

GNSS ATMOSPHERIC SEISMOLOGY
COMENTARIOS Y TRABAJOS CIENTIFICOS RELACIONADOS
Por Julio Cesar Gianibelli

GNSS Atmospheric Seismology: Theory, Observations and Modeling 1st ed. 2019 Edition

by [Shuanggen Jin](#) (Author), [R. Jin](#) (Author), [X. Liu](#) (Author)

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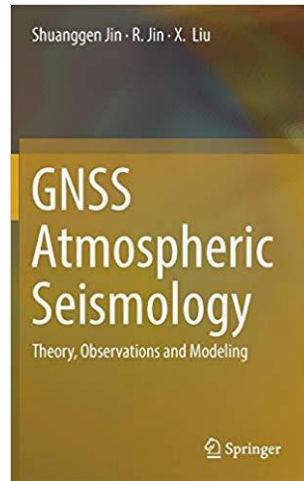


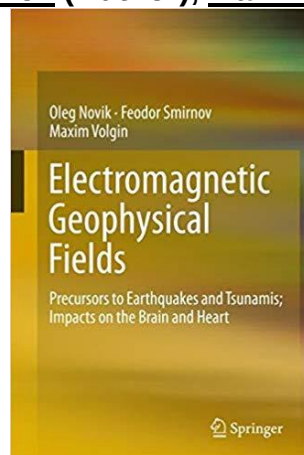
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Otros dos titulos importantes son:

Electromagnetic Geophysical Fields: Precursors to Earthquakes and Tsunamis; Impacts on the Brain and Heart (1st ed. 2019)

by [Oleg Novik](#) (Author), [Feodor Smirnov](#) (Author), [Maxim Volgin](#) (Author)

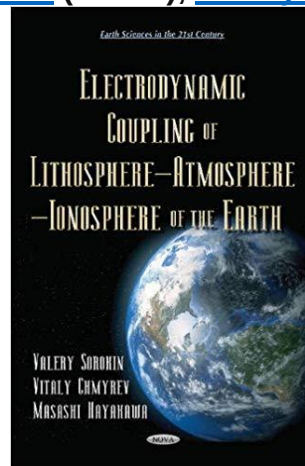


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Electrodynamic Coupling of Lithosphere – Atmosphere – Ionosphere of the Earth by [V. M. Sorokin](#) (Editor), [V. M. Chmyrev](#) (Editor), [M. Hayakawa](#) (Editor)



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Preface Introduction

Chapter 1 DC Electric Field of Seismic Origin in the Ionosphere and Near Ground Atmosphere

Chapter 2 The Source of Electric Current Perturbation in the Global Atmosphere – Ionosphere Circuit

Chapter 3 DC Electric Field of Disturbed Current in the Global Circuit

Chapter 4 Small-scale Ionospheric Irregularities

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Conclusion List of Authors Index

Estos tres libros presentan una nueva línea de investigación donde convergen en su estudio diferentes autores uno de ellos es Sergey Pulinets quien tiene una clara forma de presentar las características fenomenológicas en estos otros tres libros:

SERGEY PULINETTS

Dentro de la temática del estudio de los Precusores de los Terremotos Sergey es un experto que ha marcado una nueva forma del estudio de la dinámica del acoplamiento Ionosfera-Corteza Terrestre. Estos tres títulos son importantes como bibliografía que marca este nuevo paradigma en las Geociencias.

1) Ionospheric Precursors of Earthquakes Softcover reprint of hardcover 1st ed. 2005 Edition

by [Sergey Pulinets](#) (Author), [Kyrill Boyarchuk](#) (Contributor)

- Paperback: 332 pages
- Publisher: Springer; Softcover reprint of hardcover 1st ed. 2005 edition
- Language: English
- ISBN-10: 3642058760
- ISBN-13: 978-3642058769

2) Pre-Earthquake Processes: A Multidisciplinary Approach to Earthquake Prediction Studies (Geophysical Monograph Series) 1st Edition

