Mustafa Üstüner, Ph.D.

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About

- I am currently an Assistant Professor in the Department of Climate Science and Meteorological Engineering at Samsun University. My research focuses on remote sensing for environmental monitoring and agricultural applications. My doctoral dissertation, *'Crop Classification with Polarimetric Synthetic Aperture Radar Images: Comparative Analysis'"*, evaluated polarimetric features and target decomposition methods to improve crop classification using advanced machine learning techniques. More recently, I have worked with multi-sensor EO data for environmental monitoring and assessment.

Employment History

2025 – · · ·
- **Assistant Professor,** Climate Science and Meteorological Engineering, Samsun University, Türkiye
- **Associate Member,** Institute for Biodiversity and Sustainable Development (IBSD), Universiti Teknologi MARA, Malaysia

2021 – 2025
- **Assistant Professor,** Geomatic Engineering, Artvin Coruh University, Türkiye

2010 – 2020
- **Research Assistant,** Geomatic Engineering, Yıldız Technical University, Türkiye

Education

2014 – 2020
- **Ph.D., Geomatic Engineering** in Yıldız Technical University, Türkiye.
  Thesis title: *Crop classification with polarimetric synthetic aperture radar images: Comparative analysis (in English)*

2011 – 2014
- **M.Sc. Geomatic Engineering** in Yıldız Technical University, Türkiye.
  Thesis title: *Comparative sensitivity analysis of kernel parameters for support vector machines on land use classification: A case study of RapidEye and Spot (in Turkish).*

2006 – 2010
- **B.Sc. Geodesy and Photogrammetry Engineering** in Karadeniz Technical University, Türkiye.

Visiting Research

2018 – 2019
- **Department of Earth Observation, Institute for Geography** in Friedrich Schiller University, Jena, **Germany**. (Supervision: Prof. Dr. Christiane Schmullius, Chair for Remote Sensing, Institute for Geography, Friedrich-Schiller-Universitat Jena)

2013 – 2013
- **Geospatial Analytics Lab (G-SAL)** in University of South Florida St.Petersburg, St. Petersburg, FL, **United States of America**. (Supervision: Prof. Dr. Barnali Dixon, Director of the Geospatial Analytics Lab (G-SAL) at USF)

Projects

2025-2027
- [**Researcher**] Project Title: SylvaSense – Mapping and Monitoring Fagus sylvatica in Türkiye Using Remote Sensing and Machine Learning Techniques [**International- TUBITAK 2515 - COST Action Members R&D Support Program**] **Theme**: Forest

Projects (continued)

2023-2025 • [**Researcher**] Project Title: Monitoring Rice Fields by Joint Use of Multi-temporal SAR and Optical Data for Yield and Growth Estimation [**International- TUBITAK - 2502 - Research Projects- Bilateral Cooperation Support Program with Bulgarian Academy of Sciences (BAS)**] **Theme**: Agriculture

2020-2024 • [**Researcher**] Project Title: Global climate change, sea level Rise, Extreme Events and local ground subsidence effects in coastal and river delta regions through Novel and Integrated remote sensing approacHes (GREENISH) [**International- ESA-Most China Programme**]

Invited Lecturer

Invited Lecture and Hands-on-Training

2025 • Short training course on" **Crop Monitoring by Using Remote Sensing Techniques**", organized by Asia-Pacific Space Cooperation Organization (APSCO) in collaboration with Turkish Space Agency (TUA) and TÜBİTAK Space Technologies Research Institute (UZAY), from 12-16 May 2025, in Kusadasi, Aydin/Izmir, Türkiye.
(Introduction to SAR Remote Sensing: From Theory to Applications, including Hands-on-Training)

Keynote Speaker

Keynote Speech

2025 • Keynote presentation on" **Synthetic Aperture Radar (SAR) for Disaster Detection**", in the 6th Geoplanning International Conference and Scientific Consortium, Diponegoro University, Semarang, Indonesia, held on Wednesday, 6th August 2025. More at: `https://geoplanning.id/`

Teaching Portfolio

Undergraduate Level

- **Photogrammetry**, Artvin Coruh University, Turkiye.
- **Digital Image Processing**, Artvin Coruh University, Turkiye.
- **Computer Programming I (Fortran)**, Samsun University, Turkiye
- **Geographic Information Systems (GIS)**, Samsun University, Turkiye.

