







WP 3

Leaders Piergiorgio Scarlato Francesca Funiciello

First year meeting Rome, 1 December 2023















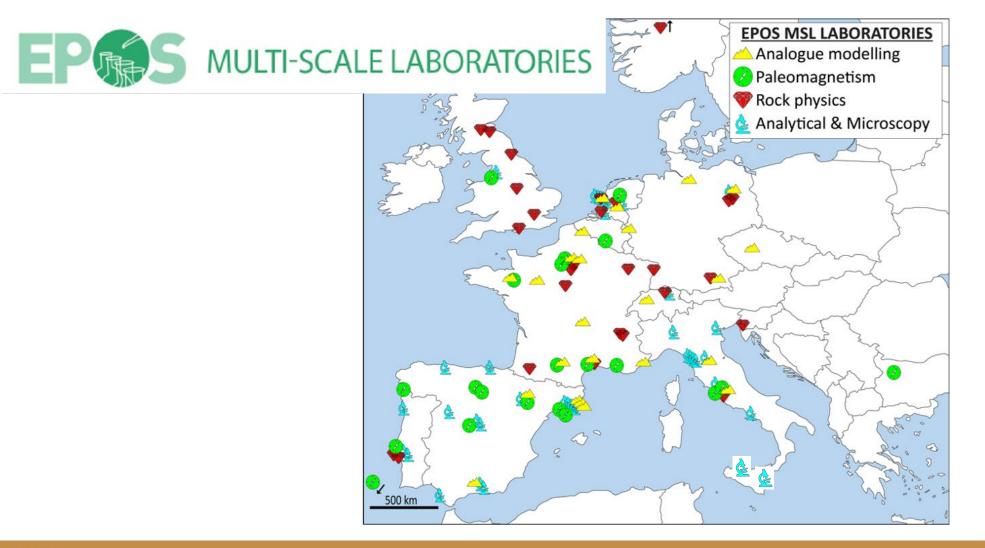
























Laboratory of Experimental Tectonics	Università Roma TRE	Francesca Funiciello
Laboratory of Paleomagnetism	Università Roma TRE	Francesca Cifelli
Laboratorio di Core Logging	OGS – Università di Trieste	Andrea Caburlotto
LA-ICP-MS Laboratory	CNR – IGG sezione di Pavia	Alberto Zanetti
Ar-Ar Geochronology Laboratory	CNR – IGG sezione di Pisa	Gianfranco Di Vincenzo
TOOL Lab - Tectonic Modeling Laboratory	CNR – IGG sezione di Firenze	Marco Bonini
Archaeomagnetic Laboratory	CNR – IGG sezione di Pisa	Claudia Principe
Fluid-geochemistry laboratories	INGV - Osservatorio Vesuviano	Stefano Caliro
Micro-CT laboratory	INGV - Osservatorio Vesuviano	Lucia Pappalardo
Isotopic geochemistry laboratory	INGV - Osservatorio Vesuviano	llenia Arienzo
SEM and FTIR laboratory	INGV - Osservatorio Vesuviano	Monica Piochi
X-Ray Diffraction laboratory	INGV - Osservatorio Vesuviano	Angela Mormone
Reflection Seismology Laboratory "SismoLab-3D"	INGV - Sezione Roma1	Roberto Basili
Fluid Geochemistry Laboratory	INGV - Sezione Roma1	Alessandra Sciarra
New Technology and Instruments laboratory	INGV - Sezione Roma1	Giuseppe Di Stefano
Geology and Geotechnologies Laboratory	INGV - Sezione Roma1	Paolo Marco De Martini
HPHT of experimental Volcanology and Geophysics	INGV - Sezione Roma1	Piergiorgio Scarlato
Site effects Laboratory	INGV - Sezione Roma1	Giovanna Cultrera
X-ray Laboratory	INGV - Osservatorio Etneo	Lucia Miraglia
Sedimentology Laboratory	INGV - Osservatorio Etneo	Daniele Andronico
Laboratory of Paleomagnetism	INGV - Sezione Roma 2	Aldo Winkler
Stable Isotopes Lab	INGV - Sezione di Palermo	Giorgio Capasso
Noble gas Lab	INGV - Sezione di Palermo	Andrea Rizzo
Laser Ablation-ICP-MS lab	INGV - Sezione di Palermo	Antonio Paonita
Trace elements lab	INGV - Sezione di Palermo	Lorenzo Brusca
Ion chromatography Laboratory	INGV - Sezione di Palermo	Sergio Bellomo
Optical Microscopy and Scanning Electron Microscopy	INGV - Sezione di Pisa	Claudia D'Oriano
Sedimentology and Volcanology Labs	INGV - Sezione di Pisa	Alessio Di Roberto

