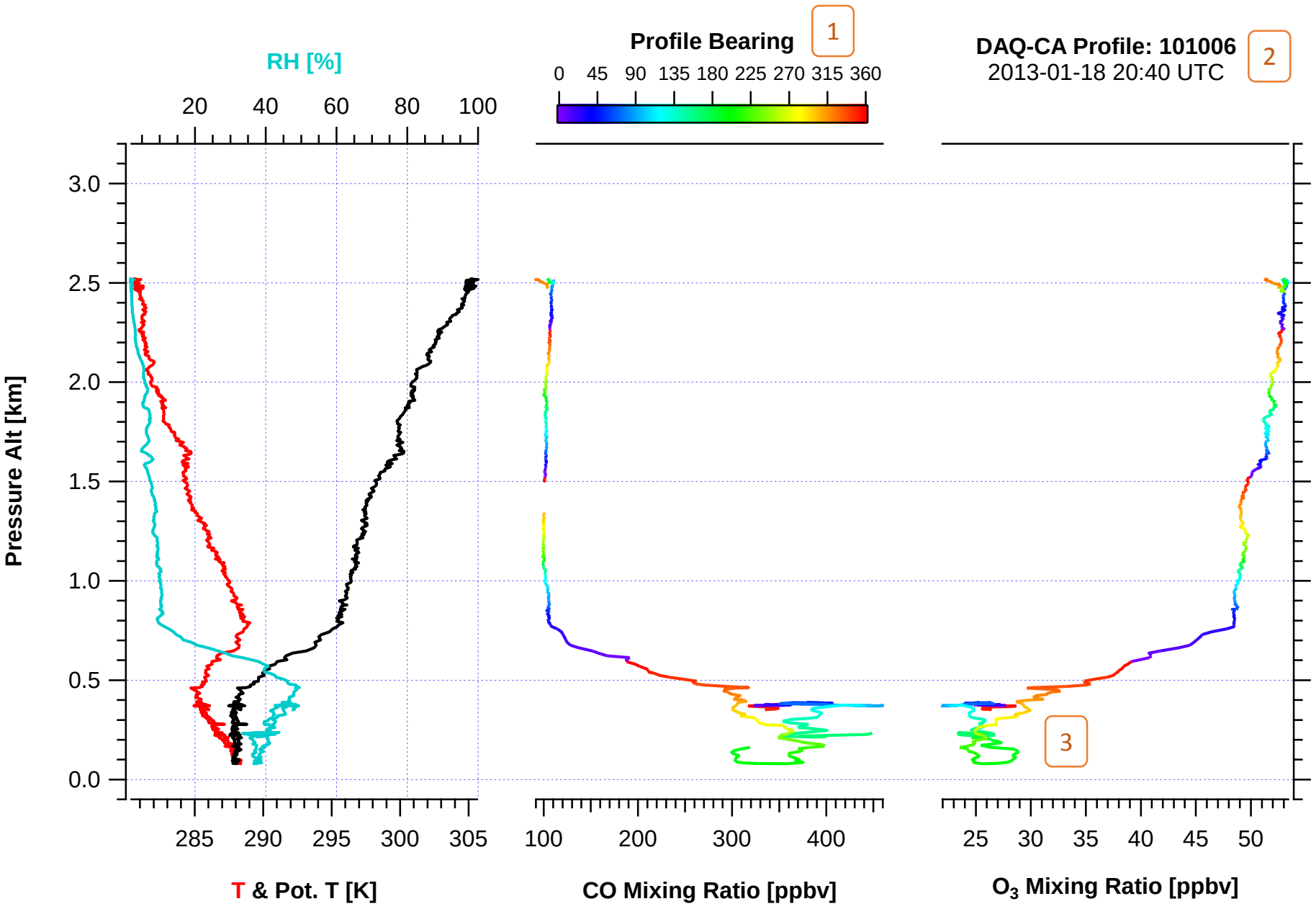


README

Data Source: all plots were made on 20150623 using data from version R3 of the DAQCA grand merge.

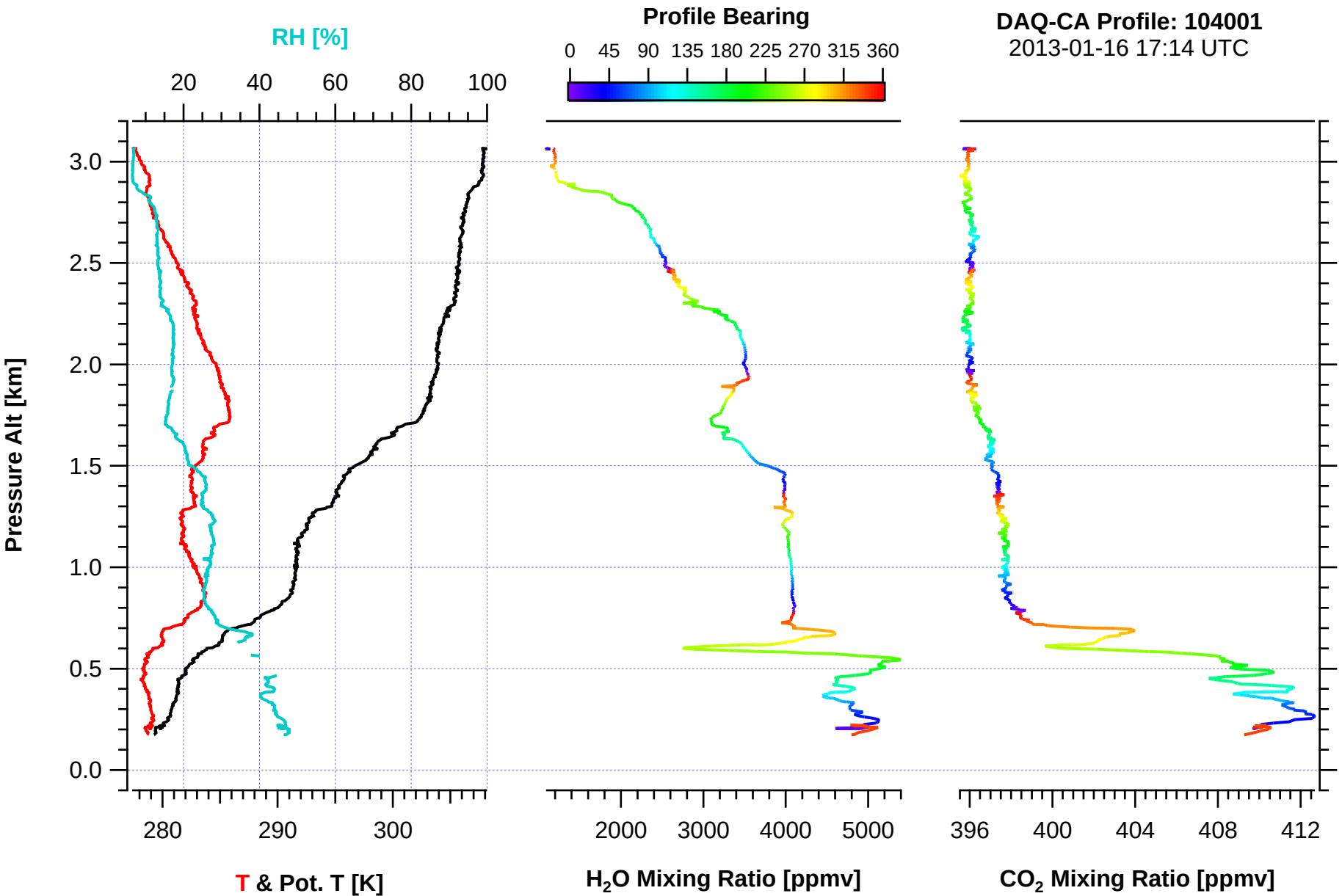
Contact Info: For more information or to request additional plots, please contact Michael Shook (michael.shook@nasa.gov, 757-864-5793).

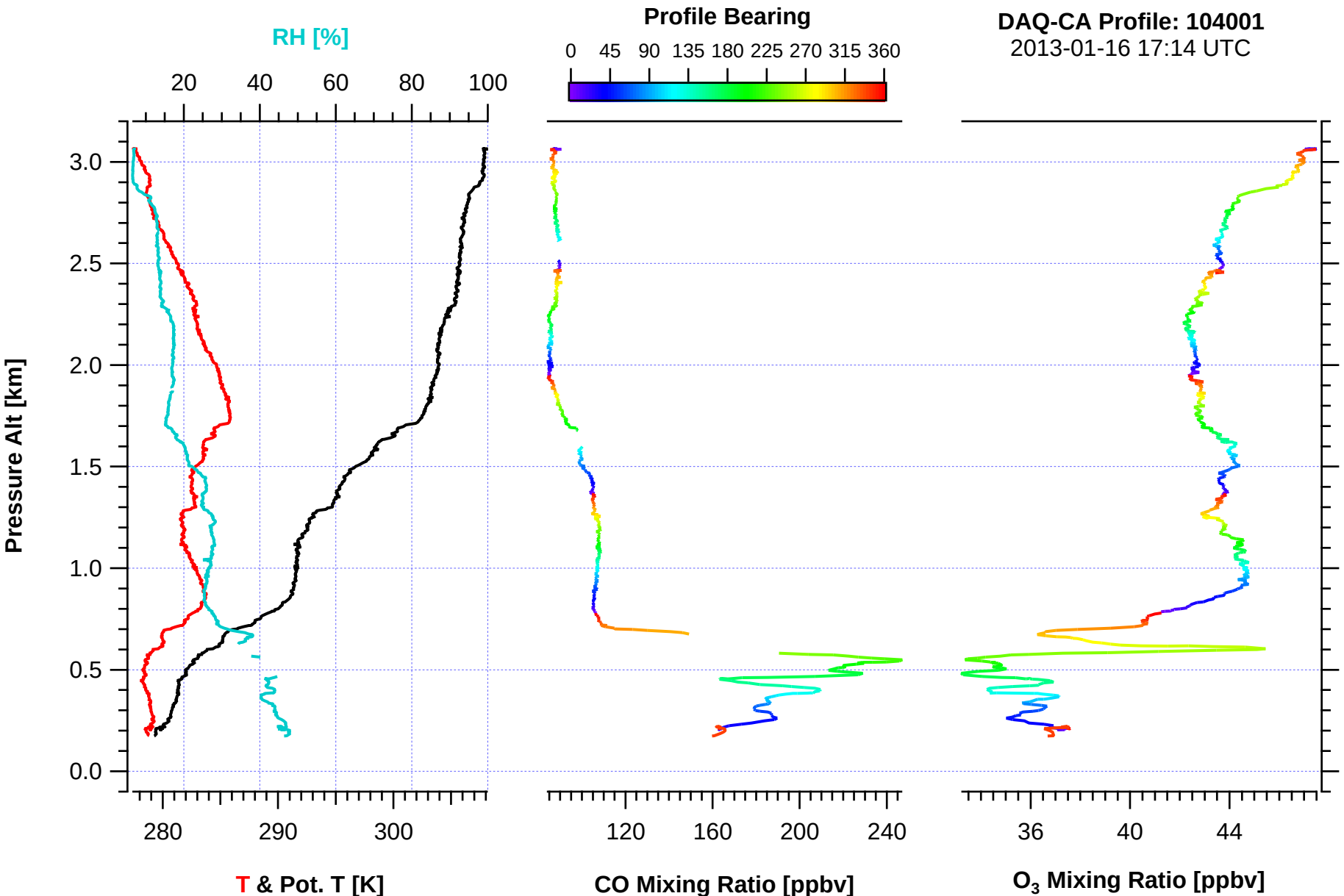
Variables plotted (merge names):

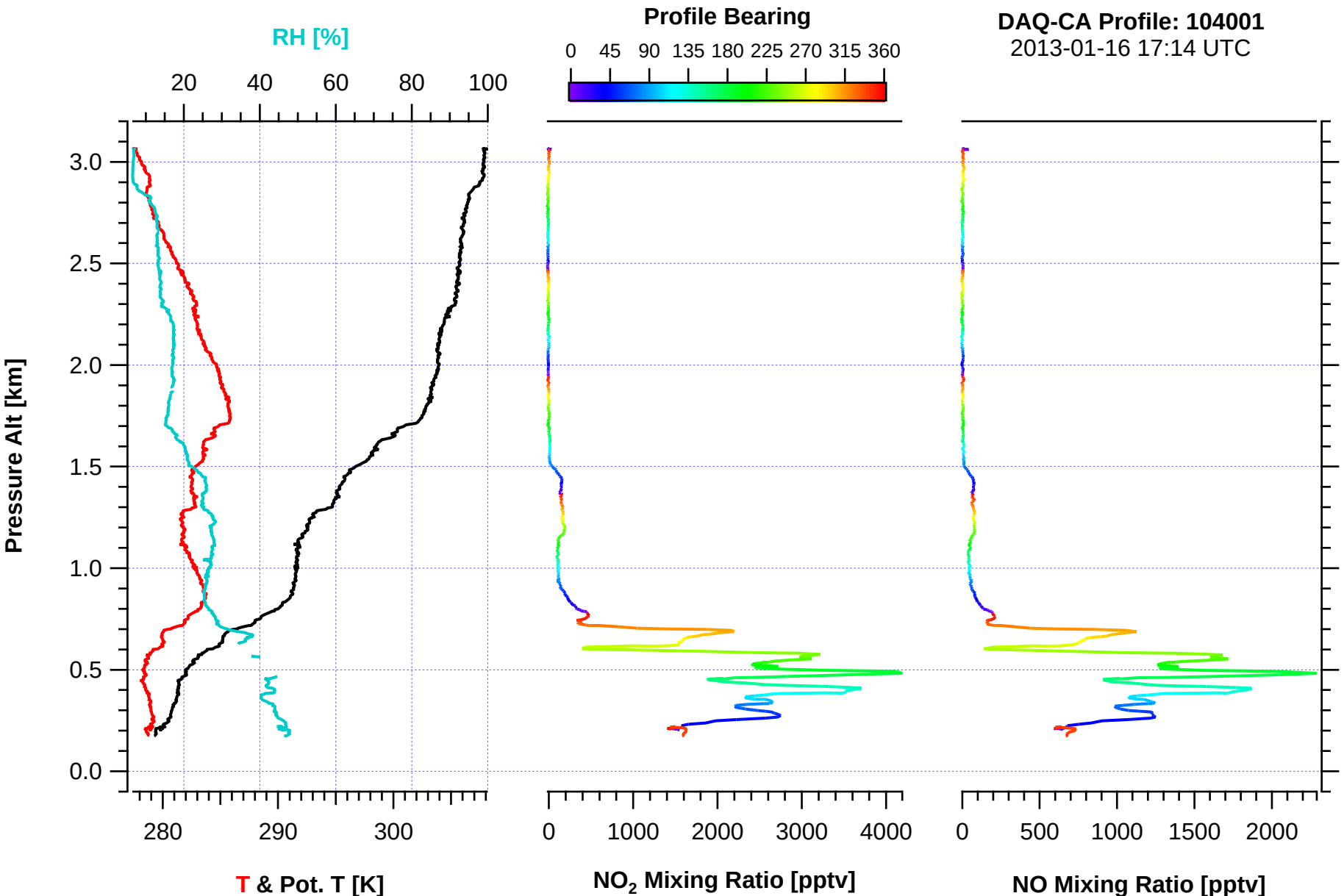
- ALTP
- TEMPERATURE
- THETA
- RelativeHumidity
- H2O_MixingRatio
- CO2_MixingRatio
- CO_MixingRatio
- O3_MixingRatio
- NO2_MixingRatio
- NO_MixingRatio
- CH2O_DFGAS
- Acetaldehyde_MixingRatio
- MVK_MACR_crotonaldehyde_MixingRatio
- Isoprene_MixingRatio
- SCAT550tot
- CNgt10nm
- A_JNO2_Nadir
- A_JNO2_Zenith
- jNO2_Total (sum of Nadir and Zenith)
- IR_SurfTemp
- Methanol_MixingRatio
- NH3_MixingRatio
- CH4_MixingRatio

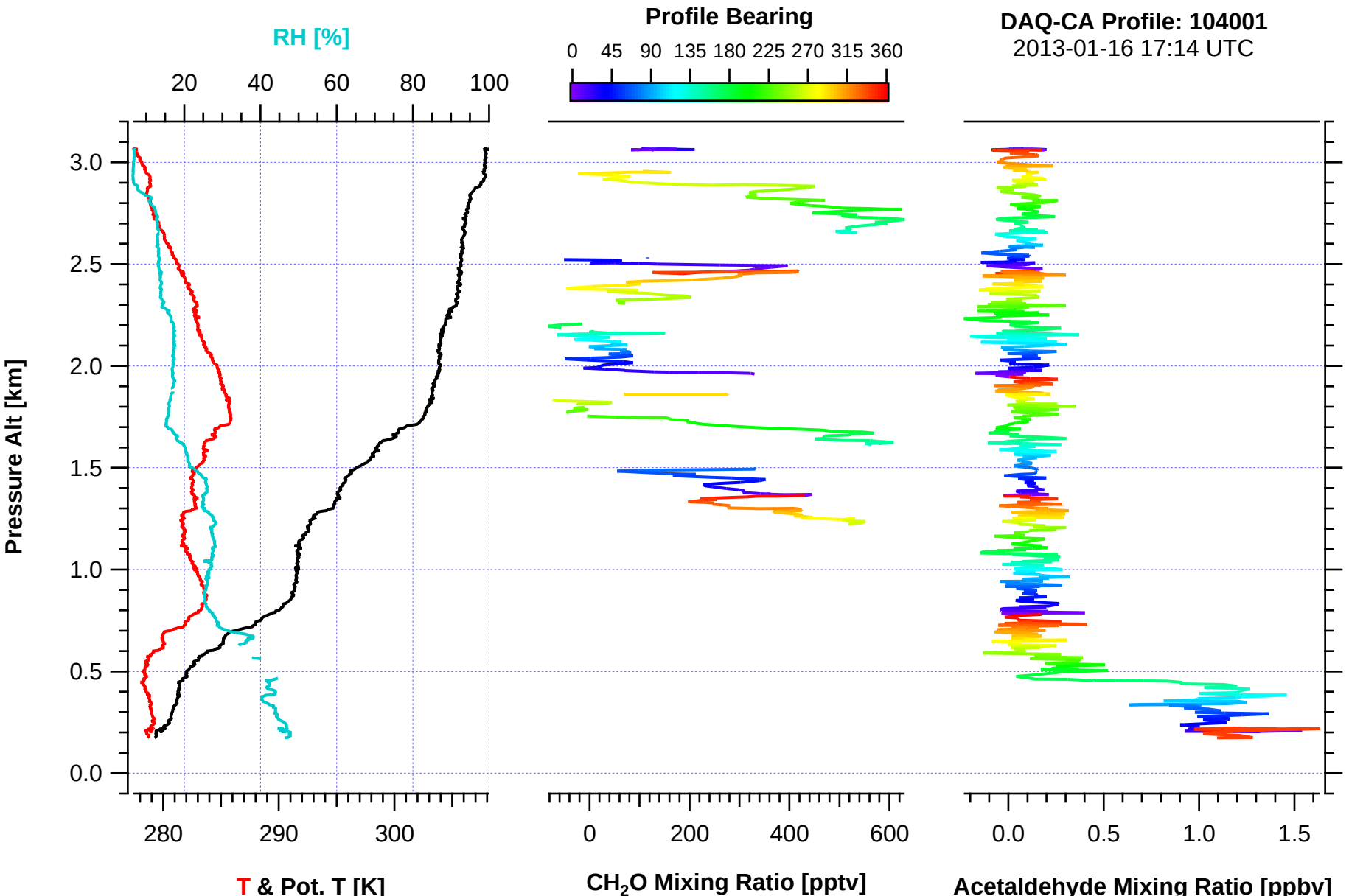
Plot info:

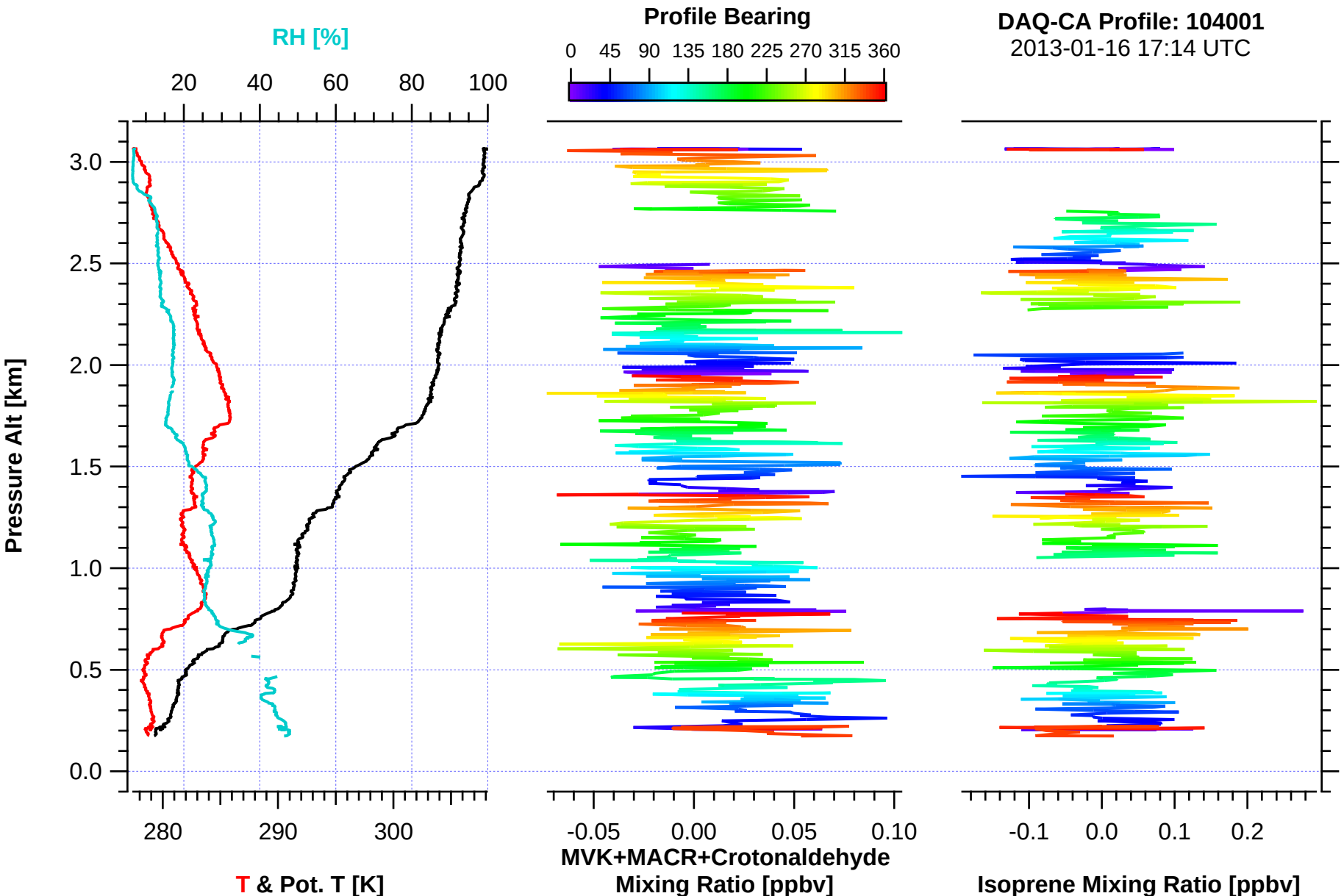
1. "Profile bearing" indicates the direction in which the aircraft was located relative to the center of the spiral (e.g. a Profile Bearing of 90° means the aircraft was on the east side of the spiral).
2. The time given is the start time of the profile.
3. Instances of multiple measurements at a single altitude are usually due to missed approaches performed as part of the profiles at some sites.

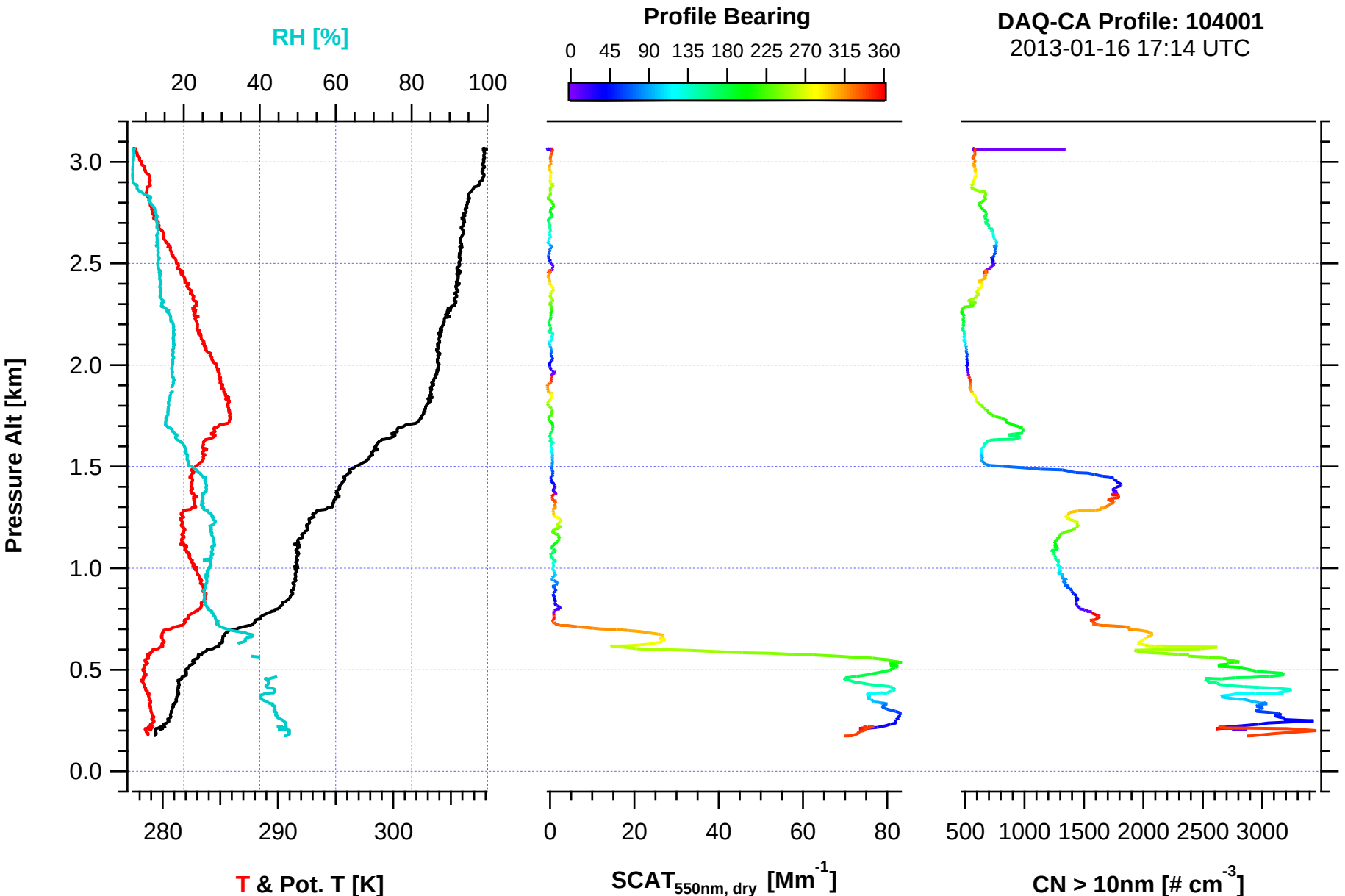

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104001
2013-01-16 17:14 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
2000
3000
4000
5000
H2O Mixing Ratio [ppmv]
396
400
404
408
412
CO2 Mixing Ratio [ppmv]

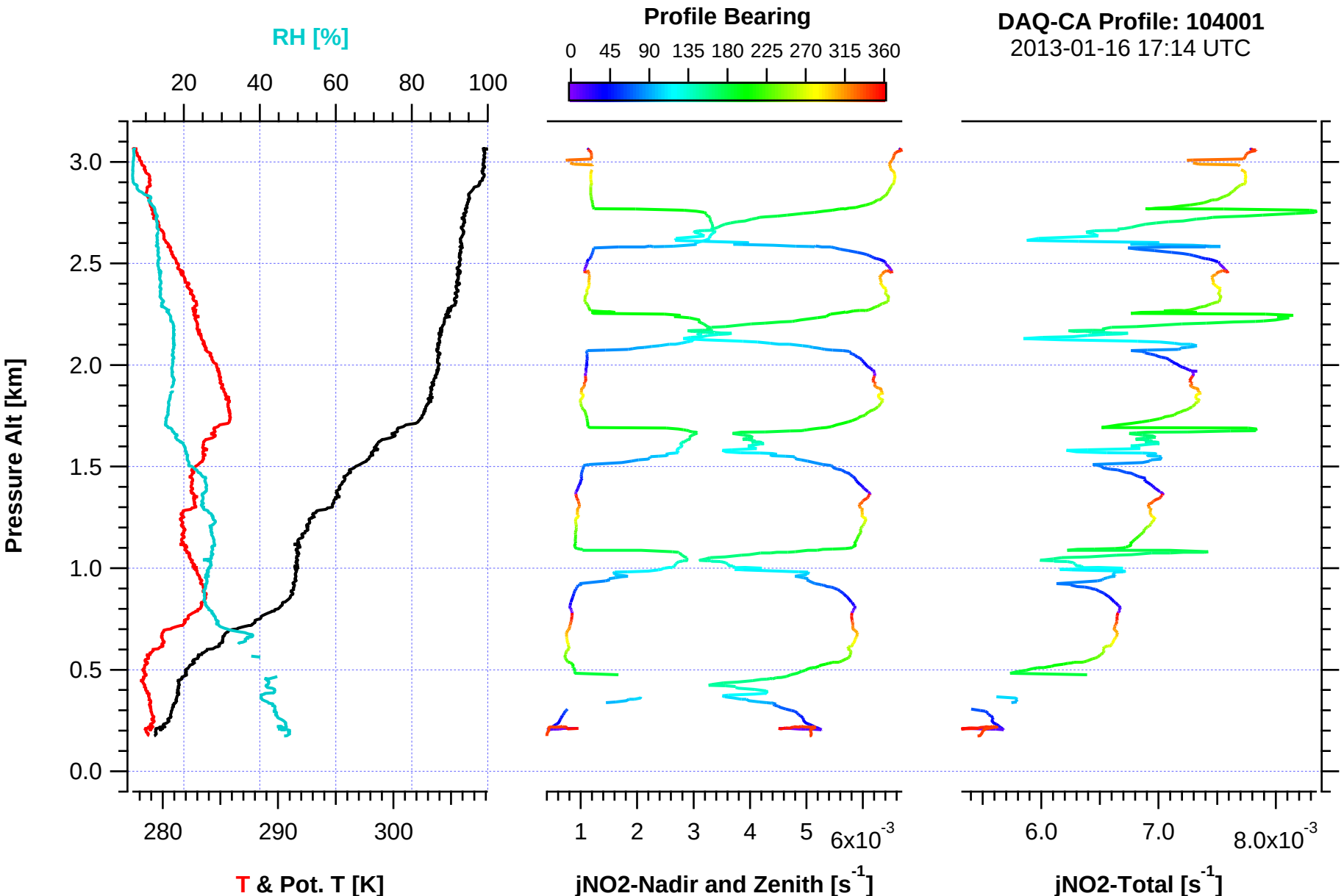

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104001
2013-01-16 17:14 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
120
160
200
240
CO Mixing Ratio [ppbv]
36
40
44
O3 Mixing Ratio [ppbv]

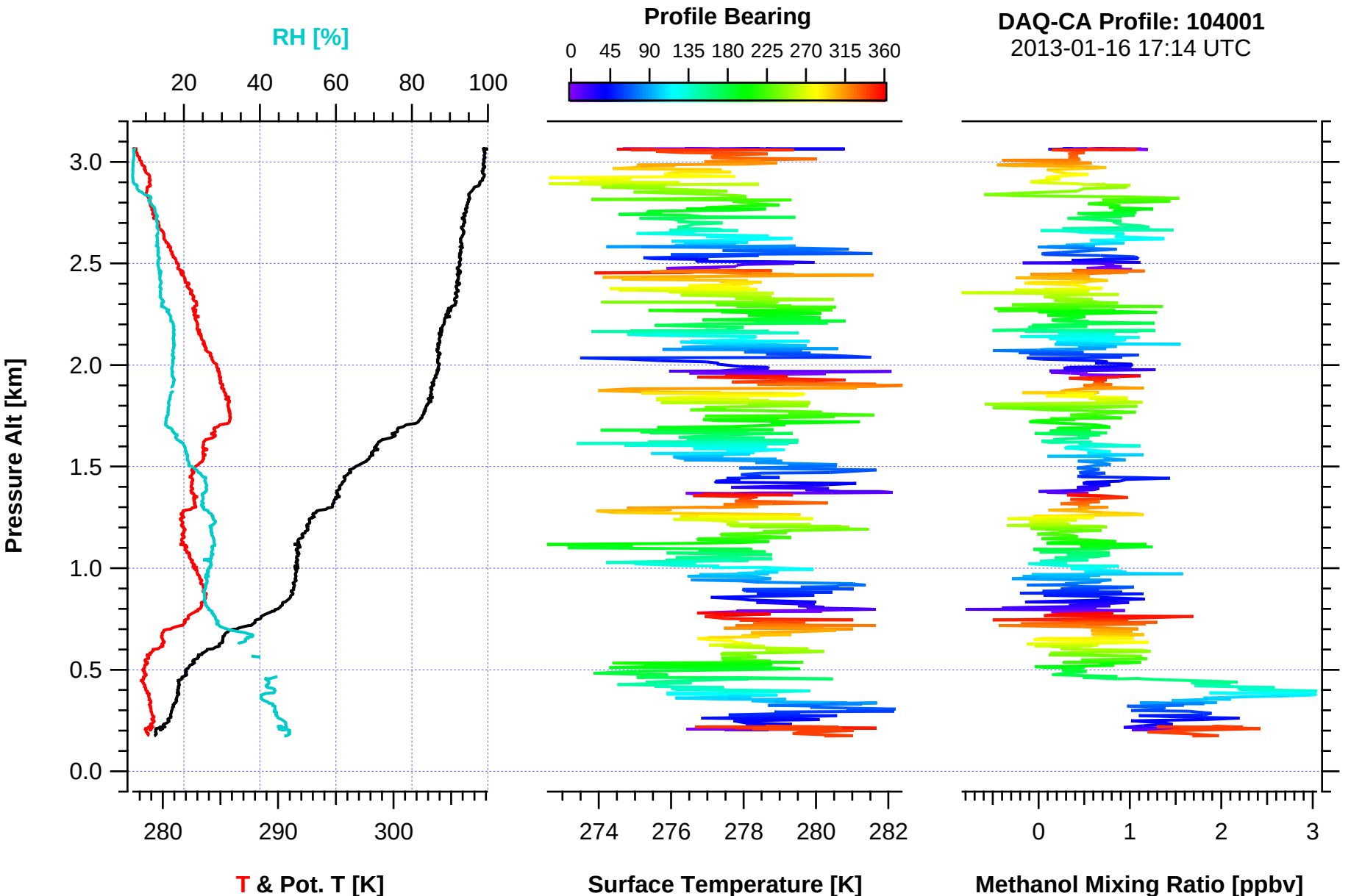

DAQ-CA Profile: 104001
2013-01-16 17:14 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0 2.5 2.0 1.5 1.0 0.5 0.0
280 290 300
T & Pot. T [K]
0 1000 2000 3000 4000
NO2 Mixing Ratio [pptv]
0 500 1000 1500 2000
NO Mixing Ratio [pptv]

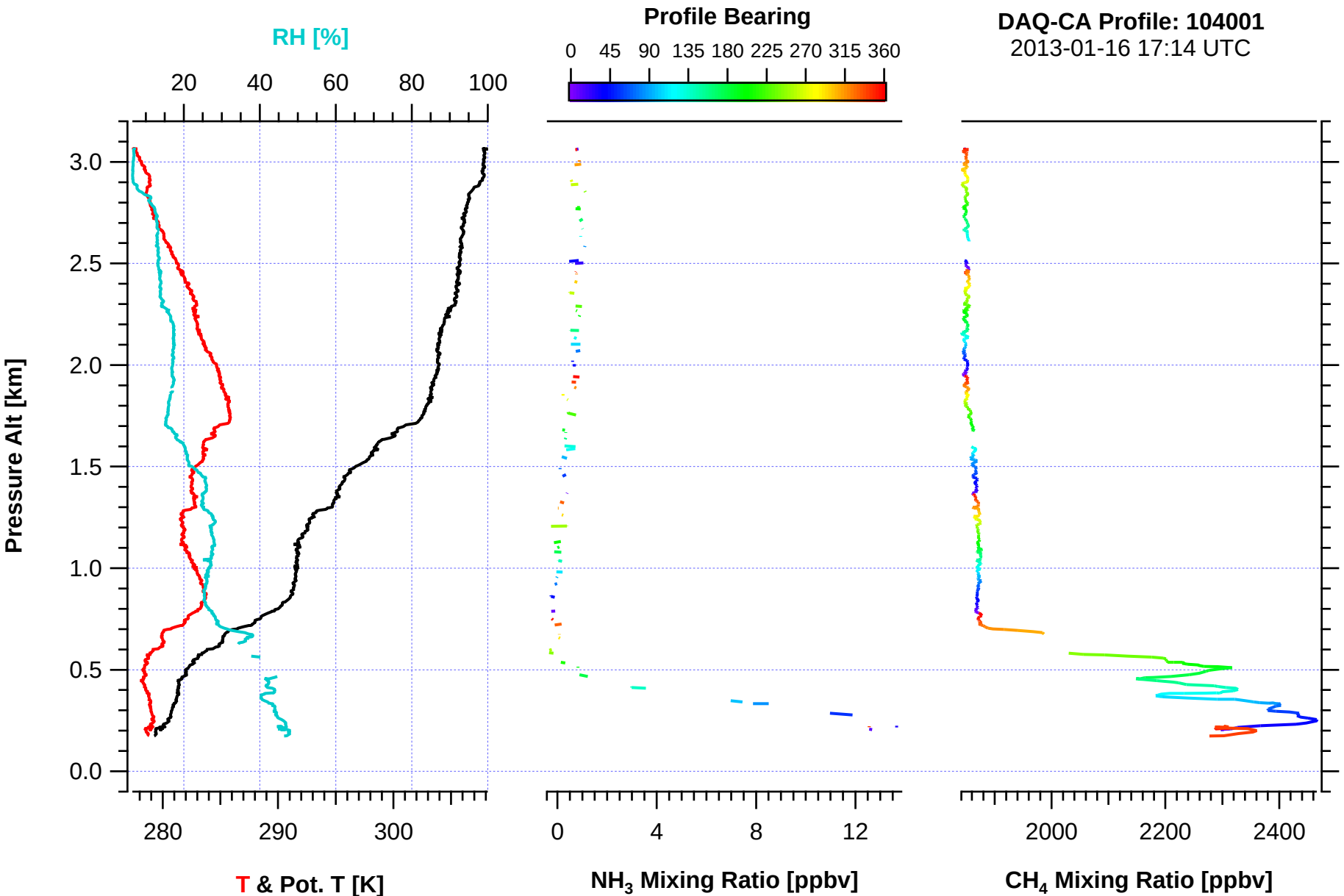

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104001
2013-01-16 17:14 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
0
200
400
600
CH2O Mixing Ratio [pptv]
0.0
0.5
1.0
1.5
Acetaldehyde Mixing Ratio [ppbv]

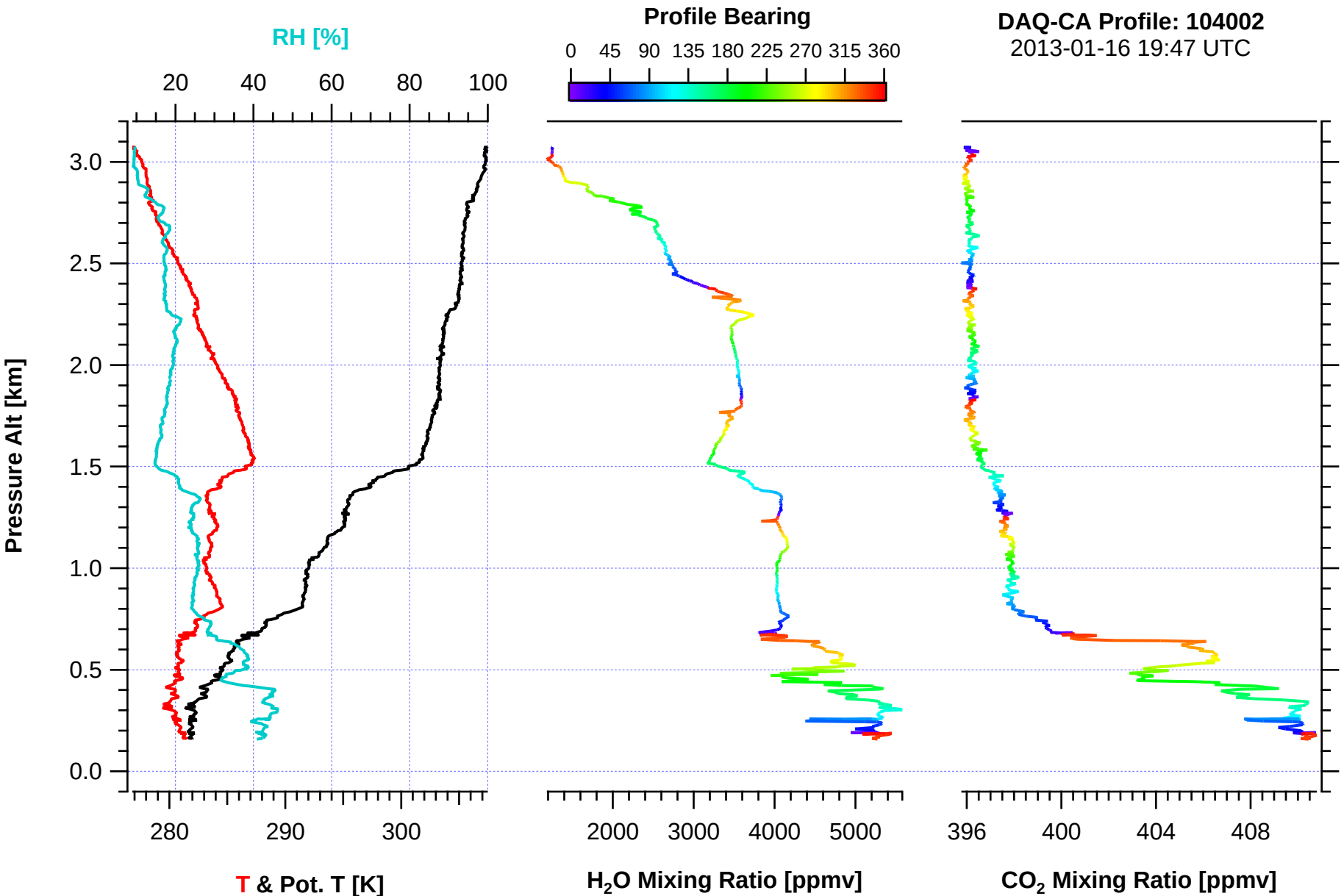

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104001
2013-01-16 17:14 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
-0.05
0.00
0.05
0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.1
0.0
0.1
0.2
Isoprene Mixing Ratio [ppbv]

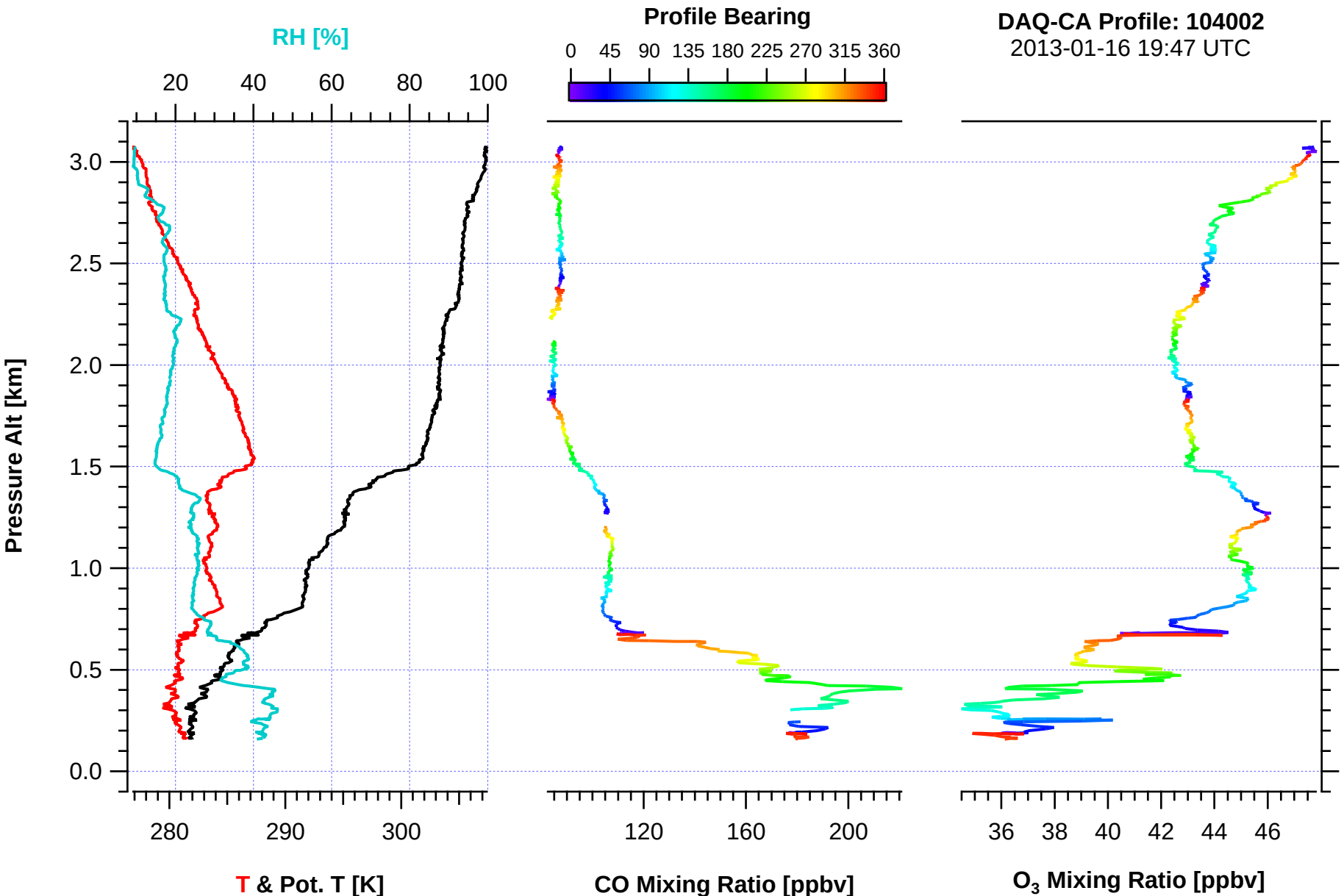

DAQ-CA Profile: 104001
2013-01-16 17:14 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0 2.5 2.0 1.5 1.0 0.5 0.0
280 290 300
T & Pot. T [K]
0 20 40 60 80
SCAT550nm, dry [Mm-1]
500 1000 1500 2000 2500 3000
CN > 10nm [# cm-3]

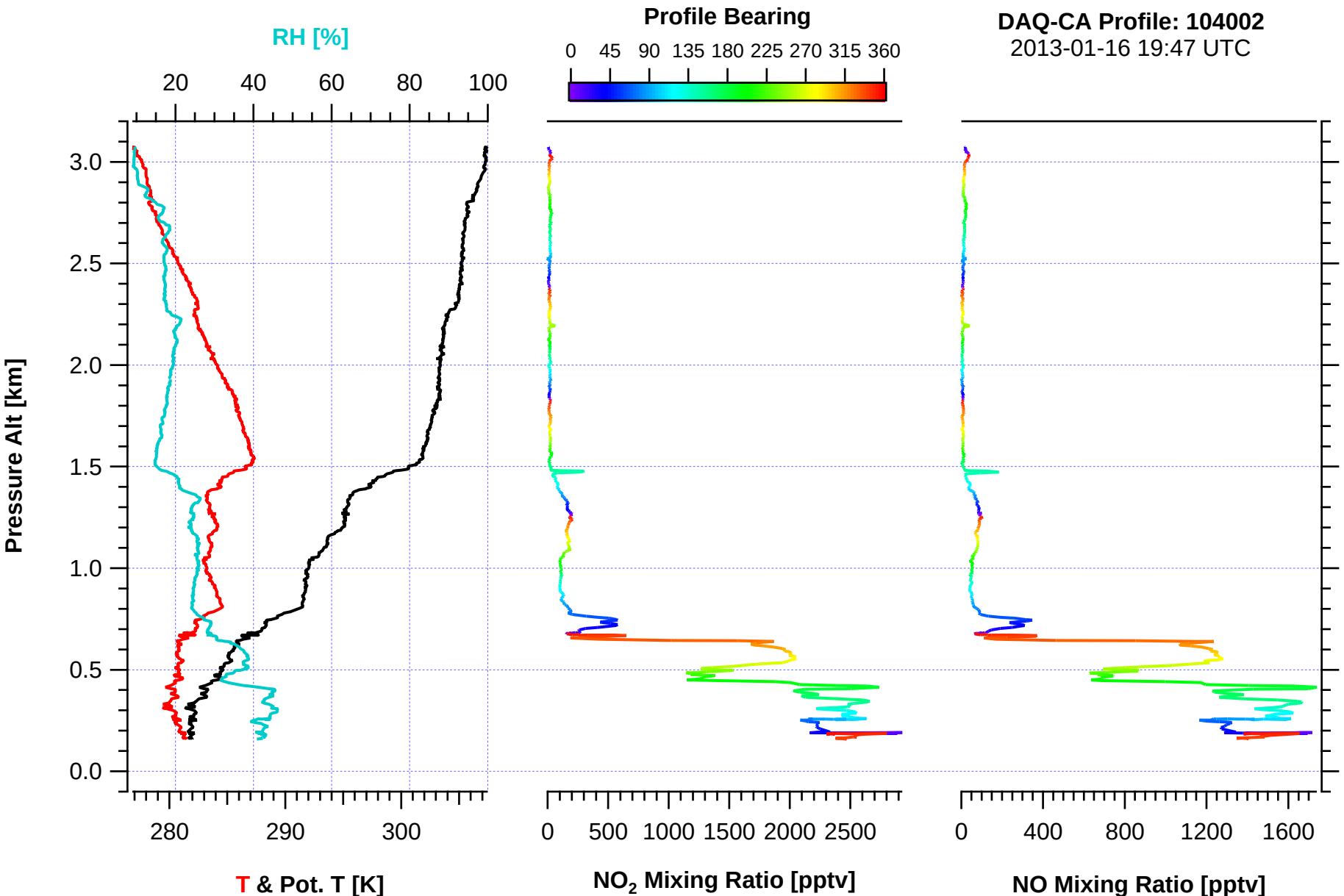

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104001
2013-01-16 17:14 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
1
2
3
4
5
6x10-3
jNO2-Nadir and Zenith [s-1]
6.0
7.0
8.0x10-3
jNO2-Total [s-1]

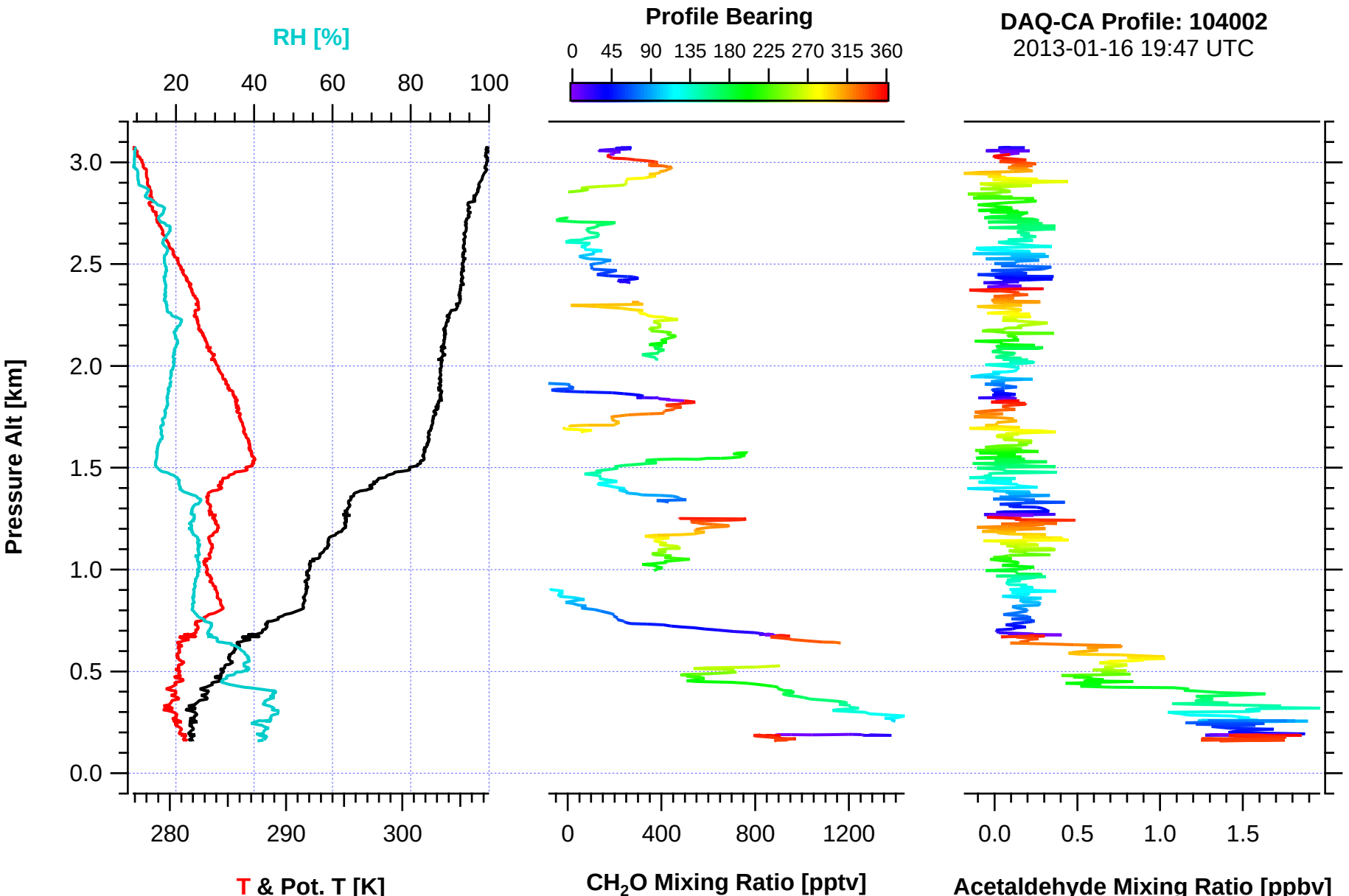

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104001
2013-01-16 17:14 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
274
276
278
280
282
Surface Temperature [K]
0
1
2
3
Methanol Mixing Ratio [ppbv]

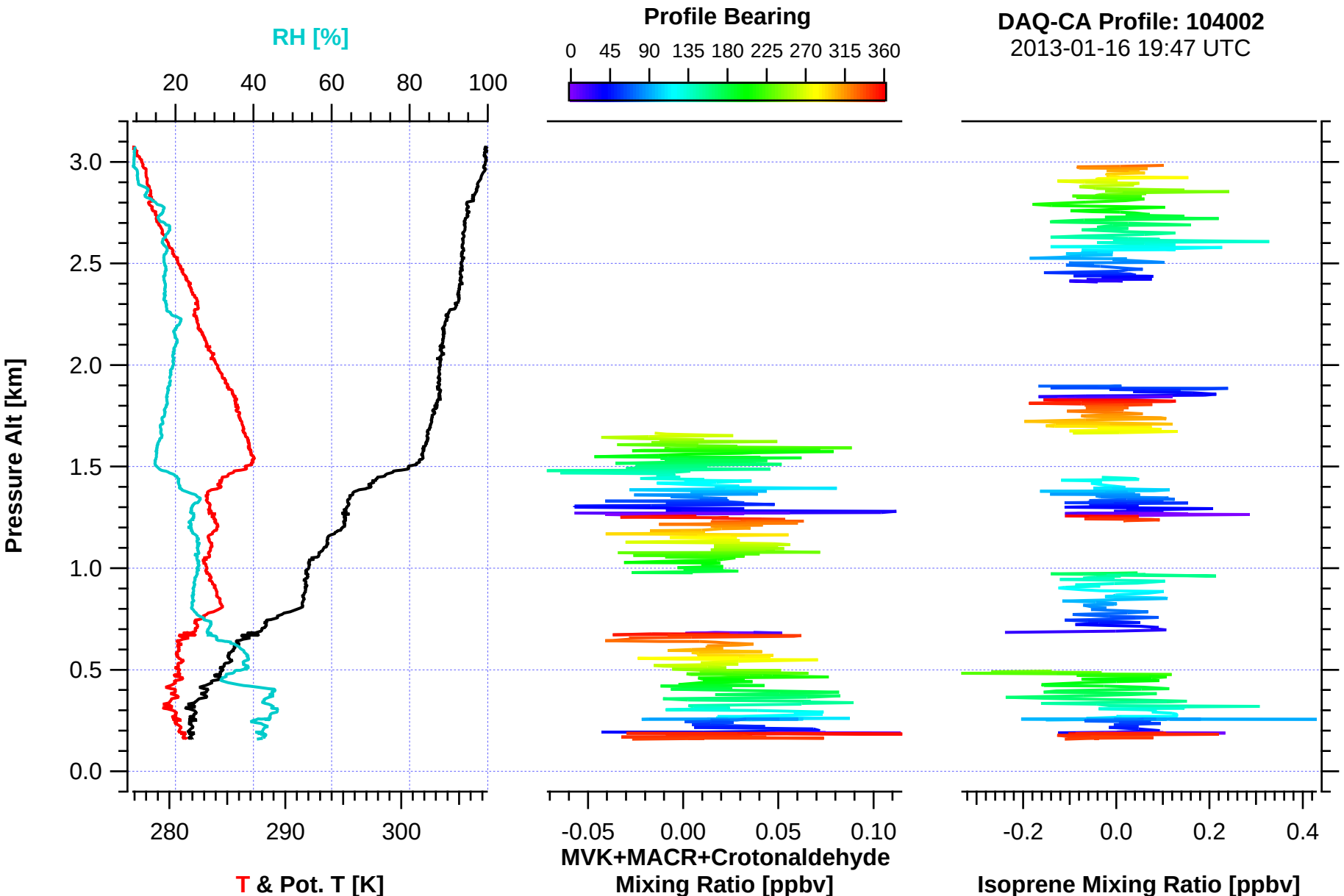

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104001
2013-01-16 17:14 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
0
4
8
12
NH3 Mixing Ratio [ppbv]
2000
2200
2400
CH4 Mixing Ratio [ppbv]

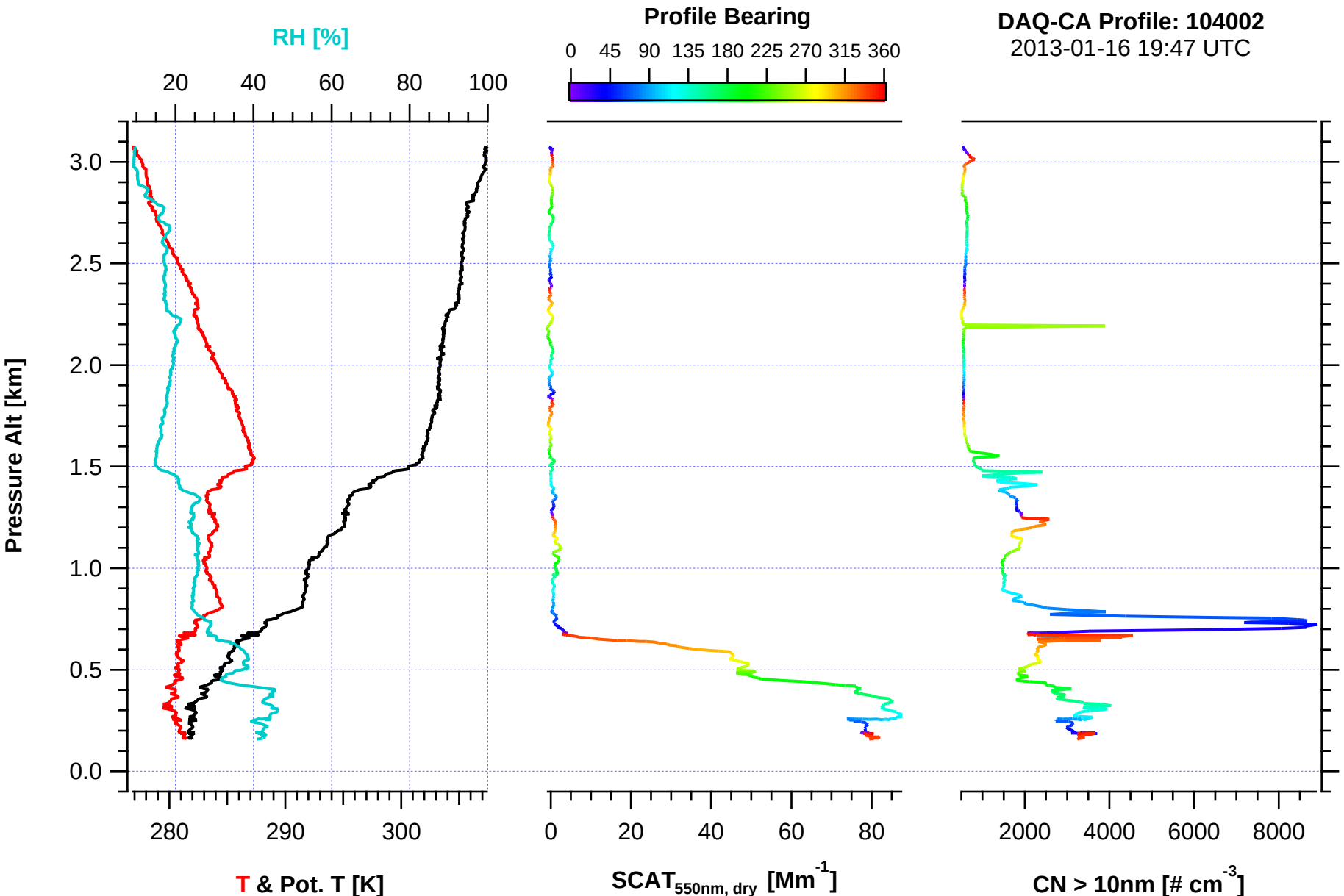

DAQ-CA Profile: 104002
2013-01-16 19:47 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0 2.5 2.0 1.5 1.0 0.5 0.0
280 290 300
T & Pot. T [K]
2000 3000 4000 5000
H2O Mixing Ratio [ppmv]
396 400 404 408
CO2 Mixing Ratio [ppmv]

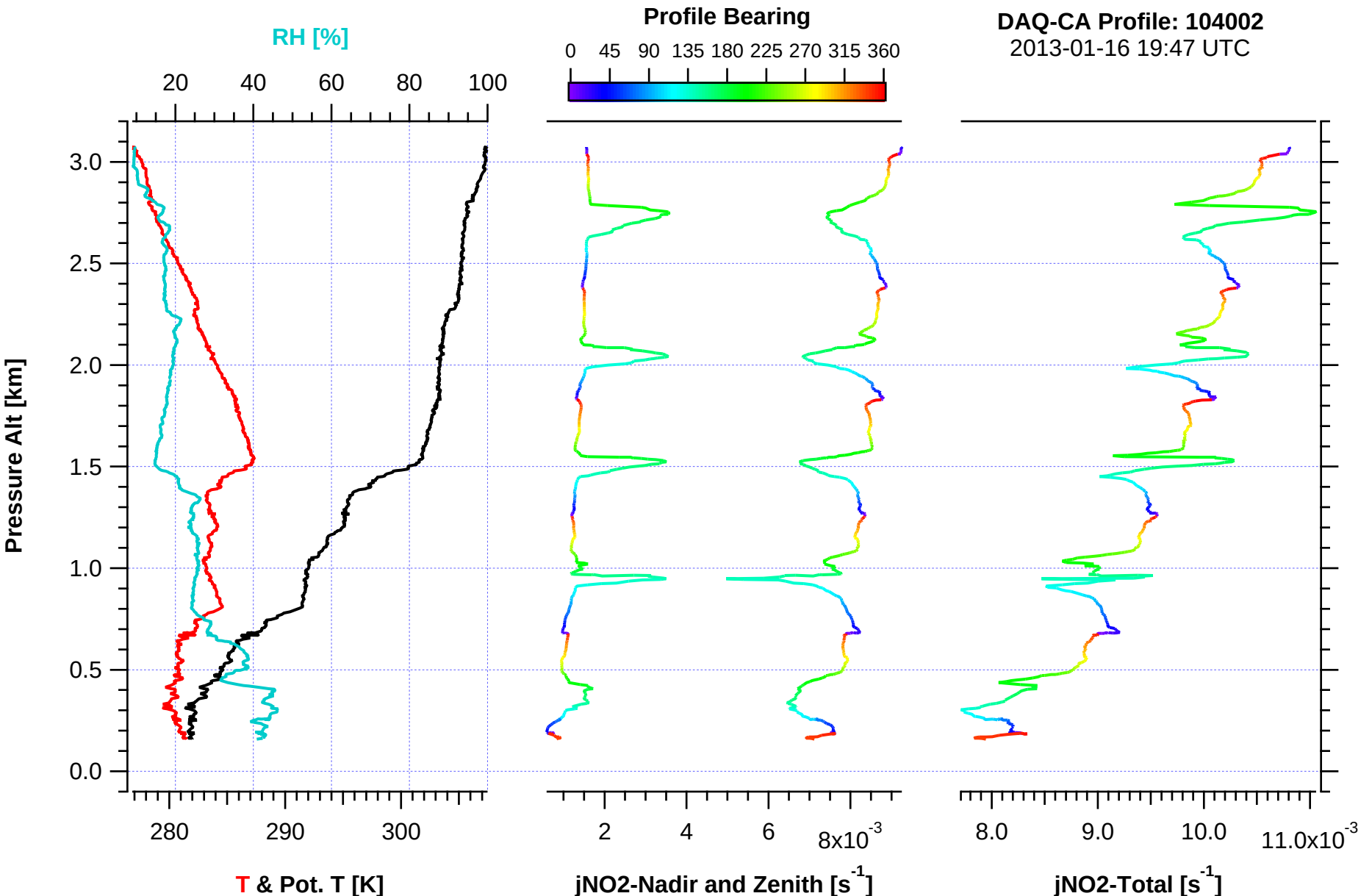

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104002
2013-01-16 19:47 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
120
160
200
CO Mixing Ratio [ppbv]
36
38
40
42
44
46
O3 Mixing Ratio [ppbv]

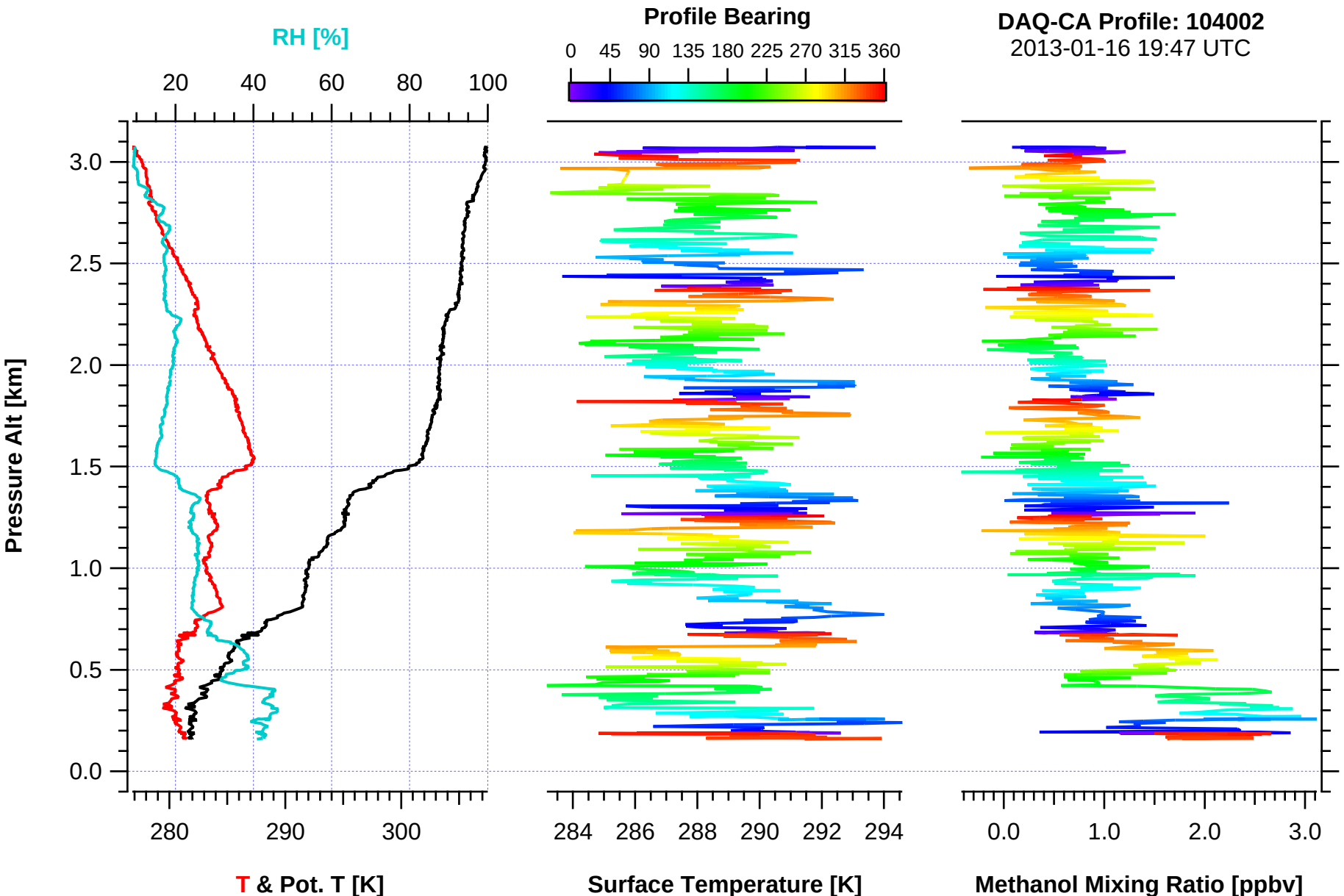

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104002
2013-01-16 19:47 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
0
500
1000
1500
2000
2500
NO2 Mixing Ratio [pptv]
0
400
800
1200
1600
NO Mixing Ratio [pptv]

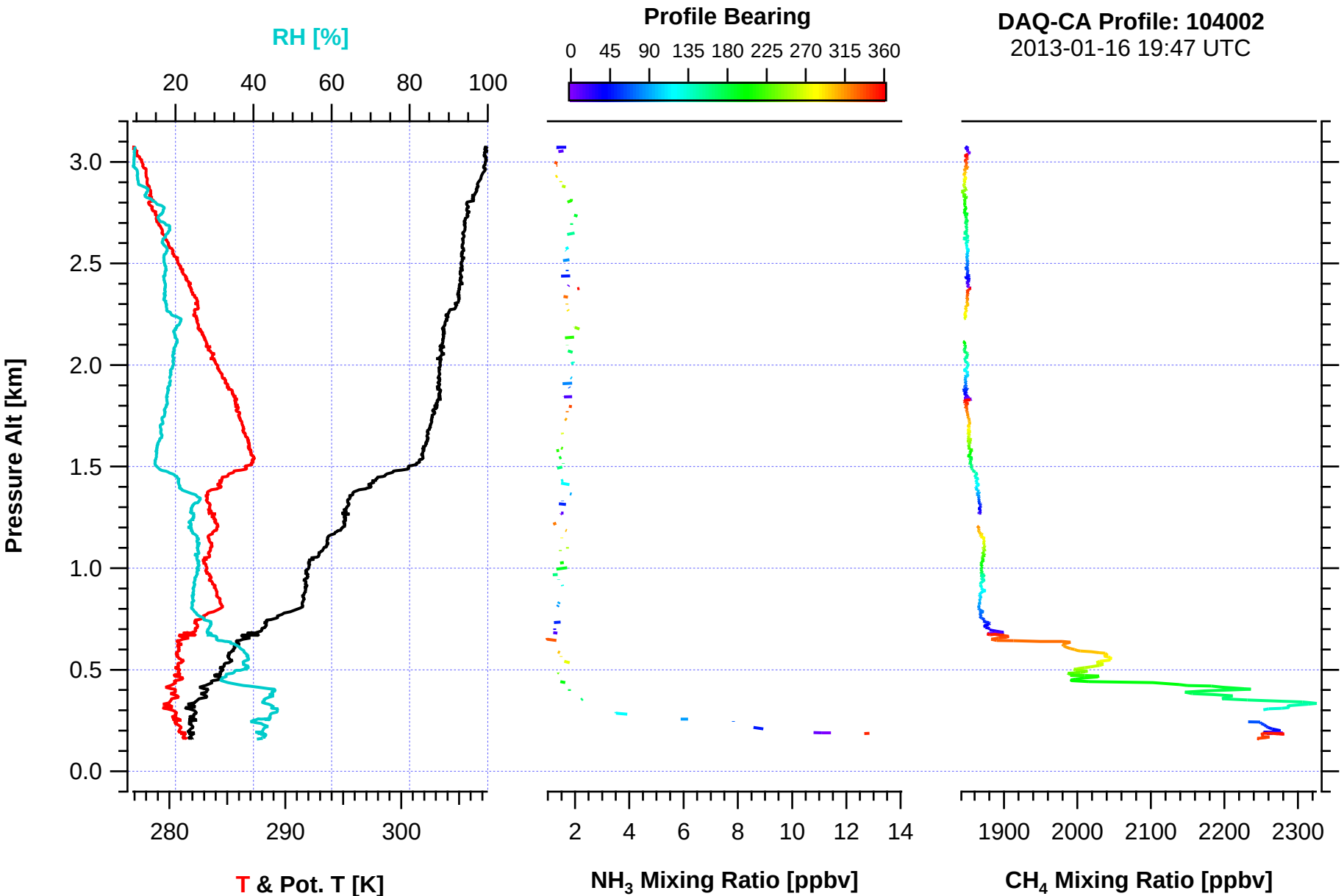

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104002
2013-01-16 19:47 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
0
400
800
1200
CH2O Mixing Ratio [pptv]
0.0
0.5
1.0
1.5
Acetaldehyde Mixing Ratio [ppbv]

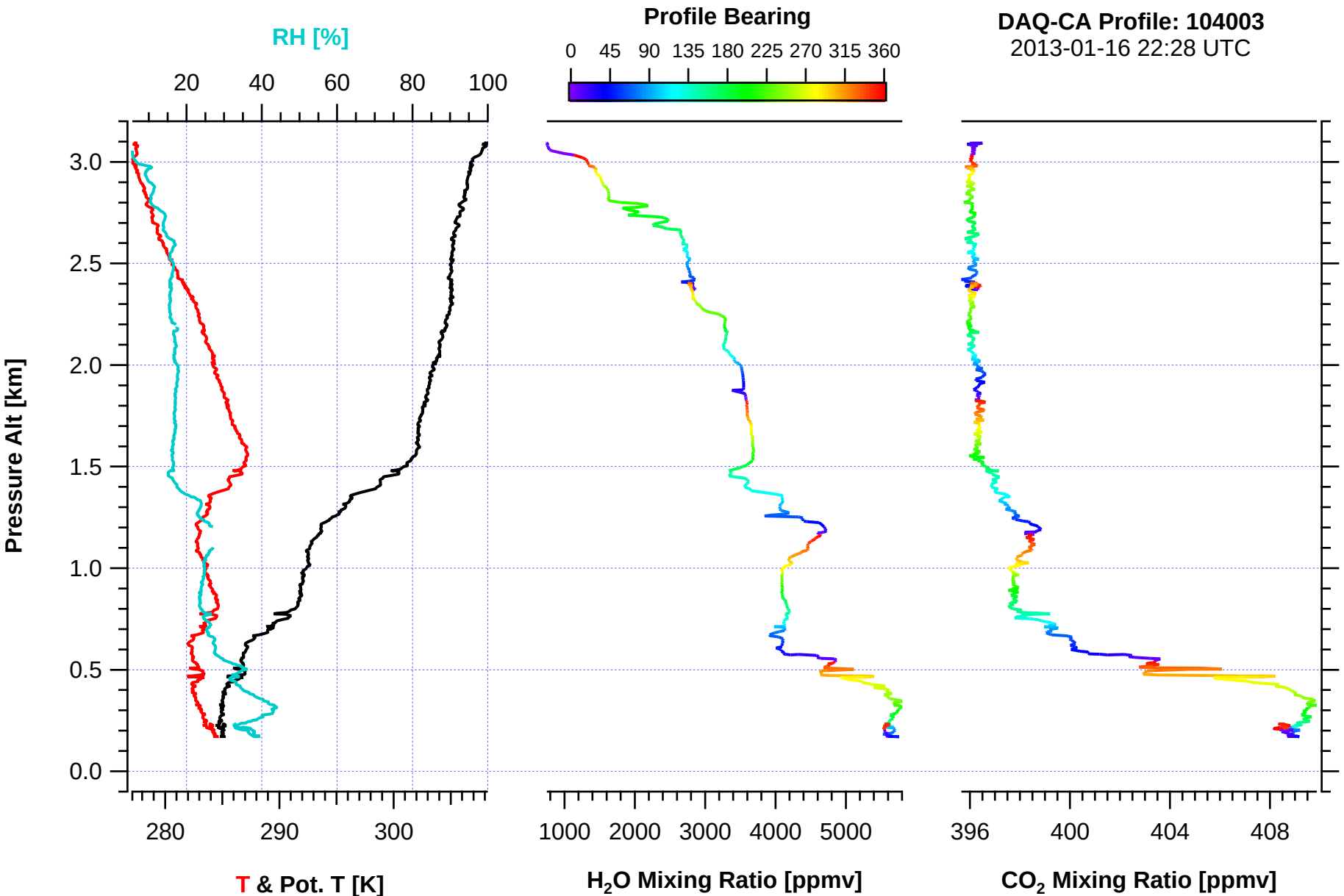

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104002
2013-01-16 19:47 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
-0.05
0.00
0.05
0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.2
0.0
0.2
0.4
Isoprene Mixing Ratio [ppbv]

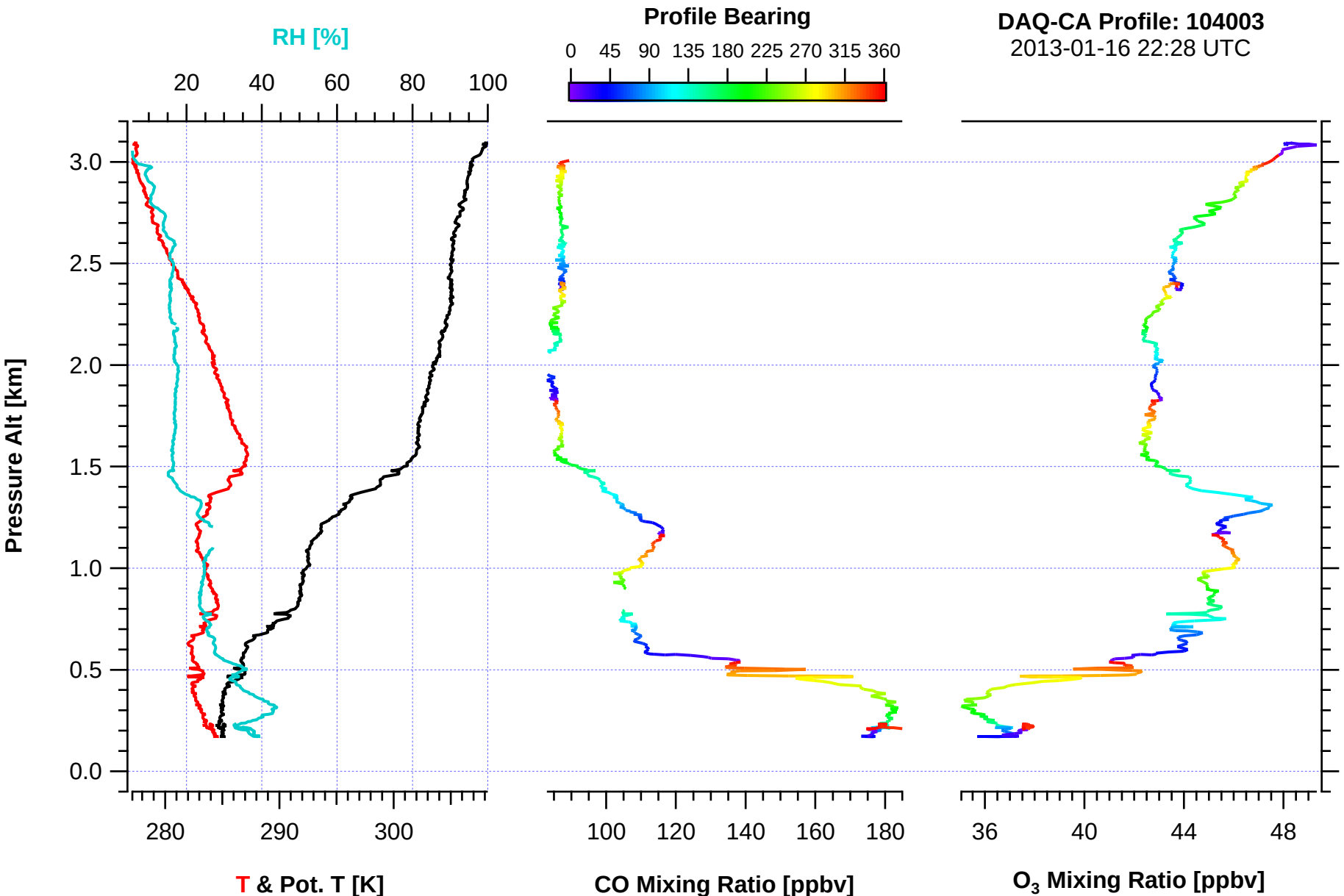

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104002
2013-01-16 19:47 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
0
20
40
60
80
SCAT550nm, dry [Mm-1]
2000
4000
6000
8000
CN > 10nm [# cm-3]

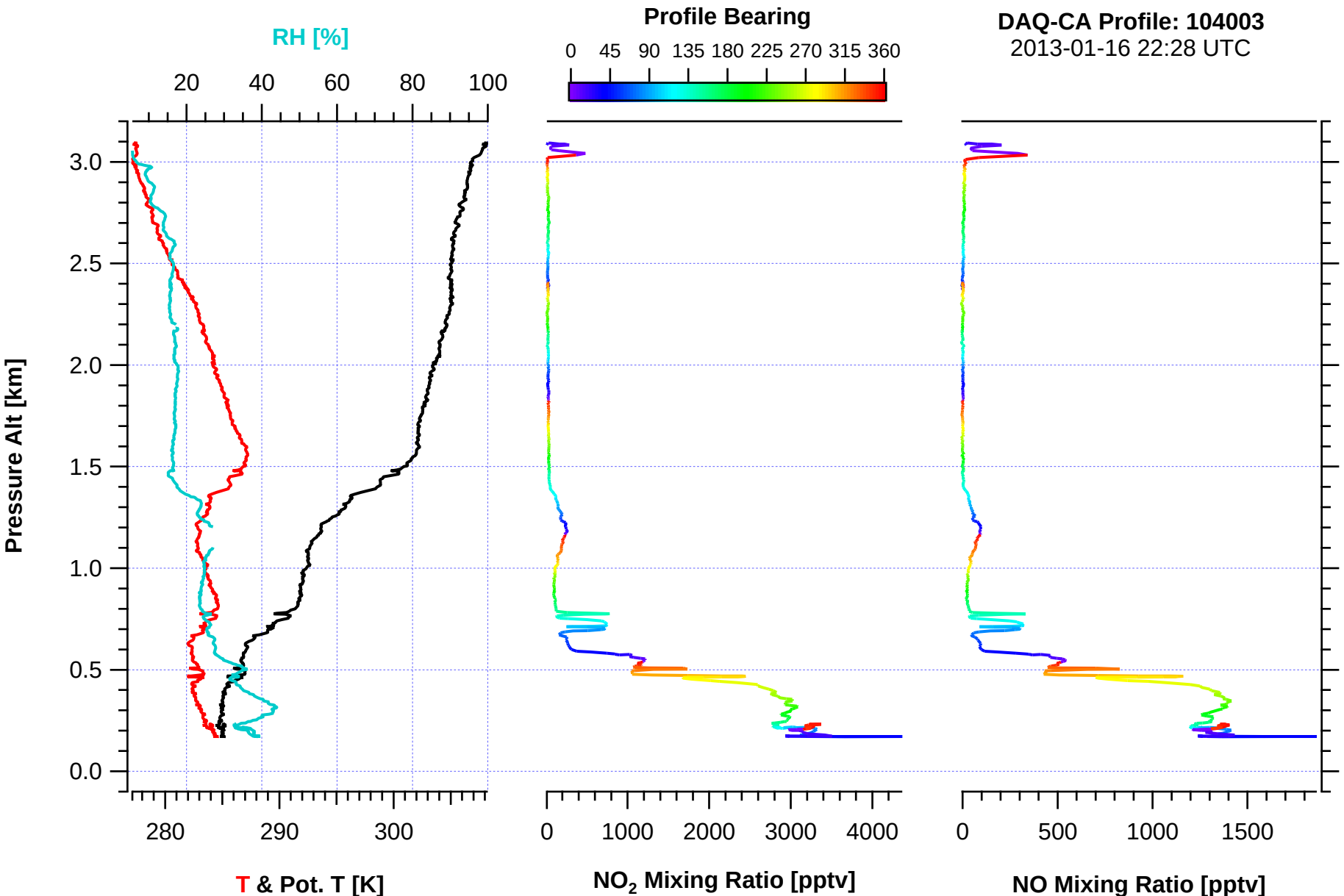

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104002
2013-01-16 19:47 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
2
4
6
8x10-3
jNO2-Nadir and Zenith [s-1]
8.0
9.0
10.0
11.0x10-3
jNO2-Total [s-1]

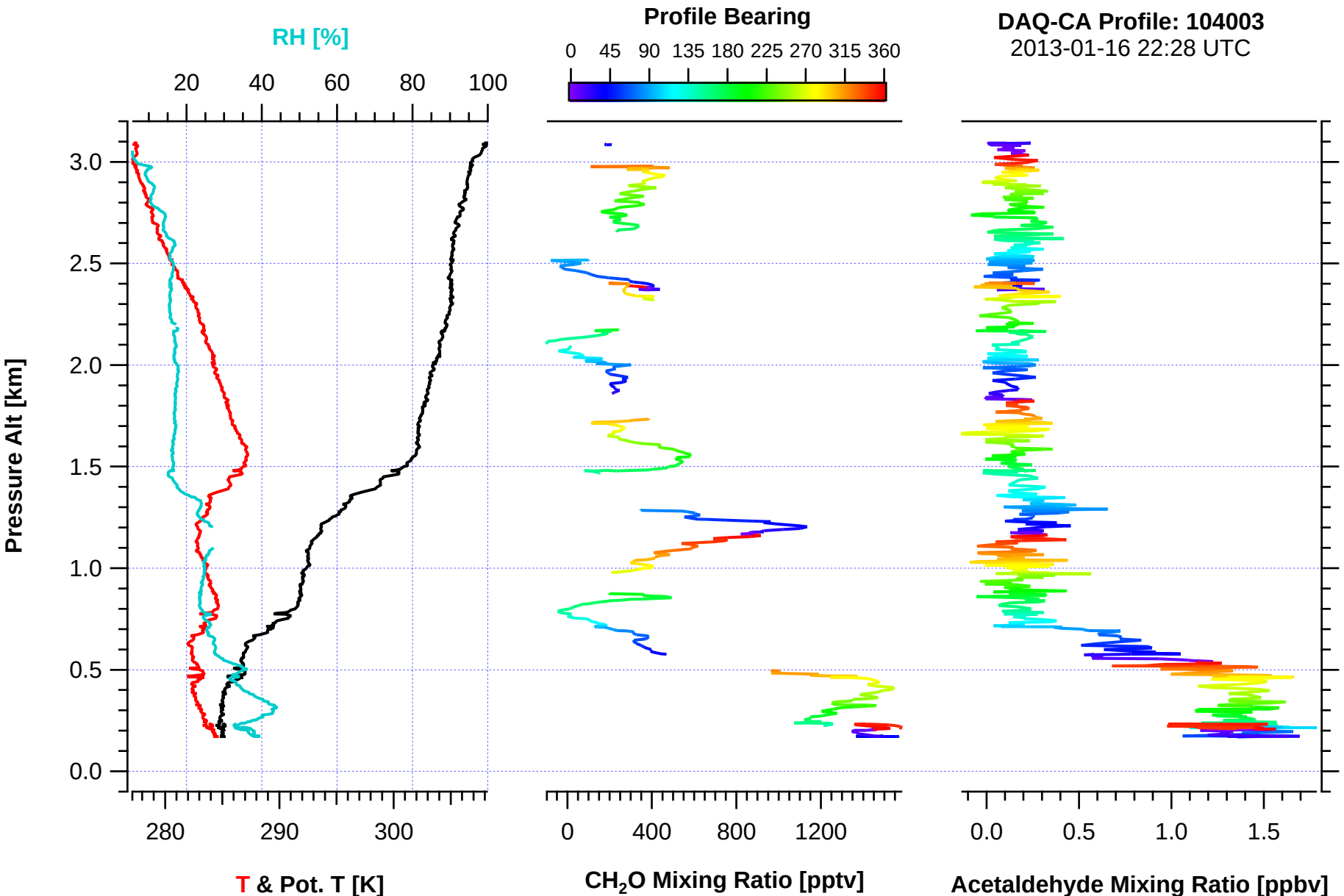

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104002
2013-01-16 19:47 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
284
286
288
290
292
294
0.0
1.0
2.0
3.0
T & Pot. T [K]
Surface Temperature [K]
Methanol Mixing Ratio [ppbv]

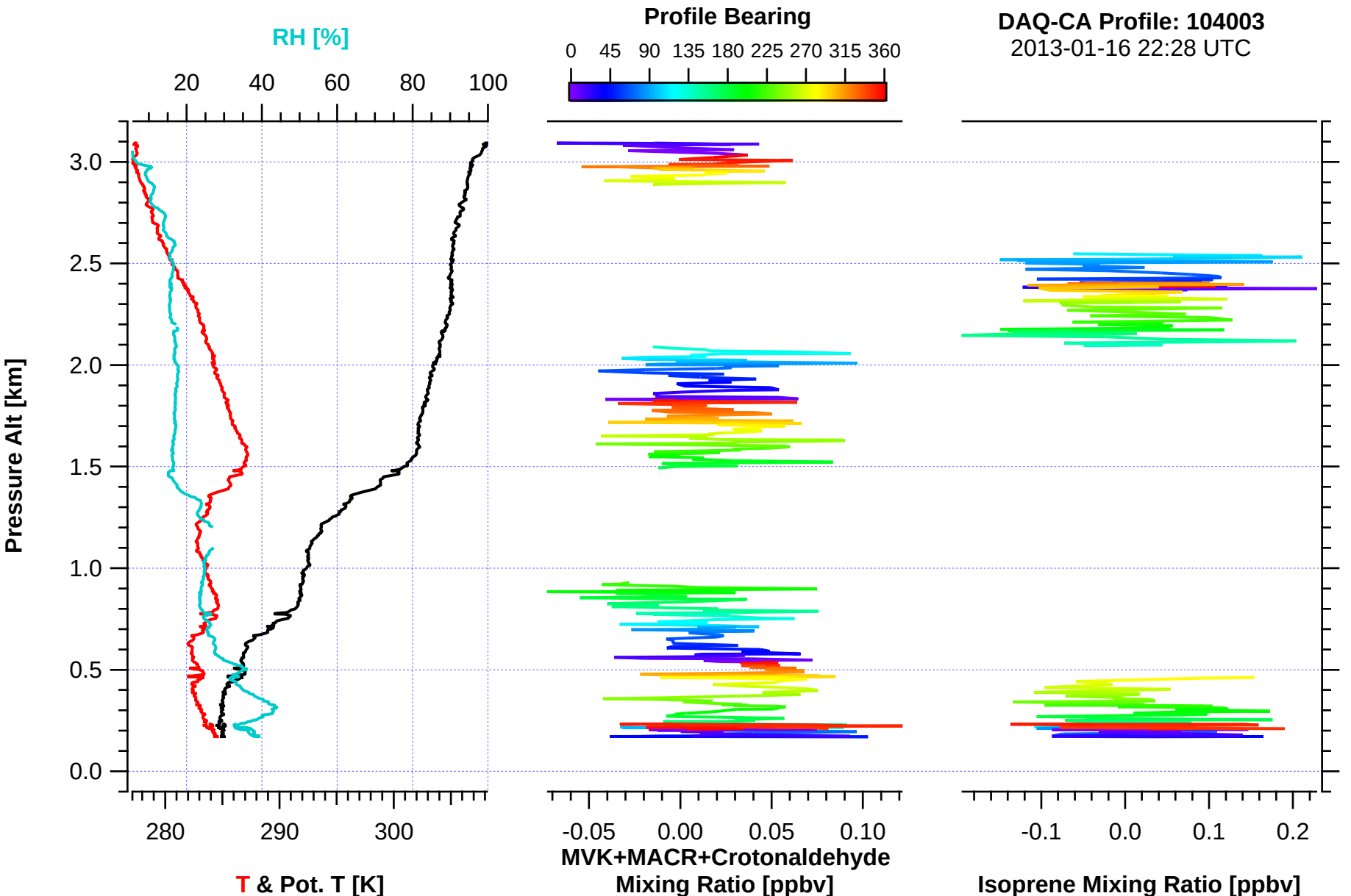

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104002
2013-01-16 19:47 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
2
4
6
8
10
12
14
NH3 Mixing Ratio [ppbv]
1900
2000
2100
2200
2300
CH4 Mixing Ratio [ppbv]

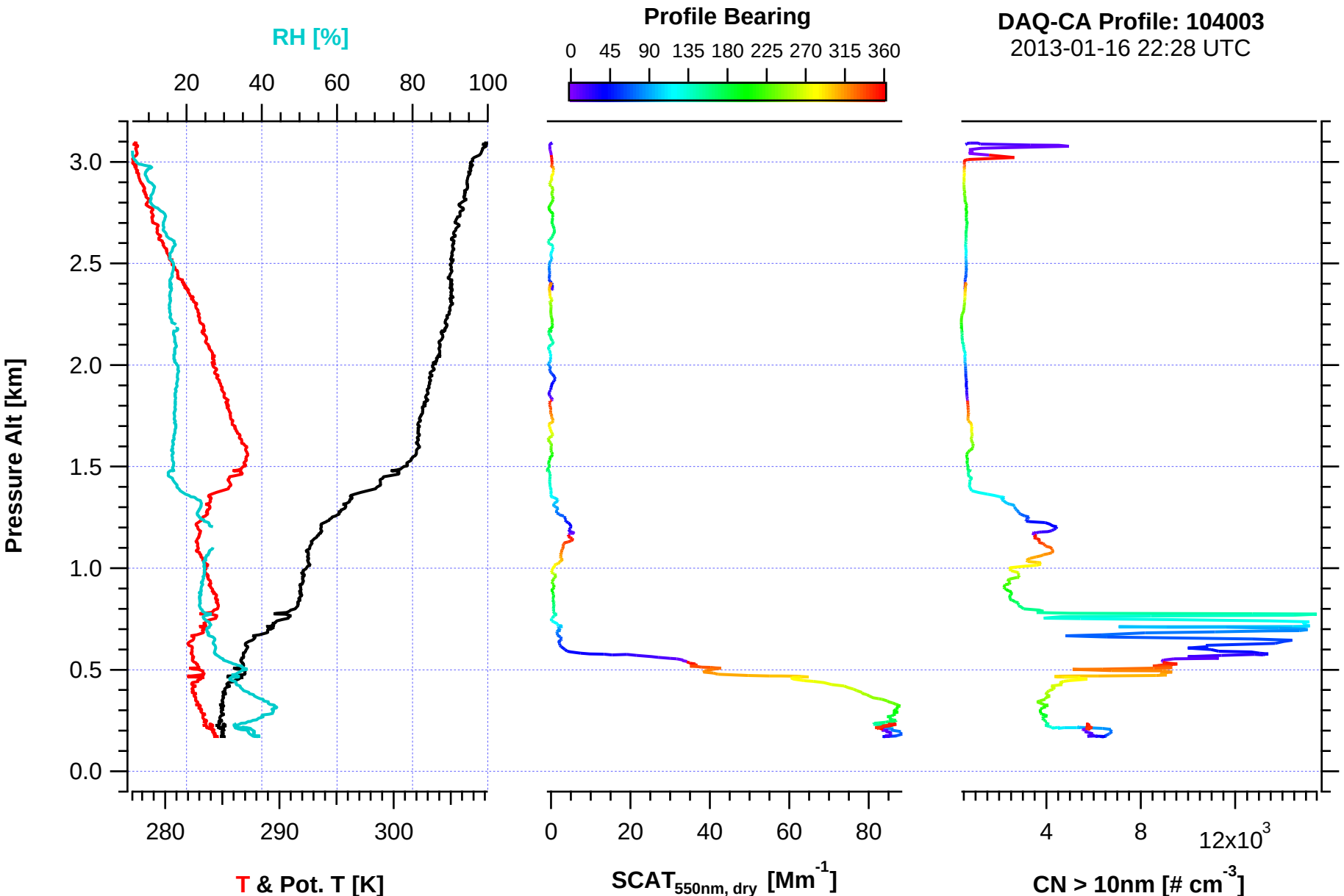

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104003
2013-01-16 22:28 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
1000
2000
3000
4000
5000
H2O Mixing Ratio [ppmv]
396
400
404
408
CO2 Mixing Ratio [ppmv]

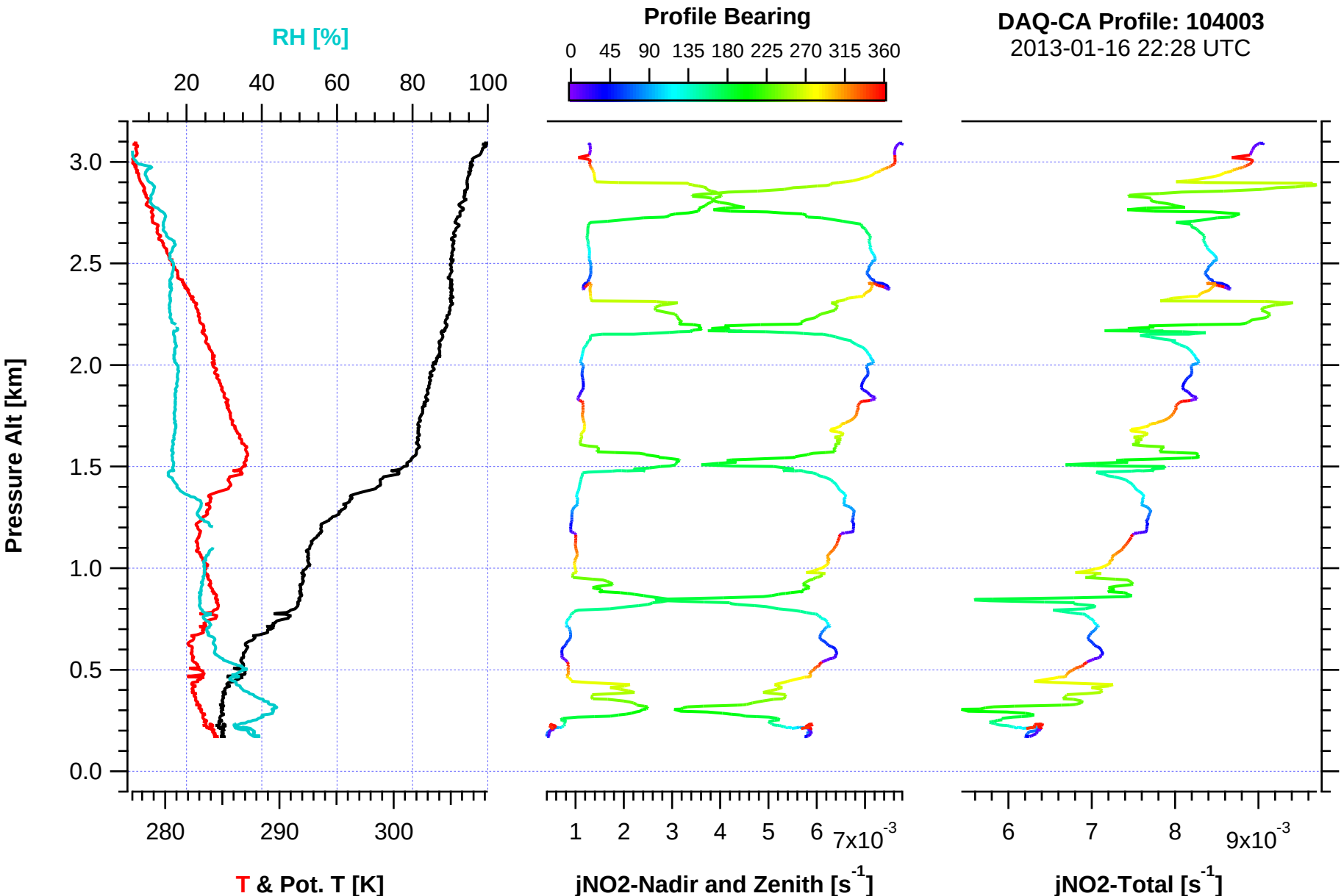

DAQ-CA Profile: 104003
2013-01-16 22:28 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 290 300
T & Pot. T [K]
100 120 140 160 180
CO Mixing Ratio [ppbv]
36 40 44 48
O3 Mixing Ratio [ppbv]

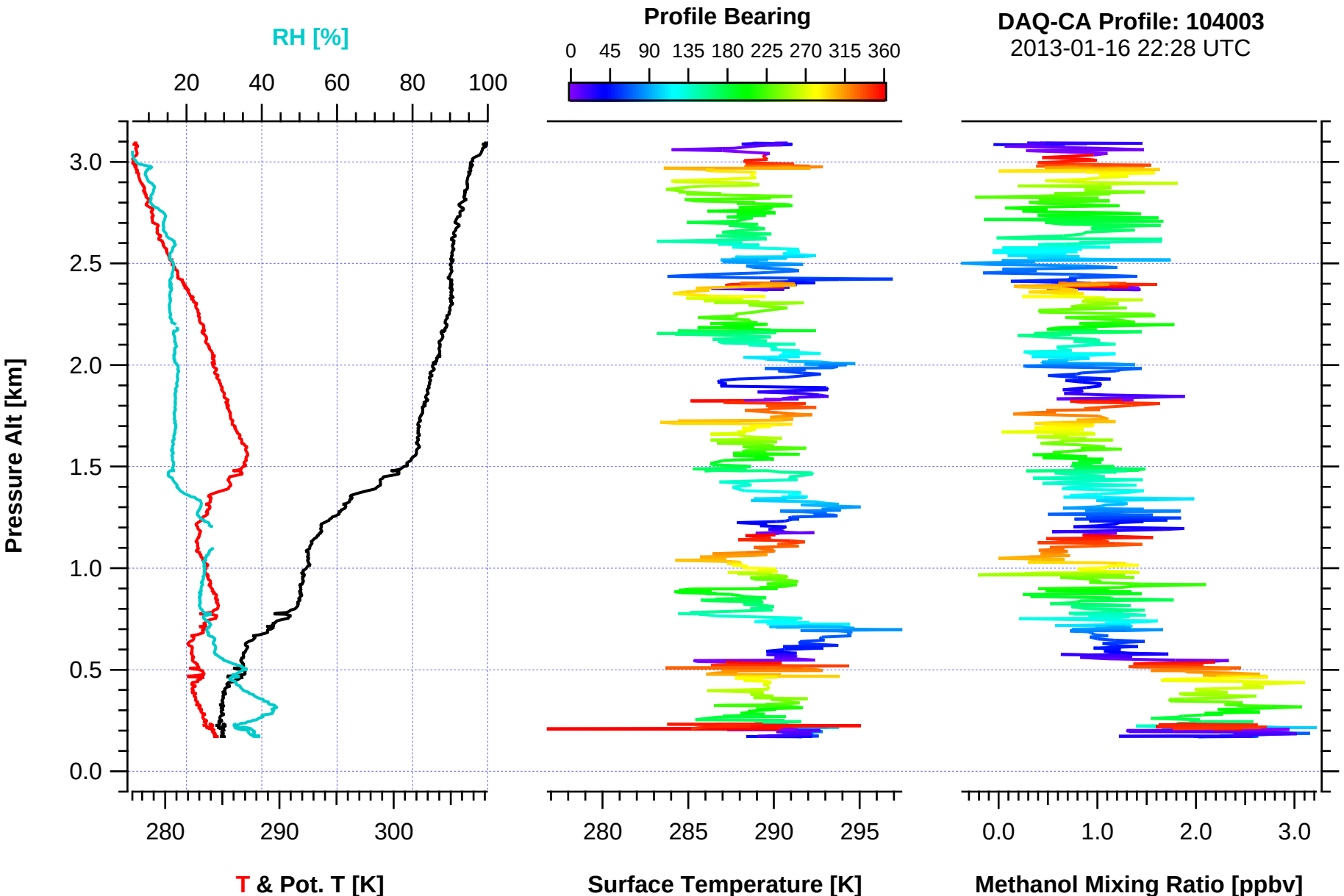

DAQ-CA Profile: 104003
2013-01-16 22:28 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 290 300
T & Pot. T [K]
0 1000 2000 3000 4000
NO2 Mixing Ratio [pptv]
0 500 1000 1500
NO Mixing Ratio [pptv]

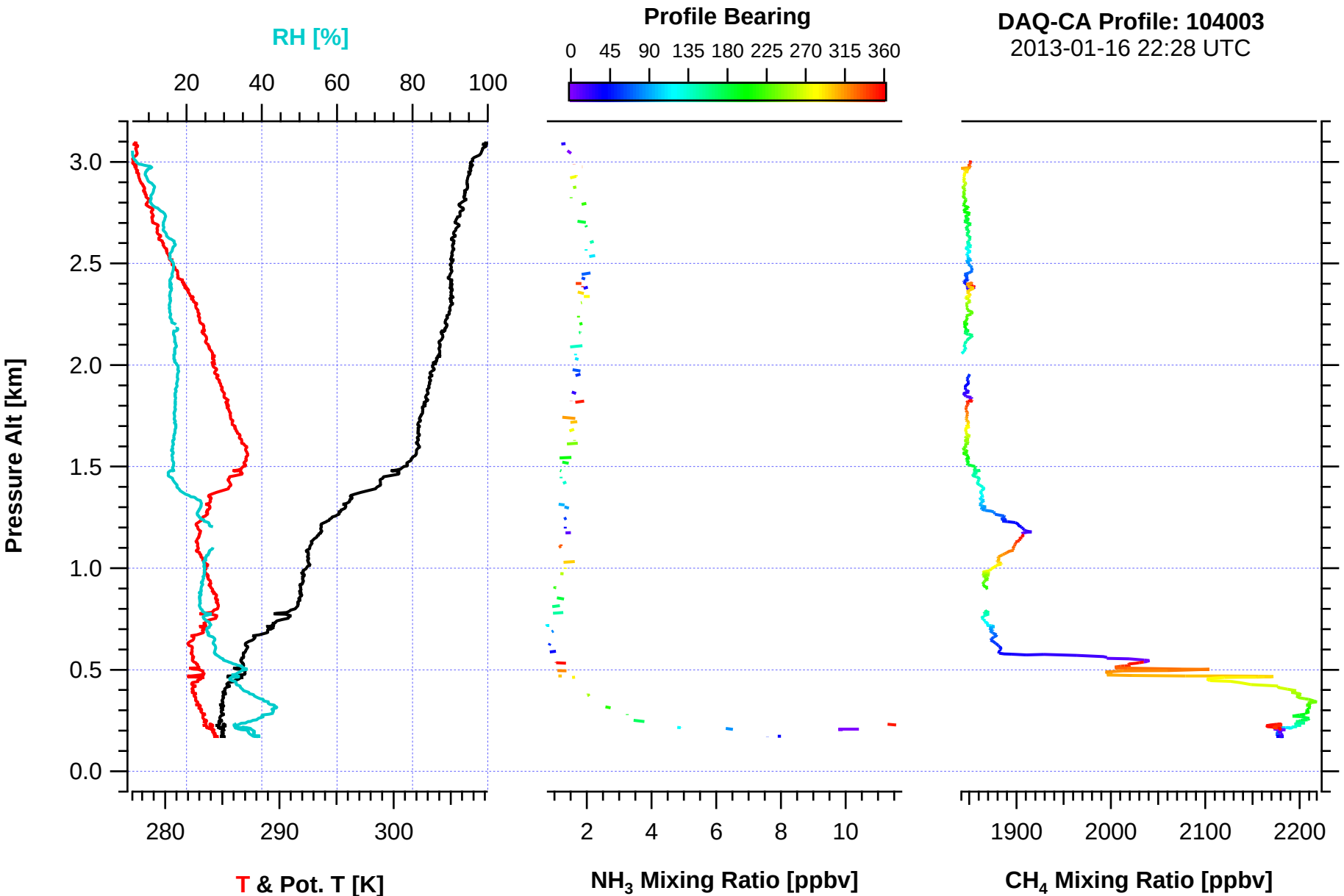

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104003
2013-01-16 22:28 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
0
400
800
1200
CH2O Mixing Ratio [pptv]
0.0
0.5
1.0
1.5
Acetaldehyde Mixing Ratio [ppbv]

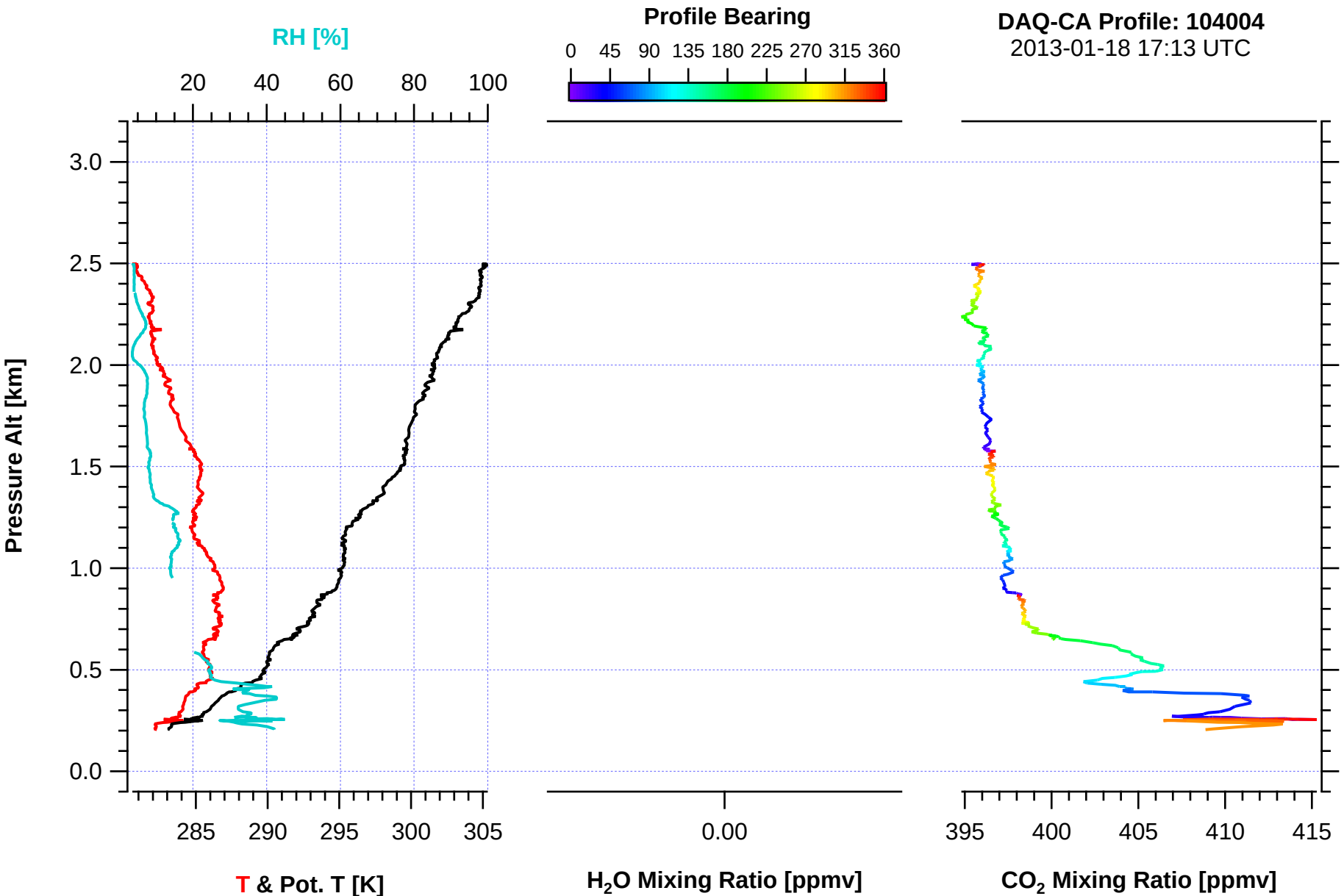

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104003
2013-01-16 22:28 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
-0.05
0.00
0.05
0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.1
0.0
0.1
0.2
Isoprene Mixing Ratio [ppbv]

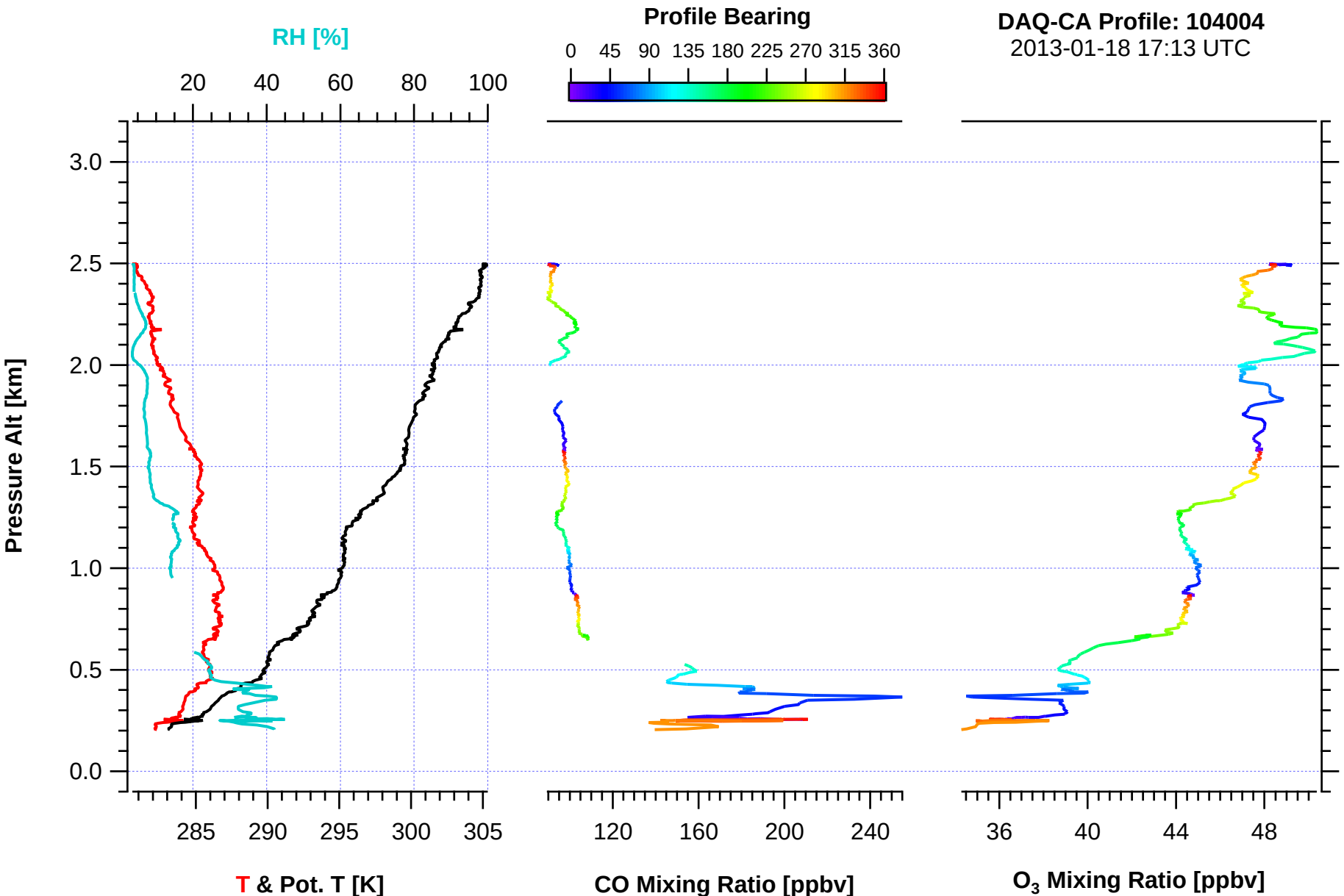

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104003
2013-01-16 22:28 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
0
20
40
60
80
SCAT550nm, dry [Mm-1]
4
8
12x103
CN > 10nm [# cm-3]

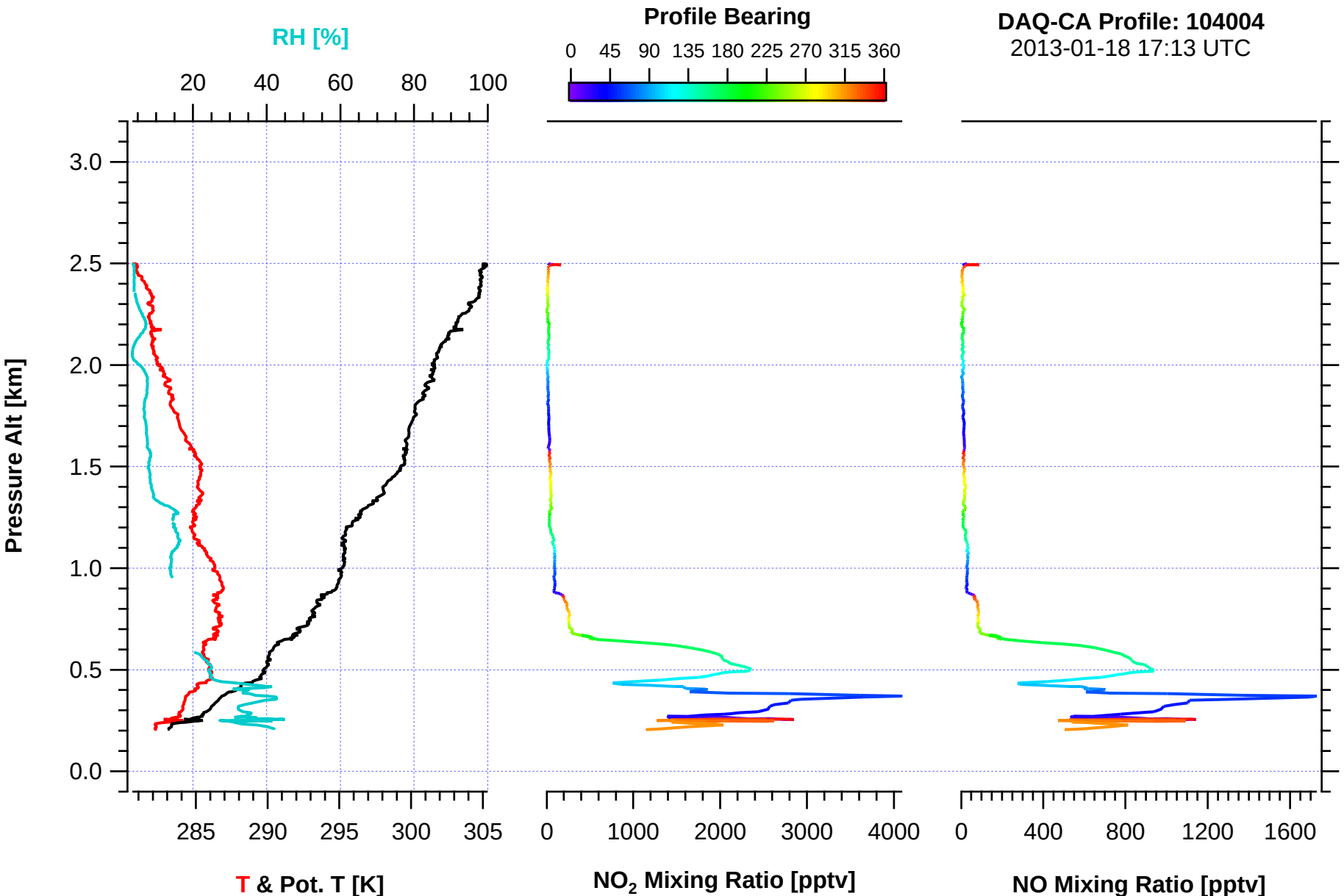

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104003
2013-01-16 22:28 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
1 2 3 4 5 6 7x10-3
jNO2-Nadir and Zenith [s-1]
6 7 8 9x10-3
jNO2-Total [s-1]

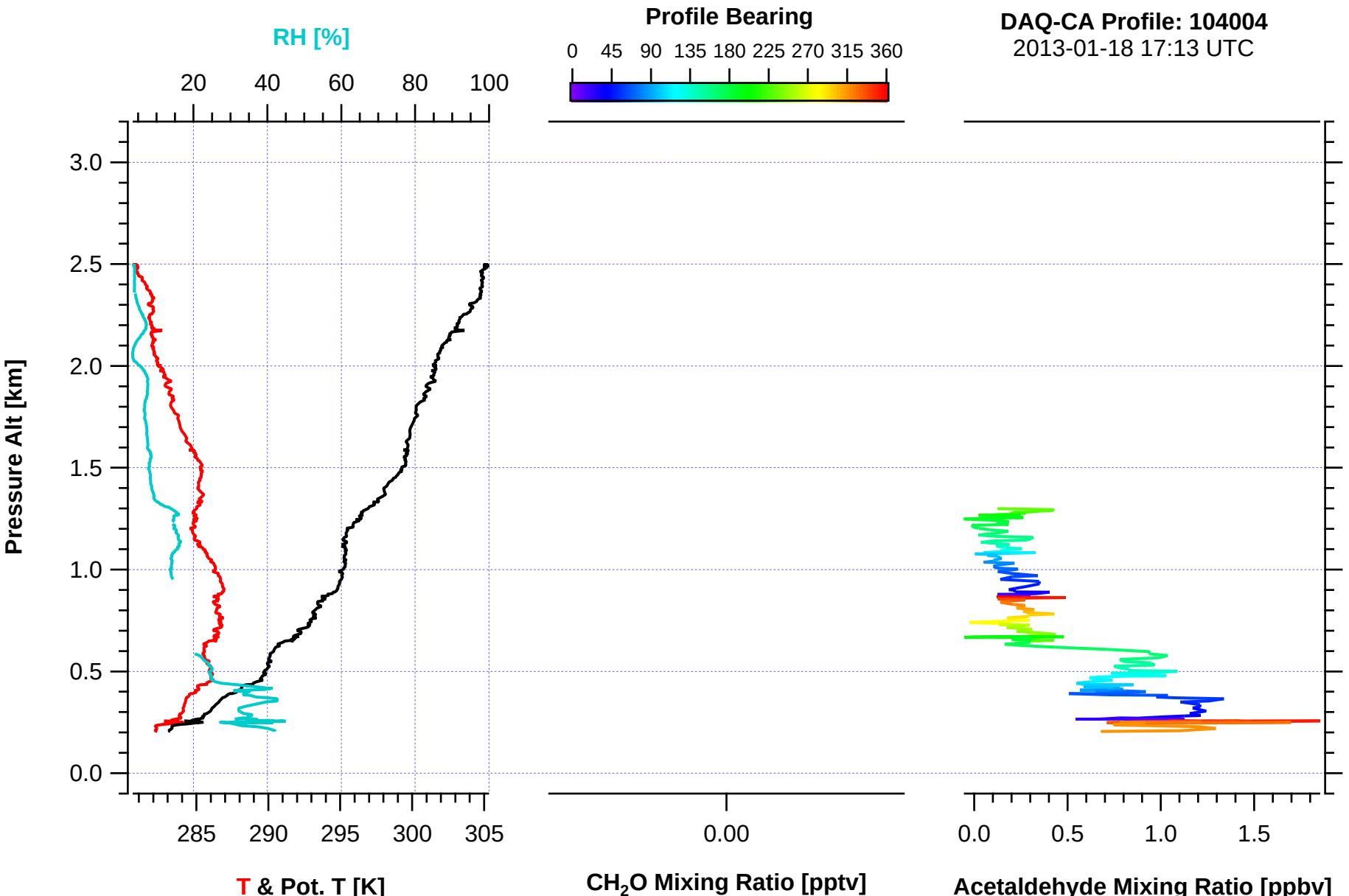

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104003
2013-01-16 22:28 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
280
285
290
295
Surface Temperature [K]
0.0
1.0
2.0
3.0
Methanol Mixing Ratio [ppbv]

