

## Assoc. Prof. ALİ ELMAS

### Personal Information

Office Phone: [+90 462 377 3429](tel:+904623773429) Extension: 3429

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

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

Address: KTÜ Jeofizik Müh. Böl. 61080 TRABZON

### International Researcher IDs

ORCID: 0000-0003-3343-2742

Publons / Web Of Science ResearcherID: ABB-5215-2020

ScopusID: 57220586019

Yoksis Researcher ID: 53642

### Education Information

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Jeofizik, Turkey 2007 - 2012

Postgraduate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Jeofizik, Turkey 2004 - 2007

Undergraduate, Karadeniz Technical University, Jeofizik Mühendisliği Bölümü, Turkey 1999 - 2003

### Foreign Languages

English, B2 Upper Intermediate

### Certificates, Courses and Trainings

Education Management and Planning, Tübitak Proje Hazırlama Kursu, KTÜ, 2015

Education Management and Planning, Doktora Staj Kursu, Comenius University, 2012

### Dissertations

Doctorate, 3B GRAVİTE TERS ÇÖZÜM HESAPLARINDA SİSMİK HIZ SINIRLARININ KULLANILMASIYLA YOĞUNLUĞUN DERİNLİKLE DEĞİŞİMİNİN TESPİTİ, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Jeofizik, 2012

Postgraduate, GRAVİTE YÖNTEMİNDE İKİ BOYUTLU SENTETİK MODELİN ÜÇ BOYUTLU TASARIMIYLA TESTİ, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Jeofizik, 2007

### Research Areas

Geophysical Engineering, Applied Geophysics, Gravity, Engineering and Technology

### Academic Titles / Tasks

Associate Professor, Karadeniz Technical University, Mühendislik Fakültesi, Jeofizik Mühendisliği, 2019 - Continues

Assistant Professor, Karadeniz Technical University, Mühendislik Fakültesi, Jeofizik Mühendisliği, 2015 - 2019  
Expert, Karadeniz Technical University, Mühendislik Fakültesi, Jeofizik Mühendisliği, 2006 - 2015

## Academic and Administrative Experience

Deputy Head of Department, Karadeniz Technical University, Mühendislik Fakültesi, Jeofizik Mühendisliği, 2021 - 2023  
Deputy Head of Department, Karadeniz Technical University, Mühendislik Fakültesi, Jeofizik Mühendisliği, 2015 - 2018

## Courses

Sayısal Çözümleme, Undergraduate, 2020 - 2021  
Gravimetri, Doctorate, 2019 - 2020  
Gravite Modelleme, Doctorate, 2018 - 2019  
Gravite Manyetik Prospeksiyon, Undergraduate, 2016 - 2017  
Olasılık ve İstatistik, Undergraduate, 2016 - 2017  
Jeofizik Yorumlama, Undergraduate, 2016 - 2017

## Advising Theses

Elmas A., Marmara Denizi Baseninin Tektonik ve Kabuk Yapısının WGM2012 Gravite Verileri Yardımıyla Belirlenmesi, Doctorate, A.Yasir(Student), 2023  
Elmas A., Thesis, Postgraduate, A.Yasir(Student), 2017

## Jury Memberships

Post Graduate, Post Graduate, Karadeniz Teknik Üniversitesi, May, 2022  
Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, Karadeniz Teknik Üniversitesi, June, 2021

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

- I. **Architecture of tectonic and crustal structure of the middle marmara sub-basin and its surroundings using gravity data**  
Parlak A. Y., ELMAS A.  
CARBONATES AND EVAPORITES, vol.38, no.1, 2023 (SCI-Expanded)
- II. **Sediment thickness of the Tuz Gölü Basin using gravity data**  
Elmas A.  
CARBONATES AND EVAPORITES, vol.37, no.36, pp.1-9, 2022 (SCI-Expanded)
- III. **Determination of tectonic and crustal structure of Bitlis-Poturge Suture Zone using WGM2012 complete Bouguer anomaly data**  
ELMAS A.  
ACTA GEODAETICA ET GEOPHYSICA, vol.57, no.1, pp.215-229, 2022 (SCI-Expanded)
- IV. **Major tectonic features and geodynamic setting of the Black Sea Basin: Evidence from satellite-derived gravity, heat flow, and seismological data**  
Maden N., Elmas A.  
Tectonophysics, vol.824, no.1, pp.1-16, 2022 (SCI-Expanded)
- V. **Mineralized structure prospection with depth estimation using magnetic data**

