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Supplement of

Short-term velocity variations at three rock glaciers and their relationship with meteorological conditions

V. Wirz et al.

Correspondence to: V. Wirz (vanessa.wirz@geo.uzh.ch)

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1 Difference between velocity estimations corrected and uncorrected for mast tilt

Inclinometer measurements at the GPS mast allow correction of GPS positions for mast tilt (Wirz et al., 2014). Standard deviations in inclination (θ) are typically around 0.4° , and around 2.5° for the orientation (az) of the mast tilt. The correction for mast tilt is only appropriate where tilting is greater than the uncertainty of the inclinometer measurements (see supplementary material). This is only the case for R2b and R7c. For R7c, however, inclinometer data are not available over the entire period. However, sensitivity analysis have showed that for the intra-annual velocities differences corrected and uncorrected for the tilt of the mast at R2b are negligible and have no influence on the results presented within this study (e.g. Fig. S1). For better comparison we therefore only corrected the total displacement over the three years at R2b for tilt of the mast.

Fig. S1 shows the horizontal velocities estimated and direction of movement once calculated for the GPS positions not corrected for the mast tilt, and once corrected for the mast tilt, assuming the center of rotation lies 1 m within the boulder (2.5 m below the antenna).

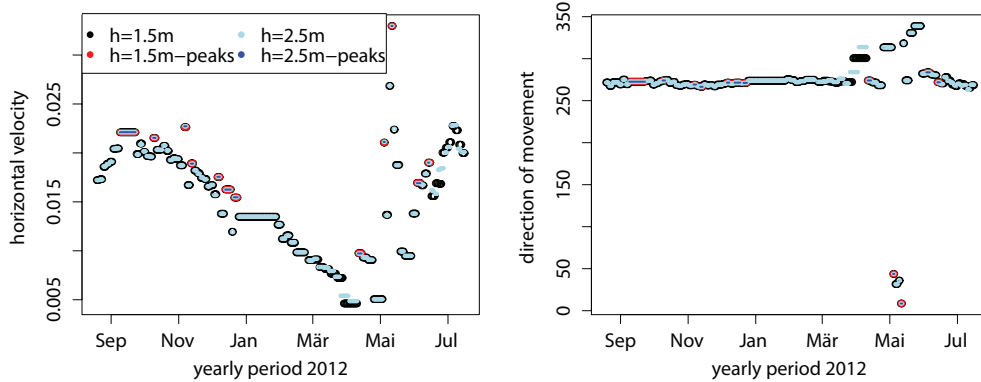


Figure S1: Estimated velocities using SNRT with SNR- $t=40$ for a one-year time-series (study year 2012) at R2b and detected peaks (with $t_p=6$), once corrected for a tilt of the mast (lightblue, assuming the center of rotation lies 1 m within the boulder on the Z-axis below the antenna, see Wirz. et al., 2014 for more details), and once not corrected for the mast tilt (black, at the antenna).

2 Spineplots

To visualize potential relationships between the individual explanatory variables and the occurrence of peaks we used spineplots (Friendly, 1994). Spineplots are used to visualize the frequencies of the occurrence of velocity-peaks as opposed to the absence of velocity-peaks (later called no-peak-periods) on potential meteorological variables. The width of the individual bars relate to the 25 %-quantiles of the explanatory variable. Since probably different processes and hence different meteorological variables were relevant for the occurrence of peaks during snow-cover and snow-free conditions, we distinguished between periods with an insulating snow cover (snow-cover period) and without (snow-free period, snow.ind). The snow-cover period includes the days where an insulating snow cover can be derived from GST data.

