

1

2

[Tectonics]

3

Supporting Information for

4

**Fault segmentation as constraint to the occurrence of the main shocks of
the 2016 Central Italy seismic sequence**

6

Pizzi A.¹, Di Domenica A.¹, Gallovič F.², Luzi L.³, Puglia R.³

8

¹ University “G. d’Annunzio”, Chieti-Pescara, Italy

9

² Charles University, Faculty of Math. and Physics, Dept. of Geophysics, Prague, Czech
Republic

10

11

³ Istituto Nazionale di Geofisica e Vulcanologia, Milano, Italy

12

13

14

Contents of this file

15

16

Figures S1 to S3

17

Introduction

18

S1, S2 and S3 show the comparison between observed and simulated waveforms
for the three main events of the 2016 Central Italy seismic sequence. The recorded
strong-motion data and the synthetics are filtered by a 4th order causal Butterworth filter
between 0.05 and 0.50 Hz. For the stations Arquata del Tronto, RQT, and Amatrice,
AMT, a different range was used (0.1-0.5Hz) in case of Amatrice event (August 24th,
2016). The stations are codified according to the Engineering Strong-Motion database
(esm.mi.ingv.it).

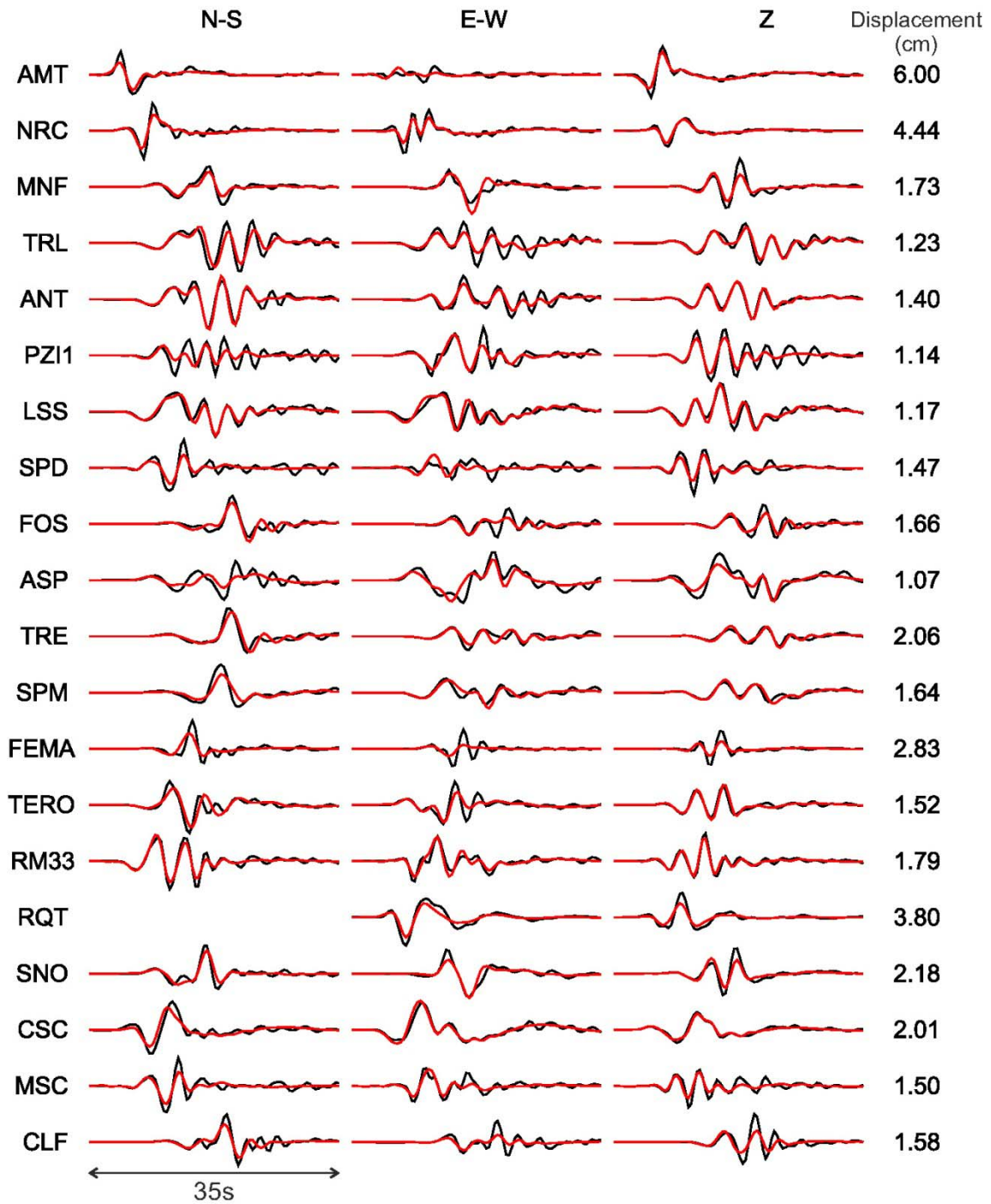
25

26

27

28

29



30

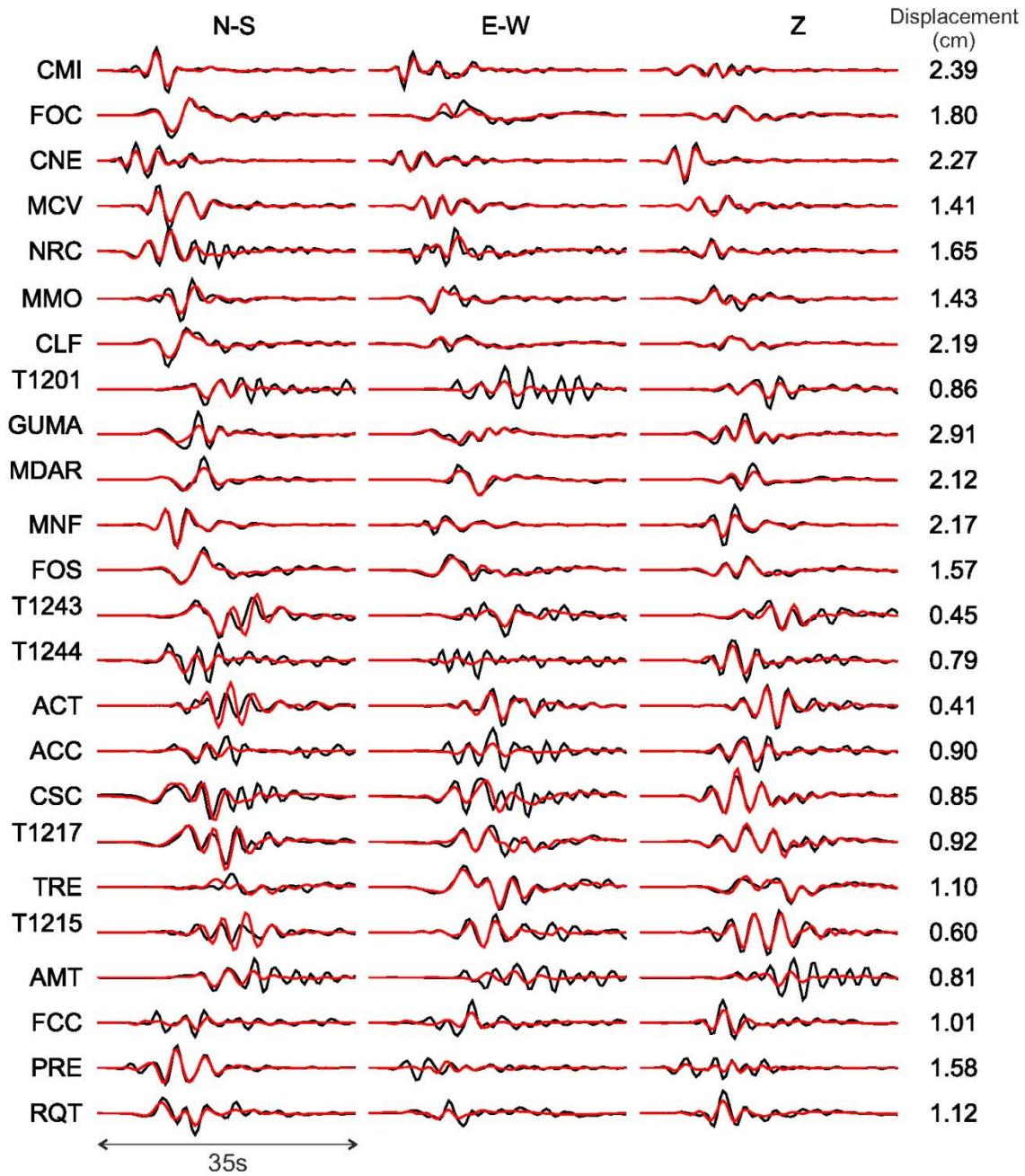
31 **Figure S1.** Comparison between observed (black) and simulated (red) waveforms for the
 32 August 24th, 2016 - M6.2 Amatrice earthquake. The station code is on the left; stations are
 33 codified as in the Engineering Strong-Motion database (esm.mi.ingv.it). Bottom: time scale (s).

