Supplementary Materials: sUAS-Based Remote Sensing of River Discharge Using Thermal Particle Image Velocimetry and Bathymetric Lidar

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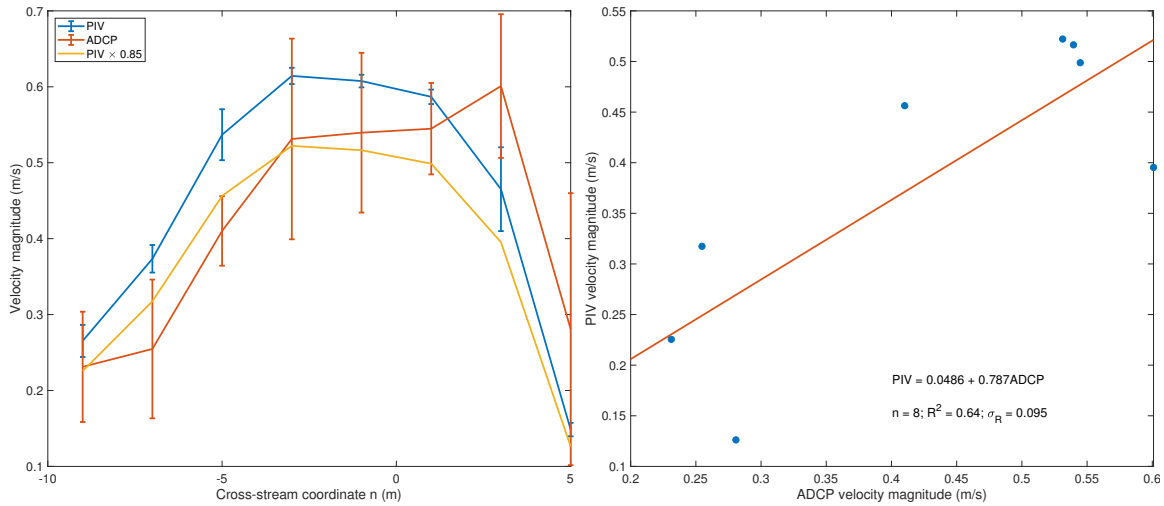

Figure S1. (a) Comparison of PIV-derived velocities and ADCP measurements along cross-section 2. (b) Accuracy assessment of PIV-derived depth-averaged velocities via linear regression.

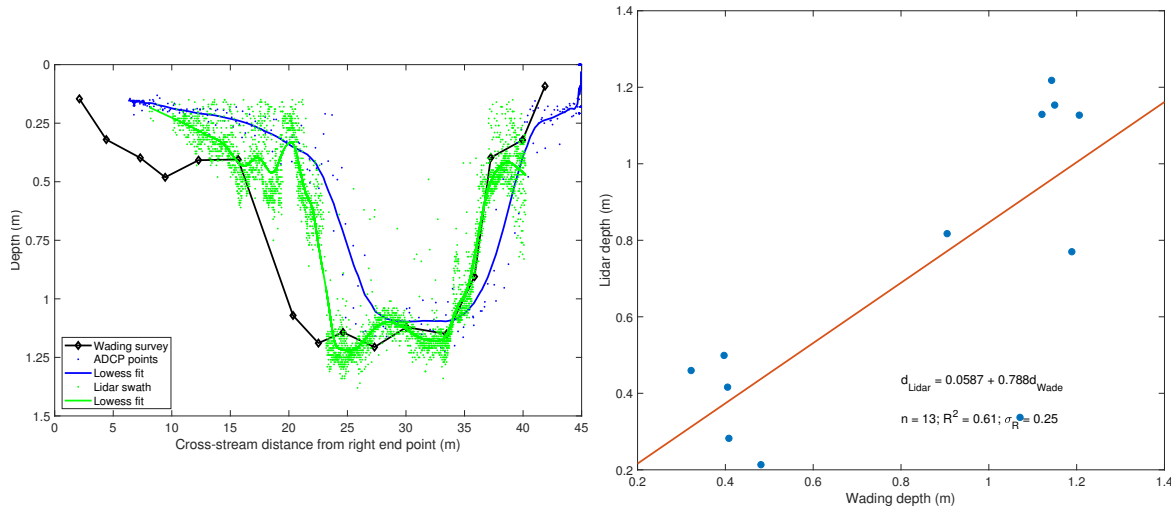

Figure S2. (a) Depth comparison between lidar, wading, and ADCP measurements along cross section 2. (b) Accuracy assessment of lidar-derived depths via linear regression.