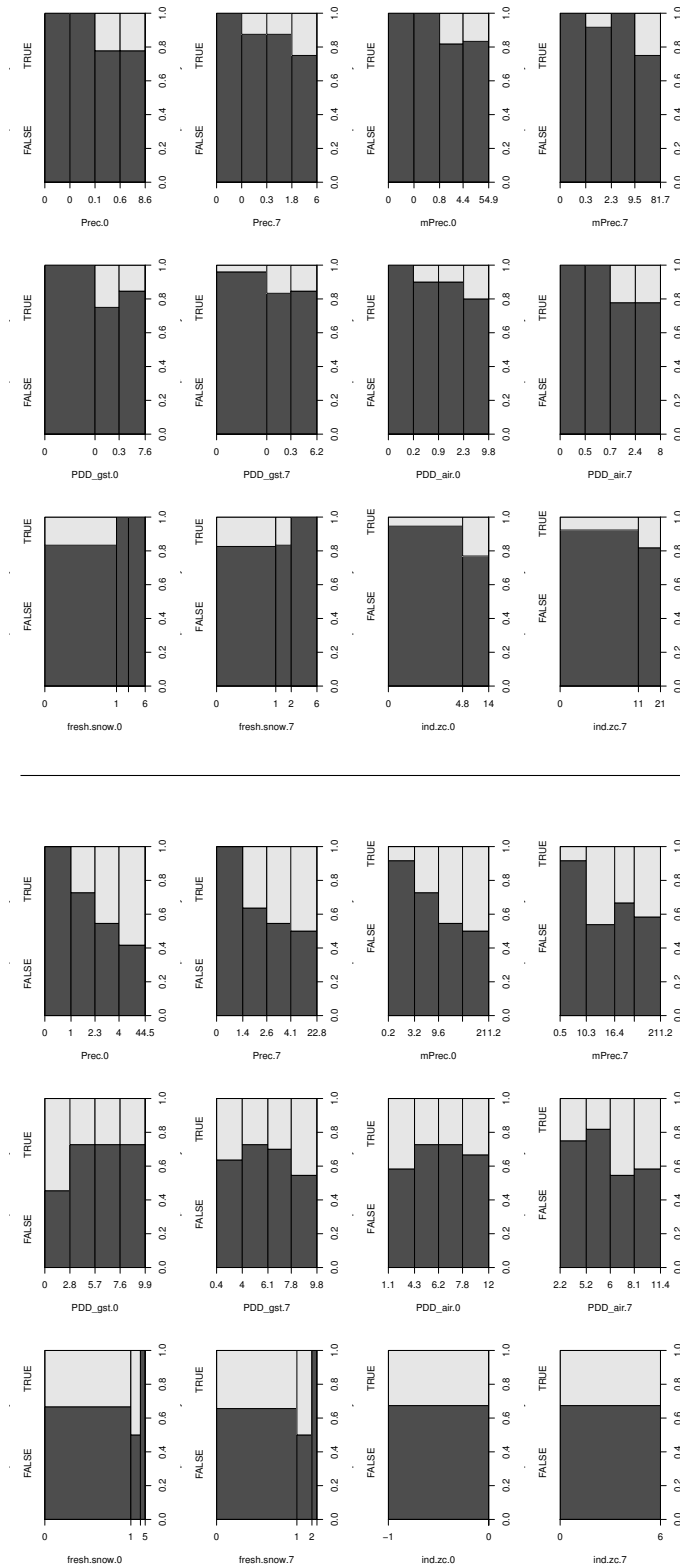


Figure S2: Spineplots for R7b (lower station on rock glacier Dirru). Frequencies of the occurrence of a peak as opposed to the absence of a peak conditional on potential explanatory variables. Bar widths refer to the 25%-quantiles of the explanatory variables. The upper plot refers to snow-cover conditions, the lower plot to snow-free conditions.

