

PDS_VERSION_ID = PDS3
LABEL_REVISION_NOTE = "

For New Horizons, this LABEL_REVISION_NOTE is used to keep track of when the template is used to generate a DATASET.CAT file for a data set.

Brian Carcich

- Publication date: 2016-04-22
- NH-internal archive software version: V2.0

RECORD_TYPE = STREAM
INSTRUMENT_HOST_NAME = "NEW HORIZONS"
OBJECT = DATA_SET
DATA_SET_ID = "NH-P-PEPSSI-3-PLUTO-V1.0"

OBJECT = DATA_SET_INFORMATION

START_TIME = 2015-01-14T23:59:57.691
STOP_TIME = 2015-07-30T23:59:56.893

DATA_SET_DESC = "

Data Set Overview
=====

This data set contains Calibrated data taken by New Horizons Pluto Energetic Particle Spectrometer Science Investigation instrument during the PLUTO mission phase.

PEPSSI (Pluto Energetic Particles Spectrometer Science Investigation) is a particle telescope and a time-of-flight (TOF) spectrometer that measures ions and electrons over a broad range of energies and pitch angles. Particle composition and energy spectra are measured for H to Fe from ~ 30 keV to ~1 MeV (but not all species are uniquely separated) and for electrons from ~30 keV to 700 keV. PEPSSI comprises a time-of-flight (TOF) section and a solid-state detector (SSD) array that measures particle energy. The combination of measured energy and TOF provides unique particle identification by mass and particle energy depending on the range: for protons from ~30 keV to ~1 MeV; for heavy (CNO) ions from ~80 keV to ~1 MeV. Lower-energy (>3 keV) ion fluxes are measured by TOF only, but without the SSD signal, providing velocity spectra at these energies as well. Due to storage and bandwidth limitations, all event data cannot be stored or telemetered to the ground. Instead, a round-robin algorithm is used to save Energy, TOF, and timing data for select events. The common data products contain these event and summary measurements, accumulated over fixed periods of 86,400 seconds, with each period in a single file comprising multiple binary tables. The documentation provided with this data set describes the data format.

No period

During the Pluto mission phase starting in January, 2015, there were several sub-phases: three Approach sub-phases, (AP1, AP2 and AP3); a CORE sequence for the Pluto flyby on 14 July, 2015 (Day Of Year 195), sometimes also referred to as NEP (Near-Encounter Phase); three Departure sub-phases (DP1, DP2, DP3). For this first PEPSSI delivery for the Pluto mission phase, this data set includes only the Approach data plus the subset of the CORE sequence data that was downlinked through the end of July, 2015. The rest of the Pluto data will be delivered in future versions of this data set according to the schedule