### Bankhead National Forest, AL, AMF3 (Main Site)

Atmospheric Radiation Measurement User Facility



# ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
bnfaosacsmtofspecM1.a	D250307.10	Missing	No Data	2025-01-09T17:32:35	2025-02-26T19:45:08
bnfaosacsmtofspecM1.a	D250214.6	Missing	Power Outage	2024-12-27T19:10:14	2024-12-30T19:45:24
bnfaosacsmtofspecM1.a	D241203.8	Missing	Data Missing	2024-11-19T20:12:43	2024-11-22T20:03:15
bnfaosacsmtofspecM1.a	D250303.1	Incorrect	Incorrect Data	2025-02-24T00:00:00	2025-02-28T23:59:59
bnfaosmetM1.a1	D250303.1	Incorrect	Incorrect Data	2025-02-24T00:00:00	2025-02-28T23:59:59
bnfaosmetM1.a1	D250203.3	Missing	No Data	2024-12-29T04:36:25	2024-12-30T14:34:49
bnfaosmetM1.a1	D241031.1	Missing	Failed Power and Intermittent Communications	2024-10-01T00:00:00	2024-10-21T20:27:59
bnfaosmetM1.a1	D250307.3	Missing	Power Outage	2025-02-16T05:48:20	2025-02-17T15:56:18
bnfaosapsM1.b1	D250130.4	Missing	Missing Data	2025-01-10T16:51:27	2025-01-13T14:49:39
bnfaosapsM1.b1	D250219.1	Missing	Missing data	2025-02-16T05:48:20	2025-02-18T15:21:25
bnfaosapsM1.b1	D250414.7	Missing	Missing Data	2025-04-12T14:39:57	2025-04-14T15:20:00
bnfaosapsM1.b1	D250121.1	Missing	Missing Data	2024-12-29T04:00:00	2025-01-02T22:48:14
bnfaosapsM1.b1	D241218.1	Missing	Missing Data	2024-12-12T16:17:56	2024-12-17T19:59:54
bnfaosapsM1.b1	D241125.4	Missing	No Data	2024-11-19T19:00:00	2024-11-25T16:00:00
bnfaosapsM1.b1	D250303.1	Incorrect	Incorrect Data	2025-02-24T00:00:00	2025-02-28T23:59:59
bnfaoscaps3wM1.b1	D250213.3	Incorrect	Incorrect Data	2025-01-21T18:01:16	2025-02-12T13:04:15
bnfaoscaps3wM1.b1	D250128.2	Incorrect	Bad Data	2025-02-05T14:00:00	2025-02-12T13:04:15
bnfaoscaps3wM1.b1	D250303.1	Incorrect	Incorrect Data	2025-02-24T00:00:00	2025-02-28T23:59:59
bnfaoscaps3wM1.b1	D250213.2	Missing	No Data	2024-11-07T16:20:22	2025-01-21T18:01:16
bnfaosccn2colaavgM1.b	D250106.8	Missing	No Data due to Power Outage at BNF Site	2024-12-29T04:37:08	2024-12-30T15:00:00
bnfaosccn2colaavgM1.b	D250317.6	Missing	CCN Offline	2025-03-14T20:00:00	2025-03-17T14:00:00
bnfaosccn2colaavgM1.b	D241126.1	Missing	No Data	2024-11-19T19:00:00	2024-11-20T22:00:00
bnfaosccn2colaavgM1.b	D250414.1	Missing	CCN Offline Due to Power Outage at Site	2025-04-12T14:44:00	2025-04-14T13:14:20
bnfaosccn2colaavgM1.b	D250410.9	Missing	CCN Offline Due to Power Outage at Site	2025-04-09T13:17:35	2025-04-09T17:04:04
bnfaosccn2colaavgM1.b	D250110.1	Missing	CCN Shutdown due to Cold Weather	2025-01-10T12:31:07	2025-01-13T17:02:19
bnfaosccn2colaavgM1.b	D250320.6	Missing	CCN Offline Due to Power Outage at Site	2025-02-16T05:50:22	2025-02-18T15:17:36
bnfaosccn2colaavgM1.b	D250310.5	Missing	CCN Offline Due to Power Outage at Site	2025-03-05T01:00:00	2025-03-06T03:00:00
bnfaosccn2colaavgM1.b	D250411.6	Missing	CCN Offline Due to Power Outage at Site	2025-04-10T23:29:00	2025-04-11T13:10:00
bnfaosccn2colaavgM1.b	D250109.3	Incorrect	Dry Shutdown of CCN due to Cold Weather Power Outage	2025-01-09T15:00:00	2025-01-10T13:00:00
bnfaosccn2colaavgM1.b	D250114.4	Incorrect	CCN Startup and Flow Calibration after Cold Weather Outage	2025-01-13T14:50:00	2025-01-14T21:00:00

# ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
bnfaosccn2colaavgM1.b	D250410.10	Incorrect	Auto Startup of CCN Program	2025-04-09T17:04:04	2025-04-10T19:00:00
bnfaosccn2colaavgM1.b	D250320.8	Incorrect	Auto Startup of CCN Program	2025-02-18T15:17:36	2025-02-18T16:40:00
bnfaosccn2colaavgM1.b	D250303.1	Incorrect	Incorrect Data	2025-02-24T00:00:00	2025-02-28T23:59:59
bnfaosccn2colaavgM1.b	D250414.3	Incorrect	Auto Startup of CCN Program	2025-04-14T13:14:20	2025-04-14T14:00:00
bnfaoscoM1.b1	D241209.8	Suspect	Sample Line Disruption	2024-10-01T03:00:00	2024-10-08T20:00:00
bnfaoscoM1.b1	D250204.1	Missing	Missing Data	2024-12-25T14:51:48	2024-12-26T15:28:18
bnfaoscoM1.b1	D250303.1	Incorrect	Incorrect Data	2025-02-24T00:00:00	2025-02-28T23:59:59
bnfaoscpcu1mM1.b1	D250410.2	Incorrect	Incorrect Data	2025-04-09T14:00:00	2025-04-09T19:59:59
bnfaoscpcu1mM1.b1	D250303.1	Incorrect	Incorrect Data	2025-02-24T00:00:00	2025-02-28T23:59:59
bnfaoscpcu1mM1.b1	D241209.2	Incorrect	Incorrect Data	2024-12-07T03:00:00	2024-12-09T16:00:00
bnfaoscpcu1mM1.b1	D241125.5	Incorrect	Incorrect Data	2024-11-25T16:00:00	2024-11-25T19:00:00
bnfaoscpcu1mM1.b1	D250317.5	Incorrect	Incorrect Data	2025-03-05T20:26:47	2025-03-07T01:00:00
bnfaoscpcu1mM1.b1	D250109.2	Missing	Missing Data	2024-12-29T04:37:12	2024-12-30T15:18:27
bnfaoscpcu1mM1.b1	D241125.3	Missing	No Data	2024-11-18T15:00:00	2024-11-25T16:00:00
bnfaoscpcu1mM1.b1	D250414.8	Missing	Missing Data	2025-04-12T14:44:32	2025-04-14T12:23:12
bnfaoscpcu1mM1.b1	D241116.3	Missing	Missing Data	2024-10-29T14:23:32	2024-11-01T17:34:24
bnfaoscpcu1mM1.b1	D250130.4	Missing	Missing Data	2025-01-10T16:51:27	2025-01-13T14:49:39
bnfaoscpcu1mM1.b1	D250219.2	Missing	Missing Data	2025-02-16T05:39:59	2025-02-17T20:45:00
bnfaoscpcu1mM1.b1	D241116.4	Suspect	Suspect	2024-11-01T06:00:00	2024-11-05T06:00:00
bnfaosnephdry1mM1.b1	D250325.1	Incorrect	Bulb Burned Out	2025-03-12T04:50:00	2025-03-12T15:00:00
bnfaosnephdry1mM1.b1	D250414.4	Incorrect	No Valid Data	2025-04-10T23:00:00	2025-04-11T13:00:00
bnfaosnephdry1mM1.b1	D241105.3	Incorrect	Bulb Burned Out	2024-10-01T04:14:43	2024-10-30T23:59:59
bnfaosnephdry1mM1.b1	D250303.1	Incorrect	Incorrect Data	2025-02-24T00:00:00	2025-02-28T23:59:59
bnfaosnephdry1mM1.b1	D241127.1	Incorrect	Nephelometer Bulb Burned Out	2024-11-08T03:00:00	2024-11-12T18:00:00
bnfaosnephdry1mM1.b1	D250307.12	Incorrect	Bulb Burned Out	2025-02-11T19:00:00	2025-02-20T20:00:00
bnfaosnephdry1mM1.b1	D250107.6	Missing	Data Missing	2024-12-29T04:37:11	2024-12-30T14:32:12
bnfaosnephdry1mM1.b1	D250121.5	Missing	Instrument Offline	2025-01-10T16:51:23	2025-01-13T14:48:44
bnfaosnephdry1mM1.b1	D250106.6	Missing	Data Missing	2024-12-25T14:51:48	2024-12-27T15:00:00
bnfaoso3M1.b1	D250204.4	Missing	Missing Data	2024-12-29T04:37:06	2024-12-30T14:59:10
bnfaoso3M1.b1	D250303.1	Incorrect	Incorrect Data	2025-02-24T00:00:00	2025-02-28T23:59:59

# ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
bnfaospsap3w1mM1.b1	D250214.9	Missing	Power Outage	2025-01-10T16:51:26	2025-01-13T14:56:07
bnfaospsap3w1mM1.b1	D250409.10	Missing	Missing Data	2025-03-14T02:32:25	2025-03-17T15:32:19
bnfaospsap3w1mM1.b1	D250408.3	Missing	Missing Data	2025-02-16T05:48:19	2025-02-17T15:56:12
bnfaospsap3w1mM1.b1	D250303.1	Incorrect	Incorrect Data	2025-02-24T00:00:00	2025-02-28T23:59:59
bnfaospsap3w1mM1.b1	D241029.1	Incorrect	Bad Data	2024-10-01T00:00:00	2024-10-01T14:00:00
bnfaospsap3w1mM1.b1	D241025.1	Incorrect	Incorrect PSAP Data	2024-10-22T13:43:00	2024-10-24T13:43:00
bnfaospsap3w1mM1.b1	D241125.1	Incorrect	PSAP Leaking	2024-10-22T13:51:00	2024-11-01T19:46:00
bnfaospsap3w1mM1.b1	D241125.2	Incorrect	Flow Pump Failed	2024-11-12T23:00:00	2024-11-22T20:05:00
bnfaossmpsM1.b1	D250219.2	Missing	Missing Data	2025-02-16T05:39:59	2025-02-17T20:45:00
bnfaossmpsM1.b1	D250127.5	Missing	Missing Data	2025-01-22T16:45:02	2025-01-23T14:50:00
bnfaossmpsM1.b1	D241209.1	Missing	Missing Data	2024-12-07T13:54:57	2024-12-09T15:00:00
bnfaossmpsM1.b1	D250109.1	Missing	No Data	2024-12-29T04:30:01	2025-01-02T22:45:00
bnfaossmpsM1.b1	D241029.12	Missing	Missing Data	2024-10-14T20:20:01	2024-10-16T16:15:00
bnfaossmpsM1.b1	D250313.2	Missing	Missing Data	2025-03-05T00:55:00	2025-03-06T01:35:00
bnfaossmpsM1.b1	D241125.3	Missing	No Data	2024-11-18T15:00:00	2024-11-25T16:00:00
bnfaossmpsM1.b1	D250414.7	Missing	Missing Data	2025-04-12T14:39:57	2025-04-14T15:20:00
bnfaossmpsM1.b1	D250127.4	Missing	Missing Data	2025-01-10T16:45:02	2025-01-13T16:00:05
bnfaossmpsM1.b1	D241125.5	Incorrect	Incorrect Data	2024-11-16T00:30:00	2024-11-18T15:00:00
bnfaossmpsM1.b1	D241105.1	Incorrect	Incorrect Data	2024-10-28T20:00:00	2024-10-29T18:00:00
bnfaossmpsM1.b1	D250303.1	Incorrect	Incorrect Data	2025-02-24T00:00:00	2025-02-28T23:59:59
bnfaossmpsM1.b1	D250410.2	Incorrect	Incorrect Data	2025-04-09T14:00:00	2025-04-09T19:59:59
bnfaosso2M1.b1	D250408.2	Missing	Data Unavailable	2025-02-16T05:48:19	2025-02-17T15:57:51
bnfaosso2M1.b1	D250129.2	Missing	Data Unavailable	2024-11-04T19:29:03	2024-11-07T21:36:39
bnfaosso2M1.b1	D250307.13	Incorrect	Incorrect Data	2025-02-03T03:55:00	2025-02-03T05:00:00
bnfaosso2M1.b1	D250303.1	Incorrect	Incorrect Data	2025-02-24T00:00:00	2025-02-28T23:59:59
bnfaossp2xrM1.b1	D250303.1	Incorrect	Incorrect Data	2025-02-24T00:00:00	2025-02-28T23:59:59
bnfaosuhsasM1.b1	D250311.4	Missing	Power Outage	2025-02-16T04:59:56	2025-02-18T16:32:32
bnfaosuhsasM1.b1	D241205.1	Missing	Gaps in the Data	2024-10-17T01:00:00	2024-12-03T18:00:00
bnfaosuhsasM1.b1	D250107.5	Missing	Missing Data	2024-12-25T13:59:51	2025-01-02T16:17:03
bnfaosuhsasM1.b1	D250303.1	Incorrect	Incorrect Data	2025-02-24T00:00:00	2025-02-28T23:59:59

