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Methods developed to identify and remove spacecraft generated magnetic fields from Venus Express magnetometer data

S. Pope (1), T. Zhang (2), M. Balikhin (1), M. Delva (2), L. Hvizdo (3), K. Kudela (3), H. Alleyne (1)

(1) Space Systems Group, Department of Automatic Control and Systems Engineering, University of Sheffield, UK, (2) Space Research Institute, Austrian Academy of Sciences, 8042 Graz, Austria, (3) Institute of Experimental Physics, Slovak Academy of Sciences, Kosice, Slovakia (s.a.pope@sheffield.ac.uk)

It is a challenging problem to make accurate in situ measurements of the local magnetic field vector from a non-magnetically clean spacecraft using a short boom. It will be shown how methods developed for the Venus Express magnetometer experiment using two point measurements, can be used to identify spacecraft generated events in magnetic field data. The types of interference identified and the application of techniques including fuzzy logic, pattern recognition and nonlinear identification to the correction of spacecraft contributions in the measured field vector will be presented.