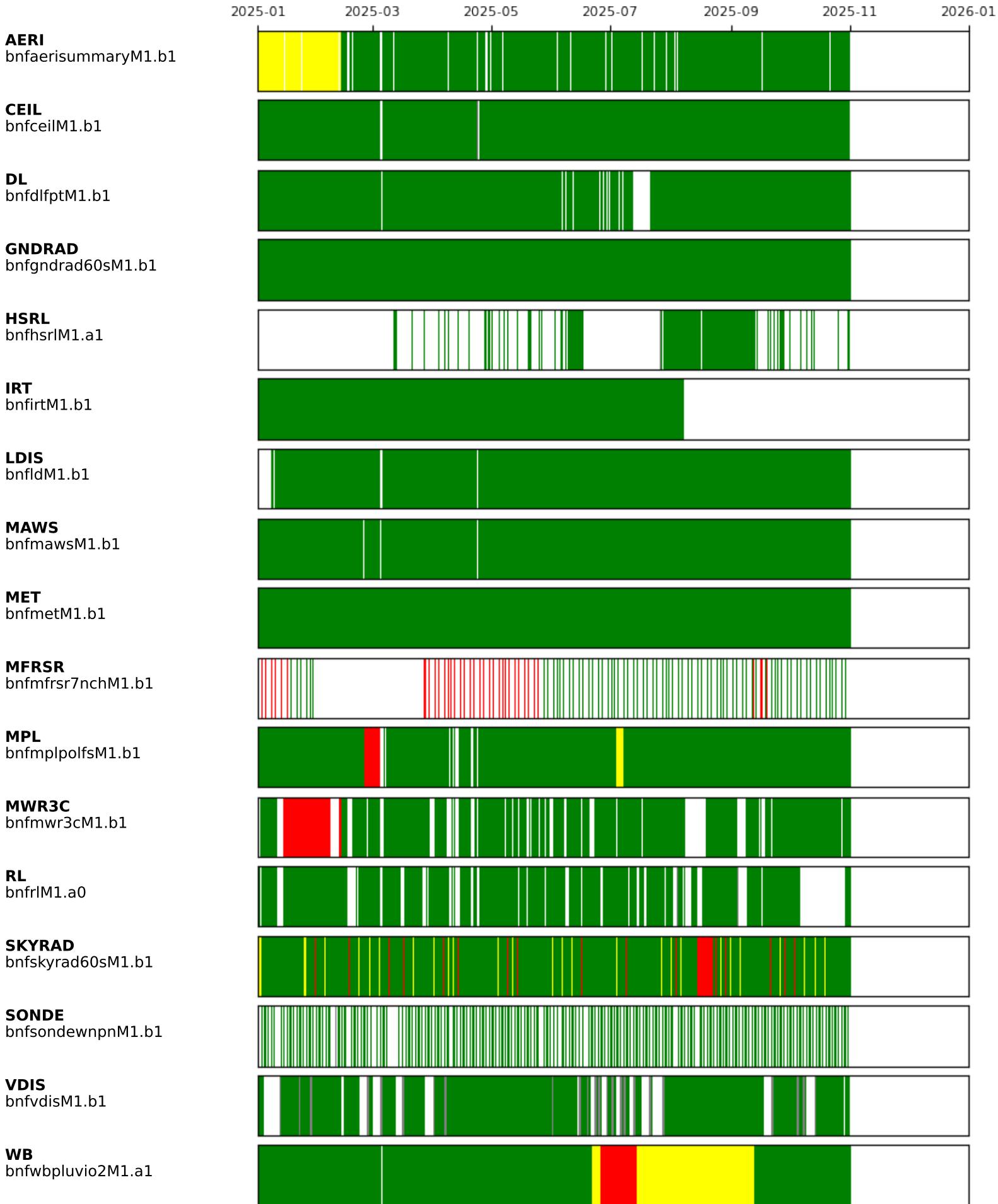


# Bankhead National Forest, AL, AMF3 (Main Site)

## 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          | 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 |
| bnfriM1.a0          | D251007.2  | Missing   | Missing Data                     | 2025-09-04T11:31:20 | 2025-09-09T15:17:00 |

## ARM Data Quality Report (DQR) Table

| Datastream        | DQR        | Quality   | Subject   | Start Date          | End Date            |
|-------------------|------------|-----------|---|---------------------|---------------------|
| 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  | 2024-12-01T21:48:00 | 2024-12-01T22:39:11 |
| 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 |
| bnfskyrad60sM1.b1 | D241231.2  | Suspect   | Suspect Data due to Instrument/Environmental Conditions | 2024-11-23T19:38:00 | 2024-11-23T19:44:00 |
| 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      | 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. <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., 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>  |

## 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. <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>  |