

Polar Orbiting Meteorological Satellite Systems

STATUS OF RUSSIAN POLAR ORBITING METEOROLOGICAL SATELLITE SYSTEMS

Summary and purpose of the WP

Two satellites of METEOR-2 and -3 series are currently operated in circular orbit inclined at approximately 82° . Satellite information of medium resolution provided by Okean-O satellite is used for meteorological and hydrological applications.

Action proposed: no action required.

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Two satellites of METEOR-2 and –3 series are currently operated in circular orbit inclined at approximately 82° . These satellites are operated far beyond lifetimes and their capabilities are limited. TV images of MR-900 scanning instrument (resolution 2 km, swath width 2600 km, spectral band 0.5-0.7 μm) are directly disseminated from these satellites in APT mode (137 MHz) as well as from RESURS-01 N4 satellite.

Satellite series and number	Launch date	APT radio signal characteristics			
		Carrier frequency, MHz	Modulation	Allocated bandwidth, kHz	Radio transmitter output power, W
METEOR-2 N21*	31/08/1991	137.3	FM	100	5
METEOR-3 N5	15/08/1991	137.85	FM	100	5
RESURS-01 N4**	10/07/1998	137.75	FM	100	5

* Meteor-2 N21 limited APT transmission of visible images.

** Resurs-01 N4 is temporarily out of operations.

Meteorological payload on oceanographic satellites

Additional satellite information useful for meteorological and hydrological applications is provided by Okean-O satellite (launched 17/07/99). Core payload includes, in particular, multizonal scanning devices of medium resolution (MSU-SK 150 m at 600 km swath band).