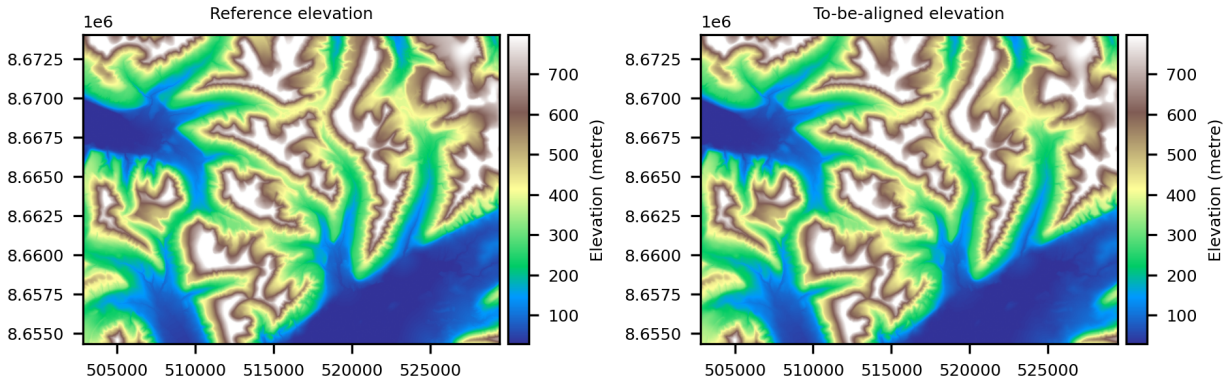
Accuracy assessment report — xDEM

xDEM version: 0.1.dev50

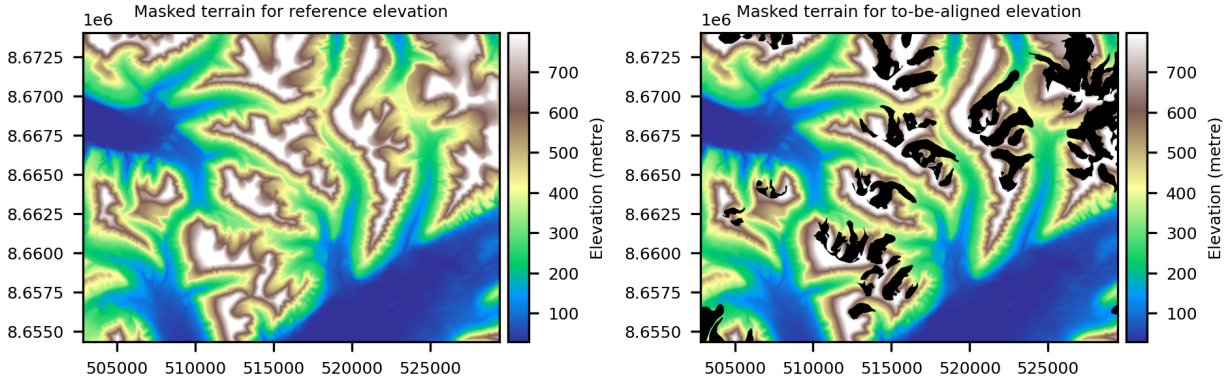
Date: 30/04/2026 08:25:59

Computing time: 8.26 seconds

Elevation inputs



Masked elevation data

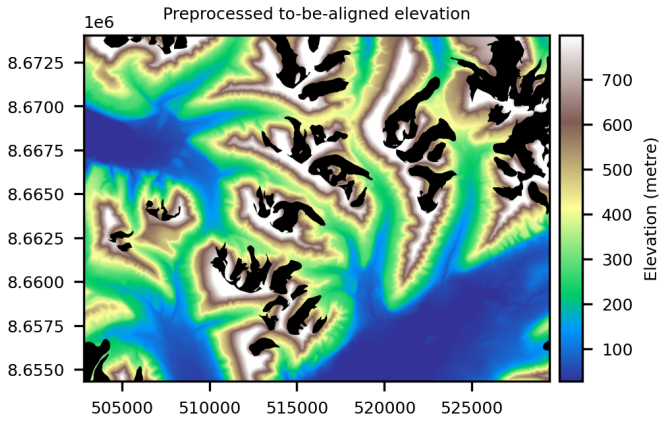


Information about inputs

Information	Value
reference_elev	{'path_to_elev': '../../../xdem/example_data/Longyearbyen/data/DEM_2009_ref.tif', 'from_vcrs': 'None', 'to_vcrs': 'None', 'downsample': '1'}
to_be_aligned_elev	{'path_to_elev': '../../../xdem/example_data/Longyearbyen/data/DEM_1990.tif', 'path_to_mask': '../../../xdem/example_data/

	Longyearbyen/data/glacier_mask/CryoClim_GAO_SJ_1990.shp', 'from_vcrs': 'None', 'to_vcrs': 'None', 'downsample': '1'}
sampling_grid	reference_elev

Preprocessed elevation data



Coregistration user configuration

Information	Value
step_one	{'method': 'LZD', 'extra_information': "{'subsample': 10000}"}
process	True

LZD inputs