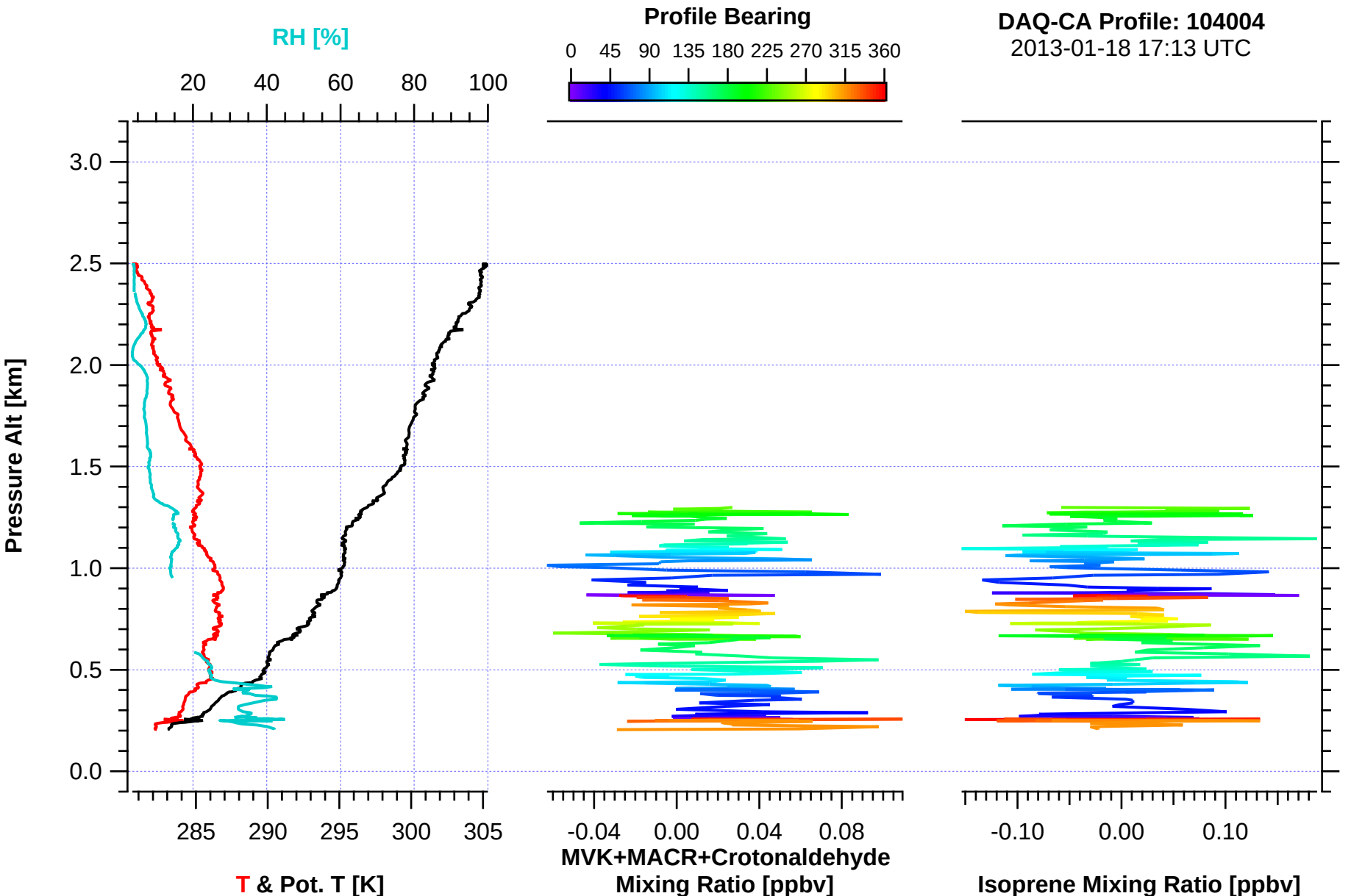

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104003
2013-01-16 22:28 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
290
300
T & Pot. T [K]
2
4
6
8
10
NH3 Mixing Ratio [ppbv]
1900
2000
2100
2200
CH4 Mixing Ratio [ppbv]

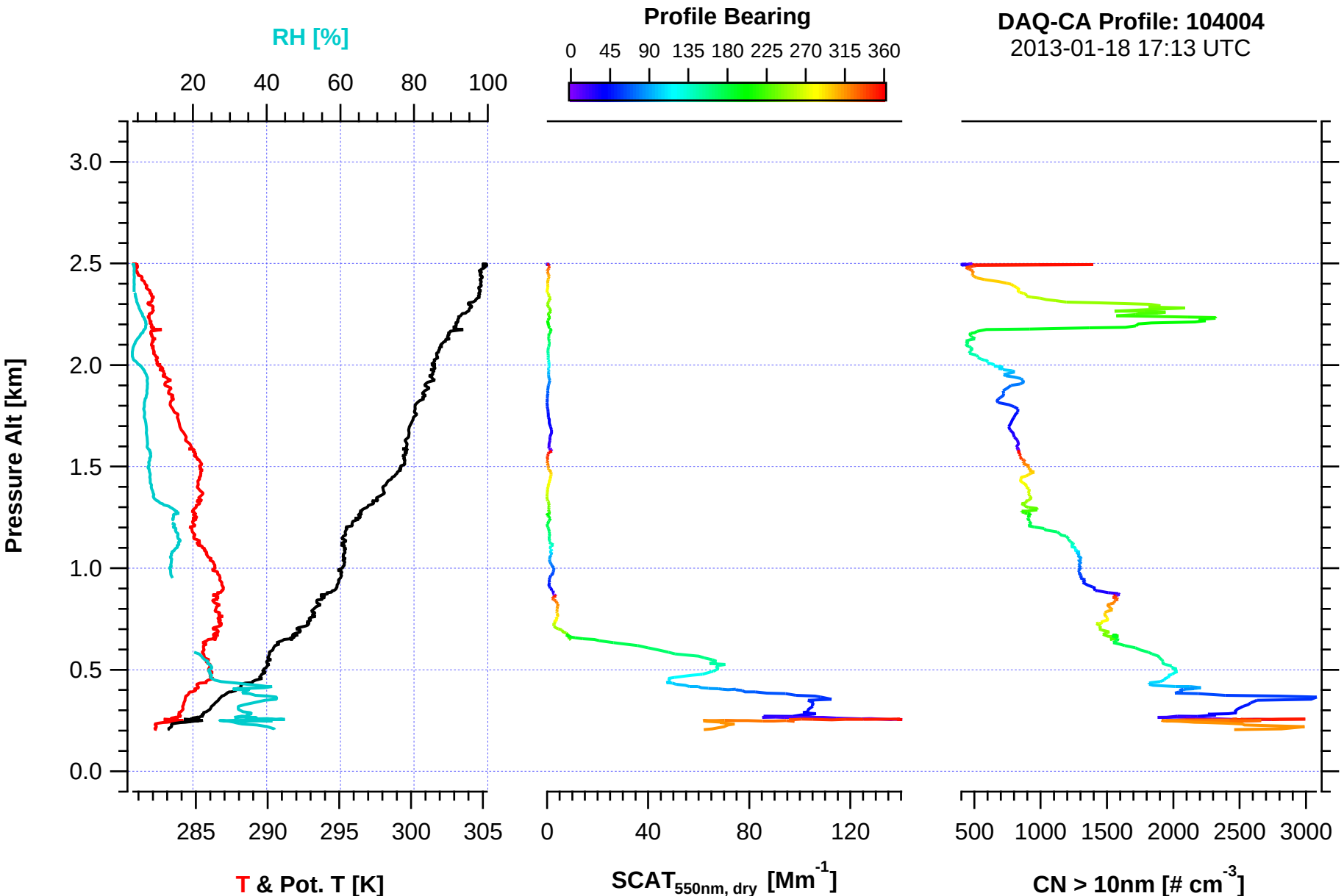

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104004
2013-01-18 17:13 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285
290
295
300
305
T & Pot. T [K]
0.00
H2O Mixing Ratio [ppmv]
395
400
405
410
415
CO2 Mixing Ratio [ppmv]

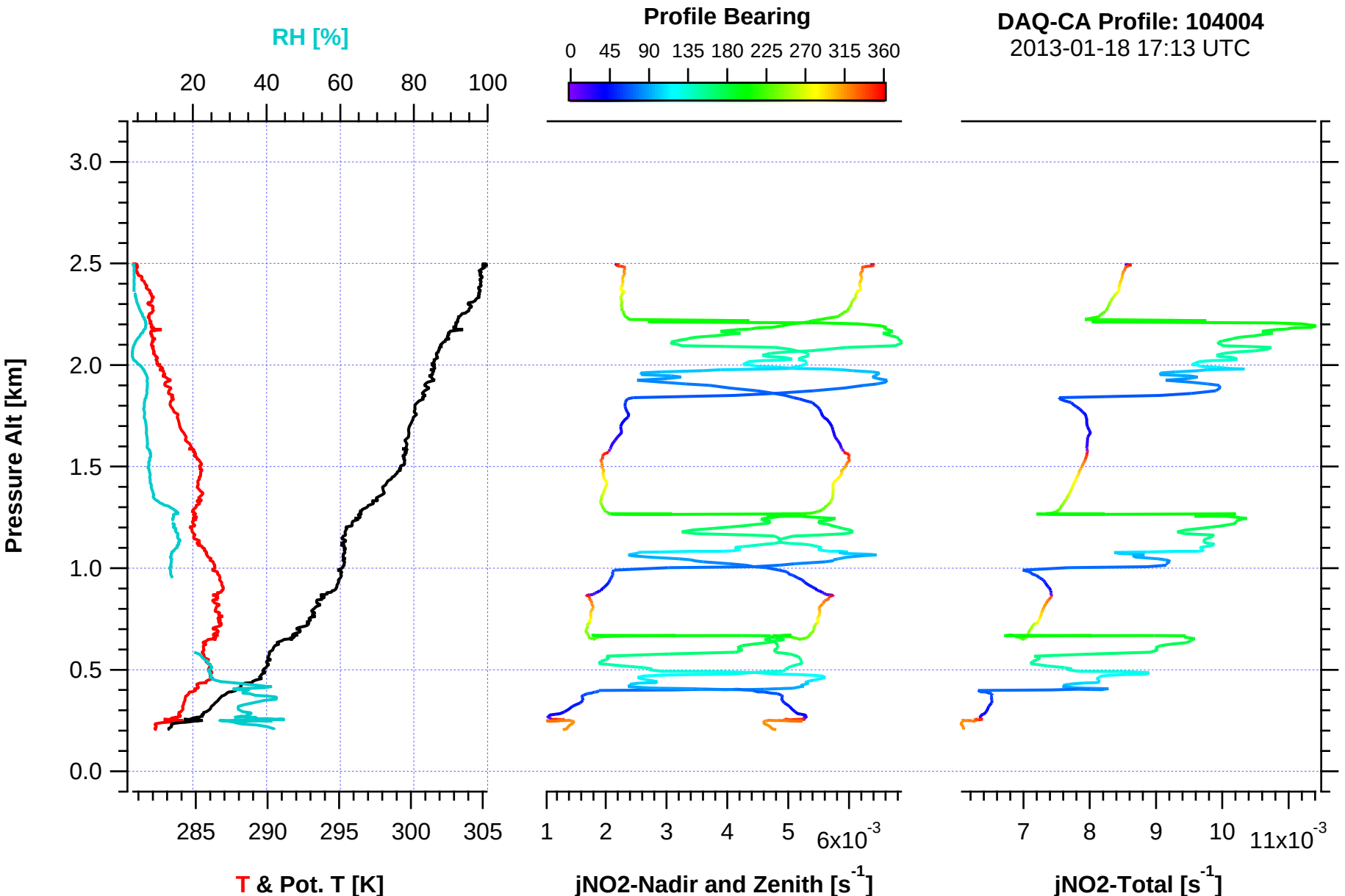

DAQ-CA Profile: 104004
2013-01-18 17:13 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
120 160 200 240
CO Mixing Ratio [ppbv]
36 40 44 48
O3 Mixing Ratio [ppbv]

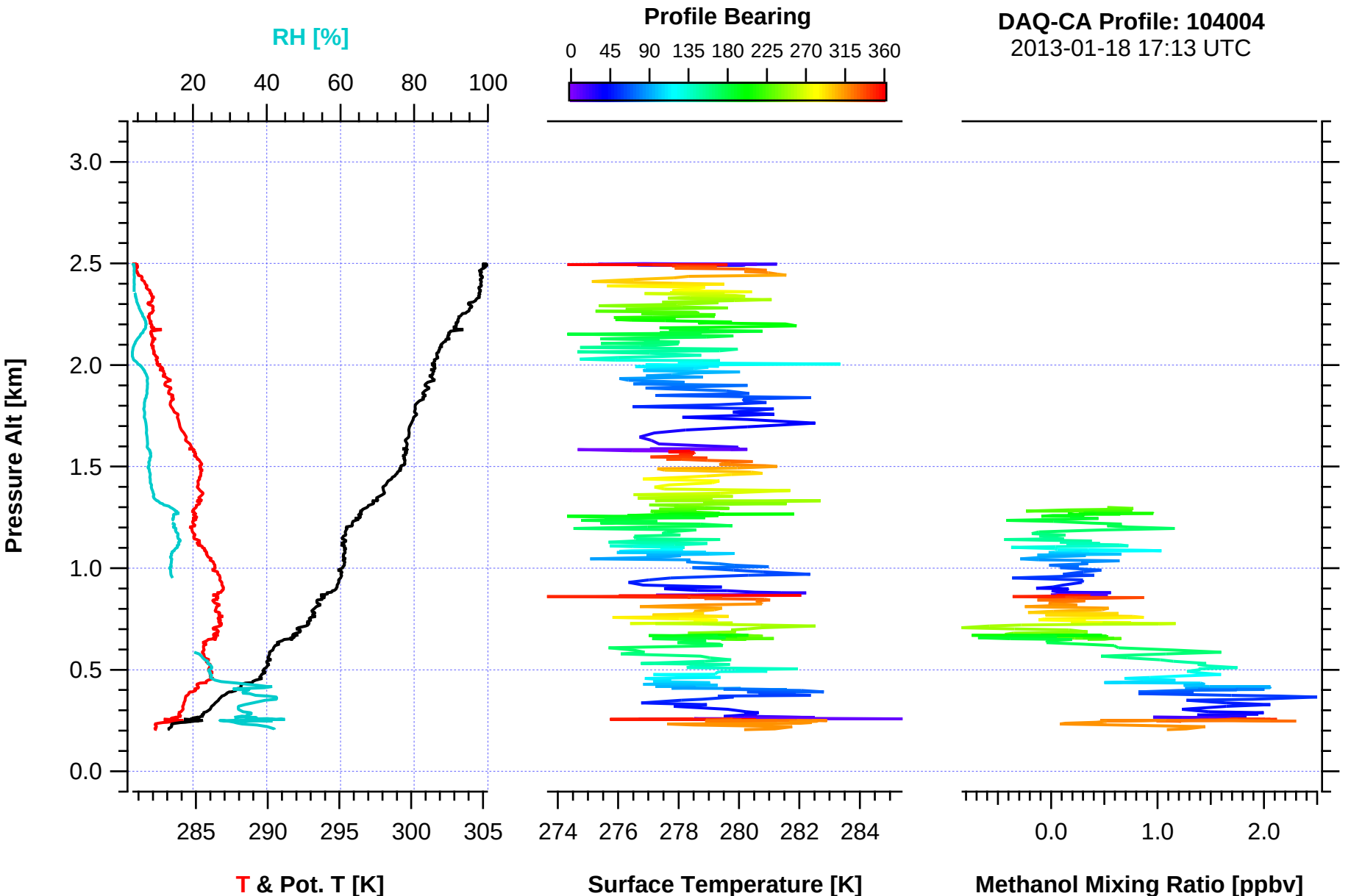

DAQ-CA Profile: 104004
2013-01-18 17:13 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
0 1000 2000 3000 4000
NO2 Mixing Ratio [pptv]
0 400 800 1200 1600
NO Mixing Ratio [pptv]

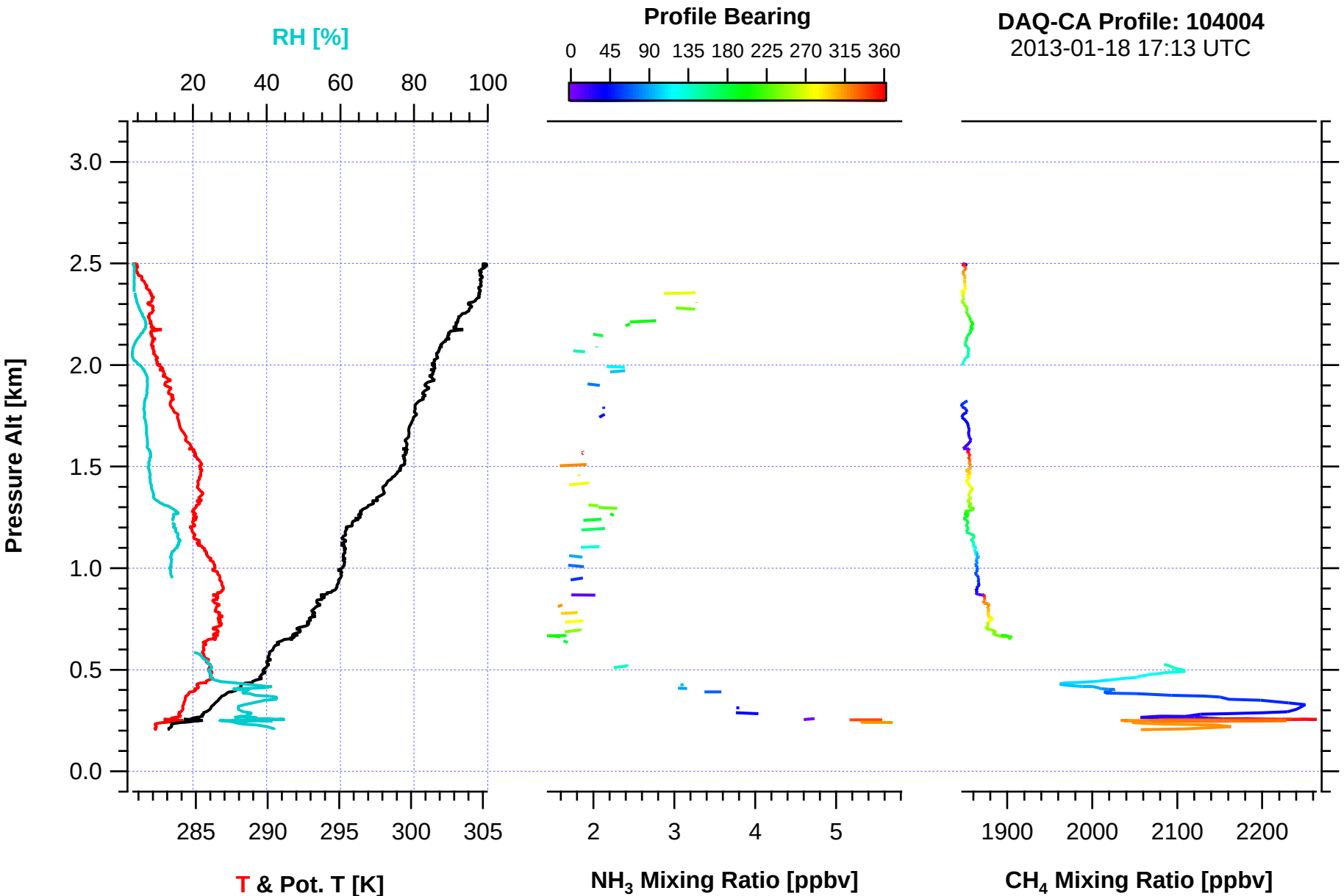

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104004
2013-01-18 17:13 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285
290
295
300
305
T & Pot. T [K]
0.00
CH2O Mixing Ratio [pptv]
0.0
0.5
1.0
1.5
Acetaldehyde Mixing Ratio [ppbv]

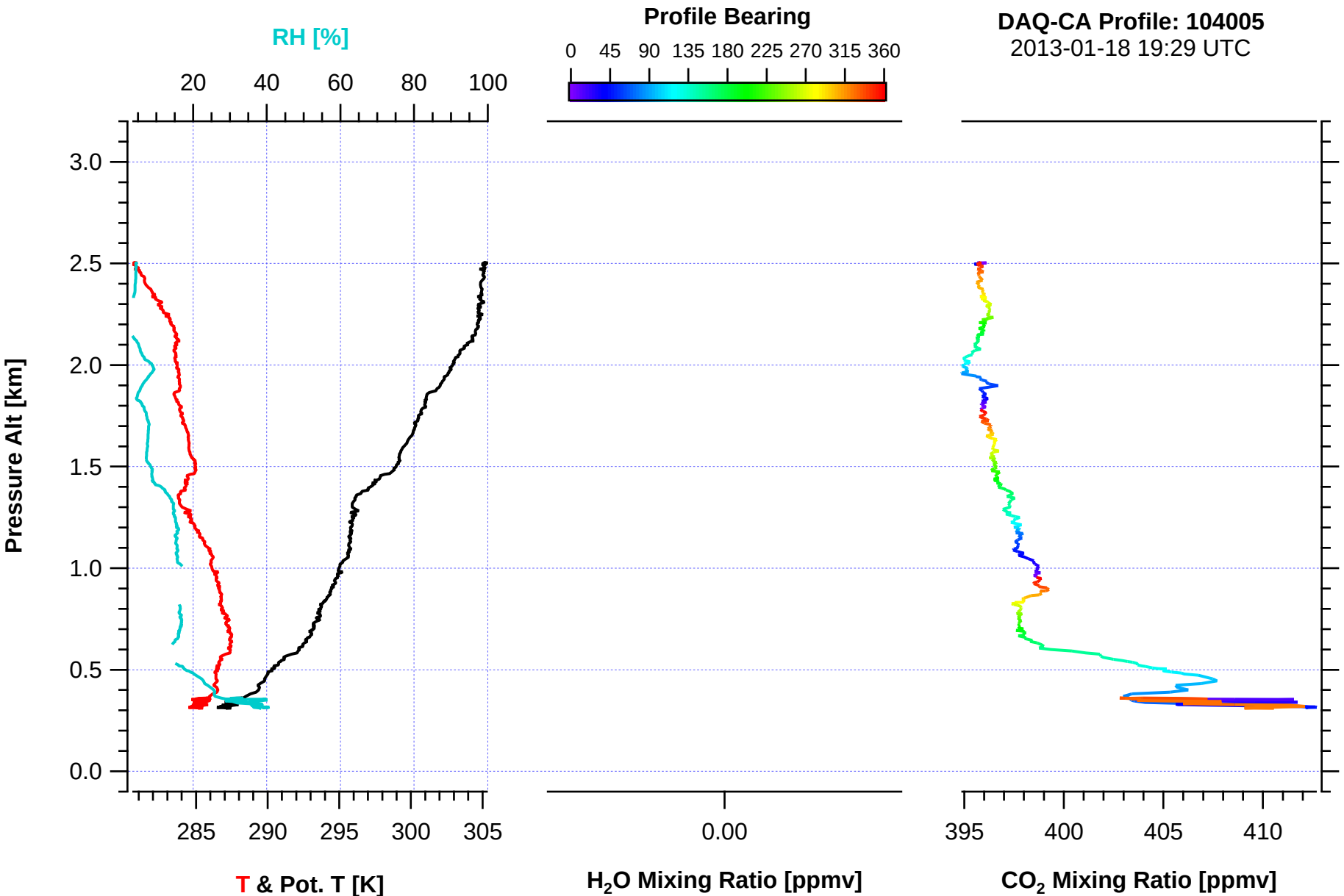

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104004
2013-01-18 17:13 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285
290
295
300
305
T & Pot. T [K]
-0.04
0.00
0.04
0.08
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.10
0.00
0.10
Isoprene Mixing Ratio [ppbv]

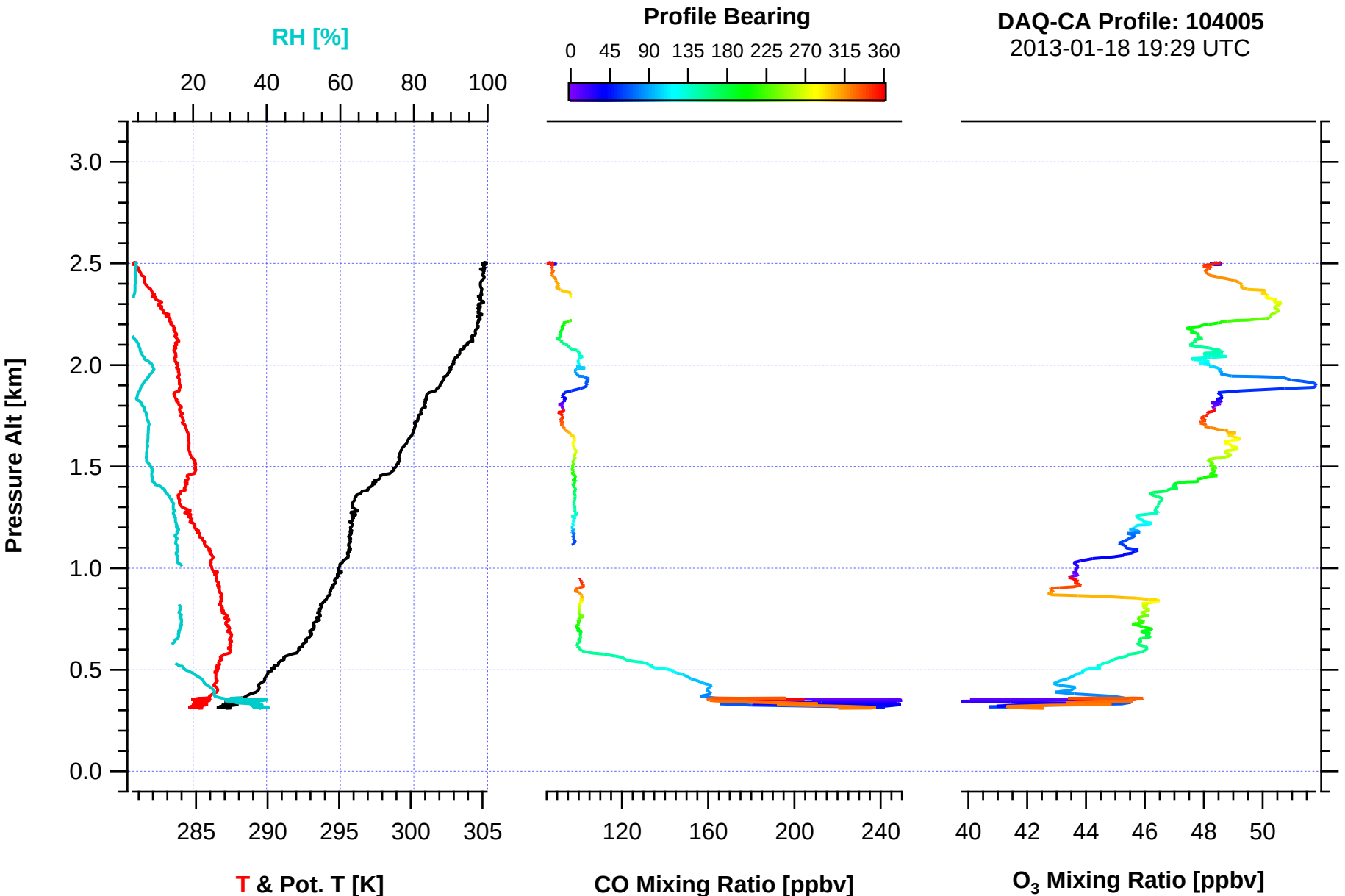

DAQ-CA Profile: 104004
2013-01-18 17:13 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
0 40 80 120
SCAT550nm, dry [Mm-1]
500 1000 1500 2000 2500 3000
CN > 10nm [# cm-3]

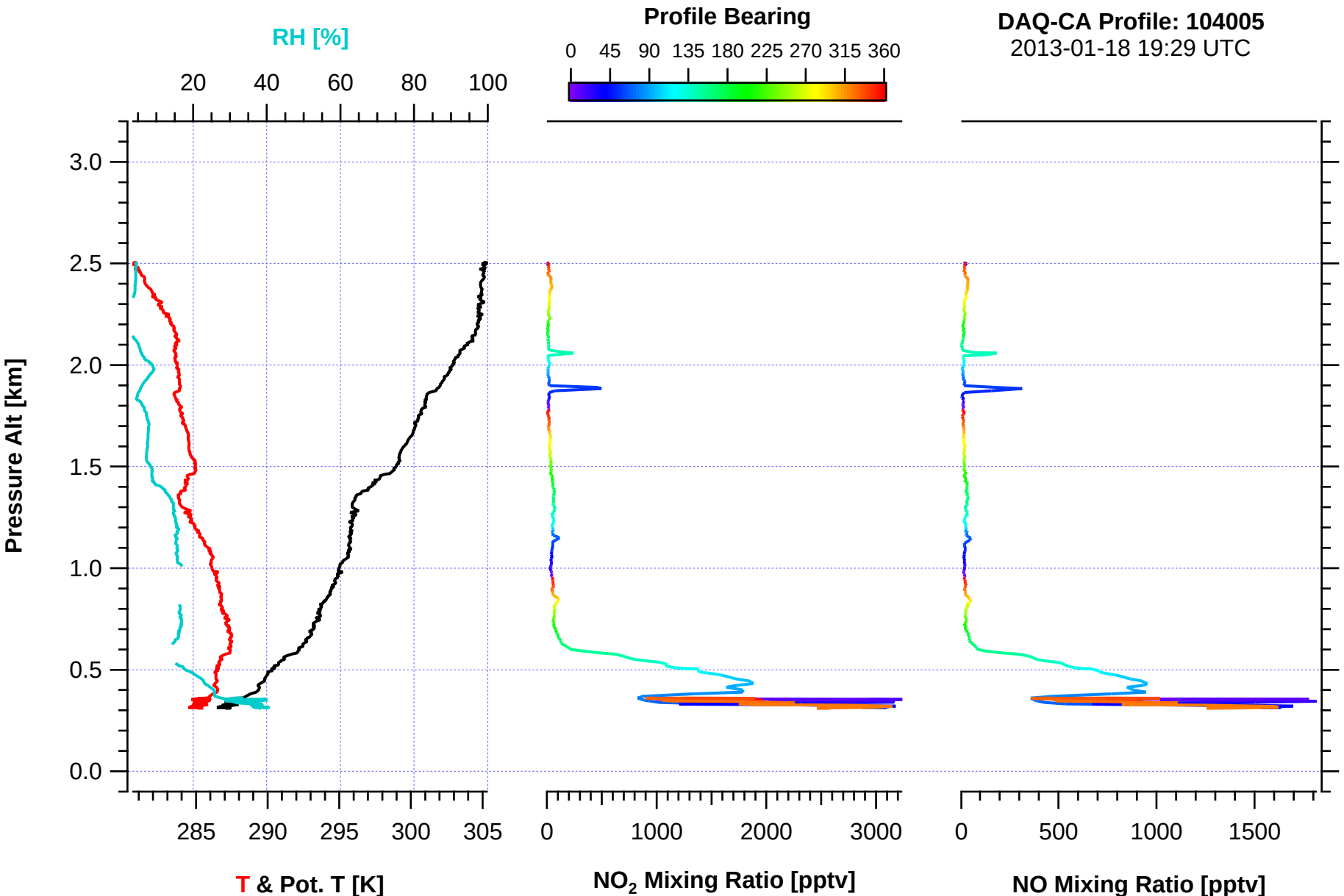

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104004
2013-01-18 17:13 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285
290
295
300
305
1
2
3
4
5
6x10^-3
7
8
9
10
11x10^-3
T & Pot. T [K]
jNO2-Nadir and Zenith [s^-1]
jNO2-Total [s^-1]

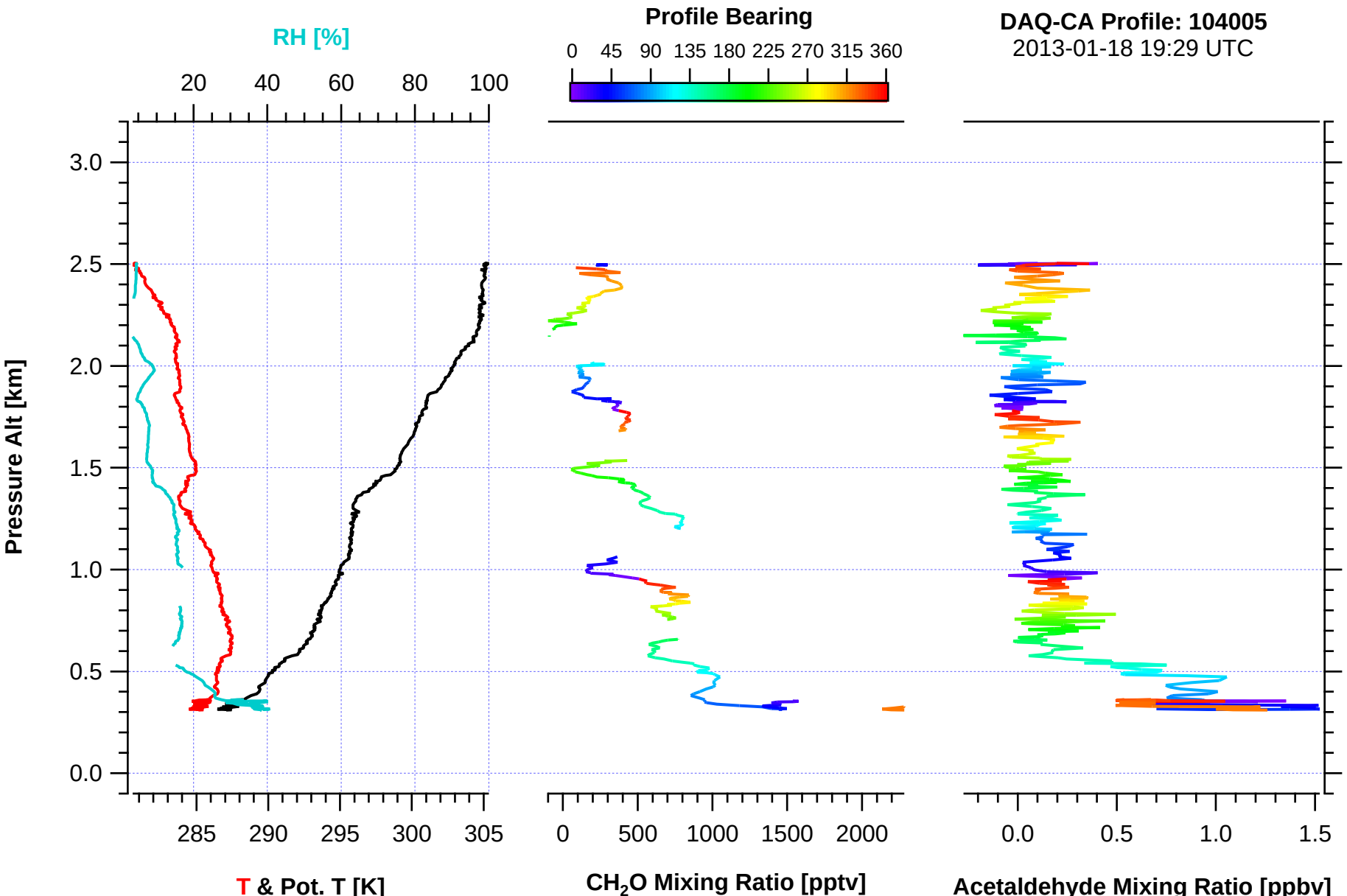

DAQ-CA Profile: 104004
2013-01-18 17:13 UTC
RH [%]
20 40 60 80 100
Profile Bearing
0 45 90 135 180 225 270 315 360
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
274 276 278 280 282 284
Surface Temperature [K]
0.0 1.0 2.0
Methanol Mixing Ratio [ppbv]

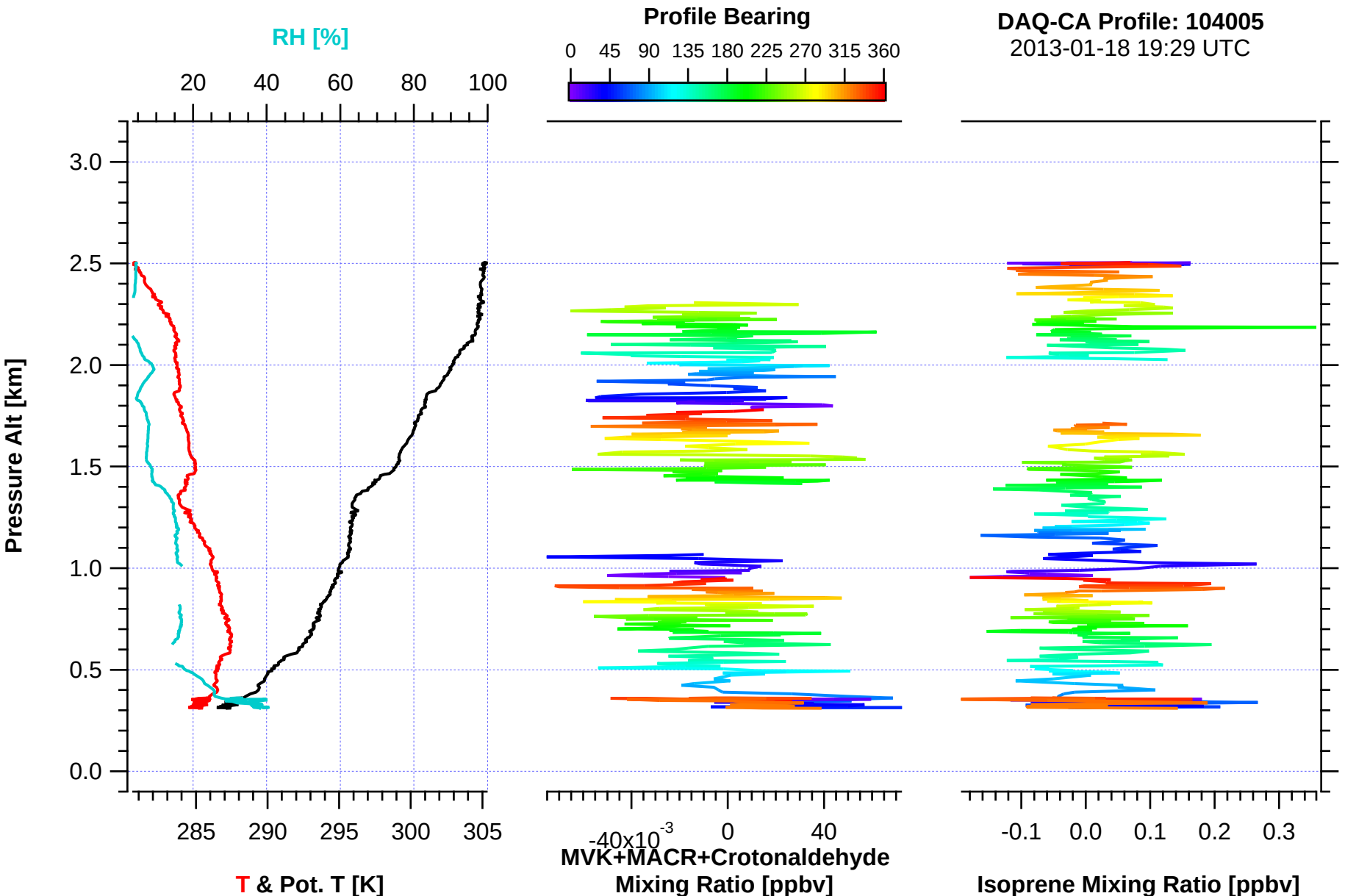

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104004
2013-01-18 17:13 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285
290
295
300
305
T & Pot. T [K]
2
3
4
5
NH3 Mixing Ratio [ppbv]
1900
2000
2100
2200
CH4 Mixing Ratio [ppbv]

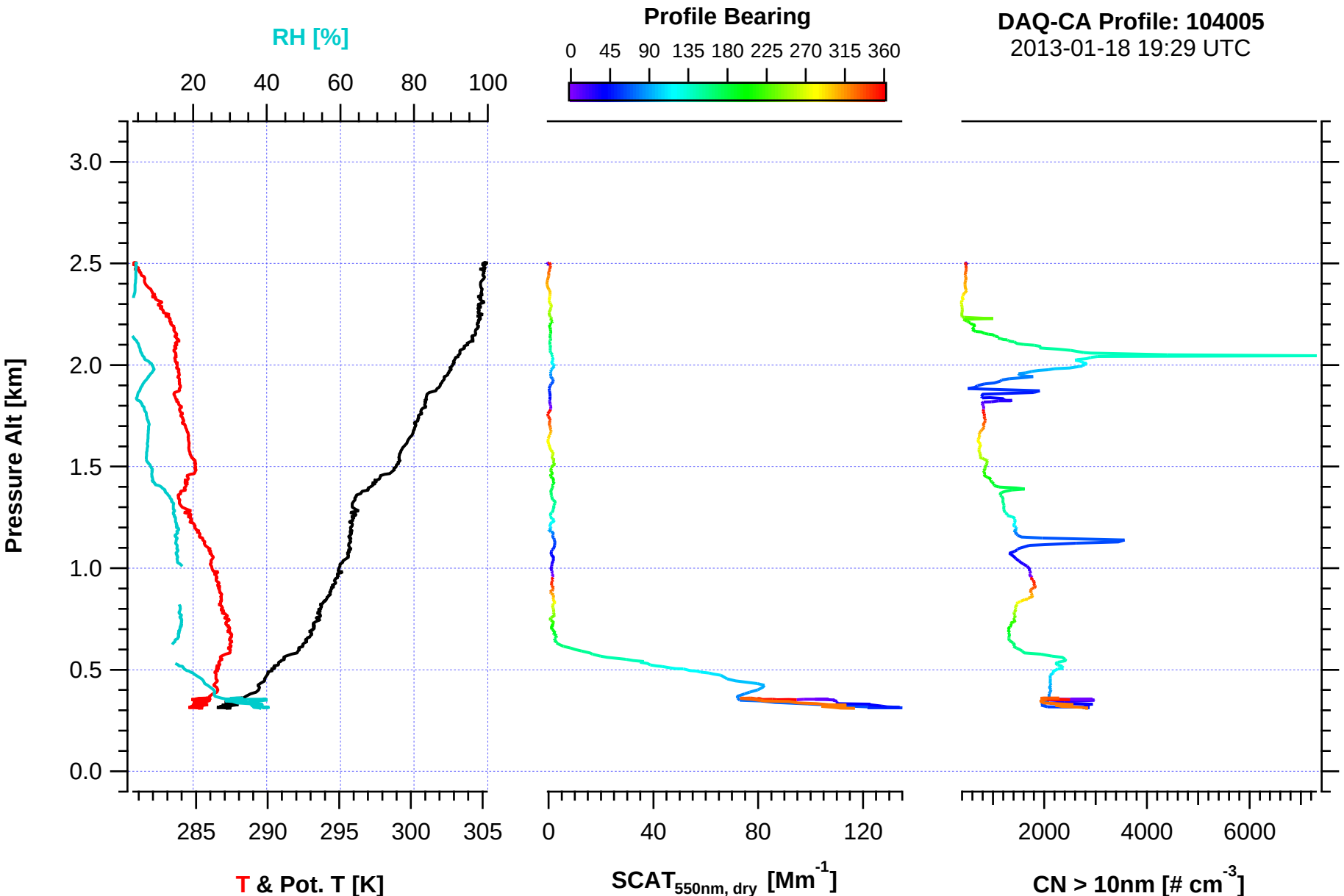

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104005
2013-01-18 19:29 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285
290
295
300
305
T & Pot. T [K]
0.00
H2O Mixing Ratio [ppmv]
395
400
405
410
CO2 Mixing Ratio [ppmv]

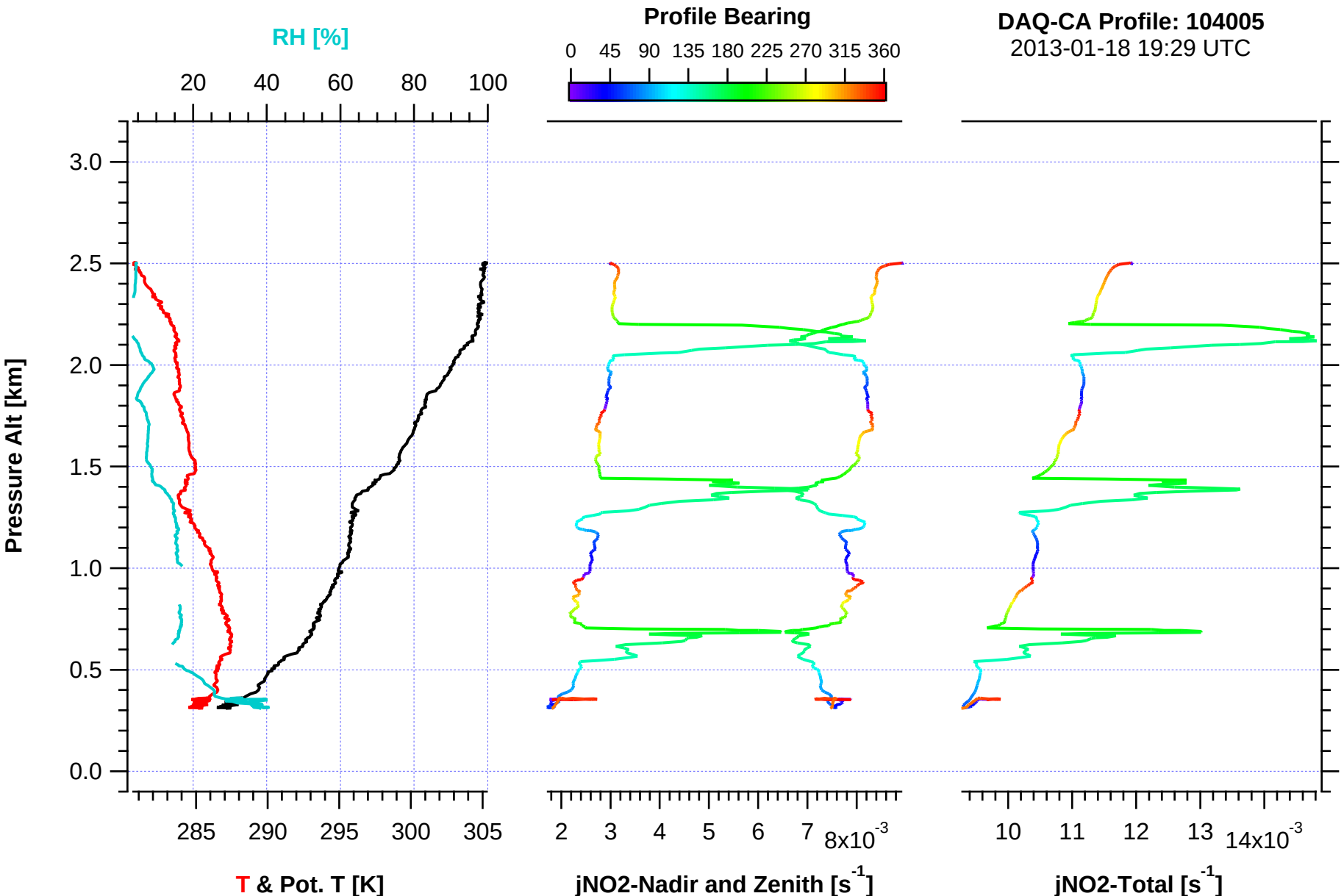

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104005
2013-01-18 19:29 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
120 160 200 240
CO Mixing Ratio [ppbv]
40 42 44 46 48 50
O3 Mixing Ratio [ppbv]

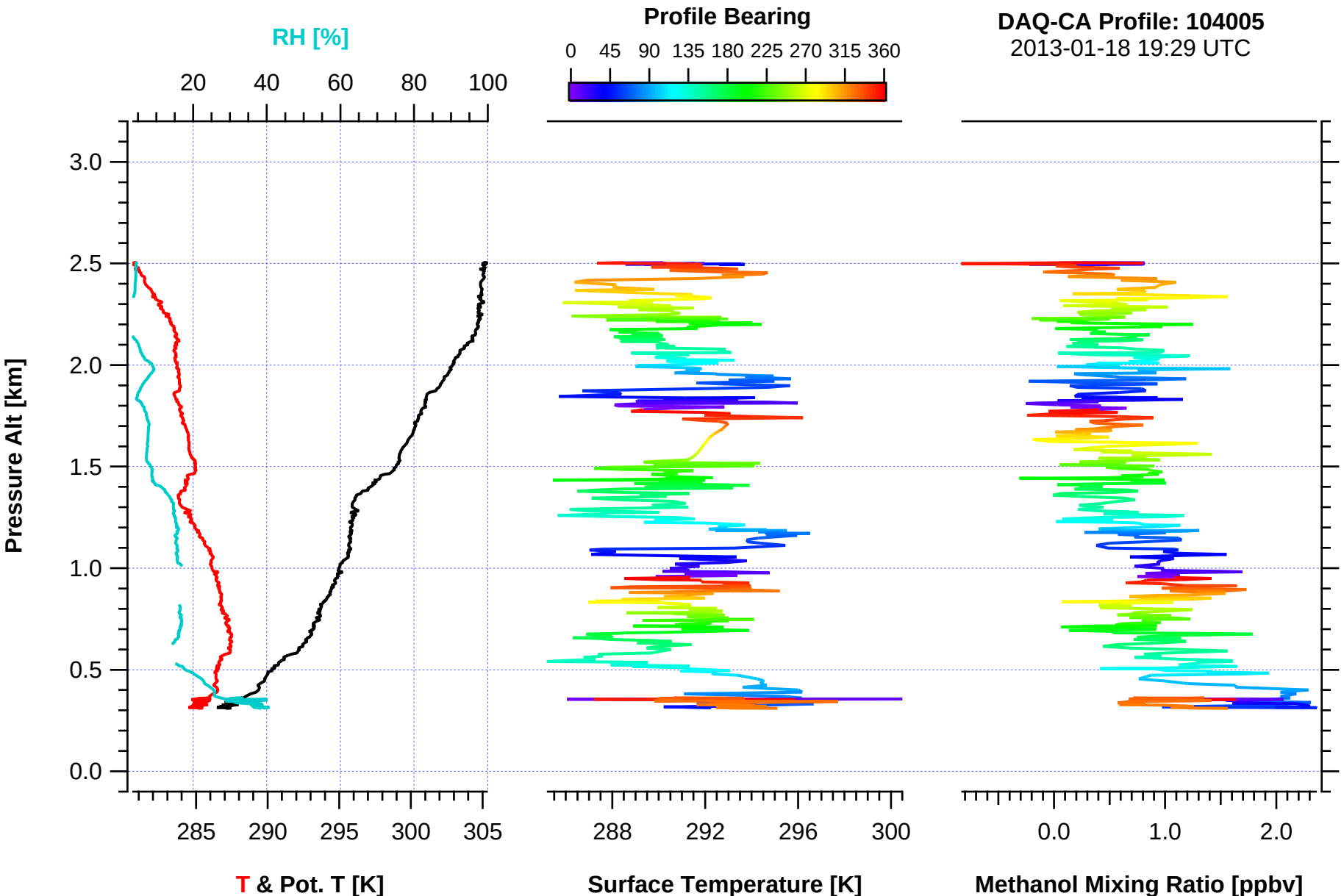

DAQ-CA Profile: 104005
2013-01-18 19:29 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
0 1000 2000 3000
NO2 Mixing Ratio [pptv]
0 500 1000 1500
NO Mixing Ratio [pptv]

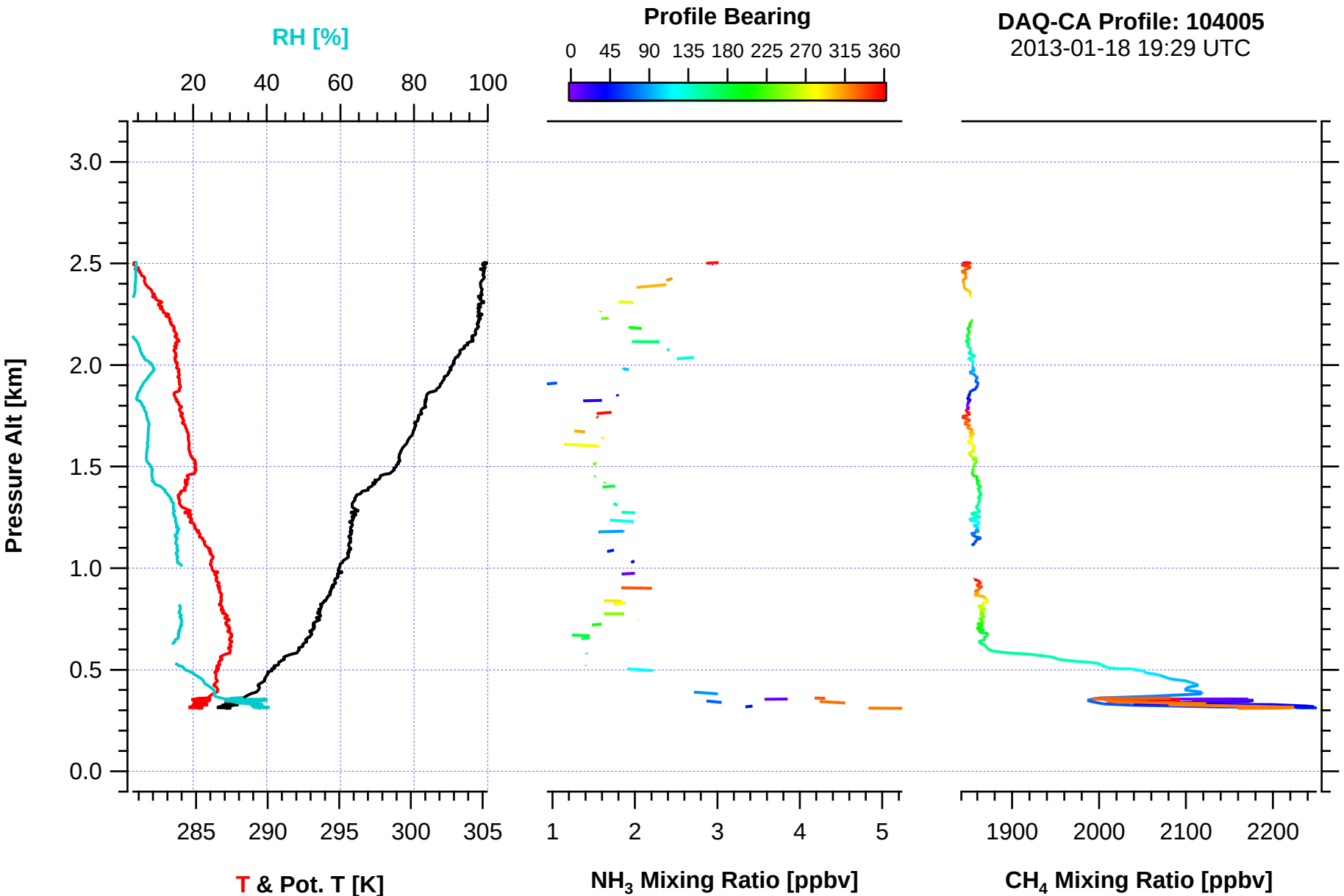

DAQ-CA Profile: 104005
2013-01-18 19:29 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
0 500 1000 1500 2000
CH2O Mixing Ratio [pptv]
0.0 0.5 1.0 1.5
Acetaldehyde Mixing Ratio [ppbv]

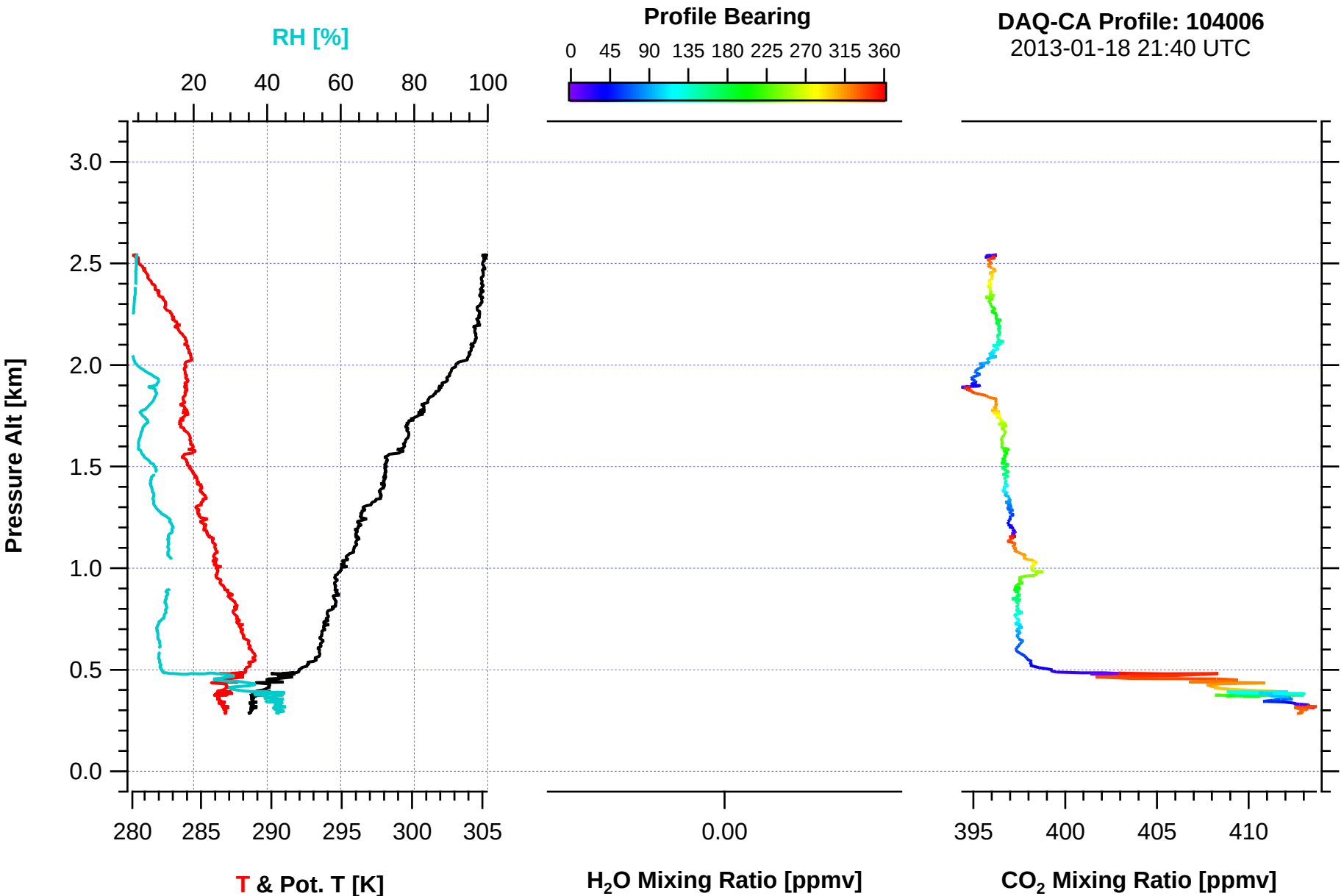

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104005
2013-01-18 19:29 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285
290
295
300
305
T & Pot. T [K]
-40x10-3
0
40
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.1
0.0
0.1
0.2
0.3
Isoprene Mixing Ratio [ppbv]

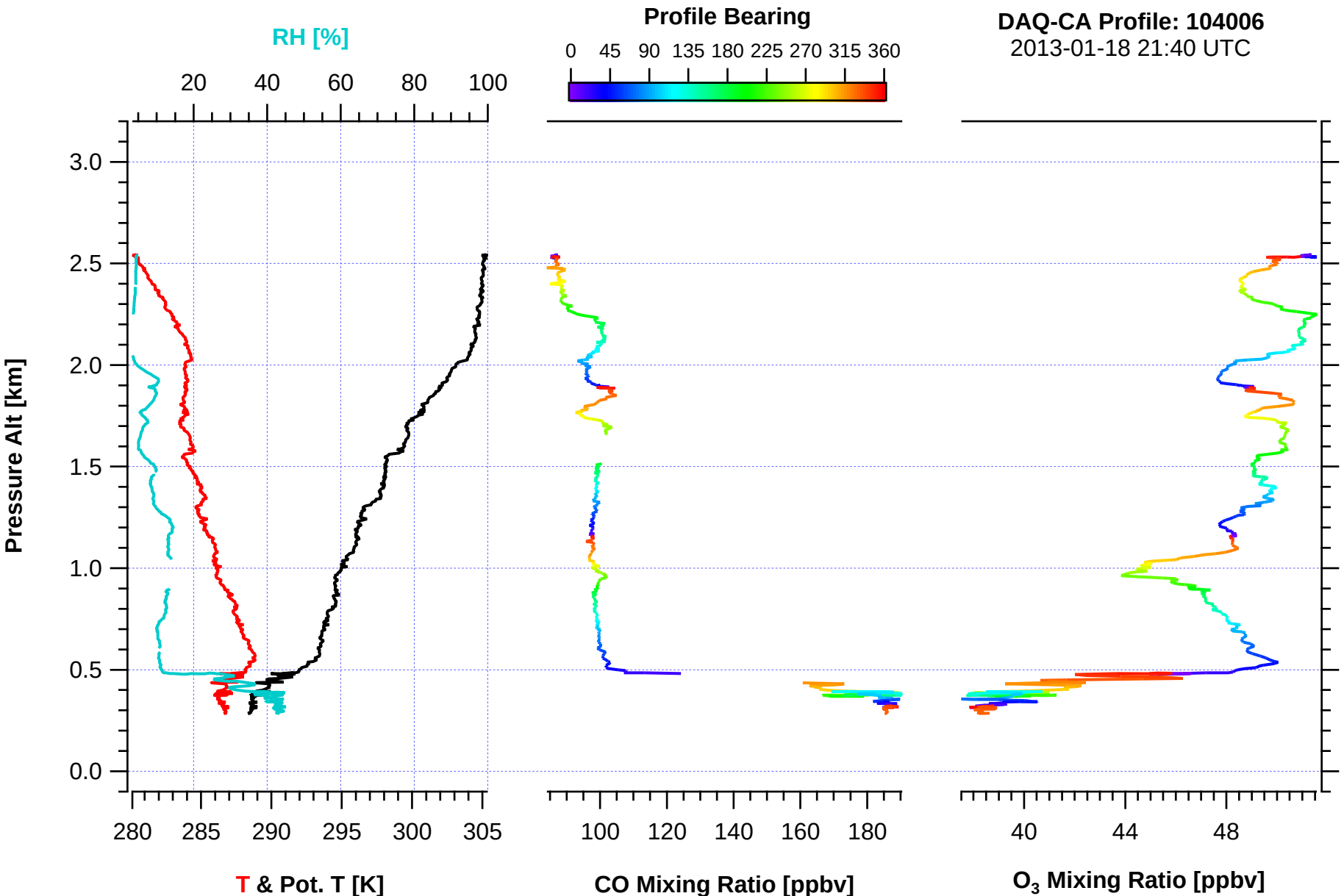

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104005
2013-01-18 19:29 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285
290
295
300
305
T & Pot. T [K]
0
40
80
120
SCAT550nm, dry [Mm-1]
2000
4000
6000
CN > 10nm [# cm-3]

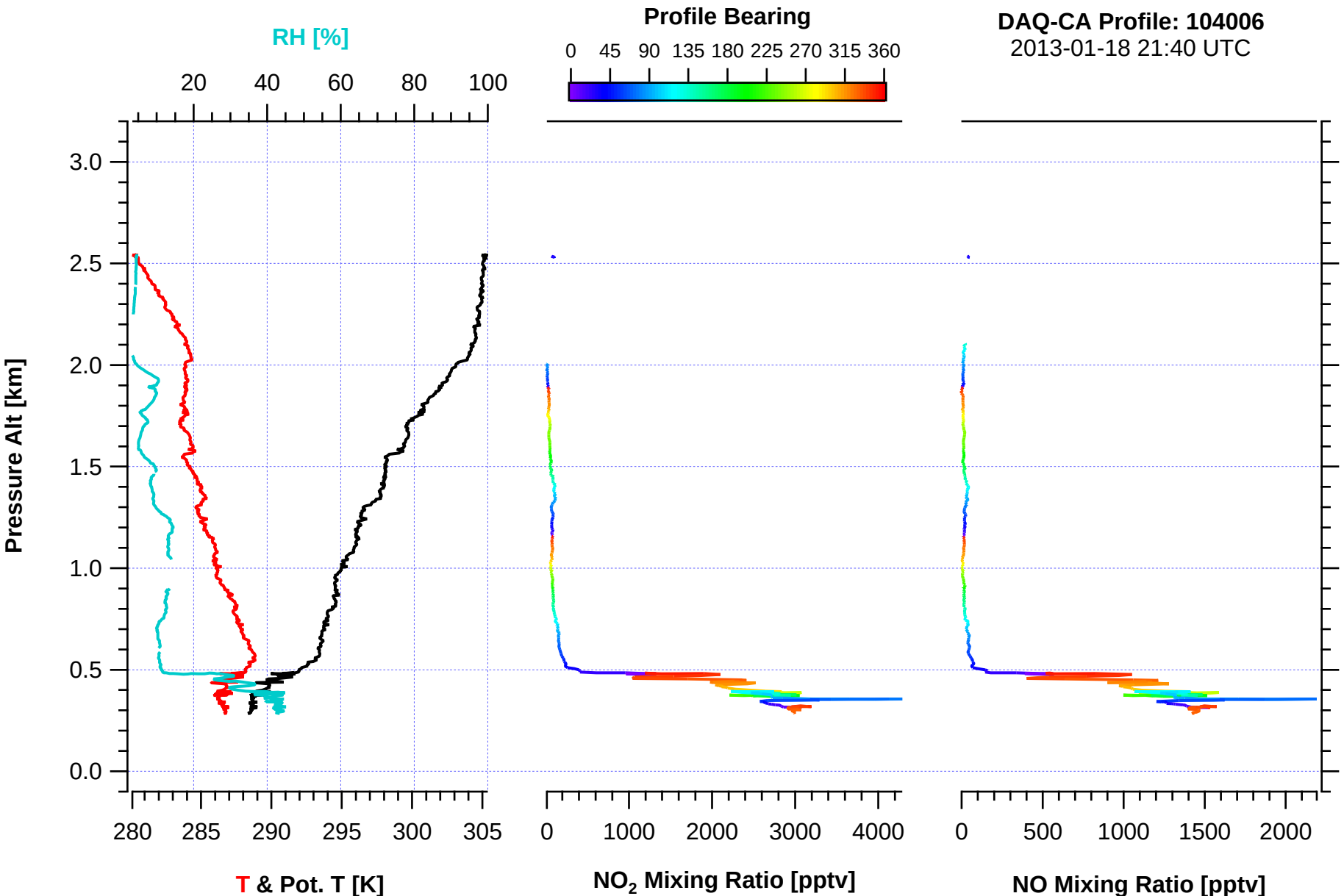

RH [%]
20 40 60 80 100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104005
2013-01-18 19:29 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
2 3 4 5 6 7 8x10^-3
jNO2-Nadir and Zenith [s^-1]
10 11 12 13 14x10^-3
jNO2-Total [s^-1]

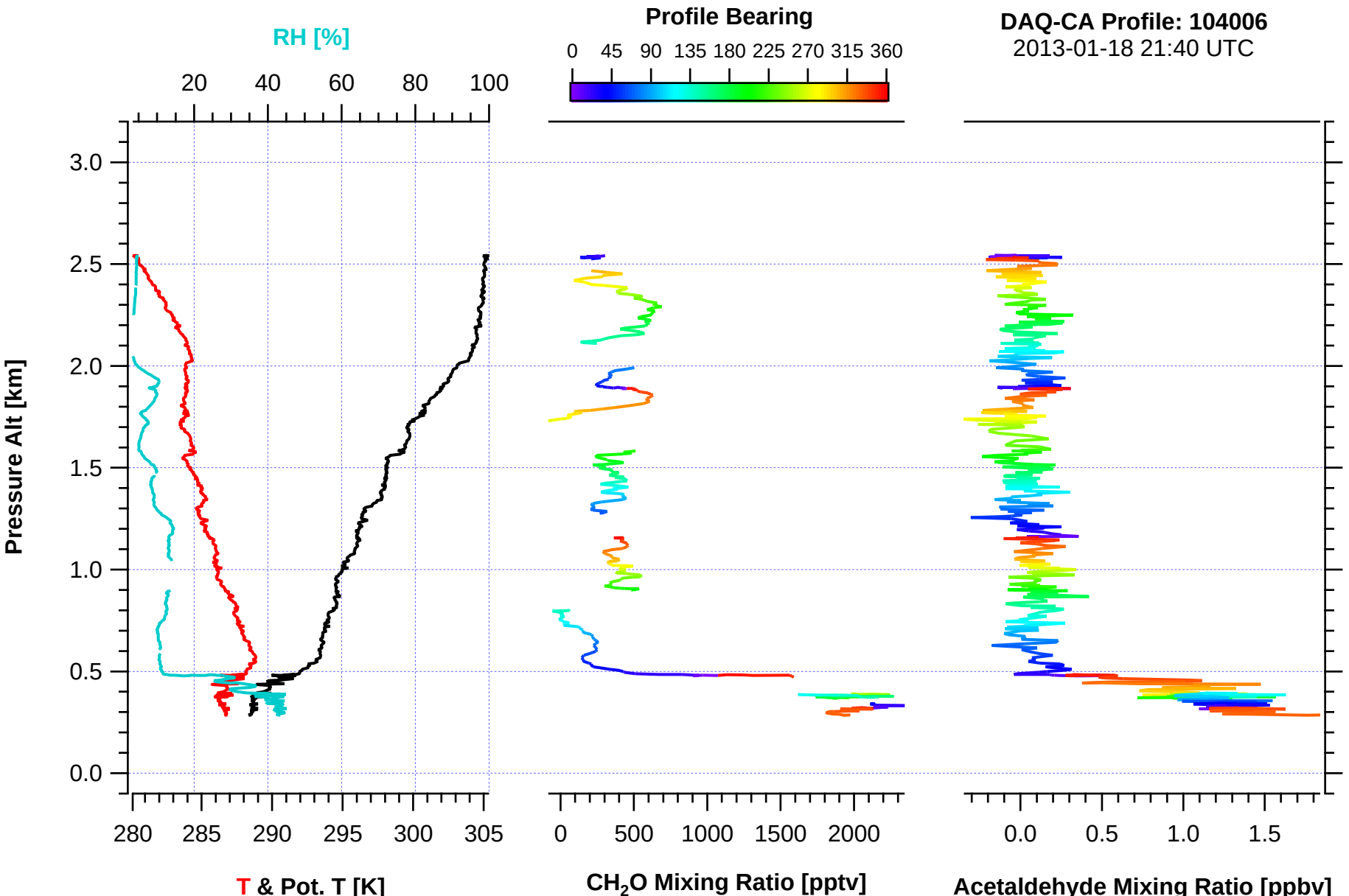

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104005
2013-01-18 19:29 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
288 292 296 300
Surface Temperature [K]
0.0 1.0 2.0
Methanol Mixing Ratio [ppbv]

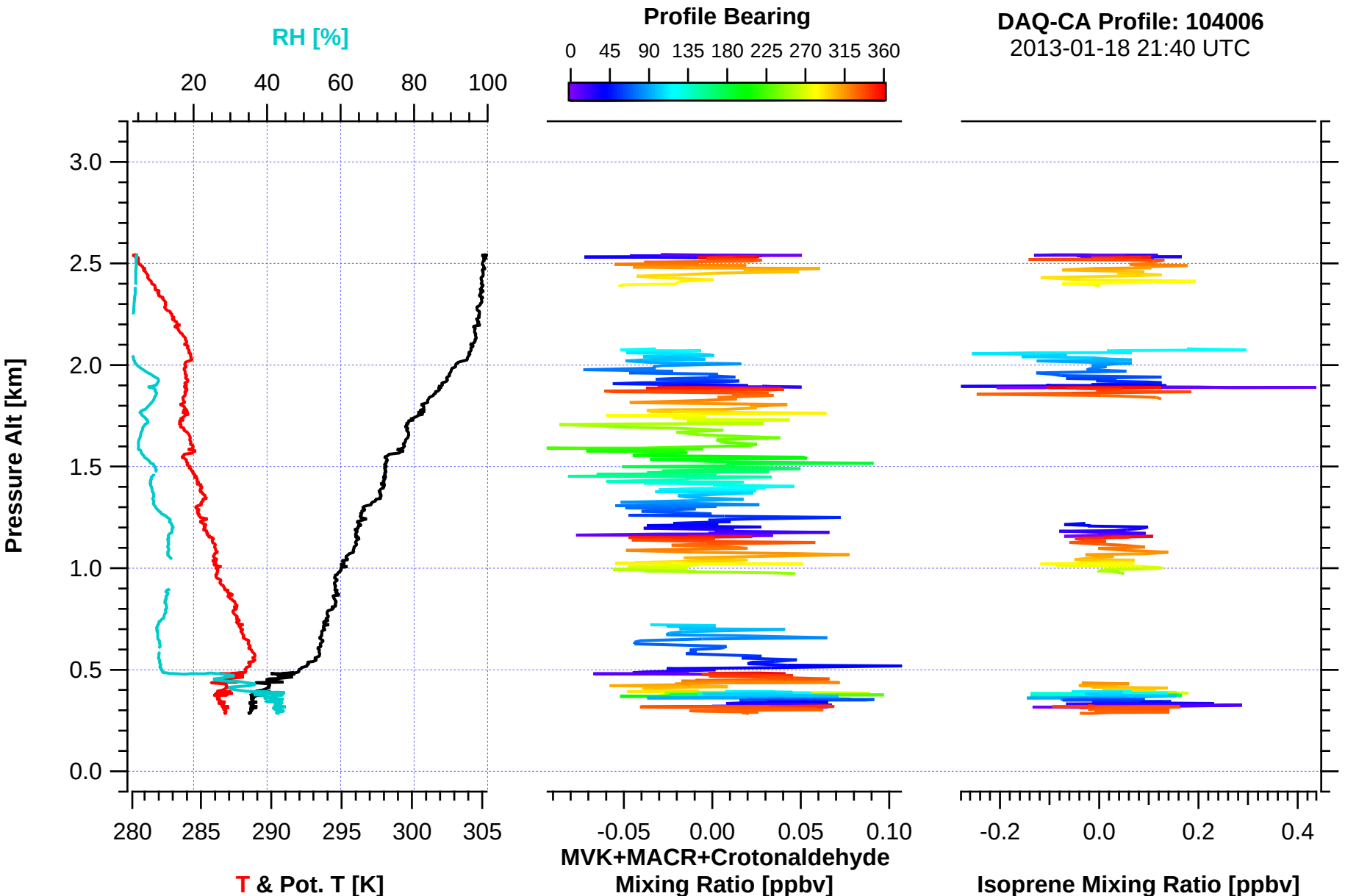

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104005
2013-01-18 19:29 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
1 2 3 4 5
NH3 Mixing Ratio [ppbv]
1900 2000 2100 2200
CH4 Mixing Ratio [ppbv]

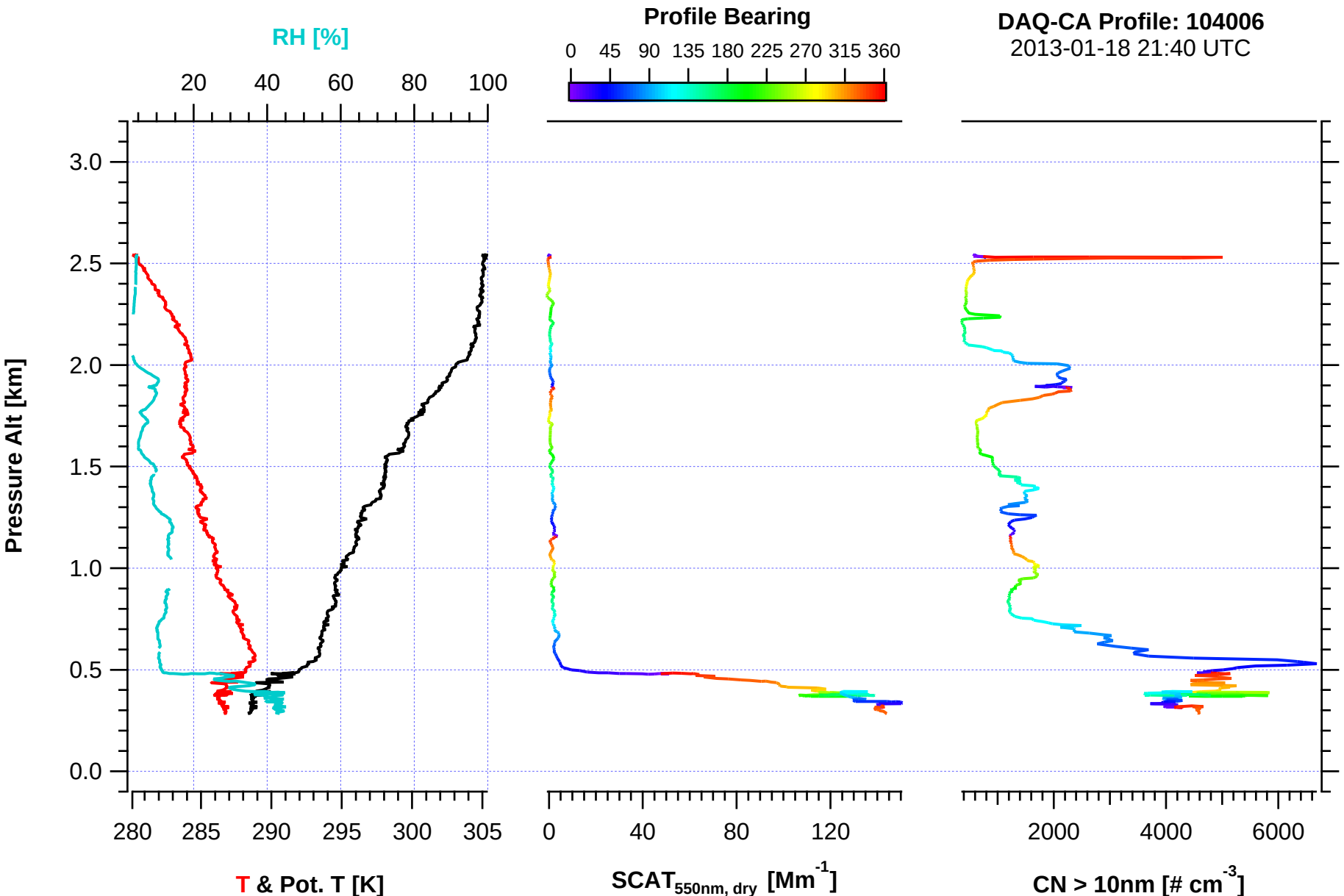

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104006
2013-01-18 21:40 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300 305
T & Pot. T [K]
0.00
H2O Mixing Ratio [ppmv]
395 400 405 410
CO2 Mixing Ratio [ppmv]

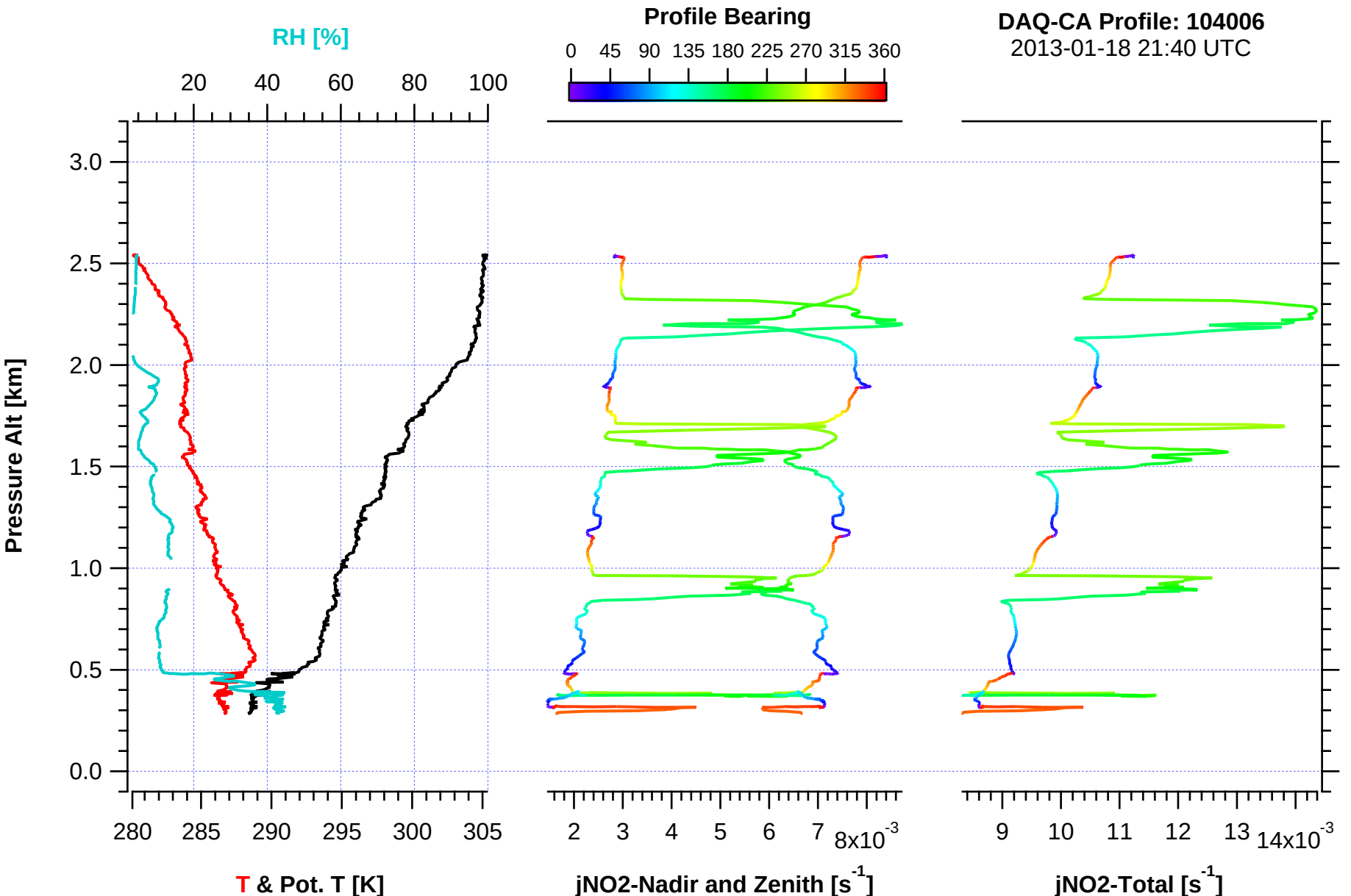

DAQ-CA Profile: 104006
2013-01-18 21:40 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300 305
T & Pot. T [K]
100 120 140 160 180
CO Mixing Ratio [ppbv]
40 44 48
O3 Mixing Ratio [ppbv]

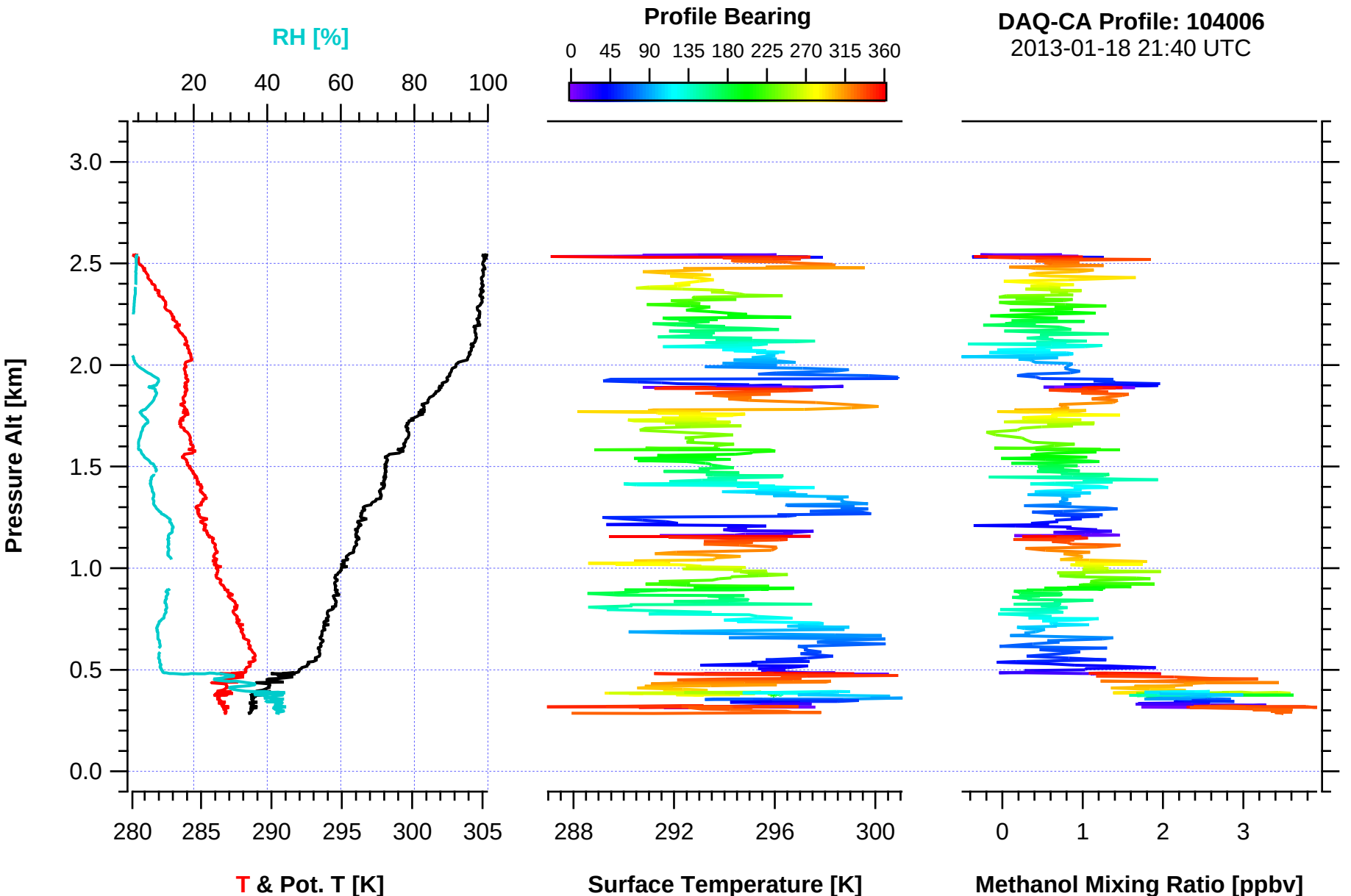

DAQ-CA Profile: 104006
2013-01-18 21:40 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300 305
T & Pot. T [K]
0 1000 2000 3000 4000
NO2 Mixing Ratio [pptv]
0 500 1000 1500 2000
NO Mixing Ratio [pptv]

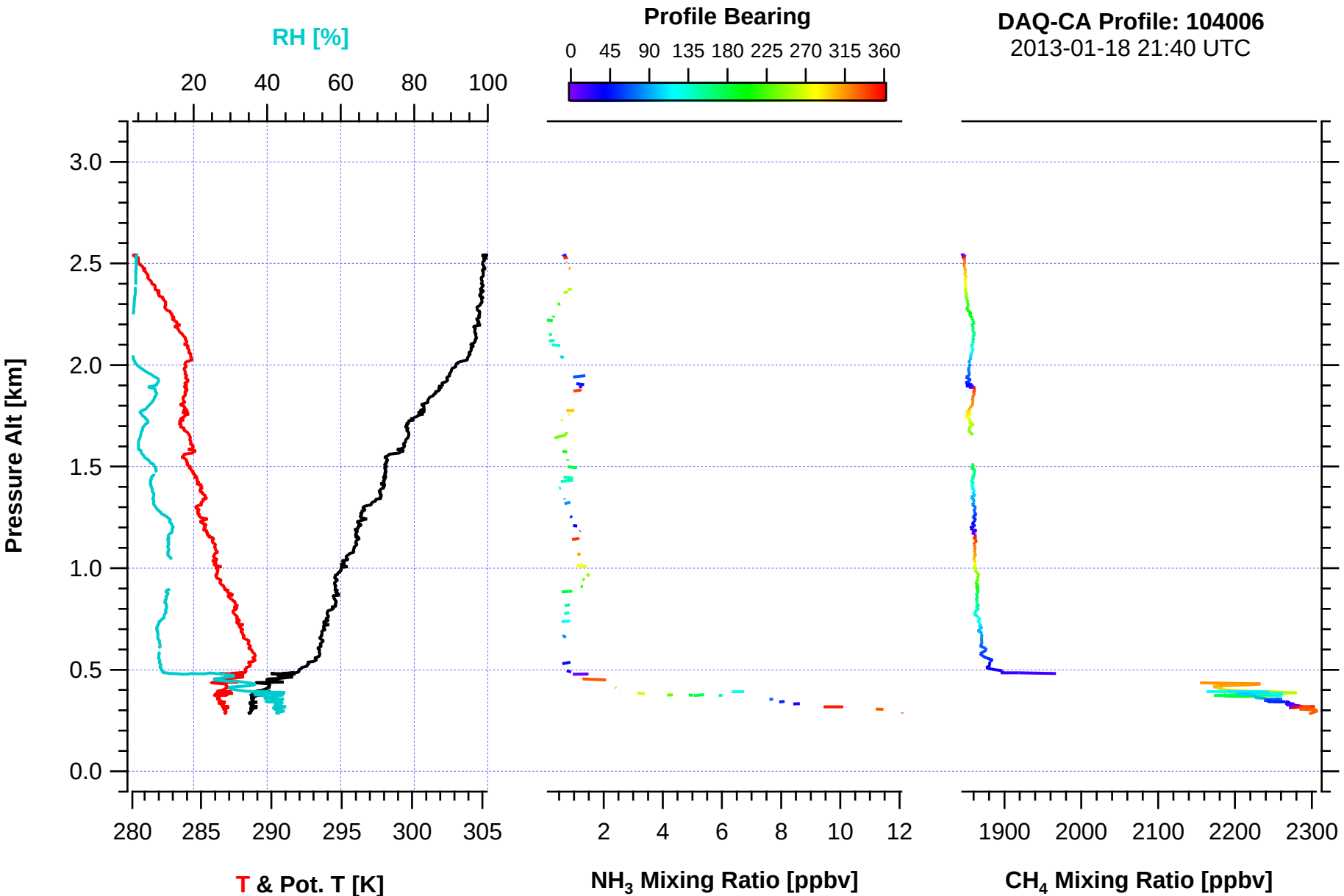

DAQ-CA Profile: 104006
2013-01-18 21:40 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0 2.5 2.0 1.5 1.0 0.5 0.0
280 285 290 295 300 305
T & Pot. T [K]
0 500 1000 1500 2000
CH2O Mixing Ratio [pptv]
0.0 0.5 1.0 1.5
Acetaldehyde Mixing Ratio [ppbv]

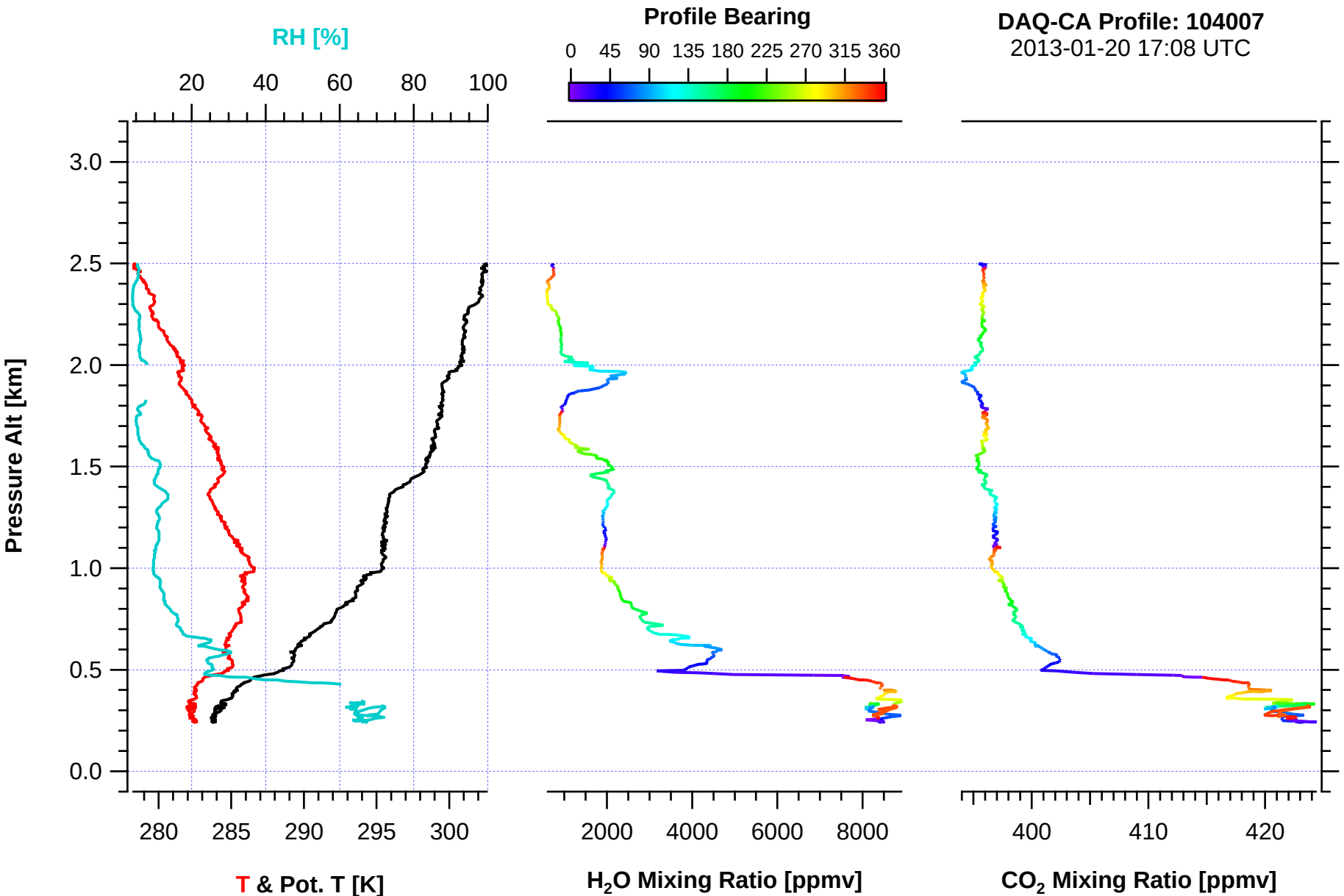

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104006
2013-01-18 21:40 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300 305
T & Pot. T [K]
-0.05 0.00 0.05 0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.2 0.0 0.2 0.4
Isoprene Mixing Ratio [ppbv]

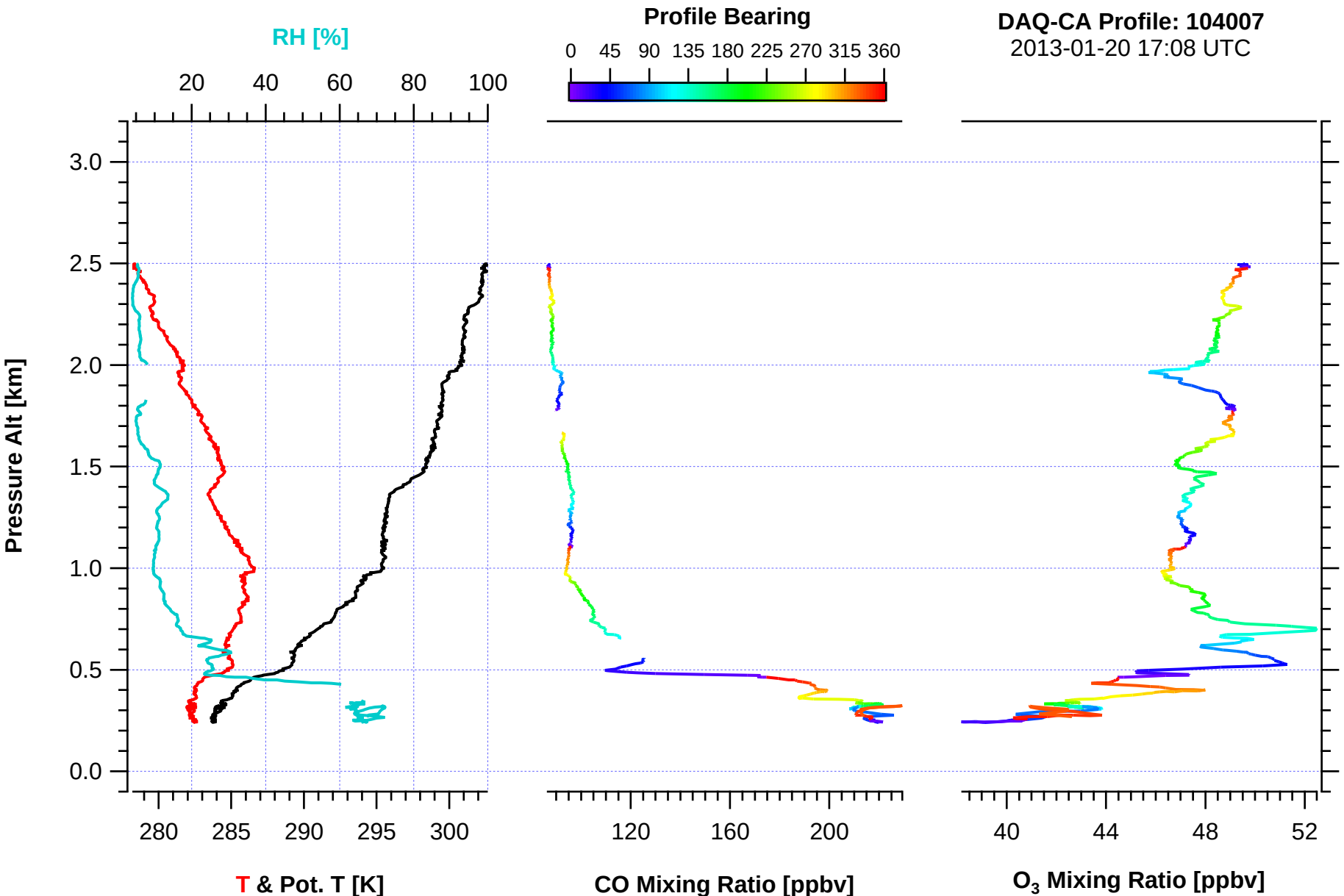

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104006
2013-01-18 21:40 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300 305
T & Pot. T [K]
0 40 80 120
SCAT550nm, dry [Mm-1]
2000 4000 6000
CN > 10nm [# cm-3]

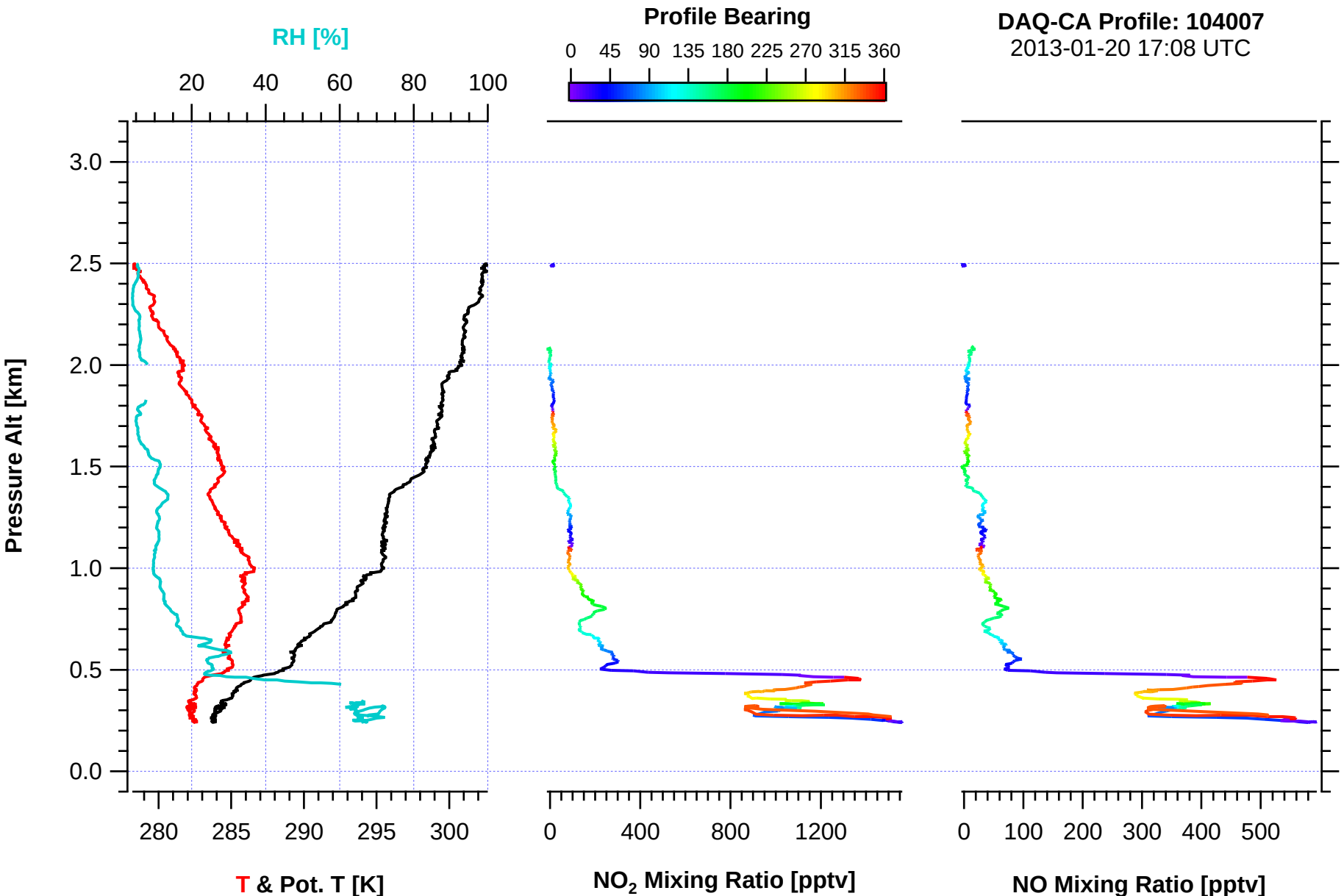

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104006
2013-01-18 21:40 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300 305
T & Pot. T [K]
2 3 4 5 6 7 8x10-3
jNO2-Nadir and Zenith [s-1]
9 10 11 12 13 14x10-3
jNO2-Total [s-1]

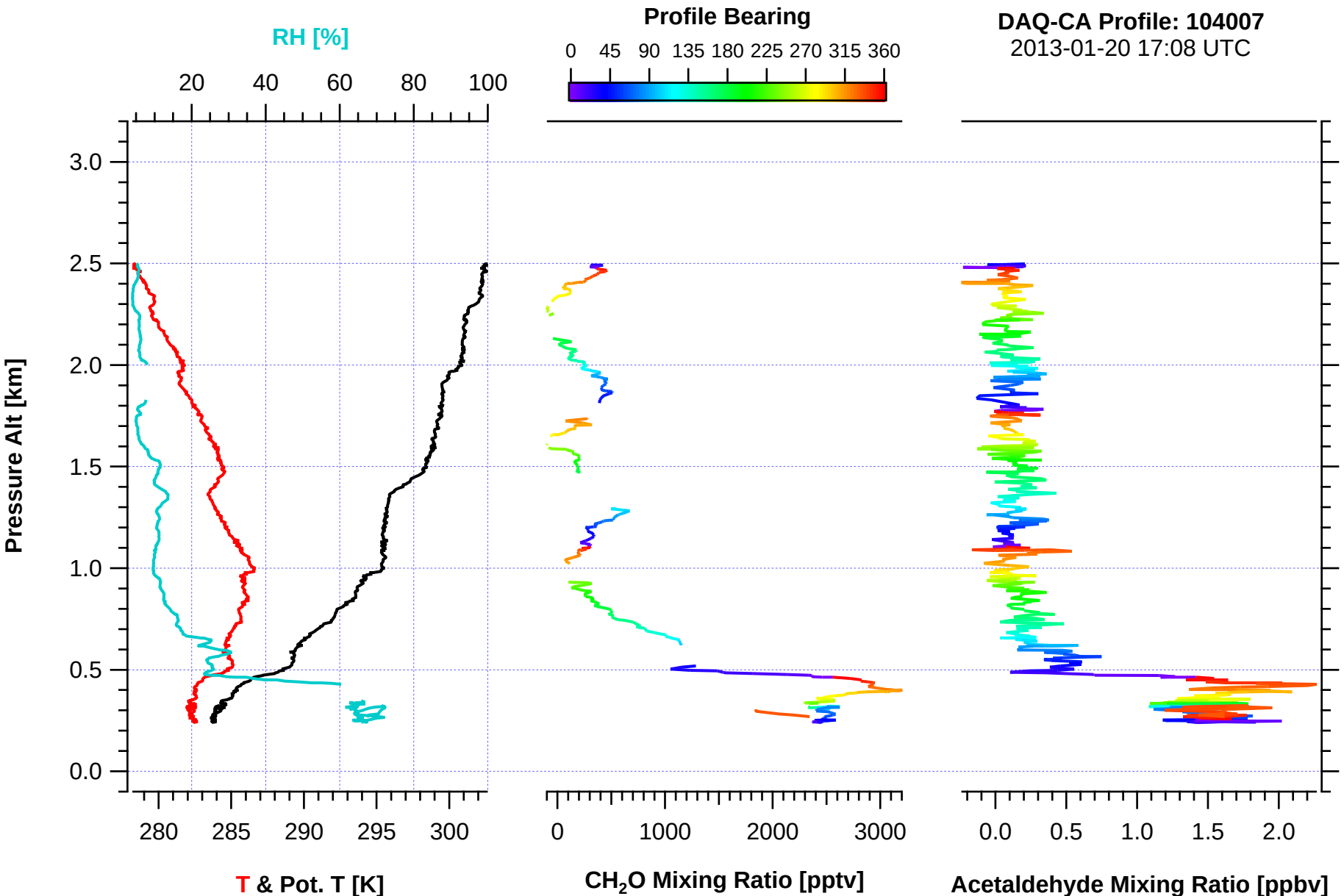

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104006
2013-01-18 21:40 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300 305
T & Pot. T [K]
288 292 296 300
Surface Temperature [K]
0 1 2 3
Methanol Mixing Ratio [ppbv]

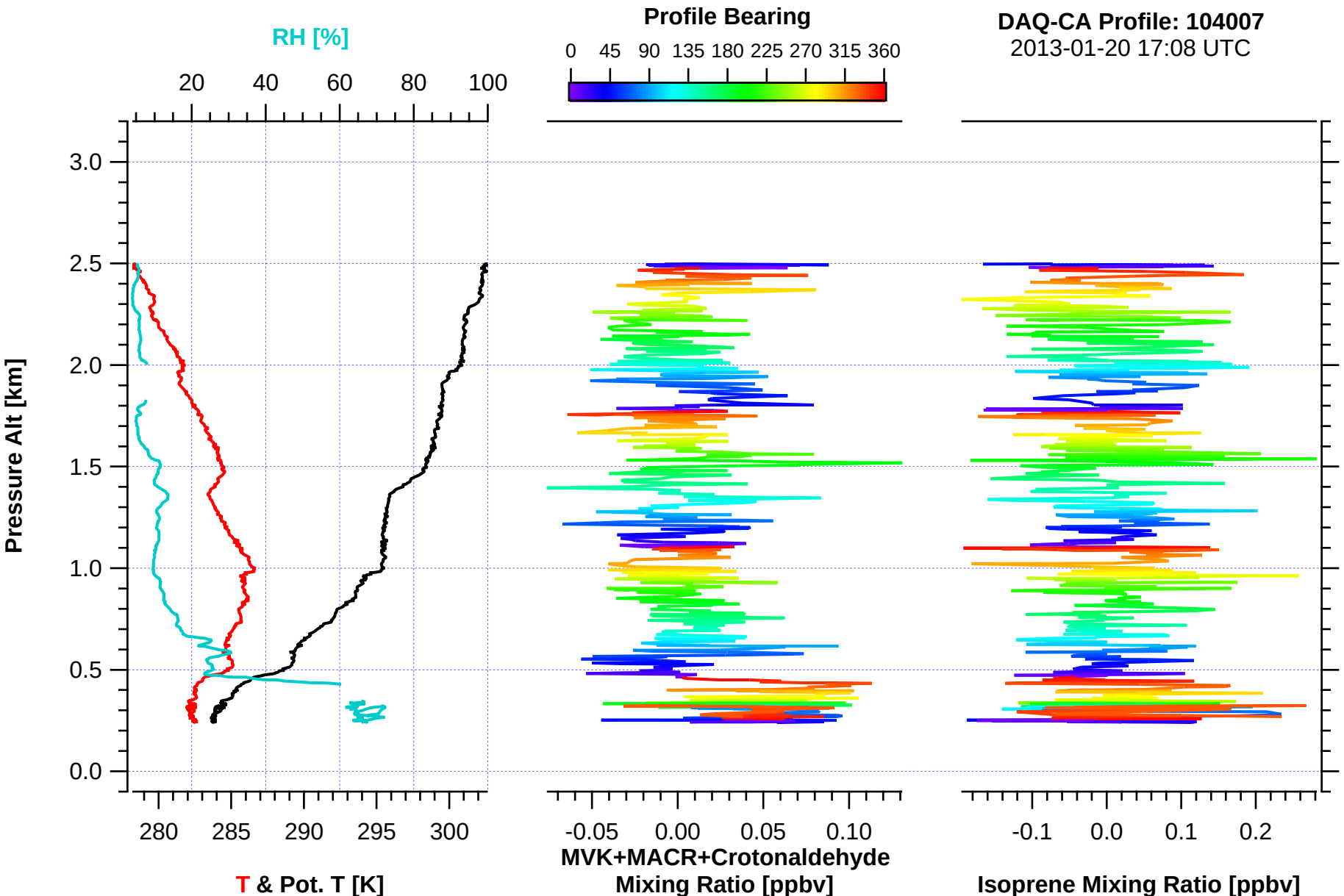

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104006
2013-01-18 21:40 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300 305
T & Pot. T [K]
2 4 6 8 10 12
NH3 Mixing Ratio [ppbv]
1900 2000 2100 2200 2300
CH4 Mixing Ratio [ppbv]

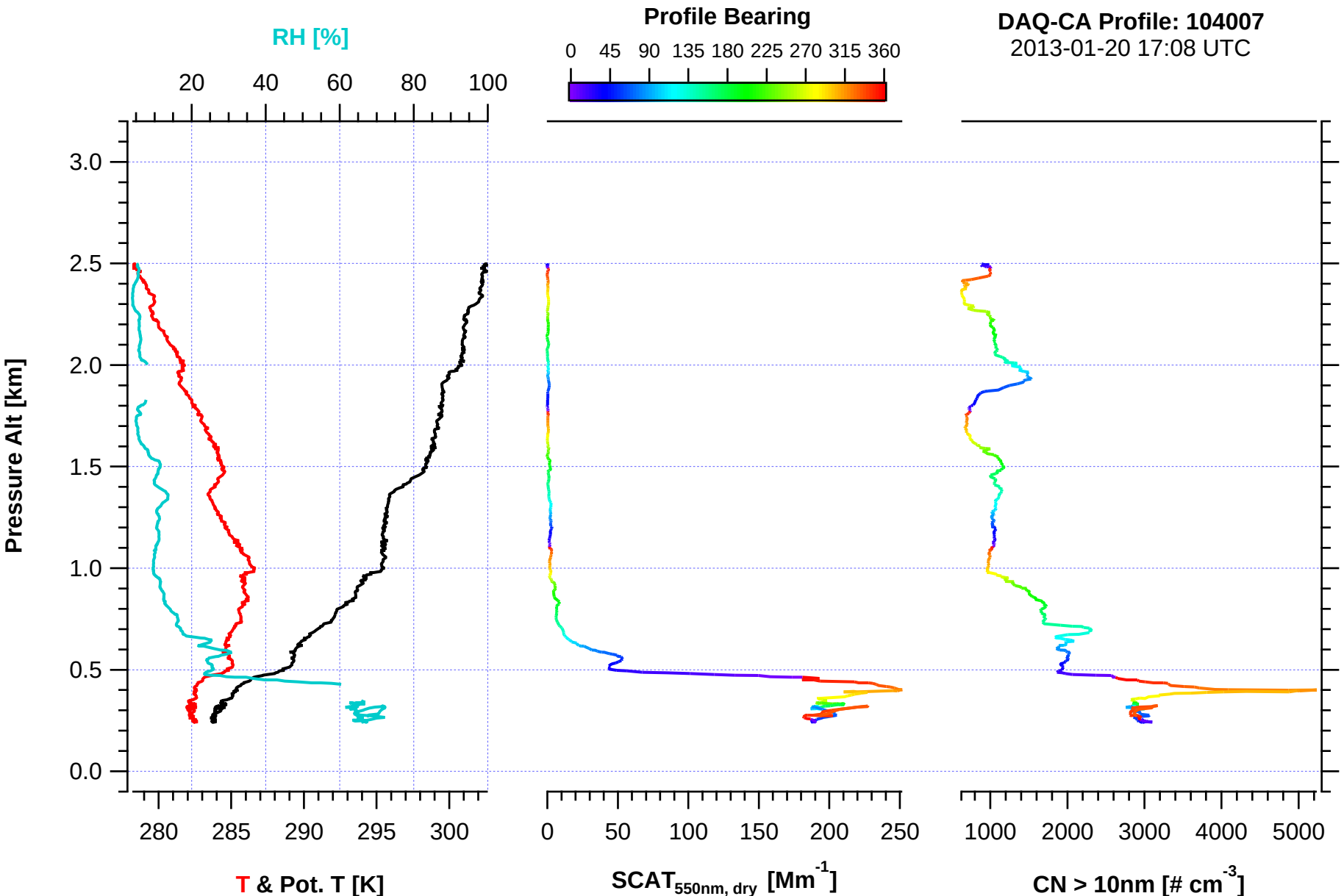

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104007
2013-01-20 17:08 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
2000
4000
6000
8000
H2O Mixing Ratio [ppmv]
400
410
420
CO2 Mixing Ratio [ppmv]

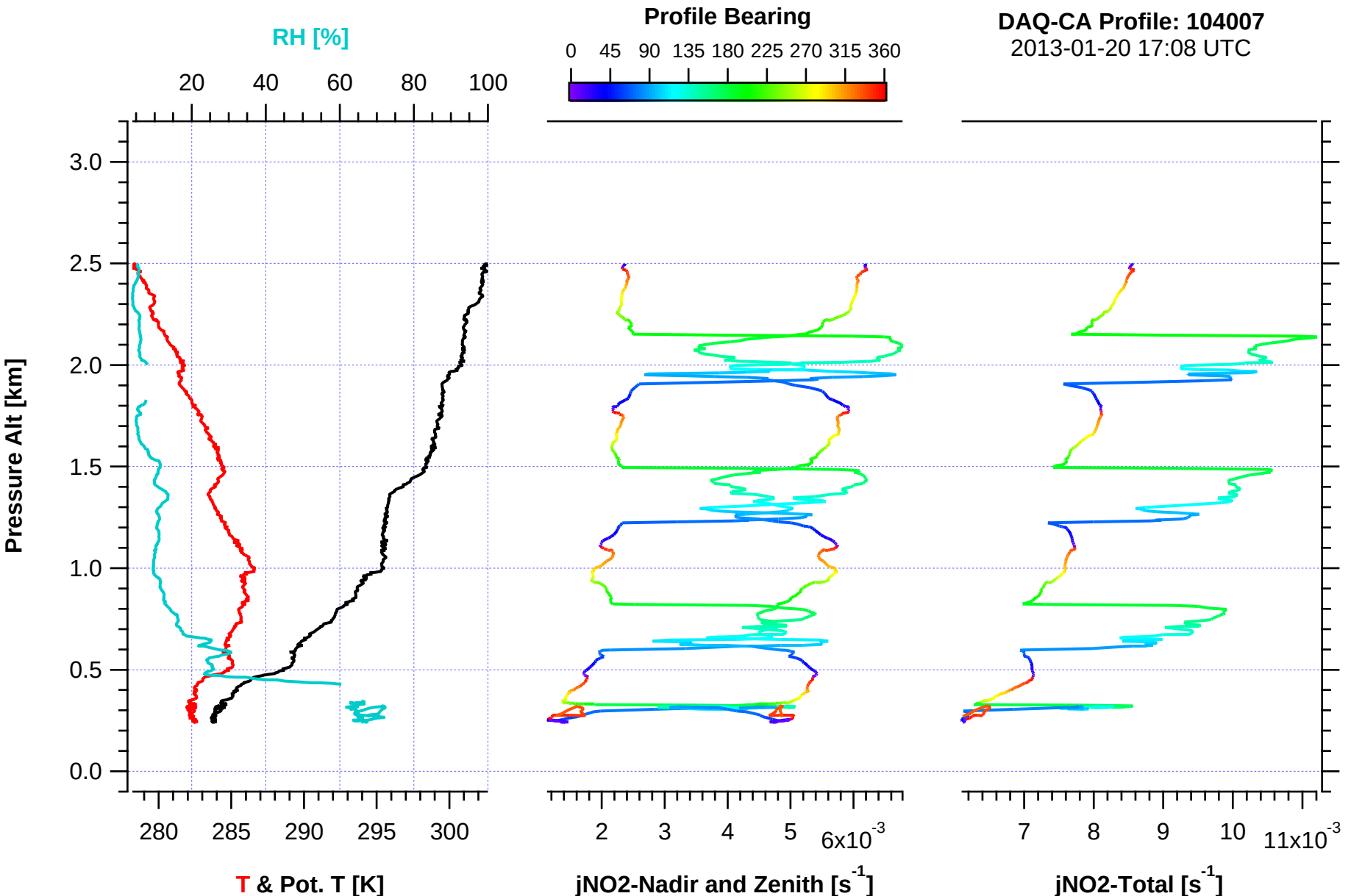

DAQ-CA Profile: 104007
2013-01-20 17:08 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
120 160 200
CO Mixing Ratio [ppbv]
40 44 48 52
O3 Mixing Ratio [ppbv]

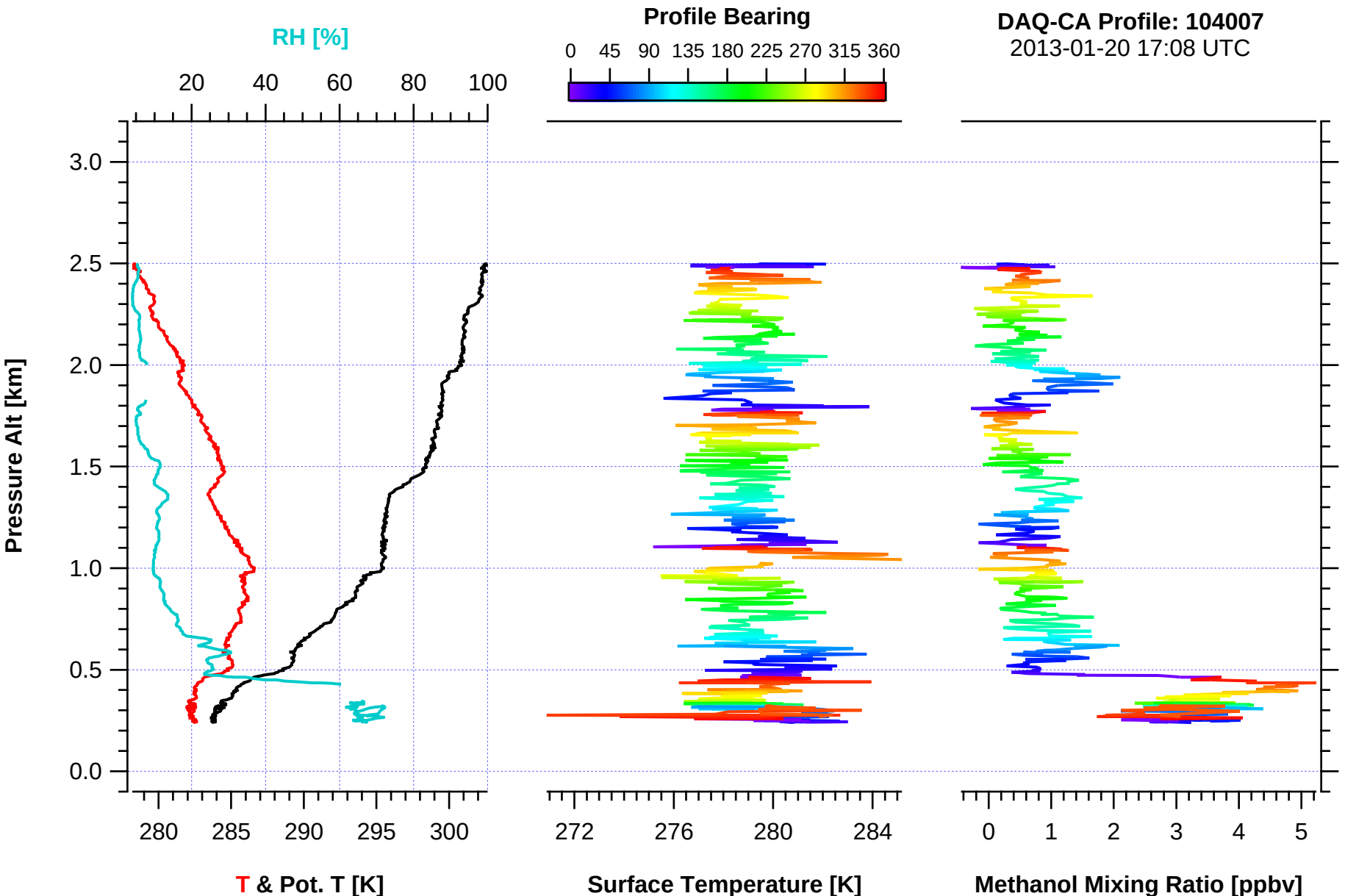

DAQ-CA Profile: 104007
2013-01-20 17:08 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 400 800 1200
NO2 Mixing Ratio [pptv]
0 100 200 300 400 500
NO Mixing Ratio [pptv]

