008 CROSS STRAT

Session: Interpreting cross stratification	Materials needed:
Sedimentology and Stratigraphy	Powerpoint on cross stratification
	• Rubin animations of cross strat

Goals of the session:

- To forge a link between bedforms and the cross stratification they produce
- Students should understand that cross stratification allows us to interpret specific flow conditions (velocity, depth, etc.)
- Students should be able to describe unidirectional, oscillatory, and combined-flow bedforms

Estimated	Session outline	
time		
30 minutes	1. Finish Part II of "Deriving bedform phase diagrams" jigsaw.	
	a. Re-arrange into groups with representative from each grain size	
	class	
	b. Students should describe what happens as grain size varies, based	
	on their own plots.	
45 minutes	2. Bedforms and cross stratification lecture	
15 minutes	3. Combined flow problem	
	a. What is a combined flow?	
	b. Using Myrow and Southard (1991) figure, interpret the trajectory	
	4. Choose groups for lab demos.	
Session notes		