

## **Prof. FEZA ARIKAN**

### **Personal Information**

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### **International Researcher IDs**

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ScopusID: 6603901653

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### **Education Information**

Doctorate, Northeastern University, Mühendislik Fakültesi, Elektrik Ve Bilgisayar, United States Of America 1988 - 1992

Postgraduate, Northeastern University, Mühendislik Fakültesi, Elektrik Ve Bilgisayar, United States Of America 1986 - 1988

Undergraduate, Middle East Technical University, Faculty Of Engineering, Elektrik Ve Elektronik, Turkey 1982 - 1986

### **Foreign Languages**

English, C1 Advanced

### **Dissertations**

Doctorate, Radar Returns from a Low-Flying Target over a Rough Sea Surface under Multipath and Clutter Conditions, Northeastern University, Elektrik Ve Bilgisayar Mühendisliği, 1992

Postgraduate, Scattering from Finite Length Circularly Cylindrical Structures, Northeastern University, Elektrik Ve Bilgisayar Mühendisliği, 1988

### **Research Areas**

Electrical and Electronics Engineering, Electromagnetic, Wave Propagation and Remote Sensing, Electromagnetic Waves, Antennas and Propagation, Engineering and Technology

### **Academic Titles / Tasks**

Professor, Hacettepe University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2005 - Continues

Associate Professor, Hacettepe University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 1999 - 2005

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 1994 - 1999

Lecturer PhD, Hacettepe University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 1993 - 1994

## **Academic and Administrative Experience**

Hacettepe Üniversitesi, Hacettepe Ankara Sanayi Odası 1. Osb Meslek Yüksekokulu, 2012 - 2014

Hacettepe Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2006 - 2009

## **Advising Theses**

ARIKAN F., Deprem ile iyonküredeki toplam elektron içeriği arasındaki ilişkinin araştırılması, Doctorate, S.KARATAY(Student), 2010

ARIKAN F., Türkiye için IONOLAB-TEC kullanılarak GPS tabanlı TEI ve alıcı yanılığı veri tabanı hazırlanması, Postgraduate, M.SÜKRÜ(Student), 2008

## **Published journal articles indexed by SCI, SSCI, and AHCI**

- I. **IONOLAB-Fusion: Fusion of Radio Occultation into Computerized Ionospheric Tomography**  
Yenen S. D., ARIKAN F.  
ATMOSPHERE, no.6, 2024 (SCI-Expanded)
- II. **A Method for Automatic Scaling of Ionograms and Electron Density Reconstruction**  
Gok G., Alp Y. K., ARIKAN O., ARIKAN F.  
IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, vol.60, 2022 (SCI-Expanded)
- III. **Comparison of IRI-2016 F2 Layer Model Parameters with Ionosonde Measurements**  
ARIKAN F., SEZEN U., Gulyaeva T. L.  
JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS, vol.124, no.10, pp.8092-8109, 2019 (SCI-Expanded)
- IV. **Eight proxy indices of solar activity for the International Reference Ionosphere and Plasmasphere model**  
Gulyaeva T. L., ARIKAN F., SEZEN U., POUSTOVALOVA L. V.  
JOURNAL OF ATMOSPHERIC AND SOLAR-TERRESTRIAL PHYSICS, vol.172, pp.122-128, 2018 (SCI-Expanded)
- V. **Observation of the solar eclipse of 20 March 2015 at the Pruhonice station**  
MOŠNA Z., BOŠKA J., KNÍŽOVÁ P. K., Sindelafova T., KOUBA D., CHUM J., REJFEK L., POTUŽNÍKOVÁ K., ARIKAN F., TOKER C.  
JOURNAL OF ATMOSPHERIC AND SOLAR-TERRESTRIAL PHYSICS, vol.171, pp.277-284, 2018 (SCI-Expanded)
- VI. **Model based Computerized Ionospheric Tomography in space and time**  
Tuna H., Arikан O., ARIKAN F.  
ADVANCES IN SPACE RESEARCH, vol.61, no.8, pp.2057-2073, 2018 (SCI-Expanded)
- VII. **Performance of Solar Proxy Options of IRI-Plas Model for Equinox Seasons**  
SEZEN U., GULYAEVA T. L., ARIKAN F.  
JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS, vol.123, no.2, pp.1441-1456, 2018 (SCI-Expanded)
- VIII. **IONOLAB-MAP: An automatic spatial interpolation algorithm for total electron content**  
Deviren M. N., ARIKAN F.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.26, no.4, pp.1933-1945, 2018 (SCI-Expanded)
- IX. **Ionospheric responses during equinox and solstice periods over Turkey**  
Karatay S., Cinar A., ARIKAN F.  
ADVANCES IN SPACE RESEARCH, vol.60, no.9, pp.1958-1967, 2017 (SCI-Expanded)
- X. **Earthquake aftereffects in the Equatorial Ionization Anomaly region under geomagnetic quiet and storm conditions**  
Gulyaeva T., ARIKAN F., Stanislawska I.  
Advances in Space Research, vol.60, no.2, pp.406-418, 2017 (SCI-Expanded)
- XI. **A fast algorithm for automatic detection of ionospheric disturbances: DROT**