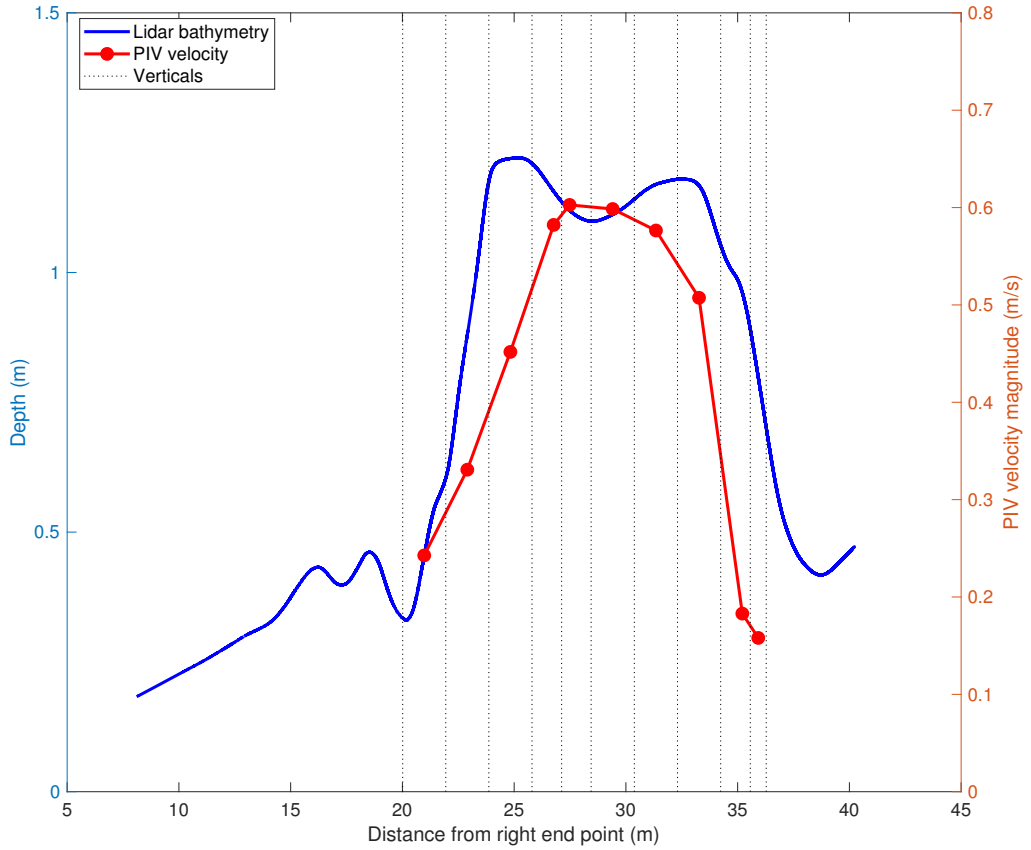

Figure S3. PIV-derived velocities, lidar depths, and left and right edges for each vertical used in the incremental discharge calculation for cross section 2 based entirely on remotely sensed data.

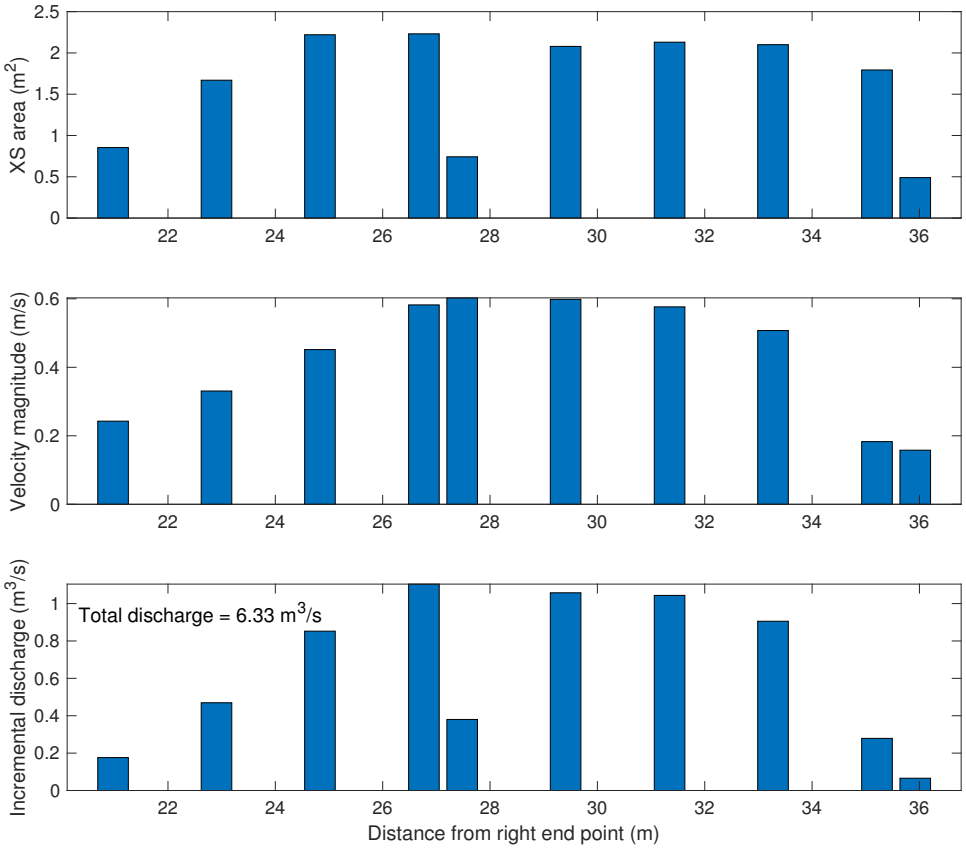

Figure S4. Illustration of how the cross-sectional area associated with each vertical is multiplied by the corresponding velocity magnitude to yield a series of incremental discharges that are then summed laterally to obtain the total discharge. This example is based on remotely sensed data from cross-section 2 on the Blue River.