

Youth Forum on Drought Monitoring in Central Asia

As climate change and its impacts become an increasingly pressing issue for Central Asia, holding the Central Asian Youth Drought Monitoring Forum is not only a scientific but also a strategically important initiative. Particularly significant is the fact that the forum is being organized within the framework of the international conference "Space Technology Conference 2026."

The event was attended by representatives of the regional nodes of the ESCAP drought management mechanism from China, India and Russia, international experts, representatives of government agencies, universities and research centers, as well as young researchers and students under 35 years of age.

It should be noted that, despite the significant potential of Central Asian countries, the region faces serious climate risks. Drought has a significant impact on agriculture, water resources, and economic stability, making the transition from reactive to proactive risk management a strategic priority.

In this context, modern space technologies are the most relevant solution. Satellite data and Earth observation systems allow for the rapid acquisition of objective information about the environment, forecasting changes, and making informed decisions.

The forum is also in line with the 2022 Jakarta Ministerial Declaration, which aims to engage youth in space activities and achieve the Sustainable Development Goals. It demonstrates an effective model of collaboration between research centers, space agencies, international organizations, and higher education institutions, facilitating knowledge sharing and building a regional community of experts.

The event is part of the ESCAP project "Strengthening the Capacity of Central Asian Countries to Use Earth Observation Technologies and Geospatial Data for Agriculture and Drought Monitoring." The project aims to develop the capacity of Kyrgyzstan, Tajikistan, and Uzbekistan.

Uzbekistan is also conducting systematic work in this area. In particular, the Uzbekcosmos Agency is actively implementing space technologies. Key results include:

- implementation of monitoring systems based on Earth remote sensing;
- assessment of agricultural lands and identification of water shortage risks;
- monitoring of water resources using satellite data;
- development of analytical GIS maps;
- expansion of international cooperation.

The forum is expected to showcase innovative ideas from young people, develop collaborative platforms based on geospatial analysis and open source software,

establish a regional network of young researchers, and strengthen links between education and practice.

Thus, the Central Asian Youth Drought Monitoring Forum is not just a scientific event, but an investment in the future of the region.

Holding the forum as part of the Space Technology Conference 2026 creates a solid foundation for new scientific initiatives and innovative solutions, contributing to the sustainable development of Central Asia.