34

35

36

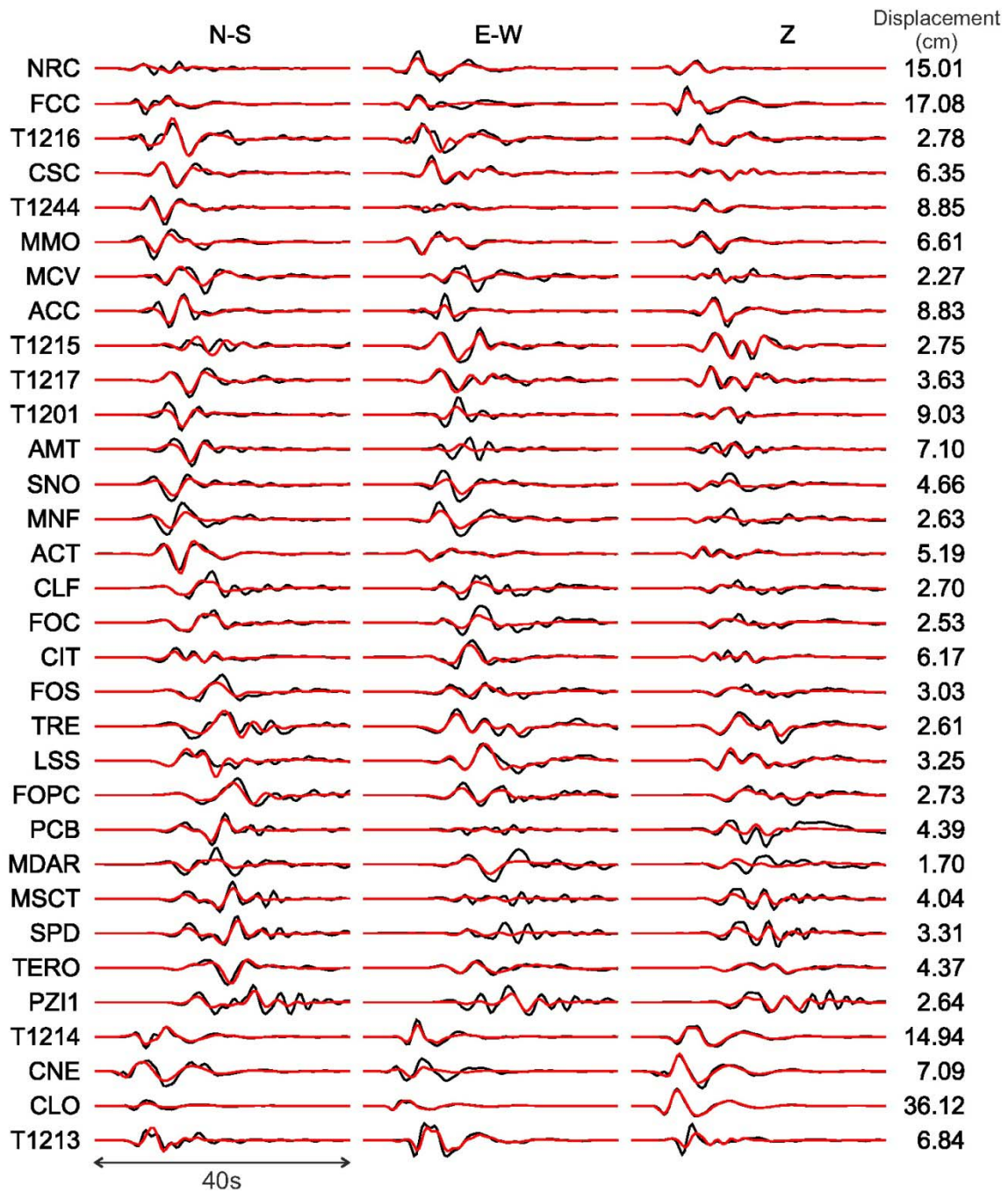
37
38



39
40
41
42
43
44
45
46
47

Figure S2. Comparison between observed (black) and simulated (red) waveforms for the October 26th, 2016 - M6.1 Ussita earthquake. The station code is on the left; stations are codified as in the Engineering Strong-Motion database (esm.mi.ingv.it). Bottom: time scale (s).

48
49
50



51
52
53
54
55
56

Figure S3. Comparison between observed (black) and simulated (red) waveforms for the October 30th, 2016 - M6.5 Norcia earthquake. The station code is on the left; stations are codified as in the Engineering Strong-Motion database (esm.mi.ingv.it). Bottom: time scale (s).