The JPL Tropical Cyclone Information System (TCIS) is a Web portal (http://tropicalcyclone.jpl.nasa.gov) that provides researchers with an extensive set of observed hurricane parameters together with large-scale and convection-resolving model outputs. It provides a comprehensive set of high-resolution satellite (see figure), airborne, and in-situ observations in both image and data formats. Large-scale datasets depict the surrounding environmental parameters such as SST (Sea Surface Temperature) and aerosol loading. Model outputs and analysis tools are provided to evaluate model performance and compare observations from different platforms.

The system pertains to the thermodynamic and microphysical structure of the storm, the air-sea interaction processes, and the larger-scale environment as depicted by ocean heat content and the aerosol loading of the environment.

Currently, the TCIS is populated with satellite observations of all tropical cyclones observed globally during 2005. There is a plan to extend the database both forward in time till present as well as backward to 1998. The portal is powered by a MySQL database and an Apache/Tomcat Web server on a Linux system. The interactive graphic user interface is provided by Google Map.