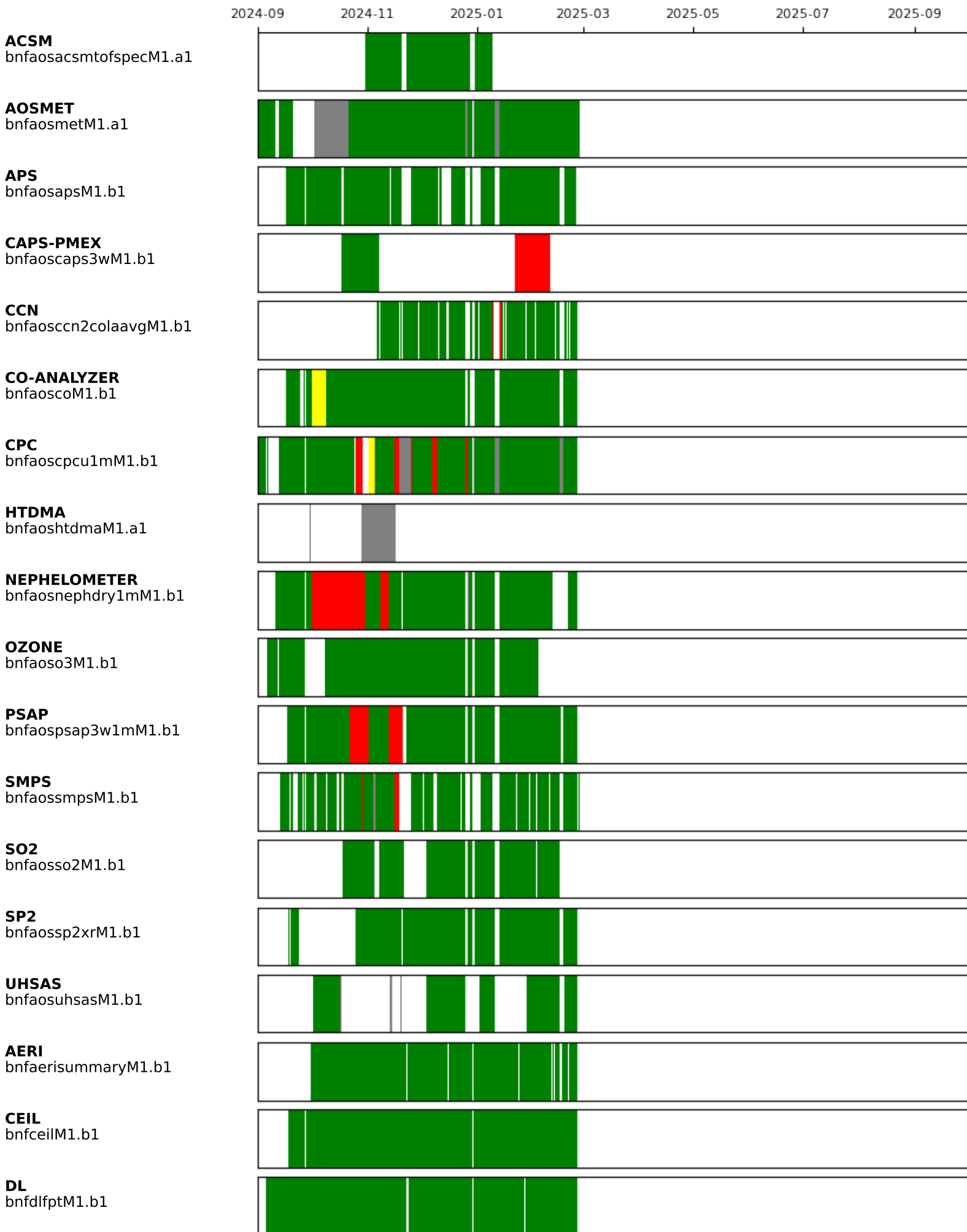