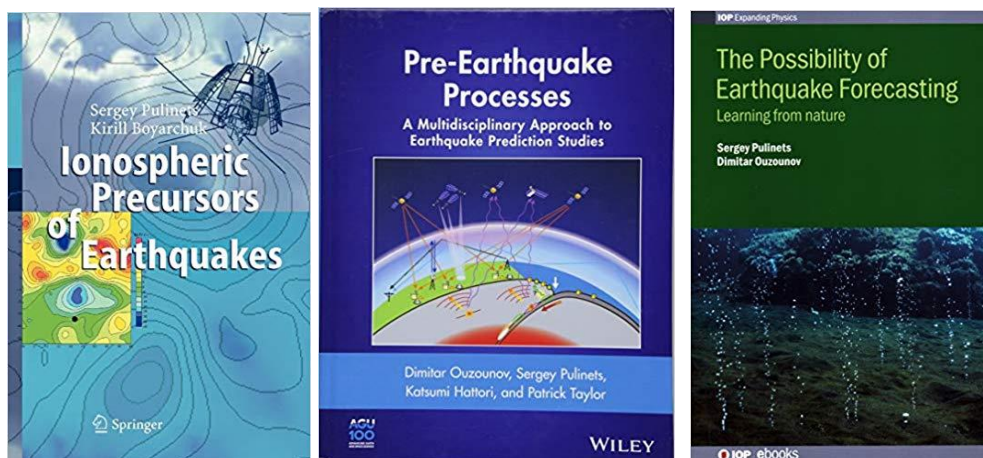
by [Dimitar Ouzounov](#) (Author), [Sergey Pulinets](#) (Author), [Katsumi Hattori](#) (Author), [Patrick Taylor](#) (Author)

- Series: Geophysical Monograph Series (Book 234)
- Hardcover: 384 pages
- Publisher: American Geophysical Union; 1 edition (July 18, 2018)
- Language: English
- ISBN-10: 1119156939
- ISBN-13: 978-1119156932

3) The Possibility of Earthquake Forecasting

by [Sergey Pulinets](#) (Author)

- Hardcover: 152 pages
- Publisher: IOP Publishing Ltd (February 28, 2019)
- Language: English
- ISBN-10: 0750312491
- ISBN-13: 978-0750312493



LINKS GNSS ATMOSPHERIC SEISMOLOGY LISTA DE TRABAJOS

Esta lista de trabajos científicos forma un conjunto, con los aportes bibliográficos presentados, la medula espinal del fenómeno de acoplamiento IONOSFERA-ATMOSFERA-CORTEZA-LITOSFERA

001 GNSS ionospheric seismology: Recent observation evidences and characteristics

http://www.ipgp.fr/~ninto/Jin_2015ESR.pdf

002 Integration of Single-Frequency GNSS and Strong-Motion Observations for Real-Time Earthquake Monitoring

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003 The Variometric Approach to GNSS Seismology from Concept to Applications

<https://www.orfeus-eu.org/documents/lisbon2017/WorkshopORFEUS-25Oct/PM2/Mattia%20Crespi%20-%20ORFEUS-EPOS.pdf>

004 Real-time capture of seismic waves using high-rate multi-GNSS observations: Application to the 2015 Mw7.8 Nepal earthquake

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1002/2015GL067044>

005 Warnings from the ionosphere

https://cdn.earthdata.nasa.gov/conduit/upload/7266/NASA_SOP_2017_warnings_from_the_ionosphere.pdf

006 Ionospheric GNSS Imagery of Seismic Source: Possibilities, Difficulties, and Challenges

<https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/2018JA026107>

007 INVESTIGATION OF IONOSPHERIC PRECURSORS OF EARTHQUAKES IN ROMANIA USING THE ROMANIAN GNSS/GPS NETWORK

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VER REVIEWS ON GEOPHYSICS

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008 Ionospheric Detection of Explosive Events

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2017RG000594>

009 Real-time GNSS seismology using a single receiver

https://www.researchgate.net/publication/262843402_Real-time_GNSS_seismology_using_a_single_receiver

010 A Global Database of Strong-Motion Displacement GNSS Recordings and an Example Application to PGD Scaling

https://www.researchgate.net/publication/328684867_A_Global_Database_of_Strong-Motion_Displacement_GNSS_Recordings_and_an_Example_Application_to_PGD_Scaling

011 Seismic waves from atmospheric sources and Atmospheric/Ionospheric signatures of seismic waves.

https://www.researchgate.net/publication/278717653_Seismic_Waves_from_Atmospheric_Sources_and_AtmosphericIonospheric_Signatures_of_Seismic_Waves

012 Pattern and evolution of seismo-ionospheric disturbances following the 2011 Tohoku earthquakes from GPS observations

013 Detection and modeling of Rayleigh wave induced patterns in the ionosphere

012 AND 013 FROM

https://www.academia.edu/12540566/GNSS_ionospheric_seismology_Recent_observation_evidences_and_characteristics

