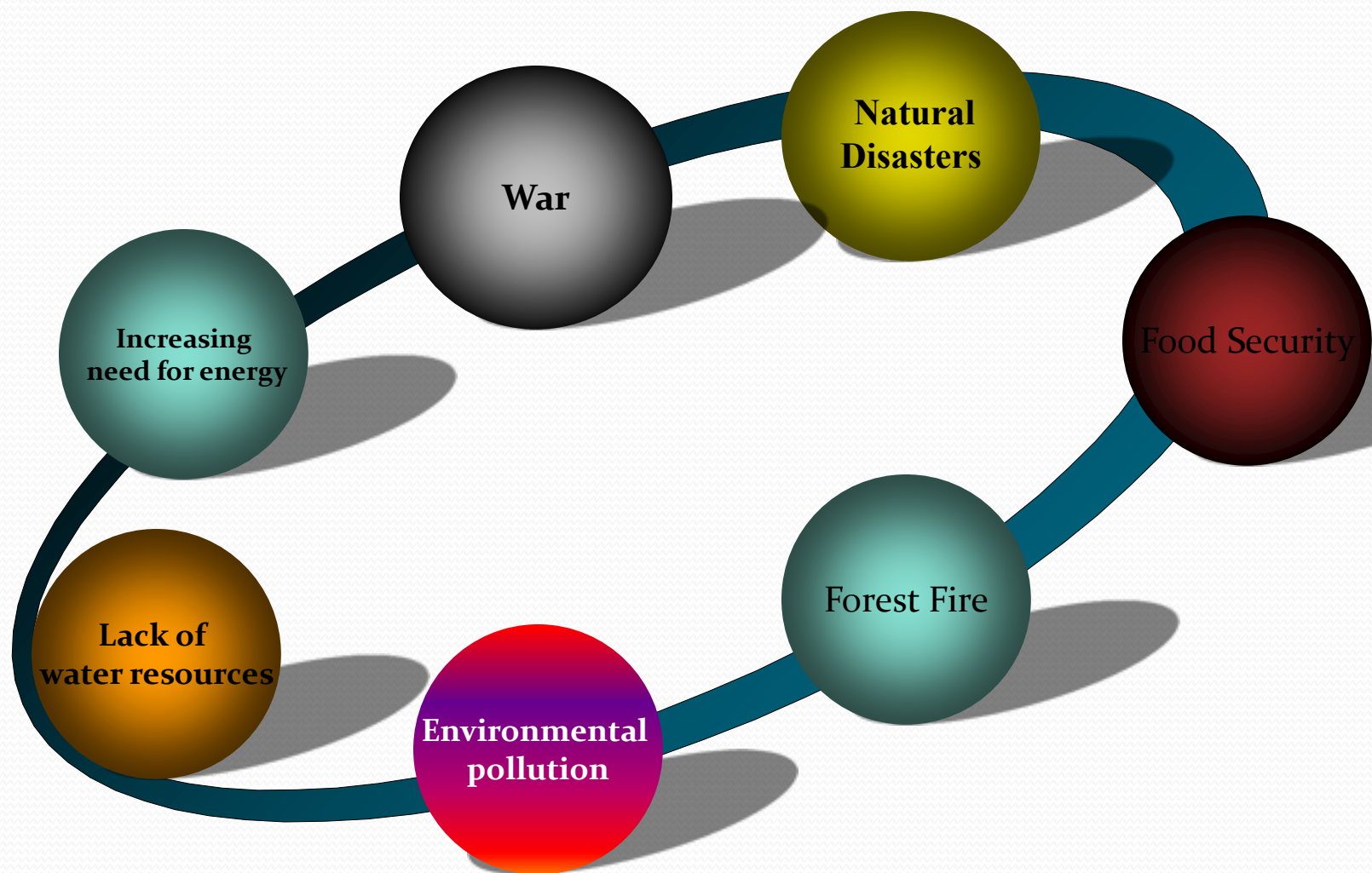


The use of space technologies in disaster risk management

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National Center for Earth Observation System