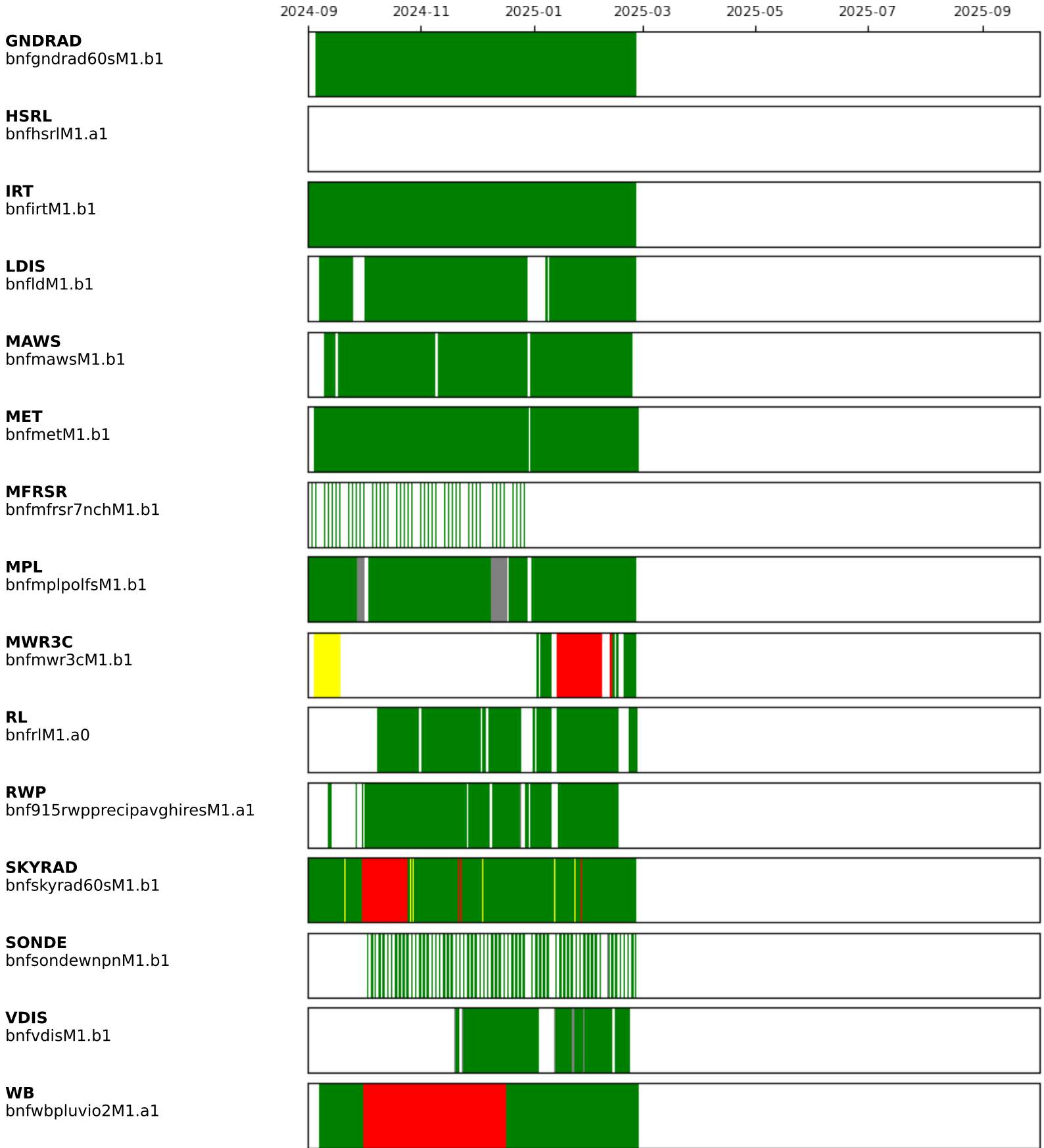


