

From EAST-AIRE to the ARM Mobile Facility Deployment in China: an Overview of Data Status

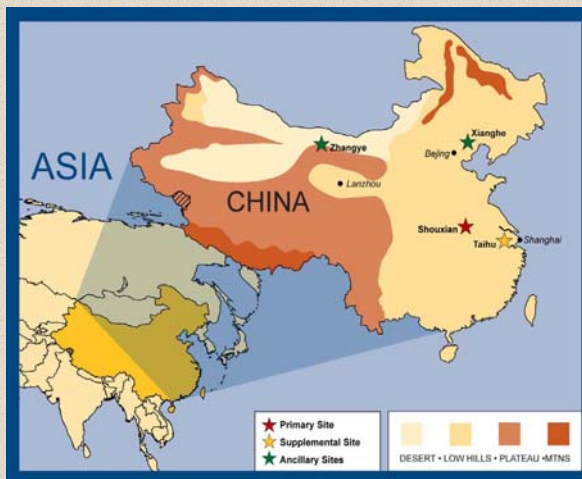
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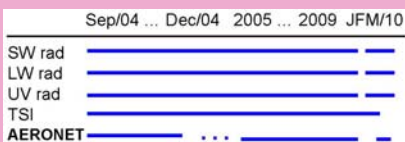


Introduction

As the most populated and fastest-developing country in the world, China is undergoing drastic changes in many respects, including changes to its environment and climate. Unraveling the impact of environmental changes on weather and climate requires a good knowledge and understanding of atmospheric aerosols and precursor gases and their interactions with key meteorological variables such as radiation, clouds, and precipitation. Towards meeting these goals, the **East Asian Study of Tropospheric Aerosols: an International Regional Experiment** (EAST-AIRE) has collected radiation and aerosol data at two sites in China since its inception in the fall of 2004. The deployment of the **ARM Mobile Facility** at a third site during most of 2008 greatly expanded the scope of geophysical data obtained in China. This poster summarizes the data streams available from all sites, as well as issues encountered along the way.

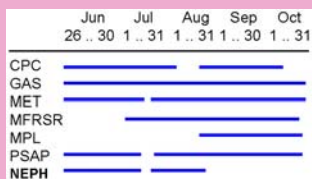


Xianghe EAST-AIRE

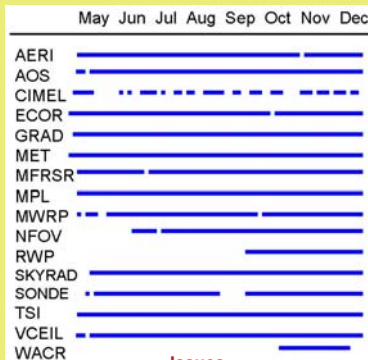


* SW Flux Analysis VAP available

AAF 2008

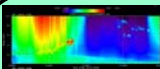


Shouxian AMF

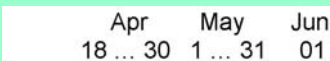


Issues:

- suspect wind speed/ppt rate
- some shading probs with MFRSR
- reprocessing MPL (15-m range data)
- reprocessing VCEIL



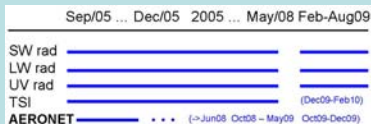
Jingtai AAF



MPL

❖ ANL deployment (contact: R. Coulter)

Taihu EAST-AIRE



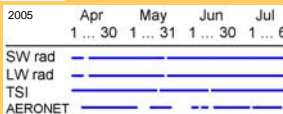
Issues:

- deterioration of TSI dome - acid rain
- MWR calib. Issues - resolved
- lightning strike in Aug09
- * SW Flux Analysis VAP available

AAF 2008

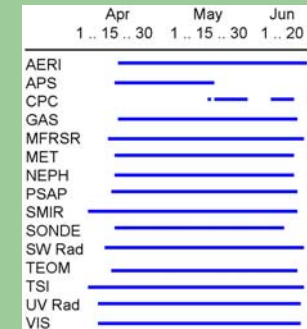


Liangning EAST-AIRE



SW rad _____
LW rad _____
TSI _____
AERONET _____

Zhangye AAF

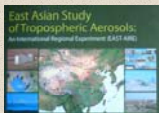


Issues:

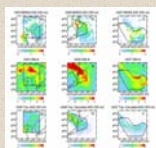
- MPL Level 1 data available in May
- CIMEL data held back - Lev0 avail.

What have we learned?

Breakout Session

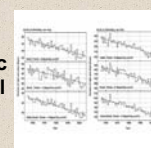


2007 JGR Special Issue:
18 articles



C. Li et al.

2010 JGR Special Issue:
East Asian Study of Tropospheric Aerosols and Impact on Regional Climate (EAST-AIRC)
12 articles in press
8 articles in progress



Y. Qian et al.

Wed. 13h30 - 15h30