

Prompt report on 2021/10/07 22:41 NW Chiba Pref. Earthquake

Event

Table 1 Event<sup>1</sup>

Origin time	Epicenter	Latitude	Longitude	Magnitude	Depth
2021/10/07 22:41	NW Chiba Pref.	35°35.4'N	140°06.2'E	$M_J$ 5.9	75 km

Strong motion data

Table 2.1 List of strong motion records

Code	Station	$\Delta$ (km)	$I_{JMA}$	Azim.	Loc.	Max. acc. (cm/s <sup>2</sup> )			Notes
						H1	H2	V	
CHPM	Main Building, Chiba Prefectural Office	2	3.9	333°	B1F*	41.9	50.2	17.2	Fig.2.1
					08F	82.6	83.5	27.2	Fig.2.2
					19F	55.1	52.6	49.4	Fig.2.3
					04F	76.8	68.5	20.0	
					14F	87.9	61.8	41.0	
CHB	Chiba Government Office Bldg. #2	3	5.1	346°	B1F*	52.1	63.5	21.8	Fig.3.1
					08F	190.6	164.0	34.1	Fig.3.2
ICK	Gyotoku Library, Ichikawa City	20	4.4	321°	01F*	90.5	42.7	19.5	Fig.4.1
					02F	134.9	53.2	24.3	Fig.4.2
					05F	242.3	100.3	21.8	Fig.4.3
MNM	Minamisuna Apartment #3	27	4.0	180°	01F*	39.2	45.0	8.4	
					15F	91.1	134.9	18.8	
SNN	Shinonome National Public Officers Apartment House	28	3.9	039°	GL*	48.8	46.6	25.2	
					01F	21.3	34.6	8.9	
					M4F	31.3	40.8	8.6	
					04F	25.5	35.1	9.8	
					36F	29.8	47.8	18.1	
TKD	Kosha Tower Tsukuda	30	3.7	180°	01F*	30.2	35.6	9.2	
					18F	30.3	41.3	18.7	
					37F	72.8	63.7	9.8	
ICK	Sumida Ward Office	30	3.5	000°	B1F*	21.8	23.7	9.0	
					08F	56.0	66.8	13.4	
					20F	60.0	97.7	18.8	
TUF	Tokyo University of Marine Science and Technology	32	4.7	000°	GL*	163.4	113.2	42.0	Fig.5.1
					01F	131.7	126.8	42.1	Fig.5.2
					07F	370.7	190.5	57.9	Fig.5.3
NMW	Main Building, National Museum of Western Art	33	3.8	218°	GL*	78.0	53.0	32.7	
					B1FW	33.4	27.9	16.2	
					B1FE	37.9	31.5	24.8	
					01FW	16.2	36.1	19.3	
					01FE	26.8	34.4	25.7	
04F	35.3	34.4	22.9						

