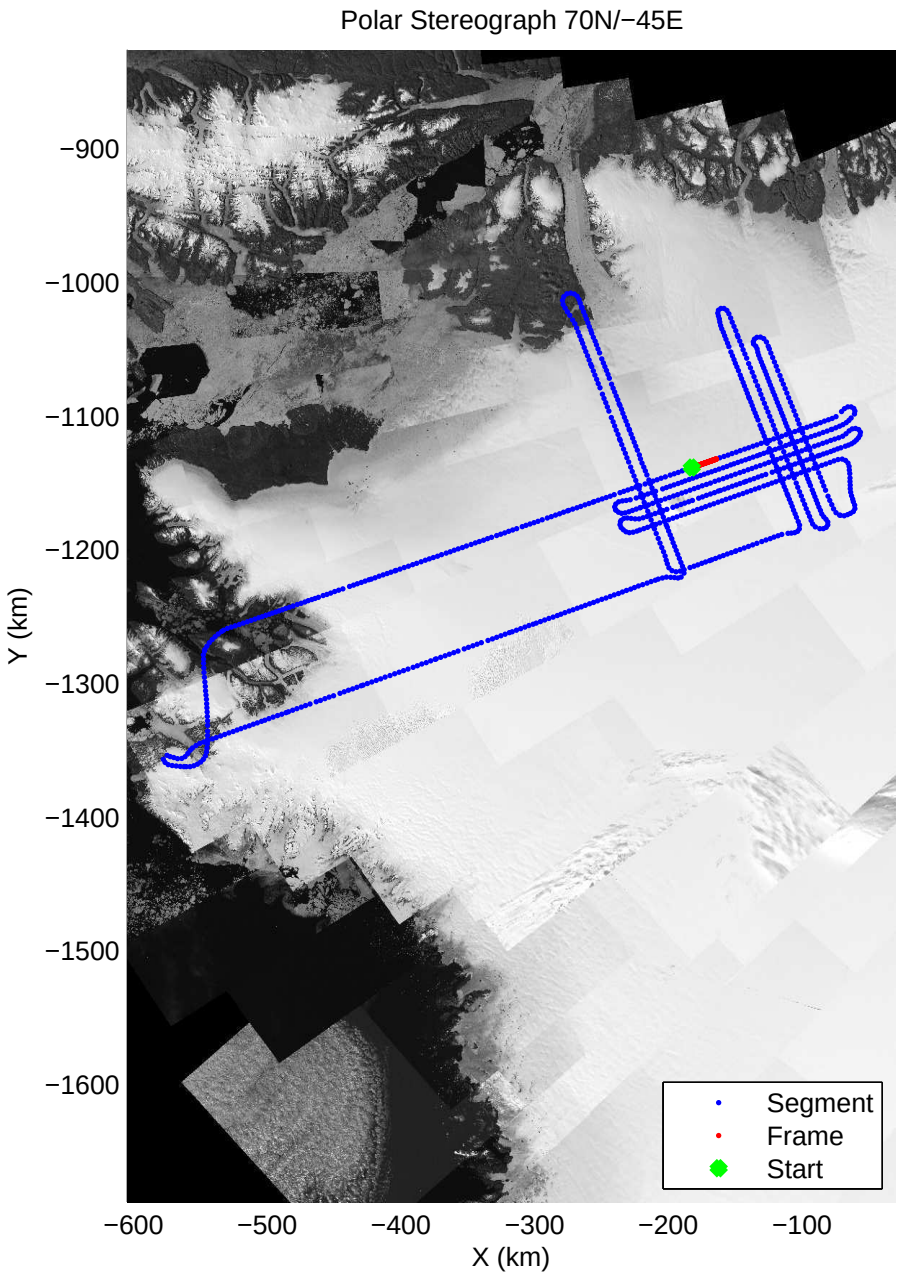

−1130
−1135
−1140
−1145
−1150
−1155
Y (km)
−205
−200
−195
−190
X (km)

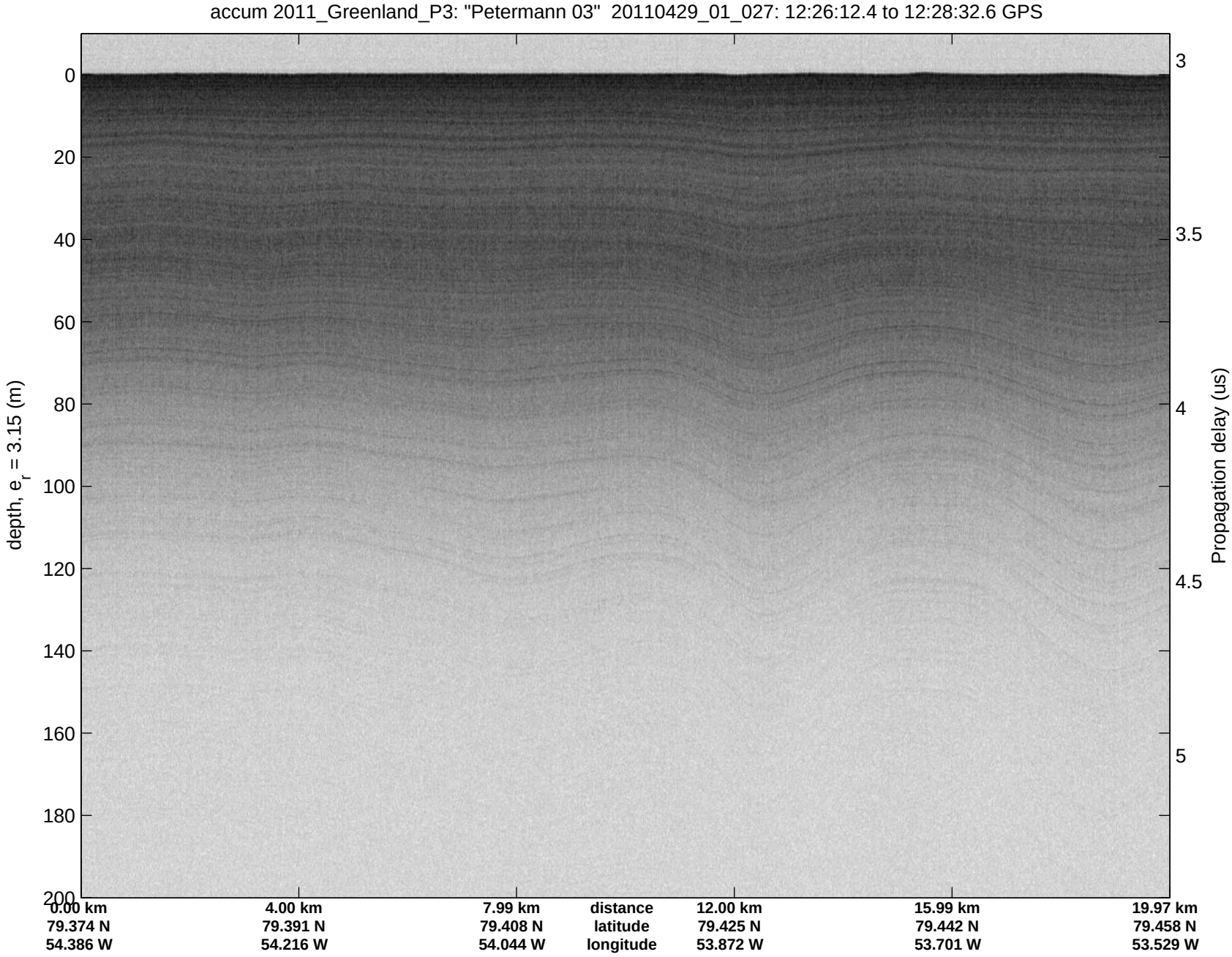

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

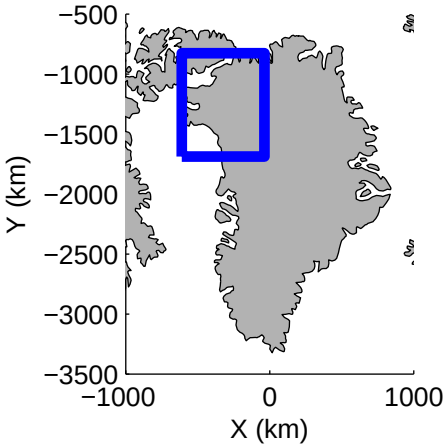

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_026: 12:23:51.2 to 12:26:12.2 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.287 N
55.231 W
4.00 km
79.304 N
55.064 W
8.00 km
79.322 N
54.895 W
distance
latitude
longitude
11.99 km
79.339 N
54.726 W
15.98 km
79.356 N
54.557 W
19.97 km
79.374 N
54.388 W

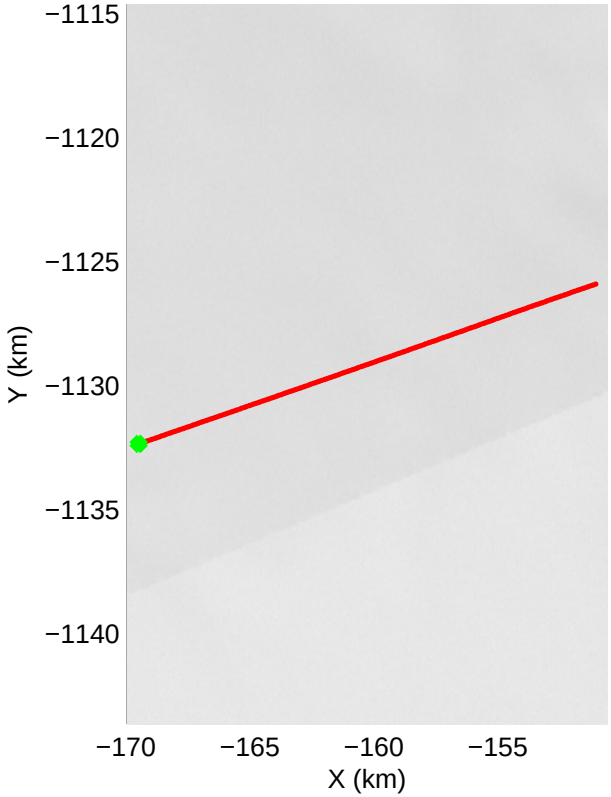

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

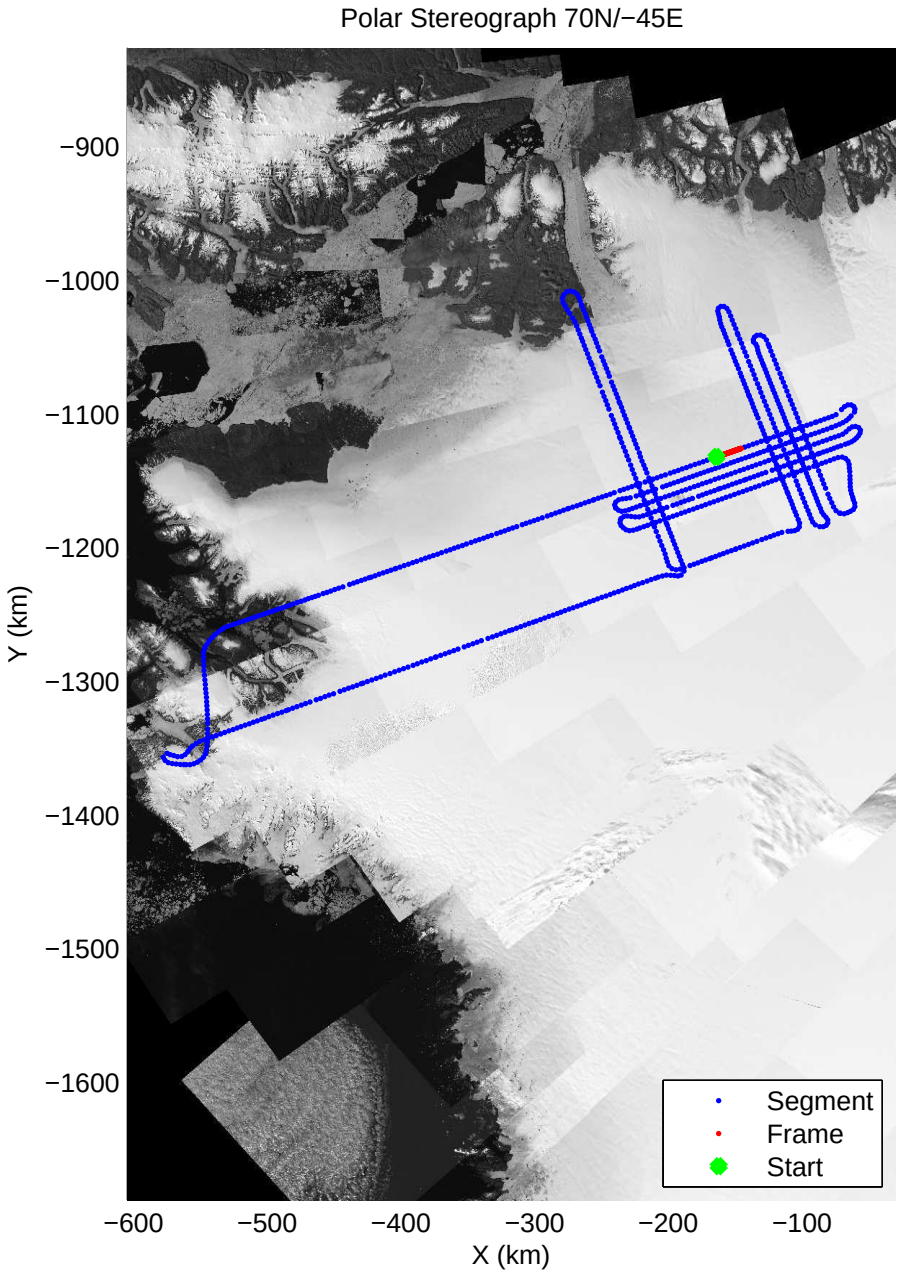

−1125
−1130
−1135
−1140
−1145
−1150
Y (km)
−185
−180
−175
−170
X (km)

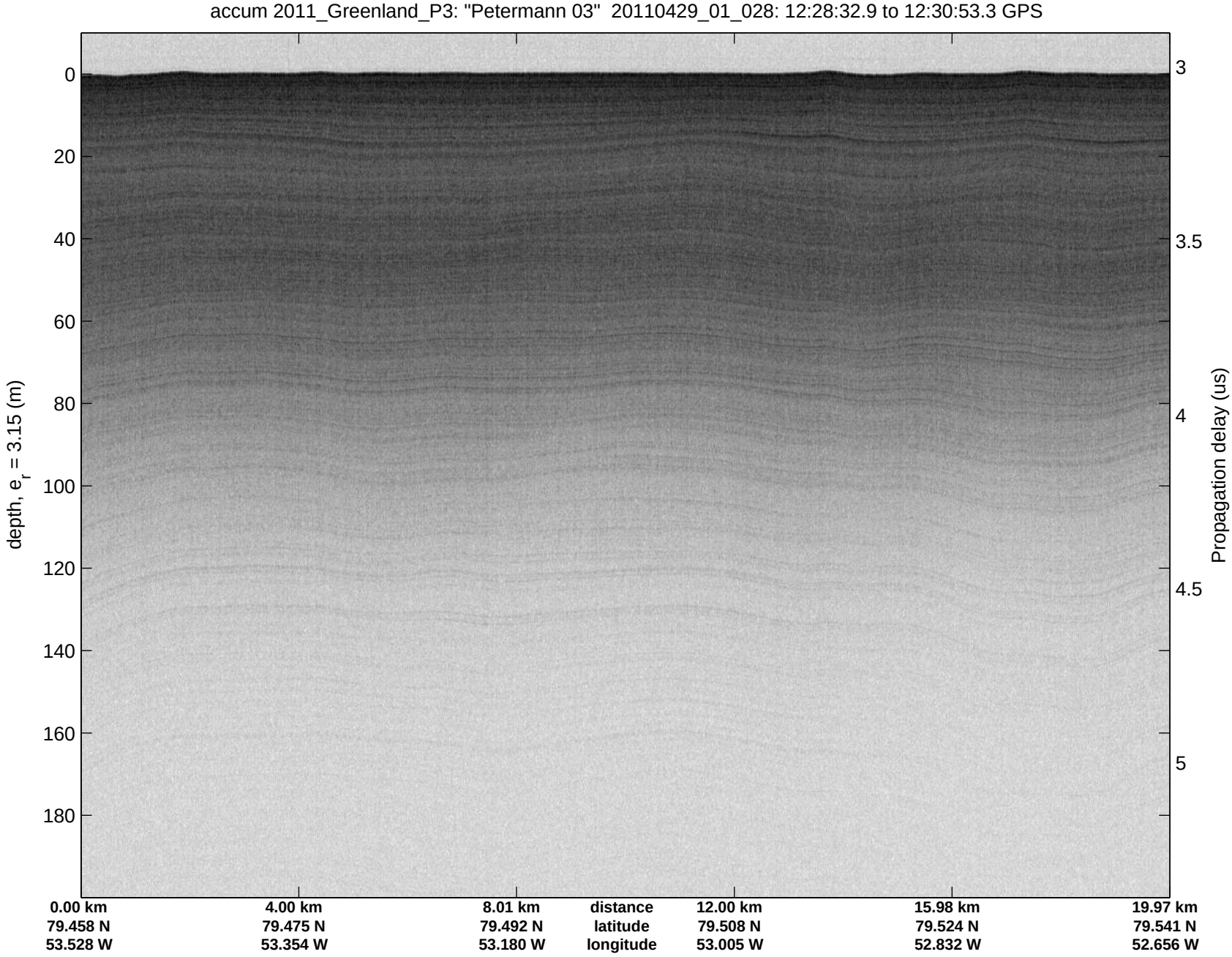

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

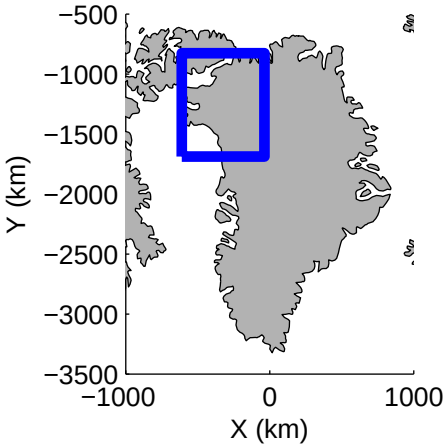

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_027: 12:26:12.4 to 12:28:32.6 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.374 N
54.386 W
4.00 km
79.391 N
54.216 W
7.99 km
79.408 N
54.044 W
distance
latitude
longitude
12.00 km
79.425 N
53.872 W
15.99 km
79.442 N
53.701 W
19.97 km
79.458 N
53.529 W

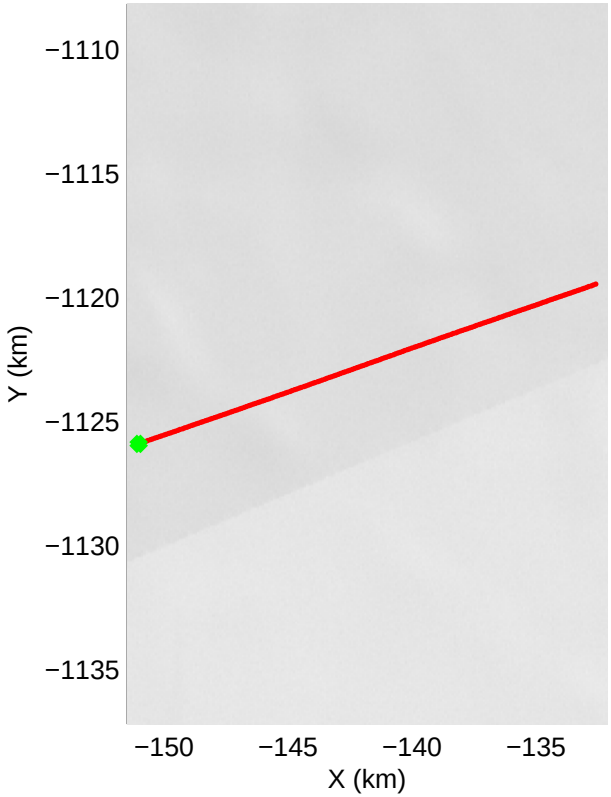

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

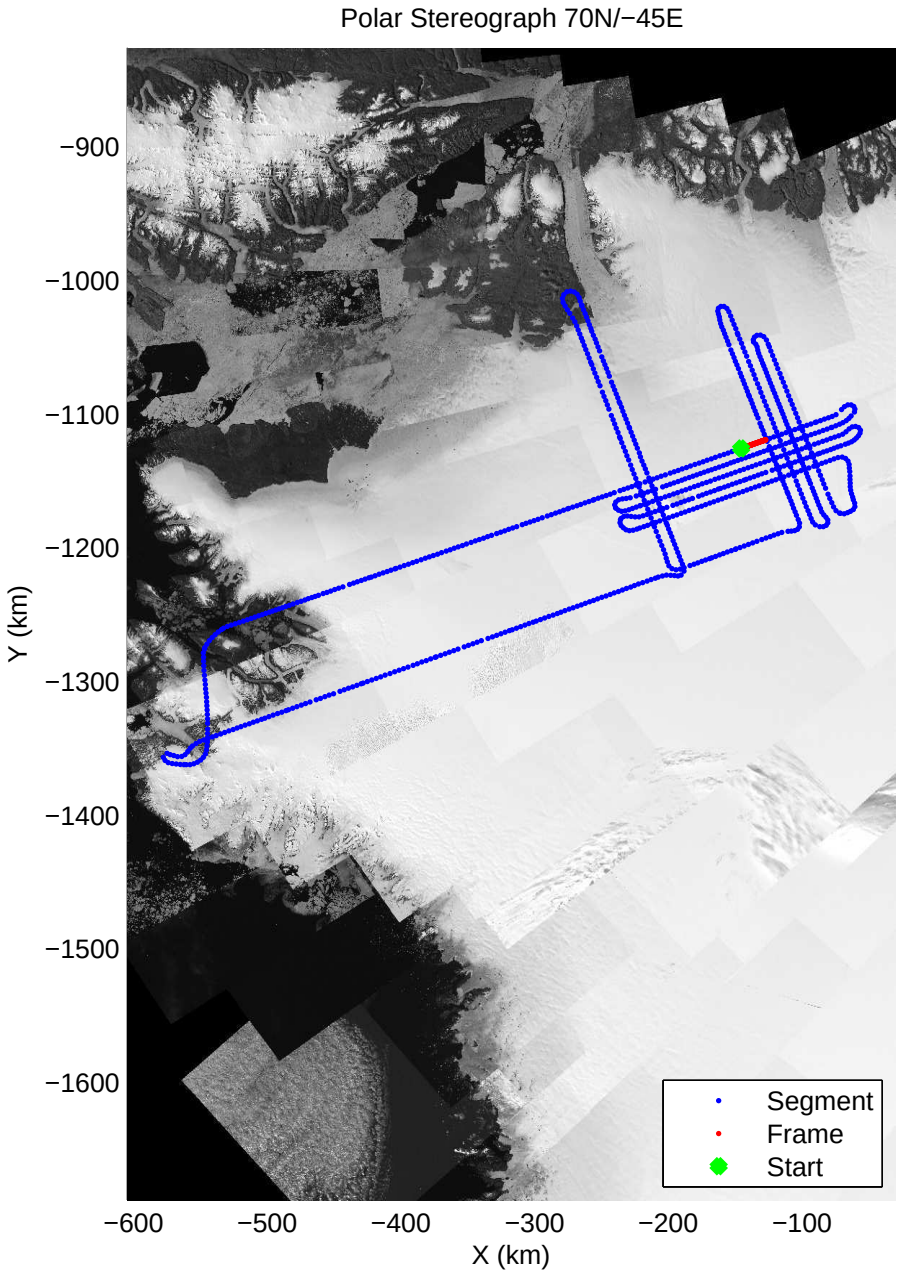

−1115
−1120
−1125
−1130
−1135
−1140
Y (km)
−170
−165
−160
−155
X (km)

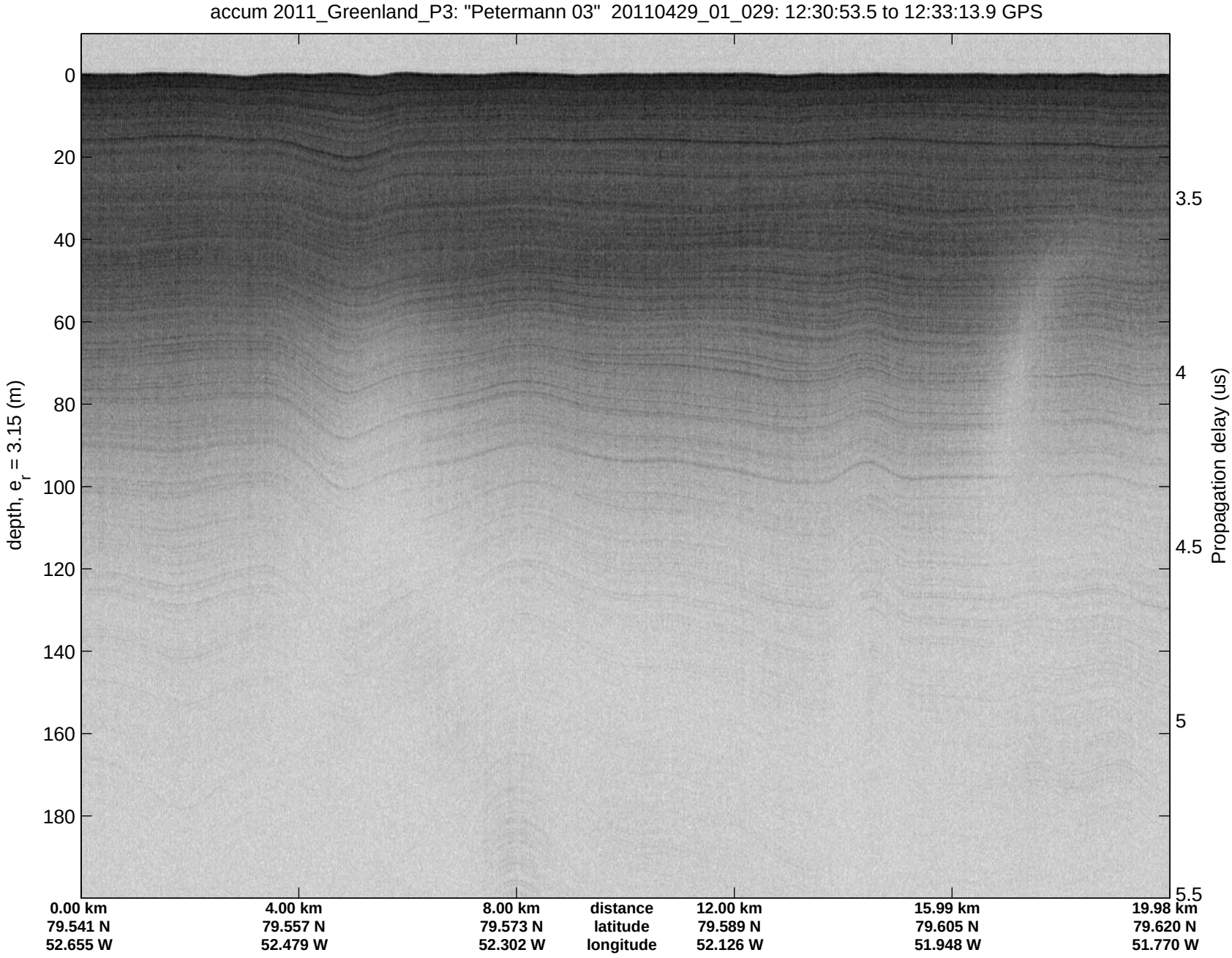

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

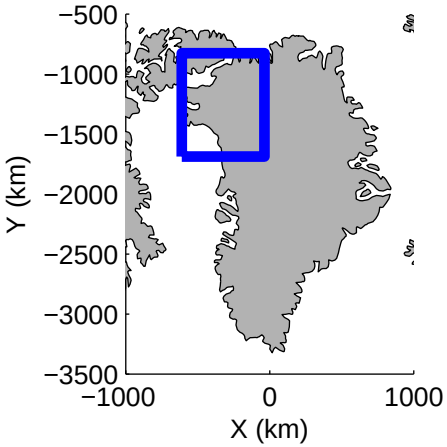

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_028: 12:28:32.9 to 12:30:53.3 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.458 N
53.528 W
4.00 km
79.475 N
53.354 W
8.01 km
79.492 N
53.180 W
distance
latitude
longitude
12.00 km
79.508 N
53.005 W
15.98 km
79.524 N
52.832 W
19.97 km
79.541 N
52.656 W

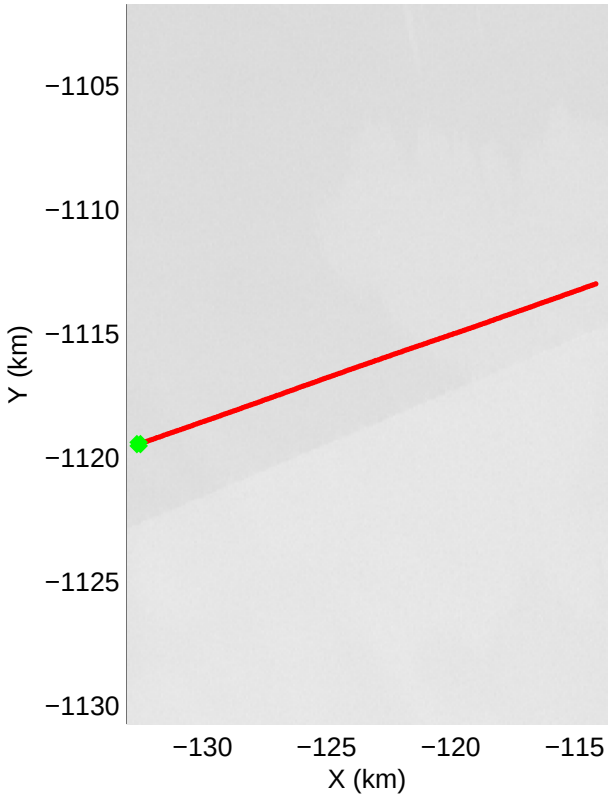

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

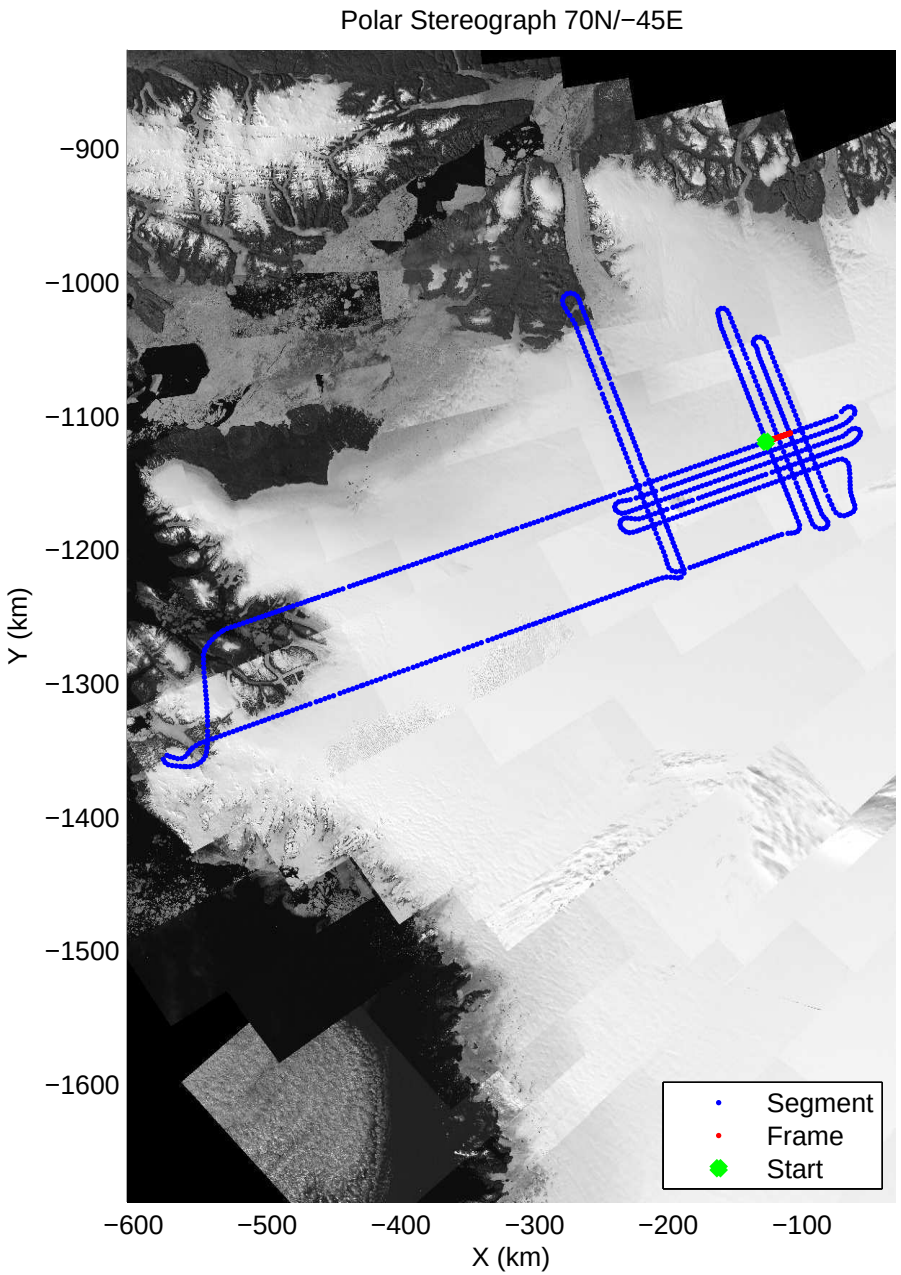

−1110
−1115
−1120
−1125
−1130
−1135
Y (km)
−150
−145
−140
−135
X (km)

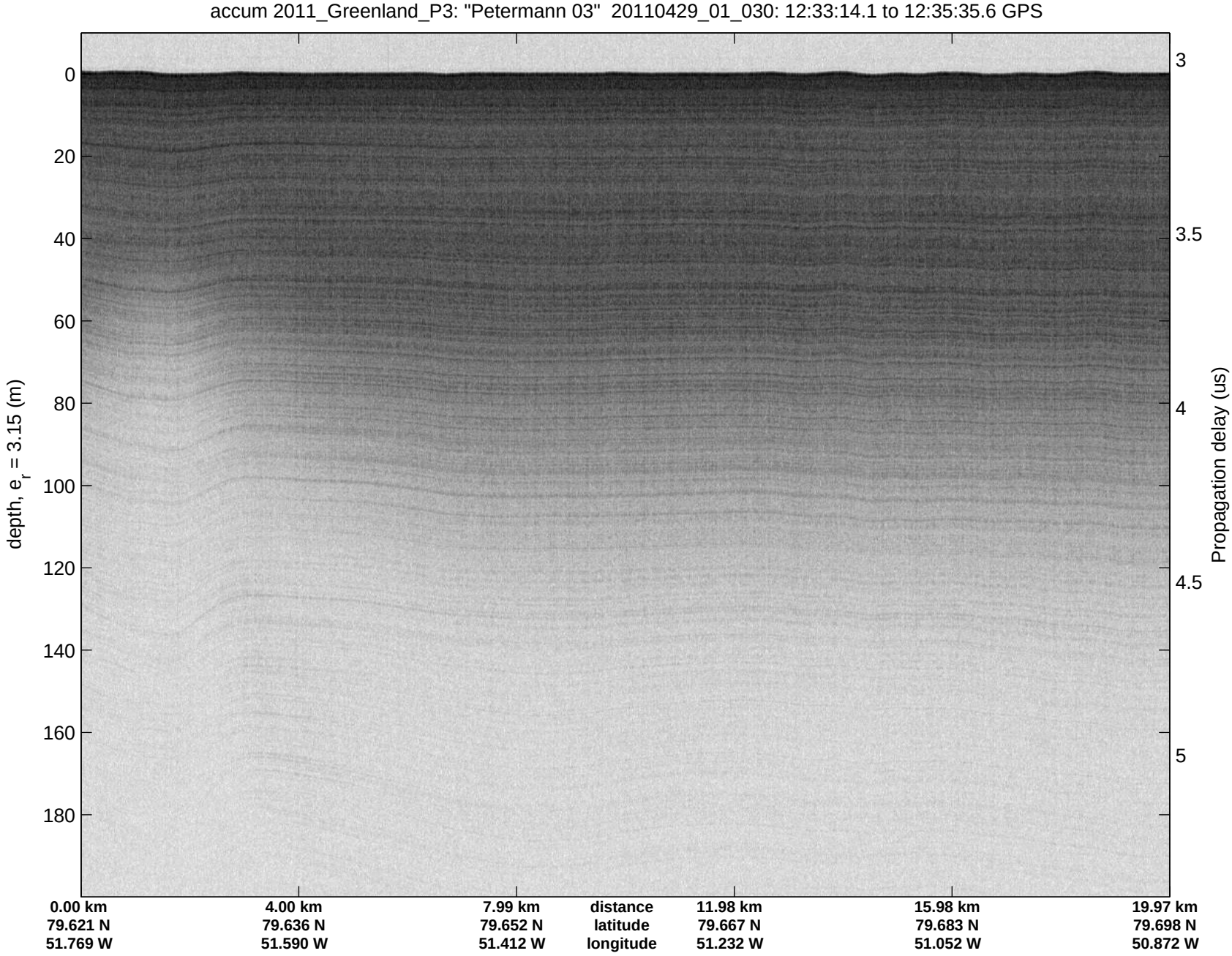

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

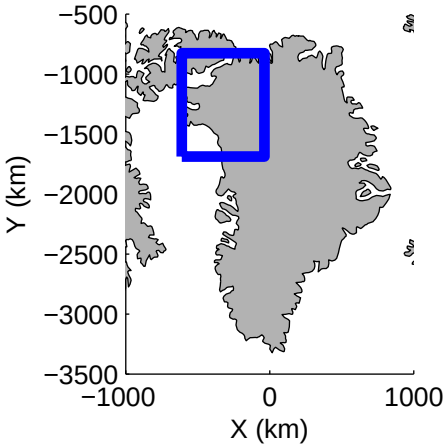

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_029: 12:30:53.5 to 12:33:13.9 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.541 N
52.655 W
4.00 km
79.557 N
52.479 W
8.00 km
79.573 N
52.302 W
distance
latitude
longitude
12.00 km
79.589 N
52.126 W
15.99 km
79.605 N
51.948 W
19.98 km
79.620 N
51.770 W

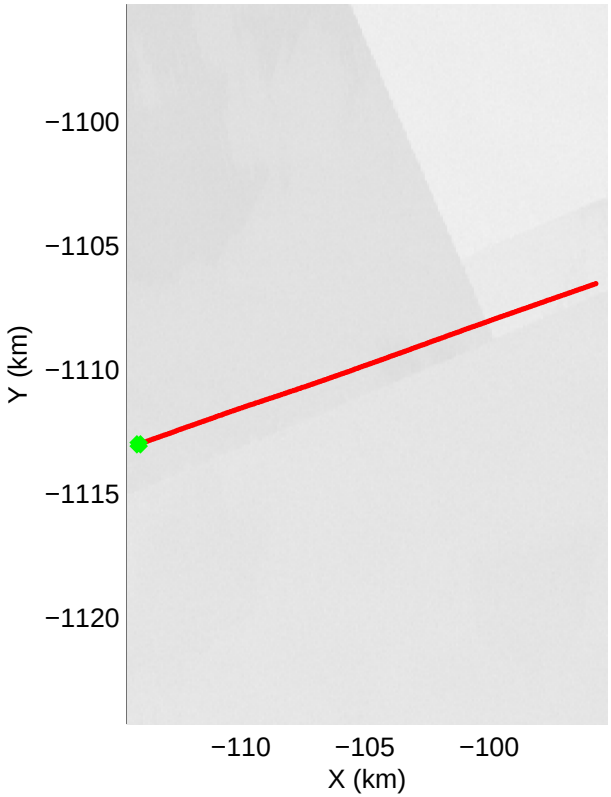

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

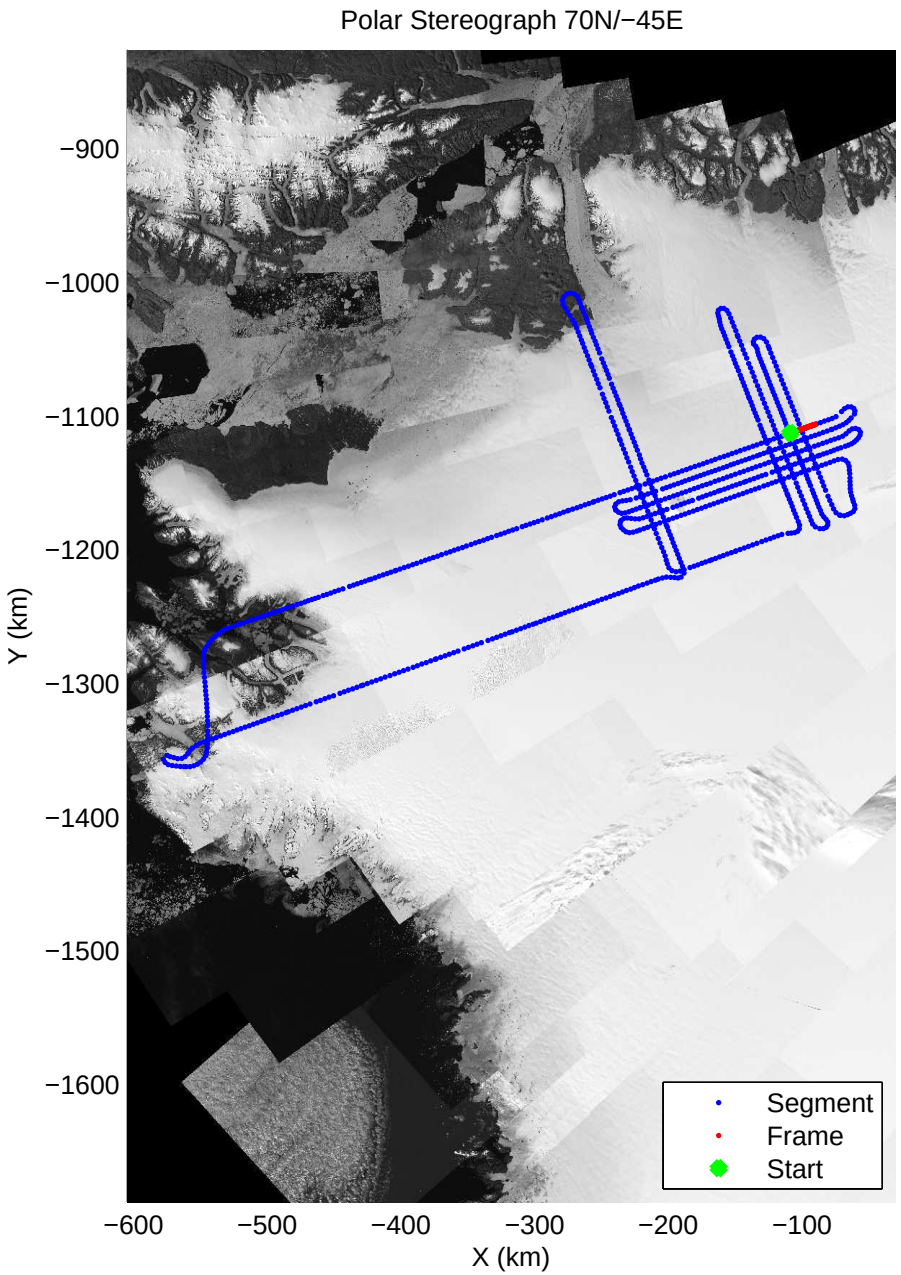

−1105
−1110
−1115
−1120
−1125
−1130
Y (km)
−130
−125
−120
−115
X (km)

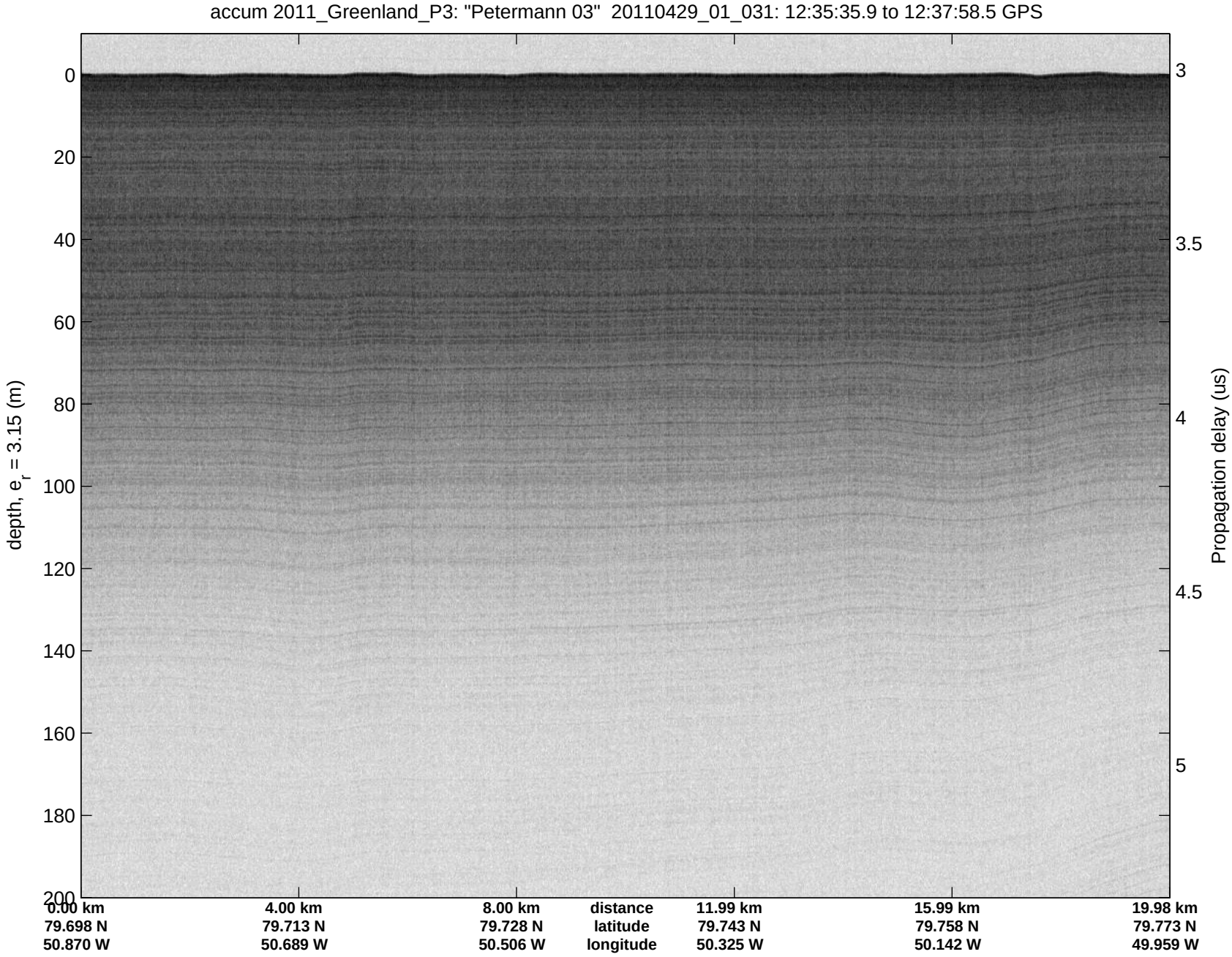

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

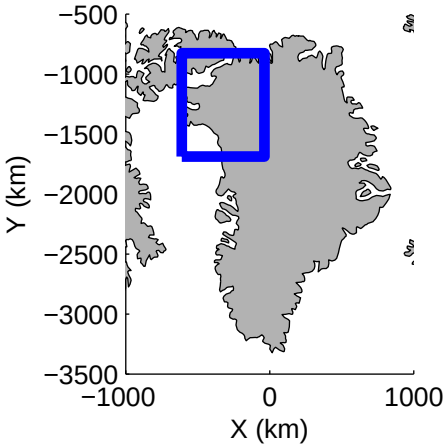

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_030: 12:33:14.1 to 12:35:35.6 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.621 N
51.769 W
4.00 km
79.636 N
51.590 W
7.99 km
79.652 N
51.412 W
distance
latitude
longitude
11.98 km
79.667 N
51.232 W
15.98 km
79.683 N
51.052 W
19.97 km
79.698 N
50.872 W

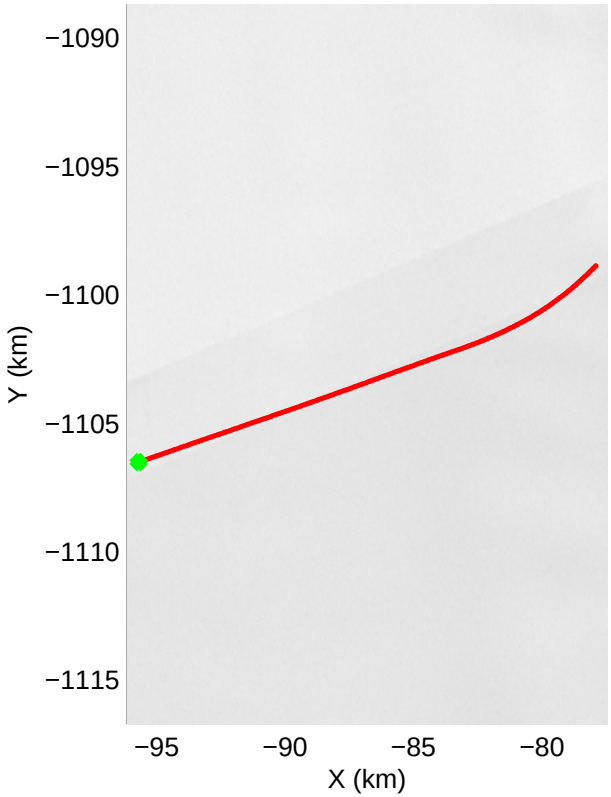

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

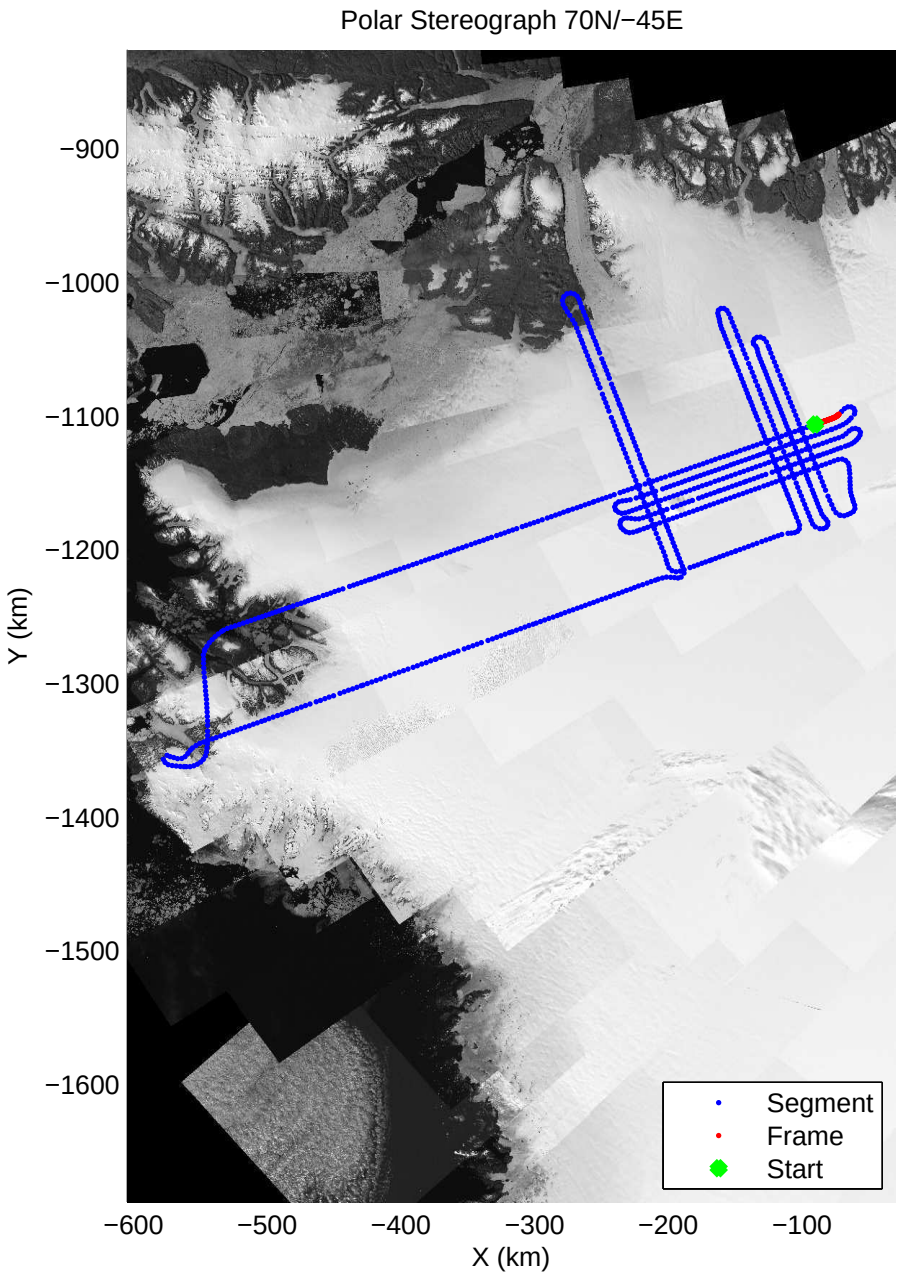

−1100
−1105
−1110
−1115
−1120
Y (km)
−110
−105
−100
X (km)

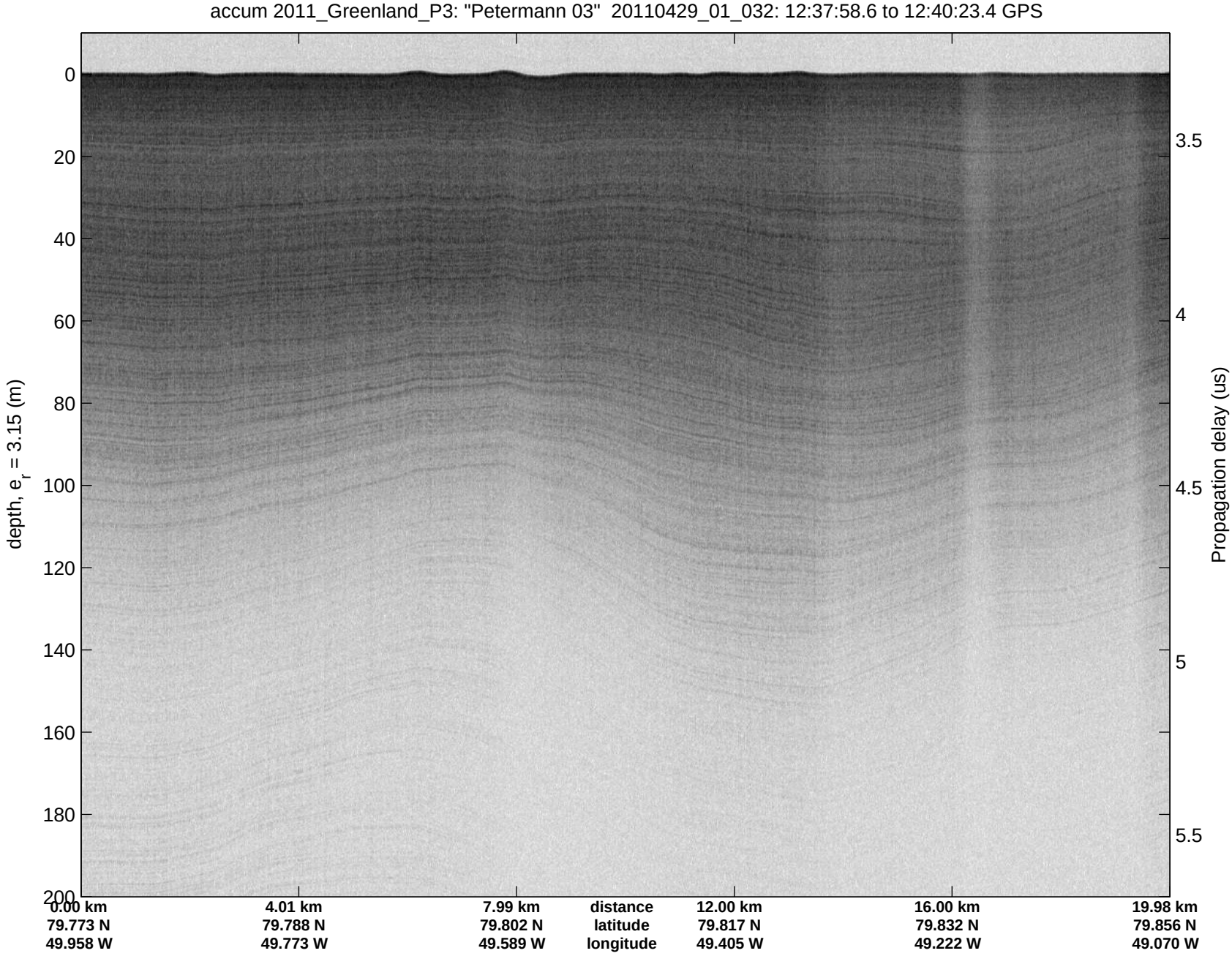

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

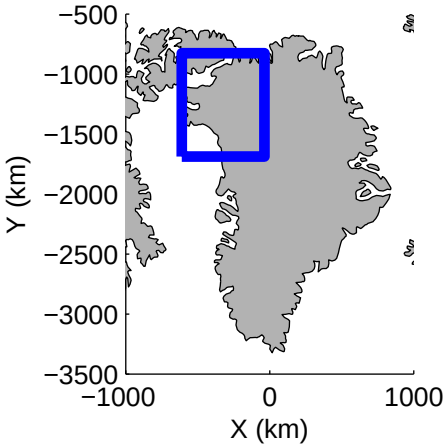

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_031: 12:35:35.9 to 12:37:58.5 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.698 N
50.870 W
4.00 km
79.713 N
50.689 W
8.00 km
79.728 N
50.506 W
distance
latitude
longitude
11.99 km
79.743 N
50.325 W
15.99 km
79.758 N
50.142 W
19.98 km
79.773 N
49.959 W


−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

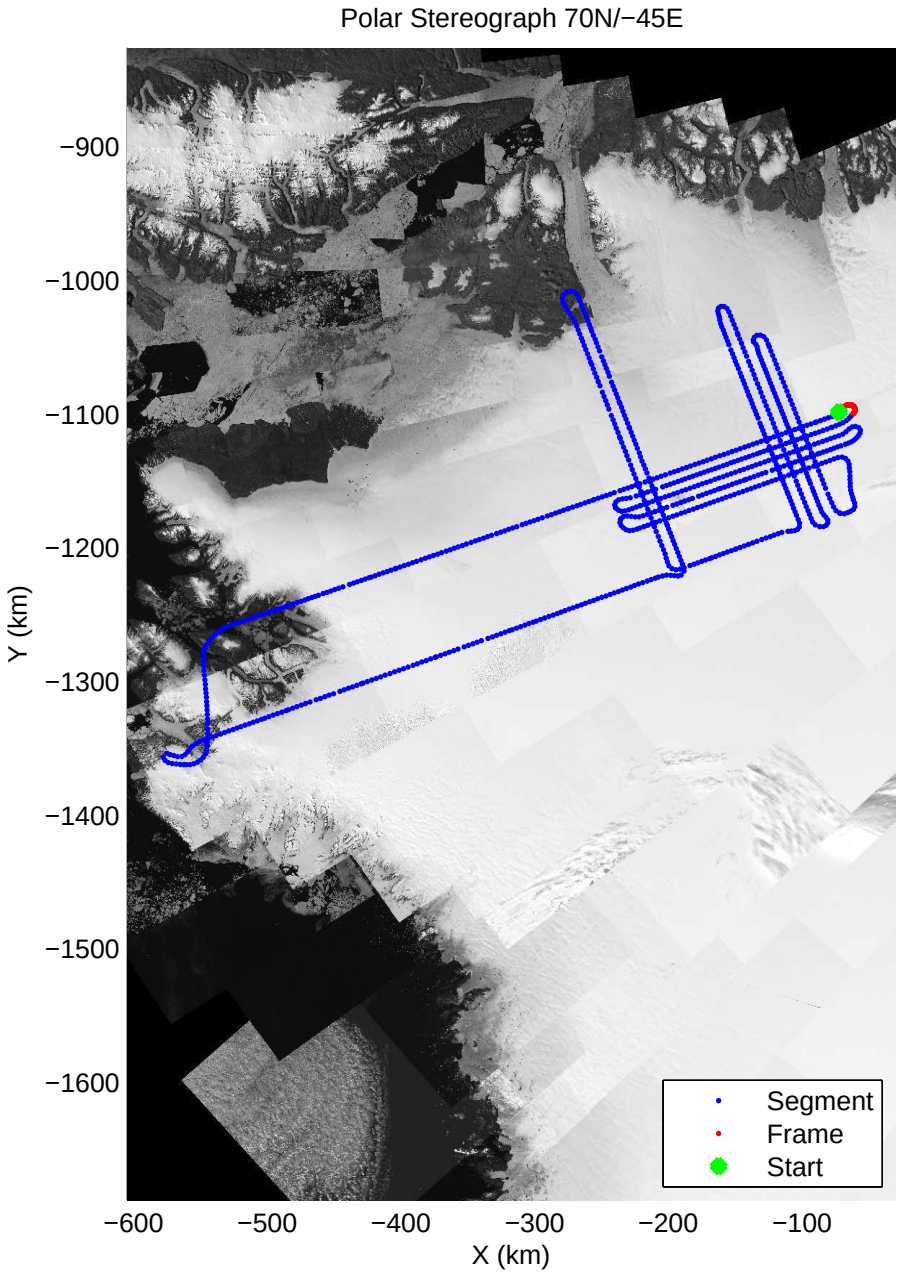

−1090
−1095
−1100
−1105
−1110
−1115
Y (km)
−95
−90
−85
−80
X (km)

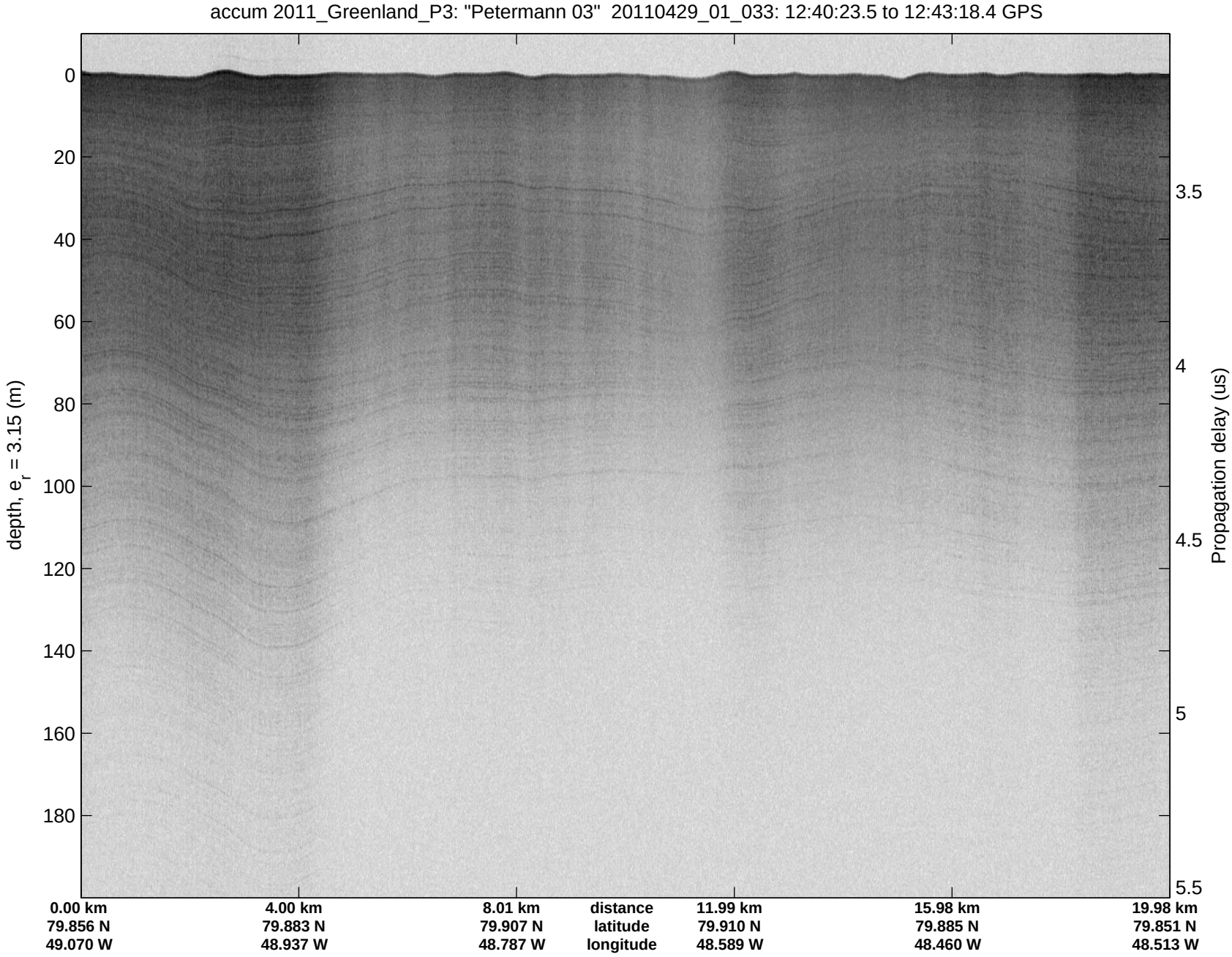

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

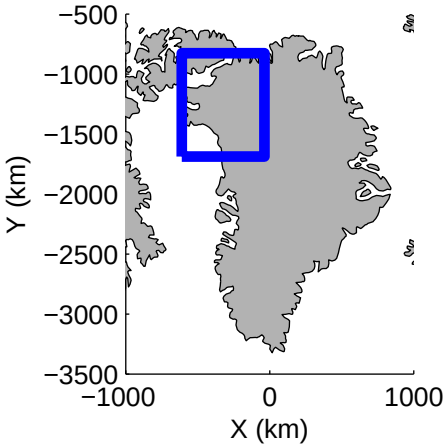

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_032: 12:37:58.6 to 12:40:23.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.773 N
49.958 W
4.01 km
79.788 N
49.773 W
7.99 km
79.802 N
49.589 W
distance
latitude
longitude
12.00 km
79.817 N
49.405 W
16.00 km
79.832 N
49.222 W
19.98 km
79.856 N
49.070 W

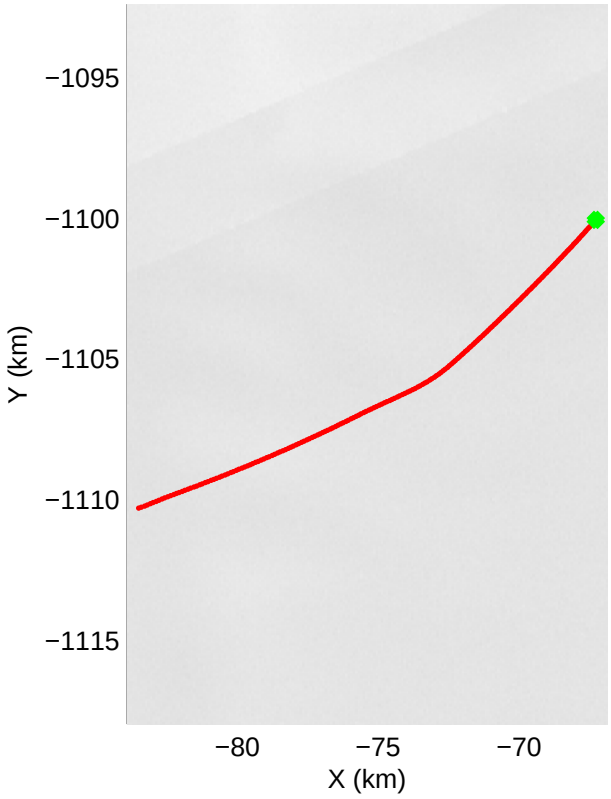

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

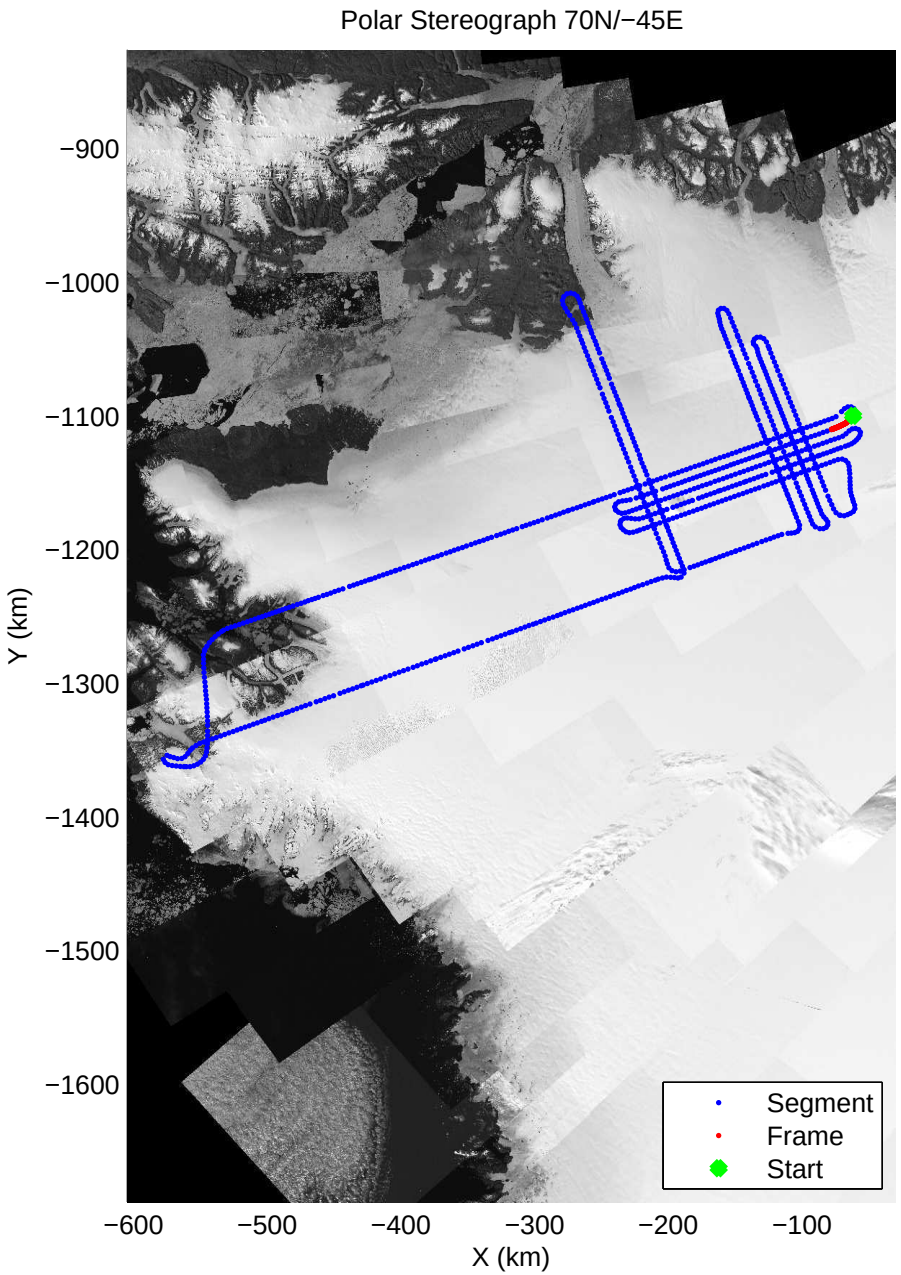
−1088
−1090
−1092
−1094
−1096
−1098
−1100
−1102
−1104
−1106
Y (km)
−78
−76
−74
−72
−70
−68
−66
X (km)

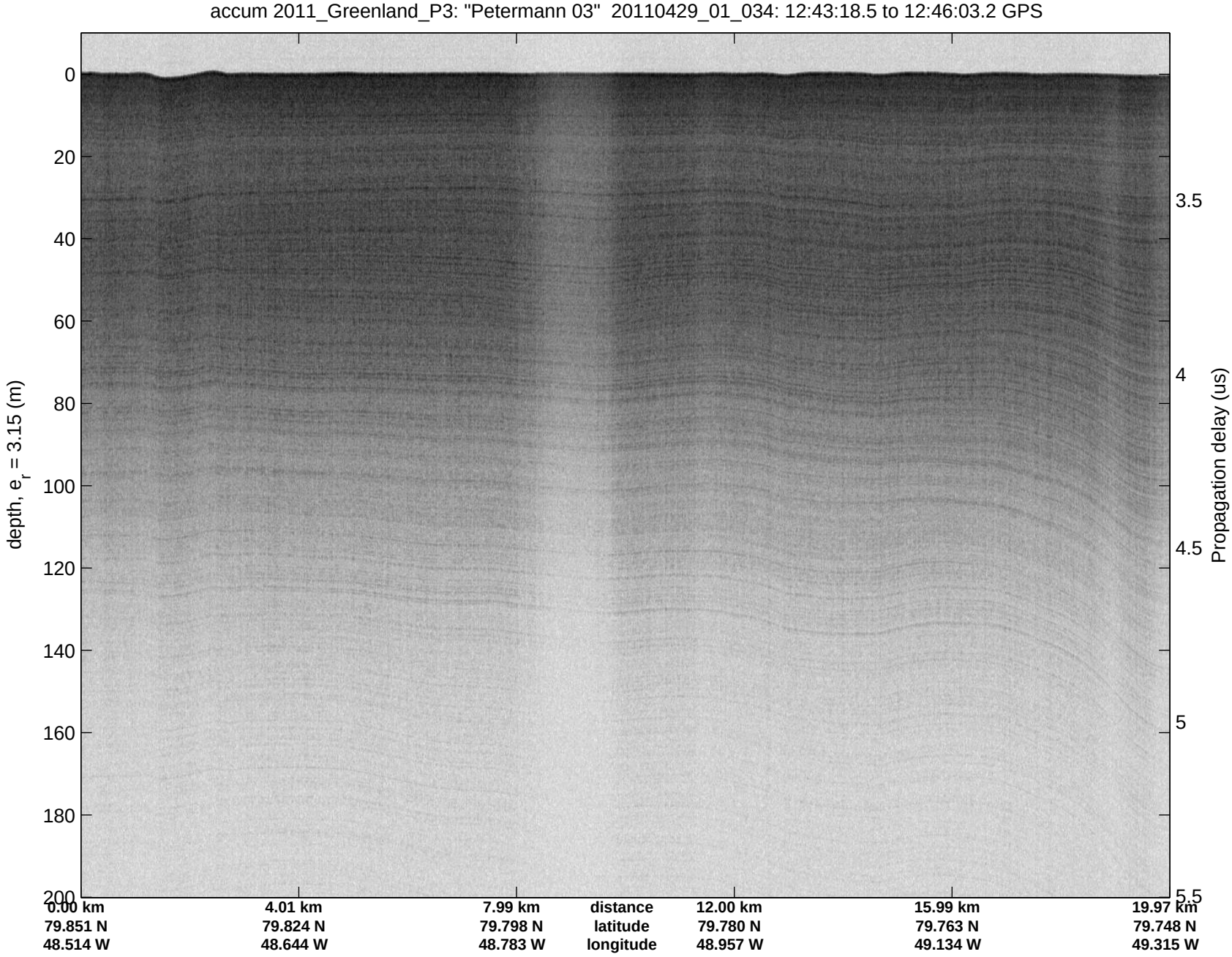

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

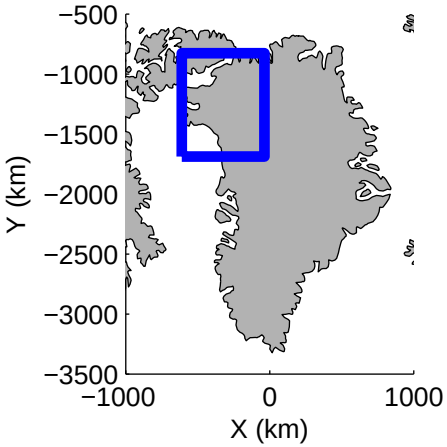

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_033: 12:40:23.5 to 12:43:18.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.856 N
49.070 W
4.00 km
79.883 N
48.937 W
8.01 km
79.907 N
48.787 W
distance
latitude
longitude
11.99 km
79.910 N
48.589 W
15.98 km
79.885 N
48.460 W
19.98 km
79.851 N
48.513 W


−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

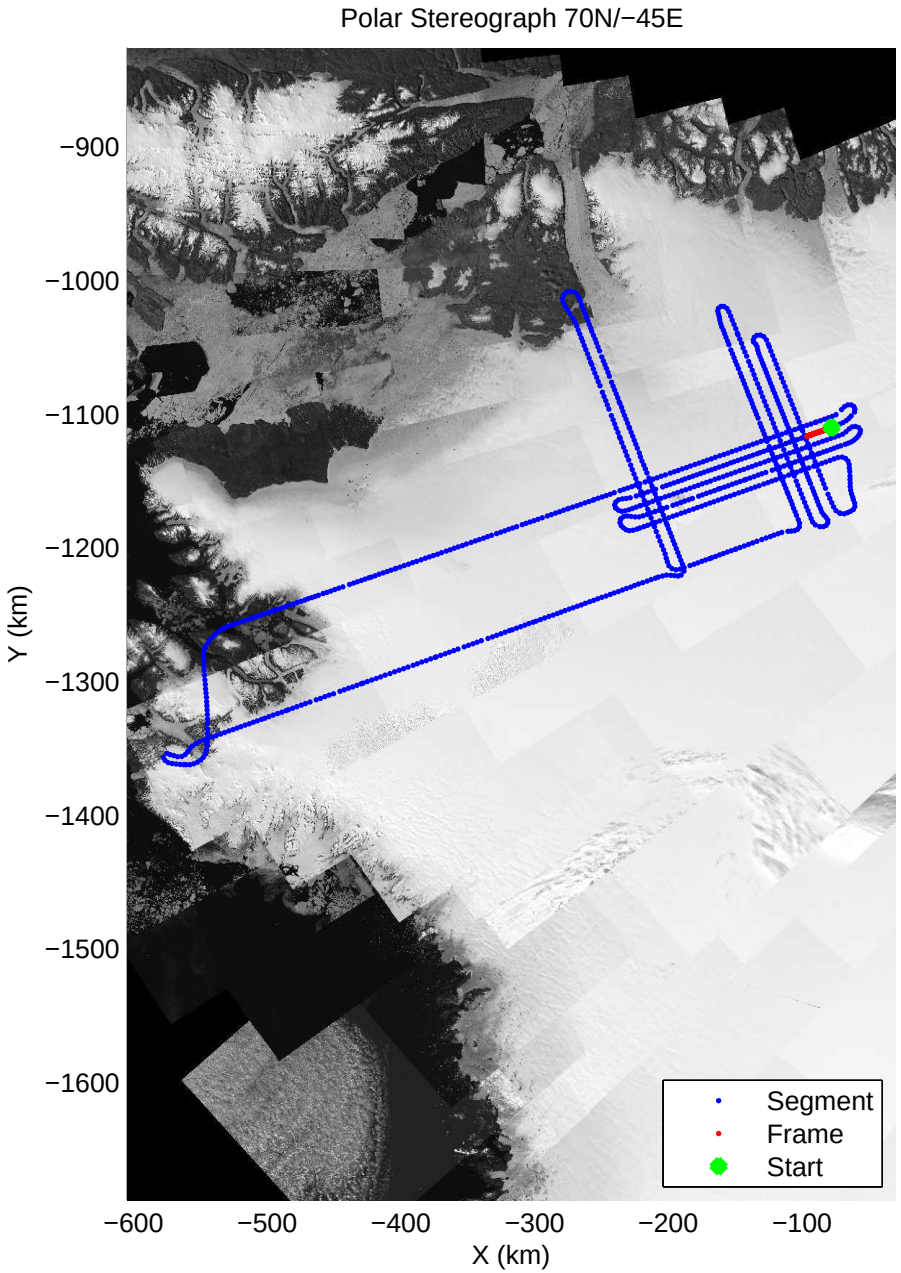

−1095
−1100
−1105
−1110
−1115
Y (km)
−80
−75
−70
X (km)

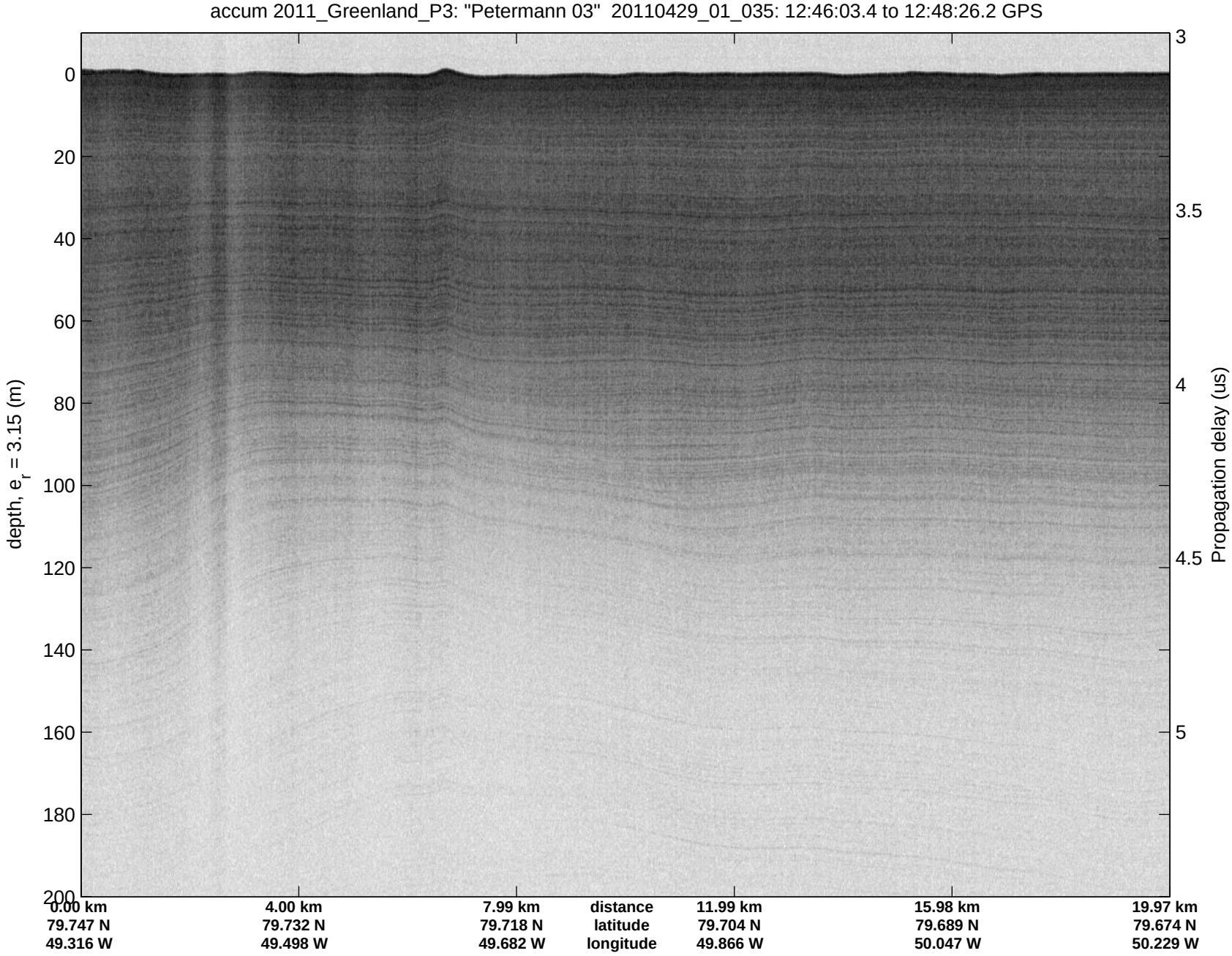

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

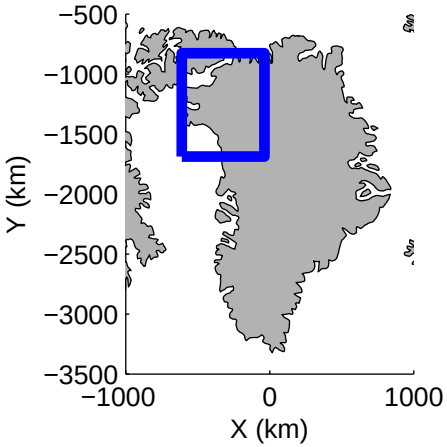

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_034: 12:43:18.5 to 12:46:03.2 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.851 N
48.514 W
4.01 km
79.824 N
48.644 W
7.99 km
79.798 N
48.783 W
distance
latitude
longitude
12.00 km
79.780 N
48.957 W
15.99 km
79.763 N
49.134 W
19.97 km
79.748 N
49.315 W

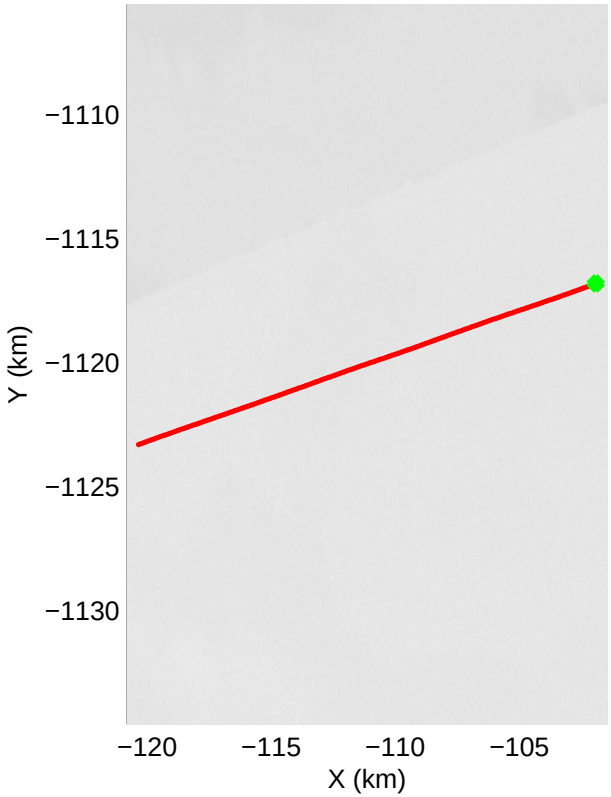

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

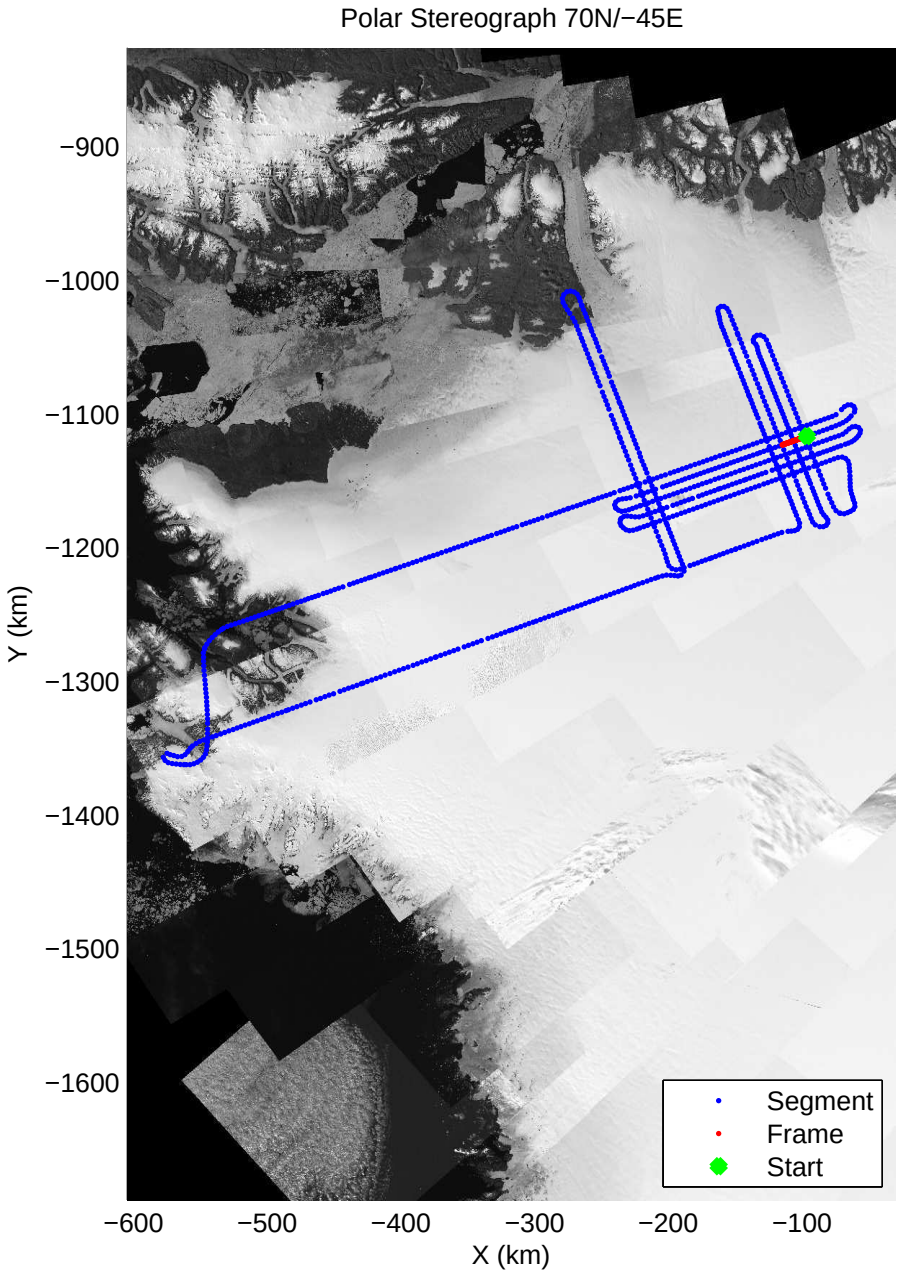
−1100
−1105
−1110
−1115
−1120
−1125
Y (km)
−100
−95
−90
−85
X (km)

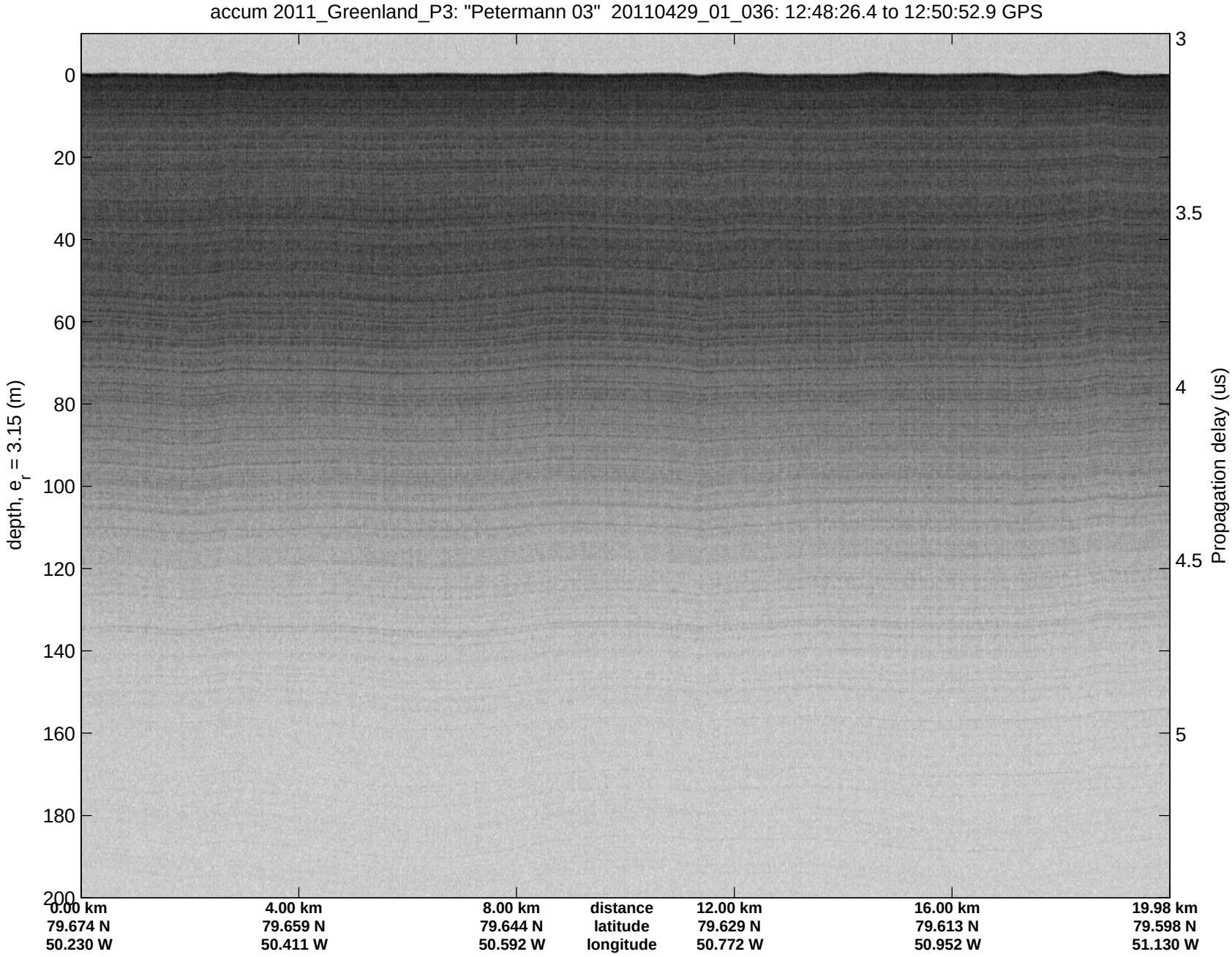

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

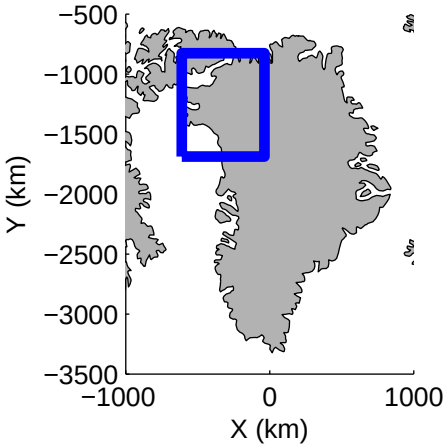

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_035: 12:46:03.4 to 12:48:26.2 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
79.747 N
49.316 W
4.00 km
79.732 N
49.498 W
7.99 km
79.718 N
49.682 W
distance
latitude
longitude
11.99 km
79.704 N
49.866 W
15.98 km
79.689 N
50.047 W
19.97 km
79.674 N
50.229 W

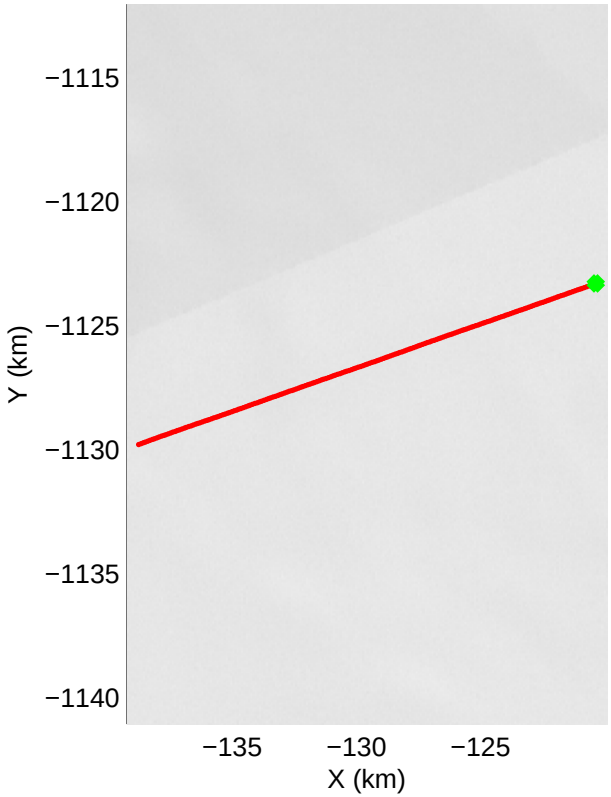

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

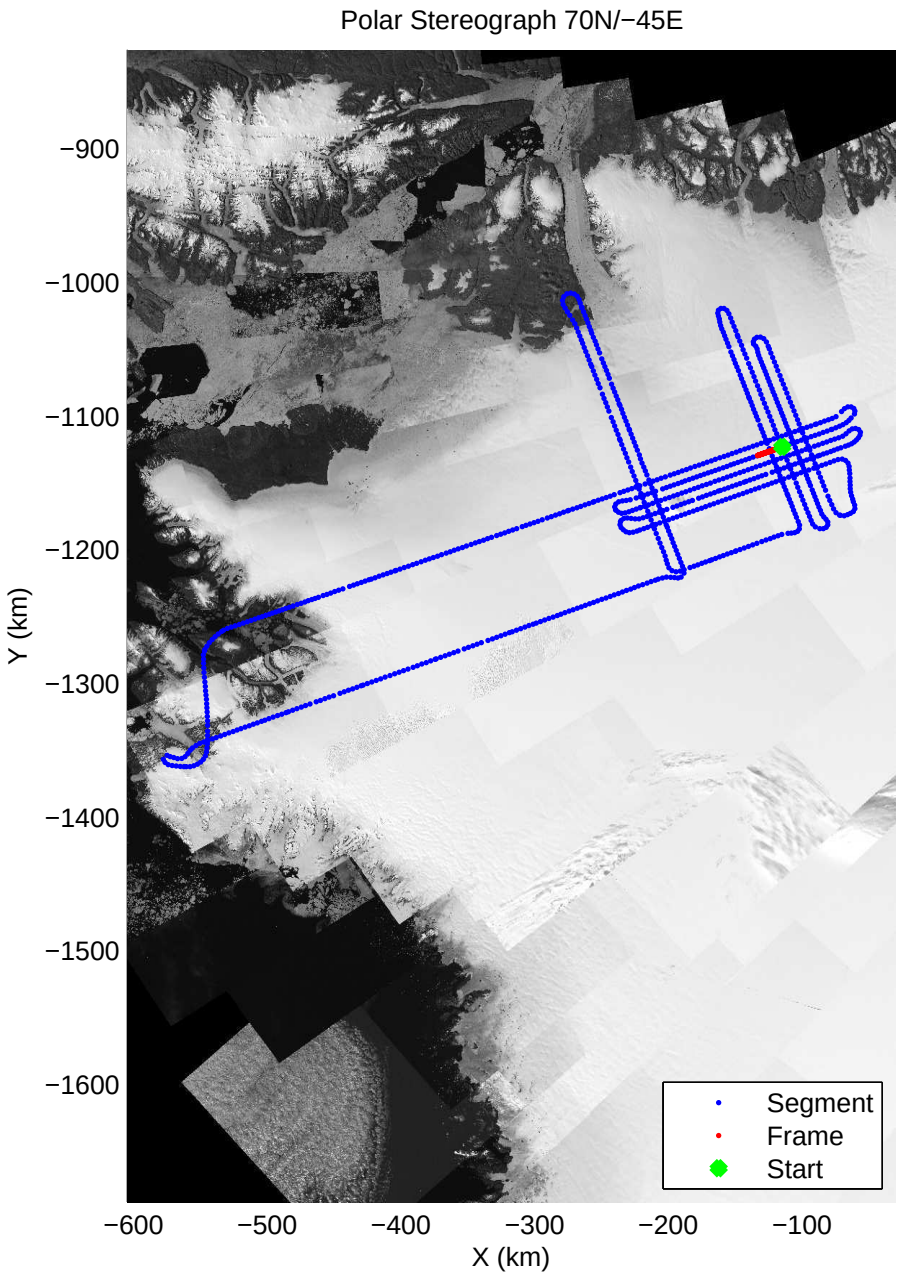

−1110
−1115
−1120
−1125
−1130
Y (km)
−120
−115
−110
−105
X (km)

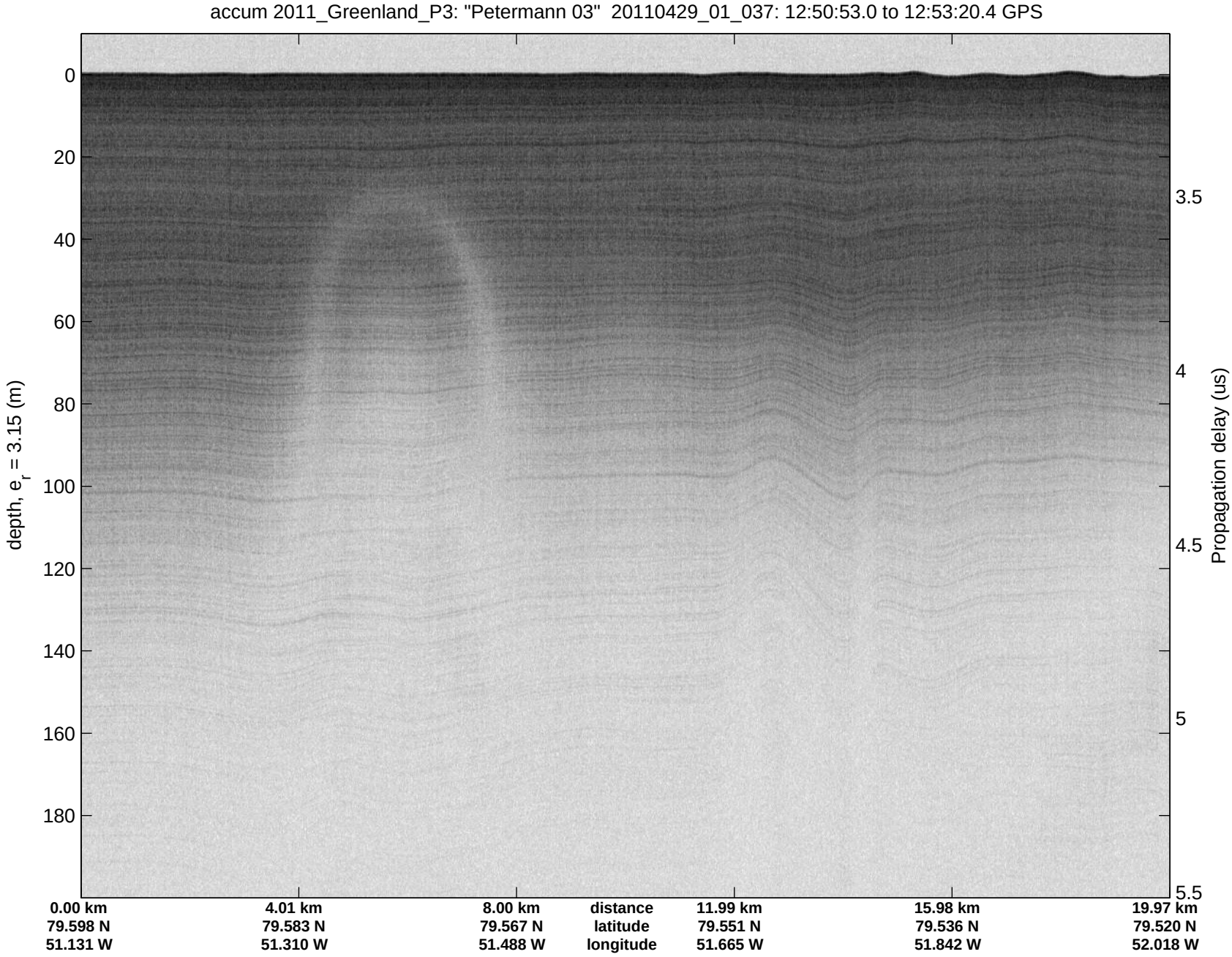

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

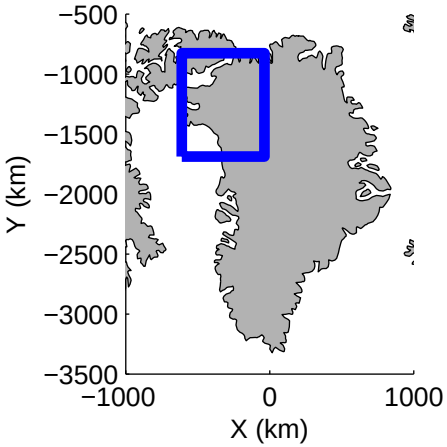

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_036: 12:48:26.4 to 12:50:52.9 GPS
depth, e_r = 3.15 (m)
Propagation delay (us)
0
20
40
60
80
100
120
140
160
180
200
3
3.5
4
4.5
5
0.00 km
79.674 N
50.230 W
4.00 km
79.659 N
50.411 W
8.00 km
79.644 N
50.592 W
distance
latitude
longitude
12.00 km
79.629 N
50.772 W
16.00 km
79.613 N
50.952 W
19.98 km
79.598 N
51.130 W

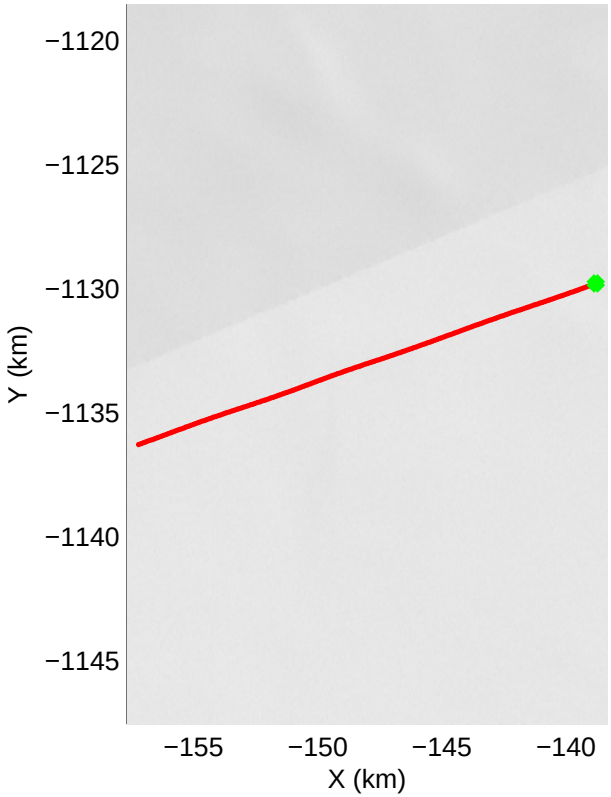

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

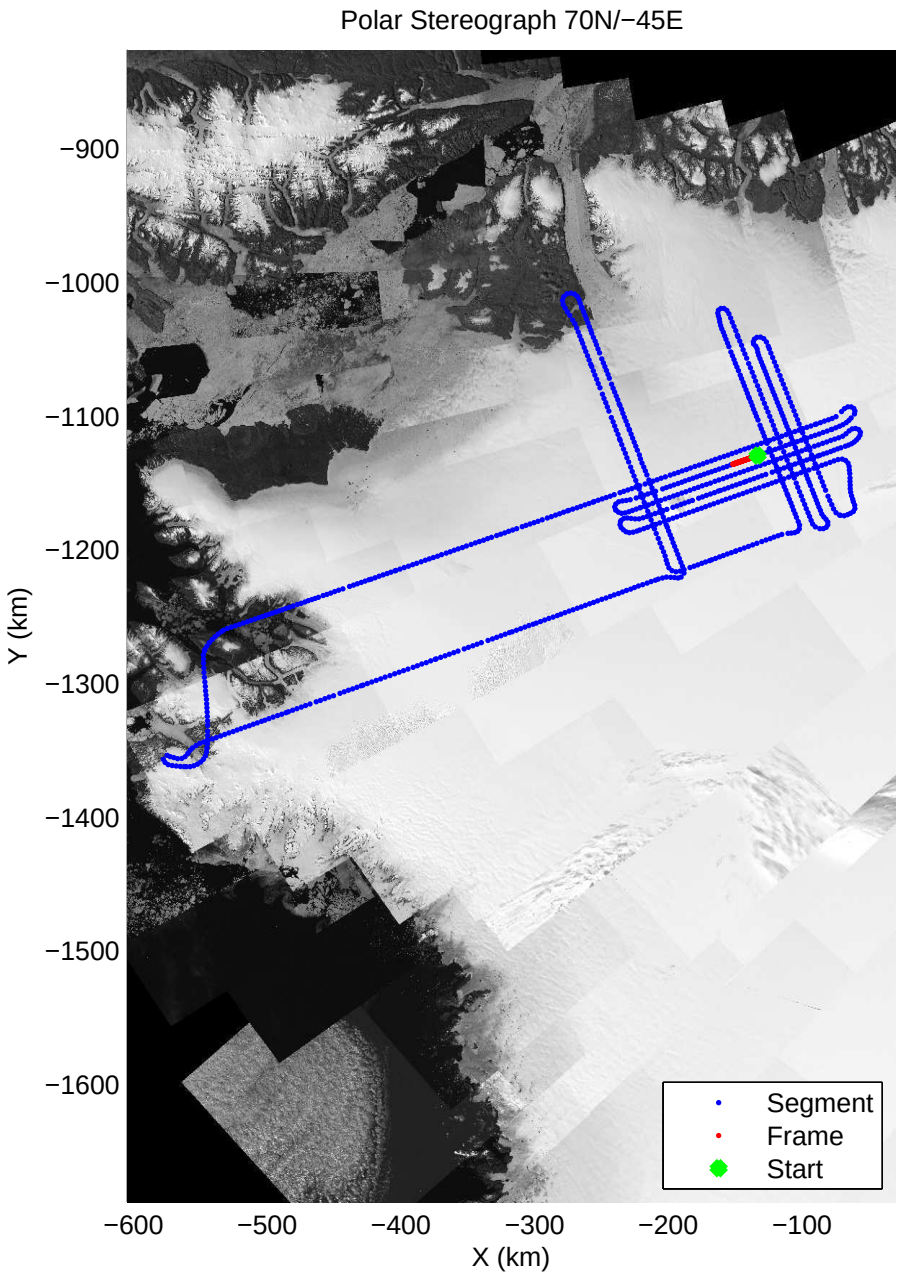

−1115
−1120
−1125
−1130
−1135
−1140
Y (km)
−135
−130
−125
X (km)

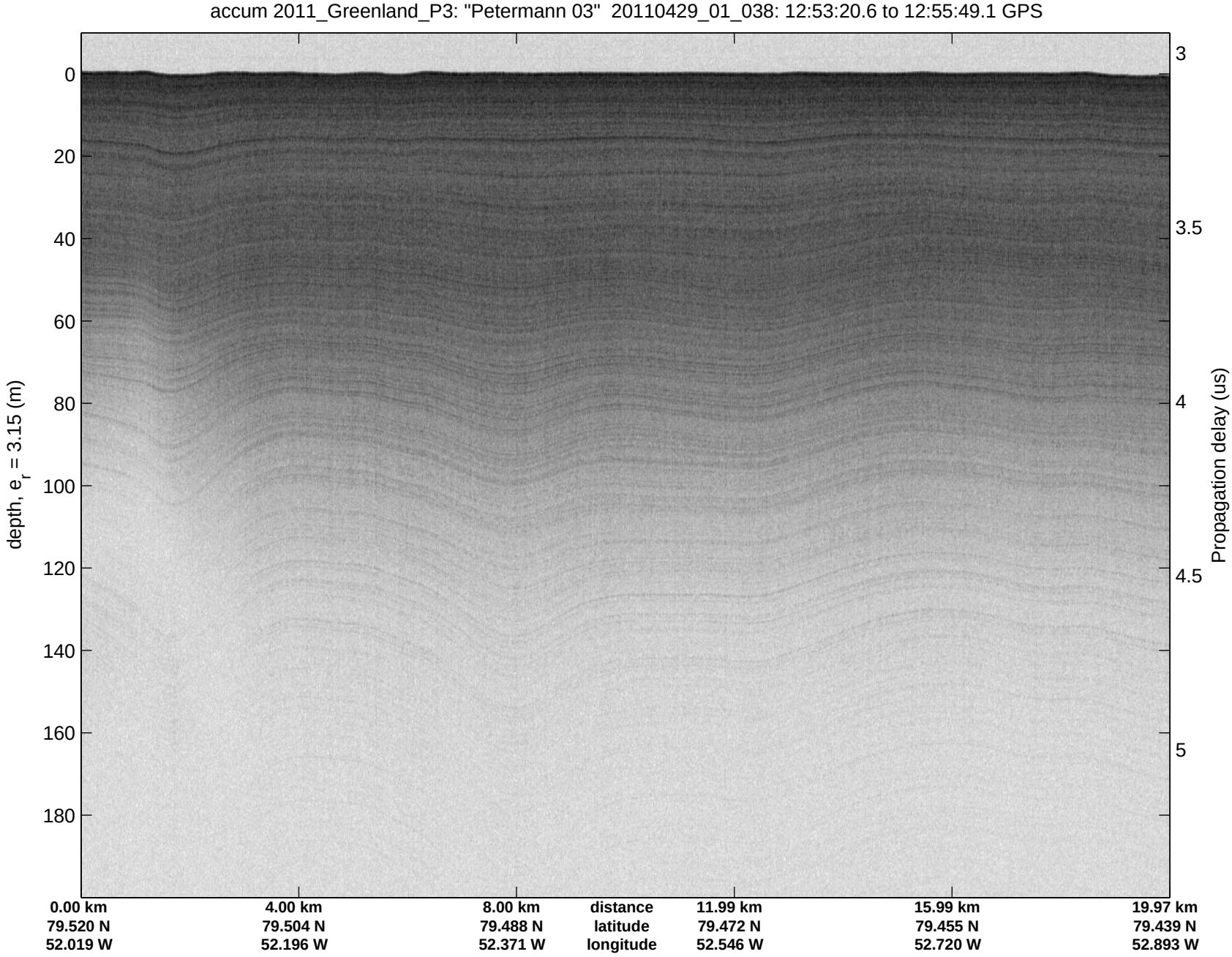

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

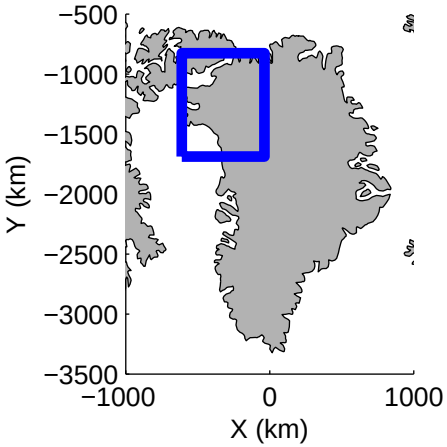

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_037: 12:50:53.0 to 12:53:20.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.598 N
51.131 W
4.01 km
79.583 N
51.310 W
8.00 km
79.567 N
51.488 W
distance
latitude
longitude
11.99 km
79.551 N
51.665 W
15.98 km
79.536 N
51.842 W
19.97 km
79.520 N
52.018 W

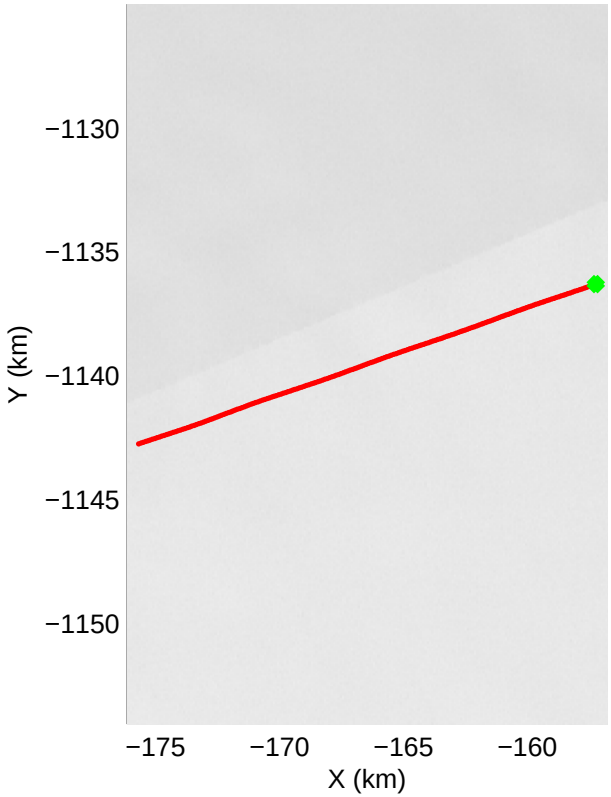

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

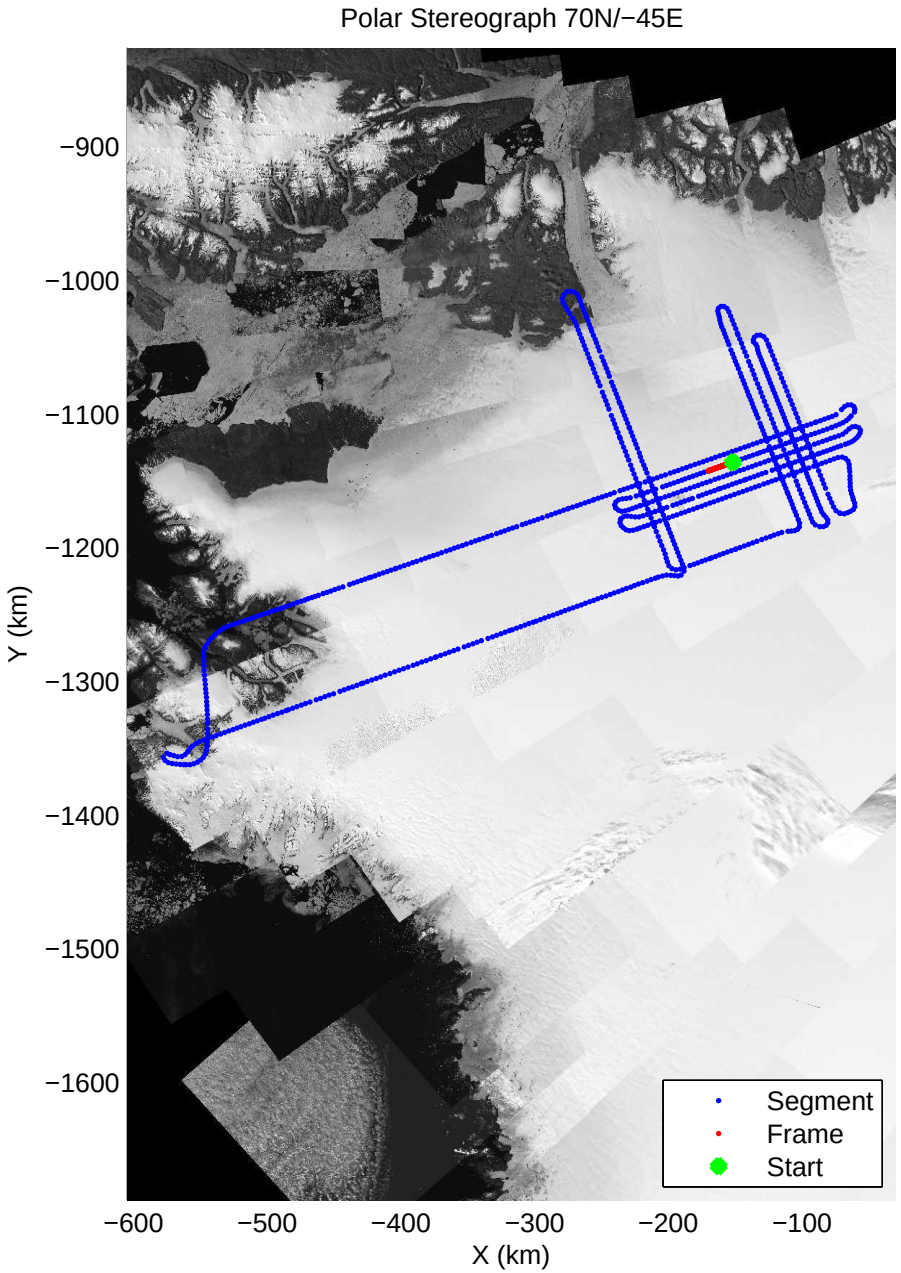

−1120
−1125
−1130
−1135
−1140
−1145
Y (km)
−155
−150
−145
−140
X (km)

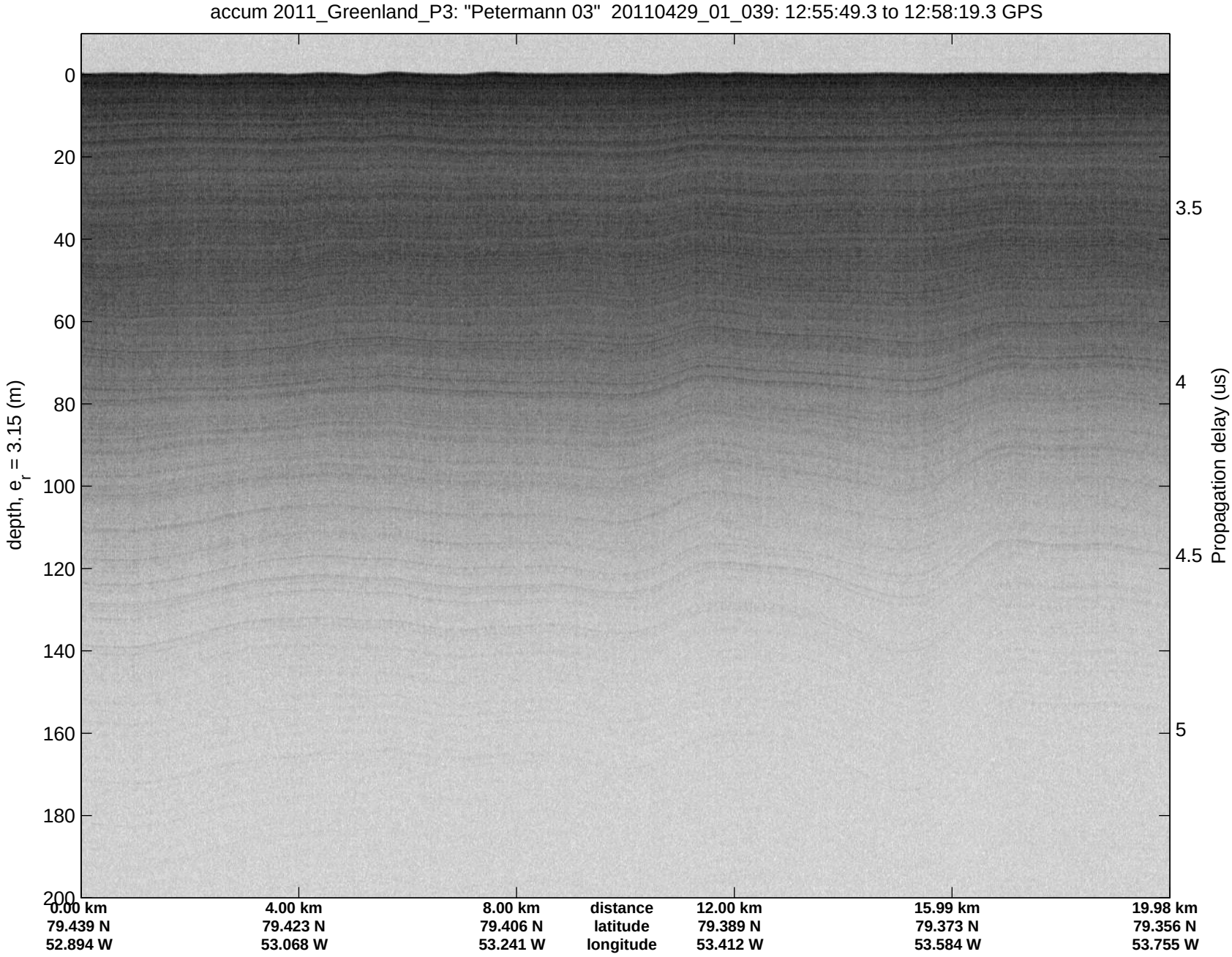

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

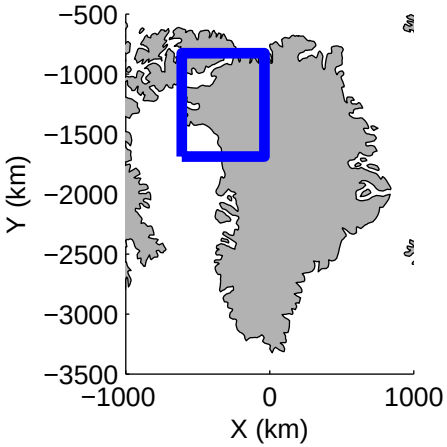

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_038: 12:53:20.6 to 12:55:49.1 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.520 N
52.019 W
4.00 km
79.504 N
52.196 W
8.00 km
79.488 N
52.371 W
distance
latitude
longitude
11.99 km
79.472 N
52.546 W
15.99 km
79.455 N
52.720 W
19.97 km
79.439 N
52.893 W

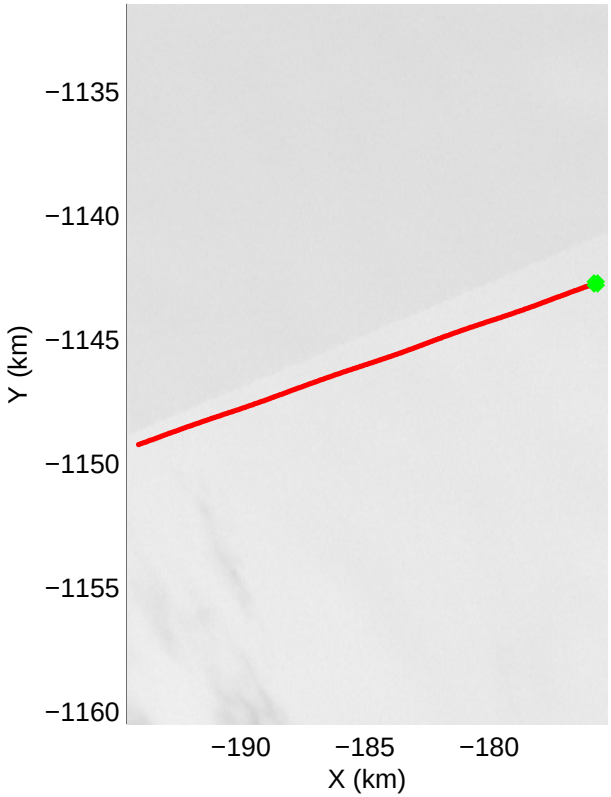

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

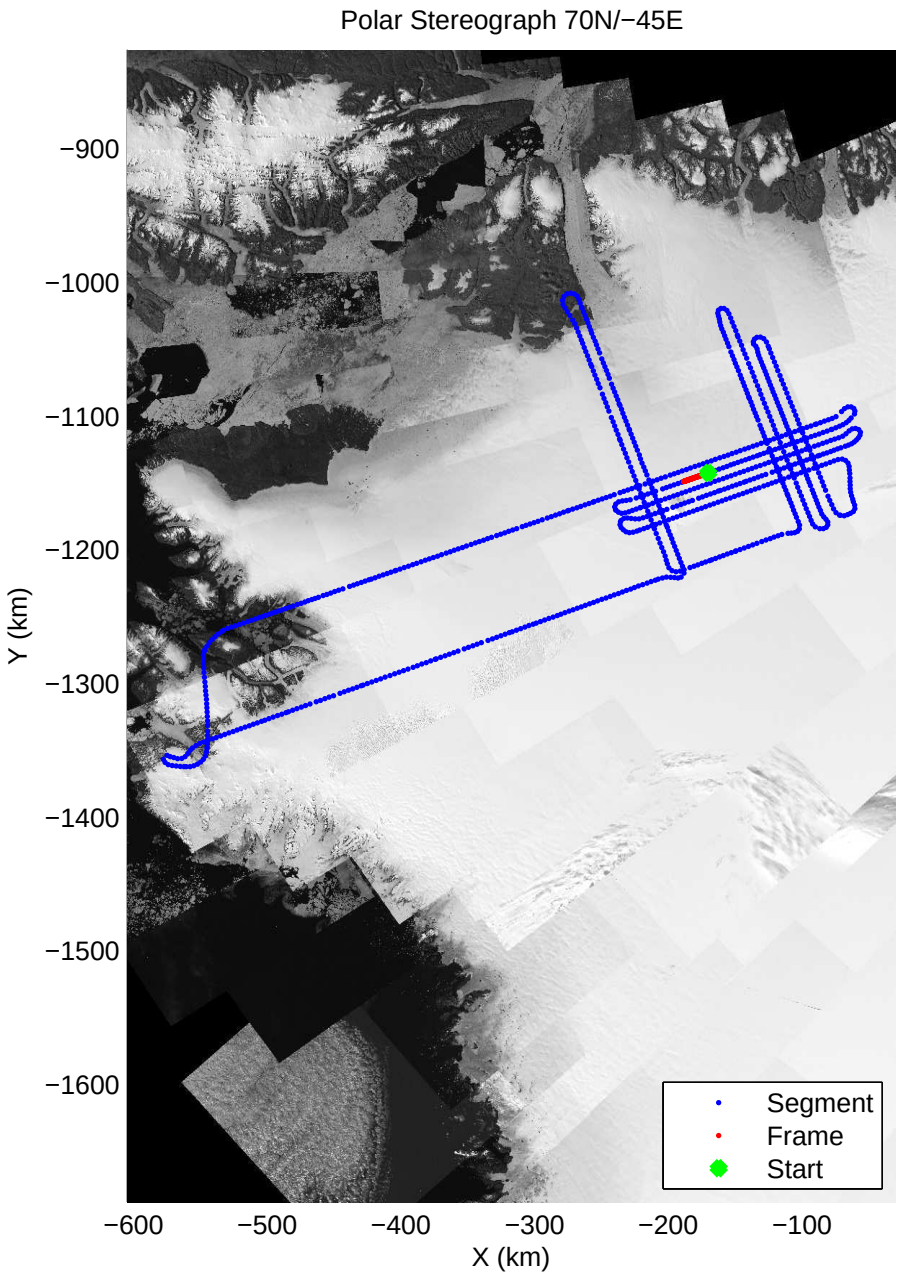

−1130
−1135
−1140
−1145
−1150
Y (km)
−175
−170
−165
−160
X (km)

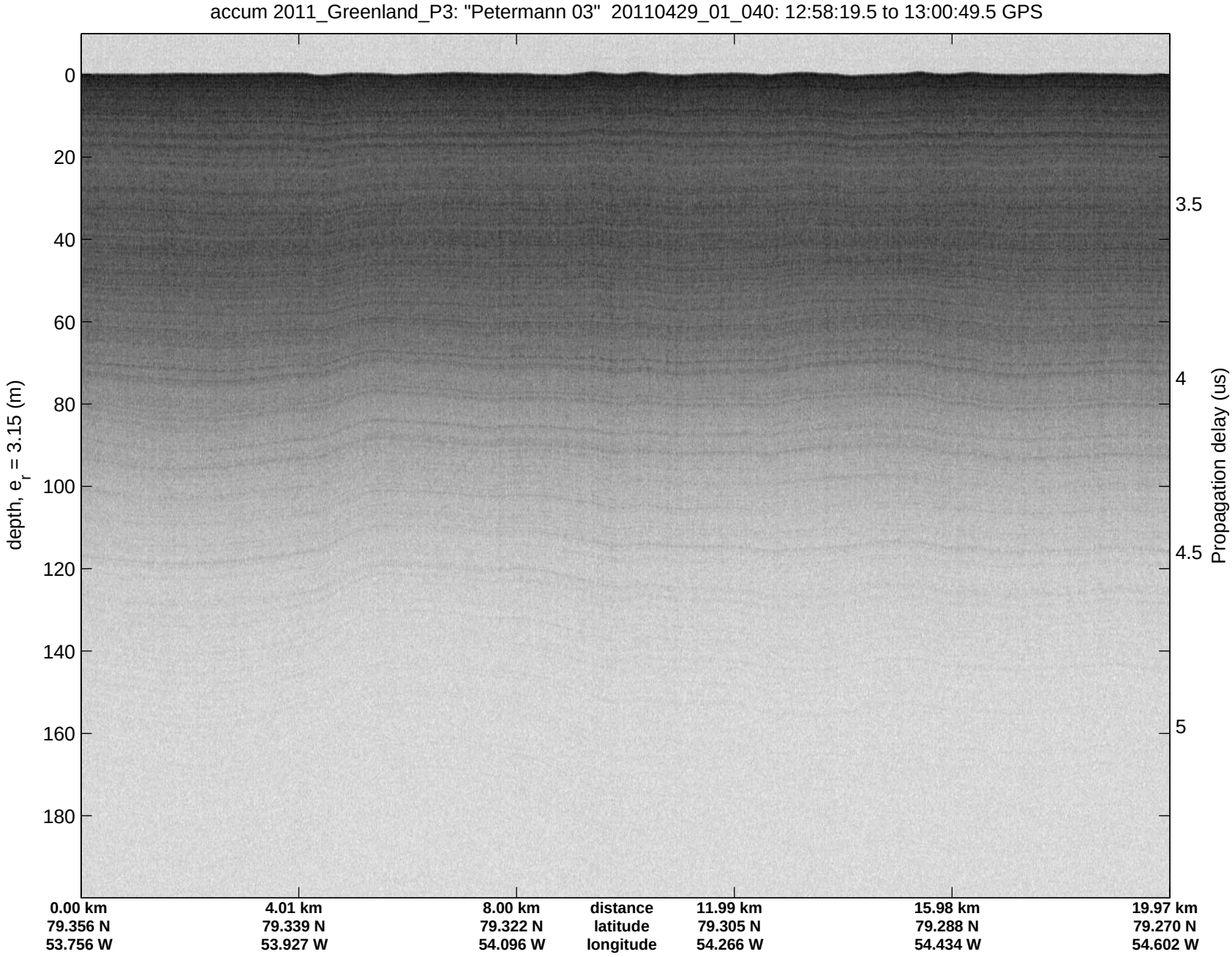

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

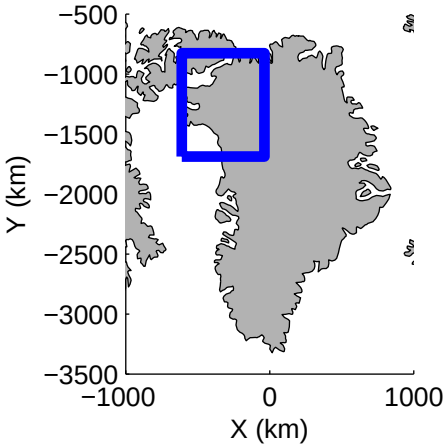

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_039: 12:55:49.3 to 12:58:19.3 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
0.00 km
79.439 N
52.894 W
4.00 km
79.423 N
53.068 W
8.00 km
79.406 N
53.241 W
distance
latitude
longitude
12.00 km
79.389 N
53.412 W
15.99 km
79.373 N
53.584 W
19.98 km
79.356 N
53.755 W

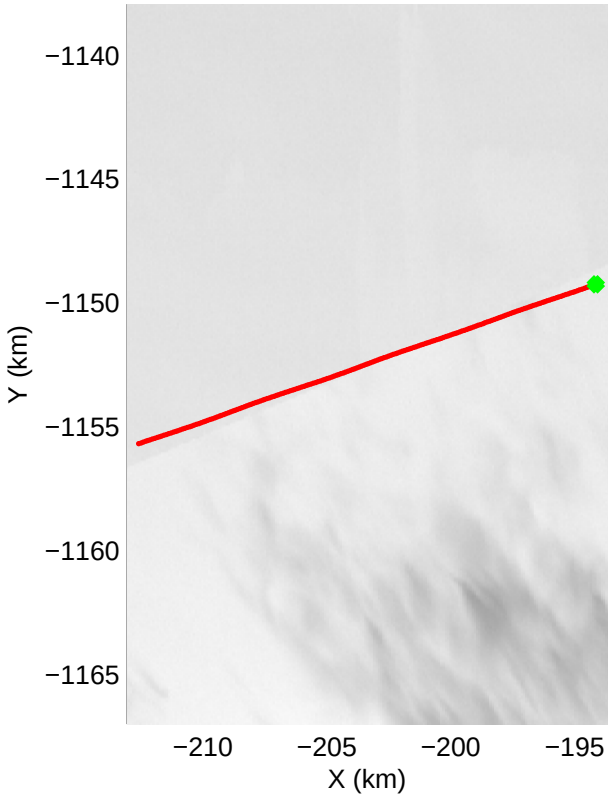

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

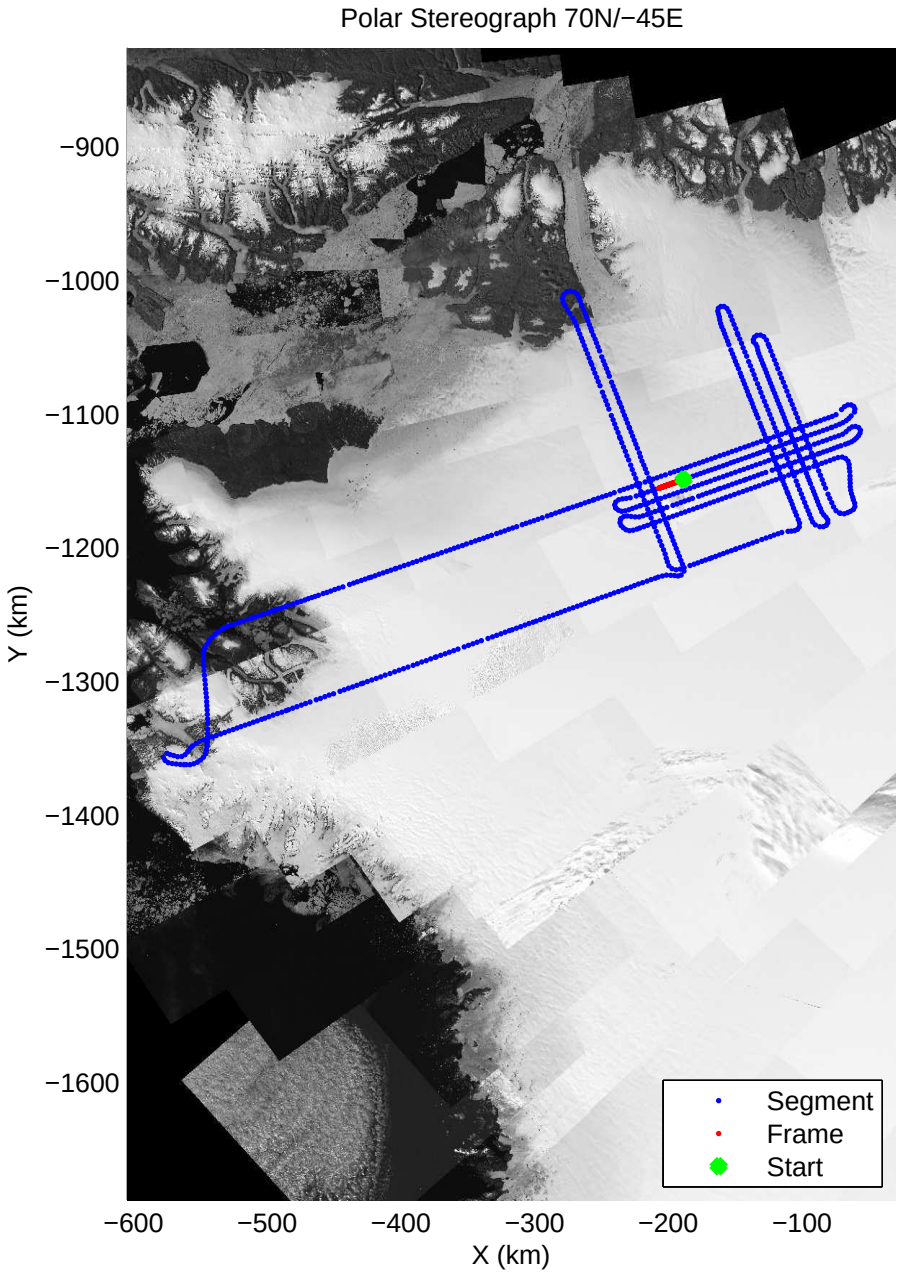

−1135
−1140
−1145
−1150
−1155
−1160
Y (km)
−190
−185
−180
X (km)

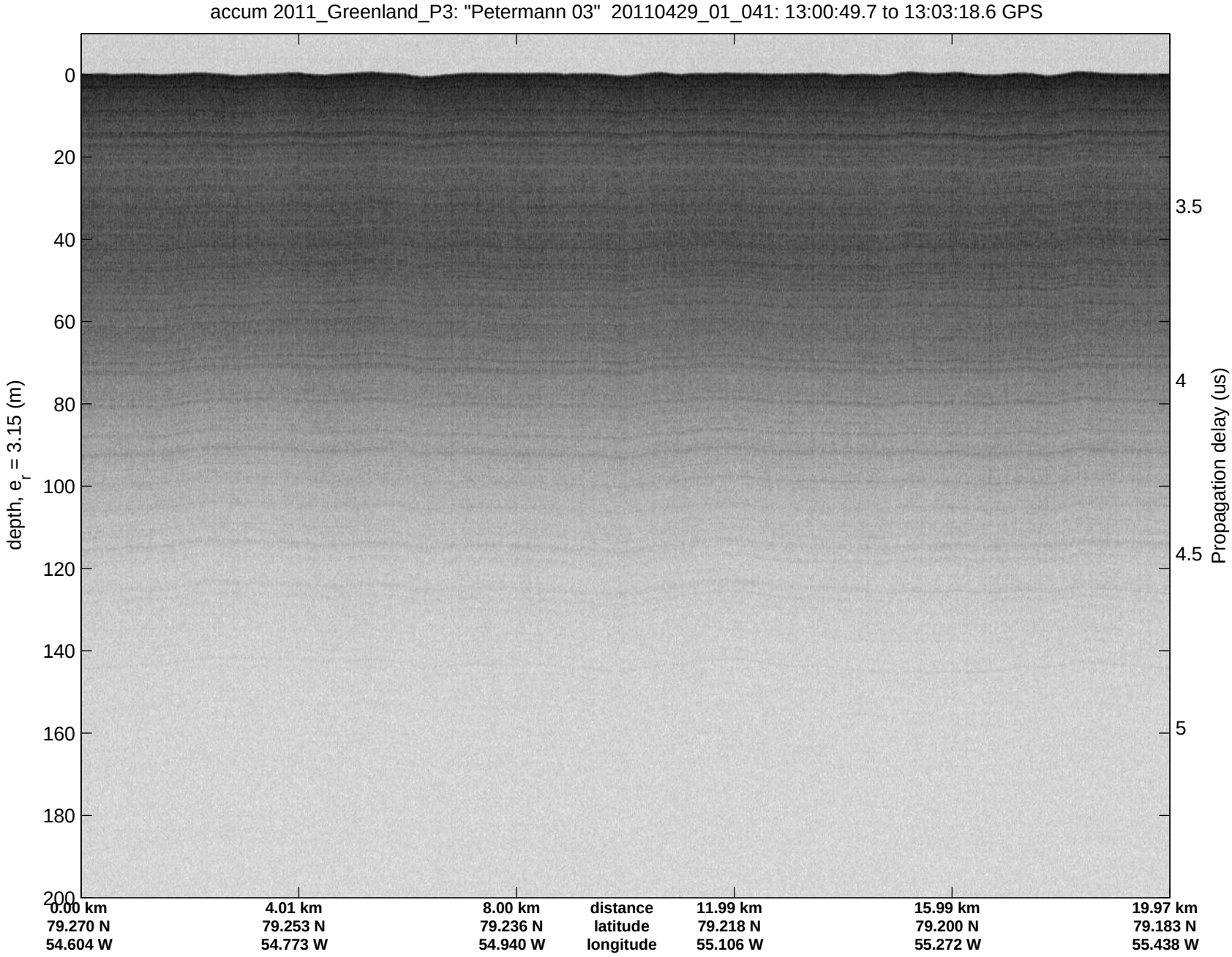

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

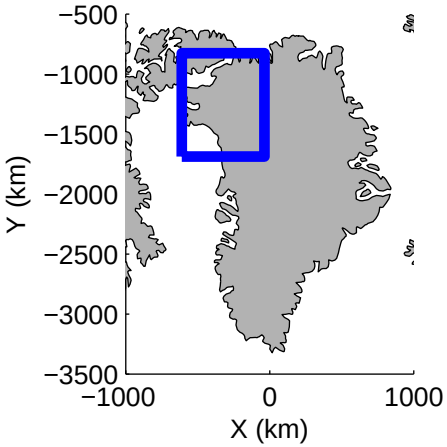

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_040: 12:58:19.5 to 13:00:49.5 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
0.00 km
79.356 N
53.756 W
4.01 km
79.339 N
53.927 W
8.00 km
79.322 N
54.096 W
distance
latitude
longitude
11.99 km
79.305 N
54.266 W
15.98 km
79.288 N
54.434 W
19.97 km
79.270 N
54.602 W

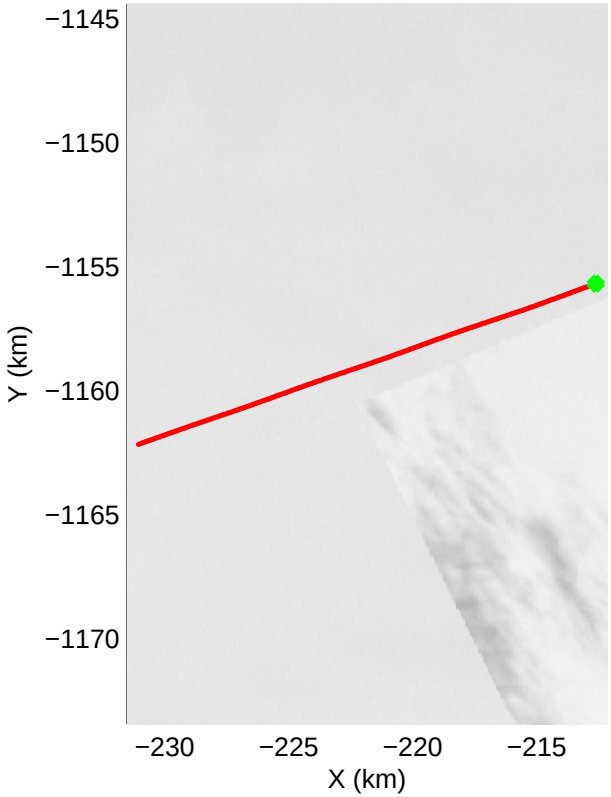

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

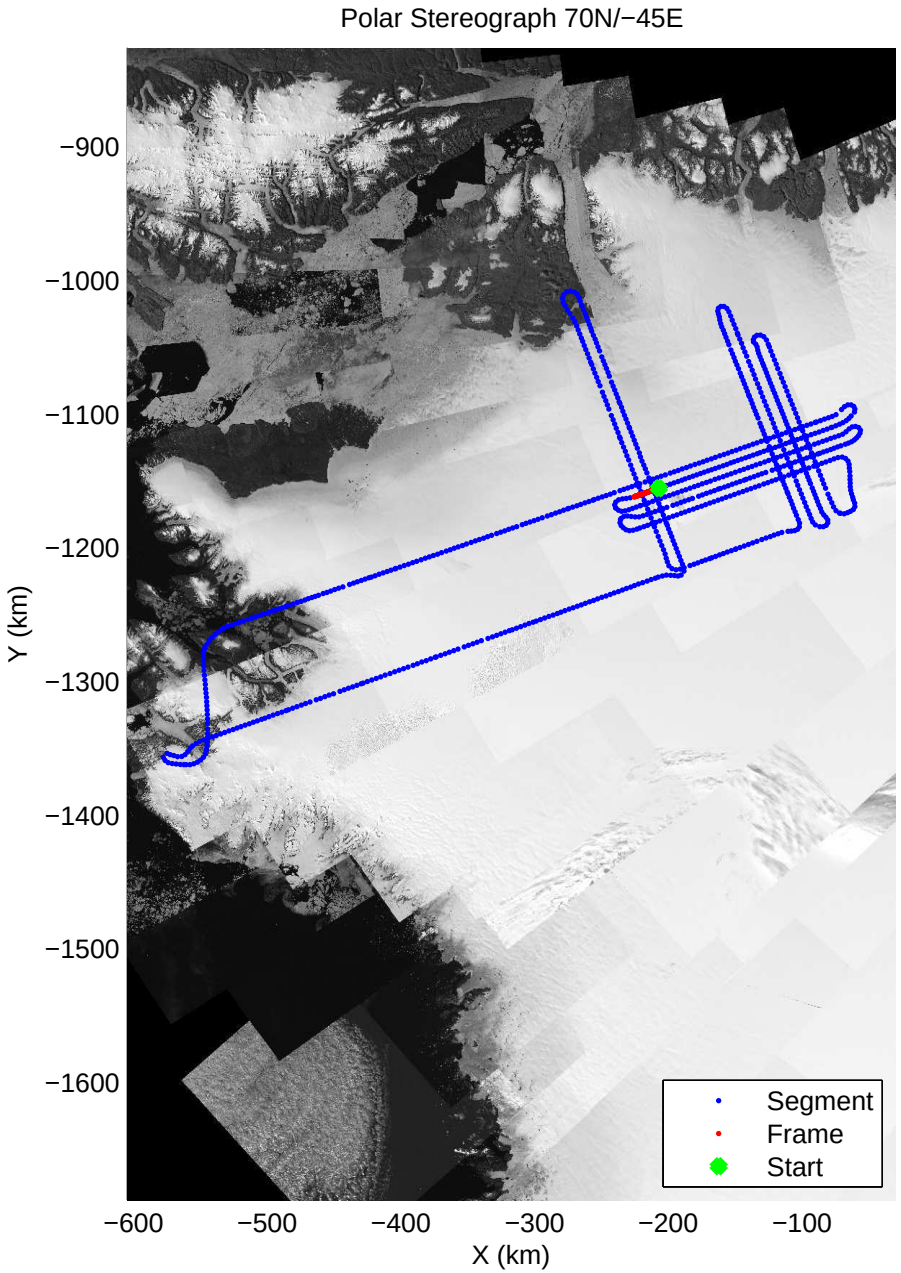

−1140
−1145
−1150
−1155
−1160
−1165
Y (km)
−210
−205
−200
−195
X (km)

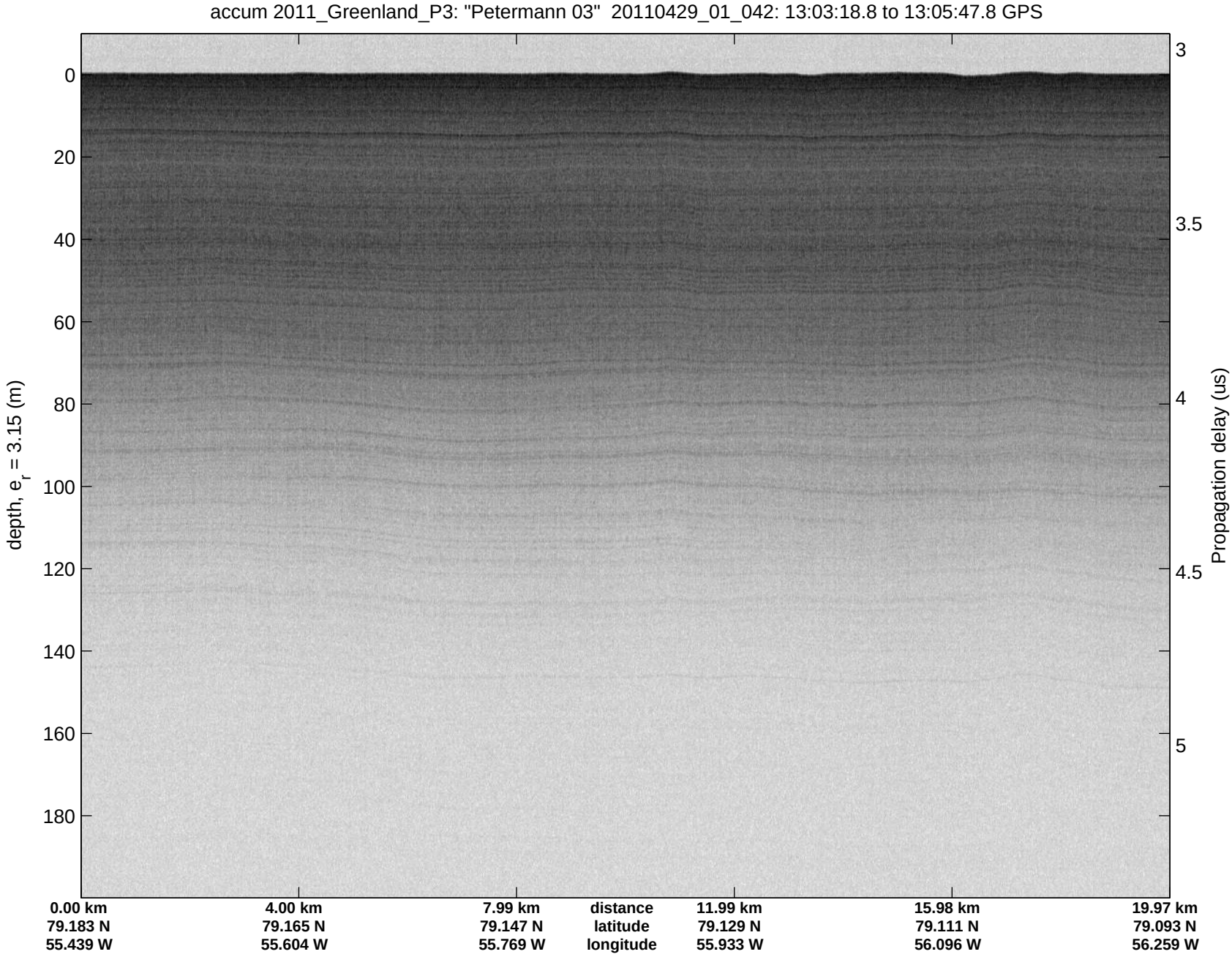

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

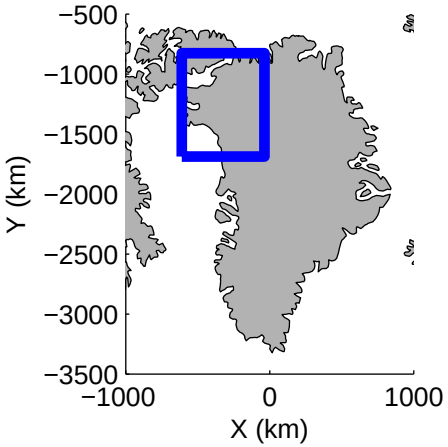

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_041: 13:00:49.7 to 13:03:18.6 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
3.5
4
4.5
5
Propagation delay (us)
0.00 km
79.270 N
54.604 W
4.01 km
79.253 N
54.773 W
8.00 km
79.236 N
54.940 W
distance
latitude
longitude
11.99 km
79.218 N
55.106 W
15.99 km
79.200 N
55.272 W
19.97 km
79.183 N
55.438 W

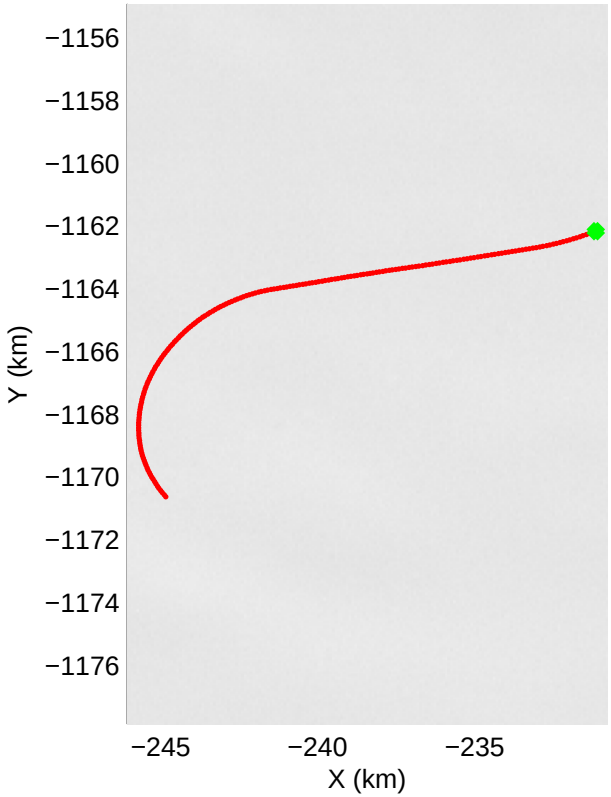

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

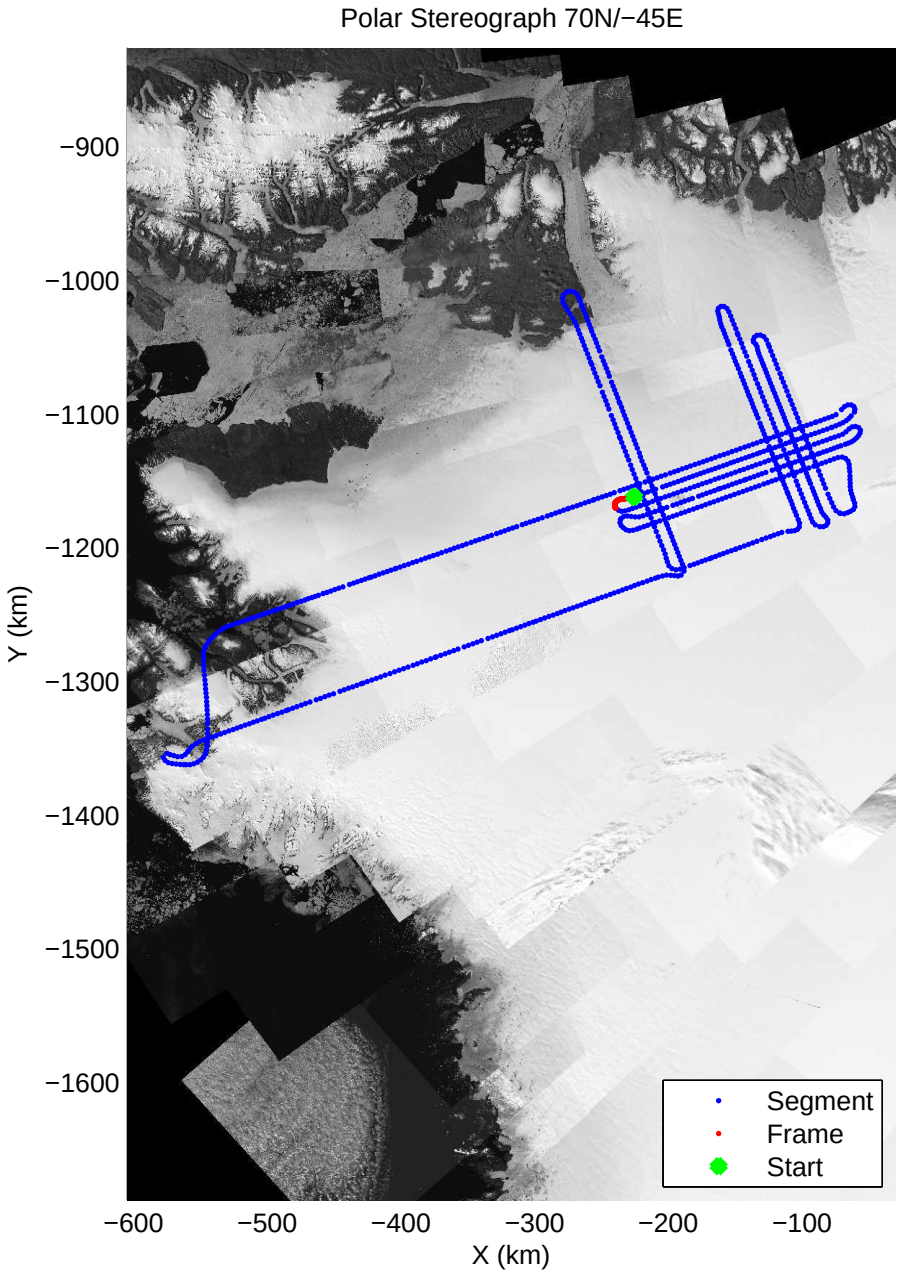

−1145
−1150
−1155
−1160
−1165
−1170
Y (km)
−230
−225
−220
−215
X (km)

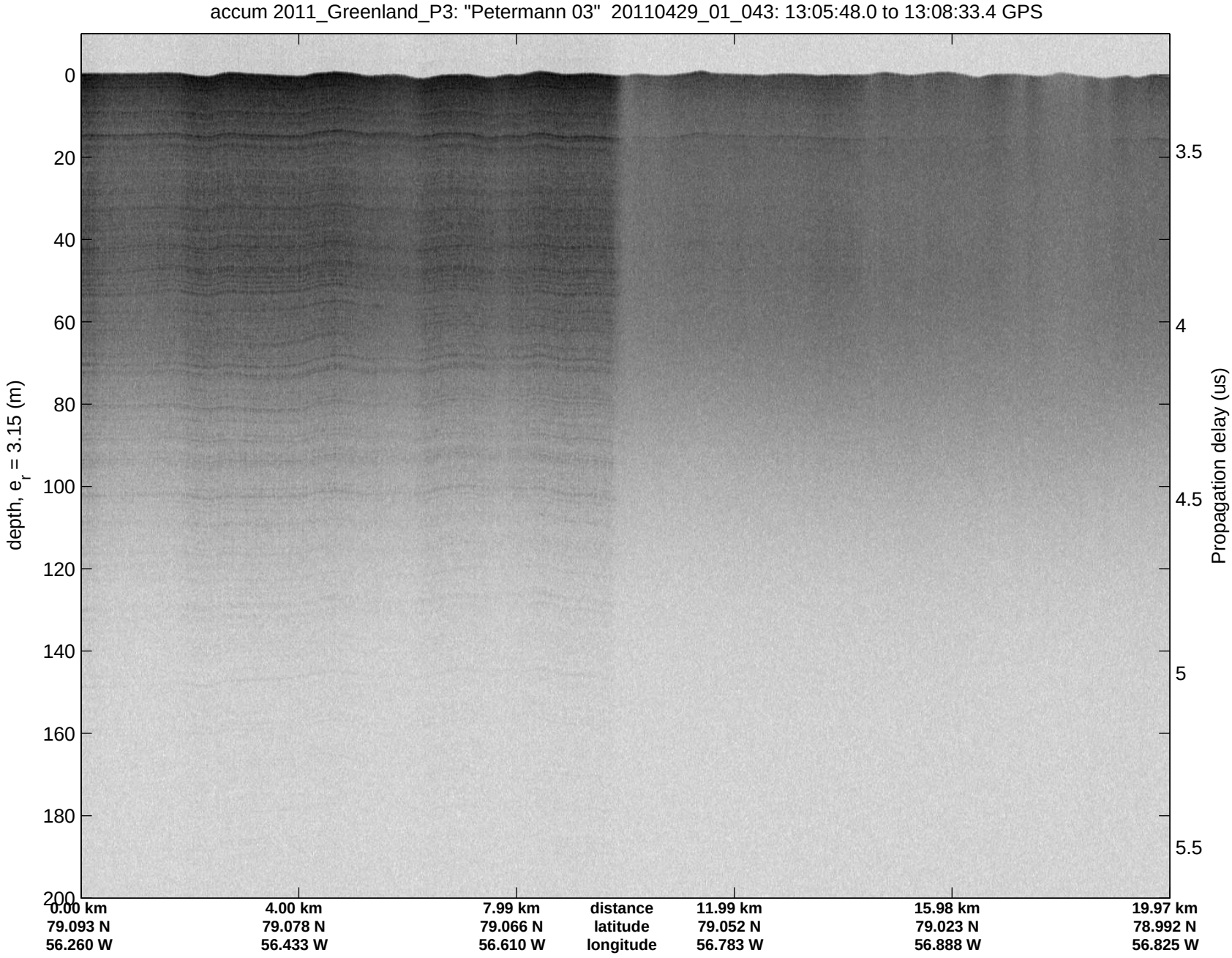

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

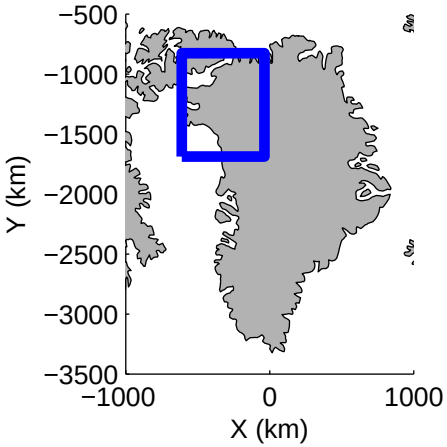

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_042: 13:03:18.8 to 13:05:47.8 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.183 N
55.439 W
4.00 km
79.165 N
55.604 W
7.99 km
79.147 N
55.769 W
distance
latitude
longitude
11.99 km
79.129 N
55.933 W
15.98 km
79.111 N
56.096 W
19.97 km
79.093 N
56.259 W

