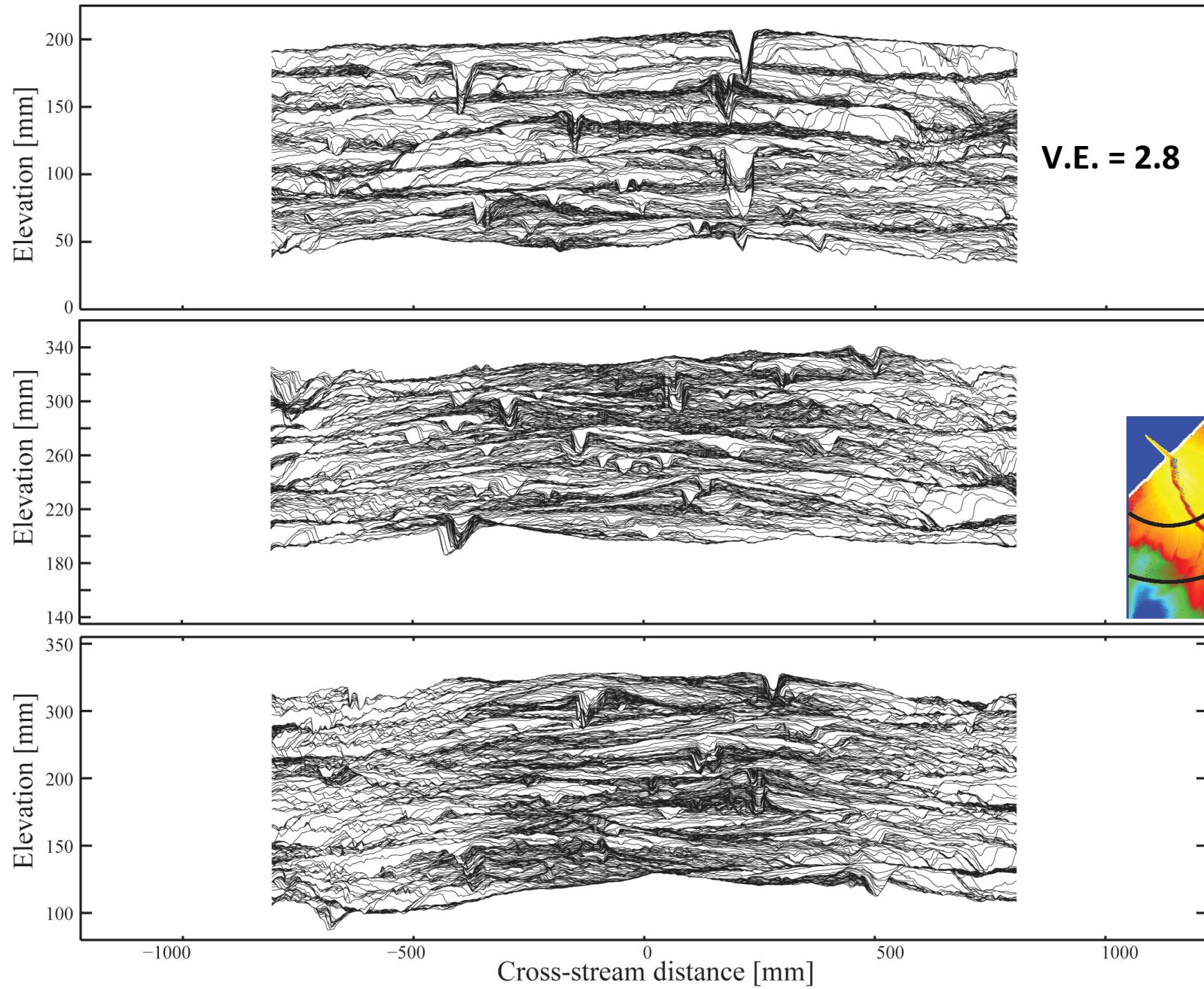


Final Synthetic Stratigraphy

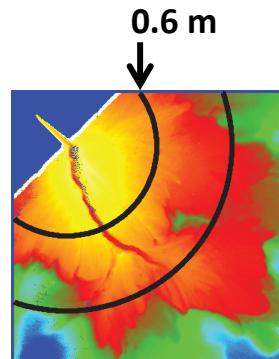
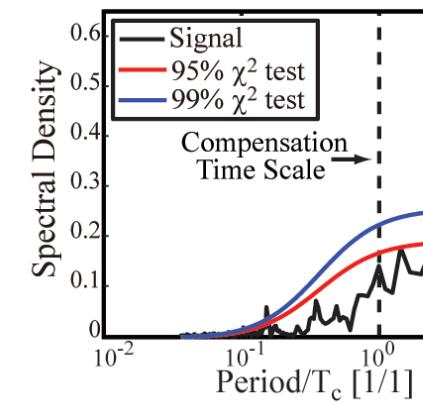
