

# Mountain Evening/ Vechernyaya

Belarus National Academy of Sciences

67°39'35"S 46°09'18"E

Type: Station

Operational period:  
December–March

## Location

East Antarctic, Enderby Land, Tala hills, Mountain Evening/  
Vechernyaya.

## Biodiversity and natural environment

Mountain Evening/Vechernyaya station is built on ice-free ground, Enderby Land, at 95m above sea level.

## History and facilities

Within the thirty-seven year period from 1955 to 1992, one hundred and two Belarusian specialists took part in Antarctic research as part of the Soviet Antarctic expeditions. Later, for the ten year period from 2006 to 2016 with logistics assistance of the Russian Federation, eight Belarusian Antarctic Expeditions (BAE) were organized. More than thirty Belarusian specialists conducted scientific research in the Antarctic within the BAE, in particular, at the field base of the Russian Antarctic Expedition (RAE) "Evening Mountain" (Eastern Antarctic, Enderby Land, Tala Hills) and, between 2007 and 2015, performed significant technical work in support of BAE activity. From December 2015 through January 2016, the first portion of the national research station, a three-section module for control, communication and navigation, was assembled in Antarctica.

CLIMATE	
Climate zone	Coastal Antarctica
Permafrost	Continuous
Mean annual wind speed (km/h)	
Max wind speed (km/h)	194
Dominant wind direction	SE
Sea Ice Break Up	January–March
Snow free period	November–April
Total annual precipitation (mm)	
Precipitation type	Snow
Mean annual temperature (°C)	
Mean temperature in February (°C)	-9.2
Mean temperature in July (°C)	
ENVIRONMENT	
Region	Continental Antarctica
Antarctic Environmental Domain: D – East Antarctic coastal geologic	
Antarctic Conservation Biogeographic Region: 5 Enderby Land	
Altitude of facility (m)	95
Type of surface facility built on	Ice-free ground
Long term monitoring	Yes
Waste management	Yes
Hazard(ous) management	Yes
Fuel spill response capability	Yes



## General research and databases

Scientific activity within the period 2007–2015 was conducted within six themes: complex ground-based and satellite monitoring of tropospheric aerosol, clouds and underlying surface, research of the state of ozonosphere and ultraviolet radiation, hydrometeorological and climatic research, development of radio engineering facilities for monitoring of the snow-ice cover, geophysical research, biodiversity of nearshore ecosystems and anthropogenic influence on the environment, influence of extreme production and natural factors on humans. Since 2016, the realization of the regular five-year stage of the national program for polar research "Monitoring of Earth's polar areas, creation of Belarusian Antarctic station and ensuring the activity of polar expeditions for 2016–2020 and for the period till 2025" began. To realize the goals of the scientific programmes a range of activity will be supported, these include: complex ground-based and satellite monitoring of the atmosphere and underlying surface, development of the optical model of atmospheric aerosol of the underlying surface of Enderby Land and adjacent territories, research on the influence of small gas components of atmosphere on seasonal variations of UV irradiation in the ground layer and water ecosystems of Enderby Land and adjacent territories, geophysical and geological research, complex research of biological resources and ecological monitoring of biotical components of Enderby Land of offshore zones, research of environmental change and climate of Enderby Land and adjacent territories under the influence of natural and anthropogenic factors, and scientific support of performance of obligations of the Republic of Belarus within the Environmental Protocol.

## Features in the facility area

Biological features, Bird colonies, Bluff, Clear air zone, Coast, Crevasse, Fauna, Hill, Ice cap or glacier, Ice tongue, Lake, Low humidity, Melt streams, Moraine, Mountain, Permanent snowpatches, Sea, Sea ice, Seal colonies, Snow.

## Main science disciplines

Atmospheric chemistry and physics, Climatology, Ecology, Environmental sciences, Geology, Geophysics, GIS, Isotopic chemistry, Limnology, Marine biology, Microbiology, Ozone study, Paleolimnology, Pollution, Sedimentology, Soil science, Terrestrial biology.



Photo: Haidashou

FACILITIES INFRASTRUCTURE	
Area under roof (m <sup>2</sup> )	108
Area scientific laboratories (m <sup>2</sup> )	21
Type of scientific laboratories: Biology	
Conference room (capacity)	10
Logistic area (m <sup>2</sup> )	15000
Number of beds	7
Showers	Yes
Laundry facilities	Yes
Power supply type	Fossil fuel, Renewable
Power supply (V)	60
Power supply (hours per day)	24
Hydroponics facilities	Yes
Number of staff on station (peak/summer season)	7
Number of scientists on station (peak/summer season)	4
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)	12
Specific device/Scientific equipment: Multi-wave length scanning polarization sun/sky radiometer CE-318N, Spectral albedometer AS-A, Multi-wave length polarization Raman LIDAR, Filter ozonometer M124-M designed to measure TOA in the atmosphere employing "direct sun" (DS) and "zenith" (Z)	
Scientific services possible: Columnar optical parameters of atmospheric aerosol. Data are presented in AERONET database. Spectra of diffuse reflection coefficient (albedo). Profiles of the optical and microstructure parameters of aerosol and cloud particles.	
Long-term monitoring/observations: Start of observations: radiometer, since December, 2008; albedometer, since December 2011; LIDAR, since December, 2012. Filter ozonometer M124-M from 2006/2007. Multi-functional UV Spectroradiometer PION-UV-II from 2007/2008. Autonomous remote system PION-FN from 2015/2016. Semiconductor gas sensor. PION-SO 2007/2008, 2015/2016. Image spectrograph MARS-B 2013/2014.	
MEDICAL FACILITIES	
Area of medical facility (m <sup>2</sup> )	18
Staff with basic medical training or doctor (Summer)	1
Staff with basic medical training or doctor (Winter)	
Capability: Basic, Surgery	
Equipment: Anaesthesia, Diagnostic X-ray, Microbiology	
Distance to hospital (km)	
Closest emergency facility in Antarctica (km)	1400
Closest emergency facility external (km)	8000
Medical research capabilities	No
Medical screening requirements	Yes
VEHICLES AT FACILITY	
Sea transportation:	
Land transportation: Three snowmobiles, one snow truck, one truck	
WORKSHOP FACILITIES	
Metal workshop, Wood workshop	
COMMUNICATIONS	
Computer, E-mail, Fax, Printer, Satellite phone, Scanner	
TRANSPORT AND FREIGHT	
Access	Air, Sea
Transport to facility: 4WD, Airplane, Helicopter, Ship, Skidoo, Truck	
Number of airstrips	
Length (m) of longest runway	
Width (m) of longest runway	
Number of flight visits per year	4
Period of flight visits per year: January, February, November, December	
Helipad	Yes
Number of ship visits per year	2
Period of ship visits per year: January, February, March, April, November, December	
Ship landing facilities: None	