

BSRN STATION DESCRIPTION

STATION MANAGER

Office of Antarctic Observations,
Japan Meteorological Agency (JMA)

Address: Japan Meteorological Agency,
3-6-9 Toranomon, Minato-ku,
Tokyo 105-8431, JAPAN

Tel : +81-3-3434-9105

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

STATION LOCATION

Latitude : 69° 00.3 ' (69.005 deg.) S

Longitude : 39° 34.9 ' (39.581 deg.) E

Elevation : 29.1 m (MSL)

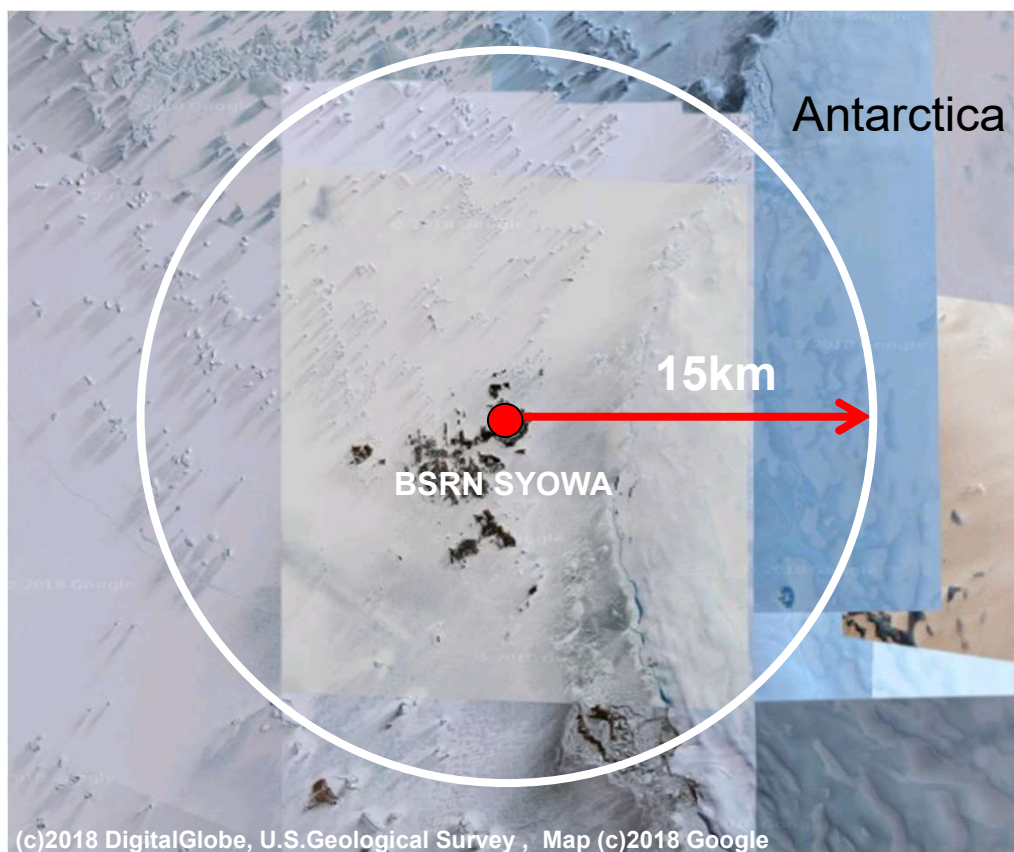
Local Time: GMT + 03

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.

