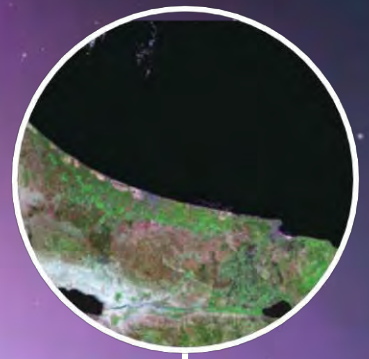
UN-SPIDER RSO, ISRAEL

Earth and Planetary Image Facility, Ben-Gurion University of the Negev

Dr. Shimrit Maman,
Research Associate & Director

Prof. Dan G. Blumberg,
Vice President, PI and head of facility



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Earth and Planetary Image Facility

1. Research
2. Ground Satellite Receiving Station
3. Meteorological Station
4. NASA RPIF
5. Education & Public Outreach
6. UN SPIDER ISRAELI RSO

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Space and air-borne remote sensing

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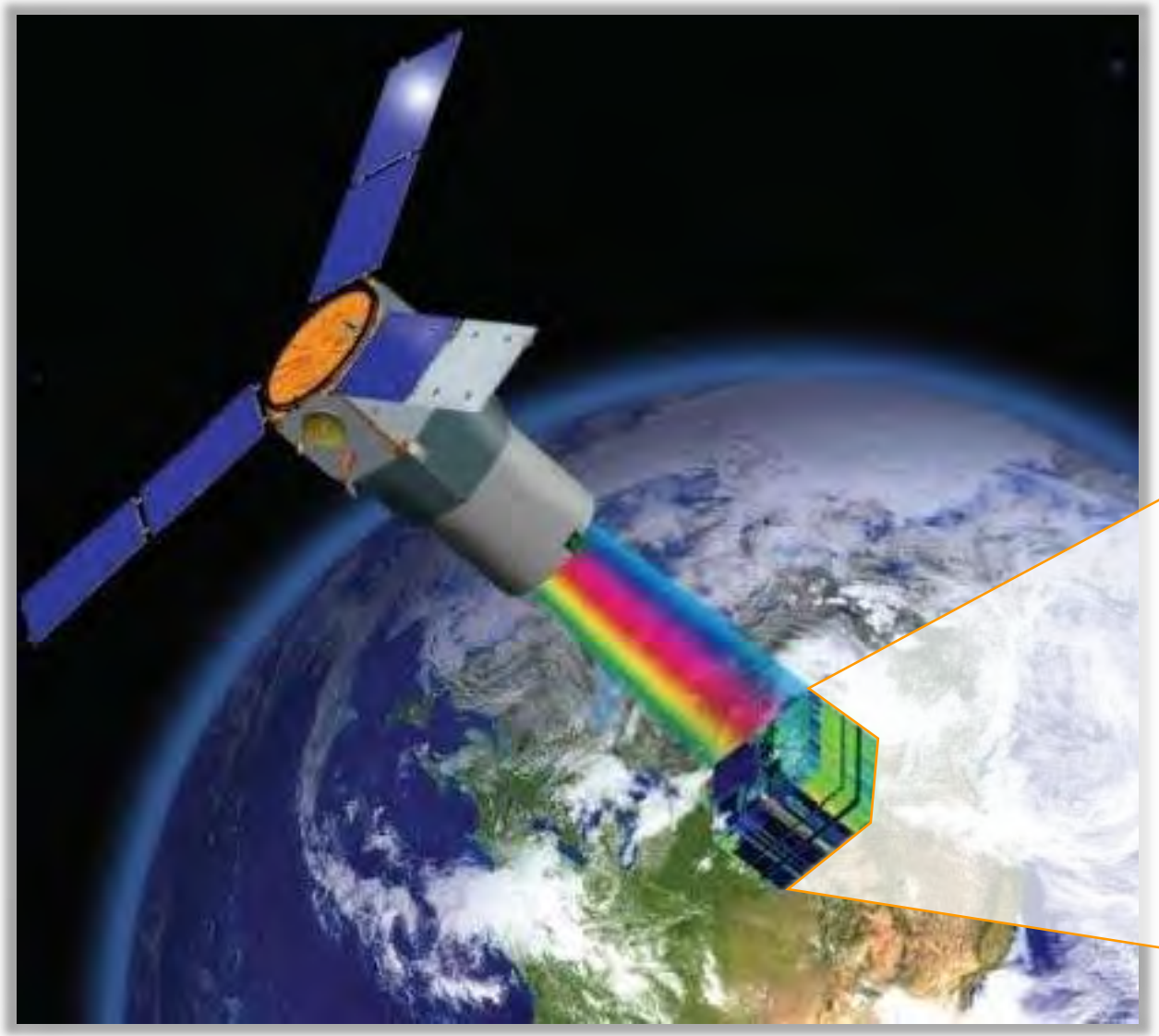
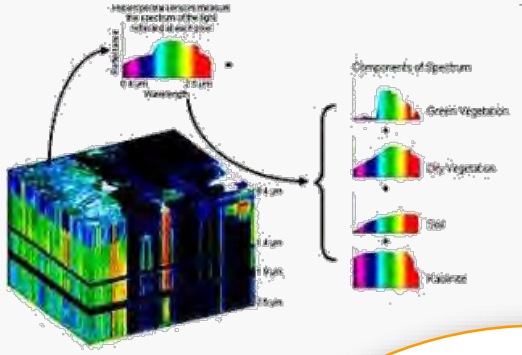
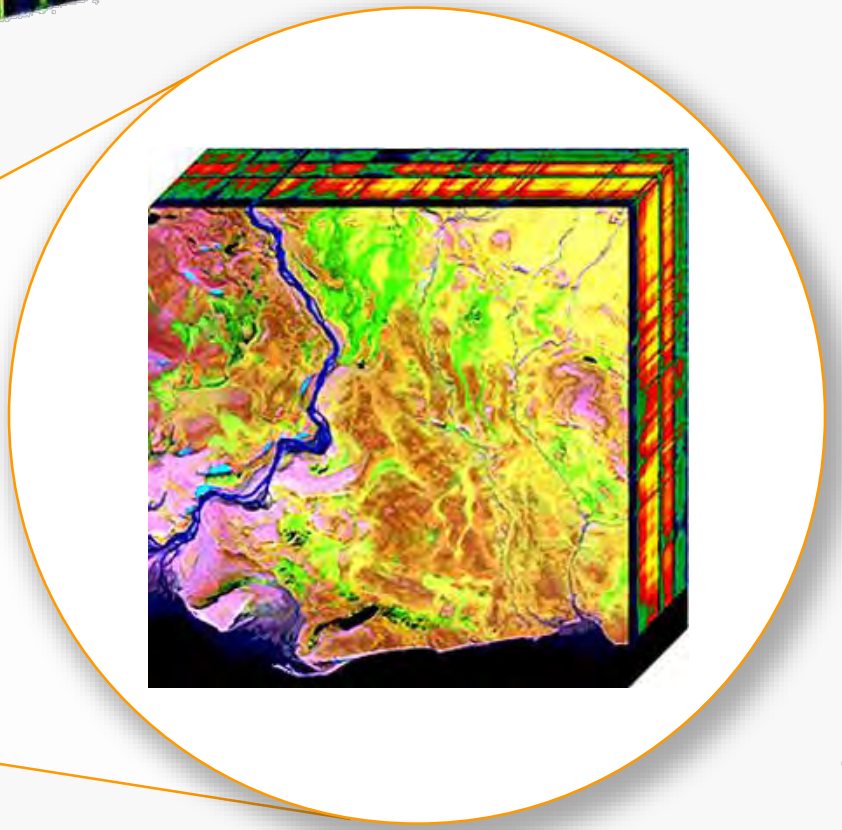
Multi-dimensional data, detection & classification







