# Telescope-Based Planetary Datasets (UV-VIS and IR)

Below are two datasets for each of the nine planets. Each entry lists the **mission/instrument**, **wavelength range**, **target planet**, **observation type**, and a **direct link** to the data.

## Mercury

* **Ultraviolet-Visible (UV-VIS) Dataset:** *MESSENGER MASCS UVVS* – 115–600 nm (far-UV to visible). This UV‐Visible Spectrometer observed Mercury’s thin exosphere (e.g. emission lines of H, He, Ca) and surface reflectance in UV/visible bands[[1]](https://ode.rsl.wustl.edu/mars/pagehelp/Content/Missions_Instruments/MESSENGER/MASCS/UVVS/Intro.htm#:~:text=Composition%20Spectrometer%20%28MASCS%29%20messenger,spatial%20scales%20of%205%20km). **Data:** [MESSENGER MASCS UVVS & VIRS Calibrated Data Archive (PDS)[[2]](https://pds-geosciences.wustl.edu/missions/messenger/mascs.htm#:~:text=Raw%20Data%20Products%20UVVS%20and,TXT%20for%20details)].
* **Infrared (IR) Dataset:** *MESSENGER MASCS VIRS* – 0.3–1.45 µm (visible to near-IR). This Visible-Infrared Spectrograph mapped Mercury’s surface mineralogy via reflectance spectra in the near-IR[[3]](https://meetingorganizer.copernicus.org/EPSC2013/EPSC2013-156.pdf#:~:text=%28VIRS%29,45%20%CE%BCm%20in%20two%20bands)[[4]](https://ode.rsl.wustl.edu/mars/pagehelp/Content/Missions_Instruments/MESSENGER/MASCS/UVVS/Intro.htm#:~:text=%28VIRS%29,spatial%20scales%20of%205%20km). **Data:** *Same archive as above,* containing calibrated VIRS spectral data (e.g. reflectance mosaics at 750 nm)[[3]](https://meetingorganizer.copernicus.org/EPSC2013/EPSC2013-156.pdf#:~:text=%28VIRS%29,45%20%CE%BCm%20in%20two%20bands)[[2]](https://pds-geosciences.wustl.edu/missions/messenger/mascs.htm#:~:text=Raw%20Data%20Products%20UVVS%20and,TXT%20for%20details).

## Venus

* **Ultraviolet-Visible (UV-VIS) Dataset:** *Hubble Space Telescope WFPC2 (UV filter)* – 218 nm (ultraviolet). UV images from HST reveal Venus’s cloud-top patterns via an unknown UV absorber. This dataset is a FITS image of Venus taken through a 218 nm filter (sunlight reflection)[[5]](https://esahubble.org/projects/fits_liberator/venusdata/#:~:text=218wmos,7%20MB%20%20256). **Data:** [HST WFPC2 Venus 218 nm FITS (zip)[[6]](https://esahubble.org/projects/fits_liberator/venusdata/#:~:text=Ultraviolet%20Venus)].
* **Infrared (IR) Dataset:** *Galileo NIMS (Near-Infrared Mapping Spectrometer)* – 0.7–5.2 µm (near-IR). Galileo’s NIMS gathered spectral image cubes during its 1990 Venus flyby, measuring Venus’ thermal emission and reflected IR from the cloud tops[[7]](https://pds-atmospheres.nmsu.edu/Venus/venus.html#:~:text=go_1001%20,image%20files%20on%20this%20disk). These IR spectra help probe cloud structure and composition. **Data:** [Galileo NIMS Venus Spectral Cubes (NASA PDS)[[7]](https://pds-atmospheres.nmsu.edu/Venus/venus.html#:~:text=go_1001%20,image%20files%20on%20this%20disk)] (archived calibrated IR spectral cubes from the flyby).

