



Supplement of

Brief communication: Shared parameterisation for estimating snow water equivalent through cosmic ray neutron sensors in the Italian Alps

Mario Gallarate et al.

Correspondence to: Mario Gallarate (mario.gallarate@unito.it)

The copyright of individual parts of the supplement might differ from the article licence.

Table S1: Overview of the network with sites ordered by ascending elevation. Bold font indicates sites where manual SWE measurements are available; asterisks indicate the sites where part of the data was used for calibration.

Name	Elevation [m a.s.l.]	Latitude [° N]	Longitude [° E]	# Manual SWE samples (# used for calibration)	Time Series Length
Lisser*	1422	45.9543	11.6510	11 (4)	11/08/2023 – 01/09/2025
Campogrosso	1462	45.7285	11.1684	/	12/11/2023 – 01/09/2025
Palantina	1492	46.1189	12.4759	5	26/09/2023 – 01/09/2025
Sant'Antonio	1495	46.5720	12.4858	/	21/12/2023 – 01/09/2025
Faverghera	1603	46.0751	12.3013	/	07/08/2023 – 01/09/2025
Larici*	1606	45.9636	11.4193	12 (4)	10/08/2023 – 01/09/2025
Campomolon*	1732	45.8732	11.2729	9 (2)	10/10/2023 – 01/09/2025
Monte Baldo	1756	45.7731	10.8657	/	13/09/2023 – 01/09/2025
Malga Losch	1757	46.2624	11.9595	/	06/10/2023 – 01/09/2025
Casera Doana	1887	46.4812	12.5410	/	19/09/2023 – 01/09/2025
Baldi*	1913	46.4152	12.0731	35 (15)	21/09/2023 – 01/09/2025
Coltrondo	1929	46.6652	12.4435	/	20/09/2023 – 01/09/2025
Cima Dodici	1965	45.9790	11.4868	/	18/07/2024 – 01/09/2025
Val Visdende	2001	46.6538	12.6174	/	09/11/2023 – 01/09/2025
Cherz*	2010	46.5153	11.8782	15 (6)	01/11/2023 – 01/09/2025
Monte Rite	2013	46.3823	12.2484	/	09/07/2024 – 01/09/2025
Fadner	2155	46.9256	11.8614	2	25/10/2024 – 01/09/2025
Pradazzo*	2195	46.3559	11.8227	17 (5)	25/11/2023 – 01/09/2025
Ornella	2227	46.4757	11.8863	25	05/10/2023 – 01/09/2025
Cavalli	2255	46.4694	10.8194	3	30/10/2024 – 01/09/2025
Monte Piana	2262	46.6134	12.2503	/	05/10/2023 – 01/09/2025
Tre Cime	2375	46.6176	12.3178	/	10/07/2024 – 01/09/2025
Sestriere	2490	44.9540	6.9111	7	15/10/2023 – 01/09/2025
Nivolet	2555	45.5192	7.1714	1	02/01/2024 – 01/09/2025
San Martino	2580	46.2793	11.8864	/	11/07/2024 – 01/09/2025
Mosso	2901	45.8754	7.8717	5	28/12/2023 – 01/09/2025