ILGE

• n°34 Laboratories

• n°95 Researchers/Technicians













WHAT WE DO?

Physics, petro-physics, chemistry of Consiglio Nazionale delle Ricerche sediments-rocks-minerals-magma INGV Analogue modelling of A ROMA TRE Consiglio Nazionale delle geological processes Ricerche Consiglio Nazionale delle Ricerche **Dynamics of faults and eruptions** INGV Consiglio Nazionale delle Ricerche Geochronology INGV A ROMA TRE Paleomagnetism INGV



integrated laboratories for geosciences and environment















1 - **integration and implementation** of existing national research infrastructures to increase their international competitiveness;

2 - **optimization of the use of national laboratories** by structuring policies and consolidating protocols aimed at maximizing the use of their resources (i.e., data and facilities);

3 - **reduction of fragmentation and duplication of "large" apparata** to rationalize investments of the Italian research;

4 - support the **mobility** of researchers, students (i.e., degree and doctorate) and technicians between the different infrastructures.







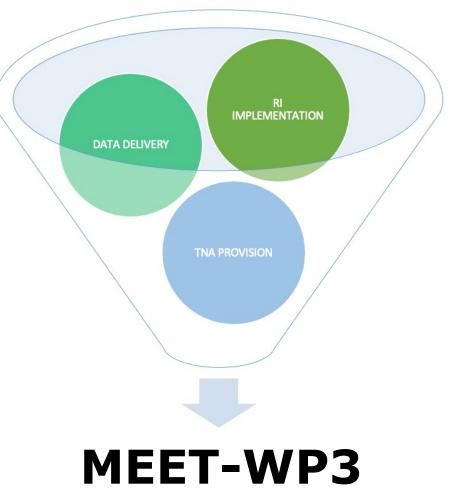








PILLARS















FIRST YEAR WP3 ACTIVITIES

- Kick-off (7 December 2022)
- Meetings/training
- Recruitment of personnel
- Tenders
- Organizing TNA-NOA (portal, access rules)
- Manage Criticalities (mainly administrative)















PILLAR#1: RI IMPLEMENTATION

ILGE will strengthen the national research scenario by implementing a solid network of experimental and analytical RI characterized by transversal competences.



modernized ILGE laboratories

- advance national research capabilities far beyond the present state
- assume a leading international role in Solid Earth Science











