

fastrack2009.2_prognotes.pdf

This file lists some of the software and structural changes included in McIDAS-X version 2009.2 that are most likely to affect your locally-developed McIDAS code. (See http://www.ssec.wisc.edu/mcidas/software/x/fastrack2009.2_changes.txt for the complete list of code changes included in McIDAS-X 2009.2.)

SSEC recommends that you always compile and link all local code after installing each new version of McIDAS-X. Use the information below to determine if you should make additional changes or accommodations to your local code.

- The Level 1b server, **lv1baget.cp**, was updated to pad the fourth character for units with 3 characters (i.e., RAD or RAW). Previously, these units were truncated with a NULL character, causing errors for XP and 64-bit Linux workstations.
- Non-linear calibration corrections were added to the POES server, **POES.c**, for NOAA-19 AVHRR data. This corrected a 4 degree brightness temperature error.
- Support for the *-nox11* flag was inadvertently removed from **makefile** in McIDAS-X version 2009.1. This option is again available.
- The installation and compilation scripts (**mcinst.sh** and **mccomp.sh**) were updated to better support gfortran.
- This installation script, **mcinst.sh**, now allows users to attempt to build McIDAS-X on unsupported versions of Linux and Sun operating systems. Disk space amount is not known for these systems, so the largest amount from the corresponding operating system is used.
- The calibration tables sent in the GVAR signal for GOES-14 and subsequent satellites have been moved from Block 0. These tables have never changed so static values were added to **GVAR.c**. Additionally, the location of nadir for an instrument has moved to a different location within Block 0. Default values are now used if the values are not found in the new Block 0 location.
- A new flag, *-DTCL_NO_STACK_CHECK=1*, was added to the Tcl compilation script, **tclcomp.sh**, to support newer versions of AIX.
- Negative values can now be written out by the netCDF server, **ncdfaput.cp**. This was done by having **imgcopy.pgm** always request 4-byte data values when the destination dataset is netCDF format.
- The ABI navigation routine, **nvxabis.dlm**, was updated to make SAE and EAS invertible. The routine was also updated to calculate solar and satellite zenith angles.
- The ABI calibration routine, **kbxabis.dlm**, was updated so bands 1-6 are now considered visible and all others IR. The radiance to temperature equation was updated and all references to albedo were changed to reflectance.
- The netCDF servers were updated to write out CF-compliant files. CF-compliant files are always written unless the new keyword CF=NO is added to IMG* commands. The following modules were updated and/or added for this change.

imgcopy.pgm
imgremap.pgm
mcncdf.h
ncdfaput.cp

imgfilt.pgm
makefile
mcsortcf.for

imgoper.pgm
mcaput.for
NCDF.c