

About us

...our team for your needs

Founders:

- Daniele Staglianò, CEO
- Stefano Lischi
- Riccardo Massini
- Dario Petri



- **Innovative radar systems**
- **Low emission or NO emission**
- **Small size**
- **Easy deployable**
- **Low Energy consumption**
- **Optimized radar signal processing tools**



Expertise & Research Fields

- **Radar Imaging (SAR, ISAR)**
- **Multichannel and Multistatic Systems**
- **Detection and Tracking**
- **Automatic Target Recognition**
- **Change Detection**
- **Interferometry**
- **Polarimetry**



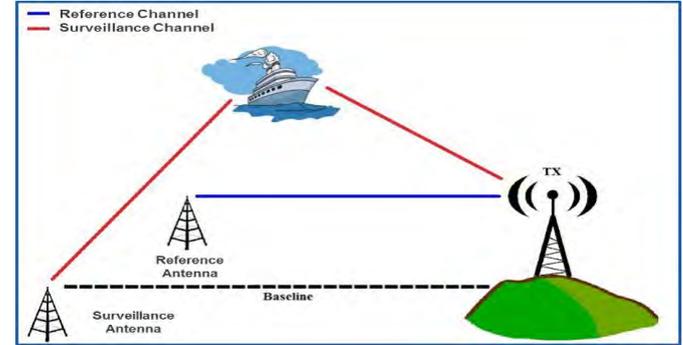
Products

...years of research and prototyping

GCK-e1000: multiband passive radar

Features

- No electromagnetic radiation
- No frequency band allocation
- Covert Surveillance of moving targets
- Light weight
- Low cost
- Low energy consumption



Waveform	Output Power	Dynamic Range	Range Coverage	Azimuth Coverage	Polarization
DVB-T/S UMTS LTE WiFi	No Emission	>80dB	<80km	<360°	Single Pol Dual Pol