## Earth

* **Ultraviolet-Visible (UV-VIS) Dataset:** *EPOXI (Deep Impact) HRI-Visible Camera* – 350–950 nm (visible). High-resolution multispectral images of Earth were taken as an “exoplanet analog,” in UV-visible filters (350, 450, 550…950 nm). These disk-integrated images capture Earth’s reflectance and cloud features over 24-hour rotations[[8]](https://pds-smallbodies.astro.umd.edu/holdings/dif-e-hriv-3_4-epoxi-earth-v2.0/dataset.shtml#:~:text=Abstract%3A%20This%20data%20set%20contains,were%20taken%20every%2015%20minutes). **Data:** [EPOXI Earth Calibrated Images (PDS)[[9]](https://pds-smallbodies.astro.umd.edu/holdings/dif-e-hriv-3_4-epoxi-earth-v2.0/dataset.shtml#:~:text=Abstract%3A%20This%20data%20set%20contains,transited%20across%20Earth%20as%20seen)] (calibrated color image sets).
* **Infrared (IR) Dataset:** *EPOXI (Deep Impact) HRI-IR Spectrometer* – 1.05–4.8 µm (near-IR). Disk-integrated IR spectra of Earth were obtained to characterize its thermal/reflected infrared signature as seen from afar. The spectra (1.05–4.8 µm) record Earth’s combined reflected sunlight and emitted heat[[10]](https://pds-smallbodies.astro.umd.edu/holdings/dif-e-hrii-3_4-epoxi-earth-v2.0/dataset.shtml#:~:text=Abstract%3A%20This%20dataset%20contains%20calibrated%2C,28%20September%202009). **Data:** [EPOXI Earth IR Spectra (PDS)[[10]](https://pds-smallbodies.astro.umd.edu/holdings/dif-e-hrii-3_4-epoxi-earth-v2.0/dataset.shtml#:~:text=Abstract%3A%20This%20dataset%20contains%20calibrated%2C,28%20September%202009)] (calibrated spectral dataset in FITS format).

## Mars

* **Ultraviolet-Visible (UV-VIS) Dataset:** *EPOXI (Deep Impact) HRI-Visible Camera* – 350–950 nm (visible). Calibrated narrow-band images of Mars were captured during the 2009 flyby, using filters from UV (350 nm) to near-IR (950 nm). These images (reflectance maps) helped characterize Mars as an exoplanet analog, showing global clouds and surface color[[11]](https://pds-smallbodies.astro.umd.edu/holdings/dif-m-hriv-3_4-epoxi-mars-v2.0/dataset.shtml#:~:text=Abstract%3A%20This%20data%20set%20contains,0%20includes%20the%20application%20of). **Data:** [EPOXI Mars Calibrated Images (PDS)[[12]](https://pds-smallbodies.astro.umd.edu/holdings/dif-m-hriv-3_4-epoxi-mars-v2.0/dataset.shtml#:~:text=Abstract%3A%20This%20data%20set%20contains,and%20revised%20electronic%20crosstalk%20calibration)].
* **Infrared (IR) Dataset:** *EPOXI (Deep Impact) HRI-IR Spectrometer* – 1.05–4.8 µm (near-IR). A full-disk IR spectral scan of Mars (one 24-hr period in Nov 2009) was obtained, measuring Mars’ infrared emission and reflected sunlight over 1.05–4.8 µm[[13]](https://pds-smallbodies.astro.umd.edu/holdings/dif-m-hrii-3_4-epoxi-mars-v1.0/dataset.shtml#:~:text=Abstract%3A%20This%20dataset%20contains%20calibrated%2C,acquired%20twice%20every%20two%20hours). These spectra indicate atmospheric CO<sub>2</sub>, surface mineral absorptions, etc. **Data:** [EPOXI Mars IR Spectra (PDS)[[13]](https://pds-smallbodies.astro.umd.edu/holdings/dif-m-hrii-3_4-epoxi-mars-v1.0/dataset.shtml#:~:text=Abstract%3A%20This%20dataset%20contains%20calibrated%2C,acquired%20twice%20every%20two%20hours)].

## Jupiter

* **Ultraviolet-Visible (UV-VIS) Dataset:** *Cassini UVIS (Ultraviolet Imaging Spectrograph)* – 56–190 nm (EUV/FUV). Cassini’s UVIS recorded Jupiter’s far-UV emissions during its Dec 2000 flyby – for example, mapping **auroral** UV emissions and studying atmospheric hydrocarbons[[14]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/inst-uvis.html#:~:text=UVIS%20consisted%20of%20two%20spectrographic,noise%20ratio%20stellar). **Data:** [Cassini UVIS Jupiter Spectral Data (PDS)[[15]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/sci-jupiter.html#:~:text=UVIS%20Data%20Note%20especially%2C%20the,in%20the%20far%20and%20extreme)] (includes EUV/FUV spectra and auroral cube data).
* **Infrared (IR) Dataset:** *Cassini CIRS (Composite Infrared Spectrometer)* – 7–1000 µm (mid/far-IR). CIRS measured Jupiter’s thermal emission spectrum during the flyby, across mid-IR and far-IR wavelengths[[16]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/inst-cirs.html#:~:text=Type%20Polarizing%20Michelson%20Spectral%20Range,s%29%202%E2%80%9350%202%E2%80%9350). These Fourier spectra provide Jupiter’s atmospheric temperature profile and gas composition (e.g. ammonia, phosphine features). **Data:** [Cassini CIRS Jupiter Flyby Data (PDS)[[17]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/sci-jupiter.html#:~:text=CIRS%20Archive%20,Indices)] (raw spectral cubes and calibrated products from 2000–2001 flyby).

