

Spacewatch 0.9m Mosaic Camera Survey, v1.0

spacewatch_data_structure_and_naming_convention.pdf

Spacewatch 0.9m Mosaic Camera Survey Data Structure and Naming Convention

Document authors: Brucker, M. J.; Larsen, J. A.; Mastaler, R. A.; McMillan, R. S.

Date: February 25, 2021

bundle

A) survey data and targeted asteroid data

year

month

day

fits + XML

B) calibration data

fits + XML

C) documents

The data are sorted by observation date in UT.

Survey data: The filename convention represents the start time of the observation where sw is an abbreviation of Spacewatch and the sky region number was a temporary name for a patch of sky in the survey that changed for each observing run. The observing run number is designated as the Brown lunation number (Brown 1933) corresponding to the new moon occurring during the center of the run. The mosaic CCD amplifiers are numbered 001 through 008.

Survey data filename format:

sw_observing_run_sky_region_year_month_day_hour_minute_second.ccd amplifier

For example, the XML label representing the survey image recorded by amplifier 8 of the mosaic CCD of sky region 35.01 with a start time of January 8, 2007 at 11:03:46 UT during observing run 1040 is named sw_1040_35.01_2007_01_08_11_03_46.008.xml.

Targeted data: A few asteroids were specifically targeted for astrometry follow-up observations. The targeted data filename format is similar to that of the survey data. The asteroid's packed designation is listed instead of a sky region number.

For example, the XML label for amplifier 2 of the targeted observation of near-Earth asteroid 2003 WB25 on October 31, 2008 at 11:50:28 UT during observing run 1062 is named sw_1062_K03W25B_2008_10_31_11_50_28.002.xml.

Calibration filename format:

sw_observing_run_masterflat.ccd amplifier

sw_observing_run_masterfringe.ccd amplifier

Reference:

Brown, E. W. 1933. The Motion of the Moon, 1923-1931. *MNRAS* **93**, 603-619.