



BASILICATA REGION SEISMOMETRIC NETWORK

Key events

In April 1983 during a journey in **Washington**, Eng. Maurizio Leggeri (formerly Member of the CGIAM Scientific Committee) met distinguished exponents of the **NATIONAL ITALIAN AMERICAN FOUNDATION (NIAF)**, non-profit foundation established in 1975 with the aim to promote the **historical and cultural Italian-American heritage**.

During the meeting, on the wave of emotion aroused by the **Irpinia earthquake** causing severe damages in Basilicata, Eng. Leggeri declared to wish to realize a **seismic monitoring system** to be installed on the territory of **Basilicata Region**. His proposal was well accepted by the NIAF Board of Directors which allocated 50.000\$ and then further 25.000\$.

In January 1984, always more motivated to realize a regional seismic monitoring system, Eng. Leggeri started the exploratory contact with **KINEMATRICS SYSTEM** (Pasadena-California), leader Company in the production and procurement of seismic monitoring tools.

In July of the same year, the then-CGIAM President, **Mr. Giovanni Messina**, submitted the seismometric network project to the President of Basilicata Region, **Carmelo Azzarà**, who was positively struck by this initiative.

In October, CGIAM and the **National Institute of Geophysics (ING)**, then-President **Enzo Boschi**, started a collaboration aimed at designing the seismometric network, coming from the cooperation between Eng. Leggeri and Dr. Console, formerly CGIAM Partner from 1981 and appointed also Member of the CGIAM Scientific Committee in 1984.

In November, the **“Project for the Regional Seismometric Network of the Basilicata Region”** was drawn up. The local network, designed to be connected to the existing national network, planned a centralized recording in Potenza where the signals of 10 sensors placed in strategic positions were challenged so as to collect the significant data of the whole Region.

In December, Eng. Leggeri and Dr. Console published the project: **““Based regional seismographic network throught the territory of Basilicata as an addition to the national network”**, EERI, California-Newsletter, December 1984 - Vol.18-n°9.

In January 1985, Eng. Leggeri sent the summary of the seismometric network project to **Giuseppe Zamberletti**, Italian **Minister of Civil Protection**, known on the occasion of the 1980 earthquake, who plugged and thanked Eng. Leggeri for this initiative.

In December 1988 by DGR n° 7923 the Basilicata Region allocated a financial contribution of Lire 350.000.000 as well as custom and VAT expenses for the network initiation.

Finally at the beginning of 1990, after a sustained and continuous design and dialogue phase aimed at achieving the network wherein the main actors involved were: CGIAM, Basilicata Region, National Institute of Geophysics and Kinematics System (Pasadena and Losanna offices), the equipment coming from Pasadena was delivered: **8 seismometric networks**.



On 5th May 1990 a **strong earthquake** occurred in Potenza and, from this time, despite the financial difficulties, some sensors were installed to a limited extent in Potenza and the first data were recorded.

In the aftermath, CGIAM promoted a large awareness campaign aimed at optimizing and integrating the seismometric network, by now completely working, through the purchase of new Strong-Motion equipment (these instruments record the ground acceleration of large amplitude unlike the seismographs designed to record the displacements of small magnitude seismic events).

Thanks to this awareness campaign, in 1992 two Strong-Motion instruments were financed, the first one by "**Lucania Bank**" and the second one by "**Pescopagano and Brindisi Bank**". These tools were installed in Potenza at the two banks, Viale Marconi and Via N. Sauro.

Moreover, in April 1993, even **INA** (National Insurance Institute) financed the purchase of another Strong-Motion instrument, installed on its building in Piazza Prefettura in Potenza.

Even if different from the designed network, in addition to provide the data capture to CGIAM, during its operation the network was connected to the national network by modem so that the recorded data were sent at the same time to the central calculator in Rome at INGV.

In 1995, the recording instrument making up the seismometric network was moved from the CGIAM headquarter in Tito to the Basilicata Region offices, in Via Anzio in Potenza.

In November 1995, the **Potenza Province** entrusted the management of the new equipment (6 **accelerographs**) to CGIAM that will be installed in 1996 in the municipality offices of Potenza, Melfi, San Fele, Picerno and Villa D'Agri.

Finally in 1999, the equipment, located in Via Anzio, was loaned for use to the **Geodynamic Center of Basilicata University**, Director Albina Colella, so as to improve it.