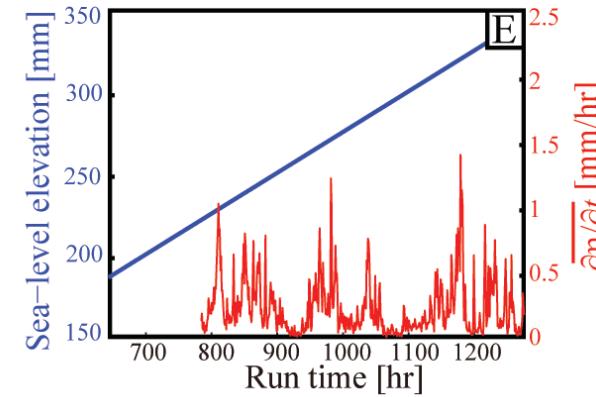
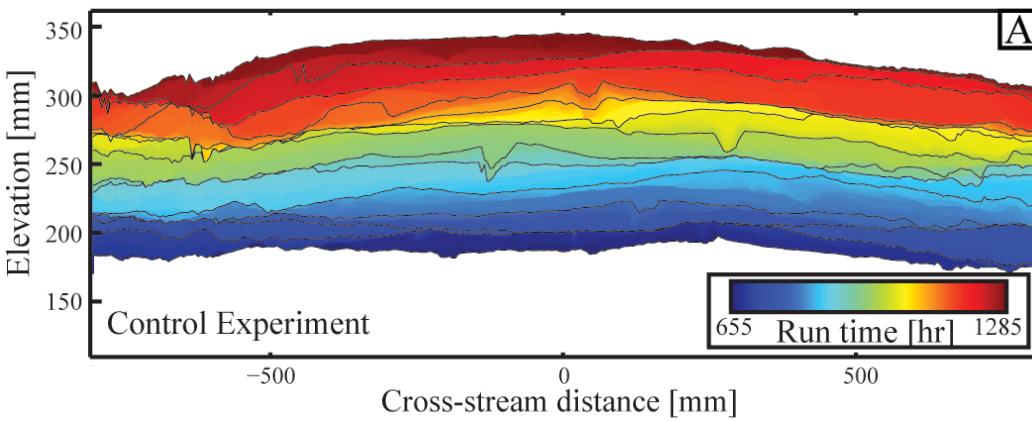
$0 H^*, 0 T^*$ $0.5H^*, 0.5 T^*$ $4 H^*, 2 T^*$



