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# Electrodynamics Coupling between High and Low latitudes by using all the Existing Magnetometer Networks

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

## Ibrahim Fathy Abdalghafar Salem



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#### RESEARCH ARTICLE

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##### Key Points:

- Planetary signature of disturbance dynamo
- Extraction of disturbance dynamo
- Period of the disturbance dynamo

### Ionospheric disturbance dynamo associated to a coronal hole: Case study of 5–10 April 2010

I. Fathy<sup>1,2</sup>, C. Amory-Mazaudier<sup>2</sup>, A. Fathy<sup>1,3</sup>, A. M. Mahrous<sup>1</sup>, K. Yumoto<sup>4</sup>, and E. Ghamry<sup>5,6</sup>

<sup>1</sup>Space Weather Monitoring Center, Faculty of Science, Helwan University, Helwan, Egypt, <sup>2</sup>LPP/CNRS/UPMC, Saint-Maur-des-Fossés, France, <sup>3</sup>Physics Department, Fayoum University, Al Fayoum, Egypt, <sup>4</sup>International Center for Space Weather Science and Education, Kyushu University, Fukuoka, Japan, <sup>5</sup>National Research Institute of Astronomy and Geophysics, Helwan, Cairo, Egypt, <sup>6</sup>School of Space Research, Kyung Hee University, Yongin, South Korea



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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

A. Shimeis,<sup>1,2</sup> I. Fathy,<sup>1,2</sup> C. Amory-Mazaudier,<sup>2</sup> R. Fleury,<sup>3</sup> A. M. Mahrous,<sup>1</sup> K. Yumoto,<sup>4,5</sup> and K. Groves<sup>6</sup>



### MAGDAS magnetometer in Egypt