- EFENDI E., ARIKAN F.  
Advances in Space Research, vol.59, no.12, pp.2923-2933, 2017 (SCI-Expanded)
- XII. **Persistent long-term (1944-2015) ionosphere-magnetosphere associations at the area of intense seismic activity and beyond**  
Gulyaeva T. L., ARIKAN F., Stanislawska I.  
ADVANCES IN SPACE RESEARCH, vol.59, no.4, pp.1033-1040, 2017 (SCI-Expanded)
- XIII. **Statistical discrimination of global post-seismic ionosphere effects under geomagnetic quiet and storm conditions**  
Gulyaeva T., ARIKAN F.  
GEOMATICS NATURAL HAZARDS & RISK, vol.8, no.2, pp.509-524, 2017 (SCI-Expanded)
- XIV. **Regional ionospheric trend statistics: IONOLAB-PDF**  
KÖROĞLU O., ARIKAN F.  
Turkish Journal of Electrical Engineering and Computer Sciences, vol.25, no.3, pp.1773-1783, 2017 (SCI-Expanded)
- XV. **Ionolab-Ray: A wave propagation algorithm for anisotropic and inhomogeneous ionosphere**  
Erdem E., ARIKAN F.  
Turkish Journal of Electrical Engineering and Computer Sciences, vol.25, no.3, pp.1712-1723, 2017 (SCI-Expanded)
- XVI. **Association of ionospheric storms and substorms of Global Electron Content with proxy AE index**  
YENEN S. D., Gulyaeva T. L., ARIKAN F., Arikан O.  
ADVANCES IN SPACE RESEARCH, vol.56, no.7, pp.1343-1353, 2015 (SCI-Expanded)
- XVII. **Regional model-based computerized ionospheric tomography using GPS measurements: IONOLAB-CIT**  
Tuna H., Arikан O., ARIKAN F.  
RADIO SCIENCE, vol.50, no.10, pp.1062-1075, 2015 (SCI-Expanded)
- XVIII. **North-south components of the annual asymmetry in the ionosphere**  
Gulyaeva T. L., ARIKAN F., Hernandez-Pajares M., Veselovsky I. S.  
RADIO SCIENCE, vol.49, no.7, pp.485-496, 2014 (SCI-Expanded)
- XIX. **Online user-friendly slant total electron content computation from IRI-Plas: IRI-Plas-STEC**  
Tuna H., Arikан O., ARIKAN F., GULYAEVA T. L., SEZEN U.  
SPACE WEATHER-THE INTERNATIONAL JOURNAL OF RESEARCH AND APPLICATIONS, vol.12, no.1, pp.64-75, 2014 (SCI-Expanded)
- XX. **Symmetry and asymmetry of ionospheric weather at magnetic conjugate points for two midlatitude observatories**  
Gulyaeva T. L., ARIKAN F., Stanislawska I., Poustovalova L. V.  
ADVANCES IN SPACE RESEARCH, vol.52, no.10, pp.1837-1844, 2013 (SCI-Expanded)
- XXI. **Estimation of hmF2 and foF2 Communication Parameters of Ionosphere F2-Layer Using GPS Data and IRI-Plas Model**  
SEZEN U., Sahin O., ARIKAN F., Arikан O.  
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.61, no.10, pp.5264-5273, 2013 (SCI-Expanded)
- XXII. **GIM-TEC adaptive ionospheric weather assessment and forecast system**  
Gulyaeva T. L., ARIKAN F., Hernandez-Pajares M., Stanislawska I.  
JOURNAL OF ATMOSPHERIC AND SOLAR-TERRRESTRIAL PHYSICS, vol.102, pp.329-340, 2013 (SCI-Expanded)
- XXIII. **Online, automatic, near-real time estimation of GPS-TEC: IONOLAB-TEC**  
SEZEN U., ARIKAN F., Arikан O., UGURLU O., SADEGHIMORAD A.  
SPACE WEATHER-THE INTERNATIONAL JOURNAL OF RESEARCH AND APPLICATIONS, vol.11, no.5, pp.297-305, 2013 (SCI-Expanded)
- XXIV. **Spatio-temporal interpolation of total electron content using a GPS network**  
DEVIREN M. N., ARIKAN F., Arikан O.  
RADIO SCIENCE, vol.48, no.3, pp.302-309, 2013 (SCI-Expanded)
- XXV. **Observed Ionospheric Effects of 23 October 2011 Van, Turkey Earthquake**  
ARIKAN F., DEVIREN M. N., LENK O., SEZEN U., Arikан O.  
GEOMATICS NATURAL HAZARDS & RISK, vol.3, no.1, pp.1-8, 2012 (SCI-Expanded)

