ISIS & PDS4

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ISIS & PDS

- HISTORY
 - Integrated Software for Imagers and Spectrometers (ISIS)
 - ISIS2 (old version) & PDS3
 - PDS3 ingest: A 'basic' generic version
 - With additional (separate) specific versions developed per mission/instr requirements
- ISIS ReDESIGN (ISIS3)
 - ISIS2 to ISIS3 upgrade/conversion (~2001 start, through 2006, then ongoing versioning)
 - Full redesign
 - <u>https://isis.astrogeology.usgs.gov/documents/Conversion/Conversion.</u> <u>html</u>

ISIS & PDS

- ISIS3 & PDS4
 - Always intended to provide PDS4 ingest
 - Recent initial ingest development via specific use-case (e.g. EXOMARS TGO-CaSSIS)
 - Yet, developed with longer term plans for generic PDS4 ingest (and export?)
 - 'PDS_to_ISIS' (ingest)
 - 'ISIS_to_PDS' (export)
 - Eventual final version will detect content (PDS3, PDS4, mission/instr specific, FITS, etc), and ingest accordingly
 - Developed local internal libraries for initial PDS4 ingest
 - ISIS3 underlying architecture C++
 - PDS4 parsing (populates local data structure/dictionary) via existing XML parsers
 - Dictionary parsing and other development via local Python & C++ coding
 - Product/data manipulation via ISIS3 libraries
 - Not currently using existing PDS-tools PDS4 libraries (will examine further)
 - Comments from ISIS (more pending, as development continues):
 - The usual ... Information as needed for generic and project/mission specific classes/elements/attributes.
 - So, via IM/SR/schema and sample products.