PILLAR#1: RI IMPLEMENTATION





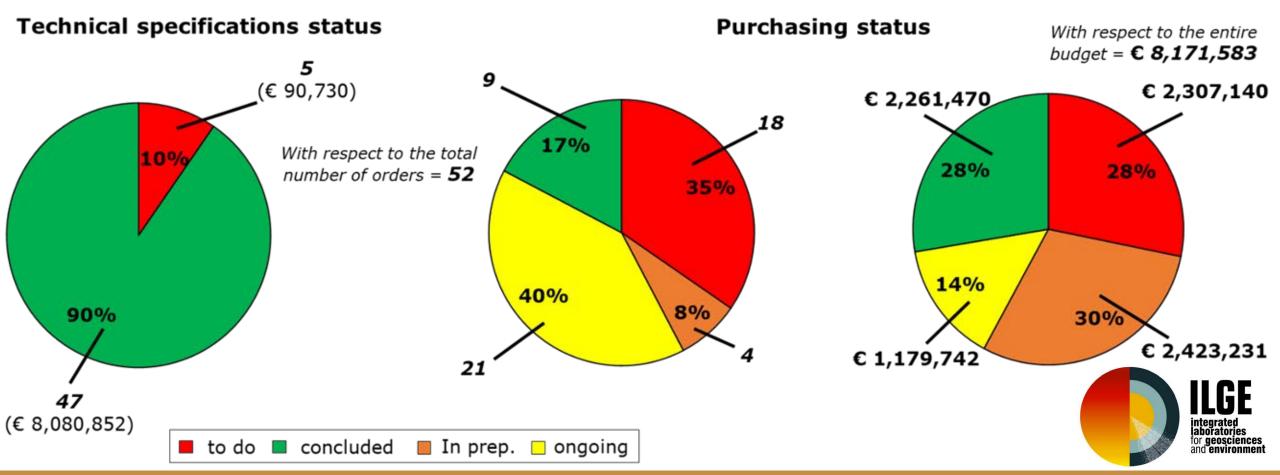








PILLAR#1: RI IMPLEMENTATION









https://epos-msl.uu.nl





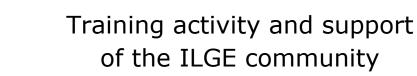
PILLAR#2: DATA DELIVERY MSL Dataset Portal

A A A A A A A Sugar

MSL Metadata Catalogue

https://dataservices.gfz-potsdam.de/portal/index.html

	Portoam	EUDIONA/TEREBINIUS/STM	Caluaria Lata Subdomaina About Salach
fortal Submit Metadata About/Con	tact Data Readiness Roadmap RDN recommendations for PhD students		
arch	· ·	₩ / Datasets	
a ESC to class suggestions)	Person Maria Maria	T Late	
	· · · · · · · · · · · · · · · · · · ·	atheriab (A	analog modelling
al Filter Cantha	And the second	Loberatory of Exper (4)	
+		Tectoric Modeling (4) 🛛 🔿	18 datasets found for "analog Order by Resvance
-		Heffec - Heimholtz (2)	modelling*
PDV 644	I make a subscription of and	TeoLab - Teclonic (1)	
wan.		TecMOD - GRUssoel (C., (1)	Supplament to: Rheological banchmark of silicone oils used for analog medelin
Selection (Link)			The detopete that are presented here have been statisted to provide a rheologisal benchmark of silic
rateguet, moderati, at'i, georagiat, 🗴	Late 10 Opertmethig	T Subdamaire.	used in various analog modeling laboratories. The data contains
	Found 59 datasets.	analogue models of (14)	Supplementary contacted to "Machine Learning one condict the Doring and size o
erters	Digital image correlation data from analogue modelling experiments addressing extension of weakened crust		Supprementary material to "Mashine Learning can predict the timing and size o. This data set includes the search of digital image convertion of one experiment on subduction
man Research Centre for Geosciences	Authors: Osaglede, Edeseghe E.; Rosenau, Nethiles; Rudolf, Michael et al. Abstract: This data set includes the results of digital image correlation analysis		megathrust earthquakes with interacting asperites performed at the Laboratory of
ries	applied to analogue modeling experiments (Table 1) on the effect of weakness during distributed crustal extension performed at the Helmhatz Laboratory for	T Kapwords	
auth science	Tectonic Modelling (HelTec) of the GFZ German Research Centre for more	mai%-scale laborat. ; (%)	Ring shear test data of iron powder – quartz sand mixture: a new marker mater.
earth science services	Ring shear test data of quartz sand - silicate conceptores mixtures used for ana- logue experiments at the Institute of Geophysics of the Cosch Academy of Sci-	TECTONICS (11)	This dataset provides histori data from ring-shear tests (FST) on an iron powder – quartz sand mich ivegoht rolio 1 (3). This material is used in particular as marker
irce types	ence, Progue	Quartz Sand (R)	proof a rest root to be reacted to be bound as the state.
na -	Authors: Warsitrika, Michael; Závada, Prokop; Kniza, Ondřej et al. Abstract: This dataset provides friction data from ring-shear tests (RST) for mix-	Sand (R)	Supplement to: Graben formation and dike arrest during the 2009 Harrat Lunaxy.
	tures of quartz sand and sili-cate ceospheres, which are used for analog esperi- ments in the laboratory of the Institute of Geo-physics of the Czech Academy of	Digital Image Core (7)	This dataset is supplementary material to the article by Xu et al. (2516) 'Braben formation and dike a
utjects	Science (IG CAS) (Warsitzka et al., 2021). The motures have been more	property data of an (7)	during the 2009 Harvit Lunapyly dike intrusion in Saudi Arabia
e madeling results e madels of geologic processes	Digital image correlation data from analogue modelling experiments addressing magina emplacement along simple shear and transfermienal fault series.	techonic process (7)	
set > hacturing	Authors: Michail, Maria: Rudolf, Michael; Rosenau, Matthias et al.	tectorile setting (7)	Digital image correlation data from analogue modelling experiments addressing.
sator setting x crust satting x cards, serce > safed sinth > tectorics herce services > data analysis and v.	Abstract: This data set includes the results of digital image constation analysis applied to nine experiments (Table 1) on magma-tectonic interaction performed	PLATE TECTONICS IS	This cara set includes the results of digital image constation of Stillshiftle-elecous experiments on gravitational salt tectorics performed at the Tectonic Modelling Lab of the
an plate observing system	at the Helmholtz Laboratory for Tectoric Madelling (HelTec) of the GPZ German Research Centre for Geosciences in Potsdam in the framework of EPOS more	Corundum Sand (5)	
anar .	CT data, PDV analysis results and surface view videos of analogue models of inter-	Show More Keywords	Experimental data of analogue models of subduction investigating the interpla
sefficient de laboratories	acting crustal and manife weaknesses during rifting Authors: Zwaan, Prank; Chenin, Raukne; Briett, Duncan et al.	The server of th	This dataset includes images capicling the evolution in map view and lateral view of T analogue
of analogae modeling materials	Abstract: This data set includes videos depicting the surface evolution (time laps photographs and Particle Image Velocimetry or PLV analogs) of 15 analogue	Y Fernata	experiments of subduction to better understand the interplays between slab pull.