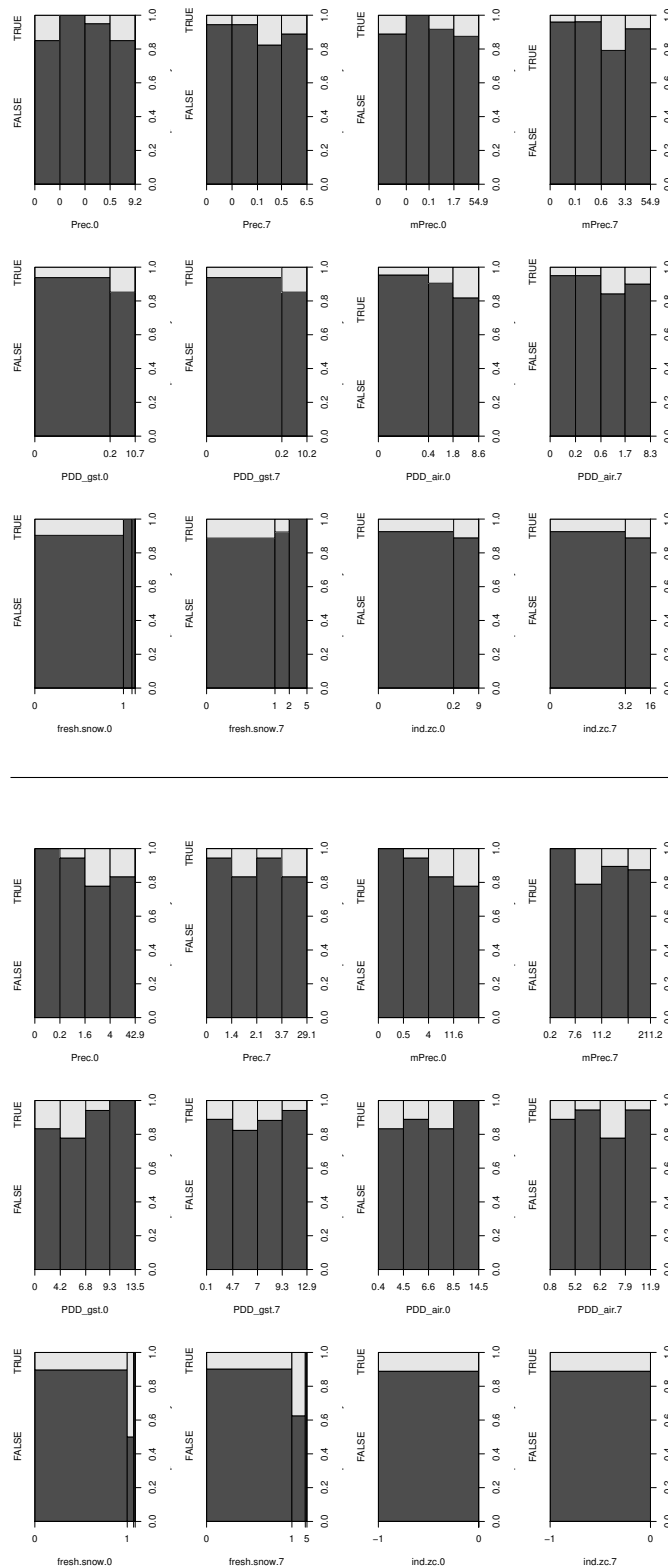


Figure S3: Spineplots for R2b (lower station on rock glacier Breithorn/Gugla). Frequencies of the occurrence of a peak (light grey) as opposed to the absence of a peak (darkgrey) conditional on potential explanatory variables. Bar widths refer to the 25%-quantiles of the explanatory variables, except for new snow (fresh.snow) and zero curtain (ind.zc). The upper plots (upper 3 lines) refers to snow-cover conditions, the lower plot to snow-free conditions.

3 Wilcoxon rank sum test

Table S1 shows the p-values of the Wilcoxon rank sum test p_w for all potential explanatory variables. It is distinguished between snow-cover and snow-free period and the positions (R2b, R7c).

Table S1: P-values of the Wilcoxon rank sum test.

variable	R7c	R7c	R2b	R2b
	snow=0	snow=1	snow=0	snow=1
Prec.0	0.02	0.01	0.09	0.24
maxPrec.0	0.09	0.01	0.05	0.24
Prec.7	0.04	0.03	0.19	0.90
maxPrec.7	0.37	0.01	0.21	0.58
Prec.30	0.95	0.12	0.96	0.48
maxPrec.30	0.95	0.10	0.50	0.47
Prec.60	0.78	0.58	0.98	0.45
maxPrec.60	0.36	0.38	0.51	0.95
PDD _{air} .0	0.59	0.09	0.20	0.99
PDD _{air} .7	0.30	0.04	0.19	0.84
PDD _{gst} .0	0.33	0.03	0.27	0.79
PDD _{gst} .7	0.69	0.02	0.20	0.71
PDD _{air} .30	0.78	0.07	0.42	0.88
PDD _{air} .60	0.73	0.33	0.85	0.79
PDD _{gst} .30	0.43	0.06	0.16	0.85
PDD _{gst} .60	0.68	0.22	0.09	0.99
n.snow.0	0.17	0.05	0.89	0.99
n.snow.7	0.56	0.05	0.75	0.35
n.snow.30	0.39	0.13	0.80	0.95
n.snow.60	0.64	0.31	0.55	0.90
ind.zc.0	0.52	0.63	0.88	0.53
ind.zc.7	0.52	0.37	0.83	0.63
ind.zc.30	0.91	0.11	0.76	0.96
ind.zc.60	0.43	0.07	0.79	0.70

4 Logistic regression models

In the following main model results and description of the different logistic regression models are provided, e.g., variable estimations and confidence-intervals, AUROC, and AIC. Model results are provided for peak-detection applying different SNR-t and t_p .

Table S2: Logistic regression models based on velocity estimations using SNR-t=40 and $t_p=6$.

NS	Temp	AUROC	AIC	Model
Prec.0	PDD _{gst} .0	0.85	148.4	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:Temp+NS:zc.ind+NS:snow.ind
max.Prec.0	PDD _{gst} .0	0.84	156.4	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:Temp+snow.ind+NS:snow.ind+Temp:pos
Prec.0	PDD _{air} .0	0.84	163.5	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:Temp+snow.ind+NS:snow.ind+NS:pos
max.Prec.0	PDD _{air} .0	0.82	171.4	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:Temp+snow.ind+NS:snow.ind+NS:pos
Prec.7	PDD _{gst} .0	0.79	166.8	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:Temp+snow.ind+NS:snow.ind
Prec.7	PDD _{air} .0	0.78	176.5	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:Temp+snow.ind+NS:snow.ind+NS:pos
max.Prec.7	PDD _{gst} .0	0.78	171.7	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:Temp+snow.ind+NS:snow.ind
Prec.7	PDD _{gst} .7	0.77	176.1	peak.true~NS+Temp+zc.ind+snow.ind+pos+snow.ind+NS:snow.ind+NS:pos
max.Prec.7	PDD _{air} .0	0.76	182.6	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:Temp+snow.ind+NS:snow.ind+zc.ind+pos+snow.ind:pos
max.Prec.7	PDD _{gst} .7	0.75	181.4	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:Temp+snow.ind+NS:snow.ind+Temp:pos
Prec.0	PDD _{gst} .7	0.75	168.5	peak.true~NS+pos+NS:pos
Prec.0	PDD _{air} .7	0.75	168.5	peak.true~NS+pos+NS:pos
max.Prec.7	PDD _{air} .7	0.75	182.5	peak.true~NS+Temp+zc.ind+snow.ind+pos+snow.ind+NS:snow.ind+Temp:pos
Prec.7	PDD _{air} .7	0.73	173.9	peak.true~NS+pos+NS:pos
max.Prec.0	PDD _{gst} .7	0.69	175.3	peak.true~NS+snow.ind+pos+NS:pos
max.Prec.0	PDD _{air} .7	0.69	175.3	peak.true~NS+snow.ind+pos+NS:pos

