## Collocated Instruments on ice Atmospheric Radiation Measurement User Facility

Infrared Thermometer: Sky brightness temperature

ARM Name: IRT
Datastream: mosirtS3.b1

Infrared Thermometer: Ground surface

temperature
ARM Name: GNDIRT Datastream: mosgndirtS3.b1

Ground radiation sensor: 60-second upwelling

ARM Name: GNDRAD

Datastream: mosgndrad60sS3.b1

Laser disdrometer ARM Name: LDIS Datastream: mosldS3.b1

Multi-Filter Radiometer (MFR): upwelling irradiance at 3-meter height ARM Name: MFR

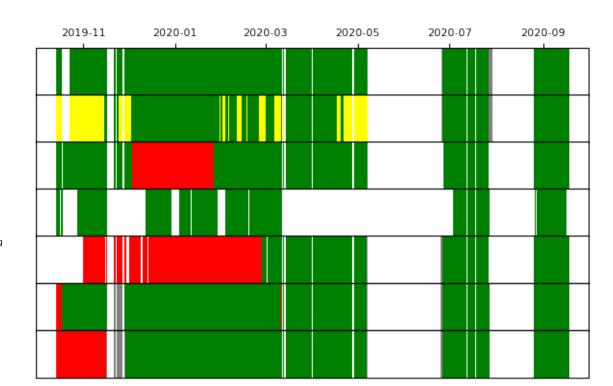
Datastream: mosmfr3mS3.b1

Present Weather Detector ARM Name: MET

Datastream: mospwdS3.b1

Pluvio-2 Weighing Bucket Precipitation

Gauge
ARM Name: WB
Datastream: moswbpluvio2S3.a1



## ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
mosirtS3.b1	D200128.1	missing	Power Disconnected	20191127.051100	20191128.111059
mosirtS3.b1	D210817.1	missing	Polarstern in Norwegian Territorial Waters	20200603.203600	20200608.200000
mosirtS3.b1	D200423.1	missing	No Data	20200313.030400	20200314.082859
mosirtS3.b1	D200914.9	missing	No Data	20200727.000100	20200825.123259
mosirtS3.b1	D200515.4	missing	Facility Relocation	20200507.070000	20200625.235959
mosgndirtS3.b1	D200128.1	missing	Power Disconnected	20191127.051100	20191128.111059
mosgndirtS3.b1	D210817.1	missing	Polarstern in Norwegian Territorial Waters	20200603.203600	20200608.200000
mosgndirtS3.b1	D200423.1	missing	No Data	20200313.030400	20200314.082859
mosgndirtS3.b1	D200914.9	missing	No Data	20200727.000100	20200825.123259
mosgndirtS3.b1	D200515.4	missing	Facility Relocation	20200507.070000	20200625.235959
mosgndirtS3.b1	D200225.37	suspect	Questionable Data	20200421.100000	20200507.065900
mosgndrad60sS3.b1	D210817.1	missing	Polarstern in Norwegian Territorial Waters	20200603.203600	20200608.200000
mosgndrad60sS3.b1	D210806.2	missing	No Data	20191126.232601	20191128.110959
mosgndrad60sS3.b1	D210806.3	missing	Missing Data	20200313.030401	20200314.084559
mosgndrad60sS3.b1	D210416.7	missing	No Data	20200727.000100	20200825.123200
mosgndrad60sS3.b1	D200612.2	missing	No Data	20200507.073600	20200626.135300
mosgndrad60sS3.b1	D200205.3	incorrect	Incorrect Data	20191203.050000	20200126.110000
mosldS3.b1	D210503.6	missing	No Data	20200129.065900	20200203.122300
mosldS3.b1	D200515.2	missing	No Data	20191116.233000	20191212.150300
mosldS3.b1	D210521.1	missing	No Data	20200727.080801	20200826.042959
mosldS3.b1	D200422.5	missing	No Data	20200311.152001	20200703.072359
mosmfr3mS3.b1	D220210.28	missing	Missing Data	20191129.131141	20191201.093819
mosmfr3mS3.b1	D210817.1	missing	Polarstern in Norwegian Territorial Waters	20200603.203600	20200608.200000
mosmfr3mS3.b1	D210416.8	missing	No Data	20200727.000000	20200825.123100
mosmfr3mS3.b1	D200515.7	missing	No Data	20200507.000000	20200626.000000
mosmfr3mS3.b1	D210419.2	missing	No Data - Missing Data	20200313.030500	20200314.082600
mosmfr3mS3.b1	D200605.6	incorrect	Incorrect Data - Various Issues	20191101.000000	20200227.131400
mospwdS3.b1	D210817.1	missing	Polarstern in Norwegian Territorial Waters	20200603.203600	20200608.200000
mospwdS3.b1	D210416.5	missing	No Data	20200727.075600	20200825.123100
mospwdS3.b1	D200515.6	missing	Instrument Packed Up	20200507.000000	20200626.000000

## ARM Data Quality Report (DQR) Table

Datastream	DQR	Quality	Subject	Start Date	End Date
mospwdS3.b1	D210422.2	missing	Missing Data	20200313.030600	20200314.082700
mospwdS3.b1	D200317.5	incorrect	Data Incorrect	20191014.030000	20191018.071100
mospwdS3.b1	D200312.2	missing	Power Interruption Caused Missing Data	20191116.234100	20191128.111000
mospwdS3.b1	D200327.1	incorrect	Present Weather Detector Error Code	20200310.114800	20200311.043700
mospwdS3.b1	D211103.1	incorrect	Incorrect Precipitation Rates Over 10 mm/hr from Present Weather Detector	20200722.171500	20200722.171600
moswbpluvio2S3.a1	D210817.1	missing	Polarstern in Norwegian Territorial Waters	20200603.203600	20200608.200000
moswbpluvio2S3.a1	D210806.1	missing	No Data	20200313.030501	20200314.082659
moswbpluvio2S3.a1	D210416.6	missing	No Data	20200727.075600	20200825.123100
moswbpluvio2S3.a1	D200515.9	missing	Instrument Packed Up - Temporary	20200507.000000	20200626.000000
moswbpluvio2S3.a1	D200218.1	missing	Missing Data	20191116.000000	20191128.235959
moswbpluvio2S3.a1	D200218.2	incorrect	Instrument Status Variables Indicate Instrument Faults.	20191014.000000	20191128.235959

## ARM Data Object Identifier (DOI) Table

Instrument	DOI		
IRT	Shi, Y. Infrared Thermometer (GNDIRT). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1366509		
GNDIRT	N/A		
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		
LDIS	Wang, D., Bartholomew, M. J., & Shi, Y. Laser Disdrometer (LD). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1973058		
MFR	Hodges, G., & Herrera, C. Multifilter Radiometer (MFR3M). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1973374		
MET	Kyrouac, J., & Tuftedal, M. Surface Meteorological Instrumentation (PWD). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1507725		
WB	Wang, D., Bartholomew, M., & Cromwell, E. Weighing Bucket Precipitation Gauge (WBPLUVIO2). Atmospheric Radiation Measurement (ARM) User Facility. https://doi.org/10.5439/1338194		