Applications

- Maritime traffic surveillance
- Vehicular traffic monitoring



GCK-e1000: radar tracking



MMSI-247294700



MMSI-247334000



MMSI-247552000



MMSI-210090000



MMSI-636012570



MMSI-247064930

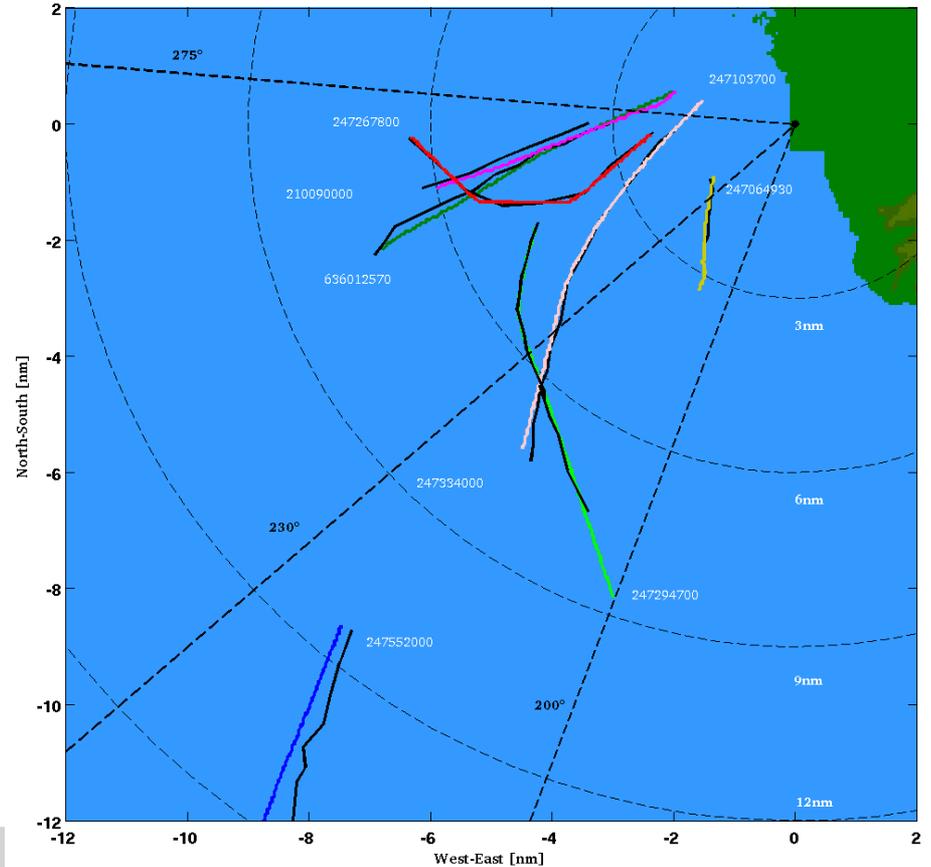


MMSI-247267800



MMSI-247103700

Radar tracks vs AIS data



MXI-e1000: 3D interferometric ISAR

Features

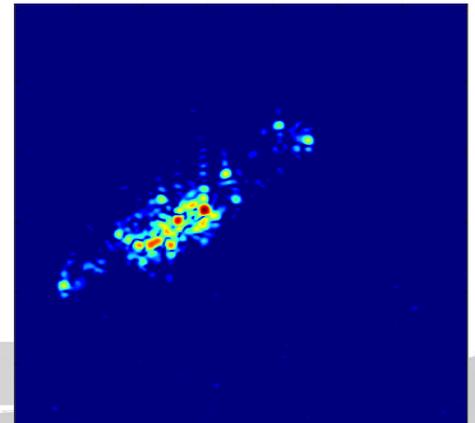
- light weight
- small size
- easy deployable
- low power consumption
- very low electromagnetic emission
- deployable in a radar sensor network



Waveform	Frequency	Chirp rate	Output Power	Minimum Detectable signal	Dynamic Range	Noise figure	Polarization
LFMCW	10.55-10.85 GHz	<1.5 THz/s	30dBm	-130dBm	>80dB	5dB	Linear V

Applications

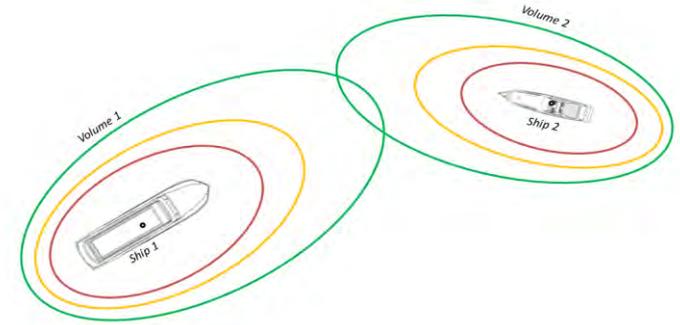
- maritime traffic surveillance
- airport Surface Movement surveillance
- low flying aerial vehicles surveillance
- urban and rural area monitoring
- vehicular traffic monitoring
- automatic Target Recognition



MXI sensor network



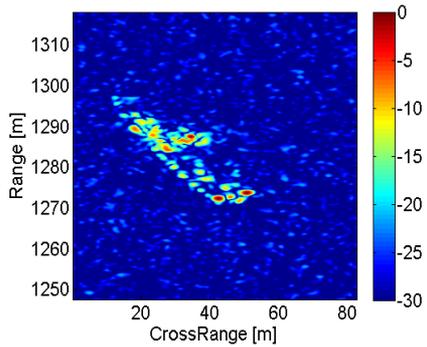
A network of short range radar sensors for port situational awareness



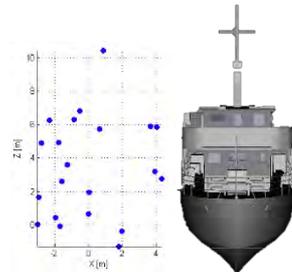
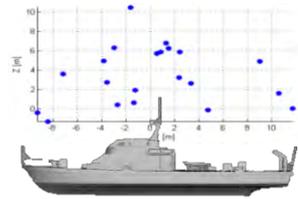
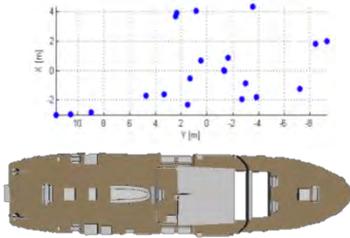
Warning area for collision avoidance

