



*Supplement of*

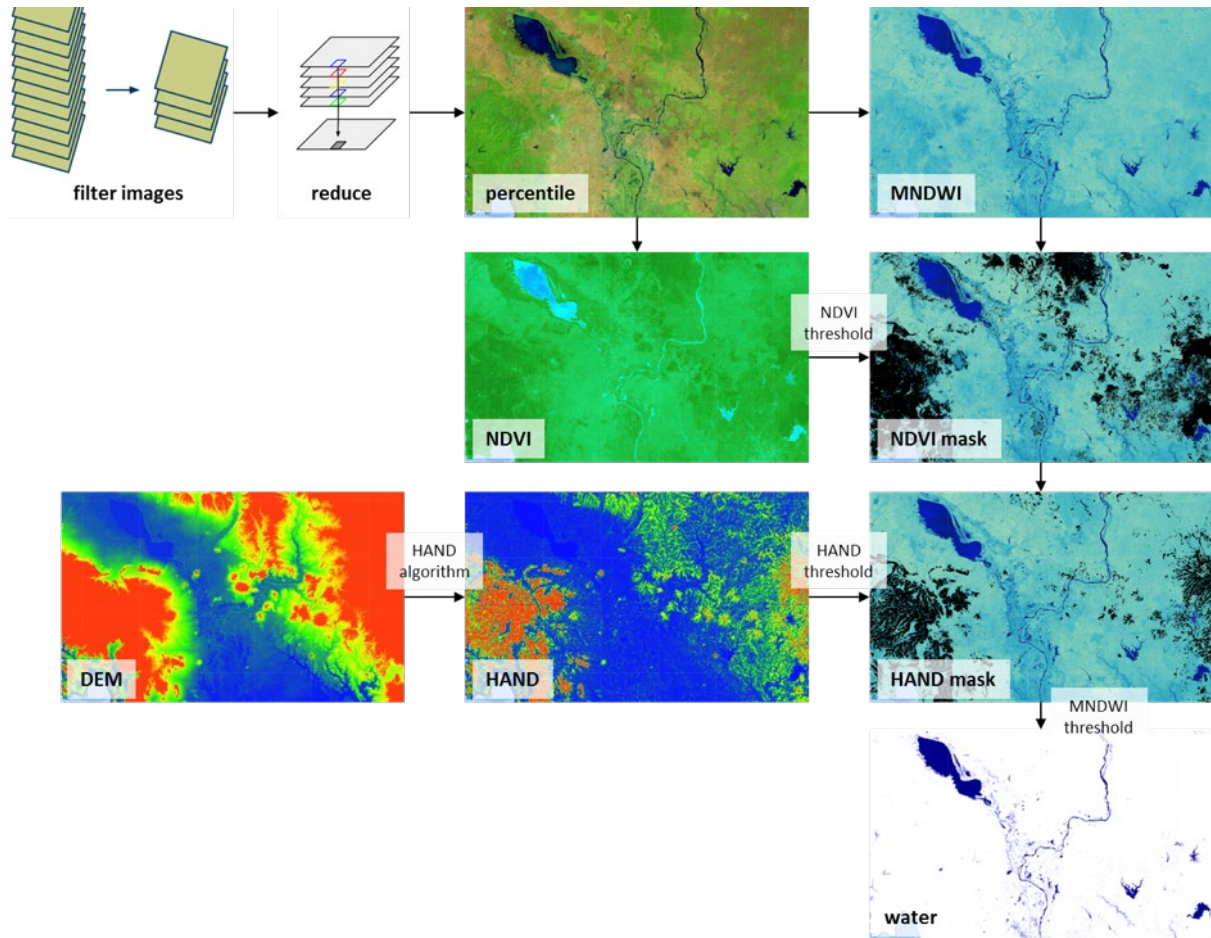
## **The Cambodian Mekong floodplain under future development plans and climate change**

