

Report of A-LIFE flight on 31 March 2017

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April 26, 2017

1 Flight objectives

Second test flight; testing instrumentation; sampling at Mt. Sonnblick and Vienna.

2 Flight

Take-off at 9:35 MESZ / 7:35 UTC at Oberpfaffenhofen; at about 5.7 km to Mt. Sonnblick (Austria); boxes around Mt. Sonnblick at 5.7 km, 5.0 km, 4.3 km; flight to Vienna Airport at 5.7 km (short period at 7.8 km); some boxes around Vienna at 5.7 km and 3.8 km. Low approach over Vienna Airport at 80 m above ground at 9:53 UTC; return to Oberpfaffenhofen at 9.3 km; landing at 10:44 UTC in Oberpfaffenhofen.

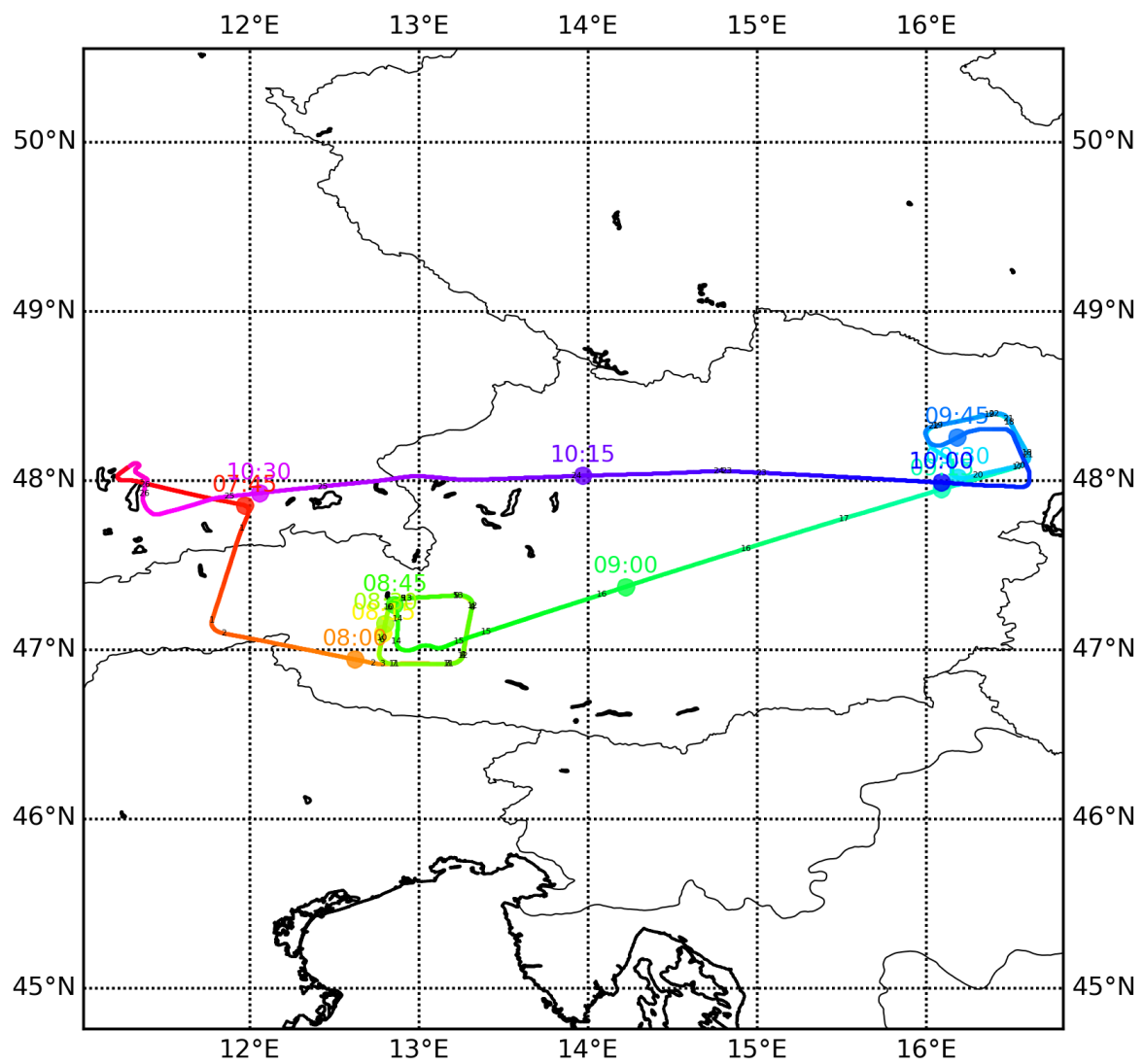


Figure 1: Flight route; color changes with time; UTC times indicted.

