1

Details

Each IMAGE OBJECT is a 3-dimensional representation of PEPSSI Rate Box Definition for one of those sets above. PEPSSI event measurements comprise an Energy measurement and a Time-Of-Flight (TOF) measurement. The combined (TOF, Energy) pair of each measurements represents a position on the TOV vs. Energy plane. The each position on that plane corresponds to one on nineteen rate boxes, as displayed in Figure 11-6 of the SOC_INST_ICD document.

The LINE_SAMPLES axis in each IMAGE represents the Energy ADU (Analog-Digital Units; raw energy data number) of a PEPSSI raw measurement, LINE_SAMPLES positions 1 through 1024 corresponds to Energy ADU measurements of 0 through 1023.

The LINES axis in each IMAGE represents the TOF ADU of a PEPSSI raw measurement, LINES positions 1 through 20148 corresponds to TOF ADU measurements of 0 through 2047.

The value of each location in the IMAGE OBJECT is the Rate Box Index for that location's Energy and TOF ADU values.

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MISSION NAME = "NEW HORIZONS"
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DATA_SET_ID = "NH-P-PEPSSI-3-PLUTO-V2.0"

PRODUCT_ID = "RATEBOXDEFINITIONS"

PRODUCER_INSTITUTION_NAME = "SOUTHWEST RESEARCH INSTITUTE"

PRODUCT_CREATION TIME = 2015-12-31T00:00:00

INSTRUMENT NAME="

PLUTO ENERGETIC PARTICLE SPECTROMETER SCIENCE INVESTIGATION"

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INSTRUMENT_HOST_NAME = "NEW HORIZONS"

OBJECT = HEADER

BYTES = 2880

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INTERCHANGE_FORMAT = "BINARY"

RECORDS = 1

DESCRIPTION = "

FITS format defined in NASA/Science

Office Standards Technology 100-1.0

END_OBJECT = HEADER

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