A Review of EEFIT Missions Over the Period 1983 to 2019

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This extended abstract and associated presentation provides a review of EEFIT missions over the period 1983 to 2019.

EEFIT can trace its origins back to 1982 (Booth, 1984; Booth et al., 2011). The founding objectives for EEFIT stated that its purpose was to enable earthquake engineers, architects and scientists to collaborate with colleagues in earthquake prone countries in the task of understanding and consequently improving the seismic performance of both traditional and engineered structures. Training was to be achieved through observing and documenting the nature of the seismic hazards (ground rupture, ground shaking, liquefaction, landslides and tsunami) and documenting how the built-environment at full-scale actually responded to these seismic hazards. The impact of earthquakes on people was the third main objective. All of these objectives were to be achieved principally by conducting field investigations by a multi-disciplinary team following major damaging earthquakes worldwide and reporting back to the local and international engineering community. Encouraging collaboration between academia and industry to achieve these objectives was an important consideration for EEFIT from the outset.

The first EEFIT mission took place soon after the Liege, Belgium earthquake of November 1983 with the first EEFIT presentation of findings to colleagues back in the UK and EEFIT field report taking place in 1984. The most recent EEFIT mission was undertaken in November 2018 following the earthquake and tsunami in Sulawesi, Indonesia. Over the period 1983 to 2019 there has been 37 EEFIT missions – on average 1 mission per year. Table 1 provides a complete listing of the EEFIT missions undertaken. Also included in Table 1 is a summary of the number of members that have undertaken the missions. Over the years 258 individuals have benefited from the experience gained on an EEFIT mission. The earthquake events for which EFFIT missions have been mobilised range in size from the great Mw~9.3 Sumatra, Indonesia earthquake and Indian Ocean tsunami of 2004 to the small Mw~4.0 Folkestone, UK earthquake of 2007.

Table 1. List of EEFIT Field Missions

Mission Number	Year	Earthquake	Number in EEFIT Team
1	1983	Liege, Belgium	1
2	1985	Chile	3
3	1985	Mexico	5
4	1986	San Salvador	2
5	1989	Loma Prieta, California, USA	11
6	1989	Newcastle, Australia	3
7	1990	Vrancea, Romania	3
8	1990	Augusta, Sicily	4
9	1990	Manjil, Iran	1
10	1990	Luzon, Philippines	3
11	1992	Erzincan, Turkey	5
12	1994	Northridge, California	14
13	1995	Kobe, Japan	10
14	1997	Umbria-Marche, Italy	6
15	1999	Quindio, Colombia	4
16	1999	Kocaeli, Turkey	13
17	1999	Ji-Ji, Taiwan	7
18	2001	Bhuj, India	10
19	2004	Sumatra, Indonesia and Indian Ocean	8
20	2005	Kashmir, Pakistan	4
21	2007	Peru	3
22	2007	Kent (Folkestone), UK	8
23	2008	Lincolnshire, UK	4
24	2008	Wenchuan, China	9
25	2009	L'Aquila, Italy	10
26	2009	South Pacific Islands	5
27	2009	Padang, Sumatra	5
28	2010	Haiti	3
29	2010	Maule, Chile	7
30	2011	Christchurch, New Zealand	9
31	2011	North Japan	9
32	2012	L'Aquila, Italy	10
33	2015	Nepal	10
34	2016	Muisne, Ecuador	11
35	2016	Amatrice, Italy	15
36	2016	Kumamoto, Japan	12
37	2018	Sulawesi, Indonesia	11