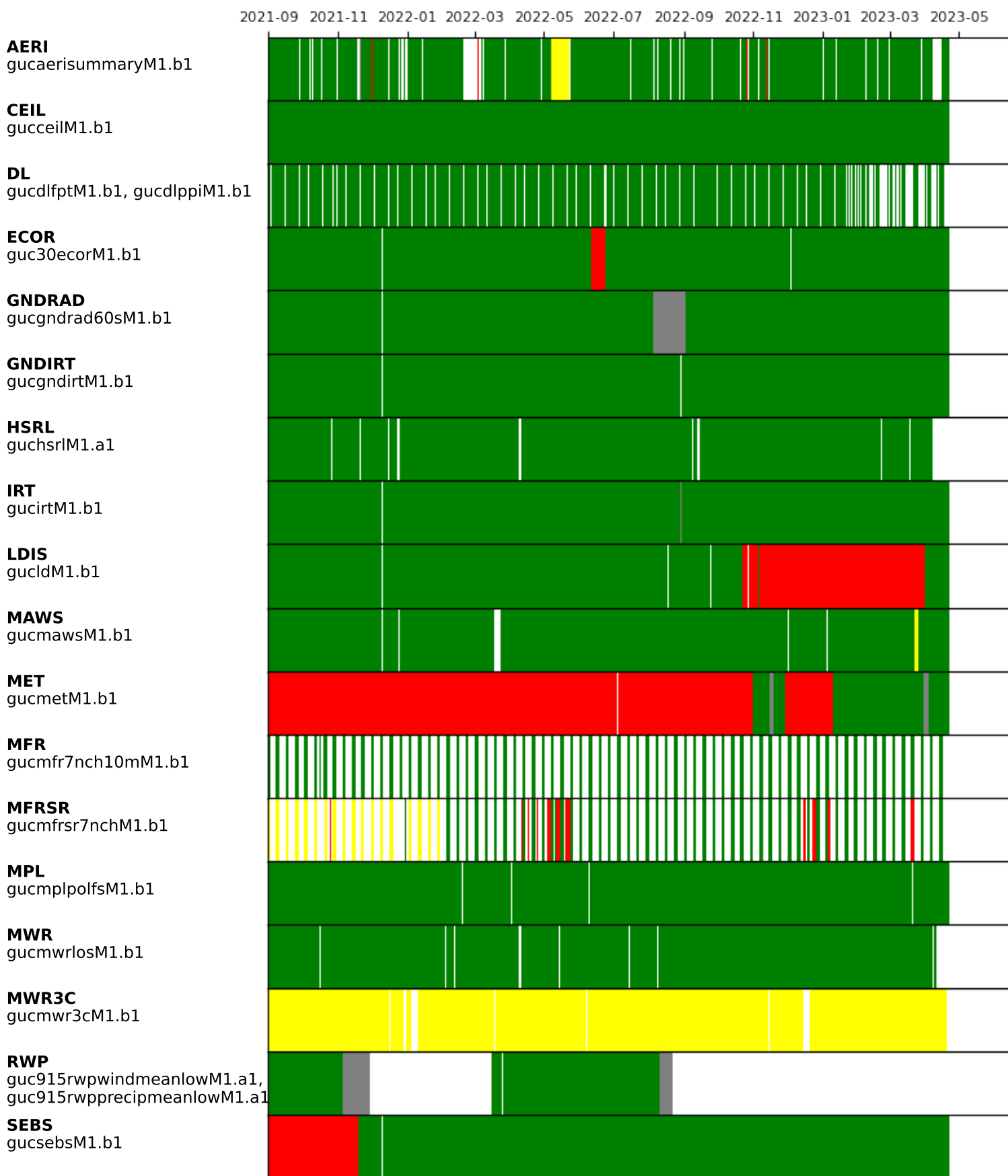


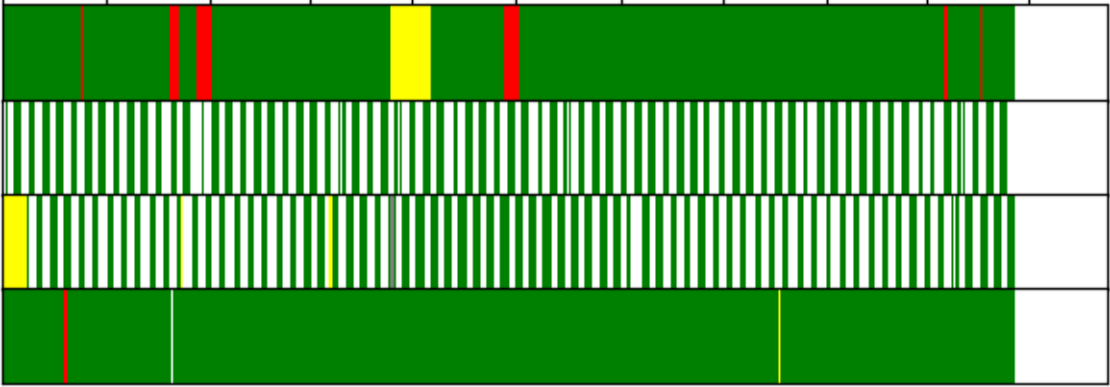
Gunnison, CO; AMF2 (main site for SAIL)

Atmospheric Radiation Measurement User Facility



2021-09 2021-11 2022-01 2022-03 2022-05 2022-07 2022-09 2022-11 2023-01 2023-03 2023-05

SKYRAD
gucskyrad60sM1.b1



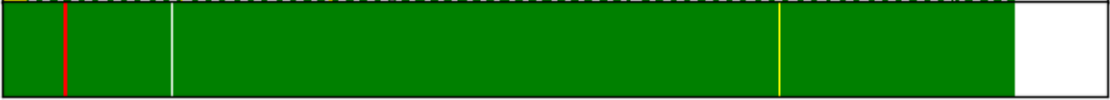
SONDE
gucsondewnpnM1.b1



TSI
guctsiskycoverM1.b1



WB
gucwbpluvio2M1.a1



ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
gucaerisummaryM1.b1	D220720.2	missing	Missing Data - Instrument Off	20220304.150000	20220307.162529
gucaerisummaryM1.b1	D220209.19	missing	No Data	20211227.055100	20211228.160801
gucaerisummaryM1.b1	D211124.3	missing	No Data	20211119.131200	20211120.235959
gucaerisummaryM1.b1	D221202.6	incorrect	Incorrect Data due to Scene Mirror not Rotating	20221112.000000	20221112.223000
gucaerisummaryM1.b1	D220720.4	suspect	AERI Skipping Laser Fringes	20220507.000000	20220523.235959
gucaerisummaryM1.b1	D220720.3	incorrect	Laser Testing	20220303.183718	20220304.150000
gucaerisummaryM1.b1	D220209.18	incorrect	Incorrect Data - Mirror Appears not to be Moving	20220101.012000	20220101.185950
gucaerisummaryM1.b1	D220210.15	incorrect	Questionable Data	20211201.000000	20211201.235959
guc30ecorM1.b1	D220711.4	incorrect	Incorrect Data	20220611.203001	20220624.000000
gucgndrad60sM1.b1	D220902.4	missing	up_long_hemisp_vent_tachometer	20220805.150000	20220902.163600
gucgndirtM1.b1	D220810.6	incorrect	Incorrect Measurements during Tower Maintenance	20220805.150000	20220805.174900
gucirtM1.b1	D220831.2	missing	No Data	20220829.011701	20220829.173759
