

# The 3rd edition of the IMAO Space Weather School

ISWI-MAGHREB-WEST AFRICA (IMAO 2017)



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The 3rd edition of the IMAO Space Weather School was scheduled to take place in Abidjan from October 16 to 28, 2017 (on the top of the page: the sponsors of the school). This school brings together 30 participants: master students, doctoral students and research professors from 10 countries (Algeria, Burkina Faso, Cameroon, Côte d'Ivoire, Guinea Conakry, Morocco, RC, DRC, Senegal and Tunisia).

This school was organized by Vafi Dumbia, Olivier Obrou and the team of the UFR SSMT.

The trainers, experts in different fields of space weather came from Algeria, Côte d'Ivoire, France and Morocco, to provide this training.



Group Photo

Solar phenomena, such as solar flares, coronal mass ejections or others, disrupt the Earth's electromagnetic environment and weaken our society using new technologies.

These intense solar disturbances can

- disrupt the satellite Earth transmissions of the global satellite navigation system (GNSS = GPS, GLONASS GALLILEO etc ...),
  - induce telluric electric currents that can cause short-circuits in transformers and damage them,
  - saturate the radar signals, making them blind, and thus prevent their operation,
- etc...

It is therefore essential to train researchers to make progress in understanding the impact of solar events on new technologies in order to avoid societal problems. It is the purpose of space weather that is to predict how solar events can affect the electromagnetic environment of the earth and thus disrupt our daily lives.

**In the equatorial zone, plasma bubbles create almost daily disturbances of GNSS signals, called scintillations even in the absence of strong solar disturbances. The particularities of the equatorial zone require the development of space weather, plasma physics, and the implementation of scientific instruments to understand the scintillations of GNSS signals.**