

Ionosonde data analysis in relation with the occurrence of the 24 August 2016 M6 Amatrice earthquake

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A study on the ionosonde data in the period of few months preceding the crustal M6 earthquake occurred on 24 August 2016, in Central Italy, near Amatrice village is here presented. The earlier obtained relationships for ionospheric anomalies related to strong Japanese earthquakes are considered in this work, to check their validation for the Italian moderate earthquakes. The considered ionospheric anomalies are based on the observed variations of the sporadic E-layer parameters h'Es and fbEs, together with the variation of the critical frequency foF2, over the Rome ionospheric ionosonde. Empirical dependencies for the seismo-ionospheric disturbances relating the earthquake magnitude and the epicenter distance, are obtained and presented. The dependences of the studied process, are showed in the results.