

**Dr. Binod Adhikari**

Degree: PhD

Name of the University: [INPE - Instituto Nacional de Pesquisas Espaciais](#),  
Sao Paulo, Brazil

Specialization: **Space Geo-Physics**

Research Interest: **Ionosphere, Magnetosphere, Solid Earth Geophysics, Solar Physics, Cosmic Ray.**

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**Publications:**

B Adhikari, NP Chapagain, [Polar Cap Potential and Merging Electric Field during High Intensity Long Duration Continuous Auroral Activity](#), **Journal of Nepal Physical Society** 3 (1), 6-17

1. Niraj Bhattarai, Narayan P. Chapagain, B. Adhikari, Total Electron Content and Electron Density Profile Observations during Geomagnetic Storms using COSMIC Satellite Data, **Discovery, International**.
3. **Daily, Seasonal and Monthly Variation of Middle-low latitudes Magnetic Field during Low Solar Activity. Discovery, 2017, 53(255), 181-190**
4. Study of Field Aligned Current (FAC), IMF (Ey), Northward (X) and Eastward (Y) Components of Geomagnetic Field during Super Sub-Storm. **Earth and space science**
5. Analysis of Super Sub-storm Events with Reference to Polar Cap Potential and Polar Cap index." **Earth and Space Science**.
6. HILDCAA-Related Effects Recorded in Middle Low Latitude Magnetometers, **Phd Thesis, (2015)**.
7. Study of Field Aligned Current (FAC), Interplanetary Electric Field Component (Ey), Interplanetary Magnetic Field Component (Bz), Northward (X) and Eastward (Y) Components of Geomagnetic Field during Supersubstorm, **Earth and space science**
8. Analysis of Geomagnetic Storms Using Wavelet Transforms, **Journal of Nepal Physical Society**

**Under Review**

1. Development of Geomagnetically Induced Current during Geomagnetic Storms. **Advances in Space Research**.
2. Impacts on Cosmic-Ray Intensity Observed during Geomagnetic Disturbances, **Solar Physics**.
3. Study of Energy Released during Earthquake by Wavelet Analysis. [Nonlinear Processes in Geophysics](#)

Ongoing Thesis/project:

1. A RESEARCH PROPOSAL FOR THE STUDY OF VLF (Very Low Frequency waves) WAVE For UGC Research Grant for Faculty Members  
UNIVERSITY GRANTS COMMISSION, Sanothimi, Bhaktapur, Nepal, RESEARCH DIVISION
2. A RESEARCH PROPOSAL: **Periodicities Observed on SOLAR FLUX INDEX (F<sub>7</sub>) DURING Geomagnetic Disturbances, For RESEARCH GRANT APPLICATION, Nepal Academy of Science and Technology**
3. **Students' Thesis/project work: (Bachelors/Master/PhD)**
4. More than 5 Students are enrolled on master dissertation.
5. 8 students are enrolled on master project work.
6. 3 students are enrolled on Bachelors project work.
7. One student is enrolled on PhD program (Co-Supervisor).

**Research Team**

1. **Dr. Narayan Chapagain**, Central Department of Physics, Tribhuvan University.
2. **Carlos Roberto Braga**, [INPE - Instituto Nacional de Pesquisas Espaciais](#), Sao Paulo, Brazil.  
**Sudiptasasmal**, University of Calcutta.