

Supplement of:

Characterise the particle single scattering albedo with a modified airborne dual-wavelengths CAPS monitor

Chenjie Yu¹, Edouard Pangui², Kevin Tu², Mathieu Cazaunau², Maxime Feingesicht², Thierry Bourriane³, Timothy B. Onasch⁴, Andrew Freedman⁴, Christopher Cantrell², and Paola Formenti¹

¹ Université Paris Cité and Univ Paris Est Créteil, CNRS, LISA, F-75013 Paris, France

² Univ Paris Est Créteil and Université Paris Cité, CNRS, LISA, F-94010 Créteil, France

³ CNRM, CNRS/Météo France, Toulouse, France

⁴ Aerodyne Research Inc., Billerica, MA 01821-3976, USA

Correspondence to: Chenjie Yu (chenjie.yu@lisa.ipsl.fr) and Paola Formenti (paola.formenti@lisa.ipsl.fr)

S1 Chamber characterisation experiment

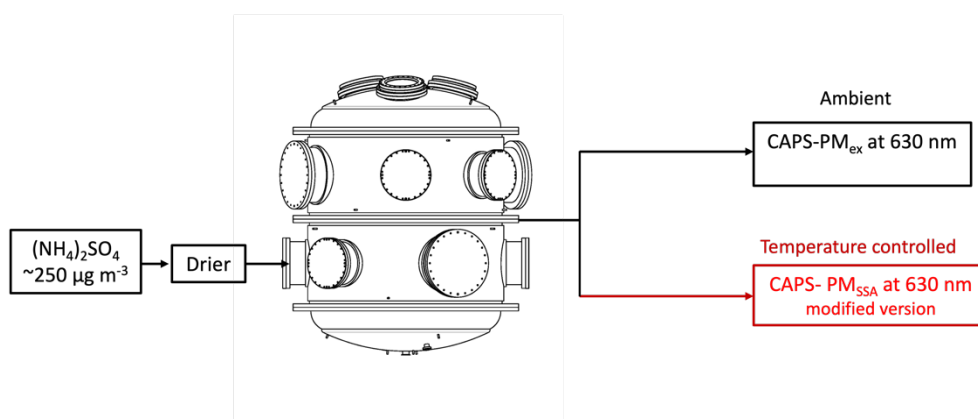


Figure S1 Instrument configurations for the intercomparison study at different pressure levels with controlled temperatures within the CESAM chamber

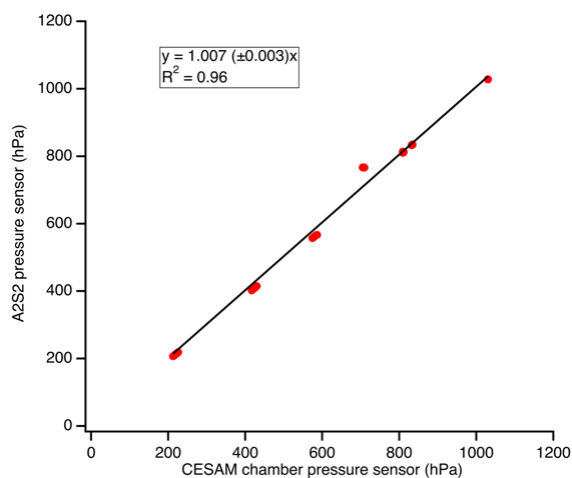


Figure S2 Intercomparison between the CESAM chamber pressure sensor and the A2S2 pressure sensor

S2 Airborne deployment of the A2S2



Figure S3 Photo of the A2S2 configured as part of the AVIRAD system onboard the ATR-42

