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PARTICLE SIZE DISTRIBUTION DATA MEASURED AT CAPE GRIM

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GENERAL REMARKS

During the ACE 1 intensive measurement campaign the Institute for Tropospheric Research (IFT) carried out continuous particle size distribution measurements at Cape Grim.
The measurements were performed during the period November 17th to December 13th 1995.

For these size distribution measurements, a Twin Differential Mobility Particle Sizing (DMPS) system consisting of 2 Vienna-type Differential Mobility Analysers (DMAs) and 2 Condensation Particle Counters (CPCs, TSI 3035 and TSI 3010) was used. The DMAs and CPCs were calibrated during the ACE1 calibration workshops at the IFT (DMAs) and at the University of Washington (CPCs).
Measurements were performed in the particle size regime 3 < dp < 750 nm.
The measured raw distributions were inverted using the new data inversion algorithm developed at the IFT. During the inversion the DMA transmission efficiencies and the CPC counting efficiencies were accounted for.

FILE FORMAT AND STRUCTURE

Made available here are the inverted size distributions. All distributions measured during one day are stored together in a single file. The filename indicates the particular date of the measurement, e.g. the file named 'gr112095.out' contains all distributions measured November 20th, 1995 at Cape Grim.

Each of the data files contains the following information:

date	yearmonthday	[YYYYMMDD]
time	time of day	[UTC]
T	cabin temperature	[K]
p	cabin pressure	[mbar]
k	number of size bins	[-]
dp(i)	midpoint particle diameter	[nm]
dndlogdp(i)	discrete size distribution	[#/cm3]

The data is stored according to the following structure:

```
date  time   T   p   k   dp(1) ... dp(k)
date  time   T   p   k   dndlogdp(1) ... dndlogdp(k)
```

We wish you a pleasant data evaluation. If you have any remarks or questions, please contact

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