

## **Associate Prof. Selda Altuncu Poyraz**



### **CONTACT INFORMATION:**

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### **EDUCATION:**

**2022** B.Sc in Geographic Information Systems, Anadolu University.

**2009** Ph.D in Geophysics, İstanbul University, Department of Geophysical Engineering, İstanbul, Turkey.

**2001** M.Sc in Geophysics, Süleyman Demirel University, Department of Geophysical Engineering Isparta, Turkey.

**1997** B.Sc in Geophysics, Süleyman Demirel University, Department of Geophysical Engineering Isparta, Turkey.

### **WORK EXPERIENCE:**

**2022-** :Assistant Manager, Boğaziçi University, Kandilli Observatory and Earthquake Research Institute, Regional Earthquake and Tsunami Monitoring Center, İstanbul, Turkey.

**2005-2022** :Geophysical Engineer, Boğaziçi University, Kandilli Observatory and Earthquake Research Institute, Regional Earthquake and Tsunami Monitoring Center, İstanbul, Turkey.

**2019:** Visitor Lecturer, Medeniyet University, İstanbul.

**June 2013- July 2013:** Visitor Researcher, University of Leeds, School of Earth and Environment, Leeds/England.

**2000-2005:** Lecturer, Süleyman Demirel University, Earthquake and Geotechnical Research Center, Isparta, Turkey.

**INTERESTED AREA:**

Determination of Earthquake Location  
Analysis & Reading of Seismogram  
Fault Plane Solution/Moment Tensor Inversion Studies,  
Earthquake Catalogue Studies (Instrumental and Historical Period)  
Local Shear Wave Splitting  
Geographic Information System  
Receiver Function Studies  
Archaeogeophysics  
Resistivity Studies  
Preparedness for disaster

**SELECTED PROJECTS:**

**Researcher**, 2023. *Imaging focal zone of the 2023 Kahramanmaraş earthquakes by electromagnetic methods*, Japan Science and Technology Agency (JST), J-Rapid Project

**Project manager**, 2020. *Investigation of Temporal and Spatial Distribution of Noise Sources in RETMC Seismic Network*, Project code:15381/Boğaziçi University, Scientific Research Projects

**Project manager**, 2014-2015. Crustal Anisotropy Beneath the Western Segment of North Anatolian Fault Zone from Local Shear-Wave Splitting, Project code:9406 /Boğaziçi University, Scientific Research Projects

**Researcher**, 2012-2015. Deep crustal structure of the North Anatolian Fault Zone and the Earthquake Cycle, Leeds University (Natural Environment Research Council)

**Researcher**, 2013. Global Historical Earthquake Catalogue and Database (GEM)

**Project manager**, 2010-2012. Update the database of National Earthquake Monitoring Center and implemented to Geographic Information System, Project code:5556 /Boğaziçi University, Scientific Research Projects

**Publications in National and International Journals:**

**Altuncu Poyraz, S.**, 2023. *An investigation of seismic anisotropy in the crust beneath the western part of the North Anatolian Fault Zone*, Tectonophysics, 865, pg.230037.

**Altuncu Poyraz, S.**, 2023. *Crustal thicknesses on Thrace Basin via receiver function*, Journal of Radiation Research and Applied Sciences, 16 (4), pg.100739.

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Necmioğlu, Ö., Turhan, F., Özer Sözdinler, C., Yılmazer, M., Güneş, Y., Cambaz, M. D., **Altuncu Poyraz, S.**, Ergün, T., Kalafat, D., Özener, H., **2021. KOERI's Tsunami Warning System in the Eastern Mediterranean and Its Connected Seas: A Decade of Achievements and Challenges**, Applied Science, 11(23).

Rost, S., Houseman, G., Frederiksen, A.F., Cornwell, D. G., Kahraman, M., **Altuncu Poyraz, S.**, Teoman, U.M., Thompson, D. A., Türkelli, N., Gülen, L., Utkucu, M., Wright, T. J., 2021. *Structure of the northwestern North Anatolian Fault Zone imaged via teleseismic scattering tomography*, Geophysical Journal International, 227 (2), pg. 922-940.

Cambaz, M.D., Özer, M., Güneş, Y., Ergün, T., Öğütçü, Z., Altuncu Poyraz, S., Köseoğlu, A., Turhan, F., Yılmazer, M., Kekovalı, K., Necmioğlu, Ö., Kalafat, D., Çaklı, E., Özener, H., 2021. *Evolution of the Kandilli Observatory and Earthquake Research Institute (KOERI) Seismic Network and the Data Center Facilities as a Primary Node of EIDA*, Seismological Research Letter (SRL), 92(3), pg. 1571-1580.

**S. Altuncu Poyraz**, D. Kalafat, Y. Güneş, F. Turhan, R. Polat, 2020. *Türkiye ve Civarı Sismik Moment Tensör Kataloğu:2016-2019*, Mühendislik Bilimleri ve Tasarım Dergisi, Volume 8, Issue 4, 1150-1141 pg.

