Palu Earthquake Strong Motion Waveform by Observation System Developed by Japan

Palu Earthquake and Palu observatory

M 7.5 – 78km N of Palu, Indonesia
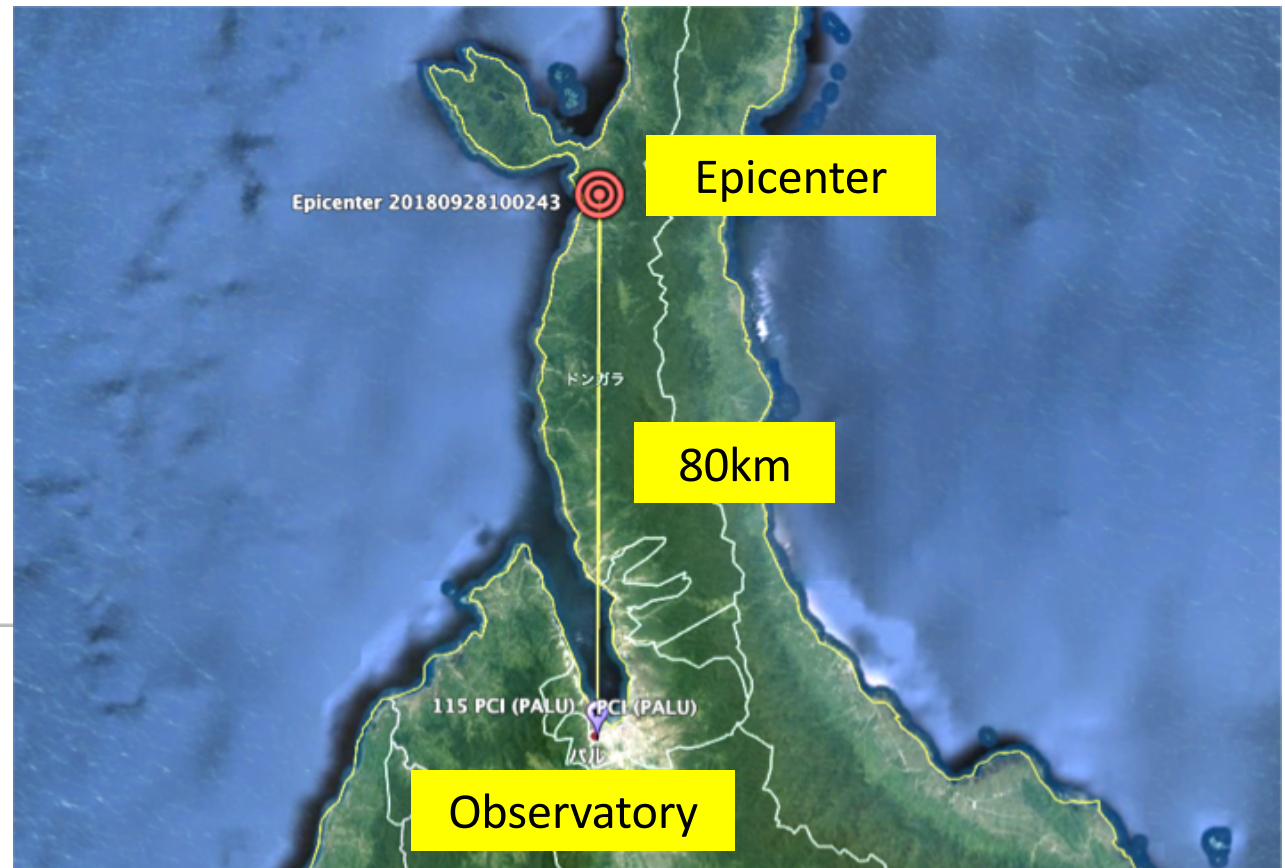
IX DYFI?	IX ShakeMap	YELLOW PAGER	