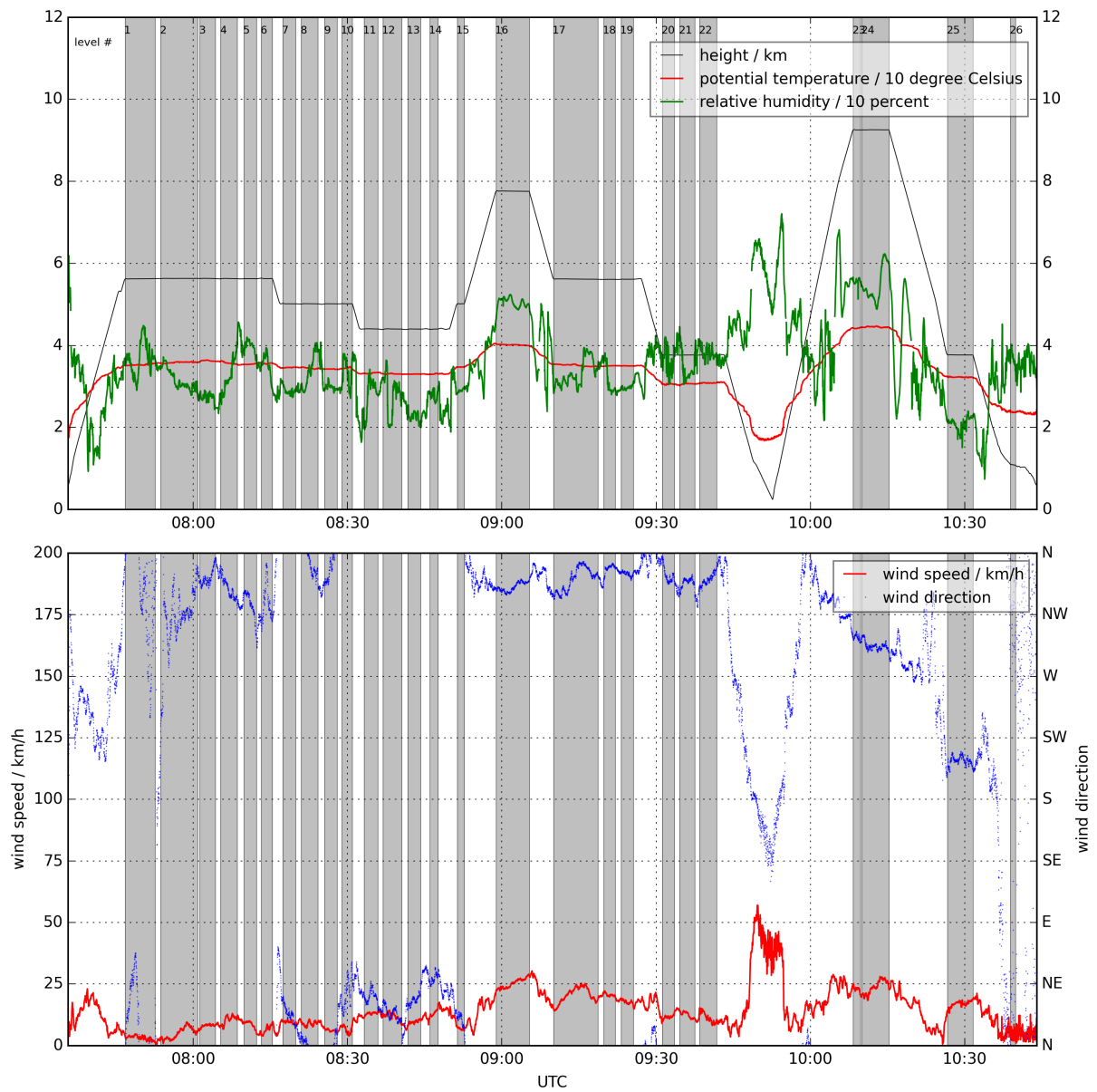
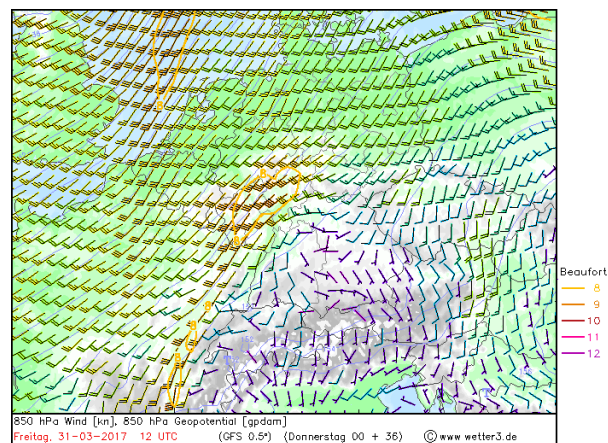
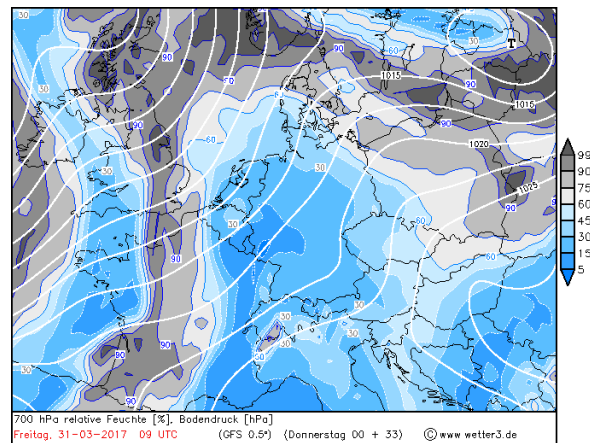
