

## RPS SOC Status

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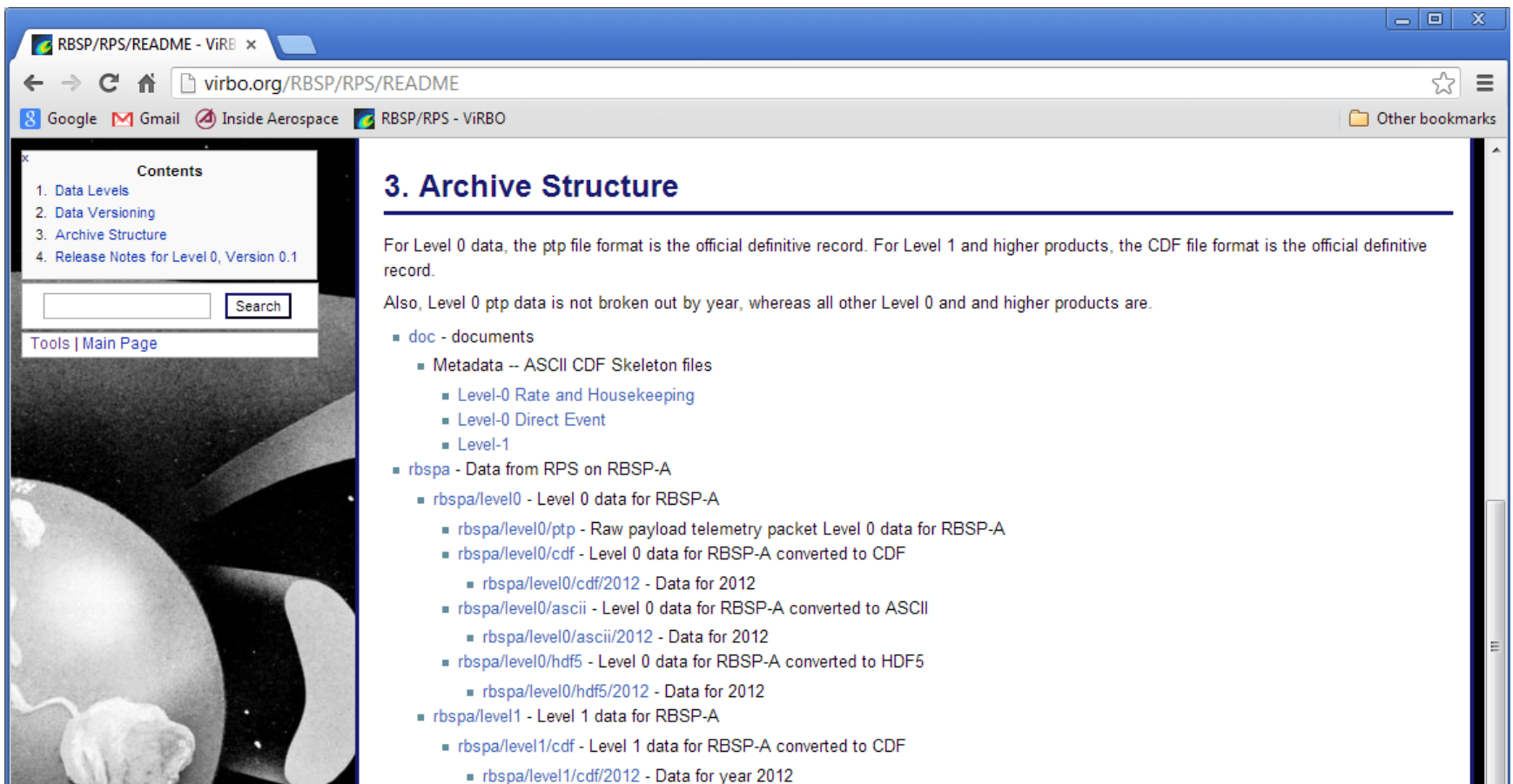
# RPS Data Products