rs.isa.ir



مورالیک ماهواره از تصاویر هادیس



1384-01-01

اخذ روزانه تصاویر ماهواره TERRA و AQUA



1384-01-01

پایش ماهواره ای بلایای طبیعی کشور



1384-01-01



1384-01-01



1384-01-01



1384-01-01



1384-01-01



1384-01-01

پایش ماهواره ای زلزله های کشور، رنده های آبی



1384-01-01



1384-01-01



1384-01-01



1384-01-01

پایش ماهواره ای سایر پدیده های طبیعی



1384-01-01



1384-01-01



1384-01-01



1384-01-01

پایش ماهواره ای محیط های جغرافیایی



1384-01-01



1384-01-01



1384-01-01

پایش ماهواره ای محیط زیست در حیط توسعه آبادان



1384-01-01

Quick Look Terra/MODIS



False color composite 1-4-3/ modis/AQUA



date: 2017-11-18

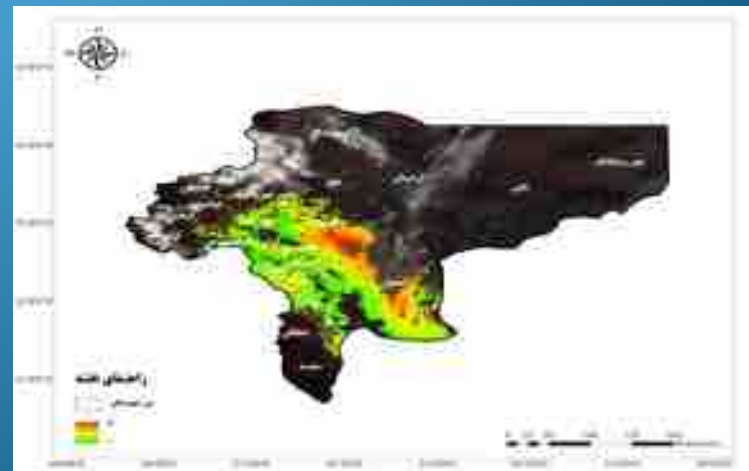
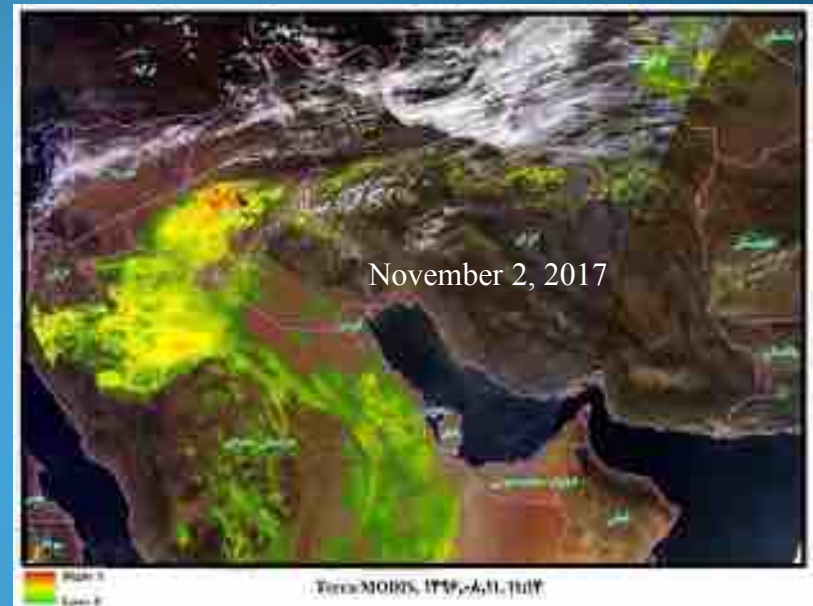
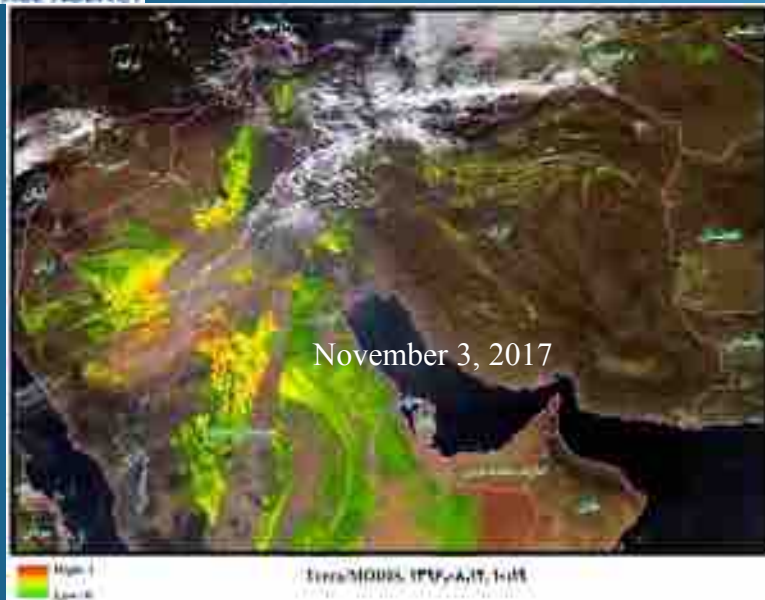