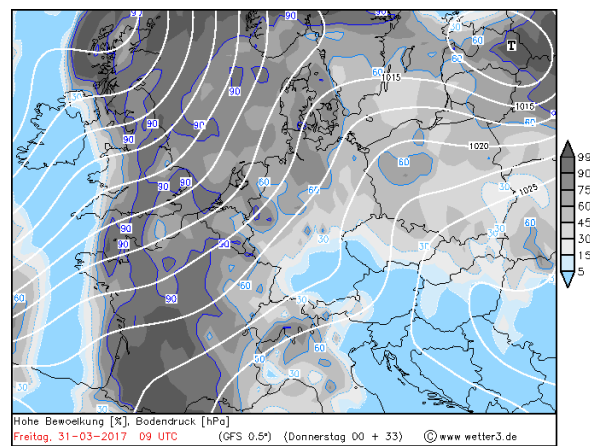
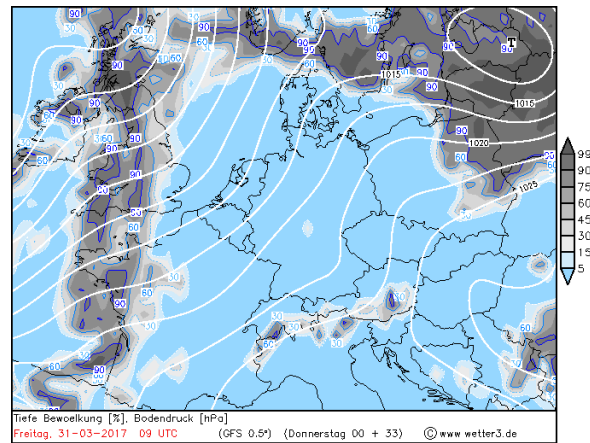


