The products are generated in Hierarchical Data Format (HDF4) in separate 5000 x 5000 30-m pixel tiles defined in the Albers Equal Area projection. There are a total of 501 CONUS and 162 Alaskan tiles referenced using a two digit horizontal and vertical tile coordinate system that is reflected in the HDF product filename. (http://globalmonitoring.sdstate.edu/projects/weld/)

Indirect projection method is used, which finds the intersected L1T UTM scenes and mapping them to a given tile. A mapping list is first built to mapping all the possible L1T scenes intersected with a CONUS tile. Then all the possible L1T scenes in a given day (or a period) are used as input to feed the re-projection code. A WELD product has more auxiliary layers related to pixel based solar and viewing geometry, could detection results (both automatic cloud cover assessment, ACCA and decision tree, DT) and the location index in L1T files. The product from EROS could be different; hence the delivered code can be used as a reference. And the following codes are provided:

1 A main re-projection c code *albers.toa.tile.ofutm.proc.v3.0.c* in folder *./* *albers.toa.tile.ofutm.proc* containing the core re-projection tiles, the core algorithm is in a lines 546-830. Code in other lines are only related to file read/write and meta writing, which you may not be so interested.

2 A folder *./weld.common.files.v3.0* containing all pixel coordinates projection algorithm and tile read/write algorithm c head/source files.

3 Two tile to scene mapping list files, one for CONUS (*conus.tile.pathrow.map.v1.6.txt*) and one for Alaska (*alaska.tile.pathrow.map.v1.6.txt*). The format is *tileID;path1\_row1;path2\_row2;……;pathn\_rown;*