

Demcompare report

Jun 23, 2023

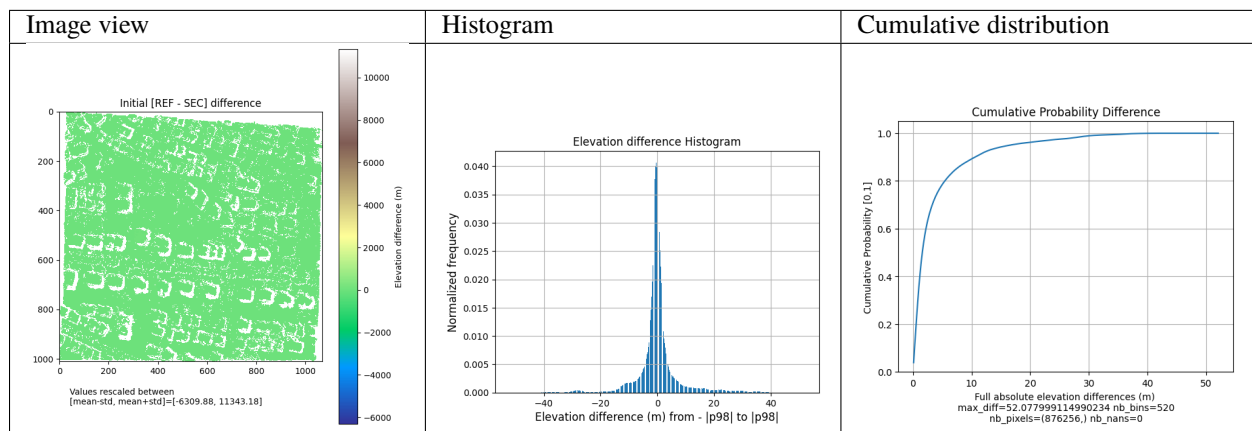
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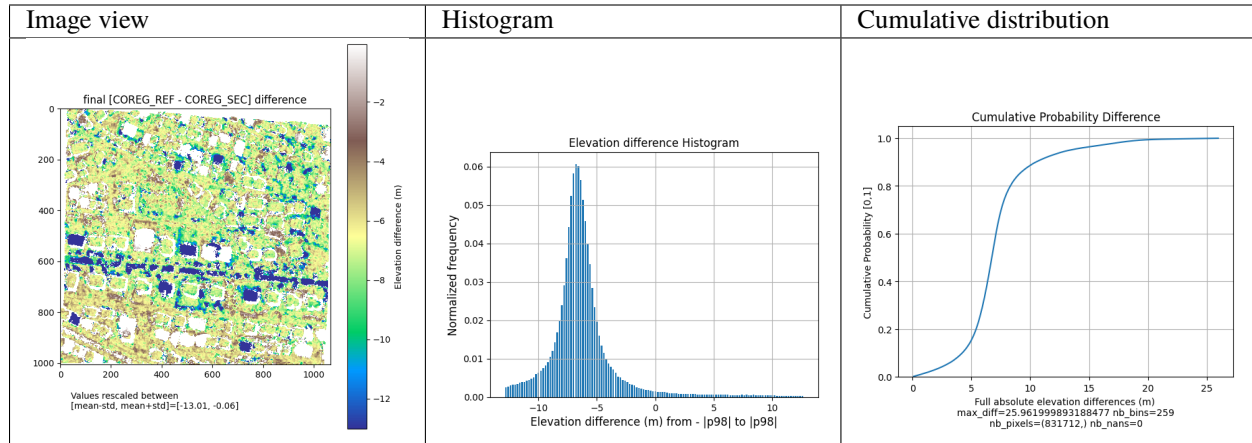
- *Generated date:* 23/06/23 17h33
- *Demcompare version:* 0.5.2
- *Documentation:* <https://demcompare.readthedocs.io/>
- *Repository:* <https://github.com/CNES/demcompare>

1 Image views

1.1 Initial elevation (REF-SEC)



1.2 Final elevation after coregistration (COREG_REF-COREG_SEC)



2 Stats Results

The **stats metrics** are organized around **classification layers and modes**.