1

BSRN SITE DESCRIPTION

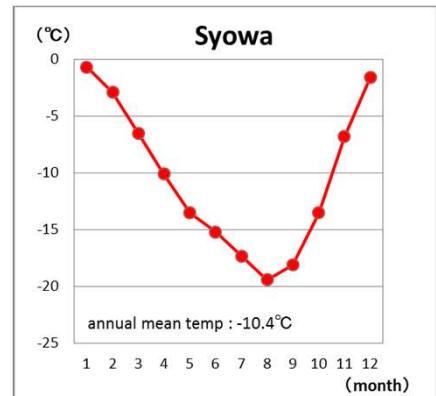
SITE DESCRIPTION



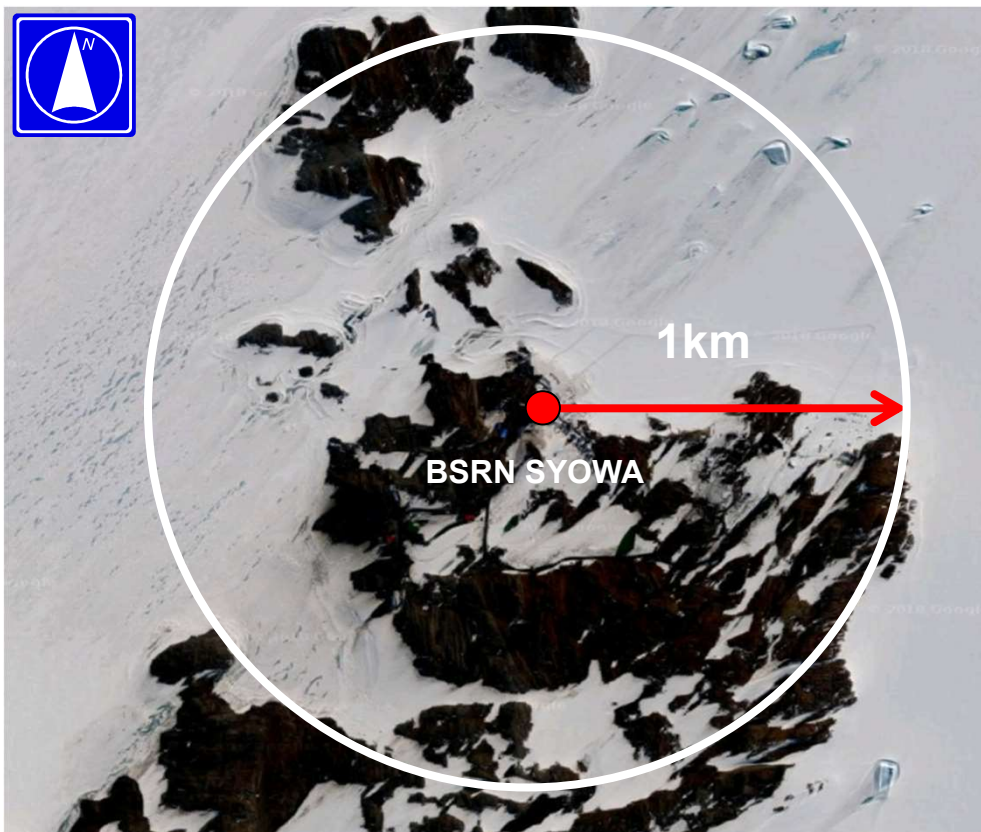
The observation site faces the sea ice and is covered with snow except for a short summer period.

CLIMATE

Köppen climate classification EF
(Ice cap climate)



DESCRIPTIVE MAP OF SURROUNDING 1 KM RADIUS



BSRN SITE DESCRIPTION

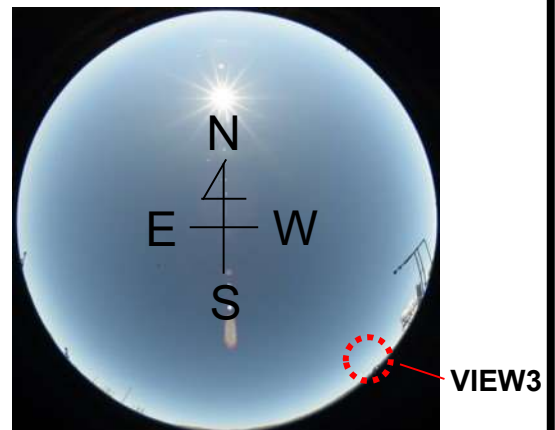
INSTRUMENT DESCRIPTION

- ①
Tracker(EKO STR-22,STR-22G)
Kipp & Zonen CHP1 Pyrheliometer
Kipp & Zonen CMP21 Pyranometer
(for Diffuse Solar Radiation)
Kipp & Zonen CGR4 Pyrgeometer
- ②
Kipp & Zonen CMP21 Pyranometer
(for Global Solar Radiation)
- ③
Kipp & Zonen CGR4 Pyrgeometer
(for Upward Longwave Radiation)
Kipp & Zonen CMP21 Pyranometer
(for Reflected Solar Radiation)
- ④
Beck Dobson Spectrophotometer
- ⑤
Kipp & Zonen MK II ,MK III
Brewer Spectrophotometer