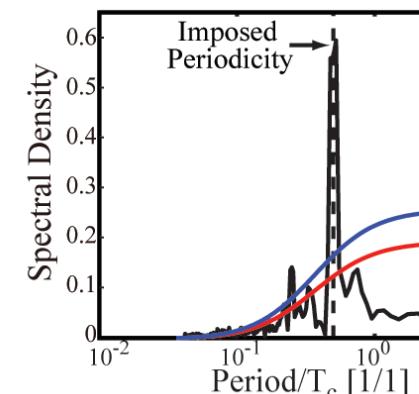
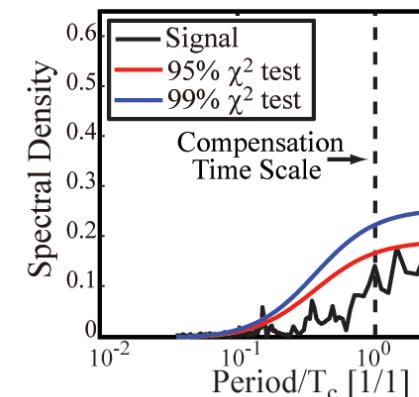
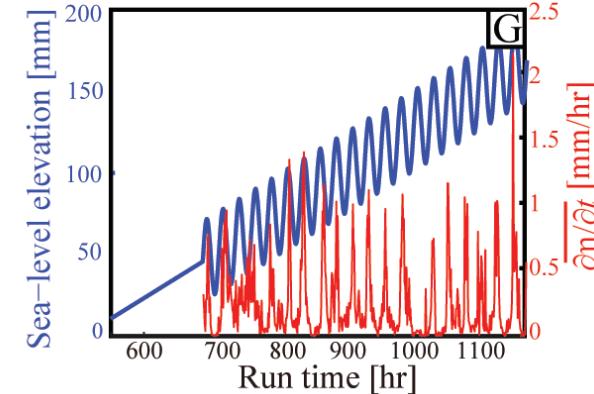
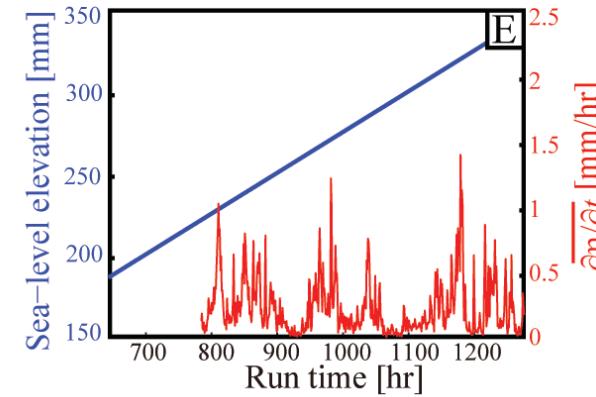
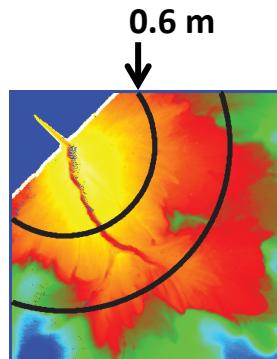
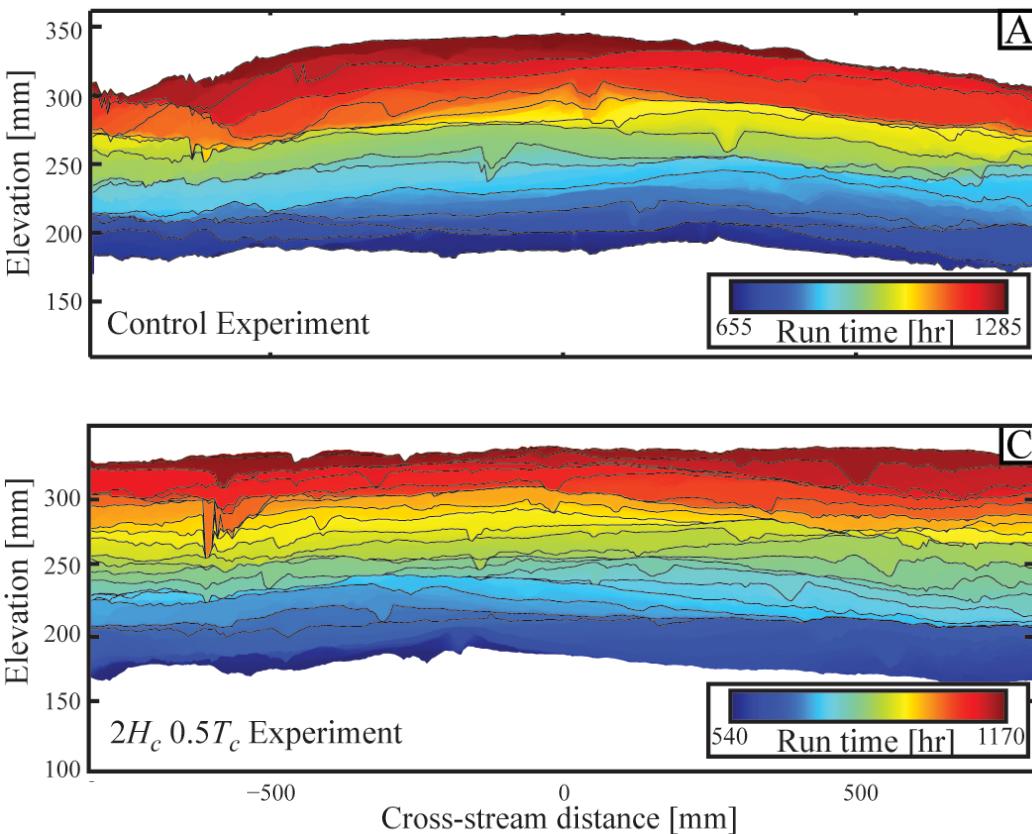
V.E. = 2.8