Graduate Level

- **Classification of Remotely Sensed Data: Theory and Applications**, Artvin Coruh University, Turkiye.
- **Processing of Polarimetric SAR Data and Information Extraction**, Artvin Coruh University, Turkiye.
- **Machine Learning for Remote Sensing**, Artvin Coruh University, Turkiye.

Miscellaneous Experience

Awards

2018 • **Top 1% of Reviewers in Geosciences**, Publons Peer Review Awards 2018.

Academic Metric

2025 • **Google Scholar**, Citations= 1316, h-index=13 (as of November 6, 2025)

Miscellaneous Experience (continued)

Editorial Board Member

2020 • **Geoplanning: Journal of Geomatics and Planning**, Associate Editor
2022 • **European Journal of Remote Sensing**, Editorial Board Member
2023 • **Remote Sensing**, (Special Issue G. Editor) MDPI
• **Resilience**, (Section Editor) Dergipark
2025 • **Turkish Journal of Remote Sensing**, Co-Editor
• **Samsun Aviation and Aeronautical Research Journal**, Associate Editor

Organizing Committee Member

2020 • **2020 IEEE International Geoscience and Remote Sensing Symposium** (IGARSS 2020)
2022 • **2022 IEEE Mediterranean and Middle-East Geoscience and Remote Sensing Symposium**
2023 • **2023 IEEE International Geoscience and Remote Sensing Symposium** (IGARSS 2023)
2024 • **2024 IEEE Mediterranean and Middle-East Geoscience and Remote Sensing Symposium**
2026 • **2026 IEEE Mediterranean and Middle-East Geoscience and Remote Sensing Symposium**

Scientific Committee Member

2023 • **10th International Conference on Recent Advances in Air and Space Technologies** (RAST2023)
2026 • **11th International Conference on Recent Advances in Air and Space Technologies** (RAST2026)

Research Publications

Journal Articles

1. H. Catal Reis, V. Turk, C. M. Kaya Yildiz, M. F. Bozkurt, S. N. Yigit, and **M. Ustuner**, "A deep neural network combined with a two-stage ensemble model for detecting cracks in concrete structures," *Frontiers of Structural and Civil Engineering*, 2025. DOI: 10.1007/s11709-025-1199-y
2. H. Catal Reis, V. Turk, **M. Ustuner**, C. M. Kaya, and R. Tatli, "Post-seismic structural assessment: Advanced crack detection through complex feature extraction using pre-trained deep learning and machine learning integration," *Earth Science Informatics*, vol. 18, no. 151, 2025. DOI: 10.1007/s12145-024-01659-y
3. N. Elmastas, F. Adiguzel, **M. Ustuner**, M. Cetin, A. Alkan, and A. Sahap, "Determining climatic risks in the eastern anatolia region using the wind chill index, türkiye," *Air Quality, Atmosphere & Health*, pp. 1–12, 2025.
4. S. Hajaj, A. El Harti, A. B. Pour, Y. Khandouch, **M. Ustuner**, and M. M. Amiri, "Balancing hyperspectral dimensionality reduction and information preservation for machine learning-based lithological classification using enmap hyperspectral imagery," *Remote Sensing Applications: Society and Environment*, vol. 38, no. 1, p. 101 618, 2025. DOI: 10.1016/j.rsase.2025.101618
5. S. Hajaj et al., "Evaluation of heterogeneous ensemble learning algorithms for lithological mapping using enmap hyperspectral data: Implications for mineral exploration in mountainous region," *Minerals*, vol. 15, no. 8, p. 833, 2025. DOI: 10.3390/min15080833
6. O. G. Narin et al., "Integration of multi-temporal sentinel-1 and sentinel-2 data for paddy rice crop height estimation and uncertainty assessment using quantile regression forests," *Precision Agriculture*, vol. 26, no. 6, pp. 1–28, 2025.