- XXVI. **Inter-hemispheric imaging of the ionosphere with the upgraded IRI-Plas model during the space weather storms**  
 Gulyaeva T. L., ARIKAN F., Stanislawska I.  
 EARTH PLANETS AND SPACE, vol.63, no.8, pp.929-939, 2011 (SCI-Expanded)
- XXVII. **Probability density function estimation for characterizing hourly variability of ionospheric total electron content**  
 TUREL N., ARIKAN F.  
 RADIO SCIENCE, vol.45, 2010 (SCI-Expanded)
- XXVIII. **Investigation of total electron content variability due to seismic and geomagnetic disturbances in the ionosphere**  
 Karatay S., ARIKAN F., Arikan O.  
 RADIO SCIENCE, vol.45, 2010 (SCI-Expanded)
- XXIX. **PERFORMANCE EVALUATION OF TRACK ASSOCIATION AND MAINTENANCE FOR A MFPAR WITH DOPPLER VELOCITY MEASUREMENTS**  
 Kural F., ARIKAN F., Arikan O., Efe M.  
 PROGRESS IN ELECTROMAGNETICS RESEARCH-PIER, vol.108, pp.249-275, 2010 (SCI-Expanded)
- XXX. **DAMA-Infrared Sea Modeling and Analysis Software**  
 ERDEM E., ARIKAN F., EROL C. B.  
 IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, vol.47, no.10, pp.3581-3592, 2009 (SCI-Expanded)
- XXXI. **A new technique for direction of arrival estimation for ionospheric multipath channels**  
 Guldogan M. B., Arikan O., ARIKAN F.  
 ADVANCES IN SPACE RESEARCH, vol.44, no.6, pp.653-662, 2009 (SCI-Expanded)
- XXXII. **Multipath Separation-Direction of Arrival (MS-DOA) with Genetic Search Algorithm for HF channels**  
 ARIKAN F., KOROGLU O., FIDAN S., Arikan O., Guldogan M. B.  
 ADVANCES IN SPACE RESEARCH, vol.44, no.6, pp.641-652, 2009 (SCI-Expanded)
- XXXIII. **Tomographic reconstruction of the ionospheric electron density as a function of space and time**  
 Erturk O., Arikan O., ARIKAN F.  
 ADVANCES IN SPACE RESEARCH, vol.43, no.11, pp.1702-1710, 2009 (SCI-Expanded)
- XXXIV. **Scale factor mitigating non-compliance of double-frequency altimeter measurements of the ionospheric electron content over the oceans with GPS-TEC maps**  
 Gulyaeva T. L., ARIKAN F., Delay S. H.  
 EARTH PLANETS AND SPACE, vol.61, no.9, pp.1103-1109, 2009 (SCI-Expanded)
- XXXV. **Regional TEC mapping with Random Field Priors and Kriging**  
 SAYIN I., ARIKAN F., Arikan O.  
 RADIO SCIENCE, vol.43, no.5, 2008 (SCI-Expanded)
- XXXVI. **Estimation of single station interfrequency receiver bias using GPS-TEC**  
 ARIKAN F., NAYIR H., SEZEN U., Arikan O.  
 RADIO SCIENCE, vol.43, no.4, 2008 (SCI-Expanded)
- XXXVII. **Total Electron Content estimation with Reg-Est**  
 NAYIR H., Arikan F., ARIKAN O., EROL C. B.  
 JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS, vol.112, 2007 (SCI-Expanded)
- XXXVIII. **Statistical characterization of the ionosphere using GPS signals**  
 EROL C., Arikan F.  
 JOURNAL OF ELECTROMAGNETIC WAVES AND APPLICATIONS, vol.19, no.3, pp.373-387, 2005 (SCI-Expanded)
- XXXIX. **Simulation of sea clutter at various frequency bands**  
 Arikan F., VURAL N.  
 JOURNAL OF ELECTROMAGNETIC WAVES AND APPLICATIONS, vol.19, no.4, pp.529-542, 2005 (SCI-Expanded)
- XL. **Regularized estimation of vertical total electron content from GPS data for a desired time period**  
 Arikan F., EROL C., ARIKAN O.  
 RADIO SCIENCE, vol.39, no.6, 2004 (SCI-Expanded)
- XLI. **A brief review of HF channel response estimation**

