Seismogenic faults investigation and monitoring

Alessandro Mondini[1], Francesco Brozzetti[2], Cristina Pauselli[3]

[1]Consiglio Nazionale delle Ricerche (Istituto di Ricerca per la Protezione Idrogeologica)

[2]Università degli Studi “G. d’Annunzio” Chieti – Pescara (Dip.to di Scienze Psicologiche, della Salute e del Territorio)

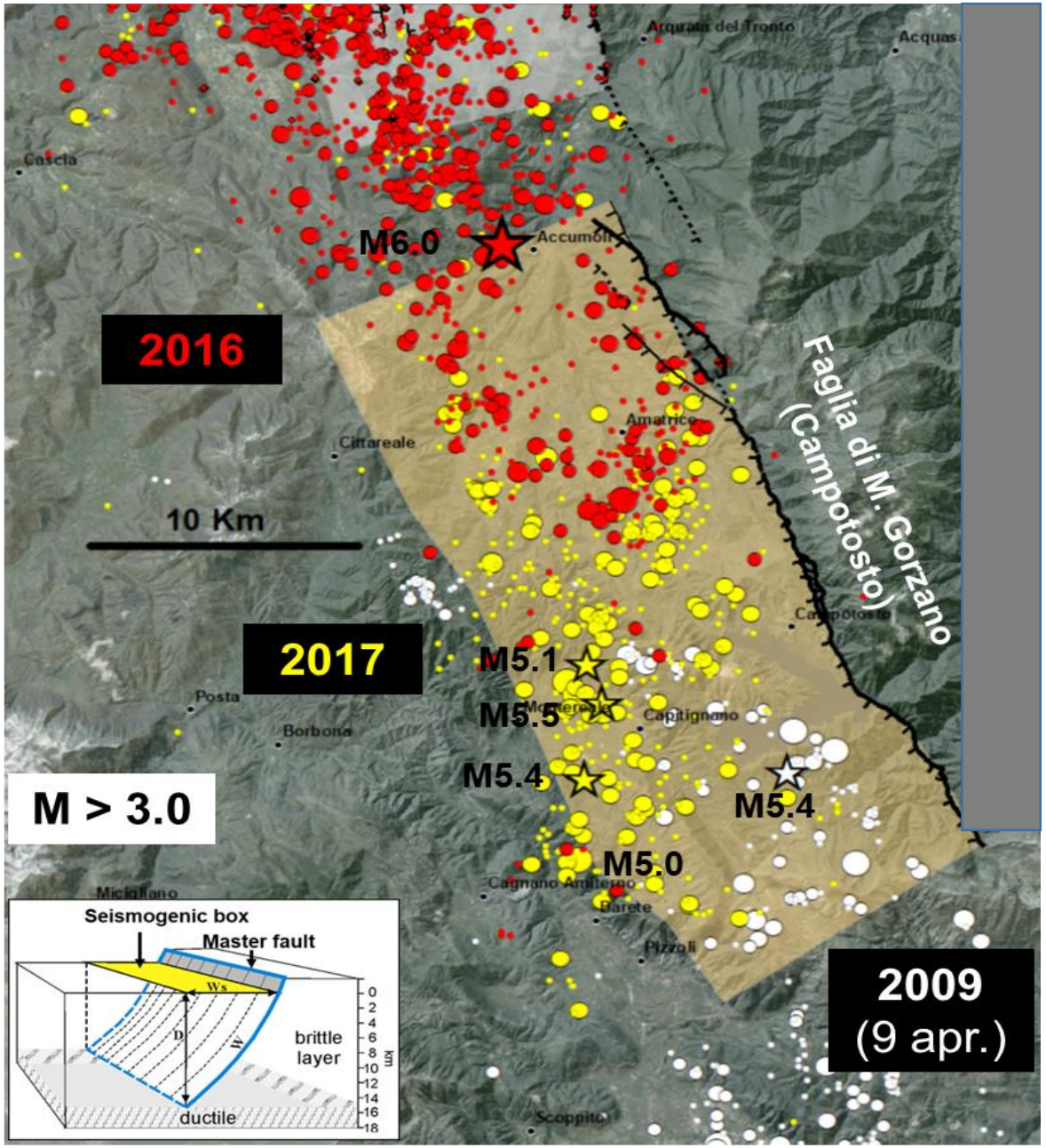
[3]Università degli Studi di Perugia (Dip.to di Fisica e Geologia)