- ELMAS A.  
CARBONATES AND EVAPORITES, vol.36, no.4, 2021 (SCI-Expanded)
- VI. **Tectonic and crustal structure of the Eastern Pontides using Bouguer gravity data**  
ELMAS A.  
ACTA GEOPHYSICA, vol.69, no.5, pp.1637-1650, 2021 (SCI-Expanded)
- VII. **Tectonic and crustal structure of Archangelsky ridge using Bouguer gravity data**  
ELMAS A., KARSLI H.  
MARINE GEOPHYSICAL RESEARCH, vol.42, no.3, 2021 (SCI-Expanded)
- VIII. **Edge position detection and depth estimation from gravity data with application to mineral exploration**  
ELMAS A.  
CARBONATES AND EVAPORITES, vol.34, no.1, pp.189-196, 2019 (SCI-Expanded)
- IX. **Lineaments in the Shamakhy-Gobustan and Absheron hydrocarbon containing areas using gravity data**  
ELMAS A., KARSLI H., Kadirov F. A.  
ACTA GEOPHYSICA, vol.66, no.1, pp.39-49, 2018 (SCI-Expanded)
- X. **Determining change of density with depth by using seismic velocity boundaries in 2D gravity inversion calculations**  
Cavsak H., ELMAS A.  
CARBONATES AND EVAPORITES, vol.30, no.2, pp.145-151, 2015 (SCI-Expanded)
- XI. **Gold and Silver Prospection Using Magnetic, Radiometry and Microgravity Methods in the Kisladag Province of Western Turkey**  
Ercan O. A., ŞEREN A., ELMAS A.  
RESOURCE GEOLOGY, vol.64, no.1, pp.25-34, 2014 (SCI-Expanded)
- XII. **Determining crustal structure and density in the eastern Black Sea and Pontide Mountains using 3D gravity model calculations**  
Cavsak H., ELMAS A.  
CARBONATES AND EVAPORITES, vol.28, no.4, pp.475-484, 2013 (SCI-Expanded)
- XIII. **Determining change of density with depth by using seismic velocity boundaries in 3D gravity inversion calculations**  
Cavsak H., ELMAS A.  
ACTA GEODAETICA ET GEOPHYSICA, vol.48, no.4, pp.405-417, 2013 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Bouguer gravite verileriyle Marmara Bölgesi'nde sığ kabuk yapısı araştırması**  
Elmas A.  
Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi, vol.24, no.70, pp.1-6, 2022 (Peer-Reviewed Journal)
- II. **Van Gölü ve Civarının Sığ Kabuk Yapısının WGM2012 Bouguer Gravite Verileriyle İncelenmesi**  
Elmas A.  
Jeoloji Mühendisliği Dergisi, vol.46, no.1, pp.41-50, 2022 (Peer-Reviewed Journal)
- III. **Modelling of Crust Structure of Central Anatolia Region**  
Elmas A.  
Adıyaman Üniversitesi Mühendislik Bilimleri Dergisi, vol.15, no.1, pp.486-497, 2021 (Peer-Reviewed Journal)
- IV. **Investigation of lineaments in the mid-Black arc region using Bouguer gravity data**  
Parlak A. Y., Elmas A.  
Jeoloji Mühendisliği Dergisi, vol.45, no.1, pp.199-212, 2021 (Scopus)
- V. **Gravite düşey türev verileriyle Batı Karadeniz Bölgesinin yapı sınırlarının araştırılması**  
Elmas A., Parlak A. Y.

