1.1 CALDB Data

The following changes were made to the IXPE CALDB:

1. data/xpe/gpd/cpf/arf:
   a. ixpe_d[123]_20170101_02.arf and ixpe_d[123]_20170101_alpha075_02.arf added, fixes an error in the mirror effective area due to DU3 having a thicker thermal shield than DU1 and DU2.
   b. ixpe_d[123]_20170101_alpha075simple_02.arf: Adds ARF for "simple" weights.
2. data/xpe/gpd/cpf/mrf:
   a. ixpe_d[123]-20170101_02alpha075simple_02.mrf: Adds MRF for "simple" weights.
3. data/ixpe/xrt/bcf/badpix:
   a. All version _01 files were replaced by version _02 files. The originals did not contain correctly formatted headers for the current version of quzcif to identify and locate them. The current files replace INSTRUME=MMA with INSTRUME=XRT, and DETNAME=MMA[1234] with DETNAM=DU[1234].
4. data/ixpe/xrt/bcf/boomdrift:
   a. ixpe_a0_20221011_boomdrift_01.fits: File added to support new ixpeboomdriftcorr module. This contains the periodic boom drift model fit parameters used by that module.
5. data/ixpe/xrt/bcf/eaf:
   a. ixpe_m[123]_20210103_eaf_02.fits: Files replace the version 01 files which used incorrect INSTRUME and DETNAM keyword values. The current files replace INSTRUME=MMA with INSTRUME=XRT, and DETNAME=MMA[1234] with DETNAM=DU[1234].
   b. ixpe_m2_20210103_eaf_02.fits: In addition, this file fixes an error in the mirror EAF due to DU3 having a thicker thermal shiled than DU1 and DU2.
6. data/ixpe/xrt/bcf/reef:
   a. ixpe_m[1234]_20210103_reef_02.fits: Updated calculations of the REEF values. In addition, files replace the version 01 files, which used incorrect INSTRUME and DETNAM keyword values. The current files replace INSTRUME=MMA with INSTRUME=XRT, and DETNAME=MMA[1234] with DETNAM=DU[1234].
7. data/ixpe/xrt/bcf/tstrans:
   a. ixpe_m0_20210103_tstrans_02.fits: Version _02 replaces version _01 which used incorrect INSTRUME and DETNAM keyword values. The current files replace INSTRUME=MMA with INSTRUME=XRT, and DETNAME=MMA[1234] with DETNAM=DU[1234].
8. data/ixpe/xrt/bcf/vign:
   a. ixpe_m0_20210103_vign_02.fits: Version _02 replaces version _01 which used incorrect INSTRUME and DETNAM keyword values. The current files replace INSTRUME=MMA with INSTRUME=XRT, and DETNAME=MMA[1234] with DETNAM=DU[1234].
9. data/ixpe/xrt/bcf/align/ixpe_a0_20220606_align_01.fits.
   a. Updated the Q_SC_OH1 and Q_SC_OH2 quaternion data used to generate offset targets and align event and star tracker data during pipeline processing. These account for the Tip, Tilt, Rotate maneuvers completed on 2022-06-06.

10. data/ixpe/xrt/index/caldb.indx20220504 added.
    a. This index file was added with the information for the updated file described in 1.a, above.
11. data/ixpe/xrt/caldb.indx.
    a. Symbolic link updated to point to data/ixpe/xrt/index/caldb.indx20220504 described above. This enables the module quzcif to correctly query for the new alignment file based on time.
12. data/ixpe/xrt/bcf/align/ixpe_a0_20220606_align_01.fits was added. This contains the updated Q_SC_OH1 and Q_SC_OH2 quaternions to handle the Tip-Tilt-Rotate position adjustment that was made on 2022-06-06.
13. data/ixpe/xrt/index/caldb.indx20220616 added. This index file was added with the information for the updated file above.
14. data/ixpe/xrt/caldb.indx update to point to data/ixpe/xrt/index/caldb.indx20220616 described above. This enables the module quzcif to correctly query for the new alignment file based on time.