

Fig. S1 – Map of Changri Nup Glacier showing the extent of the UAV DEMs and the location of the markers used. The background image is the multispectral Pléiades image of November 2016 (copyright : CNES 2016, distribution Airbus D&S).

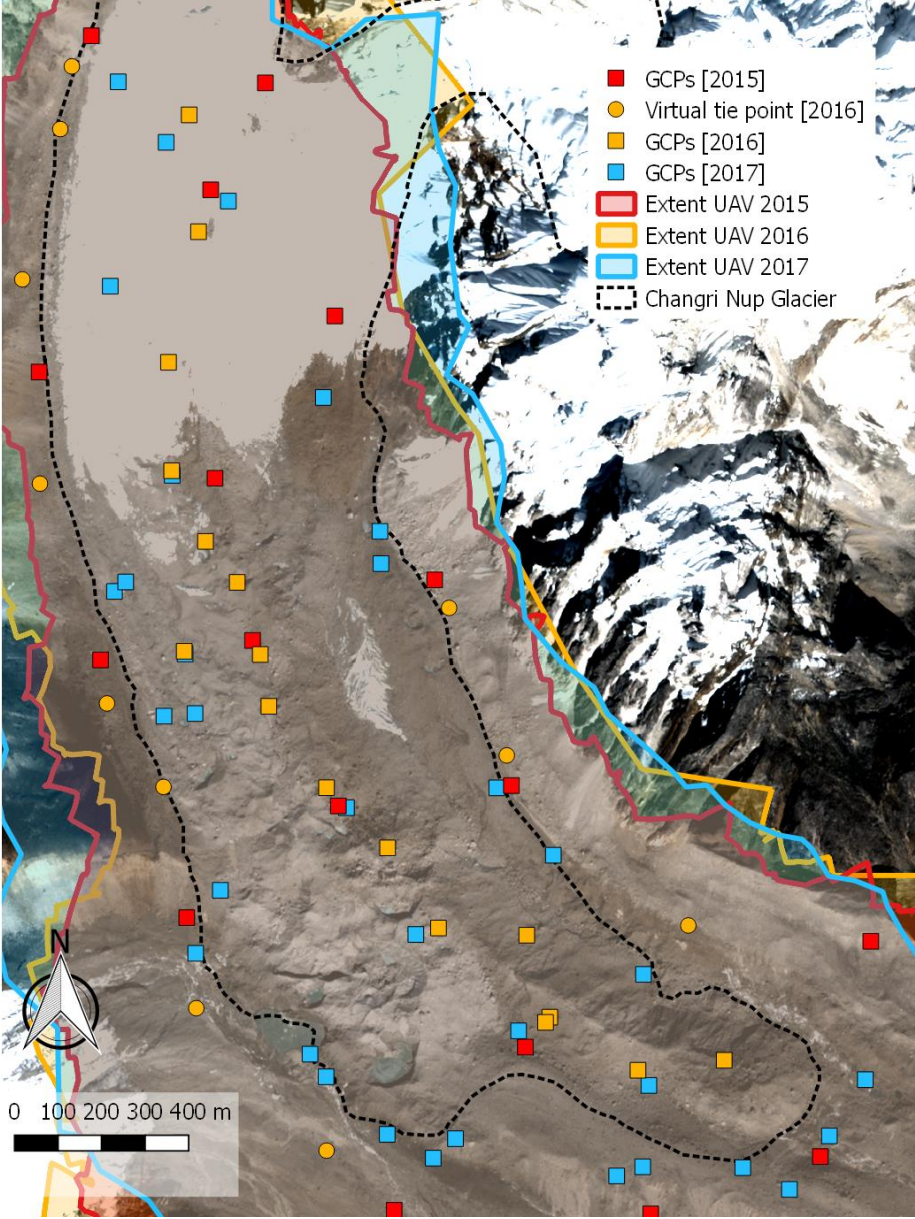


Fig. S2 – Elevation changes on stable terrain from Pléiades DEMs of November 2015 and November 2016 as a function of curvature, slope and aspect.