<sup>1</sup> Japan Meteorological Agency

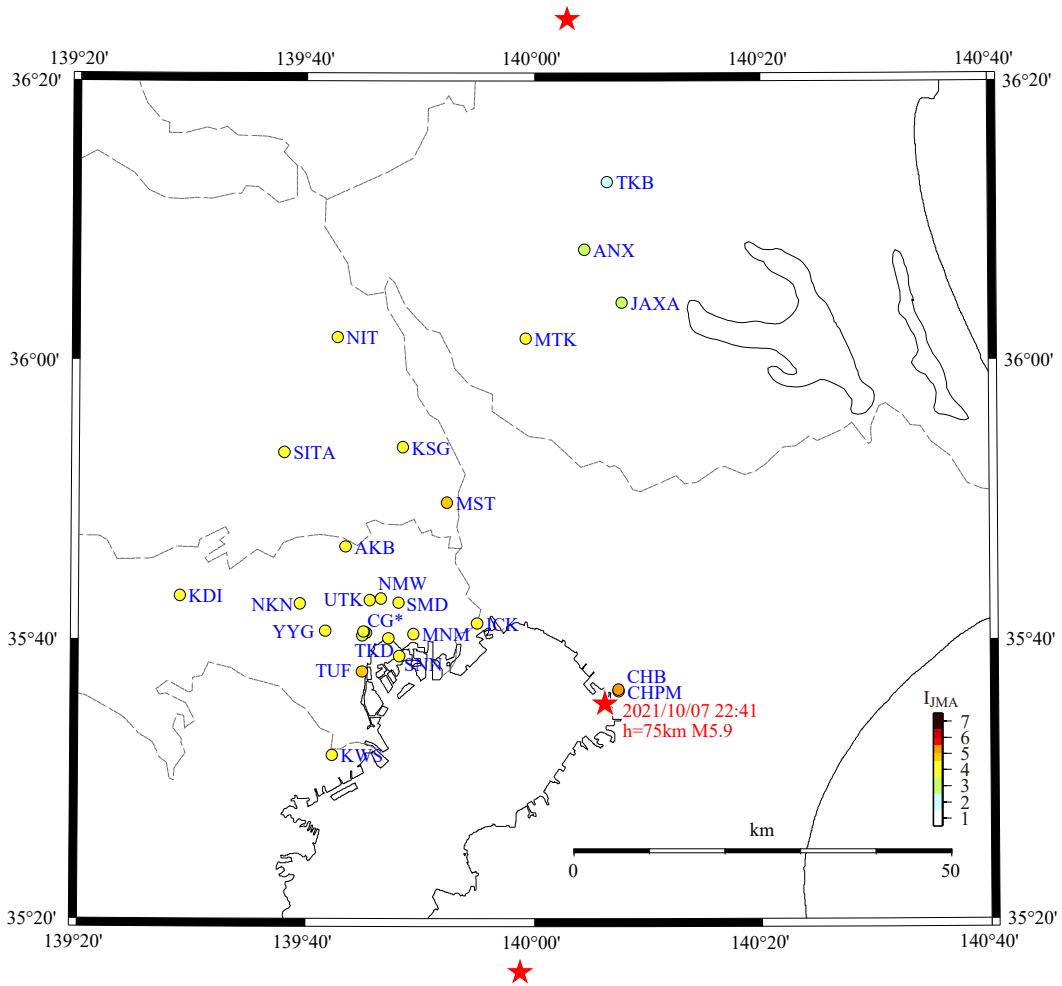
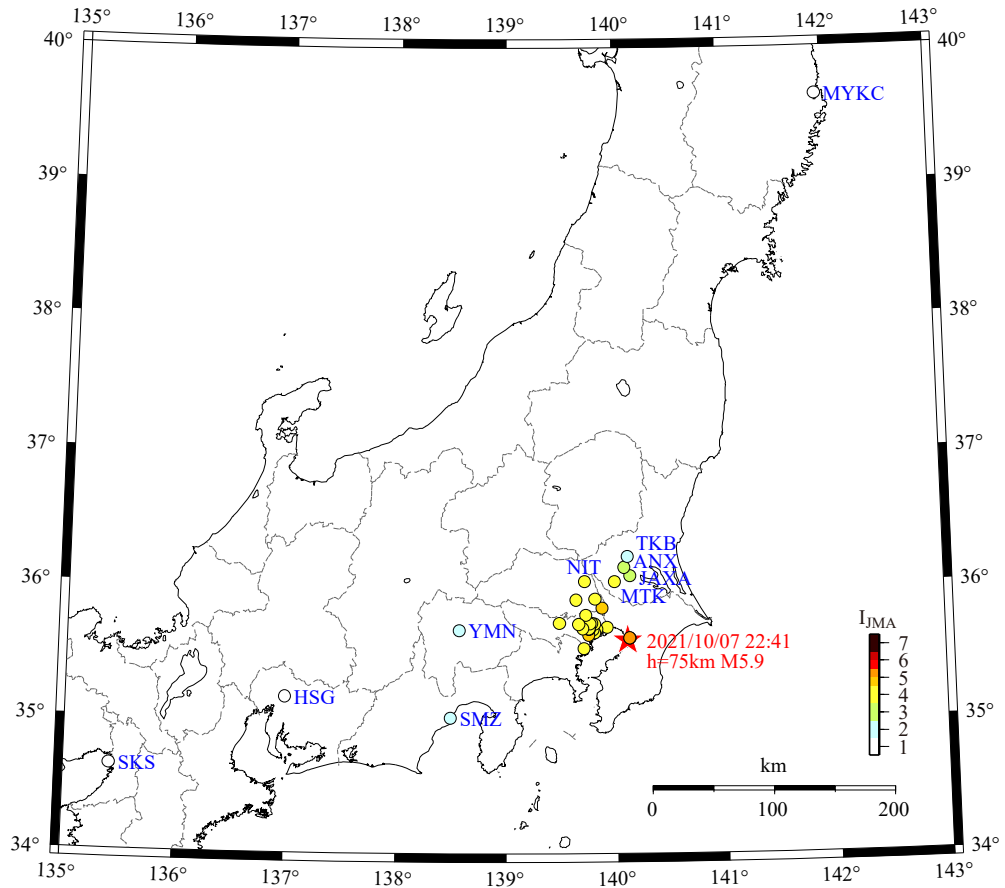
Table 2.2 List of strong motion records

