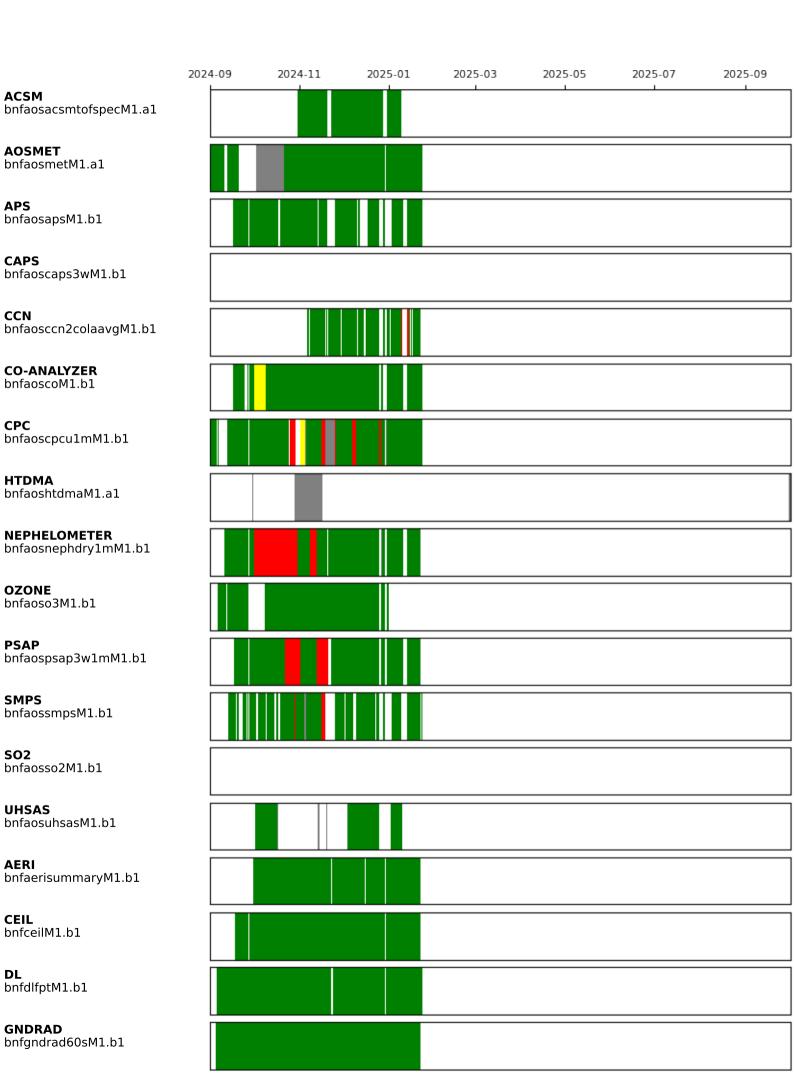
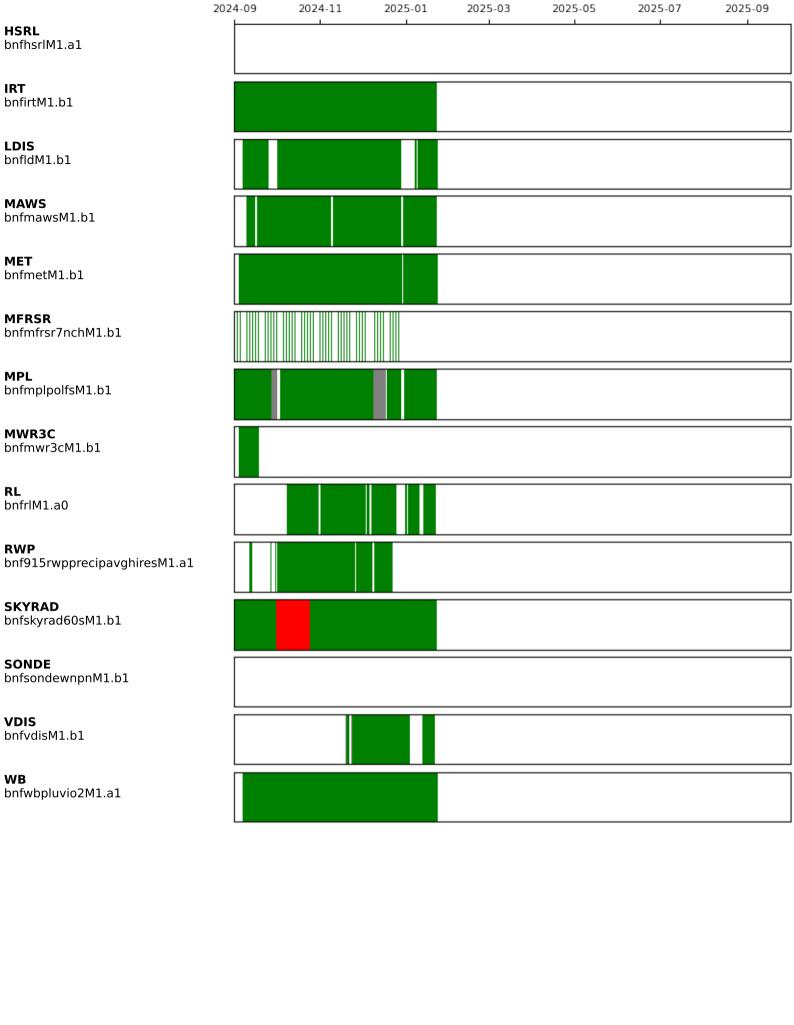
### Bankhead National Forest, AL, AMF3 (Main Site)