- Arikan F.  
JOURNAL OF ELECTROMAGNETIC WAVES AND APPLICATIONS, vol.18, no.6, pp.837-851, 2004 (SCI-Expanded)
- XLII. Regularized estimation of vertical total electron content from Global Positioning System data**  
Arikan F., EROL C., ARIKAN O.  
JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS, vol.108, 2003 (SCI-Expanded)
- XLIII. Adaptive tracking of narrowband HF channel response**  
Arikan F., ARIKAN O.  
RADIO SCIENCE, vol.38, no.6, 2003 (SCI-Expanded)
- XLIV. Mode separation and direction of arrival estimation in HF links**  
Arikan F., YILMAZ N., ARIKAN O., MILED M.  
RADIO SCIENCE, vol.38, no.1, 2003 (SCI-Expanded)
- XLV. A new algorithm for high-quality ionogram generation and analysis**  
Arikan F., ARIKAN O., SALOUS S.  
RADIO SCIENCE, vol.37, no.1, 2002 (SCI-Expanded)
- XLVI. Algorithm for high quality ionograms**  
Arikan F., SALOUS S., ARIKAN O.  
ELECTRONICS LETTERS, vol.36, no.11, pp.985-987, 2000 (SCI-Expanded)
- XLVII. Statistical characterization of time variability in midlatitude single-tone HF channel response**  
Arikan F., EROL C.  
RADIO SCIENCE, vol.33, no.5, pp.1429-1443, 1998 (SCI-Expanded)
- XLVIII. Statistics of simulated ocean clutter**  
Arikan F.  
JOURNAL OF ELECTROMAGNETIC WAVES AND APPLICATIONS, vol.12, no.4, pp.499-526, 1998 (SCI-Expanded)
- XLIX. A methodology for modeling and simulation of radar clutter and multipath**  
Arikan F., RAEMER H.  
JOURNAL OF ELECTROMAGNETIC WAVES AND APPLICATIONS, vol.10, no.2, pp.215-242, 1996 (SCI-Expanded)