2D and 3D reconstruction

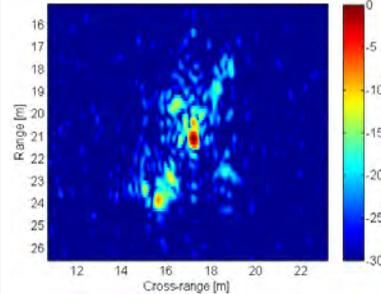
2D Imaging



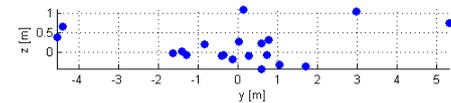
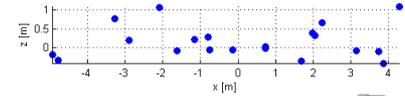
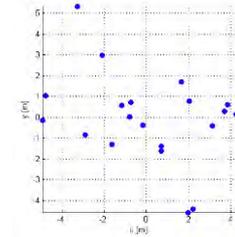
3D reconstruction



2D Imaging



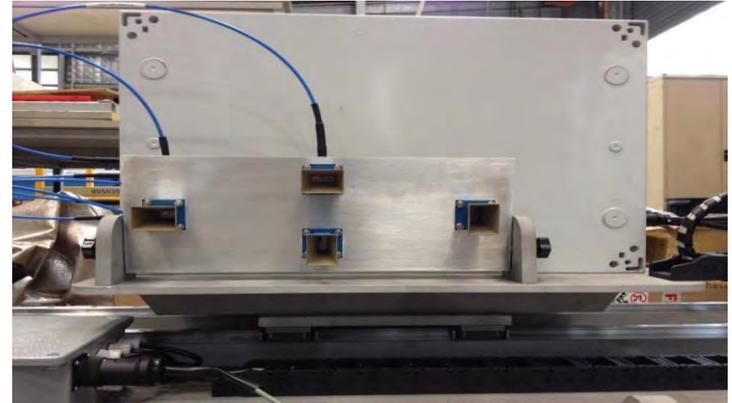
3D reconstruction



GXI-e1000: Polarimetric ground-based SAR

Features

- easy deployable
- low power consumption
- very low electromagnetic emission
- deployable in a radar sensor network
- customizable according to user's needs



Waveform	Frequency	Chirp rate	Output Power	Minimum Detectable signal	Dynamic Range	Noise figure	Polarization
LFMCW	9.95-10.75 GHz	<1.5 THz/s	-4dBm	-130dBm	>80dB	5dB	Single Pol Full Pol

Applications

- environmental monitoring
- infrastructural monitoring (buildings, bridges,...)
- urban and rural area monitoring



We offer ad-hoc solutions for the customer's needs:



- Project proposal
- Feasibility study
- Prototype development
- Test on field
- Delivery
- Post-sale support