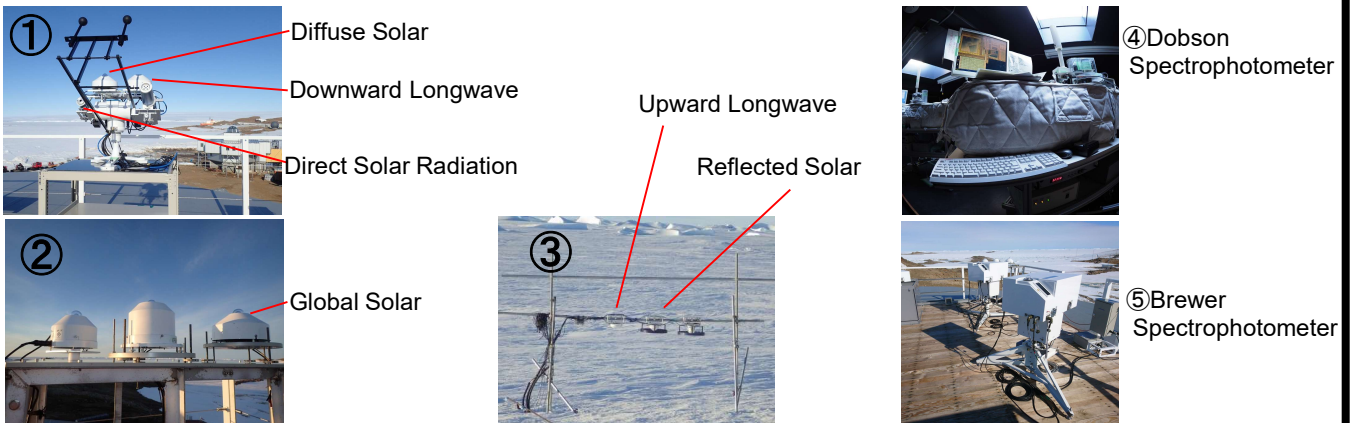
INSTRUMENT LOCATION MAP



HORIZON MAP OF CENTRAL INSTRUMENT

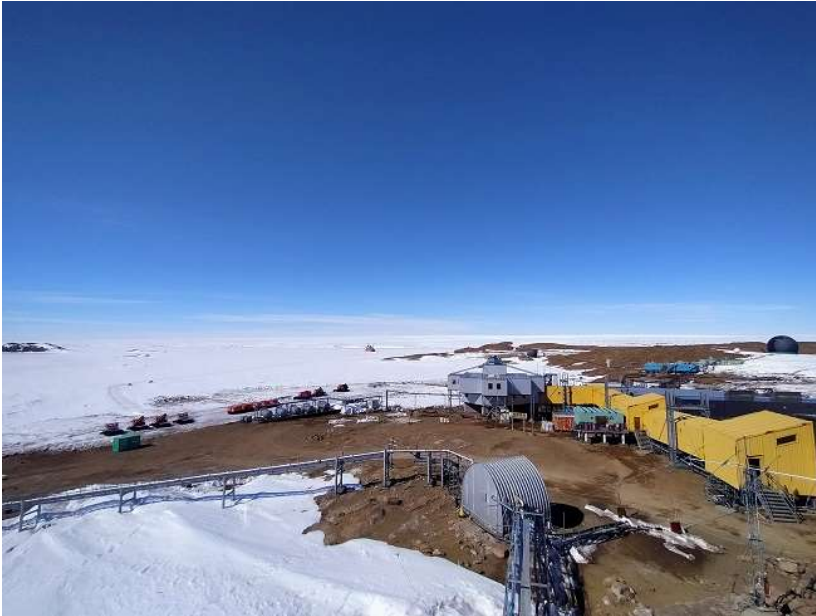


DESCRIPTION OF METEOROLOGICAL INSTRUMENTS



BSRN STATION VIEWS

VIEW1

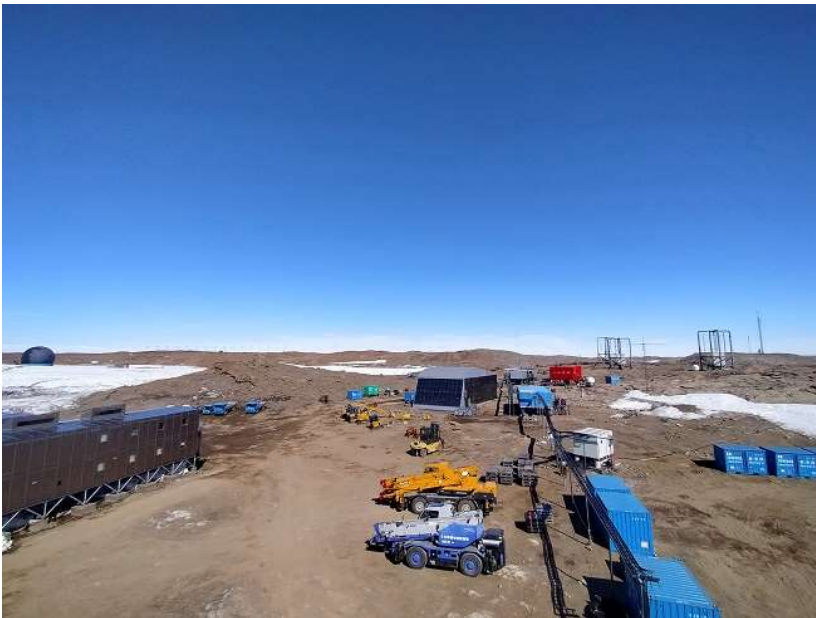


DESCRIPTION

Eastern View

Azimuth 90 degrees
Inclination ~2 degrees

VIEW2



DESCRIPTION

Southern View

Azimuth 180 degrees
Inclination ~3 degrees

BSRN STATION VIEWS

