

# CASSINI MAGNETIC FIELD OBSERVATIONS OF SATURN'S INTERNAL PLANETARY MAGNETIC FIELD

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## Abstract

Initial observations of magnetic field data from the dual technique Cassini magnetometer instrument at Saturn confirms the remarkable axial symmetry of the internal planetary field which shows that very little if any secular change has occurred since the Pioneer and Voyager flybys some 23 years ago. All observations to date arise from low invariant magnetic latitudes. A clear 10.5 hour periodicity is observed in the magnetic field observations in the distant field which points to the possibility of an asymmetry in the high latitude internal planetary field. The possibility of using these observations to aid in constraining the rotation rate of the planet will be discussed.

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