

Resolution: Spatial resolution is the ability to discriminate between two objects on the ground. A spatial resolution capability of 5 meters means that objects closer together than 5 meters will appear to the sensor as one. Normally, an increase in resolution implies a loss in the area viewed or field of view. Resolution may also be spectral; that is the ability to discriminate between specific wavelengths or between objects at slightly different temperatures, or it may be in velocity. The resolution of a sensor is the smallest interval capable of being detected by that sensor.

Satellite: A satellite is an object which is held in orbit about another object due to gravitational attraction between the two bodies. Satellites may be man made or natural. For example, the moon is a natural satellite of the earth.

Sensor: A device that can detect electromagnetic, acoustic or other energy emitted or reflected by an object at a distance.

Sun-Synchronous Orbit: An orbit whose plane remains at a fixed angle with respect to the sun throughout the earth's annual revolution about the sun.

Swath width: The distance from one side to the other on the earth's surface that a specific sensor is able to survey at one time.

Surveillance: An activity that involves maintaining a close watch over a specific area for the purposes of determining what activities are taking place within that area. Surveillance can be continuous or periodic depending on the type of activities of interest. Closer examination triggered as a result of surveillance would be defined as reconnaissance.

Synthetic Aperture Radar: A radar designed to enhance the resolution in the across track direction of the radar motion. It achieves this by storing the returned data for a period of time and through processing, synthesizes a very long antenna. Airborne and spaceborne SAR is used primarily for ground imaging.

Tracking: Once an object has been detected, tracking involves monitoring the subsequent course of the object. Tracking may be continuous, in which case the sensor must maintain constant contact, or it may be periodic, with the sensor revisiting the object to be tracked with sufficient frequency to be able to maintain a track of its movement.

Verification: The process of determining the degree to which parties to an agreement are complying with provisions of the agreement.