Code	Station	$\Delta$ (km)	$I_{JMA}$	Azim.	Loc.	Max. acc. (cm/s <sup>2</sup> )			Notes
						H1	H2	V	
CGC	Central Government Office Bldg. #6	33	3.5	208°	01F*	34.1	31.0	9.9	
					20B	35.3	55.9	38.6	
					19C	33.0	58.6	24.4	
CG2	Central Government Office Bldg. #2	33	3.4	208°	B4F*	30.4	28.1	9.3	
					13F	37.0	34.9	19.6	
					21F	33.7	39.5	25.8	
CG7	Central Government Office Bldg. #7	33	3.4	294°	01F*	30.9	22.8	12.2	
					B2F	26.0	16.6	7.1	
					16F	29.2	20.0	12.3	
CG3	Central Government Office Bldg. #3	33	3.7	208°	B3F*	34.8	38.3	11.1	
					B2F	17.9	14.9	9.5	
					12F	31.9	27.6	17.0	
MST	Misato City Hall	34	4.6	258°	GL*	110.2	-	23.8	
					01F	65.5	80.8	16.0	
					07F	138.8	124.3	24.9	
UTK	University of Tokyo	34	3.8	348°	GL*	53.8	61.7	16.4	
					01F	24.9	43.6	11.8	
					7FN	91.1	62.1	14.1	
					7FS	94.0	90.4	30.8	
KWS	Kawasaki-minami Office, Labour Standards Bureau	37	4.4	045°	01F*	61.0	102.6	14.6	
					02F	69.8	109.6	18.0	
					07F	175.3	316.4	50.3	
YYG	Building C, National Olympics Memorial Youth Center	38	4.2	355°	GL*	103.5	92.8	24.1	
					B1F	86.3	88.8	31.8	
					04F	106.4	129.3	31.2	
AKB	Akabane Hall, Kita Ward	40	4.1	354°	B1F*	89.0	49.8	18.3	
					06F	112.1	123.3	26.5	
NKN	Nakano Branch, Tokyo Legal Affairs Bureau	42	4.1	359°	01F*	63.2	68.4	17.2	
					06F	108.1	144.5	26.5	
KSG	Koshigaya Branch, Saitama Legal Affairs Bureau	43	4.2	150°	1F*	51.7	49.6	11.9	
MTK	Mitsukaido Branch, Shimodate River Office	50	4.1	090°	01F*	61.0	61.2	16.9	
JAXA	Headquarters Building, JAXA Tsukuba Space Center	53	3.3	335°	B1F*	35.2	27.0	8.2	
					01F	24.7	24.4	10.3	
					11F	38.0	39.5	19.5	
SITA	Saitama Shintoshin Government Office Building (Arena)	54	3.9	313°	01F*	43.6	45.0	14.9	
KDI	College of Land, Infrastructure and Transport	58	3.9	090°	GL*	59.5	71.3	17.6	
					01F	48.7	69.7	14.7	
					03F	66.0	152.7	12.5	
NIT	Nippon Institute of Technology	60	4.2	288°	GL*	75.8	67.5	14.1	
					01F	66.7	31.8	11.0	
					06F	148.9	123.0	17.3	

