

SPACE EXPLORATION SYMPOSIUM (A3)
Solar System Exploration (6)

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THE CONTINUING EXPLORATION OF SATURN BY CASSINI

Abstract

The Cassini mission to explore the Saturn system is a joint international endeavor among NASA, the European Space Agency, and the Italian Space Agency. The original mission as agreed to and funded by the partner agencies was for four years of active science data collection from in orbit about Saturn, which began on July 1, 2004. When this part of the mission was completed and the spacecraft was still in an excellent state of health with much valuable science still remaining to be accomplished, a mission extension of 27 months was approved. This first extension is now more than half completed and a proposal is being developed for a further extension with one of the primary science goals being the observation and study of seasonal change at Saturn as it moves into summer in its northern hemisphere for the first time since Cassini arrived. This paper will describe highlights of the mission to date, summarize the current spacecraft health and status of its consumables, and give an overview of what is planned for further exploration of the Saturn system.