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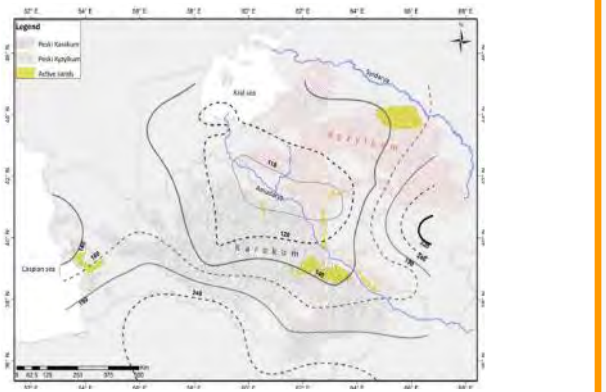
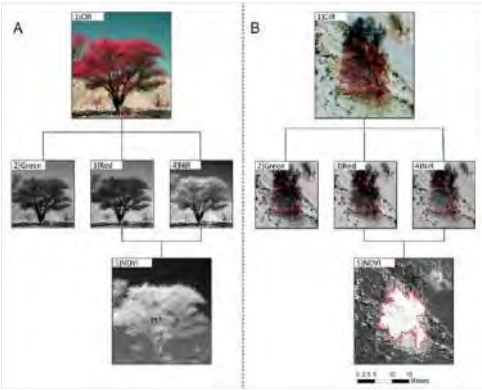
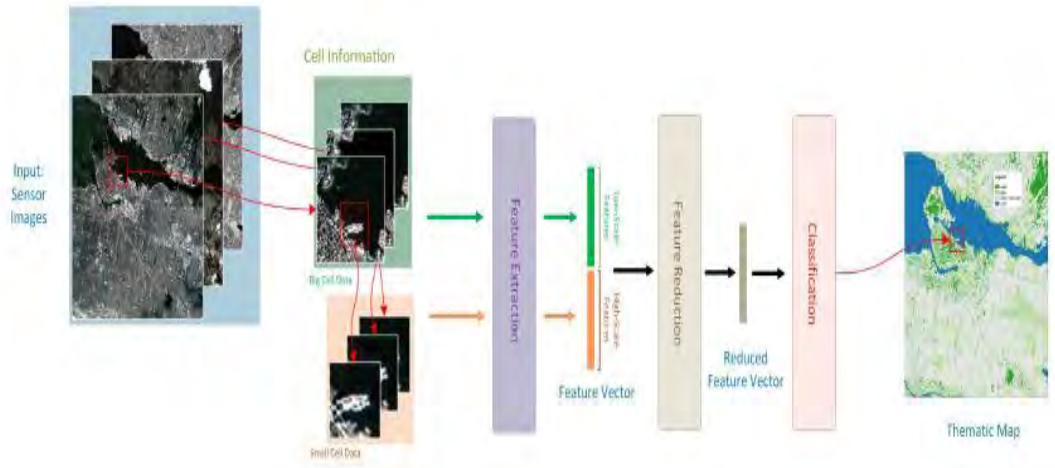


Central Asian dune dynamics



Arid environment Vegetation



Machine Learning Methods Applied to Object Recognition in Multichannel & Multisensor Geospatial Imaging

