

Lamont, OK (Extended and Co-located with C1)  
Atmospheric Radiation Measurement User Facility



## ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
sgpaosacsmE13.b1	D220223.1	incorrect	Mentors Working on Instruments	20220214.170000	20220219.235959
sgpaosacsmE13.b1	D211208.2	incorrect	Instruments Periodically Sampling Cabin Air	20211208.181500	20211208.192000
sgpaosacsmE13.b1	D211025.2	incorrect	AOS Manifold Blower Down	20211023.170000	20211028.141000
sgpaosacsmE13.b1	D210929.4	incorrect	Mentors on Site Performing Maintenance	20210921.140000	20210924.200000
sgpaosacsmE13.b1	D210721.1	incorrect	Instrument Tuning and Troubleshooting	20210708.193000	20210721.174000
sgpaosacsmE13.b1	D201223.1	missing	Missing Data	20200707.000000	20210708.000000
sgpaosacsmE13.b1	D200424.2	suspect	Instrument Shelter AC Failure	20200416.190000	20200424.180000
sgpaosacsmE13.b1	D191119.1	suspect	Mentors at Site	20191116.160000	20191117.210000
sgpaosacsmE13.b1	D200515.10	incorrect	Incorrect Data	20200509.060800	20200513.172000
sgpaosacsmE13.b1	D200330.2	missing	Missing Data	20200327.160400	20200330.152900
sgpaosacsmE13.b1	D200608.2	missing	Missing Data	20200606.230900	20200608.141600
sgpaosacsmE13.b1	D201224.1	missing	ACSM Shipped to Vendor for Maintenance	20201216.150000	30010101.000000
sgpaosacsmE13.b1	D190717.4	incorrect	Instrument Mentors Onsite Performing Maintenance.	20190716.160000	20190717.220000
sgpaosacsmE13.b1	D190328.4	incorrect	Instrument mentors on site	20190318.100000	20190321.190000
sgpaosacsmE13.b1	D170828.1	suspect	SGP/AOS/ACSM/APS/CCN/CPC/HTDMA/NEPHELOMETER/13 - Mentors on site	20170822.080000	20170824.180000
sgpaosacsmE13.b1	D190318.8	incorrect	Incorrect Data because of unresolved filter switching valve issues. These were resolved on a recent calibration trip.	20181021.182300	20190401.173036
sgpaosacsmE13.b1	D171116.3	missing	SGP/ACSM/E13 - Instrument vacuum leak	20171028.205000	20180302.170000
sgpaosacsmE13.b1	D190403.1	incorrect	Mentors on site performing maintenance the AOS	20190401.140000	20190401.183500
sgpaosacsmE13.b1	D181030.4	suspect	Possible clogged critical orifice	20180905.140400	20181029.182000
sgpaosacsmE13.b1	D180809.1	incorrect	AOS stack lowered for maintenance	20180809.134000	20180809.150000
sgpaosacsmE13.b1	D170818.1	suspect	SGP/ACSM/E13 - Inlet pressure low	20170811.193200	20170814.143100
sgpaosapsE13.b1	D211208.2	incorrect	Instruments Periodically Sampling Cabin Air	20211208.181500	20211208.192000
sgpaosapsE13.b1	D211025.2	incorrect	AOS Manifold Blower Down	20211023.170000	20211028.141000
sgpaosapsE13.b1	D210907.4	missing	Missing Data	20210712.160000	20210824.181759
sgpaosapsE13.b1	D210929.4	incorrect	Mentors on Site Performing Maintenance	20210921.140000	20210924.200000
sgpaosapsE13.b1	D201112.6	missing	Missing Data	20200902.175000	20201104.152500
sgpaosapsE13.b1	D170106.3	missing	SGP/APS/E13 - Instrument out for repairs	20161214.173000	20170314.181659
sgpaosapsE13.b1	D190717.2	missing	APS Damaged due to a Lightning Strike.	20190703.170000	20190716.185000
sgpaosapsE13.b1	D190423.2	missing	APS Laser Failure	20190423.053400	20190529.140400
sgpaosapsE13.b1	D170724.2	missing	SGP/APS/E13 - Instrument returned for repair	20170719.130000	20170823.162459

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sgpaosapsE13.b1	D220223.1	incorrect	Mentors Working on Instruments	20220214.170000	20220219.235959
sgpaosapsE13.b1	D170504.4	incorrect	SGP/APS/E13 - Instrument Failure	20161203.153000	20161214.172959
sgpaosapsE13.b1	D171113.2	incorrect	SGP/APS/E13 - Size distributions are not representative of the ambient aerosol	20171026.235800	20171027.152800
sgpaosapsE13.b1	D220209.20	suspect	Suspect Data	20210618.000000	20210619.235959
sgpaosapsE13.b1	D220127.3	incorrect	Incorrect Data	20211216.150000	20211223.180000
sgpaosapsE13.b1	D220124.1	incorrect	Questionable Data	20220122.130000	20220124.180000
sgpaosapsE13.b1	D211123.9	incorrect	Incorrect Data	20211102.180000	20211104.235959
sgpaosapsE13.b1	D210907.3	incorrect	High Numbers Concentration	20210621.080000	20210712.160000
sgpaosapsE13.b1	D210618.5	incorrect	Questionable Data	20210604.150021	20210607.213000
sgpaosapsE13.b1	D201210.3	incorrect	Incorrect Data	20200901.195601	20200902.175000
sgpaosapsE13.b1	D201207.2	incorrect	APS Data Affected	20200608.202829	20200610.135601
sgpaosapsE13.b1	D170608.2	incorrect	SGP/APS/E13 - Clogged inner nozzle	20170519.015500	20170602.182759
sgpaosapsE13.b1	D170724.1	incorrect	SGP/APS/E13 - Data not representative of atmospheric aerosol concentrations	20170625.151000	20170719.125959
sgpaosmetE13.a1	D191119.1	suspect	Mentors at Site	20191116.160000	20191117.210000
sgpaosmetE13.a1	D190717.4	incorrect	Instrument Mentors Onsite Performing Maintenance.	20190716.160000	20190717.220000
sgpaosmetE13.a1	D190328.4	incorrect	Instrument mentors on site	20190318.100000	20190321.190000
sgpaosmetE13.a1	D170828.1	suspect	SGP/AOS/ACSM/APS/CCN/CPC/HTDMA/NEPHELOMETER/13 - Mentors on site	20170822.080000	20170824.180000
sgpaosmetE13.a1	D190731.1	missing	Missing Data Due to Lightning Strike	20190703.171500	20190731.133500
sgpaosmetE13.a1	D190403.1	incorrect	Mentors on site performing maintenance the AOS	20190401.140000	20190401.183500
sgpaosmetE13.a1	D180304.1	incorrect	Mentors on site	20180302.120000	20180306.230000
sgpaosmetE13.a1	D170214.5	incorrect	SGP/AOSMET/E13 - Stack lowered for maintenance	20170203.154100	20170203.215059
sgpaosmetE13.a1	D170214.6	missing	SGP/AOSMET/E13 - Missing data due to configuration error	20170203.215000	20170206.225859
sgpaosmetE13.a1	D190513.1	incorrect	Pressure, Temperature, Humidity Data Intermittent	20190116.160000	20190315.125000
sgpaosmetE13.a1	D170214.7	incorrect	SGP/AOSMET/E13 - Connector corrosion causing incorrect and missing data	20170120.072500	20170121.112659
sgpaosmetE13.a1	D200327.4	suspect	Precipitation Overestimation	20200319.000000	20200319.235959
sgpaosmetE13.a1	D210421.2	missing	Wind Data Missing	20210208.092700	20210209.141900
sgpaosmetE13.a1	D200827.1	missing	Missing Wind Data	20200824.034600	20200827.150000
sgpaosmetE13.a1	D201016.3	missing	Missing Data (e.g. -9999)	20200907.070000	20200922.144600
sgpaosmetE13.a1	D180824.8	missing	Wind data missing	20180701.100500	20180809.200759
sgpaoscaps3wE13.b1	D211208.2	incorrect	Instruments Periodically Sampling Cabin Air	20211208.181500	20211208.192000