- Mühendislik Bilimleri ve Tasarım Dergisi, vol.9, no.4, pp.1072-1079, 2021 (Peer-Reviewed Journal)
- VI. **Manyetik özellik gösteren gömülü bir cismin Sınır Analizi ve NTG Yöntemleriyle konumunun belirlenmesi**  
Elmas A., Babacan A. E.  
Adıyaman Üniversitesi Mühendislik Bilimleri Dergisi, vol.8, pp.196-202, 2021 (Peer-Reviewed Journal)
- VII. **Kıbrıs Adasındaki Yapısal Süreksizliklerin EGM08 Gravite Verileri Kullanılarak Belirlenmesi**  
ELMAS A.  
Jeoloji Mühendisliği Dergisi, vol.42, pp.17-32, 2018 (Scopus)
- VIII. **Türkiye'nin Tektonik Yapısının Gravite Verileri Kullanılarak Değerlendirilmesi**  
ELMAS A.  
Mühendislik Bilimleri ve Tasarım Dergisi, vol.6, no.2, pp.258-264, 2018 (Peer-Reviewed Journal)
- IX. **Trabzon Civarındaki Fay Türü Jeolojik Yapıların Gravite Verileri Kullanılarak Belirlenmesi**  
ELMAS A.  
Jeoloji Mühendisliği Dergisi, vol.41, pp.137-153, 2017 (Scopus)
- X. **A new method for determining lower density layer in prospection of hydrocarbon**  
ELMAS A., Cavsak H.  
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.22, no.3, pp.233-240, 2016 (ESCI)
- XI. **Comparing of the 2D-3D Gravity Calculations in Cartesian Coordinates and 3D in Cartesian-Spherical Coordinates**  
ÇAVŞAK H., ELMAS A.  
SDÜ Journal of Engineering Science and Design, vol.2, no.2, pp.103-111, 2014 (Peer-Reviewed Journal)
- XII. **CRUST STUDYING IN THE EASTERN PONTIDES BY 3D GRAVITY ALGORIHM**  
ÇAVŞAK H., ELMAS A.  
e-Journal of New World Sciences Academy, vol.6, no.3, 2011 (Peer-Reviewed Journal)
- XIII. **3D Modeling Of Gravity Anomalies Using 2D Synthetic Models**  
ÇAVŞAK H., ELMAS A.  
SDÜ Journal of Engineering Science and Design, vol.1, no.2, pp.79-86, 2010 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Batı Karadeniz Bölgesinin jeolojik birimlerinin araştırılma**  
Elmas A., Parlak A. Y.  
3rd International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2021), 15 - 17 December 2021, pp.173-176
- II. **Gravite verileriyle Archangelsky Sirtının temel kaya üst yüzeyinin belirlenmesi**  
Elmas A., Karşlı H.  
3rd International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2021), 15 - 17 December 2021, pp.177-181
- III. **Bouguer gravite verileriyle Marmara Denizi tabanında NTG Yöntemiyle temel kaya seviyesi araştırması**  
Parlak A. Y., Elmas A.  
6.Uluslararası Mühendislik ve Teknoloji Yönetimi Kongresi, 20 November - 21 December 2021, pp.532-536
- IV. **Bouguer gravite verileriyle Marmara Bölgesi'nde temel kaya incelemesi**  
Elmas A.  
6.Uluslararası Mühendislik ve Teknoloji Yönetimi Kongresi, İstanbul, Turkey, 20 - 21 November 2021, pp.542-546
- V. **Gömülü Olan Manyetik Bir Cismin NTG Yöntemiyle Belirlenmesi**  
ELMAS A., BABACAN A. E.  
6.ULUSLARARASI MÜHENDİSLİK VE TEKNOLOJİ YÖNETİMİ KONGRESİ, Turkey, 20 November 2021, pp.537-541
- VI. **Tuz Gölü ve civarının sediment kalınlığının gravite yöntemiyle araştırılması**