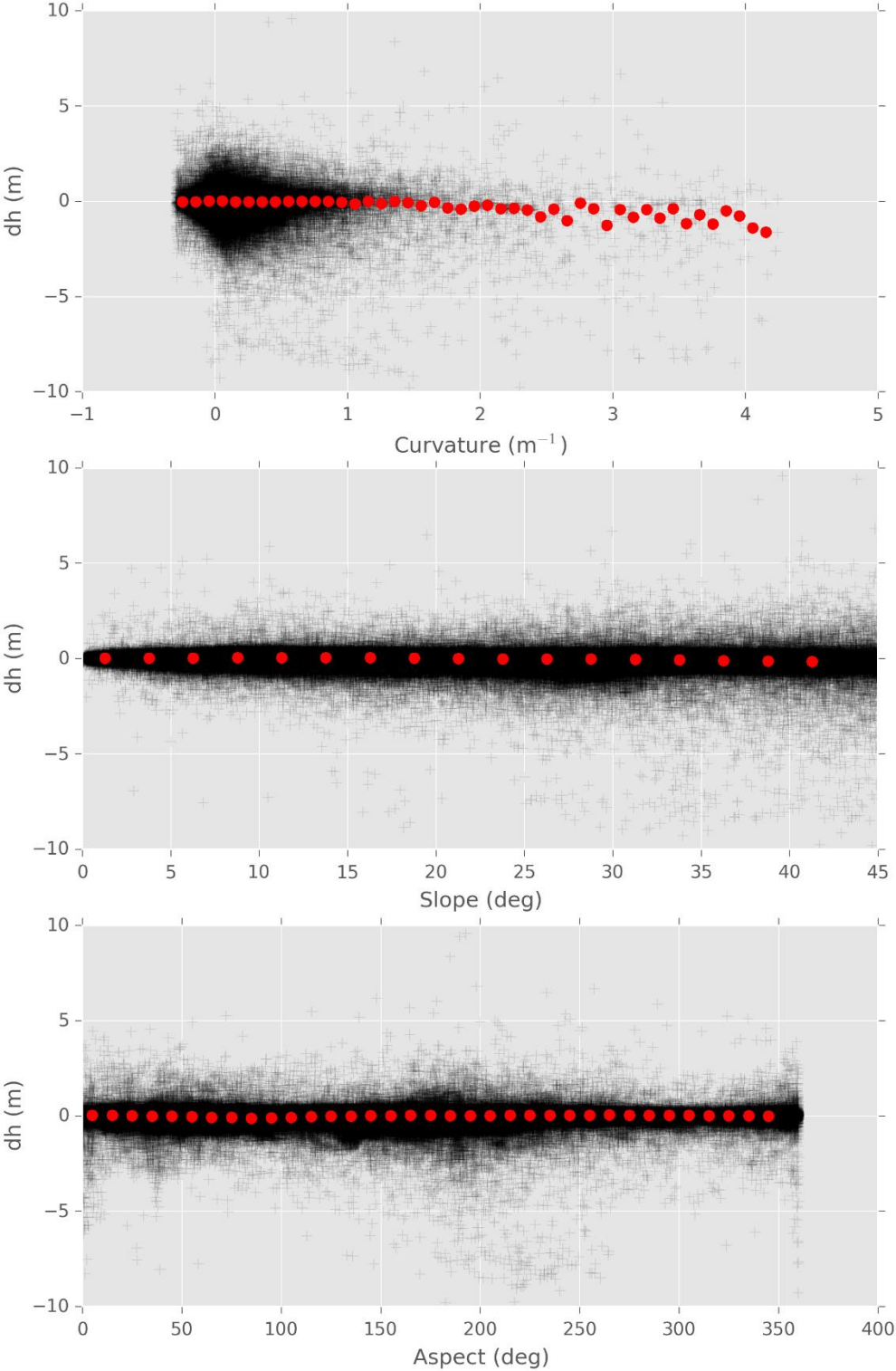


Fig. S3 – Comparison of the field measured velocity with the Pléiades measured velocity. The dashed line is the 1:1 line.

