## Supplementary Materials:

## Region-wide glacier mass balances over the Pamir - Karakoram - Himalaya during 1999-2011

## 1. References for the outlines exported from the GLIMS database:

Bajracharya, S.: GLIMS Glacier Database. Boulder, CO: National Snow and Ice Data Center/World Data Center for Glaciology. Digital Media. 2008.

Berthier, E.: GLIMS Glacier Database. Boulder, CO: National Snow and Ice Data Center/World Data Center for Glaciology. Digital Medi. 2006.

Haritashya, U.: GLIMS Glacier Database. Boulder, CO: National Snow and Ice Data Center/World Data Center for Glaciology. Digital Media. 2007.

Dolgova, E.: GLIMS Glacier Database. Boulder, CO: National Snow and Ice Data Center/World Data Center for Glaciology. Digital Media. 2007.

Kasputin, G.: GLIMS Glacier Database. Boulder, CO: National Snow and Ice Data Center/World Data Center for Glaciology. Digital Media. 2006.

Khromova, T.: GLIMS Glacier Database. Boulder, CO: National Snow and Ice Data Center/World Data Center for Glaciology. Digital Media. 2005.

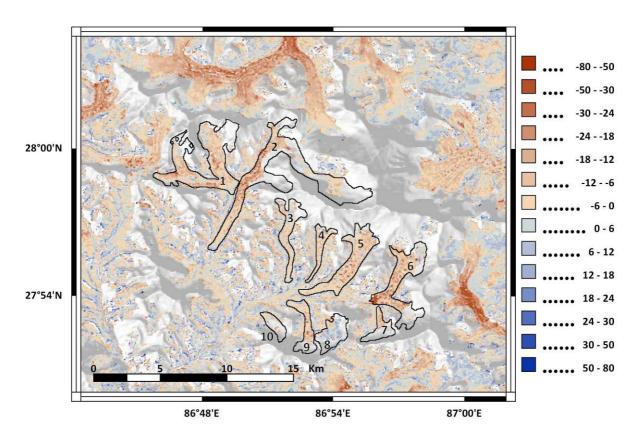
Lavrentiev, I.: GLIMS Glacier Database. Boulder, CO: National Snow and Ice Data Center/World Data Center for Glaciology. Digital Media. 2006.

Li, X.: GLIMS Glacier Database. Boulder, CO: National Snow and Ice Data Center/World Data Center for Glaciology. Digital Media. 2003.

Nosenko, L.: GLIMS Glacier Database. Boulder, CO: National Snow and Ice Data Center/World Data Center for Glaciology. Digital Media. 2005, 2007.

Zheltyhina, N.: GLIMS Glacier Database. Boulder, CO: National Snow and Ice Data Center/World Data Center for Glaciology. Digital Media. 2005, 2006, 2007.

## 2. Supplementary Figures S1 to S10:



**Fig. S1**: Detail of the elevation differences (off and on glaciers) over the upper Khumbu Valley (Everest study site). The mass balance of the 10 glaciers outlined here are given in Table 5. They are: 1-Changri Nup/Shar, 2-Khumbu, 3-Nuptse, 4-Lhotse Nup, 5-Lhotse, 6-Lhotse Shar/Imja, 7-Amphu Laptse, 8-Chukhung, 9-Ama Dablam and 10-Duwo.

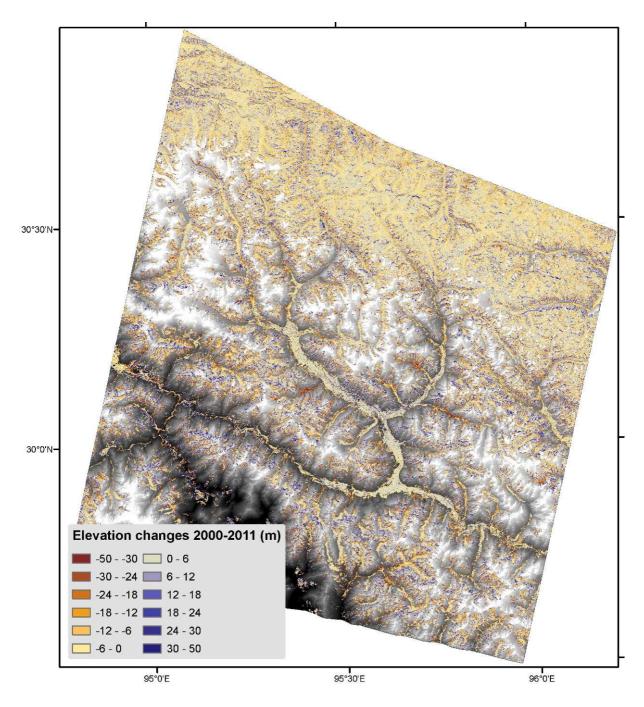


Fig. S2: Elevation differences off glaciers over the Hengduan Shan study site.

