



PRoVisG - Planetary Robotics Vision Ground Processing

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D3.3 Robotics Interface

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Lead contractor for this deliverable AU

Dissemination level: Restricted to a group specified by the consortium (including the Commission Services)

EXECUTIVE SUMMARY

The PRoVisG research project aims to develop a framework for planetary robotic vision processing bringing together the European space community. Through the better processing and visualisation of data products from robotic missions, reductions in the operational cost and increases in data output can be realised. The project also aims to increase public awareness and provide procedures to effectively distribute mission data and information to the scientific community and general public.

PRoVisG builds upon images (two- and three dimensional data obtained by vision sensors) taken on or close to the surface of planetary bodies. It intends to provide generic tools for generating 3D data products from this image data for the use in mission scenarios, both for operations and science use.

This document summarizes the description of current and future possible vision sensors used in planetary environment, seen from the processing point of view. It gives information on how to access the (processing - relevant) key parameters of the images and meta data involved, using a survey performed during Work Package 2.

Based on current available and used standards inside the planetary community an interface for (meta-) data exchange inside and outside PRoVisG is established and defined.

The second part of the document deals with 3D data structures and identifies suitable 3D data representation approaches inside PRoVisG.

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