Table S3: Logistic regression models based on velocity estimations using SNR-t=20 and $t_p=6$.

NS	Temp	AUROC	AIC	Model
Prec.0	PDD _{air} .0	0.71	291.21	peak.true~NS+Temp+snow.ind+pos+NS:Temp+Temp:snow.ind
Prec.7	PDD _{gst} .0	0.71	290.36	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:snow.ind+Temp:zc.ind+Temp:snow.ind
max.Prec.7	PDD _{gst} .0	0.71	292.47	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:snow.ind+Temp:zc.ind+Temp:snow.ind
max.Prec.0	PDD _{gst} .0	0.71	295.94	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:Temp+Temp:zc.ind+Temp:snow.ind
Prec.7	PDD _{air} .0	0.71	290.97	peak.true~NS+Temp+snow.ind+pos+NS:snow.ind+Temp:snow.ind
max.Prec.7	PDD _{air} .0	0.70	292.68	peak.true~NS+Temp+snow.ind+pos+NS:snow.ind+Temp:snow.ind
max.Prec.0	PDD _{air} .0	0.70	293.24	peak.true~NS+Temp+snow.ind+pos+NS:Temp+Temp:snow.ind
Prec.0	PDD _{gst} .7	0.69	292.55	peak.true~NS+Temp+snow.ind+pos+NS:Temp
Prec.0	PDD _{gst} .0	0.69	292.74	peak.true~NS+Temp+snow.ind+pos+NS:Temp
Prec.0	PDD _{air} .7	0.69	295.469	peak.true~NS+Temp+pos+NS:Temp
Prec.7	PDD _{gst} .7	0.689	292.199	peak.true~NS+snow.ind+pos+NS:snow.ind
Prec.7	PDD _{air} .7	0.689	292.199	peak.true~NS+snow.ind+pos+NS:snow.ind
max.Prec.0	PDD _{gst} .7	0.68	295.29	peak.true~NS+Temp+snow.ind+pos+NS:Temp
max.Prec.7	PDD _{gst} .7	0.67=	294.08	peak.true~NS+snow.ind+pos+NS:snow.ind
max.Prec.7	PDD _{air} .7	0.67=	294.08	peak.true~NS+snow.ind+pos+NS:snow.ind
max.Prec.0	PDD _{air} .7	0.67	296.57	peak.true~NS+pos

Table S4: Coefficients of all final models, that were obtained based on velocity estimations with SNR-t=40 and $t_p=10$.

NS	Temp	AUROC	AIC	Model
Prec.0	PDD _{gst} .0	0.87	137.90	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:snow.ind+NS:pos
Prec.0	PDD _{gst} .7	0.85	142.29	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:snow.ind+NS:pos
Prec.0	PDD _{air} .0	0.85	142.63	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:snow.ind+NS:pos
max.Prec.0	PDD _{gst} .0	0.84	144.62	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:snow.ind+NS:pos
Prec.0	PDD _{air} .7	0.83	143.34	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:Temp+NS:pos
Prec.7	PDD _{gst} .0	0.83	145.62	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:snow.ind+NS:pos
max.Prec.0	PDD _{gst} .7	0.82	148.25	peak.true~NS+zc.ind+snow.ind+pos+NS:snow.ind+NS:pos
max.Prec.0	PDD _{air} .7	0.81	148.46	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:Temp+NS:pos
max.Prec.0	PDD _{air} .0	0.81	148.25	peak.true~NS+zc.ind+snow.ind+pos+NS:snow.ind+NS:pos
max.Prec.7	PDD _{gst} .0	0.81	151.37	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:zc.ind+NS:snow.ind+Temp:pos
max.Prec.7	PDD _{gst} .7	0.80	154.82	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:zc.ind+NS:snow.ind+Temp:pos
max.Prec.7	PDD _{air} .7	0.79	155.72	peak.true~NS+Temp+zc.ind+snow.ind+pos+NS:zc.ind+NS:snow.ind+Temp:pos
Prec.7	PDD _{gst} .7	0.78	149.75	peak.true~NS+zc.ind+snow.ind+pos+NS:pos
Prec.7	PDD _{air} .7	0.78	149.75	peak.true~NS+zc.ind+snow.ind+pos+NS:pos
Prec.7	PDD _{air} .0	0.78	149.75	peak.true~NS+zc.ind+snow.ind+pos+NS:pos
max.Prec.7	PDD _{air} .0	0.76	153.36	peak.true~NS+zc.ind+snow.ind+pos+NS:pos