VIEW3

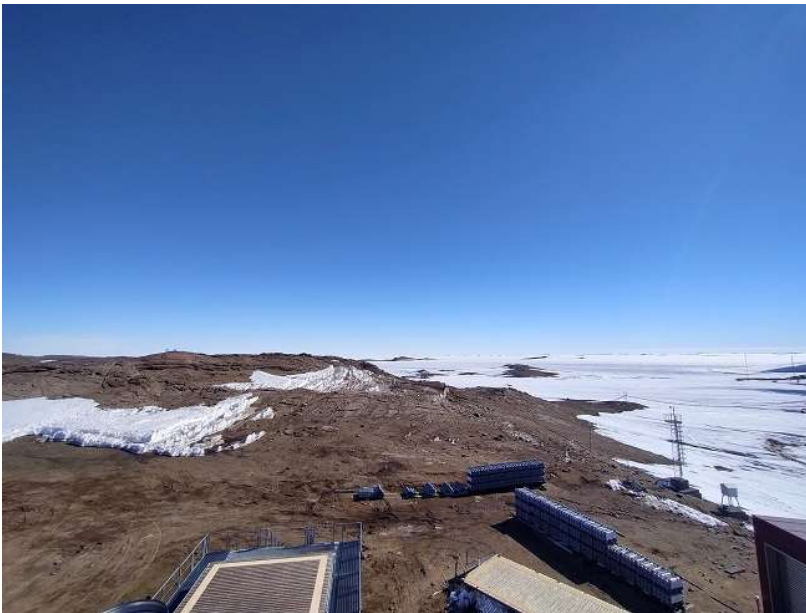


DESCRIPTION

Obstruction View

- ① Antenna
Azimuth 189 degrees
Inclination 10 degrees
- ② Antenna
Azimuth 239 degrees
Inclination 11 degrees

VIEW4



DESCRIPTION

Western View

Azimuth 270 degrees
Inclination ~0 degrees

BSRN STATION VIEWS

VIEW5



DESCRIPTION

Northern View

Azimuth 360 degrees
Inclination ~ 1 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.