

## Supplemental figure captions

Supplemental Figure S1. Daily observed and simulated  $SWC(\theta)$  during the calibration (2008–2010) and validation (2011–2012) periods at TP 2 location.

Supplemental Figure S2. Daily observed and simulated  $SWC(\theta)$  during the calibration (2008–2010) and validation (2011–2012) periods at TP 3 location.

Supplemental Figure S3. Daily observed and simulated  $SWC(\theta)$  during the calibration (2008–2010) and validation (2011–2012) periods at TP 4 location.

Supplemental Figure S4. Daily observed  $SWC(\theta)$  at TP 4 location versus the average observed  $SWC(\theta)$  at the other three locations (TP 1-3) during study period.