## Articles Published in Other Journals

- I. NVIS HF signal propagation in ionosphere using calculus of variations  
SEZEN U., ARIKAN F., ARIKAN O.  
GEODESY AND GEODYNAMICS, vol.10, no.1, pp.72-76, 2019 (ESCI)
- II. Dynamo equation solution using Finite Volume Method for midlatitude ionosphere  
ARIKAN F., SEZEN U., ARIKAN O.  
GEODESY AND GEODYNAMICS, vol.9, no.6, pp.425-431, 2018 (ESCI)
- III. Online computation of International Reference Ionosphere Extended to Plasmasphere (IRI-Plas) model for space weather  
SEZEN U., Gulyaeva T. L., ARIKAN F.  
GEODESY AND GEODYNAMICS, vol.9, no.5, pp.347-357, 2018 (ESCI)
- IV. Spectral investigation of traveling ionospheric disturbances: IONOLAB-FFT  
ARIKAN F., YARICI A.  
GEODESY AND GEODYNAMICS, vol.8, no.5, pp.297-304, 2017 (ESCI)
- V. TEC Proxy Index of Solar Activity for the International Reference Ionosphere and its Extension to Plasmasphere IRI-Plas Model  
GULYAEVA T., ARIKAN F., L P., SEZEN U.  
International Journal of Scientific Engineering and Applied Science (IJSEAS), vol.3, pp.144-150, 2017 (Non Peer-Reviewed Journal)
- VI. Global Distribution of Zones of Enhanced Risk for the Ionospheric Weather  
GULYAEVA T., ARIKAN F., STANISLAWSKA I., POUSTOVALOVA L.  
Journal of Geography, Environment and Earth Science International, vol.4, pp.1-13, 2016 (Peer-Reviewed Journal)

