



## **A comparison of in situ backscattering and optical particle counters measurements on cirrus clouds observed during the M55 GEOPHYSICA tropical campaigns.**

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The high altitude research aircraft M55 Geophysica performed field campaigns in Bauru, Brasil (2004), Darwin, Australia (2005) and Ouagadougou, Burkina Faso (2006). Its scientific payload included a two wavelength backscattersonde able to measure in-situ optical properties, as color, backscatter and depolarization ratio of aerosol and clouds, and FSSP-100 and -300 probes to performs size resolved measurements of particles in the micron range. Here we will provide an overview of the data acquired and an evaluation of the optical and microphysical dataset with emphasis on cirrus cloud observations, comparing the measurements from the two instruments with the aid of optical modelling.