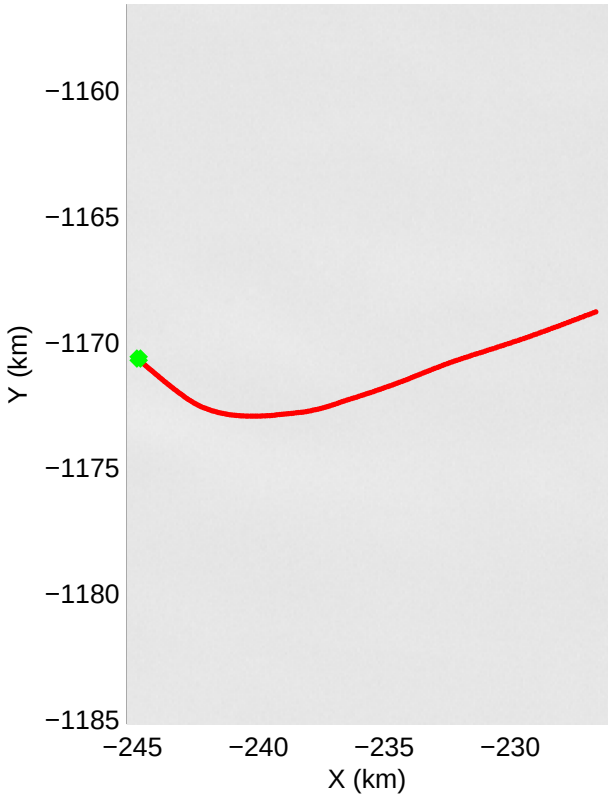

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

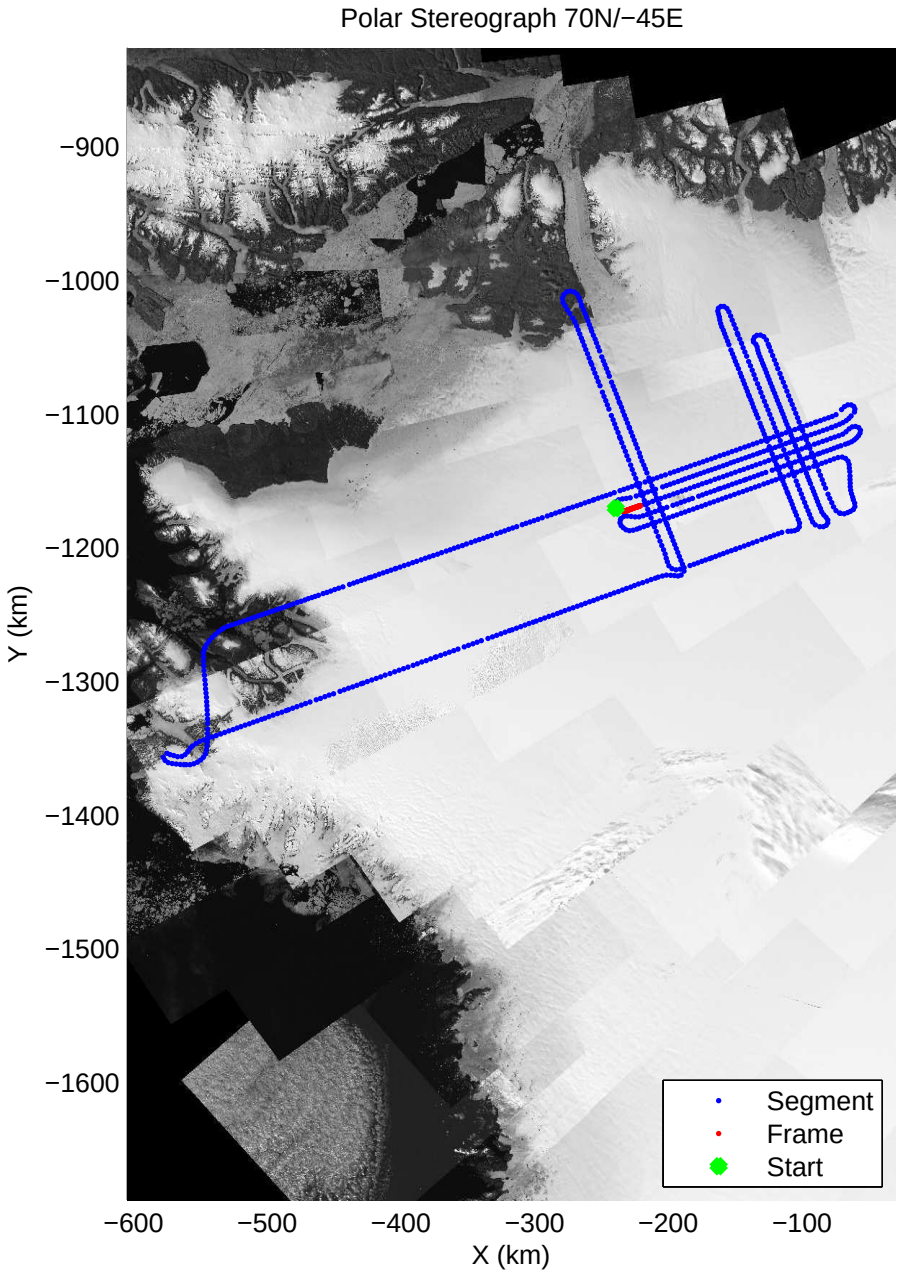

−1156
−1158
−1160
−1162
−1164
−1166
−1168
−1170
−1172
−1174
−1176
Y (km)
−245
−240
−235
X (km)

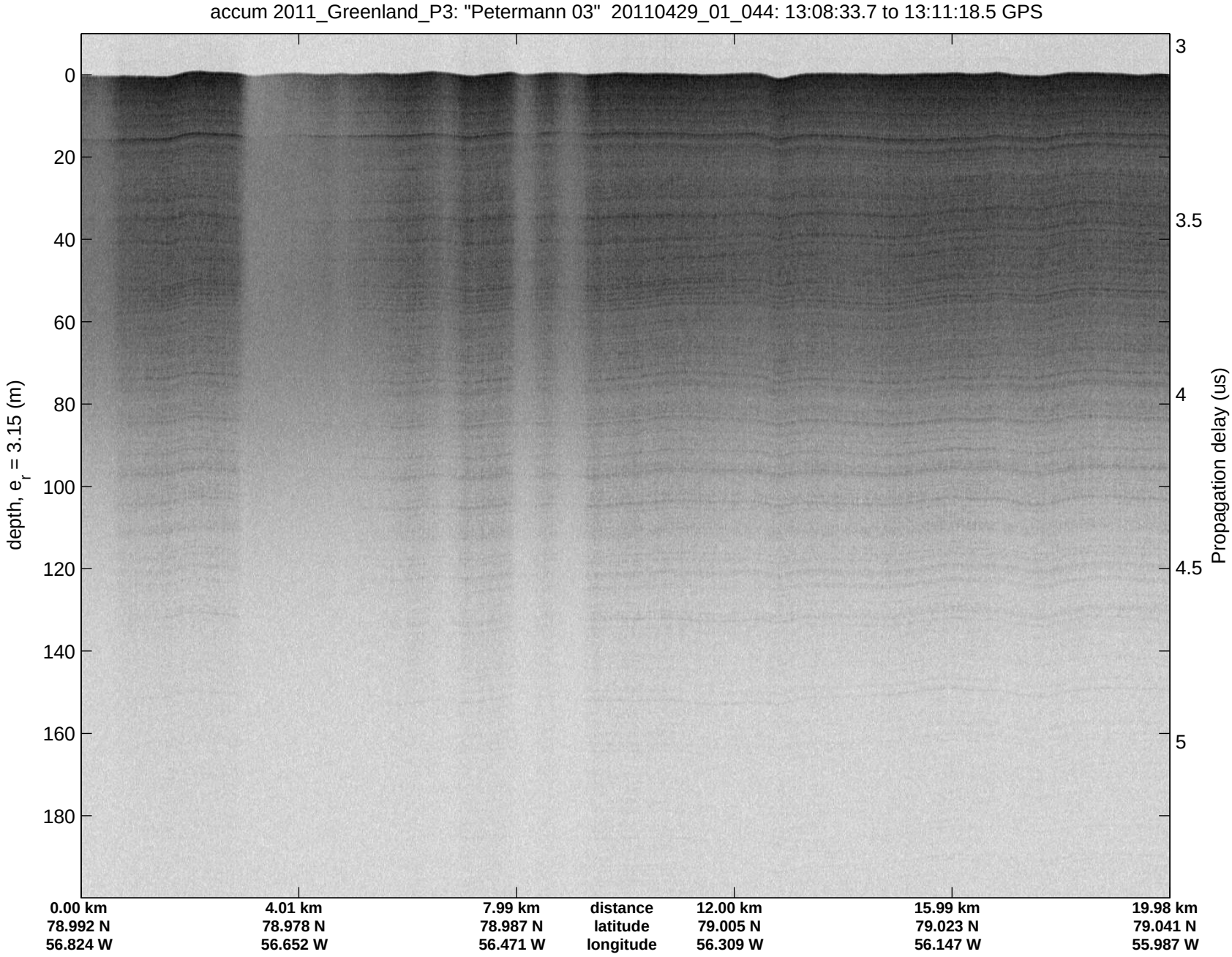

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

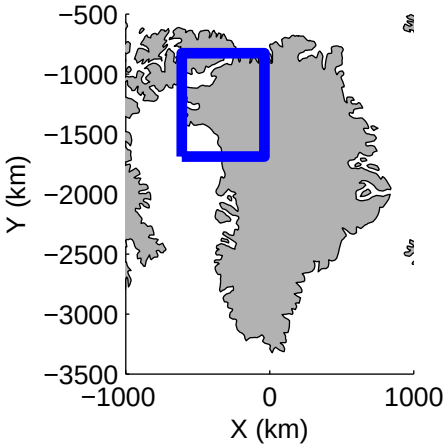

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_043: 13:05:48.0 to 13:08:33.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.093 N
56.260 W
4.00 km
79.078 N
56.433 W
7.99 km
79.066 N
56.610 W
distance
latitude
longitude
11.99 km
79.052 N
56.783 W
15.98 km
79.023 N
56.888 W
19.97 km
78.992 N
56.825 W

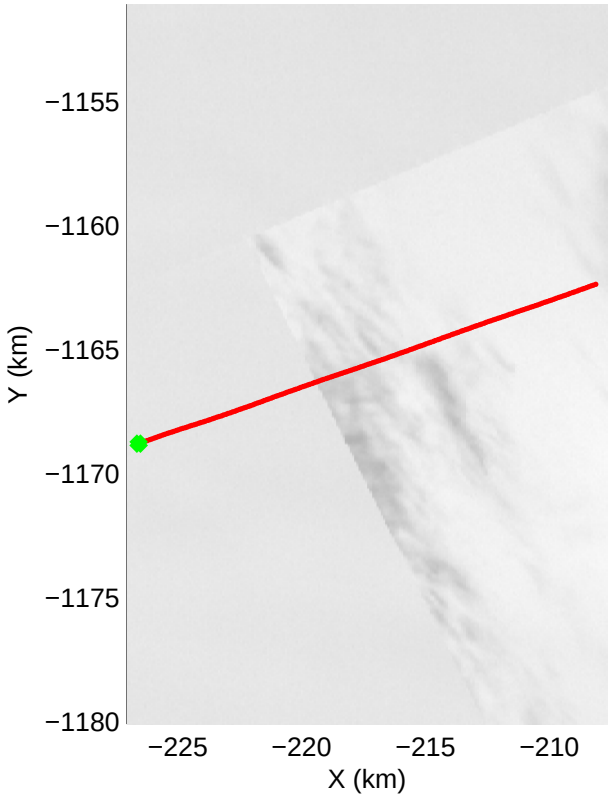

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

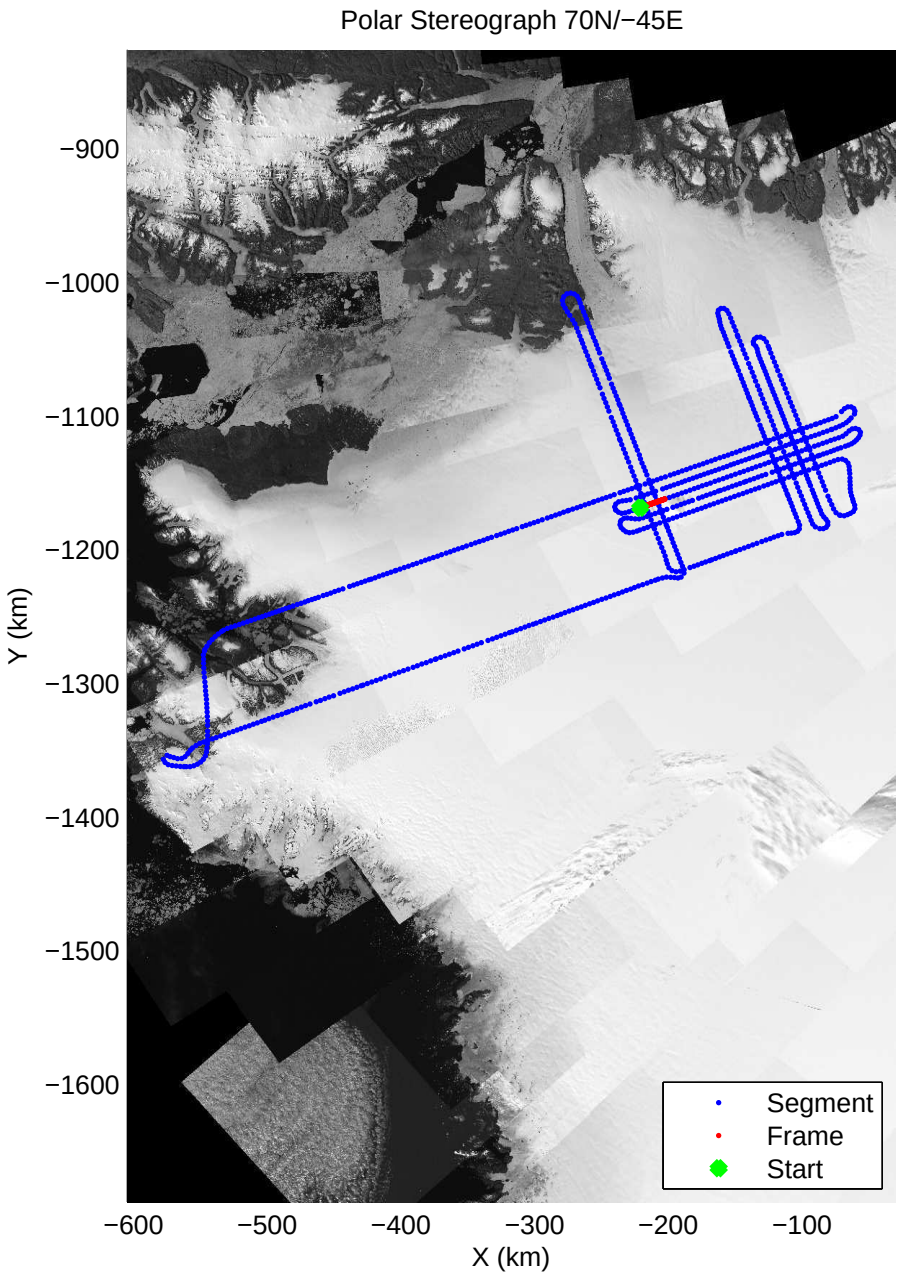

−1160
−1165
−1170
−1175
−1180
−1185
Y (km)
−245
−240
−235
−230
X (km)

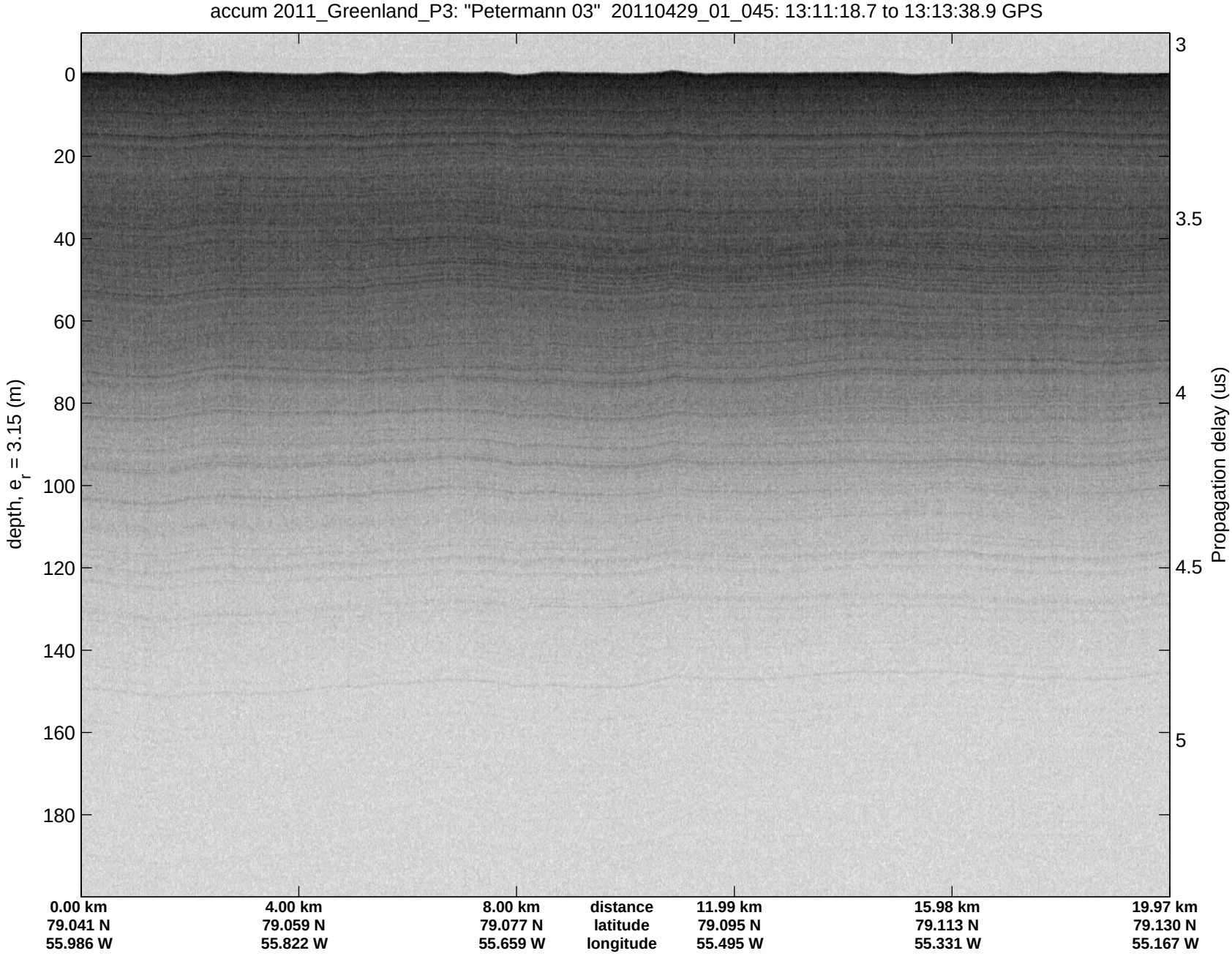

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

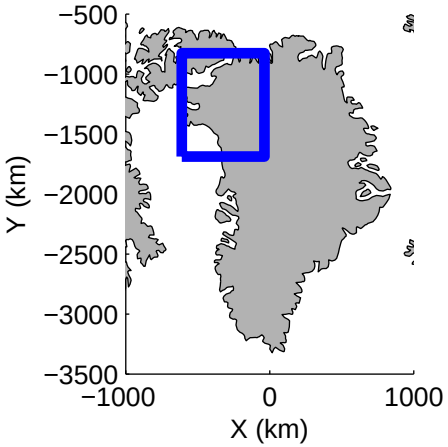

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_044: 13:08:33.7 to 13:11:18.5 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
78.992 N
56.824 W
4.01 km
78.978 N
56.652 W
7.99 km
78.987 N
56.471 W
distance
latitude
longitude
12.00 km
79.005 N
56.309 W
15.99 km
79.023 N
56.147 W
19.98 km
79.041 N
55.987 W

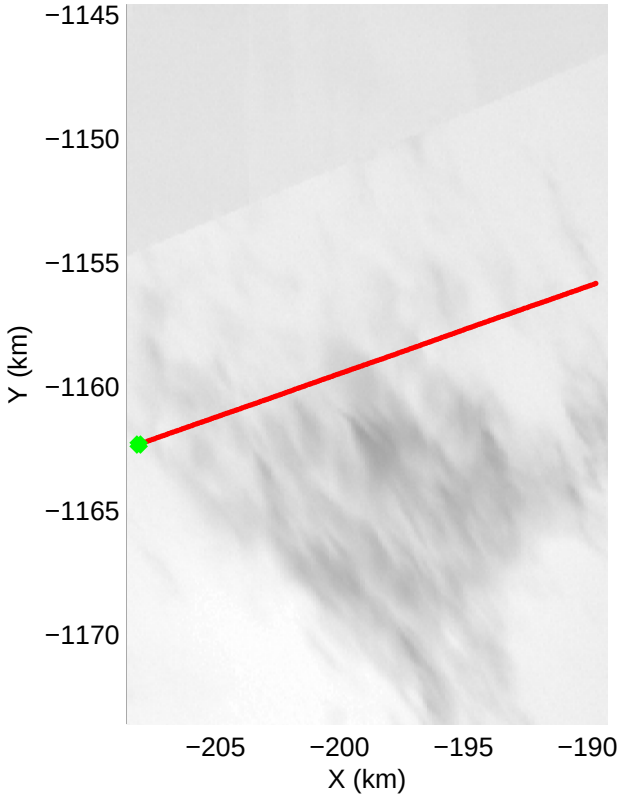

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

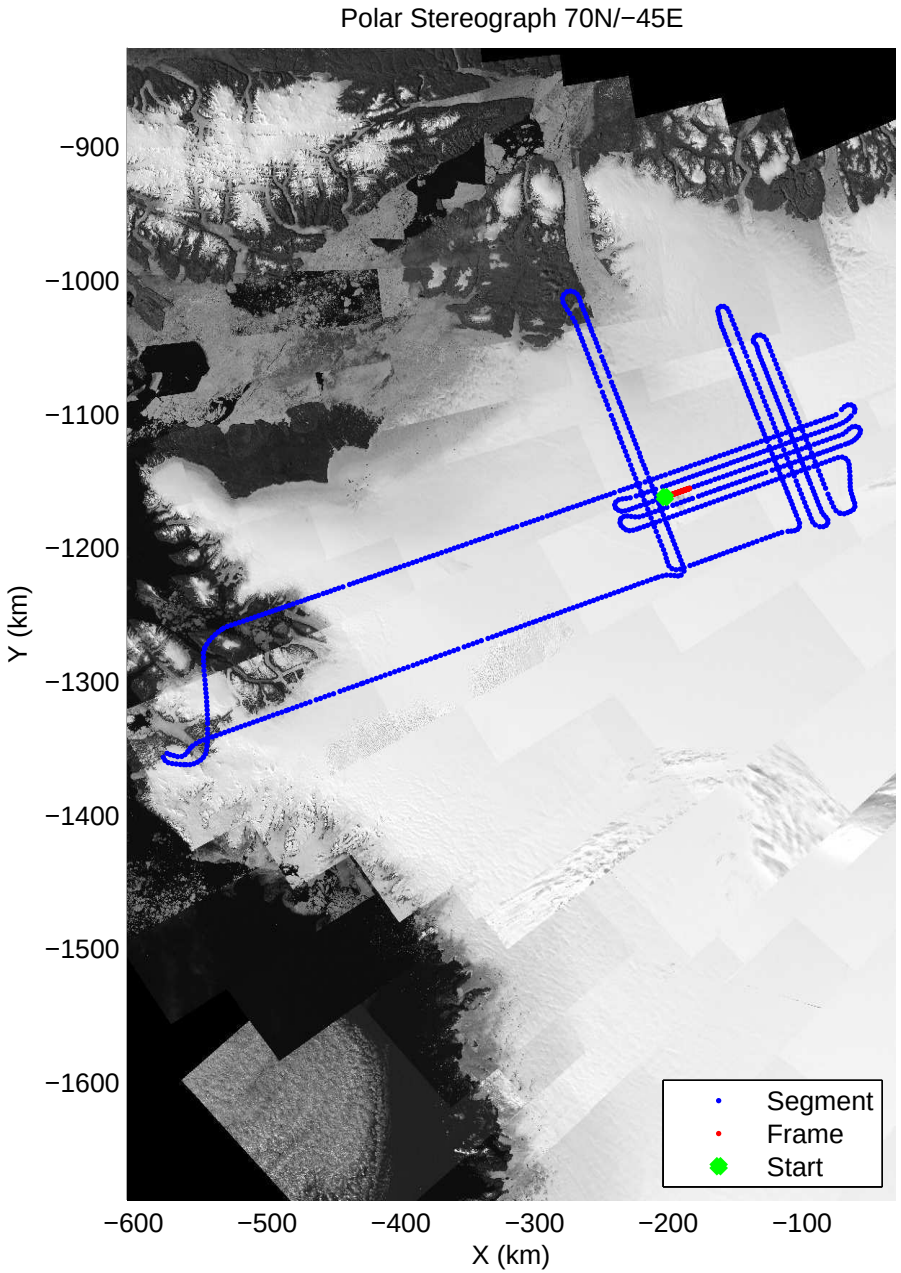

−1155
−1160
−1165
−1170
−1175
−1180
Y (km)
−225
−220
−215
−210
X (km)

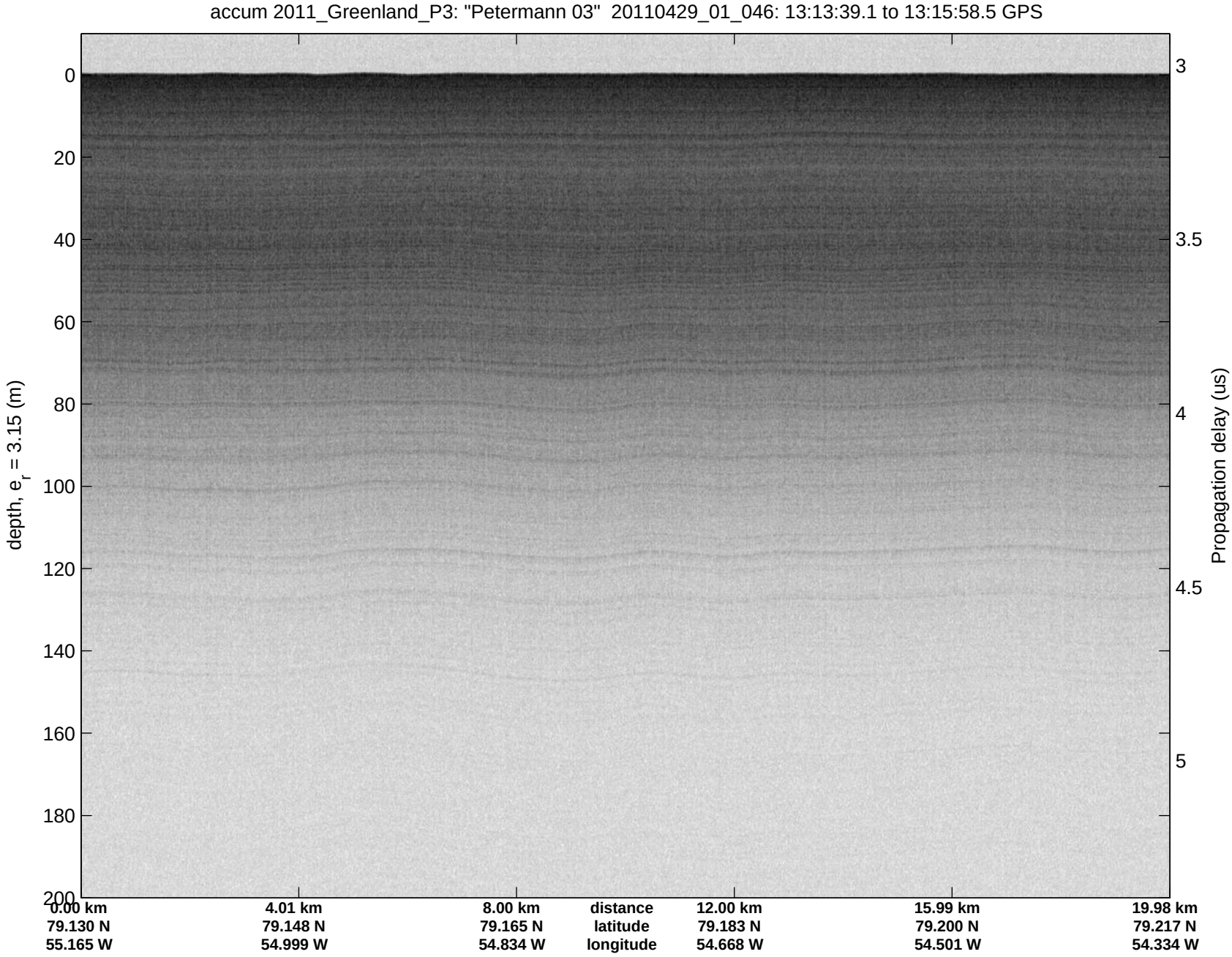

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

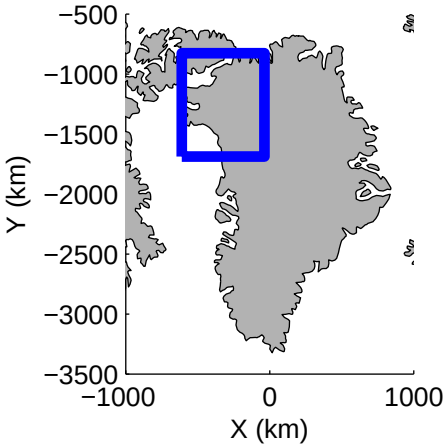

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_045: 13:11:18.7 to 13:13:38.9 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
79.041 N
55.986 W
4.00 km
79.059 N
55.822 W
8.00 km
79.077 N
55.659 W
distance
latitude
longitude
11.99 km
79.095 N
55.495 W
15.98 km
79.113 N
55.331 W
19.97 km
79.130 N
55.167 W

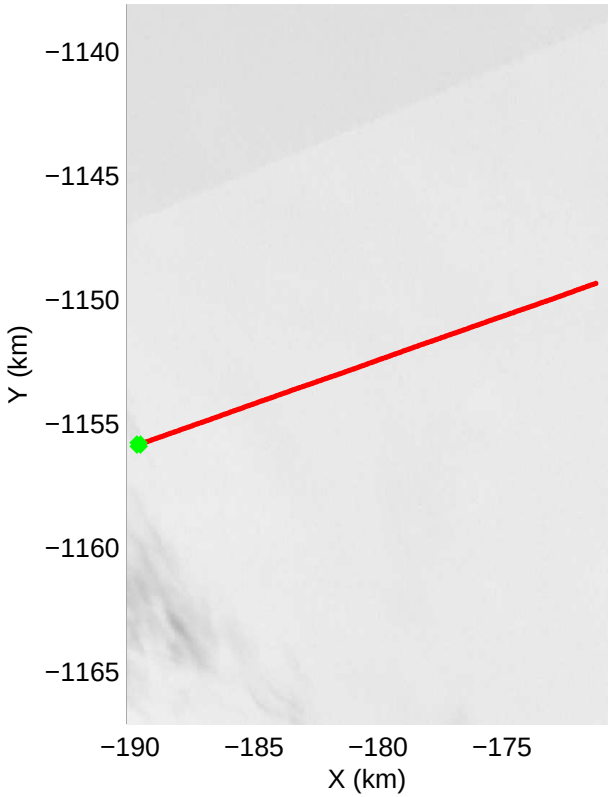

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

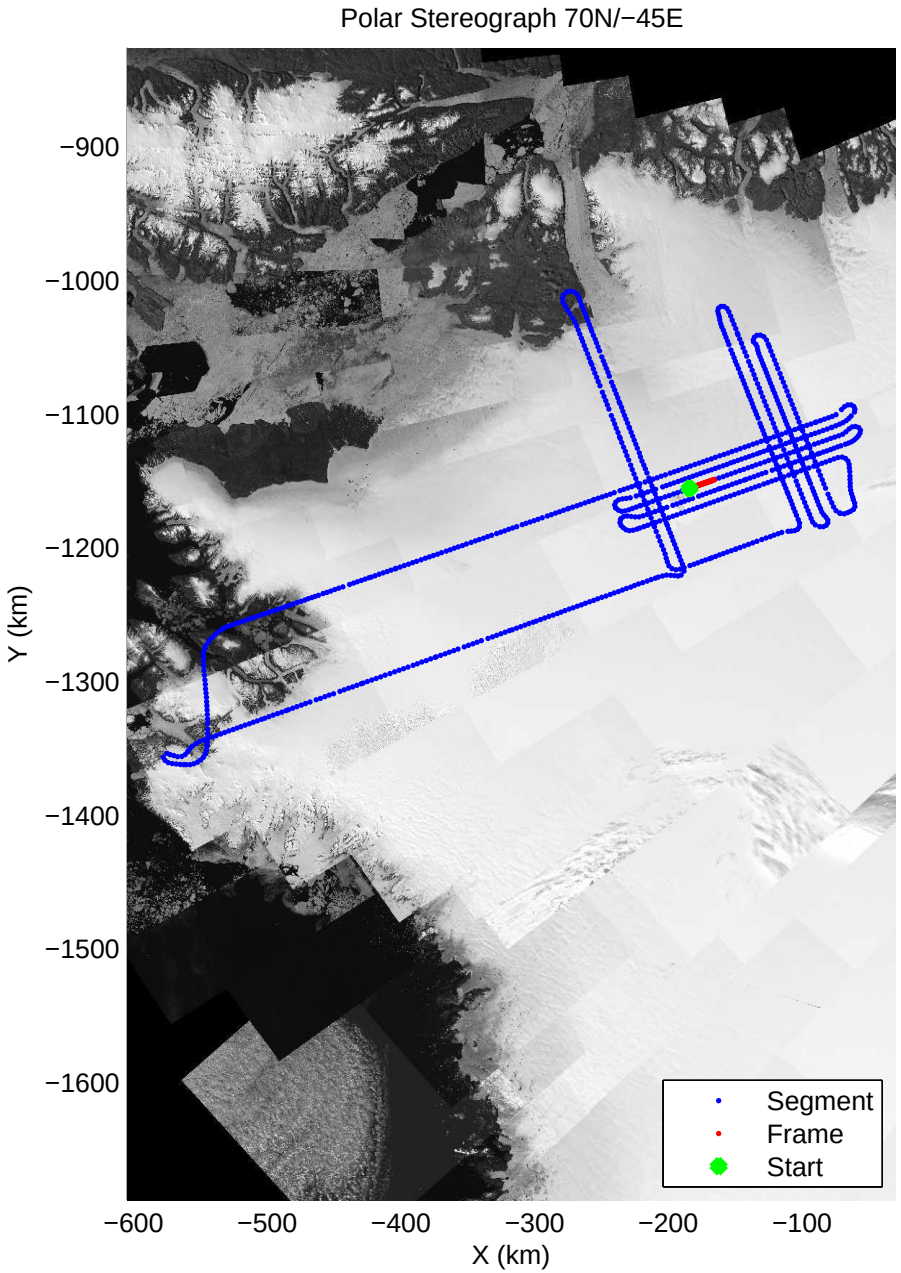

−1145
−1150
−1155
−1160
−1165
−1170
Y (km)
−205
−200
−195
−190
X (km)

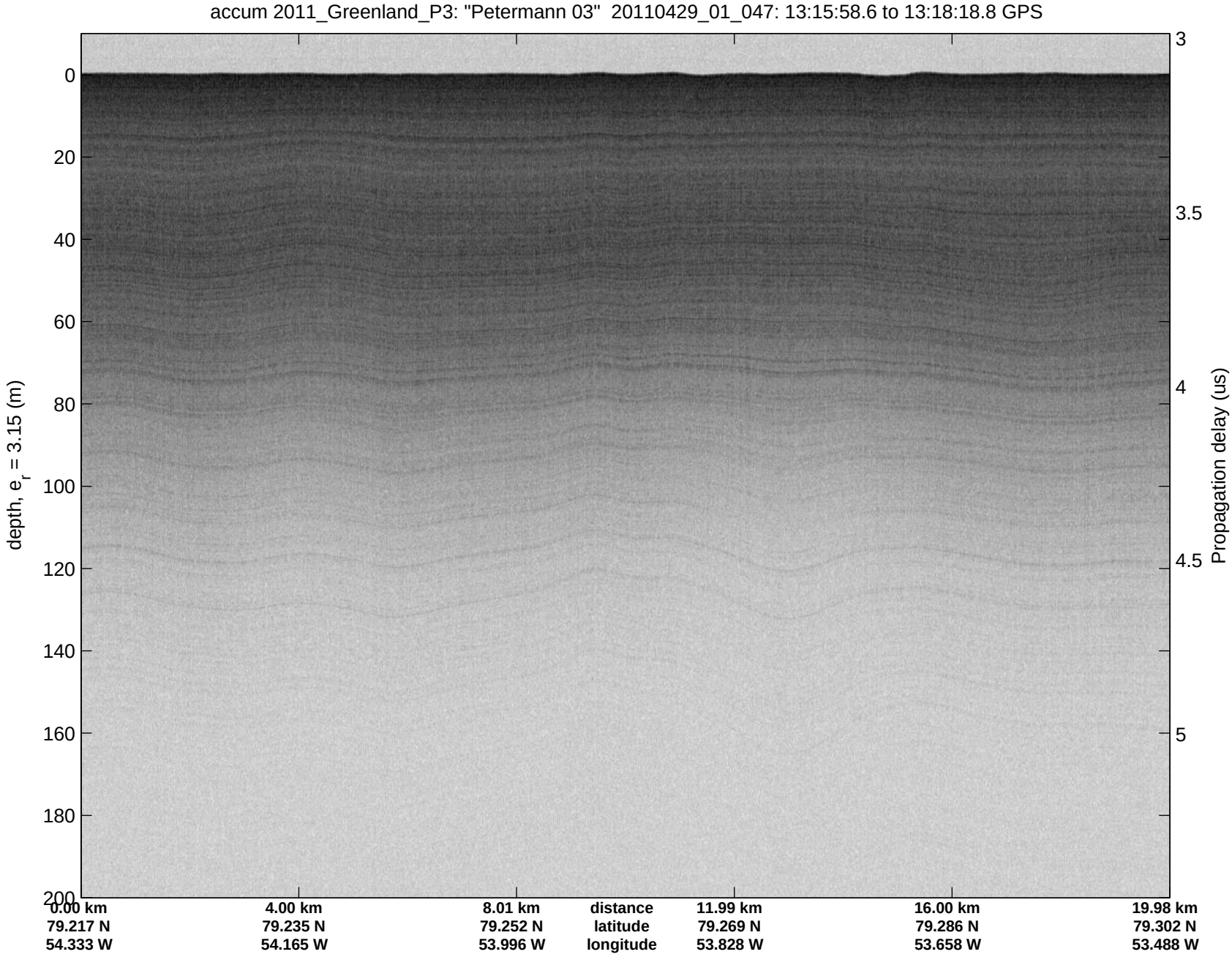

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

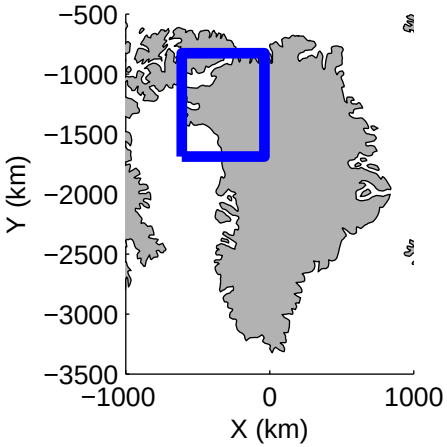

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_046: 13:13:39.1 to 13:15:58.5 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.130 N
55.165 W
4.01 km
79.148 N
54.999 W
8.00 km
79.165 N
54.834 W
distance
latitude
longitude
12.00 km
79.183 N
54.668 W
15.99 km
79.200 N
54.501 W
19.98 km
79.217 N
54.334 W

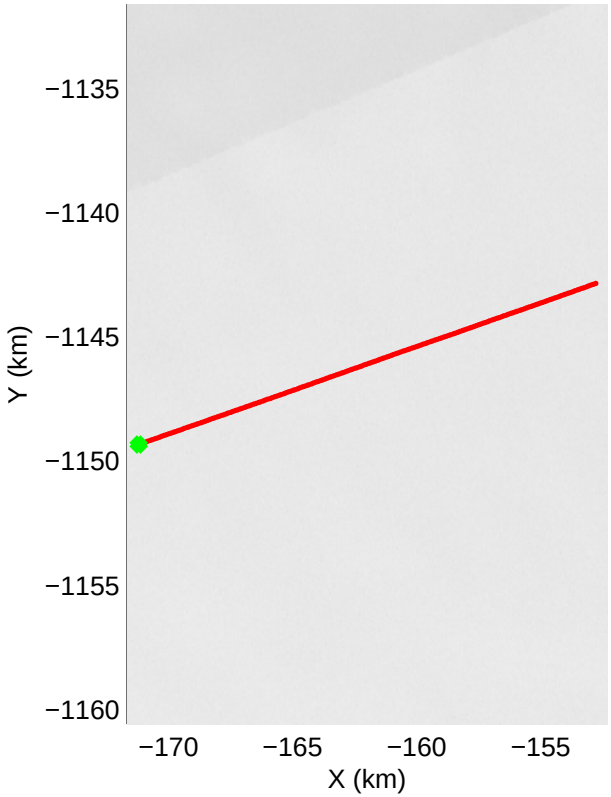

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

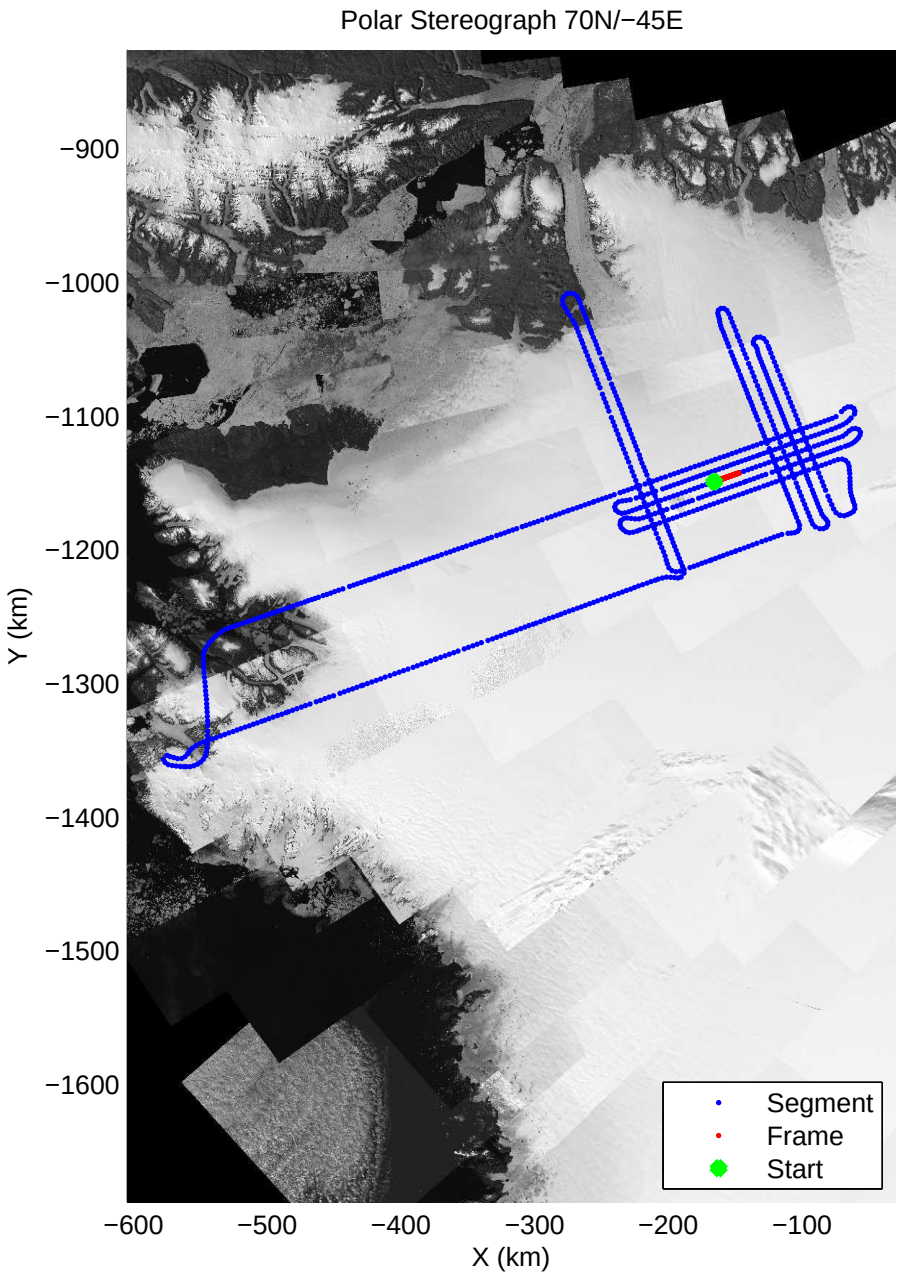

−1140
−1145
−1150
−1155
−1160
−1165
Y (km)
−190
−185
−180
−175
X (km)

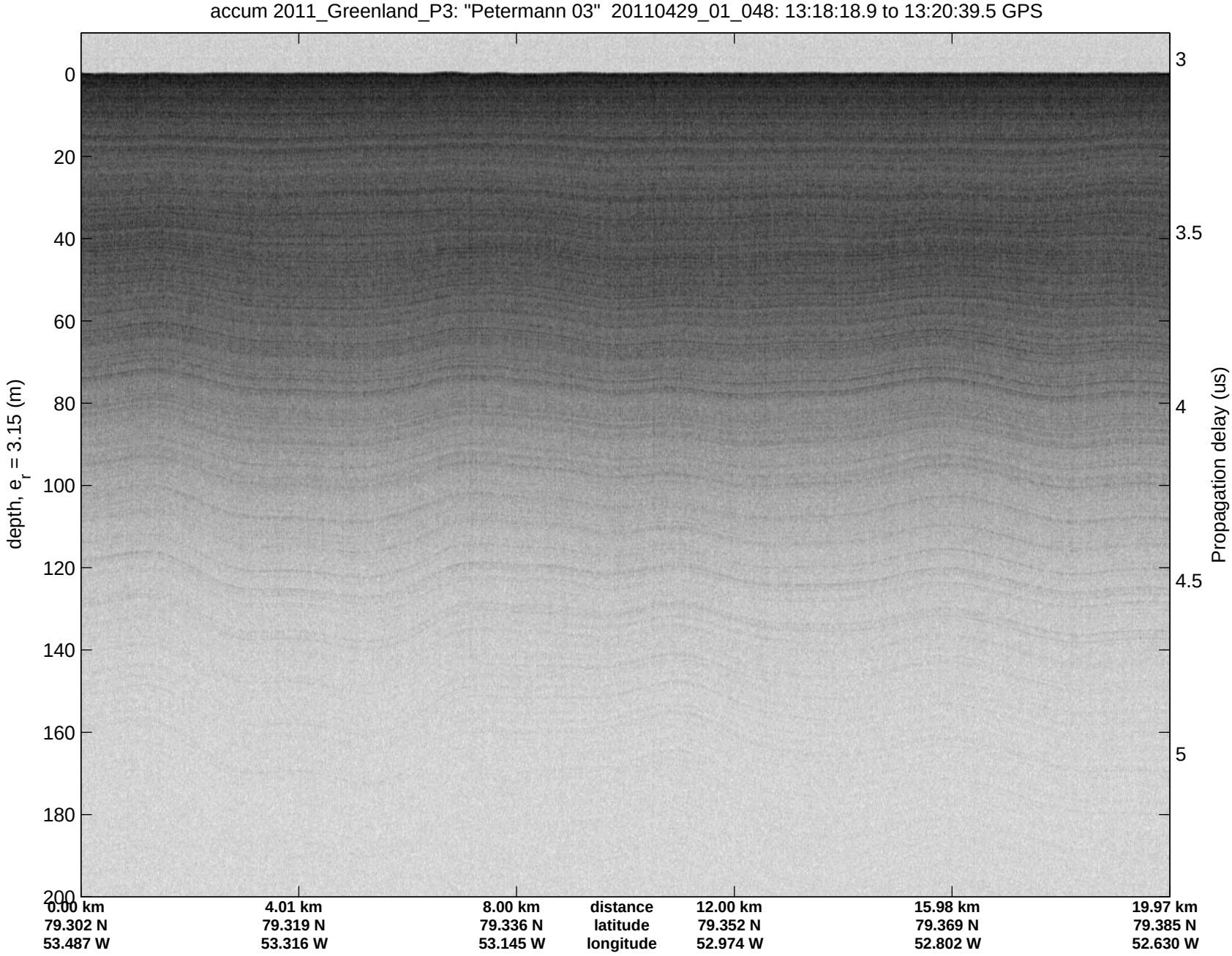

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

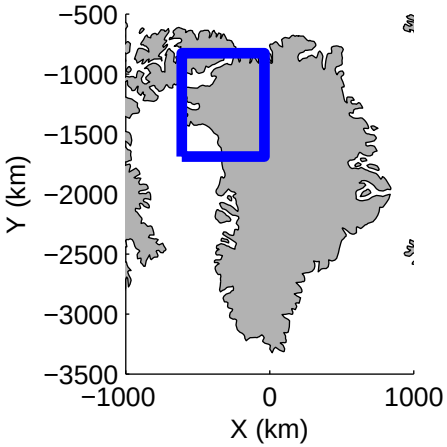

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_047: 13:15:58.6 to 13:18:18.8 GPS
depth, e_r = 3.15 (m)
Propagation delay (us)
0
20
40
60
80
100
120
140
160
180
200
3
3.5
4
4.5
5
0.00 km
79.217 N
54.333 W
4.00 km
79.235 N
54.165 W
8.01 km
79.252 N
53.996 W
distance
latitude
longitude
11.99 km
79.269 N
53.828 W
16.00 km
79.286 N
53.658 W
19.98 km
79.302 N
53.488 W

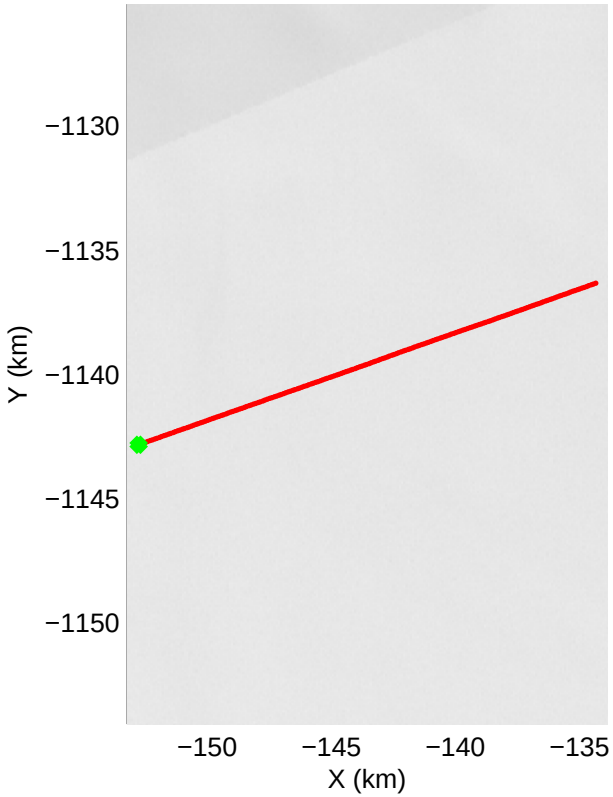

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

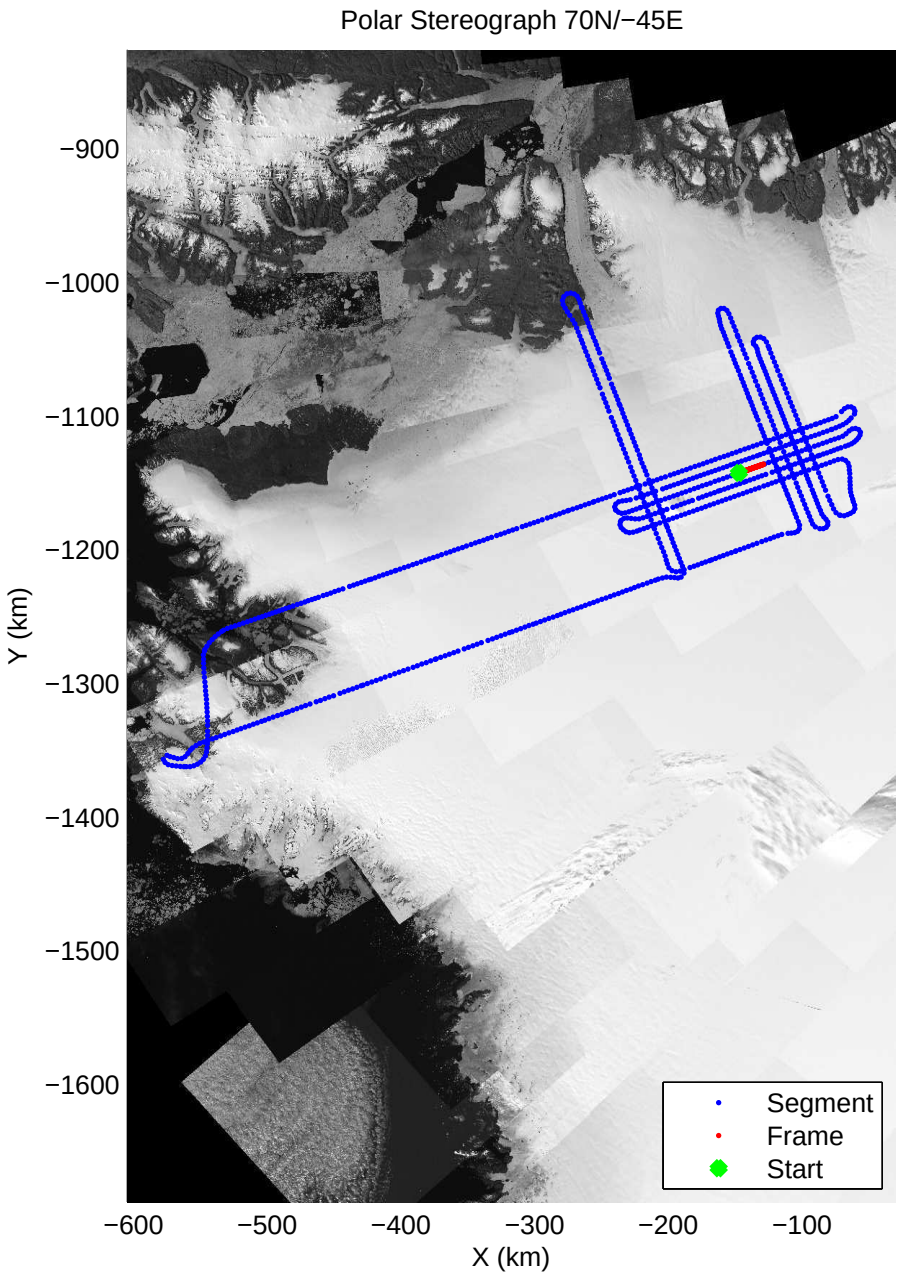

−1135
−1140
−1145
−1150
−1155
−1160
Y (km)
−170
−165
−160
−155
X (km)

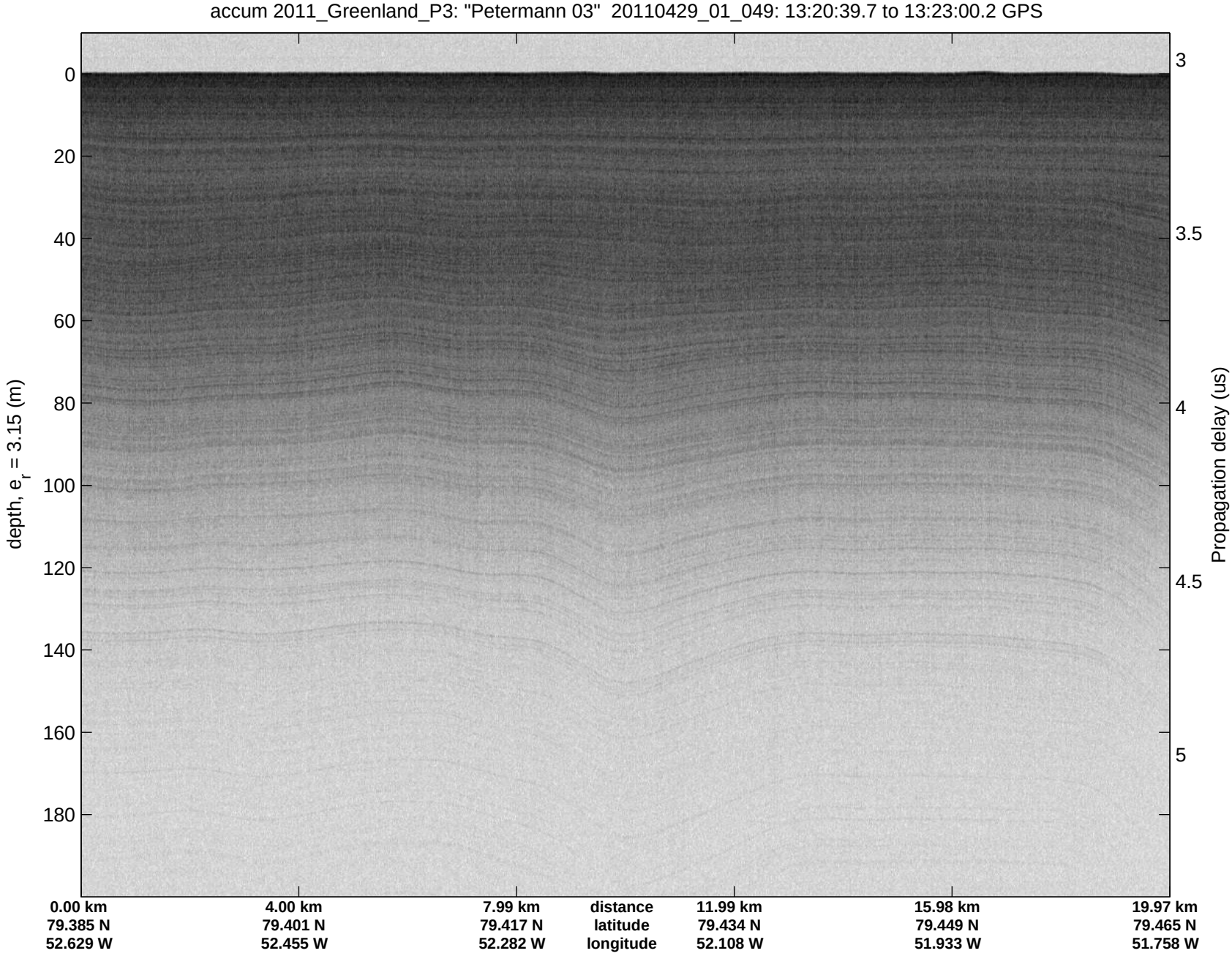

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

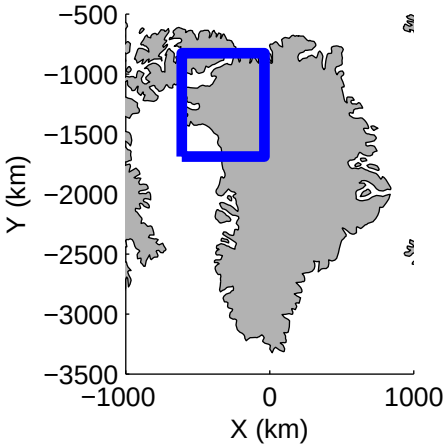

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_048: 13:18:18.9 to 13:20:39.5 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.302 N
53.487 W
4.01 km
79.319 N
53.316 W
8.00 km
79.336 N
53.145 W
distance
latitude
longitude
12.00 km
79.352 N
52.974 W
15.98 km
79.369 N
52.802 W
19.97 km
79.385 N
52.630 W

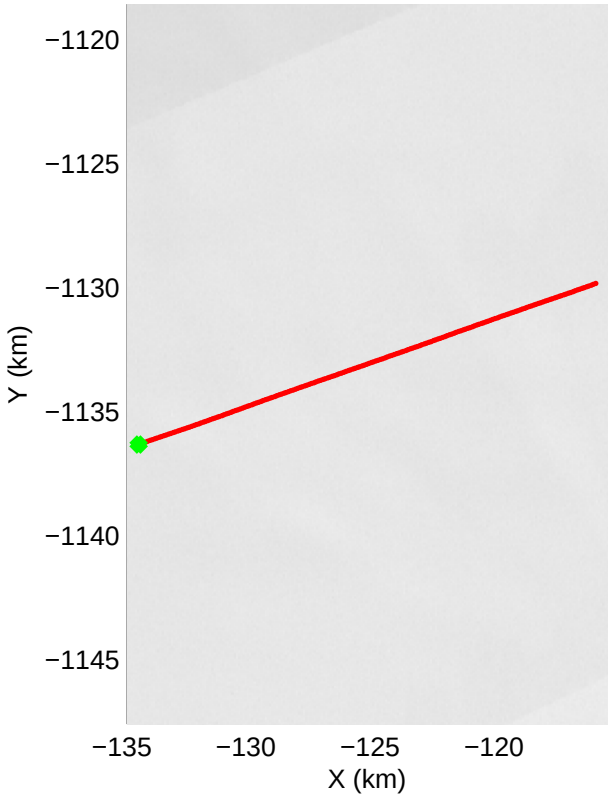

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

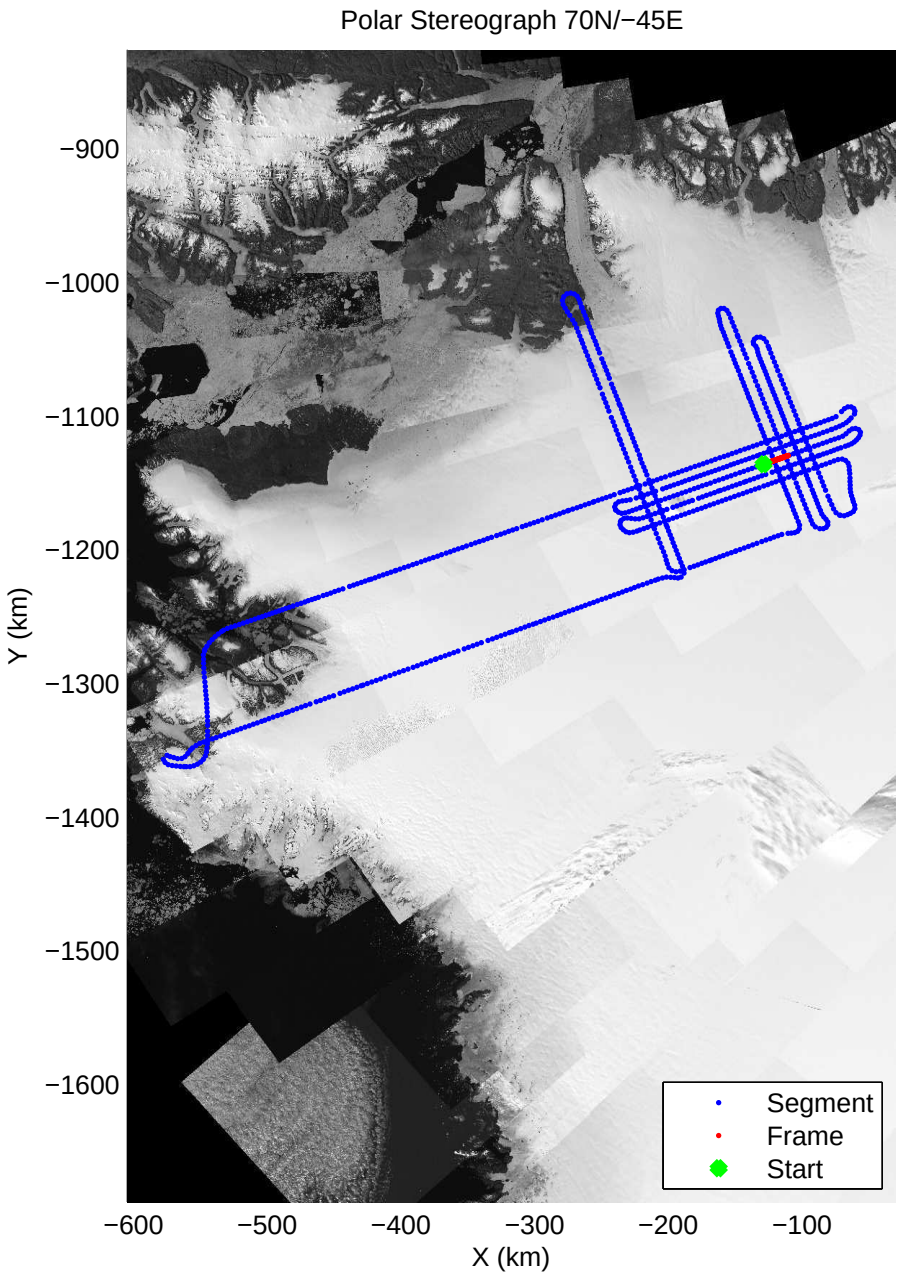

−1130
−1135
−1140
−1145
−1150
Y (km)
−150
−145
−140
−135
X (km)

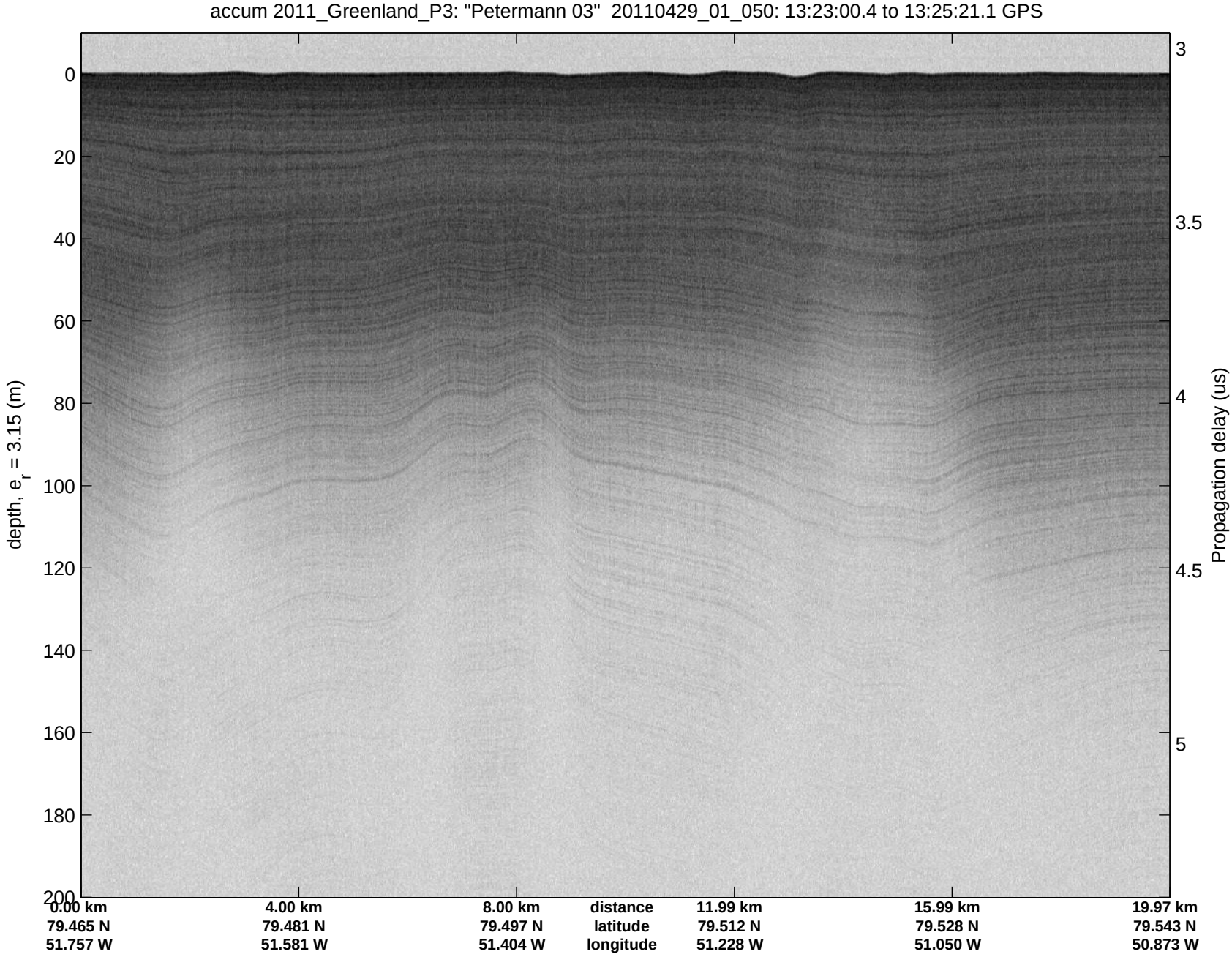

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

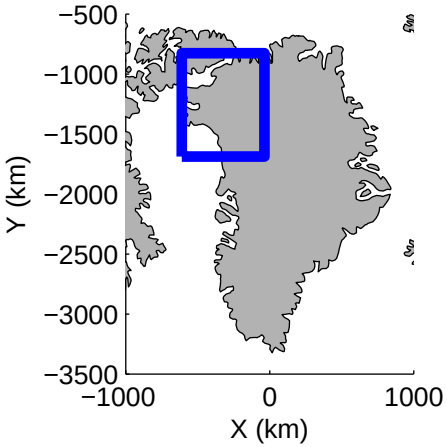

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_049: 13:20:39.7 to 13:23:00.2 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.385 N
52.629 W
4.00 km
79.401 N
52.455 W
7.99 km
79.417 N
52.282 W
distance
latitude
longitude
11.99 km
79.434 N
52.108 W
15.98 km
79.449 N
51.933 W
19.97 km
79.465 N
51.758 W

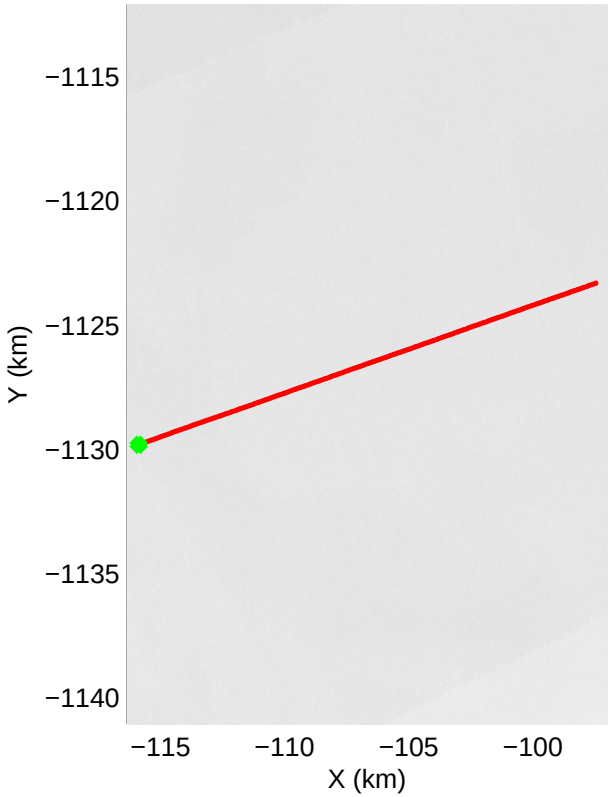

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

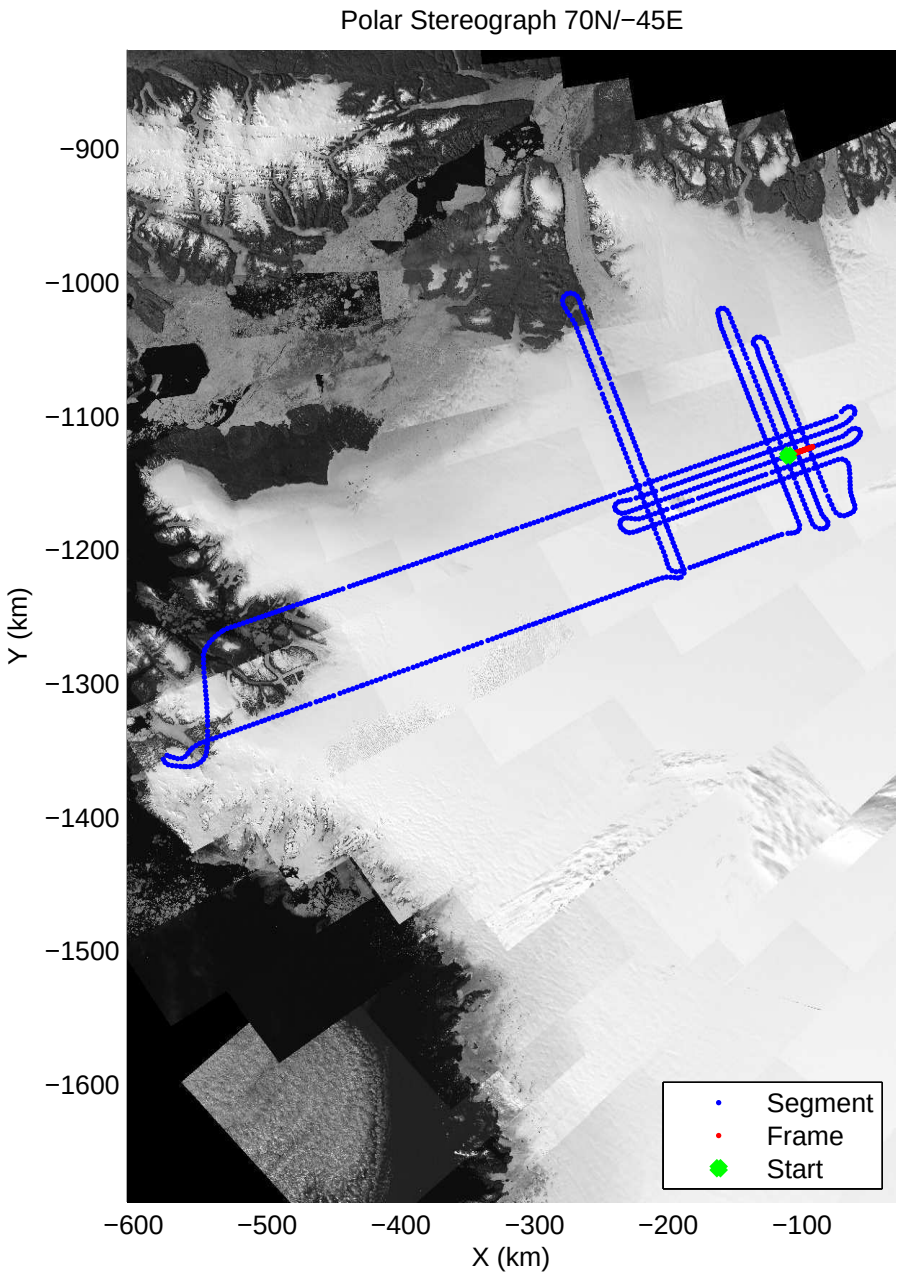

−1120
−1125
−1130
−1135
−1140
−1145
Y (km)
−135
−130
−125
−120
X (km)

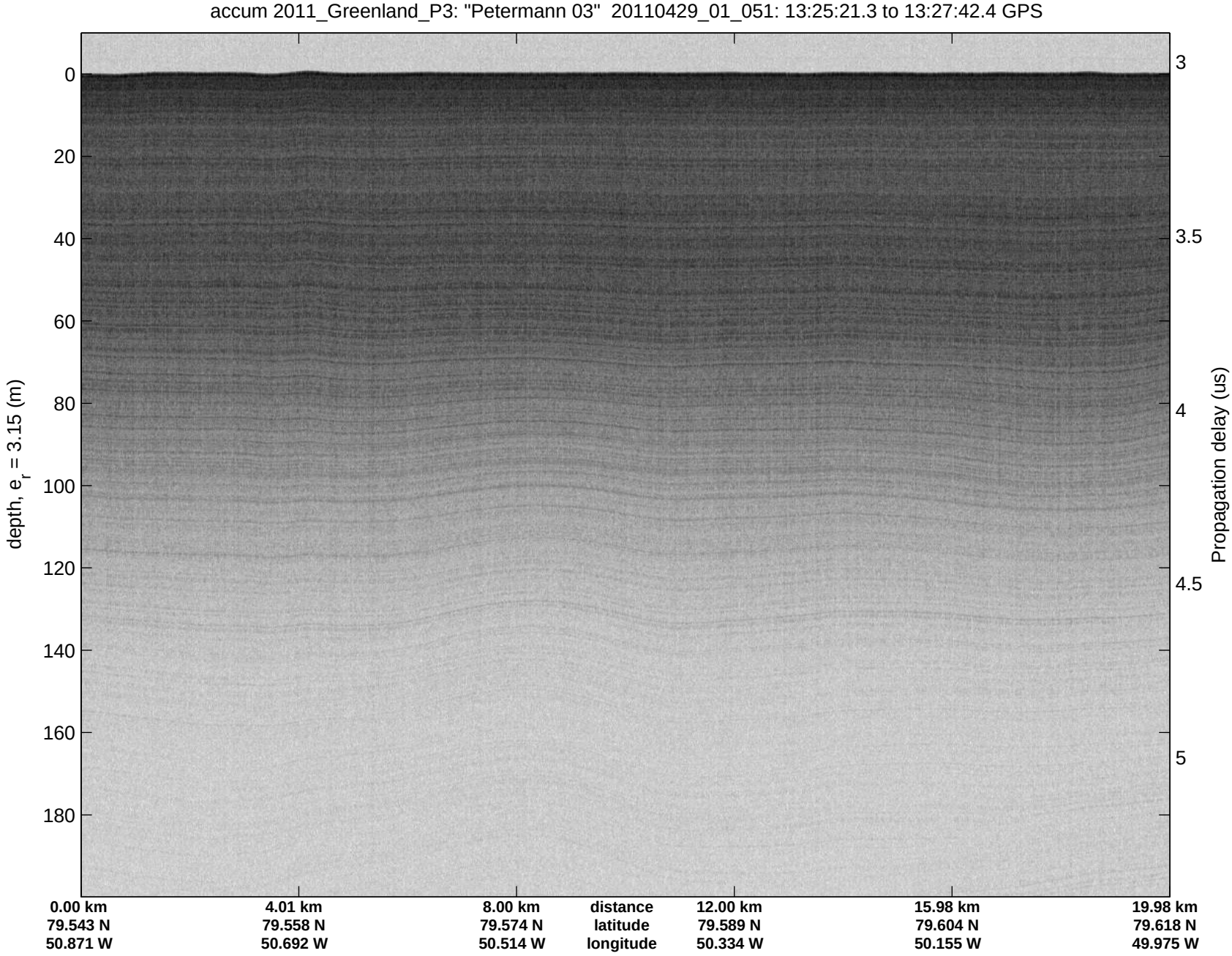

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

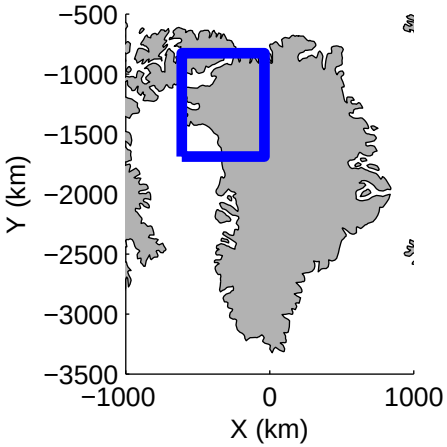

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_050: 13:23:00.4 to 13:25:21.1 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.465 N
51.757 W
4.00 km
79.481 N
51.581 W
8.00 km
79.497 N
51.404 W
distance
latitude
longitude
11.99 km
79.512 N
51.228 W
15.99 km
79.528 N
51.050 W
19.97 km
79.543 N
50.873 W

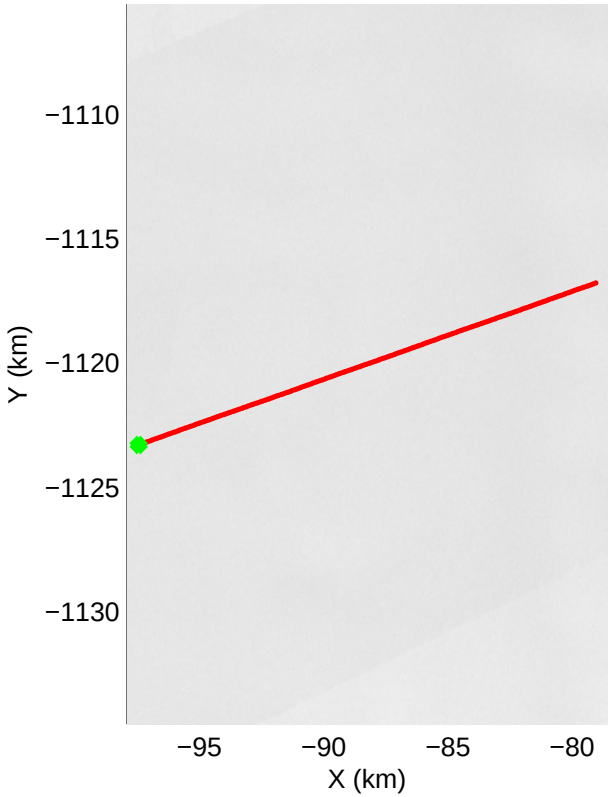

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

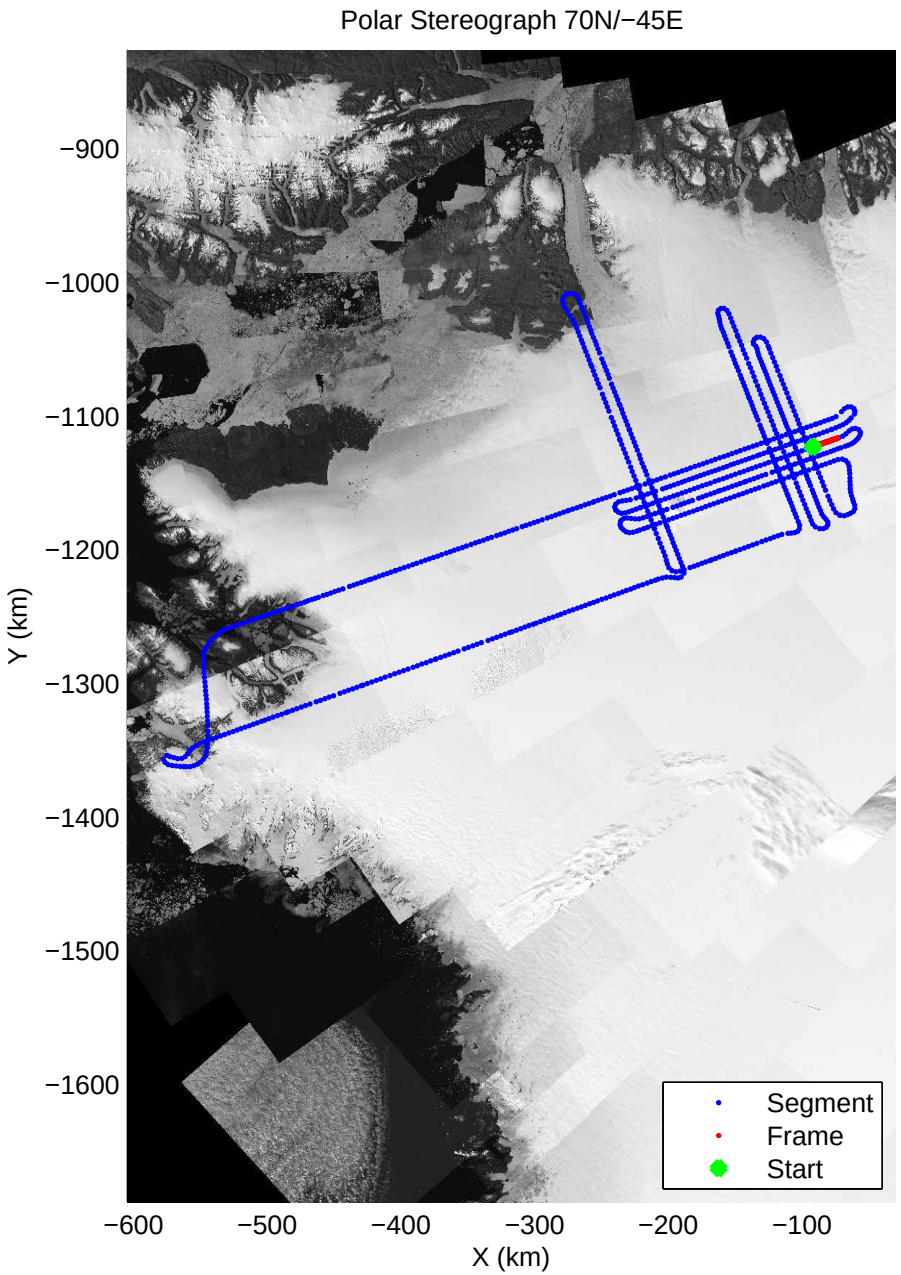

−1115
−1120
−1125
−1130
−1135
−1140
Y (km)
−115
−110
−105
−100
X (km)

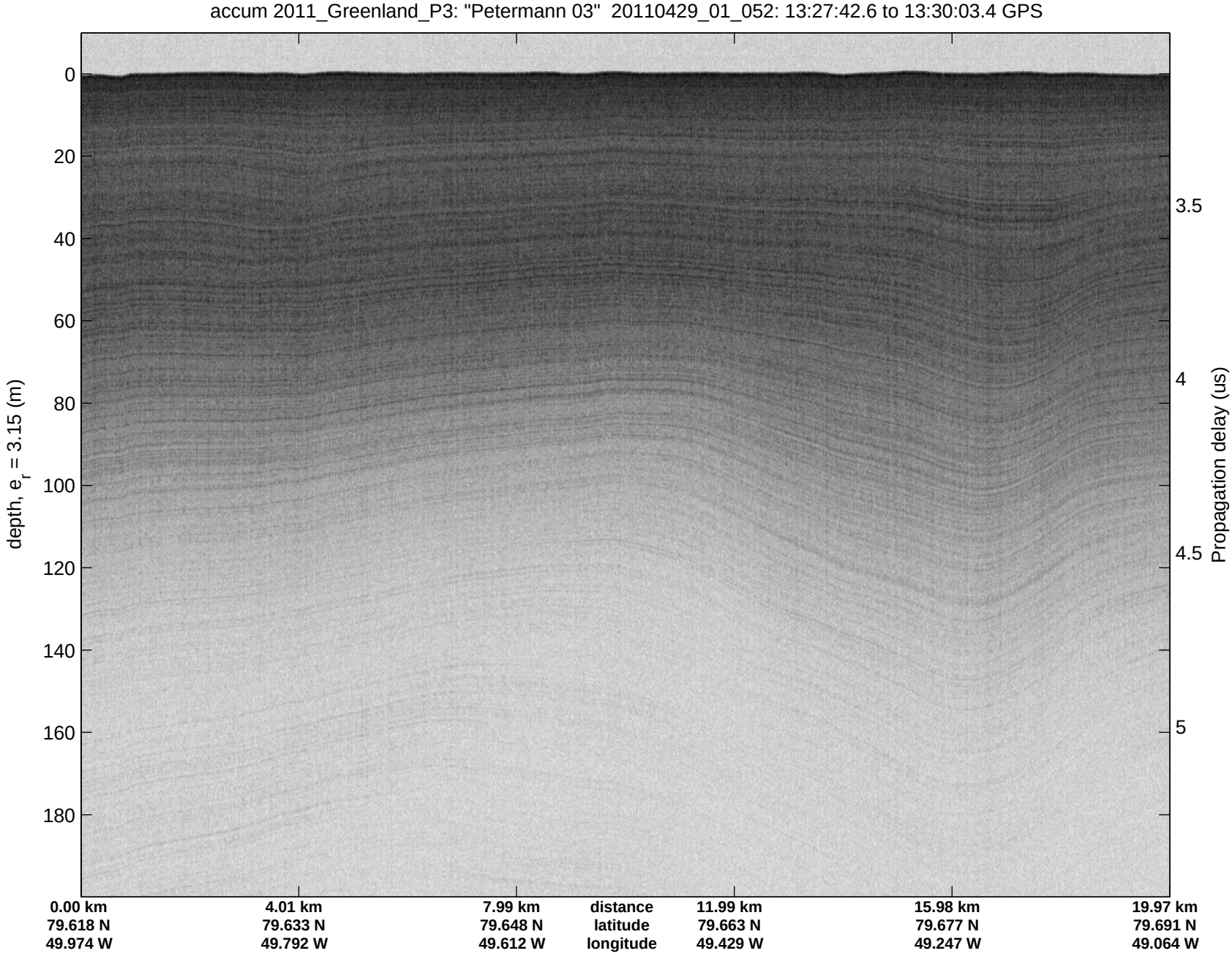

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

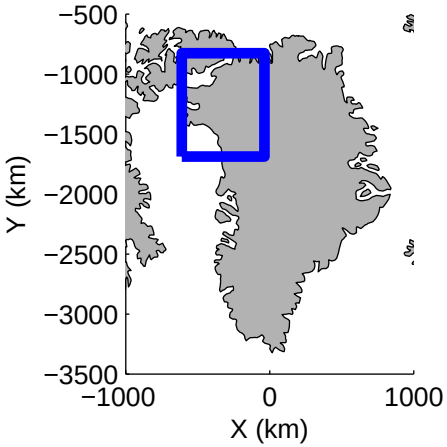

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_051: 13:25:21.3 to 13:27:42.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.543 N
50.871 W
4.01 km
79.558 N
50.692 W
8.00 km
79.574 N
50.514 W
distance
latitude
longitude
12.00 km
79.589 N
50.334 W
15.98 km
79.604 N
50.155 W
19.98 km
79.618 N
49.975 W

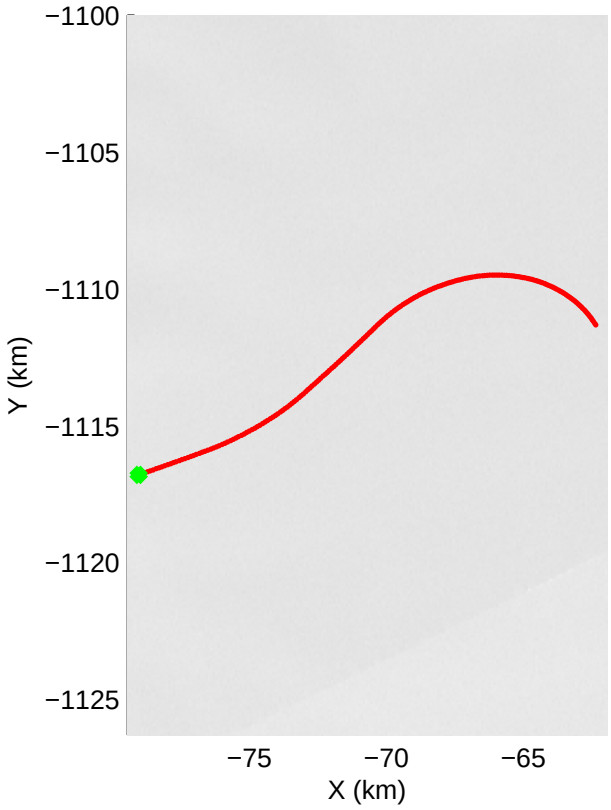

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

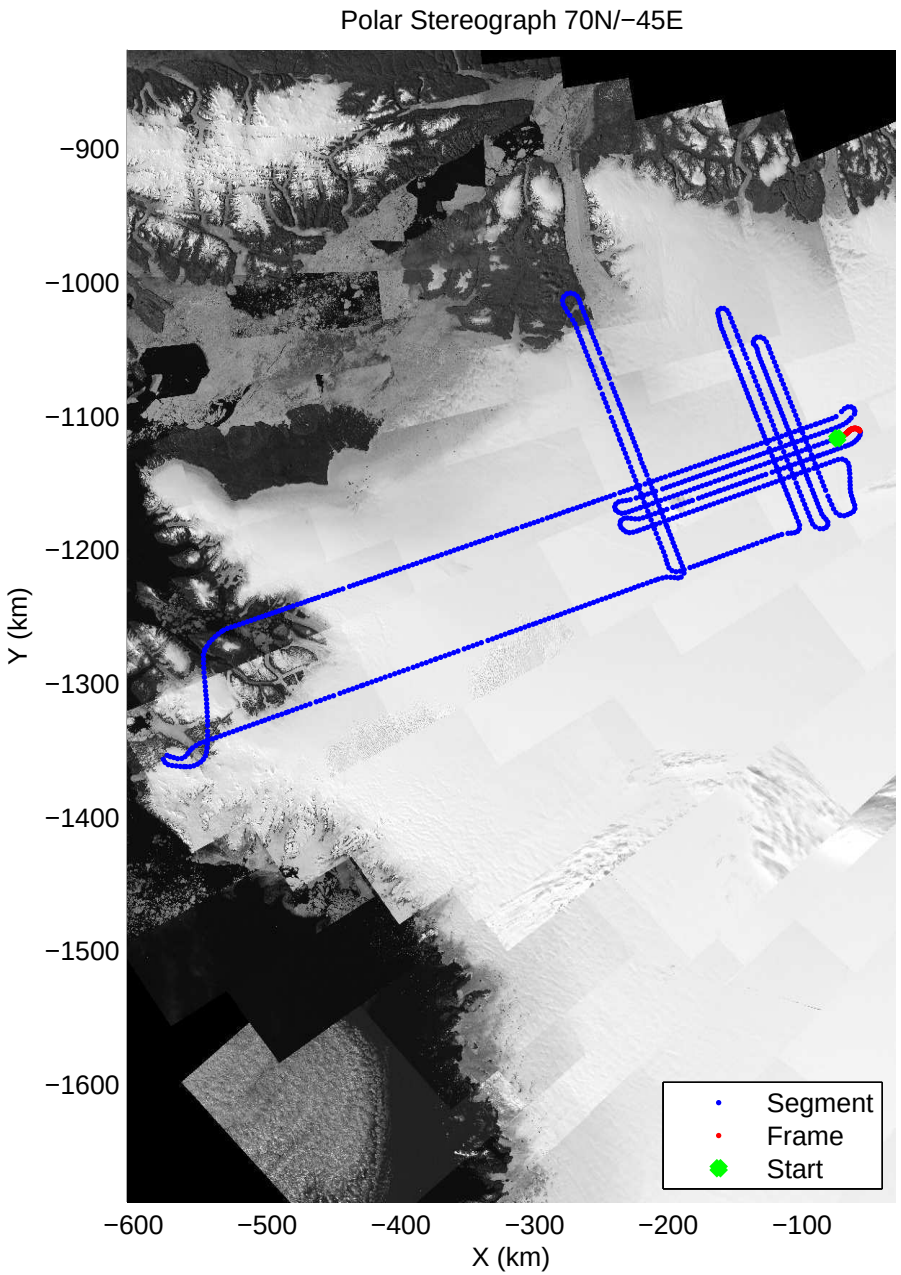

−1110
−1115
−1120
−1125
−1130
Y (km)
−95
−90
−85
−80
X (km)

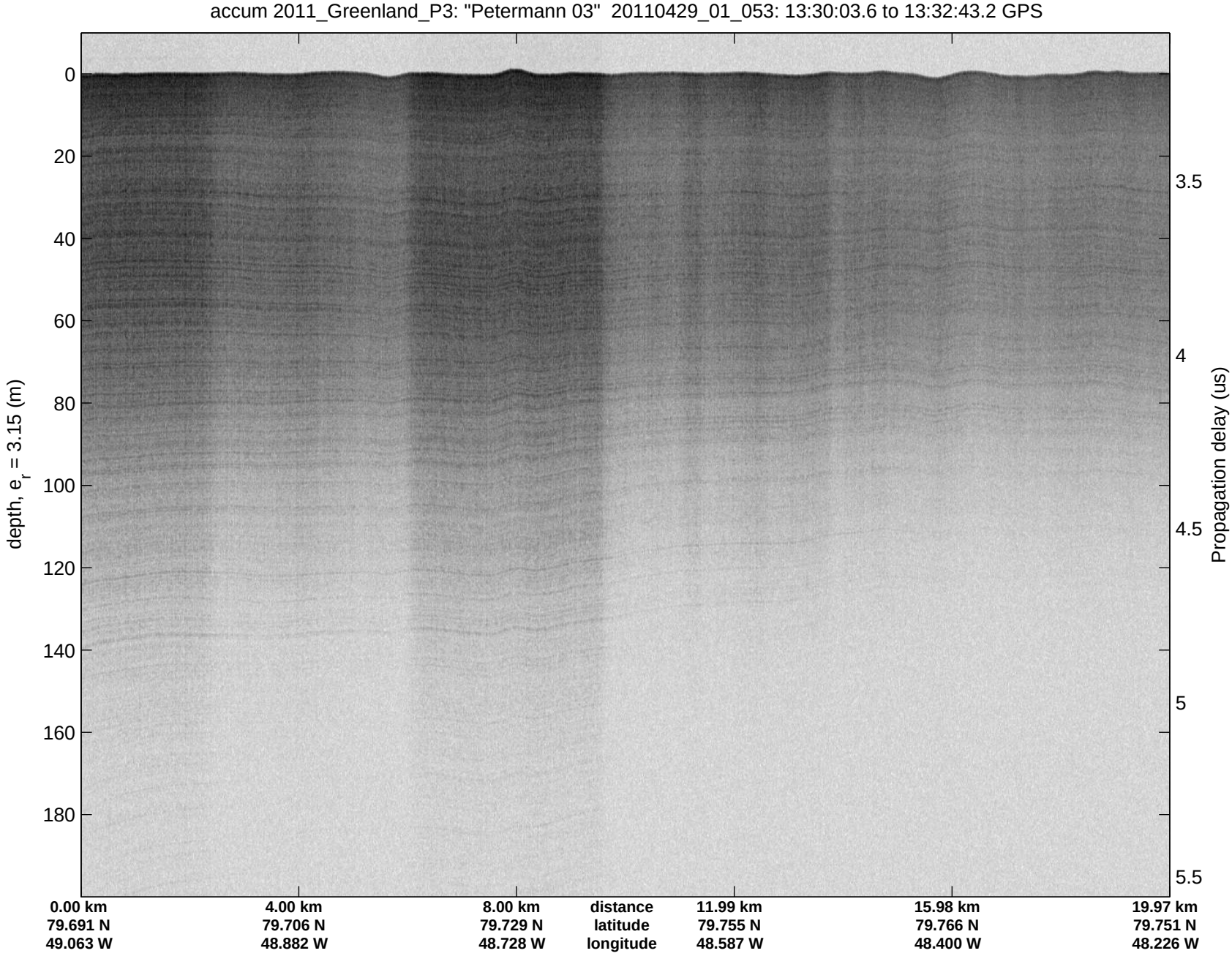

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

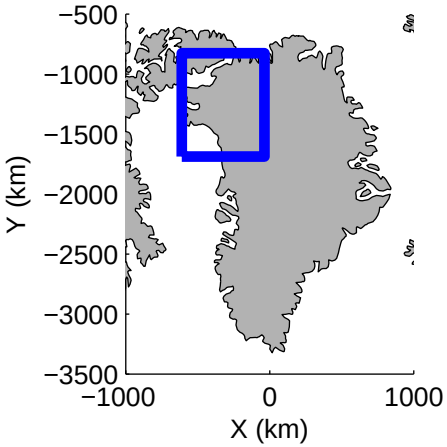

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_052: 13:27:42.6 to 13:30:03.4 GPS
0
20
40
60
80
100
120
140
160
180
depth, e_r = 3.15 (m)
3.5
4
4.5
5
Propagation delay (us)
0.00 km
79.618 N
49.974 W
4.01 km
79.633 N
49.792 W
7.99 km
79.648 N
49.612 W
distance
latitude
longitude
11.99 km
79.663 N
49.429 W
15.98 km
79.677 N
49.247 W
19.97 km
79.691 N
49.064 W

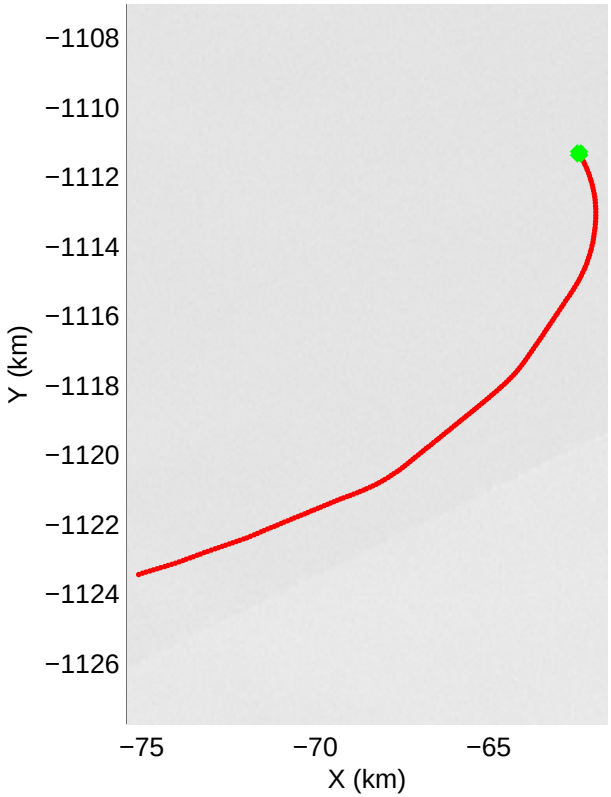

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

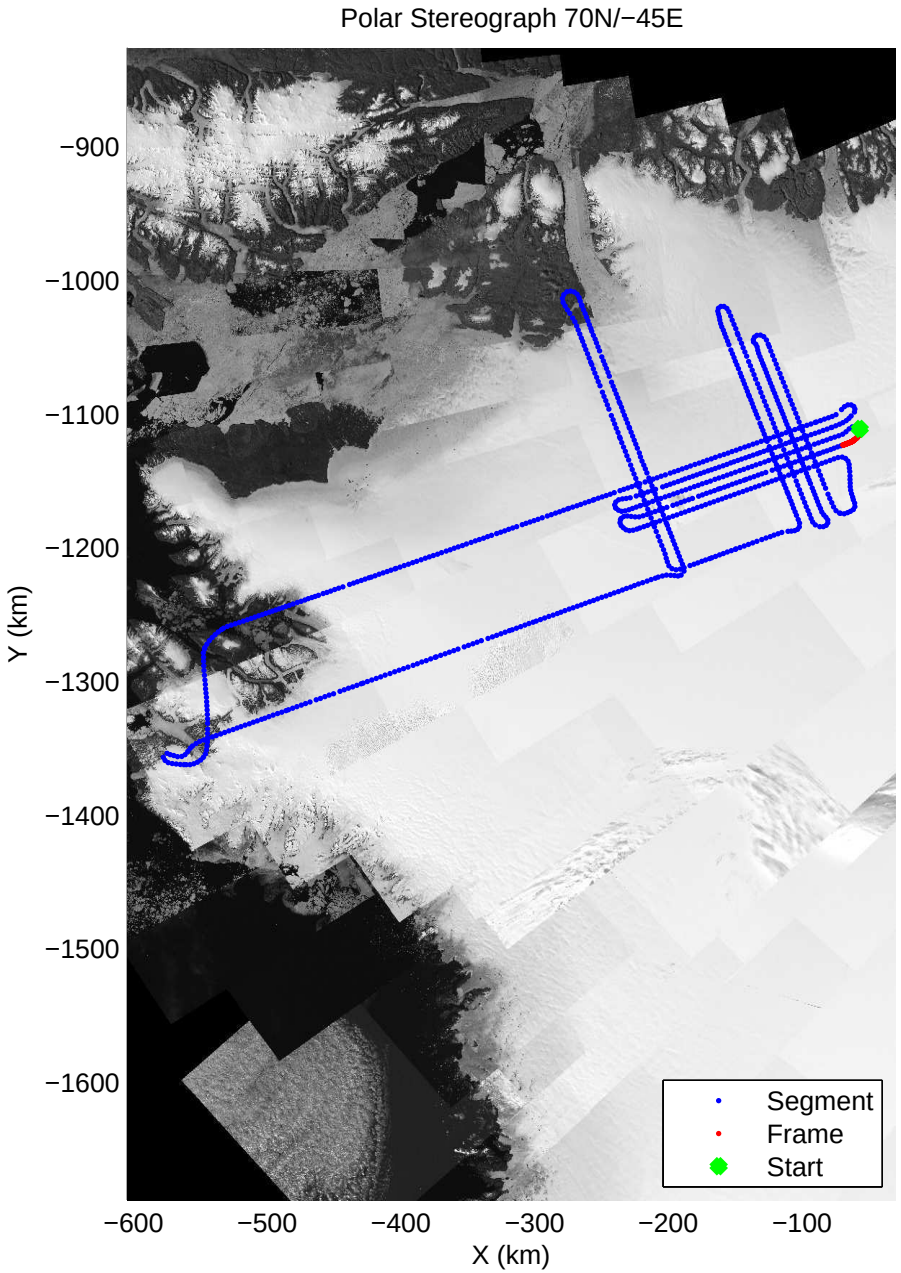

−1100
−1105
−1110
−1115
−1120
−1125
Y (km)
−75
−70
−65
X (km)

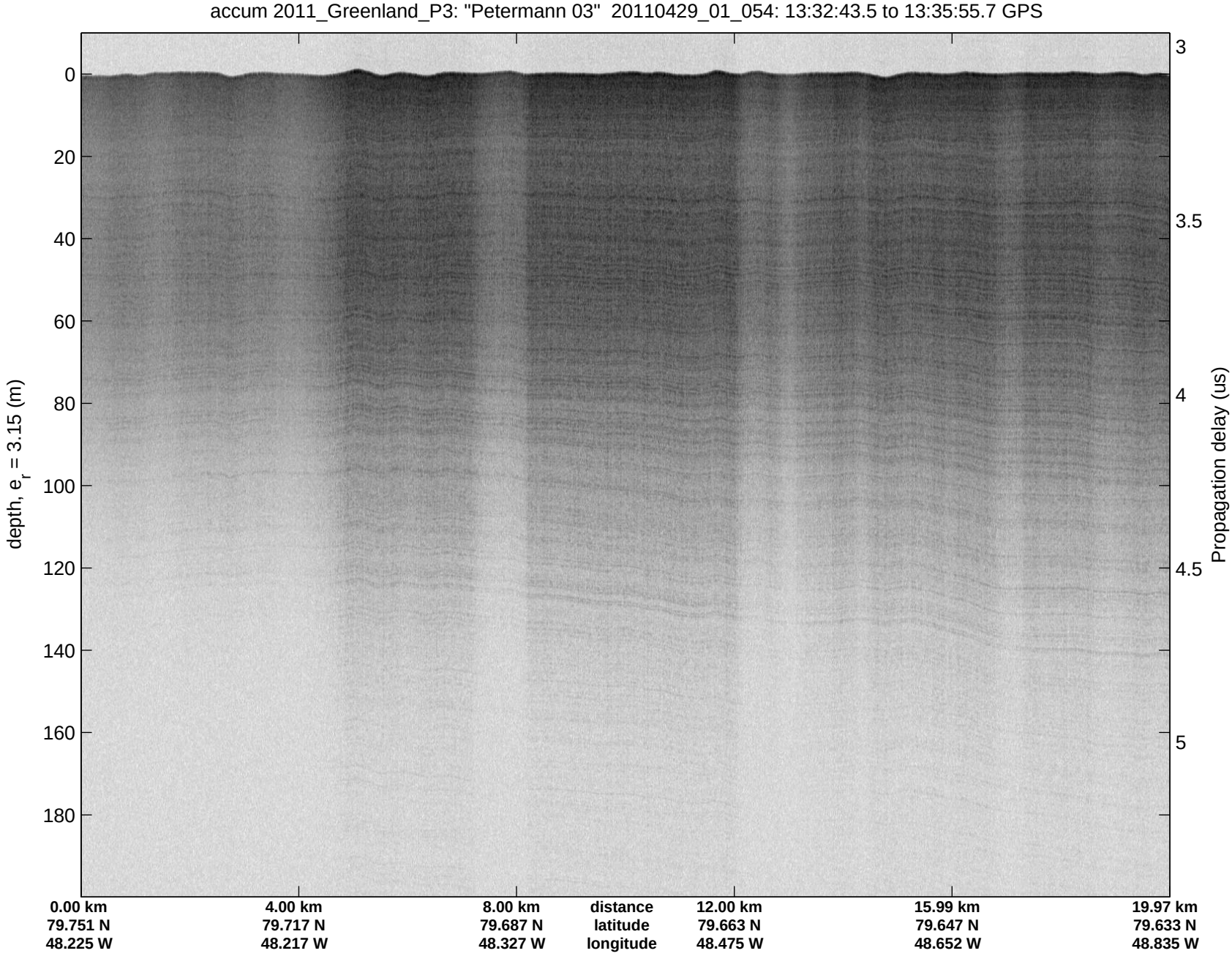

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

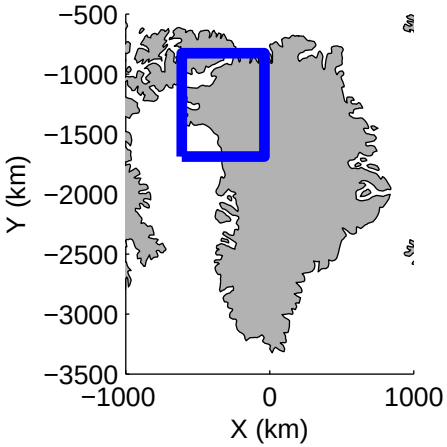

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_053: 13:30:03.6 to 13:32:43.2 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.691 N
49.063 W
4.00 km
79.706 N
48.882 W
8.00 km
79.729 N
48.728 W
distance
latitude
longitude
11.99 km
79.755 N
48.587 W
15.98 km
79.766 N
48.400 W
19.97 km
79.751 N
48.226 W

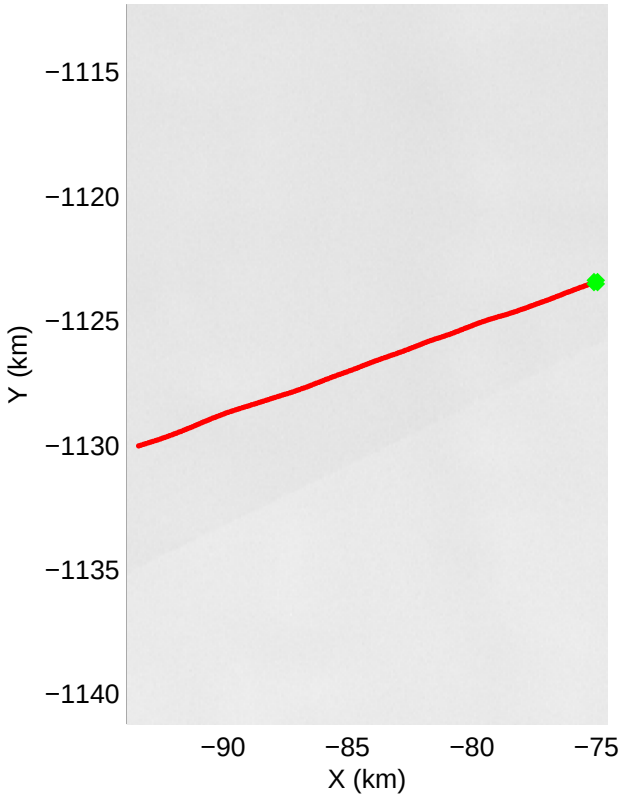

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

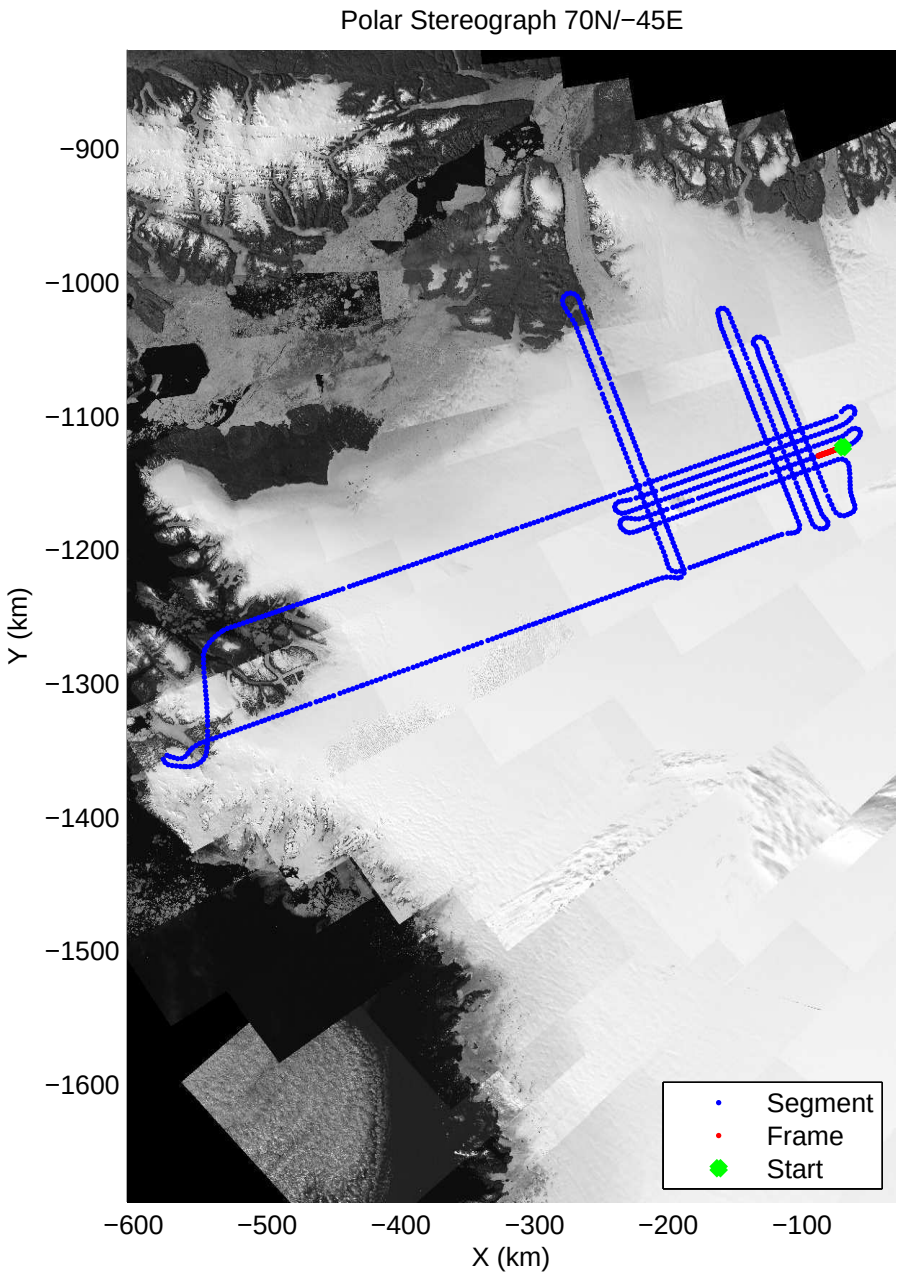

−1108
−1110
−1112
−1114
−1116
−1118
−1120
−1122
−1124
−1126
Y (km)
−75
−70
−65
X (km)

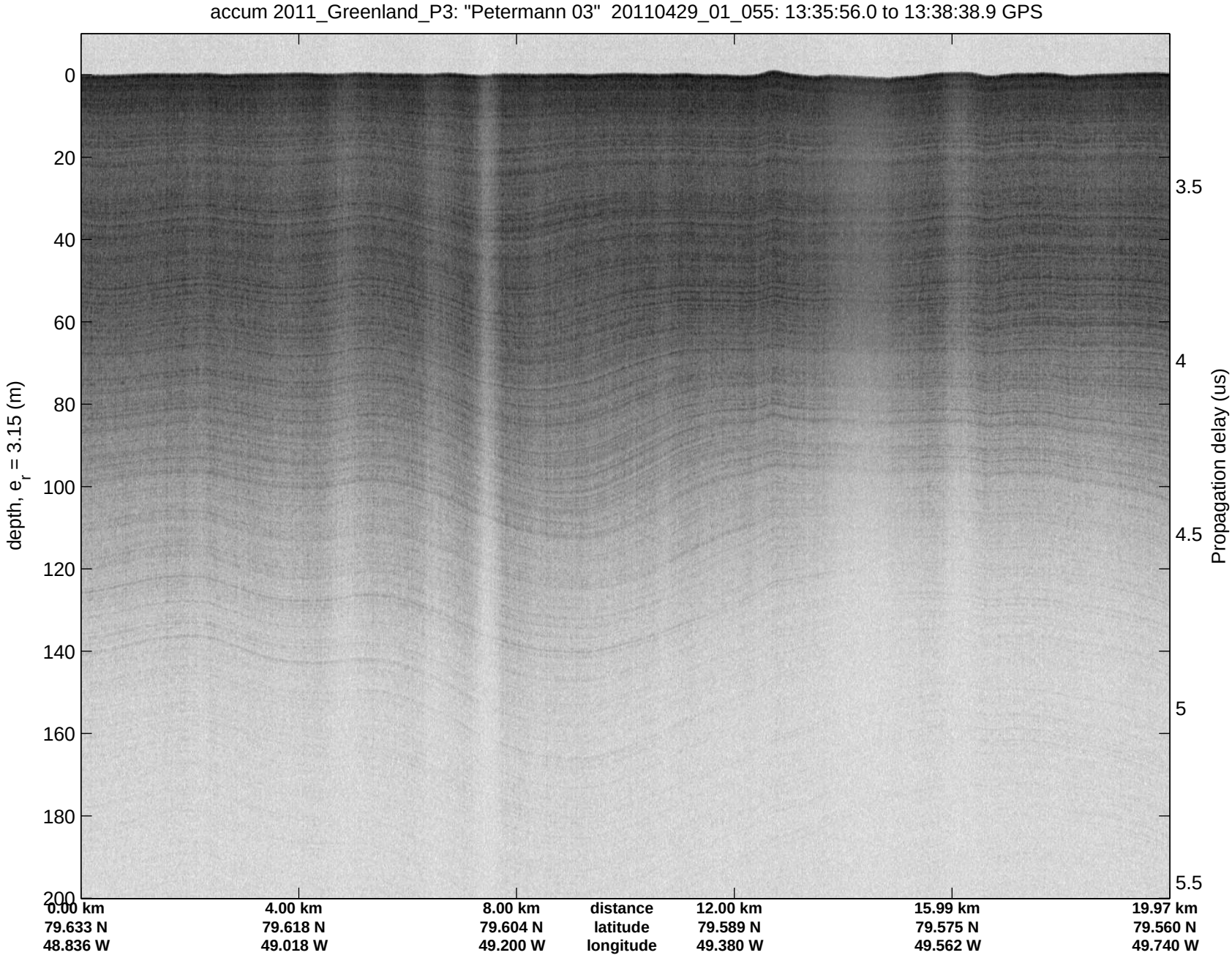

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

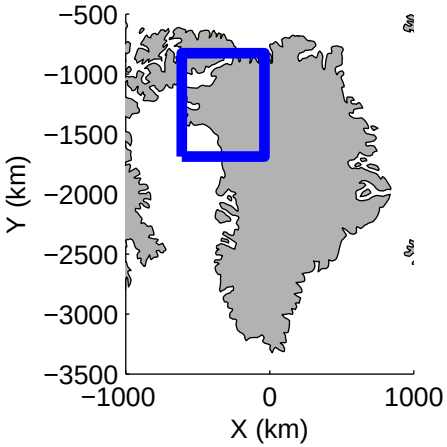

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_054: 13:32:43.5 to 13:35:55.7 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
79.751 N
48.225 W
4.00 km
79.717 N
48.217 W
8.00 km
79.687 N
48.327 W
distance
latitude
longitude
12.00 km
79.663 N
48.475 W
15.99 km
79.647 N
48.652 W
19.97 km
79.633 N
48.835 W

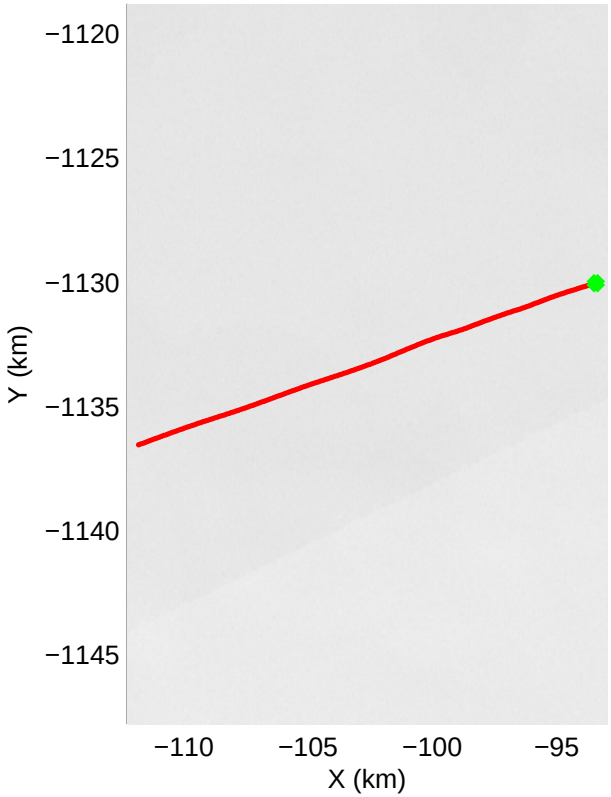

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

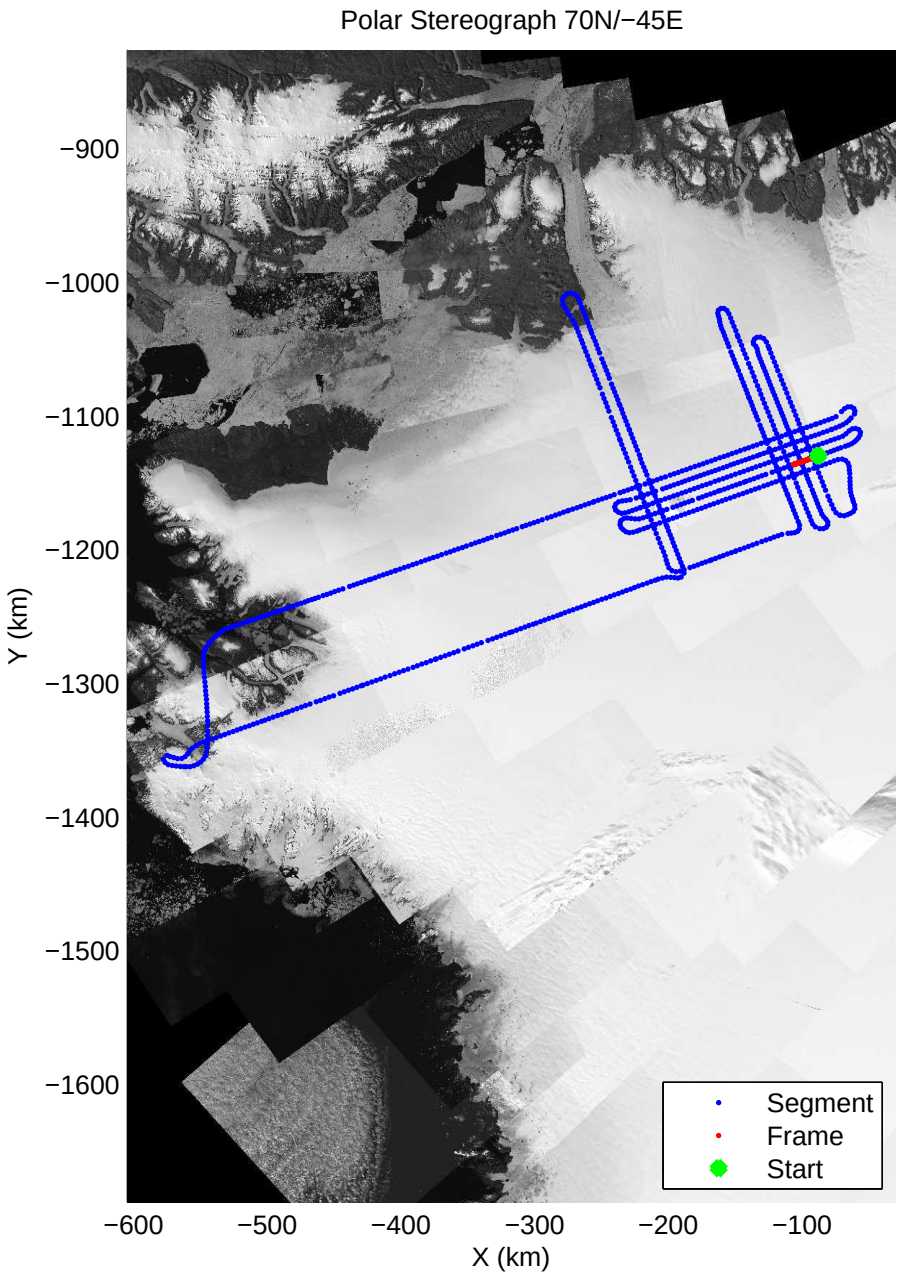

−1115
−1120
−1125
−1130
−1135
−1140
Y (km)
−90
−85
−80
−75
X (km)

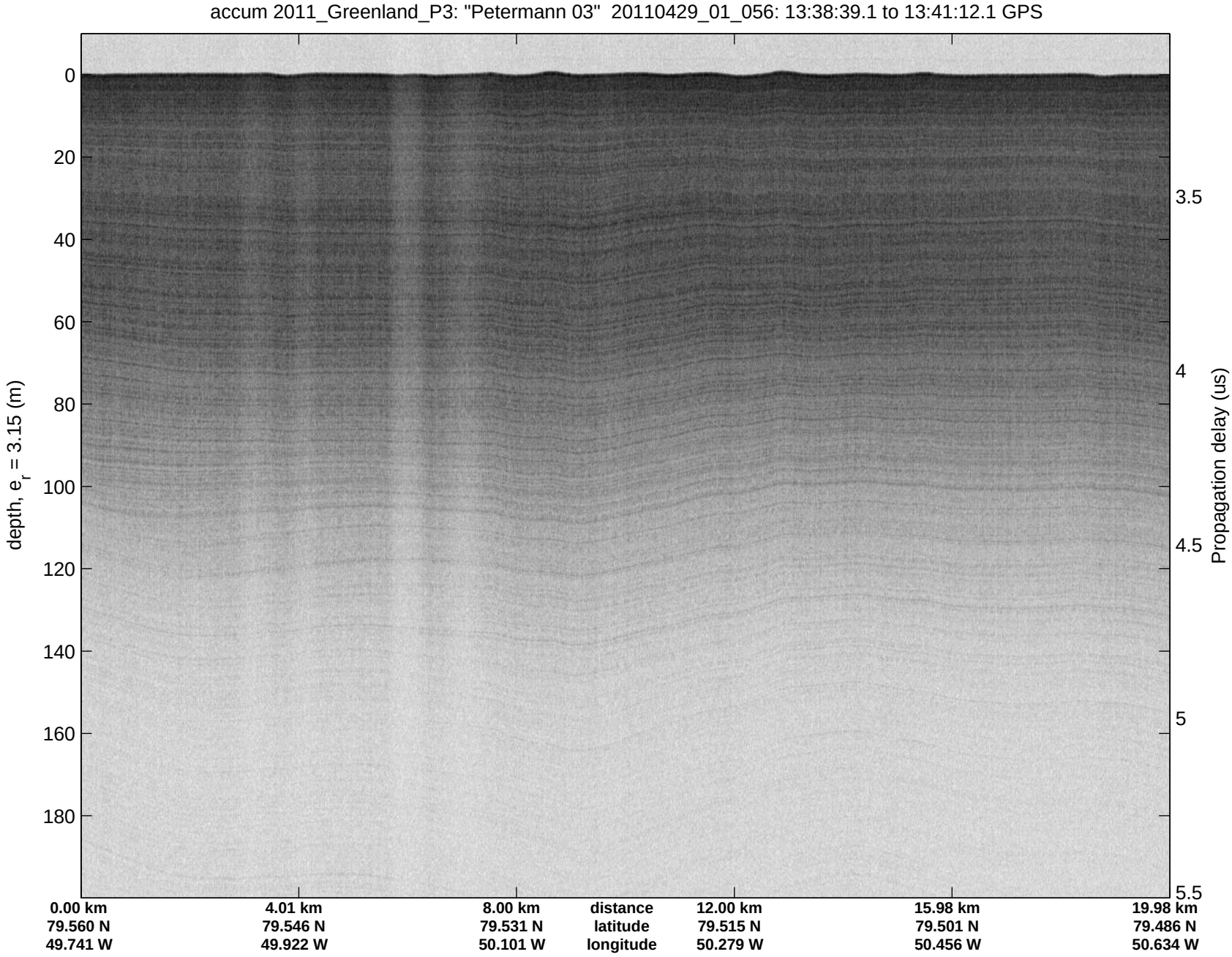

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

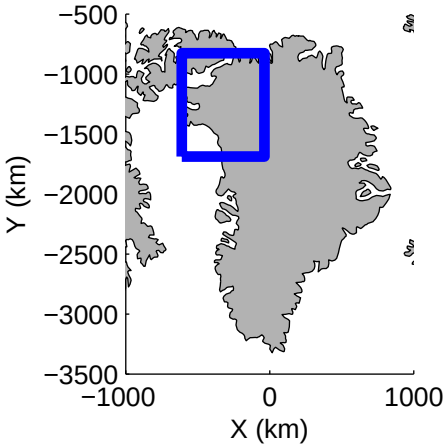

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_055: 13:35:56.0 to 13:38:38.9 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.633 N
48.836 W
4.00 km
79.618 N
49.018 W
8.00 km
79.604 N
49.200 W
distance
latitude
longitude
12.00 km
79.589 N
49.380 W
15.99 km
79.575 N
49.562 W
19.97 km
79.560 N
49.740 W

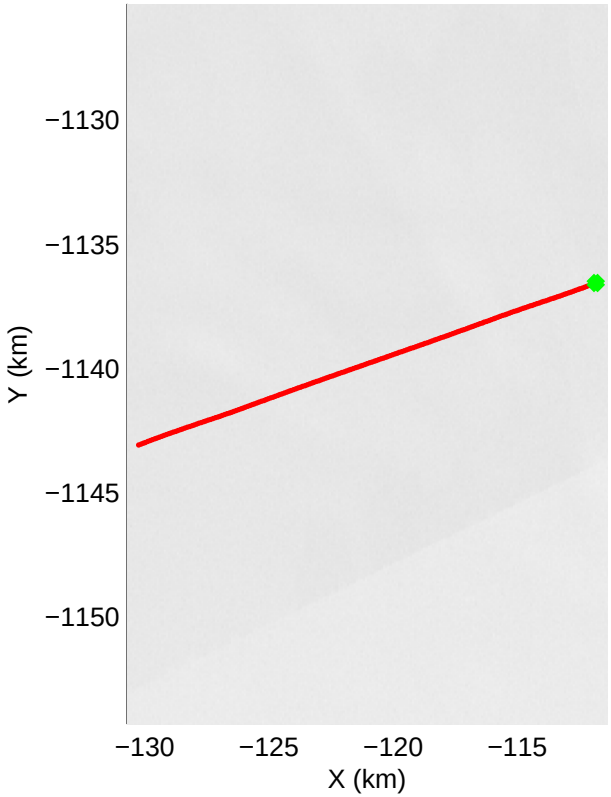

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

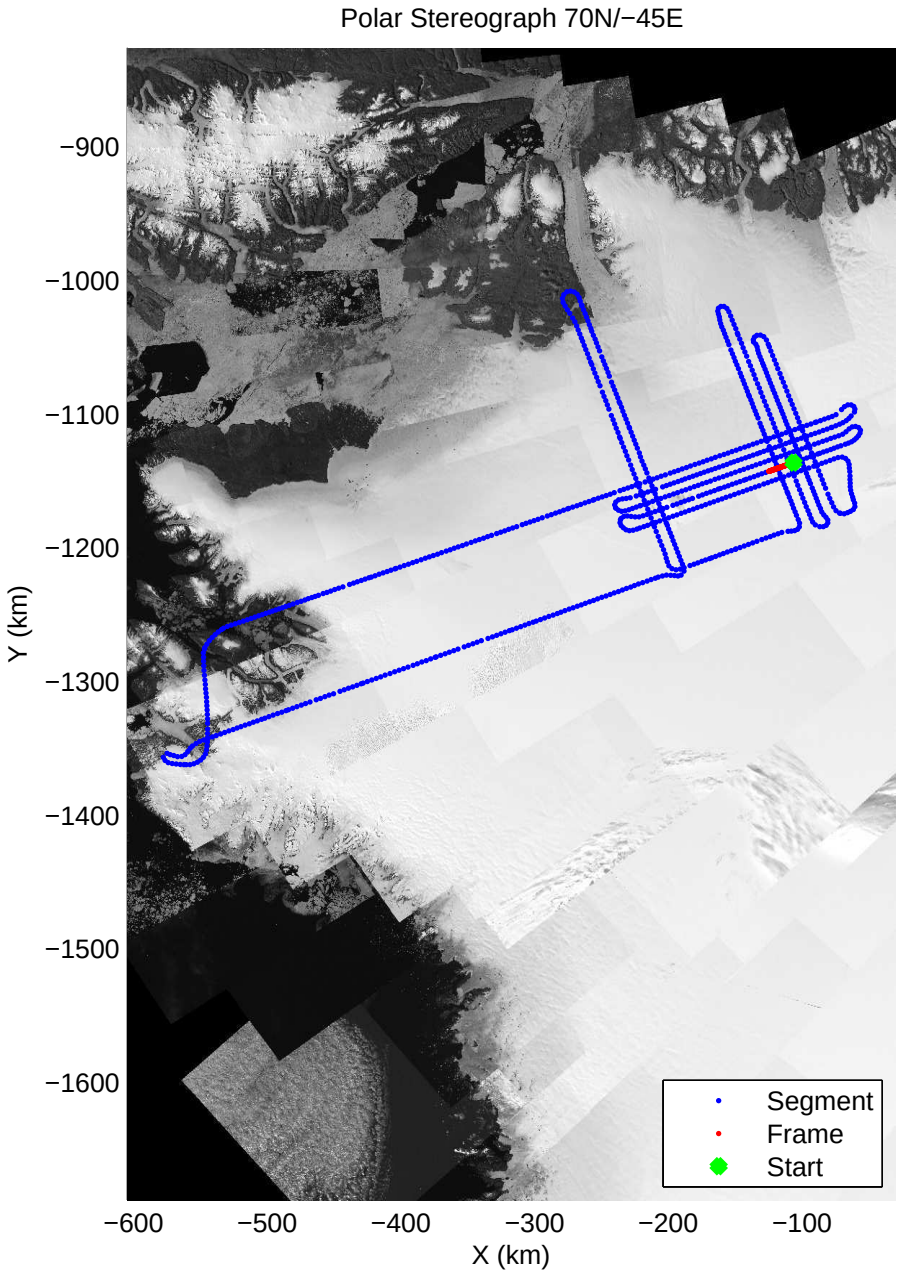

−1120
−1125
−1130
−1135
−1140
−1145
Y (km)
−110
−105
−100
−95
X (km)

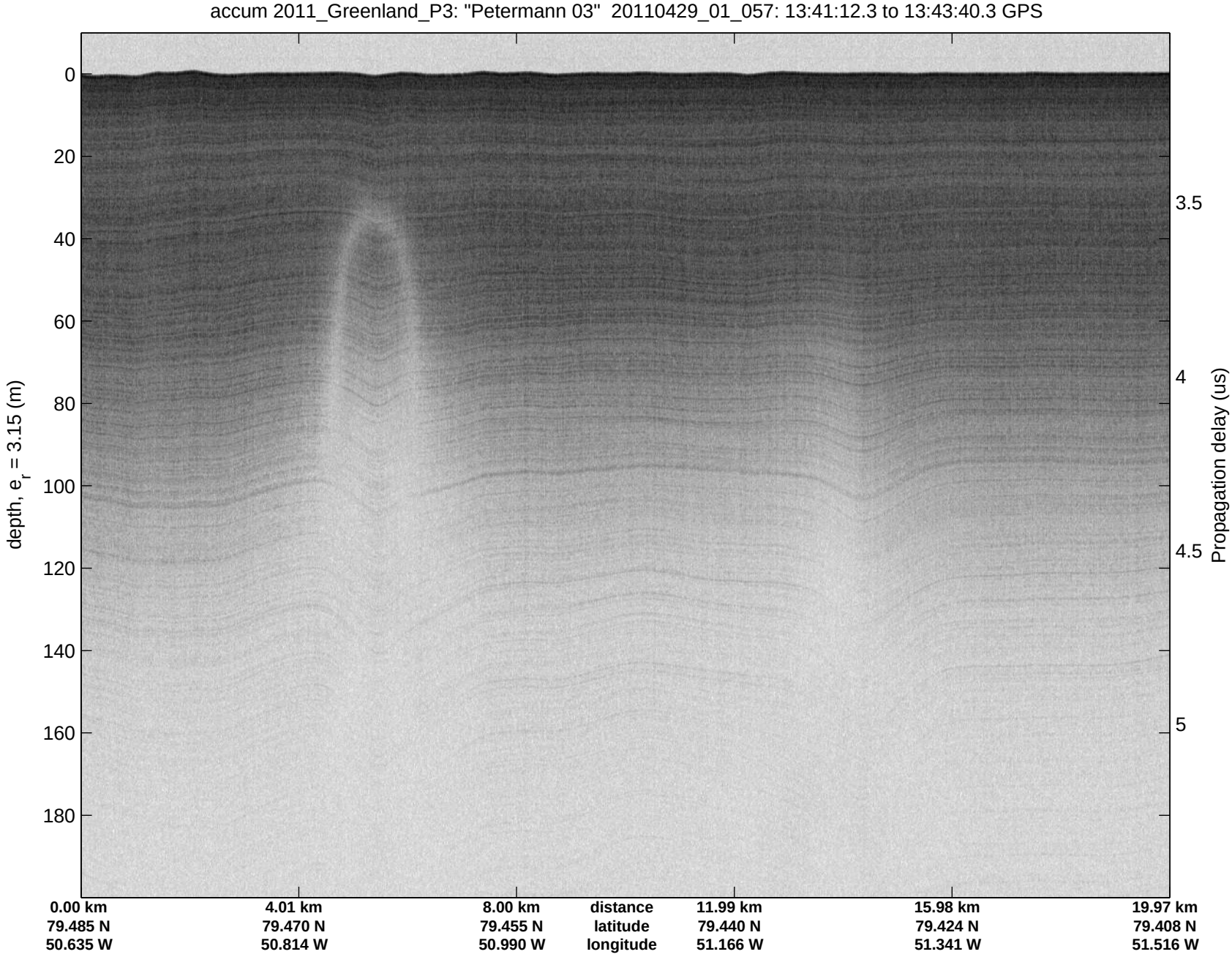

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

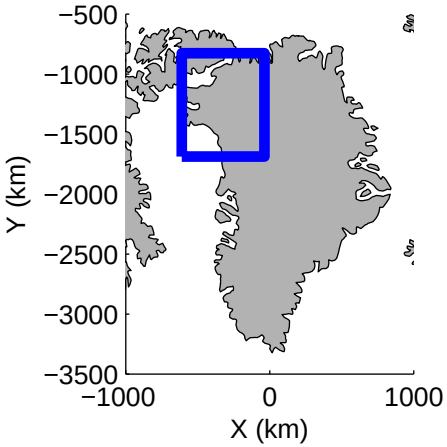

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_056: 13:38:39.1 to 13:41:12.1 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.560 N
49.741 W
4.01 km
79.546 N
49.922 W
8.00 km
79.531 N
50.101 W
distance
latitude
longitude
12.00 km
79.515 N
50.279 W
15.98 km
79.501 N
50.456 W
19.98 km
79.486 N
50.634 W

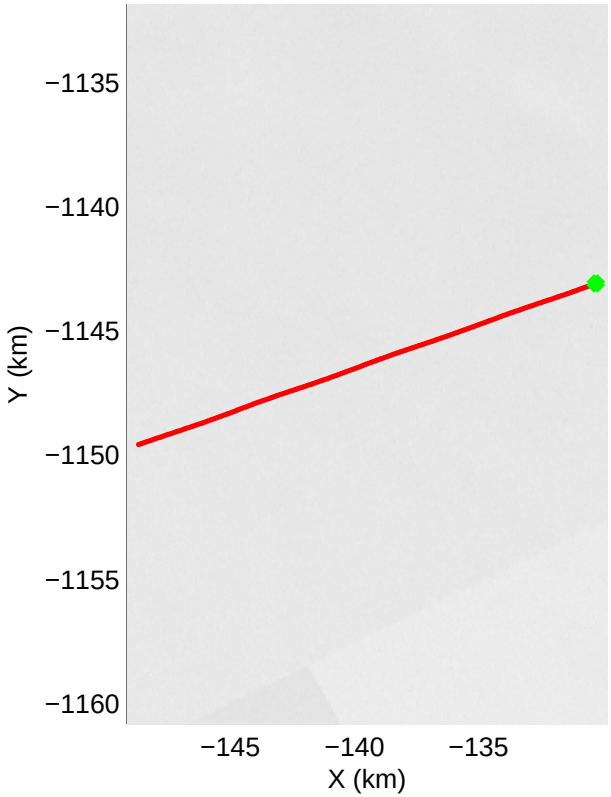

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

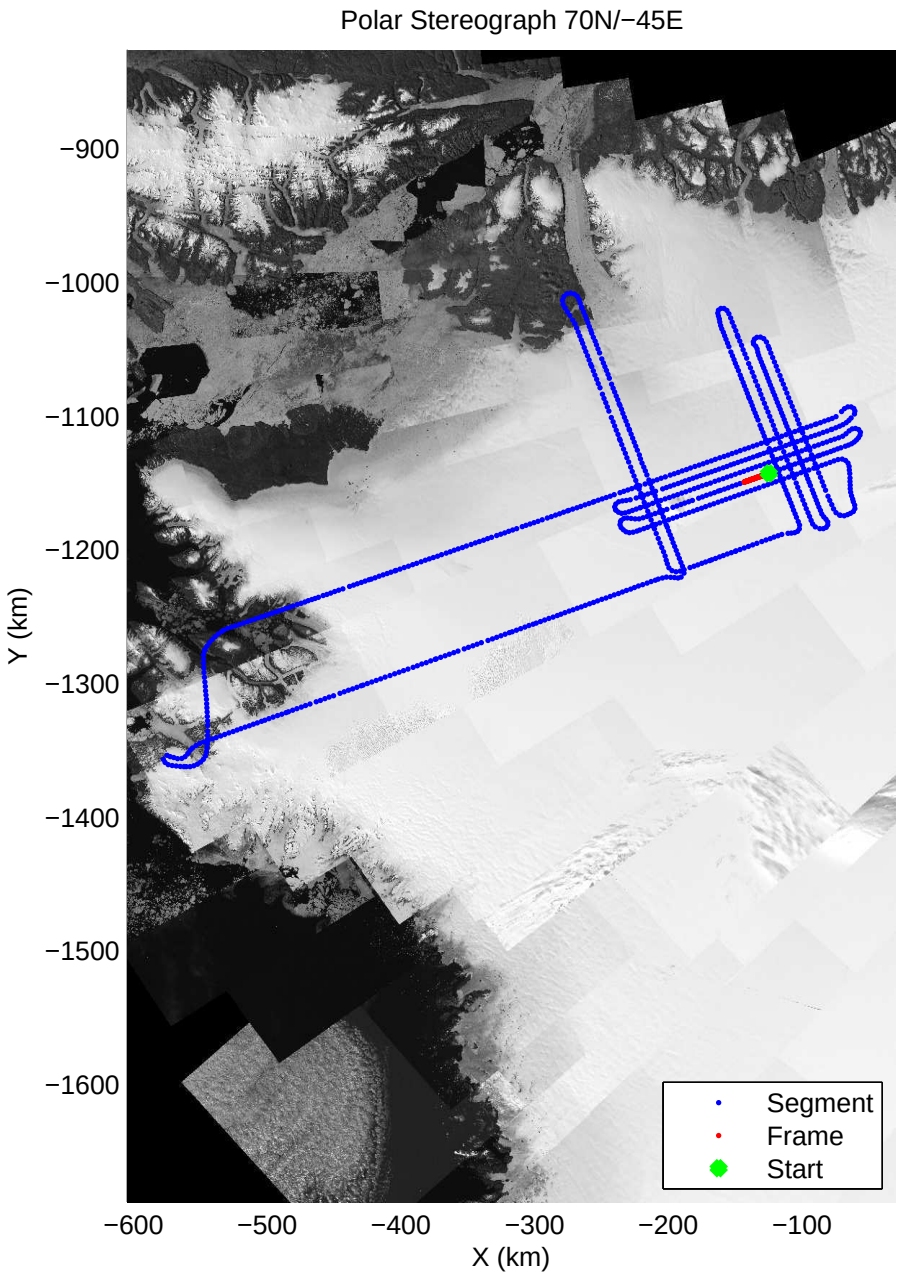

−1130
−1135
−1140
−1145
−1150
Y (km)
−130
−125
−120
−115
X (km)

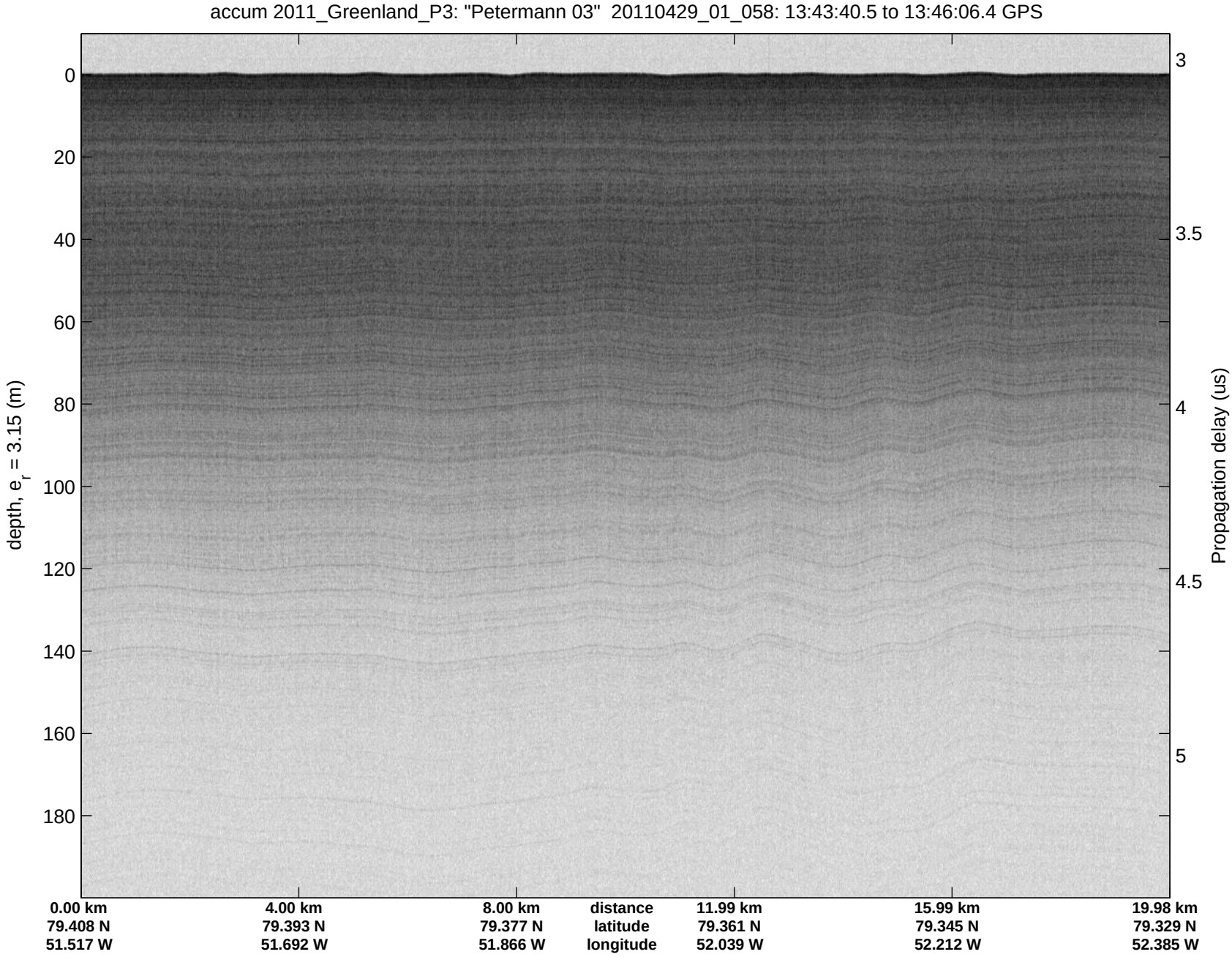

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

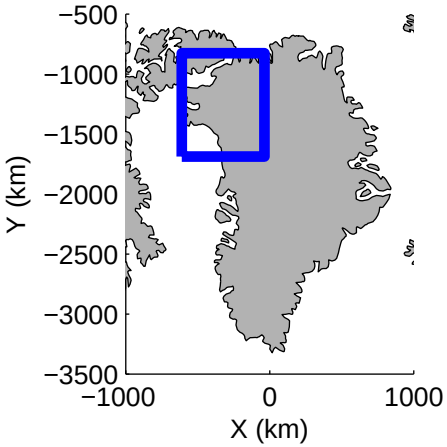

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_057: 13:41:12.3 to 13:43:40.3 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
0.00 km
79.485 N
50.635 W
4.01 km
79.470 N
50.814 W
8.00 km
79.455 N
50.990 W
distance
latitude
longitude
11.99 km
79.440 N
51.166 W
15.98 km
79.424 N
51.341 W
19.97 km
79.408 N
51.516 W

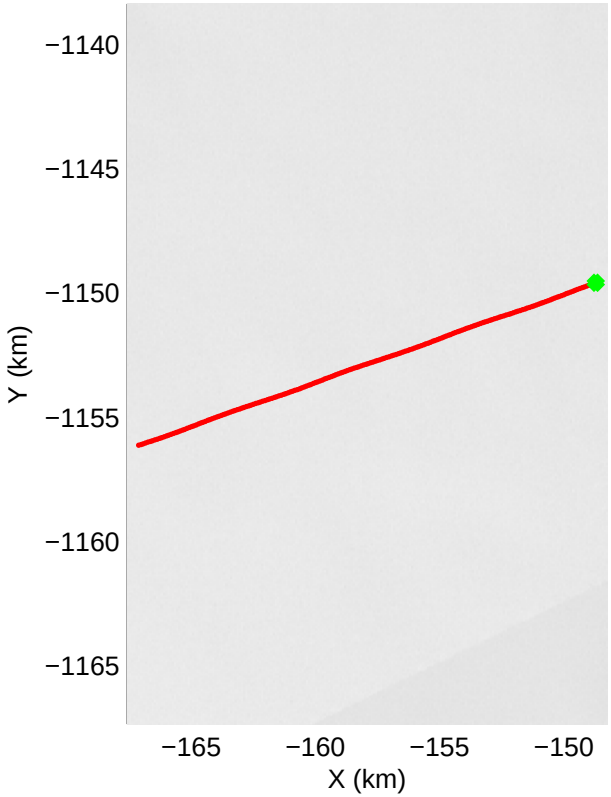

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

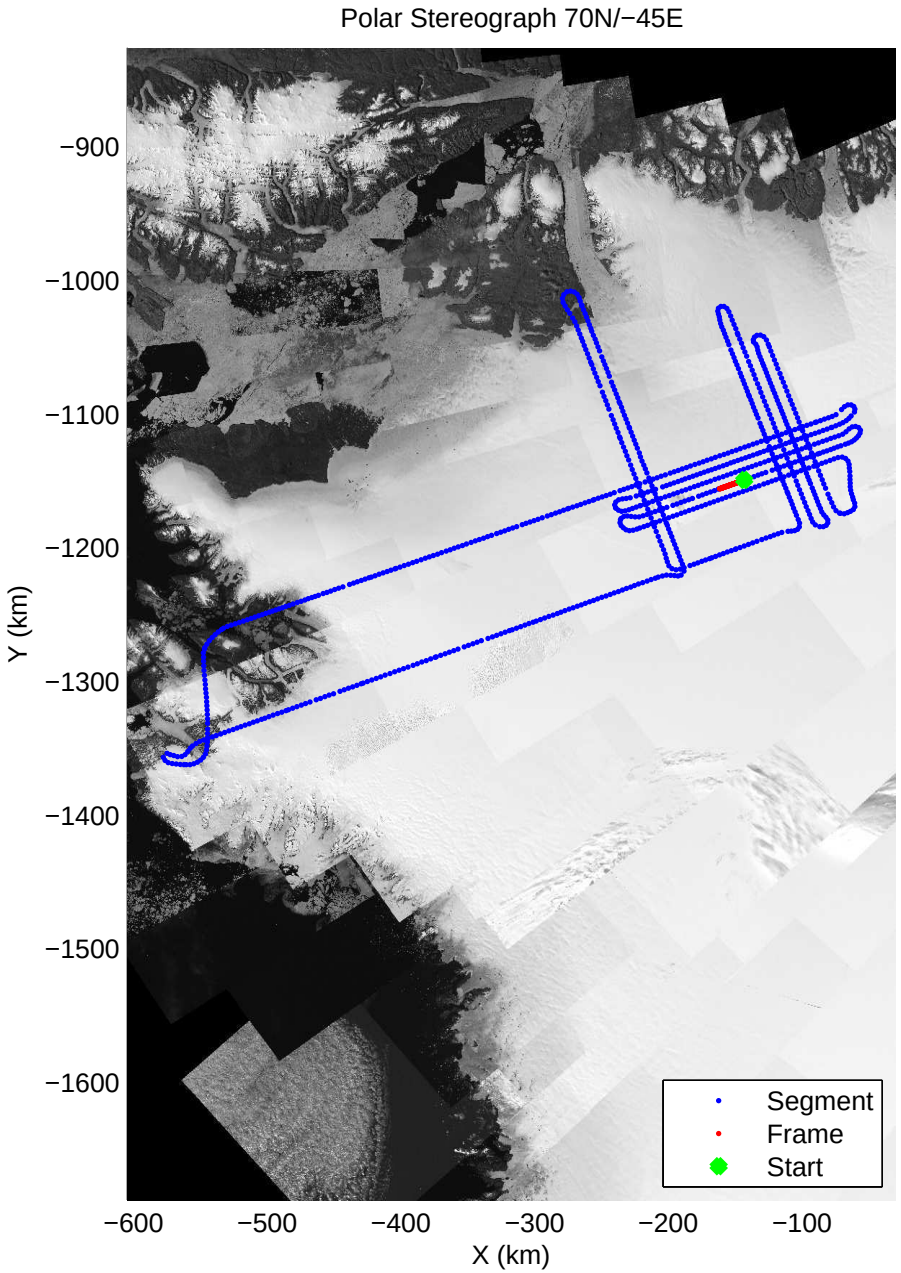

−1135
−1140
−1145
−1150
−1155
−1160
Y (km)
−145
−140
−135
X (km)

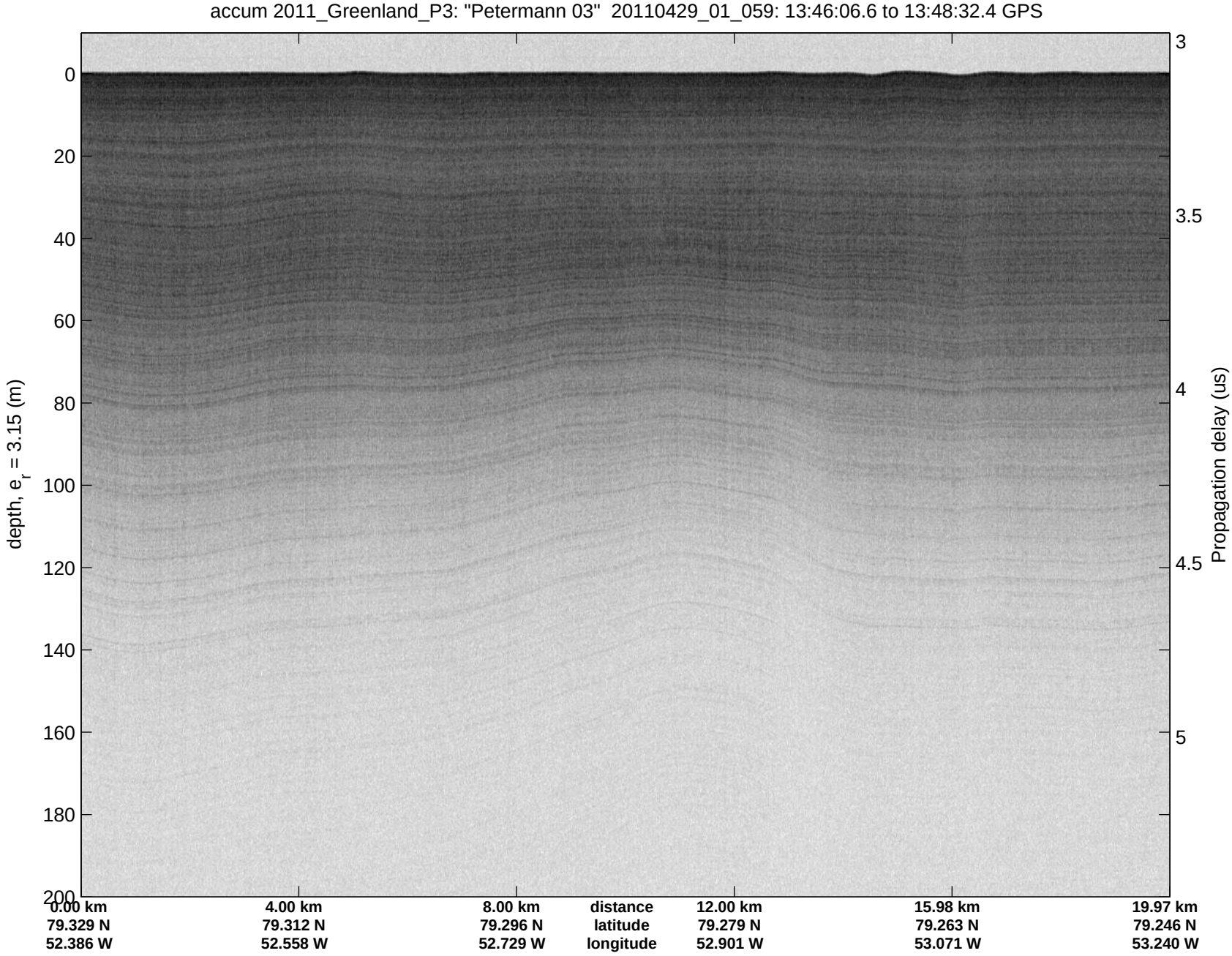

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

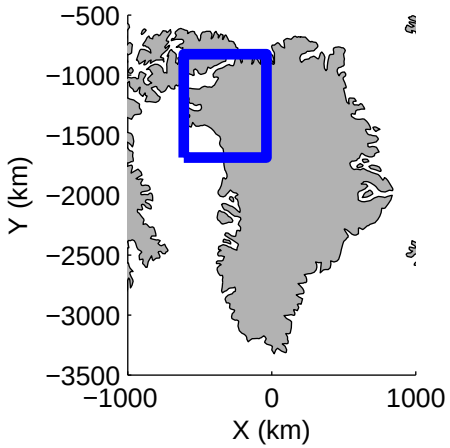

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_058: 13:43:40.5 to 13:46:06.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.408 N
51.517 W
4.00 km
79.393 N
51.692 W
8.00 km
79.377 N
51.866 W
distance
latitude
longitude
11.99 km
79.361 N
52.039 W
15.99 km
79.345 N
52.212 W
19.98 km
79.329 N
52.385 W

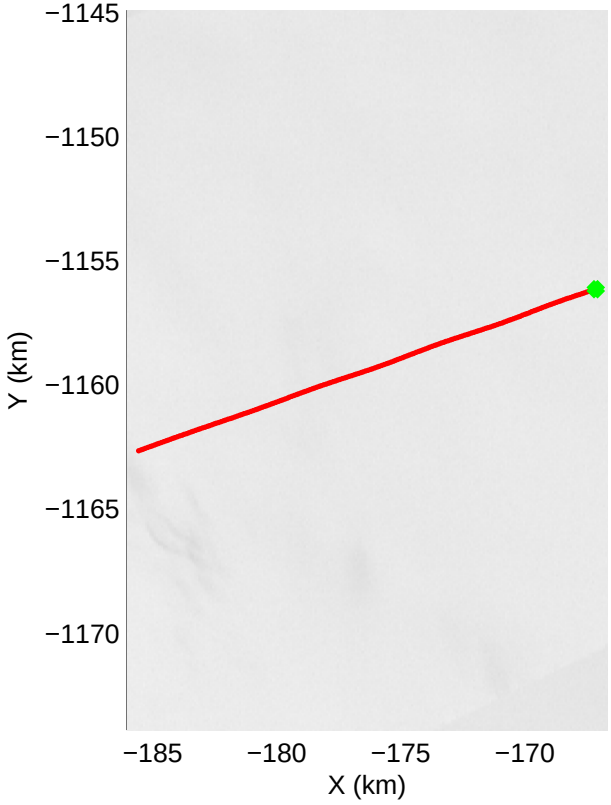

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

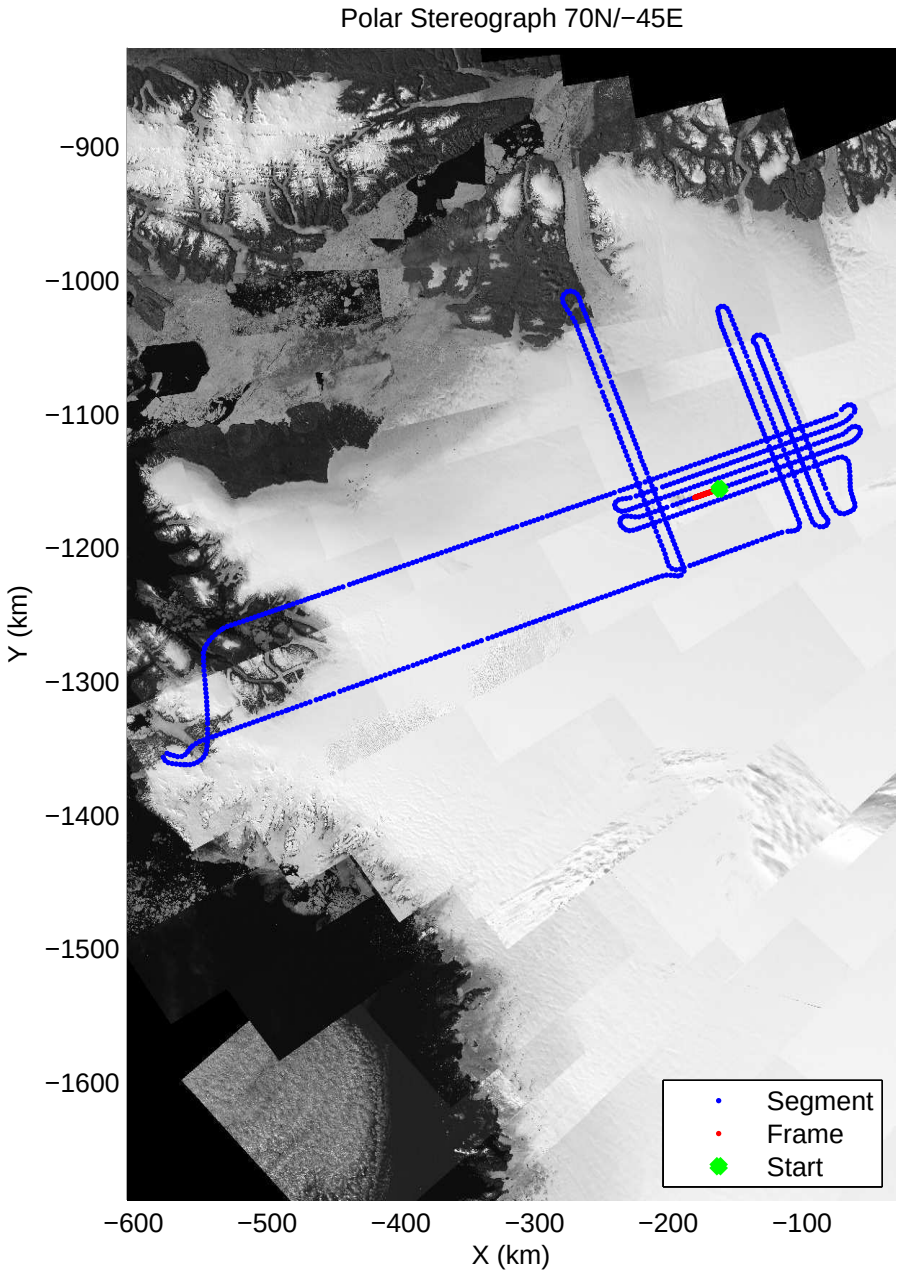

−1140
−1145
−1150
−1155
−1160
−1165
Y (km)
−165
−160
−155
−150
X (km)