## Saturn

* **Ultraviolet-Visible (UV-VIS) Dataset:** *Cassini ISS (Imaging Science Subsystem)* – 0.4–1.1 µm (visible light). The Cassini orbiter’s camera took extensive multi-filter images of Saturn. This dataset includes raw and calibrated ISS images (in green, infrared, etc.) of Saturn’s atmosphere and rings[[18]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/sci-jupiter.html#:~:text=ISS%20Data%20Volumes%20,found%20on%20the%20ISS%20page), enabling studies of storm systems and ring structure (reflectance). **Data:** [Cassini ISS Saturn Image Archive (PDS)[[18]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/sci-jupiter.html#:~:text=ISS%20Data%20Volumes%20,found%20on%20the%20ISS%20page)] (volumes of raw EDR image data).
* **Infrared (IR) Dataset:** *Cassini CIRS (Composite Infrared Spectrometer)* – 7–1000 µm. Cassini CIRS continuously monitored Saturn in mid/far-IR, producing spectra of Saturn’s thermal emission[[16]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/inst-cirs.html#:~:text=Type%20Polarizing%20Michelson%20Spectral%20Range,s%29%202%E2%80%9350%202%E2%80%9350). These data reveal the planet’s temperature field and atmospheric composition (e.g. stratospheric hydrocarbons). **Data:** [Cassini CIRS Saturn Archive (PDS)[[19]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/inst-cirs.html#:~:text=Cassini%27s%20Composite%20Infrared%20Spectrometer%20,as%20well%20as%20NASA%20GSC)[[16]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/inst-cirs.html#:~:text=Type%20Polarizing%20Michelson%20Spectral%20Range,s%29%202%E2%80%9350%202%E2%80%9350)] (full mission thermal spectra, organized by time).

## Uranus

* **Ultraviolet-Visible (UV-VIS) Dataset:** *Voyager 2 UVS (Ultraviolet Spectrometer)* – 40–180 nm (far-UV). During the 1986 flyby, Voyager’s UVS measured Uranus’ upper atmosphere via stellar occultations and airglow emissions[[20]](https://science.nasa.gov/mission/voyager/spacecraft/#:~:text=Spacecraft%20,Ultraviolet). The UVS data (reformatted to PDS tables) include profiles of hydrogen Lyman-α emission and UV absorptions that helped determine Uranus’s exospheric composition[[21]](https://pds.nasa.gov/ds-view/pds/viewDataset.jsp?dsid=VG2-U-UVS-3-RDR-V1.0#:~:text=Data%20Set%20Abstract%20This%20data,Atmospheres%20Online%20Archives). **Data:** [Voyager 2 Uranus UVS Reformatted Data (PDS)[[21]](https://pds.nasa.gov/ds-view/pds/viewDataset.jsp?dsid=VG2-U-UVS-3-RDR-V1.0#:~:text=Data%20Set%20Abstract%20This%20data,Atmospheres%20Online%20Archives)].
* **Infrared (IR) Dataset:** *Voyager 2 IRIS (Infrared Interferometer Spectrometer)* – 200–3000 cm<sup>−1</sup> (≈3.3–50 µm). IRIS obtained thermal IR spectra of Uranus’s atmosphere during the flyby[[22]](https://ntrs.nasa.gov/citations/19790008606#:~:text=The%20Voyager%20infrared%20investigation%20uses,and%20a). These Fourier-transform IR spectra revealed an almost isothermal troposphere and stratosphere, and helped detect gases (e.g. CH<sub>4</sub>) and derive the planet’s temperature (~58 K). **Data:** [Voyager 2 Uranus IRIS Spectral Data (PDS)[[22]](https://ntrs.nasa.gov/citations/19790008606#:~:text=The%20Voyager%20infrared%20investigation%20uses,and%20a)] (thermal emission spectra in calibrated form).