Stats are generated from:

- **input_ref** when one input dem and statistics only
- reprojected **input_ref - input_sec** difference when statistics only
- reprojected and coregistered **input_ref - input_sec** difference with coregistration and statistics

2.1 Classification layer: global

Mode: standard

Table showing comparison metrics

Set Name	nbpts	per-cent_valid_points	mean	me-dian	max	min	sum	per-centil_90	squared_summad	rmse	std
global:	11861021	0.0029	-6.78	-6.69	12.90	-25.96	-5638297.00	8.06	50796252.0059	7.82	3.89

2.2 Classification layer: Slope0

Mode: standard

Table showing comparison metrics

Set Name	mean	median	max	min	sum	percentil_90	squared_summad	rmse	std	nbpts	percent_valid_points	
[0%;5%[:0	-7.02	-6.73	9.37	-19.11	-1094.53	3.63	9187.03	0.78	7.67	3.11	160.00	0.01
[5%;10%[:5	-6.82	-6.75	10.79	-25.70	-8008.12	2.59	61546.67	0.68	7.24	2.44	1224.00	0.11
[10%;25%[:10	-6.79	-6.70	12.81	-25.96	-202324.12	2.71	1562551.62	0.80	7.24	2.52	30884.00	0.288
[25%;45%[:25	-6.82	-6.67	12.87	-25.96	-370023.06	3.95	2935363.50	0.02	7.35	2.76	56083.00	0.523
[45%;inf[:45	-6.51	-6.60	12.90	-25.96	-1416136.62	7.28	12780142.00	0.20	7.66	4.05	222285.00	0.73

Mode: intersection

Table showing comparison metrics

Set Name	mean	median	max	min	sum	percentil_90	squared_summad	rmse	std	nbpts	percent_valid_points	
[0%;5%[:0	-7.02	-6.73	9.37	-19.11	-1094.53	3.63	9187.03	0.78	7.67	3.11	160.00	0.01
[5%;10%[:5	-6.82	-6.75	10.79	-25.70	-8008.12	2.59	61546.67	0.68	7.24	2.44	1224.00	0.11
[10%;25%[:10	-6.79	-6.70	12.81	-25.96	-202324.12	2.71	1562551.62	0.80	7.24	2.52	30884.00	0.288
[25%;45%[:25	-6.82	-6.67	12.87	-25.96	-370023.06	3.95	2935363.50	0.02	7.35	2.76	56083.00	0.523
[45%;inf[:45	-6.51	-6.60	12.90	-25.96	-1416136.62	7.28	12780142.00	0.20	7.66	4.05	222285.00	0.73

Mode: exclusion

Table showing comparison metrics

Set Name	mean	median	max	min	sum	per-centil_90	squared_summad	rmse	std	nbpts	per-cent_valid_points	
[0%;5%[:0	-7.55	-6.90	11.96	-25.89	-63142.47	8.24	591026.75	1.22	8.41	3.70	8669.00	0.81
[5%;10%[:5	-7.55	-6.91	12.29	-25.87	-174409.78	7.75	1610734.50	0.17	8.35	3.57	23948.00	0.223
[10%;25%[:10	-7.63	-6.94	12.88	-25.95	-785172.06	8.19	7414507.00	0.34	8.49	3.72	106965.00	0.97
[25%;45%[:25	-7.37	-6.87	12.90	-25.96	-1072950.88	7.51	9864000.00	0.40	8.23	3.66	150482.00	0.403
[45%;inf[:45	-6.29	-6.47	12.90	-25.96	-1146740.38	8.74	9914919.00	0.59	7.37	3.85	190867.00	0.780

3 Full input configuration

```
{
"output_dir": "/home/duboise/work/src/discover-cnes-3d-tools/data_turkey/outputs_
↳demcompare_diff_dsm",
"input_ref": {
  "path": "/home/duboise/work/src/discover-cnes-3d-tools/data_turkey/outputs_cars_post_
↳event/cars_dsm_post_event.tif",
  "zunit": "m"
},
"input_sec": {
  "path": "/home/duboise/work/src/discover-cnes-3d-tools/data_turkey/outputs_cars_pre_
↳event/cars_dsm_pre_event.tif",
  "zunit": "m",
  "geoid_georef": "True",
  "nodata": 0
},
"coregistration": {
  "method_name": "nuth_kaab_internal",
  "number_of_iterations": 6,
  "estimated_initial_shift_x": 0,
  "estimated_initial_shift_y": 0,
  "output_dir": "/home/duboise/work/src/discover-cnes-3d-tools/data_turkey/outputs_
↳demcompare_diff_dsm",
  "sampling_source": "sec",
  "save_optional_outputs": false
},
"statistics": {
  "classification_layers": {
    "Slope0": {
      "type": "slope",
      "ranges": [
        0,
        5,
        10,
        25,
        45
      ]
    }
  }
},
"remove_outliers": "True",
"output_dir": "/home/duboise/work/src/discover-cnes-3d-tools/data_turkey/outputs_
↳demcompare_diff_dsm"
},
"report": "sphinx",
"otd": "default_OTD"
}
```