Table 2.3 List of strong motion records

Code	Station	$\Delta$ (km)	$I_{JMA}$	Azim.	Loc.	Max. acc. (cm/s <sup>2</sup> )			Notes
						H1	H2	V	
ANX	Building Research Institute	60	3.3	180°	A01*	20.1	16.8	9.0	
					A89	11.1	9.3	5.0	
					BFE	15.4	13.0	8.8	
					8FE	46.6	59.5	16.3	
					MBC	16.6	13.0	7.7	
					M8C	64.6	66.2	14.6	
TKB	Tsukuba Mt. Observatory, ERI	69	2.2	000°	GL*	13.3	10.2	8.0	
YMN	Yamanashi Prefectural Office	139	2.1	006°	B1F*	7.6	10.2	4.5	
					01F	7.4	9.3	5.3	
					08F	9.8	8.9	6.8	
SMZ	Shimizu Government Office Bldg.	160	1.9	165°	01F*	3.5	3.8	1.9	
					06F	13.1	11.4	1.3	
HSG	Urban Rafre Hoshigaoka #10	286	0.5	000°	GL*	0.9	0.8	0.5	
					01F	0.7	0.7	0.4	
					25F	2.5	2.8	0.7	
SKS	Sakishima Office, Osaka Prefecture	439	0.3	229°	01F*	0.5	0.5	0.3	
					18F	1.4	0.9	0.4	
					38F	1.3	0.9	0.7	
					52FN	1.5	1.4	0.8	
					52FS	1.4	1.4	0.9	
MYKC	Miyako City Hall	479	0.8	165°	01F	1.2	1.1	0.4	
					06F	3.1	3.8	0.6	
					GL*	1.7	1.2	0.8	

notes)  $\Delta$ : epicentral distance,  $I_{JMA}$ : JMA seismic intensity (using sensor with \*), Azim.: azimuth from North clockwise, H1, H2 and V: horizontal#1, horizontal#2 and vertical directions



