

# 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
bnfaerisummaryM1.b1	D250314.4	Suspect	Interferometer Skipping Fringes	2024-11-18T00:00:00	2025-02-12T17:00:00
bnfceilM1.b1	D250509.8	Missing	Missing Data due to Power Outage	2025-03-04T23:59:52	2025-03-06T00:00:03
bnfceilM1.b1	D250512.10	Missing	No Data	2025-04-23T20:50:15	2025-04-25T00:00:06
bnfhlsruM1.a1	D251124.2	Missing	Missing Data	2025-11-08T12:45:00	2025-11-10T15:00:00
bnfhlsruM1.a1	D250919.6	Missing	Missing Data	2025-05-14T20:00:01	2025-05-15T16:29:59
bnfhlsruM1.a1	D250811.1	Missing	No Data Available	2025-06-17T14:45:00	2025-07-27T00:45:00
bnfldM1.b1	D250122.8	Missing	Missing Data	2024-12-29T04:36:01	2025-01-07T15:14:59
bnfldM1.b1	D251202.5	Missing	No Data	2025-11-08T12:40:01	2025-11-12T14:30:59
bnfmawsM1.b1	D250319.1	Missing	Missing Data	2025-02-23T23:59:01	2025-02-25T00:00:04
bnfmfrsr7nchM1.b1	D250527.13	Incorrect	Incorrect Data	2024-12-23T12:52:00	2025-01-17T06:00:00
bnfmfrsr7nchM1.b1	D250613.1	Incorrect	Incorrect Data	2025-03-27T13:51:20	2025-05-28T16:30:00
bnfmfrsr7nchM1.b1	D250929.5	Incorrect	Incorrect Data	2025-09-16T22:38:00	2025-09-19T23:56:20
bnfmfrsr7nchM1.b1	D250527.14	Missing	Missing Data	2025-01-29T20:52:41	2025-03-27T13:51:19
bnfmpolpolfsM1.b1	D241218.2	Missing	Missing Data	2024-12-09T00:00:00	2024-12-18T17:25:00
bnfmpolpolfsM1.b1	D241216.2	Missing	Missing Data	2024-09-27T13:46:24	2024-10-03T19:03:19
bnfmpolpolfsM1.b1	D250425.2	Missing	No Data	2025-04-20T13:20:17	2025-04-21T13:51:16
bnfmpolpolfsM1.b1	D250324.5	Incorrect	Data Incorrect	2025-02-24T19:00:05	2025-03-06T17:39:25
bnfmpolpolfsM1.b1	D250717.12	Suspect	Suspect Measurements	2025-07-03T21:00:00	2025-07-07T15:30:00
bnfmwr3cM1.b1	D250408.10	Missing	Missing Data	2025-04-07T23:07:35	2025-04-10T15:29:15
bnfmwr3cM1.b1	D250218.1	Missing	Missing Data	2025-03-05T01:00:00	2025-03-06T11:36:49
bnfmwr3cM1.b1	D251201.1	Missing	Missing Data	2025-11-14T13:00:00	2025-11-17T17:22:31
bnfmwr3cM1.b1	D250617.1	Missing	Missing Data	2025-05-19T07:00:00	2025-05-20T12:30:46
bnfmwr3cM1.b1	D250211.3	Missing	Missing Data	2024-10-01T00:00:00	2025-01-02T12:01:21
bnfmwr3cM1.b1	D250813.2	Missing	Missing Data	2025-08-08T09:00:00	2025-08-19T12:12:21
bnfmwr3cM1.b1	D250625.1	Missing	Missing Data	2025-06-20T16:00:01	2025-06-22T19:15:15
bnfmwr3cM1.b1	D250922.3	Missing	Missing Data	2025-09-04T11:00:00	2025-09-08T13:54:40
bnfmwr3cM1.b1	D250214.3	Incorrect	Incorrect Values	2025-01-13T00:00:00	2025-02-13T00:00:00
bnfmwr3cM1.b1	D250211.2	Suspect	Calibration Uncertain	2024-09-04T12:00:00	2024-09-18T23:59:59
bnfriM1.a0	D251029.1	Incorrect	Incorrect Data due to Low Energy Level	2025-08-30T00:00:00	2025-10-06T15:28:36
bnfriM1.a0	D250415.7	Missing	Missing Data	2025-04-12T14:44:28	2025-04-14T14:37:47