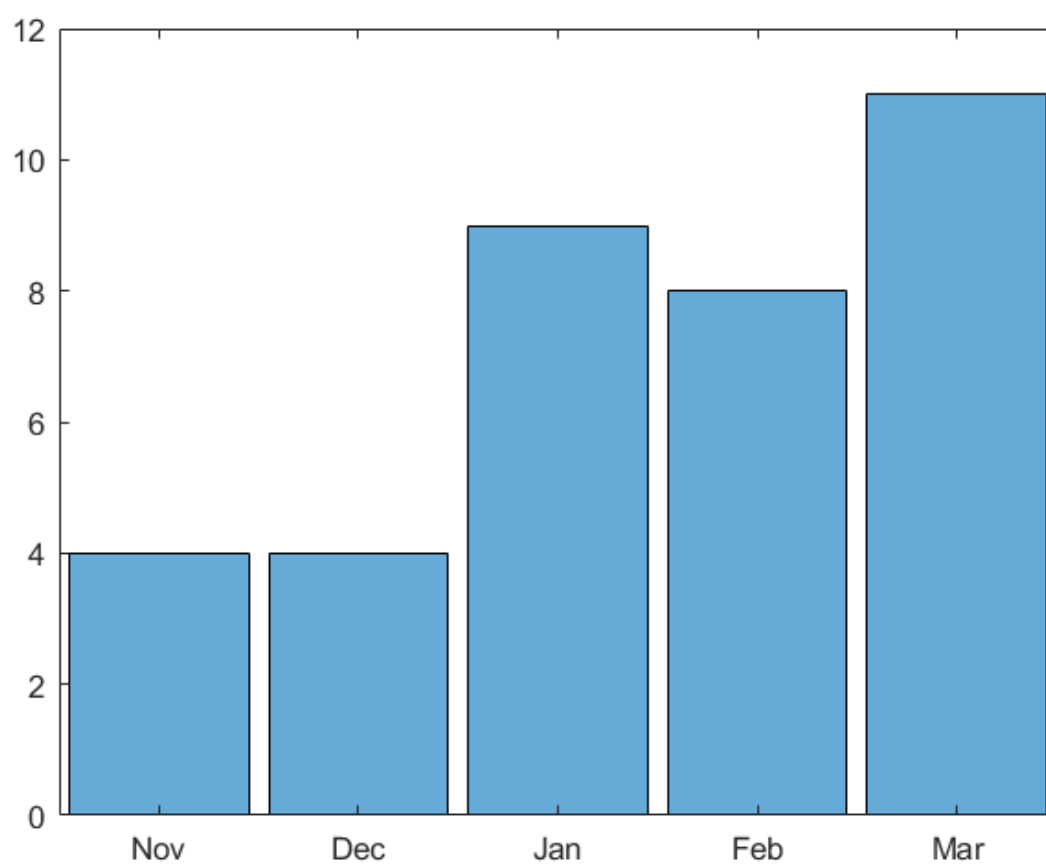


Figure S1: Distribution showing in which month the manual SWE samplings used for calibration (35 data points in total) were taken.

