

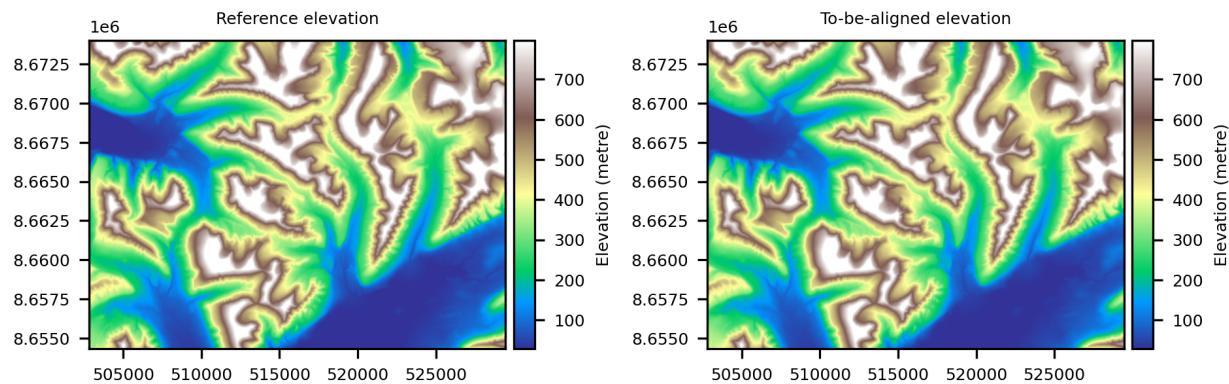
Accuracy assessment report — xDEM

xDEM version: 0.2.3.dev26

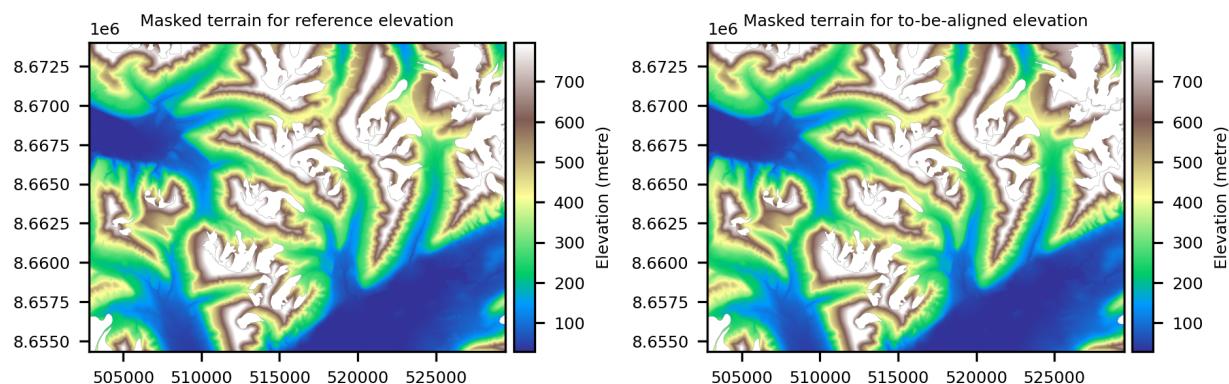
Date: 26/02/2026 14:37:01

Computing time: 12.86 seconds

Elevation inputs



Masked elevation data

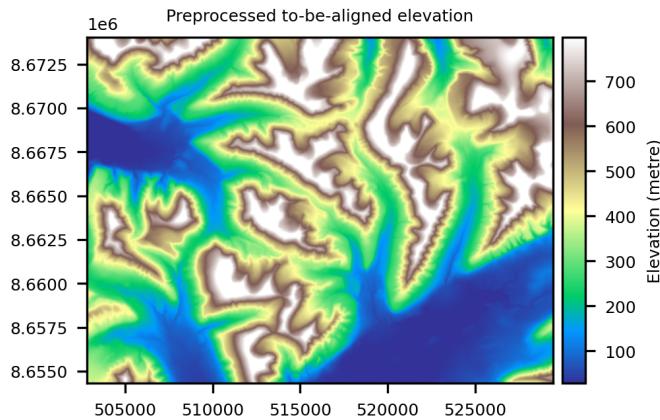


Information about inputs

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

```
{'centroid': '(516048.39, 8664263.24, 377.02)', 'matrix':  
affine    '[[ 9.99999989e-01 1.18935868e-04 -8.98659020e-05
```

```

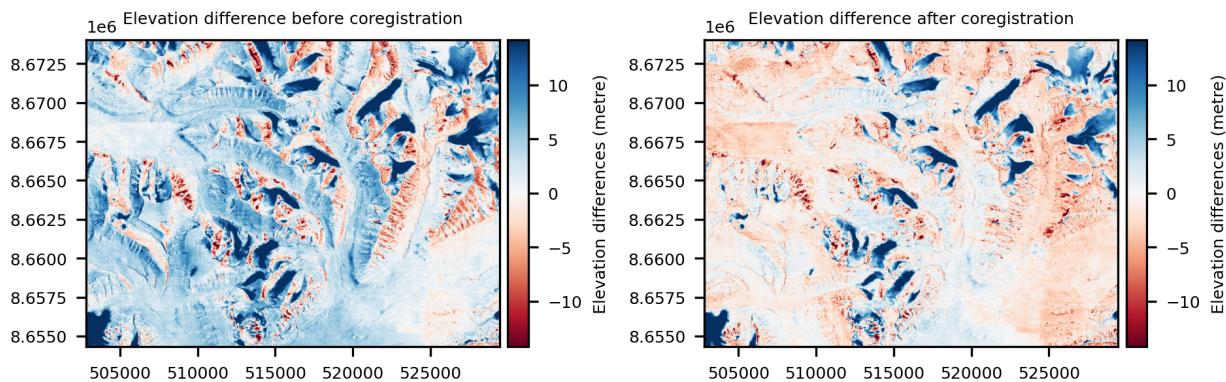
9.27075541e+00]\n [-1.18939217e-04 9.99999992e-01
-3.72660317e-05 1.15738237e-01]\n [ 8.98614690e-05 3.72767199e-05
9.9999995e-01 -3.12406906e+00]\n [ 0.00000000e+00
0.00000000e+00 0.00000000e+00 1.00000000e+00]]', 'shift_x': '9.27',
'shift_y': '0.12', 'shift_z': '-3.12'}
random    {'subsample_final': '10000'}

```

Statistics

Data	Aligned elevation	Difference before coreg	Difference after coreg
Median	361.983	2.766	-0.847
NMAD	291.535	3.806	2.551
Valid count	1309691	1312020	1309691

Elevation differences



Differences histogram

