

## GEOSA has sponsored the Arabic papers sessions during Dubai geospatial week 2025

The General Authority for Survey (GEOSA) has sponsored Arabic-language scientific papers during the 2025 Geospatial week in Dubai.

GEOSA as ordinary member representing Saudi Arabia appreciates the ISPRS Society's Council for the organization's support during the Dubai 2025 Geospatial week and the event organizers, the Sheikh Mohammed bin Rashid space Center.

GEOSA participated in the Dubai Geospatial Week 2025 by sponsoring the event and holding an exhibition that reflected the Authority's activities, work, and pioneering national role in the geospatial sector. GEOSA contributes to supporting researchers and students participating with scientific papers during the Geospatial Week 2025.

The scientific Arabic papers included 14 geospatial research papers from several universities in the Arabian Gulf region, presented by students, researchers, and those interested in the geospatial field. The sessions were held in Tuesday 8<sup>th</sup> April 2025 from 8 am to 6 pm. The topics of papers are:

- 1- Applying spatial suitability to select the best new residential suburb in Riyadh using artificial intelligence.
- 2- Applying remote sensing and geographic information systems techniques to study desertification indicators in the Qassim region.
- 3- Factors affecting the displacement of the oil spill in the Gulf
- 4- Factors affecting the sustainability of water ponds in Qalta Umm Qalida in the Armah Mountains using geographic information systems and remote sensing
- 5- Selecting the most suitable sites for building solar power plants in Arar City using geographic information systems.
- 6- Using geosensors and deep learning techniques for ecosystem monitoring: Mapping trees associated with nectar sources using aerial and satellite imagery
- 7- Developing geospatial capabilities through the Space Data Complex
- 8- Using KhalifaSat, remote sensing, and artificial intelligence to extract data
- 9- Changes in vegetation density in Rawdat Khuraim, Saudi Arabia, during the period 1998-2021 using remote sensing and geographic information systems.
- 10- A sustainable approach to heritage management using integrated geospatial technologies
- 11- The Role of Remote Sensing and Artificial Intelligence in Serving Sustainability Efforts in the United Arab Emirates

12- Using deep learning and machine learning algorithms to map natural resources in the northern United Arab Emirates

13- Building a digital model of AlUla's tourist routes

14- Real-time detection of vehicles crossing Raspberry Pi emergency lanes.

The main goal of GEOSA in this event is motivating and encouraging Arabic-speakers' researchers, students, and academics in region to share their efforts and knowledge.

<https://gsw2025.ae/agenda/arabic/arabic.pdf>

