

BARIS BAKIOGLU

Field Geophysicist | Potential Field Specialist | Airborne & Marine Geophysics | Gravity & Magnetic Surveys

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PROFESSIONAL SUMMARY

Field Geophysicist and Potential Field Specialist with 10+ years of international experience in airborne, marine, and ground geophysical surveys. Experienced in gravity and magnetic data acquisition, instrumentation, technical reporting, field operations, quality control, processing and interpretation, delivering reliable and timely results for large-scale exploration programs. Currently pursuing a Ph.D. in Geology while conducting research in gravity and magnetic interpretation.

CORE COMPETENCIES

- Airborne Gravity & Magnetic Surveys
- Gravity & Magnetic Data Acquisition
- Field Operations
- Quality Control (QC)
- Instrument Calibration
- Marine Geophysics
- Oasis Montaj
- Technical Reporting
- Python (Automation, Geophysical Processing, Jupyter Notebook)

EDUCATION

- PhD in Geology (*in progress*) – University of Kansas, Aug 2024 – Present
- MS in Geological Sciences – University of South Carolina, Aug 2012 – June 2014
- BS in Geophysical Engineering – Sakarya University, Sep 2005 – June 2009.

PROFESSIONAL EXPERIENCE

Graduate Teaching & Research Assistant – University of Kansas | July 2024 – Present

- Conducting research integrating gravity, magnetic, remote sensing, and structural interpretation for basement characterization and natural hydrogen exploration.
- Teaching undergraduate geology laboratories

Department Manager – Gravity, Magnetism & Remote Sensing – TPAO | May 2022 – June 2024

- Managed multidisciplinary geophysical programs valued at over **US\$5 million**, coordinating technical, operational, and contractor activities. Oversaw acquisition of 100,000+ line-km of marine gravity/magnetism data.
- Designed technical training programs for in-house geophysicists.
- Coordinated directly with international contractors throughout survey planning, acquisition, QC, and project delivery.

Mid-Senior Geophysicist – TPAO | November 2017 – May 2022

- Served as the technical client representative for international airborne and marine geophysical acquisition projects.
- Led QC and processing for \$2M marine datasets, optimizing interpretation timelines.
- Developed *Oasis Montaj* scripts to automate processing and improve reproducibility.

- Produced integrated interpretation products influencing exploration drilling.
- Prepared technical specifications and managed international geophysical acquisition contracts.

Geophysicist – TPAO | November 2014 – November 2017

- Managed survey planning, gravimeter & magnetometer calibration, and field execution.

SELECTED PROJECT ACHIEVEMENTS

- **Airborne Gravity & Magnetics Survey – SE Turkey:** \$1.2M project covering 75,000 km²; delivered structural maps ahead of schedule.
- **Marine Gravity QC & Processing – Mediterranean & Black Sea:** Reduced data turnaround by 25%, improving exploration timelines.

FIELDWORK EXPERIENCE

- Supervised airborne gravity and magnetic survey acquisition during 200+ flight hours.
- Participated in 30-day offshore marine geophysical campaigns.
- Conducted field operations across remote and mountainous terrain.
- Worked closely with pilots, survey crews, and acquisition contractors.

INSTRUMENTATION & TOOLS

- Gravimeters: Scintrex CG-5, Scintrex Marine Gravimeter System-6
- Magnetometers: Scintrex ENVI Pro, Geometrics G-882

SOFTWARE & PROGRAMMING

- Oasis Montaj
- ArcGIS / ArcMap
- Kingdom Suite
- Python
- MATLAB

AWARDS & CERTIFICATIONS

- SEG Lucien LaCoste Scholarship (2026)
- James A & Rowena E Peoples Summer Research Scholarship (2025)
- Excellence in Graduate Teaching Award – University of Kansas (2025)
- Presenter Award – National Geodesy Commission of Turkey (2016)

SELECTED PUBLICATIONS & TECHNICAL PRESENTATIONS

1. Bakioglu, K.B, 2026. Integrated Potential-Field Analysis of Basement Structure and Fault Reactivation in the Midcontinent Rift (Kansas). Poster Session in IMAGE2026.
2. Yilmaz Oz et al., 2025. 3-D seismic delineation of the North Anatolian Fault System shear zone in the Western Half of Marmara Basin, Türkiye. Journal of Tectonophysics.
3. Bakioglu, K.B, & Kulunk H. S, 2021. Acquisition, Data Processing and Quality Control of Raw Marine Gravity Data in Turkish Petroleum (in Turkish). National Geodesy Commission
4. Saeid E. et al. Garzon Massif Basement Tectonics: Structural Control on Evolution of Petroleum Systems in Upper Magdalena and Putumayo Basins, Colombia. Journal of Marine and Petroleum Geology.