

Supplementary file 2. Full results from HSD tests for all combinations of point cloud types for different acquisition years, strata, and variables. The table shows mean difference (percentage points), as well as lower (lwr) and upper (upr) value of the confidence interval and the corresponding p-value of a t-test. Test showing differences significantly different from zero are highlighted in bold.

Combination	Year	Str	Var	Difference	lwr	upr	p-adj
Agisoft-ALS	2015	All	All	0.08	0.03	0.12	0.000
MatchT1-ALS	2015	All	All	0.06	0.02	0.11	0.001
MatchT2-ALS	2015	All	All	0.06	0.02	0.11	0.001
Pix4D-ALS	2015	All	All	0.09	0.05	0.14	0.000
SURE-ALS	2015	All	All	0.04	0.00	0.09	0.087
MatchT1-Agisoft	2015	All	All	-0.01	-0.06	0.03	0.975
MatchT2-Agisoft	2015	All	All	-0.01	-0.06	0.03	0.979
Pix4D-Agisoft	2015	All	All	0.02	-0.03	0.06	0.885
SURE-Agisoft	2015	All	All	-0.03	-0.08	0.01	0.288
MatchT2-MatchT1	2015	All	All	0.00	-0.05	0.05	1.000
Pix4D-MatchT1	2015	All	All	0.03	-0.02	0.08	0.434
SURE-MatchT1	2015	All	All	-0.02	-0.07	0.02	0.760
Pix4D-MatchT2	2015	All	All	0.03	-0.02	0.07	0.453
SURE-MatchT2	2015	All	All	-0.02	-0.07	0.02	0.743
SURE-Pix4D	2015	All	All	-0.05	-0.10	-0.01	0.018
Agisoft-ALS	2018	All	All	0.06	0.02	0.10	0.000
MatchT1-ALS	2018	All	All	0.05	0.01	0.09	0.004
MatchT2-ALS	2018	All	All	0.06	0.02	0.09	0.000
Pix4D-ALS	2018	All	All	0.07	0.03	0.11	0.000
SURE-ALS	2018	All	All	0.04	0.00	0.08	0.029
MatchT1-Agisoft	2018	All	All	-0.01	-0.05	0.03	0.949
MatchT2-Agisoft	2018	All	All	0.00	-0.04	0.03	1.000
Pix4D-Agisoft	2018	All	All	0.01	-0.03	0.05	0.982
SURE-Agisoft	2018	All	All	-0.02	-0.06	0.02	0.680
MatchT2-MatchT1	2018	All	All	0.01	-0.03	0.05	0.990
Pix4D-MatchT1	2018	All	All	0.02	-0.02	0.06	0.601
SURE-MatchT1	2018	All	All	-0.01	-0.05	0.03	0.992
Pix4D-MatchT2	2018	All	All	0.01	-0.02	0.05	0.920
SURE-MatchT2	2018	All	All	-0.02	-0.05	0.02	0.839
SURE-Pix4D	2018	All	All	-0.03	-0.07	0.01	0.243
Agisoft-ALS	2015	1	All	0.04	0.00	0.09	0.067
MatchT1-ALS	2015	1	All	0.02	-0.02	0.07	0.664
MatchT2-ALS	2015	1	All	0.02	-0.02	0.07	0.640
Pix4D-ALS	2015	1	All	0.04	0.00	0.09	0.093

Combination	Year	Str	Var	Difference	lwr	upr	p-adj
SURE-ALS	2015	1	All	0.02	-0.02	0.07	0.689
MatchT1-Agisoft	2015	1	All	-0.02	-0.07	0.03	0.814
MatchT2-Agisoft	2015	1	All	-0.02	-0.07	0.03	0.832
Pix4D-Agisoft	2015	1	All	0.00	-0.05	0.04	1.000
SURE-Agisoft	2015	1	All	-0.02	-0.07	0.03	0.793
MatchT2-MatchT1	2015	1	All	0.00	-0.05	0.05	1.000
