

## University of LISbon SEISmic network

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### 1. INTRODUCTION

In 2001, the ULISSEIS network was launched by the Centro de Geofísica da Universidade de Lisboa (CGUL). Its purpose is to contribute to fill, at least, some of the global VBB network gaps in Western Europe, in cooperation and coordination with other FDSN members. The other important task is the densification of the national network in order to enable high-resolution regional studies of seismicity and earth structure.

### 2. PRESENT STATUS OF THE NETWORK

The ULISSEIS network is operating five digital three-component broad band stations. We have two more stations that are temporarily closed, one in Évora (EVO) and the other one in Madeira Island (MDR). Their sitting map is shown in figure 1.a-c for Portugal mainland, Azores and Madeira, respectively.

From the five operating stations, FLRS, temporarily deployed in Flores, belongs to the “Réseau Large-Bande Mobile” of the INSU and is maintained by ULISSEIS. The EVOP is kept with the coordination of the LDG.

Table 1 resumes the actual status of the installed broad band stations, namely their code, location, main characteristics and the network partners (for FLRS and EVOP).

### 3. DATA AVAILABILITY

With exception for EVOP station, which still is under restricted access, data from the other stations is, or will be, converted in SEED format and then made openly available to the scientific community. CDRO data is already being sent to IRIS archives and we intend to send data from GGNV, MORF and FLRS within 2 months.

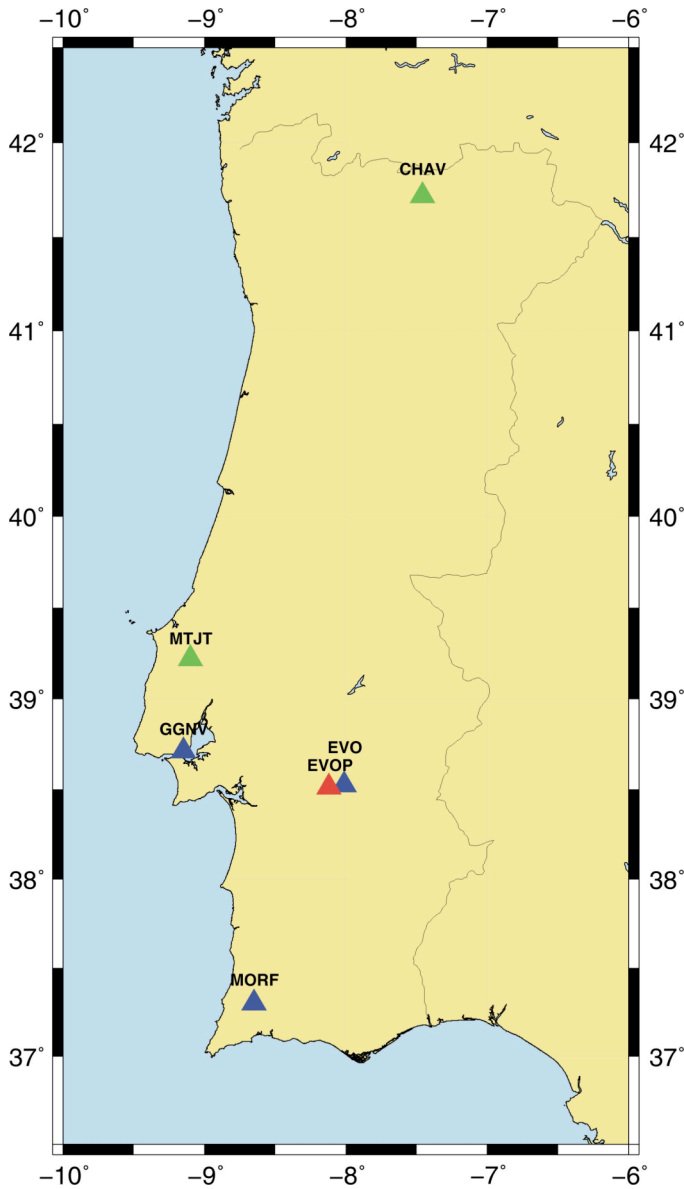
The ULISSEIS Data Center archiving is now underway and will enable a smooth flow of data from the CGUL stations to the seismological research community via anonymous ftp. Details in <http://www.igidl.ul.pt/ru.htm>