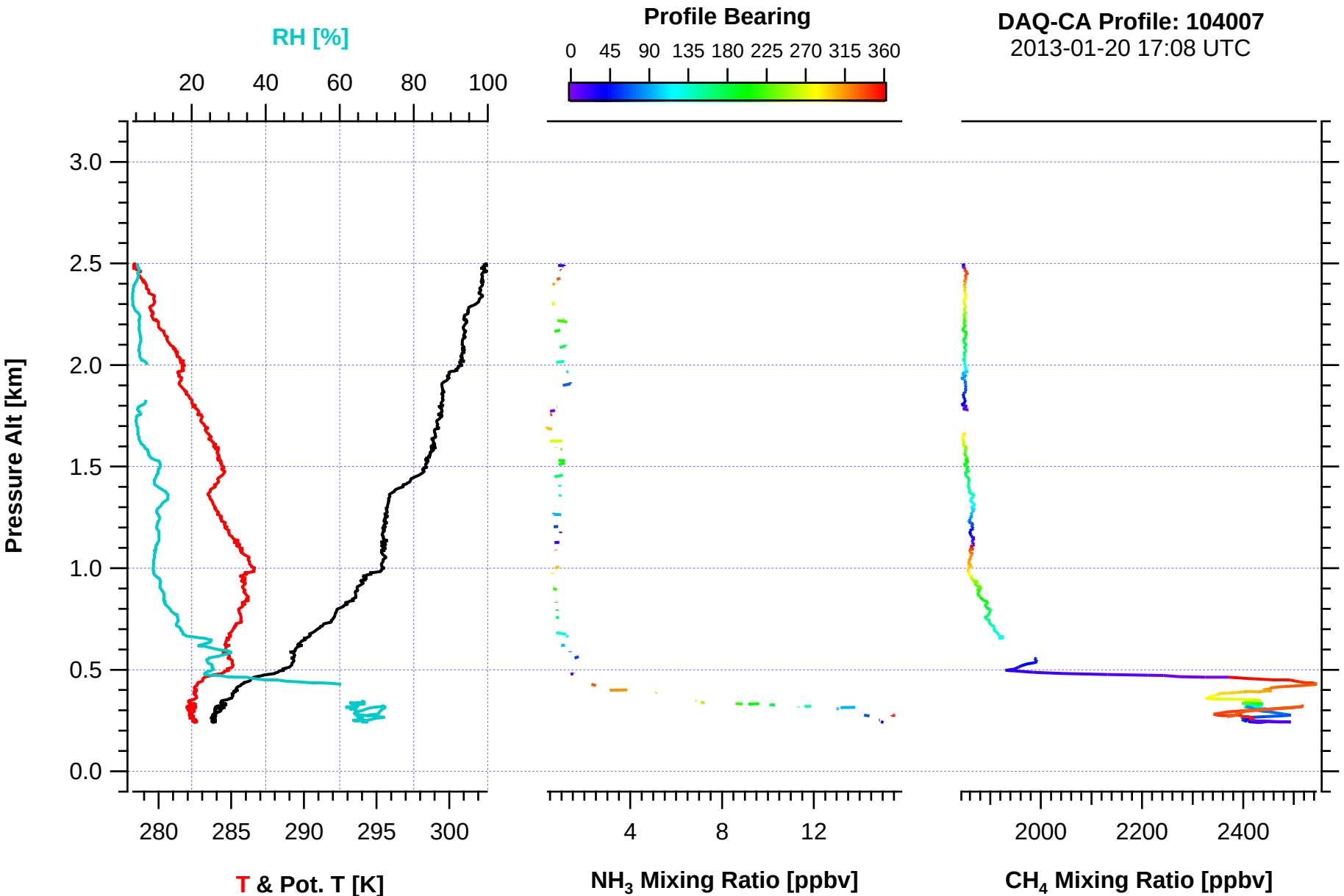

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104007
2013-01-20 17:08 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
0
1000
2000
3000
CH2O Mixing Ratio [pptv]
0.0
0.5
1.0
1.5
2.0
Acetaldehyde Mixing Ratio [ppbv]

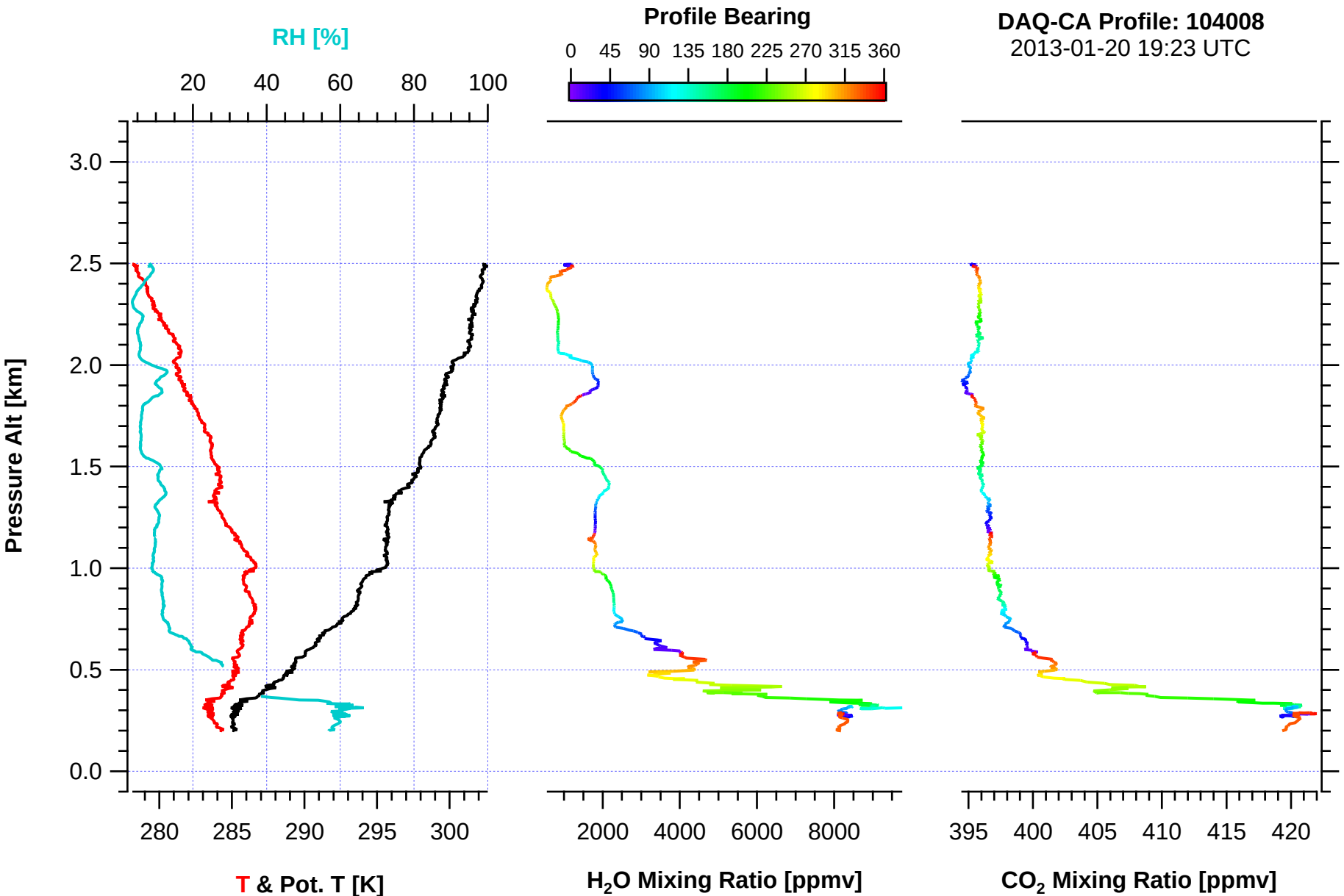

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104007
2013-01-20 17:08 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
-0.05
0.00
0.05
0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.1
0.0
0.1
0.2
Isoprene Mixing Ratio [ppbv]

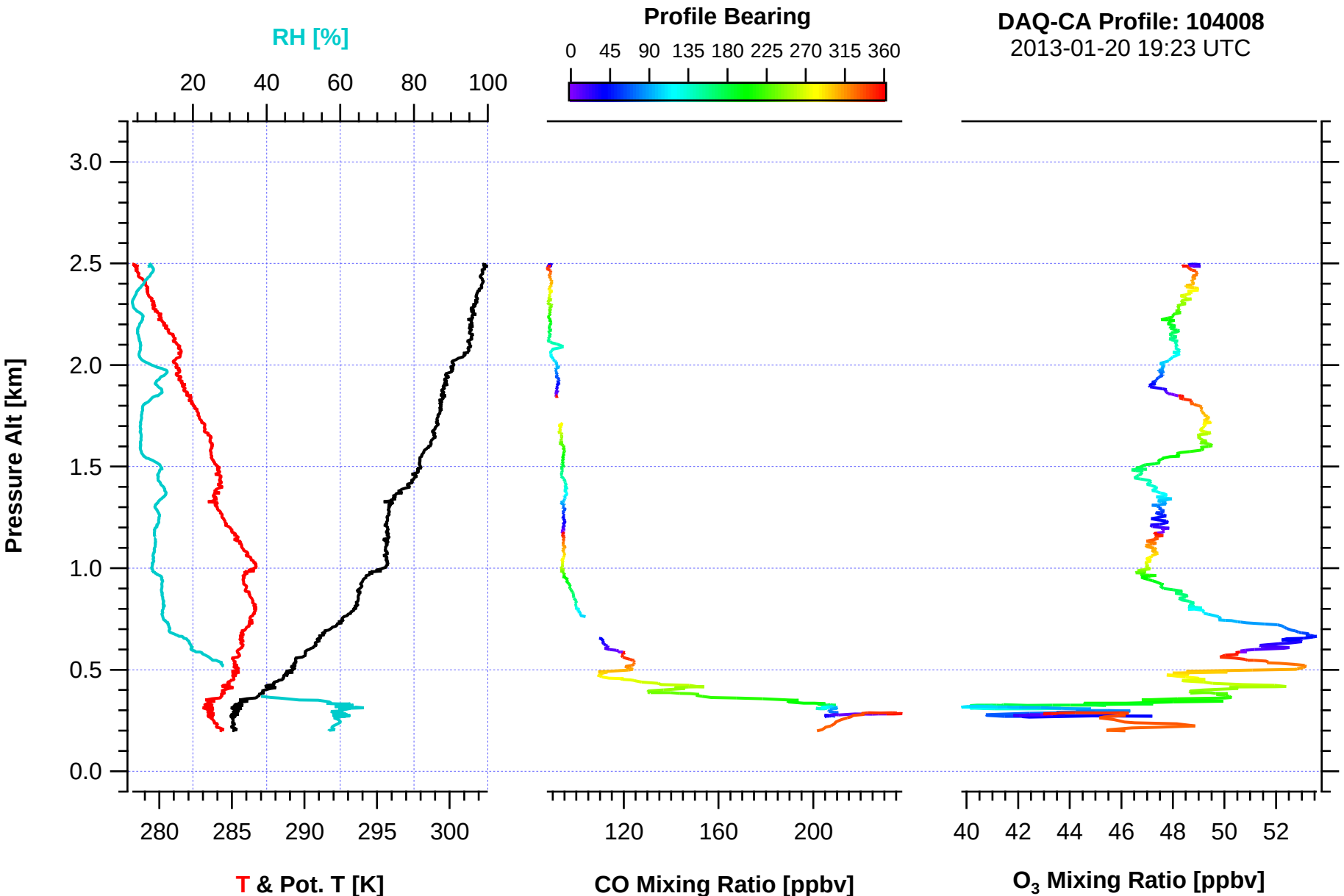

DAQ-CA Profile: 104007
2013-01-20 17:08 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 50 100 150 200 250
SCAT550nm, dry [Mm-1]
1000 2000 3000 4000 5000
CN > 10nm [# cm-3]

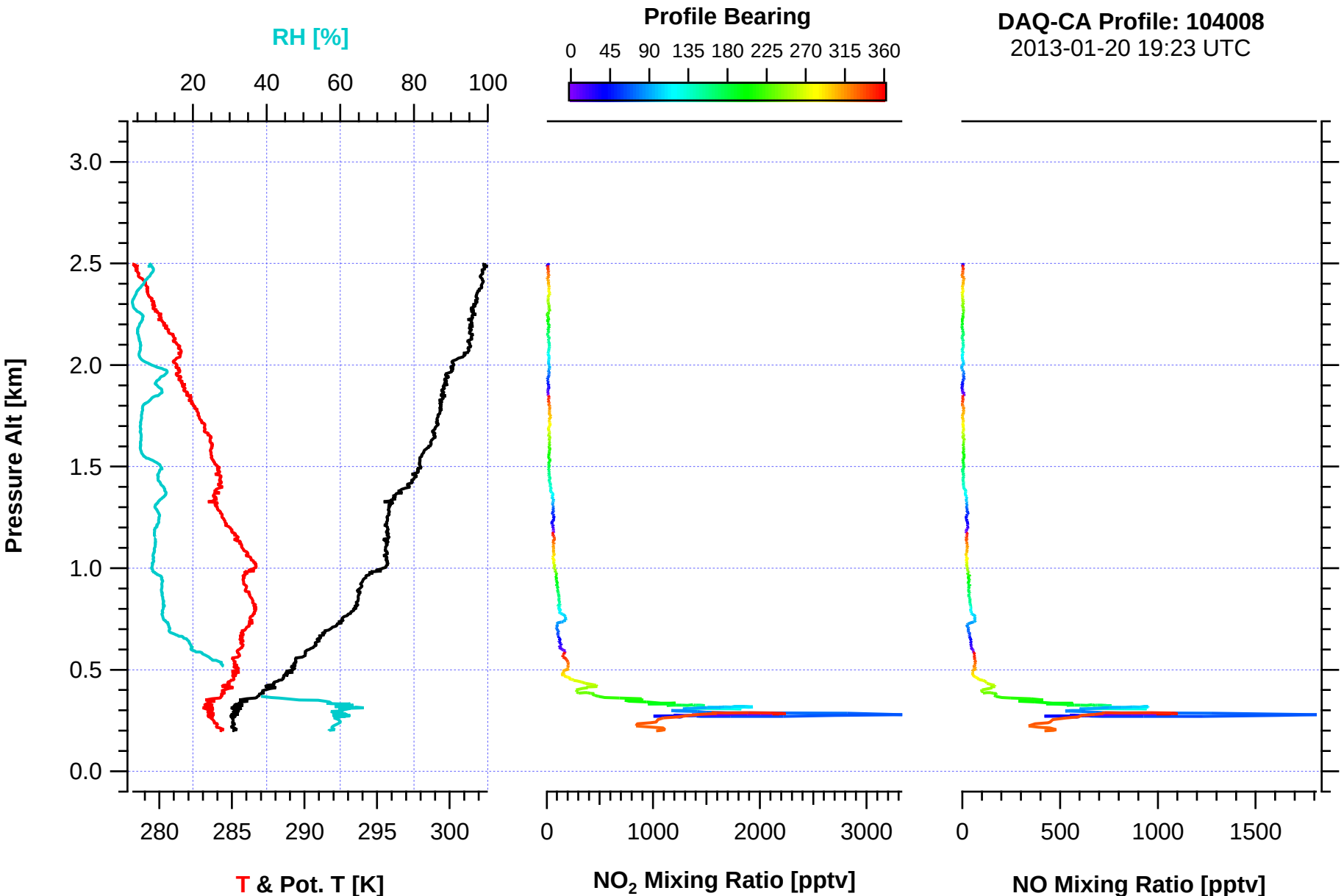

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104007
2013-01-20 17:08 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
2
3
4
5
6x10-3
jNO2-Nadir and Zenith [s-1]
7
8
9
10
11x10-3
jNO2-Total [s-1]

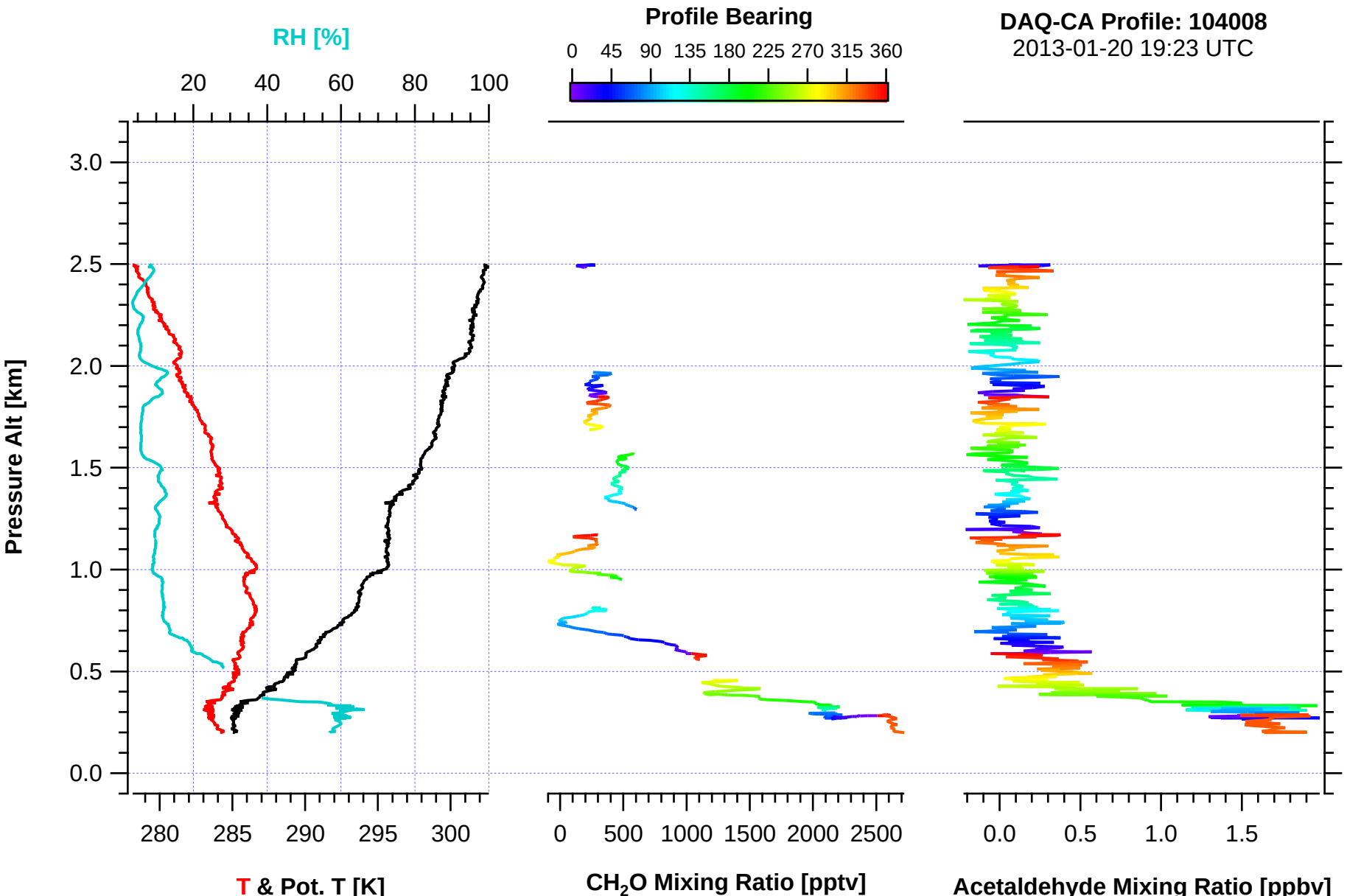

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104007
2013-01-20 17:08 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
272
276
280
284
Surface Temperature [K]
0
1
2
3
4
5
Methanol Mixing Ratio [ppbv]

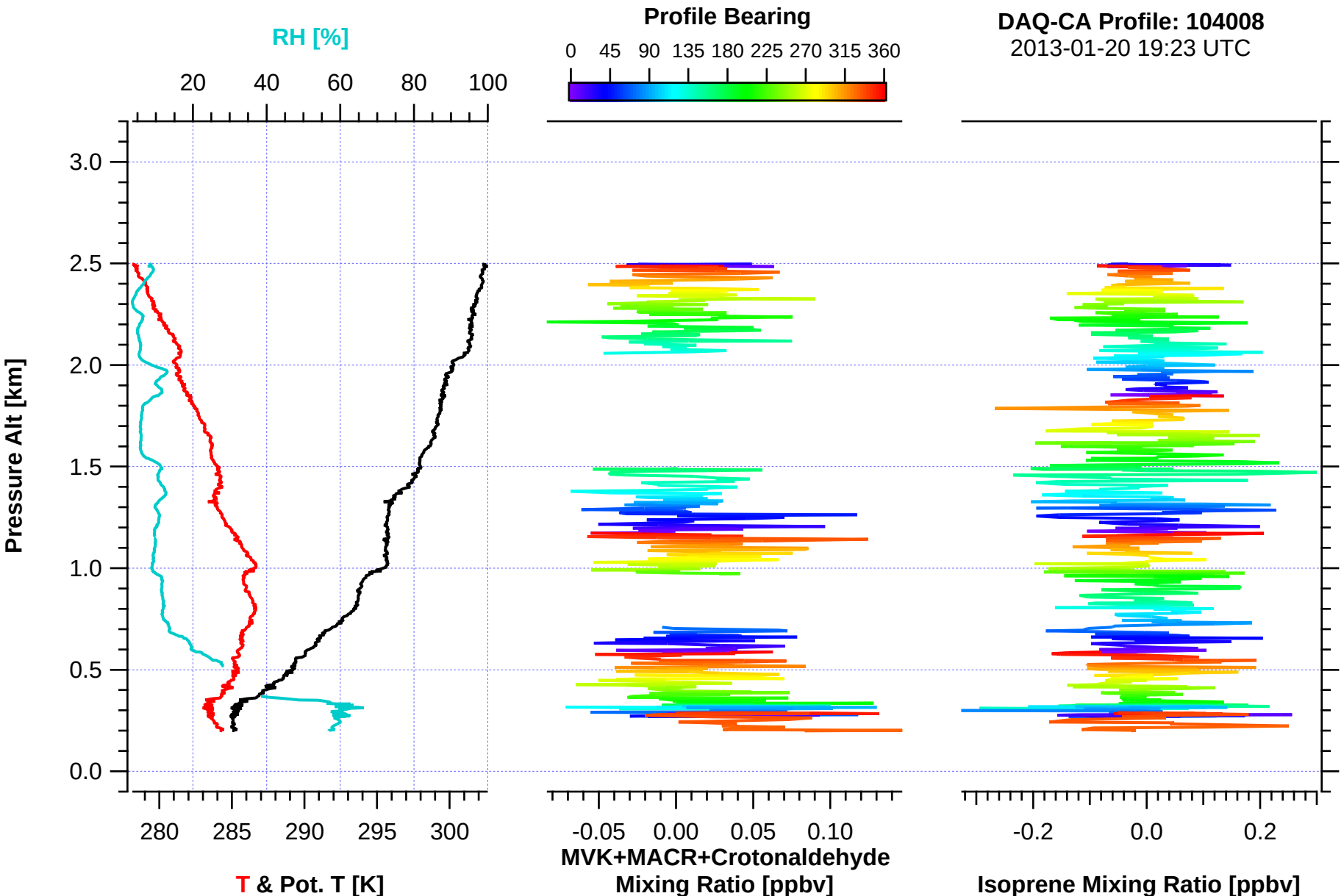

DAQ-CA Profile: 104007
2013-01-20 17:08 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0 2.5 2.0 1.5 1.0 0.5 0.0
280 285 290 295 300
T & Pot. T [K]
4 8 12
NH3 Mixing Ratio [ppbv]
2000 2200 2400
CH4 Mixing Ratio [ppbv]

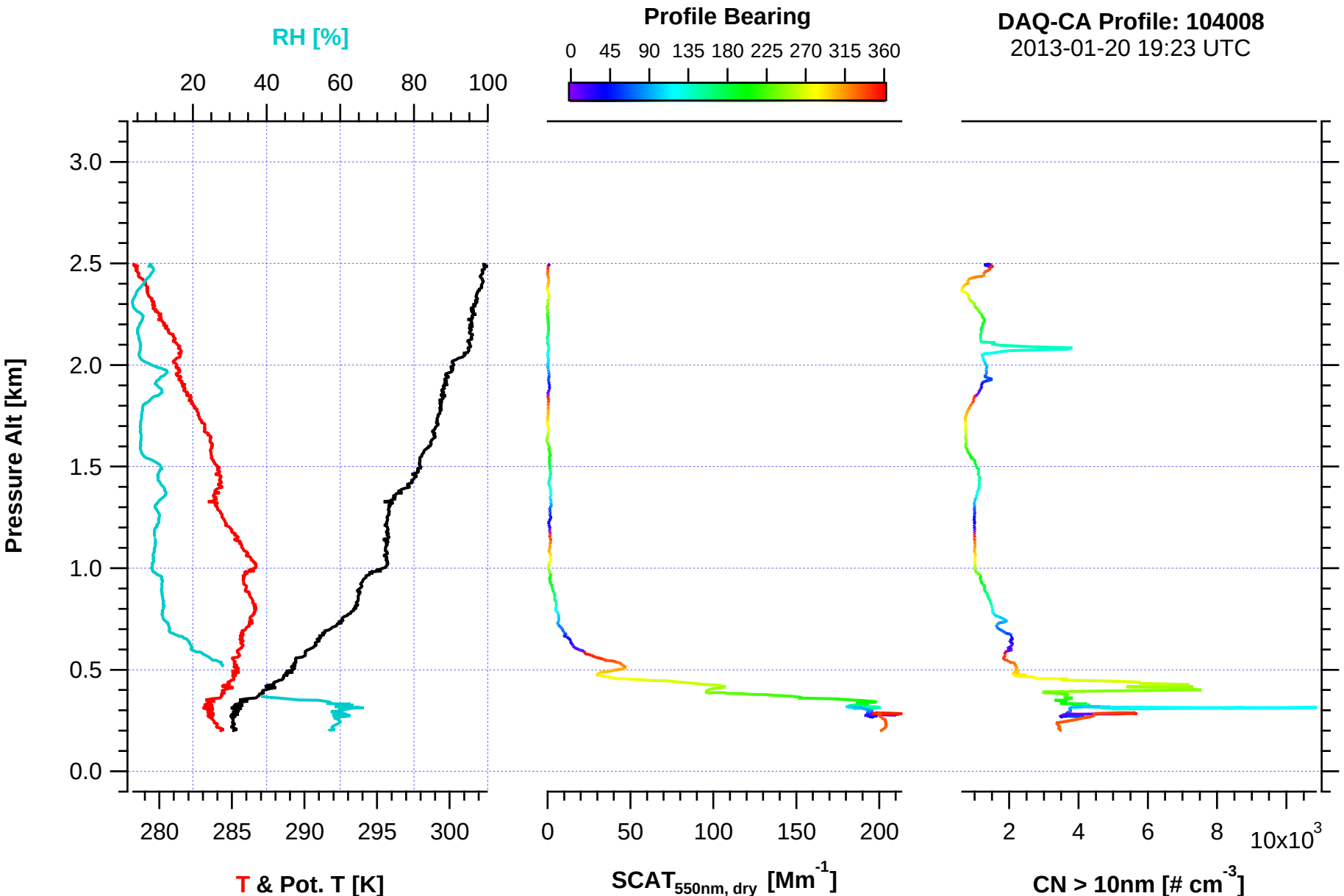

DAQ-CA Profile: 104008
2013-01-20 19:23 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2000 4000 6000 8000
H2O Mixing Ratio [ppmv]
395 400 405 410 415 420
CO2 Mixing Ratio [ppmv]

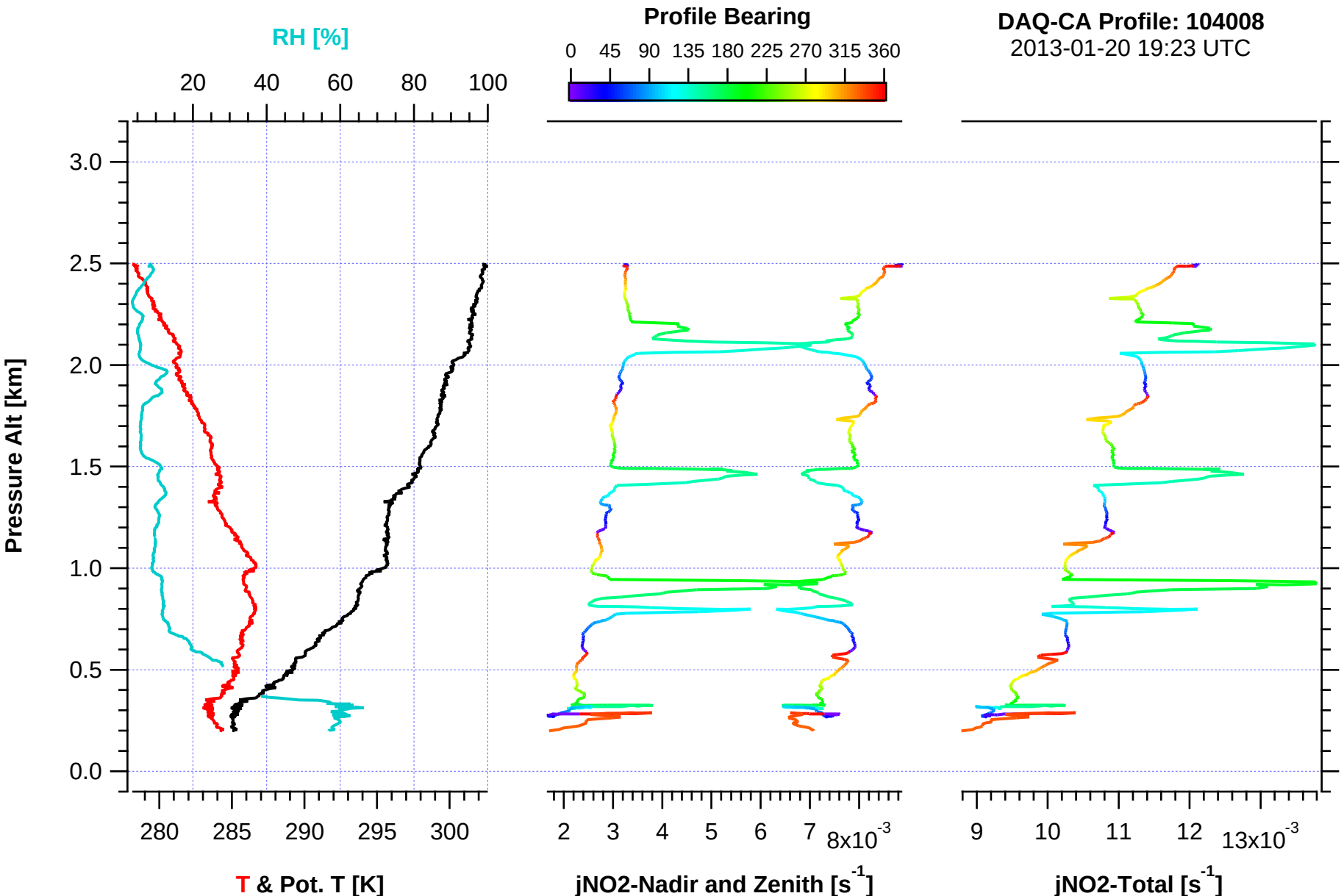

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104008
2013-01-20 19:23 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
120
160
200
CO Mixing Ratio [ppbv]
40
42
44
46
48
50
52
O3 Mixing Ratio [ppbv]

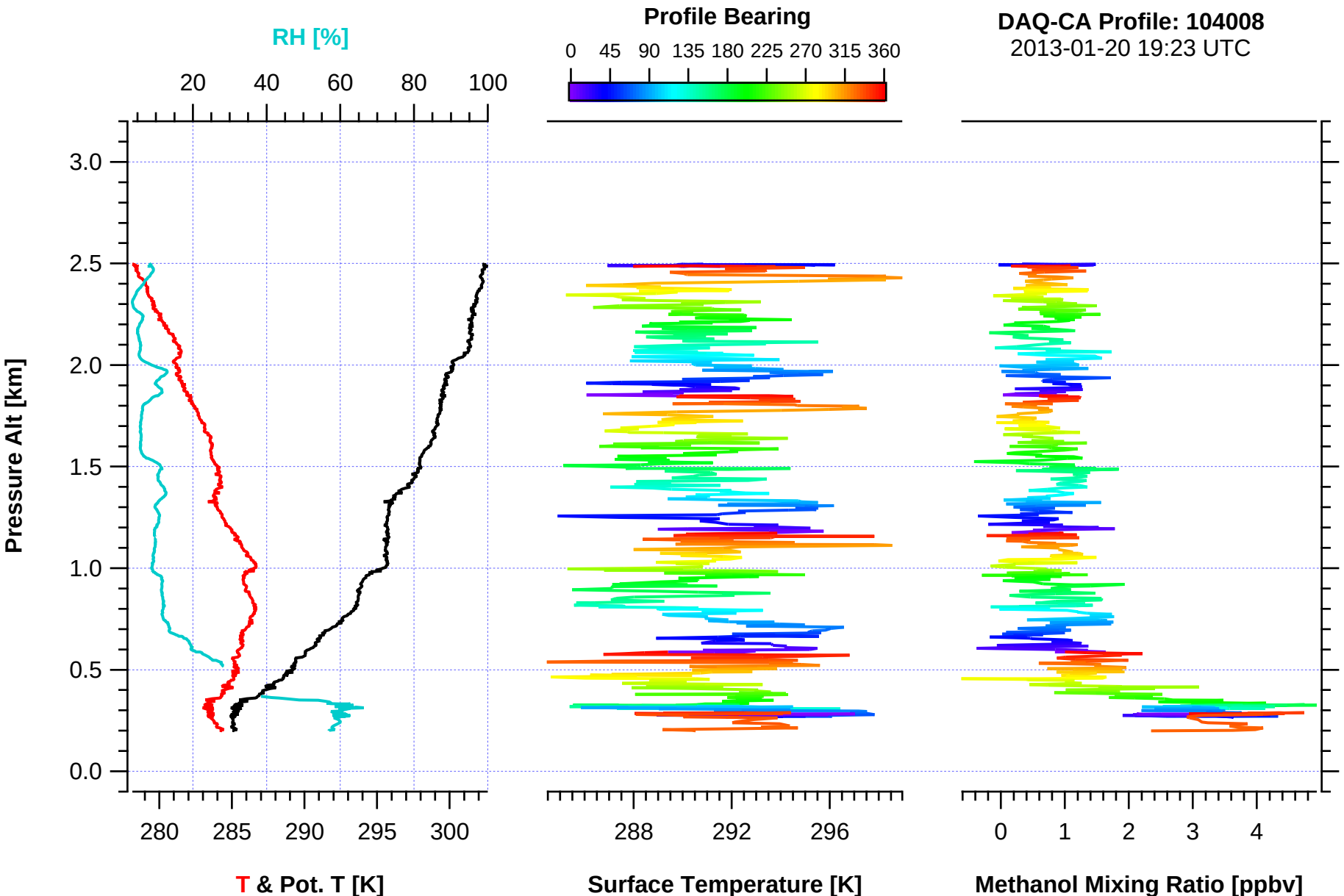

DAQ-CA Profile: 104008
2013-01-20 19:23 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 1000 2000 3000
NO2 Mixing Ratio [pptv]
0 500 1000 1500
NO Mixing Ratio [pptv]

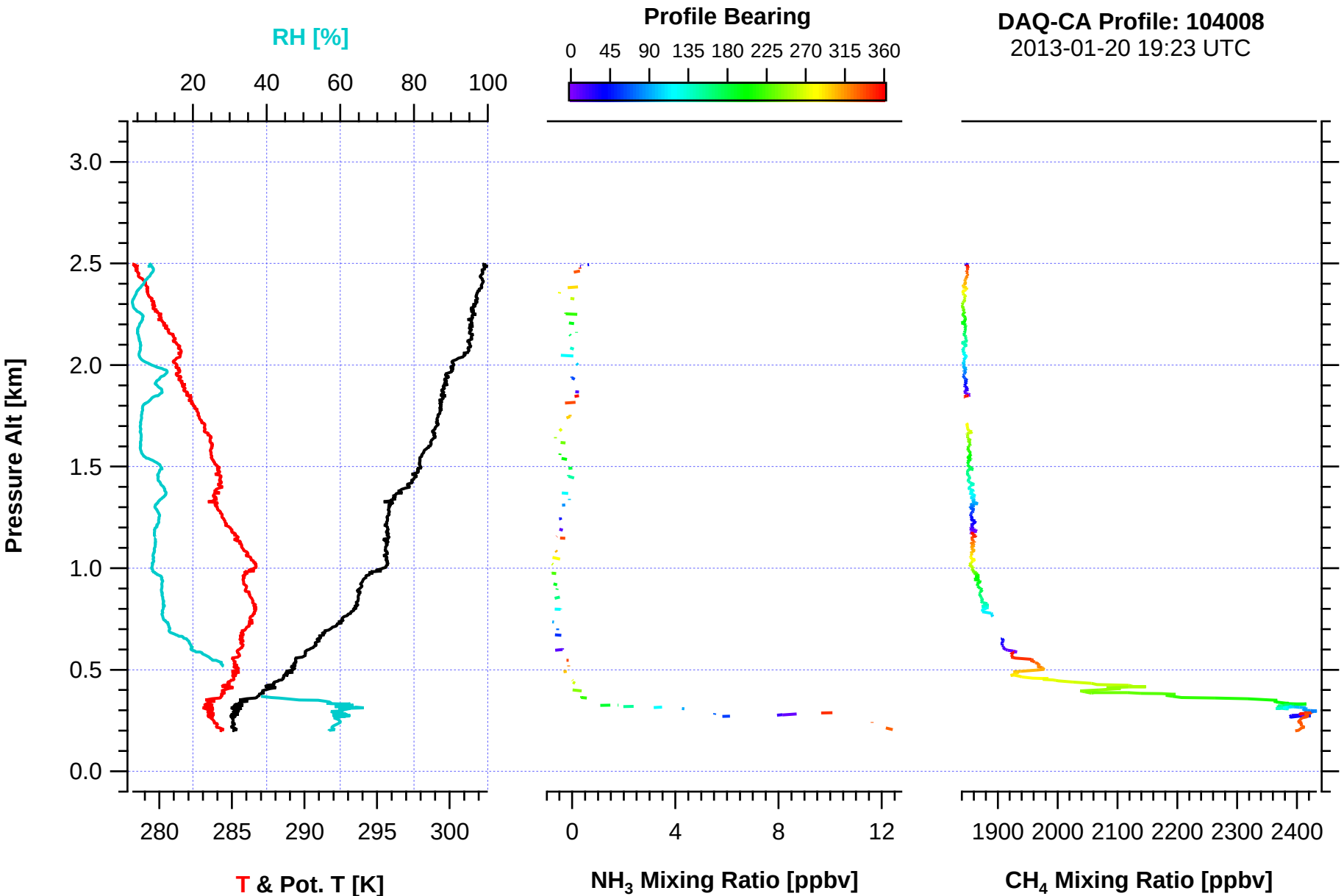

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104008
2013-01-20 19:23 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 500 1000 1500 2000 2500
CH2O Mixing Ratio [pptv]
0.0 0.5 1.0 1.5
Acetaldehyde Mixing Ratio [ppbv]

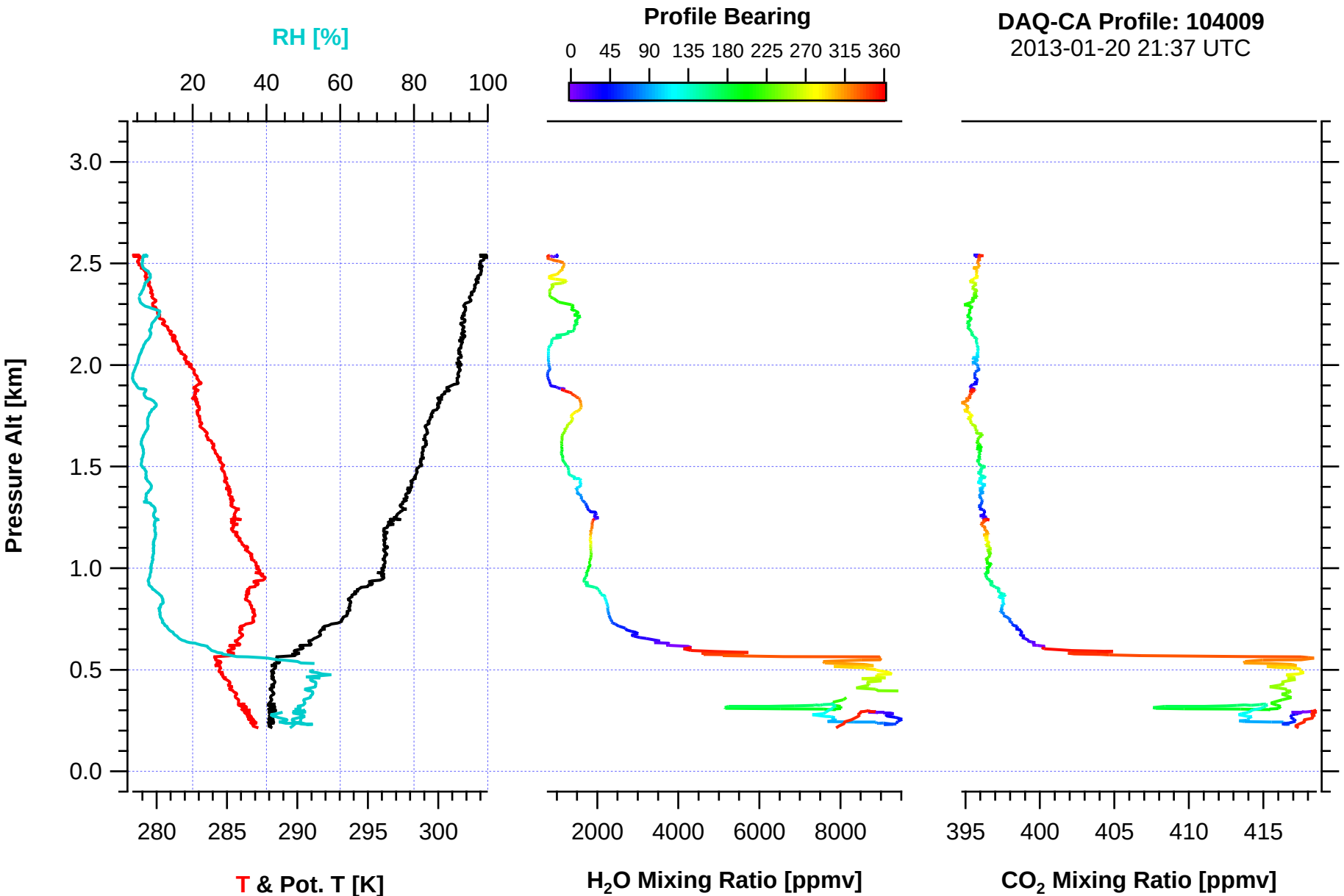

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104008
2013-01-20 19:23 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
-0.05
0.00
0.05
0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.2
0.0
0.2
Isoprene Mixing Ratio [ppbv]

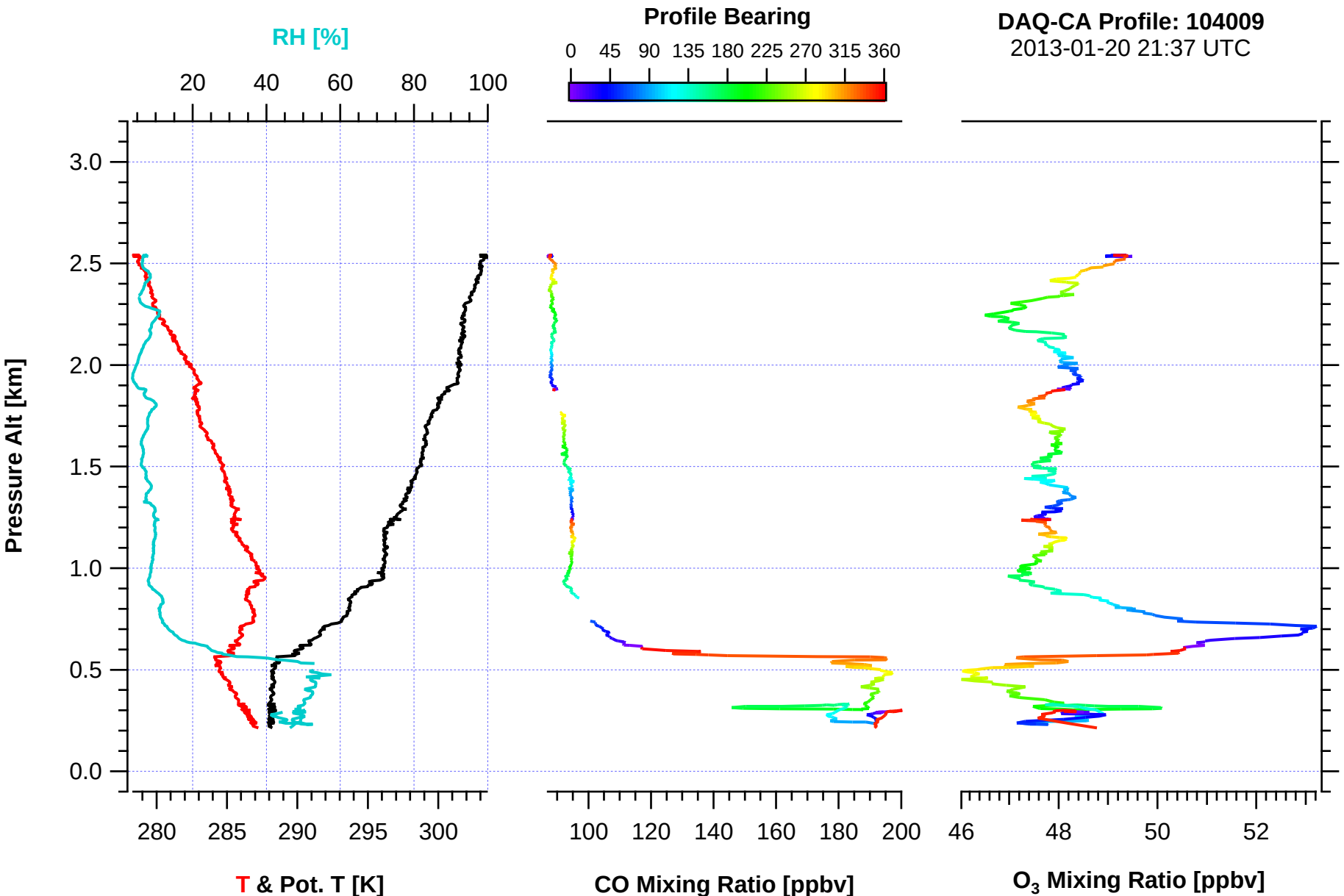

DAQ-CA Profile: 104008
2013-01-20 19:23 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 50 100 150 200
SCAT550nm, dry [Mm-1]
2 4 6 8
10x10^3
CN > 10nm [# cm-3]

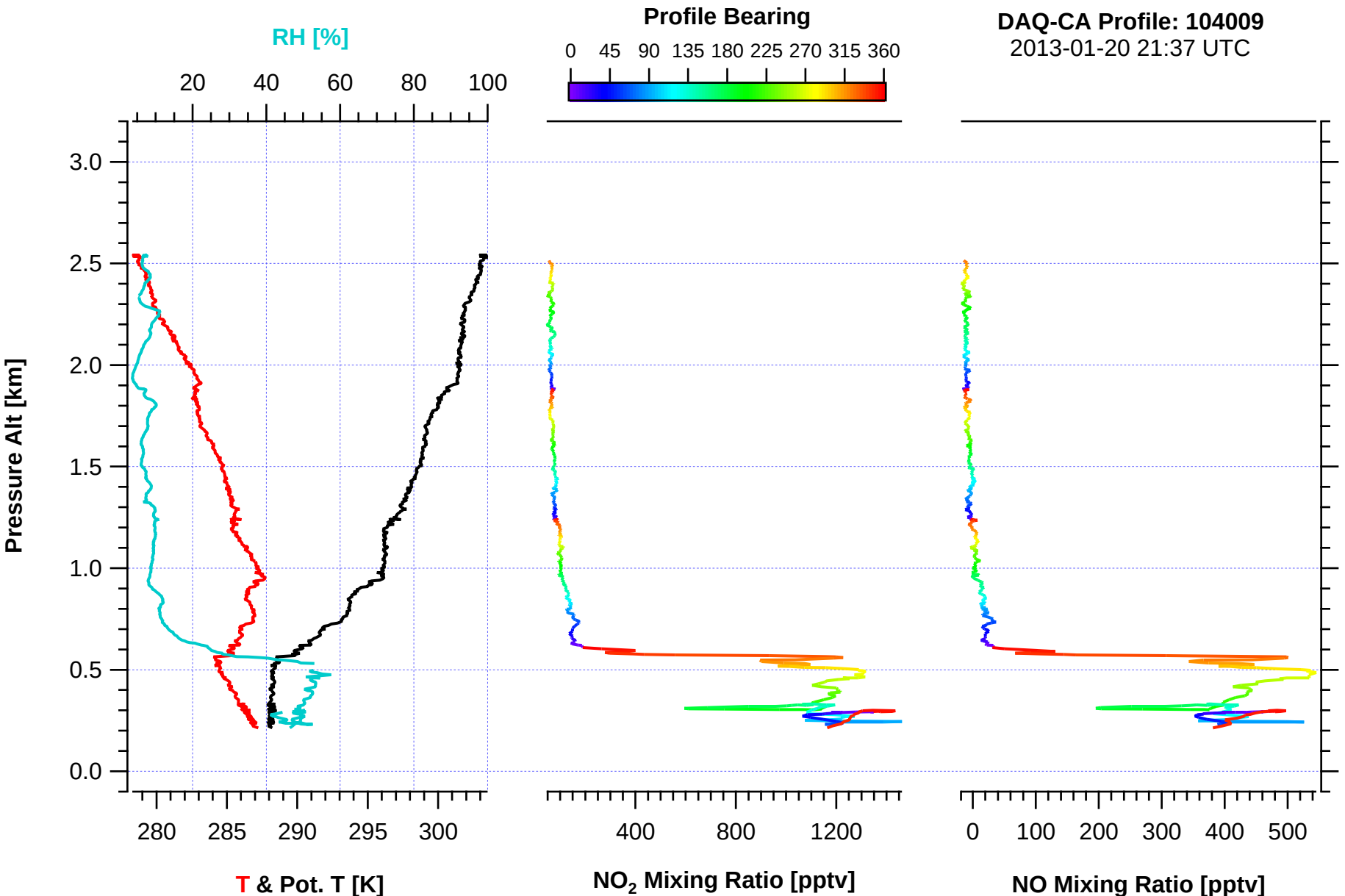

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104008
2013-01-20 19:23 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
2
3
4
5
6
7
8x10-3
jNO2-Nadir and Zenith [s-1]
9
10
11
12
13x10-3
jNO2-Total [s-1]

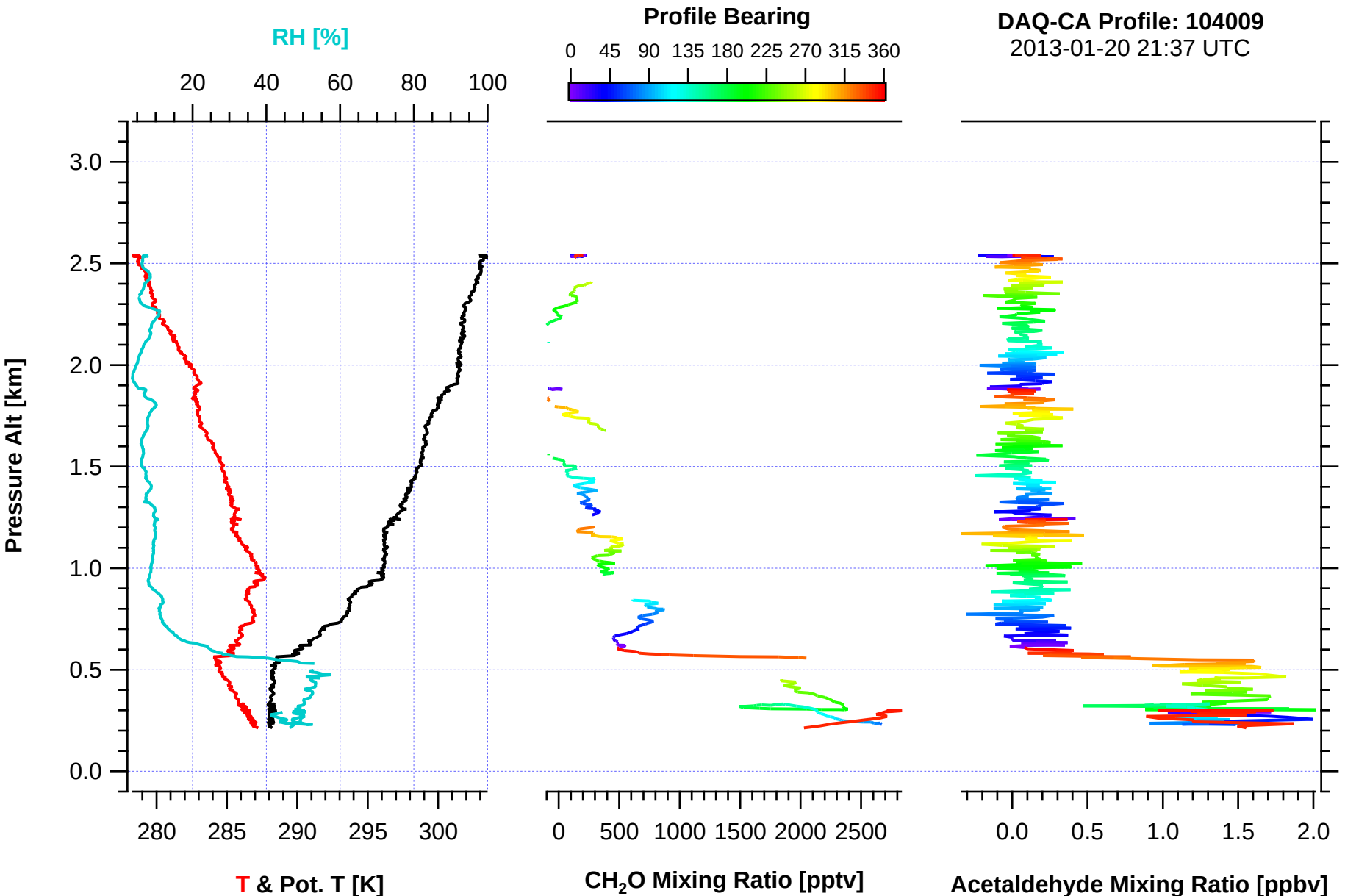

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104008
2013-01-20 19:23 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
288
292
296
Surface Temperature [K]
0
1
2
3
4
Methanol Mixing Ratio [ppbv]

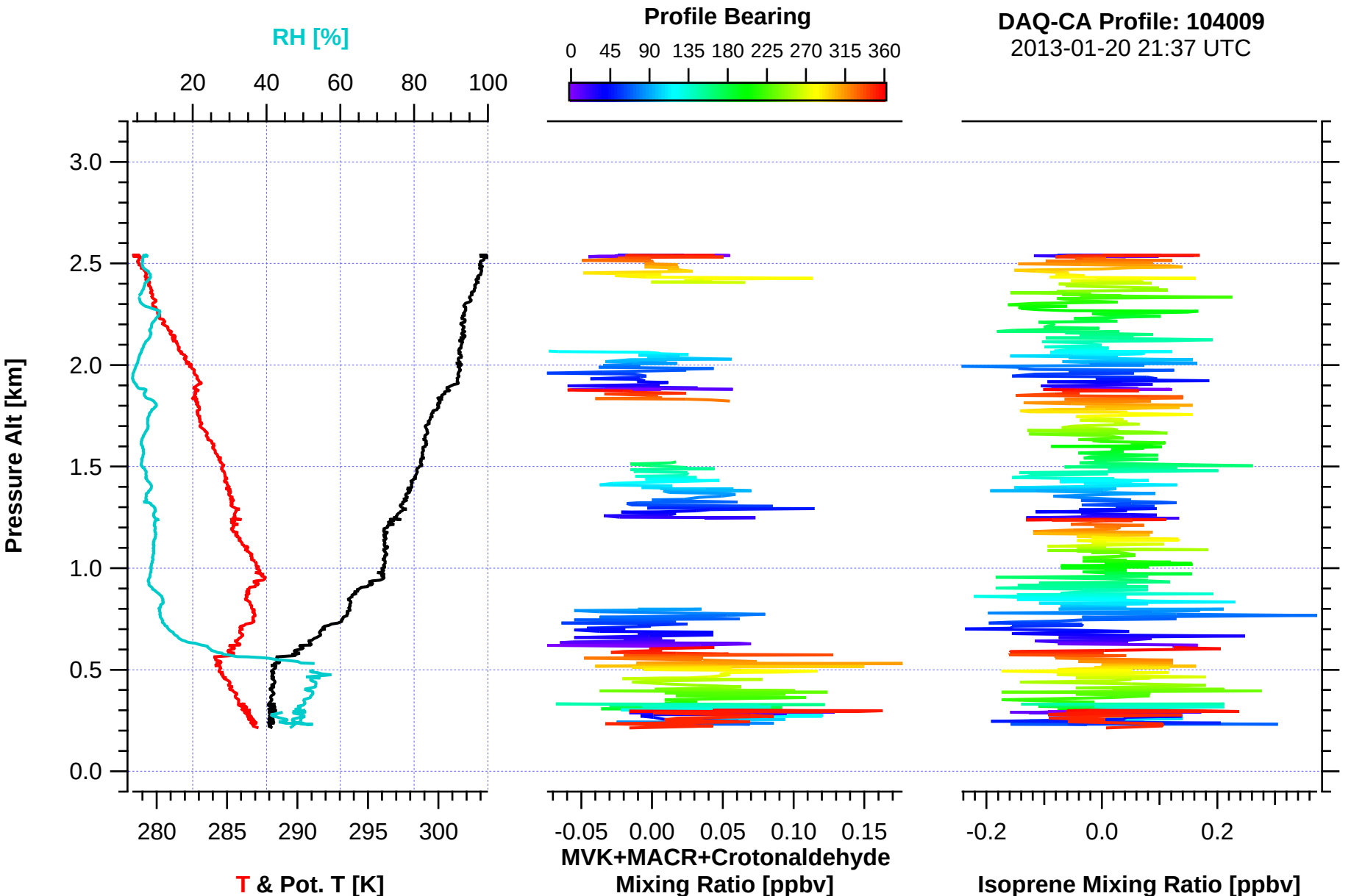

DAQ-CA Profile: 104008
2013-01-20 19:23 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 4 8 12
NH3 Mixing Ratio [ppbv]
1900 2000 2100 2200 2300 2400
CH4 Mixing Ratio [ppbv]

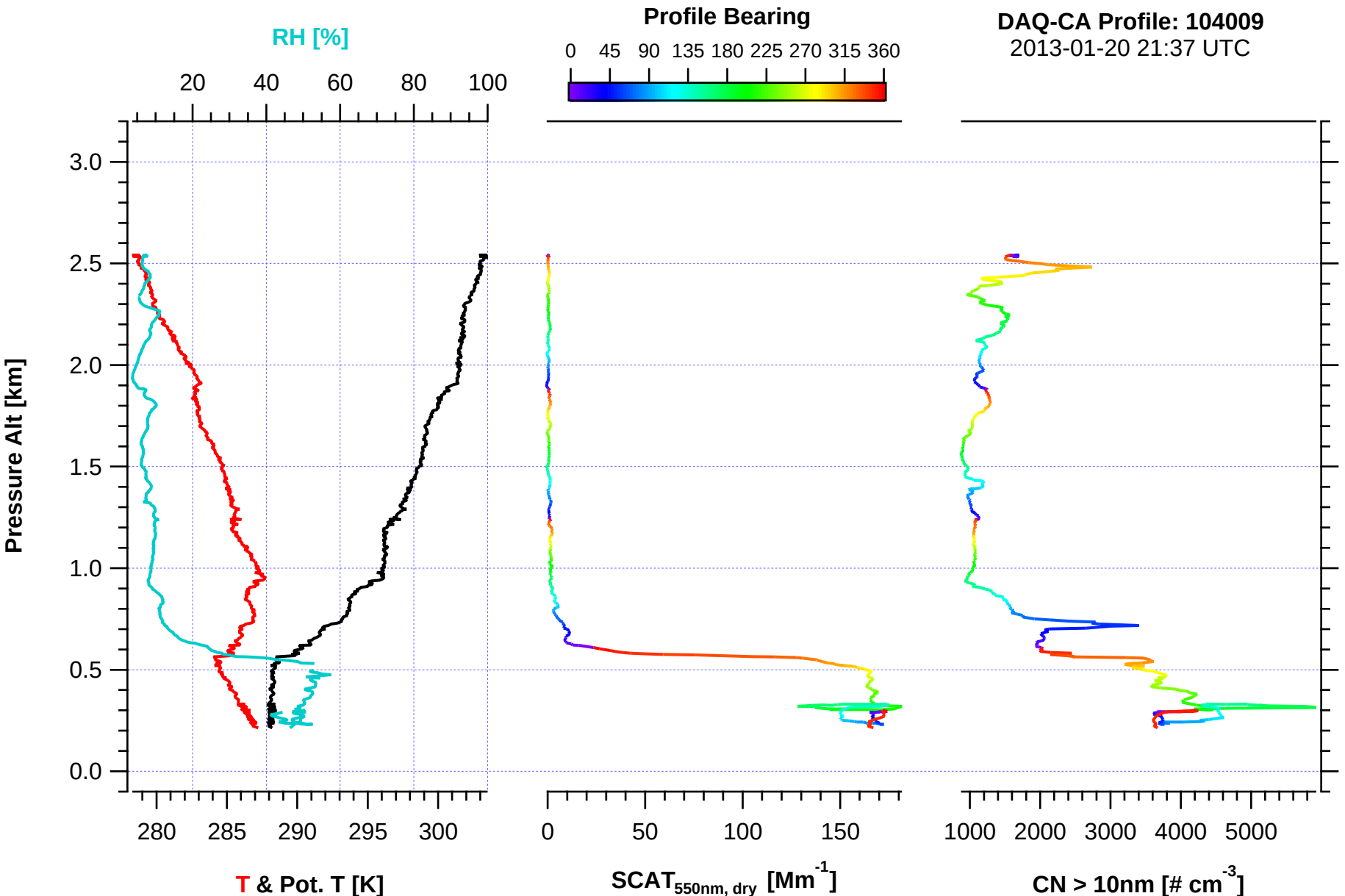

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104009
2013-01-20 21:37 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2000 4000 6000 8000
H2O Mixing Ratio [ppmv]
395 400 405 410 415
CO2 Mixing Ratio [ppmv]

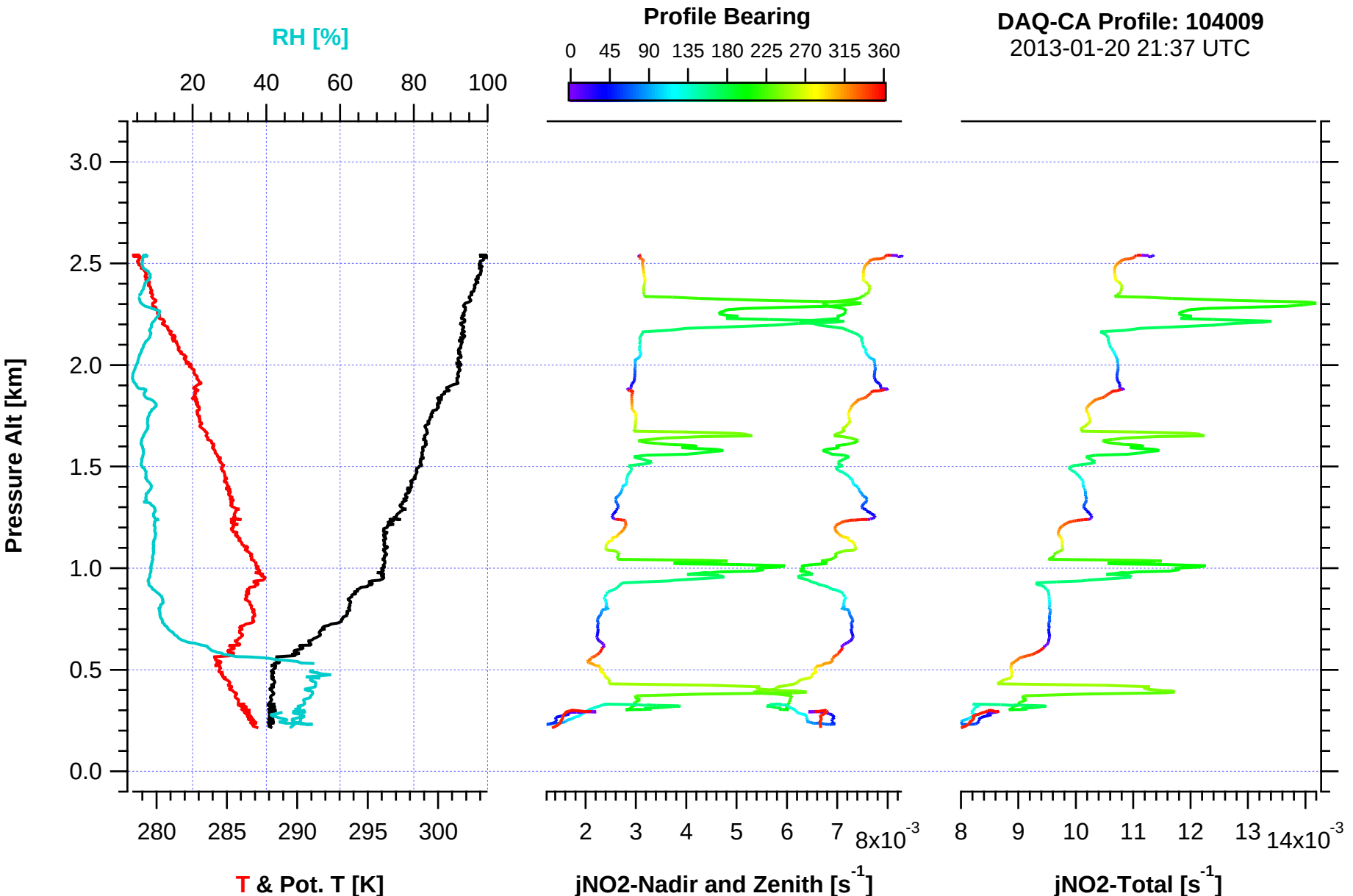

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104009
2013-01-20 21:37 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
100 120 140 160 180 200
CO Mixing Ratio [ppbv]
46 48 50 52
O3 Mixing Ratio [ppbv]

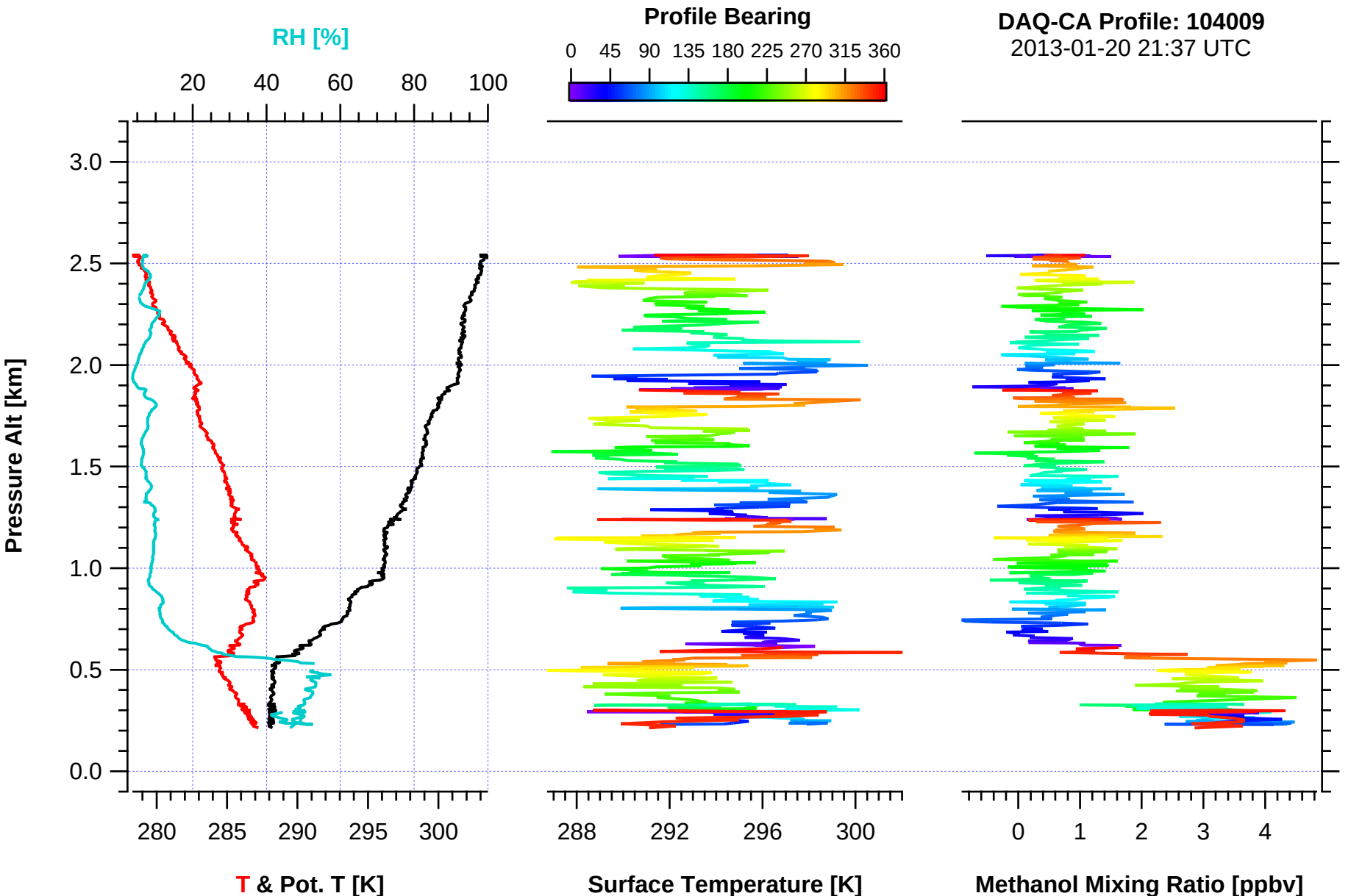

DAQ-CA Profile: 104009
2013-01-20 21:37 UTC
RH [%]
20 40 60 80 100
Profile Bearing
0 45 90 135 180 225 270 315 360
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
400 800 1200
NO2 Mixing Ratio [pptv]
0 100 200 300 400 500
NO Mixing Ratio [pptv]

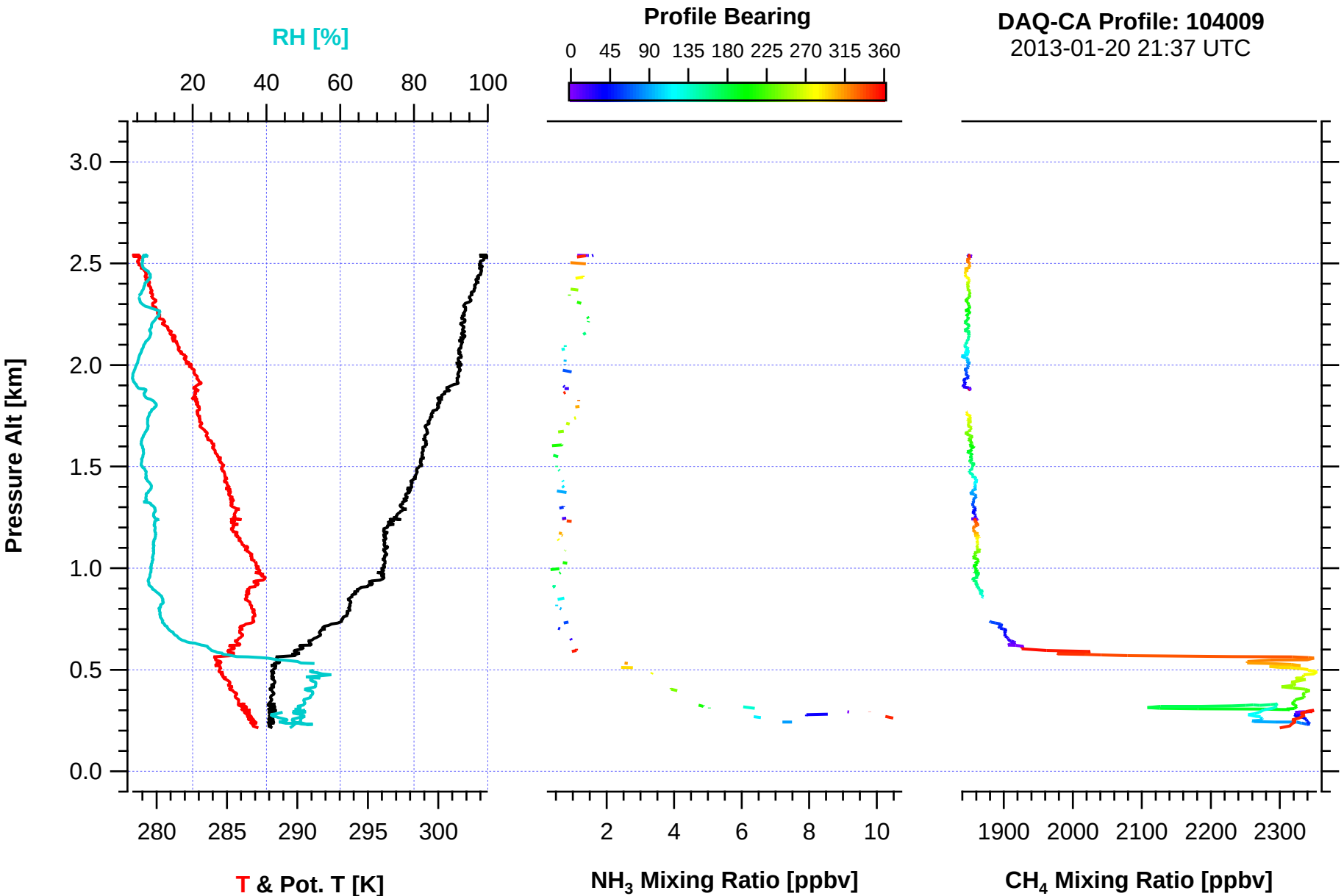

RH [%]
20 40 60 80 100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104009
2013-01-20 21:37 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 500 1000 1500 2000 2500
CH2O Mixing Ratio [pptv]
0.0 0.5 1.0 1.5 2.0
Acetaldehyde Mixing Ratio [ppbv]

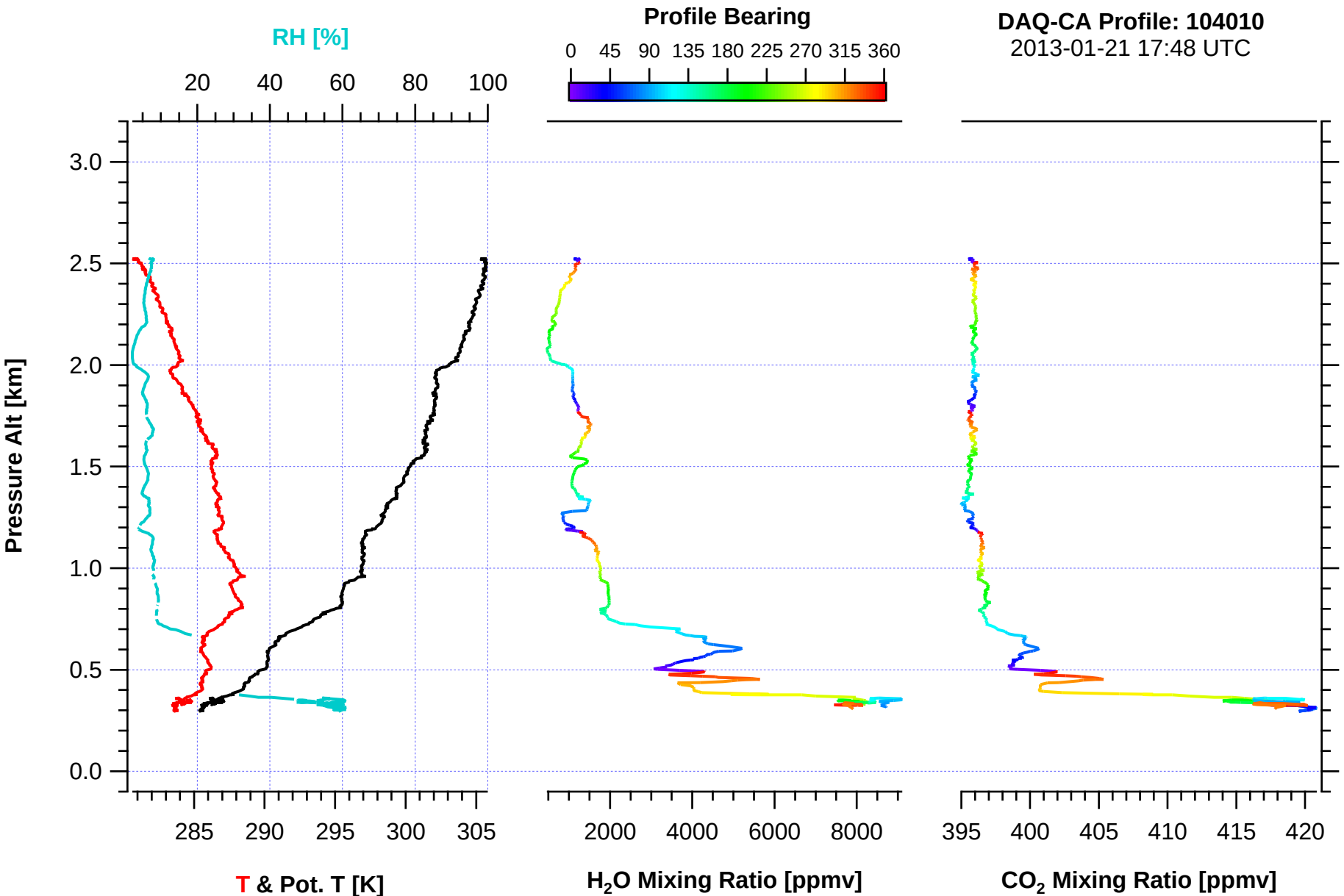

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104009
2013-01-20 21:37 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
-0.05 0.00 0.05 0.10 0.15
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.2 0.0 0.2
Isoprene Mixing Ratio [ppbv]

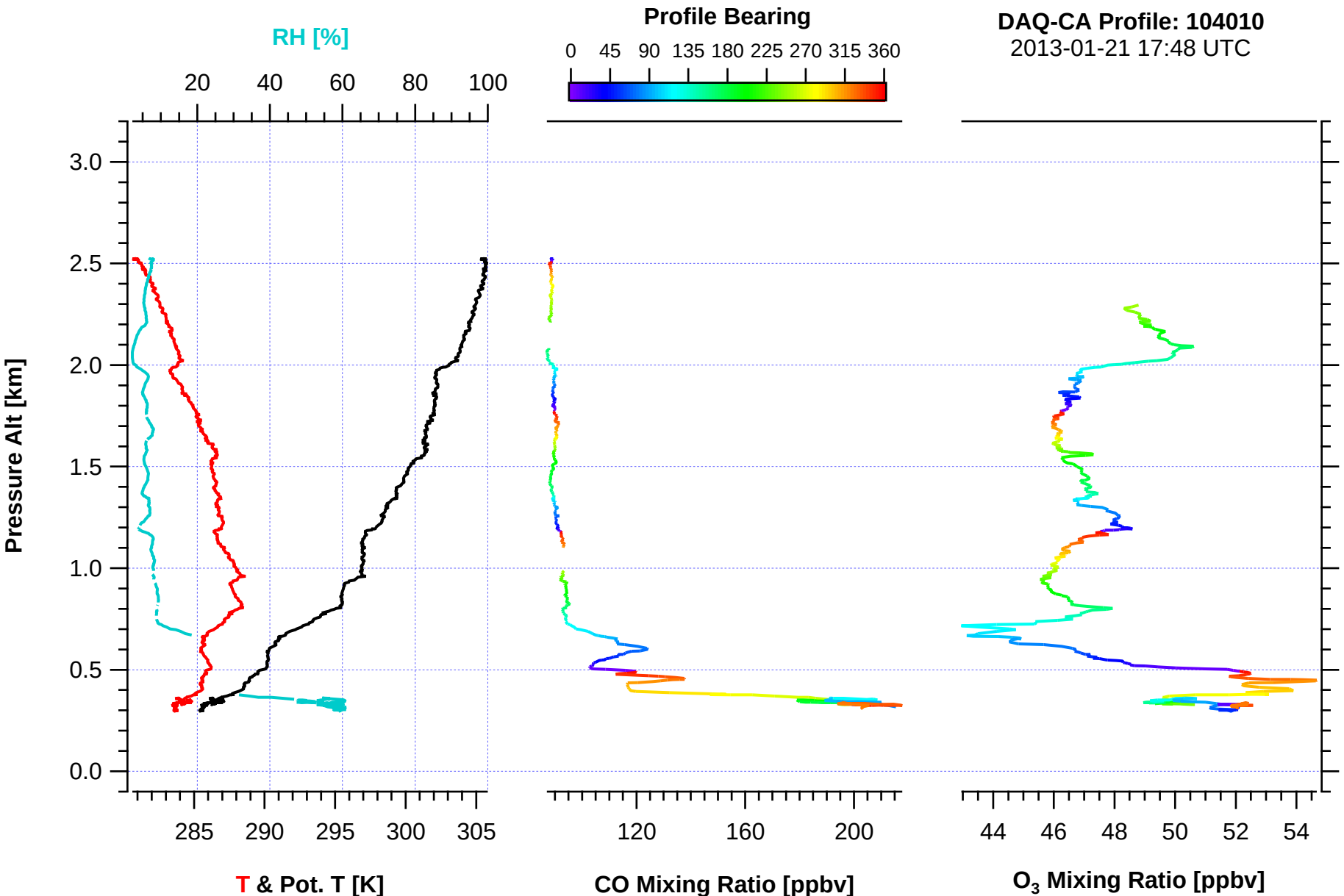

DAQ-CA Profile: 104009
2013-01-20 21:37 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 50 100 150
SCAT550nm, dry [Mm-1]
1000 2000 3000 4000 5000
CN > 10nm [# cm-3]

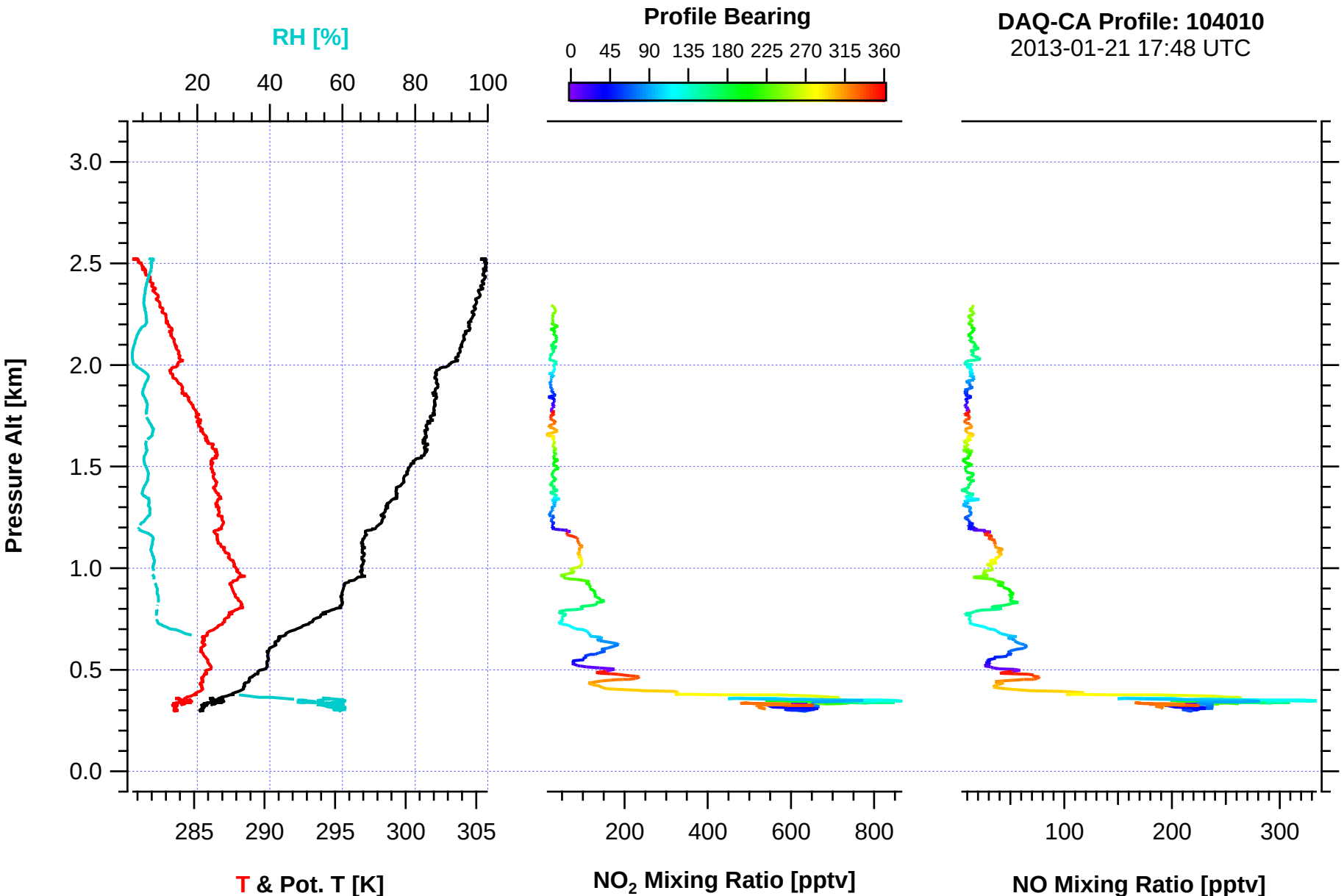

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104009
2013-01-20 21:37 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2 3 4 5 6 7 8x10-3
jNO2-Nadir and Zenith [s-1]
8 9 10 11 12 13 14x10-3
jNO2-Total [s-1]

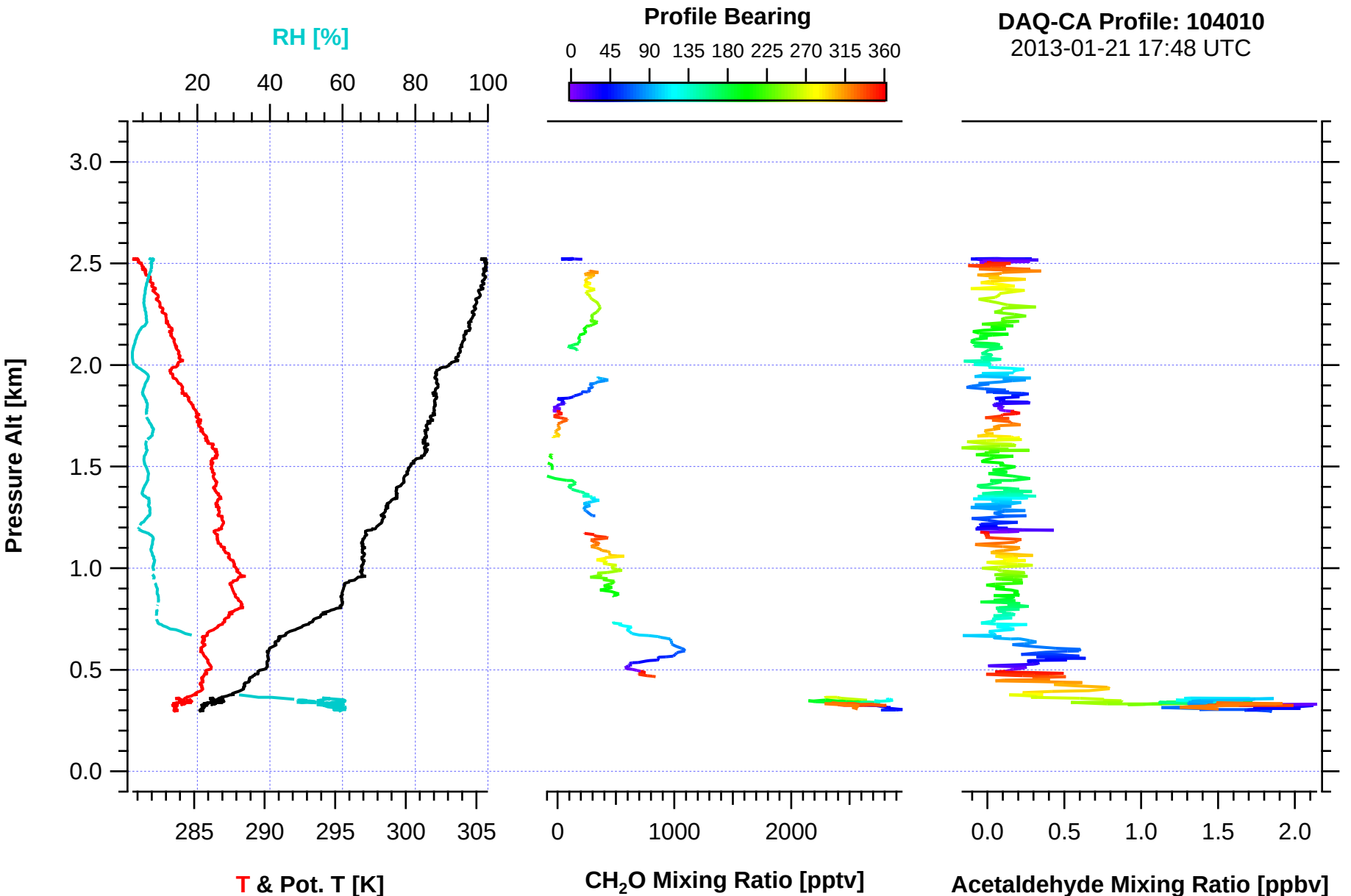

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104009
2013-01-20 21:37 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
288 292 296 300
Surface Temperature [K]
0 1 2 3 4
Methanol Mixing Ratio [ppbv]

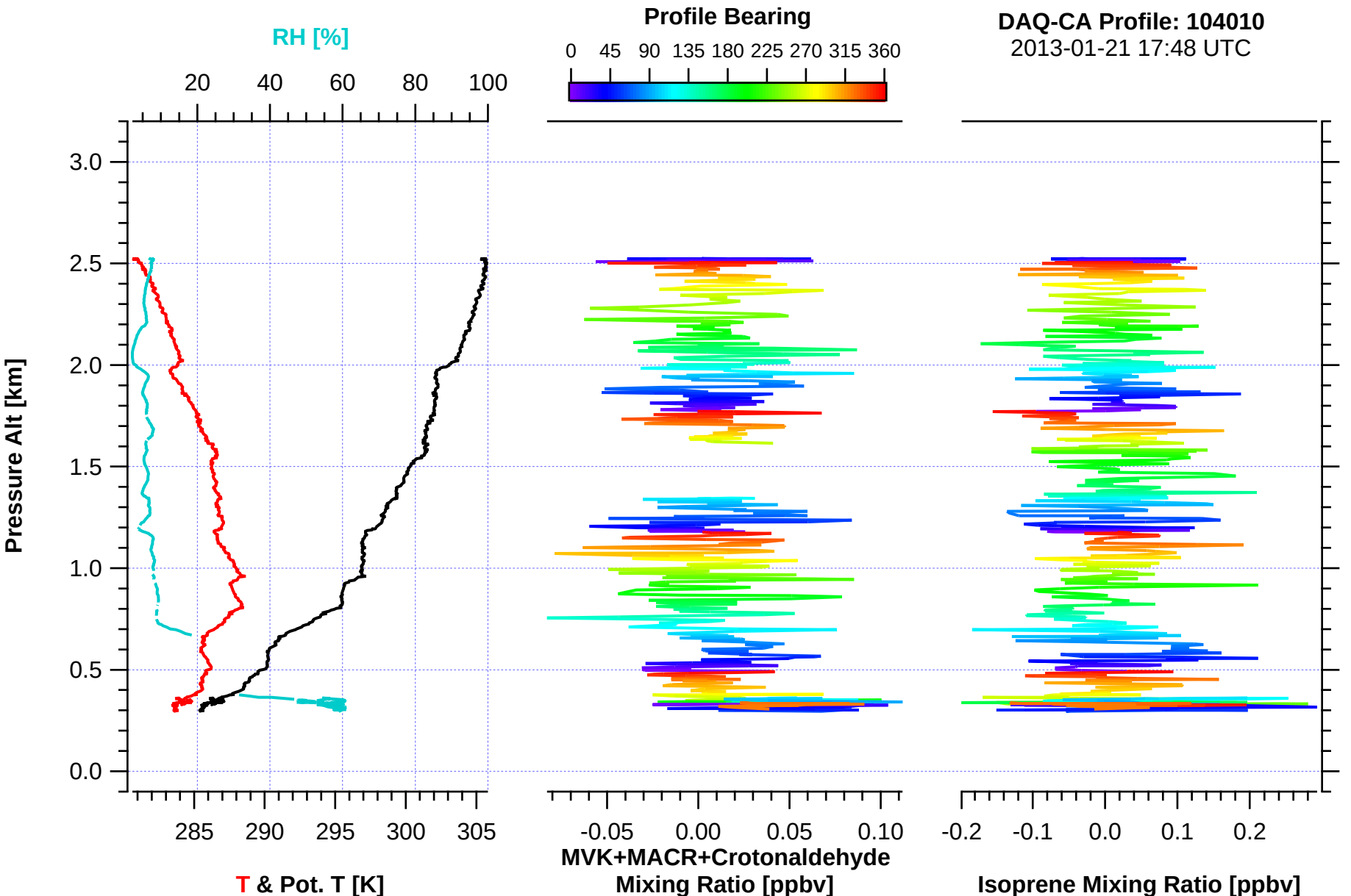

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104009
2013-01-20 21:37 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2 4 6 8 10
NH3 Mixing Ratio [ppbv]
1900 2000 2100 2200 2300
CH4 Mixing Ratio [ppbv]

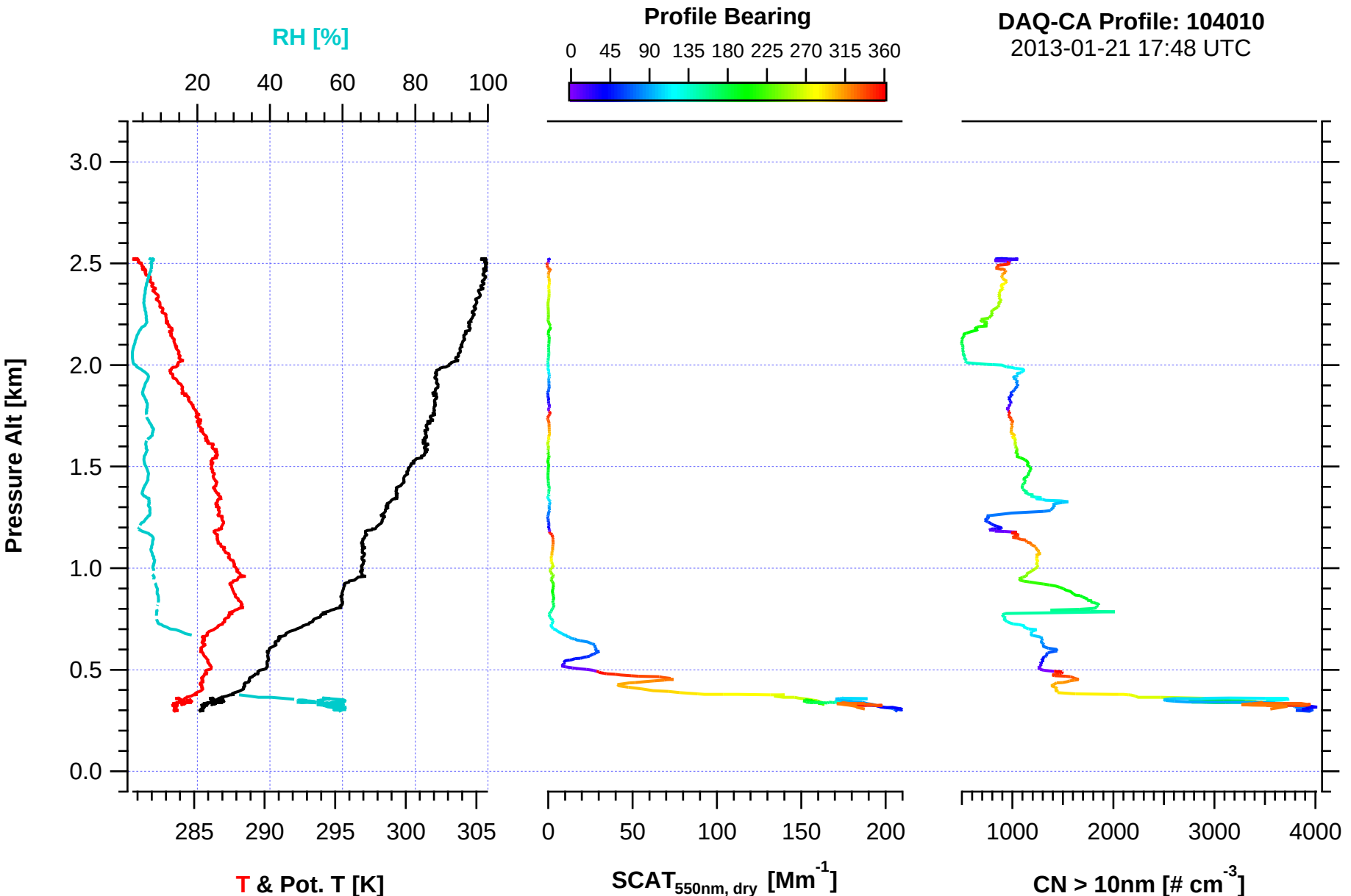

DAQ-CA Profile: 104010
2013-01-21 17:48 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
2000 4000 6000 8000
H2O Mixing Ratio [ppmv]
395 400 405 410 415 420
CO2 Mixing Ratio [ppmv]

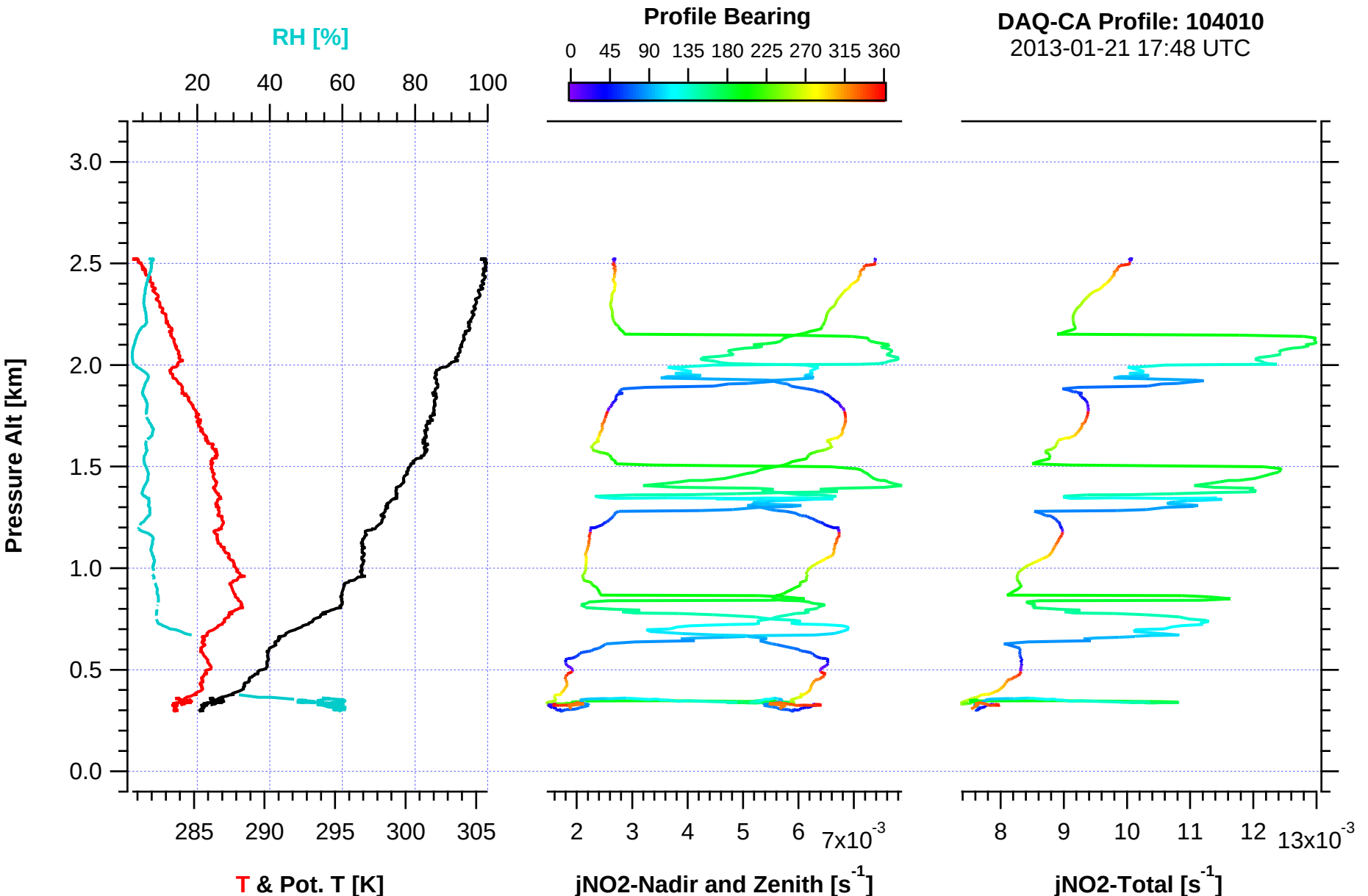

DAQ-CA Profile: 104010
2013-01-21 17:48 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
120 160 200
CO Mixing Ratio [ppbv]
44 46 48 50 52 54
O3 Mixing Ratio [ppbv]

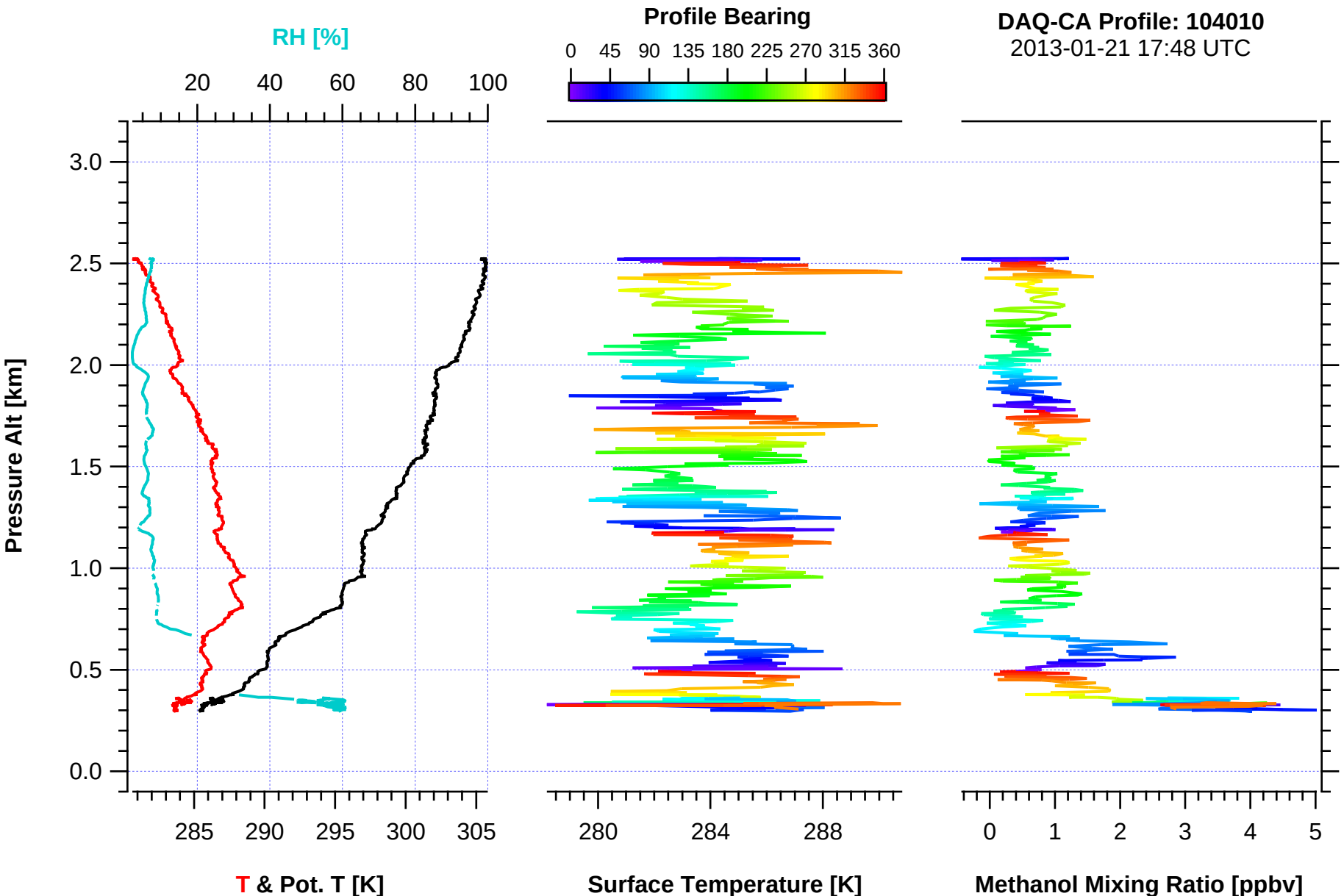

DAQ-CA Profile: 104010
2013-01-21 17:48 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
200 400 600 800
NO2 Mixing Ratio [pptv]
100 200 300
NO Mixing Ratio [pptv]

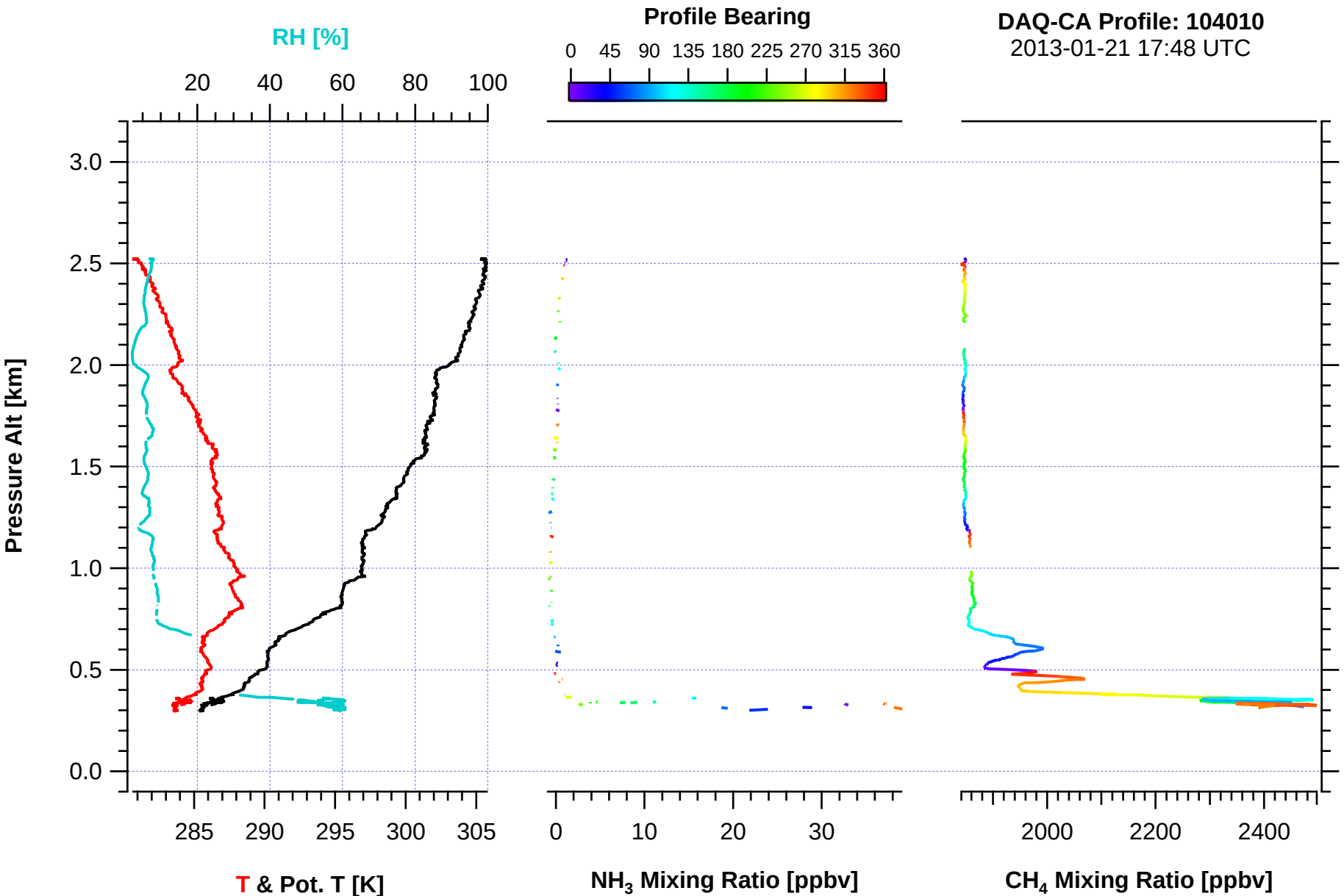

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104010
2013-01-21 17:48 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285
290
295
300
305
T & Pot. T [K]
0
1000
2000
CH2O Mixing Ratio [pptv]
0.0
0.5
1.0
1.5
2.0
Acetaldehyde Mixing Ratio [ppbv]

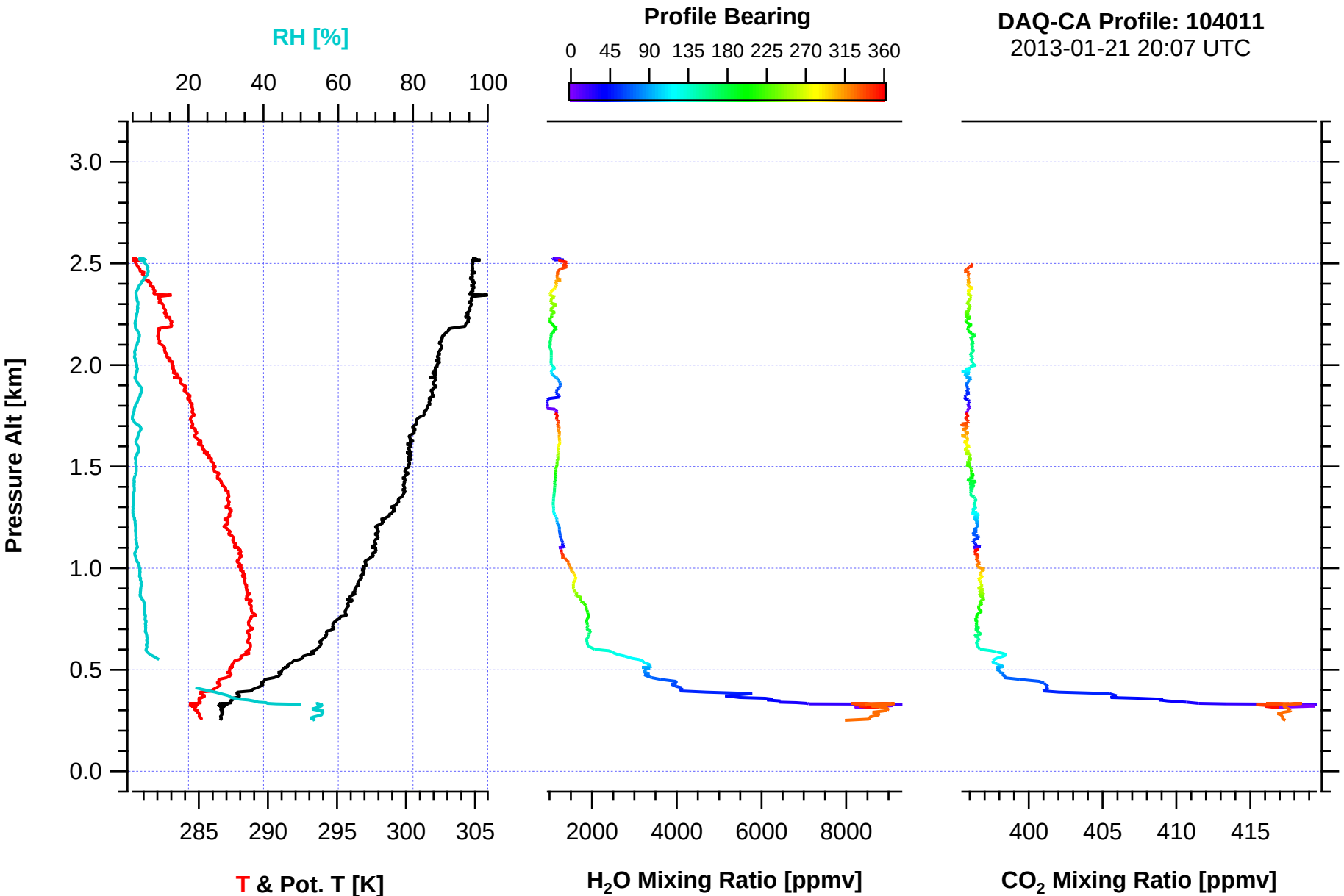

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104010
2013-01-21 17:48 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
-0.05 0.00 0.05 0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.2 -0.1 0.0 0.1 0.2
Isoprene Mixing Ratio [ppbv]

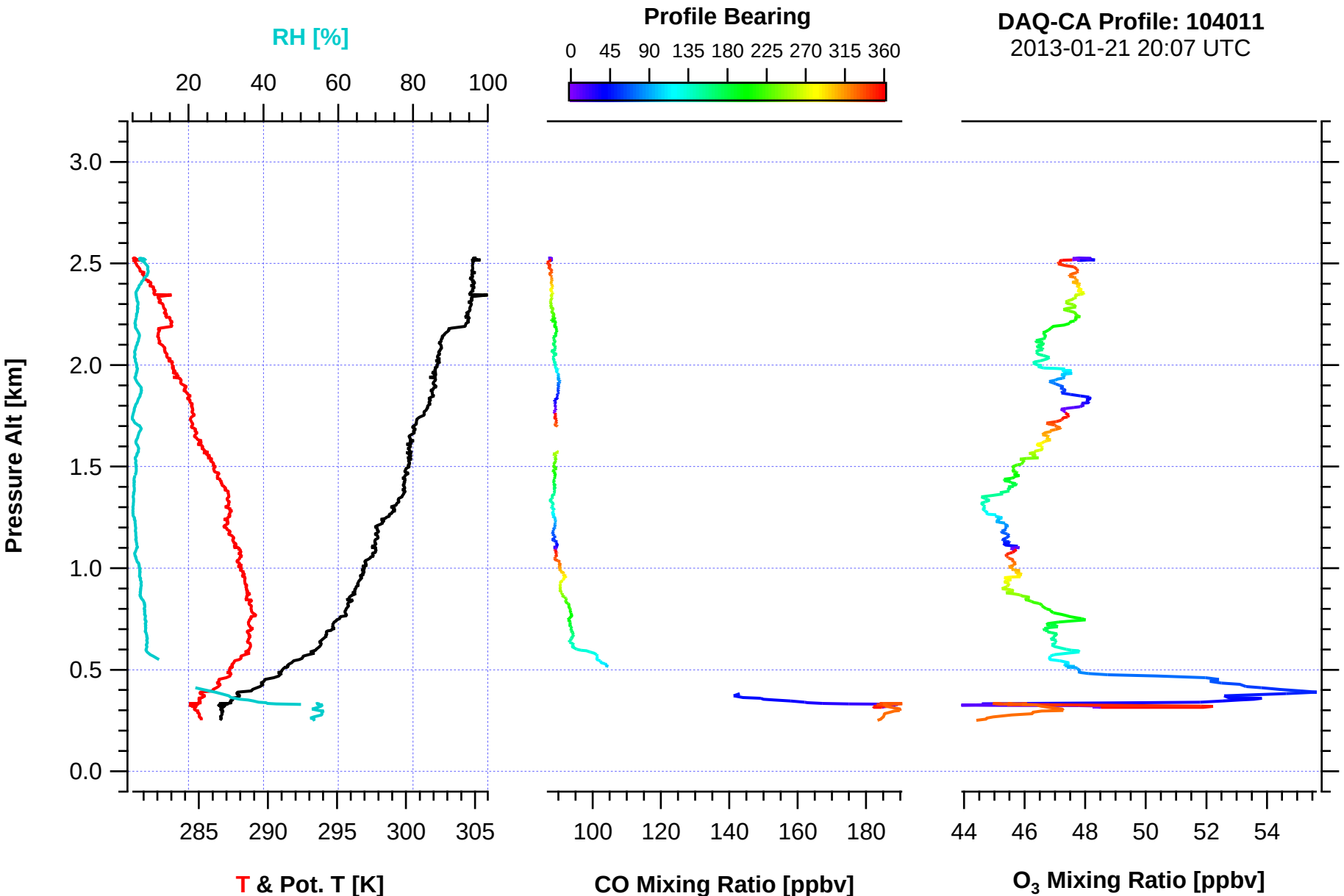

DAQ-CA Profile: 104010
2013-01-21 17:48 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
0 50 100 150 200
SCAT550nm, dry [Mm-1]
1000 2000 3000 4000
CN > 10nm [# cm-3]

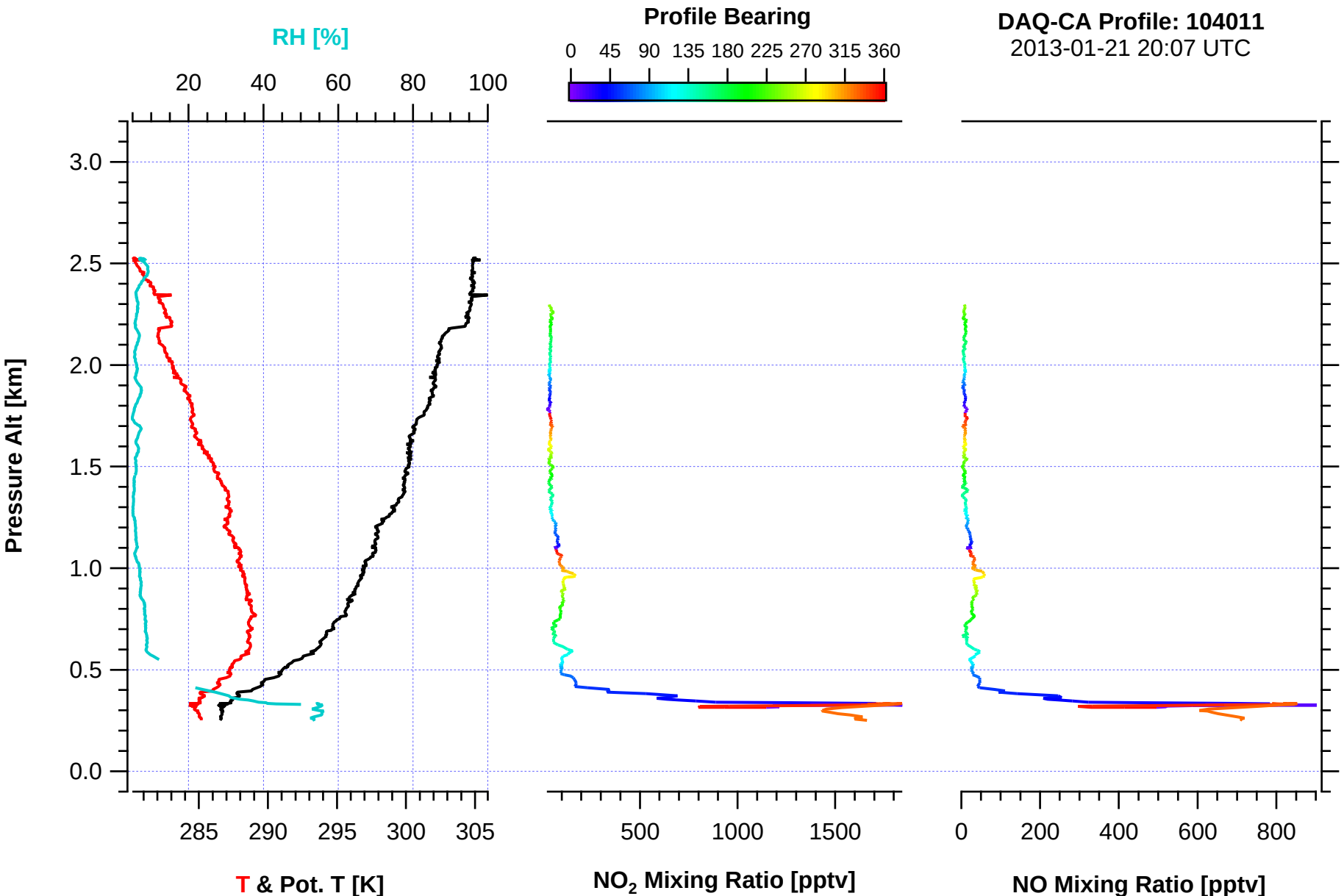

DAQ-CA Profile: 104010
2013-01-21 17:48 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
2 3 4 5 6 7x10^-3
jNO2-Nadir and Zenith [s^-1]
8 9 10 11 12 13x10^-3
jNO2-Total [s^-1]

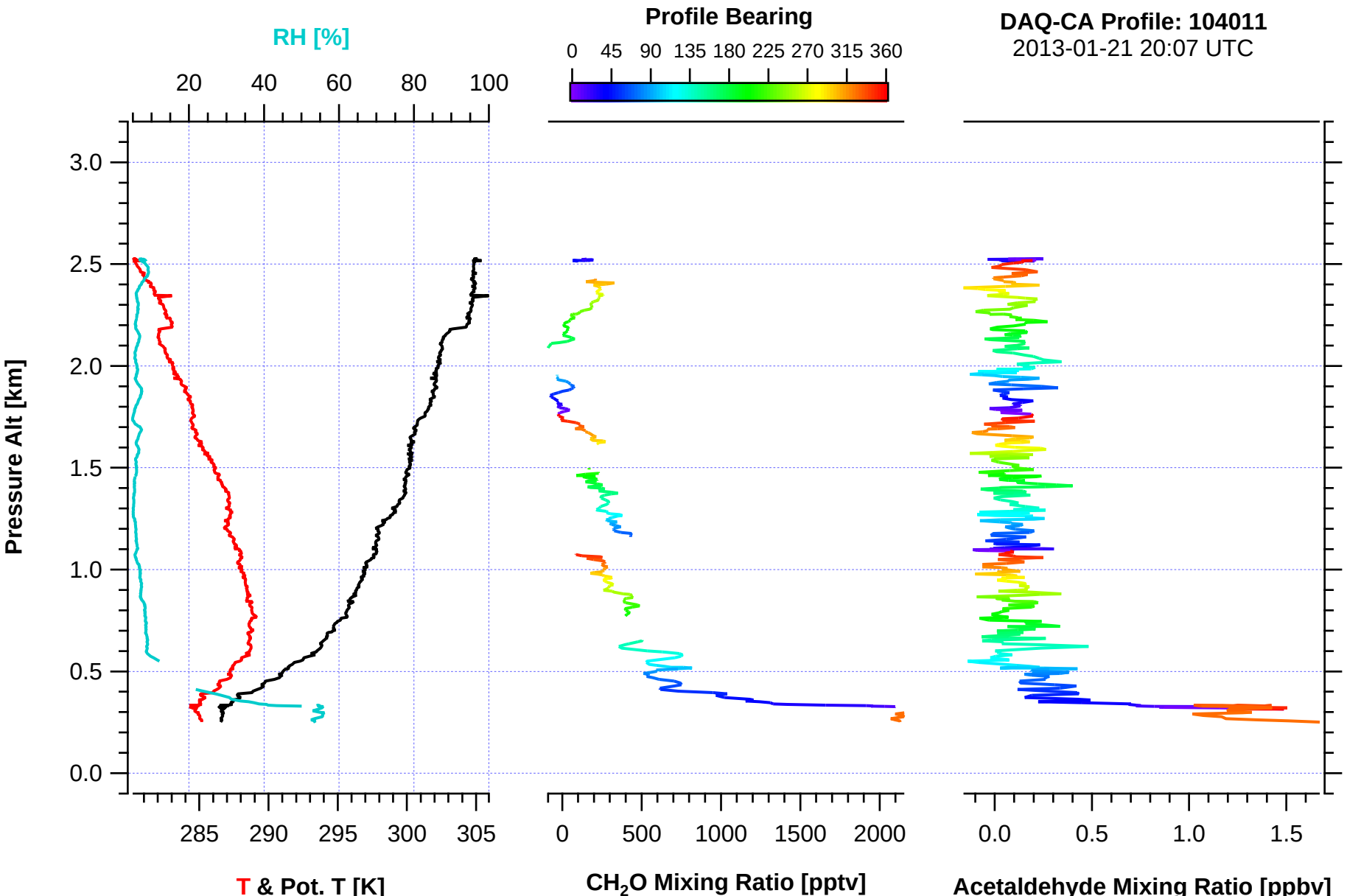

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104010
2013-01-21 17:48 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
280 284 288
Surface Temperature [K]
0 1 2 3 4 5
Methanol Mixing Ratio [ppbv]