7 **M. Ustuner** and F. F. Simsek, "An assessment of training data for agricultural land cover classification: A case study of Bafra, Türkiye," *Earth Science Informatics*, vol. 18, no. 1, p. 7, 2025. DOI: 10.1007/s12145-024-01555-5

8 F. Yilgan, M. Miháliková, R. S. Kara, and **M. Ustuner**, "Analysis of the forest fire in the 'Bohemian Switzerland' national park using Landsat-8 and Sentinel-5p in Google Earth Engine," *Natural Hazards*, vol. 121, no. 5, pp. 6133–6154, 2025. DOI: 10.1007/s11069-024-07052-8

9 S. A. Salleh et al., "Support vector machine (svm) and object based classification in earth linear features extraction: A comparison," *Revue Internationale de Geomatique*, vol. 33, no. 0, pp. 183–199, 2024. DOI: https://doi.org/10.32604/rig.2024.050723

10 **M. Ustuner**, "Computer processing of remotely-sensed images [book reviews]," *IEEE Geoscience and Remote Sensing Magazine*, vol. 12, no. 3, pp. 207–208, 2024. DOI: 10.1109/MGRS.2024.3436845

11 M. Zhang et al., "Impact of urban surfaces on microclimatic conditions and thermal comfort in Burdur, Türkiye," *Atmosphere*, vol. 15, no. 11, 2024, ISSN: 2073-4433. DOI: 10.3390/atmos15111375

12 Q. Zhao et al., "Innovative remote sensing methodologies and applications in coastal and marine environments," *Geo-Spatial Information Science*, vol. 27, no. 3, pp. 836–853, 2024.

13 **M. Ustuner**, "Çekirdek tabanlı aşırı öğrenme makinesi ile hiperspektral görüntü sınıflandırma (kernel extreme learning machine for hyperspectral image classification)," *Türk Uzaktan Algılama ve CBS Dergisi (Turkish Journal of Remote Sensing and GIS)*, vol. 4, no. 2, pp. 198–212, 2023. DOI: 10.48123/rsgis.1237772

14 N. H. Zakaria et al., "Conceptualizing spatial heterogeneity of urban composition impacts on precipitation within tropics," *International Journal of Sustainable Construction Engineering and Technology*, vol. 14, no. 5, pp. 145–160, 2023.

15 A. Ertürk, G. Taskin, A. Ö. Ok, **M. Ustuner**, and K. Kayabol, "2021 IEEE GRSS Turkey chapter activities [chapters column]," *IEEE Geoscience and Remote Sensing Magazine*, vol. 10, no. 1, pp. 352–354, 2022. DOI: 10.1109/MGRS.2022.3146186

16 S. Madenoğlu et al., "Toprak neminin yarı kurak alanlarda çok zamanlı radarsat-2 verileri ile incelenmesi (analysis of soil moisture in semi-arid areas with multi-temporal radarsat-2 data)," *Jeodezi ve Jeoinformasyon Dergisi (Journal of Geodesy and Geoinformation)*, vol. 9, no. 1, pp. 1–11, 2022. DOI: 10.9733/JGG.2022R0001.T

17 **M. Ustuner** and F. B. Sanli, "Crop classification from multi-temporal polsar data with regularized greedy forest," *Advanced Remote Sensing*, vol. 1, no. 1, pp. 10–15, 2021.

18 **M. Ustuner**, S. Abdikan, G. Bilgin, and F. Balık Şanlı, "Hafif gradyan artırma makineleri ile tarımsal ürünlerin sınıflandırılması (crop classification using light gradient boosting machines)," *Türk Uzaktan Algılama ve CBS Dergisi (Turkish Journal of Remote Sensing and GIS)*, vol. 1, no. 2, pp. 97–105, 2020.