gucirtM1.b1	D230322.9	incorrect	Incorrect Data	20230311.180500	20230311.193000
gucldM1.b1	D230412.3	incorrect	Incorrect Data	20230206.000000	20230331.235959
gucldM1.b1	D230209.1	incorrect	Incorrect Precipitation Properties	20230117.000000	20230206.235959
gucldM1.b1	D230116.2	incorrect	Incorrect Precipitation Properties	20221106.000000	20230116.235959
gucmawsM1.b1	D220323.1	missing	Network Issues	20220318.183001	20220323.194259
gucmawsM1.b1	D230407.4	suspect	High RH	20230323.000000	20230325.235959
gucmetM1.b1	D220719.3	suspect	Tower Lowered	20220713.180000	20220713.190000
gucmetM1.b1	D210920.2	incorrect	Pressure Data Incorrect	20210901.000000	20210917.174000
gucmetM1.b1	D230404.3	missing	Missing Optical Rain Gauge Data	20230331.024300	20230404.194800
gucmetM1.b1	D221209.4	incorrect	False Precipitation Recorded	20220731.171500	20220731.171659
gucmetM1.b1	D220210.27	incorrect	False Precipitation Recorded	20220130.205000	20220130.205500
gucmetM1.b1	D221118.7	missing	Missing Present Weather Detector Data	20221115.215301	20221118.190059
gucmetM1.b1	D211001.1	incorrect	Present Weather Detector Instrument Errors	20210901.000000	20210921.184500
gucmetM1.b1	D230224.3	incorrect	Broken Heater Fuse on Tipping Bucket Rain Gauge	20221129.000000	20230109.235959
gucmetM1.b1	D230303.1	incorrect	False Precipitation Recorded	20230226.171300	20230226.171359
gucmetM1.b1	D220225.3	incorrect	Snow Obstructed in Tipping Bucket Rain Gauge	20220220.000000	20220222.235959
gucmetM1.b1	D221103.2	incorrect	Temperature Data Reads High	20210901.000000	20221031.201559
gucmfrsr7nchM1.b1	D211021.4	incorrect	Shading Problem - Shadowband Slip	20211015.150000	20211015.180400

ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
gucmfrsr7nchM1.b1	D220210.21	suspect	Questionable Data - Nighttime Values Over-Ranging	20210718.000000	20220204.173000
gucmfrsr7nchM1.b1	D220607.4	incorrect	Shading Problem - Shadowband Misalignment	20220406.133500	20220406.151600
gucmfrsr7nchM1.b1	D210831.1	incorrect	Shading Problem - Shadowband Misalignment	20210804.150600	20210804.204700
gucmfrsr7nchM1.b1	D211130.2	incorrect	Shading Problem - Shadowband Misalignment	20211025.143700	20211025.174800
gucmfrsr7nchM1.b1	D230109.2	incorrect	Incorrect Data - Snow/Ice	20221210.152000	20221210.223000
gucmwrlosM1.b1	D220406.5	missing	Missing Data	20220408.183701	20220410.130259
gucmwr3cM1.b1	D230112.3	missing	Missing Data	20221215.160001	20221220.125400
gucmwr3cM1.b1	D220110.1	missing	Missing Data	20211228.120000	20211230.175959
gucmwr3cM1.b1	D220113.3	suspect	Inaccurate Tip Calibration	20210709.140000	30010101.000000
gucmwr3cM1.b1	D210917.1	incorrect	Incorrect IRT Data	20210901.000000	20211102.180000
guc915rwpwindmeanlov	D221114.3	missing	Missing Data	20220811.000000	20221104.161005
guc915rwpwindmeanlov	D220404.11	missing	Missing Data	20211105.213000	20220315.235959
guc915rwpwindmeanlov	D220405.6	incorrect	Incorrect Data	20220315.000000	20220315.235959
gucsebsM1.b1	D220211.4	incorrect	Incorrect Data	20210713.212258	20211118.170000
gucskyrad60sM1.b1	D230314.1	missing	Missing Data due to External Power Failure	20230311.054600	20230311.180400
gucskyrad60sM1.b1	D220109.1	incorrect	Incorrect Data due to Failed Solar Tracker and Adverse Environmental Conditions	20211224.140000	20220102.200000
gucskyrad60sM1.b1	D230405.5	incorrect	Incorrect Data due to Tracking/Shading Issue	20230402.135400	20230402.161400
gucskyrad60sM1.b1	D230314.4	incorrect	External Power Failure resulted in Loss of Time Keeping in Tracker	20230311.180400	20230313.191400
gucskyrad60sM1.b1	D221213.2	incorrect	Incorrect Data - Due to Tracker Issue	20220608.114000	20220608.170700
gucskyrad60sM1.b1	D221213.3	incorrect	Incorrect Data	20220815.133600	20220815.165500
gucskyrad60sM1.b1	D220715.5	incorrect	Incorrect Data due to Misaligned Tracker	20220624.120000	20220703.163000
gucskyrad60sM1.b1	D211215.2	incorrect	Incorrect Dta due to Failed Tracker	20211208.160000	20211213.183500
gucskyrad60sM1.b1	D220518.2	suspect	Questionable Data from the short_direct_normal Datastream (NIP Instrument)	20220418.000000	20220511.194500
gucskyrad60sM1.b1	D211123.1	incorrect	Incorrect short_direct_normal Data due to Problem with NIP Instrument	20211028.180000	20211028.210000
gucsondewnnpnM1.b1	D230103.2	missing	No Data	20221221.000000	20221221.235959
gucsondewnnpnM1.b1	D220318.2	missing	First and Second Flight Attempt Failed	20220314.110000	20220314.145959
guctsiskycoverM1.b1	D230403.2	missing	No Data	20230317.165931	20230318.204800
guctsiskycoverM1.b1	D220911.1	missing	Missing Data	20220907.160001	20220910.150259
guctsiskycoverM1.b1	D220512.1	missing	TSI Movie not Available	20220418.000000	20220420.000000
guctsiskycoverM1.b1	D220331.1	incorrect	Maintenance Impacts Data	20220324.181430	20220324.181730

ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
guctsiskycoverM1.b1	D220120.2	suspect	Mirror Misalignment Resulting from Ice	20211215.142500	20211215.234130
guctsiskycoverM1.b1	D220331.3	suspect	Questionable Data	20220312.200730	20220314.180200
guctsiskycoverM1.b1	D210917.5	suspect	Mountains Visible within TSI Processing Zenith	20210801.000000	20210915.171030
gucwbpluvio2M1.a1	D230122.2	suspect	Questionable Data	20221204.000000	20221204.231739
gucwbpluvio2M1.a1	D211027.2	incorrect	Incorrect Data	20211007.033049	20211008.235959

ARM Data Object Identifier (DOI) Table

Instrument	DOI
AERI	Gero, J., Garcia, R., Hackel, D., Ermold, B., & Gaustad, K. Atmospheric Emitted Radiance Interferometer (AERICH1). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1025143
CEIL	Zhang, D., Morris, V., & Ermold, B. Ceilometer (CEIL10M). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1497398
DL	Newsom, R., & Shi, Y. Doppler Lidar (DLCAL2). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1025184
ECOR	Sullivan, R., Billesbach, D., Keeler, E., & Ermold, B. Eddy Correlation Flux Measurement System (30ECOR). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1025039
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). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1377837
GNDIRT	N/A
HSRL	Holz, R., Garcia, J., & Schuman, E. High Spectral Resolution Lidar (HSRL). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1462207
IRT	Shi, Y. Infrared Thermometer (GNDIRT). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1366509
LDIS	Wang, D., & Shi, Y. Laser Disdrometer (LD). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1779709
MAWS	Keeler, E., & Kyroutac, J. Automatic Weather Station (MAWS). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1162061
MET	Kyroutac, J., & Shi, Y. Surface Meteorological Instrumentation (MET). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1786358
MFR	Hodges, G., Herrera, C., & Ermold, B. Multifilter Radiometer (MFR7NCH10M). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1773175
MFRSR	Hodges, G., Herrera, C., & Ermold, B. Multifilter Rotating Shadowband Radiometer (MFRSR7NCH). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1429369
MPL	Muradyan, P., Cromwell, E., Koontz, A., & Coulter, R. Micropulse Lidar (MPLPOLFS). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1320657
MWR	Cadeddu, M., & Tuftedal, M. Microwave Radiometer (MWRLOS). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1046211
MWR3C	Cadeddu, M., Gibler, G., & Koontz, A. Microwave Radiometer, 3 Channel (MWR3C). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1025248
RWP	Muradyan, P. Radar Wind Profiler (915RWPPRECIPMEANHIGH). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1482579

ARM Data Object Identifier (DOI) Table

Instrument	DOI
SEBS	Sullivan, R., & Keeler, E. Surface Energy Balance System (SEBS). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1025274
SKYRAD	Sengupta, M., Habte, A., Andreas, A., Reda, I., Jaker, S., Xie, Y., Yang, J., Gotseff, P., Kutchenreiter, M., & Shi, Y. Sky Radiometers on Stand for Downwelling Radiation (SKYRAD60S). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1377836
SONDE	Keeler, E., & Burk, K. Balloon-Borne Sounding System (SONDEWNPN). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1595321
TSI	Flynn, D., & Morris, V. Total Sky Imager (TSISKYCOVER). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1025308
WB	Wang, D., Bartholomew, M., & Cromwell, E. Weighing Bucket Precipitation Gauge (WBPLUVIO2). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1338194