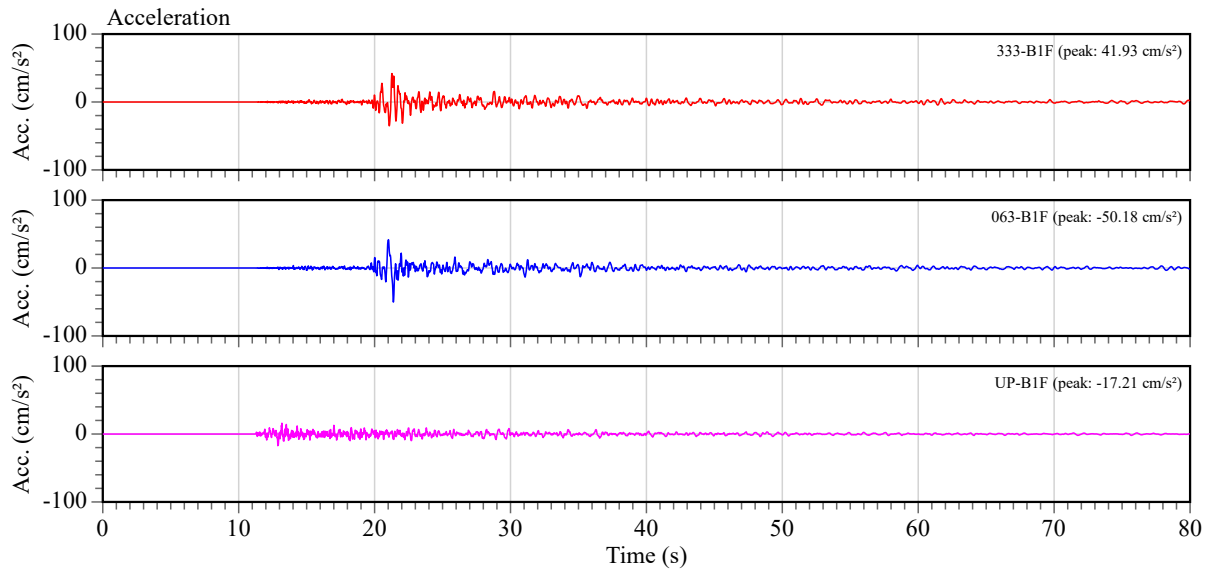


Fig. 2.1 Acceleration waveforms of B1F at the station CHPM

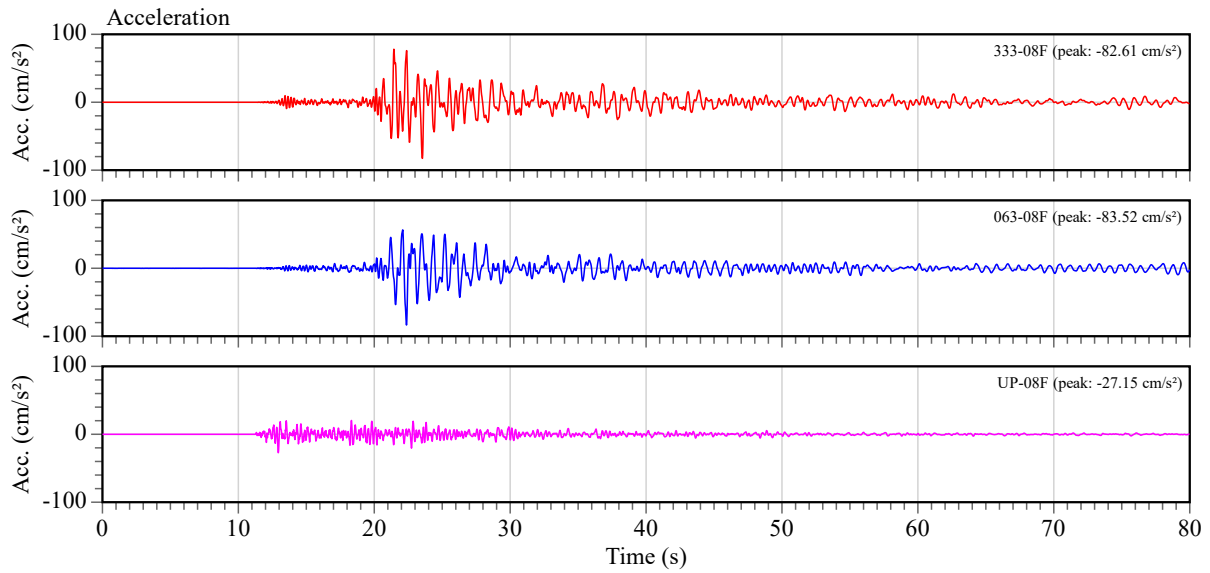


Fig. 2.2 Acceleration waveforms of 08F at the station CHPM