19 **M. Ustuner** and F. Balık Şanlı, "Çok zamanlı polarimetrik sar verileri ile tarımsal ürünlerin sınıflandırılması (crop classification using multi-temporal polarimetric sar data)," *Jeodezi ve Jeoinformasyon Dergisi (Journal of Geodesy and Geoinformation)*, vol. 7, no. 1, pp. 1–10, 2020. DOI: 10.9733/JGG.2020R0001.T

20 R. Nasirzadehdizaji, F. Balik Sanli, S. Abdikan, Z. Cakir, A. Sekertekin, and **M. Ustuner**, "Sensitivity analysis of multi-temporal sentinel-1 sar parameters to crop height and canopy coverage," *Applied Sciences*, vol. 9, no. 4, p. 655, 2019.

21 **M. Ustuner** and F. Balik Sanli, "Polarimetric target decompositions and light gradient boosting machine for crop classification: A comparative evaluation," *ISPRS International Journal of Geo-Information*, vol. 8, no. 2, p. 97, 2019.

22. M. T. Esetlili et al., "Comparison of object and pixel-based classifications for mapping crops using rapideye imagery: A case study of menemen plain, Turkey," *International Journal of Environment and Geoinformatics*, vol. 5, no. 2, pp. 231–243, 2018.

23. **M. Ustuner** and F. Balık Şanlı, "Evaluating training data for crop type classification using support vector machines and random forests," *Geodetski glasnik*, vol. 51, no. 48, 2017.

24. **M. Ustuner**, M. Esetlili, F. Sanli, S. Abdikan, and Y. Kurucu, "Comparison of crop classification methods for the sustainable agriculture management," *J. Environ. Prot. Ecol*, vol. 17, no. 2, pp. 648–655, 2016.

25. S. Abdikan, G. Bilgin, F. B. Sanli, E. Uslu, and **M. Ustuner**, "Enhancing land use classification with fusing dual-polarized terrasar-x and multispectral rapideye data," *Journal of Applied Remote Sensing*, vol. 9, no. 1, pp. 096 054–096 054, 2015.

26. **M. Ustuner**, F. B. Sanli, and B. Dixon, "Application of support vector machines for landuse classification using high-resolution rapideye images: A sensitivity analysis," *European Journal of Remote Sensing*, vol. 48, no. 1, pp. 403–422, 2015.

Conference Proceedings

1. S. Abdikan et al., "Exploring sentinel-1 and sentinel-2 time series sensitivity to rice height," in *2024 IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor)*, 2024, pp. 672–676. DOI: 10.1109/MetroAgriFor63043.2024.10948853

2. **M. Ustuner**, "Randomized principal component analysis for hyperspectral image classification," in *2024 IEEE Mediterranean and Middle-East Geoscience and Remote Sensing Symposium (M2GARSS)*, 2024, pp. 26–30. DOI: 10.1109/M2GARSS57310.2024.10537329

3. **M. Ustuner**, "Classification of urban areas using gaofen-3 sar data by lightgbm," in *XXIII Conference of PhD Students and Young Scientists*, 2023.

4. **M. Ustuner**, "Polarimetrik sar görüntülerinin rotasyon orman algoritması ile sınıflandırılması (classification of polarimetric sar images with rotation forest algorithm)," in *TUFUAB 12. Teknik Sempozyumu*, 2023.

5. **M. Ustuner**, "Synergistic use of optical and synthetic aperture radar data for improving land cover classification: A case study for munich," in *8th International Scientific Conference "Telecommunications, Informatics, Energy and Management" – TIEM 2023*, 2023.

