DATA REPOSITORY

Supplementary Data Table 1: All measurements of migrated area, preserved area and preservation percent for the numerical model, Helena AR and McMurray Formation datasets. Each data set is separated into accretion package (AP), bar and meander belt (MB) scales.

Supplementary Data Table 2: Data used to construct graphs in Figure 14. Preservation percent over time (normalized Stage), the graph of all the data, the equation of the trend line and the r^2 for the correlation between the trend line and the raw data.

Supplementary Data Figure 1: An example of how the graphs in Figure 14 were constructed based on the example from Figure 9. Each measurement is documented as a step-wise track of preservation, starting at Stage 1 and 100% preservation, and ending at some final preservation percent (which may be 0%).

Example Survivability Graph

all measurements start here, regardless of which stage they were deposited at

n = 4

Percent Preservation

67.7%

track of preservation percent over time (stage)

0.0%

FINAL

stages not shown in Figure 9A

Stage (normalized)