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sgpaoscaps3wE13.b1	D211025.2	incorrect	AOS Manifold Blower Down	20211023.170000	20211028.141000
sgpaoscaps3wE13.b1	D211020.5	incorrect	SGP AOS Datastreams missing SGP Impactor data	20210930.231401	20211004.085959
sgpaoscaps3wE13.b1	D210929.4	incorrect	Mentors on Site Performing Maintenance	20210921.140000	20210924.200000
sgpaoscaps3wE13.b1	D201218.2	missing	Missing Data	20200806.180000	20201101.000000
sgpaoscaps3wE13.b1	D190717.4	incorrect	Instrument Mentors Onsite Performing Maintenance.	20190716.160000	20190717.220000
sgpaoscaps3wE13.b1	D200424.2	suspect	Instrument Shelter AC Failure	20200416.190000	20200424.180000
sgpaoscaps3wE13.b1	D191119.1	suspect	Mentors at Site	20191116.160000	20191117.210000
sgpaoscaps3wE13.b1	D200513.2	missing	No Data	20200409.140800	20200526.111700
sgpaoscaps3wE13.b1	D181119.1	suspect	Leak in the impactor line	20181106.150000	20181107.170000
sgpaoscaps3wE13.b1	D190109.2	missing	Missing Data	20180420.181315	20190606.145000
sgpaoscaps3wE13.b1	D190709.2	suspect	Incorrect Impactor Flow	20190703.170000	20190709.170000
sgpaoscaps3wE13.b1	D190226.1	suspect	Work on the impactor line	20190225.144000	20190225.190000
sgpaoscaps3wE13.b1	D190305.2	suspect	Impactor flow not nominal	20190228.160500	20190228.170000
sgpaoscaps3wE13.b1	D191126.1	suspect	Possible Leak in the Impactor Line	20191003.150000	20191121.210000
sgpaoscaps3wE13.b1	D190618.3	suspect	Leak on the Impactor Line	20190608.060000	20190617.190000
sgpaoscaps3wE13.b1	D190816.5	missing	Missing Data	20190703.171500	20190709.182000
sgpaoscaps3wE13.b1	D220223.1	incorrect	Mentors Working on Instruments	20220214.170000	20220219.235959
sgpaoscaps3wE13.b1	D210622.1	suspect	Impactor Flow not Nominal	20210616.170000	20210617.145959
sgpaoscaps3wE13.b1	D181119.2	suspect	Leak in the impactor line	20181106.150000	20181107.170000
sgpaoscaps3wE13.b1	D191008.2	incorrect	Dirty Mirrors	20190606.145000	20190626.000000
sgpaoscaps3wE13.b1	D181108.1	suspect	Low impactor flow	20181106.140000	20181107.200000
sgpaoscaps3wE13.b1	D210730.5	incorrect	Incorrect Data	20210517.171000	20210722.164400
sgpaoscaps3wE13.b1	D200917.4	incorrect	Incorrect Data	20200619.000000	20200806.180000
sgpaoscaps3wE13.b1	D201113.1	incorrect	Nephelometer Calibration	20201110.183000	20201113.000000
sgpaoscaps3wE13.b1	D220304.1	incorrect	Sample Pump Failure on the Green Channel of the 3W-CAPS	20220121.183000	20220303.214600
sgpaosccn2colaE13.b1	D211208.2	incorrect	Instruments Periodically Sampling Cabin Air	20211208.181500	20211208.192000
sgpaosccn2colaE13.b1	D211025.2	incorrect	AOS Manifold Blower Down	20211023.170000	20211028.141000
sgpaosccn2colaE13.b1	D211020.5	incorrect	SGP AOS Datastreams missing SGP Impactor data	20210930.231401	20211004.085959
sgpaosccn2colaE13.b1	D210929.4	incorrect	Mentors on Site Performing Maintenance	20210921.140000	20210924.200000
sgpaosccn2colaE13.b1	D210216.1	missing	Instrument Taken Offline due to Severe Weather	20210211.184500	20210222.200000