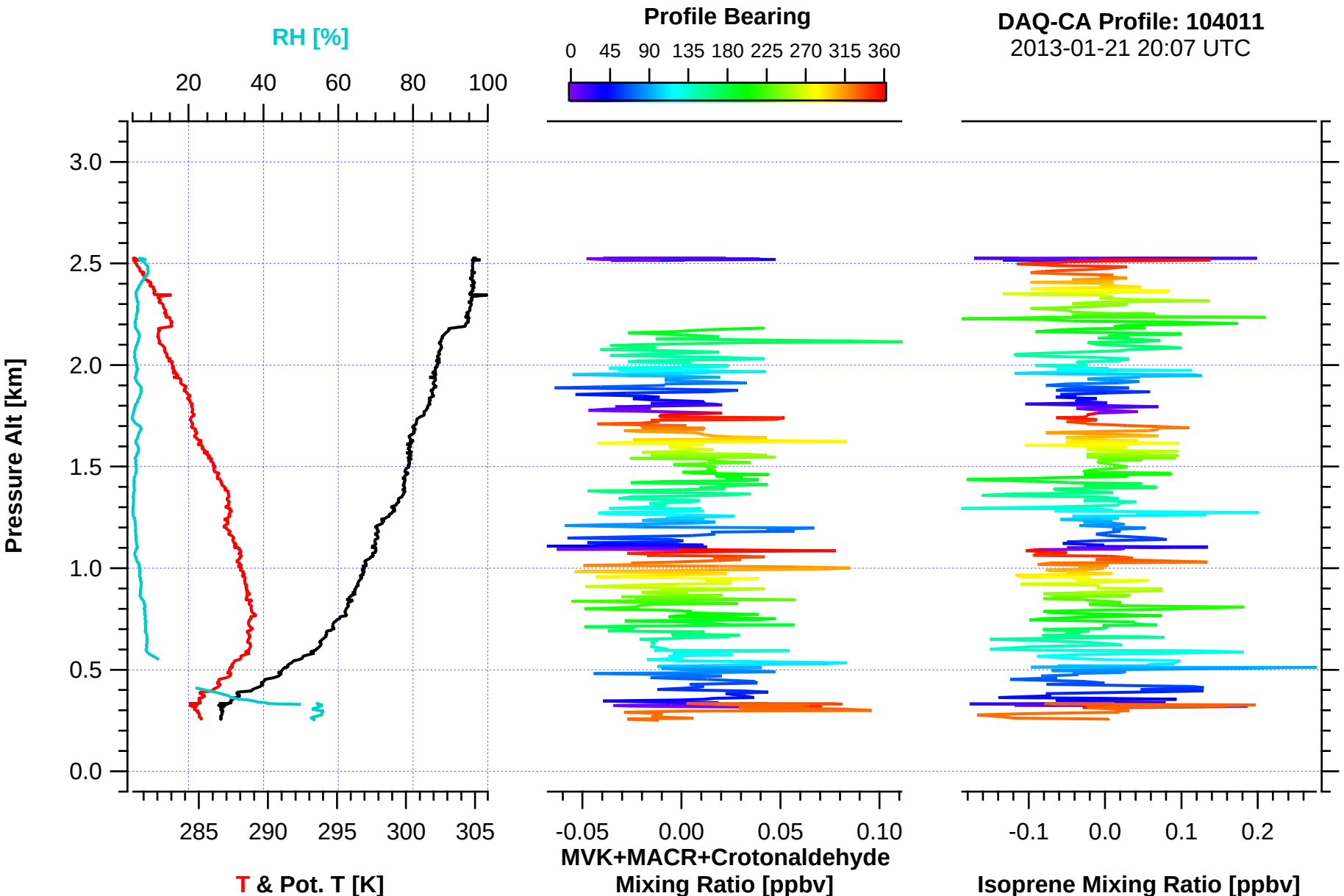

DAQ-CA Profile: 104010
2013-01-21 17:48 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
0 10 20 30
NH3 Mixing Ratio [ppbv]
2000 2200 2400
CH4 Mixing Ratio [ppbv]

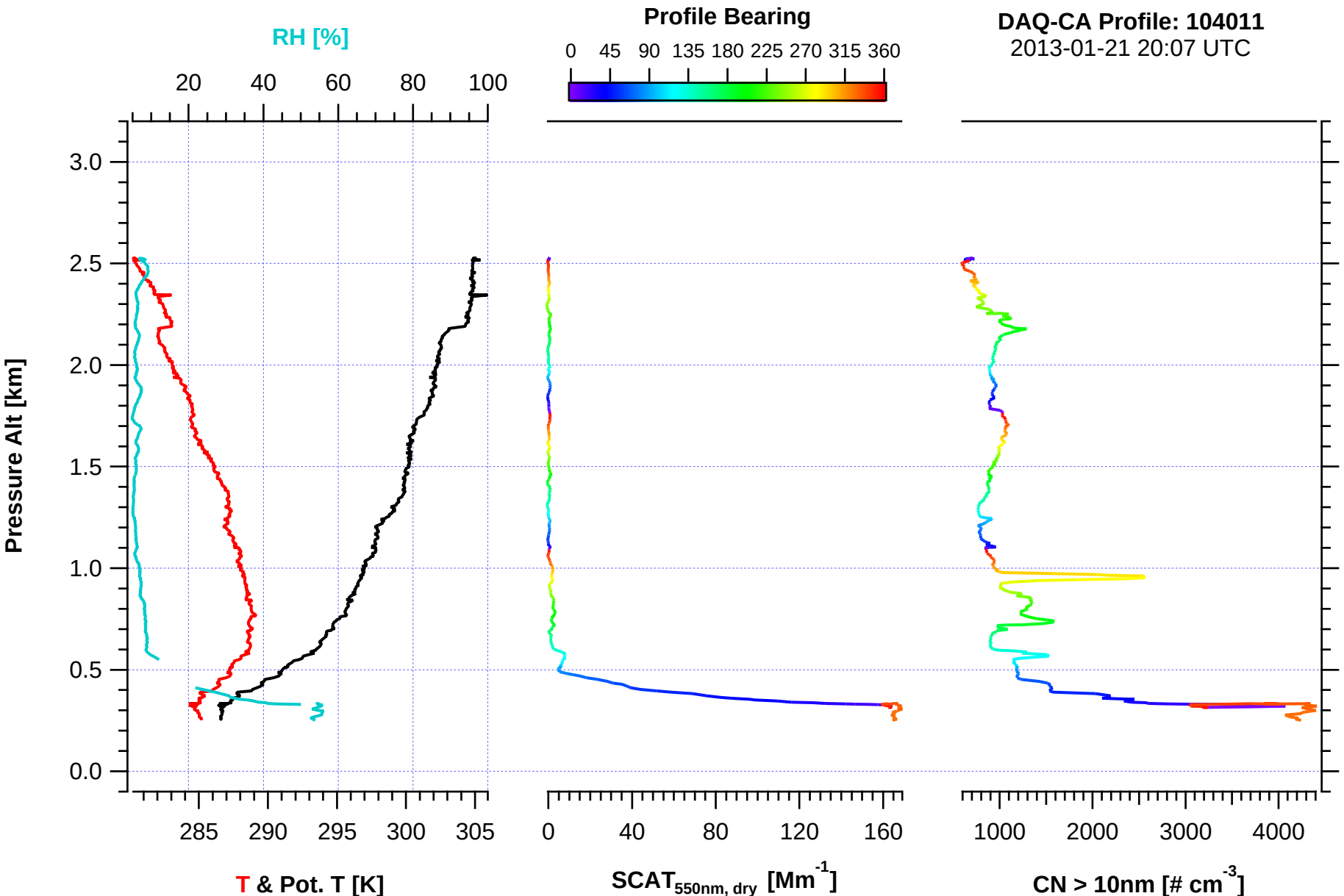

DAQ-CA Profile: 104011
2013-01-21 20:07 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0 2.5 2.0 1.5 1.0 0.5 0.0
285 290 295 300 305
T & Pot. T [K]
2000 4000 6000 8000
H2O Mixing Ratio [ppmv]
400 405 410 415
CO2 Mixing Ratio [ppmv]

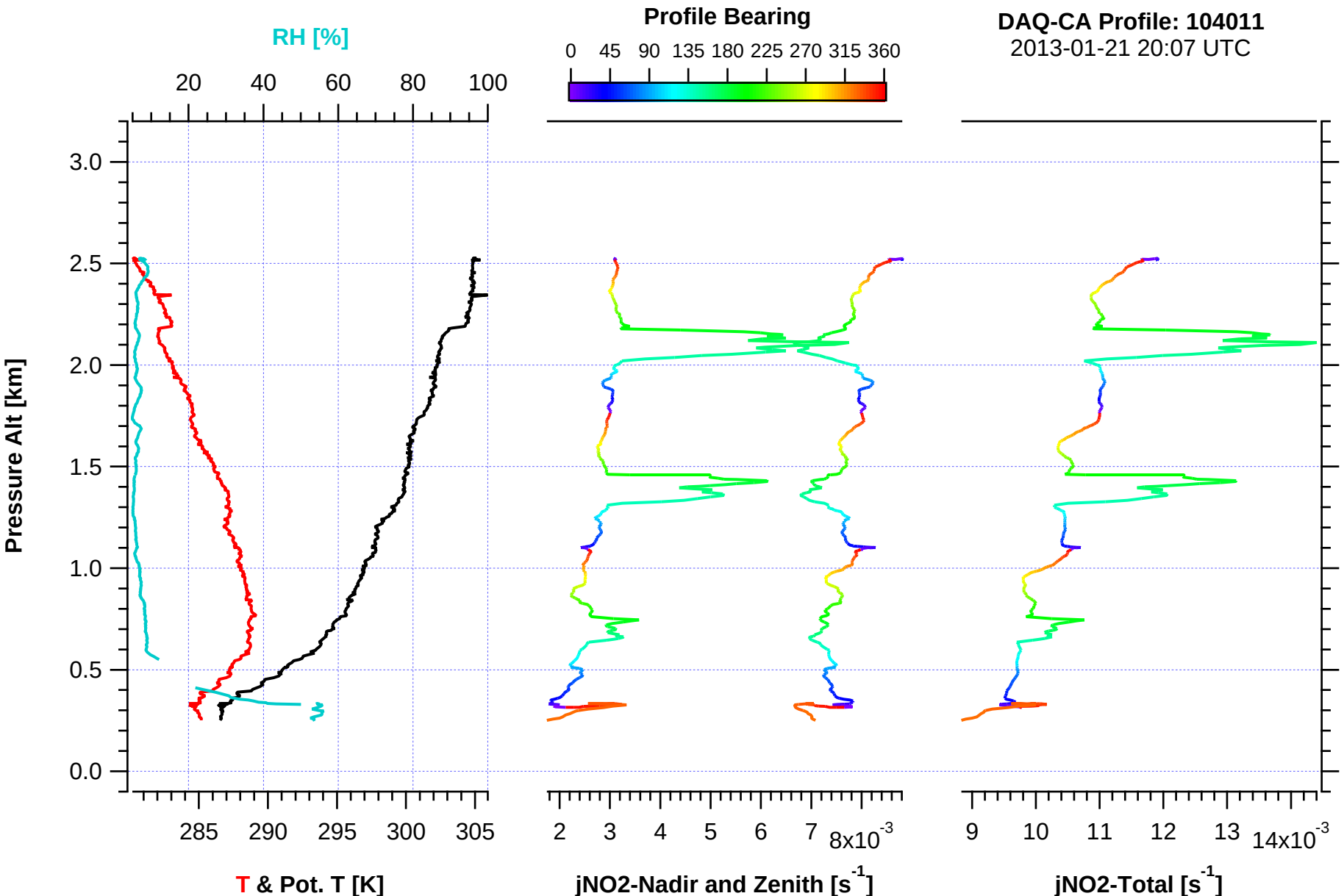

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104011
2013-01-21 20:07 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
100 120 140 160 180
CO Mixing Ratio [ppbv]
44 46 48 50 52 54
O3 Mixing Ratio [ppbv]

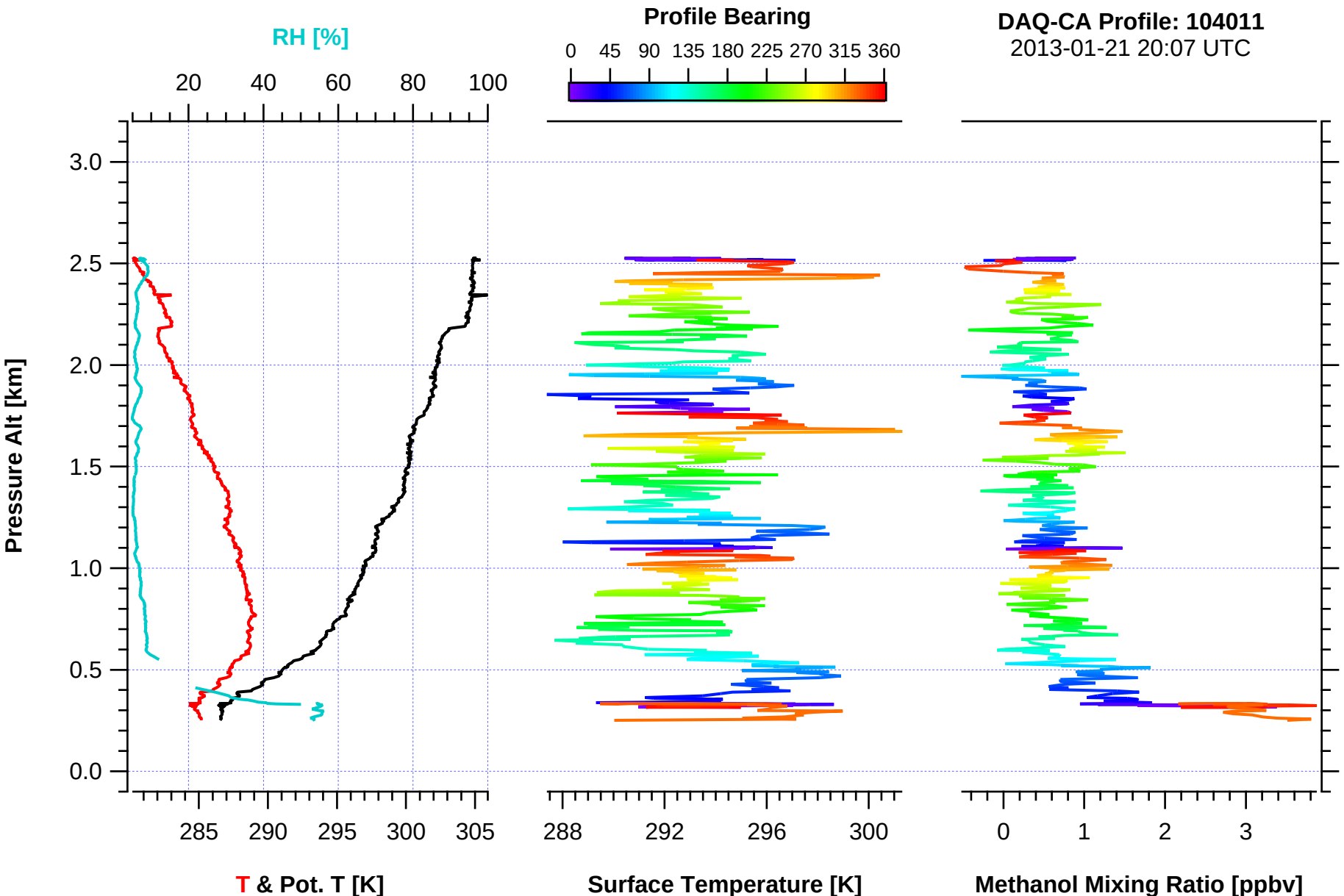

DAQ-CA Profile: 104011
2013-01-21 20:07 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0 2.5 2.0 1.5 1.0 0.5 0.0
285 290 295 300 305
T & Pot. T [K]
500 1000 1500
NO2 Mixing Ratio [pptv]
0 200 400 600 800
NO Mixing Ratio [pptv]

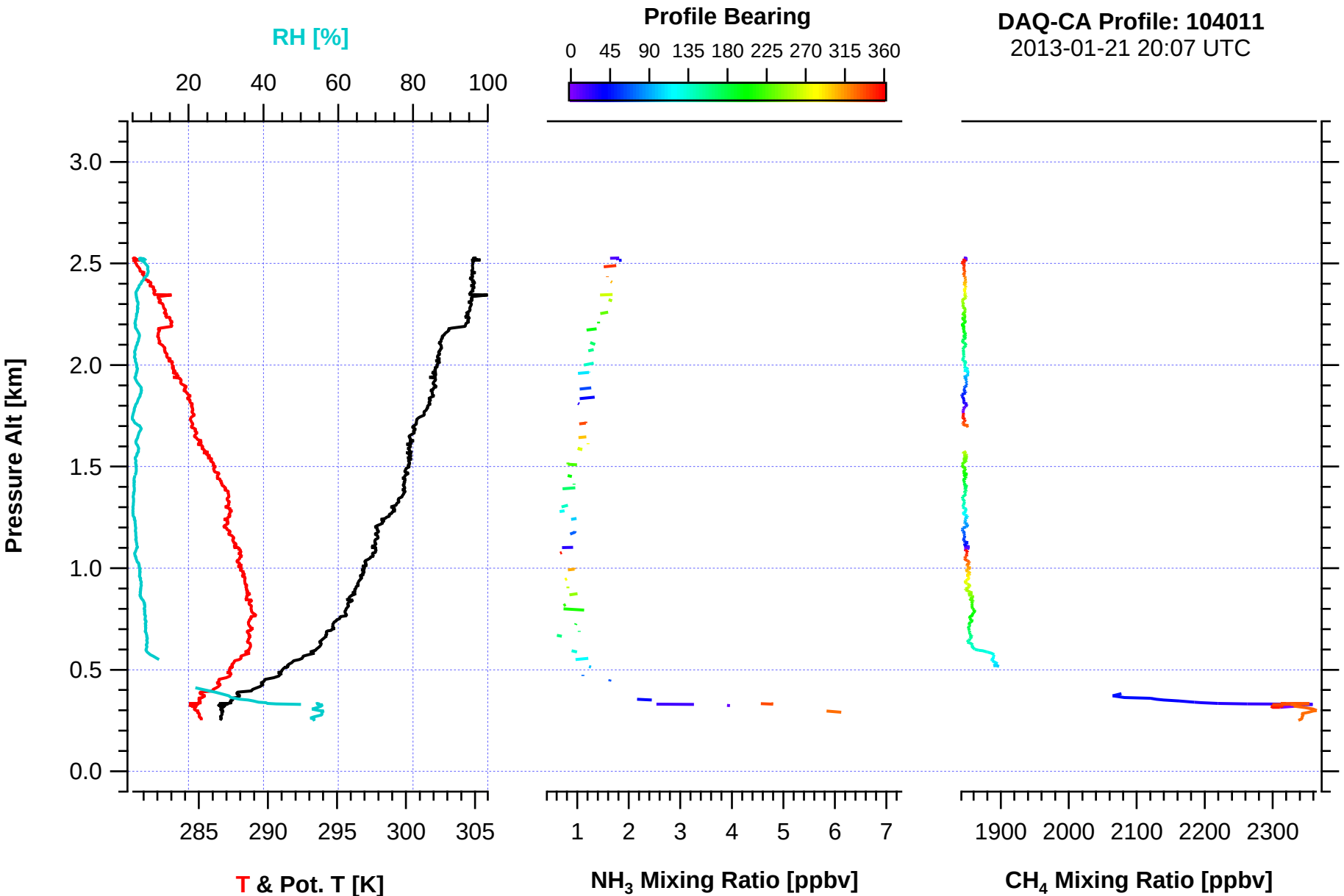

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104011
2013-01-21 20:07 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
0 500 1000 1500 2000
CH2O Mixing Ratio [pptv]
0.0 0.5 1.0 1.5
Acetaldehyde Mixing Ratio [ppbv]

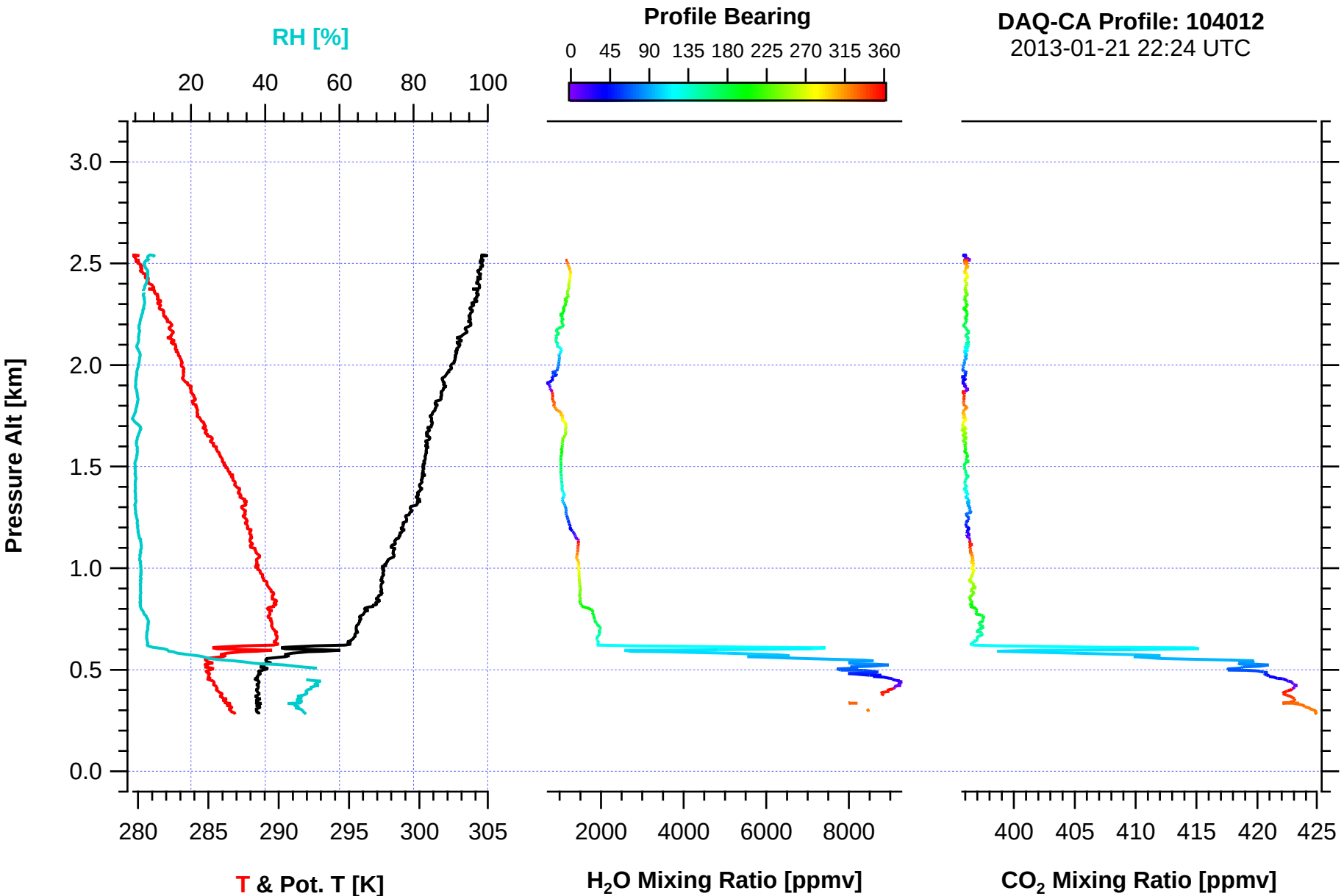

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104011
2013-01-21 20:07 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
-0.05 0.00 0.05 0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.1 0.0 0.1 0.2
Isoprene Mixing Ratio [ppbv]

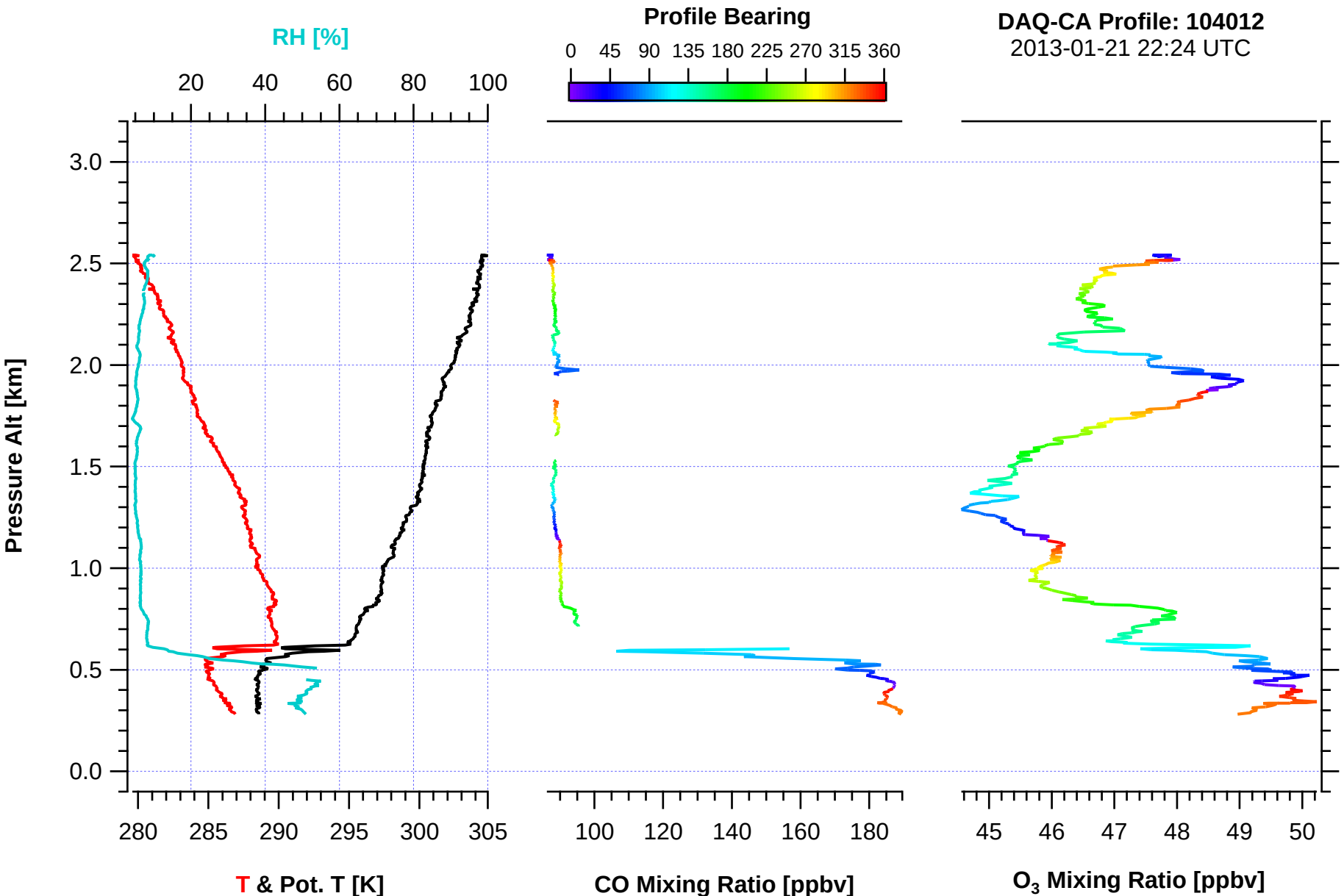

DAQ-CA Profile: 104011
2013-01-21 20:07 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0 2.5 2.0 1.5 1.0 0.5 0.0
285 290 295 300 305
T & Pot. T [K]
0 40 80 120 160
SCAT550nm, dry [Mm-1]
1000 2000 3000 4000
CN > 10nm [# cm-3]

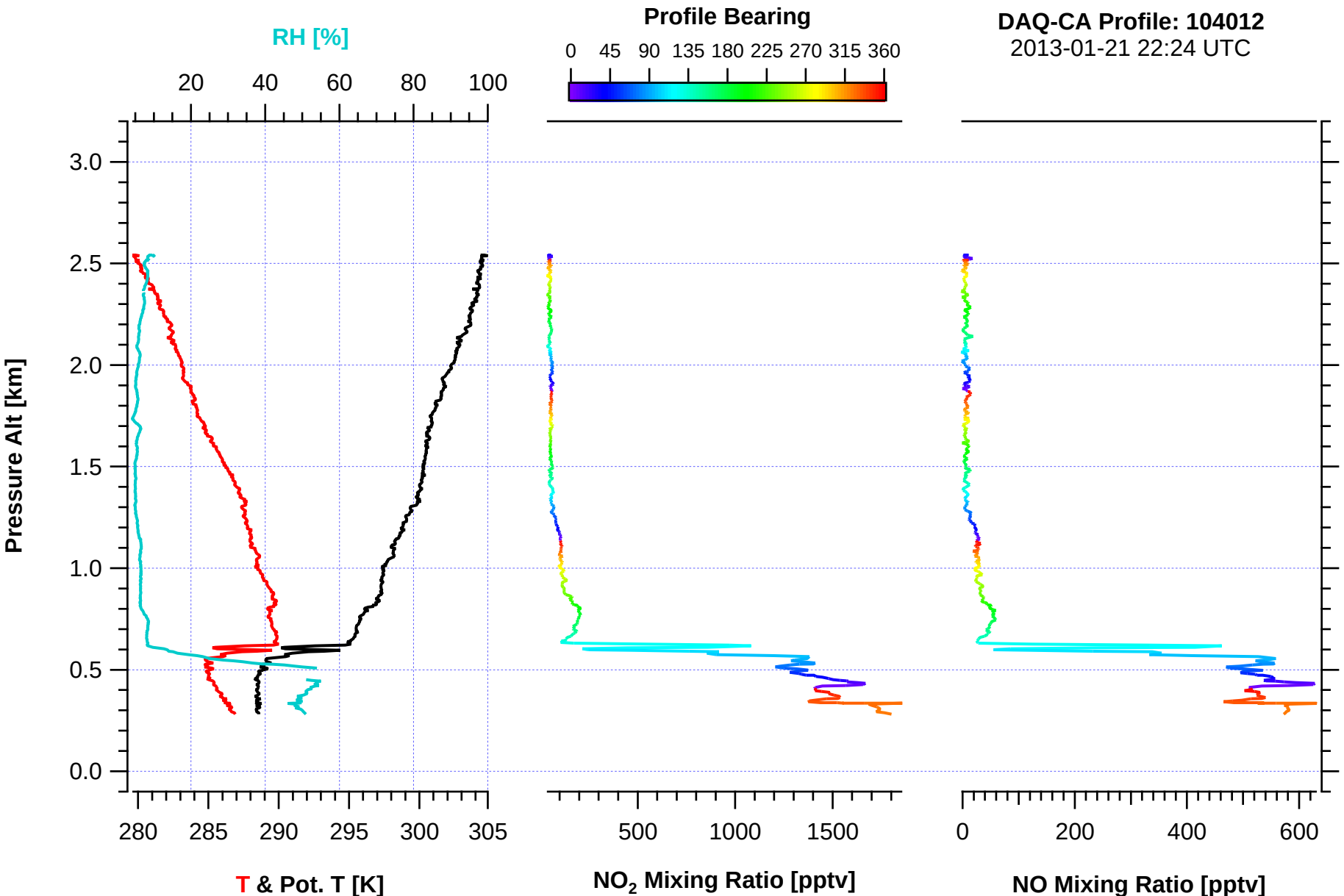

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104011
2013-01-21 20:07 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
2 3 4 5 6 7 8x10-3
jNO2-Nadir and Zenith [s-1]
9 10 11 12 13 14x10-3
jNO2-Total [s-1]

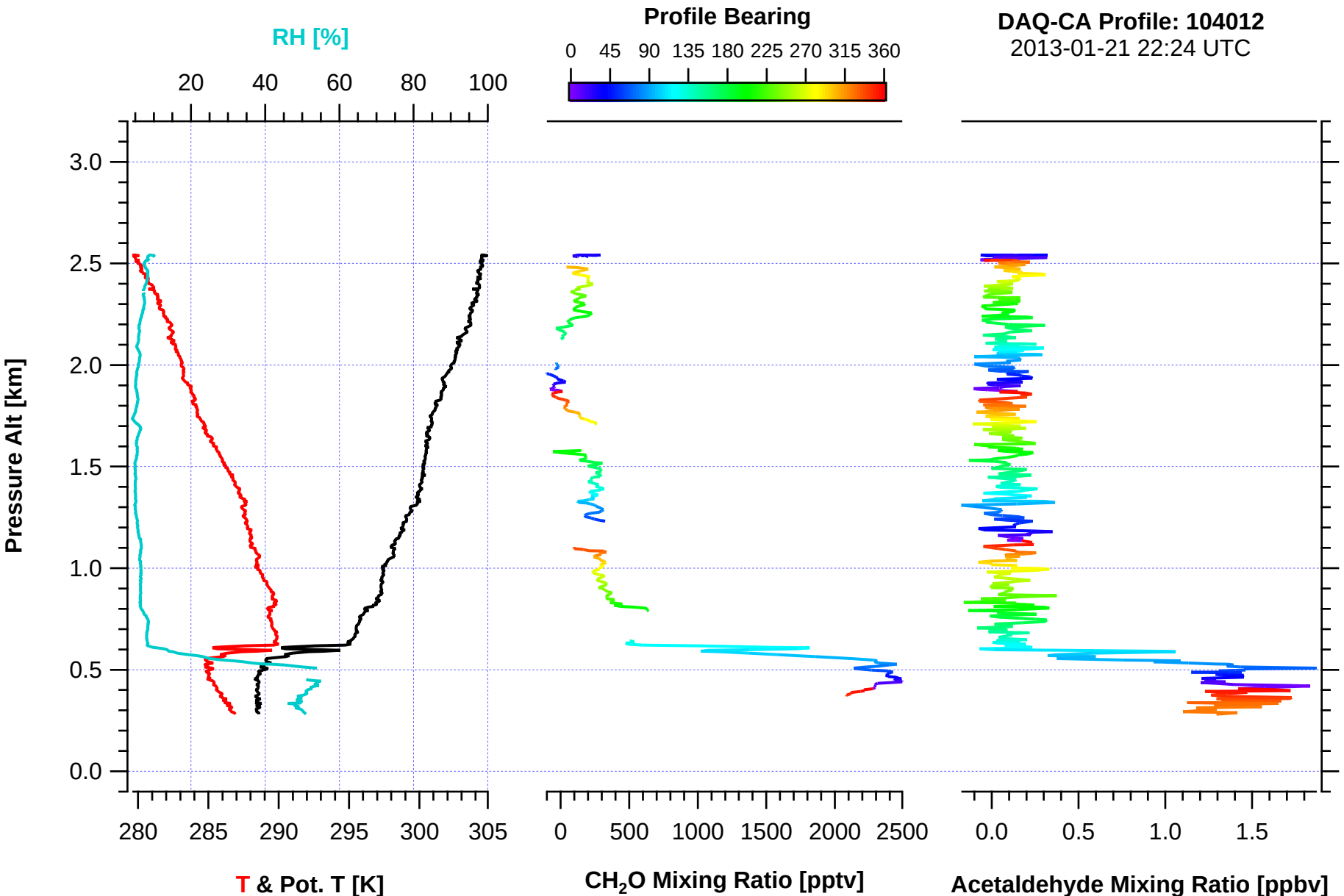

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104011
2013-01-21 20:07 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
288 292 296 300
Surface Temperature [K]
0 1 2 3
Methanol Mixing Ratio [ppbv]

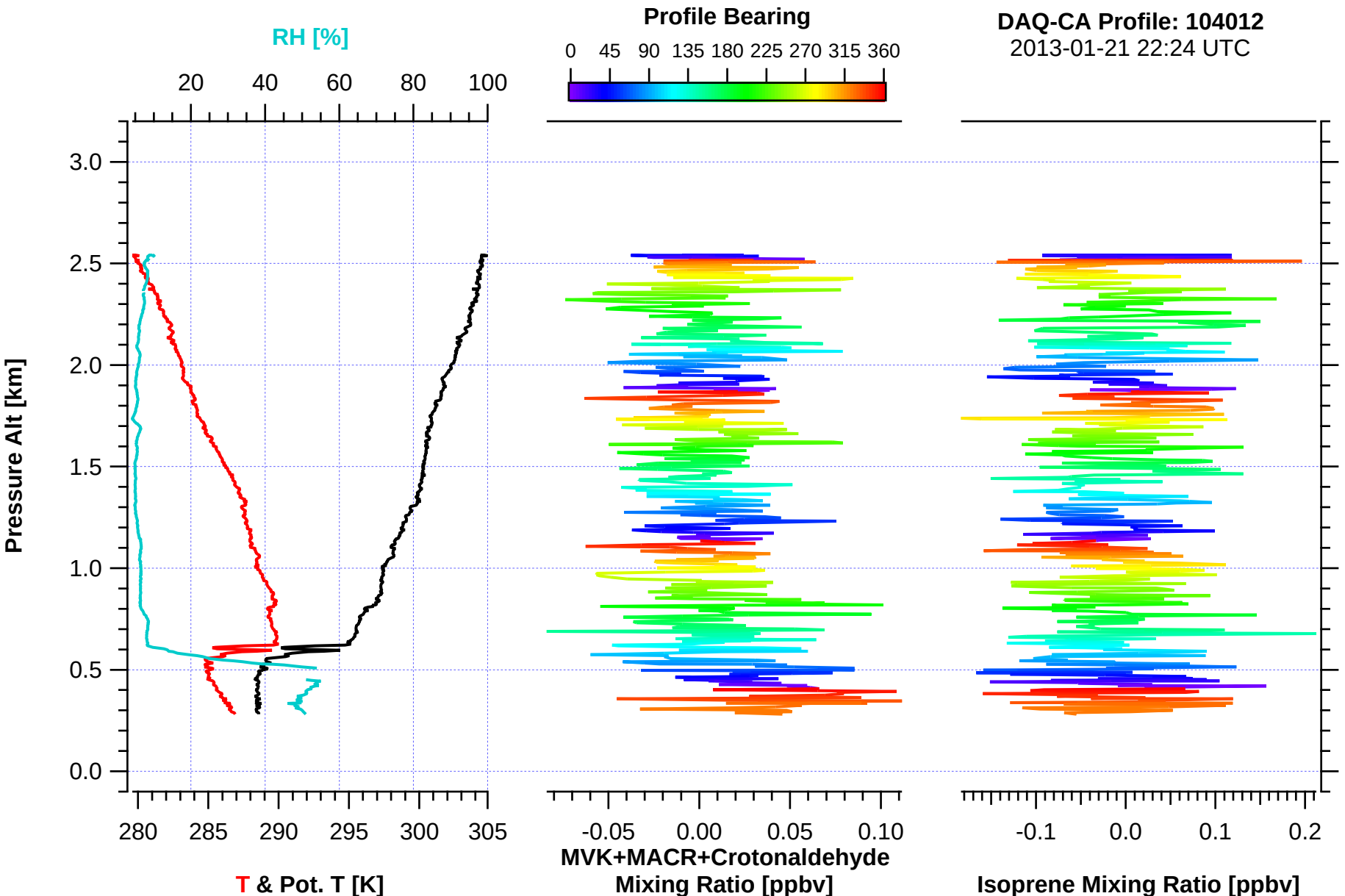

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104011
2013-01-21 20:07 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
1 2 3 4 5 6 7
NH3 Mixing Ratio [ppbv]
1900 2000 2100 2200 2300
CH4 Mixing Ratio [ppbv]

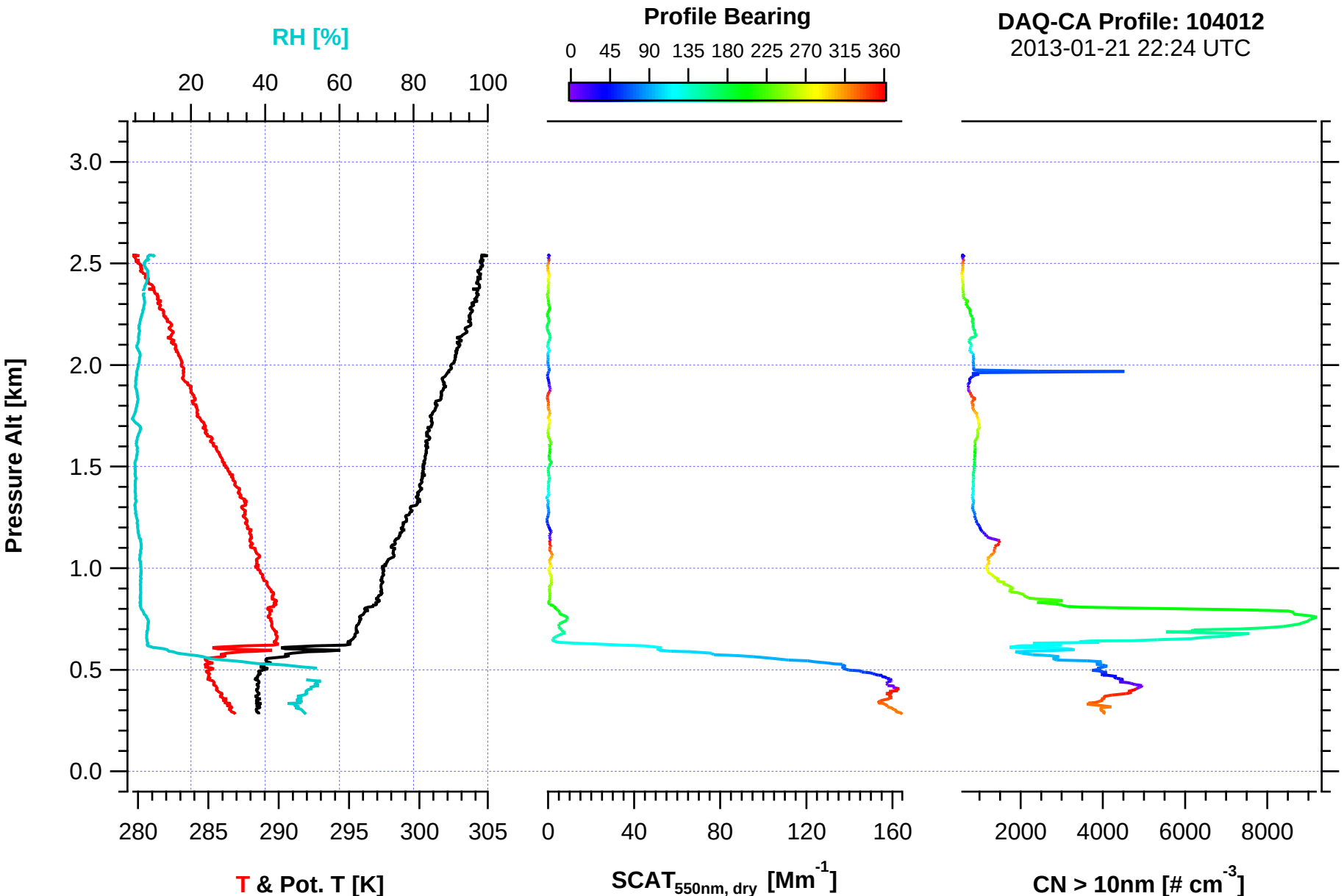

DAQ-CA Profile: 104012
2013-01-21 22:24 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300 305
T & Pot. T [K]
2000 4000 6000 8000
H2O Mixing Ratio [ppmv]
400 405 410 415 420 425
CO2 Mixing Ratio [ppmv]

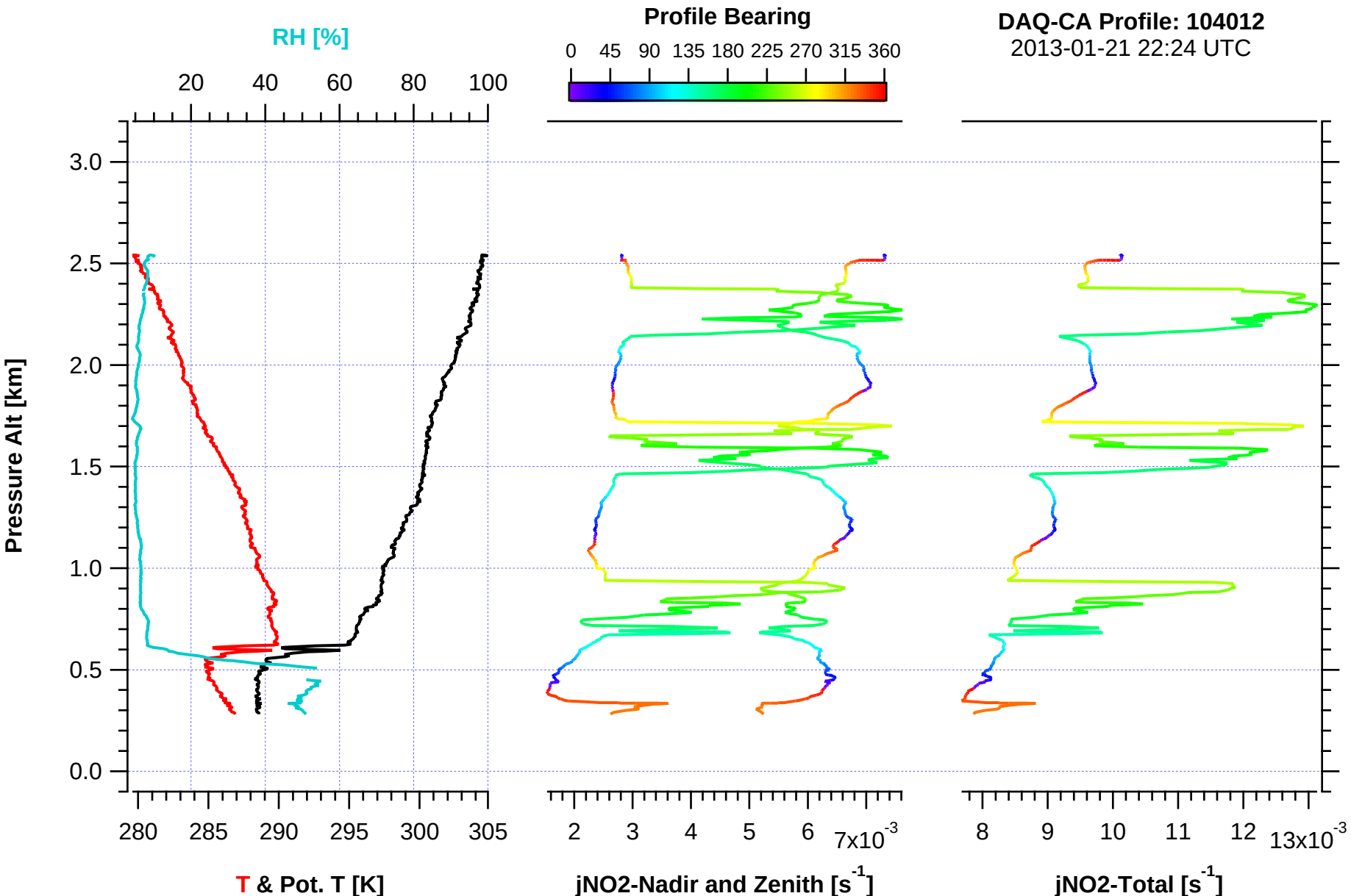

DAQ-CA Profile: 104012
2013-01-21 22:24 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300 305
T & Pot. T [K]
100 120 140 160 180
CO Mixing Ratio [ppbv]
45 46 47 48 49 50
O3 Mixing Ratio [ppbv]

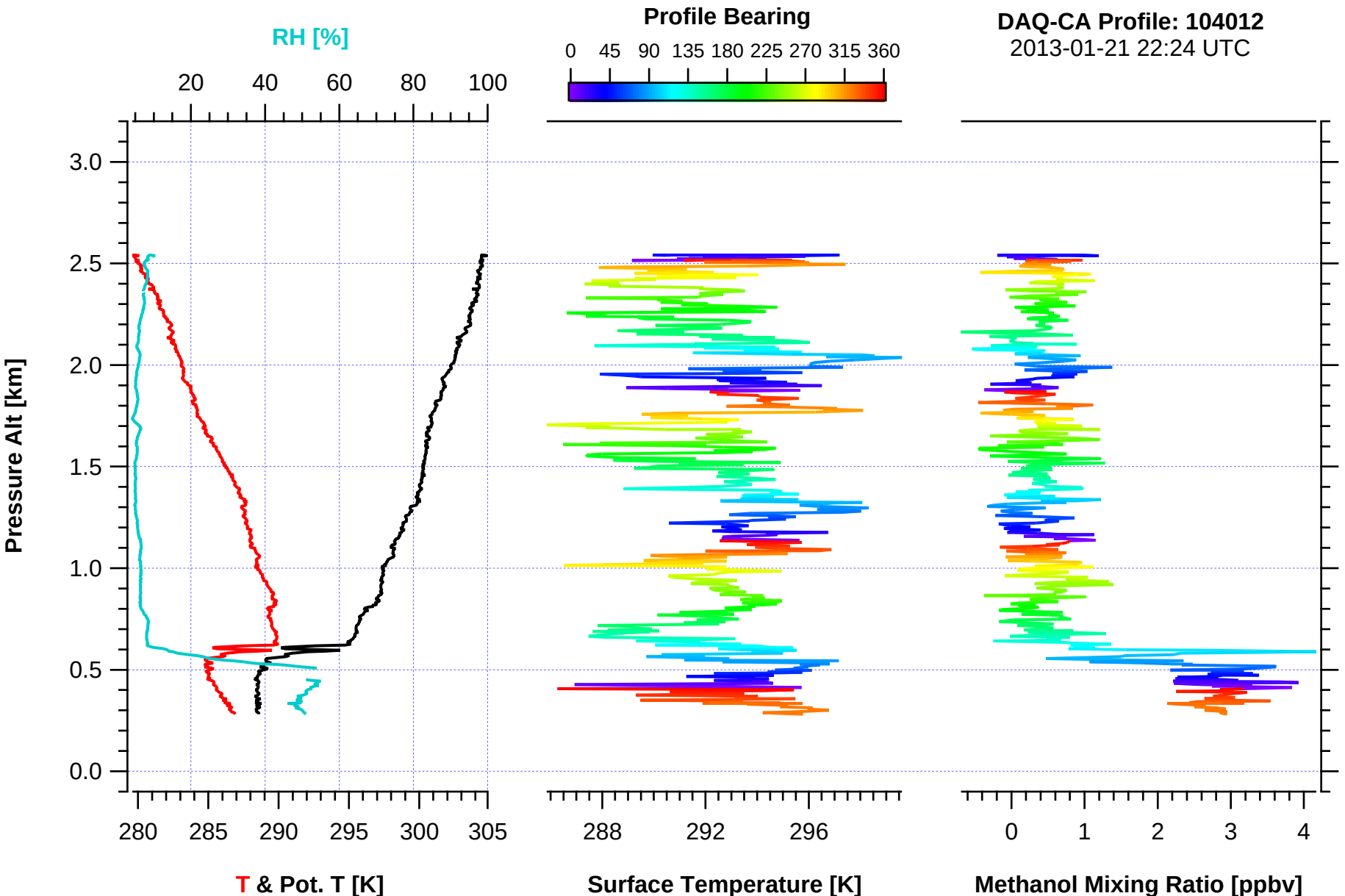

DAQ-CA Profile: 104012
2013-01-21 22:24 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300 305
T & Pot. T [K]
500 1000 1500
NO2 Mixing Ratio [pptv]
0 200 400 600
NO Mixing Ratio [pptv]

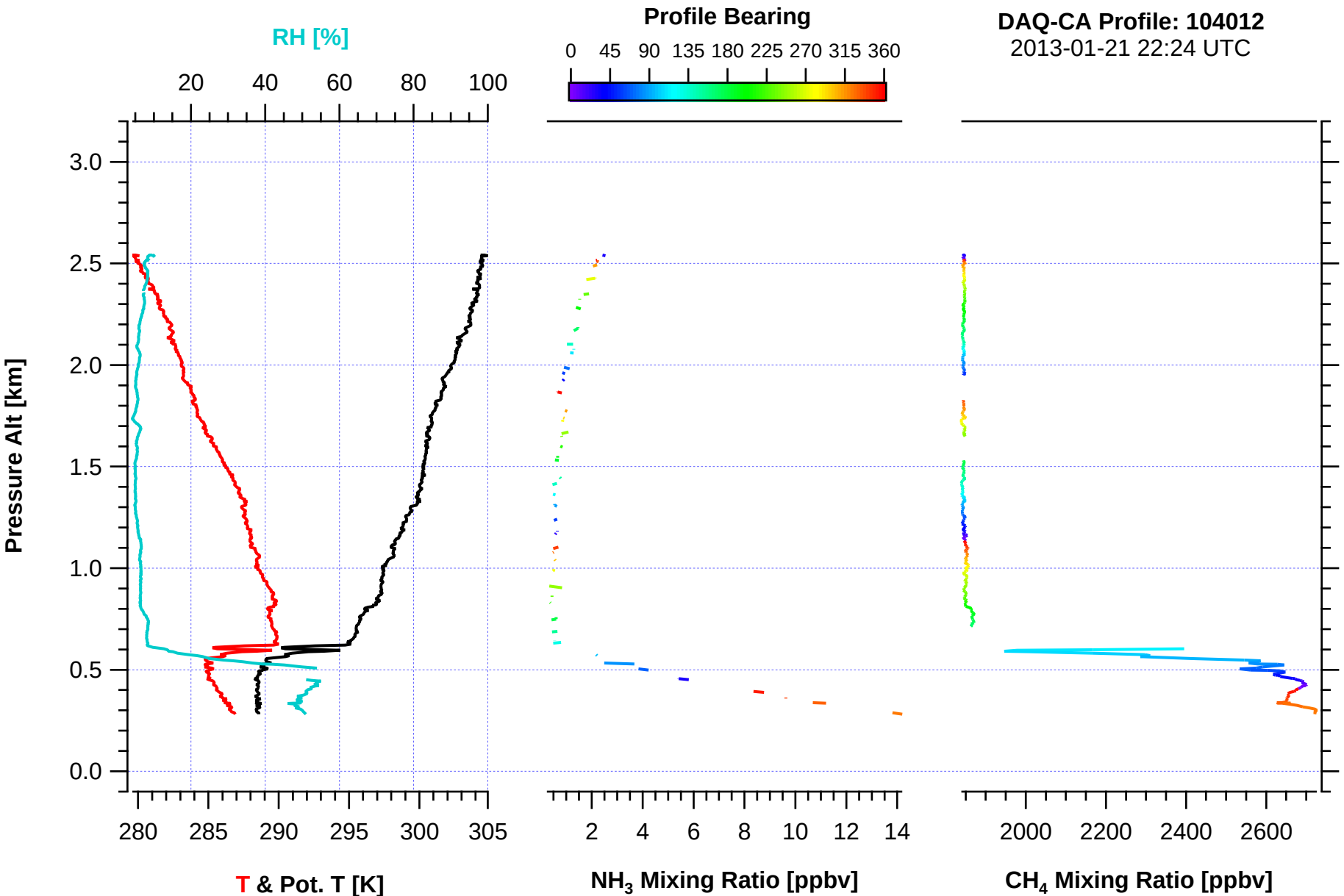

DAQ-CA Profile: 104012
2013-01-21 22:24 UTC
RH [%]
20 40 60 80 100
Profile Bearing
0 45 90 135 180 225 270 315 360
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300 305
T & Pot. T [K]
0 500 1000 1500 2000 2500
CH2O Mixing Ratio [pptv]
0.0 0.5 1.0 1.5
Acetaldehyde Mixing Ratio [ppbv]

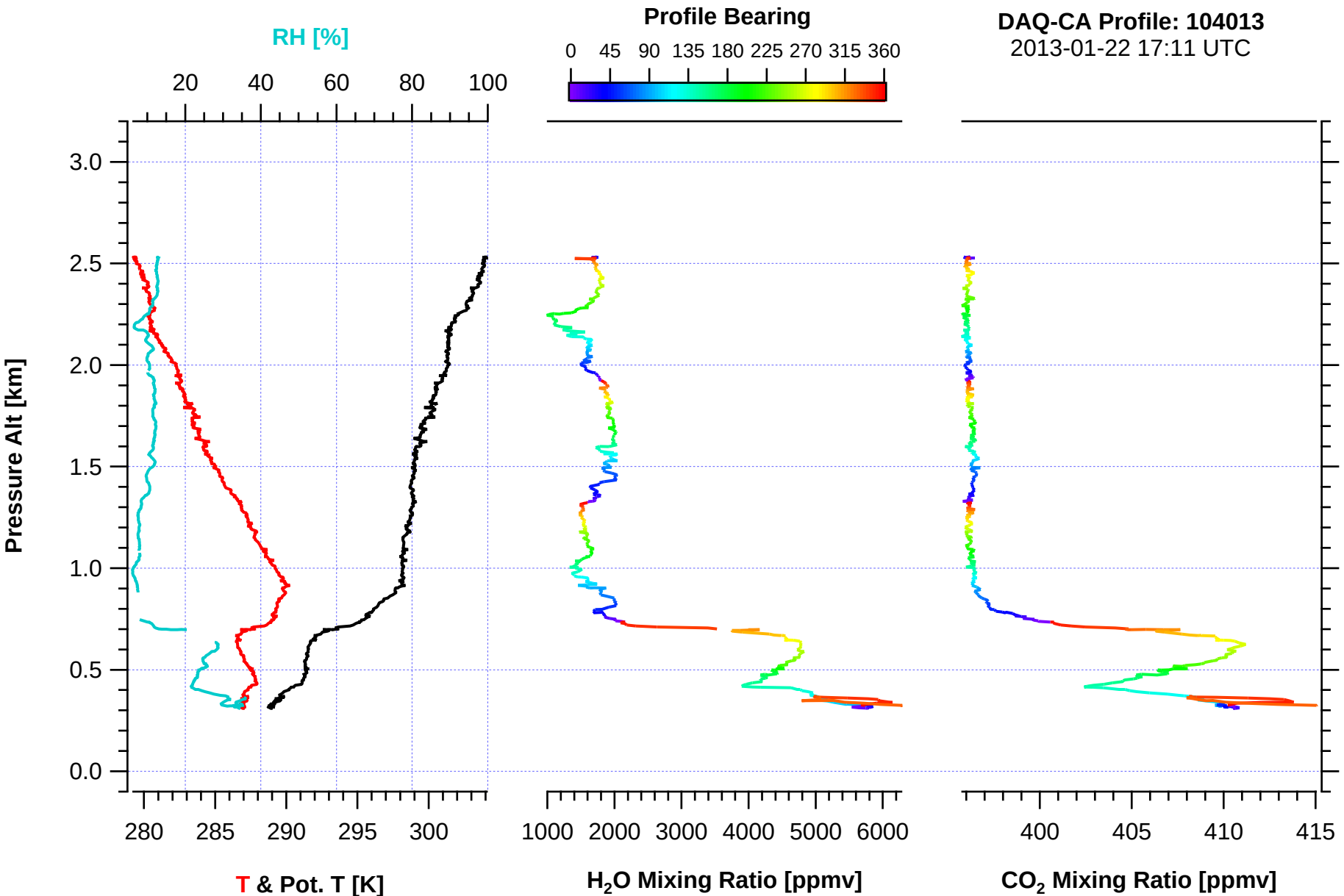

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104012
2013-01-21 22:24 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300 305
T & Pot. T [K]
-0.05 0.00 0.05 0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.1 0.0 0.1 0.2
Isoprene Mixing Ratio [ppbv]

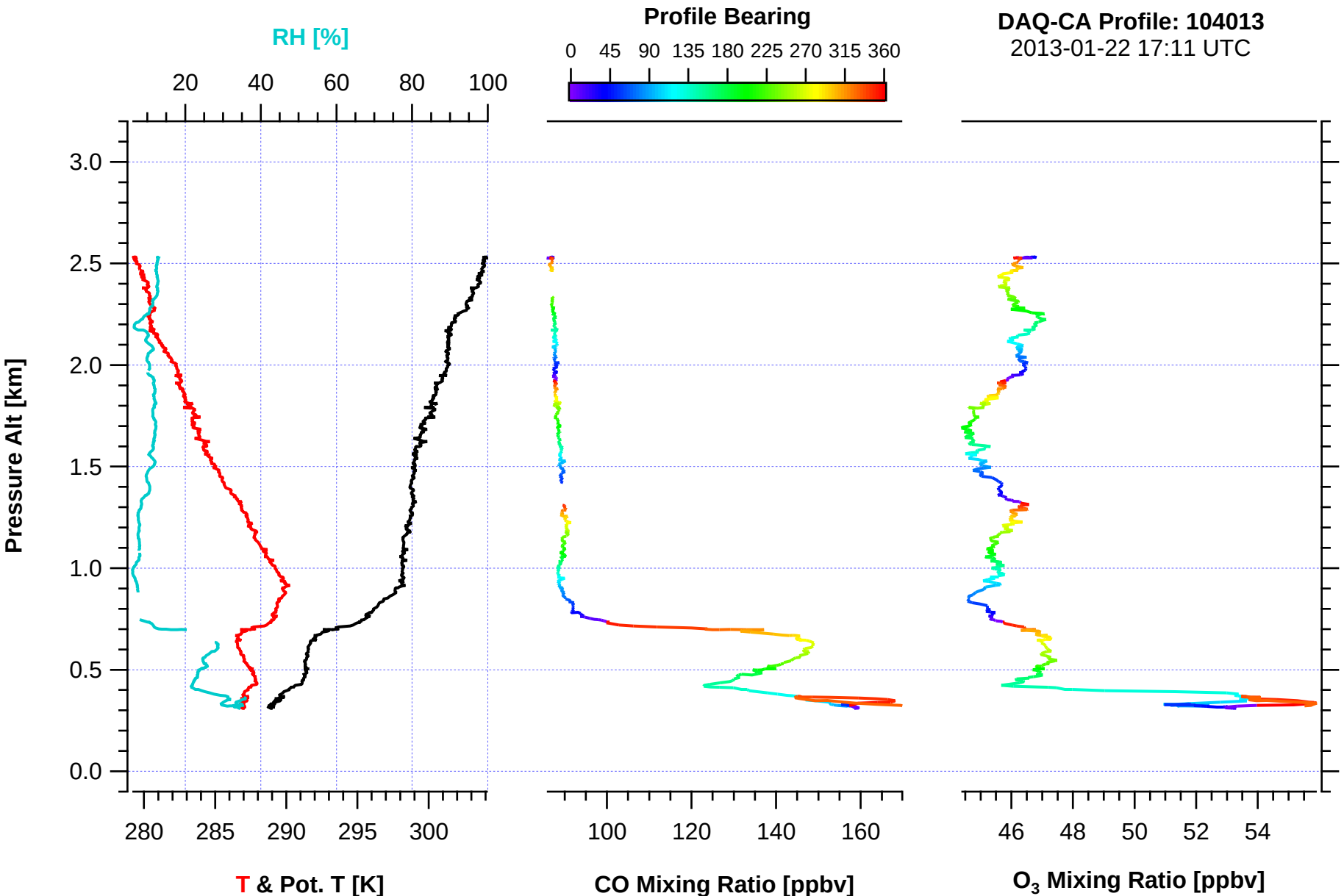

DAQ-CA Profile: 104012
2013-01-21 22:24 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300 305
T & Pot. T [K]
0 40 80 120 160
SCAT550nm, dry [Mm-1]
2000 4000 6000 8000
CN > 10nm [# cm-3]

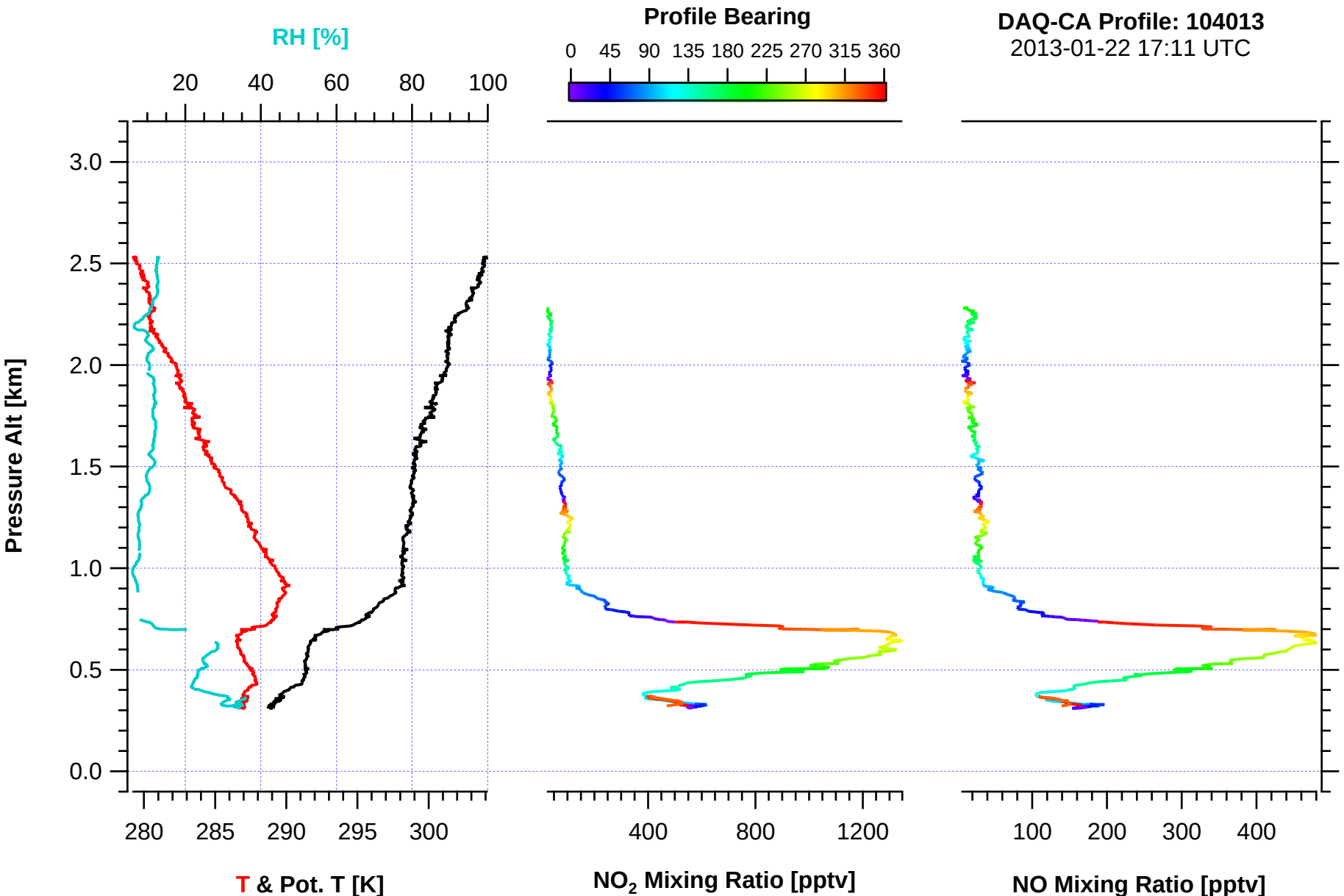

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104012
2013-01-21 22:24 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300 305
T & Pot. T [K]
2 3 4 5 6 7x10-3
jNO2-Nadir and Zenith [s-1]
8 9 10 11 12 13x10-3
jNO2-Total [s-1]

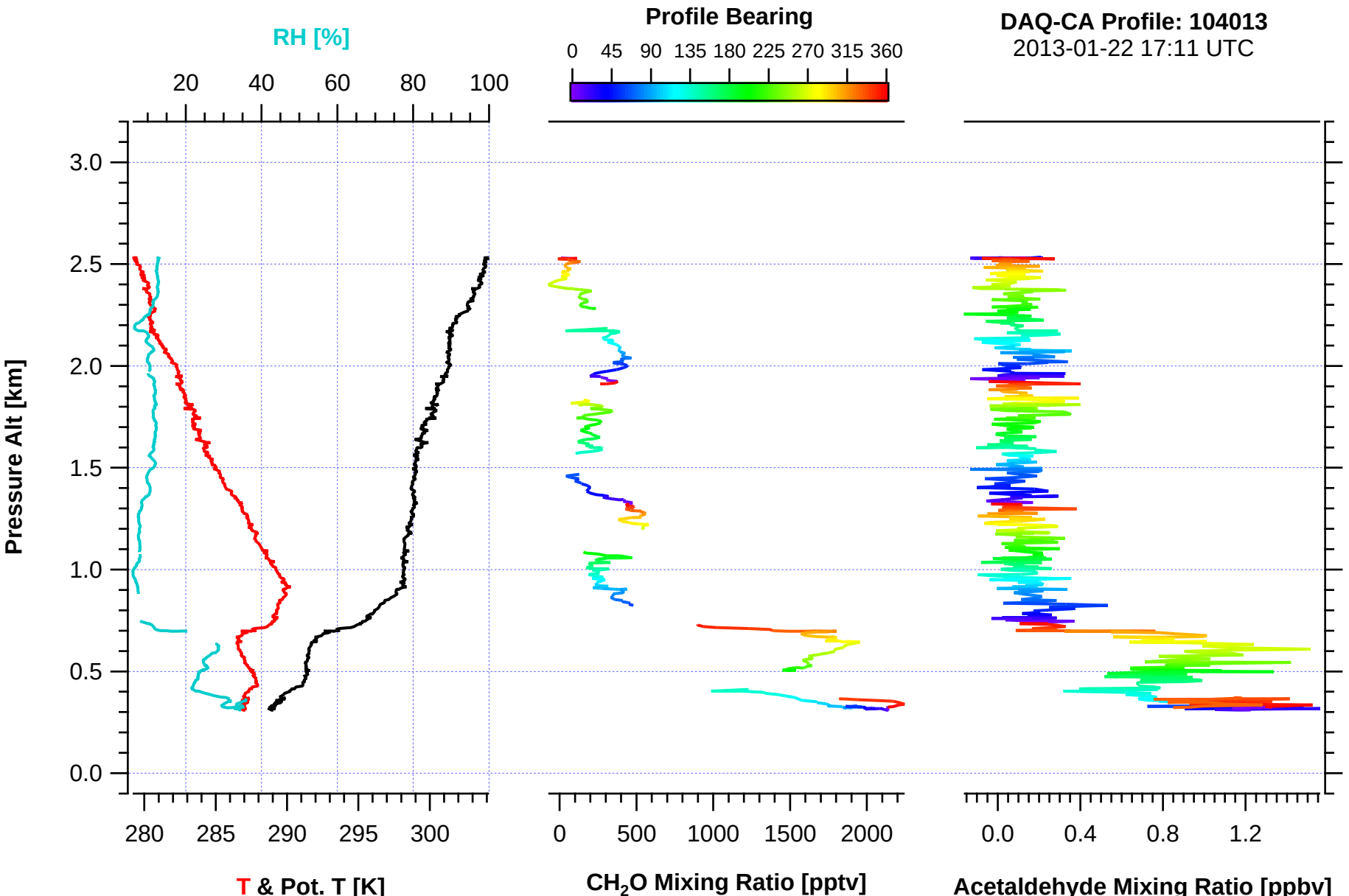

DAQ-CA Profile: 104012
2013-01-21 22:24 UTC
RH [%]
20 40 60 80 100
Profile Bearing
0 45 90 135 180 225 270 315 360
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300 305
T & Pot. T [K]
288 292 296
Surface Temperature [K]
0 1 2 3 4
Methanol Mixing Ratio [ppbv]

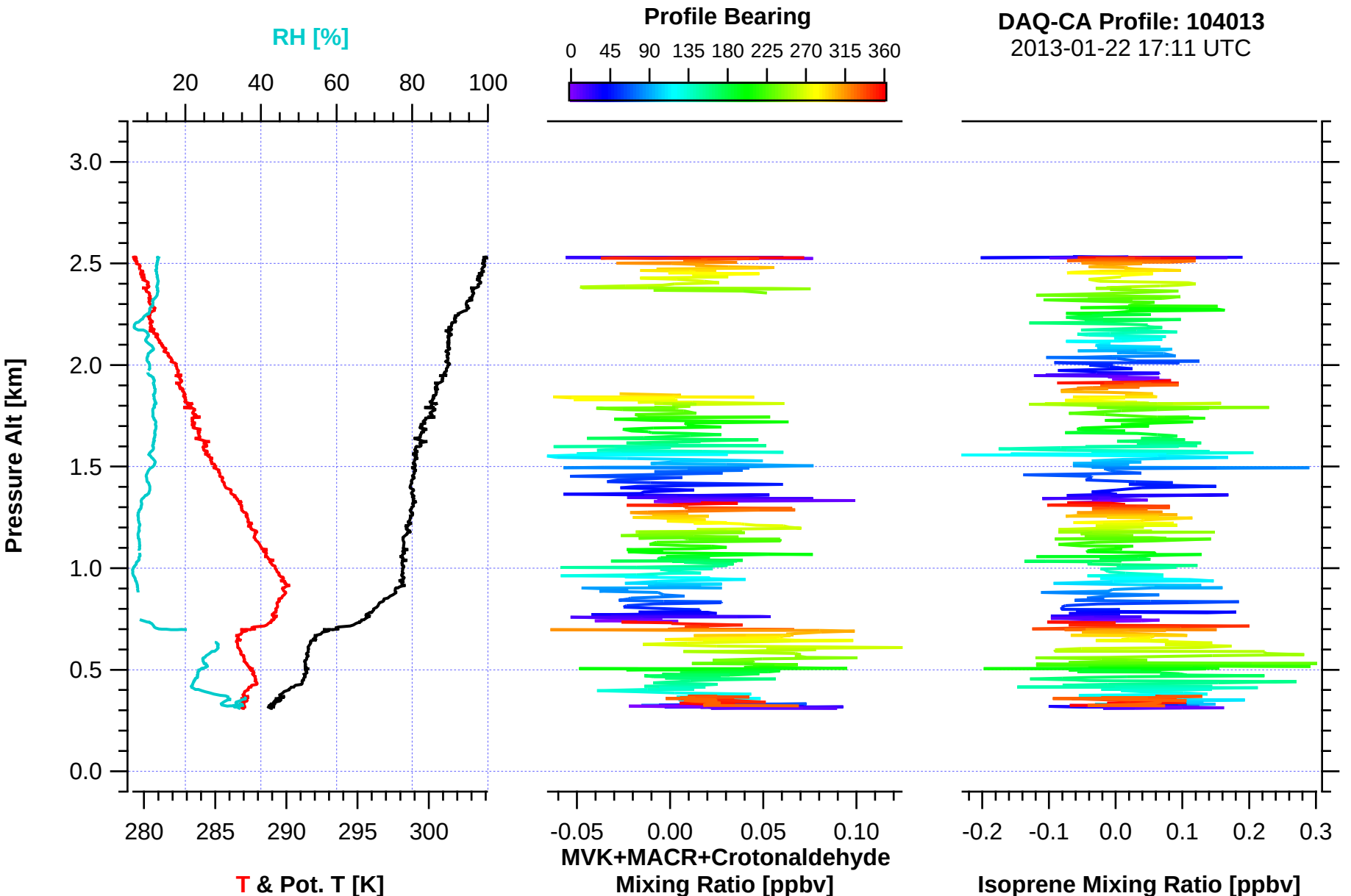

DAQ-CA Profile: 104012
2013-01-21 22:24 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300 305
T & Pot. T [K]
2 4 6 8 10 12 14
NH3 Mixing Ratio [ppbv]
2000 2200 2400 2600
CH4 Mixing Ratio [ppbv]

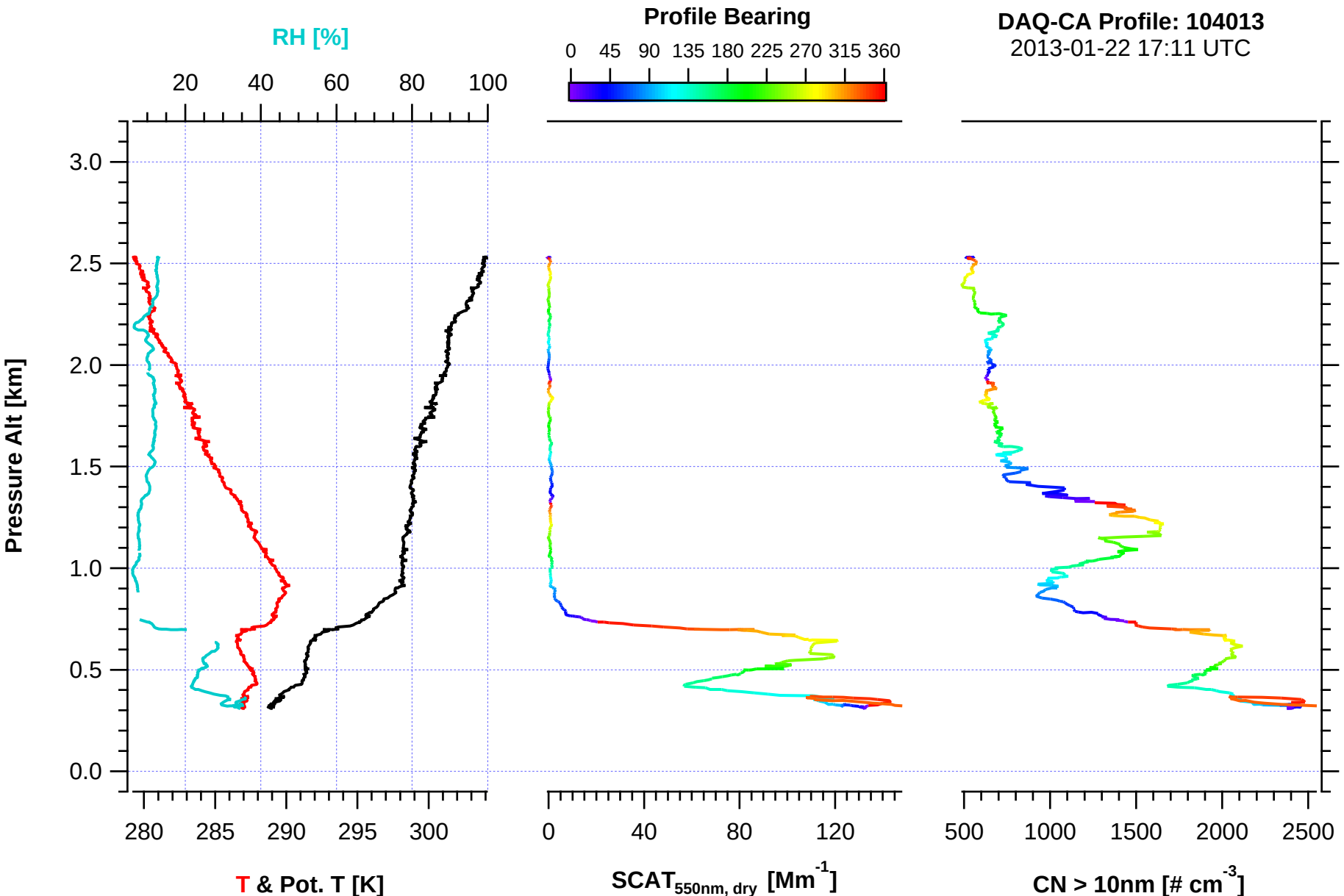

DAQ-CA Profile: 104013
2013-01-22 17:11 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0 2.5 2.0 1.5 1.0 0.5 0.0
280 285 290 295 300
T & Pot. T [K]
1000 2000 3000 4000 5000 6000
H2O Mixing Ratio [ppmv]
400 405 410 415
CO2 Mixing Ratio [ppmv]

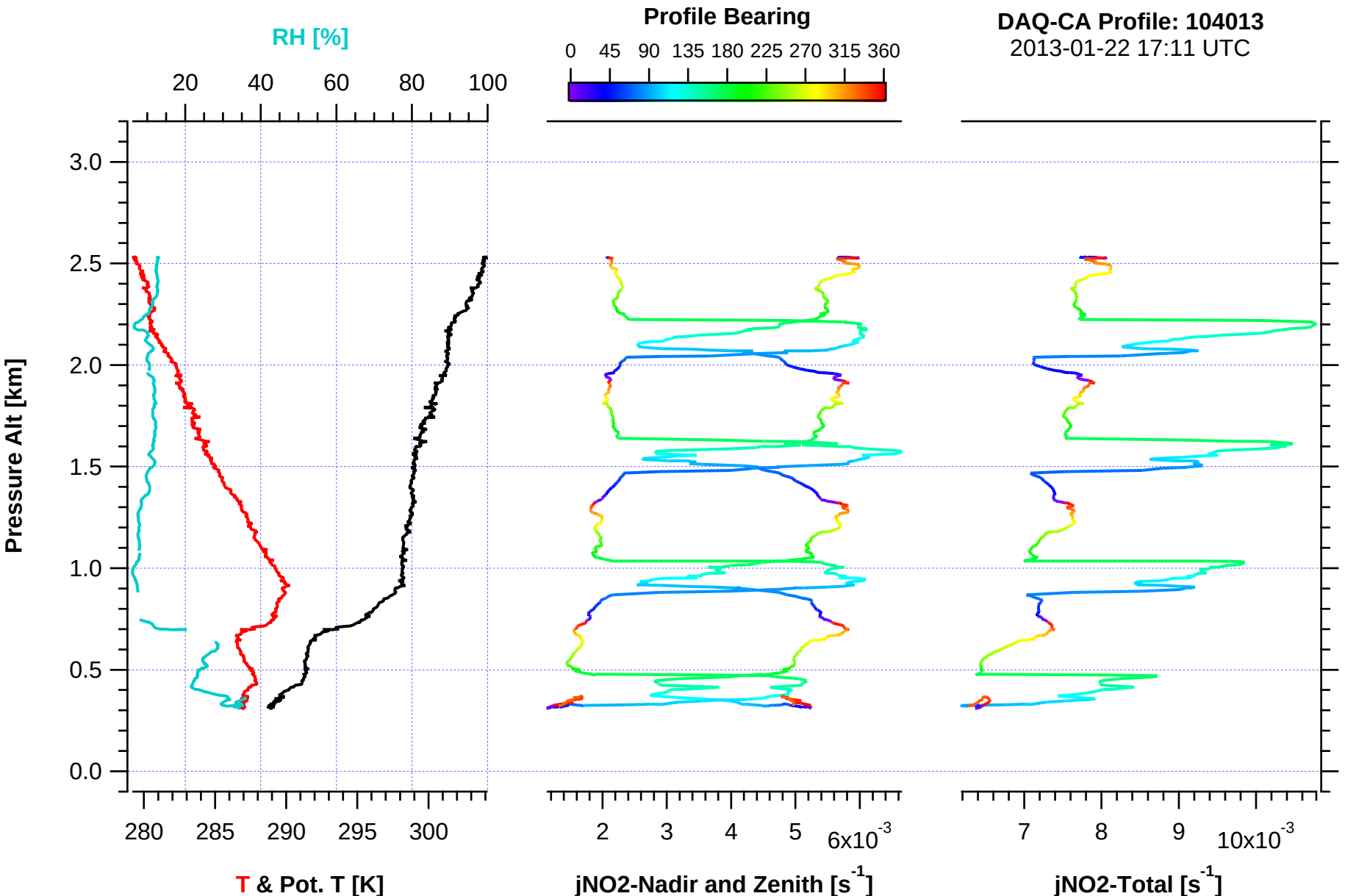

DAQ-CA Profile: 104013
2013-01-22 17:11 UTC
RH [%]
20 40 60 80 100
Profile Bearing
0 45 90 135 180 225 270 315 360
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
100 120 140 160
CO Mixing Ratio [ppbv]
46 48 50 52 54
O3 Mixing Ratio [ppbv]

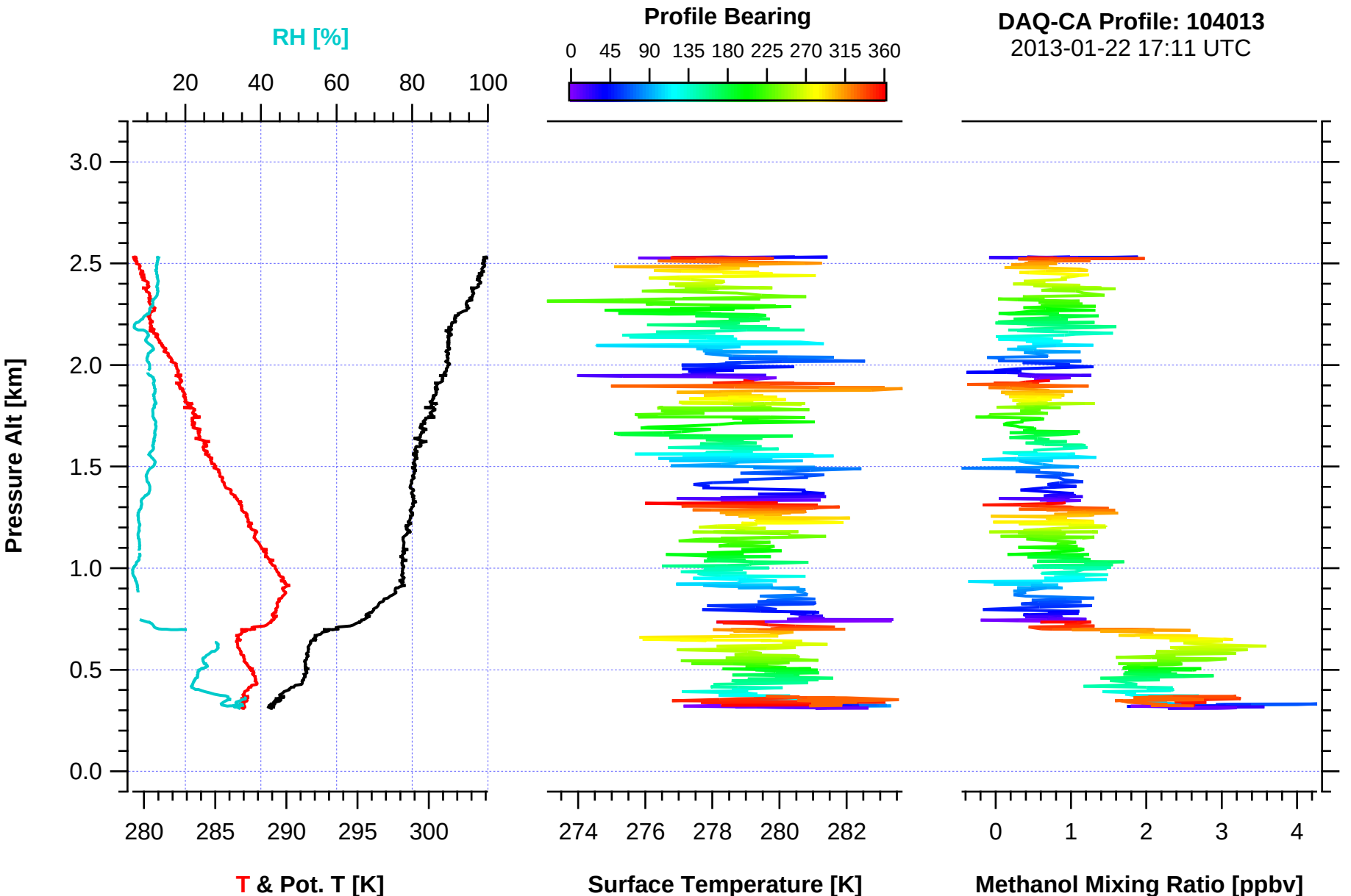

DAQ-CA Profile: 104013
2013-01-22 17:11 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
400 800 1200
NO2 Mixing Ratio [pptv]
100 200 300 400
NO Mixing Ratio [pptv]

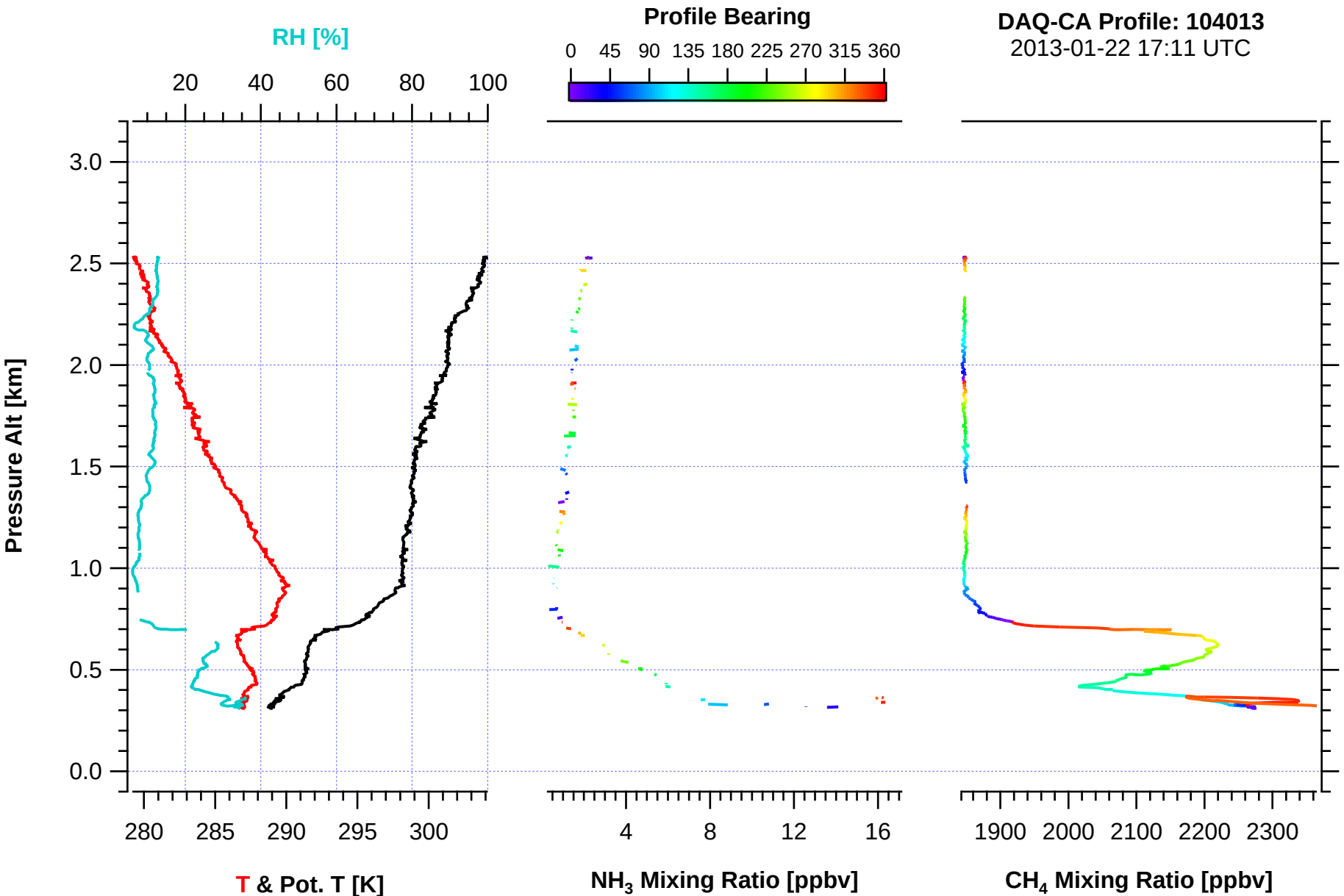

DAQ-CA Profile: 104013
2013-01-22 17:11 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 500 1000 1500 2000
CH2O Mixing Ratio [pptv]
0.0 0.4 0.8 1.2
Acetaldehyde Mixing Ratio [ppbv]

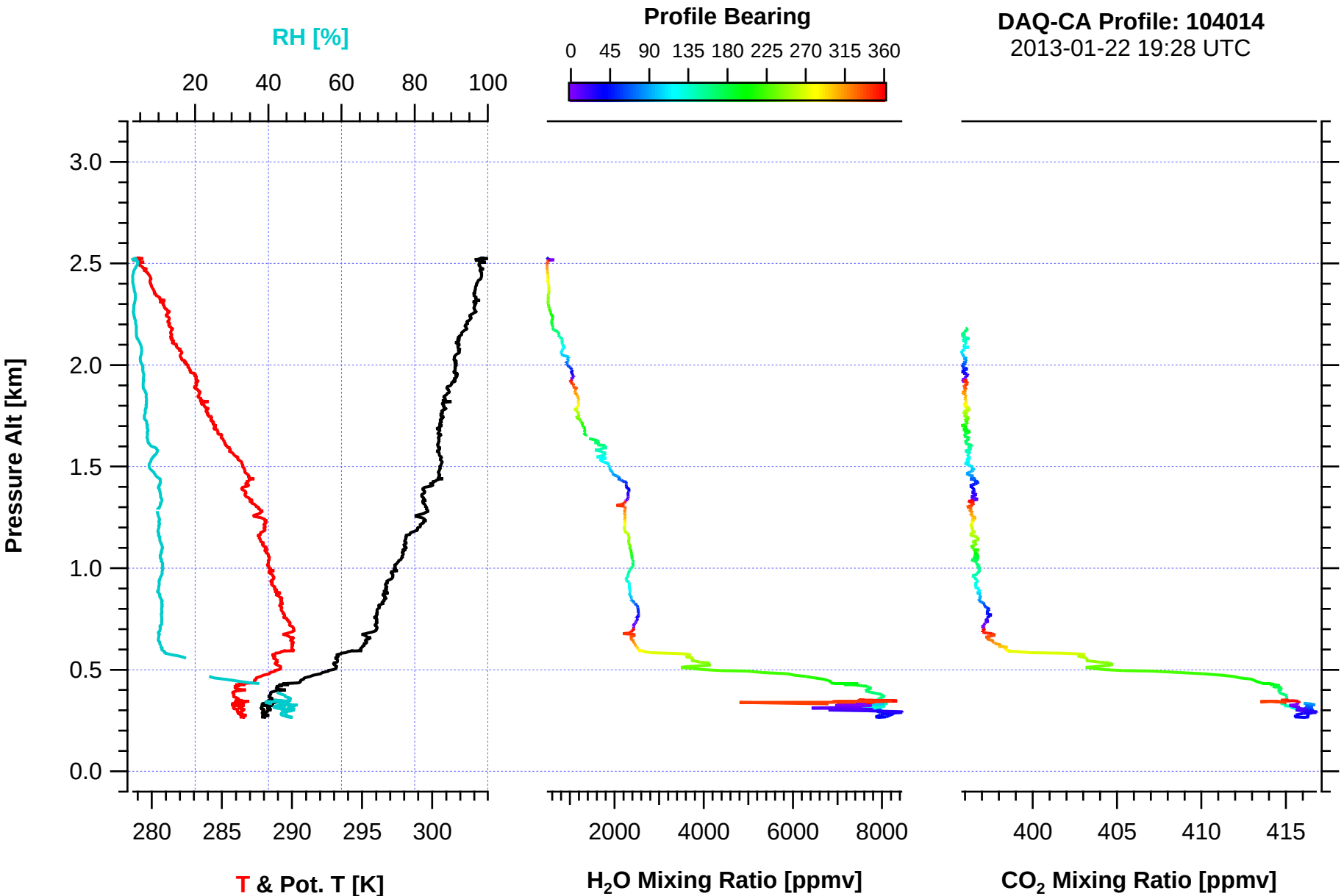

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104013
2013-01-22 17:11 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
-0.05 0.00 0.05 0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.2 -0.1 0.0 0.1 0.2 0.3
Isoprene Mixing Ratio [ppbv]

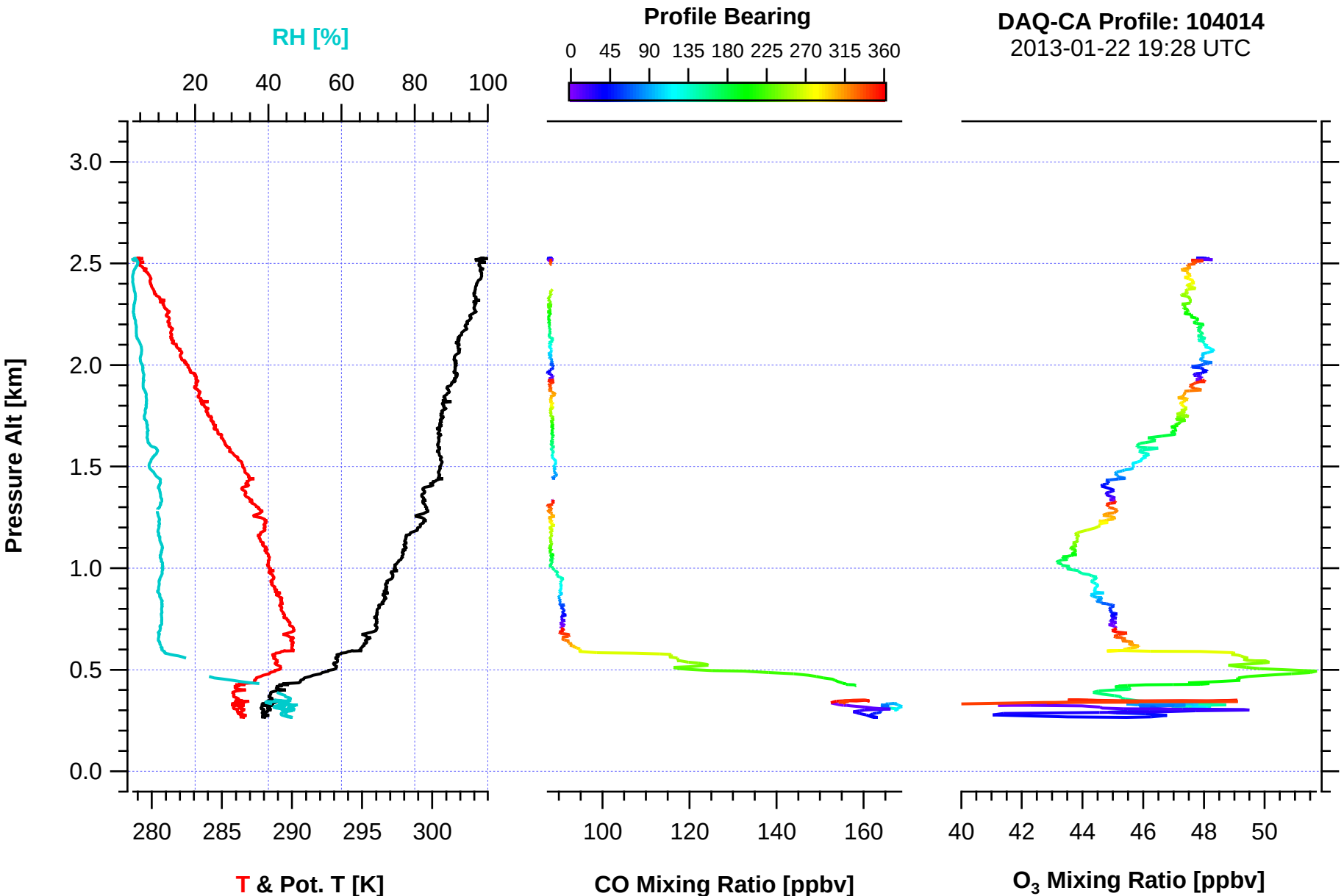

DAQ-CA Profile: 104013
2013-01-22 17:11 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 40 80 120
SCAT550nm, dry [Mm-1]
500 1000 1500 2000 2500
CN > 10nm [# cm-3]

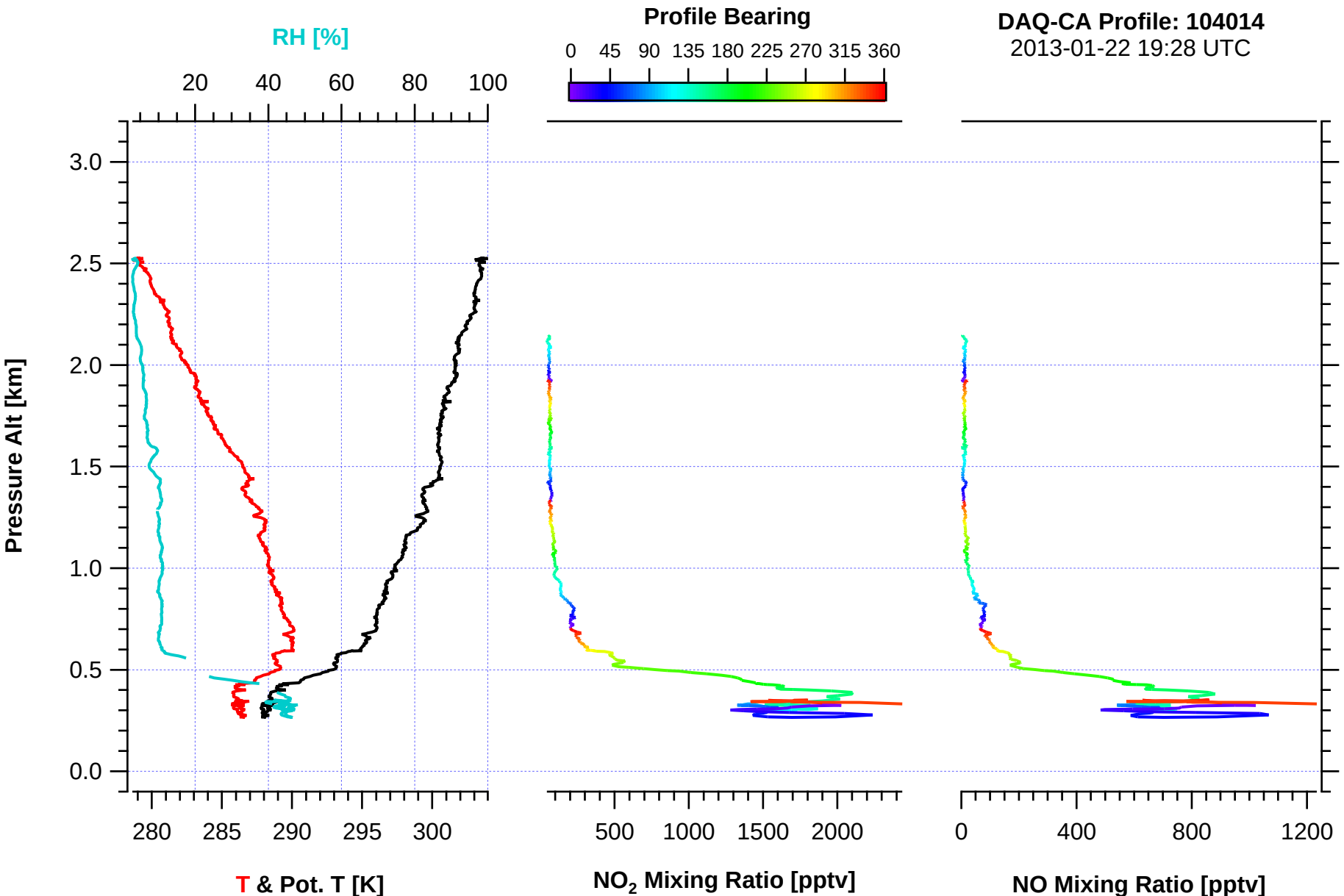

DAQ-CA Profile: 104013
2013-01-22 17:11 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2 3 4 5 6x10-3
jNO2-Nadir and Zenith [s-1]
7 8 9 10x10-3
jNO2-Total [s-1]

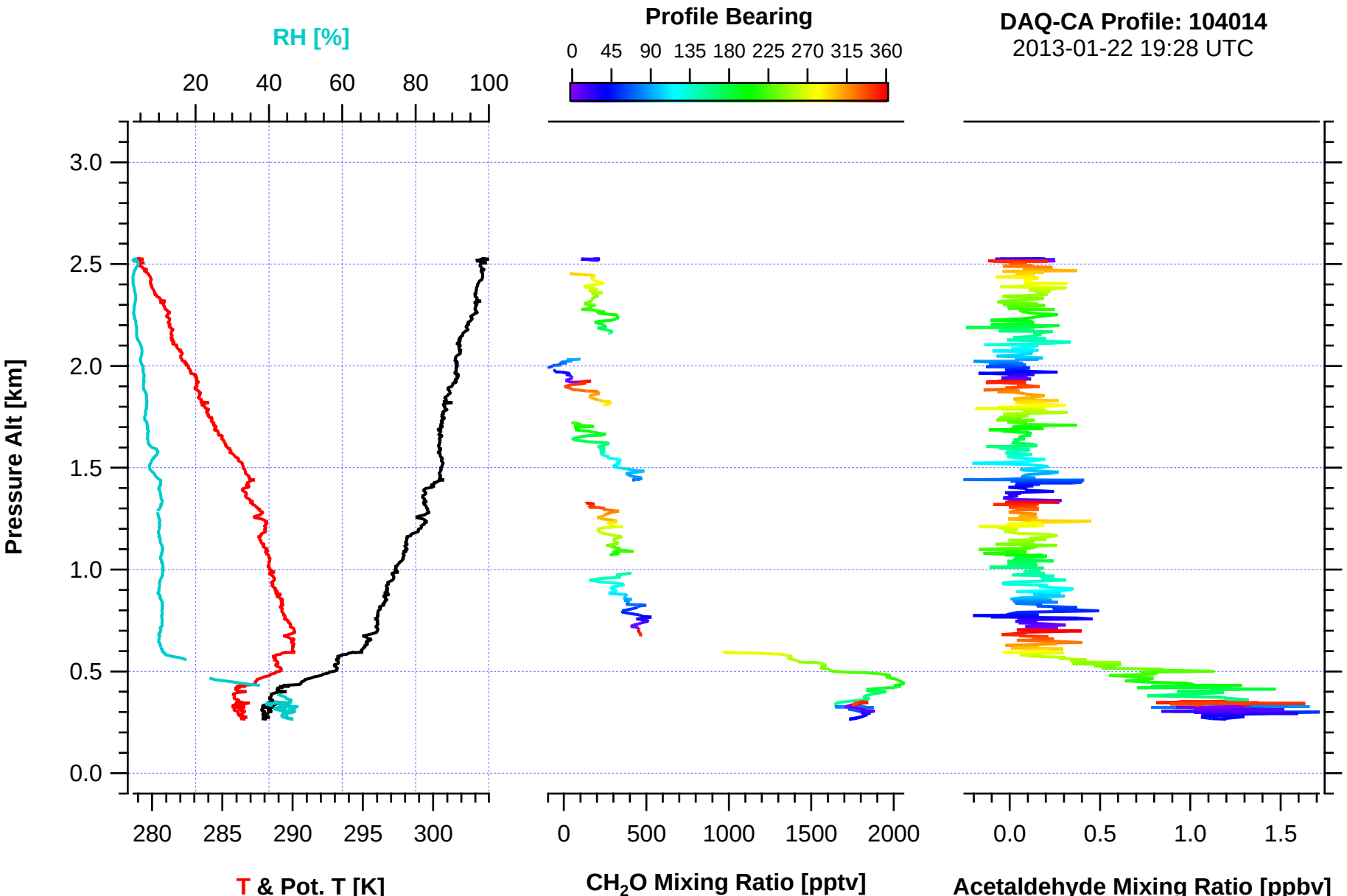

DAQ-CA Profile: 104013
2013-01-22 17:11 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
274 276 278 280 282
Surface Temperature [K]
0 1 2 3 4
Methanol Mixing Ratio [ppbv]

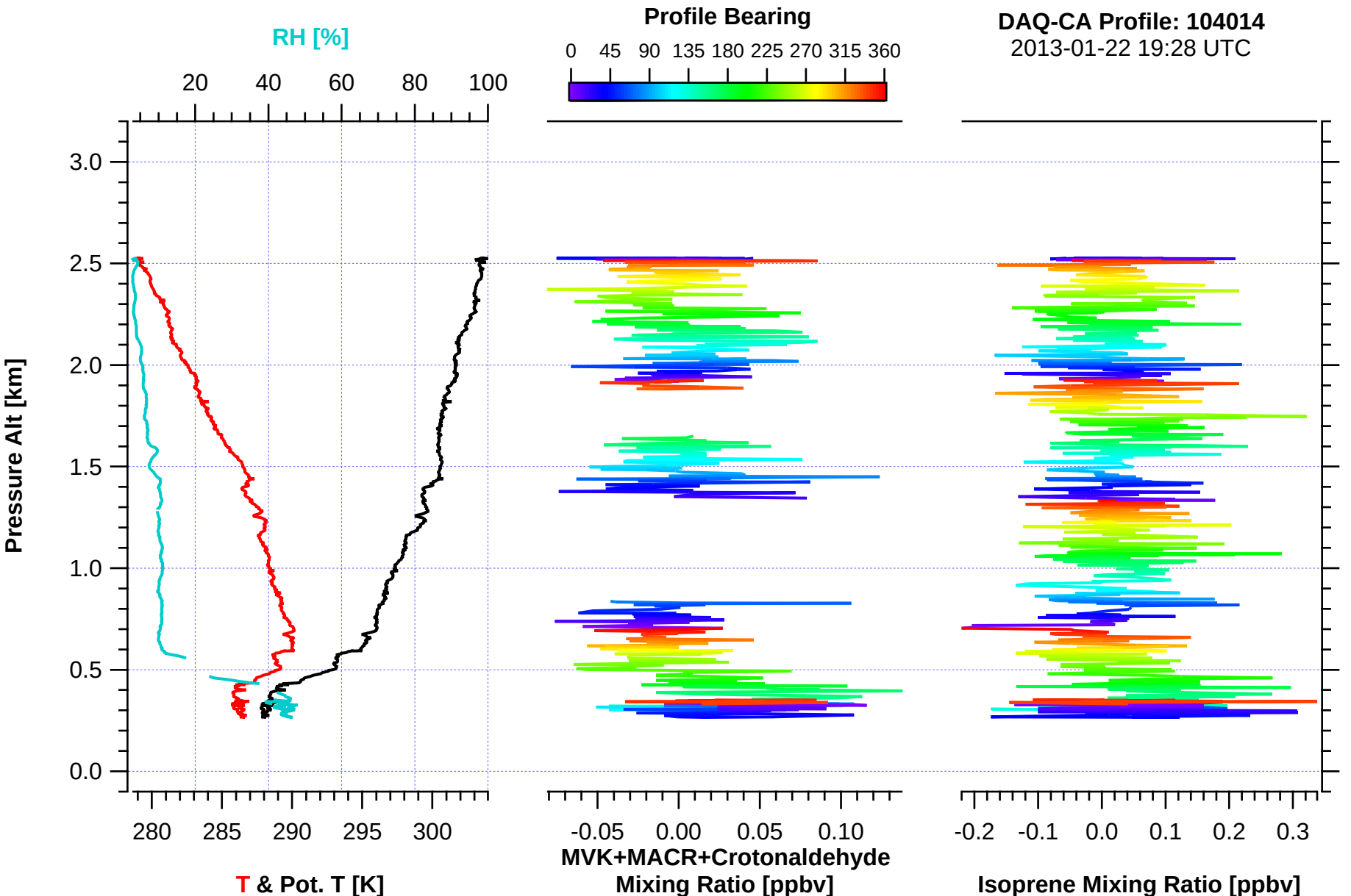

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104013
2013-01-22 17:11 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
4 8 12 16
NH3 Mixing Ratio [ppbv]
1900 2000 2100 2200 2300
CH4 Mixing Ratio [ppbv]

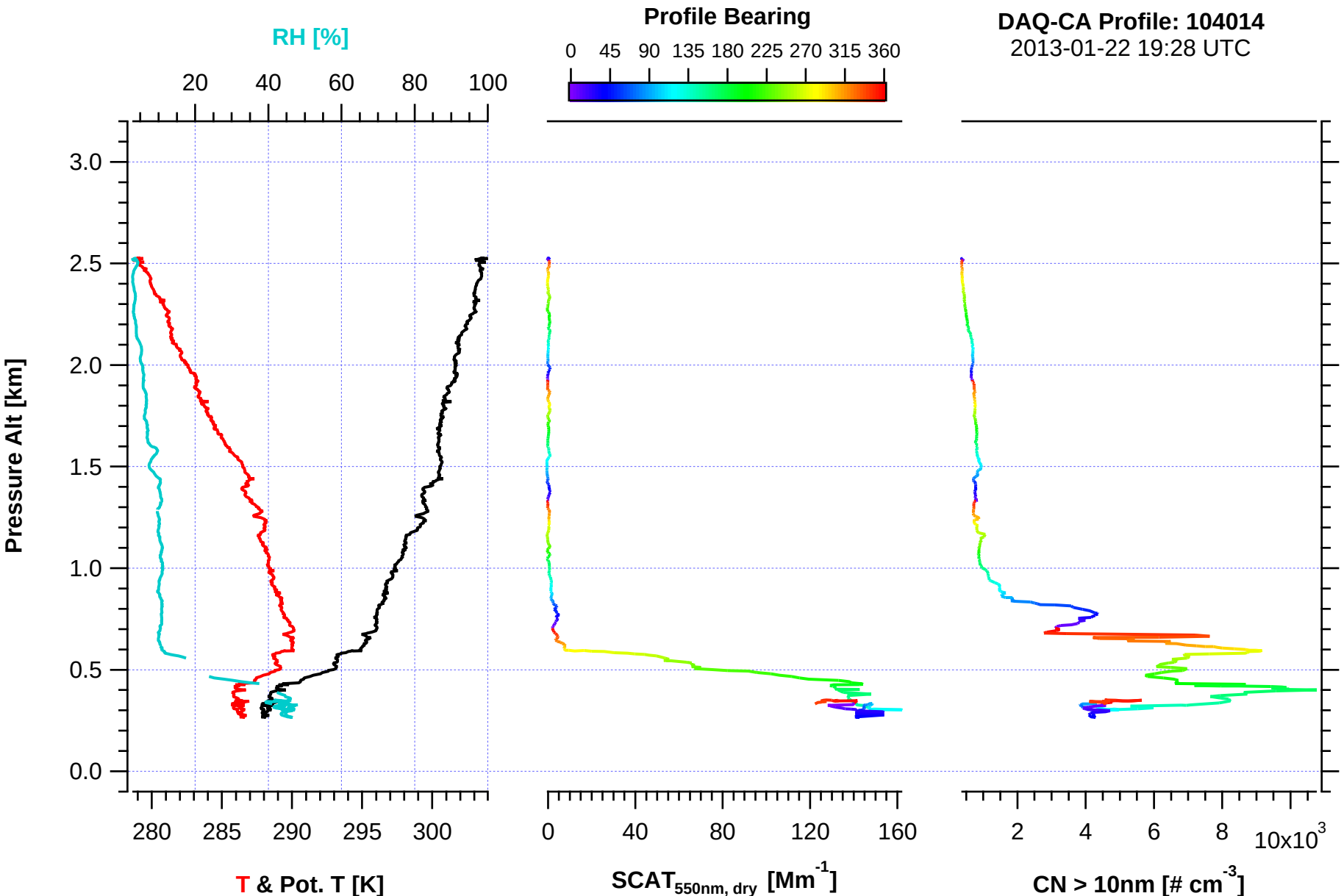

DAQ-CA Profile: 104014
2013-01-22 19:28 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2000 4000 6000 8000
H2O Mixing Ratio [ppmv]
400 405 410 415
CO2 Mixing Ratio [ppmv]

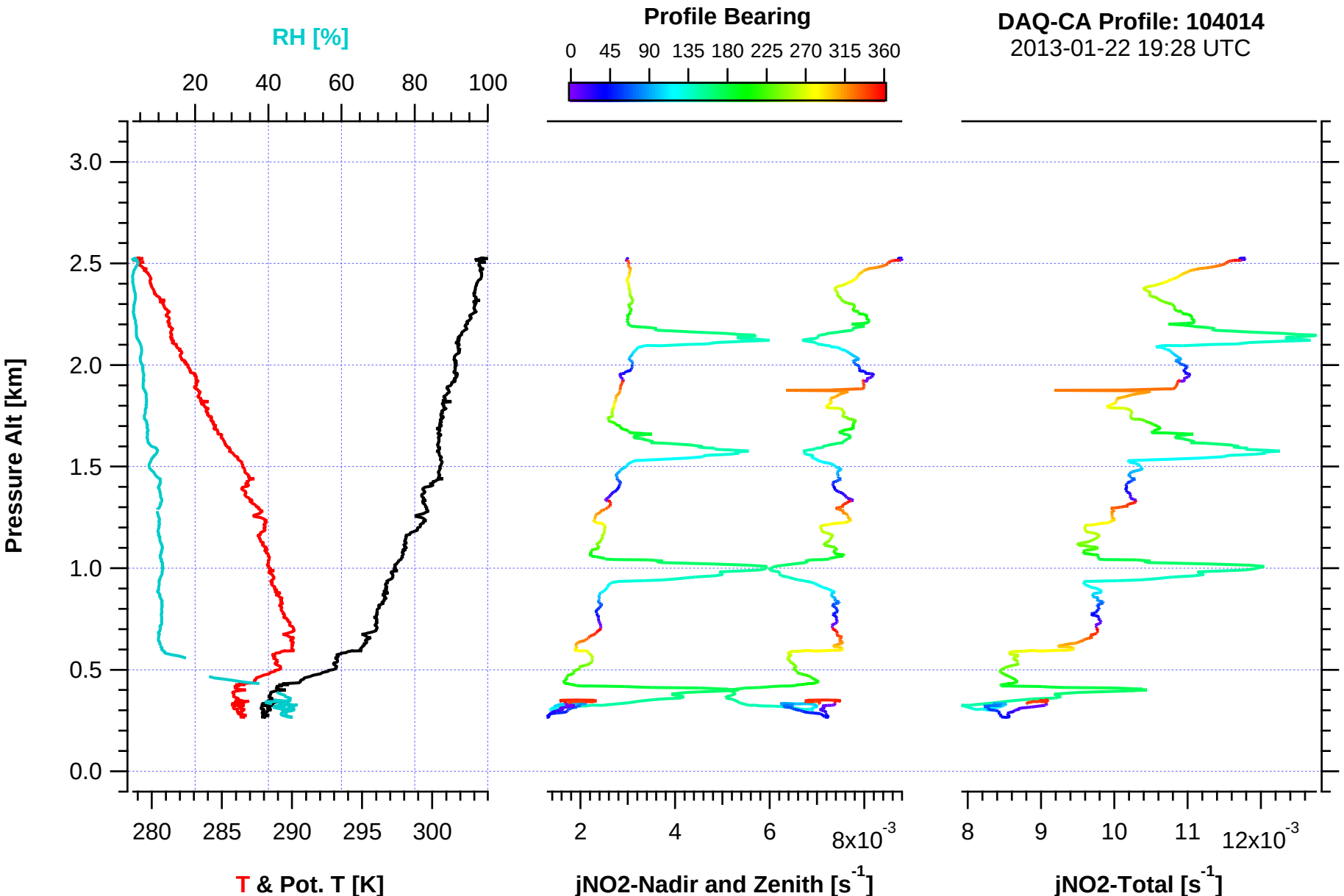

DAQ-CA Profile: 104014
2013-01-22 19:28 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
100 120 140 160
CO Mixing Ratio [ppbv]
40 42 44 46 48 50
O3 Mixing Ratio [ppbv]

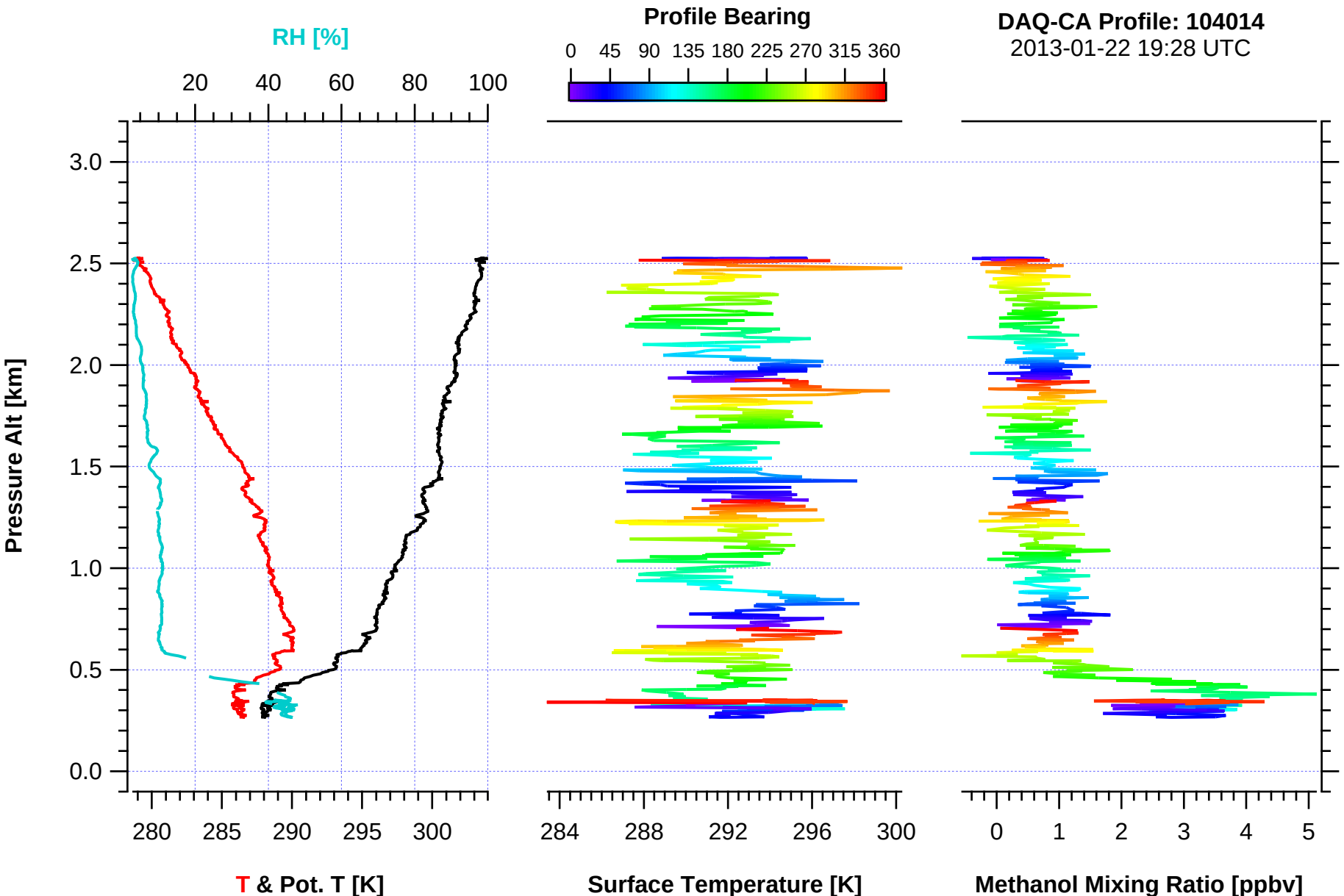

DAQ-CA Profile: 104014
2013-01-22 19:28 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
500 1000 1500 2000
NO2 Mixing Ratio [pptv]
0 400 800 1200
NO Mixing Ratio [pptv]

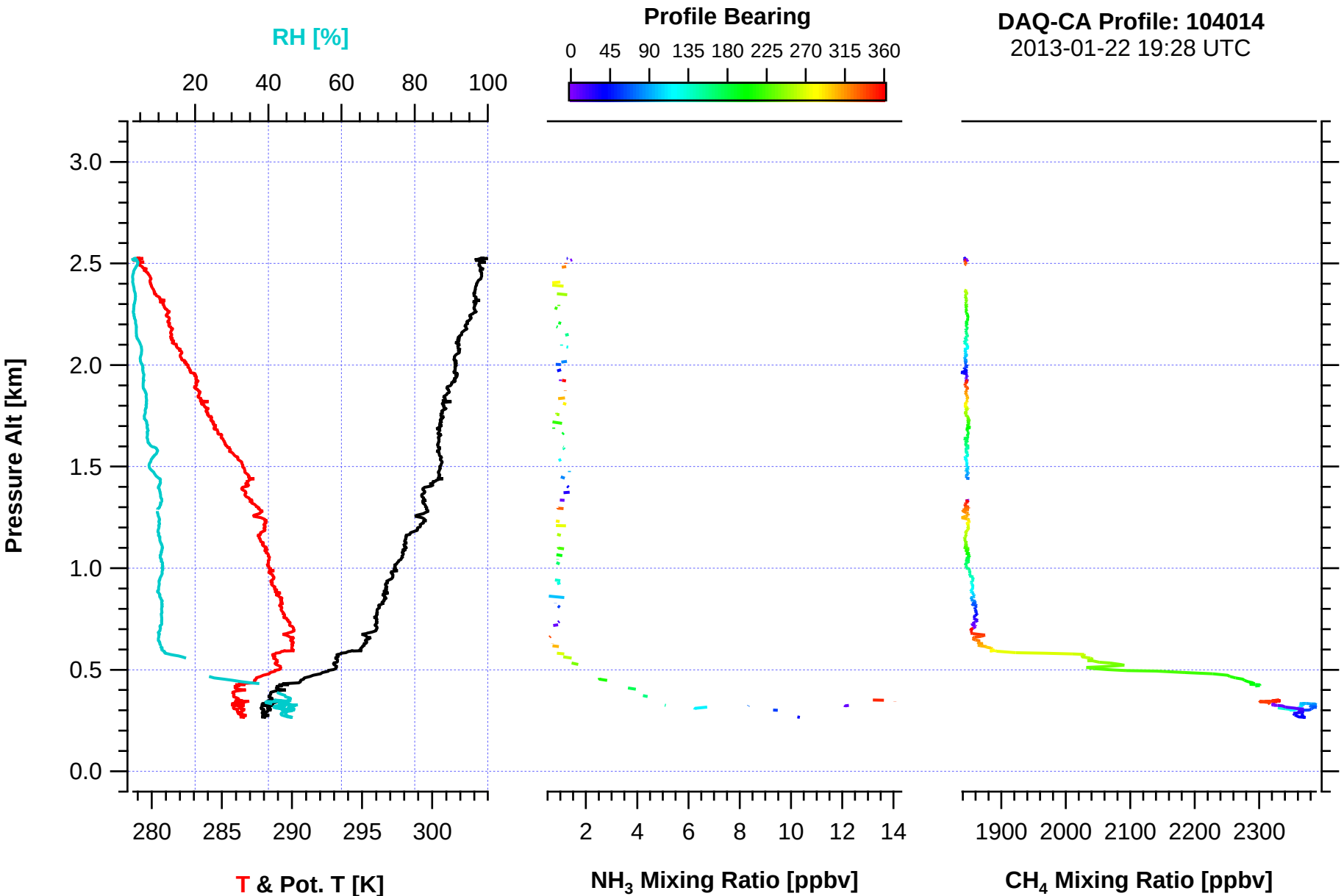

DAQ-CA Profile: 104014
2013-01-22 19:28 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0 2.5 2.0 1.5 1.0 0.5 0.0
280 285 290 295 300
T & Pot. T [K]
0 500 1000 1500 2000
CH2O Mixing Ratio [pptv]
0.0 0.5 1.0 1.5
Acetaldehyde Mixing Ratio [ppbv]