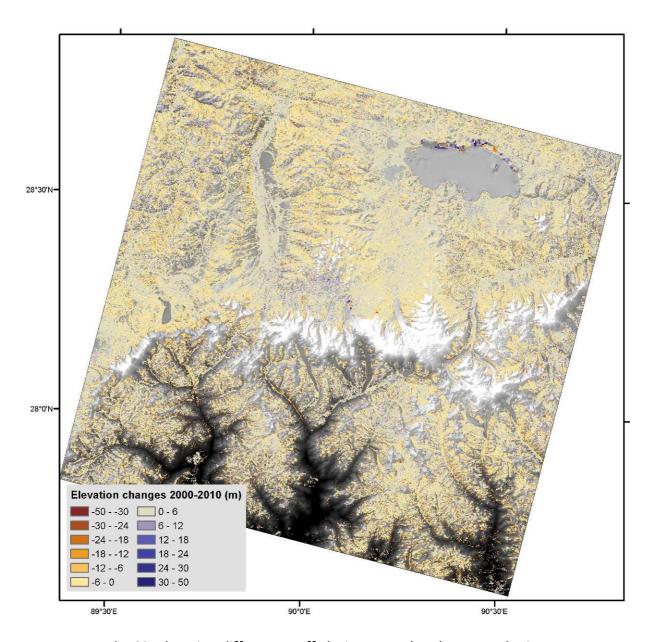


Fig. S3: Elevation differences off glaciers over the Bhutan study site.

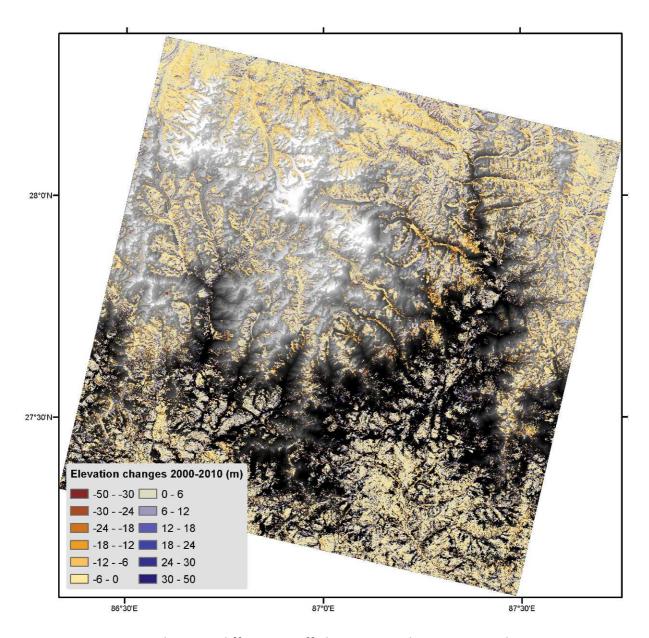


Fig. \$4: Elevation differences off glaciers over the Everest study site.

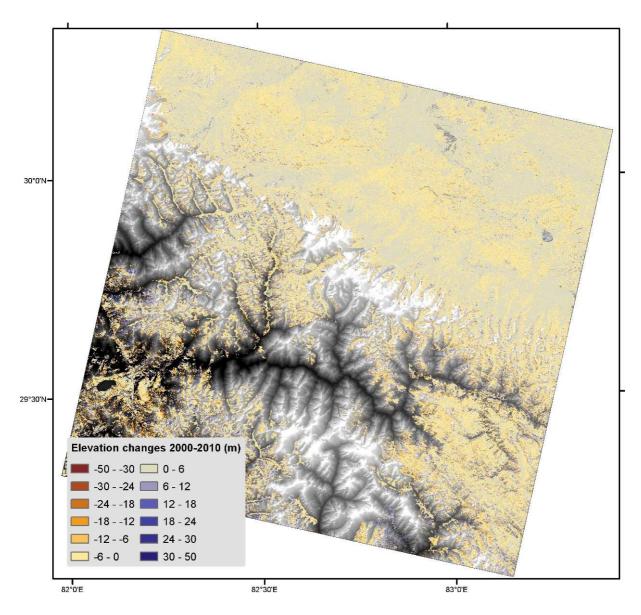


Fig. S5: Elevation differences off glaciers over the West Nepal study site.