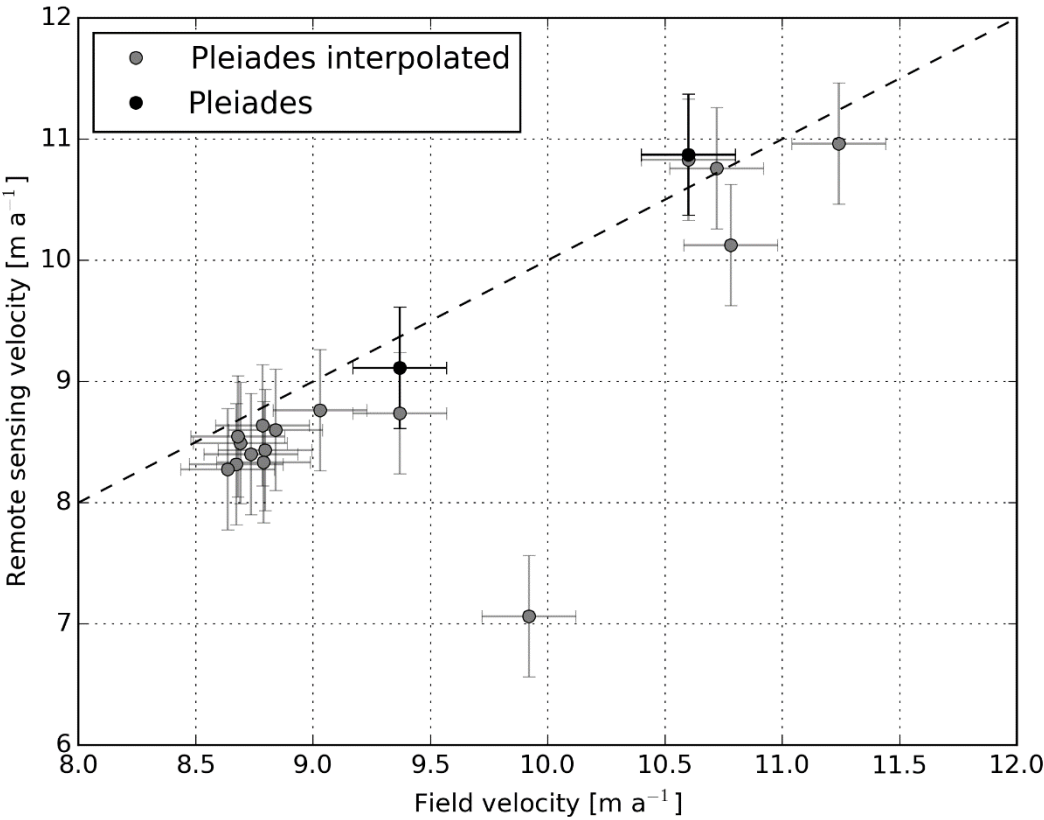
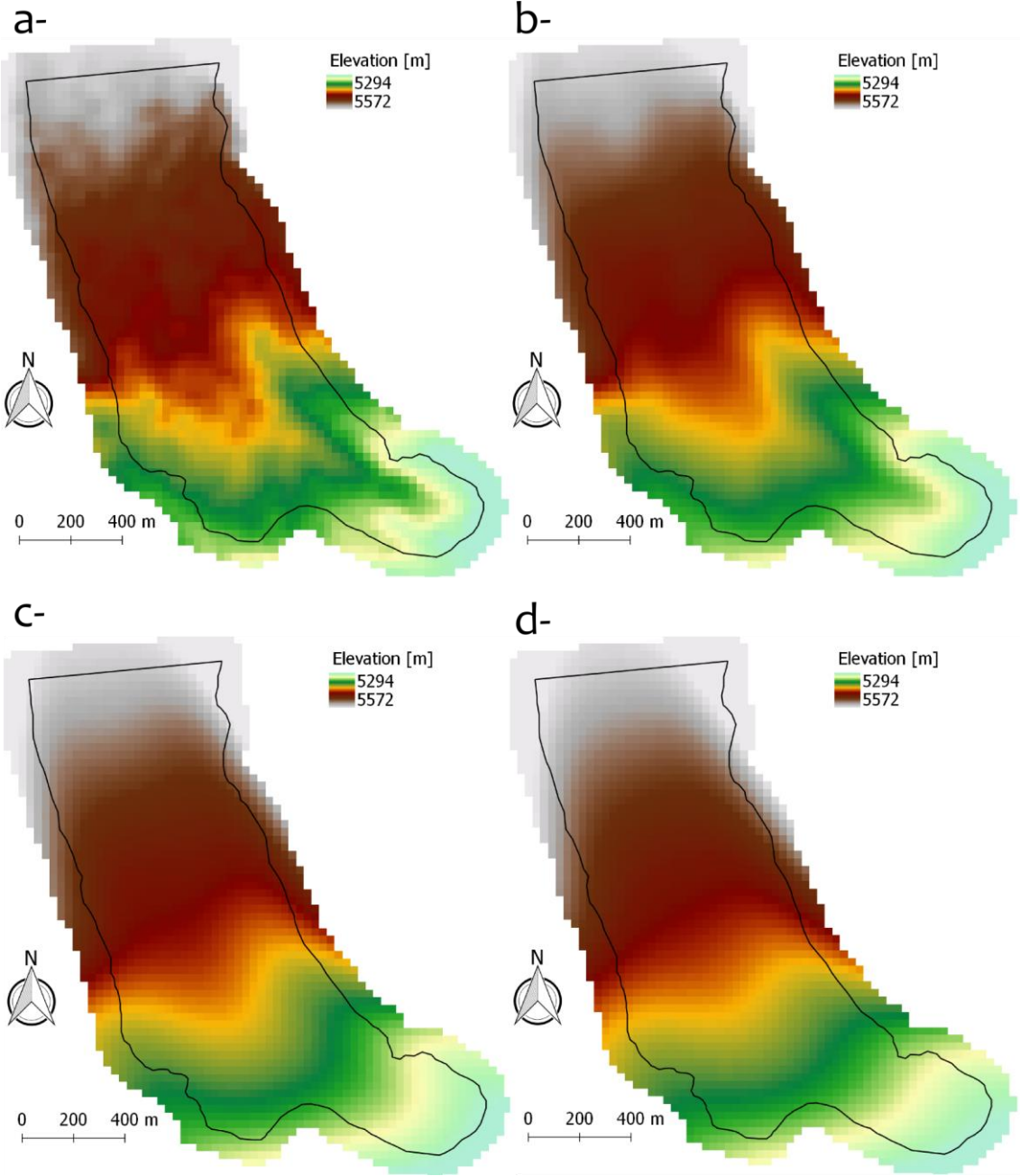


