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# PSA DATA USER GUIDE TEMPLATE

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# APPROVAL

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## 1. INTRODUCTION

*<This document is intended as a template for non-PI teams or external scientists to generate documentation, called the Data User Guide (DUG), to be included with datasets they deliver to the Planetary Science Archive (PSA). All text in italics and contained within triangular brackets (such as this text) is intended for instructional purposes only and should be deleted from any final version of this document to be provided to the PSA by the external data provider.>*

*<Note that the “Reference” field on page 1 should be populated with a unique ESA document ID. Contact the Archive Scientist with whom you are working on this dataset to provide and insert this ID.>*

*<In addition to the table of contents on the previous page, you may wish to consider including a list of figures and/or a list of tables if applicable. The table of contents need not be included in the latter, as this list is intended to provide users a way to quickly find any data or informational tables provided in your DUG.>*

### 1.1 <Instrument/Dataset name> Introduction

*<The actual introduction of the DUG will be written to explain the purpose of this document with a quick overview, i.e. that it is intended as a guide on how to use the dataset that you are providing to the PSA. If you are referencing any other documents, they should be listed as part of the introduction as well, usually in section “1.3” (essentially like the bibliography of a peer-reviewed article.>*

*<If you wish to provide your contact information to the future users of your dataset, the introduction is also a good place to include such a section.>*

### 1.2 Abbreviations and Acronyms

*<Any abbreviations and acronyms used throughout the document shall be listed in a subsection of the introduction. An example of this is provided below.>*

DUG Data User Guide

ESA European Space Agency

PSA Planetary Science Archive

### 1.3 Reference and Applicable Documents

*< If you are referencing any other documents, they should be listed here (i.e. this is the bibliography section).>*

## 2. DATA SOURCE(S) DESCRIPTION

*<Depending on how many sources are used to create your dataset [e.g. 1+ instrument(s)], please adjust the word “SOURCE(S)” in this section to be either singular or plural, as appropriate.>*

*<This section should cover the scientific objectives which led to the observations and the creation of this dataset. Additionally, the research method and/or analytical techniques utilized in the creation of the data will be explained here. The reference papers listed in bibliographical detail in the Introduction section should be referred to here as well (e.g. Smith et al. [2099]), with a bit of explanation on how those papers apply to this dataset. This section should provide more of a general overview, while the next will cover more details.>*

### 2.1 Acknowledgements

*<In this subsection you should acknowledge the sources of your data. For example, if part of the source material came from an instrument on a spacecraft, make sure to acknowledge that team here. If any of the source data is publicly archived, such as in the PSA, make sure to mention the dataset names, and direct links to the data could be helpful to end users as well.>*

*<This is also the area in which you can specify to the archive user on how you would like your own work to be acknowledged if it is used by them for further research.>*

### 3. DATA PRODUCT GENERATION

*<In this section more details will be provided on how the source data for this dataset was gathered. Then, the specific scientific and/or engineering techniques that were applied to arrive at the final form of the dataset should be explained in more detail. Giving explanations of each step is needed for the end users. Any calibration methods and parameters, and the processing level of the data will be discussed here as well. Comparisons to other results, if applicable, should also be included in this section. Other topics to discuss can include instrument modes, assumptions made in the analysis, etc.>*

*<Finally, there shall be some discussion of how this dataset was reviewed and validated. For most external datasets (i.e. not those provided as part of regular deliveries by a mission's Principal Investigator teams) this can be covered by referencing and including the details of a published, peer-reviewed article which corresponds to the dataset being provided to the PSA. In case no such article exists, a review would have to be conducted by a third party, which would need to be discussed in detail with the PSA prior to acceptance of the dataset.>*

## 4. ARCHIVE FORMAT AND CONTENT

*<Here, please indicate to the users which archiving standard was used, e.g. PDS3 or PDS4. The directory and file structures used in the dataset must be explained. For example, the DATA directory (in the case of PDS3) can include several levels of subdirectories, for separate instrument channels or to divide the data by different observation periods. The method which was used to subdivide the data should be explained here. All folders or collections are to be described in this section.>*

*<The structure on contents of the individual data products shall be explained here as well. For example, if you provide the data in binary format, an explanation of how to decode the data into human-legible form should be provided. Please keep in mind that this will be read by new scientists many decades from now who are not familiar with your data yet, thus provide as much detail as you can.>*

## 5. SOFTWARE

*<If there are any commonly available software applications that would be useful in working with this dataset, they shall be listed here. Additionally, if you included your own custom code as part of the dataset delivery, details on how to use this code should be explained in this section.>*

## 6. APPENDIX: <INSERT TITLE HERE>

*<This section is optional, and you may even have multiple appendices. Appendices can be used to provide the full printing of any custom-code you have provided as part of the dataset (though the code should still be provided as part of the dataset itself). Another potential use would be to highlight more extensive examples of how to use this data, such as a step-by-step guide with images. Any other information which you think would be helpful to future users of this dataset but which does not fit well into the above sections can be included in an appendix.>*