



Space Weather Activities of the GIRGEA TEAM

www.iswi-secretariat.org

www.girgea.org

Presented by Christine Amory-Mazaudier

LPP, CNRS/Ecole Polytechnique/Sorbonne Université/Université Paris-Sud/Observatoire de Paris

The Abdus Salam International Centre of Theoretical Physics , T/ICT4D

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ALGERIA

Naima ZAOURAR ISWI coordinator for ALGERIA

Université des sciences et de la technologie Houari Boumediene (USTHB) Alger



Hassen ABDELLAOUI defended his PhD on November 14, 2019 at USTHB

Director : Naima Zourar

Study of the national deployment of an accurate positioning network based on GNSS satellite constellations and its contribution to the estimation of the integrated water vapour content in the atmosphere [National GPS network]

ALGERIA

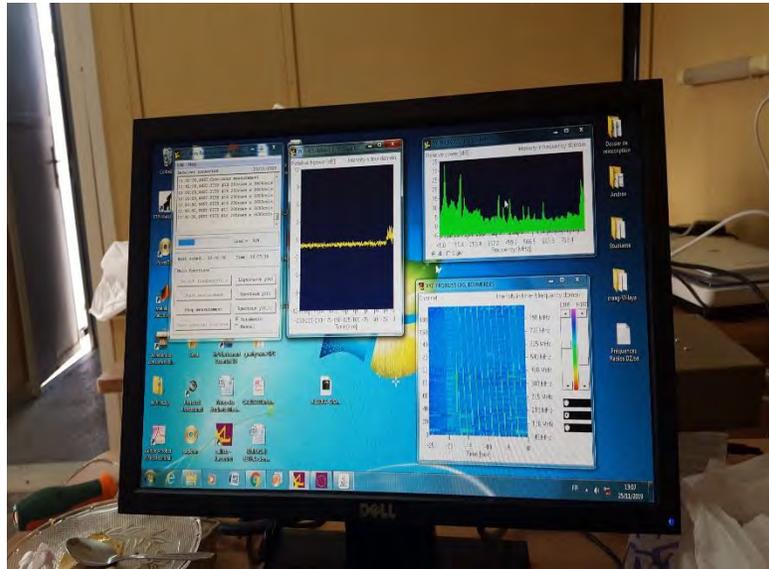
Callisto in Algeria, December 2019
CRAAG : Centre de Recherche en Astronomie, Astrophysique
et Géophysique



Fatma ANAD



Christian MONSTEIN



BURKINA FASO

Frédéric OUATTARA, ISWI COORDINATOR FOR BURKINA FASO
University of NORBERT ZONGO KOUDOUGOU



GUIBULA Karim defended his thesis on July 3, 2019,
at Norbert ZONGO University

Director : Frédéric Ouattara

Title: “IRI-2012 modeling of the fof2 variability during
geomagnetic activities at the Korhogo station from
1992 to 2002”



DIABATE Abidina defended his PhD on July 4th, 2019, at Norbert
ZONGO University

Director : Frédéric Ouattara

Title : “Modeling by IRI-2012 of the variability of foF2 during
fluctuating activities at Ouagadougou

[data base of ionosonde]



BURKINA FASO



SAWADOGO Wambi Emmanuel defended his thesis on July 4, 2019, at Norbert ZONGO University
Director : Frédéric Ouattara
Title: Modeling by IRI-2012 of the variability of foF2 during recurrent activities at the Ouagadougou station during solar cycles 21 -22



Frédéric OUATTARA, was nominated President of his University Norbert ZONGO on May 22, 2019. He was received by the President of the Republic of Burkina Faso,

Professor Frédéric Ouattara accompanied by the Minister of Higher Education for the presentation of his prize to the President of the Republic, HE Mr. Rock Marc Christian KABORE

VOA A LA UNE - REGARDIEZ - SCOUTEZ - EN SHOW - DOSSIERS SPECIAUX - SANGO - LINGALA

BURKINA FASO
14 décembre 2019
Actualités International

Un Burkinabé parmi les plus grands scientifiques du monde

Partager

Voir les commentaires

Print

Frédéric Ouattara, Prix africain d'excellence dans la recherche des sciences de l'espace, 14 décembre 2019. (VOA/Akwamu Dimpangni)

