Chandra X-ray Center

Status Bits

Both ACIS and HRC event files contain a STATUS column which consists of 32 bits. These bits are used to indicate various potential issues with the events, such as bad pixels, cosmic rays, or streak events. They are numbered 0-31, counting from right to left, and carry a value of 0 or 1; 0 marks the bit as good, while 1 marks it as bad.

See the following memos for an explanation of the status bits in event and bad pixel files:

- ACIS event files
- ACIS bad pixel files
- HRC event files

The majority of the status bits are set during standard data processing (SDP). The Create a New Level=2 Event File thread contains examples of filtering ACIS and HRC data on status.

Status Bits