**S. Altuncu Poyraz**, D. Aksarı, T. Ergün, U. M. Teoman, A. Pınar, 2019. *The December 2nd, 2015 Bingöl, Eastern Anatolia-TURKEY, Earthquake (Mw=5.3): A Rupture on Optimally Oriented Fault Plane*, Journal of Asian Earth Sciences, Volume 173, 88-97pg.

S. Özden,S.Över, **S. Altuncu Poyraz**, Y.Güneş, A. Pınar, 2018. *Tectonic Implications of the 2017 Ayvacık (Çanakkale) Earthquakes, Biga Peninsula, NW Turkey*,Journal of Asian Earth Sciences, 154 (2018), 125-141p.

M. Kahraman, D.G. Cornwell, D. Thompson, S. Rost, G.A. Houseman, N. Türkelli, U.M. Teoman, **S. Altuncu Poyraz**, M. Utkucu, L. Gülen, 2015. *Crustal-scale shear zones and heterogeneous structure beneath the North Anatolian Fault Zone, Turkey, revealed by a high-density seismometer array*, EPSL (Earth and Planetary Sience Letters),430 (2015) 129–139.

**S. Altuncu Poyraz**, M.U. Teoman, N. Türkelli, M. Kahraman, D. Cambaz, A. Mutlu, S. Rost , G. A. Houseman , D.A. Thompson , D. Cornwell, M. Utkucu, L. Gülen, 2015 . *New constraints on micro-seismicity and stress state in the western part of the North Anatolian Fault Zone: Observations from a dense seismic array*, Tectonophysics, 656, sf. 190-201, doi:10.1016/j.tecto.2015.06.022.

A.W. Frederiksen, D. Thompson, S. Rost, D.G. Cornwell, L. Gülen, G.A. Houseman, M. Kahraman, **S.A. Poyraz**, U.M. Teoman, N. Türkelli and M. Utkucu, 2015. *Crustal thickness variations and isostatic disequilibrium across the North Anatolian Fault, western Turkey*, Geophysical Research Letters, 42, 3, 751-757, DOI: 10.1002/2014GL062401.

<https://abdn.elsevierpure.com/en/publications/crustal-thickness-variations-and-isostatic-disequilibrium-across-/persons/>

**Altuncu Poyraz, S.**, Pınar, A., Özden, S., Tunçer, M.K., 2014. *Implications of the 2007's Earthquake Activity in Eğirdir Lake (SW Anatolia) based on Moment Tensor Solutions and Inversion of Stress State*, Pure and Applied Geophysics, 171,7, 199-1309, DOI: 10.1007/s00024-013-0715-5.  
<http://link.springer.com/article/10.1007%2Fs00024-013-0715-5>

Seray Ç. Yıldız, Suha Özden, S. Zeki Tutkun, Özkan Ateş, **Selda A. Poyraz**, Sevinç K. Yeşilyurt, Öznur Karaca, 2013. *Ganos Fayı Boyunca Geç Senozoyik Yaşılı Gerilme Durumları, KB Türkiye (Late Cenozoic Stress States along the Ganos Fault, NW Turkey)*, Bulletin of Geology,56, no:1.

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**Selda Altuncu Poyraz** ve Doğan Kalafat, 2012. *Applications of GIS in Seismology*, Journal of Geophysics, no:17, pg:25-37, doi 12 b03 geophysics-0312-20.

[https://www.researchgate.net/publication/263887533\\_Applications\\_of\\_GIS\\_in\\_Seismology](https://www.researchgate.net/publication/263887533_Applications_of_GIS_in_Seismology)

**Selda Altuncu Poyraz**, M. Alper Şengül, Ali Pınar, 2011. *23 Ekim 2011 Van-Tabanlı Depremi Kaynak Mekanizması ve Sismotektonik Yorumu (Source Rupture Process and Seismotectonic Implication of Van Tabanlı Earthquake, October 23, 2011*, Journal of Istanbul Earthsciences, 24,2,pg.129-139.

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M. Alper Şengül, **Selda Altuncu Poyraz**, Ali Ozvan, Mucip Tapan, Doğan Kalafat, 2010. *Focal Mechanism Solutions and Soil-Structure Interaction Features of Hakkari-Sütlüce Earthquake, January 25, 2005*, Journal of Istanbul Earthsciences, 23, 1, pg.9-18.

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M.Nuri Dolmaz, Erdinç Öksüm, Yalçın Kalyoncuoğlu, Ömer Elitok, İbrahim Aydin, **Selda Altuncu**, 2009. *Investigation of the Lithospheric Structure in the Southeastern Anatolian Collision Zone (Malatya-Elaziğ-Bingöl-Diyarbakır-Adıyaman) with Magnetic and Gravimetric Methods*, Journal of Istanbul Earthsciences, 22, 2, pg.105-118.

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Yalçın Kalyoncuoğlu, Osman Uyanık, **Selda Altuncu**, Elçin Geçim, 2006. *An Alternative Method for the Estimation of b-value in the Gutenberg-Richter Relation with Application in Southwest of Turkey*, Dokuz Eylül University, Faculty of Engineering, Journal of Science and Engineering, 8, 2, pg.67-78.

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