

Replication Dataset for

Quantifying hydraulic roughness from field data: can dune morphology tell the whole story?

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 - b. Reference surface for detrending of data
2. Water surface slope
 - a. 3 datasets and metadata
3. Grain size distribution
4. Water level at seven gauging stations, and its locations (x, y, chainage)
5. Discharge
 - a. ADCP measurements in 2015, 2016, 2017 used for discharge correction
 - b. Discharge derived from rating curve (waterinfo.rws.nl) at three stations
6. River geometry
 - a. Width
 - b. Groynes
 - c. Longitudinal training dams (LTDs)
 - d. Central axis
7. Scripts
 - a. Curvature
 - b. Xy2sn coordinate transformation (including rotation, adjusted from Vermeulen et al., 2014)
 - c. Bedform tracking tool (Van der Mark & Blom, 2007)

References

- Van der Mark, C. F., & Blom, A. (2007). *A new and widely applicable tool for determining the geometric properties of bedforms*.
- Vermeulen, B., Hoitink, A. J. F., Van Berkum, S. W., & Hidayat, H. (2014). Sharp bends associated with deep scours in a tropical river: The river Mahakam (East Kalimantan, Indonesia). *Journal of Geophysical Research: Earth Surface*, 119(7), 1441–1454. <https://doi.org/10.1002/2013JF002923>