Objectives

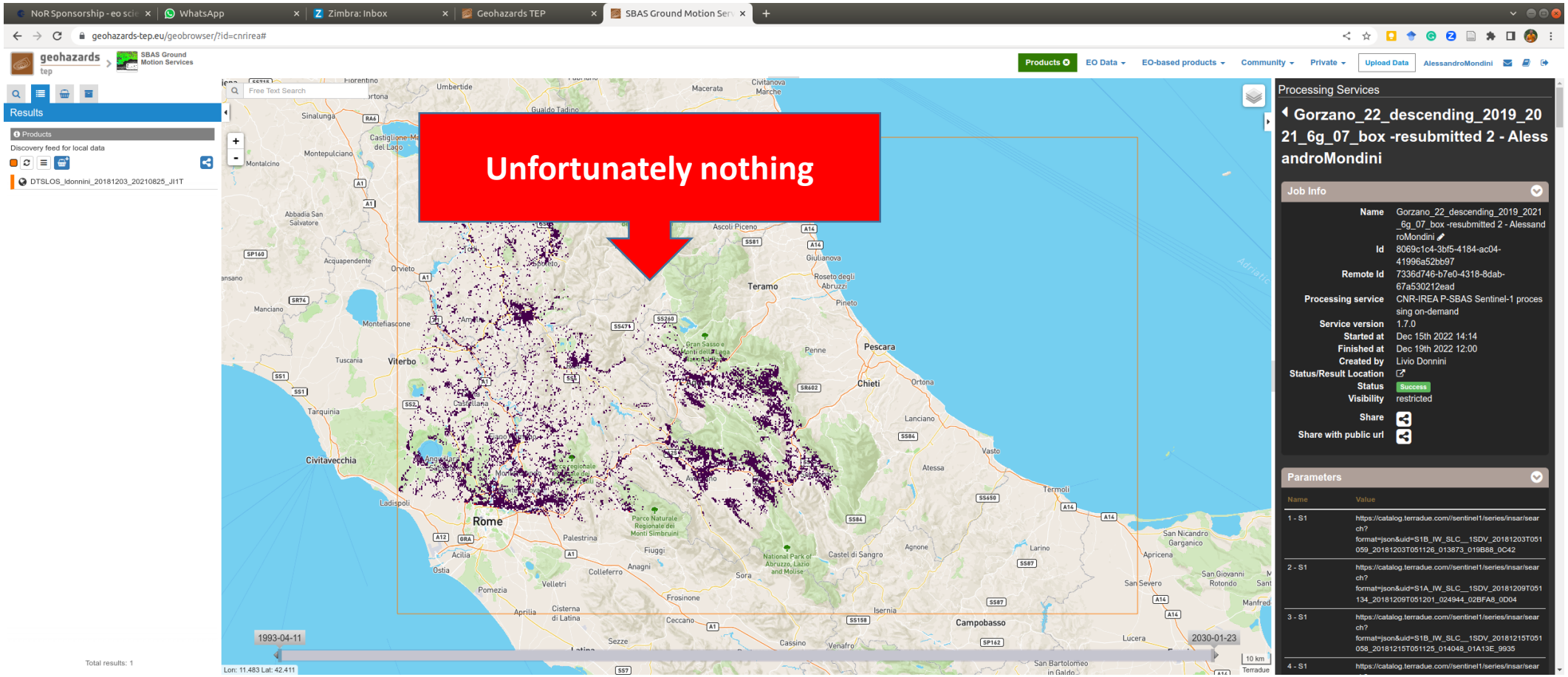
- To obtain surface displacement measurements using DInSAR technology to investigate the current state of the deformation field around the Gorzano fault, which is part of the complex extensional fault system of the Italian Appenines.

Rationale

- Was/is the Gorzano seismogenic box completely filled by the recent sequences in the area or there is still a seismic gap?



What we saw with the SBAS Ground Motion Service



Possible reasons / problems

- Very high vegetated area, we tried to lower the minimum coherence, but all runs failed
- We tried with different temporal windows, same results
- We only processed images acquired during descending orbits
- Possible presence of snow in the area of interest in winter time. We were not able to find snow cover maps for confirmation

The highlights of any benefits to society derived from the project

- Difficult to ascertain: maybe we found a limit in the application of the service. This test case probably requires a different band (L?), a different resolution, or the application of a different interferometric process

Consumption report

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CNR IRPI, Università degli Studi "G. d'Annunzio" Chieti, Università degli Studi di Perugia

ASD185

2022/12/07

		2022																					
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
		Jobs	*Prod.*	*Jobs*	*Prod.*	*Jobs*	*Prod.*	*Jobs*	*Prod.*	*Jobs*	*Prod.*	*Jobs*	*Prod.*	*Jobs*	*Prod.*	*Jobs*	*Prod.*	*Jobs*	*Prod.*	*Jobs*	*Prod.*	*Jobs*	*Prod.*	*Jobs*	*Prod.*
Service Name	Total			2	240	0	0	4	707	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CNR-IREA P-SBAS Sentinel-1 processing on-demand	6			2	240	0	0	4	707	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Subscribed Plans	**Total**															**Balance**
Flex Service Pack (€5,000) - NOR 1b2959	€3,315		€840.0	€0.0	€2,474.5	€0.0	€0.0	€0.0	€0.0	€0.0	€0.0	€0.0				€1,685.5