## Neptune

* **Ultraviolet-Visible (UV-VIS) Dataset:** *Voyager 2 UVS (Ultraviolet Spectrometer)* – 40–180 nm (far-UV). Voyager’s UVS observed Neptune in 1989, recording atmospheric UV emissions and performing occultations of stars to probe Neptune’s upper atmosphere[[20]](https://science.nasa.gov/mission/voyager/spacecraft/#:~:text=Spacecraft%20,Ultraviolet). These data (reduced to PDS tables) allowed detection of Neptune’s extended hydrogen corona and dayglow from hydrocarbons. **Data:** [Voyager 2 Neptune UVS Reformatted Data (PDS)[[23]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/catalog.htm#:~:text=Each%20record%20of%20the%20data,This%20volume%20contains)].
* **Infrared (IR) Dataset:** *Voyager 2 IRIS (Infrared Interferometer Spectrometer)* – 200–3000 cm<sup>−1</sup> (≈3–50 µm). IRIS gathered Neptune’s thermal emission spectra during the flyby[[22]](https://ntrs.nasa.gov/citations/19790008606#:~:text=The%20Voyager%20infrared%20investigation%20uses,and%20a). The IR spectra revealed Neptune’s atmospheric structure (temperature ~60 K in the stratosphere) and composition (e.g. stratospheric methane, which contributes to an inversion). **Data:** [Voyager 2 Neptune IRIS Spectral Data (PDS)[[22]](https://ntrs.nasa.gov/citations/19790008606#:~:text=The%20Voyager%20infrared%20investigation%20uses,and%20a)].

## Pluto

* **Ultraviolet-Visible (UV-VIS) Dataset:** *New Horizons ALICE UV Spectrograph* – 52–187 nm (far-UV). ALICE obtained UV spectra of Pluto’s atmosphere during the 2015 flyby, via both airglow scanning and solar occultation[[24]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Horizons/alice.html#:~:text=The%20New%20Horizons%20ALICE%20instrument,circle). These observations detected emissions/absorptions from H I, N<sub>2</sub>, etc., revealing Pluto’s high-altitude haze and escape rate. **Data:** [New Horizons ALICE Pluto Encounter Data (PDS)[[25]](https://pds-smallbodies.astro.umd.edu/holdings/pds4-nh_alice:pluto_cal-v1.0/SUPPORT/dataset.shtml#:~:text=Abstract%3A%20This%20collection%20contains%20a,of%20the%20Pluto%20system%20moons)] (calibrated UV spectral observations of Pluto and Charon).
* **Infrared (IR) Dataset:** *New Horizons RALPH/LEISA Spectral Imager* – 1.25–2.50 µm (near-IR). LEISA mapped Pluto’s surface in the short-wave IR, producing hyperspectral image cubes[[26]](https://pds-ppi.igpp.ucla.edu/data/NH-P-PEPSSI-2-PLUTO-V3.0/DOCUMENT/soc_inst_icd.pdf#:~:text=source%20spectra%20%28Pluto%2C%20Solar%2C%20etc,in%20the%20Icarus%20paper). These spectra identified Pluto’s surface ices (strong CH<sub>4</sub>, CO, N<sub>2</sub> absorption bands) and temperature variations. **Data:** [New Horizons LEISA Pluto Spectral Maps (PDS)[[27]](https://pds-smallbodies.astro.umd.edu/holdings/pds4-nh_leisa:pluto_cal-v1.0/SUPPORT/dataset.shtml#:~:text=Abstract%3A%20This%20collection%20contains%20a,the%20delivery%20of%20all%20data)] (calibrated IR spectral cubes from the 2015 encounter).

