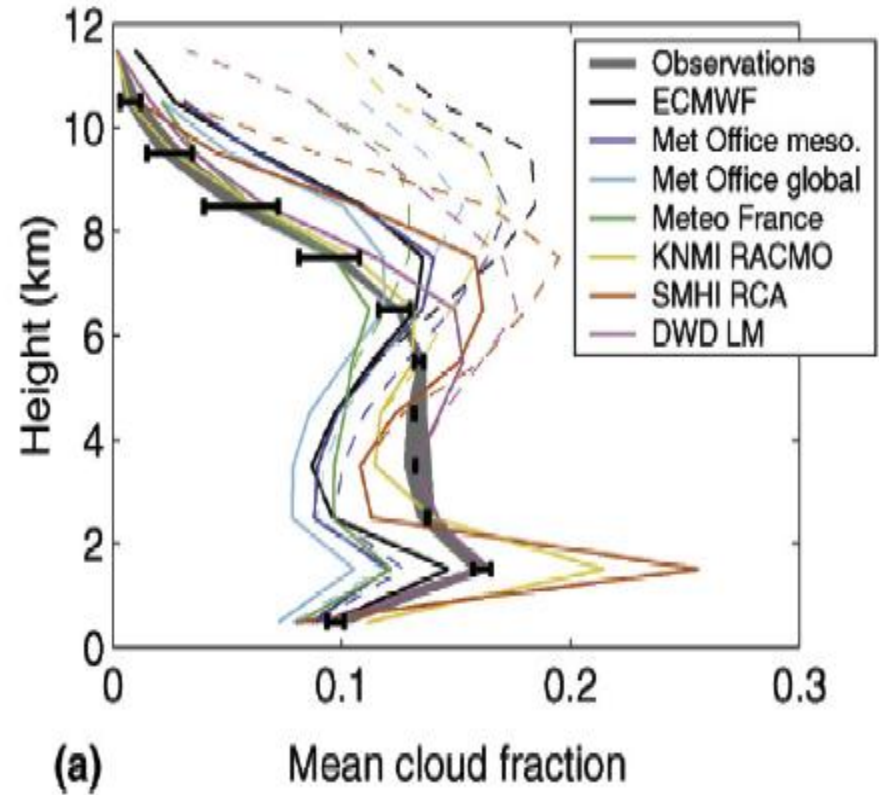
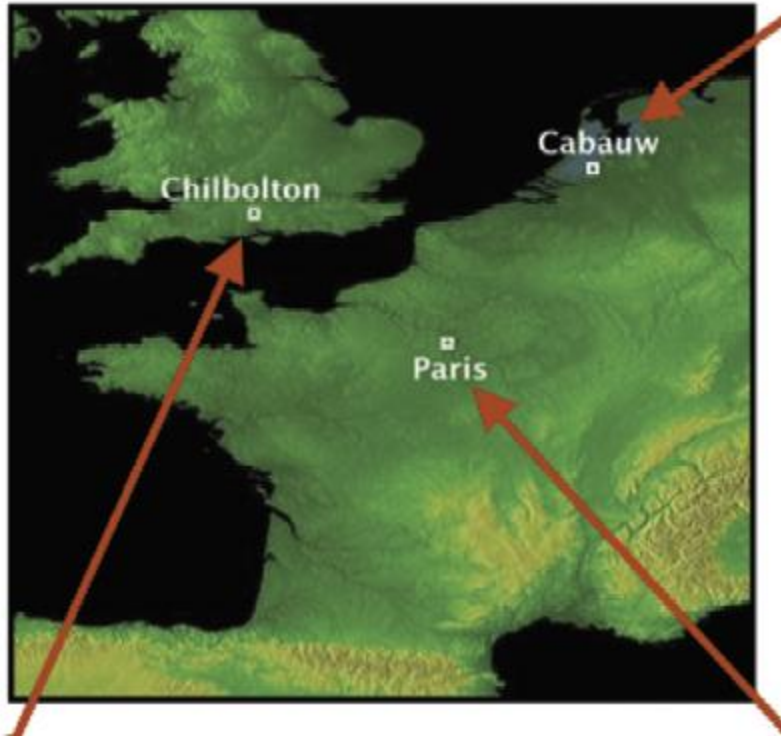