014 Advances in earthquake and tsunami sciences and disaster risk reduction since the 2004 Indian ocean tsunami

<https://link.springer.com/content/pdf/10.1186%2Fs40562-014-0015-7.pdf>

015 HIGH-RATE GNSS TECHNIQUES FOR THE DETECTION OF LARGE SEISMIC DISPLACEMENTS

https://www.researchgate.net/publication/224116996_High-rate_GNSS_techniques_for_the_detection_of_large_seismic_displacements

016 Seismo-ionospheric anomalies and implications from recent GNSS observations in India and South-East Asia

<https://www.sciencedirect.com/science/article/pii/S1674984716300088>

017 Special Issue: GNSS Applications in Geodesy and Geodynamics

<https://www.sciencedirect.com/journal/geodesy-and-geodynamics/vol/7/issue/1>

017 ScienceDirect_articles_04Jul2019_02-13-16.155.zip

018 Real-time high-rate GNSS techniques for earthquake monitoring and early warning

<https://d-nb.info/1075807514/34>

VER Images for gnss atmospheric seismology PDF

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019 Global Navigation Satellite System to Enhance Tsunami Early Warning Systems

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020 High-rate GPS for Seismology and Monitoring Systems

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021 Real-time GNSS seismology using a single receiver

<https://academic.oup.com/gji/article/198/1/72/604490>

022 Recent developments in seismological geodesy

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Volume 7, Issue 3, May 2016, Pages 157-164

VER Special Issue: Geodetic and Geophysical Observations and Applications and Implications

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024 Coseismic and postseismic deformation associated with the 2016 Mw 7.8 Kaikoura earthquake, New Zealand: fault movement investigation and seismic hazard analysis

<https://earth-planets-space.springeropen.com/articles/10.1186/s40623-018-0827-3>

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025 Effect of Earthquake's Surface Wave on Ionosphere Layer

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026 The Utility of GNSS for Earthquake Early Warning in Regions with Sparse Seismic Networks

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027 Pre-seismic ionospheric anomalies detected before the 2016 Kumamoto earthquake

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030 Real-time GNSS for Fast Seismic Source Inversion and Tsunami Early Warning
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031 Dynamic characteristics of very-high-rate GPS observations for seismology
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035 Near Real-Time High-Rate GPS Data Analysis for Earthquake and Tsunami Early Warning
http://tuprints.ulb.tu-darmstadt.de/4609/1/Diss_LMendozaMalia.pdf

036 Seismological Grand Challenges in Understanding Earth's Dynamic Systems
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037 Modeling of atmospheric-coupled Rayleigh waves on planets with atmosphere: From Earth observation to Mars and Venus perspectives
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038 Technical note on the multi-GNSS, multi-frequency and near real-time ionospheric TEC monitoring system for South America
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040 Evaluating the Quality of GNSS CORS Data for Seismic Monitoring in the South-Eastern Caribbean
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043 Geosystemics and Earthquakes
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044 Assimilation of GNSS tomography products into WRF using radio occultation data assimilation operator
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045 CubeSat observing atmospheric and space electricity for the science of serious natural disasters: A Challenge to their mitigations
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048 Review of variations in $M_w < 7$ earthquake motions on position and TEC ($M_w = 6.5$ Aegean Sea earthquake sample)

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051 Space geodetic data (GPS) and earthquake forecasting: examples from the Italian geodetic network

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052 Precursor analysis of ionospheric GPS-TEC variations before the 2010 M7.2 Baja California earthquake

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053 Seismo-ionospheric anomalies and implications from recent GNSS observations in India and South-East Asia

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055 HIGH-RATE GNSS TECHNIQUES FOR THE DETECTION OF LARGE SEISMIC DISPLACEMENTS

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057 Real-time sensing of atmospheric water vapor from multi-GNSS constellations

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059 The use of products from ground-based GNSS observations in meteorological nowcasting

