

GROUND STATION PANSKA VES

Panská Ves 26, Dubá
47141 Czech Republic
tel.: +420 487 870 273
e-mail: jsi@ufa.cas.cz

GPS: 50.5285°, 14.5695° ASL: 315 m



INSTITUTE OF ATMOSPHERIC PHYSICS
ASCR

Satellite Control and Telemetry station Panska Ves is a part of the ionospheric observatory of the Institute of Atmospheric Physics ASCR and is located about 60km north of Prague. It was founded in 1967 for the INTERCOSMOS program. It participated in a wide range of space projects such as ACTIVE, APEX and INTERBALL. Panska Ves was the only tele-command and telemetry (TC/TM) station for the five Czech satellites MAGION and for the satellite MIMOSA. The station is continuously upgraded and equipped with the state of art technology. Station is connected to the Deep Space network and currently receives data from CLUSTER (ESA) and RBSP (NASA) satellites. Observatory disposes two operational buildings and large field for antennas and other equipment. There are two 10m dishes and other antennas covering UHF, S and X telemetry band. Demodulators are based on the SDR (Software Defined Radio). Upgrade to other bands is possible.

Antenna overview

Antenna	Frequency	Gain	Polarization	FOV (-3dB)	Azimuth sweep rate	Elevation sweep rate
2xDish 10m	2.21-2.3GHz	45.0dBi	RCP/LCP	1.0deg	0.3 deg/s	0.3 deg/s
Dish 6.2m	2.21-2.3GHz	40.5dBi	RCP/LCP	1.6deg	1.0deg/s	1.0deg/s
	8.2-8.45GHz	51.7dBi	RCP/LCP	0.43deg		
Dish 4.2m	1.7-1.72GHz	34.5dBi	RCP/LCP	2.5deg	6.0 deg/s	6.0 deg/s
	2.21-2.3GHz	36.0dBi	RCP/LCP	2.3deg		
	8.2-8.45GHz	48.3dBi	RCP/LCP	0.6deg		
Dish 3m	2.21-2.3GHz	34.0dBi	RCP/LCP	3.2deg	6.0 deg/s	4.5 deg/s
Helical 4x	430-450MHz	20.0dBi	RCP	18deg	11.2 deg/s	11.2 deg/s

The Panska Ves ground station is small, efficient and flexible ground segment suitable mainly for scientific and low-cost projects. Station offers its free capacity for short or long term satellite data reception.



contact: Dr. Jiří Šimůnek, jsi@ufa.cas.cz
Dr. Jaroslav Chum, jachu@ufa.cas.cz