

URL: http://cxc.harvard.edu/ciao3.4/level.html Last modified: December 2006

AHELP for CIAO 3.4

level

Context: chandra

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## **Synopsis**

Describes the amount of processing performed to create a given product.

## Description

The processing level (ranging from 0-3) describes the extent of processing performed to create a Chandra data product. All products (event files, pha files, aspect files, etc.) have a level according to strictly defined criteria. These are outlined, with comments for users, below.

- L0 Level 0 products are the telemetry files packaged in FITS format. These are available upon request, but users generally will not have the need (or ability) to process these files.
- L1 Level 1 products are calibrated data derived from a single observation interval. These include files such as: ephemerides, aspect solutions, and event files. Users should consider this level the standard starting point for most processing, unless L1.5 products exist.
- L1.5 Level 1.5 products may exist for some kinds of data, such as grating data or solar system observations, which require further calibration. The most common L1.5 product is created to assign events to grating orders. A synonym of L1.5 data is "1a" (e.g. an event file for a grating observation, with the events assigned to their grating orders, will have "evt1a" in it's name).
- L2 Level 2 products contain merged, filtered data from all the observation intervals for an OBSID, and source properties derived from this merged data. Standard L2 files are made by the Standard Data Processing (SDP). Custom processing from level 1 (with special filtering, alternate source detection methods, etc.) may give improved results as compared to SDP. Users should pay particular attention to the version of the calibration products used when processing their data. This information is stored in the "CALDBVER" header keyword.
- L3 Level 3 products consist of catalogs and aggregate analysis of large numbers of observations. An example of a level 3 product would be a Chandra Source Catalog for all non–proprietary data, with sources identified and cross referenced with other catalogs. To date, there have been no L3 products created.

## See Also

calibration caldb

chandra
<u>coords, guide, isis, pileup, times</u>
chips
<u>chips</u>
concept
autoname, parameter, stack, subspace
dm
dm, dmbinning, dmcols, dmfiltering, dmimages, dmimfiltering, dmintro, dmopt, dmregions, dmsyntax
gui
<u>gui</u>
modules
<u>paramio, pixlib, stackio</u>
slang
<u>overview, slang, tips</u>
tools
acis build badpix, acis classify hotpix, acis process events, celldetect, dmmerge, hrc build badpix,
hrc dtfstats, hrc process events, tg create mask, tg resolve events, tgdetect, tgextract

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