

## Monsoonal fluctuation during 120ka by clay fraction analysis of the eastern Mediterranean Sea, ODP Leg 160

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We revealed variations of clay minerals in two piston cores from the eastern Mediterranean Sea during 120 Ka. We studied and reconstructed a method of powder X-ray diffraction on clay fraction. Each process on sample preparation and orienting with Molybdenite as an internal standard was carefully considered in the procedure of semi-quantitative clay mineral analysis. The fluctuations of relative content of smectite had been closely correlated with glacial-interglacial cycles and also kaolinite had been correlated with summer insolation curve during 120 Ka. On the other hand, chlorite reflects a frequency of turbidite occurring correlated with glacial eustasy. These variations should be as records of river discharge and/or precipitation related to African monsoonal change.