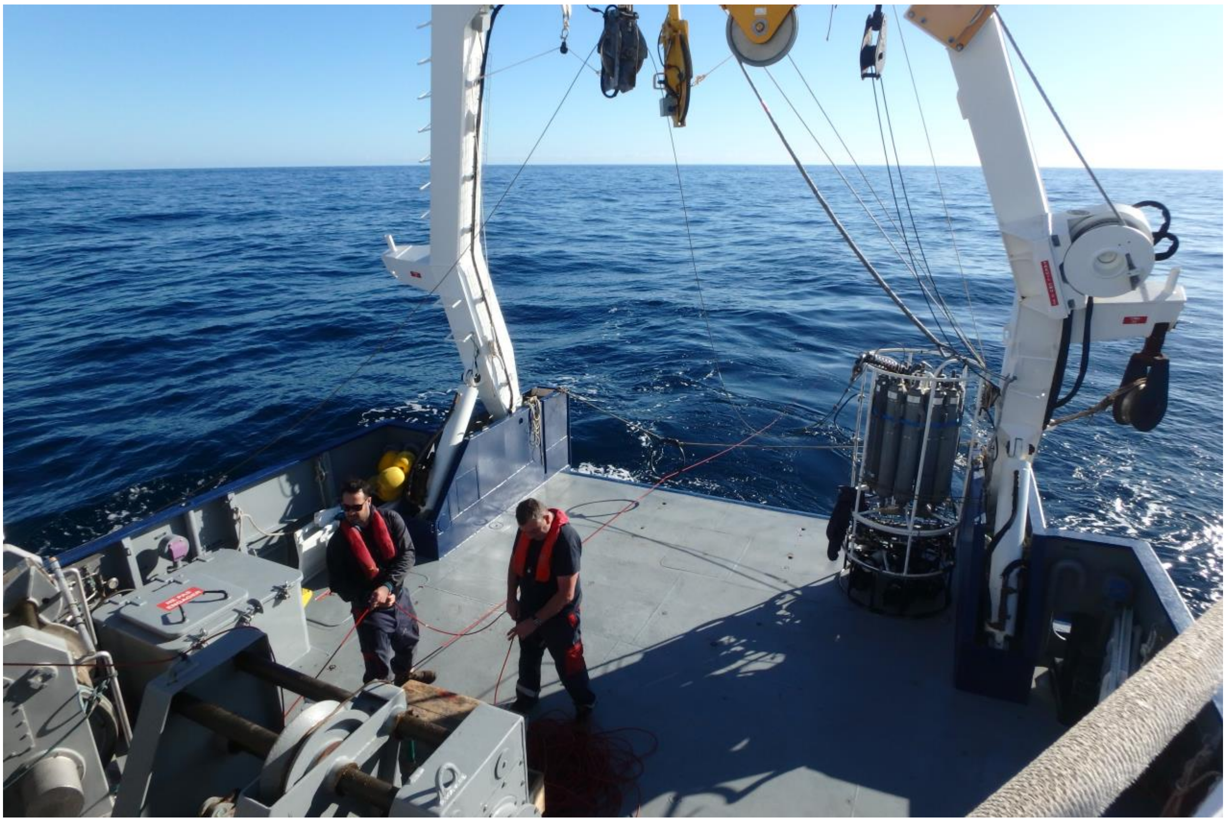
BOUSSOLE PROJECT

C-OPS Data catalogue for 2023
Cruise 250 to cruise 261

Institut de la Mer de Villefranche (IMEV), 06230 Villefranche sur mer, France



Recovery of the *Biospherical* Compact - Optical Profiler System (C-OPS) at the BOUSSOLE site from the deck of the R/V *Téthys II*

ESA/ESRIN contract N° 4000119096/17/I-BG

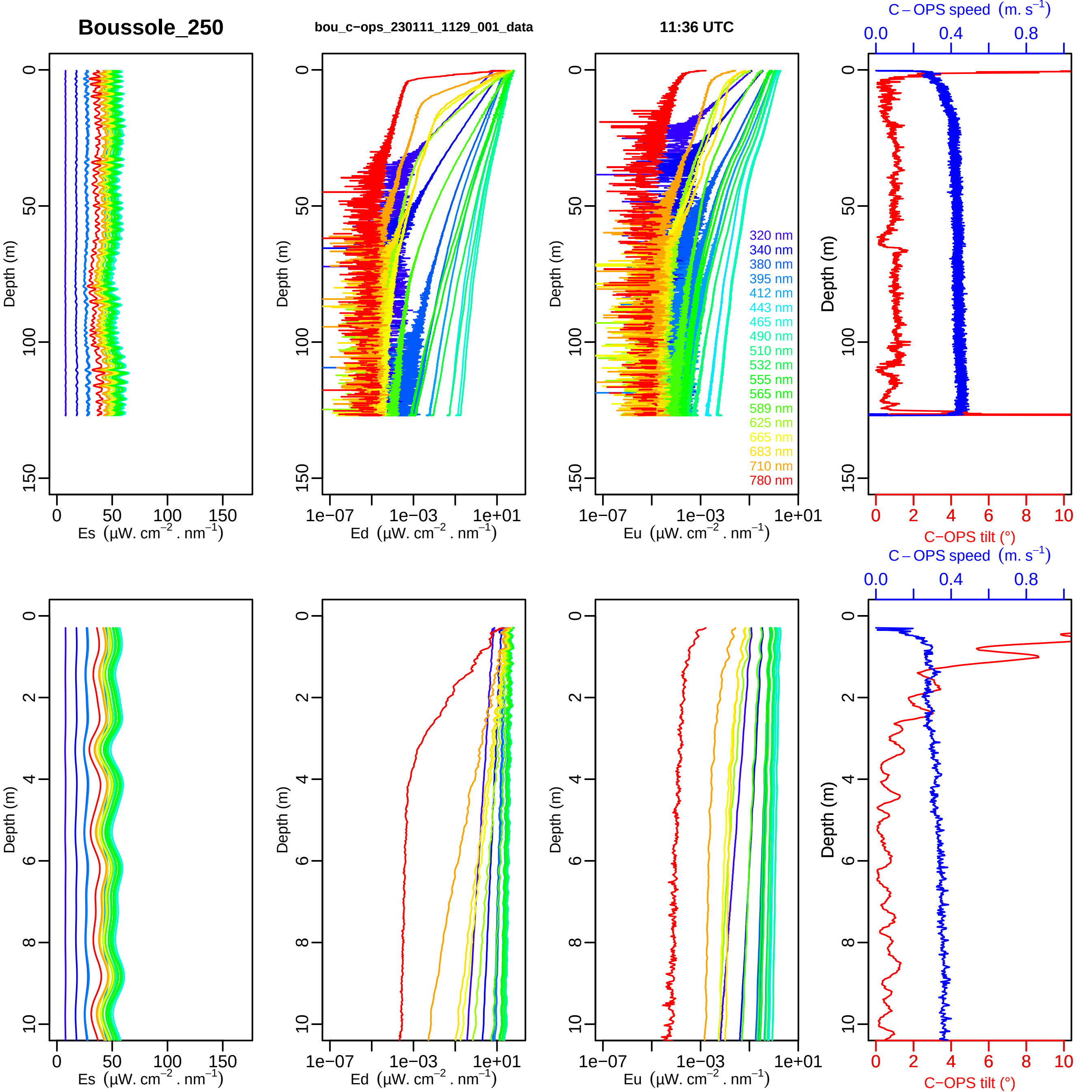
C-OPS parameters

The C-OPS used during the BOUSSOLE cruises is equipped with Es, Ed and Eu* sensors.

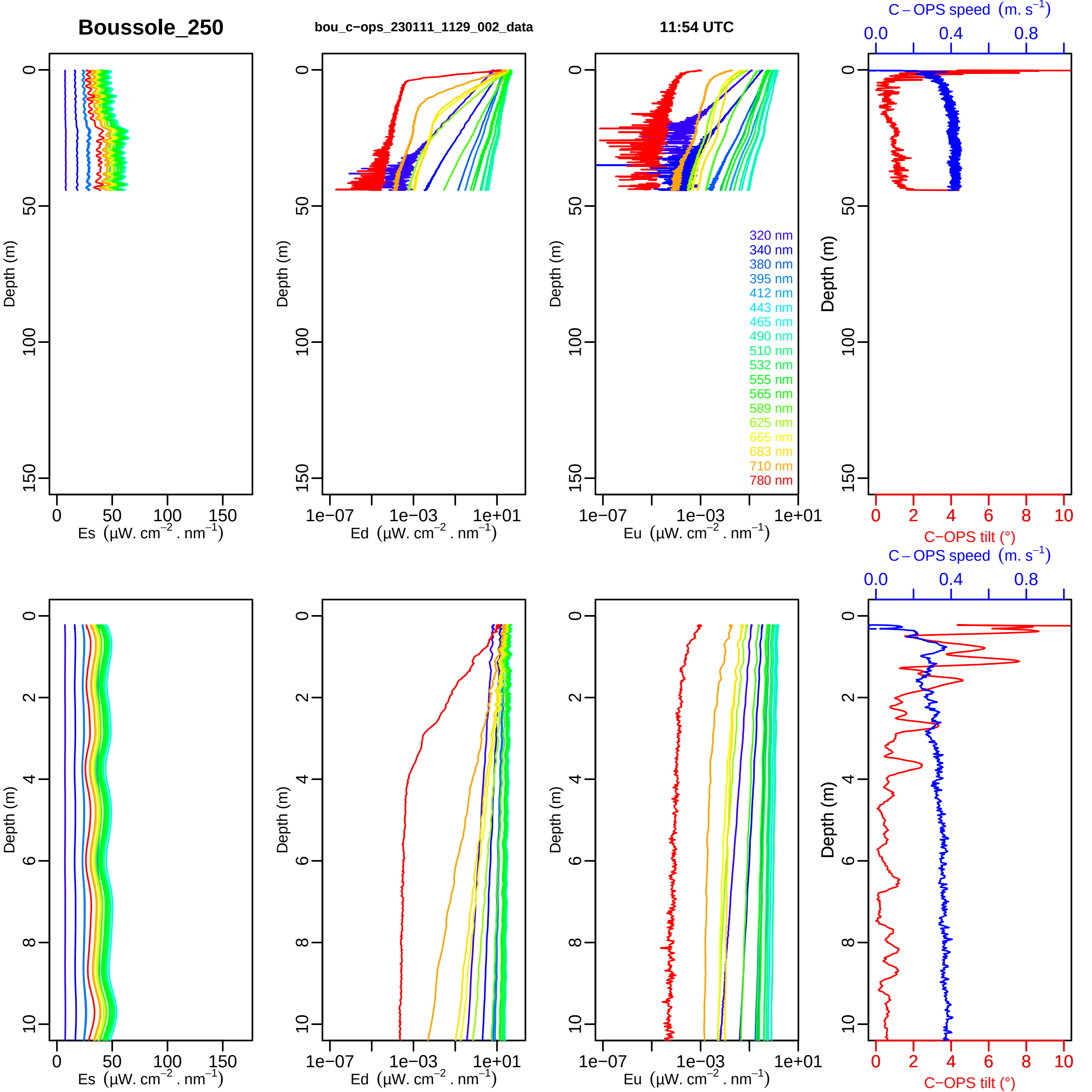
This C-OPS system measures downward and upward irradiance at 18 wavelengths + PAR:
320, 340, 380, 395, 412, 443, 465, 490, 510, 532, 555, 565, 589, 625, 665, 683, 710, 780 nm and PAR.

The plots presented in this catalogue are obtained from raw data and show the radiometric profiles in log scale, the absolute tilt records in water and the descent rate of the C-OPS.

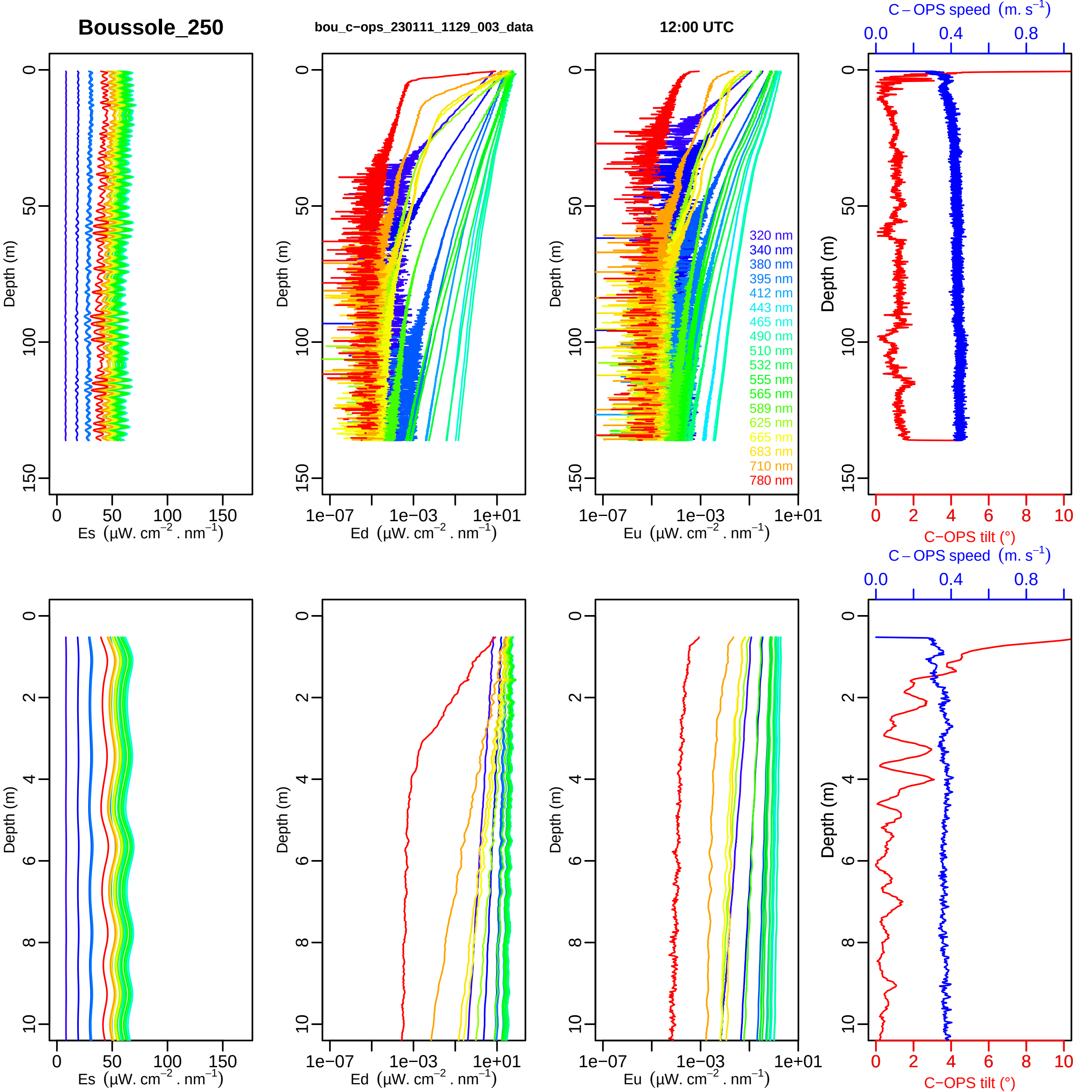
*Es: downward surface irradiance
Eu: upward irradiance
Ed: downward irradiance

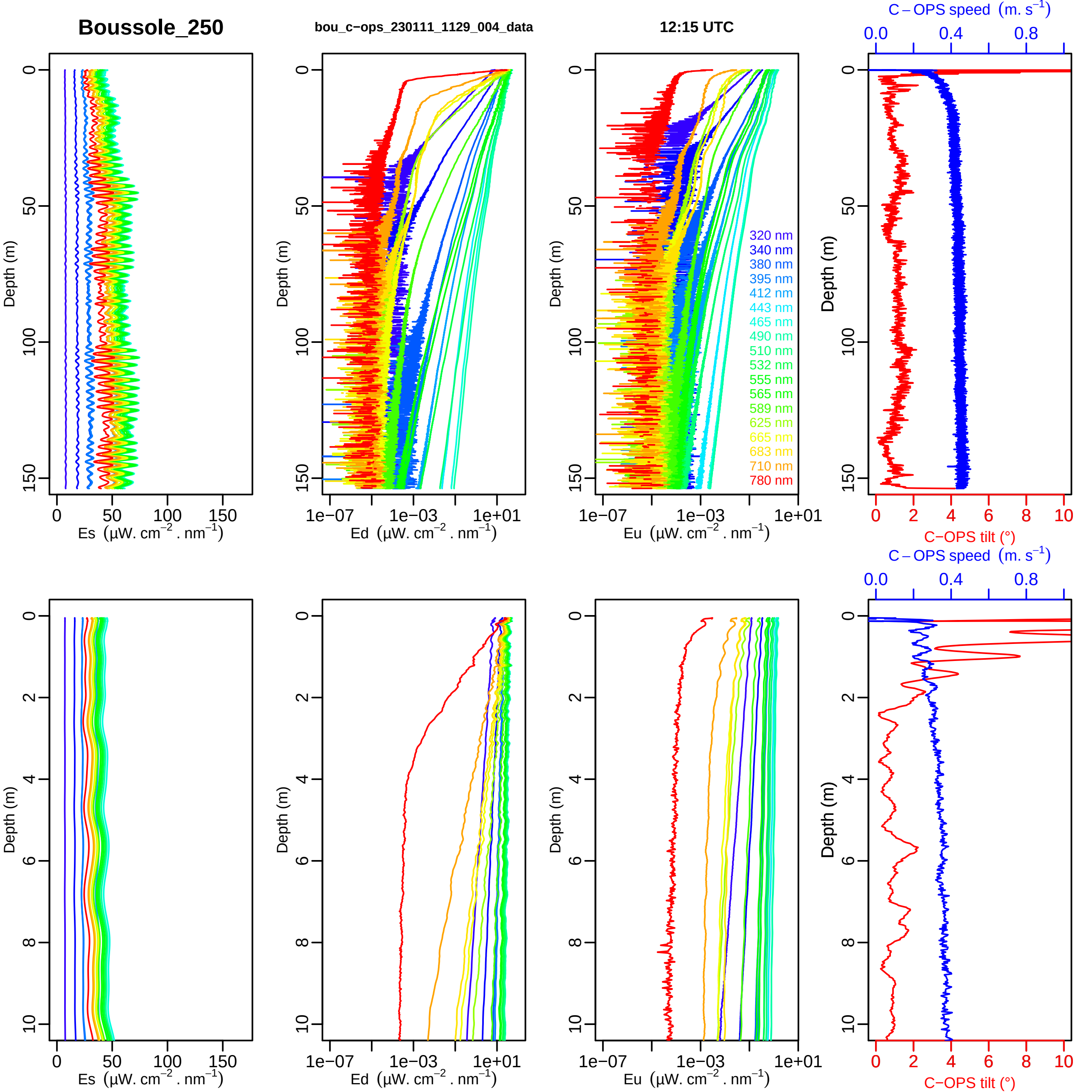


Boussole_250
bou_c−ops_230111_1129_001_data
11:36 UTC
C − OPS speed (m. s−1)
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm

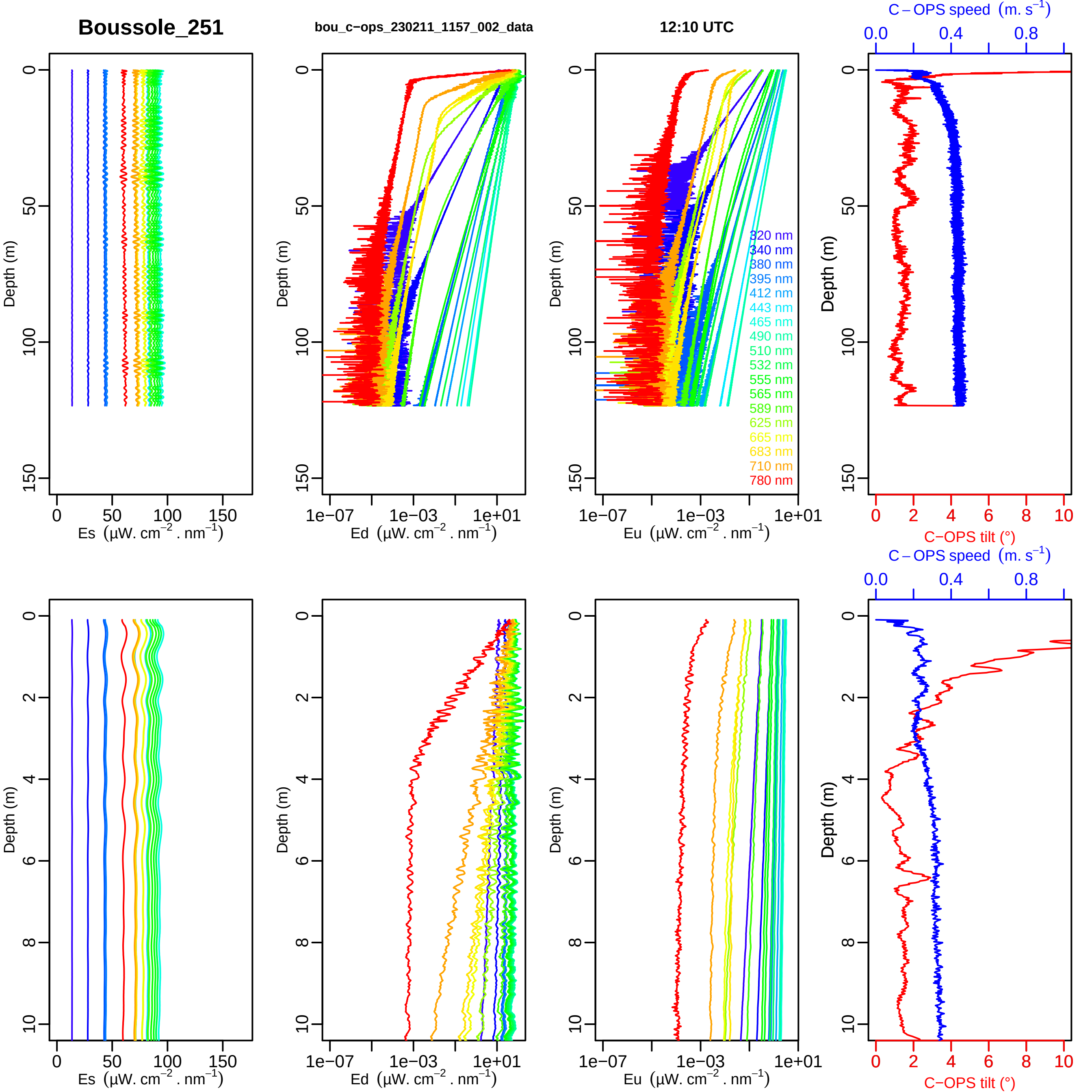


Boussole_250
bou_c−ops_230111_1129_002_data
11:54 UTC
C − OPS speed (m. s−1)
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm