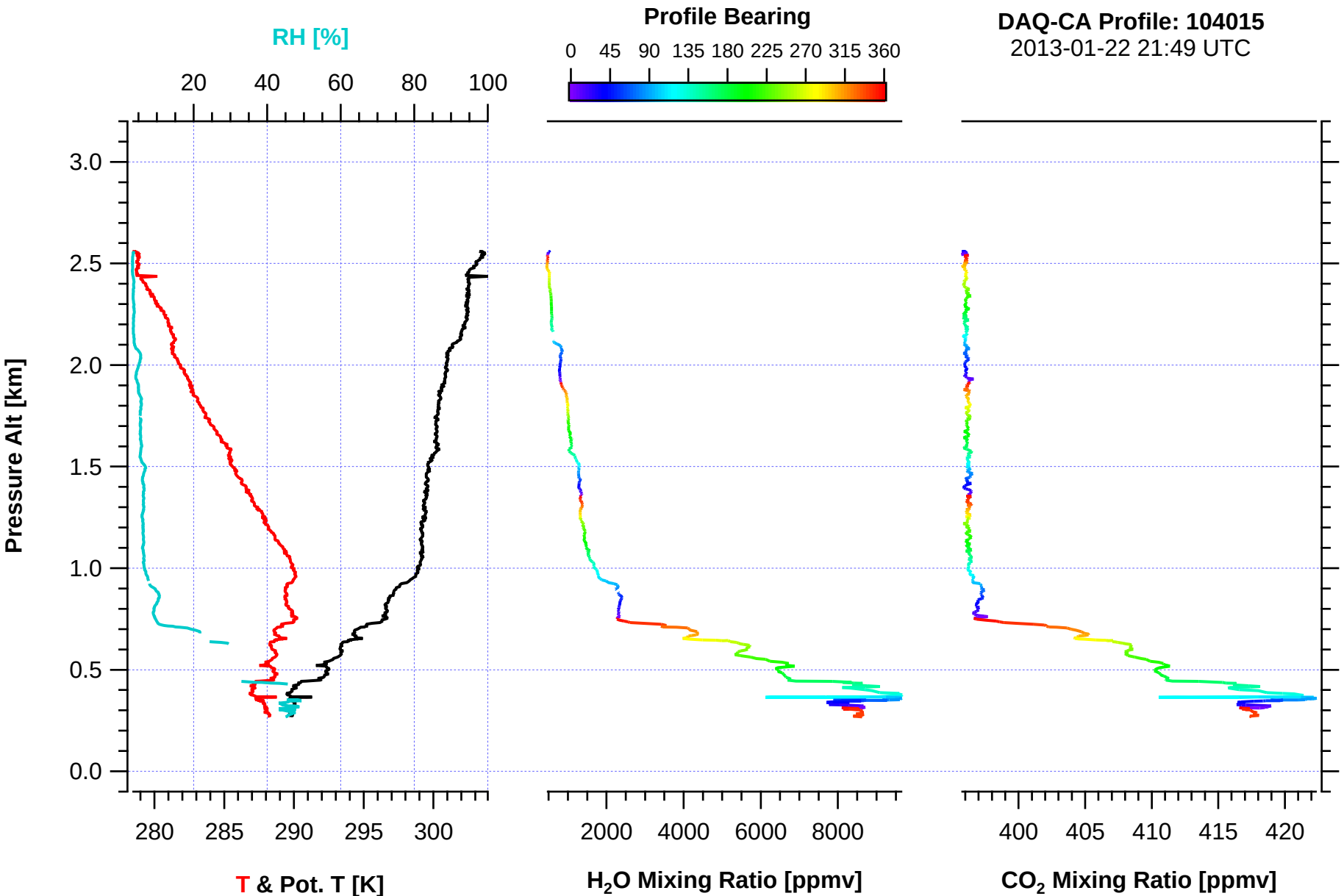

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104014
2013-01-22 19:28 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
-0.05 0.00 0.05 0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.2 -0.1 0.0 0.1 0.2 0.3
Isoprene Mixing Ratio [ppbv]

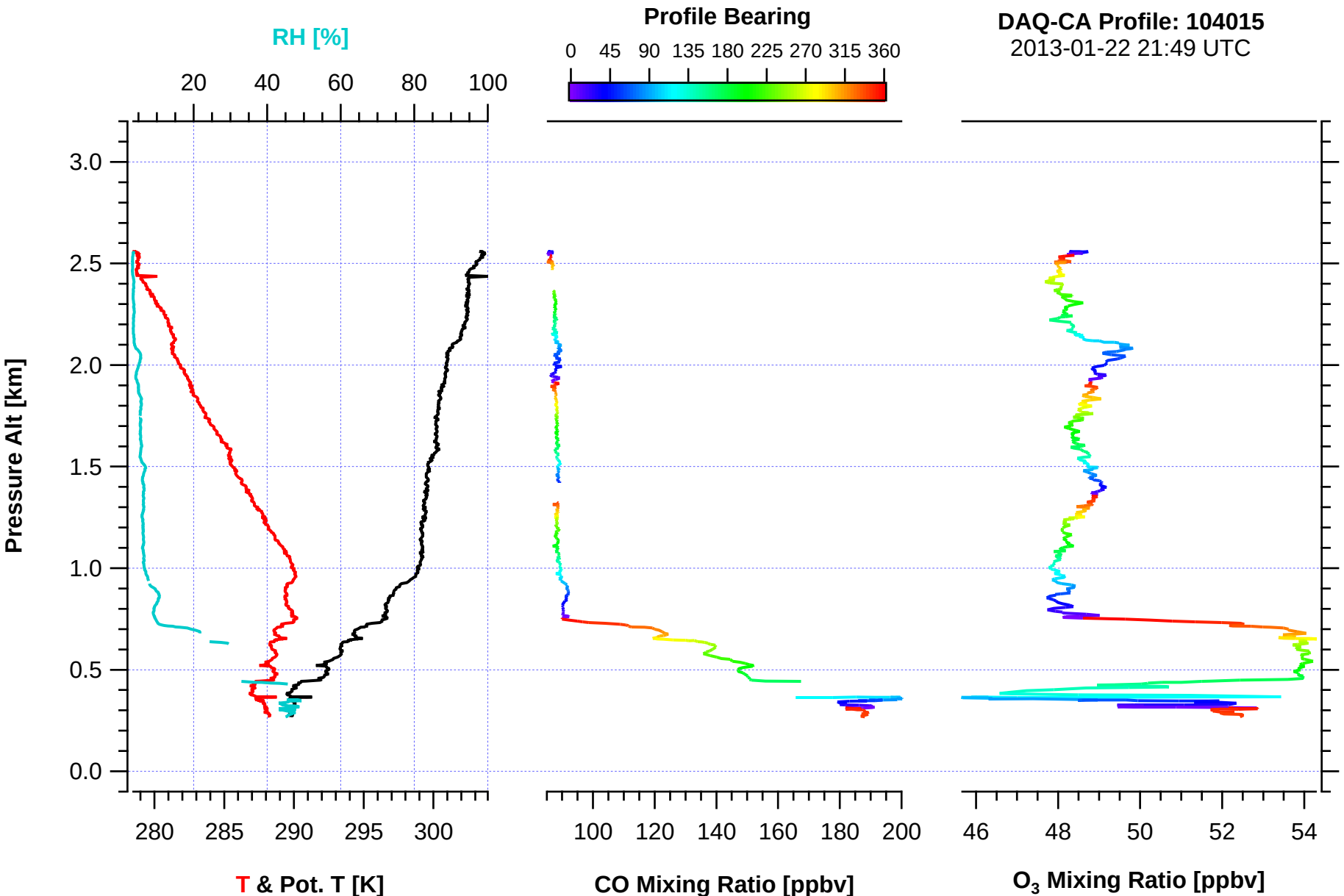

DAQ-CA Profile: 104014
2013-01-22 19:28 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 40 80 120 160
SCAT550nm, dry [Mm-1]
2 4 6 8
10x10^3
CN > 10nm [# cm-3]

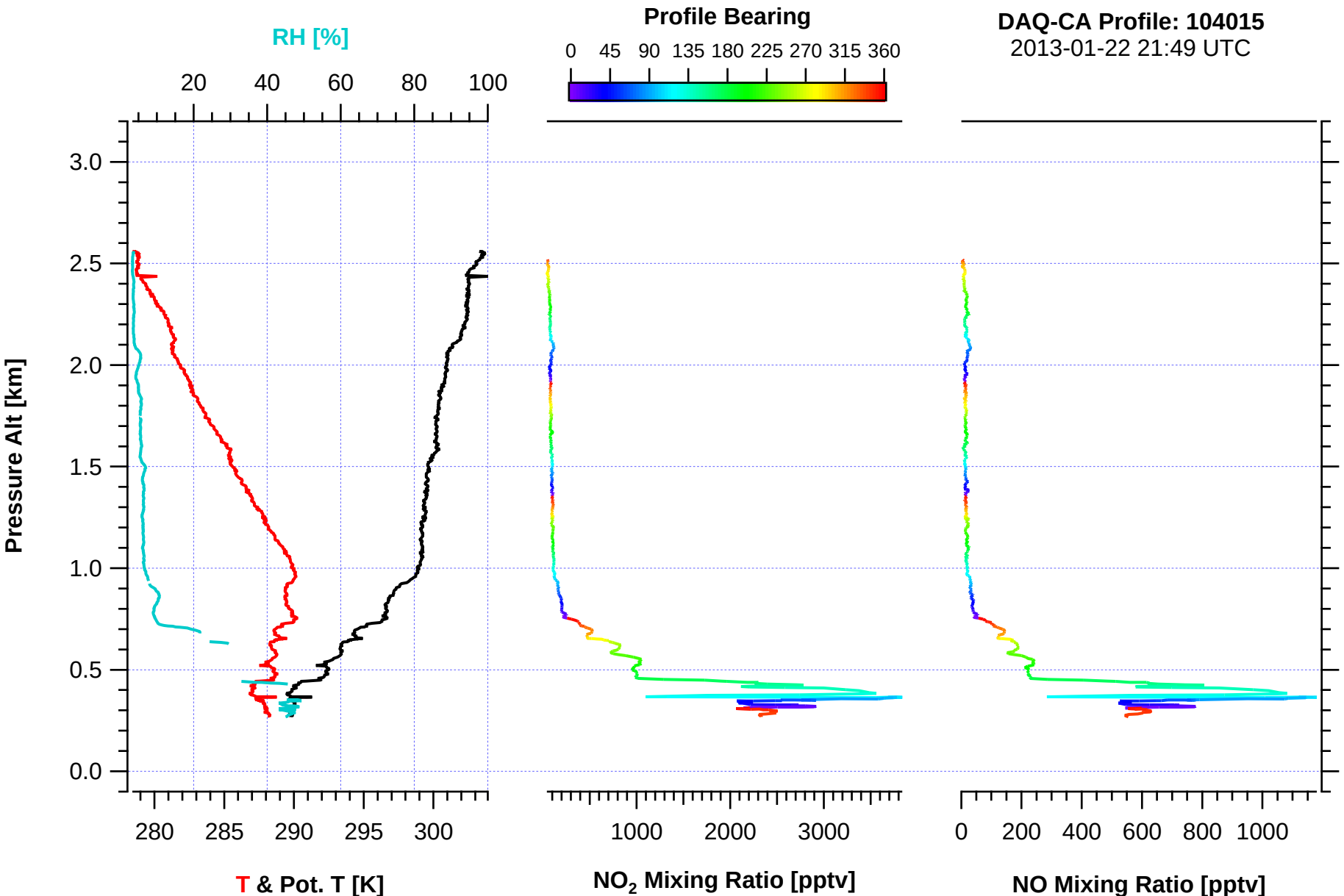

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104014
2013-01-22 19:28 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
2
4
6
8x10^-3
jNO2-Nadir and Zenith [s^-1]
8
9
10
11
12x10^-3
jNO2-Total [s^-1]

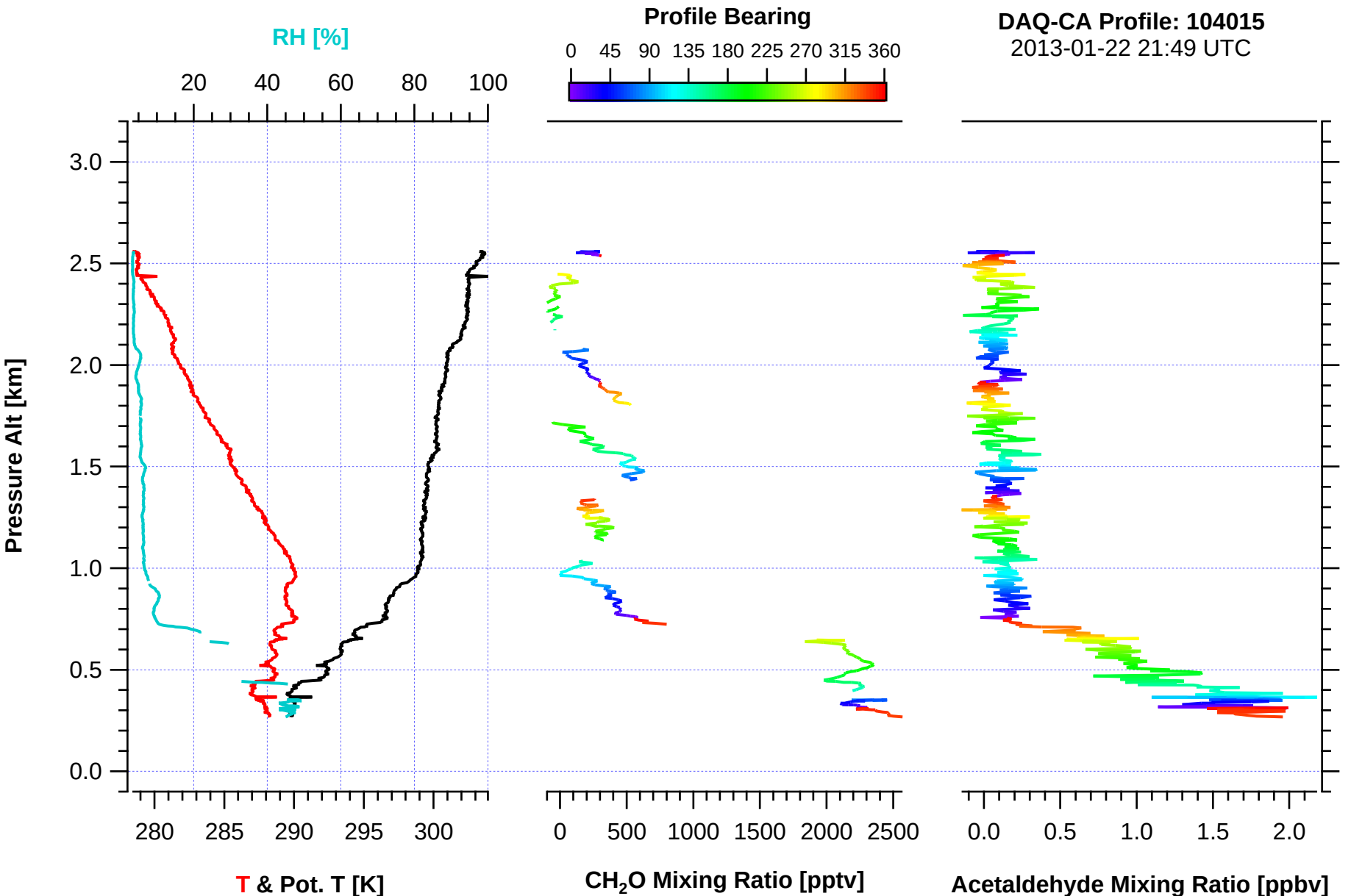

DAQ-CA Profile: 104014
2013-01-22 19:28 UTC
RH [%]
20 40 60 80 100
Profile Bearing
0 45 90 135 180 225 270 315 360
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
284 288 292 296 300
Surface Temperature [K]
0 1 2 3 4 5
Methanol Mixing Ratio [ppbv]

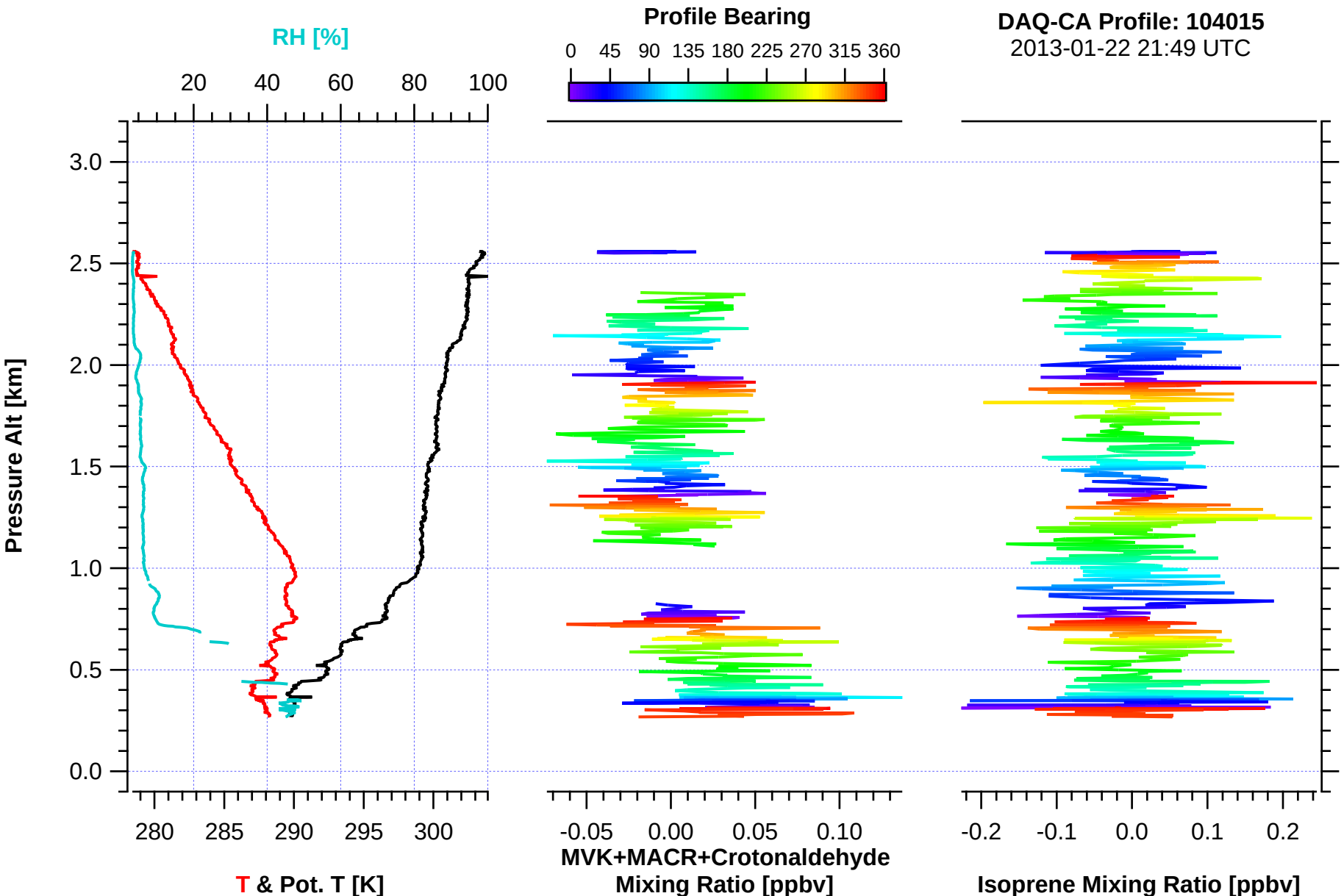

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104014
2013-01-22 19:28 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2 4 6 8 10 12 14
NH3 Mixing Ratio [ppbv]
1900 2000 2100 2200 2300
CH4 Mixing Ratio [ppbv]

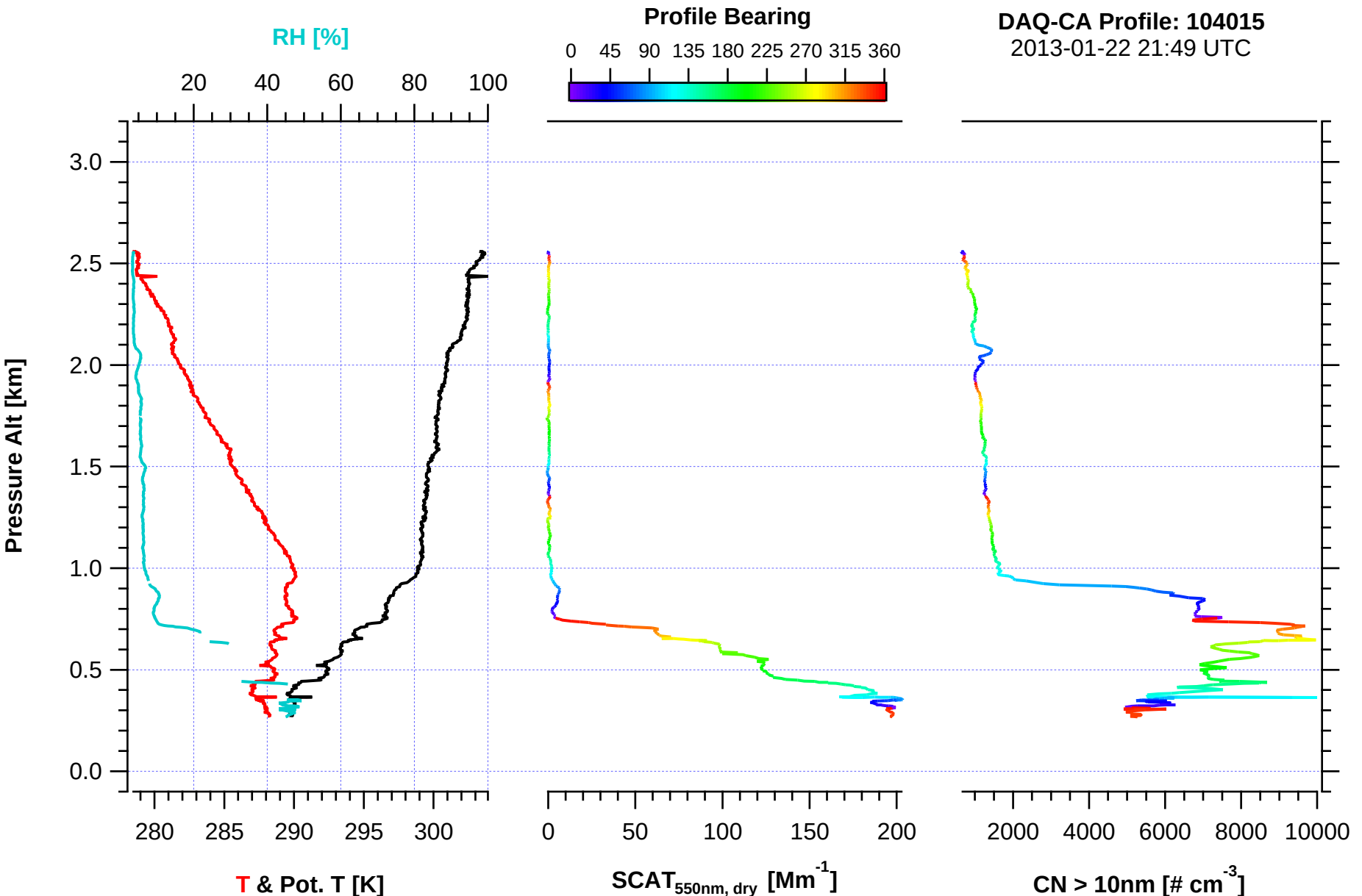

DAQ-CA Profile: 104015
2013-01-22 21:49 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2000 4000 6000 8000
H2O Mixing Ratio [ppmv]
400 405 410 415 420
CO2 Mixing Ratio [ppmv]

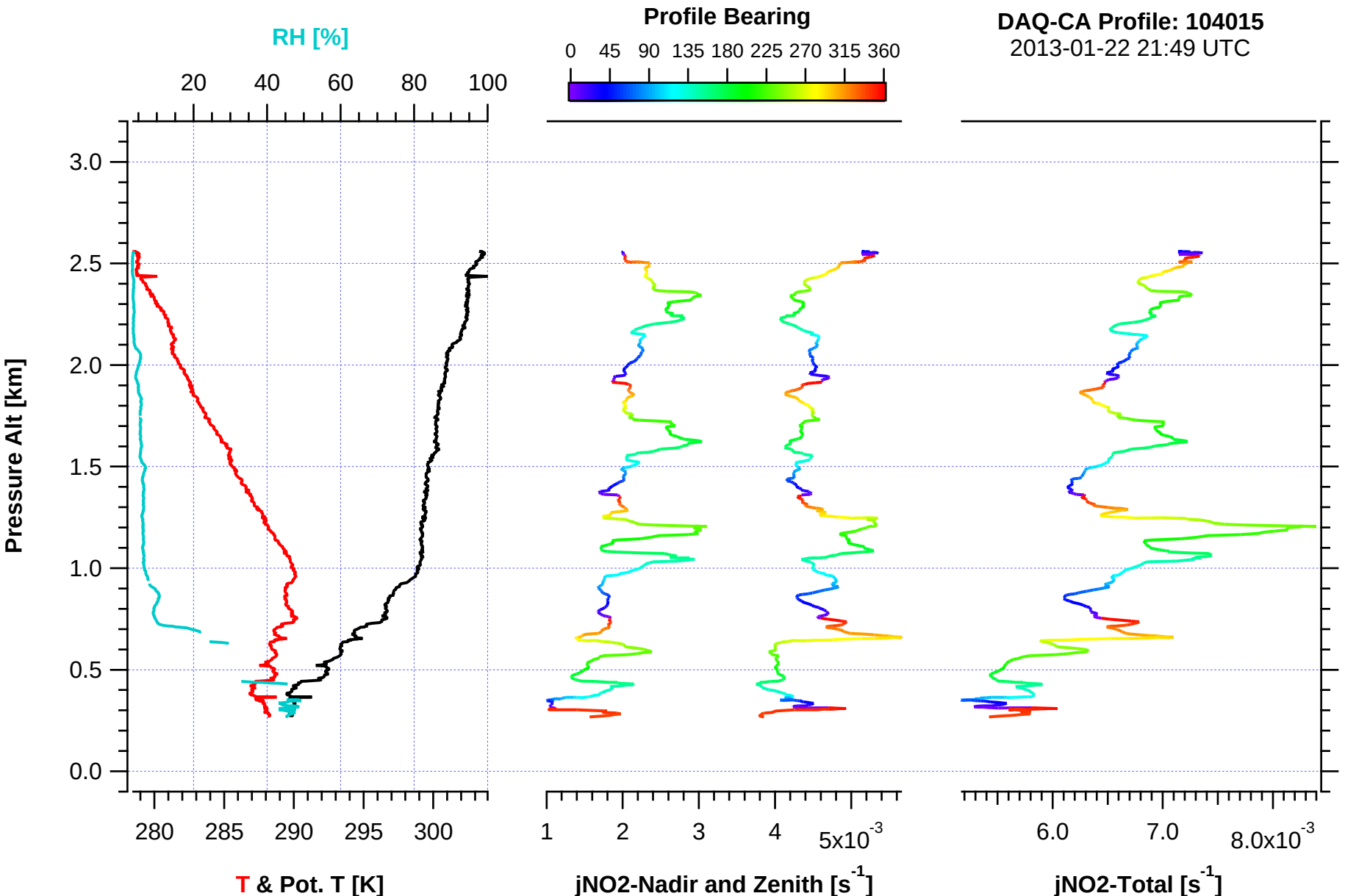

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104015
2013-01-22 21:49 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
100 120 140 160 180 200
CO Mixing Ratio [ppbv]
46 48 50 52 54
O3 Mixing Ratio [ppbv]

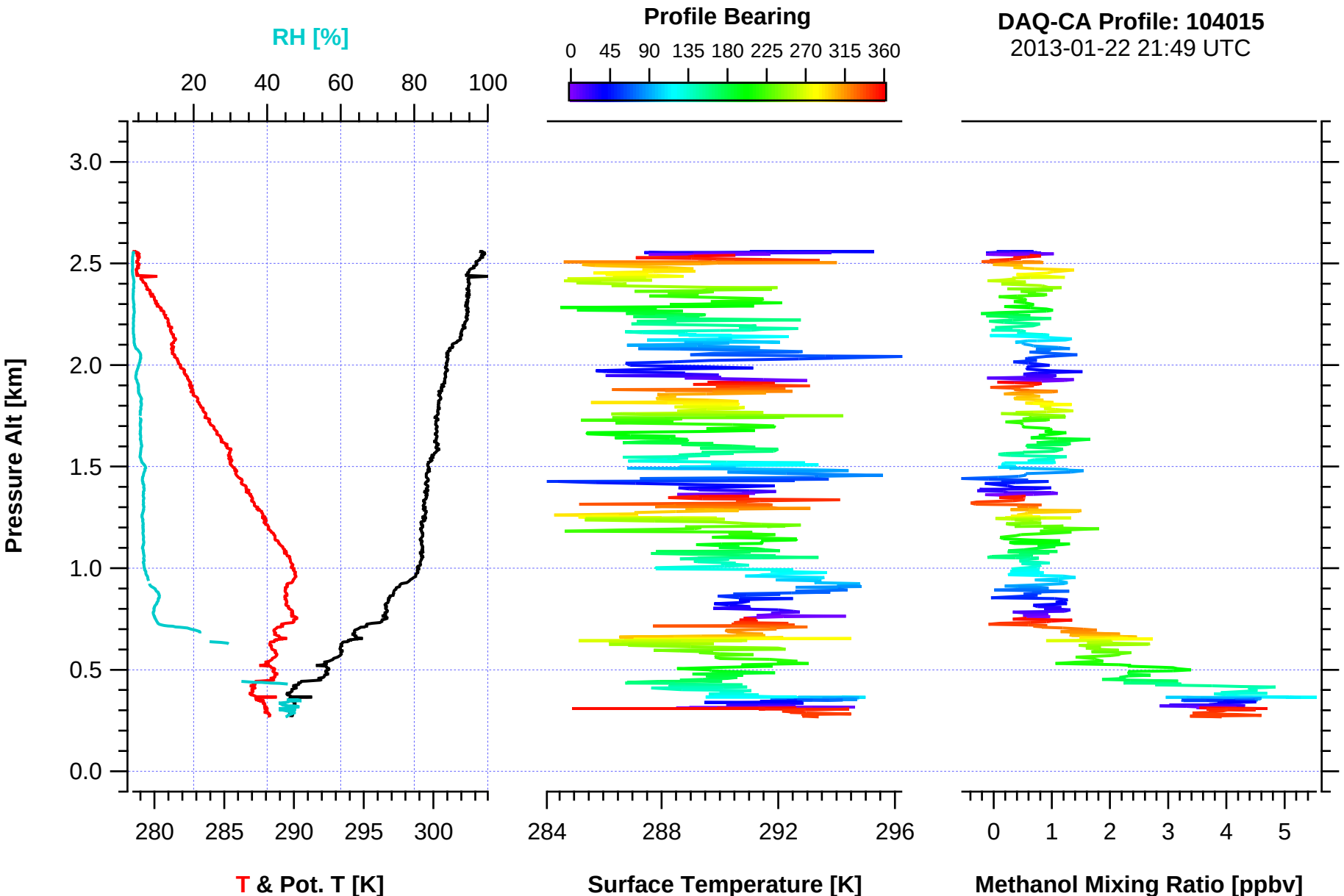

DAQ-CA Profile: 104015
2013-01-22 21:49 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
1000 2000 3000
NO2 Mixing Ratio [pptv]
0 200 400 600 800 1000
NO Mixing Ratio [pptv]

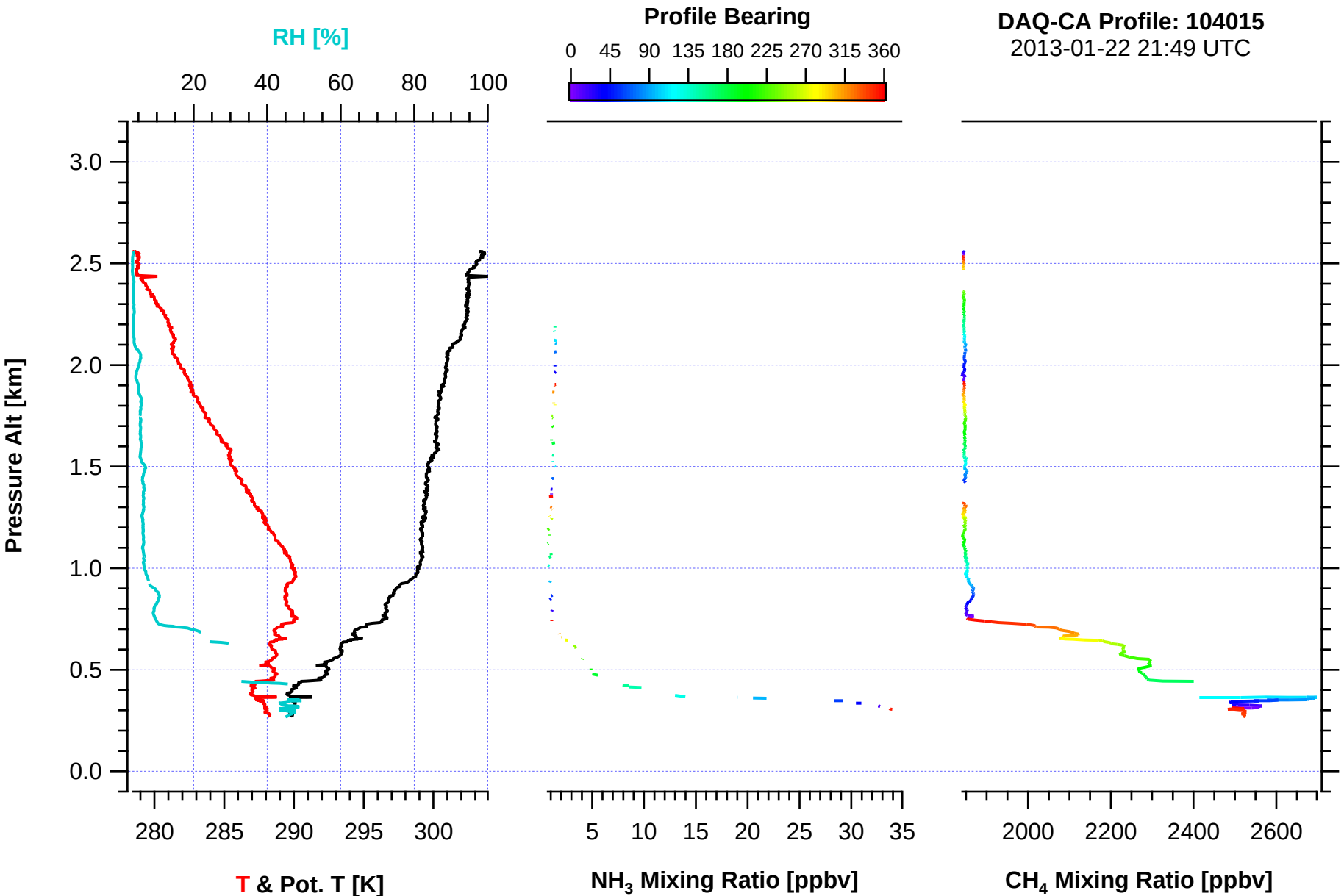

DAQ-CA Profile: 104015
2013-01-22 21:49 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0 2.5 2.0 1.5 1.0 0.5 0.0
280 285 290 295 300
T & Pot. T [K]
0 500 1000 1500 2000 2500
CH2O Mixing Ratio [pptv]
0.0 0.5 1.0 1.5 2.0
Acetaldehyde Mixing Ratio [ppbv]

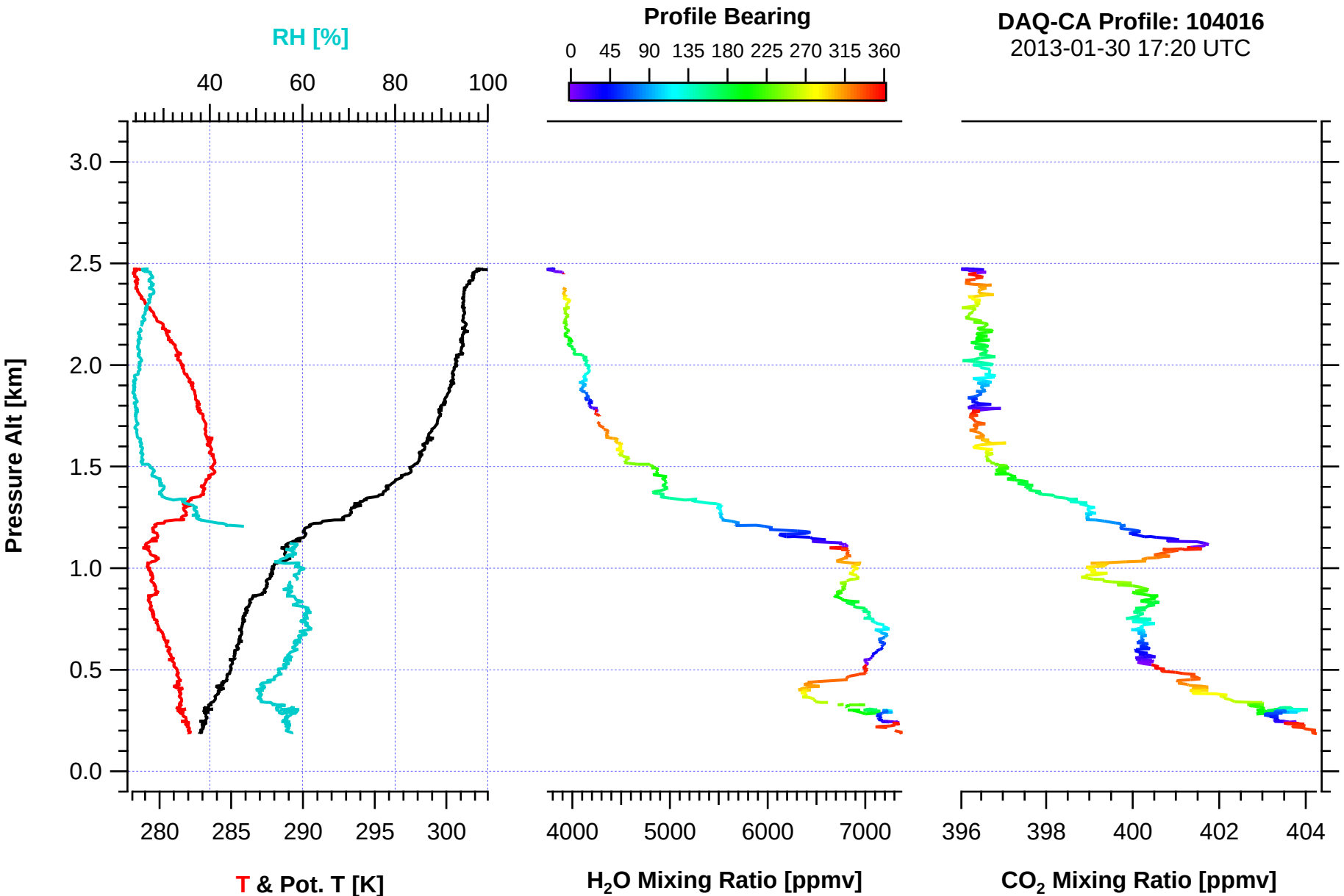

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104015
2013-01-22 21:49 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
-0.05 0.00 0.05 0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.2 -0.1 0.0 0.1 0.2
Isoprene Mixing Ratio [ppbv]

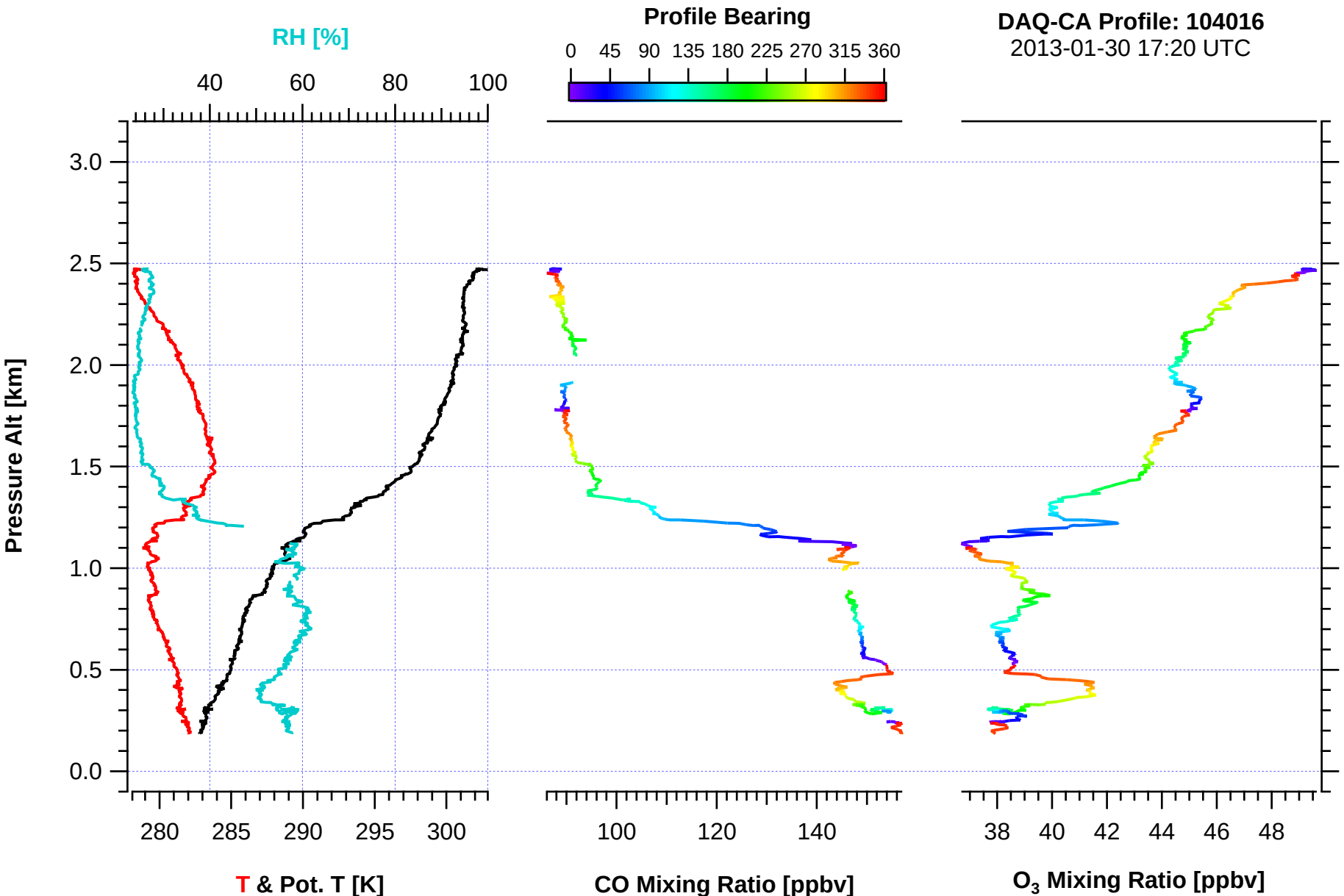

DAQ-CA Profile: 104015
2013-01-22 21:49 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 50 100 150 200
SCAT550nm, dry [Mm-1]
2000 4000 6000 8000 10000
CN > 10nm [# cm-3]

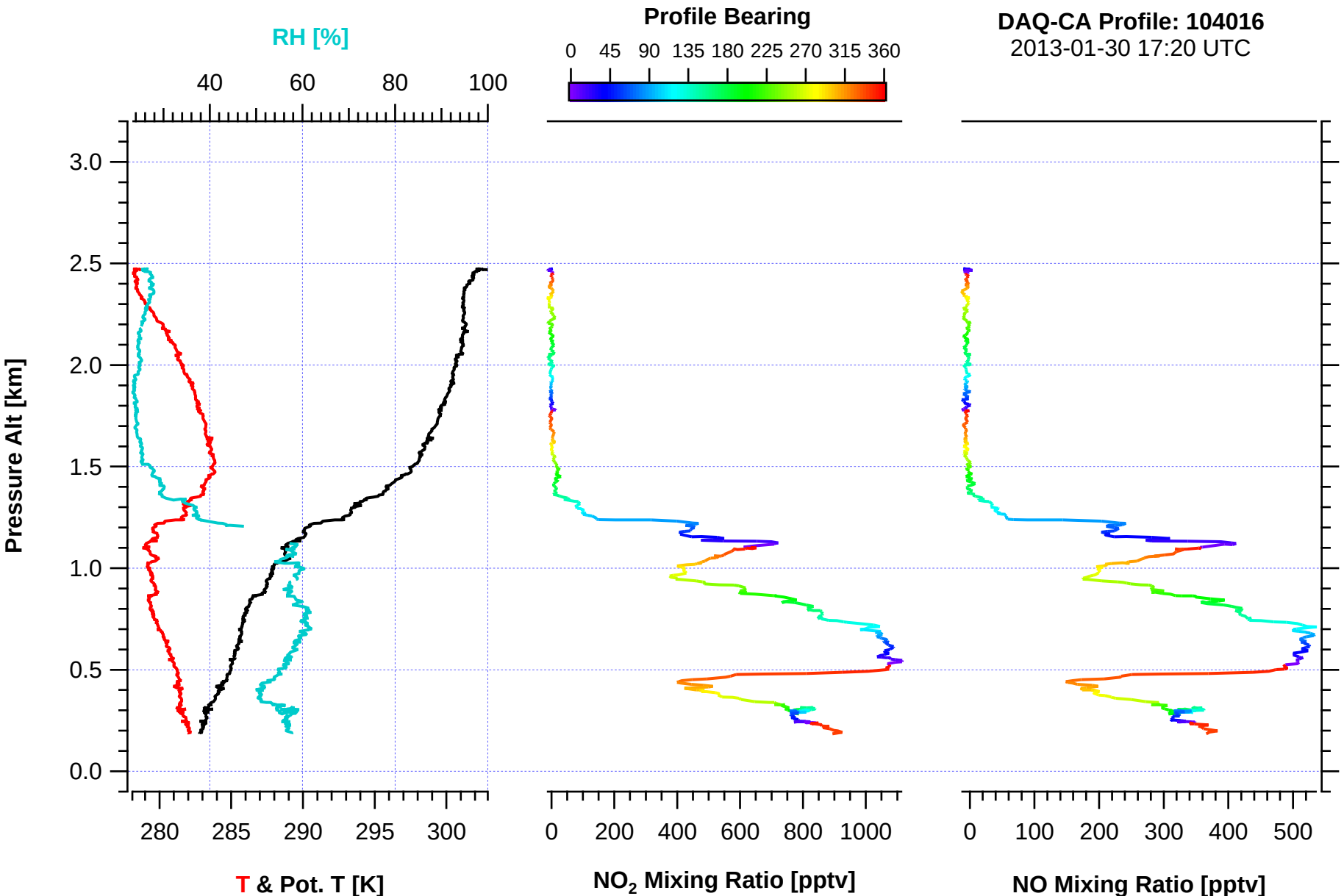

DAQ-CA Profile: 104015
2013-01-22 21:49 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
1 2 3 4 5x10^-3
jNO2-Nadir and Zenith [s^-1]
6.0 7.0 8.0x10^-3
jNO2-Total [s^-1]

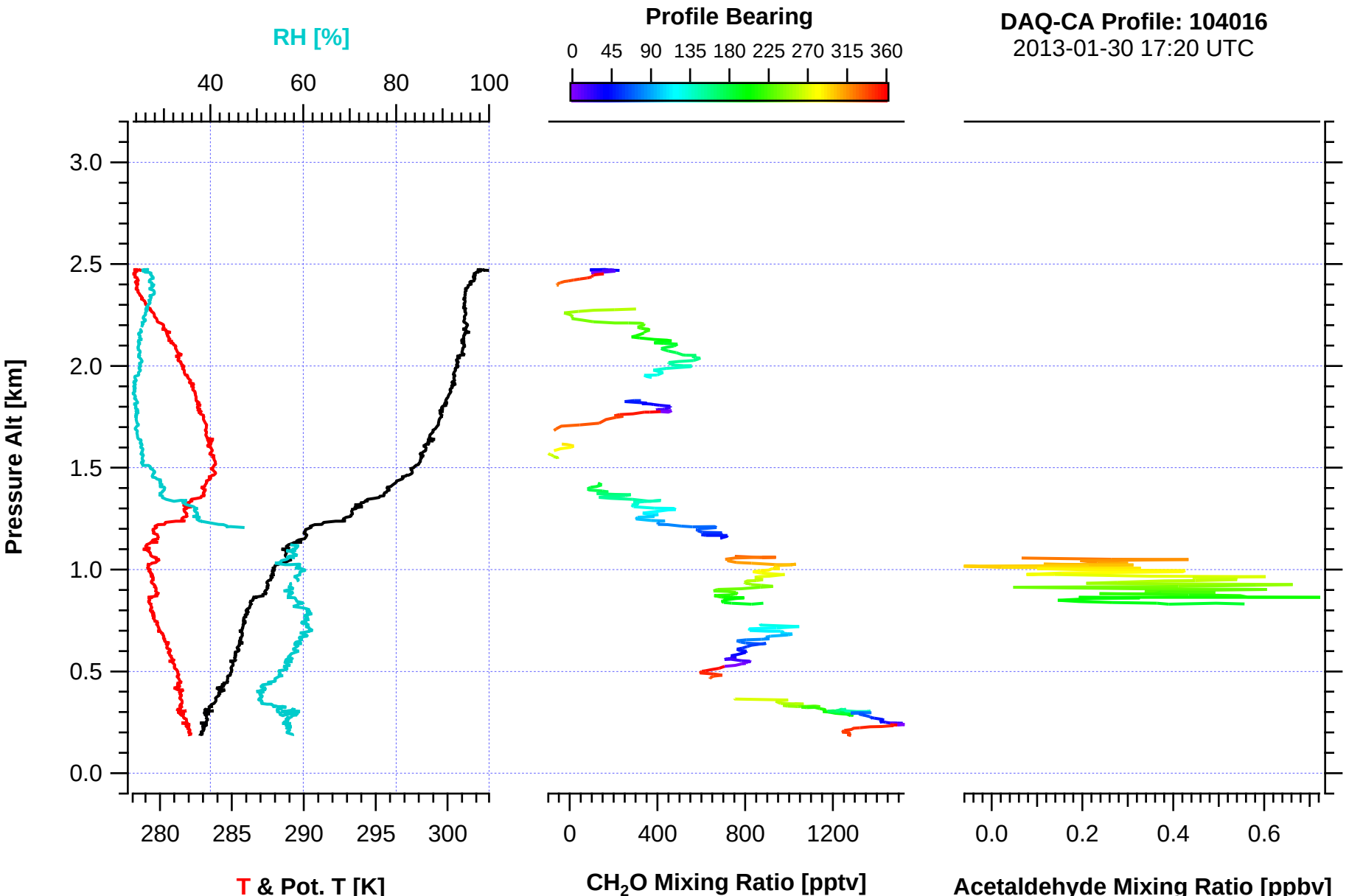

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104015
2013-01-22 21:49 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
284 288 292 296
Surface Temperature [K]
0 1 2 3 4 5
Methanol Mixing Ratio [ppbv]

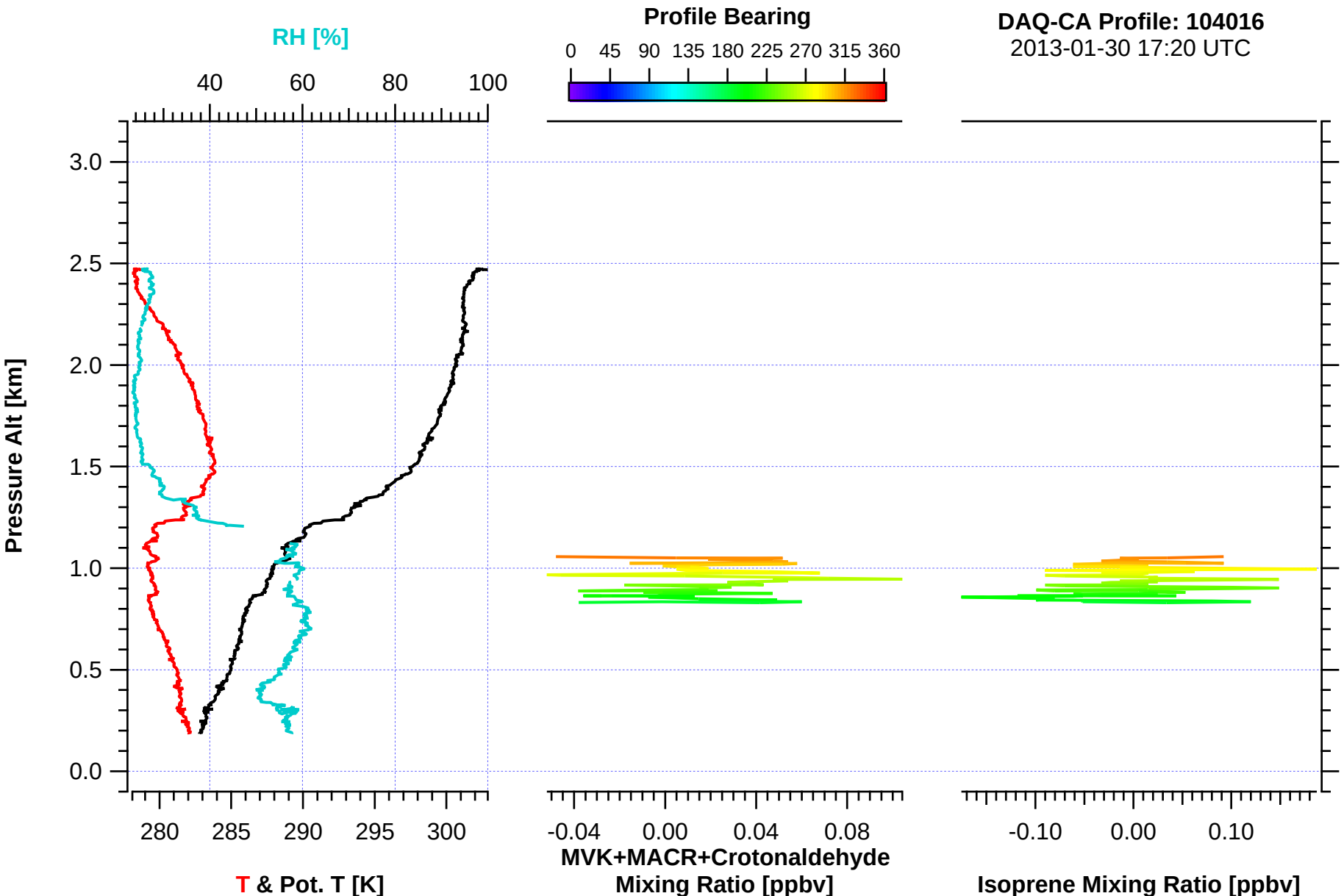

DAQ-CA Profile: 104015
2013-01-22 21:49 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
5 10 15 20 25 30 35
NH3 Mixing Ratio [ppbv]
2000 2200 2400 2600
CH4 Mixing Ratio [ppbv]

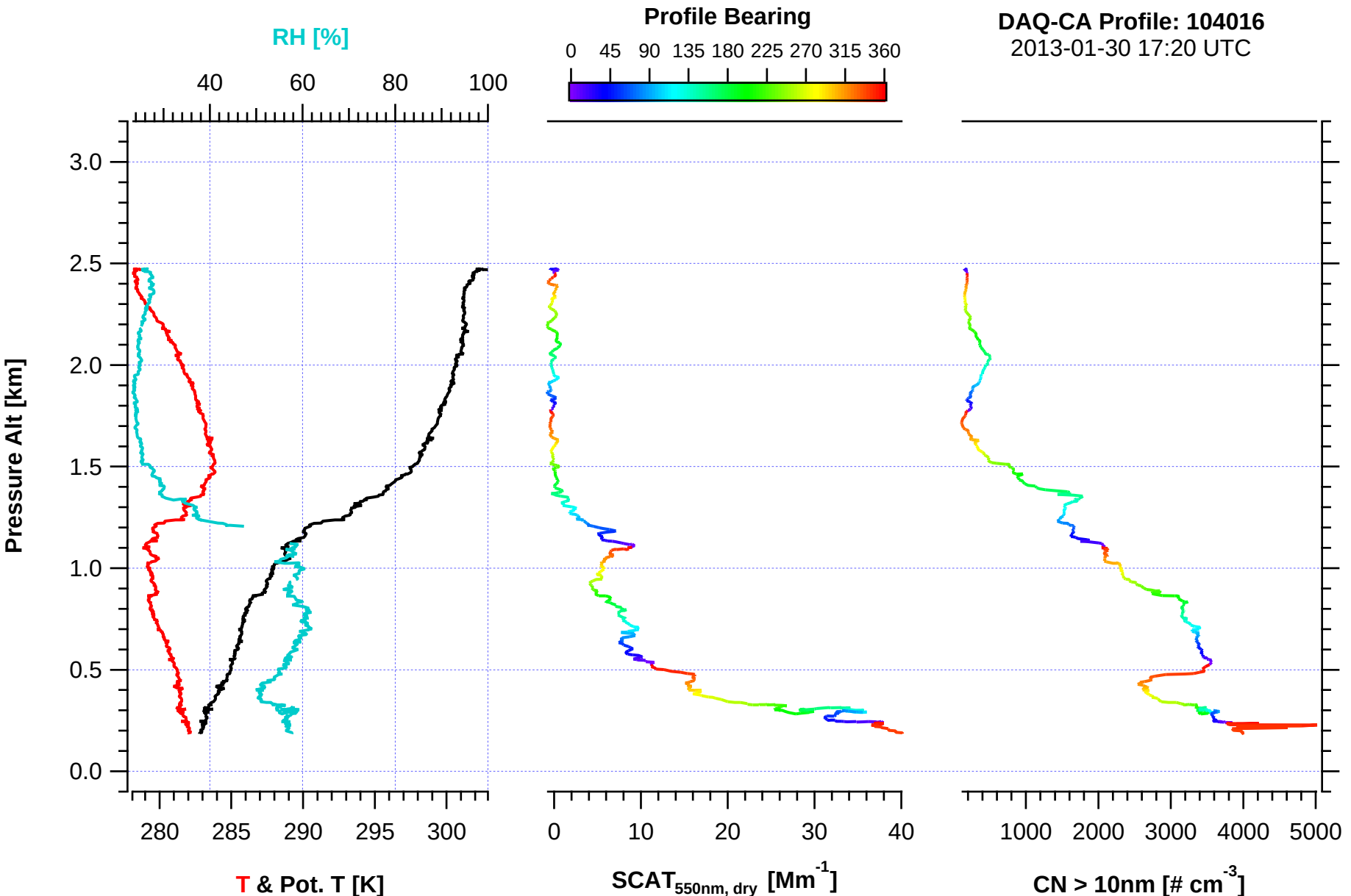

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104016
2013-01-30 17:20 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
4000 5000 6000 7000
H2O Mixing Ratio [ppmv]
396 398 400 402 404
CO2 Mixing Ratio [ppmv]

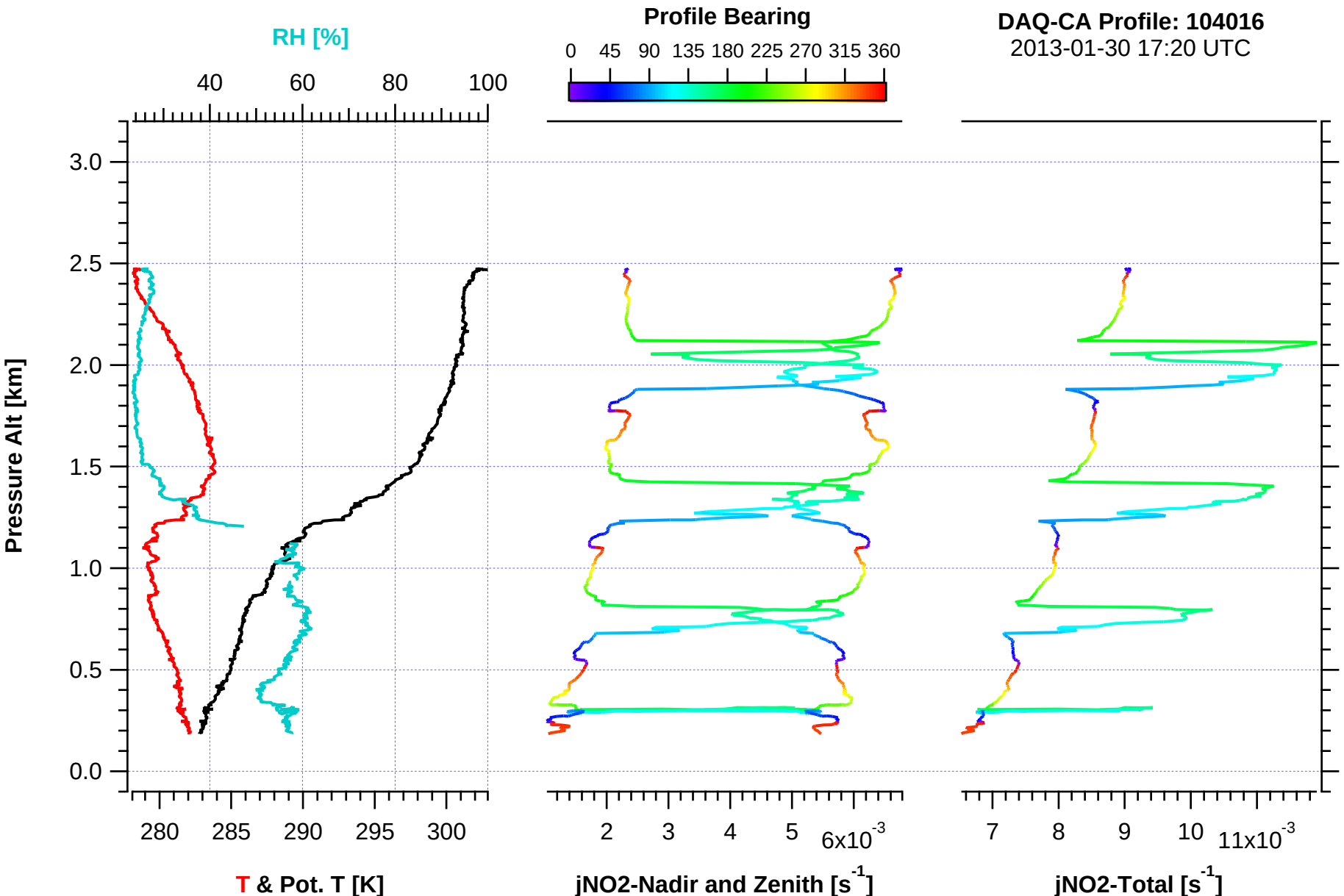

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104016
2013-01-30 17:20 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
100 120 140
CO Mixing Ratio [ppbv]
38 40 42 44 46 48
O3 Mixing Ratio [ppbv]

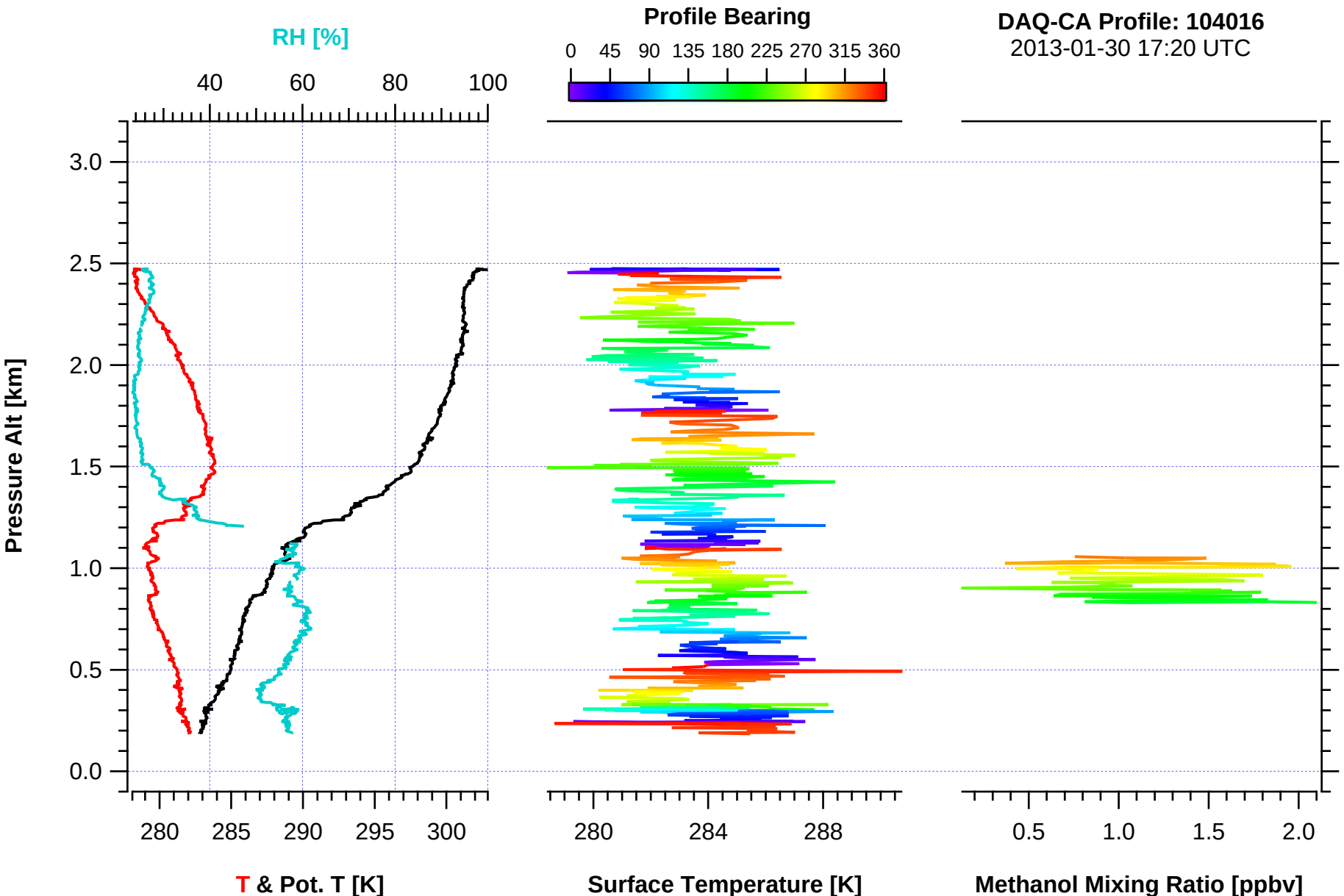

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104016
2013-01-30 17:20 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 200 400 600 800 1000
NO2 Mixing Ratio [pptv]
0 100 200 300 400 500
NO Mixing Ratio [pptv]

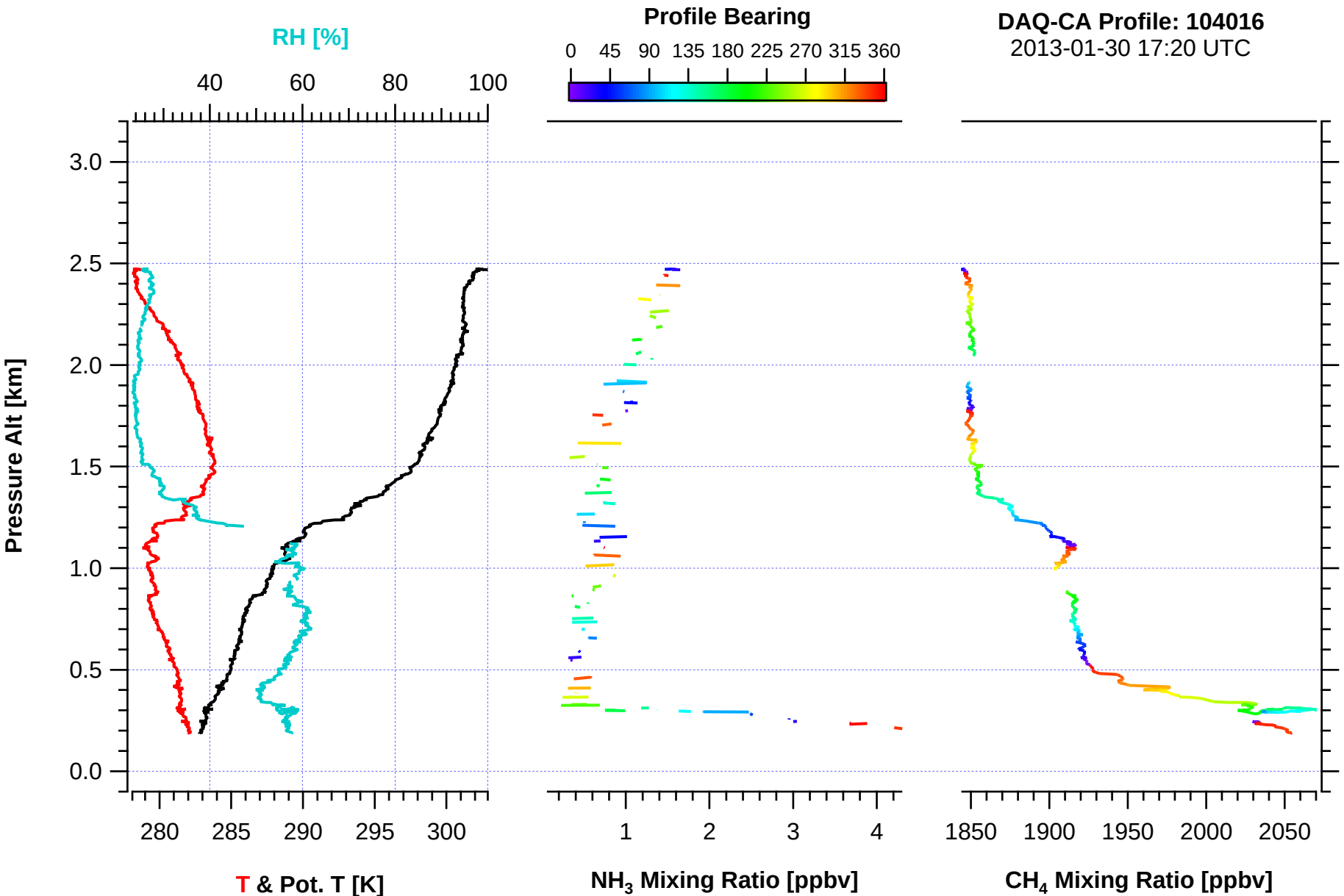

DAQ-CA Profile: 104016
2013-01-30 17:20 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 400 800 1200
CH2O Mixing Ratio [pptv]
0.0 0.2 0.4 0.6
Acetaldehyde Mixing Ratio [ppbv]

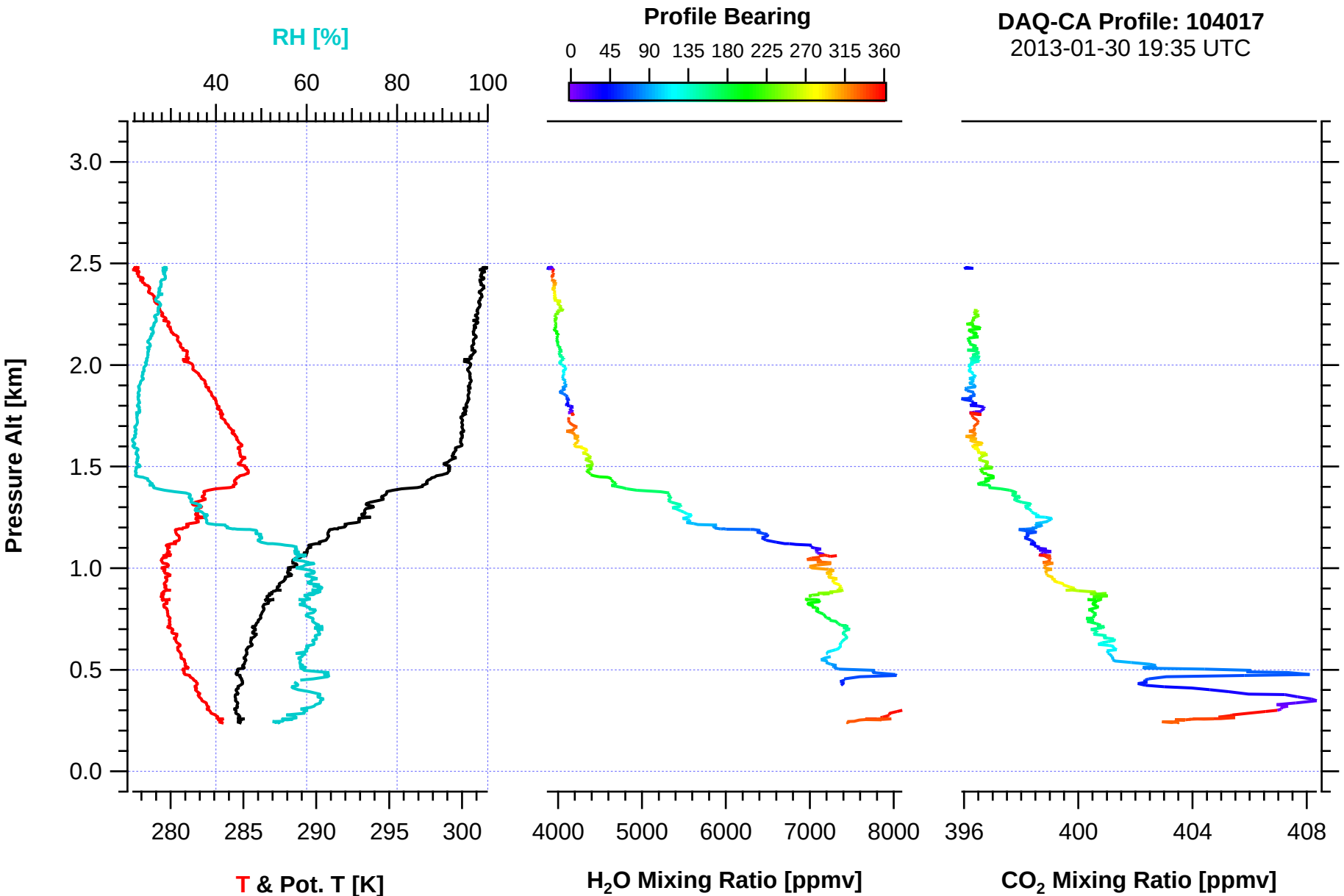

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104016
2013-01-30 17:20 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
-0.04 0.00 0.04 0.08
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.10 0.00 0.10
Isoprene Mixing Ratio [ppbv]

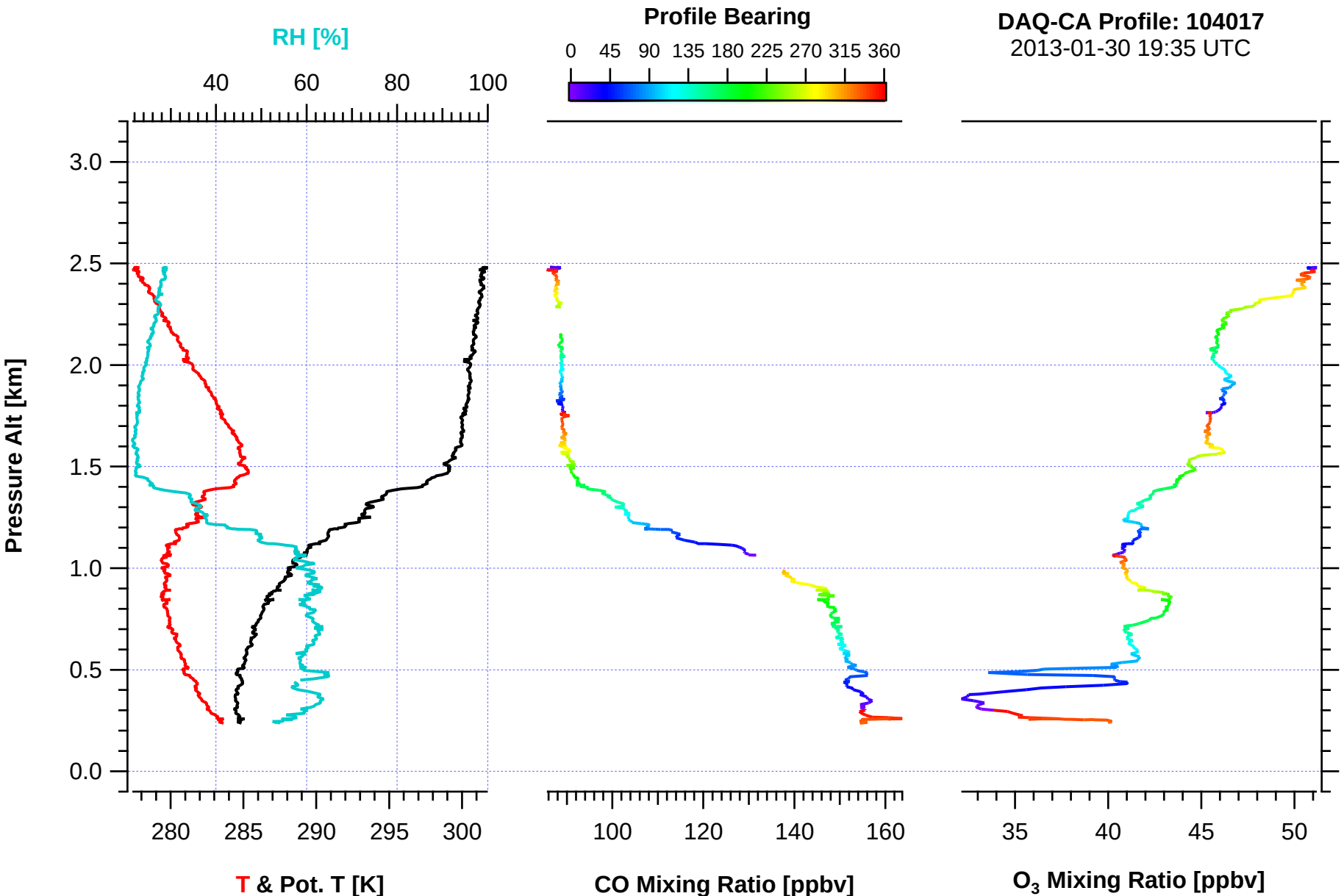

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104016
2013-01-30 17:20 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 10 20 30 40
SCAT550nm, dry [Mm-1]
1000 2000 3000 4000 5000
CN > 10nm [# cm-3]

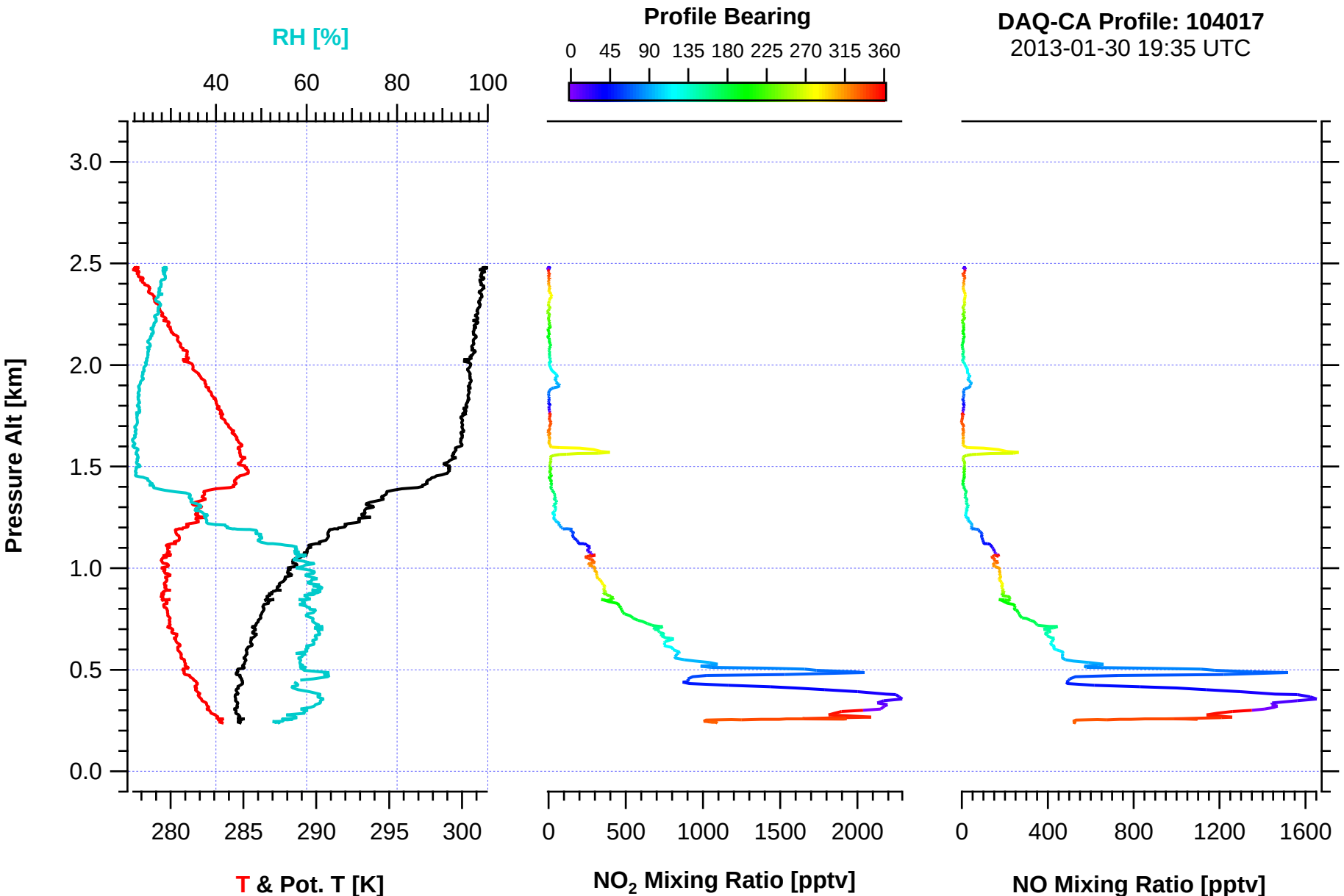

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104016
2013-01-30 17:20 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2 3 4 5 6x10^-3
jNO2-Nadir and Zenith [s^-1]
7 8 9 10 11x10^-3
jNO2-Total [s^-1]

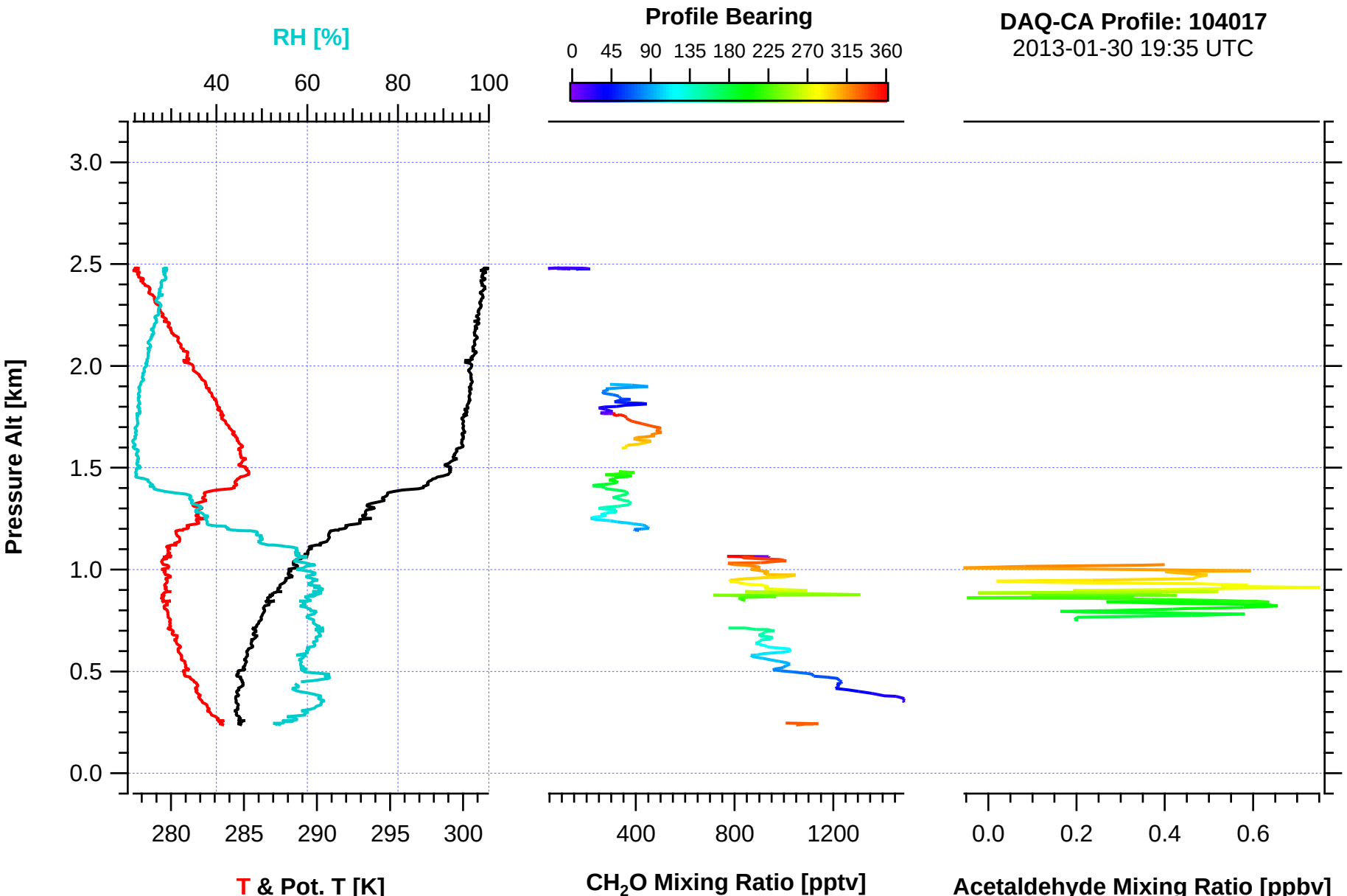

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104016
2013-01-30 17:20 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
280 284 288
Surface Temperature [K]
0.5 1.0 1.5 2.0
Methanol Mixing Ratio [ppbv]

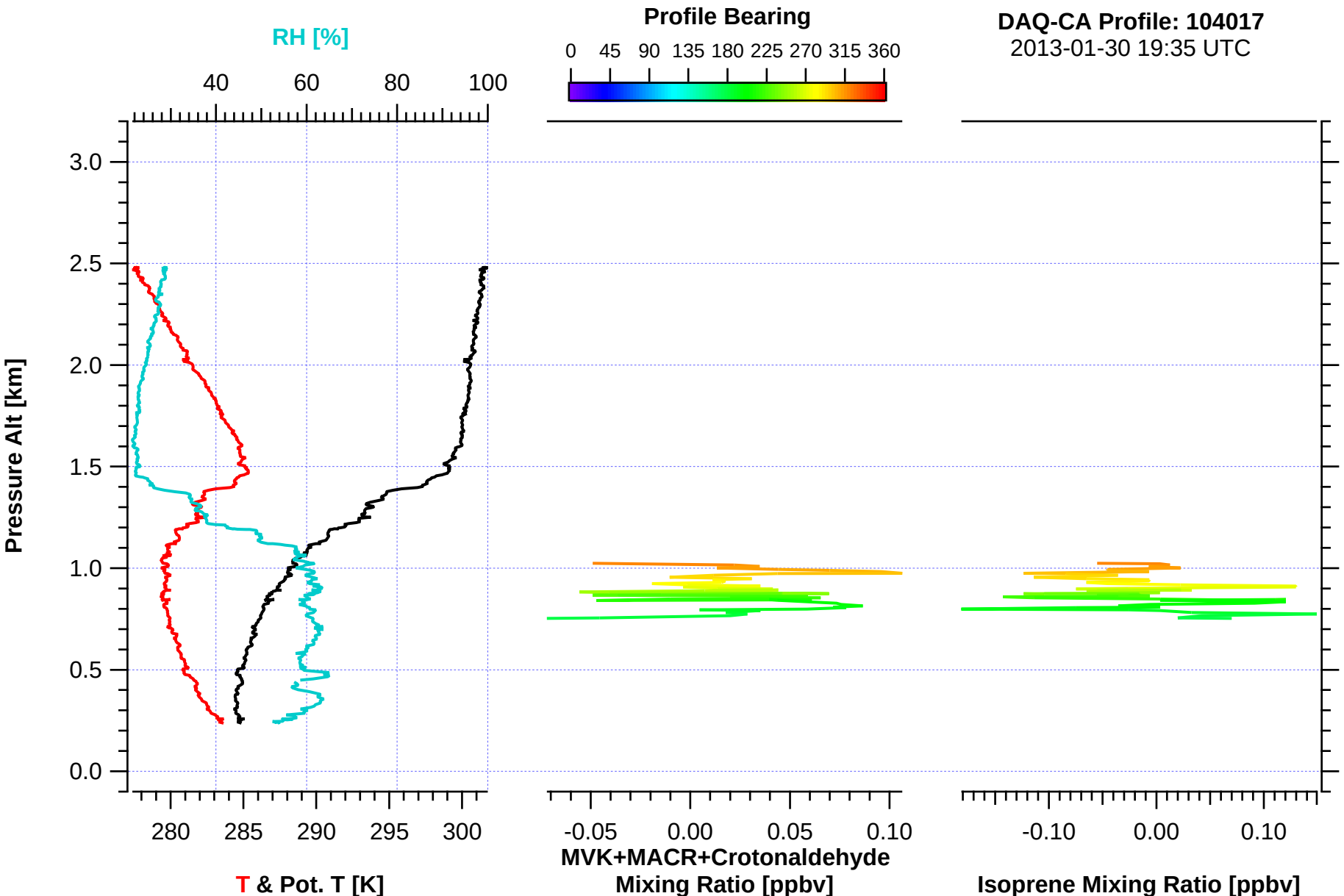

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104016
2013-01-30 17:20 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
1 2 3 4
NH3 Mixing Ratio [ppbv]
1850 1900 1950 2000 2050
CH4 Mixing Ratio [ppbv]

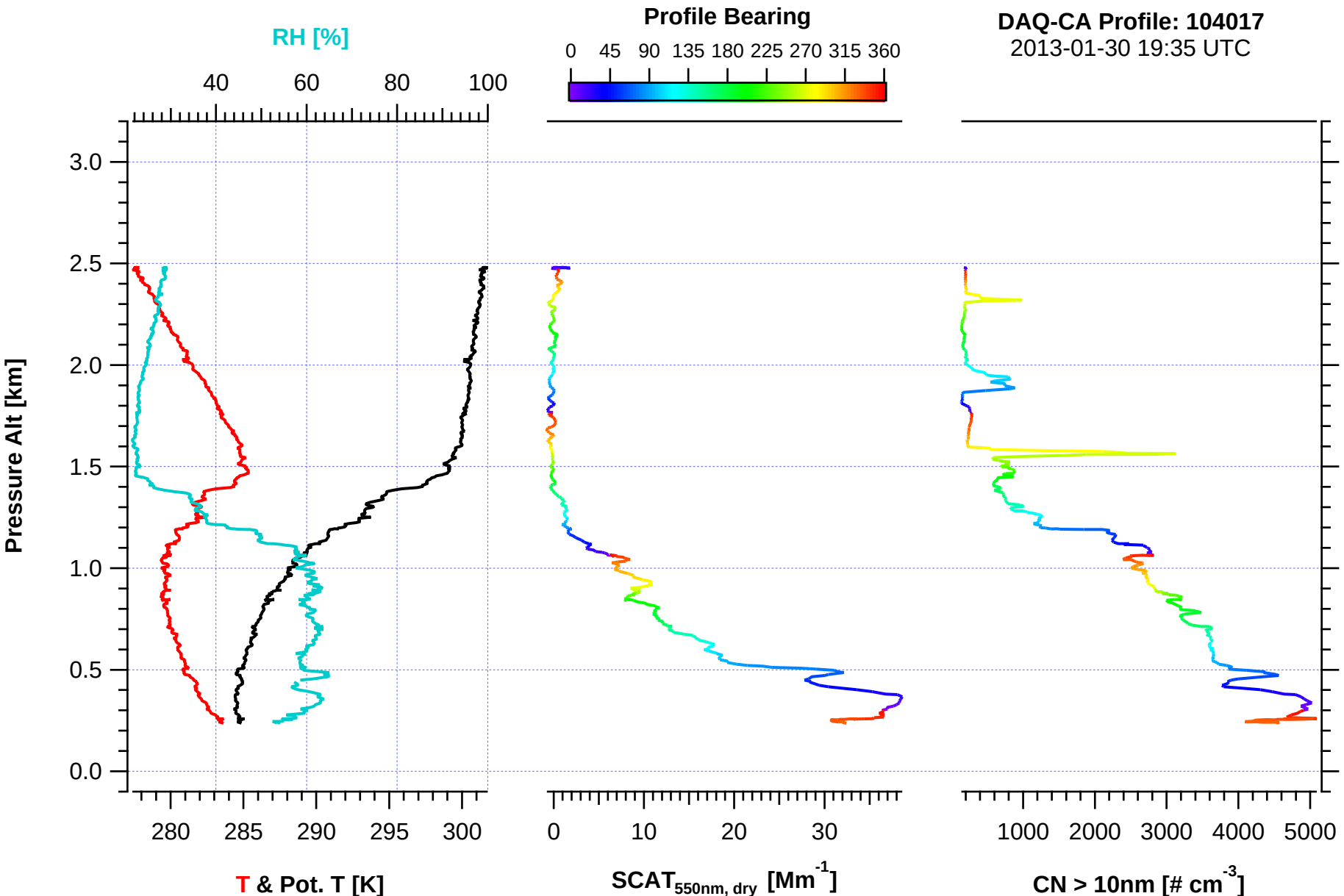

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104017
2013-01-30 19:35 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
4000 5000 6000 7000 8000
H2O Mixing Ratio [ppmv]
396 400 404 408
CO2 Mixing Ratio [ppmv]

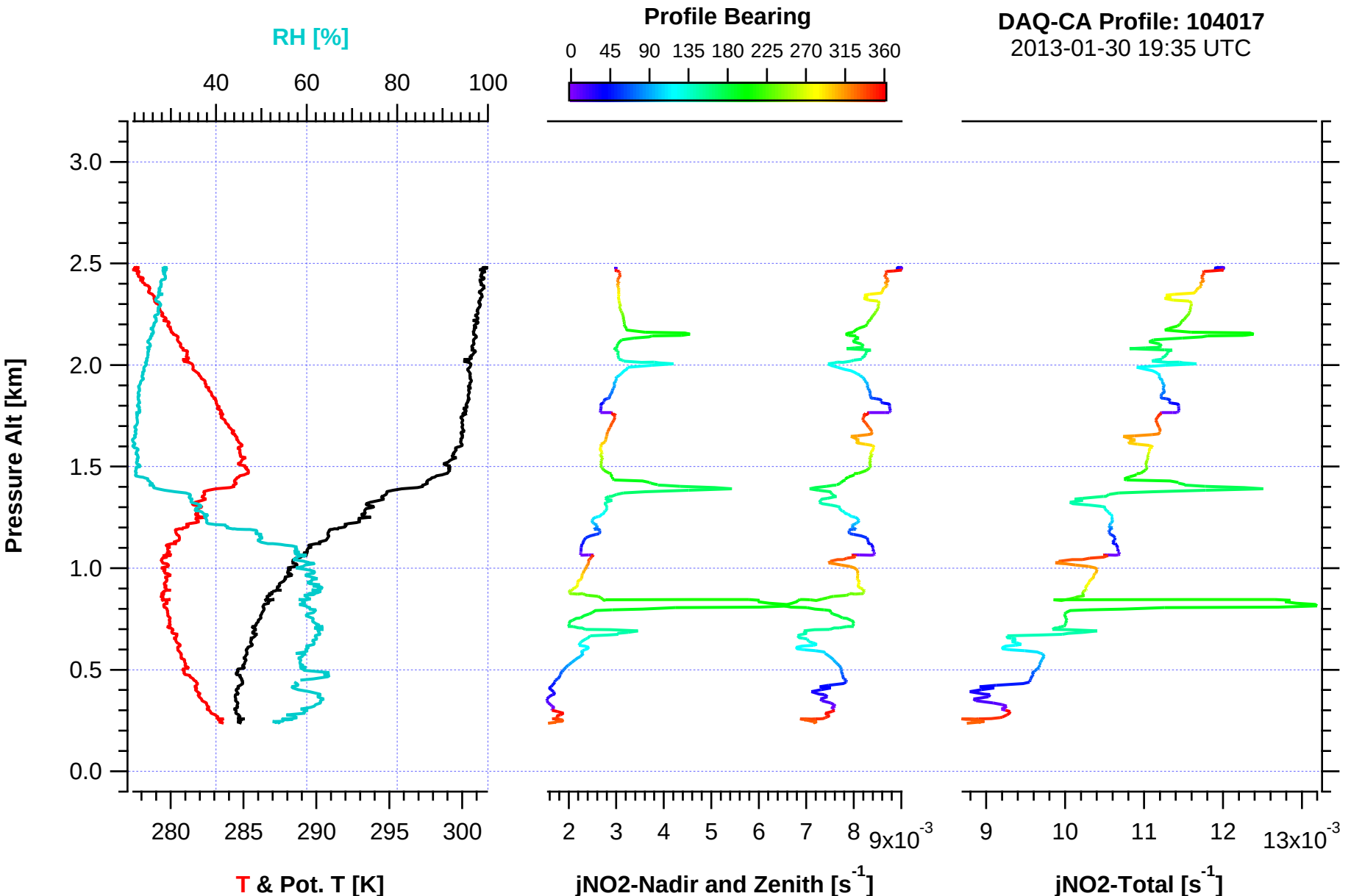

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104017
2013-01-30 19:35 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
100 120 140 160
CO Mixing Ratio [ppbv]
35 40 45 50
O3 Mixing Ratio [ppbv]

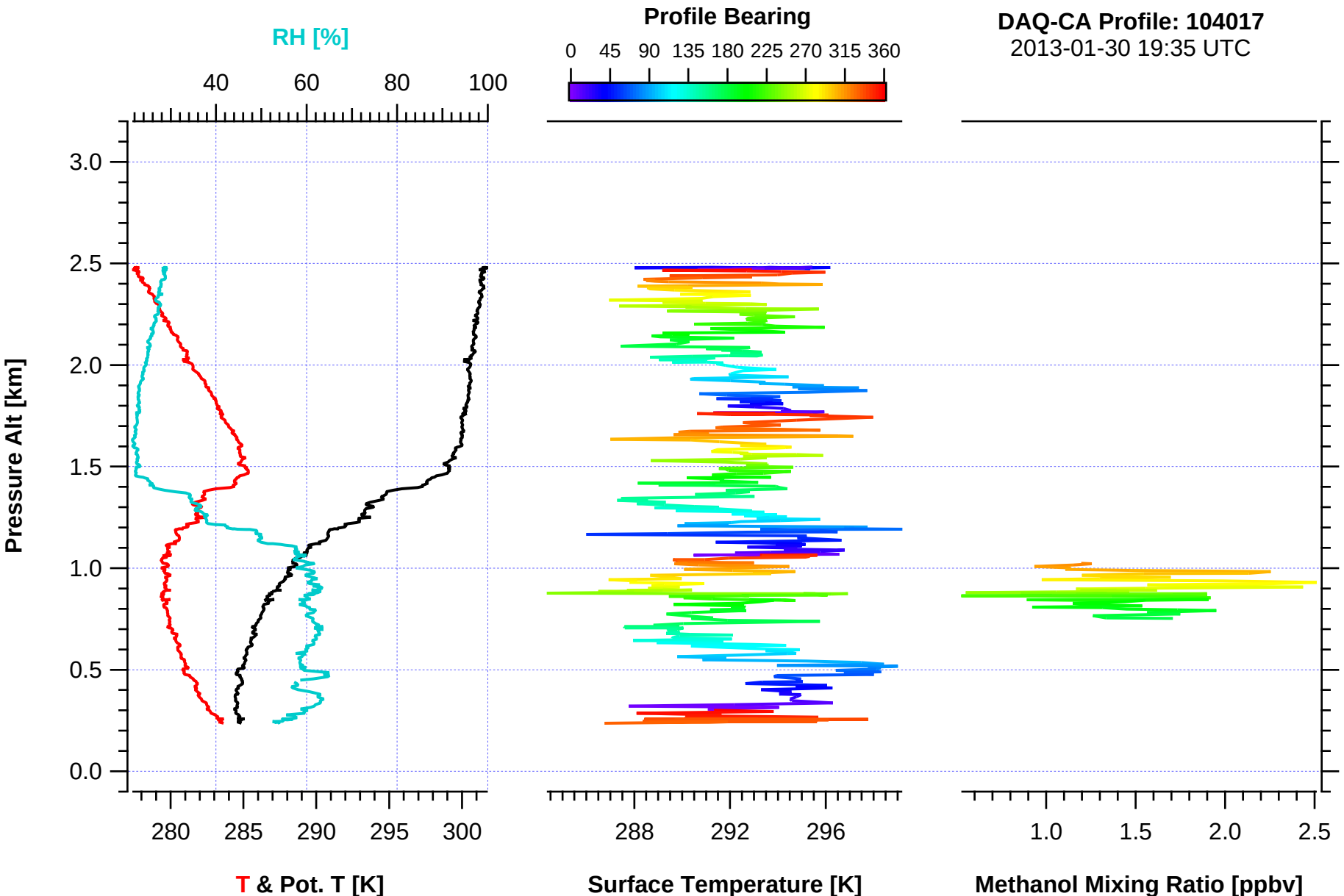

DAQ-CA Profile: 104017
2013-01-30 19:35 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 500 1000 1500 2000
NO2 Mixing Ratio [pptv]
0 400 800 1200 1600
NO Mixing Ratio [pptv]

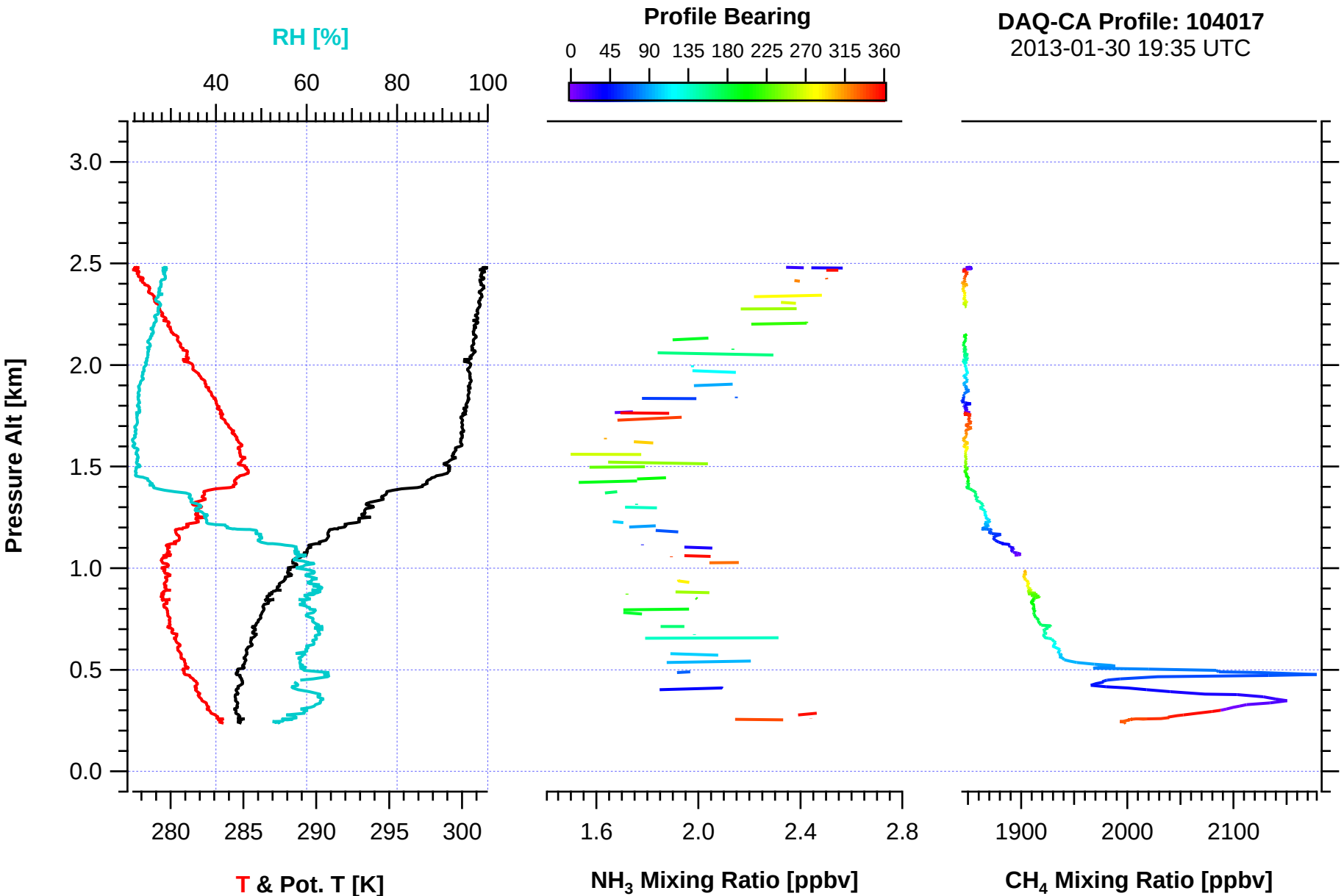

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104017
2013-01-30 19:35 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
400 800 1200
CH2O Mixing Ratio [pptv]
0.0 0.2 0.4 0.6
Acetaldehyde Mixing Ratio [ppbv]

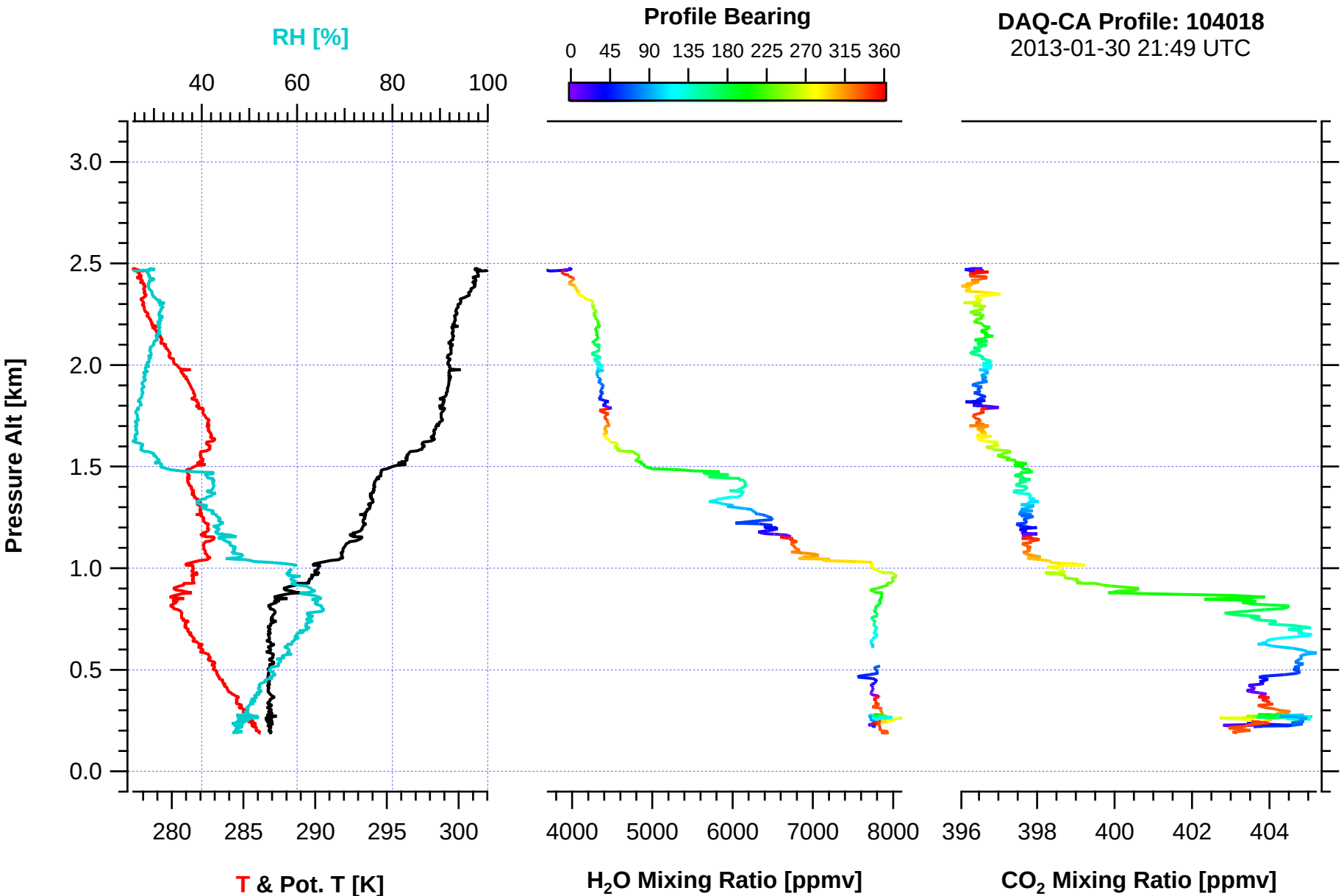

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104017
2013-01-30 19:35 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
-0.05 0.00 0.05 0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.10 0.00 0.10
Isoprene Mixing Ratio [ppbv]

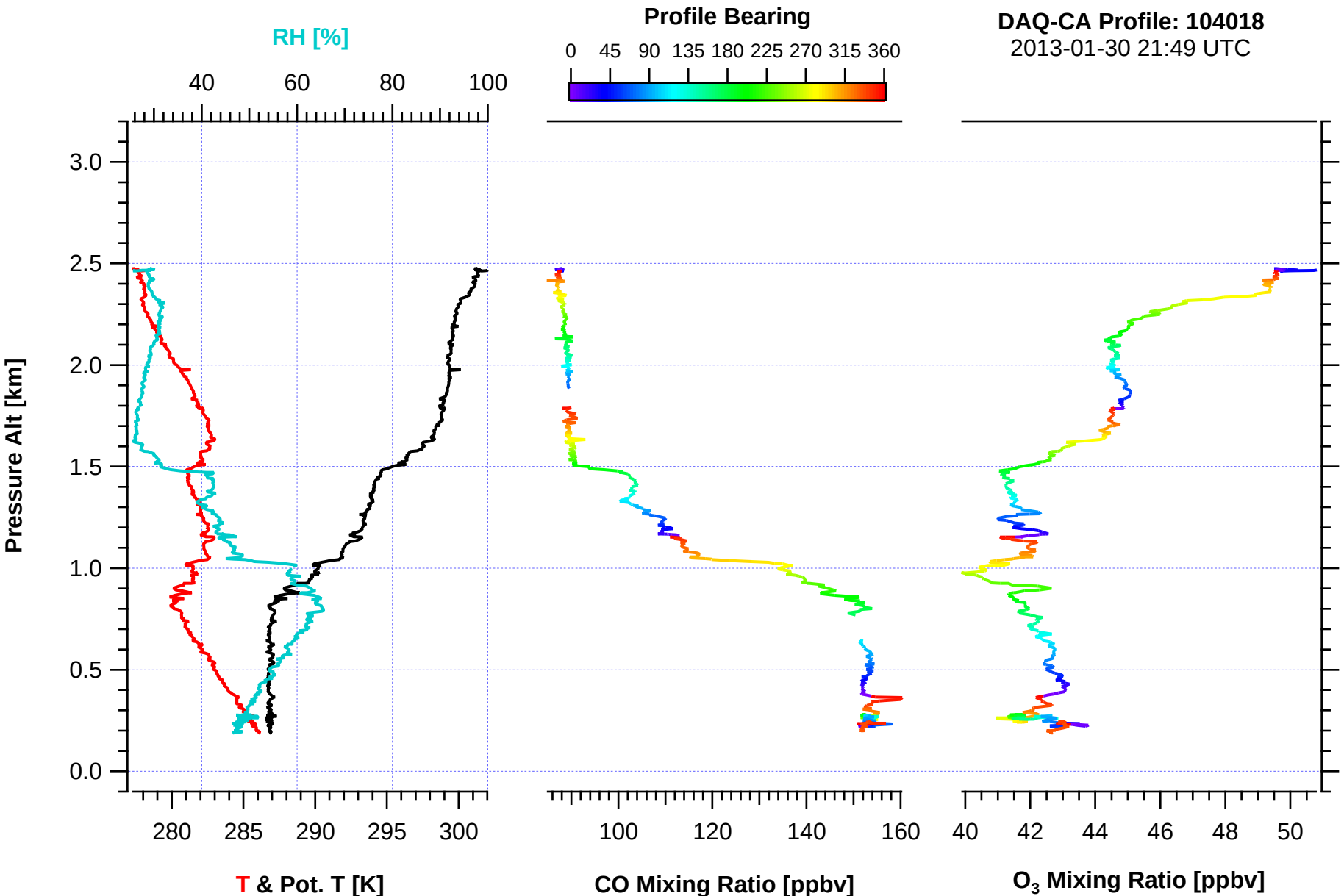

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104017
2013-01-30 19:35 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 10 20 30
SCAT550nm, dry [Mm-1]
1000 2000 3000 4000 5000
CN > 10nm [# cm-3]

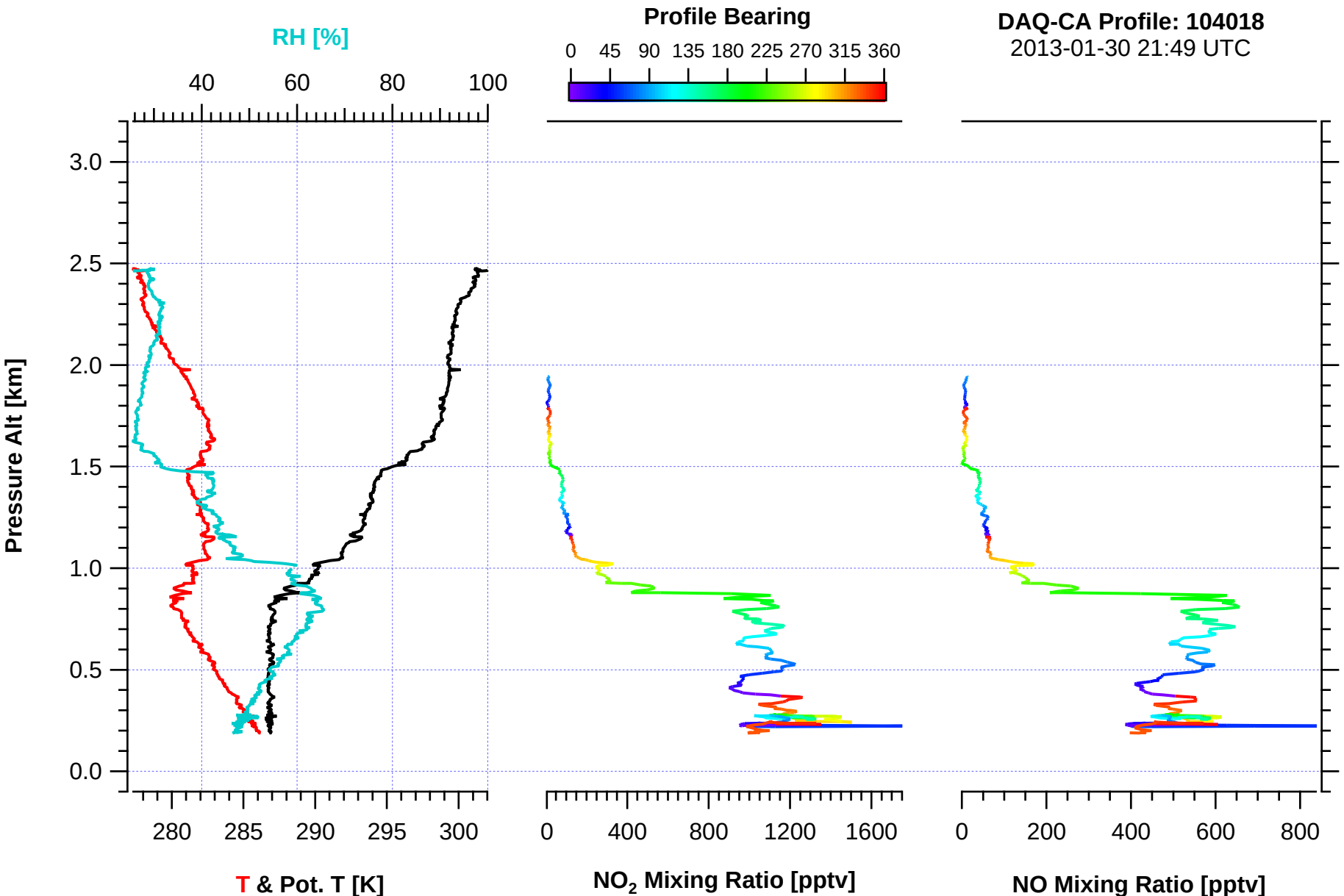

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104017
2013-01-30 19:35 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2 3 4 5 6 7 8
9x10-3
jNO2-Nadir and Zenith [s-1]
9 10 11 12
13x10-3
jNO2-Total [s-1]

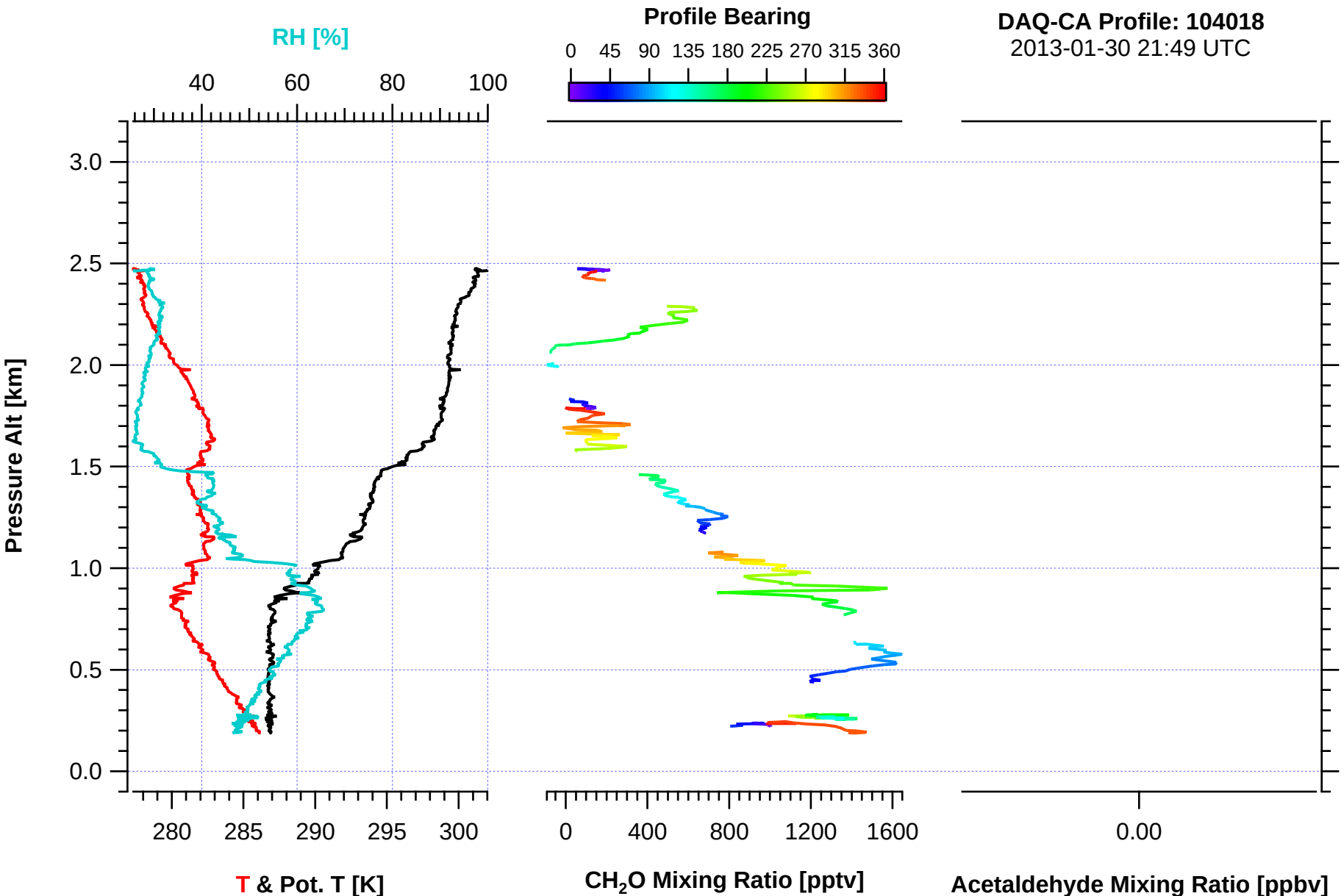

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104017
2013-01-30 19:35 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
288 292 296
Surface Temperature [K]
1.0 1.5 2.0 2.5
Methanol Mixing Ratio [ppbv]