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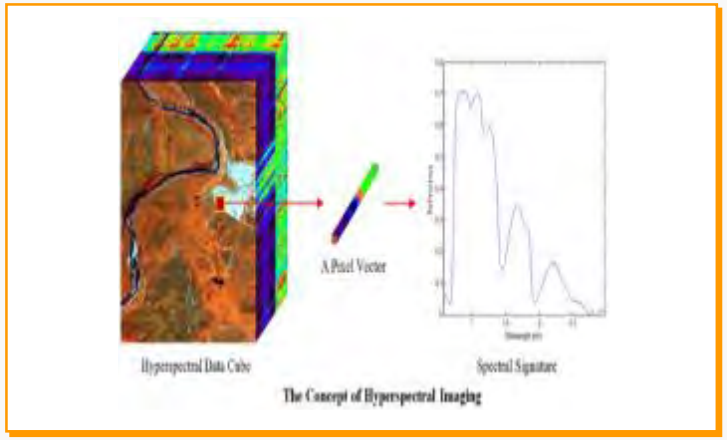
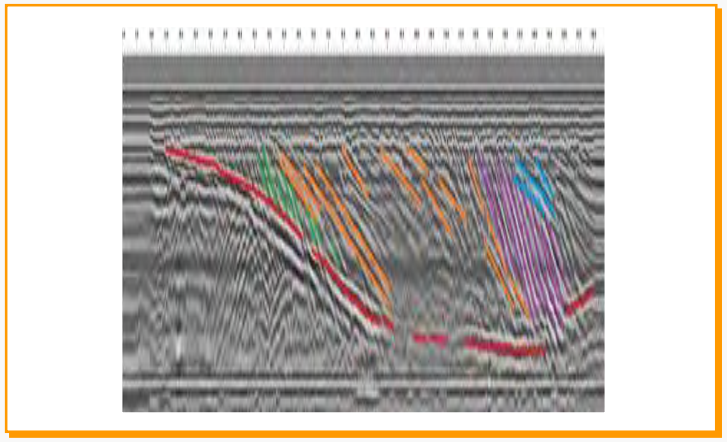
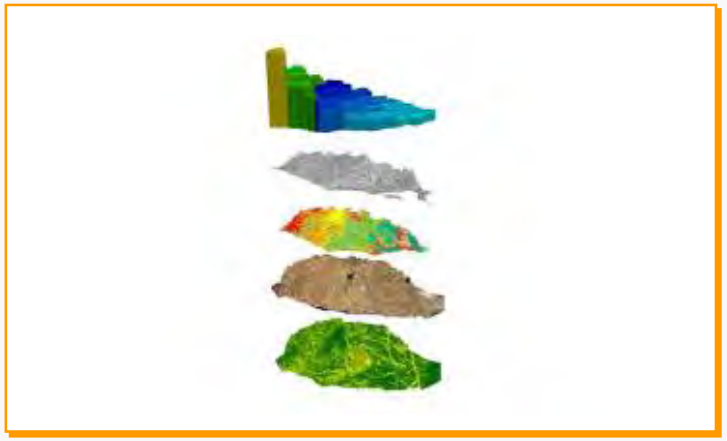
EPIF RESEARCH



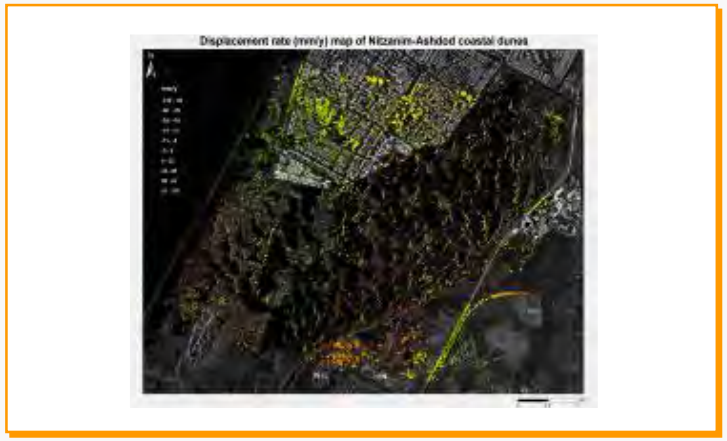
Hyperspectral target and anomaly detection



Internal dune structure using GPR



High spatial resolution for Hydro geomorphic processes in hyper arid regions



Dune mapping by InSAR

Earth Wind streaks

Rapid response after natural disasters

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Pre- And Post-Tsunami Radarsat Image - 31/12/2004

