

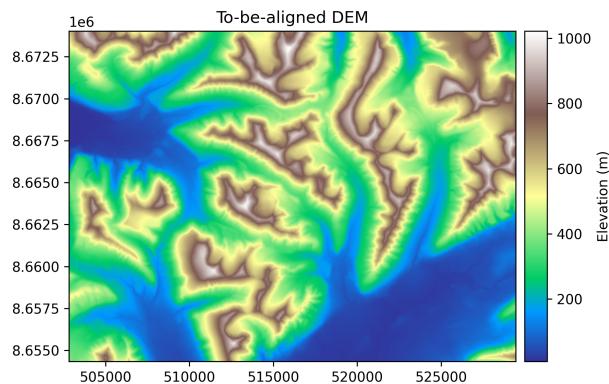
# Accuracy assessment report — xDEM

xDEM version: 0.2.3.dev26

Date: 13/02/2026 16:06:42

Computing time: 20.94 seconds

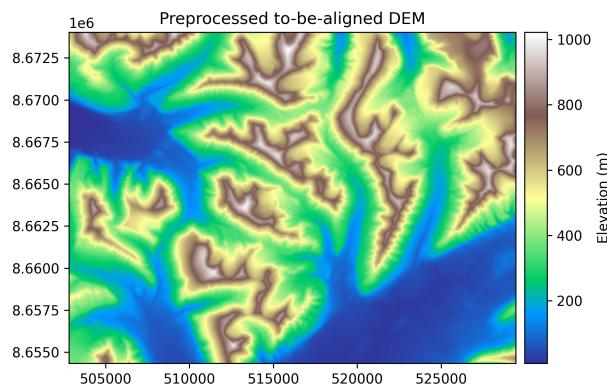
## Elevation datasets



## 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 DEM



## Coregistration user configuration

### Information Value

```
step_one      {'method': 'NuthKaab'}  
process       True
```

## NuthKaab inputs

### Information Value

```
random        {'subsample': '500000.', 'random_state': '42'}  
              {'fit_or_bin': 'bin_and_fit', 'fit_func': '_nuth_kaab_fit_func',  
fitorbin      'fit_optimizer': 'curve_fit', 'bin_sizes': '72', 'bin_statistic':  
              'nanmedian', 'nd': '1', 'bias_var_names': "[aspect]"}  
iterative     {'max_iterations': '10', 'tolerance': '0.'}  
specific      {}  
affine        {'apply_vshift': 'True'}
```

## NuthKaab outputs

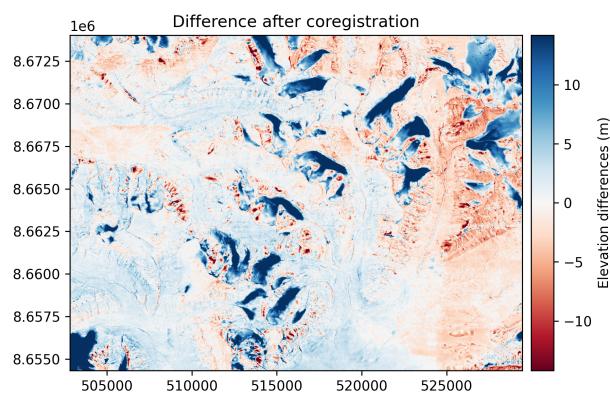
### Information Value

```
affine        {'shift_x': '9.2', 'shift_y': '2.79', 'shift_z': '-1.98'}  
random       {'subsample_final': '500000'}
```

# Statistics

Data	Aligned elevation	Difference before coreg	Difference after coreg
Median	363.10772705078125	2.766407012939453	0.36712646484375
NMAD	291.1906433105469	3.805830478668213	2.8275182247161865
Valid count	1312020.0	1312020.0	1312020.0

## Elevation differences



## Differences histogram