False color composite 7-2-1/modis/AQUA

Dust Storm Monitoring



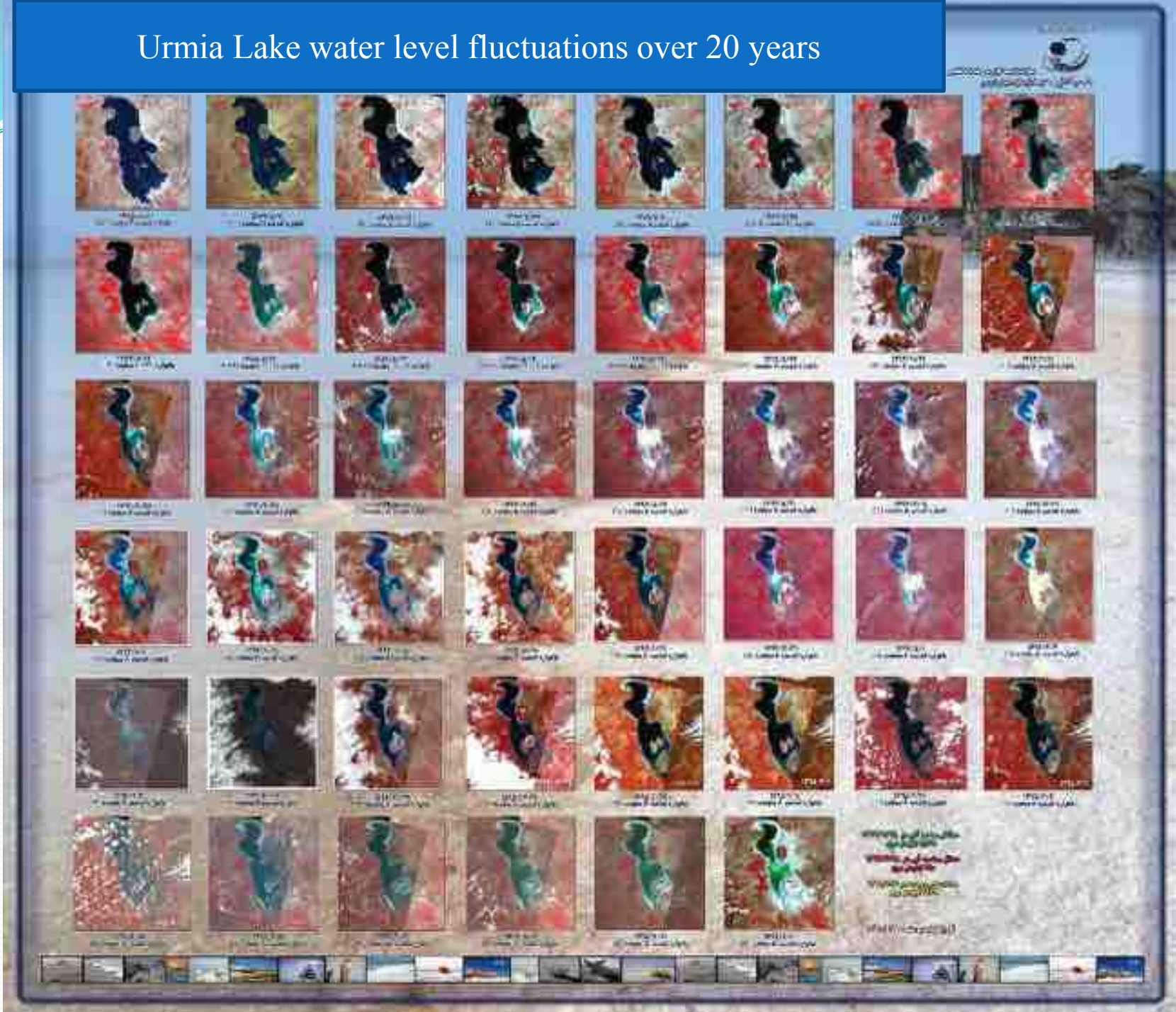
Dust Storm Monitoring Using Satellite Imagery