- VII. **Performance of GPS slant total electron content and IRI-Plas-STEC for days with ionospheric disturbance**  
ARIKAN F., SHUKUROV S., Tuna H., Arikан O., Gulyaeva T. L.  
GEODESY AND GEODYNAMICS, vol.7, no.1, pp.1-10, 2016 (ESCI)
- VIII. **Probability of occurrence of planetary ionosphere storms associated with the magnetosphere disturbance storm time events**  
Gulyaeva T., ARIKAN F., STANISLAWSKA I.  
Advances in Radio Science, vol.12, pp.261-266, 2014 (Scopus)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Comparison of IRI-Plas STEC and IONOLAB-STEC over a Midlatitude GPS Network**  
Yenen S. D., ARIKAN F., Gulyaeva T.  
9th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 11 - 14 June 2019, pp.649-653
- II. **Ionogram Scaling using Hidden Markov Models**  
Gok G., Alp Y. K., ARIKAN O., ARIKAN F.  
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- III. **Fusion of ionosonde measurements and TEC estimations using statistical techniques**  
KÖROĞLU O., ARIKAN F., TOKER C., ARTUNER H., Mošna Z.  
The second VarSITI General Symposium (VarSITI-2017), Irkutsk, Russia, 10 - 15 July 2017
- IV. **Modelling the Spatial-Temporal Variability of the Ionosphere over Turkey using a GPS Network**  
Yenen S. D., SEZEN U., ARIKAN F.  
32nd General Assembly and Scientific Symposium of the International-Union-of-Radio-Science (URSI GASS), Montreal, Canada, 19 - 26 August 2017
- V. **Analysis of Seasonal Ionospheric Gradients Over Turkey For Year 2011**  
Koroglu M., Koroglu O., ARIKAN F.  
32nd General Assembly and Scientific Symposium of the International-Union-of-Radio-Science (URSI GASS), Montreal, Canada, 19 - 26 August 2017
- VI. **Online International Reference Ionosphere Extended to Plasmasphere (IRI-Plas) Model**  
SEZEN U., Gulyaeva T. L., ARIKAN F.  
32nd General Assembly and Scientific Symposium of the International-Union-of-Radio-Science (URSI GASS), Montreal, Canada, 19 - 26 August 2017
- VII. **Statistical Analysis of the Ionosphere based on Singular Value Decomposition**  
DEMİR U., Deviren M. N., TOKER C., ARIKAN F.  
41st COSPAR Scientific Assembly, 30 July - 07 August 2016
- VIII. **The Seasonal Anomalies in Ionosphere over Turkey**  
ÇINAR A., KARATAY S., Arikан F.  
24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.1137-1140
- IX. **SPACE WEATHER STUDIES OF IONOLAB GROUP**  
ARIKAN F., SEZEN U., TOKER C., ARTUNER H., BULU G., DEMİR U., ERDEM E., Arikан O., Tuna H., Karatay S., et al. URSI Asia-Pacific Radio Science Conference (URSI AP-RASC), Seoul, South Korea, 21 - 25 August 2016, pp.1136-1139
- X. **Improved IONOLAB TEC Space Weather Service**  
ARIKAN F., SEZEN U., TOKER C., BULU G., ARTUNER H., KARATAY S.  
IRI 2015 Workshop KMITL, 9 - 13 November 2015
- XI. **Online IRI Plas Interface Service by IONOLAB**  
ARIKAN F., TL G., TOKER C., SEZEN U., ARTUNER H.  
IRI 2015 Workshop KMITL, 9 - 13 November 2015

- XII. **Computation of Fresnel Integral by Fractional Fourier Transform Methods**  
SAYIN I., ARIKAN F., ARIKAN O.  
1st URSI Atlantic Radio Science Conference (URSI AT-RASC), Gran Canaria, Spain, 16 - 24 May 2015
- XIII. **Detection of Ionospheric Disturbances over Turkey Using Ionospheric Spatial Gradient Estimates**  
Koroglu M., ARIKAN F., Koroglu O.  
7th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 16 - 19 June 2015, pp.488-493
- XIV. **Observing ionosphere over Turkey using Correlation Coefficient for Slant Total Electron Content**  
Shukurov S., ARIKAN F., Gulyaeva T.  
7th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 16 - 19 June 2015, pp.515-518
- XV. **A Model Based Ray Tracing Algorithm for Anisotropic and Inhomogeneous Ionosphere with GIM-TEC Assimilation**  
Erdem E., ARIKAN F., Deviren M. N., Cor I.  
7th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 16 - 19 June 2015, pp.477-481
- XVI. **Automatic TEC Mapping Using a GPS Network and GIM-TEC**  
Deviren M. N., ARIKAN F., SAYIN I., Koroglu O.  
1st URSI Atlantic Radio Science Conference (URSI AT-RASC), Gran Canaria, Spain, 16 - 24 May 2015
- XVII. **3D Electron Density Estimation in the Ionosphere**  
Tuna H., ARIKAN O., ARIKAN F.  
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.529-532
- XVIII. **MATHEMATICAL MODELING OF THE PLASMA FREQUENCY - HEIGHT PROFILE OF THE IONOSPHERE FOR HF COMMUNICATIONS**  
TOKER C., ARIKAN F., ARIKAN O.  
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.1063-1066
- XIX. **REGIONAL AND SEASONAL PARAMETRIC PROBABILITY DENSITY FUNCTION ESTIMATION FOR TOTAL ELECTRON CONTENT**  
Koroglu O., ARIKAN F., Deviren M. N.  
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.915-918
- XX. **Investigation of Short-Period Ionospheric Variation over Turkey**  
Deviren M. N., ARIKAN F., ARIKAN O.  
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.794-797
- XXI. **REMOTE SENSING AND 2-D IMAGING OF IONOSPHERE BY IONOLAB GROUP**  
ARIKAN F., TOKER C., SEZEN U., Deviren M. N., Cilibas O., ARIKAN O.  
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.1520-1523
- XXII. **Ray Tracing on Stratified Plane Ionosphere Model**  
Erdem E., ARIKAN F.  
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.1391-1394
- XXIII. **GENERATION OF EARTHQUAKE DETECTION SIGNAL BASED ON IONOSPHERIC ELECTRON CONTENT VARIATION**  
Akyol A. A., ARIKAN O., ARIKAN F.  
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.590-593
- XXIV. **Investigation on the Reliability of Earthquake Prediction Based on Ionospheric Electron Content**