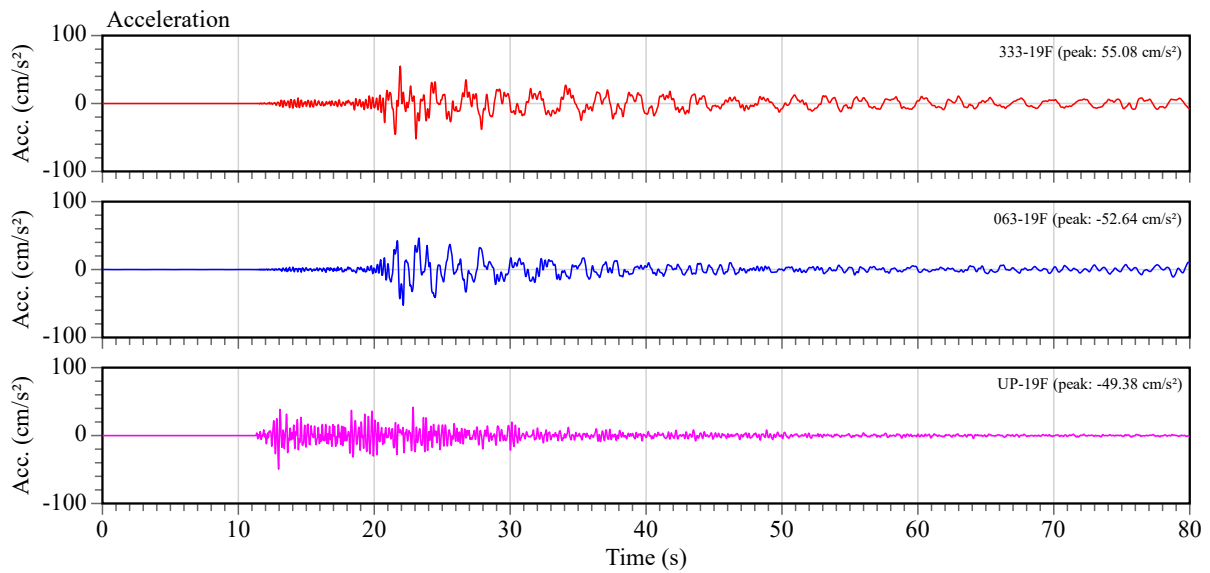


Fig. 2.3 Acceleration waveforms of 19F at the station CHPM

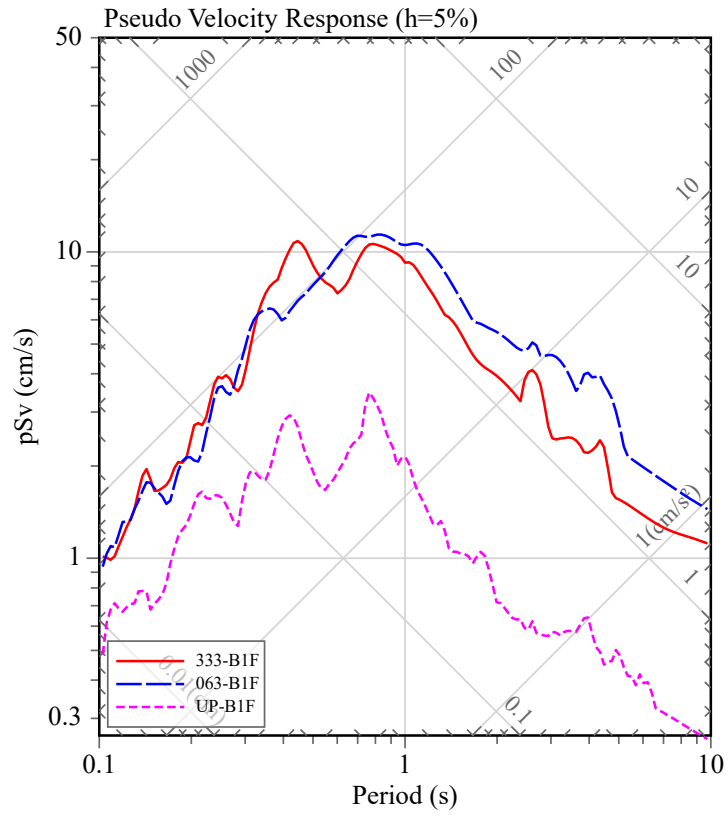


Fig. 2.4 Pseudo response spectra of B1F at the station CHPM ( $h=5\%$ )