PILLAR#2: DATA DELIVERY

C Â	▲ Not secure	mee	et.ingv.it/attivita/transn	nal-access/tn	a-ilge-facilities	A	☆ ≎	& ¢	() ☆		~ ?
S Ingv			TORING EARTH'S JTION AND TECTONICS		Finanziato dall'Unione europ NextGenerationEU	ea 🐼 d	linistero ell'Universi della Ricero		Italia Piano Nazion Di Riparsa e P	lomani	
	An Carrier and An Andrew Andre	MAN MAN Isnatio	DGETTO - ATTW M/MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM	www.m	DMUNICAZIONE		Q ⊂EFW	GALF H	HZ IN	4	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Show 10	✓ entries							Search:			
Category		÷	Name		Laboratory		↓ Labora Section	tory n/Department		Landing page	
Analogue r processes	nodeling of geologica	ıl	Shock-tube system		HPHT of experimenta Geophysics	al Volcanology and	INGV -	Sezione Roma 1		link	
Analogue r processes	nodeling of geologica	il	Rheological characteriza materials	ation of analog	Laboratory of Experir	mental Tectonics	Univers	ità Roma TRE		link	
	nodeling of geologica	d									
processes	5 5 5		Subduction facility		Laboratory of Experir	mental lectonics	Univers	ità Roma TRE		link	

TOOL Lab - Tectonic Modelling Laboratory

Micropaleontology

Paleoclimate

X-ray Laboratory

Noble gas Lab

Laboratory

Fluid Geochemistry Laboratory

Gas Chromatography Lab

CNR - IGG sezione di Firenze

link

link

link

link

link

Previous 1 2 3 4 Next

Landing page

INGV - Sezione di Pisa

INGV - Sezione di Pisa

INGV - Osservatorio Etneo

INGV - Sezione di Palermo

INGV - Sezione di Palermo

INGV - Sezione Roma 1

Section/Department

I aboratory

In close coordination with A11.1 and A11.2 of WP11 Italian Platform for Solid Earth Science (IPSES) the first dynamic prototype of a catalogue listing all ILGE facilities is available at http://meet.ingv.it/attivita/transnational-access

To fully support the **FAIR data principles** (Findable, Accessible, Interoperable, Reusable) access **via API** (Application Programming interface) is currently being worked on.





