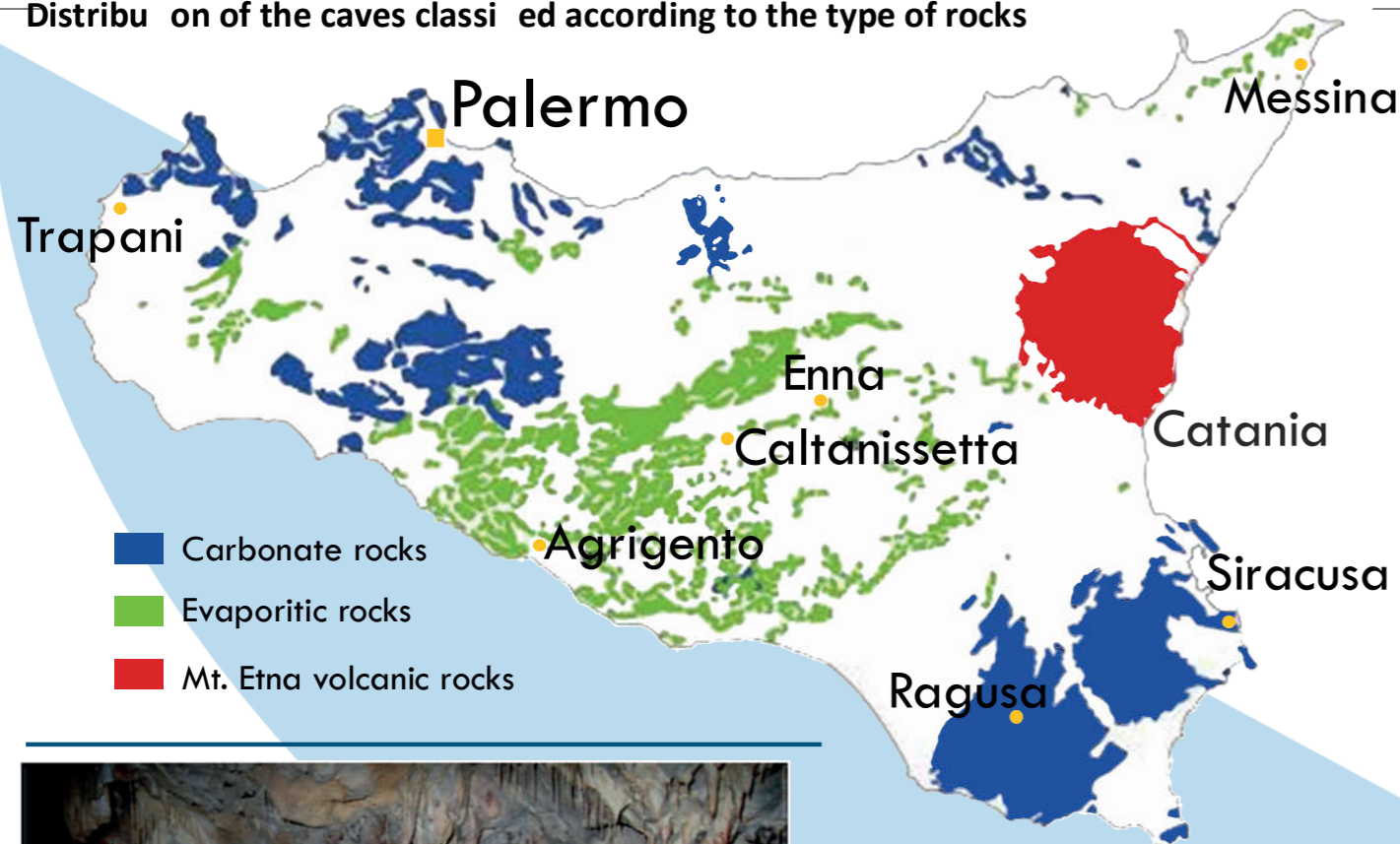




The complex geological setting and the different rock outcrops in Sicily, allow to observe karst landforms in limestones, in the evaporitic rocks and caves in volcanic rocks. In particular 64% of registered caves are carved in limestone, 26% in volcanic rocks and 10% in gypsum. The large number of caves is in the Palermo Mountains (26%), in Monte Etna (26%) and in Iblei Mounts (25%)

## Distribution of the caves classified according to the type of rocks



- Carbonate rocks
- Evaporitic rocks
- Mt. Etna volcanic rocks

### The main karstic areas of speleological interest

Monte Etna
Monti Iblei
Monti Sicani
Monti di Trapani
Monti di Palermo
Monti di Trabia e Termini Imerese
Massiccio delle Madonie
Monti Nebrodi
Monti Peloritani
Bacino di Mazara del Vallo
Bacino del Belice
Bacino del Platani
Bacino dell'Agrigentino
Bacino dell'Imera meridionale

### The deepest caves (> 200 m)

Abisso del Gatto	-323 m
Grotta dell'Eremita	-308 m
Abisso dei Cocci	-300 m
Abisso del Vento	-210 m

### The longest caves (>2000 m)

Grotta dell'Eremita	2880 m
Complesso Alfio-Villasmundo	2634 m
Abisso del Vento	2250 m
Ingh. di Monte Conca	2260 m
Abisso dei Cocci	2053 m

### SPELEOLOGICAL CLUBS BELONGING TO THE FSRS

ASS. NATURALISTICA SPELEOLOGICA "LE TADDARITE" - Palermo
CENTRO IBLEO DI RICERCHE- SPELEO-IDROGEOLOGICHE - Ragusa
CENTRO SPELEOLOGICO ETNEO - Catania
GRUPPO GROTTA CACYPARIS - Noto (SR)
GRUPPO SPELEO BELPASSO - Belpasso (CT)
GRUPPO SPELEOLOGICO SIRACUSANO - CAI - Siracusa
SPELEO CLUB IBLEO - Ragusa

### CAVES CADASTER

<b>Organization</b>	
Region of reference	Sicily
Regional Federation of reference	FSRS
Territorial coverage	Regional
Use of GIS (Geographic Information System)	Qgis
Realization of a WebGIS	no
Referent name	F. Leone
Referent E-mail	catasto@federazionepeleologicasiciliana.it
<b>Dataset</b>	
N° of caves registered in the cadaster	1152
N° of caves with survey	475
N° of caves with complete morphometric data (length, depth, etc.)	944
Existence of a base cadaster form	Si
N° of incomplete cadaster form	208
Datum of entrance coordinates	WGS84/ED50/Roma40 - metriche Gauss-Boaga
N° of karst areas	17
Existence of special cadaster (marine caves/hazard/touristic caves/etc.)	Si
Existence of reliability of the data	Si
<b>Computerization of data</b>	
Existence of electronic cadaster form	Si
Used software	SQLite + SpatiaLite
N° of electronic cadaster form	1152
<b>Special Data</b>	
Bibliographic data:	Si
Geological data:	Si
Idrological data:	Si

## KARSTIC PHENOMENA

More than 20% of Sicily is composed by karstifiable rocks, outcropping roughly for 6000 km<sup>2</sup>. Most important areas from the speleological point of view are: Madonie, Palermo, Trapani, Iblei Mountains and the evaporites, mainly Messinian Gypsum, outcropping in the central-southern Sicily.



## THE VOLCANIC CAVES

Etna Mount is a singular speleological area. On the volcano slopes, more than two hundred caves that formed during the numerous eruptions, occurred. The main types of volcanic caves present on Etna are the Lava tube (or reogenetic surficial type) and the le Caves along fractures.