

The airship ZEPPELIN NT as a measurement platform in the planetary boundary layer: ZEPTER-1

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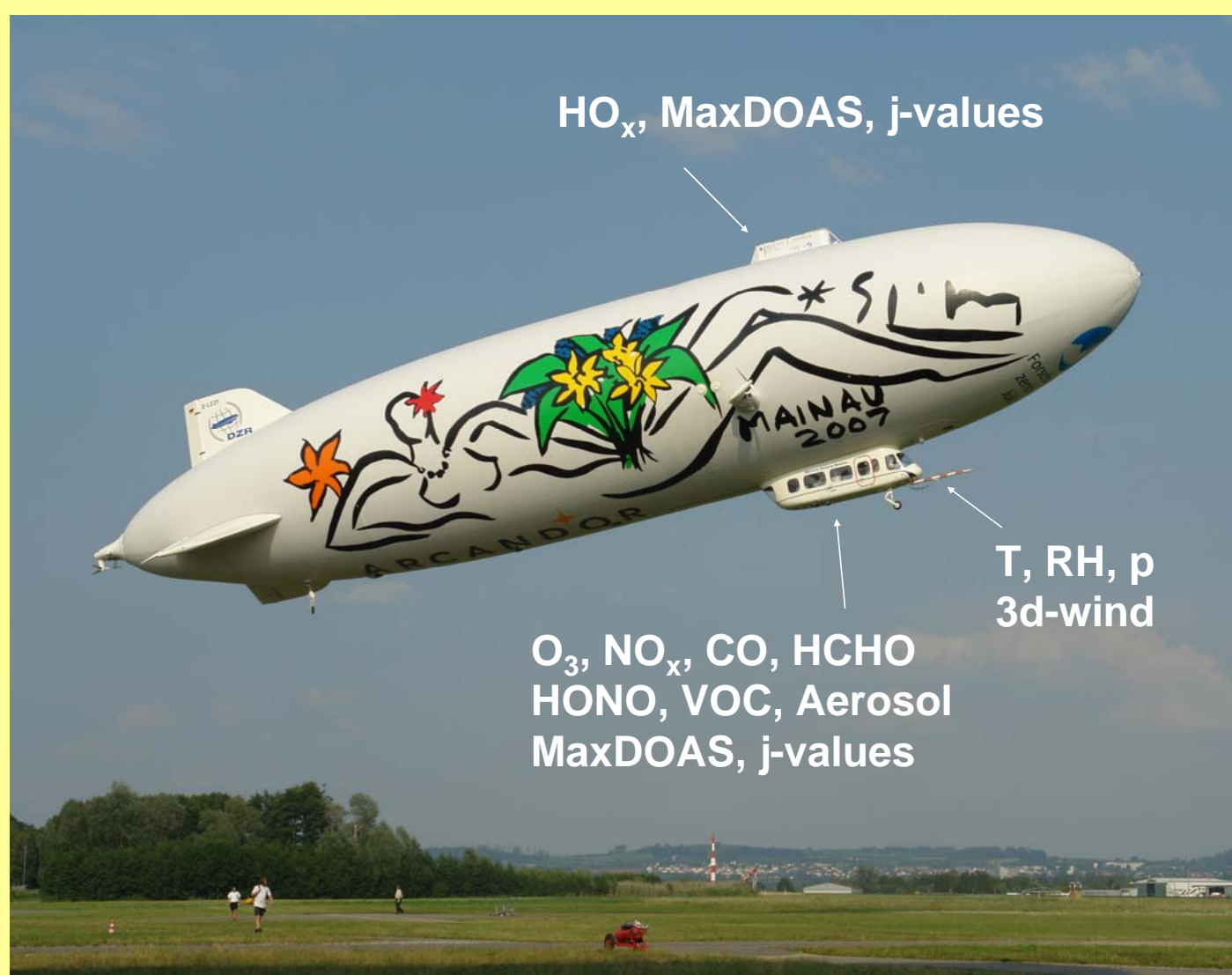
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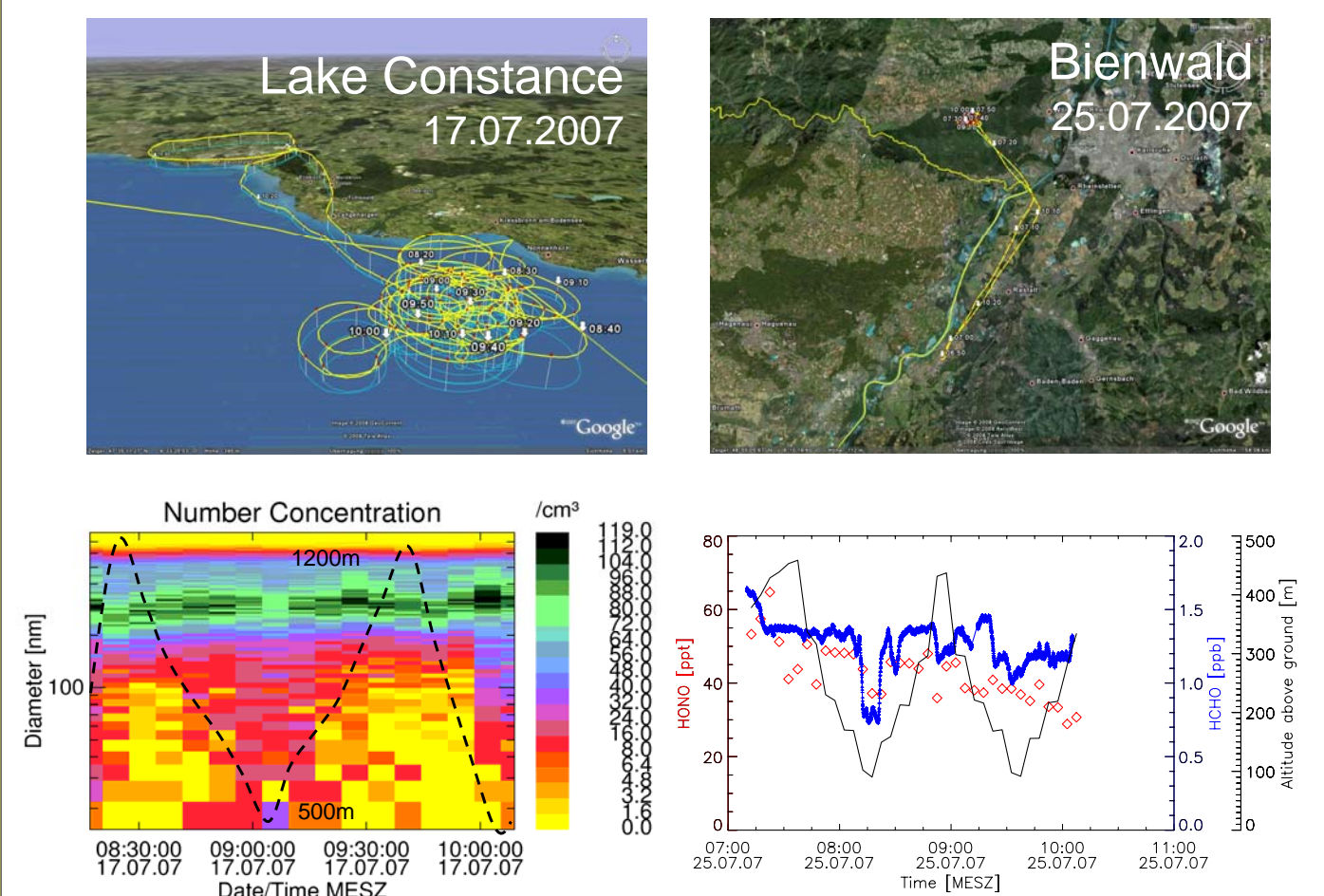
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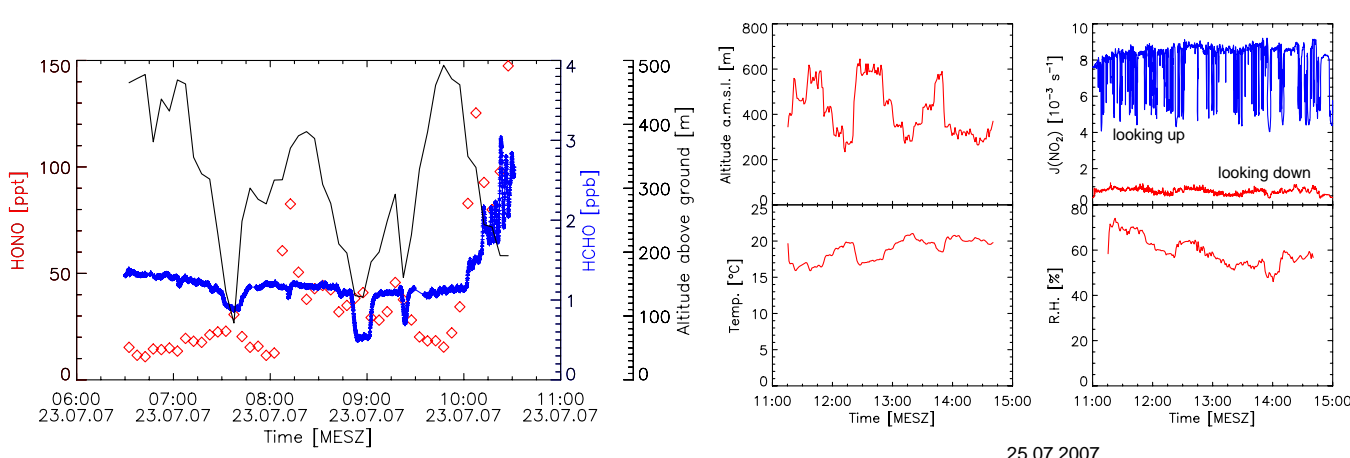
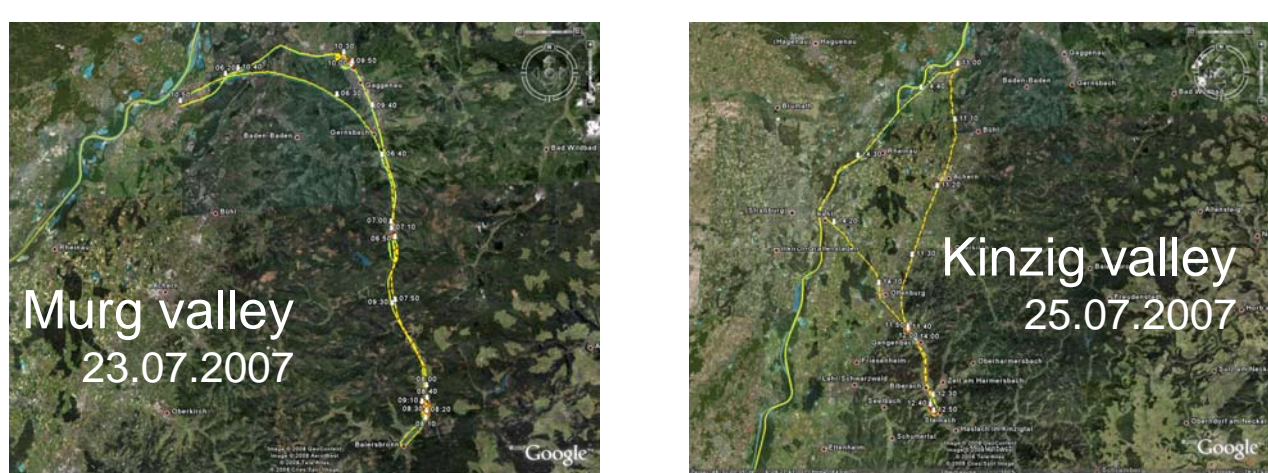
In July 2007 the airship ZEPPELIN NT was equipped with a suite of instruments to measure the distribution of different trace gases, aerosols and short-lived radicals in the planetary boundary layer together with radiation fluxes and different meteorological parameters. Some of the instruments were mounted on a platform on top of the airship to allow for an undisturbed sampling of air. During the first five days of ZEPTER-1 the airship was deployed at its home base Friedrichshafen mainly flying vertical profiles over Lake Constance. Thereafter the airship was transferred to the COPS/TRACKS operation base at airport Karlsruhe/Baden-Baden. From that location the airship flew a number of tracks into the Murg and Kinzig valley in the Black Forest, several vertical profiles over the Bienwald and a first pseudo-Lagrangian experiment north-east of Karlsruhe.



