

BSRN STATION DESCRIPTION

STATION MANAGER

Office of Antarctic Observations,
Japan Meteorological Agency (JMA)

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1-3-4 Otemachi, Chiyoda-ku,
Tokyo 100-8122, JAPAN

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E-mail : antarctic@met.kishou.go.jp

STATION LOCATION

Latitude : 69 ° 00.3 ' (69.005 deg.) S

Longitude : 39 ° 35.3 ' (39.589 deg.) E

Elevation : 18.4 m (MSL)

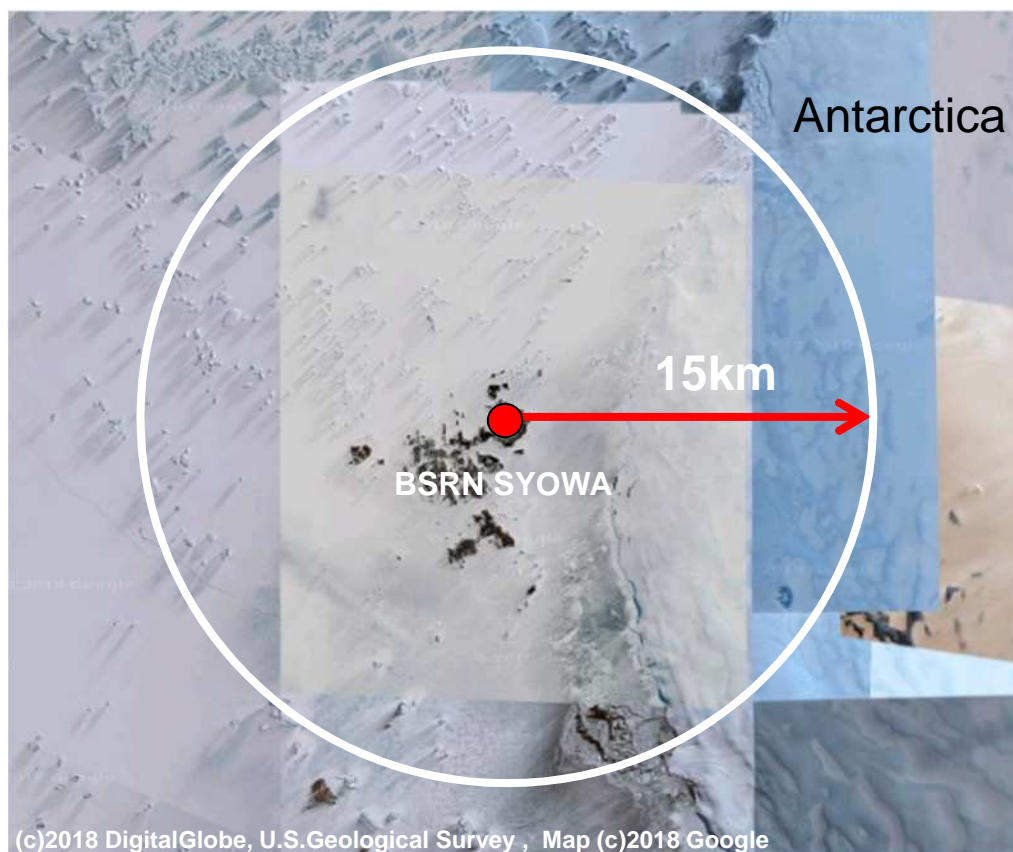
Local Time: GMT + 03

Topography Type: 4 (hilly , rural)

Surface Type: 4 (sea ice)

Address : Syowa Station, Antarctica

TOPOGRAPHIC MAP OF SURROUNDING 15 KM RADIUS



Syowa Station is an observatory located on East Ongul Island, about 4 km from the continent, on the east coast of Lutzow-Holm Bay, East Antarctica.

