An automated approach to the removal of spacecraft generated magnetic interference from Venus Express magnetic field data

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It is extremely important to have magnetometer experiments on planetary spacecraft, in particular to study the interaction between a planet and the solar wind. In general this would require a magnetically clean spacecraft. However for some planetary missions this requirement cannot be fulfilled for a number of reasons, such as limited resources. As a consequence any magnetic field measurements made will contain interference from the spacecraft. This is the case with Venus Express and an automated method that allows the natural magnetic field to be distinguished from the spacecraft induced interference using two point measurements will be presented.