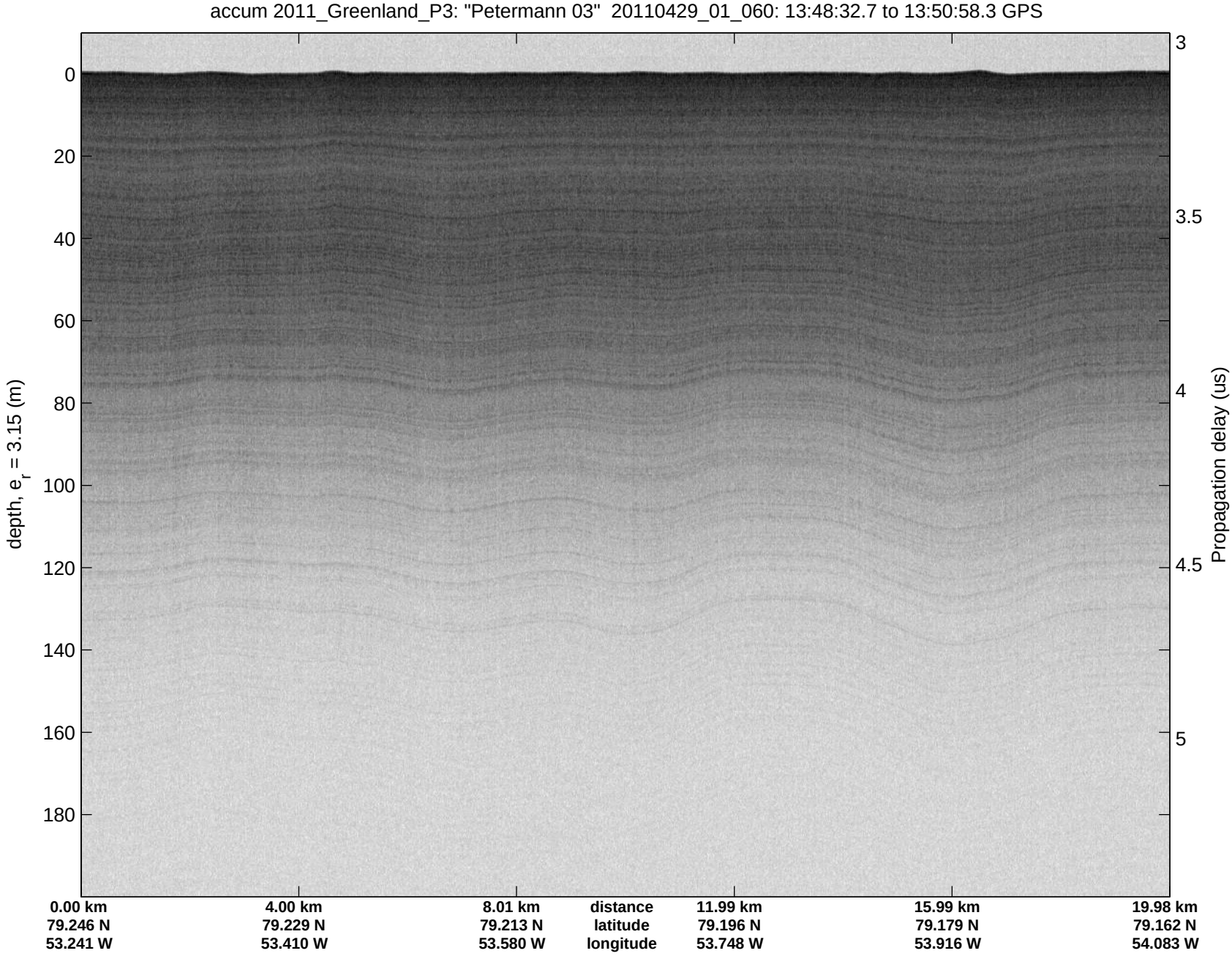

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

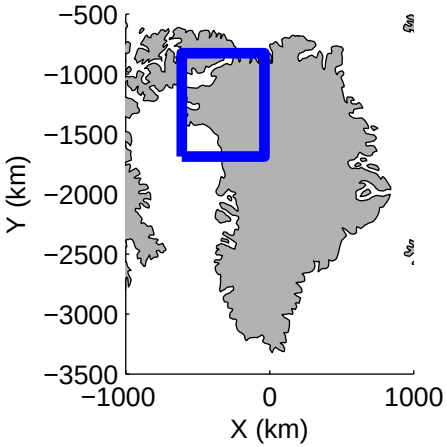

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_059: 13:46:06.6 to 13:48:32.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
79.329 N
52.386 W
4.00 km
79.312 N
52.558 W
8.00 km
79.296 N
52.729 W
distance
latitude
longitude
12.00 km
79.279 N
52.901 W
15.98 km
79.263 N
53.071 W
19.97 km
79.246 N
53.240 W

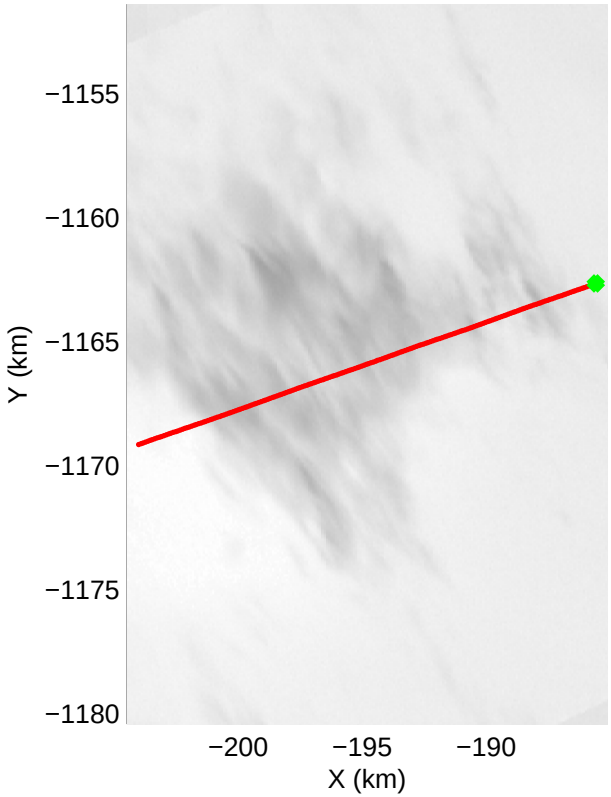

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

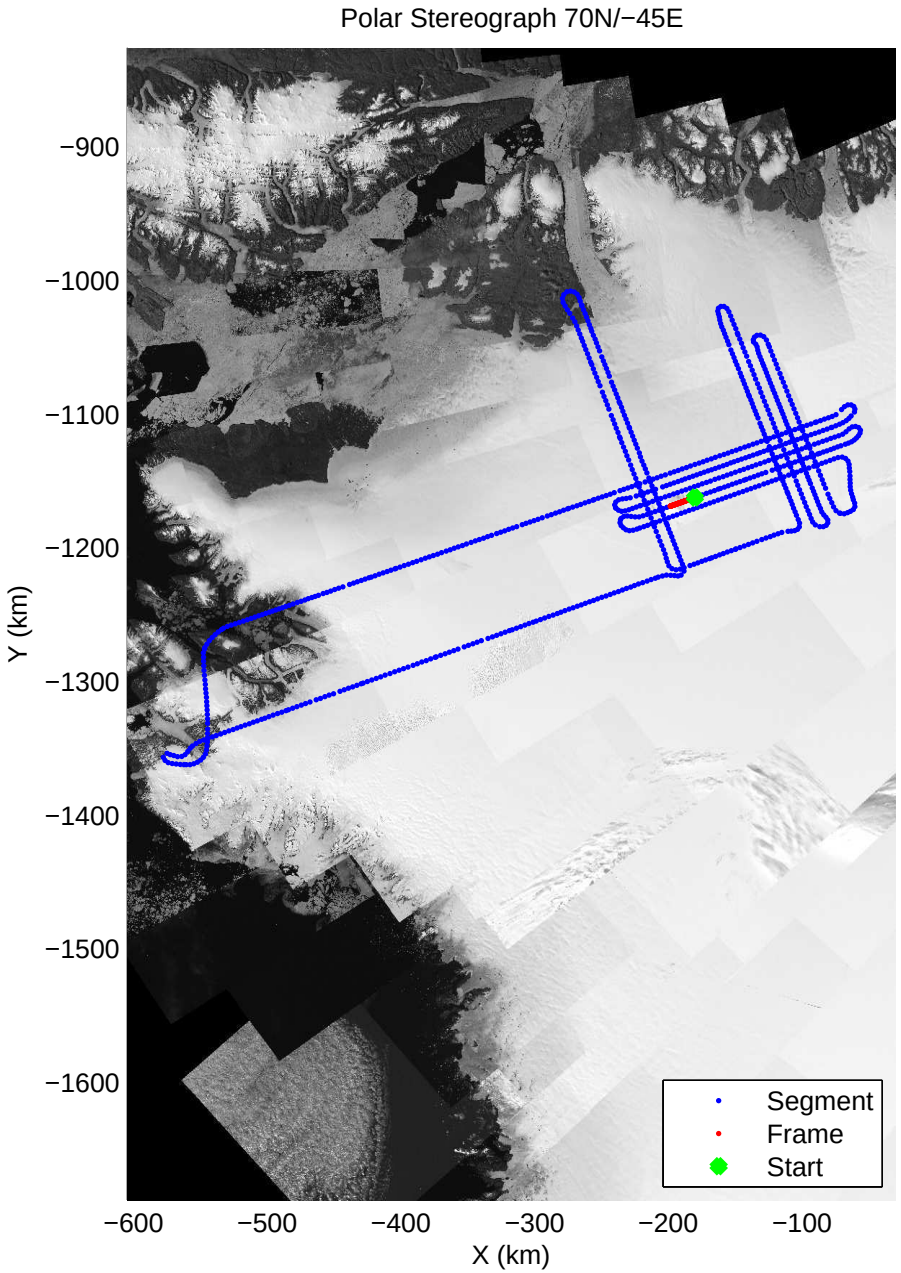

−1145
−1150
−1155
−1160
−1165
−1170
Y (km)
−185
−180
−175
−170
X (km)

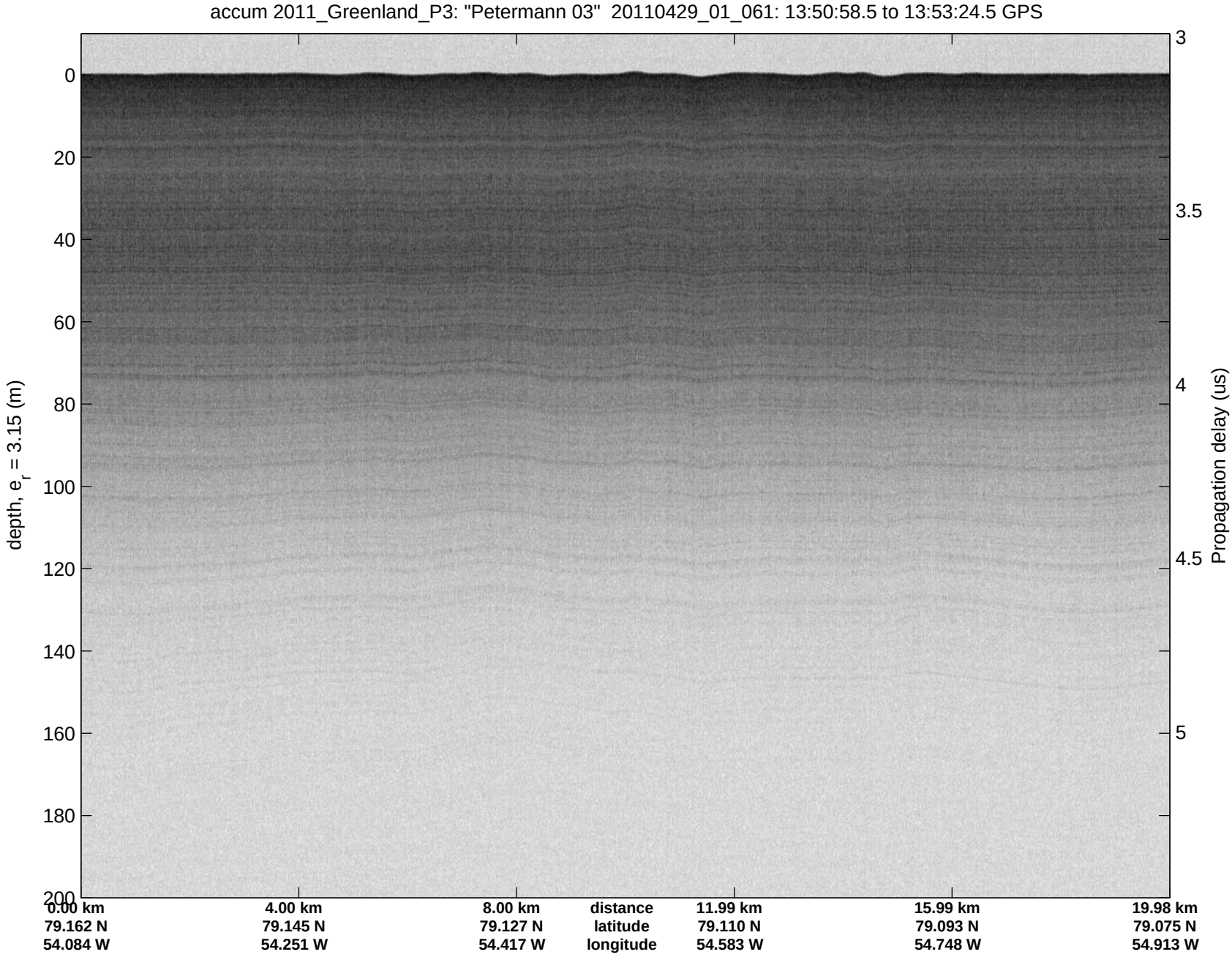

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

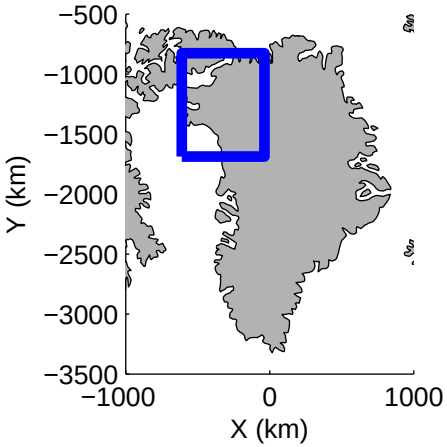

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_060: 13:48:32.7 to 13:50:58.3 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
79.246 N
53.241 W
4.00 km
79.229 N
53.410 W
8.01 km
79.213 N
53.580 W
distance
latitude
longitude
11.99 km
79.196 N
53.748 W
15.99 km
79.179 N
53.916 W
19.98 km
79.162 N
54.083 W

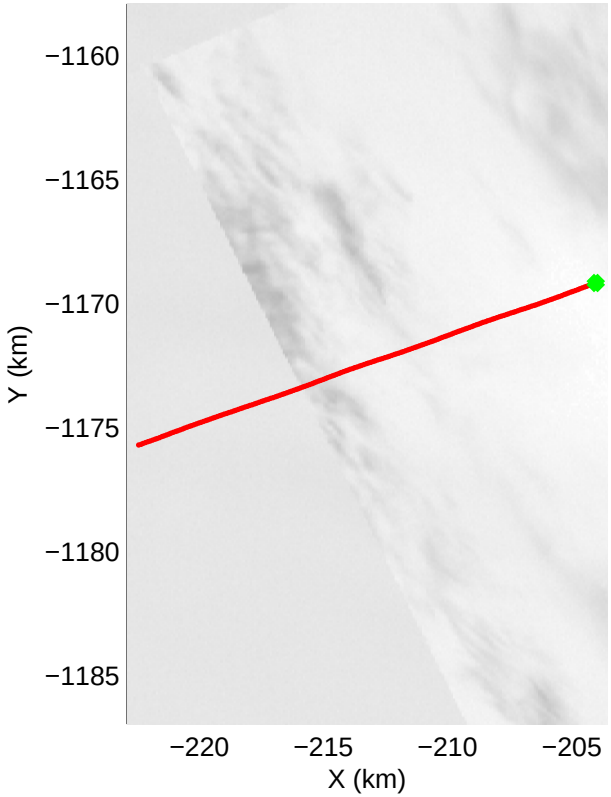

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

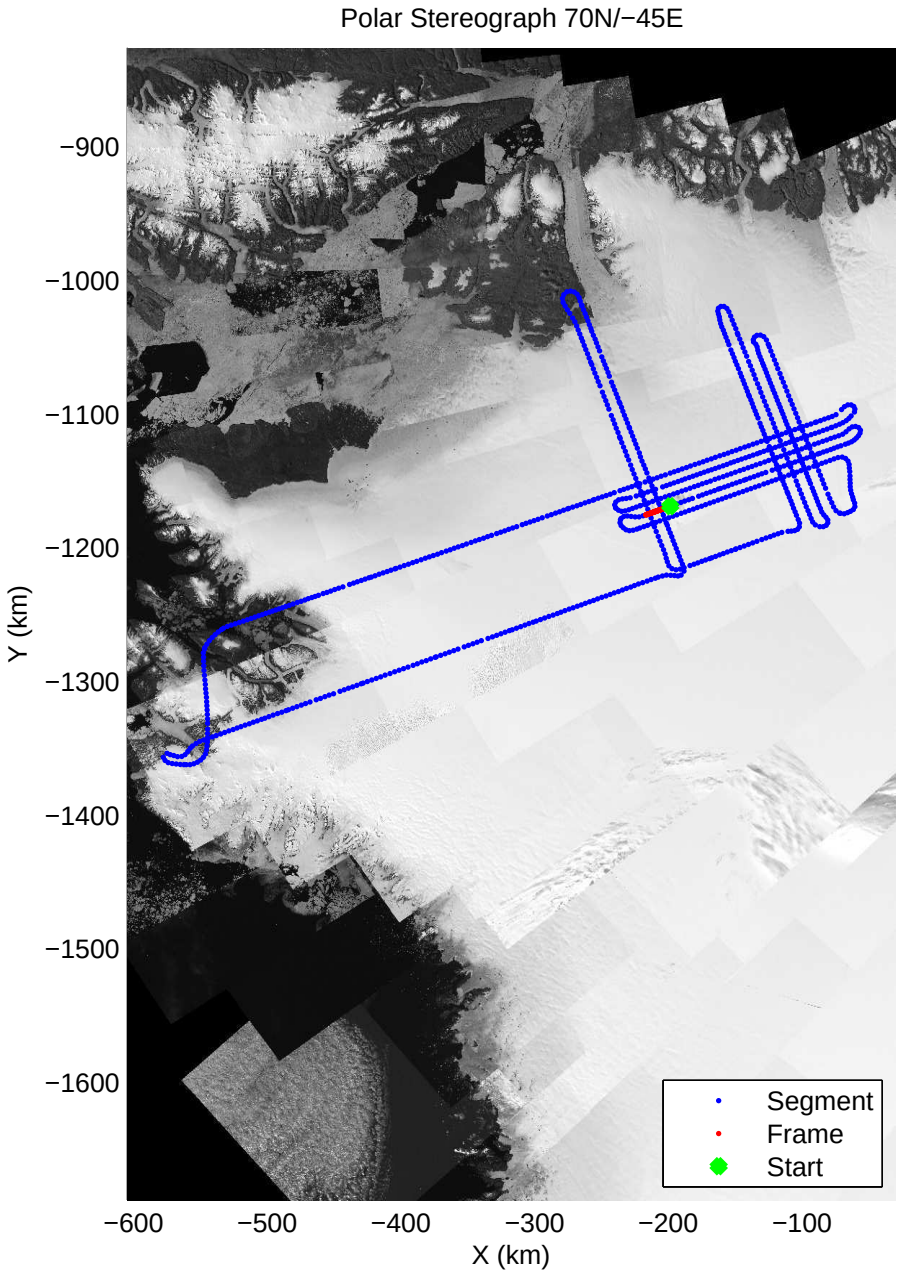

−1155
−1160
−1165
−1170
−1175
−1180
Y (km)
−200
−195
−190
X (km)

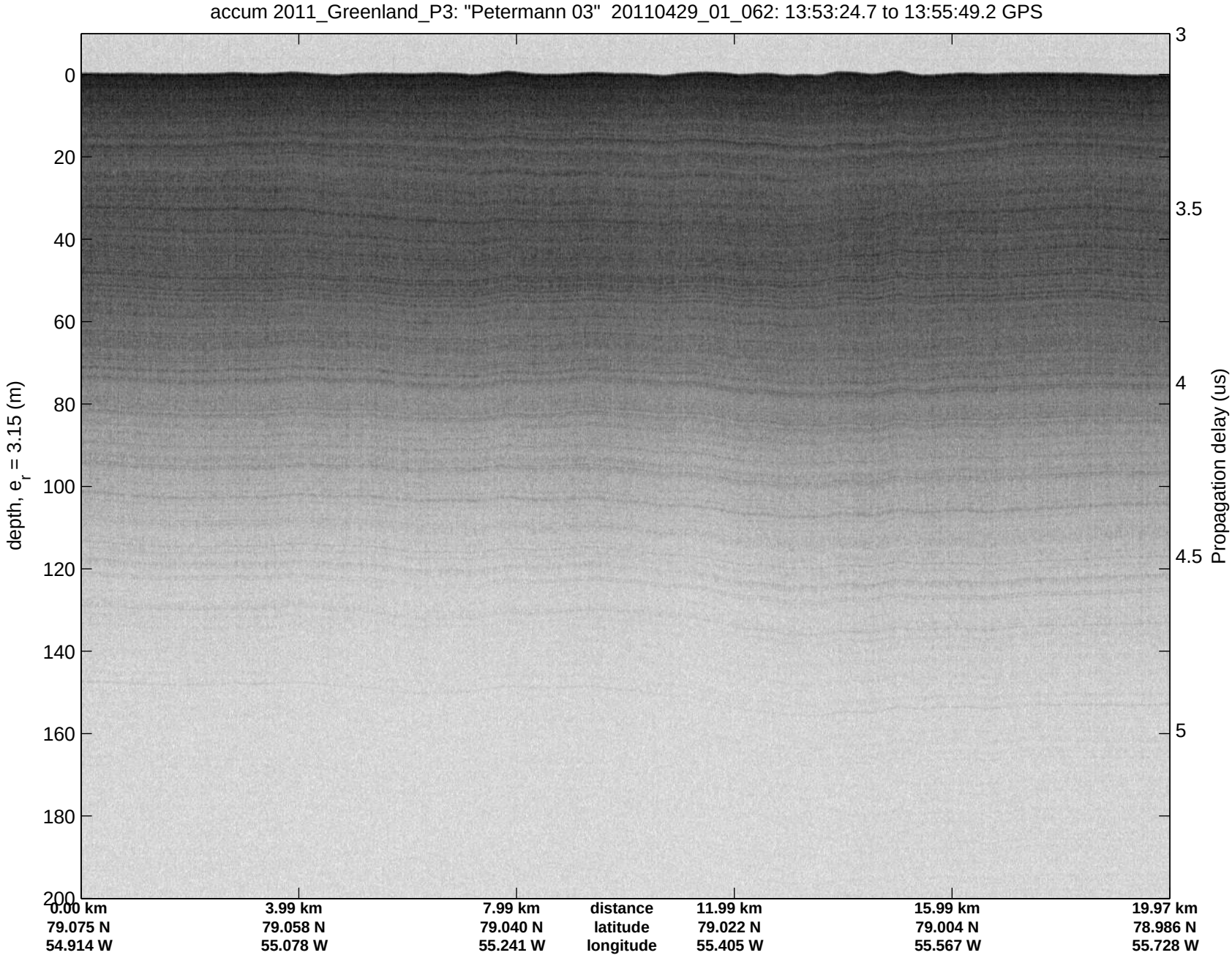

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

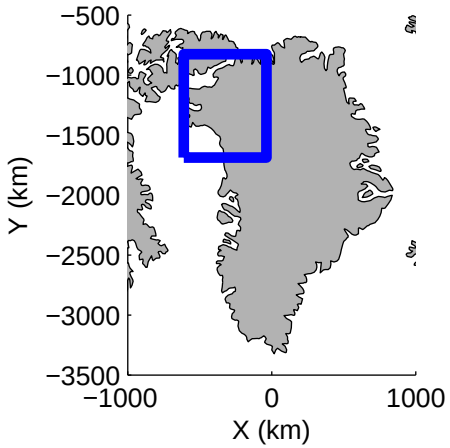

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_061: 13:50:58.5 to 13:53:24.5 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
79.162 N
54.084 W
4.00 km
79.145 N
54.251 W
8.00 km
79.127 N
54.417 W
distance
latitude
longitude
11.99 km
79.110 N
54.583 W
15.99 km
79.093 N
54.748 W
19.98 km
79.075 N
54.913 W

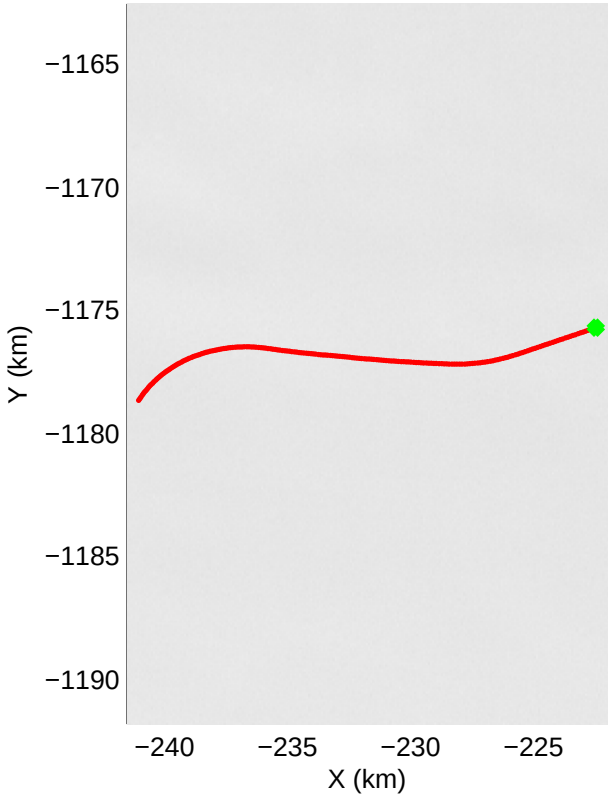

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

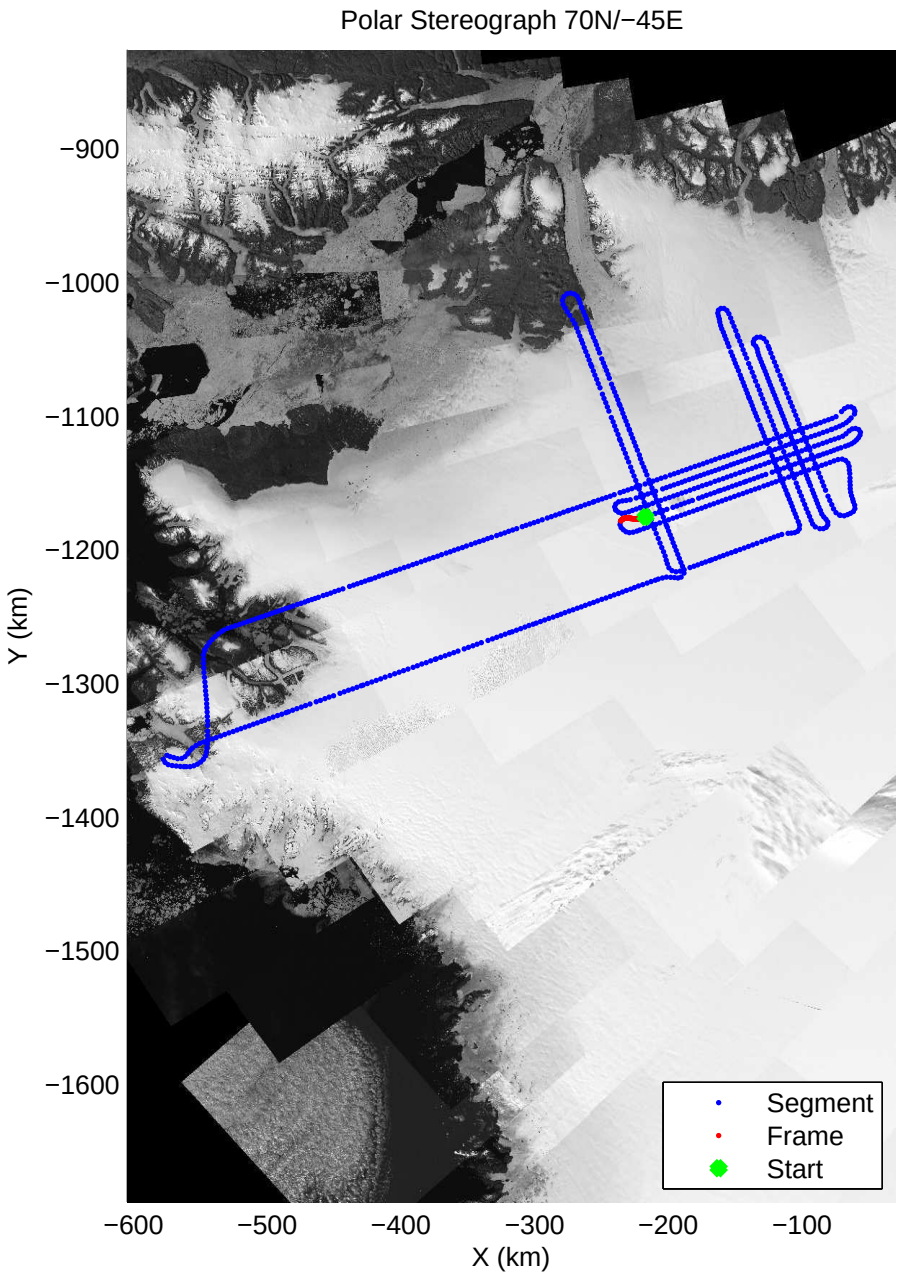

−1160
−1165
−1170
−1175
−1180
−1185
Y (km)
−220
−215
−210
−205
X (km)

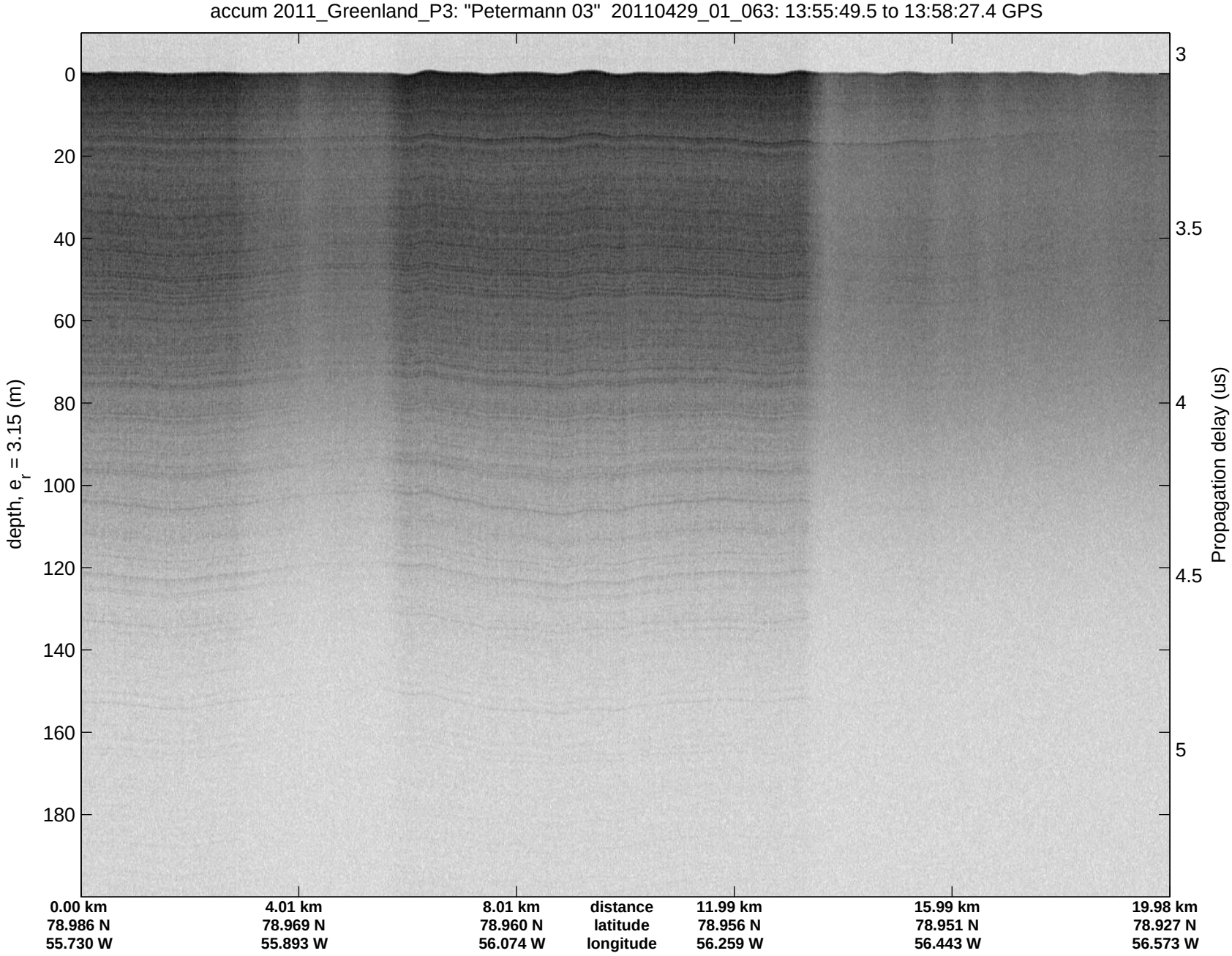

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

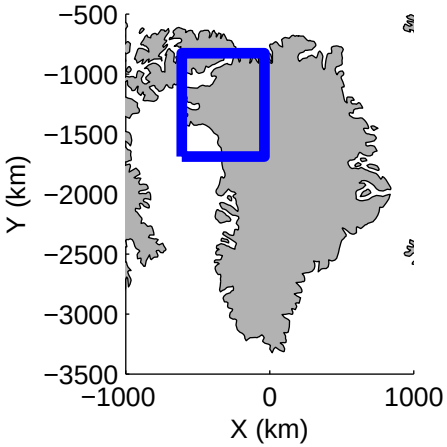

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_062: 13:53:24.7 to 13:55:49.2 GPS
depth, e_r = 3.15 (m)
Propagation delay (us)
0
20
40
60
80
100
120
140
160
180
200
3
3.5
4
4.5
5
0.00 km
79.075 N
54.914 W
3.99 km
79.058 N
55.078 W
7.99 km
79.040 N
55.241 W
distance
latitude
longitude
11.99 km
79.022 N
55.405 W
15.99 km
79.004 N
55.567 W
19.97 km
78.986 N
55.728 W

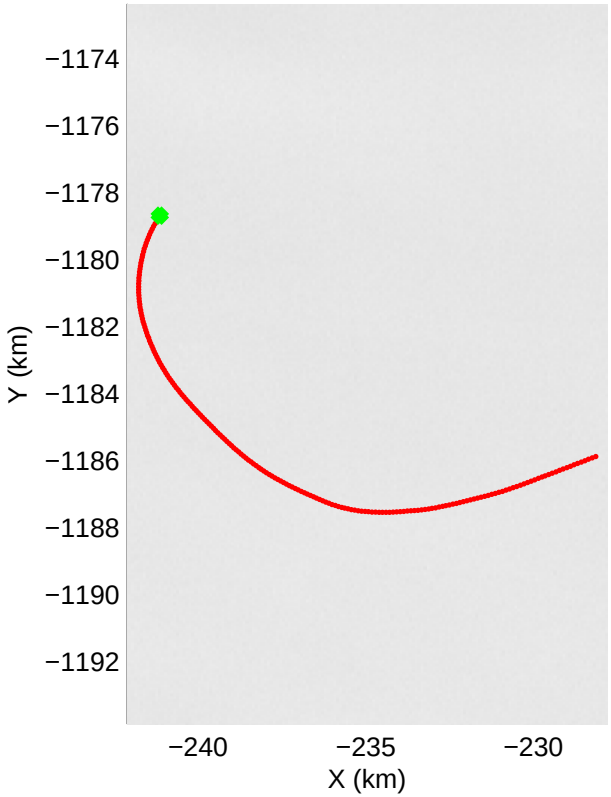

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

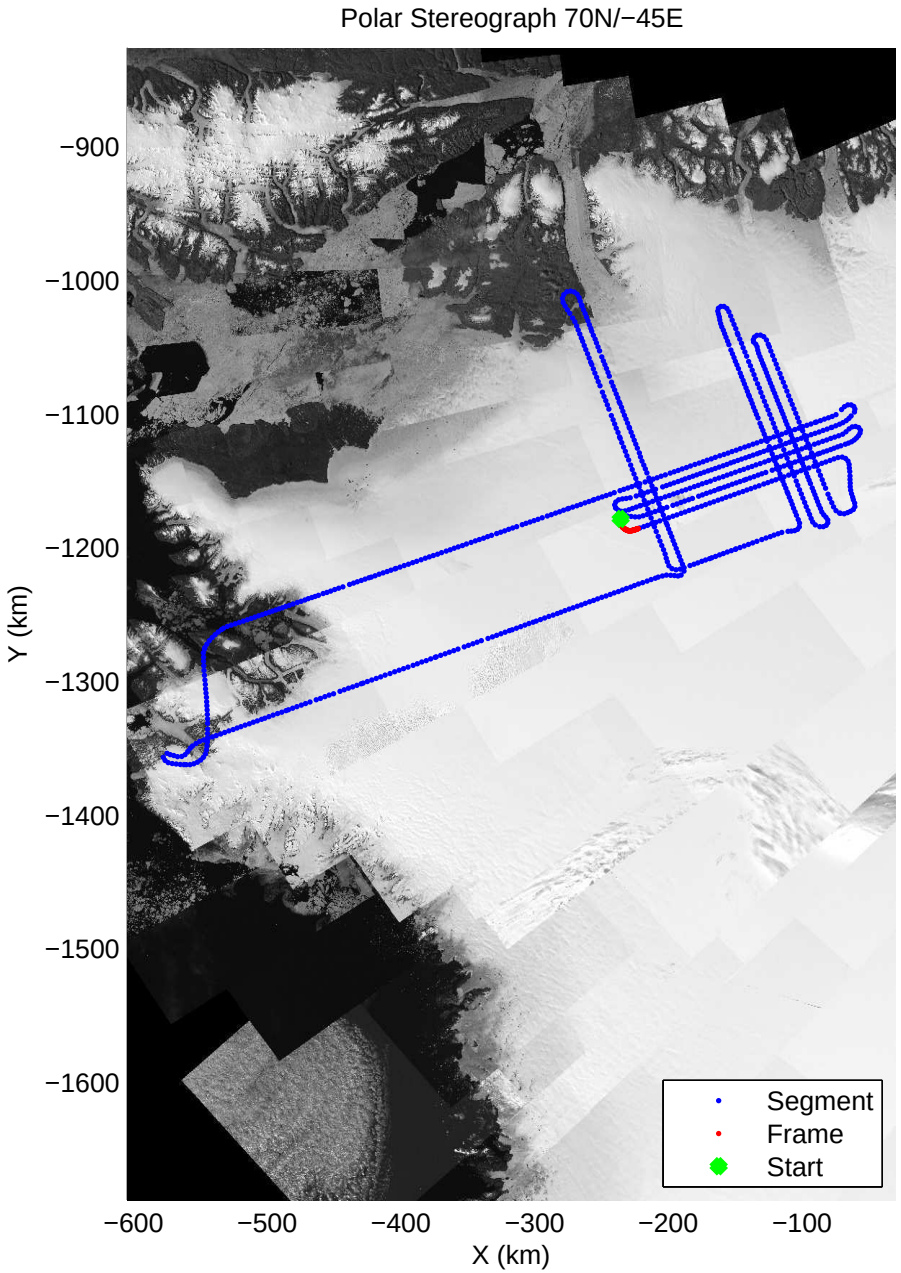

−1165
−1170
−1175
−1180
−1185
−1190
Y (km)
−240
−235
−230
−225
X (km)

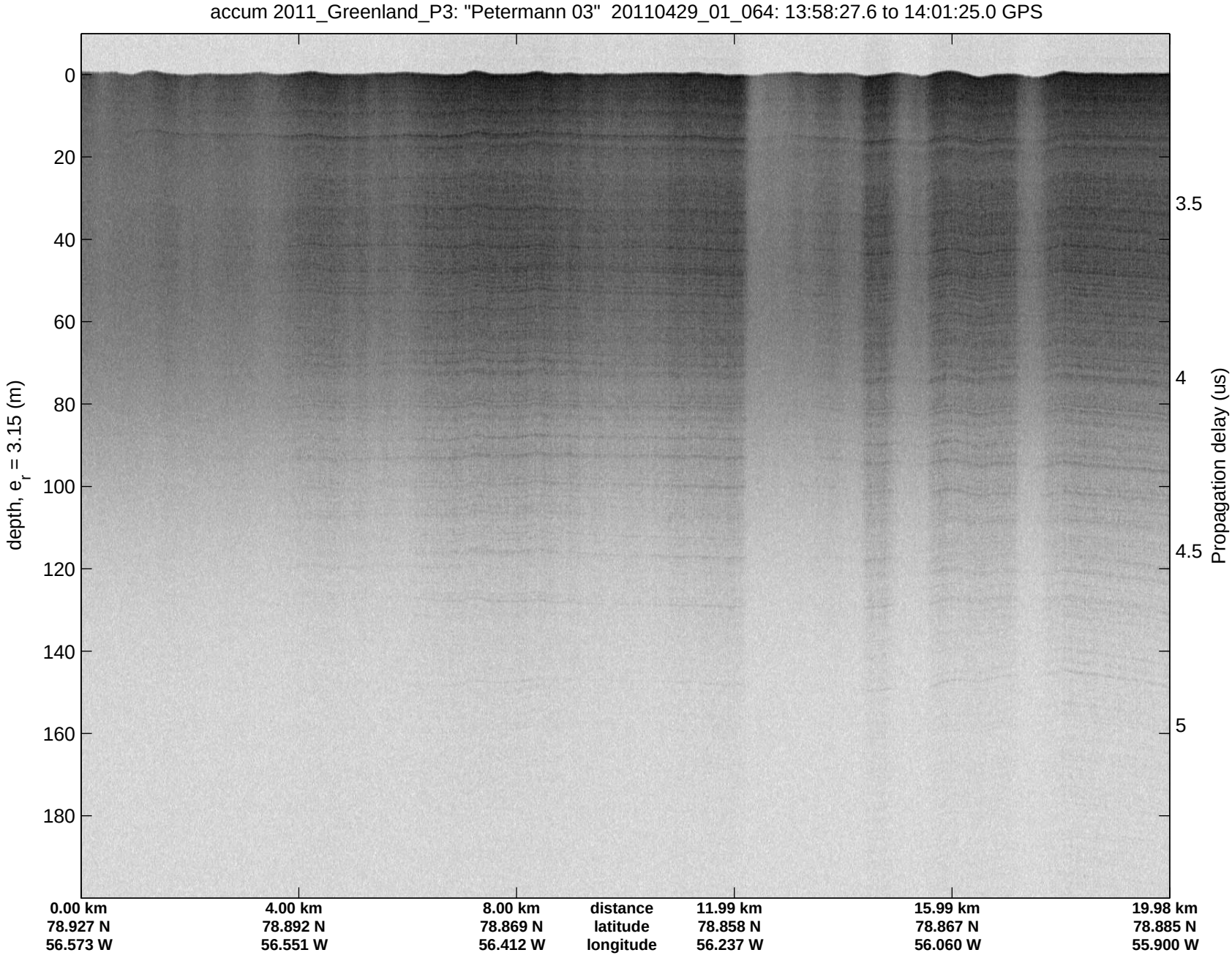

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

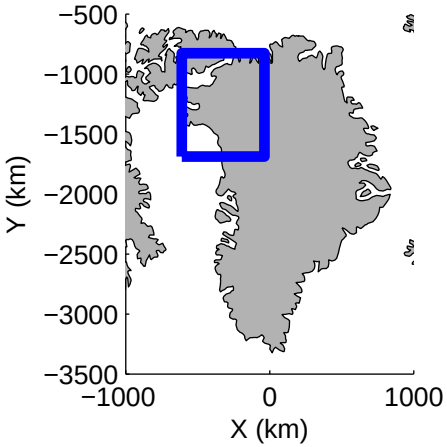

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_063: 13:55:49.5 to 13:58:27.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
78.986 N
55.730 W
4.01 km
78.969 N
55.893 W
8.01 km
78.960 N
56.074 W
distance
latitude
longitude
11.99 km
78.956 N
56.259 W
15.99 km
78.951 N
56.443 W
19.98 km
78.927 N
56.573 W

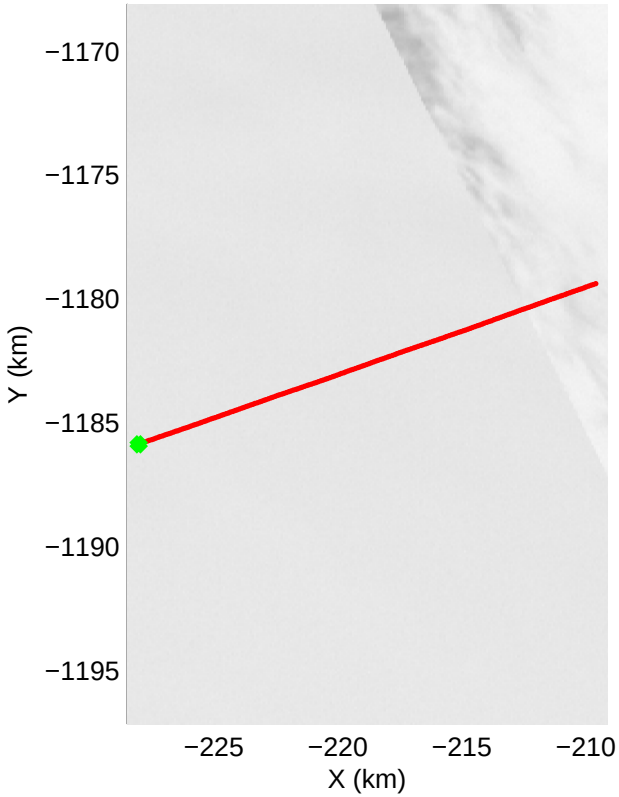

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

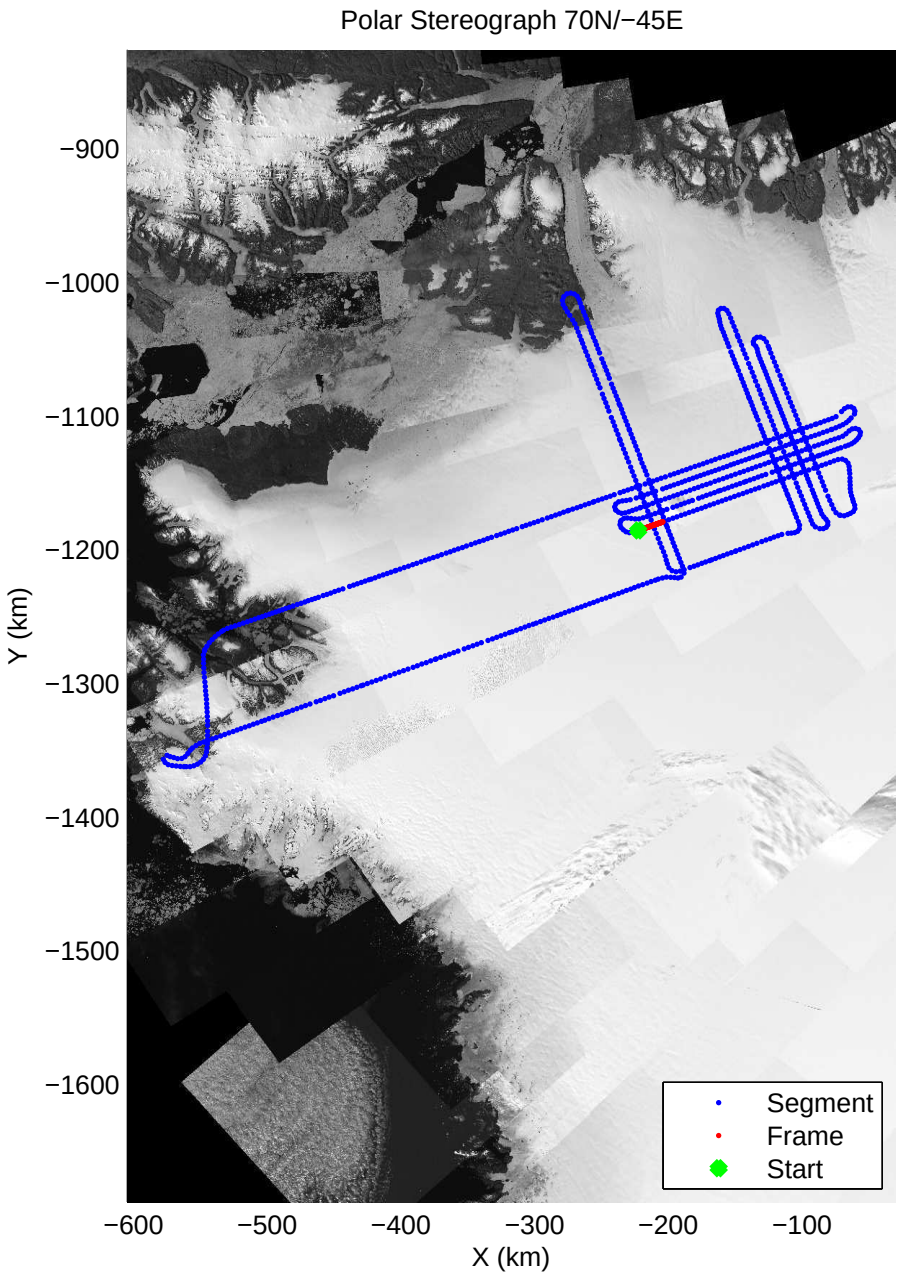

−1174
−1176
−1178
−1180
−1182
−1184
−1186
−1188
−1190
−1192
Y (km)
−240
−235
−230
X (km)

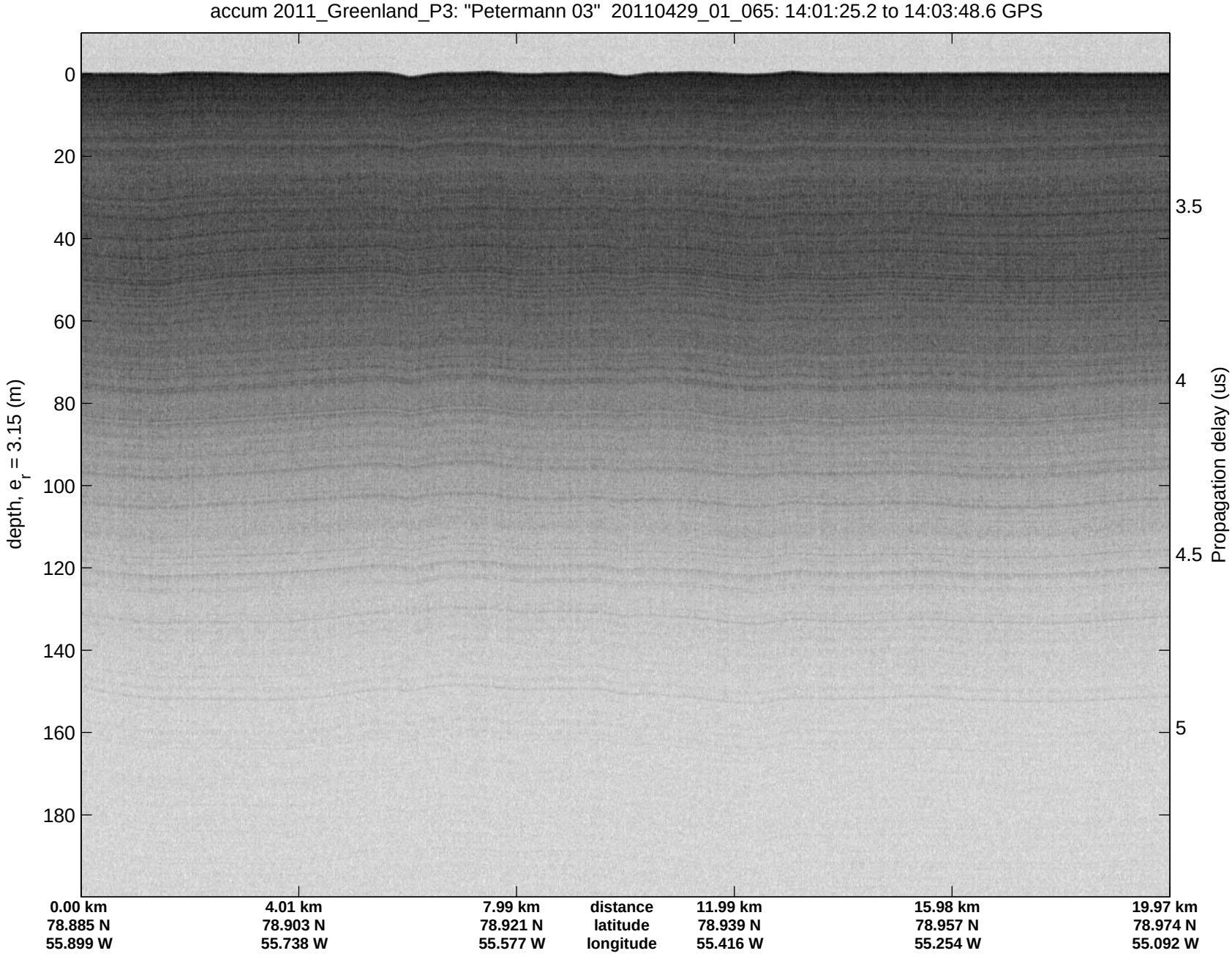

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

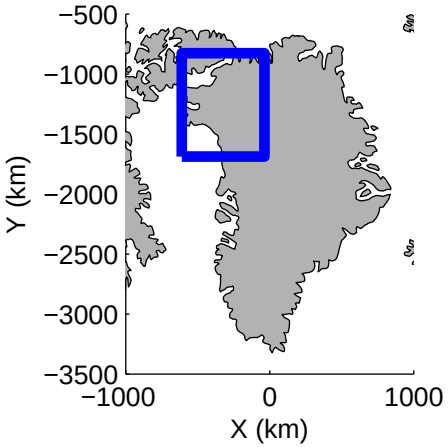

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_064: 13:58:27.6 to 14:01:25.0 GPS
0
20
40
60
80
100
120
140
160
180
depth, e_r = 3.15 (m)
3.5
4
4.5
5
Propagation delay (us)
0.00 km
78.927 N
56.573 W
4.00 km
78.892 N
56.551 W
8.00 km
78.869 N
56.412 W
distance
latitude
longitude
11.99 km
78.858 N
56.237 W
15.99 km
78.867 N
56.060 W
19.98 km
78.885 N
55.900 W

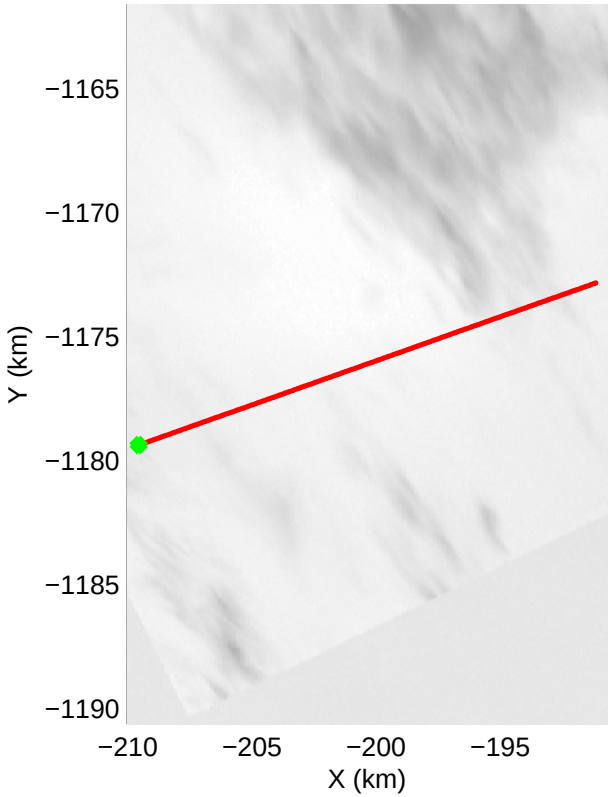

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

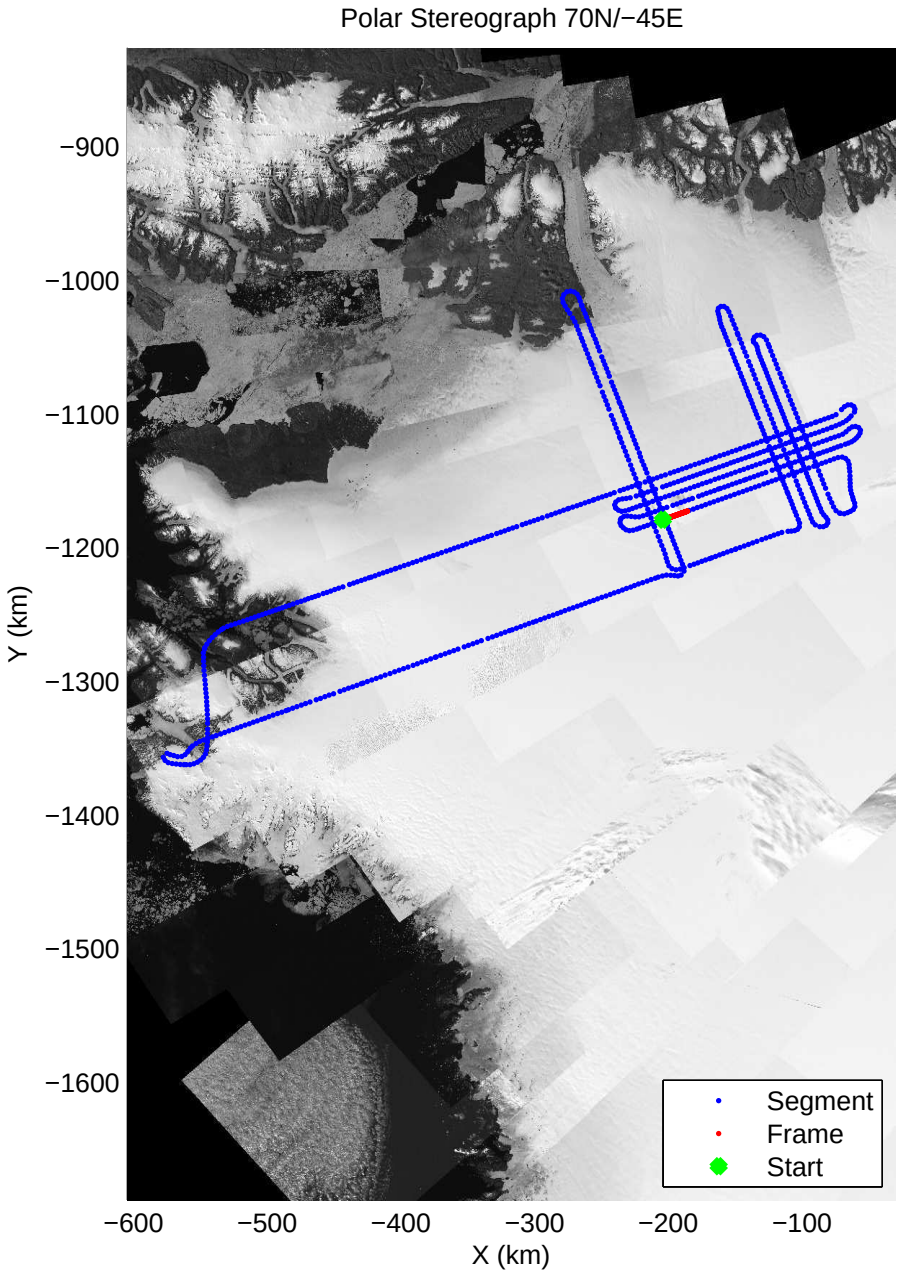

−1170
−1175
−1180
−1185
−1190
−1195
Y (km)
−225
−220
−215
−210
X (km)

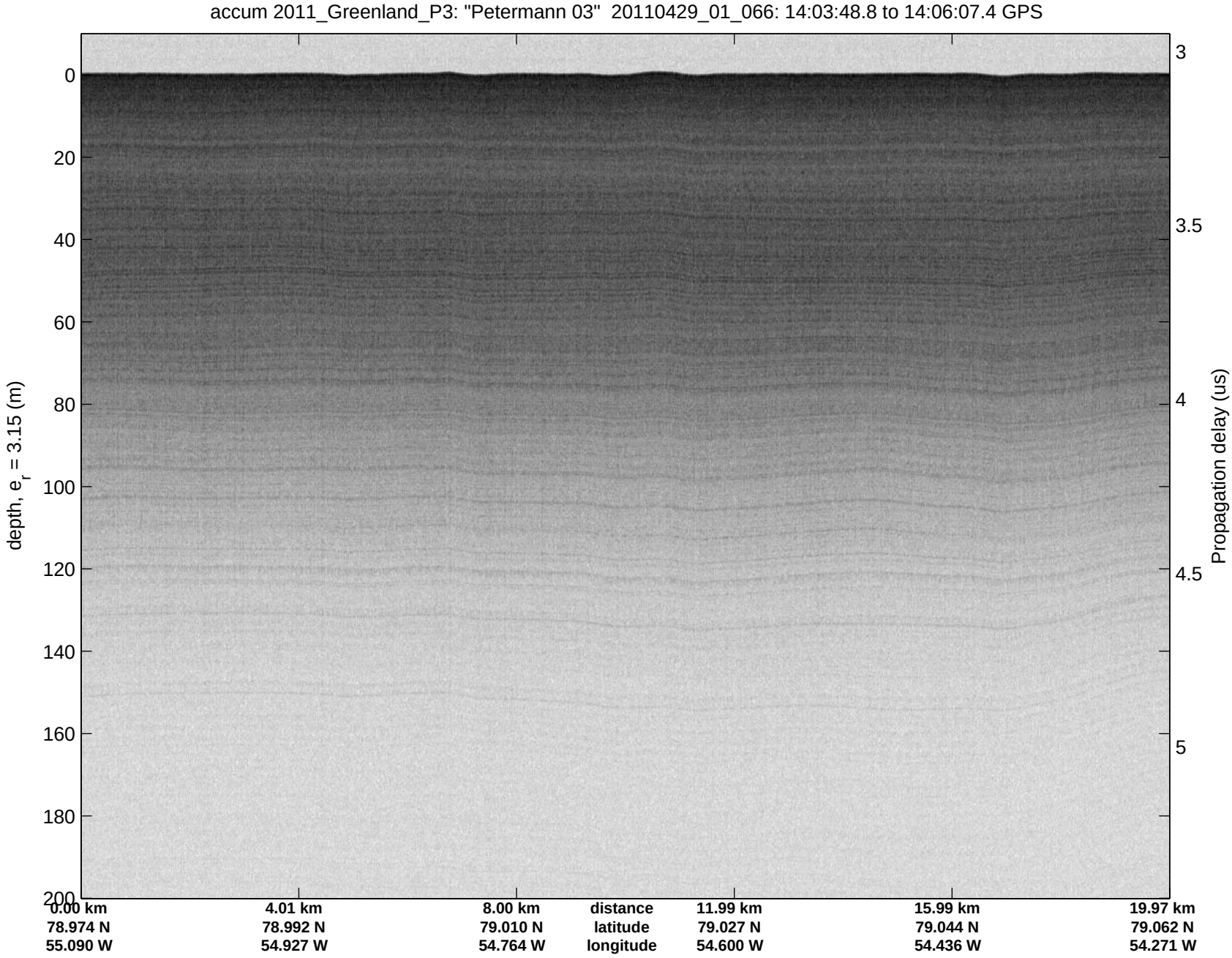

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

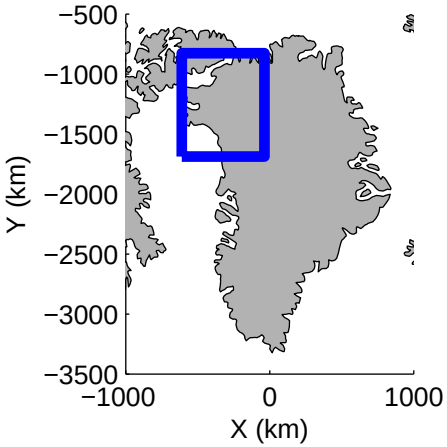

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_065: 14:01:25.2 to 14:03:48.6 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
0.00 km
78.885 N
55.899 W
4.01 km
78.903 N
55.738 W
7.99 km
78.921 N
55.577 W
distance
latitude
longitude
11.99 km
78.939 N
55.416 W
15.98 km
78.957 N
55.254 W
19.97 km
78.974 N
55.092 W

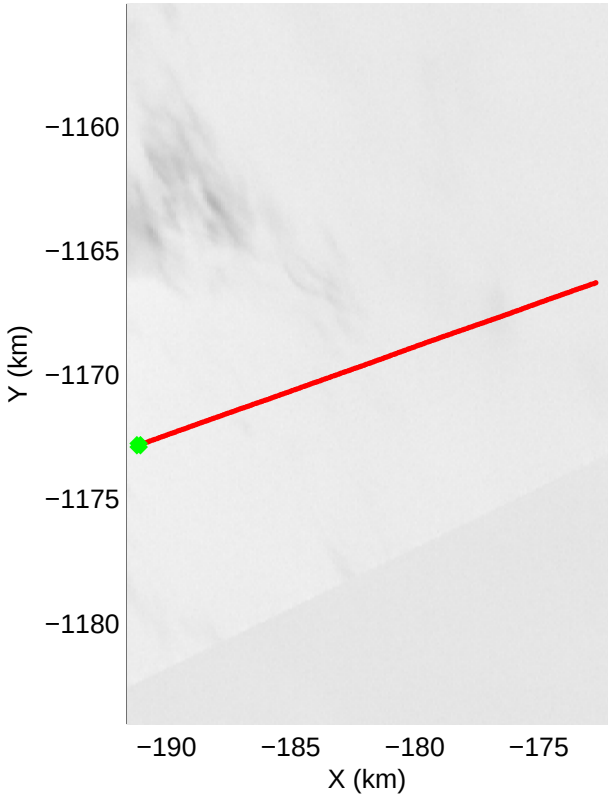

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

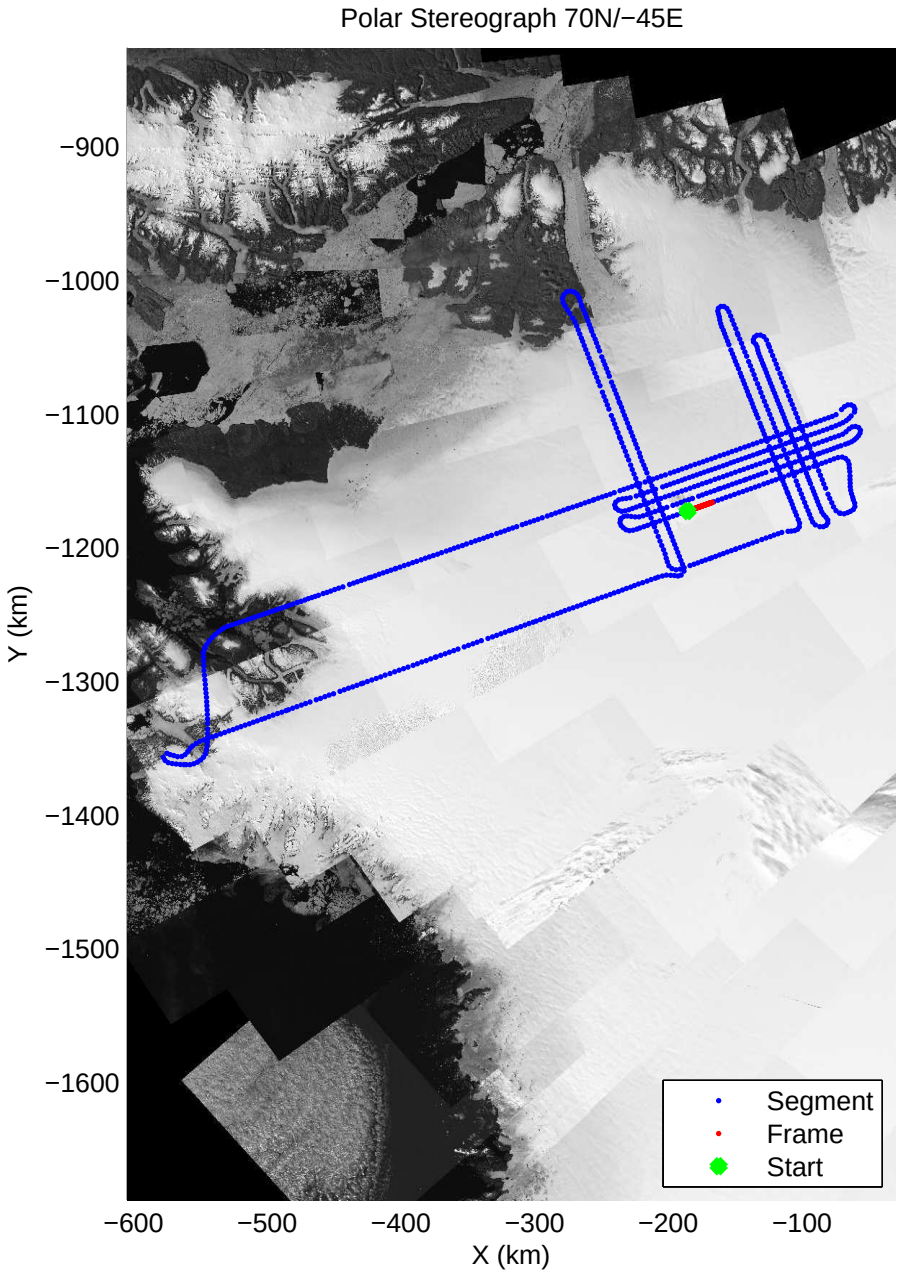

−1165
−1170
−1175
−1180
−1185
−1190
Y (km)
−210
−205
−200
−195
X (km)

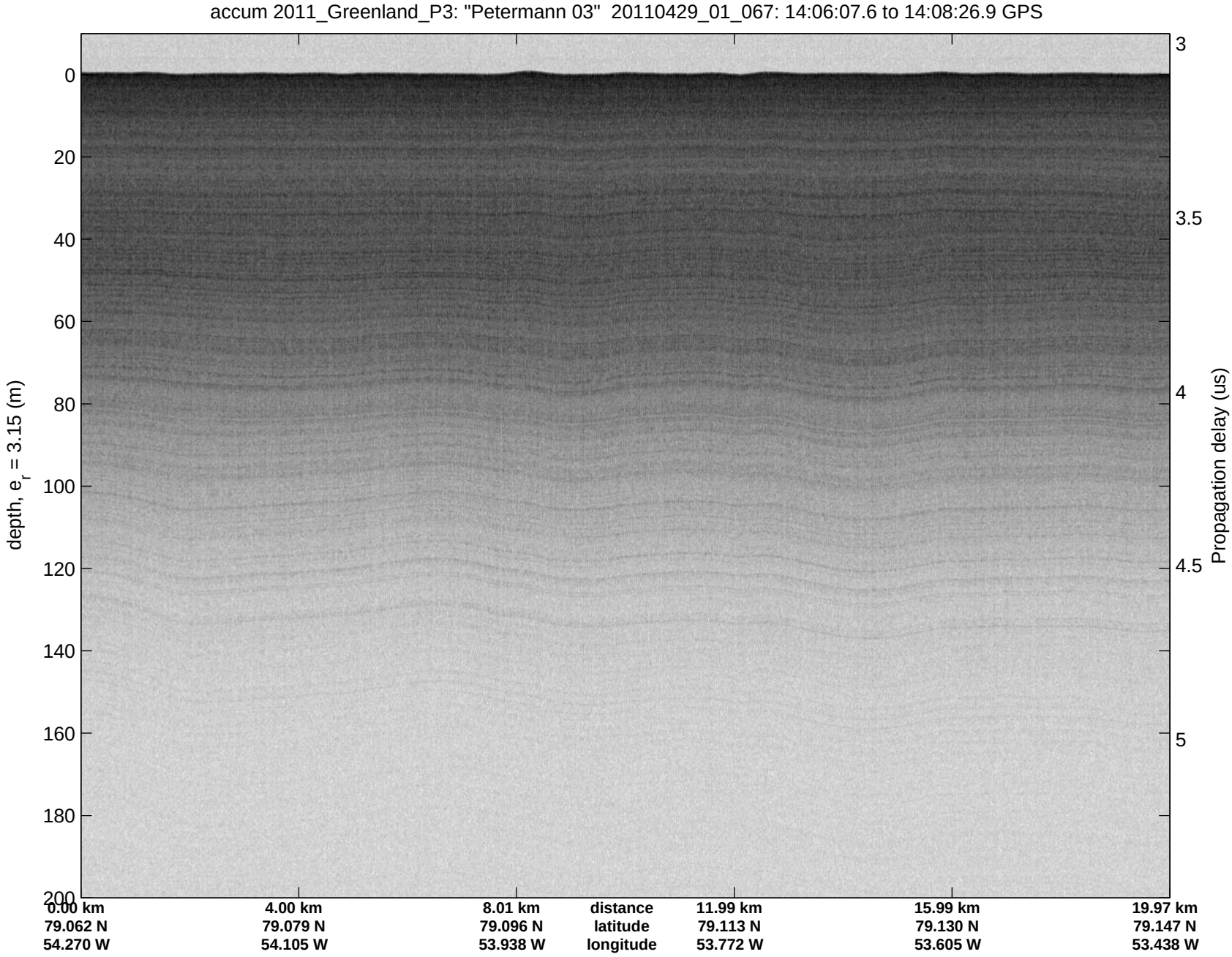

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

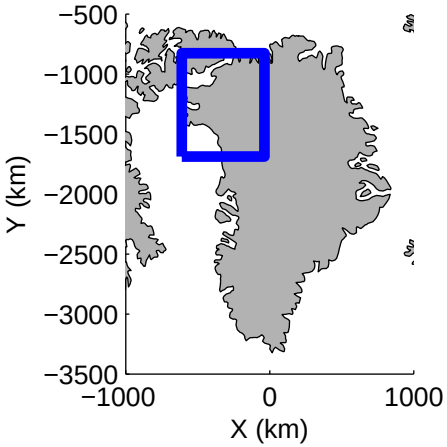

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_066: 14:03:48.8 to 14:06:07.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
78.974 N
55.090 W
4.01 km
78.992 N
54.927 W
8.00 km
79.010 N
54.764 W
distance
latitude
longitude
11.99 km
79.027 N
54.600 W
15.99 km
79.044 N
54.436 W
19.97 km
79.062 N
54.271 W

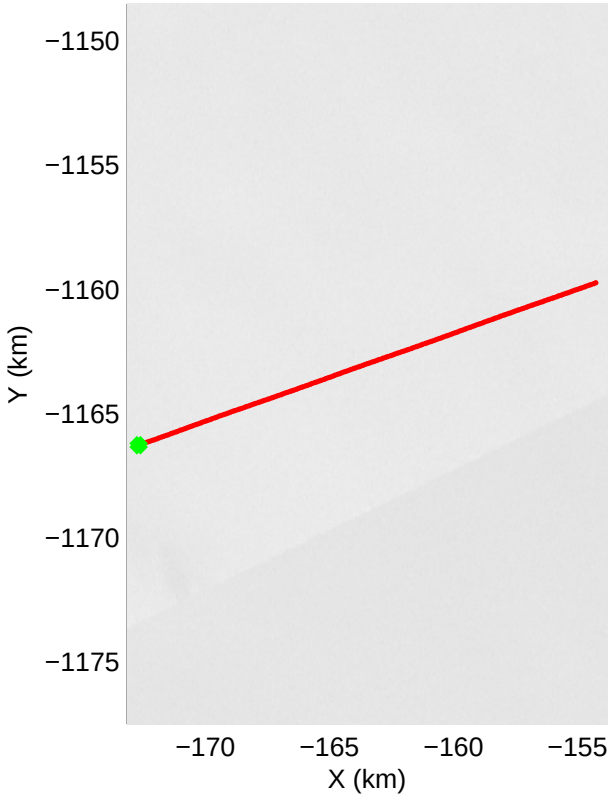

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

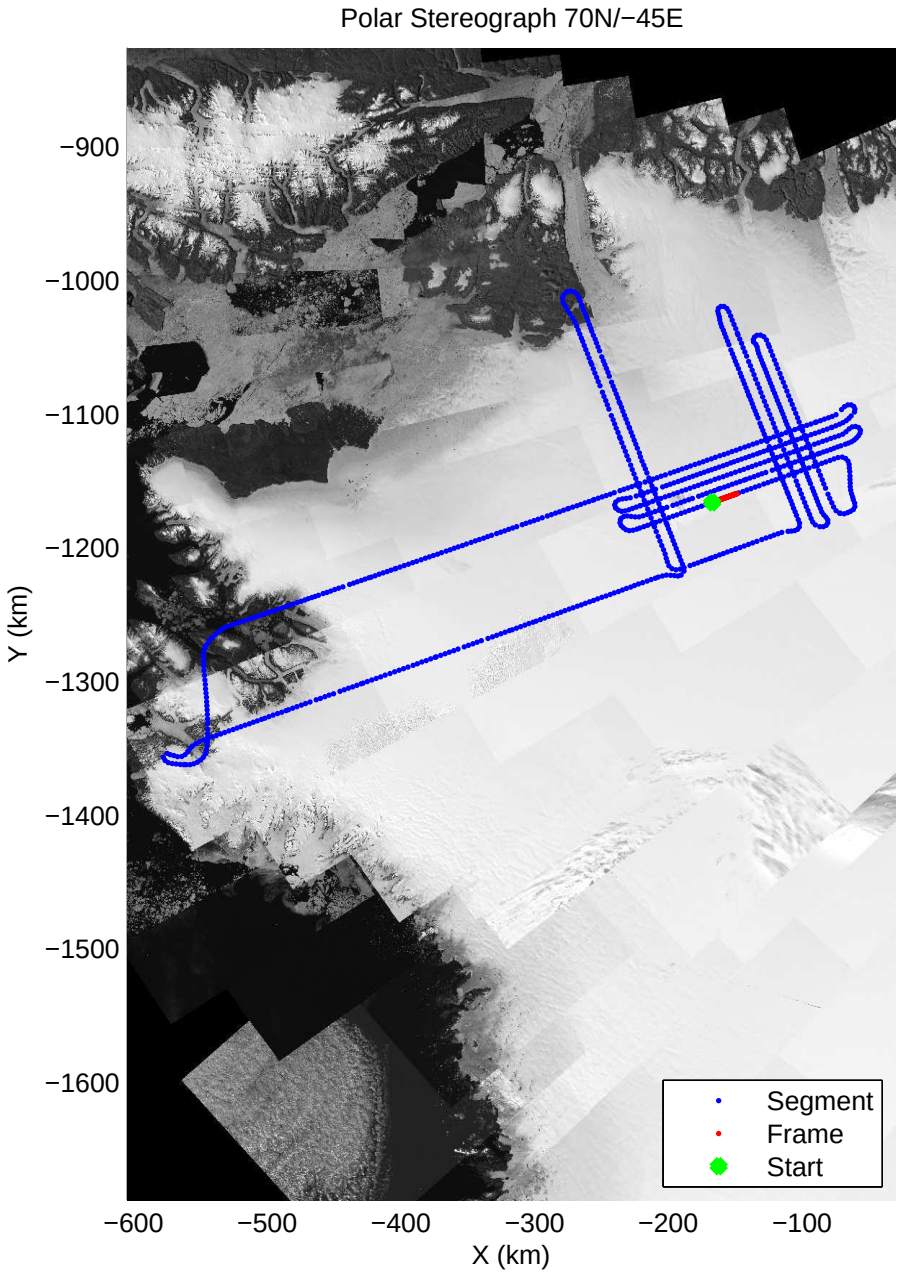

−1160
−1165
−1170
−1175
−1180
Y (km)
−190
−185
−180
−175
X (km)

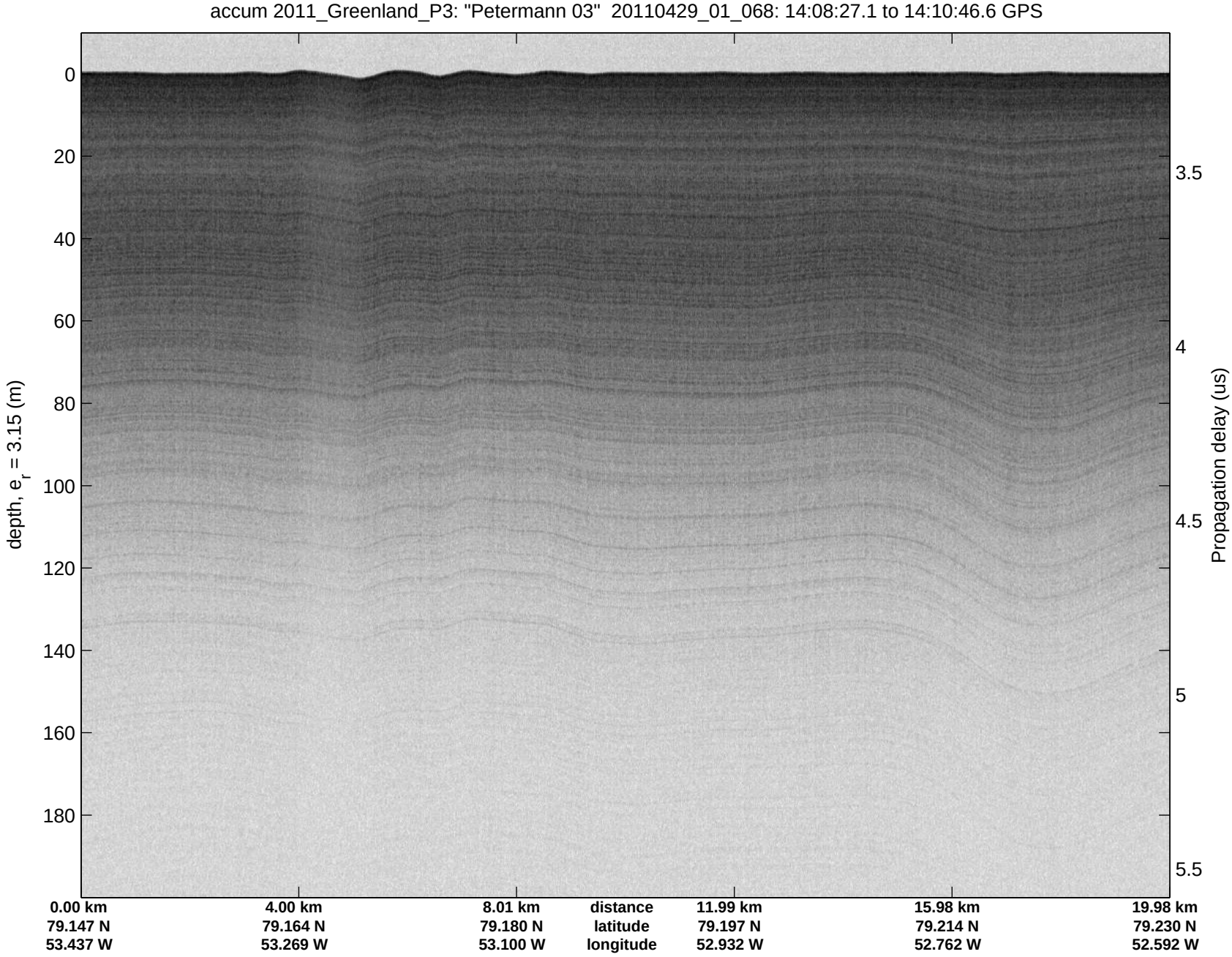

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

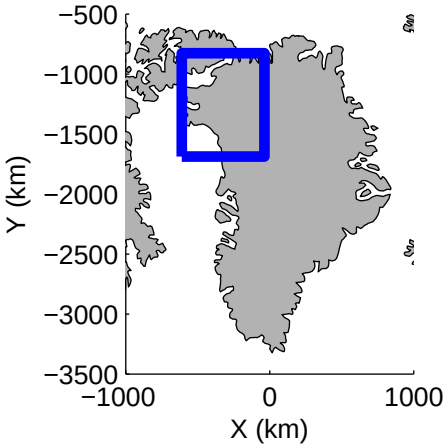

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_067: 14:06:07.6 to 14:08:26.9 GPS
depth, e_r = 3.15 (m)
Propagation delay (us)
0
20
40
60
80
100
120
140
160
180
200
3
3.5
4
4.5
5
0.00 km
79.062 N
54.270 W
4.00 km
79.079 N
54.105 W
8.01 km
79.096 N
53.938 W
distance
latitude
longitude
11.99 km
79.113 N
53.772 W
15.99 km
79.130 N
53.605 W
19.97 km
79.147 N
53.438 W


−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

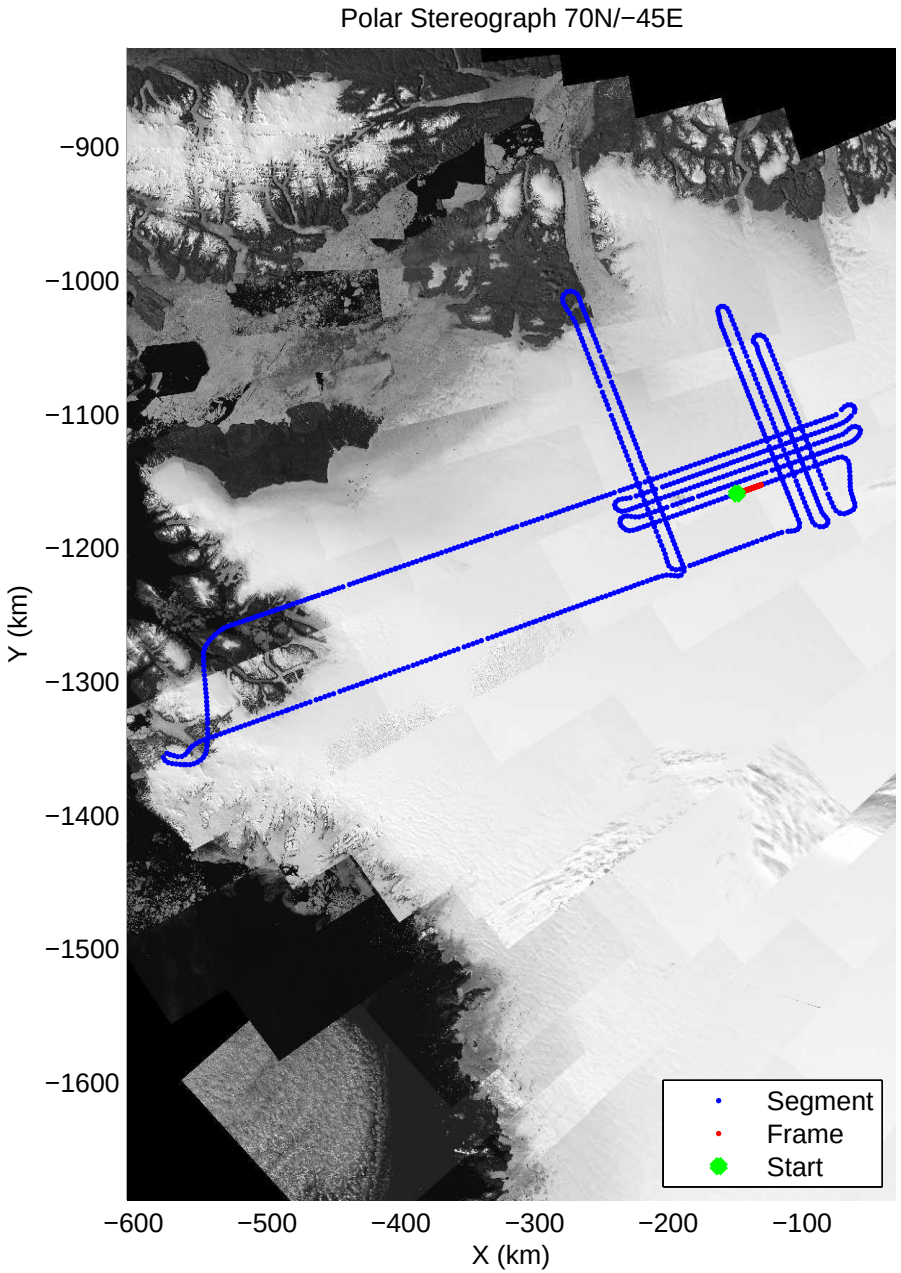

−1150
−1155
−1160
−1165
−1170
−1175
Y (km)
−170
−165
−160
−155
X (km)

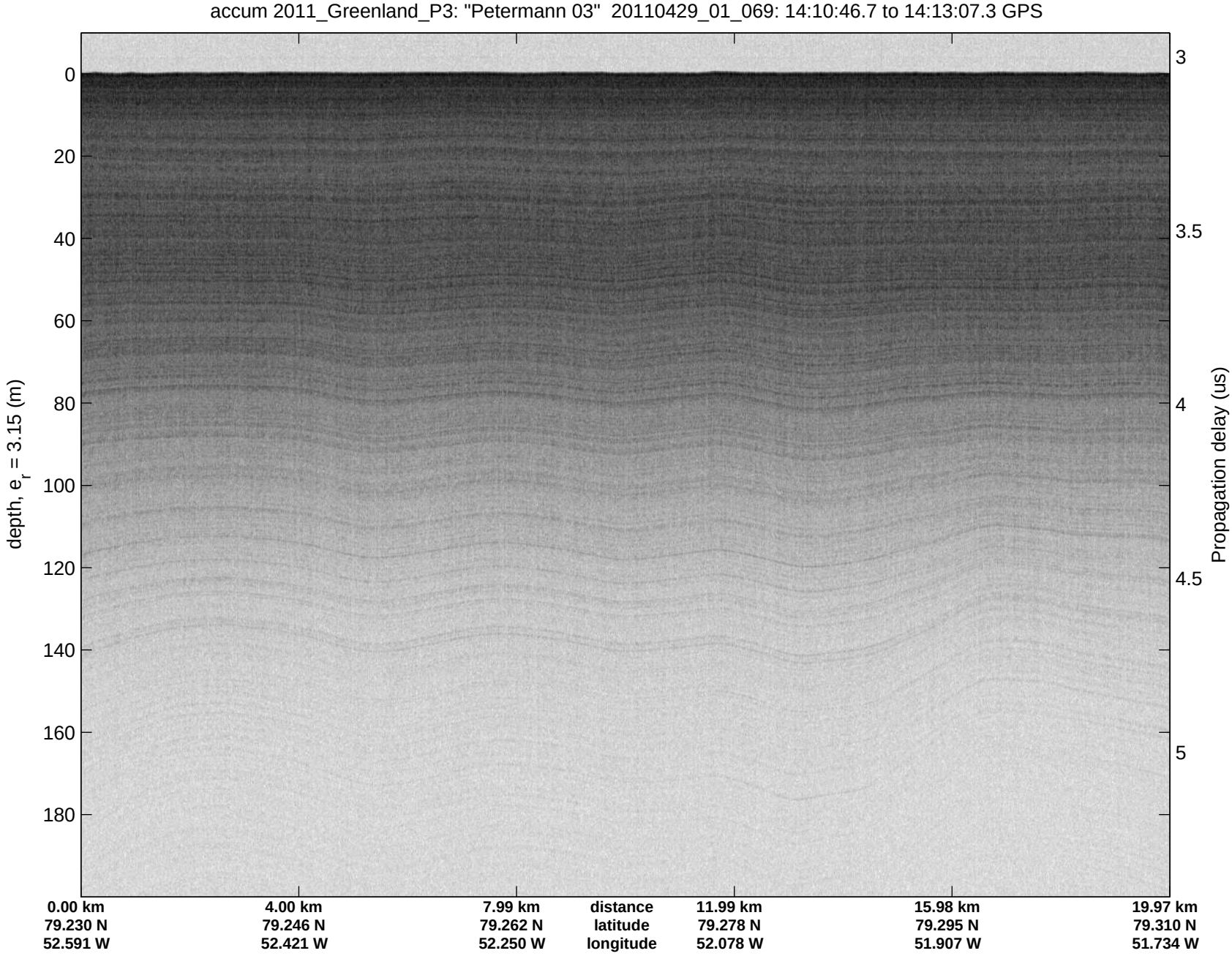

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

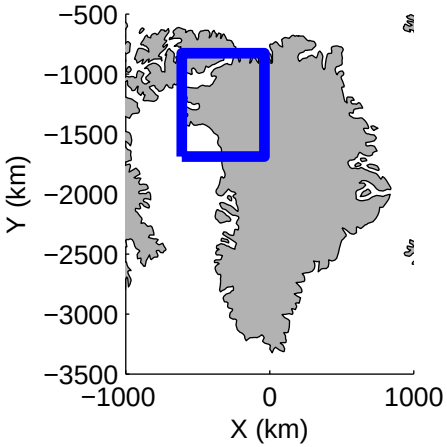

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_068: 14:08:27.1 to 14:10:46.6 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.147 N
53.437 W
4.00 km
79.164 N
53.269 W
8.01 km
79.180 N
53.100 W
distance
latitude
longitude
11.99 km
79.197 N
52.932 W
15.98 km
79.214 N
52.762 W
19.98 km
79.230 N
52.592 W

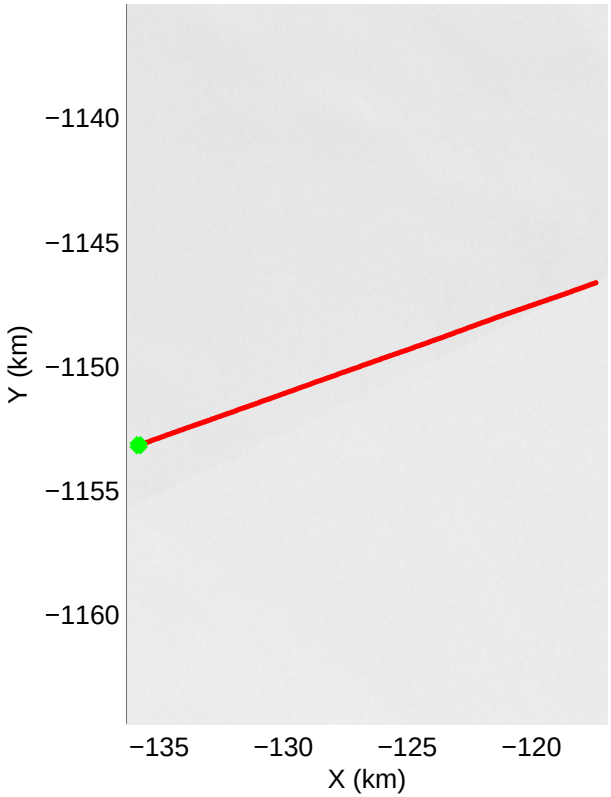

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

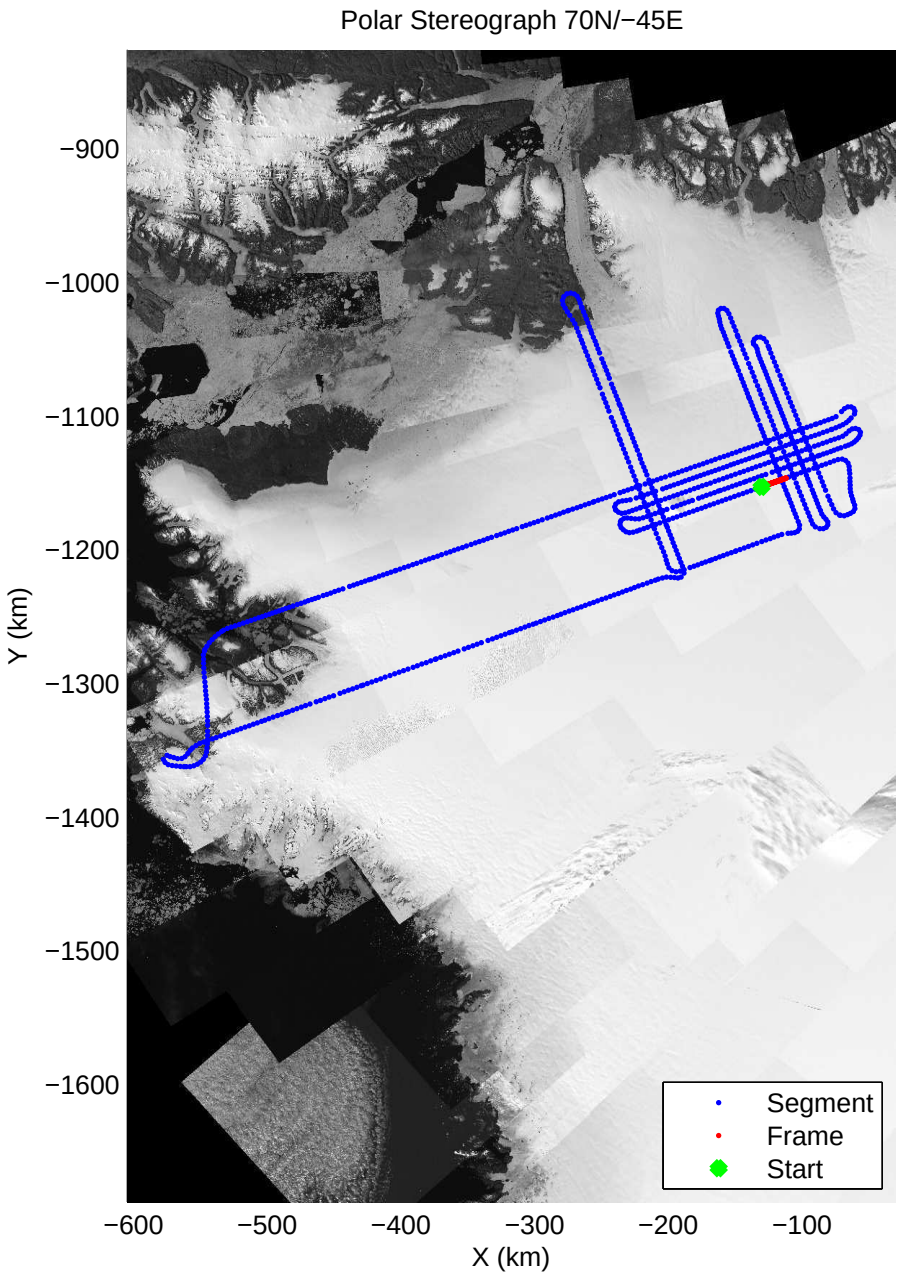
−1145
−1150
−1155
−1160
−1165
−1170
Y (km)
−155
−150
−145
−140
X (km)

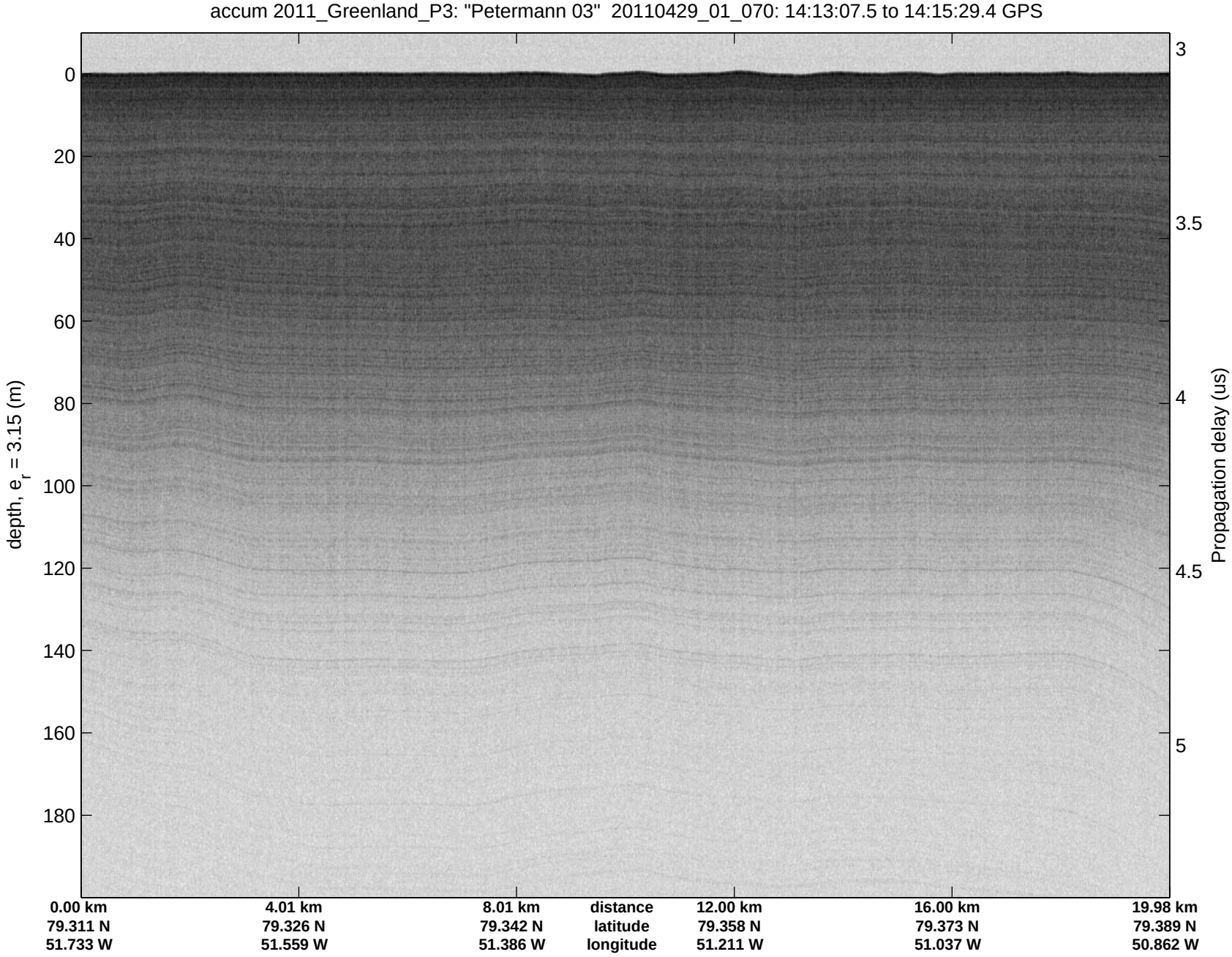

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

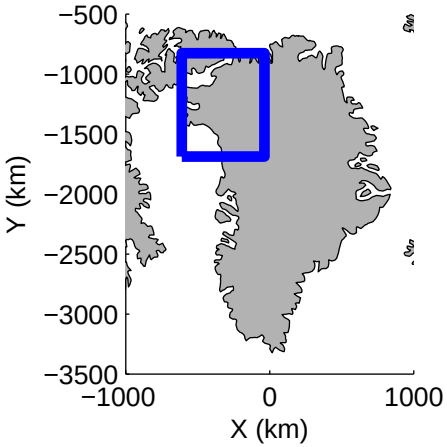

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_069: 14:10:46.7 to 14:13:07.3 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.230 N
52.591 W
4.00 km
79.246 N
52.421 W
7.99 km
79.262 N
52.250 W
distance
latitude
longitude
11.99 km
79.278 N
52.078 W
15.98 km
79.295 N
51.907 W
19.97 km
79.310 N
51.734 W

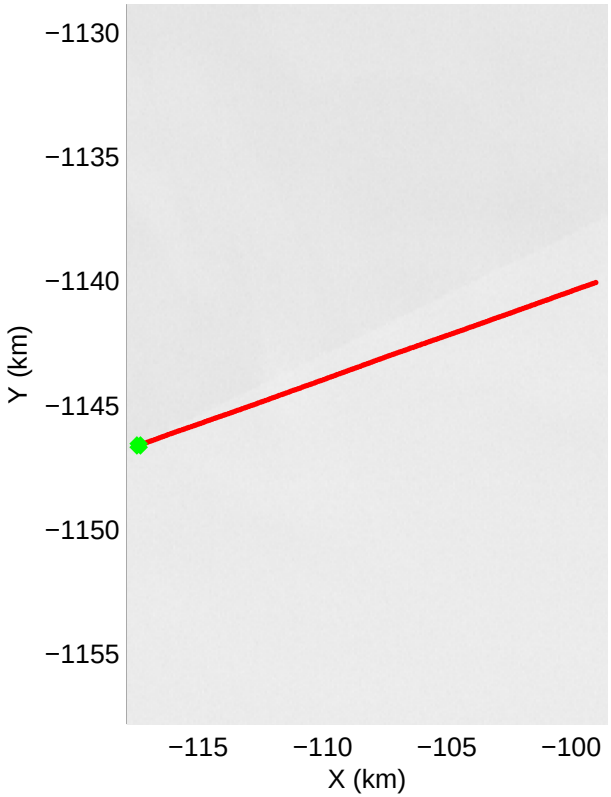

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

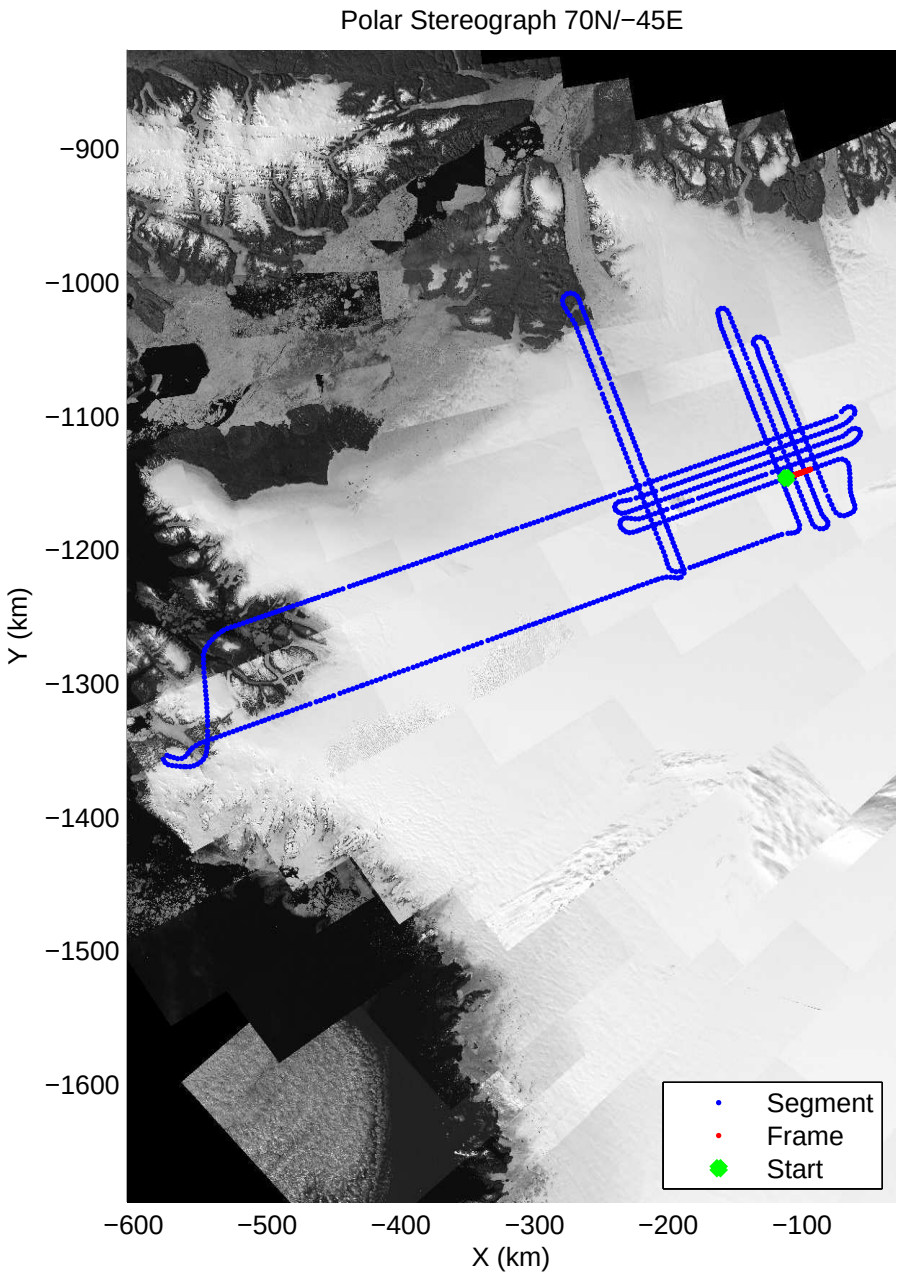

−1140
−1145
−1150
−1155
−1160
Y (km)
−135
−130
−125
−120
X (km)

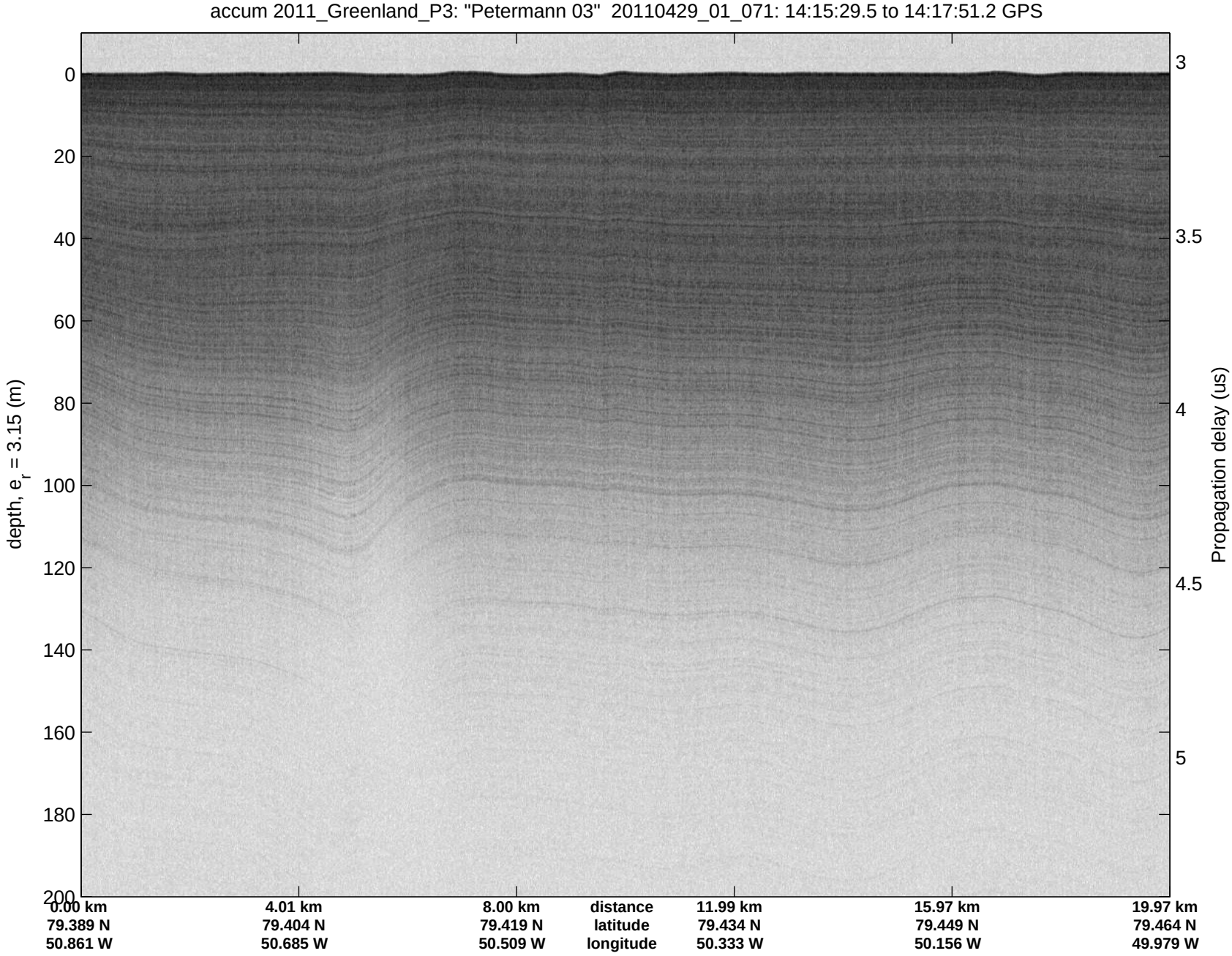

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

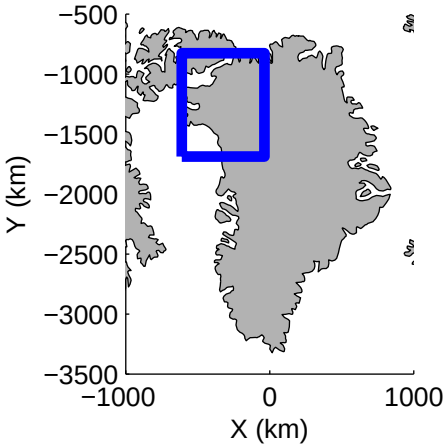

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_070: 14:13:07.5 to 14:15:29.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
79.311 N
51.733 W
4.01 km
79.326 N
51.559 W
8.01 km
79.342 N
51.386 W
distance
latitude
longitude
12.00 km
79.358 N
51.211 W
16.00 km
79.373 N
51.037 W
19.98 km
79.389 N
50.862 W

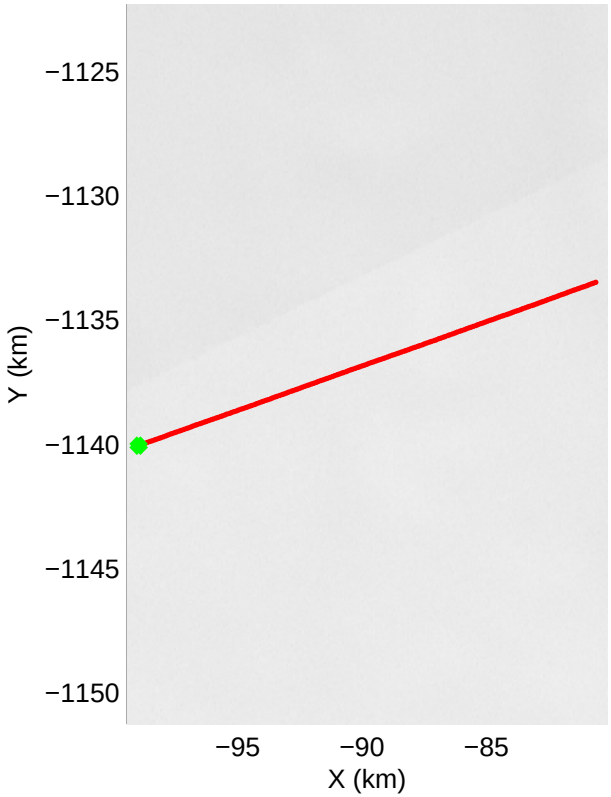

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

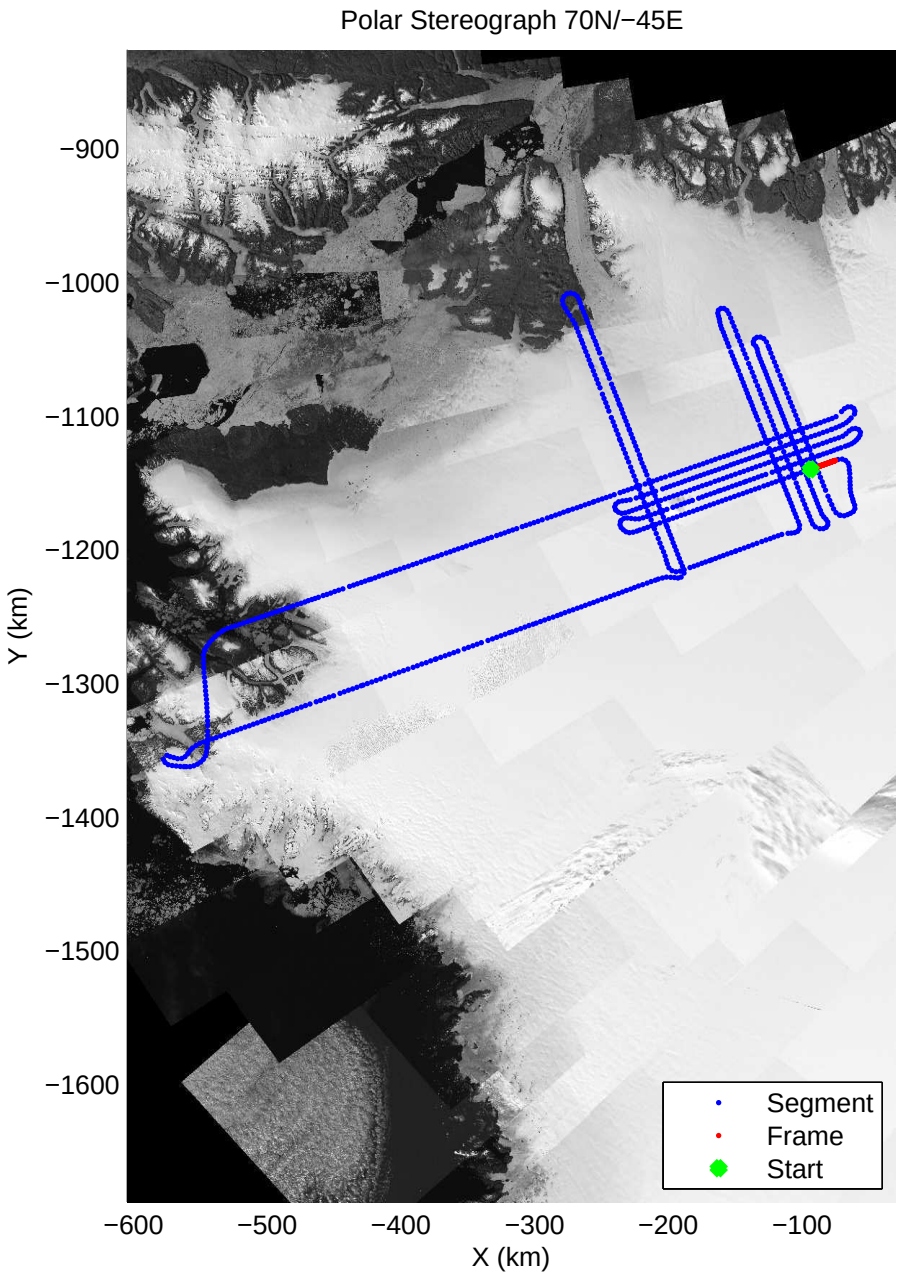

−1130
−1135
−1140
−1145
−1150
−1155
Y (km)
−115
−110
−105
−100
X (km)

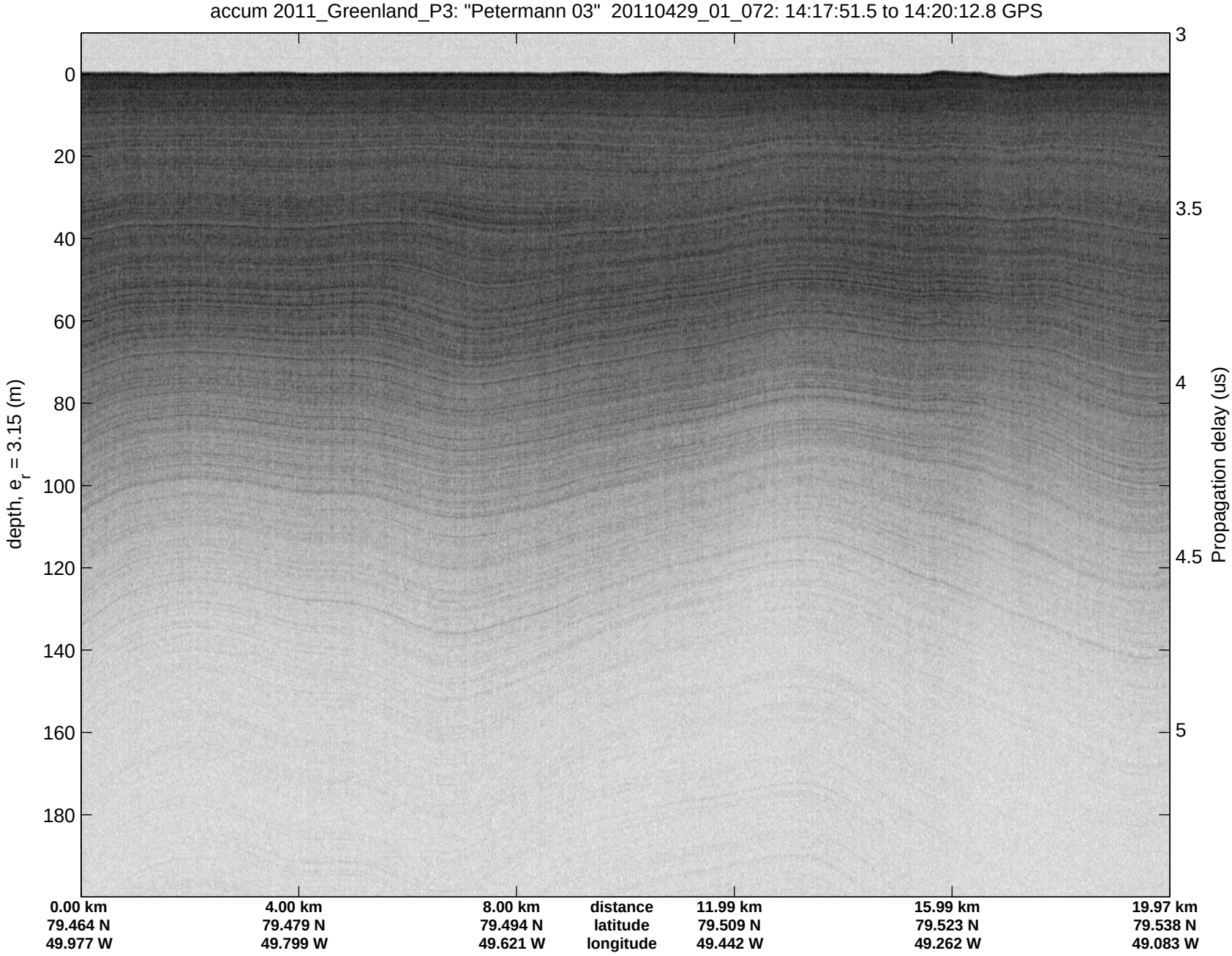

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

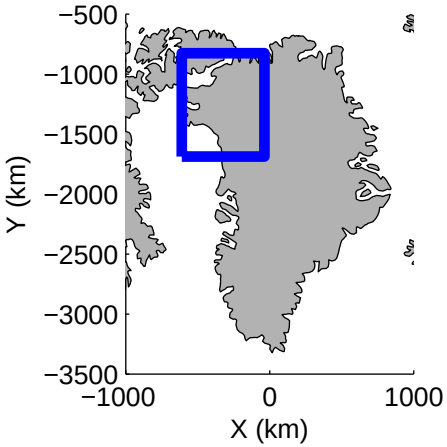

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_071: 14:15:29.5 to 14:17:51.2 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.389 N
50.861 W
4.01 km
79.404 N
50.685 W
8.00 km
79.419 N
50.509 W
distance
latitude
longitude
11.99 km
79.434 N
50.333 W
15.97 km
79.449 N
50.156 W
19.97 km
79.464 N
49.979 W

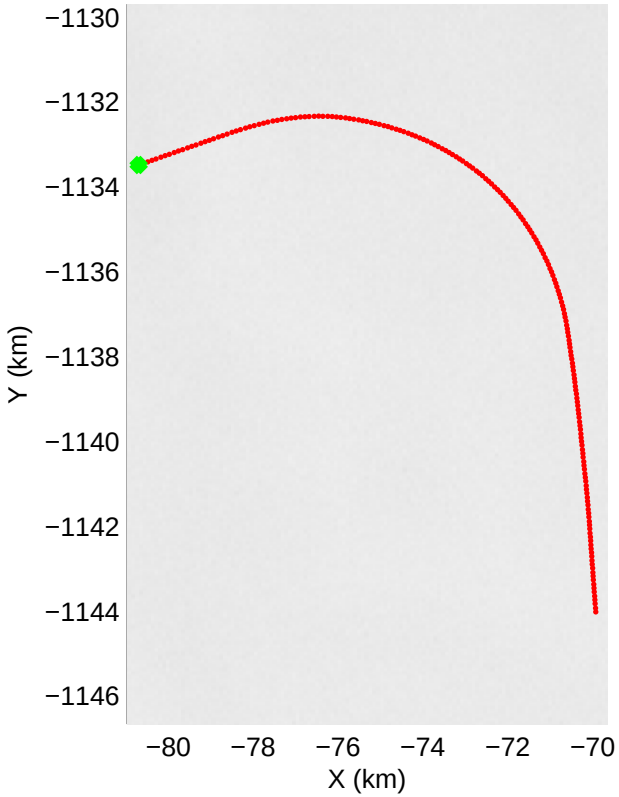

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

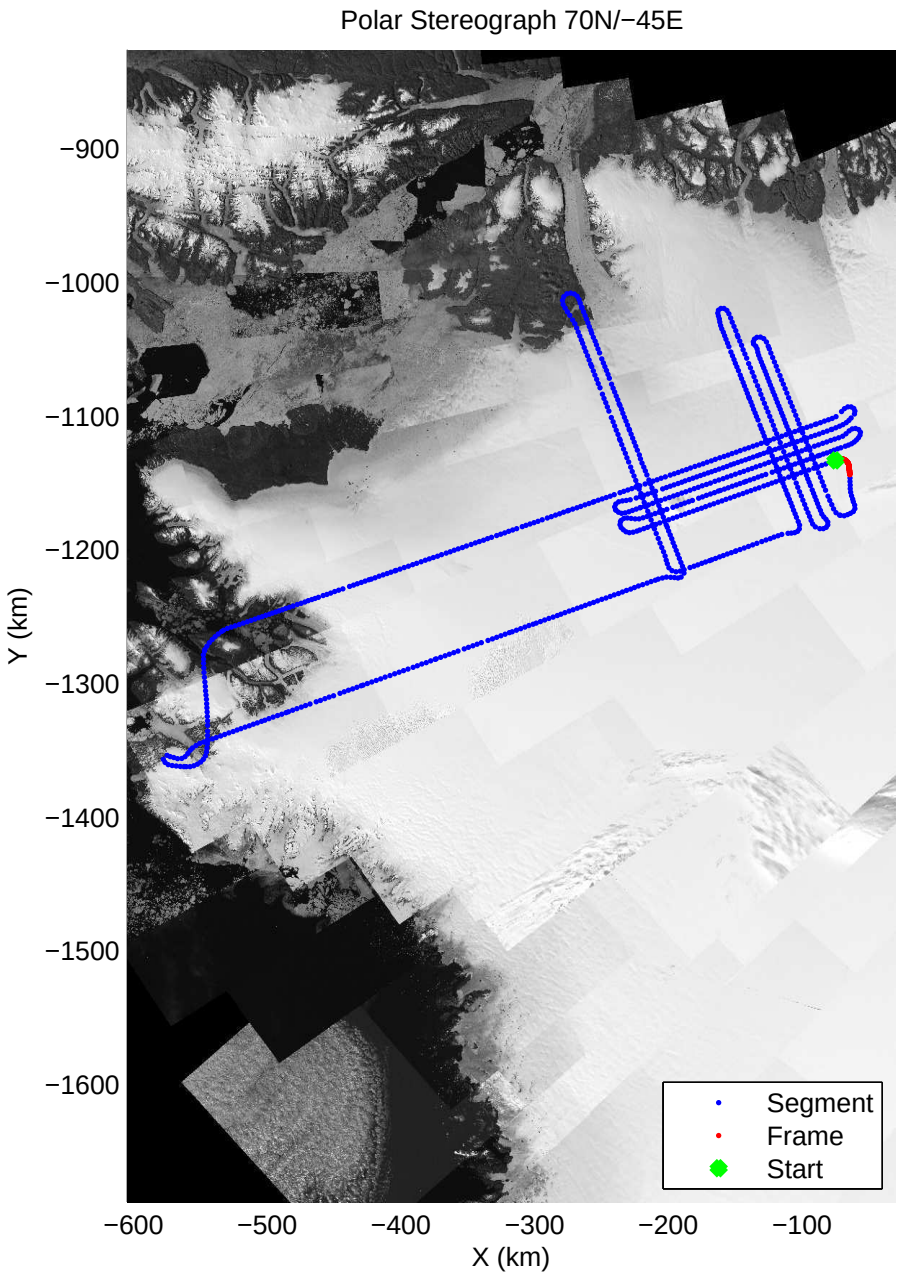

−1125
−1130
−1135
−1140
−1145
−1150
Y (km)
−95
−90
−85
X (km)

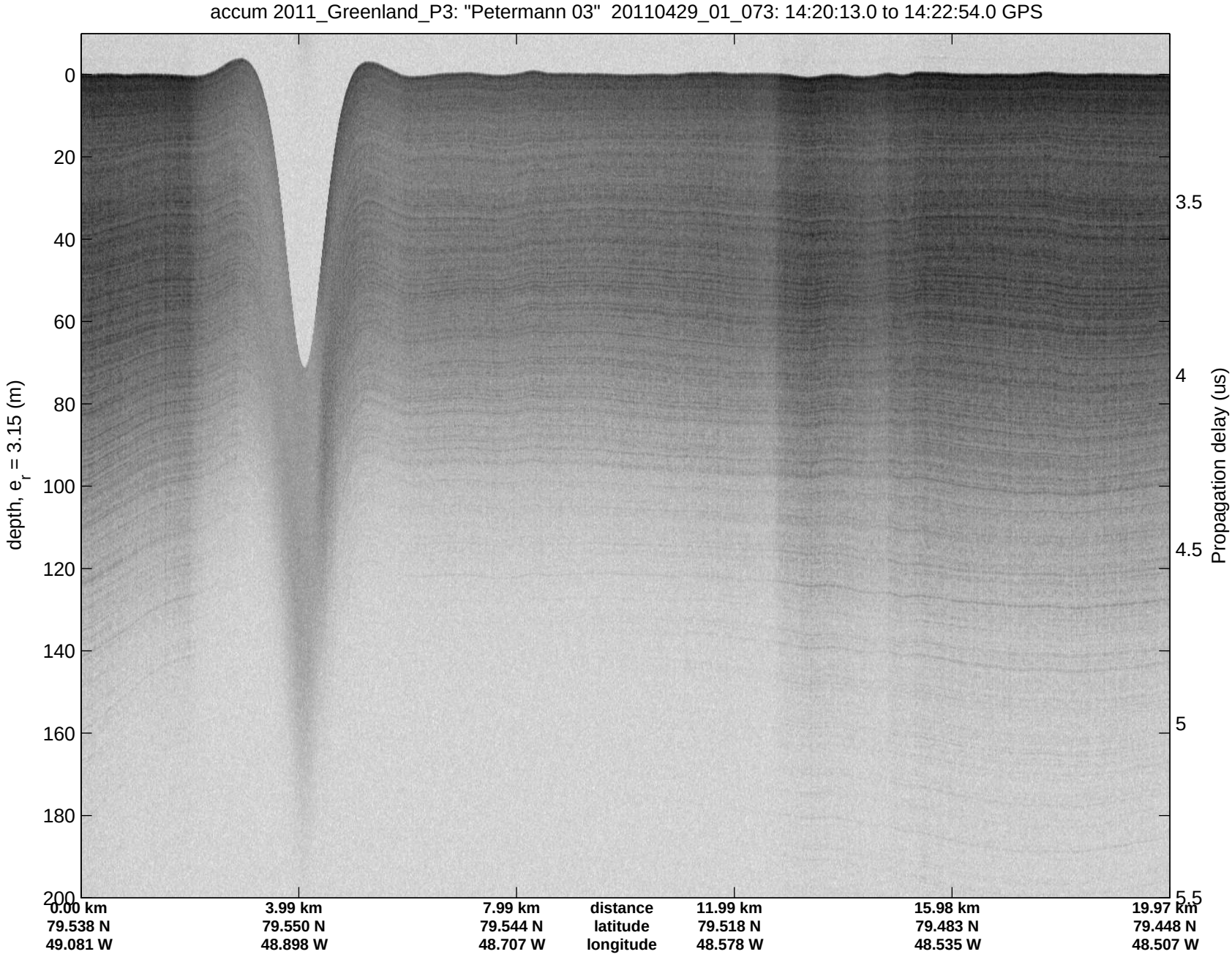

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

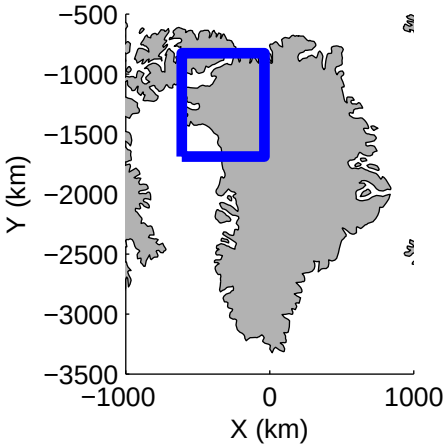

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_072: 14:17:51.5 to 14:20:12.8 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
79.464 N
49.977 W
4.00 km
79.479 N
49.799 W
8.00 km
79.494 N
49.621 W
distance
latitude
longitude
11.99 km
79.509 N
49.442 W
15.99 km
79.523 N
49.262 W
19.97 km
79.538 N
49.083 W

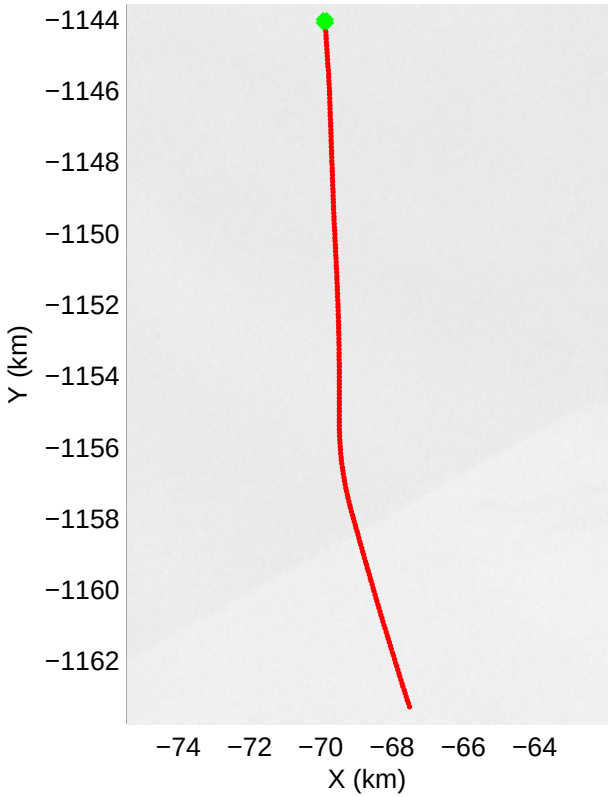

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

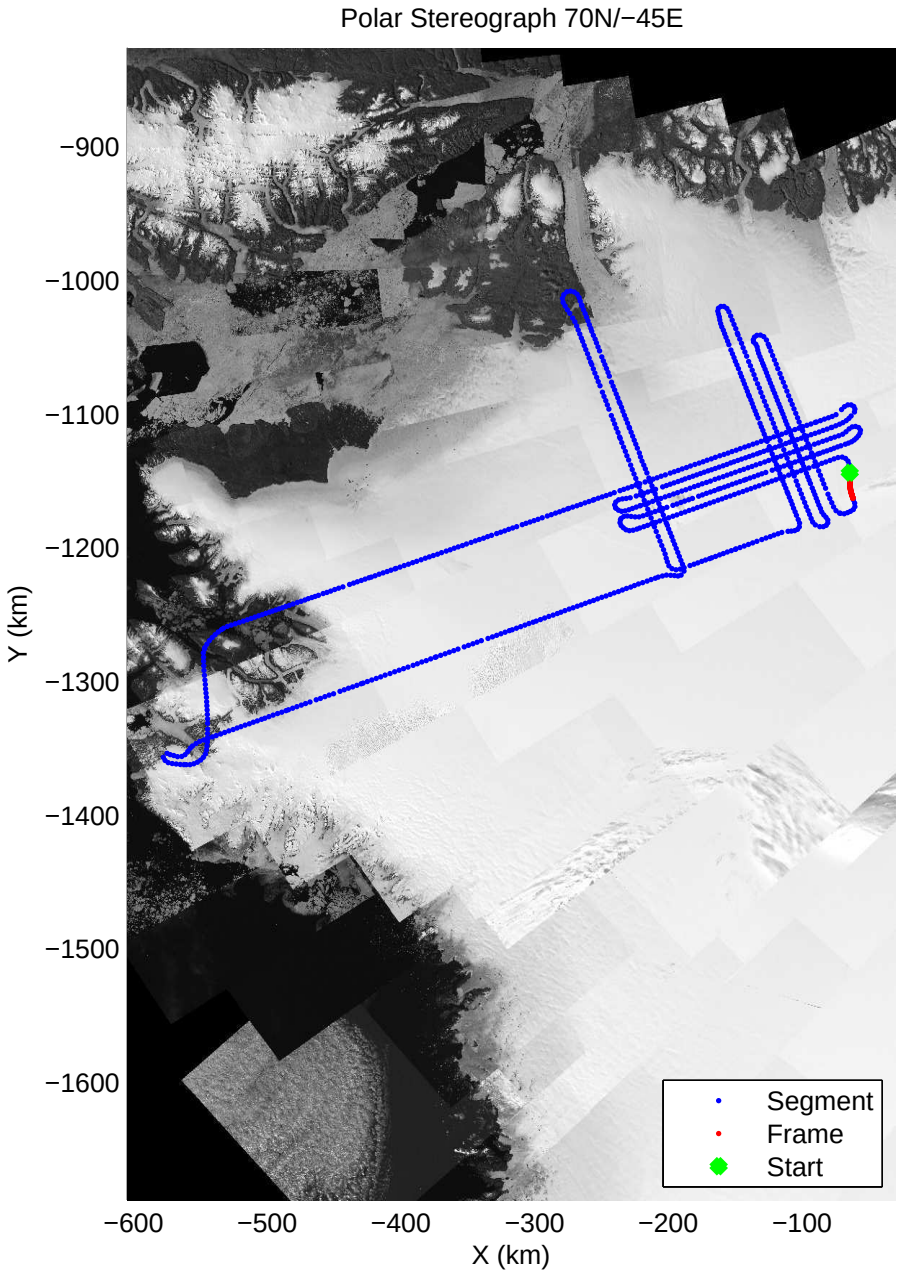

−1130
−1132
−1134
−1136
−1138
−1140
−1142
−1144
−1146
Y (km)
−80
−78
−76
−74
−72
−70
X (km)

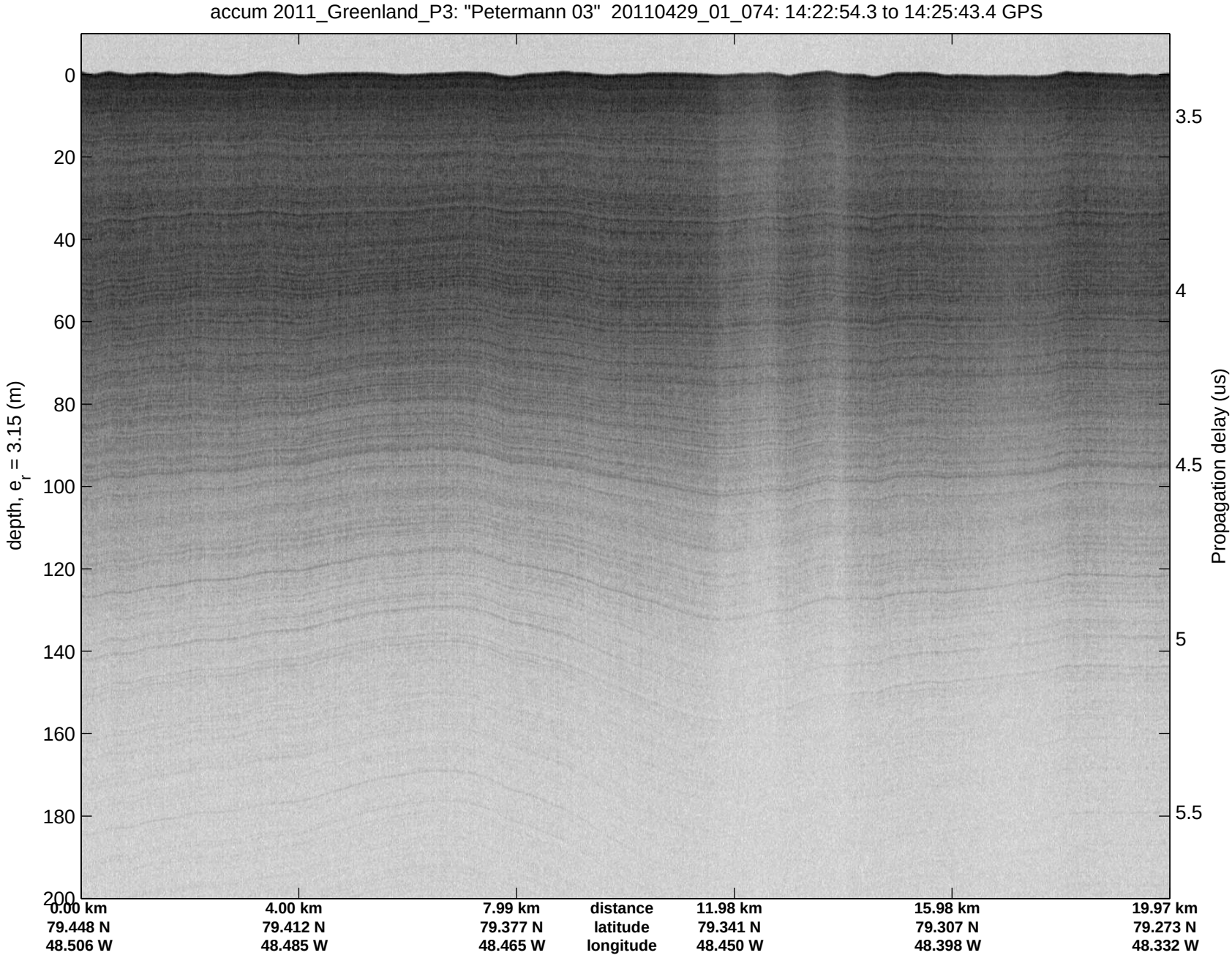

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

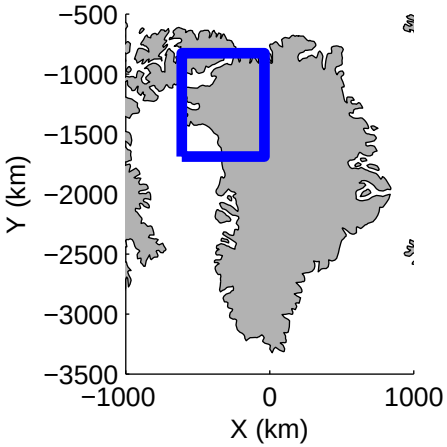

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_073: 14:20:13.0 to 14:22:54.0 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.538 N
49.081 W
3.99 km
79.550 N
48.898 W
7.99 km
79.544 N
48.707 W
distance
latitude
longitude
11.99 km
79.518 N
48.578 W
15.98 km
79.483 N
48.535 W
19.97 km
79.448 N
48.507 W

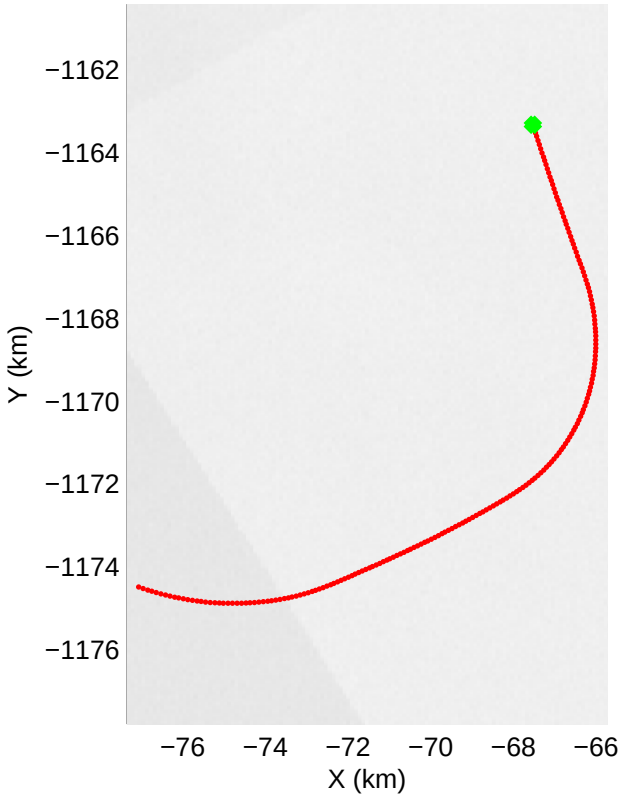

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

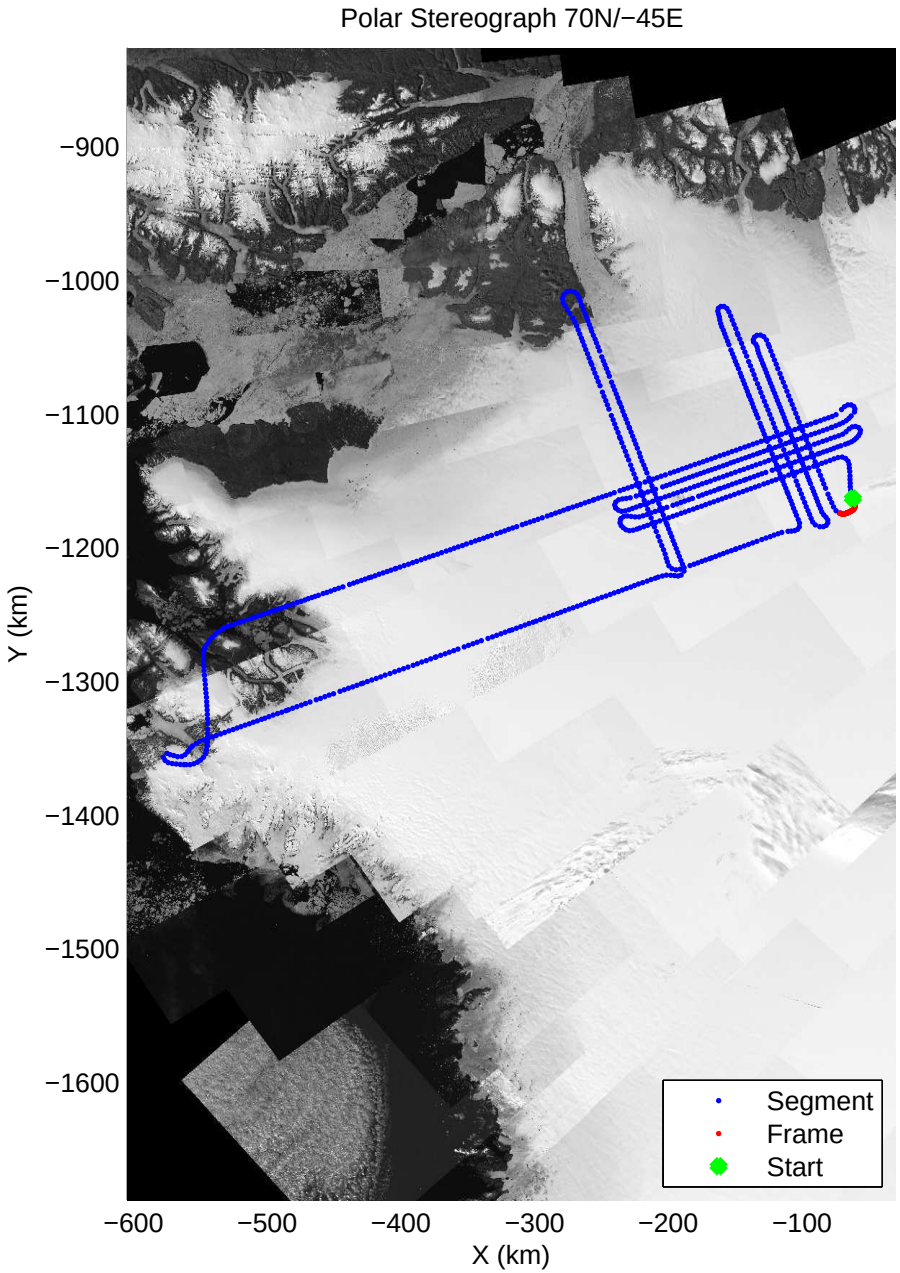

−1144
−1146
−1148
−1150
−1152
−1154
−1156
−1158
−1160
−1162
Y (km)
−74
−72
−70
−68
−66
−64
X (km)

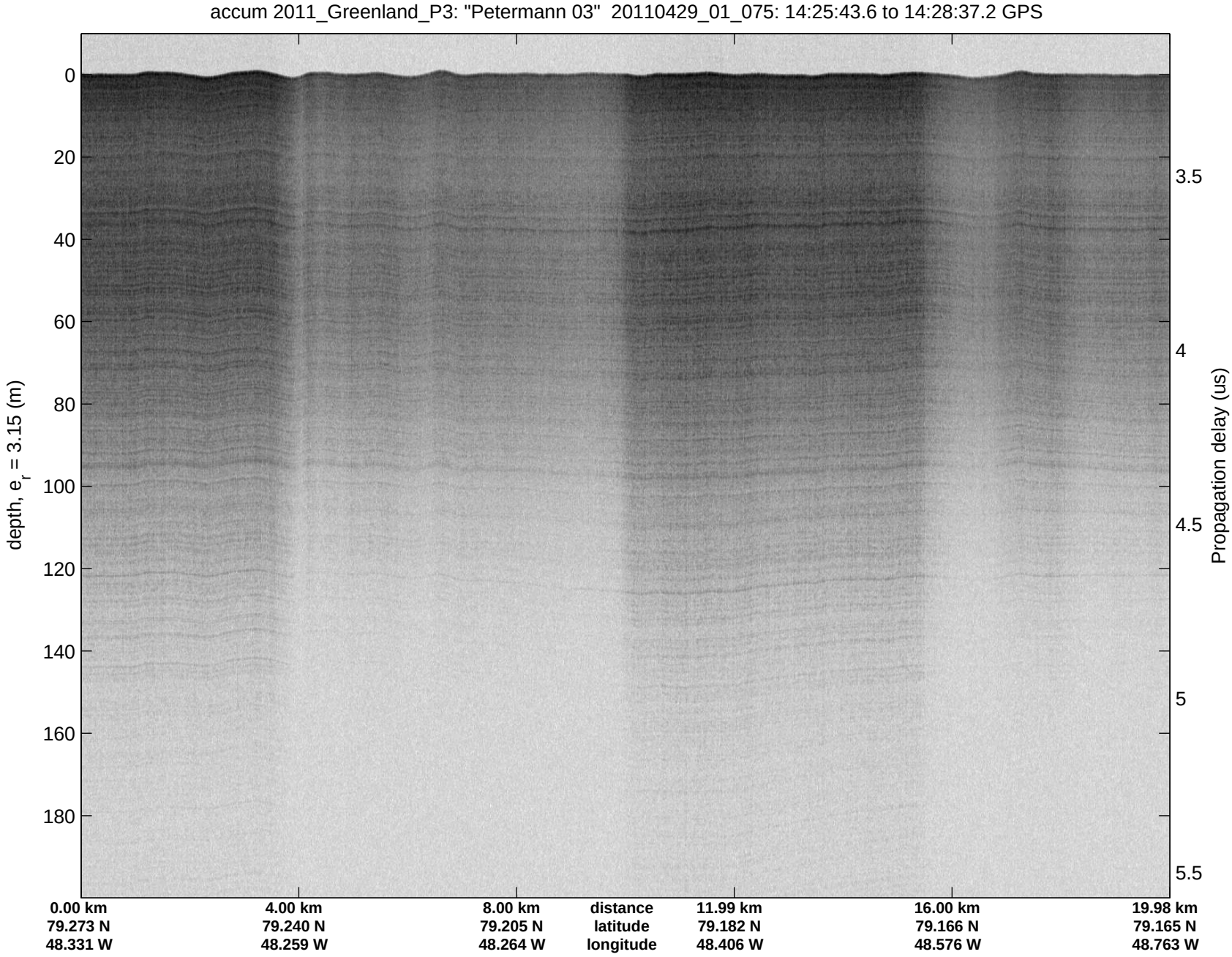

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

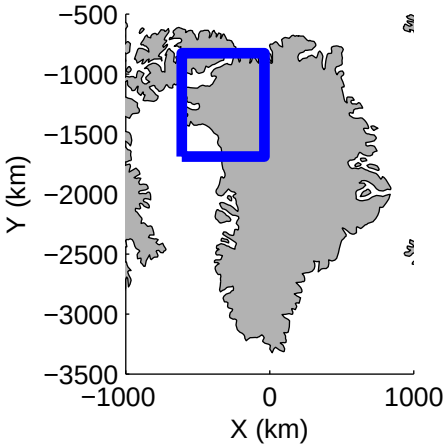

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_074: 14:22:54.3 to 14:25:43.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.448 N
48.506 W
4.00 km
79.412 N
48.485 W
7.99 km
79.377 N
48.465 W
distance
latitude
longitude
11.98 km
79.341 N
48.450 W
15.98 km
79.307 N
48.398 W
19.97 km
79.273 N
48.332 W

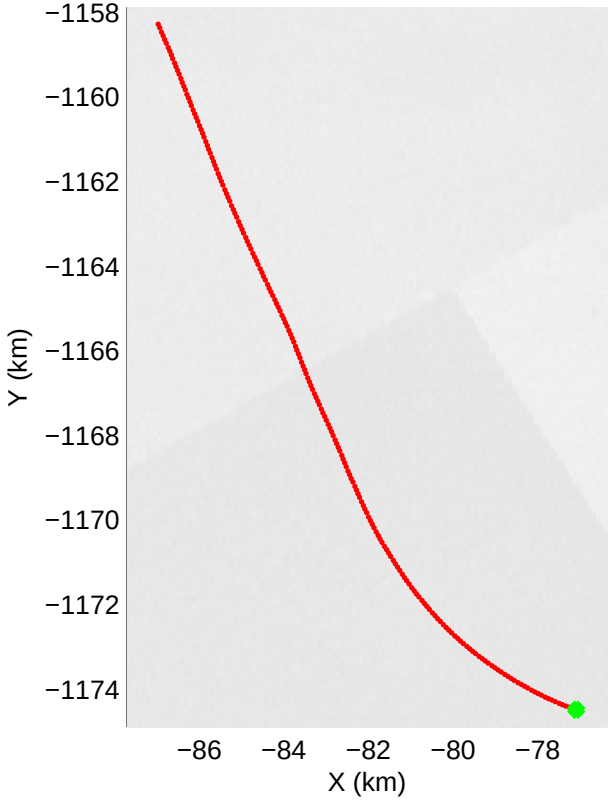

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

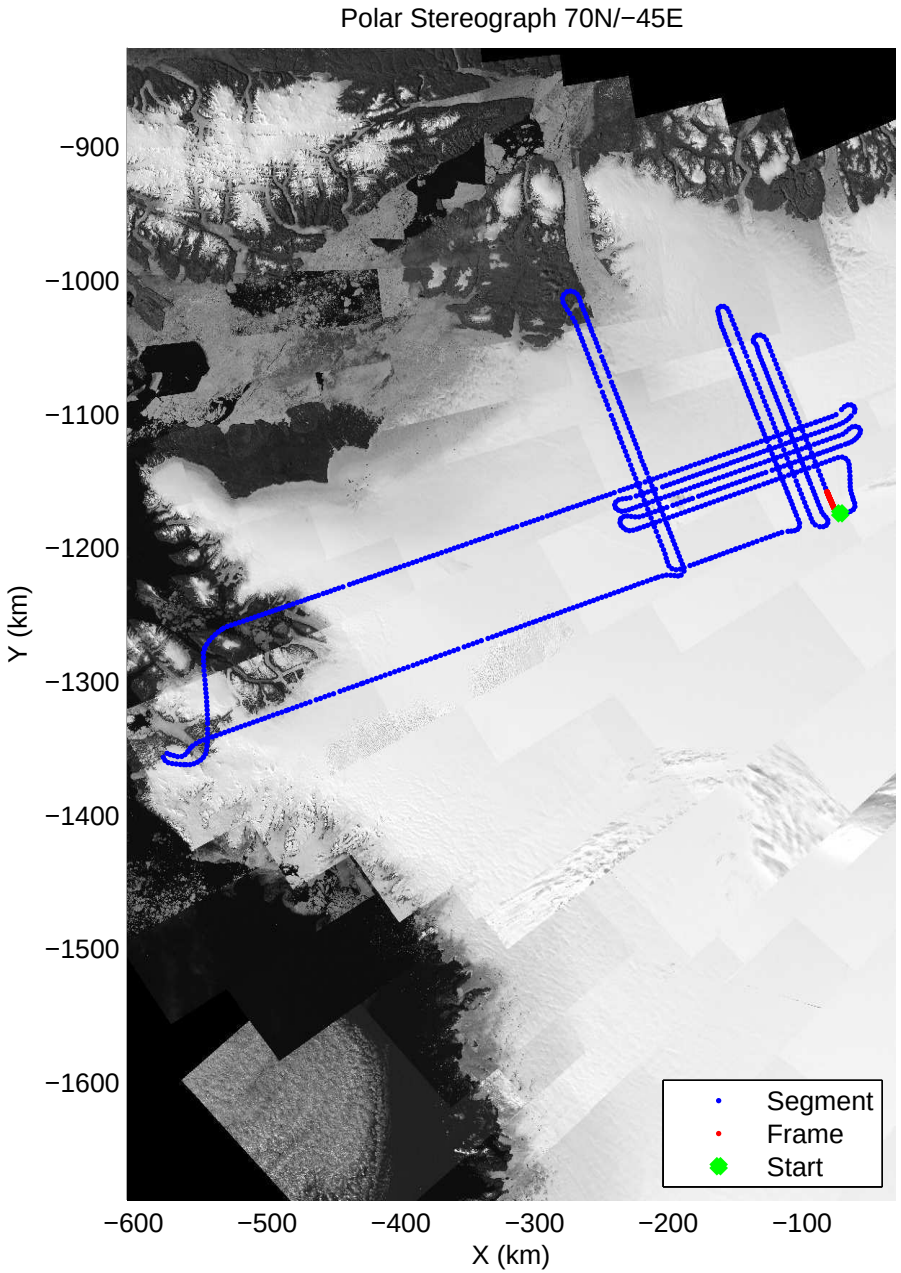

−1162
−1164
−1166
−1168
−1170
−1172
−1174
−1176
Y (km)
−76
−74
−72
−70
−68
−66
X (km)

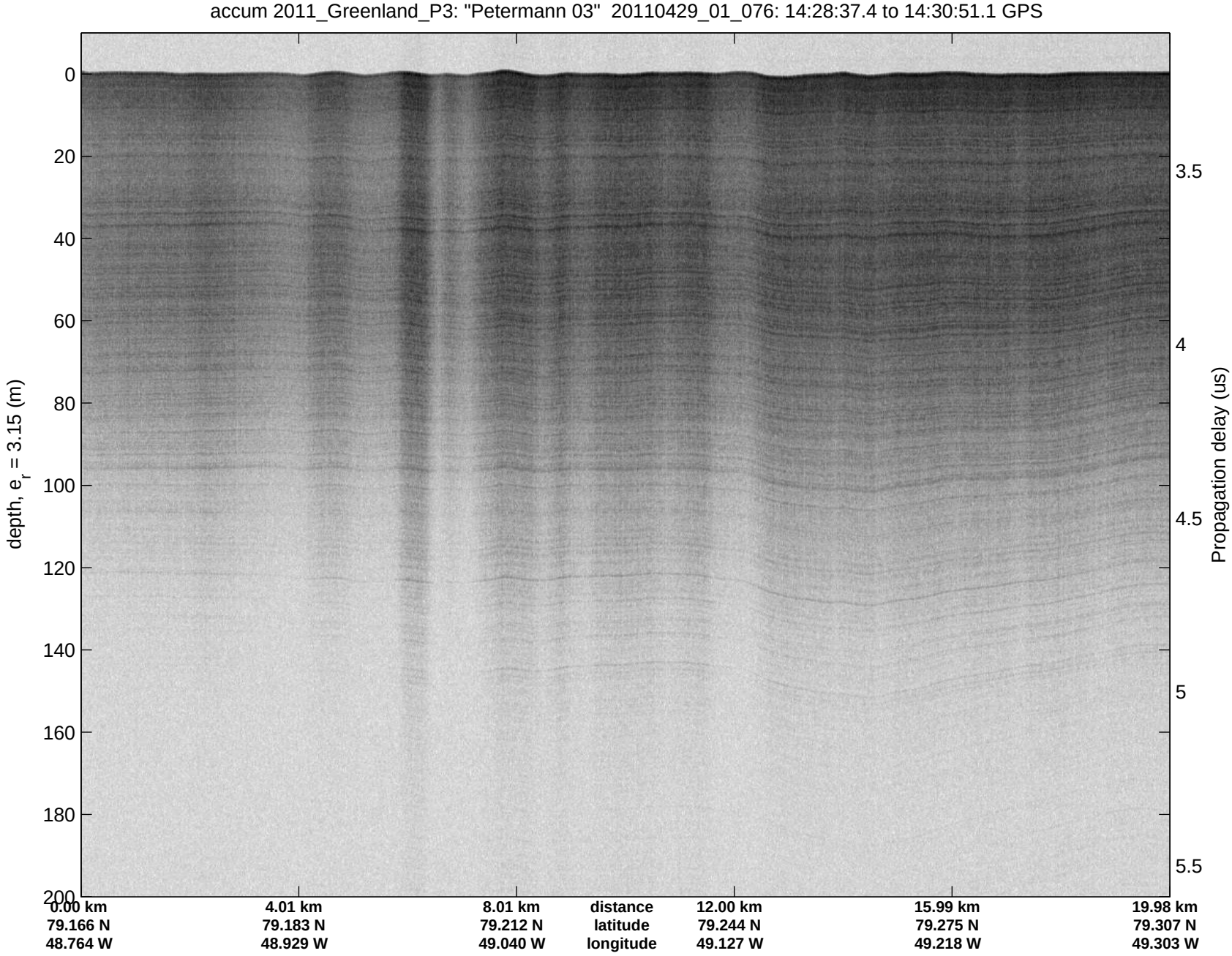

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

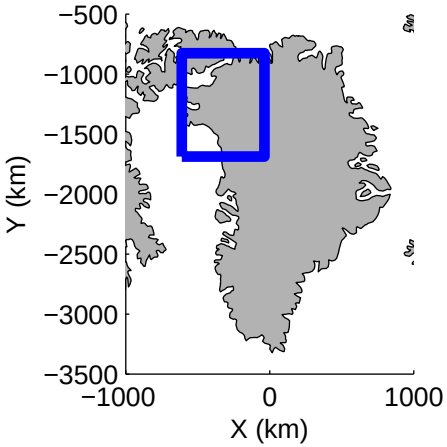

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_075: 14:25:43.6 to 14:28:37.2 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.273 N
48.331 W
4.00 km
79.240 N
48.259 W
8.00 km
79.205 N
48.264 W
distance
latitude
longitude
11.99 km
79.182 N
48.406 W
16.00 km
79.166 N
48.576 W
19.98 km
79.165 N
48.763 W