Water body Monitoring



Urmia Lake water level fluctuations over 20 years





May 9, 2017

تاریخ: 13960219

ماهواره Landsat-8/OLI ترکیب باندی: 3-4-5

مساحت آبی: 2751 کیلومتر مربع

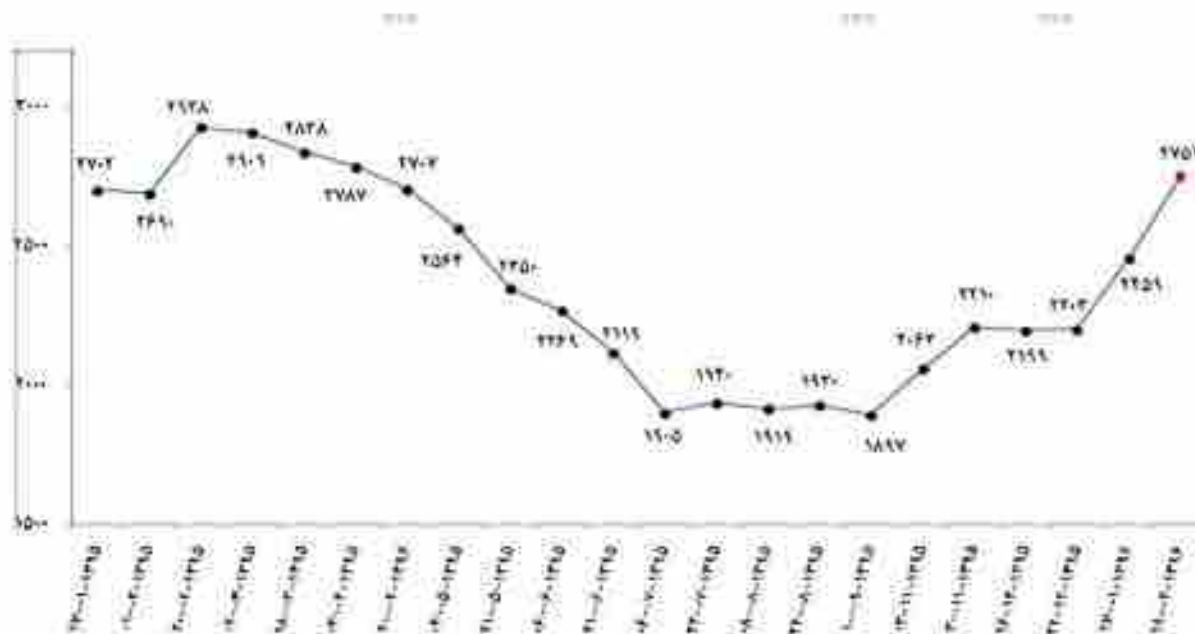


October 9, 2017

۷ مهر ۱۳۹۶

ماهواره ماهواره آریستارک ۲

مساحت آبی دریاچه: ۱۲۱۸ کیلومتر مربع



Agricultural Land Monitoring



Agricultural Land Map



Field Observation

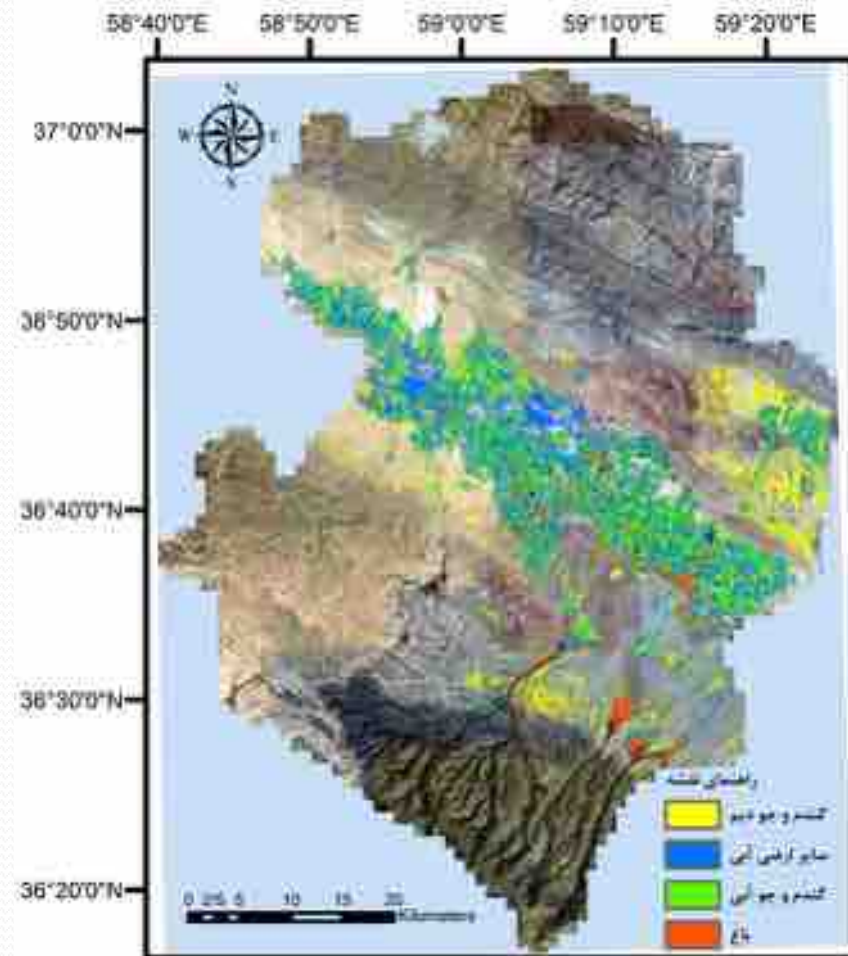
