



GIUSEPPE MERCALLI, 100TH ANNIVERSARY OF HIS DEATH. A CELEBRATION

Andrea Tertulliani¹

In the night between 18 and 19 March 1914, Giuseppe Mercalli died. He was, at that time the Director of the Osservatorio Vesuviano in Naples, the oldest and famous volcanological observatory of the world.

The name of Mercalli is permanently tied to the namesake scale, but he was one of the founders of whole earth sciences in Italy. Even if his scientific background descended still from an eighteenth-century knowledge, he completely renewed the method to study Earth sciences, in particular volcanoes and earthquakes. His scientific path was very eclectic.

After a first phase as traditional geologist, Mercalli was attracted by the most catastrophic phenomena of the Earth, identifying in a systematic classification of the different characteristics of eruptions and earthquakes, the key toward a comprehension of such events.

His first intensity scale was compiled in 1883, six degrees from slight to disastrous. After the Western Liguria earthquake, that occurred in 1887, Mercalli realized that the De Rossi-Forel scale, largely used at the time, was inadequate to fit extremely severe scenarios. In 1888 and 1902 Mercalli designed other scales, the latest was adopted as standard of the Central Office of Meteorology and Geodynamics. The M7 Messina earthquake convinced Mercalli and the other Italian seismologists to add the twelfth degree.

Mercalli studied in the field all the major Italian earthquakes of his time, providing the first and robust tools and guidelines of the macroseismic surveys.

Maybe not everyone knows he was a priest, and he was a teacher all the life.

His untimely end was very dramatic: he died in the fire of his two-rooms lodge, in Naples.

“Curious end for who spent the life observing the volcanic flames”, observed the contemporaries.

This poster shows the main feature of the man and the seismologist Giuseppe Mercalli, especially concerning his role as a founder of the modern macroseismology.

¹ Dr., Istituto Nazionale di Geofisica e Vulcanologia, andrea.tertulliani@ingv.it



Figure 1. Mercalli on the Vesuvius. 1911.