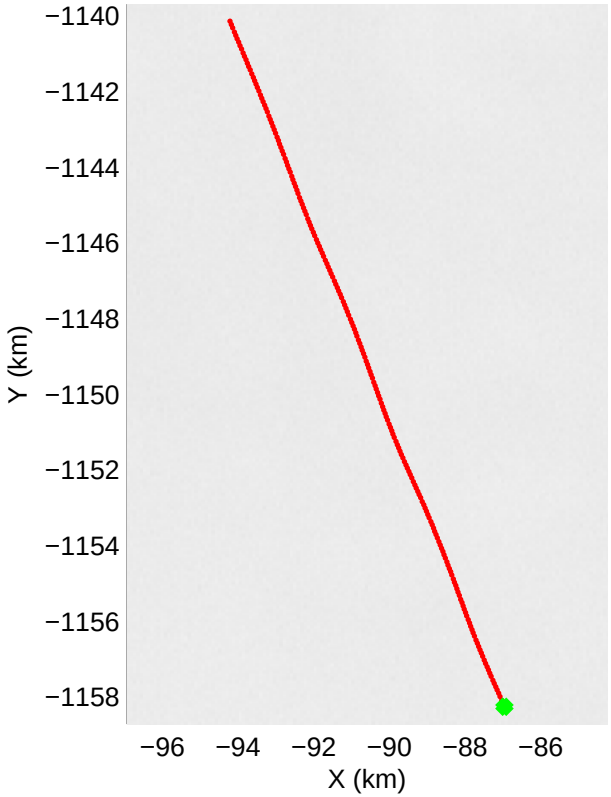

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

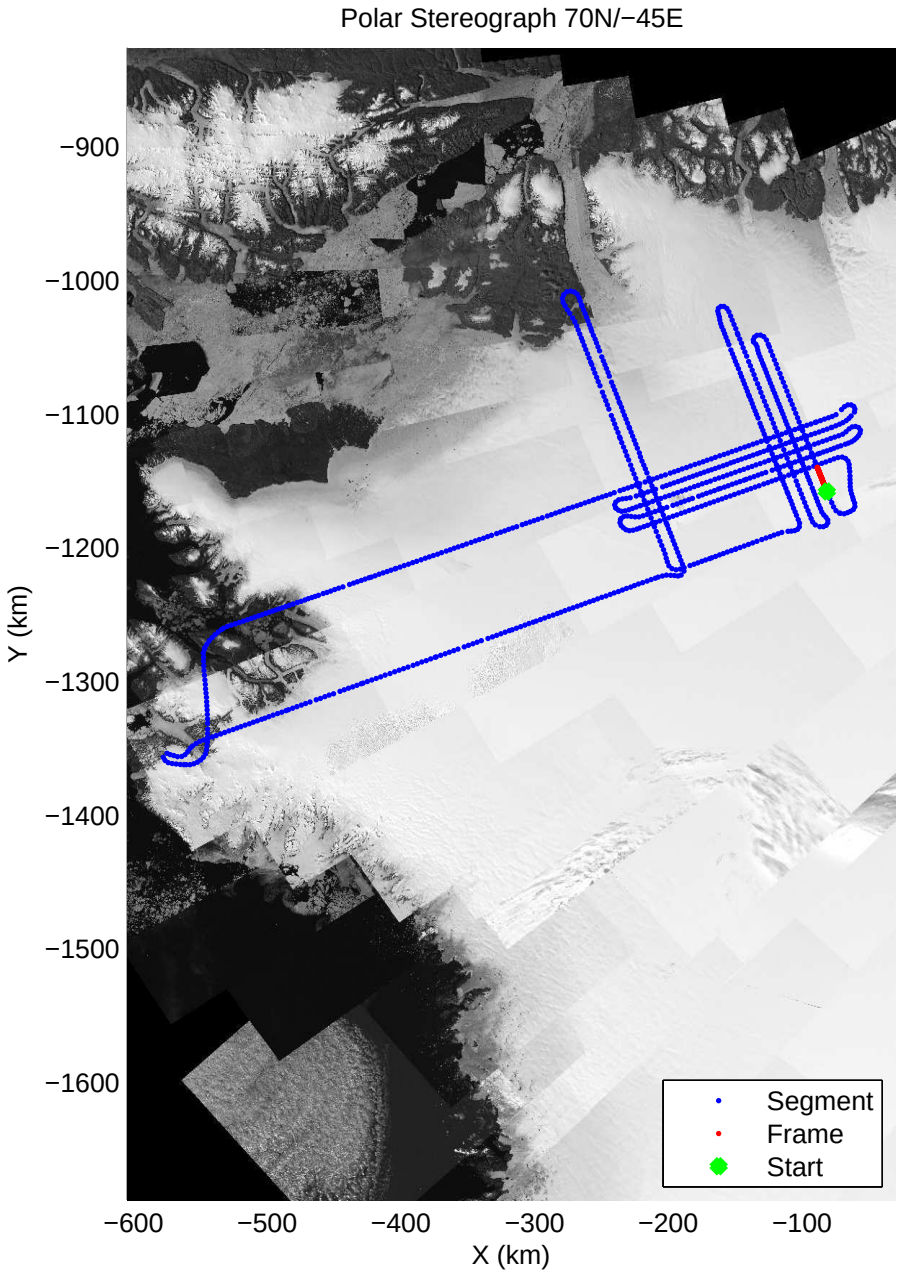

−1158
−1160
−1162
−1164
−1166
−1168
−1170
−1172
−1174
Y (km)
−86
−84
−82
−80
−78
X (km)

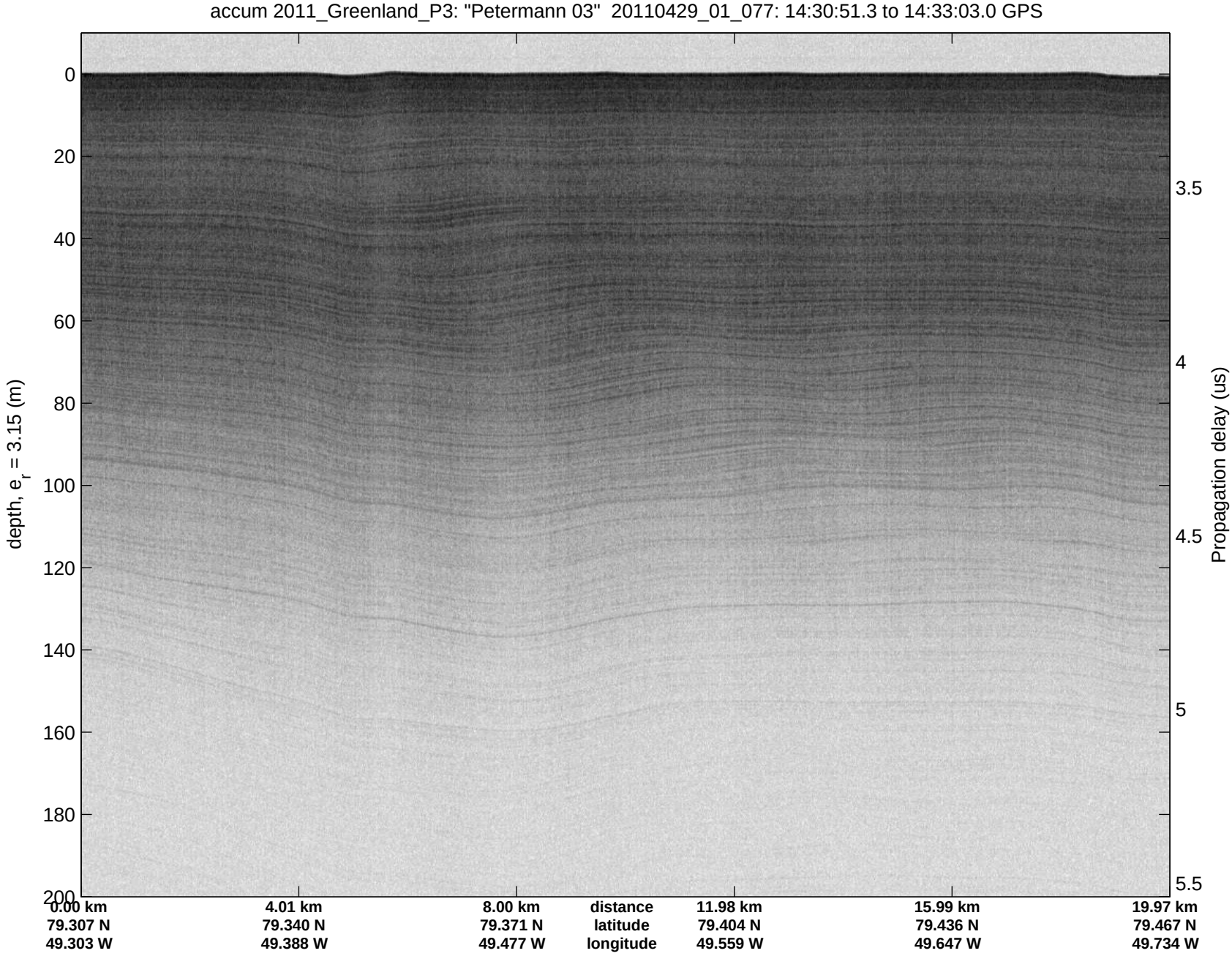

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

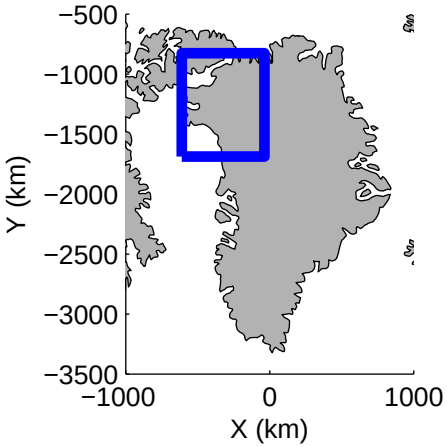

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_076: 14:28:37.4 to 14:30:51.1 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.166 N
48.764 W
4.01 km
79.183 N
48.929 W
8.01 km
79.212 N
49.040 W
distance
latitude
longitude
12.00 km
79.244 N
49.127 W
15.99 km
79.275 N
49.218 W
19.98 km
79.307 N
49.303 W


−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

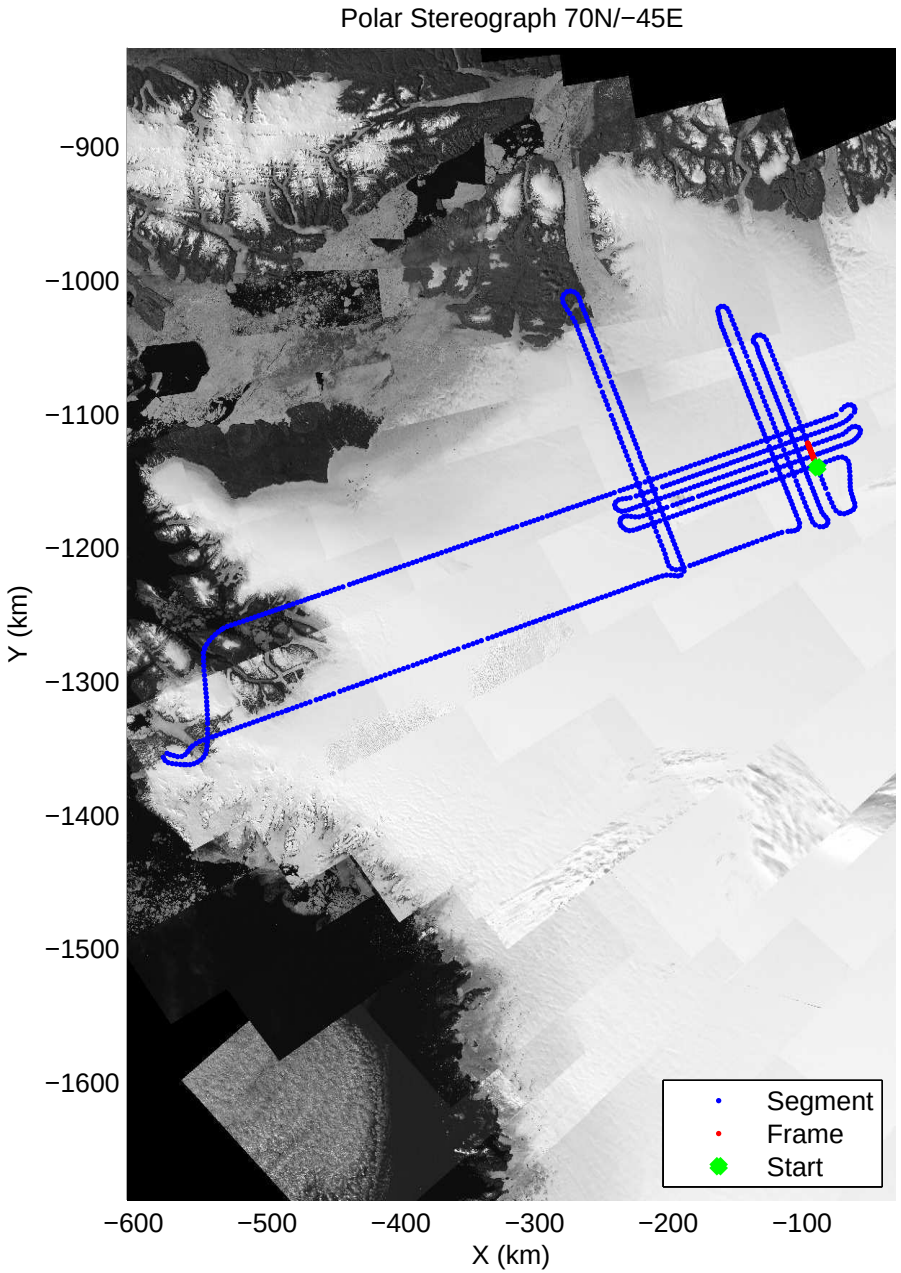

−1140
−1142
−1144
−1146
−1148
−1150
−1152
−1154
−1156
−1158
Y (km)
−96
−94
−92
−90
−88
−86
X (km)

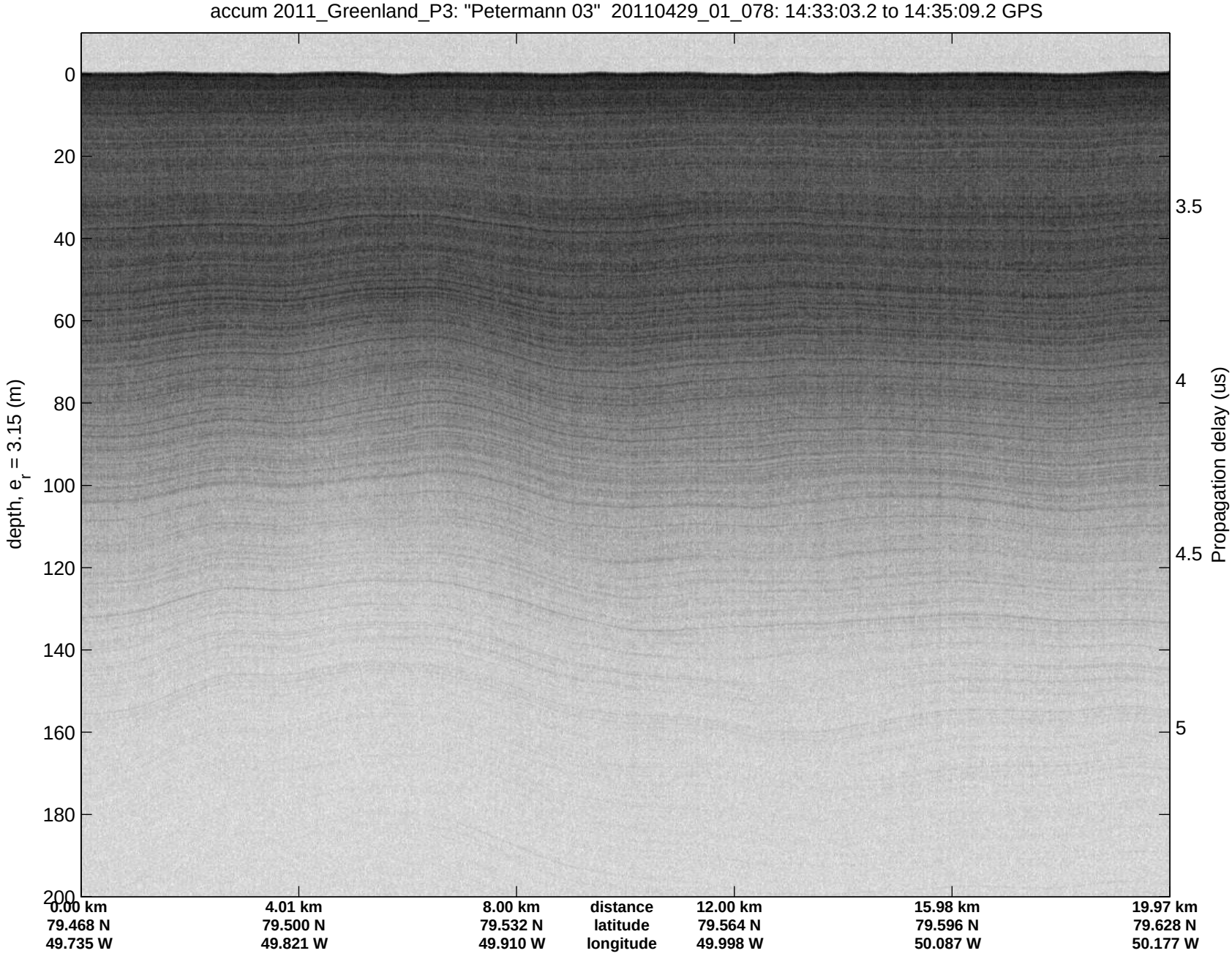

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

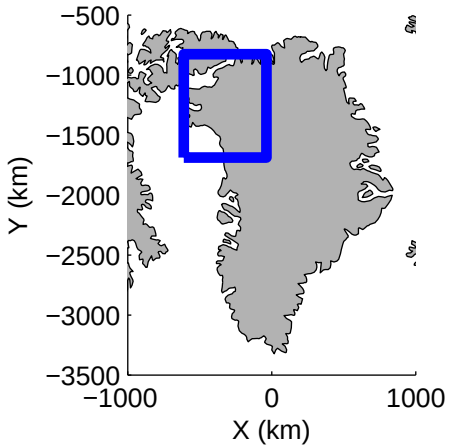

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_077: 14:30:51.3 to 14:33:03.0 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
3.5
4
4.5
5
5.5
Propagation delay (us)
0.00 km
79.307 N
49.303 W
4.01 km
79.340 N
49.388 W
8.00 km
79.371 N
49.477 W
distance
latitude
longitude
11.98 km
79.404 N
49.559 W
15.99 km
79.436 N
49.647 W
19.97 km
79.467 N
49.734 W


−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

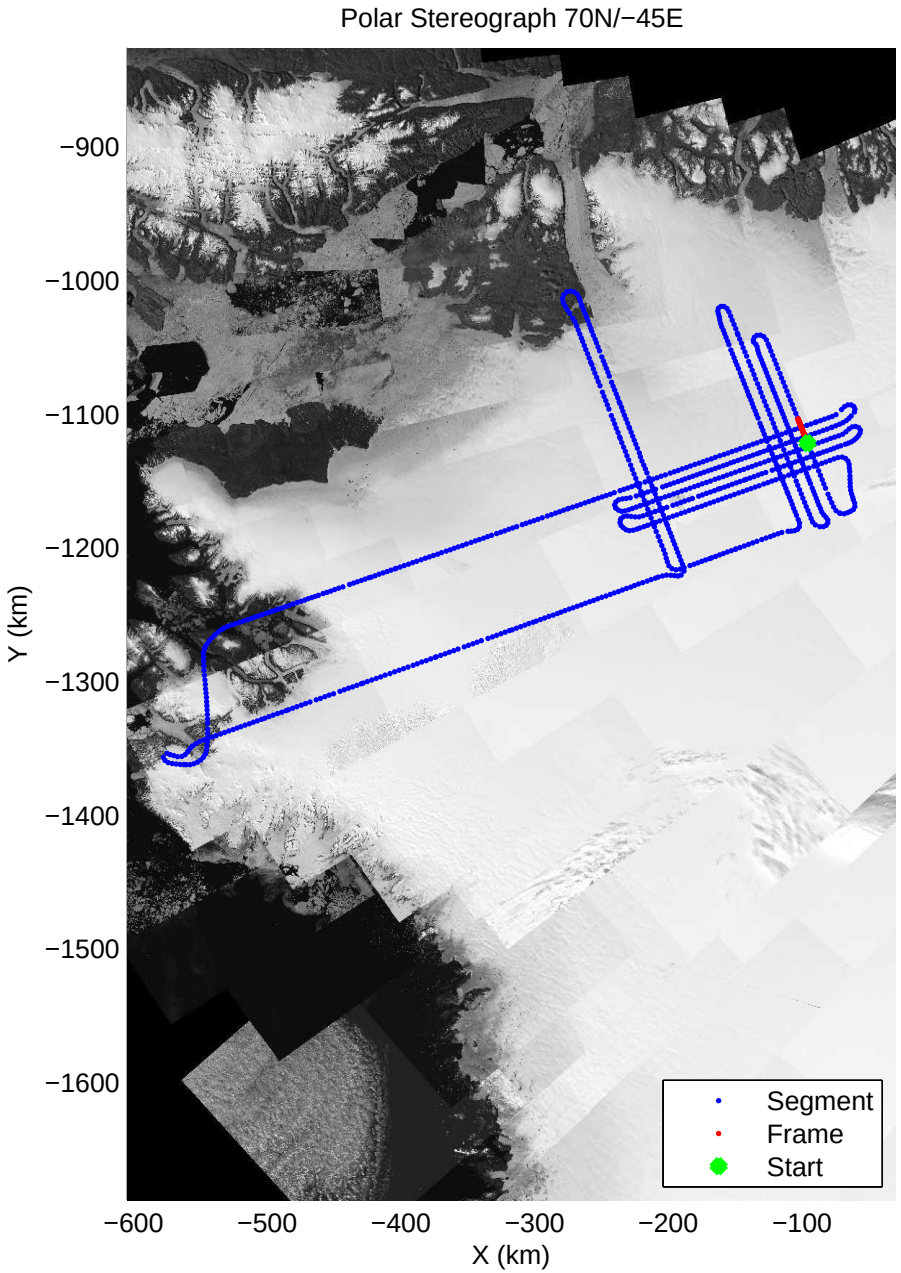
−1122
−1124
−1126
−1128
−1130
−1132
−1134
−1136
−1138
−1140
Y (km)
−104
−102
−100
−98
−96
−94
−92
X (km)

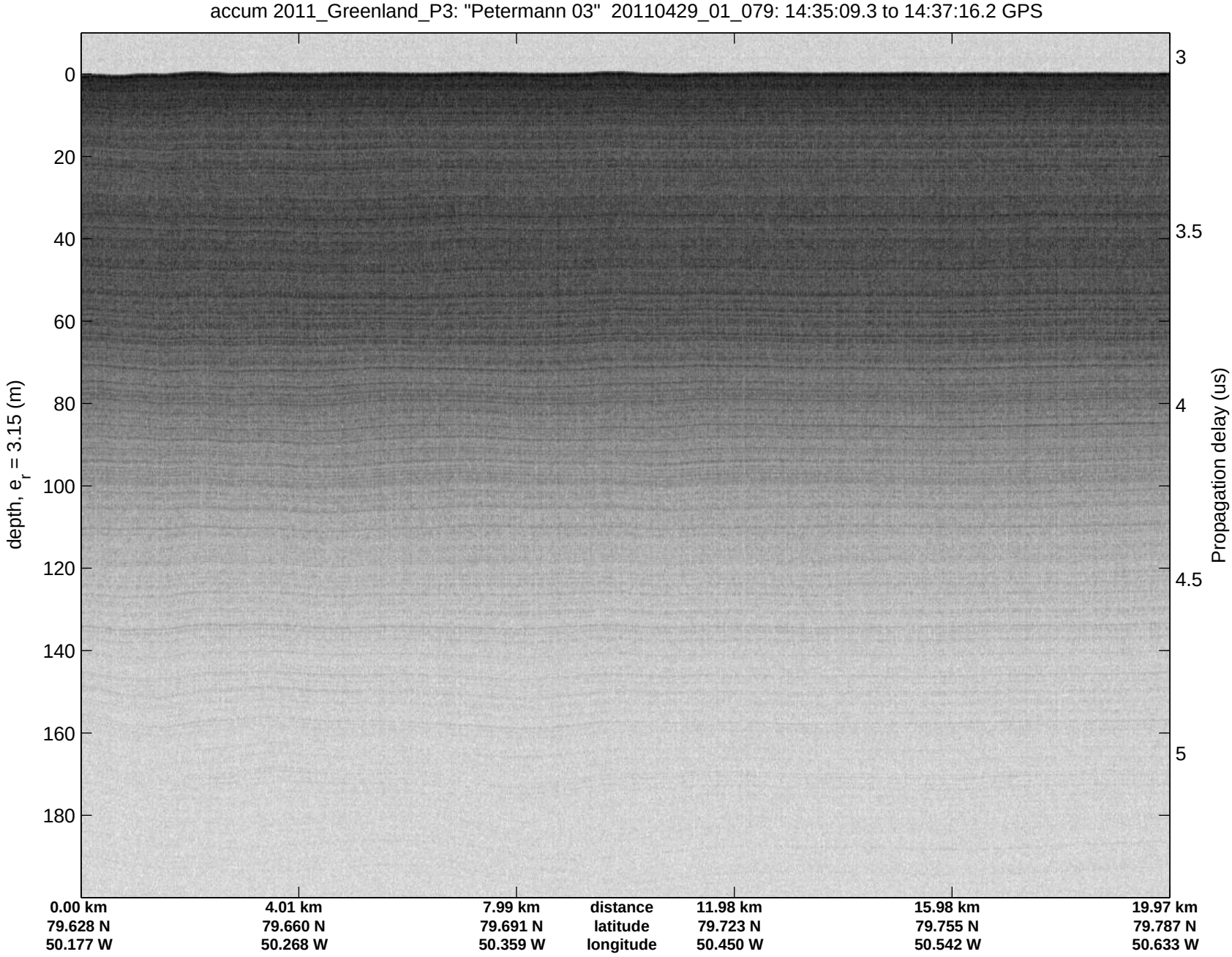

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

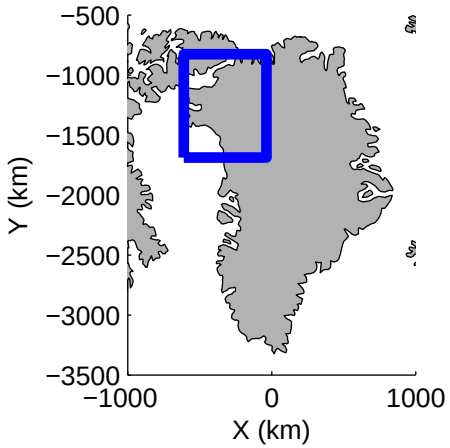

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_078: 14:33:03.2 to 14:35:09.2 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
0.00 km
79.468 N
49.735 W
4.01 km
79.500 N
49.821 W
8.00 km
79.532 N
49.910 W
distance
latitude
longitude
12.00 km
79.564 N
49.998 W
15.98 km
79.596 N
50.087 W
19.97 km
79.628 N
50.177 W


−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

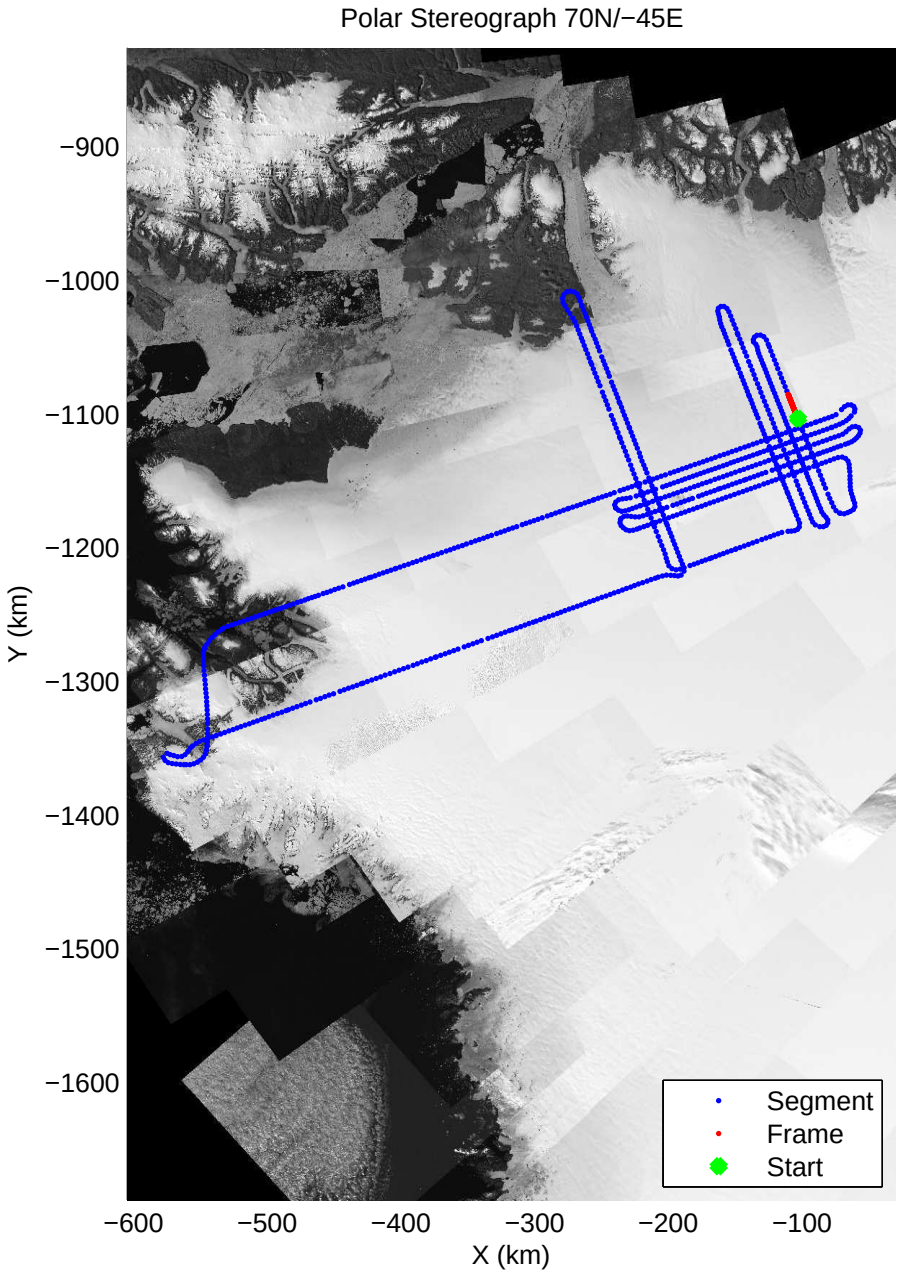
−1104
−1106
−1108
−1110
−1112
−1114
−1116
−1118
−1120
−1122
Y (km)
−110
−108
−106
−104
−102
−100
X (km)

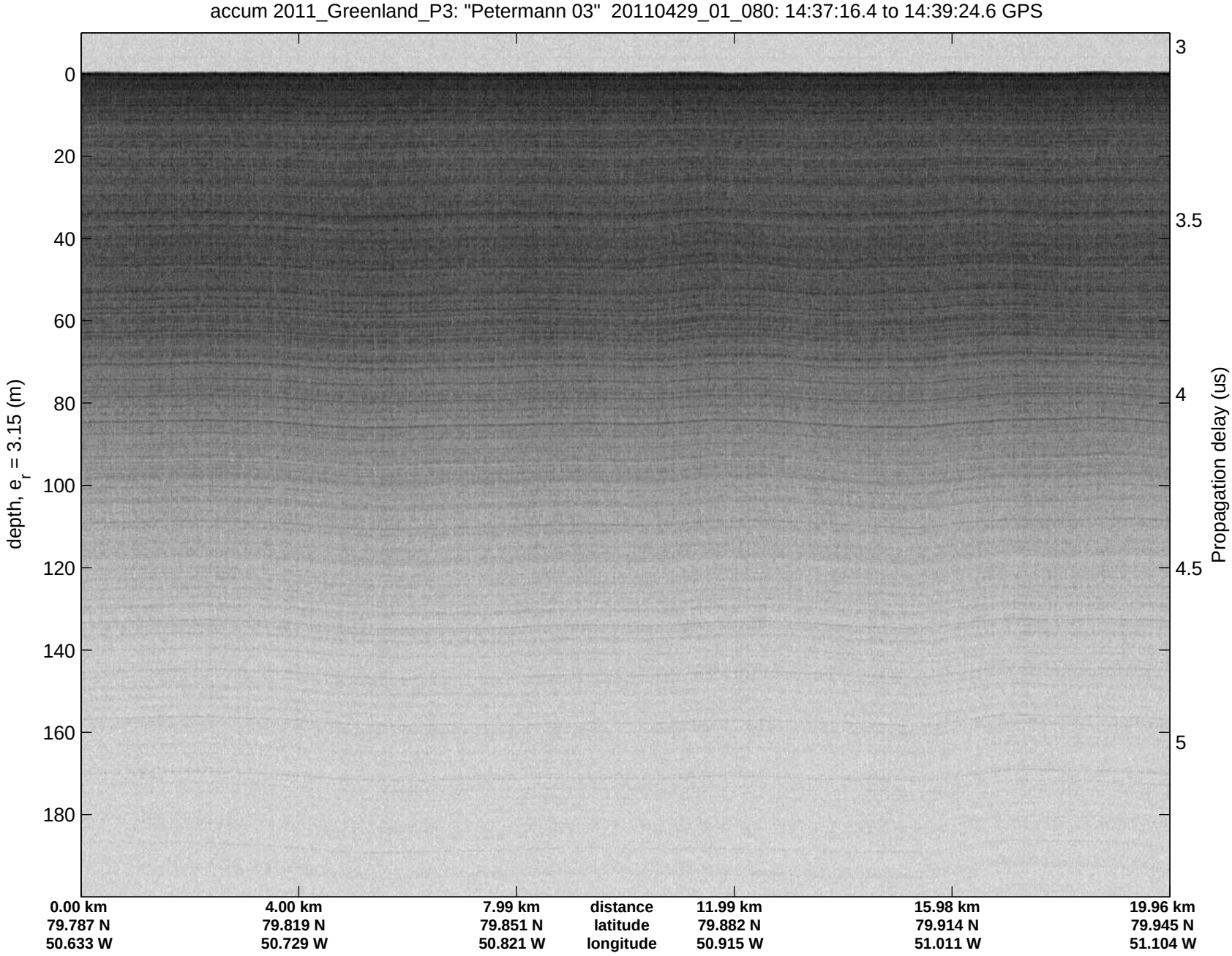

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

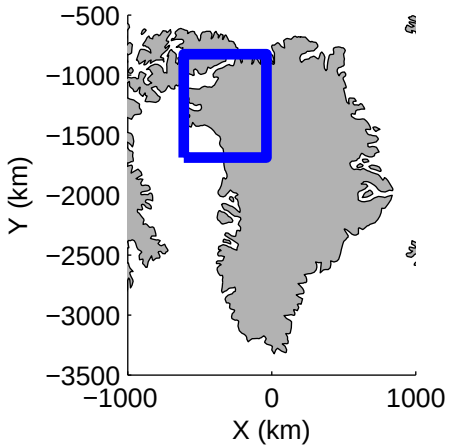

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_079: 14:35:09.3 to 14:37:16.2 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
79.628 N
50.177 W
4.01 km
79.660 N
50.268 W
7.99 km
79.691 N
50.359 W
distance
latitude
longitude
11.98 km
79.723 N
50.450 W
15.98 km
79.755 N
50.542 W
19.97 km
79.787 N
50.633 W

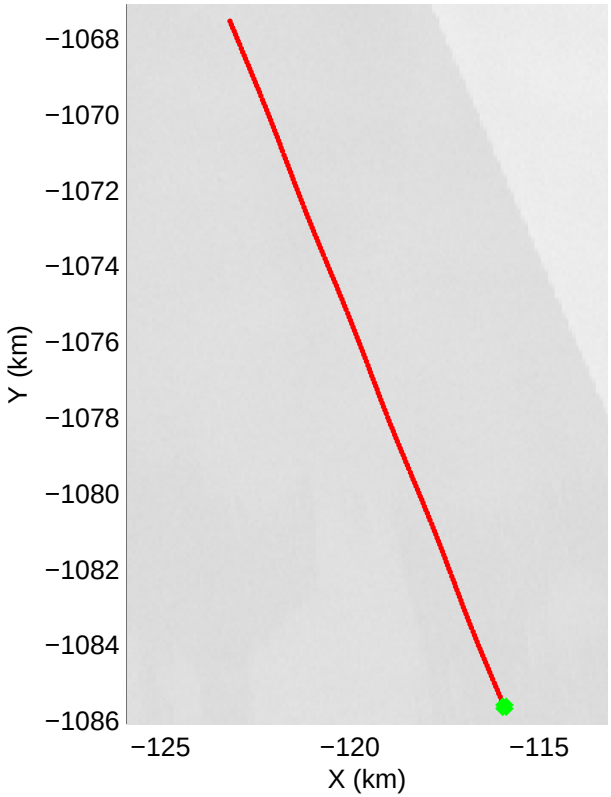

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

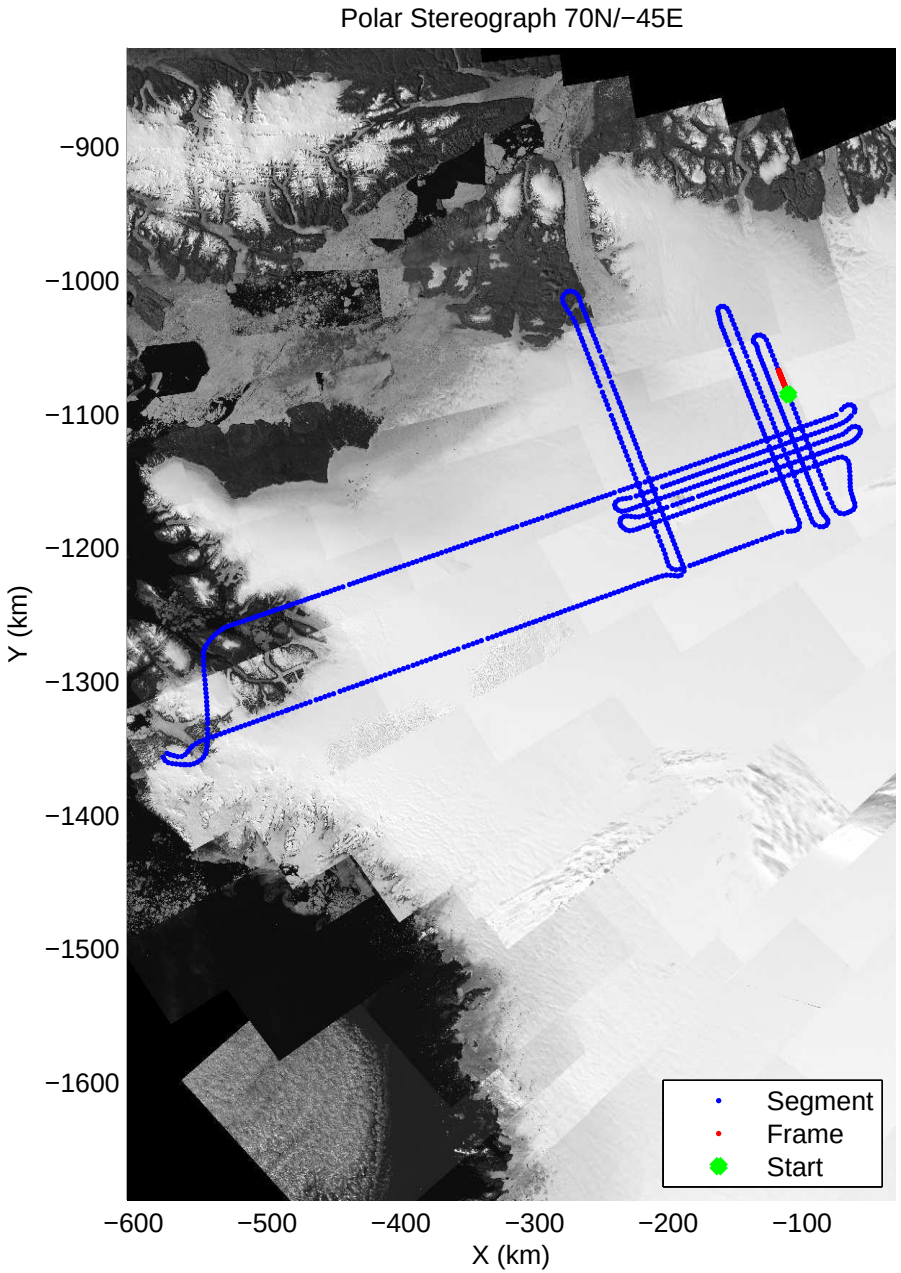
−1086
−1088
−1090
−1092
−1094
−1096
−1098
−1100
−1102
−1104
Y (km)
−118
−116
−114
−112
−110
−108
X (km)

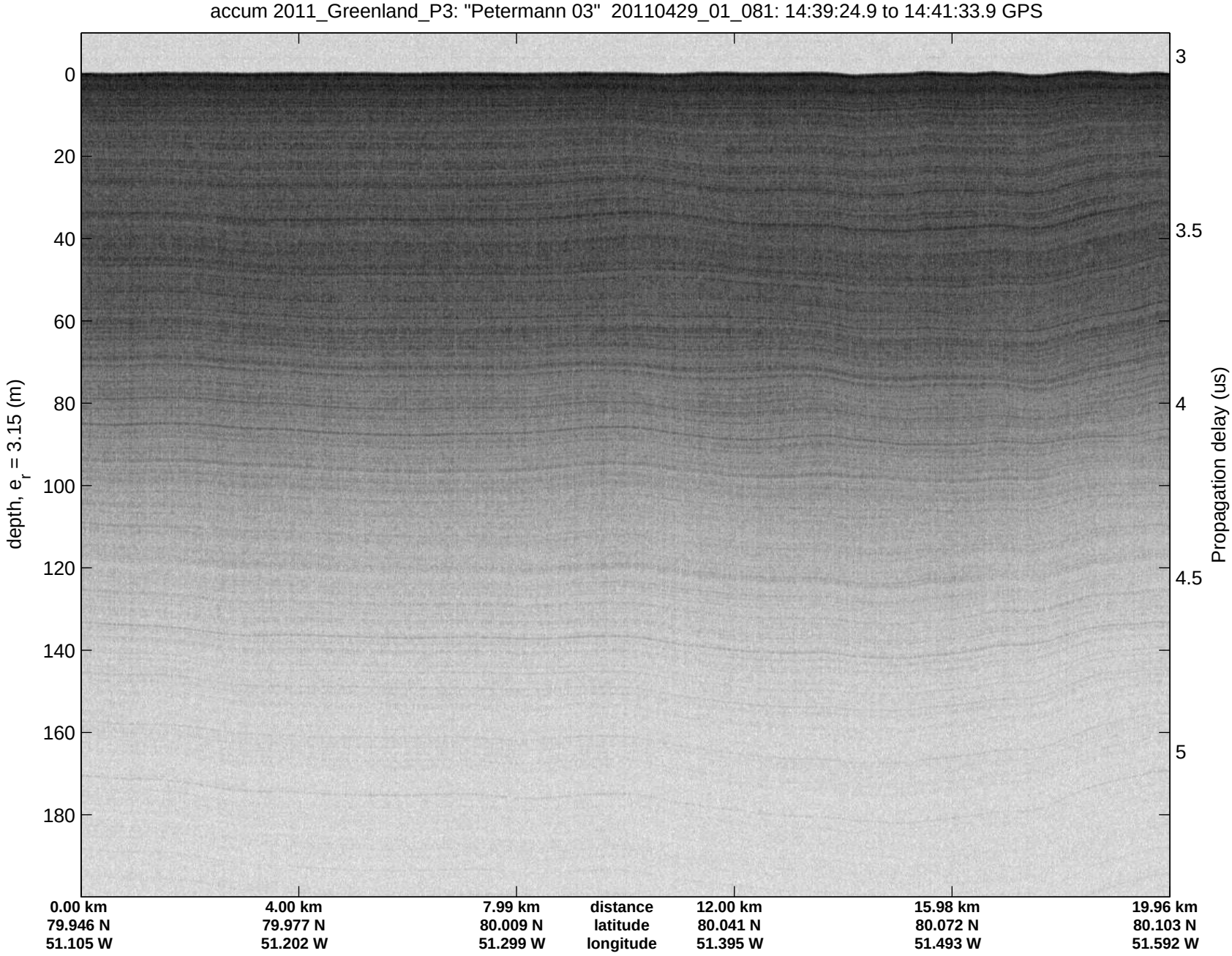

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

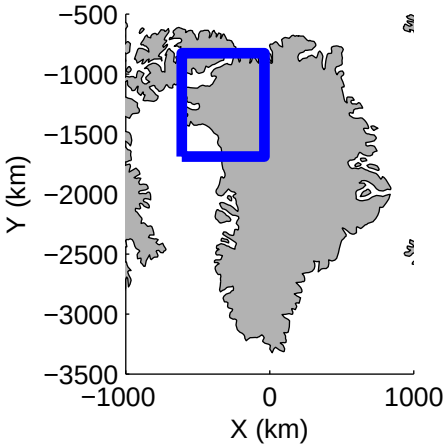

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_080: 14:37:16.4 to 14:39:24.6 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.787 N
50.633 W
4.00 km
79.819 N
50.729 W
7.99 km
79.851 N
50.821 W
distance
latitude
longitude
11.99 km
79.882 N
50.915 W
15.98 km
79.914 N
51.011 W
19.96 km
79.945 N
51.104 W

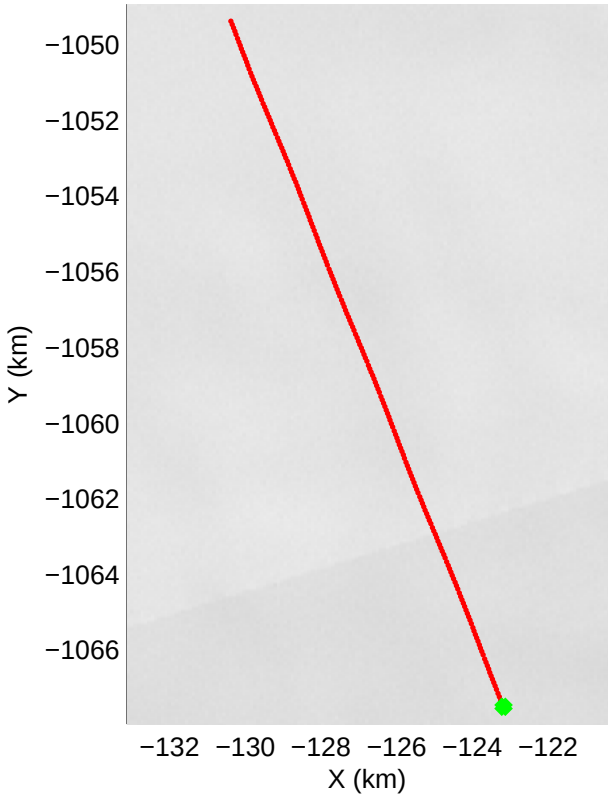

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

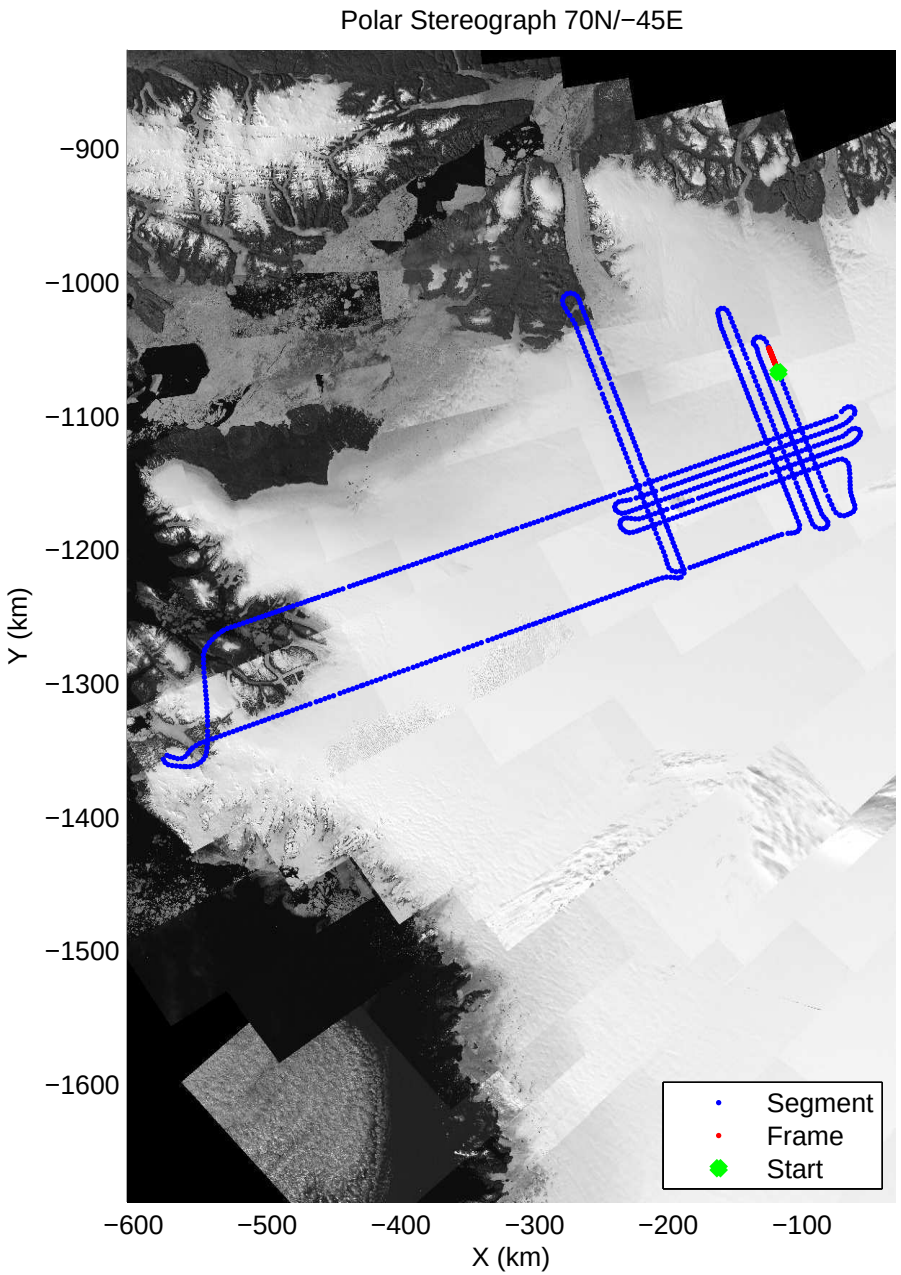

−1068
−1070
−1072
−1074
−1076
−1078
−1080
−1082
−1084
−1086
Y (km)
−125
−120
−115
X (km)

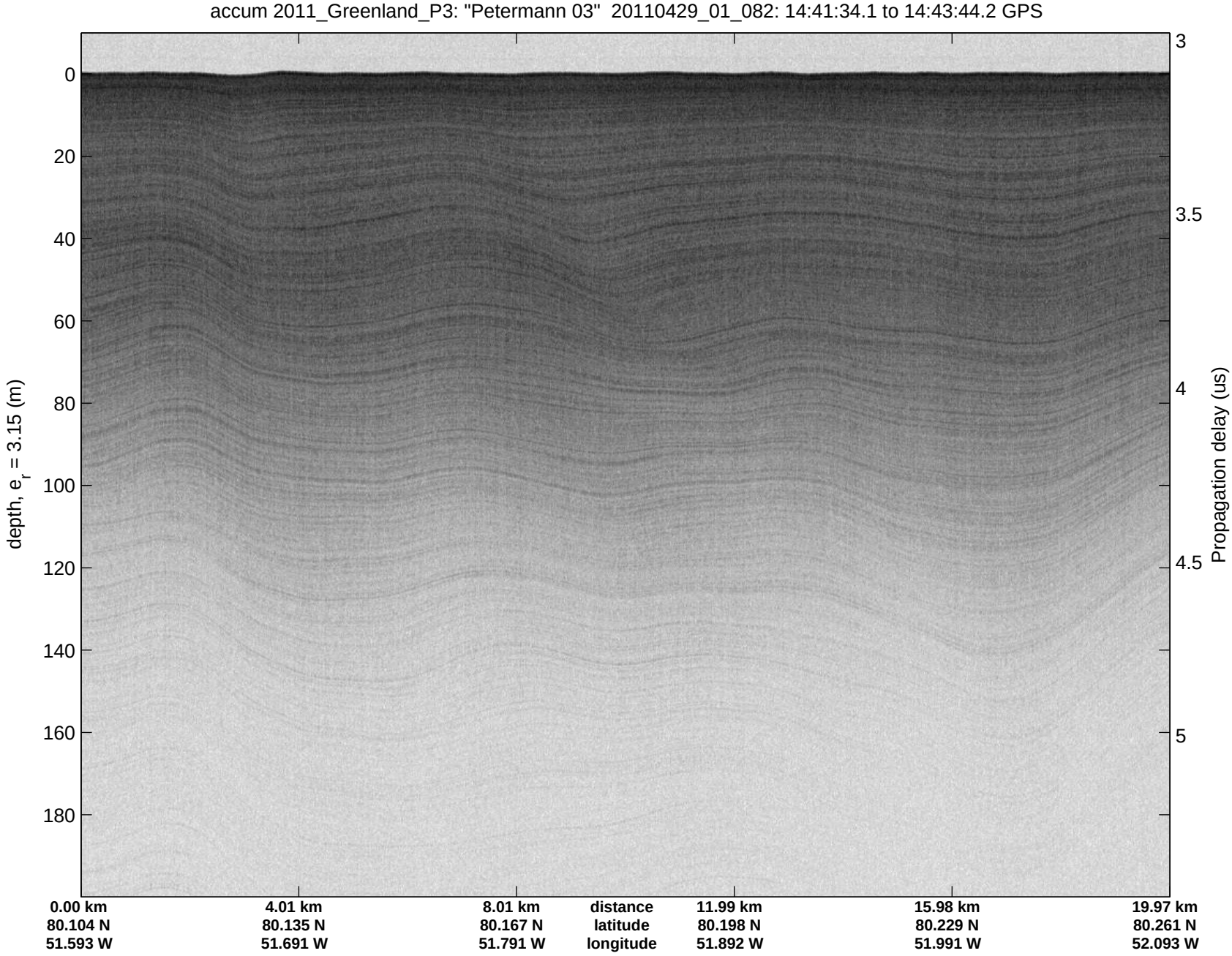

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

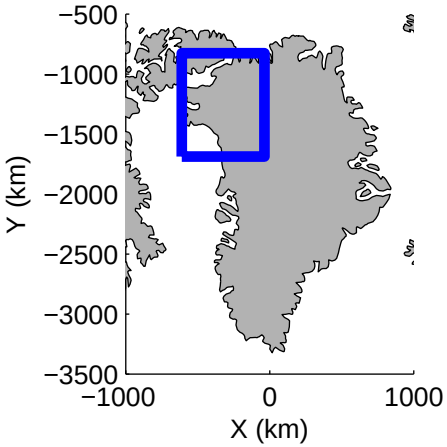

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_081: 14:39:24.9 to 14:41:33.9 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.946 N
51.105 W
4.00 km
79.977 N
51.202 W
7.99 km
80.009 N
51.299 W
distance
latitude
longitude
12.00 km
80.041 N
51.395 W
15.98 km
80.072 N
51.493 W
19.96 km
80.103 N
51.592 W

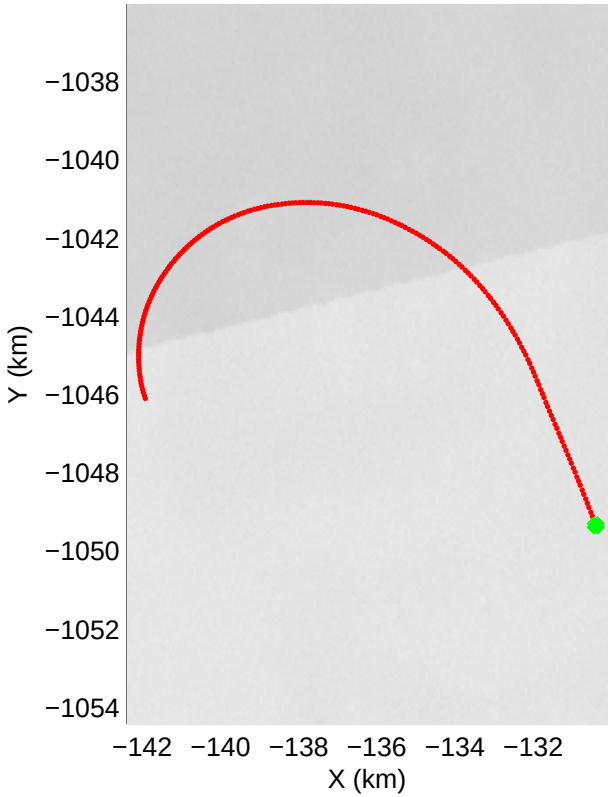

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

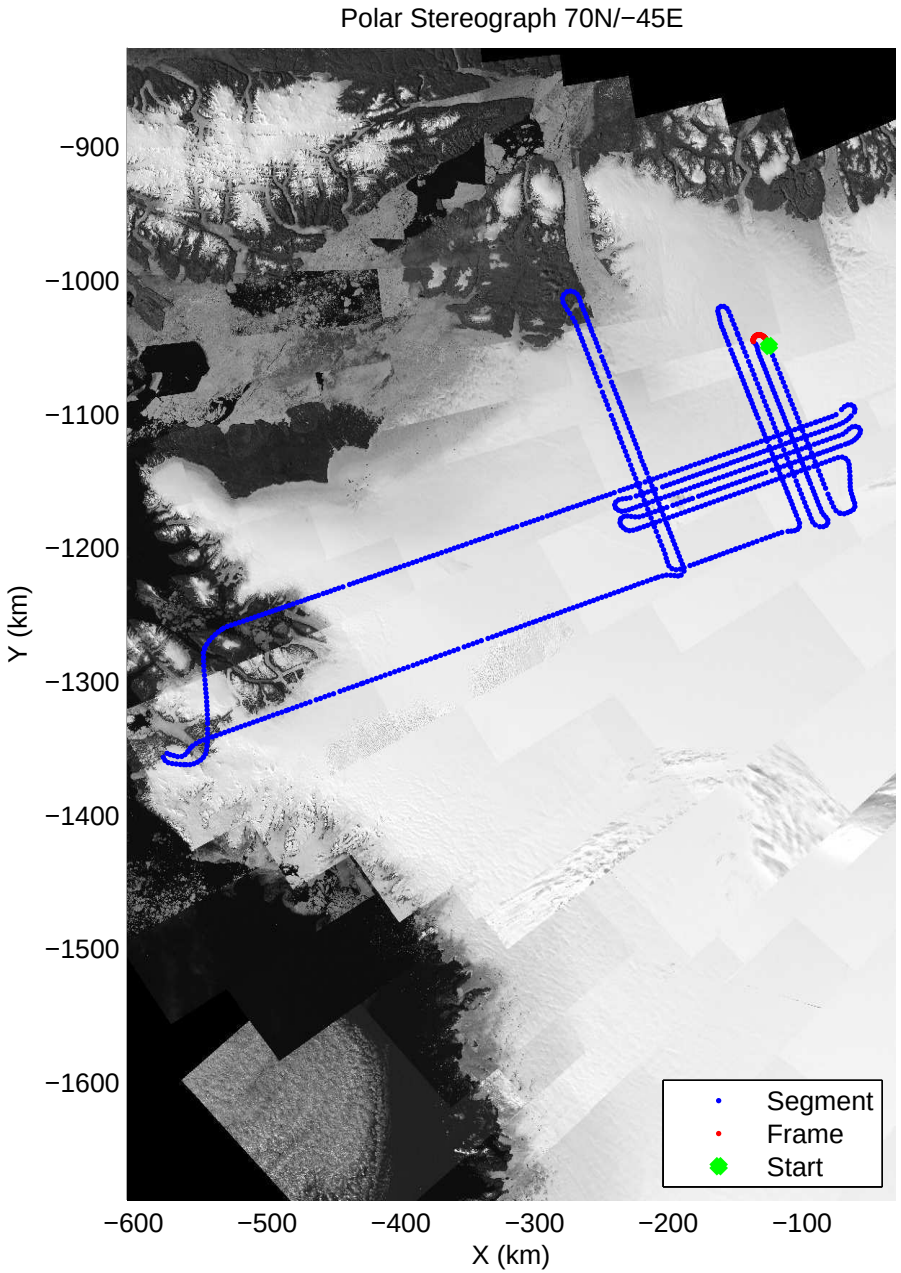

−1050
−1052
−1054
−1056
−1058
−1060
−1062
−1064
−1066
Y (km)
−132
−130
−128
−126
−124
−122
X (km)

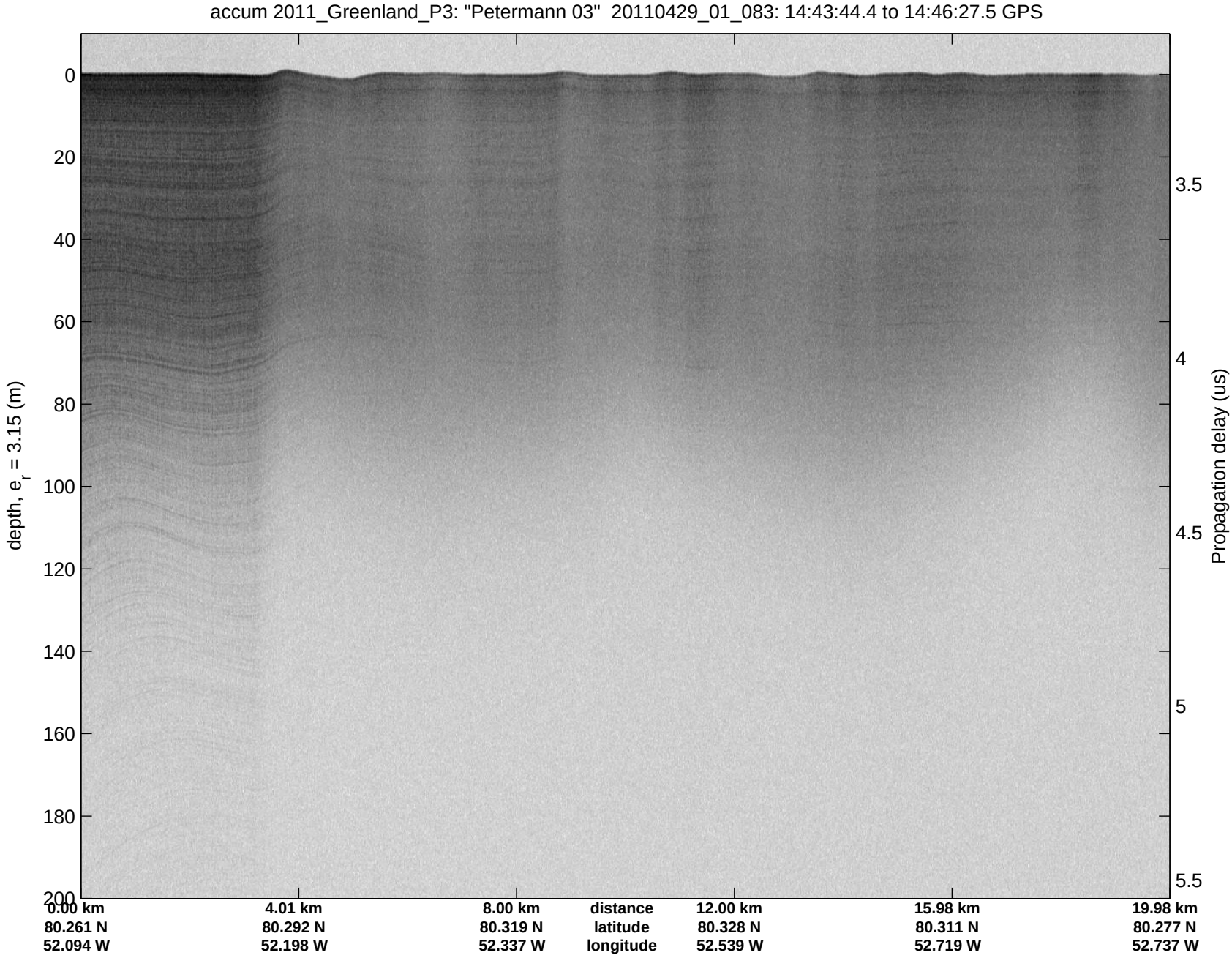

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

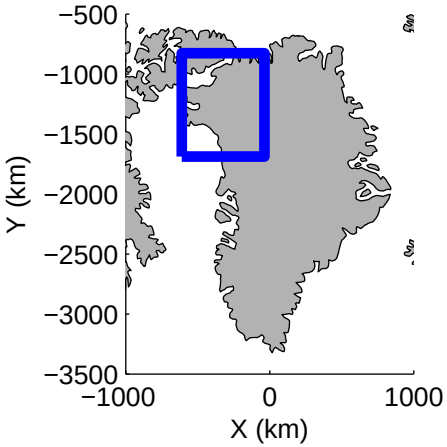

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_082: 14:41:34.1 to 14:43:44.2 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
80.104 N
51.593 W
4.01 km
80.135 N
51.691 W
8.01 km
80.167 N
51.791 W
distance
latitude
longitude
11.99 km
80.198 N
51.892 W
15.98 km
80.229 N
51.991 W
19.97 km
80.261 N
52.093 W

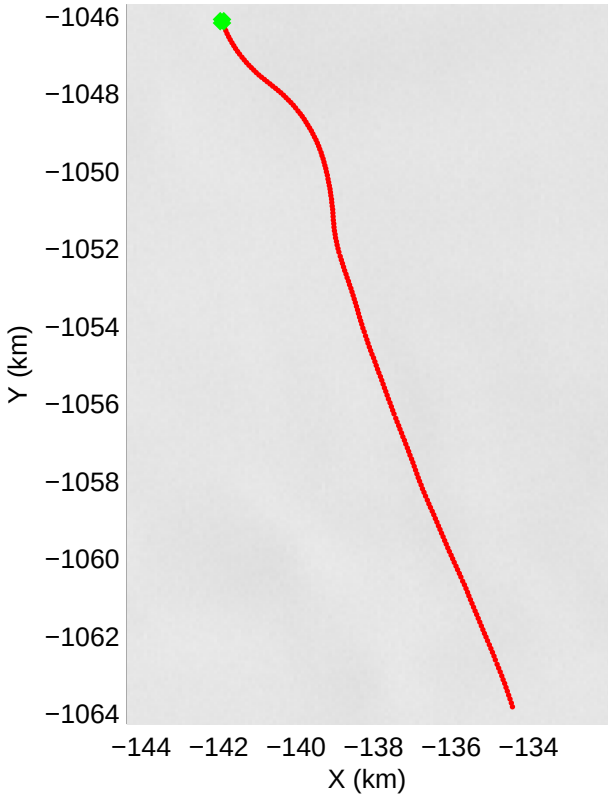

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

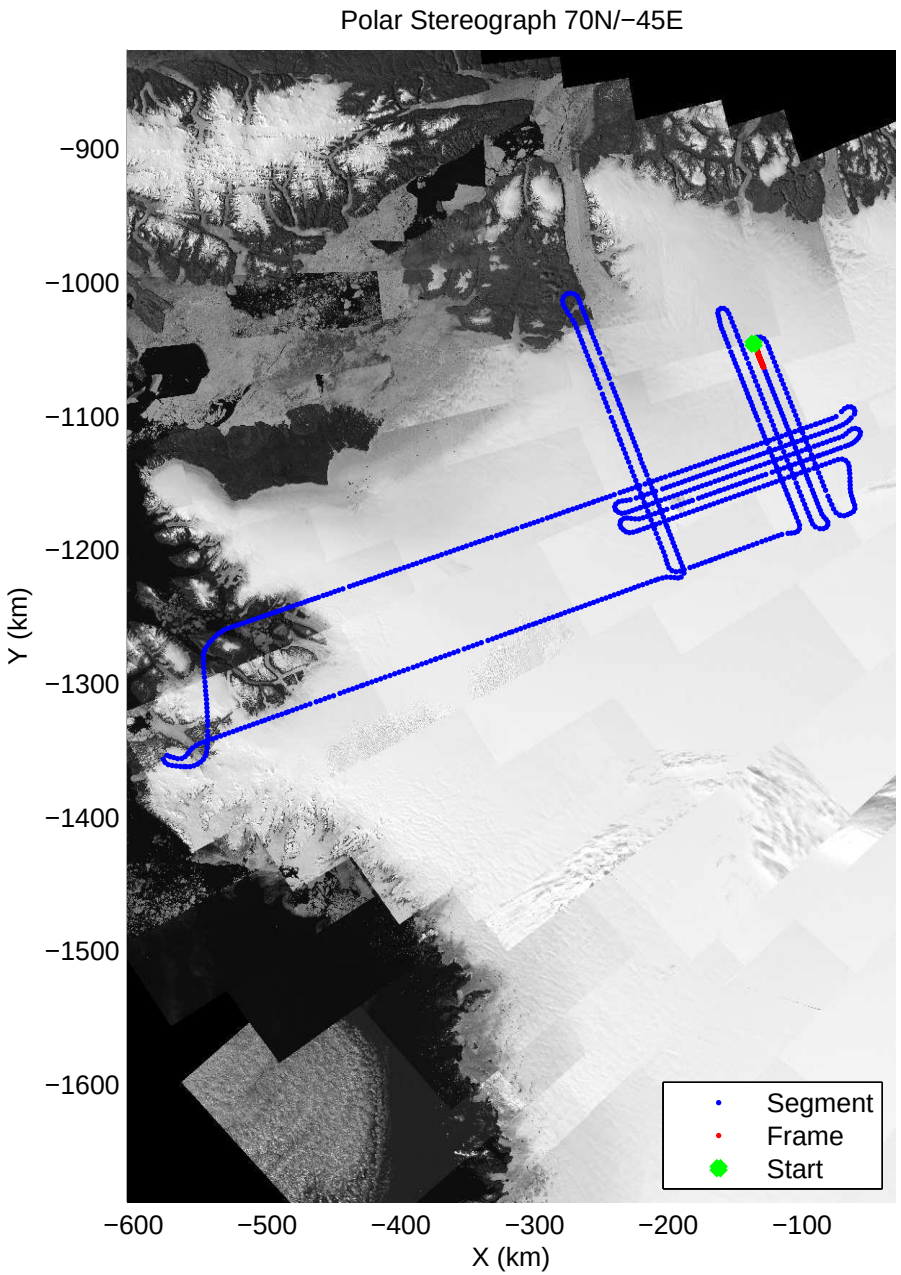

−1038
−1040
−1042
−1044
−1046
−1048
−1050
−1052
−1054
Y (km)
−142
−140
−138
−136
−134
−132
X (km)

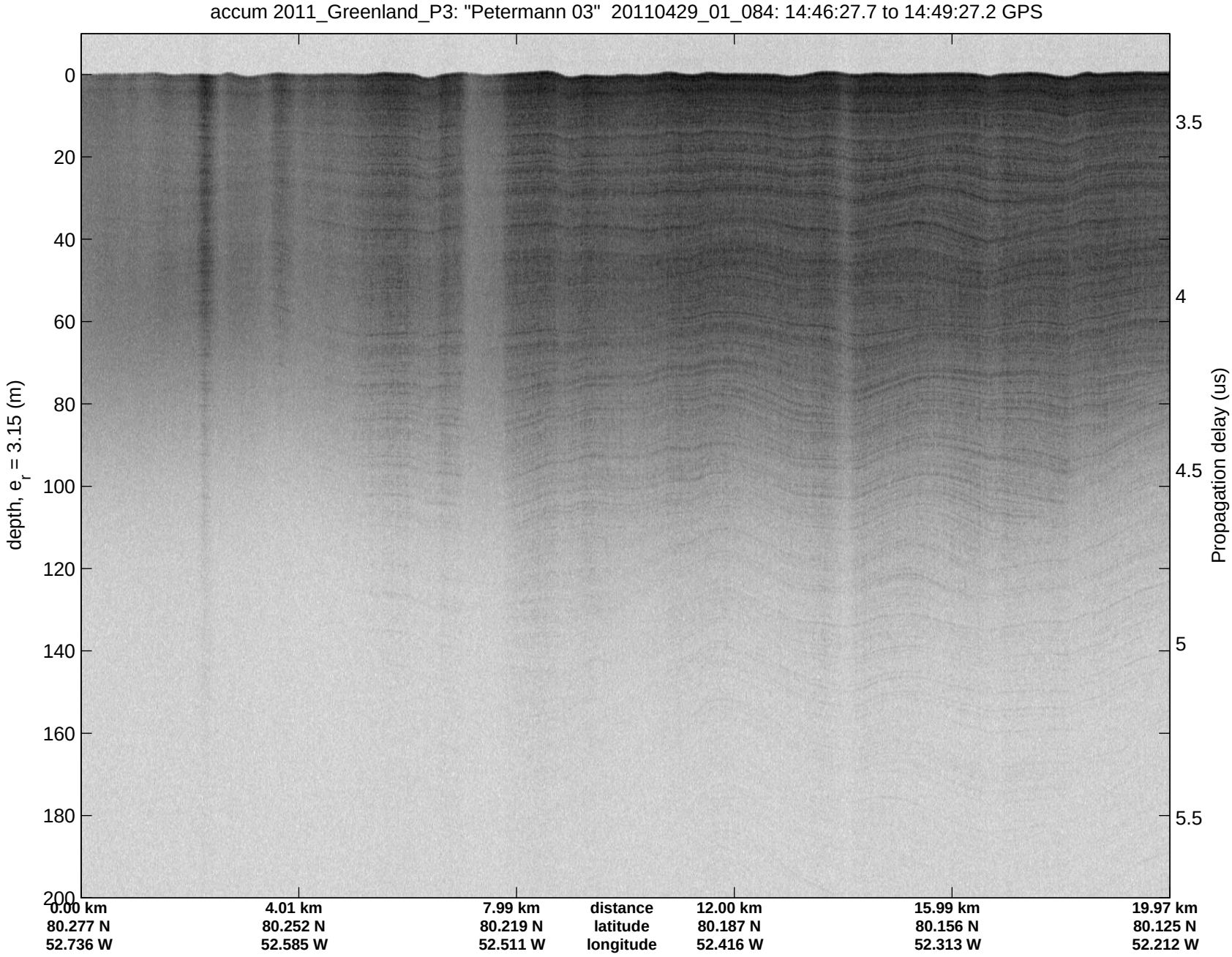

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

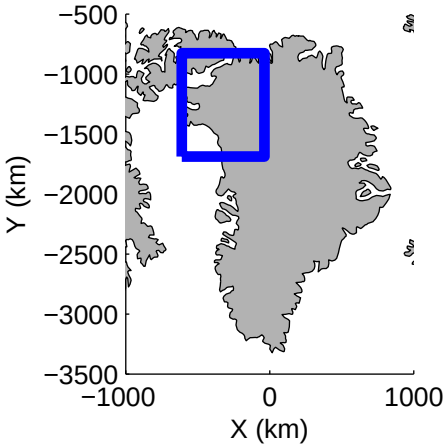

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_083: 14:43:44.4 to 14:46:27.5 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
80.261 N
52.094 W
4.01 km
80.292 N
52.198 W
8.00 km
80.319 N
52.337 W
distance
latitude
longitude
12.00 km
80.328 N
52.539 W
15.98 km
80.311 N
52.719 W
19.98 km
80.277 N
52.737 W

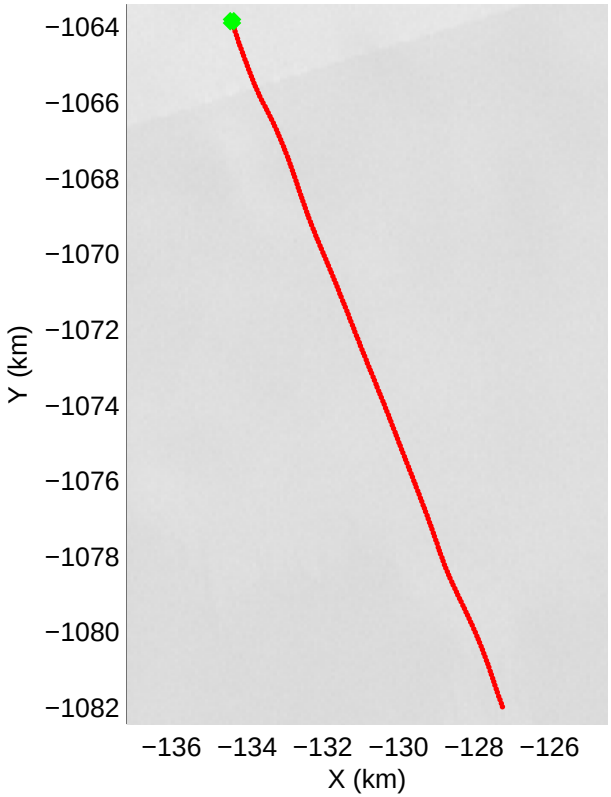

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

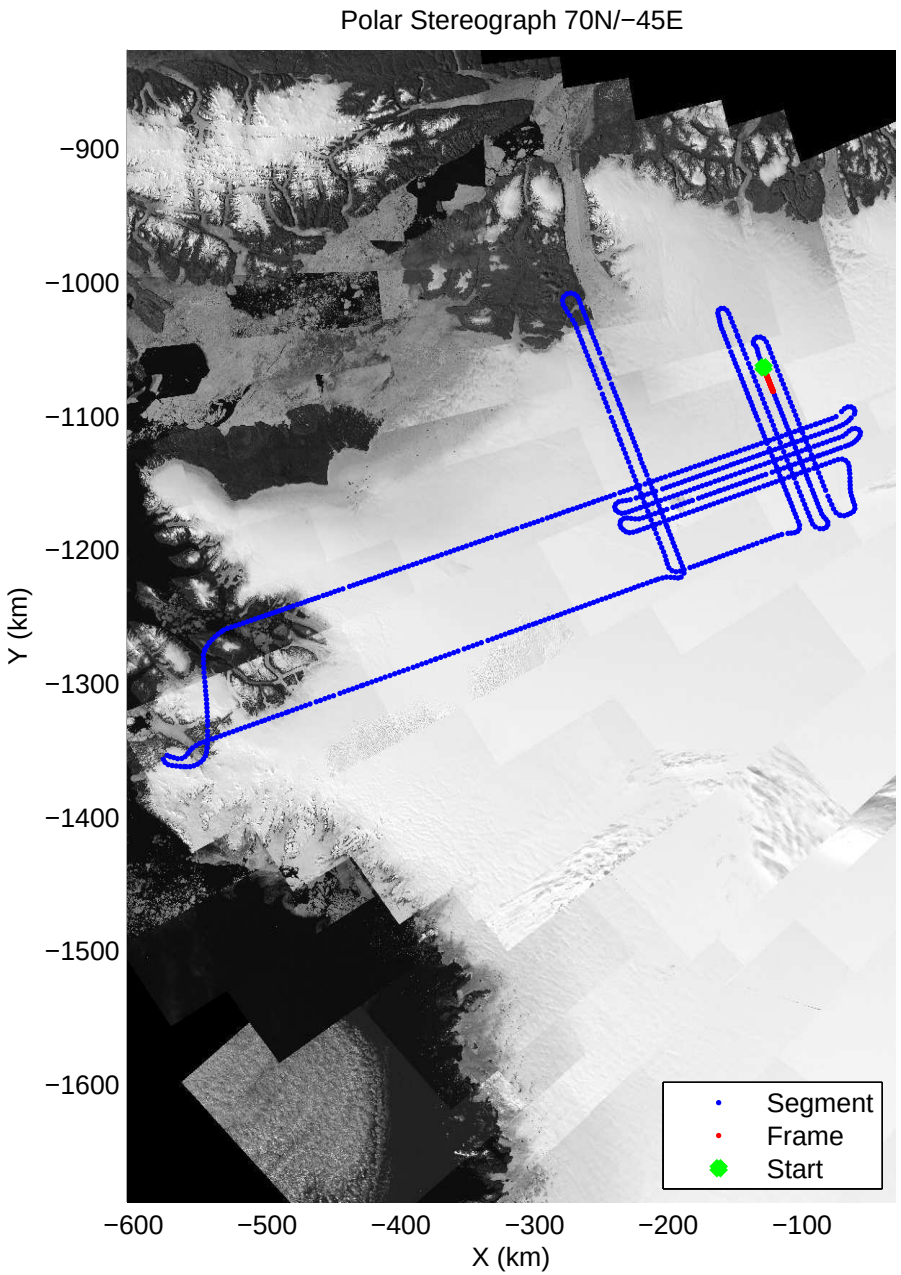

−1046
−1048
−1050
−1052
−1054
−1056
−1058
−1060
−1062
−1064
Y (km)
−144
−142
−140
−138
−136
−134
X (km)

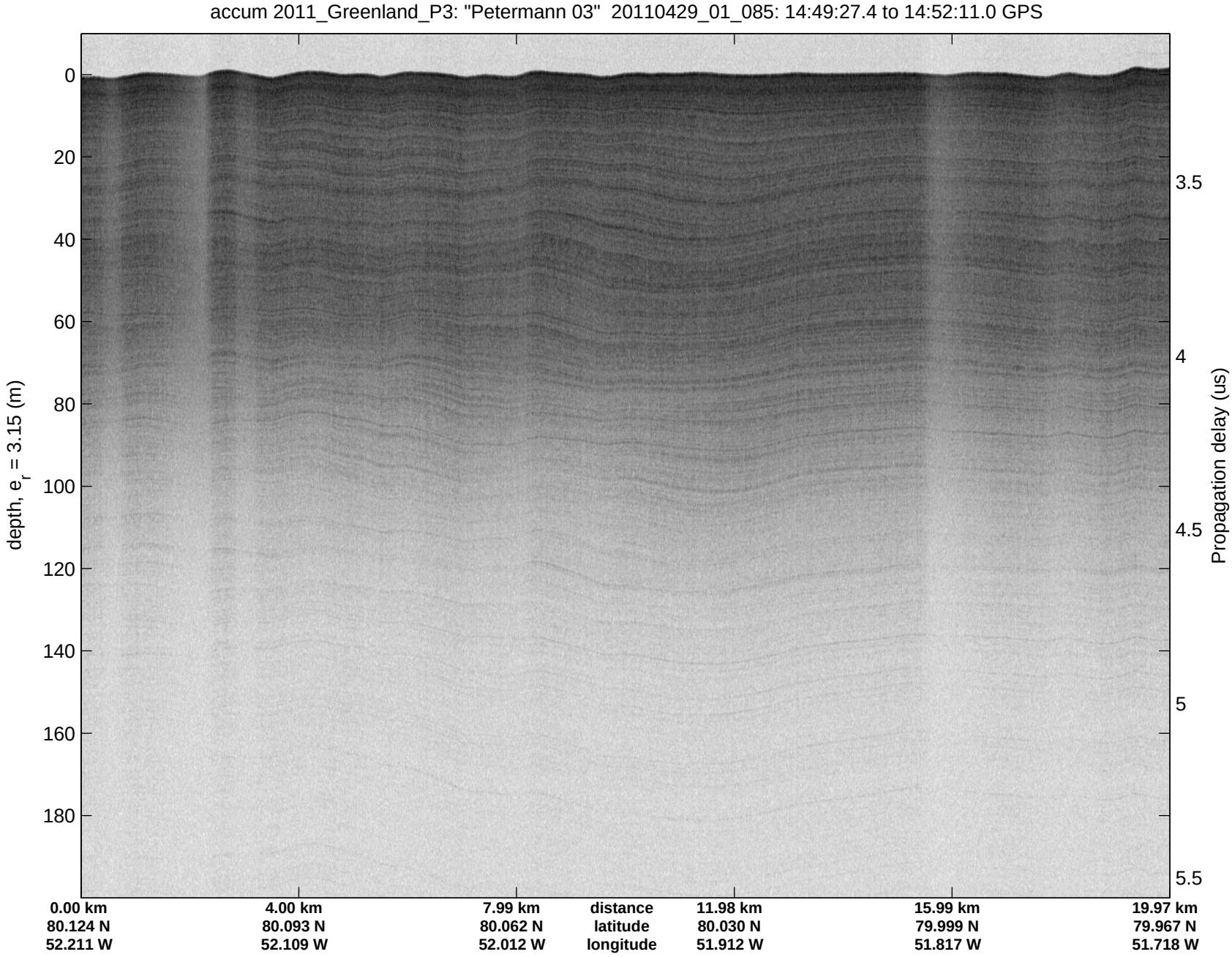

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

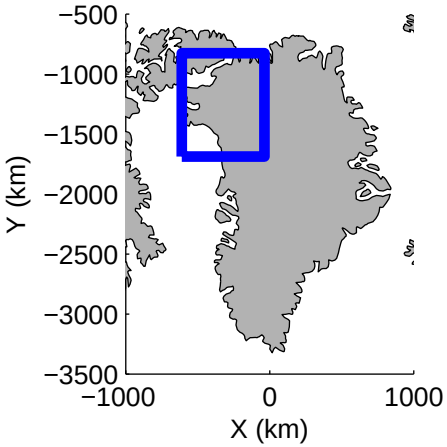

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_084: 14:46:27.7 to 14:49:27.2 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
80.277 N
52.736 W
4.01 km
80.252 N
52.585 W
7.99 km
80.219 N
52.511 W
distance
latitude
longitude
12.00 km
80.187 N
52.416 W
15.99 km
80.156 N
52.313 W
19.97 km
80.125 N
52.212 W

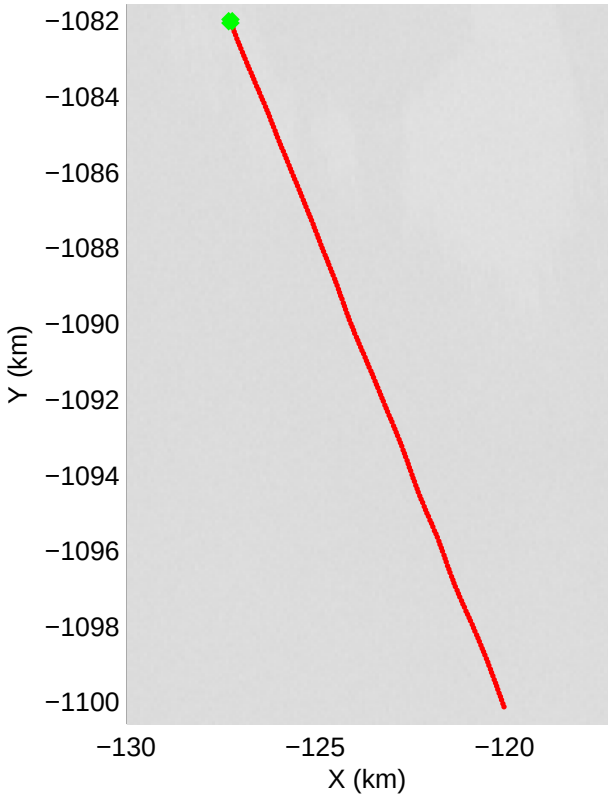

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

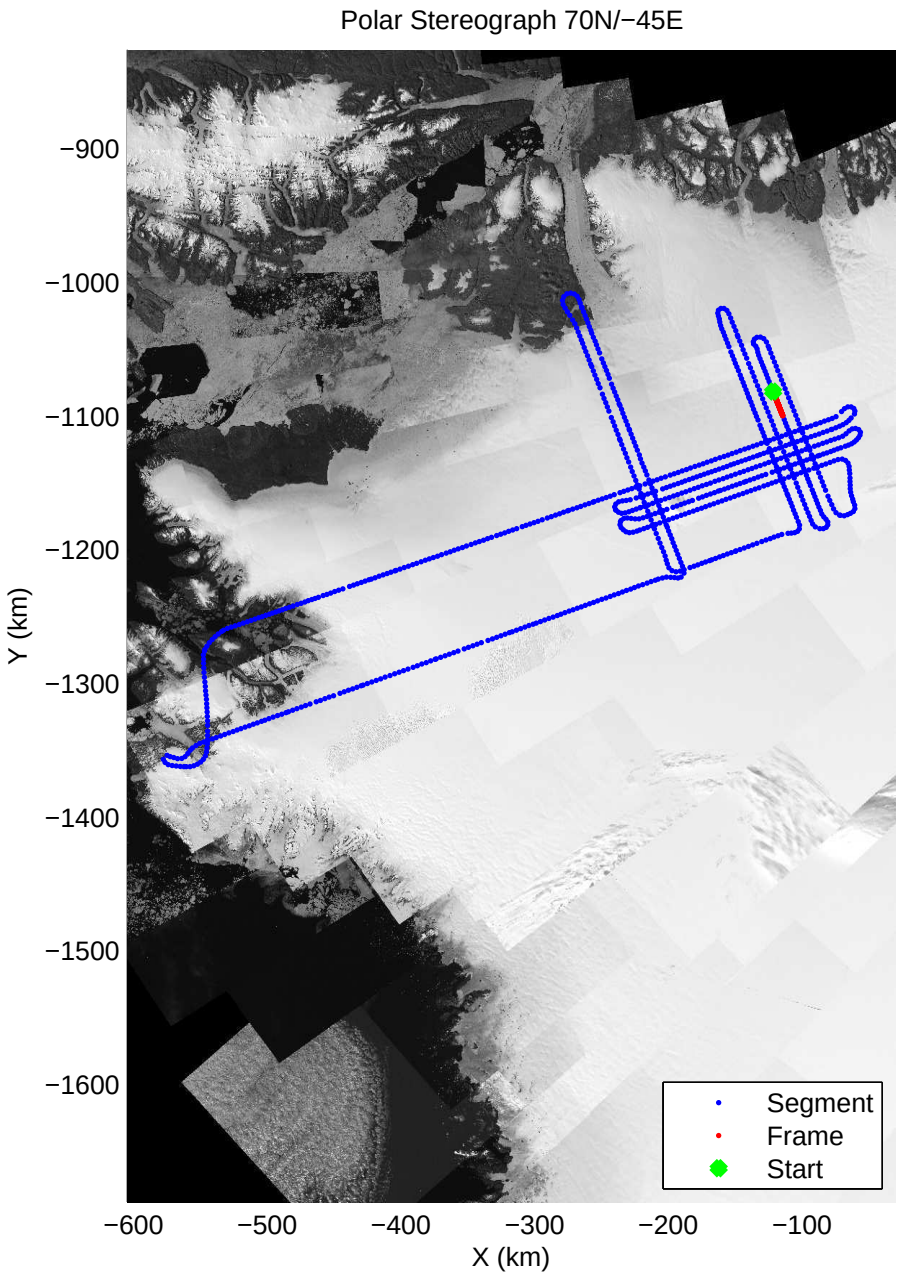

−1064
−1066
−1068
−1070
−1072
−1074
−1076
−1078
−1080
−1082
Y (km)
−136
−134
−132
−130
−128
−126
X (km)

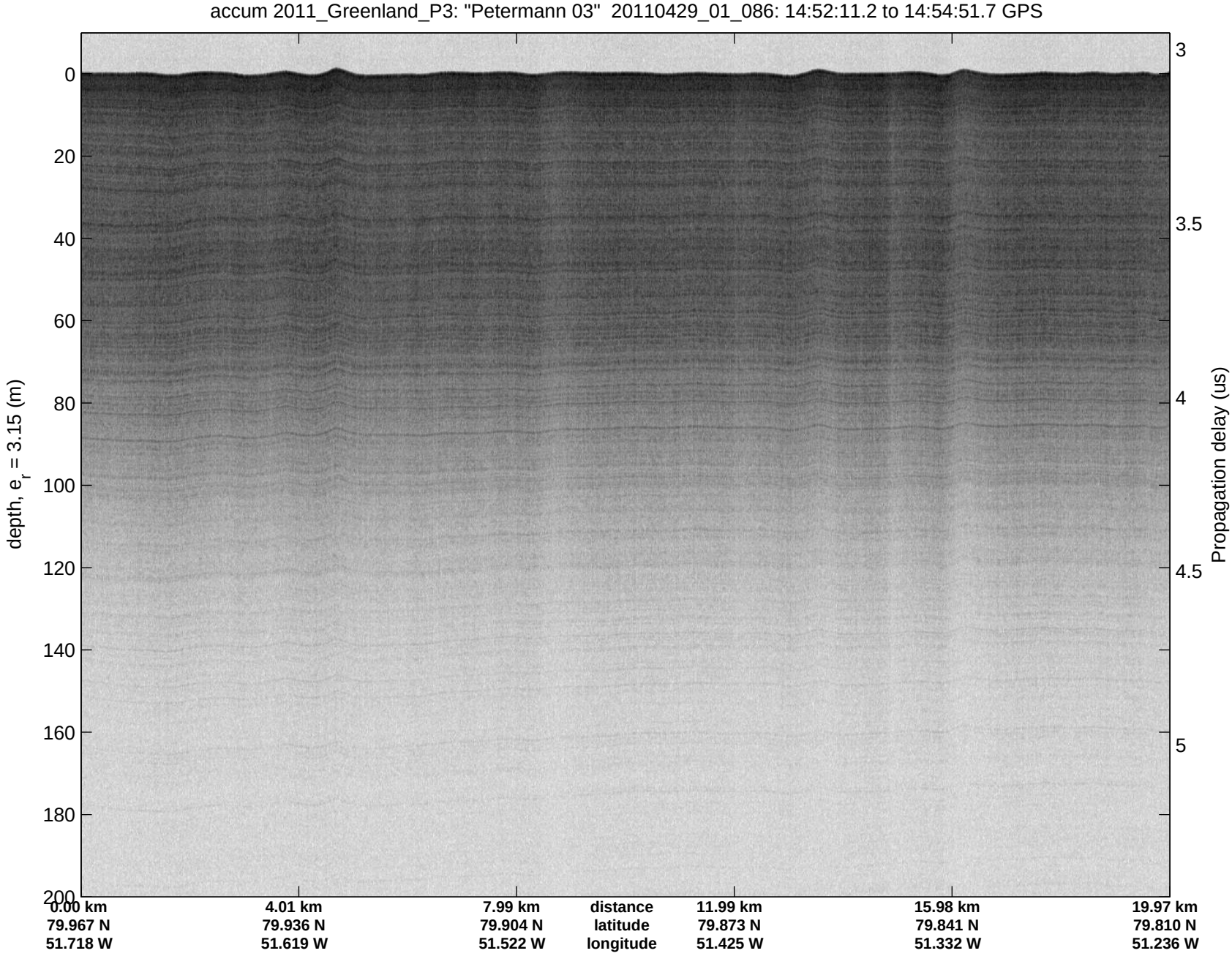

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

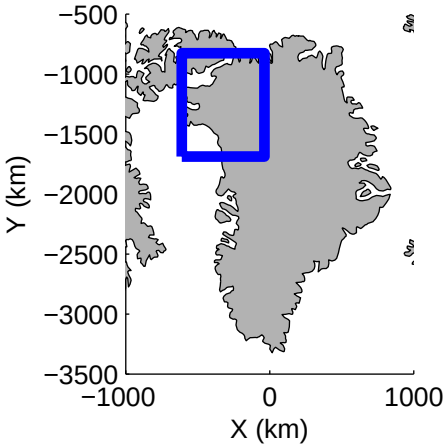

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_085: 14:49:27.4 to 14:52:11.0 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
80.124 N
52.211 W
4.00 km
80.093 N
52.109 W
7.99 km
80.062 N
52.012 W
distance
latitude
longitude
11.98 km
80.030 N
51.912 W
15.99 km
79.999 N
51.817 W
19.97 km
79.967 N
51.718 W

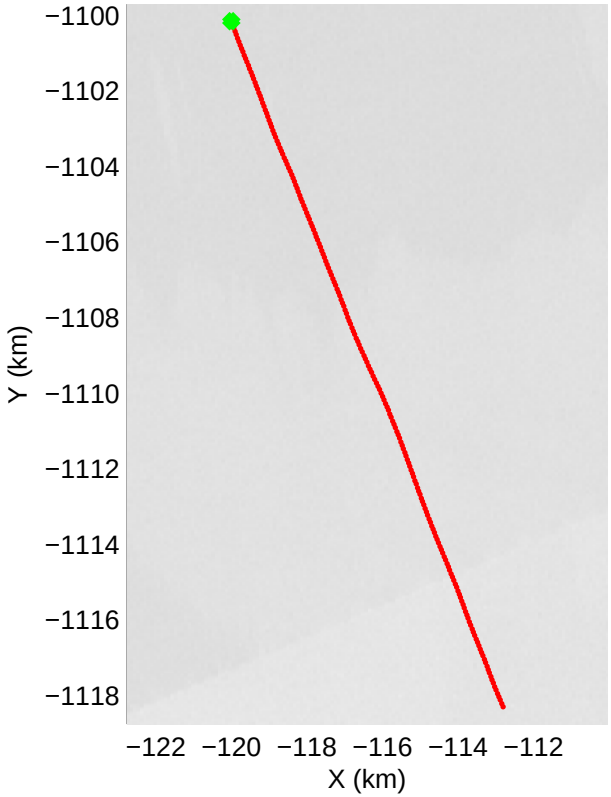

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

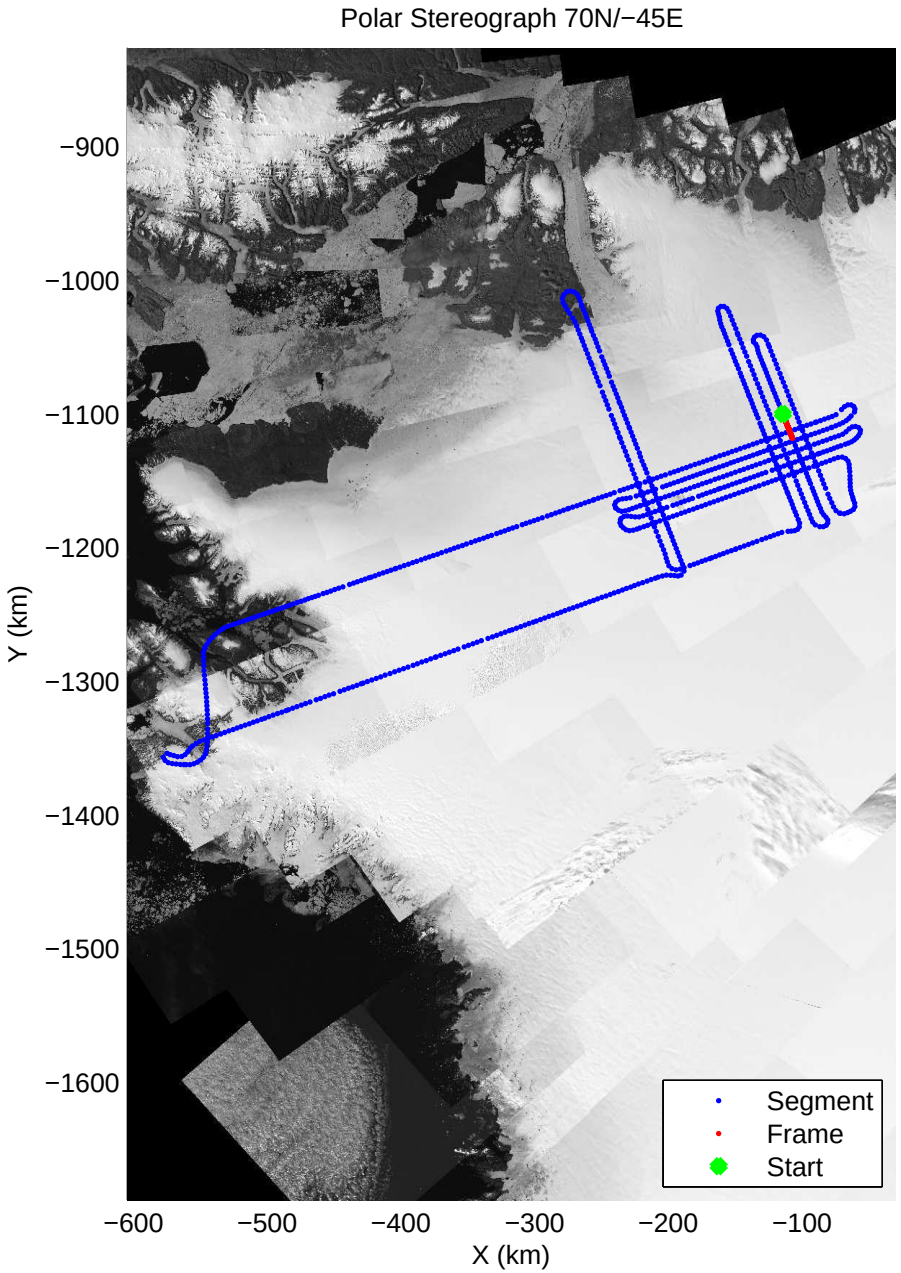

−1082
−1084
−1086
−1088
−1090
−1092
−1094
−1096
−1098
−1100
Y (km)
−130
−125
−120
X (km)

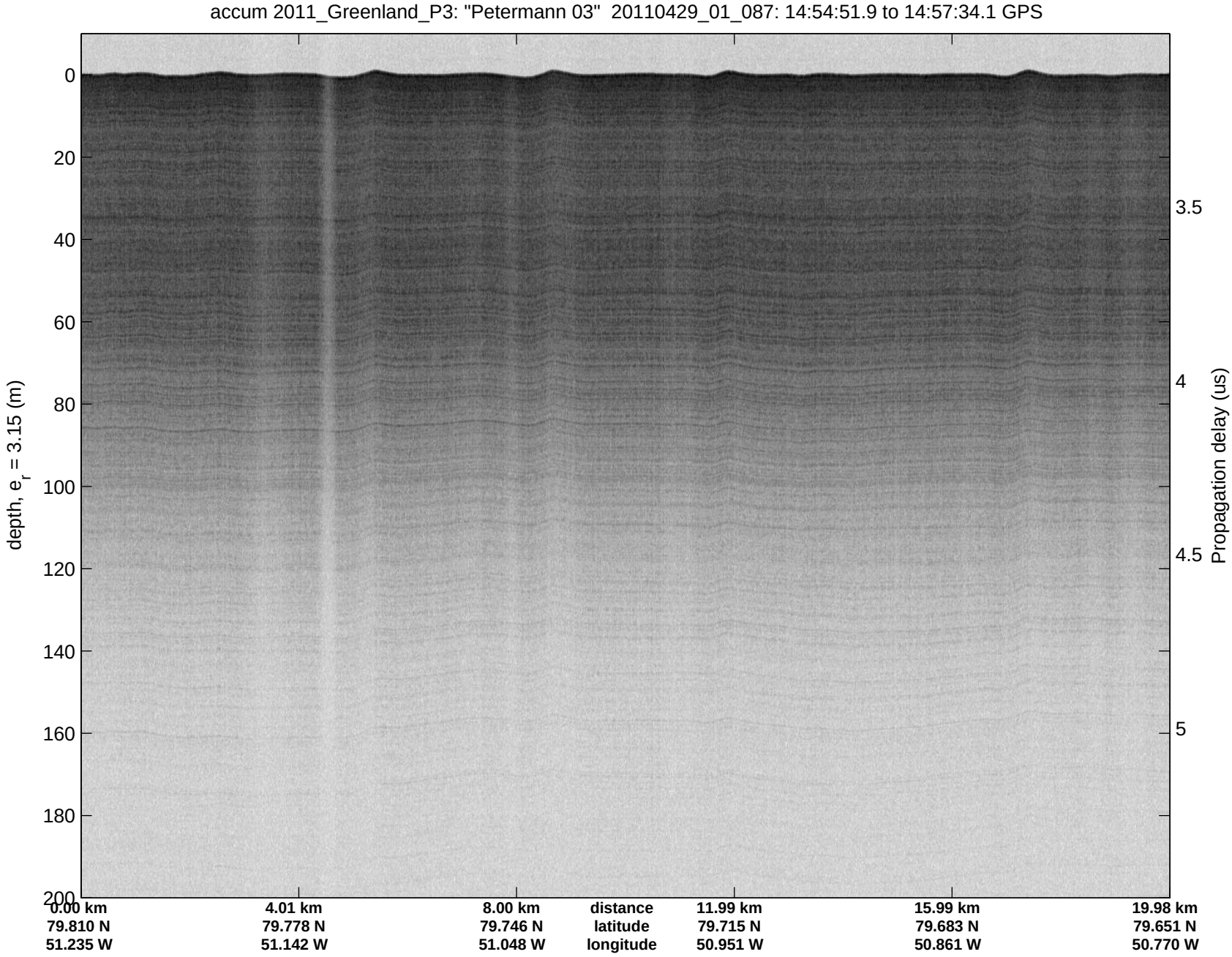

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

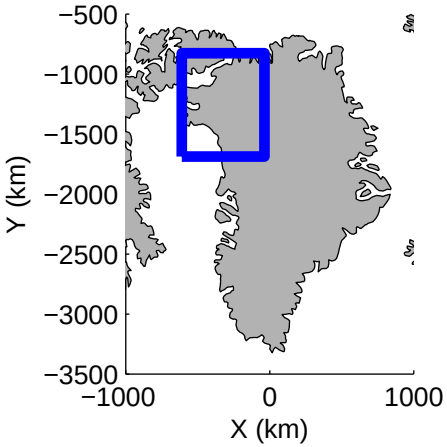

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_086: 14:52:11.2 to 14:54:51.7 GPS
depth, e_r = 3.15 (m)
Propagation delay (us)
0
20
40
60
80
100
120
140
160
180
200
3
3.5
4
4.5
5
0.00 km
79.967 N
51.718 W
4.01 km
79.936 N
51.619 W
7.99 km
79.904 N
51.522 W
distance
latitude
longitude
11.99 km
79.873 N
51.425 W
15.98 km
79.841 N
51.332 W
19.97 km
79.810 N
51.236 W

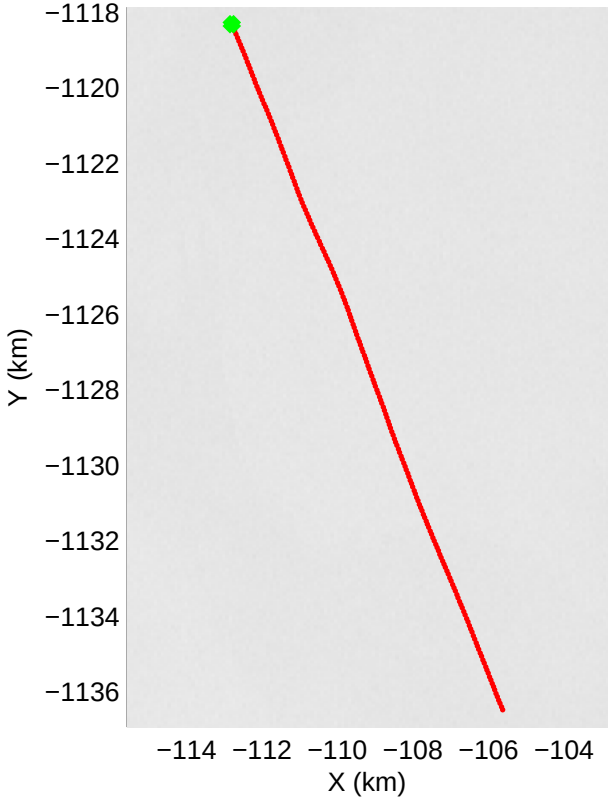

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

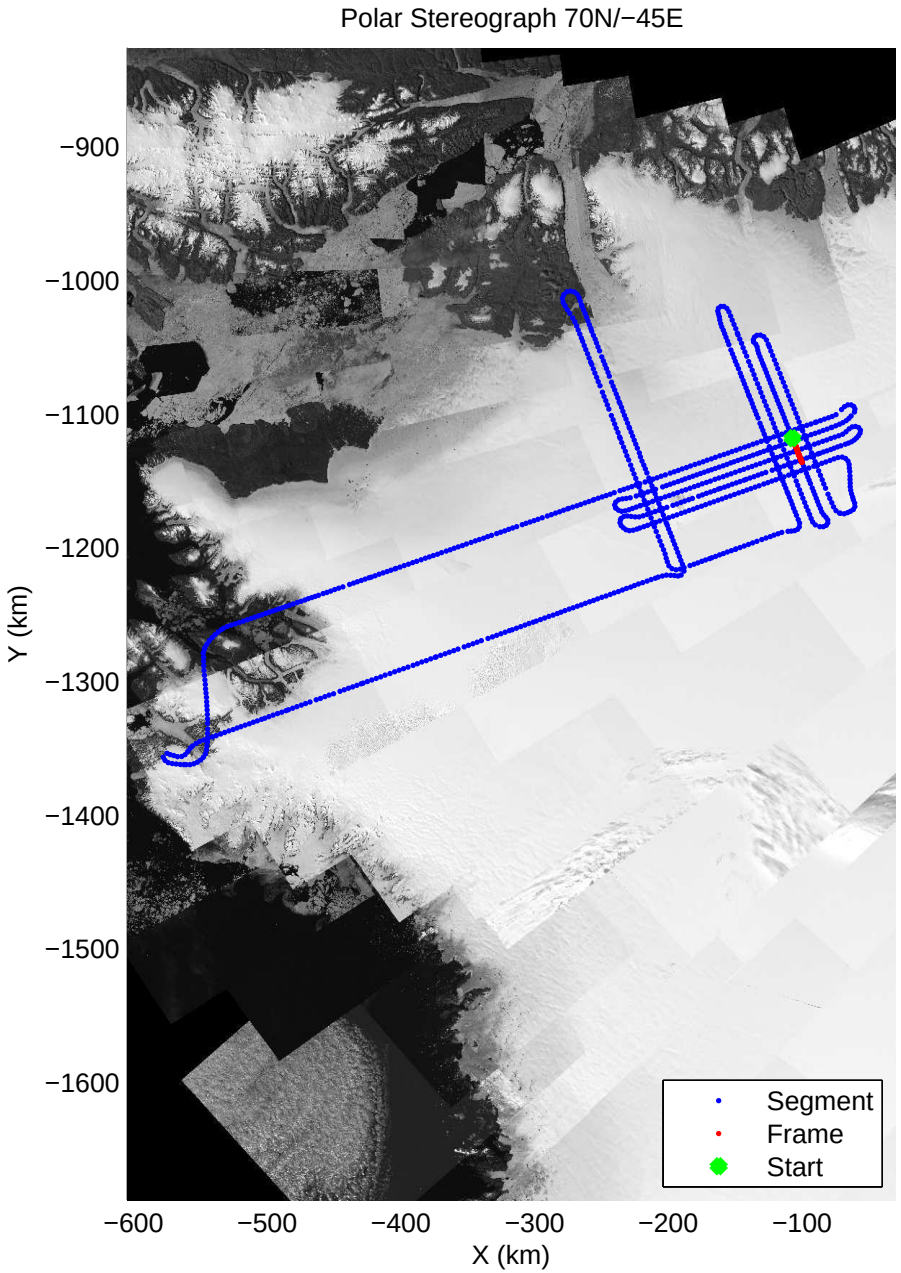

−1100
−1102
−1104
−1106
−1108
−1110
−1112
−1114
−1116
−1118
Y (km)
−122
−120
−118
−116
−114
−112
X (km)

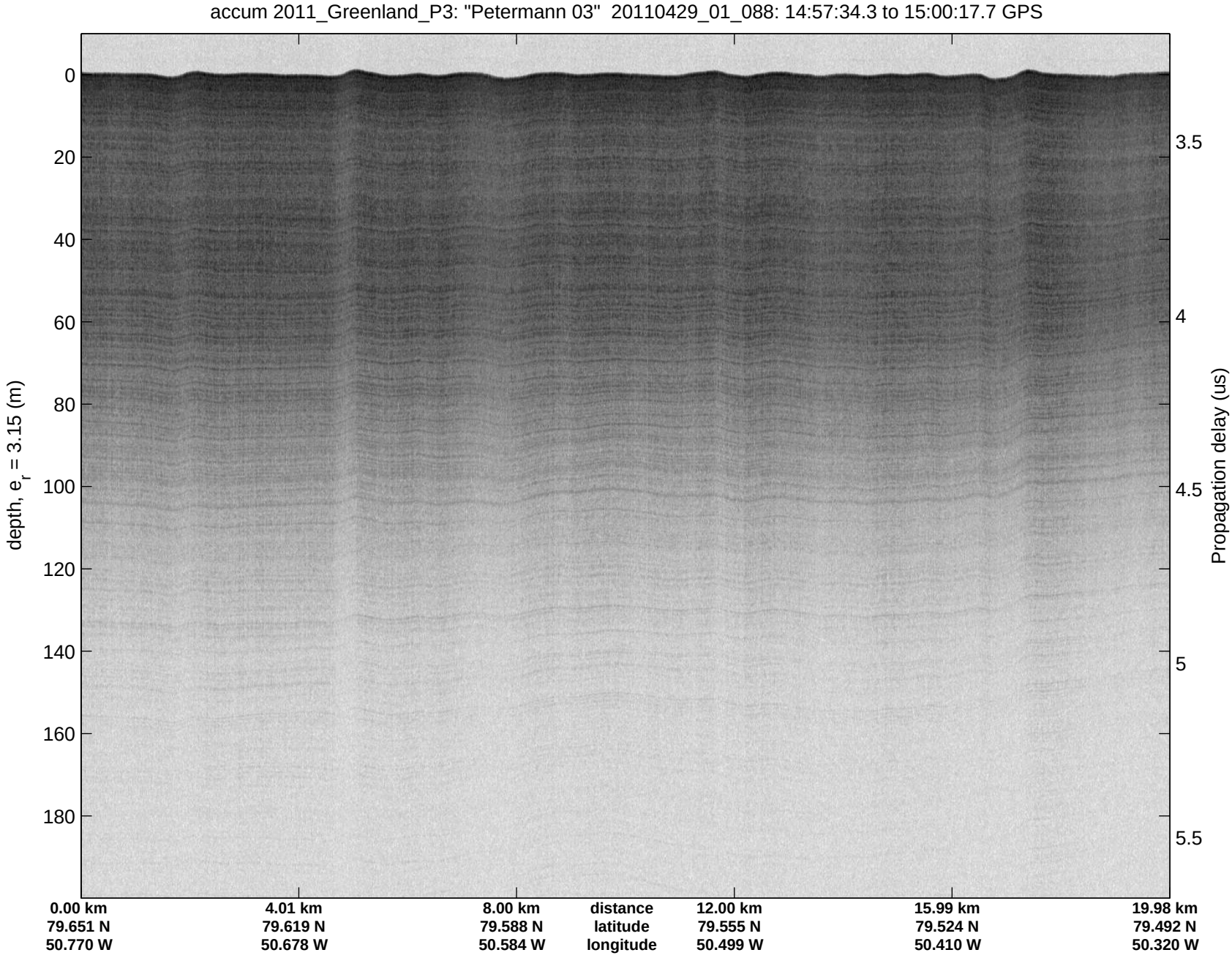

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

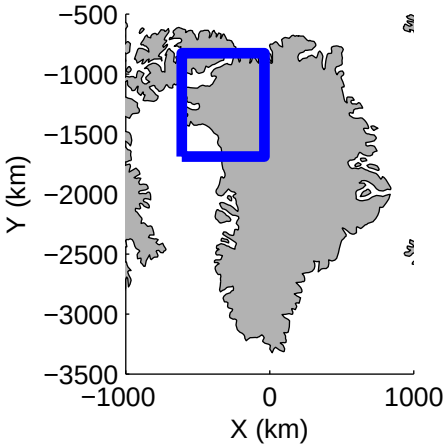

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_087: 14:54:51.9 to 14:57:34.1 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
0.00 km
79.810 N
51.235 W
4.01 km
79.778 N
51.142 W
8.00 km
79.746 N
51.048 W
distance
latitude
longitude
11.99 km
79.715 N
50.951 W
15.99 km
79.683 N
50.861 W
19.98 km
79.651 N
50.770 W

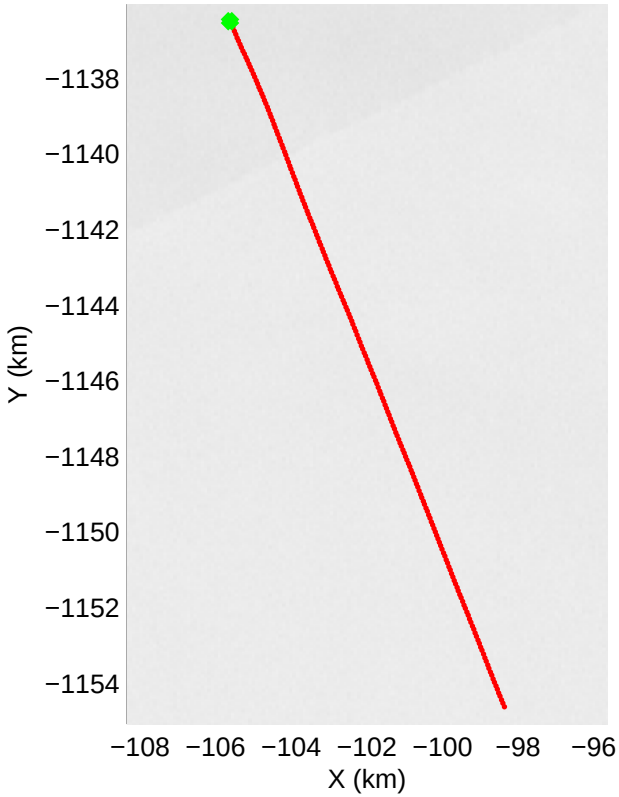

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

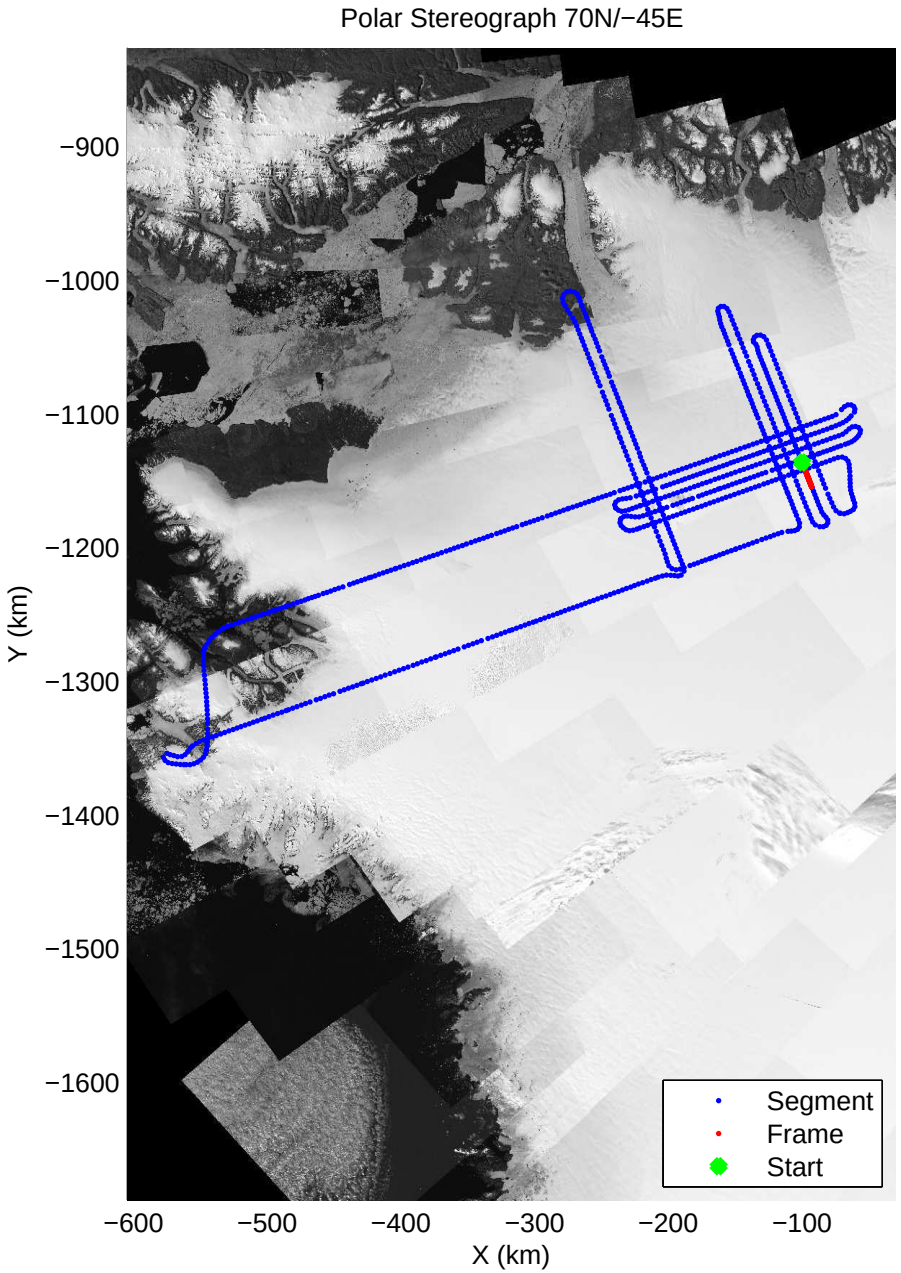

−1118
−1120
−1122
−1124
−1126
−1128
−1130
−1132
−1134
−1136
Y (km)
−114
−112
−110
−108
−106
−104
X (km)

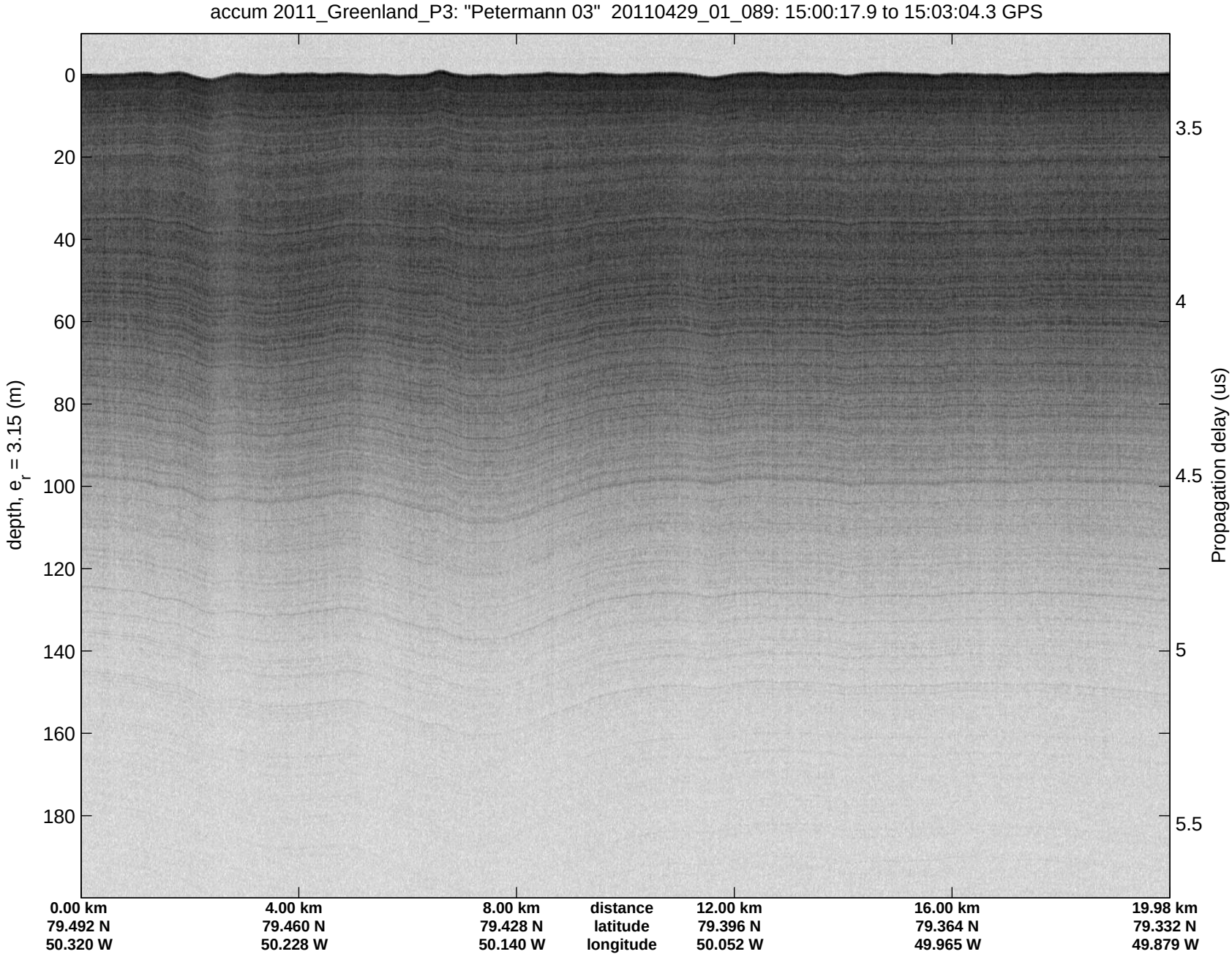

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

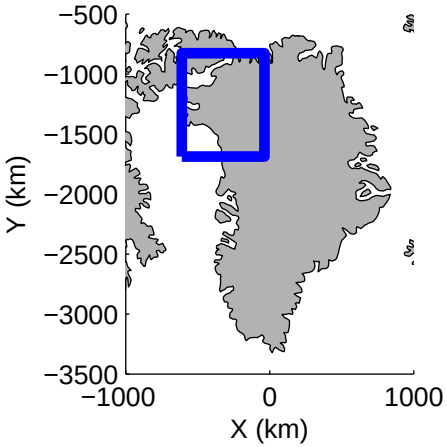

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_088: 14:57:34.3 to 15:00:17.7 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.651 N
50.770 W
4.01 km
79.619 N
50.678 W
8.00 km
79.588 N
50.584 W
distance
latitude
longitude
12.00 km
79.555 N
50.499 W
15.99 km
79.524 N
50.410 W
19.98 km
79.492 N
50.320 W

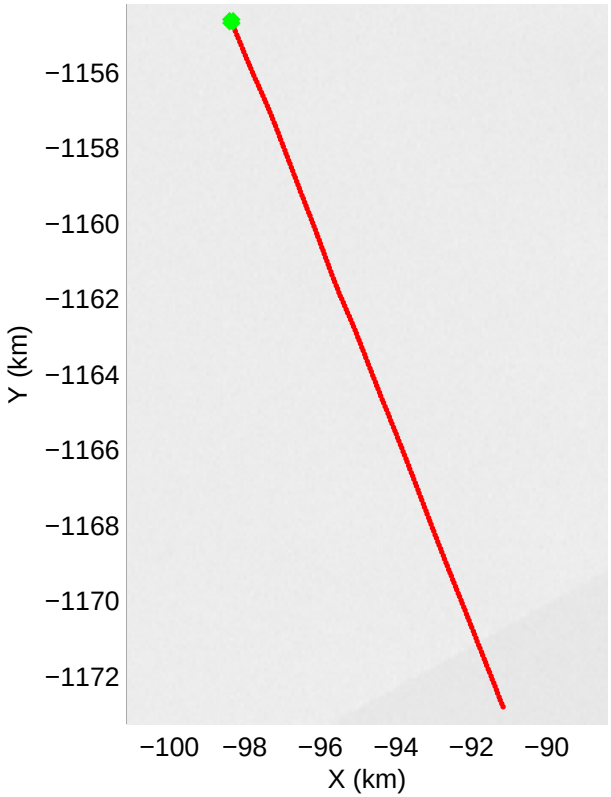

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

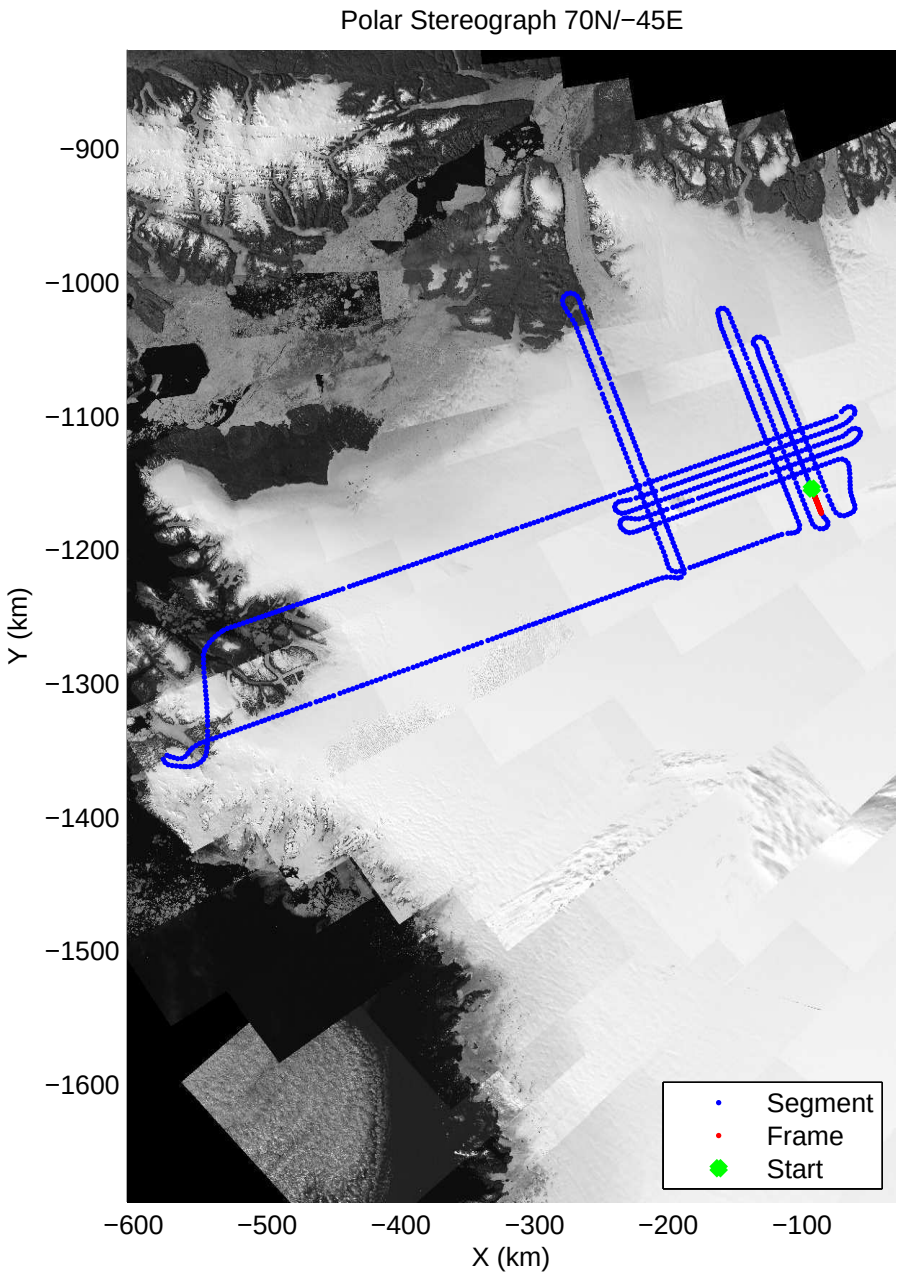

−1138
−1140
−1142
−1144
−1146
−1148
−1150
−1152
−1154
Y (km)
−108
−106
−104
−102
−100
−98
−96
X (km)

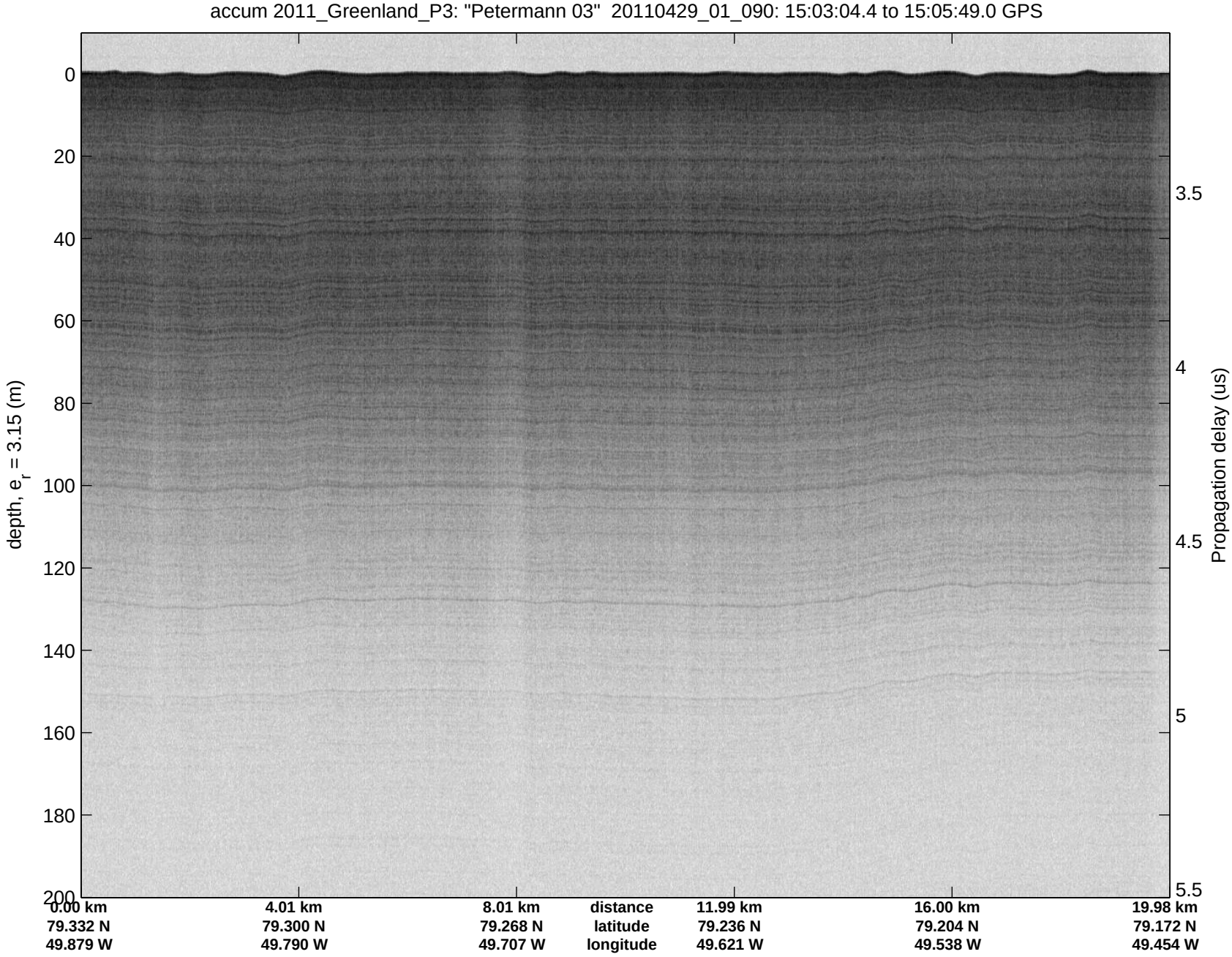

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

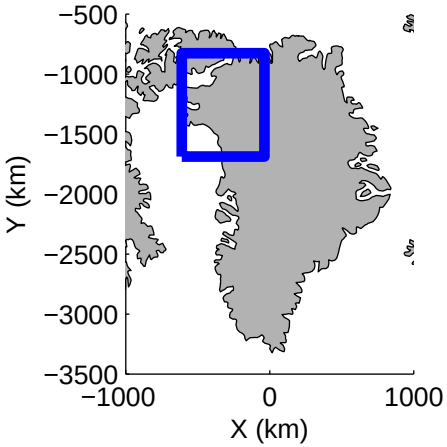

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_089: 15:00:17.9 to 15:03:04.3 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.492 N
50.320 W
4.00 km
79.460 N
50.228 W
8.00 km
79.428 N
50.140 W
distance
latitude
longitude
12.00 km
79.396 N
50.052 W
16.00 km
79.364 N
49.965 W
19.98 km
79.332 N
49.879 W

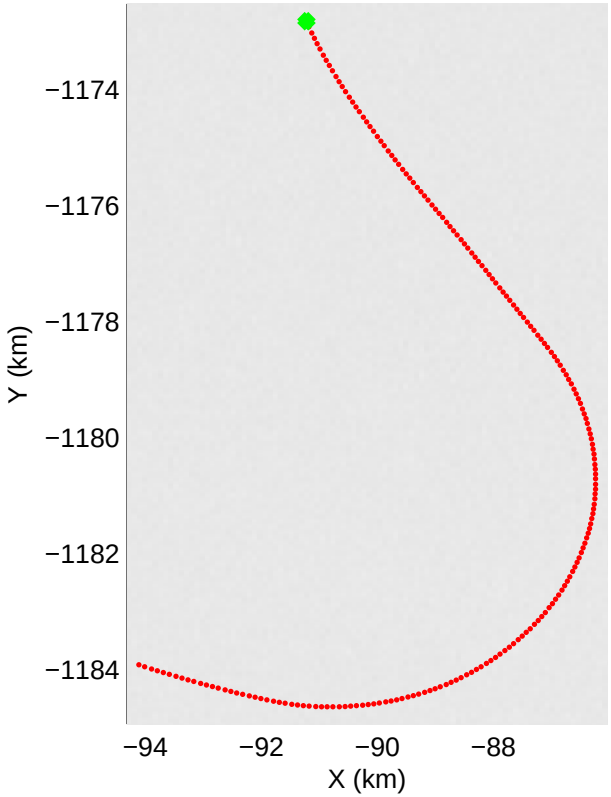

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

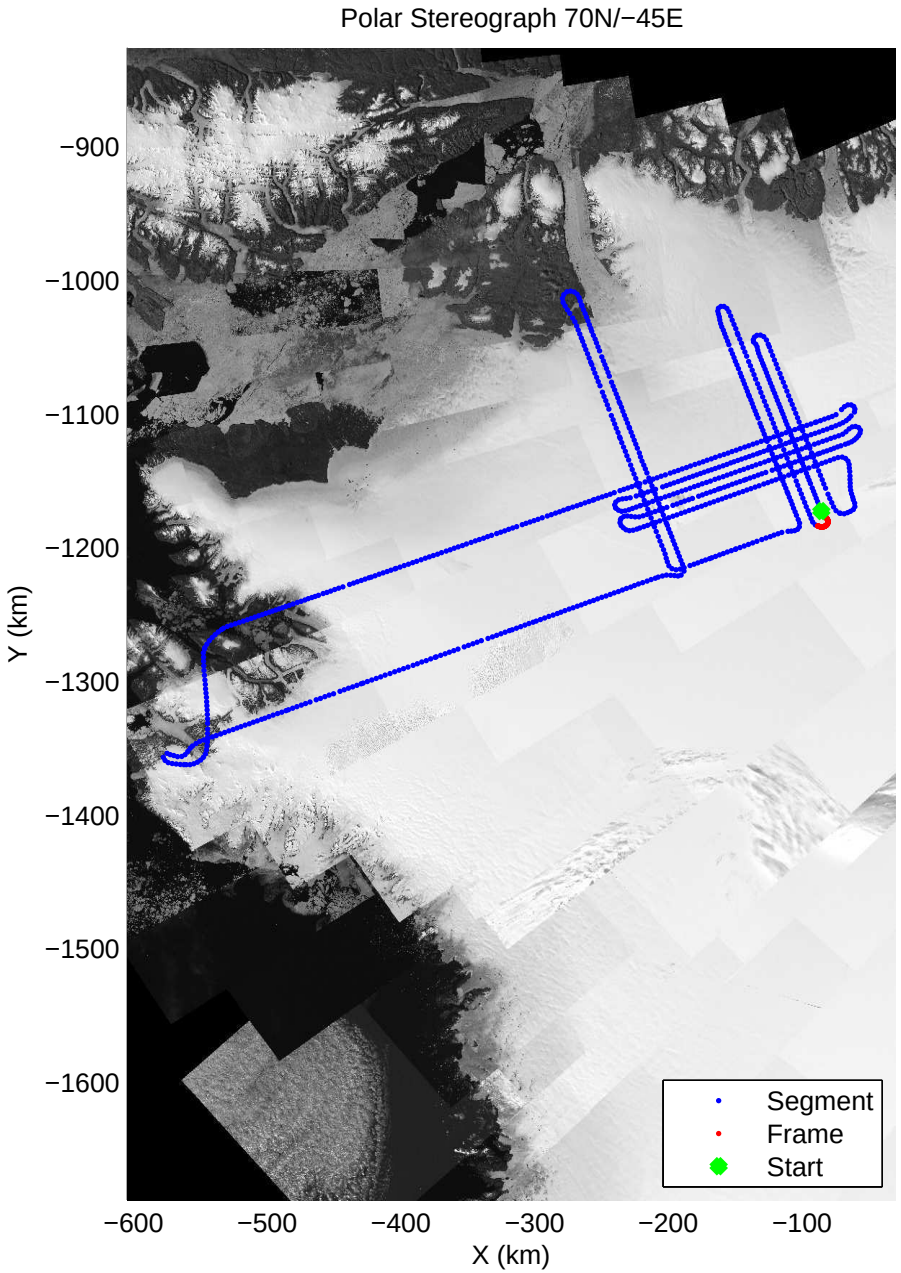

−1156
−1158
−1160
−1162
−1164
−1166
−1168
−1170
−1172
Y (km)
−100
−98
−96
−94
−92
−90
X (km)

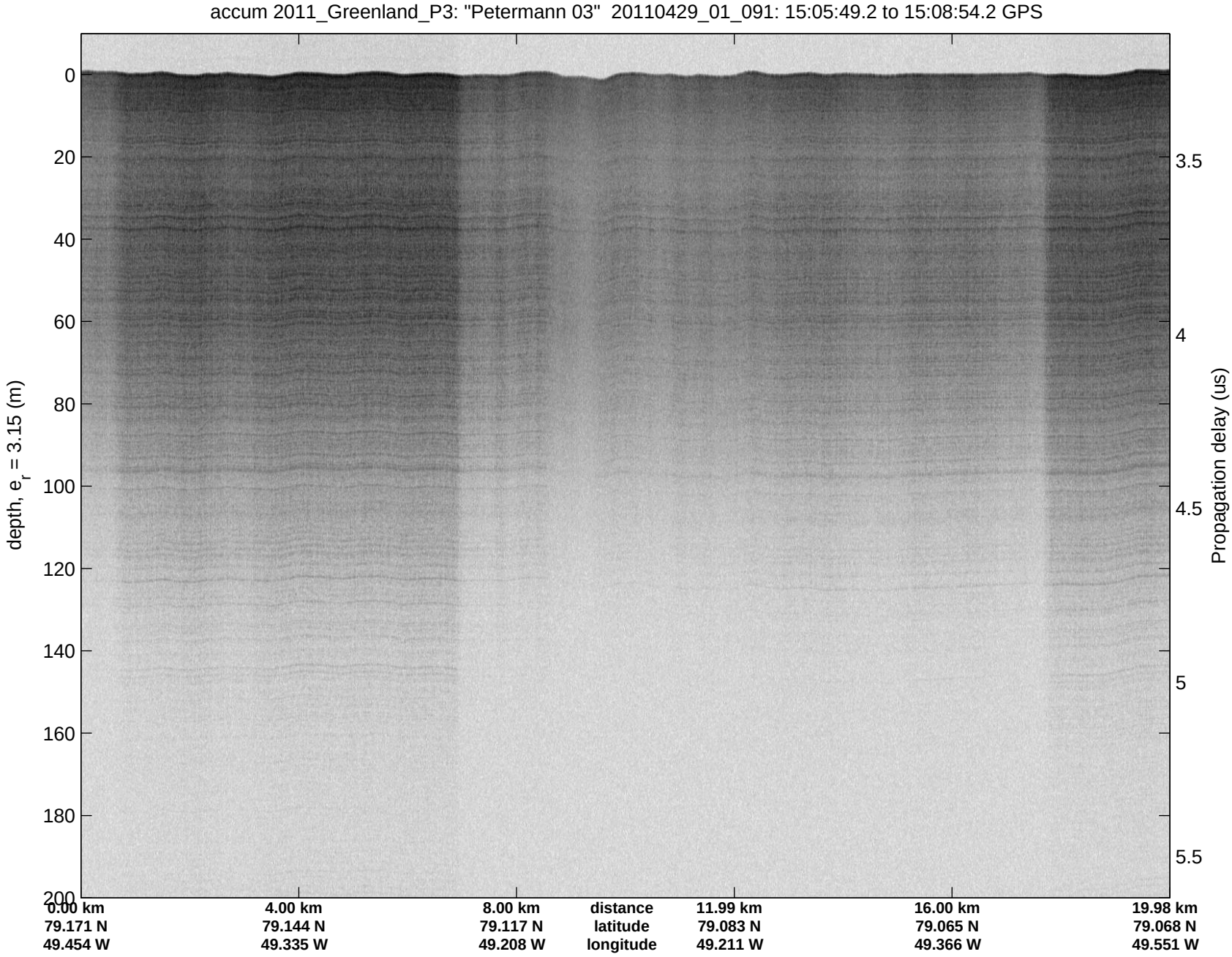

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

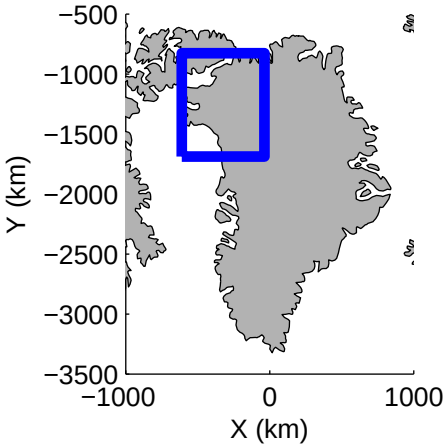

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_090: 15:03:04.4 to 15:05:49.0 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.332 N
49.879 W
4.01 km
79.300 N
49.790 W
8.01 km
79.268 N
49.707 W
distance
latitude
longitude
11.99 km
79.236 N
49.621 W
16.00 km
79.204 N
49.538 W
19.98 km
79.172 N
49.454 W

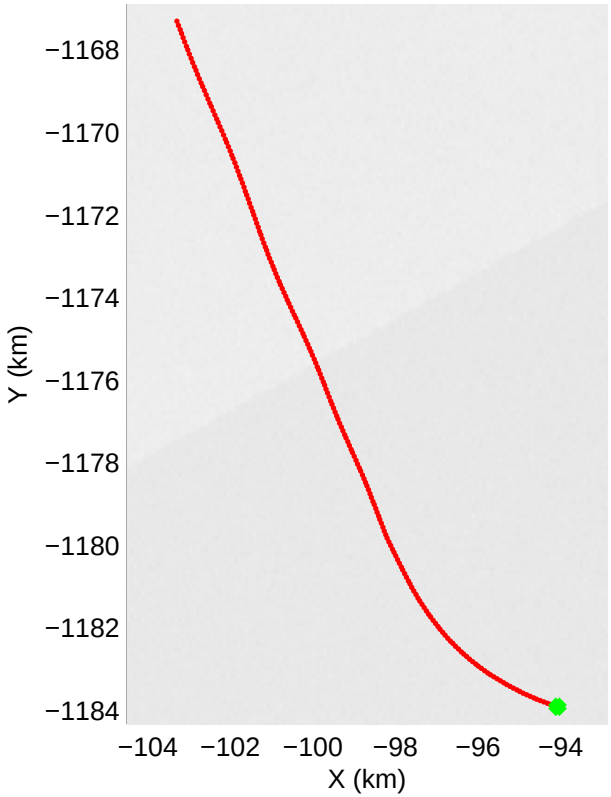

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

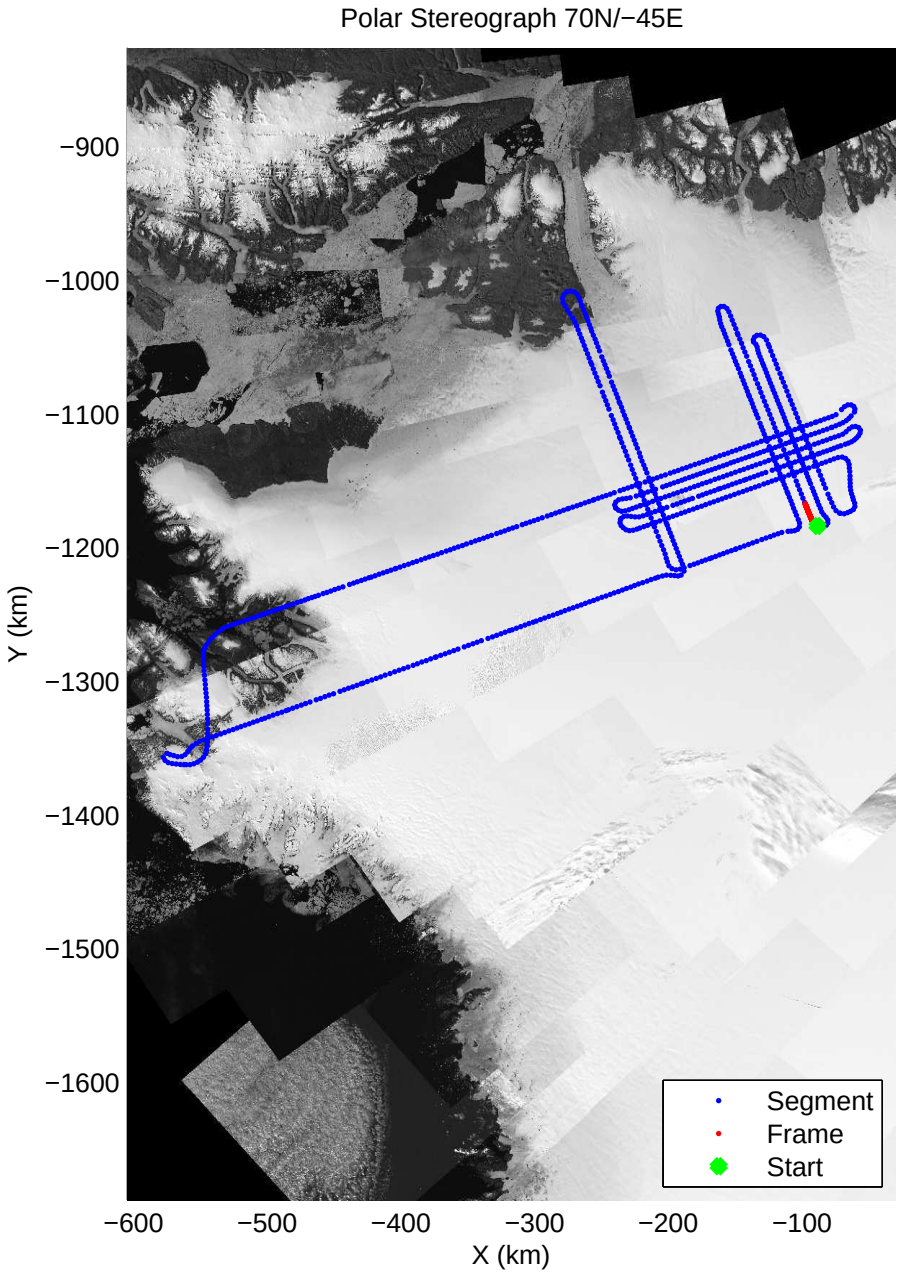

−1174
−1176
−1178
−1180
−1182
−1184
Y (km)
−94
−92
−90
−88
X (km)

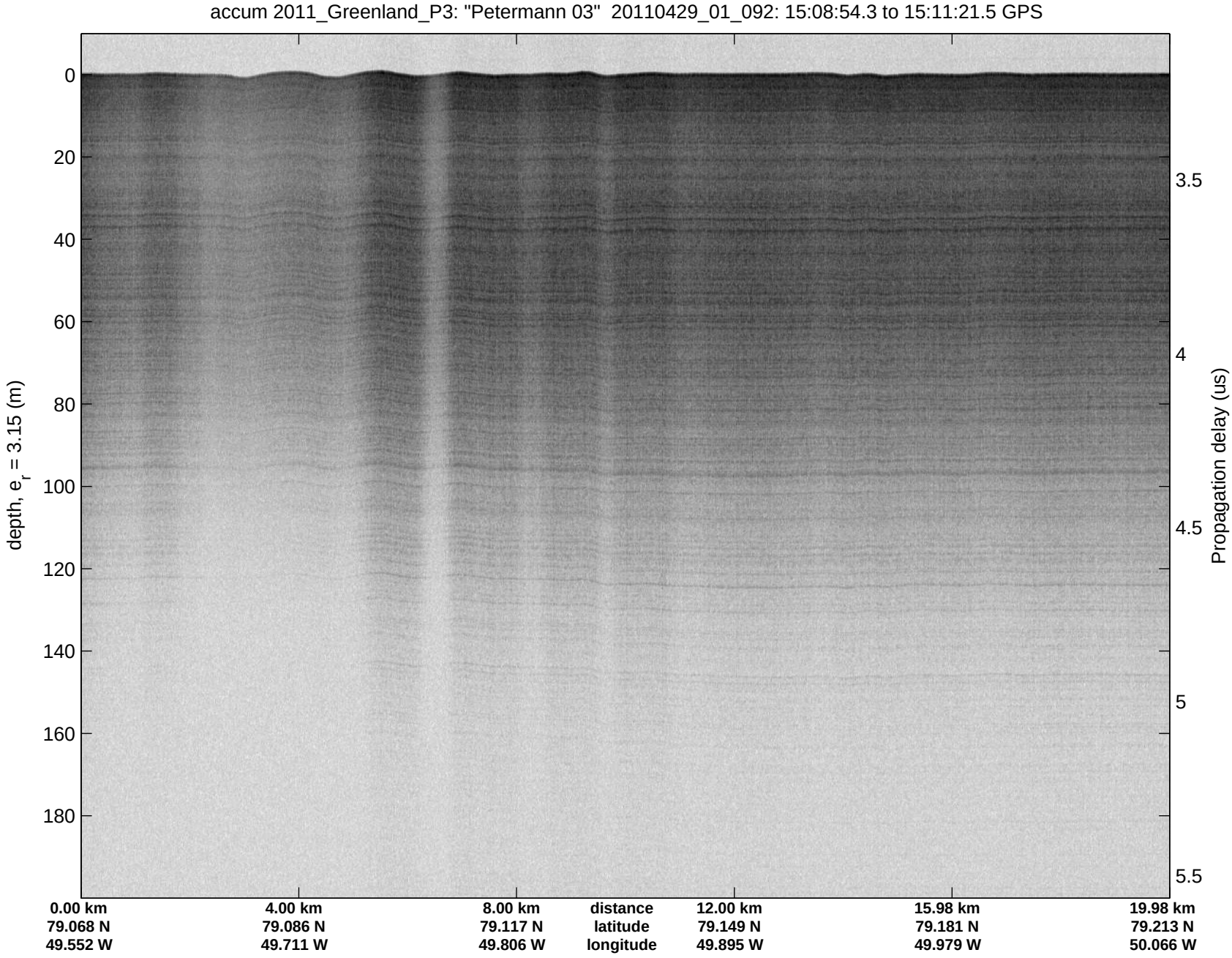

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

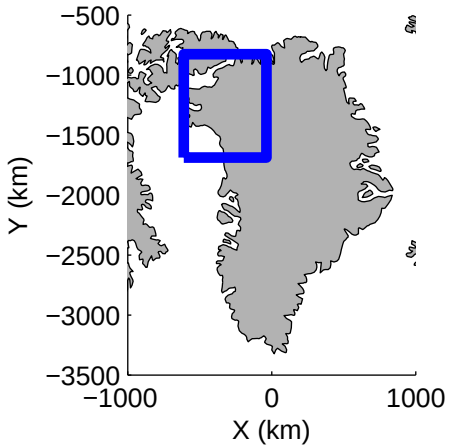

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_091: 15:05:49.2 to 15:08:54.2 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.171 N
49.454 W
4.00 km
79.144 N
49.335 W
8.00 km
79.117 N
49.208 W
distance
latitude
longitude
11.99 km
79.083 N
49.211 W
16.00 km
79.065 N
49.366 W
19.98 km
79.068 N
49.551 W


−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

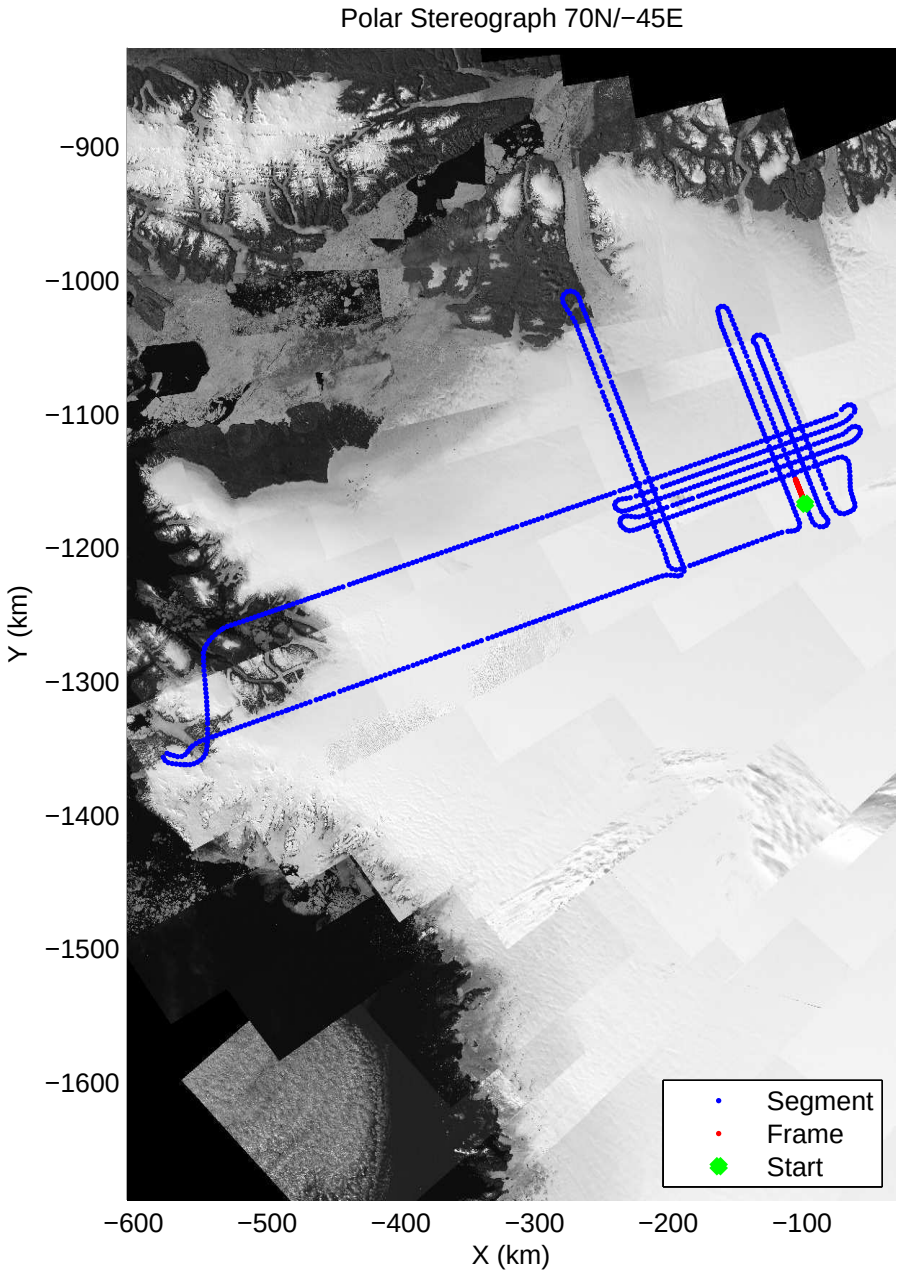

−1168
−1170
−1172
−1174
−1176
−1178
−1180
−1182
−1184
Y (km)
−104
−102
−100
−98
−96
−94
X (km)

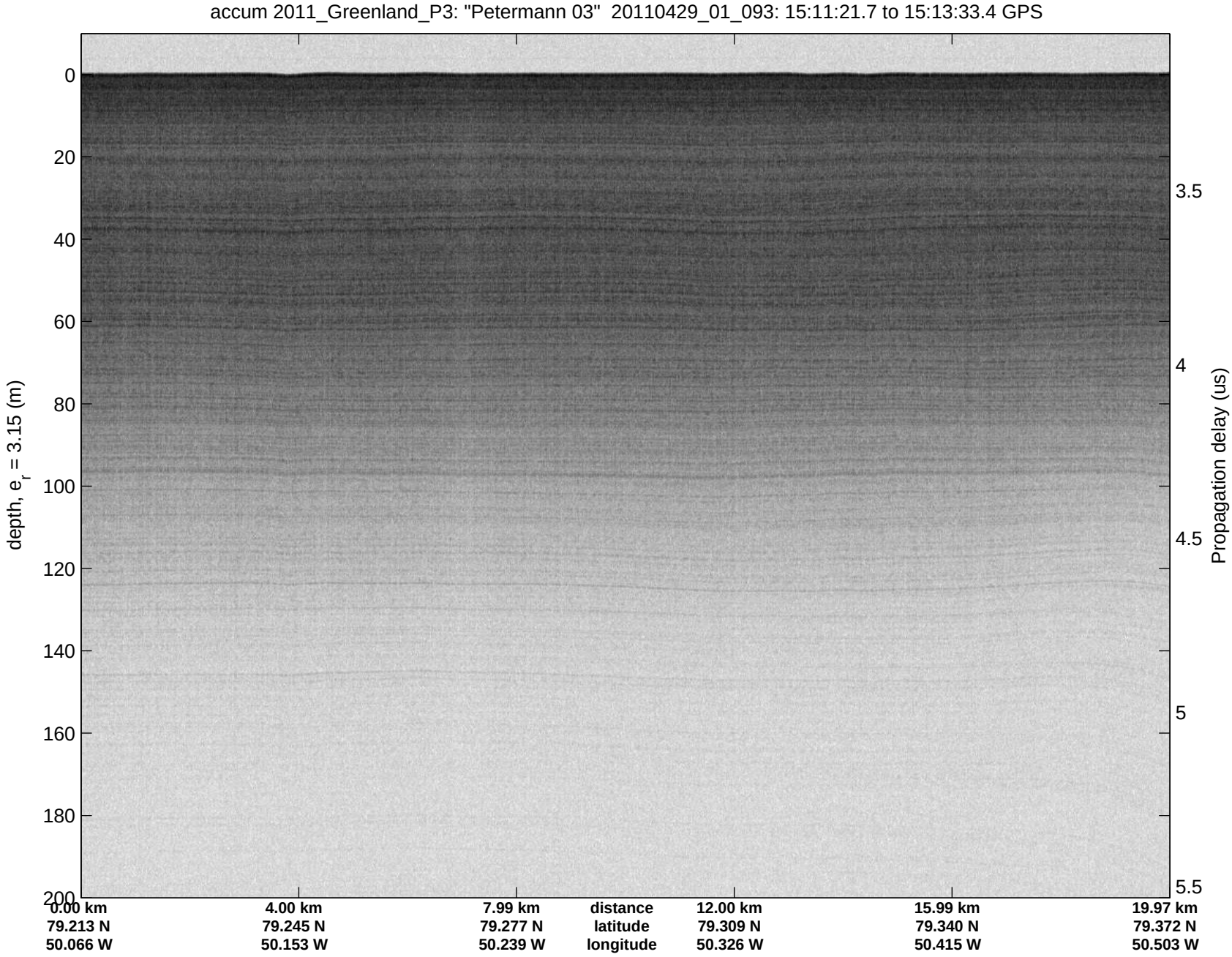

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

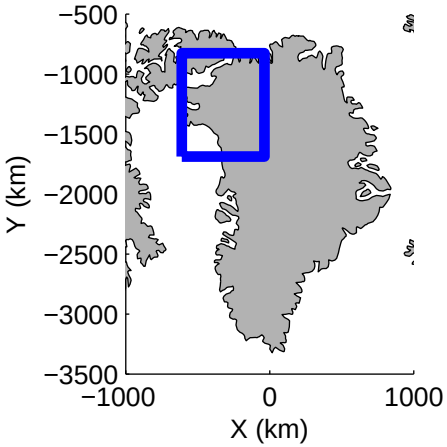

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_092: 15:08:54.3 to 15:11:21.5 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.068 N
49.552 W
4.00 km
79.086 N
49.711 W
8.00 km
79.117 N
49.806 W
distance
latitude
longitude
12.00 km
79.149 N
49.895 W
15.98 km
79.181 N
49.979 W
19.98 km
79.213 N
50.066 W