Time	2018-09-28 10:02:43 (UTC)
Location	0.178°S 119.840°E
Depth	10.0 km

Observatory: PCI-PALU
0.90554S, 119.83666E

80km from the Epi-center

Epicenter 20180928100243

Epicenter
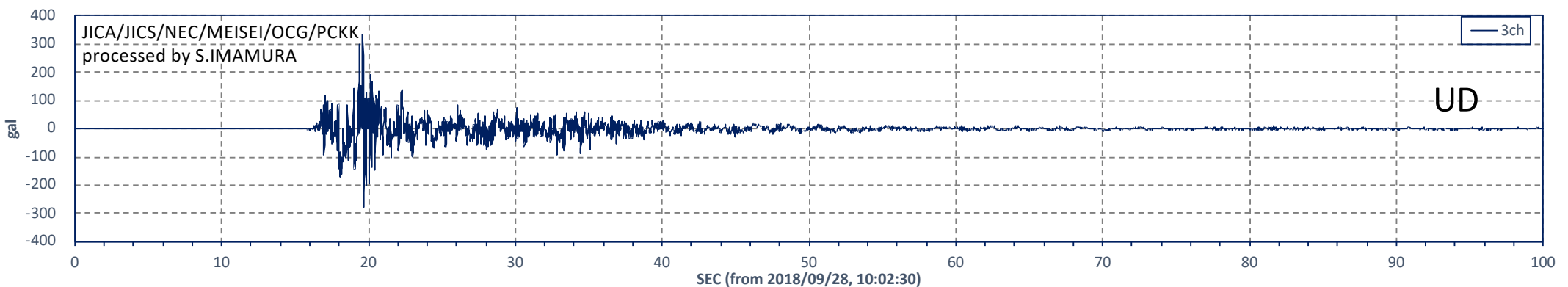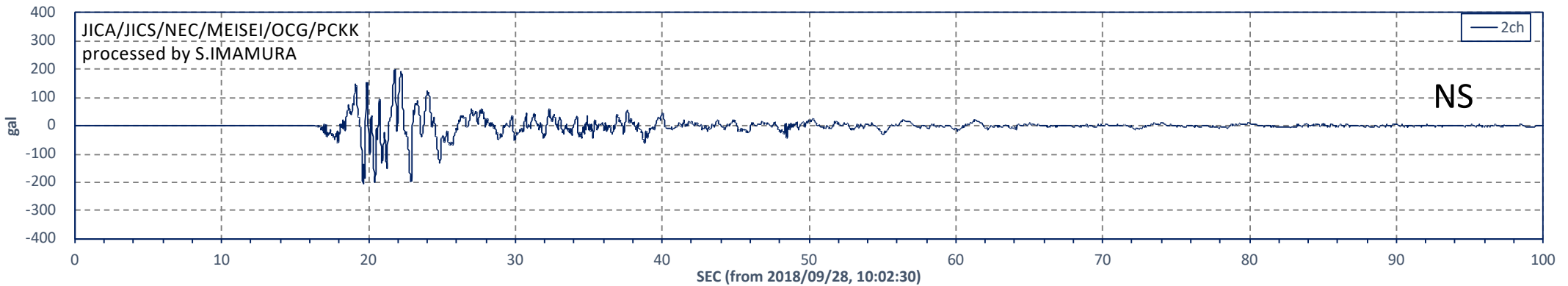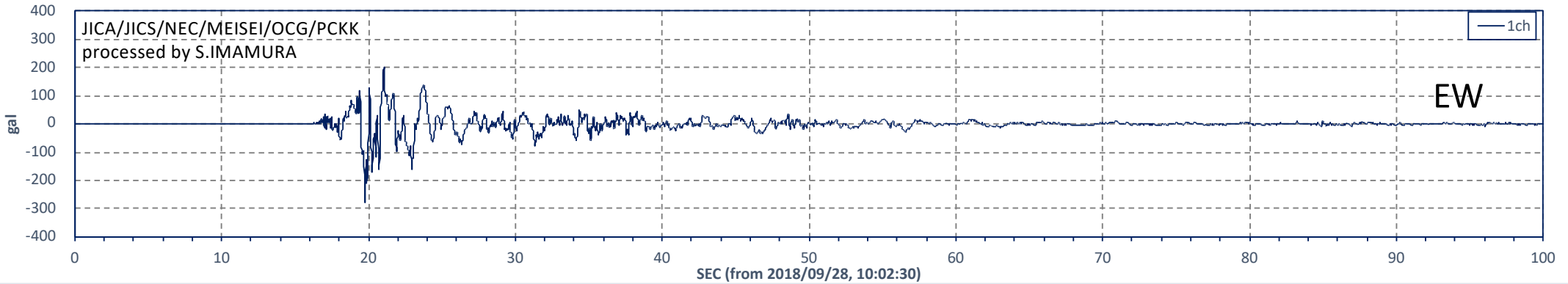
80km

