



Meteorology and precipitation analysis: a study on the chemical contents in different kind of precipitation and the relationship between daily and weekly collection.

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Since 1988, in the chemical laboratory of Vigna di Valle, the rainfall water is collected and analyzed. At first it was a weekly collection but later it will become a daily one too. Because of the great quantity of samples during years, many investigations could be carried out, both comparing single events and total precipitation contents, and analyzing chemical components of the precipitation coming from many atmospheric disturbances different for origin and extension area, wind direction and typology of territory interested along its way. Through pH diagrams and other chemical-physicist parameters, it's possible to represent a first indication emerged from the analysis of the two different kind of samples collected, and also it's possible to make a valuation about future differences and perspectives. This study burned from the opportunity of having in the same site two samplers controlled constantly; the chemical laboratory is responsible of collected samples analysis, data analytical validation and statistical elaboration. It may be consider very interesting to know how much and which kind of elements are collected and transported for long distances and time between different parts of the heart by meteorological phenomena. It depends on the wind direction and on the choice of precipitation to fall down that we could send or receive sand, pollution or other light materials from everywhere. This work would have to concur to overlap the two sampling data and to discriminate every acid-rain event from those that have churn with "pad effect" and, at the same time, to be able to associate these phenomena at a meteorological specific situation. The results are taken in consideration for the atmospheric pollution monitoring activity and therefore also for acid-rain carried out by "GAW", which the A.M. is member of since 1975, with a net of collection stations,

as the one of Vigna di Valle.