TM band 5, sensitive to mid-IR light from 1.55 to 1.75 μm, was selected to provide information regarding crop water content and soil moisture conditions. TM band 7 (2.08 to 2.35 μm) is important for discrimination of rock formations. TM band 6, a thermal infrared band sensitive to radiation from 10.40 to 12.50 μm, is useful for investigation of a variety of thermally evident events.

Landsat imagery is directly received through a global network of earth receiving stations. When the Landsat satellite is within line-of-sight of a receiving station, image data are transmitted in real time to that station. Landsat TM or MSS imagery can also be relayed to EOSAT at the Earth Resources Observation System (EROS) Data Center in Sioux Falls, South Dakota, using the Tracking Data Relay Satellite System (TDRS) communications relay satellite and RCA's domestic communications satellite (DOMSAT).

Soyuzkarta

Soyuzkarta offers satellite imagery acquired using KFA-1000 and MK-4 cameras. Table 3 outlines the characteristics of the two camera systems. Both have a reported spatial resolution of close to 5 m. The imagery is recorded onto photographic film. Digital images are produced by digitizing the first-generation films. Both systems provide 60% north-south overlap between scenes, permitting stereoscopic viewing of the imagery.

Table 3

Characteristics of the Soyuzkarta Sensors

	KFA-1000	MK-4
Number of channels	1	4
Focal length	1000 mm	300 mm
Frame format	300 × 300 mm	180 × 180 mm
Original scale*	1:220 000 to 1:280 000	1:6 500 000 to 1:1 500 000
Longitudinal overlap	60%	60%
Width of survey band	120 km or more (2 cameras)	120 – 270 km
Spectral bands	0.560 – 0.670 μm 0.760 – 0.810 μm	0.635 – 0.690 μm 0.810 – 0.900 μm 0.515 – 0.565 μm 0.460 – 0.505 μm 0.580 – 0.800 μm 0.400 – 0.700 μm
Spatial resolution	5 m	6 m

* Depending upon altitude of survey.