

# ARM Southern Great Plains (SGP) Update

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## ARM Profiling Modules

Provides continuous profiles of temperature humidity, and wind intended to efforts to develop a continuous model forcing data set

### Instruments:

MWR3C  
AERI (EF 23,37,39)

### Coming Soon:

Doppler Lidar  
ASSIST (EF41)



PGS measurements under LBNL grant in transition to ARM measurements at the SGP 60m Tower for more details...

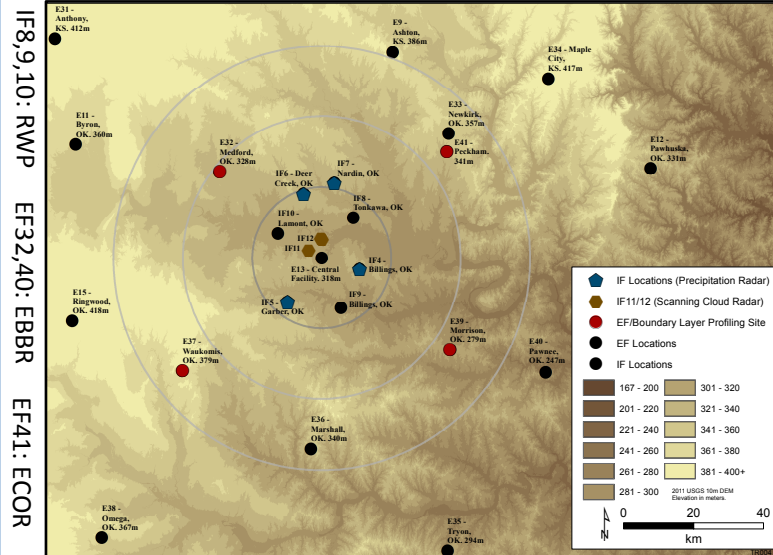
### Measurements:

AOSGHG  
PGS  
PGSISO  
CO  
CO2FLX  
AMC  
FLASK



See Other Poster: Mentor Sébastien Biraud

## Central Facility(CF) Extended Facility(EF) Intermediate Facility(IF)



EF39: EBBR& ECOR All EF: IRT, MET, MFRSR, SEBS, SIR,STAMP

Coming Soon IF11: KaW SACR IF12: KaX SACR, AOS

### SGP FY16 Field Campaigns To Date:

Orbiting Carbon Observatory-Fourier Transform Spectrometer Validation – Oklahoma  
Magnetic Field Observations at Purcell, OK  
ARM Radiosondes for NPOESS/NPP Valiation  
Radar Scanning IOP for Boundary Layer Clouds  
Full-Column Greenhouse Sampling 2015-2017  
Measuring Clouds at SGP with Stereo Photogrammetry  
Portable Flux Tower Deployments  
Chemical Imaging of Atmospheric Organic Particles  
Hollistic Interactions of Shallow Clouds, Aerosols, and Land-Ecosystems (HI-SCALE)  
Cross-Scale Land-Atmosphere Experiment  
Black Carbene Aerosol Deposition Study  
UV-visible Brown Carbon Aerosol Optical Properties  
HI-SCALE: Nanoparticle Composition and Precursors  
HI-SCALE: NGA Calibration Target Placements

More Coming: Submit Field Campaign Requests at:  
<http://www.arm.gov/campaigns/propose>

## Soil Temperature And Moisture Profile

Measures soil water content and temperature at 5 depths, plus precipitation and plant water availability

Hydra Probe Soil Temperature and TR-525M Metric Heated tipping bucket rain gauge For more details...



See Other Poster: Mentor D. Cook, J. Kyrouac

## Automatic Weather Station (MAWS)

Measures atmospheric moisture, pressure, temperature, and horizontal wind. Interfaces directly with Vaisala DigiCORA ground station to Provide standardized surface measurements to the radiosonde data set.

### Vaisala MAWS301

HMP155 T/RH probe in RMYoung 43502  
Aspirated Rad Shield; WMT700 Ultrasonic Wind Sensor; PTB330 Digital Barometer

Raman Lidar modernized and collocated with other profilers for better multi-instrument analyses. Details separate...



See Other Poster: Mentor John Goldsmith

EF32,40: EBBR EF41: ECOR EF23,37,39,41: MWR3C,DL, AERI/ASSIST

CF INSTRUMENTS: ACSM AERI AOS BRS CCN CEIL CLAP CO2FLX CPC DL IRT PGS RAIN RL RWP SASHE SASZE SIRSSONDE TDMA,THWAPS TSI TWR VDIS

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CSPHOT DISDROMETER IRSI KaW SACR KAZR MAWS MFR MFRSR MPL MWR MWR3C Neph NIMFR ORG PASS PSAP