

Polar Orbiting Meteorological Satellite Systems

STATUS OF RUSSIAN POLAR ORBITING METEOROLOGICAL SATELLITE SYSTEM

Summary and purpose of the WP

The first polar orbiting satellite Meteor-3M N1 of the new series of meteorological satellites continues its routine operation on circular sun-synchronous morning orbit.

Action proposed: no action required.

STATUS OF RUSSIAN POLAR ORBITING METEOROLOGICAL SATELLITE SYSTEM

The first polar orbiting satellite Meteor-3M N1 of the new series of meteorological satellites was launched on 10 December 2001. METEOR-3M N1 continues its routine operation at circular sun-synchronous orbit inclined at 99.6 degrees with 09:15 a.m. ascending node (morning orbit).

The payload of Meteor-3M N1 includes the scanning instrument MR-2000M (0.5-0.8 μm), scanning IR radiometer KLIMAT (10.5-12.5 μm), MW scanning radiometer MIVZA (5 channels in the range 20-94 GHz), MW conical scanning radiometer MTVZA (20 channels in the range 18.7-183.3 GHz), high resolution scanning instrument MSU-E (3 channels in the range 0.5-0.9 μm with spatial resolution 38 m), UV – band instrument SFM-2, complex of heliogeophysical instruments (KGI-4C, MSGI-5EI) and sensor SAGE – III (USA, NASA).

Due to technical problems with devices (MIVZA and MTVZA) and on-board transmitter (466 MHz), at present only MSU-E, SAGE – III, KGI-4C, MSGI-5EI data are available.

Meteor-3M N1 data direct broadcast in raw format is carried out in 1.7 and 8.2 GHz bands. Data acquisition, processing, derivation and dissemination of products are being performed on routine basis by Roshydromet centres.