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

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Magnetometer experiments on planetary spacecraft are tremendously important, in particular to study the interaction between a particular planet and the solar wind. In general this would require a magnetically clean spacecraft. However for some planetary missions this requirement cannot be full filled for a number of reasons e.g. resources. We present a method based on Neural Networks and two point measurements that allows the natural magnetic field to be distinguished from the spacecraft induced interference. This method will be applied to the data from the Venus Express Spacecraft that is going to reach Venus later this year.