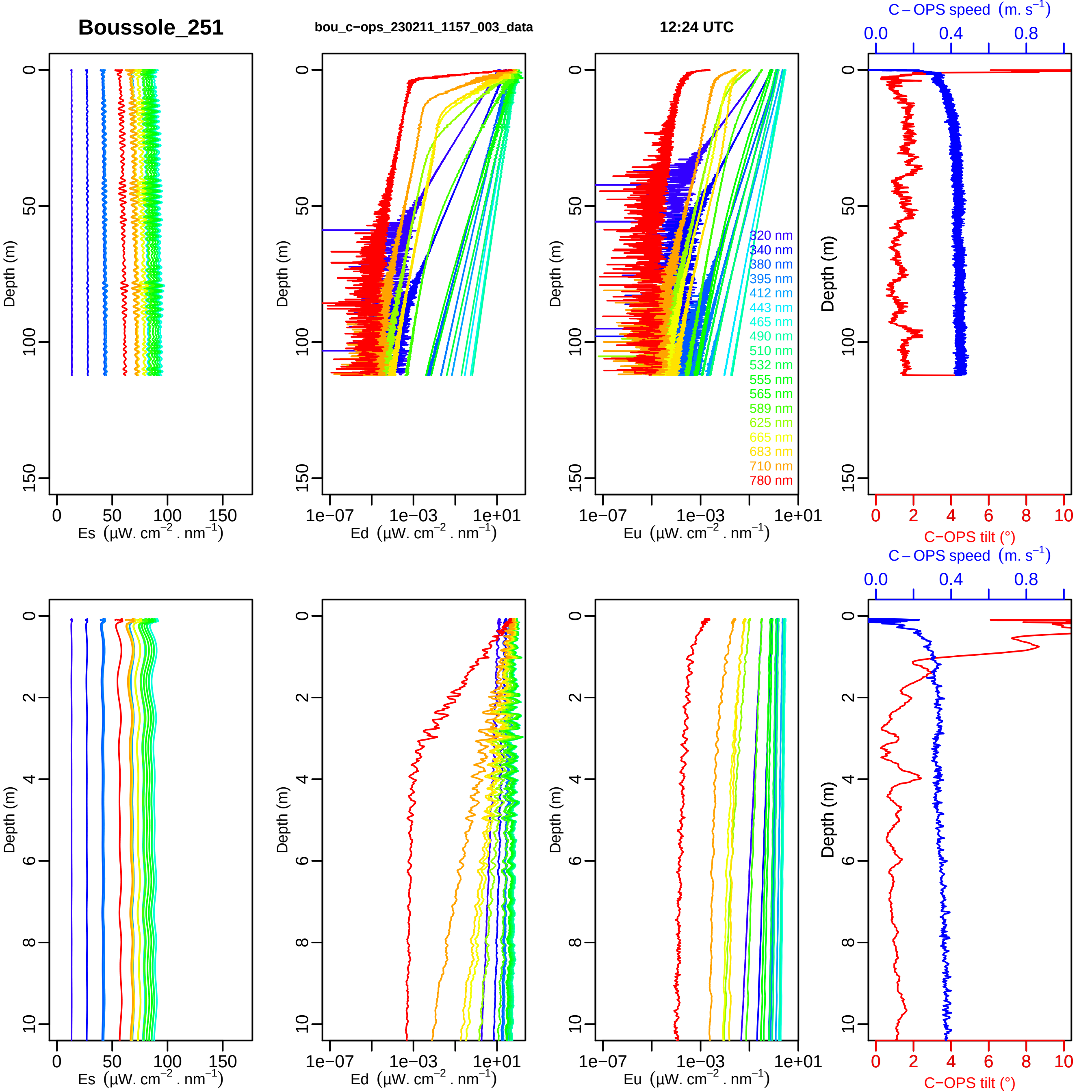

Boussole_250
bou_c−ops_230111_1129_003_data
12:00 UTC
C − OPS speed (m. s−1)
0.0
0.4
0.8
Depth (m)
0
50
100
150
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
1e−07
1e−03
1e+01
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm
C−OPS tilt (°)
0
2
4
6
8
10



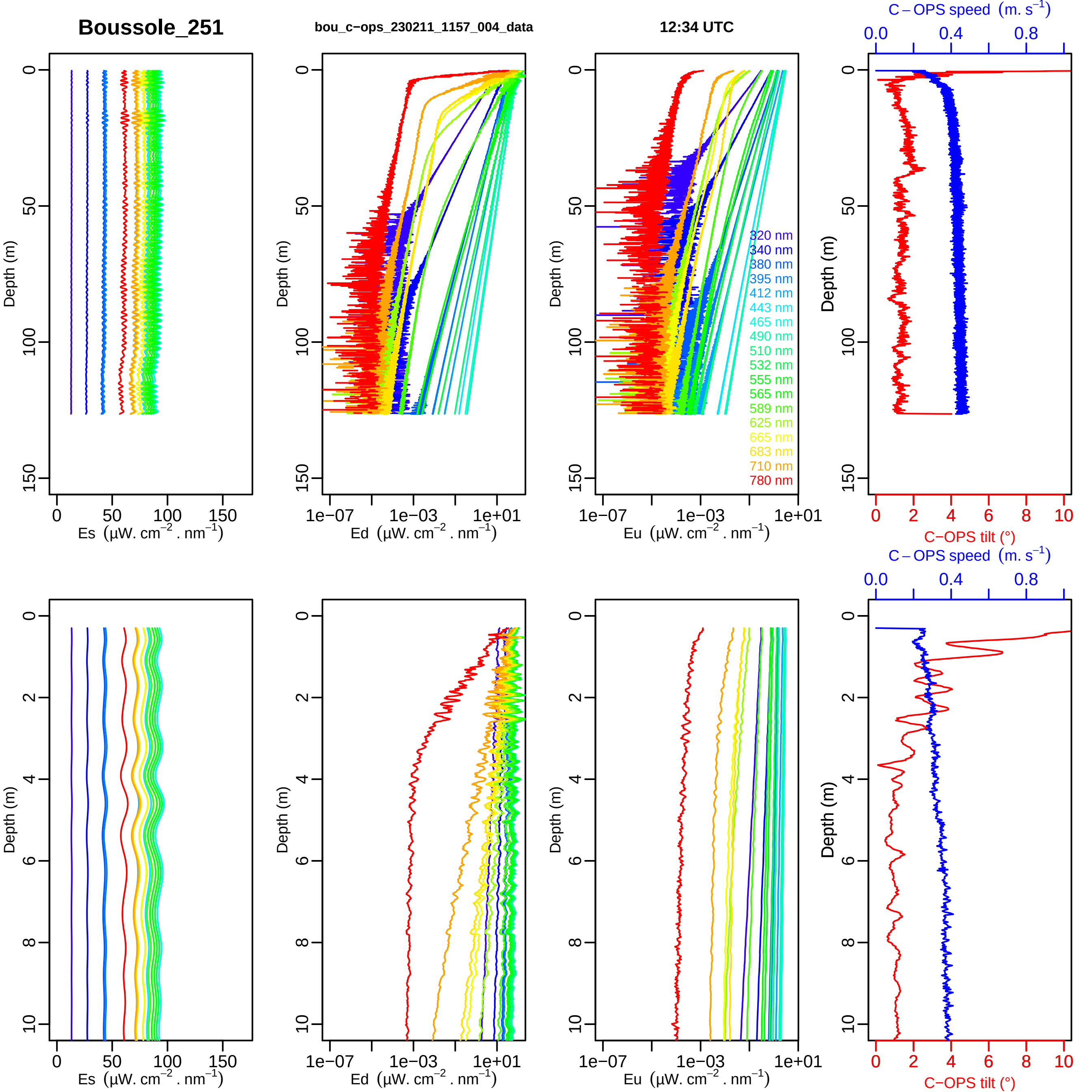
Boussole_250
bou_c-ops_230111_1129_004_data
12:15 UTC
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm
C − OPS speed (m. s−1)
C−OPS tilt (°)

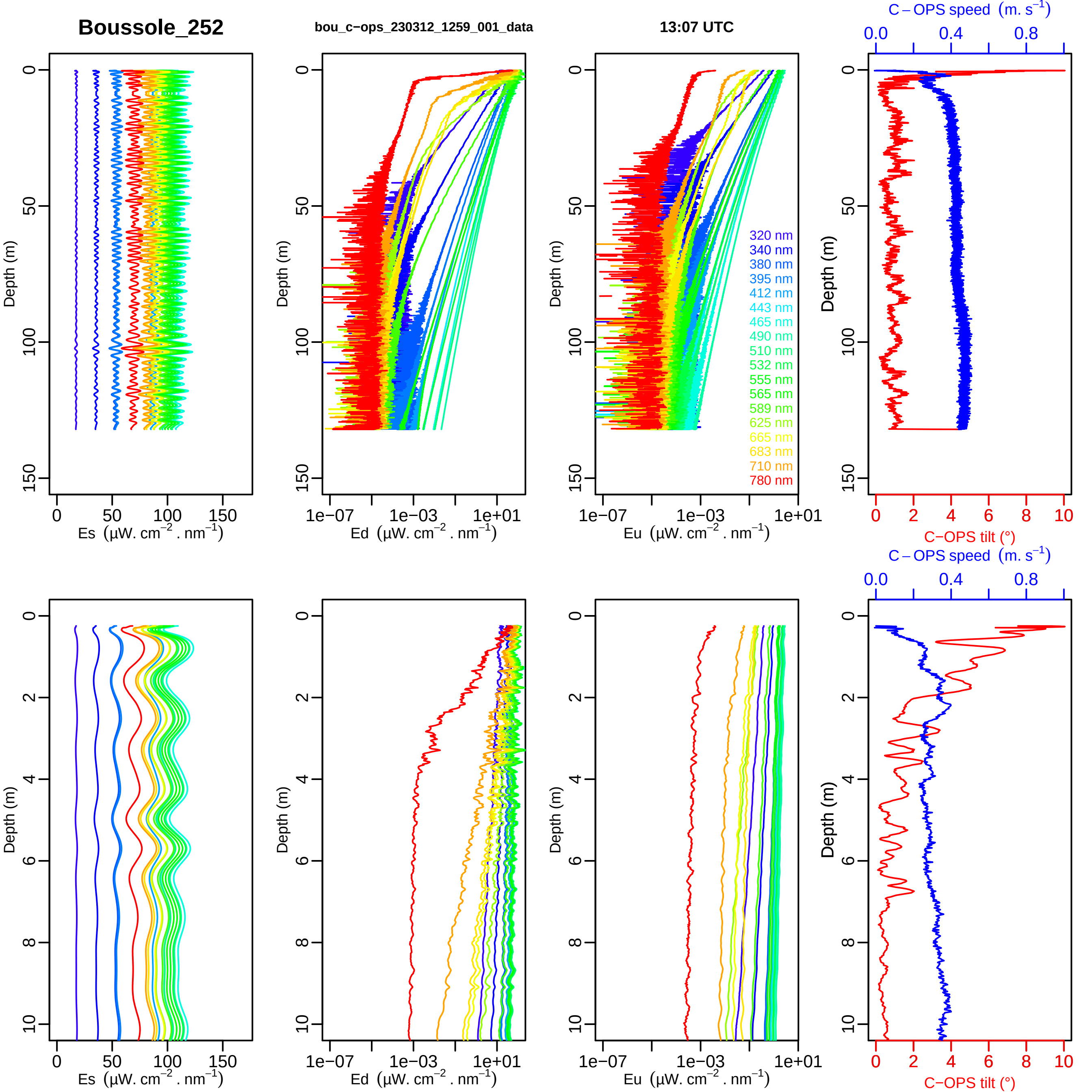


Boussole_251
bou_c-ops_230211_1157_002_data
12:10 UTC
C – OPS speed (m. s⁻¹)
C−OPS tilt (°)
Depth (m)
Es (µW. cm⁻². nm⁻¹)
Ed (µW. cm⁻². nm⁻¹)
Eu (µW. cm⁻². nm⁻¹)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm

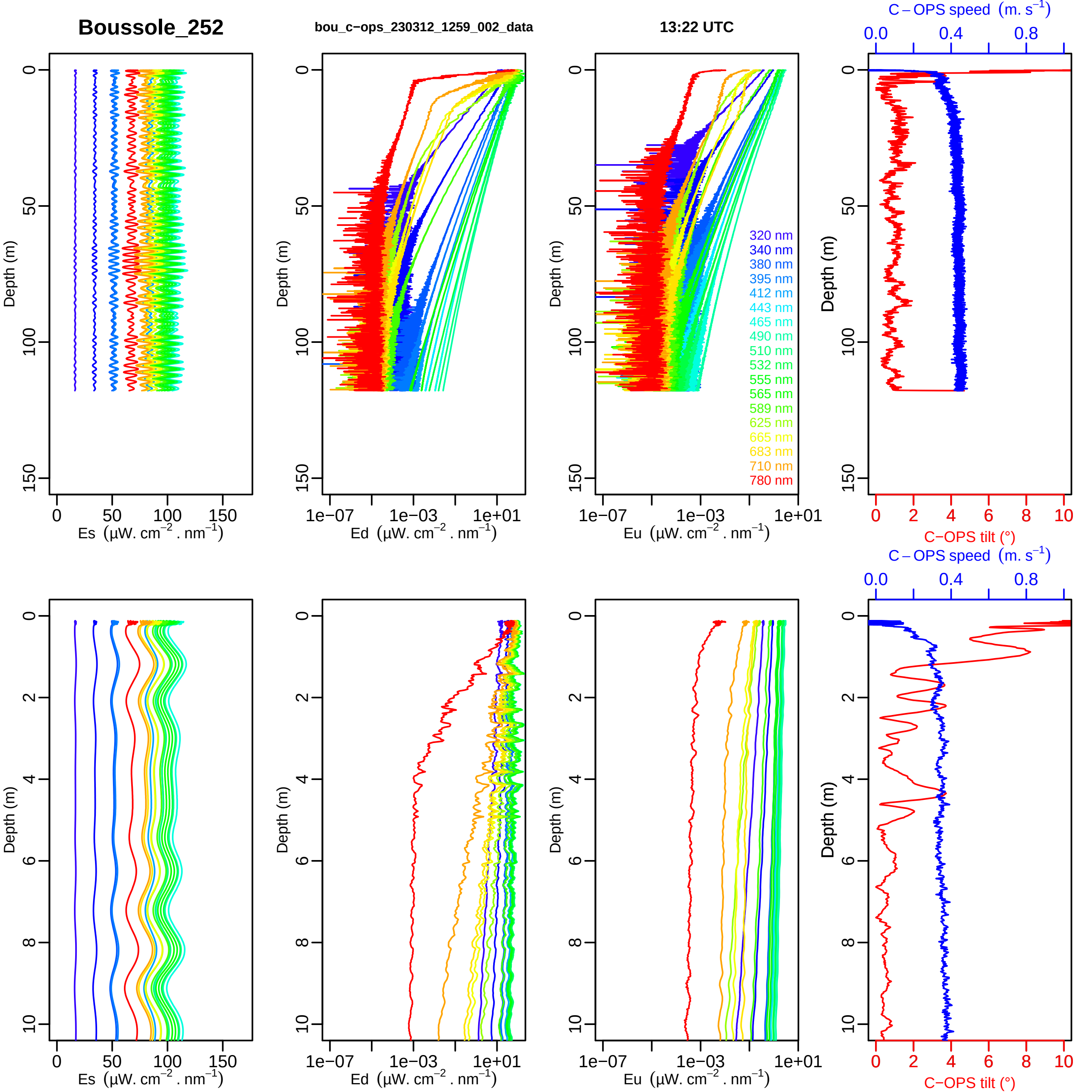


Boussole_251
bou_c−ops_230211_1157_003_data
12:24 UTC
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C − OPS speed (m. s−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm

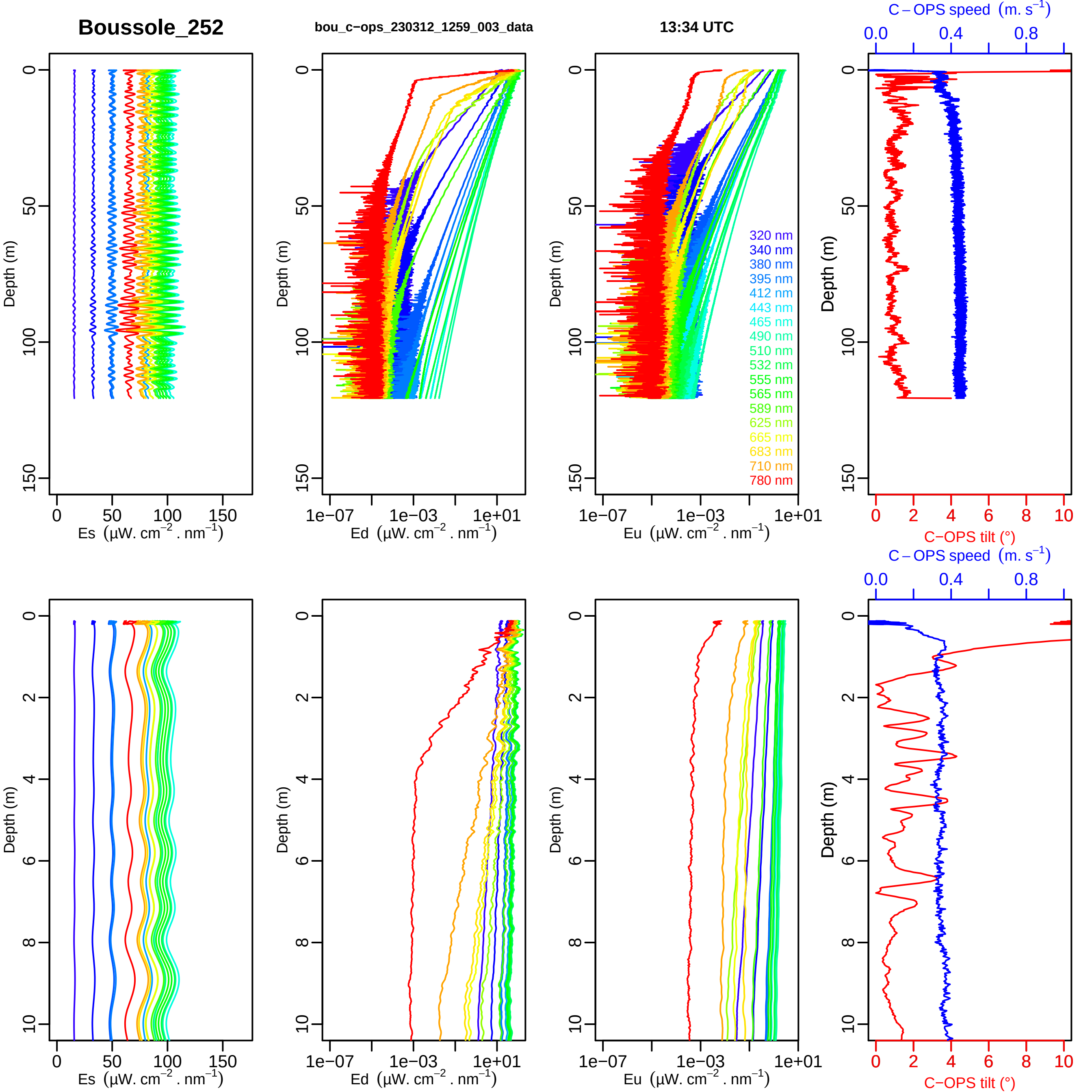

Boussole_251
bou_c-ops_230211_1157_004_data
12:34 UTC
C – OPS speed (m. s−1)
C−OPS tilt (°)
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm