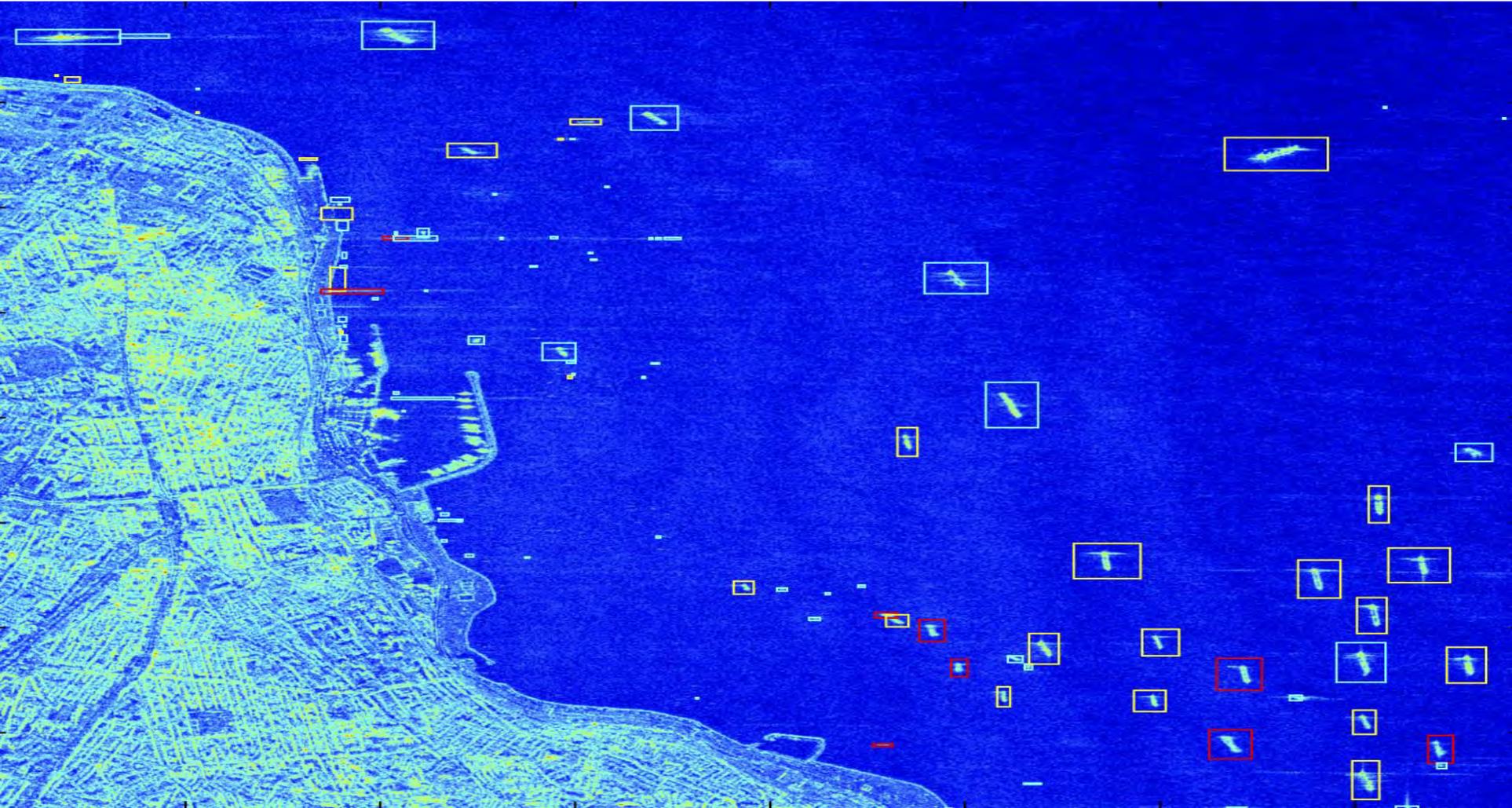
Services

...sensing, monitoring, protecting

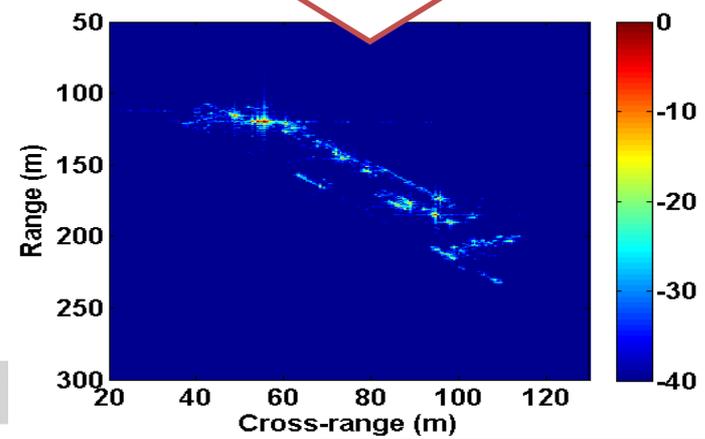
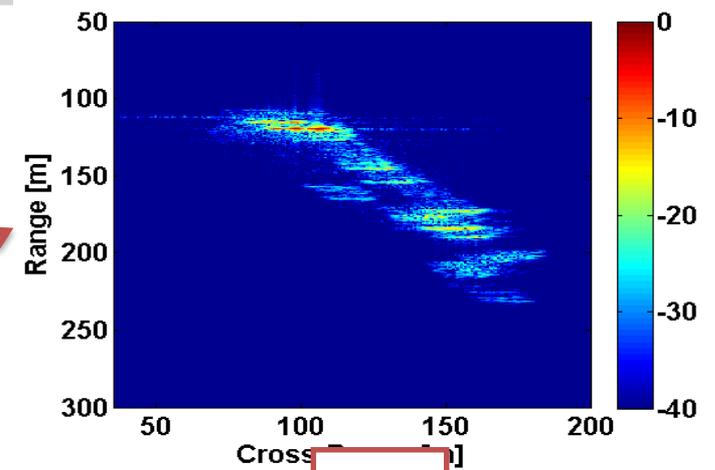
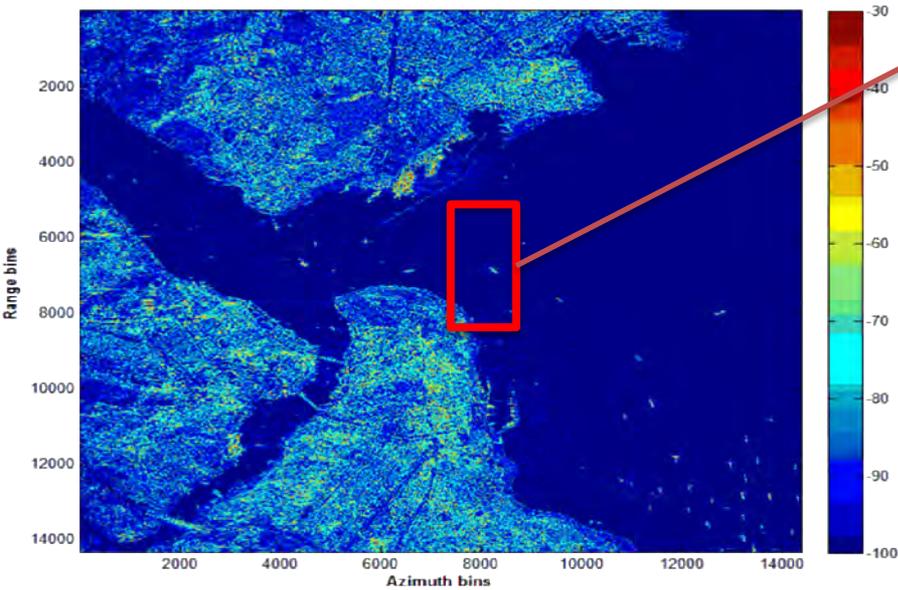
Harbor surveillance



