



The restart of meteorological observations in the 19th century in Lisbon: the contribution of Marino Miguel FRANZINI (1779-1861)

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After the early meteorological observations of the 1770s to the 1790s in continental Portugal (including a 5 year daily series by J. Velho), there were hardly any until 1815.

In December 1815, a meteorological station was set up in Lisbon by Marino Miguel Franzini (1779-1861), an engineer who was also actively involved in Politics (liberal party). Following the tradition of the 18th century enlightenment movement, he took a keen interest in Nature and Sciences, particularly in the “influence” of weather and climate on health and agriculture. Franzini started his observations by request of a physician who sought to understand the reasons why the maximum mortality occurred on the summer months, unlike in northern countries of Europe where maximum mortality occurred in winter (as it happens nowadays in Portugal). The deterministic background of the two scientists is clear.

Franzini was a member of the Lisbon Academy of Sciences (founded in 1799) and had contact with foreign Academies and foreign scientists. His instruments were carefully constructed and described, including graduation scales, and stations' location was indicated. Data from two years observations (several meteorological variables) was published in the Academy of Sciences Memoirs. From 1818 until 1826 and from 1835 until 1856 data was divulged in journals and newspapers, such as the “Journal of Medical Sciences”, together with data on necrology in some of Lisbon parishes (illustrating the interest of physicians on weather); meteorological data and information about agriculture was also published in the “Lisbon Gazette”. Unfortunately, there are hardly any daily data, as Franzini grouped his records according to weather types, as will be explained. Franzini's series will be presented in our talk. The gap between 1826 and 1835 was due to the political activities in which Franzini was involved: the civil war (liberals against absolutist) disrupted scientific research in Portugal.

Official meteorological observations began in Lisbon, in December 1854, in a site not far away from Franzini's station. The long series of Lisbon includes the 1835-54 Franzini's series.