0.6 m

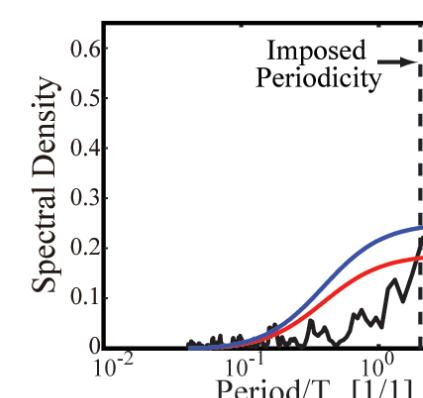
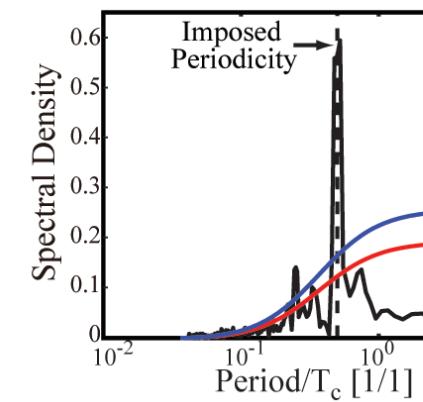
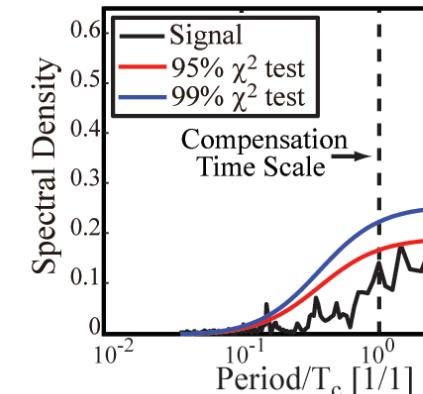
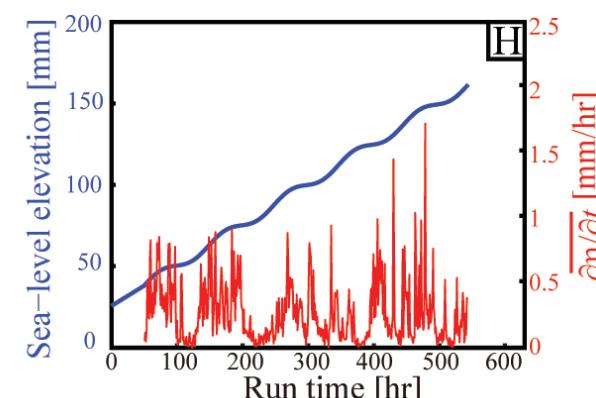
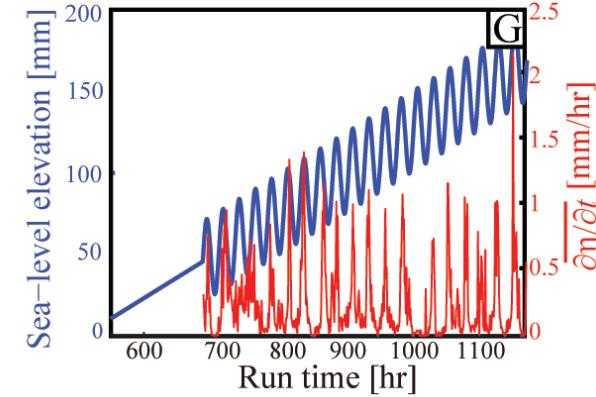
