

From Normal to Strike-Slip: Stress Regime Transition in Egypt and its Implications

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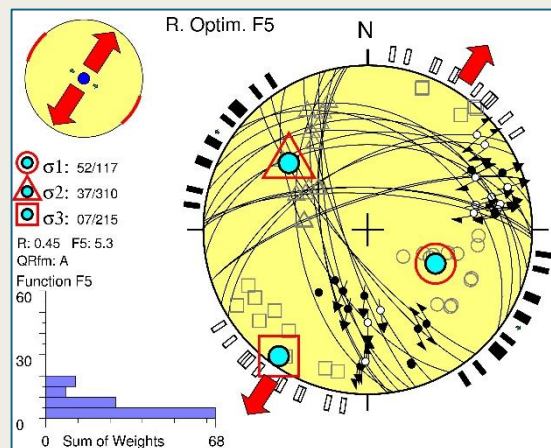
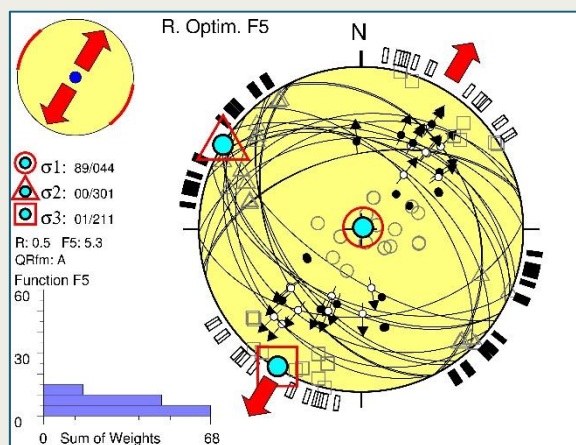
Egyptian National Data Centre (ENDC), National Research Institute of Astronomy and Geophysics (NRIAG)



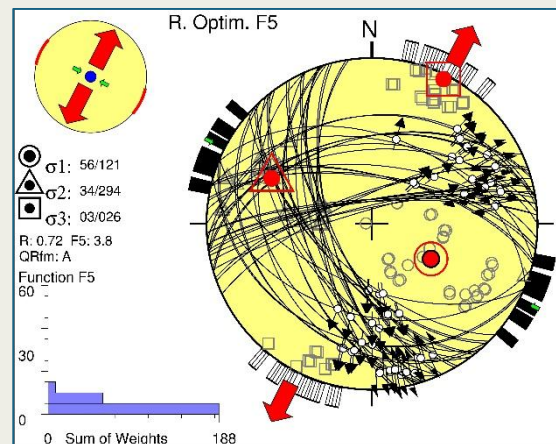
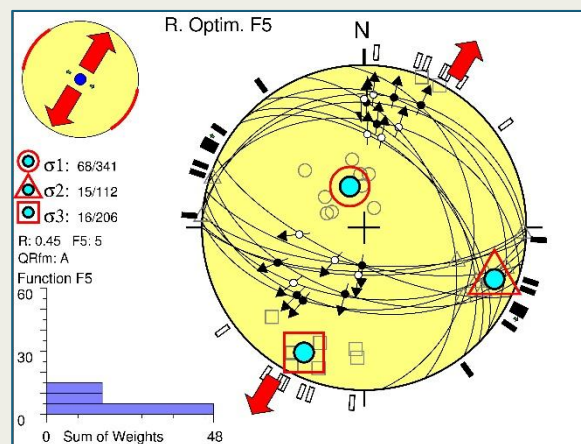
INTRODUCTION AND MAIN RESULTS

This study analyzes stress tensor inversion using focal mechanism solutions across Egypt. Homogeneous data verified by Kagan angle revealed a shift from normal stress in northern Egypt to strike-slip in the south, highlighting significant tectonic variation and suggesting further investigation into underlying causes.

Stress tensor in different seismic zones in northern part of Egypt



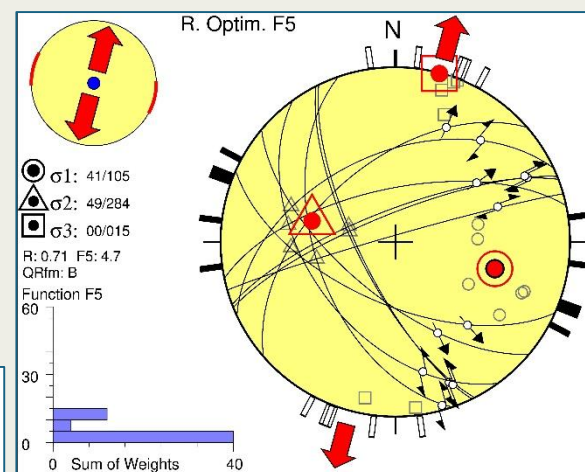
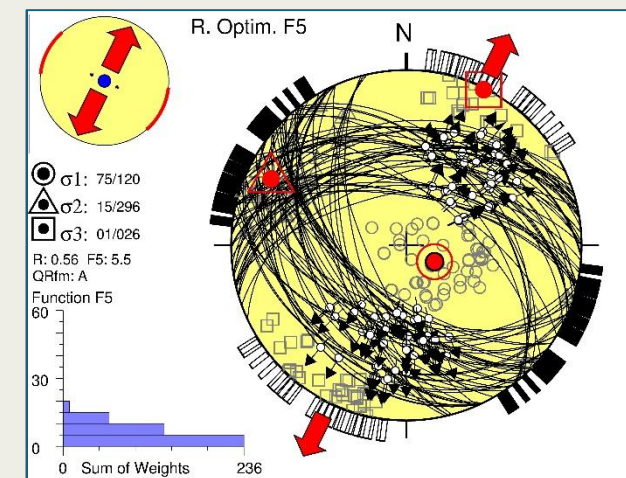
Stress tensor of 1st and 2nd groups in Southern Gulf of Suez



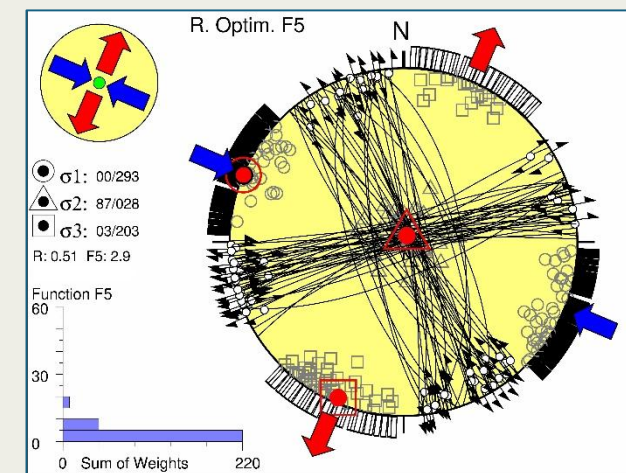
Stress tensor inversion in Cairo Suez District zone

Stress tensor inversion in Dahshour zone

Stress tensor in northern part of Egypt



Stress tensor inversion in Eastern Desert



Stress tensor in southern part of Egypt

