

## Res. Asst. SELMA ZENGİN KAZANCI

### Personal Information

Office Phone: [+90 462 377 2776](tel:+904623772776)

Fax Phone: [+90 462 328 0918](tel:+904623280918)

Email: [szengin@ktu.edu.tr](mailto:szengin@ktu.edu.tr)

Web: <https://avesis.ktu.edu.tr//szengin>

### International Researcher IDs

ORCID: 0000-0003-1795-5367

Publons / Web Of Science ResearcherID: AAN-9591-2020

ScopusID: 57191821498

Yoksis Researcher ID: 57382

### Education Information

Postgraduate, Karadeniz Technical University, -, Harita Mühendisliği, Turkey 2011 - 2014

### Research Areas

Atmospheric Sciences and Meteorological Engineering, Climate, Climate Change and Climate Modeling, Geotechnical Engineering, Map, Error Theory, Map Networks, Satellite Map, Space Map, Engineering and Technology

### Academic Titles / Tasks

Research Assistant, Karadeniz Technical University, -, Harita Mühendisliği, 2011 - Continues

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

- I. **Homogenizing GPS Integrated Water Vapor Time Series: Benchmarking Break Detection Methods on Synthetic Data Sets**  
Van Malderen R., Pottiaux E., Klos A., Domonkos P., Elias M., Ning T., Bock O., Guijarro J., Alshawaf F., Hoseini M., et al.  
EARTH AND SPACE SCIENCE, vol.7, 2020 (SCI-Expanded)
- II. **Comparison of regression-based and combined versions of Inverse Distance Weighted methods for spatial interpolation of daily mean temperature data**  
TANIR KAYIKÇI E., ZENGİN KAZANCI S.  
ARABIAN JOURNAL OF GEOSCIENCES, vol.9, no.17, 2016 (SCI-Expanded)
- III. **OPTIMIZED PARAMETERIZATION FOR SPATIAL INTERPOLATION OF DAILY TEMPERATURE DATA AT BLACK SEA REGION, TURKEY**  
TANIR KAYIKÇI E., ZENGİN KAZANCI S.  
FRESENIUS ENVIRONMENTAL BULLETIN, vol.25, no.2, pp.464-489, 2016 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Establishment of Karadeniz Technical University Permanent GNSS Station as Reactivated of TRAB IGS Station**  
ZENGİN KAZANCI S., TANIR KAYIKÇI E.  
GEODESY AND CARTOGRAPHY, vol.66, no.2, pp.253-258, 2017 (ESCI)
- II. **HOMOGENIZING GPS INTEGRATED WATER VAPOUR TIME SERIES: METHODOLOGY AND BENCHMARKING THE ALGORITHMS ON SYNTHETIC DATASETS**  
Van Malderen R., Pottiaux E., Klos A., Bock O., Bogusz J., Chimani B., Elias M., Gruszczynska M., Guijarro J., ZENGİN KAZANCI S., et al.  
World Meteorological Organisation World Climate Data and Monitoring Programme Series, vol.85, pp.102-114, 2017 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Use of GNSS Tropospheric Products for Climate Monitoring (Working Group 3)**  
Bock O., Pacione R., Ahmed F., Araszkievicz A., Bałdysz Z., Balidakis K., Barroso C., Bastin S., Beirle S., Berckmans J., et al.  
in: Advanced GNSS Tropospheric Products for Monitoring Severe Weather Events and Climate, Jonathan Jones,Guergana Guerovala,Jan Dousa,Galina Dick,Siebren de Haan,Eric Pottiaux,Olivier Bock,Rosa Pacione,Roeland van Malderen, Editor, Springer, London/Berlin , Berlin, pp.267-402, 2020