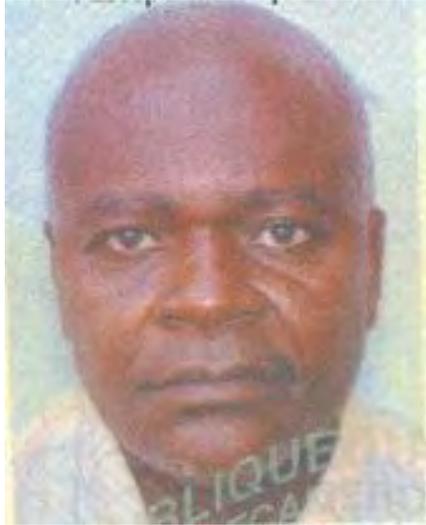
Chaque année, des scientifiques du monde entier se réunissent lors de la conférence de l'Union américaine de géophysique. L'Union a reconnu les réalisations extraordinaires de 95 personnes dont le Burkinabé Frédéric Ouattara.

A lire aussi

Les études interrompues par le terrorisme

CAMEROON

César M'BANE, ISWI COORDINATOR FOR CAMEROON
University of Yaounde



PhD in 2018

Director: César M'Bane

Title of the thesis: "Measurement and interpretation of the regular variation of the components (XYZ) of the Earth's magnetic field in Yaounde-Cameroon".

[AMBER magnetometer, IHY project]

position at the University of Yaounde, in 2019

Dr Honoré MESSANGA ETOUNDI





Vafi DOUMBIA, ISWI coordinator

Côte d'IVOIRE

presented at ISWI meeting last year

Jean ACKAH defended his thesis on January 25, 2019 at Houphouët Boigny University in Abidjan, Côte d'Ivoire.

Director : Olivier Obrou

Title : *“Study of the Total Electron Content and Ionospheric Scintillation over Abidjan during the solar minimum and solar flares periods”* [USE SCINDA GPS (IHY project)]



Soro Ibrahima COULIBALY defended his thesis on February 6 , 2019 at Houphouët Boigny University in Abidjan, Côte d'Ivoire.

Director: Jean-Pierre ADOHI

Title: *Study of disturbances of the equatorial F-layer ionosphere at night during a magnetic storm*

[Use of the IONOSONDE (IEEY project)]



MOROCCO

Aziza BOUNHIR - ISWI Ccoordinator of Morocco
University Cady Ayyad , Marakech



Mohamed KAAB defended his PhD on November 30, 2019 at University Cady Ayyad

Title : Exploration od the Thermospheric ionospheric coupling via optical instruments : RENOIR experience

[RENOIR (ISWI project)]



Directeur de Thèse
Zouhair BENKHALDOUN

NIGERIA



Babatunde RABIU, ISWI ccordinator of Nigeria



Paul AMAECHI defended his thesis on February 27, 2019 at the University: Lagos, Akoka, Yaba, Lagos, Nigeria,

theme: ***“Characterization of Irregularities of the Ionosphere above the Equatorial Ionization Anomaly, in Africa from 2010 to 2016”***

SENEGAL

Meeting Report 4:

4th Edition of the School of Space Weather IMAO, Senegal, Africa

I. Gaye¹ and C. Amory-Mazaudier^{2,3}

¹University of Thiès, Thiès, Senegal

²LPP, CNRS/Ecole Polytechnique/Sorbonne Université/Université Paris-Sud/Observatoire de Paris, Paris, France

³T/ICT4D Abdus Salam ICTP, Trieste, Italy



Idrissa Gaye



Christine Amory-Mazaudier

The IMAO 2019 Space Weather School aimed to strengthen the capacities of young researchers, Master 2 students and PhD students from the Maghreb and West Africa in all the scientific disciplines concerned by 'Space Weather'.



Figure 1. Group Photo from IMAO Workshop.

The courses were focused on the Physics of the Sun, the Magnetosphere and the Ionosphere, the Atmosphere / Ionosphere / Magnetosphere and Geomagnetism couplings, but also on Climate Modeling, Ocean Dynamics and the GNSS (Global Navigation Satellite System). The faculty team consisted of professors from the following countries: Algeria, Burkina Faso, Côte d'Ivoire, France, Morocco, Senegal, USA.

33 participants came from 13 countries from Maghreb, West Africa, Central and East Africa: Algeria, Benin, Burkina Faso, Cameroon, Côte d'Ivoire, France, Guinea Conakry, Morocco, Nigeria, RC, DRC, Rwanda and Senegal.

