

Polar Orbiting Meteorological Satellite Systems

STATUS OF METEOR POLAR ORBITING METEOROLOGICAL SYSTEMS

Summary and purpose of document

This paper presents the current status of METEOR polar orbiting meteorological systems as well as meteorological payload on board of other Russian satellites

Action

No action required

Status of METEOR polar orbiting meteorological systems

Two satellites of METEOR-2 and –3 series are currently operated in circular orbit inclined at approximately 82°. As far as these satellite are operated beyond their lifetime their capabilities are limited. TV imagery data from MR-900 scanning instrument are only available in direct transmission to local receiving stations APPI at 137 MHz frequency band (APT mode).

Meteorological payload on RESURS-01 N4 satellite

In order to complement existing METEOR meteorological satellite measurements the similar imager MR-900 was installed on board of RESURS-01 N4 satellite (launched on 10/07/98). The data are transmitted in APT mode.

Besides, scanning radiometer SCARAB and ISP-2 sensor for radiance budget measurements are as well installed on board of RESURS-01 N4. Due to the failure of the transmitter transmission of the data from these instruments is terminated since April 1999.

Payload on OKEAN-O satellite

Additional satellite information useful for meteorological and hydrological applications is supposed to be provided by joint Russian-Ukrainian satellite OKEAN-O (launched 17/07/99, flight tests). Along with multispectral scanning devices MSU-E and MSU-SK of high and medium resolution (similar to those installed on-board of RESURS-01 satellites) the core payload includes side-looking radar RLSBO as well as ensemble of tracking and scanning MW radiometer.