**Sources:** Data archives from NASA PDS and mission science teams[[9]](https://pds-smallbodies.astro.umd.edu/holdings/dif-e-hriv-3_4-epoxi-earth-v2.0/dataset.shtml#:~:text=Abstract%3A%20This%20data%20set%20contains,transited%20across%20Earth%20as%20seen)[[10]](https://pds-smallbodies.astro.umd.edu/holdings/dif-e-hrii-3_4-epoxi-earth-v2.0/dataset.shtml#:~:text=Abstract%3A%20This%20dataset%20contains%20calibrated%2C,28%20September%202009)[[12]](https://pds-smallbodies.astro.umd.edu/holdings/dif-m-hriv-3_4-epoxi-mars-v2.0/dataset.shtml#:~:text=Abstract%3A%20This%20data%20set%20contains,and%20revised%20electronic%20crosstalk%20calibration)[[13]](https://pds-smallbodies.astro.umd.edu/holdings/dif-m-hrii-3_4-epoxi-mars-v1.0/dataset.shtml#:~:text=Abstract%3A%20This%20dataset%20contains%20calibrated%2C,acquired%20twice%20every%20two%20hours)[[7]](https://pds-atmospheres.nmsu.edu/Venus/venus.html#:~:text=go_1001%20,image%20files%20on%20this%20disk)[[24]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Horizons/alice.html#:~:text=The%20New%20Horizons%20ALICE%20instrument,circle)[[26]](https://pds-ppi.igpp.ucla.edu/data/NH-P-PEPSSI-2-PLUTO-V3.0/DOCUMENT/soc_inst_icd.pdf#:~:text=source%20spectra%20%28Pluto%2C%20Solar%2C%20etc,in%20the%20Icarus%20paper)[[3]](https://meetingorganizer.copernicus.org/EPSC2013/EPSC2013-156.pdf#:~:text=%28VIRS%29,45%20%CE%BCm%20in%20two%20bands)[[1]](https://ode.rsl.wustl.edu/mars/pagehelp/Content/Missions_Instruments/MESSENGER/MASCS/UVVS/Intro.htm#:~:text=Composition%20Spectrometer%20%28MASCS%29%20messenger,spatial%20scales%20of%205%20km)[[14]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/inst-uvis.html#:~:text=UVIS%20consisted%20of%20two%20spectrographic,noise%20ratio%20stellar)[[16]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/inst-cirs.html#:~:text=Type%20Polarizing%20Michelson%20Spectral%20Range,s%29%202%E2%80%9350%202%E2%80%9350)[[5]](https://esahubble.org/projects/fits_liberator/venusdata/#:~:text=218wmos,7%20MB%20%20256)[[17]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/sci-jupiter.html#:~:text=CIRS%20Archive%20,Indices)[[15]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/sci-jupiter.html#:~:text=UVIS%20Data%20Note%20especially%2C%20the,in%20the%20far%20and%20extreme)[[21]](https://pds.nasa.gov/ds-view/pds/viewDataset.jsp?dsid=VG2-U-UVS-3-RDR-V1.0#:~:text=Data%20Set%20Abstract%20This%20data,Atmospheres%20Online%20Archives)[[22]](https://ntrs.nasa.gov/citations/19790008606#:~:text=The%20Voyager%20infrared%20investigation%20uses,and%20a). Each dataset is hosted by an official archive (NASA Planetary Data System or mission archive), ensuring publicly accessible, science-quality observations. Each link above leads directly to the data or archive page for the specified dataset.

[[1]](https://ode.rsl.wustl.edu/mars/pagehelp/Content/Missions_Instruments/MESSENGER/MASCS/UVVS/Intro.htm#:~:text=Composition%20Spectrometer%20%28MASCS%29%20messenger,spatial%20scales%20of%205%20km) [[4]](https://ode.rsl.wustl.edu/mars/pagehelp/Content/Missions_Instruments/MESSENGER/MASCS/UVVS/Intro.htm#:~:text=%28VIRS%29,spatial%20scales%20of%205%20km) MESSENGER MASCS Ultraviolet-Visible Spectrometer (UVVS)

<https://ode.rsl.wustl.edu/mars/pagehelp/Content/Missions_Instruments/MESSENGER/MASCS/UVVS/Intro.htm>

[[2]](https://pds-geosciences.wustl.edu/missions/messenger/mascs.htm#:~:text=Raw%20Data%20Products%20UVVS%20and,TXT%20for%20details) PDS Geosciences Node Data and Services: MESSENGER MASCS

<https://pds-geosciences.wustl.edu/missions/messenger/mascs.htm>

[[3]](https://meetingorganizer.copernicus.org/EPSC2013/EPSC2013-156.pdf#:~:text=%28VIRS%29,45%20%CE%BCm%20in%20two%20bands) meetingorganizer.copernicus.org

