

# North African response to climate change over the past 20ka: Comparing methods of grain-size analysis at continental margins

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## How has North Africa's climate changed?

- Cyclic shifts between arid (desert) and humid (vegetation) periods.
- Most recent long-term shift was the African Humid Period (11.7-5.5ka)
- Caused by changes in insolation and sea surface temperatures in the North Atlantic.



## How can terrigenous dust tell us about this change?

- Possible to use inorganic dust blown off Sahara to track this change in sediment cores.
- Smaller grains=fluvial (humid period)
- Larger grains=eolian (arid period)

## What are the problems with studying terrigenous dust?

- How can we separate the eolian from the fluvial component in mixed samples?
- End-member modeling!

## GC37 Weibull Distribution