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sgpaosccn2colaE13.b1	D191119.1	suspect	Mentors at Site	20191116.160000	20191117.210000
sgpaosccn2colaE13.b1	D170828.1	suspect	SGP/AOS/ACSM/APS/CCN/CPC/HTDMA/NEPHELOMETER/513 - Mentors on site	20170822.080000	20170824.180000
sgpaosccn2colaE13.b1	D190328.4	incorrect	Instrument mentors on site	20190318.100000	20190321.190000
sgpaosccn2colaE13.b1	D181126.2	missing	Flooded column B	20181115.220000	20181121.180000
sgpaosccn2colaE13.b1	D200506.2	missing	Instrument Offline	20200402.160000	20200506.000000
sgpaosccn2colaE13.b1	D190702.1	incorrect	Column B Flooded	20190621.060000	20190701.180000
sgpaosccn2colaE13.b1	D170905.3	incorrect	SGP/CCN/E13 - Instrument out of water	20170903.230000	20170905.183000
sgpaosccn2colaE13.b1	D210205.8	incorrect	Instrument Replaced with a Spare	20201117.000000	20201125.000000
sgpaosccn2colaE13.b1	D220223.1	incorrect	Mentors Working on Instruments	20220214.170000	20220219.235959
sgpaosccn2colaE13.b1	D210119.3	missing	Spare Instrument being Installed	20200812.180000	20200821.000000
sgpaosccn2colaE13.b1	D210611.1	incorrect	Water in Air Lines	20210608.130000	20210610.000000
sgpaosccn2colaE13.b1	D190403.1	incorrect	Mentors on site performing maintenance the AOS	20190401.140000	20190401.183500
sgpaosccn2colaE13.b1	D190108.13	incorrect	Instrument flooded	20180601.090000	20181107.210000
sgpaosccn2colaE13.b1	D211210.1	suspect	Very Small Amount of Cabin Air Potentially in the CCN Sample Stream	20211022.180000	20211210.180000
sgpaospcpf1mE13.b1	D211208.2	incorrect	Instruments Periodically Sampling Cabin Air	20211208.181500	20211208.192000
sgpaospcpf1mE13.b1	D211025.2	incorrect	AOS Manifold Blower Down	20211023.170000	20211028.141000
sgpaospcpf1mE13.b1	D211020.5	incorrect	SGP AOS Datastreams missing SGP Impactor data	20210930.231401	20211004.085959
sgpaospcpf1mE13.b1	D210929.4	incorrect	Mentors on Site Performing Maintenance	20210921.140000	20210924.200000
sgpaospcpf1mE13.b1	D210115.4	missing	Missing Data	20201123.174800	20201217.211400
sgpaospcpf1mE13.b1	D191119.1	suspect	Mentors at Site	20191116.160000	20191117.210000
sgpaospcpf1mE13.b1	D190717.4	incorrect	Instrument Mentors Onsite Performing Maintenance.	20190716.160000	20190717.220000
sgpaospcpf1mE13.b1	D190328.4	incorrect	Instrument mentors on site	20190318.100000	20190321.190000
sgpaospcpf1mE13.b1	D200424.2	suspect	Instrument Shelter AC Failure	20200416.190000	20200424.180000
sgpaospcpf1mE13.b1	D200429.2	missing	Instruments Producing Invalid Data until They Were Switched Off	20200402.000000	30010101.000000
sgpaospcpf1mE13.b1	D190827.4	missing	CPCs Taken Offline for Maintenance and Replacement.	20190822.180300	20190826.183300
sgpaospcpf1mE13.b1	D190717.1	missing	CPCs Damaged due to Lightning Strike	20190703.171500	20190717.141000
sgpaospcpf1mE13.b1	D190403.4	missing	CPCF and CPCUF offline for testing	20190328.202100	20190329.115000
sgpaospcpf1mE13.b1	D220223.1	incorrect	Mentors Working on Instruments	20220214.170000	20220219.235959
sgpaospcpf1mE13.b1	D220209.6	incorrect	Questionable Data	20210409.210000	20210429.020000
sgpaospcpf1mE13.b1	D190403.1	incorrect	Mentors on site performing maintenance the AOS	20190401.140000	20190401.183500

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sgpaospcpf1mE13.b1	D180304.1	incorrect	Mentors on site	20180302.120000	20180306.230000
sgpaospcpf1mE13.b1	D190115.2	suspect	High Cabin Temperature	20190107.120000	20190107.190000
sgpaospcpf1mE13.b1	D220210.17	incorrect	Incorrect Data	20220207.150000	20220207.180000
sgpaospcpf1mE13.b1	D220127.1	incorrect	Questionable Data	20220113.160000	20220113.173000
sgpaospcpf1mE13.b1	D211123.6	incorrect	Questionable Data	20211108.180000	20211108.200000
sgpaospcpf1mE13.b1	D211123.2	incorrect	Incorrect Data	20211006.224000	20211007.003000
sgpaospcpf1mE13.b1	D211005.8	incorrect	Incorrect Data	20210728.210000	20210806.160000
sgpaospcpf1mE13.b1	D201216.6	incorrect	Instrument Butanol Flooding	20201119.134205	20201123.174800
sgpaospcpf1mE13.b1	D191203.2	suspect	Unstable Flow Rate	20191201.060000	20191203.191100
sgpaospcufE13.b1	D220223.1	incorrect	Mentors Working on Instruments	20220214.170000	20220219.235959
sgpaospcufE13.b1	D211129.1	missing	Missing Data	20211112.170001	20211129.160000
sgpaospcufE13.b1	D211208.2	incorrect	Instruments Periodically Sampling Cabin Air	20211208.181500	20211208.192000
sgpaospcufE13.b1	D211025.2	incorrect	AOS Manifold Blower Down	20211023.170000	20211028.141000
sgpaospcufE13.b1	D210907.5	missing	Missing Data	20210830.150000	20210922.165959
sgpaospcufE13.b1	D211020.5	incorrect	SGP AOS Datastreams missing SGP Impactor data	20210930.231401	20211004.085959
sgpaospcufE13.b1	D210929.4	incorrect	Mentors on Site Performing Maintenance	20210921.140000	20210924.200000
sgpaospcufE13.b1	D210412.6	missing	Missing Data	20210122.180000	20210408.145800
sgpaospcufE13.b1	D200424.2	suspect	Instrument Shelter AC Failure	20200416.190000	20200424.180000
sgpaospcufE13.b1	D191119.1	suspect	Mentors at Site	20191116.160000	20191117.210000
sgpaospcufE13.b1	D190717.4	incorrect	Instrument Mentors Onsite Performing Maintenance.	20190716.160000	20190717.220000
sgpaospcufE13.b1	D190403.1	incorrect	Mentors on site performing maintenance the AOS	20190401.140000	20190401.183500
sgpaospcufE13.b1	D180304.1	incorrect	Mentors on site	20180302.120000	20180306.230000
sgpaospcufE13.b1	D190328.4	incorrect	Instrument mentors on site	20190318.100000	20190321.190000
sgpaospcufE13.b1	D200429.2	missing	Instruments Producing Invalid Data until They Were Switched Off	20200402.000000	30010101.000000
sgpaospcufE13.b1	D190827.4	missing	CPCs Taken Offline for Maintenance and Replacement.	20190822.180300	20190826.183300
sgpaospcufE13.b1	D190717.1	missing	CPCs Damaged due to Lightning Strike	20190703.171500	20190717.141000
sgpaospcufE13.b1	D180328.3	incorrect	The inlet tubing to the CPCuf was disconnected.	20180323.144259	20180327.145639
sgpaospcufE13.b1	D190115.2	suspect	High Cabin Temperature	20190107.120000	20190107.190000
sgpaospcufE13.b1	D190403.4	missing	CPCF and CPCUF offline for testing	20190328.202100	20190329.115000
sgpaospcufE13.b1	D190403.6	incorrect	CPCUF disconnected for testing	20190403.185400	20190403.191200

