GOES-R Landmarking: Working With SRTM Water Body Data

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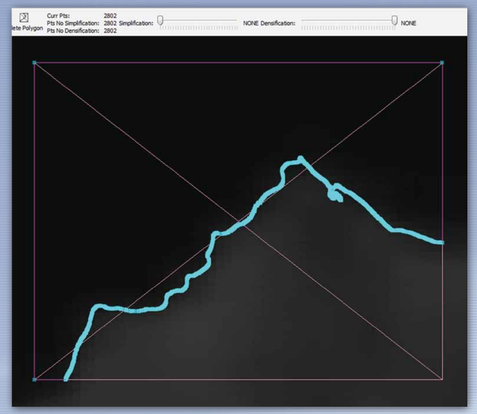
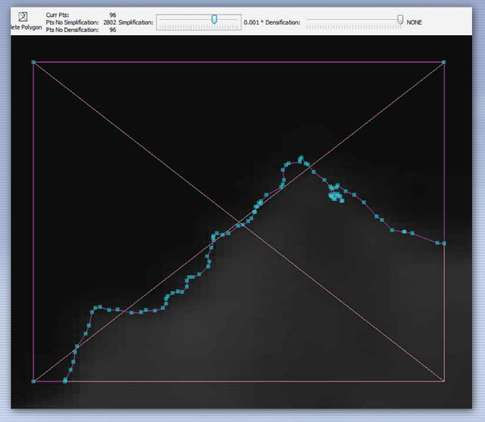
SRTM Water Body Data (SWBD) is more accurate than the Global Self-consistent, Hierarchical, High-resolution Shoreline (GSHHS) and has more than 10 times the data. It is easily integrated into the image viewing software.

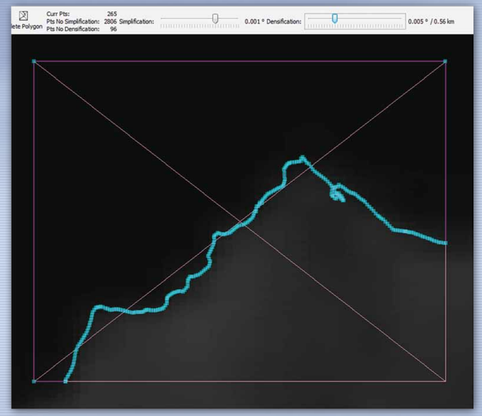
	SWBD	GSHHS
Coverage	56°S to 60°N	Global
Elevation	Included for each point	None
Age	2000	1990 and Pre-1980
Resolution	~10 m–90 m	~2 m–24 km (mean: 178 m)
Accuracy	20 m CEP @ 90%	Unknown (estimated 50 m–100 m)



Example of an operator selected landmark. The original sample from SWBD returns a polygon that has 2,802 points. This overly dense number of points can be greatly reduced by adjusting the simplification and densification tolerances.



By adjusting the simplification tolerance in a Douglas-Peuker algorithm, we have retained the shape of the initial polygon, but reduced the polygon to a mere 96 points.



By adjusting the densification tolerance, we can add additional points to fill the gaps. The resultant polygon looks very similar to the original data; however, it has a reasonable 265 points compared to the 2,802 original points.

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