Ferraz Programa Antártico Brasileiro

62°5′07.7″S 58°23′55.4″W

Type: Station

Operational period: Year-round

Location

Ferraz Antarctic station is located on Keller Peninsula, within the Admiralty Bay, King George Island.

Biodiversity and natural environment

Plants: Deschampsia antarctica, Colobanthus quitensis, Mosses, lichens, algae.

Animals: Skua, Larus dominicanus, Storm petrel, Sterna vitatta reproduce in neighboring areas; Pygoscelis papua, P. Antarctica, P. Adélie and Shag blue eye are visitors.

Seals: Fur seal, Weddell seal, Elephant seal, Crabeater seal and Leopard seal are frequent visitors.

Three small cirque glaciers and a small rock glacier are found on Flagstaf Mount and Tyrrell Ridge. Many seasonal small streams are found during the summer.

History and facilities

Ferraz station was established in 1984 and has been occupied continuously since 1986. On February 25, 2012 it suffered a fire; such an incident was without precedent in the history of 30 years of PROANTAR.

General research and databases

Emília project (High Atmosphere Physics), Jacyra project (Atmosphere studies), Helena project (Marine Biogeochemistry), Davis Mendes project (Metereology), José Roberto project (Marine biology), Juliano Cury project (Plant biology), Neusa project (Geospatial studies) , Paulo Câmara project (Molecular Biology), Pio project (Macro Algae), Rosa project (Medical Anthropology), Schaeffer project (Permafrost and criosols), Vivian project (Soil biology), Zarankin project (Anthropology).

CLIMATE	
Climate zone	Maritime Antarctica
Permafrost	Discontinuous
Mean annual wind speed (km/h)	21.6
Max wind speed (km/h)	
Dominant wind direction	
Sea Ice Break Up	
Snow free period	January, February, March
Total annual precipitation (mm)	
Precipitation type	Snow and Rain
Mean annual temperature (°C)	-2
Mean temperature in February (°C)	2.5
Mean temperature in July (°C)	-12
ENVIRONMENT	
Region	Antarctic Peninsula
Antarctic Environmental Domain: G – Antarctic Peninsula offshore island geologic	
Antarctic Conservation Biogeographic Region: 3 North-west Antarctic Peninsula	
Altitude of facility (m)	8
Type of surface facility built on	Ice-free ground
Long term monitoring	Yes
Waste management	Yes
Hazard(ous) management	No
Fuel spill response capability	Yes

FERRAZ

FACILITIES INFRASTRUCTURE	
Area under roof (m^2)	980
Area scientific laboratories (m^2)	100
Type of scientific laboratories: Biology, Chemistry, Geophysics, GIS	
Conference room (capacity)	
Logistic area (m^2)	16000
Number of beds	66
Showers	Yes
Laundry facilities	Yes
Power supply type	Fossil fuel
Power supply (V)	220
Power supply (hours per day)	24
Hydroponics facilities	No
Number of staff on station (peak/summer season)	15
Number of scientists on station (peak/summer season)	25
Number of staff on station (off peak/winter season)	15
Number of scientists on station (off peak/winter season)	0
Max number of personnel at a time (staff, scientists and others)	66
Specific device/Scientific equipment:	
Scientific services possible:	
Long-term monitoring/observations:	
MEDICAL FACILITIES	Yes
Area of medical facility (m^2)	48
Staff with basic medical training or doctor (Summer)	1
Staff with basic medical training or doctor (Winter)	1
Capability: Basic	
Equipment: Anaesthesia	
Distance to hospital (km)	
Closest emergency facility in Antarctica (km)	
Closest emergency facility external (km)	
Medical research capabilities	No
Medical screening requirements	Yes
VEHICLES AT FACILITY	
Sea transportation: Three boats, One launch	
Land transportation: Four quad bikes, Three snowmobiles, One pick-up, One Bulldozer	
WORKSHOP FACILITIES	
ICTS, Mechanical, Metal workshop, Wood workshop	
COMMUNICATIONS	
Computer, E-mail, Internet, Satellite phone, Telephone, VHF	
TRANSPORT AND FREIGHT	
Access	Air, Sea
Transport to facility: Helicopter, Ship	
Number of airstrips	0
Length (m) of longest runway	
Width (m) of longest runway	
Number of flight visits per year	0
Period of flight visits per year:	
Helipad	Yes
Number of ship visits per year	5
Period of ship visits per year: January, February, March, October, November, December	
Ship landing facilities: None	

Features in the facility area

Bluff, Coast, Fjord, Hill, Lake, Low artificial light pollution, Low humidity, Melt streams, Moraine, Permanent snowpatches, Plateau, Rock, Sea, Sea ice, Shoreline, Snow.

Main science disciplines

Anthropology, Atmospheric chemistry and physics, Climatology, Environmental sciences, Geodesy, Geomorphology, Geophysics, GIS, Mapping, Marine biology, Microbiology, Oceanography, Pollution, Sedimentology, Soil science, Terrestrial biology.

Photos: Programa Antártico Brasileiro

www.mar.mil.br/secirm/ingles/proantar.html