115 PCI (PALU)   PCI (PALU)

Observatory

Observed waveform data

- Sensor: Strong motion accelerometer

- AD resolution: 24bit

- Measurement range: $\pm$ 3000 gal

- Sensitivity:
  - 3000gal / 2^23bit gal/digit = 0.0003576278 gal/digit

- Sampling rate: 100 s/s

- Component: EW, NS, UD
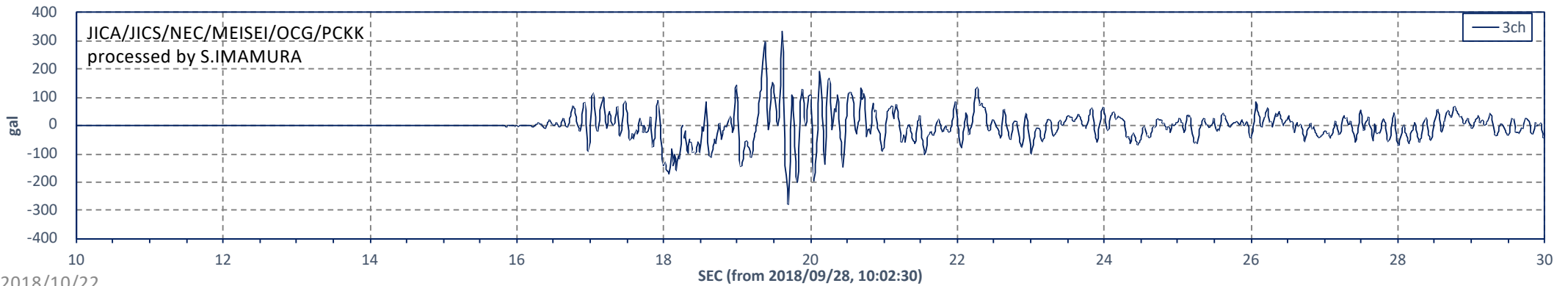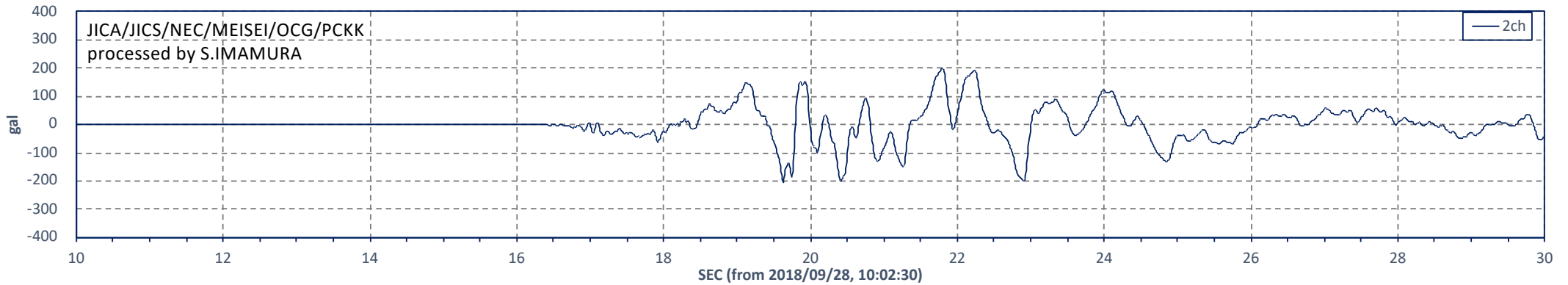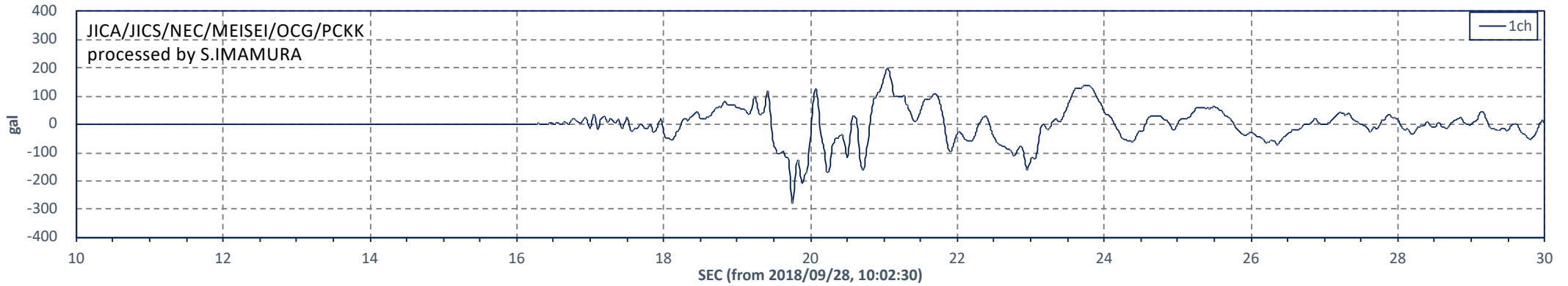
- Recording Period: 2018/09/28/10:02:30 to 10:09:29.99

