A Data Management Plan created using DMPonline.be

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Template: FWO DMP (Flemish Standard DMP)

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#### Project abstract:

At the end of their life some binary stars form Keplerian disks of gas and dust with similar properties as the planet-forming disks around young stars. These scaled-up versions of protoplanetary disks form as the result of an unconstrained interaction process that takes place in the final evolution of binary stars. The fate of these stars depends on the evolution and dispersal of their circumbinary disks, as they are believed to interact dynamically. These stable discs must therefore play a lead role in the final evolution of a large population of binary stars, yet their structure, dispersal and evolution remains elusive. With this project we focus on the very inner structure and aim at resolving all building blocks of these systems and their interactions. We will use a combination of very specific observational data as well as state-of-the art modelling tools. Our research plans to open new windows to study, in space and time, dust sublimation physics, binary evolution processes, and circumstellar disk evolution.

Last modified: 22-06-2024

## **DPIA**

DPIA

Have you performed a DPIA for the personal data processing activities for this project?

Question not answered.

# G097619N GDPR

**GDPR** 

Have you registered personal data processing activities for this project?

Question not answered.

## **Application DMP**

#### Questionnaire

Describe the datatypes (surveys, sequences, manuscripts, objects ...) the research will collect and/or generate and /or (re)use. (use up to 700 characters)

Data comes from international observatories and mainly the European Southern Observatory (ESO). These observatories have their own data management plan with a propriety period of 1 year after which the data becomes public and accessible via ESO.

Specify in which way the following provisions are in place in order to preserve the data during and at least 5 years after the end of the research? Motivate your answer. (use up to 700 characters)

- 1. Designation of responsible person (If already designated, please fill in his/her name.)
- 2. Storage capacity/repository
  - o during the research: Hans Van Winckel
  - after the research: European Souther Observatory (ESO)

What's the reason why you wish to deviate from the principle of preservation of data and of the minimum preservation term of 5 years? (max. 700 characters)

We do not wish to deviate from that. The archive at ESO is operated for much longer than 5 years.

Are there issues concerning research data indicated in the ethics questionnaire of this application form? Which specific security measures do those data require? (use up to 700 characters)

Astrophysical data is universal by definition and there is no ethical questionnaire involved.

Which other issues related to the data management are relevant to mention? (use up to 700 characters)

The data is managed by the European Souther Observatory.

The published data is also available via the journal as well as the Astronomical Data System (ADS)

## FWO DMP (Flemish Standard DMP)

#### 1. Research Data Summary

List and describe all datasets or research materials that you plan to generate/collect or reuse during your research project. For each dataset or data type (observational, experimental etc.), provide a short name & description (sufficient for yourself to know what data it is about), indicate whether the data are newly generated/collected or reused, digital or physical, also indicate the type of the data (the kind of content), its technical format (file extension), and an estimate of the upper limit of the volume of the data.

|                 |             |  |   | Only for digital data   | Only for digital data   | Only for<br>digital data   | Only for physical data |
|-----------------|-------------|--|---|---|---|--|------------------------|
| Dataset<br>Name | Description | New or reused  | Digital or<br>Physical                                      | Digital Data Type   | Digital Data<br>format  | Digital data<br>volume<br>(MB/GB/TB)   | Physical volume        |
|                 |             | Please choose from the following options:  Generate new data Reuse existing data | Please choose from the following options:  Digital Physical | Please choose from the following options:  • xObservational • xExperimental • Compiled/aggregated data • Simulation data • xSoftware • Other • NA | Please choose from the following options:  • .por, .xml, .tab, .csv,.pdf, .txt, .rtf, .dwg, .gml, • xNA | Please choose from the following options:  • <100MB • <1GB • x<100GB • <1TB • <5TB • <10TB • <50TB • >50TB |                        |
|                 |             |  |   | Observational data via<br>ESO   | fits format or<br>flexible image<br>transport system  |  |                        |
|                 |             |  |   | Software via Github   |   |  |                        |
|                 |             |  |   |   |   |  |                        |

If you reuse existing data, please specify the source, preferably by using a persistent identifier (e.g. DOI, Handle, URL etc.) per dataset or data type:

not applicable

Are there any ethical issues concerning the creation and/or use of the data (e.g. experiments on humans or animals, dual use)? Describe these issues in the comment section. Please refer to specific datasets or data types when appropriate.

• No

Will you process personal data? If so, briefly describe the kind of personal data you will use in the comment section. Please refer to specific datasets or data types when appropriate.