Advanced radar images from satellites



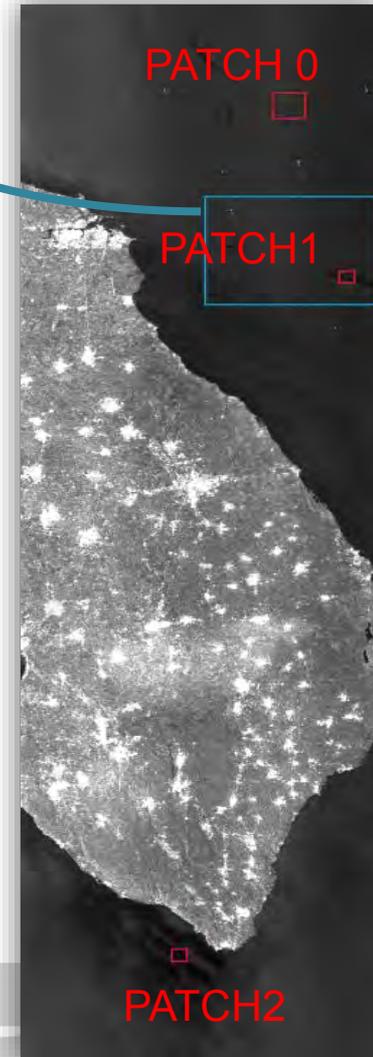
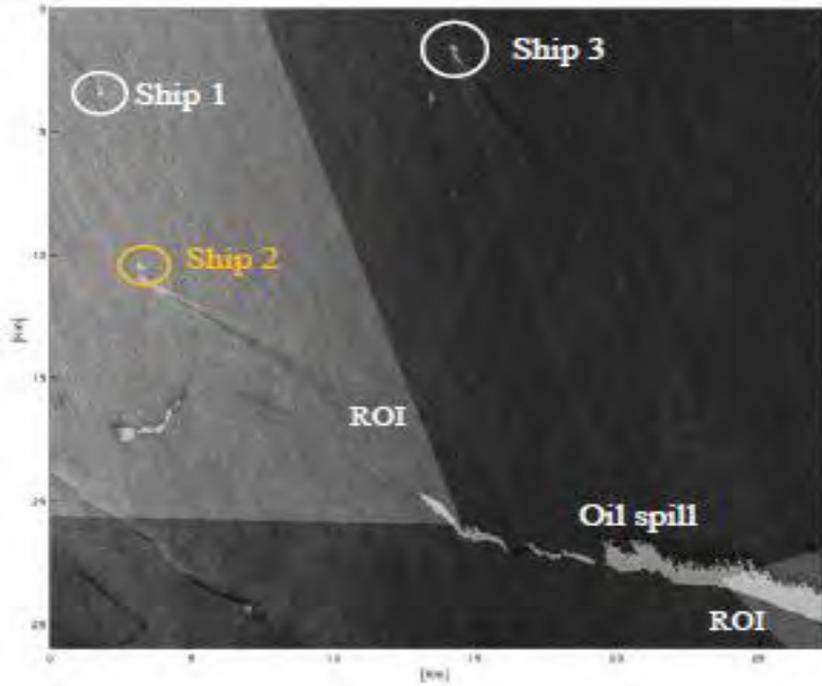
Moving target refocusing