Information	Value
random	{'subsample': '10000', 'random_state': '42'}
fitorbin	{'fit_minimizer': 'least_squares', 'fit_loss_func': 'linear'}
iterative	{'max_iterations': '200', 'tolerance': '0.01'}
specific	{}
affine	{'only_translation': 'False'}

LZD outputs

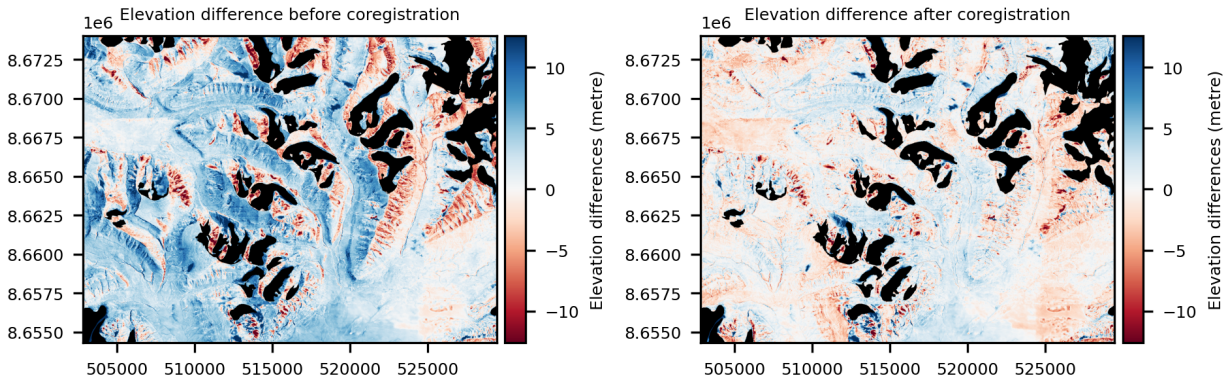
Information	Value
affine	{'centroid': '(515650.83, 8663888.17, 353.11)', 'matrix': '[[9.99999985e-01 1.17578419e-04 -1.30099078e-04 1.02548967e+01]\n [-1.17594385e-04 9.99999986e-01 -1.22719549e-04

	1.90590313e+00]\n [1.30084647e-04 1.22734846e-04 9.99999984e-01 -1.93544013e+00]\n [0.00000000e+00 0.00000000e+00 0.00000000e+00 1.00000000e+00]]', 'shift_x': '10.25', 'shift_y': '1.91', 'shift_z': '-1.94'}
random	{'subsample_final': '10000'}

Statistics

Data	Aligned elevation	Difference before coreg	Difference after coreg
Median	316.330	2.334	-0.048
NMAD	277.103	3.417	2.050
Valid count	1133607	1145221	1133607

Elevation differences



Differences histogram