

# The MVISR Sensor of the FY-1C Satellite

The MVISR (Multichannel Visible and IR Scan Radiometer) instrument of FY-1C is a scanning imaging radiometer similar to AVHRR on the NOAA satellites, but with 10 channels—4 channels in the visible range, 4 in the near-IR range, and 2 in the IR range.

Spectral properties of these channels are given in the following table:

<b>MVISR Channel</b>	<b>Wavelength</b>	<b>Spectrum</b>	<b>Unit of Measure</b>	<b>Ground Resolution</b>	<b>Primary Use</b>
mvisr_ch1	0.58-0.68 $\mu$ m	visible	albedo/reflectance (%)	1.1km	Daytime cloud, ice, and snow, vegetation
mvisr_ch2	0.84-0.89 $\mu$ m	near IR	albedo/reflectance (%)	1.1km	Daytime cloud, vegetation, water
mvisr_ch3	3.55-3.95 $\mu$ m	near IR	temperature (°)	1.1km	Heat source, night cloud
mvisr_ch4	10.3-11.3 $\mu$ m	thermal IR	temperature (°)	1.1km	SST, day/night cloud
mvisr_ch5	11.5-12.5 $\mu$ m	thermal IR	temperature (°)	1.1km	SST, day/night cloud
mvisr_ch6	1.58-1.64 $\mu$ m	near IR	albedo/reflectance (%)	1.1km	Soil humidity, ice/snow distinguishing
mvisr_ch7	0.43-0.48 $\mu$ m	visible	albedo/reflectance (%)	1.1km	Ocean color
mvisr_ch8	0.48-0.53 $\mu$ m	visible	albedo/reflectance (%)	1.1km	Ocean color
mvisr_ch9	0.53-0.58 $\mu$ m	visible	albedo/reflectance (%)	1.1km	Ocean Color
mvisr_ch10	0.90-0.965 $\mu$ m	near IR	albedo/reflectance (%)	1.1km	Water Vapor