| Data Level | Name                 | Contents   | Latency*      | Reprocessing                         | Status   |
|------------|----------------------|--|---------------|--------------------------------------|--|
| 0 (L0)     | Level 0 Data         | RPS PTP/CCSDS packets (decoded in CDF and ascii, includes raw space weather data)  | 1-3 days      | 1,2,3,4,7 days                       | Posted to ViRBO, expect only minor upgrades henceforth |
| 1 (L1)     | Level 1 Data         | Nearly all L0 data, UTC, energy/photon deposits, singles and coincidence rates, s/c location, RPS boresight vector, magnetic field vector, estimated incident energy/angle, dead times (including quota effects), “space weather” products | L0 + 1-3 days | Daily up to L0+5 days, and on-demand | Still developing code for routine processing           |
| 2 (L2)     | Energy Spectra       | MET, UTC, flux versus energy spectrum (once per 5 degrees rotation), pitch-angle and full magnetic coordinates (e.g., $L_m$ , MLT, I, $B_{local}$ , $B_{equ}$ , $\Phi$ ) of RPS boresight in OPQ and TS models                             | L1 + 1-2 days | Daily up to L0+7 days and on-demand  | Not started  |
| 3 (L3)     | Energy-Angle Spectra | MET, UTC, energy-pitch angle spectrum (once per spin and once per minute), full magnetic coordinates in OPQ and TS models  | L2 + 1-2 days | Daily up to L0+10 days and on-demand | Not started  |
| 4 (L4)     | Global Maps          | UTC, flux vs $E/\alpha_{eq}/L_m$ , flux vs $E/K/\Phi$ , PSD vs $M/K/\Phi$ maps (once per orbit leg) in OPQ, and TS models  | L3 + 1-2 days | Daily up to L0+14 days and on-demand | Not started  |

\* Expect to produce all the way L1 to L4 using OPQ immediately, but it will take more days to get other field models, especially active ones, and to include measured B

# Data Access

- Presently, only Level 0 data is routinely generated and published
- Access is via ViRBO: ftp or http
- <http://virbo.org/RBSP/RPS/README>



The screenshot shows a web browser window with the address bar displaying [virbo.org/RBSP/RPS/README](http://virbo.org/RBSP/RPS/README). The page content includes a 'Contents' sidebar on the left with links to 'Data Levels', 'Data Versioning', 'Archive Structure', and 'Release Notes for Level 0, Version 0.1'. The main content area features the section header '3. Archive Structure' followed by a paragraph explaining file formats for Level 0 and Level 1 data. Below this is a bulleted list of data categories and their sub-structures.

### 3. Archive Structure

For Level 0 data, the ptp file format is the official definitive record. For Level 1 and higher products, the CDF file format is the official definitive record.

Also, Level 0 ptp data is not broken out by year, whereas all other Level 0 and higher products are.

- [doc](#) - documents
  - Metadata -- ASCII CDF Skeleton files
    - [Level-0 Rate and Housekeeping](#)
    - [Level-0 Direct Event](#)
    - [Level-1](#)
  - [rbspa](#) - Data from RPS on RBSP-A
    - [rbspa/level0](#) - Level 0 data for RBSP-A
      - [rbspa/level0/ptp](#) - Raw payload telemetry packet Level 0 data for RBSP-A
      - [rbspa/level0/cdf](#) - Level 0 data for RBSP-A converted to CDF
        - [rbspa/level0/cdf/2012](#) - Data for 2012
      - [rbspa/level0/ascii](#) - Level 0 data for RBSP-A converted to ASCII
        - [rbspa/level0/ascii/2012](#) - Data for 2012
      - [rbspa/level0/hdf5](#) - Level 0 data for RBSP-A converted to HDF5
        - [rbspa/level0/hdf5/2012](#) - Data for 2012
    - [rbspa/level1](#) - Level 1 data for RBSP-A
      - [rbspa/level1/cdf](#) - Level 1 data for RBSP-A converted to CDF
        - [rbspa/level1/cdf/2012](#) - Data for year 2012