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sgpaospcufE13.b1	D220210.17	incorrect	Incorrect Data	20220207.150000	20220207.180000
sgpaospcufE13.b1	D220127.1	incorrect	Questionable Data	20220113.160000	20220113.173000
sgpaospcufE13.b1	D220125.1	incorrect	Questionable Data	20211109.180000	20211112.150000
sgpaospcufE13.b1	D211123.6	incorrect	Questionable Data	20211108.180000	20211108.200000
sgpaospcufE13.b1	D211020.1	incorrect	Incorrect Data	20210820.170000	20210830.150000
sgpaospcufE13.b1	D210205.9	incorrect	Questionable Data	20210114.041510	20210122.180000
sgpaospcufE13.b1	D190827.7	incorrect	Incorrect Condenser Temperature in CPCUF	20190826.190000	20190827.203000
sgpaospcufE13.b1	D171005.6	incorrect	SGP/CPC/E13 - Instrument partially sampling cabin air	20170629.165500	20170822.183000
sgpaoshtdmaE13.a1	D211220.1	suspect	Periodic Flow Issues affecting Data Quality	20211213.193000	20220128.210000
sgpaoshtdmaE13.a1	D220223.1	incorrect	Mentors Working on Instruments	20220214.170000	20220219.235959
sgpaoshtdmaE13.a1	D211209.1	missing	Instrument not Saving Data	20210430.230001	20210504.155959
sgpaoshtdmaE13.a1	D211208.2	incorrect	Instruments Periodically Sampling Cabin Air	20211208.181500	20211208.192000
sgpaoshtdmaE13.a1	D211025.2	incorrect	AOS Manifold Blower Down	20211023.170000	20211028.141000
sgpaoshtdmaE13.a1	D210929.4	incorrect	Mentors on Site Performing Maintenance	20210921.140000	20210924.200000
sgpaoshtdmaE13.a1	D210115.6	incorrect	Internal Pump Failure	20201018.041500	20210505.150000
sgpaoshtdmaE13.a1	D201027.1	suspect	Internal Flows not Nominal	20201017.060000	20201026.191500
sgpaoshtdmaE13.a1	D191119.1	suspect	Mentors at Site	20191116.160000	20191117.210000
sgpaoshtdmaE13.a1	D190403.1	incorrect	Mentors on site performing maintenance the AOS	20190401.140000	20190401.183500
sgpaoshtdmaE13.a1	D180304.1	incorrect	Mentors on site	20180302.120000	20180306.230000
sgpaoshtdmaE13.a1	D190717.4	incorrect	Instrument Mentors Onsite Performing Maintenance.	20190716.160000	20190717.220000
sgpaoshtdmaE13.a1	D190328.4	incorrect	Instrument mentors on site	20190318.100000	20190321.190000
sgpaoshtdmaE13.a1	D170828.1	suspect	SGP/AOS/ACSM/APS/CCN/CPC/HTDMA/NEPHELOMETER/513 - Mentors on site	20170822.080000	20170824.180000
sgpaoshtdmaE13.a1	D201005.1	missing	Instrument Flooded	20200222.050000	20201002.170000
sgpaoshtdmaE13.a1	D210524.1	incorrect	Flow Issues	20210519.160000	20210521.190000
sgpaoshtdmaE13.a1	D191227.1	incorrect	Software Froze	20191224.080000	20191227.150000
sgpaoshtdmaE13.a1	D190905.2	incorrect	Software Crash	20190821.190000	20190904.210000
sgpaoshtdmaE13.a1	D190730.2	incorrect	Software Crash	20190728.120000	20190730.144000
sgpaoshtdmaE13.a1	D191204.1	incorrect	Software Frozen	20191127.140000	20191204.180000
sgpaoshtdmaE13.a1	D190620.4	incorrect	Instrument Periodically Offline or Running in Non-Standard Configuration	20171129.000000	20190621.000000
sgpaoshtdmaE13.a1	D190620.5	incorrect	Instrument Offline	20180512.120000	20190621.000000

## ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
sgpaoshtdmaE13.a1	D170913.1	suspect	SGP/HTDMA/E13 - Instrument testing after installation	20170829.000000	20170905.150000
sgpaoshtdmaE13.a1	D171208.7	incorrect	SGP/HTDMA/E13 - Flow control issues	20170921.000000	20171129.000000
sgpaosnanosmpsE13.b1	D220223.1	incorrect	Mentors Working on Instruments	20220214.170000	20220219.235959
sgpaosnanosmpsE13.b1	D220209.17	incorrect	Incorrect Data	20211006.120000	20211006.150000
sgpaosnanosmpsE13.b1	D211208.2	incorrect	Instruments Periodically Sampling Cabin Air	20211208.181500	20211208.192000
sgpaosnanosmpsE13.b1	D211025.2	incorrect	AOS Manifold Blower Down	20211023.170000	20211028.141000
sgpaosnanosmpsE13.b1	D210730.1	incorrect	Incorrect Data	20210627.004000	20210628.140000
sgpaosnanosmpsE13.b1	D210929.4	incorrect	Mentors on Site Performing Maintenance	20210921.140000	20210924.200000
sgpaosnanosmpsE13.b1	D201119.2	missing	Missing nSMPS Data	20201017.000000	20201020.090000
sgpaosnanosmpsE13.b1	D200424.2	suspect	Instrument Shelter AC Failure	20200416.190000	20200424.180000
sgpaosnanosmpsE13.b1	D191119.1	suspect	Mentors at Site	20191116.160000	20191117.210000
sgpaosnanosmpsE13.b1	D190328.4	incorrect	Instrument mentors on site	20190318.100000	20190321.190000
sgpaosnanosmpsE13.b1	D180304.1	incorrect	Mentors on site	20180302.120000	20180306.230000
sgpaosnanosmpsE13.b1	D170828.1	suspect	SGP/AOS/ACSM/APS/CCN/CPC/HTDMA/NEPHELOMETER/13 - Mentors on site	20170822.080000	20170824.180000
sgpaosnanosmpsE13.b1	D171012.5	missing	SGP/SMPS/E13 - Instrument repaired by vendor	20170927.153500	20171101.202000
sgpaosnanosmpsE13.b1	D170907.8	missing	SGP/SMPS/E13 - Internal leak in the CPC	20170823.194500	30010101.000000
sgpaosnanosmpsE13.b1	D161215.8	missing	SGP/SMPS/E13 - Instrument out for repairs	20161214.171000	20170314.200959
sgpaosnanosmpsE13.b1	D161207.1	incorrect	SGP/SMPS/E13 - CPC testing	20161205.213500	20161205.220459
sgpaosnanosmpsE13.b1	D190708.2	missing	Instruments Offline After Lightning Strike	20190703.203000	20190705.203500
sgpaosnanosmpsE13.b1	D210316.5	missing	Missing nSMPS Data	20210313.140000	20210315.141500
sgpaosnanosmpsE13.b1	D220210.17	incorrect	Incorrect Data	20220207.150000	20220207.180000
sgpaosnanosmpsE13.b1	D220127.1	incorrect	Questionable Data	20220113.160000	20220113.173000
sgpaosnanosmpsE13.b1	D211123.6	incorrect	Questionable Data	20211108.180000	20211108.200000
sgpaosnanosmpsE13.b1	D170918.4	incorrect	SGP/SMPS/E13 - Instrument internal leak	20170822.195500	20170823.194459
sgpaosnephwet1mE13.b1	D211208.2	incorrect	Instruments Periodically Sampling Cabin Air	20211208.181500	20211208.192000
sgpaosnephwet1mE13.b1	D211207.2	missing	Software Crash	20210807.084701	20210809.142159
sgpaosnephwet1mE13.b1	D211025.2	incorrect	AOS Manifold Blower Down	20211023.170000	20211028.141000
sgpaosnephwet1mE13.b1	D211116.1	missing	Computer Failure	20211112.160000	20211115.150000
sgpaosnephwet1mE13.b1	D211019.1	missing	Missing Data	20210725.000000	20210820.000000
sgpaosnephwet1mE13.b1	D211020.5	incorrect	SGP AOS Datastreams missing SGP Impactor data	20210930.231401	20211004.085959



## ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
sgpaosnephwet1mE13.k	D210929.4	incorrect	Mentors on Site Performing Maintenance	20210921.140000	20210924.200000
sgpaosnephwet1mE13.k	D200424.2	suspect	Instrument Shelter AC Failure	20200416.190000	20200424.180000
sgpaosnephwet1mE13.k	D191119.1	suspect	Mentors at Site	20191116.160000	20191117.210000
sgpaosnephwet1mE13.k	D190328.4	incorrect	Instrument mentors on site	20190318.100000	20190321.190000
sgpaosnephwet1mE13.k	D200729.2	missing	Software Frozen	20200712.120000	20200713.161600
sgpaosnephwet1mE13.k	D200302.4	incorrect	Bulb Burned Out	20200229.063000	20200303.000000
sgpaosnephwet1mE13.k	D181119.1	suspect	Leak in the impactor line	20181106.150000	20181107.170000
sgpaosnephwet1mE13.k	D200422.6	incorrect	Bulb Burned Out	20200419.190000	20200505.000000
sgpaosnephwet1mE13.k	D190325.1	incorrect	Leak in the Humidigraph	20190308.180000	20190318.220000
sgpaosnephwet1mE13.k	D190709.2	suspect	Incorrect Impactor Flow	20190703.170000	20190709.170000
sgpaosnephwet1mE13.k	D190226.1	suspect	Work on the impactor line	20190225.144000	20190225.190000
sgpaosnephwet1mE13.k	D190305.2	suspect	Impactor flow not nominal	20190228.160500	20190228.170000
sgpaosnephwet1mE13.k	D181107.2	missing	Instrument software off	20181101.170000	20181102.130000
sgpaosnephwet1mE13.k	D191126.1	suspect	Possible Leak in the Impactor Line	20191003.150000	20191121.210000
sgpaosnephwet1mE13.k	D181102.9	missing	Instrument software frozen	20180730.000000	20180821.140000
sgpaosnephwet1mE13.k	D190618.3	suspect	Leak on the Impactor Line	20190608.060000	20190617.190000
sgpaosnephwet1mE13.k	D181016.1	missing	Power outage	20181008.020000	20181009.140000
sgpaosnephwet1mE13.k	D181003.1	incorrect	Clogged filter in the ambient ("dry") nephelometer	20180906.000000	20180908.000000
sgpaosnephwet1mE13.k	D200316.1	incorrect	Bulb Burned Out	20200229.060000	20200303.000000
sgpaosnephwet1mE13.k	D180827.6	missing	Computer offline	20180825.130000	20180827.130000
sgpaosnephwet1mE13.k	D210317.2	missing	Missing Data and Files that are Missing Header Information	20210102.170000	20210104.220000
sgpaosnephwet1mE13.k	D220223.1	incorrect	Mentors Working on Instruments	20220214.170000	20220219.235959
sgpaosnephwet1mE13.k	D211006.5	incorrect	Bulb Burned Out	20211001.170000	20211005.000000
sgpaosnephwet1mE13.k	D210413.1	incorrect	Bulb Burned Out	20210408.000000	20210413.000000
sgpaosnephwet1mE13.k	D210622.1	suspect	Impactor Flow not Nominal	20210616.170000	20210617.145959
sgpaosnephwet1mE13.k	D210301.4	suspect	Humidification System not Working	20210111.140000	20210223.000000
sgpaosnephwet1mE13.k	D201216.7	incorrect	Bulb Burned Out	20201124.041300	20201125.000000
sgpaosnephwet1mE13.k	D201113.1	incorrect	Nephelometer Calibration	20201110.183000	20201113.000000
sgpaosnephwet1mE13.k	D181119.2	suspect	Leak in the impactor line	20181106.150000	20181107.170000
sgpaosnephwet1mE13.k	D181108.1	suspect	Low impactor flow	20181106.140000	20181107.200000

## ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
sgpaosnephwet1mE13.b1	D181003.5	incorrect	Wet neph bulb burned out	20180726.070000	20180731.000000
sgpaoso3E13.b1	D211028.1	suspect	Use with Caution	20210612.000001	20210618.235959
sgpaoso3E13.b1	D211208.2	incorrect	Instruments Periodically Sampling Cabin Air	20211208.181500	20211208.192000
sgpaoso3E13.b1	D211025.2	incorrect	AOS Manifold Blower Down	20211023.170000	20211028.141000
sgpaoso3E13.b1	D210929.4	incorrect	Mentors on Site Performing Maintenance	20210921.140000	20210924.200000
sgpaoso3E13.b1	D200424.2	suspect	Instrument Shelter AC Failure	20200416.190000	20200424.180000
sgpaoso3E13.b1	D200624.4	missing	Reprocess historical SGP E13 AOSO3 data with new b-level processes to apply o3 corrections	20190321.000000	20200221.000000
sgpaoso3E13.b1	D220223.1	incorrect	Mentors Working on Instruments	20220214.170000	20220219.235959
sgpaospsap3w1mE13.b1	D211208.2	incorrect	Instruments Periodically Sampling Cabin Air	20211208.181500	20211208.192000
sgpaospsap3w1mE13.b1	D211025.2	incorrect	AOS Manifold Blower Down	20211023.170000	20211028.141000
sgpaospsap3w1mE13.b1	D211019.1	missing	Missing Data	20210725.000000	20210820.000000
sgpaospsap3w1mE13.b1	D211020.5	incorrect	SGP AOS Datastreams missing SGP Impactor data	20210930.231401	20211004.085959
sgpaospsap3w1mE13.b1	D210929.4	incorrect	Mentors on Site Performing Maintenance	20210921.140000	20210924.200000
sgpaospsap3w1mE13.b1	D191119.1	suspect	Mentors at Site	20191116.160000	20191117.210000
sgpaospsap3w1mE13.b1	D190717.4	incorrect	Instrument Mentors Onsite Performing Maintenance.	20190716.160000	20190717.220000
sgpaospsap3w1mE13.b1	D190328.4	incorrect	Instrument mentors on site	20190318.100000	20190321.190000
sgpaospsap3w1mE13.b1	D170828.1	suspect	SGP/AOS/ACSM/APS/CCN/CPC/HTDMA/NEPHELOMETER/513 - Mentors on site	20170822.080000	20170824.180000
sgpaospsap3w1mE13.b1	D200424.2	suspect	Instrument Shelter AC Failure	20200416.190000	20200424.180000
sgpaospsap3w1mE13.b1	D181119.1	suspect	Leak in the impactor line	20181106.150000	20181107.170000
sgpaospsap3w1mE13.b1	D200506.8	missing	Instrument Down due to Covid-19 MinSafe Restriction at SGP	20200402.204000	20200504.144600
sgpaospsap3w1mE13.b1	D190930.7	suspect	Inlet Drying Tests were Done with Nafion.	20190930.182100	20190930.200200
sgpaospsap3w1mE13.b1	D190325.1	incorrect	Leak in the Humidigraph	20190308.180000	20190318.220000
sgpaospsap3w1mE13.b1	D190709.2	suspect	Incorrect Impactor Flow	20190703.170000	20190709.170000
sgpaospsap3w1mE13.b1	D190226.1	suspect	Work on the impactor line	20190225.144000	20190225.190000
sgpaospsap3w1mE13.b1	D190305.2	suspect	Impactor flow not nominal	20190228.160500	20190228.170000
sgpaospsap3w1mE13.b1	D190606.1	missing	Missing Data	20190313.204600	20190319.150000
sgpaospsap3w1mE13.b1	D191126.1	suspect	Possible Leak in the Impactor Line	20191003.150000	20191121.210000
sgpaospsap3w1mE13.b1	D190816.6	missing	Missing Data	20190703.171400	20190708.182257
sgpaospsap3w1mE13.b1	D190618.3	suspect	Leak on the Impactor Line	20190608.060000	20190617.190000
sgpaospsap3w1mE13.b1	D180423.5	incorrect	Periods > 1h with Tr < 0.7	20180301.133412	20180301.150150

## ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
sgpaospsap3w1mE13.b	D180423.3	incorrect	Periods > 1h with Tr < 0.7	20180201.113355	20180201.151058
sgpaospsap3w1mE13.b	D180406.12	incorrect	Periods > 1h where Tr < 0.7 due to Operator inability to change filters	20180120.083503	20180122.161044
sgpaospsap3w1mE13.b	D180102.8	incorrect	SGP/PSAP/E13 - Periods > 1h with Tr < 0.7	20170801.061747	20170801.152217
sgpaospsap3w1mE13.b	D180204.2	incorrect	SGP/PSAP/E13 - Periods > 1h with Tr < 0.7	20171201.000000	20171201.020112
sgpaospsap3w1mE13.b	D180204.1	incorrect	SGP/PSAP/E13 - Periods > 1 h with Tr < 0.7	20171101.084802	20171101.133445
sgpaospsap3w1mE13.b	D180202.10	incorrect	SGP/PSAP/E13 - Periods > 1h with Tr < 0.7 due to Operator inability to change filters	20171001.000000	20171002.145447
sgpaospsap3w1mE13.b	D180202.9	incorrect	SGP/PSAP/E13 - Periods > 1h with Tr < 0.7 due to Operator inability to change filters	20170901.081133	20170901.163541
sgpaospsap3w1mE13.b	D170517.2	missing	SGP/PSAP/E13 - Power failure at site	20170304.073017	20170306.210045
sgpaospsap3w1mE13.b	D220223.1	incorrect	Mentors Working on Instruments	20220214.170000	20220219.235959
sgpaospsap3w1mE13.b	D210622.1	suspect	Impactor Flow not Nominal	20210616.170000	20210617.145959
sgpaospsap3w1mE13.b	D190403.1	incorrect	Mentors on site performing maintenance the AOS	20190401.140000	20190401.183500
sgpaospsap3w1mE13.b	D201113.1	incorrect	Nephelometer Calibration	20201110.183000	20201113.000000
sgpaospsap3w1mE13.b	D181119.2	suspect	Leak in the impactor line	20181106.150000	20181107.170000
sgpaospsap3w1mE13.b	D181108.1	suspect	Low impactor flow	20181106.140000	20181107.200000
sgpaospsap3w1mE13.b	D180426.4	suspect	CAPS sample line open to cabin air	20180425.140000	20180426.153000
sgpaospsap3w1mE13.b	D180423.4	incorrect	Flow not reset to 1.0 SLPM after changing filter. Flow slowly deteriorated over the month.	20180303.154800	20180330.141300
sgpaospsap3w1mE13.b	D170809.9	incorrect	SGP/PSAP/E13 - Transmission less than 0.7	20170713.090029	20170713.184034
sgpaospsap3w1mE13.b	D170809.4	suspect	SGP/PSAP/E13 - Idiopathic oscillation	20170710.162438	20170711.133559
sgpaospsap3w1mE13.b	D170809.2	incorrect	SGP/PSAP/E13 - Transmission less than 0.7	20170628.063137	20170628.135702
sgpaospsap3w1mE13.b	D170807.2	incorrect	SGP/PSAP/E13 - Transmissions less than 0.7	20170503.132322	20170503.154805
sgpaospsap3w1mE13.b	D170518.1	incorrect	SGP/PSAP/E13 - PSAP filter transmittance less than 0.7	20170429.043131	20170430.235959
sgpaospsap3w1mE13.b	D170517.3	incorrect	SGP/PSAP/E13 - Transmission less than 0.7	20170328.215145	20170329.142039
sgpaospsap3w1mE13.b	D170516.4	incorrect	SGP/PSAP/E13 - Invalid data from Transmission < 0.7	20170227.194414	20170228.140848
sgpaospsap3w1mE13.b	D170516.2	incorrect	SGP/PSAP/E13 - Transmission less than 0.7	20170130.151300	20170130.211034
sgpaospsap3w1mE13.b	D170117.5	incorrect	SGP/PSAP/E13 - PSAP data gaps greater than 1 hour due to transmittance less than 0.7	20161210.193633	20161212.150921
sgpaospsap3w1mE13.b	D170117.2	incorrect	SGP/PSAP/E13 - Dilution system not available	20161124.042638	20161125.163017
sgpaossmmpsE13.b1	D220223.1	incorrect	Mentors Working on Instruments	20220214.170000	20220219.235959
sgpaossmmpsE13.b1	D211208.2	incorrect	Instruments Periodically Sampling Cabin Air	20211208.181500	20211208.192000
sgpaossmmpsE13.b1	D211025.2	incorrect	AOS Manifold Blower Down	20211023.170000	20211028.141000
sgpaossmmpsE13.b1	D211005.9	incorrect	Incorrect Data	20210606.210000	20210607.150000

## ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
sgpaossmmpsE13.b1	D210813.9	missing	No Data	20210806.150000	20210809.210000
sgpaossmmpsE13.b1	D210813.1	incorrect	Incorrect Data	20210627.200500	20210628.134500
sgpaossmmpsE13.b1	D210929.4	incorrect	Mentors on Site Performing Maintenance	20210921.140000	20210924.200000
sgpaossmmpsE13.b1	D201118.1	incorrect	Data Affected	20200831.173000	20200901.130500
sgpaossmmpsE13.b1	D201117.4	missing	Missing SMPS Data	20201020.020000	20201022.190000
sgpaossmmpsE13.b1	D200424.2	suspect	Instrument Shelter AC Failure	20200416.190000	20200424.180000
sgpaossmmpsE13.b1	D191119.1	suspect	Mentors at Site	20191116.160000	20191117.210000
sgpaossmmpsE13.b1	D190717.4	incorrect	Instrument Mentors Onsite Performing Maintenance.	20190716.160000	20190717.220000
sgpaossmmpsE13.b1	D190328.4	incorrect	Instrument mentors on site	20190318.100000	20190321.190000
sgpaossmmpsE13.b1	D180304.1	incorrect	Mentors on site	20180302.120000	20180306.230000
sgpaossmmpsE13.b1	D170828.1	suspect	SGP/AOS/ACSM/APS/CCN/CPC/HTDMA/NEPHELOMETER/513 - Mentors on site	20170822.080000	20170824.180000
sgpaossmmpsE13.b1	D190708.2	missing	Instruments Offline After Lightning Strike	20190703.203000	20190705.203500
sgpaossmmpsE13.b1	D170320.3	incorrect	SGP/SMPS/E13 - Instrument Troubleshooting	20170227.163000	20170227.170959
sgpaossmmpsE13.b1	D170302.3	suspect	SGP/SMPS/E13 - Impactor pressure elevated	20170209.000000	20170224.215959
sgpaossmmpsE13.b1	D220209.6	incorrect	Questionable Data	20210409.210000	20210429.020000
sgpaossmmpsE13.b1	D220209.21	incorrect	Questionable Data	20220203.010000	20220209.103000
sgpaossmmpsE13.b1	D220127.1	incorrect	Questionable Data	20220113.160000	20220113.173000
sgpaossmmpsE13.b1	D211123.6	incorrect	Questionable Data	20211108.180000	20211108.200000
sgpaossmmpsE13.b1	D210930.2	incorrect	Questionable Data	20210913.030000	20210917.160000
sgpaossmmpsE13.b1	D211123.2	incorrect	Incorrect Data	20211006.224000	20211007.003000
sgpaossmmpsE13.b1	D211005.8	incorrect	Incorrect Data	20210728.210000	20210806.160000
sgpaosso2E13.b1	D220209.13	incorrect	Reprocess Historical SGP E13 AOSSO2 Data with New b-level Processes to Apply SO2 Calibration and Offset Correction	20161116.000000	20190910.235959
sgpaosso2E13.b1	D211208.2	incorrect	Instruments Periodically Sampling Cabin Air	20211208.181500	20211208.192000
sgpaosso2E13.b1	D211025.2	incorrect	AOS Manifold Blower Down	20211023.170000	20211028.141000
sgpaosso2E13.b1	D210929.4	incorrect	Mentors on Site Performing Maintenance	20210921.140000	20210924.200000
sgpaosso2E13.b1	D200424.2	suspect	Instrument Shelter AC Failure	20200416.190000	20200424.180000
sgpaosso2E13.b1	D191119.1	suspect	Mentors at Site	20191116.160000	20191117.210000
sgpaosso2E13.b1	D190328.4	incorrect	Instrument mentors on site	20190318.100000	20190321.190000
sgpaosso2E13.b1	D170828.1	suspect	SGP/AOS/ACSM/APS/CCN/CPC/HTDMA/NEPHELOMETER/513 - Mentors on site	20170822.080000	20170824.180000
sgpaosso2E13.b1	D191212.2	missing	Data Down due to Lightning Strike	20190703.180000	20190705.200000

## ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
sgpaosso2E13.b1	D191125.4	incorrect	Missing Data due to Pump Failure	20191106.191100	20191117.210000
sgpaosso2E13.b1	D170517.1	missing	SGP/TRACEGAS/E13 - Site power failure	20170305.143900	20170306.201145
sgpaosso2E13.b1	D220223.1	incorrect	Mentors Working on Instruments	20220214.170000	20220219.235959
sgpaosso2E13.b1	D170807.4	incorrect	SGP/SO2/E13 - Ambient contaminated by sample	20170618.000000	20170618.010000
sgpaosuhsasE13.b1	D211208.2	incorrect	Instruments Periodically Sampling Cabin Air	20211208.181500	20211208.192000
sgpaosuhsasE13.b1	D211123.13	missing	No Data due to Ingest Errors	20211109.170000	30010101.000000
sgpaosuhsasE13.b1	D211025.2	incorrect	AOS Manifold Blower Down	20211023.170000	20211028.141000
sgpaosuhsasE13.b1	D211019.1	missing	Missing Data	20210725.000000	20210820.000000
sgpaosuhsasE13.b1	D200424.2	suspect	Instrument Shelter AC Failure	20200416.190000	20200424.180000
sgpaosuhsasE13.b1	D191119.1	suspect	Mentors at Site	20191116.160000	20191117.210000
sgpaosuhsasE13.b1	D190827.6	suspect	Sample Transport Flow Not Nominal	20190823.180000	20190826.185500
sgpaosuhsasE13.b1	D190717.4	incorrect	Instrument Mentors Onsite Performing Maintenance.	20190716.160000	20190717.220000
sgpaosuhsasE13.b1	D190328.4	incorrect	Instrument mentors on site	20190318.100000	20190321.190000
sgpaosuhsasE13.b1	D190111.4	missing	Instrument uninstalled temporarily	20170405.190000	20190111.000000
sgpaosuhsasE13.b1	D170828.1	suspect	SGP/AOS/ACSM/APS/CCN/CPC/HTDMA/NEPHELOMETER/513 - Mentors on site	20170822.080000	20170824.180000
sgpaosuhsasE13.b1	D201202.1	missing	Reprocess sgpaosuhsasE13.a1 datastream and create new sgpaosuhsasE13.b1 datastream.	20161115.000000	20170406.000000
sgpaosuhsasE13.b1	D220223.1	incorrect	Mentors Working on Instruments	20220214.170000	20220219.235959
sgpaosuhsasE13.b1	D180304.1	incorrect	Mentors on site	20180302.120000	20180306.230000
sgpaosuhsasE13.b1	D220217.18	suspect	Optical diameter midpoints in the UHSAS were calculated using arithmetic mean, but should be calculated using geometric mean.	20161115.000000	20220214.000000

## ARM Data Object Identifier (DOI) Table

Instrument	DOI
ACSM	Zawadowicz, M., & Watson, T. Aerosol Chemical Speciation Monitor (AOSACSM). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1558768">https://doi.org/10.5439/1558768</a>
APS	Koontz, A., & Sedlacek, A. Aerodynamic Particle Sizer (AOSAPS). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1407135">https://doi.org/10.5439/1407135</a>
AOSMET	Kyrouac, J., & Springston, S. Meteorological Measurements associated with the Aerosol Observing System (AOSMET). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1025153">https://doi.org/10.5439/1025153</a>
CAPS-PMEX	Sedlacek, A., Smith, S., & Tilp, A. Cavity Attenuated Phase Shift Extinction Monitor (AOSCAPS3W). Atmospheric Radiation Measurement (ARM) User Facility.
CCN	Uin, J., Andrews, E., Salwen, C., & Senum, G. Cloud Condensation Nuclei Particle Counter (AOSCCN1COL). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1256093">https://doi.org/10.5439/1256093</a>
CPC	Kuang, C., Andrews, E., Salwen, C., Boyer, M., & Singh, A. Condensation Particle Counter (AOSCP). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1025152">https://doi.org/10.5439/1025152</a>
CPCUF	N/A
HTDMA	Uin, J., & Cromwel, E. Humidified Tandem Differential Mobility Analyzer (AOSHTDMA). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1095581">https://doi.org/10.5439/1095581</a>
NANOSMPS	N/A
NEPHELOMETER	Uin, J., Andrews, E., Salwen, C., & Senum, G. Nephelometer (AOSNEPHDRY1M). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1259232">https://doi.org/10.5439/1259232</a>
OZONE	Springston, S., & Koontz, A. Ozone Monitor (AOSO3). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1346692">https://doi.org/10.5439/1346692</a>
PSAP	Trojanowski, R., Springston, S., Andrews, E., & Salwen, C. Particle Soot Absorption Photometer (AOSPSAP3W1M). Atmospheric Radiation Measurement (ARM) User Facility.
SMPS	Kuang, C., & Ermold, B. Scanning mobility particle sizer (AOSNANOSMPS). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1635016">https://doi.org/10.5439/1635016</a>
SO2	Trojanowski, R. Sulfur Dioxide Monitor (AOSSO2). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1250820">https://doi.org/10.5439/1250820</a>
UHSAS	Uin, J., Senum, G., Koontz, A., & Flynn, C. Ultra-High Sensitivity Aerosol Spectrometer (AOSUHSAS). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1409033">https://doi.org/10.5439/1409033</a>