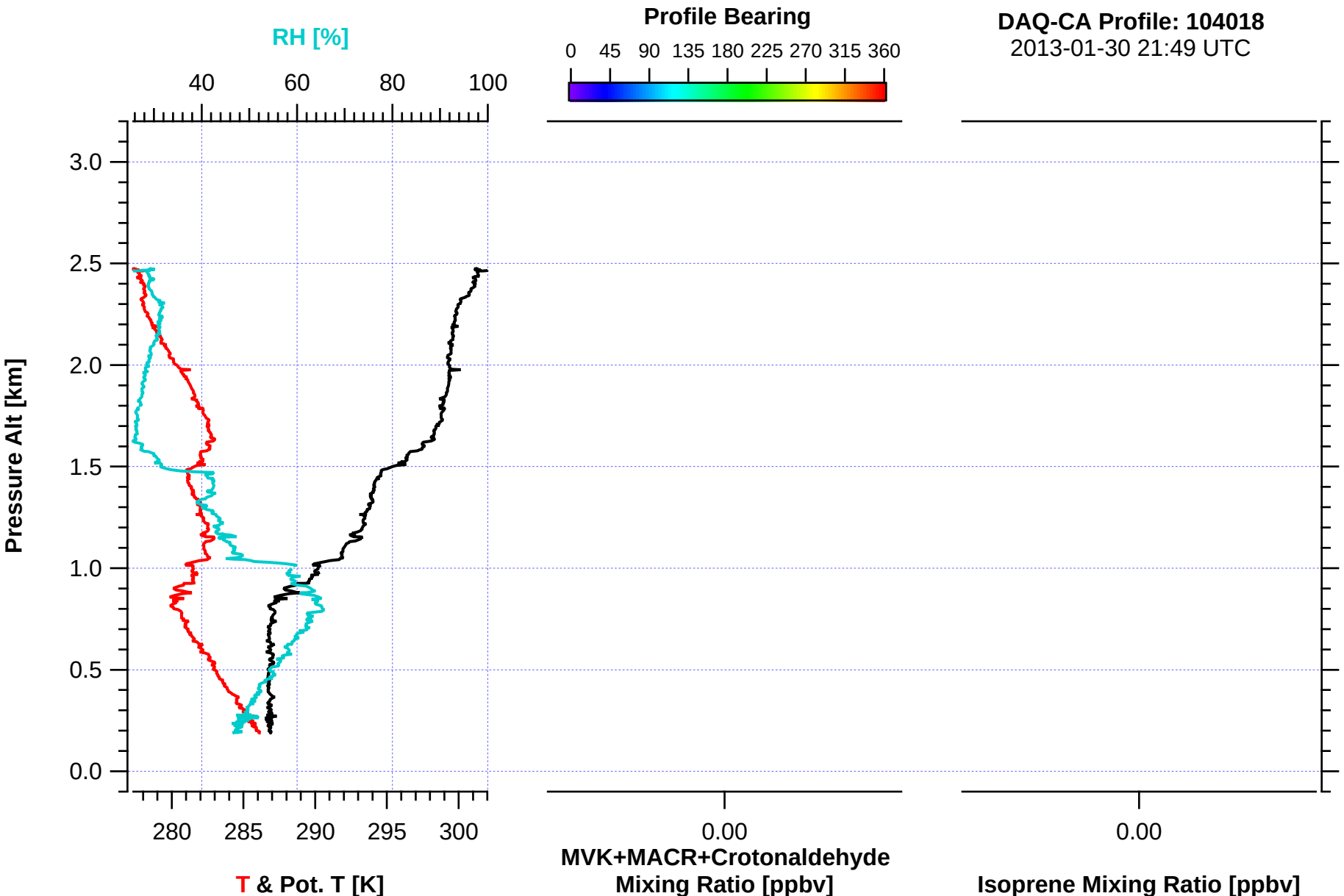

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104017
2013-01-30 19:35 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
1.6
2.0
2.4
2.8
NH3 Mixing Ratio [ppbv]
1900
2000
2100
CH4 Mixing Ratio [ppbv]

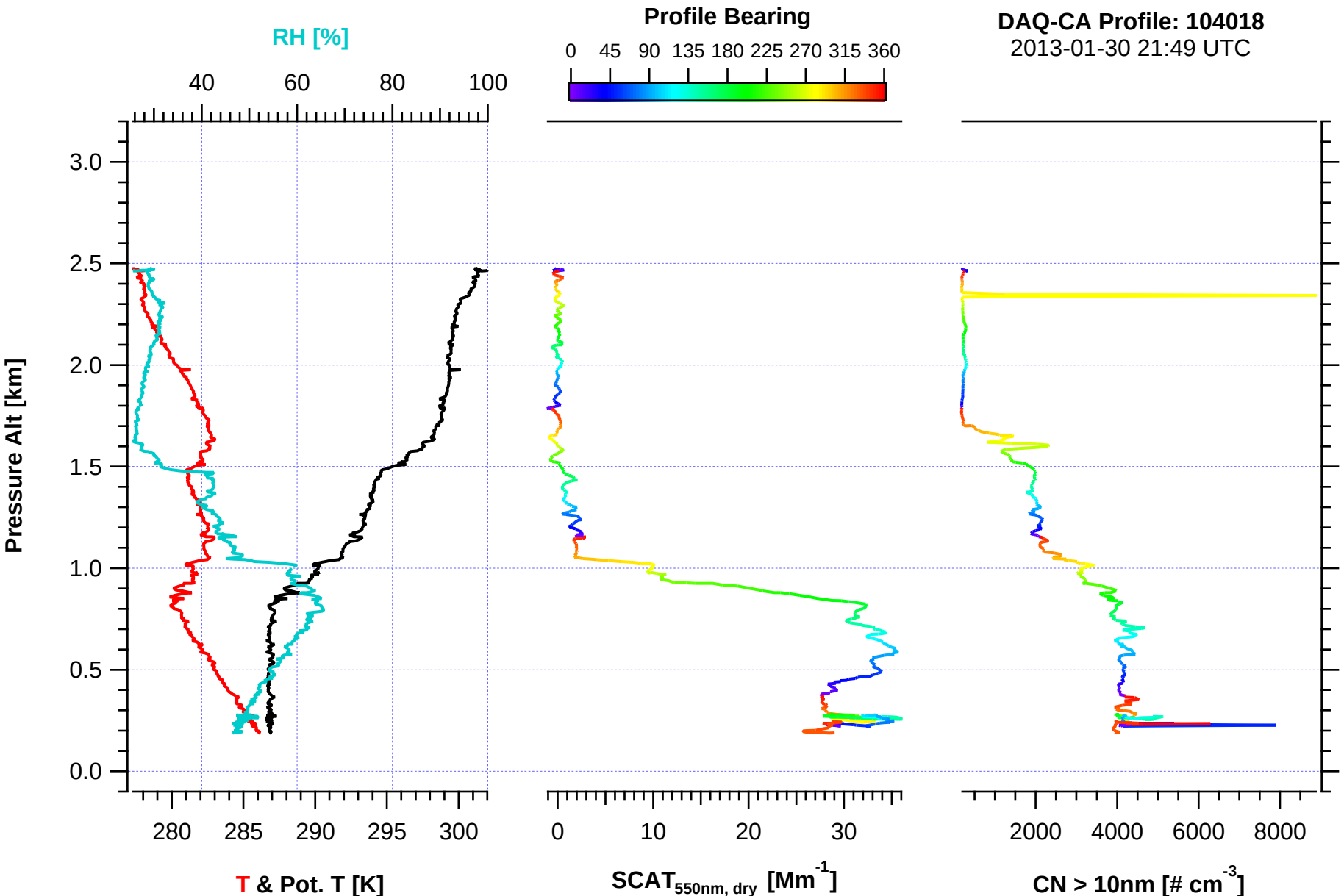

DAQ-CA Profile: 104018
2013-01-30 21:49 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
4000 5000 6000 7000 8000
H2O Mixing Ratio [ppmv]
396 398 400 402 404
CO2 Mixing Ratio [ppmv]

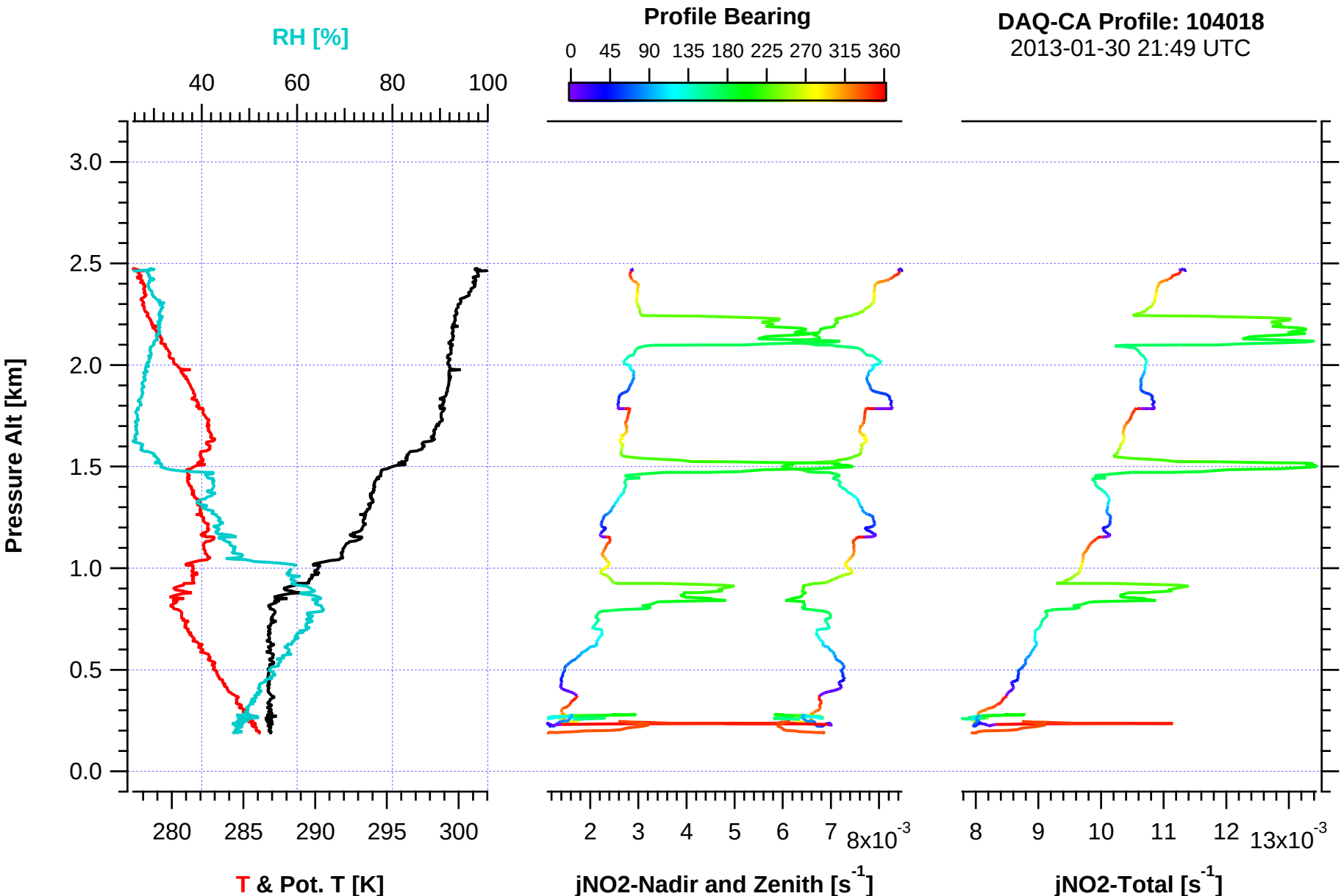

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104018
2013-01-30 21:49 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
100 120 140 160
CO Mixing Ratio [ppbv]
40 42 44 46 48 50
O3 Mixing Ratio [ppbv]

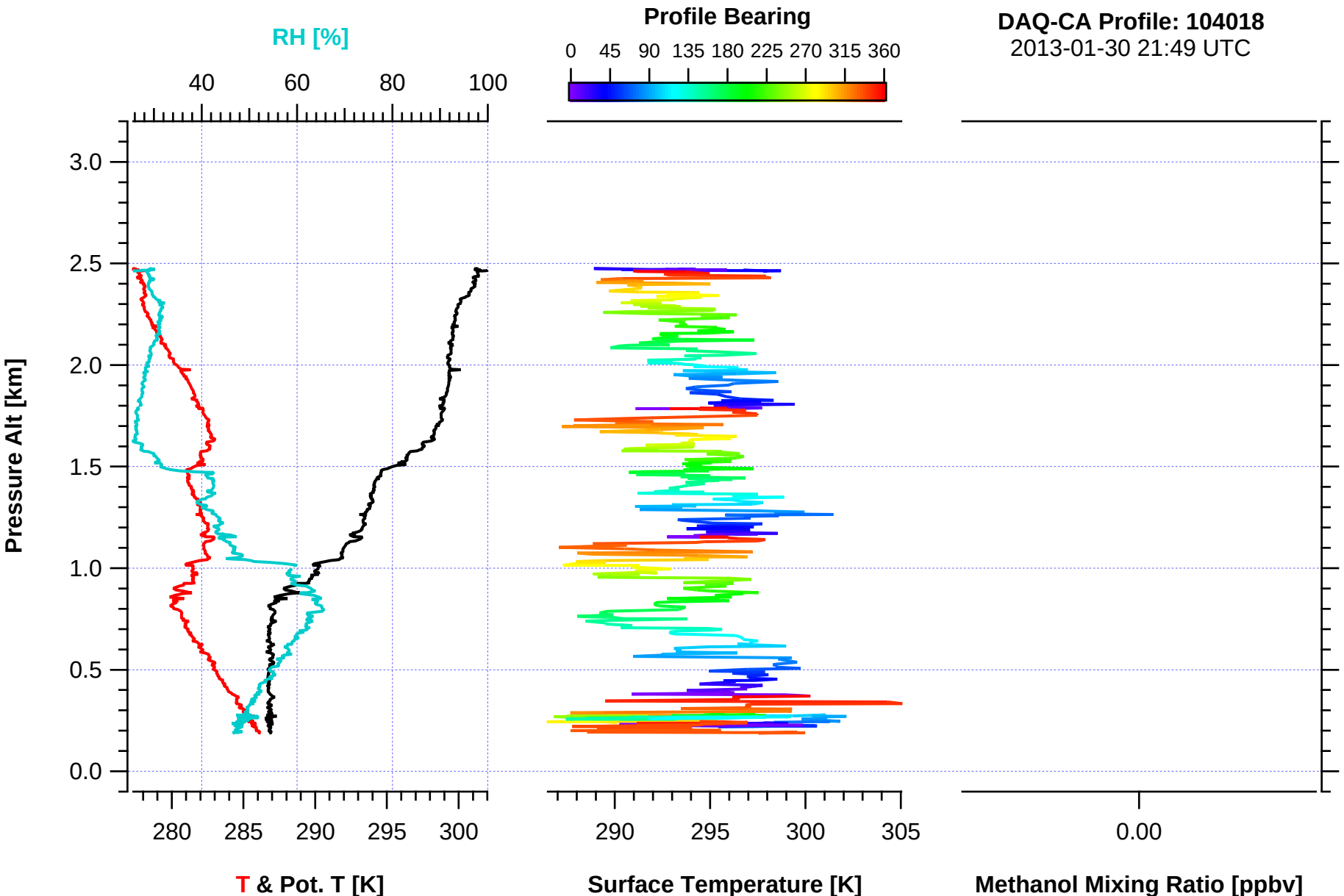

DAQ-CA Profile: 104018
2013-01-30 21:49 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 400 800 1200 1600
NO2 Mixing Ratio [pptv]
0 200 400 600 800
NO Mixing Ratio [pptv]

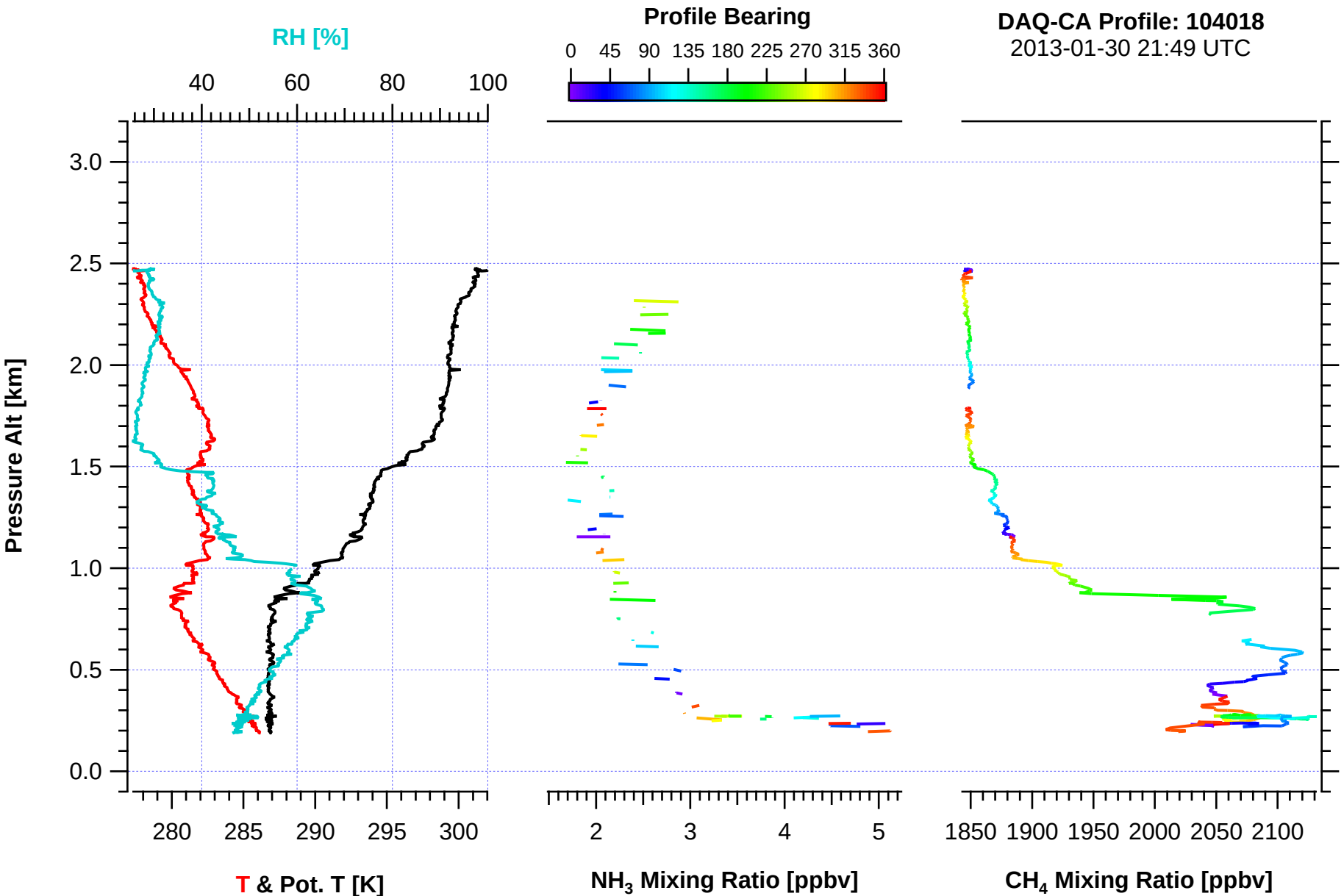

DAQ-CA Profile: 104018
2013-01-30 21:49 UTC
RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 400 800 1200 1600
CH2O Mixing Ratio [pptv]
0.00
Acetaldehyde Mixing Ratio [ppbv]

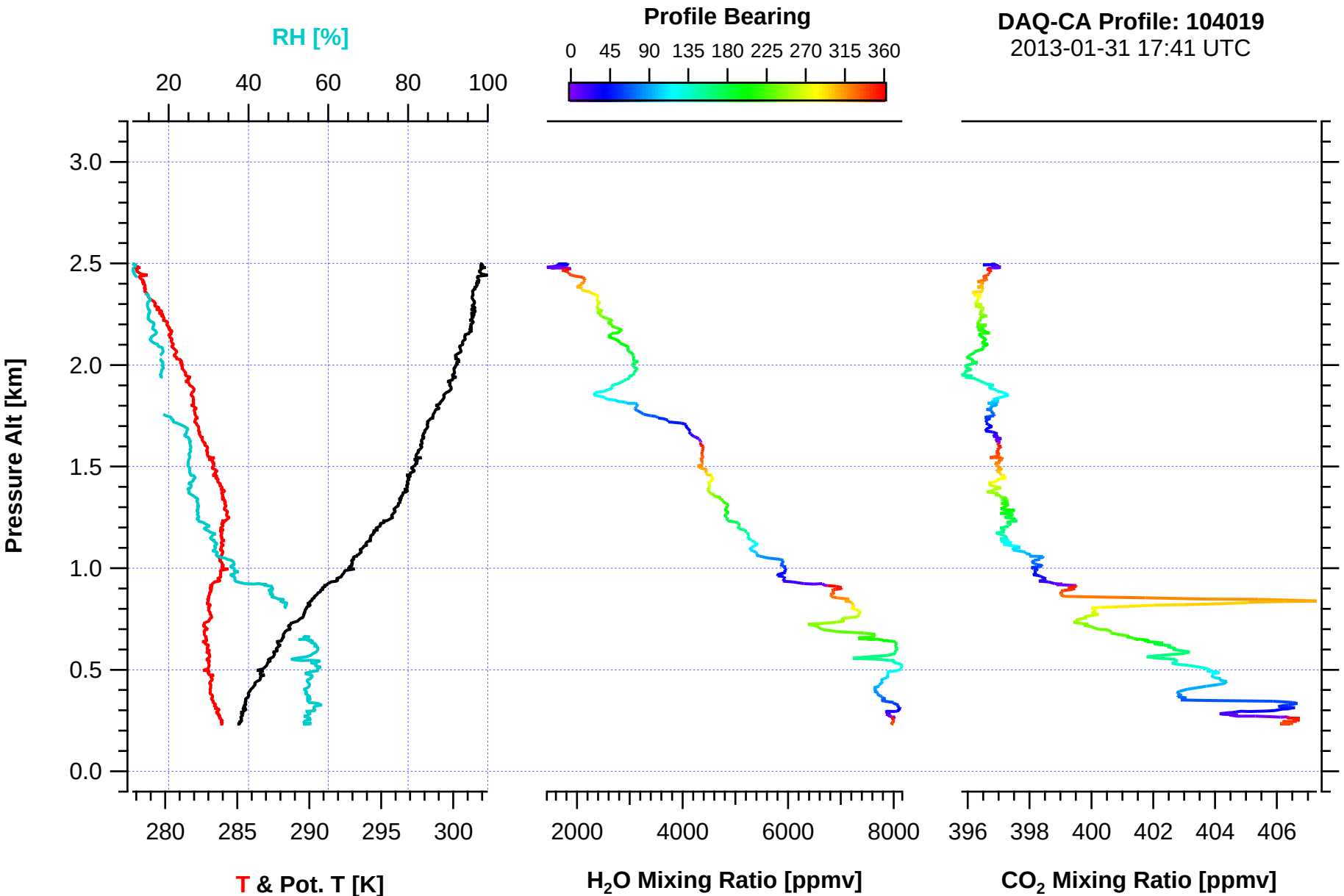

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104018
2013-01-30 21:49 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
0.00
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
0.00
Isoprene Mixing Ratio [ppbv]

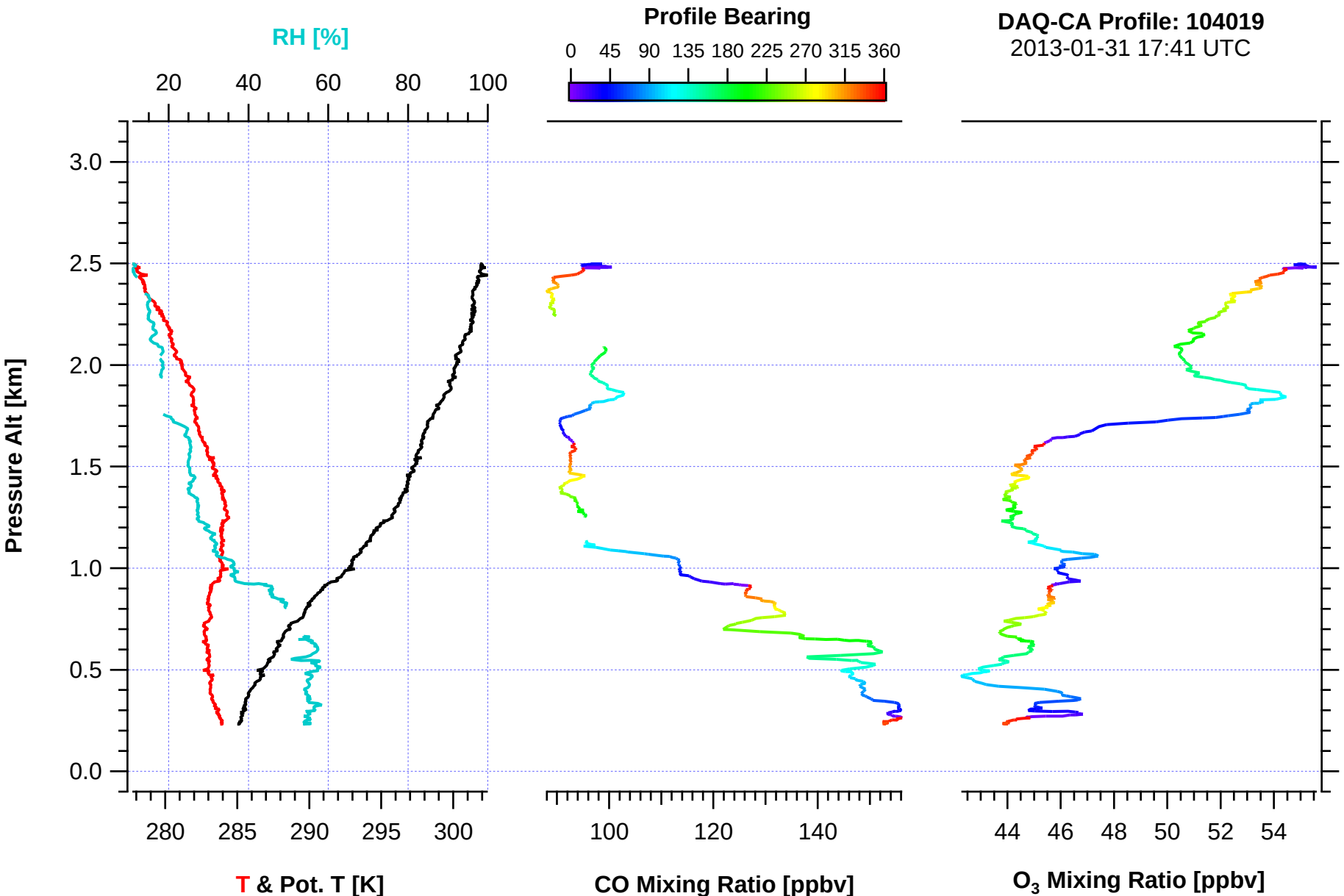

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104018
2013-01-30 21:49 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 10 20 30
SCAT550nm, dry [Mm-1]
2000 4000 6000 8000
CN > 10nm [# cm-3]

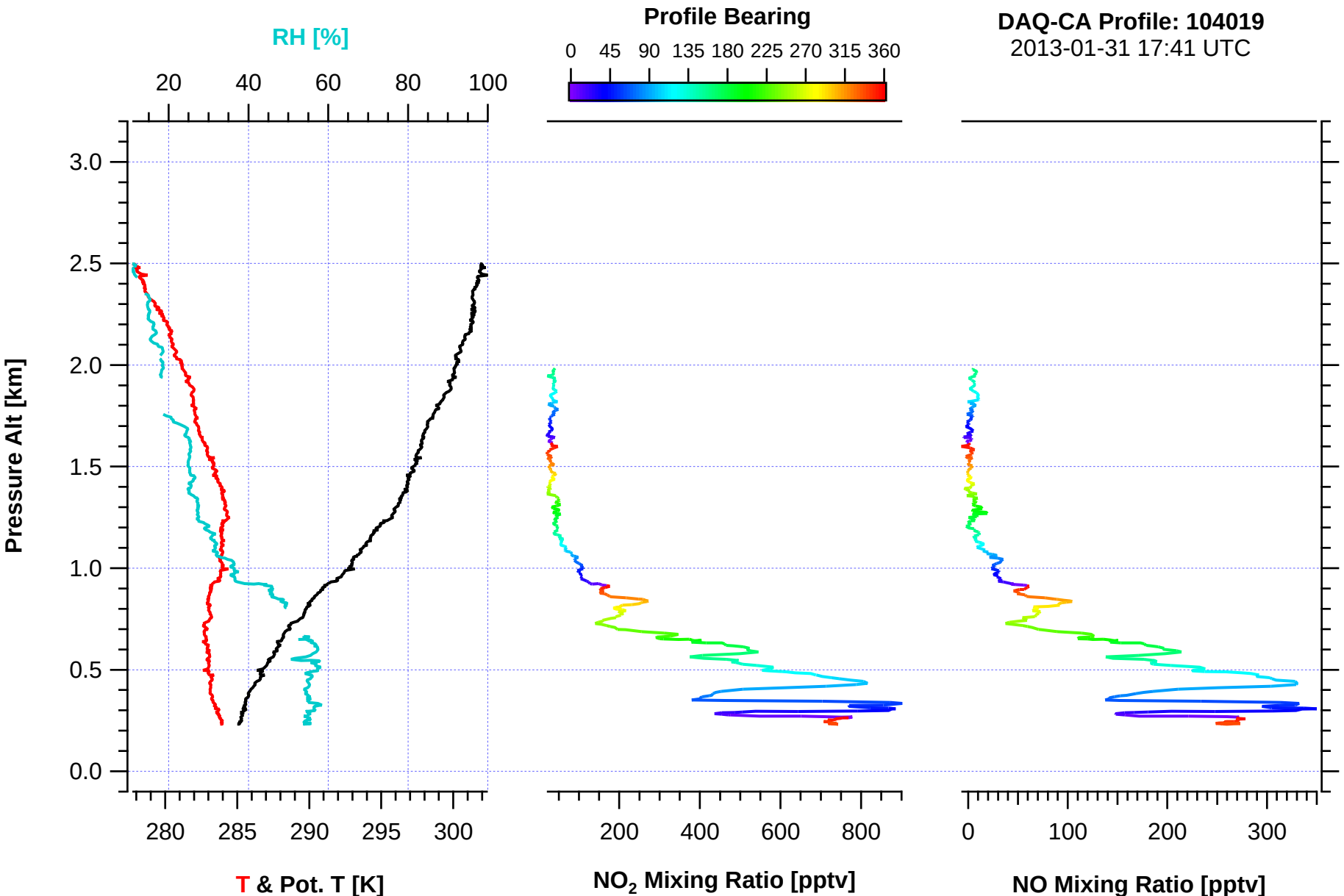

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104018
2013-01-30 21:49 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2 3 4 5 6 7 8x10-3
jNO2-Nadir and Zenith [s-1]
8 9 10 11 12 13x10-3
jNO2-Total [s-1]

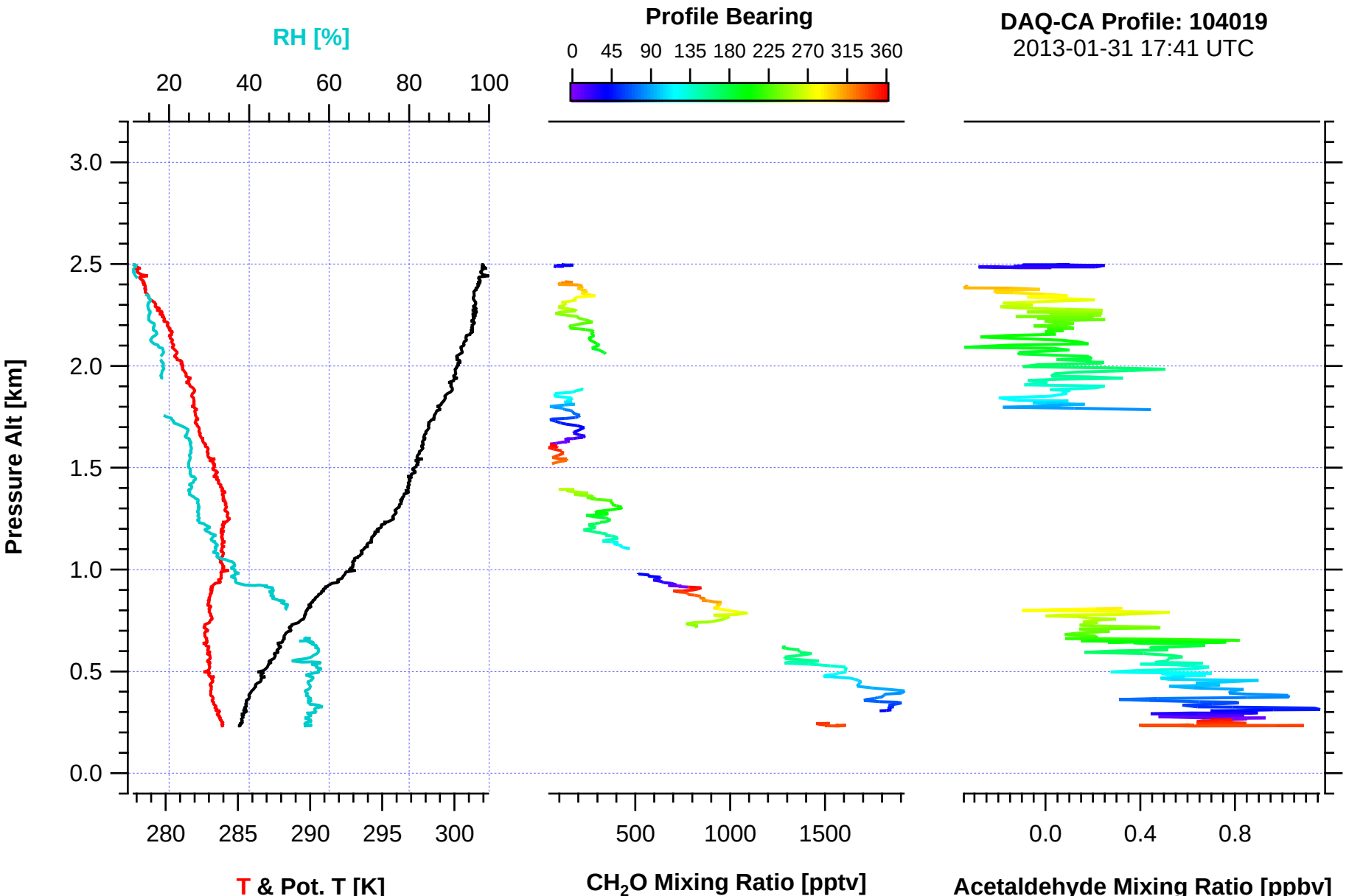

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104018
2013-01-30 21:49 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
290 295 300 305
Surface Temperature [K]
0.00
Methanol Mixing Ratio [ppbv]

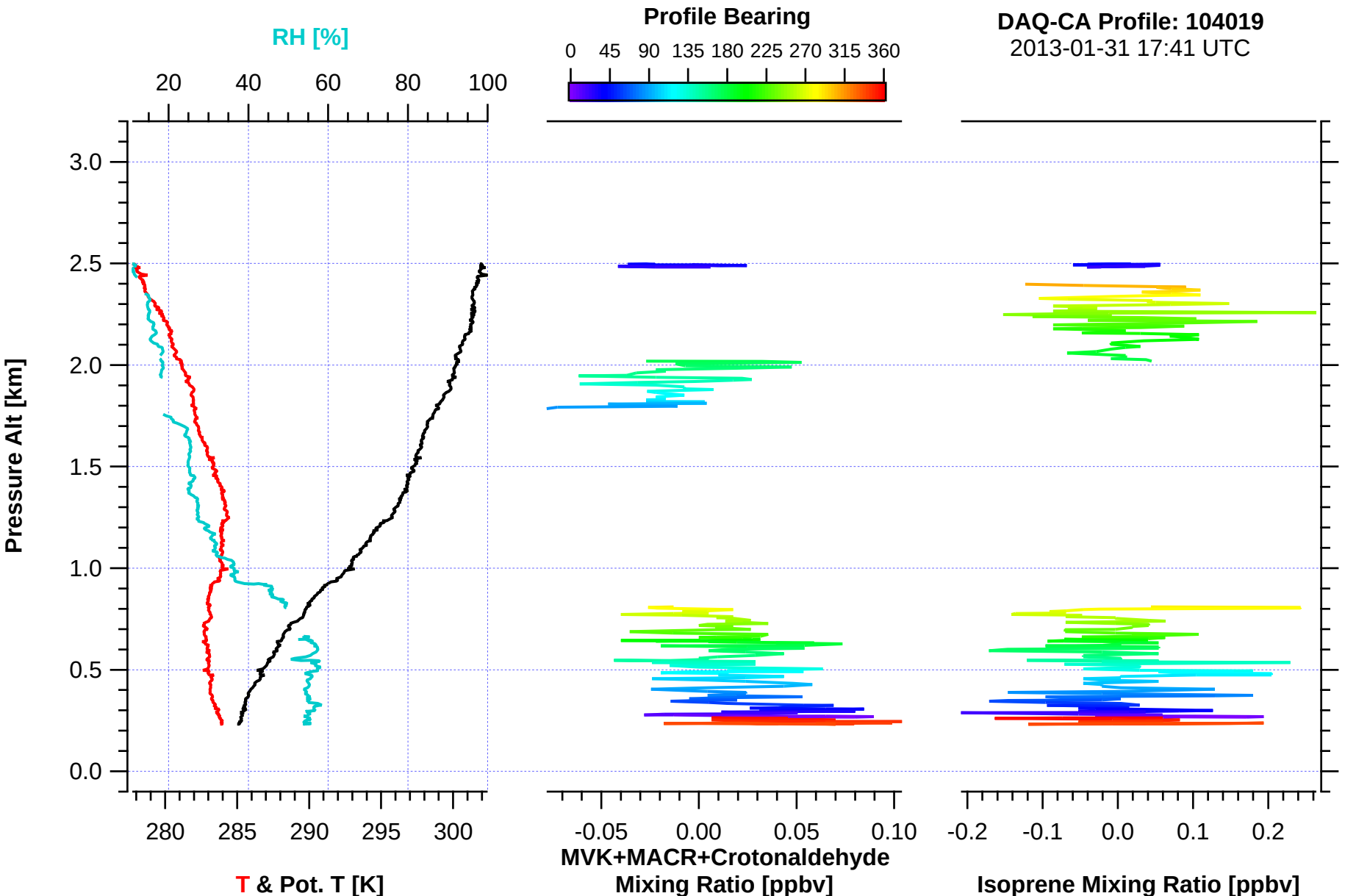

RH [%]
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104018
2013-01-30 21:49 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2 3 4 5
NH3 Mixing Ratio [ppbv]
1850 1900 1950 2000 2050 2100
CH4 Mixing Ratio [ppbv]

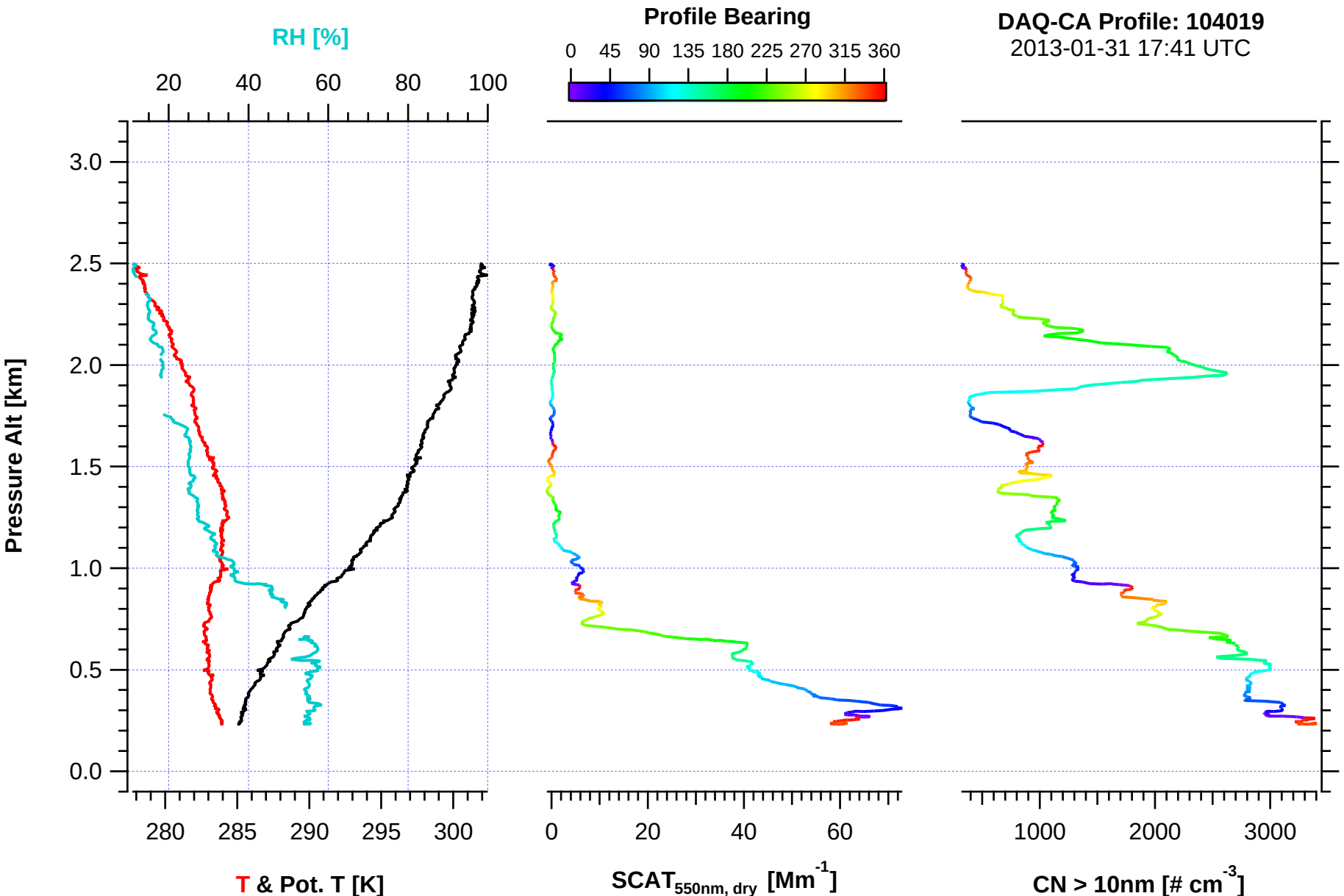

DAQ-CA Profile: 104019
2013-01-31 17:41 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2000 4000 6000 8000
H2O Mixing Ratio [ppmv]
396 398 400 402 404 406
CO2 Mixing Ratio [ppmv]

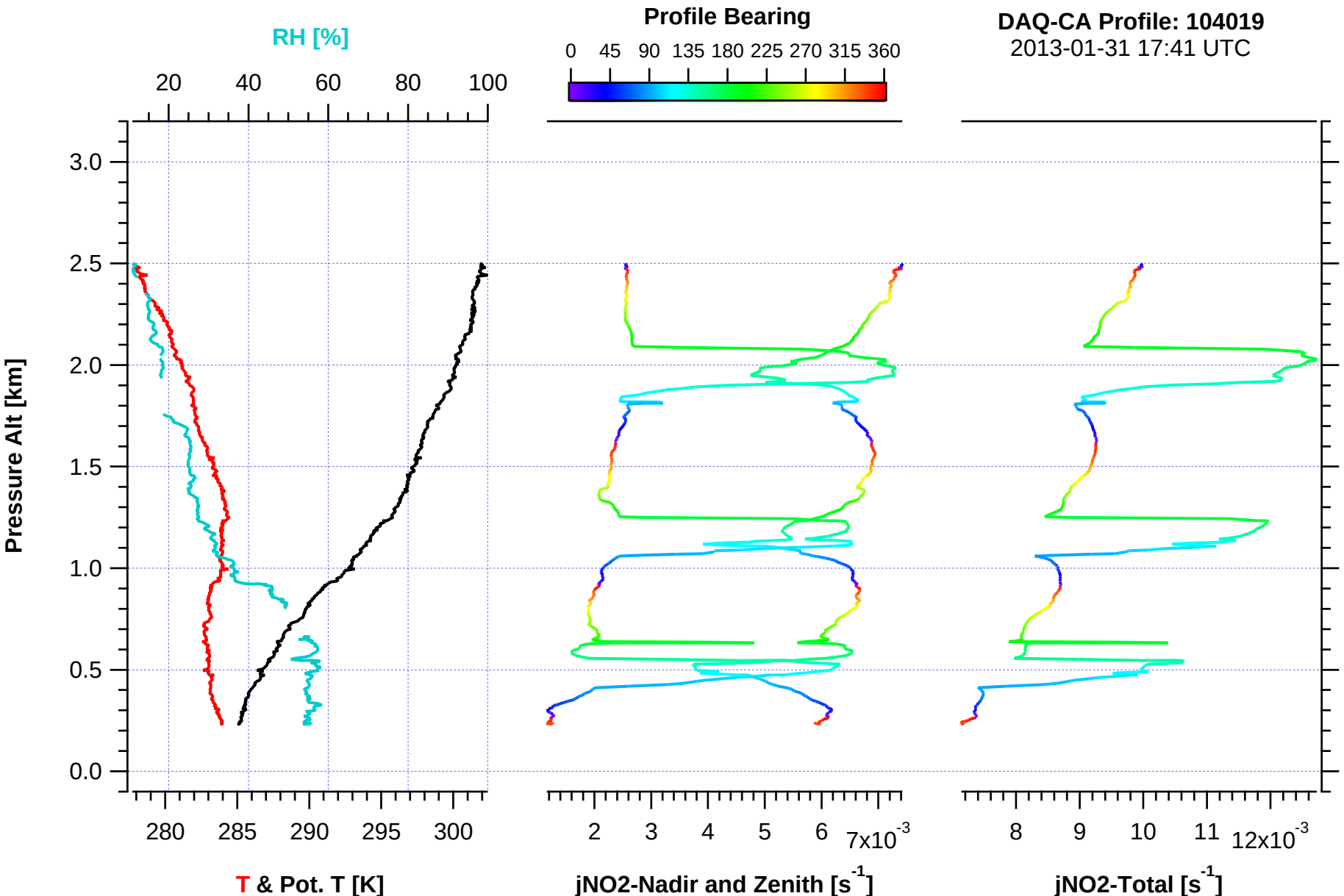

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104019
2013-01-31 17:41 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
100 120 140
CO Mixing Ratio [ppbv]
44 46 48 50 52 54
O3 Mixing Ratio [ppbv]

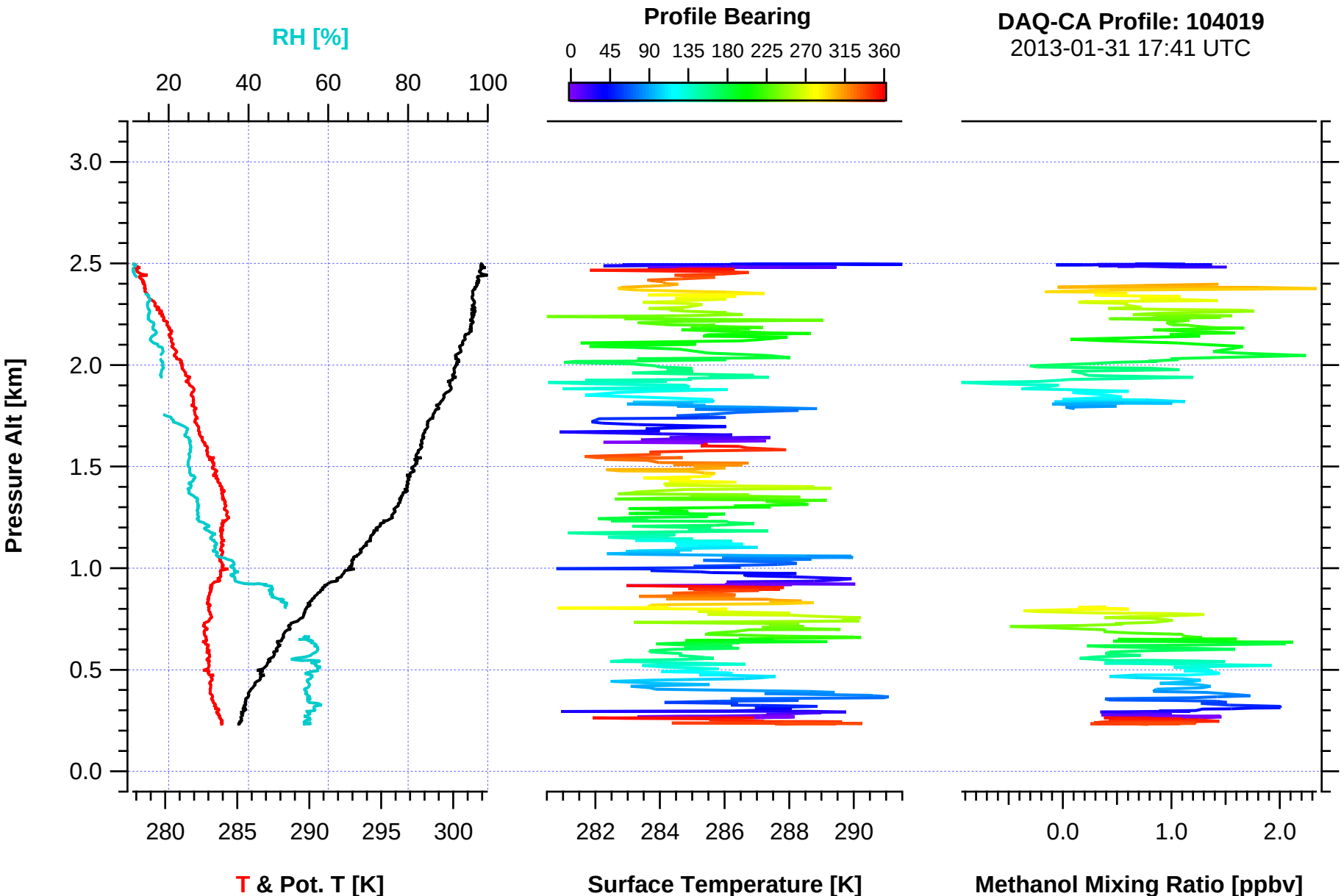

DAQ-CA Profile: 104019
2013-01-31 17:41 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
200 400 600 800
NO2 Mixing Ratio [pptv]
0 100 200 300
NO Mixing Ratio [pptv]

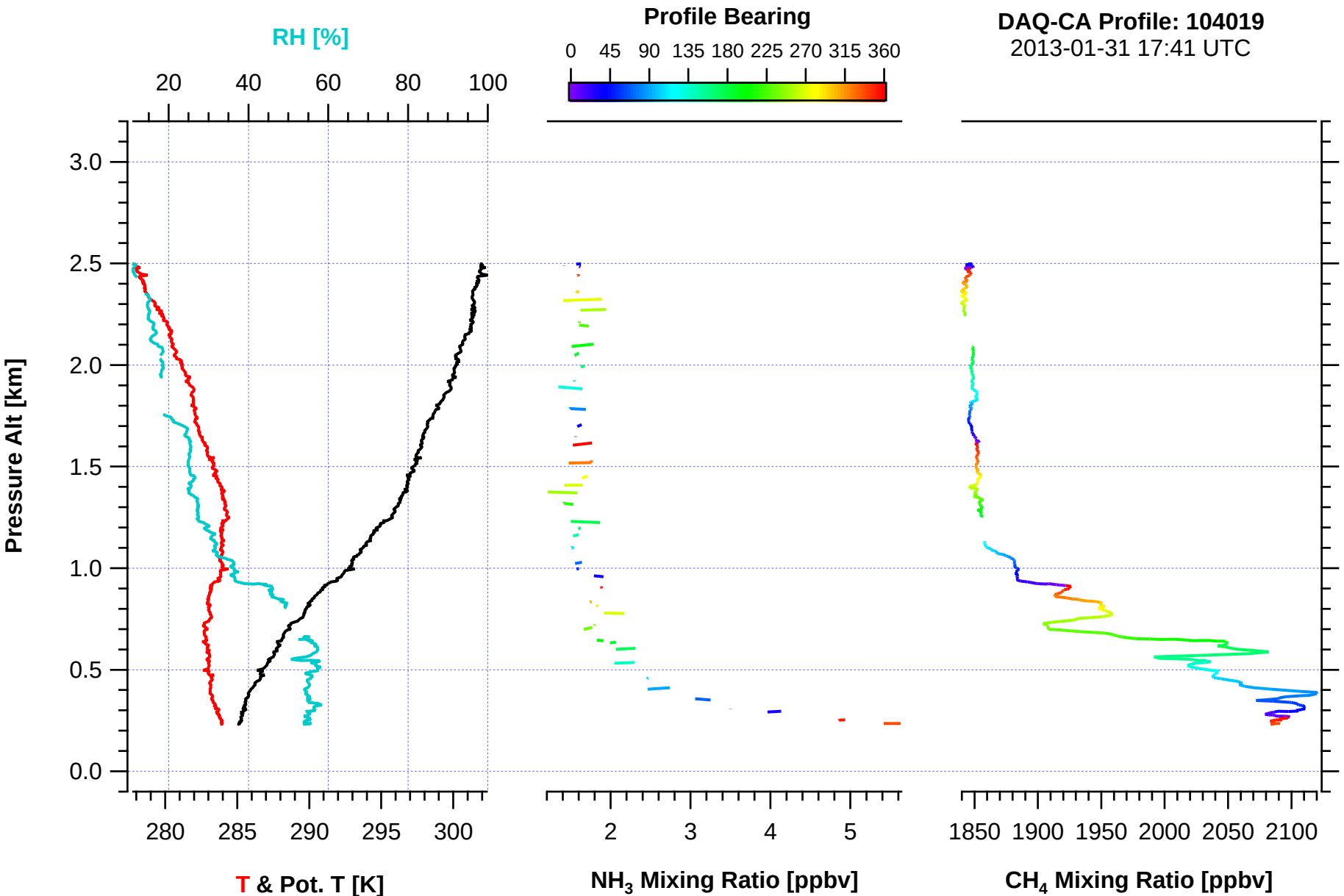

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104019
2013-01-31 17:41 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
500
1000
1500
CH2O Mixing Ratio [pptv]
0.0
0.4
0.8
Acetaldehyde Mixing Ratio [ppbv]

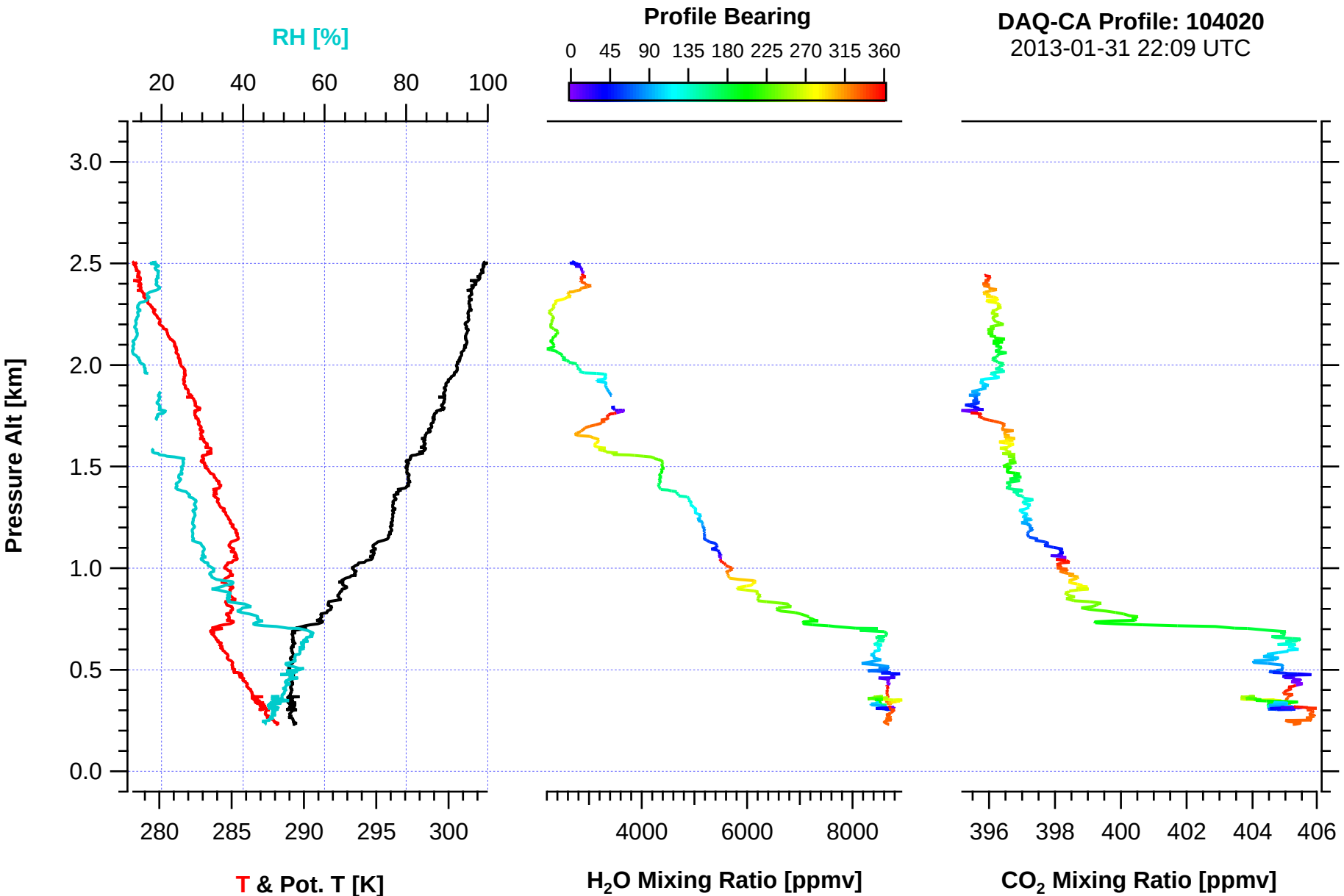

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104019
2013-01-31 17:41 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
-0.05
0.00
0.05
0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.2
-0.1
0.0
0.1
0.2
Isoprene Mixing Ratio [ppbv]

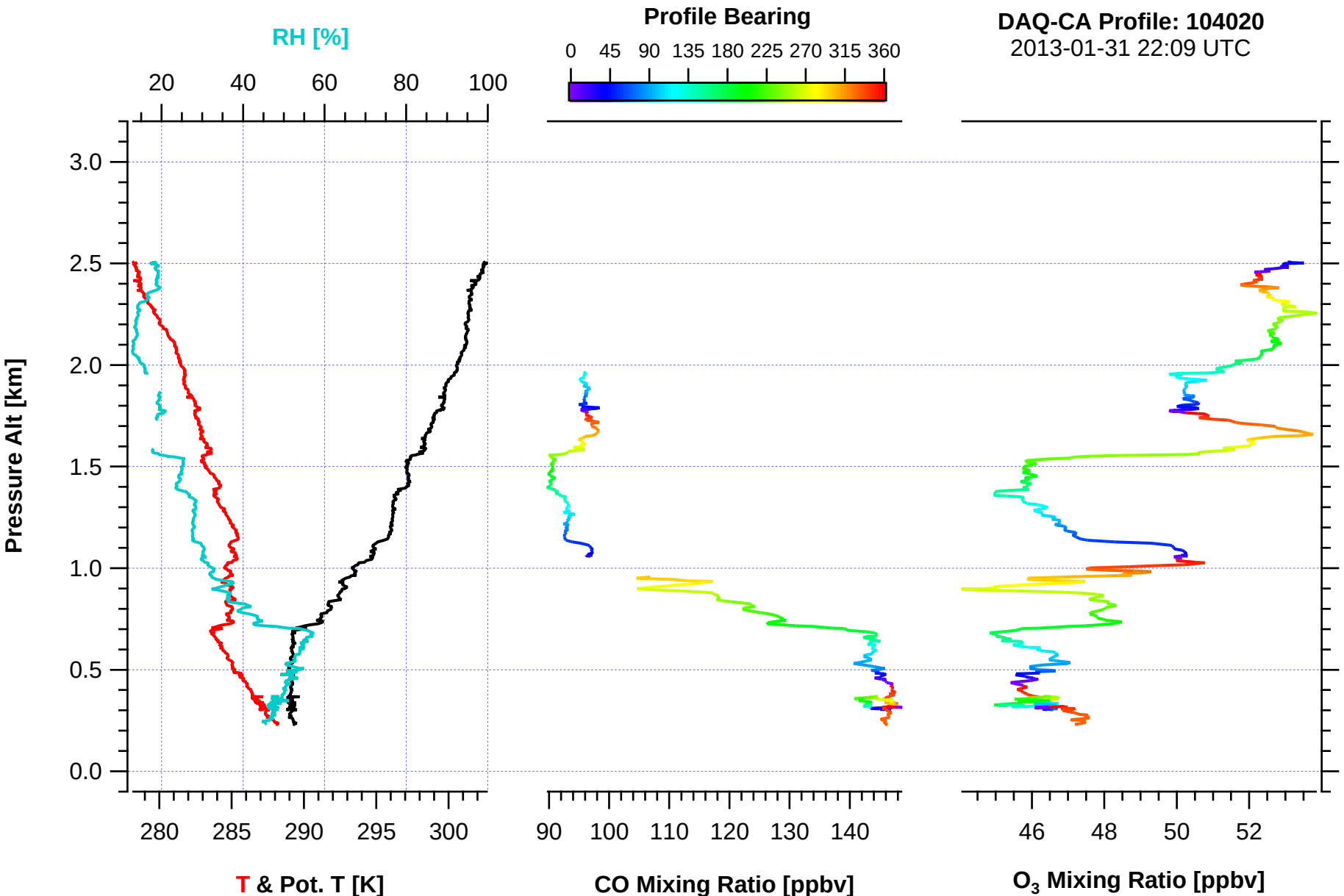

DAQ-CA Profile: 104019
2013-01-31 17:41 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 20 40 60
SCAT550nm, dry [Mm-1]
1000 2000 3000
CN > 10nm [# cm-3]

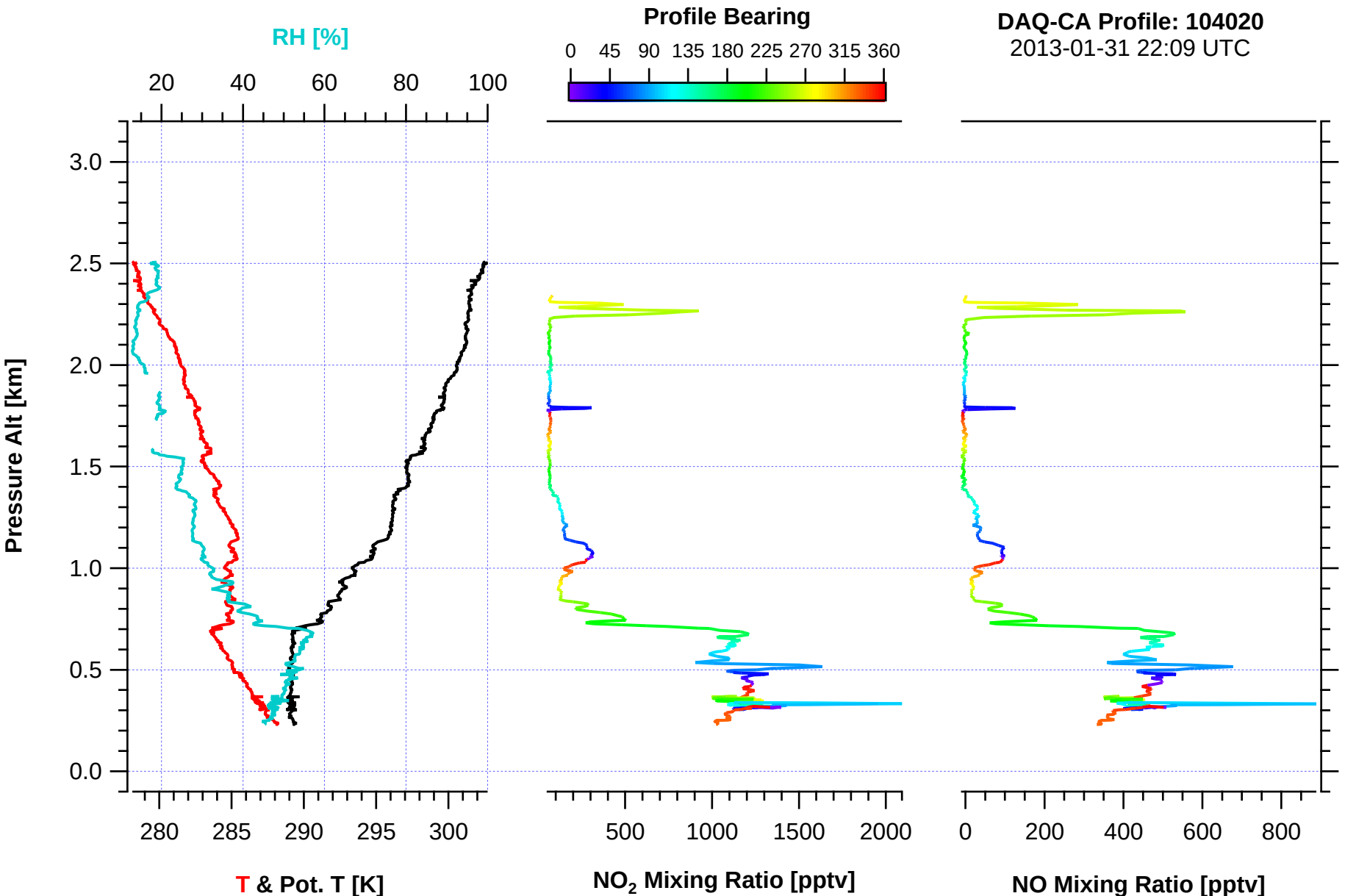

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104019
2013-01-31 17:41 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2 3 4 5 6 7x10-3
jNO2-Nadir and Zenith [s-1]
8 9 10 11 12x10-3
jNO2-Total [s-1]

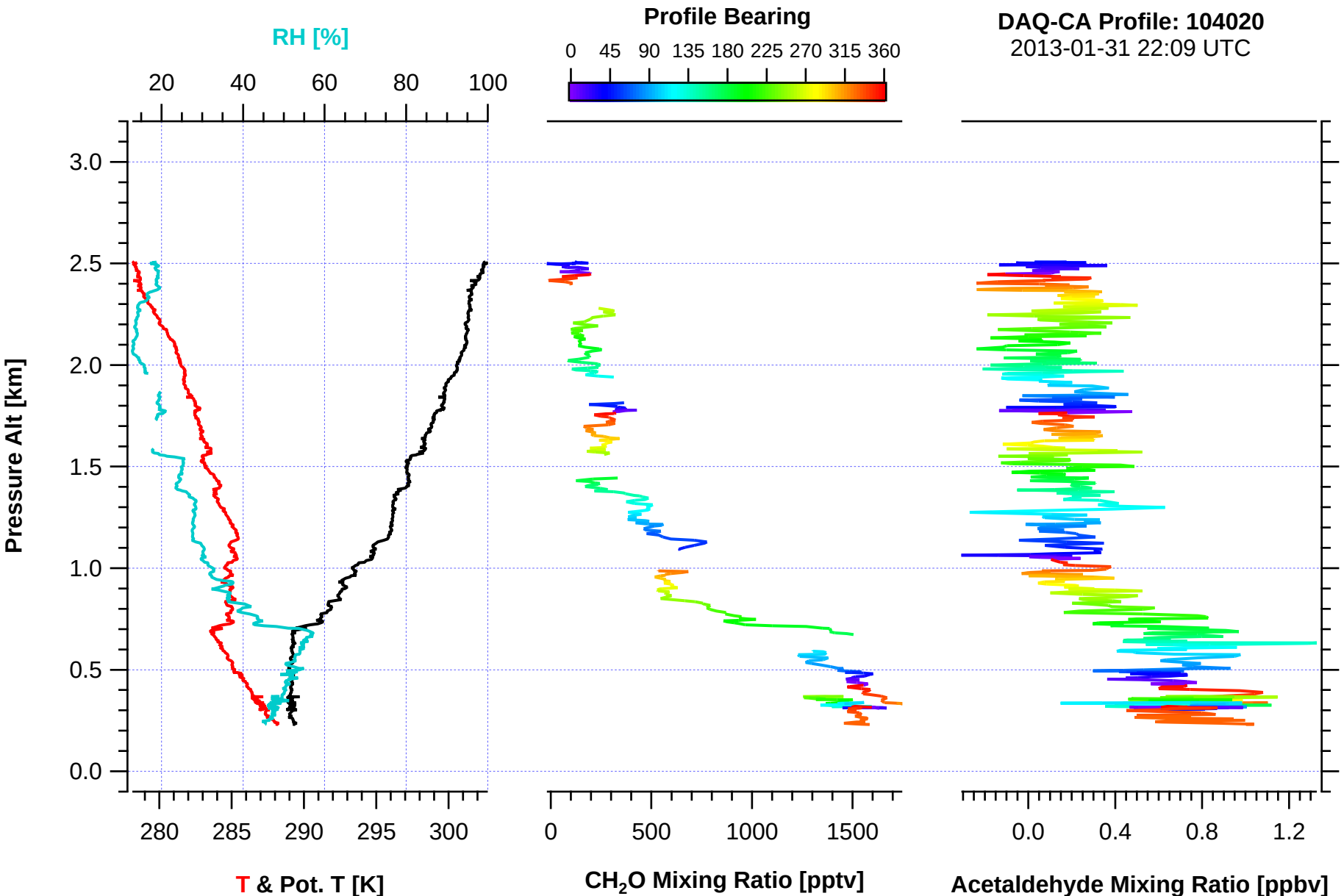

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104019
2013-01-31 17:41 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
282 284 286 288 290
Surface Temperature [K]
0.0 1.0 2.0
Methanol Mixing Ratio [ppbv]

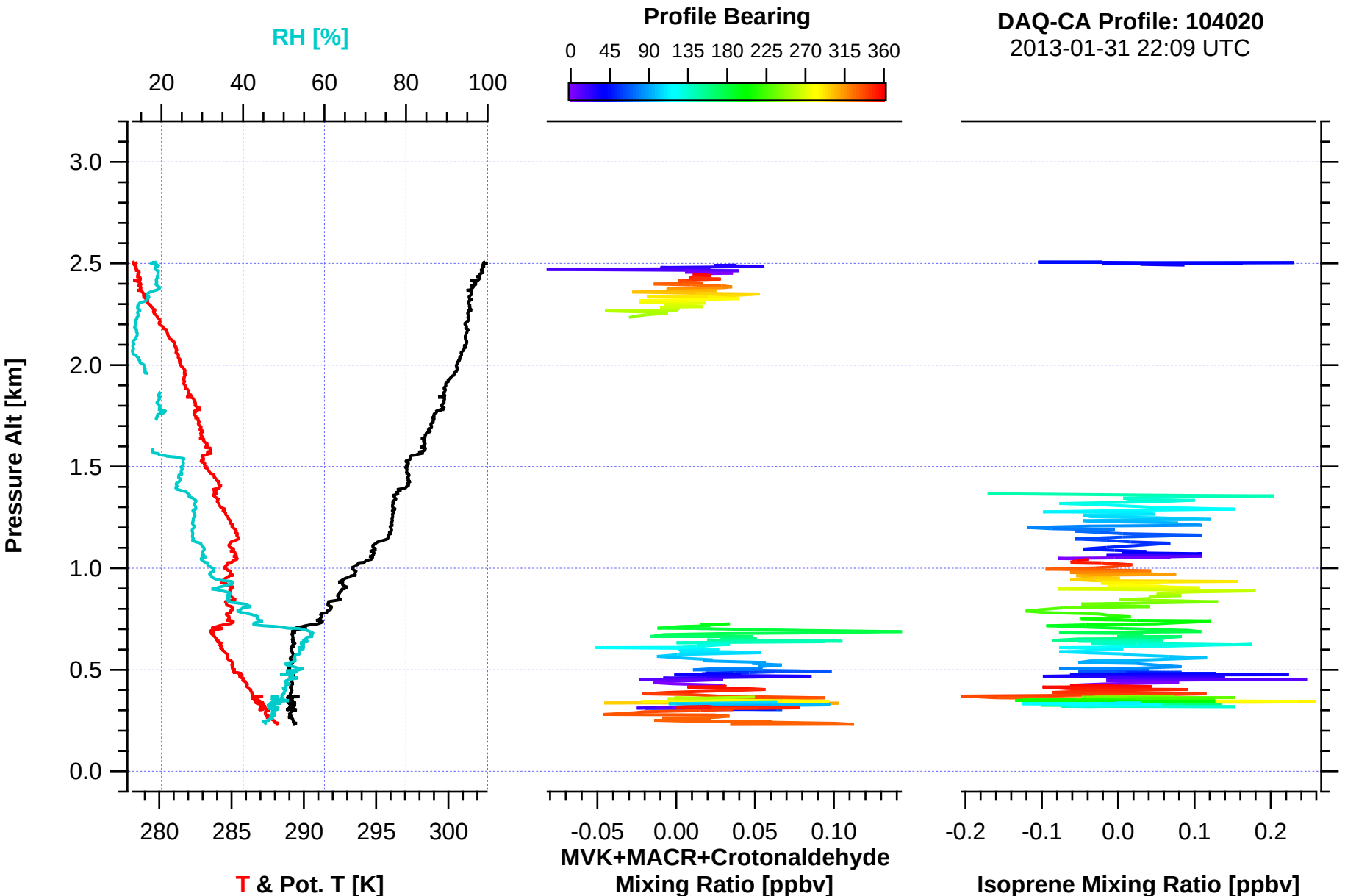

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104019
2013-01-31 17:41 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2 3 4 5
NH3 Mixing Ratio [ppbv]
1850 1900 1950 2000 2050 2100
CH4 Mixing Ratio [ppbv]

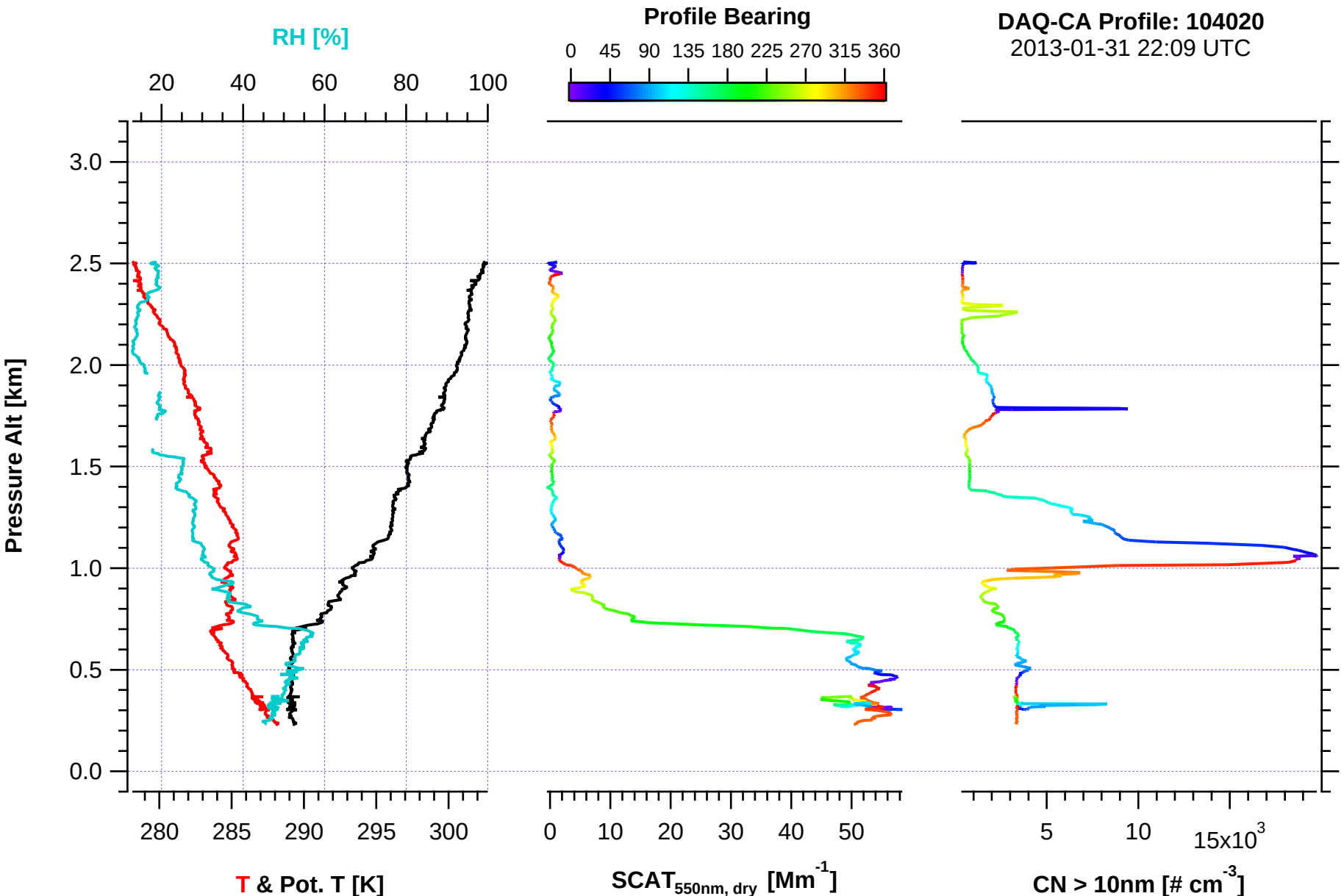

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104020
2013-01-31 22:09 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
4000
6000
8000
H2O Mixing Ratio [ppmv]
396
398
400
402
404
406
CO2 Mixing Ratio [ppmv]

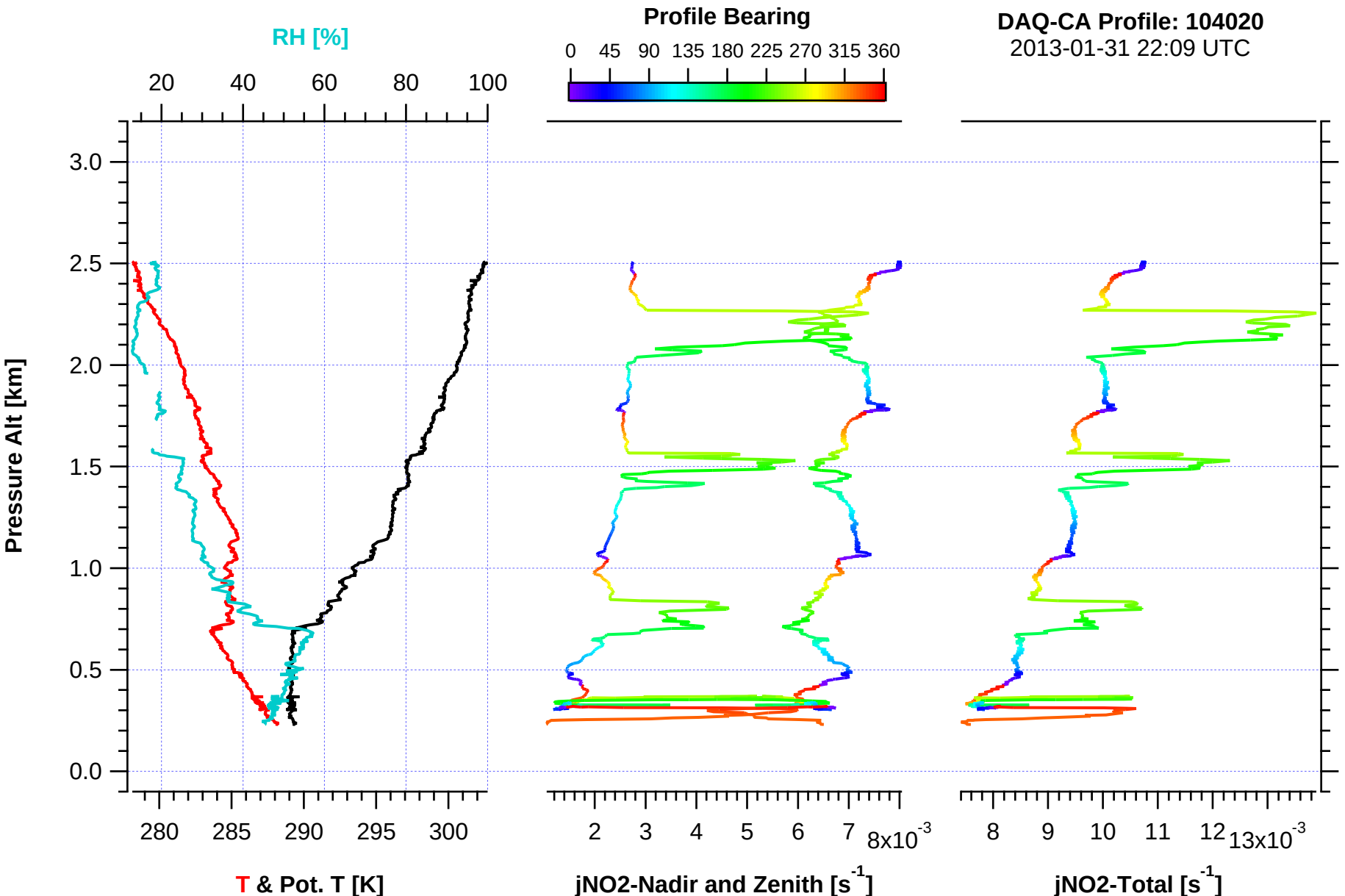

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104020
2013-01-31 22:09 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
90 100 110 120 130 140
CO Mixing Ratio [ppbv]
46 48 50 52
O3 Mixing Ratio [ppbv]

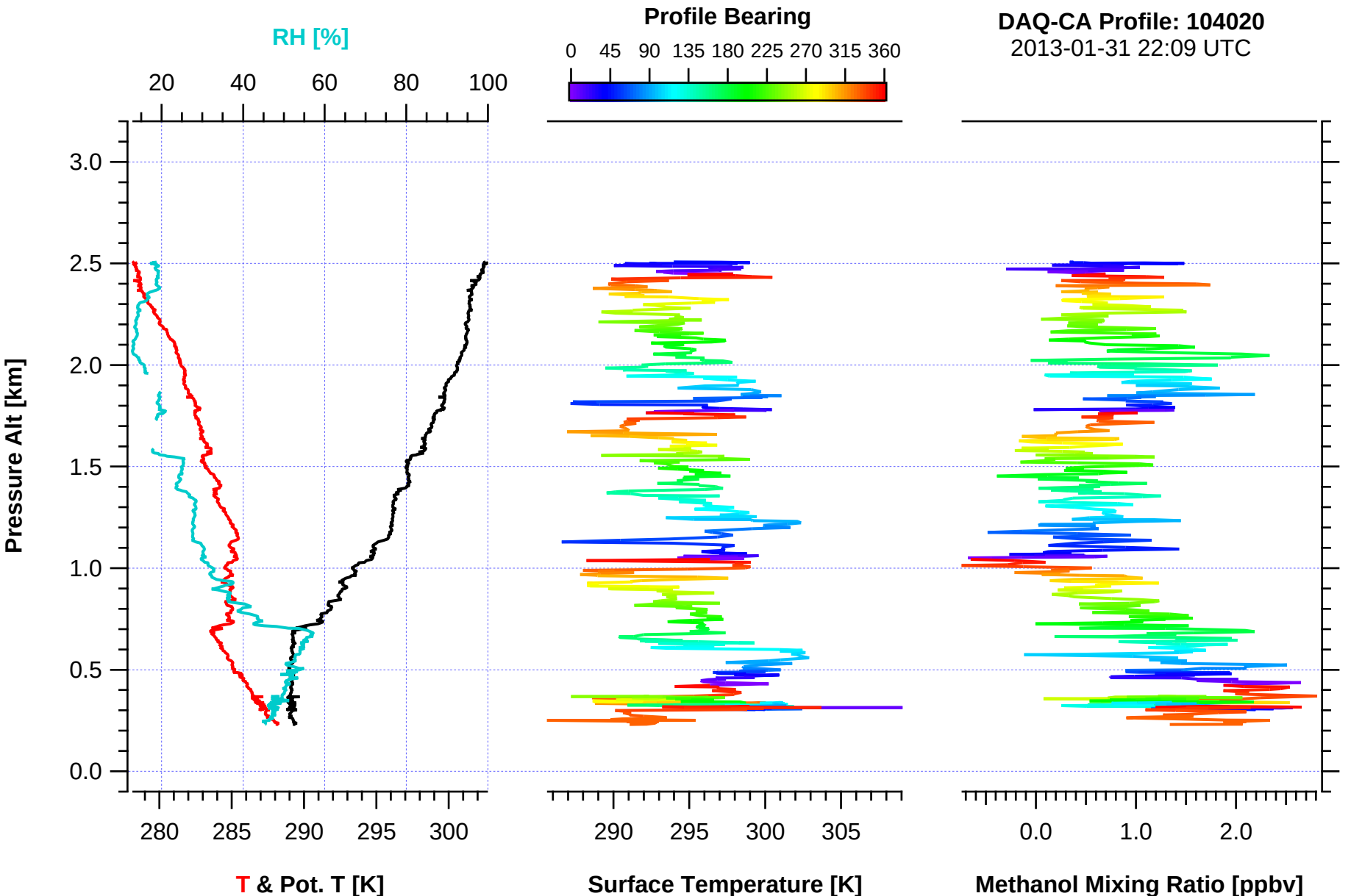

DAQ-CA Profile: 104020
2013-01-31 22:09 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0 2.5 2.0 1.5 1.0 0.5 0.0
280 285 290 295 300
T & Pot. T [K]
500 1000 1500 2000
NO2 Mixing Ratio [pptv]
0 200 400 600 800
NO Mixing Ratio [pptv]

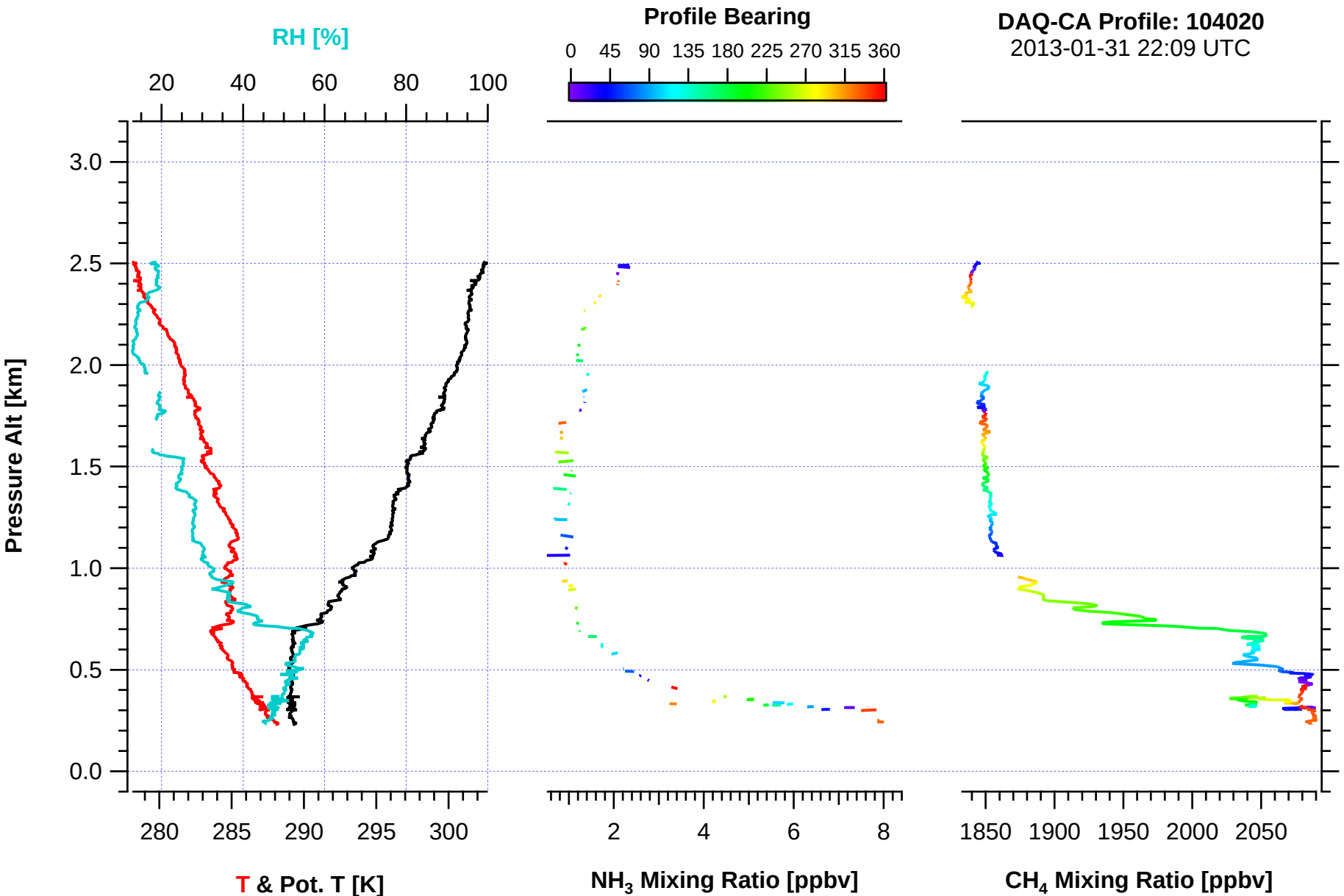

DAQ-CA Profile: 104020
2013-01-31 22:09 UTC
RH [%]
20
40
60
80
100
Profile Bearing
0
45
90
135
180
225
270
315
360
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
0
500
1000
1500
CH2O Mixing Ratio [pptv]
0.0
0.4
0.8
1.2
Acetaldehyde Mixing Ratio [ppbv]

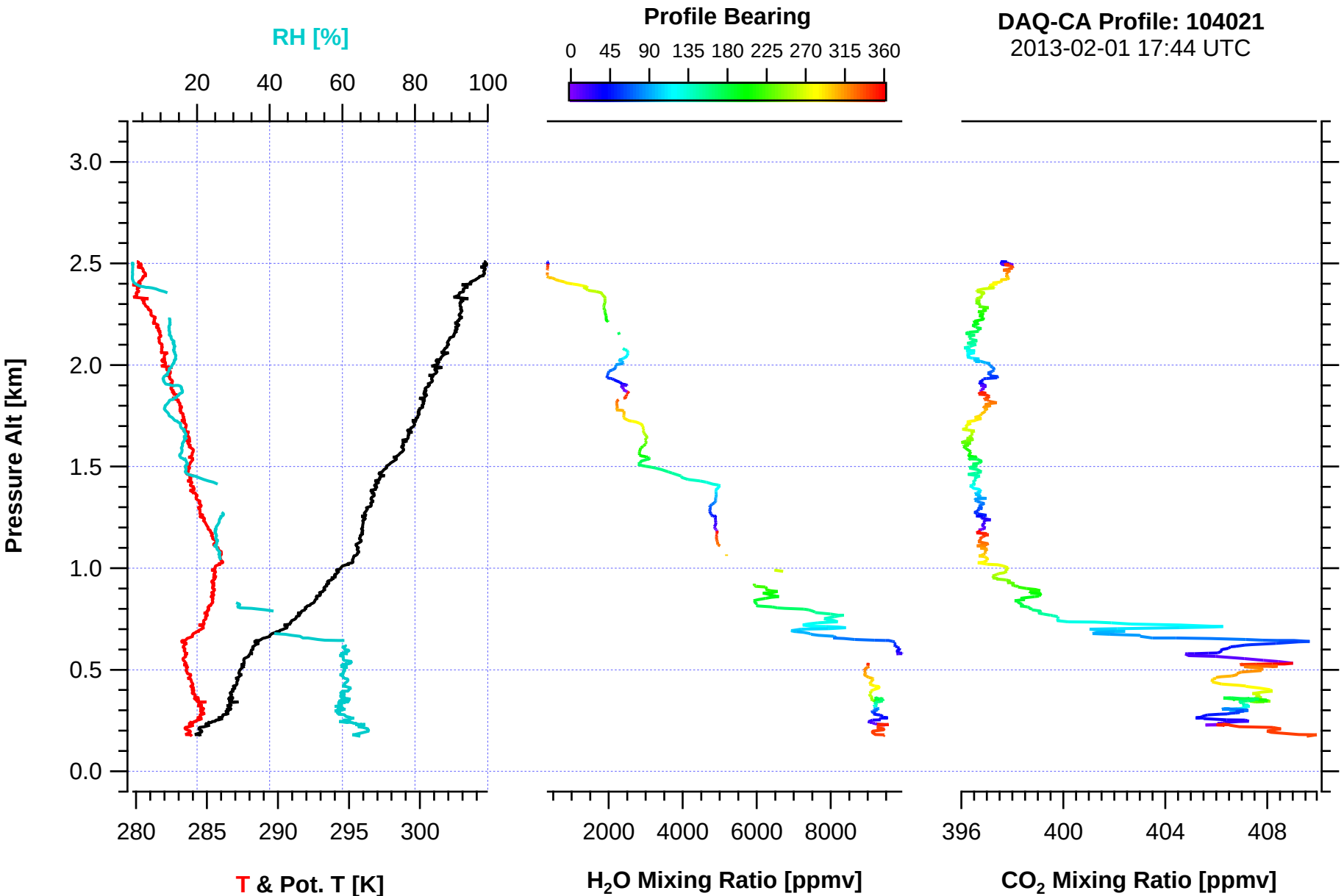

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104020
2013-01-31 22:09 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
-0.05 0.00 0.05 0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.2 -0.1 0.0 0.1 0.2
Isoprene Mixing Ratio [ppbv]

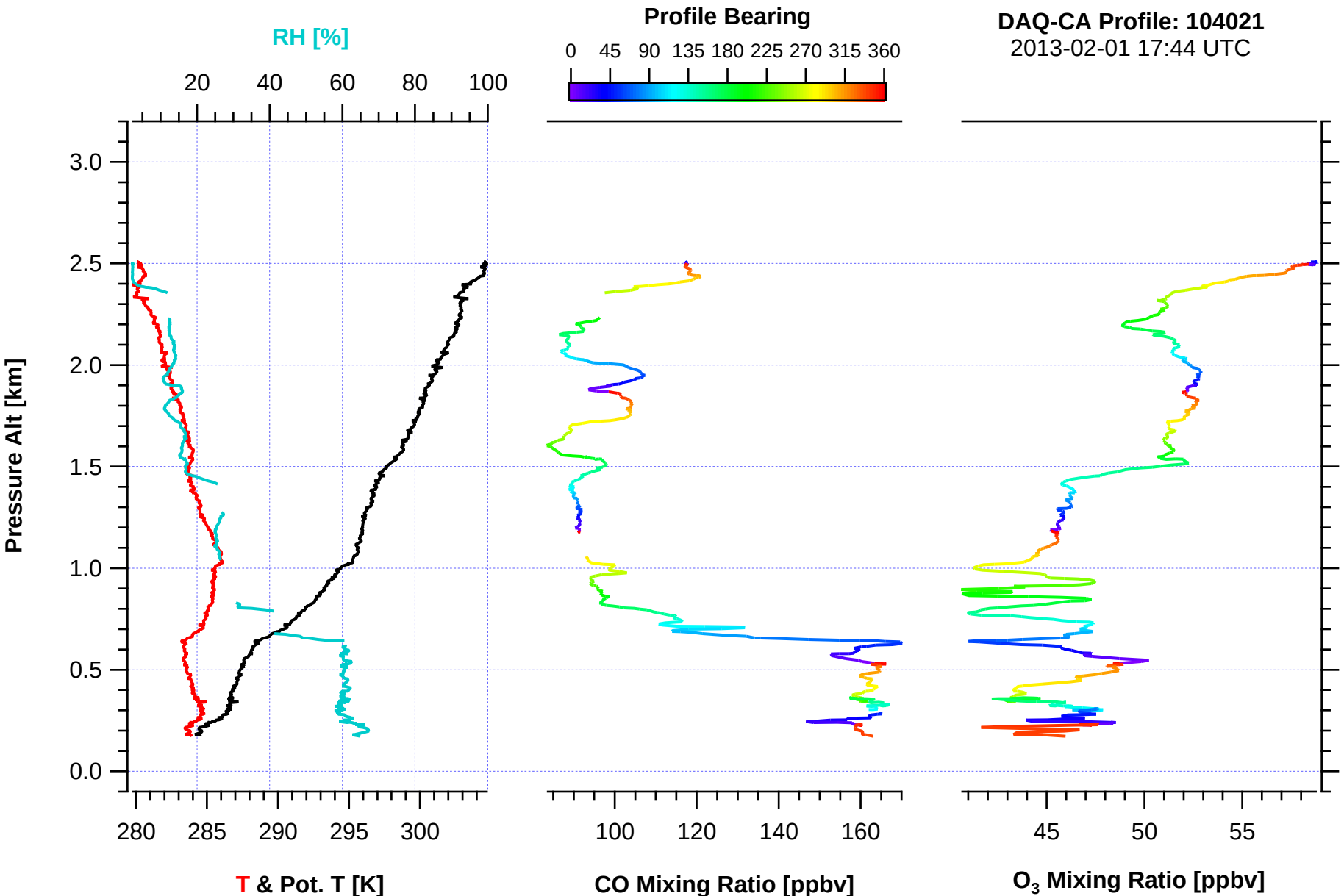

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104020
2013-01-31 22:09 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
0
10
20
30
40
50
SCAT550nm, dry [Mm-1]
5
10
15x10^3
CN > 10nm [# cm-3]

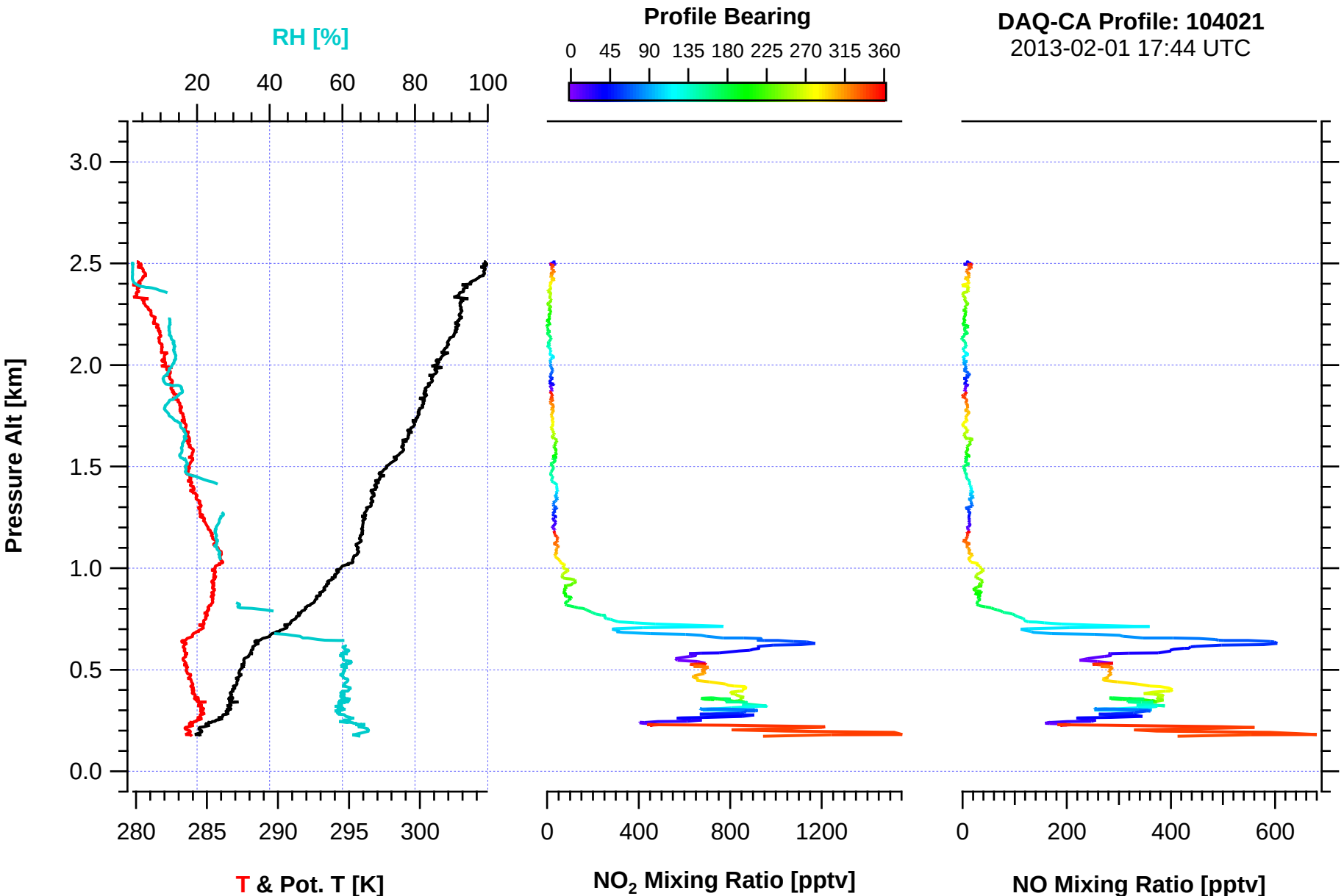

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104020
2013-01-31 22:09 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2 3 4 5 6 7 8x10-3
jNO2-Nadir and Zenith [s-1]
8 9 10 11 12 13x10-3
jNO2-Total [s-1]

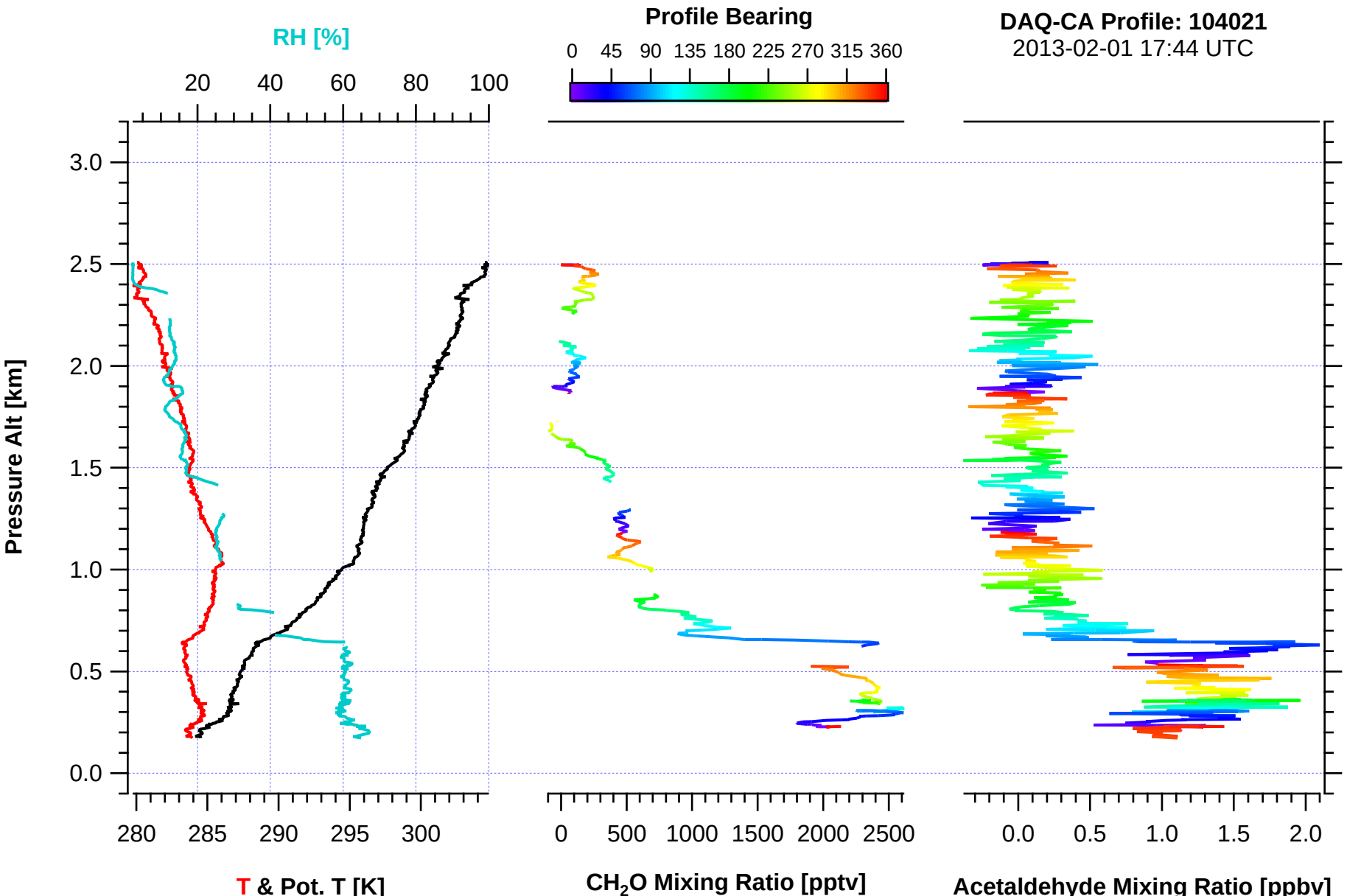

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104020
2013-01-31 22:09 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
290 295 300 305
Surface Temperature [K]
0.0 1.0 2.0
Methanol Mixing Ratio [ppbv]

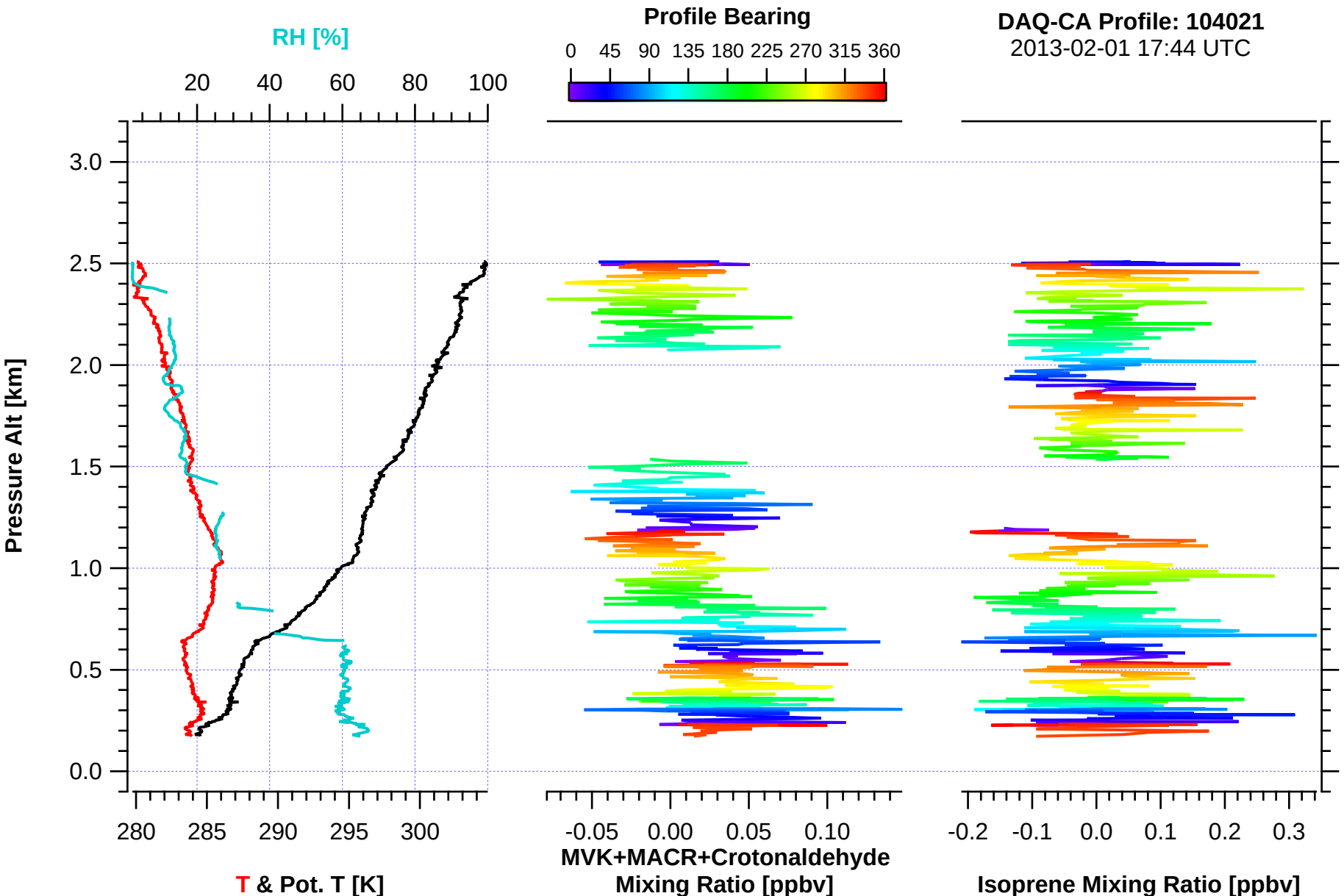

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104020
2013-01-31 22:09 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
2
4
6
8
NH3 Mixing Ratio [ppbv]
1850
1900
1950
2000
2050
CH4 Mixing Ratio [ppbv]

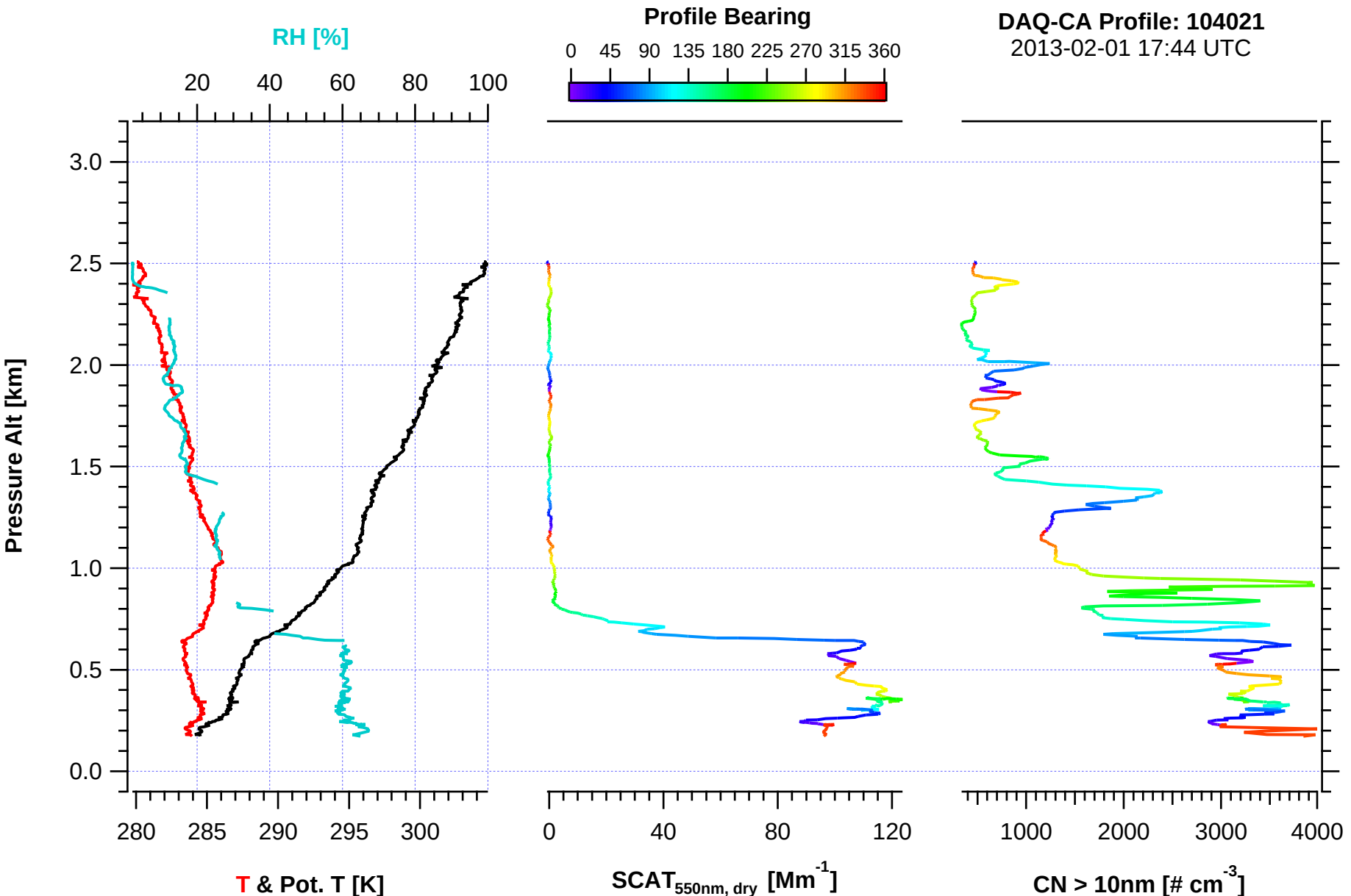

DAQ-CA Profile: 104021
2013-02-01 17:44 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2000 4000 6000 8000
H2O Mixing Ratio [ppmv]
396 400 404 408
CO2 Mixing Ratio [ppmv]

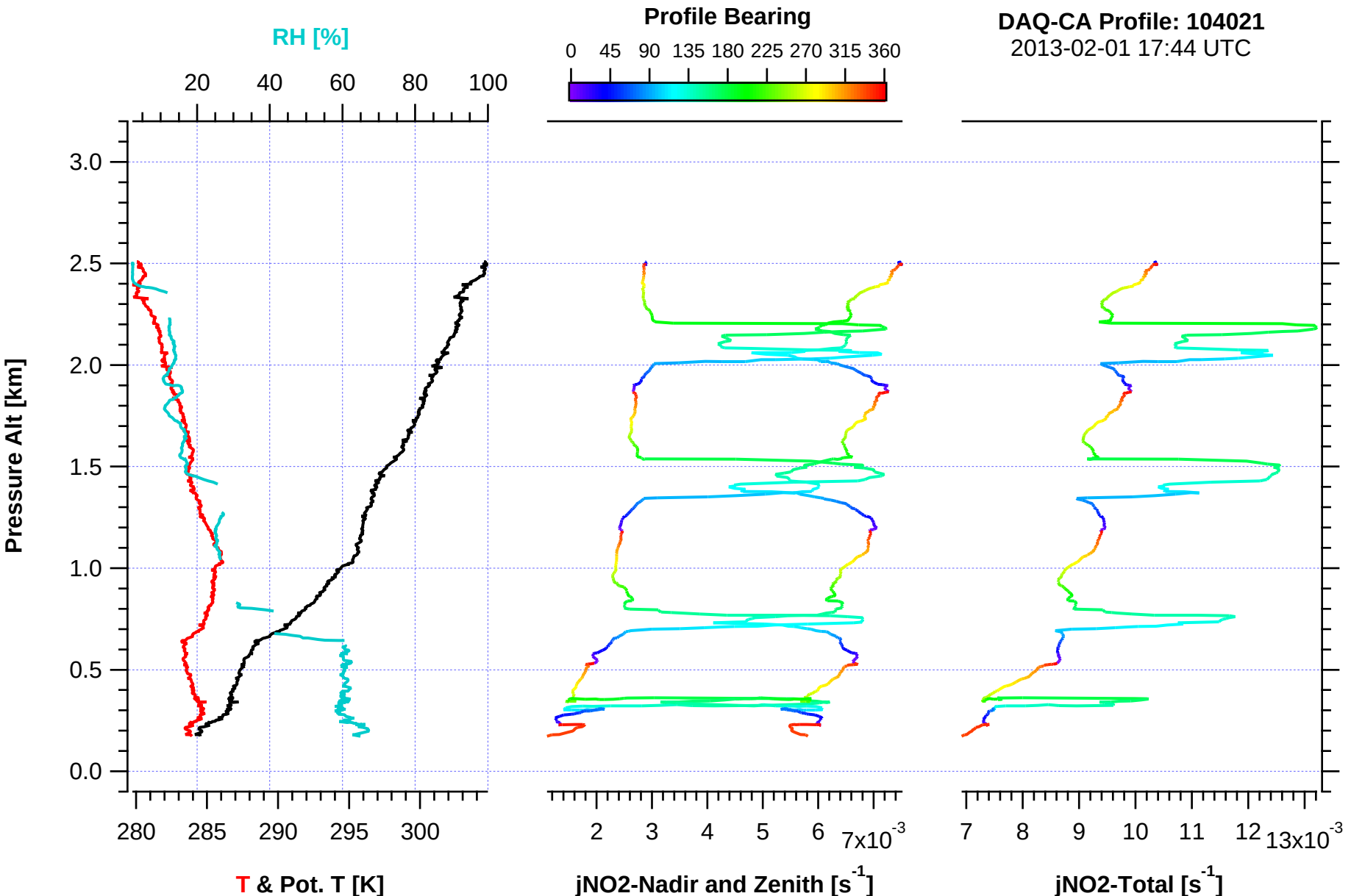

DAQ-CA Profile: 104021
2013-02-01 17:44 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
100 120 140 160
CO Mixing Ratio [ppbv]
45 50 55
O3 Mixing Ratio [ppbv]

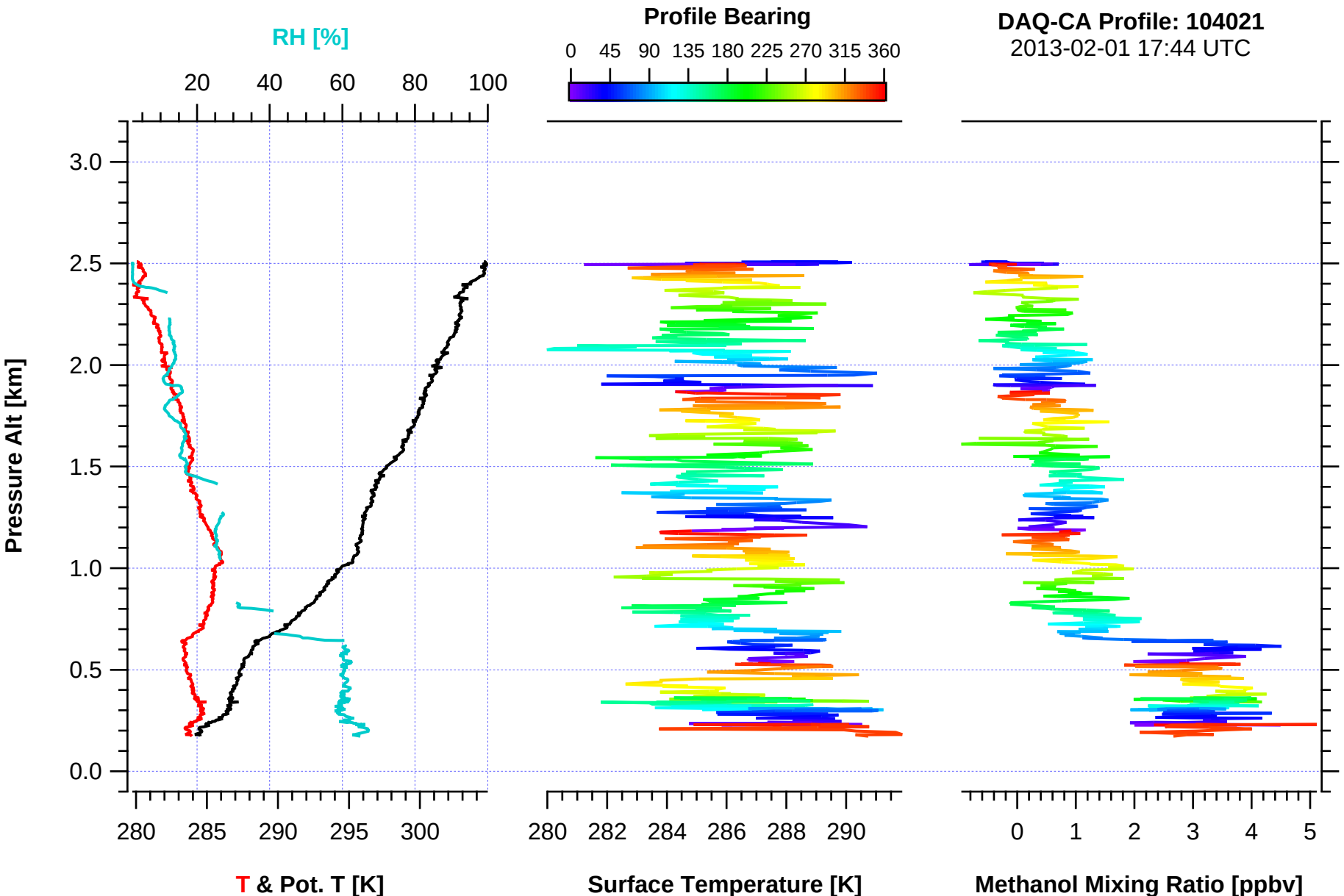

DAQ-CA Profile: 104021
2013-02-01 17:44 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 400 800 1200
NO2 Mixing Ratio [pptv]
0 200 400 600
NO Mixing Ratio [pptv]

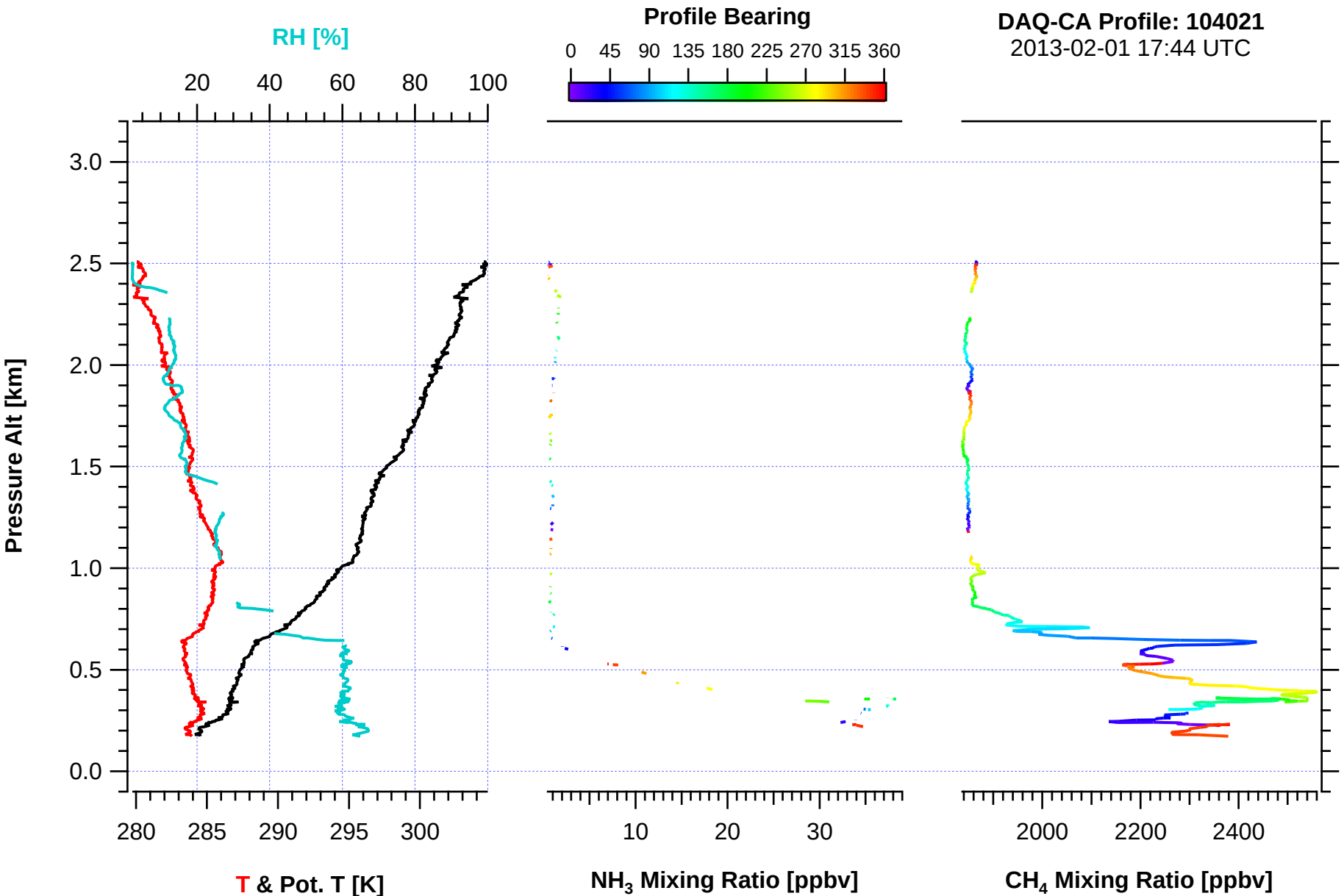

DAQ-CA Profile: 104021
2013-02-01 17:44 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0 2.5 2.0 1.5 1.0 0.5 0.0
280 285 290 295 300
T & Pot. T [K]
0 500 1000 1500 2000 2500
CH2O Mixing Ratio [pptv]
0.0 0.5 1.0 1.5 2.0
Acetaldehyde Mixing Ratio [ppbv]