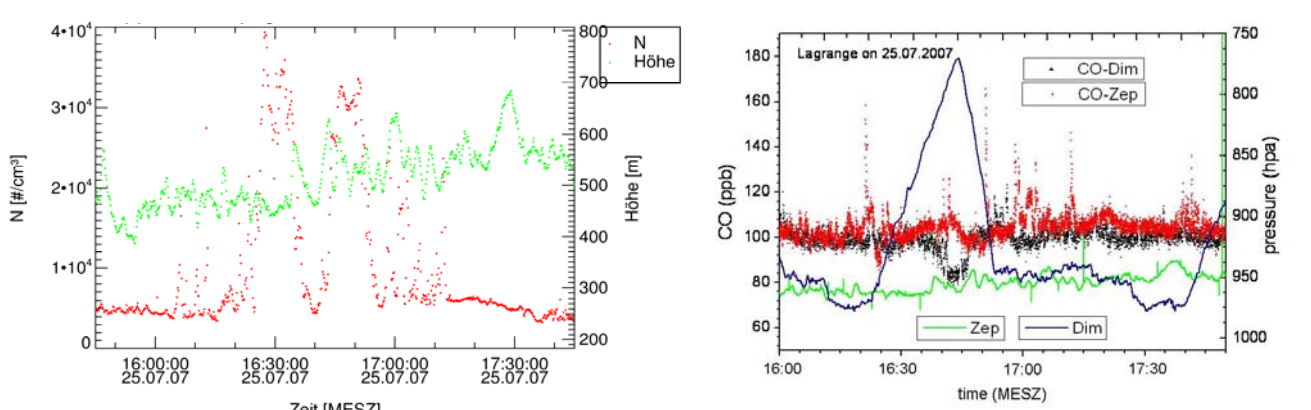
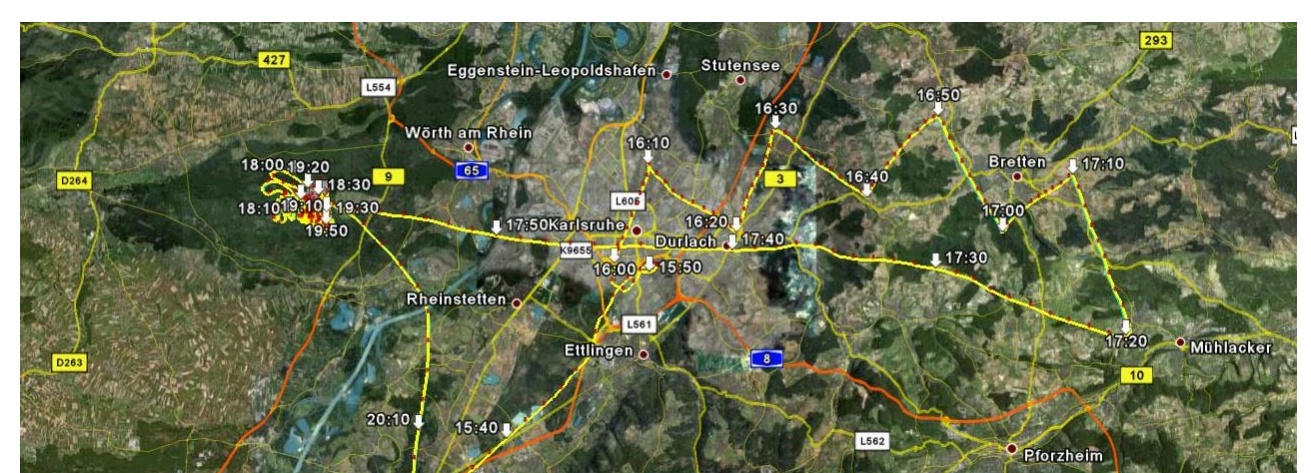
Vertical Profiles



Entrainment-Experiments



Pseudo-Lagrangian Experiment (25.07.2007)



Parallel measurements of Zeppelin (Zep) and MetAir Dimona (Dim)

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