Table S5: Coefficients of all final models, that were obtained based on velocity estimations with SNR-t=40 and $t_p=6$.

Variable	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	-1.53	0.44	-3.45	0.00
NS	1.04	0.28	3.70	0.00
zc.indTRUE	3.65	1.52	2.41	0.02
snow.indTRUE	-3.40	1.63	-2.08	0.04
pos55	-0.87	0.48	-1.84	0.07
NS:snow.indTRUE	-0.71	0.24	-2.91	0.00
NS:pos55	-0.50	0.24	-2.11	0.04
(Intercept)	-1.53	0.44	-3.45	0.00
NS	1.04	0.28	3.70	0.00
zc.indTRUE	3.65	1.52	2.41	0.02
snow.indTRUE	-3.40	1.63	-2.08	0.04
pos55	-0.87	0.48	-1.84	0.07
NS:snow.indTRUE	-0.71	0.24	-2.91	0.00
NS:pos55	-0.50	0.24	-2.11	0.04
(Intercept)	-0.61	0.64	-0.96	0.33
NS	1.43	0.40	3.58	0.00
Temp	-0.17	0.09	-1.97	0.05
zc.indTRUE	2.68	1.39	1.93	0.05
snow.indTRUE	-2.94	1.56	-1.89	0.06
pos55	-0.75	0.49	-1.54	0.12
NS:Temp	-0.05	0.04	-1.16	0.25
NS:snow.indTRUE	-0.93	0.33	-2.79	0.01
NS:pos55	-0.56	0.27	-2.12	0.03
(Intercept)	-0.15	0.73	-0.21	0.84
NS	1.13	0.30	3.74	0.00
Temp	-0.24	0.11	-2.13	0.03
zc.indTRUE	3.32	1.62	2.05	0.04
snow.indTRUE	-4.72	1.80	-2.63	0.01
pos55	-0.93	0.48	-1.93	0.05
NS:snow.indTRUE	-0.83	0.26	-3.21	0.00
NS:pos55	-0.47	0.25	-1.92	0.05
Temp:zc.indTRUE	0.33	0.17	1.91	0.06
(Intercept)	-2.19	0.58	-3.80	0.00
NS	0.69	0.20	3.39	0.00
zc.indTRUE	3.75	1.54	2.42	0.02
snow.indTRUE	-3.07	1.63	-1.88	0.06
pos55	-0.46	0.54	-0.86	0.39
NS:snow.indTRUE	-0.55	0.19	-2.85	0.00
NS:pos55	-0.31	0.18	-1.74	0.08
(Intercept)	-2.19	0.58	-3.80	0.00
NS	0.69	0.20	3.39	0.00
zc.indTRUE	3.75	1.54	2.42	0.02
snow.indTRUE	-3.07	1.63	-1.88	0.06
pos55	-0.46	0.54	-0.86	0.39
NS:snow.indTRUE	-0.55	0.19	-2.85	0.00
NS:pos55	-0.31	0.18	-1.74	0.08
(Intercept)	-1.10	0.68	-1.62	0.10
NS	0.79	0.22	3.57	0.00
Temp	-0.24	0.10	-2.49	0.01
zc.indTRUE	3.63	1.59	2.29	0.02
snow.indTRUE	-4.18	1.69	-2.48	0.01
pos55	-0.38	0.55	-0.69	0.49
NS:snow.indTRUE	-0.65	0.21	-3.12	0.00
NS:pos55	-0.30	0.18	-1.61	0.11
Temp:zc.indTRUE	0.28	0.15	1.80	0.07
(Intercept)	-1.78	0.88	-2.04	0.04
NS	0.76	0.24	3.21	0.00
Temp	-0.02	0.13	-0.16	0.87
zc.indTRUE	2.05	1.33	1.54	0.12
snow.indTRUE	-2.62	1.55	-1.69	0.09
pos55	0.31	0.82	0.38	0.70
NS:Temp	-0.03	0.03	-1.13	0.26
NS:snow.indTRUE	-0.80	0.22	-3.65	0.00
Temp:zc.indTRUE	0.34	0.18	1.91	0.06
Temp:pos55	-0.26	0.15	-1.70	0.09
(Intercept)	-1.57	0.66	-2.39	0.02
NS	2.20	0.65	3.41	0.00
Temp	-0.04	0.09	-0.44	0.66
zc.indTRUE	28.00	2'120.61	0.01	0.99
snow.indTRUE	-27.17	2'120.61	-0.01	0.99