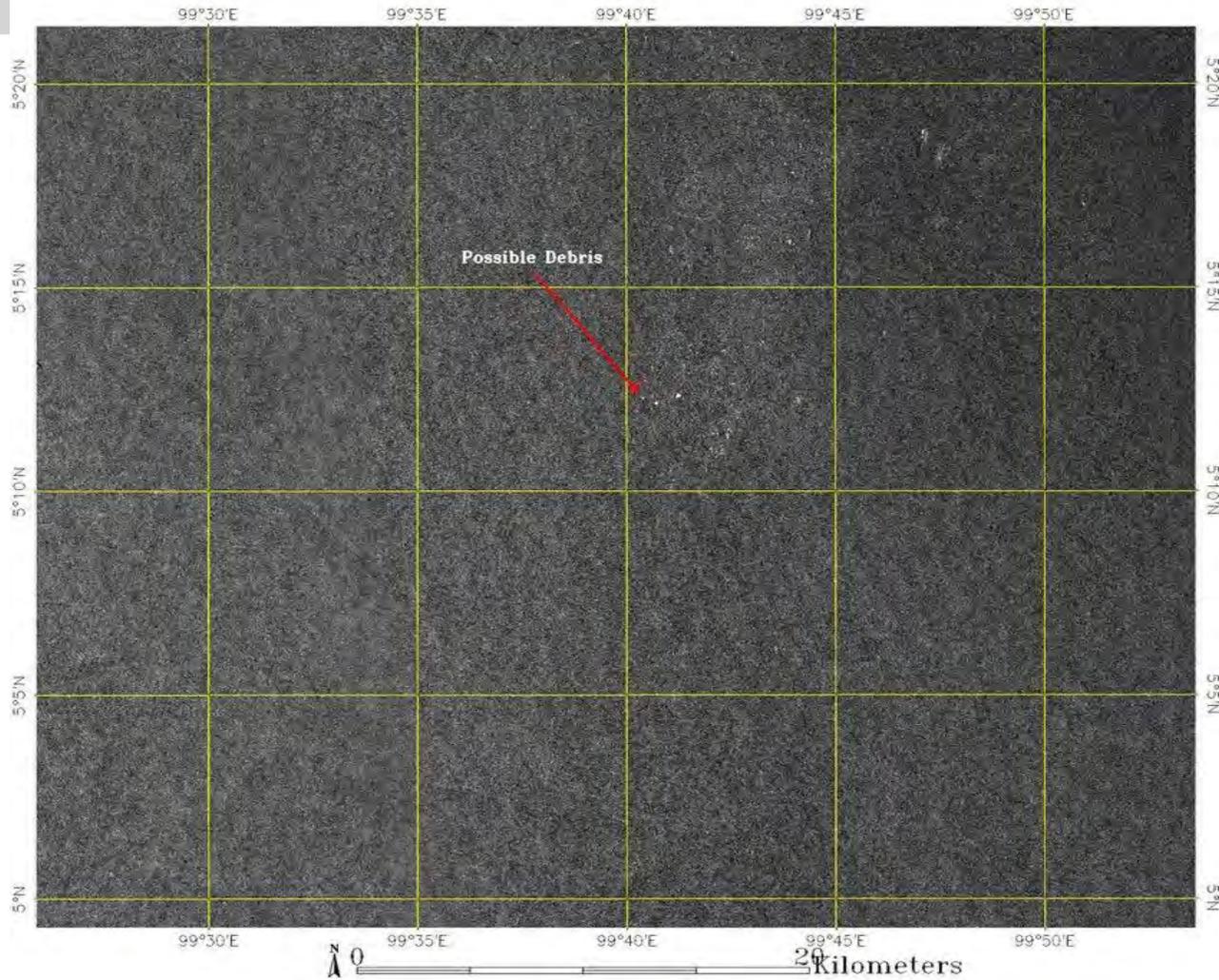
Environmental monitoring



Oil spill detection and classification



	d	ASRD	Class
Patch 0	0.3737	49.1312	CLEAN SEA
Patch1	0.5666	12.8820	OIL SPILL
Patch2	1.2004	1.4208	LACK OF WIND