Atmospheric Radiation Measurement User Facility





# ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
bnfaosacsmtofspecM1.a	D241203.8	Missing	Data Missing	2024-11-19T20:12:43	2024-11-22T20:03:15
bnfaosmetM1.a1	D241031.1	Missing	Failed Power and Intermittent Communications	2024-10-01T00:00:00	2024-10-21T20:27:59
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
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
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	D241116.3	Missing	Missing Data	2024-10-29T14:23:32	2024-11-01T17:34:24
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	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	2024-10-01T04:14:41	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
bnfaosnephdry1mM1.b1	D250106.6	Missing	Data Missing	2024-12-25T14:51:48	2024-12-27T15:00:00
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	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	D241209.1	Missing	Missing Data	2024-12-07T13:54:57	2024-12-09T15:00:00

# ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
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	D241125.3	Missing	No Data	2024-11-18T15:00:00	2024-11-25T16:00:00
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	2024-12-25T13:59:51	2025-01-02T16:17:03
bnfldM1.b1	D250122.8	Missing	Missing Data	2024-12-29T04:36:01	2025-01-07T15:14:59
bnfmplpolfsM1.b1	D241218.2	Missing	Missing Data	2024-12-09T00:00:00	2024-12-18T17:25:00
bnfmplpolfsM1.b1	D241216.2	Missing	Missing Data	2024-09-27T13:46:24	2024-10-03T19:03:19
bnfrlM1.a0	D241112.2	Missing	Missing Data	2024-12-25T14:51:37	2024-12-31T16:42:10
bnfskyrad60sM1.b1	D241231.2	Suspect	Suspect Data due to Instrument/Environmental Conditions	2025-01-05T19:08:00	2025-01-05T19:22:00
bnfskyrad60sM1.b1	D241112.3	Incorrect	Data Incorrect due to Reversed Signal Polarity	2024-10-01T00:00:00	2024-10-24T18:27:00
bnfsondewnpnM1.b1	D250107.9	Missing	No SONDE Launches	2025-01-29T00:00:00	2025-01-29T23:59:59
bnfvdisM1.b1	D241126.3	Missing	Missing Data	2024-10-01T00:00:00	2024-11-19T23:59:59
bnfvdisM1.b1	D241204.3	Missing	Missing Data	2024-11-22T00:00:00	2024-11-23T23:59:59
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.
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	N/A
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 Flynn, C., Ermold, B., Andrews, E., Kuang, C., Hayes, C., Singh, A., & Salwen, C.
СРС	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.
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	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.
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., Springston, S., & Koontz, A. Sulfur Dioxide Monitor (AOSSO2), 2024-9-01 to 2025-10-01, ARM Mobile Facility (ASI), Ascension Island, South Atlantic Ocean; AMF1 (M1). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1342164
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
AERI	Gero, J., Garcia, R., Hackel, D., Ermold, B., & Gaustad, K. Atmospheric Émitted 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

## ARM Data Object Identifier (DOI) Table

Instrument	DOI					
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					
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, Supplemental facility at Courtland (S20). 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, Eastern North Atlantic (ENA), Graciosa Island, Azores, Portugal (C1). 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 Eacility, https://doi.org/10.5439/1572188 Sengupta, M., Habte, A., Andreas, A., Reda, I., Jaker, S., Xie, Y., Yang, J., Gotseff, P.,					
SKYRAD	Kutchenreiter, M., & Shi, Y. Sky Radiometers on Stand for Downwelling Radiation (SKYRAD60S), 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					
SONDE	Keeler, E., Burk, K., & Kyrouac, 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 Wang, D., Jane, M., Cromwell, E., Sturm, M., Irving, K., Delamere, J., & Mockaitis, M.					
WB	Wang, D., Jane, M., Cromwell, L., Sturm, M., Irving, K., Delamere, J., & Mockaitis, M. 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					