Laboratory

X-ray spectrometer

Noble Gas Laborator

Gaschromatography

gas chromatography laboratory

Biostratigraphy and Paleoclimate

Speleothem sampling for paleoclimate

processes

Geochemical data

Geochemical data

Geochemical data

Geochemical data

Showing 1 to 10 of 37 entries

Category

Environmental e paleoclimatic study

Environmental e paleoclimatic study









PILLAR#3: **TRANS NATIONAL ACCESS PROVISION**

PNR/PNIR 2021-2027

ESFRI

3.2 L'accesso¹⁵

Le IR sono e devono essere elemento fortemente attrattivo per i ricercatori di tutto il mondo, rappresentando il luogo fisico o virtuale aperto a tutti, per poter condurre ricerche 🕇 d'avanguardia, sperimentare, crescere ed innovare. L'accesso offerto dalle IR con la possibilità di fruire di dati, attrezzature, servizi ed expertise diversi per condurre studi ed esperimenti scientifici ha un ruolo decisivo nel far avanzare le frontiere della conoscenza nei vari settori, con la creazione di saperi orientati a sfide sociali globali che mai come ora richiedono approcci e metodi innovativi.

Con l'accesso aperto ai risultati (dati, articoli, standard, procedure, strumenti ecc.) e alle facility, dove svolgere e perfezionare la ricerca, le IR si impegnano a svolgere un ruolo rilevante nell'attuazione della Strategia sulla Scienza Aperta promossa dalla Commissione europea per migliorare la circolazione delle conoscenze e l'innovazione.

L'accesso alle IR rappresenta anche per il settore privato un'opportunità unica per utilizzare le migliori tecnologie e competenze esistenti, creare e testare nuovi prodotti e servizi per il mercato, risolvere problemi tecnici suscettibili, diversamente, di rallentare lo sviluppo di attività imprenditoriali innovative e altamente competitive.

È dunque opportuno promuovere un accesso sempre più aperto e sostenibile, favorendo le diverse tipologie e modalità di accesso esistenti. Le IR, ognuna con caratteristiche e 🗧 🕇 combinazioni proprie, offrono essenzialmente tre diversi tipi di accesso

- l'accesso virtuale a dati, strumenti e prodotti digitali, forniti direttamente attraverso la Rete e le infrastrutture di comunicazione.
- l'accesso fisico a laboratori e facilities, che si realizza guando l'utente visita di persona i siti dell'infrastruttura di ricerca e ha modo di usare in loco attrezzature e strumentazioni, ricevere training e supporto da parte di personale specializzato,
- l'accesso remoto a risorse, strumentazioni e servizi, guando l'utente, pur non essendo presente in loco nella facility di interesse, ha la possibilità di fruire di servizi specifici e utilizzarne le attrezzature a distanza

. . . Occorre incentivare e supportare il programma di accesso alle IR



RIs based on physical or remote access should continue to offer services on an excellence basis in line with European Charter

for Access to Research Infrastructures (e.g. access should be granted according to the quality of proposals submitted by the relevant research community and evaluated following a process of peer review). For each RI, a proper balance must be found between RI member and non-member access as well as priority excellence-based, and fee-based access. RIs based on virtual access should offer services on an open and FAIR basis.

