



Space Weather in Burkina Faso



Report

Les zones climatiques

- Chef lieu province
- Limite sous bassins versants

Burkina Faso



GPS Scinda Burkina Faso

ZERBO Jean Louis, Local coordinator

A. Scientific achievements/Academic (PhD)



1. Title: Coronal mass ejection, high stream solar wind speed equatorial ionosphere during the solar cycles 23 and 24

At Nazi BONI University, Bobo-Dioulasso

2. Title: From Sun to Earth: Dynamicsn Structure of slaor wind et geomagnetism during the solar cycles 23 and 24



A. Scientific achievements/Academic (PhD)

3. Title: Contribution to the study of the lower ionosphere: Modeling of NmD and foD during calm geomagnetic activities at Ouagadougou station during solar cycle 22

At N Robert ZONGO
University,
Koudougou

4. Title: Modeling of the critical frequency (f_o) and electron density (N_m) of the ionosphere layer E in relation to solar and geomagnetic activities in the equatorial zone



B. Scientific achievements/Research

Article 1 (2022)

Recurrent Events' Impacts on foF2 Diurnal Variations at Dakar Station during Solar Cycles 21-22 **Sandwidi and Ouattara (2022)**, International Journal of Geophysics

<https://doi.org/10.1155/2022/4883155>

Article 2 (février 2023)

Contribution to the explanation of the semi-annual anomaly observed in the Intertropical zone using the critical frequencies fof2 extracted during the Sunspot cycles 20, 21 and 22 at the Ouagadougou station, **Segda Abdoul-Kader, Gnahou Doua Allain* and Kaboré Salfo**, International Journal of advanced Research (IJAR)

<http://dx.doi.org/10.21474/IJAR01/16266>

Article 3 (mars 2023)

Koudougou Station TEC's Variability Seasonal Anomalies Analysis During Fluctuating Events Over Solar Cycle 24 , **Tinlé Pahima, Doua Allain Gnahou*, Sibri Alphonse Sandwidi & Frédéric Ouattara** Applied Physics Research; Vol. 15, No. 1; 2023 ISSN 1916-9639 E-ISSN 1916-9647 <https://doi.org/10.5539/apr.v15n1p50>

Article 4 (avril 2023)

Koudougou (Burkina Faso, Africa), GPS-TEC Response to Recurrent Geomagnetic Storms during Solar Cycle 24 Declining Phase **Sagedo Sawadogo, Doua Allain Gnahou , Sibri Alphonse Sandwidi , and Frédéric Ouattara**, International Journal of Geophysics Volume 2023, Article ID 4181389, 13 pages <https://doi.org/10.1155/2023/4181389>

B. Scientific achievements/Research

Article 5 (November 2023)

Solar activity: Towards a standard classification of solar phases from cycle 1 to cycle 24 **Saguedo Sawadogo, Doua Allain Gnabahou*, Tinlé Pahima, Frédéric Ouattara**

Advances in Space Research 73 (2024) 1041–1049

<https://doi.org/10.1016/j.asr.2023.11.011>

Article 6 (2022)

Global Reporting Format (GRF) Application Automation for Runway Surface Conditions in West Africa

Dieudonné Sama, Doua Allain Gnabahou*, Frédéric Ouattara, Marie Zidouemba, Oboulbiga Diassibo, Sibri Alphonse Sandwidi

Advances in Aerospace Science and Technology, 2022, 7, 135-145

<https://doi.org/10.4236/aast.2022.73009>

Article 7 (Juin 2023)

Impact of Multi-Axle Vehicles and Road Overloads on the Durability of Asphalt Pavements.

Kobori, K., Gnabahou*, D.A., Imbga, K. and Sandwidi, A.S. (2023)

Open Journal of Civil Engineering , 13, 237-251. <https://doi.org/10.4236/ojce.2023.132018>



Thank you