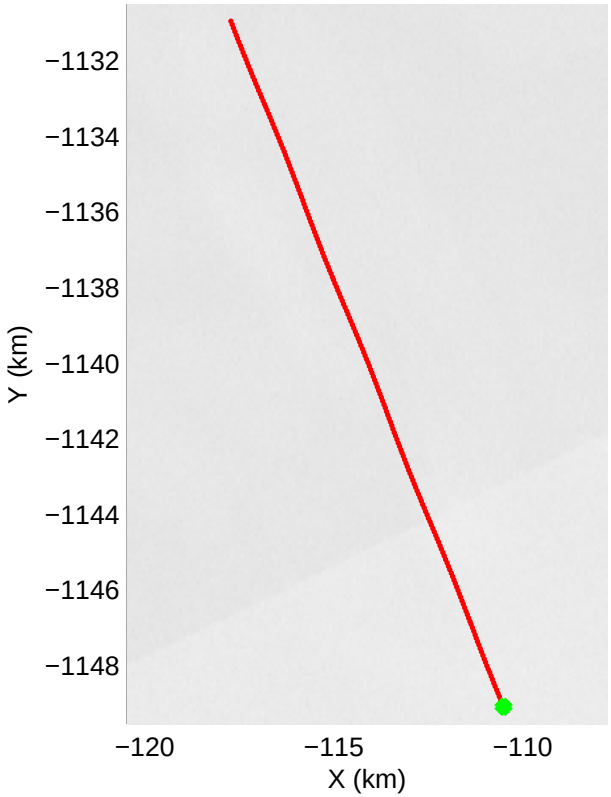

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

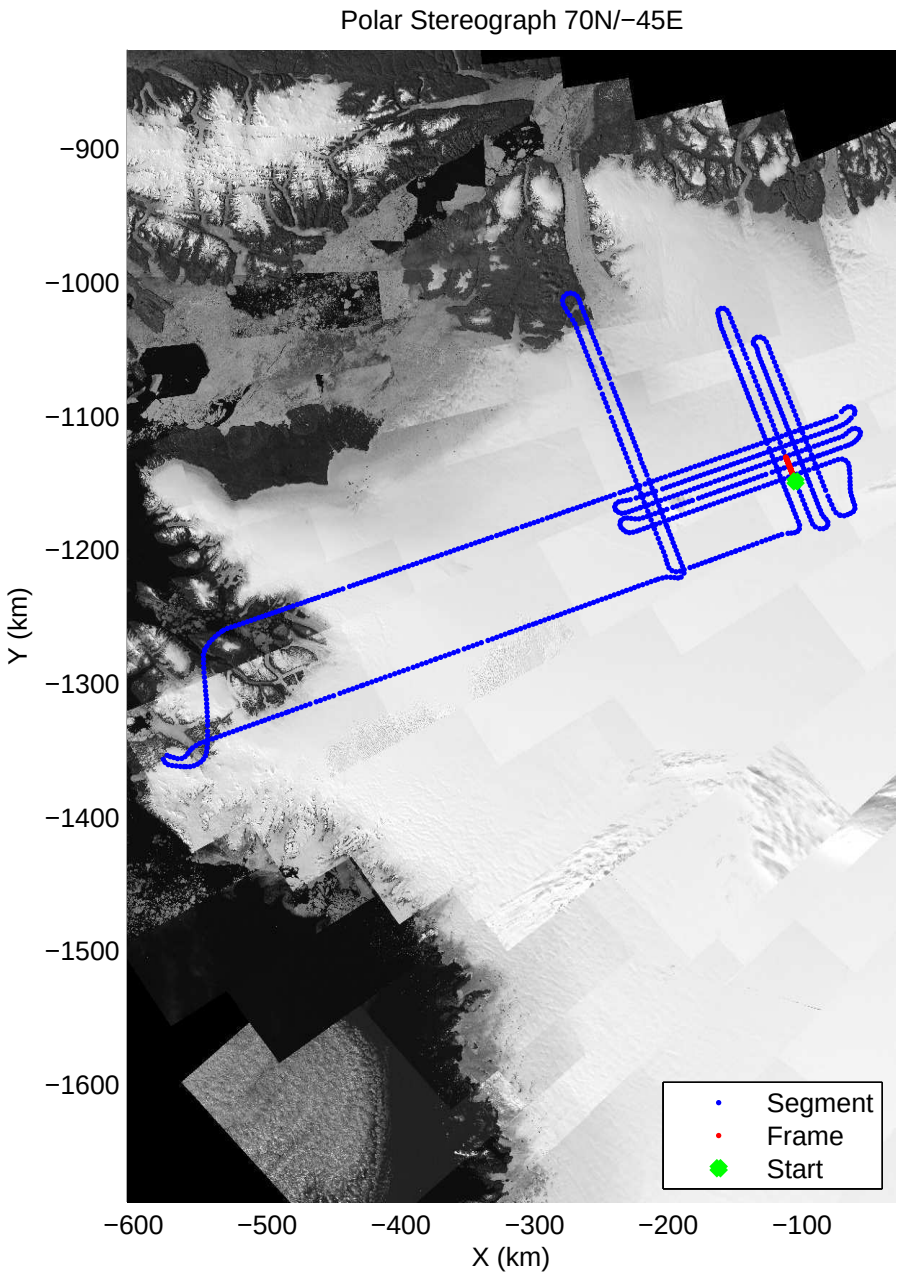
−1150
−1152
−1154
−1156
−1158
−1160
−1162
−1164
−1166
Y (km)
−112
−110
−108
−106
−104
−102
X (km)

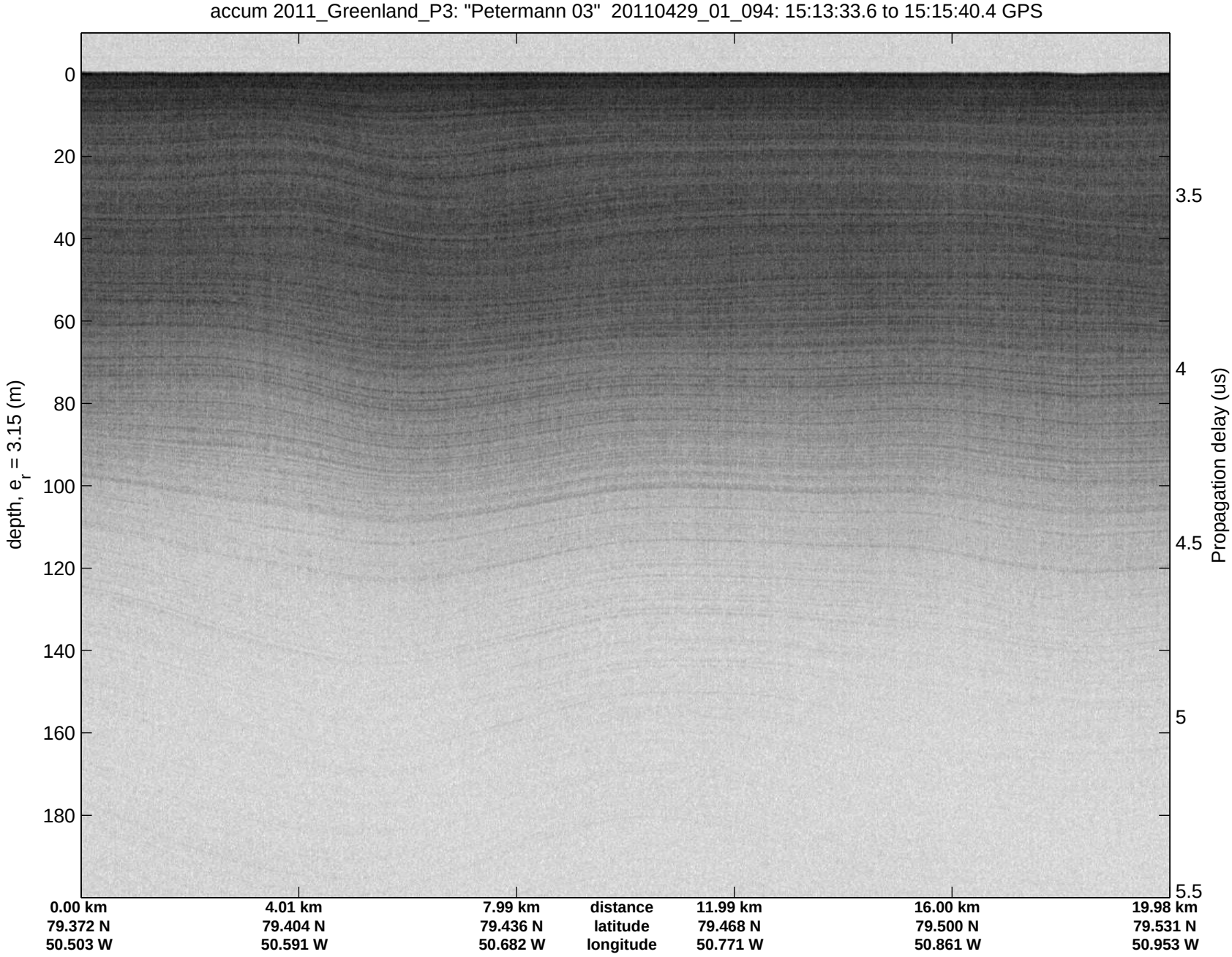

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

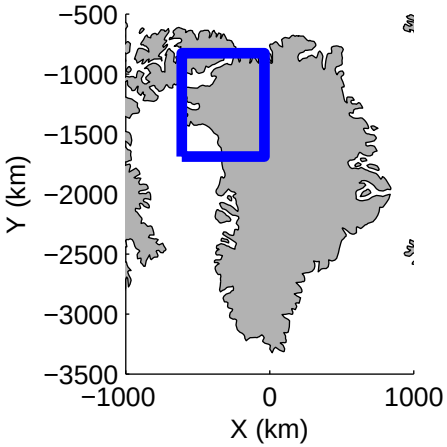

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_093: 15:11:21.7 to 15:13:33.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.213 N
50.066 W
4.00 km
79.245 N
50.153 W
7.99 km
79.277 N
50.239 W
distance
latitude
longitude
12.00 km
79.309 N
50.326 W
15.99 km
79.340 N
50.415 W
19.97 km
79.372 N
50.503 W

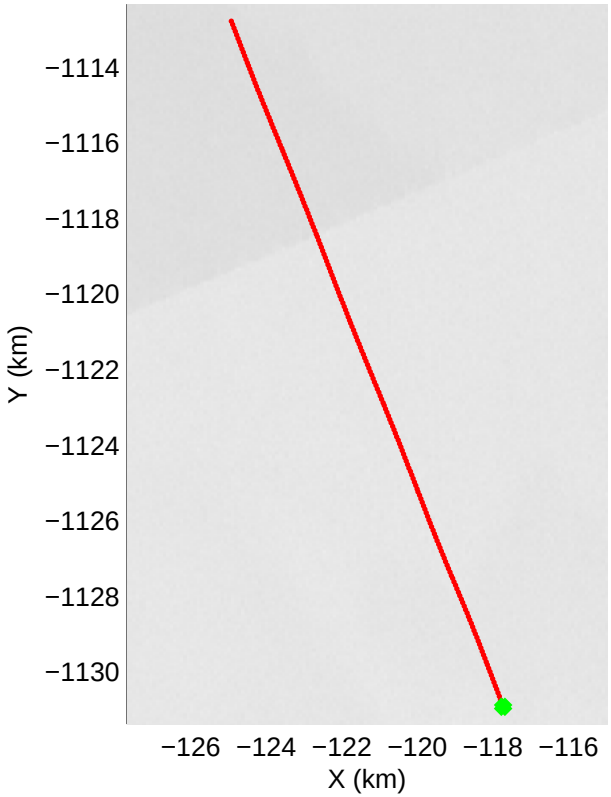

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

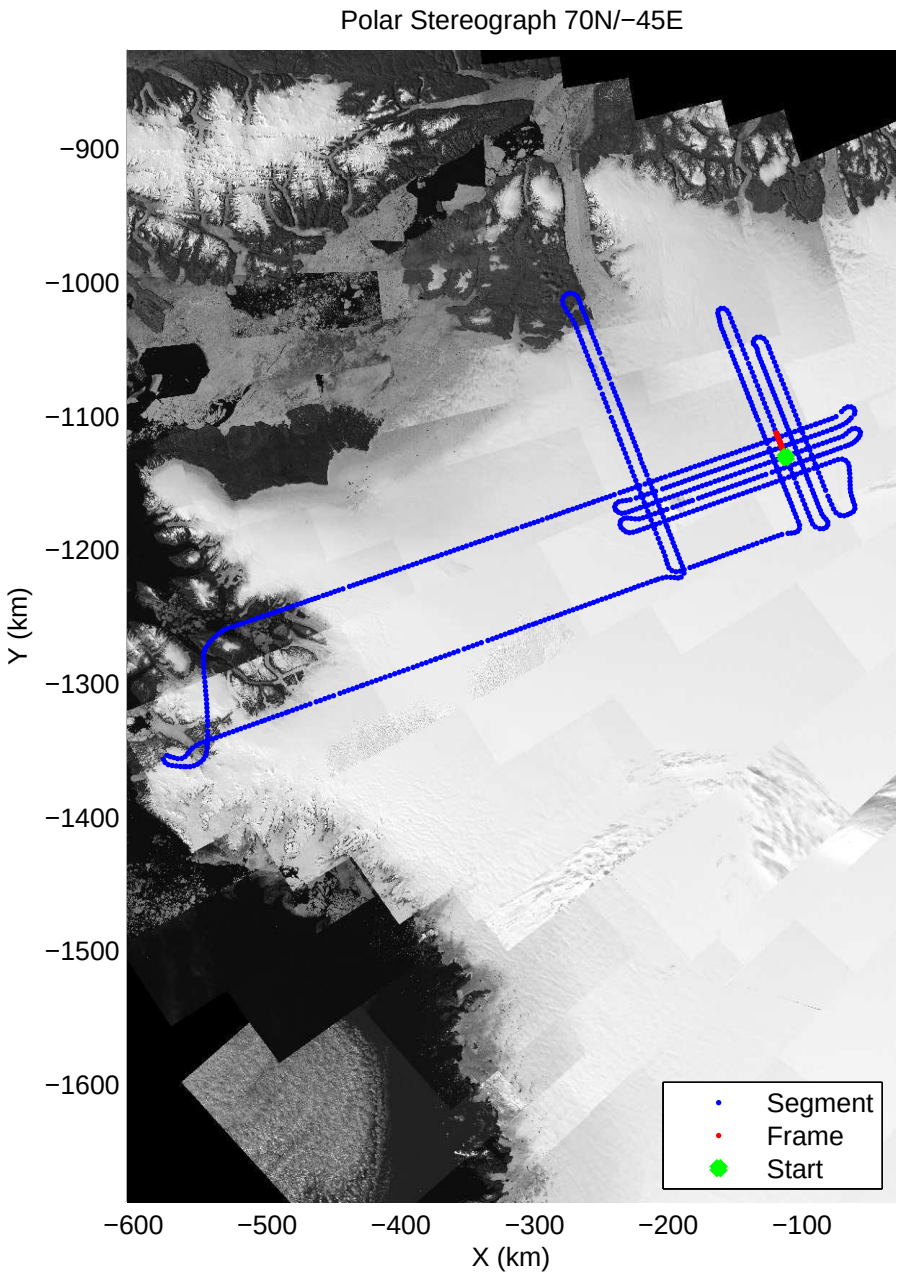

−1132
−1134
−1136
−1138
−1140
−1142
−1144
−1146
−1148
Y (km)
−120
−115
−110
X (km)

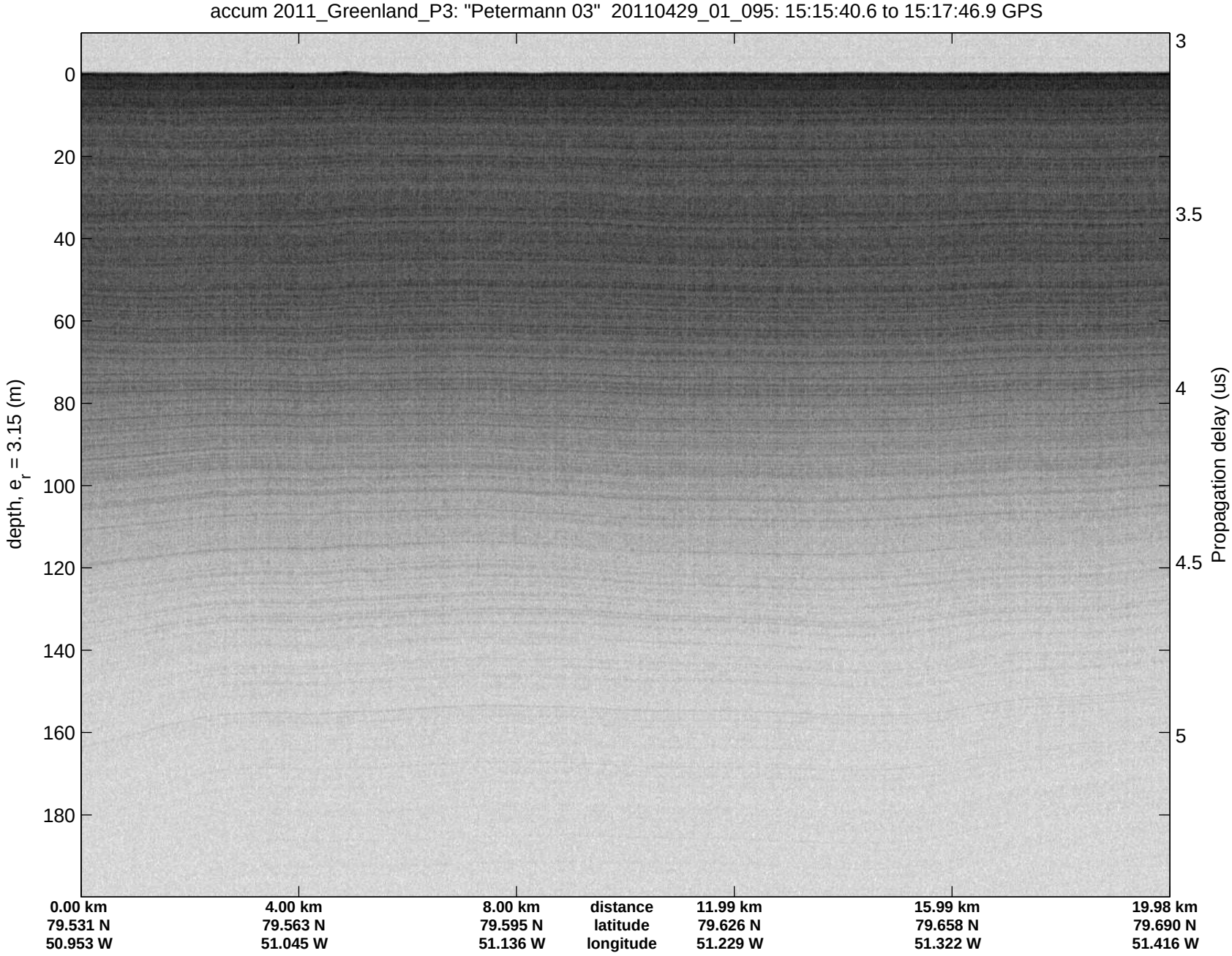

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

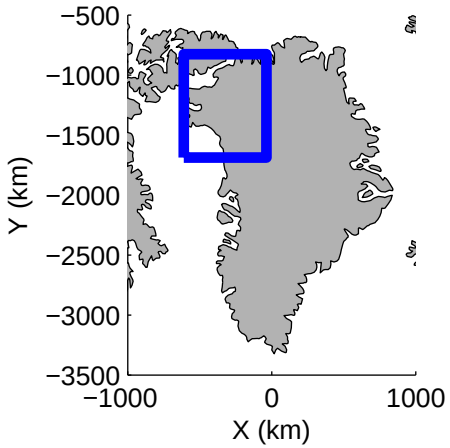

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_094: 15:13:33.6 to 15:15:40.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.372 N
50.503 W
4.01 km
79.404 N
50.591 W
7.99 km
79.436 N
50.682 W
distance
latitude
longitude
11.99 km
79.468 N
50.771 W
16.00 km
79.500 N
50.861 W
19.98 km
79.531 N
50.953 W

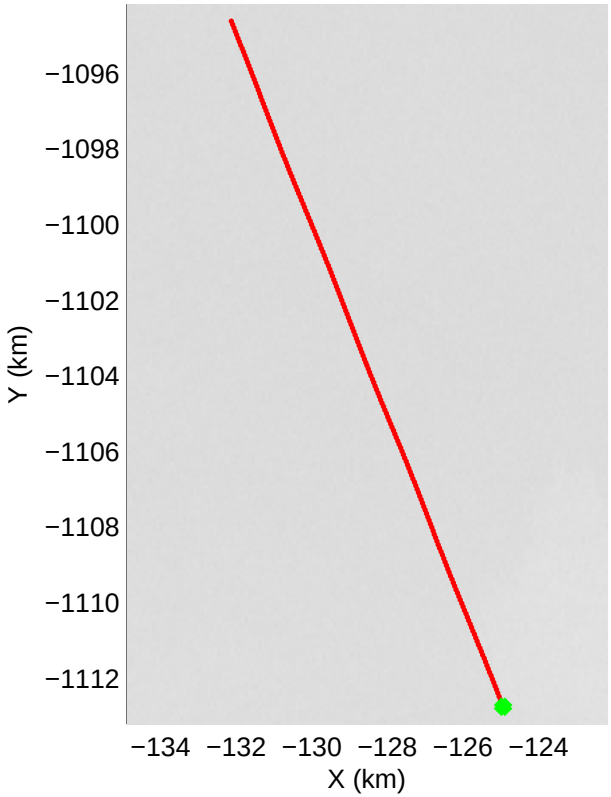

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

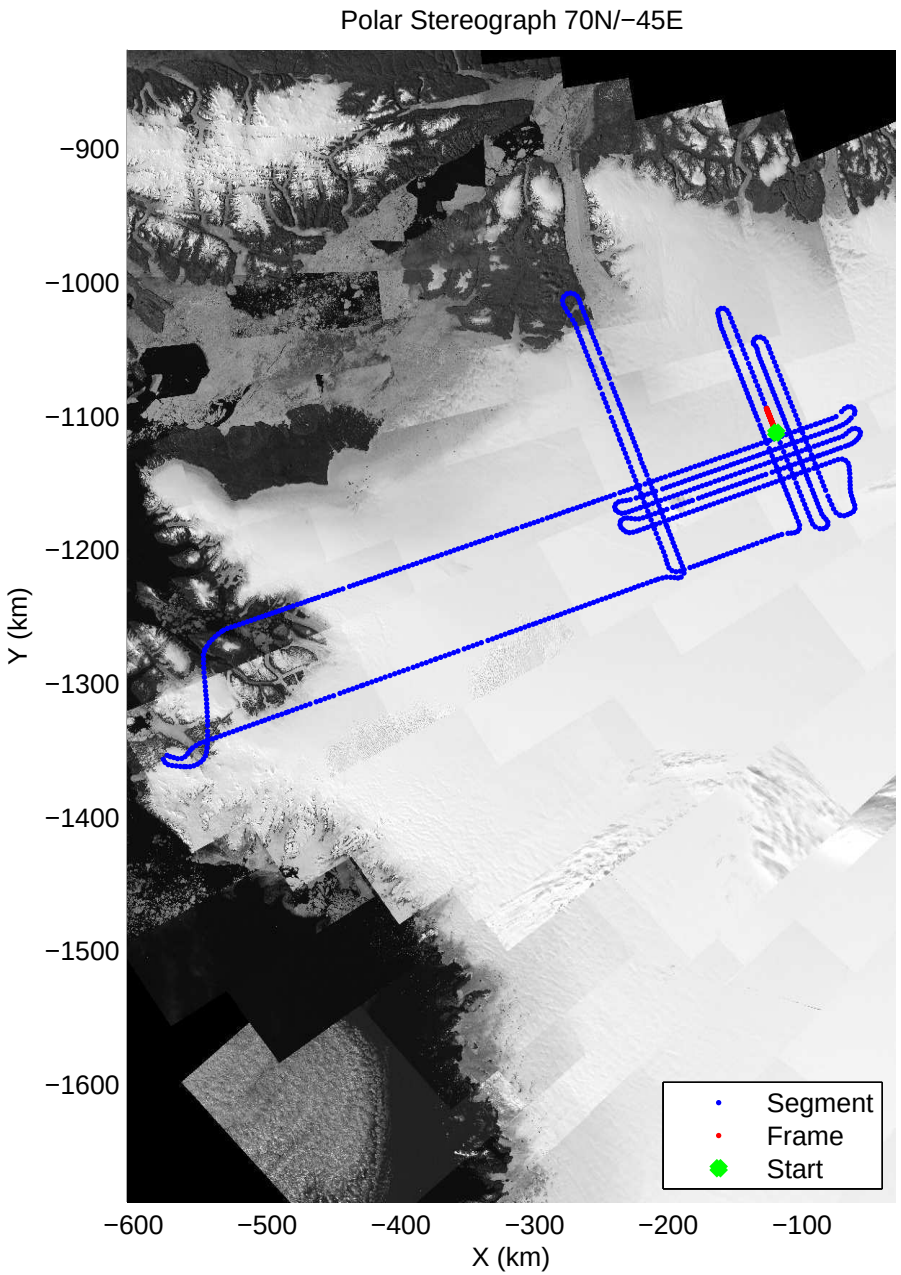

−1114
−1116
−1118
−1120
−1122
−1124
−1126
−1128
−1130
Y (km)
−126
−124
−122
−120
−118
−116
X (km)

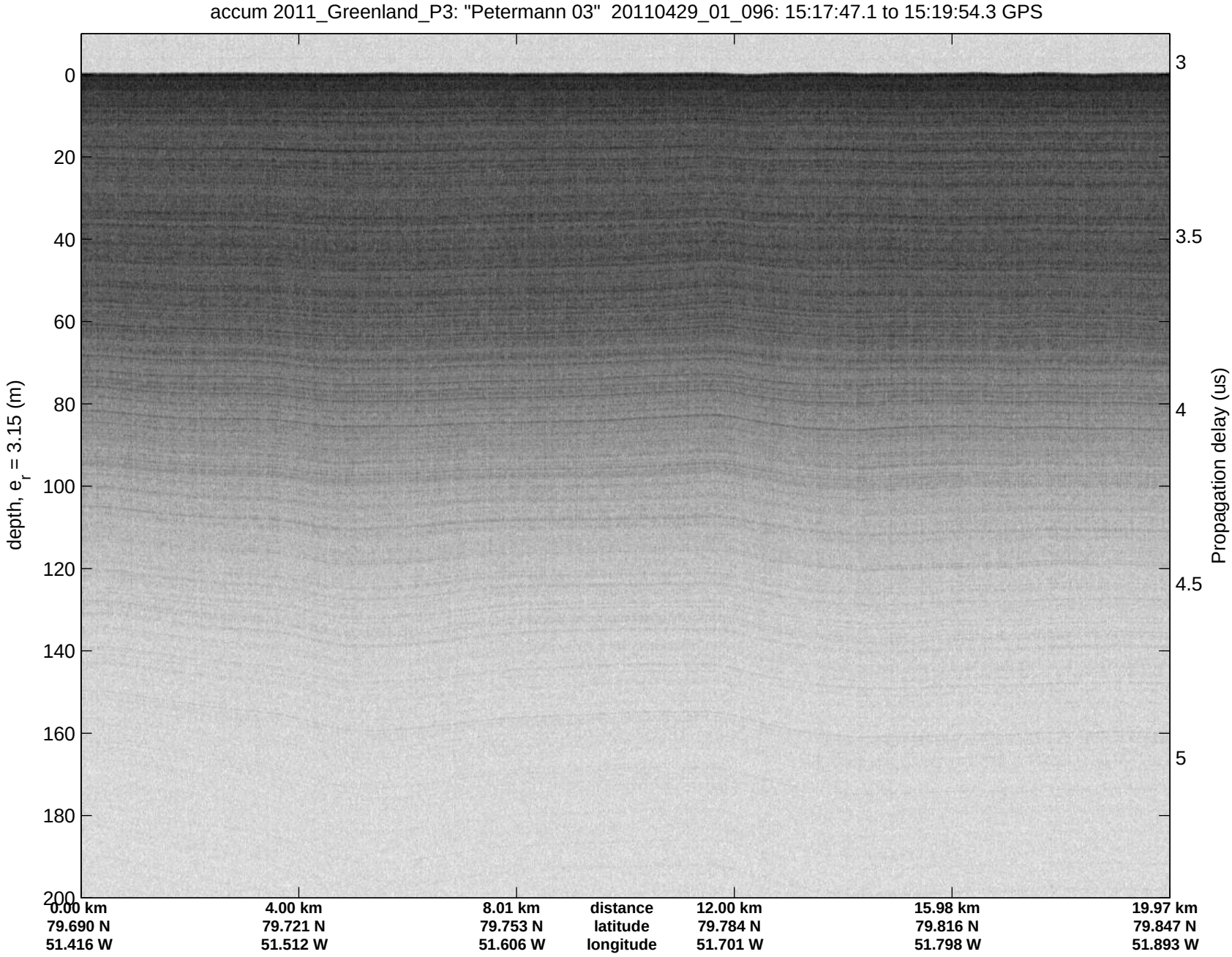

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

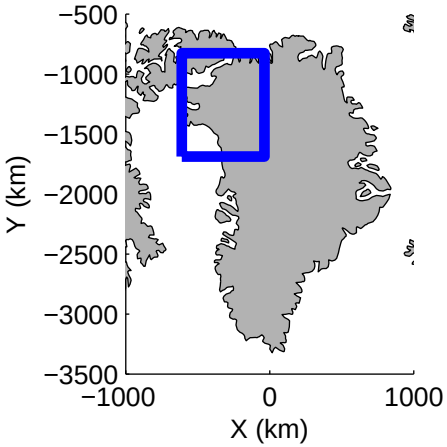

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_095: 15:15:40.6 to 15:17:46.9 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
79.531 N
50.953 W
4.00 km
79.563 N
51.045 W
8.00 km
79.595 N
51.136 W
distance
latitude
longitude
11.99 km
79.626 N
51.229 W
15.99 km
79.658 N
51.322 W
19.98 km
79.690 N
51.416 W

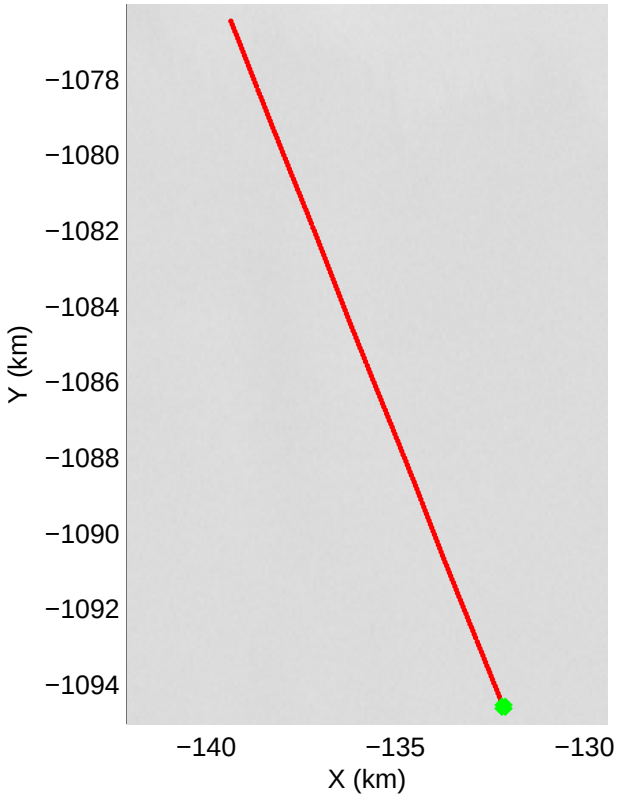

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

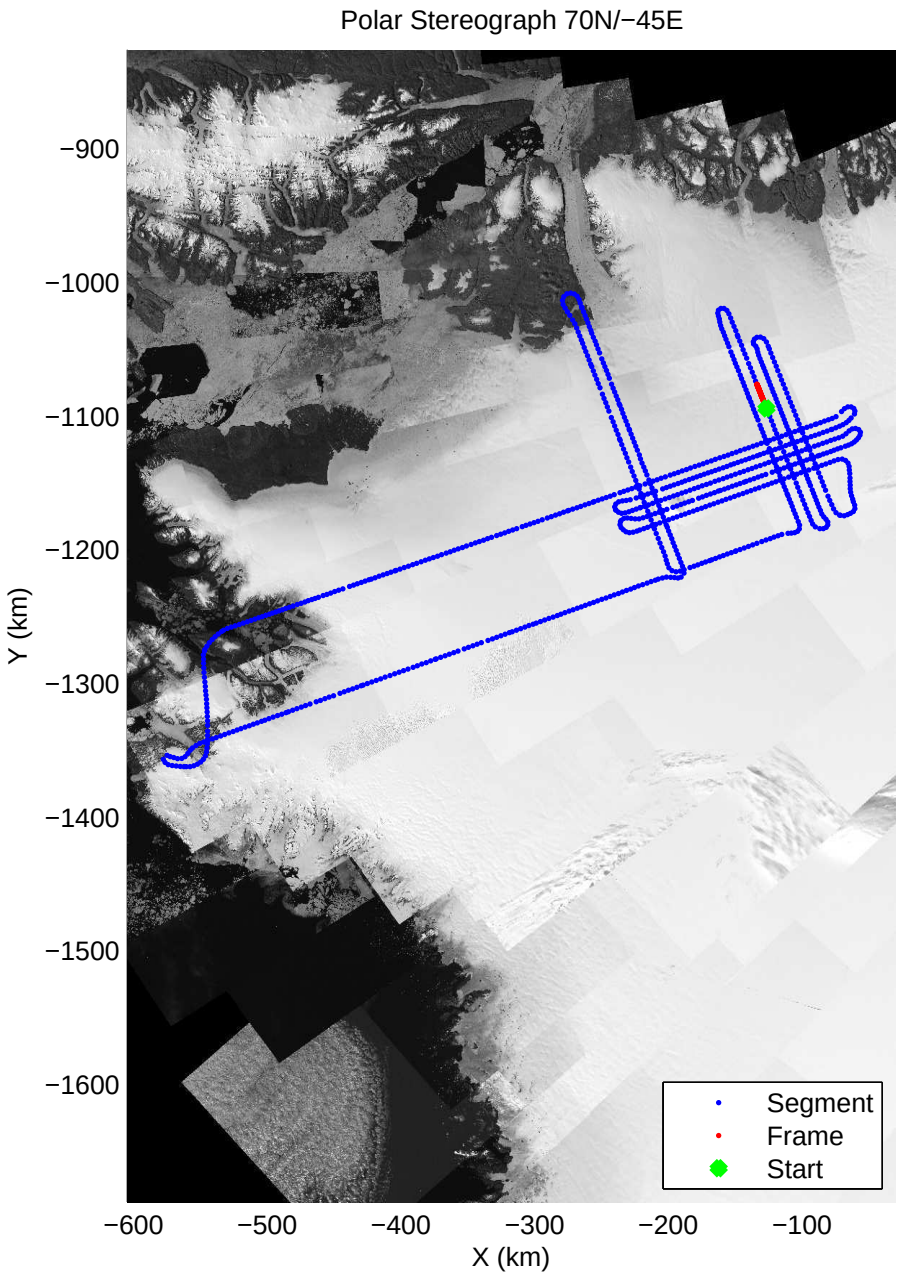

−1096
−1098
−1100
−1102
−1104
−1106
−1108
−1110
−1112
Y (km)
−134
−132
−130
−128
−126
−124
X (km)

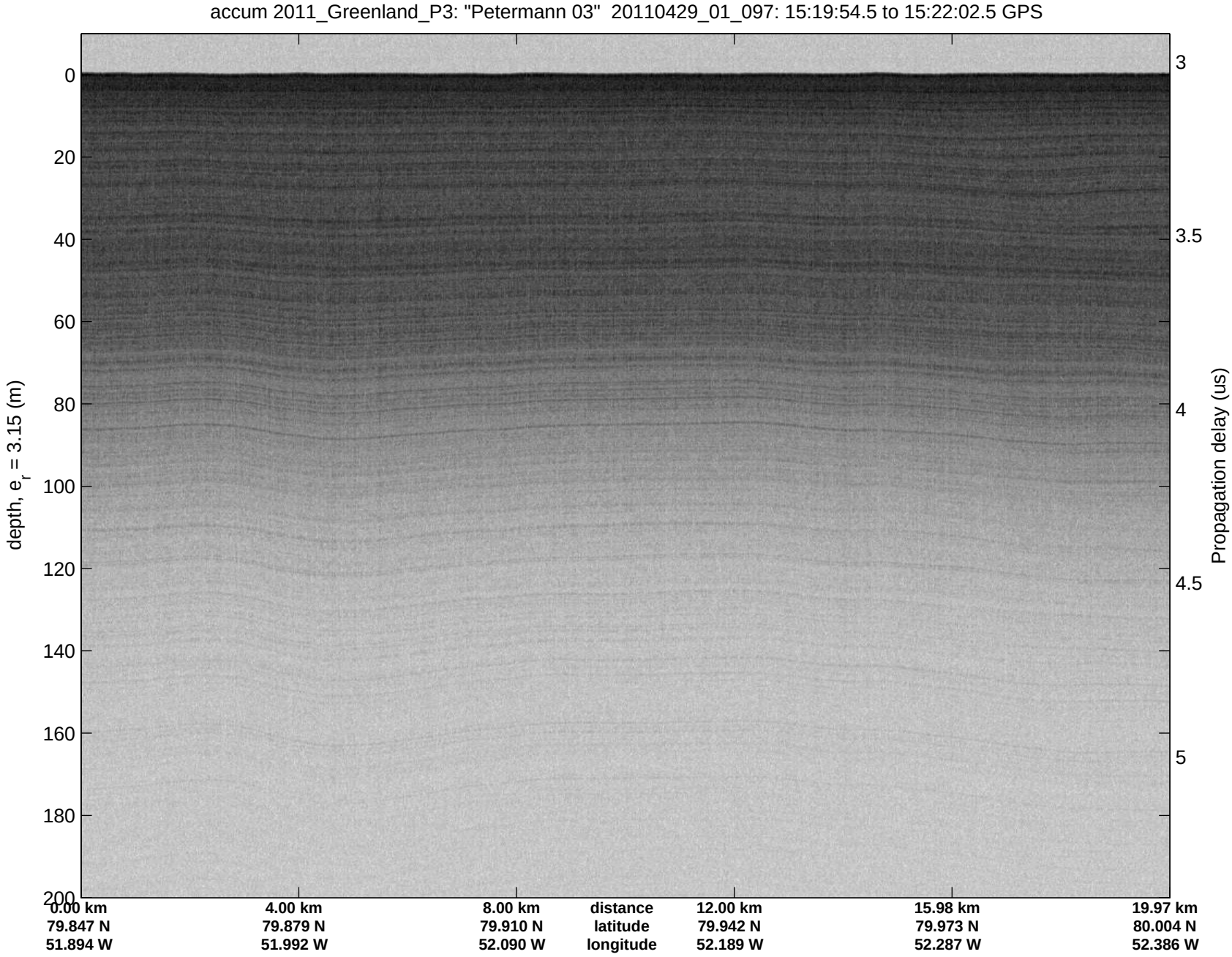

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

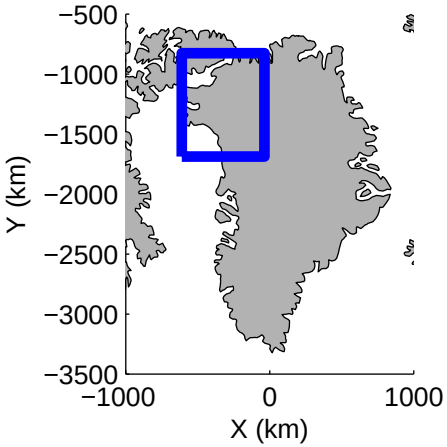

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_096: 15:17:47.1 to 15:19:54.3 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.690 N
51.416 W
4.00 km
79.721 N
51.512 W
8.01 km
79.753 N
51.606 W
distance
latitude
longitude
12.00 km
79.784 N
51.701 W
15.98 km
79.816 N
51.798 W
19.97 km
79.847 N
51.893 W

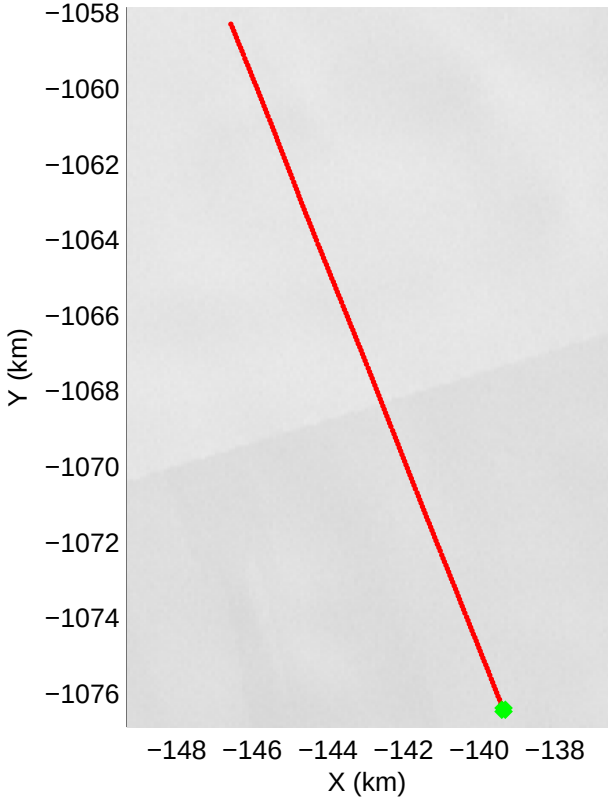

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

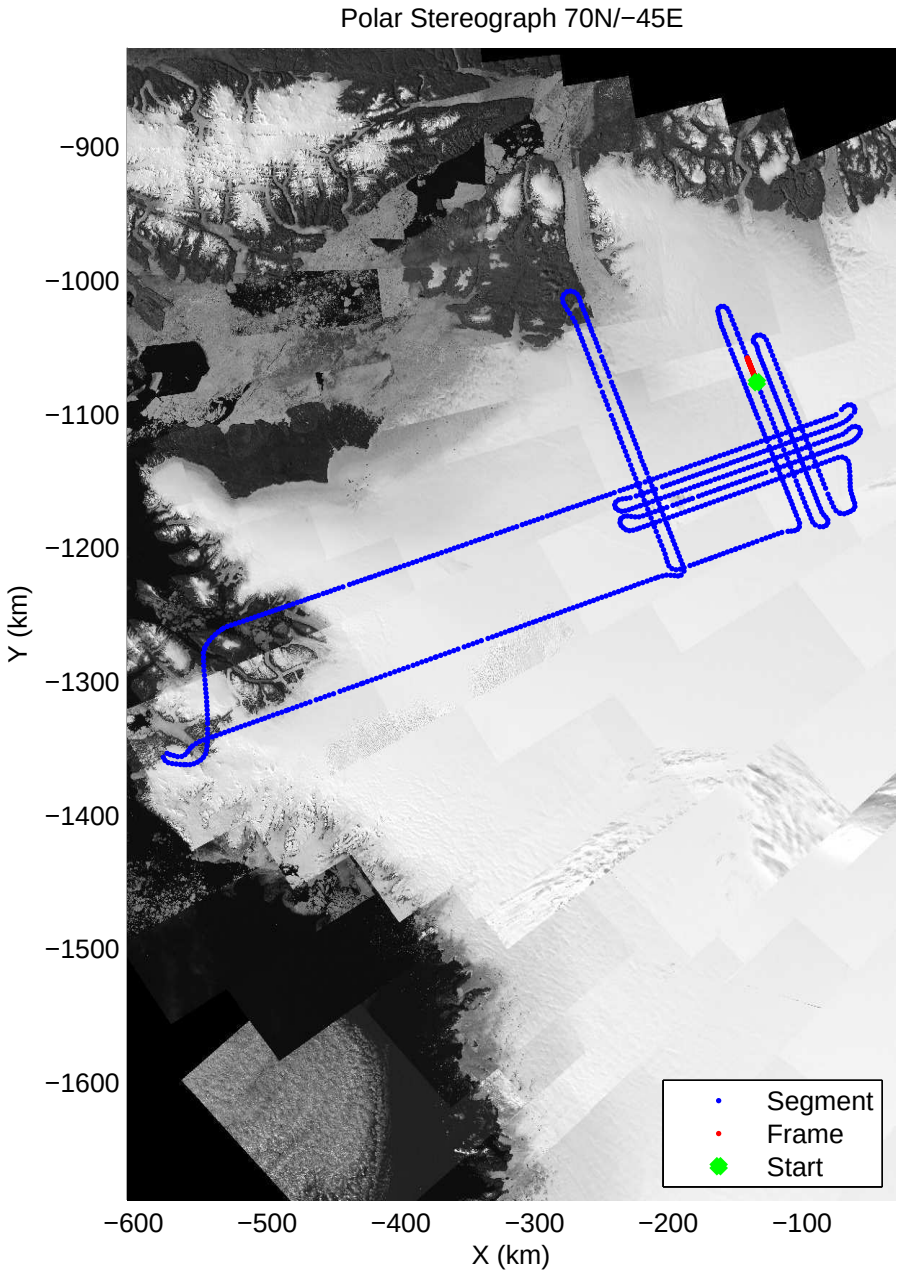

−1078
−1080
−1082
−1084
−1086
−1088
−1090
−1092
−1094
Y (km)
−140
−135
−130
X (km)

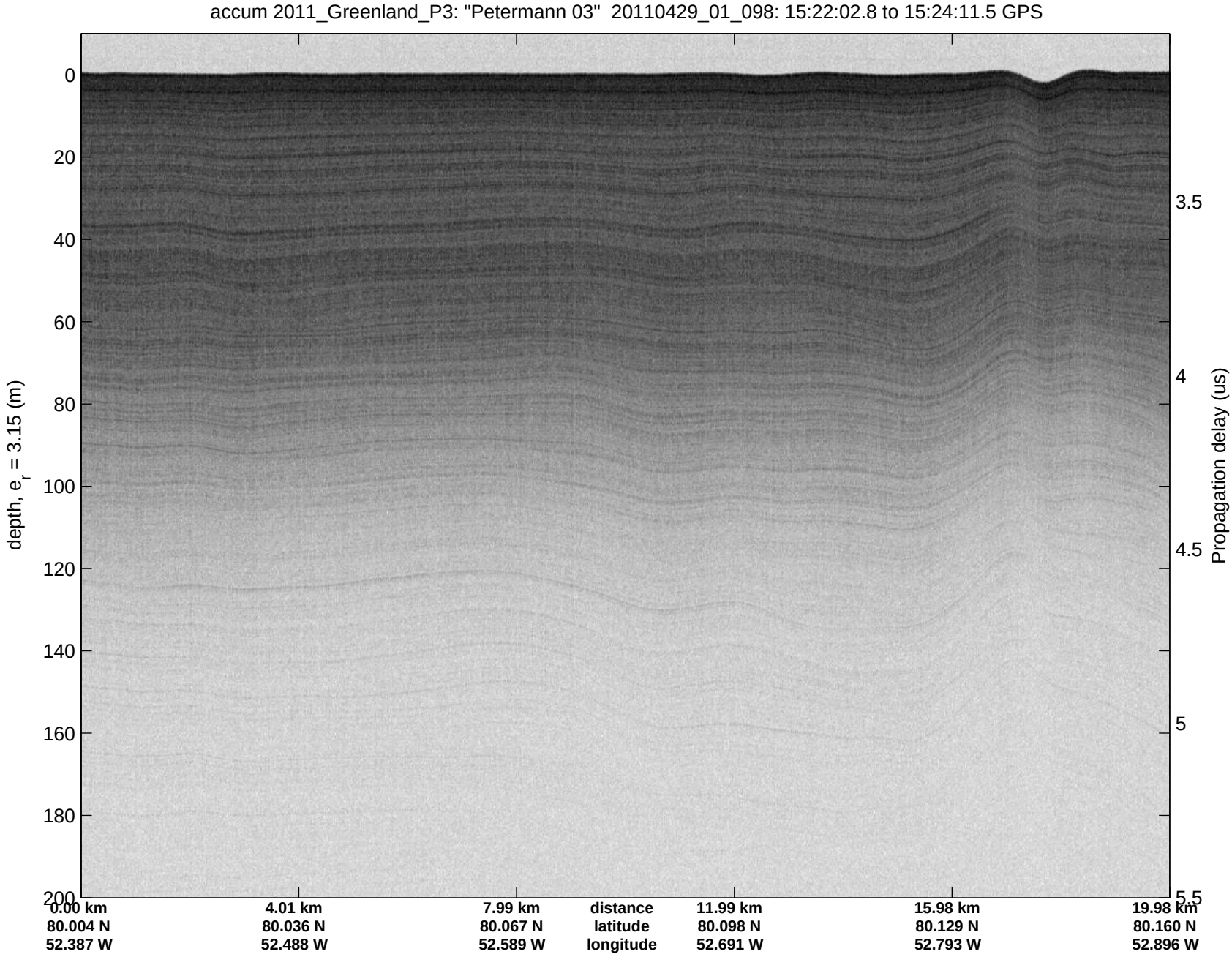

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

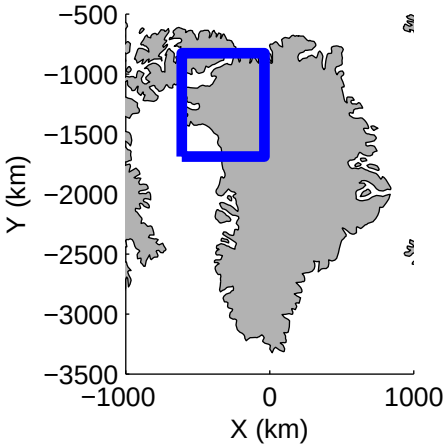

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_097: 15:19:54.5 to 15:22:02.5 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.847 N
51.894 W
4.00 km
79.879 N
51.992 W
8.00 km
79.910 N
52.090 W
distance
latitude
longitude
12.00 km
79.942 N
52.189 W
15.98 km
79.973 N
52.287 W
19.97 km
80.004 N
52.386 W

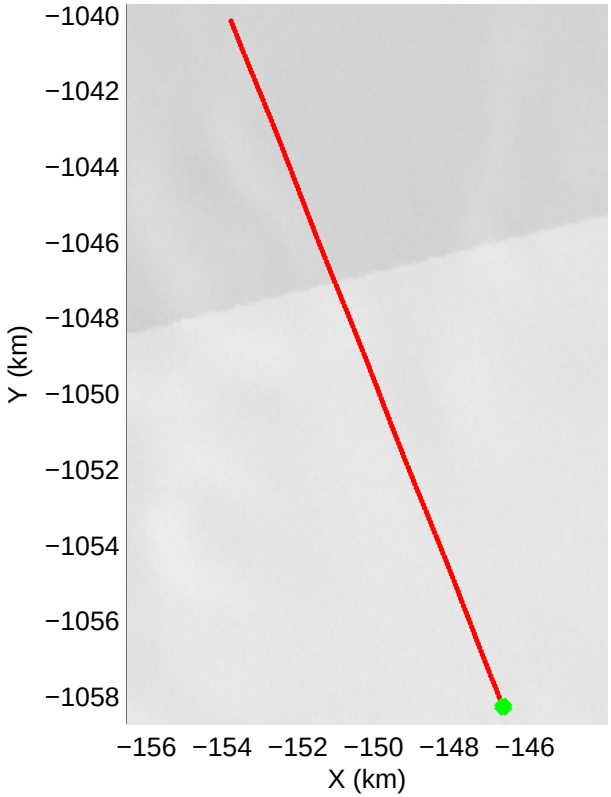

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

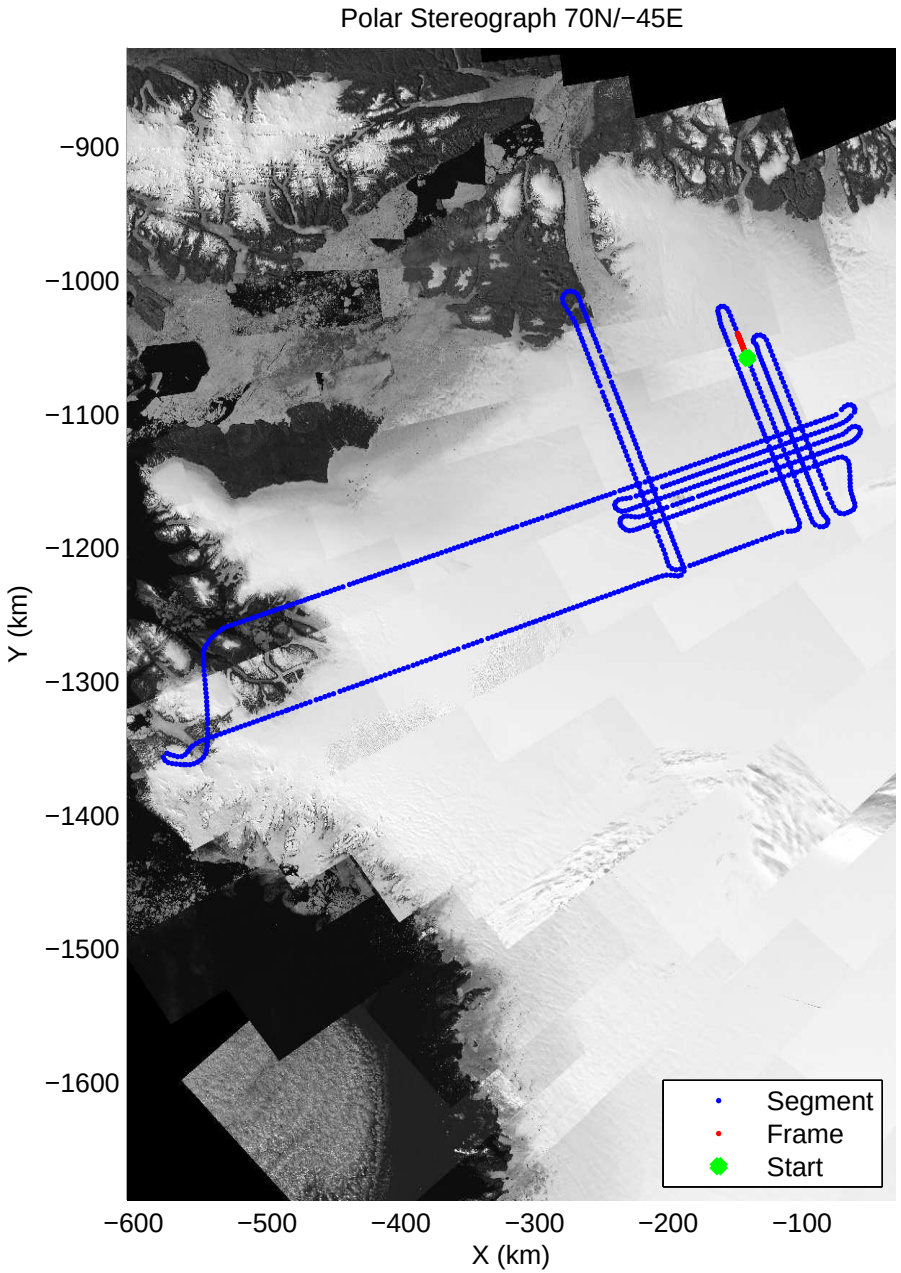

−1058
−1060
−1062
−1064
−1066
−1068
−1070
−1072
−1074
−1076
Y (km)
−148
−146
−144
−142
−140
−138
X (km)

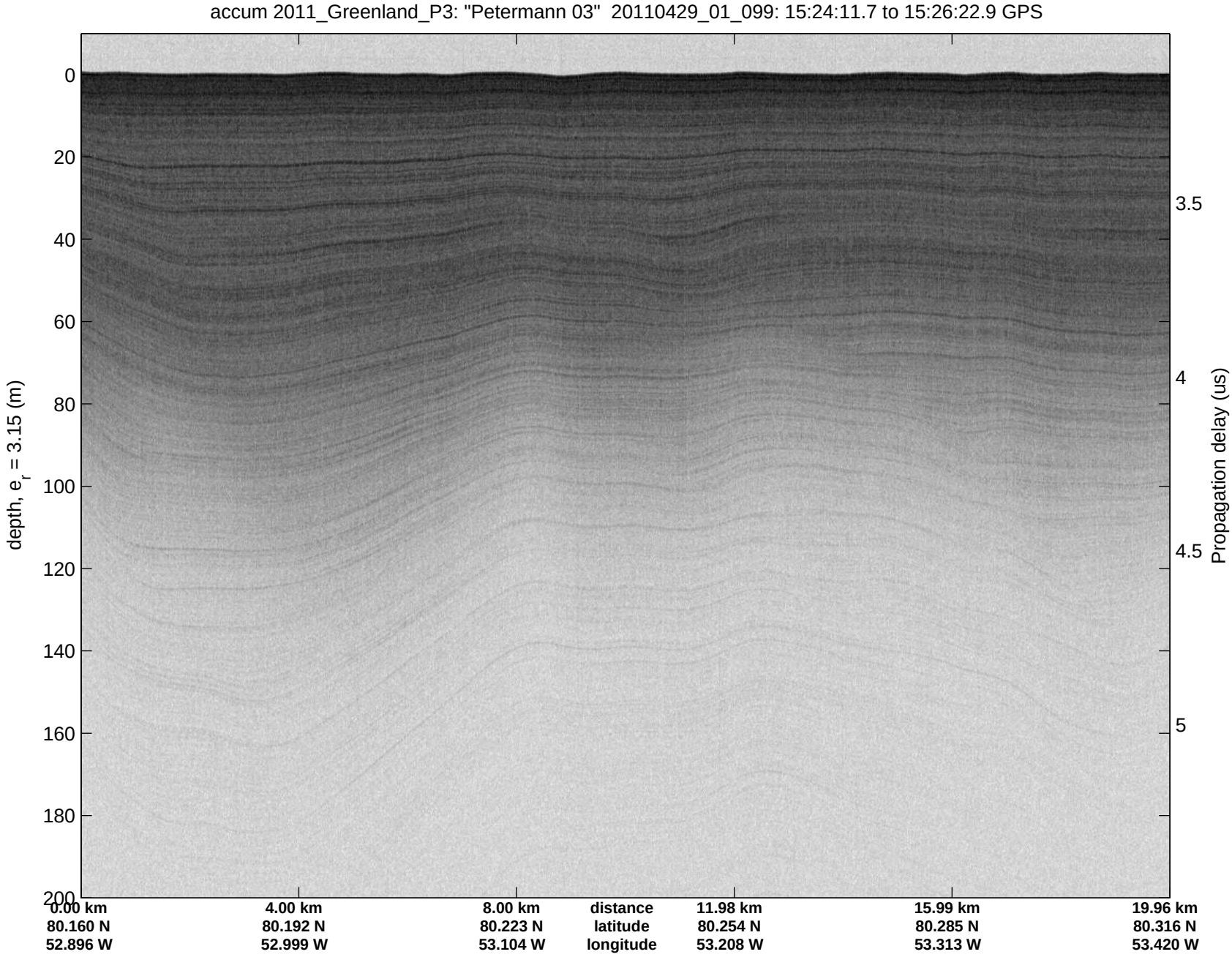

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

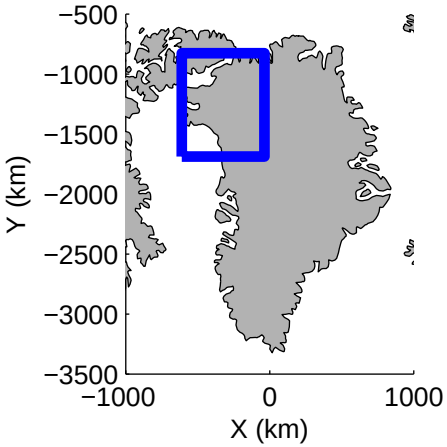

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_098: 15:22:02.8 to 15:24:11.5 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
80.004 N
52.387 W
4.01 km
80.036 N
52.488 W
7.99 km
80.067 N
52.589 W
distance
latitude
longitude
11.99 km
80.098 N
52.691 W
15.98 km
80.129 N
52.793 W
19.98 km
80.160 N
52.896 W


−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

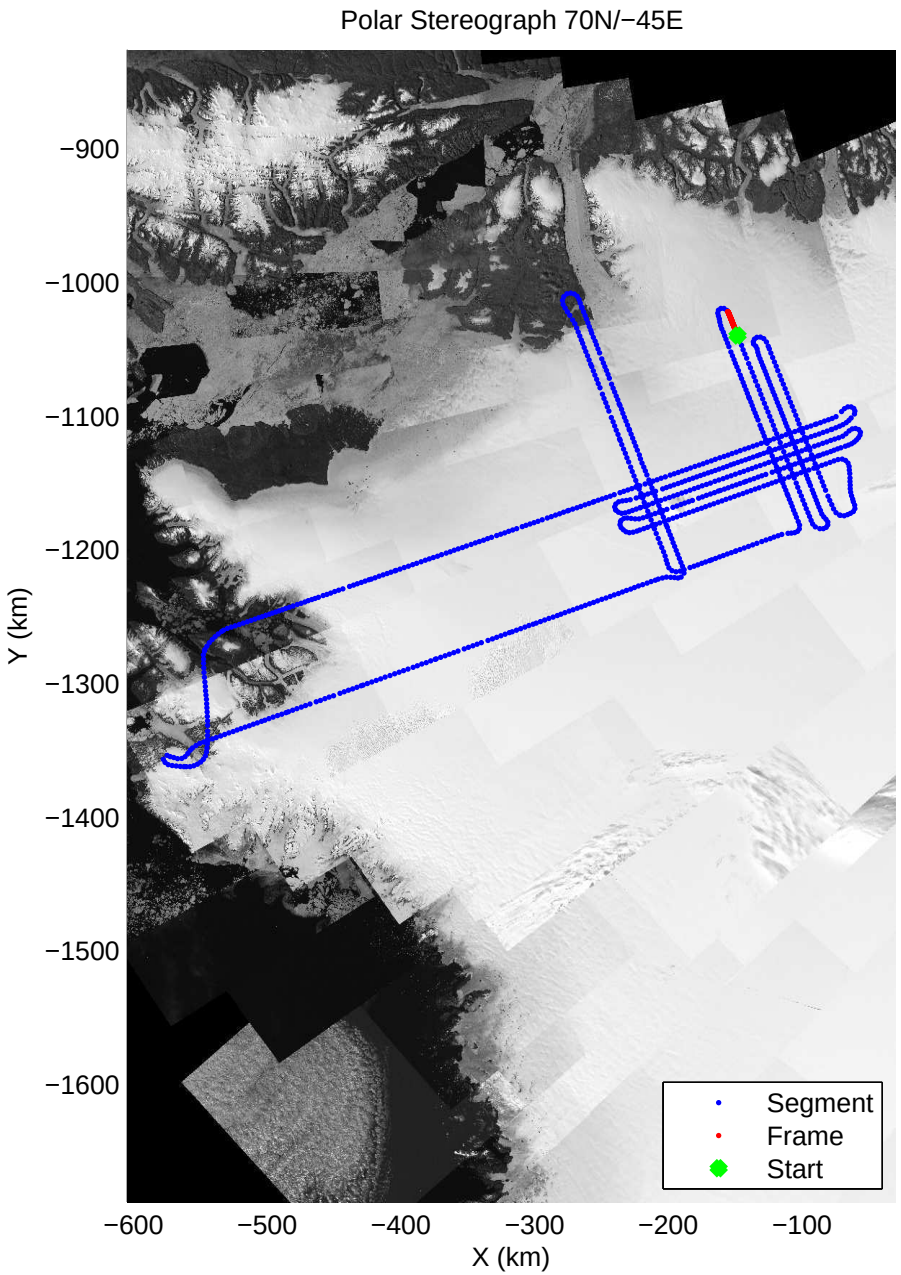

−1040
−1042
−1044
−1046
−1048
−1050
−1052
−1054
−1056
−1058
Y (km)
−156
−154
−152
−150
−148
−146
X (km)

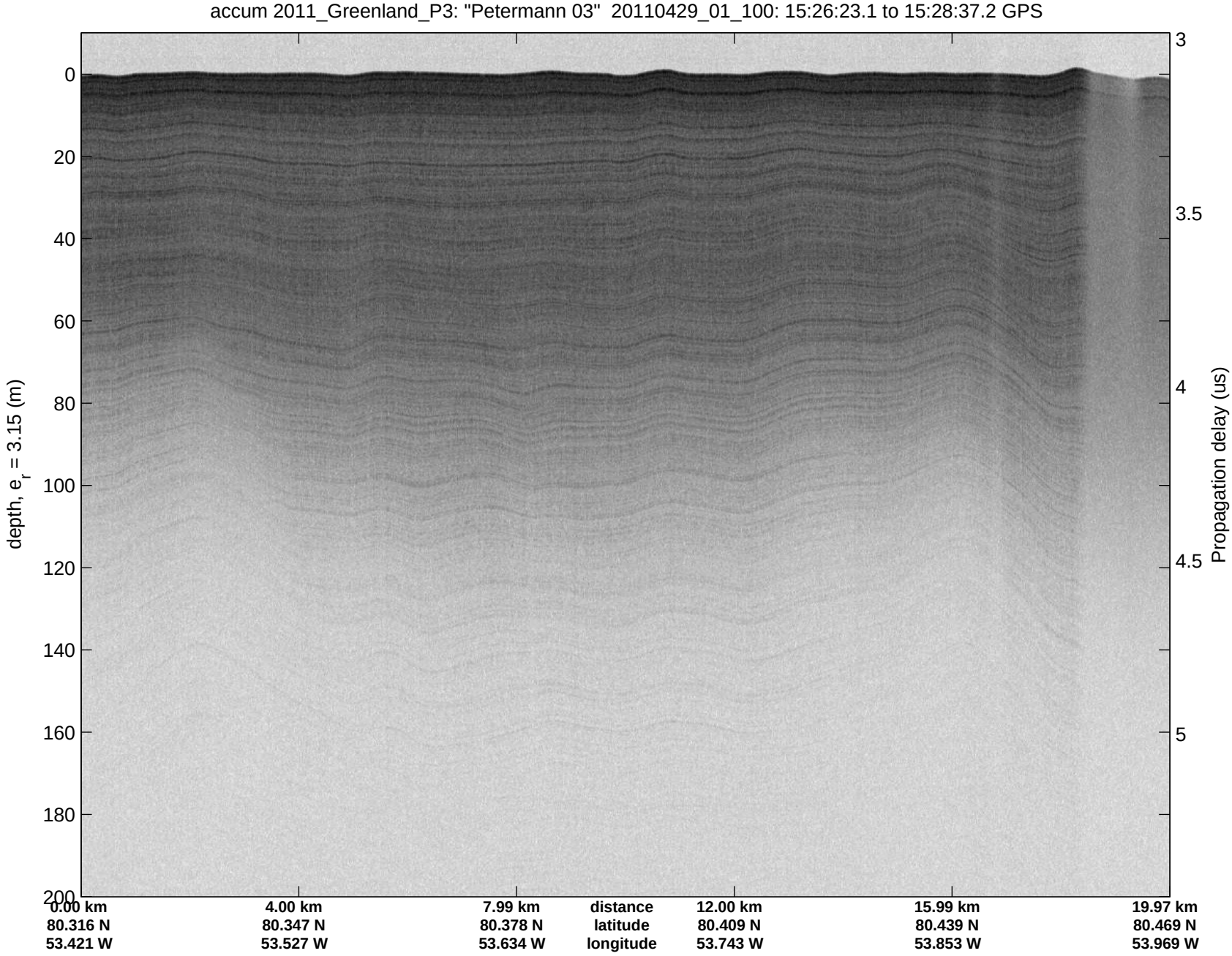

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

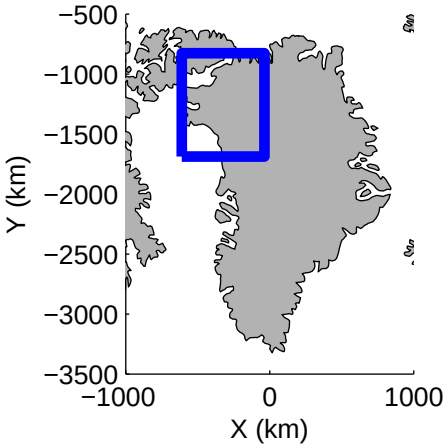

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_099: 15:24:11.7 to 15:26:22.9 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
0.00 km
80.160 N
52.896 W
4.00 km
80.192 N
52.999 W
8.00 km
80.223 N
53.104 W
distance
latitude
longitude
11.98 km
80.254 N
53.208 W
15.99 km
80.285 N
53.313 W
19.96 km
80.316 N
53.420 W

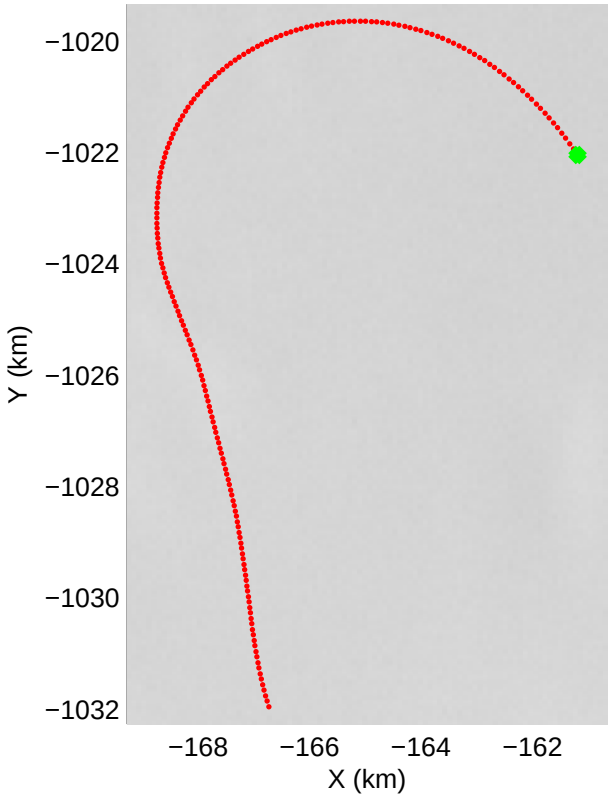

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

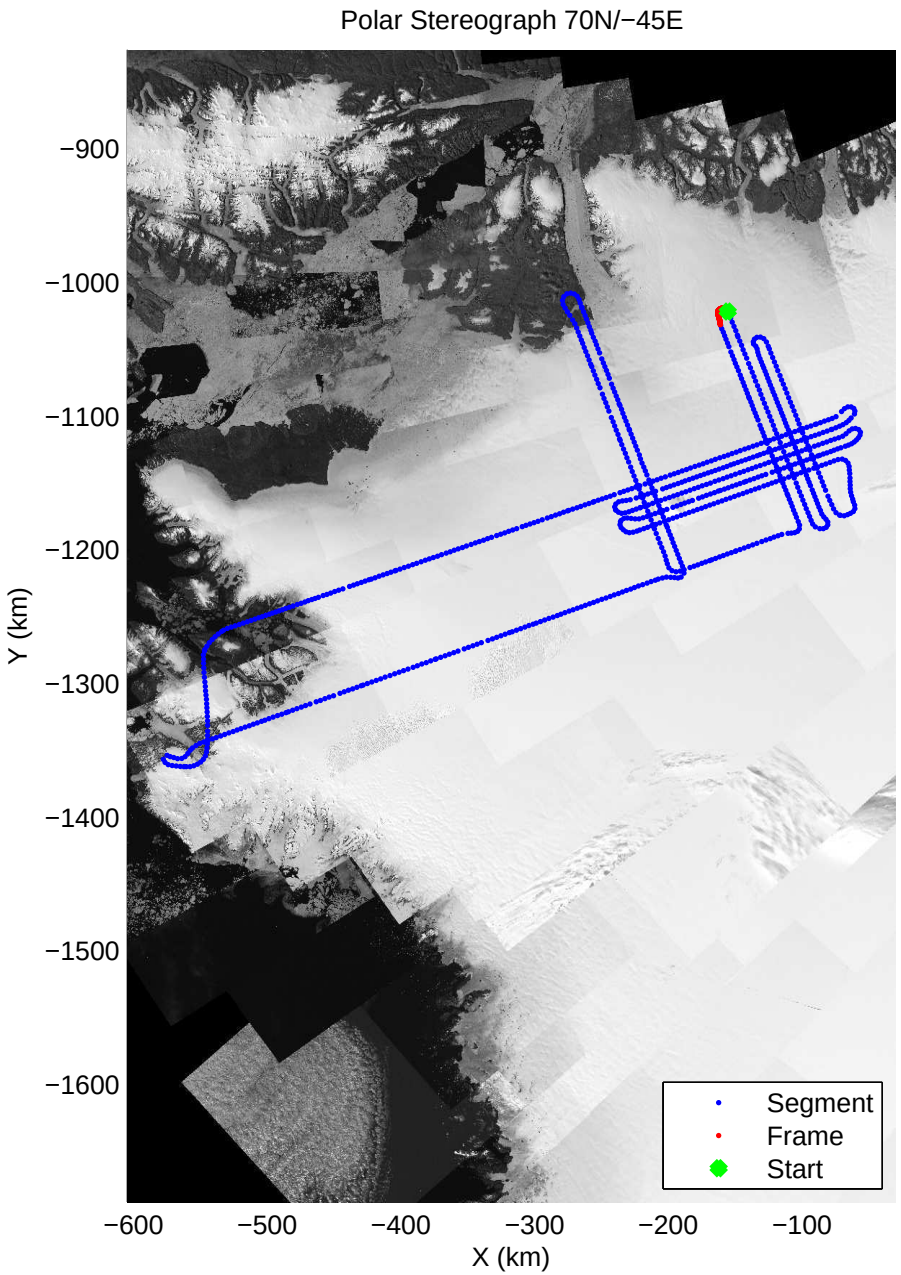
−1022
−1024
−1026
−1028
−1030
−1032
−1034
−1036
−1038
−1040
Y (km)
−162
−160
−158
−156
−154
−152
X (km)

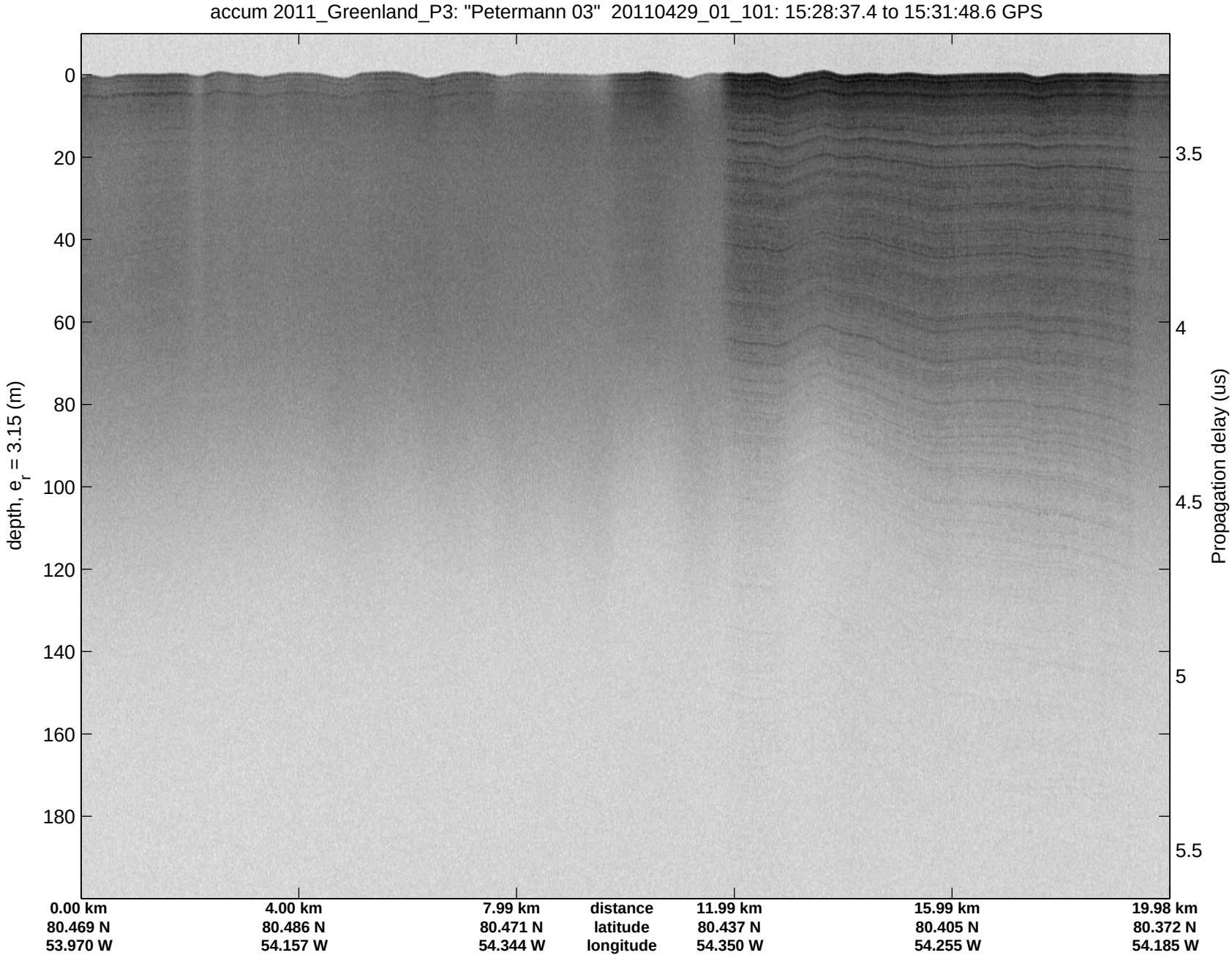

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

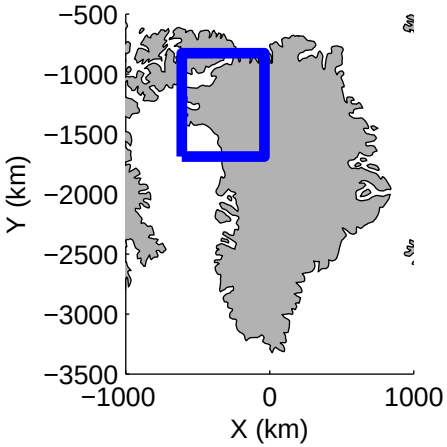

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_100: 15:26:23.1 to 15:28:37.2 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
80.316 N
53.421 W
4.00 km
80.347 N
53.527 W
7.99 km
80.378 N
53.634 W
distance
latitude
longitude
12.00 km
80.409 N
53.743 W
15.99 km
80.439 N
53.853 W
19.97 km
80.469 N
53.969 W

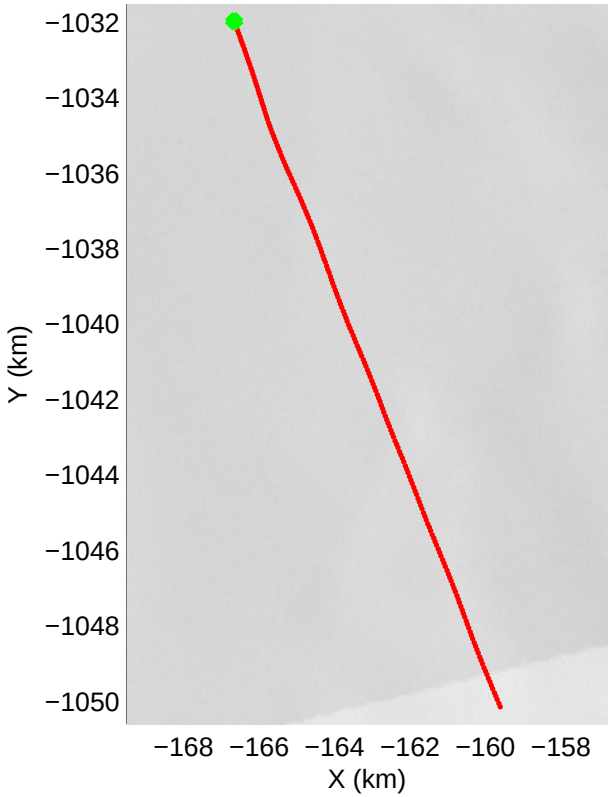

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

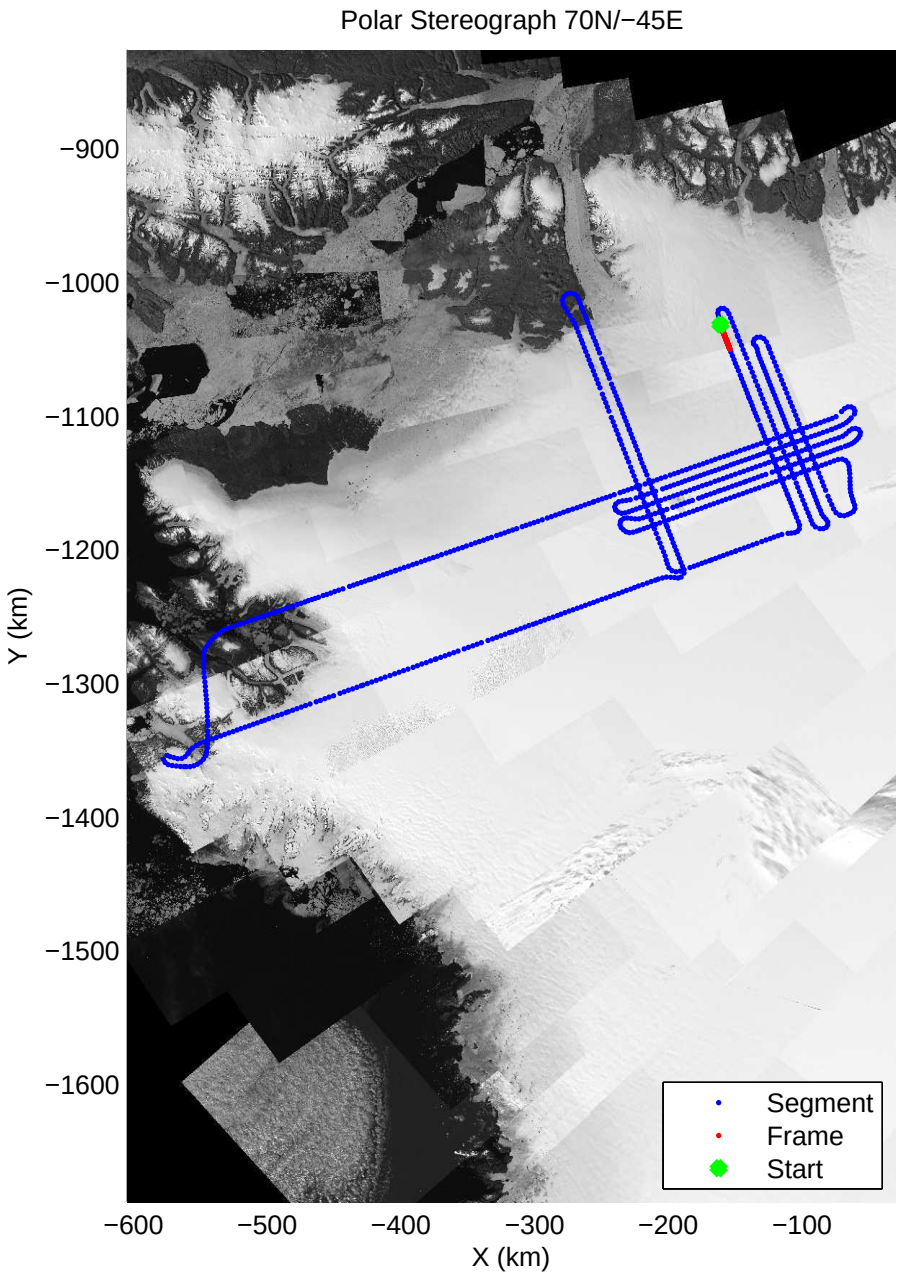

−1020
−1022
−1024
−1026
−1028
−1030
−1032
Y (km)
−168
−166
−164
−162
X (km)

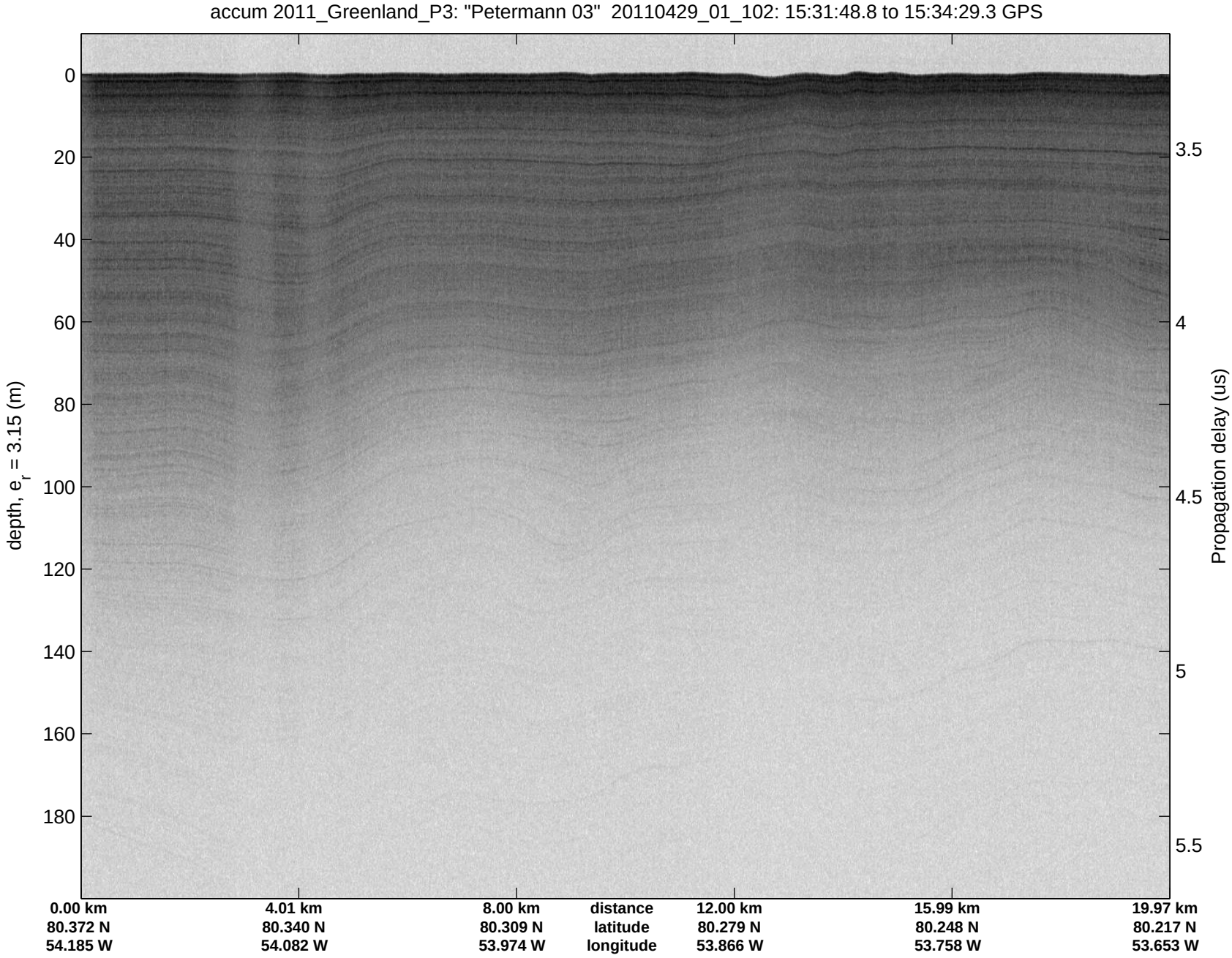

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

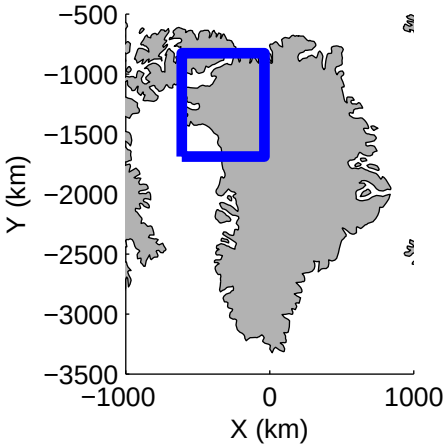

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_101: 15:28:37.4 to 15:31:48.6 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
80.469 N
53.970 W
4.00 km
80.486 N
54.157 W
7.99 km
80.471 N
54.344 W
distance
latitude
longitude
11.99 km
80.437 N
54.350 W
15.99 km
80.405 N
54.255 W
19.98 km
80.372 N
54.185 W


−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

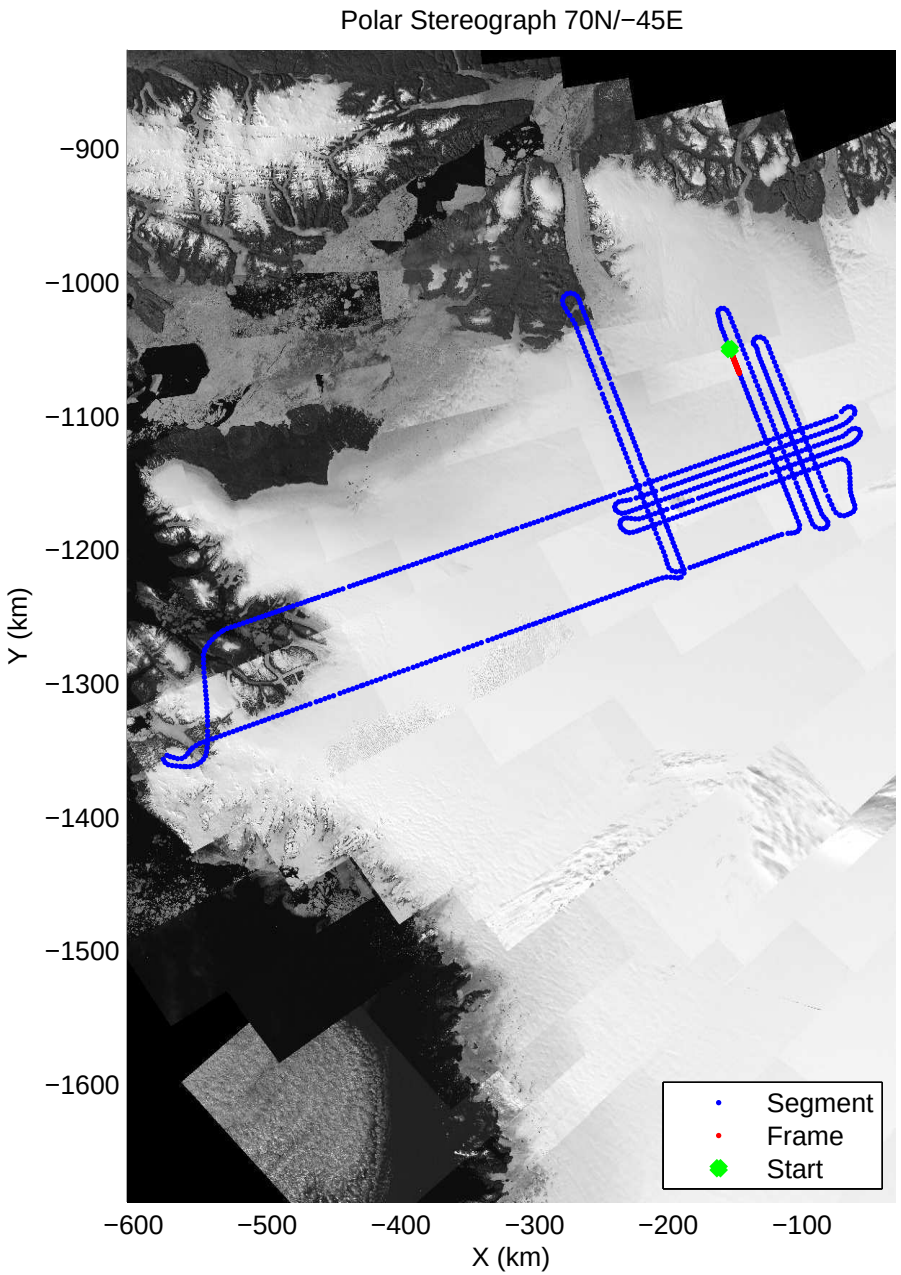

−1032
−1034
−1036
−1038
−1040
−1042
−1044
−1046
−1048
−1050
Y (km)
−168
−166
−164
−162
−160
−158
X (km)

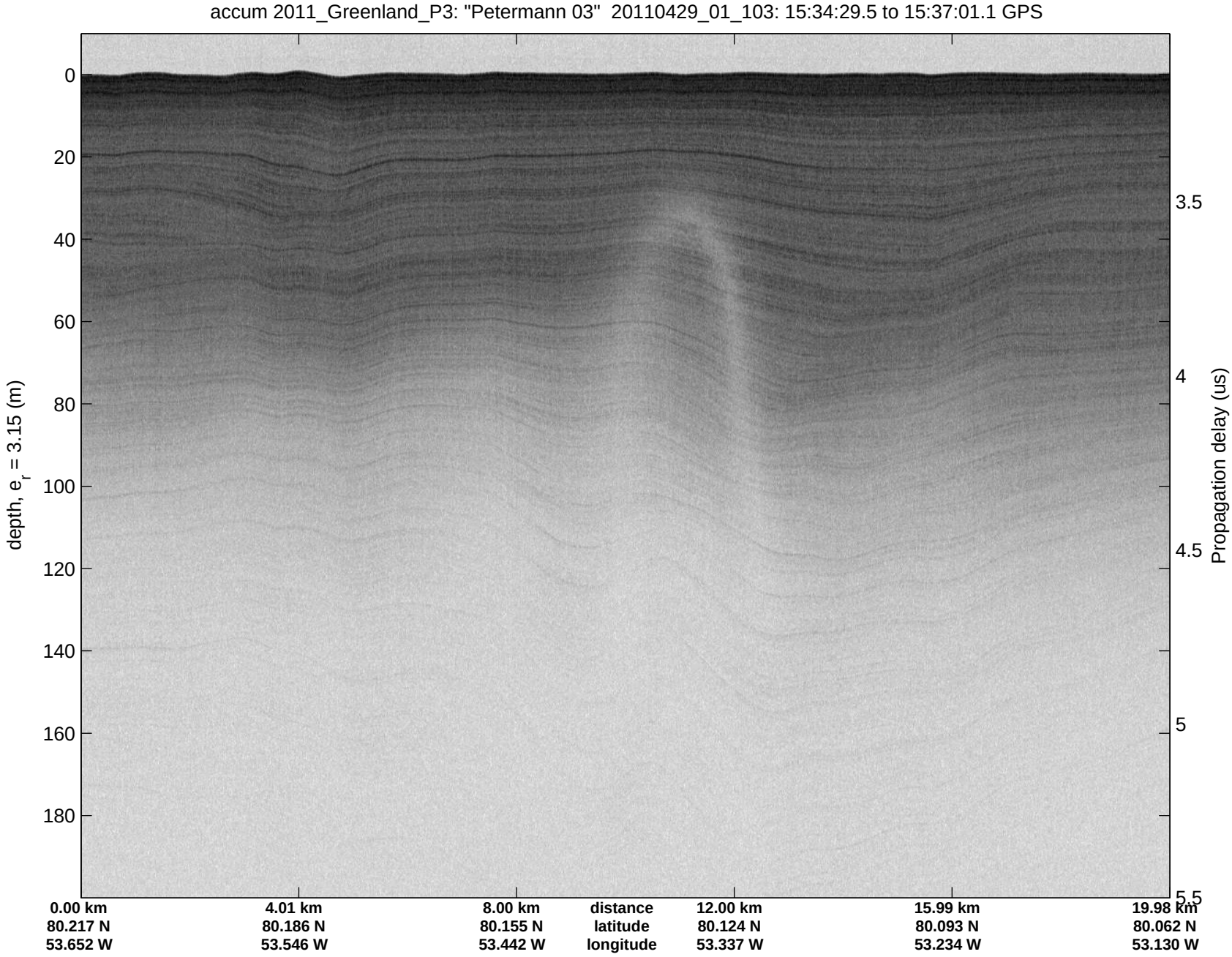

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

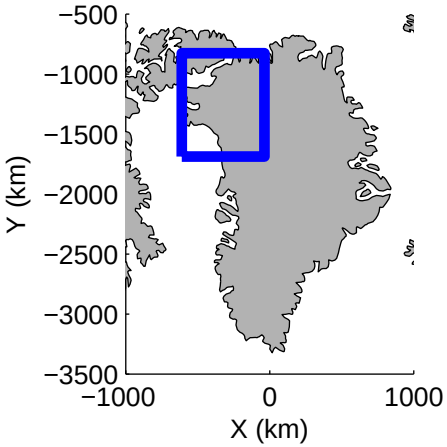

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_102: 15:31:48.8 to 15:34:29.3 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
80.372 N
54.185 W
4.01 km
80.340 N
54.082 W
8.00 km
80.309 N
53.974 W
distance
latitude
longitude
12.00 km
80.279 N
53.866 W
15.99 km
80.248 N
53.758 W
19.97 km
80.217 N
53.653 W

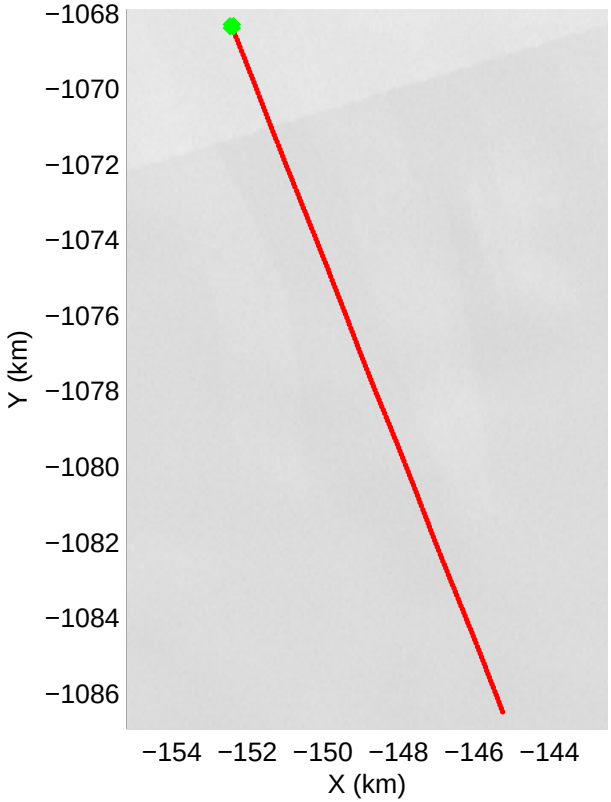

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

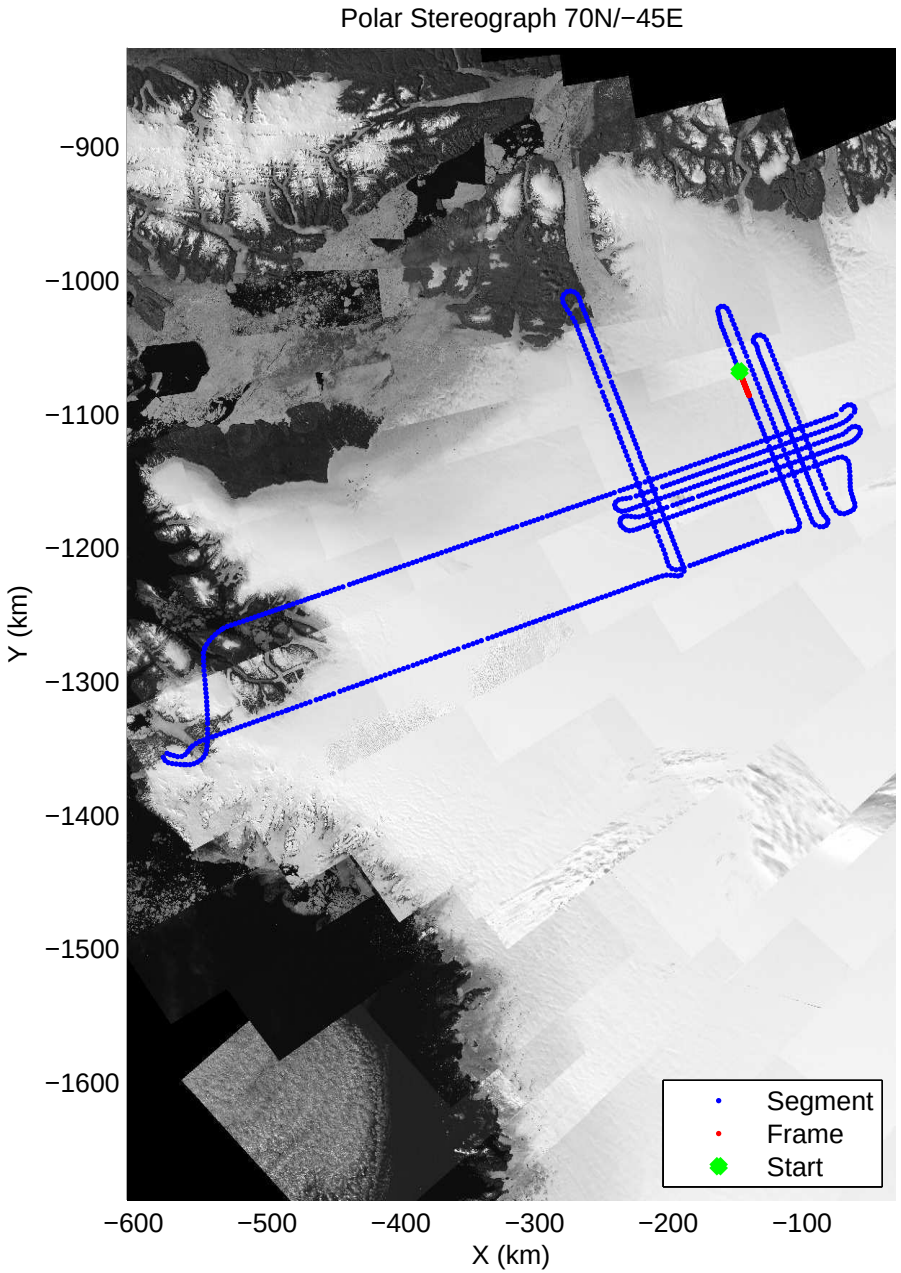
−1050
−1052
−1054
−1056
−1058
−1060
−1062
−1064
−1066
−1068
Y (km)
−160
−155
−150
X (km)

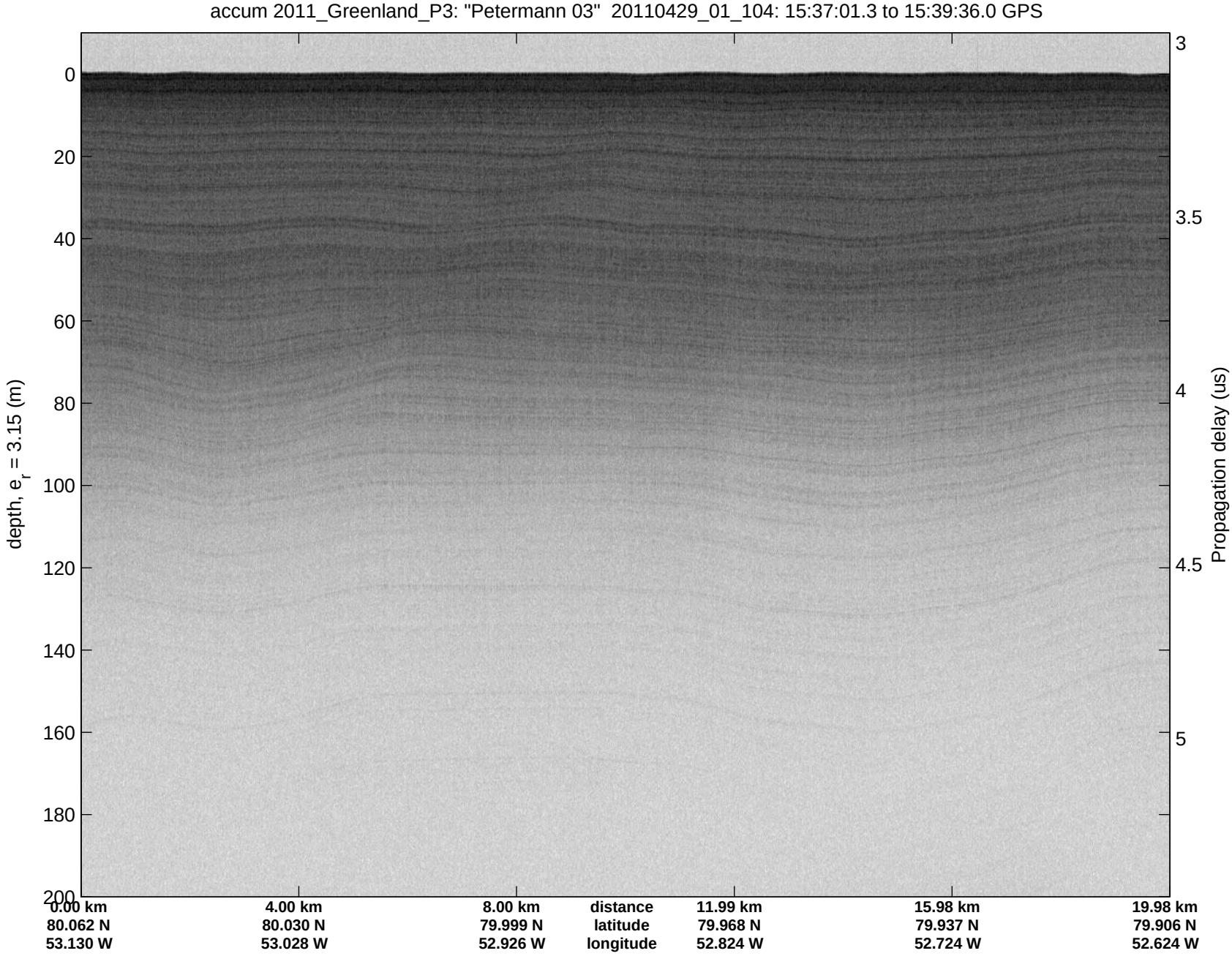

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

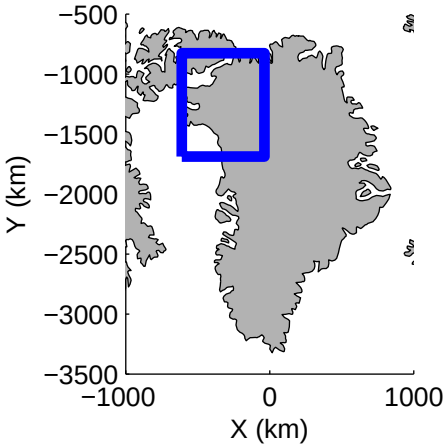

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_103: 15:34:29.5 to 15:37:01.1 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
80.217 N
53.652 W
4.01 km
80.186 N
53.546 W
8.00 km
80.155 N
53.442 W
distance
latitude
longitude
12.00 km
80.124 N
53.337 W
15.99 km
80.093 N
53.234 W
19.98 km
80.062 N
53.130 W

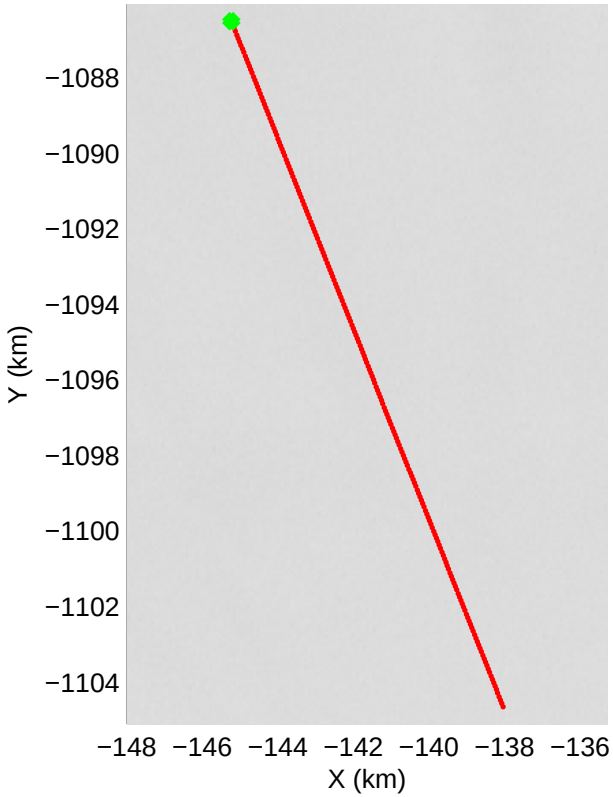

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

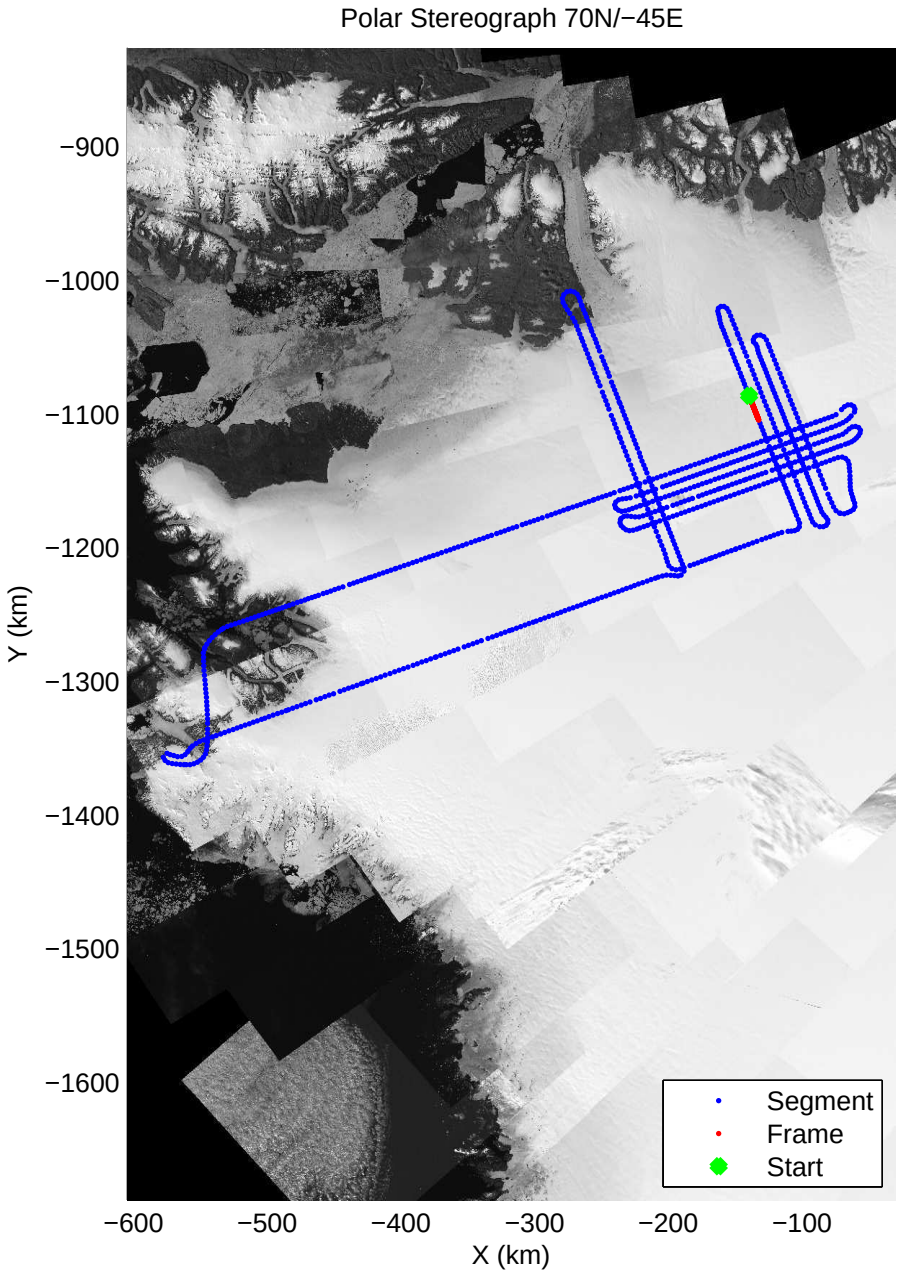

−1068
−1070
−1072
−1074
−1076
−1078
−1080
−1082
−1084
−1086
Y (km)
−154
−152
−150
−148
−146
−144
X (km)

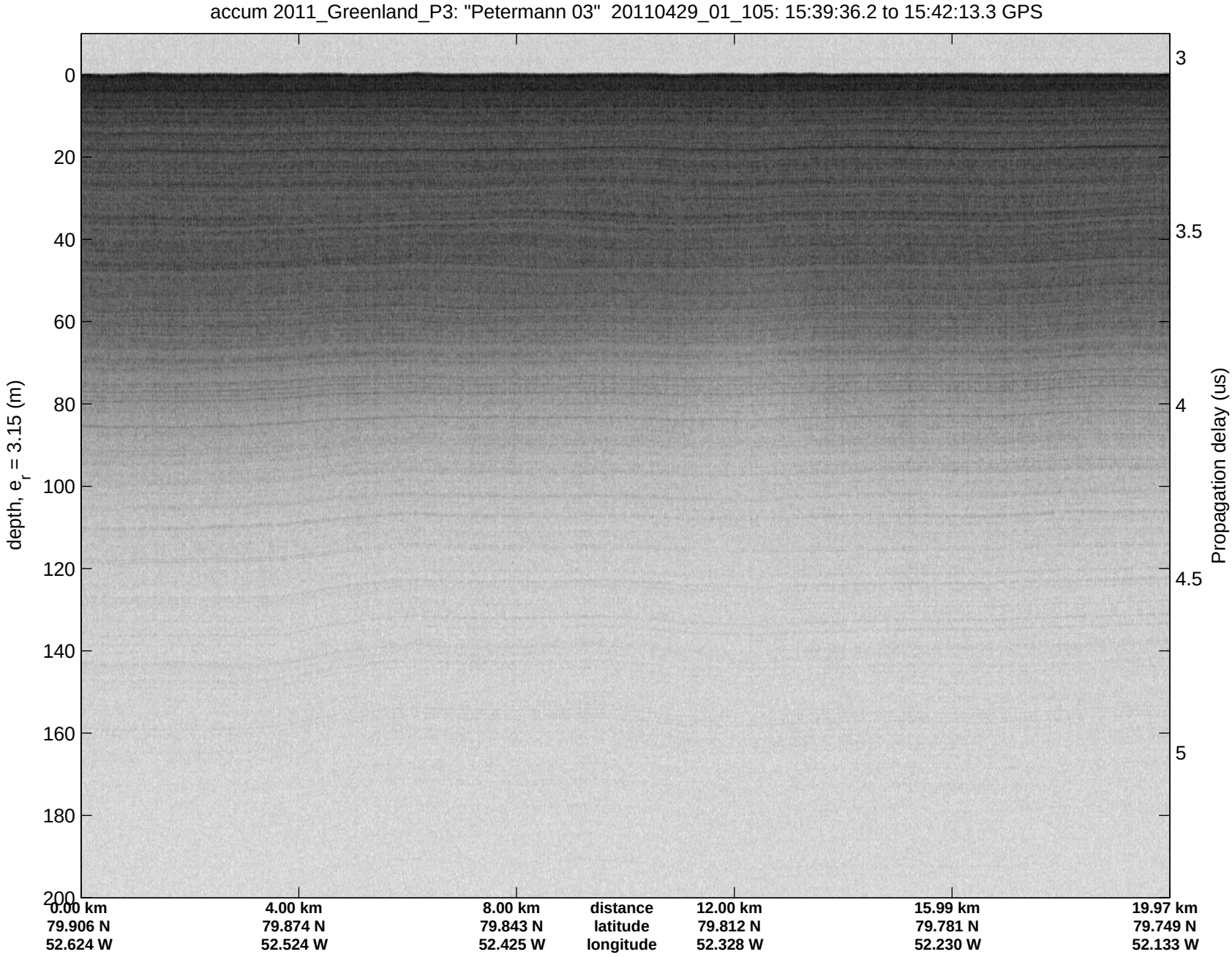

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

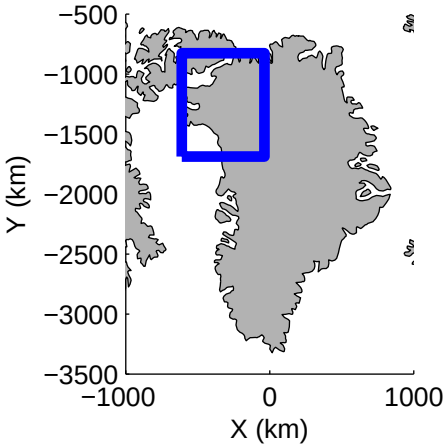

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_104: 15:37:01.3 to 15:39:36.0 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
80.062 N
53.130 W
4.00 km
80.030 N
53.028 W
8.00 km
79.999 N
52.926 W
distance
latitude
longitude
11.99 km
79.968 N
52.824 W
15.98 km
79.937 N
52.724 W
19.98 km
79.906 N
52.624 W


−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

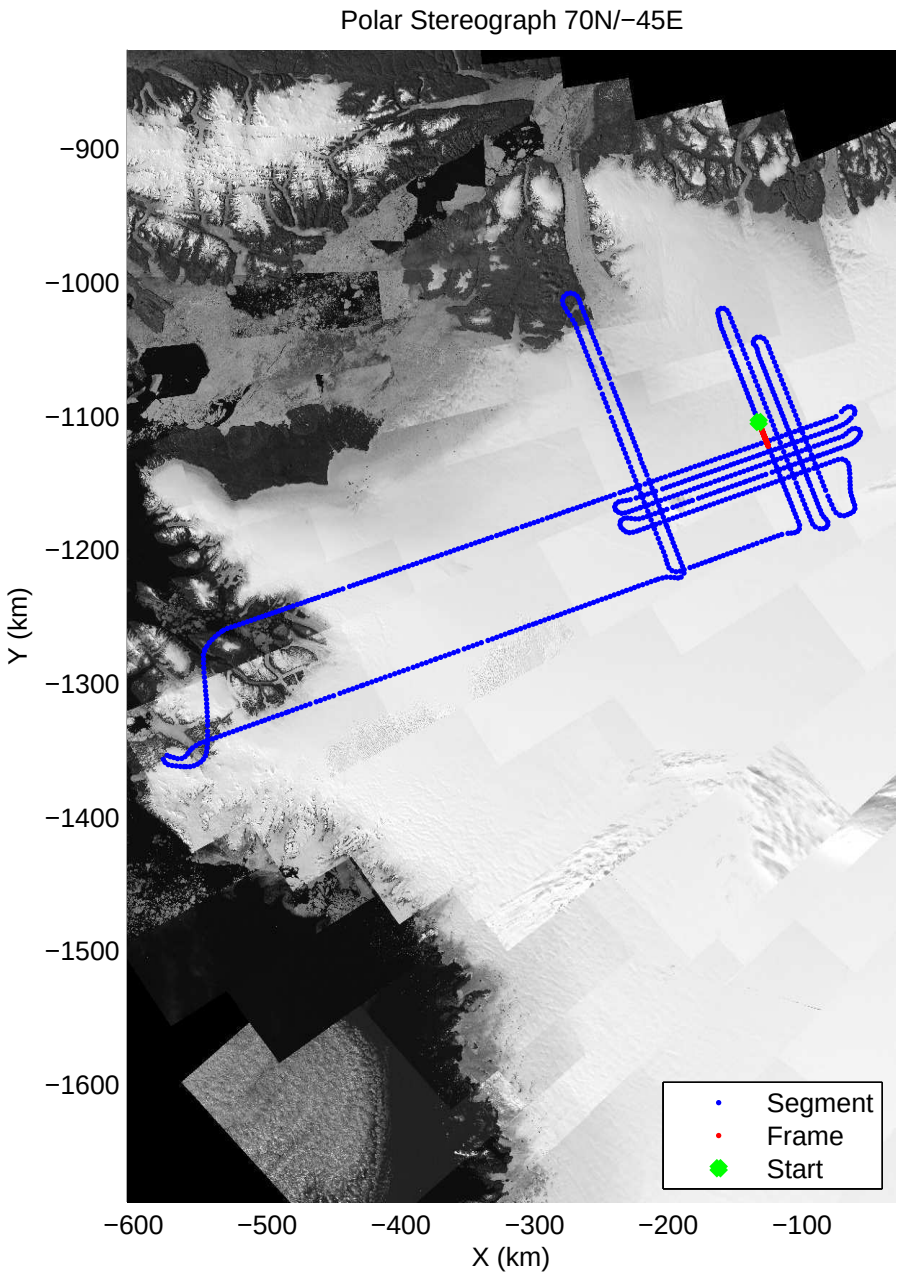

−1088
−1090
−1092
−1094
−1096
−1098
−1100
−1102
−1104
Y (km)
−148
−146
−144
−142
−140
−138
−136
X (km)

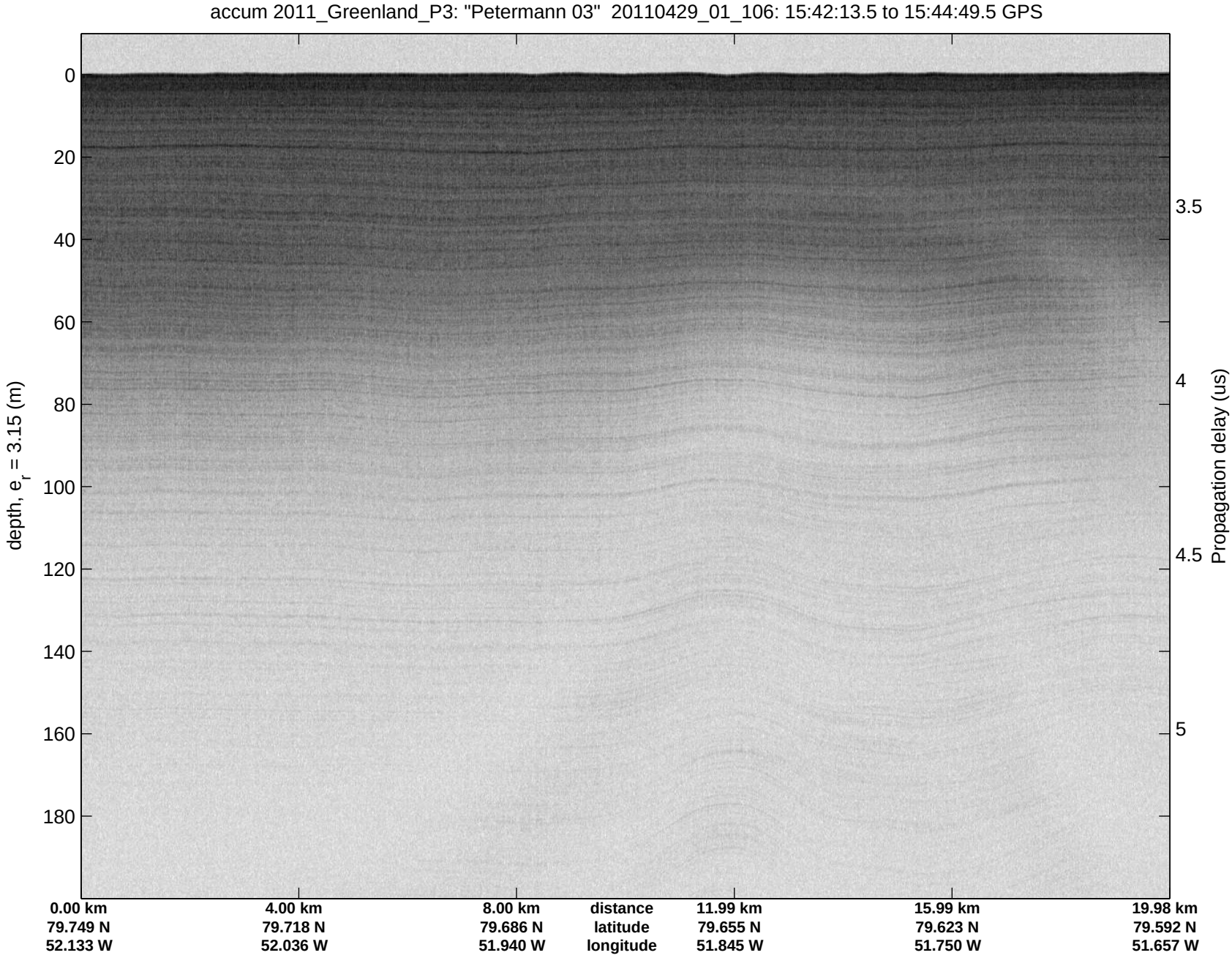

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

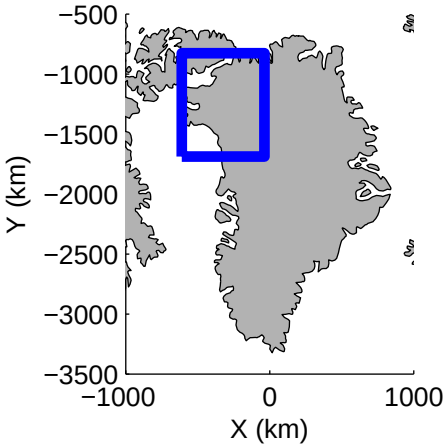

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_105: 15:39:36.2 to 15:42:13.3 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
79.906 N
52.624 W
4.00 km
79.874 N
52.524 W
8.00 km
79.843 N
52.425 W
distance
latitude
longitude
12.00 km
79.812 N
52.328 W
15.99 km
79.781 N
52.230 W
19.97 km
79.749 N
52.133 W

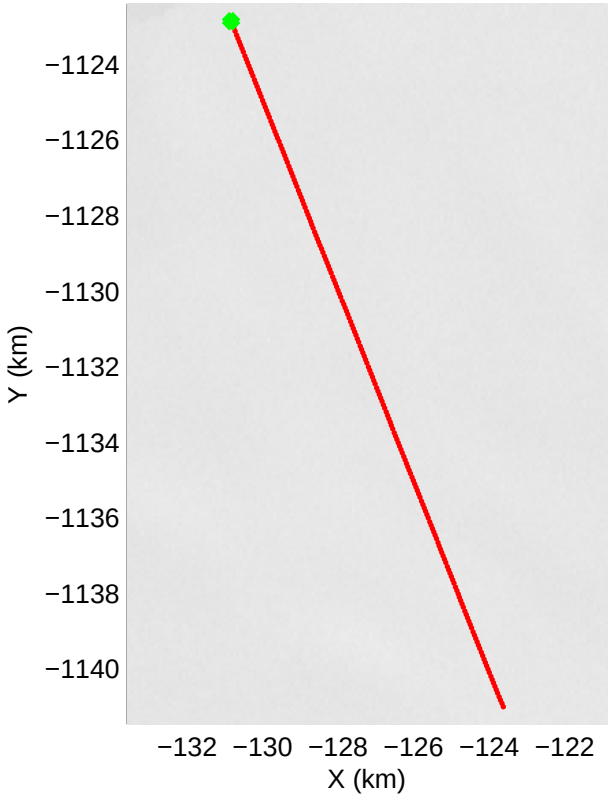

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

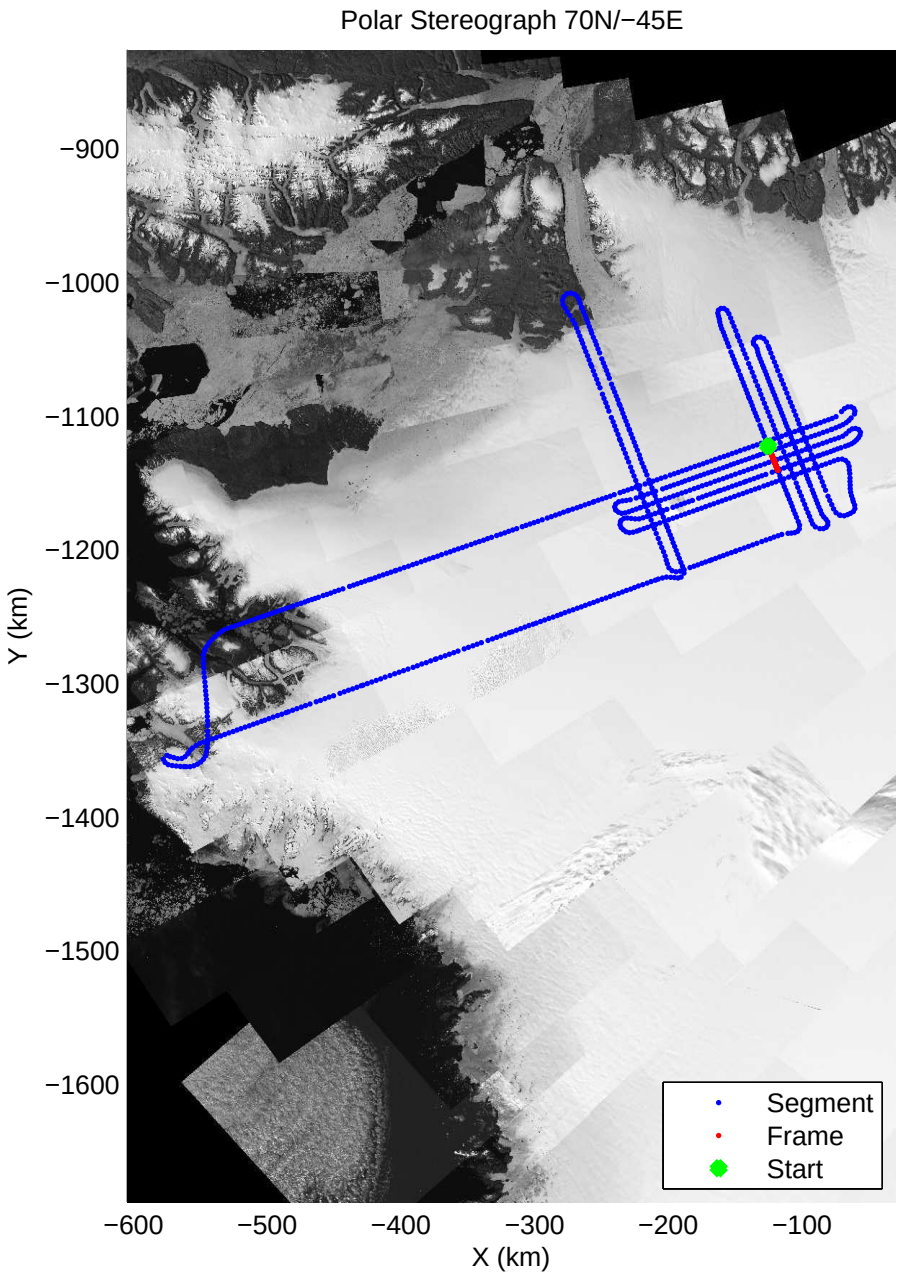
−1106
−1108
−1110
−1112
−1114
−1116
−1118
−1120
−1122
Y (km)
−140
−138
−136
−134
−132
−130
X (km)

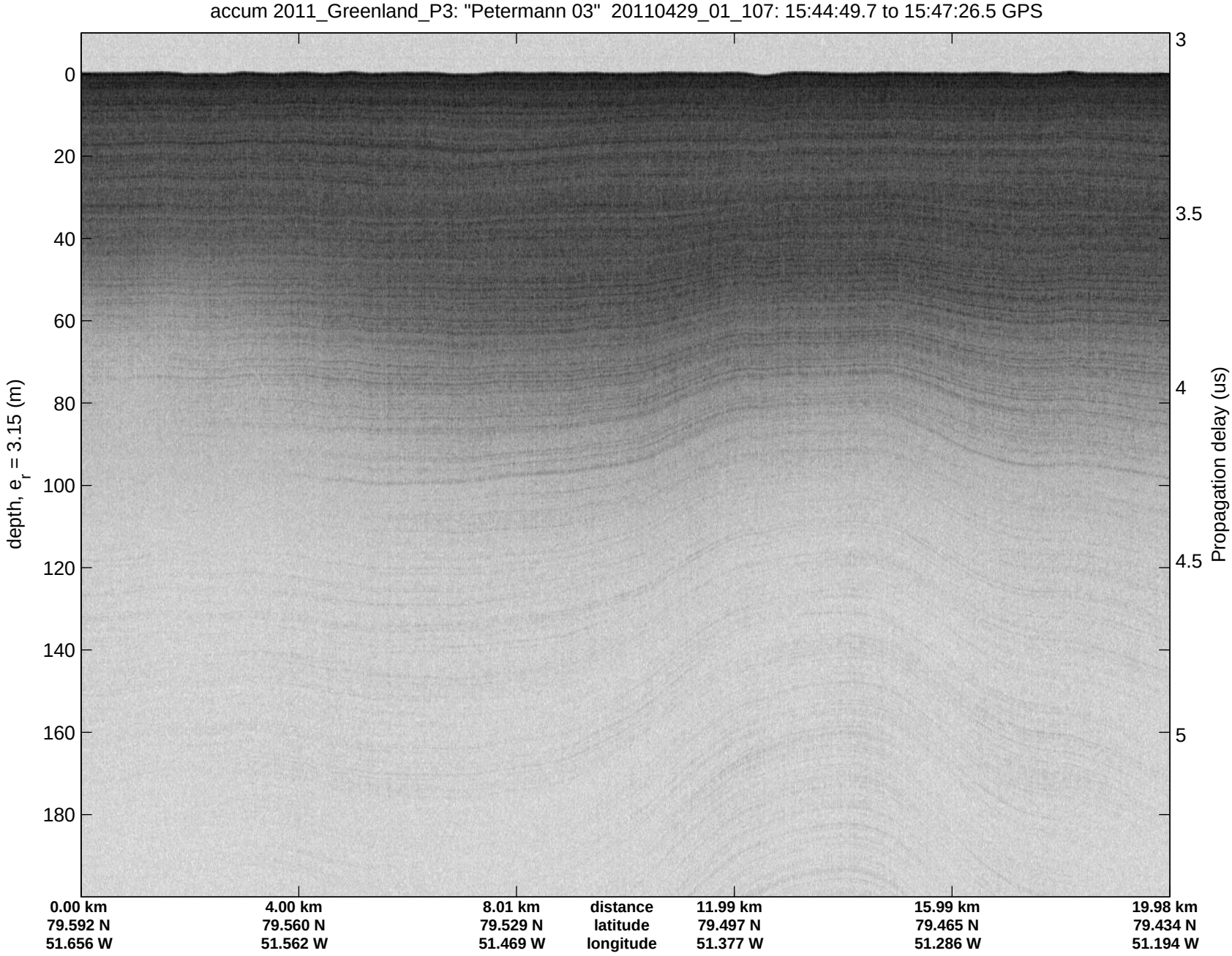

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

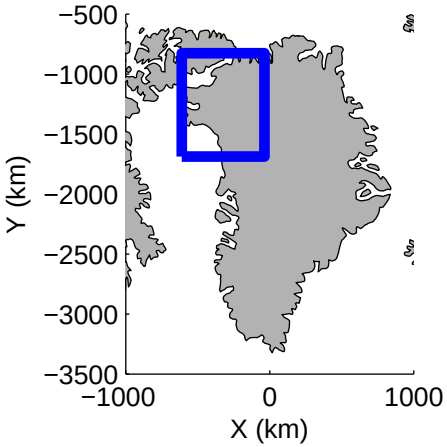

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_106: 15:42:13.5 to 15:44:49.5 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
0.00 km
79.749 N
52.133 W
4.00 km
79.718 N
52.036 W
8.00 km
79.686 N
51.940 W
distance
latitude
longitude
11.99 km
79.655 N
51.845 W
15.99 km
79.623 N
51.750 W
19.98 km
79.592 N
51.657 W

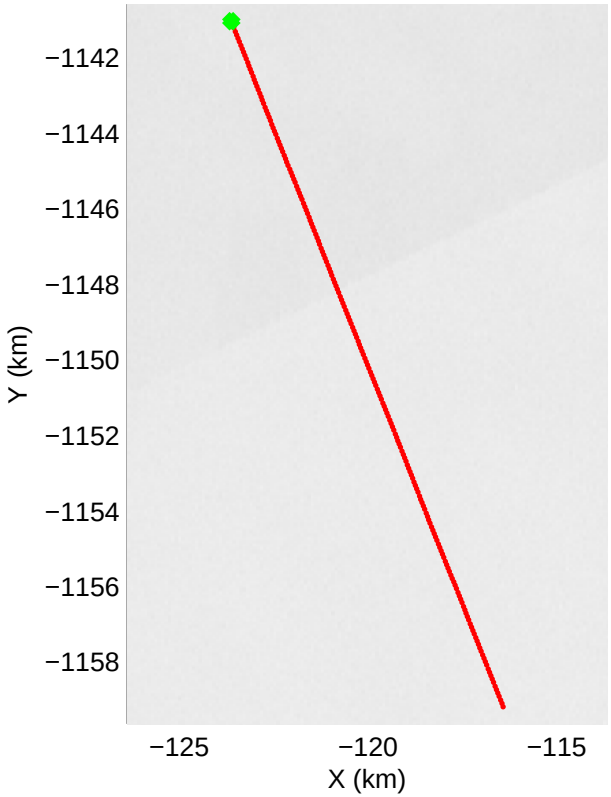

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

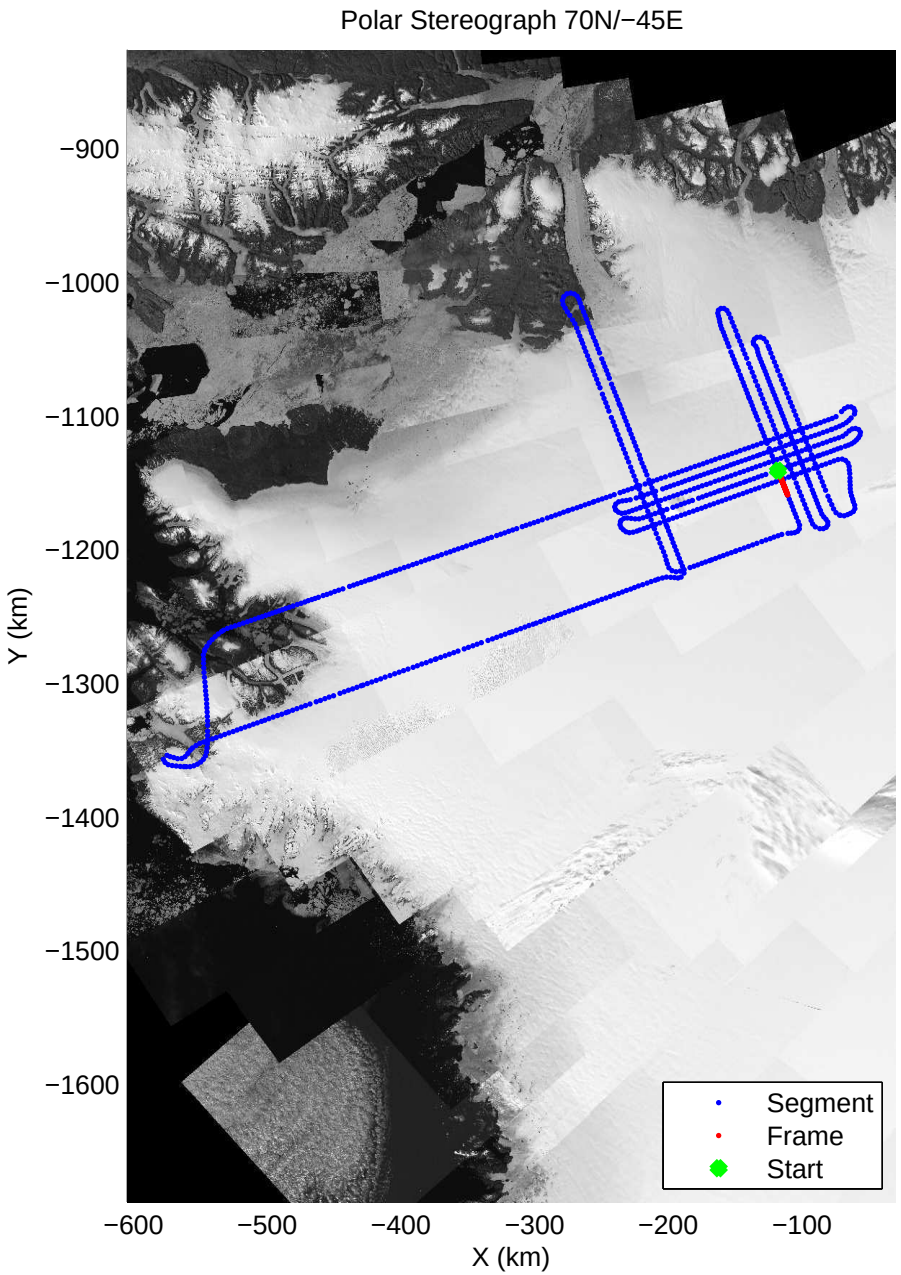

−1124
−1126
−1128
−1130
−1132
−1134
−1136
−1138
−1140
Y (km)
−132
−130
−128
−126
−124
−122
X (km)

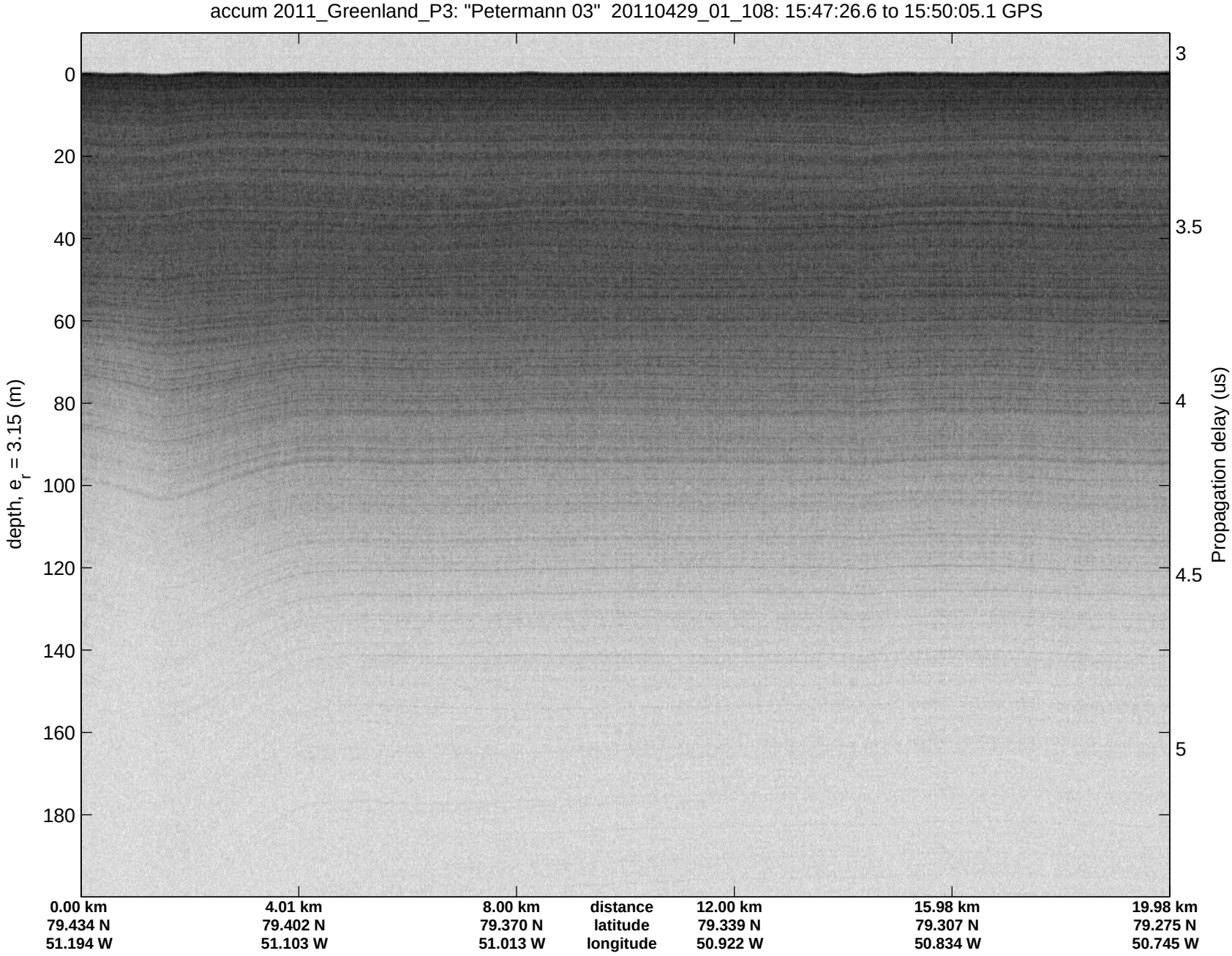

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

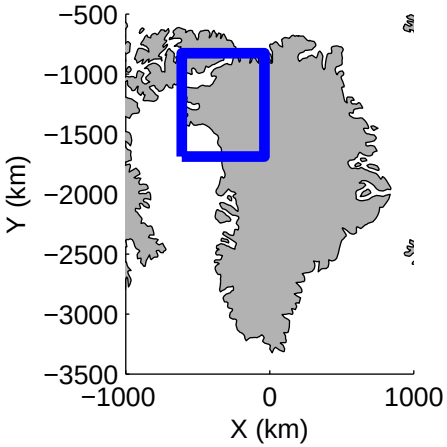

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_107: 15:44:49.7 to 15:47:26.5 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
79.592 N
51.656 W
4.00 km
79.560 N
51.562 W
8.01 km
79.529 N
51.469 W
distance
latitude
longitude
11.99 km
79.497 N
51.377 W
15.99 km
79.465 N
51.286 W
19.98 km
79.434 N
51.194 W

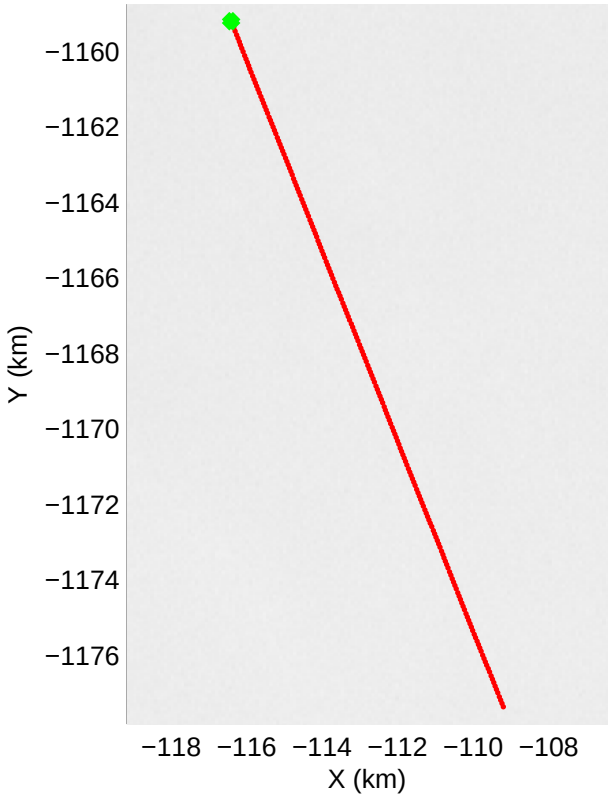

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

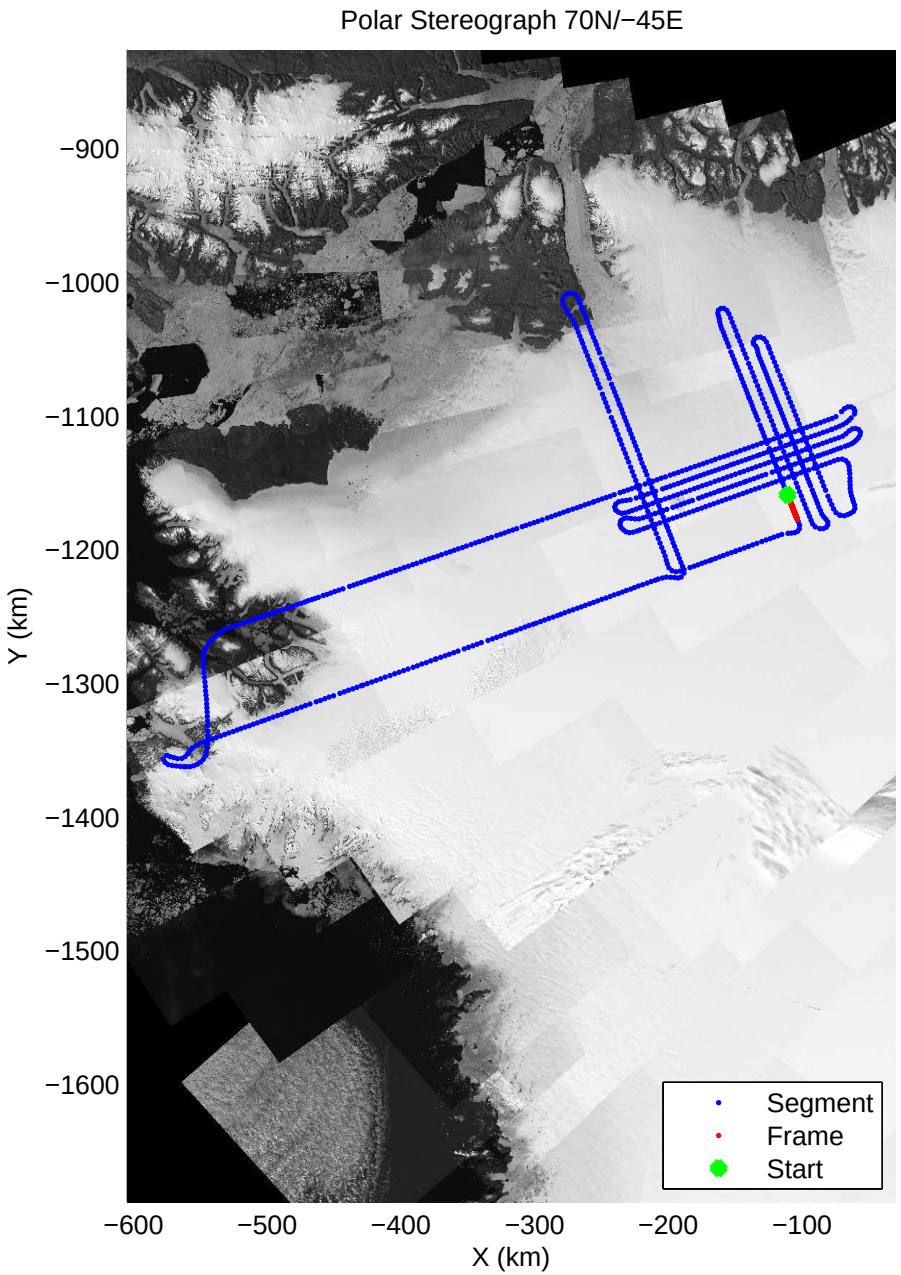

−1142
−1144
−1146
−1148
−1150
−1152
−1154
−1156
−1158
Y (km)
−125
−120
−115
X (km)

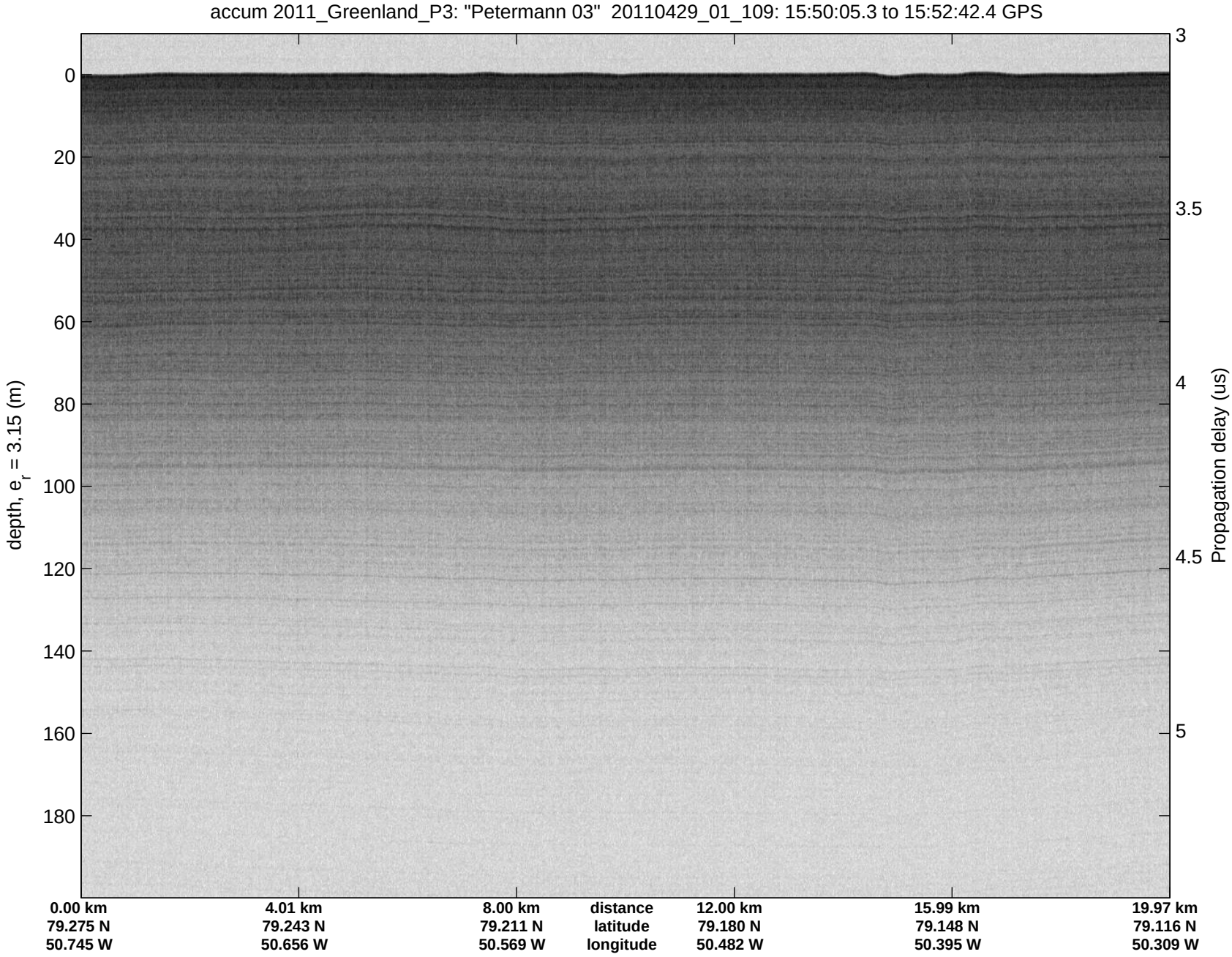

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

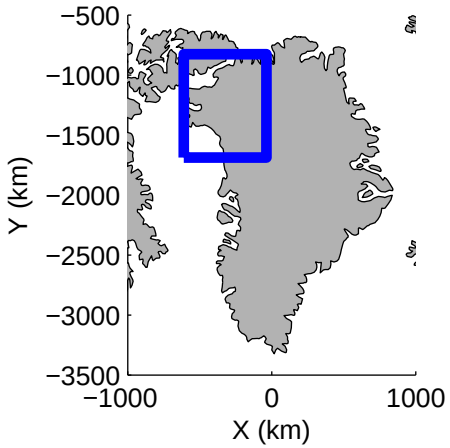

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_108: 15:47:26.6 to 15:50:05.1 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.434 N
51.194 W
4.01 km
79.402 N
51.103 W
8.00 km
79.370 N
51.013 W
distance
latitude
longitude
12.00 km
79.339 N
50.922 W
15.98 km
79.307 N
50.834 W
19.98 km
79.275 N
50.745 W

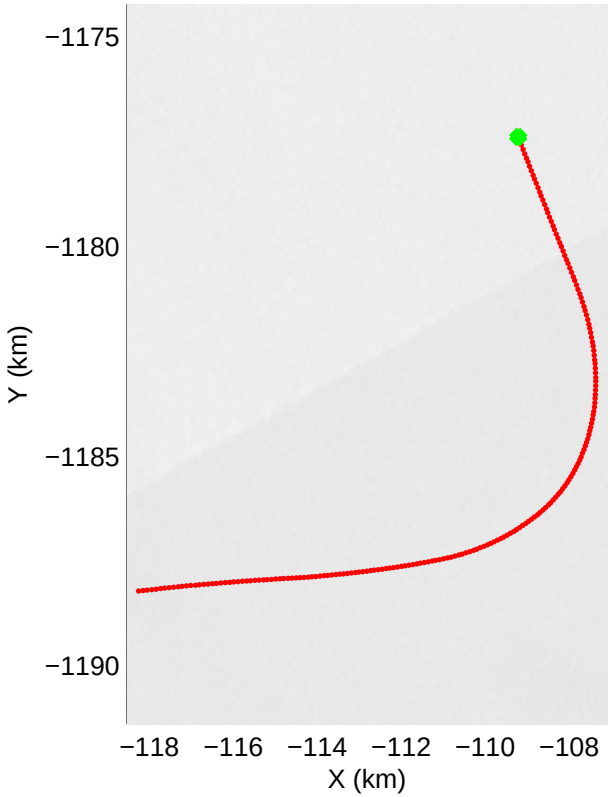

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

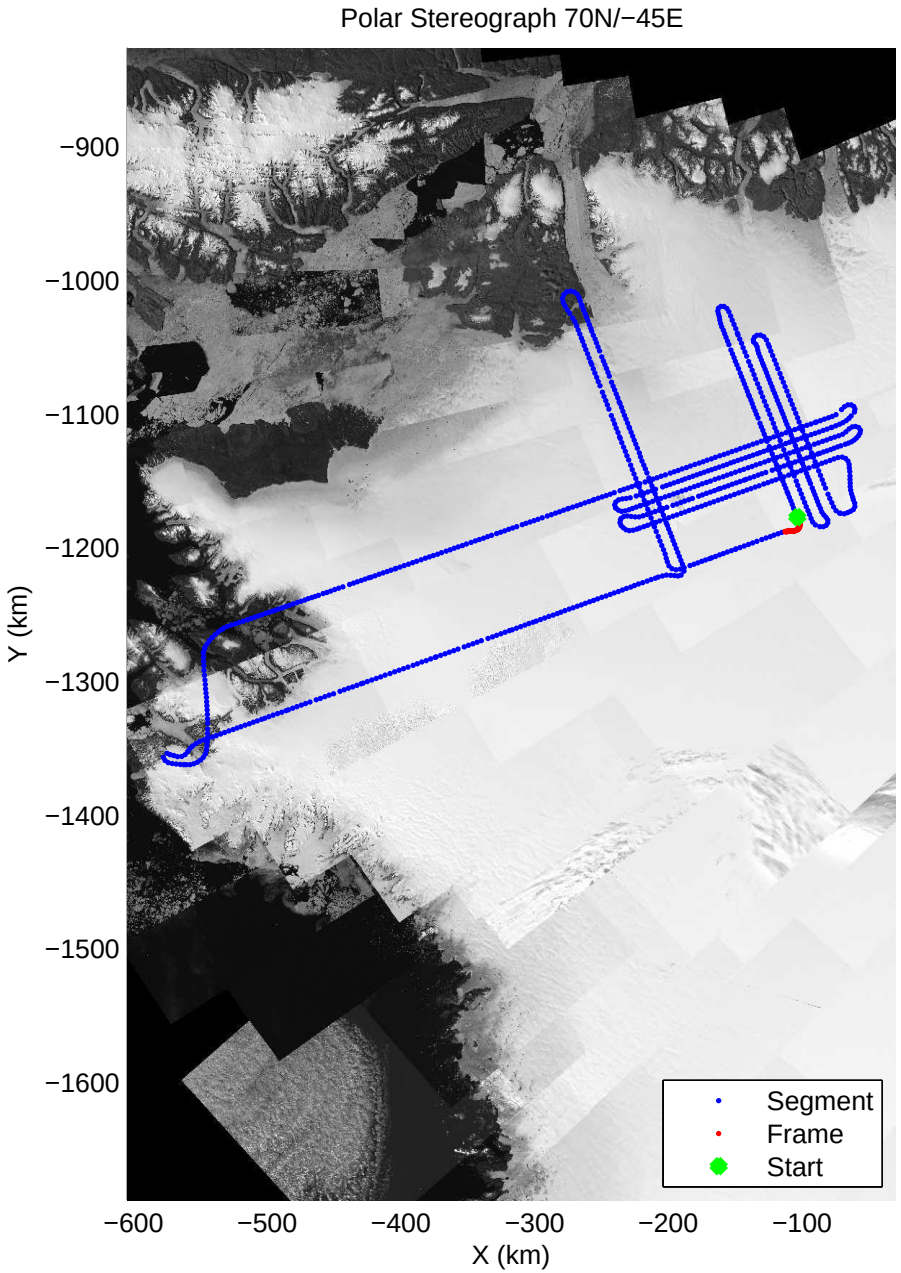

−1160
−1162
−1164
−1166
−1168
−1170
−1172
−1174
−1176
Y (km)
−118
−116
−114
−112
−110
−108
X (km)

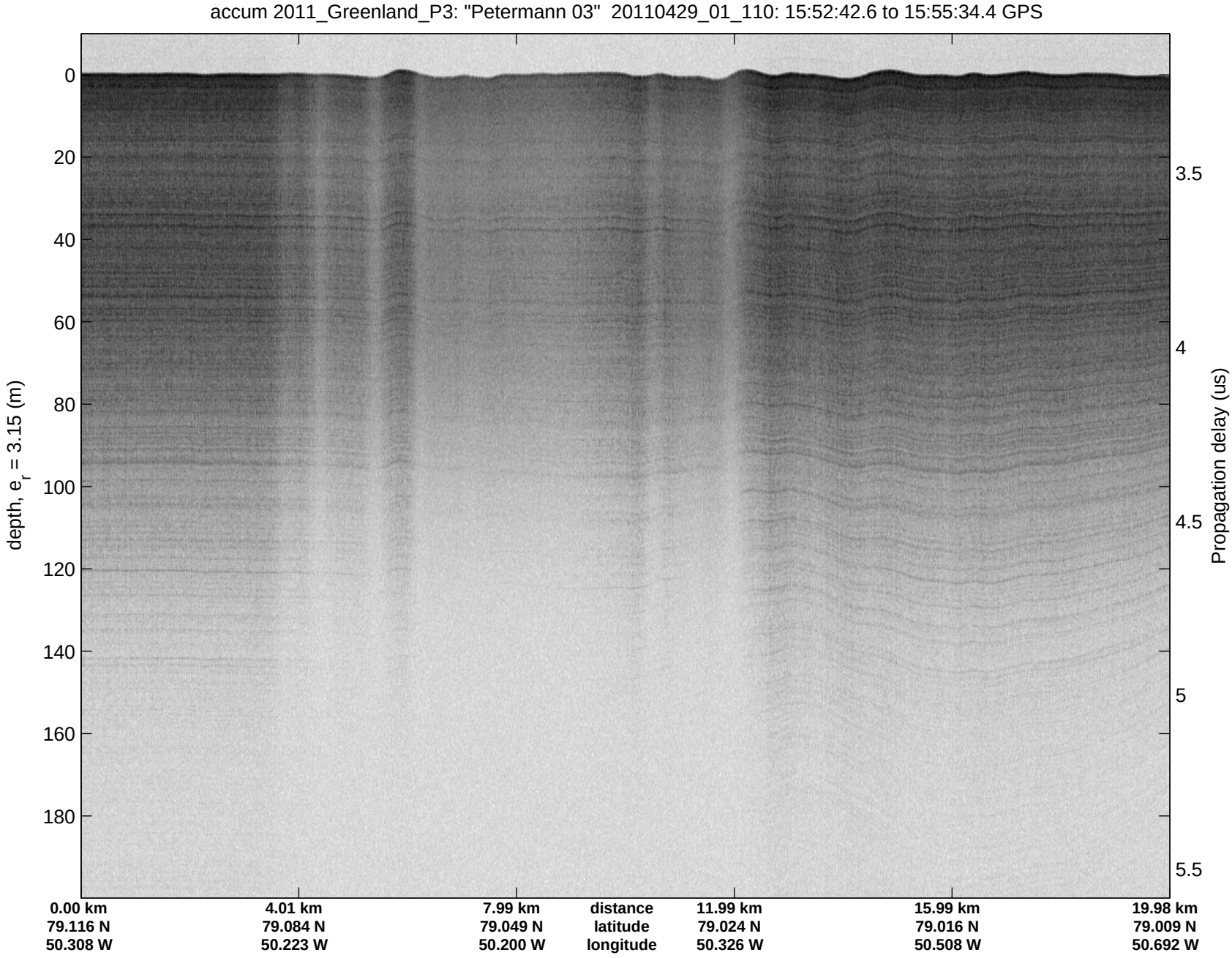

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

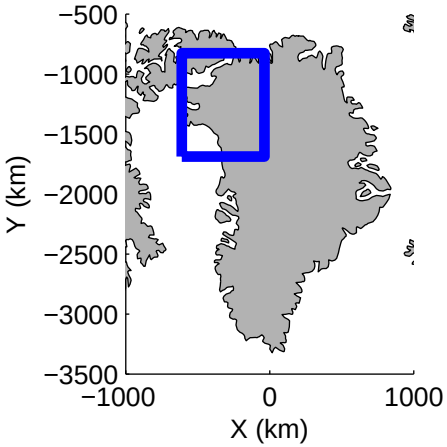

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_109: 15:50:05.3 to 15:52:42.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.275 N
50.745 W
4.01 km
79.243 N
50.656 W
8.00 km
79.211 N
50.569 W
distance
latitude
longitude
12.00 km
79.180 N
50.482 W
15.99 km
79.148 N
50.395 W
19.97 km
79.116 N
50.309 W

