READING REPORT EXAMPLE
(This is a very brief and abbreviated example. It could easily be expanded.)


This paper describes sedimentary structures that lead the authors to conclude that large Jurassic dunes of wind-blown sand were subject to seasonal reversals of wind direction and monsoon rains on a yearly cycle.

The data collected by the authors include careful description of small and large scale cross-lamination and cross bedding, thickness and geometry of these features, and geographic orientation of paleoflow indicators preserved in the Jurassic Navajo Sandstone from Utah. Important sedimentary structures include ripple cross-lamination, cross bedding, and slump features. Data were organized into cycles of sedimentation, which allowed the authors to analyze periodic changes statistically.

The authors interpret the Navajo sandstone as representing large (30m!) sand dunes that migrated by aeolian processes due to prevailing winds across Pangaea (although they are not the first to say this!). The new contribution is to identify yearly cycles of sedimentation, two prevailing wind directions (they also state that this has been said before), and a seasonal weather pattern that included lee-face slumping of the dunes. Monsoonal rainfall is implied by sand coherence and thickness of slump blocks. Previous studies established the plate tectonic positions of these depositional settings, and possible weather influences. The authors test their ideas against this previous work.

This paper demonstrates that even in a much-studied and well-known unit like the Navajo Sandstone, new interpretations can be derived by careful observation and documentation of detailed bedding fabric.