**Alexander J. Horton et al.**

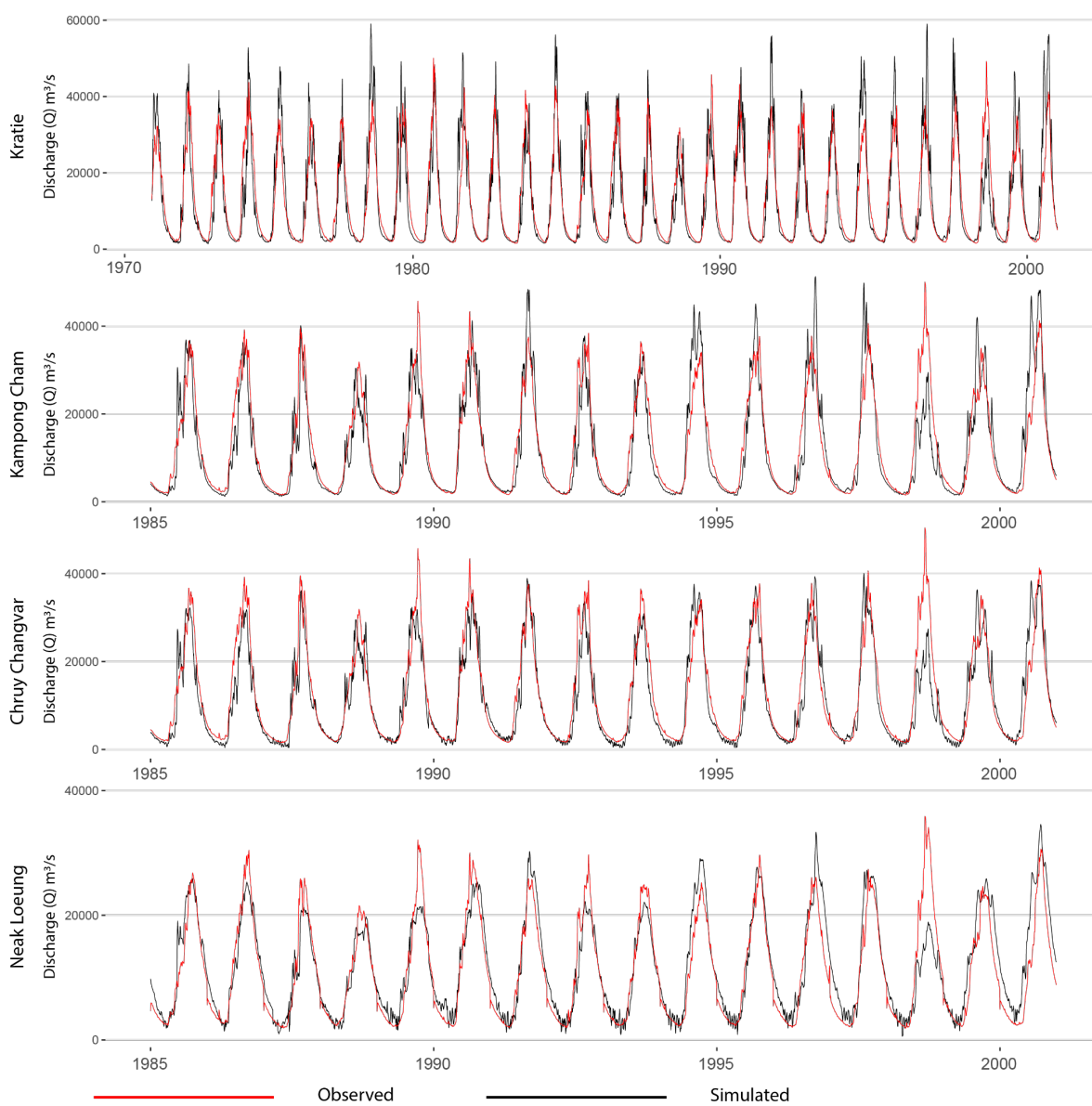
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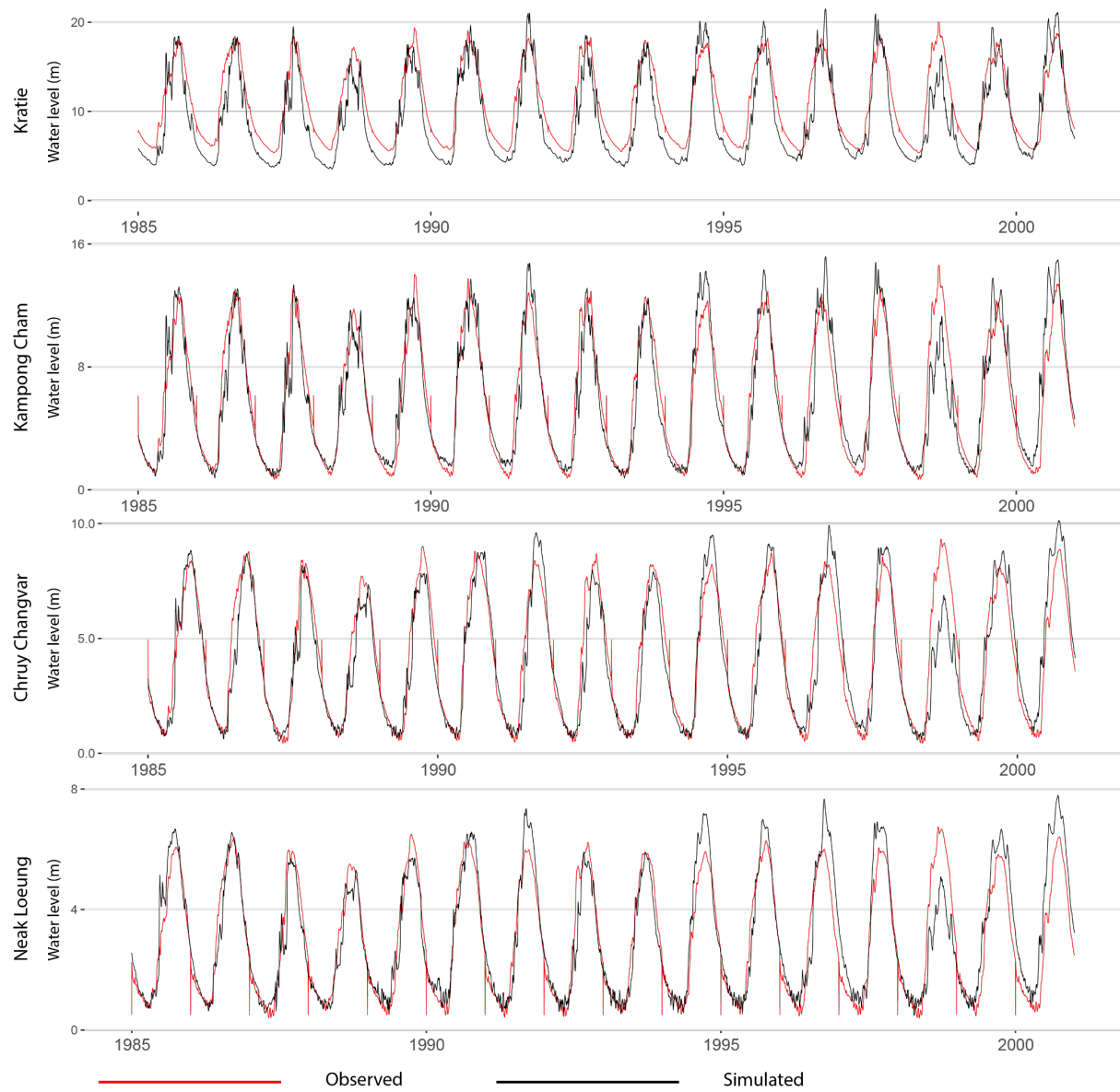
## Supplementary material