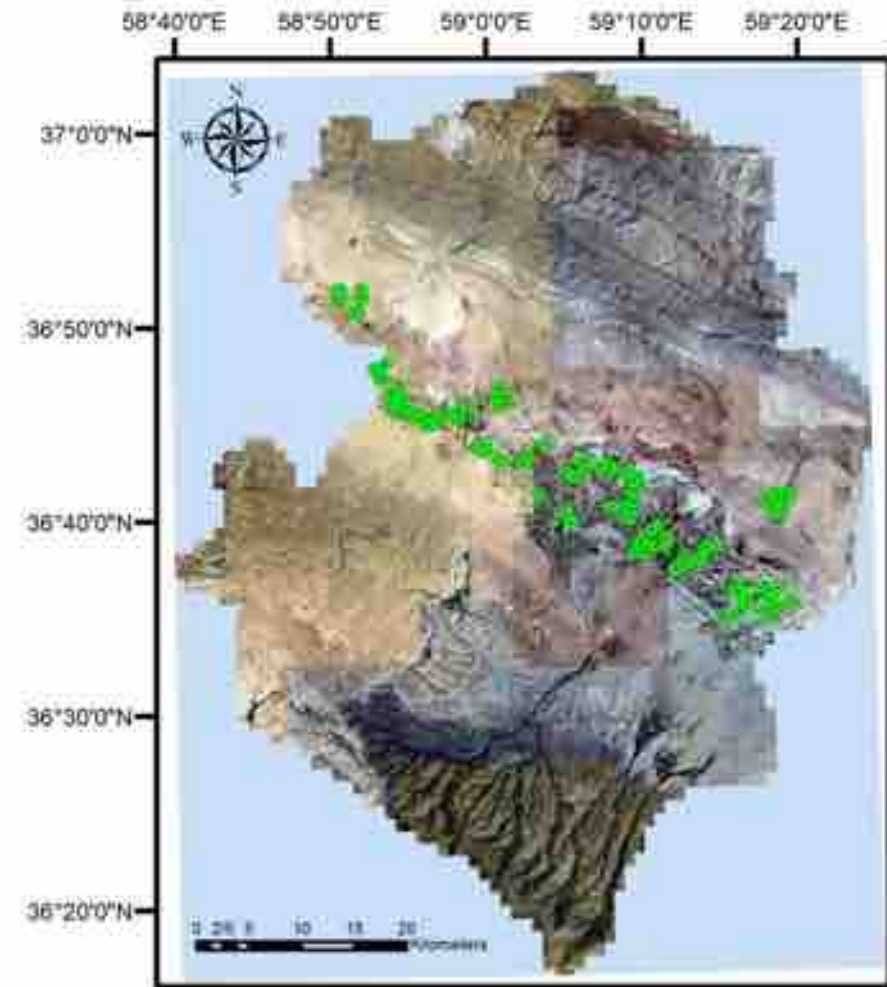


Download Landsat8 Imagery & Quality control





Agricultural Crop Map



A photograph of a forest fire. Thick white smoke rises from the ground, partially obscuring the trees. In the foreground, bright orange and yellow flames are visible on the forest floor. Several dark tree trunks are visible, some in the foreground and others in the background. The sky is a hazy, light brown color due to the smoke.

