

# Special Issue No.3

## Central Asia Journal of Water Research

<http://www.water-ca.org/>



**Tentative Title:** Application of earth observation tools in water and land resource management in Central Asia, Armenia and Afghanistan.

**Scope:** Many internationally funded research projects on land and water resources have been implemented in Central Asia over the past decade generating new data sets, new insights into these issues, and improving water and land management in Central Asia based on sound scientific information. The proposed Special Issue (SI) would be focused on the application of earth observation tools in the management of water resources, addressing landscape degradation (e.g., water and soil salinization) and suggesting potential best management practices in land and water resource usage such as bioremediation, in order to promote their sustainable development and food security in the region and neighbor countries. The SI will provide a platform for the exchange of results from projects and aims to identify future research priorities for sustainable development in Central Asia.

This multidisciplinary publication will include contributions from hydrologists, geoscientific, environmental, policy and socio-economic research communities. Selected papers will address such issues as:

### **Earth observation applications**

- Monitoring and assessment of water and land resources, particularly agrarian landscapes
- Climate change, its impact on water land resources
- Climate smart technologies/practices
- Changes in the cryosphere and hydrology
- Innovative tools for scientific investigations and water management
- Modeling of water resources and land use change

### **Water resources assessment including quantity and quality**

### **Agricultural, industrial, and urban waste and contamination**

### **Salinization of water and land resources**

- Desalinization or amelioration methods for land and water resources

### **Transformation processes in the water sector of Central Asia**

- Institutional cooperation
- Legal framework
- Socio-economic and financial analyses
- Water policy
- Transboundary water issues

**Funding partner:** ISTC

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