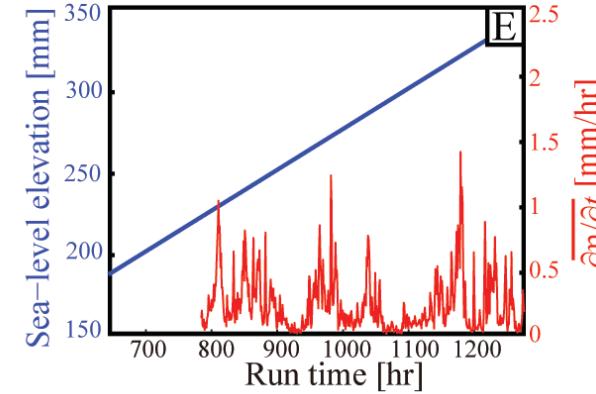
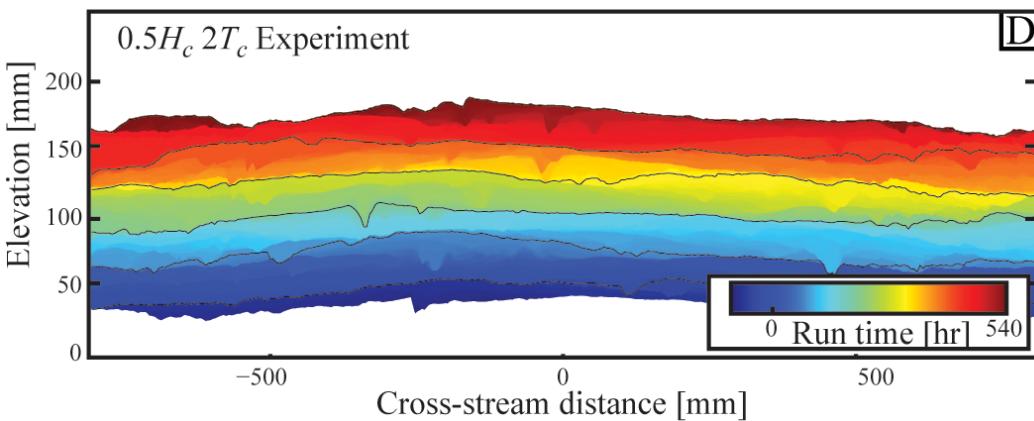
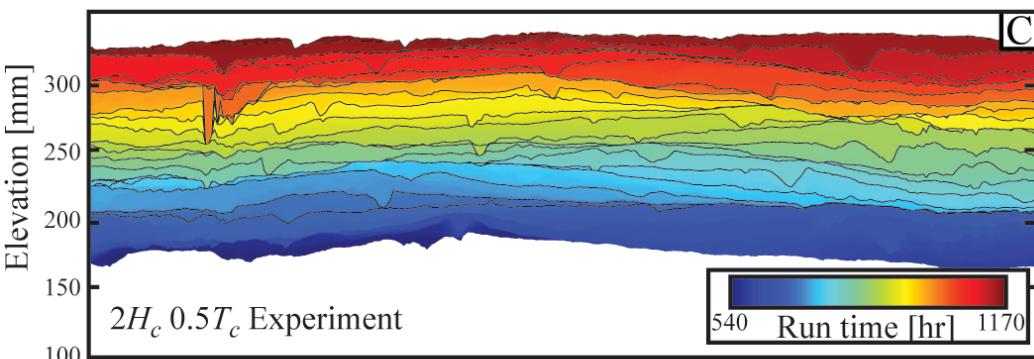
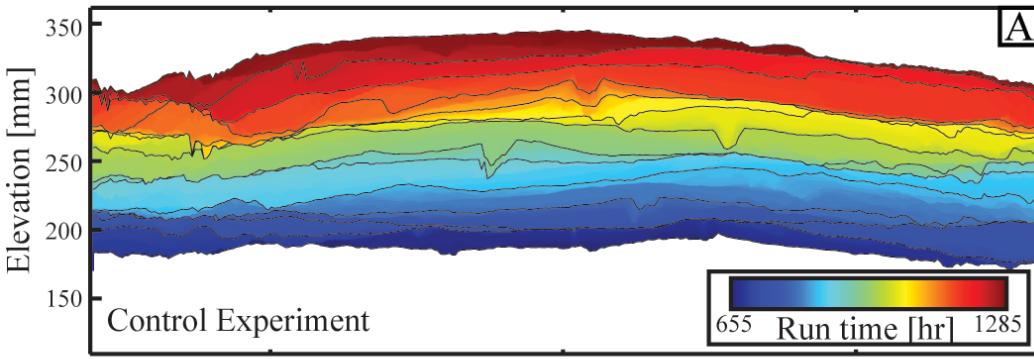
Findings Results along X-section 600 mm from source