ARM Validation Data for Climate Models

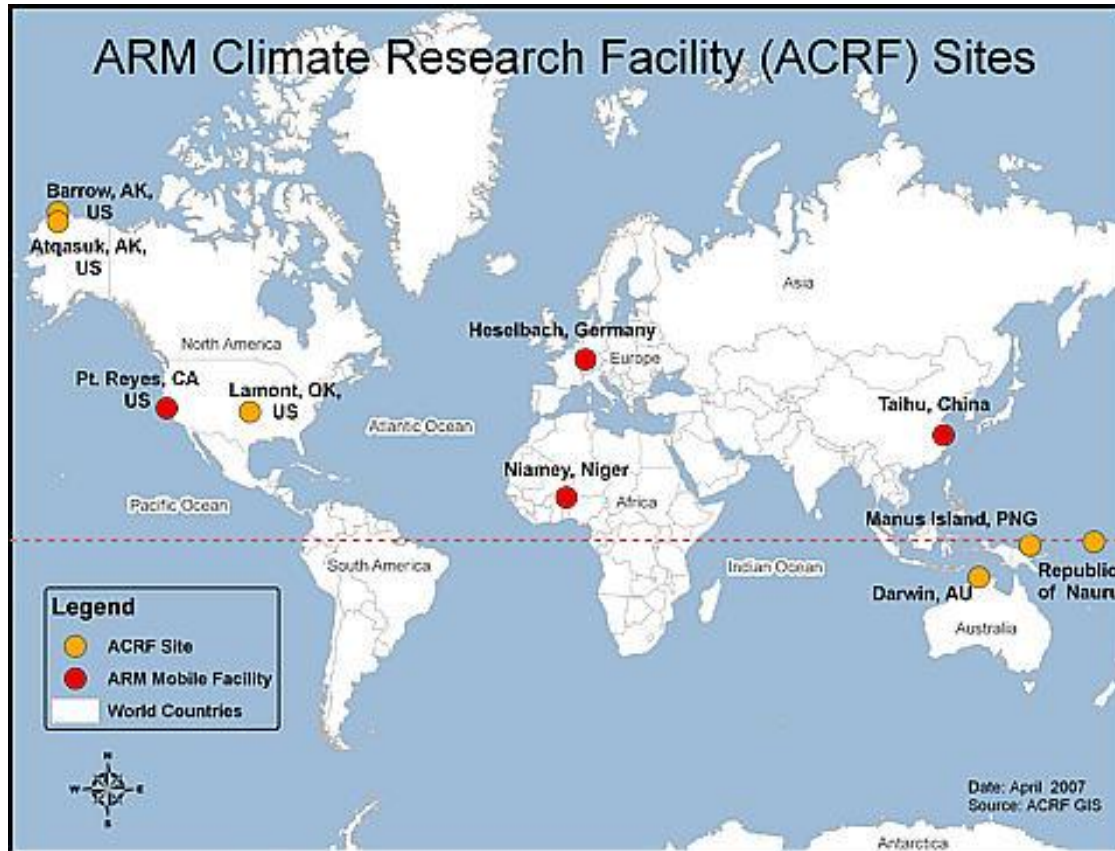
1. ARM-Net
2. Best Estimate Climate Data

CloudNet – A European Project



(Illingworth et al. BAMS 2007)

ARM-Net A Proposal from UK to ARM



The Proposal (Hogan et al.)

1. Cloud radar data from ARM and European sites are processed into GCM variables (cloud fraction, liquid water and ice water).
2. Seven European models, NCEP models, and other climate models are evaluated (*near real-time* processing)

ARM asks for input:

1. Whether this is useful to CAM?
2. How can AMWG make use of the proposed activity?

Climate Modeling Best Estimate Dataset

Initial data list

- Cloud fraction from ARSCL and TSI
- Liquid water path and precipitable water from MWRRET
- Surface Radiative Fluxes from QCRAD

Data available at all five ARM primary research sites

<http://iop.archive.arm.gov/arm-iop/0showcase-data/cmbel/>

| | | |
|--------|-------------------|--------------|
| SGP.C1 | Lamont, OK | 1996 – 2007 |
| NSA.C1 | Barrow, AK | 1998 -- 2007 |
| TWP.C1 | Manus Island, PNG | 1996 -- 2007 |
| TWP.C2 | Nauru, PNG | 1998 -- 2007 |
| TWP.C3 | Darwin,AU | 2002 -- 2007 |

(From Xie et al. 2008)

ARM to AMWG:

Can these best estimate products be added to the AMWG diagnostic package?