Landslide monitoring & prevention

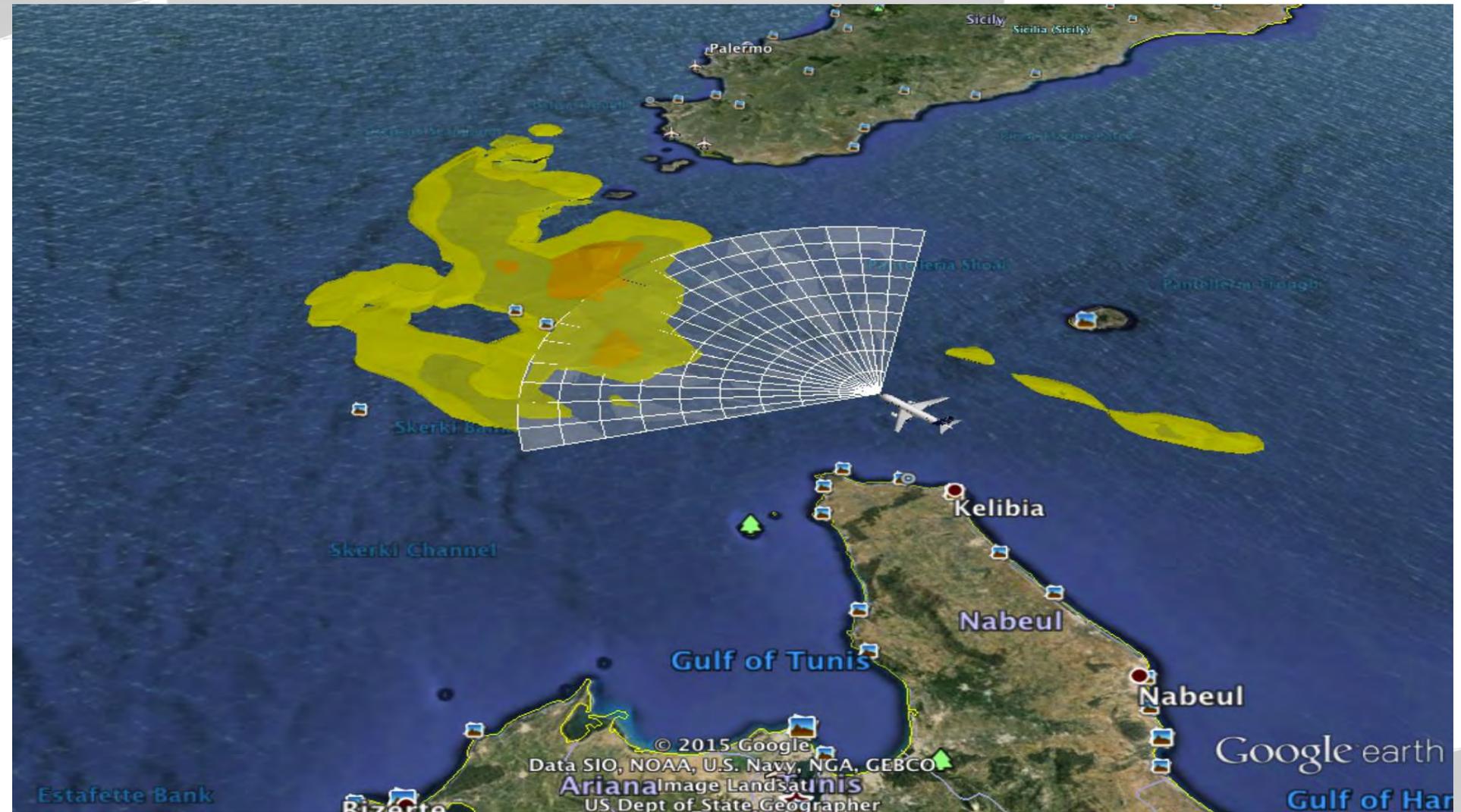


Infrastructures monitoring

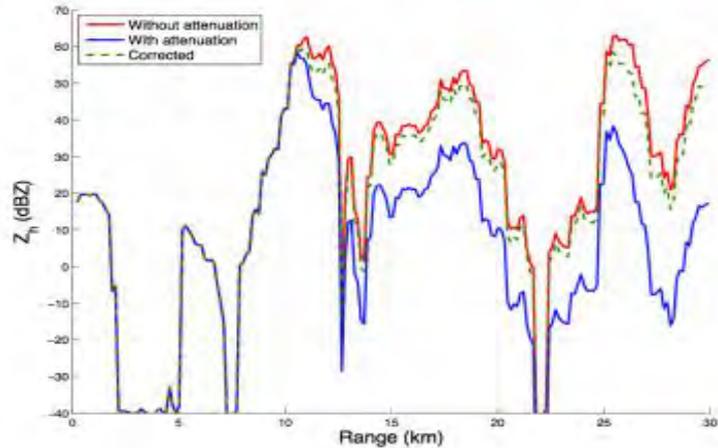
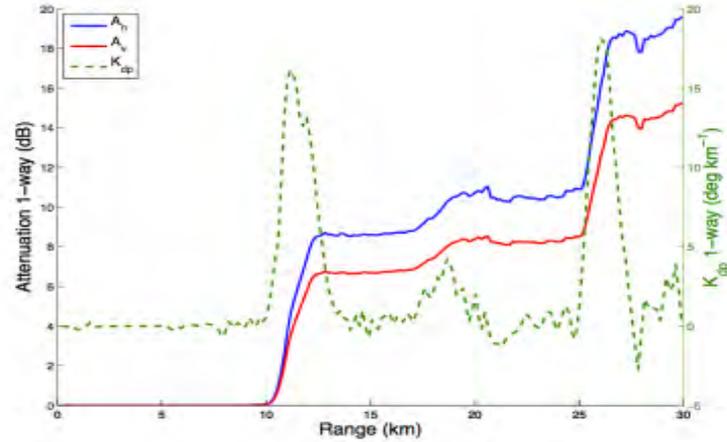




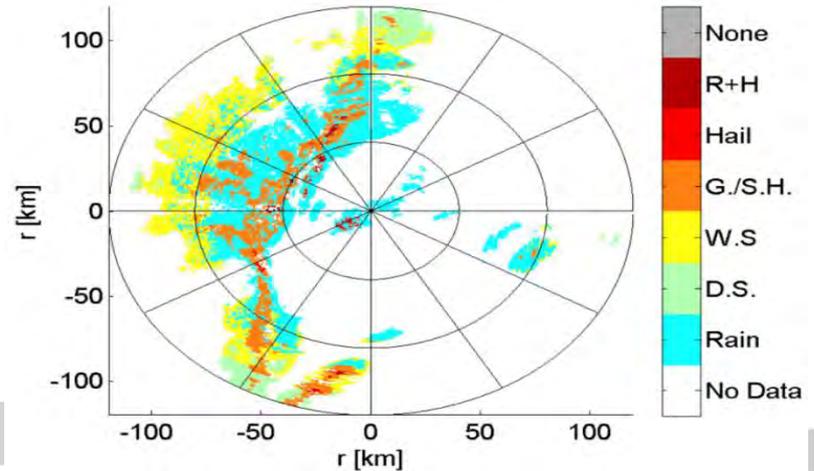