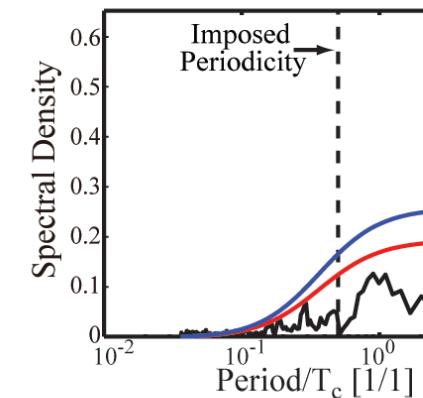
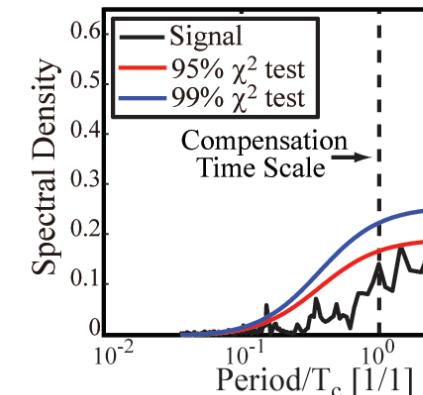
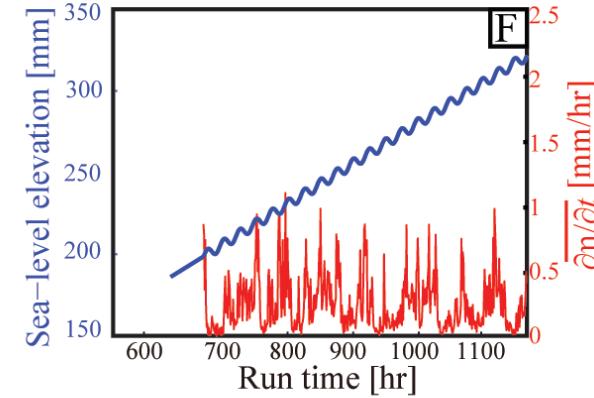
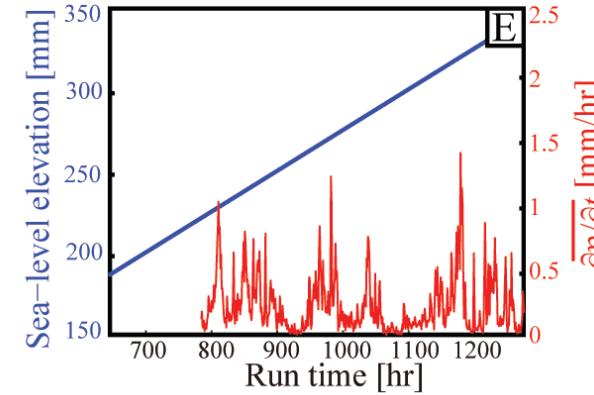
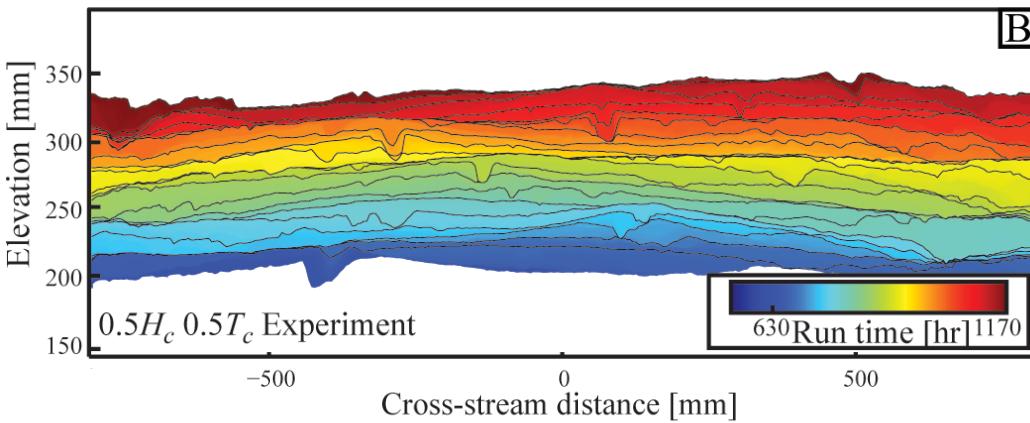
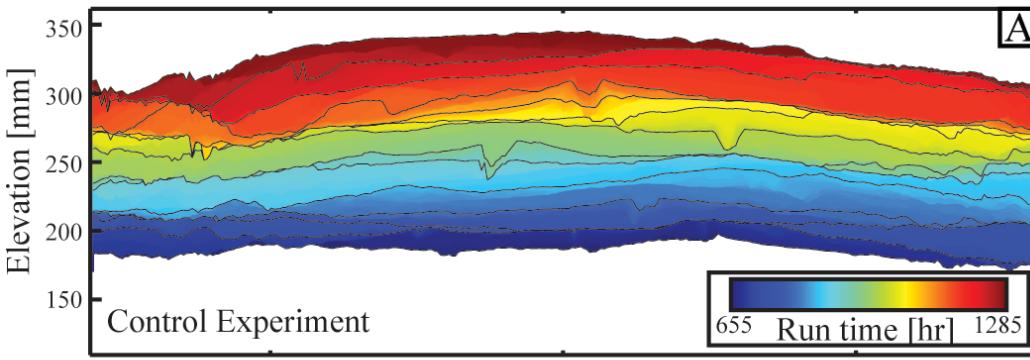
Findings Results along X-section 600 mm from source