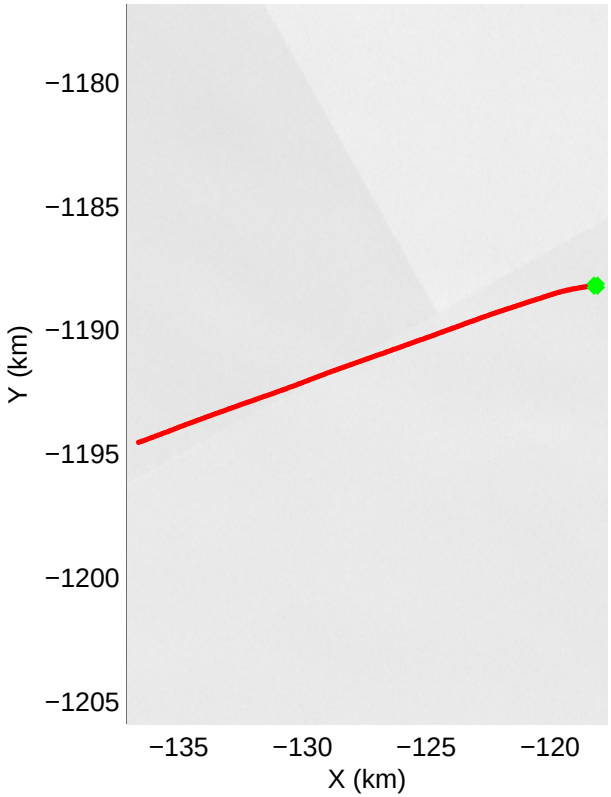

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

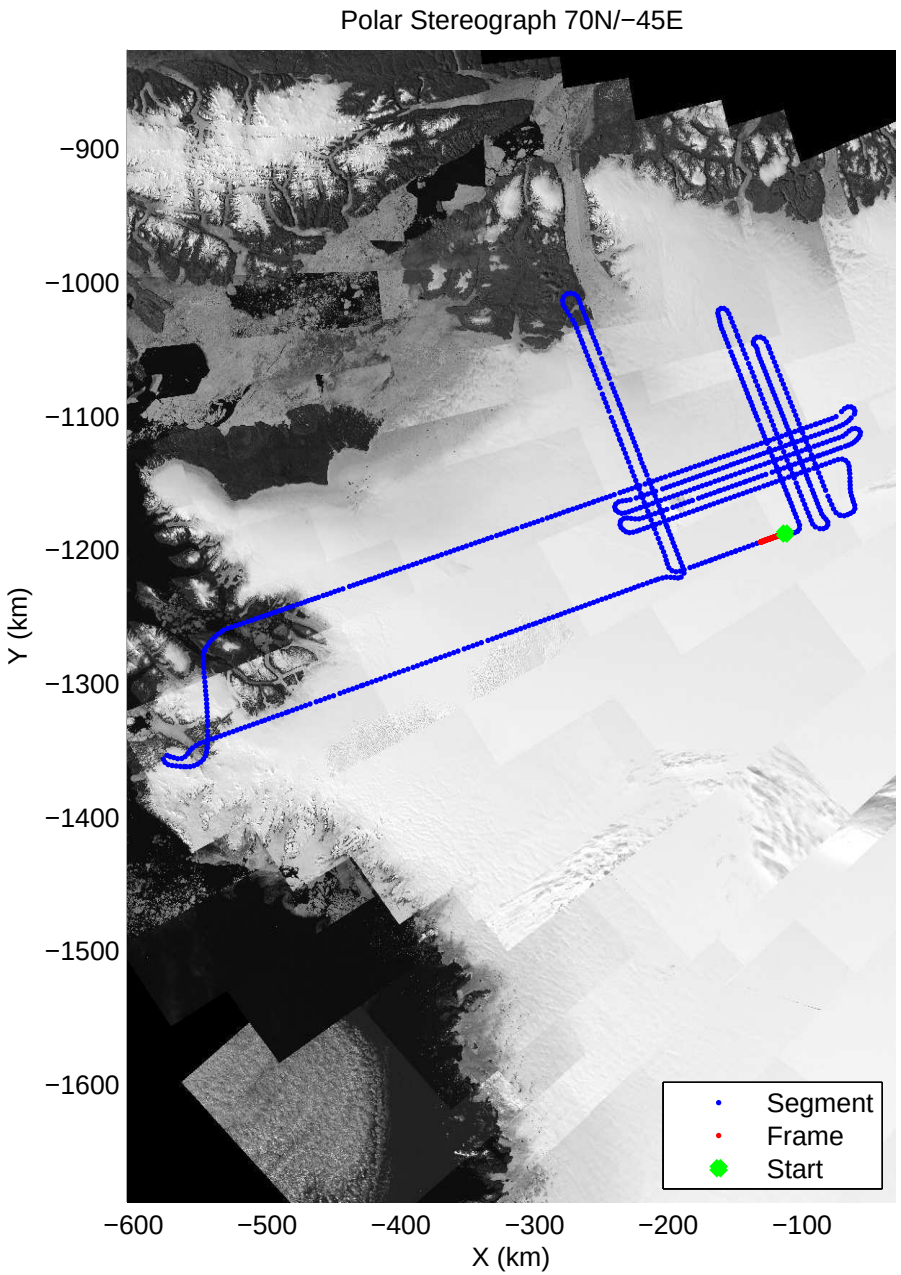

−1175
−1180
−1185
−1190
Y (km)
−118
−116
−114
−112
−110
−108
X (km)

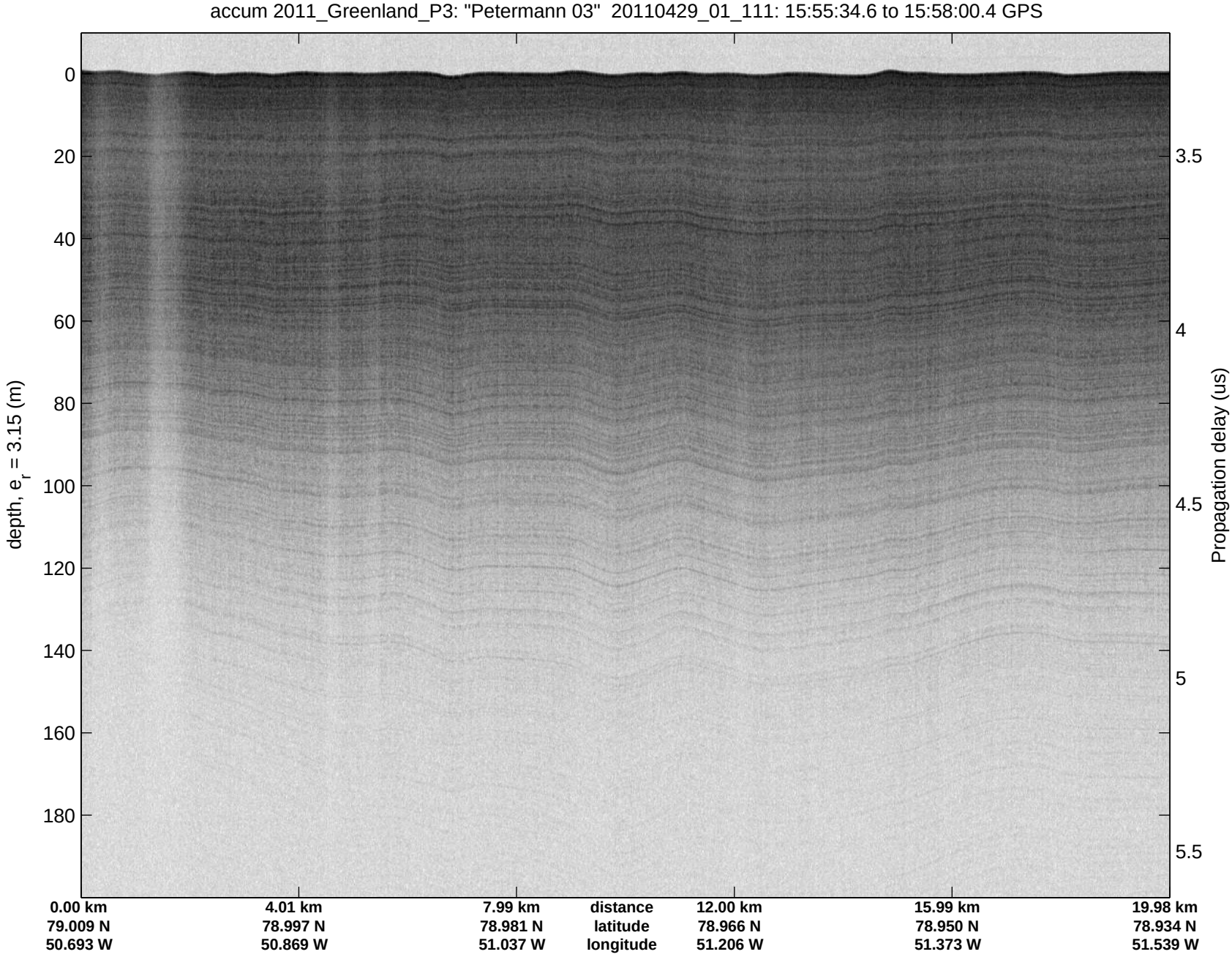

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

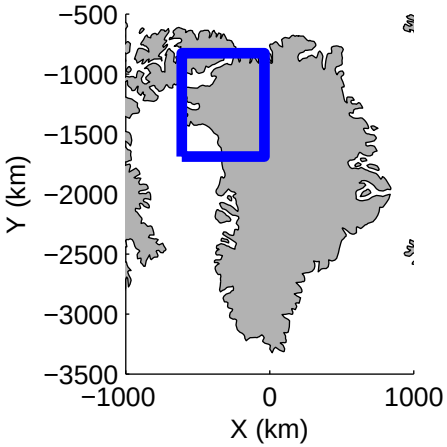

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_110: 15:52:42.6 to 15:55:34.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.116 N
50.308 W
4.01 km
79.084 N
50.223 W
7.99 km
79.049 N
50.200 W
distance
latitude
longitude
11.99 km
79.024 N
50.326 W
15.99 km
79.016 N
50.508 W
19.98 km
79.009 N
50.692 W

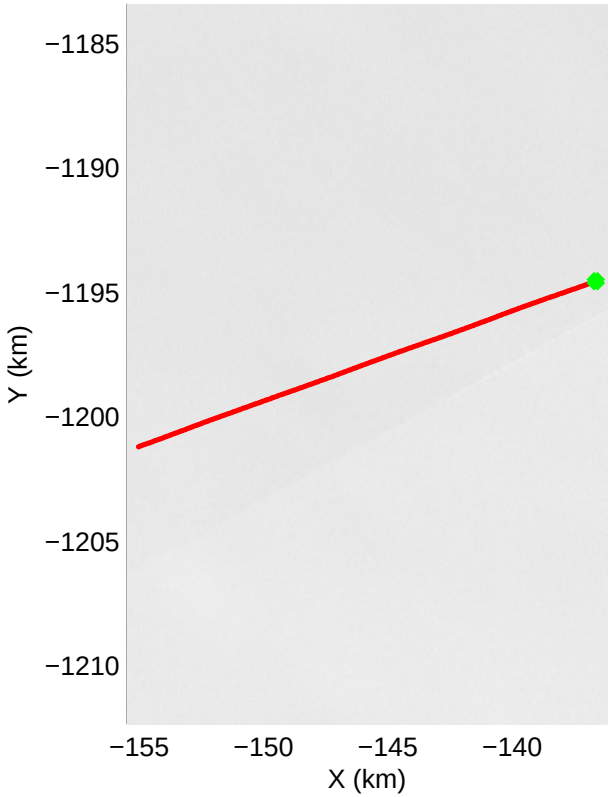

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

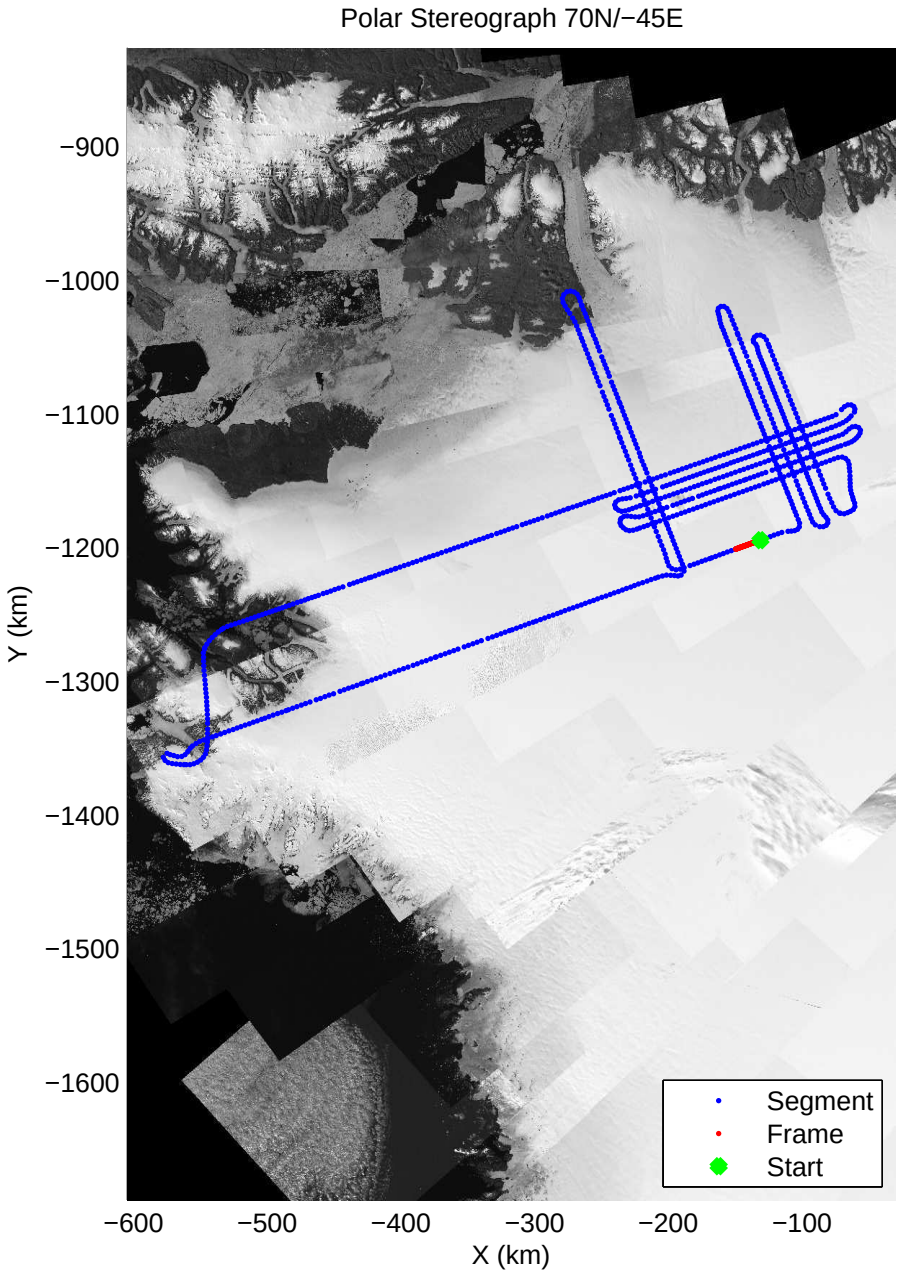

−1180
−1185
−1190
−1195
−1200
−1205
Y (km)
−135
−130
−125
−120
X (km)

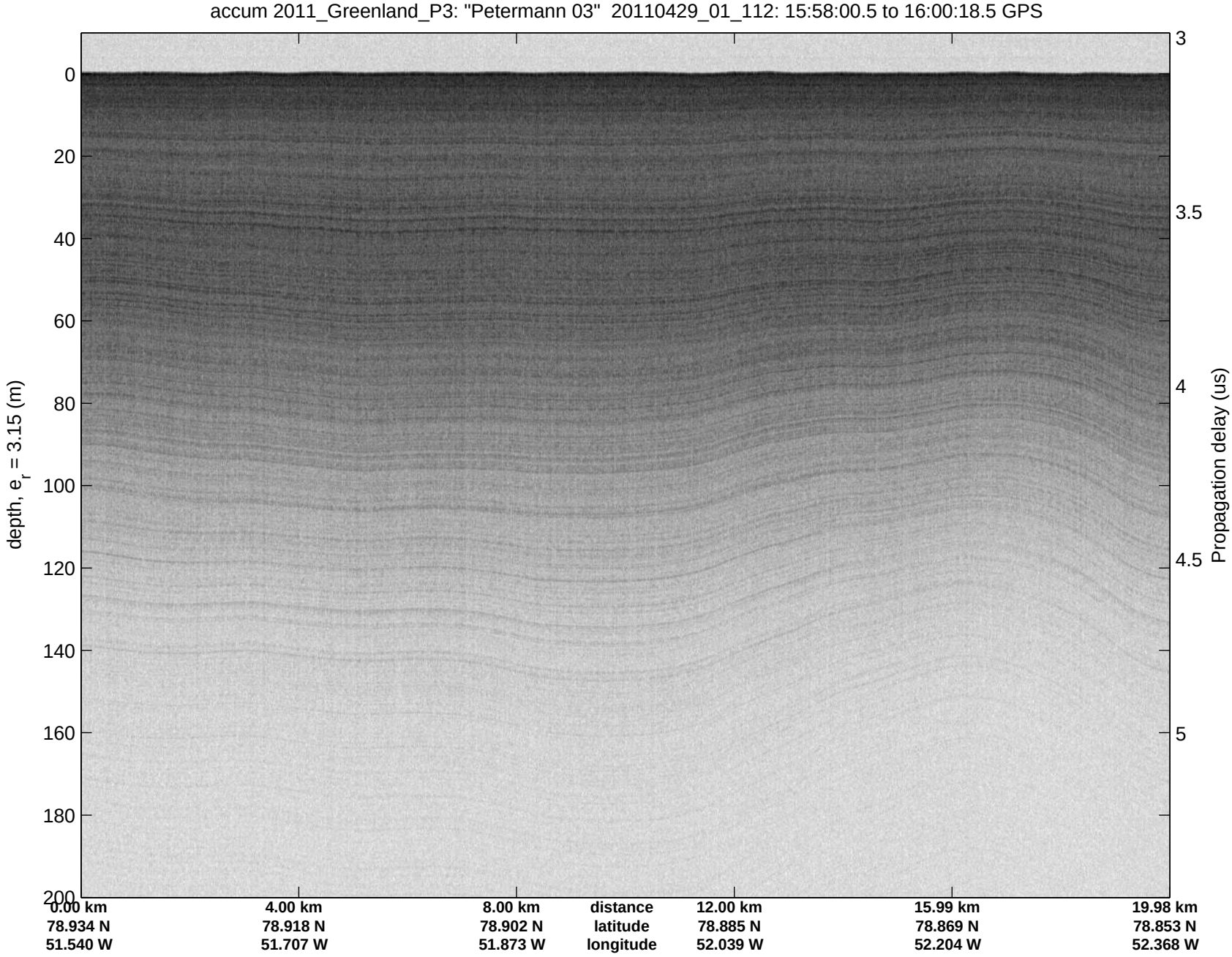

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

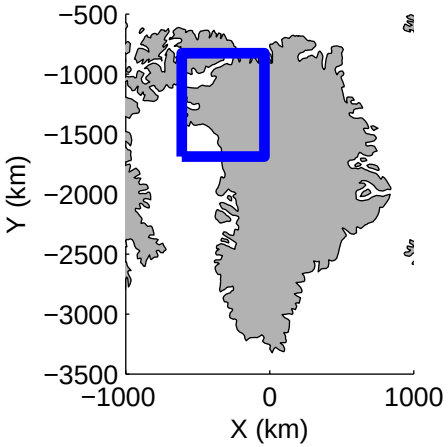

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_111: 15:55:34.6 to 15:58:00.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.009 N
50.693 W
4.01 km
78.997 N
50.869 W
7.99 km
78.981 N
51.037 W
distance
latitude
longitude
12.00 km
78.966 N
51.206 W
15.99 km
78.950 N
51.373 W
19.98 km
78.934 N
51.539 W

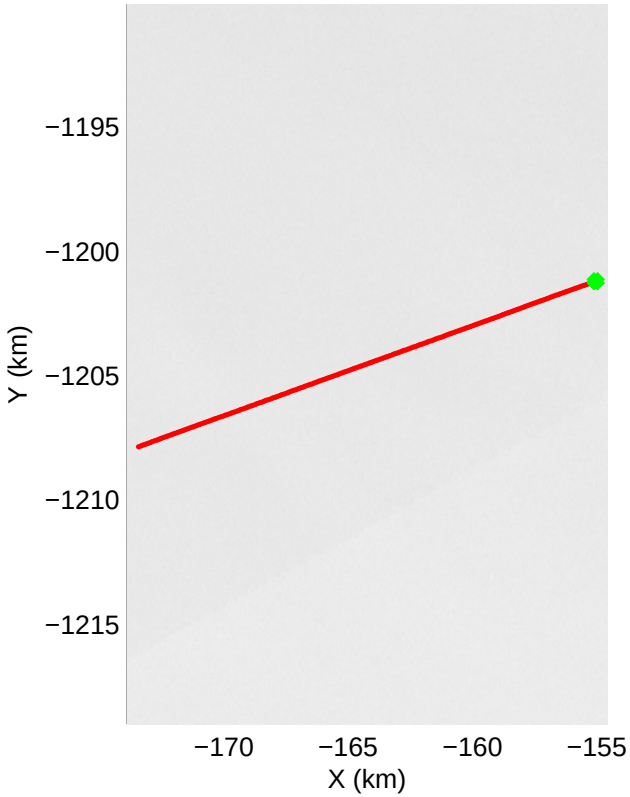

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

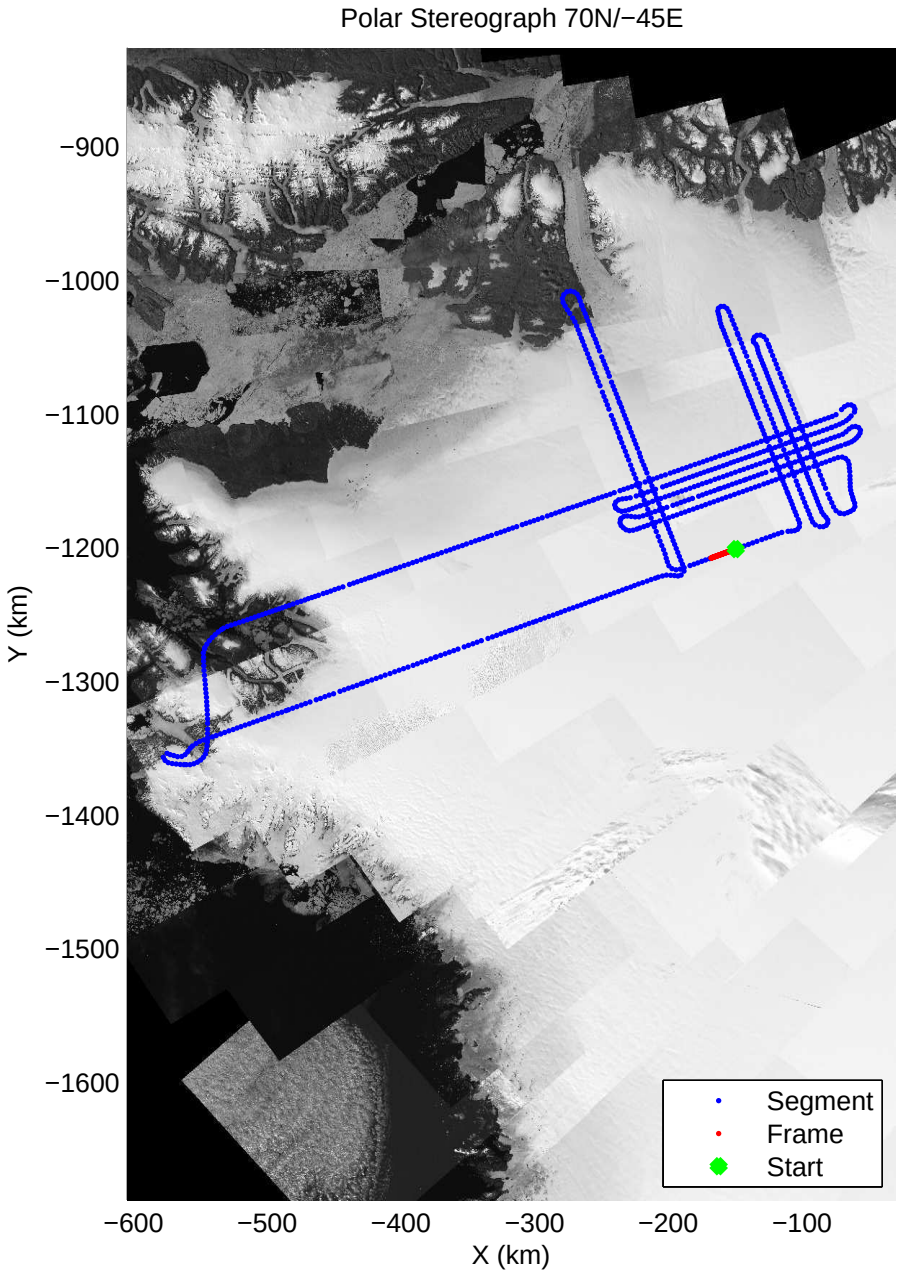

−1185
−1190
−1195
−1200
−1205
−1210
Y (km)
−155
−150
−145
−140
X (km)

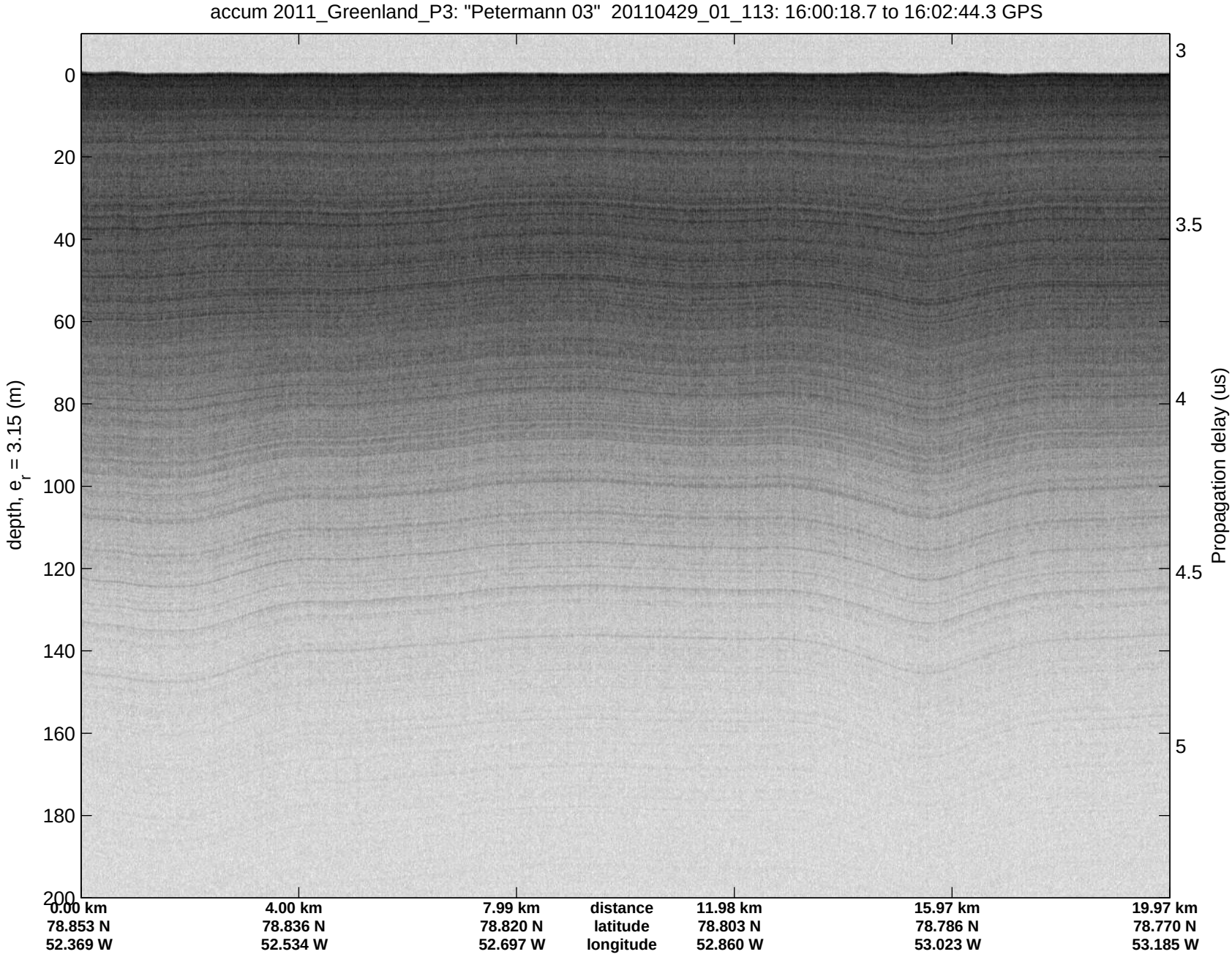

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

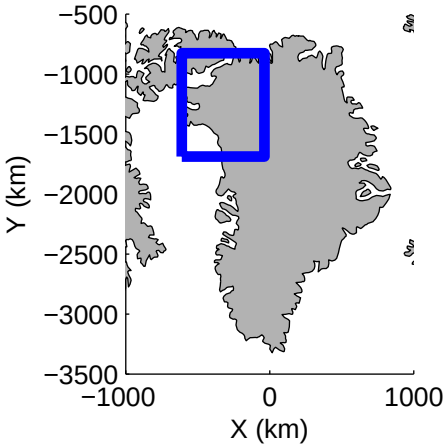

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_112: 15:58:00.5 to 16:00:18.5 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
78.934 N
51.540 W
4.00 km
78.918 N
51.707 W
8.00 km
78.902 N
51.873 W
distance
latitude
longitude
12.00 km
78.885 N
52.039 W
15.99 km
78.869 N
52.204 W
19.98 km
78.853 N
52.368 W

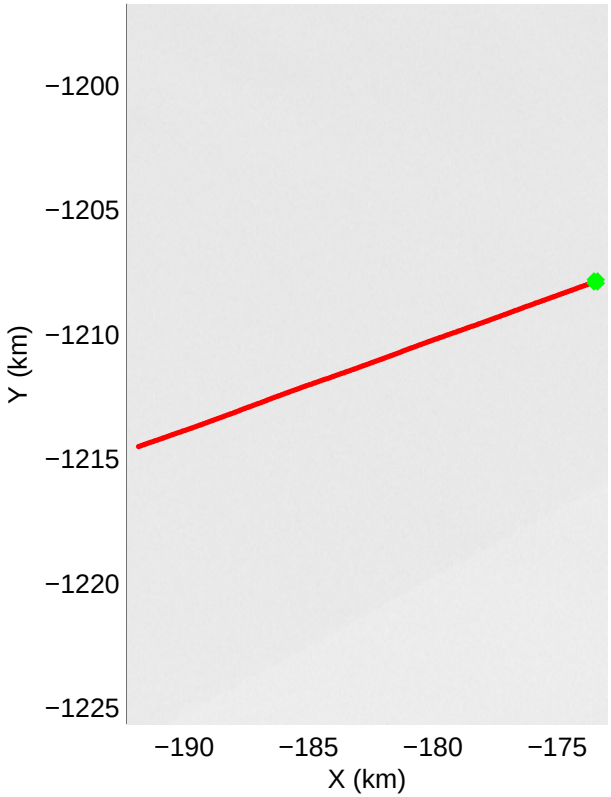

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

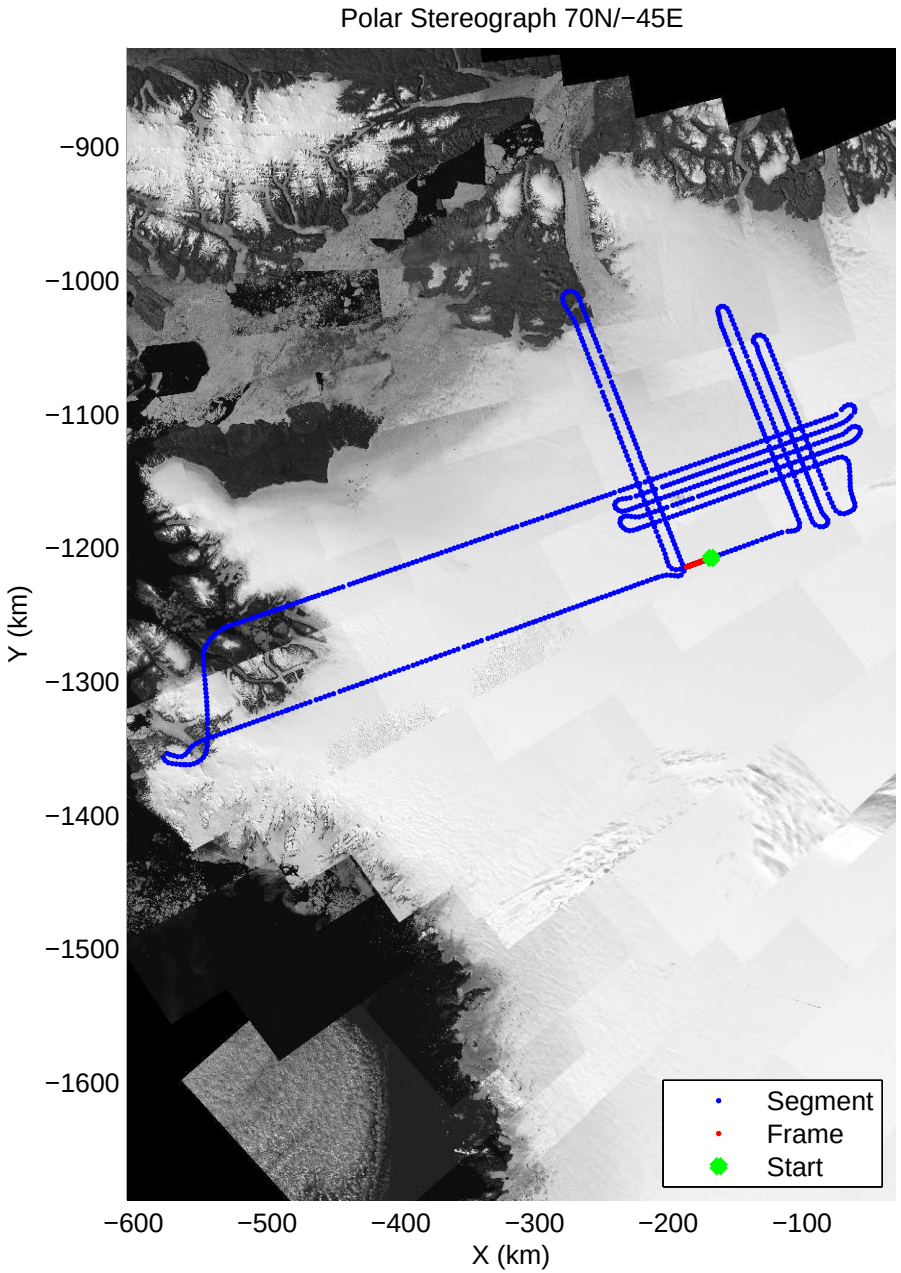

−1195
−1200
−1205
−1210
−1215
Y (km)
−170
−165
−160
−155
X (km)

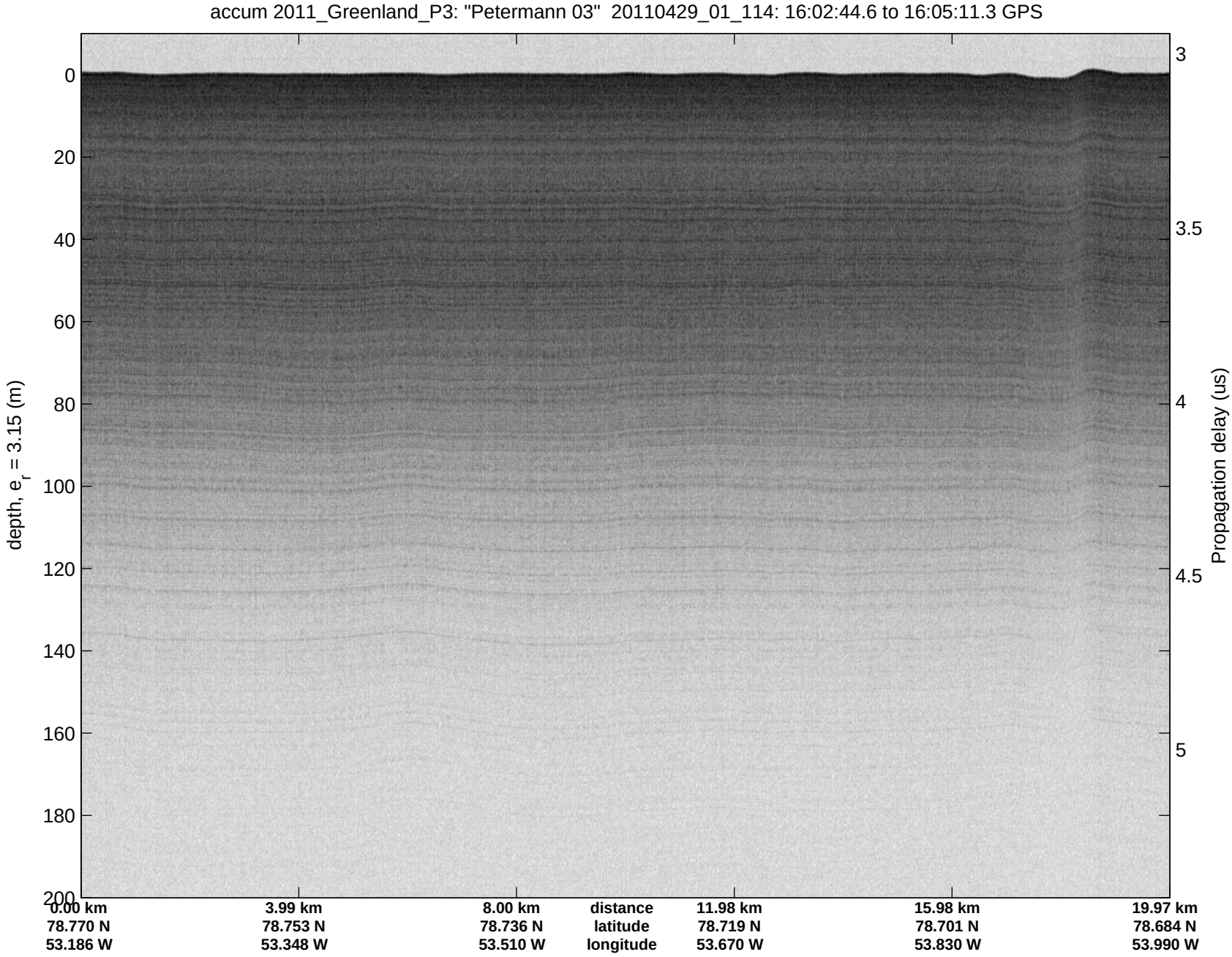

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

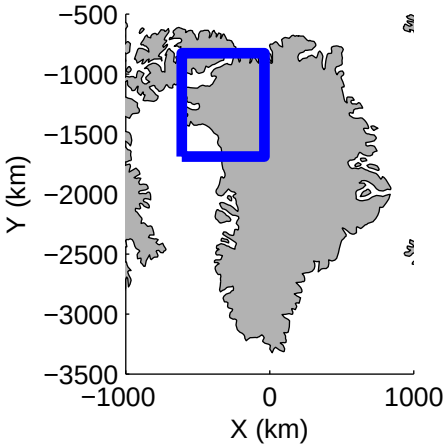

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_113: 16:00:18.7 to 16:02:44.3 GPS
depth, e_r = 3.15 (m)
Propagation delay (us)
0
20
40
60
80
100
120
140
160
180
200
3
3.5
4
4.5
5
0.00 km
78.853 N
52.369 W
4.00 km
78.836 N
52.534 W
7.99 km
78.820 N
52.697 W
distance
latitude
longitude
11.98 km
78.803 N
52.860 W
15.97 km
78.786 N
53.023 W
19.97 km
78.770 N
53.185 W

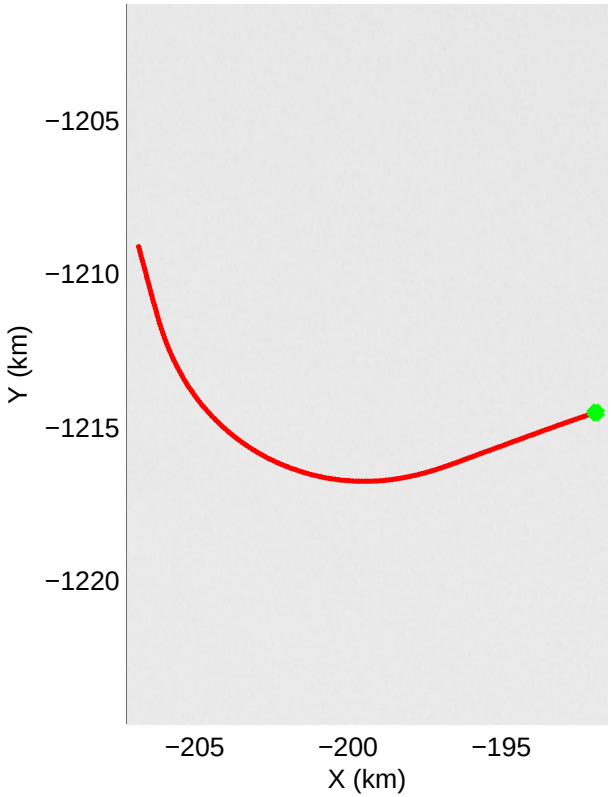

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

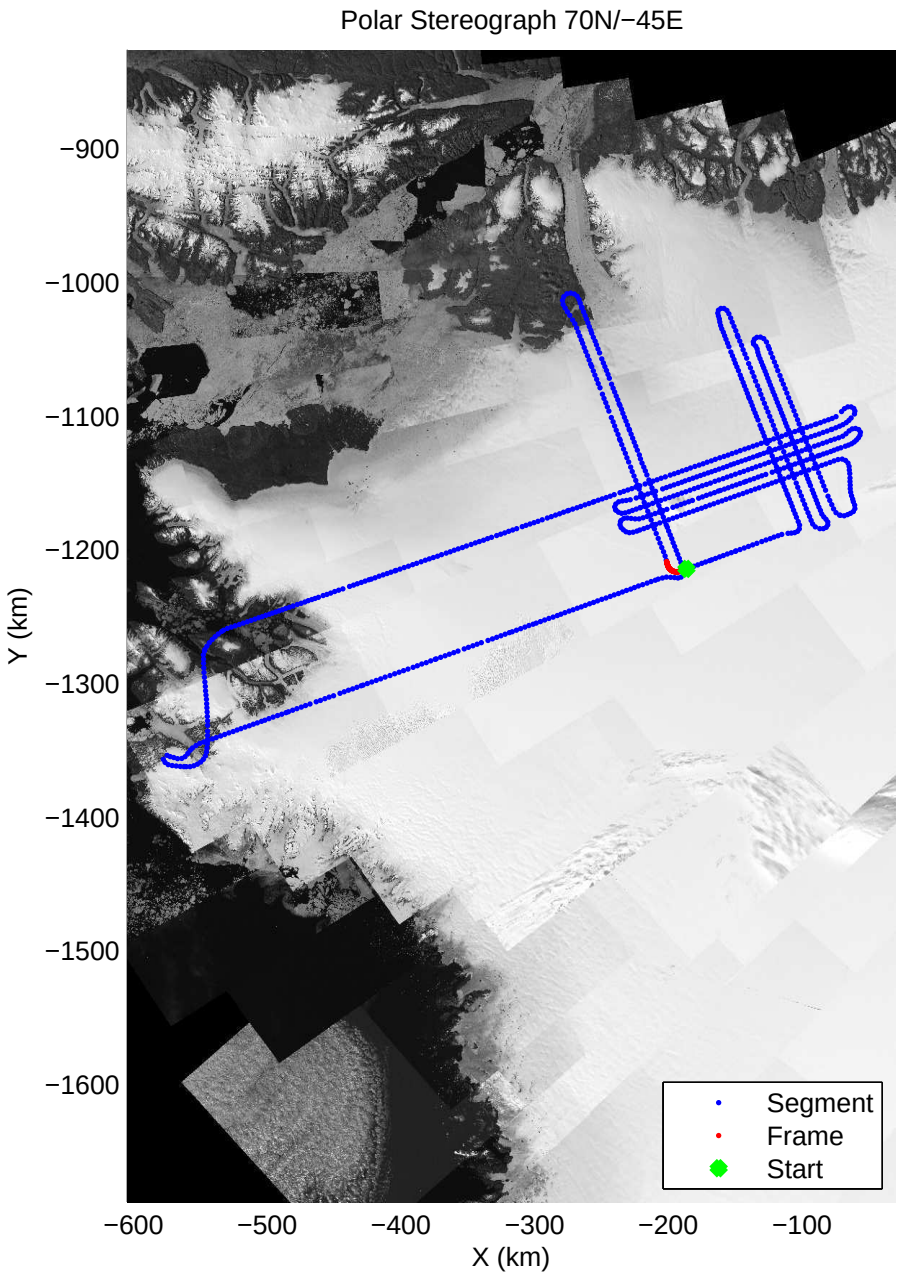

−1200
−1205
−1210
−1215
−1220
−1225
Y (km)
−190
−185
−180
−175
X (km)

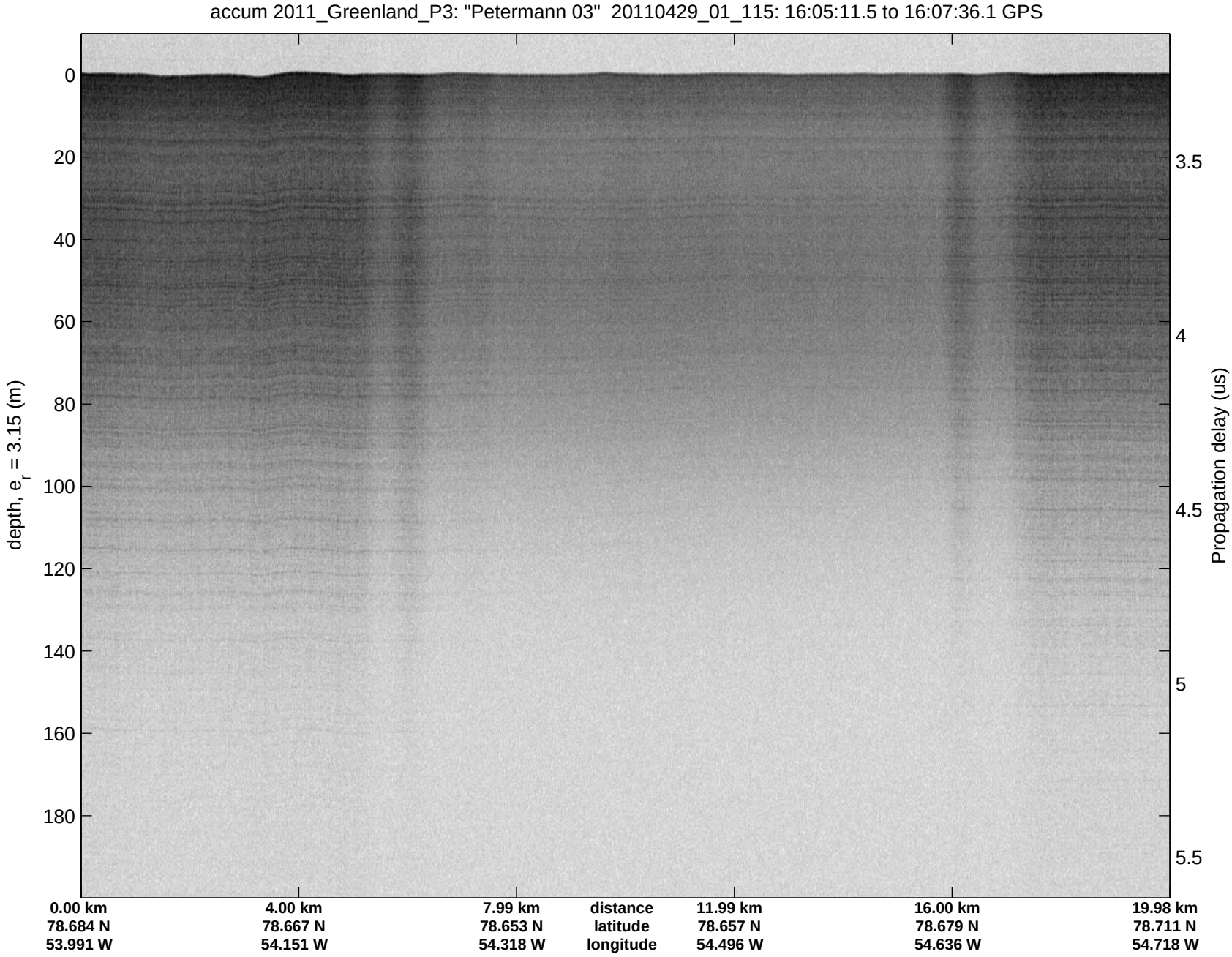

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

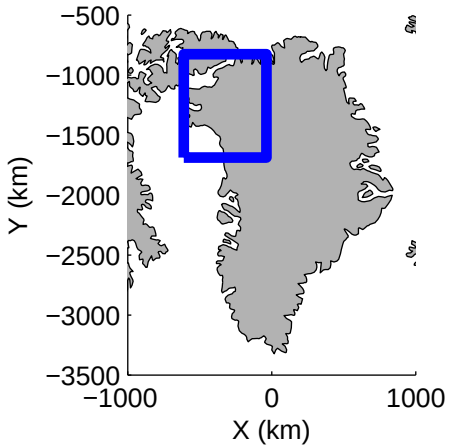

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_114: 16:02:44.6 to 16:05:11.3 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
78.770 N
53.186 W
3.99 km
78.753 N
53.348 W
8.00 km
78.736 N
53.510 W
distance
latitude
longitude
11.98 km
78.719 N
53.670 W
15.98 km
78.701 N
53.830 W
19.97 km
78.684 N
53.990 W

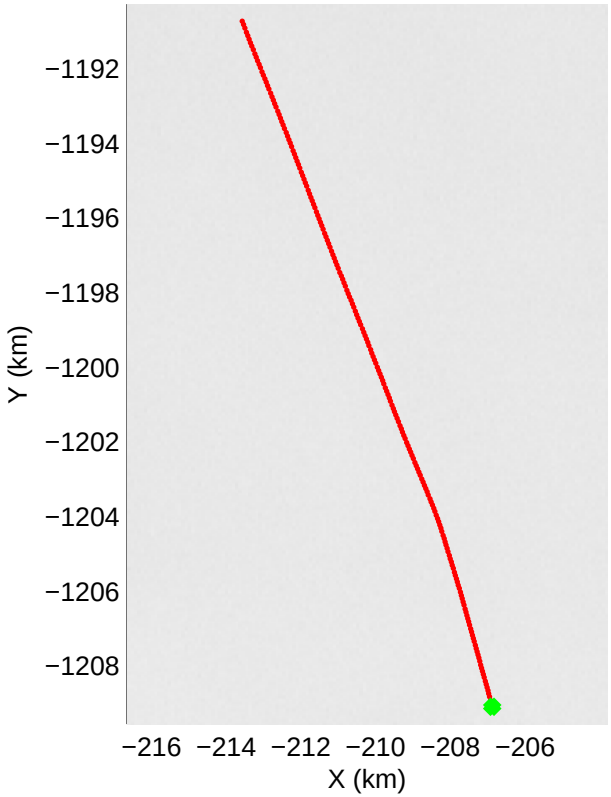

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

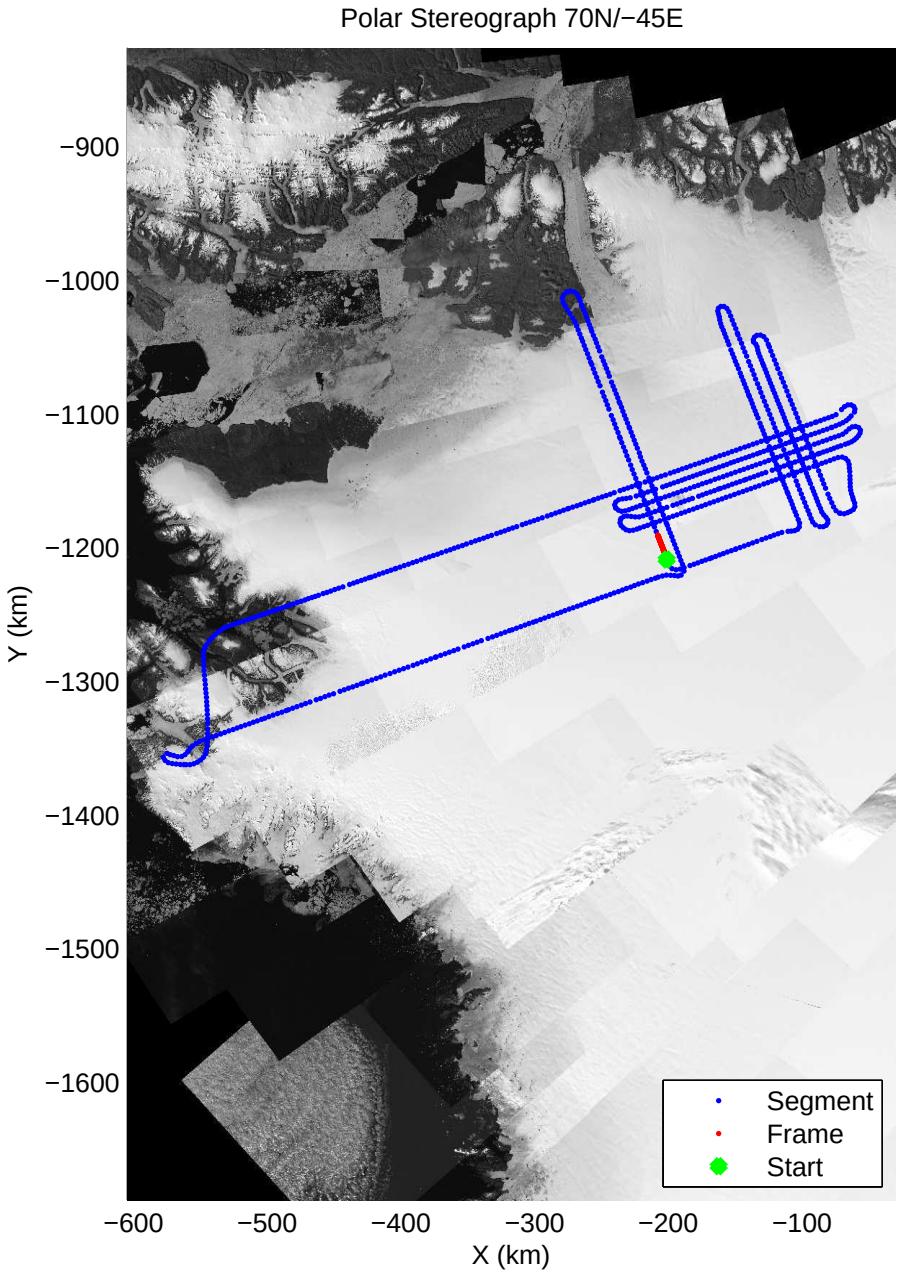

−1205
−1210
−1215
−1220
Y (km)
−205
−200
−195
X (km)

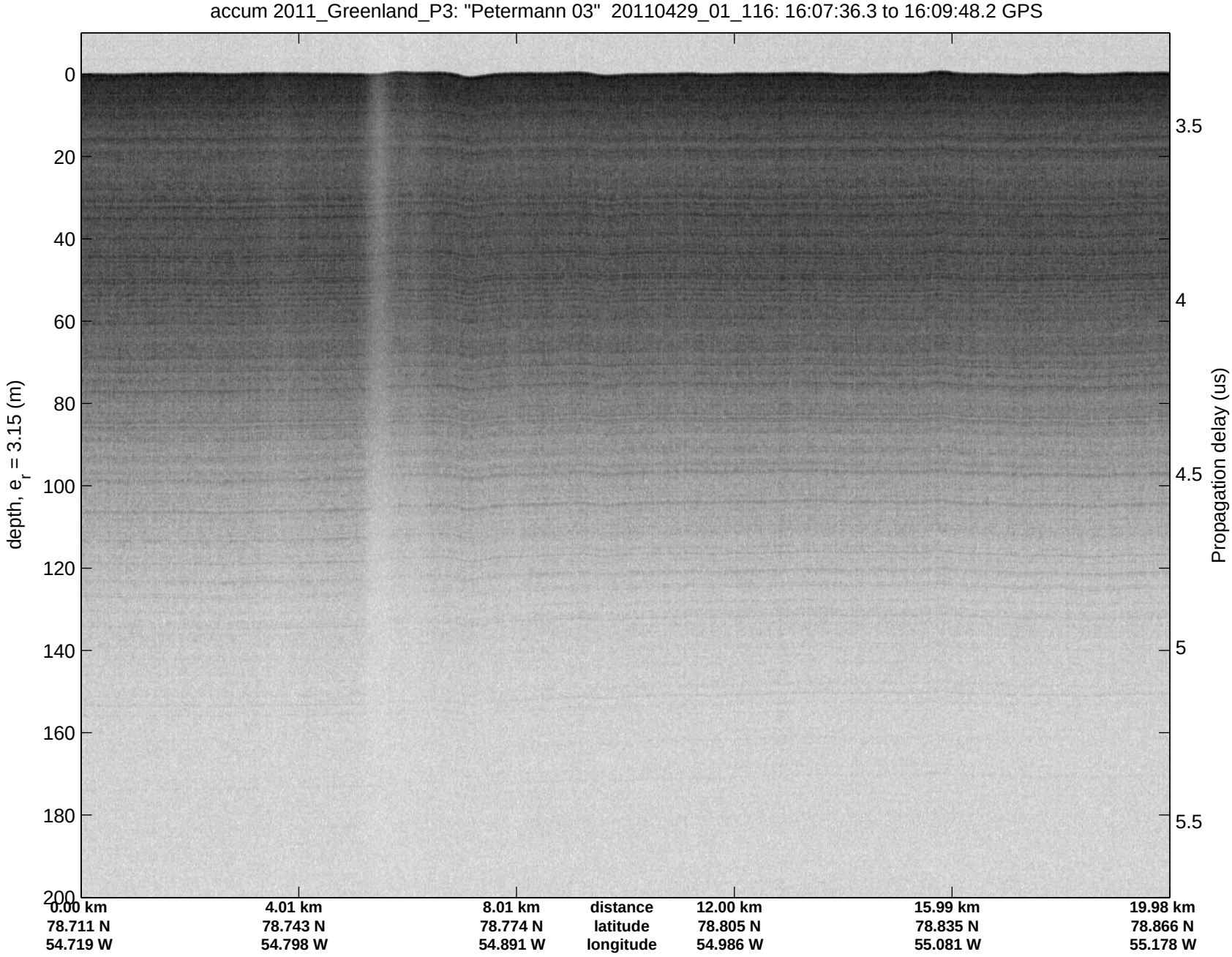

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

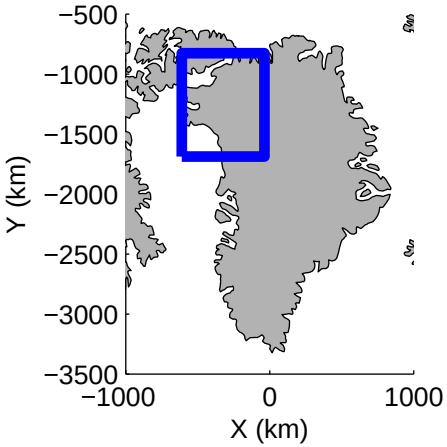

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_115: 16:05:11.5 to 16:07:36.1 GPS
0
20
40
60
80
100
120
140
160
180
depth, e_r = 3.15 (m)
3.5
4
4.5
5
5.5
Propagation delay (us)
0.00 km
78.684 N
53.991 W
4.00 km
78.667 N
54.151 W
7.99 km
78.653 N
54.318 W
distance
latitude
longitude
11.99 km
78.657 N
54.496 W
16.00 km
78.679 N
54.636 W
19.98 km
78.711 N
54.718 W

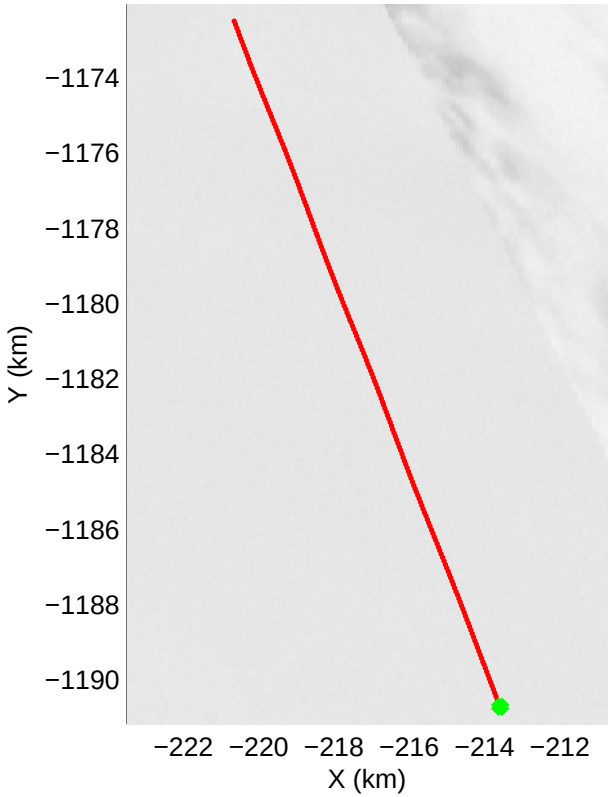

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

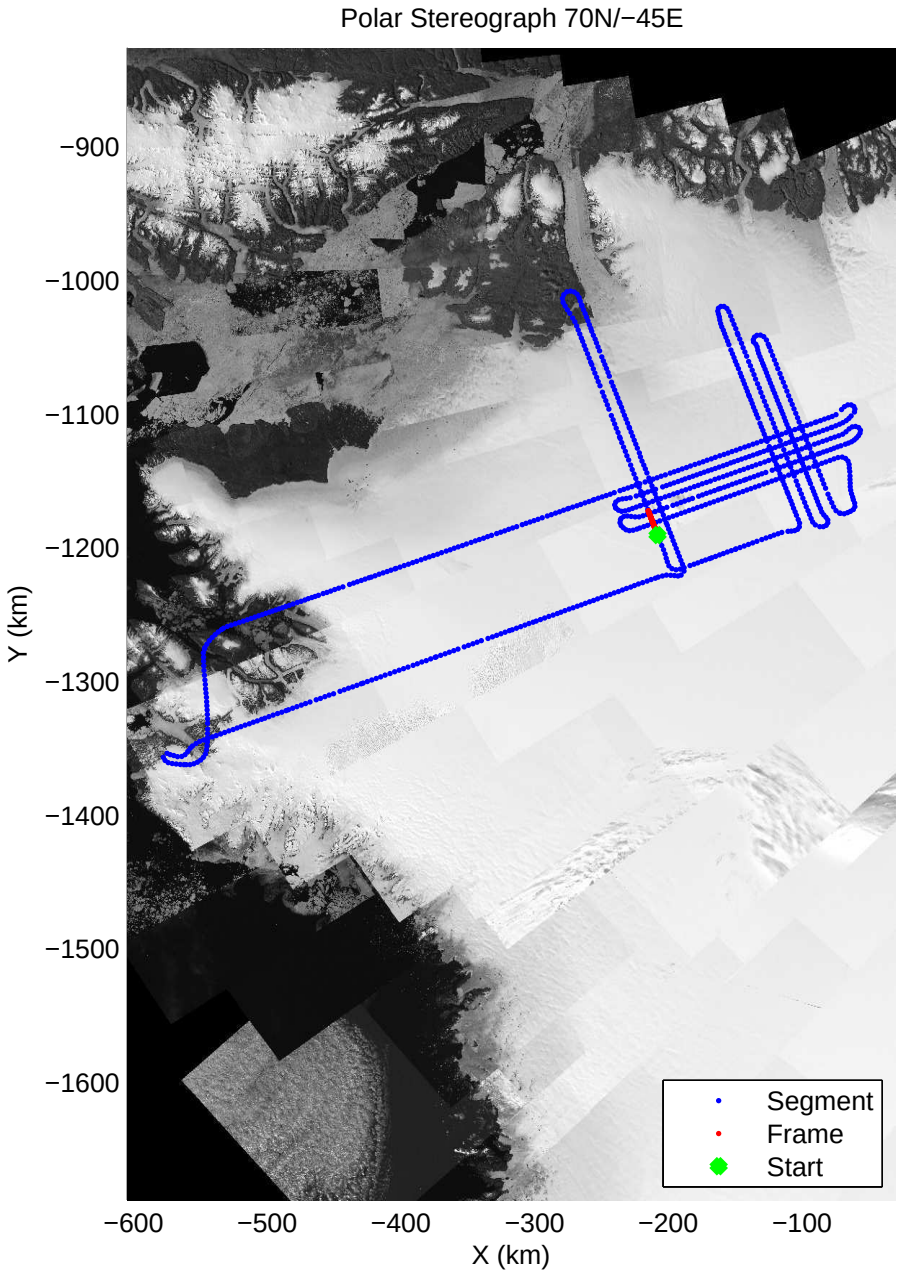

−1192
−1194
−1196
−1198
−1200
−1202
−1204
−1206
−1208
Y (km)
−216
−214
−212
−210
−208
−206
X (km)

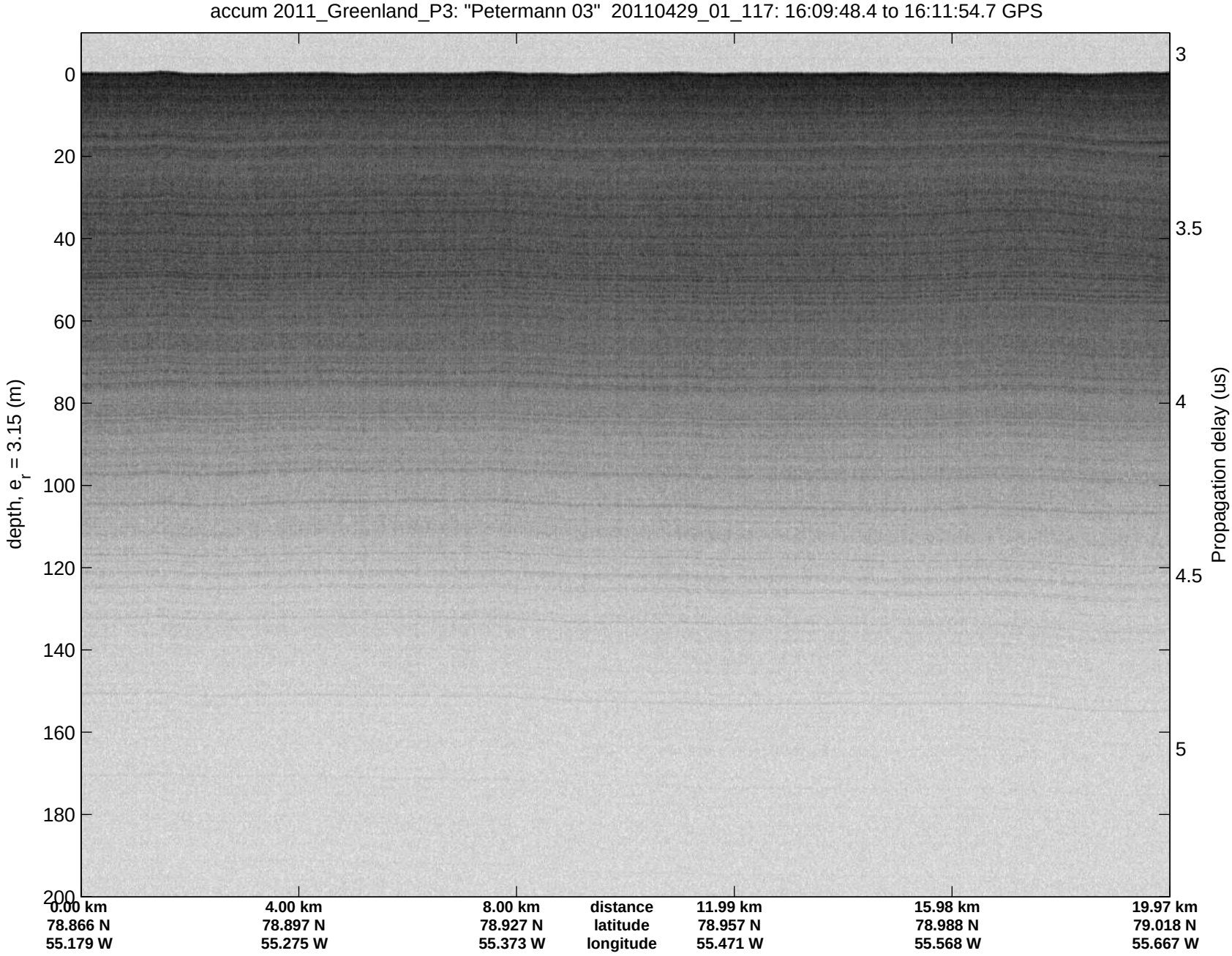

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

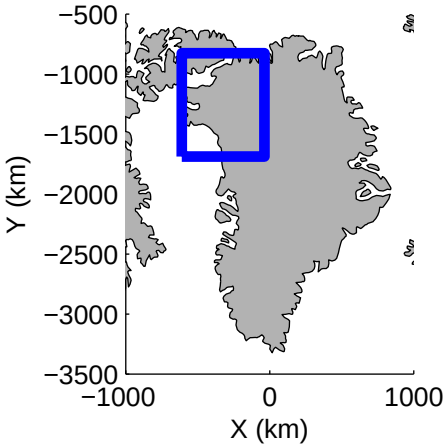

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_116: 16:07:36.3 to 16:09:48.2 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
78.711 N
54.719 W
4.01 km
78.743 N
54.798 W
8.01 km
78.774 N
54.891 W
distance
latitude
longitude
12.00 km
78.805 N
54.986 W
15.99 km
78.835 N
55.081 W
19.98 km
78.866 N
55.178 W

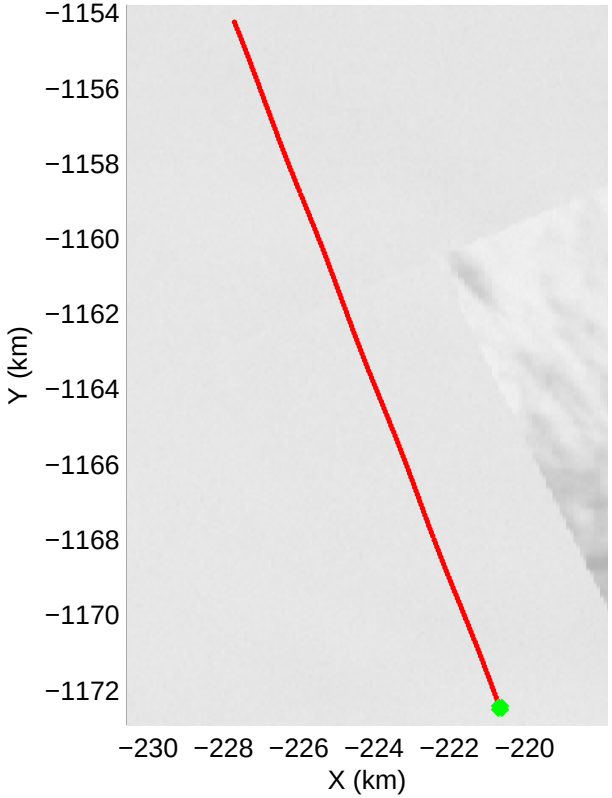

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

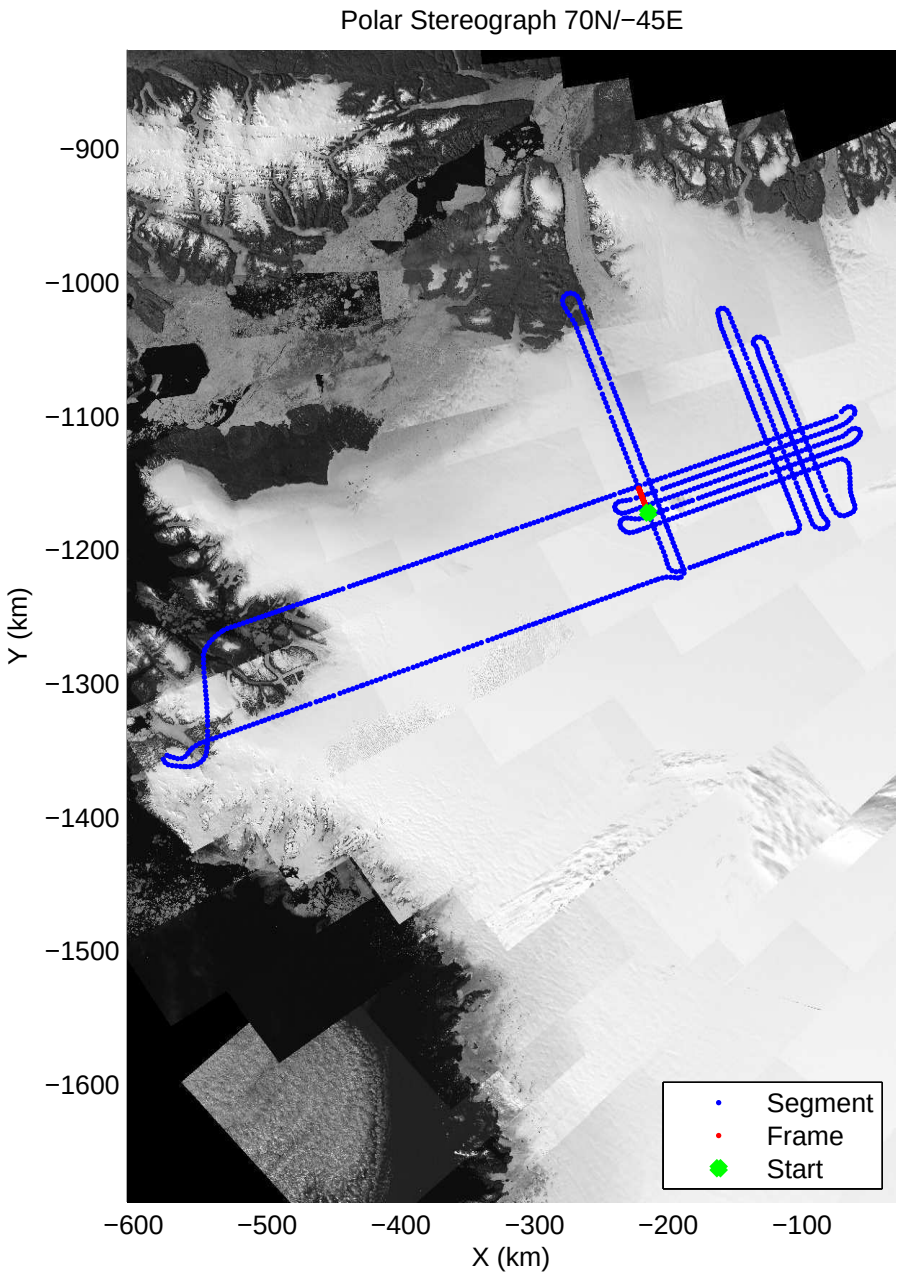

−1174
−1176
−1178
−1180
−1182
−1184
−1186
−1188
−1190
Y (km)
−222
−220
−218
−216
−214
−212
X (km)

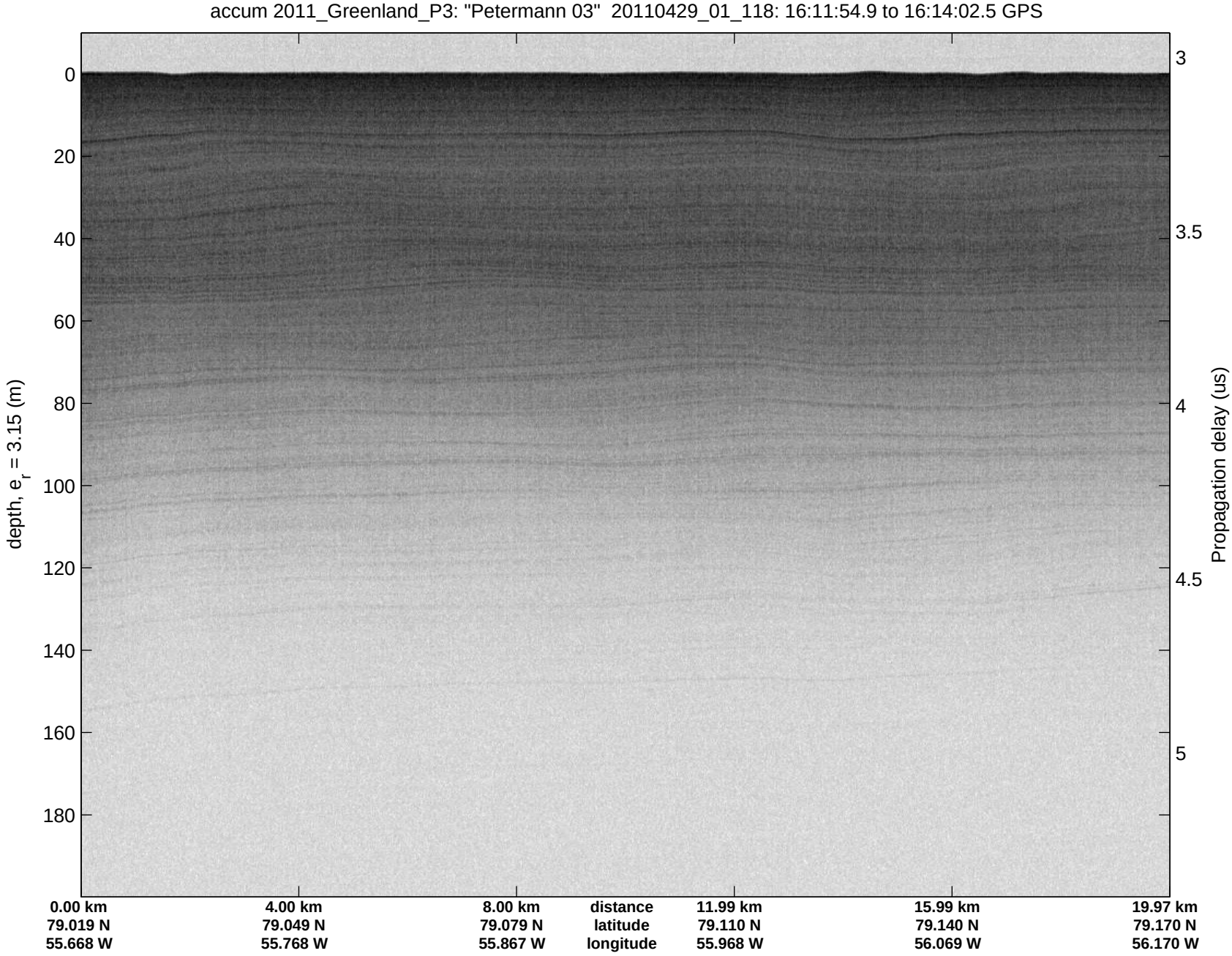

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

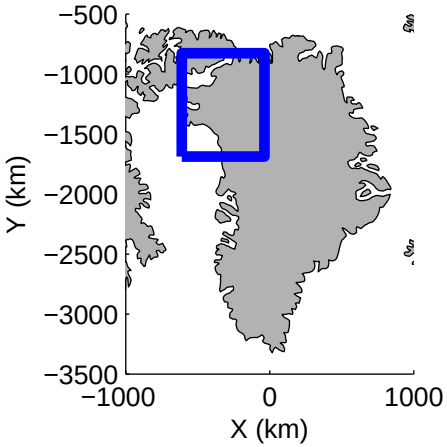

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_117: 16:09:48.4 to 16:11:54.7 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
78.866 N
55.179 W
4.00 km
78.897 N
55.275 W
8.00 km
78.927 N
55.373 W
distance
latitude
longitude
11.99 km
78.957 N
55.471 W
15.98 km
78.988 N
55.568 W
19.97 km
79.018 N
55.667 W

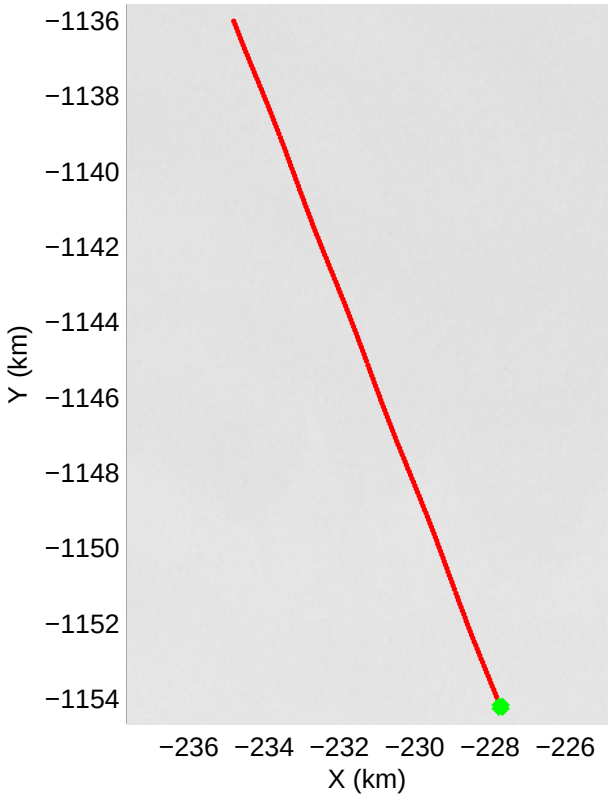

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

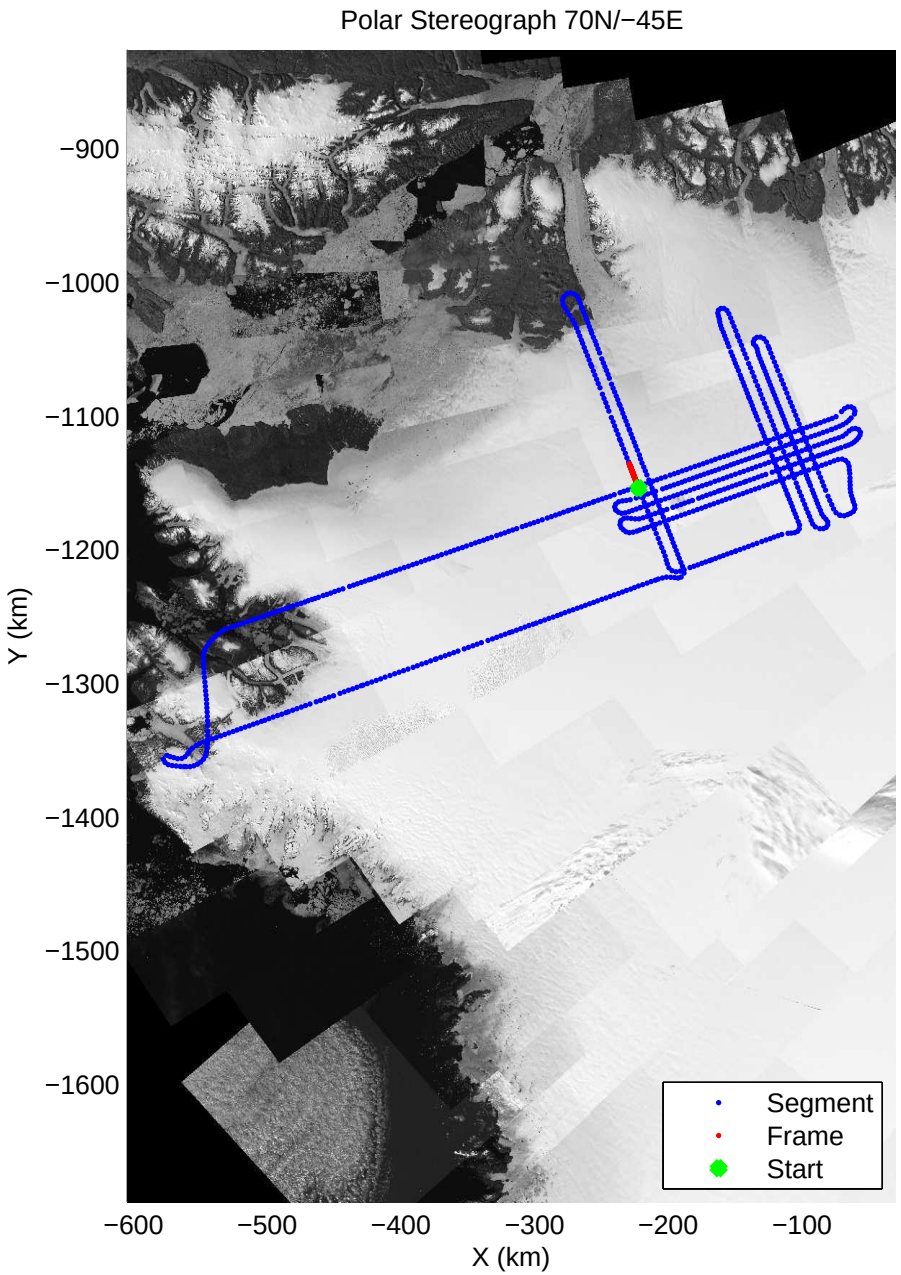

−1154
−1156
−1158
−1160
−1162
−1164
−1166
−1168
−1170
−1172
Y (km)
−230
−228
−226
−224
−222
−220
X (km)

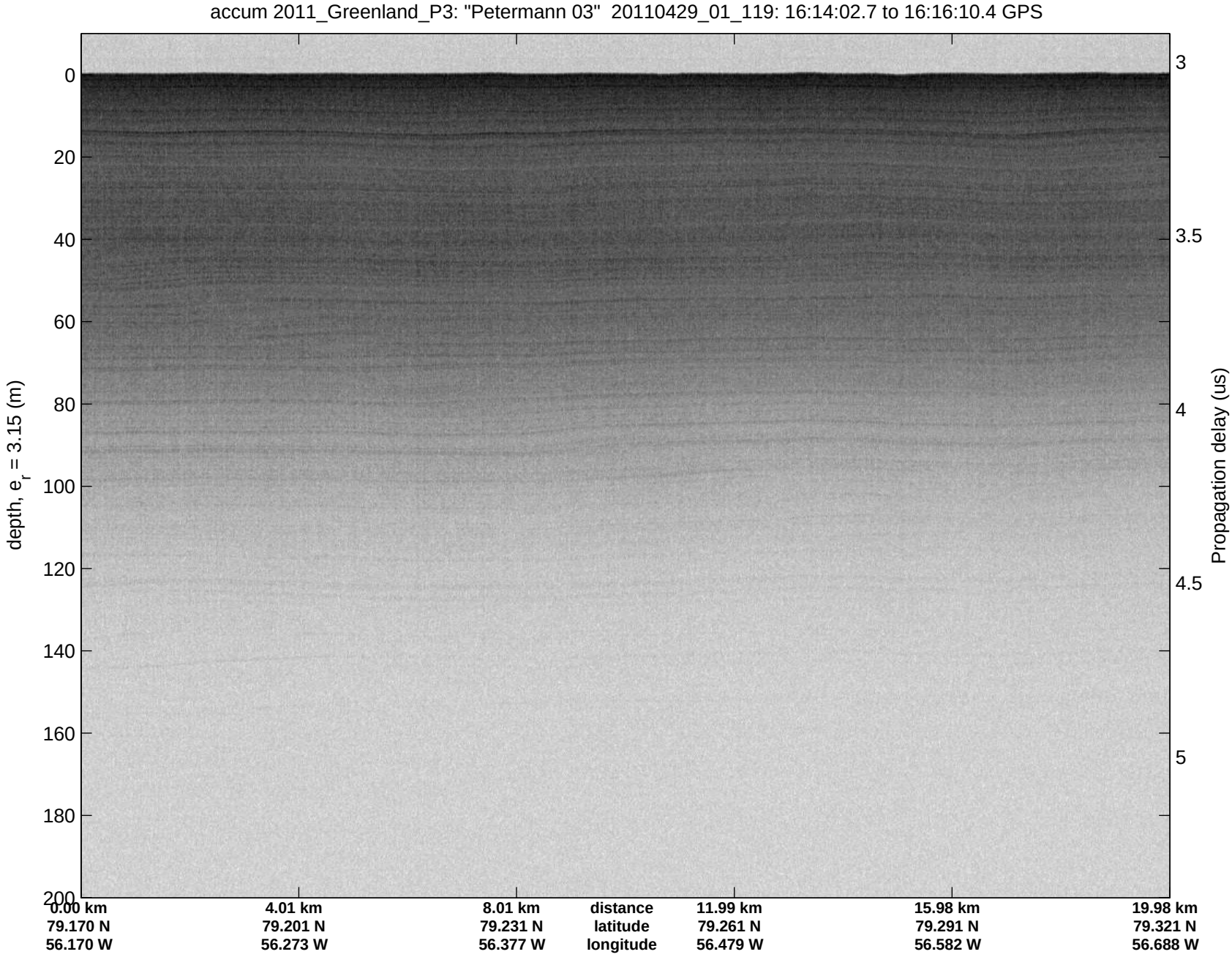

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

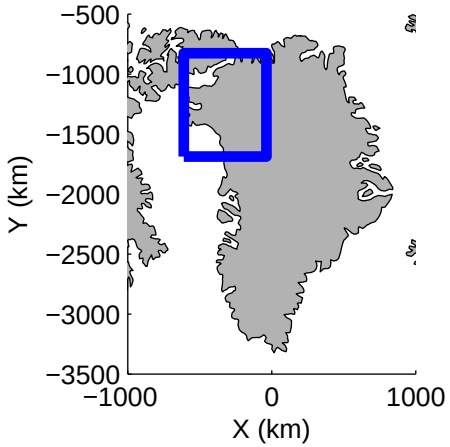

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_118: 16:11:54.9 to 16:14:02.5 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.019 N
55.668 W
4.00 km
79.049 N
55.768 W
8.00 km
79.079 N
55.867 W
distance
latitude
longitude
11.99 km
79.110 N
55.968 W
15.99 km
79.140 N
56.069 W
19.97 km
79.170 N
56.170 W

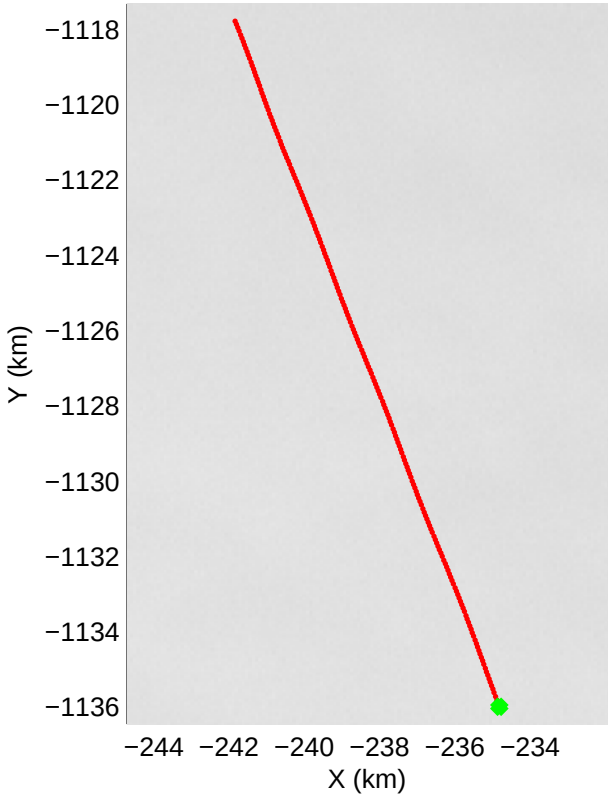

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

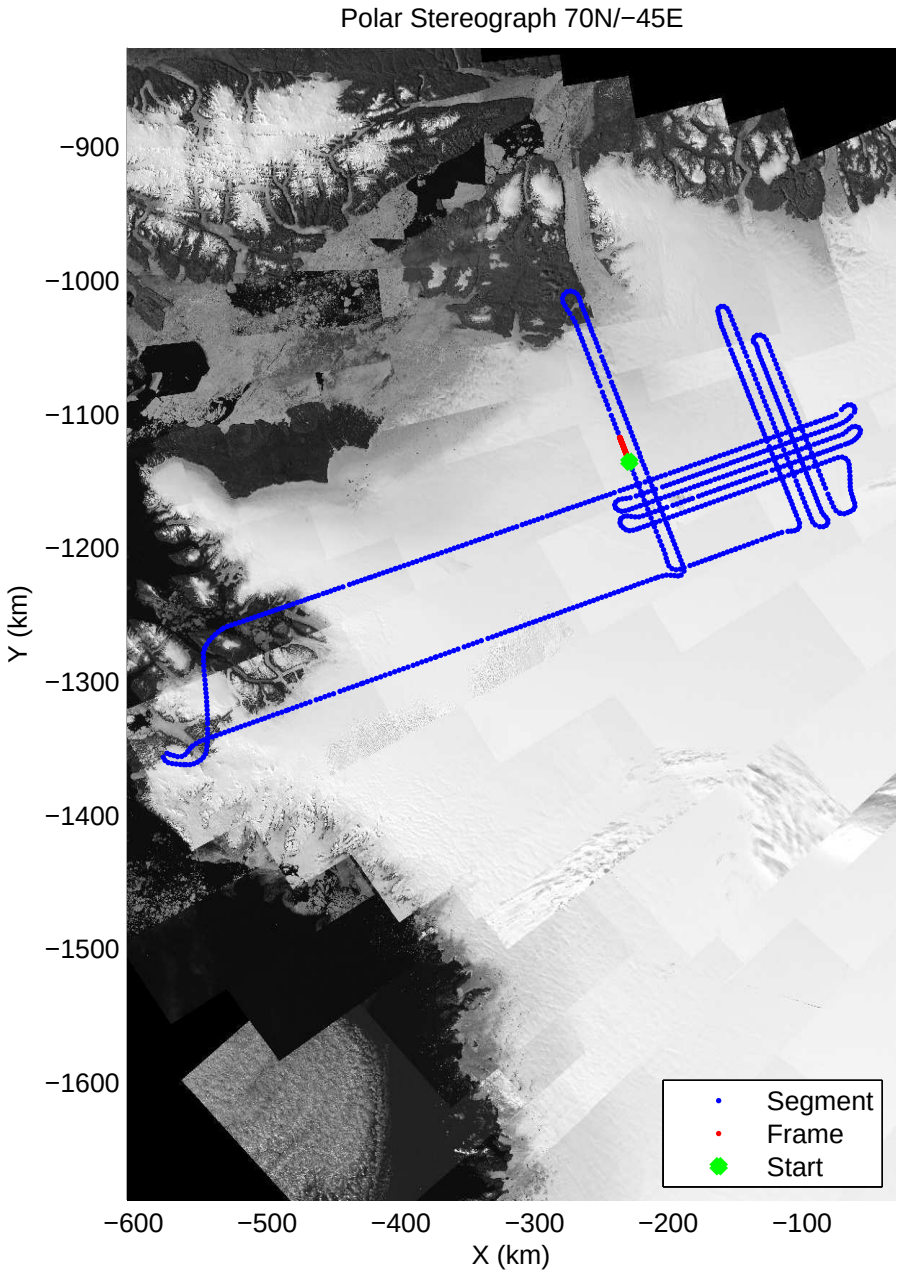

−1136
−1138
−1140
−1142
−1144
−1146
−1148
−1150
−1152
−1154
Y (km)
−236
−234
−232
−230
−228
−226
X (km)

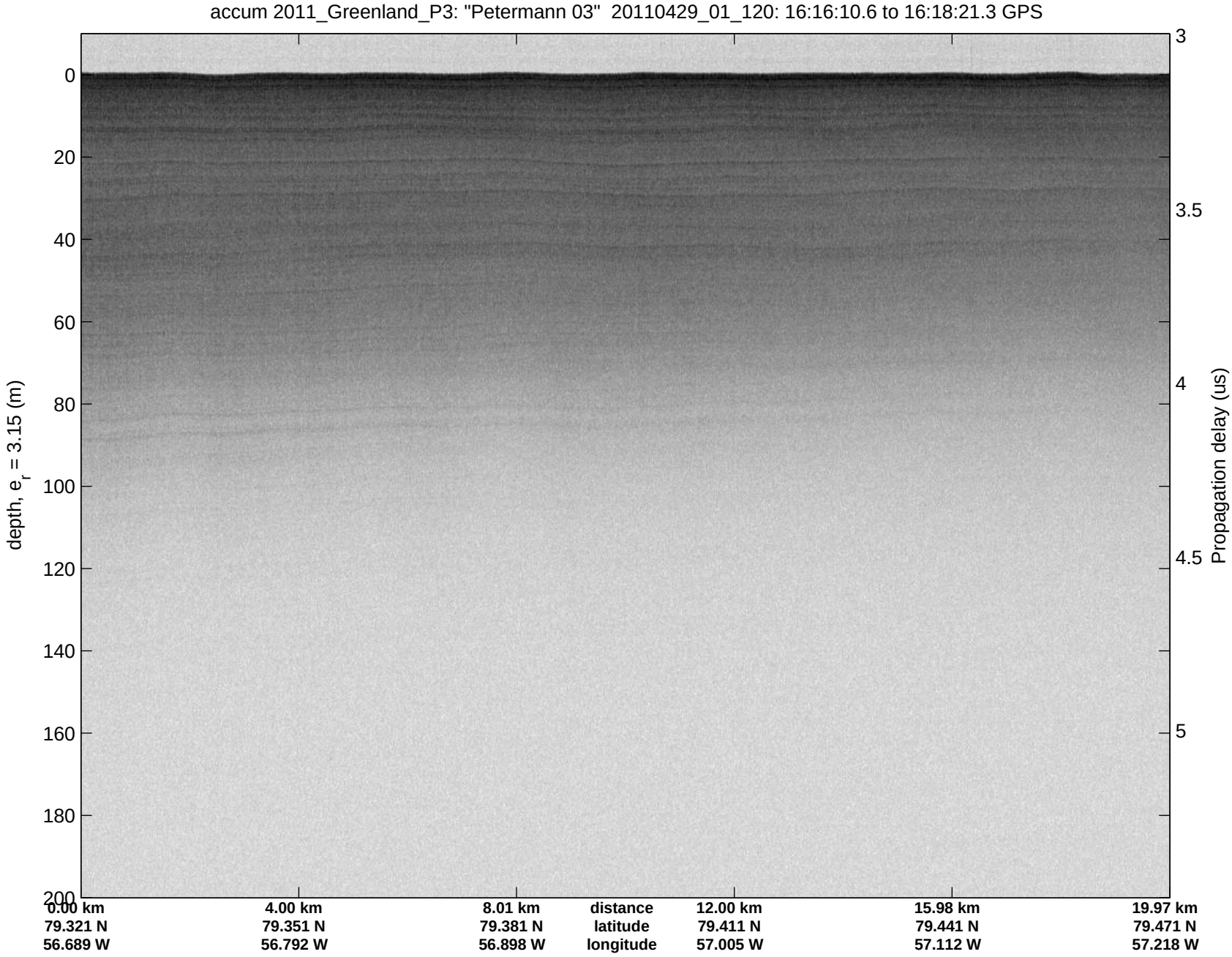

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

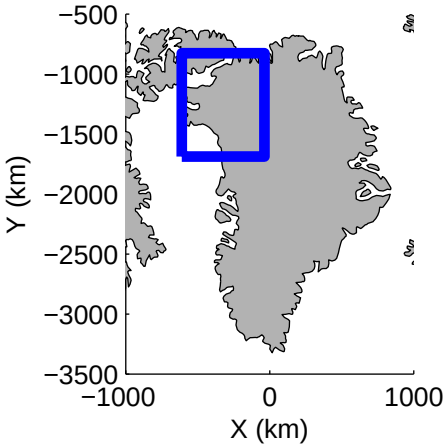

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_119: 16:14:02.7 to 16:16:10.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.170 N
56.170 W
4.01 km
79.201 N
56.273 W
8.01 km
79.231 N
56.377 W
distance
latitude
longitude
11.99 km
79.261 N
56.479 W
15.98 km
79.291 N
56.582 W
19.98 km
79.321 N
56.688 W

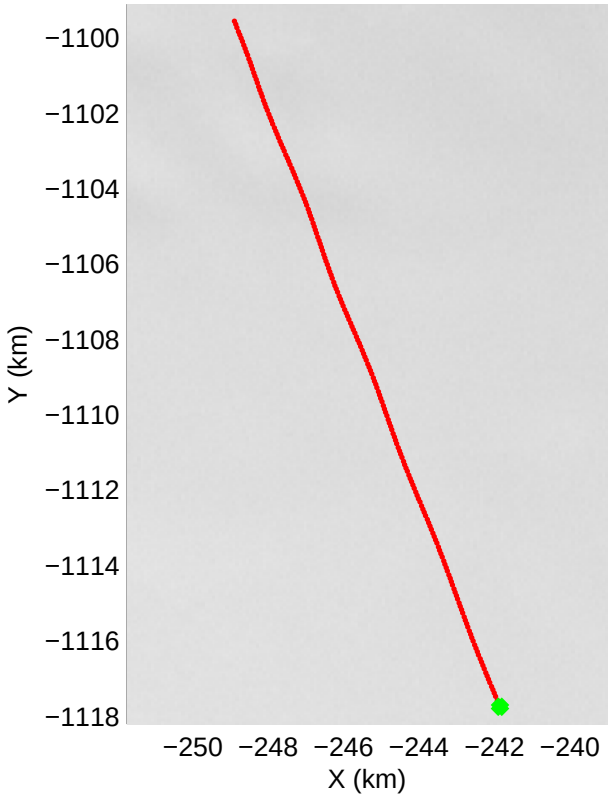

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

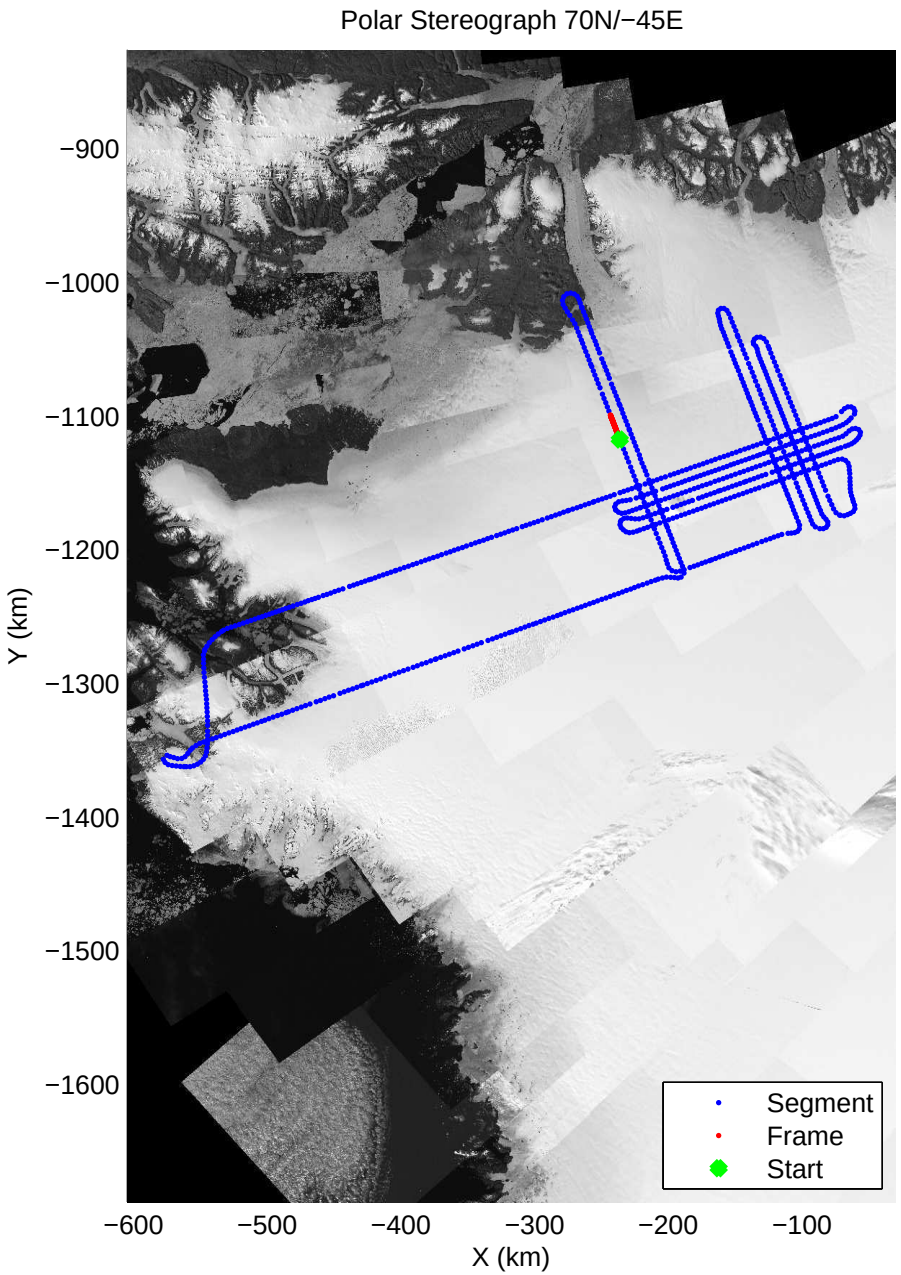

−1118
−1120
−1122
−1124
−1126
−1128
−1130
−1132
−1134
−1136
Y (km)
−244
−242
−240
−238
−236
−234
X (km)

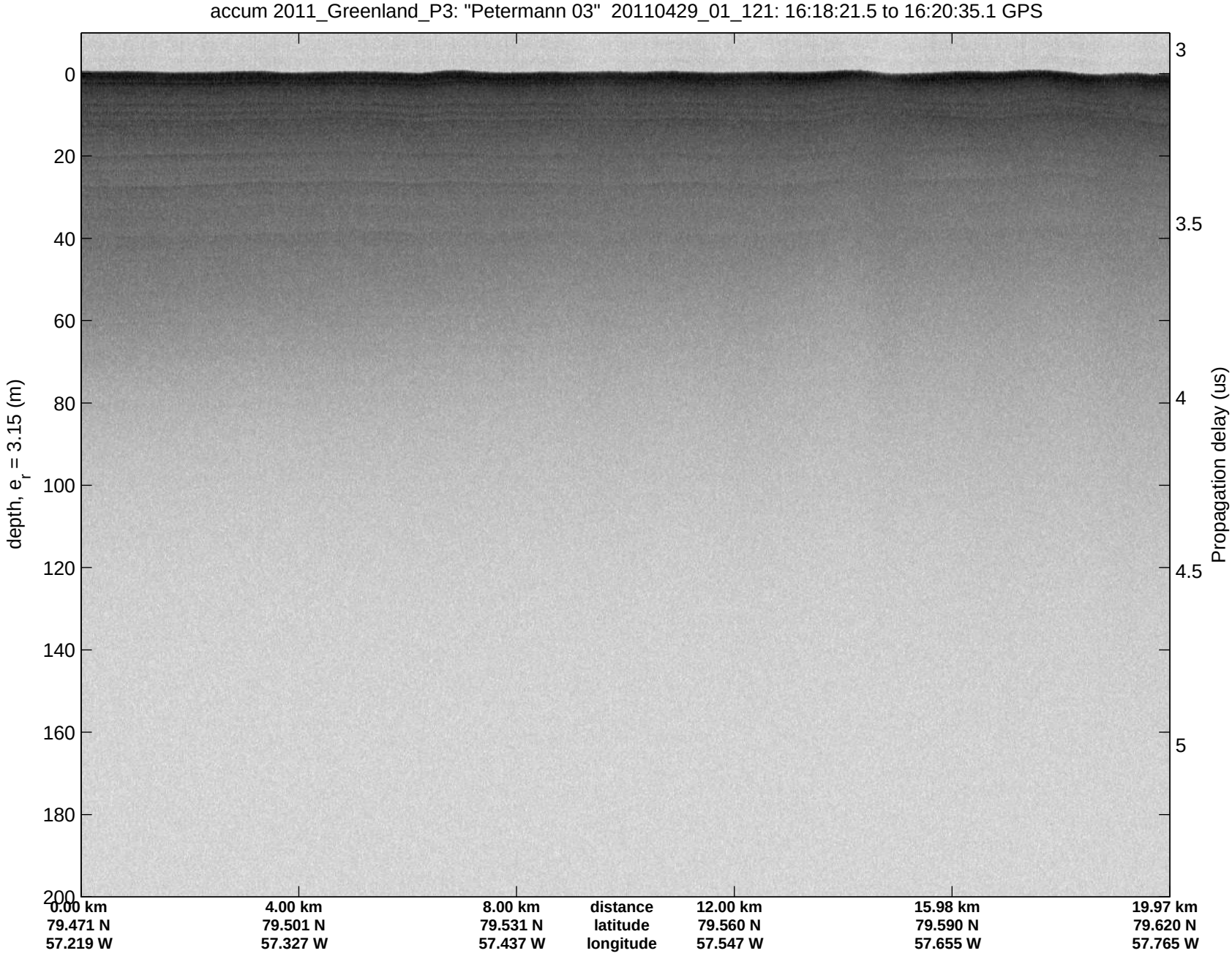

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

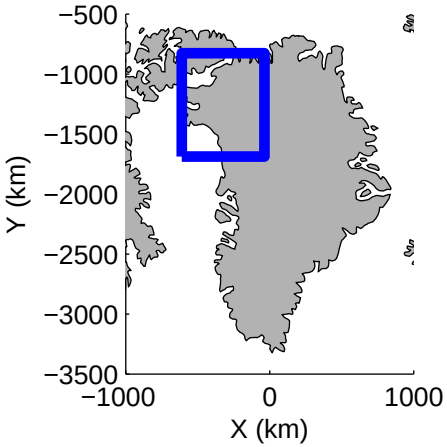

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_120: 16:16:10.6 to 16:18:21.3 GPS
depth, e_r = 3.15 (m)
Propagation delay (us)
0
20
40
60
80
100
120
140
160
180
200
3
3.5
4
4.5
5
0.00 km
79.321 N
56.689 W
4.00 km
79.351 N
56.792 W
8.01 km
79.381 N
56.898 W
distance
latitude
longitude
12.00 km
79.411 N
57.005 W
15.98 km
79.441 N
57.112 W
19.97 km
79.471 N
57.218 W

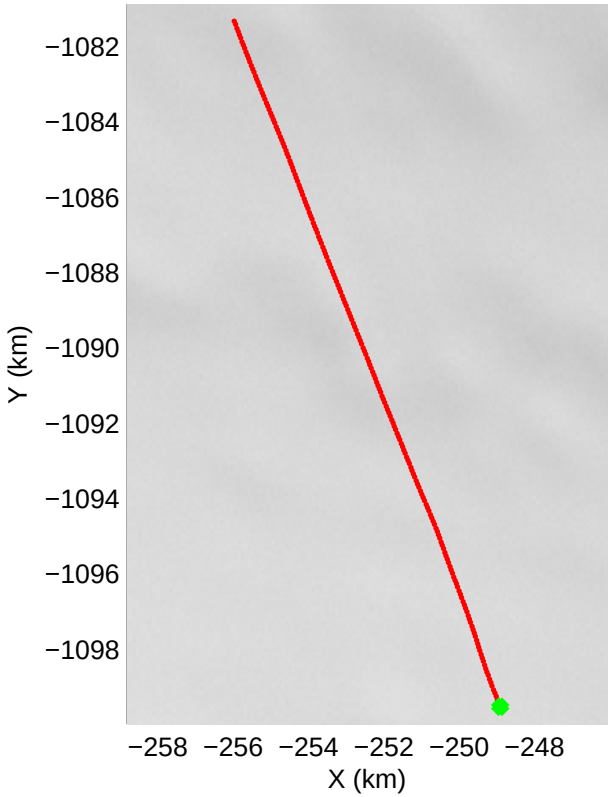

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

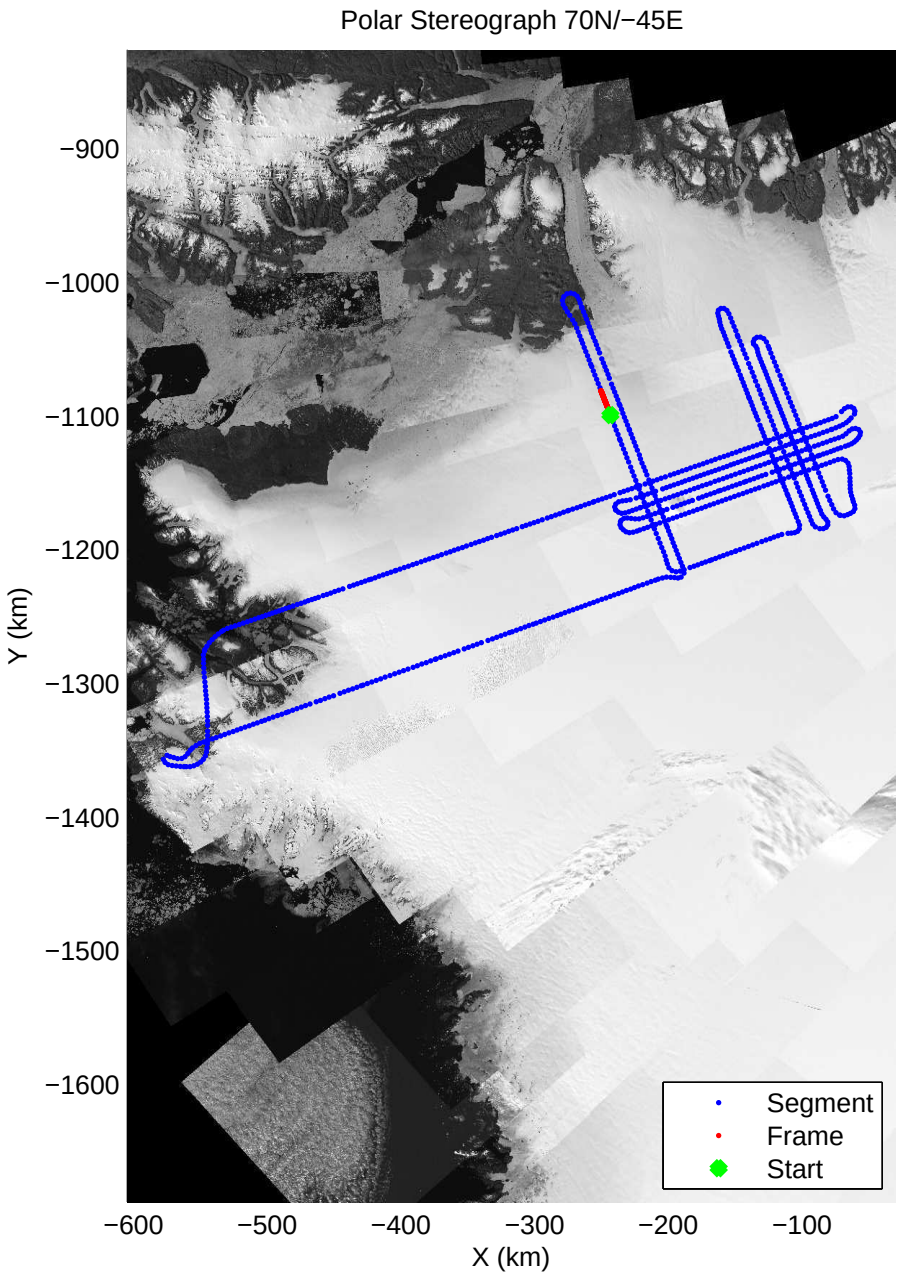

−1100
−1102
−1104
−1106
−1108
−1110
−1112
−1114
−1116
−1118
Y (km)
−250
−248
−246
−244
−242
−240
X (km)

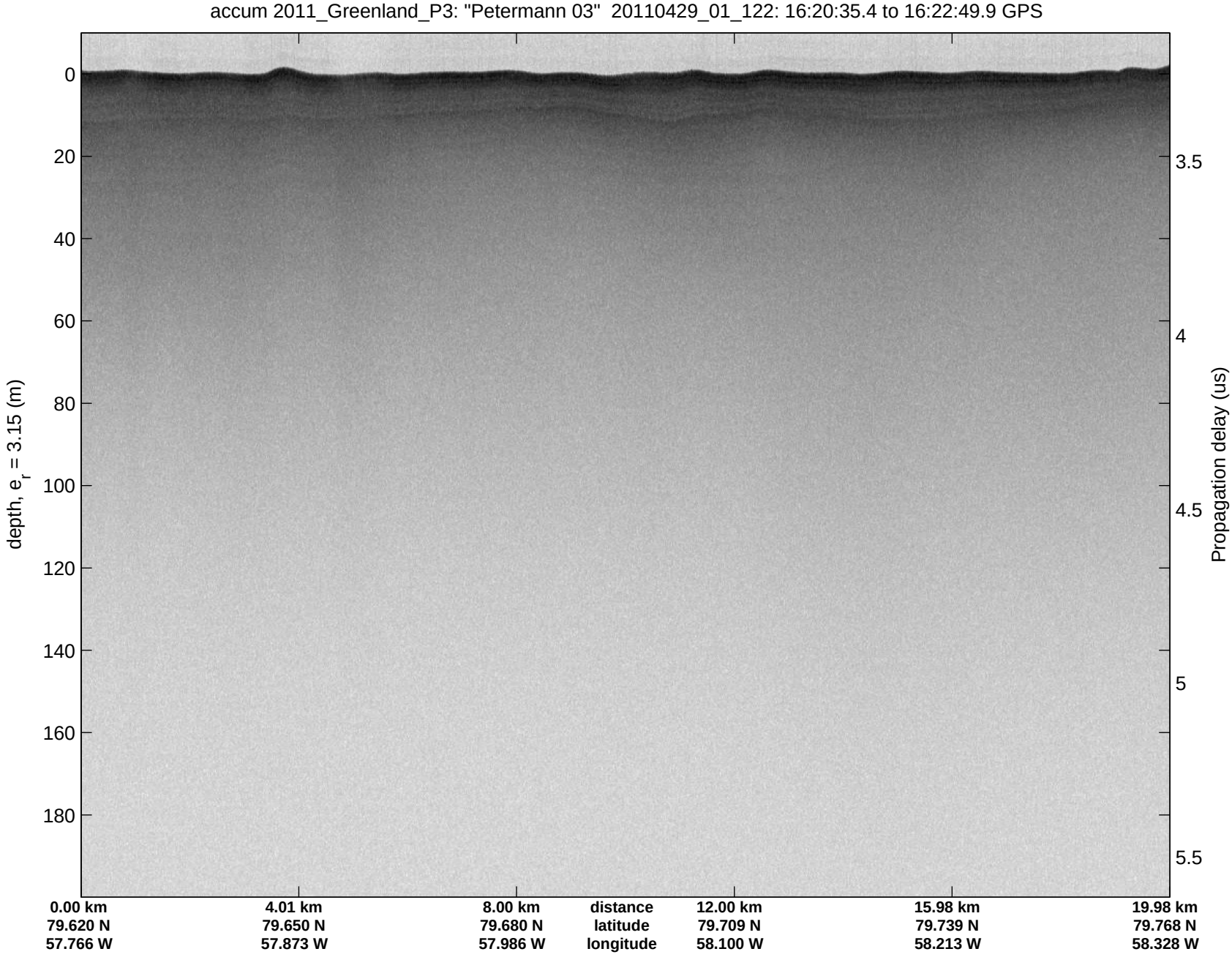

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

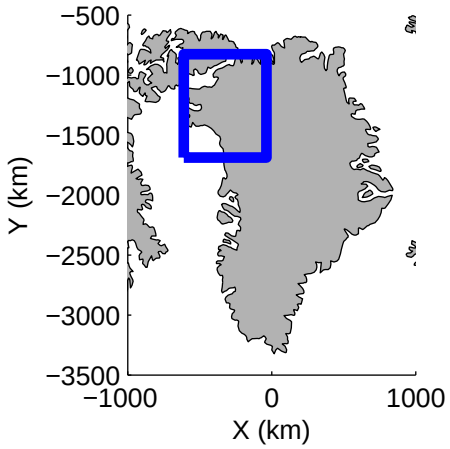

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_121: 16:18:21.5 to 16:20:35.1 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
79.471 N
57.219 W
4.00 km
79.501 N
57.327 W
8.00 km
79.531 N
57.437 W
distance
latitude
longitude
12.00 km
79.560 N
57.547 W
15.98 km
79.590 N
57.655 W
19.97 km
79.620 N
57.765 W

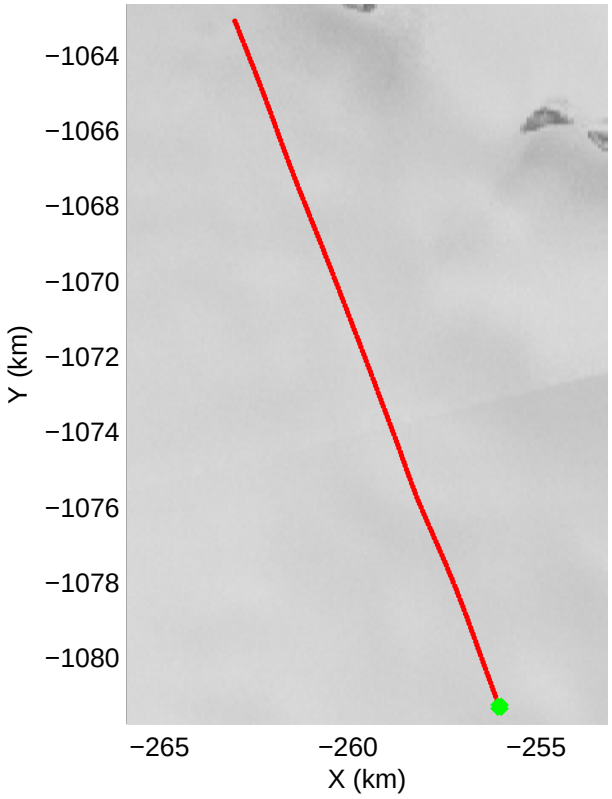

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

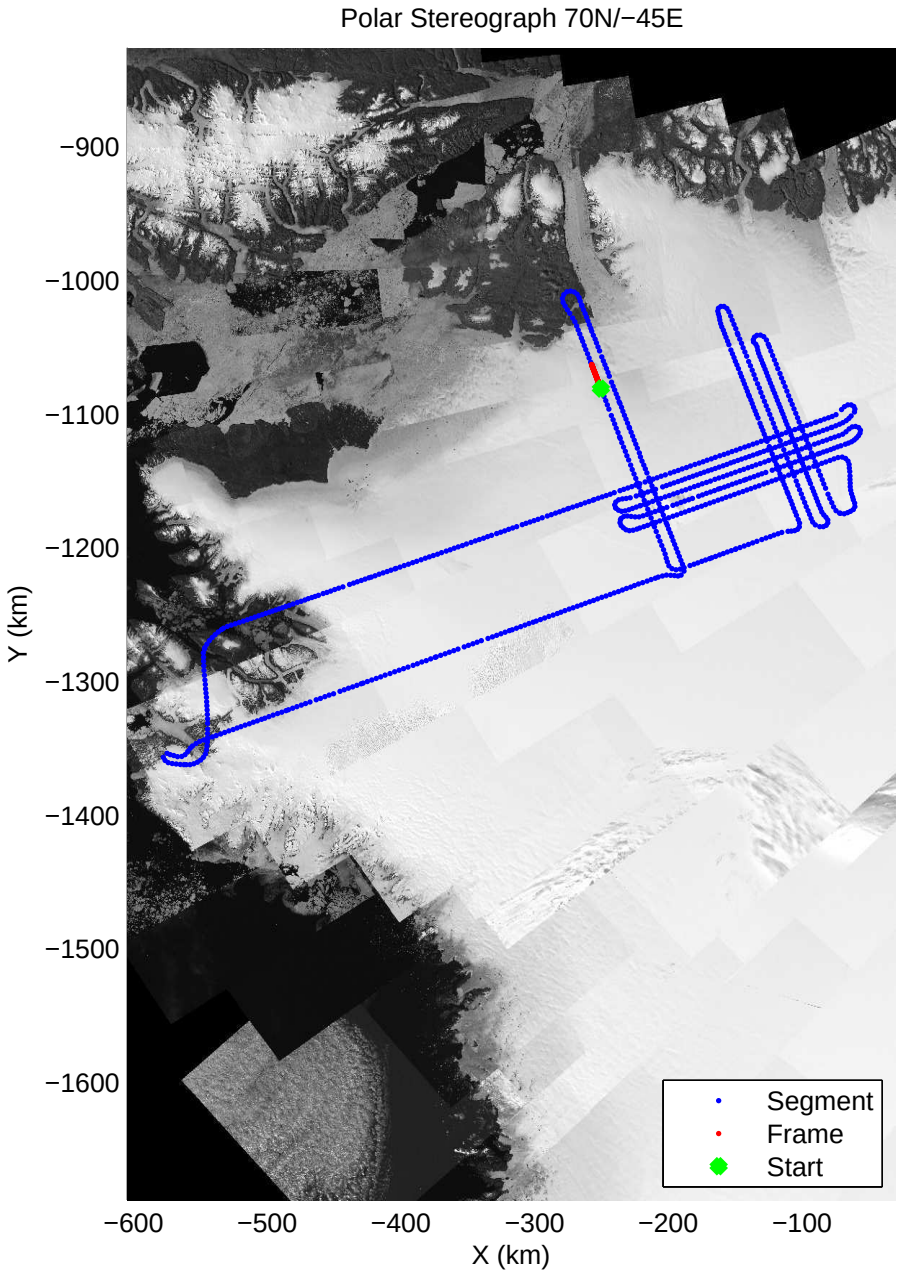

−1082
−1084
−1086
−1088
−1090
−1092
−1094
−1096
−1098
Y (km)
−258
−256
−254
−252
−250
−248
X (km)

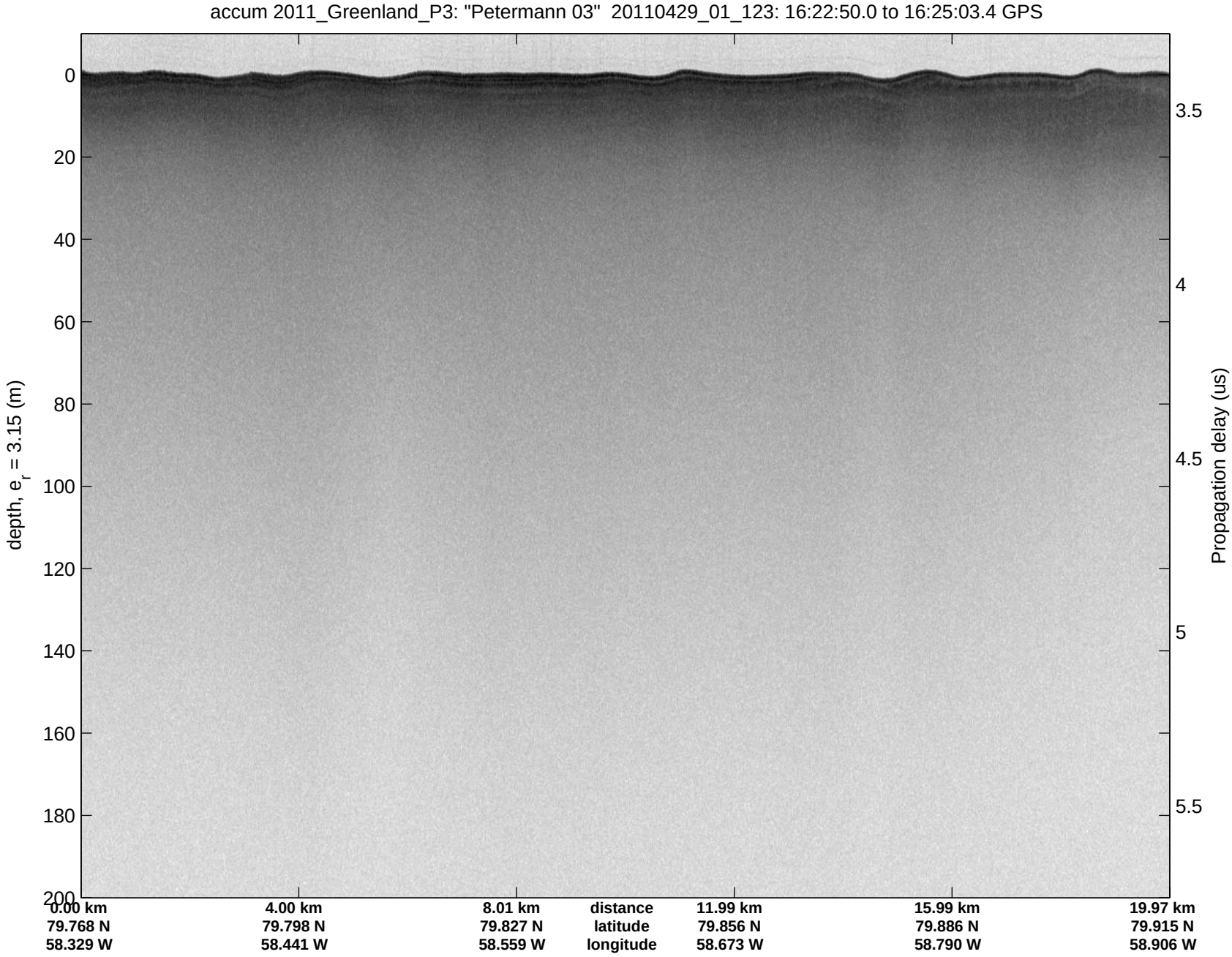

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

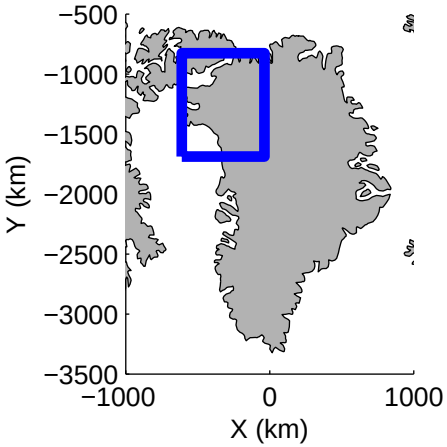

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_122: 16:20:35.4 to 16:22:49.9 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.620 N
57.766 W
4.01 km
79.650 N
57.873 W
8.00 km
79.680 N
57.986 W
distance
latitude
longitude
12.00 km
79.709 N
58.100 W
15.98 km
79.739 N
58.213 W
19.98 km
79.768 N
58.328 W

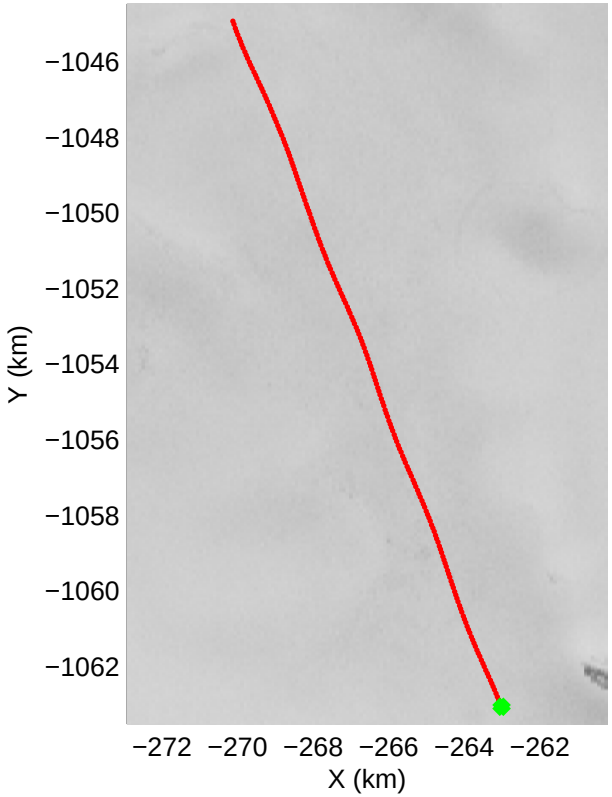

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

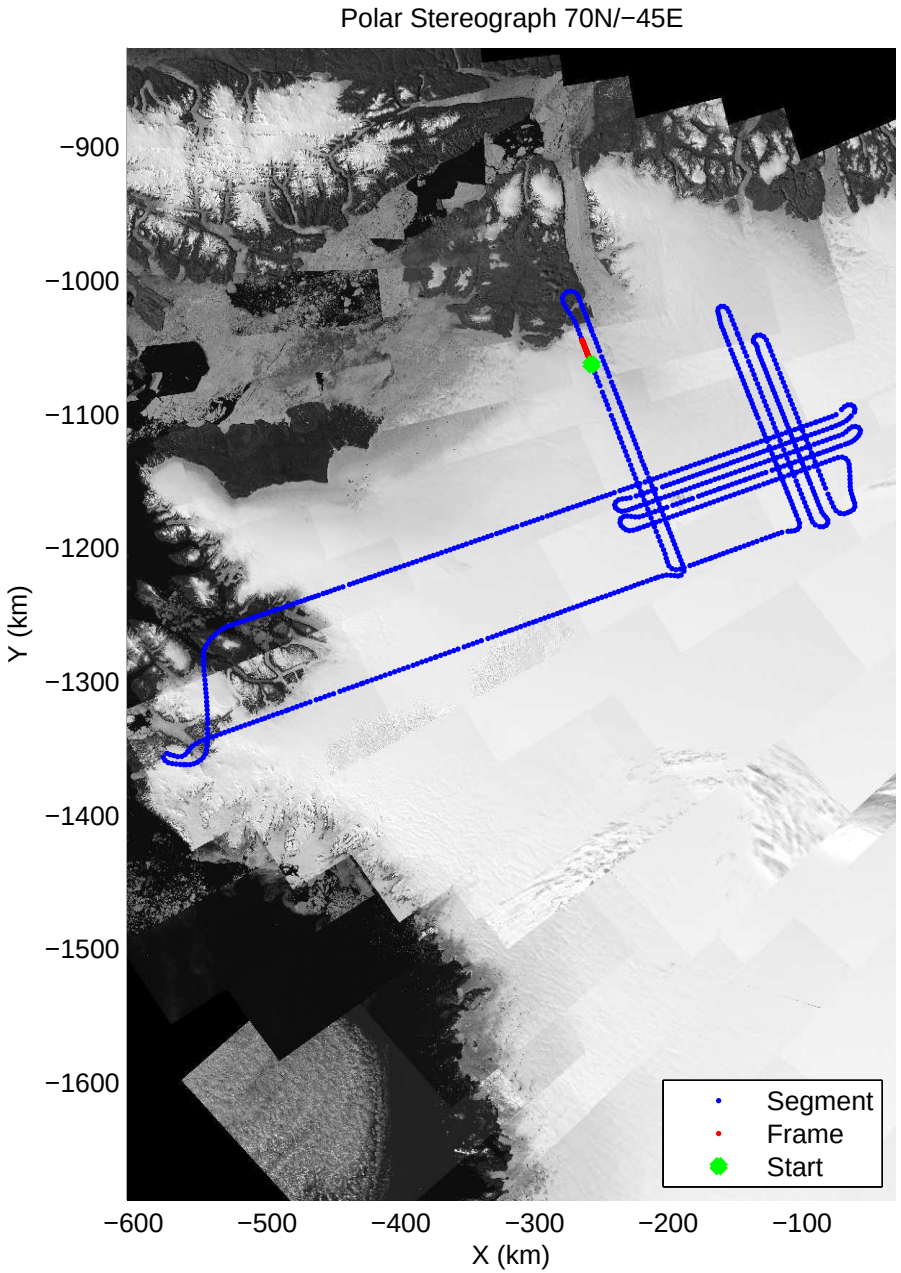

−1064
−1066
−1068
−1070
−1072
−1074
−1076
−1078
−1080
Y (km)
−265
−260
−255
X (km)

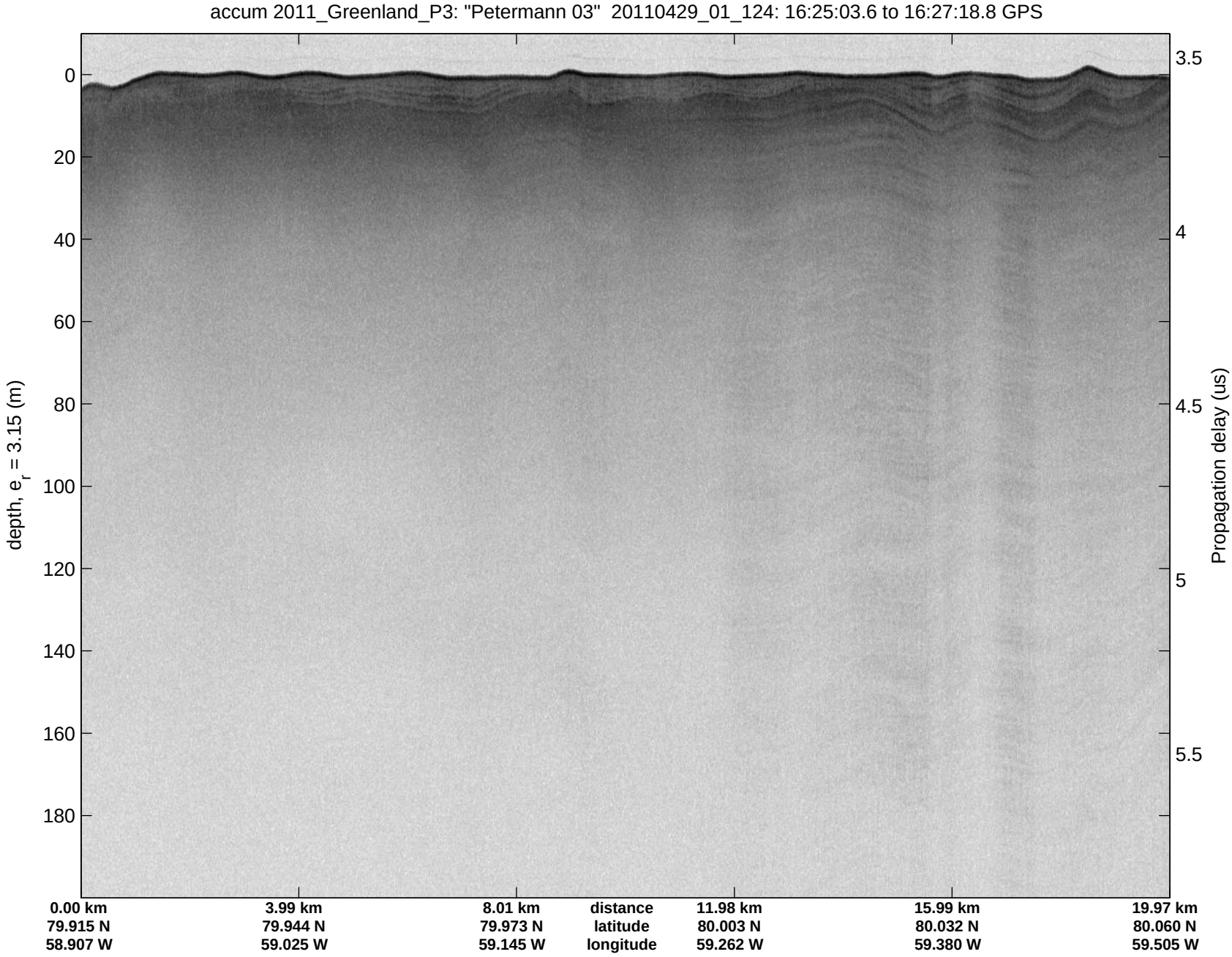

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

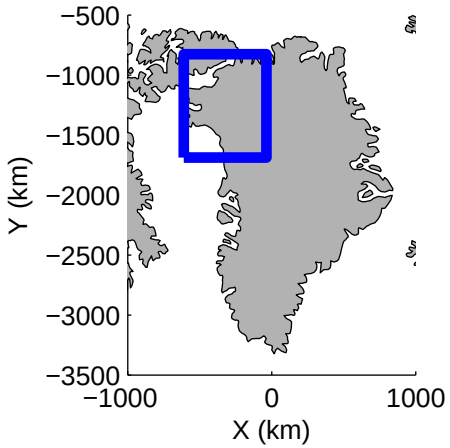

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_123: 16:22:50.0 to 16:25:03.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.768 N
58.329 W
4.00 km
79.798 N
58.441 W
8.01 km
79.827 N
58.559 W
distance
latitude
longitude
11.99 km
79.856 N
58.673 W
15.99 km
79.886 N
58.790 W
19.97 km
79.915 N
58.906 W

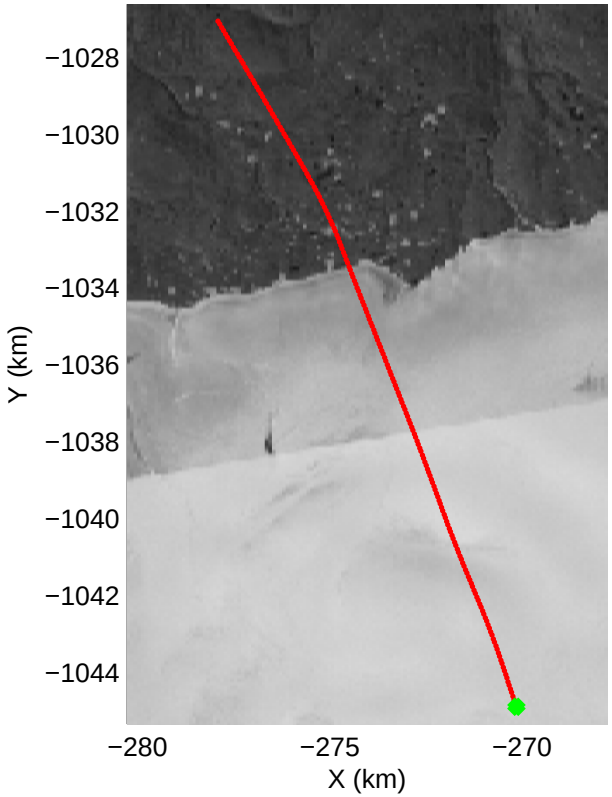

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

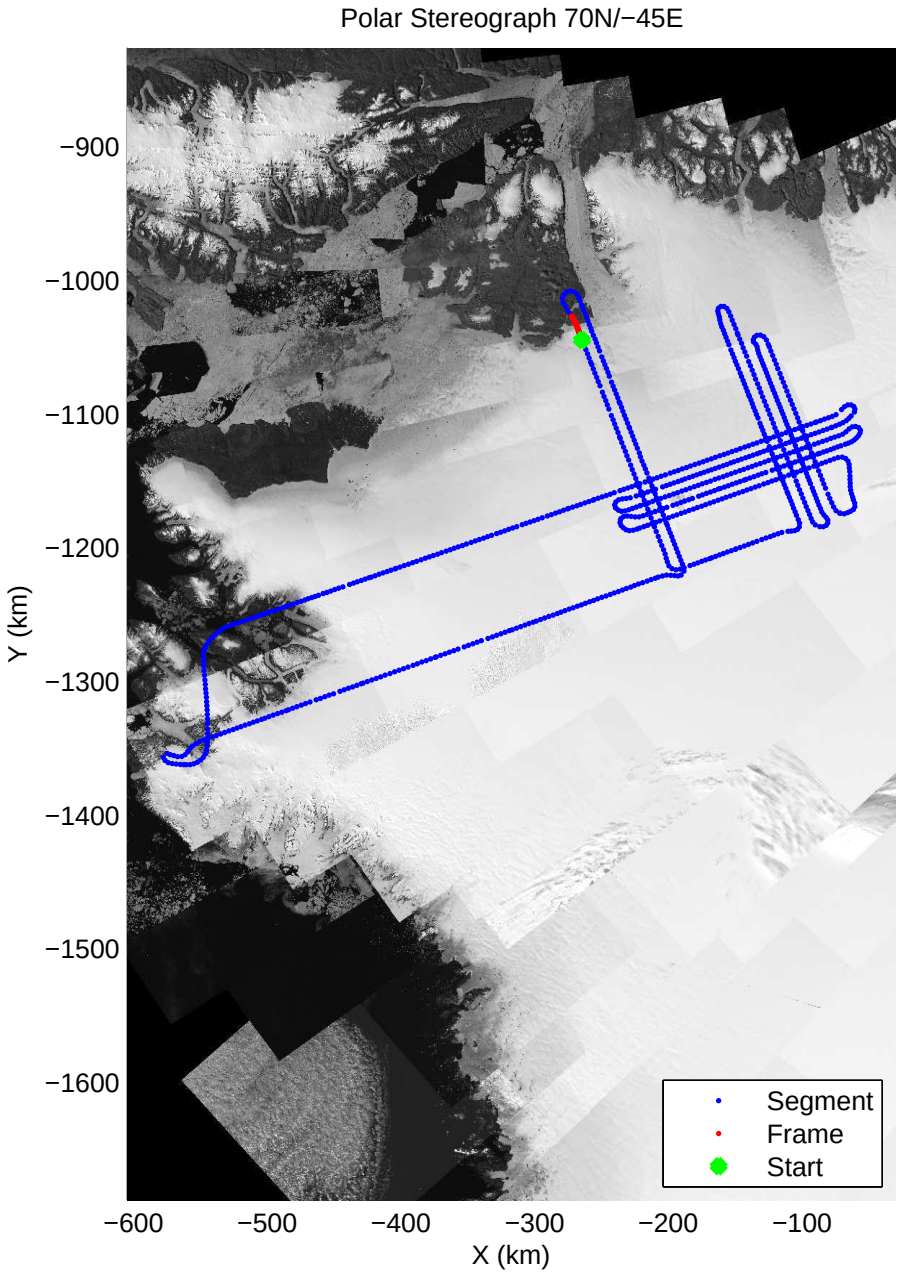

−1046
−1048
−1050
−1052
−1054
−1056
−1058
−1060
−1062
Y (km)
−272
−270
−268
−266
−264
−262
X (km)

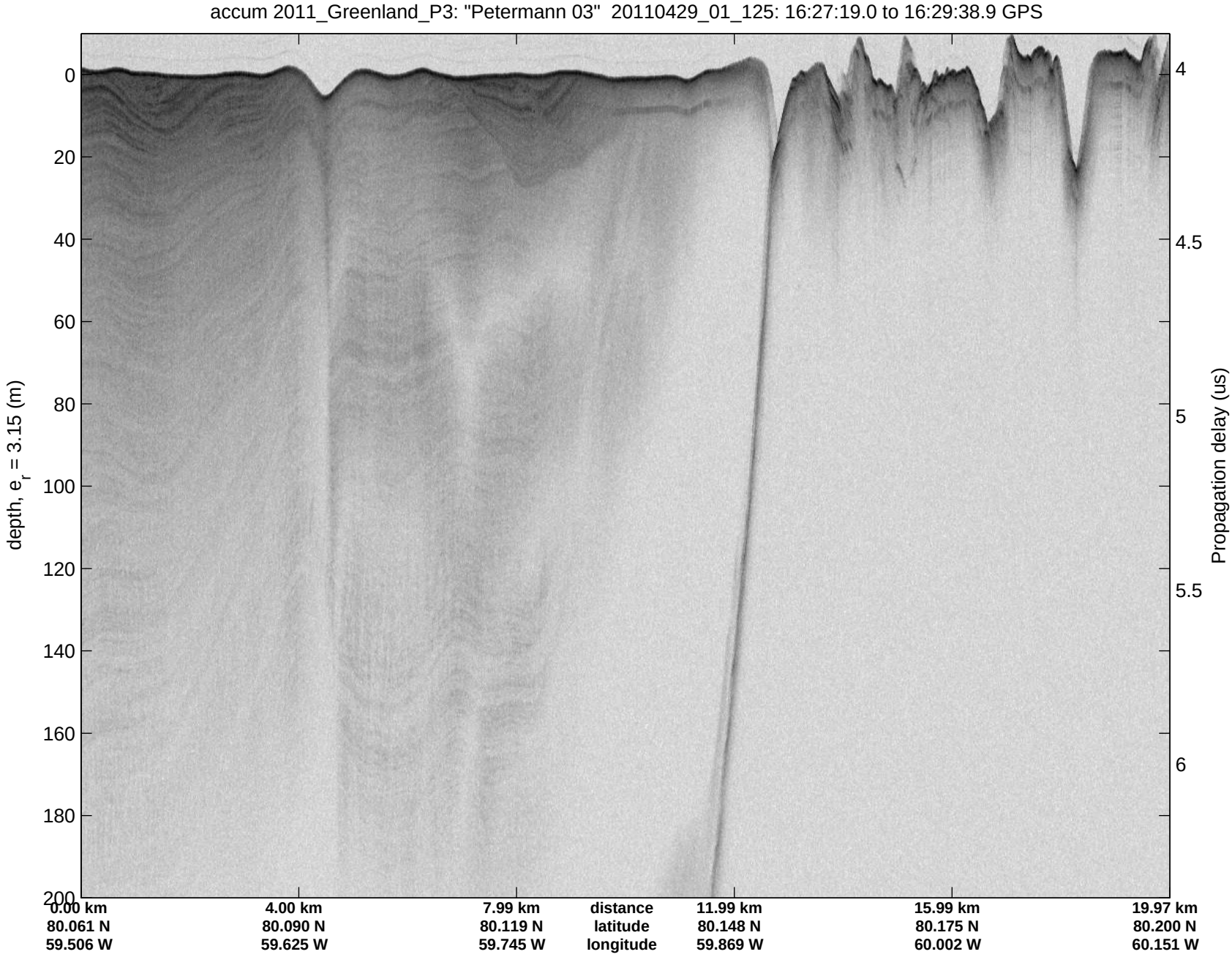

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

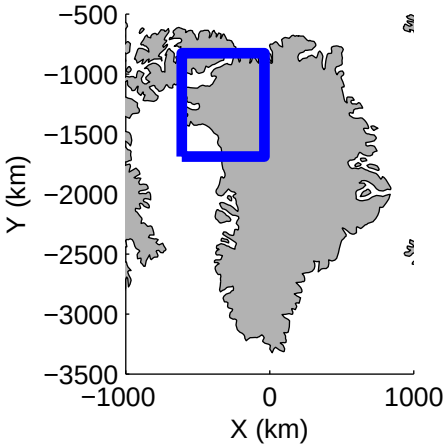

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_124: 16:25:03.6 to 16:27:18.8 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.915 N
58.907 W
3.99 km
79.944 N
59.025 W
8.01 km
79.973 N
59.145 W
distance
latitude
longitude
11.98 km
80.003 N
59.262 W
15.99 km
80.032 N
59.380 W
19.97 km
80.060 N
59.505 W

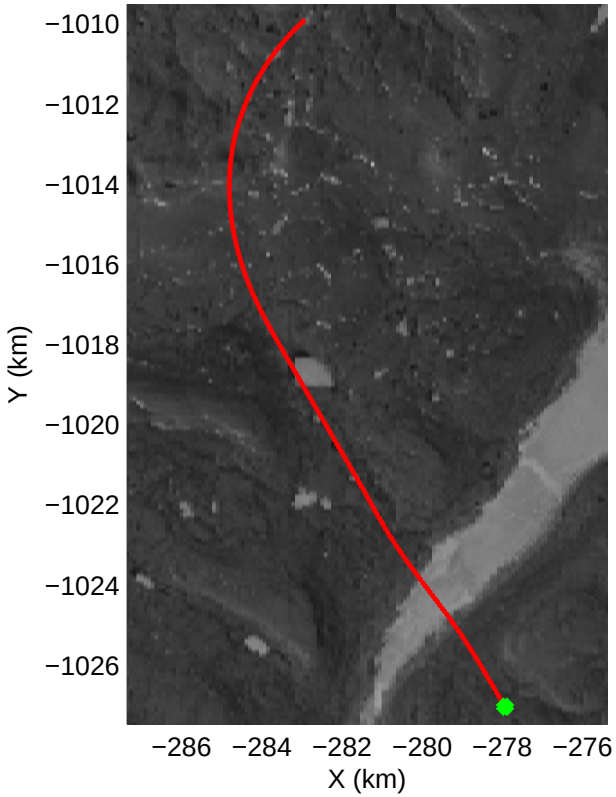

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

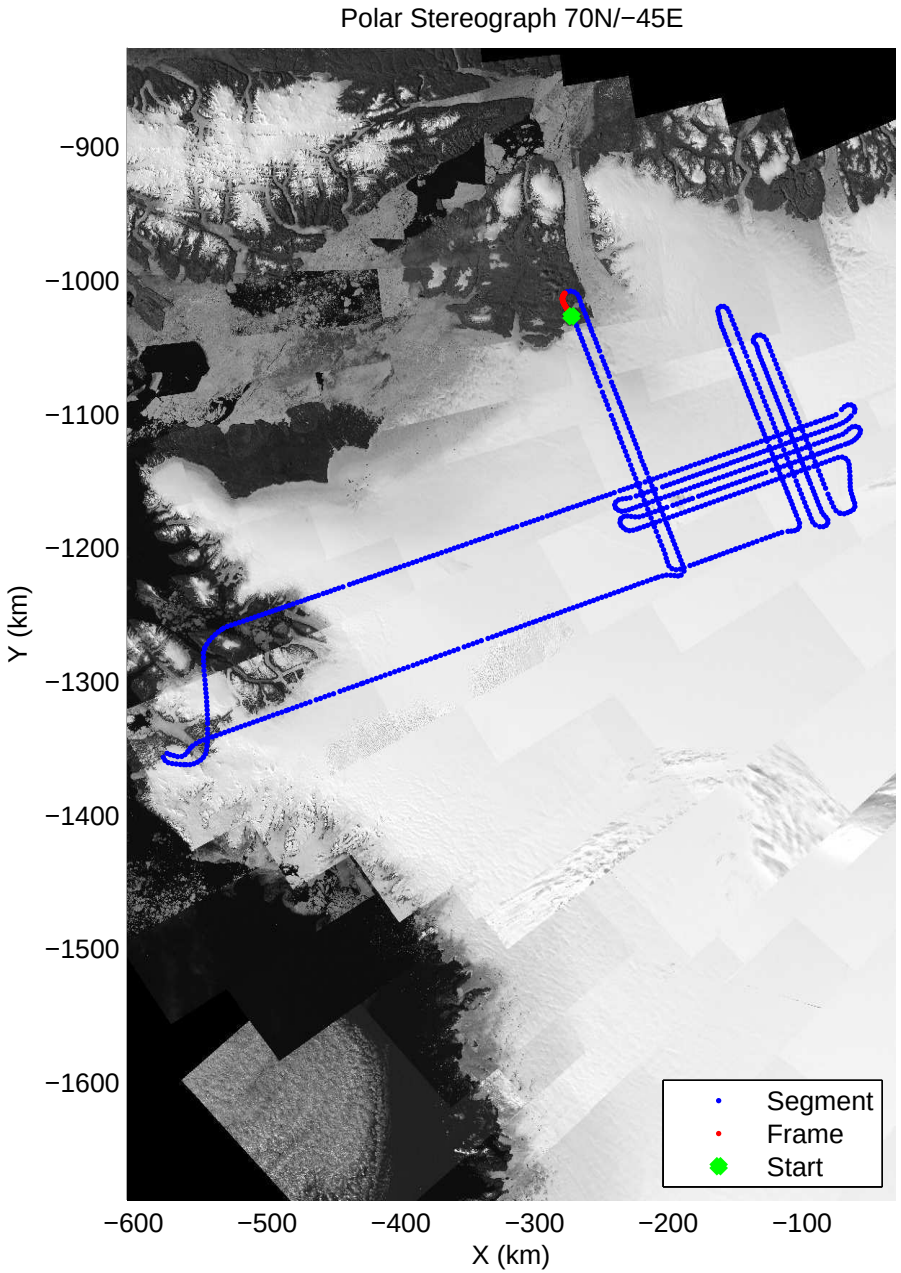

−1028
−1030
−1032
−1034
−1036
−1038
−1040
−1042
−1044
Y (km)
−280
−275
−270
X (km)

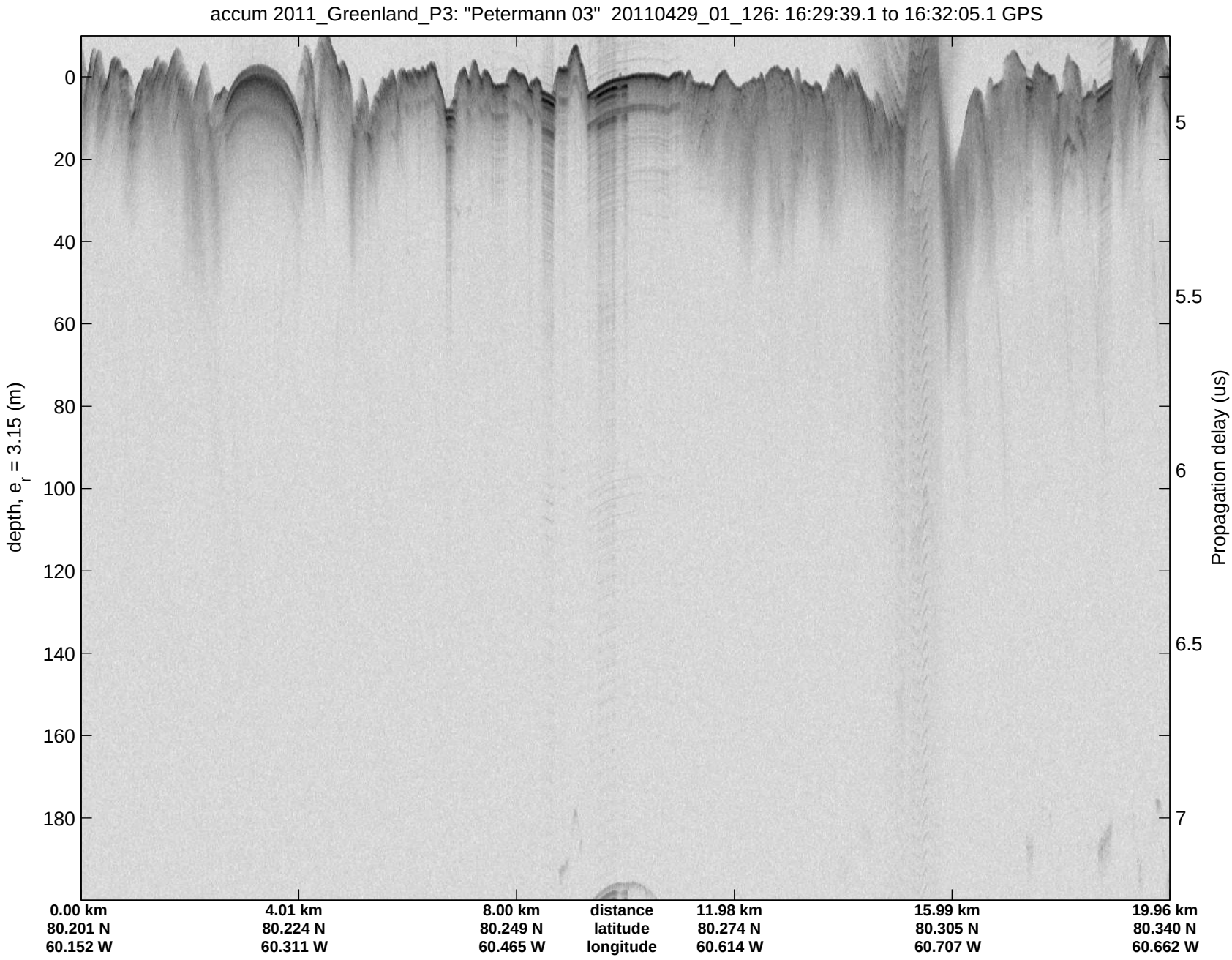

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

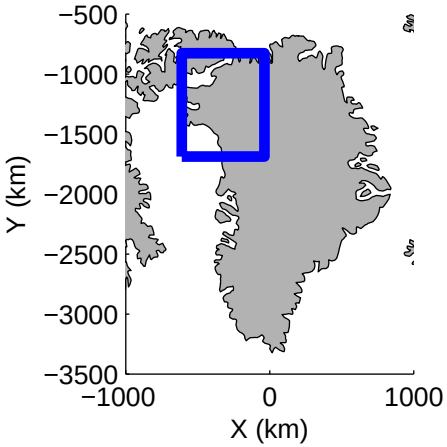

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_125: 16:27:19.0 to 16:29:38.9 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
4
4.5
5
5.5
6
0.00 km
80.061 N
59.506 W
4.00 km
80.090 N
59.625 W
7.99 km
80.119 N
59.745 W
distance
latitude
longitude
11.99 km
80.148 N
59.869 W
15.99 km
80.175 N
60.002 W
19.97 km
80.200 N
60.151 W

