

ISMD strong-motion flat-file 2012-2018 is a parametric table which contains metadata and intensity measures of the revised (MAN) accelerometric waveforms recorded for earthquakes with magnitude ≥ 3.5 occurred on the Italian territory since January, 1st, 2012.

Column details:

- 1) *Date and Time* of the earthquake: year (yyyy), month (mm), day (dd), hour (hh), minute (mm), second (ss) (e.g. 20120124235446)
- 2) *Station Code* (e.g. ASOL)
- 3) *Component* (HNE=East West; HNN=North South; HNZ=vertical)
- 4) *NTC18 soil category* of the recording station (e.g. A=A soil category of NTC18 seismic code)
- 5) *Station Longitude* (E°) in centesimal degree (e.g. 11.9023)
- 6) *Station Latitude* (N°) in centesimal degree (e.g. 45.8003)
- 7) *Station Quota* (e.g. 181.00 m. a.s.l.)
- 8) *Peak Ground Acceleration*, PGA (e.g. 1.03617 gal or cm/s^2)
- 9) *Peak Ground Velocity*, PGV (e.g. 0.0310258 cm/s)
- 10) *Peak Ground Displacement*, PGD (e.g. 0.00204136 cm)
- 11) *Acceleration Response Spectra at period (T) of 0.3s* (e.g. 1.46307 gal or cm/s^2)
- 12) *Acceleration Response Spectra at period (T) of 1.0s* (e.g. 0.166481 gal or cm/s^2)
- 13) *Acceleration Response Spectra at period (T) of 3.0s* (e.g. 0.015298 gal or cm/s^2)
- 14) *Arias Intensity*, AI (e.g. 0.00256064 cm/s)
- 15) *Housner Intensity*, HI (e.g. 0.0736031 cm)
- 16) *Epicentral Distance* (e.g. 77.71 km)
- 17) *Hypocentral Distance* (e.g. 78.39 km)
- 18) *Epicenter Longitude* (E°) in centesimal degree (e.g. 10.9730)
- 19) *Epicenter Latitude* (N°) in centesimal degree (e.g. 45.5410)
- 20) *Hypocentral Depth* (e.g. 10.30 km)
- 21) *Local (M_L) or Moment (M_w) Magnitude* (e.g. 4.2)

References

Arias, A. (1970). *A measure of earthquake intensity*, in *Seismic Design of Nuclear Power Plants*, R. Hansen (Editor), M.I.T. press, Cambridge.

Housner, G.W. (1952). *Spectrum intensities of strong-motion earthquakes*, in: *Proc. Symp. on Earthquake and Blast Effects Structures*, C. M. Feigen (editors), Univ. California, Los Angeles, 21-36.

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