

WALLABY Data Policy

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| Ver. | Date | Changes | Authors |
|------|------------|--|---------|
| 0.2 | 20/02/2020 | Initial draft | LSS |
| 0.3 | 08/07/2020 | Multi-wavelength, value-added products | LSS |
| 0.4 | 26/08/2020 | Exec and WG feedback incorporated | LSS |
| 0.5 | 04/12/2023 | Various updates and corrections; use of public data no longer needs approval | TW |

1. ASKAP Data Policy

Data from ASKAP is notionally delivered to WALLABY in the form of a fully-reduced spectral-line data cube (a so-called ‘Level 5’ data product). The WALLABY quality control team checks data quality and marks it as suitable for release, or re-observation. If suitable for release, the validated data is released on CASDA (the ASKAP data portal) as a ‘Level 6’ data product, together with a preliminary source catalogue from Sélavý. At this point, the data becomes publicly accessible. During the main survey, the gap between observation and release is expected to be short (a matter of days or weeks).

2. WALLABY Data Products

2.1 Core Data Products

The image cubes delivered by CASDA will be large (almost 1 TB for a single WALLABY observation), and may be difficult to handle for an individual user (although cutouts of small regions are now possible). The WALLABY team therefore expects to be able to deliver a number of **science-ready value-added (‘Level 7’) data products** to members, including the following core products, derived from the ASKAP spectral-line data sets:

- A galaxy catalogue derived from SoFiA with official WALLABY source names for all detections
- Cubelets, moment maps and spectra for all SoFiA detections
- Rotation curves and kinematic data for selected galaxies
- High-resolution (12”) images and source catalogues for selected galaxies

These core products will be made available through a database which will be improved and updated from time to time.

WALLABY core data products will be delivered by regular internal data releases to the WALLABY team, with public releases expected to occur annually. WALLABY team members will also have access to the combined knowledge about the technical characteristics of the data from internal documentation, from Technical and Science Working Groups (TWGs, SWGs), and from other team members.

Quality control will be provided by the relevant TWG.

Additional value-added data products (such as stacked spectra), and analysis tools may be provided, but will not be necessarily designated as official WALLABY core data products.

2.2 Additional Data Products

Depending on resources, WALLABY **additional data products** may also be made available to the team, including:

- Ancillary optical/IR redshift and imaging data
- VHS, GALEX and SkyMapper UV/Optical/IR cutouts
- Catalogues of luminosities, stellar masses and star formation rates
- Radio continuum images and flux density catalogues.
- Simulations

These data products, which are not derived from ASKAP spectral-line data, will be facilitated by TWG 1 ('Numerical Simulations & Mock Surveys') and TWG 2 ('Multi-wavelength & ASKAP Survey Synergies'). Some of these products may be simple curations of public data. Others will require considerable effort to synthesise, or may require substantial observational effort.

WALLABY additional data products will be delivered by regular internal data releases to the WALLABY team, with only occasional public releases (e.g. after publication). WALLABY team members will also have access to the combined knowledge about the technical characteristics of the data from internal documentation, from the relevant working groups and from their creators.

Overall quality control will be overseen by the relevant working groups.

Additional value-added data products (such as images/redshifts over small regions), and analysis tools may be provided, but will not necessarily be designated as official WALLABY additional data products.

3. Rights and Responsibilities

3.1 Creation

WALLABY team members working on extensive additional data products that are not publicly available should inform the relevant working group chairs, providing them with information on: **type of product** (e.g., wavelength of interest, cut-out, aperture photometry, profiles, stellar masses, targets included, etc.) and a rough **timeline** for when the work is expected to be completed. The relevant information will be published on the relevant TWG 1 and TWG 2 wiki so that every WALLABY member is aware of current activities within the team and duplication of effort is avoided.

3.2 Documentation

WALLABY data products will be accompanied by extended documentation, including all the information needed for their proper use. That documentation will include the contact details of relevant people in case of questions/issues with the products.

3.3 Usage, Access and Availability

Members may access validated ('Level 6') data and value-added ('Level 7') WALLABY core and additional data products. The analysis of **proprietary data** internally released to the team must be restricted to science projects for which approval has already been granted (see WALLABY Project Policy). Team members are encouraged to also submit project proposals for the use of **public data** to foster a collaborative environment and minimise the risk of duplication of effort.

New projects that arise from a perusal of incoming data, and publication of that data, must follow the WALLABY Publication Policy.

WALLABY core and additional data products **must not be passed on to a third party** for a project that is not the basis of an accepted WALLABY proposal. Exceptions may be made for projects for which the role of the WALLABY data is minor (see WALLABY Publication Policy).

A list of official (and non-official) WALLABY additional data products is kept on the relevant TWG 1 and TWG 2 wiki. The purpose of this is to inform team members of available data sets in order to avoid possible duplication of effort.

To ensure uniformity of results, WALLABY members are expected to use WALLABY core and additional data products in preference to other available products, unless adequate reasons are given to the management team.

3.4 Publication and Ownership

As per the WALLABY publication policy, substantial efforts in contributing to WALLABY core and additional data products are recognised through membership of the WALLABY builders list for a period of time. Such recognition is given for effort that provides data over wide areas of sky, substantially benefits the projects of other team members, and which is available as an official WALLABY product.

Other useful non-official data sets may be made available to WALLABY members. Additional authorship and different ownership arrangements may apply to such datasets.

Some WALLABY additional data products involve effort from people not on the WALLABY builders list or people who are not WALLABY members. The arrangements for inclusion of additional authors when such data are used for a project shall be maintained on the TWG 1 and TWG 2 wiki.

Creators of WALLABY additional products have the right to make their product publicly available. This can be done via publication unrelated to the WALLABY survey.

4. Conflicts

Failure to follow the above policy may result in data products losing their official status, owners being removed from the builders list, science papers being delayed, or loss of WALLABY team membership (subject to the WALLABY membership policy). Conflicts that are not resolved by discussion with the relevant working group chairs should be referred to a member of the WALLABY management team.

5. References

- ATNF data policies: https://www.atnf.csiro.au/observers/data/data_policies.html
- WALLABY policies: <https://wallaby-survey.org/policies/>