

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 | 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 |
| bnfmawsM1.b1 | D250319.1 | Missing | Missing Data | 2025-02-23T23:59:07 | 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 |
| bnfmlpolfsM1.b1 | D241218.2 | Missing | Missing Data | 2024-12-09T00:00:00 | 2024-12-18T17:25:00 |
| bnfmlpolfsM1.b1 | D241216.2 | Missing | Missing Data | 2024-09-27T13:46:24 | 2024-10-03T19:03:19 |
| bnfmlpolfsM1.b1 | D250425.2 | Missing | No Data | 2025-04-20T13:20:17 | 2025-04-21T13:51:16 |
| bnfmlpolfsM1.b1 | D250324.5 | Incorrect | Data Incorrect | 2025-02-24T19:00:05 | 2025-03-06T17:39:25 |
| bnfmlpolfsM1.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 | 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 |
| 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 |

ARM Data Quality Report (DQR) Table

| Datastream | DQR | Quality | Subject | Start Date | End Date |
|-------------------|------------|-----------|---|---------------------|---------------------|
| 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 | D251104.2 | Suspect | Questionable Data | 2025-10-16T20:52:00 | 2025-10-16T22:18:59 |
| bnfskyrad60sM1.b1 | D241231.2 | Suspect | Suspect Data due to Instrument/Environmental Conditions | 2025-01-05T19:08:00 | 2025-01-05T19:22:00 |
| bnfskyrad60sM1.b1 | D250819.1 | Incorrect | Incorrect Data | 2025-08-14T19:51:00 | 2025-08-22T15:33:00 |
| 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 |
| 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 | D241204.3 | Missing | Missing Data | 2024-11-22T00:00:00 | 2024-11-23T23:59:59 |
| 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. https://doi.org/10.5439/1989299 |
| 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. https://doi.org/10.5439/1497398 |
| 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. https://doi.org/10.5439/1025183 |
| 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. https://doi.org/10.5439/1377837 |
| HSRL | Bambha, R., Eloranta, E., Garcia, J., 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. https://doi.org/10.5439/1329238 |
| 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. https://doi.org/10.5439/1973058 |
| 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. https://doi.org/10.5439/1162061 |
| 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. https://doi.org/10.5439/1786358 |
| 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. https://doi.org/10.5439/1429369 |
| 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. https://doi.org/10.5439/1320657 |
| 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. https://doi.org/10.5439/1025248 |
| 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. https://doi.org/10.5439/1996909 |

ARM Data Object Identifier (DOI) Table

| 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. https://doi.org/10.5439/1377836 |
| 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. https://doi.org/10.5439/1595321 |
| 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. 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), 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. https://doi.org/10.5439/1338194 |