Weekly report from 07-30-2012 to 08-05-2012

WORK DONE

- This week, I finished the Orthorectification algorithm and so all the main features of my plugin are completed. Now, the SAR images can be orthorectified using a standard ASCII DEM or an ellipsoidal constant as input information and also the plugin works with both TerraSAR-X and RADARSAT-2 sensors.
- I added the possibility to choose the average box interpolation methods (windows 3x3, 5x5, 7x7) in order to reduce speckle noise during the generation of the orthophoto image (see figure 1).
- Figure 2 shows on the left the raw RADARSAT-2 FineQuad image of Vancouver - Canada image (downloaded from the MDA Site http://gs.mdacorporation.com/SatelliteData/Radarsat2/SampleDataset.aspx), in the center the SRTM DEM used (source: http://srtm.csi.cgiar.org/SELECTION/inputCoord.asp) and on the right the result of the Orthorectification PlugIn with the overlaid UTM-WGS84 grid layer.

FIGURE 1: Orthorectification GUI screenshot:

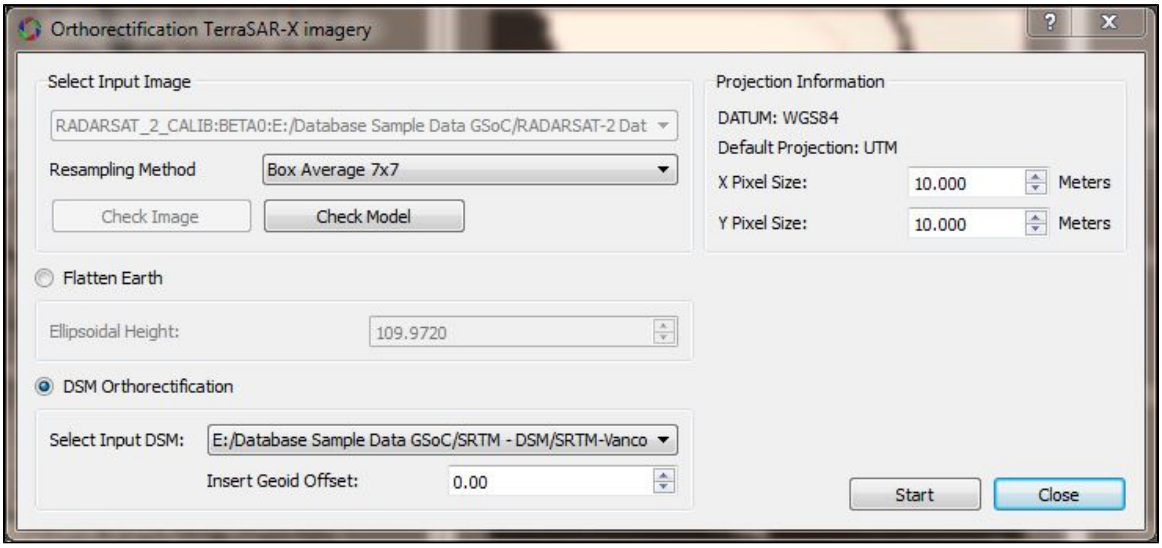
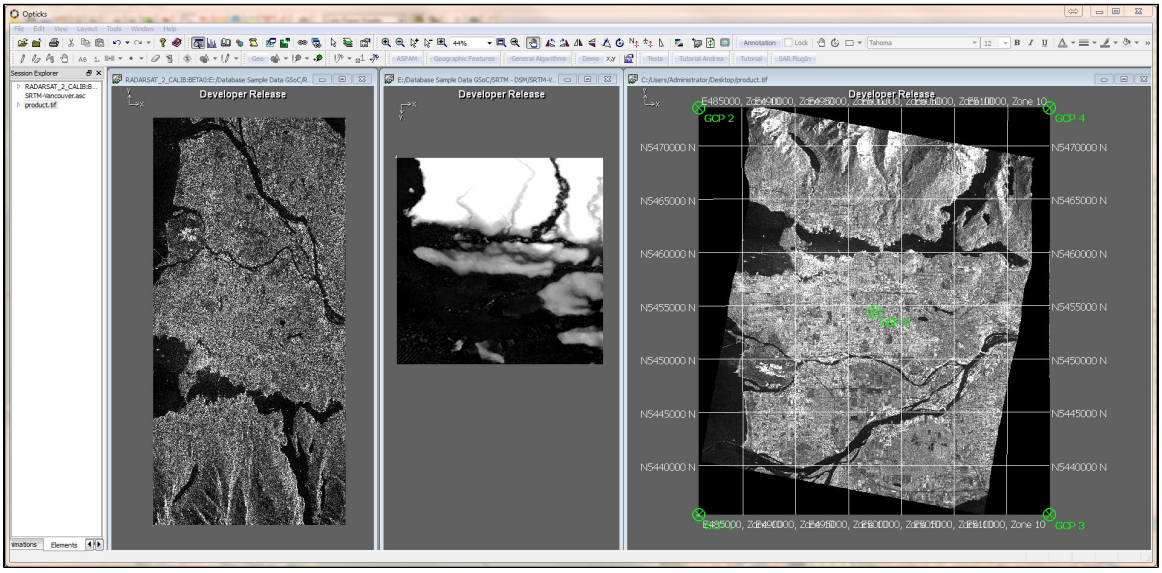


FIGURE 2: Orthorectification process data screenshot:



- Next week I will look for bugs, review the code, and I will generate the .aeb file for the installation of the SAR Plugin into Opticks.
- I have uploaded all the code to the GIT hub repository that can be found at the following link https://github.com/GSoC-2012-Nascetti/GSoC_SARPlugIn_Nascetti.

ISSUES THAT ARE SLOWING ME DOWN

- Nothing in particular this week.