

4. In case of sideways-looking synthetic aperture radar, a ground resolution no better than 300 centimeters (3 meters). Weather and light independent instrument. In environmental data collection mode, such a SAR would be most useful for:
- Landscape topography change detection: if used in interferometric mode it can detect minute changes in landscape topography which has important application in monitoring of volcanoes, landslides, earthquake displacements and urban subsidence;
 - Mountain hazard management and disaster mapping (i.e., for glacial flood-burst events, monitoring of glacial advances and retreats, measurement of snow packs and ice sheets, landslide/avalanche inventory mapping);
 - Surface hydrological states and processes: boundaries of flooded rivers and water basins; flood effects mapping and monitoring; coastal-area (hurricane) damage extent-mapping; control of sea-surface pollution caused by damaged oil wells and oil terminals;
 - Deforestation: fire-burn measurement and mapping, illegal logging surveillance; determining boundaries of fields and forests;
 - Mapping of fields and ploughed soils: state of crops; assessment of soil moisture content; desertification of arable soils.

In accordance with the treaty, image data are shared between the observing and the observed state. Copies are also sent to imagery depositories in Ottawa and Budapest, where they are available to any treaty signatory willing to pay the reproduction costs.⁹ The use of the thermal IR imaging capability is not permitted during the IOC phase, unless otherwise mutually agreed between the observing and the observed parties. The treaty also establishes a procedure for the introduction of additional categories and improvements to the capabilities of existing sensors on unanimous agreement by states-parties

⁹ Michael R. Little, "US Open Skies." Air Forces Monthly Issue 181 (April 2003), p. 53.