### ARM Data Object Identifier (DOI) Table

Instrument	DOI
ACSM	Shilling, J., Anna, M., Shippert, T., Hayes, C., Allain, M., Salwen, C., & Behrens, B. Aerosol Chemical Speciation Monitor (AOSACSMTOFSPEC), 2024-9-01 to 2025-10-01, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1822138
AOSMET	Kyrouac, J., & Tuftedal, M. Meteorological Measurements associated with the Aerosol Observing System (AOSMET), 2024-9-01 to 2025-10-01, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1984920
APS	Singh, A., Oliveira, D., Koontz, A., Sedlacek, A., & Kuang, C. Aerodynamic Particle Sizer (AOSAPS), 2024-9-01 to 2025-10-01, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1407135
CAPS-PMEX	Koontz, A., Sedlacek, A., & Smith, S. Cavity Attenuated Phase Shift Extinction Monitor (AOSCAPS3W), 2024-9-01 to 2025-10-01, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1406888
CCN	Koontz, A., Uin, J., Andrews, E., Enekwizu, O., Hayes, C., & Salwen, C. Cloud Condensation Nuclei Particle Counter (AOSCCN2COLA), 2024-9-01 to 2025-10-01, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1323892
CO-ANALYZER	Koontz, A., Springston, S., & Trojanowski, R. Carbon Monoxide Analyzer (AOSCO), 2024-9-01 to 2025-10-01, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1250819
СРС	Flynn, C., Ermold, B., Andrews, E., Kuang, C., Hayes, C., Singh, A., & Salwen, C. Condensation Particle Counter (AOSCPCF1M), 2024-9-01 to 2025-10-01, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1398277
NEPHELOMETER	Uin, J., Hayes, C., & Mayol Bracero, O. Nephelometer (AOSNEPHDRY1M), 2024-9-01 to 2025-10-01, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1984586
OZONE	Springston, S., Koontz, A., & Trojanowski, R. Ozone Monitor (AOSO3), 2024-9-01 to 2025-10-01, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1346692
PSAP	Ermold, B., Flynn, C., Trojanowski, R., Andrews, E., Hayes, C., Salwen, C., & Flynn, C. Particle Soot Absorption Photometer (AOSPSAP3W1M), 2024-9-01 to 2025-10-01, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1225037
SMPS	Kuang, C., Singh, A., Howie, J., Salwen, C., & Hayes, C. Scanning mobility particle sizer (AOSSMPS), 2024-9-01 to 2025-10-01, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1476898
SO2	Trojanowski, R. Sulfur Dioxide Monitor (AOSSO2), 2024-9-01 to 2025-10-01, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1250820
SP2	Sedlacek, A., & Ermold, B. Single Particle Soot Photometer (AOSSP2XR), 2024-9-01 to 2025-10-01, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/2507427

### ARM Data Object Identifier (DOI) Table

Instrument	DOI
UHSAS	Uin, J., Senum, G., Koontz, A., Flynn, C., Salwen, C., & Hayes, C. Ultra-High Sensitivity Aerosol Spectrometer (AOSUHSAS), 2024-9-01 to 2025-10-01, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1409033