Bankhead National Forest, AL, AMF3 (Main Site)

Atmospheric Radiation Measurement User Facility





ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
bnfaosacsmtofspecM1.a	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
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
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	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
bnfaoscaps3wM1.b1	D250213.3	Incorrect	Incorrect Data	2025-01-21T18:00:00	2025-02-10T23:59:00
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	D241126.1	Missing	No Data	2024-11-19T19:00:00	2024-11-20T22:00:00
bnfaosccn2colaavgM1.b	D250110.1	Missing	CCN Shutdown due to Cold Weather	2025-01-10T12:31:07	2025-01-13T17:02:19
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
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
bnfaospcpu1mM1.b1	D250109.2	Missing	Missing Data	2024-12-29T04:37:12	2024-12-30T15:18:27
bnfaospcpu1mM1.b1	D241125.3	Missing	No Data	2024-11-18T15:00:00	2024-11-25T16:00:00
bnfaospcpu1mM1.b1	D241116.3	Missing	Missing Data	2024-10-29T14:23:32	2024-11-01T17:34:24
bnfaospcpu1mM1.b1	D250130.4	Missing	Missing Data	2025-01-10T16:51:27	2025-01-13T14:49:39
bnfaospcpu1mM1.b1	D250219.2	Missing	Missing Data	2025-02-16T05:39:59	2025-02-17T20:45:00
bnfaospcpu1mM1.b1	D241209.2	Incorrect	Incorrect Data	2024-12-07T03:00:00	2024-12-09T16:00:00
bnfaospcpu1mM1.b1	D241125.5	Incorrect	Incorrect Data	2024-11-25T16:00:00	2024-11-25T19:00:00
bnfaospcpu1mM1.b1	D241116.4	Suspect	Suspect	2024-11-01T06:00:00	2024-11-05T06:00:00
bnfaoshtdmaM1.a1	D241205.4	Missing	Missing Data	2024-09-30T20:00:00	3001-01-01 00:00:00
bnfaosnephdry1mM1.b1	D241105.3	Incorrect	Bulb Burned Out	2024-10-01T04:14:47	2024-10-30T23:59:59
bnfaosnephdry1mM1.b1	D241127.1	Incorrect	Nephelometer Bulb Burned Out	2024-11-08T03:00:00	2024-11-12T18:00:00
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

ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
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
bnfaospsap3w1mM1.b1	D250214.9	Missing	Power Outage	2025-01-10T16:51:26	2025-01-13T14:56:07
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
bnfaossmmpsM1.b1	D250219.2	Missing	Missing Data	2025-02-16T05:39:59	2025-02-17T20:45:00
bnfaossmmpsM1.b1	D250127.5	Missing	Missing Data	2025-01-22T16:45:02	2025-01-23T14:50:00
bnfaossmmpsM1.b1	D241209.1	Missing	Missing Data	2024-12-07T13:54:57	2024-12-09T15:00:00
bnfaossmmpsM1.b1	D250109.1	Missing	No Data	2024-12-29T04:30:07	2025-01-02T22:45:00
bnfaossmmpsM1.b1	D241029.12	Missing	Missing Data	2024-10-14T20:20:07	2024-10-16T16:15:00
bnfaossmmpsM1.b1	D241125.3	Missing	No Data	2024-11-18T15:00:00	2024-11-25T16:00:00
bnfaossmmpsM1.b1	D250127.4	Missing	Missing Data	2025-01-10T16:45:02	2025-01-13T16:00:05
bnfaossmmpsM1.b1	D241125.5	Incorrect	Incorrect Data	2024-11-16T00:30:00	2024-11-18T15:00:00
bnfaossmmpsM1.b1	D241105.1	Incorrect	Incorrect Data	2024-10-28T20:00:00	2024-10-29T18:00:00
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	2024-12-25T13:59:57	2025-01-02T16:17:03
bnfldM1.b1	D250122.8	Missing	Missing Data	2024-12-29T04:36:07	2025-01-07T15:14:59
bnfmplpolfM1.b1	D241218.2	Missing	Missing Data	2024-12-09T00:00:00	2024-12-18T17:25:00
bnfmplpolfM1.b1	D241216.2	Missing	Missing Data	2024-09-27T13:46:24	2024-10-03T19:03:19
bnfmwr3cM1.b1	D250214.3	Incorrect	Incorrect Values	2025-01-13T00:00:00	2025-02-13T00:00:00
bnfmwr3cM1.b1	D250211.3	Missing	Missing Data	2024-10-01T00:00:00	2025-01-02T12:01:21
bnfmwr3cM1.b1	D250211.2	Suspect	Calibration Uncertain	2024-09-04T12:00:00	2024-09-18T23:59:59
bnfrlM1.a0	D241112.2	Missing	Missing Data	2024-12-25T14:51:37	2024-12-31T16:42:10
bnf915rwpprecipavghire	D250217.2	Missing	No Data	2024-12-25T00:00:00	2024-12-27T19:25:00
bnfskyrad60sM1.b1	D240929.3	Incorrect	Incorrect Data	2024-11-30T21:41:00	2024-11-30T22:39:37
bnfskyrad60sM1.b1	D241112.3	Incorrect	Data Incorrect due to Reversed Signal Polarity	2024-10-01T00:00:00	2024-10-24T18:27:00
bnfskyrad60sM1.b1	D241231.2	Suspect	Suspect Data due to Instrument/Environmental Conditions	2025-01-05T19:08:00	2025-01-05T19:22:00
bnfsondewnpnM1.b1	D250107.9	Missing	No SONDE Launches	2025-01-29T00:00:00	2025-01-29T23:59:59

ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
bnfsondewnpnM1.b1	D250205.2	Missing	No Launches	2025-02-10T00:00:00	2025-02-11T23:59:59
bnfvdisM1.b1	D241126.3	Missing	Missing Data	2024-10-01T00:00:00	2024-11-19T23:59:59
bnfvdisM1.b1	D250207.7	Missing	Missing Data	2025-01-28T00:00:00	2025-01-28T23:59:59
bnfvdisM1.b1	D241204.3	Missing	Missing Data	2024-11-22T00:00:00	2024-11-23T23:59:59
bnfwbpluvio2M1.a1	D250124.3	Incorrect	Incorrect Data	2024-10-01T00:00:00	2024-12-16T23:59:59
bnfwbpluvio2M1.a1	D250123.8	Suspect	Suspicious Data	2024-12-29T01:00:00	2024-12-29T05:00:00

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
CPC	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
HTDMA	Uin, J., Cromwel, E., Hayes, C., & Salwen, C. Humidified Tandem Differential Mobility Analyzer (AOSHTDMA), 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/10.5439/1095581
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 (AOSMPS), 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
AERI	Gero, J., Garcia, R., Hackel, D., Ermold, B., & Gaustad, K. Atmospheric Emitted Radiance Interferometer (AERICH1), 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/10.5439/1989299
CEIL	Zhang, D., Morris, V., & Ermold, B. Ceilometer (CEIL10M), 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/10.5439/1497398
DL	Newsom, R., Shi, Y., & Krishnamurthy, R. Doppler Lidar (DLFPT), 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/10.5439/1025185
GNDRAD	Sengupta, M., Habte, A., Andreas, A., Reda, I., Jaker, S., Xie, Y., Yang, J., Gotseff, P., Kutchenreiter, M., & Shi, Y. Ground Radiometers on Stand for Upwelling Radiation (GNDRAD60S), 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/10.5439/1377837
HSRL	Bambha, R., Eloranta, E., Garcia, J., & Ermold, B. High Spectral Resolution Lidar (HSRL), 2024-9-01 to 2025-10-01, ARM Mobile Facility (ACX), Off the Coast of California - NOAA Ship Ronald H. Brown; AMF2 (M1). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1972278
IRT	Shi, Y., Howie, J., Goldberger, L., & Morris, V. Infrared Thermometer (IRT), 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/10.5439/1329238
LDIS	Zhu, Z., Wang, D., & Shi, Y. Laser Disdrometer (LD), 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/10.5439/1973058
MAWS	Keeler, E., Kyrouac, J., & Ermold, B. Automatic Weather Station (MAWS), 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/10.5439/1162061
MET	Kyrouac, J., Shi, Y., & Tuftedal, M. Surface Meteorological Instrumentation (MET), 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/10.5439/1786358
MFRSR	Hodges, G., Herrera, C., & Ermold, B. Multifilter Rotating Shadowband Radiometer (MFRSR7NCH), 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/10.5439/1429369
MPL	Muradyan, P., Cromwell, E., Koontz, A., Coulter, R., Flynn, C., Ermold, B., & OBrien, J. Micropulse Lidar (MPLPOLFS), 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/10.5439/1320657
MWR3C	Cadeddu, M., Gibler, G., Koontz, A., & Tuftedal, M. Microwave Radiometer, 3 Channel (MWR3C), 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/10.5439/1025248
RL	Newsom, R., Bambha, R., & Chand, D. Raman Lidar (RL), 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/10.5439/1996909
RWP	Muradyan, P., & Ermold, B. Radar Wind Profiler (915RWPPRECIPAVGHIREs), 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/10.5439/1572188
	Sengupta, M., Habte, A., Andreas, A., Reda, I., Jaker, S., Xie, Y., Yang, J., Gotseff, P.,

ARM Data Object Identifier (DOI) Table

Instrument	DOI
SONDE	Keeler, E., Burk, K., & Kyrrouac, J. Balloon-Borne Sounding System (SONDEWNPN), 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/10.5439/1595321
VDIS	Zhu, Z., & Wang, D. Video Disdrometer (VDIS), 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/10.5439/1992988
WB	Zhu, Z., Wang, D., Jane, M., Cromwell, E., Sturm, M., Irving, K., & Delamere, J. Weighing Bucket Precipitation Gauge (WBPLUVIO2), 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/10.5439/1338194