BSRN SITE DESCRIPTION

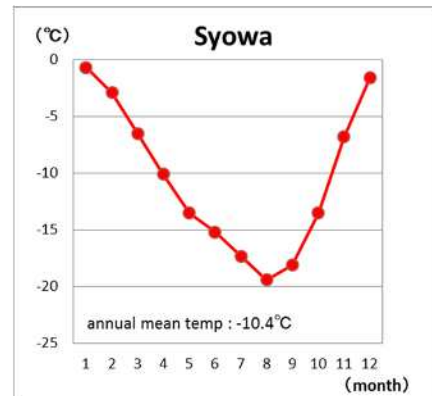
SITE DESCRIPTION



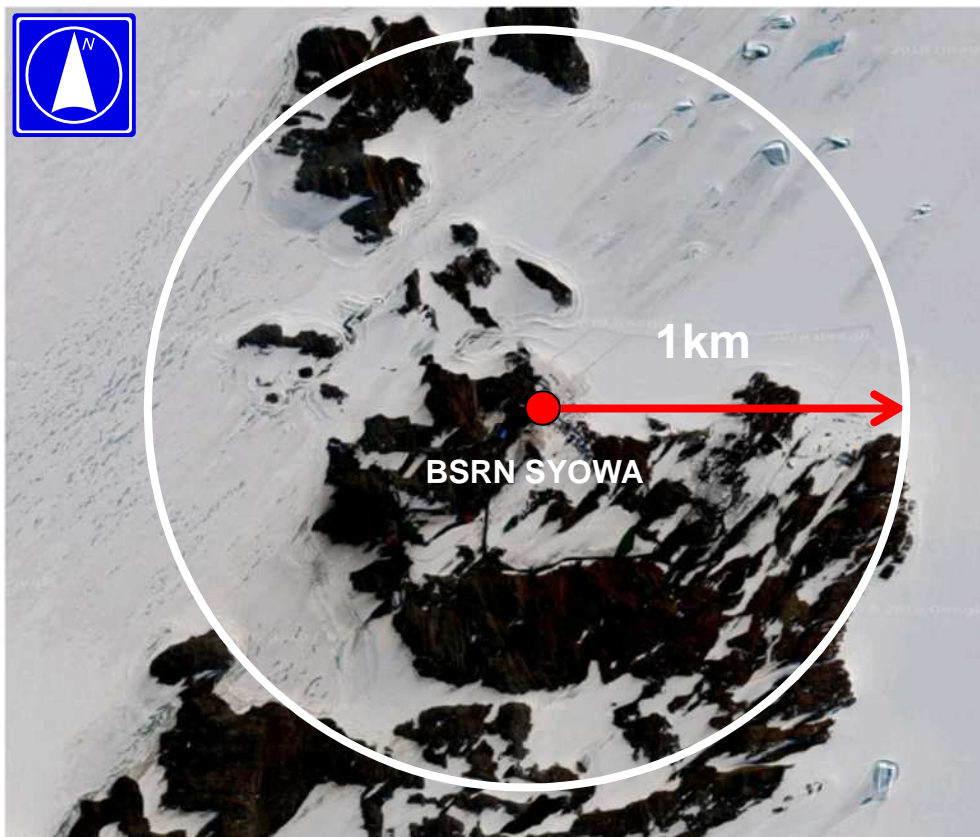
The observation site faces the sea ice and is covered with snow except for a short summer period.

CLIMATE

Köppen climate classification EF
(Ice cap climate)



DESCRIPTIVE MAP OF SURROUNDING 1 KM RADIUS



BSRN SITE DESCRIPTION

INSTRUMENT DESCRIPTION

Tracker(EKO STR-22,STR-22G)
 Kipp & Zonen CHP1,CH1 Pyrheliometer
 Kipp & Zonen CMP21 Pyranometer
 (for Global Solar Radiation)
 Kipp & Zonen CMP21 Pyranometer
 (for Diffuse Solar Radiation)
 Kipp & Zonen CG4 Pyrgeometer
 Kipp & Zonen MK ,MK
 Brewer Spectrophotometer

Kipp & Zonen CG4 Pyrgeometer
 (for Upward Longwave Radiation)
 Kipp & Zonen CMP21 Pyranometer
 (for Reflected Solar Radiation)