pos55	-0.56	0.51	-1.09	0.27
NS:Temp	-0.16	0.08	-2.07	0.04
NS:zc.indTRUE	1.94	115.12	0.02	0.99
NS:snow.indTRUE	-3.19	115.12	-0.03	0.98
NS:pos55	-0.51	0.36	-1.41	0.16
(Intercept)	-1.67	0.46	-3.64	0.00
NS	1.03	0.33	3.12	0.00
zc.indTRUE	3.68	2.02	1.82	0.07
snow.indTRUE	-3.22	2.11	-1.53	0.13
pos55	-0.68	0.47	-1.45	0.15
NS:snow.indTRUE	-0.58	0.30	-1.92	0.06
NS:pos55	-0.64	0.29	-2.17	0.03
(Intercept)	-1.35	0.59	-2.29	0.02
NS	2.16	0.54	4.01	0.00
Temp	-0.10	0.08	-1.22	0.22
zc.indTRUE	28.33	2'139.51	0.01	0.99
snow.indTRUE	-27.58	2'139.51	-0.01	0.99
pos55	-0.58	0.52	-1.11	0.27
NS:Temp	-0.16	0.06	-2.70	0.01
NS:zc.indTRUE	2.06	116.15	0.02	0.99
NS:snow.indTRUE	-3.09	116.15	-0.03	0.98
NS:pos55	-0.57	0.38	-1.49	0.14
(Intercept)	-1.62	0.68	-2.40	0.02
NS	1.94	0.55	3.54	0.00
Temp	-0.02	0.08	-0.25	0.81
zc.indTRUE	31.15	1'854.96	0.02	0.99
snow.indTRUE	-30.33	1'854.96	-0.02	0.99
pos55	-0.71	0.49	-1.46	0.15
NS:Temp	-0.13	0.06	-2.24	0.02
NS:zc.indTRUE	1.92	100.70	0.02	0.98
NS:snow.indTRUE	-2.87	100.70	-0.03	0.98
NS:pos55	-0.65	0.34	-1.91	0.06
(Intercept)	-4.52	1.44	-3.13	0.00
NS	1.33	0.50	2.67	0.01
Temp	0.40	0.20	1.94	0.05
zc.indTRUE	21.99	1'931.21	0.01	0.99
snow.indTRUE	-19.66	1'931.21	-0.01	0.99
pos55	0.09	0.72	0.13	0.90
NS:Temp	-0.14	0.07	-2.06	0.04
NS:zc.indTRUE	1.67	104.84	0.02	0.99
NS:snow.indTRUE	-2.53	104.84	-0.02	0.98
Temp:pos55	-0.20	0.13	-1.55	0.12
(Intercept)	-2.76	0.95	-2.91	0.00
NS	0.39	0.20	1.93	0.05
Temp	0.14	0.12	1.17	0.24
zc.indTRUE	19.71	1'203.05	0.02	0.99
snow.indTRUE	-18.97	1'203.05	-0.02	0.99
pos55	0.45	0.82	0.55	0.58
NS:zc.indTRUE	1.19	65.31	0.02	0.99
NS:snow.indTRUE	-1.44	65.31	-0.02	0.98
Temp:pos55	-0.26	0.14	-1.87	0.06
(Intercept)	-3.83	1.15	-3.32	0.00
NS	1.42	0.42	3.41	0.00
Temp	0.15	0.14	1.12	0.26
zc.indTRUE	21.69	1'935.05	0.01	0.99
snow.indTRUE	-20.02	1'935.05	-0.01	0.99
pos55	0.02	0.89	0.02	0.99
NS:Temp	-0.12	0.05	-2.38	0.02
NS:zc.indTRUE	1.58	105.05	0.02	0.99
NS:snow.indTRUE	-2.27	105.05	-0.02	0.98
NS:pos55	-0.35	0.30	-1.18	0.24
(Intercept)	-1.80	0.92	-1.97	0.05
NS	0.68	0.25	2.66	0.01
Temp	-0.15	0.09	-1.66	0.10
zc.indTRUE	3.88	2.63	1.47	0.14
snow.indTRUE	-4.15	2.68	-1.55	0.12
pos55	0.03	0.74	0.04	0.97
NS:snow.indTRUE	-0.49	0.26	-1.92	0.05
NS:pos55	-0.41	0.24	-1.70	0.09
Temp:zc.indTRUE	0.31	0.16	1.97	0.05

Table S6: Coefficients of all final models, that were obtained based on velocity estimations with SNR-t=20 and $t_p=6$.