- Elmas A.  
6th International Mediterranean Science and Engineering Congress (IMSEC 2021), Antalya, Turkey, 25 - 27 October 2021, pp.74-76
- VII. **Gravite Verilerinin Normalize Tam Gradyent Yöntemiyle İşlenmesinde Profil Uzunluğu Etkisi**  
Elmas A.  
6th International Mediterranean Science and Engineering Congress (IMSEC 2021), Antalya, Turkey, 25 - 27 October 2021, pp.77-78
- VIII. **Finding new edges of the units the mid-Black Sea region using EGM08 Bouguer gravity data**  
Parlak A. Y., Elmas A.  
6th International Mediterranean Science and Engineering Congress (IMSEC 2021), Antalya, Turkey, 25 - 27 October 2021, pp.1-5
- IX. **Calculating of the basement of Eastern Pontides using Bouguer Gravity Data by NFG and inversion techniques**  
Elmas A.  
1st International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 1 November - 03 December 2021, pp.126-128
- X. **Modelling of Interface Topographies of the Central Anatolia Region**  
Elmas A.  
1st International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 1 - 03 November 2021, pp.129-131
- XI. **Bouguer gravite verileriyle Ankara ili ve civarındaki süreksizliklerin araştırılması**  
Elmas A.  
1st International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 1 - 03 November 2021, pp.132-135
- XII. **Tectonic Structure of Bitlis-Pötürge Suture Zone Using Gravity Data**  
Elmas A.  
9th International Advanced Technologies Symposium (IATS'21), Elazığ, Turkey, 27 - 28 October 2021, pp.63-66
- XIII. **Mineralized Structure Surveying using RTP Magnetic Data**  
Elmas A.  
9th International Advanced Technologies Symposium (IATS'21), Elazığ, Turkey, 27 - 28 October 2021, pp.67-70
- XIV. **Bursa ili ve civarındaki süreksizliklerin gravite verileriyle araştırılması**  
Elmas A.  
9th International Advanced Technologies Symposium (IATS'21), Elazığ, Turkey, 27 - 28 October 2021, pp.71-74
- XV. **Estimation of Tectonic Structure of Eastern Anatolia Region using Gravity Data**  
ELMAS A.  
2nd International Symposium on Innovative Approaches in Scientific Studies, 30 November - 02 December 2018
- XVI. **Determination of Updated Tectonic Structure of Turkey Utilizing Gravity Data**  
ELMAS A.  
2nd International Symposium on Innovative Approaches in Scientific Studies, 30 November - 02 December 2018
- XVII. **Gravity Anomalies on Continental Edgings**  
ELMAS A.  
2nd International Symposium on Innovative Approaches in Scientific Studies, 30 November - 02 December 2018
- XVIII. **Determining of Lineaments in the Shamakhy-Gobustan and Absheron Areas Using Gravity Data**  
ELMAS A., KARSLI H.  
9th International Symposium on Eastern Mediterranean Geology (ISEMG-2018), 7 - 11 May 2018, pp.213-216
- XIX. **Surveying of Tectonic Structure in the Eastern Pontides region. International Symposium on Eastern Mediterranean Geology**  
ELMAS A.  
9th International Symposium on Eastern Mediterranean Geology, 7 - 11 May 2018
- XX. **INVESTIGATION OF GEOTHERMAL SOURCES BY USING GRAVITY AND ELECTRIC RESISTIVITY METHODS**

ELMAS A., BABACAN A. E., Kara R. T.

9th International Symposium on Eastern Mediterranean Geology (ISEMG 2018), Antalya, Turkey, 7 - 11 May 2018, pp.189-193

- XXI. **Trabzondaki çizgiselliklerin Gravite Verileri Kullanılarak Belirlenmesi**  
ELMAS A.  
International Conference on Technology, Engineering and Science (ICONTEs 2017), 10 - 19 October 2017
- XXII. **Kıbrıs Süreksizliklerinin Gravite Verileriyle Araştırılması**  
ELMAS A.  
International Conference on Technology, Engineering and Science (ICONTEs 2017), 26 - 29 October 2017
- XXIII. **EXPLORATION OF IRON ORE DEPOSIT IN ELBİSTAN OF SOUTHERN TURKEY, USING MAGNETIC DATA**  
Kara R. T., ELMAS A., BABACAN A. E.  
International Conference on Education in Mathematics, Science Technology, 18 - 21 May 2017, pp.334-337
- XXIV. **Geothermal Source Research With Gravity and Electricity Methods. International Conference on Research in Education and Science**  
ELMAS A.  
International Conference on Research in Education and Science (ICRES 2017), 18 - 21 May 2017
- XXV. **Exploration of Iron Ore Deposit in Elbistan of Southern Turkey, Using Magnetic Data**  
RASİM TAYLAN K., ELMAS A., BABACAN A. E.  
International Conference on Research in Education and Science, 18 - 21 May 2017, pp.334-337
- XXVI. **Mineralized Structure Prospection using HGM and TAM Techniques with Magnetic Data in Gaziantep Southern Turkey**  
ELMAS A.  
22nd European Meeting of Environmental and Engineering Geophysics, 4 - 08 September 2016
- XXVII. **IMAGING OF NEAR SURFACE BURIED STRUCTURES USING MAGNETIC AND ELECTROMAGNETIC METHODS**  
BABACAN A. E., ELMAS A.  
International Conference on Research in Education and Science (ICRES), May 19-22, 2016, Bodrum, Turkey, 19 - 22 May 2016
- XXVIII. **Shallow Crust Study with Gravity Data using HGM and TAM Techniques in Gaziantep Southern Turkey**  
ELMAS A.  
International Conference on Research in Education and Science, 19 - 22 May 2016, pp.1031-1034
- XXIX. **Determination of Properties of Margins using Free Air and Bouguer Anomalies**  
ELMAS A.  
International Conference on Research in Education and Science, 19 - 22 May 2016, pp.954-959
- XXX. **Gold Prospection Using Magnetic, VLF and SP Methods in the Kışladağ Province of Western Turkey**  
ERCAN Ö. A., ŞEREN A., ELMAS A.  
International Conference on Research in Education and Science, 23 - 26 April 2015, pp.64-70
- XXXI. **2B Gravite Ters Çözüm Hesabında Sismik Hız Sınırlarıyla Yoğunluk Değişimi Çalışması**  
ÇAVŞAK H., ELMAS A.  
Türkiye 20. Uluslararası Jeofizik Kongre ve Sergisi, Antalya, Turkey, 24 - 28 November 2013, vol.CD, pp.130-133
- XXXII. **Determining Change of Density with Depth by Using Seismic Velocity Boundaries in 3D Gravity Inversion Calculations**  
ÇAVŞAK H., ELMAS A.  
6th Congress of Balkan Geophysical Society, Budapest, Budapest, Hungary, 13 - 16 June 2011, vol.CD
- XXXIII. **2B Gravite İncersiyon Hesaplarında Sismik Hız Sınırlarının Kullanılması**  
ÇAVŞAK H., ELMAS A.  
Türkiye 19. Uluslararası Jeofizik Kongre ve Sergisi, Ankara, Turkey, 23 - 26 November 2010, vol.CD
- XXXIV. **Yedi Profil Altında 3B Gravite Hesaplarıyla Doğu Pontitlerde Kabuk Yapısı Çalışması**  
ÇAVŞAK H., ELMAS A.  
Bilimde Modern Yöntemler Sempozyumu, Diyarbakır, Turkey, 10 - 13 May 2010, vol.CD, pp.629-642