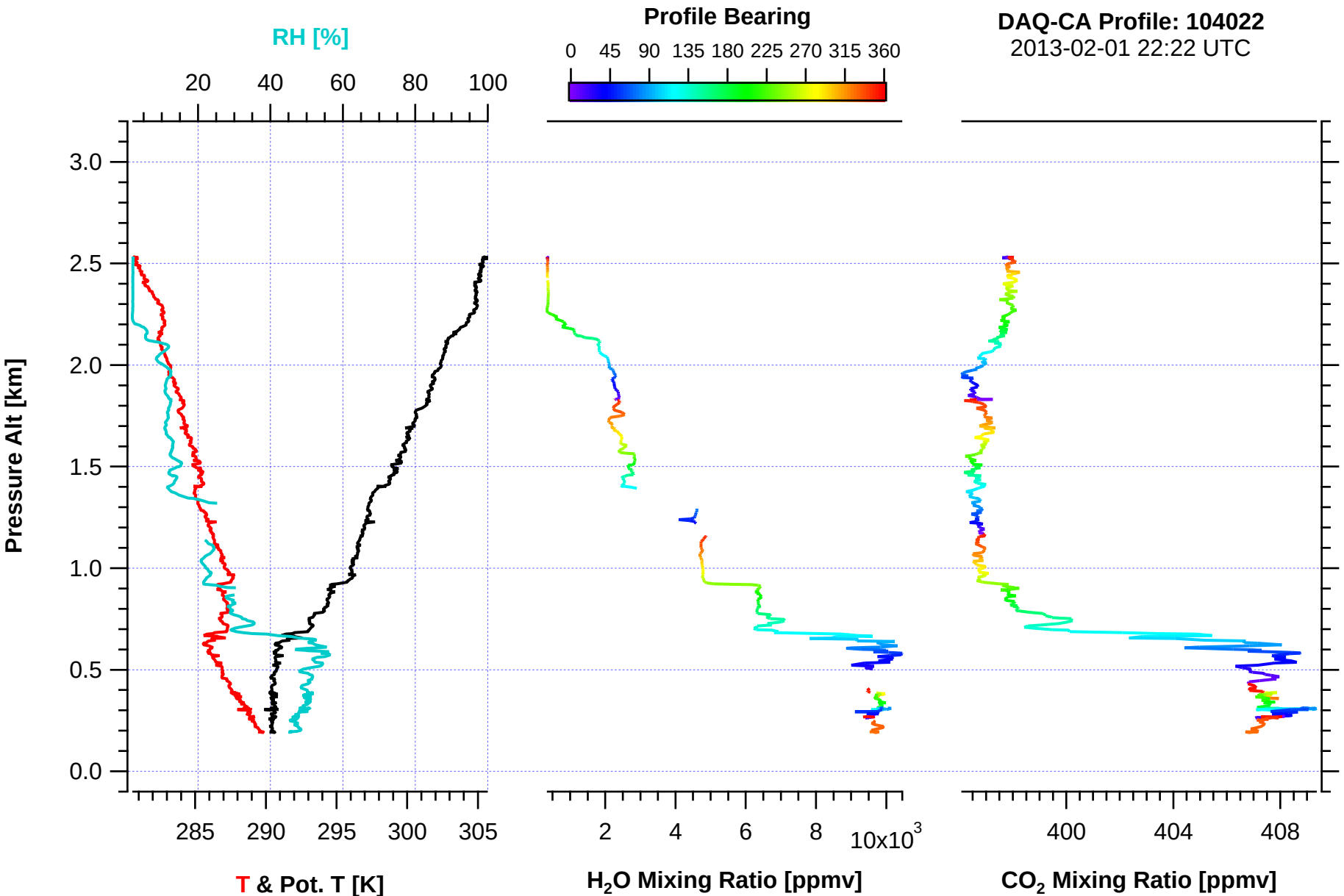

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104021
2013-02-01 17:44 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
-0.05 0.00 0.05 0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.2 -0.1 0.0 0.1 0.2 0.3
Isoprene Mixing Ratio [ppbv]

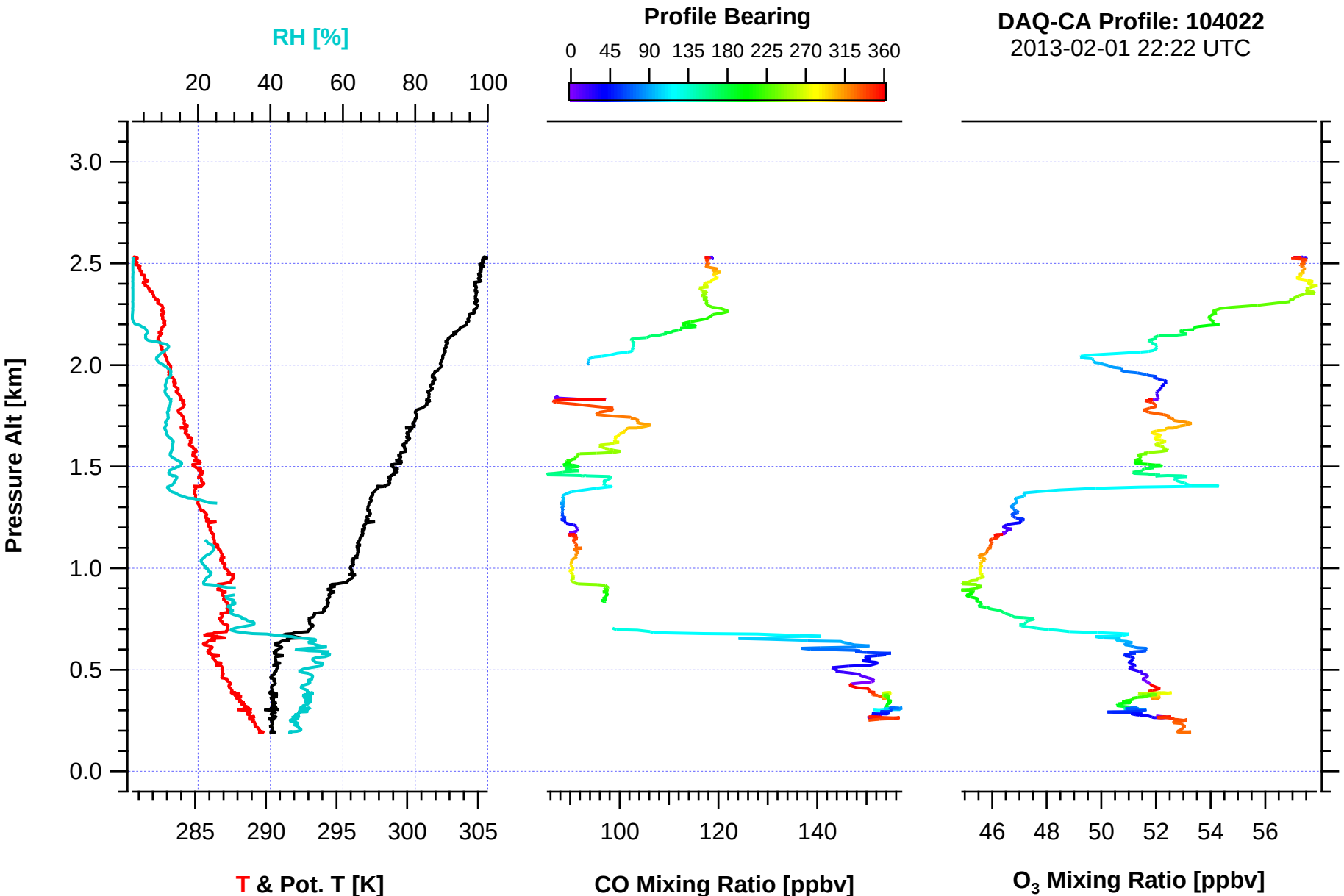

DAQ-CA Profile: 104021
2013-02-01 17:44 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 40 80 120
SCAT550nm, dry [Mm-1]
1000 2000 3000 4000
CN > 10nm [# cm-3]

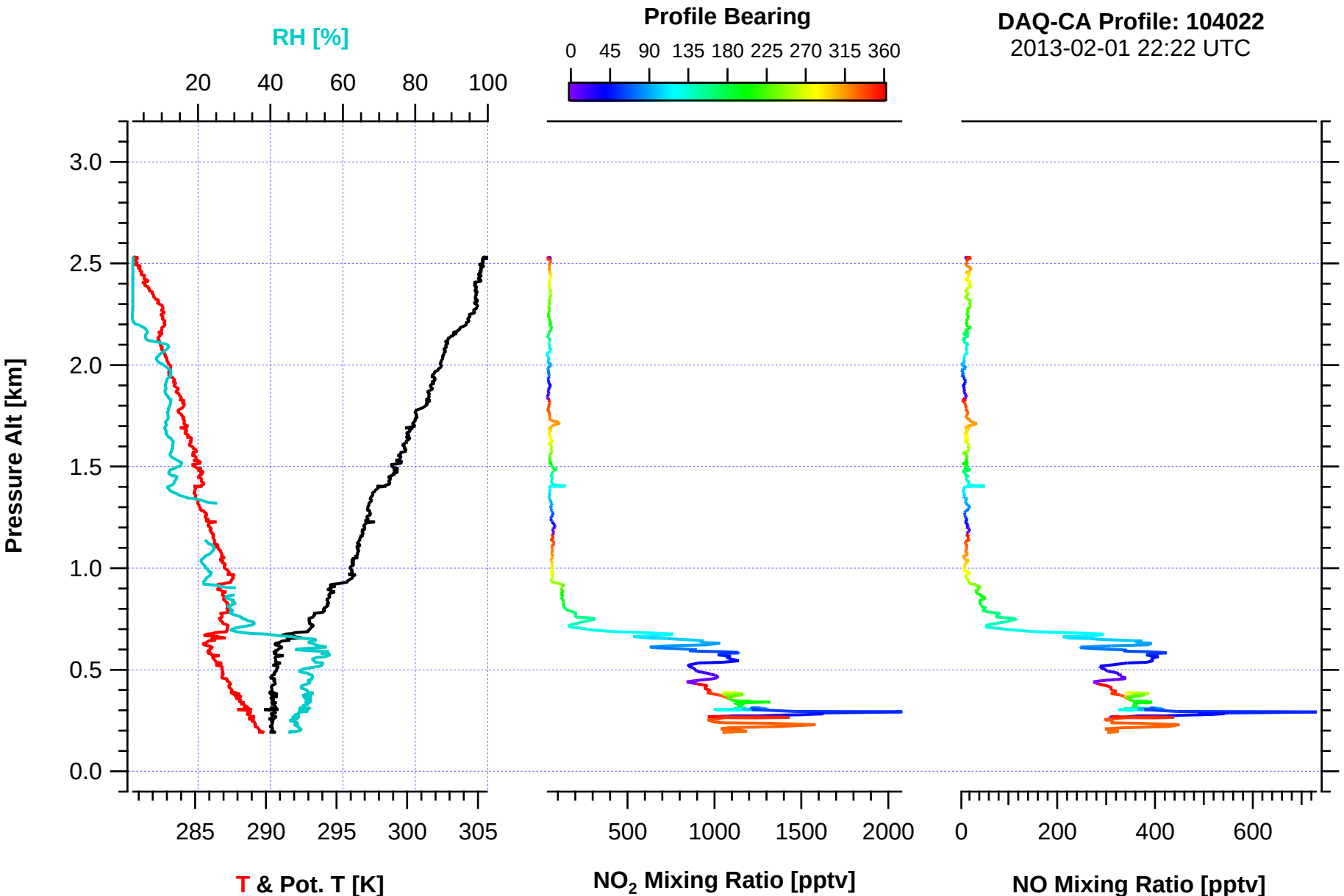

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104021
2013-02-01 17:44 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2 3 4 5 6 7x10-3
jNO2-Nadir and Zenith [s-1]
7 8 9 10 11 12 13x10-3
jNO2-Total [s-1]

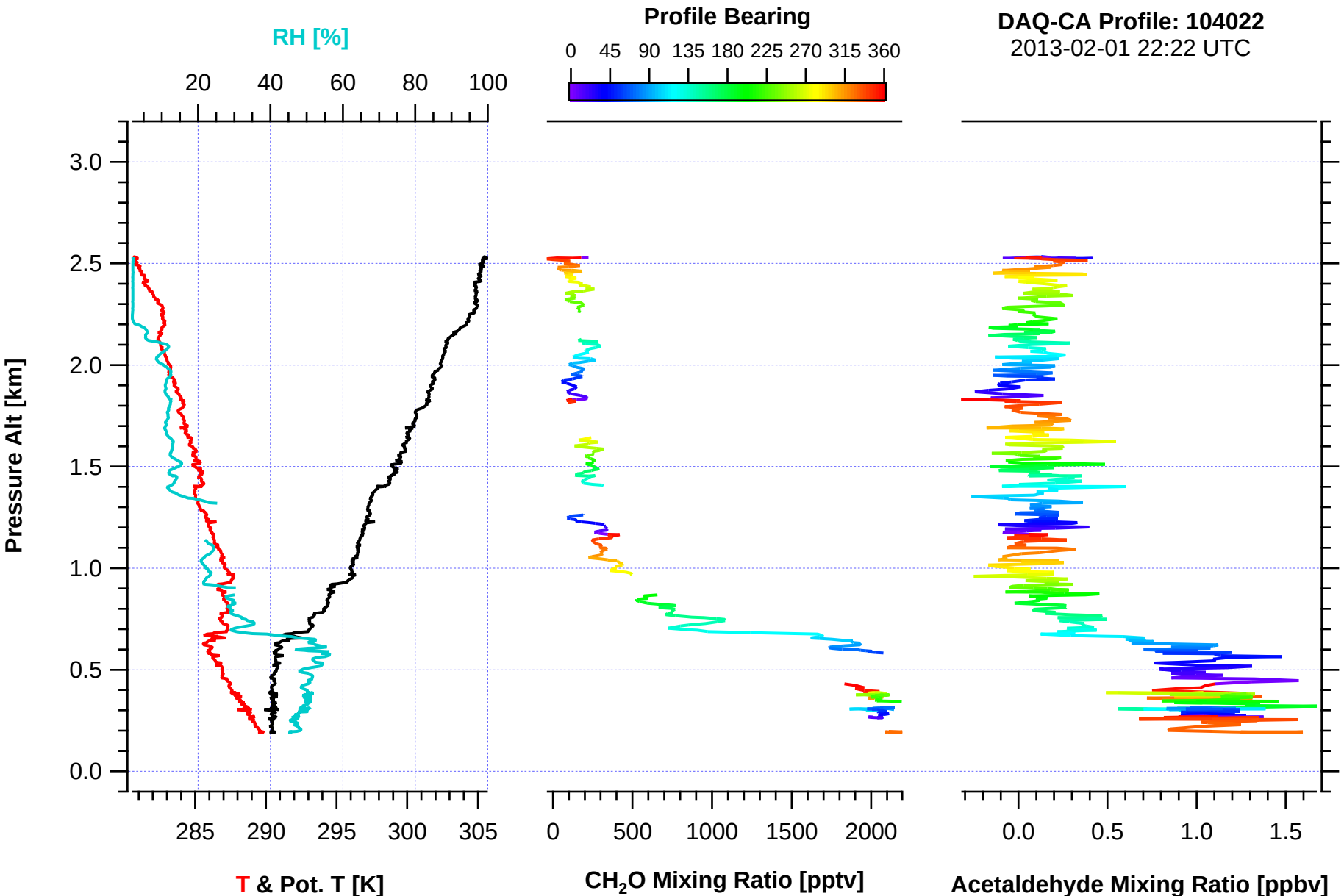

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104021
2013-02-01 17:44 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
280 282 284 286 288 290
Surface Temperature [K]
0 1 2 3 4 5
Methanol Mixing Ratio [ppbv]

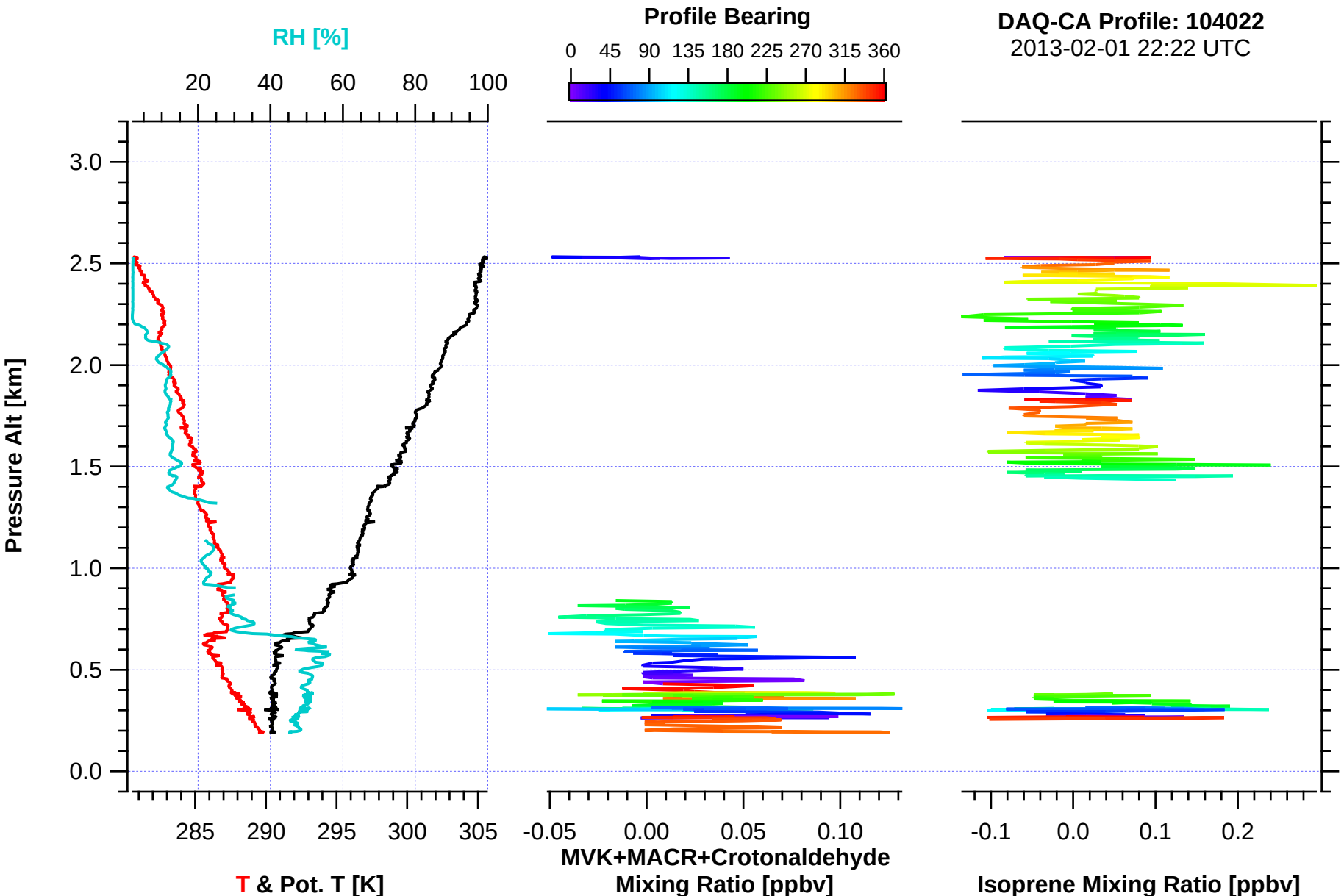

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104021
2013-02-01 17:44 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
10
20
30
NH3 Mixing Ratio [ppbv]
2000
2200
2400
CH4 Mixing Ratio [ppbv]

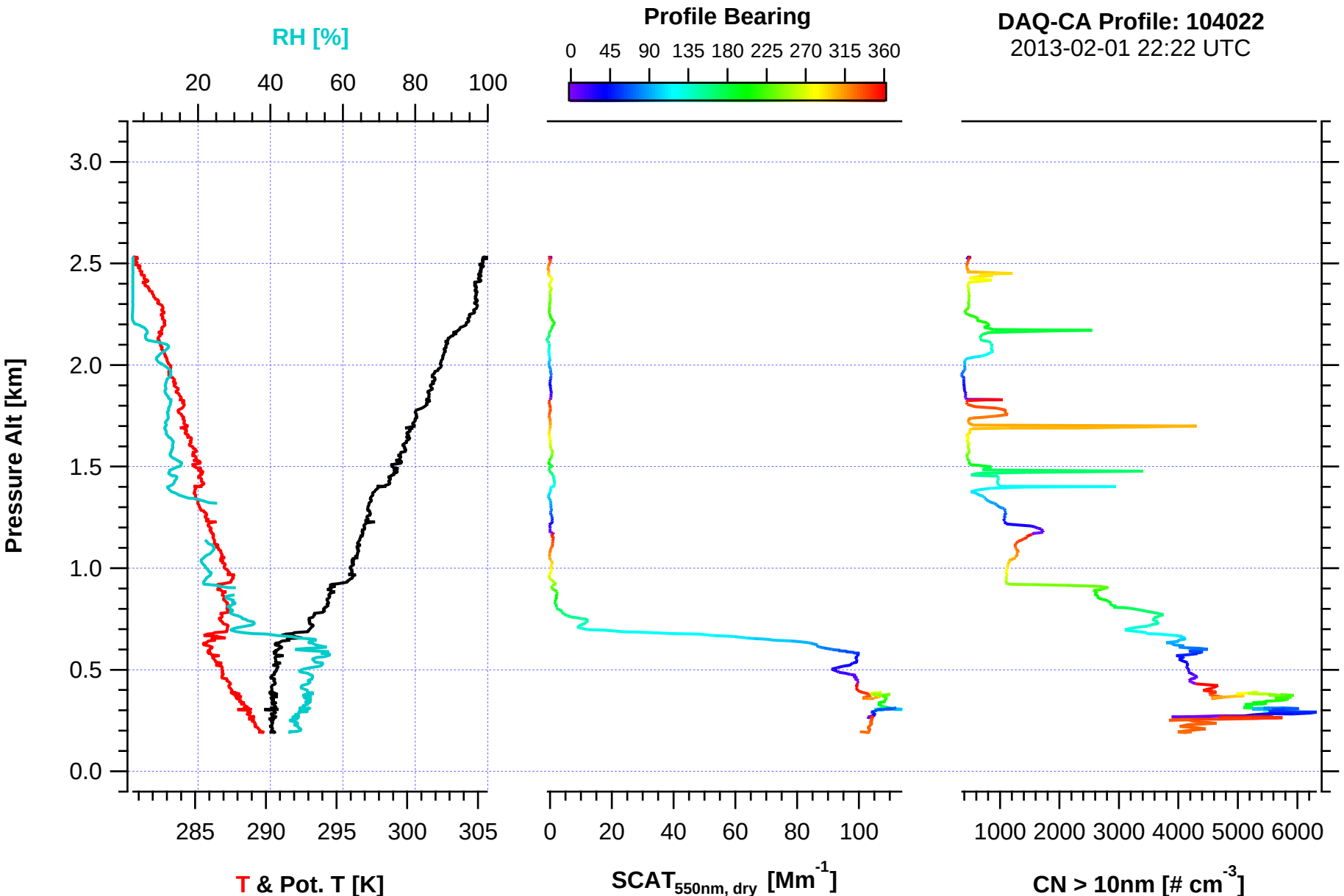

DAQ-CA Profile: 104022
2013-02-01 22:22 UTC
RH [%]
20
40
60
80
100
Profile Bearing
0
45
90
135
180
225
270
315
360
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285
290
295
300
305
T & Pot. T [K]
2
4
6
8
10x10^3
H2O Mixing Ratio [ppmv]
400
404
408
CO2 Mixing Ratio [ppmv]

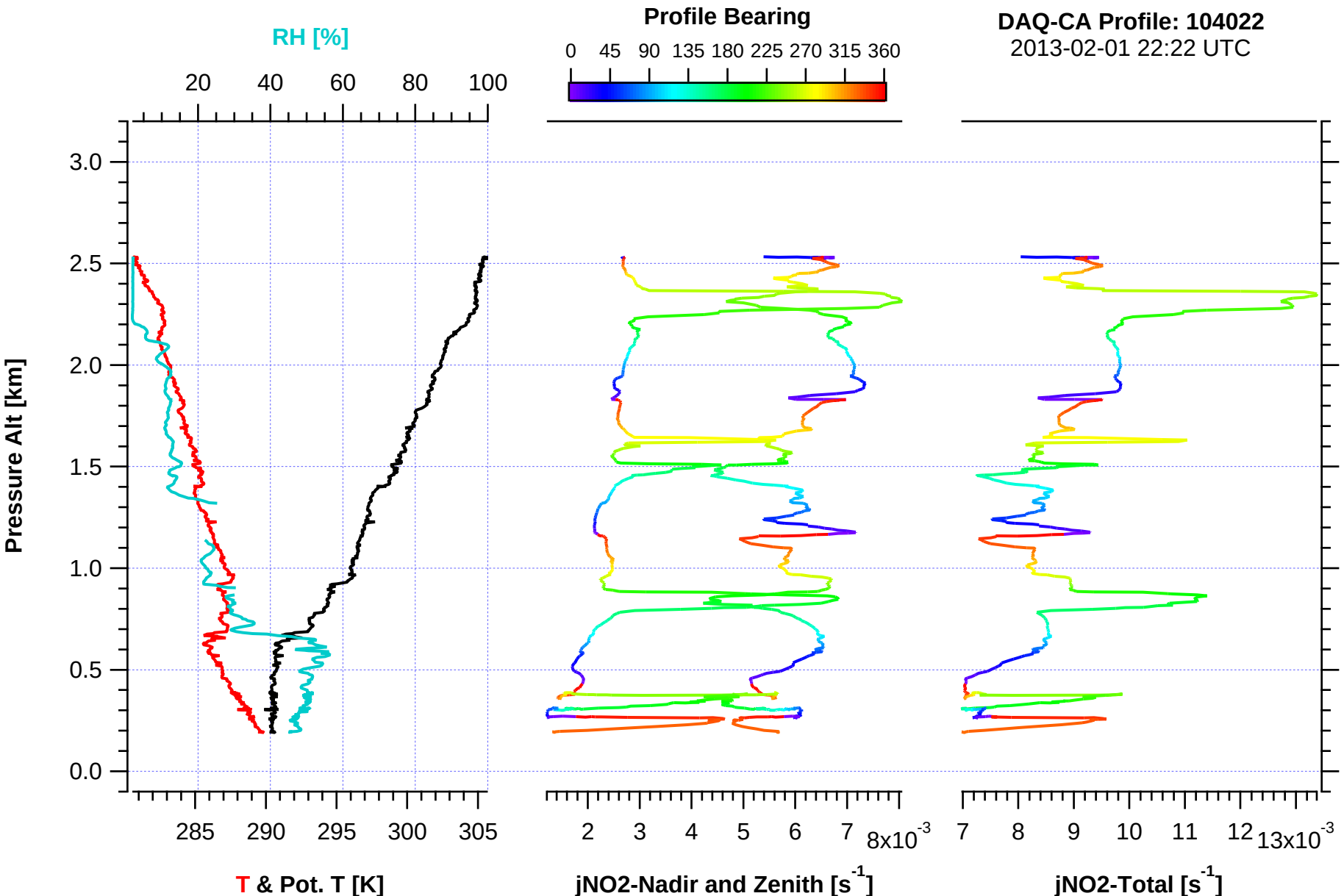

DAQ-CA Profile: 104022
2013-02-01 22:22 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
100 120 140
CO Mixing Ratio [ppbv]
46 48 50 52 54 56
O3 Mixing Ratio [ppbv]

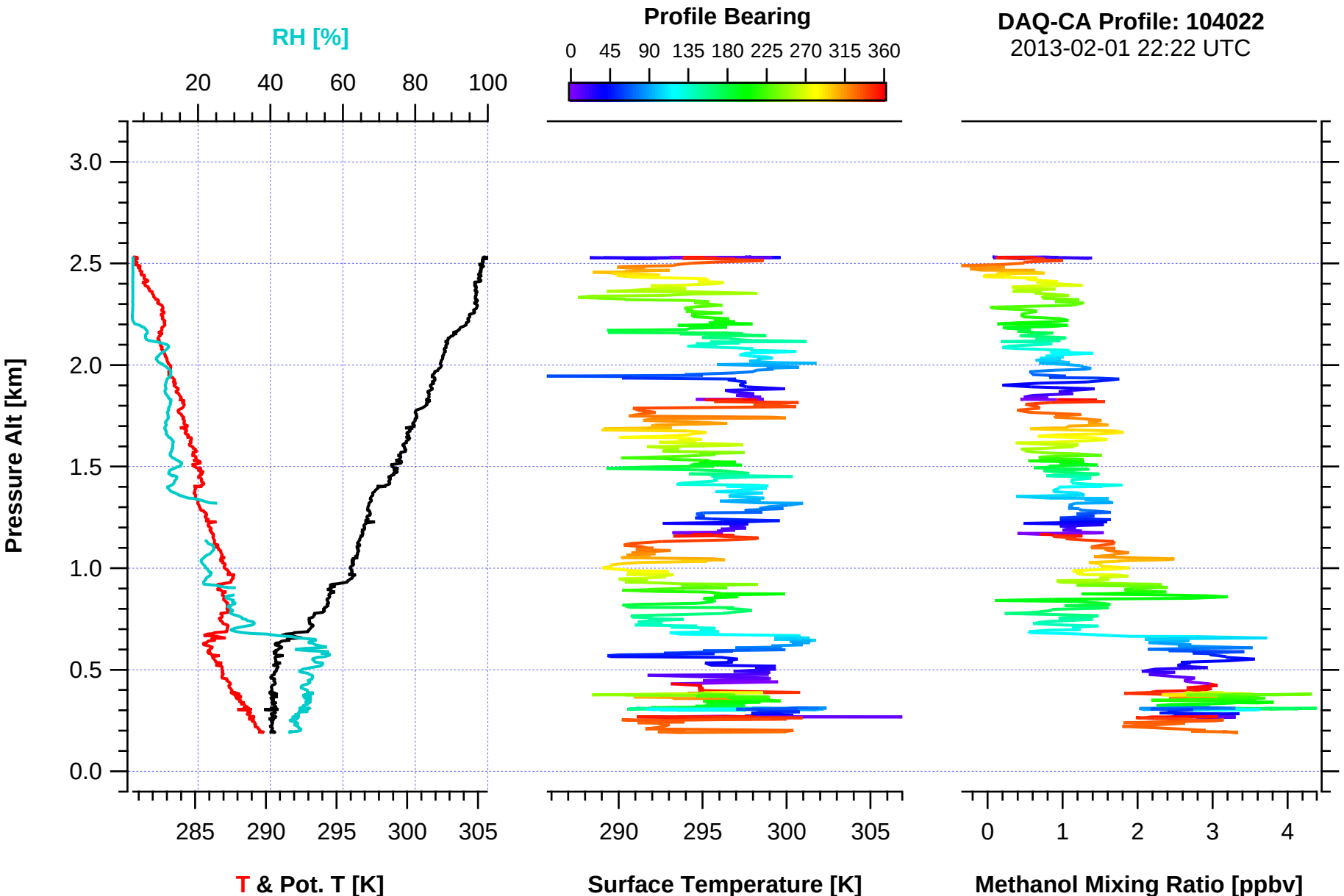

DAQ-CA Profile: 104022
2013-02-01 22:22 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
500 1000 1500 2000
NO2 Mixing Ratio [pptv]
0 200 400 600
NO Mixing Ratio [pptv]

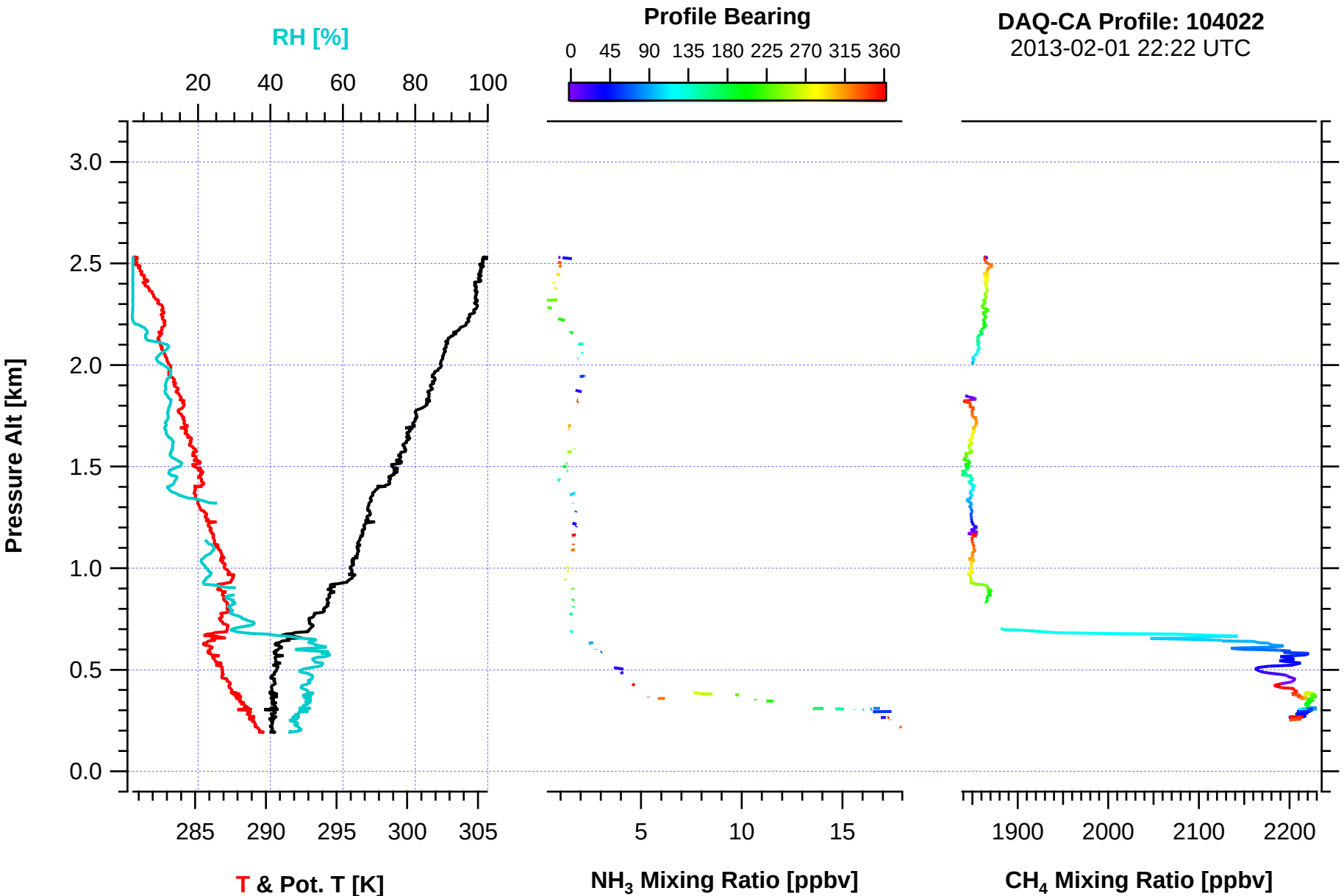

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104022
2013-02-01 22:22 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285
290
295
300
305
T & Pot. T [K]
0
500
1000
1500
2000
CH2O Mixing Ratio [pptv]
0.0
0.5
1.0
1.5
Acetaldehyde Mixing Ratio [ppbv]

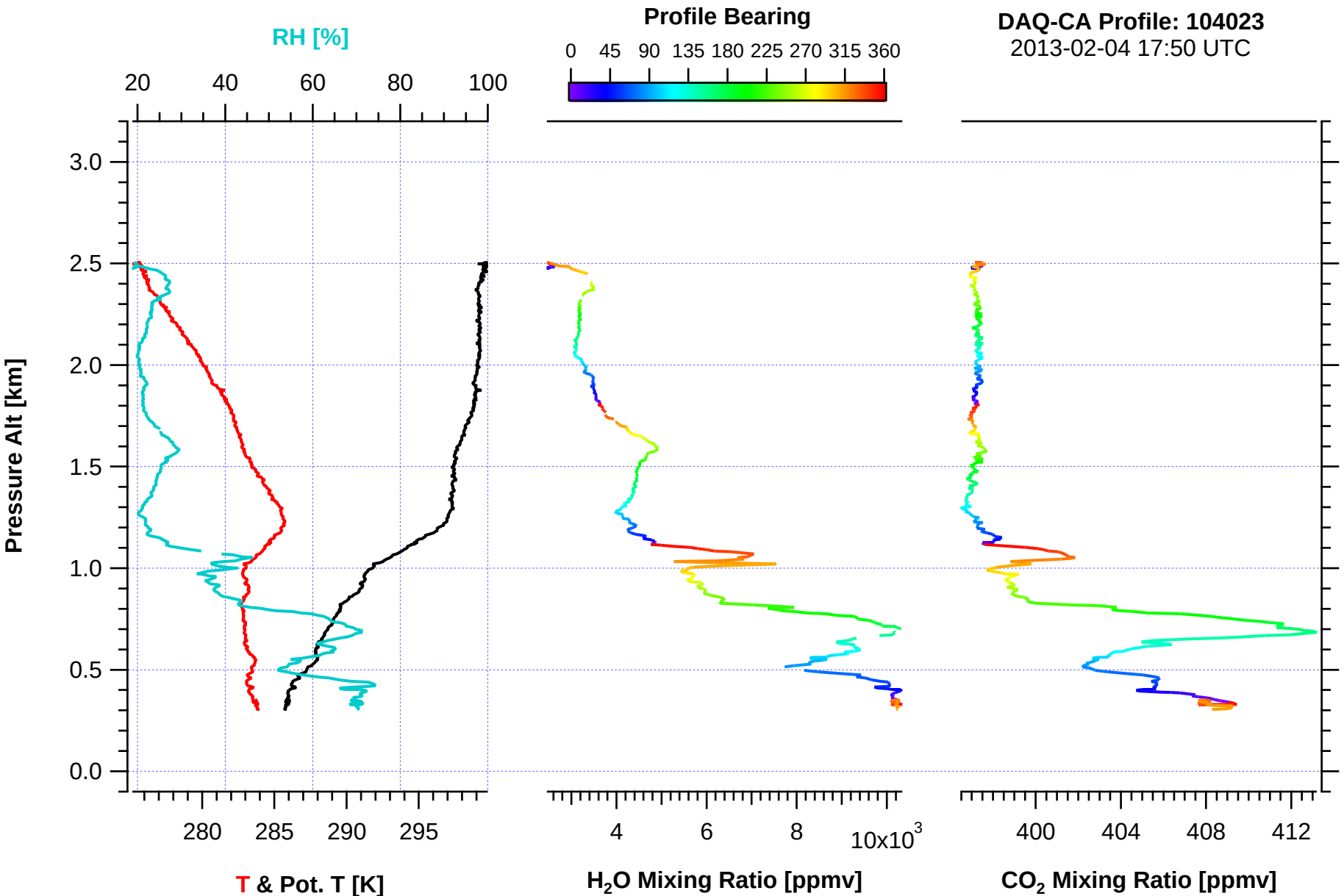

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104022
2013-02-01 22:22 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
-0.05 0.00 0.05 0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.1 0.0 0.1 0.2
Isoprene Mixing Ratio [ppbv]

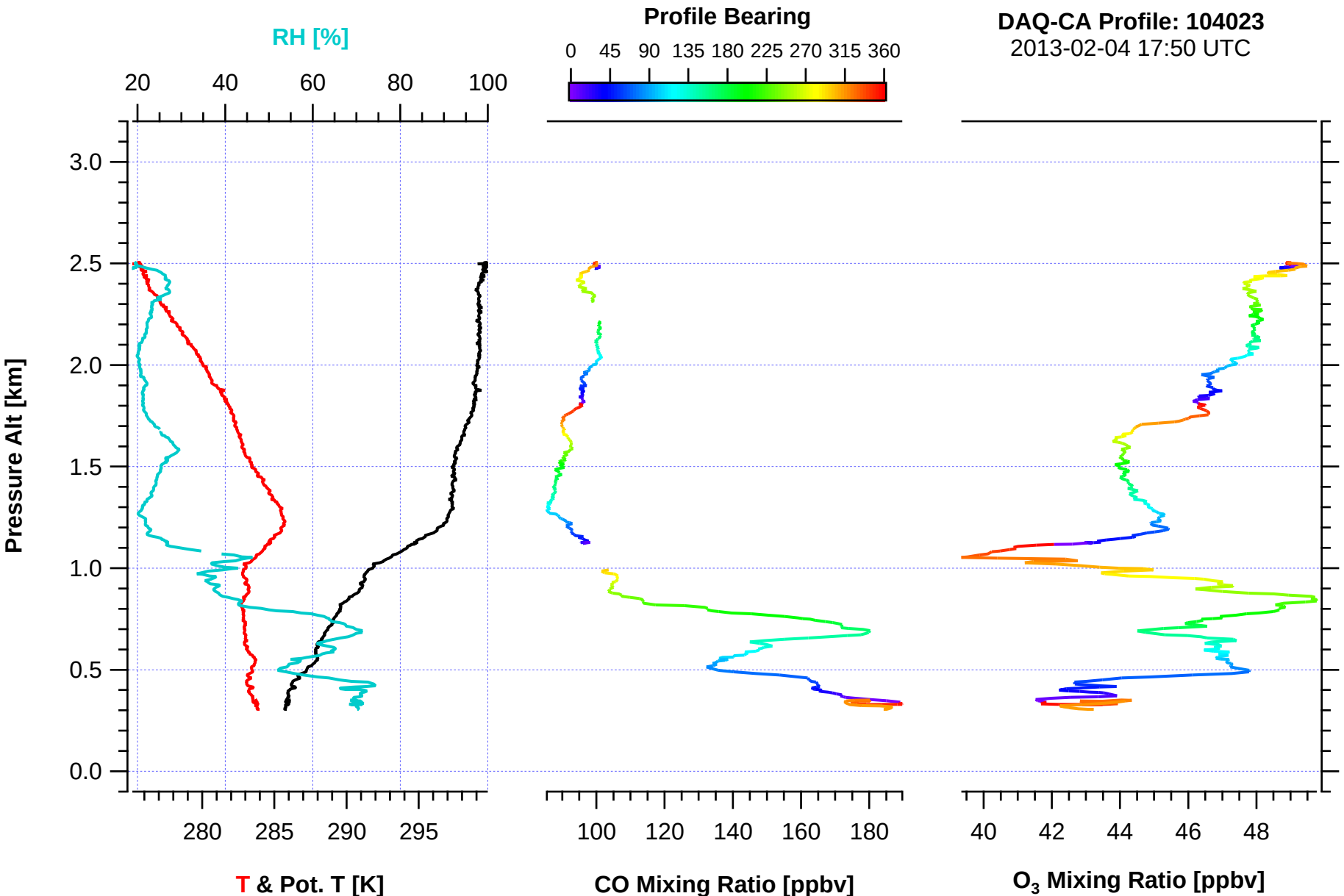

RH [%]
20 40 60 80 100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104022
2013-02-01 22:22 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
0 20 40 60 80 100
SCAT550nm, dry [Mm-1]
1000 2000 3000 4000 5000 6000
CN > 10nm [# cm-3]

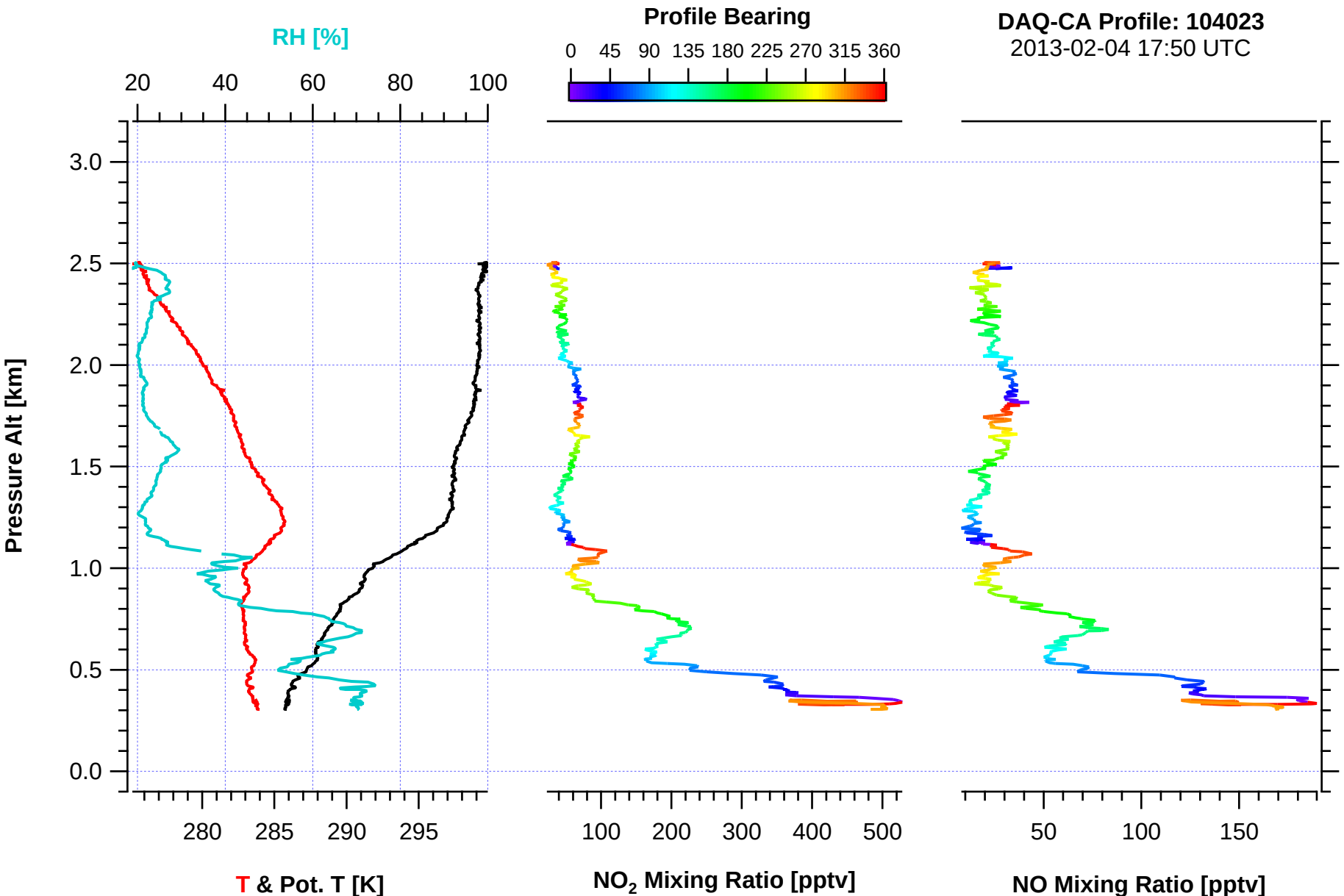

RH [%]
20 40 60 80 100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104022
2013-02-01 22:22 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
2 3 4 5 6 7 8x10-3
jNO2-Nadir and Zenith [s-1]
7 8 9 10 11 12 13x10-3
jNO2-Total [s-1]

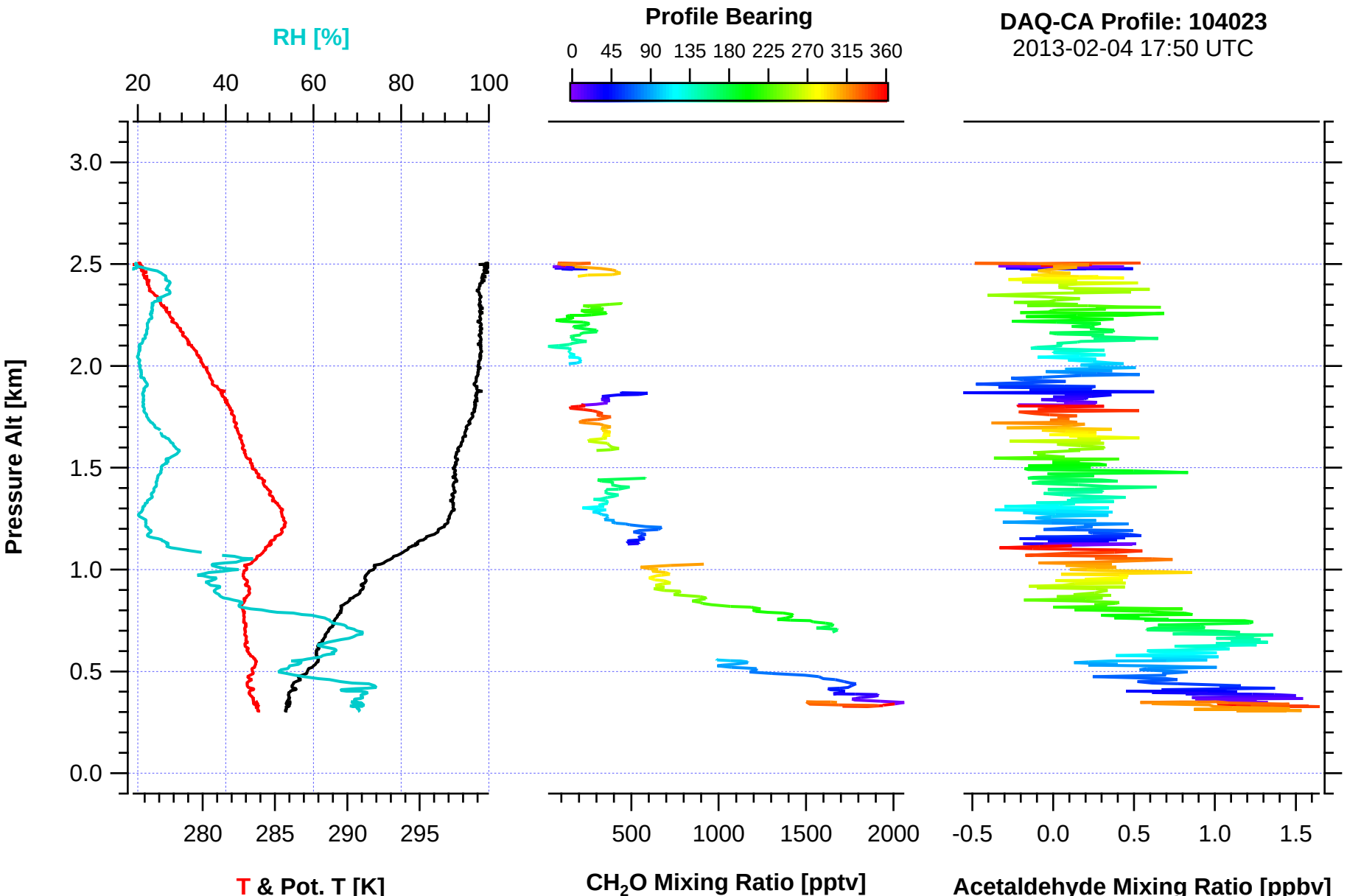

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104022
2013-02-01 22:22 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
290 295 300 305
Surface Temperature [K]
0 1 2 3 4
Methanol Mixing Ratio [ppbv]

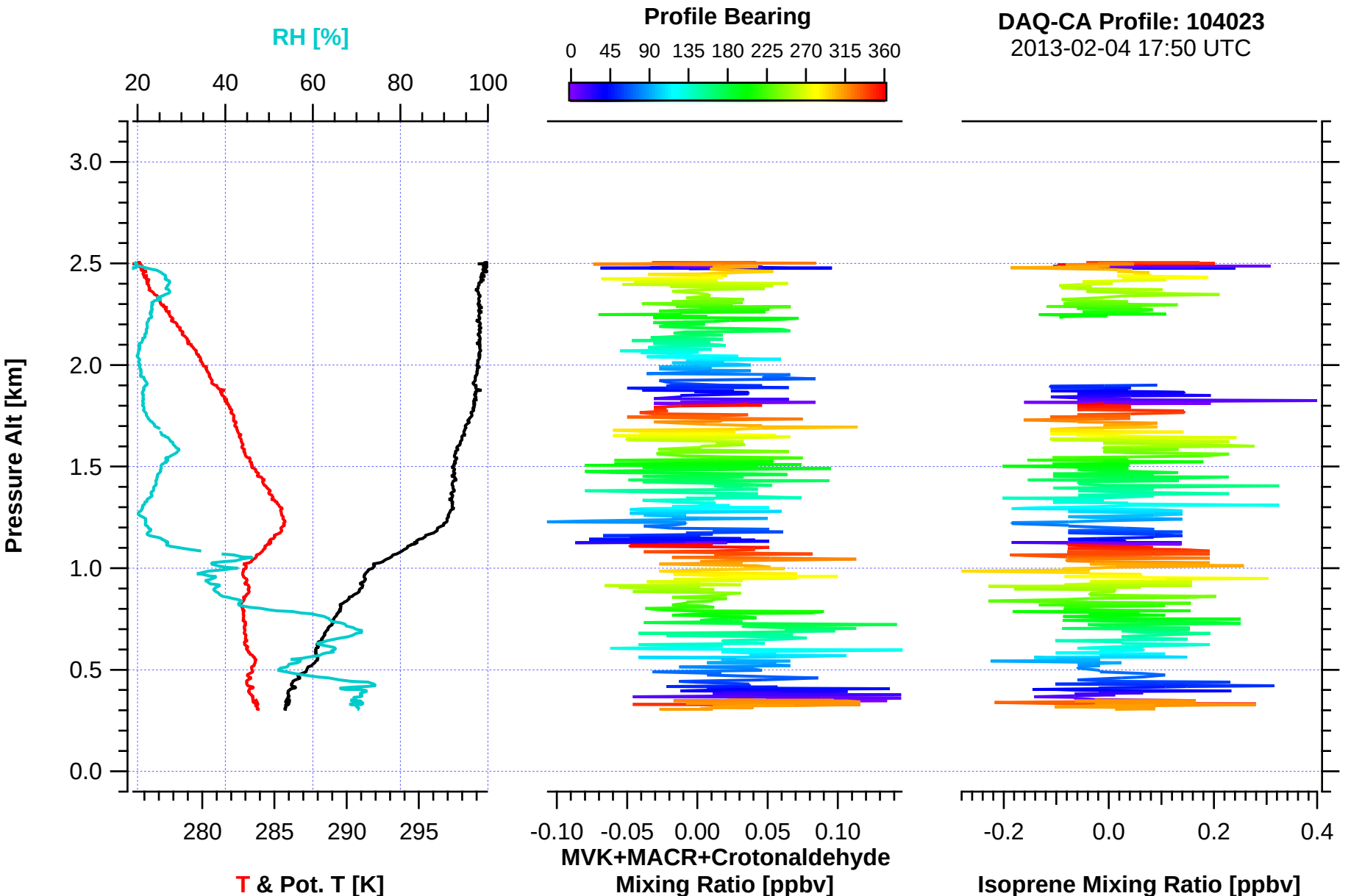

DAQ-CA Profile: 104022
2013-02-01 22:22 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
285 290 295 300 305
T & Pot. T [K]
5 10 15
NH3 Mixing Ratio [ppbv]
1900 2000 2100 2200
CH4 Mixing Ratio [ppbv]

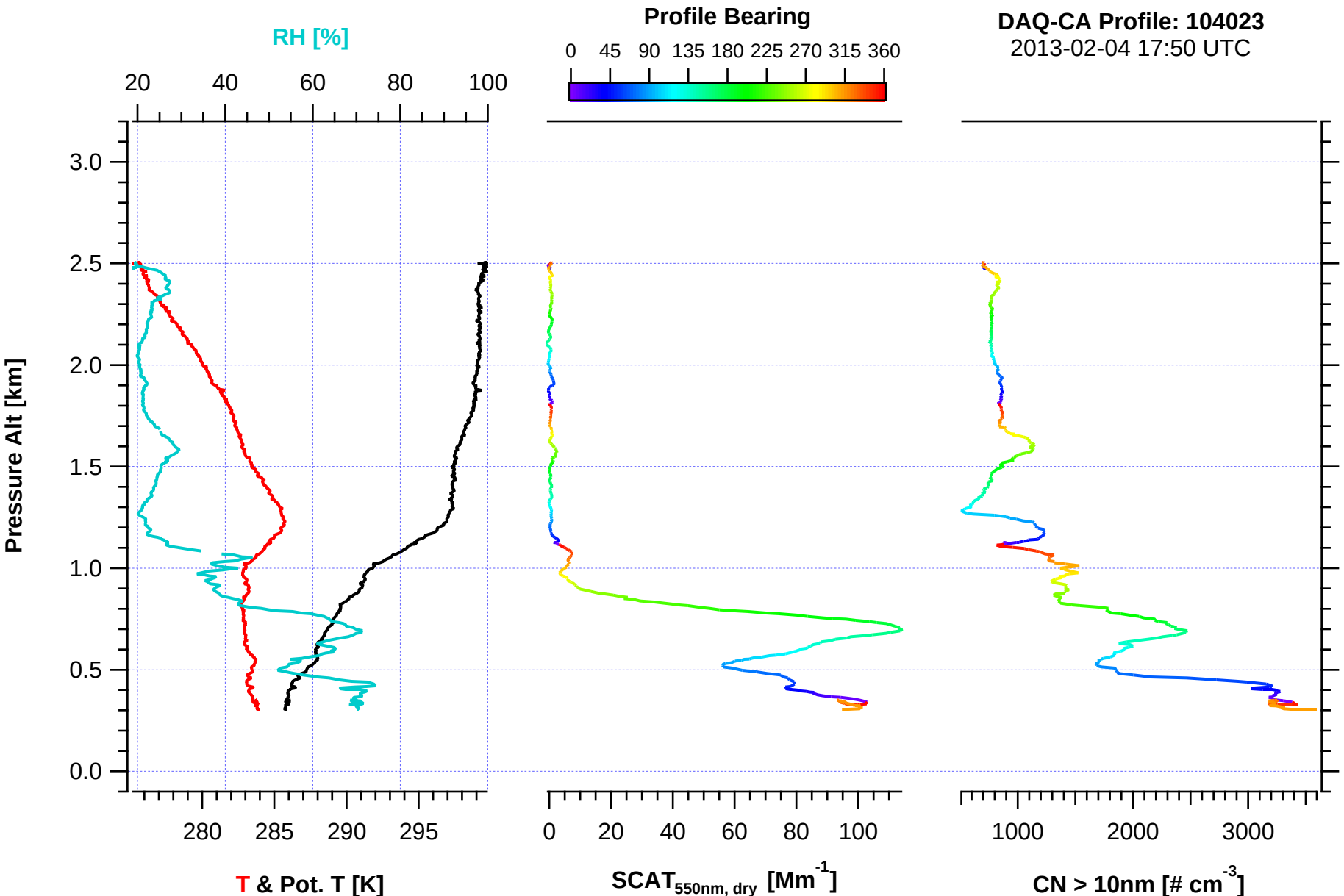

DAQ-CA Profile: 104023
2013-02-04 17:50 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295
T & Pot. T [K]
4 6 8
10x10^3
H2O Mixing Ratio [ppmv]
400 404 408 412
CO2 Mixing Ratio [ppmv]

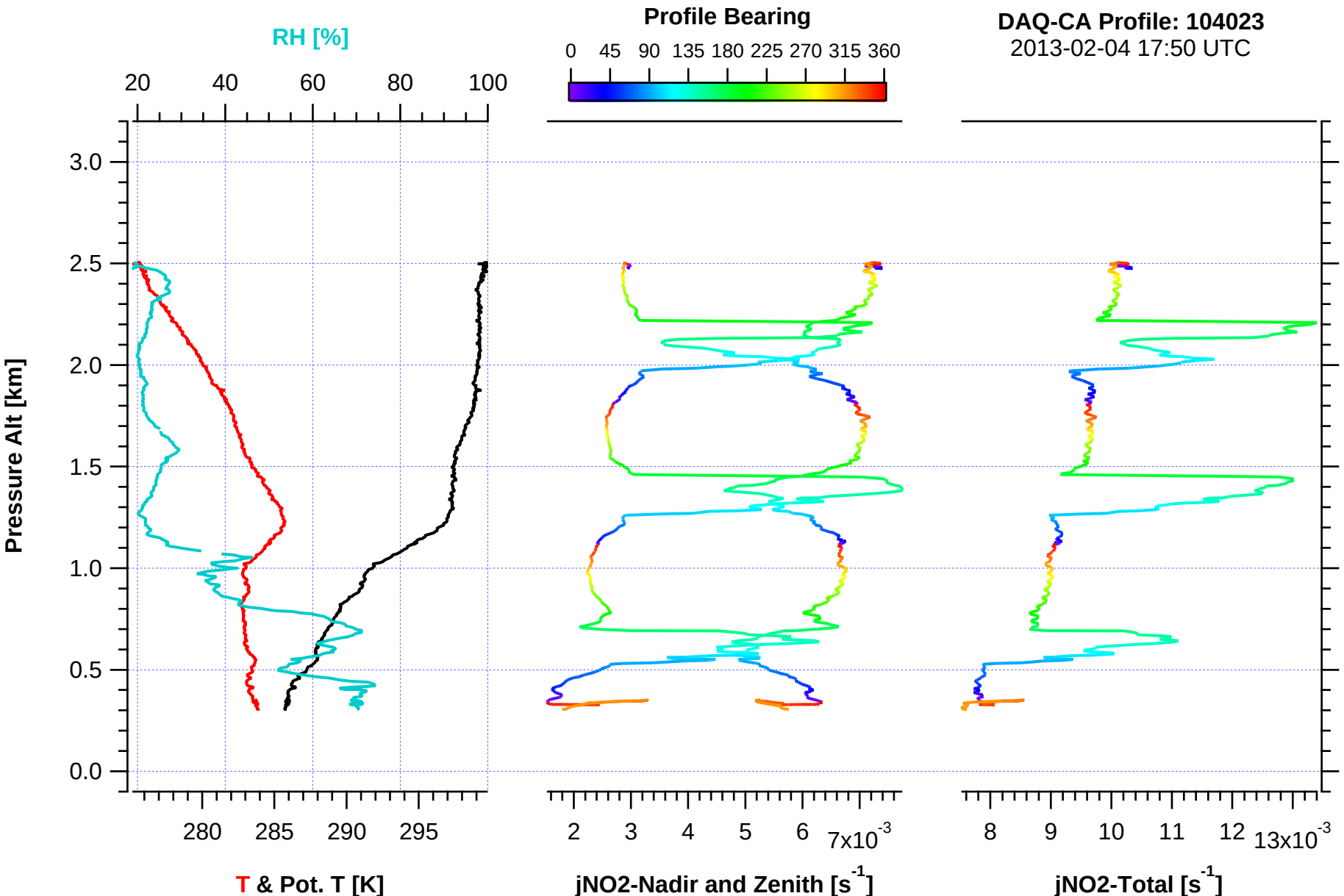

DAQ-CA Profile: 104023
2013-02-04 17:50 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295
T & Pot. T [K]
100 120 140 160 180
CO Mixing Ratio [ppbv]
40 42 44 46 48
O3 Mixing Ratio [ppbv]

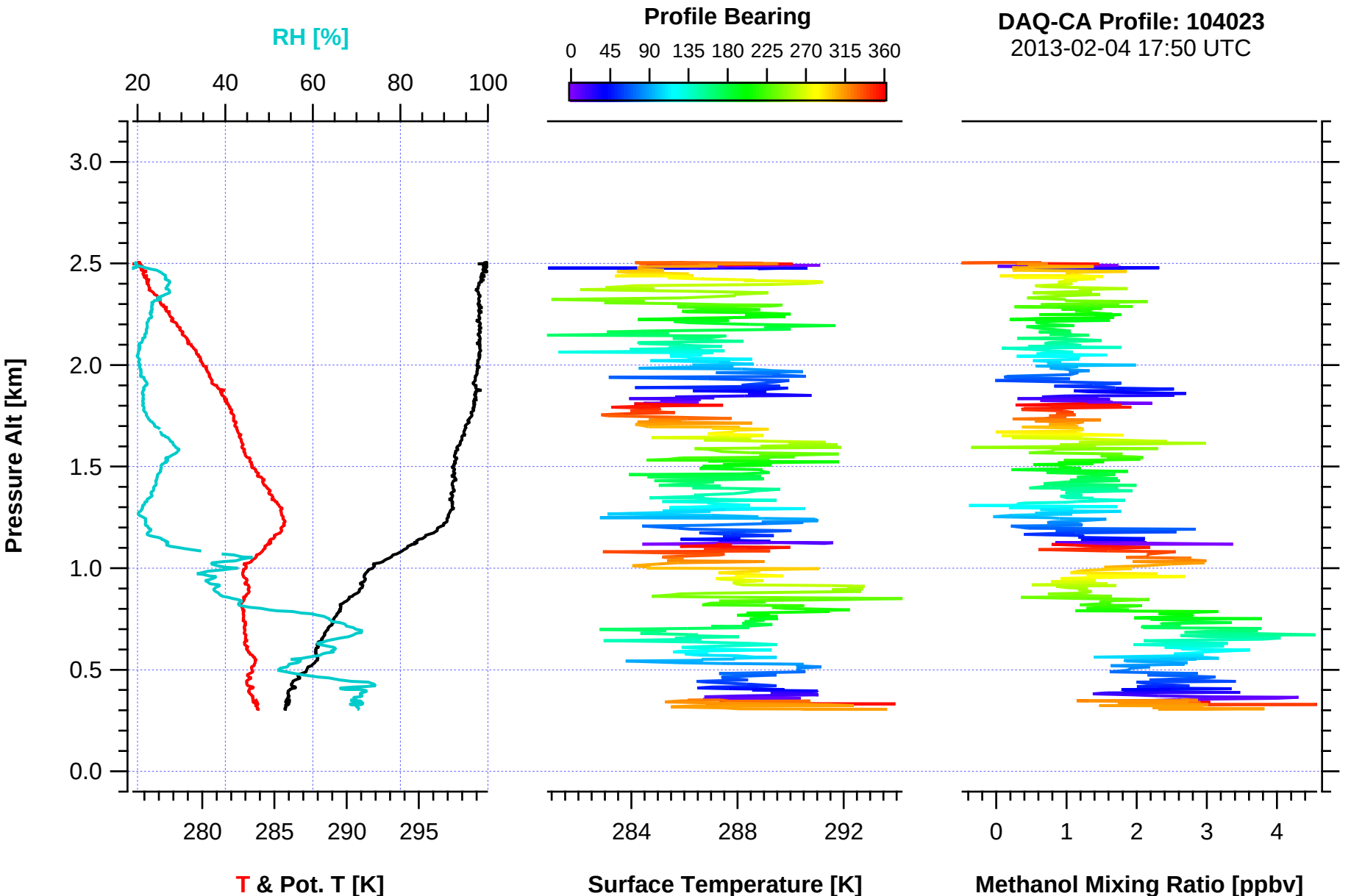

DAQ-CA Profile: 104023
2013-02-04 17:50 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295
T & Pot. T [K]
100 200 300 400 500
NO2 Mixing Ratio [pptv]
50 100 150
NO Mixing Ratio [pptv]

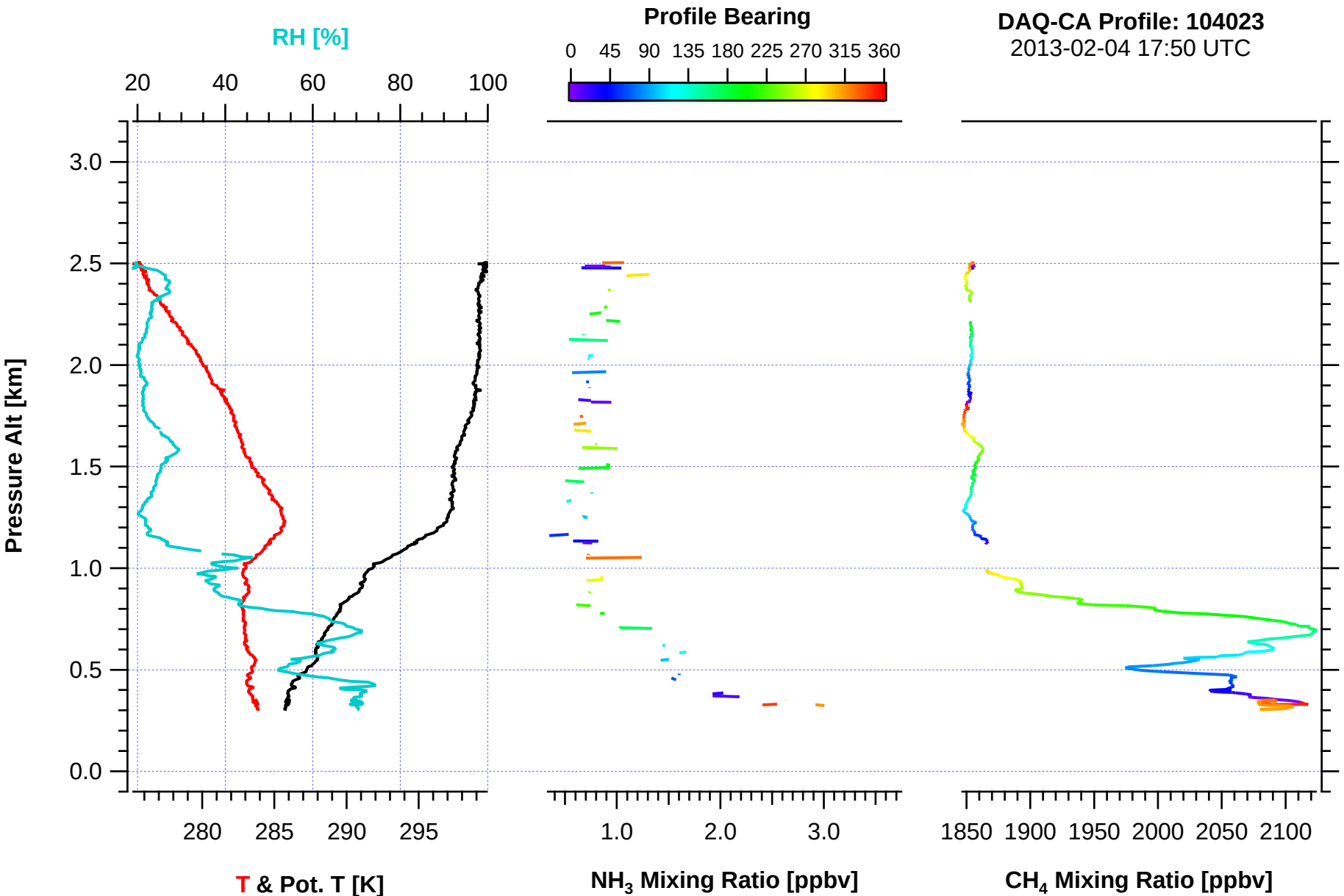

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104023
2013-02-04 17:50 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
T & Pot. T [K]
500
1000
1500
2000
CH2O Mixing Ratio [pptv]
-0.5
0.0
0.5
1.0
1.5
Acetaldehyde Mixing Ratio [ppbv]

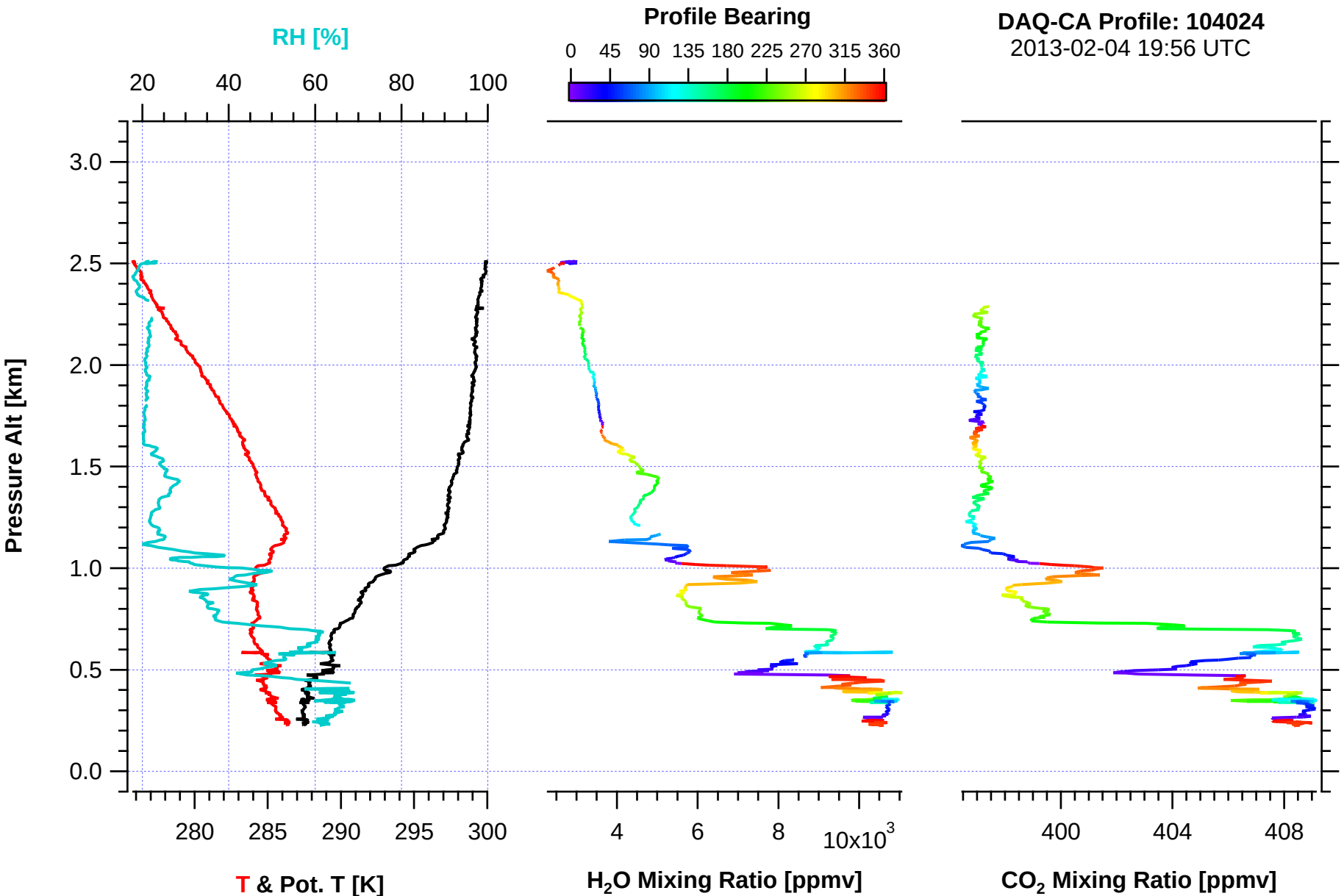

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104023
2013-02-04 17:50 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
T & Pot. T [K]
-0.10
-0.05
0.00
0.05
0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.2
0.0
0.2
0.4
Isoprene Mixing Ratio [ppbv]

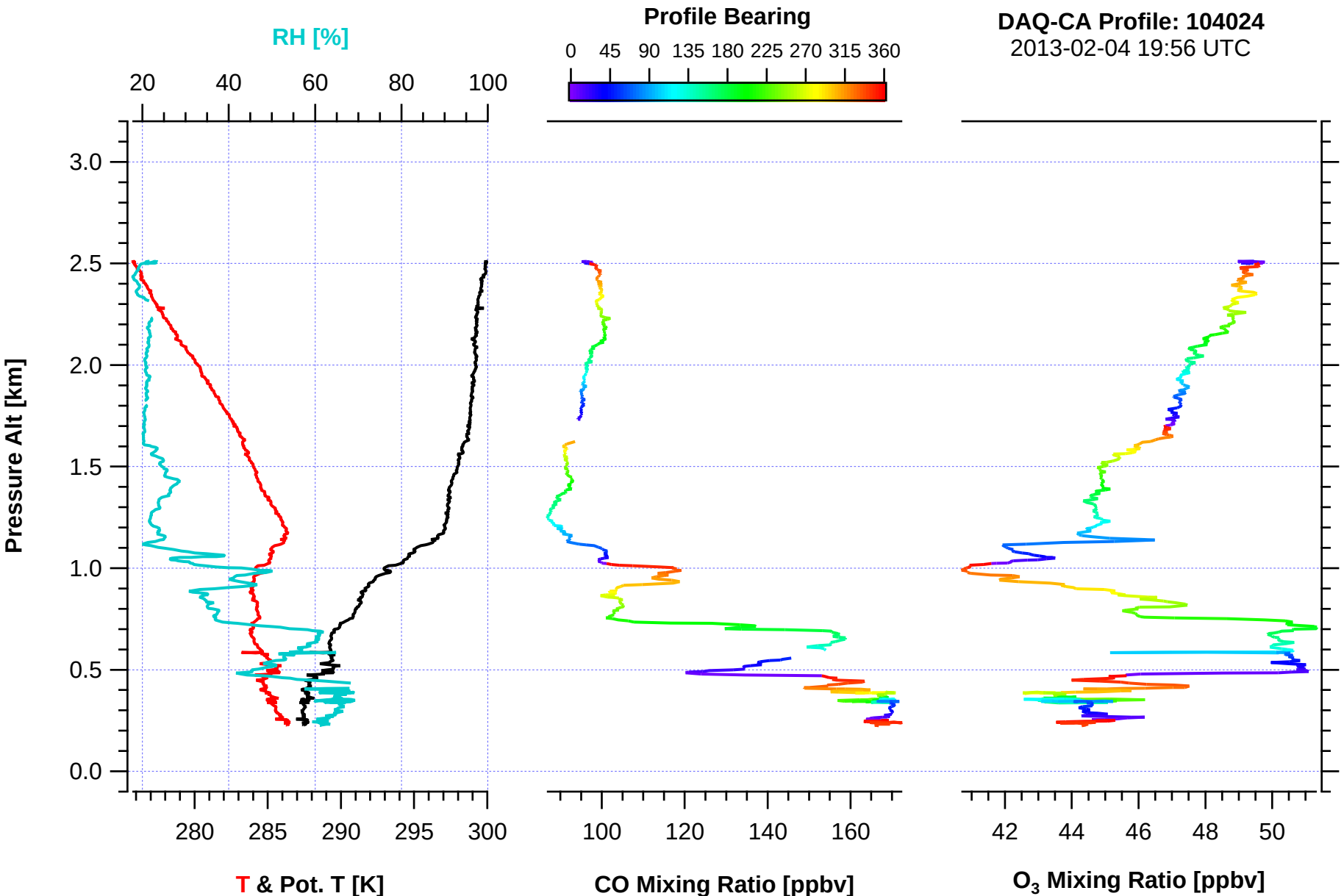

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104023
2013-02-04 17:50 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
T & Pot. T [K]
0
20
40
60
80
100
SCAT550nm, dry [Mm-1]
1000
2000
3000
CN > 10nm [# cm-3]

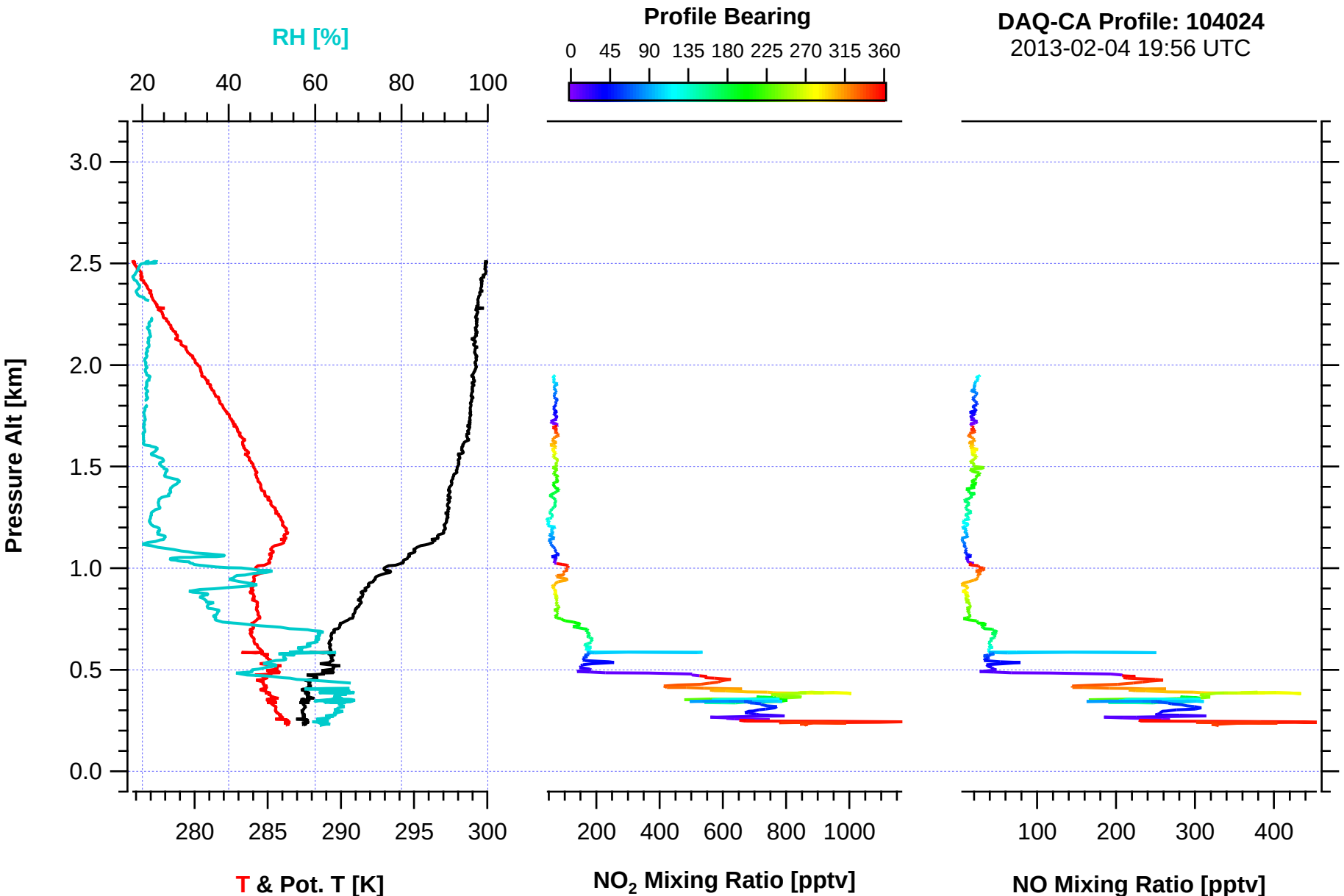

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104023
2013-02-04 17:50 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
T & Pot. T [K]
2
3
4
5
6
7x10-3
jNO2-Nadir and Zenith [s-1]
8
9
10
11
12
13x10-3
jNO2-Total [s-1]

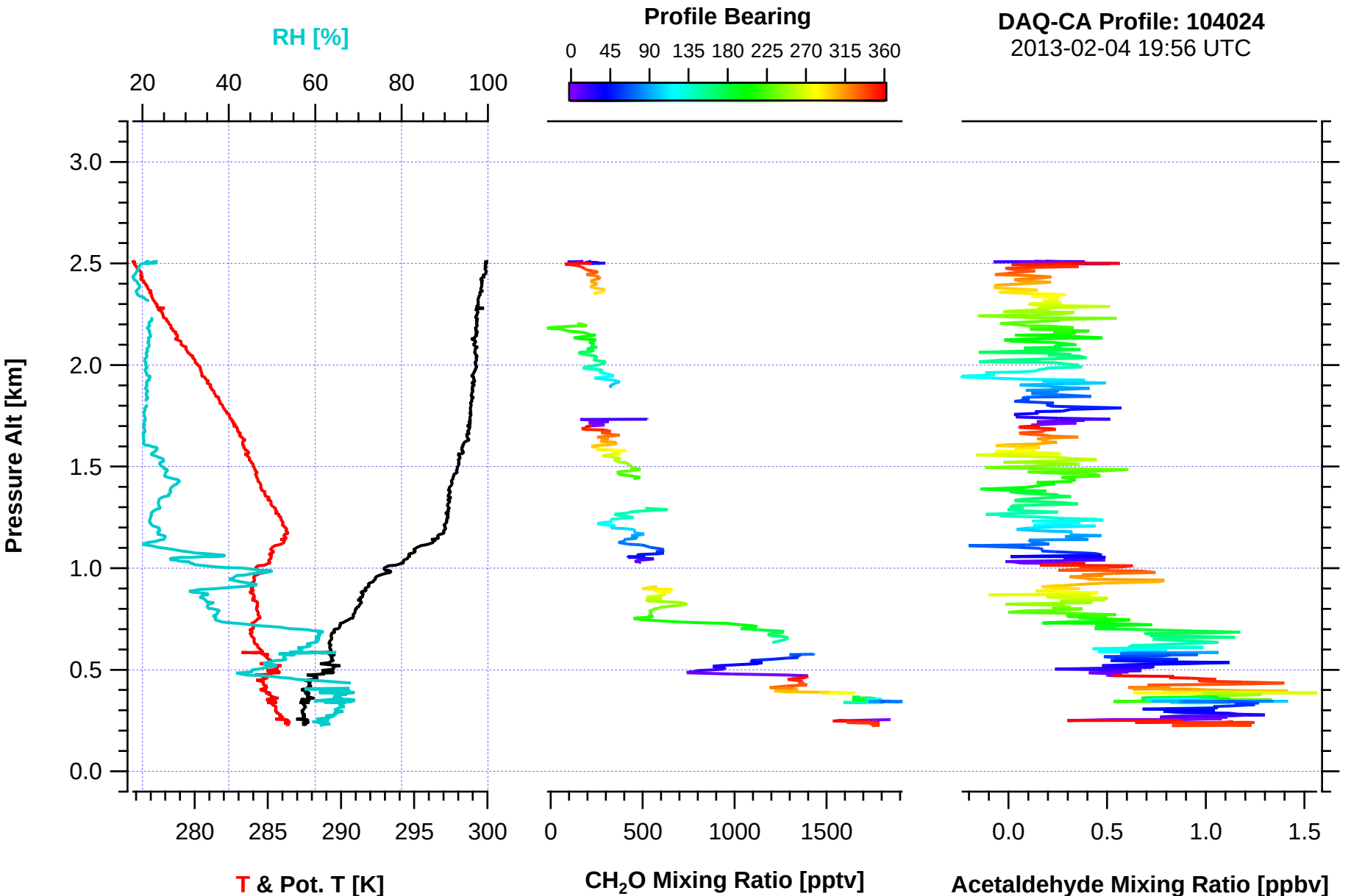

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104023
2013-02-04 17:50 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
T & Pot. T [K]
284
288
292
Surface Temperature [K]
0
1
2
3
4
Methanol Mixing Ratio [ppbv]

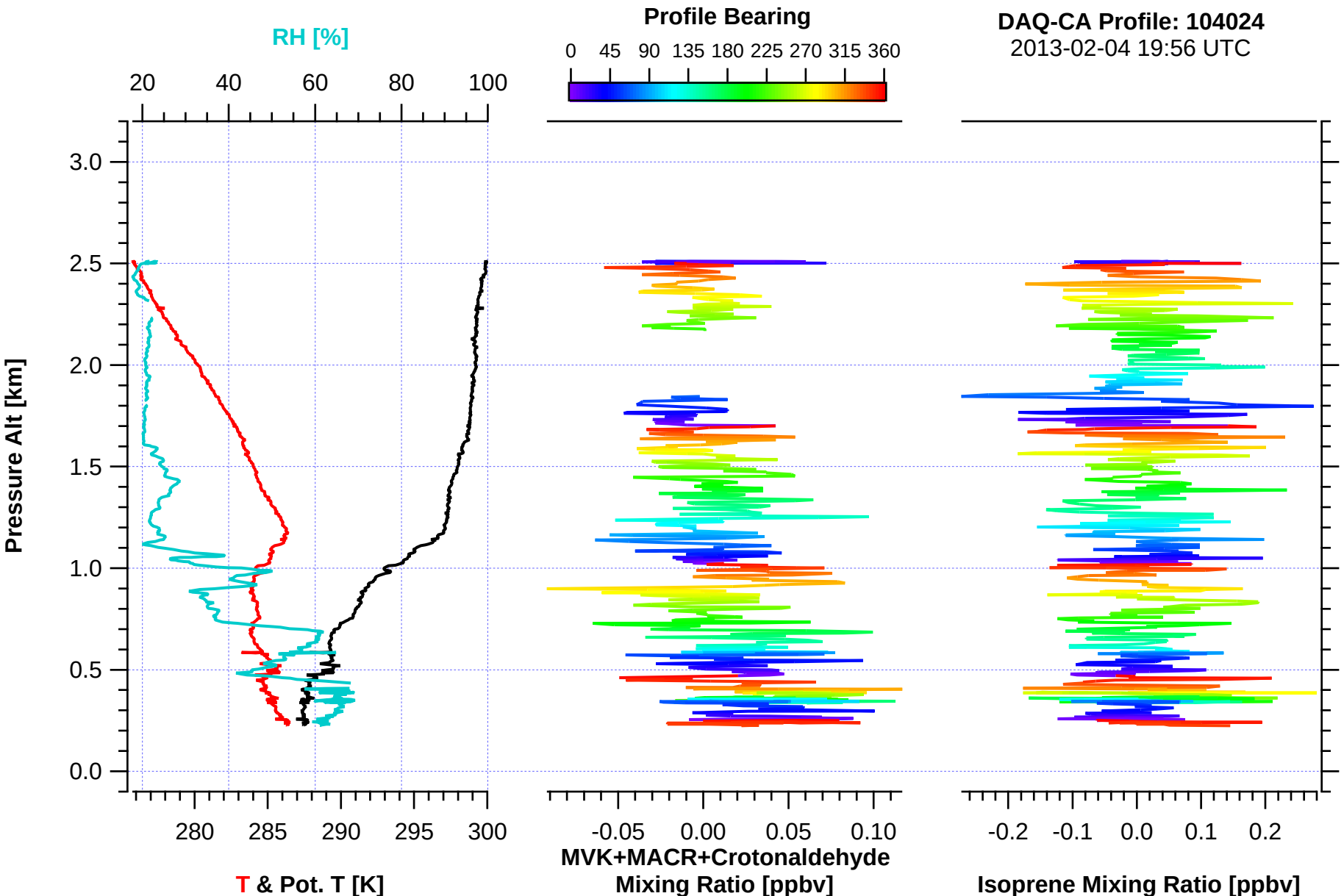

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104023
2013-02-04 17:50 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
T & Pot. T [K]
1.0
2.0
3.0
NH3 Mixing Ratio [ppbv]
1850
1900
1950
2000
2050
2100
CH4 Mixing Ratio [ppbv]

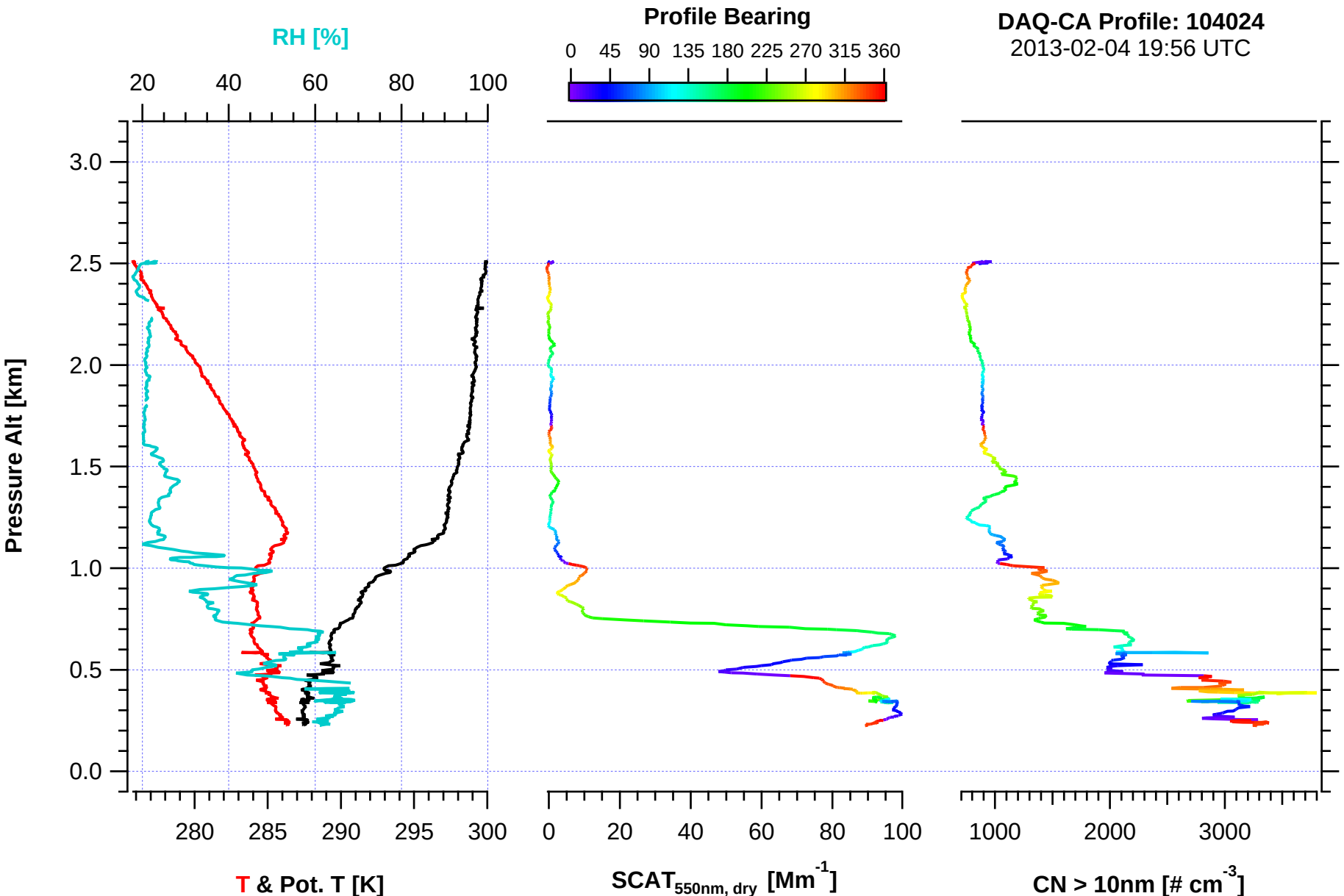

DAQ-CA Profile: 104024
2013-02-04 19:56 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
4 6 8
10x10^3
H2O Mixing Ratio [ppmv]
400 404 408
CO2 Mixing Ratio [ppmv]

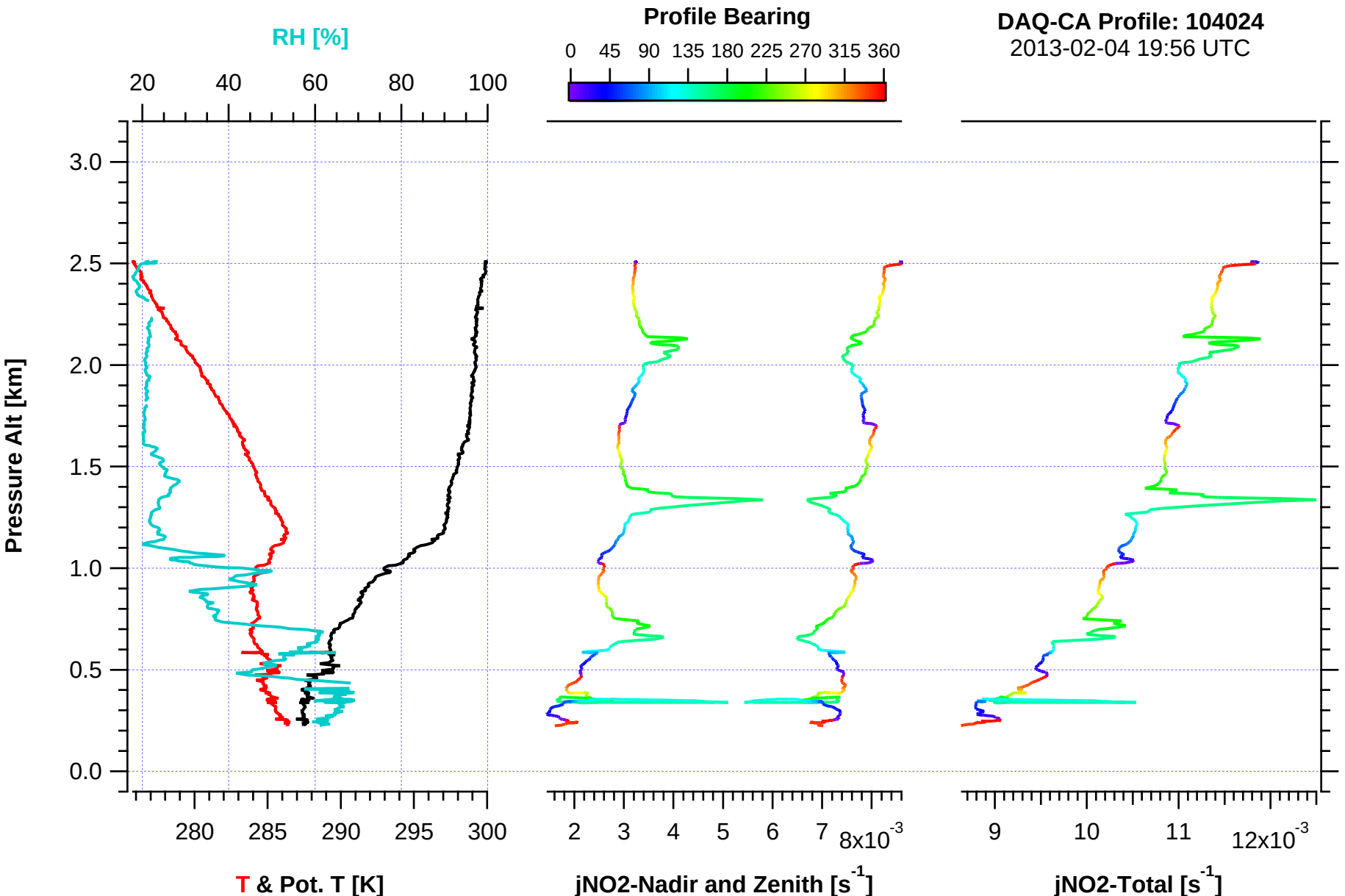

DAQ-CA Profile: 104024
2013-02-04 19:56 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
100 120 140 160
CO Mixing Ratio [ppbv]
42 44 46 48 50
O3 Mixing Ratio [ppbv]

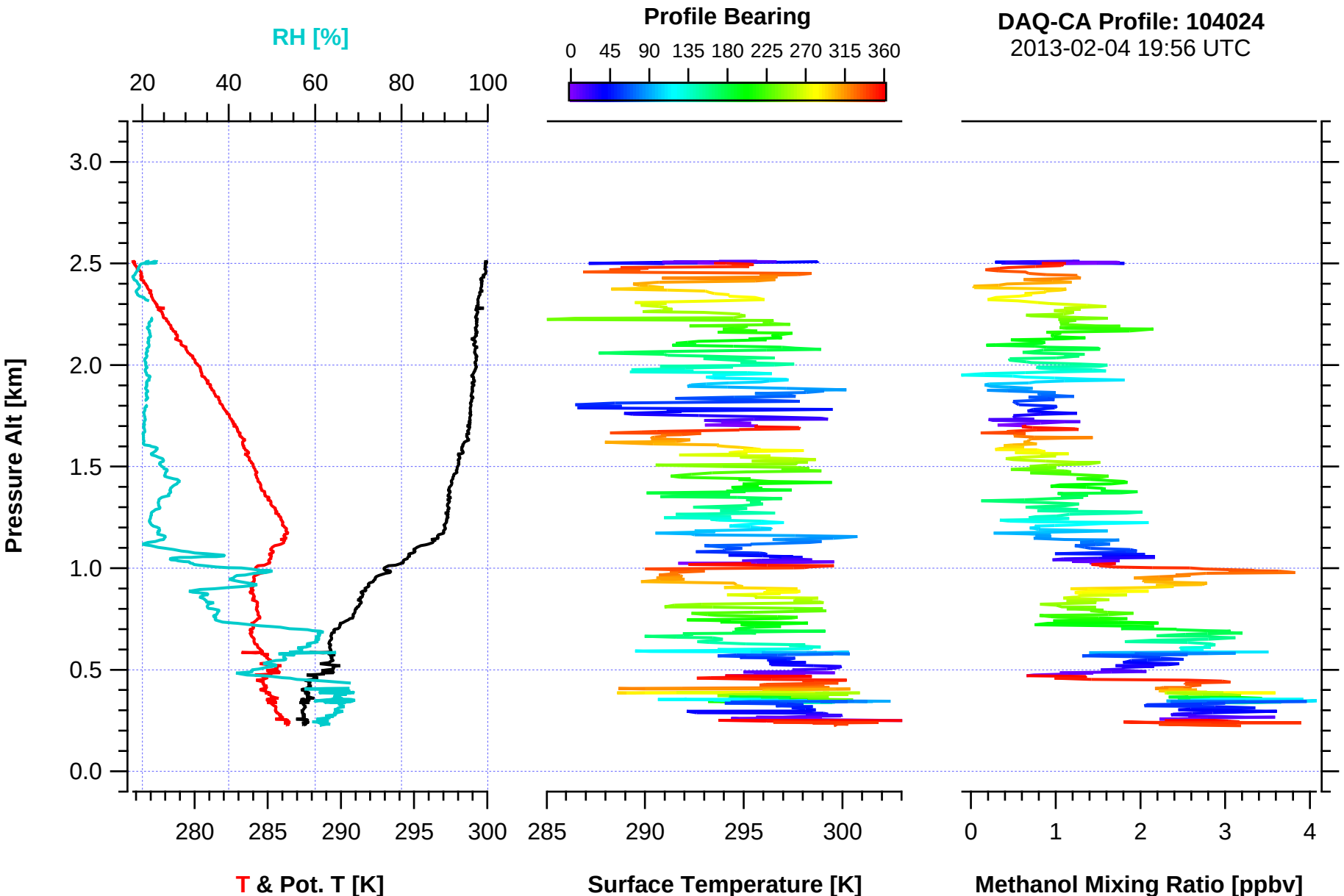

DAQ-CA Profile: 104024
2013-02-04 19:56 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
200 400 600 800 1000
NO2 Mixing Ratio [pptv]
100 200 300 400
NO Mixing Ratio [pptv]

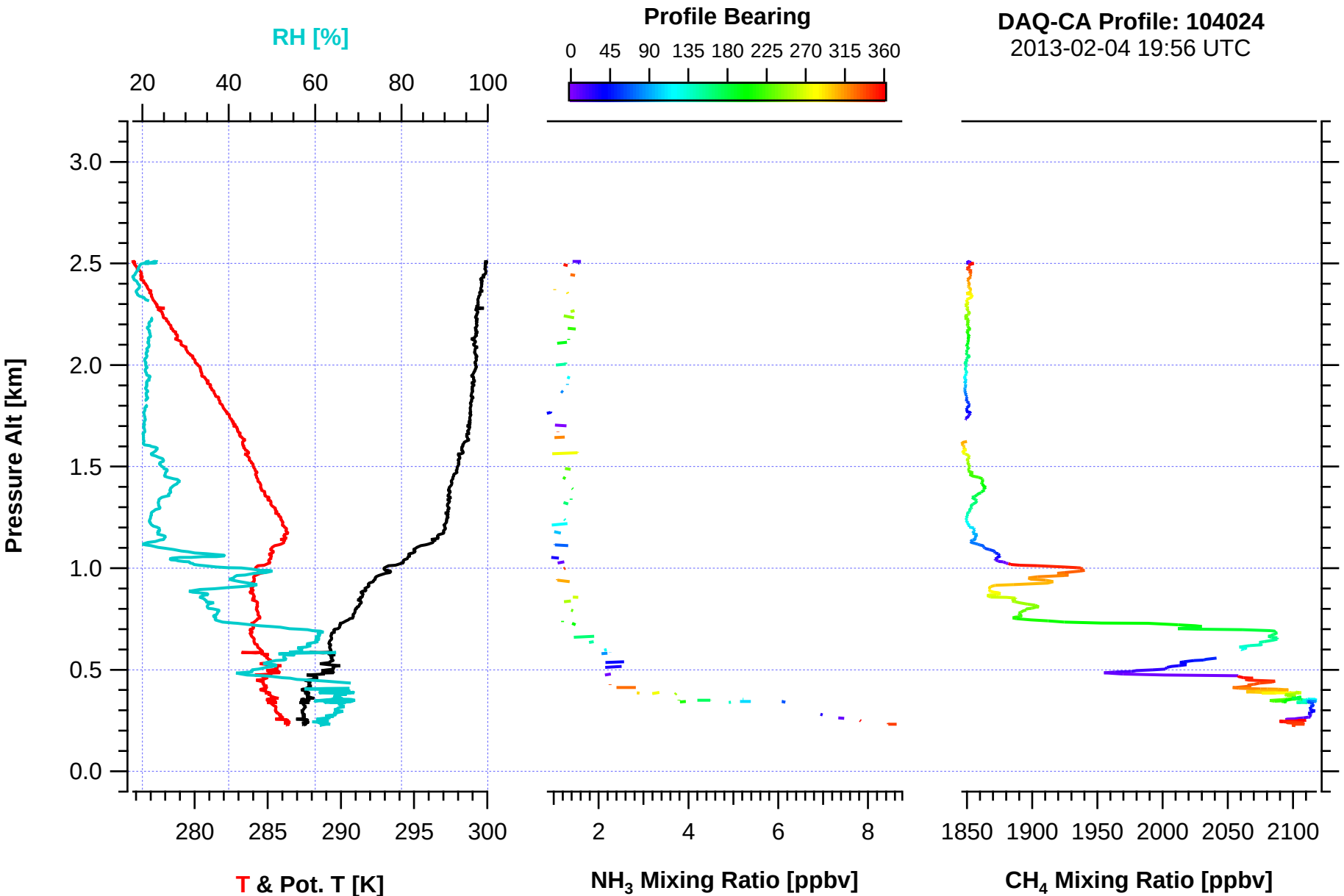

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104024
2013-02-04 19:56 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
0
500
1000
1500
CH2O Mixing Ratio [pptv]
0.0
0.5
1.0
1.5
Acetaldehyde Mixing Ratio [ppbv]

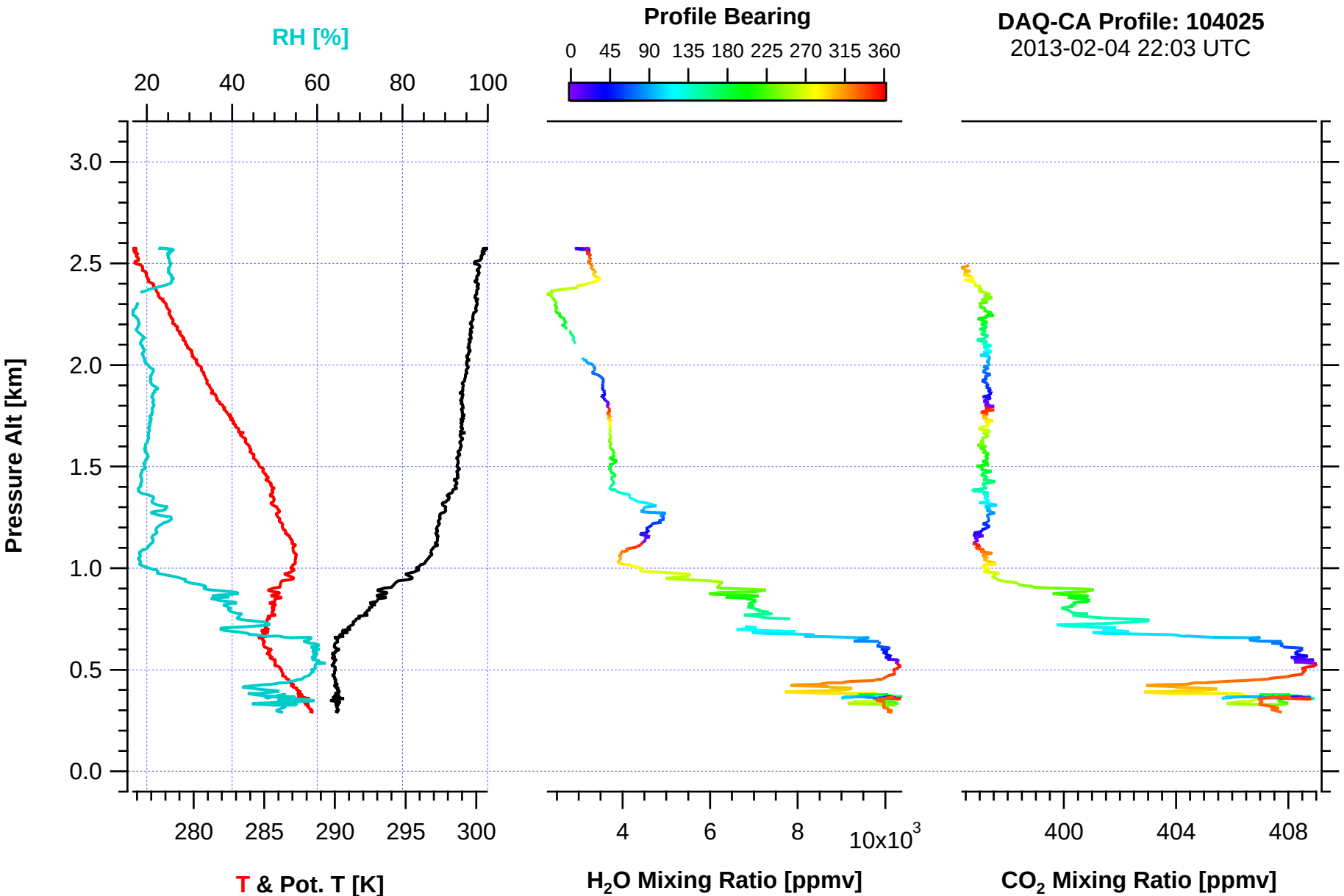

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104024
2013-02-04 19:56 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
-0.05
0.00
0.05
0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.2
-0.1
0.0
0.1
0.2
Isoprene Mixing Ratio [ppbv]

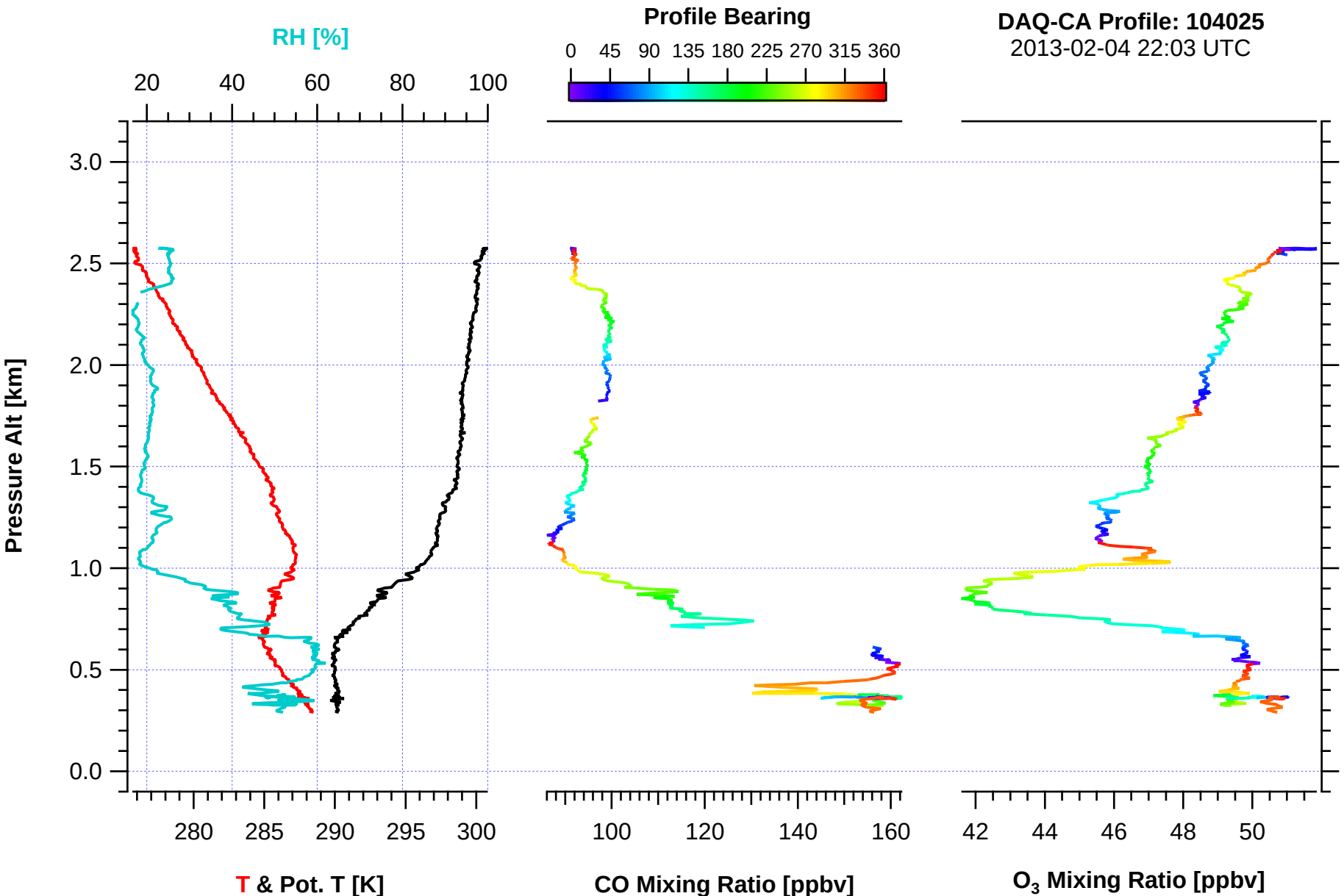

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104024
2013-02-04 19:56 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
0
20
40
60
80
100
SCAT550nm, dry [Mm-1]
1000
2000
3000
CN > 10nm [# cm-3]

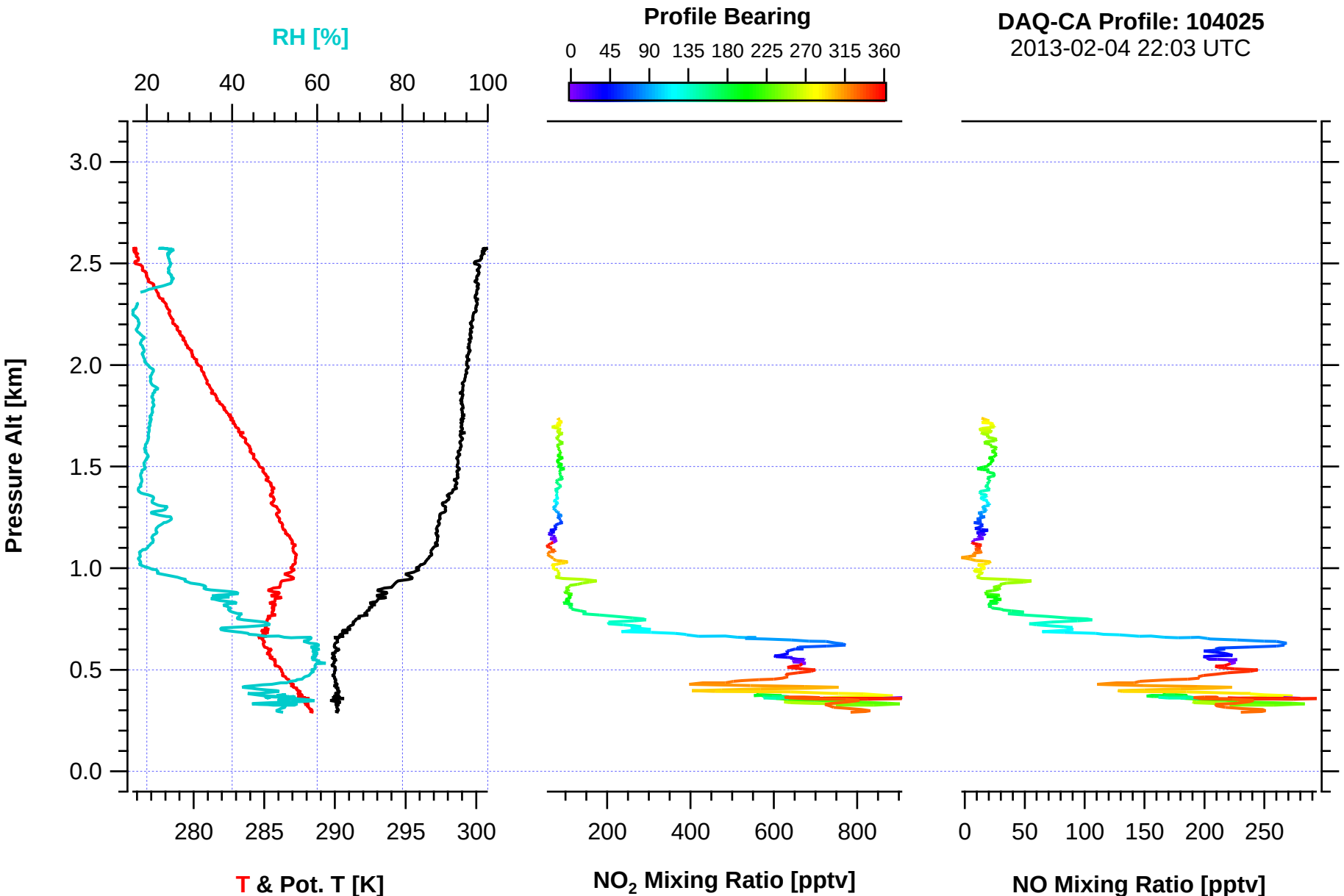

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104024
2013-02-04 19:56 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
2
3
4
5
6
7
8x10-3
jNO2-Nadir and Zenith [s-1]
9
10
11
12x10-3
jNO2-Total [s-1]

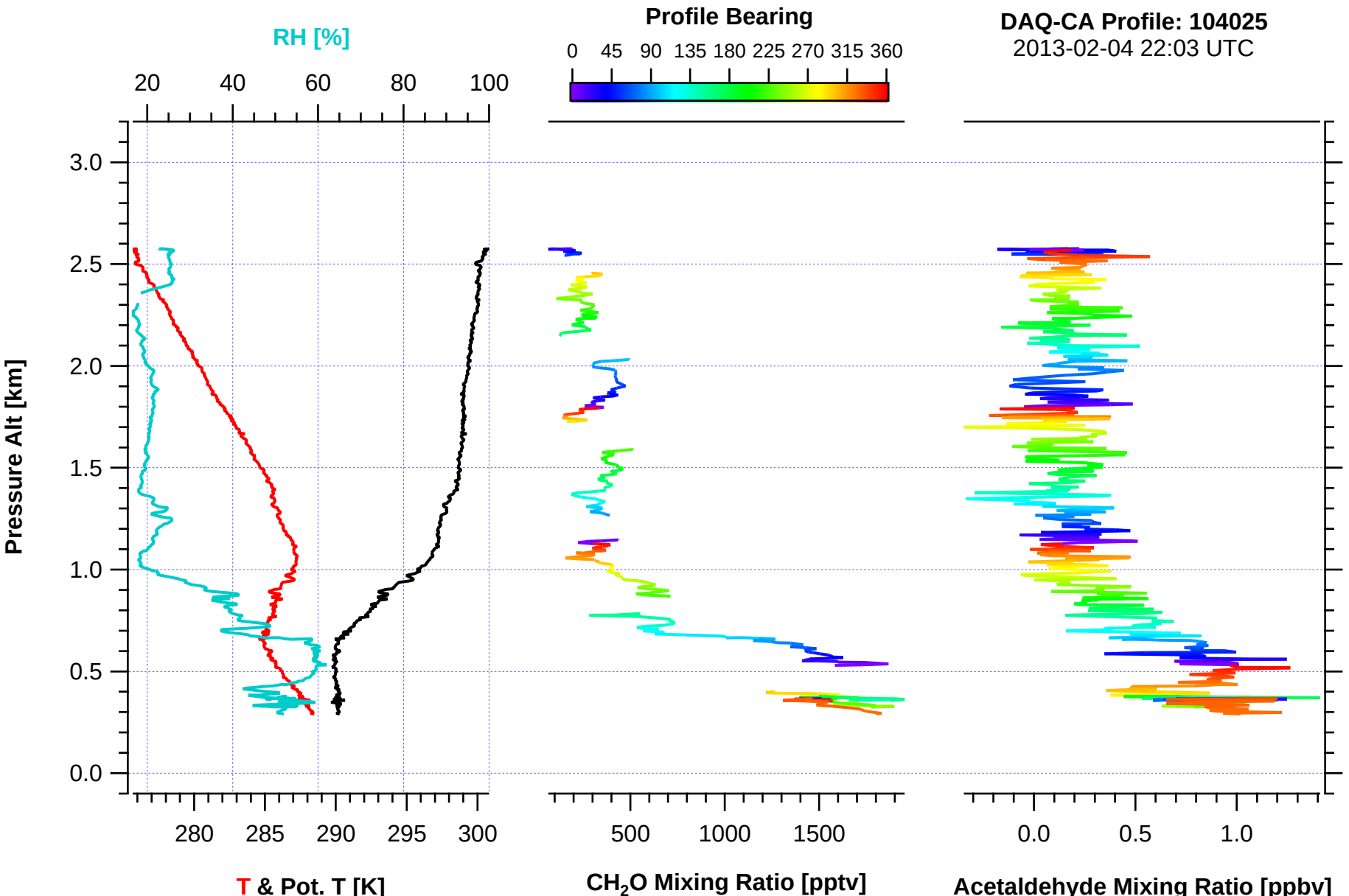

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104024
2013-02-04 19:56 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
285 290 295 300
Surface Temperature [K]
0 1 2 3 4
Methanol Mixing Ratio [ppbv]

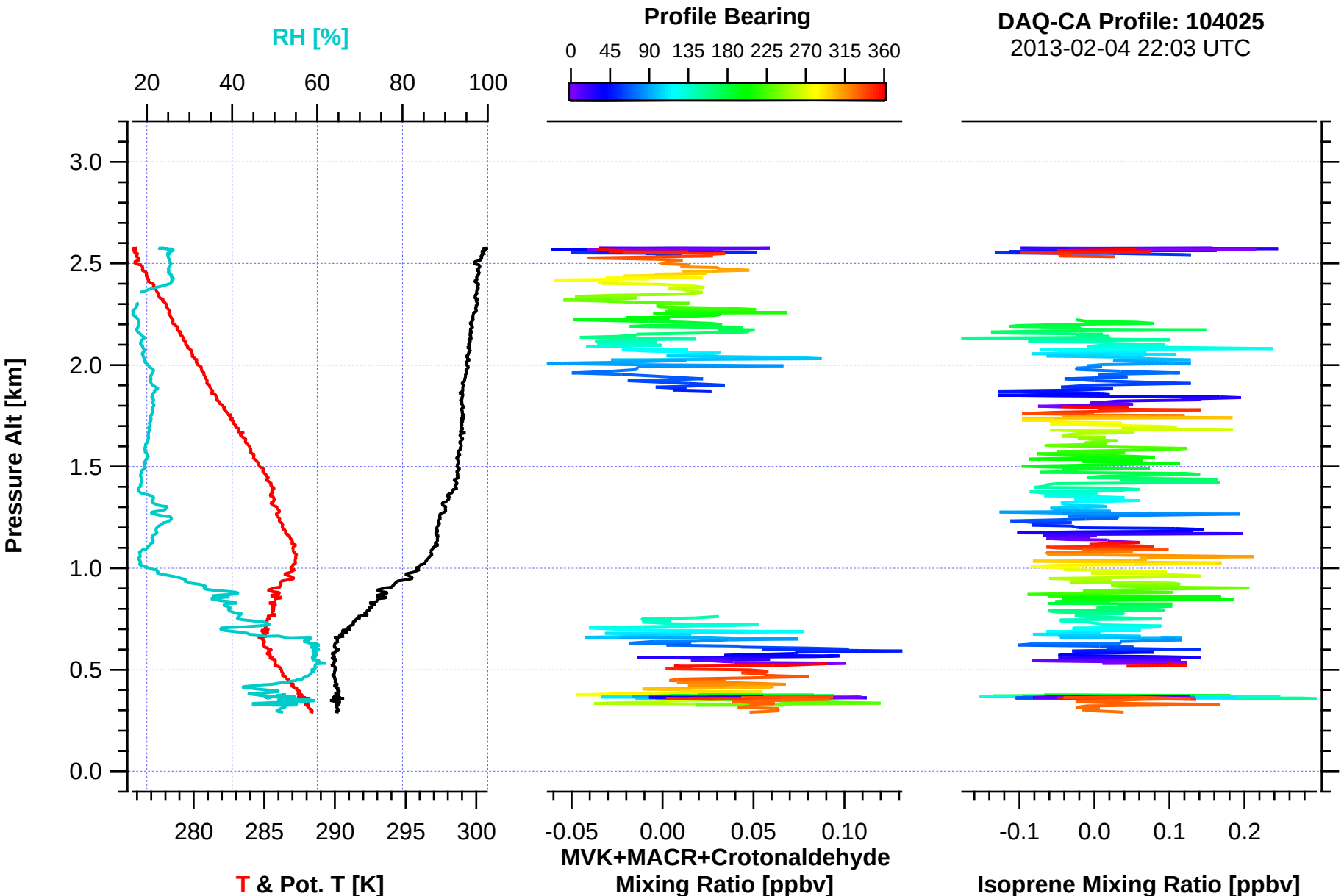

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104024
2013-02-04 19:56 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
2
4
6
8
NH3 Mixing Ratio [ppbv]
1850
1900
1950
2000
2050
2100
CH4 Mixing Ratio [ppbv]