Fire Monitoring System

Fire Monitoring System

Objectives •

Automation •

Detect Fires with at least 100 sq m •

Detect & Warning in shortest time •

Web GIS •

SMS & E-Mail system for Warning •





**Golestan Province
Forest Fire**

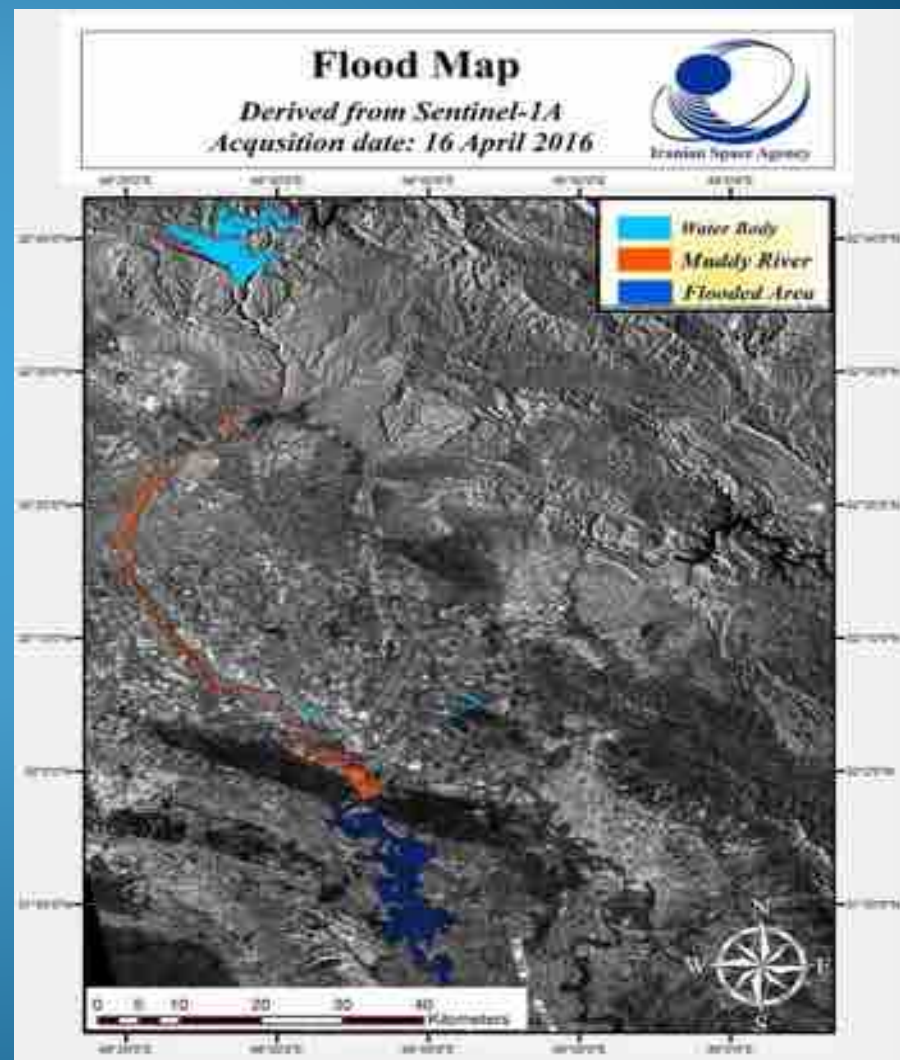




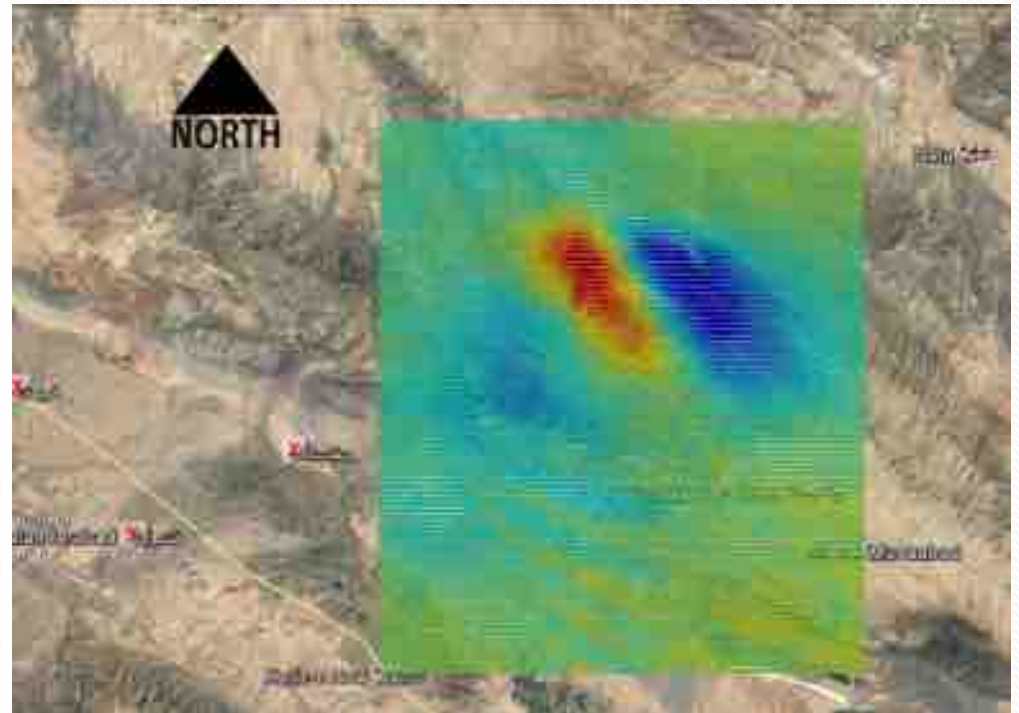
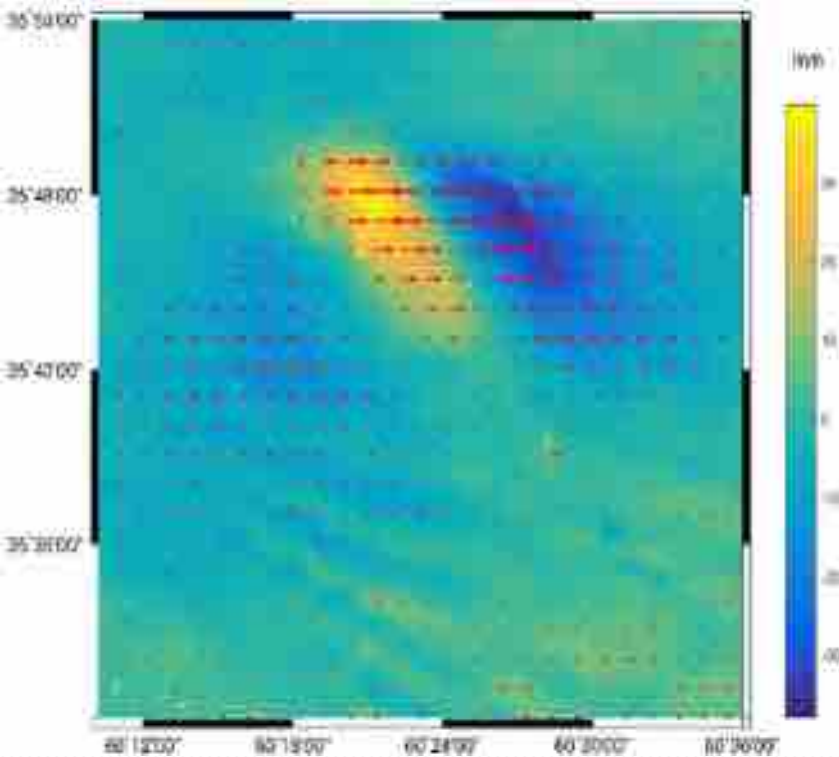
Before