With the support of ESFRI, the MS/AC are invited to promote the convergence of national policies and frameworks on RI access and funding models; to reduce the overhead of establishing and operating (especially distributed) RIs and thereby facilitating transnational access. Furthermore, the EC and MS/AC are invited to consider additional, sustainable funding models, complementing the existing funding model, which approaches (transnational) access (TNA) as an element of EC projects.

The EC and MS/AC are invited to make RI access costs eliaible for an expanded set of funding sources, including national funds, European structural and investment funds, and appropriate EC framework funds (e.g. all Pillar 1 and Pillar 2 instruments in Horizon Europe)

EUROPEAN COMMISSION

European Commission	n English Search
Research and innov	vation
Home > Partners, networking > A	Access to research infrastructure > Access to European Research Infrastructures
Access to Euro	pean Research Infrastructures
	ational access to Research Infrastructures, the charter for access, lists of
research minastructures, in	erated projects and news.
PAGE CONTENTS	Transnational access to European Research Infrastructures
PAGE CONTENTS Transnational access to European Research Infrastructures	Transnational access to European Research Infrastructures Research Infrastructures are facilities, resources and services used by the science community to conduct research and foster innovation.
Transnational access to European Research	Research Infrastructures are facilities, resources and services used by the science community to
Transnational access to European Research Infrastructures	Research Infrastructures are facilities, resources and services used by the science community to conduct research and foster innovation.



for geosciences









PILLAR#3: **TRANS NATIONAL ACCESS PROVISION**



Evaluation of Research Quality



- NEW5: VQR 2020-2024 Le infrastrutture devono essere caratterizzate da: 3.
 - apertura all'utilizzo da parte della comunità scientifica e di utenti provenienti od associati ad imprese, Enti a) Pubblici di Ricerca o ad Atenei, senza vincolo di appartenenza istituzionale o nazionale, ai fini della conduzione di ricerche di alta qualità nei rispettivi campi;
 - priorità di accesso in base alla qualità delle proposte, sottoposte a valutazione da parte degli organi dirigenti b) dell'infrastruttura.













PILLAR#3: TRANS NATIONAL ACCESS PROVISION

Service allowing for physical and virtual access of users to the ILGE network of laboratories providing financial support for both the host laboratories and the mobility of researchers and students.



ILGE's competence based on:

- organization of three MSL-EPOS pilot calls (2017, 2018, 2019);
- organization of the service in the EXCITE project (call INFRAIA H2020);
- definition of infrastructure access rules at national/international level.













PILLAR#3: TRANS NATIONAL ACCESS PROVISION





1st year: definition of infrastructure access rules at national/international level. Realisation of the digital platform to manage the calls (--> WP11).

- 2nd year: organization of the 1st TNA/NOA pilot call.
- 3rd year: organization of the 2nd TNA/NOA call.













PILLAR#3: TRANS NATIONAL ACCESS PROVISION



- Trainings within the community
- Definition of Guidelines and infrastructure access rules at national/international level.
- Setup and realization of the Facilities catalogue (in collaboration with the WP 11) <u>https://meet.ingv.it/attivita/transnational-access/tna-ilge-facilities</u>
- Setup and realization of the digital platform to manage the calls (in collaboration with WP11)













PILLAR#3: TRANS NATIONAL ACCESS PROVISION



- end 2023: open first call
- mid February 2024: deadline first call
- February-mid march 2024: evaluation of the proposals
- April-September 2024: TNA/NOA
- October-November 2024: Analysis and Report













MILESTONES M24



M16

M8

- Data training
- TNA training
- Reclutamento completo
- > 70% acquisti completato
- > Gare di appalto chiuse
- Indicatori di qualità

- 100% acquisti completato
- Installazione
 completata di > 50%
 delle strumentazioni
- ≻ I TNA call
- Sviluppo portale TNA
- Indicatori di qualità

- 100% delle strumentazioni installate
- 100% delle infrastrutture implementate
- Report sulla I call TNA completo
- ≻ II TNA call
- Indicatori di qualità

- Implementazione completa delle procedure per la condivisione dei dati
- Report sulla II call TNA completo
- 100% del materiale consumabile acquistato
- > Indicatori di qualità















