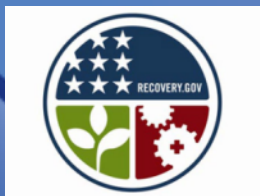


ARM Mobile Aerosol Observing System, Initial Deployment at Aerosol Life Cycle IOP, 2011

Stephen R. Springston

3/27/2011

ASR, Science Team Meeting, San Antonio, TX



BROOKHAVEN
NATIONAL LABORATORY

a passion for discovery

 **Office of
Science**
U.S. DEPARTMENT OF ENERGY



ARM
CLIMATE RESEARCH FACILITY

MAOS A/C

MAOS A

CCN-200
PSAP
Aethalometer
PASS-3
SP2
Dual Nephelometer Hygrometer
CPC (>10 nm)
CPC (>2.5 nm)
UHSAS
SMPS
HTDMA
ACSM
Local Meteorology

- 4 Instrument Racks
- Aerosol Inlet

MAOS C

PILS
PTRMS
Carbon Monoxide
Ozone
Sulfur Dioxide
NO_x (NO, NO₂, NO_y)
SODAR
Profiler

- 1 Instrument Rack
- 2 Custom Mounts
- Trace Gas Inlet
- Aerosol Inlet

IOP Platforms and Infrastructure

- MAOS A – 20' SeaTainer
 - MAOS C – 20' SeaTainer
 - BNL Mobile Laboratory – 34' Winnebago (Guests)
 - AMFII AOS – 20' SeaTainer
-
- Inlets
 - Power – 110 VAC, limited UPS
 - AC
 - Internet

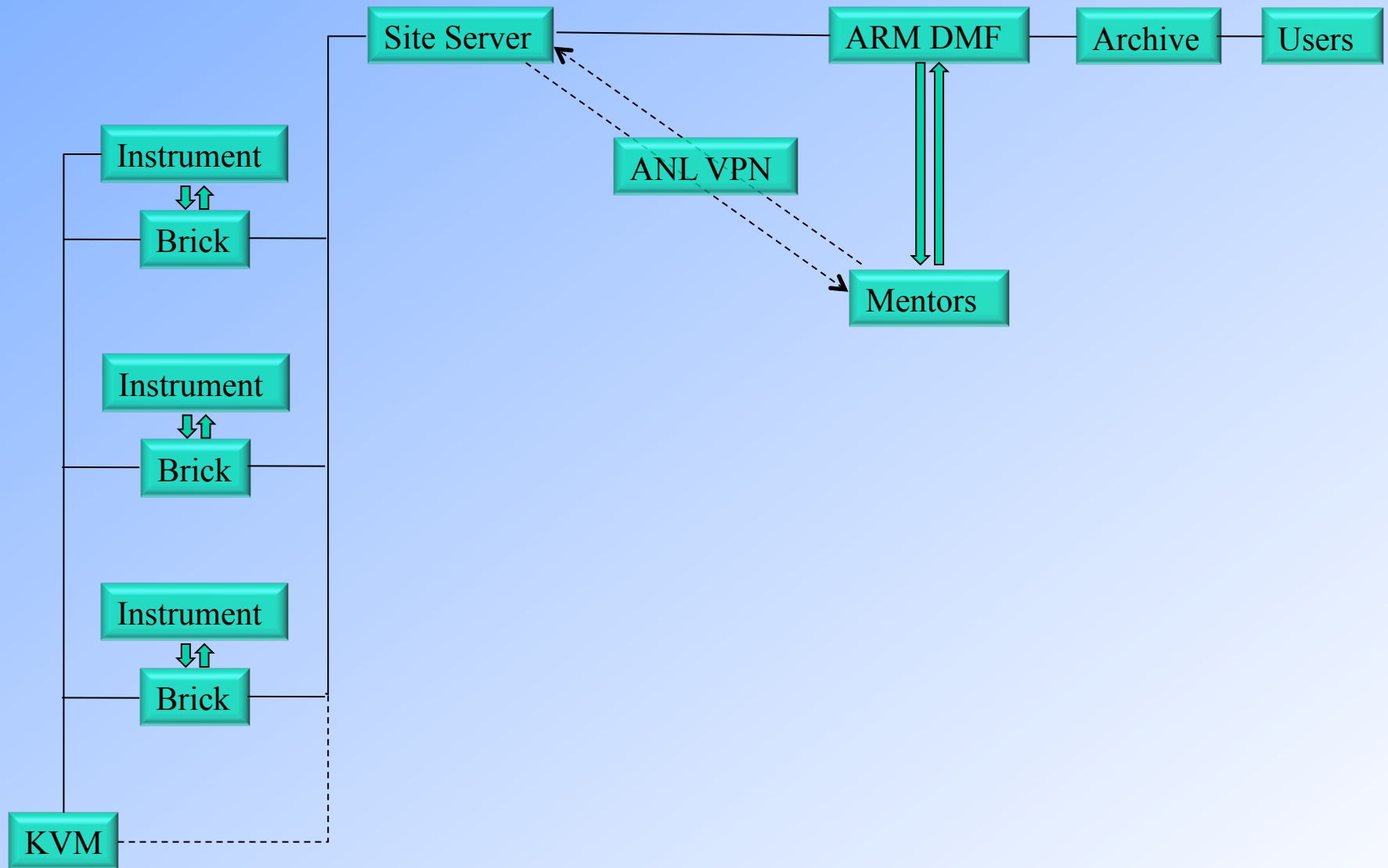
Inlet

- Dimensionally and Dynamically equivalent to AMFI AOS
- 5 x 30 LPM pick offs
- BNL Mobile Laboratory parked adjacent to AOS for sampling

Data/Control

- Standard LabView vi GUI for all base instruments
- ‘View’ access for all participants
- ‘Full Control’ for Mentors

Data Route



Thanks!



Top Row: Larry Milian, Scott Smith, Stephen Springston, Art Sedlacek
Bottom Row: Yin-Nan Lee, Cindy Salwen, Nancy Warren, Judy Williams, Lisa Morello, Bill Behrens, Gunnar Senum
Not Shown: Gabe Vignato