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Datastream	DQR	Quality	Subject	Start Date	End Date
bnfriM1.a0	D250407.2	Missing	Missing Data	2025-03-26T14:44:20	2025-03-28T14:59:19
bnfriM1.a0	D250807.8	Missing	Missing Data	2025-07-14T14:54:08	2025-07-15T21:58:41
bnfriM1.a0	D250224.4	Missing	Missing Data	2025-01-10T16:51:19	2025-01-13T18:25:07
bnfriM1.a0	D251007.2	Missing	Missing Data	2025-09-04T11:31:20	2025-09-09T15:17:00
bnfriM1.a0	D251109.2	Missing	Missing Data	2025-10-06T15:28:36	2025-10-29T21:53:19
bnfriM1.a0	D250717.3	Missing	Missing Data	2025-06-26T09:31:29	2025-06-27T14:11:35
bnfriM1.a0	D250827.2	Missing	Missing Data	2025-08-02T04:06:51	2025-08-04T14:39:18
bnfriM1.a0	D250328.10	Missing	No Data	2025-02-16T05:48:09	2025-02-20T15:24:16
bnfriM1.a0	D241112.2	Missing	Missing Data	2024-12-25T14:51:37	2024-12-31T16:42:10
bnfriM1.a0	D250327.2	Missing	Missing Data	2025-03-15T09:32:10	2025-03-17T14:23:58
bnfriM1.a0	D250717.2	Missing	Missing Data	2025-06-07T18:35:42	2025-06-09T14:36:22
bnfriM1.a0	D250519.2	Missing	Missing Data	2025-04-20T13:20:18	2025-04-21T14:54:51
bnfskyrad60sM1.b1	D240929.3	Incorrect	Incorrect Data	2025-02-22T22:46:00	2025-02-22T23:39:38
bnfskyrad60sM1.b1	D250819.1	Incorrect	Incorrect Data	2025-08-14T19:51:00	2025-08-22T15:33:00
bnfskyrad60sM1.b1	D251212.1	Incorrect	Incorrect Data	2025-12-09T18:29:00	2025-12-10T14:05:00
bnfskyrad60sM1.b1	D241112.3	Incorrect	Data Incorrect due to Reversed Signal Polarity	2024-10-01T00:00:00	2024-10-24T18:27:00
bnfskyrad60sM1.b1	D251104.2	Suspect	Questionable Data	2025-10-18T13:19:00	2025-10-18T14:06:59
bnfskyrad60sM1.b1	D241231.2	Suspect	Suspect Data due to Instrument/Environmental Conditions	2024-11-22T15:30:00	2024-11-22T15:44:00
bnfsondewnpnM1.b1	D250107.9	Missing	No SONDE Launches	2025-01-29T00:00:00	2025-01-29T23:59:59
bnfsondewnpnM1.b1	D250205.2	Missing	No Launches	2025-02-10T00:00:00	2025-02-11T23:59:59
bnfvdisM1.b1	D250611.2	Missing	Missing Data	2025-06-14T00:00:00	2025-06-15T23:59:59
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	D250320.2	Missing	Missing Data	2025-03-28T00:00:00	2025-04-01T23:59:59
bnfvdisM1.b1	D250411.7	Missing	Missing Data	2025-04-07T00:00:00	2025-04-07T23:59:59
bnfvdisM1.b1	D251014.4	Missing	Missing Data	2025-10-10T00:00:00	2025-10-14T23:59:59
bnfvdisM1.b1	D251002.4	Missing	Missing Data	2025-09-18T00:00:00	2025-09-22T23:59:59
bnfvdisM1.b1	D251119.1	Missing	Missing Data	2025-11-08T00:00:00	2025-11-09T23:59:59
bnfvdisM1.b1	D241204.3	Missing	Missing Data	2024-11-22T00:00:00	2024-11-23T23:59:59
bnfvdisM1.b1	D251118.6	Missing	No Data	2025-10-29T00:00:00	2025-10-29T23:59:59

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Datastream	DQR	Quality	Subject	Start Date	End Date
bnfvdisM1.b1	D251202.4	Incorrect	Incorrect Data	2025-11-26T00:00:00	2025-11-28T23:59:59
bnfwbpluvio2M1.a1	D251014.5	Suspect	Questionable Data	2025-06-22T00:00:00	2025-09-12T23:59:59
bnfwbpluvio2M1.a1	D250320.5	Suspect	Suspect Data	2025-03-05T01:00:00	2025-03-05T03:00:00
bnfwbpluvio2M1.a1	D250425.10	Suspect	Suspect Data	2025-04-09T15:00:00	2025-04-09T17:00:00
bnfwbpluvio2M1.a1	D250123.8	Suspect	Suspicious Data	2024-12-29T01:00:00	2024-12-29T05:00:00
bnfwbpluvio2M1.a1	D250728.2	Incorrect	Incorrect Data	2025-06-26T00:00:00	2025-07-14T23:59:59