Figure 2: Flight and meteorological data (CMET)

3 Meteorological situation

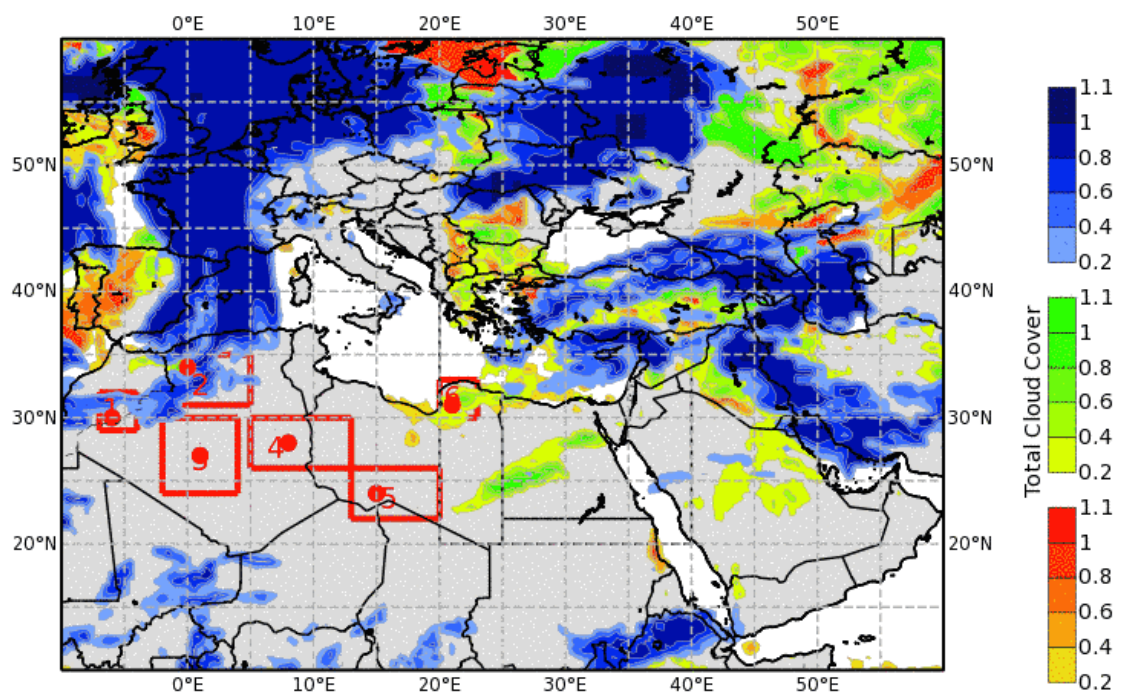
- Almost cloud-free conditions.
- Low pressure system approaching from North-West.
- Mostly weak winds, except near ground over Vienna with winds from South.