Findings Results along X-section 600 mm from source



Findings Results along X-section 600 mm from source

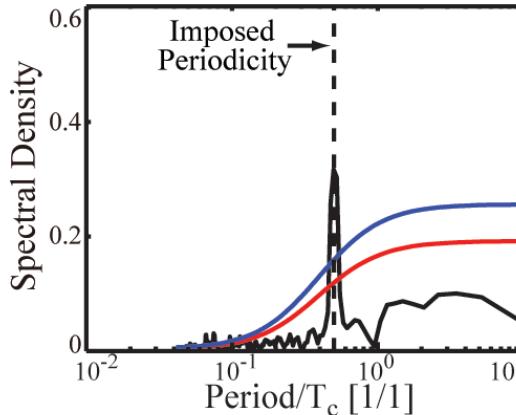


gous to modulated turbulence [von der Heydt et al., 2003] and shredded sediment flux signals [Jerolmack & Paola, 2010] **there is no evidence of periodicity in stratigraphy when H^* and $T^* < \sim 0.6$.**

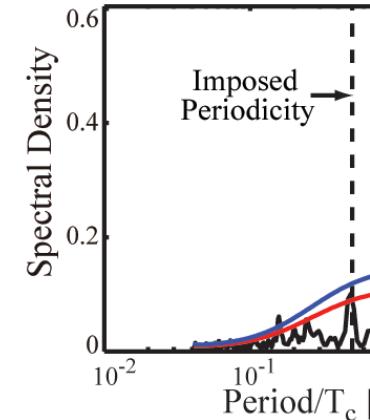
onal Notes

al signal storage, in our experiments,
not occur at shoreline. It occurs at
ge backwater transition location.