• No

| Does your work have potential for commercial valorization (e.g. tech transfer, for example spin-offs, commercial exploitation,)? If so, please comment per dataset or data type where appropriate.   |
|--|
| • No   |
| blue sky research (or rather dark night research as observations are done at night)  |
| Do existing 3rd party agreements restrict exploitation or dissemination of the data you (re)use (e.g. Material/Data transfer agreements/ research collaboration agreements)? If so, please explain in the comment section to what data they relate and what restrictions are in place.   |
| • No   |
|  |
| Are there any other legal issues, such as intellectual property rights and ownership, to be managed related to the data you (re)use? If so, please explain in the comment section to what data they relate and which restrictions will be asserted.  |
| • No   |
|  |
|  |
| 2. Documentation and Metadata  |
| Clearly describe what approach will be followed to capture the accompanying information necessary to keep data understandable and usable, for yourself and others, now and in the future (e.g., in terms of documentation levels and types required, procedures used, Electronic Lab Notebooks, README.txt files, Codebook.tsv etc. where this information is recorded). |
| <ul> <li>ESO archive is freely available and you can use querries to search for the data</li> <li>ESO is an international organisation and all data obtained at the telescope have a propriety period of 1 year.</li> </ul>  |
| Will a metadata standard be used to make it easier to find and reuse the data? If so, please specify (where appropriate per dataset or data type) which metadata standard will be used. If not, please specify (where appropriate per dataset or data type) which metadata will be created to make the data easier to find and reuse.                                    |
| • Yes  |
| FITS is the standard   |
| iofits for interferometric data which is well embedded into the VLTI at ESO  |
|  |
| 3. Data storage & back-up during the research project  |
| Where will the data be stored?   |
| At ESO   |

During processing and analyses at the it infrastructure of the institute of astronomy

When published, the data becomes part of the journal

| How will the data be backed up?   |
|---|
| <ul> <li>at ESO</li> <li>during the project at the full and incremental back-up system of the Institute of Astronomy</li> </ul>   |
| Is there currently sufficient storage & backup capacity during the project? If yes, specify concisely. If no or insufficient storage or backup capacities are available, then explain how this will be taken care of.   |
| • Yes   |
| How will you ensure that the data are securely stored and not accessed or modified by unauthorized persons?   |
| By the ESO security system. ESO is an international ornganisation   |
| What are the expected costs for data storage and backup during the research project? How will these costs be covered?   |
| no costs. The costs are covered by the yearly Belgian contribution to ESO   |
| 4. Data preservation after the end of the research project  |
| Which data will be retained for at least five years (or longer, in agreement with other retention policies that are applicable) after the end of the project? In case some data cannot be preserved, clearly state the reasons for this (e.g. legal or contractual restrictions, storage/budget issues, institutional policies).  |
| yes. The data is preserved much longer than 5 years at ESO  |
| Where will these data be archived (stored and curated for the long-term)?   |
| Yes   |
| What are the expected costs for data preservation during the expected retention period? How will these costs be covered?  |
| The costs are covered by the Belgian yearly contribution as member of ESO   |
| 5 December 19 June 19 |
| 5. Data sharing and reuse   |
| Will the data (or part of the data) be made available for reuse after/during the project? In the comment section please explain per dataset or data type which data will be made available.   |
| • Yes, in an Open Access repository   |

If access is restricted, please specify who will be able to access the data and under what conditions.

| ESO member state user ESO has also a wider strategy to have access to data worldwide   |
|--|
| ESO has also a wider strategy to have access to data worldwide   |
| Are there any factors that restrict or prevent the sharing of (some of) the data (e.g. as defined in an agreement with a 3rd party, legal restrictions)? Please explain in the comment section per dataset or data type where appropriate. |
| • No   |
|  |
| Where will the data be made available? If already known, please provide a repository per dataset or data type.   |
| There is a propriety period of 1 year at ESO   |
|  |
| When will the data be made available?  |
| After one year   |
|  |
| Which data usage licenses are you going to provide? If none, please explain why.   |
| None. ESO is providing access to the data.   |
| Trong. 250 is promaing access to the data.   |
| Do you intend to add a PID/DOI/accession number to your dataset(s)? If already available, you have the option to provide it in the comment section.  |
| • No   |
|  |
|  |
| What are the expected costs for data sharing? How will these costs be covered?   |
| No costs as ESO is taking care of the data management  |
|  |
|  |
| 6. Responsibilities  |
| Who will manage data documentation and metadata during the research project?   |
| ESO  |
|  |
| Who will manage data storage and backup during the research project?   |
| ESO  |
| Who will manage data preservation and sharing?   |
| ESO  |
|  |
| Who will update and implement this DMP?  |

ESO as well as the PI

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