

Cassini VESPA

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Abstract

NASA's Cassini Mission has gathered thirteen years of data exploring Saturn and its moons, rings, magnetosphere, and atmosphere. As the mission comes to a close, scientists need to ensure that the information they have assembled during this extraordinary mission is easily accessible to new researchers. Each of Cassini's twelve instruments can take observations in different modes and with different sensors. The instrument teams store their data in disparate systems and formats, and process them to different levels. Creating a single, intuitive interface for new scientists to search across all of this data is a daunting task. The VESPA (Virtual European Solar and Planetary Access) framework offers a potential solution for this challenge. VESPA provides a standard data model, access protocol, and registration service so that any team can turn their dataset into a service provider. The Cassini archive team has created a prototype with VESPA to evaluate whether the framework is a solution for this flagship mission. The resulting system allows users to query data from any Cassini instrument in one place, along with data from other missions, other agencies, ground-based observations, and laboratory results. This poster will describe the Cassini experience setting up the VESPA server, importing various types of Cassini data, and gathering feedback from the science community.