After Fire Image

Flood Mapping



Khorasan Earthquake Monitoring Using Radar Satellite Imagery



Maximum movement in horizontal direction was 4 cm.
Maximum movement in vertical direction was 14.75 cm.

Kermanshah Earthquake Monitoring

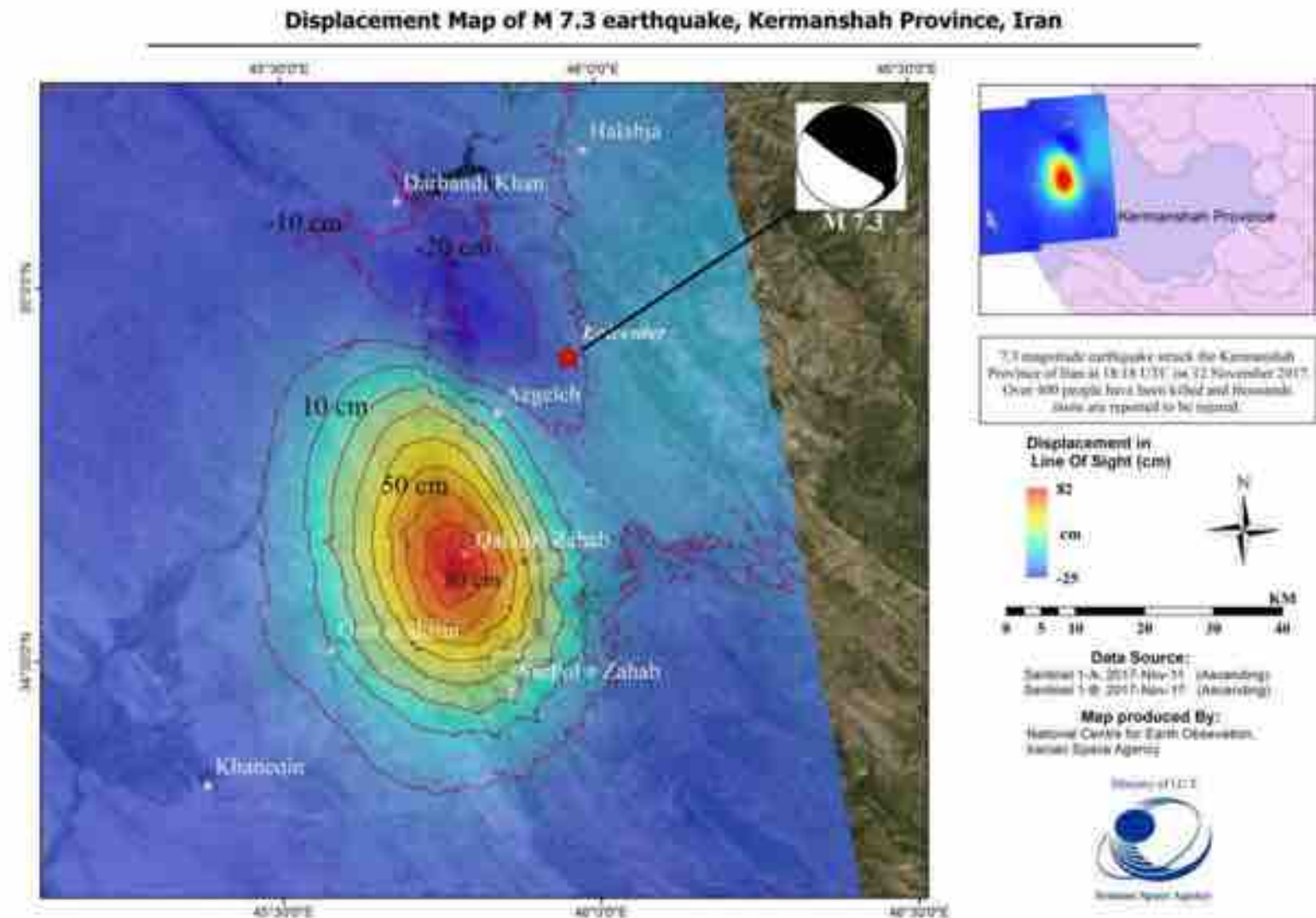
Preliminary Damage Maps of 7.3 Earth Quake, Sarpol-e-Zahab, Kermanshah, Iran



