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Interactive comment on "Geometric accuracy assessment of global coarse resolution satellite data sets: a study based on AVHRR GAC data at the subpixel level" *by* Xiaodan Wu et al.

Anonymous Referee #2

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This paper describes the work undertaken by the authors to assess the geolocation accuracy at the subpixel level of AVHRR Global Area Coverage data from NOAA-17, MetOp-A and MetOp-B satellites. The paper is comprehensive and generally well written, with sufficient figures to follow the work that is described. The authors used a coregistration method based on reference NDVI data from MODIS. The authors use NDVI from NOAA-17, MetOp-A and MetOp-B satellites (using visible and near IR bands), and use the described Correlation-based Patch Matching Method to assess the sub-pixel geo-location accuracy in both the along-track and cross-track directions. Six regions of interest from Europe and Africa were selected for analysis, and included different land cover and terrain characteristics. The effect of large satellite zenith an-

gles was also examined. Results are presented as mean cross-track and along-track shifts along with a standard deviation for each of the satellites applied to each of the regions of interest. The analysis was thorough, and I cannot suggest any further work needed for the paper.

I have a few specific comments for the paper: 1) Provide a reference or two on the land-sea fraction method mentioned on page 3. 2) When introducing figures 1 and 2, point out the color bar for SatZ and that the white line represents small SatZ along the satellite path. This will be helpful to the reader. 3) The figure 8 caption is not correct. The first two rows are SatZ cross-track and along-track (a-c) and (d-f). Longitude should be (g-i). Latitude should be (j-l).