

Nested draped magnetic fields: The RPC-MAG view of Rosetta's dayside excursion at comet 67P/Churyumov-Gerasimenko

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The Rosetta Plasma Consortium magnetometer measurements of during the dayside excursion (22 September - 11 October 2015) are used to investigate the large scale structure of the magnetic field. It is found that during the outbound leg of the excursion the cone angle of the magnetic field changed clearly from tailward to sunward. During the inbound leg Rosetta moved from this sunward pointed region to a tailward pointed region, which did not exist during the outbound leg. With the slow velocity of Rosetta, this means that this region moves over the spacecraft. Later, closer to the comet the direction changes again to sunward directed field. These measurements show the existence and development of so-called nested draping around comet 67P/Churyumov-Gerasimenko.