



On the location of the Io Plasma torus: Voyager 1 observations

Martin Volwerk

Austrian Academy of Sciences, IWF Graz, Graz, Austria (martin.volwerk@oeaw.ac.at)

The Voyager 1 outbound ultraviolet observations of the Io plasma torus are used to determine the location of the ansae, to obtain a third viewing angle of this structure in the Jovian magnetosphere. At an angle of -114° with respect to the Sun-Jupiter line, or a Jovian local time of 0430 LT, the Voyager 1 data deliver a distance of 5.74 ± 0.10 for the approaching and 5.83 ± 0.15 for the receding ansa. Various periodicities in the radial distance, brightness and width of the ansae are seen with respect to system III longitude and Io phase angle. The torus ribbon feature does not appear in all ansa scans.