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New CASSIOPE/e-POP Science Data Products in the Swarm Mission Data System

Since becoming part of ESA's Swarm Constellation, significant work has been done to bring the data products, production methods, and data access of the CASSIOPE/e-POP mission data in line with the rest of the Swarm mission. In this talk, we present an overview of recent data product enhancements that are of (potential) interest to the DASP community.

Principal among these is the update to the e-POP Data Explorer (eDEX): a filtering and searching tool for retrieving e-POP data products. Previously a desktop application, a new version is available online at <https://edex.phys.ucalgary.ca>

The insights gained from the on-orbit science operation have informed the redesign of several previously available data products and their improved readability and ease of use. Ongoing updates at the CASSIOPE Mission Operations Centre are providing higher accuracy position and attitude information from the entire CASSIOPE/e-POP mission. New, higher-accuracy science data products are being made available as products in line with their Swarm equivalents, as existing mission data are being reprocessed with the new position and attitude information.

The range of available new higher-level e-POP science data products from the different e-POP instruments include electron density profiles (based on GPS occultation), vertical total electron counts, and recalibrated magnetic field (MGF) data.

CASSIOPE; Data; Ephemeris;