600 mm from basin source
~ Average Backwater Transition

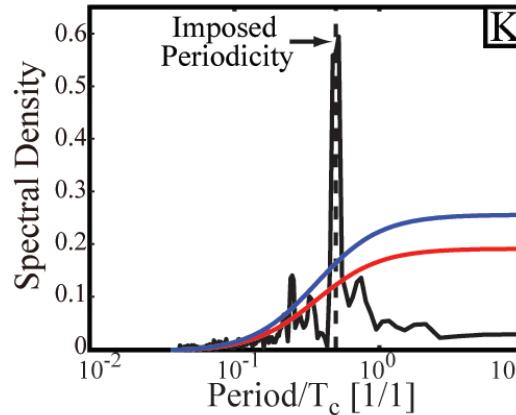


1100 mm from ba
~ Average Shorelin

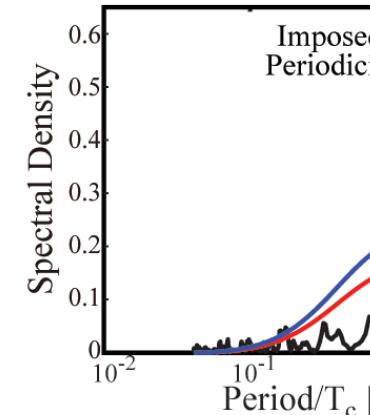


Both from $H^* = 1 \ T^* = 0.5$ Experiment

$H^* = 2 \ T^* = 0.5$



$H^* = 0.5 \ T^* = 0.5$



600 mm from source for both

tude (Range) of RSL cycle appears to
re important than Period for signal
e (But both are important!)

Autogenic time-scales for field scale systems

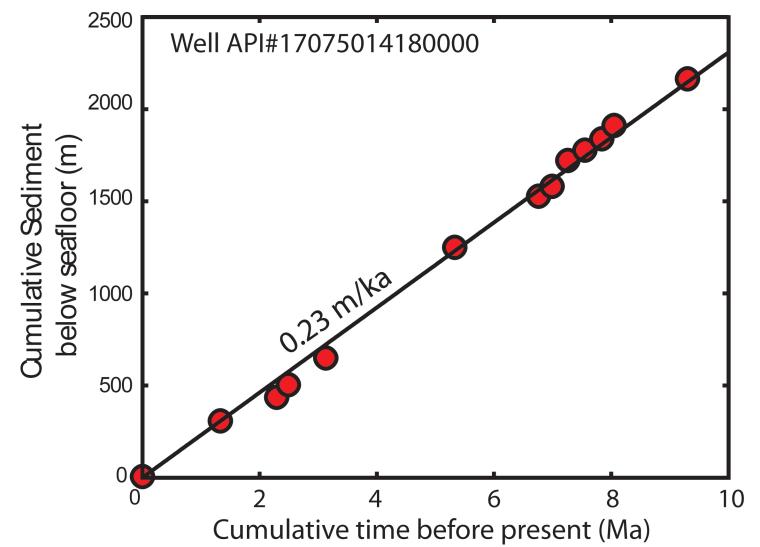
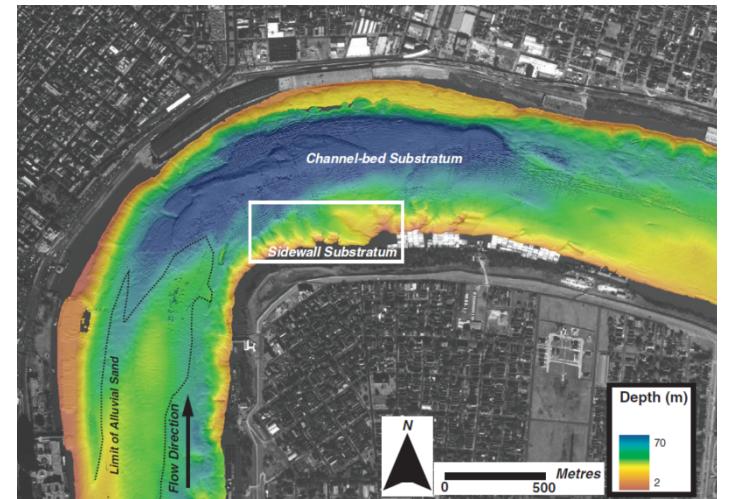


Photo Credit:
Cdr. Chris Hadfield

**Channel depth of lower
Mississippi river: 50 m**
Nittrouer et al., 2013

**Long-term
sedimentation rate:**
0.23 m/kyr
(Straub et al., 2009)

$$T_C = \frac{l}{r} \quad \rightarrow \quad \sim 217,000 \text{ yrs}$$



Calculated autogenic time-scale (T_c) is long in comparison to many allogenic time-scales (e.g. Milankovitch Cycles)