

Digital Appendix supplementary material for Leclair article

Interpreting fluvial hydro-morphology from the rock record:
large river peak flows leave no clear signature

This digital appendix contains previously unpublished data from Leclair's experimental investigation on dune deposit preservation, in addition to results from a new analysis of selected data from Leclair S.F. (2002), Preservation of cross-strata due to migration of subaqueous dunes: an experimental investigation: *Sedimentology*, v. 49, p.1157-1180.

File "Leclair_theory_review": (in Microsoft Word and in Adobe Acrobat PDF formats) presents: (1) a brief review of the Paola-Borgman theory; (2) new testing of the applicability of the Leclair-Bridge model to the interpretation of partially preserved cosets; and, (3) a description of the effects of dune migration patterns on cross-set boundaries, with examples of sedimentary structures solely due to each of these patterns and guidance (or warning) for identifying cosets and cross-sets in outcrops and cores.

Files named: "Video_S...": video files (in Quicktime .MOV format) on dune migration patterns, as seen from flume side-wall

Files named "Pict_S...": picture files (JPEG format) for five 1-m long experimental sediment peels. All material is from Leclair's experiments at Binghamton University, NY, U.S.A.

Four Microsoft Excel files with: 1) some graphs of ship tracks of survey lines; 2) data (distance, bed elevation) for two 40-km long survey lines on the Mississippi River; 3) a graph file of these data; 4) a graph file of bed profiles for five ~ 15-km long survey lines of this river.

Files named "Loire_9...": colour pictures (JPEG format) of the Loire River deposit described in the paper.