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Solar Impact on the Ionized Layers at the Crest of the Equatorial Anomaly in the African Longitude Sector of the Northern Hemisphere

A Thesis For the Degree of Doctor of Philosophy in Science in the Physics of Astronomy

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Signature of the coronal hole near the north crest equatorial anomaly over Egypt during the strong geomagnetic storm 5 April 2010

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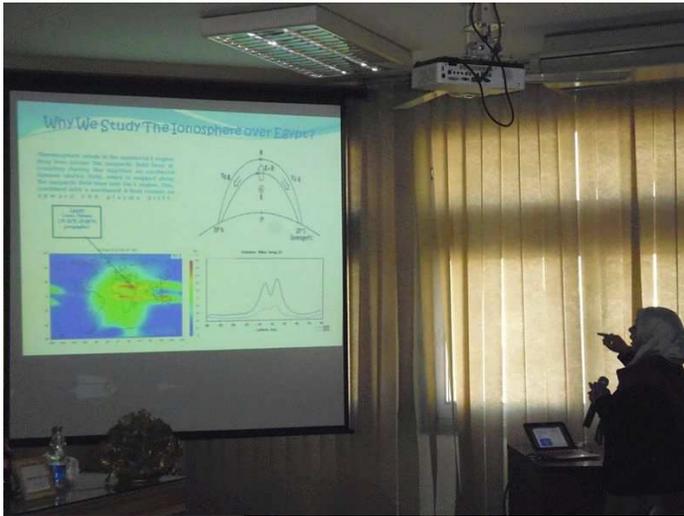
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Transient variations of vertical total electron content over some African stations from 2002 to 2012

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TEC Variations along an East Euro-African Chain

during 5th April 2010 Geomagnetic Storm

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