6. S. R. Reyes, C. Cruz, **M. Ustuner**, C. Jjuuko, and S. Guliyeva, "Creative strategies in navigating the new normal: Advancing the contributions of the isprs student consortium as an international organization," in *XXIV ISPRS Congress (2021 edition)*, vol. V-5-2021, 2021, pp. 23–30. DOI: 10.5194/isprs-annals-V-5-2021-23-2021

7. S. Abdikan, C. Bayik, **M. Ustuner**, and F. Balik Sanli, "Repeat-pass interferometric and backscatter analysis of x-band paz satellite – first results," in *XXIV ISPRS Congress (2020 edition)*, vol. XLIII-B3-2020, 2020, pp. 253–258. DOI: 10.5194/isprs-archives-XLIII-B3-2020-253-2020

8. S. R. Reyes et al., "The isprs student consortium: Sustaining relevance and creating shared visions for the youth," in *XXIV ISPRS Congress (2020 edition)*, vol. 5, 2020, pp. 39–46. DOI: 10.5194/isprs-annals-V-5-2020-39-2020

9. A. A. Sahin, **M. Ustuner**, and N. M. Pınar, "The impact of environmental factors and tree cover density on allergenic cupressaceae and platanuspollen exposure in urbanized region: Ankara case," in *7th European Symposium on Aerobiology*, 2020, p. 74.

10. S. Abdikan, C. Bayik, **M. Ustuner**, and F. Balik Sanli, "An assessment of urban area extraction using alos-2 data," in *9th International Conference on Recent Advances in Space Technologies, RAST2019*, 2019. DOI: 10.1109/RAST.2019.8767819

11. **M. Ustuner** and F. Balik Sanli, "Multitemporal sar classification of urban areas using extremely randomized trees," in *International Symposium on Applied Geoinformatics (ISAG-2019)*, 2019.

12. **M. Ustuner** and F. Balik Sanli, "Regularized greedy forests for polarimetric sar image classification," in *XXIX International Symposium on Modern Technologies, Education and Professional Practice in Geodesy and Related Fields*, 2019.

13. **M. Ustuner**, F. Balik Sanli, S. Abdikan, E. Erten, and C. Lopez Martinez, "Evaluating the cloude-pottier decomposition for crop classification using multi-temporal radarsat-2 data," in *POLinSAR 2019, 9th International Workshop on Science and Applications of SAR Polarimetry and Polarimetric Interferometry*, 2019.

14. **M. Ustuner**, F. B. Sanli, S. Abdikan, G. Bilgin, and C. Goksel, "A booster analysis of extreme gradient boosting for crop classification using polsar imagery," in *2019 8th International Conference on Agro-Geoinformatics*, 2019. DOI: 10.1109/Agro-Geoinformatics.2019.8820698

15. S. Abdikan, A. Sekertekin, **M. Ustuner**, F. Balik Sanli, and R. Nasirzadehdizaji, "Backscatter analysis using multi-temporal sentinel-1 sar data for crop growth of maize in konya basin, Turkey," in *2018 ISPRS TC III Mid-Term Symposium on Developments, Technologies and Applications in Remote Sensing*, vol. 42, 2018, pp. 9–13. DOI: 10.5194/isprs-archives-XLII-3-9-2018

16. F. Balik Sanli, A. Delen, **M. Ustuner**, C. Bayik, and S. Abdikan, "Monitoring urban green space using göktürk-2 data: A case study for edirne city," in *The 2nd International Urban, Environment and Health Congress*, 2018.