Damage Maps of 7.3 Earthquake, Sarpol-e-Zahab, Kermanshah, Iran



Kermanshah Earthquake Monitoring Using Radar Satellite Imagery



Capacity Building

- Booklet on “Effective use of Space-based information to monitor disasters and its impacts: Lessons Learnt from Drought in Iran”



Effective use of space-based information to monitor disasters and its impacts

Lessons Learnt from Drought in Iran

Prepared by Iranian Space Agency

Capacity Building



UNITED NATIONS
Office for Outer Space Affairs

English | Español | Français

UN-SPIDER KNOWLEDGE PORTAL

Space-based Information for Disaster Risk Management and Emergency Response

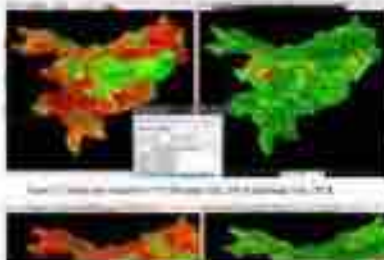
Home | Space Application | Risks and Disasters | Links and Resources | **Advisory Support** | Network | Projects | News & Events

About Us

Advisory Support

- Advisory Missions
- Emergency Support
- Recommended Practices**
- Training Activities
- Flowchart

Recommended Practice: Agricultural drought monitoring



Drought monitoring is an important component in drought early warning systems. This practice shows how to monitor the impacts of meteorological drought on natural vegetation using MODIS optical satellite imagery.

Step by Step

In Detail

Objective:
The purpose of this recommended practice is to monitor impacts of meteorological drought on natural vegetation (rain fed, range land & forests). Availability, simplicity, free of charge data, good research literature and citation, minimum requirements of inputs are main criteria, which have

Recommended by:



Related Practices

Recommended Practice:
Food Hazard Monitoring

Related data

MODIS Vegetation Product (NASA)
MODIS Vegetation Product (NASA)

Capacity Building



Capacity Building



- Including World Space Week programs, a short training course on remote sensing applications and GIS applications was successfully held during 8-9 October, 2017 in National Disaster Management Organization of Iran. Topics included:
- Remote sensing
- GIS
- GNSS, GPS
- International data sharing systems
- Flood mapping using SAR data
- Fire monitoring and detection using satellite imagery

suggestions

In the process of distributing and producing information for disaster management, we can define four stages:

- - **Primary data:** it is data capturing, which due to the fast approach of technology trend, is improving very fast. Of course for some hazards like earthquakes are still low.
- - **Data management:** for data management, we need data management tools and databases, while many countries do not have the proper infrastructure for it.
- - **Information:** In order to obtain information, a proper model and analysis is required. At this point, we need to come up with a functional model. Today, there are no difficulties about plenty data processing software. Real challenge is the methods and application models that are suitable for the end user. Many scientific articles talk about various models, however, in fact, they are far from being implemented. It seems that there is a need for more interaction between executive agencies and research and academic centers.
- - **Product:** this is the theme of “applicable systems”. In stage 3, applicable model will be designed and developed mostly through academic and research centers. In this stage, the model will be implementing. In fact, the user offers a positive or negative feedback for the end product. Now, the underlying issue is the application models that have undergone their research process and have reached the stage of implementation.

Thanks