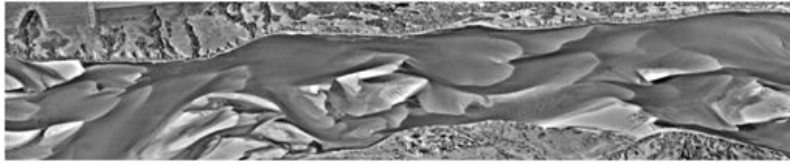


River processes



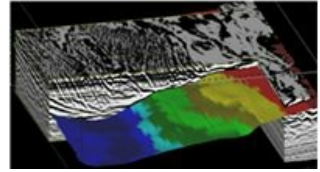
A central issue at the heart of the study of ancient rivers is that while their deposits represent the definitive evidence of what rivers leave behind, the interpretation of the processes and environments at the time of deposition is fundamentally ambiguous. To make progress requires a new perspective; instead of seeing modern and ancient studies as separate entities they must be viewed as a temporal continuum.

Deposits result from river processes, the key to development of river science is thus extending the timescales over which process studies can take place so that interpretation of ancient rivers is no longer ambiguous. This can only be achieved by delivering new quantitative knowledge of the process-product relationship that can then be used as both boundary conditions and validation datasets for numerical models. Collaboration with numerical modellers to extend the process timescales that are currently lacking will deliver the science breakthrough that is currently lacking. It is this goal which has formed the overriding philosophy that underpins research into fluvial processes at Birmingham.

Examples of our research

[Magnitude-Frequency \(/research/activity/geosystems/projects/south-saskatchewan/index.aspx\)](/research/activity/geosystems/projects/south-saskatchewan/index.aspx)

Do big floods leave a distinctive imprint in the deposits of rivers?



[Scale invariance \(http://www.brighton.ac.uk/parana/\)](http://www.brighton.ac.uk/parana/)

Is knowledge derived from small rivers directly applicable to the Worlds largest rivers?



[Transitions \(http://www.brighton.ac.uk/columbia/\)](http://www.brighton.ac.uk/columbia/)

How do rivers vary downstream as they become increasingly influenced by tidal processes?



Boundaries

What are the exchange processes occurring between turbulent flows and the pore spaces within the river bed?
View Boundaries publications



Projects

- **[The South Saskatchewan River Project \(/research/activity/geosystems/projects/south-saskatchewan/index.aspx\)](/research/activity/geosystems/projects/south-saskatchewan/index.aspx)**