17. U. Gokdag, **M. Ustuner**, G. Bilgin, and F. B. Sanli, "Kernel extreme learning machines for polsar image classification using spatial features; [uzamsal öznitelikler kullanilarak çekirdek tabanli aşiri öğrenme makineleri ile polsar görüntüsü siniflandirilmasi]," in *26th IEEE Signal Processing and Communications Applications Conference, SIU 2018*, 2018, pp. 1–4. DOI: 10.1109/SIU.2018.8404282

18. **M. Ustuner**, F. Balik Sanli, S. Abdikan, M. T. Esetlili, and G. Bilgin, "An application of roll-invariant polarimetric features for crop classification from multi-temporal radarsat-2 sar data," in *2018 ISPRS Technical Commission I Midterm Symposium on Innovative Sensing - From Sensors to Methods and Applications*, vol. 42, 2018, pp. 451–456. DOI: 10.5194/isprs-archives-XLII-1-451-2018

19. **M. Ustuner**, U. Gokdag, G. Bilgin, and F. B. Sanli, "Comparing the classification performances of supervised classifiers with balanced and imbalanced sar data sets; [egiticili siniflandirma yöntemlerinin dengeli ve dengesiz sar veri kümelerindeki başarimlarinin karşilaştirilmasi]," in *26th IEEE Signal Processing and Communications Applications Conference, SIU 2018*, 2018, pp. 1–4. DOI: 10.1109/SIU.2018.8404183

20. S. Abdikan, **M. Ustuner**, F. B. Sanli, and G. Bilgin, "Combining landsat and alos data for land cover mapping; [landsat ve alos verilerini kullanarak arazi örtüsü haritasinin oluşturulmasi]," in *2017 25th Signal Processing and Communications Applications Conference, SIU 2017*, 2017. DOI: 10.1109/SIU.2017.7960379

21. **M. Ustuner** and F. Balik Sanli, "Landsat-8 uydu görüntüsü ile arazi örtüsü sınıflandırmasında makine öğrenme algoritmalarının kullanımı," in *16 TÜRKİYE HARİTA BİLİMSEL VE TEKNİK KURULTAYI*, 2017.

22. **M. Ustuner**, G. Bilgin, and F. Balik Sanli, "Classification of sentinel-1a sar data using principal component analysis and kernel principal component analysis," in *Proceedings of the International Symposium on GIS Applications in Geography and Geosciences (ISGGG 17)*, 2017.

23. **M. Ustuner**, F. B. Sanli, G. Bilgin, and S. Abdikan, "Land use and cover classification of sentinel-ia sar imagery: A case study of istanbul; [sentinel-1a sar görüntüsü ile arazi örtüsü ve kullanimi siniflandirmasi: Istanbul örneği]," in *2017 25th Signal Processing and Communications Applications Conference, SIU 2017*, 2017. DOI: 10.1109/SIU.2017.7960373

24. S. Abdikan, F. Balik Sanli, **M. Ustuner**, and F. Calo, "Land cover mapping using sentinel-1 sar data," in *XXIII ISPRS Congress, 12–19 July 2016*, vol. XLI-B7, 2016, pp. 757–761. DOI: 10.5194/isprs-archives-XLI-B7-757-2016

25. **M. Ustuner**, F. Balik Sanli, and S. Abdikan, "Balanced vs imbalanced training data: Classifying rapideye data with support vector machines," in *XXIII ISPRS Congress, 12–19 July 2016*, vol. XLI-B7, 2016, pp. 379–384. DOI: 10.5194/isprs-archives-XLI-B7-379-2016

26. **M. Ustuner**, F. Balik Sanli, and S. Abdikan, "Bitki örtüsü indekslerinin tarımsal ürün deseni tespitindeki etkisinin araştırılması," in *6 Uzaktan Algılama Ve Cografi Bilgi Sistemleri Sempozyumu*, 2016.

27. F. Balik Sanli, **M. Ustuner**, F. Bektas Balcik, and C. Goksel, "Investigating the influence of training set size for crop type classification using rapideye," in *27th International Cartographic Conference (ICC 2015)*, 2015.

28. F. Bektas Balcik, F. Balik Sanli, C. Goksel, and **M. Ustuner**, "Coastal zone detection in istanbul using landsat 8 oli image," in *27th International Cartographic Conference (ICC 2015)*, 2015. URL: https://icaci.org/files/documents/ICC_proceedings/ICC2015/papers/17/852.html

29. Z. A. Polat, **M. Ustuner**, and M. Alkan, "On the way to vision of cadastre 2034: Cadastre 2014 performance of Turkey," in *FIG Working Week 2015 (FIG 2015)*, 2015.