31/12/2004

CSA ASC

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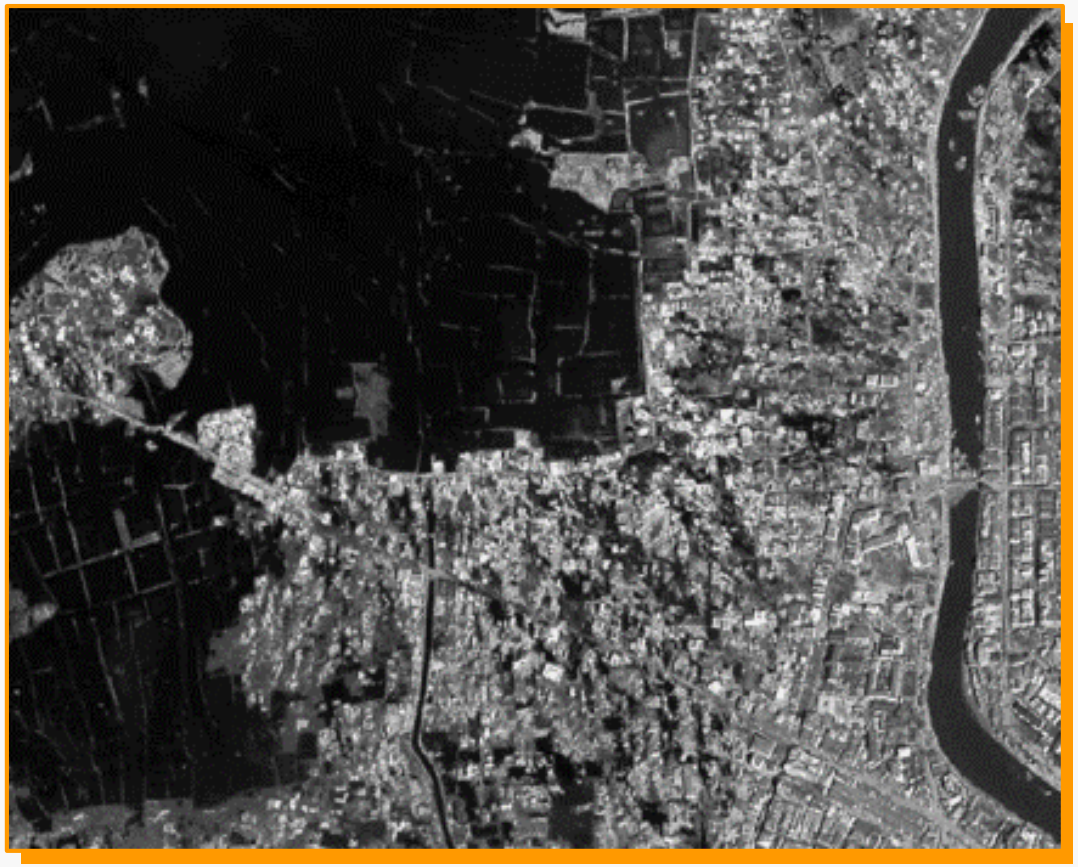
The Responsive space

Rapid response using remote sensing lessons from the 2004 Tsunami



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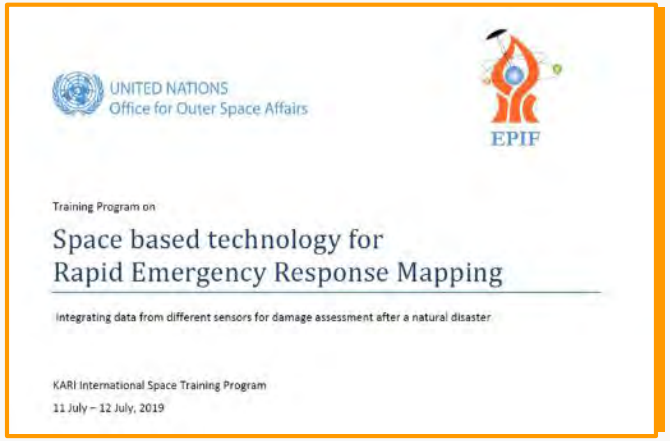
ISRAEL RSO ACTIVITIES 2019/2020

Establishment of the RSO in Israel, via ISA.

Capacity building on rapid emergency response satellite mapping.

Development of recommended practices based on our research.