Fig. S4 – Maps of elevation of Changri Nup Glacier (black outline) obtained from the original SRTM DEM (a) and from the SRTM DEM blurred with a five (b), thirty (c) and sixty (d) pixel Gaussian kernel.



Tab. S1 – Volume loss from the three methods for each cliff

Cliff ID	Volume terrestrial photogrammetry [m ³ a ⁻¹]	Volume UAV [m ³ a ⁻¹]	Volume Pléiades [m ³ a ⁻¹]
Cliff 01	54066 ± 12735	51587 ± 12946	44259 ± 11303
Cliff 02	5538 ± 1361	5726 ± 1664	6464 ± 1877
Cliff 03	14374 ± 3486	9460 ± 3038	10345 ± 3318
Cliff 04	47771 ± 11733	49691 ± 12258	48075 ± 12066
Cliff 05	5543 ± 1442	6136 ± 1767	6802 ± 1975
Cliff 06	12562 ± 3020	13224 ± 3651	13459 ± 3736
Cliff 07	7146 ± 1709	7496 ± 2080	7762 ± 2169
Cliff 08	29685 ± 7092	29315 ± 7635	28748 ± 7596
Cliff 09	4034 ± 967	4203 ± 1167	3838 ± 1104
Cliff 10	10439 ± 2559	9143 ± 2472	10485 ± 2845
Cliff 11	1398 ± 386	1747 ± 595	1000 ± 431
Cliff 12	899 ± 350	542 ± 311	507 ± 339
Total	193453 ± 19647	188270 ± 20417	181744 ± 19436