The report of the school is on the website <https://www.girgea.org>.

To appear in the journal of Meteorology

École de météorologie de l'espace Université de Thiès du 15 au 25 octobre 2019

L'école ISWI¹-Maghreb-Afrique de l'Ouest (Imao) sur la météorologie de l'espace est une rencontre scientifique de haut niveau qui se déroule tous les deux ans. La première édition s'est tenue du 6 au 16 mai 2013 à l'université des sciences et de la technologie Houari-

Boumediene (USTHB) d'Alger (Algérie), la deuxième au Centre régional africain des sciences et technologies de l'espace langue française (CraSte-LF) de Rabat (Maroc) du 16 au 21 février 2015 et la troisième à l'université Félix-Houphouët-Boigny

d'Abidjan (Côte d'Ivoire) du 16 au 28 octobre 2017. À l'issue de la troisième édition, le choix a été porté sur l'université de Thiès (Sénégal) par les organisateurs et par tous les participants, en raison de son fort potentiel scientifique pour abriter la quatrième édition en 2019.

Ces écoles Imao sont le fruit du travail de coopération des professeurs de différentes disciplines en géophysique et des pays travaillant dans le réseau de recherche Girgea². Le but de ce réseau est de former des jeunes scientifiques ayant une culture générale dans plusieurs spécialités de la géophysique, afin d'établir des ponts entre les disciplines dans le cadre de leur thèse. Les écoles Imao ont un rayonnement régional dans la mesure où elles rassemblent des participants des pays de



Les participants à l'école Imao de 2019, à l'université de Thiès (Sénégal).

1. International Space Weather Initiative, www.iswi-secretariat.org

2. Groupe international de recherche en géophysique Europe-Afrique, www.girgea.org

SUN



MAGNETOSPHERE



THERMOSPHERE/IONOSPHERE



ATMOSPHERE



THERMOSPHER/IONOSPHERE



ATMOSPHERE



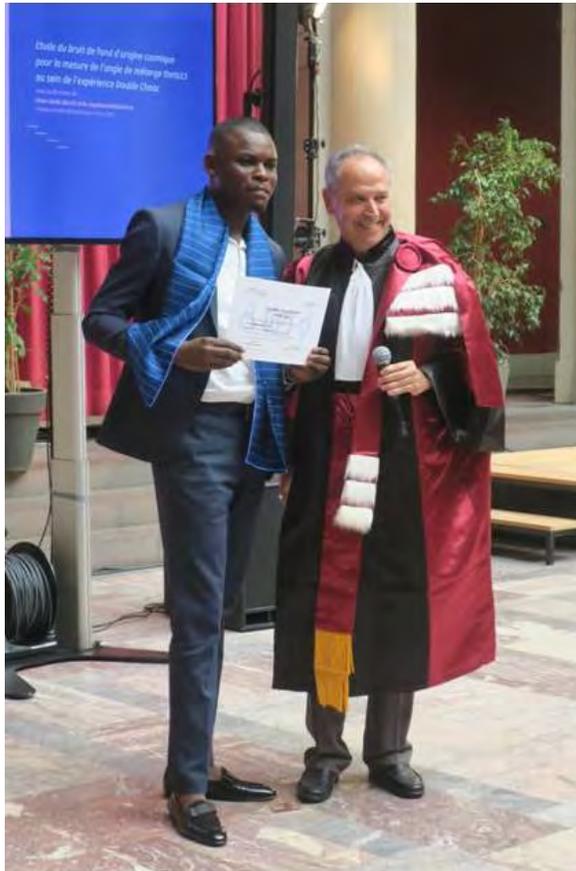
EARTH

DRC

Bruno KAHINDO, ISWI ccordinator for DRC, University of KINSHASA



Dr Kenny KALE and
the Professorr Aziz DINIA



The University of Strasbourg has organized a graduation ceremony of Doctorate on Friday, June 21, 2019 at the University Palace of Strasbourg. The President of the University and the Vice-President in charge of Research and Doctoral training awarded the 462 Doctors 2018 their diploma in the presence of the directors of the Doctoral Schools and the patron of the promotion, Jules Hoffmann - Nobel Prize in Medicine 2011. All the doctors in this class received this blue stole.

Title of his thesis: 'Study of the correlated background noise induced by cosmic muons in the Double Chooz experiment.'

PhD in 2018, position in 2019 at University of KINSHASA