

Aboa

 Finnish Antarctic Research Program
at the Finnish Meteorological Institute

73°03'00"S 13°25'00"W

Type: Station

Operational period:
October–March

Location

Aboa station is located on the Basen nunatak in the Vestfjella Mountains, Dronning Maud Land.

Biodiversity and natural environment

Vegetation is very scarce in the Basen nunatak. Some common algae, lichens and mosses, as well as some micro-organisms living in extreme conditions are present. There are a few dozen Snow petrels (*Pagodroma nivea*), a few Wilson's storm petrels (*Oceanites oceanicus*) and South Polar skuas (*Catharacta MacCormick*) nesting on the Basen cliffs.

History and facilities

Aboa was built in 1988; the Swedish research station Wasa is located on the same nunatak, 200 metres from Aboa and the two stations together form the Nordenskiöld Base Camp. Aboa was enlarged and renovated during the summer 2002–2003. Today the research station comprises a main building, a generator building, an arch shelter, two separate research/accommodation containers, a container housing a doctor's surgery/accommodation, a container with a gravity laboratory, three 20 foot storage containers (food, spare parts, storeroom), an incinerator container, a garage and a container for climate research with a year-round weather station. Aboa can accommodate expeditions of up to 17 people and it is occupied during the Antarctic summer only.

General research and databases

Finland started active Antarctic research when the station Aboa was founded in 1988. Since then, Finland has organized twenty-three (2015) Antarctic research expeditions at the Finnish research station Aboa. In recent years research has focused on geodesy and glaciology, soil, bedrock and marine geology and geophysics, bi-polar meteorological and space physics, marine and structural technology, and oceanography and marine biology. Metadata is stored in the data system of the Joint Committee on Antarctic Data Management.

| CLIMATE | |
|---|------------------------|
| Climate zone | Inland Antarctica |
| Permafrost | Continuous |
| Mean annual wind speed (km/h) | |
| Max wind speed (km/h) | |
| Dominant wind direction | |
| Sea Ice Break Up | |
| Snow free period | |
| Total annual precipitation (mm) | |
| Precipitation type | |
| Mean annual temperature (°C) | -15.3 |
| Mean temperature in February (°C) | -5.2 |
| Mean temperature in July (°C) | -21.9 |
| ENVIRONMENT | |
| Region | Continental Antarctica |
| Antarctic Environmental Domain: K – Northern latitude ice shelves | |
| Antarctic Conservation Biogeographic Region: 6 Dronning Maud Land | |
| Altitude of facility (m) | 400 |
| Type of surface facility built on | |
| Long term monitoring | Yes |
| Waste management | Yes |
| Hazard(ous) management | Yes |
| Fuel spill response capability | Yes |



Features in the facility area

Nunatak.

Main science disciplines

Atmospheric chemistry and physics, Climate change, Climatology, Geodesy, Geology, Geophysics, Glaciology.



Photos: Finnish Antarctic Research Program

| FACILITIES INFRASTRUCTURE | |
|--|------------------------|
| Area under roof (m ²) | 200 |
| Area scientific laboratories (m ²) | 75 |
| Type of scientific laboratories: Gravity | |
| Conference room (capacity) | |
| Logistic area (m ²) | 200 |
| Number of beds | 17 |
| Showers | Yes |
| Laundry facilities | Yes |
| Power supply type | Fossil fuel, Renewable |
| Power supply (V) | 220 |
| Power supply (hours per day) | 24 |
| Hydroponics facilities | No |
| Number of staff on station (peak/summer season) | 5 |
| Number of scientists on station (peak/summer season) | 8 |
| Number of staff on station (off peak/winter season) | |
| Number of scientists on station (off peak/winter season) | |
| Max number of personnel at a time (staff, scientists and others) | 17 |
| Specific device/Scientific equipment: AWS, Seismometer, GPS | |
| Scientific services possible: | |
| Long-term monitoring/observations: | |
| MEDICAL FACILITIES | |
| Area of medical facility (m ²) | 24 |
| Staff with basic medical training or doctor (Summer) | |
| Staff with basic medical training or doctor (Winter) | |
| Capability: | |
| Equipment: | |
| Distance to hospital (km) | |
| Closest emergency facility in Antarctica (km) | |
| Closest emergency facility external (km) | |
| Medical research capabilities | YES |
| Medical screening requirements | Yes |
| VEHICLES AT FACILITY | |
| Sea transportation: | |
| Land transportation: Tracked and ATVs, one tractor, snowmobiles | |
| WORKSHOP FACILITIES | |
| Mechanical, Metal workshop, Wood workshop | |
| COMMUNICATIONS | |
| Computer, E-mail, Printer, Satellite phone, Telephone, VHF | |
| TRANSPORT AND FREIGHT | |
| Access | Air |
| Transport to facility: Airplane, Helicopter, Skidoo, Walking | |
| Number of airstrips | 0 |
| Length (m) of longest runway | |
| Width (m) of longest runway | |
| Number of flight visits per year | |
| Period of flight visits per year: | |
| Helipad | Yes |
| Number of ship visits per year | |
| Period of ship visits per year: | |
| Ship landing facilities: | |