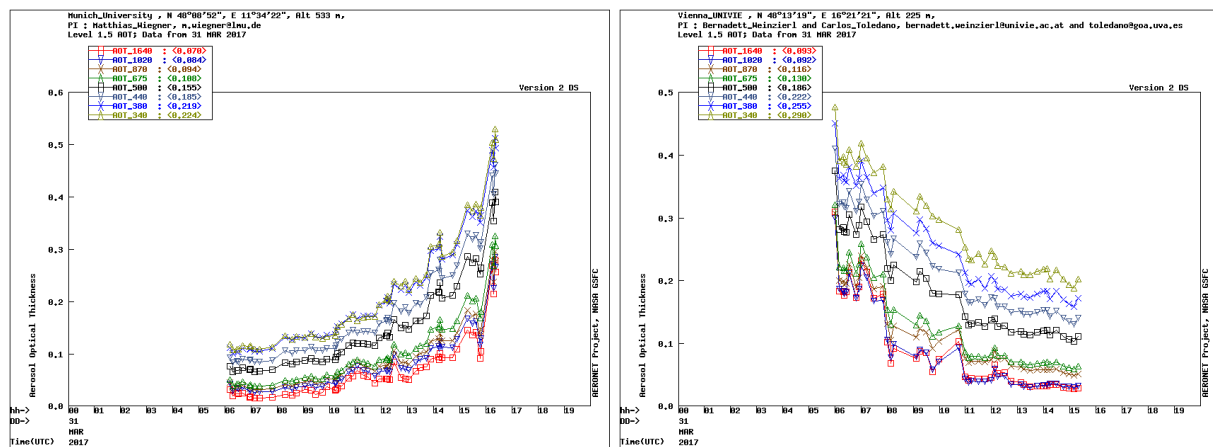
Total Cloud Cover

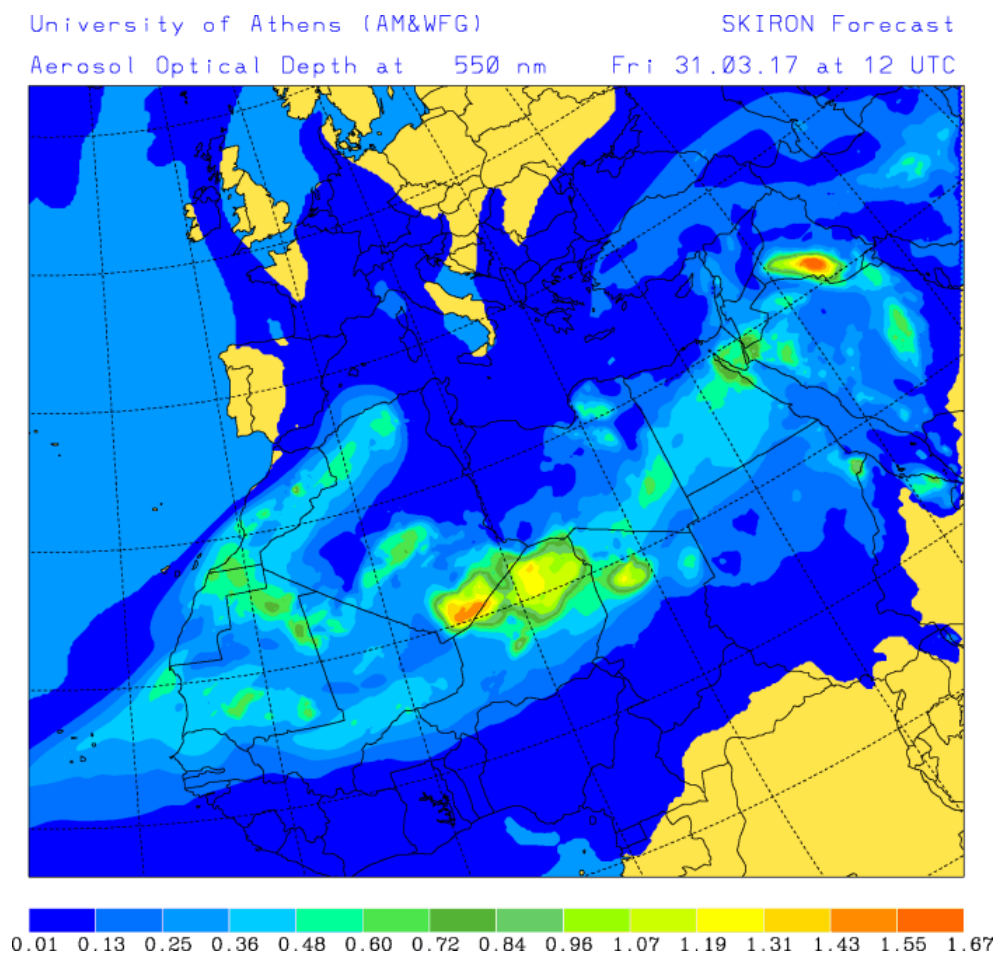
Valid: Fri, 31 Mar 2017, 09 UTC (step 033 h from Thu, 30 Mar 2017, 00 UTC)



4 Aerosol situation

- Traces of mineral dust forecast by SKIRON.
- During the flight the aerosol optical depth was dominated by fine mode aerosol in Munich in Vienna.
- Optical depth over Vienna more than twice as high as over Munich.





5 Flight description

6 Instrument status