

PDS4 Processing Levels for Science Data Sets

(with translations from terms used in other systems)

This chart provides a rough translation between processing levels defined in other data management systems and processing levels appropriate for PDS4 archives. The mappings are not exact. For PDS4 archives, use the terms in column 1 and the definitions in column 2.

PDS4 ¹		Other Systems		
Level	Definition	NASA ²	CODMAC ³	PDS3 ⁴
Telemetry ⁵	An encoded byte stream used to transfer data from one or more instruments to temporary storage where the raw instrument data will be extracted.	Packet	1 (Raw)	ODR
Raw	Original data from an instrument. If compression, reformatting, packetization, or other translation has been applied to facilitate data transmission or storage, those processes will be reversed so that the archived data are in a PDS approved archive format.	Level 0	2 (Edited)	EDR
Partially Processed	Data that have been processed beyond the raw level but which have not yet reached calibrated status.	Level 1A		
Calibrated	Data converted to physical units, which makes values independent of the instrument.	Level 1B	3 (Calibrated)	RDR
Derived	Results that have been distilled from one or more calibrated data products (for example, maps, gravity or magnetic fields, or ring particle size distributions). Supplementary data, such as calibration tables or tables of viewing geometry, used to interpret observational data should also be classified as 'derived' data if not easily matched to one of the other categories.	Level 2 Level 3 Level 4	4 (Resampled) 5 (Derived) 6 (Ancillary)	DDR

¹ *Data Processing Levels (for PDS4)*, policy adopted by PDSMC, 2013 (<https://pds.nasa.gov/datastandards/documents/policy/PolicyOnProcessingLevels03112013.pdf>)

² <https://science.nasa.gov/earth-science/earth-science-data/data-processing-levels-for-eosdis-data-products>

³ *Issues and Recommendations Associated with Distributed Computation and Data Management Systems for the Space Sciences*, 1986 (<http://www.nap.edu/catalog/12343.html>)

⁴ PDS3 used a numerical data processing level number (following CODMAC) and a data set type — an acronym — as listed here. The single data processing level number applied to the entire data set; acronyms were varied and applied inconsistently. For details, see <https://pds.nasa.gov/datastandards/pds3/standards/sr/Chapter06.pdf>

⁵ Rarely included in PDS4 archives. Telemetry is viewed as a means for data transmission; raw data, as generated by the instrument, is recovered from telemetry and archived.