## **Variation**

Akyol A. A., ARIKAN O., ARIKAN F., Deviren M. N.

16th International Conference on Information Fusion (FUSION), İstanbul, Turkey, 9 - 12 July 2013, pp.1658-1663

**XXV. Investigation of Ionospheric Trend over Turkey Using Sliding Window Statistical Analysis Method**

Deviren M. N., ARIKAN F., ARIKAN O.

21st Signal Processing and Communications Applications Conference (SIU), CYPRUS, 24 - 26 April 2013

**XXVI. AUTOMATIC REGIONAL MAPPING OF TOTAL ELECTRON CONTENT USING A GPS SENSOR NETWORK AND ISOTROPIC UNIVERSAL KRIGING**

Deviren M. N., ARIKAN F., ARIKAN O.

16th International Conference on Information Fusion (FUSION), İstanbul, Turkey, 9 - 12 July 2013, pp.1664-1669

**XXVII. Global Mapping of Hourly TEC and Ionospheric Critical Parameters by Using IRI-Plas Optimization**

Cilibas O., SEZEN U., ARIKAN F., Gulyaeva T.

6th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 12 - 14 June 2013, pp.735-738

**XXVIII. Estimation of 3D Electron Density in the Ionosphere By Using Fusion of GPS Satellite-Receiver Network Measurements and IRI-Plas Model**

Tuna H., ARIKAN O., ARIKAN F., Gulyaeva T.

16th International Conference on Information Fusion (FUSION), İstanbul, Turkey, 9 - 12 July 2013, pp.1650-1657

**XXIX. IRI-Plas Optimization Based Ionospheric Tomography**

Cilibas O., SEZEN U., ARIKAN F., Gulyaeva T.

16th International Conference on Information Fusion (FUSION), İstanbul, Turkey, 9 - 12 July 2013, pp.1645-1649

**XXX. ANALYSIS OF PROBABILITY DENSITY FUNCTIONS OF TOTAL ELECTRON CONTENT FOR MAGNETIC CONJUGATE LOCATIONS**

Sapaz M. S., ARIKAN F., Gulyaeva T., Koroglu O.

6th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 12 - 14 June 2013, pp.769-772

**XXXI. Space Weather Activities of IONOLAB Group TEC Mapping**

ARIKAN F., YILMAZ A., ARIKAN O., SAYIN I., GÜRÜN M., AKDOGAN K. E., YILDIRIM S. A.

EGU General Assembly Conference, Viyana, Austria, 19 - 24 April 2009, vol.11, pp.6962-6965

**XXXII. Investigation of Hourly and Daily Patterns for Lithosphere-Ionosphere Coupling Before Strong Earthquakes**

Karatay S., ARIKAN F., ARIKAN O.

