Hai Sentito Il Terremoto (HSIT) - Macroseismic questionnaire database 2007-2021, version 2, doi:10.13127/HSIT/Q.2

MacroseismicQuestionnaires_2007-2021_HSIT_Q.2.csv
File description

Database of the questionnaires, about earthquake macroseismic effects observed in Italy, collected for earthquakes occurred from 15-06-2007 to 31-12-2021 by "*Hai Sentito Il Terremoto*" system (HSIT, https://doi.org/10.13127/HSIT) in Italy. Data were voluntarily given by people and they were not revised by scientists, thus, there may be errors due, for example, to a user's incorrect choice of earthquake during compilation, particularly for events immediately following or just preceding a strong earthquake.
Macroseismic observations were collected through the web-based questionnaire described in "Tosi P., Sbarra P., De Rubeis V., and Ferrari C. (2015), Macroseismic intensity assessment method for web-questionnaires, Seismological Research Letters, 86, 985-990, doi: 10.1785/0220140229".
The municipality data (columns from 34 to 37) were obtained from the National Institute of Statistics (ISTAT 2011). Earthquake parameters (columns from 38 to 44) were obtained from ISIDe Working Group (2007), Italian Seismological Instrumental and Parametric Database (ISIDe) https://doi.org/10.13127/ISIDE.
Column descriptions are listed in Tables 1 and 2. In Table 2 are listed also all answer codes of the HSIT questionnaire.
Data of this file, created by Istituto Nazionale di Geofisica e Vulcanologia, are licensed under a Creative Commons Attribution 4.0 International License. For reference: **Sbarra, P., Tosi, P., De Rubeis, V., and Sorrentino, D. (2021). Hai Sentito Il Terremoto (HSIT) - Macroseismic questionnaire database 2007-20121, version 2, https://doi.org/10.13127/HSIT/Q.2**

Differences from version 1 (MacroseismicIntensities_2007-2021_HSIT_Q.1.csv) - In addition to the inclusion of data for 2019-2021, this version of the database, for earthquakes prior to 2019, may differ in the addition of new questionnaires and the deletion or relocation of questionnaires attributed to a wrong earthquake.

Table 1. Column number and field explanation of the file.

Column number	Field Name	Field Explanation
1	IdQuestionnaire	questionnaire identifier
2	QuestionnaireVersion	the answer codes have been updated four times since 2007
3 to 31	- questions listed in Table 2	29 columns listed in Table 2
32	QuestionnaireReliabilityMCS	questionnaire used (1) or not used (0) for MCS intensity estimation
33	QuestionnaireReliabilityEMS	questionnaire used (1) or not used (0) for EMS intensity estimation

34	MunicipalityNameByDb	municipality in which the observer was located during the quake (ISTAT 2011)
35	MunicipalityIstatCode	municipality ISTAT identifier (ISTAT 2011)
36	MunicipalityLat	latitude N WGS84 of the municipality centroid (ISTAT 2011)
37	MunicipalityLon	longitude E WGS84 of the municipality centroid (ISTAT 2011)
38	EventID	Italian Seismological Instrumental and Parametric Database ISIDe earthquake identifier
39	EventDate	earthquake occurrence date and time UTC in ISO 8601 "YYYY-MM-DD hh:mm:ss" (ISIDe)
40	EventLat	latitude N WGS84 of the earthquake epicentre (ISIDe)
41	EventLon	longitude E WGS84 of the earthquake epicentre (ISIDe)
42	EventMagPrefType	best quality earthquake magnitude type (ISIDe)
43	EventMagPrefValue	best quality earthquake magnitude value (ISIDe)
44	EventDepth	earthquake hypocentral depth in km (ISIDe)

Table 2. Column number and answer codes of the HSIT questionnaire.

Column number	Question Field	Answer	Indoors	Outdoors	Code
3	Observer location (versions 1, 2)	inside a building	-	-	4
		outdoors	-	-	1
	Observer location (versions 3, 4)	inside a building	-	-	4
		outdoors	-	-	2
		inside a vehicle	-	-	3
4	Floor (version 1)	unable to say	x		400
		basement/ground (-1/0)	x		401
		1/2	x		402
		3/4	x		403
		5/6	x		404
		>6	x		405
	Floor (versions 2, 3, 4)	unable to say	x		400
		basement (-1)	x		500
		ground (0)	x		501
		1	x		502
		2	x		503
		3	x		504
		4	x		505
		5	x		506