Variable	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	-0.62	0.42	-1.46	0.14
NS	0.07	0.12	0.58	0.56
Temp	-0.09	0.06	-1.38	0.17
zc.indTRUE	22.66	1'220.86	0.02	0.99
snow.indTRUE	-23.54	1'220.86	-0.02	0.98
pos55	-0.87	0.39	-2.22	0.03
NS:Temp	0.04	0.02	1.57	0.12
NS:zc.indTRUE	1.27	66.28	0.02	0.98
NS:snow.indTRUE	-1.28	66.28	-0.02	0.98
zc.indTRUE:pos55	1.07	0.68	1.56	0.12
(Intercept)	-1.01	0.26	-3.79	0.00
NS	0.19	0.10	1.92	0.05
zc.indTRUE	22.62	1'220.37	0.02	0.99
snow.indTRUE	-23.26	1'220.37	-0.02	0.98
pos55	-0.95	0.38	-2.48	0.01
NS:zc.indTRUE	1.28	66.25	0.02	0.98
NS:snow.indTRUE	-1.42	66.25	-0.02	0.98
zc.indTRUE:pos55	1.06	0.68	1.56	0.12
(Intercept)	-0.42	0.37	-1.13	0.26
NS	0.23	0.10	2.24	0.02
Temp	-0.11	0.05	-2.14	0.03
zc.indTRUE	22.93	1'226.37	0.02	0.99
snow.indTRUE	-23.87	1'226.37	-0.02	0.98
pos55	-0.80	0.39	-2.03	0.04
NS:zc.indTRUE	1.31	66.58	0.02	0.98
NS:snow.indTRUE	-1.45	66.58	-0.02	0.98
zc.indTRUE:pos55	1.00	0.69	1.46	0.14
(Intercept)	-1.01	0.26	-3.79	0.00
NS	0.19	0.10	1.92	0.05
zc.indTRUE	22.62	1'220.37	0.02	0.99
snow.indTRUE	-23.26	1'220.37	-0.02	0.98
pos55	-0.95	0.38	-2.48	0.01
NS:zc.indTRUE	1.28	66.25	0.02	0.98
NS:snow.indTRUE	-1.42	66.25	-0.02	0.98
zc.indTRUE:pos55	1.06	0.68	1.56	0.12
(Intercept)	-1.14	0.29	-3.96	0.00
NS	0.14	0.09	1.63	0.10
zc.indTRUE	20.17	1'109.84	0.02	0.99
snow.indTRUE	-20.77	1'109.84	-0.02	0.99
pos55	-0.93	0.38	-2.42	0.02
NS:zc.indTRUE	1.14	60.25	0.02	0.98
NS:snow.indTRUE	-1.24	60.25	-0.02	0.98
zc.indTRUE:pos55	1.04	0.68	1.54	0.12
(Intercept)	-1.14	0.29	-3.96	0.00
NS	0.14	0.09	1.63	0.10
zc.indTRUE	20.17	1'109.84	0.02	0.99
snow.indTRUE	-20.77	1'109.84	-0.02	0.99
pos55	-0.93	0.38	-2.42	0.02
NS:zc.indTRUE	1.14	60.25	0.02	0.98
NS:snow.indTRUE	-1.24	60.25	-0.02	0.98
zc.indTRUE:pos55	1.04	0.68	1.54	0.12
(Intercept)	-0.63	0.38	-1.68	0.09
NS	0.17	0.09	1.90	0.06
Temp	-0.10	0.05	-1.99	0.05
zc.indTRUE	20.46	1'115.47	0.02	0.99
snow.indTRUE	-21.32	1'115.47	-0.02	0.98
pos55	-0.78	0.39	-1.99	0.05
NS:zc.indTRUE	1.16	60.56	0.02	0.98
NS:snow.indTRUE	-1.26	60.56	-0.02	0.98
zc.indTRUE:pos55	0.99	0.68	1.45	0.15
(Intercept)	-1.14	0.29	-3.96	0.00
NS	0.14	0.09	1.63	0.10
zc.indTRUE	20.17	1'109.84	0.02	0.99
snow.indTRUE	-20.77	1'109.84	-0.02	0.99
pos55	-0.93	0.38	-2.42	0.02
NS:zc.indTRUE	1.14	60.25	0.02	0.98
NS:snow.indTRUE	-1.24	60.25	-0.02	0.98
zc.indTRUE:pos55	1.04	0.68	1.54	0.12
(Intercept)	-1.14	0.29	-3.96	0.00
NS	0.14	0.09	1.63	0.10
zc.indTRUE	20.17	1'109.84	0.02	0.99
snow.indTRUE	-20.77	1'109.84	-0.02	0.99
pos55	-0.93	0.38	-2.42	0.02
NS:zc.indTRUE	1.14	60.25	0.02	0.98