Pix4D-MatchT1	2015	1	All	0.02	-0.03	0.06	0.874
SURE-MatchT1	2015	1	All	0.00	-0.05	0.05	1.000
Pix4D-MatchT2	2015	1	All	0.02	-0.03	0.06	0.888
SURE-MatchT2	2015	1	All	0.00	-0.05	0.04	1.000
SURE-Pix4D	2015	1	All	-0.02	-0.06	0.03	0.857
Agisoft-ALS	2015	2	All	0.11	0.05	0.17	0.000
MatchT1-ALS	2015	2	All	0.08	0.02	0.14	0.006
MatchT2-ALS	2015	2	All	0.08	0.02	0.15	0.003
Pix4D-ALS	2015	2	All	0.14	0.07	0.20	0.000
SURE-ALS	2015	2	All	0.06	0.00	0.12	0.075
MatchT1-Agisoft	2015	2	All	-0.03	-0.10	0.03	0.686
MatchT2-Agisoft	2015	2	All	-0.03	-0.09	0.04	0.806
Pix4D-Agisoft	2015	2	All	0.03	-0.04	0.09	0.831
SURE-Agisoft	2015	2	All	-0.05	-0.11	0.01	0.197
MatchT2-MatchT1	2015	2	All	0.00	-0.06	0.07	1.000
Pix4D-MatchT1	2015	2	All	0.06	0.00	0.12	0.080
SURE-MatchT1	2015	2	All	-0.02	-0.08	0.05	0.962
Pix4D-MatchT2	2015	2	All	0.06	-0.01	0.12	0.132
SURE-MatchT2	2015	2	All	-0.02	-0.09	0.04	0.907
SURE-Pix4D	2015	2	All	-0.08	-0.14	-0.01	0.006
Agisoft-ALS	2015	3	All	0.07	-0.04	0.18	0.476
MatchT1-ALS	2015	3	All	0.09	-0.02	0.19	0.229
MatchT2-ALS	2015	3	All	0.08	-0.03	0.19	0.277
Pix4D-ALS	2015	3	All	0.09	-0.01	0.20	0.136
SURE-ALS	2015	3	All	0.04	-0.07	0.15	0.891
MatchT1-Agisoft	2015	3	All	0.02	-0.09	0.13	0.998
MatchT2-Agisoft	2015	3	All	0.01	-0.10	0.12	0.999
Pix4D-Agisoft	2015	3	All	0.03	-0.08	0.14	0.985
SURE-Agisoft	2015	3	All	-0.03	-0.14	0.08	0.981
MatchT2-MatchT1	2015	3	All	0.00	-0.11	0.11	1.000
Pix4D-MatchT1	2015	3	All	0.01	-0.10	0.12	1.000
SURE-MatchT1	2015	3	All	-0.04	-0.15	0.07	0.863

Combination	Year	Str	Var	Difference	lwr	upr	p-adj
Pix4D-MatchT2	2015	3	All	0.01	-0.10	0.12	0.999
SURE-MatchT2	2015	3	All	-0.04	-0.15	0.07	0.903
SURE-Pix4D	2015	3	All	-0.05	-0.16	0.06	0.736
Agisoft-ALS	2018	1	All	0.08	0.01	0.15	0.026
MatchT1-ALS	2018	1	All	0.06	-0.01	0.13	0.200
MatchT2-ALS	2018	1	All	0.08	0.01	0.16	0.017
Pix4D-ALS	2018	1	All	0.07	0.00	0.14	0.082
SURE-ALS	2018	1	All	0.05	-0.02	0.12	0.365
MatchT1-Agisoft	2018	1	All	-0.02	-0.09	0.05	0.968
MatchT2-Agisoft	2018	1	All	0.00	-0.07	0.08	1.000
Pix4D-Agisoft	2018	1	All	-0.01	-0.08	0.06	0.999
SURE-Agisoft	2018	1	All	-0.03	-0.10	0.04	0.872
MatchT2-MatchT1	2018	1	All	0.02	-0.05	0.10	0.935
Pix4D-MatchT1	2018	1	All	0.01	-0.06	0.08	0.999
SURE-MatchT1	2018	1	All	-0.01	-0.08	0.06	0.999
Pix4D-MatchT2	2018	1	All	-0.01	-0.09	0.06	0.994
SURE-MatchT2	2018	1	All	-0.03	-0.11	0.04	0.800
SURE-Pix4D	2018	1	All	-0.02	-0.09	0.05	0.980
