

The SID Research Project
by
Dr.C.T.More(Physics)

Stanford University Distributed space weather monitoring instruments worldwide for IHY 2007: The SID project by Dr.C.T.More(Physics).

Abstract

The International Heliophysical Year 2007 (IHY-2007) was aimed to advance our understanding of the fundamental processes that govern the Sun, Earth, and heliosphere. The IHY Education and Outreach Program is dedicated to inspiring the next generation of space and Earth scientists as well as spreading the knowledge, beauty, and relevance of our solar system to the people of the world. In Space Weather Monitor project Stanford University had deployed a global network of sensors to universities to provide quantitative diagnostics of solar-induced ionospheric disturbances, thunderstorm intensity, and magnetospheric activity. It brought real scientific instruments and data in a cost-effective way to researchers throughout the world. Instruments meet the objectives of being sensitive enough to produce research-quality data. Data contributed to the Stanford data center is openly shared and partnerships between groups in different nations develop naturally. Students and teachers have direct access to scientific expertise.

The result is a world-wide collaboration of scientists, teachers, and students to investigate the variability of the ionosphere. The IHY Committee for International Education and Public Outreach has designated the simpler SID (Sudden Ionospheric Disturbance) monitors have been provided to the researchers in each of the 192 countries of the world.

With the help of Stanford University USA, the SID Monitoring System has been installed by Dr. C.T. More, Department of Physics.

Two Channel SID Monitoring System (Khatav, India (16°46' N, 75°53' E))



Very Low Frequency Loop Antennas for SID Monitoring System.



Hexagonal Loop Antenna to receive **NAA(24 KHz)** signal

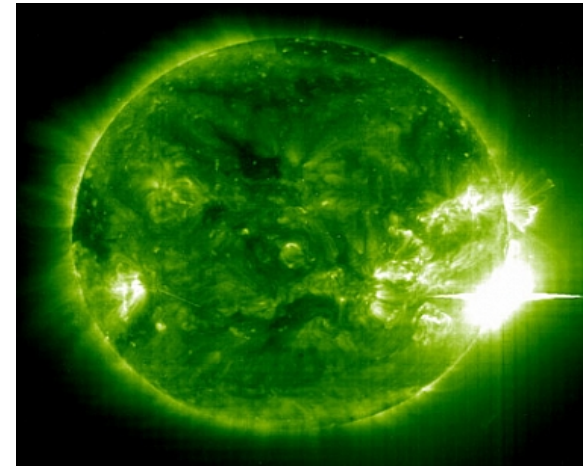


Square Loop Antenna to receive **NWC(19.8 KHz)** signal

SID Monitoring System is being used in ionospheric research which is useful to find out the effects of solar as well as stellar activities on the ionosphere of the earth



Prominence associated with solar flare



A powerful solar flare, erupts from the Sun



Solar Eclipse



Gamma Ray Burst

Output of the SID Monitoring System

1. **SID Monitoring System is being used in research which is useful to find out the effects of solar as well as stellar activities on the Ionosphere of the earth**
2. **The research project entitled “The studies on the effects of solar activity on a very low frequency radio propagation via ionosphere of the earth” has been completed.**
3. **Data and research is being communicated to Stanford University, USA.**
4. **One published research paper has been distributed to 500 researchers all over the world by Stanford University in tutorial form.**
5. **Three research papers has been published in Research Journals**
6. **Three research papers are under preparation**
7. **One research paper has cited in Three International Journals**

PhD Degree in Physics

Awarded PhD degree in Physics to C.T. More by the Shivaji University, Kolhapur on January 6, 2018.

Title of the PhD thesis:-

“THE STUDIES ON THE EFFECT OF SOLAR ACTIVITY ON A VERY LOW FREQUENCY RADIO PROPAGATION VIA IONOSPHERE OF THE EARTH”

1. C. T. More, A. K. Sharma Diurnal Variation of VLF Radio Wave Signal Strength at 19.8 and 24 kHz Received at Khatav India (16°46'N, 75°53'E) Research & Reviews: Journal of Space Science & Technology ISSN: 2321-2837 (Online), ISSN: 2321-6506 V(Print) Volume 6, Issue 2 www.stmjournals.com
2. C. T. More, A. K. Sharma Effect of Solar X-ray Flares on VLF Radio Wave Signal Strength at 19.8 and 24 kHz Received at Khatav (India) (16°46'N, 75°53'E) Research & Reviews: Journal of Space Science & Technology ISSN: 2321-2837 (Online), ISSN: 2321-6506 V(Print) Volume 6, Issue 3 www.stmjournals.com
3. C. T. More, A. K. Sharma, R. V. Bhonsle, Kenneth J. W. Lynn, Field Strength Measurement of VLF Radio Wave Propagation at 19.8 kHz between Australia and India, Australian Space Science Conference Proceedings 2010, ISBN 13:978- 0-977540-4-9, PP 249-262.

Screen Shots of Research Gate Paper Read and Citations

The screenshot shows a web browser window displaying the ResearchGate profile of Chandrakant More. The browser's address bar shows the URL <https://www.researchgate.net/profile/Ch>. The profile page includes a header with the user's name, a bio, and a navigation menu. The main content area is divided into several sections: an introduction, a field of research, skills and expertise, a stats overview, and an affiliation section. The stats overview shows 3 citations, 0 recommendations, and 362 reads. The affiliation section lists Miraj Mahavidyalaya Miraj, India, and PROFDR.A.K.SHARMA's Lab.

Chandrakant More
Ph.D. in Space weather and atmospheric Sciences · [Edit](#)

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Introduction [Edit](#)

Field of Research: Databases; Solar and stellar astrophysics; Space Weather studies of Lower Ionosphere, Ionospheric VLF radio propagation, Effects of X-ray radiation of Sco.X1 on earth's ionosphere.

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Department
Physics

PROFDR.A.K.SHARMA's Lab
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