



Cluster Inner Magnetosphere Campaign: Review of Aims and Results

Michael Balikhin

University of Sheffield, United Kingdom (m.balikhin@googlemail.com)

The goal of the Cluster Inner Magnetosphere Campaign was to study waves in the inner magnetosphere and their effects on the process of particle energisation and loss in the outer radiation belt. This program of observations took place between July and October 2013. During this period, Cluster employed a "100 km formation" which resulted in intersatellite separations of around 30 km for the pair C3 and C4 with C1 typically 4-400 km distant. Cluster 2 was situated around 5000 km from the other 3 satellites.

The main observations were targeted at the plasma wave environment using specially defined modes of operation for Cluster Wave Experiment. The results of this campaign related to equatorial magnetosonic waves, chorus, lightning whistlers and other observed waves are presented. The whole Cluster team contributed to these results.