Agisoft-ALS	2018	2	All	0.04	-0.01	0.10	0.255
MatchT1-ALS	2018	2	All	0.01	-0.05	0.07	0.996
MatchT2-ALS	2018	2	All	0.03	-0.02	0.09	0.590
Pix4D-ALS	2018	2	All	0.07	0.02	0.13	0.004
SURE-ALS	2018	2	All	0.04	-0.01	0.10	0.257
MatchT1-Agisoft	2018	2	All	-0.03	-0.09	0.03	0.584
MatchT2-Agisoft	2018	2	All	-0.01	-0.07	0.05	0.991
Pix4D-Agisoft	2018	2	All	0.03	-0.03	0.09	0.705
SURE-Agisoft	2018	2	All	0.00	-0.06	0.06	1.000
MatchT2-MatchT1	2018	2	All	0.02	-0.04	0.08	0.895
Pix4D-MatchT1	2018	2	All	0.06	0.00	0.12	0.026
SURE-MatchT1	2018	2	All	0.03	-0.03	0.09	0.596
Pix4D-MatchT2	2018	2	All	0.04	-0.02	0.10	0.304
SURE-MatchT2	2018	2	All	0.01	-0.05	0.07	0.994
SURE-Pix4D	2018	2	All	-0.03	-0.09	0.03	0.650
Agisoft-ALS	2018	3	All	0.05	-0.01	0.11	0.111
MatchT1-ALS	2018	3	All	0.06	0.00	0.12	0.039
MatchT2-ALS	2018	3	All	0.05	-0.01	0.11	0.173
Pix4D-ALS	2018	3	All	0.07	0.01	0.13	0.020
SURE-ALS	2018	3	All	0.03	-0.03	0.09	0.712
MatchT1-Agisoft	2018	3	All	0.01	-0.05	0.07	0.999

Combination	Year	Str	Var	Difference	lwr	upr	p-adj
MatchT2-Agisoft	2018	3	All	0.00	-0.06	0.06	1.000
Pix4D-Agisoft	2018	3	All	0.01	-0.05	0.07	0.989
SURE-Agisoft	2018	3	All	-0.02	-0.08	0.04	0.869
MatchT2-MatchT1	2018	3	All	-0.01	-0.07	0.05	0.991
Pix4D-MatchT1	2018	3	All	0.00	-0.06	0.06	1.000
SURE-MatchT1	2018	3	All	-0.03	-0.09	0.03	0.646
Pix4D-MatchT2	2018	3	All	0.02	-0.04	0.08	0.964
SURE-MatchT2	2018	3	All	-0.02	-0.08	0.04	0.937
SURE-Pix4D	2018	3	All	-0.04	-0.10	0.02	0.499
Agisoft-ALS	2015	All	G	0.13	0.02	0.23	0.008
MatchT1-Agisoft	2015	All	G	-0.01	-0.11	0.09	1.000
MatchT1-ALS	2015	All	G	0.11	0.01	0.22	0.021
MatchT2-Agisoft	2015	All	G	0.00	-0.11	0.10	1.000
MatchT2-ALS	2015	All	G	0.12	0.02	0.23	0.010
MatchT2-MatchT1	2015	All	G	0.01	-0.10	0.11	1.000
Pix4D-Agisoft	2015	All	G	0.02	-0.08	0.13	0.984
Pix4D-ALS	2015	All	G	0.15	0.05	0.25	0.001
Pix4D-MatchT1	2015	All	G	0.04	-0.07	0.14	0.925
Pix4D-MatchT2	2015	All	G	0.03	-0.08	0.13	0.977
SURE-Agisoft	2015	All	G	-0.05	-0.15	0.06	0.814
SURE-ALS	2015	All	G	0.08	-0.02	0.18	0.241
SURE-MatchT1	2015	All	G	-0.03	-0.14	0.07	0.932
SURE-MatchT2	2015	All	G	-0.04	-0.15	0.06	0.842
SURE-Pix4D	2015	All	G	-0.07	-0.17	0.03	0.384
Agisoft-ALS	2015	All	HL	0.03	0.00	0.05	0.013
MatchT1-Agisoft	2015	All	HL	-0.02	-0.04	0.01	0.276
MatchT1-ALS	2015	All	HL	0.01	-0.01	0.03	0.851
MatchT2-Agisoft	2015	All	HL	-0.02	-0.04	0.01	0.400
MatchT2-ALS	2015	All	HL	0.01	-0.01	0.04	0.733
MatchT2-MatchT1	2015	All	HL	0.00	-0.02	0.03	1.000