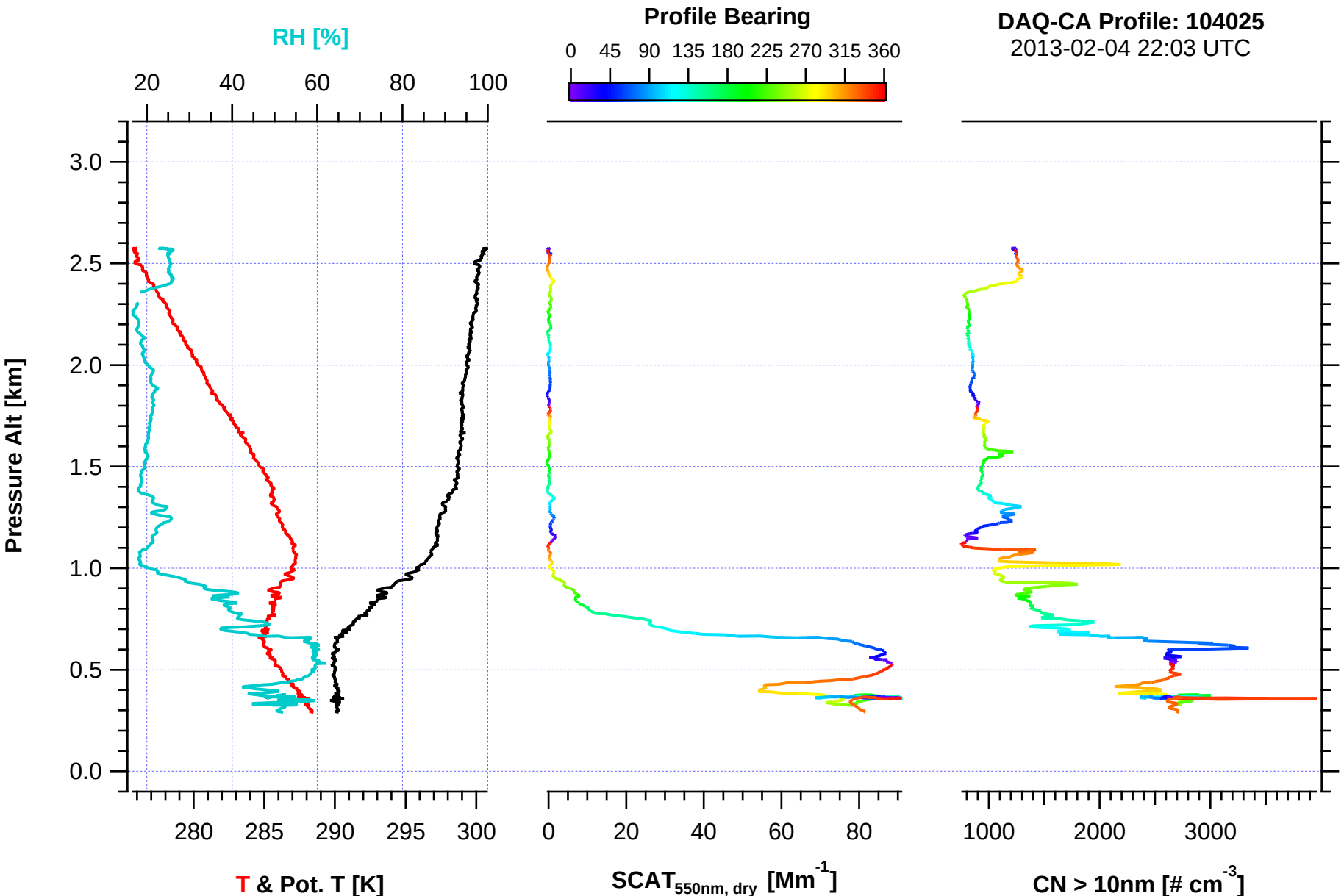

DAQ-CA Profile: 104025
2013-02-04 22:03 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
4 6 8
10x10^3
H2O Mixing Ratio [ppmv]
400 404 408
CO2 Mixing Ratio [ppmv]

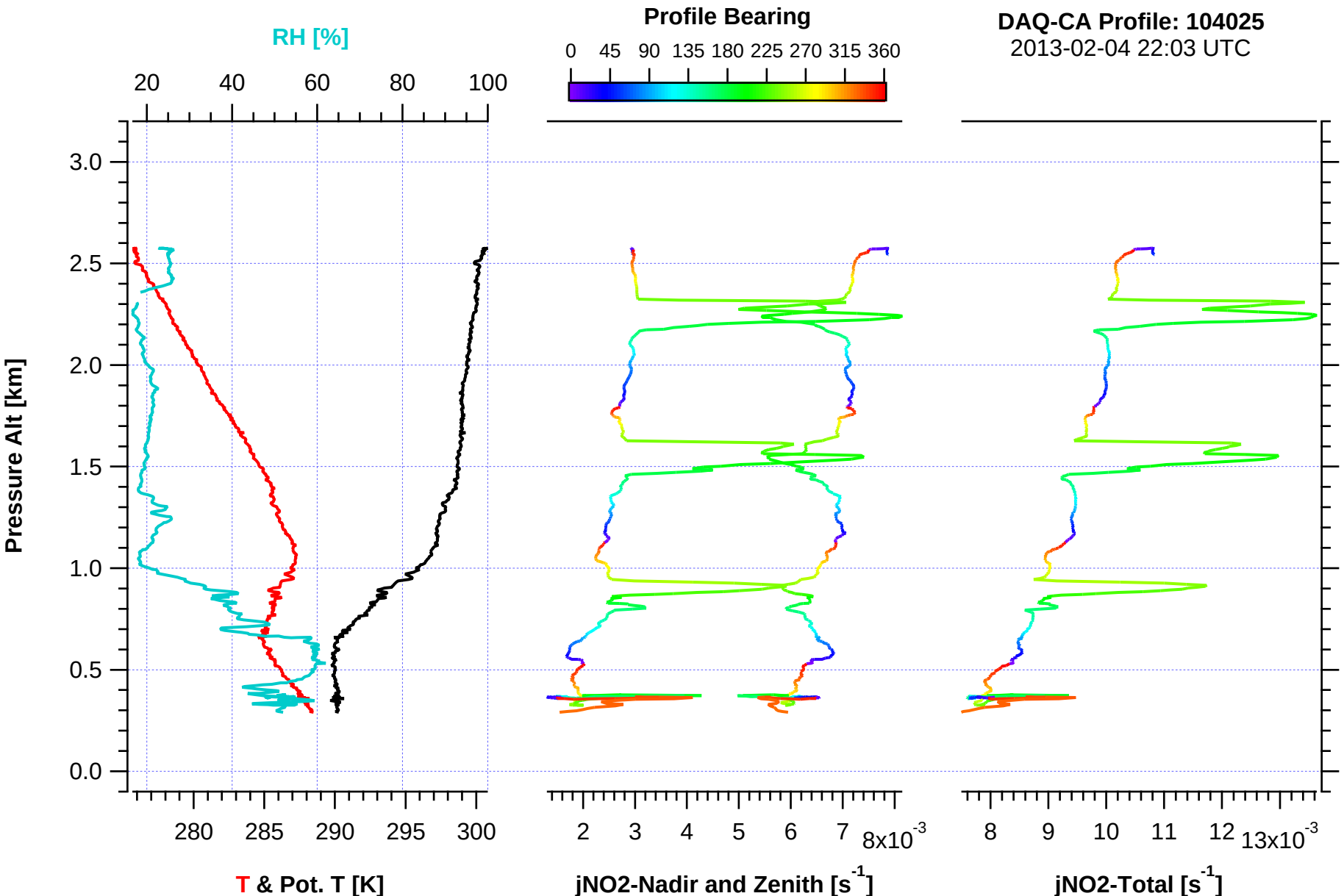

DAQ-CA Profile: 104025
2013-02-04 22:03 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0 2.5 2.0 1.5 1.0 0.5 0.0
280 285 290 295 300
T & Pot. T [K]
100 120 140 160
CO Mixing Ratio [ppbv]
42 44 46 48 50
O3 Mixing Ratio [ppbv]

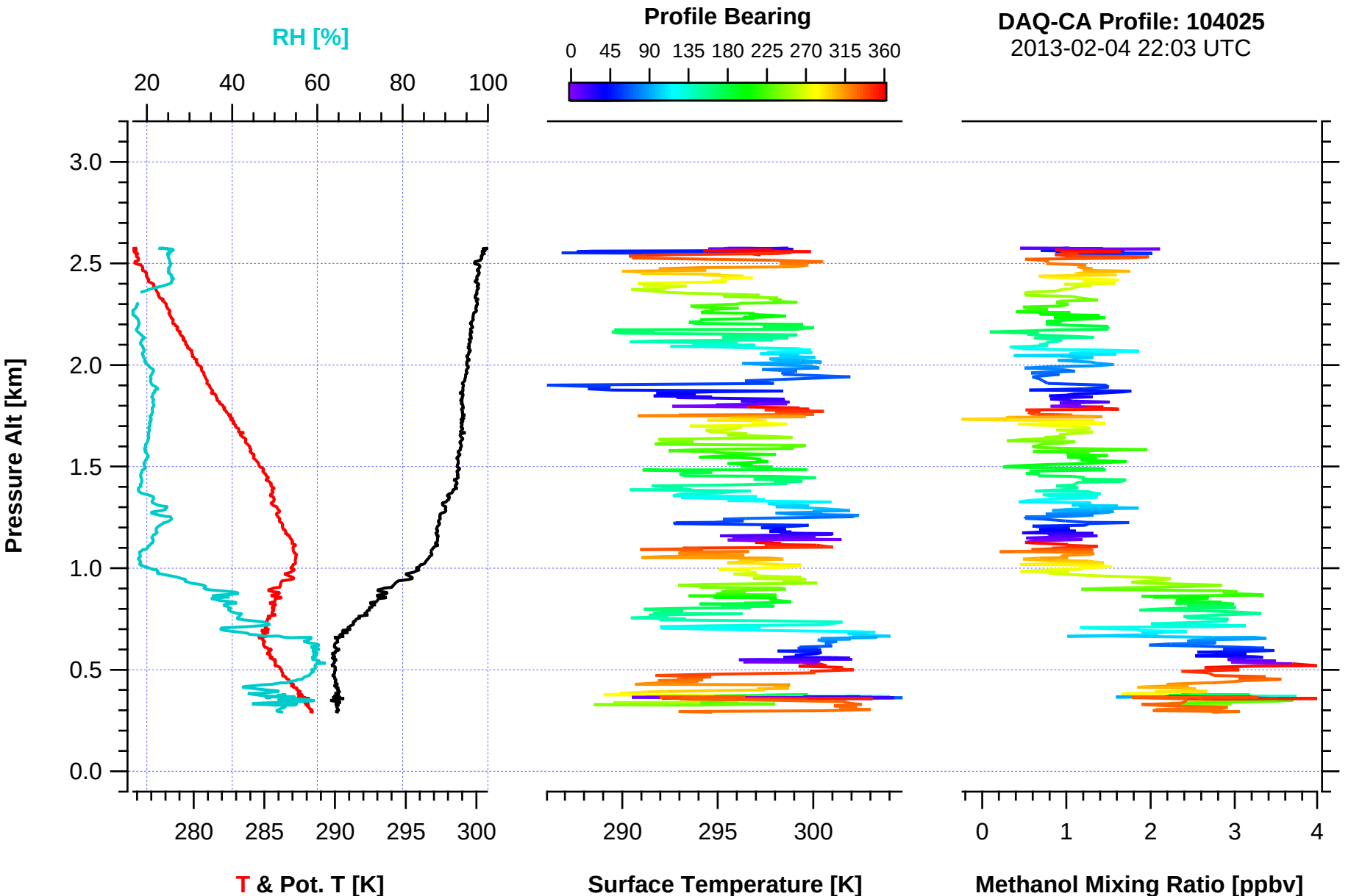

DAQ-CA Profile: 104025
2013-02-04 22:03 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0 2.5 2.0 1.5 1.0 0.5 0.0
280 285 290 295 300
T & Pot. T [K]
200 400 600 800
NO2 Mixing Ratio [pptv]
0 50 100 150 200 250
NO Mixing Ratio [pptv]

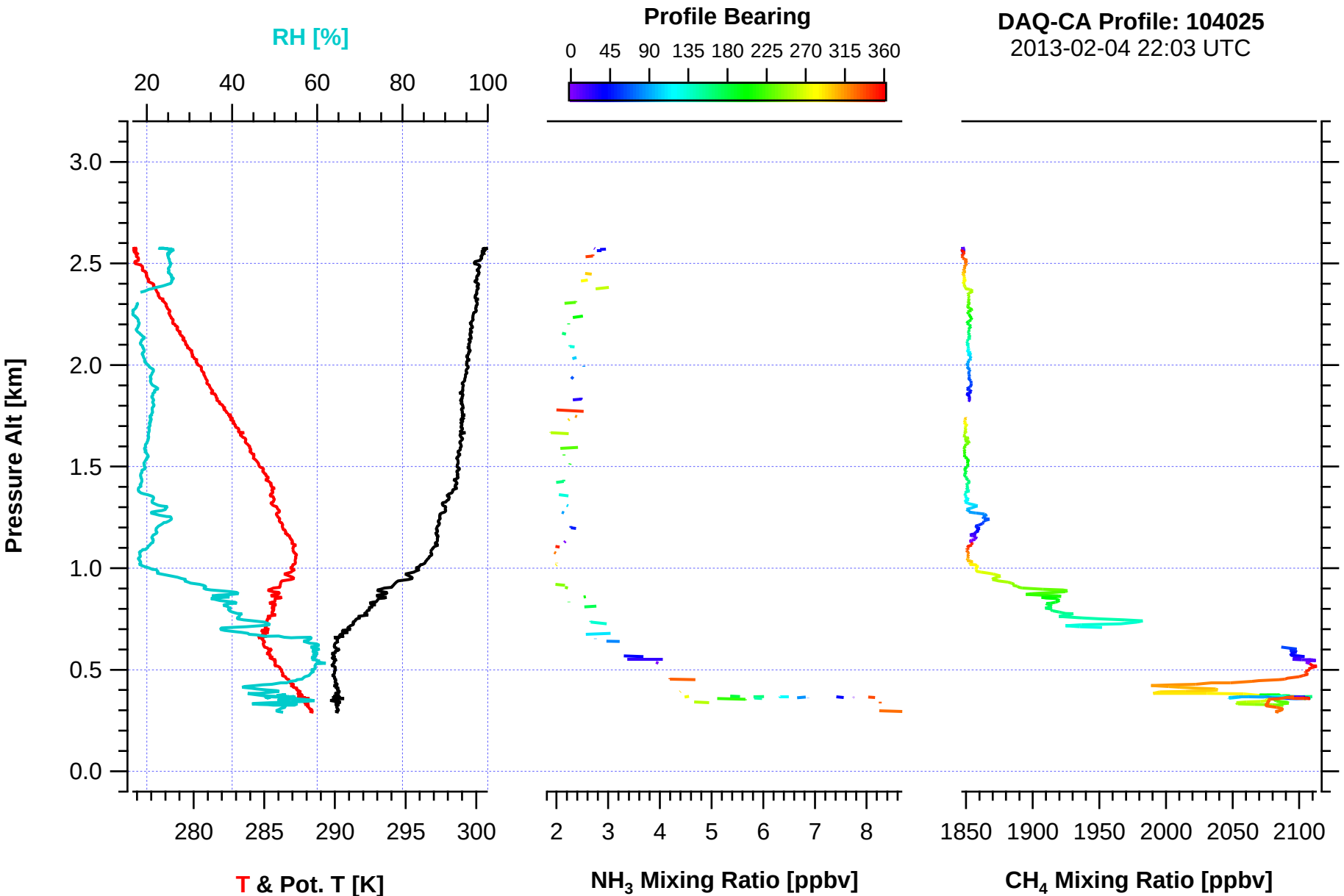

DAQ-CA Profile: 104025
2013-02-04 22:03 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0 2.5 2.0 1.5 1.0 0.5 0.0
280 285 290 295 300
T & Pot. T [K]
500 1000 1500
CH2O Mixing Ratio [pptv]
0.0 0.5 1.0
Acetaldehyde Mixing Ratio [ppbv]

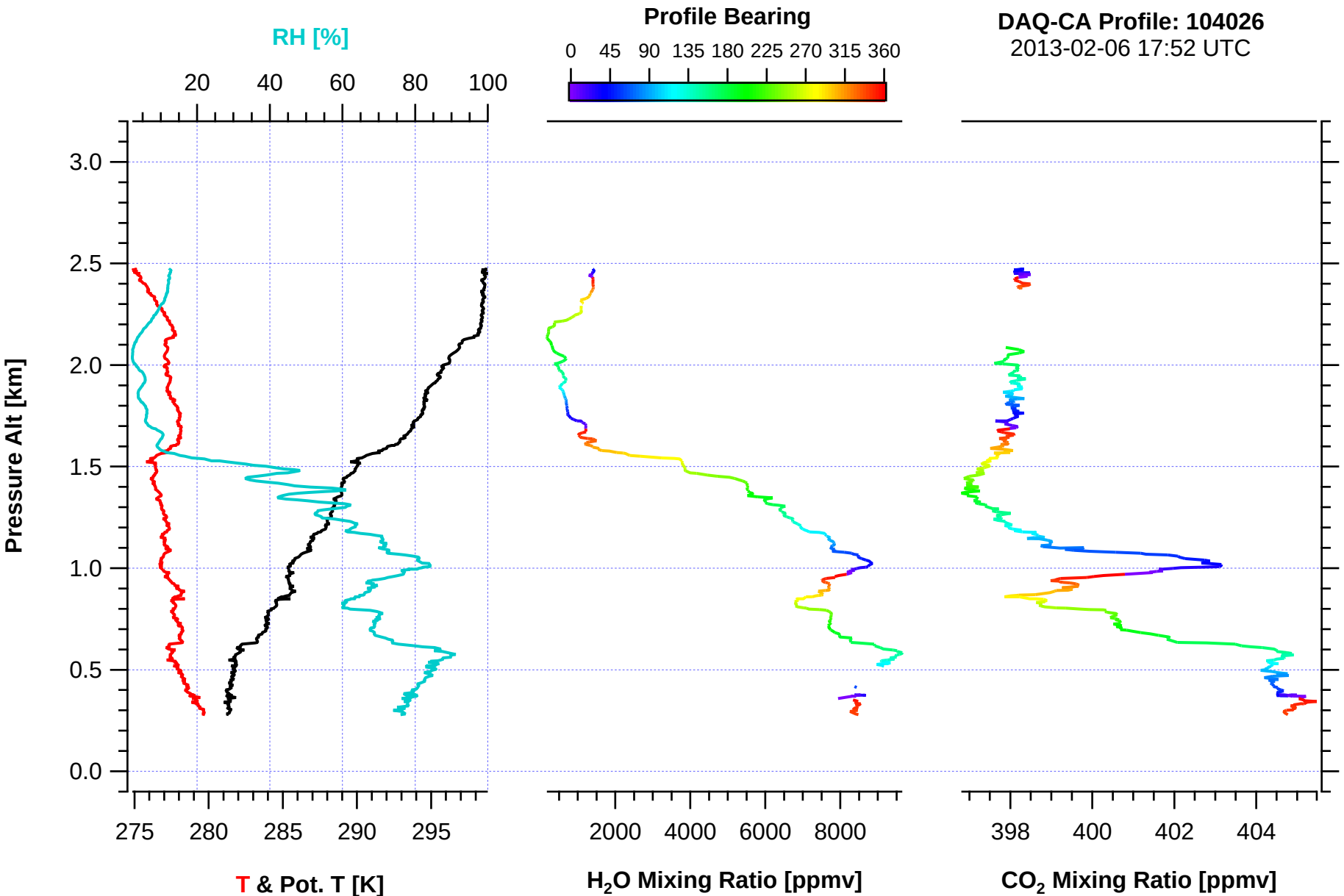

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104025
2013-02-04 22:03 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
-0.05
0.00
0.05
0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.1
0.0
0.1
0.2
Isoprene Mixing Ratio [ppbv]

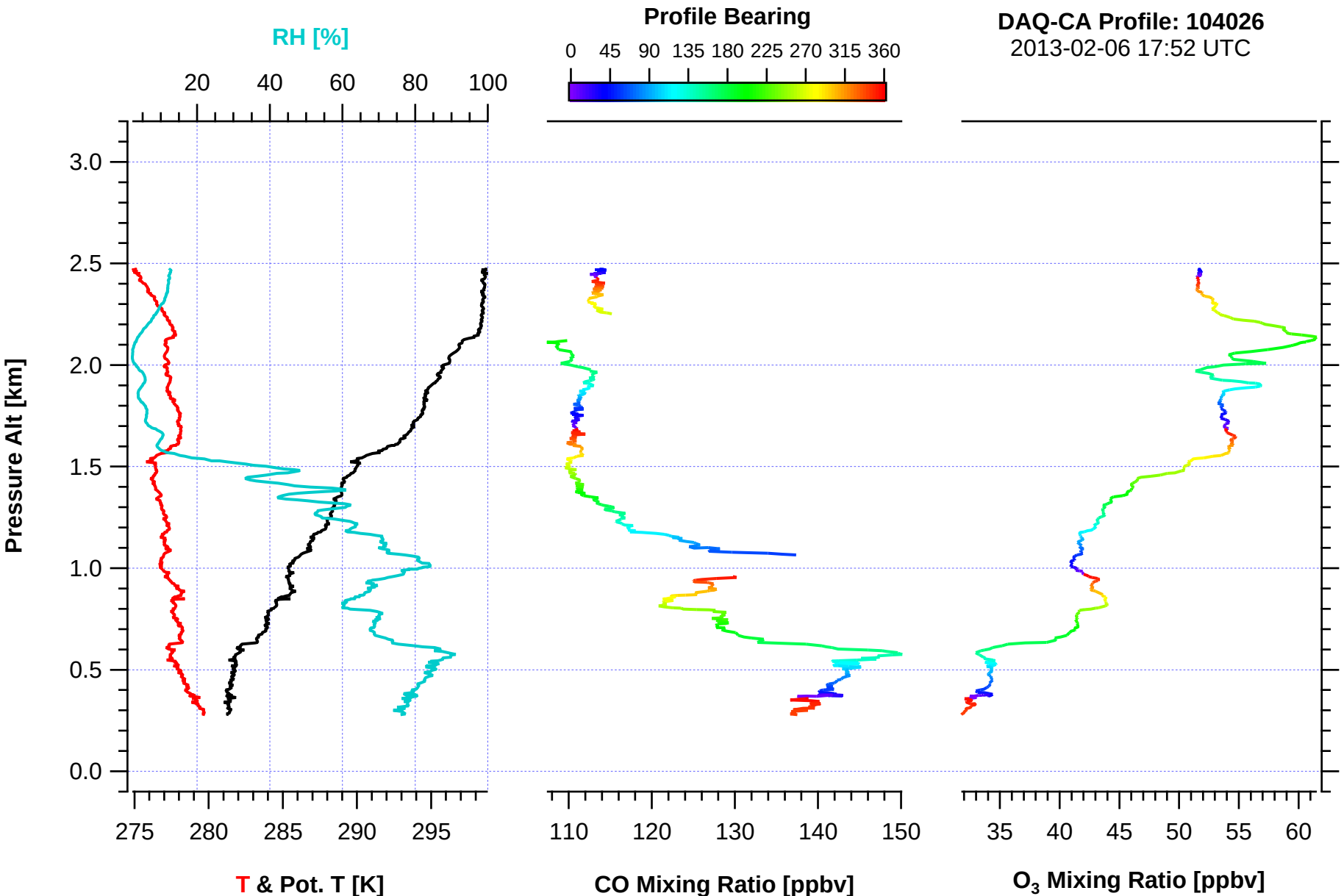

DAQ-CA Profile: 104025
2013-02-04 22:03 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
0 20 40 60 80
SCAT550nm, dry [Mm-1]
1000 2000 3000
CN > 10nm [# cm-3]

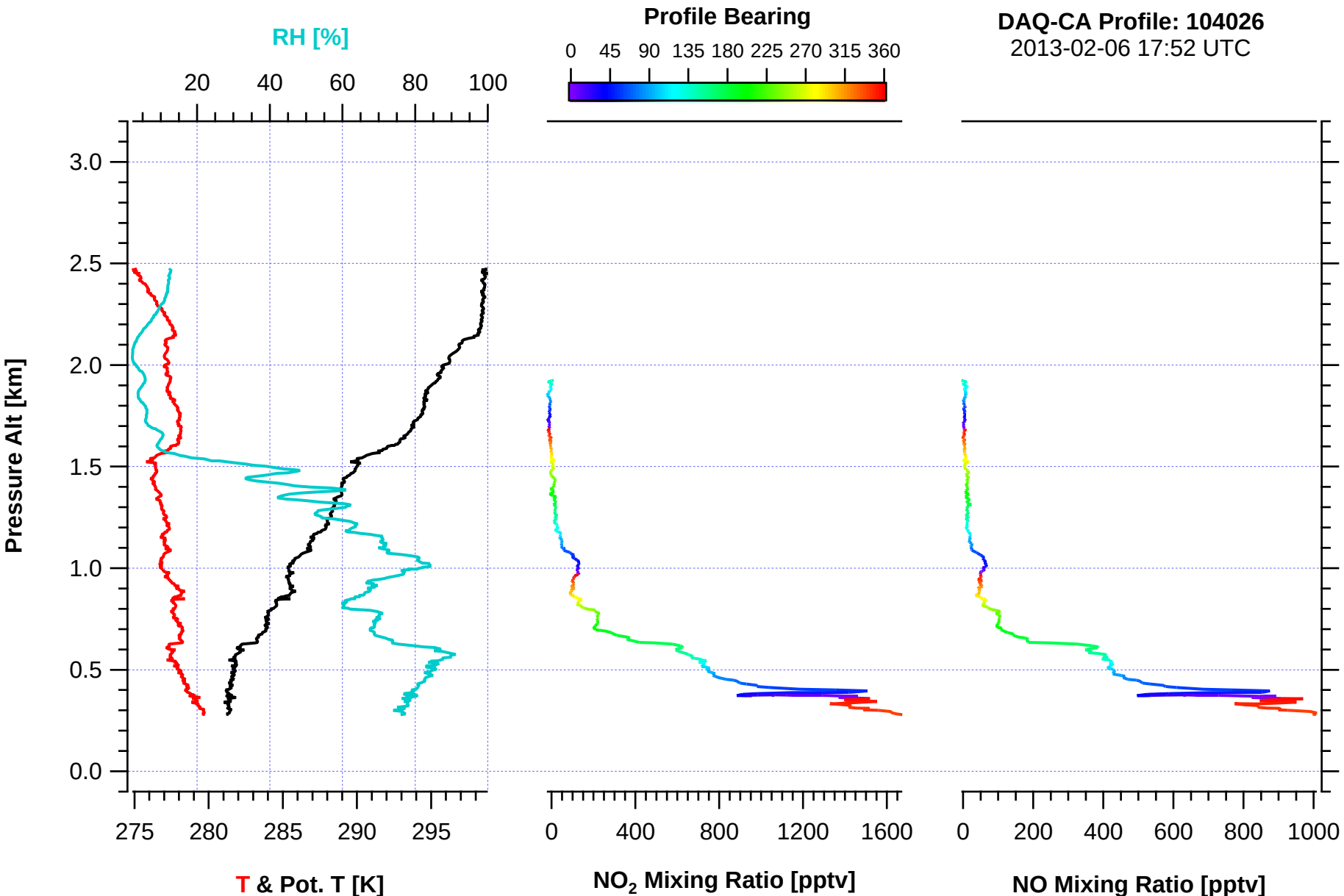

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104025
2013-02-04 22:03 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2 3 4 5 6 7 8x10-3
jNO2-Nadir and Zenith [s-1]
8 9 10 11 12 13x10-3
jNO2-Total [s-1]

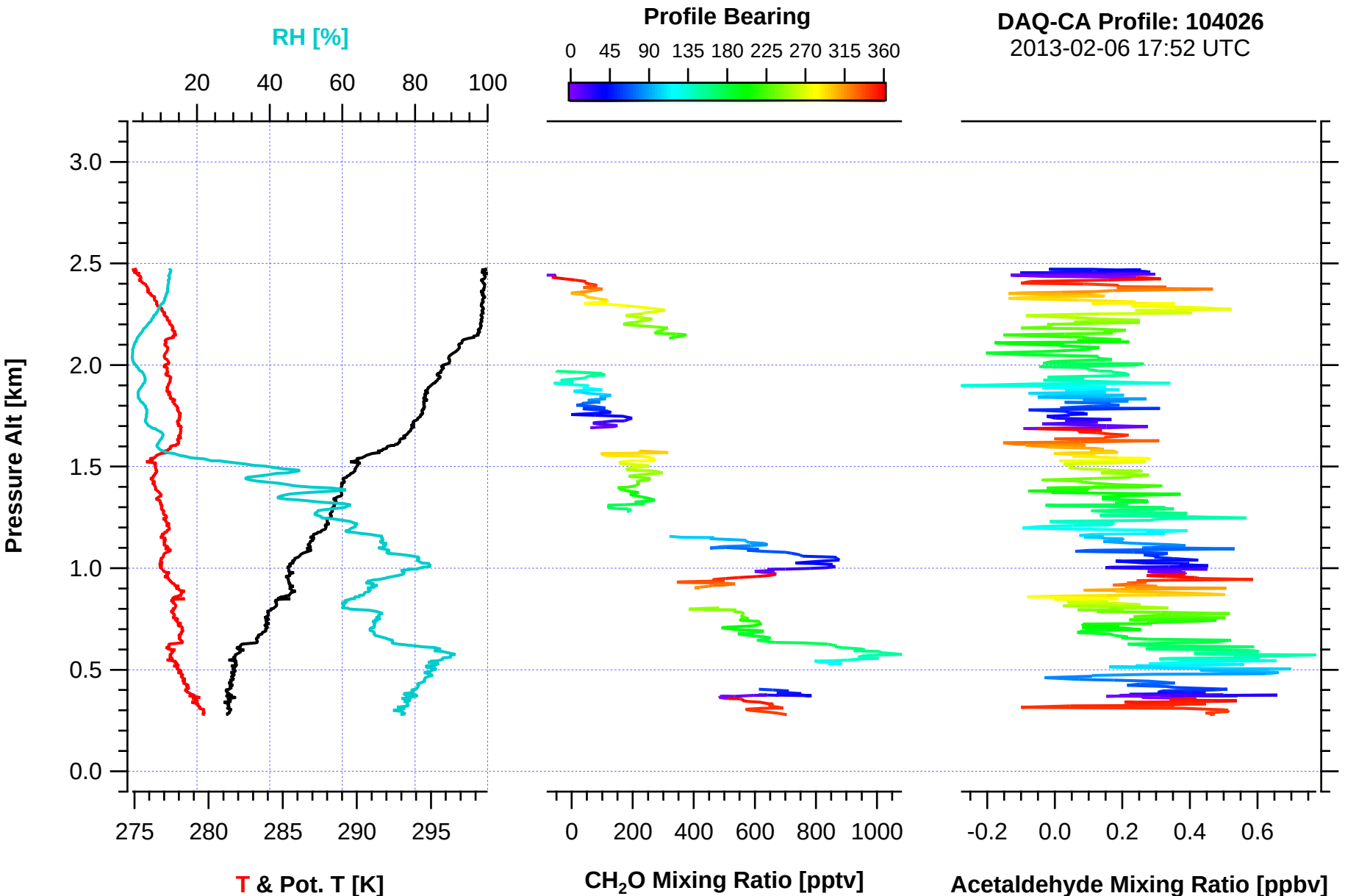

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104025
2013-02-04 22:03 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
300
T & Pot. T [K]
290
295
300
Surface Temperature [K]
0
1
2
3
4
Methanol Mixing Ratio [ppbv]

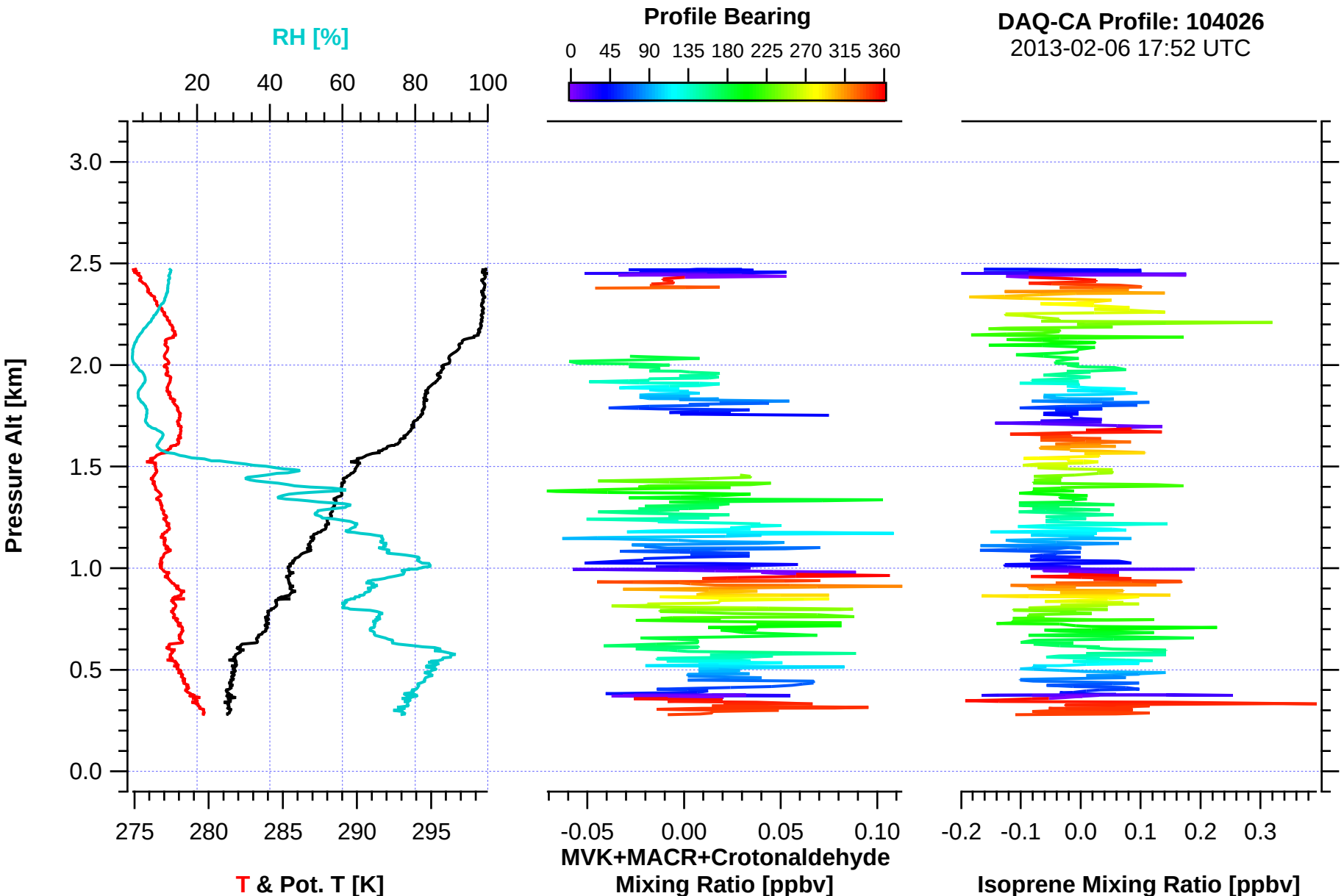

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104025
2013-02-04 22:03 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295 300
T & Pot. T [K]
2 3 4 5 6 7 8
NH3 Mixing Ratio [ppbv]
1850 1900 1950 2000 2050 2100
CH4 Mixing Ratio [ppbv]

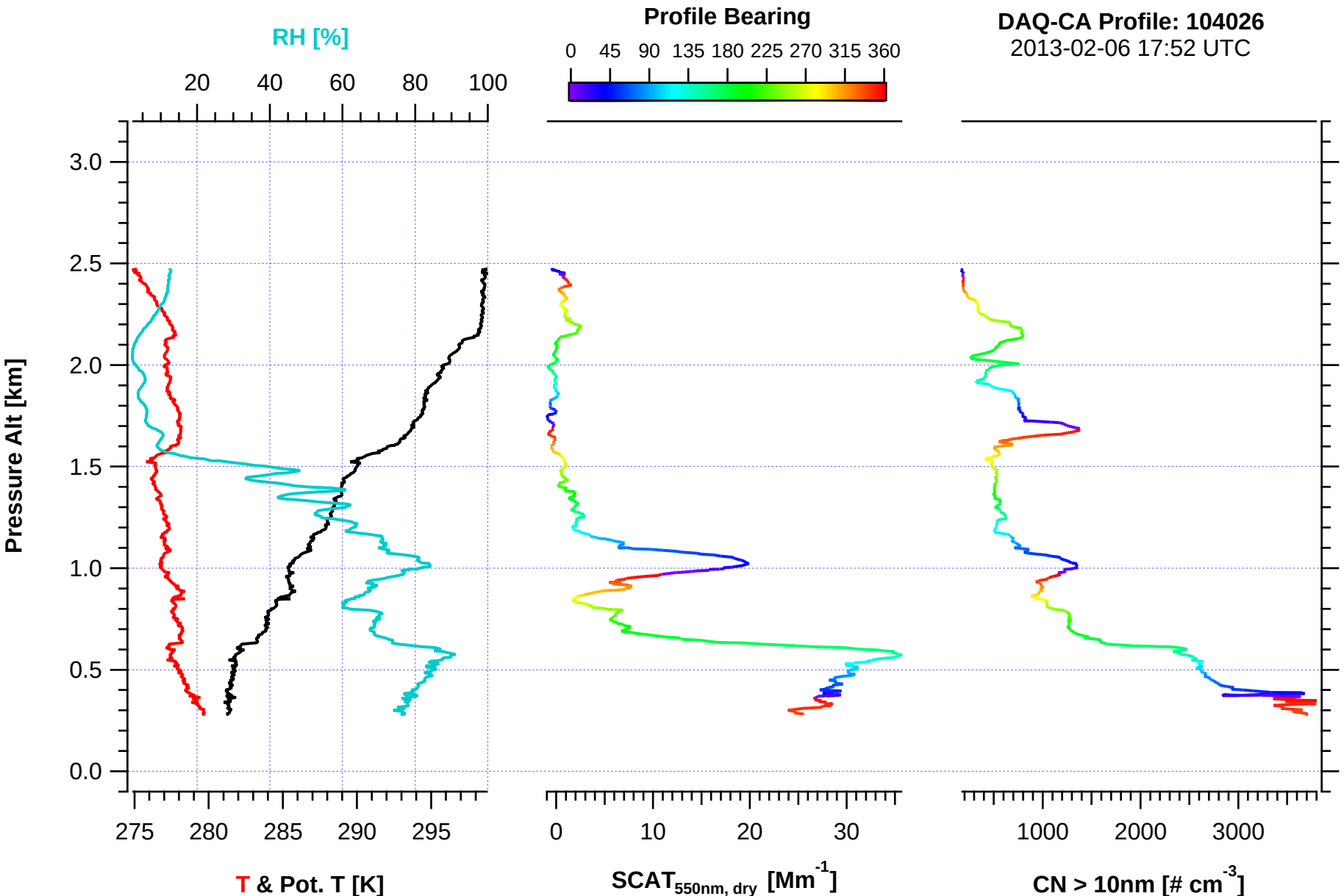

DAQ-CA Profile: 104026
2013-02-06 17:52 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
275 280 285 290 295
T & Pot. T [K]
2000 4000 6000 8000
H2O Mixing Ratio [ppmv]
398 400 402 404
CO2 Mixing Ratio [ppmv]

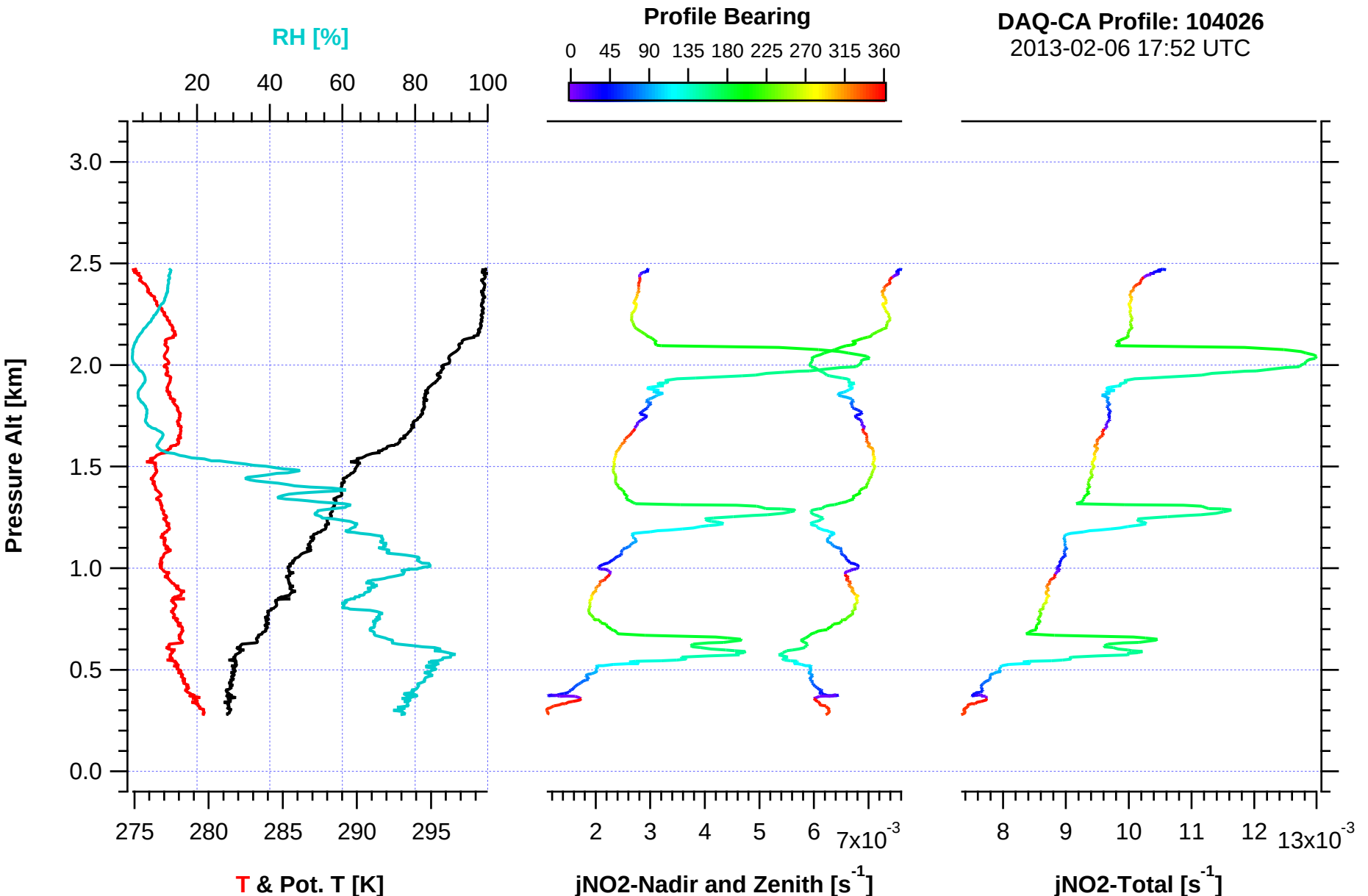

DAQ-CA Profile: 104026
2013-02-06 17:52 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
275 280 285 290 295
T & Pot. T [K]
110 120 130 140 150
CO Mixing Ratio [ppbv]
35 40 45 50 55 60
O3 Mixing Ratio [ppbv]

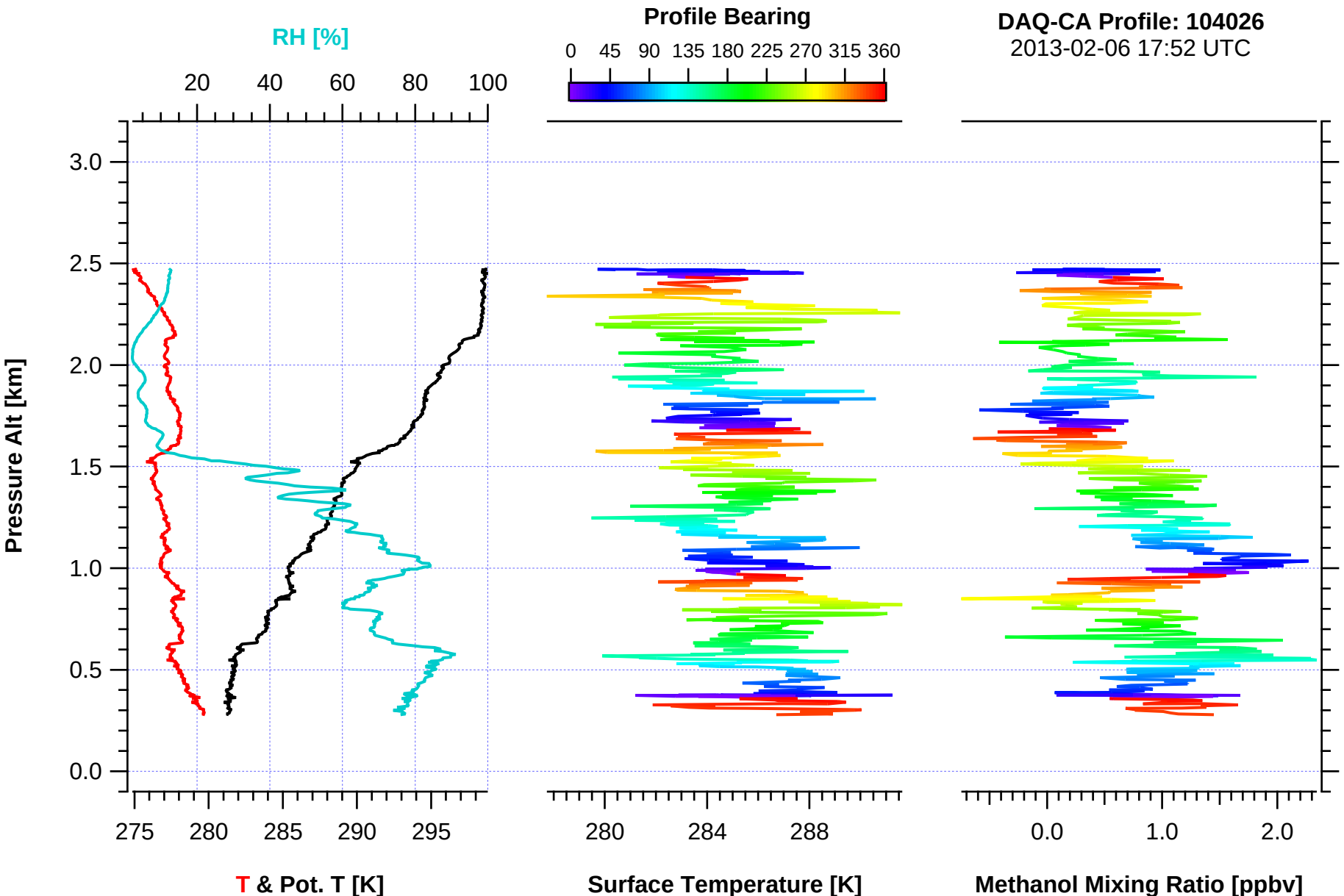

DAQ-CA Profile: 104026
2013-02-06 17:52 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
275 280 285 290 295
T & Pot. T [K]
0 400 800 1200 1600
NO2 Mixing Ratio [pptv]
0 200 400 600 800 1000
NO Mixing Ratio [pptv]

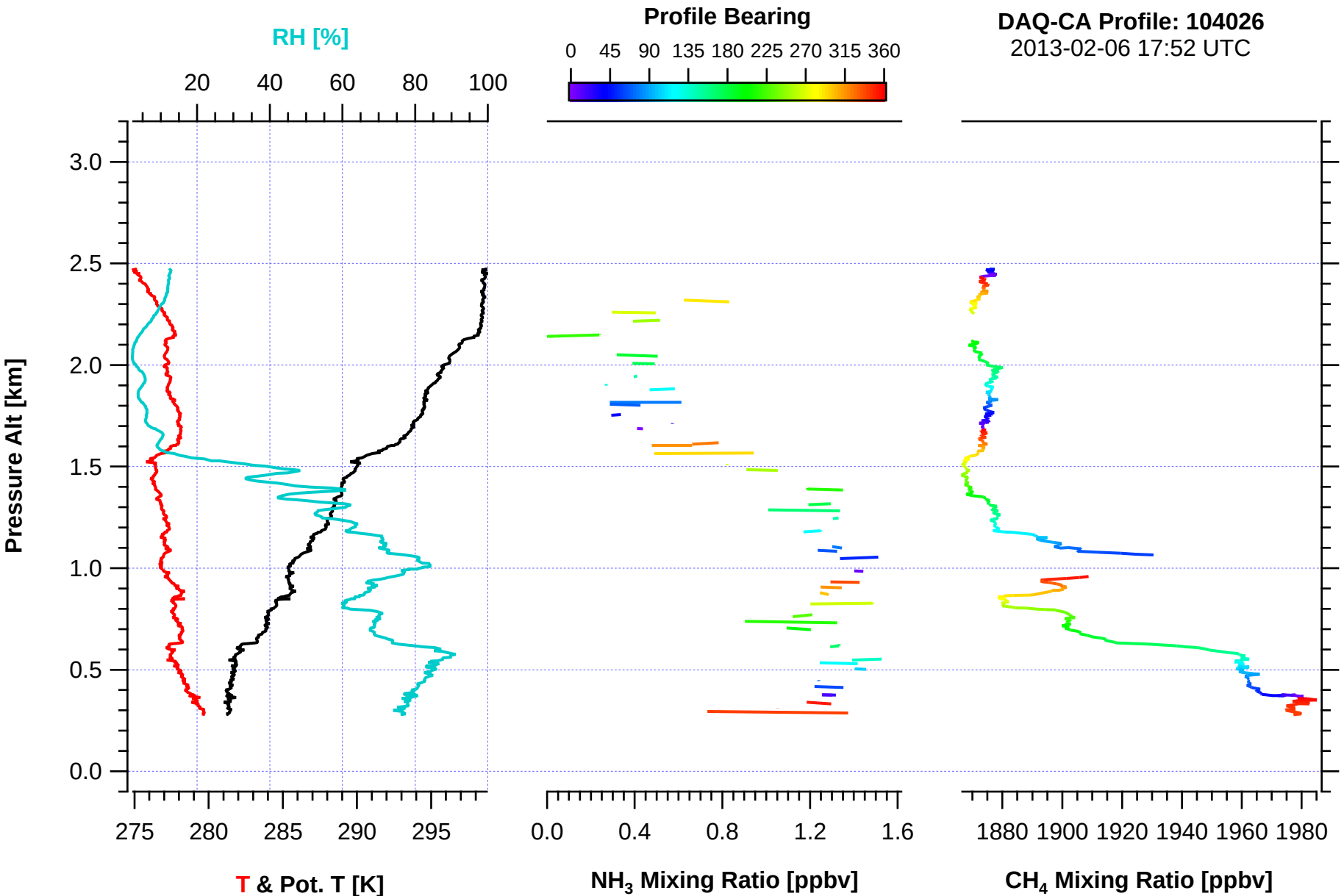

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104026
2013-02-06 17:52 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
275 280 285 290 295
T & Pot. T [K]
0 200 400 600 800 1000
CH2O Mixing Ratio [pptv]
-0.2 0.0 0.2 0.4 0.6
Acetaldehyde Mixing Ratio [ppbv]

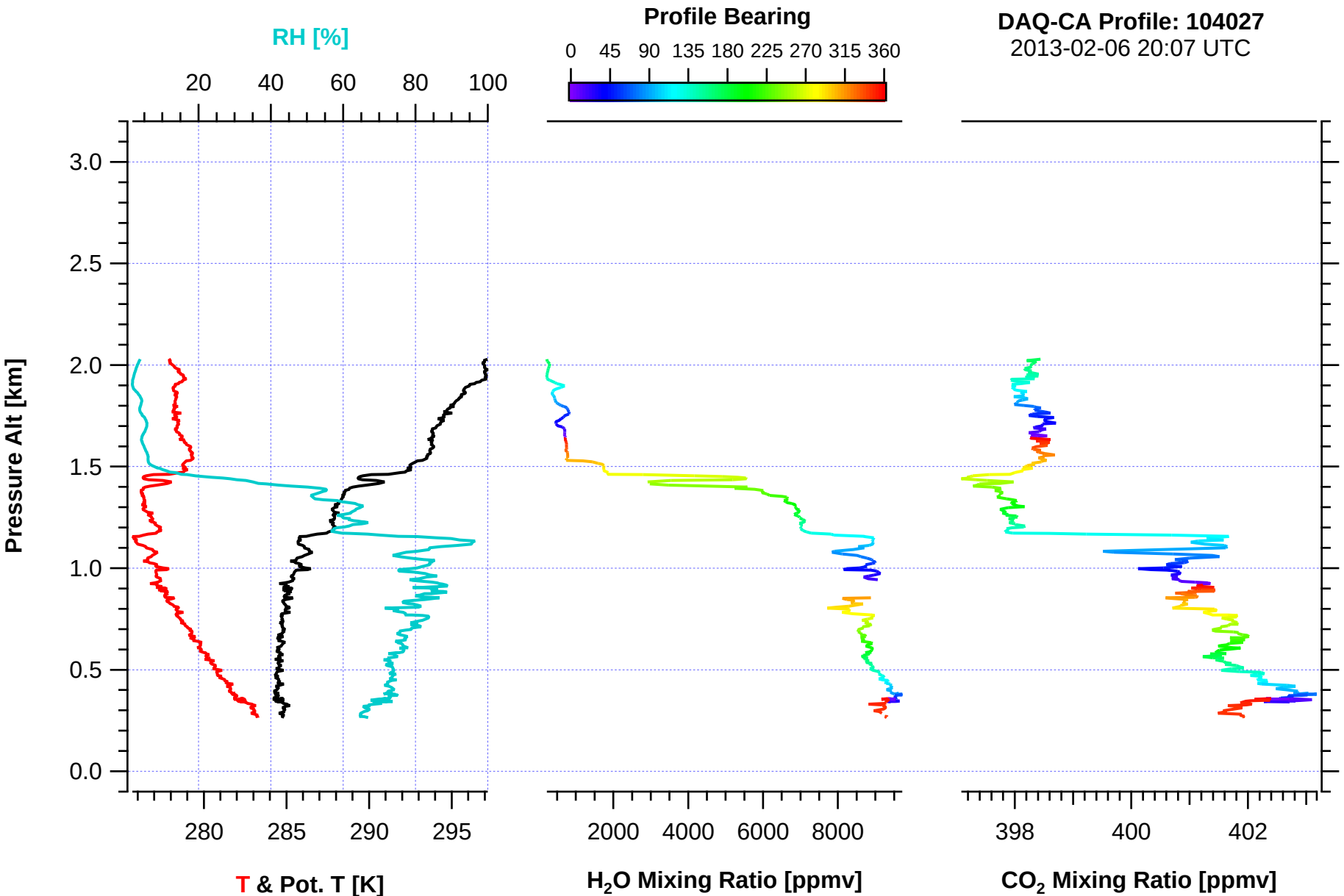

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104026
2013-02-06 17:52 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
275 280 285 290 295
T & Pot. T [K]
-0.05 0.00 0.05 0.10
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.2 -0.1 0.0 0.1 0.2 0.3
Isoprene Mixing Ratio [ppbv]

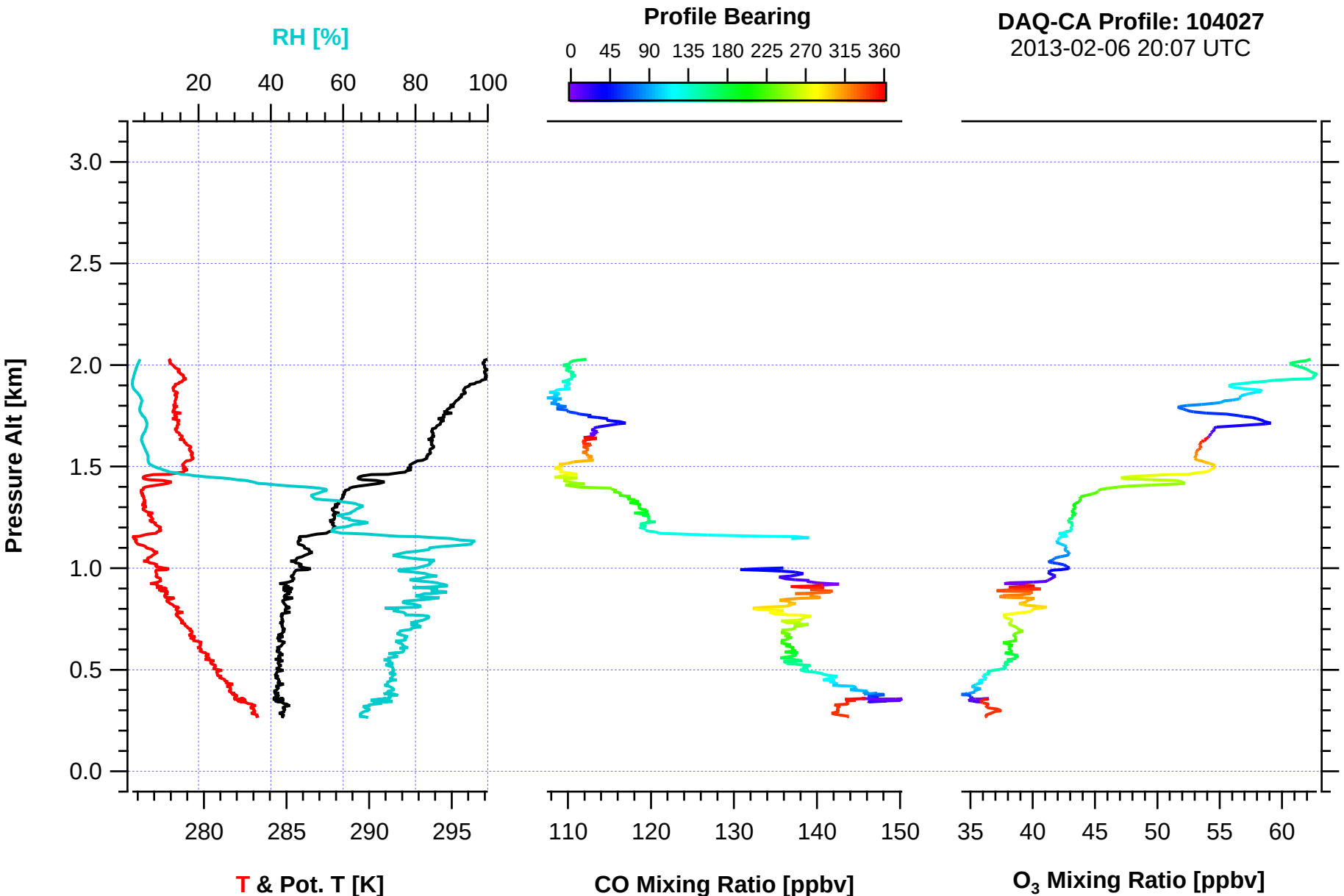

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104026
2013-02-06 17:52 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
275 280 285 290 295
T & Pot. T [K]
0 10 20 30
SCAT550nm, dry [Mm-1]
1000 2000 3000
CN > 10nm [# cm-3]

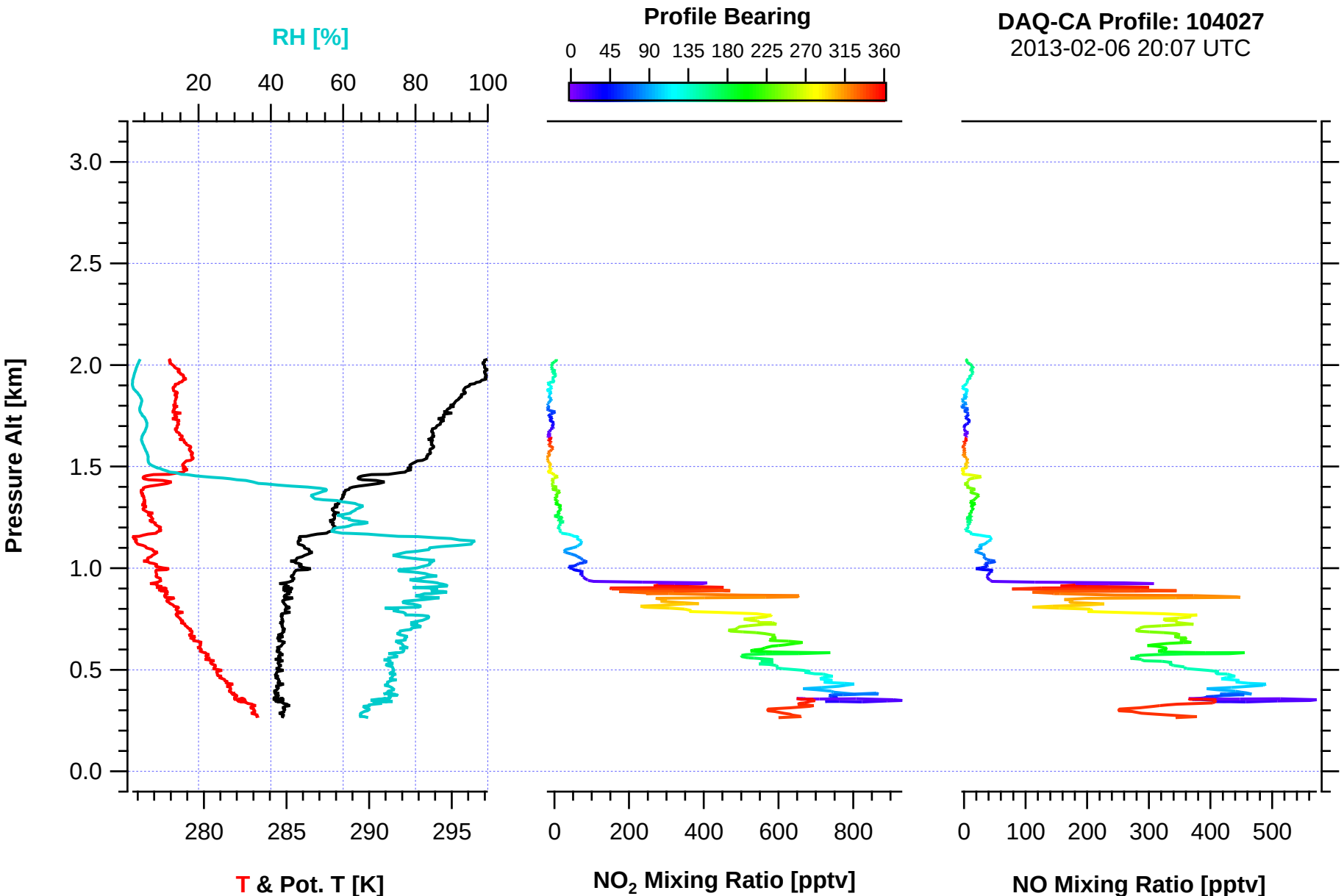

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104026
2013-02-06 17:52 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
275 280 285 290 295
T & Pot. T [K]
2 3 4 5 6 7x10-3
jNO2-Nadir and Zenith [s-1]
8 9 10 11 12 13x10-3
jNO2-Total [s-1]

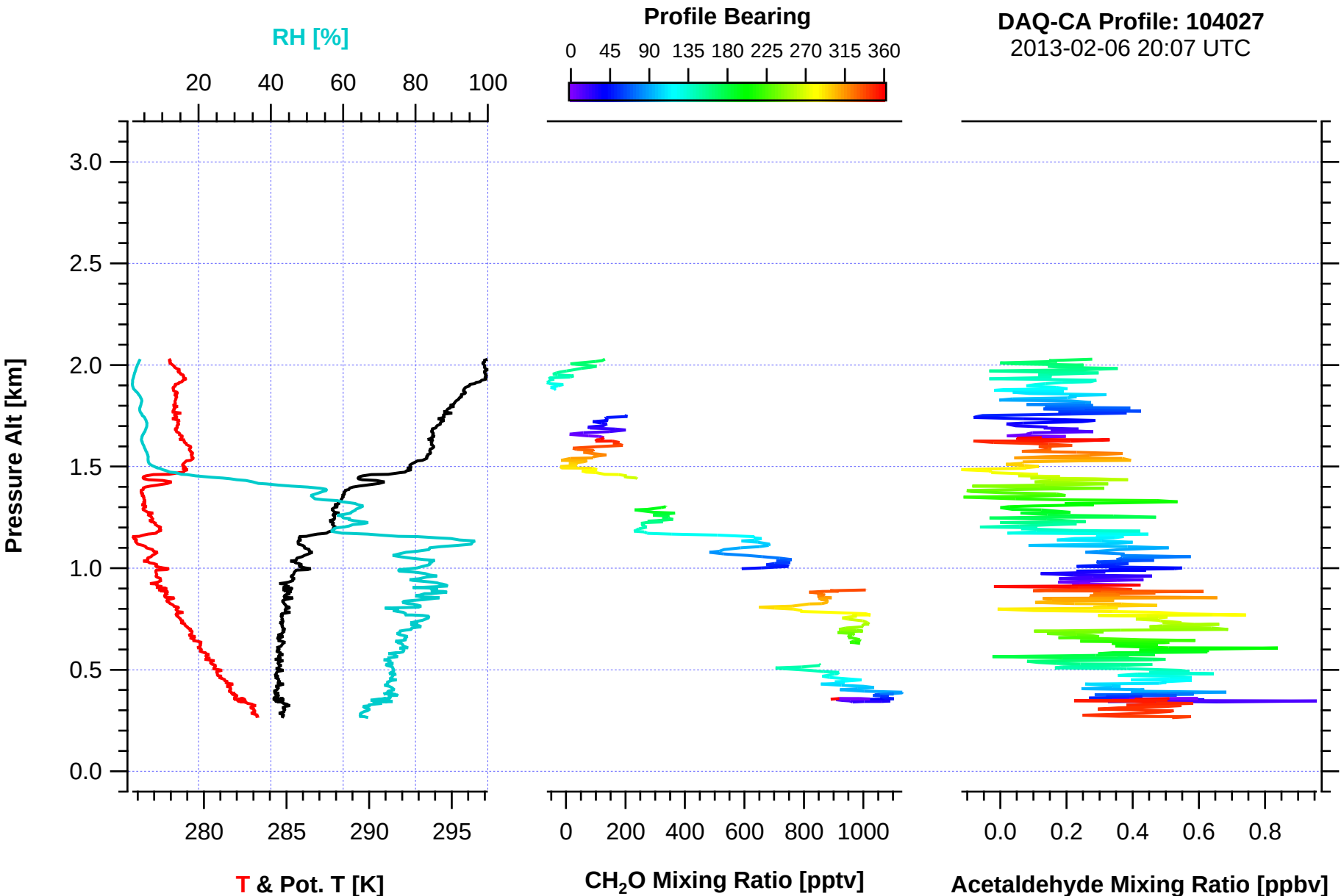

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104026
2013-02-06 17:52 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
275 280 285 290 295
T & Pot. T [K]
280 284 288
Surface Temperature [K]
0.0 1.0 2.0
Methanol Mixing Ratio [ppbv]

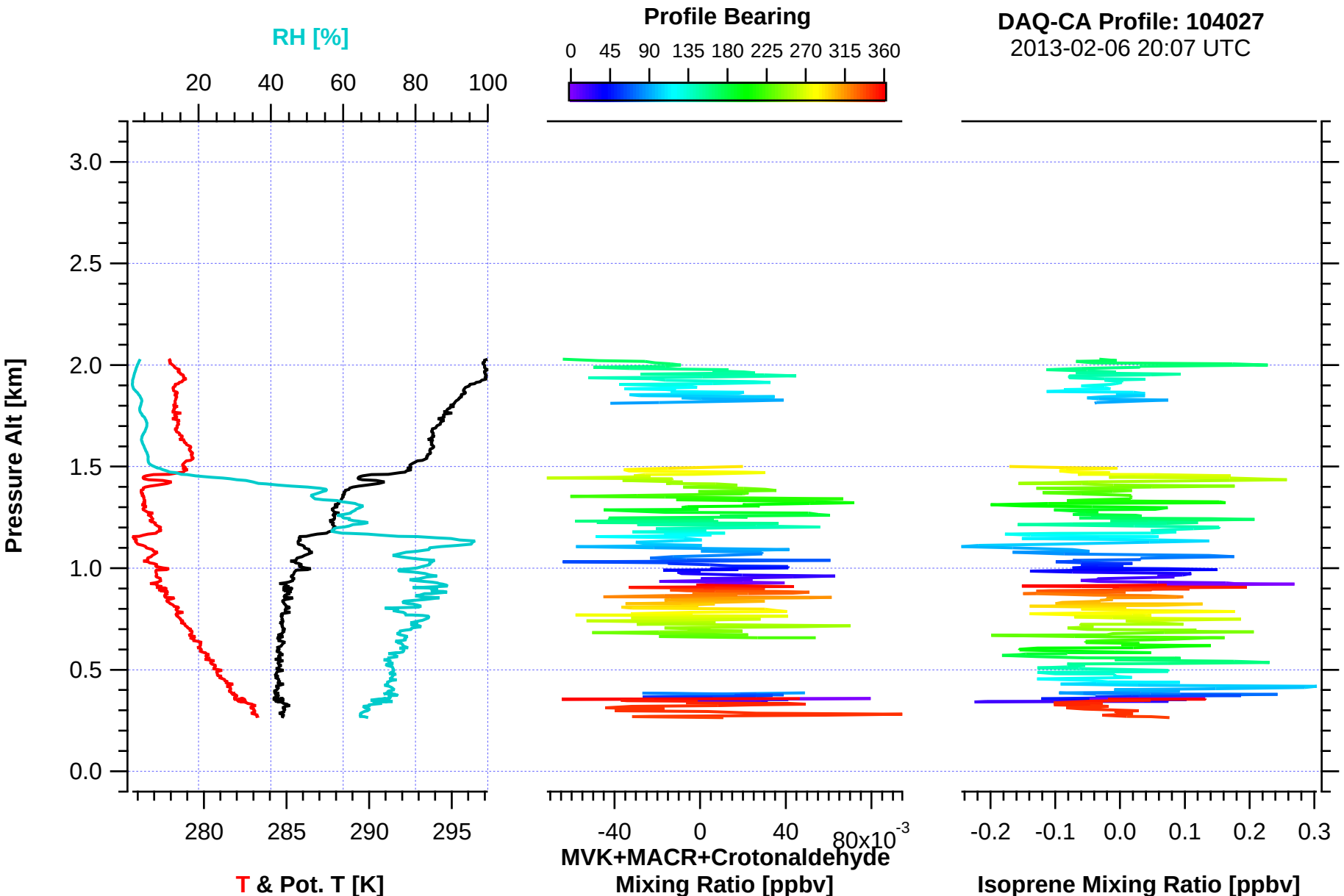

DAQ-CA Profile: 104026
2013-02-06 17:52 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
275 280 285 290 295
T & Pot. T [K]
0.0 0.4 0.8 1.2 1.6
NH3 Mixing Ratio [ppbv]
1880 1900 1920 1940 1960 1980
CH4 Mixing Ratio [ppbv]

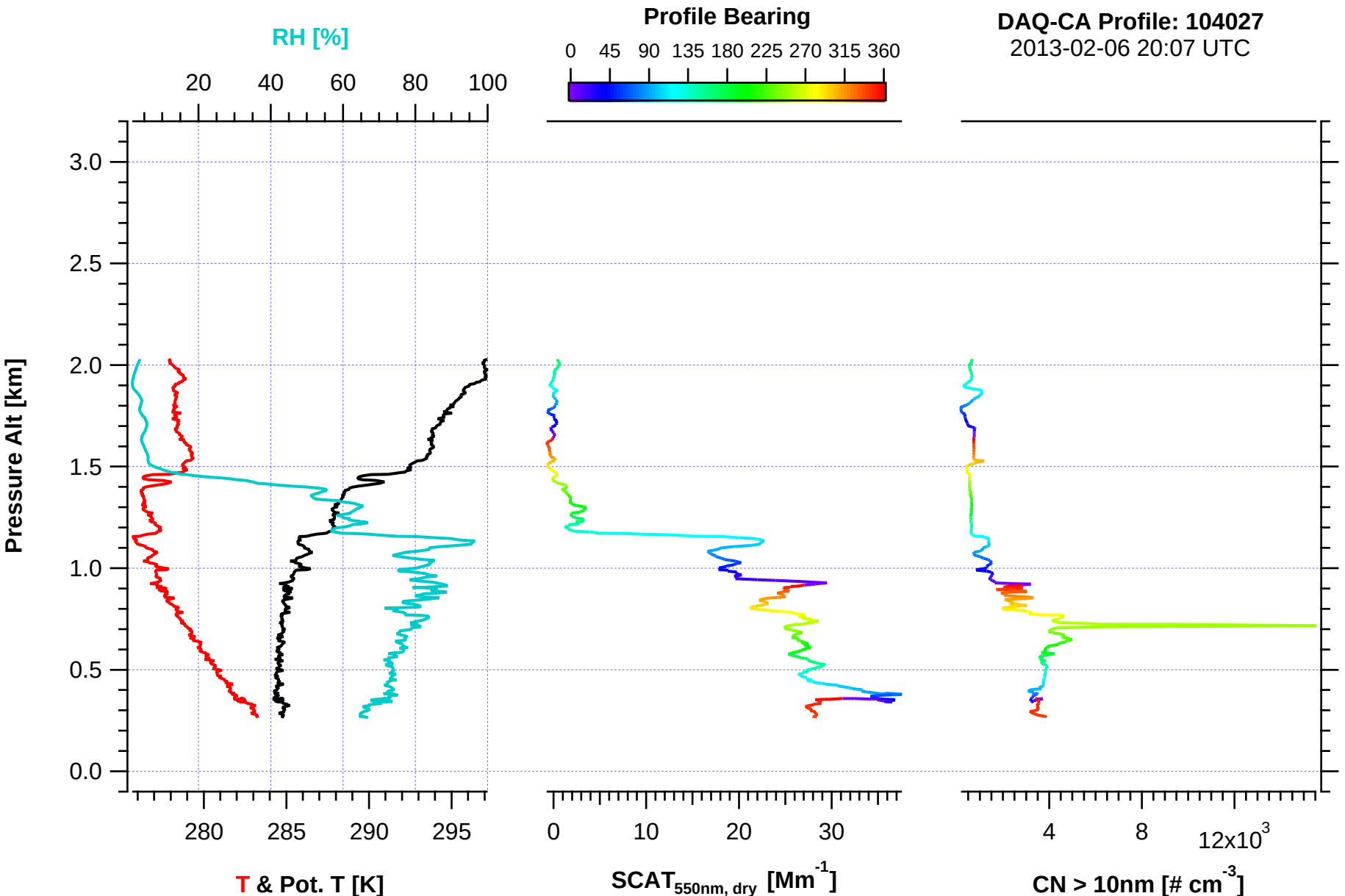

DAQ-CA Profile: 104027
2013-02-06 20:07 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295
T & Pot. T [K]
2000 4000 6000 8000
H2O Mixing Ratio [ppmv]
398 400 402
CO2 Mixing Ratio [ppmv]

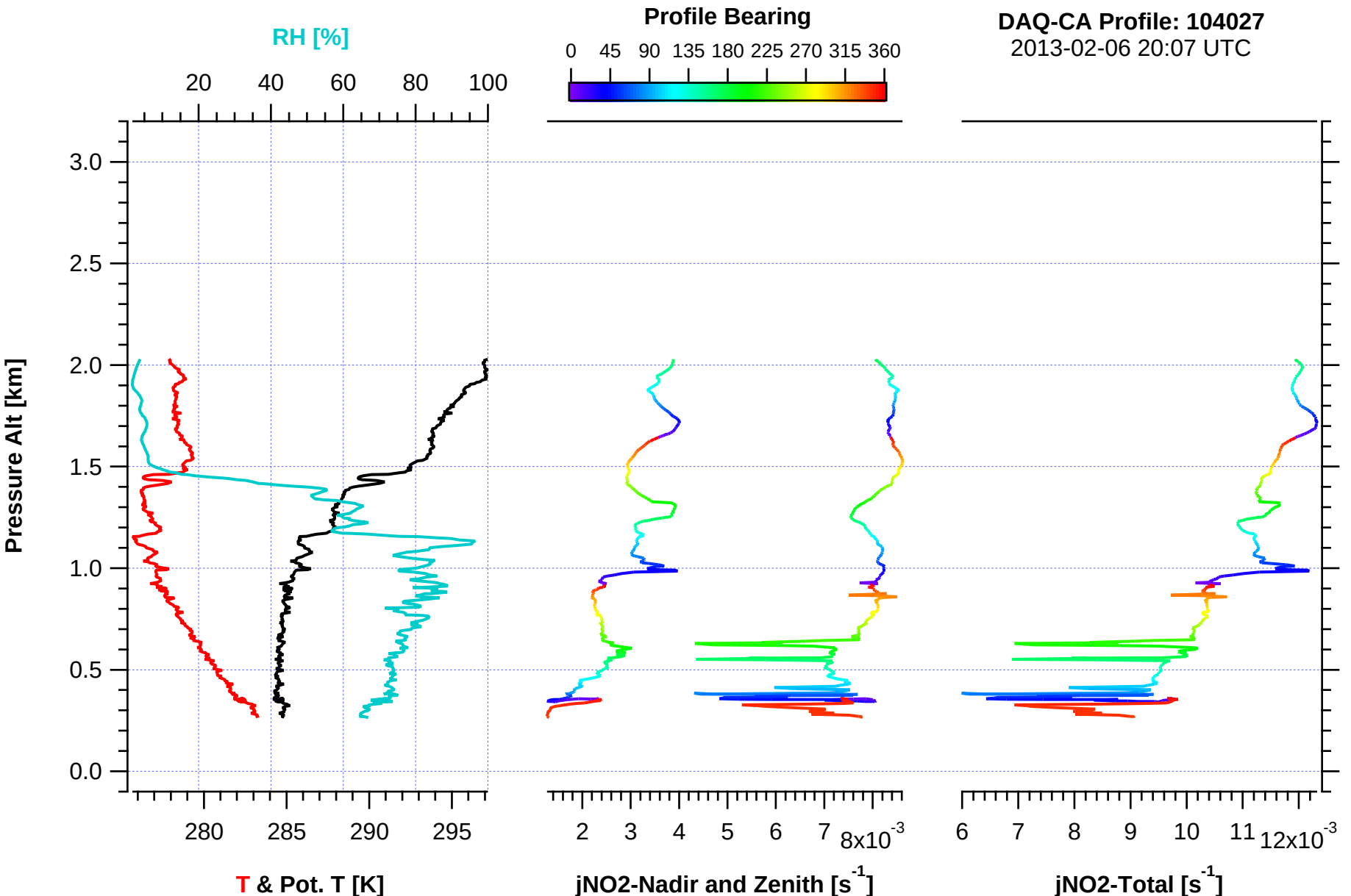

DAQ-CA Profile: 104027
2013-02-06 20:07 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295
T & Pot. T [K]
110 120 130 140 150
CO Mixing Ratio [ppbv]
35 40 45 50 55 60
O3 Mixing Ratio [ppbv]

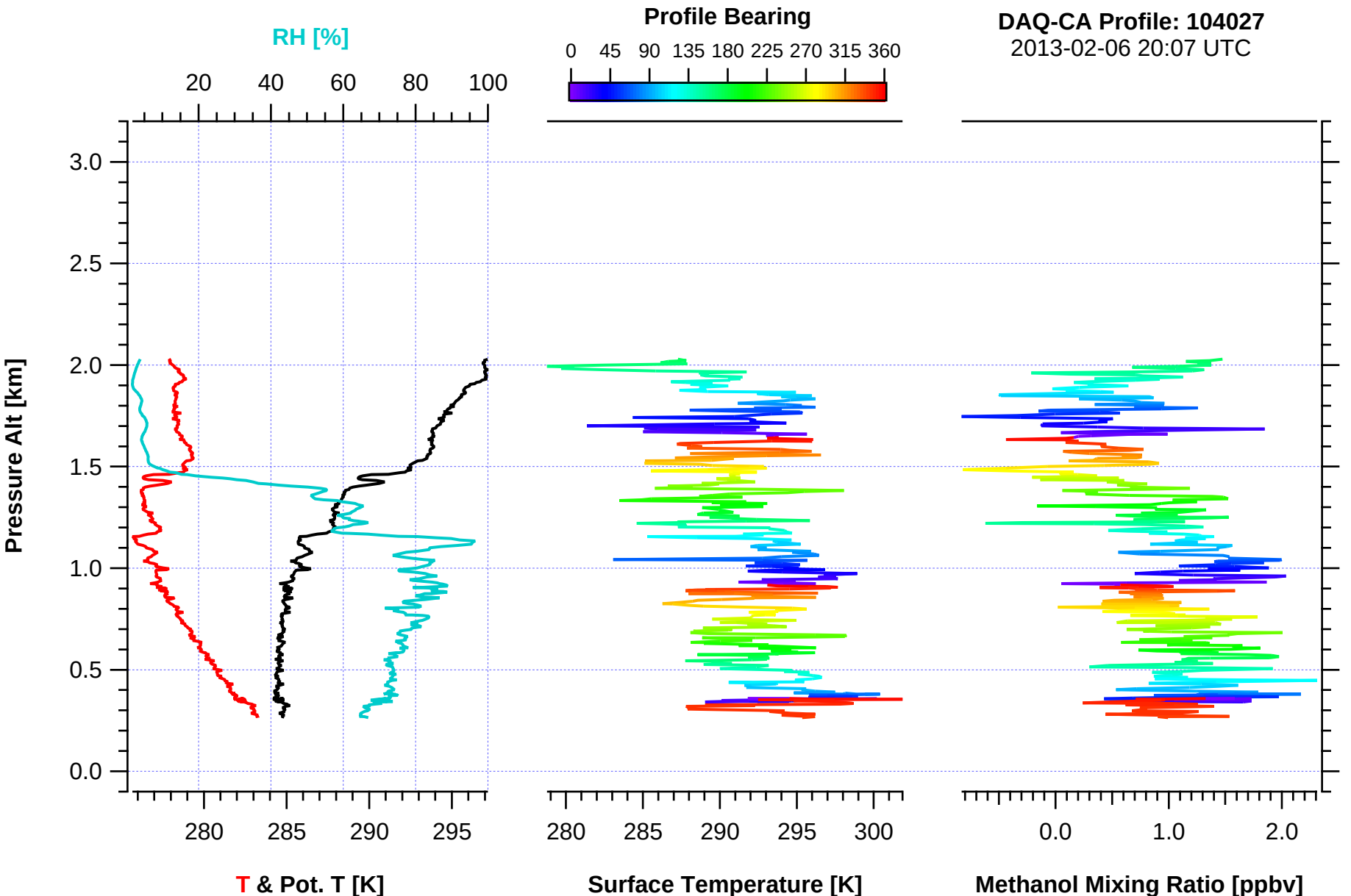

DAQ-CA Profile: 104027
2013-02-06 20:07 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295
T & Pot. T [K]
0 200 400 600 800
NO2 Mixing Ratio [pptv]
0 100 200 300 400 500
NO Mixing Ratio [pptv]

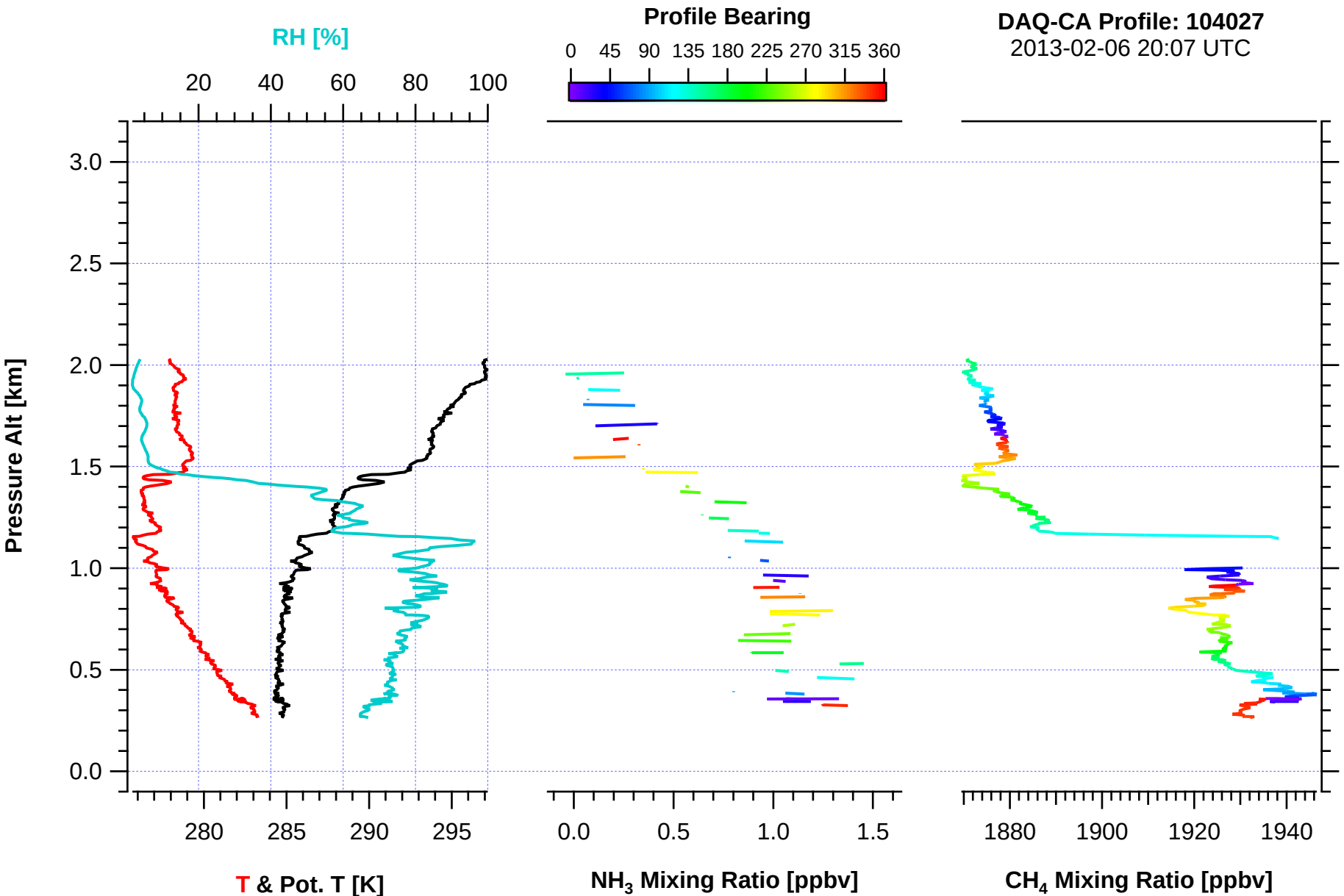

DAQ-CA Profile: 104027
2013-02-06 20:07 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280 285 290 295
T & Pot. T [K]
0 200 400 600 800 1000
CH2O Mixing Ratio [pptv]
0.0 0.2 0.4 0.6 0.8
Acetaldehyde Mixing Ratio [ppbv]

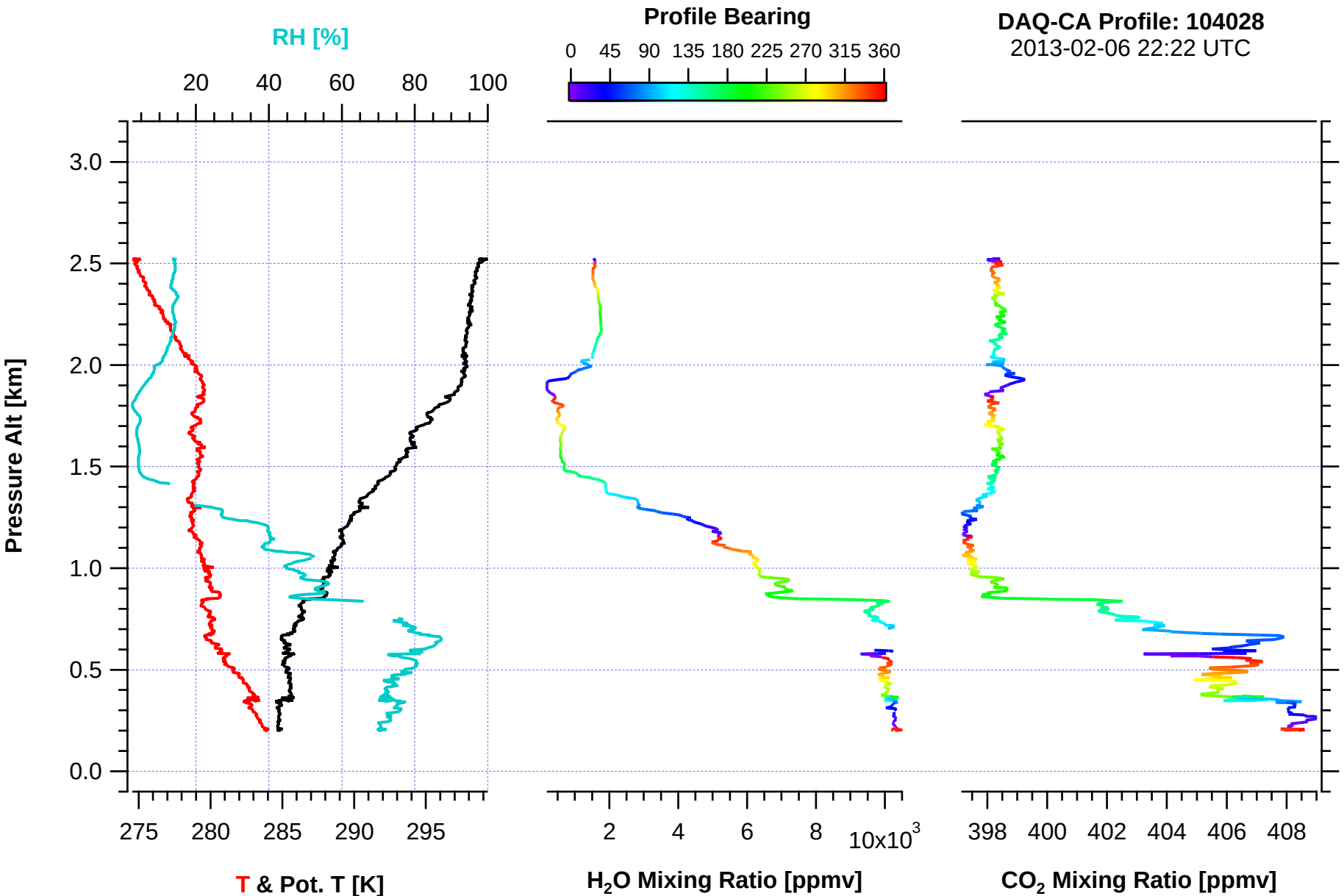

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104027
2013-02-06 20:07 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
T & Pot. T [K]
-40
0
40
80x10-3
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.2
-0.1
0.0
0.1
0.2
0.3
Isoprene Mixing Ratio [ppbv]

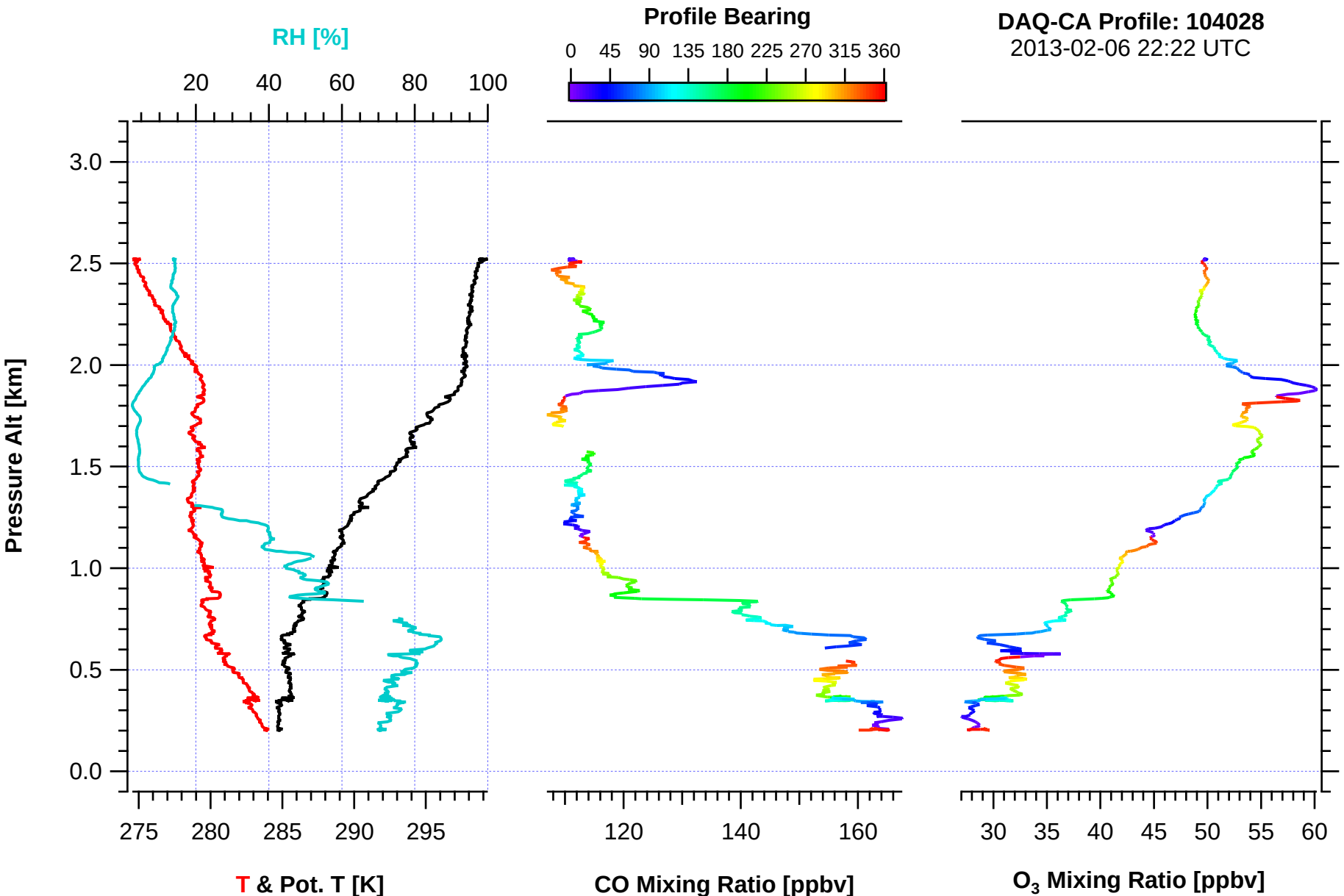

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104027
2013-02-06 20:07 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
T & Pot. T [K]
0
10
20
30
SCAT550nm, dry [Mm-1]
4
8
12x103
CN > 10nm [# cm-3]

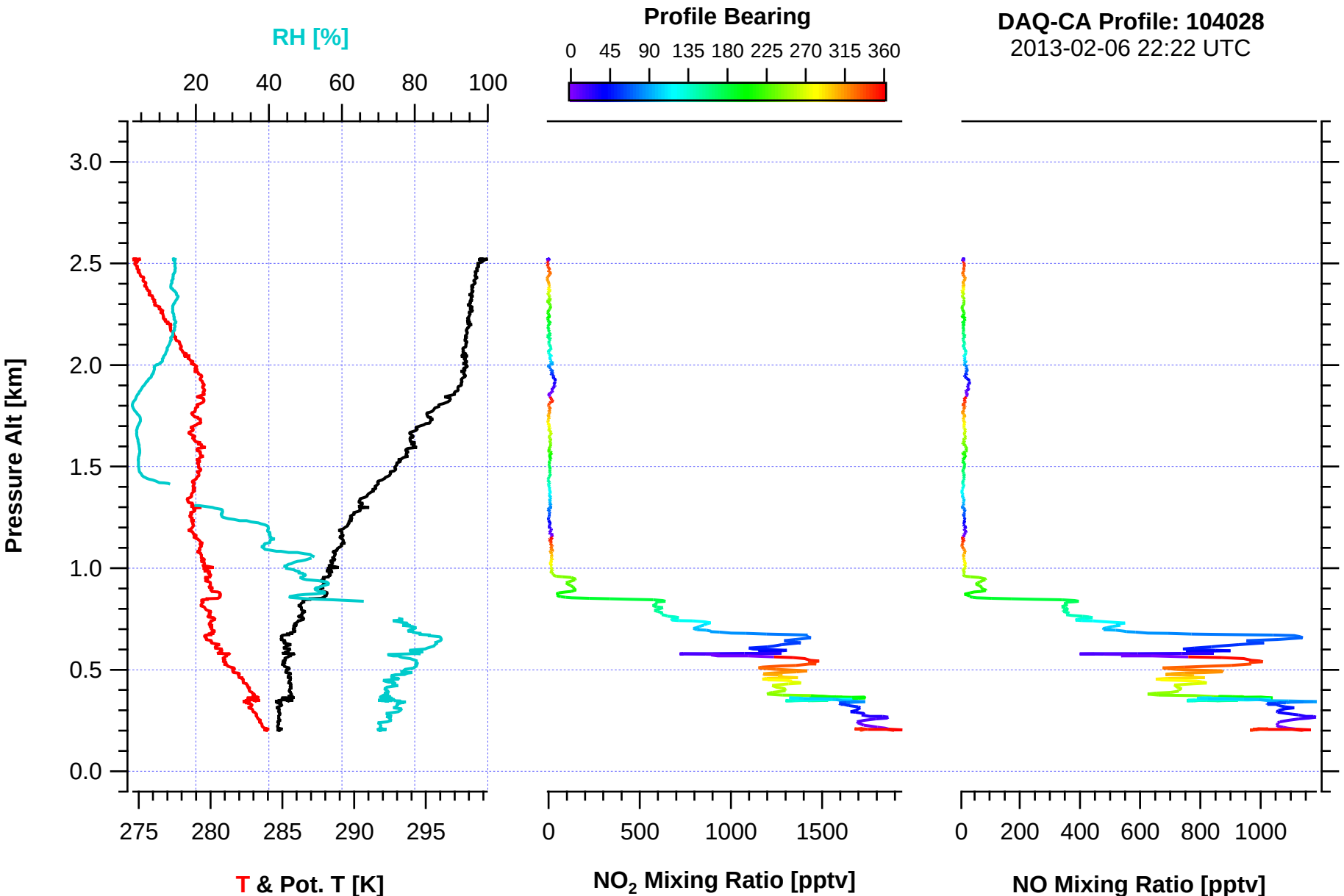

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104027
2013-02-06 20:07 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
T & Pot. T [K]
2
3
4
5
6
7
8x10-3
jNO2-Nadir and Zenith [s-1]
6
7
8
9
10
11
12x10-3
jNO2-Total [s-1]

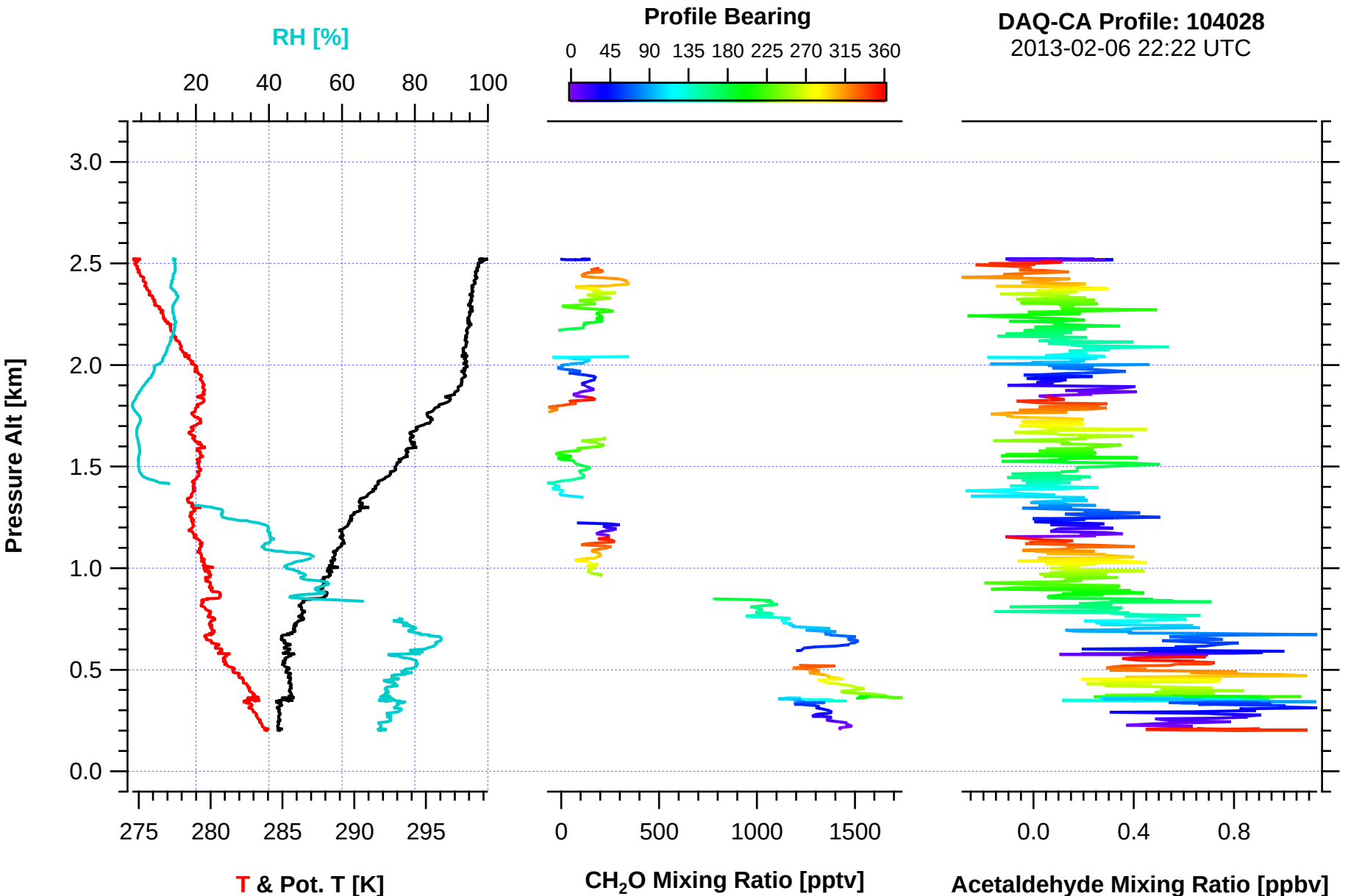

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104027
2013-02-06 20:07 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
T & Pot. T [K]
280
285
290
295
300
Surface Temperature [K]
0.0
1.0
2.0
Methanol Mixing Ratio [ppbv]

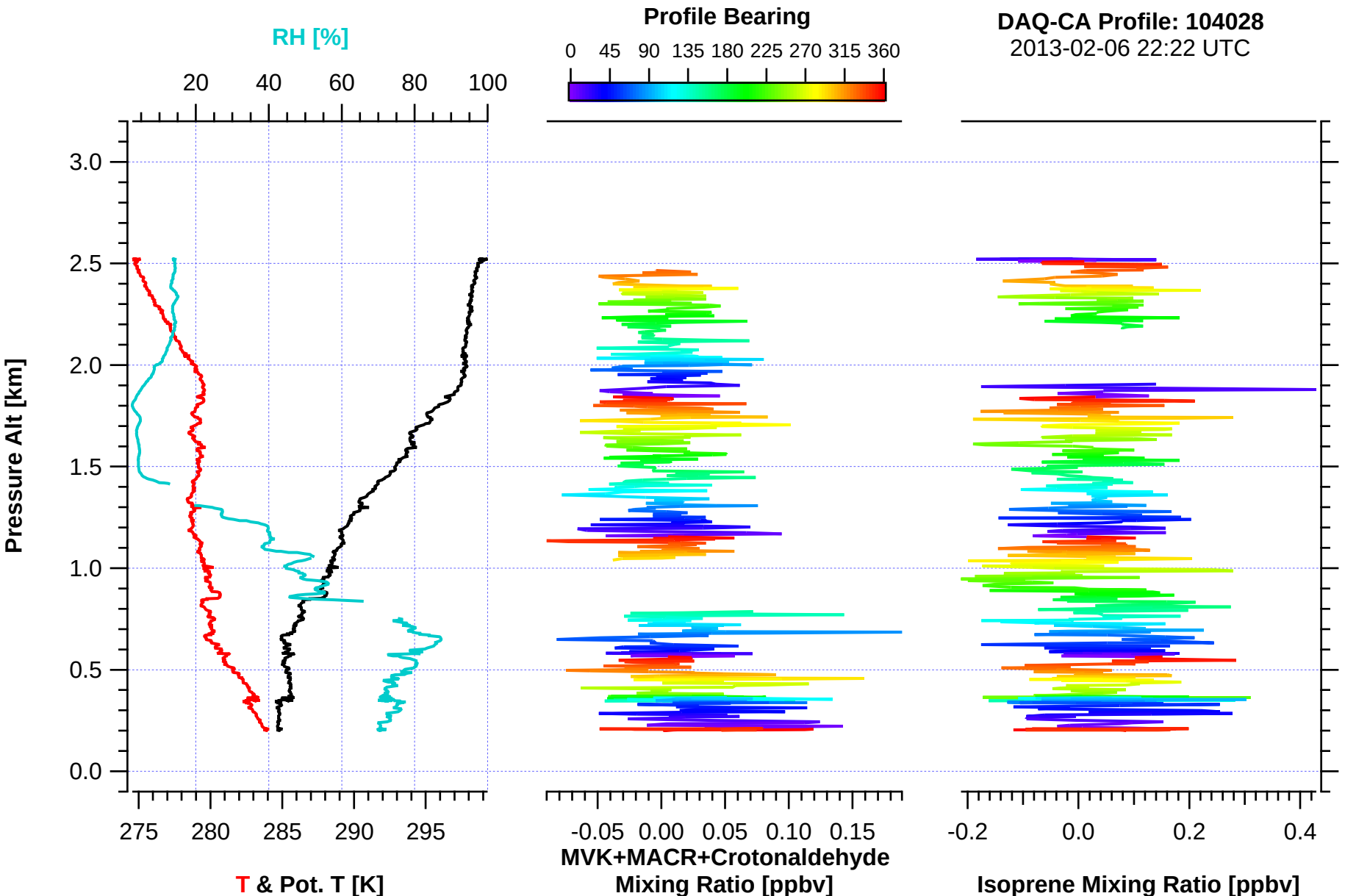

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104027
2013-02-06 20:07 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
280
285
290
295
T & Pot. T [K]
0.0
0.5
1.0
1.5
NH3 Mixing Ratio [ppbv]
1880
1900
1920
1940
CH4 Mixing Ratio [ppbv]

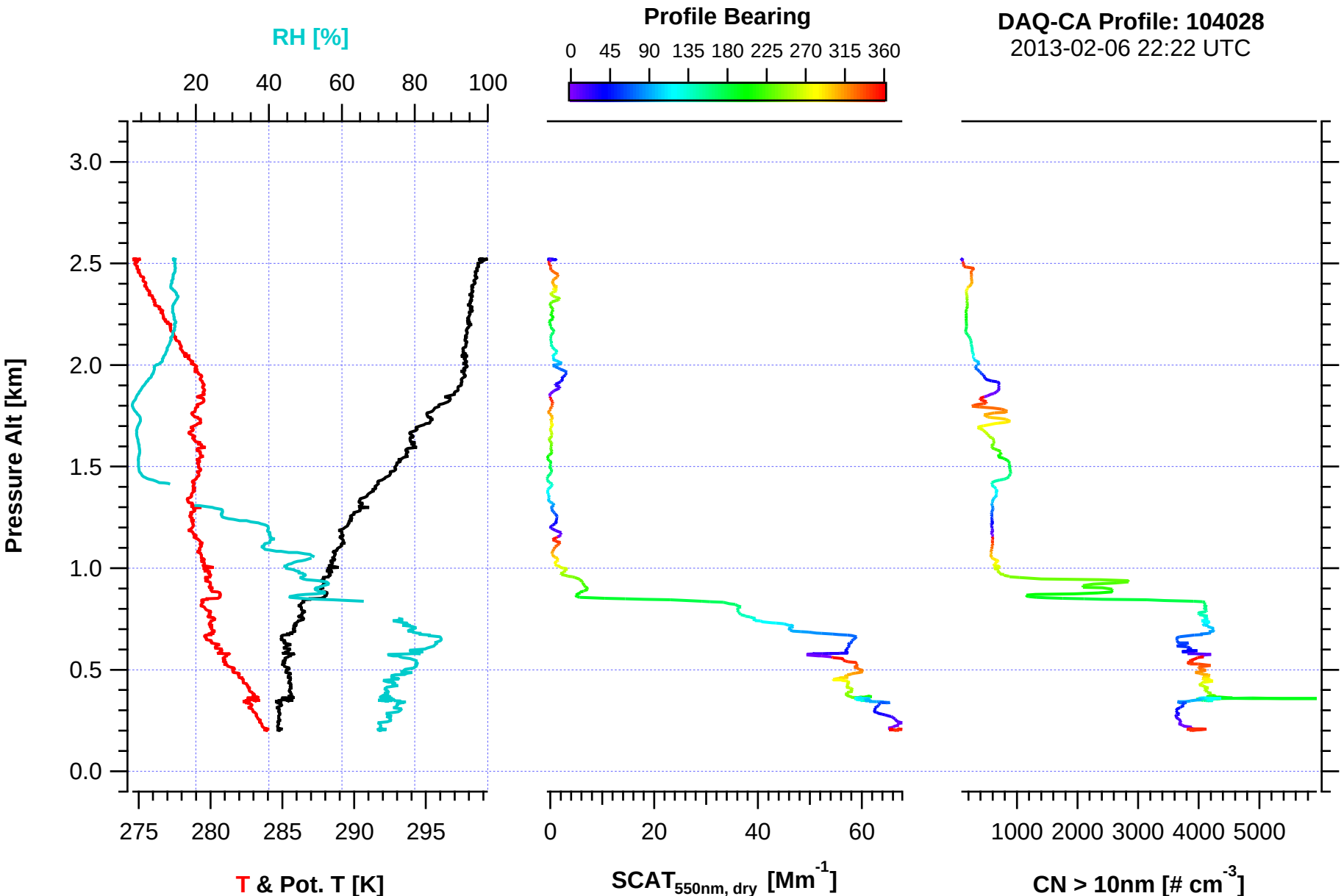

RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104028
2013-02-06 22:22 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
275 280 285 290 295
T & Pot. T [K]
2 4 6 8 10x10^3
H2O Mixing Ratio [ppmv]
398 400 402 404 406 408
CO2 Mixing Ratio [ppmv]

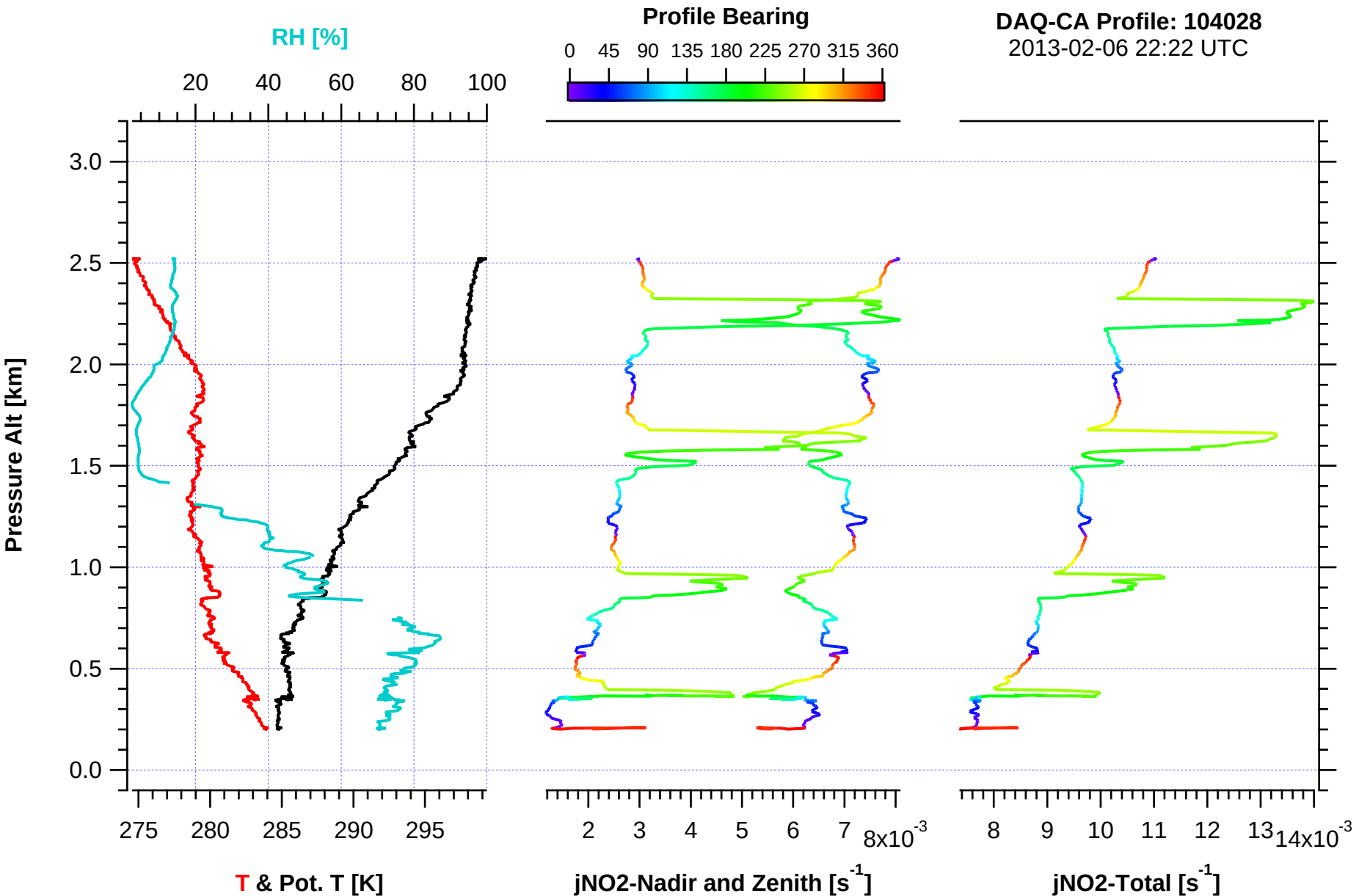

DAQ-CA Profile: 104028
2013-02-06 22:22 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
275 280 285 290 295
T & Pot. T [K]
120 140 160
CO Mixing Ratio [ppbv]
30 35 40 45 50 55 60
O3 Mixing Ratio [ppbv]

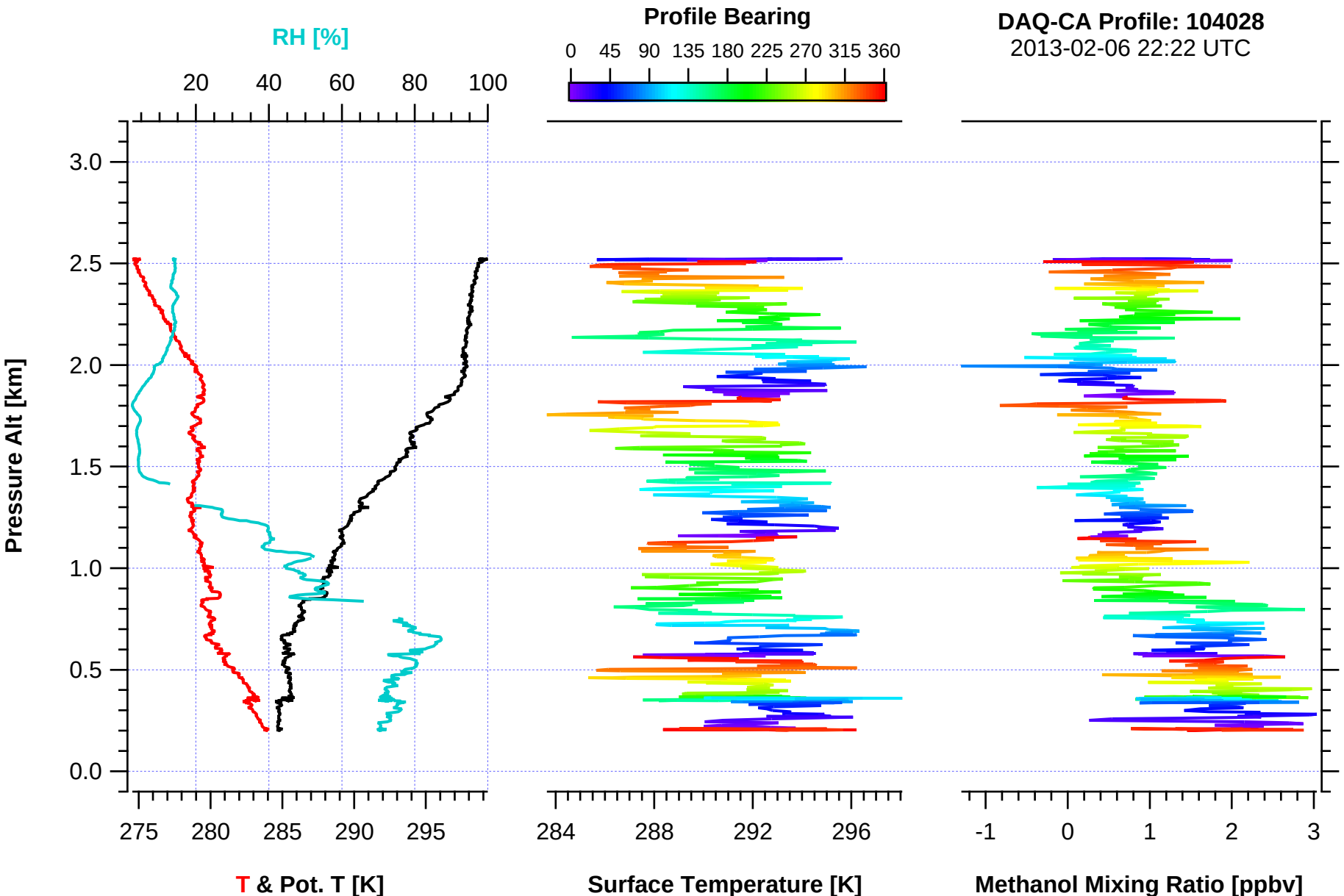

DAQ-CA Profile: 104028
2013-02-06 22:22 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
275 280 285 290 295
T & Pot. T [K]
0 500 1000 1500
NO2 Mixing Ratio [pptv]
0 200 400 600 800 1000
NO Mixing Ratio [pptv]

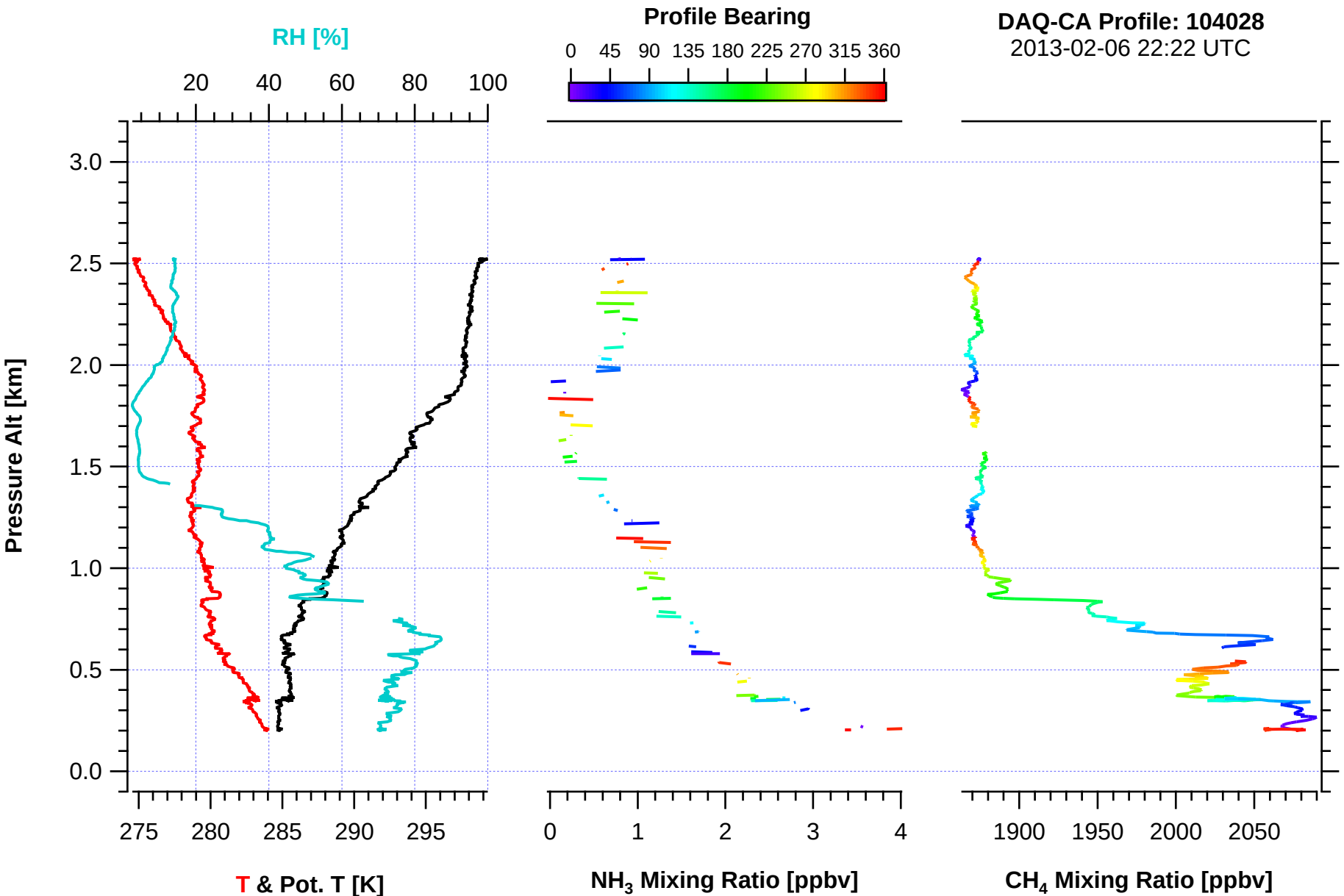

DAQ-CA Profile: 104028
2013-02-06 22:22 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
275 280 285 290 295
T & Pot. T [K]
0 500 1000 1500
CH2O Mixing Ratio [pptv]
0.0 0.4 0.8
Acetaldehyde Mixing Ratio [ppbv]


RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104028
2013-02-06 22:22 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
275 280 285 290 295
T & Pot. T [K]
-0.05 0.00 0.05 0.10 0.15
MVK+MACR+Crotonaldehyde
Mixing Ratio [ppbv]
-0.2 0.0 0.2 0.4
Isoprene Mixing Ratio [ppbv]


DAQ-CA Profile: 104028
2013-02-06 22:22 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
275 280 285 290 295
T & Pot. T [K]
0 20 40 60
SCAT550nm, dry [Mm-1]
1000 2000 3000 4000 5000
CN > 10nm [# cm-3]


DAQ-CA Profile: 104028
2013-02-06 22:22 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
275 280 285 290 295
T & Pot. T [K]
2 3 4 5 6 7 8x10-3
jNO2-Nadir and Zenith [s-1]
8 9 10 11 12 13 14x10-3
jNO2-Total [s-1]


DAQ-CA Profile: 104028
2013-02-06 22:22 UTC
Profile Bearing
0 45 90 135 180 225 270 315 360
RH [%]
20 40 60 80 100
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
275 280 285 290 295
T & Pot. T [K]
284 288 292 296
Surface Temperature [K]
-1 0 1 2 3
Methanol Mixing Ratio [ppbv]


RH [%]
20
40
60
80
100
Profile Bearing
0 45 90 135 180 225 270 315 360
DAQ-CA Profile: 104028
2013-02-06 22:22 UTC
Pressure Alt [km]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
275 280 285 290 295
T & Pot. T [K]
0 1 2 3 4
NH3 Mixing Ratio [ppbv]
1900 1950 2000 2050
CH4 Mixing Ratio [ppbv]