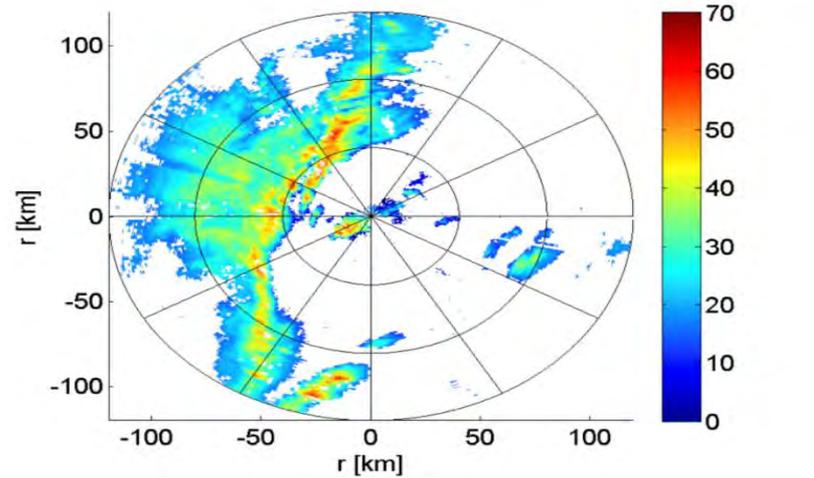
Advanced weather radar simulation



Rainfall attenuation correction



Hydrometeors classification





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