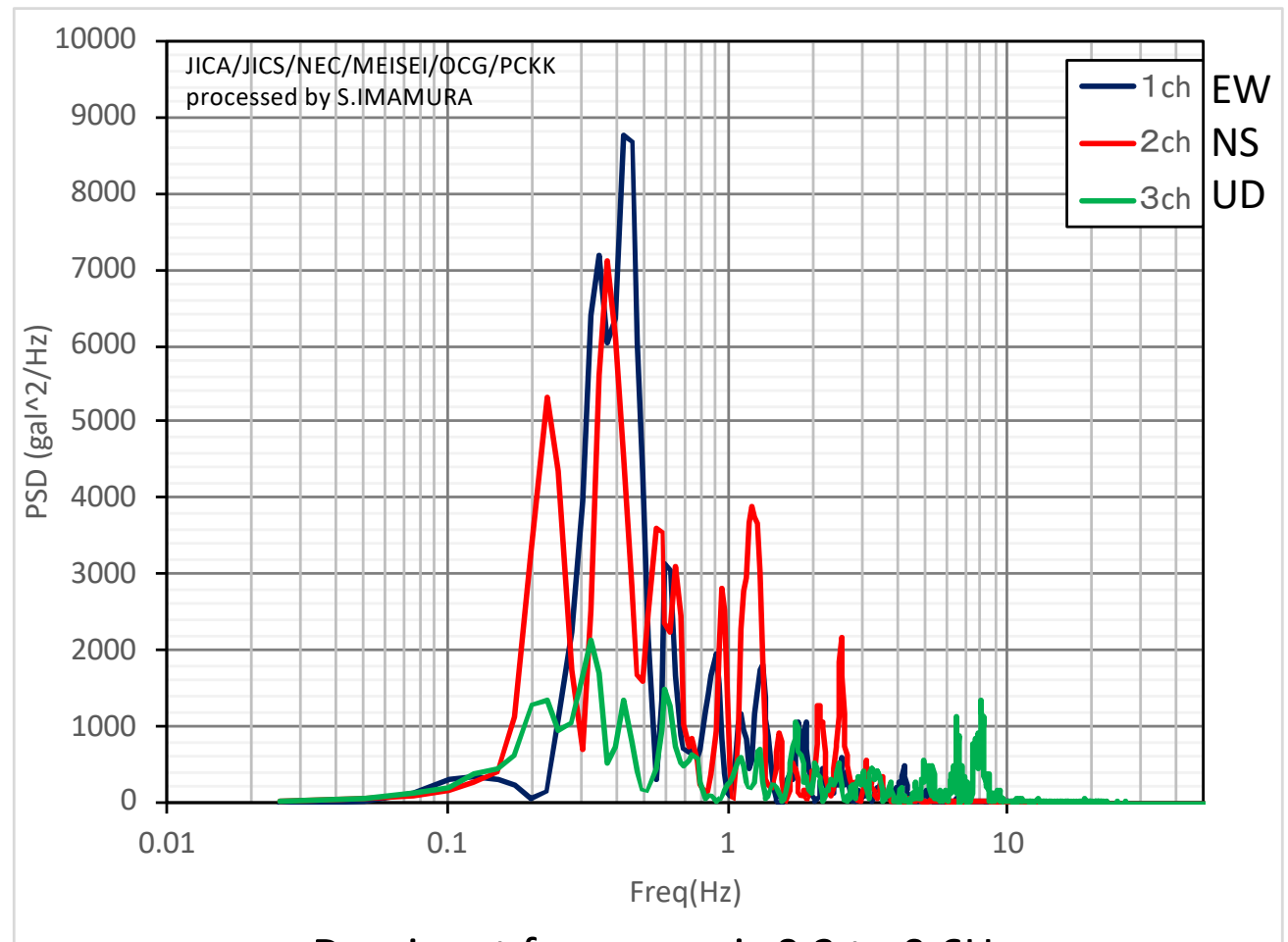# Acceleration waveform from

2018/09/28/10:02:30 to 10:04:10

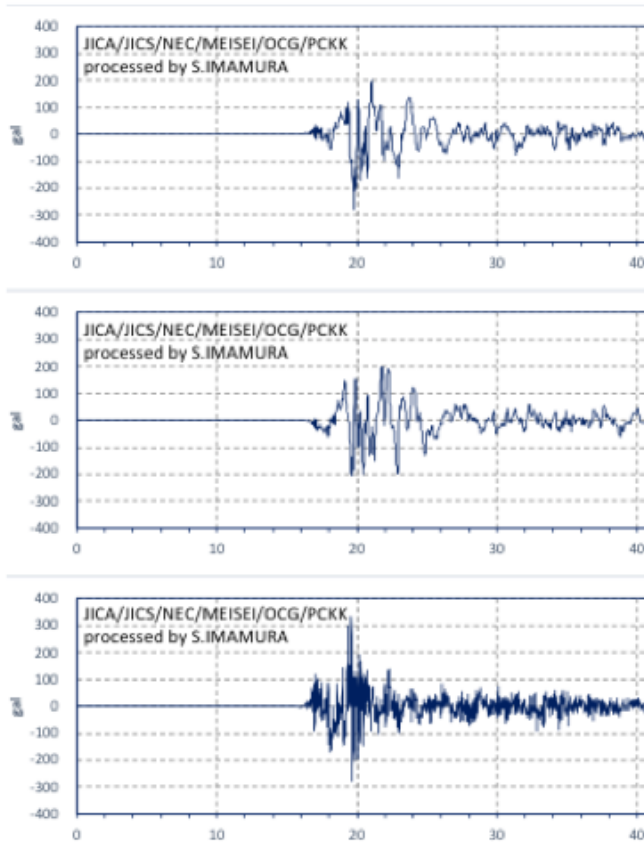# Acceleration waveform
(zoom up around main shock)

2018/10/22

Preliminary study: power spectrum (first 40 seconds)

Dominant frequency is 0.2 to 0.6Hz

2018/10/22

Preliminary study : Seismic Intensity

- JMA Instrumental Seismic Intensity:
  - 5.56 , Class 6- (six minus)

- PGA & MMI
  - EW: 281gal VII, NS: 203gal VII, UD: 335gal VIII
  - Horizontal vector: 333gal VIII
  - 3 component vector: 400gal VIII