

## **FY-1D Meteorological Satellite Ready for Launch**

### Summary and purpose of paper

This paper briefs on the characteristics and launch time of satellite FY-1D.

## FY-1D Meteorological Satellite Ready for Launch

The fourth one in the FY-1 polar orbiting meteorological satellite series, FY-1D is similar with FY-1C in terms of orbital characteristics and mission. Some improvement is envisaged based on the FY-1C experience.

### Major Orbital Parameters:

Table 1. Major Orbital Parameters of FY-1D

Orbit altitude	870 km
Inclination	98.85 <sup>0</sup>
Eccentricity	Less than 0.005
Orbit period	102.3 minutes

### Primary Instrument

The Multi-channel Visible and IR Scan Radiometer (MVISR) is the primary sensor of FY-1D, the characteristics of which are given in table 1.

Table 2. Wavelengths of the channels and primary use of MVISR

Channel	Wavelength ( $\mu\text{m}$ )	Primary Use
1	0.58-0.68	Daytime cloud, ice and snow, vegetation
2	0.84-0.89	Daytime cloud, vegetation, water vapor
3	3.55-3.95	Heat source, night cloud
4	103.-11.3	SST, day/night cloud
5	11.5-12.5	SST, day/night cloud
6	1.58-1.64	Soil moisture, ice/snow distinguishing
7	0.43-0.48	Ocean color
8	0.48-0.53	Ocean color
9	0.53-0.58	Ocean color
10	0.90-0.965	Water vapor

### Launch Time

FY-1D has finished with various mandatory tests by June 2001 before leaving the factory. It should have been transported to Taiyuan Launch Center for launch in the autumn of 2001. In view of the good state of FY-1C satellite currently in the orbit, the decision was made to delay the delivery of FY-1D in order to exploit the usefulness of FY-1C to the full extent. Hence the launch of FY-1D is postponed until the first half of 2002, depending on the state of FY-1C. The FY-1D will also broadcast CHRPT worldwide.

