

Supplement to reply to reviewer regarding hess-2022-48 Studying the dynamics of a high alpine catchment based on multiple natural tracers

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Supporting figures and tables for replies to reviewer 1 submitted on Monday October 3, 2022. File
contains 2 figures and 1 table. Figure 1 is the basis for a conceptual figure. Figure 2 is an
illustration of the seven-day moving average. And the Table contains characteristic information
regarding each of the defined flow periods.

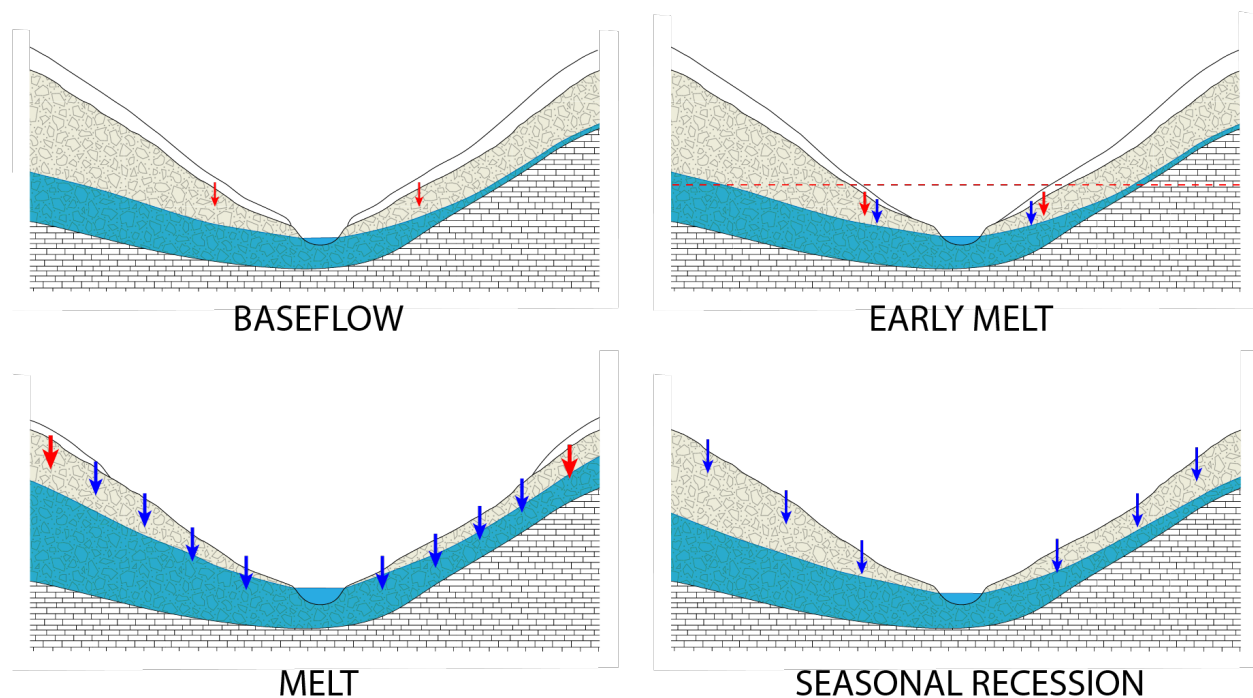


Figure 1. The basis for a conceptual figure illustrating four hydrologic seasons: baseflow (upper left), early melt (upper right), melt (lower left), and seasonal recession (lower right).

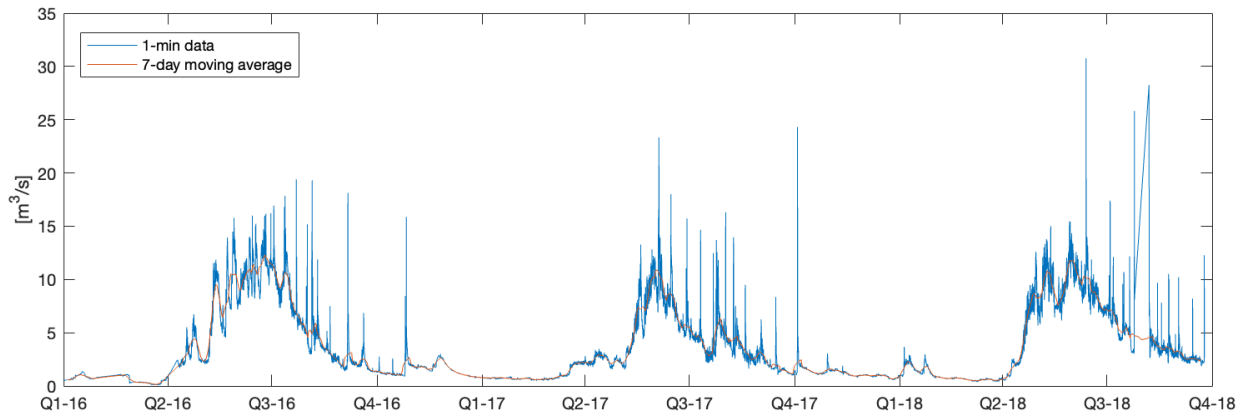


Figure 2. Illustration regarding the effect of a seven-day moving average on discharge measurements.

Period	Start Date	End Date	Q_{m1} [m ³ /s]	Q_{m7} [m ³ /s]	Q_{r7} [m ³ /s]	HH:MM	Q_b [m ³ /s]	Q_f [%]	$dqdt$ [m ³ /s/d]
B0	01.Jan.16	31.Mar.16	0.59	0.75	0.02	09:08	0.64	15	0.01
E0	31.Mar.16	06.May.16	2.44	2.56	0.11	22:47	2.20	58	0.10
M0	06.May.16	24.Jun.16	9.72	10.08	0.37	15:43	8.94	93	0.11
R1	24.Jun.16	27.Sep.16	3.87	4.62	0.15	06:57	3.57	74	-0.12
B1	27.Sep.16	18.Mar.17	1.05	1.01	0.02	20:59	0.89	27	-0.01
E1	18.Mar.17	06.May.17	2.23	2.23	0.06	00:07	2.10	52	0.02
M1	06.May.17	02.Jun.17	6.84	7.26	0.33	18:20	5.91	84	0.31
R2	02.Jun.17	27.Sep.17	4.04	4.22	0.15	13:45	3.10	70	-0.08
B2	27.Sep.17	08.Apr.18	1.01	0.99	0.02	04:06	0.94	26	-0.01
M2	08.Apr.18	31.May.18	7.85	8.32	0.31	12:28	7.55	87	0.19
R3	31.May.18	01.Jan.19	4.59	4.64	0.09	13:20	4.47	74	-0.06

Table 1. Table showing characteristic measurements for each period, corresponding start and end dates. Q_{m1} is the median of 1 minute data. Q_{m7} is the median of daily values of average 7-day moving average data. Q_{r7} is the range of 7 day moving average data possible in one day. HH:MM is the median time of peak flow in a day. Q_b is the median baseflow, calculated as the lowest of the 7-day moving average flow in a ten-day window. Q_f is the median of daily flow quantiles. $dqdt$ is the change in flow according to a 7-day window around 1 day