Pix4D-Agisoft	2015	All	HL	0.01	-0.02	0.03	0.985
Pix4D-ALS	2015	All	HL	0.03	0.01	0.06	0.001
Pix4D-MatchT1	2015	All	HL	0.02	0.00	0.05	0.058
Pix4D-MatchT2	2015	All	HL	0.02	0.00	0.05	0.103
SURE-Agisoft	2015	All	HL	-0.02	-0.04	0.01	0.330
SURE-ALS	2015	All	HL	0.01	-0.01	0.04	0.800
SURE-MatchT1	2015	All	HL	0.00	-0.02	0.03	1.000
SURE-MatchT2	2015	All	HL	0.00	-0.03	0.02	1.000

Combination	Year	Str	Var	Difference	lwr	upr	p-adj
SURE-Pix4D	2015	All	HL	-0.02	-0.05	0.00	0.076
Agisoft-ALS	2015	All	HO	0.01	-0.01	0.03	0.553
MatchT1-Agisoft	2015	All	HO	0.00	-0.02	0.02	0.998
MatchT1-ALS	2015	All	HO	0.01	-0.01	0.03	0.818
MatchT2-Agisoft	2015	All	HO	0.00	-0.02	0.02	1.000
MatchT2-ALS	2015	All	HO	0.01	-0.01	0.03	0.709
MatchT2-MatchT1	2015	All	HO	0.00	-0.02	0.02	1.000
Pix4D-Agisoft	2015	All	HO	0.01	-0.01	0.03	0.951
Pix4D-ALS	2015	All	HO	0.02	0.00	0.04	0.110
Pix4D-MatchT1	2015	All	HO	0.01	-0.01	0.03	0.779
Pix4D-MatchT2	2015	All	HO	0.01	-0.01	0.03	0.873
SURE-Agisoft	2015	All	HO	-0.01	-0.03	0.01	0.888
SURE-ALS	2015	All	HO	0.00	-0.02	0.03	0.992
SURE-MatchT1	2015	All	HO	0.00	-0.03	0.02	0.987
SURE-MatchT2	2015	All	HO	-0.01	-0.03	0.02	0.959
SURE-Pix4D	2015	All	HO	-0.01	-0.04	0.01	0.362
Agisoft-ALS	2015	All	V	0.14	0.00	0.27	0.047
MatchT1-Agisoft	2015	All	V	-0.02	-0.15	0.12	0.999
MatchT1-ALS	2015	All	V	0.12	-0.01	0.26	0.113
MatchT2-Agisoft	2015	All	V	-0.03	-0.16	0.11	0.994
MatchT2-ALS	2015	All	V	0.11	-0.02	0.25	0.182
MatchT2-MatchT1	2015	All	V	-0.01	-0.15	0.13	1.000
Pix4D-Agisoft	2015	All	V	0.03	-0.10	0.17	0.984
Pix4D-ALS	2015	All	V	0.17	0.03	0.31	0.005
Pix4D-MatchT1	2015	All	V	0.05	-0.09	0.19	0.911
Pix4D-MatchT2	2015	All	V	0.06	-0.08	0.20	0.821
SURE-Agisoft	2015	All	V	-0.06	-0.20	0.07	0.770
SURE-ALS	2015	All	V	0.07	-0.06	0.21	0.630
SURE-MatchT1	2015	All	V	-0.05	-0.18	0.09	0.922
SURE-MatchT2	2015	All	V	-0.04	-0.17	0.10	0.971
SURE-Pix4D	2015	All	V	-0.10	-0.23	0.04	0.337
Agisoft-ALS	2018	All	G	0.10	0.01	0.19	0.031
MatchT1-Agisoft	2018	All	G	-0.01	-0.11	0.08	0.999
MatchT1-ALS	2018	All	G	0.09	-0.01	0.18	0.081
MatchT2-Agisoft	2018	All	G	0.00	-0.10	0.09	1.000
MatchT2-ALS	2018	All	G	0.10	0.00	0.19	0.039
MatchT2-MatchT1	2018	All	G	0.01	-0.09	0.10	1.000
Pix4D-Agisoft	2018	All	G	0.00	-0.09	0.10	1.000

Combination	Year	Str	Var	Difference	lwr	upr	p-adj
Pix4D-ALS	2018	All	G	0.10	0.01	0.19	0.025
Pix4D-MatchT1	2018	All	G	0.01	-0.08	0.11	0.998
Pix4D-MatchT2	2018	All	G	0.01	-0.09	0.10	1.000