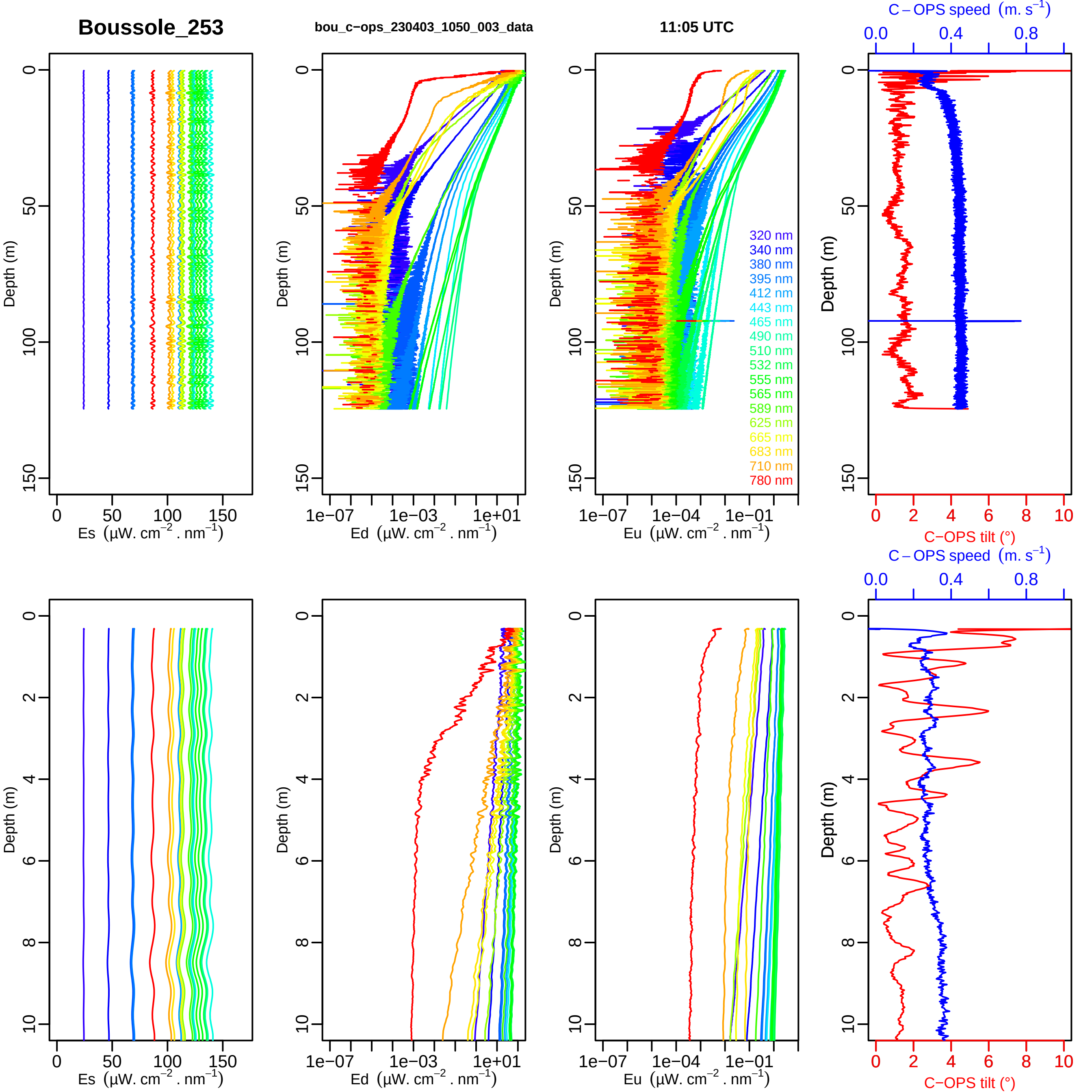
Boussole_252
bou_c-ops_230312_1259_001_data
13:07 UTC
Depth (m)
Es (μW. cm⁻² . nm⁻¹)
Ed (μW. cm⁻² . nm⁻¹)
Eu (μW. cm⁻² . nm⁻¹)
C – OPS speed (m. s⁻¹)
C–OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm



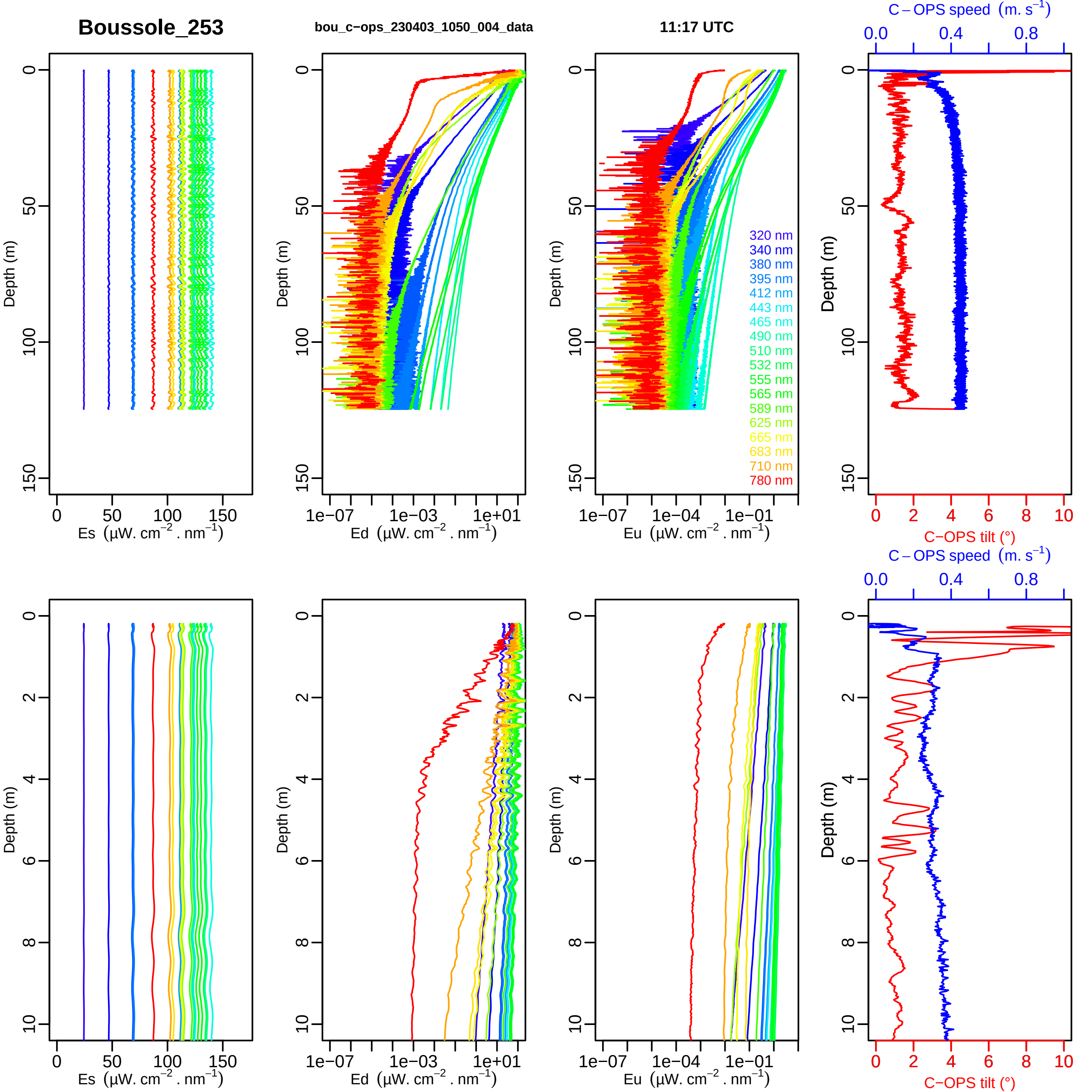
Boussole_252
bou_c−ops_230312_1259_002_data
13:22 UTC
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C − OPS speed (m. s−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm

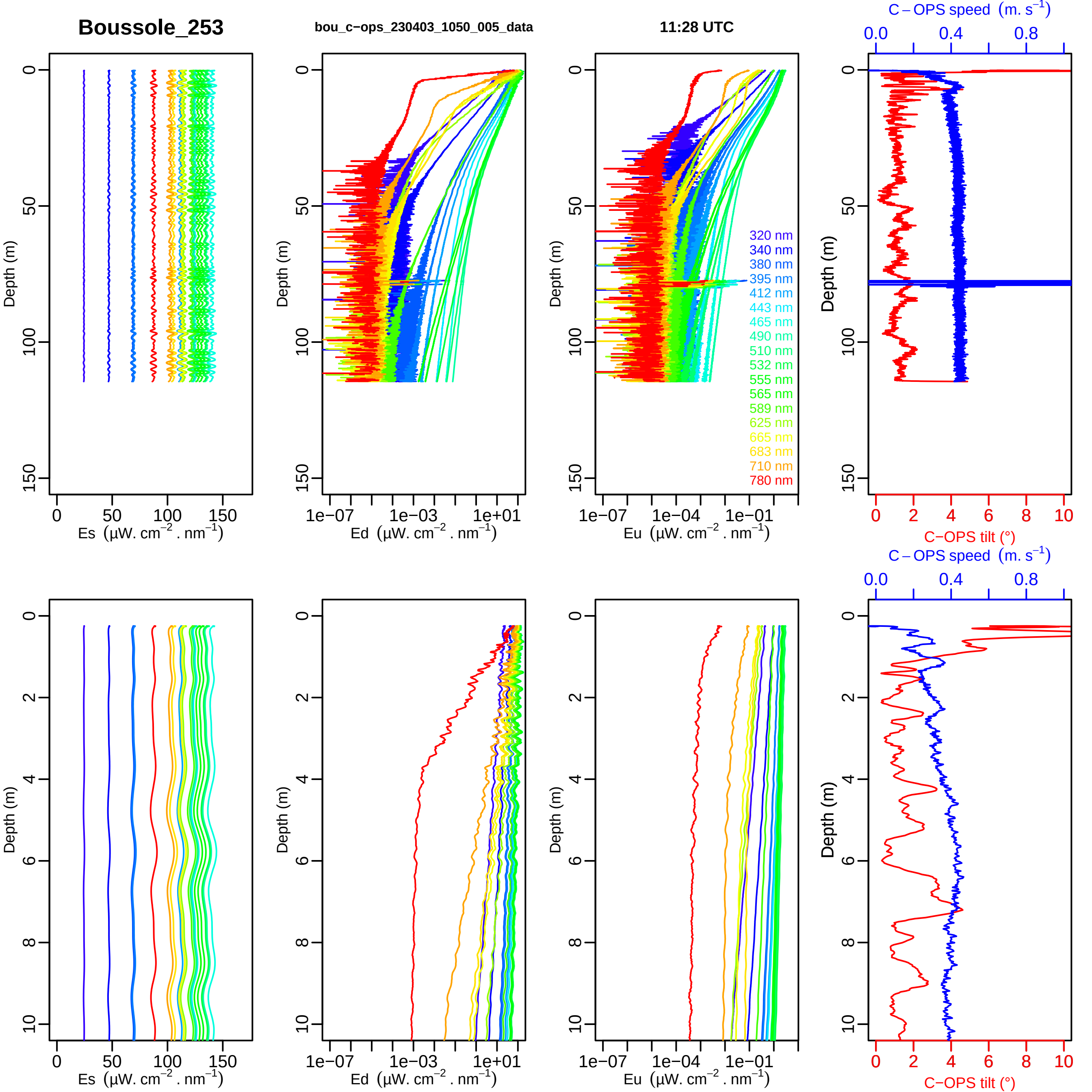


Boussole_252
bou_c-ops_230312_1259_003_data
13:34 UTC
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C − OPS speed (m. s−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm

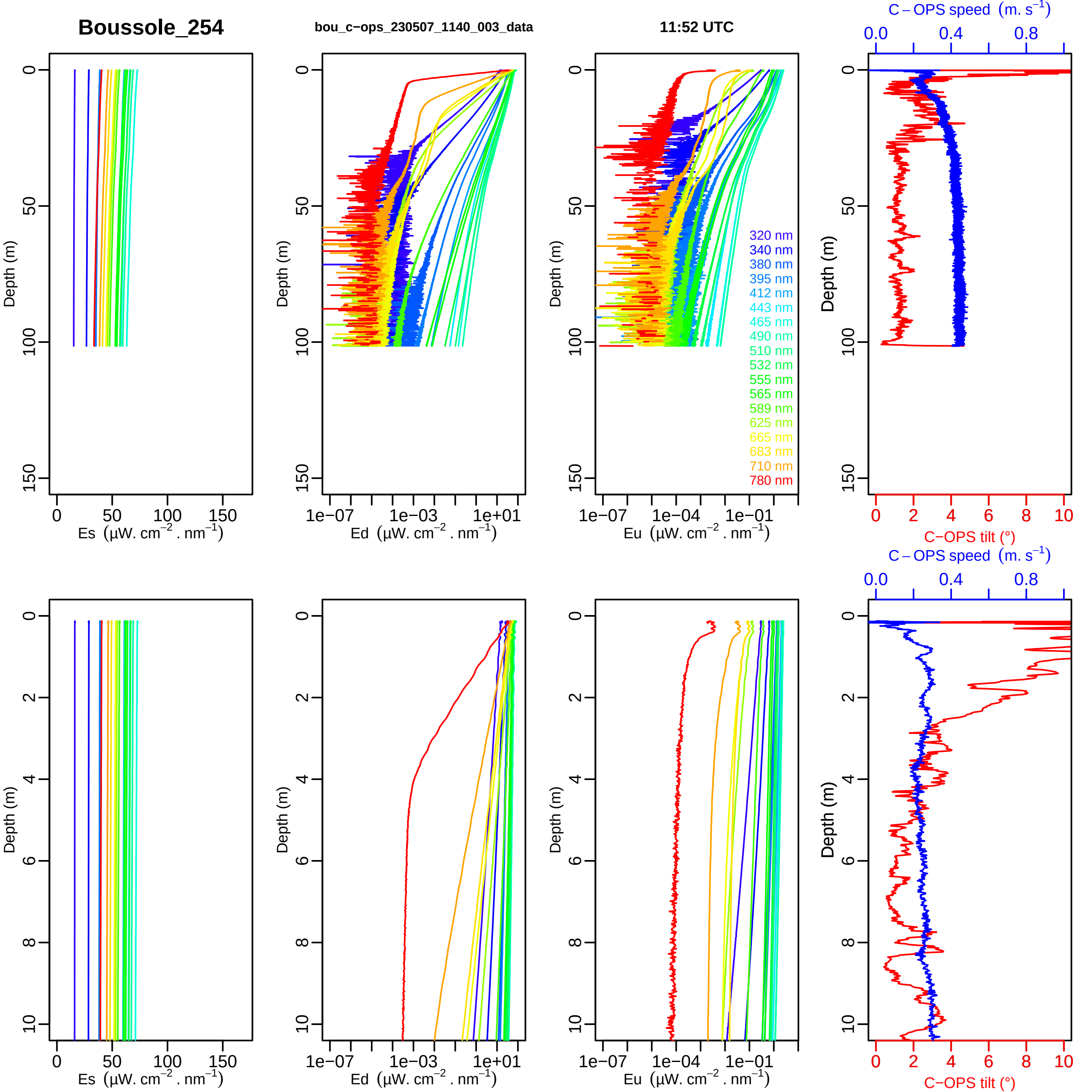


Boussole_253
bou_c−ops_230403_1050_003_data
11:05 UTC
C − OPS speed (m. s−1)
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm

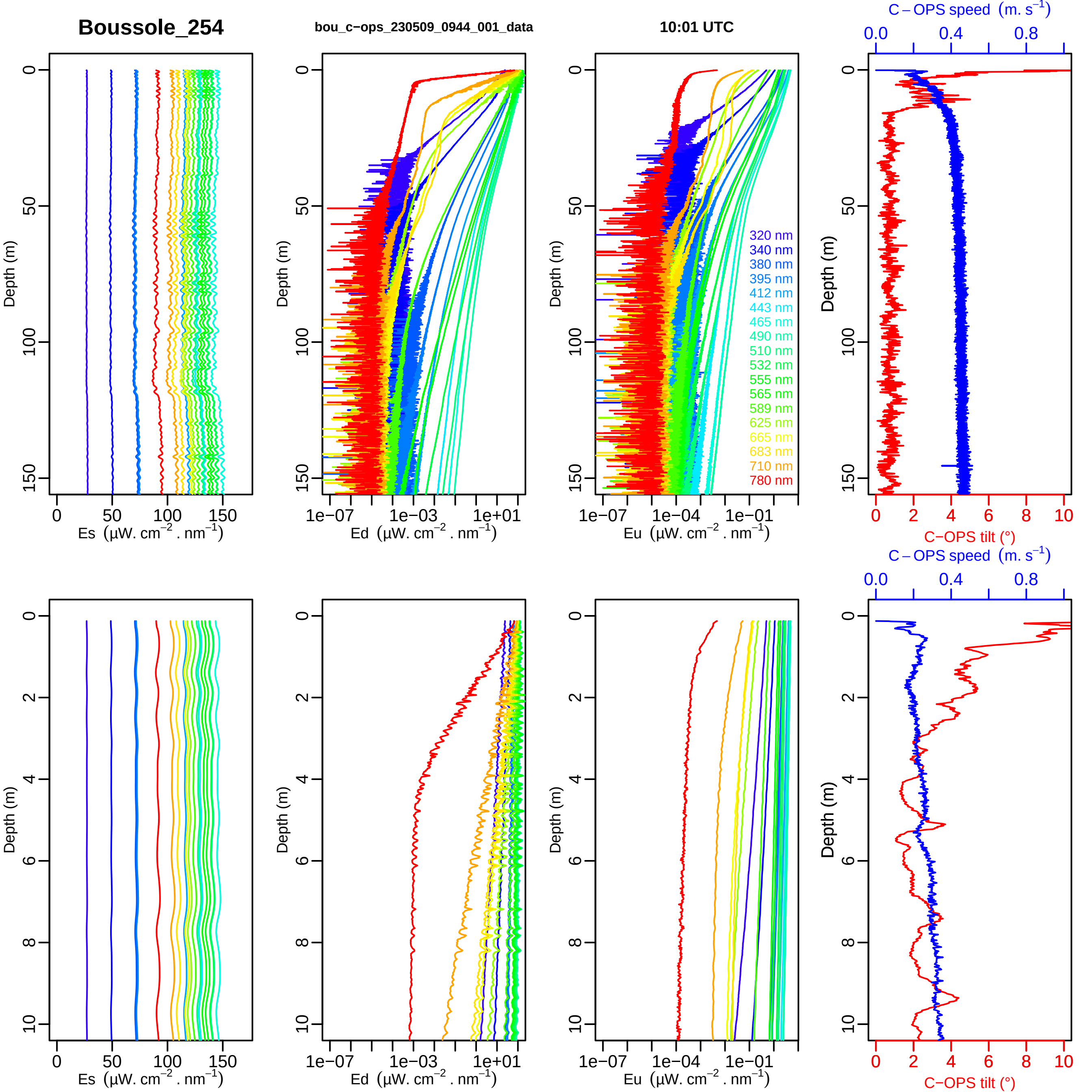

Boussole_253
bou_c−ops_230403_1050_004_data
11:17 UTC
C − OPS speed (m. s−1)
C−OPS tilt (°)
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm

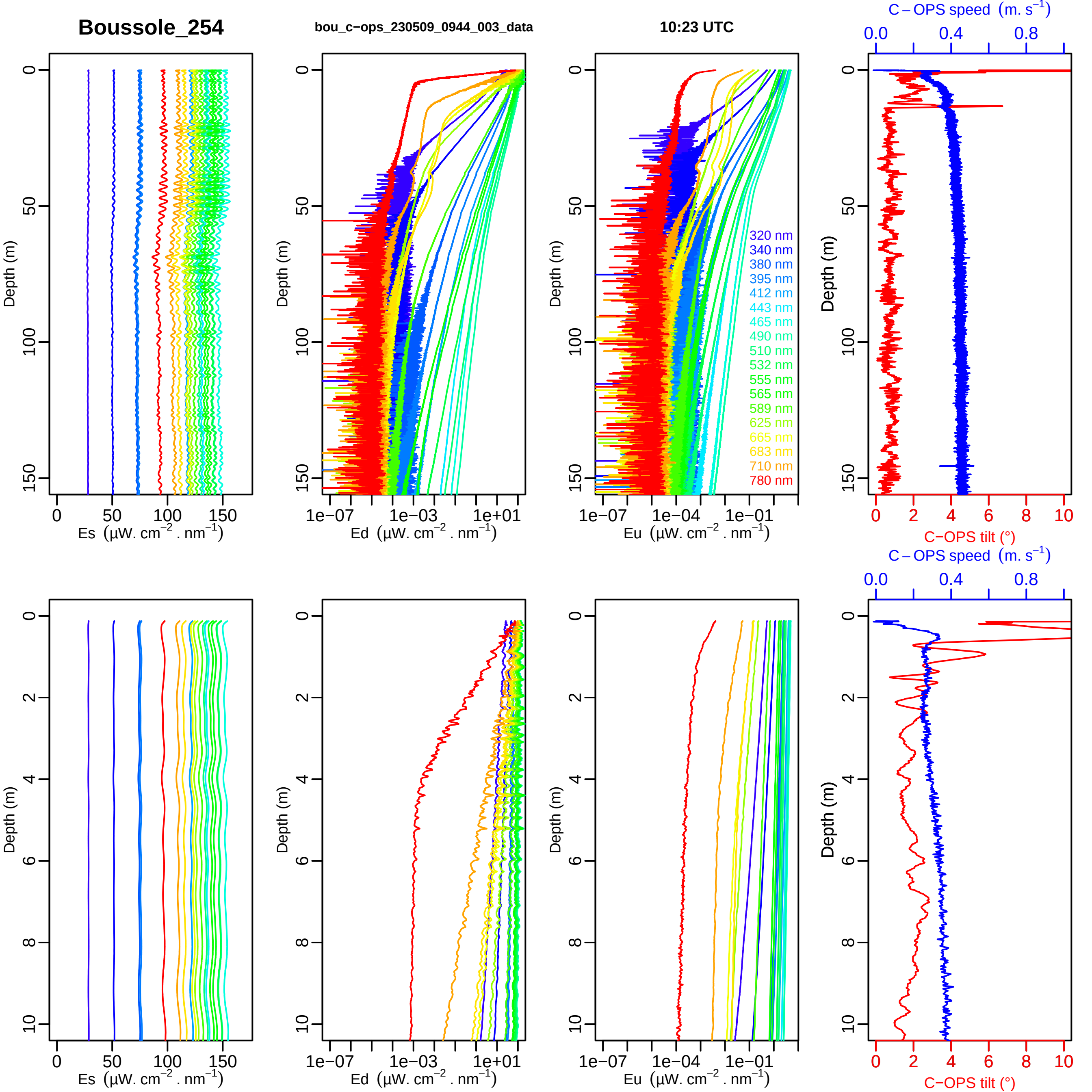


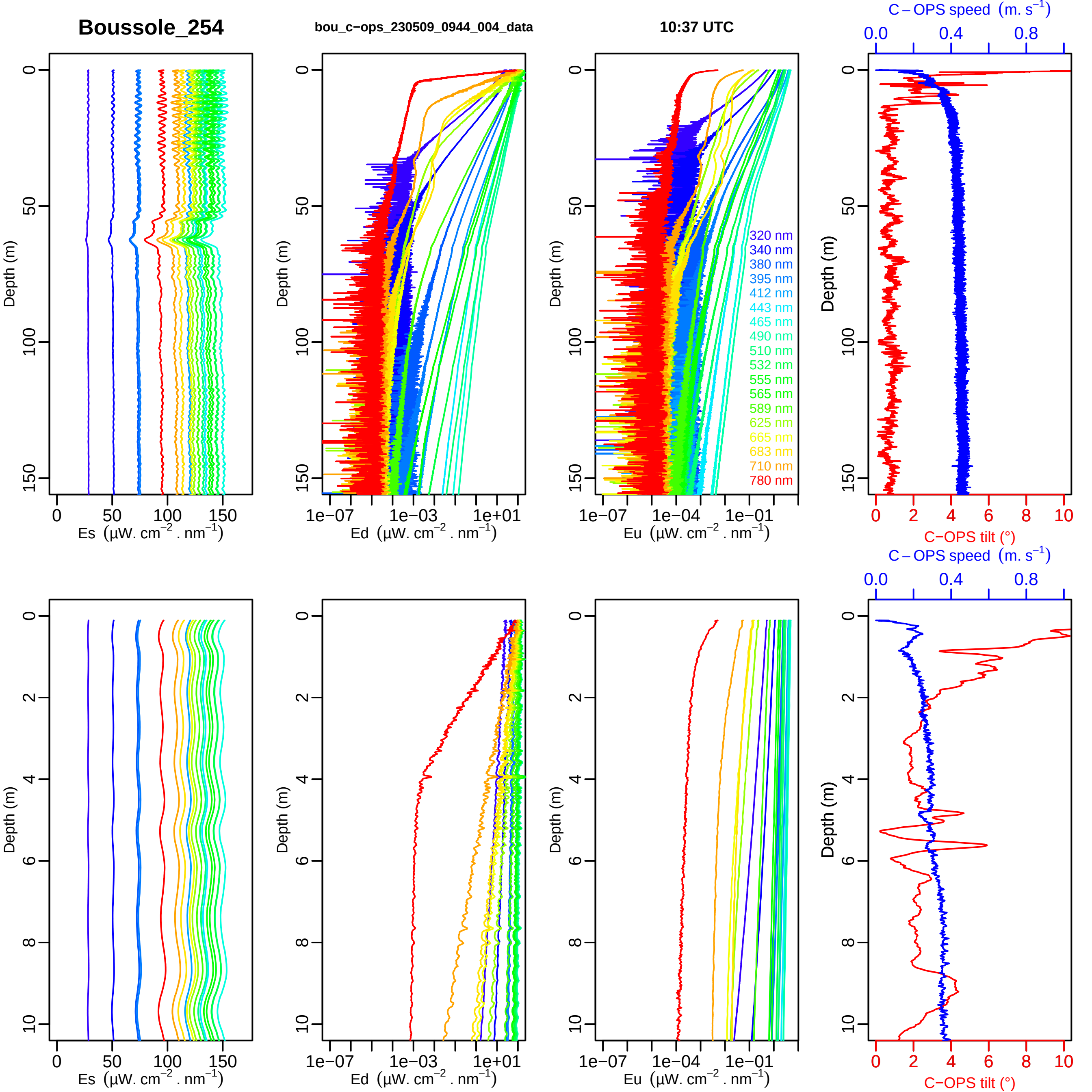
Boussole_253
bou_c-ops_230403_1050_005_data
11:28 UTC
Depth (m)
Es (µW. cm^-2 . nm^-1)
Ed (µW. cm^-2 . nm^-1)
Eu (µW. cm^-2 . nm^-1)
C – OPS speed (m. s^-1)
C–OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm



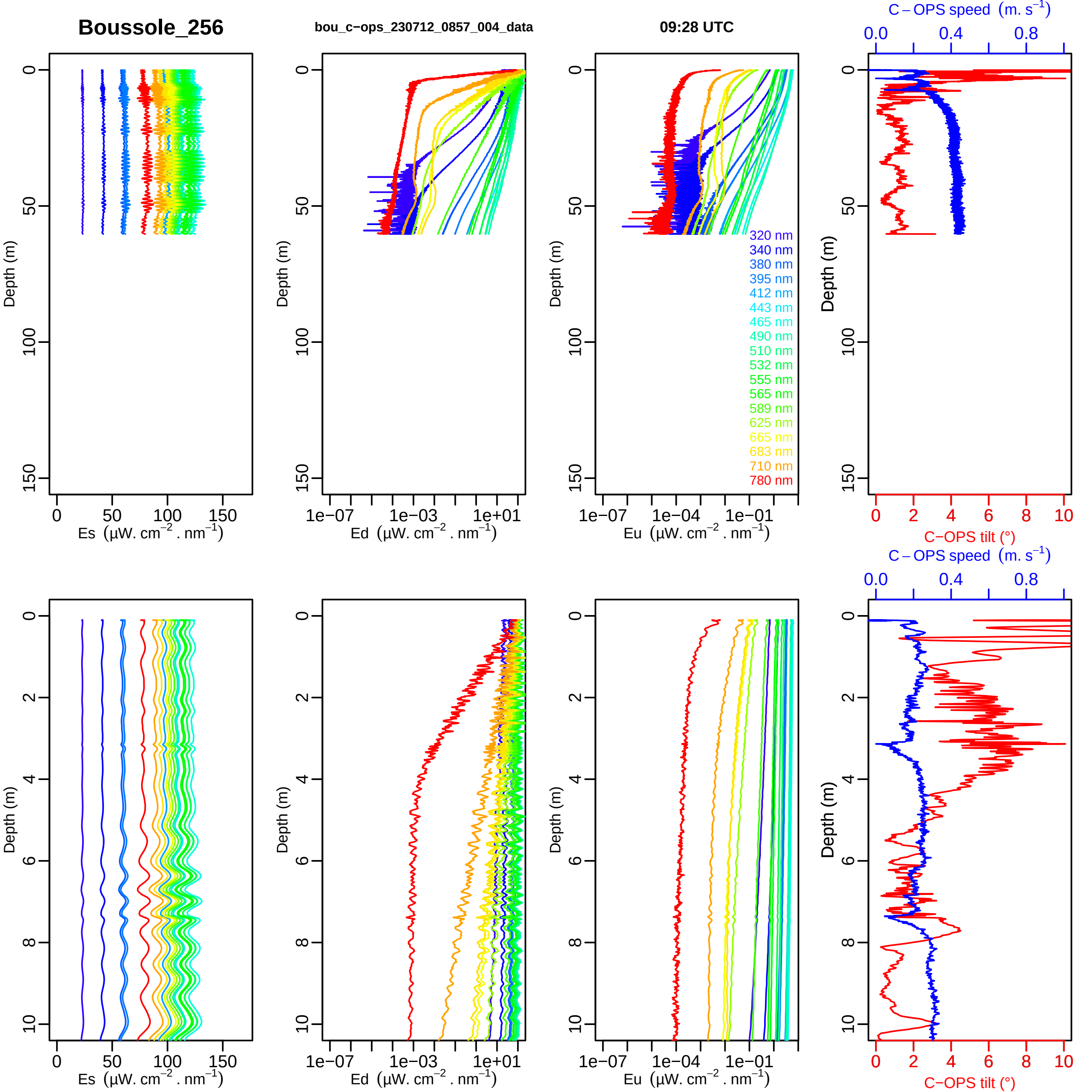
Boussole_254
bou_c−ops_230507_1140_003_data
11:52 UTC
C − OPS speed (m. s−1)
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm


Boussole_254
bou_c-ops_230509_0944_001_data
10:01 UTC
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm
C − OPS speed (m. s−1)
C−OPS tilt (°)

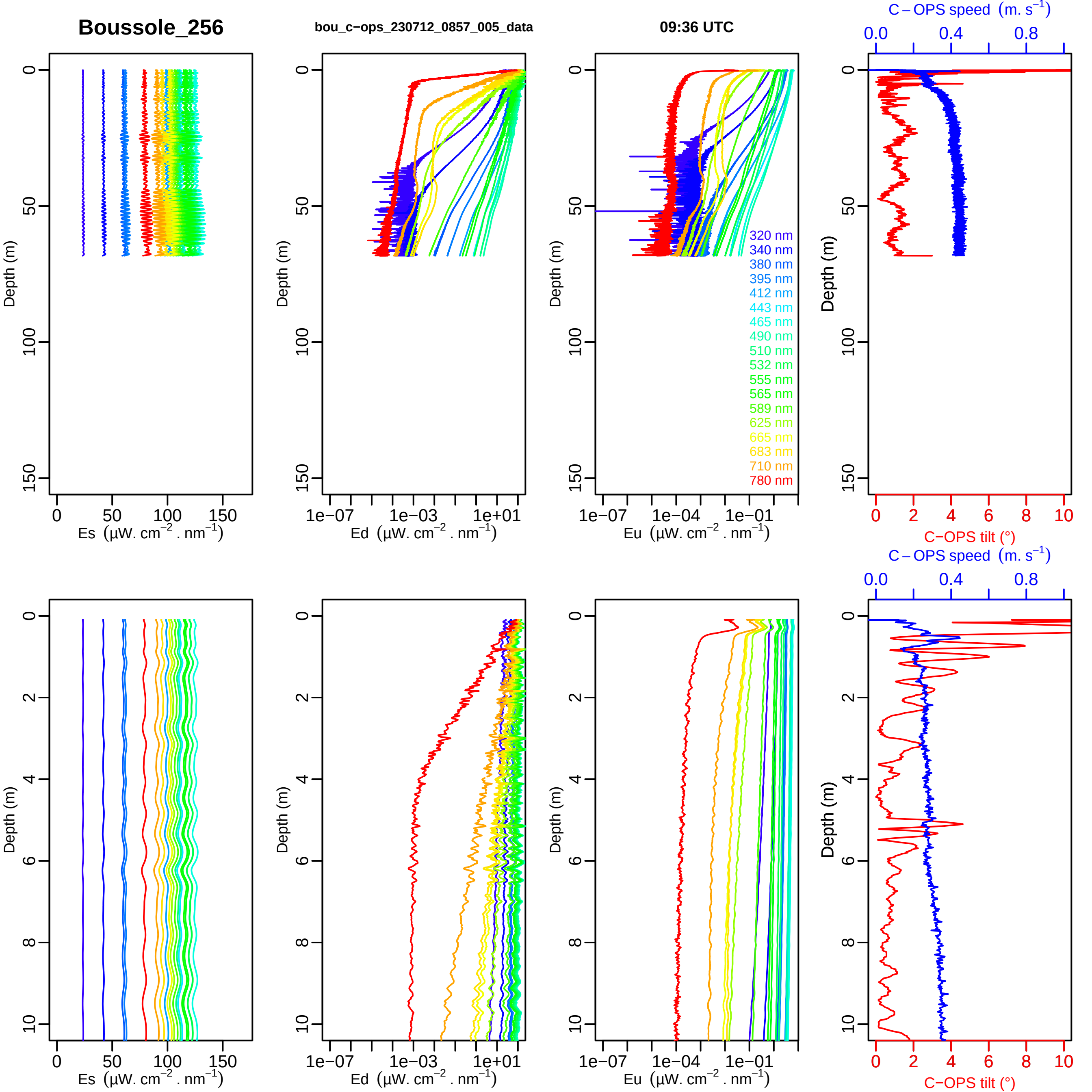

Boussole_254
bou_c-ops_230509_0944_003_data
10:23 UTC
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C − OPS speed (m. s−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm



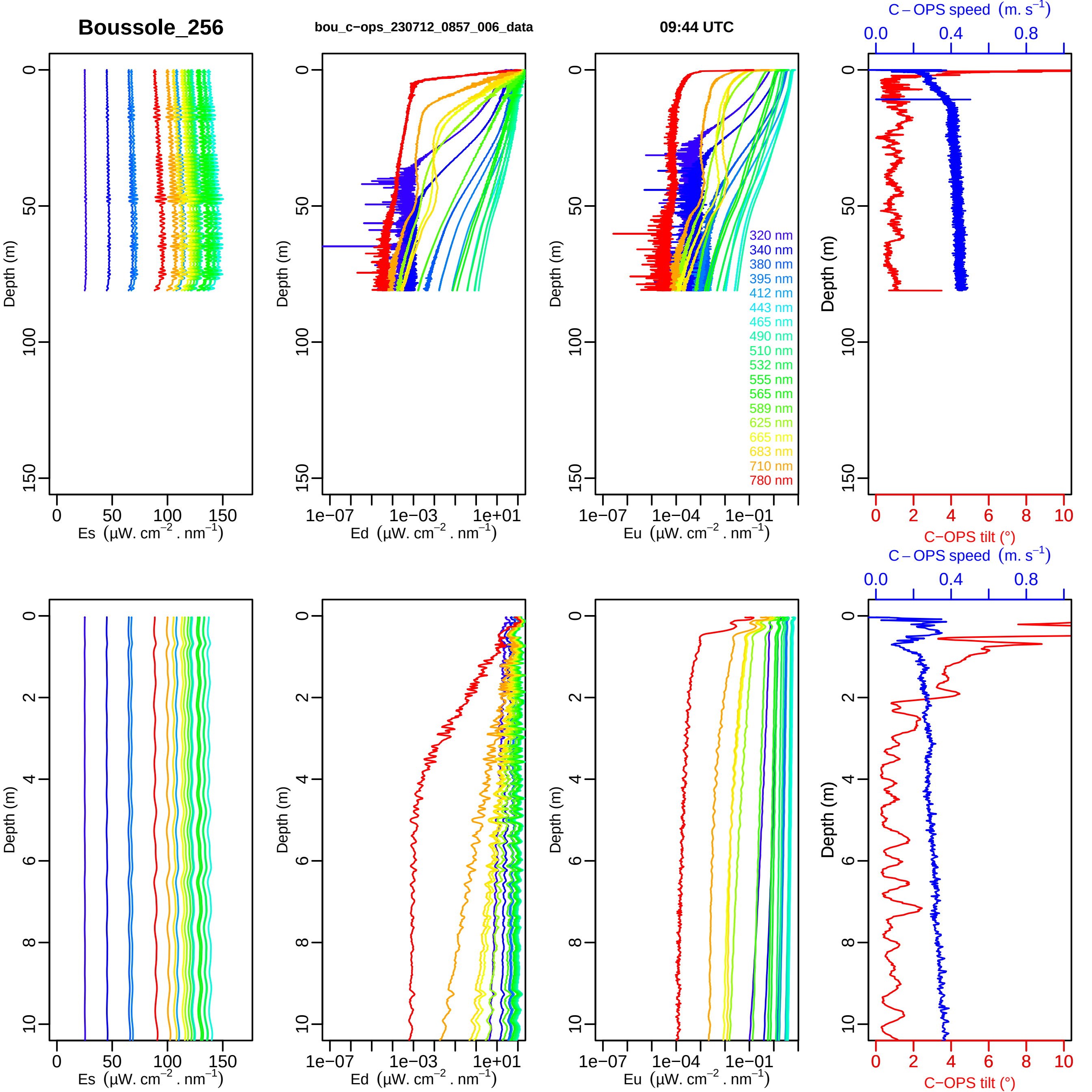
Boussole_254
bou_c−ops_230509_0944_004_data
10:37 UTC
C − OPS speed (m. s−1)
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm



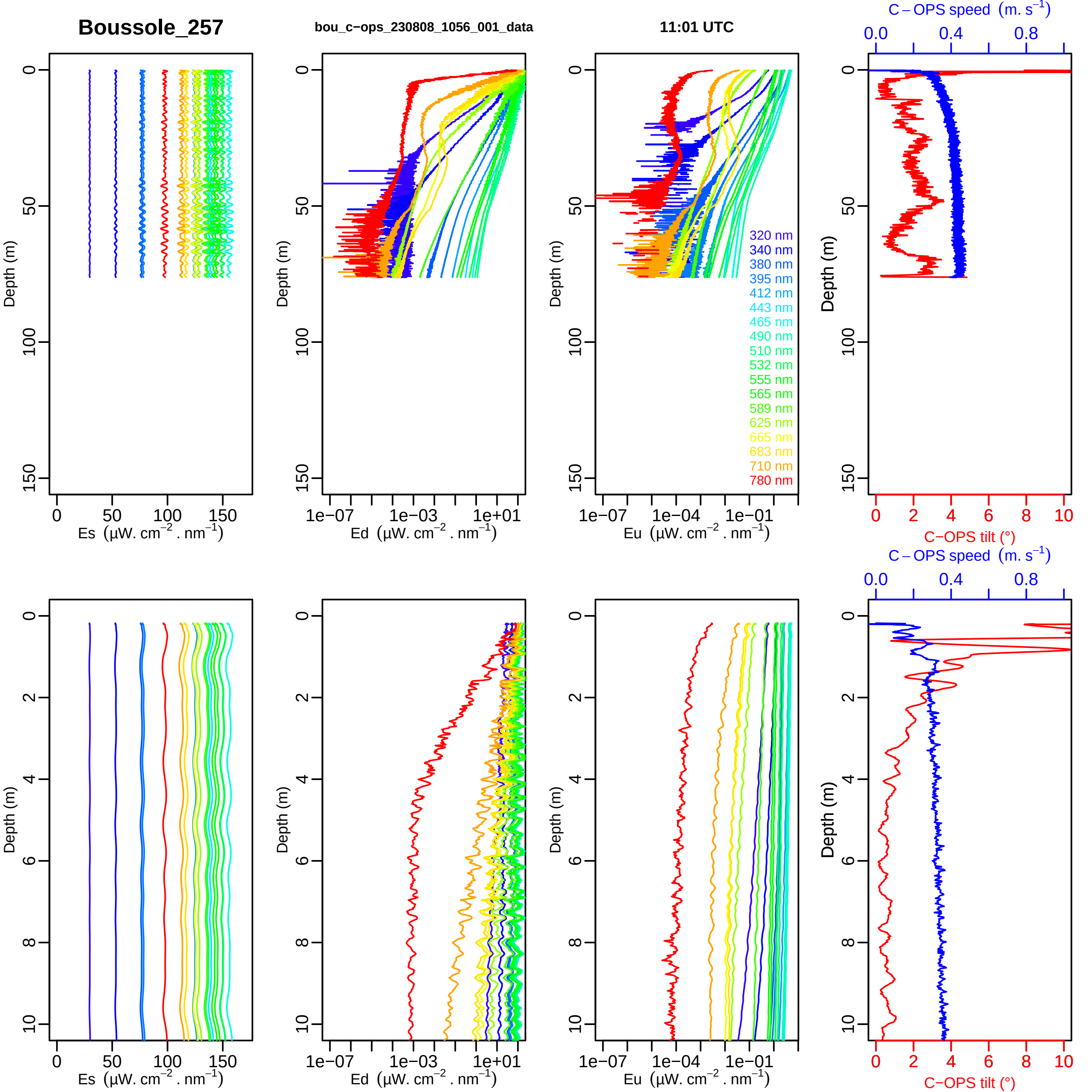
Boussole_256
bou_c−ops_230712_0857_004_data
09:28 UTC
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C − OPS speed (m. s−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm



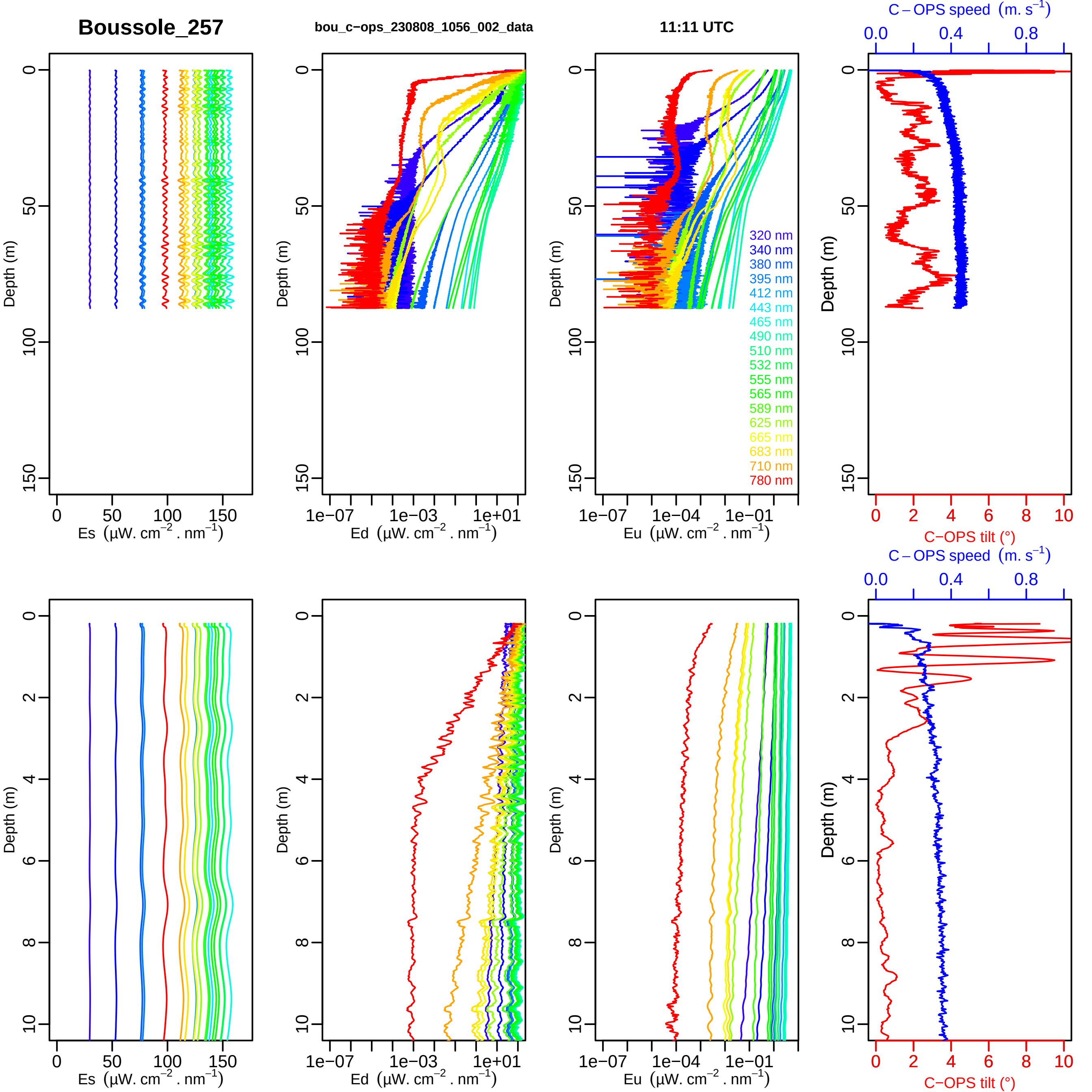
Boussole_256
bou_c−ops_230712_0857_005_data
09:36 UTC
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C − OPS speed (m. s−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm

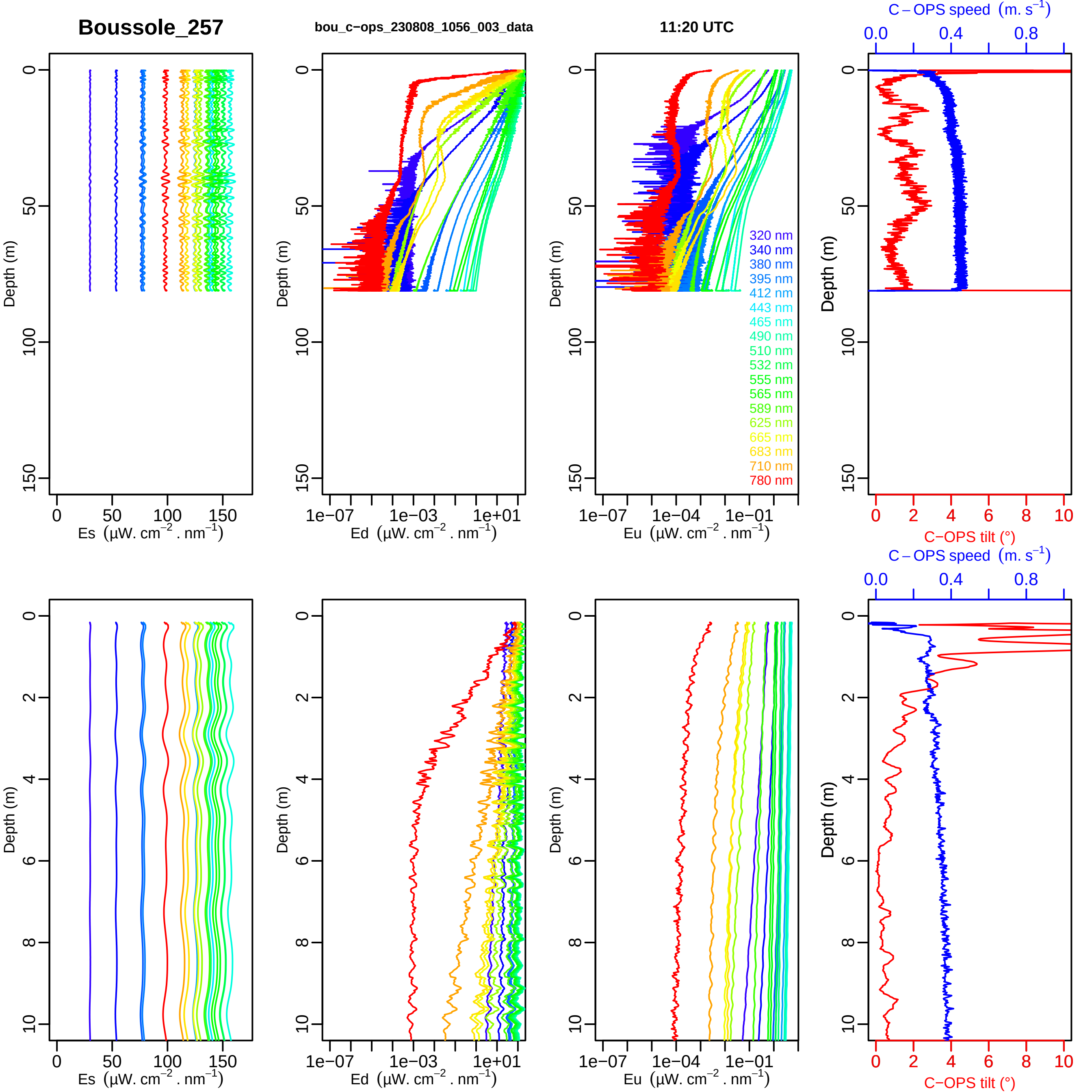


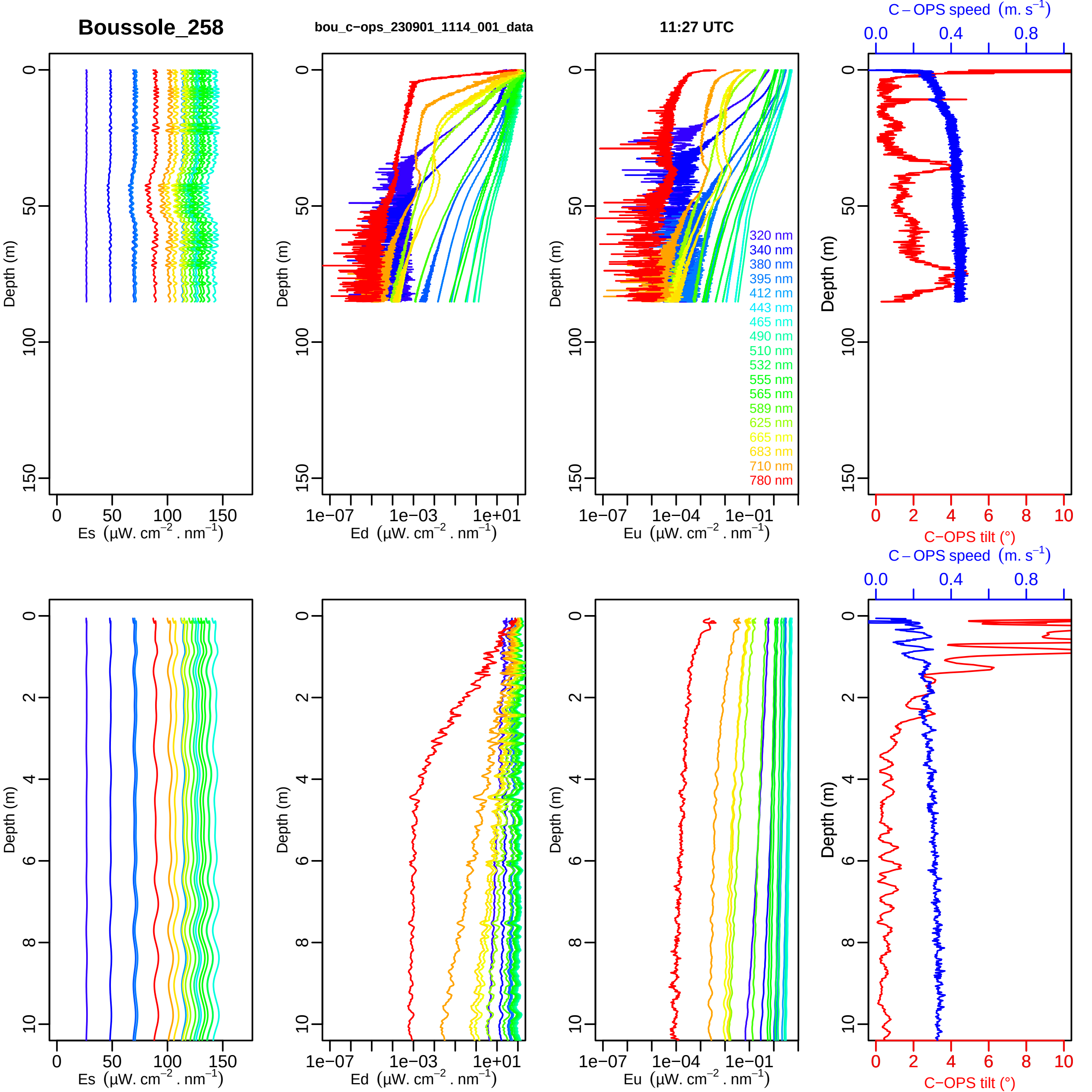
Boussole_256
bou_c−ops_230712_0857_006_data
09:44 UTC
C − OPS speed (m. s−1)
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm



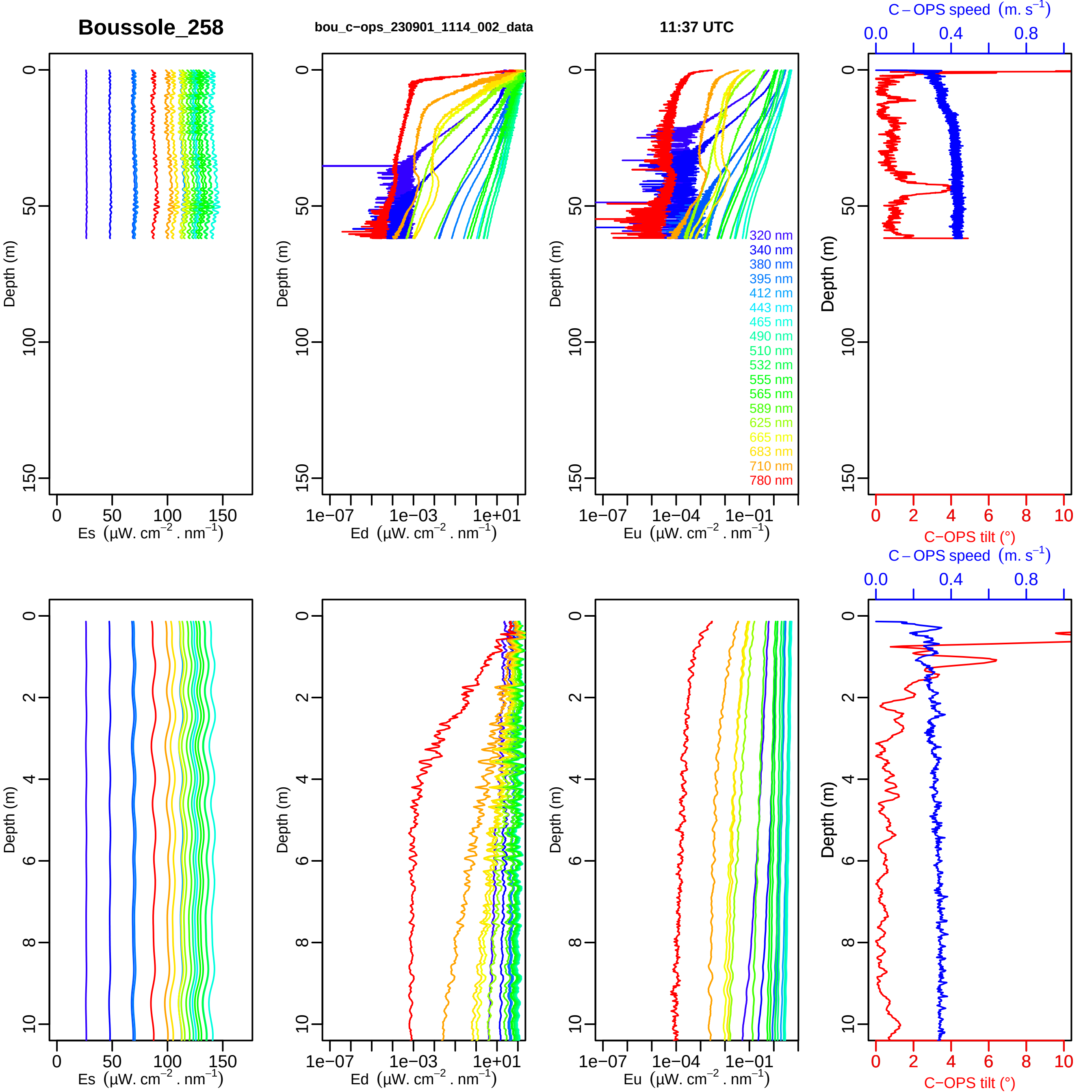
Boussole_257
bou_c−ops_230808_1056_001_data
11:01 UTC
C − OPS speed (m. s−1)
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm


Boussole_257
bou_c−ops_230808_1056_002_data
11:11 UTC
C − OPS speed (m. s−1)
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm

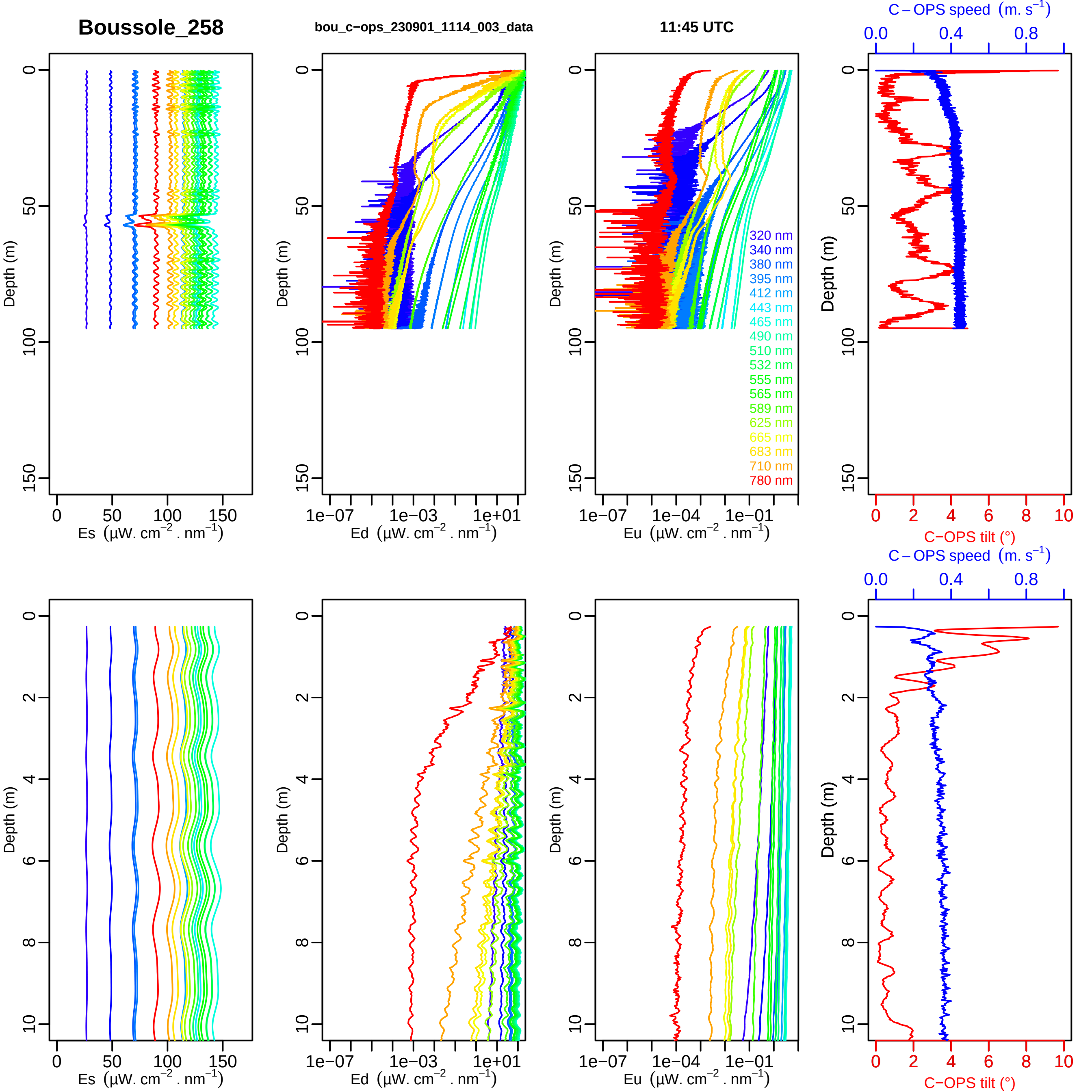

Boussole_257
bou_c−ops_230808_1056_003_data
11:20 UTC
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C − OPS speed (m. s−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm



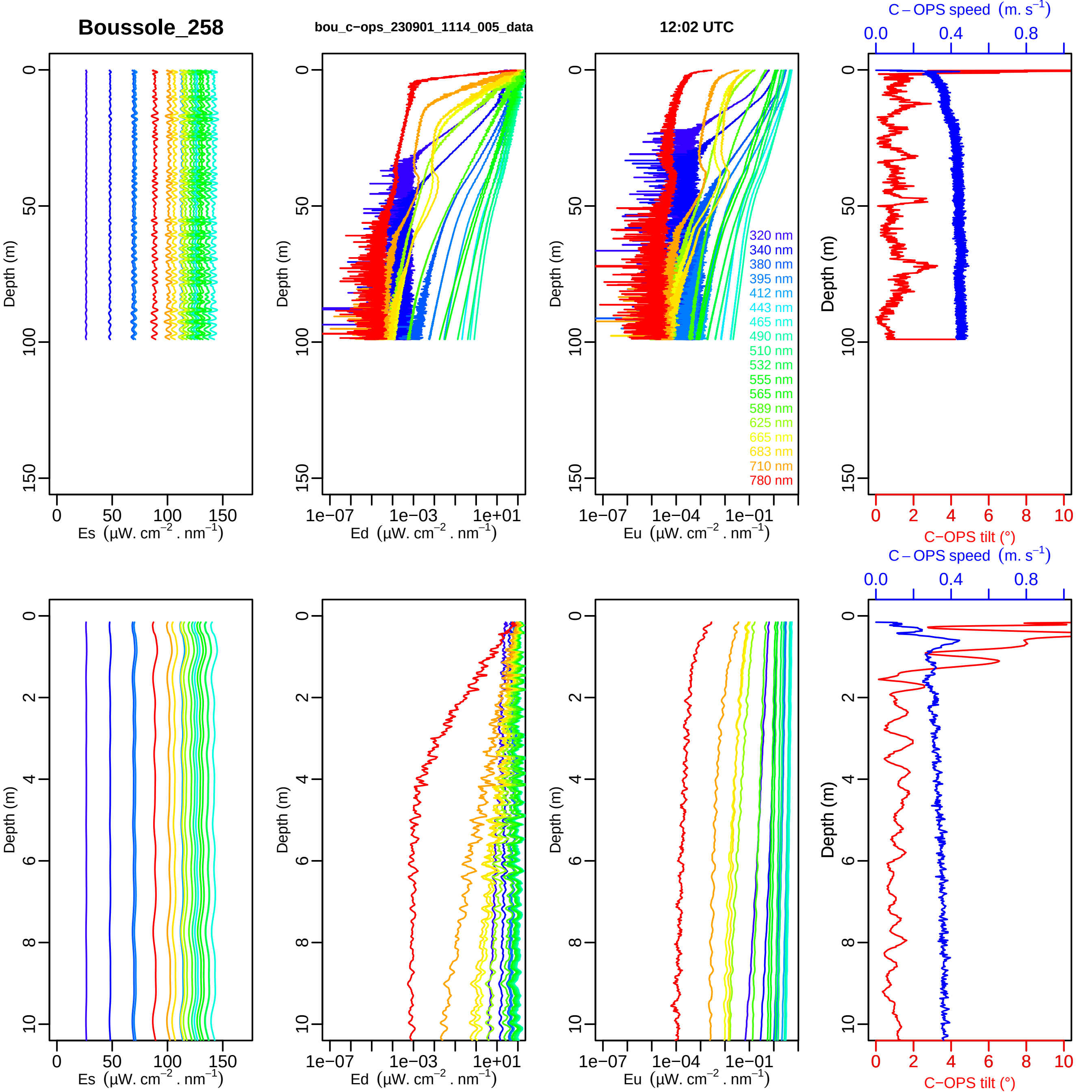
Boussole_258
bou_c−ops_230901_1114_001_data
11:27 UTC
C − OPS speed (m. s−1)
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm



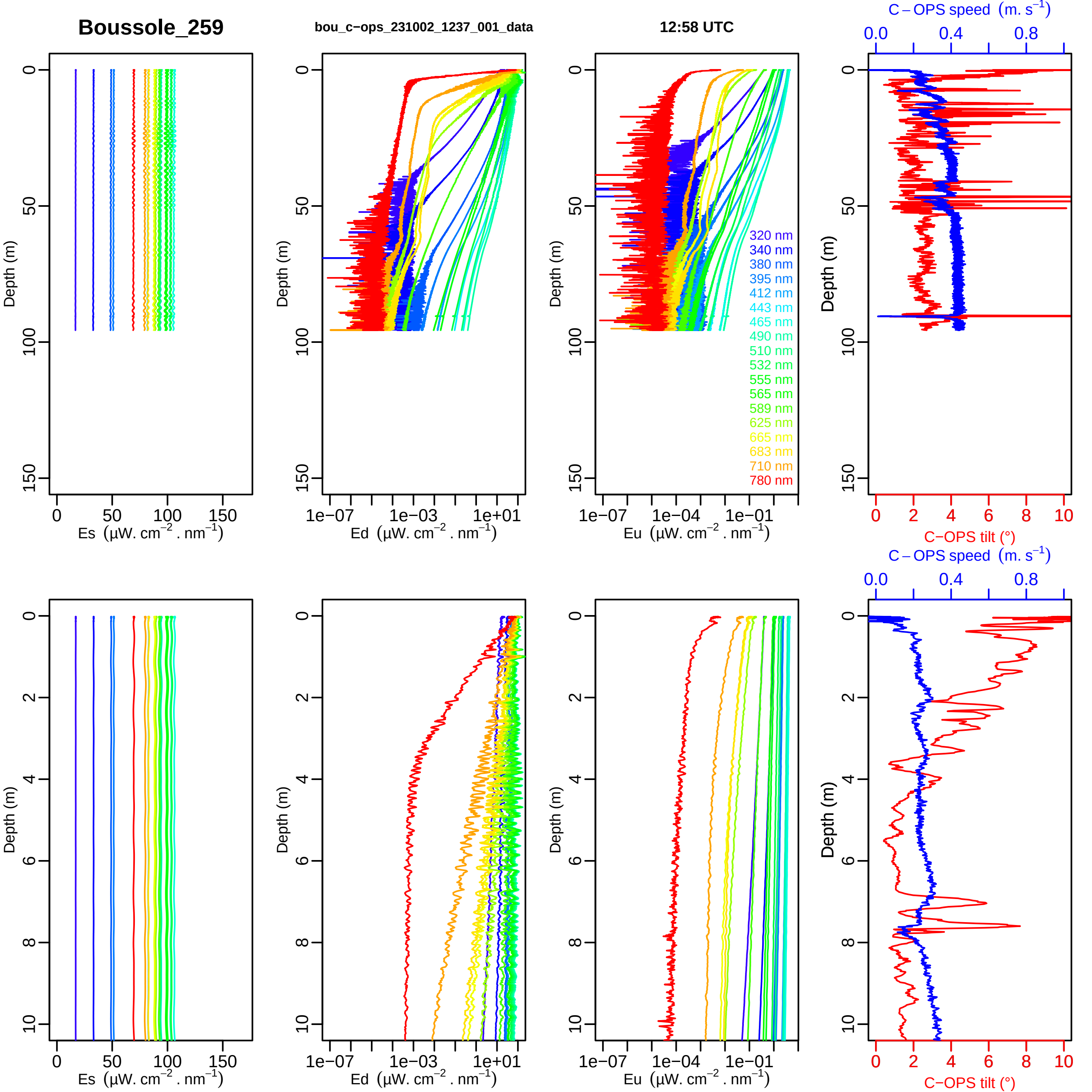
Boussole_258
bou_c-ops_230901_1114_002_data
11:37 UTC
Depth (m)
Es (µW. cm⁻². nm⁻¹)
Ed (µW. cm⁻². nm⁻¹)
Eu (µW. cm⁻². nm⁻¹)
C – OPS speed (m. s⁻¹)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm



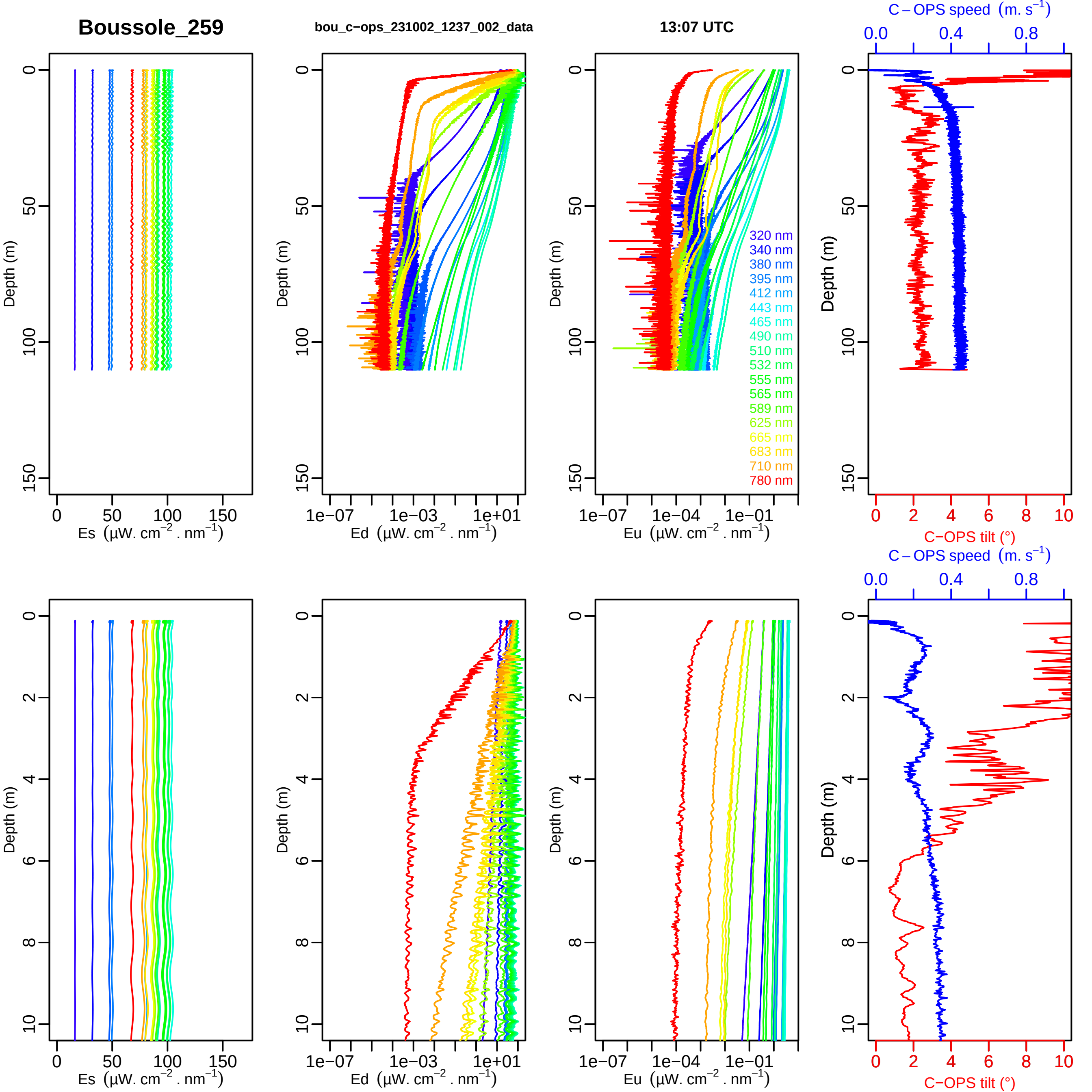
Boussole_258
bou_c−ops_230901_1114_003_data
11:45 UTC
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C − OPS speed (m. s−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm



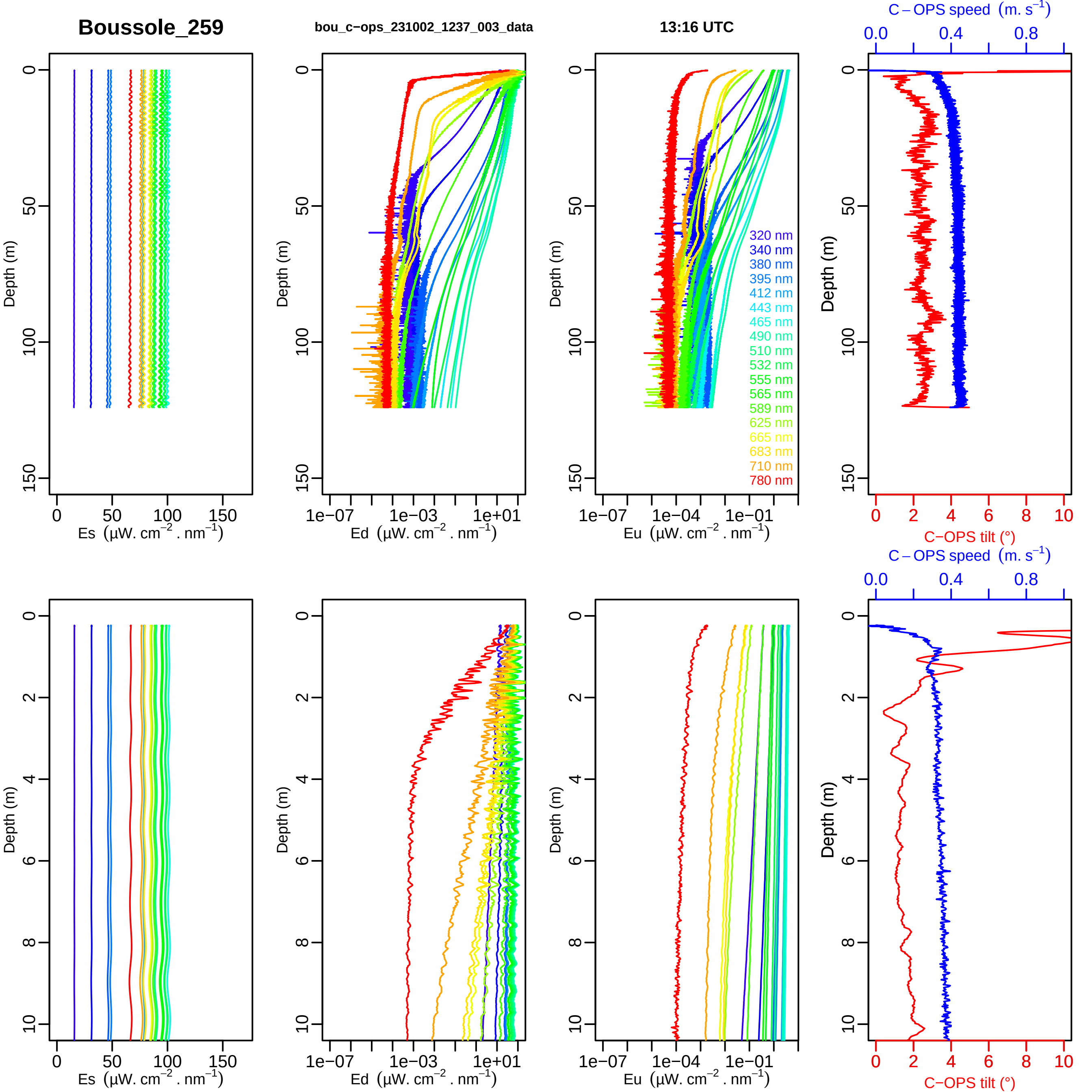
Boussole_258
bou_c−ops_230901_1114_005_data
12:02 UTC
C − OPS speed (m. s−1)
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm



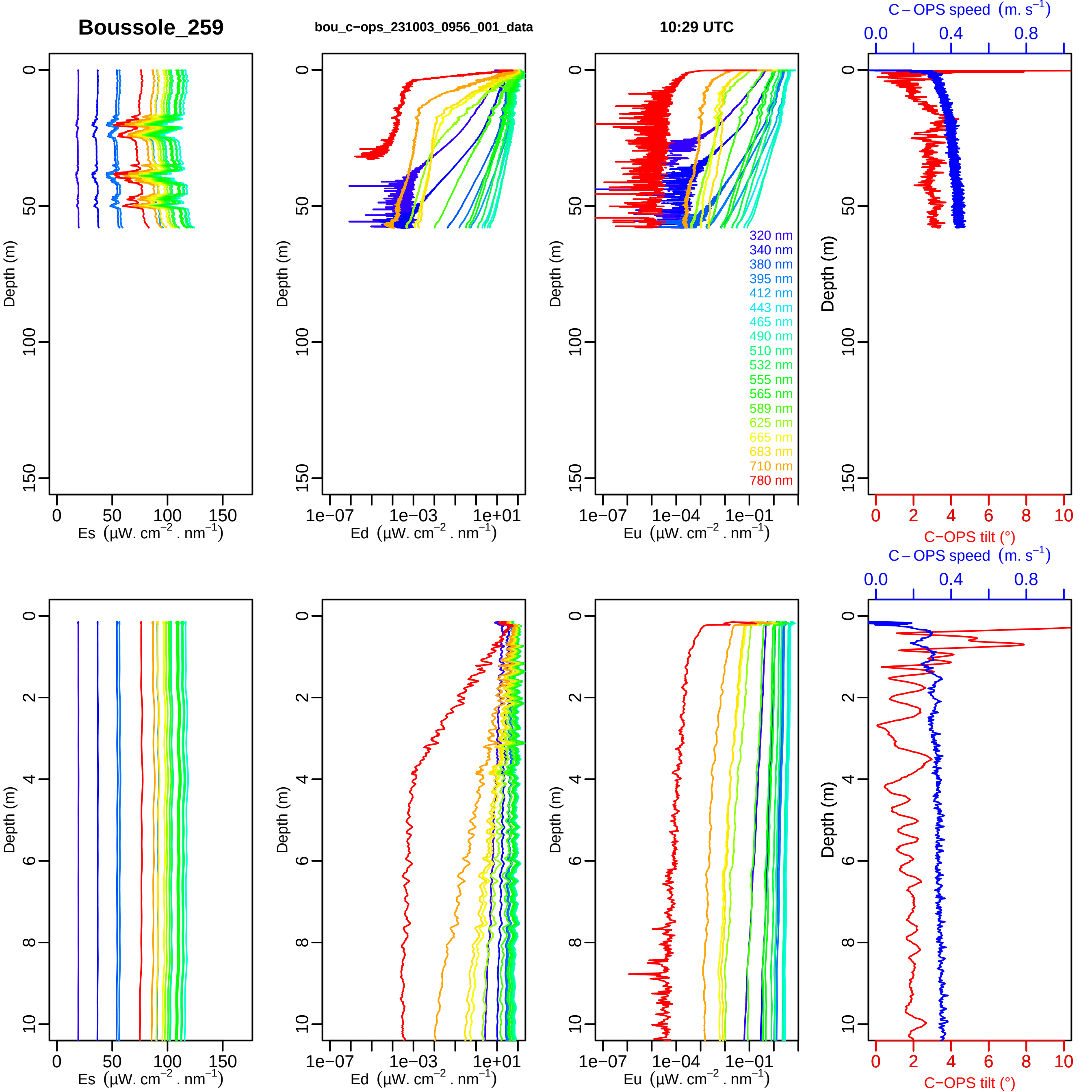
Boussole_259
bou_c−ops_231002_1237_001_data
12:58 UTC
Depth (m)
Es (µW. cm^{-2} . nm^{-1})
Ed (µW. cm^{-2} . nm^{-1})
Eu (µW. cm^{-2} . nm^{-1})
C − OPS speed (m. s^{-1})
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm
0
50
100
150
1e−07
1e−03
1e+01
1e−04
1e−01
0.0
0.4
0.8
2
4
6
8
10



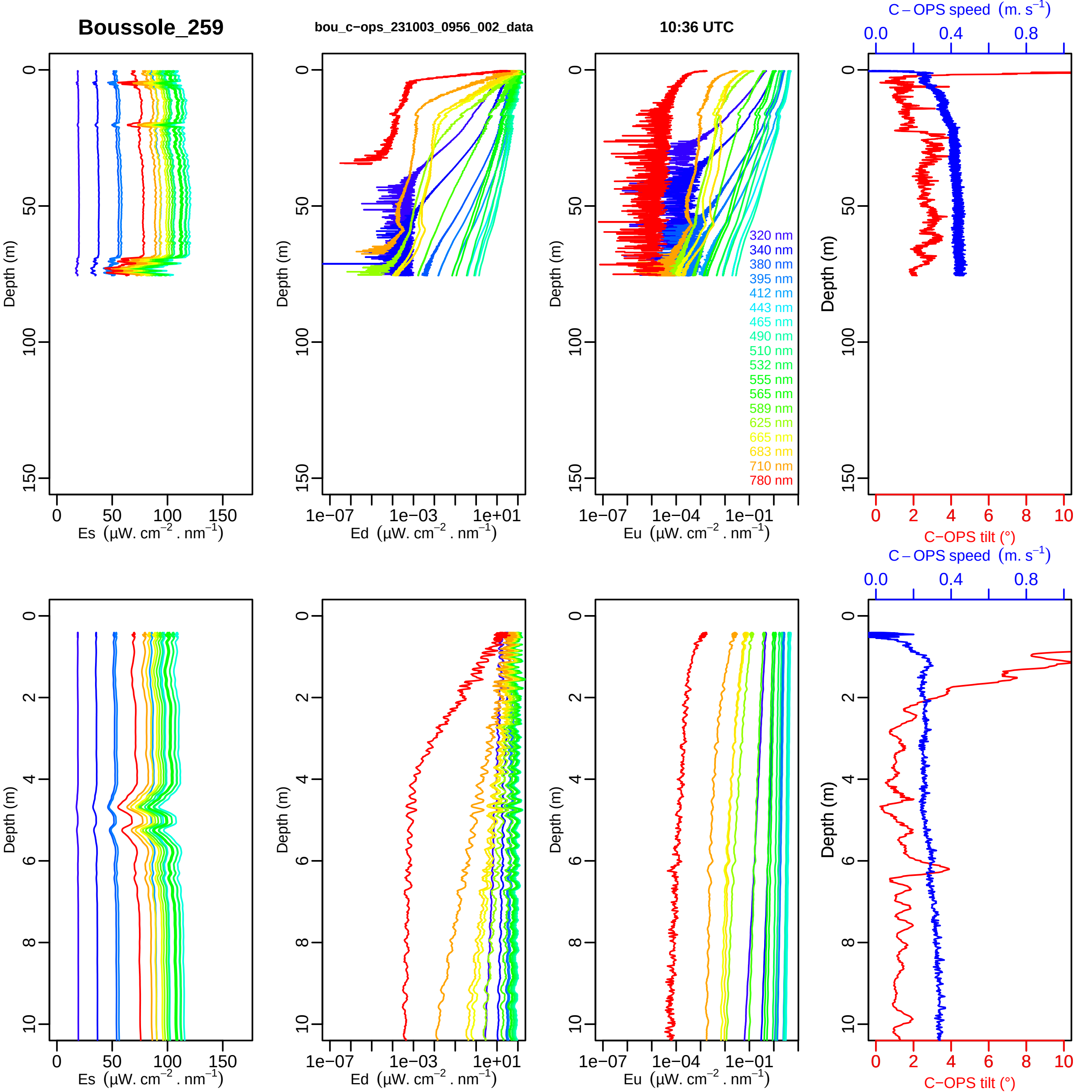
Boussole_259
bou_c−ops_231002_1237_002_data
13:07 UTC
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C − OPS speed (m. s−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm



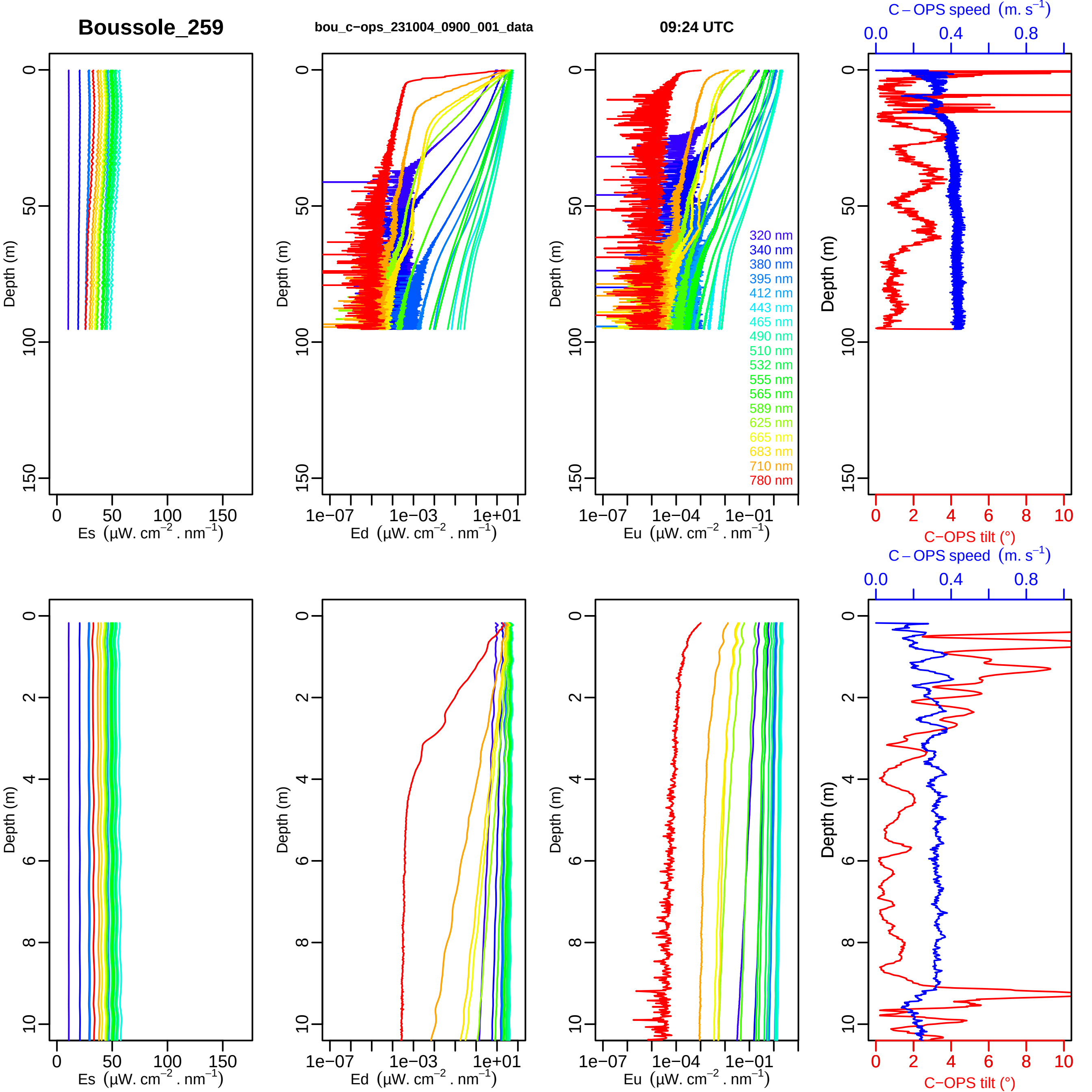
Boussole_259
bou_c−ops_231002_1237_003_data
13:16 UTC
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C − OPS speed (m. s−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm



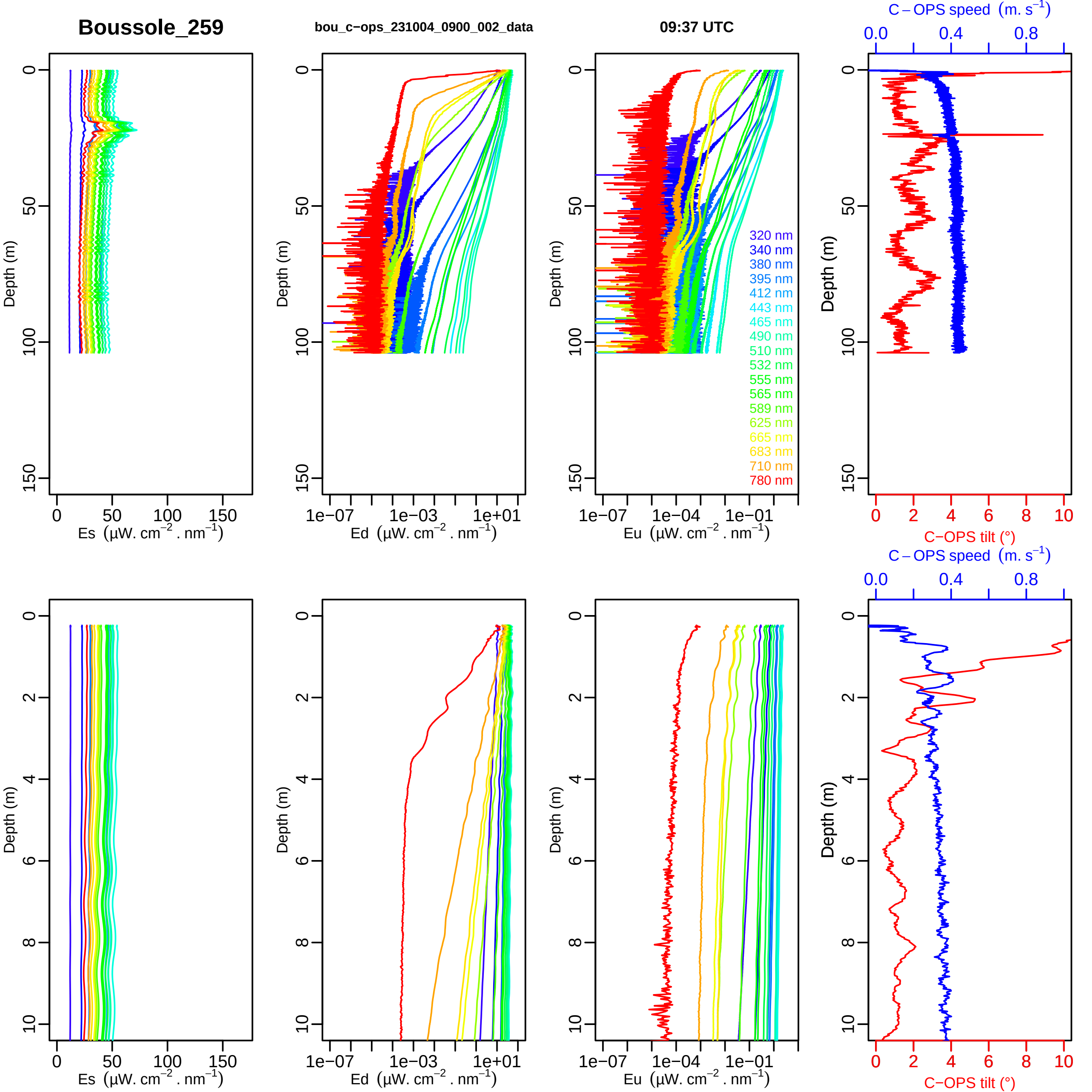
Boussole_259
bou_c−ops_231003_0956_001_data
10:29 UTC
C − OPS speed (m. s−1)
C−OPS tilt (°)
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm

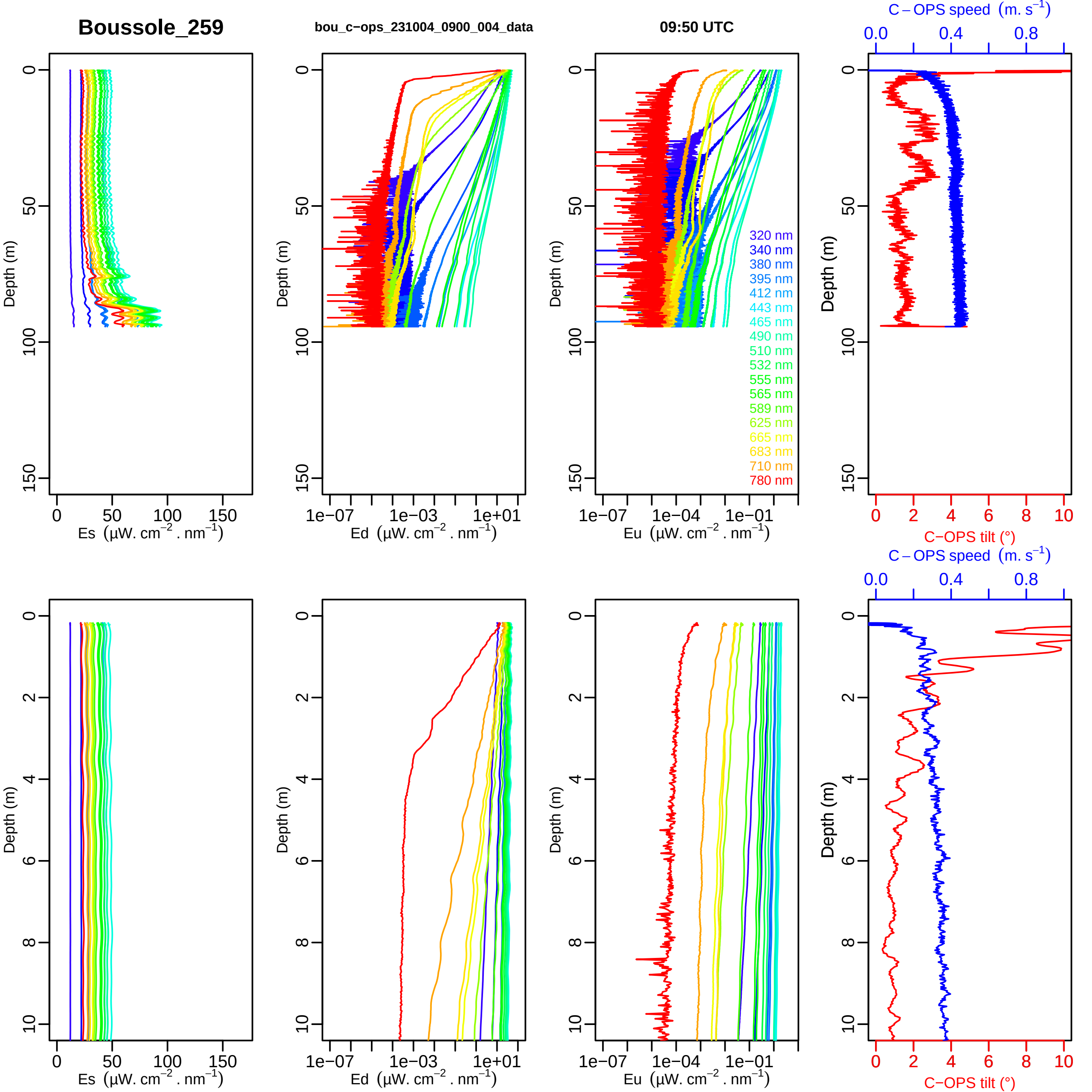


Boussole_259
bou_c-ops_231003_0956_002_data
10:36 UTC
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C – OPS speed (m. s−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm

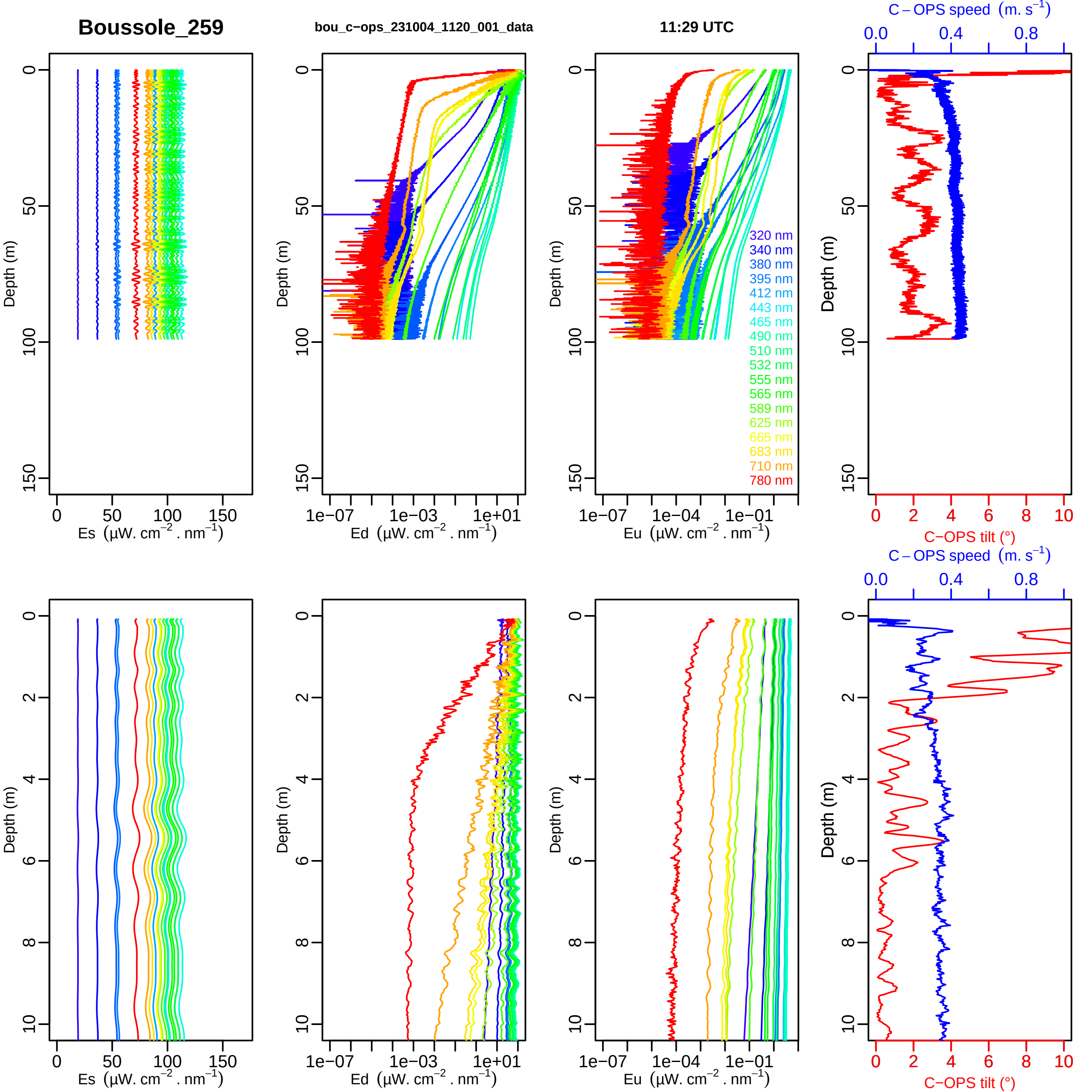


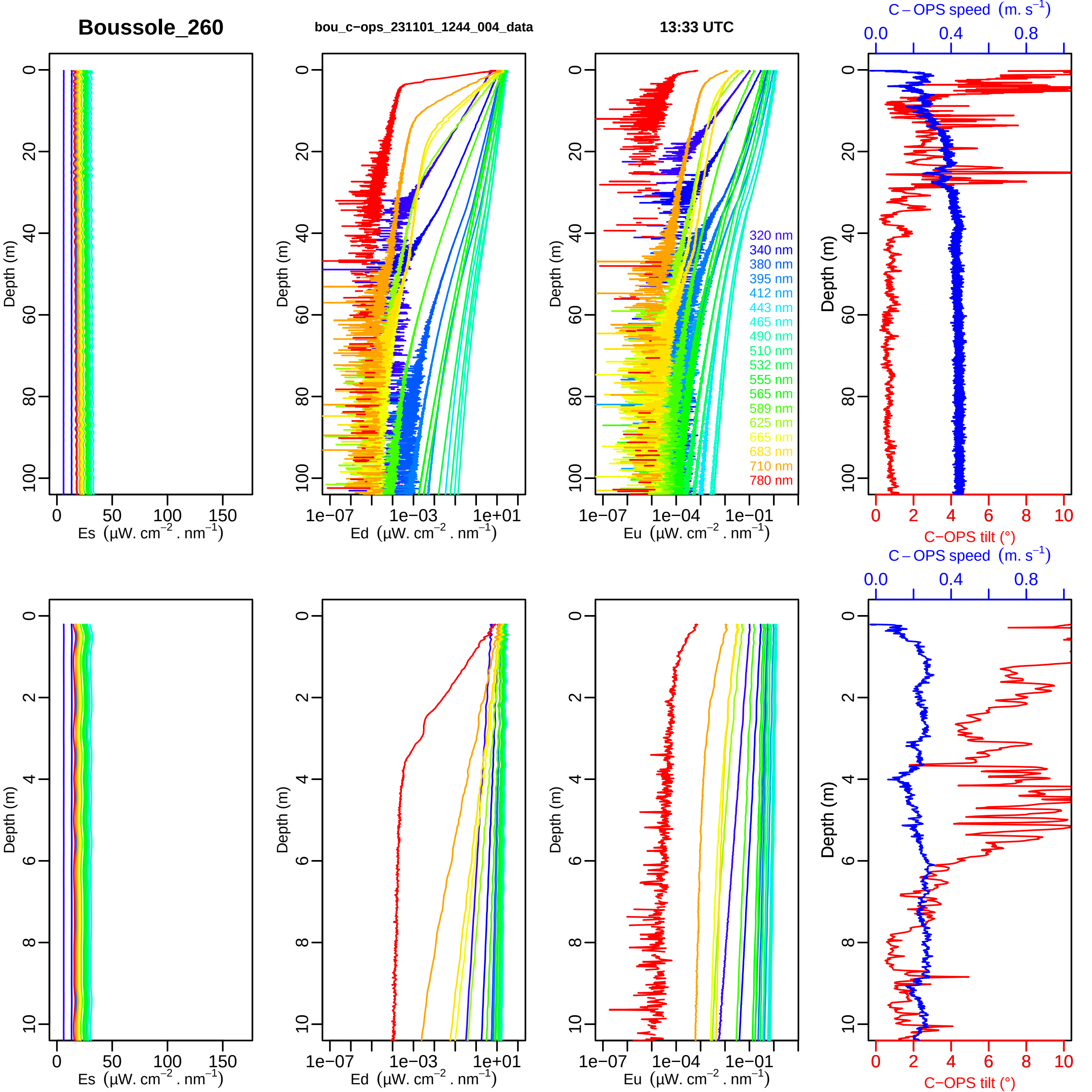
Boussole_259
bou_c−ops_231004_0900_001_data
09:24 UTC
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C − OPS speed (m. s−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm


Boussole_259
bou_c-ops_231004_0900_002_data
09:37 UTC
Depth (m)
Es (µW. cm^{-2} . nm^{-1})
Ed (µW. cm^{-2} . nm^{-1})
Eu (µW. cm^{-2} . nm^{-1})
C – OPS speed (m. s^{-1})
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm

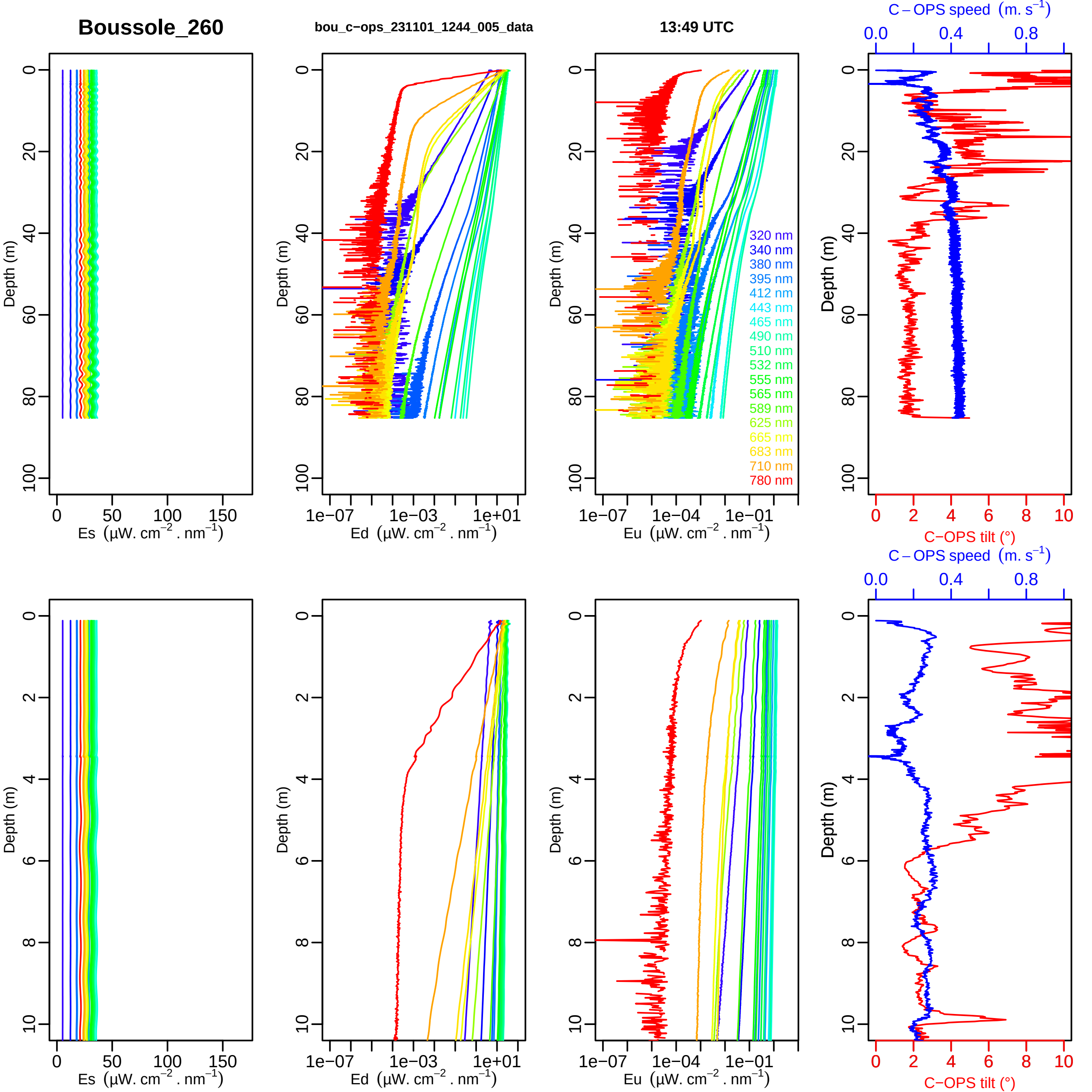


Boussole_259
bou_c−ops_231004_0900_004_data
09:50 UTC
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C − OPS speed (m. s−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm

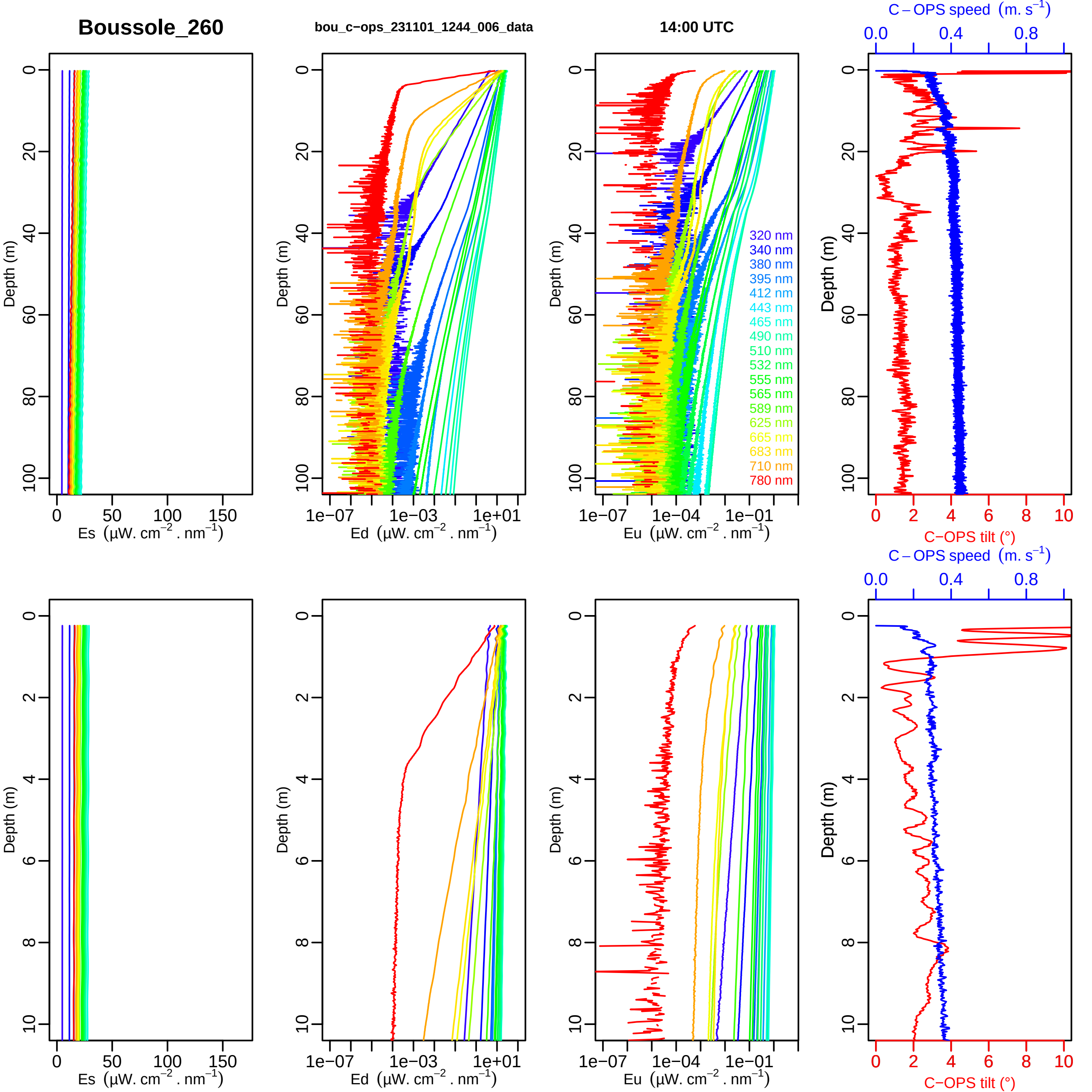

Boussole_259
bou_c−ops_231004_1120_001_data
11:29 UTC
C − OPS speed (m. s−1)
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm

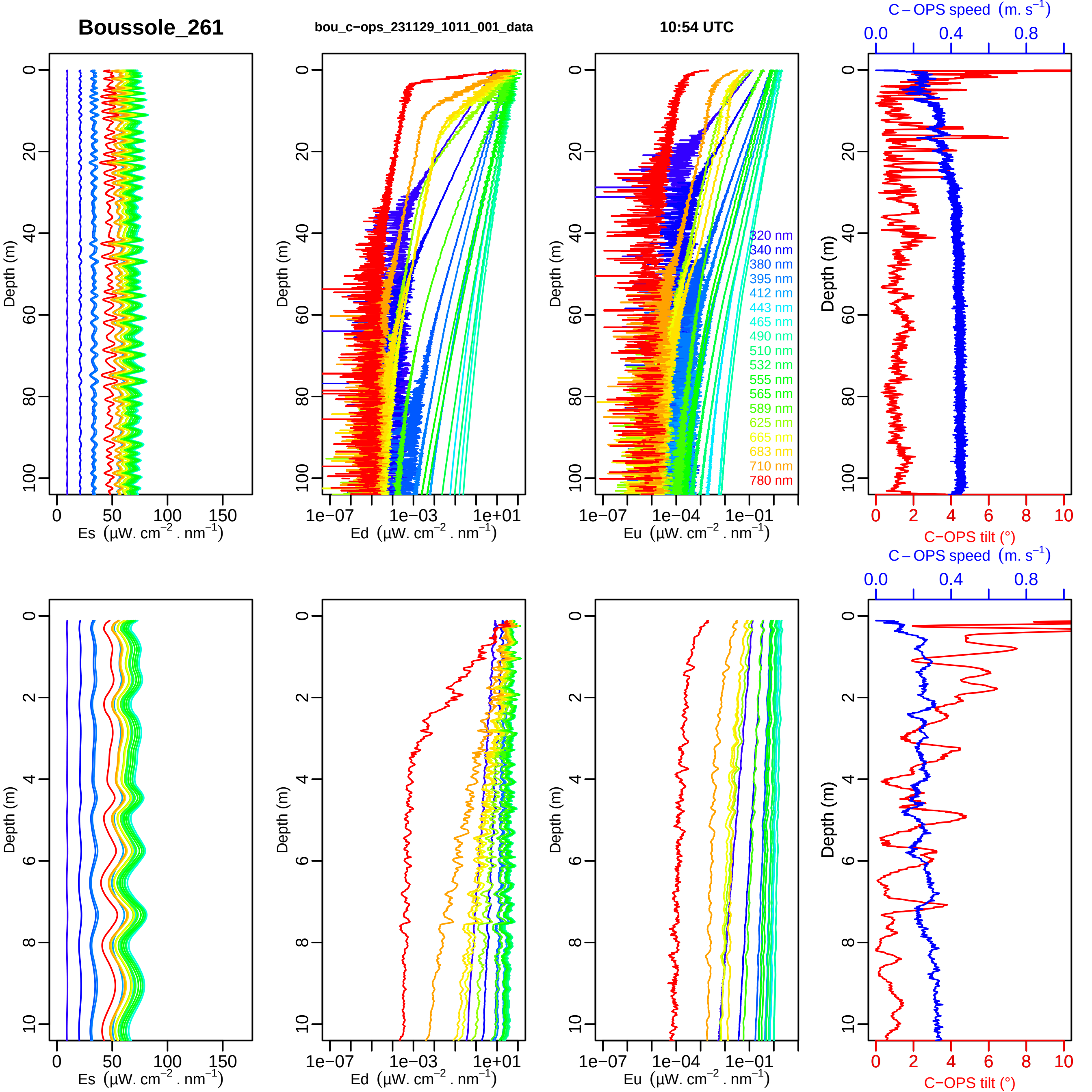


Boussole_260
bou_c−ops_231101_1244_004_data
13:33 UTC
C − OPS speed (m. s−1)
Depth (m)
Es (μW. cm−2 . nm−1)
Ed (μW. cm−2 . nm−1)
Eu (μW. cm−2 . nm−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm

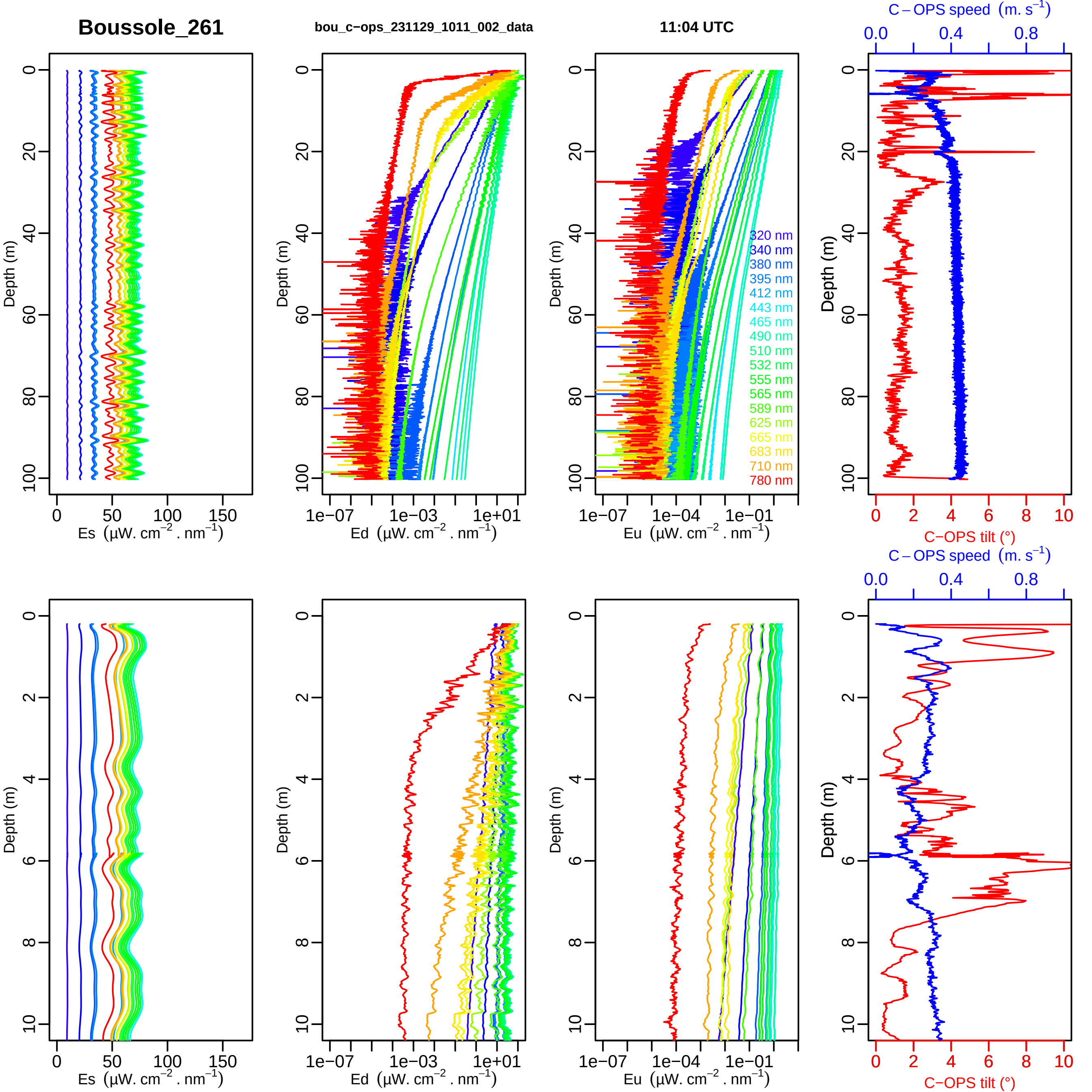


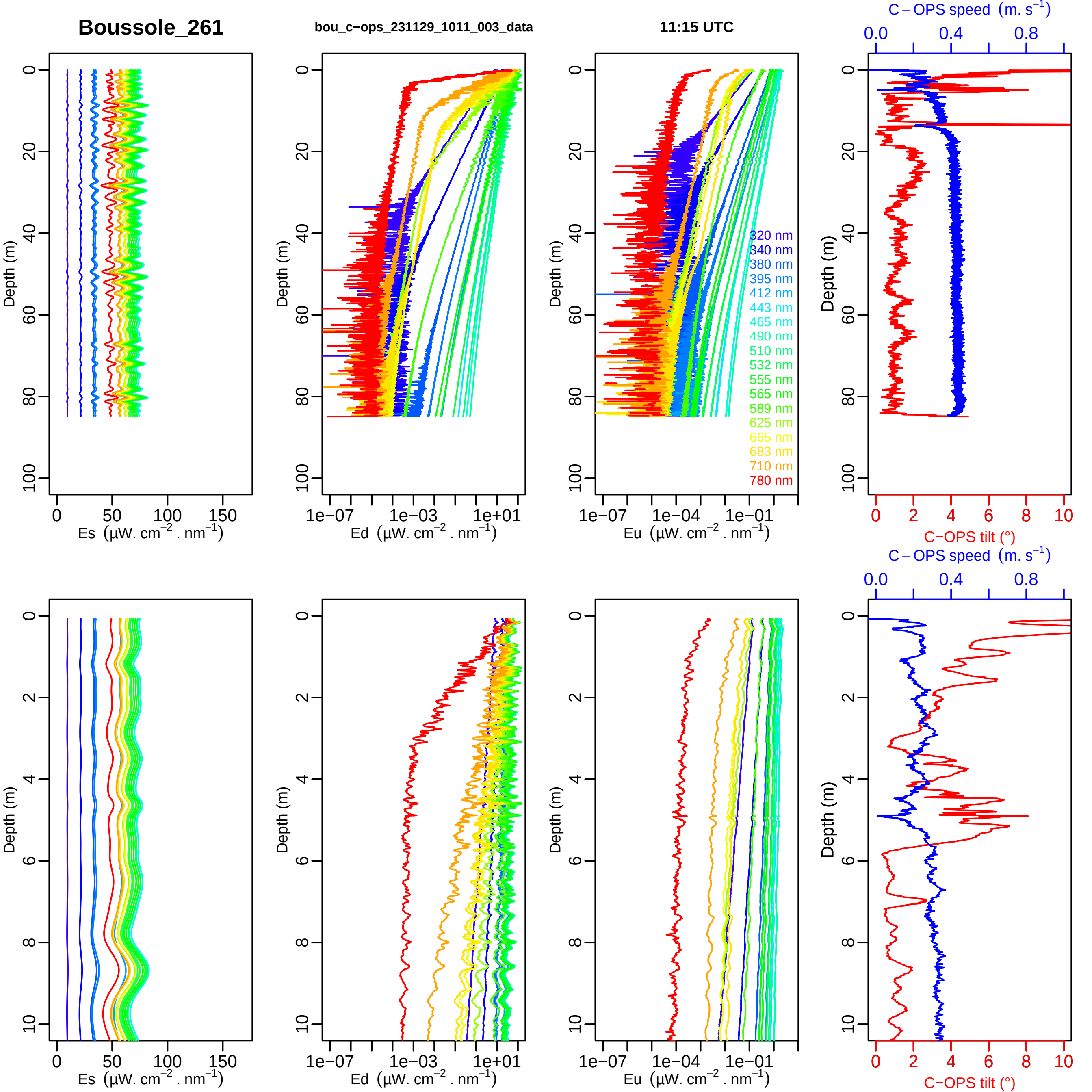
Boussole_260
bou_c-ops_231101_1244_005_data
13:49 UTC
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C – OPS speed (m. s−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm


Boussole_260
bou_c-ops_231101_1244_006_data
14:00 UTC
Depth (m)
Es (µW. cm⁻² . nm⁻¹)
Ed (µW. cm⁻² . nm⁻¹)
Eu (µW. cm⁻² . nm⁻¹)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm
C – OPS speed (m. s⁻¹)
C–OPS tilt (°)

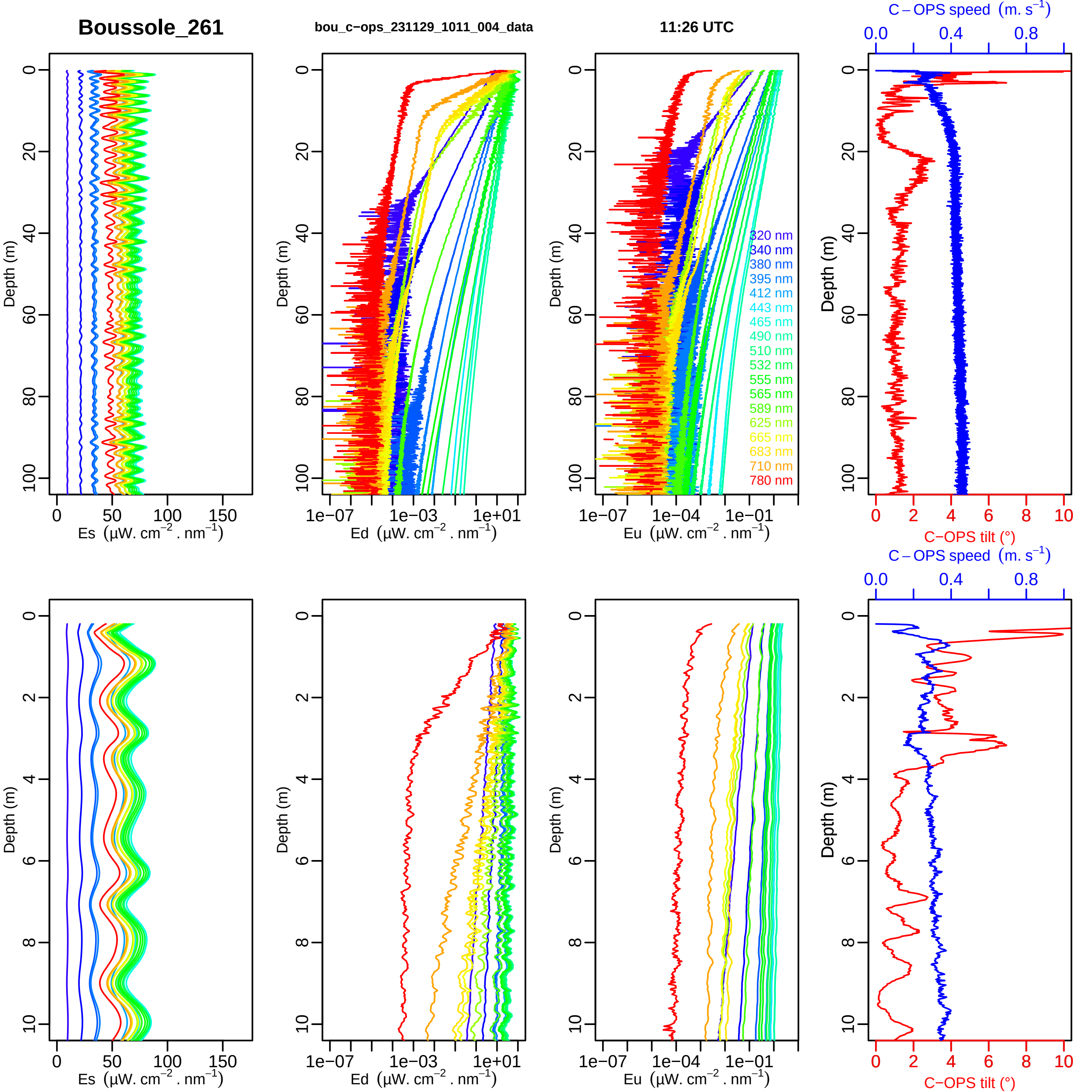


Boussole_261
bou_c-ops_231129_1011_001_data
10:54 UTC
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C − OPS speed (m. s−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm


Boussole_261
bou_c−ops_231129_1011_002_data
11:04 UTC
C − OPS speed (m. s^−1)
Depth (m)
Es (µW. cm^−2 . nm^−1)
Ed (µW. cm^−2 . nm^−1)
Eu (µW. cm^−2 . nm^−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm



Boussole_261
bou_c-ops_231129_1011_003_data
11:15 UTC
C – OPS speed (m. s−1)
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm



Boussole_261
bou_c−ops_231129_1011_004_data
11:26 UTC
Depth (m)
Es (µW. cm−2 . nm−1)
Ed (µW. cm−2 . nm−1)
Eu (µW. cm−2 . nm−1)
C − OPS speed (m. s−1)
C−OPS tilt (°)
320 nm
340 nm
380 nm
395 nm
412 nm
443 nm
465 nm
490 nm
510 nm
532 nm
555 nm
565 nm
589 nm
625 nm
665 nm
683 nm
710 nm
780 nm

Problems identified during the cruises

BOUSSOLE #250
The second C-OPS profile was stopped at 45 m depth because of an unstable surface irradiance.

BOUSSOLE #251
No problems.

BOUSSOLE #252
The first attempt of the C-OPS failed: the signal on the computer was lost. The connectors and cables of the C-OPS were cleaned but it seems that the problem provide from a computer bug. The software was restarted and the C-OPS worked correctly.

BOUSSOLE #253
No problems.

BOUSSOLE #254
No problems.

BOUSSOLE#255
C-OPS profiles could not be performed because of a technical problem: the communication between the deck-unit and the computer was lost after two attempts of deployment due to an unknown reason. It was not possible to perform other tests because of the lack of time. It will be tested in the lab.

BOUSSOLE#256
During the last cruise, C-OPS profiles could not be performed because of a technical problem. It appeared that the sea cable was faulty. So, another cable was used during this cruise but it appeared that the cable was tangled at its end. So, the C-OPS profiles had to be stopped between 60 and 80 meters depth.

BOUSSOLE#257
No problems.

BOUSSOLE #258
BOUSSOLE operations could not be performed the second day. At the beginning of the day, a leak was detected on the hydraulic system during the ascent of the deep CTD cast for MOOSE program.

BOUSSOLE #259
The second day, the C-OPS measurements were not optimal because of the bad sky conditions during the acquisition: the sky was cloudy with unstable irradiance. The profiles had to be stopped early during the acquisition.

BOUSSOLE #260
No problems.

BOUSSOLE #261
No problems