## Refereed Congress / Symposium Publications in Proceedings

- I. **Analysis of GNSS-derived Water Vapour during Extreme Weather Events in Black Sea Region**  
TANIR KAYIKÇI E., YALÇINKAYA M., ZENGİN KAZANCI S., DEMİRCAN M., ÇELİK TUNÇER S.  
XXIX International Symposium on "Modern Technologies, Education and Professional Practice in Geodesy and Related Fields, İstanbul, Turkey, 5 - 06 November 2019
- II. **GNSS Meteorolojisinden Elde Edilen Su Buharı Dağılımlarının ECMWF ve Radyosonda'dan Elde Sonuçlarla Karşılaştırılması"**  
Tanır Kayıkçı E., Yalçinkaya M., Zengin Kazancı S., Demircan M., Çelik S.  
6th International GAP Engineering Conference – GAP2018, Şanlıurfa, Turkey, 8 - 10 November 2018, pp.210-215
- III. **Comparison of Water Vapor Distributions Obtained from GNSS Meteorology with Results from ECMWF and Radioson**  
TANIR KAYIKÇI E., ZENGİN KAZANCI S., YALÇINKAYA M., ÇELİK S.  
6. International GAP Engineering Congress (GAP 2018), 8 - 10 November 2018
- IV. **Comparison of Zenith Total Delays (ZTD) derived from GNSS and ERA-Interim Datasets**  
ZENGİN KAZANCI S., TANIR KAYIKÇI E., KAPLON J., ROHM W.  
International Geography Symposium on the 30th Anniversary of the Ankara University Research Center of Turkish Geography (TUCAUM) 2018, Ankara, Turkey, 3 - 06 October 2018, vol.1
- V. **BÖLGESEL GNSS AĞLARI VE RAVINSONDA VERİLERİ İLE SU BUHARI KESTİRLERİ**  
TANIR KAYIKÇI E., ZENGİN KAZANCI S., Kaplon J., Rohm W., Çelik S.  
Uluslararası Katılımlı Türkiye Ulusal Jeodezi ve Jeofizik Birliği Bilimsel Kongresi, İzmir, Turkey, 30 May - 02 June 2018, pp.112-115
- VI. **The homogenization of GPS Integrated Water Vapour time series: methodology and benchmarking the algorithms on synthetic datasets**  
Van Malderen R., Pottiaux E., Klos A., Bock O., Bogusz J., Chimani B., Elias M., Gruszczyska M., Guijarro J., ZENGİN KAZANCI S., et al.  
EMS Annual Meeting: European Conference for Applied Meteorology and Climatology 2017, Dublin, Ireland, 4 - 08

September 2017

- VII. **Establishment of Karadeniz Technical University Permanent GNSS Station As Reactivated of TRAB IGS Station**  
Zengin Kazancı S., Tanır Kayıkçı E.  
Eurepean Reference Frame (EUREF) Symposium 2017, Warszawa, Poland, 17 - 19 May 2017
- VIII. **Performance of various homogenization tools on a synthetic benchmark dataset of GPS and ERA-interim IWV differences**  
Klos A., Van Malderen R., Pottiaux E., Bock O., Bogusz J., Chimani B., Elias M., Gruszczynska M., Guijarro J., ZENGİN KAZANCI S., et al.  
IAG-IASPEI Joint Scientific Assembly, Kobe, Japan, 30 July - 04 August 2017
- IX. **IAG JWG 4.3.8: GNSS tropospheric products for Climate: Objectives and Future Plans**  
Pacione R., Pottiaux E., Araszkievicz A., Klos A., Alshawaf F., Teferle F. N., Zengin Kazancı S.  
19th EGU General Assembly, EGU2017, Vienna, Austria, 23 - 28 April 2017, pp.1
- X. **THE HOMOGENIZATION OF GPS INTEGRATED WATER VAPOUR TIME SERIES: METHODOLOGY AND BENCHMARKING THE ALGORITHMS ON SYNTHETIC DATASETS**  
Van Malderen R., Eric P., Klos A., Bock O., Bogusz J., Chimani B., Elias M., Gruszczynska M., Guijarro J., ZENGİN KAZANCI S., et al.  
9th Seminar for Homogenization and Quality Control in Climatological Databases and 4th Conference on Spatial Interpolation Techniques in Climatology and Meteorology, Budapest, Hungary, 3 - 07 April 2017
- XI. **Effect of Data Homogenization for Trend and Seasonal Signal Detection**  
Tanır Kayıkçı E., Zengin Kazancı S., Tornatore V.  
COST Action ES1206 Final Workshop, Zuid-Holland, Netherlands, 21 - 23 February 2017, pp.26-27
- XII. **New Research Project at KTU, Trabzon for Using Regional GNSS Networks to Strengthen Severe Weather Prediction**  
Tanır Kayıkçı E., Zengin Kazancı S.  
COST Action ES1206 Final Worksop, Zuid-Holland, Netherlands, 21 - 23 February 2017
- XIII. **Non-parametric Tecniques for Trend and Change Point Detection Analysis**  
Zengin Kazancı S., Tanır Kayıkçı E., Tornatore V.  
COST Action ES1206 Sub-Working Group Data Homogenisation : 2nd Workshop, Warszawa, Poland, 23 - 25 January 2017
- XIV. **Comparison of Time Series Homogenization of IWV Estimates at IGS Stations**  
Zengin Kazancı S., Tanır Kayıkçı E., Tornatore V.  
COST Action ES1206 Sub-Working Group Data Homogenisation : 2nd Workshop, Warszawa, Poland, 23 - 25 January 2017
- XV. **Comparison of Water Vapour Estimates in Ankara Turkey**  
demircan m., TANIR KAYIKÇI E., ZENGİN KAZANCI S.  
9. ERAD European Conference on Radar in Meteorology and Hydrology, Antalya, Turkey, 10 - 14 October 2016
- XVI. **ZTD VE IWV ZAMAN SERİLERİNİN SPEKTRAL ANALİZİ VE DEĞİŞİM NOKTASI TESPİTİ**  
ZENGİN KAZANCI S., TANIR KAYIKÇI E.  
8. Mühendislik Ölçmeleri Sempozyumu, Turkey, 19 - 21 October 2016
- XVII. **"Spectral Analysis of ZTD and IWV Time Series"**  
TANIR KAYIKÇI E., ZENGİN KAZANCI S., TORNATORE V.  
GNSS4WEC Summer School 2016 and Working Group Meetings, Potsdam, Germany, 29 August - 02 September 2016, pp.1
- XVIII. **Analysis of ZTD and IWV Time Series from GPS Reprocessing Campaign**  
TANIR KAYIKÇI E., ZENGİN KAZANCI S., tornatore v.  
COST ES1206 Sub-Working Group "Data Homogenisation", 26 - 27 April 2016
- XIX. **INVESTIGATION FOR SPATIAL AND TEMPORAL VARIATIONS OF DAILY MEAN TEMPERATURES OF BLACK SEA REGION, TURKEY**  
ZENGİN KAZANCI S., TANIR KAYIKÇI E., ULUKAVAK M., YALÇINKAYA M.  
26th IUGG General Assembly 2015, Prag, Czech Republic, 22 June - 02 July 2015, pp.1

