

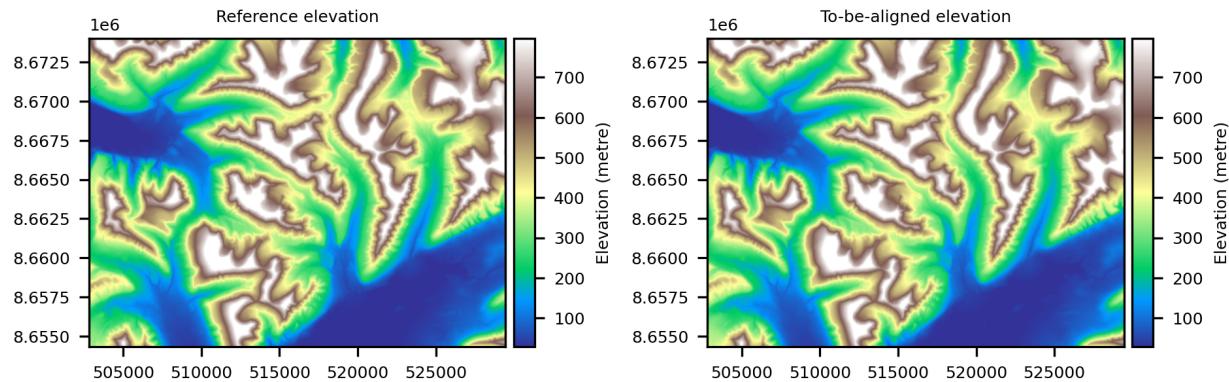
Accuracy assessment report — xDEM

xDEM version: 0.2.3.dev26

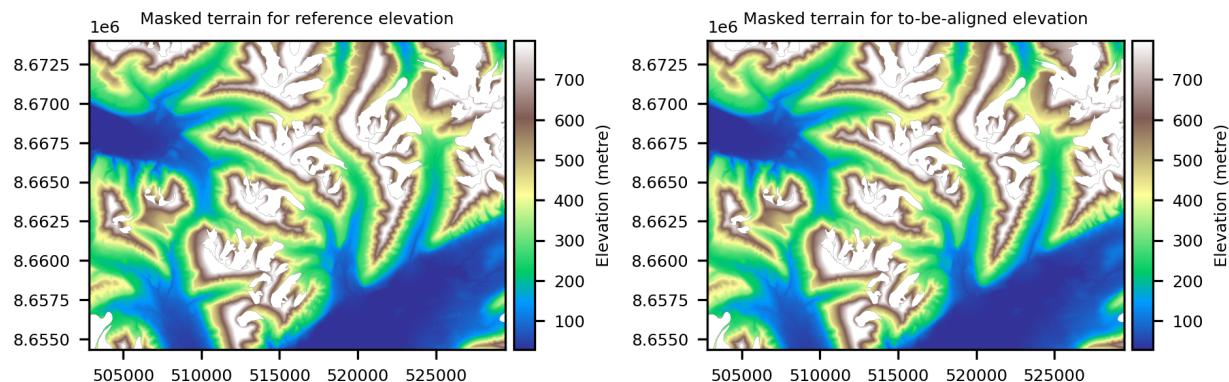
Date: 24/02/2026 15:37:06

Computing time: 15.31 seconds

Elevation inputs



Masked elevation data

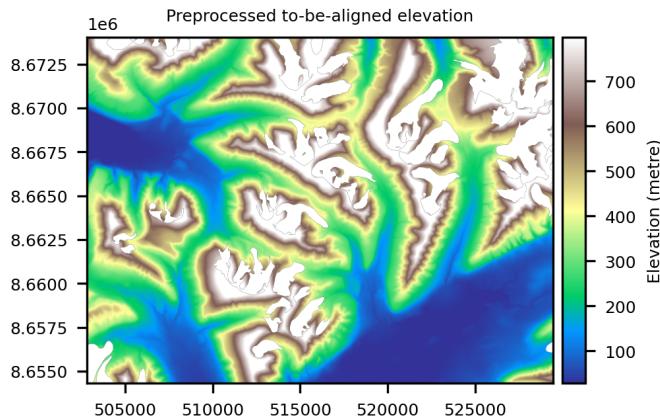


Information about inputs

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': '(515650.83, 8663888.17, 353.11)', 'matrix':  
affine    '[[ 9.99999984e-01 1.17712185e-04 -1.31656357e-04
```

```

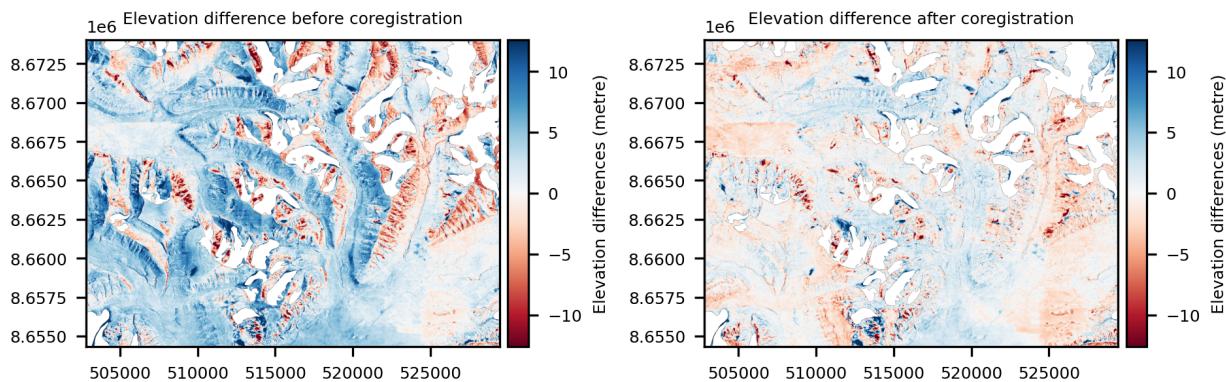
1.03246202e+01]\n [-1.17728753e-04 9.99999985e-01
-1.25841313e-04 1.96654389e+00]\n [ 1.31641542e-04
1.25856810e-04 9.99999983e-01 -1.88059635e+00]\n
[ 0.00000000e+00 0.00000000e+00 0.00000000e+00
1.00000000e+00]]', 'shift_x': '10.32', 'shift_y': '1.97', 'shift_z': '-1.88'}
random    {'subsample_final': '10000'}

```

Statistics

Data	Aligned elevation	Difference before coreg	Difference after coreg
Median	316.380	2.334	5.569e-04
NMAD	277.105	3.417	2.049
Valid count	1133607	1145221	1133607

Elevation differences



Differences histogram

