

Supplemental data for

“Assessment of runoff sensitivity in the Upper Indus Basin to interannual climate variability and potential change using MODIS satellite data products” by Nathan Forsythe, Chris G. Kilsby, Hayley J. Fowler, and David R. Archer; published in *Mountain Research and Development* (MRD) vol 32 no 1 (February 2012).

TABLE S1: Correlations of March Snow Covered Area (SCA) vs cumulative winter (Oct–Mar) precipitation and wetdays. (This table also appears in Forsythe et al 2011, as the first 7 rows of their Table 3.)

Correlations (2000 to 2007)	Precipitation at Gilgit	Precipitation at Astore	Precipitation at Skardu	Wetdays at Gilgit	Wetdays at Astore	Wetdays at Skardu
Indus to Besham [X]	.358	.590	.086	.466	.455	.307
NW UIB [0]	.800	.760	.647	.825	.678	.776
Hunza to Dainyor [1]	.683	.796	.654	.710	.687	.679
Shigar to Shigar [2]	.696	.732	.604	.692	.686	.847
Gilgit to Gilgit [3]	.587	.452	.496	.634	.378	.666
Astore to Doyian [4]	.673	.722	.265	.816	.671	.535

Values for Pearsons “r” (correlation coefficient) are **underlined in bold italic** if the corresponding significance (*p*) is less than **0.01** and highlighted in simple **bold** if *p* is less than **0.05**.

TABLE S2: Correlations of Land Surface Temperature (LST) vs 2-m air temperature (point observations). (This table also appears in Forsythe et al 2011, as the first 7 rows of their Table 4.)

Correlations (2000 to 2007)	Astore Tmax vs Tday	Gilgit Tmax vs Tday	Skardu Tmax vs Tday	Astore Tmin vs Tnight	Gilgit Tmin vs Tnight	Skardu Tmin vs Tnight
Indus to Besham [X]	.457	.453	.358	.283	.016	.184
NW UIB [0]	.489	.474	.309	.299	-.082	.227
Hunza to Dainyor [1]	.725	.694	.657	.660	.335	.527
Shigar to Shigar [2]	.736	.655	.679	.665	.310	.528
Gilgit to Gilgit [3]	.671	.709	.590	.662	.219	.564
Astore to Doyian [4]	.747	.710	.647	.664	.339	.532

Values for Pearsons “r” (correlation coefficient) are **underlined in bold italic** if the corresponding significance (*p*) is less than **0.01** and highlighted in simple **bold** if *p* is less than **0.05**.

TABLE S3: Correlation between spatial variables within individual subcatchment. (This table also appears in Forsythe et al 2011, as their Table 5.)

Correlation	Indus to Besham [X]	NW UIB [0]	Hunza to Dainyor [1]	Shigar to Shigar [2]	Gilgit to Gilgit [3]	Astore to Doyian [4]
Tday to Tnight	.779	.858	.860	.856	.852	.756
Tday to SCA	-.443	-.414	-.561	-.552	-.603	-.648
Tnight to SCA	-.339	-.286	-.477	-.473	-.496	-.560

Values for Pearsons “r” (correlation coefficient) are **underlined in bold italic** if the corresponding significance (*p*) is less than **0.01**.

REFERENCES:

- Forsythe N, Fowler HJ, Kilsby CG, Archer DR. 2011. Opportunities from remote sensing for supporting water resources management in village/valley scale catchments in the Upper Indus Basin. *Water Resources Management* Online first. 10.1007/s11269-011-9933-8
- Forsythe N, Kilsby CG, Fowler HF, Archer DR. 2012. Assessment of runoff sensitivity in the Upper Indus Basin to interannual climate variability and potential change using MODIS satellite data products. *Mountain Research and Development* 32(1). [Article in which the present supplemental material is published]