- XX. **Konumsal Enterpolasyon Yöntemleri Uygulamalarında Optimum Parametre Seçimi: Doğu Karadeniz Bölgesi Günlük Ortalama Sıcaklık Verileri Örneği"**  
ZENGİN KAZANCI S., TANIR KAYIKÇI E.  
15. Türkiye Harita Bilimsel ve Teknik Kurultayı, Ankara, Turkey, 25 - 28 March 2015, pp.1
- XXI. **Konumsal Enterpolasyon Yöntemleri Uygulamalarında Optimum Parametre Seçimi: Doğu Karadeniz Bölgesi Günlük Ortalama Sıcaklık Verileri Örneği"**  
ZENGİN KAZANCI S., TANIR KAYIKÇI E.  
7.Mühendislik Ölçmeleri Sempozyumu, Çorum, Turkey, 15 - 17 October 2014, pp.1-5

## Supported Projects

Tanır Kayıkçı E., Yalçınkaya M., Şişman Y., Köksal E., Tornatore V., TUBITAK Project, Bölgesel GNSS Ağları ile Ekstrem Hava Olaylarının Tahmininin Güçlendirilmesi, 2016 - 2020

## Scientific Research / Working Group Memberships

Iag Jwg 4.3.8 "Gnss Tropospheric Products For Climate, Royal Observatory of Belgium, Belgium, <http://iag-gnssclimate.oma.be/index.php>, 2017 - Continues

The EUMETNET EIG GNSS water vapour programme, Danish Meteorological Institute, Denmark, <http://egvap.dmi.dk/>, 2016 - Continues

Trop-NET Analiz Merkezi, KARADENİZ TEKNİK ÜNİVERSİTESİ, Turkey, <http://www.pecny.cz/gop/index.php/trop-net/trop-net-intro>, 2014 - Continues

COST Action-ES1206-Advanced Global Navigation Satellite Systems Tropospheric Products for Monitoring Severe Weather Events and Climate(GNSS4SWEC), COST-European Cooperation in Science and Technology, England, [http://www.cost.eu/COST\\_Actions/essem/ES1206](http://www.cost.eu/COST_Actions/essem/ES1206), 2013 - Continues

## Metrics

Publication: 27  
Citation (WoS): 9  
Citation (Scopus): 11  
H-Index (WoS): 2  
H-Index (Scopus): 2

## Awards

Tanır Kayıkçı E., ZENGİN KAZANCI S., ŞEHİR ÖDÜLLERİ 2020 BİLİM İŞİĞİNDA AKADEMİK ÖDÜLLER "EN İYİ PROJE", Yaşayan Şehirler Platformu, October 2020