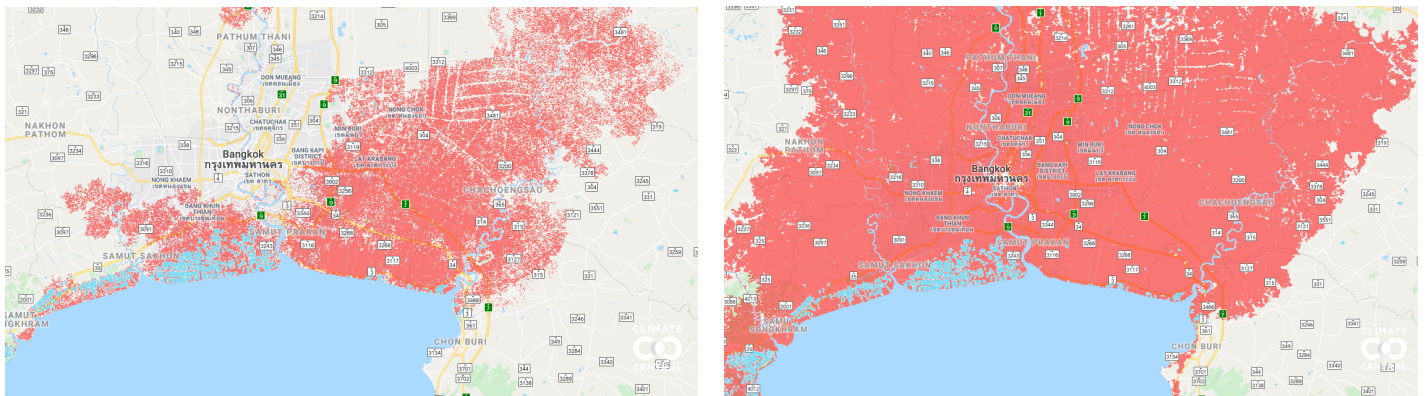


CoastalDEM[®]

Accurate elevation data for accurate flood risk assessment.

CoastalDEM reveals significant increases in projected flood exposure in coastal areas as sea levels rise. Here is an example for average annual flood height near Bangkok, Thailand in 2050.



Land below projected annual flood level for 2050 near Bangkok, Thailand

CoastalDEM 1.1 is a 1 arcsecond (~30 meter) horizontal resolution digital terrain model providing bare earth elevations for low-lying coastal areas globally.* It outperforms NASA's widely used SRTM digital elevation model, which is strongly influenced by treetops and rooftops, leading to systemic overestimation of ground elevations, and underestimation of coastal flood and sea level rise risks. By contrast, CoastalDEM has almost no bias and lower error scatter, and outperforms AW3D30 and MERITDEM, and the published error from Airbus's new WorldDEM™ Digital Terrain Model. The table below shows error metrics based on a variety of reference datasets.

*between the latitudes of 60 degrees N and 56 degrees S

Reference Data	Area	Product	Bias (m)	RMSE (m)	LE90 (m)	LE95 (m)
Lidar (continuous coverage)	USA	SRTM 3.0	3.67	5.36	9.12	11.23
		CoastalDEM 1.1	< 0.01	2.39	3.90	4.99
	Australia	SRTM 3.0	2.49	4.15	6.76	8.98
		CoastalDEM 1.1	-0.11	2.46	3.94	5.16
ICESat (sparse)	Global (60N to 56S)	SRTM 3.0	1.93	ICESat data do not support robust estimates		
		CoastalDEM 1.1	-0.024			
Stated claim**	Global	Airbus' WorldDEM™ DTM	<10m			

** by Airbus. Airbus also claims <4m accuracy for it's digital surface elevation product (includes vegetation and structure surfaces / not bare earth terrain data). Airbus does not state which metric it uses, but LE90 is industry standard.