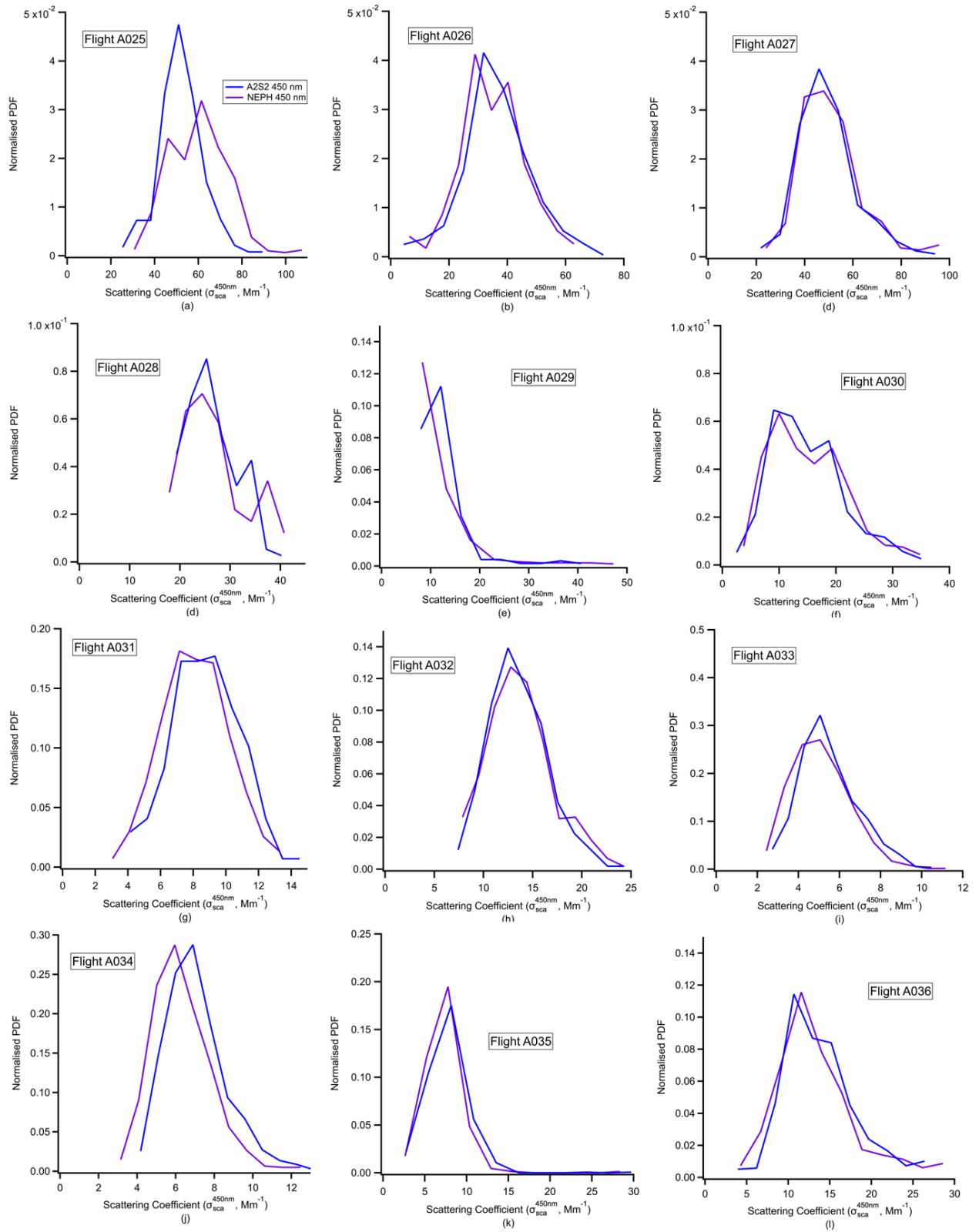


Figure S4 Normalised possibility distribution function (PDF) of A2S2 and NEPH at 450 nm

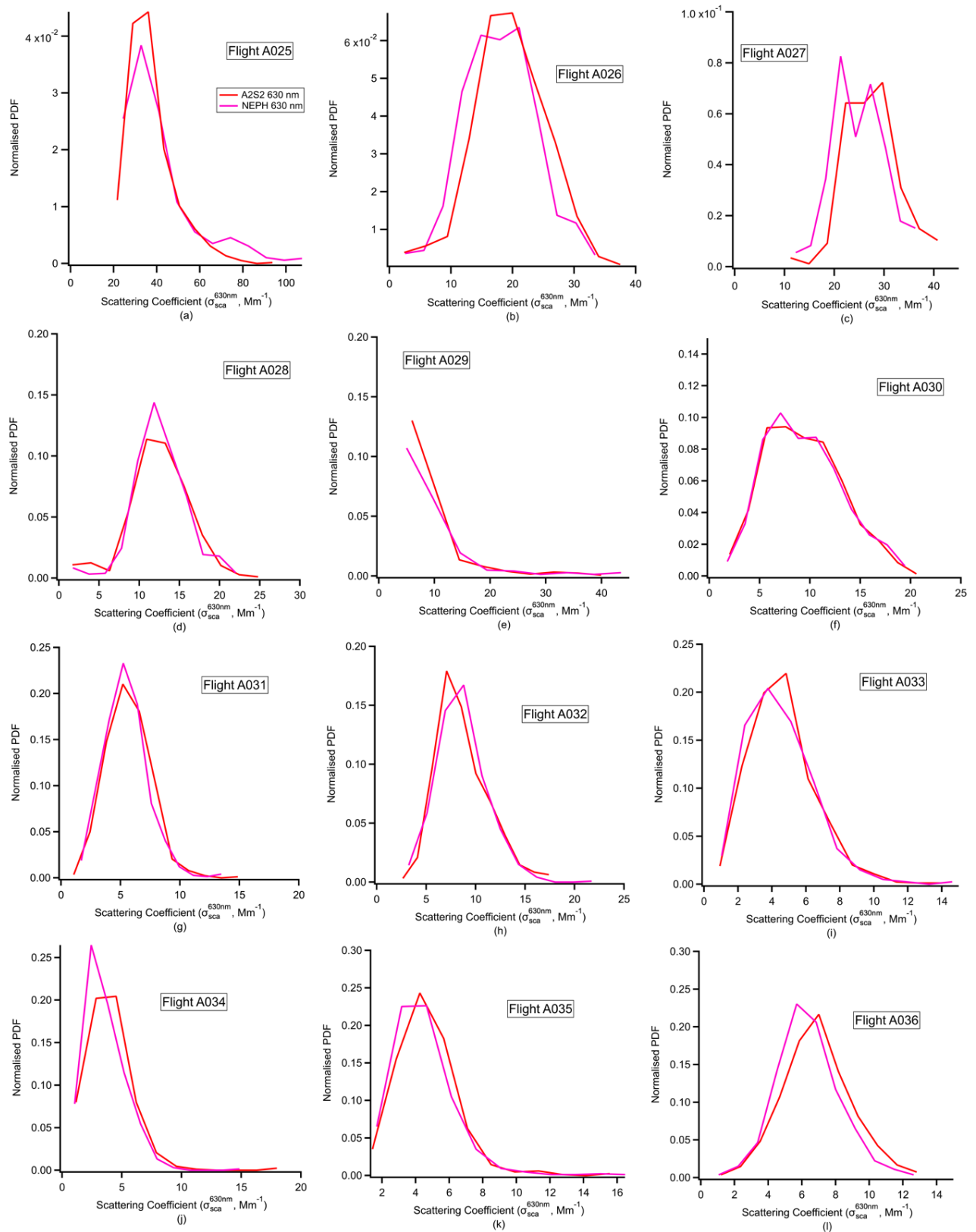


Figure S5 Normalised possibility distribution function (PDF) of A2S2 and NEPH at 630 nm