KARI training

ImageSat International N.V.
Company

Collaboration with
Israeli space industry

Expert support in advisory missions

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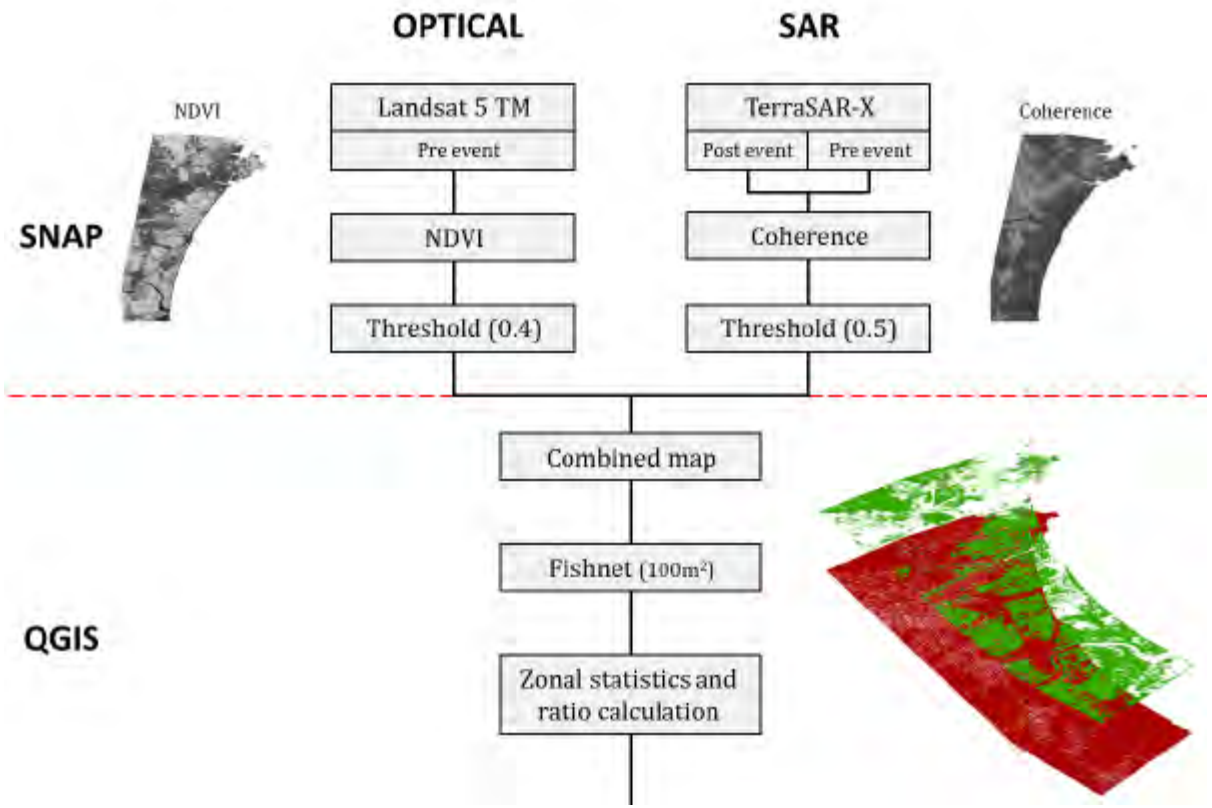
KARI TRAINING PROGRAM

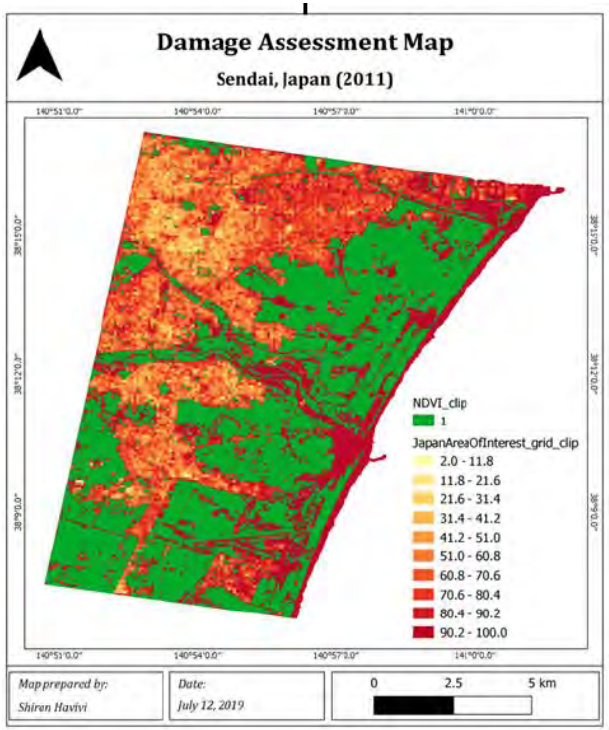
Image collection

Algorithm



Havivi et al., (2018): Combining TerraSAR-X and Landsat Images for Emergency Response in Urban Environments.