30. **M. Ustuner** and F. Balik Sanli, "Testing the sensitivity of vegetation indices for crop type classification using rapideye imagery," in *FIG Working Week 2015 (FIG 2015)*, 2015.

31. **M. Ustuner**, F. Balik Sanli, and S. Abdikan, "Spektral band ve bitki indeksi seçiminin ürün deseni sınıflandırma doğruluğuna etkisi: Karşılaştırmalı analiz," in *TUFUAB 8 Teknik Sempozyumu*, 2015.

32. **M. Ustuner** and G. Bilgin, "Mitosis detection on histopathological images using statistical detection algorithms (istatistiksel tespit algoritmaları ile histopatolojik görüntülerde mitoz belirleme)," in *2015 23nd Signal Processing and Communications Applications Conference (SIU)*, 2015, pp. 540–543. DOI: 10.1109/SIU.2015.7129880

33. T. Bakırman, G. Bilgin, F. Balik Sanli, E. Uslu, and **M. Ustuner**, "Fusion and classification of synthetic aparture radar and multispectral sattellite data," in *2014 22nd Signal Processing and Communications Applications Conference (SIU)*, 2014, pp. 754–757. DOI: 10.1109/SIU.2014.6830339

34. **M. Ustuner**, F. Balik Sanli, S. Abdikan, M. T. Esetlili, and Y. Kurucu, "Crop type classification using vegetation indices of rapideye imagery," in *ISPRS Technical Commission VII Symposium*, vol. XL-7, 2014, pp. 195–198. DOI: 10.5194/isprsarchives-XL-7-195-2014

35. **M. Ustuner**, F. Balik Sanli, S. Abdikan, M. T. Esetlili, and Y. Kurucu, "Kirmizi-kenar ve yakin kizilötesi bantlarinin tarimsal ürün deseni siniflandirma dogruluğuna olan etkisinin araştirilmasi: Rapideye ornegi," in *5. Uzaktan Algılama-CBS Sempozyumu (UZAL-CBS 2014)*, 2014.

36. F. Balik Sanli, S. Abdikan, M. T. Esetlili, **M. Ustuner**, and F. Sunar, "Fusion of terrasar-x and rapideye data: A quality analysis," in *ISPRS2013-SSG*, vol. XL-7/W2, 2013, pp. 27–30. DOI: 10.5194/isprsarchives-XL-7-W2-27-2013

37. B. Bayram and **M. Ustuner**, "Yeniden örneklemenin sınıflandırma sonucuna etkisi," in *Türkiye Ulusal Fotogrametri ve Uzaktan Algılama Birliği VII. Teknik Sempozyumu (TUFUAB 2013)*, 2013.

38. **M. Ustuner**, F. Balik Sanli, F. Bektas Balcik, and M. T. Esetlili, "Destek vektör makineleri tekniği ile sınıflandırma: Rapideye örneği," in *Türkiye Ulusal Fotogrametri ve Uzaktan Algılama Birliği VII. Teknik Sempozyumu (TUFUAB 2013)*, 2013.

39. **M. Ustuner** and F. Balik Sanli, "Comparison of neural network and isodata classifiers for land cover assessment using optical data," in *FIG Commission 3 Workshop 2012 Spatial Information, Informal Development, Property and Housing*, 2012.

Books and Chapters

1 **M. Ustuner**, F. B. Sanli, and S. Abdikan, "Forest type classification using morphological operators and forest pa method," in *Earth observation advancements in a changing world (Trends in Earth Observation Book Series)*, G. Chirici and M. Gianinetto, Eds., vol. 1, published by Italian Society of Remote Sensing, 2019, pp. 49–52, ISBN: 978-88-944687-1-7. DOI: 10.978.88944687/17

References

Available upon request.