## ARM Data Object Identifier (DOI) Table

Instrument	DOI
AERI	Gero, J., Garcia, R., Hackel, D., Ermold, B., & Gaustad, K. Atmospheric Emitted Radiance Interferometer (AERICH1), 2025-1-01 to 2025-12-31, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1989299">https://doi.org/10.5439/1989299</a>
CEIL	Zhang, D., Morris, V., & Ermold, B. Ceilometer (CEIL10M), 2025-1-01 to 2025-12-31, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1497398">https://doi.org/10.5439/1497398</a>
DL	Newsom, R., Shi, Y., & Krishnamurthy, R. Doppler Lidar (DLCAL1), 2025-1-01 to 2025-12-31, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1025183">https://doi.org/10.5439/1025183</a>
GNDRAD	Sengupta, M., Habte, A., Andreas, A., Reda, I., Jaker, S., Xie, Y., Yang, J., Gotseff, P., Kutchenerreiter, M., & Shi, Y. Ground Radiometers on Stand for Upwelling Radiation (GNDRAD60S), 2025-1-01 to 2025-12-31, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1377837">https://doi.org/10.5439/1377837</a>
HSRL	Bambha, R., Eloranta, E., Garcia, J. P., Razenkov, I., & Ermold, B. High Spectral Resolution Lidar (HSRL5S), 2025-1-01 to 2025-12-31, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility.
IRT	Shi, Y., Howie, J., Goldberger, L., & Morris, V. Infrared Thermometer (IRT), 2025-1-01 to 2025-12-31, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1329238">https://doi.org/10.5439/1329238</a>
LDIS	Zhu, Z., & Shi, Y. Laser Disdrometer (LD), 2025-1-01 to 2025-12-31, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1973058">https://doi.org/10.5439/1973058</a>
MAWS	Keeler, E., Kyrouac, J., & Ermold, B. Automatic Weather Station (MAWS), 2025-1-01 to 2025-12-31, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1162061">https://doi.org/10.5439/1162061</a>
MET	Kyrouac, J., Shi, Y., & Tuftedal, M. Surface Meteorological Instrumentation (MET), 2025-1-01 to 2025-12-31, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1786358">https://doi.org/10.5439/1786358</a>
MFRSR	Hodges, G., Sheffer, B., Herrera, C., & Ermold, B. Multifilter Rotating Shadowband Radiometer (MFRSR7NCH), 2025-1-01 to 2025-12-31, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1429369">https://doi.org/10.5439/1429369</a>
MPL	Muradyan, P., Cromwell, E., Koontz, A., Coulter, R., Flynn, C., Ermold, B., & OBrien, J. Micropulse Lidar (MPLPOLFS), 2025-1-01 to 2025-12-31, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1320657">https://doi.org/10.5439/1320657</a>
MWR3C	Cadeddu, M., Gibler, G., Koontz, A., & Tuftedal, M. Microwave Radiometer, 3 Channel (MWR3C), 2025-1-01 to 2025-12-31, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1025248">https://doi.org/10.5439/1025248</a>
RL	Newsom, R., Bambha, R., & Chand, D. Raman Lidar (RL), 2025-1-01 to 2025-12-31, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1996909">https://doi.org/10.5439/1996909</a>

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Instrument	DOI
SKYRAD	Sengupta, M., Habte, A., Andreas, A., Reda, I., Jaker, S., Xie, Y., Yang, J., Gotseff, P., Kuchenreiter, M., & Shi, Y. Sky Radiometers on Stand for Downwelling Radiation (SKYRAD60S), 2025-1-01 to 2025-12-31, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1377836">https://doi.org/10.5439/1377836</a>
SONDE	Keeler, E., Burk, K., & Kyrouac, J. Balloon-Borne Sounding System (SONDEWNPN), 2025-1-01 to 2025-12-31, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1595321">https://doi.org/10.5439/1595321</a>
VDIS	Zhu, Z. Video Disdrometer (VDIS), 2025-1-01 to 2025-12-31, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1992988">https://doi.org/10.5439/1992988</a>
WB	Zhu, Z., Wang, D., Jane, M., Cromwell, E., Sturm, M., Irving, K., & Delamere, J. Weighing Bucket Precipitation Gauge (WBPLUVIO2), 2025-1-01 to 2025-12-31, Bankhead National Forest, AL, USA; Long-term Mobile Facility (BNF), Bankhead National Forest, AL, AMF3 (Main Site) (M1). Atmospheric Radiation Measurement (ARM) User Facility. <a href="https://doi.org/10.5439/1338194">https://doi.org/10.5439/1338194</a>