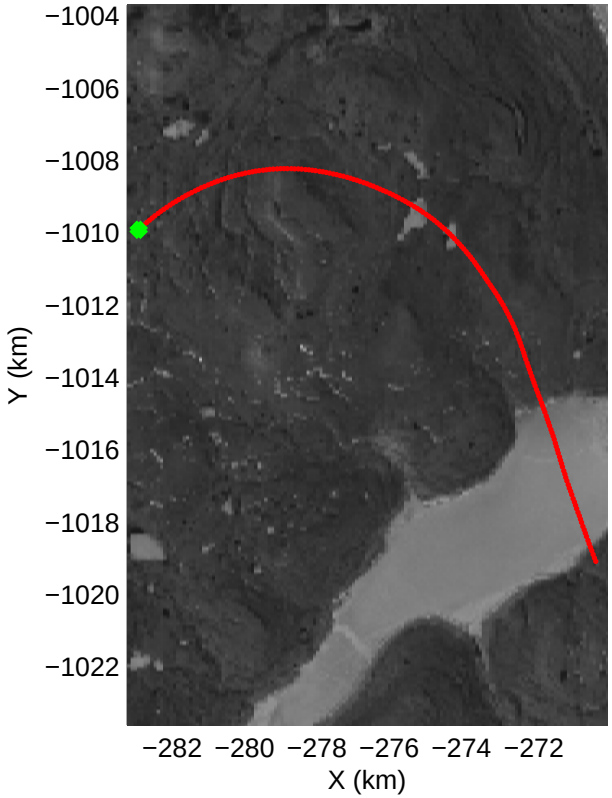

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

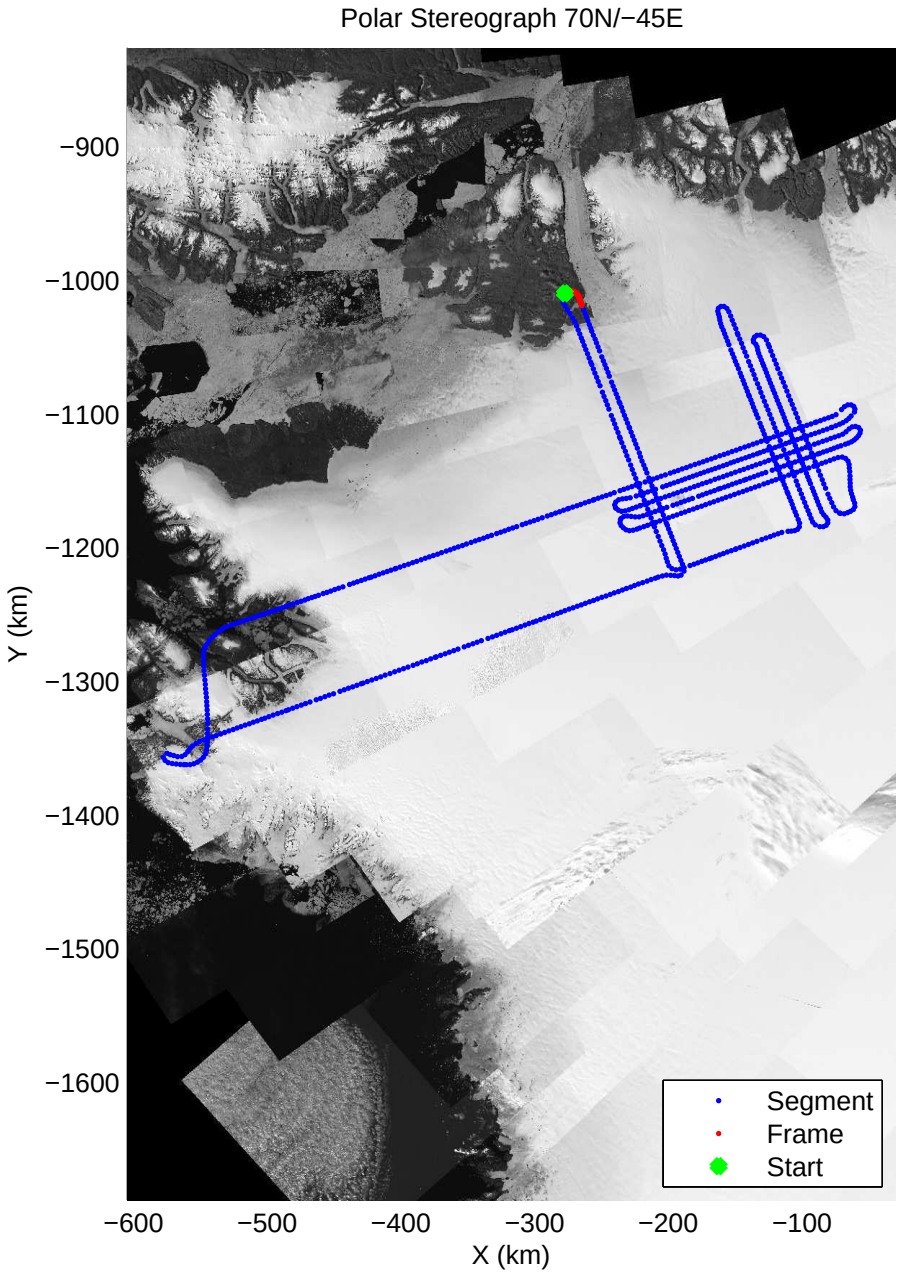

−1010
−1012
−1014
−1016
−1018
−1020
−1022
−1024
−1026
Y (km)
−286
−284
−282
−280
−278
−276
X (km)

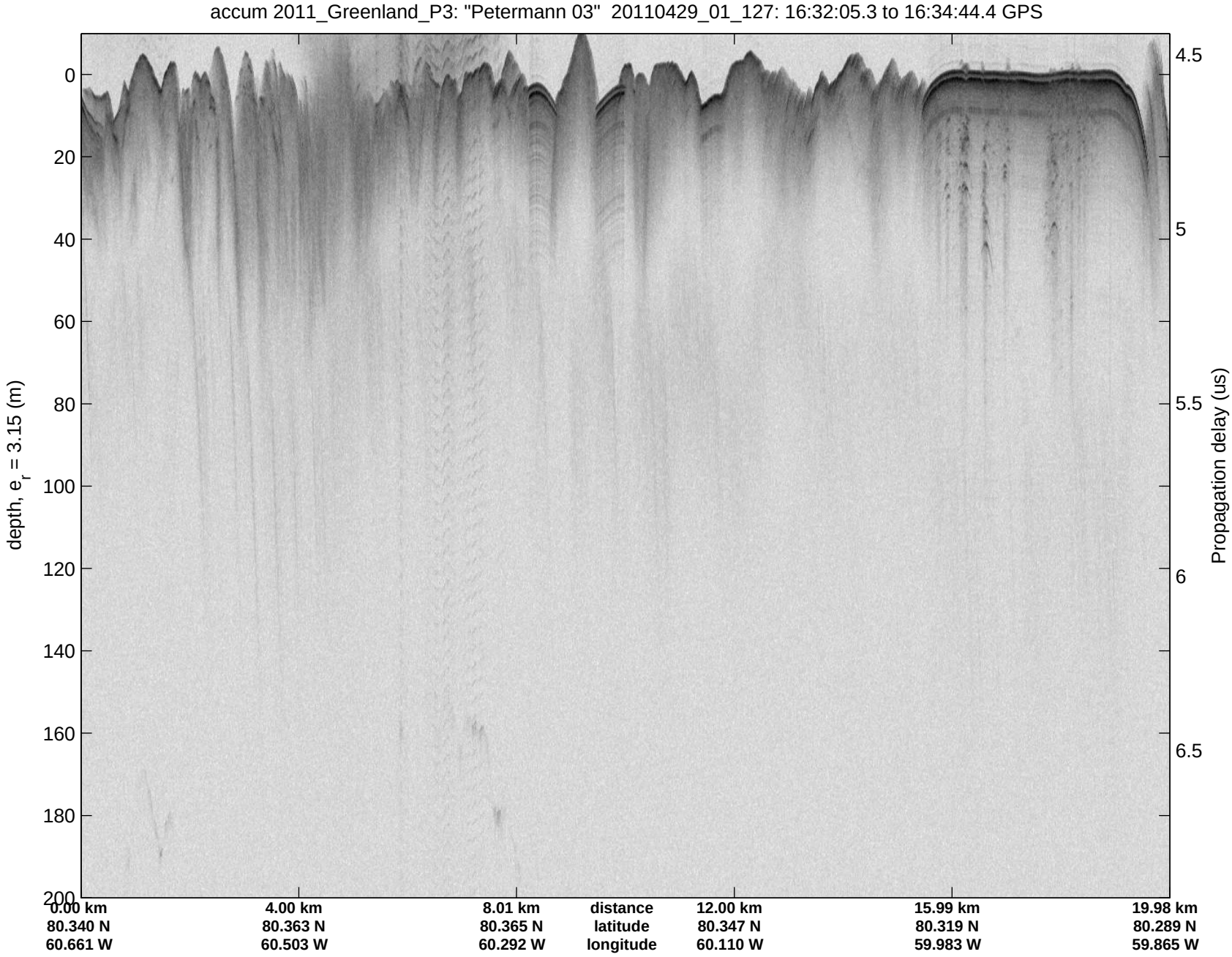

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

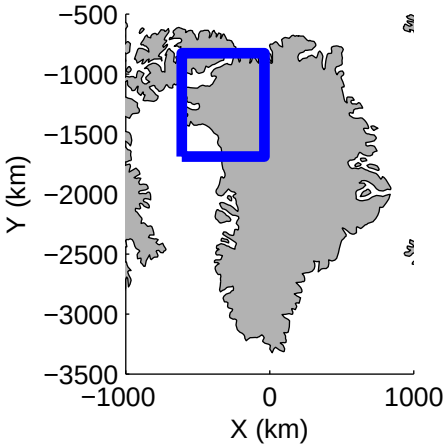

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_126: 16:29:39.1 to 16:32:05.1 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
5
5.5
6
6.5
7
0.00 km
80.201 N
60.152 W
4.01 km
80.224 N
60.311 W
8.00 km
80.249 N
60.465 W
distance
latitude
longitude
11.98 km
80.274 N
60.614 W
15.99 km
80.305 N
60.707 W
19.96 km
80.340 N
60.662 W

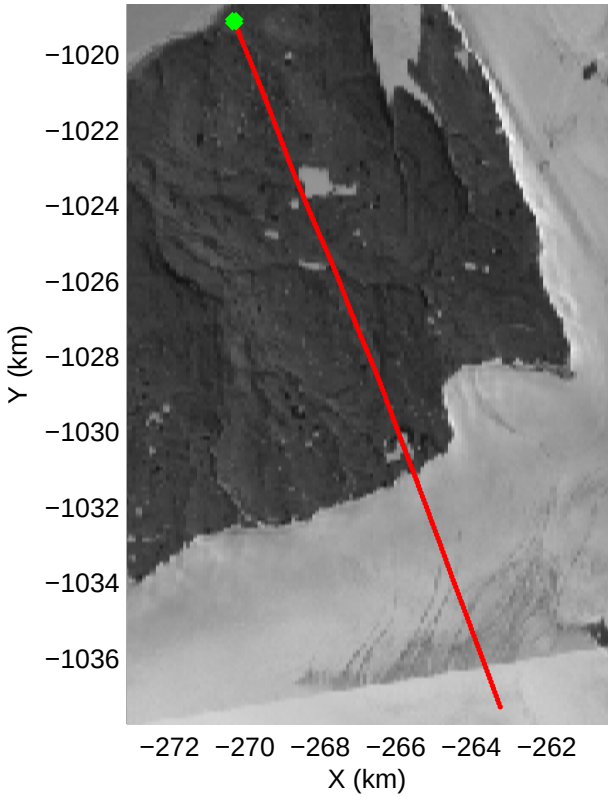

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

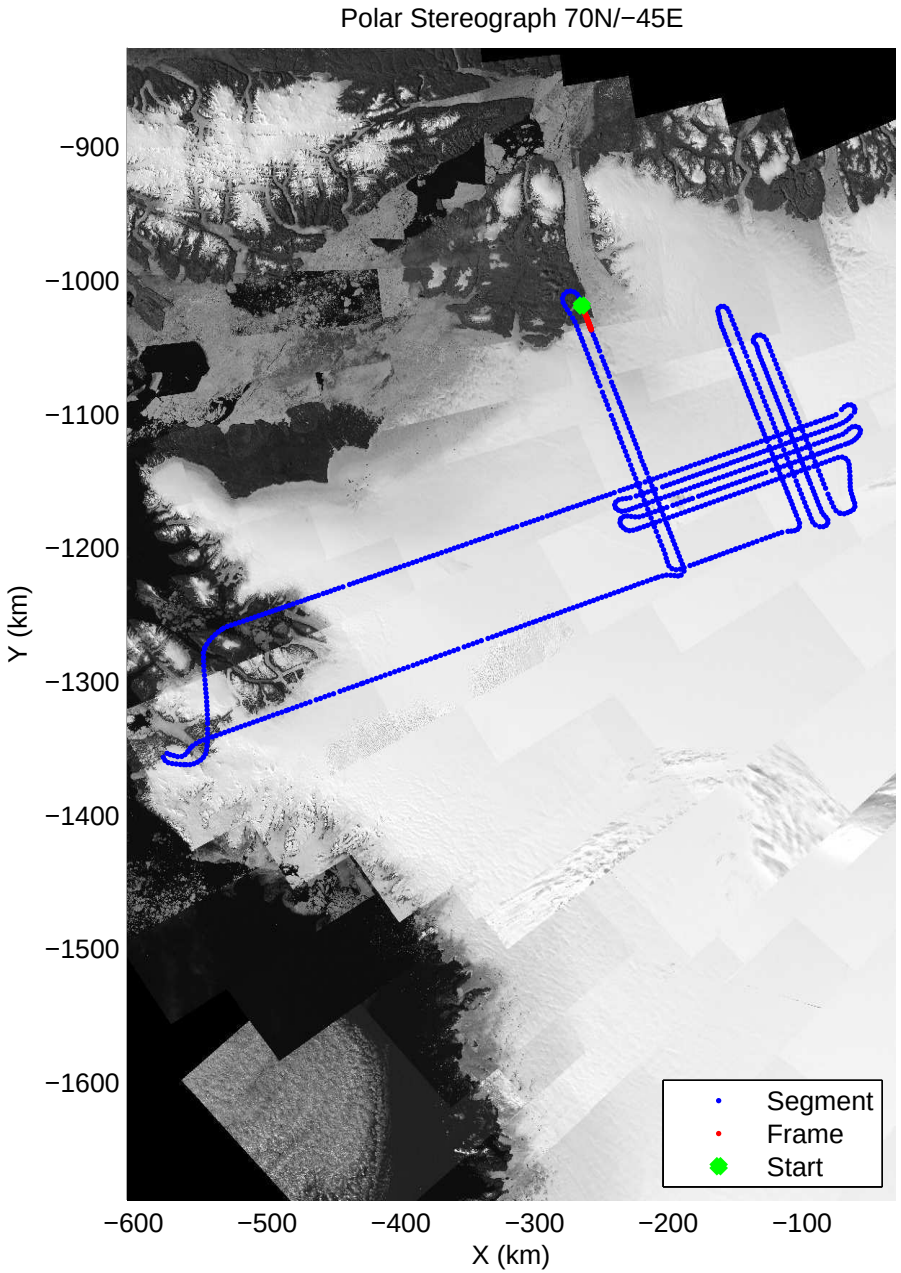

−1004
−1006
−1008
−1010
−1012
−1014
−1016
−1018
−1020
−1022
Y (km)
−282 −280 −278 −276 −274 −272
X (km)

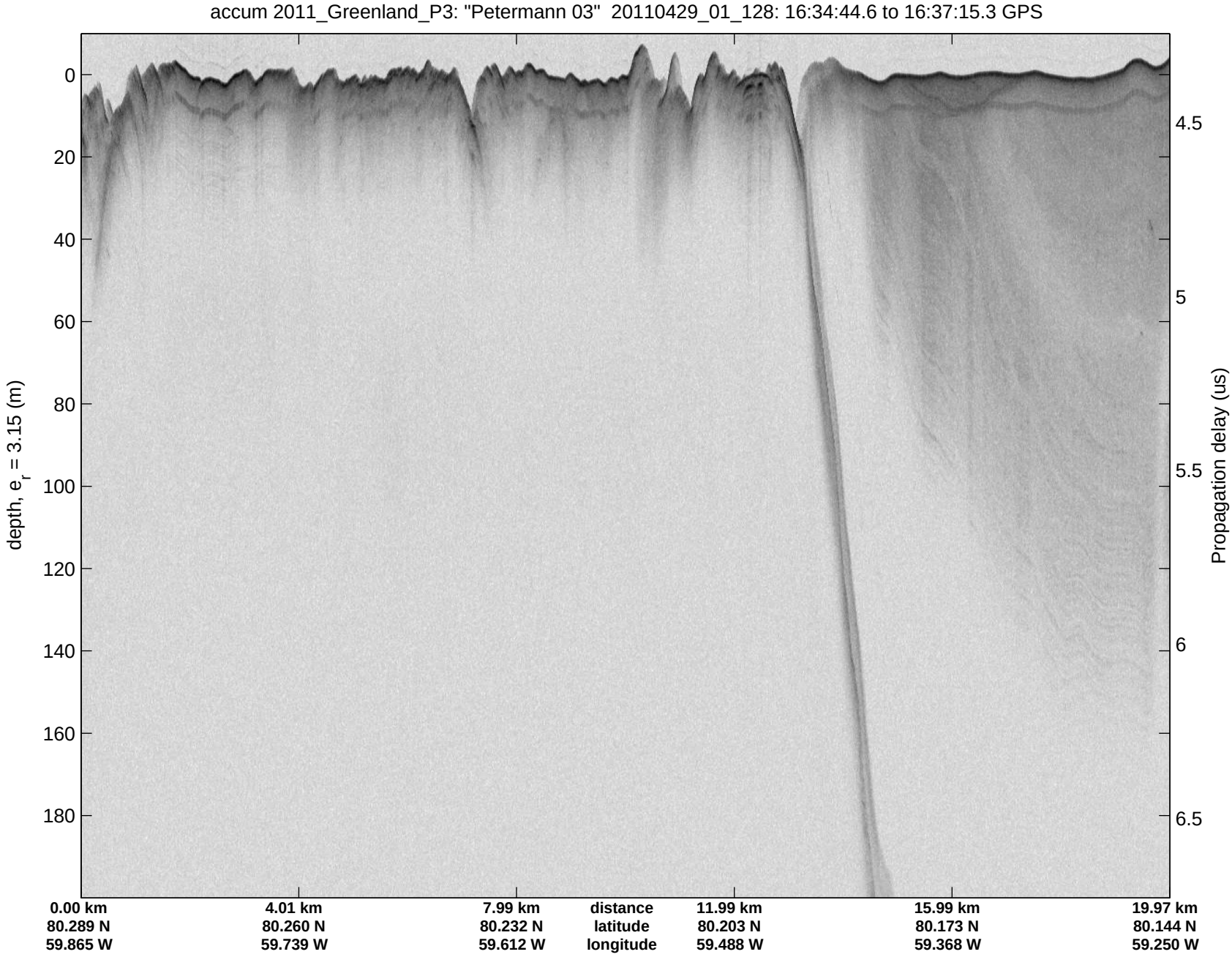

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

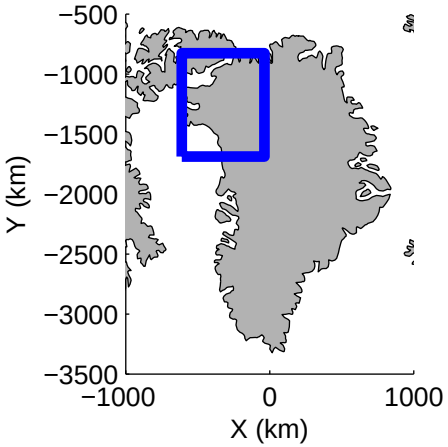

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_127: 16:32:05.3 to 16:34:44.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
4.5
5
5.5
6
6.5
0.00 km
80.340 N
60.661 W
4.00 km
80.363 N
60.503 W
8.01 km
80.365 N
60.292 W
distance
latitude
longitude
12.00 km
80.347 N
60.110 W
15.99 km
80.319 N
59.983 W
19.98 km
80.289 N
59.865 W

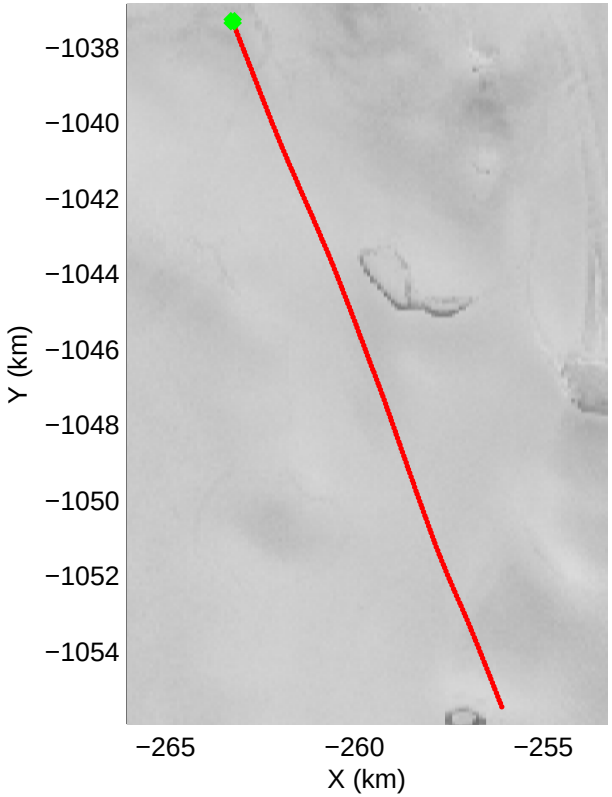

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

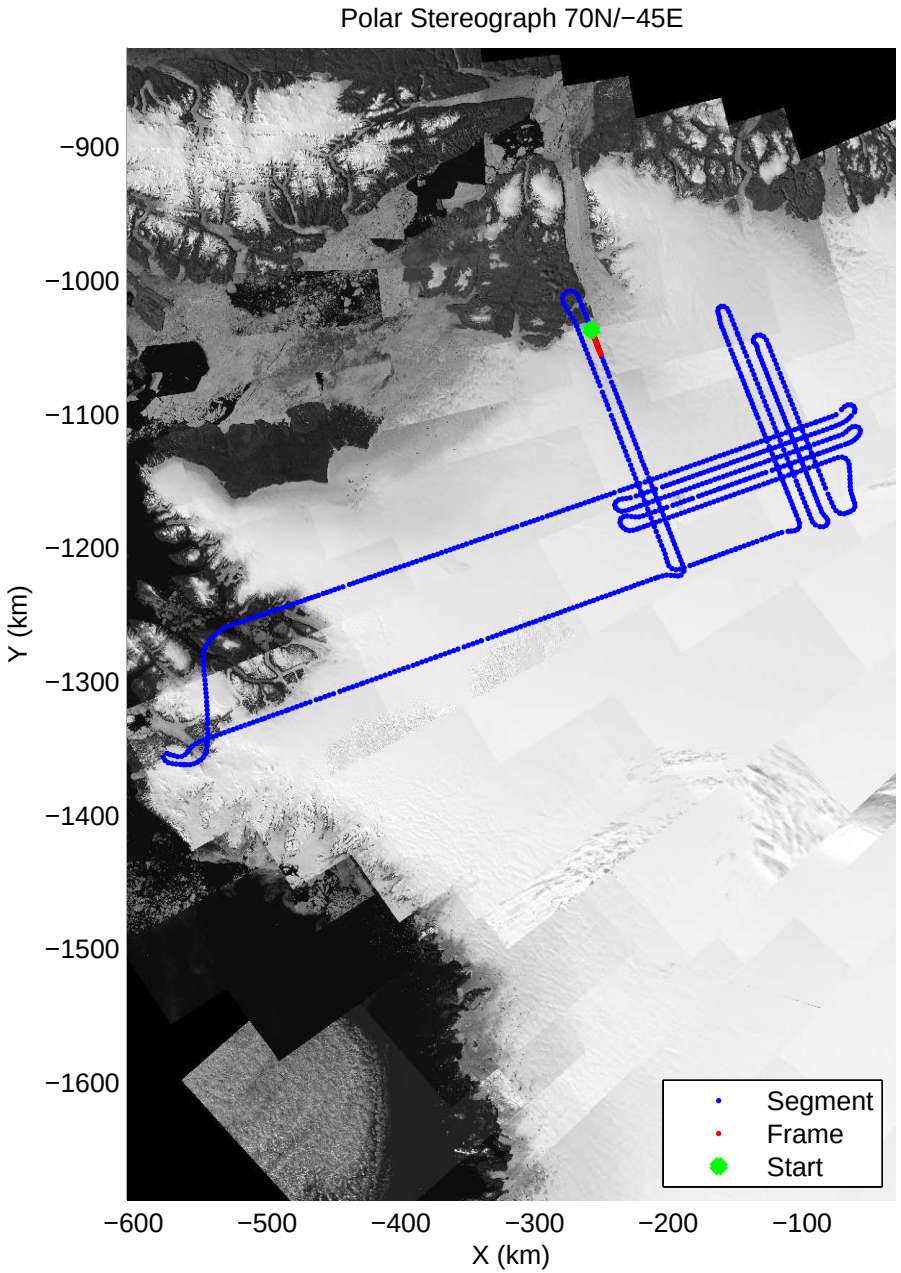

−1020
−1022
−1024
−1026
−1028
−1030
−1032
−1034
−1036
Y (km)
−272
−270
−268
−266
−264
−262
X (km)

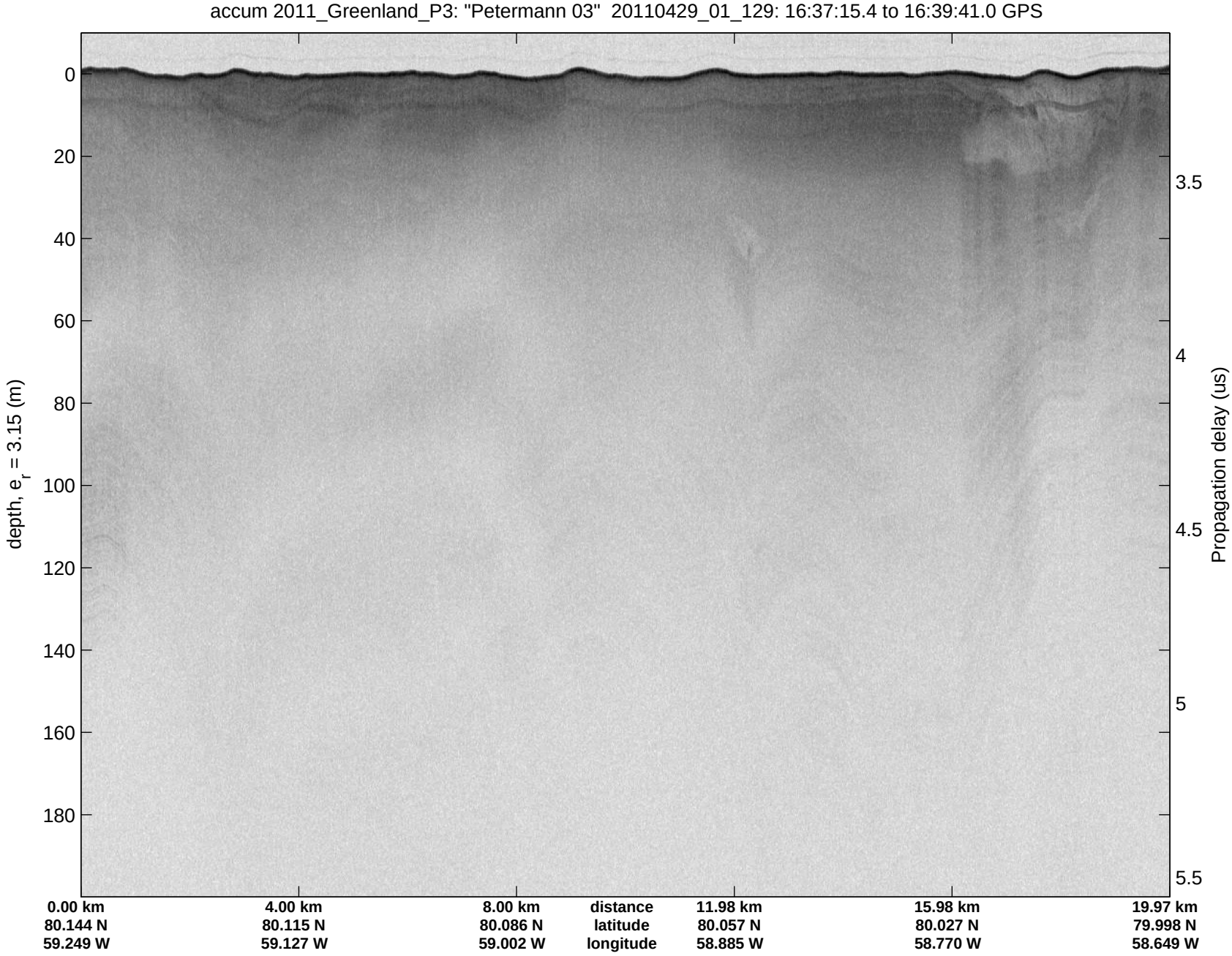

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

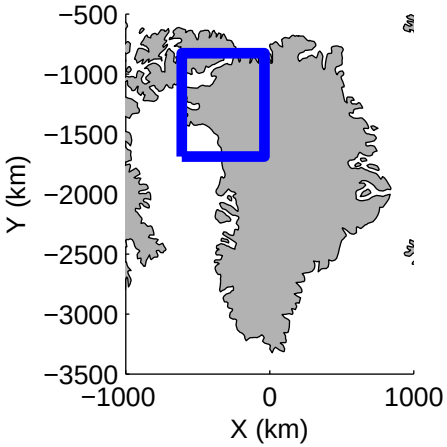

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_128: 16:34:44.6 to 16:37:15.3 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
4.5
5
5.5
6
6.5
0.00 km
80.289 N
59.865 W
4.01 km
80.260 N
59.739 W
7.99 km
80.232 N
59.612 W
distance
latitude
longitude
11.99 km
80.203 N
59.488 W
15.99 km
80.173 N
59.368 W
19.97 km
80.144 N
59.250 W

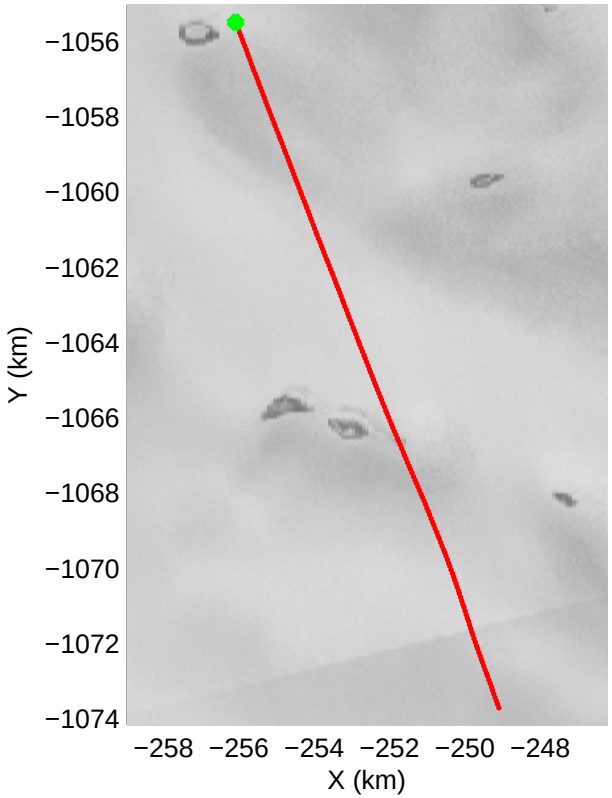

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

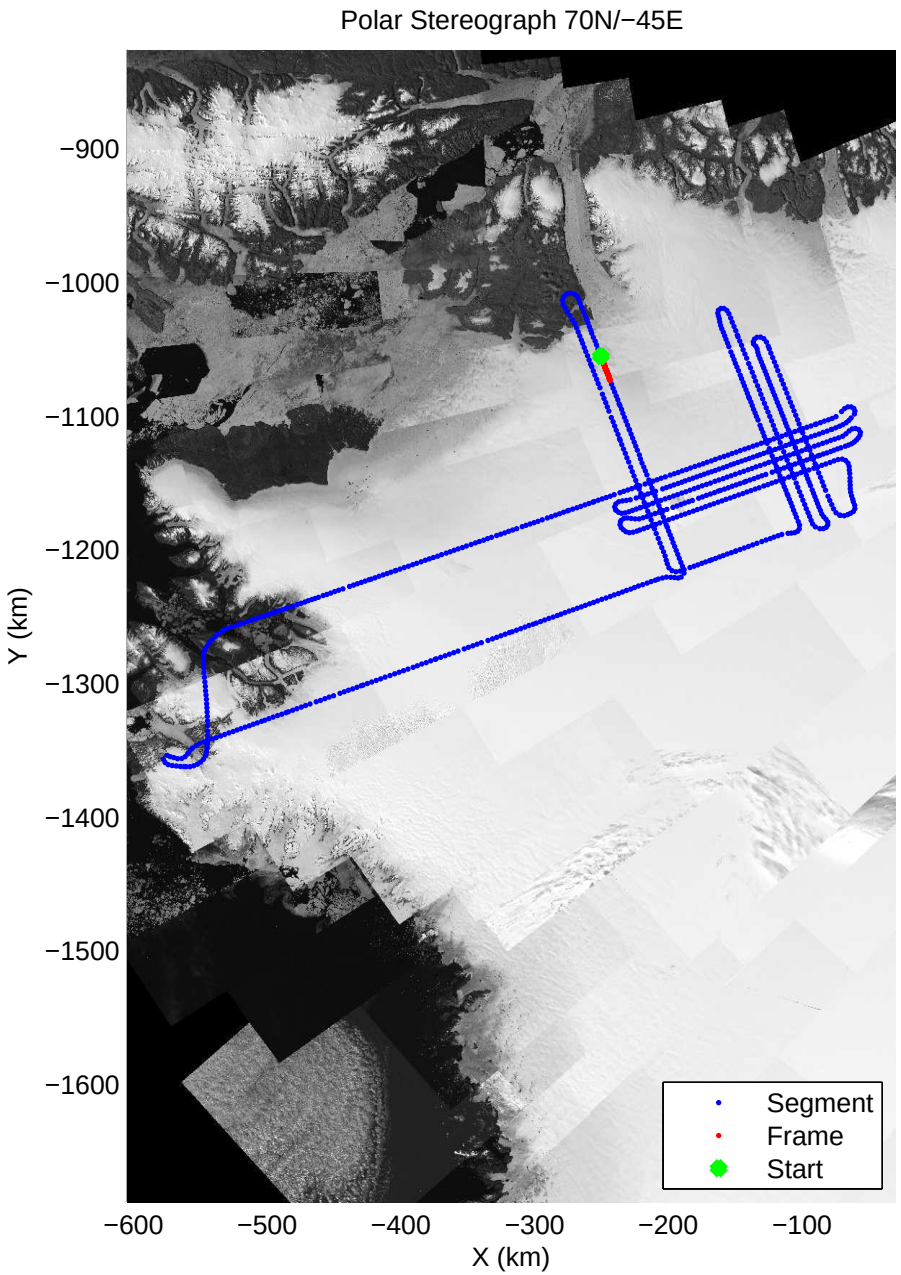

−1038
−1040
−1042
−1044
−1046
−1048
−1050
−1052
−1054
Y (km)
−265
−260
−255
X (km)

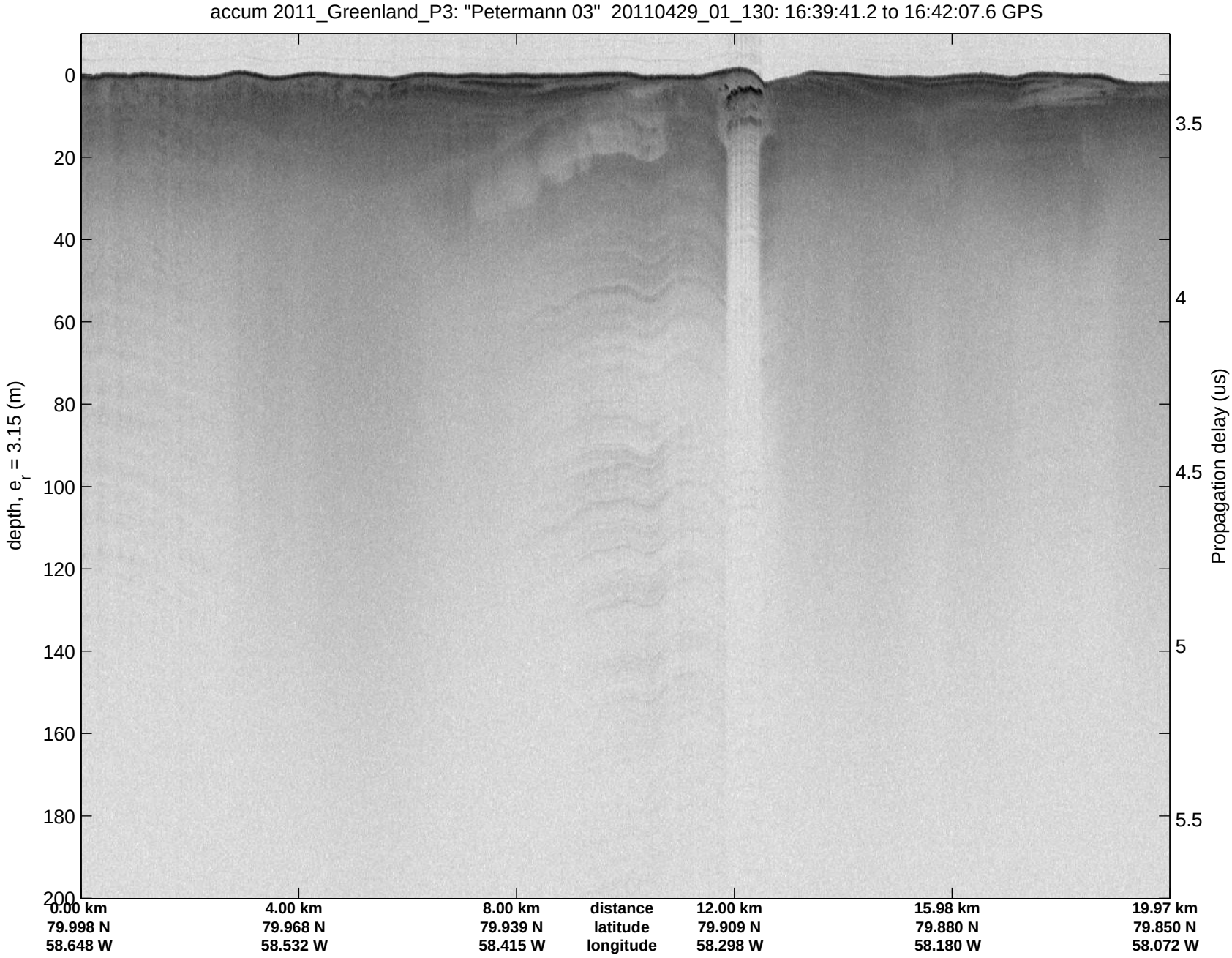

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

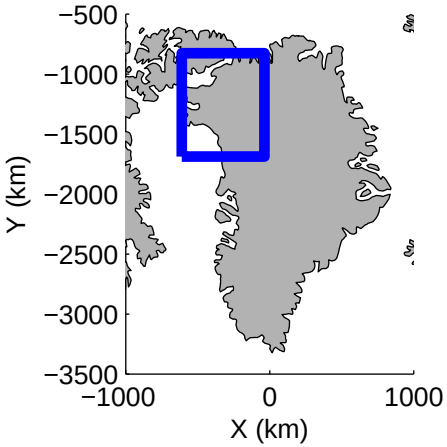

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_129: 16:37:15.4 to 16:39:41.0 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
80.144 N
59.249 W
4.00 km
80.115 N
59.127 W
8.00 km
80.086 N
59.002 W
distance
latitude
longitude
11.98 km
80.057 N
58.885 W
15.98 km
80.027 N
58.770 W
19.97 km
79.998 N
58.649 W

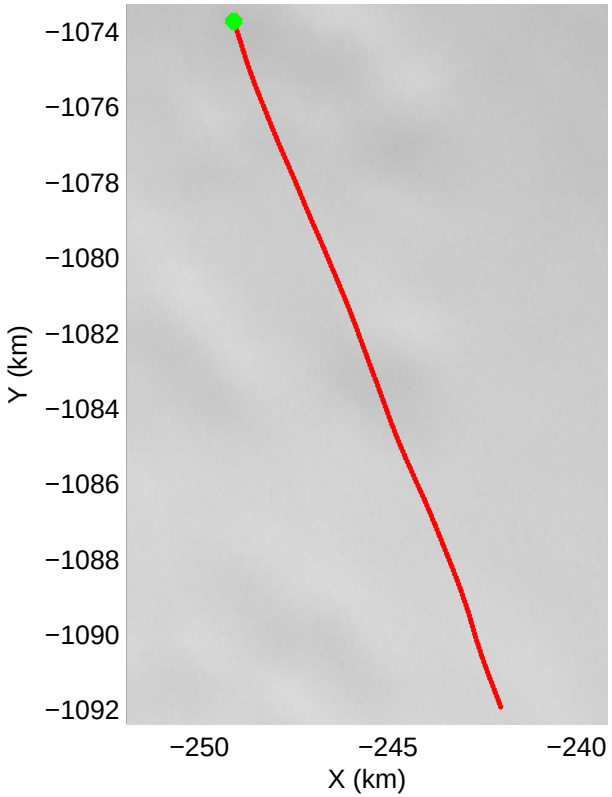

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

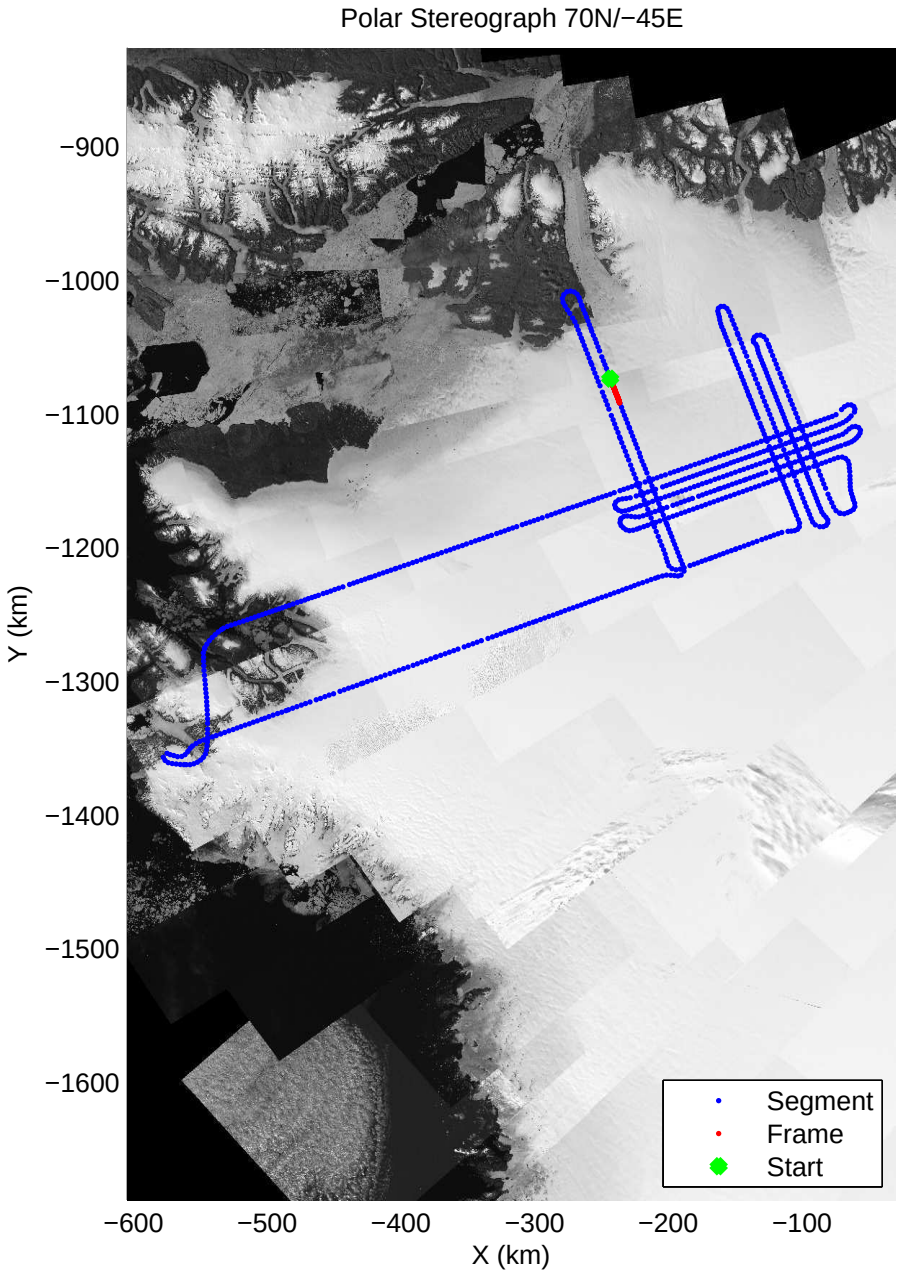

−1056
−1058
−1060
−1062
−1064
−1066
−1068
−1070
−1072
−1074
Y (km)
−258
−256
−254
−252
−250
−248
X (km)

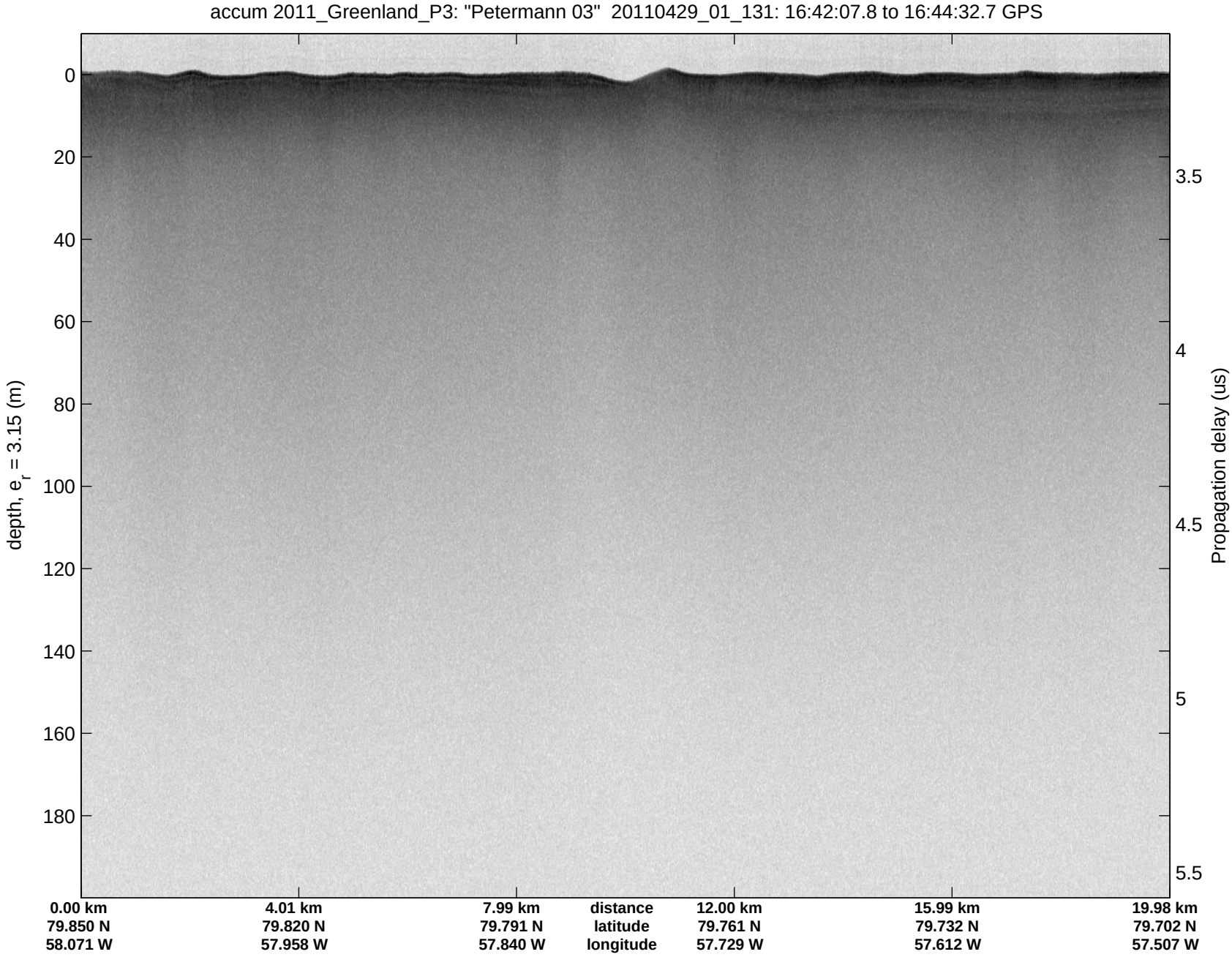

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

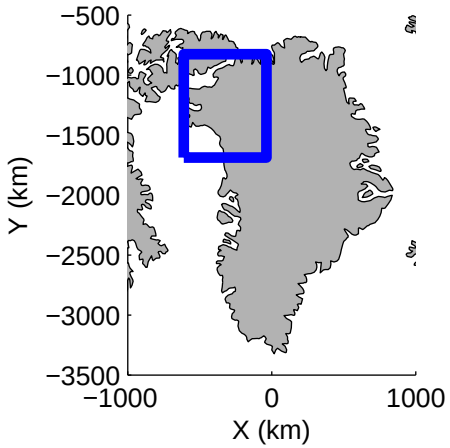

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_130: 16:39:41.2 to 16:42:07.6 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.998 N
58.648 W
4.00 km
79.968 N
58.532 W
8.00 km
79.939 N
58.415 W
distance
latitude
longitude
12.00 km
79.909 N
58.298 W
15.98 km
79.880 N
58.180 W
19.97 km
79.850 N
58.072 W

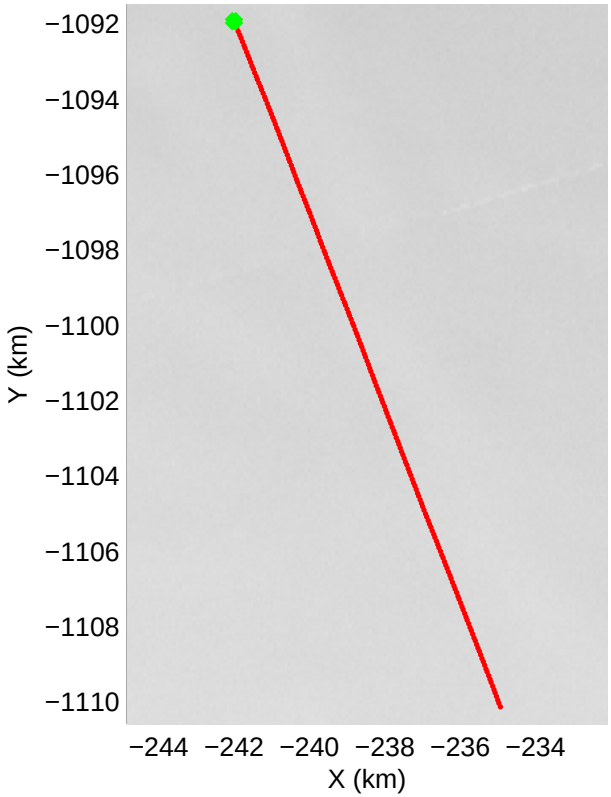

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

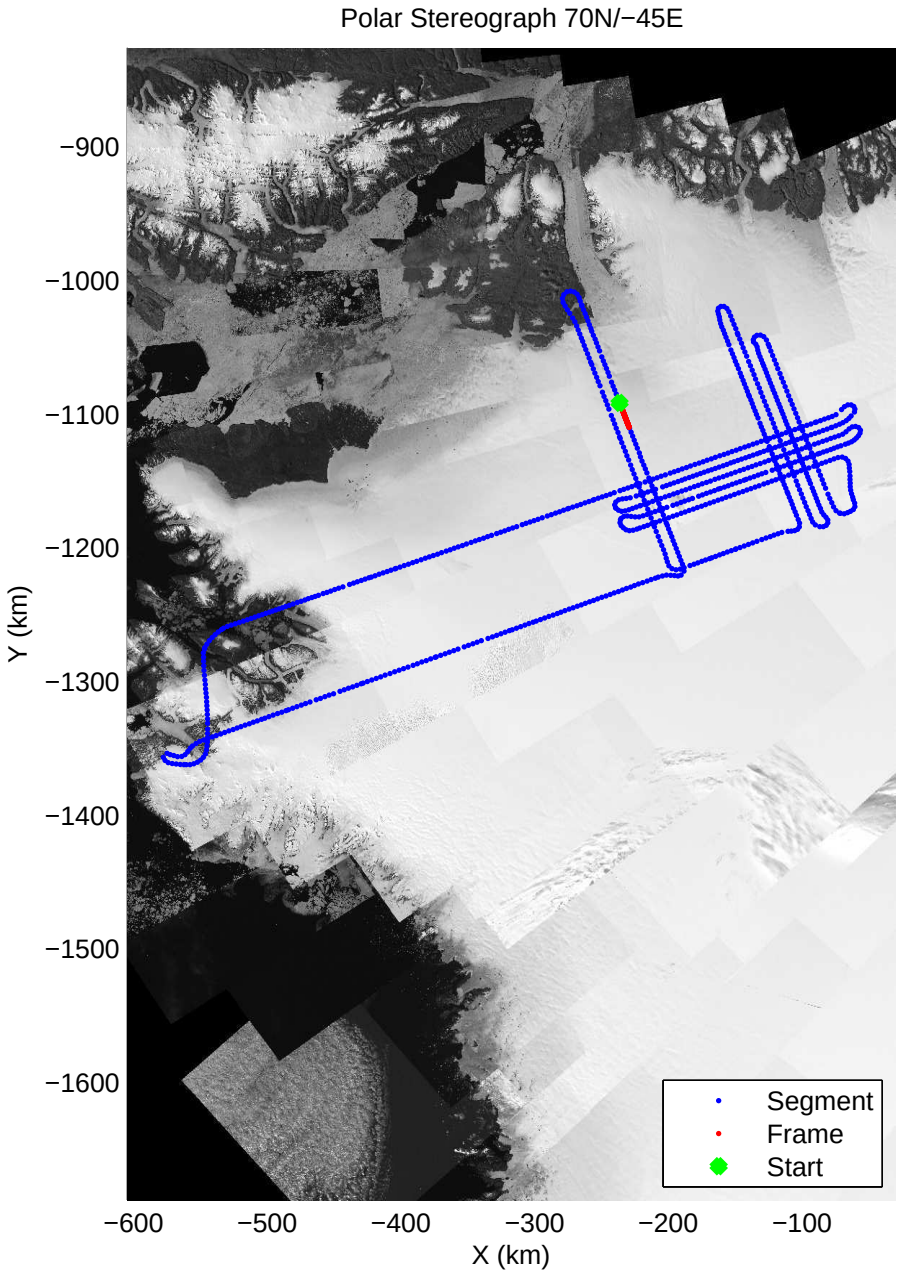

−1074
−1076
−1078
−1080
−1082
−1084
−1086
−1088
−1090
−1092
Y (km)
−250
−245
−240
X (km)

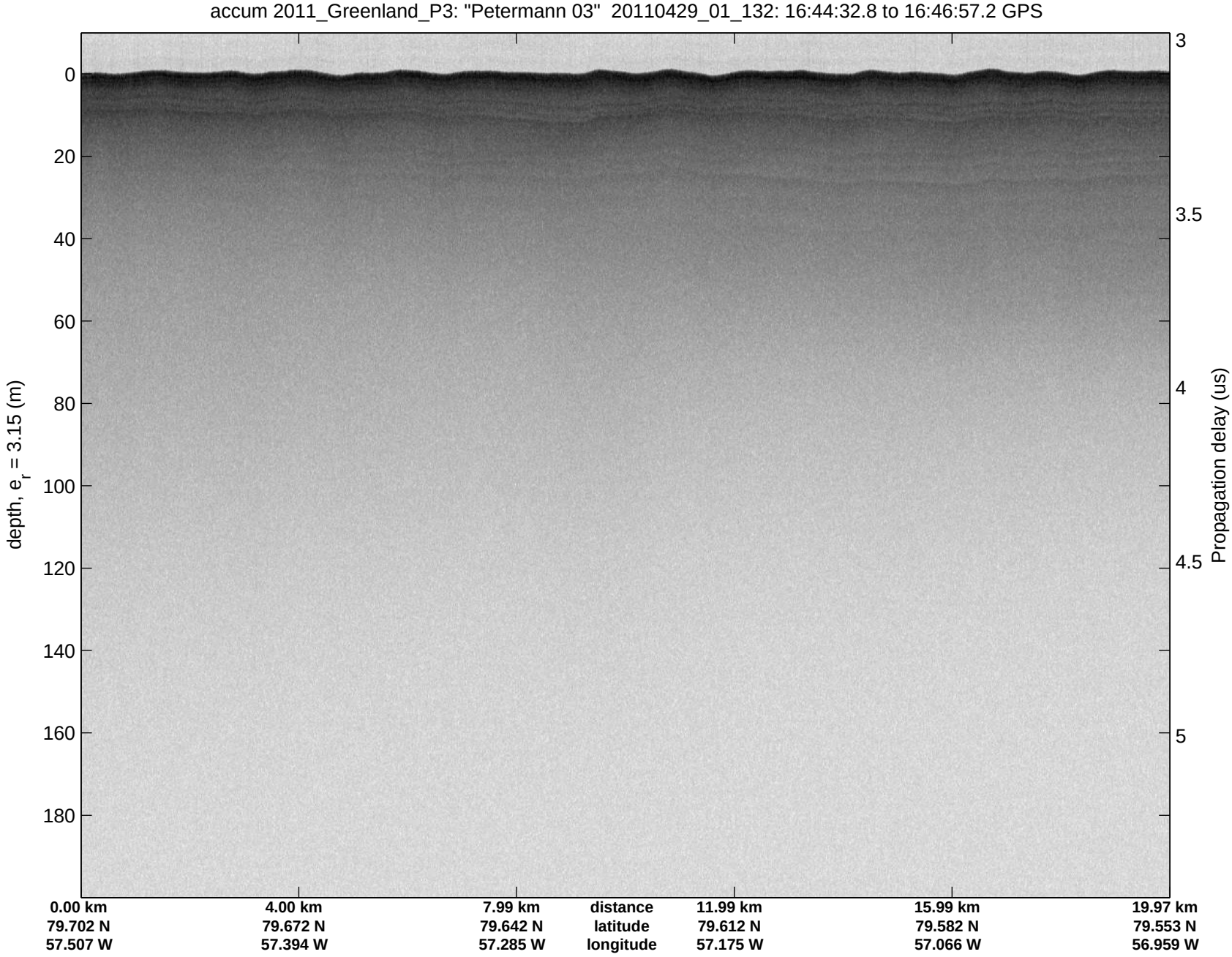

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

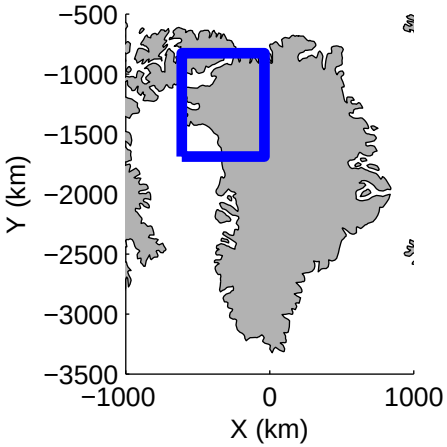

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_131: 16:42:07.8 to 16:44:32.7 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.850 N
58.071 W
4.01 km
79.820 N
57.958 W
7.99 km
79.791 N
57.840 W
distance
latitude
longitude
12.00 km
79.761 N
57.729 W
15.99 km
79.732 N
57.612 W
19.98 km
79.702 N
57.507 W

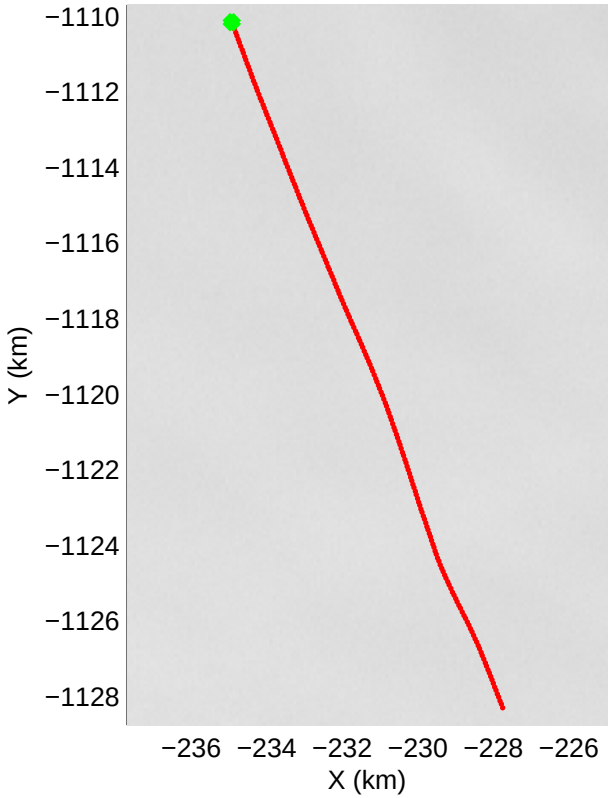

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

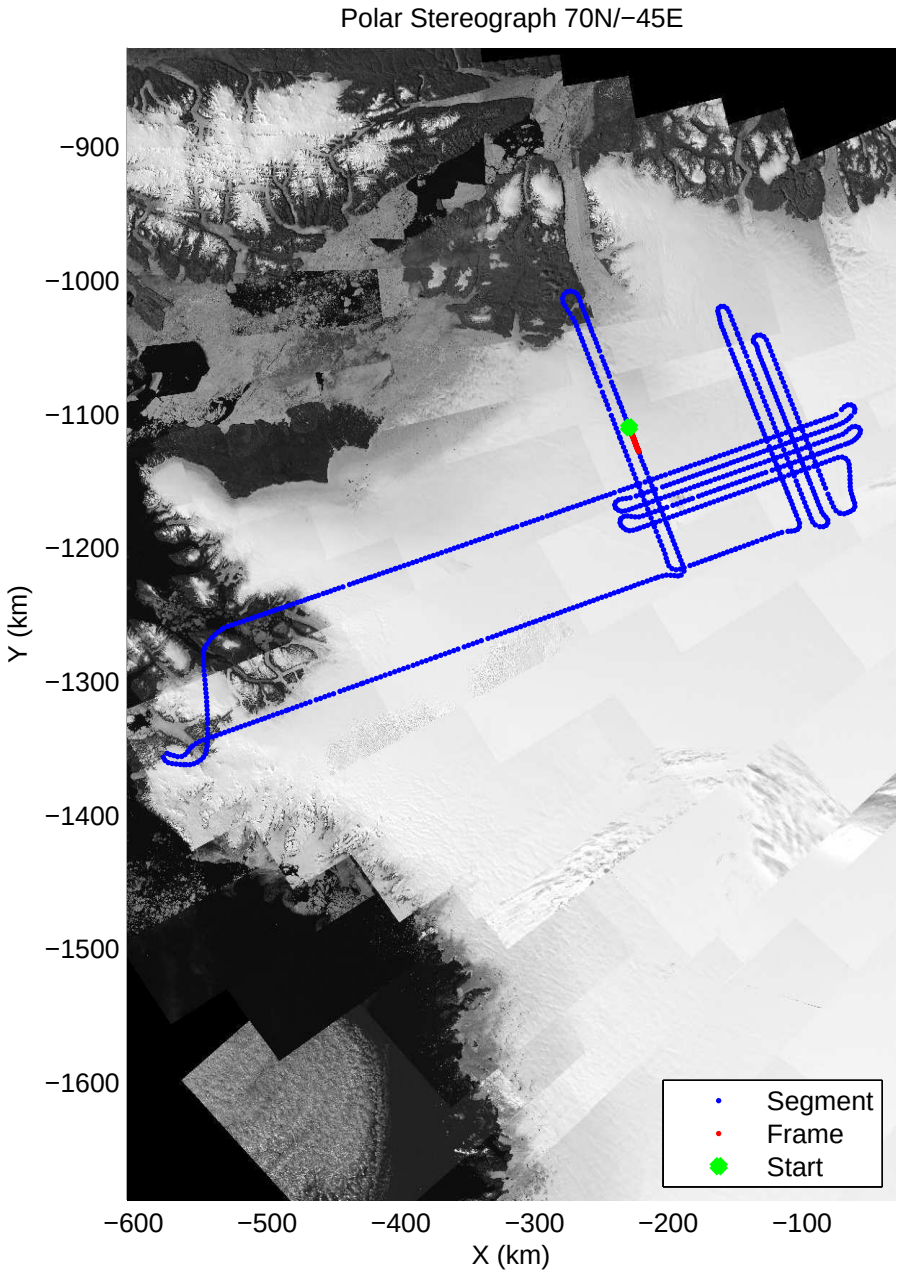

−1092
−1094
−1096
−1098
−1100
−1102
−1104
−1106
−1108
−1110
Y (km)
−244
−242
−240
−238
−236
−234
X (km)

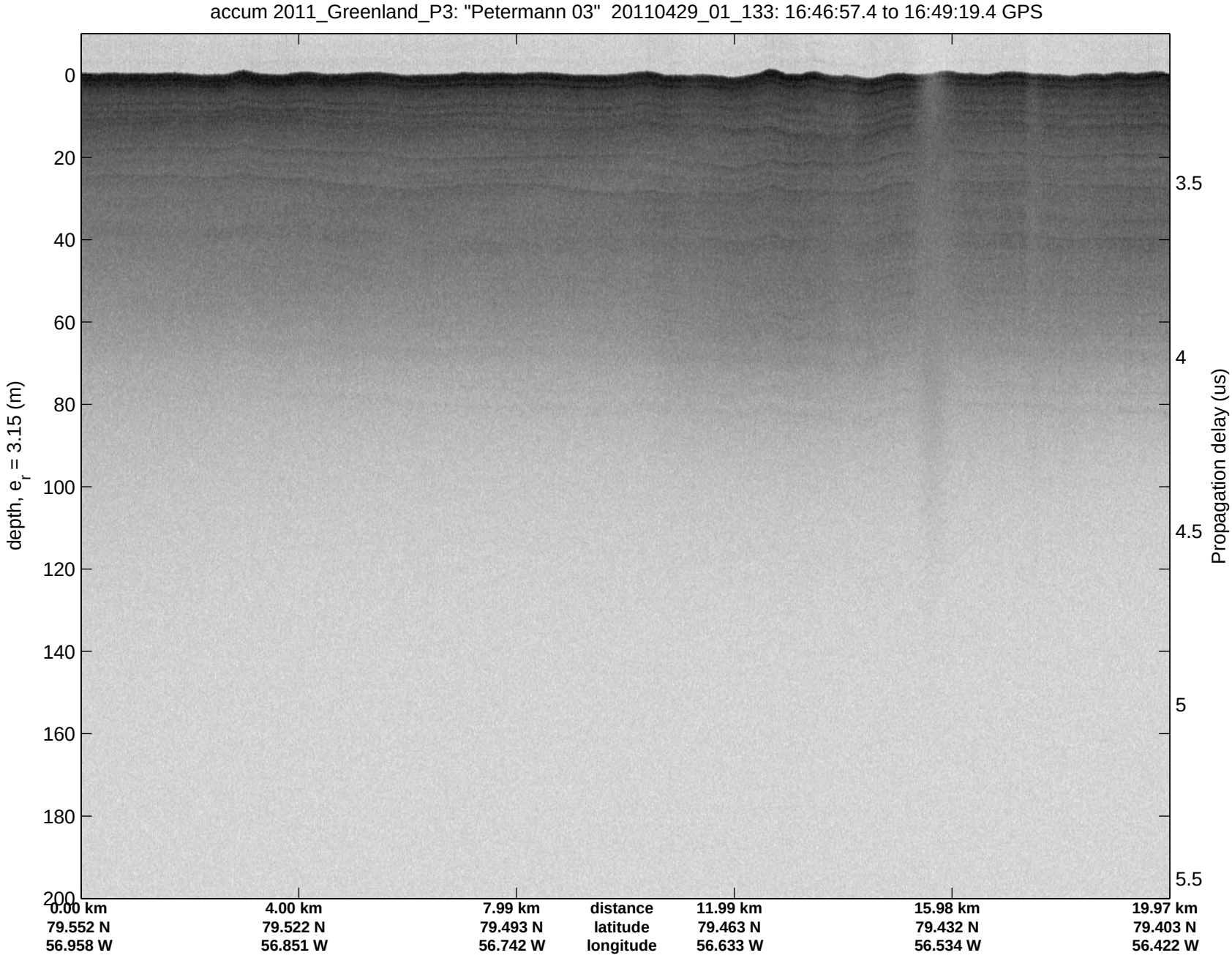

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

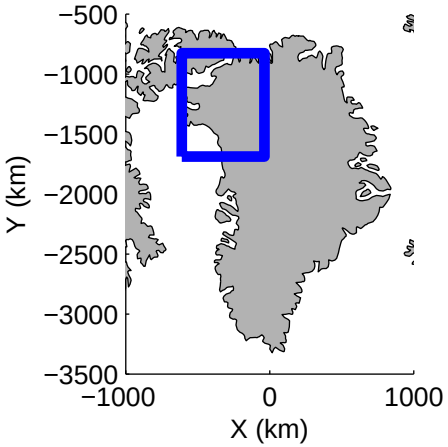

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_132: 16:44:32.8 to 16:46:57.2 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
79.702 N
57.507 W
4.00 km
79.672 N
57.394 W
7.99 km
79.642 N
57.285 W
distance
latitude
longitude
11.99 km
79.612 N
57.175 W
15.99 km
79.582 N
57.066 W
19.97 km
79.553 N
56.959 W

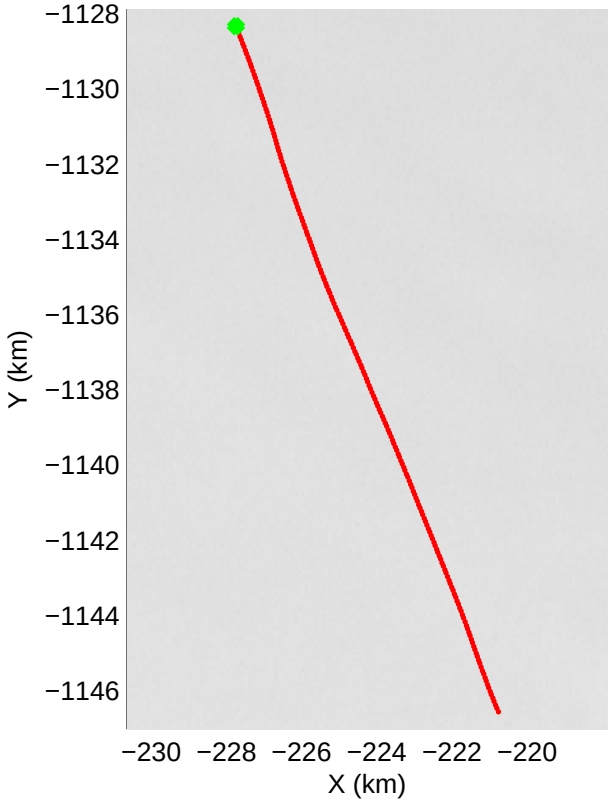

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

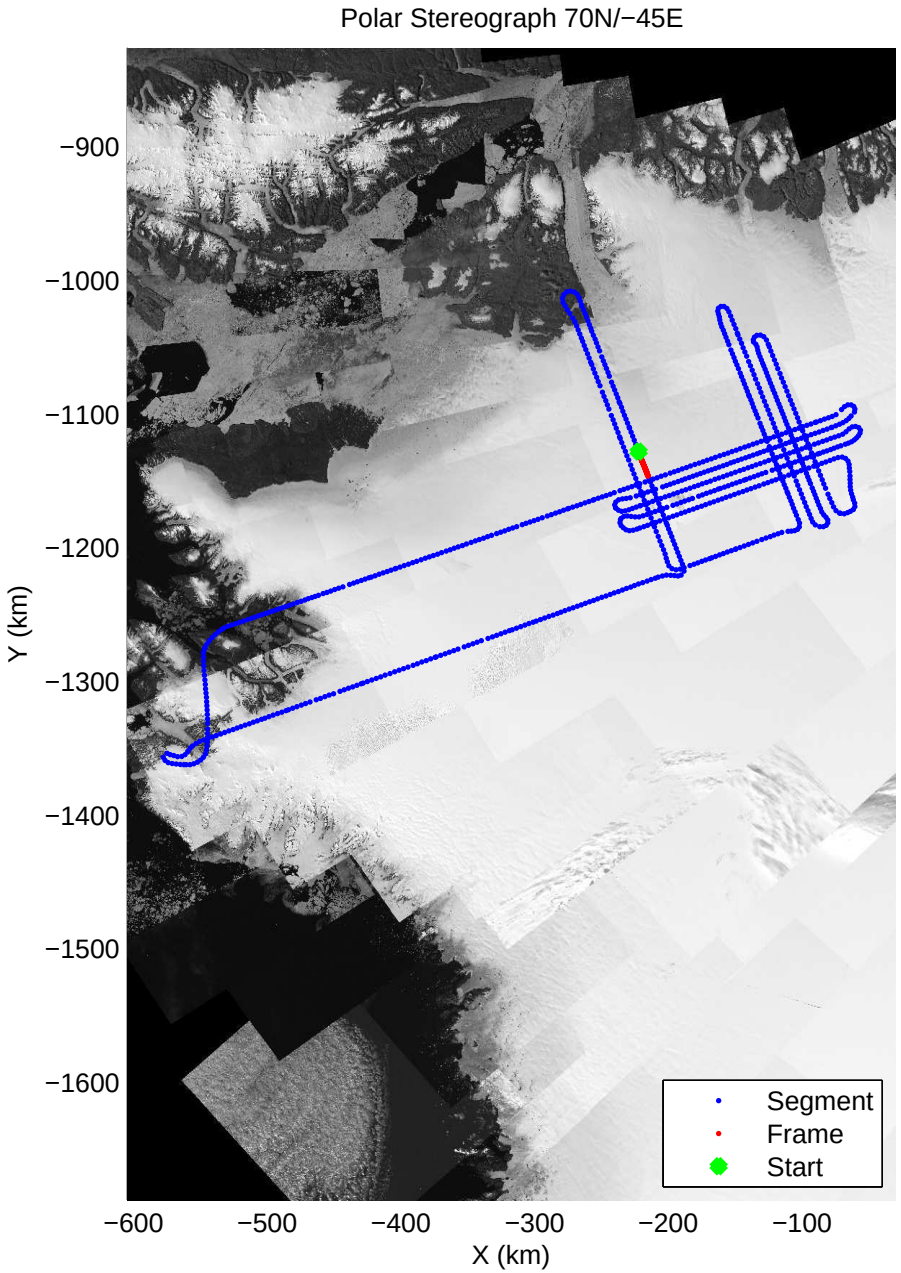

−1110
−1112
−1114
−1116
−1118
−1120
−1122
−1124
−1126
−1128
Y (km)
−236
−234
−232
−230
−228
−226
X (km)

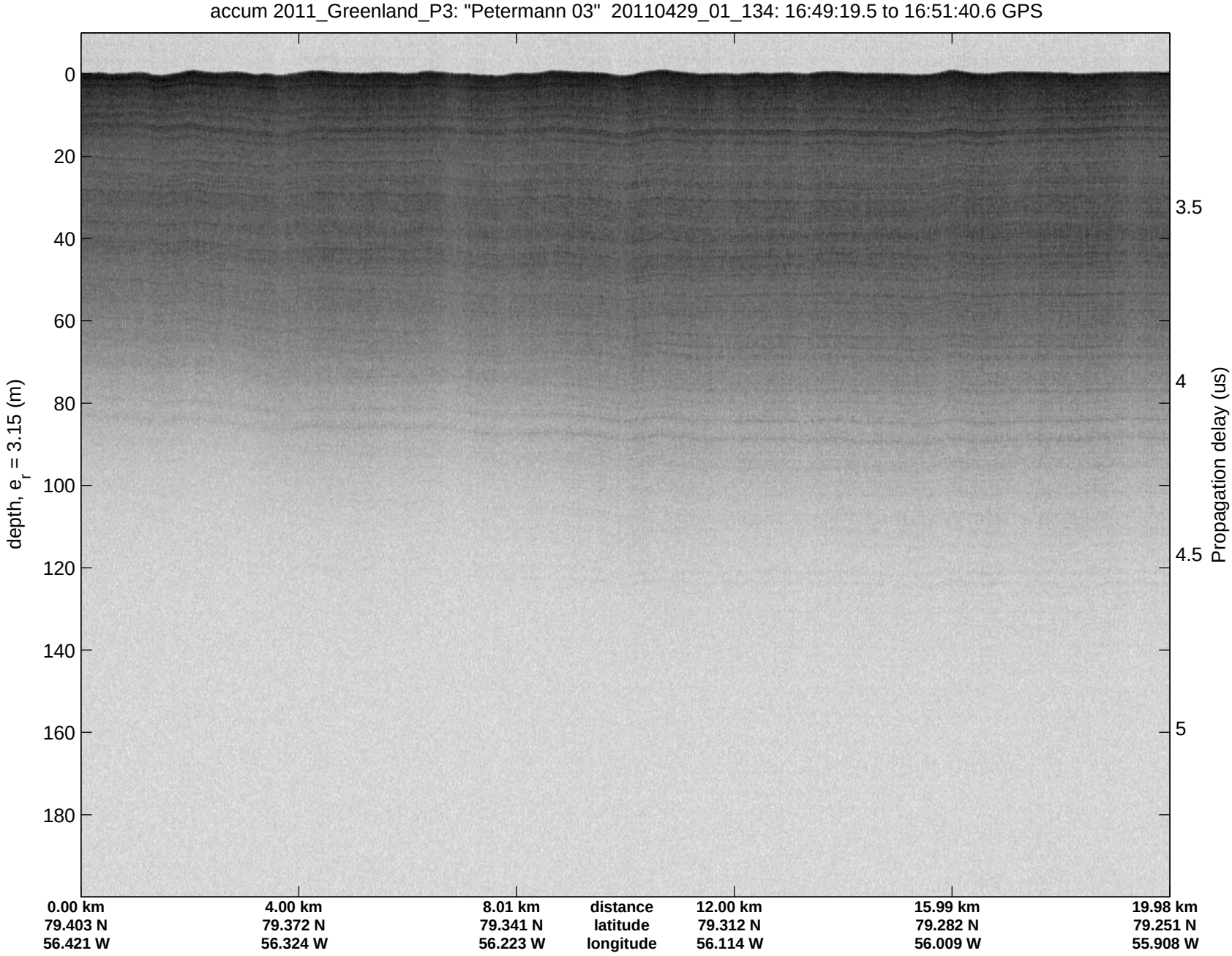

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

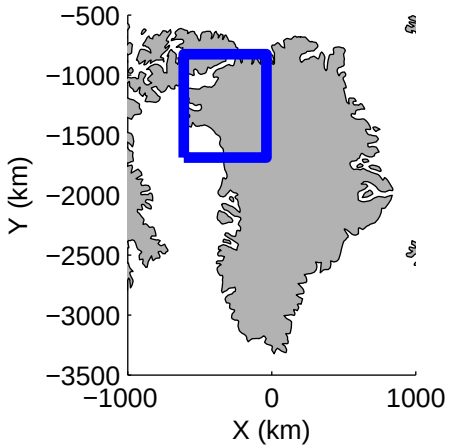

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_133: 16:46:57.4 to 16:49:19.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.552 N
56.958 W
4.00 km
79.522 N
56.851 W
7.99 km
79.493 N
56.742 W
distance
latitude
longitude
11.99 km
79.463 N
56.633 W
15.98 km
79.432 N
56.534 W
19.97 km
79.403 N
56.422 W

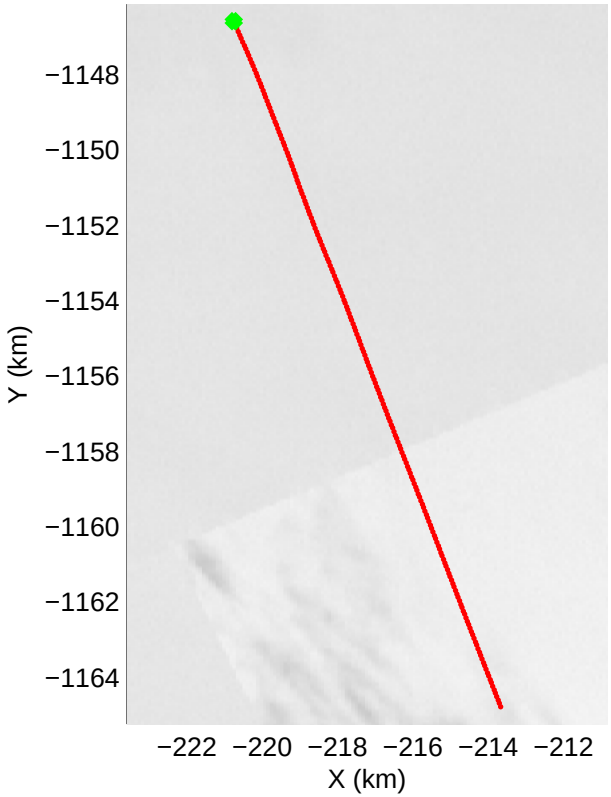

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

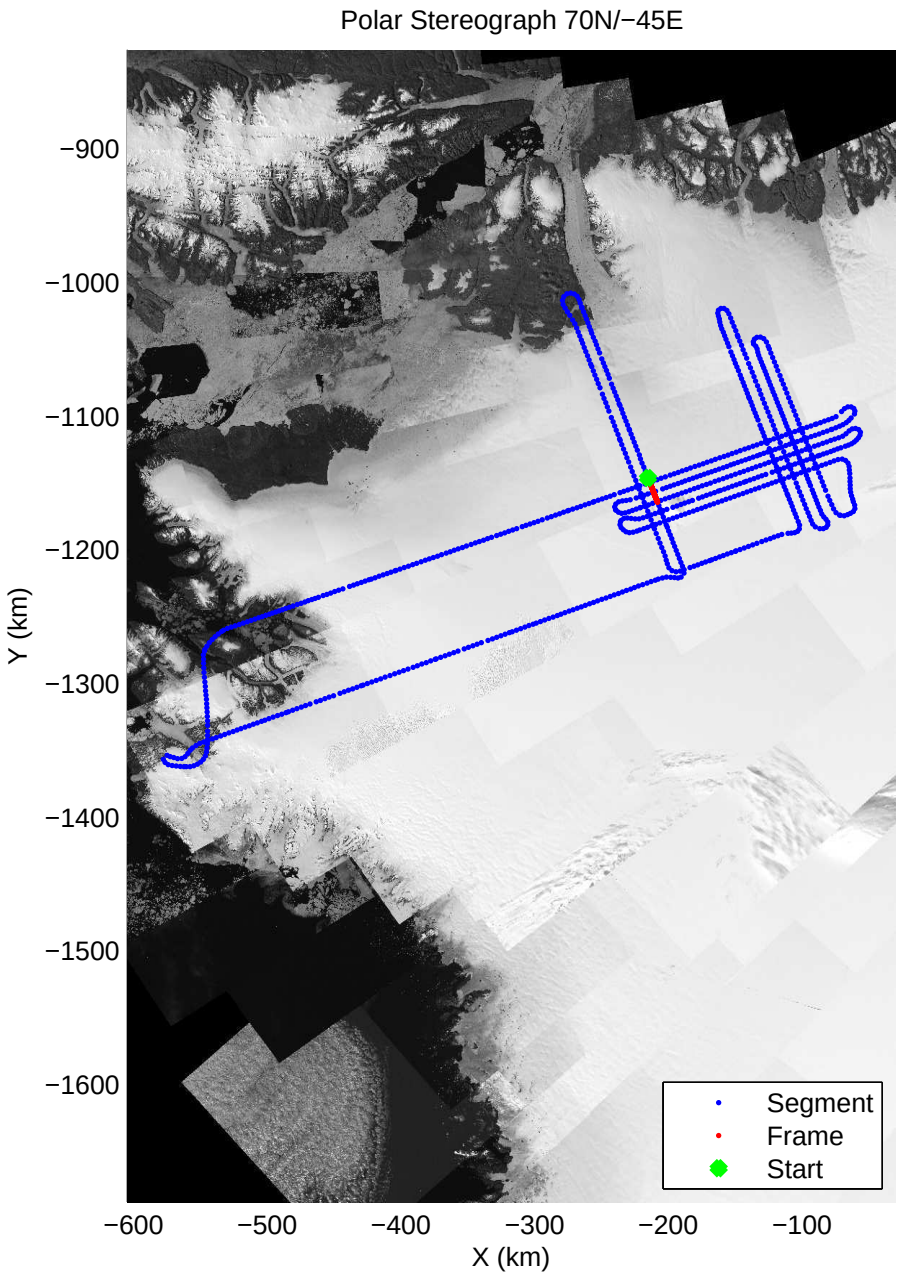

−1128
−1130
−1132
−1134
−1136
−1138
−1140
−1142
−1144
−1146
Y (km)
−230
−228
−226
−224
−222
−220
X (km)

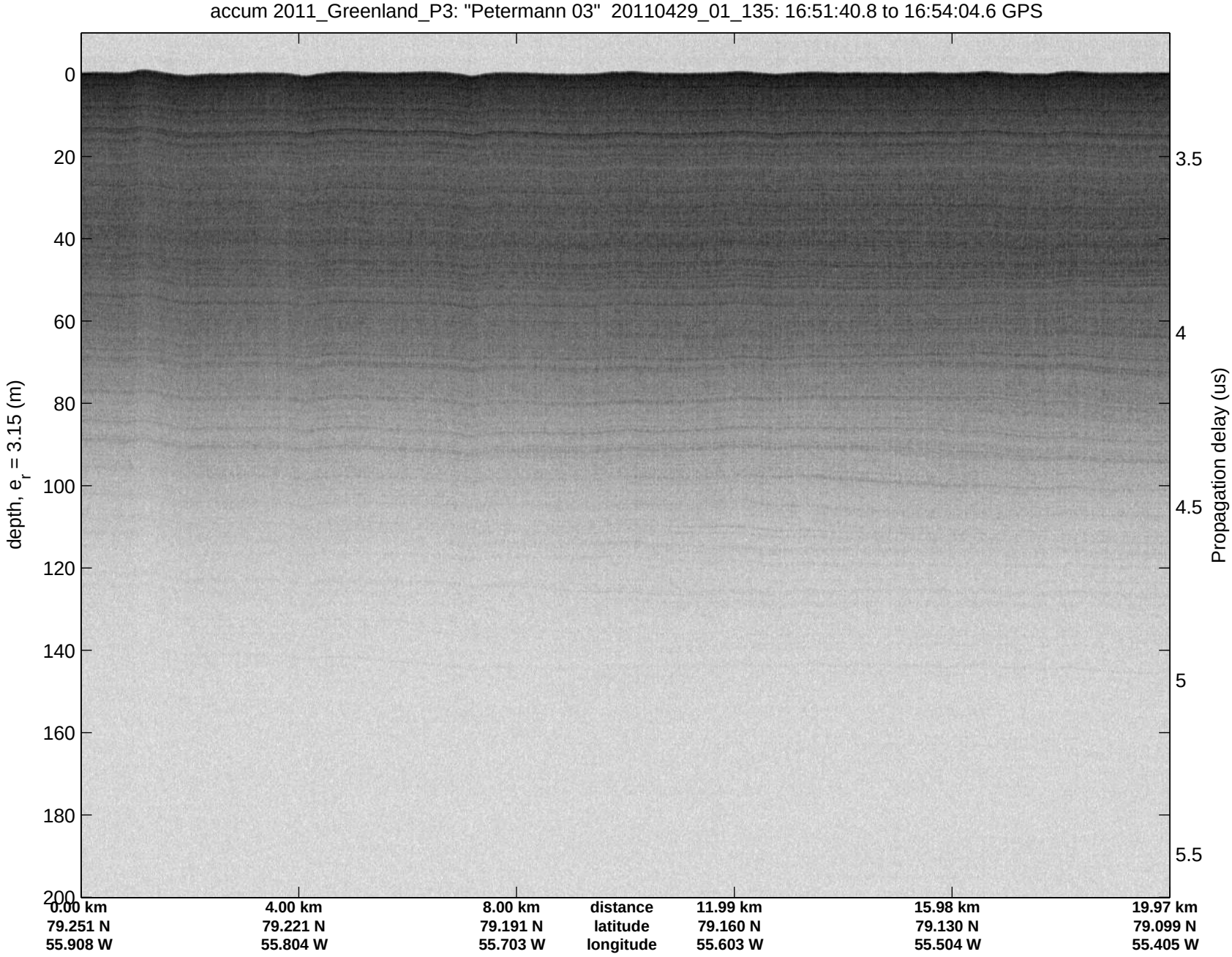

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

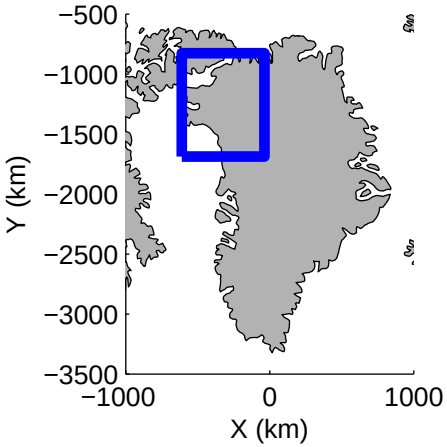

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_134: 16:49:19.5 to 16:51:40.6 GPS
0
20
40
60
80
100
120
140
160
180
depth, e_r = 3.15 (m)
3.5
4
4.5
5
Propagation delay (us)
0.00 km
79.403 N
56.421 W
4.00 km
79.372 N
56.324 W
8.01 km
79.341 N
56.223 W
distance
latitude
longitude
12.00 km
79.312 N
56.114 W
15.99 km
79.282 N
56.009 W
19.98 km
79.251 N
55.908 W

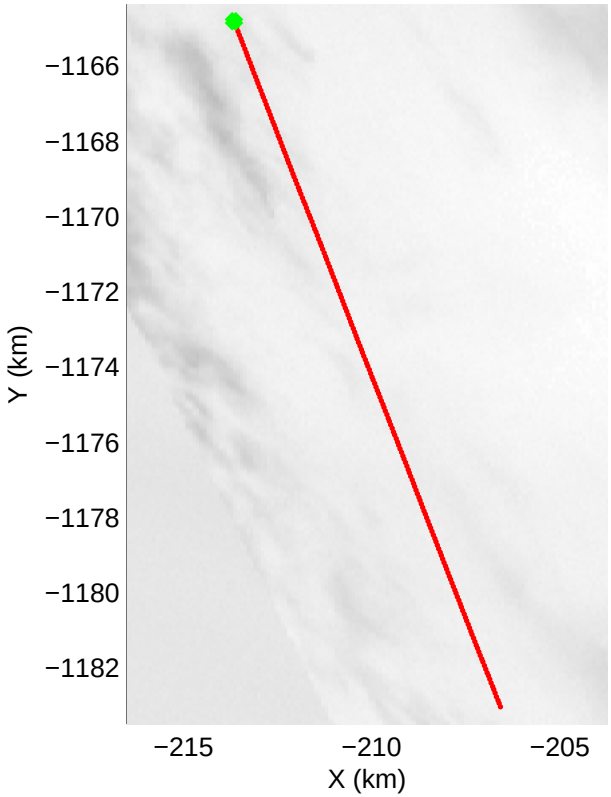

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

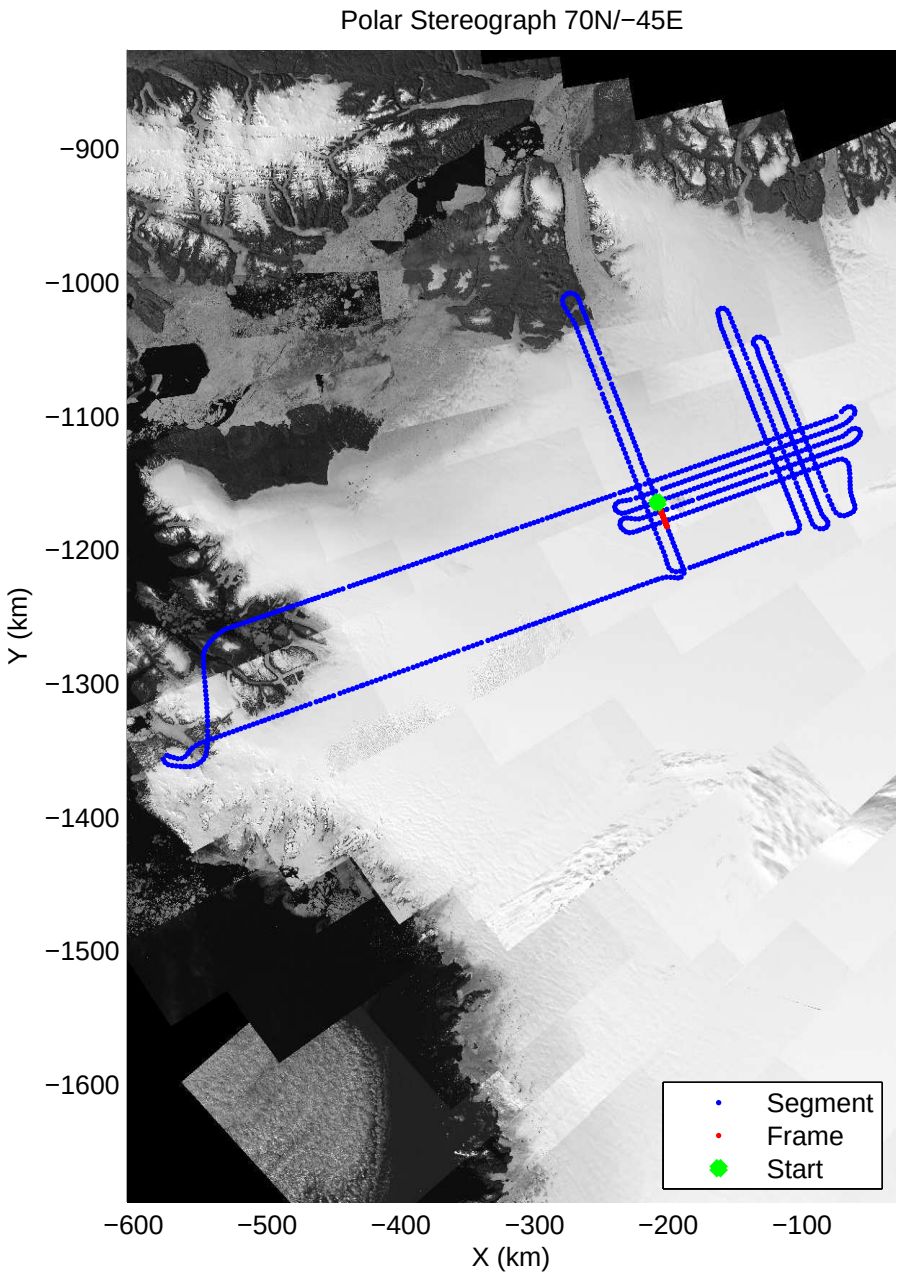

−1148
−1150
−1152
−1154
−1156
−1158
−1160
−1162
−1164
Y (km)
−222
−220
−218
−216
−214
−212
X (km)

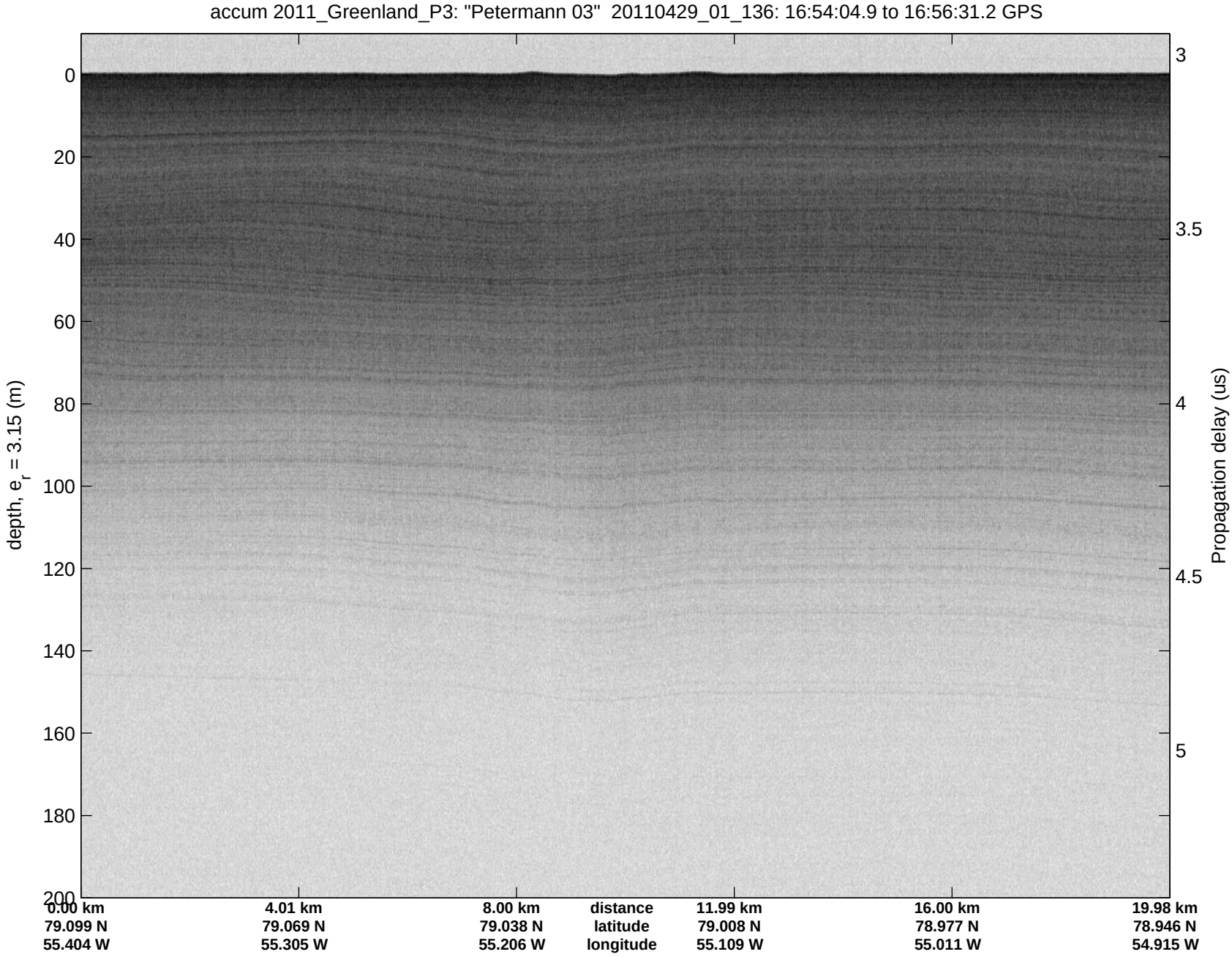

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

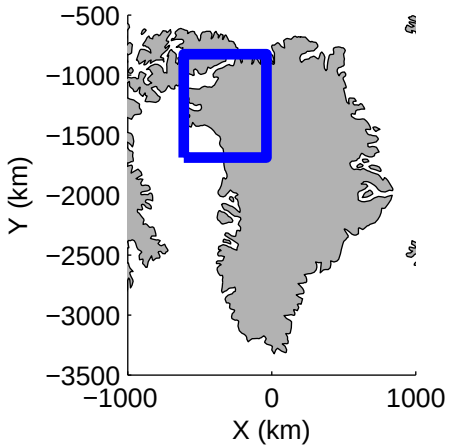

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_135: 16:51:40.8 to 16:54:04.6 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
79.251 N
55.908 W
4.00 km
79.221 N
55.804 W
8.00 km
79.191 N
55.703 W
distance
latitude
longitude
11.99 km
79.160 N
55.603 W
15.98 km
79.130 N
55.504 W
19.97 km
79.099 N
55.405 W

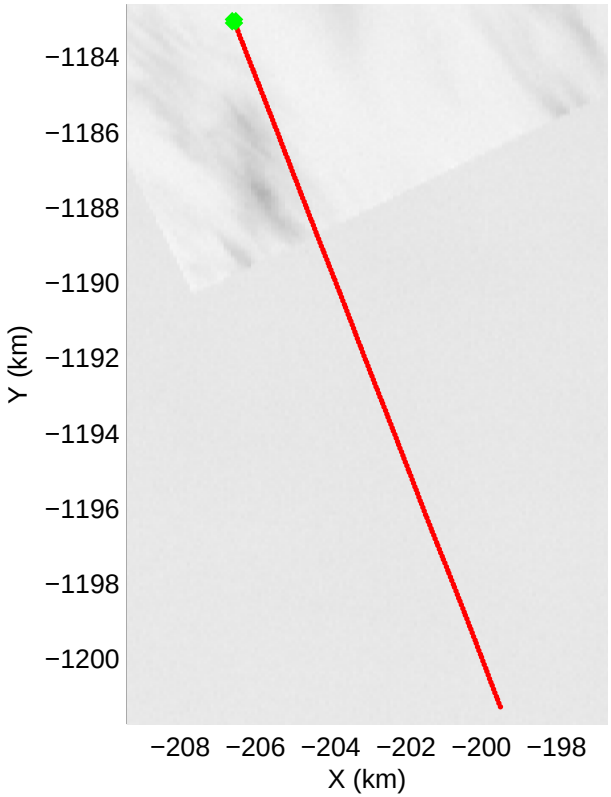

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

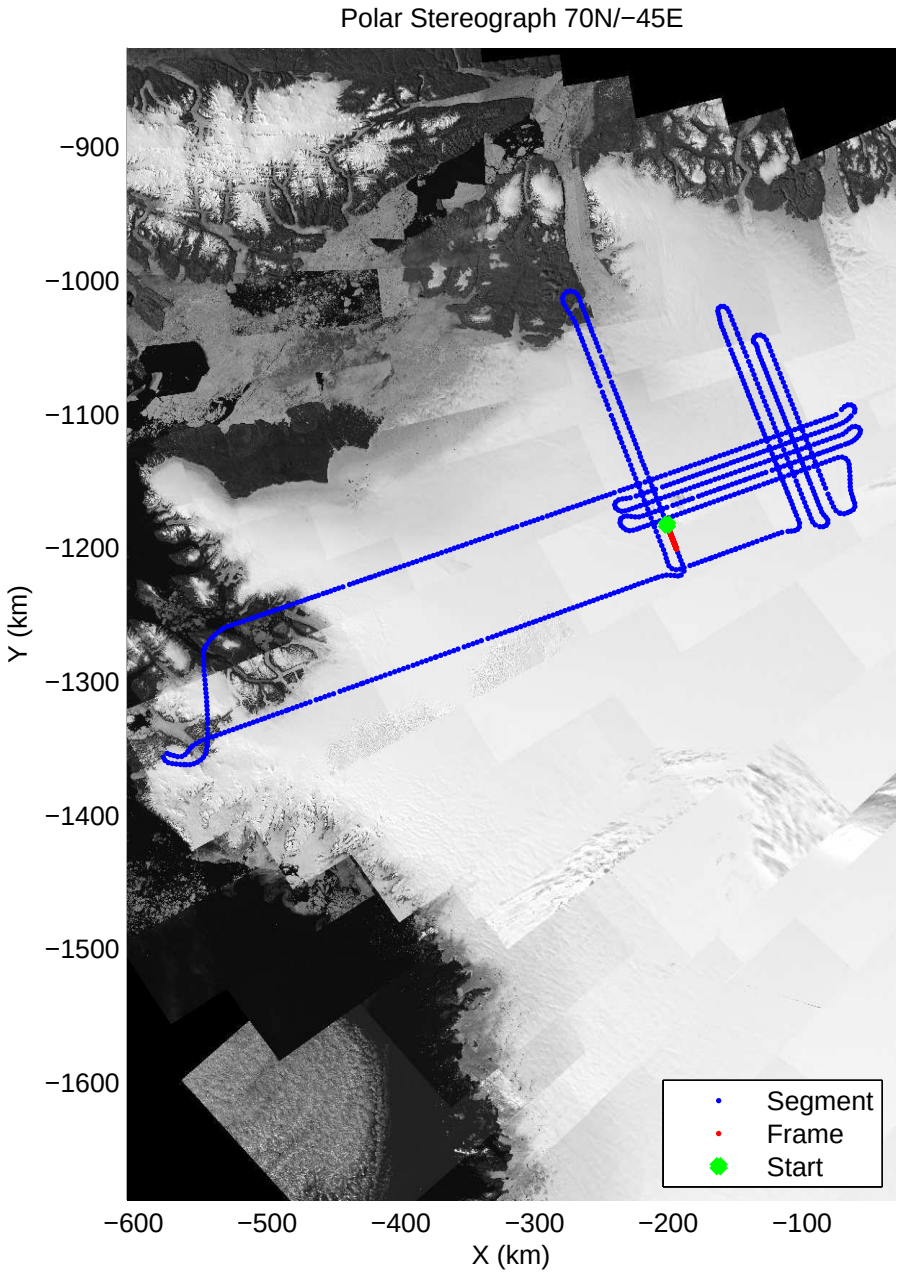

−1166
−1168
−1170
−1172
−1174
−1176
−1178
−1180
−1182
Y (km)
−215
−210
−205
X (km)

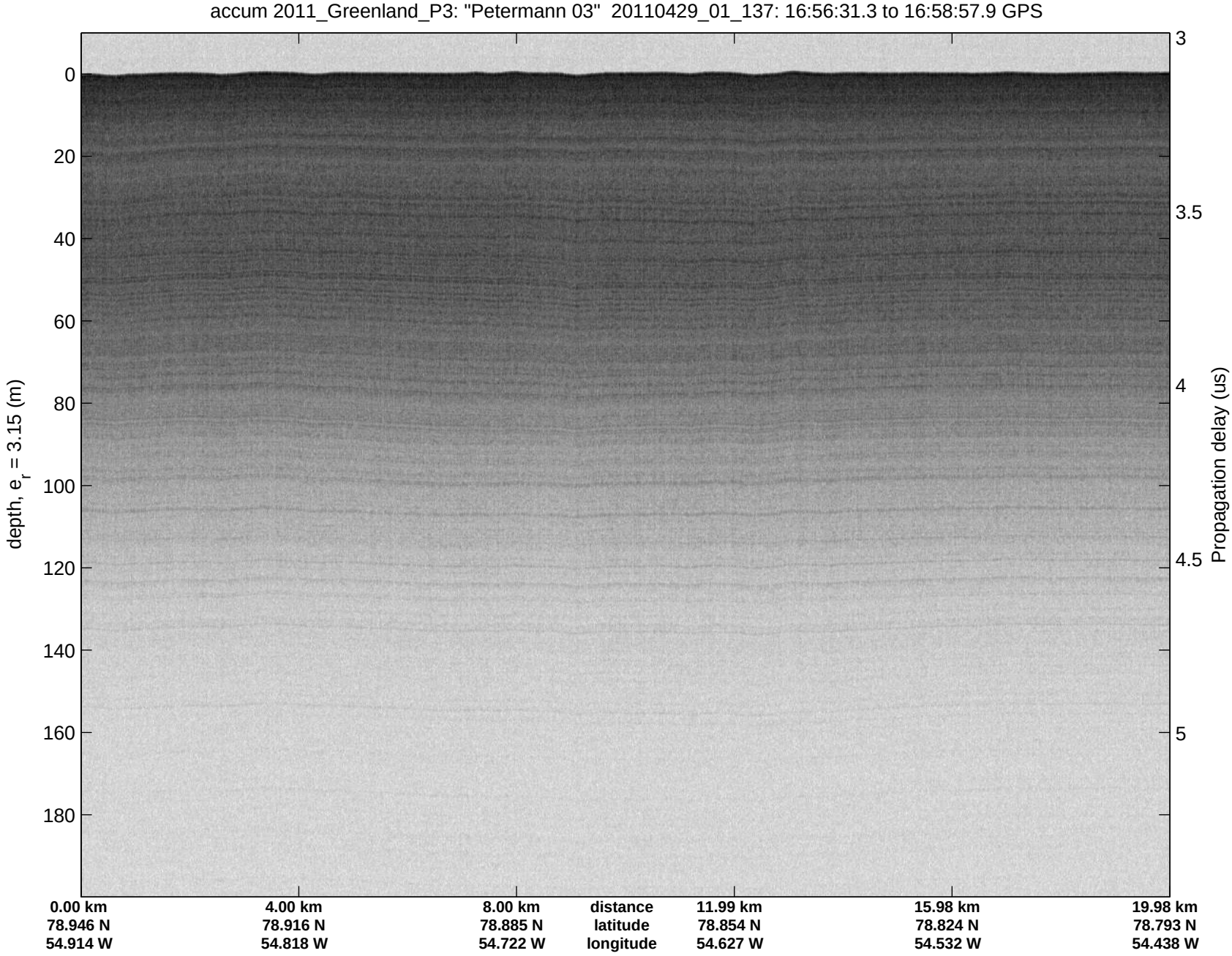

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

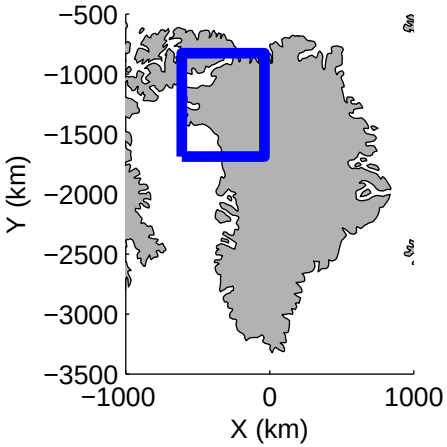

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_136: 16:54:04.9 to 16:56:31.2 GPS
depth, e_r = 3.15 (m)
Propagation delay (us)
0
20
40
60
80
100
120
140
160
180
200
3
3.5
4
4.5
5
0.00 km
79.099 N
55.404 W
4.01 km
79.069 N
55.305 W
8.00 km
79.038 N
55.206 W
distance
latitude
longitude
11.99 km
79.008 N
55.109 W
16.00 km
78.977 N
55.011 W
19.98 km
78.946 N
54.915 W

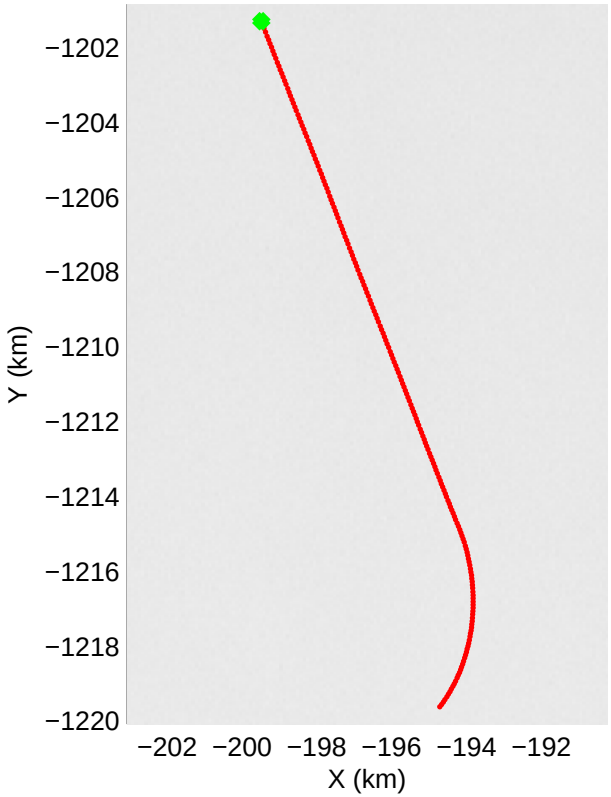

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

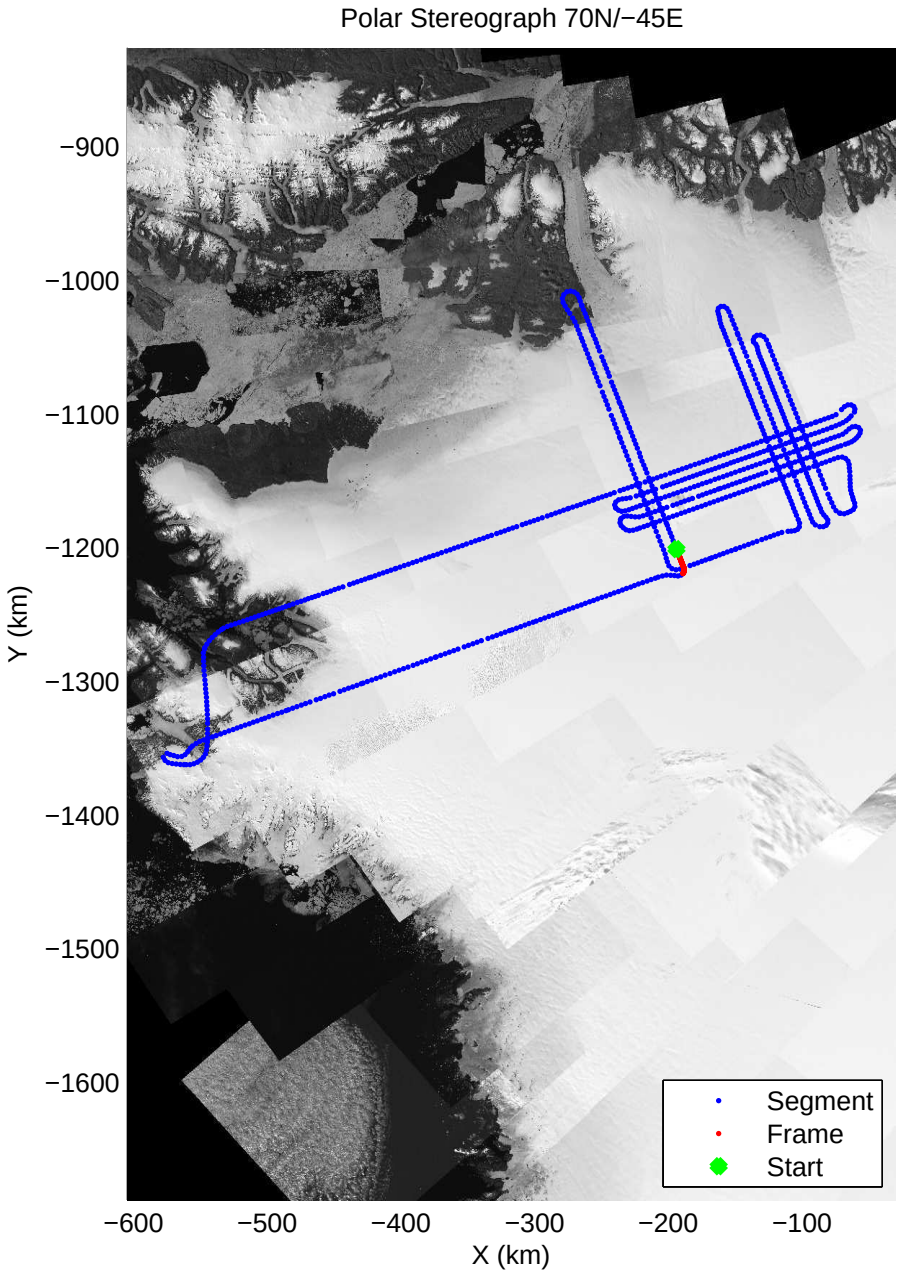

−1184
−1186
−1188
−1190
−1192
−1194
−1196
−1198
−1200
Y (km)
−208
−206
−204
−202
−200
−198
X (km)

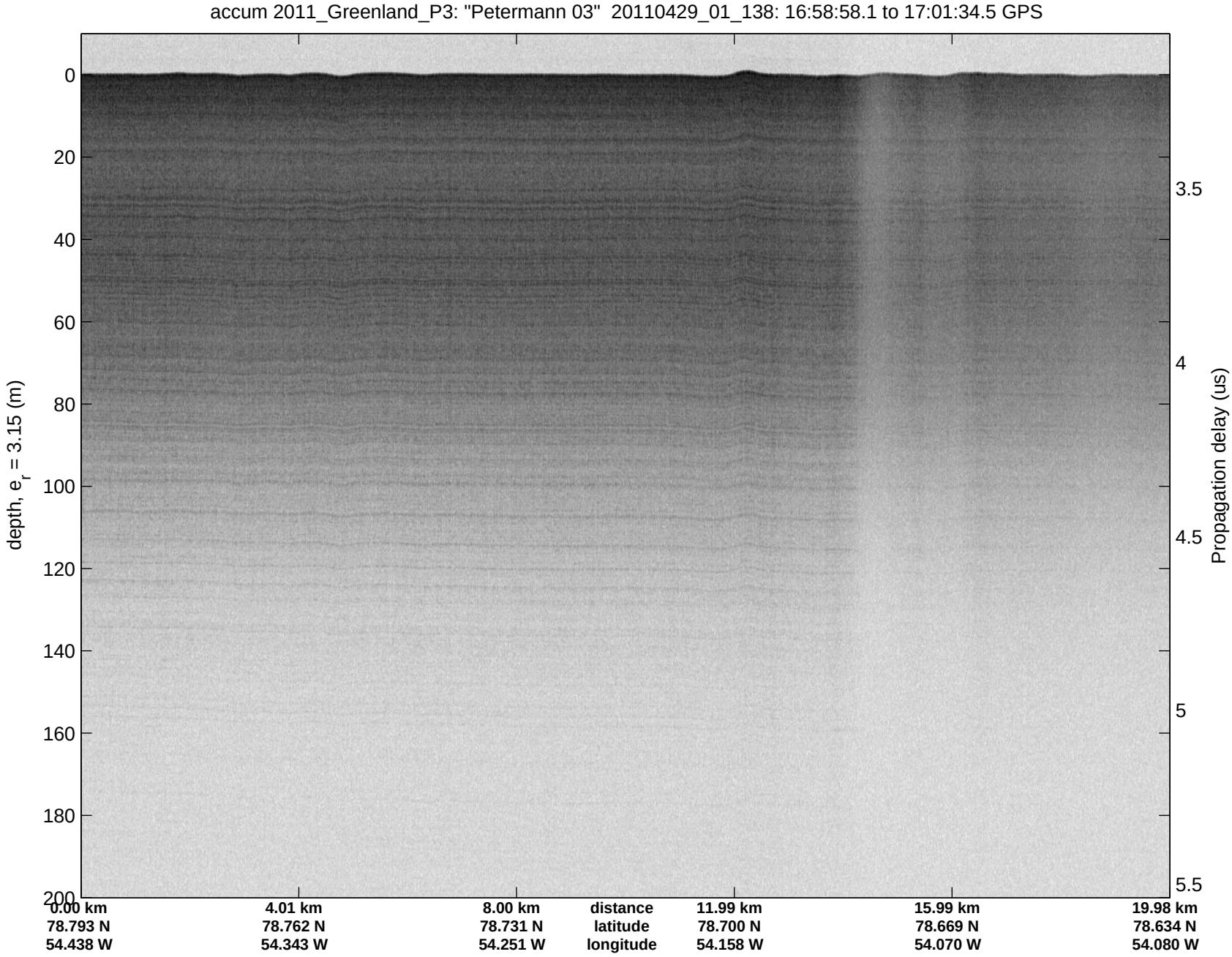

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

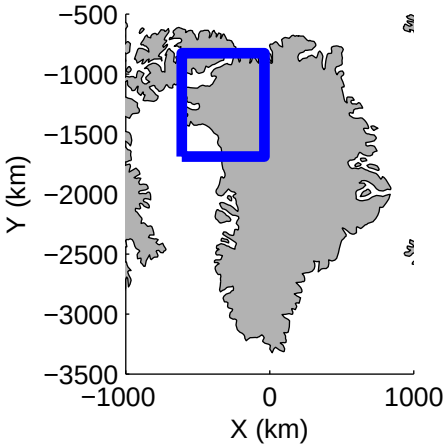

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_137: 16:56:31.3 to 16:58:57.9 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
78.946 N
54.914 W
4.00 km
78.916 N
54.818 W
8.00 km
78.885 N
54.722 W
distance
latitude
longitude
11.99 km
78.854 N
54.627 W
15.98 km
78.824 N
54.532 W
19.98 km
78.793 N
54.438 W

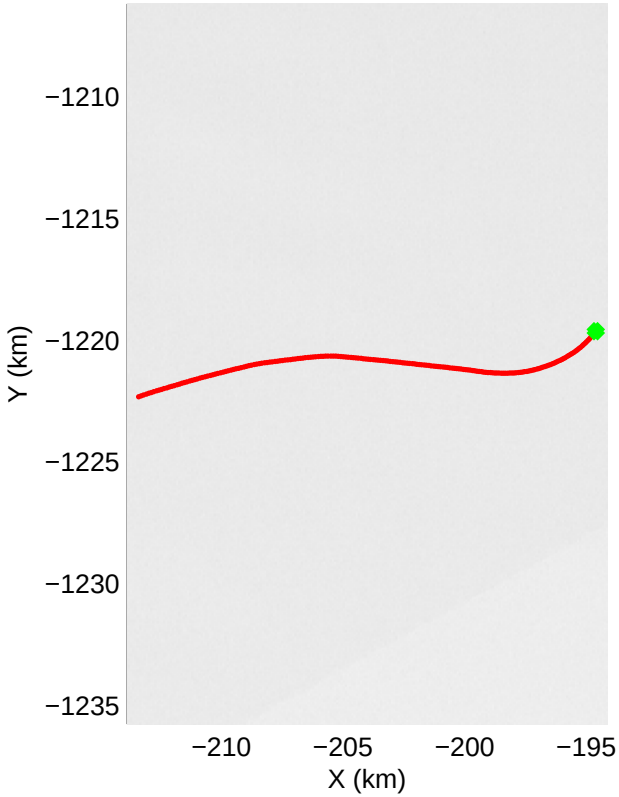

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

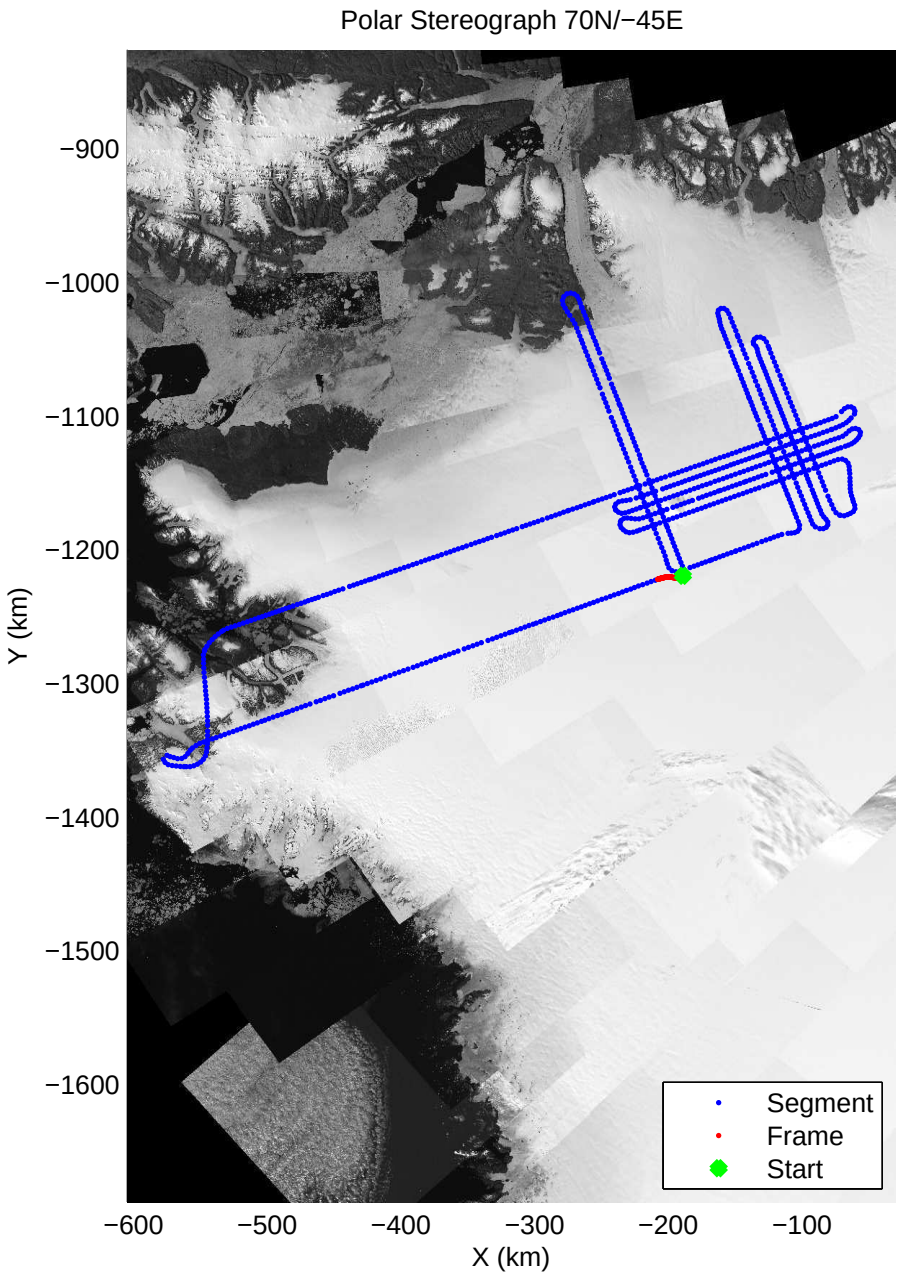

−1202
−1204
−1206
−1208
−1210
−1212
−1214
−1216
−1218
−1220
Y (km)
−202
−200
−198
−196
−194
−192
X (km)

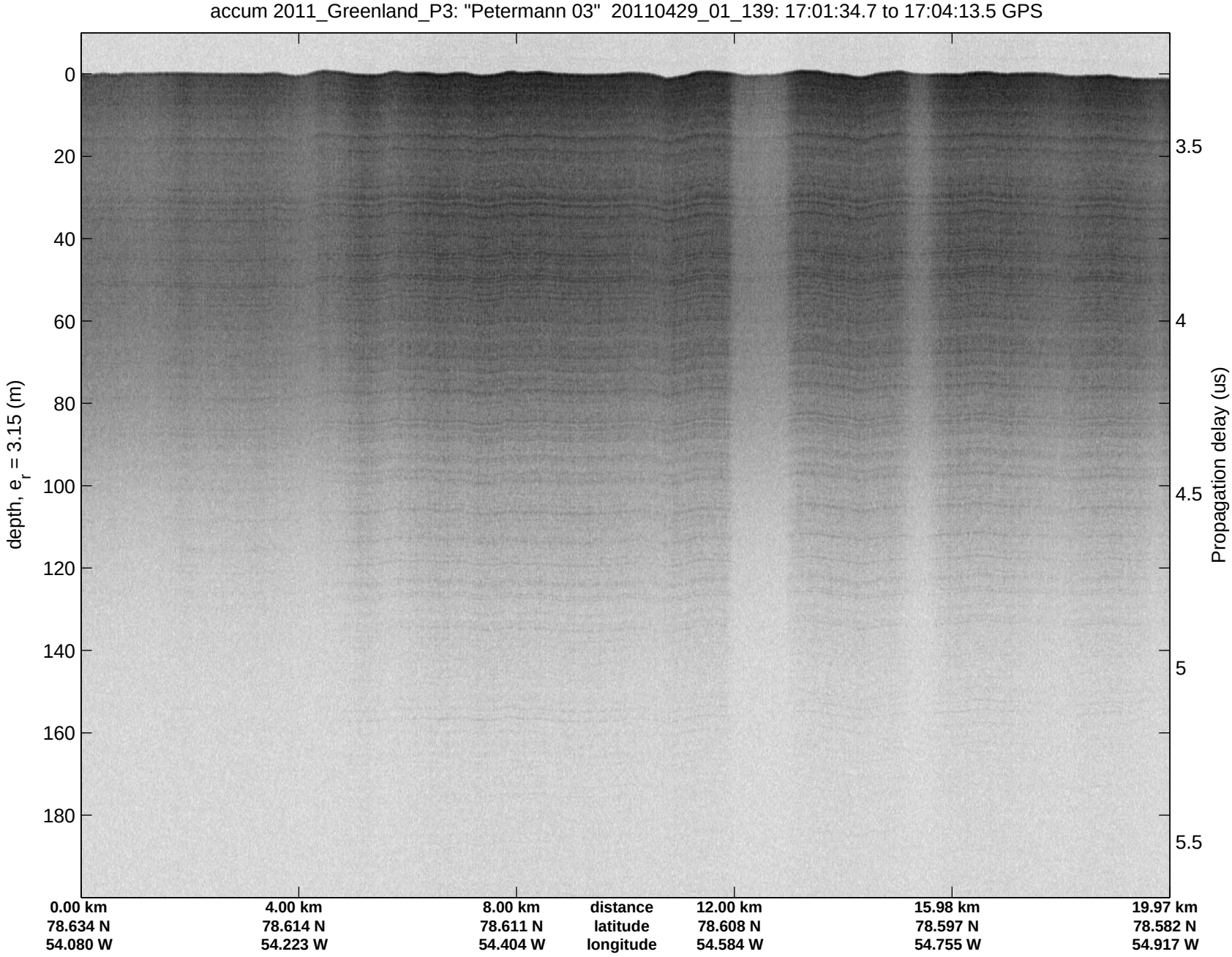

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

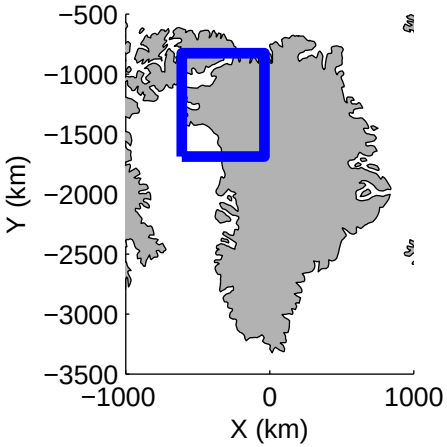

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_138: 16:58:58.1 to 17:01:34.5 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
78.793 N
54.438 W
4.01 km
78.762 N
54.343 W
8.00 km
78.731 N
54.251 W
distance
latitude
longitude
11.99 km
78.700 N
54.158 W
15.99 km
78.669 N
54.070 W
19.98 km
78.634 N
54.080 W

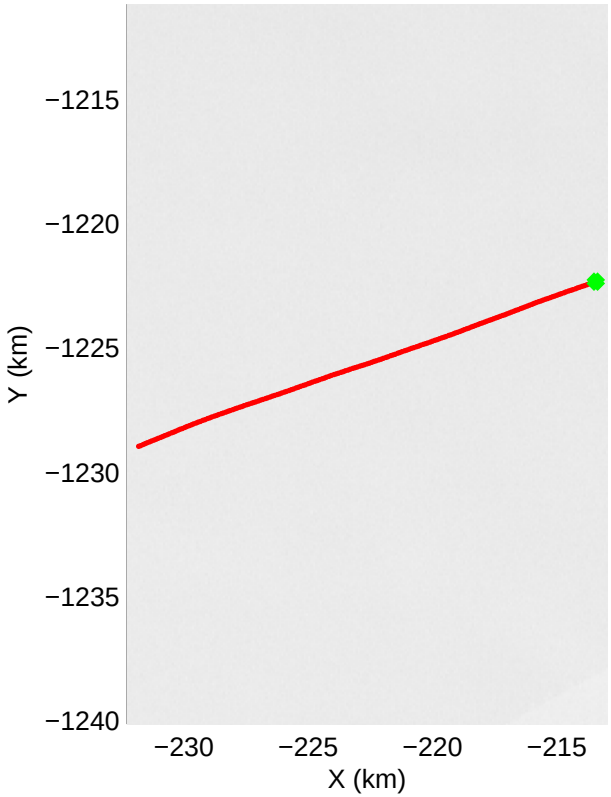

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

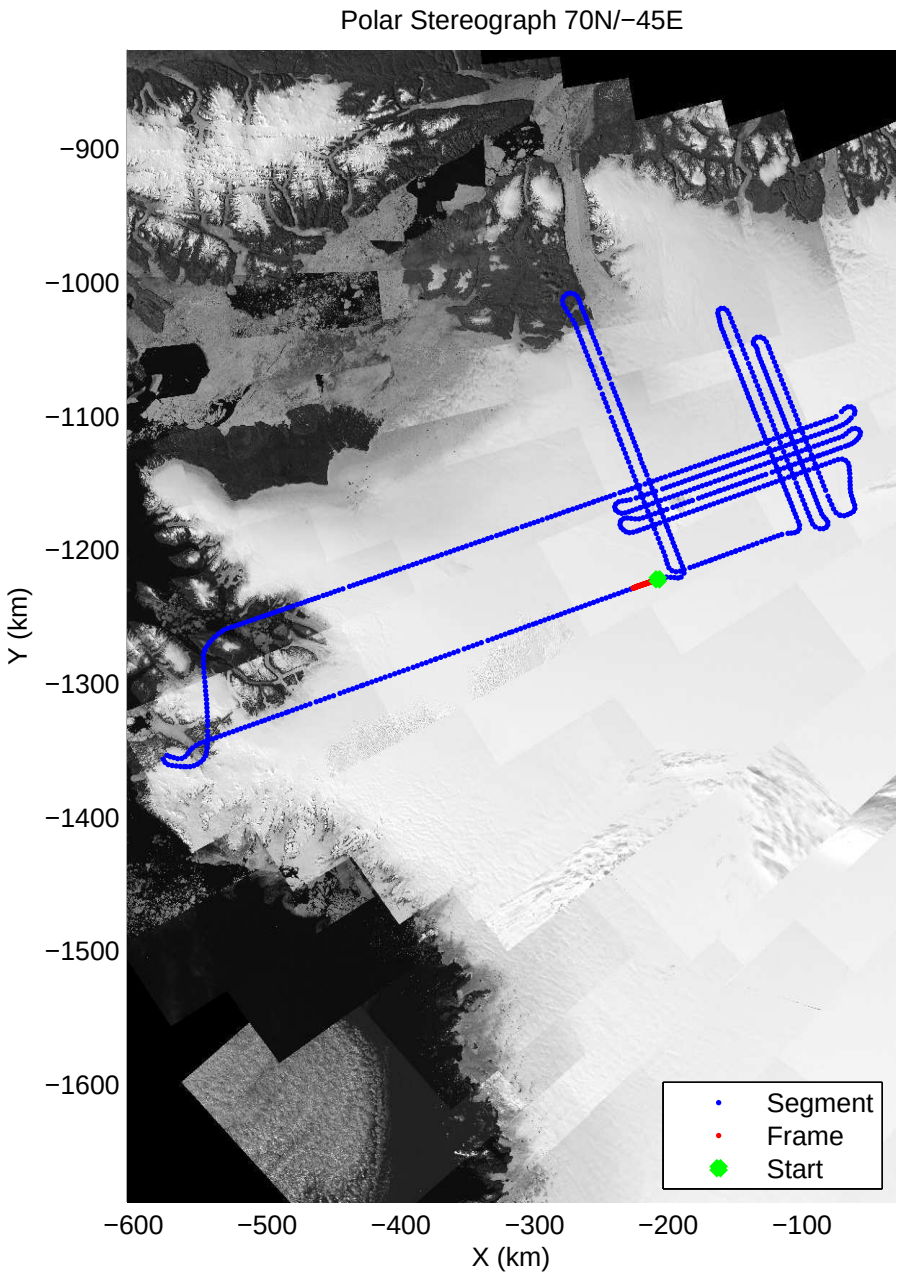

−1210
−1215
−1220
−1225
−1230
−1235
Y (km)
−210
−205
−200
−195
X (km)

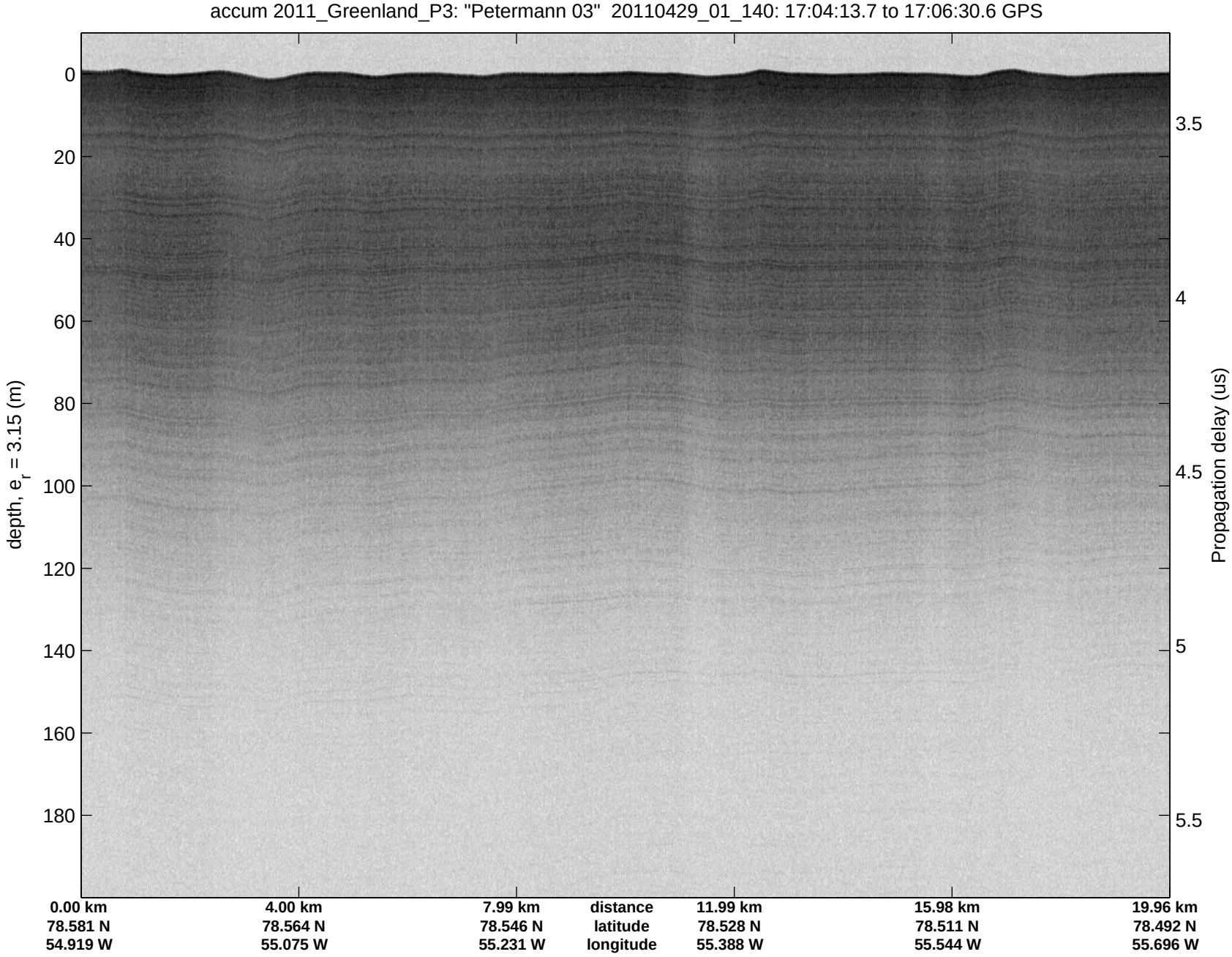

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

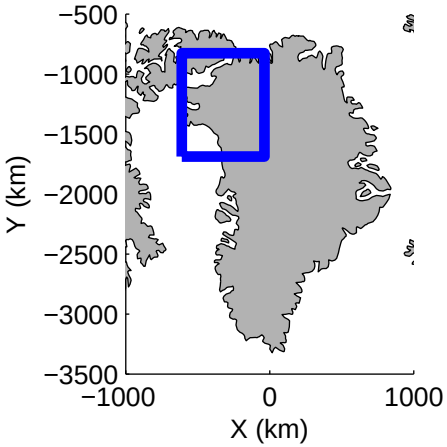

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_139: 17:01:34.7 to 17:04:13.5 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
78.634 N
54.080 W
4.00 km
78.614 N
54.223 W
8.00 km
78.611 N
54.404 W
distance
latitude
longitude
12.00 km
78.608 N
54.584 W
15.98 km
78.597 N
54.755 W
19.97 km
78.582 N
54.917 W

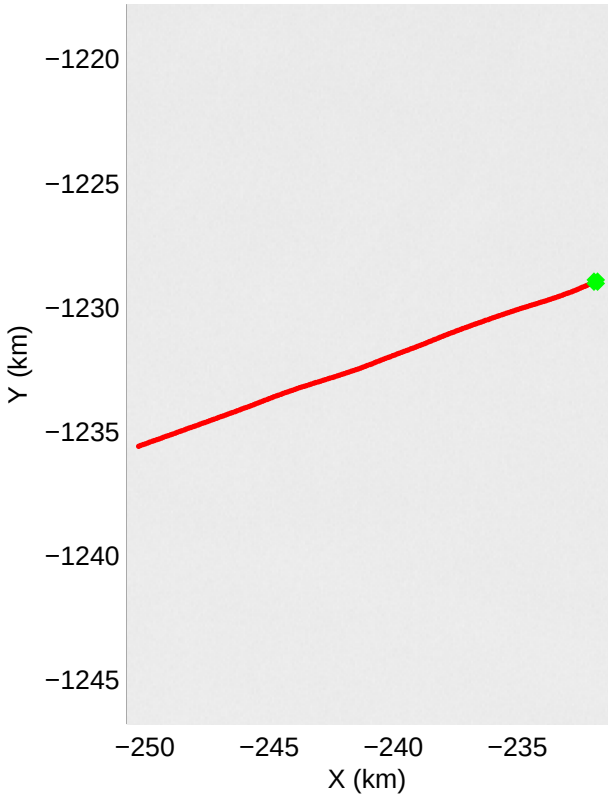

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

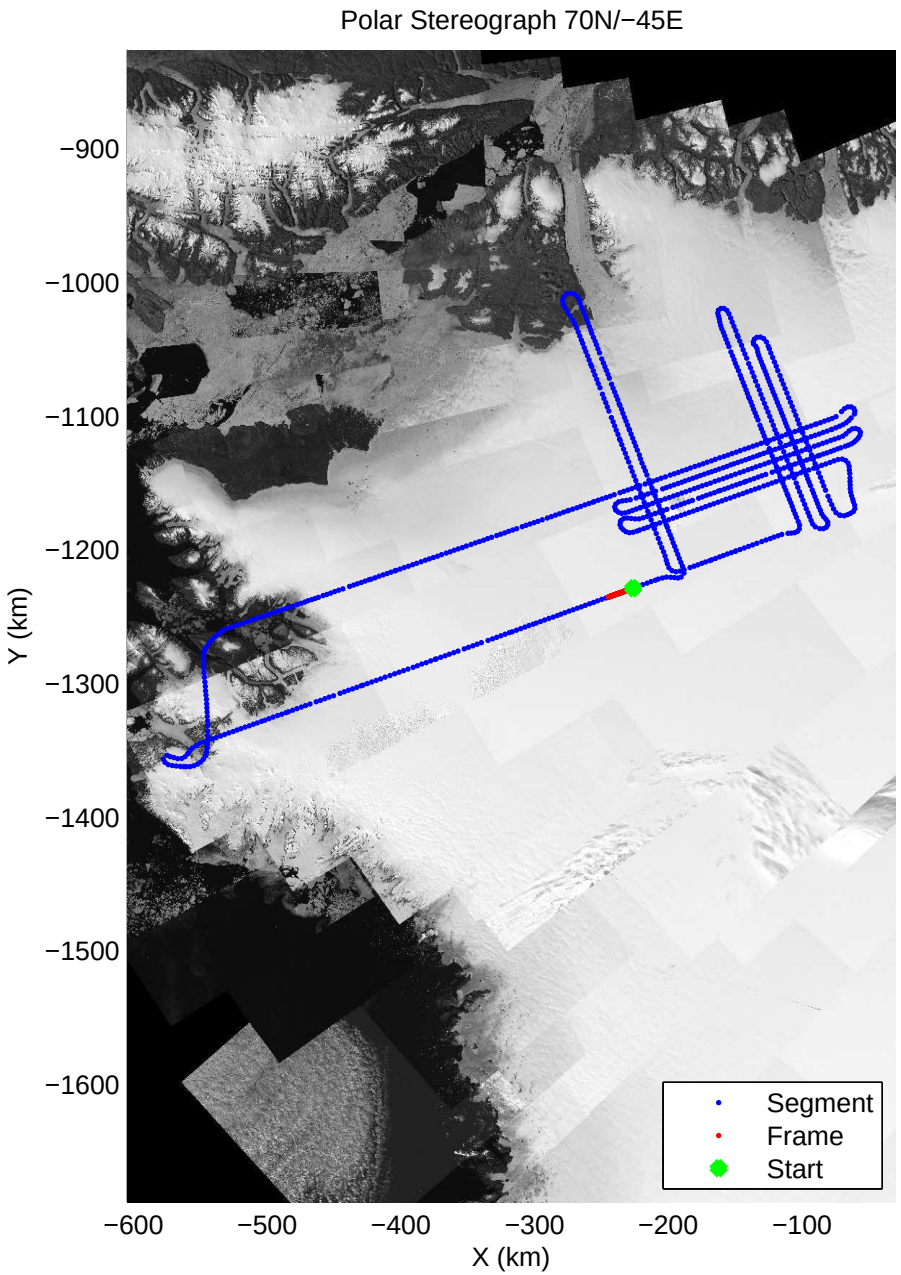

−1215
−1220
−1225
−1230
−1235
−1240
Y (km)
−230
−225
−220
−215
X (km)

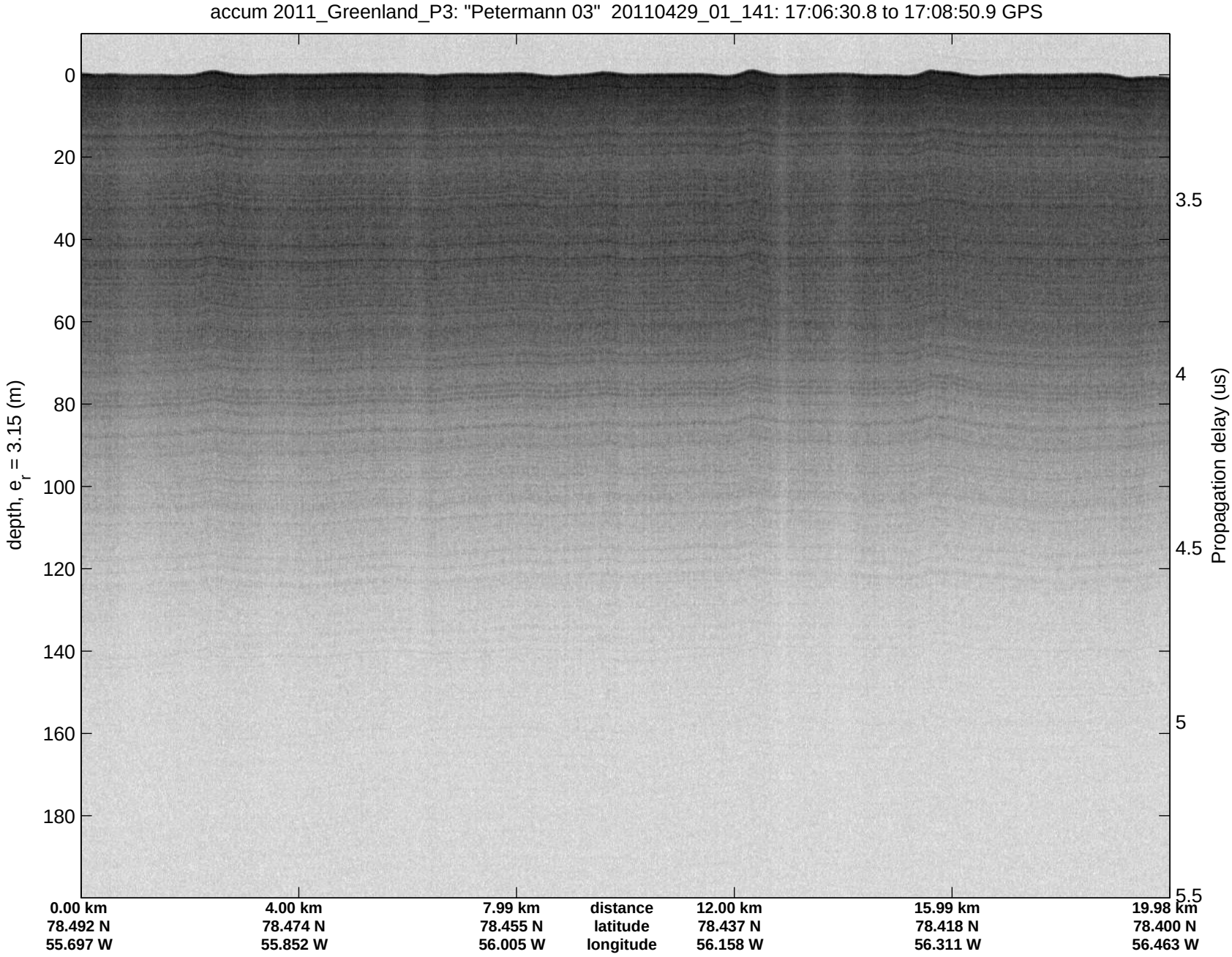

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

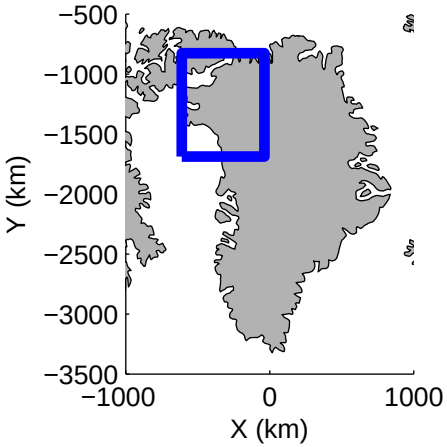

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_140: 17:04:13.7 to 17:06:30.6 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
78.581 N
54.919 W
4.00 km
78.564 N
55.075 W
7.99 km
78.546 N
55.231 W
distance
latitude
longitude
11.99 km
78.528 N
55.388 W
15.98 km
78.511 N
55.544 W
19.96 km
78.492 N
55.696 W

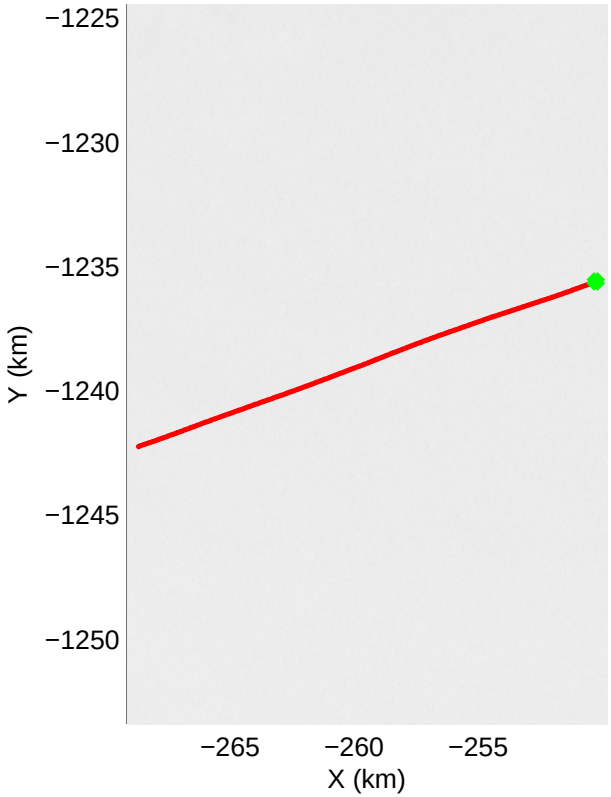

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

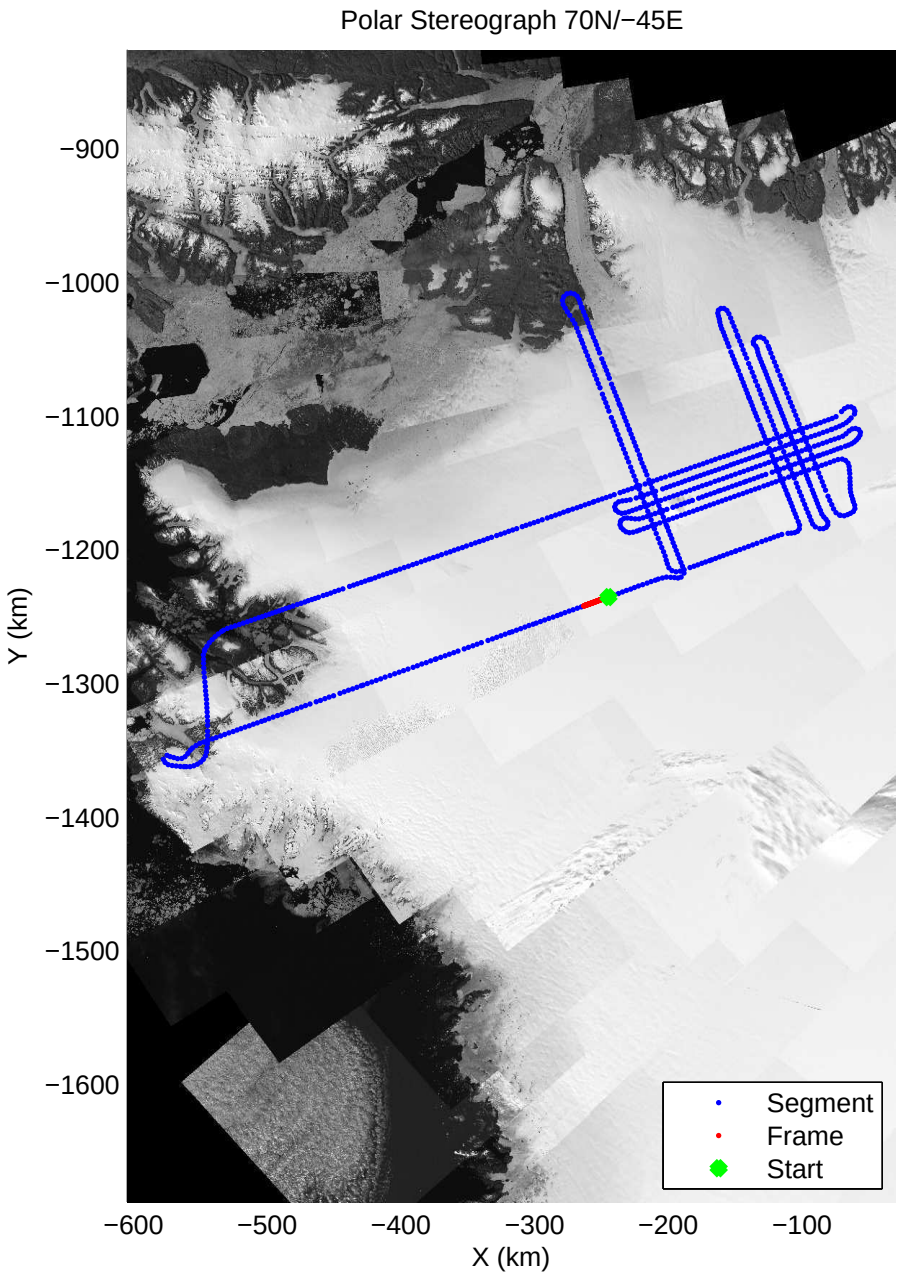

−1220
−1225
−1230
−1235
−1240
−1245
Y (km)
−250
−245
−240
−235
X (km)

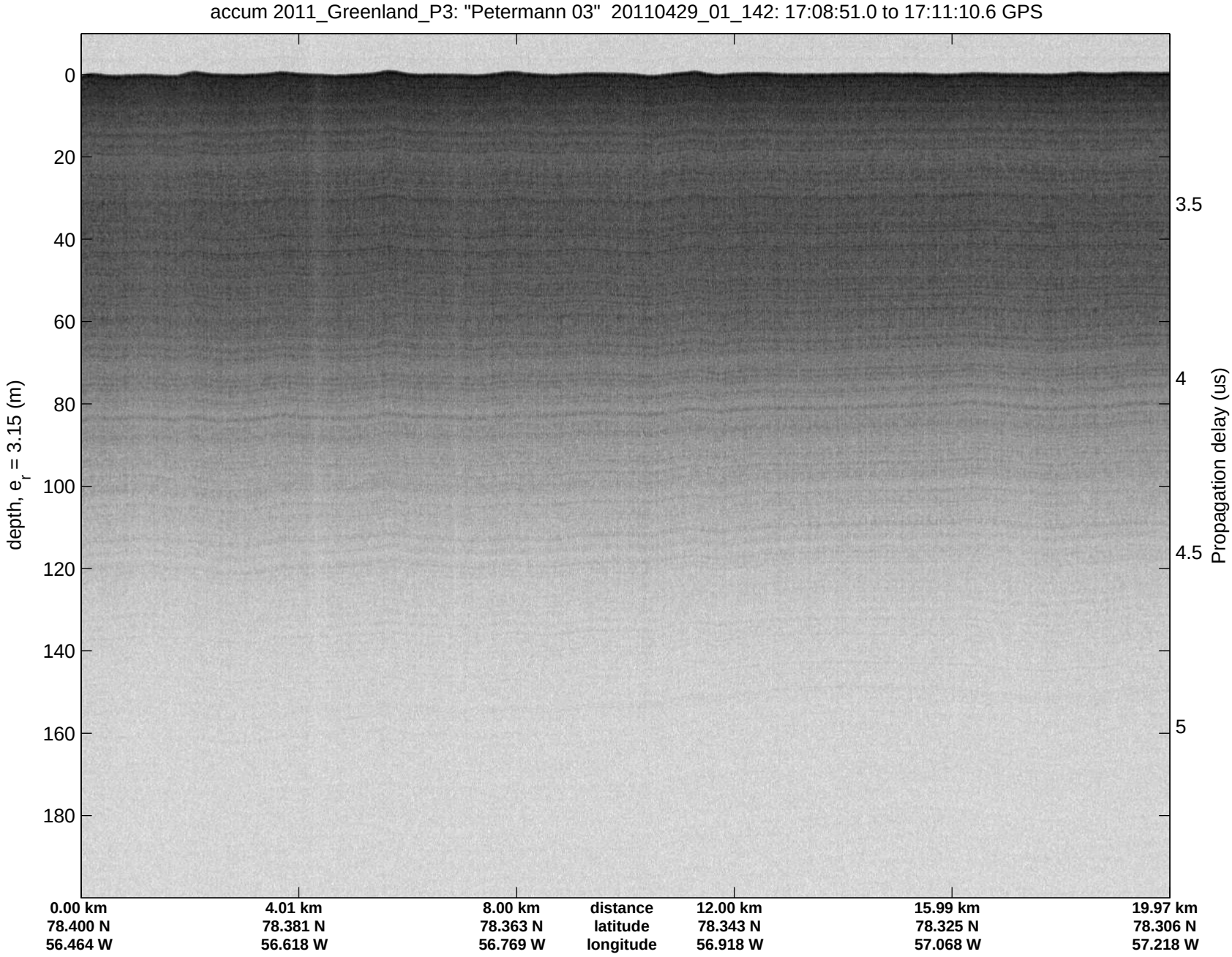

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

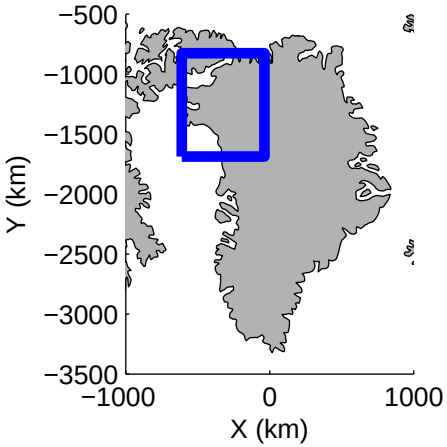

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_141: 17:06:30.8 to 17:08:50.9 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
78.492 N
55.697 W
4.00 km
78.474 N
55.852 W
7.99 km
78.455 N
56.005 W
distance
latitude
longitude
12.00 km
78.437 N
56.158 W
15.99 km
78.418 N
56.311 W
19.98 km
78.400 N
56.463 W

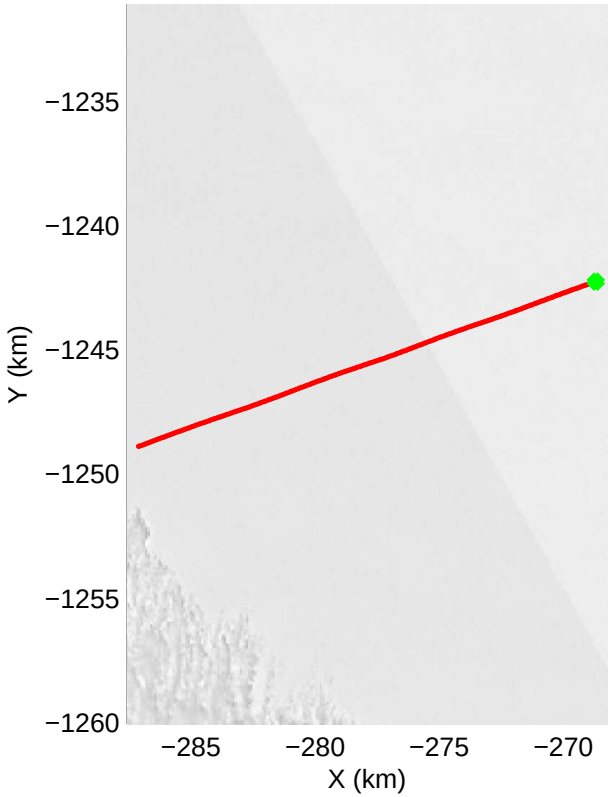

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

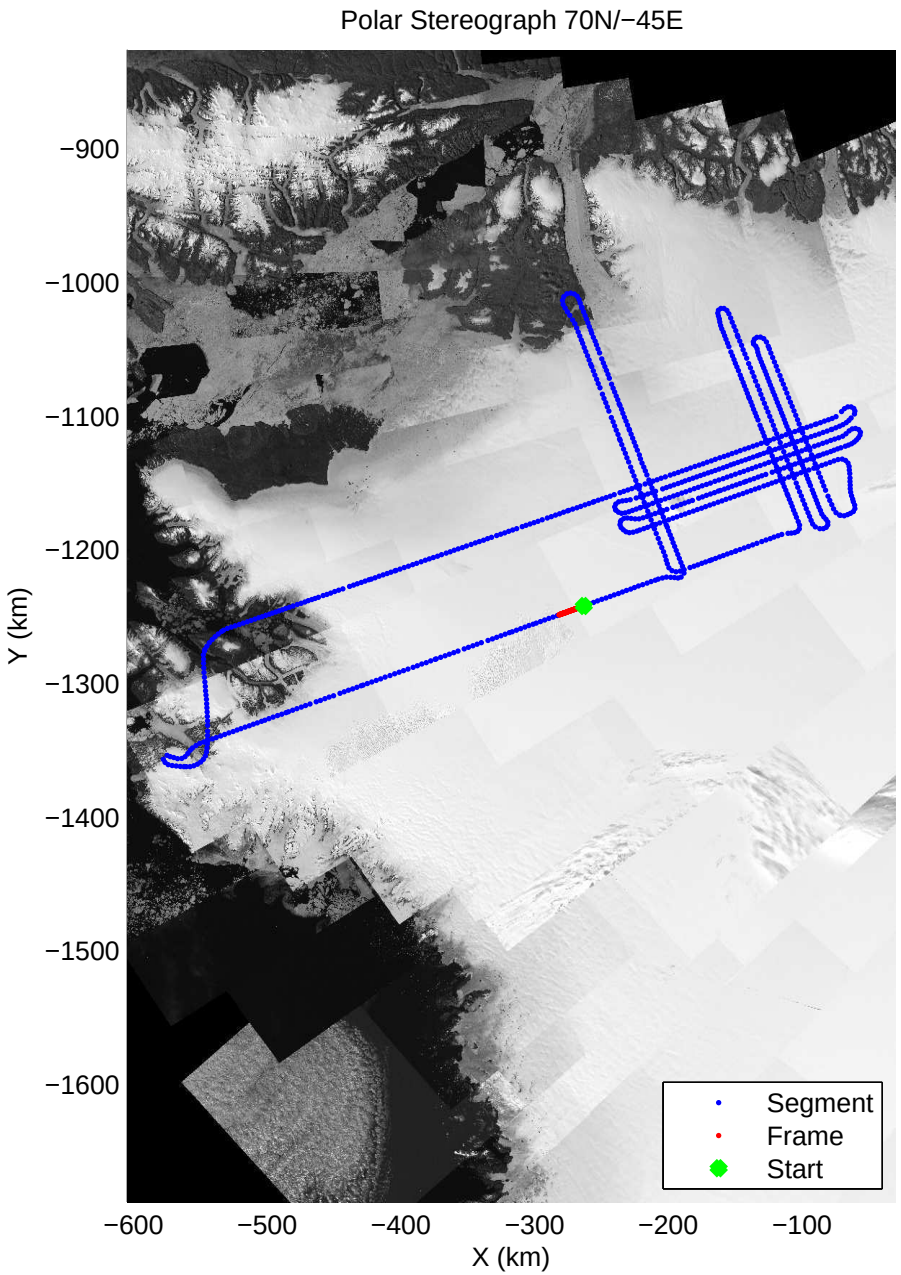

−1225
−1230
−1235
−1240
−1245
−1250
Y (km)
−265
−260
−255
X (km)