Interpretation



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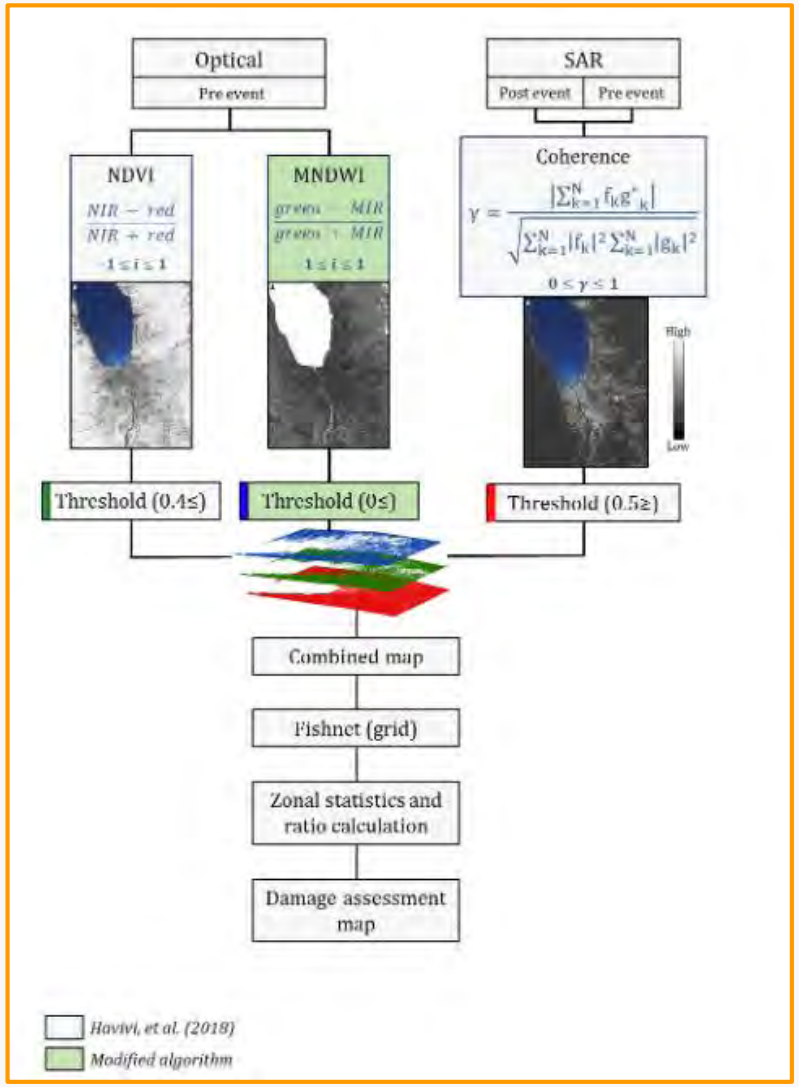
ALGORITHM IMPROVEMENTS FOR UPCOMING TRAINING



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UN-SPIDER WEB

YOUTH2030

WORKING WITH AND FOR YOUNG PEOPLE

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BGUSAT

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Ben-Gurion University Satellite

- BGU, ISA and IAI Joint Venture in Nanosatellites
- 3U CubeSat, LEO
- SWIR Imaging
- IAI BUS - LEON3
- Ground Station UHF/VHF/S-band

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Ben-Gurion University Satellite

Photo credit: www.isro.gov.in

Successfully launched!

Feb. 15 2017,
from India on the
PSLV-C37.

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Mission Patch

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Thank You.
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