**Fig. S1.** Schematic processes in generating floodwater coverage from satellite images. MNDWI is the Modified Normalized Difference Water Index, NDVI is the Normalised Difference Vegetation Index, and HAND is the Height Above Nearest Drainage. The images represented here are derived from Landsat, SRTM and OpenStreetMap (Donchyts 2016).



**Fig. S2.** Time series comparison between the observed and simulated water discharge  $[Q]$  at each gauging station. See location of the stations in [Fig. 1](#).



*Fig. S3. Time series comparison between the observed and simulated water levels [WL] at each gauging station.*

**Table S1.** Comparison of GCM ensemble means for precipitation and temperature across the wet (May - Oct) and dry (Nov - Apr) seasons between CMIP-5 and CMIP-6. Analysis is based on the ensemble median of six GCMs that are equivalent between CMIP5 and CMIP6 generations. Data with resolution of 5 arc-min from [www.worldclim.com](http://www.worldclim.com) were used.

|   | RCP 4.5 |       | RCP 8.5 |       |
|---|---------|-------|---------|-------|
|   | CMIP5   | CMIP6 | CMIP5   | CMIP6 |
| Precipitation - wet season<br>(mm / 5 months) | 1102    | 1086  | 1149    | 1090  |
| Precipitation - dry season<br>(mm / 7 months) | 338     | 328   | 332     | 333   |
| Temperature - wet season<br>(°C)              | 23.6    | 23.6  | 24.0    | 24.1  |
| Temperature - dry season<br>(°C)              | 19.7    | 19.4  | 20.0    | 19.9  |