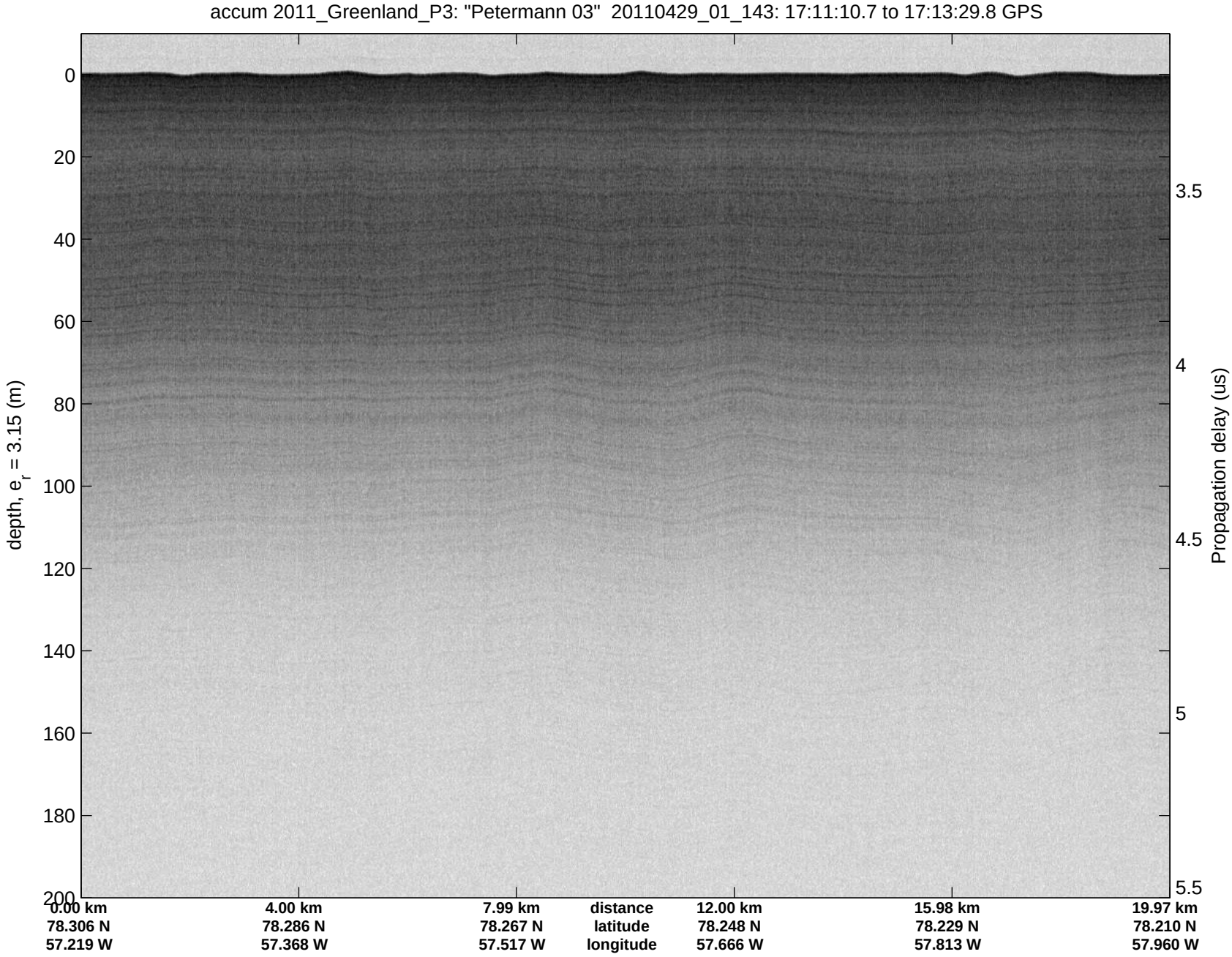

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

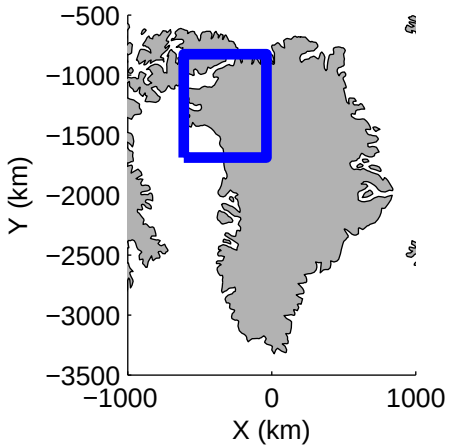

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_142: 17:08:51.0 to 17:11:10.6 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
0.00 km
78.400 N
56.464 W
4.01 km
78.381 N
56.618 W
8.00 km
78.363 N
56.769 W
distance
latitude
longitude
12.00 km
78.343 N
56.918 W
15.99 km
78.325 N
57.068 W
19.97 km
78.306 N
57.218 W

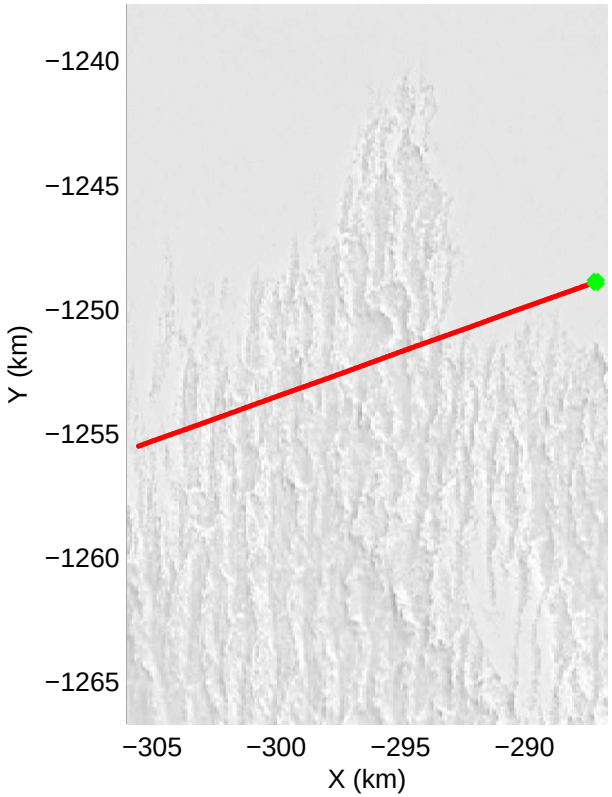

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

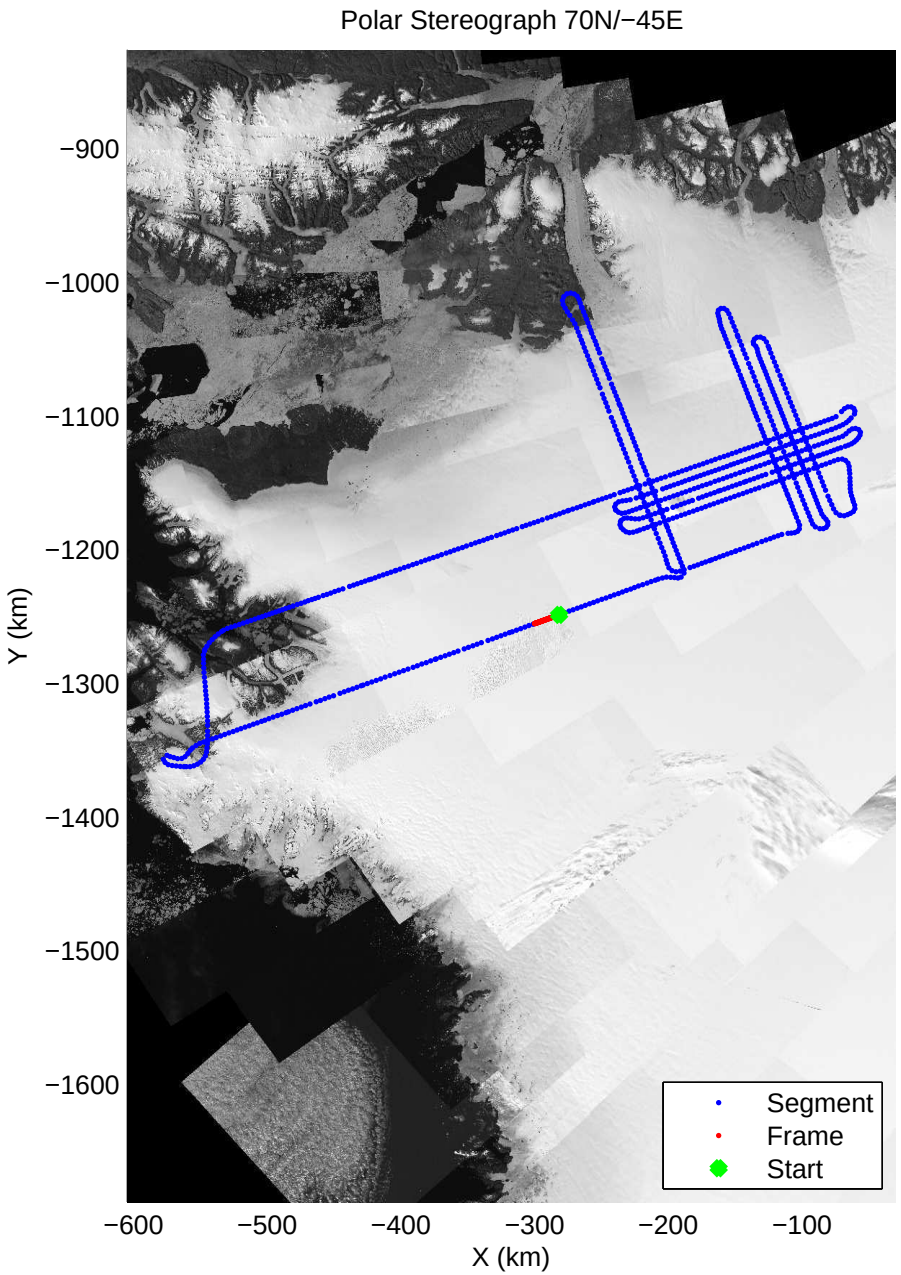

−1235
−1240
−1245
−1250
−1255
−1260
Y (km)
−285
−280
−275
−270
X (km)

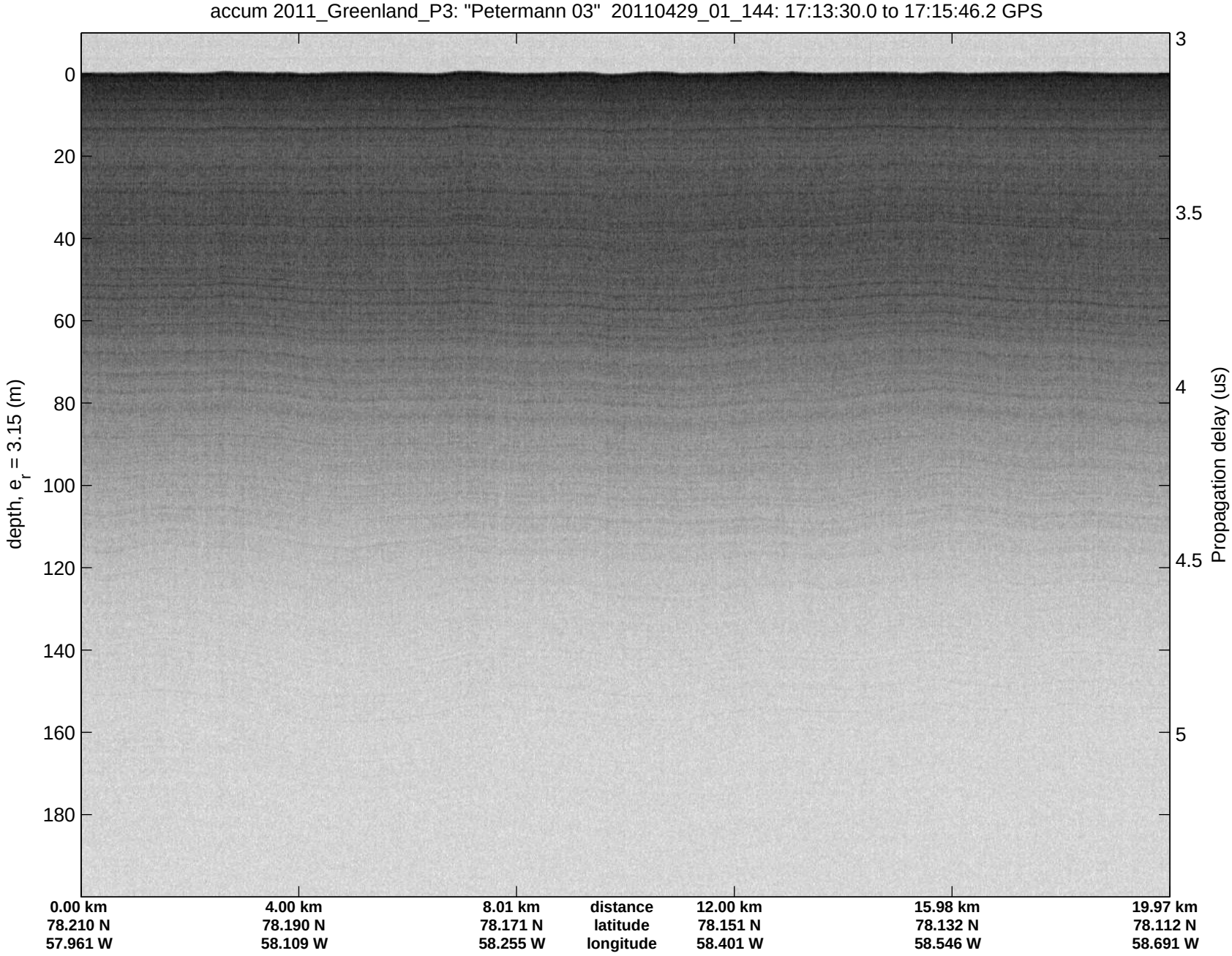

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

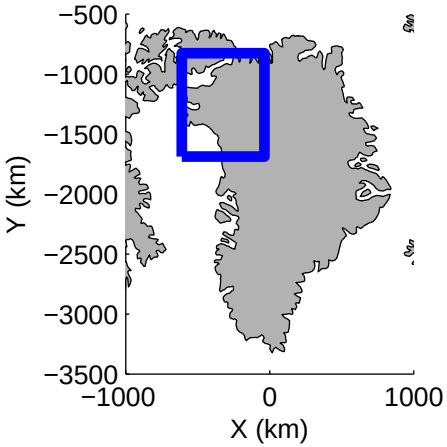

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_143: 17:11:10.7 to 17:13:29.8 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
78.306 N
57.219 W
4.00 km
78.286 N
57.368 W
7.99 km
78.267 N
57.517 W
distance
latitude
longitude
12.00 km
78.248 N
57.666 W
15.98 km
78.229 N
57.813 W
19.97 km
78.210 N
57.960 W

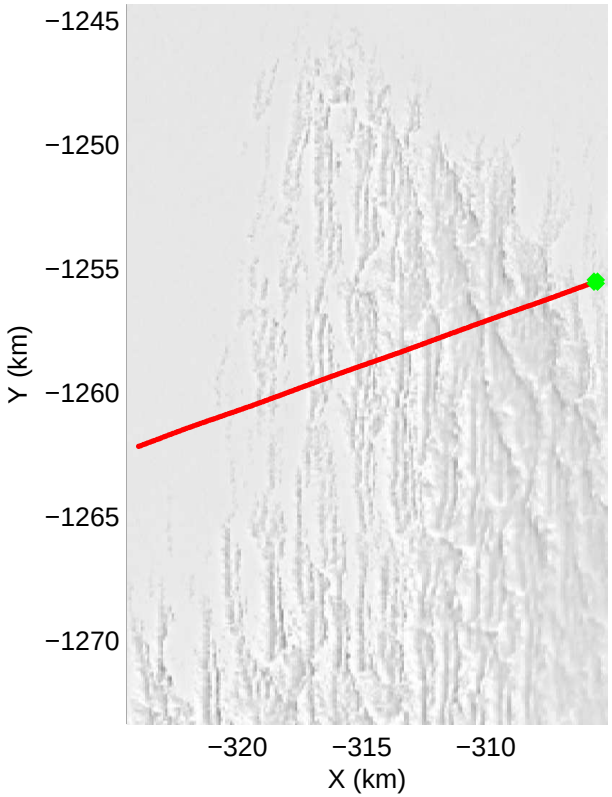

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

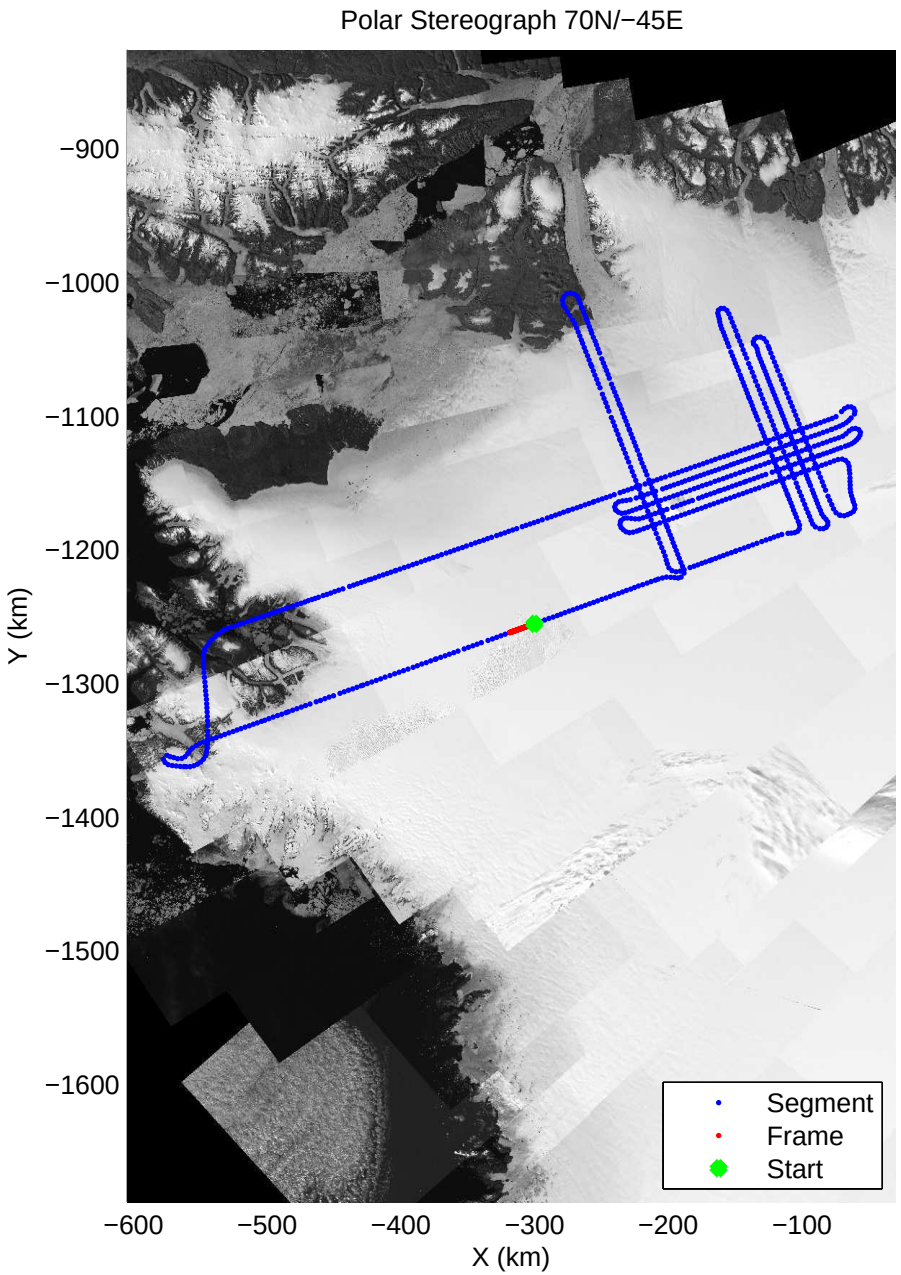

−1240
−1245
−1250
−1255
−1260
−1265
Y (km)
−305
−300
−295
−290
X (km)

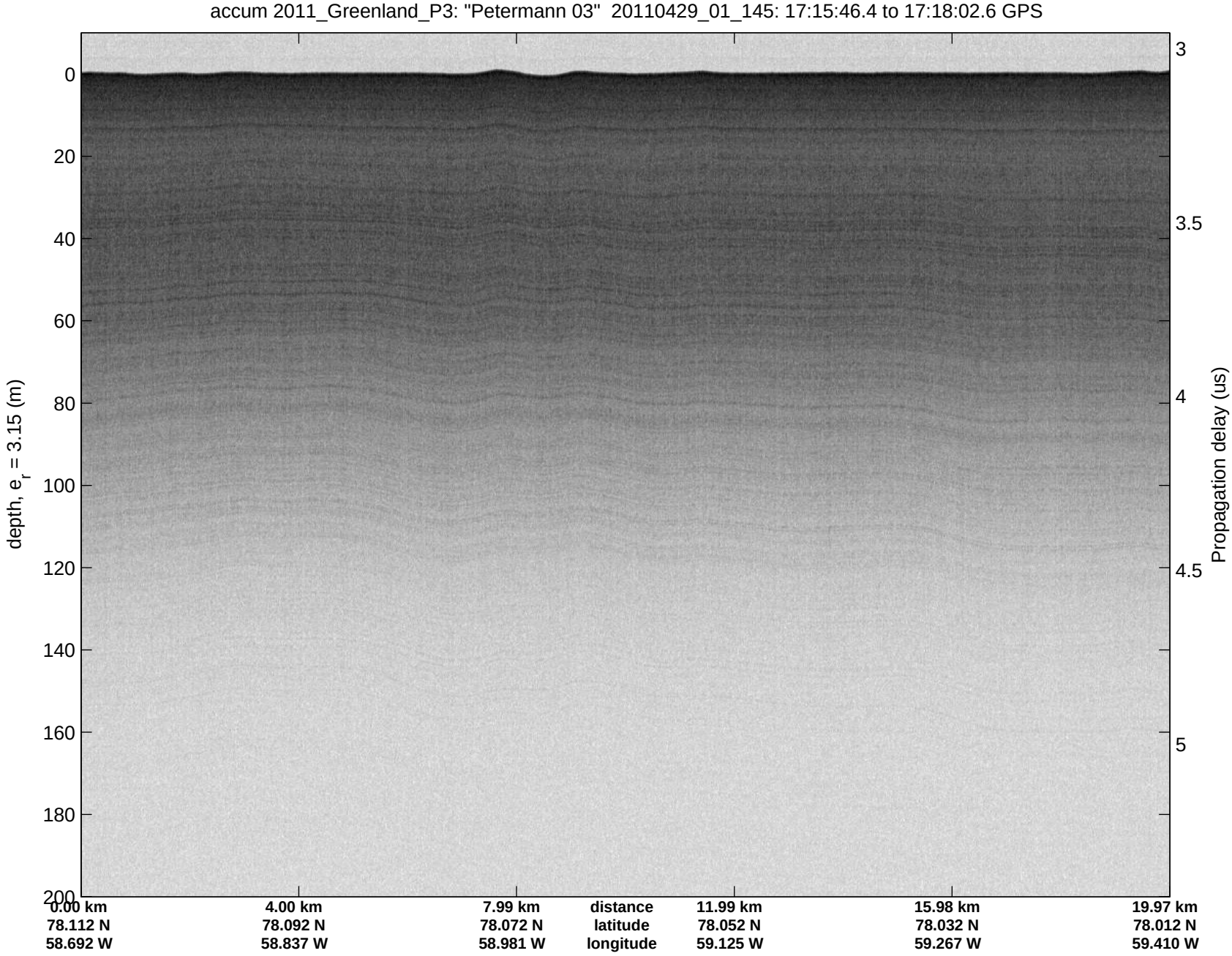

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

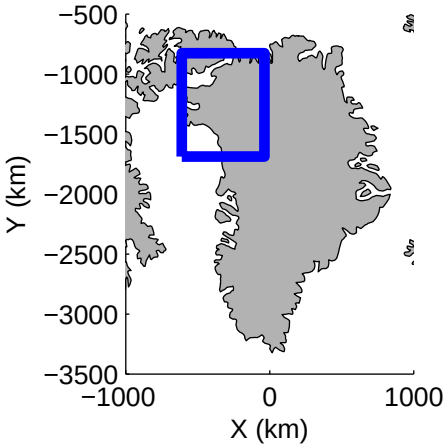

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_144: 17:13:30.0 to 17:15:46.2 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
78.210 N
57.961 W
4.00 km
78.190 N
58.109 W
8.01 km
78.171 N
58.255 W
distance
latitude
longitude
12.00 km
78.151 N
58.401 W
15.98 km
78.132 N
58.546 W
19.97 km
78.112 N
58.691 W

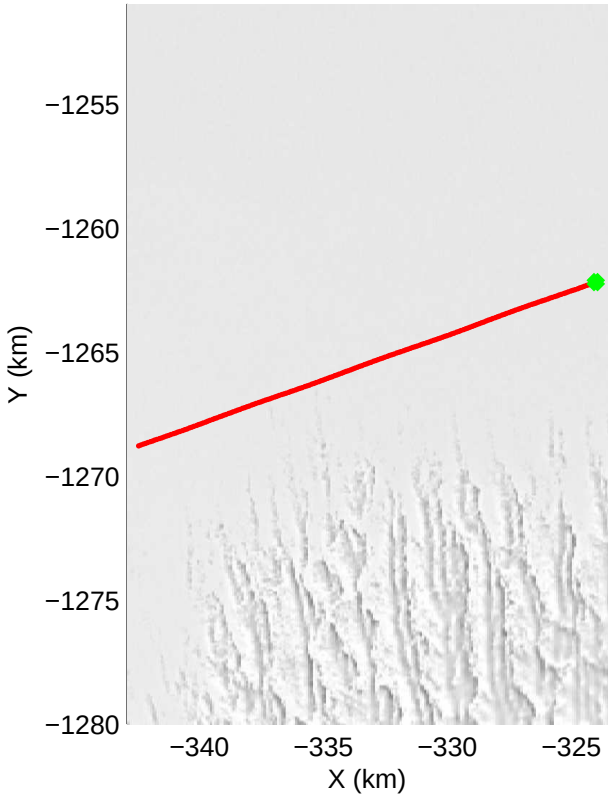

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

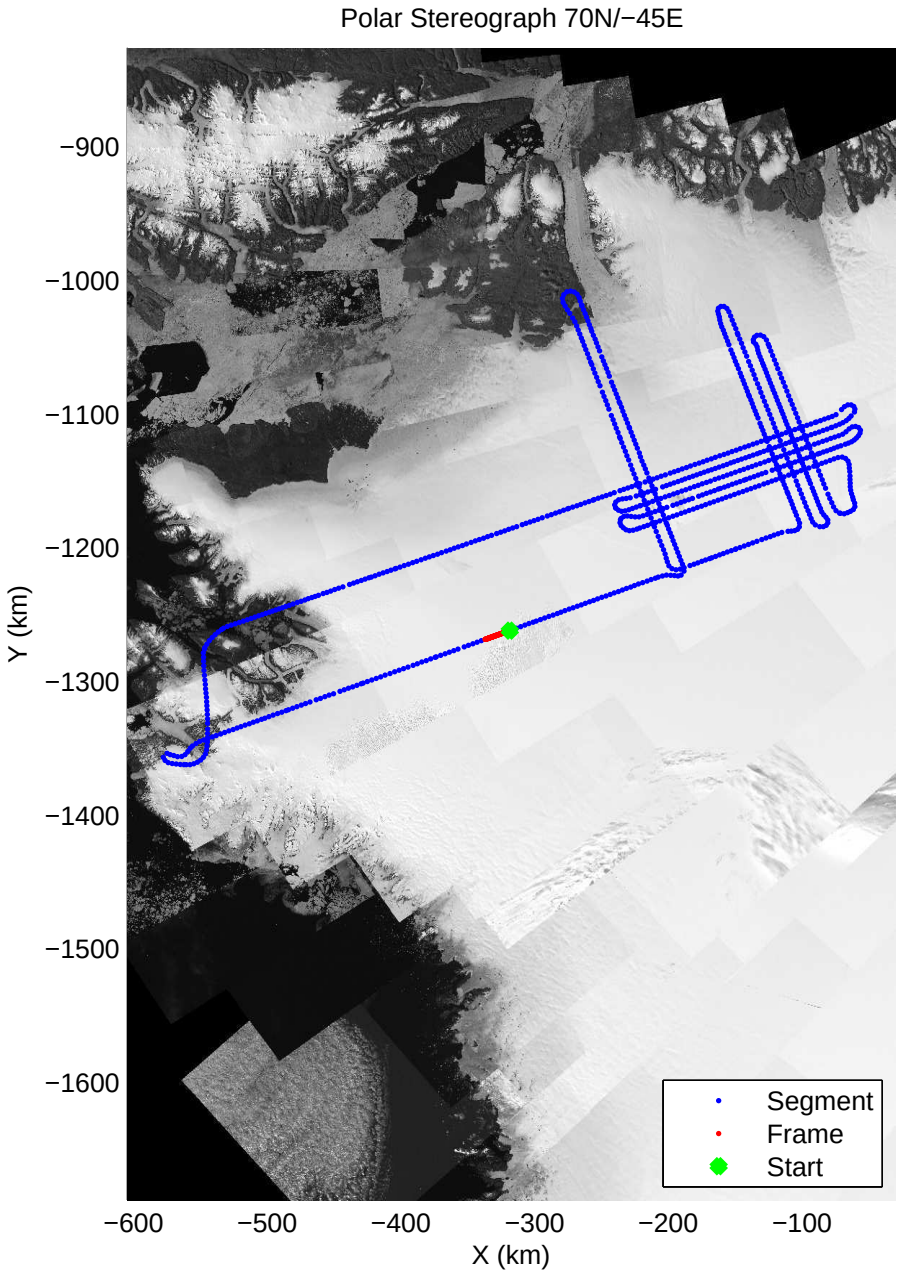

−1245
−1250
−1255
−1260
−1265
−1270
Y (km)
−320
−315
−310
X (km)

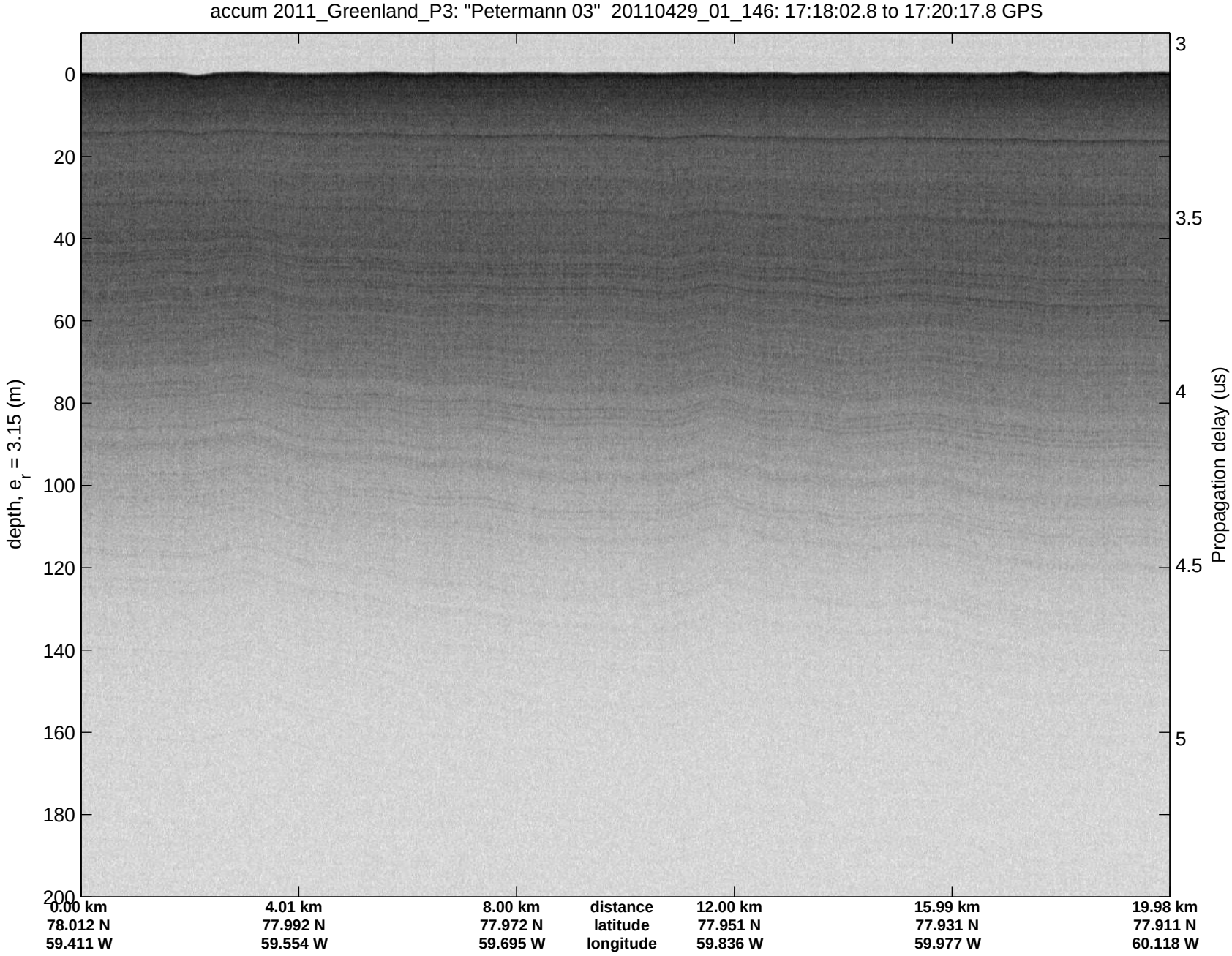

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

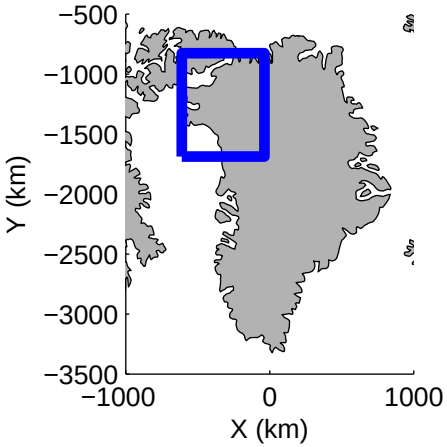

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_145: 17:15:46.4 to 17:18:02.6 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3
3.5
4
4.5
5
0.00 km
78.112 N
58.692 W
4.00 km
78.092 N
58.837 W
7.99 km
78.072 N
58.981 W
distance
latitude
longitude
11.99 km
78.052 N
59.125 W
15.98 km
78.032 N
59.267 W
19.97 km
78.012 N
59.410 W

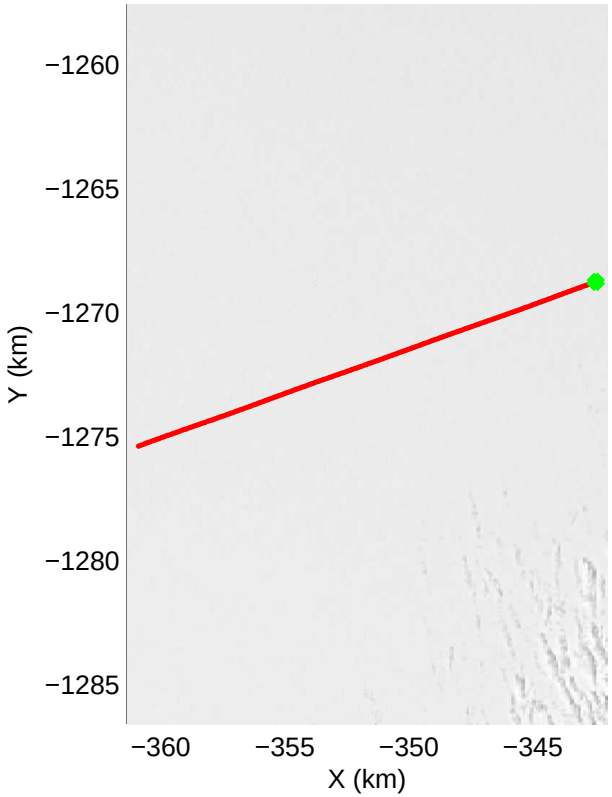

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

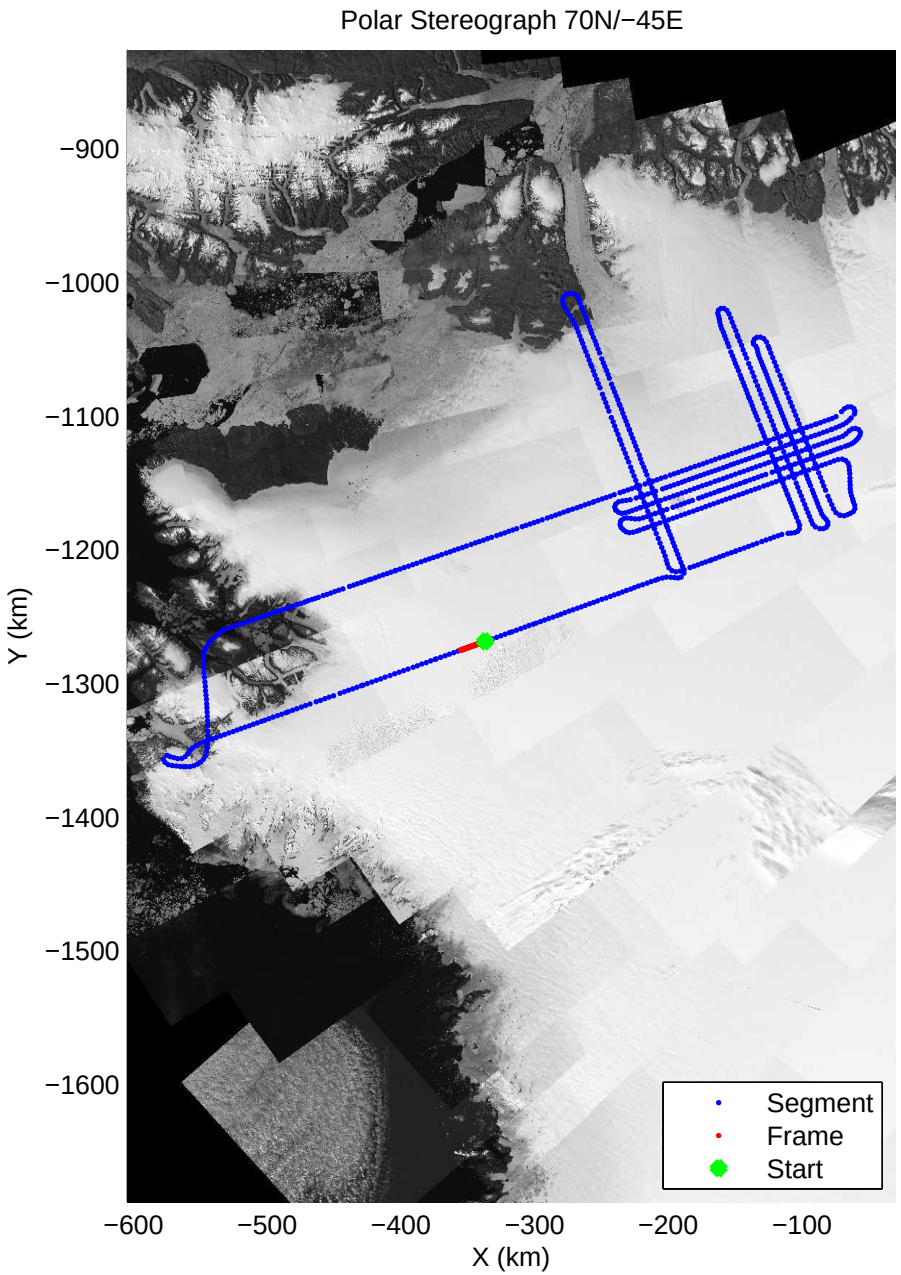

−1255
−1260
−1265
−1270
−1275
−1280
Y (km)
−340
−335
−330
−325
X (km)

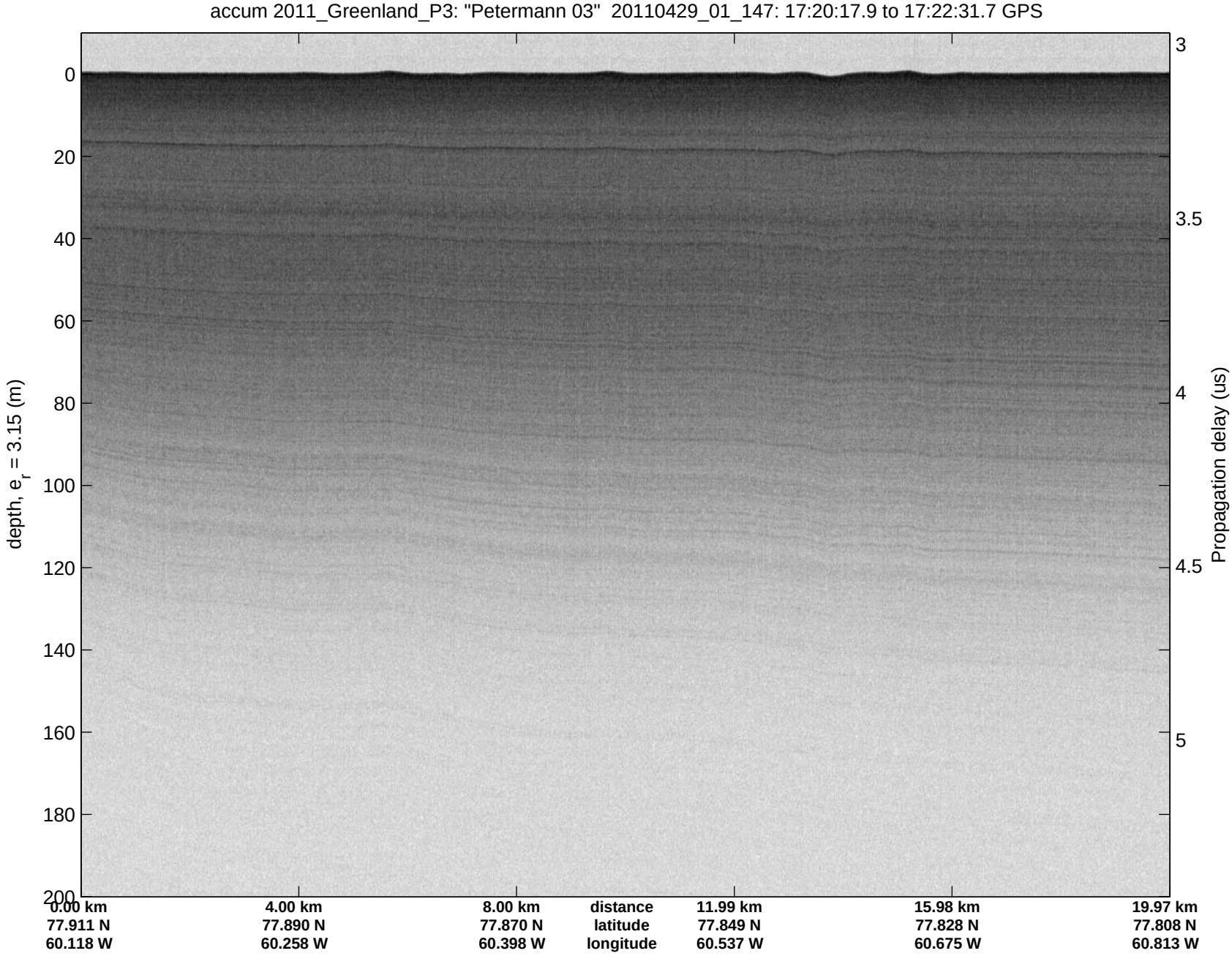

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

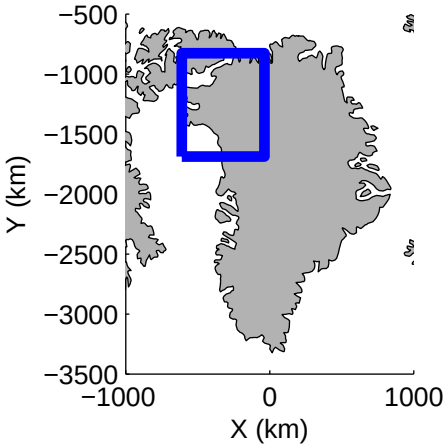

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_146: 17:18:02.8 to 17:20:17.8 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
78.012 N
59.411 W
4.01 km
77.992 N
59.554 W
8.00 km
77.972 N
59.695 W
distance
latitude
longitude
12.00 km
77.951 N
59.836 W
15.99 km
77.931 N
59.977 W
19.98 km
77.911 N
60.118 W

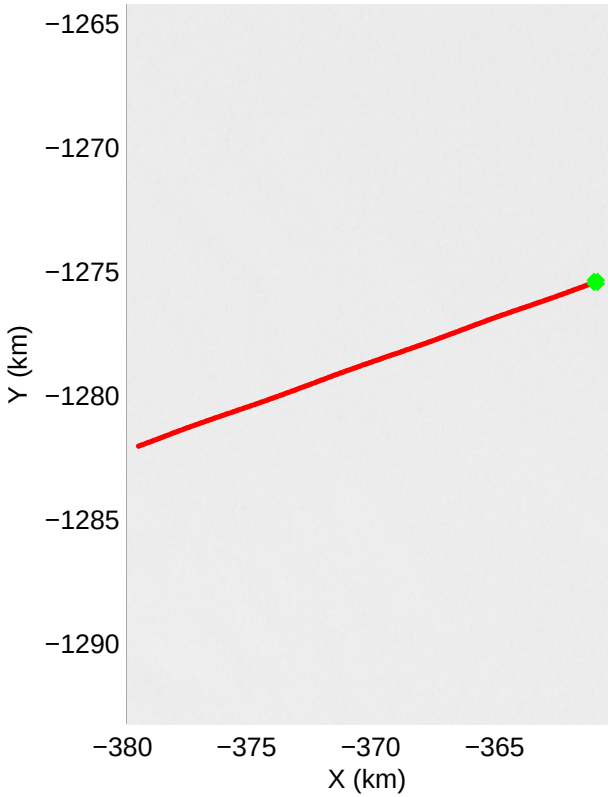

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

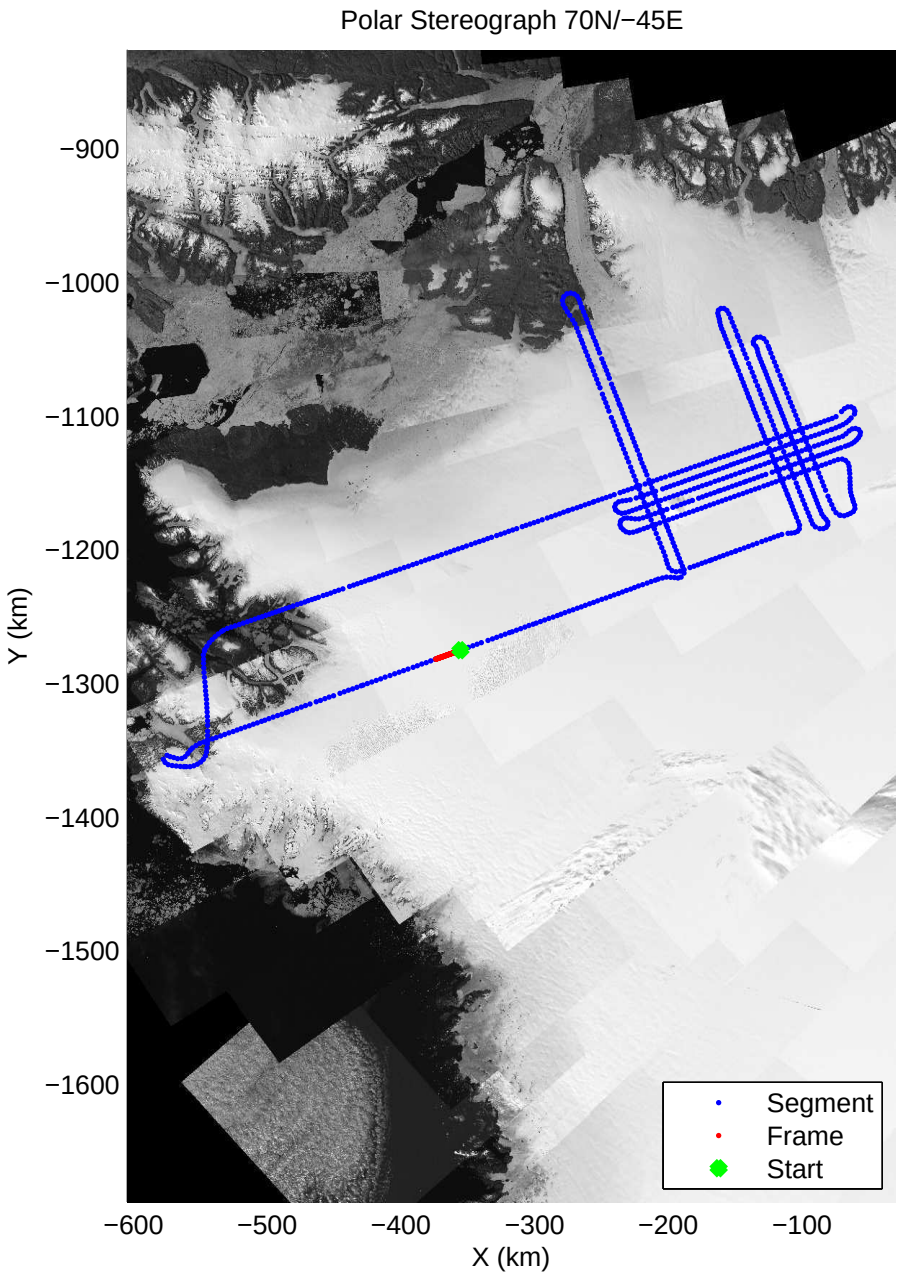

−1260
−1265
−1270
−1275
−1280
−1285
Y (km)
−360
−355
−350
−345
X (km)

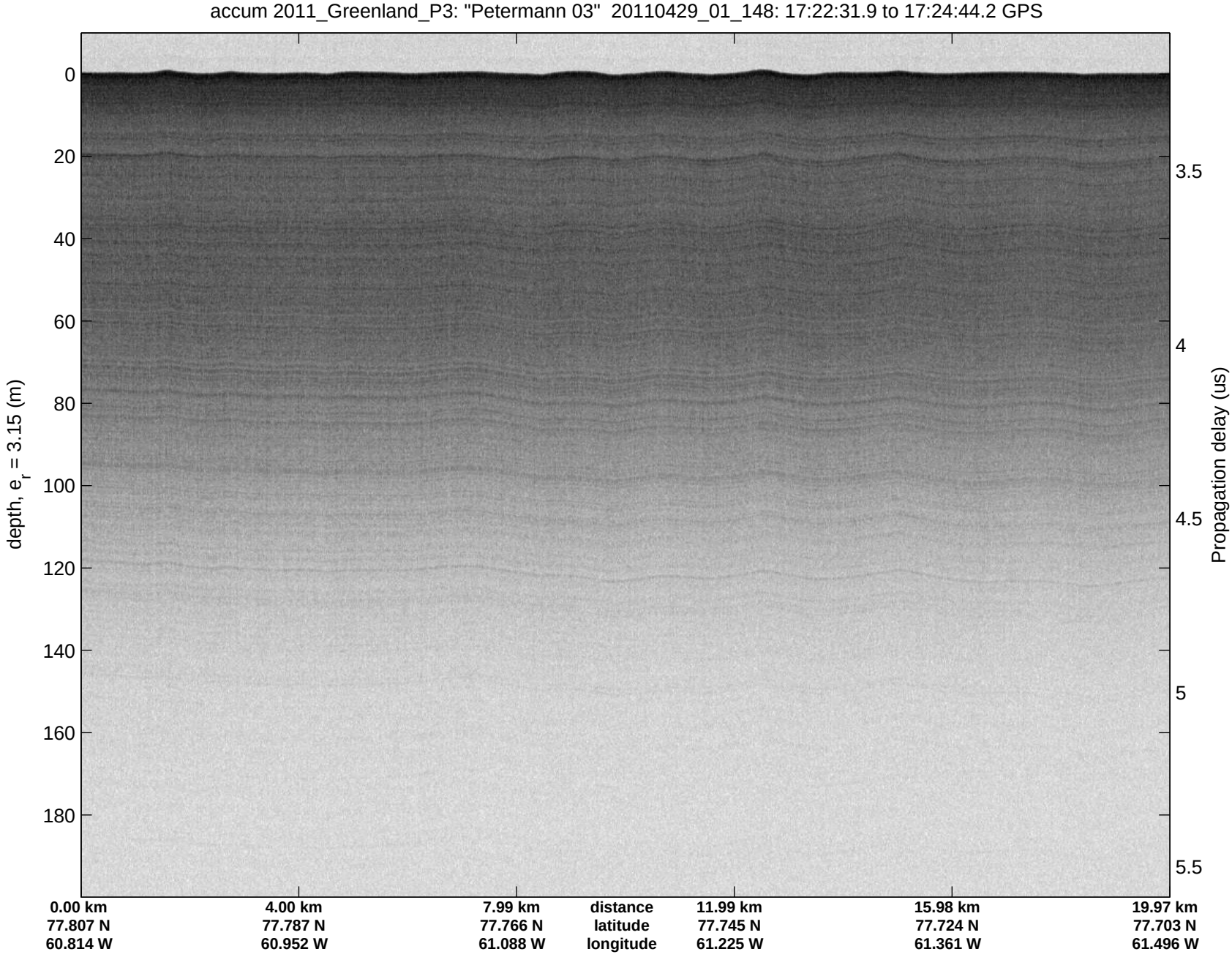

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

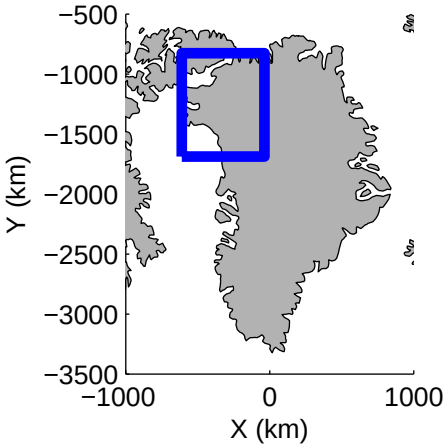

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_147: 17:20:17.9 to 17:22:31.7 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
77.911 N
60.118 W
4.00 km
77.890 N
60.258 W
8.00 km
77.870 N
60.398 W
distance
latitude
longitude
11.99 km
77.849 N
60.537 W
15.98 km
77.828 N
60.675 W
19.97 km
77.808 N
60.813 W

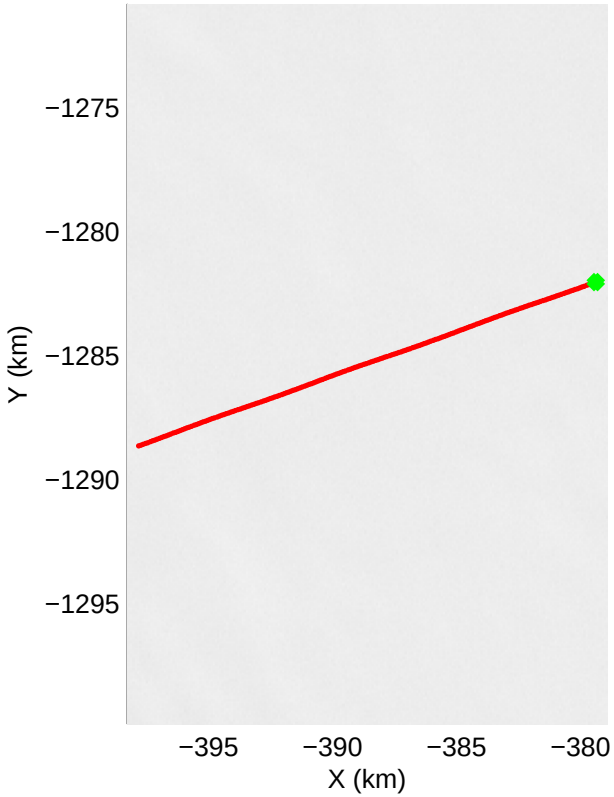

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

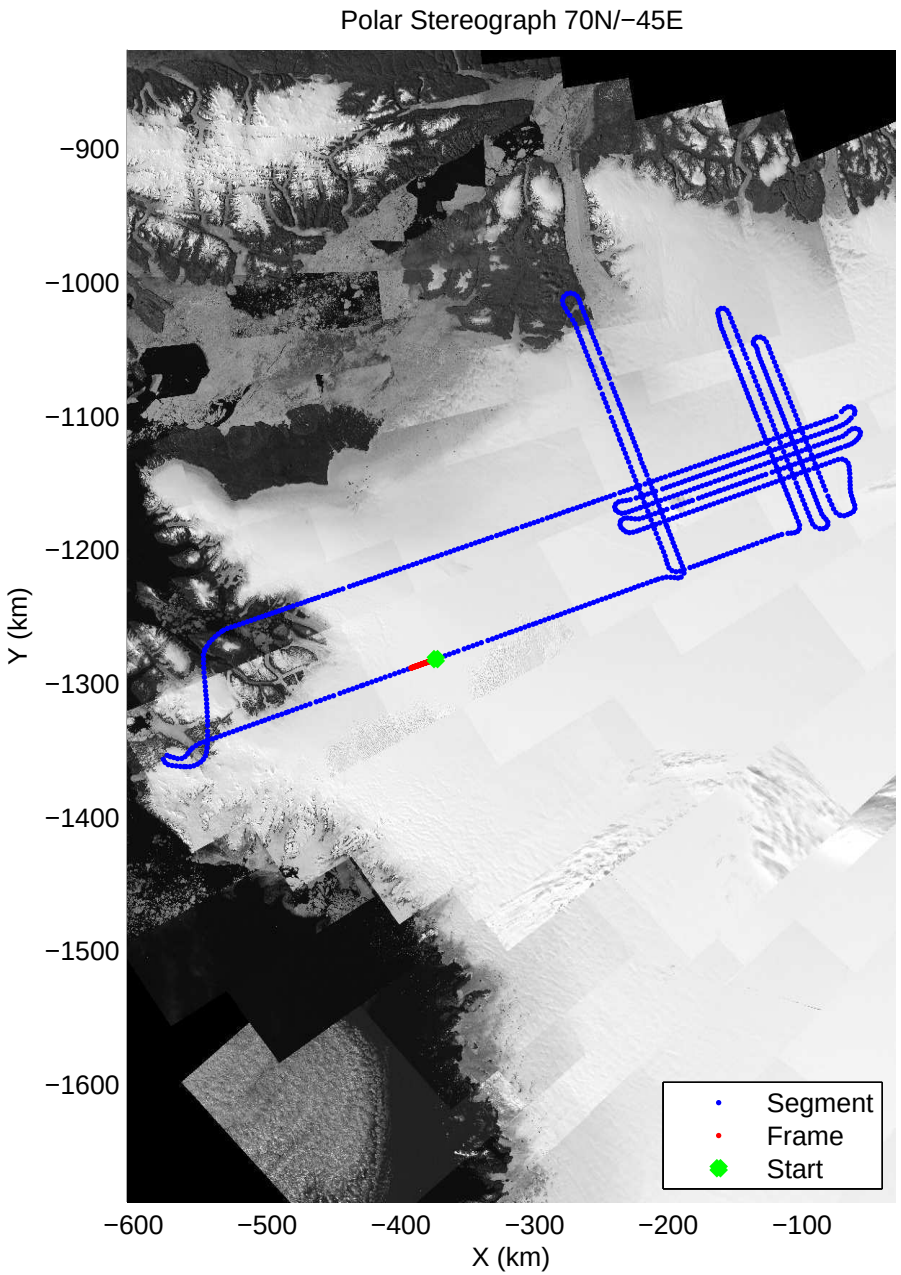

−1265
−1270
−1275
−1280
−1285
−1290
Y (km)
−380
−375
−370
−365
X (km)

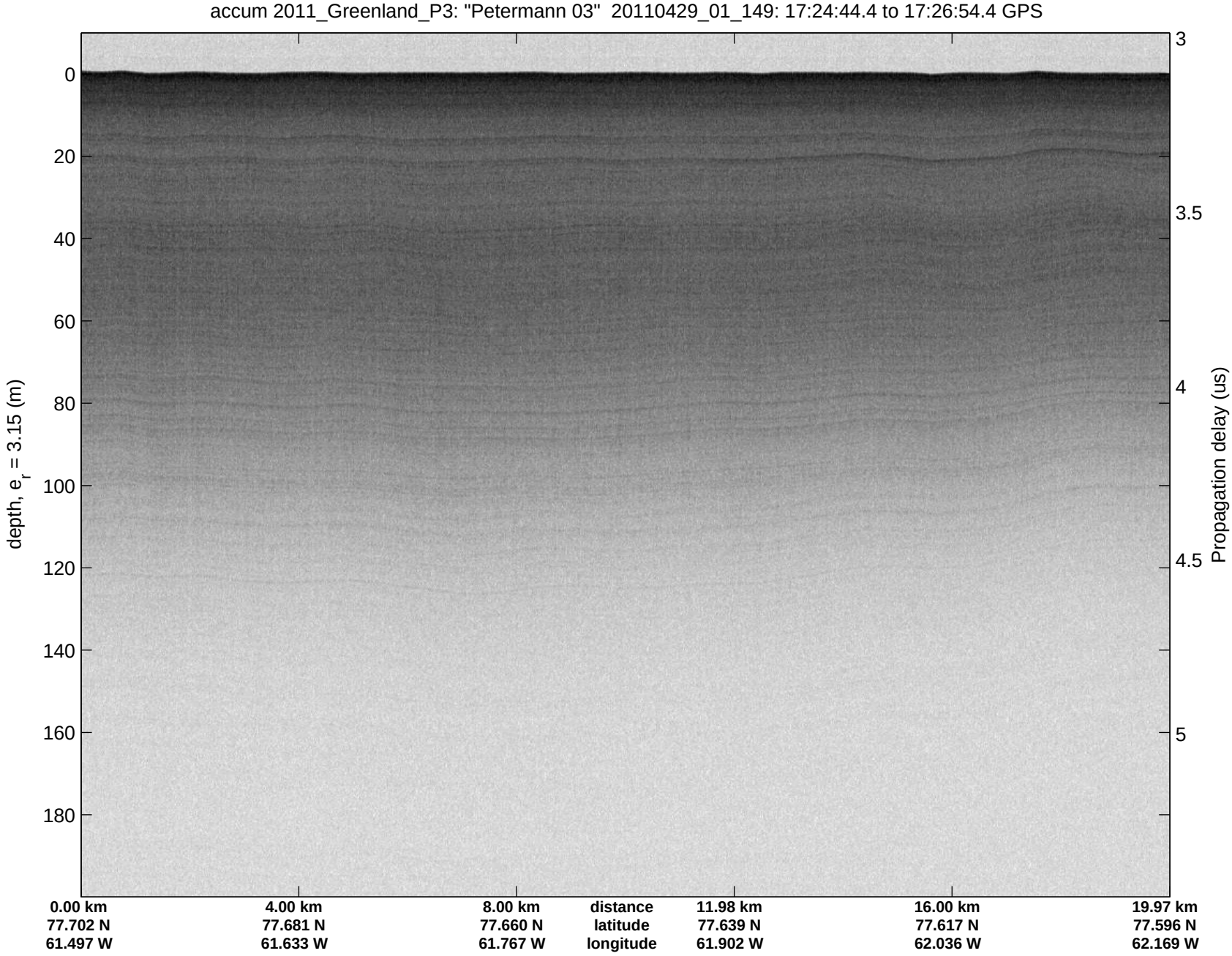

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

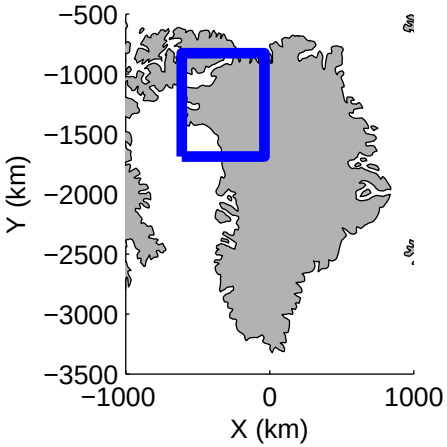

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_148: 17:22:31.9 to 17:24:44.2 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
77.807 N
60.814 W
4.00 km
77.787 N
60.952 W
7.99 km
77.766 N
61.088 W
distance
latitude
longitude
11.99 km
77.745 N
61.225 W
15.98 km
77.724 N
61.361 W
19.97 km
77.703 N
61.496 W

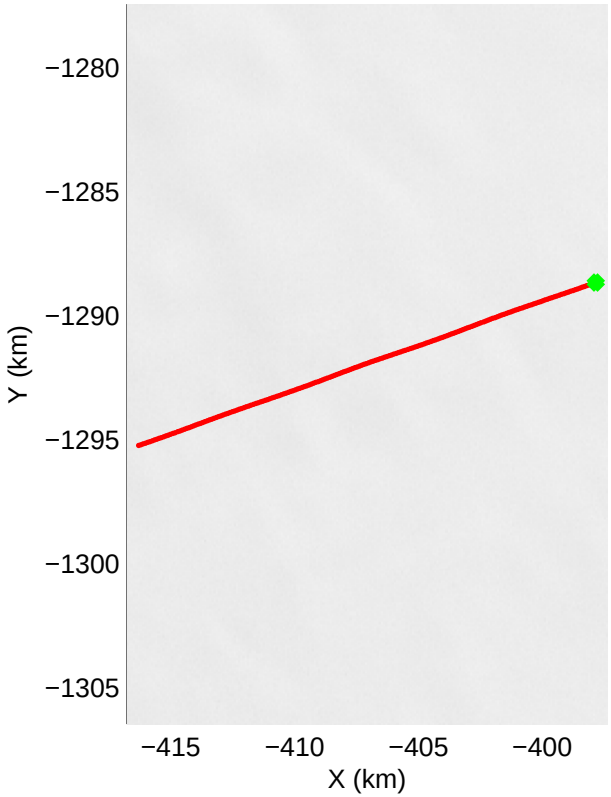

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

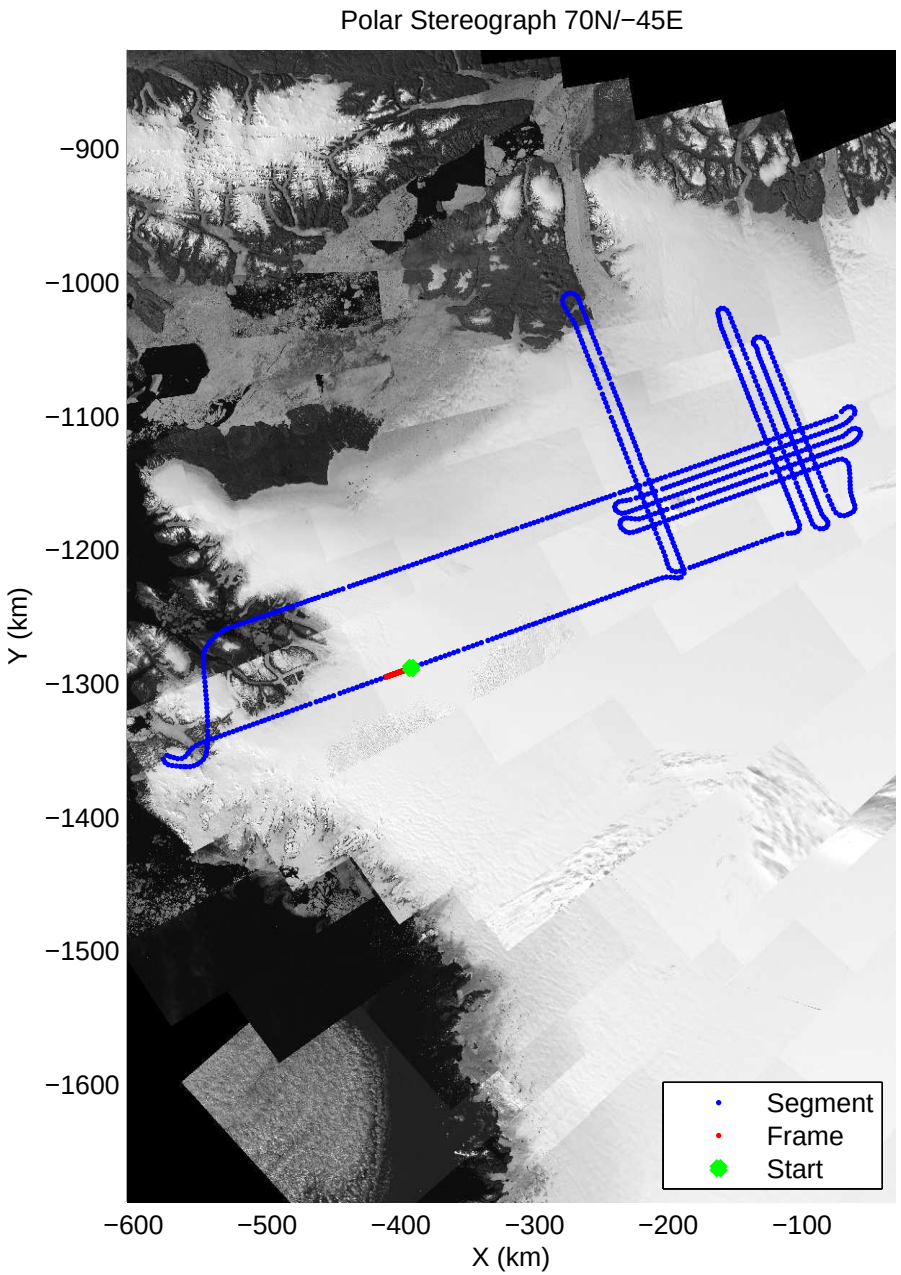

−1275
−1280
−1285
−1290
−1295
Y (km)
−395
−390
−385
−380
X (km)

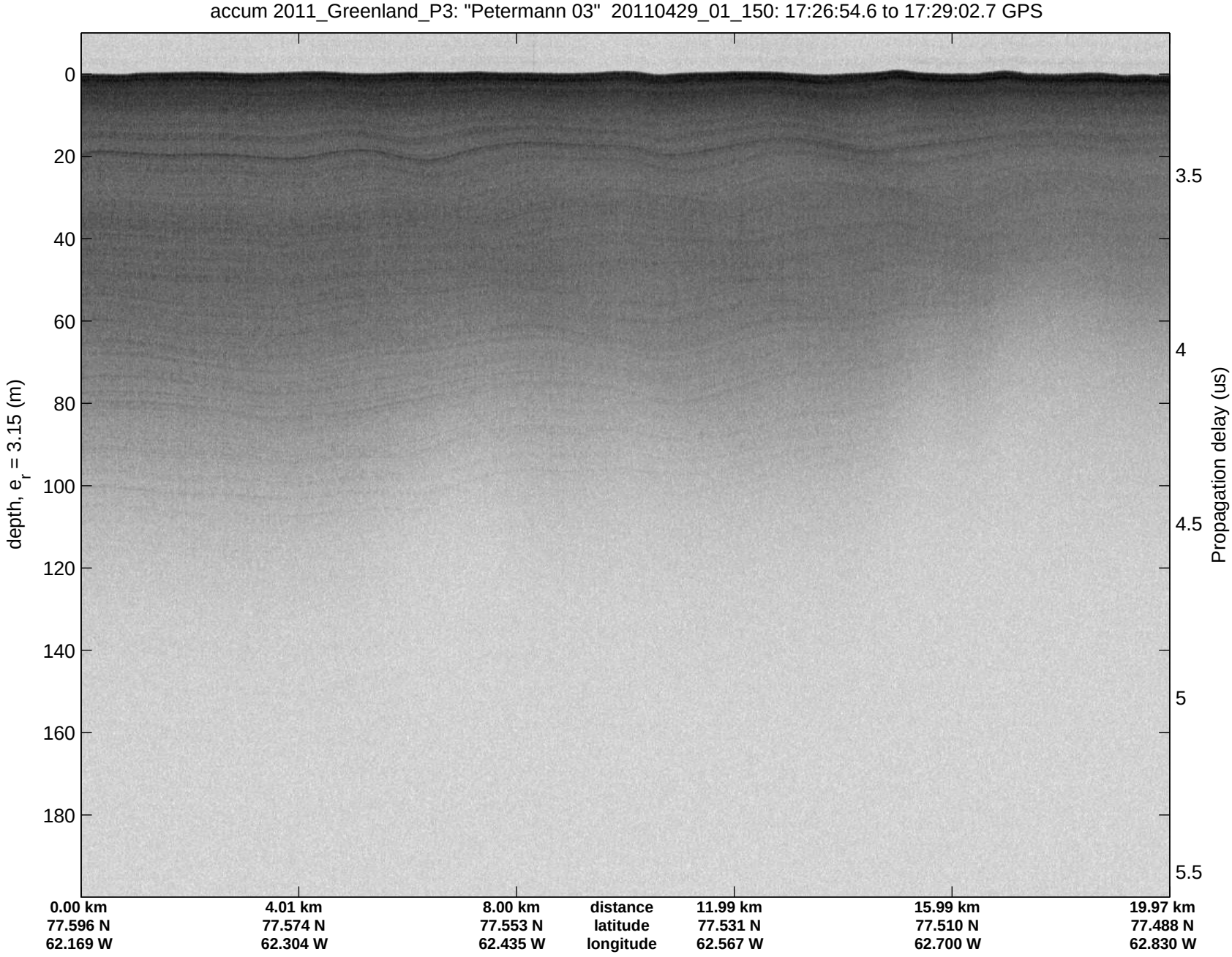

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

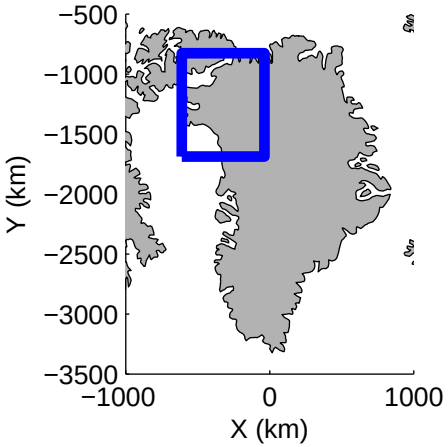

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_149: 17:24:44.4 to 17:26:54.4 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
77.702 N
61.497 W
4.00 km
77.681 N
61.633 W
8.00 km
77.660 N
61.767 W
distance
latitude
longitude
11.98 km
77.639 N
61.902 W
16.00 km
77.617 N
62.036 W
19.97 km
77.596 N
62.169 W

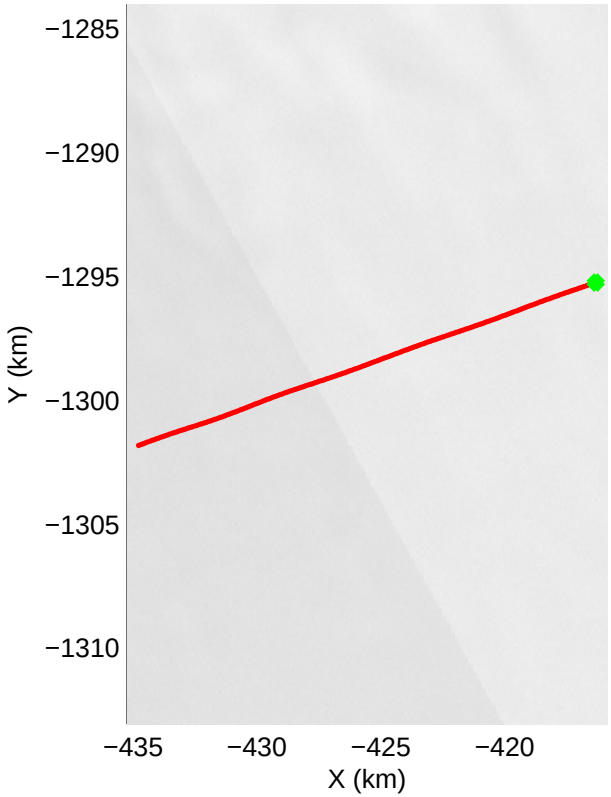

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

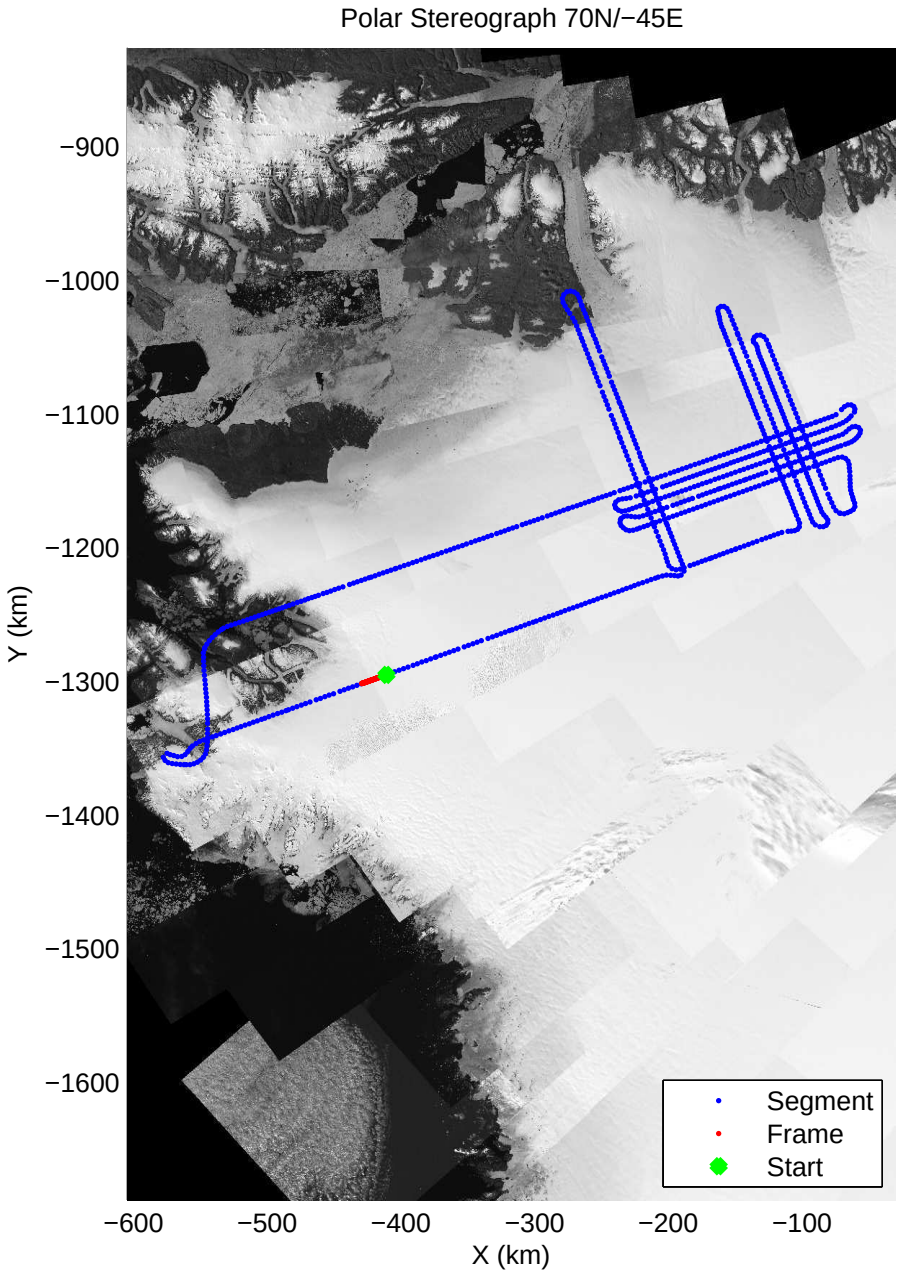

−1280
−1285
−1290
−1295
−1300
−1305
Y (km)
−415
−410
−405
−400
X (km)

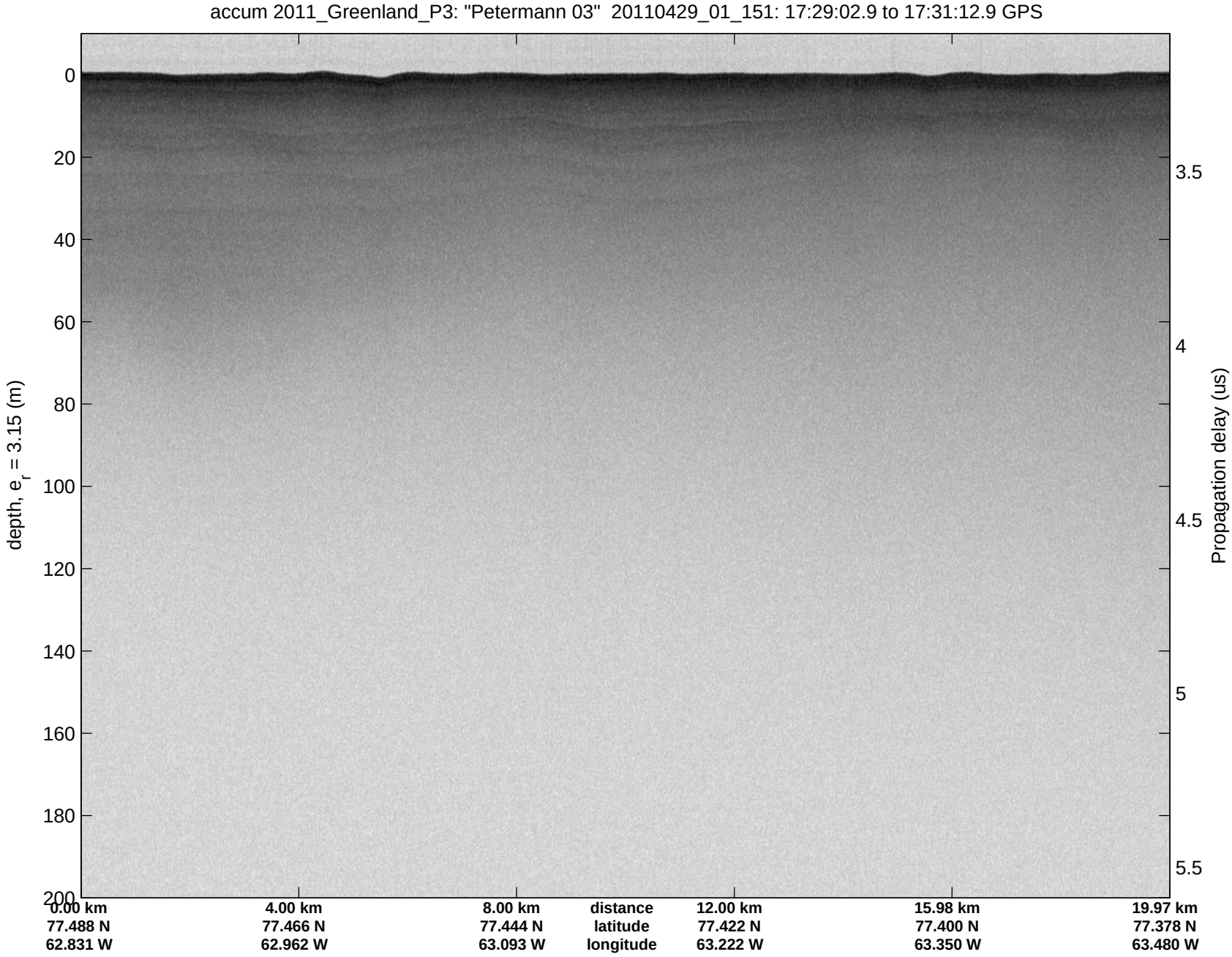

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

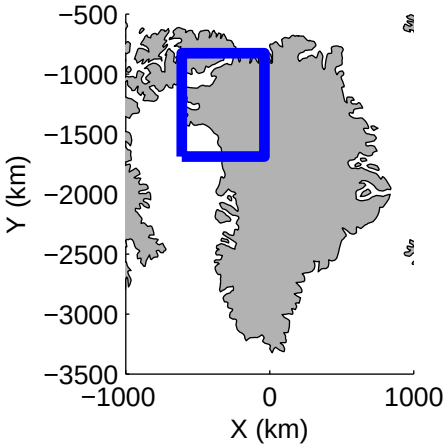

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_150: 17:26:54.6 to 17:29:02.7 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
77.596 N
62.169 W
4.01 km
77.574 N
62.304 W
8.00 km
77.553 N
62.435 W
distance
latitude
longitude
11.99 km
77.531 N
62.567 W
15.99 km
77.510 N
62.700 W
19.97 km
77.488 N
62.830 W

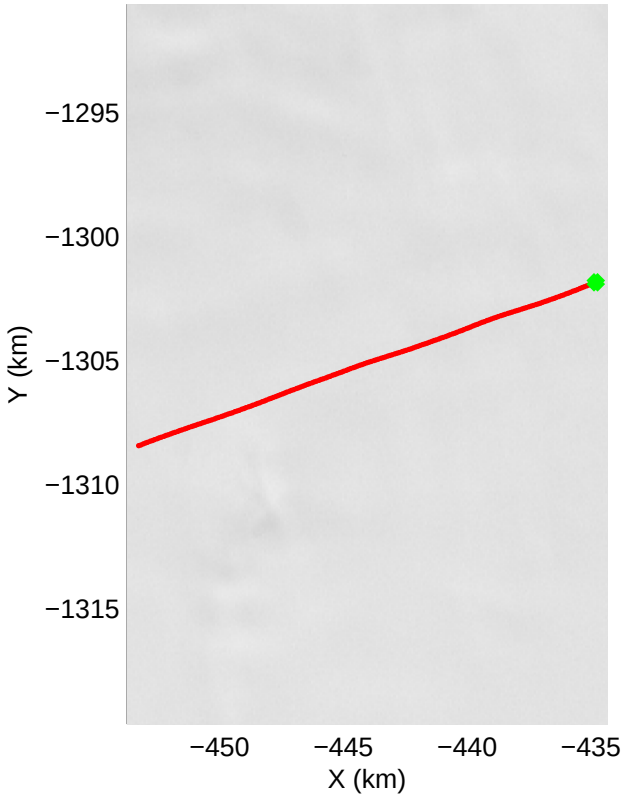

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

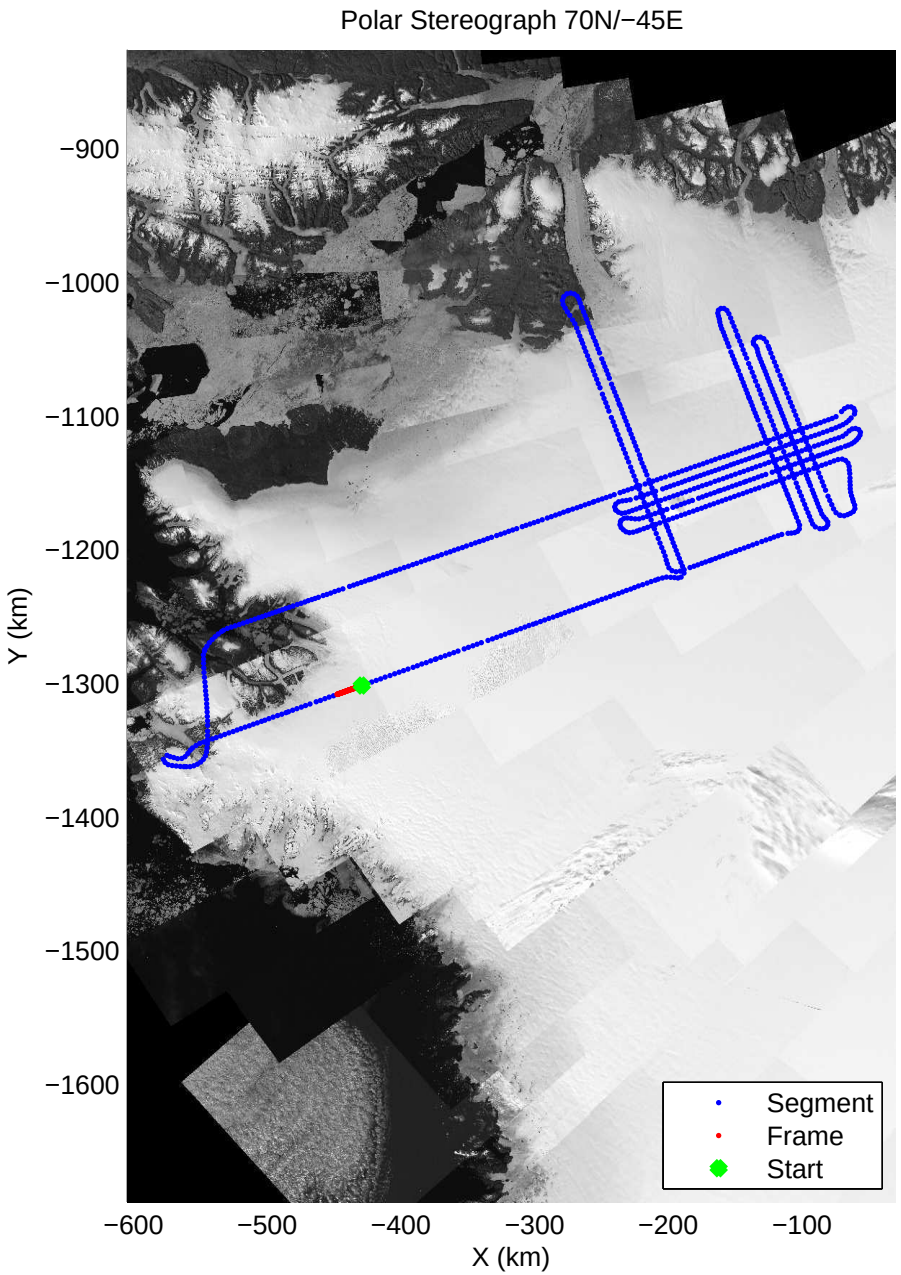

−1285
−1290
−1295
−1300
−1305
−1310
Y (km)
−435
−430
−425
−420
X (km)

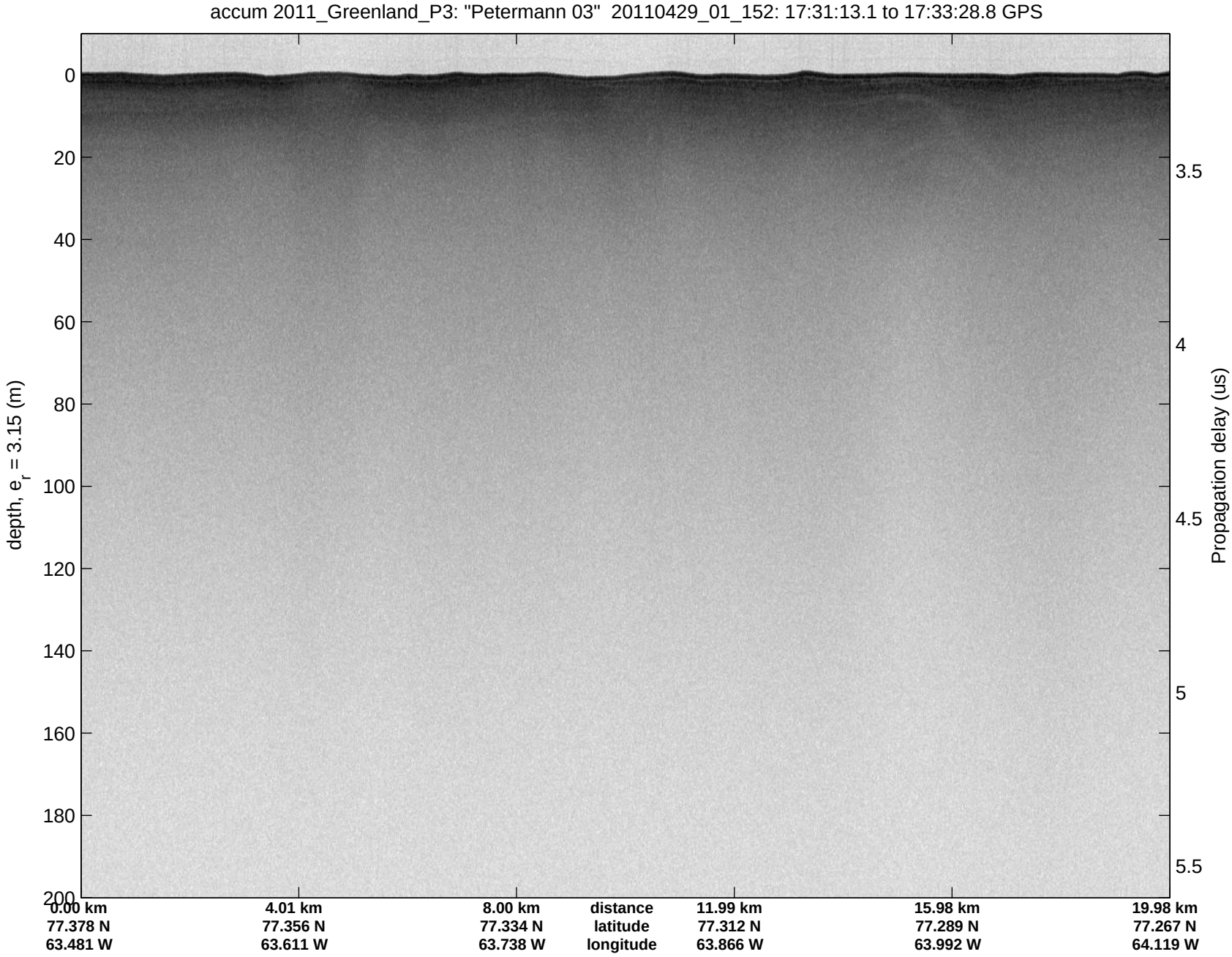

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

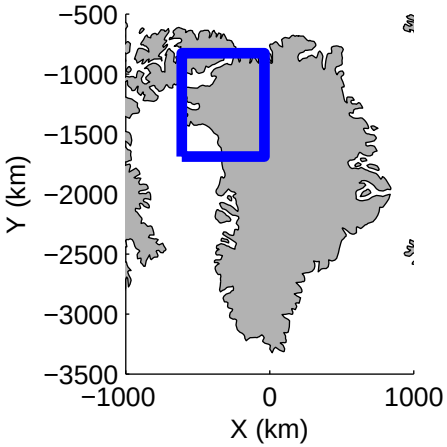

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_151: 17:29:02.9 to 17:31:12.9 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
77.488 N
62.831 W
4.00 km
77.466 N
62.962 W
8.00 km
77.444 N
63.093 W
distance
latitude
longitude
12.00 km
77.422 N
63.222 W
15.98 km
77.400 N
63.350 W
19.97 km
77.378 N
63.480 W

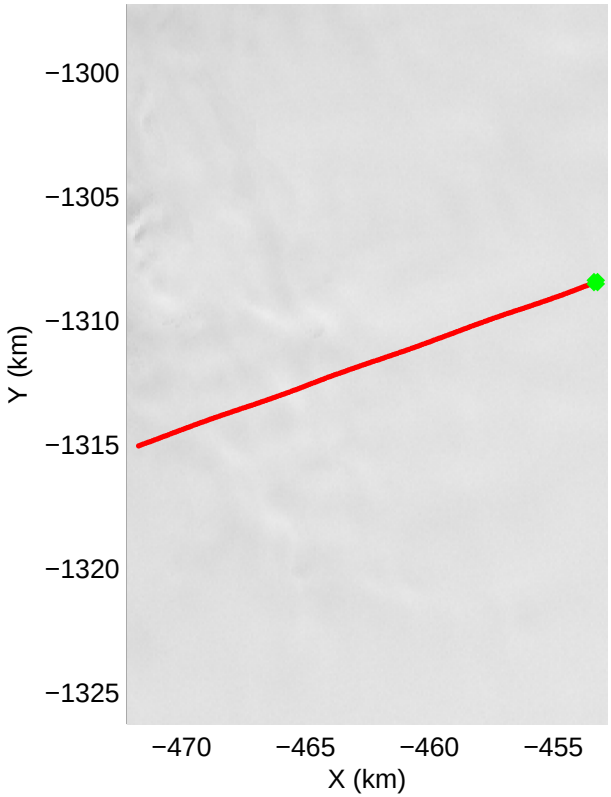

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

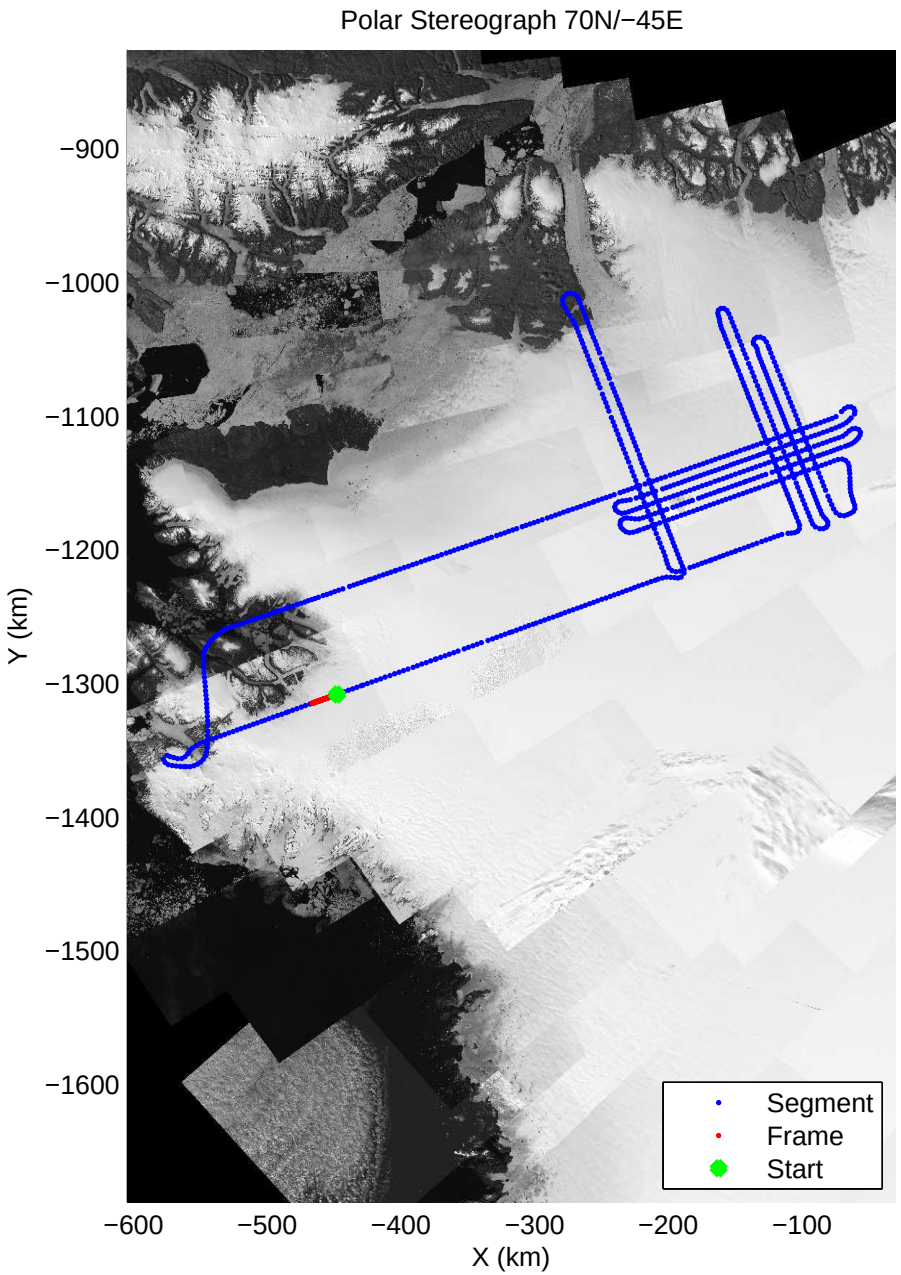

−1295
−1300
−1305
−1310
−1315
Y (km)
−450
−445
−440
−435
X (km)

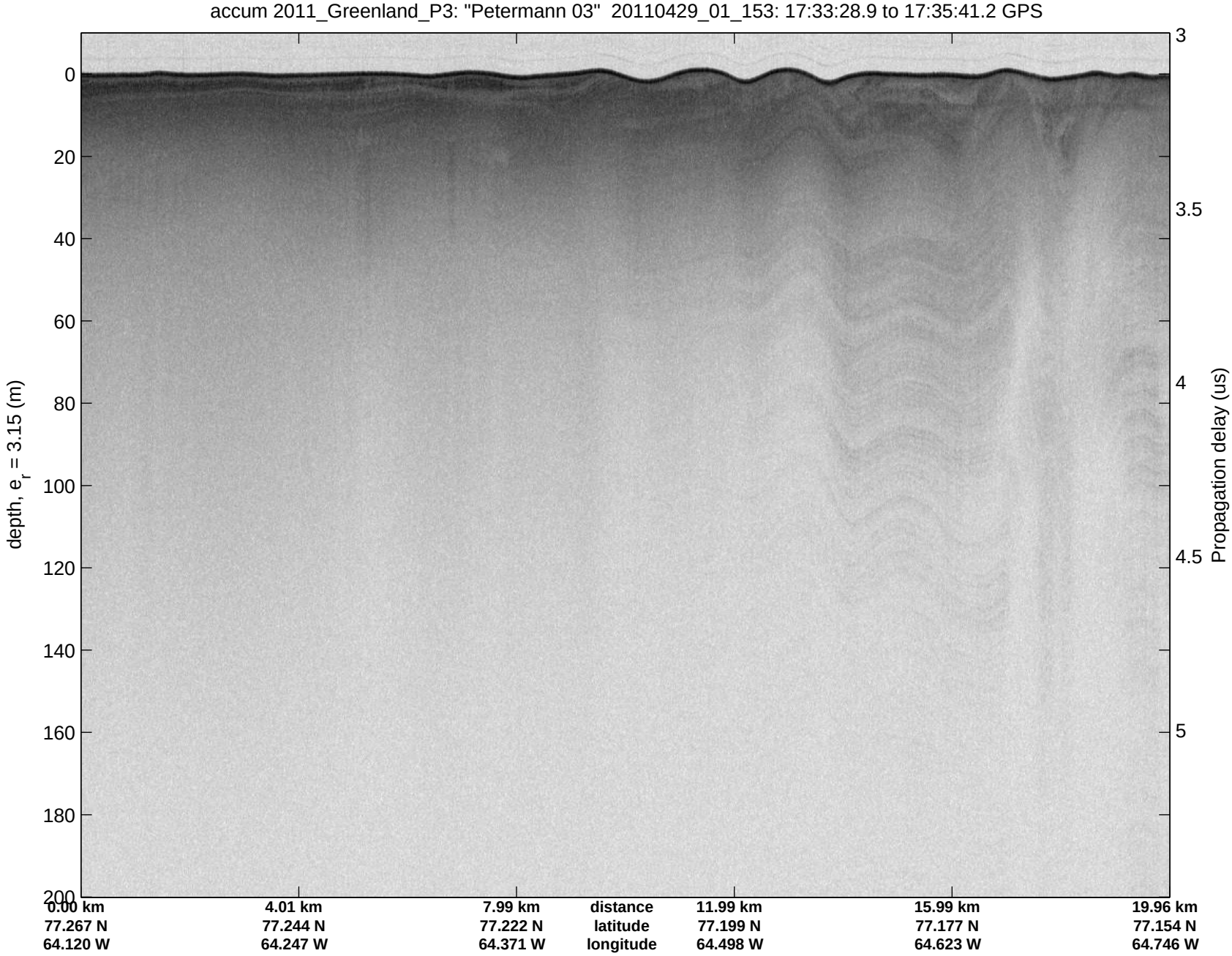

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

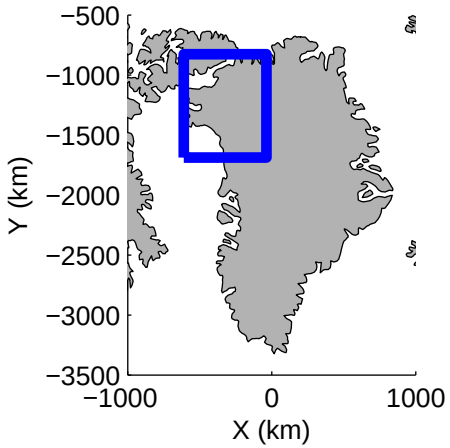

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_152: 17:31:13.1 to 17:33:28.8 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
77.378 N
63.481 W
4.01 km
77.356 N
63.611 W
8.00 km
77.334 N
63.738 W
distance
latitude
longitude
11.99 km
77.312 N
63.866 W
15.98 km
77.289 N
63.992 W
19.98 km
77.267 N
64.119 W

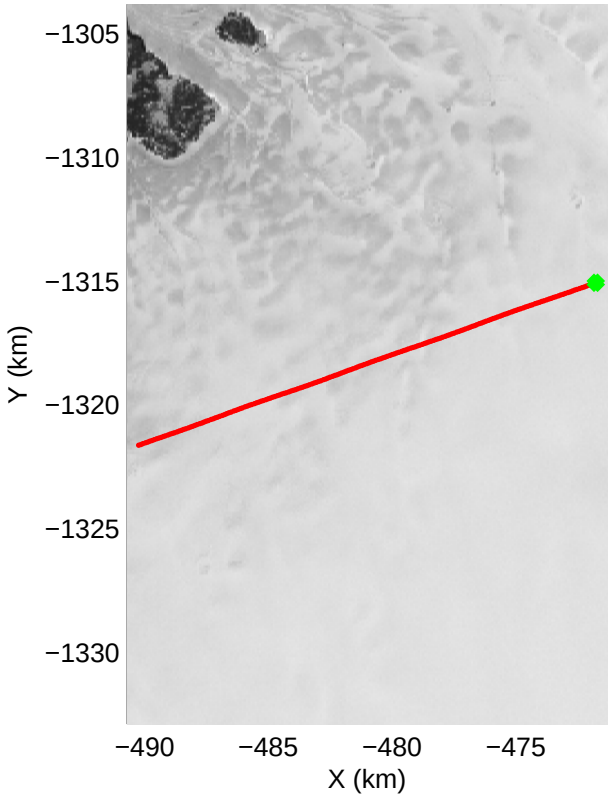

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

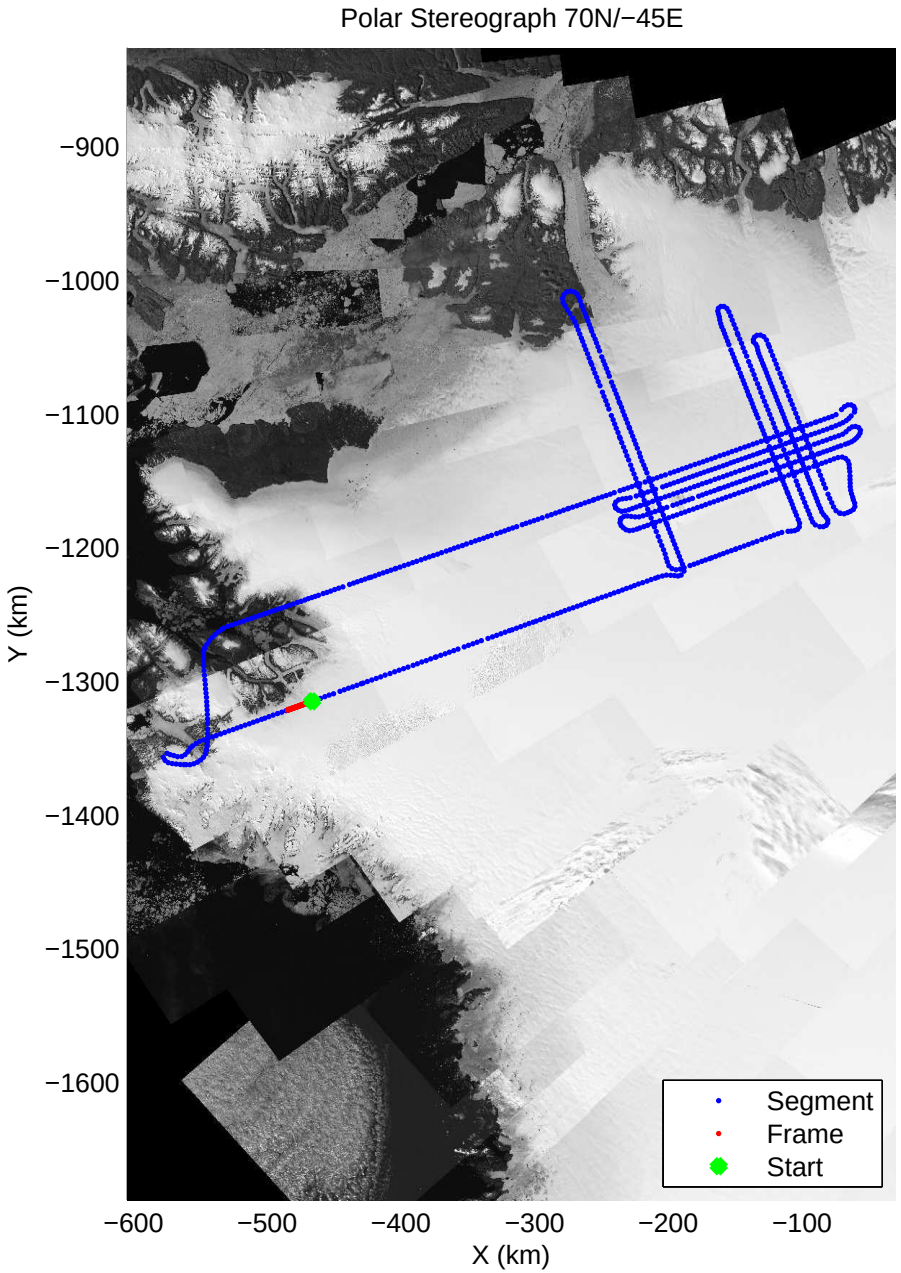

−1300
−1305
−1310
−1315
−1320
−1325
Y (km)
−470
−465
−460
−455
X (km)

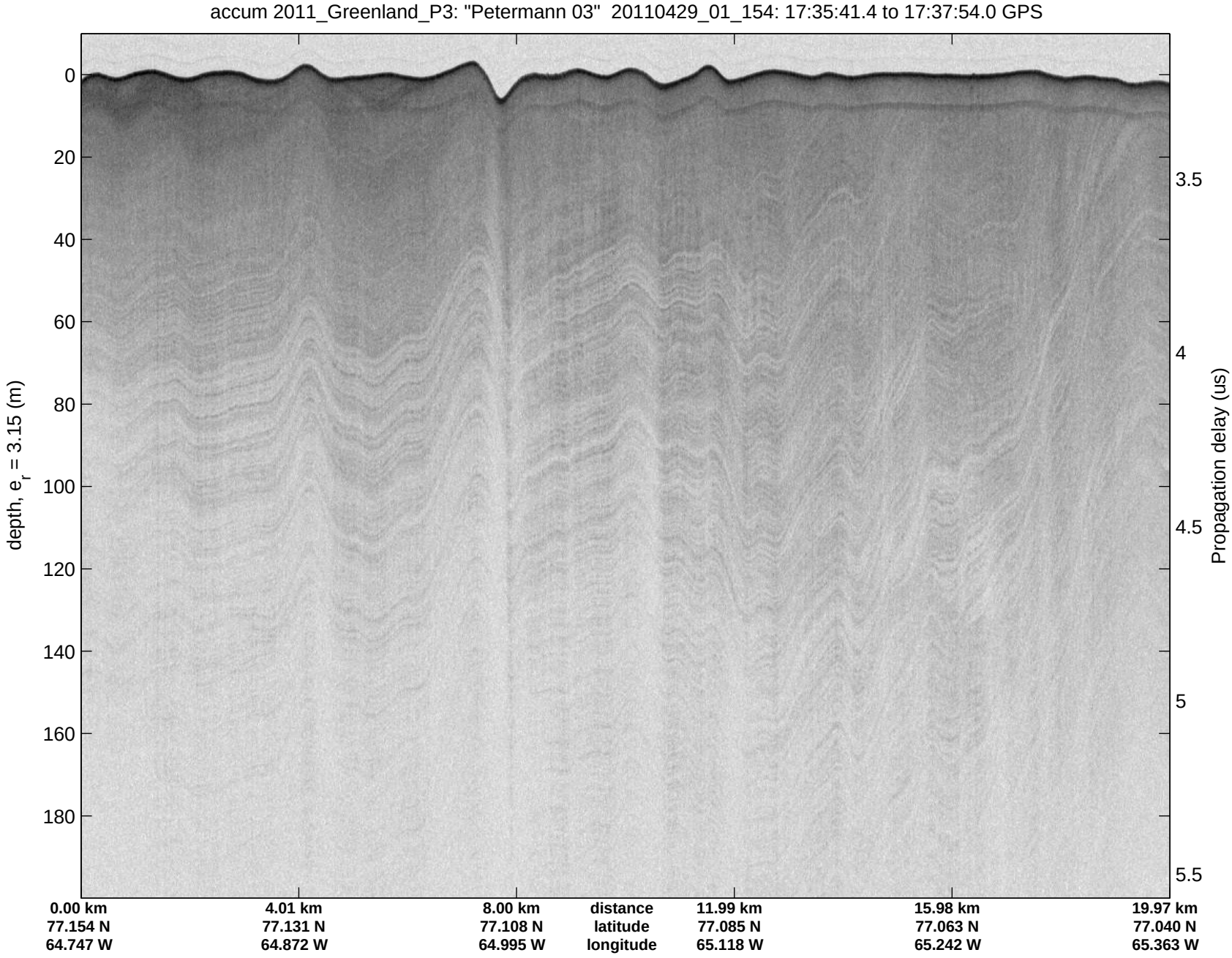

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

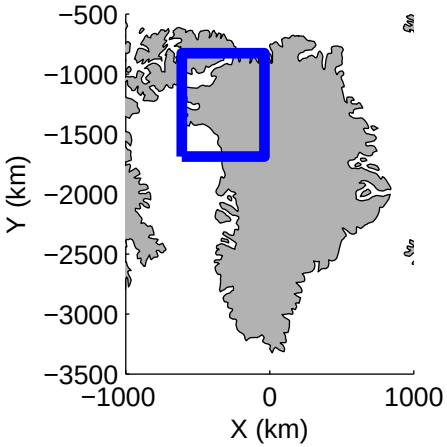

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_153: 17:33:28.9 to 17:35:41.2 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
77.267 N
64.120 W
4.01 km
77.244 N
64.247 W
7.99 km
77.222 N
64.371 W
distance
latitude
longitude
11.99 km
77.199 N
64.498 W
15.99 km
77.177 N
64.623 W
19.96 km
77.154 N
64.746 W

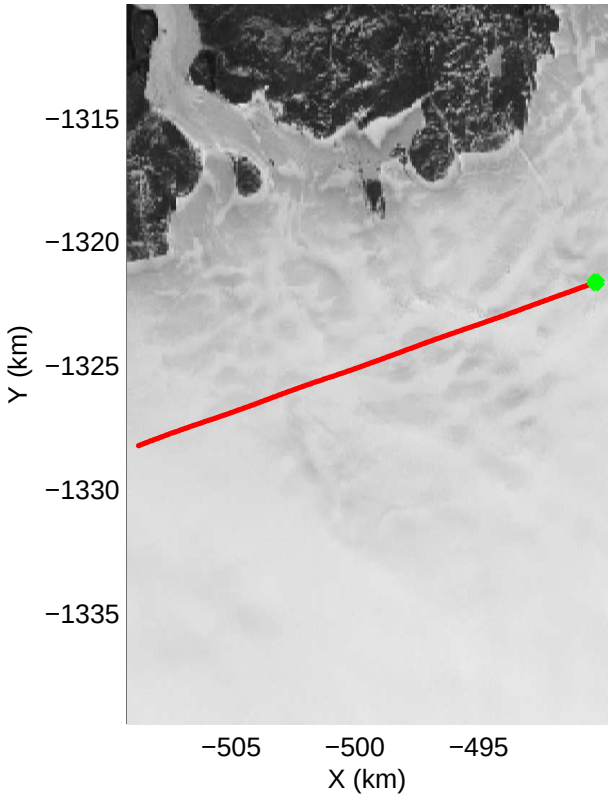

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

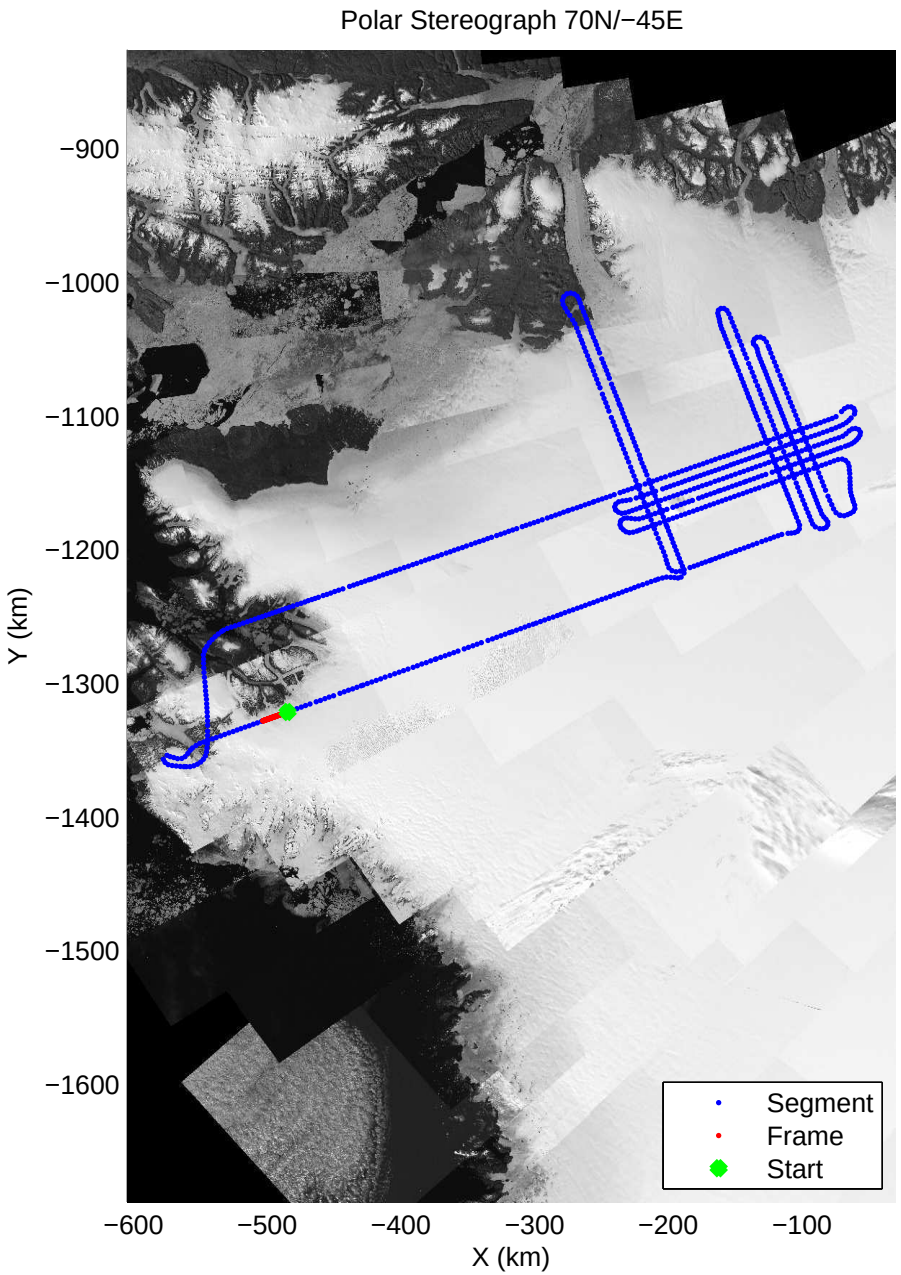

−1305
−1310
−1315
−1320
−1325
−1330
Y (km)
−490
−485
−480
−475
X (km)

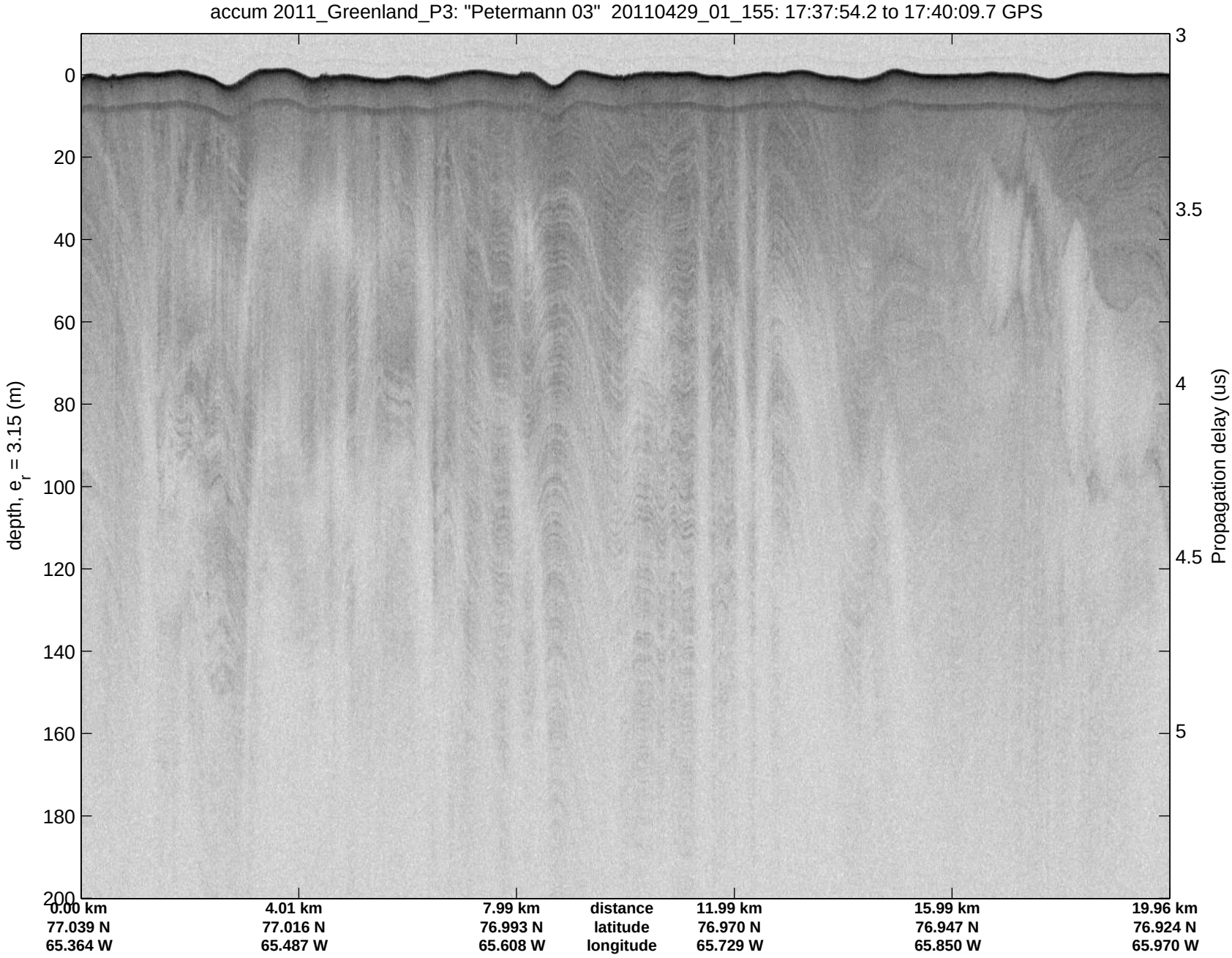

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

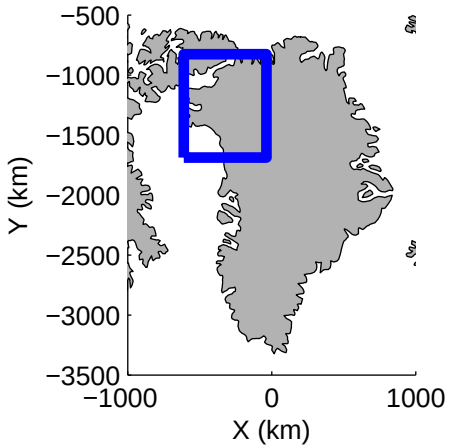

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_154: 17:35:41.4 to 17:37:54.0 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
77.154 N
64.747 W
4.01 km
77.131 N
64.872 W
8.00 km
77.108 N
64.995 W
distance
latitude
longitude
11.99 km
77.085 N
65.118 W
15.98 km
77.063 N
65.242 W
19.97 km
77.040 N
65.363 W

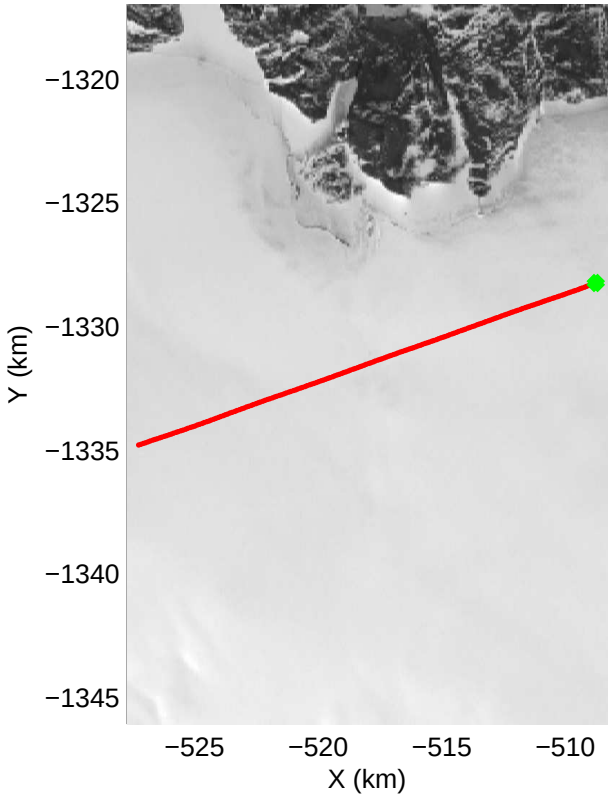

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

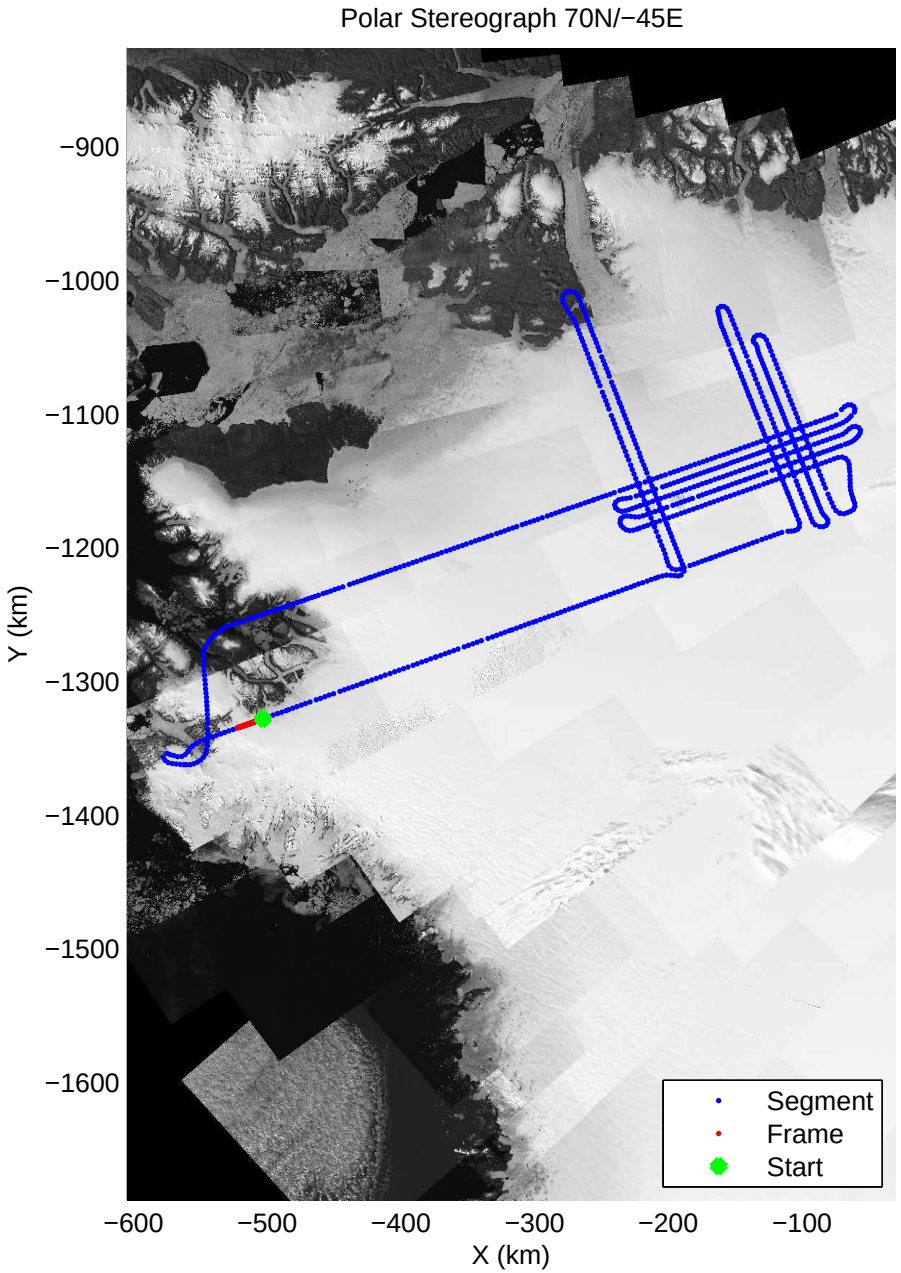

−1315
−1320
−1325
−1330
−1335
Y (km)
−505
−500
−495
X (km)

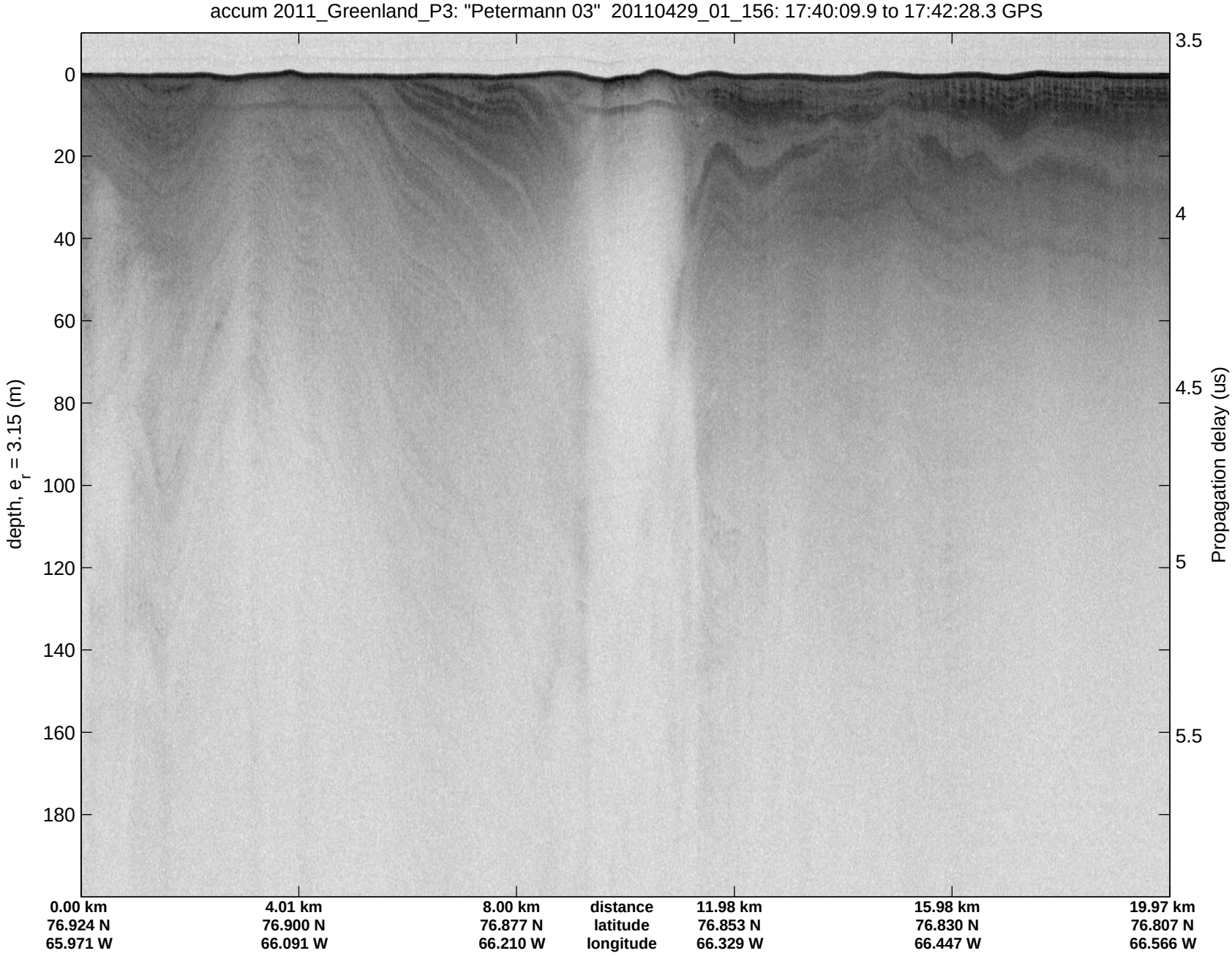

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

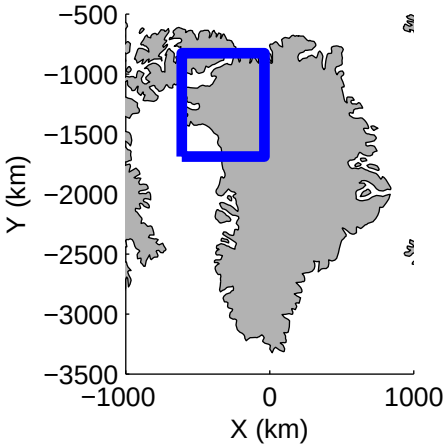

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_155: 17:37:54.2 to 17:40:09.7 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
3
3.5
4
4.5
5
Propagation delay (us)
0.00 km
77.039 N
65.364 W
4.01 km
77.016 N
65.487 W
7.99 km
76.993 N
65.608 W
distance
latitude
longitude
11.99 km
76.970 N
65.729 W
15.99 km
76.947 N
65.850 W
19.96 km
76.924 N
65.970 W

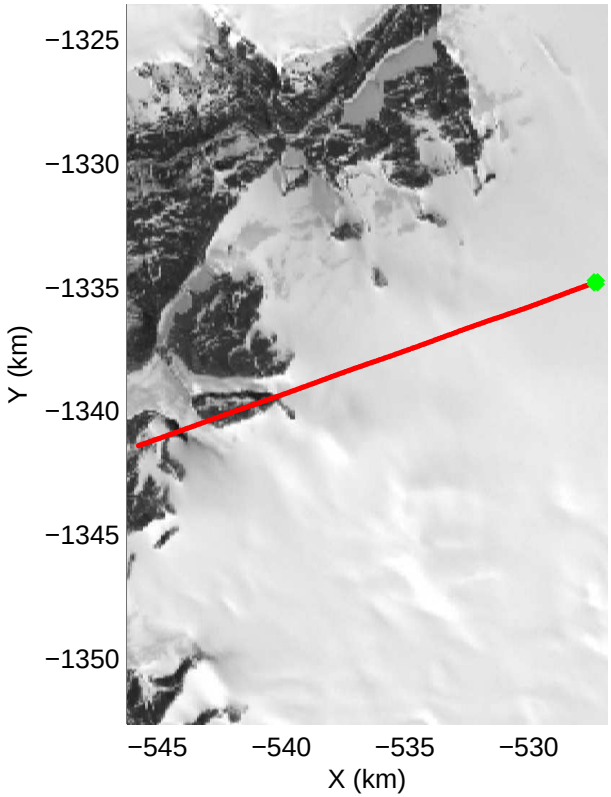

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

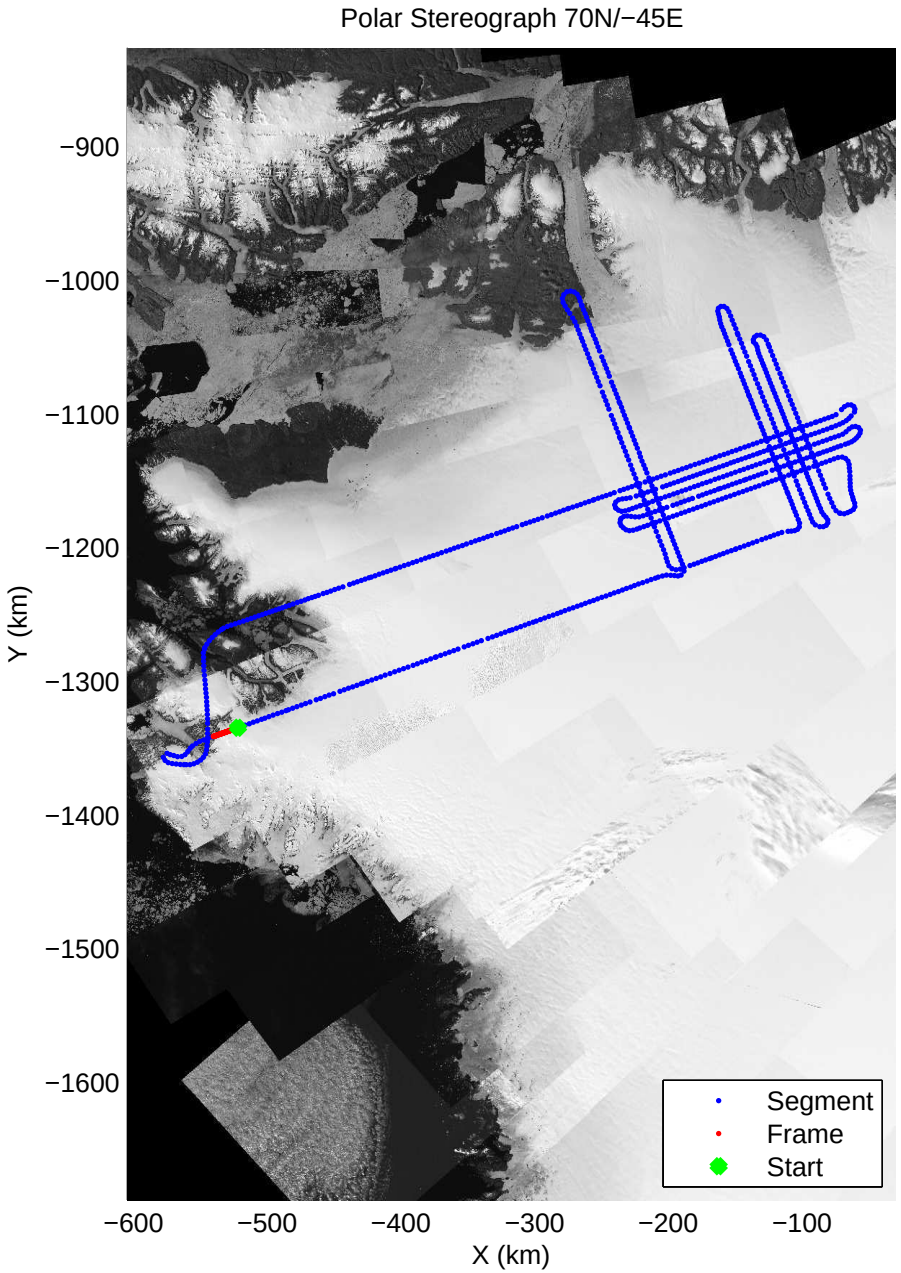

−1320
−1325
−1330
−1335
−1340
−1345
Y (km)
−525
−520
−515
−510
X (km)

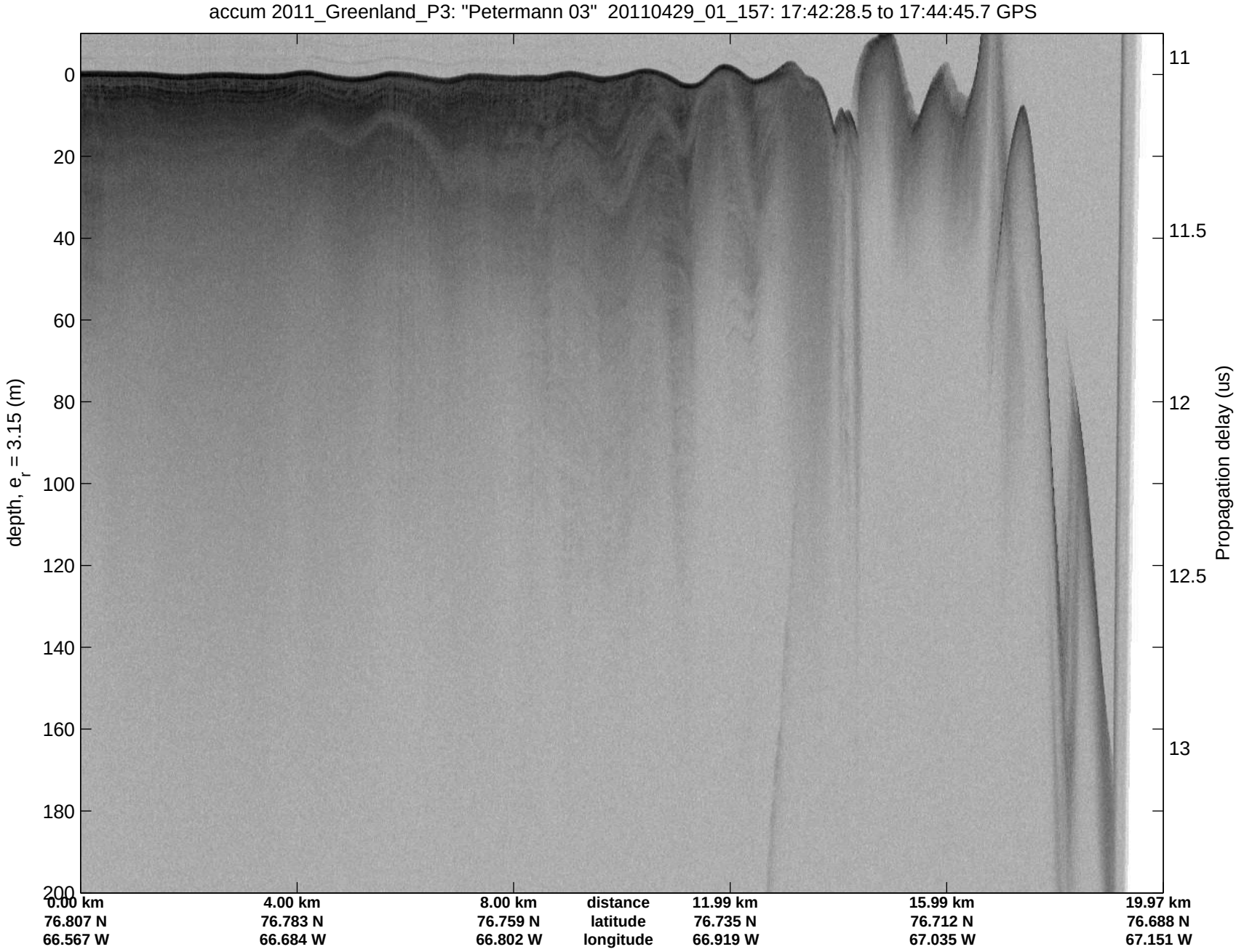

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

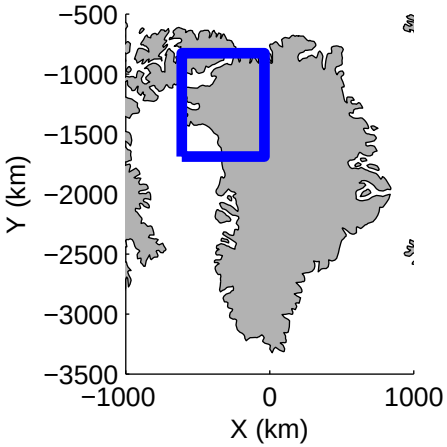

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_156: 17:40:09.9 to 17:42:28.3 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
3.5
4
4.5
5
5.5
0.00 km
76.924 N
65.971 W
4.01 km
76.900 N
66.091 W
8.00 km
76.877 N
66.210 W
distance
latitude
longitude
11.98 km
76.853 N
66.329 W
15.98 km
76.830 N
66.447 W
19.97 km
76.807 N
66.566 W

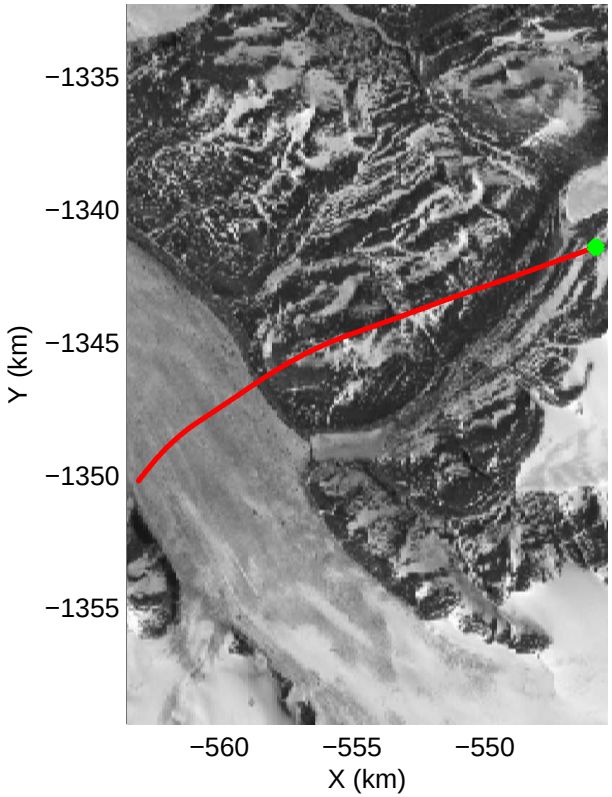

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

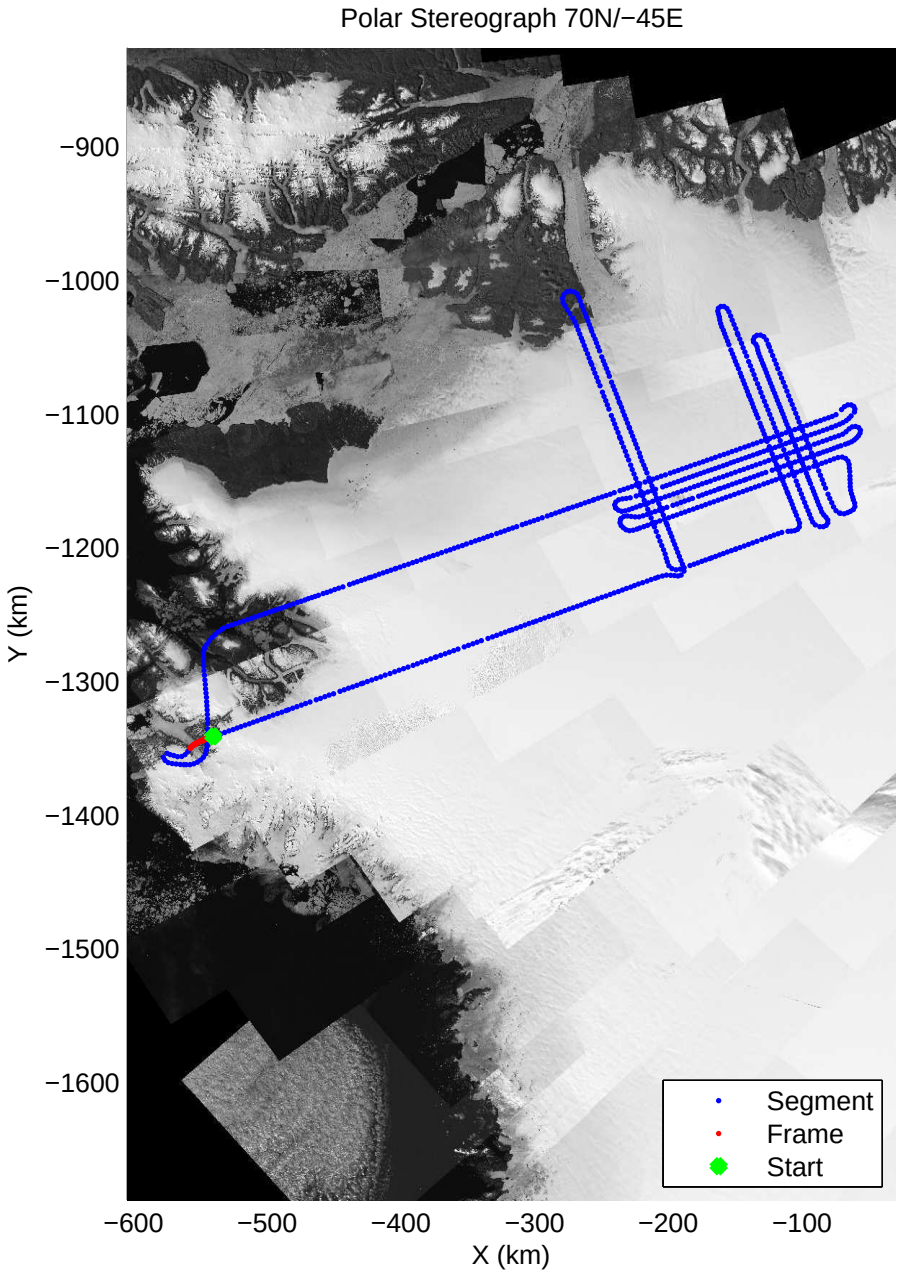

−1325
−1330
−1335
−1340
−1345
−1350
Y (km)
−545
−540
−535
−530
X (km)

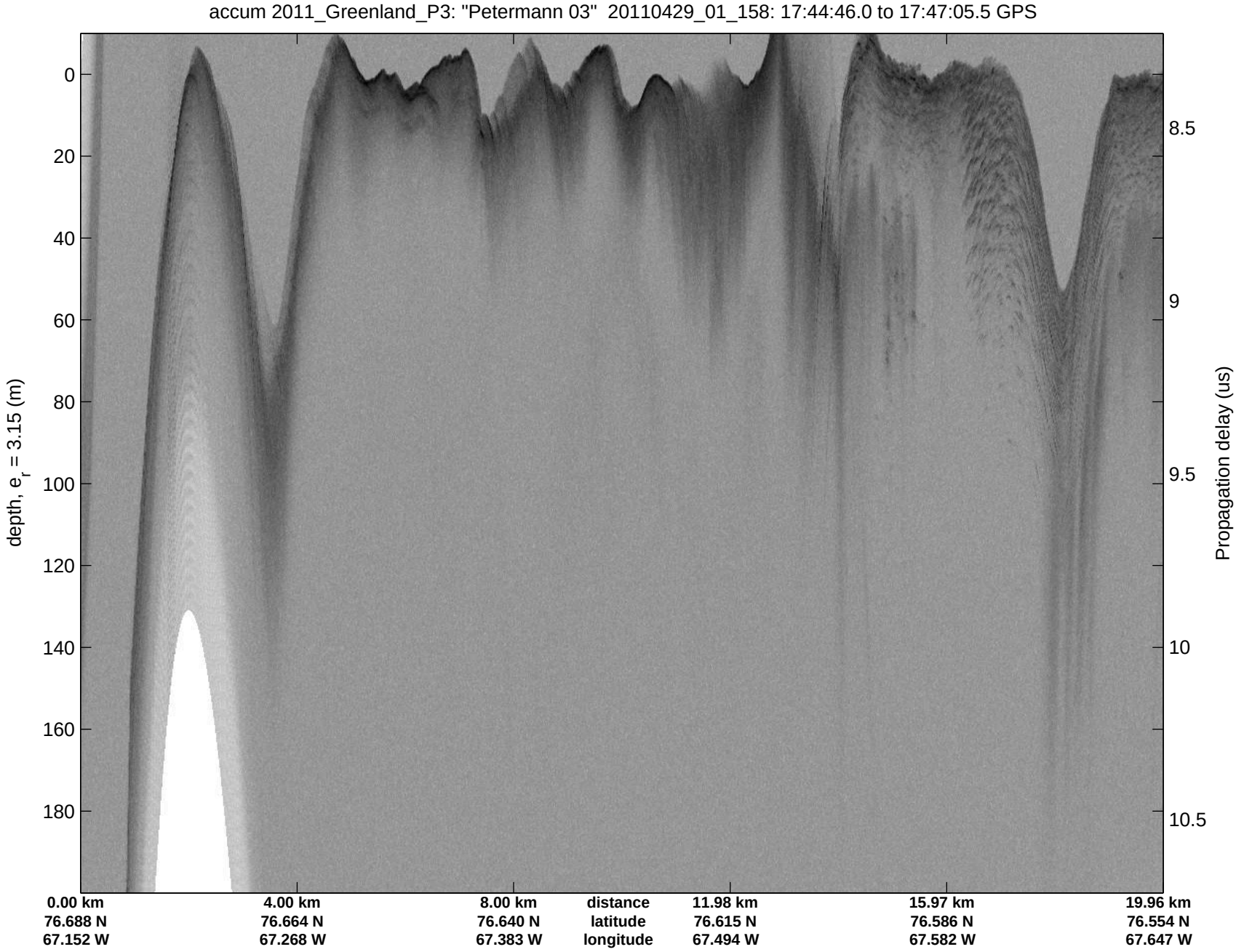

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start

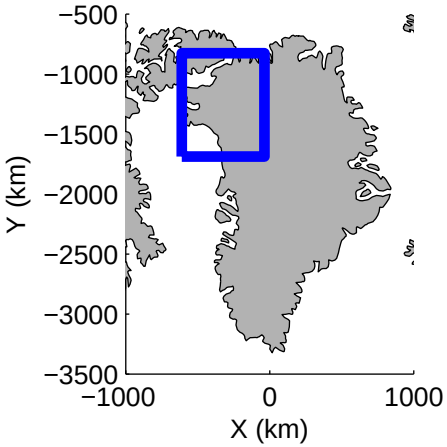

accum 2011_Greenland_P3: "Petermann 03" 20110429_01_157: 17:42:28.5 to 17:44:45.7 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
200
Propagation delay (us)
11
11.5
12
12.5
13
0.00 km
76.807 N
66.567 W
4.00 km
76.783 N
66.684 W
8.00 km
76.759 N
66.802 W
distance
latitude
longitude
11.99 km
76.735 N
66.919 W
15.99 km
76.712 N
67.035 W
19.97 km
76.688 N
67.151 W

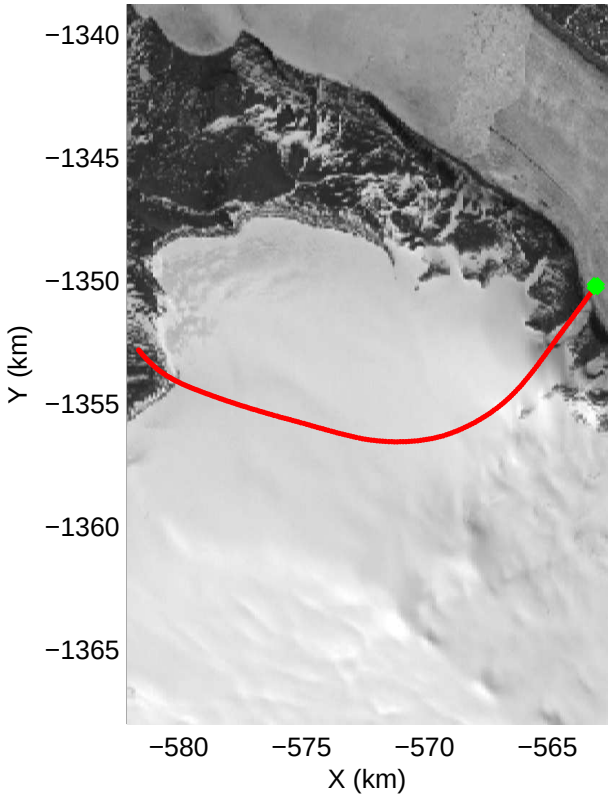

−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)

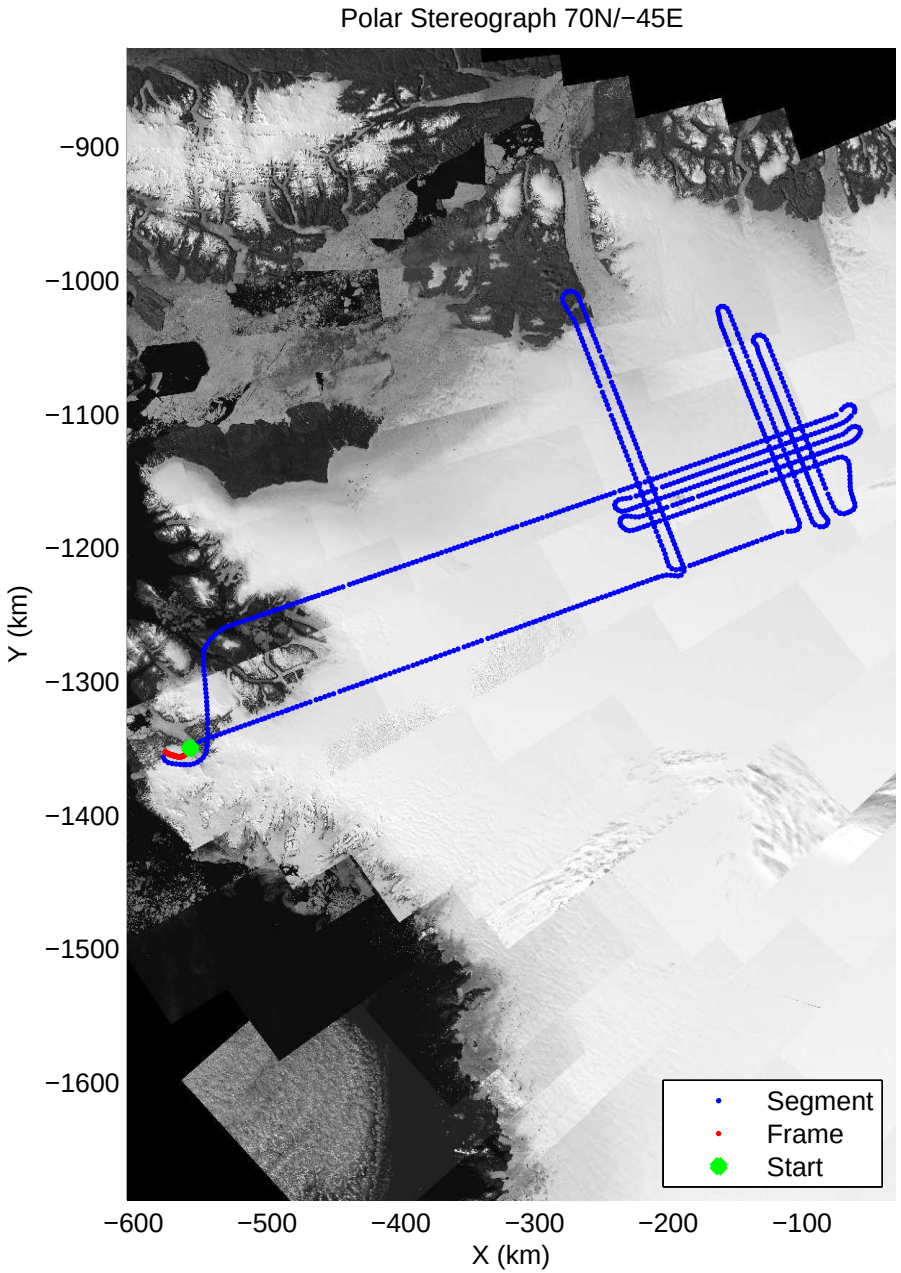

−1335
−1340
−1345
−1350
−1355
Y (km)
−560
−555
−550
X (km)

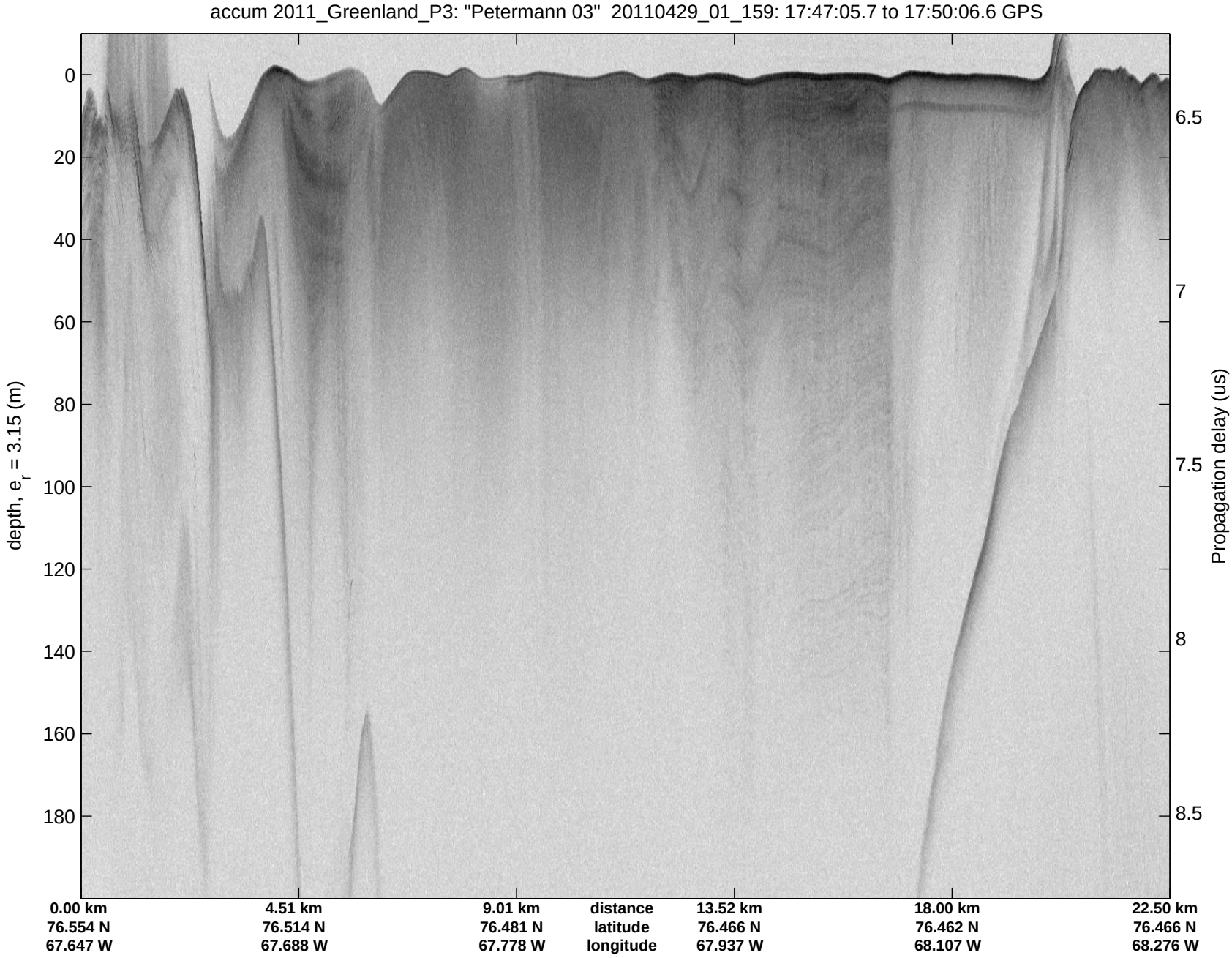

Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start


accum 2011_Greenland_P3: "Petermann 03" 20110429_01_158: 17:44:46.0 to 17:47:05.5 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
8.5
9
9.5
10
10.5
0.00 km
76.688 N
67.152 W
4.00 km
76.664 N
67.268 W
8.00 km
76.640 N
67.383 W
distance
latitude
longitude
11.98 km
76.615 N
67.494 W
15.97 km
76.586 N
67.582 W
19.96 km
76.554 N
67.647 W


−500
−1000
−1500
−2000
−2500
−3000
−3500
Y (km)
−1000
0
1000
X (km)


−1340
−1345
−1350
−1355
−1360
−1365
Y (km)
−580
−575
−570
−565
X (km)


Polar Stereograph 70N/−45E
−900
−1000
−1100
−1200
−1300
−1400
−1500
−1600
Y (km)
−600
−500
−400
−300
−200
−100
X (km)
Segment
Frame
Start


accum 2011_Greenland_P3: "Petermann 03" 20110429_01_159: 17:47:05.7 to 17:50:06.6 GPS
depth, e_r = 3.15 (m)
0
20
40
60
80
100
120
140
160
180
Propagation delay (us)
6.5
7
7.5
8
8.5
0.00 km
76.554 N
67.647 W
4.51 km
76.514 N
67.688 W
9.01 km
76.481 N
67.778 W
distance
latitude
longitude
13.52 km
76.466 N
67.937 W
18.00 km
76.462 N
68.107 W
22.50 km
76.466 N
68.276 W