PDS ATMOSPHERES NODE NEWSLETTER



Volume 2 Number 1 Spring 2021

Welcome to the Spring 2021 issue of the NASA Planetary Data System (PDS) Planetary Atmospheres Node (ATM) Archiving Newsletter. These newsletters are intended to serve as your definitive source for all archiving news related to planetary atmospheres, and to keep you informed of PDS ATM activities. We want to strike the right balance between providing open and transparent communications to our user community without overdoing it. *If there are topics that you would like to see addressed in future newsletters, please let us know!* As always, for data access, usability, and proposal assistance, please visit our website: https://pds-atmospheres.nmsu.edu/.

POLICY UPDATES/REMINDERS

Note for new data providers/proposers: Requests for letters of support should be submitted to the appropriate nodes no later than a week before the submission deadline as required by PDS policy. (Effective October 2019). See the adopted policy text for more information:

https://pds.nasa.gov/datastandards/documents/policy/FINAL PDS Policy Letters of Support 2019 10 08.pdf

NEW RESOURCES FOR DATA PROVIDERS

The PDS recently launched some new web pages designed to provide a comprehensive set of resources for R & A proposers who are considering archiving their data in the PDS: https://pds.nasa.gov/home/proposers/. These pages cover the how and why of archiving in the PDS, from requesting letters of support for proposals to the entire archiving process. Proposers are encouraged to consult these pages as a first stop for seeking information about data archiving; ATM personnel are also available and eager to answer your archiving questions!

Contact us at pds-atm@nmsu.edu.

NEW MISSION RELEASES

ATM is involved in archiving data from five active missions. This involves working closely with the instrument teams and mission archiving teams to ensure that the data are delivered, validated, and released to the public on a predetermined schedule available from: https://pds.nasa.gov/datasearch/subscription-service/data-release-calendar.shtml. Here, we provide a status report of recent data releases from these missions at ATM:

MARS



InSight 1st through 8th data release is available and certified including atmospheric data from the Temperature and Wind Sensors (TWINS) and Pressure Sensors (PS). https://pds-atmospheres.nmsu.edu/data and services/atmospheres data/INSIGHT/insight.html

Entry, Descent, and Landing (EDL) data is also now available. https://pds-atmospheres.nmsu.edu/data and services/atmospheres data/INSIGHT/insight edl.html



Mars Atmospheres and Volatile Evolution (MAVEN) 1st through 24th data release is available for Accelerometer (ACC), Neutral Gas and Ion Mass Spectrometer (NGIMS), and Imaging Ultraviolet Spectrograph (IUVS).

https://pds-atmospheres.nmsu.edu/data and services/atmospheres data/MAVEN/maven main.html



Mars Reconnaissance Orbiter (MRO) 1st through 56th data release is available including data from the Mars Climate Sounder (MCS).

https://pds-atmospheres.nmsu.edu/data and services/atmospheres data/MARS/mars reconnaissance orbiter.html



Mars Science Laboratory (MSL) Curiosity 1st through 26th data release is now available for the Rover Environmental Monitoring Station (REMS).

https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/MARS/curiosity/curiosity.html

JUPITER



Juno PDS3 data are available for

Microwave Radiometer (MWR) including the recalibrated 2.0 cruise data, through perijove 28 Ultraviolet Imager/Spectrograph (UVS), through perijove 28 Jovian Infrared Auroral Mapper (JIRAM), through perijove 28 Gravity Science Experiment (GRAV), through perijove 28 data.

https://pds-atmospheres.nmsu.edu/data and services/atmospheres data/JUNO/juno.html

NEW DERIVED DATA RELEASES (by program)

In addition to archiving mission data, ATM is also involved in hosting and archiving derived data, which are typically provided by individual data providers. These data are a valuable complement to the ATM mission data because they represent the results of investigations involving the analysis of mission data or the acquisition of field, laboratory, or ground-based data that support NASA's planetary missions. Below is a listing of derived data (by program) that have recently completed the archiving process and are now available online at ATM (since last issue – for past issues see: https://pds-atmospheres.nmsu.edu/data and services/atmospheres data/newsletter/newsletter.html).

PLANETARY DATA ARCHIVING AND TOOLS (PDART)

Laboratory Synchrotron Spectra for Propane (no broadening; Hydrogen and Helium broadening) (Bernath) – Completed Online – PDS4 Bundle containing synchrotron laboratory analog spectra for propane corresponding to hydrogen and helium broadening and no broadening.

 $\underline{https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/hydrocarbon/hydrocarbon.html}$

Recalibrated Mars Global Surveyor (MGS) Thermal Emission Spectrometer (TES) (Pankine) – Completed Online – PDS4 Bundle containing recalibrated MGS TES data pertaining to atmospheric observations. More derived products have been submitted and should be online soon.

https://pds-atmospheres.nmsu.edu/data and services/atmospheres data/MARS/pankine data.html

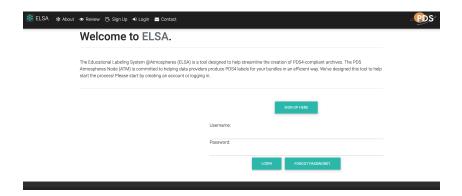
PDS4 TOOL DEVELOPMENT NEWS

ELSA

The Atmospheres Node is in the progress of developing a PDS4 tool for helping users plan and design labels for simple bundles of data that they wish to archive in the PDS. The Educational Labeling System at Atmospheres (ELSA) is well on its way to being a functional guide for putting archive bundles together. ELSA aims to allow easy access to tailoring PDS4-compliant label

templates for your needs. ELSA will allow persistent editing through a free account and step-by-step tutoring for building your bundles. Stay tuned to this section for future updates.

We are closing in on opening ELSA to external beta-testing, hopefully in the Summer 2021 timeframe. For more information or to volunteer as a beta-tester for the online tool, contact: elsa@atmos.nmsu.edu.



ATM Advisory Group

The Atmospheres Node has reconstituted its Advisory Group, which is designed to provide input and feedback to us on issues of importance to our user base. We adjusted the AG membership to better reflect our current user community, and we anticipate that the members will serve as a sounding board for new ideas about ways we can better serve the planetary atmospheres community, as well as a conduit for ideas and feedback from our user community. Please join us in thanking the current AG members for their service:

Natasha Batalha (NASA/ARC)
Don Banfield (Cornell)
Ashley Davies (JPL)
Melinda Kahre (NASA/ARC)
Ralph Lorenz (JHU/APL)

Kevin McGouldrick (CU/LASP) Conor Nixon (NASA/GSFC) Paul Withers (Boston University) Mike Wong (UC Berkeley)

Contact Us

We want to hear from you! We value your feedback and are committed to improving the archiving process as well as the usability and discoverability of data at ATM. If you have a derived data set that fits our archiving mission, please contact us to start a dialog. Also please contact us at: pds-atm@nmsu.edu if you have any questions or concerns. There is also a feedback widget on our web site that you can use if you are having trouble finding something on our web site.