**Glossary of terms - addendum**

**river morphology**

- **aggradation**: rise of river bed due to sedimentation
- **alluvial**: related to deposits of sediments left by the flow of rivers. In river morphology, the term is often reserved to sediments which continue to be eroded and deposited by the rivers
- **anabranching**: formation of a river course with multiple channels, divided by islands, or sometimes bars, that are large in relation to channel width

- **axisymmetrical**: related to idealized bends with uniform curvature
- **bar**: form of the river bed which scales with channel width
- **bathymetry**: spatial depth distribution, usually defined as the submerged bed topography with respect to a sloping idealized water level surface for a certain specified constant discharge
- **bedform**: form of the river bed which scales with water depth (dune) or viscous sublayer (ripple)
- **bedload**: sediment transport through rolling, sliding and saltation over the river bed

- **bed-material load**: transport of bed material, over the bed or in suspension

- **bed topography**: spatial bed level distribution with respect to a horizontal datum
- **bifurcation**: point where a channel or river splits into two channels or rivers
- **braiding**: formation of a river course with multiple channels, divided by bars that have a size on the order of the channel width

- **Bulle effect**: disproportionate sediment transport into offtake channels due to helical flow
- **Chézy coefficient**: coefficient for hydraulic roughness
- **confluence**: point where two channels or rivers join
- **crossing**: shallow area between two consecutive bends
- **cut-off**: formation of a new channel which shortens the channel bend
- **degradation**: lowering of river bed due to erosion
dimension (1) extent or size, (2) the number of measures needed to describe the size of an object in a certain space. In mathematical modelling, the number of dimensions is equal to the number of space co-ordinates to which partial derivatives appear in the underlying differential equations.

dune bedform which scales with water depth

Exner’s Principle principle that erosion occurs in areas of accelerating flow and sedimentation in areas of decelerating flow

geomorphology systematic study of landforms and their origin

hydrograph graph representing discharges or water levels at a given station as a function of time

mass failure bank erosion process in which large portions of the bank collapse into the river during short events

meanders sinuous rivers, sinuous channels

meandering formation of a sinuous river course through bank erosion

morphodynamics study of the time-dependent changes in the forms of alluvial beds and their underlying processes. The term is also used as a synonym for morphological behaviour

morphology branch of geomorphology, studying the forms of alluvial beds of water bodies and their ongoing changes by erosion and sedimentation. The term is also used as a synonym for the bed topography or the shape of a river

planform shape on map of banklines or water lines

point bar bar at inner bend

pool deep outer bend

regime statistically averaged properties (“climate”) of a river. A river is “in regime” if its statistically averaged properties remain constant, i.e. if the river is stable

retarded scour scour occurring during the fall of the flood

ripple bedform which scales with viscous sublayer

river morphology branch of geomorphology, studying the forms of the river bed and their ongoing changes by erosion and sedimentation

scour deepening of the bed by erosive action of water

secondary flow flow phenomena related to deviations from standard vertical profiles (spiral flow, accelerating-flow deformation, decelerating-flow deformation)

sediment solid material eroded, transported and deposited by the river

shear stress force exerted by the flow on a lateral interface of unit area

Shields parameter parameter expressing the mobility of particles of a given size under given flow conditions

sinuosity ratio between distance along the river or channel and distance along a straight line

sliding bank erosion process in which large portions of the bank collapse into the river during short events

sloughing bank erosion process in which thin layers of bank material are washed away particle by particle more or less continuously

suspended load sediment transport through flow convection, not in contact with the bed but kept in suspension by turbulence

thalweg line connecting the deepest points of consecutive cross-sections
washload throughput of sediment which does not depend on local sediment transport capacity (supply-limited instead of capacity-limited transport)

classification based on origin

bed-material load

suspended load

bedload

classification based on transport mechanism

washload