### 4. NEW AND PROPOSED DEVELOPMENTS

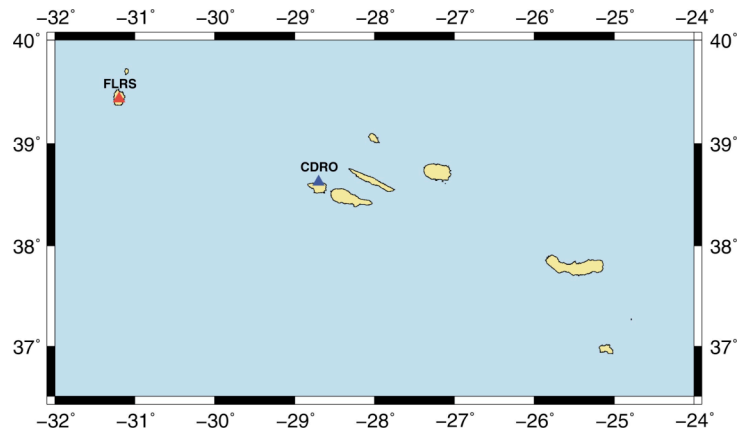
At the end of this summer, ULISSEIS started the CHAV (Chaves) site preparation. This station will be equipped with the STS1 (together with a Quanterra Q330) presently located in Évora (EVO) in order to provide a better coverage of the Portuguese territory. In the beginning of 2006, another VBB seismic station, equipped with a STS2

seismometer and a REFTEK data acquisition system, will be deployed in Montejuento. We intend to re-open MDR (Madeira) BB station which has been closed due to a hardware failure related to satellite transmission.

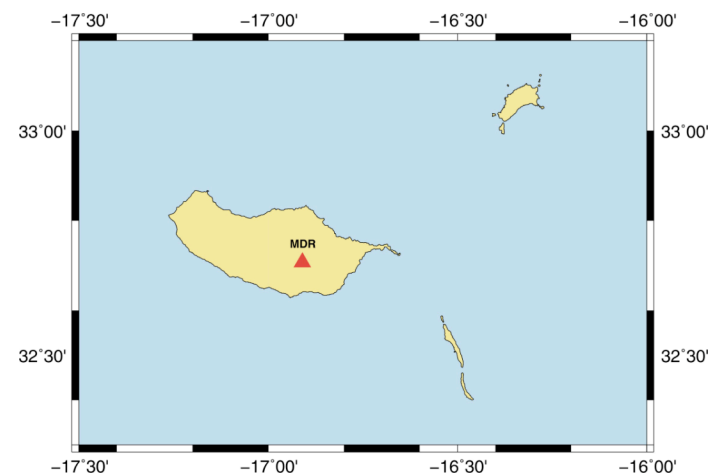
Our main efforts are now focused on the possibility of having some of our stations in real-time using an internet link.



a - Portugal mainland



b - Azores



c - Madeira

Figure 1 – Station map of the ULISSEIS (University of LISbon SEISmic) network.

▲ operational stations totally maintained by ULISSEIS.

▲ operational stations maintained in cooperation with IPGP (FLRS) and LDG (EVO and MDR)

▲ planned stations

Table 1 – Station List

<b>Station</b>	<b>Code</b>	<b>Coord.</b>	<b>Charact.</b>	<b>Operating Date</b>	<b>Data</b>
Évora	EVO	38.532N 8.013W	BB / 20bits	02/96 - 12/99	available
Évora	EVOP <sup>1</sup>	38.520N 8.120W	BB / 24 bits	1996 - present	restricted
Madeira	MDR <sup>1</sup>	32.710N 16.910W	BB / 24 bits	1996 - present	restricted
Cedros	CDRO	38.629N 28.699W	VBB / 24bits	03/07/01 - present	available
Lisboa	GGNV	38.72N 9.15W	BB / 16 bits	01/2005 - present	available
Marmelete	MORF	37.31N 8.65W	BB / 24 bits	02/2005 - present	available
Flores	FLRS <sup>2</sup>	39.43N 31.18W	VBB / 24 bits	04/05 - present	available
Chaves	CHAV	41.73N 7.46W	VBB / 132 bits	Site preparation	-
Montejunto	MTJT	39.23N 9.10W	BB / 16 bits	Planned	-

<sup>1</sup> In cooperation with the LDG

<sup>2</sup> In cooperation with the RLMB/INSU