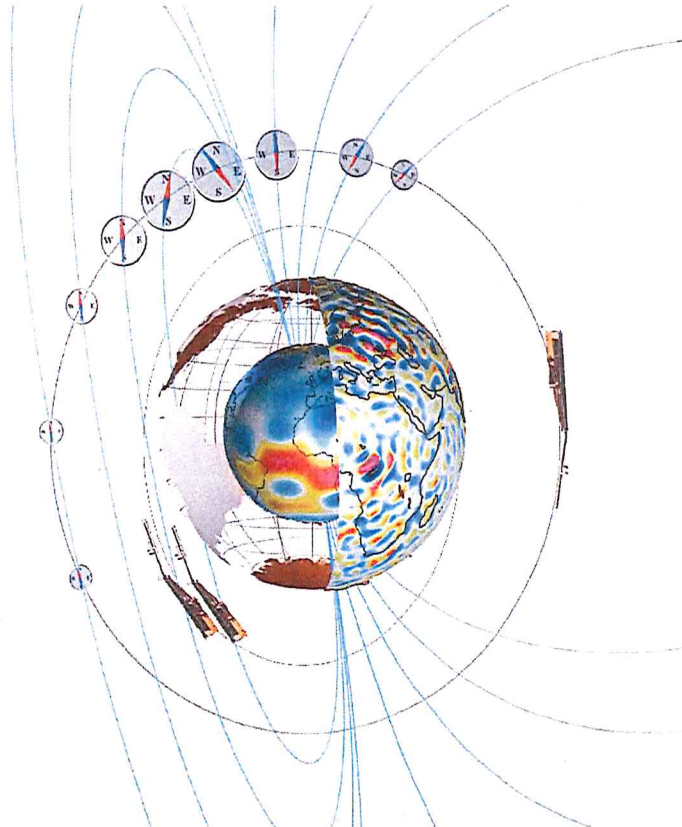




Swarm IPIR Data Transfer Functionality Document



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Prepared:

Yaqi Jin

Yaqi Jin

Date 04 July 2018

Scientist

Approved:

Wojciech K. Miloch

Wojciech K. Miloch

Date 04 July 2018

Project Manager

Prepared:

Chao Xiong

Chao Xiong

Date 04 July 2018

Scientist

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Record of Changes

Reason	Description	Rev	Date
Initial vers.	Released	1 dA	04 July 2018

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1 Introduction

1.1 Scope and applicability

This document is the Swarm Level 2 (L2) IPIR - Ionospheric Plasma IRregularities characterised by the Swarm satellites – Documentation on Data Transfer Functionality Document for the Swarm Data, Innovation and Science Cluster (Swarm DISC) consortium in response to the requirements of [AD-1]. Current or updated version of this document is available in the SVN folder: https://smart-svn.spacecenter.dk/svn/smart/SwarmDISC/DISC_Projects/ITT1_4_ionospheric_irregularities/Deliverables/.

2 Applicable and Reference Documentation

2.1 Applicable Documents

The following documents are applicable to the definitions within this document.

- [AD-1] SW-SW-DTU-GS-114, rev 1 Statement of Work for Swarm DISC ITT 1.4 “Ionospheric irregularities and fluctuations based on Swarm data”
- [AD-2] IPIR-Swarm-IPIR-1-2017 – Ionospheric Plasma IRregularities characterised by the Swarm satellites.
- [AD-3] SW-TN-UiO-GS-002, Swarm-IPIR Product Definition Document

2.2 Abbreviations

Acronym or abbreviation	Description
DISC	The Data, Innovation and Science Cluster
GFZ	The Helmholtz Centre Potsdam - GFZ German Research Centre for Geosciences, DE
IPIR	Ionospheric Plasma IRregularities characterised by the Swarm satellites
L1b	Level 1b (satellite data)
L2	Level 2 (satellite data)
CDF	Common Data Format
SVN	SVN Repository with server located at DTU. Presently, the following URLs apply: https://smart-svn.spacecenter.dk/svn/smart/SwarmDISC/DISC_Projects/ITT1_4_ionospheric_irregularities/Deliverables/
Swarm	Constellation of 3 ESA satellites, https://earth.esa.int/web/guest/missions/esa-operational-eo-missions/swarm
TBD	To Be Defined
UiO	The University of Oslo, Oslo, Norway

3 Technical Details for the file transfer

3.1 The product identifier

The product identifier is: **L2 Cat-1: IPDxIRR_2F**

L2, Cat-1 : IPIR is the level 2 fast track product, that is processed by UiO through the DISC consortium.

IPD : stands for Ionospheric Plasma Density

x : The product is derived separately for each of the three satellites, and x identifies the satellite used (A, B, C).

IRR : stands for Irregularities in the plasma density

2F : signifies that this is a fast track product. The validation is performed by means of an internal quality check in the algorithms of the product, and the quality of the product is provided by a quality flag. It is released without a validation report.

The product definition together with the data format and content are given in [AD-03].

3.2 Data volume, cadence and coverage

Approximate data volume expected for the data product: 16 MB for each of the files (one file per satellite per day) totalling for ca. 48 MB per day.

The cadence of data uploading is 1 day (may be changed since the data product depends on the L2 data products availability and cadence.)

The time coverage of each data product is: one data file per day per satellite.

3.3 Technical details for file transfer

The IP number of the system that is used for data transfer is:

fys-server-rp1.uio.no IP address: 129.240.151.145

Persons responsible for file transfer:

Yaqi Jin, e-mail: yaqi.jin@fys.uio.no

Wojciech J. Miloch, e-mail: w.j.miloch@fys.uio.no

The delivery of first dataset is planned for the beginning of September.

Dataset for all available Swarm data up to date will be delivered by 31.10.2018

The first dataset for testing purposes of data transfer can be provided already in July upon request.