		6	x		507
		7	x		508
		8	x		509
		9	x		530
		10	x		531
		>10	x		532
5	Building height (version 1)	unable to say	x		410
		1/2	x		411
		3-5	x		412
		6-10	x		413
		>10	x		414
	Building height (versions 2, 3, 4)	unable to say	x		410
		1	x		510
		2	x		511
		3	x		512
		4	x		513
		5	x		514
		6	x		515
		7	x		516
		8	x		517
		9	x		518
		10	x		519
		>10	x		520
6	Observer situation (version 1)	unable to say	x	x	20
		sleeping	x	x	21
		at rest	x	x	22
		in motion	x	x	23
	Observer situation (versions 2, 3, 4)	unable to say	x	x	20
		sleeping but awakened by the shaking	x	x	21
		at rest	x	x	22
		in motion	x	x	23
		sleeping	x	x	25
7	Earthquake felt	yes	x	x	31
		no	x	x	32
8	Shaking strength	unable to say	x	x	41
		not felt	x	x	42
		weak	x	x	43
		moderate	x	x	44
		strong	x	x	45
9	Fear (version 1)	unable to say	x	x	51
		no	x	x	52
		yes	x	x	53
	Fear (versions 2, 3, 4)	unable to say	x	x	51
		not at all, very little	x	x	52

		moderately	x	x	53
		a lot, very much	x	x	54
10	Balance	unable to say	x	x	71
		no problem	x	x	72
		difficulty to keep balance	x	x	73
		fall	x	x	74
		dizziness only	x	x	75
11	Frightened animals	unable to say	x	x	91
		no problem	x	x	92
		animals indoors	x		93
		animals outdoors		x	94
12	Free-hanging objects	unable to say	x		101
		still	x		102
		slight swinging	x		103
		violent swinging	x		104
13	China and glasses	unable to say	x		111
		still	x		112
		rattling	x		113
		clattering together	x		114
		have broken	x		115
14	Small objects (version 1)	unable to say	x		121
		still	x		122
		moved or fell	x		123
	Small objects (versions 2, 3, 4)	unable to say	x		121
		still	x		122
		moved	x		123
		fell	x		124
15	Doors and windows	unable to say	x		131
		still	x		132
		rattling	x		133
		opening or closing	x		134
		slamming	x		135
16	Liquids	unable to say	x	x	141
		still	x	x	142
		oscillating slightly	x		143
		oscillating strongly	x		144
		spilling out	x		145
		splashes from pools		x	146
17	Pictures, vases, books	unable to say	x		151
		still	x		152
		shifted	x		153
		few fell	x		154
		many fell	x		155
18	Furniture	unable to say	x		161
		still	x		162

		swinging	x		163
		moved	x		164
		fell or overturned	x		165
19	Plants, trees	unable to say		x	191
		still		x	192
		visibly moving		x	193
		shaking branches		x	194
		branches have broken		x	195
20	Acoustic effect	unable to say	x	x	201
		not heard	x	x	202
		heard	x	x	203
21	Start of acoustic effect	unable to say	x	x	211
		before the shaking	x	x	212
		during the shaking	x	x	213
		after the shaking	x	x	214
22	Provenance of acoustic effect	unable to say	x	x	221
		from the depth	x	x	222
		from the building	x	x	223
		from outdoors	x	x	224
23	Building type of structure	unable to say	x		231
		masonry	x		232
		reinforced concrete	x		233
		wood	x		234
		steel	x		235
		mixed masonry and reinforced concrete (versions 3, 4)	x		236
24	Walls	unable to say	x		241
		no damage	x		242
		cracks in plaster only	x		243
		small cracks in walls and/or big pieces of plaster fall	x		244
		large cracks in walls	x		245
		collapse	x		246
25	Roof tiles	unable to say	x		251
		no damage	x		252
		few sliding	x		253
		many sliding	x		254
26	Chimneys	unable to say	x		261
		no damage	x		262
		cracks	x		264
		fell	x		265
27	Building damages	unable to say	x		271
		no damage	x		272
		slight damage	x		273
		moderate damage	x		274

		partial collapse	x		275
		total collapse	x		276
28	End of acoustic effect (versions 3, 4)	unable to say	x	x	291
		before the shaking	x	x	292
		during the shaking	x	x	293
		after the shaking	x	x	294
29	Intensity of acoustic effect (versions 3, 4)	unable to say	x	x	301
		soft	x	x	302
		medium	x	x	303
		loud	x	x	304
30	Earthquake lights (versions 3, 4)	unable to say	x	x	331
		not observed	x	x	332
		observed	x	x	333
31	Acoustic effect similitude (versions 3, 4)	unable to say	x	x	1001
		rumble	x	x	1002
		shot	x	x	1003
		explosion	x	x	1004
		thunder	x	x	1005
		whistle	x	x	1006
		passing truck	x	x	1007
		rocks fall	x	x	1008
		thoud	x	x	1009
		other	x	x	1010