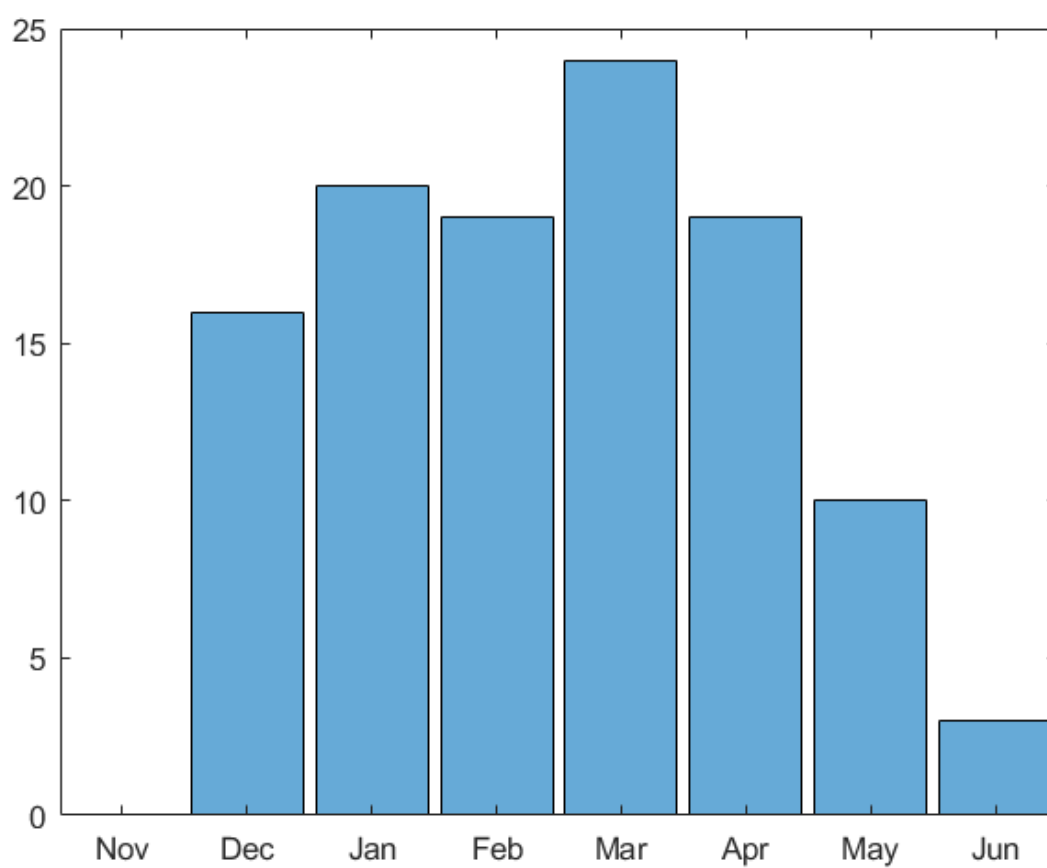


Figure S2: Distribution showing in which month the manual SWE samplings used for validation (111 data points in total) were taken.

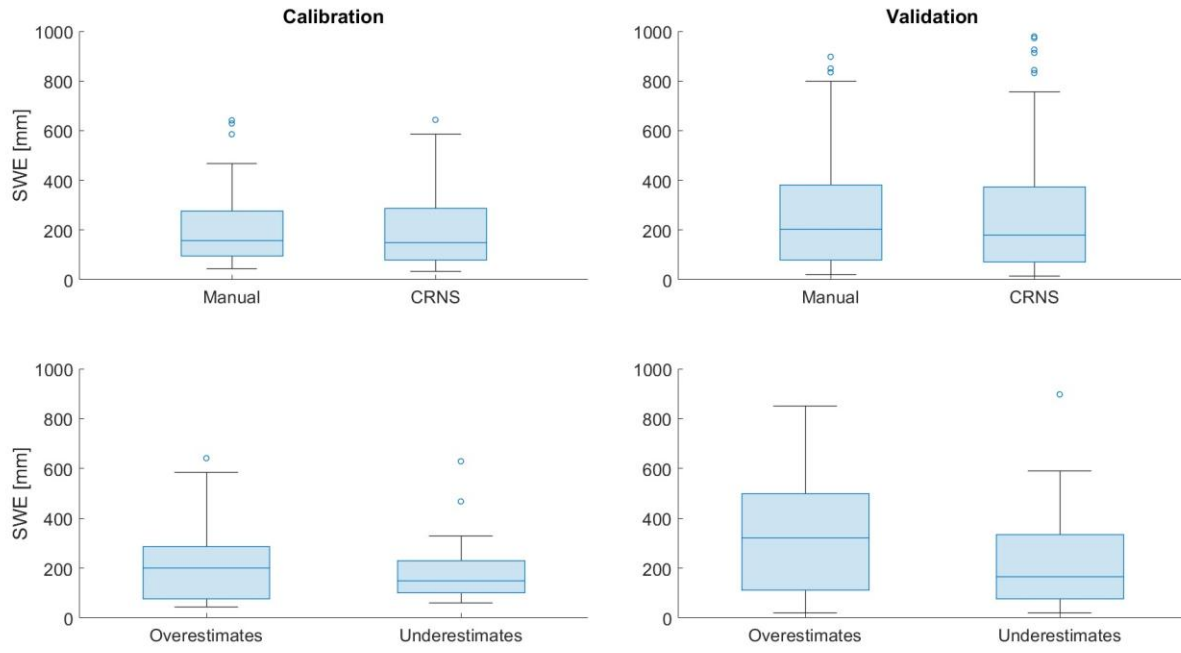


Figure S3: Upper panels: boxplots of the manual and SWE_{CRNS} data for the calibration (left) and validation (right) dataset. Lower panels: boxplots of manual SWE values that incurred in overestimates and underestimates for the calibration (left) and validation (right) dataset.