



## **A Planetary MapServer Prototype for Footprint and Image Data Delivery**

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We will demonstrate techniques to exemplarily deliver image and footprint data of the two instruments HRSC/SRC and OMEGA onboard ESA's Mars Express Orbiter. The aim here is to use open source software and comply to standards defined by the Open Geospatial Consortium (OGC). There are two interesting services defined by the OGC which are well suited for a prototype HRSC/OMEGA data delivery and application system:

The Web Feature Service (WFS) defines an interface for specifying requests for retrieving geographic features as vector data across the web. We will be evaluating this service for delivering footprints (geometric outlines of image data projected on the ground) of HRSC, SRC and OMEGA data combined with additional metadata.

The Web Map Service (WMS) interface standard provides a simple HTTP interface for requesting geo-registered map images (returned as JPEG, PNG, etc) from geospatial databases. This service is evaluated for distributing the HRSC and SRC image data themselves.

We describe the processes and methods for creating geodatabases of remote sensing footprint data, the creation of a global mosaic of image data and their delivery using open source software. As many applications on the market are equipped with interfaces to OGC's Web Services (OWS), plenty of tools are already available that can be applied to the data. By using open source software and well defined standards, we can focus our efforts on providing data instead focussing on developing and maintaining software.