SURE-Agisoft	2018	All	G	-0.03	-0.12	0.06	0.946
SURE-ALS	2018	All	G	0.07	-0.02	0.16	0.264
SURE-MatchT1	2018	All	G	-0.02	-0.11	0.08	0.994
SURE-MatchT2	2018	All	G	-0.03	-0.12	0.07	0.966
SURE-Pix4D	2018	All	G	-0.03	-0.12	0.06	0.929
Agisoft-ALS	2018	All	HL	0.00	-0.03	0.04	0.998
MatchT1-Agisoft	2018	All	HL	0.00	-0.03	0.03	1.000
MatchT1-ALS	2018	All	HL	0.01	-0.02	0.04	0.978
MatchT2-Agisoft	2018	All	HL	0.02	-0.01	0.05	0.307
MatchT2-ALS	2018	All	HL	0.03	0.00	0.06	0.126
MatchT2-MatchT1	2018	All	HL	0.02	-0.01	0.05	0.491
Pix4D-Agisoft	2018	All	HL	0.02	-0.01	0.05	0.306
Pix4D-ALS	2018	All	HL	0.03	0.00	0.06	0.125
Pix4D-MatchT1	2018	All	HL	0.02	-0.01	0.05	0.489
Pix4D-MatchT2	2018	All	HL	0.00	-0.03	0.03	1.000
SURE-Agisoft	2018	All	HL	0.00	-0.03	0.03	1.000
SURE-ALS	2018	All	HL	0.00	-0.03	0.03	1.000
SURE-MatchT1	2018	All	HL	-0.01	-0.04	0.03	0.996
SURE-MatchT2	2018	All	HL	-0.02	-0.05	0.01	0.208
SURE-Pix4D	2018	All	HL	-0.02	-0.05	0.01	0.208
Agisoft-ALS	2018	All	HO	0.01	-0.02	0.04	0.899
MatchT1-Agisoft	2018	All	HO	0.00	-0.03	0.03	1.000
MatchT1-ALS	2018	All	HO	0.01	-0.02	0.04	0.783
MatchT2-Agisoft	2018	All	HO	0.01	-0.02	0.04	0.789
MatchT2-ALS	2018	All	HO	0.02	-0.01	0.05	0.175
MatchT2-MatchT1	2018	All	HO	0.01	-0.02	0.04	0.903
Pix4D-Agisoft	2018	All	HO	0.01	-0.02	0.04	0.739
Pix4D-ALS	2018	All	HO	0.02	0.00	0.05	0.144
Pix4D-MatchT1	2018	All	HO	0.01	-0.02	0.04	0.869
Pix4D-MatchT2	2018	All	HO	0.00	-0.03	0.03	1.000
SURE-Agisoft	2018	All	HO	0.00	-0.03	0.03	0.999
SURE-ALS	2018	All	HO	0.01	-0.01	0.04	0.709
SURE-MatchT1	2018	All	HO	0.00	-0.03	0.03	1.000
SURE-MatchT2	2018	All	HO	-0.01	-0.04	0.02	0.939
SURE-Pix4D	2018	All	HO	-0.01	-0.04	0.02	0.912
Agisoft-ALS	2018	All	V	0.12	0.03	0.21	0.002

Combination	Year	Str	Var	Difference	lwr	upr	p-adj
MatchT1-Agisoft	2018	All	V	-0.04	-0.13	0.05	0.780
MatchT1-ALS	2018	All	V	0.08	-0.01	0.17	0.103
MatchT2-Agisoft	2018	All	V	-0.05	-0.14	0.04	0.669
MatchT2-ALS	2018	All	V	0.08	-0.01	0.17	0.150
MatchT2-MatchT1	2018	All	V	-0.01	-0.10	0.09	1.000
Pix4D-Agisoft	2018	All	V	0.00	-0.09	0.09	1.000
Pix4D-ALS	2018	All	V	0.12	0.03	0.21	0.002
Pix4D-MatchT1	2018	All	V	0.04	-0.05	0.13	0.791
Pix4D-MatchT2	2018	All	V	0.05	-0.04	0.14	0.682
SURE-Agisoft	2018	All	V	-0.05	-0.14	0.04	0.604
SURE-ALS	2018	All	V	0.07	-0.02	0.16	0.186
SURE-MatchT1	2018	All	V	-0.01	-0.10	0.08	1.000
SURE-MatchT2	2018	All	V	0.00	-0.09	0.09	1.000
SURE-Pix4D	2018	All	V	-0.05	-0.14	0.04	0.616