NS:snow.indTRUE	-1.24	60.25	-0.02	0.98
zc.indTRUE:pos55	1.04	0.68	1.54	0.12
(Intercept)	-1.07	0.45	-2.40	0.02
NS	0.69	0.21	3.36	0.00
Temp	-0.10	0.06	-1.53	0.13
zc.indTRUE	3.18	1.27	2.51	0.01
snow.indTRUE	-3.58	1.36	-2.64	0.01
pos55	-0.96	0.42	-2.30	0.02
NS:zc.indTRUE	0.26	0.16	1.65	0.10
NS:snow.indTRUE	-0.84	0.22	-3.76	0.00
snow.indTRUE:pos55	1.03	0.67	1.55	0.12
(Intercept)	-1.66	0.73	-2.28	0.02
NS	1.24	0.46	2.70	0.01
Temp	0.02	0.11	0.23	0.81
zc.indTRUE	2.11	1.34	1.57	0.12
snow.indTRUE	-2.18	1.55	-1.40	0.16
pos55	-1.09	0.41	-2.63	0.01
NS:Temp	-0.09	0.06	-1.52	0.13
NS:zc.indTRUE	0.26	0.18	1.44	0.15
NS:snow.indTRUE	-1.34	0.45	-2.96	0.00
Temp:zc.indTRUE	1.85	1.29	1.43	0.15
Temp:snow.indTRUE	-1.80	1.31	-1.37	0.17
snow.indTRUE:pos55	1.05	0.67	1.58	0.11
(Intercept)	-1.01	0.42	-2.42	0.02
NS	0.67	0.20	3.32	0.00
Temp	-0.12	0.06	-2.12	0.03
zc.indTRUE	3.29	1.27	2.59	0.01
snow.indTRUE	-3.67	1.35	-2.72	0.01
pos55	-0.93	0.42	-2.23	0.03
NS:zc.indTRUE	0.28	0.16	1.73	0.08
NS:snow.indTRUE	-0.82	0.22	-3.73	0.00
snow.indTRUE:pos55	1.02	0.67	1.53	0.13
(Intercept)	-1.53	0.34	-4.47	0.00
NS	0.59	0.19	3.10	0.00
zc.indTRUE	2.92	1.26	2.32	0.02
snow.indTRUE	-3.08	1.32	-2.33	0.02
pos55	-1.06	0.41	-2.58	0.01
NS:zc.indTRUE	0.20	0.14	1.45	0.15
NS:snow.indTRUE	-0.74	0.21	-3.53	0.00
snow.indTRUE:pos55	1.05	0.66	1.59	0.11
(Intercept)	-2.16	0.53	-4.11	0.00
NS	0.43	0.15	2.77	0.01
zc.indTRUE	2.55	1.12	2.29	0.02
snow.indTRUE	-2.16	1.26	-1.72	0.09
pos55	-0.98	0.41	-2.41	0.02
NS:zc.indTRUE	0.16	0.12	1.33	0.18
NS:snow.indTRUE	-0.55	0.17	-3.26	0.00
snow.indTRUE:pos55	0.97	0.66	1.47	0.14
(Intercept)	-3.55	1.16	-3.07	0.00
NS	0.96	0.39	2.50	0.01
Temp	0.19	0.16	1.18	0.24
zc.indTRUE	1.59	1.21	1.32	0.19
snow.indTRUE	0.30	1.72	0.18	0.86
pos55	-0.63	0.31	-2.00	0.05
NS:Temp	-0.08	0.05	-1.55	0.12
NS:zc.indTRUE	0.20	0.15	1.39	0.16
NS:snow.indTRUE	-1.06	0.38	-2.79	0.01
Temp:zc.indTRUE	1.81	1.26	1.44	0.15
Temp:snow.indTRUE	-1.78	1.27	-1.40	0.16
(Intercept)	-1.78	0.57	-3.13	0.00
NS	0.47	0.16	2.94	0.00
Temp	-0.10	0.05	-1.87	0.06
zc.indTRUE	2.76	1.12	2.46	0.01
snow.indTRUE	-2.61	1.28	-2.03	0.04
pos55	-0.86	0.41	-2.08	0.04
NS:zc.indTRUE	0.21	0.13	1.54	0.12
NS:snow.indTRUE	-0.60	0.18	-3.41	0.00
snow.indTRUE:pos55	0.93	0.66	1.40	0.16
(Intercept)	-2.16	0.53	-4.11	0.00
NS	0.43	0.15	2.77	0.01
zc.indTRUE	2.55	1.12	2.29	0.02
snow.indTRUE	-2.16	1.26	-1.72	0.09
pos55	-0.98	0.41	-2.41	0.02
NS:zc.indTRUE	0.16	0.12	1.33	0.18
NS:snow.indTRUE	-0.55	0.17	-3.26	0.00
snow.indTRUE:pos55	0.97	0.66	1.47	0.14

References

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