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063 Simple model for post seismic ionospheric disturbances above an earthquake epicentre and along connecting magnetic field lines
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064 Ionospheric precursors observed in TEC due to earthquake of Tamenglong on 3 January 2016
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065 Ionospheric Precursors of Earthquakes; Recent Advances in Theory and Practical Applications
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066 Ionospheric precursors of earthquakes and Global Electric Circuit
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067 Ionospheric Precursors of Earthquakes; Recent Advances in Theory and Practical Applications
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069 Low-Latitude Atmosphere-Ionosphere Effects Initiated by Strong Earthquakes Preparation Process
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070 Atmospheric and ionospheric coupling phenomena related to large earthquakes
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071 Ionoquakes: Earthquake Precursors in the Ionosphere?
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072 Ionospheric precursors for crustal earthquakes in Italy
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073 Analysis of Ionospheric Precursor of Earthquake using GIM-TEC, Kriging and Neural Network
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073 Analysis of Ionospheric Precursor of Earthquake using GIM-TEC, Kriging and Neural Network
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074 Modification of the Ionosphere by Precursors of Strong Earthquakes
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075 On a reported effect in ionospheric TEC around the time of the 6 April 2009 L'Aquila earthquake
<https://www.nat-hazards-earth-syst-sci.net/17/1461/2017/nhess-17-1461-2017.pdf>

076 Some Physical Mechanisms of Precursors to Earthquakes
<https://w3fusion.ph.utexas.edu/ifs/ifsreports/IFSR%201342.pdf>

077 INVESTIGATION OF IONOSPHERIC PRECURSORS OF EARTHQUAKES IN ROMANIA USING THE ROMANIAN GNSS/GPS NETWORK
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078 GNSS ionospheric seismology: Recent observation evidences and characteristics

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079 Ionospheric precursors of earthquakes and Global Electric Circuit

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080 Physical Bases of the Generation of ShortTerm Earthquake Precursors: A Complex Model of

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081 Formation mechanism of great positive TEC disturbances prior to Wenchuan earthquake on May 12, 2008
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082 Ionospheric variations before some large earthquakes over Sumatra

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083 INTEGRATED SEARCH FOR TAIWAN EARTHQUAKE PRECURSORS (iSTEP)

http://www.gep.ncu.edu.tw/upload/thesis/2016/thesis_1474438472.pdf

084 Atmospheric and ionospheric coupling phenomena related to large earthquakes

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085 Thermal, atmospheric and ionospheric anomalies around the time of the Colima M7.8 earthquake of 21 January 2003

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086 Practical nano-satellite monitoring of ionospheric earthquake precursors

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087 Earthquake precursors in the light of peroxy defects theory: critical review of systematic observations

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088 Revealing pre-earthquake signatures in atmosphere and ionosphere associated with 2015 M7.8 and M7.3 events in Nepal. Preliminary results

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091 Precursor analysis of ionospheric GPS-TEC variations before the 2010 M7.2 Baja California earthquake

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093 Chapter 09. Atmospheric Signals Associated with Major Earthquakes. A Multi-Sensor Approach.

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094 TEC anomalies—Local TEC changes prior to earthquakes or TEC response to solar and geomagnetic activity changes?

<https://www.terrapub.co.jp/journals/EPS/pdf/2008/6009/60090961.pdf>

095 Correlation analysis technique revealing ionospheric precursors of earthquakes

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097 On the onset of ionospheric precursors 40 min before strong earthquakes

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098 Geosystemics and Earthquakes (VER 043)

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099 Pre-Earthquake and Coseismic Ionosphere Disturbances of the Mw 6.6 Lushan Earthquake on 20 April 2013 Monitored by CMONOC

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100 Precursor anomalies prior to the 2006 Java and 2016 Yujing earthquakes

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101 Study of Ionospheric precursors related to an earthquake (M=7.8) of 16 April, 2013 using GPS-TEC measurements: Case study

https://www.researchgate.net/publication/280314856_Study_of_Ionospheric_precursors_related_to_an_earthquake_M78_of_16_April_2013_using_GPS-TEC_measurements_Case_study

102 A study of ionospheric precursors associated with the major earthquakes occurred in Pakistan region

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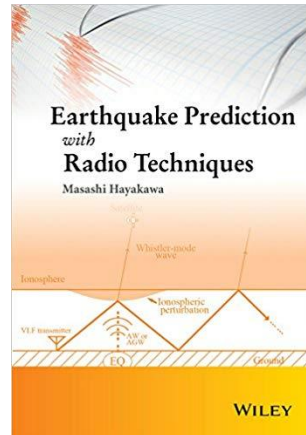
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El siguiente título se lo puede considerar como texto básico para los cursos de las carreras de Geofísica e Ingeniería en Telecomunicaciones.

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