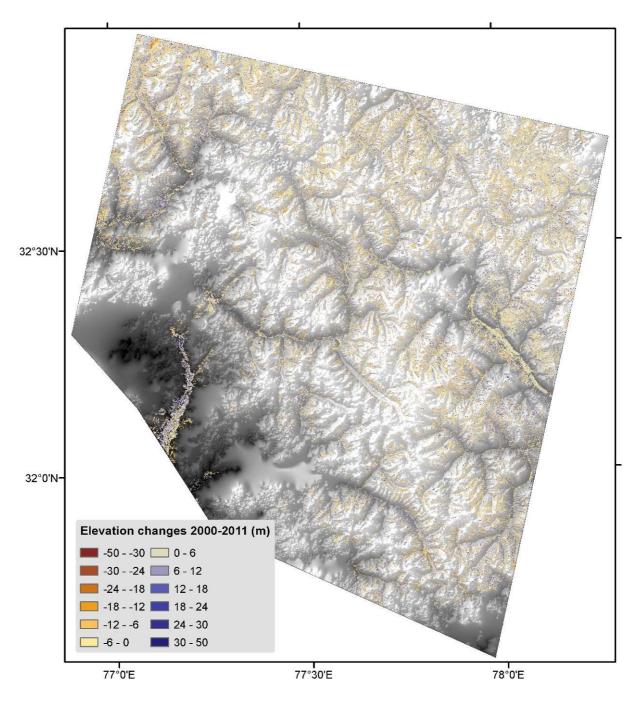


Fig. S6: Elevation differences off glaciers over the Spiti Lahaul study site.

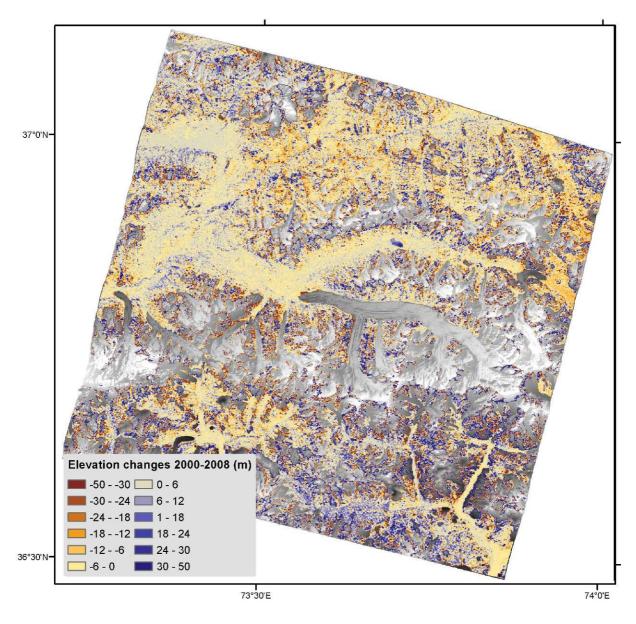


Fig. S7: Elevation differences off glaciers over the Hindu Kush study site.

