

Oklahoma Mesonet / ARS Quality Assurance Report

July 2018

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- Mesonet technicians completed scheduled rotations of 2 batteries (BATV), 2 relative humidity sensors (RELH/TSLO), 2 pyranometers (SRAD), 1 rain gauge (RAIN), 1 wind monitor nose cone (WSPD), and 2 current excitations.

MESO QA Report for Standard Variables

Variable	Status	Site	Ticket	Remarks
TAIR				
RELH	Resolved	PUTN	35559	Relative humidity and slow air temperature report errant values. Replaced sensor.
WSPD				
WDIR				
PRES				
SRAD				
RAIN	Resolved	ELRE	35553	Secondary rain gauge reports 0 during rain events. Corrected TIP2 level.
	Current	COOK	36282	Both rain gauges missed or significantly under-reported during rain events.
	Current	COOK	36287	Both rain gauges missed or significantly under-reported during rain events.
	Current	PRYO	36263	Primary rain gauge sometimes over 10 percent low during heavy rain events. Replace top only.
	Current	JAYX	36258	Secondary rain gauge sometimes misses part of rain events.

	Current	NOWA	35557	Secondary rain gauge reports less than expected.
TA9M				
WS2M				
TB10	Current	HUGO	36248	10 cm under bare soil reports errant values.
TS05	Resolved	KIN2	35373	5cm sod temperature has less diurnal variation than expected. Replaced sensor and conduit.
	Current	NEWP	36275	5cm and 10cm soil temperature under sod are cooler than expected.
TS10	Resolved	ELRE	35540	10 cm under sod reports errant values. Replaced sensor and conduit.
	Current	ADAX	36253	10 cm under sod reports errant values.
	Current	NEWP	36278	5cm and 10cm soil temperature under sod are cooler than expected.
TS25				
TS60				
TR05	Current	BURB	35568	5 cm under sod reports errant values for starting, final, and average temp.
	Current	CLOU	36367	5 cm sod not heating properly.
TRB10	Resolved	BESS	35567	Sensor often reports errantly high values. Replaced sensor.
	Resolved	OKCE	35332	10cm under bare soil reports errant values. Replaced sensor and conduit.
	Resolved	SEIL	35359	10cm bare soil moisture stopped heating. Replaced sensor.
	Current	SEIL	36365	10cm bare soil moisture stopped heating.
TRS10				

TR25	Current	WAUR	35462	25 cm sod not heating properly.
TR60	Resolved	PERK	35563	60 cm sod soil moisture stopped heating. Replaced sensor.
	Current	WAUR	36368	60cm sod not heating properly.

ARS QA Report for Standard Variables

Variable	Status	Site	Ticket	Remarks
RAIN				
VW05				
VW25				
VW45				
V05T				
V25T				
V45T				

FCARS QA Report for Standard Variables

Variable	Status	Site	Ticket	Remarks
RAIN				
VW05				
VW25				
VW45				
V05T				

V25T	
V45T	

'Current' tickets are the unresolved tickets as of the last day of the month OR those tickets added based on the Monthly QA analysis.

'Resolved' tickets are the sensor problems that were fixed during the entire month.

Variable	Description
TAIR	Air temperature at 1.5 meters
RELH	Relative humidity at 1.5 meters
WDIR	Wind direction at 10 meters
WSPD	Wind speed at 10 meters
PRES	Air pressure
SRAD	Incident solar radiation
RAIN	Rainfall
TA9M	Air temperature at 9 meters
WS2M	Wind speed at 2 meters
TB10	Soil temperature at 10 cm under bare soil
TS05	Soil temperature at 5 cm under native sod
TS10	Soil temperature at 10 cm under native sod
TS25	Soil temperature at 25 cm under native sod
TS60	Soil temperature at 60 cm under native sod
TR05	Soil moisture: Calibrated DeltaT at 5 cm under native sod
TRB10	Soil moisture: Calibrated DeltaT at 10 cm under bare soil
TRS10	Soil moisture: Calibrated DeltaT at 10 cm under native sod
TR25	Soil moisture: Calibrated DeltaT at 25 cm under native sod
TR60	Soil moisture: Calibrated DeltaT at 60 cm under native sod
VW05	Soil moisture: Volumetric water content at 5 cm under native sod
VW25	Soil moisture: Volumetric water content at 25 cm under native sod
VW45	Soil moisture: Volumetric water content at 45 cm under native sod
V05T	Soil temperature at 5 cm under native sod
V25T	Soil temperature at 25 cm under native sod
V45T	Soil temperature at 45 cm under native sod