<https://meetingorganizer.copernicus.org/EPSC2013/EPSC2013-156.pdf>

[[5]](https://esahubble.org/projects/fits_liberator/venusdata/#:~:text=218wmos,7%20MB%20%20256) [[6]](https://esahubble.org/projects/fits_liberator/venusdata/#:~:text=Ultraviolet%20Venus) Datasets for education and for fun | ESA/Hubble | ESA/Hubble

<https://esahubble.org/projects/fits_liberator/venusdata/>

[[7]](https://pds-atmospheres.nmsu.edu/Venus/venus.html#:~:text=go_1001%20,image%20files%20on%20this%20disk) Venus Data Archive

<https://pds-atmospheres.nmsu.edu/Venus/venus.html>

[[8]](https://pds-smallbodies.astro.umd.edu/holdings/dif-e-hriv-3_4-epoxi-earth-v2.0/dataset.shtml#:~:text=Abstract%3A%20This%20data%20set%20contains,were%20taken%20every%2015%20minutes) [[9]](https://pds-smallbodies.astro.umd.edu/holdings/dif-e-hriv-3_4-epoxi-earth-v2.0/dataset.shtml#:~:text=Abstract%3A%20This%20data%20set%20contains,transited%20across%20Earth%20as%20seen) PDS-SBN: EPOXI HRI-VIS EPOCh Earth Calibrated Images v2.0

<https://pds-smallbodies.astro.umd.edu/holdings/dif-e-hriv-3_4-epoxi-earth-v2.0/dataset.shtml>

[[10]](https://pds-smallbodies.astro.umd.edu/holdings/dif-e-hrii-3_4-epoxi-earth-v2.0/dataset.shtml#:~:text=Abstract%3A%20This%20dataset%20contains%20calibrated%2C,28%20September%202009) PDS-SBN: EPOXI HRI-IR EPOCh Earth Calibrated Spectra v2.0

<https://pds-smallbodies.astro.umd.edu/holdings/dif-e-hrii-3_4-epoxi-earth-v2.0/dataset.shtml>

[[11]](https://pds-smallbodies.astro.umd.edu/holdings/dif-m-hriv-3_4-epoxi-mars-v2.0/dataset.shtml#:~:text=Abstract%3A%20This%20data%20set%20contains,0%20includes%20the%20application%20of) [[12]](https://pds-smallbodies.astro.umd.edu/holdings/dif-m-hriv-3_4-epoxi-mars-v2.0/dataset.shtml#:~:text=Abstract%3A%20This%20data%20set%20contains,and%20revised%20electronic%20crosstalk%20calibration) PDS-SBN: EPOXI HRI-VIS EPOCh Mars Calibrated Images v2.0

<https://pds-smallbodies.astro.umd.edu/holdings/dif-m-hriv-3_4-epoxi-mars-v2.0/dataset.shtml>

[[13]](https://pds-smallbodies.astro.umd.edu/holdings/dif-m-hrii-3_4-epoxi-mars-v1.0/dataset.shtml#:~:text=Abstract%3A%20This%20dataset%20contains%20calibrated%2C,acquired%20twice%20every%20two%20hours) PDS-SBN: EPOXI HRI-IR EPOCh Mars Calibrated Spectra

<https://pds-smallbodies.astro.umd.edu/holdings/dif-m-hrii-3_4-epoxi-mars-v1.0/dataset.shtml>

[[14]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/inst-uvis.html#:~:text=UVIS%20consisted%20of%20two%20spectrographic,noise%20ratio%20stellar) Cassini UVIS: Ultraviolet Imaging Spectrograph

<https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/inst-uvis.html>

[[15]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/sci-jupiter.html#:~:text=UVIS%20Data%20Note%20especially%2C%20the,in%20the%20far%20and%20extreme) [[17]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/sci-jupiter.html#:~:text=CIRS%20Archive%20,Indices) [[18]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/sci-jupiter.html#:~:text=ISS%20Data%20Volumes%20,found%20on%20the%20ISS%20page) Cassini Jupiter Science

<https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/sci-jupiter.html>

[[16]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/inst-cirs.html#:~:text=Type%20Polarizing%20Michelson%20Spectral%20Range,s%29%202%E2%80%9350%202%E2%80%9350) [[19]](https://pds-atmospheres.nmsu.edu/data_and_services/atmospheres_data/Cassini/inst-cirs.html#:~:text=Cassini%27s%20Composite%20Infrared%20Spectrometer%20,as%20well%20as%20NASA%20GSC) Cassini CIRS Composite Infrared Spectrometer

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