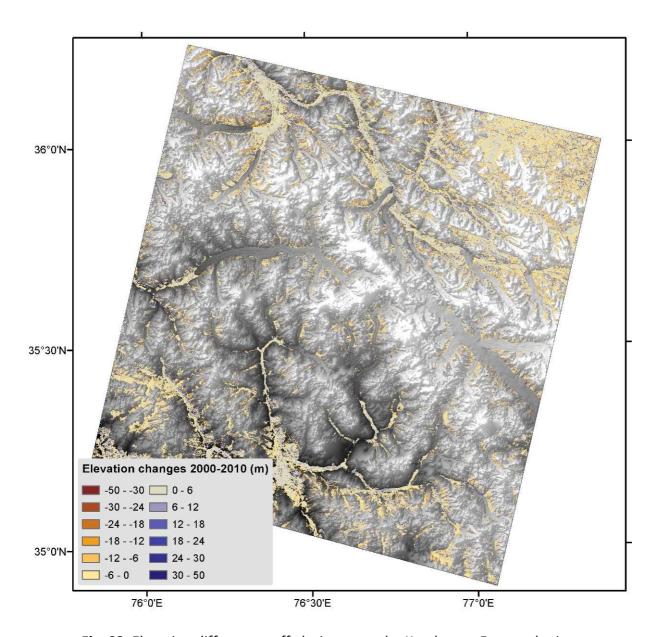


Fig. S8: Elevation differences off glaciers over the Karakoram East study site.

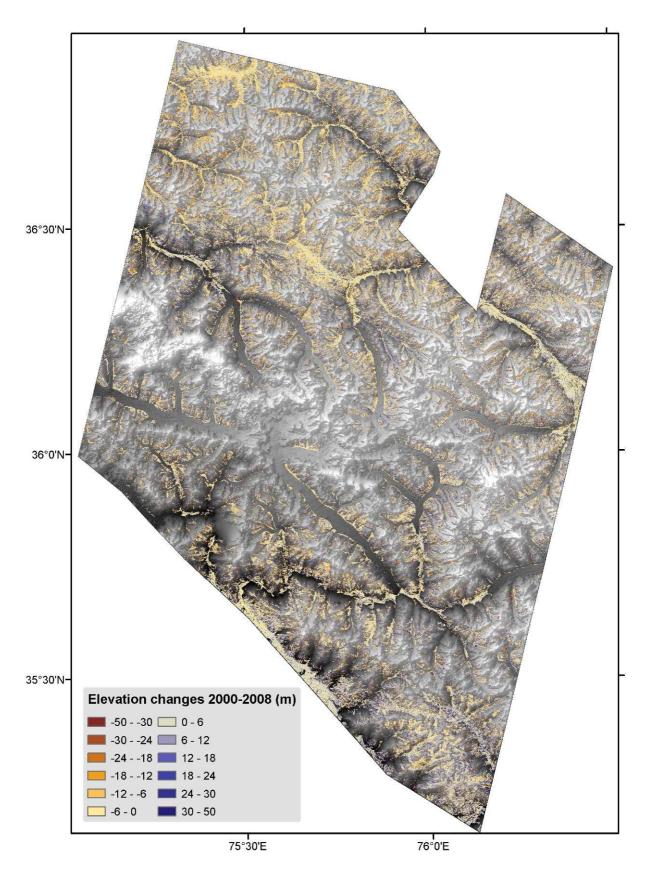


Fig. S9: Elevation differences off glaciers over the Karakoram West study site.

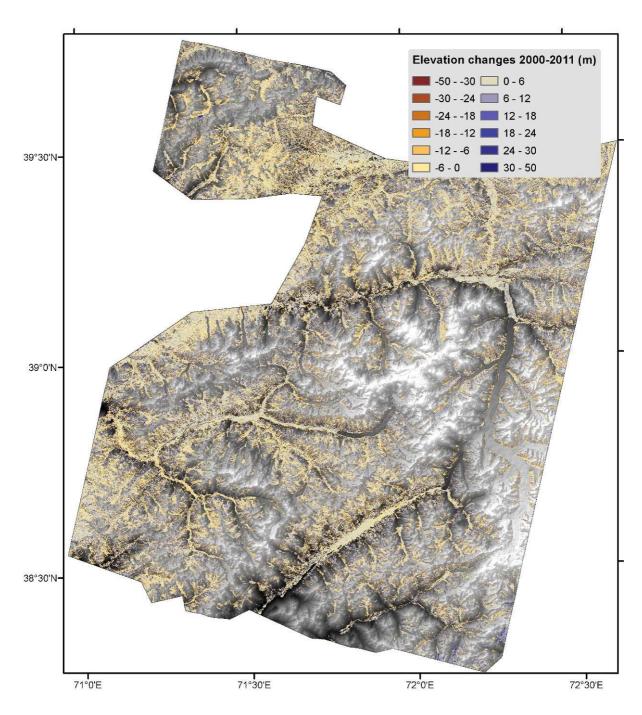


Fig. S10: Elevation differences off glaciers over the Pamir study site.