- XXXV. **Comparing of The 2D-3D Gravity Calculations in Cartesian Coordinates and 3D in Cartesian-Spherical Coordinates**  
ÇAVŞAK H., ELMAS A.  
The 4th Saint Petersburg International Conference & Exhibition, Saint Petersburg, Russia, Petersburg, Russia, 12 - 15 April 2010, vol.CD
- XXXVI. **2D Synthetic Models are tested with their 3D planning in gravity method**  
ÇAVŞAK H., ELMAS A.  
International Symposium on Engineering and Architectural Sciences of Balkan, Caucasus and Turkic Republics Conference, Isparta, Turkey, 21 - 24 October 2009, vol.1, pp.254-260
- XXXVII. **3D Modeling Of Gravity Anomalies Using 2D Synthetic Models**  
ÇAVŞAK H., ELMAS A.  
International Symposium on Engineering and Architectural Sciences of Balkan, Caucasus and Turkic Republics Conference, 10 - 13 February 2009, vol.1, pp.254-260
- XXXVIII. **Doğu Karadeniz Ve Ponditlerdeki Kabuk ve Üst Mantonun Üç Boyutlu Olarak Modellenerek, Gravite İnverziyon Hesaplarıyla Kabuk Yapısı ve Ortalama Kabuk Yoğunluğunun Tesbiti**  
ÇAVŞAK H., ELMAS A.  
Bilimde Modern Yöntemler Sempozyumu, Eskişehir, Turkey, 20 - 23 May 2008, vol.2, pp.1083-1090

## Supported Projects

- ELMAS A., PARLAK A. Y., Project Supported by Higher Education Institutions, Marmara Denizi Baseninin Tektonik ve Kabuk Yapısının WGM2012Gravite Verileri Yardımıyla Belirlenmesi, 2021 - 2023
- ŞEREN A., BABACAN A. E., ELMAS A., ŞENKAYA M., ALEMDAĞ H., Project Supported by Higher Education Institutions, 8 Yer Elektrik Çalıştayı, 2019 - 2020
- Elmas A., Çavşak H., Project Supported by Higher Education Institutions, Bilimsel Araştırma Projesi 2, 2010 - 2011
- Elmas A., Çavşak H., Project Supported by Higher Education Institutions, Bilimsel Araştırma Projesi 1, 2006 - 2008

## Scientific Refereeing

- Petroleum Research, Journal Indexed in ESCI, June 2024
- Acta Geophysica, SCI Journal, May 2024
- RESULTS IN MATERIALS, Journal Indexed in ESCI, March 2024
- MEASUREMENT SCIENCE AND TECHNOLOGY, Journal Indexed in SSCI, February 2024
- JOURNAL OF ASIAN EARTH SCIENCES, Journal Indexed in SSCI, July 2023
- Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, National Scientific Refreed Journal, June 2021

## Metrics

- Publication: 64
- Citation (WoS): 39
- Citation (Scopus): 44
- H-Index (WoS): 4
- H-Index (Scopus): 4

## Non Academic Experience

- TPAO/ANKARA
- Comenius University-Bratislava/SLOVAKIA