Beck Dobson Spectrophotometer

INSTRUMENT LOCATION MAP



HORIZON MAP OF CENTRAL INSTRUMENT



N. Az360 °



E. Az90 °

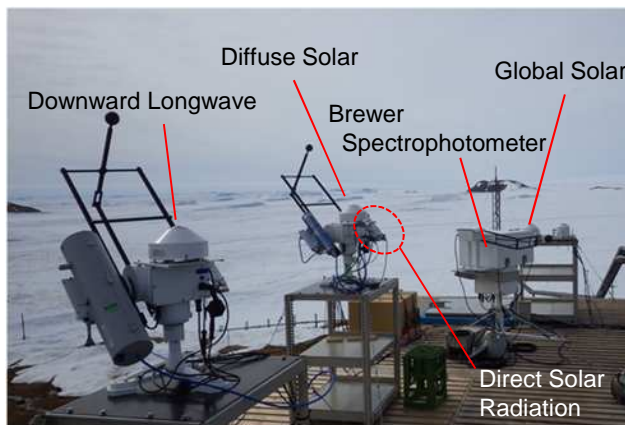


W. Az270 °



S. Az180 °

DESCRIPTION OF METEOROLOGICAL INSTRUMENTS



Upward Longwave

Reflected Solar



Dobson Spectrophotometer

BSRN STATION VIEWS

VIEW1



DESCRIPTION

Eastern View

Azimuth 90 degrees
Inclination ~ 5 degrees

Inclination of the tower is 5 degrees.

VIEW2



DESCRIPTION

Obstruction View

Azimuth 155-158 degrees
Inclination 6 degrees

Inclination of the radome top is 6 degrees.

BSRN STATION VIEWS

VIEW3



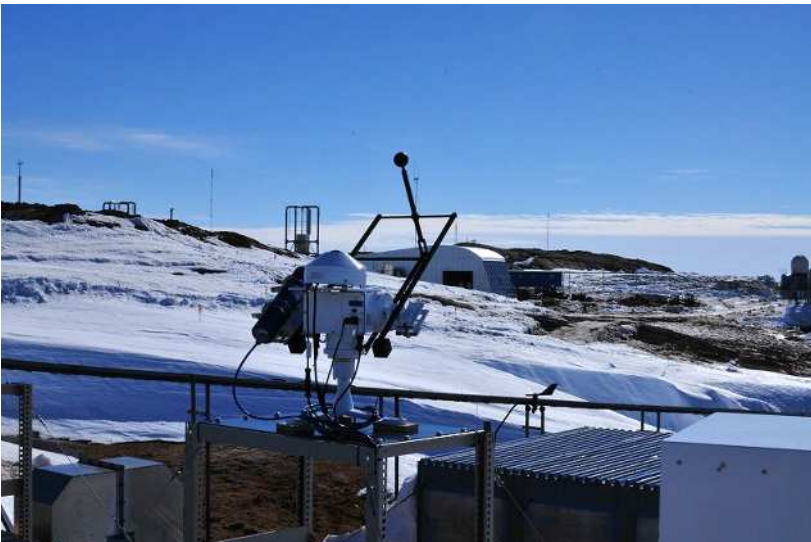
DESCRIPTION

Southern View

Azimuth 180 degrees
Inclination ~ 6 degrees

Inclination of the
antenna is 6 degrees.

VIEW4



DESCRIPTION

Western View

Azimuth 270 degrees
Inclination ~ 5 degrees

BSRN STATION VIEWS

VIEW5



DESCRIPTION

Northern View

Azimuth 360 degrees
Inclination ~ 2 degrees

VIEW6

DESCRIPTION

BSRN STATION VIEWS

Additional observation Programmes

- (a) GCOS Reference Upper Air Network (GRUAN): upper-air observation
- (b) GCOS Surface Network (GSN): surface observation
- (c) WMO-GAW programme: UV observation by the Brewer spectrophotometer
ozone observation by the Dobson spectrophotometer
ozone observation by ozonesondes

Calibration

All radiometers are calibrated every 5 years. Pyrheliometers and pyranometers are traceable to the WRR, and pyrgeometer is traceable to the World Infrared Standard Group (WISG). The trackers will be overhauled every 5 years by its manufacturer.