



1 Introduction

1.1 Purpose and Scope

The purpose of this EAICD (Experimenter to (Science) Archive Interface Control Document) is two fold. First it provides users of the Rosetta Plasma Consortium Ion Composition Analyzer (RPC-ICA) instrument with detailed description of the product and a description of how it was generated, including data sources and destinations. Secondly, it is the official interface between your instrument team and your archiving authority.

1.1.1 Contents

This document describes the data flow of the RPC-ICA instrument on Rosetta from the ~~life until~~ ^{spacecraft to} the insertion into the PSA for ESA. It includes information on how data were processed, formatted, labeled and uniquely identified. The document discusses general naming schemes for data volumes, data sets, data and label files. Standards used to generate the product are explained. Software that may be used to access the product is explained further on.

The design of the data set structure and the data product is given. Examples of these are given in the appendix.

1.2 Archiving Authorities

The Planetary Data System Standard is used as archiving standard by

- NASA for U.S. planetary missions, implemented by PDS
- ESA for European planetary missions, implemented by the Research and Scientific Support Department (RSSD) of ESA

1.2.1 ESA's Planetary Science Archive (PSA)

ESA implements an online science archive, the PSA,

- to support and ease data ingestion
- to offer additional services to the scientific user community and science operations teams as e.g.
 - search queries that allow searches across instruments, missions and scientific disciplines
 - several data delivery options as
 - direct download of data products, linked files and data sets
 - ftp download of data products, linked files and data sets

The PSA aims for online ingestion of logical archive volumes and will offer the creation of physical archive volumes on request.

1.3 Intended Readership

The staff of the archiving authority (Planetary Science Archive, ESA, RSSD, design team) and any potential user of the RPC-ICA data.