4th International Conference on Recent Advances in Space Technologies, İstanbul, Turkey, 11 - 13 June 2009, pp.670-671

**XXXIII. Investigation of Litosphere-Ionosphere Coupling Using Total Electron Content**

Karatay S., ARIKAN F., ARIKAN O.

IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Turkey, 9 - 11 April 2009, pp.507-508

**XXXIV. Investigation of Optimum Temporal Update Periods for Regional TEC Monitoring**

SAYIN I., Akdogan K. E., ARIKAN F.

4th International Conference on Recent Advances in Space Technologies, İstanbul, Turkey, 11 - 13 June 2009, pp.675-679

**XXXV. TEC statistics and correlogram applications**

Tuerel N., AKTAŞ E., ARIKAN F.

IEEE 15th Signal Processing and Communications Applications Conference, Eskişehir, Turkey, 11 - 13 June 2007, pp.692-695

**XXXVI. Synthetic TEC mapping with kriging and random field priors**

SAYIN I., ARIKAN F., ARIKAN O.

IEEE 15th Signal Processing and Communications Applications Conference, Eskişehir, Turkey, 11 - 13 June 2007, pp.786-787

**XXXVII. Calculation of sea radiance in infrared band**

## Supported Projects

ARIKAN F., TUBITAK Project, İyonküre Havası için Risk Etkenlerinin Belirlenmesi, 2016 - Continues

ARIKAN F., Project Supported by Higher Education Institutions, Çevrimiçi IRIPlas Kullanarak Orta Enlem İyonosonda İstasyonları için Farklı Güneş Göstergelerinin Karşılaştırılması, 2017 - 2017

ARIKAN F., Project Supported by Higher Education Institutions, MME 2017 Çalıştayına Katılım, 2017 - 2017

ARIKAN F., Project Supported by Higher Education Institutions, VarSITI 2017 Sempozyumuna Katılım, 2017 - 2017

ARIKAN F., TUBITAK Project, Türkiye İyonküresinin Aykırılık ve Düzensizliklerinin Yapısal Özelliklerinin Modellemenesi, 2015 - 2017

ARTUNER H., SEZEN U., TOKER C., ARIKAN F., TUBITAK Project, Eniyilenmiş Veri Sensör Bütünleştirimesi İle İyonküre Elektron Yoğunluğu Görüntülemesi, 2015 - 2017

ARIKAN F., Project Supported by Higher Education Institutions, Atıftan Bilimsel Başarı Desteği, 2016 - 2016

ARIKAN F., Project Supported by Higher Education Institutions, IRI 2015 Çalıştayına Katılım Desteği, 2015 - 2015

ARIKAN F., Project Supported by Higher Education Institutions, İyonküre-Havaküre Uzaktan Algılama için IEEE GRSS Konferansına katılım, 2015 - 2015

ARIKAN F., Project Supported by Higher Education Institutions, Yerküresel Elektron İçeriğinin Uzay Havası Fırtınalarında Örütüleri, 2015 - 2015

ARIKAN F., TUBITAK Project, Uzay Havası ve Uzay İkliminin İyonküre ve Plazmaküre Fırtınaları Üzerindeki Etkileri, 2013 - 2015

ARIKAN F., TUBITAK Project, İyonküre ve Plazmaküre Uzay Havası Fırtınalarının YKS Toplam Elektron İçeriği ile Manyetik Eşlenik Etkilerinin İncelenmesi, 2011 - 2013

ARIKAN F., TUBITAK Project, Elektron Dağılımının GPS Ölçümleriyle Bilgisayarlı Tomografik Görüntülenmesi, 2006 - 2008

ARIKAN F., TUBITAK Project, Deniz Yüzeyi Radar Kesitinin İstatistik Modellenmesi, 1994 - 1995

## Metrics

Publication: 94

Citation (WoS): 736

Citation (Scopus): 631

H-Index (WoS): 13

H-Index (Scopus): 12

## Non Academic Experience

SİGNAL LABS