

INFRASTRUCTURE/FACILITY	OCEAN BOTTOM MAGNETOMETERS
INFRASTRUCTURE/FACILITY	OBM's
LOCATION OF INFRASTRUCTURE/FACILITY	When not in operation, OBM's are recovered at INGV premises (Rome, L'Aquila, Catania). Mobile infrastructure with different locations of operation.
LEGAL NAME OF OWNER ORGANIZATION	ISTITUTO NAZIONALE DI GEOFISICA E VULCANOLOGIA, (INGV)
COUNTRY	ITALY
CONTACT	RI Responsible: Domenico Di Mauro INGV – via di Vigna Murata, 603 00143 ROME - ITALY Domenico.dimauro@ingv.it +393478161923

DESCRIPTION

<p><i>Six complete OBM (Ocean Bottom Magnetometer) systems, each consisting of a scalar magnetometer, a vector magnetometer, along with electronics, batteries, and cables. They are housed in benthospheres to withstand high pressures and are designed to record terrestrial magnetism at great depths, up to approximately 2000 meters below sea level. Each stand-alone system, mounted on a non-magnetic structure in a triangular configuration, is autonomous for months of operation. A release mechanism enables the recovery of each system from the sea bottom at the location where it was deployed. Approximate dimensions: 1.5 meters for each side of the triangle, with a height of about 1 meter. Weight in air: approximately 100 kg, and around 30 kg in water. The greatest attention must be paid to the proper functioning of the power supply batteries, which need to be checked at each use and, if necessary, replaced after each long experiment. For missions of very long duration (exceeding 3 months), the batteries should be recharged/replaced to ensure continued operation.</i></p>		
RI/ Facility participating in an ERIC	NO	

INSTRUMENTS AND AUXILIARY EQUIPMENT

Instrument/ Auxil. Equip.	Measured Parameter(s)	Elevation / Depth	Sampling	Frequency of data recovery
Scalar Magnetometer	Earth's magnetic field total intensity in nT (nanoTesla)	From sea surface to 2000 m of depth	Adjustable from 5 seconds to minutes	Adjustable from 5 seconds to minutes
Vector Magnetometer	X, Y and Z vector components of the Earth's magnetic field in nT (nanoTesla)	From sea surface to 2000 m of depth	Adjustable from 1 seconds to minutes	Adjustable from 1 seconds to minutes

ACCESS PROVIDED

Definition

- *Remote: the requested facility is operated by the owner's staff and the presence of the user team is not required,*
- *Physical (In person/hands-on): the presence of the user team is required/recommended during the whole operation period*
- *Partially remote: the presence of the user team is required at some stage (e.g. installing and un-installing, sample collection and storage).*

Access to the facility and use of the equipment may be managed autonomously by the user team. A brief training session by the owner's staff is recommended to facilitate and expedite the deployment and recovery operations.

SPECIAL REQUIREMENTS

Num of access/Call;	Not limited
Longest period granted in the year:	6 months
Exclusion Periods in the year:	NONE
Max period granted per single user team (working day; days for R/V)	NONE
Max num of user team members admitted	Not limited

Admin/Safety requirements for the user team	It must be ensured and stated that the item(s) is (are) returned in exactly the same condition as they were delivered to the user
Min # days/months of notice to the RI Resp/PI for preparing the access	2 months
Geographical Areas where RI/facility access is granted to user teams	There are no geographical limitations if agreed upon in advance, in term of expenses and logistics