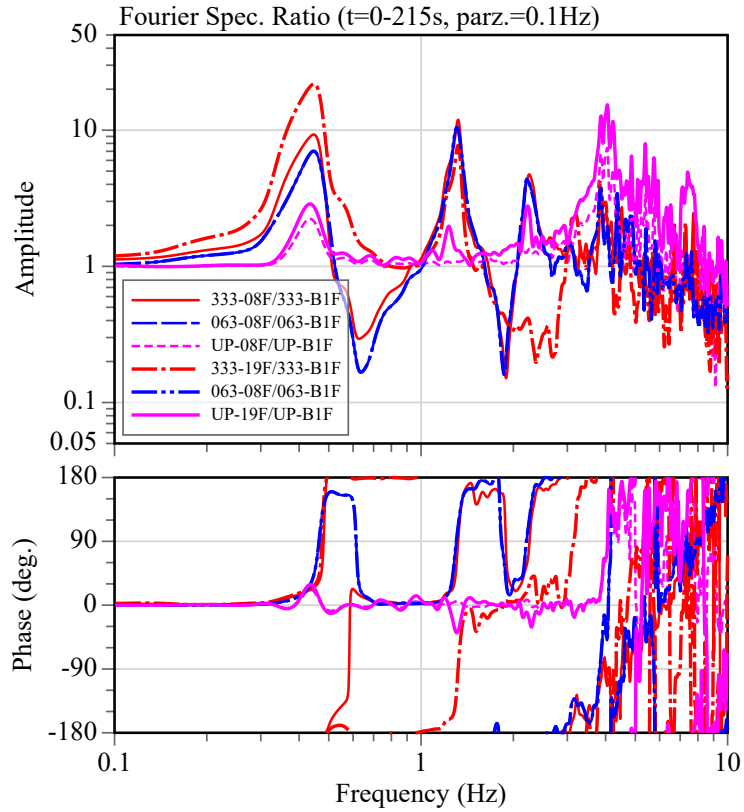


Fig. 2.5 Fourier spectral ratio of 08F/B1F and 19F/B1F at the station CHPM

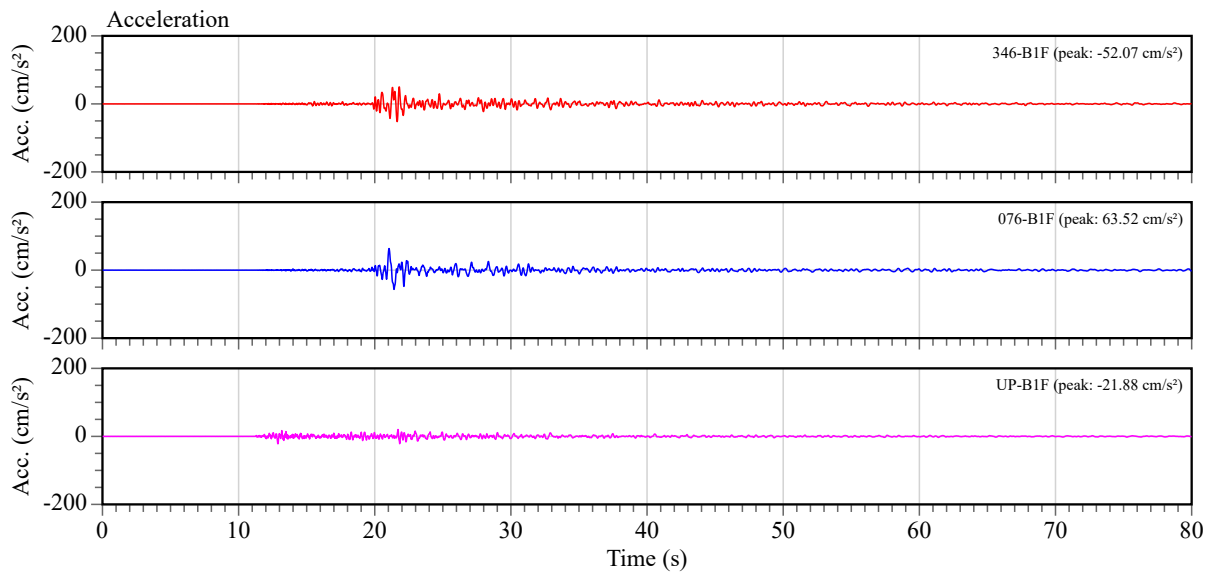


Fig. 3.1 Acceleration waveforms of B1F at the station CHB

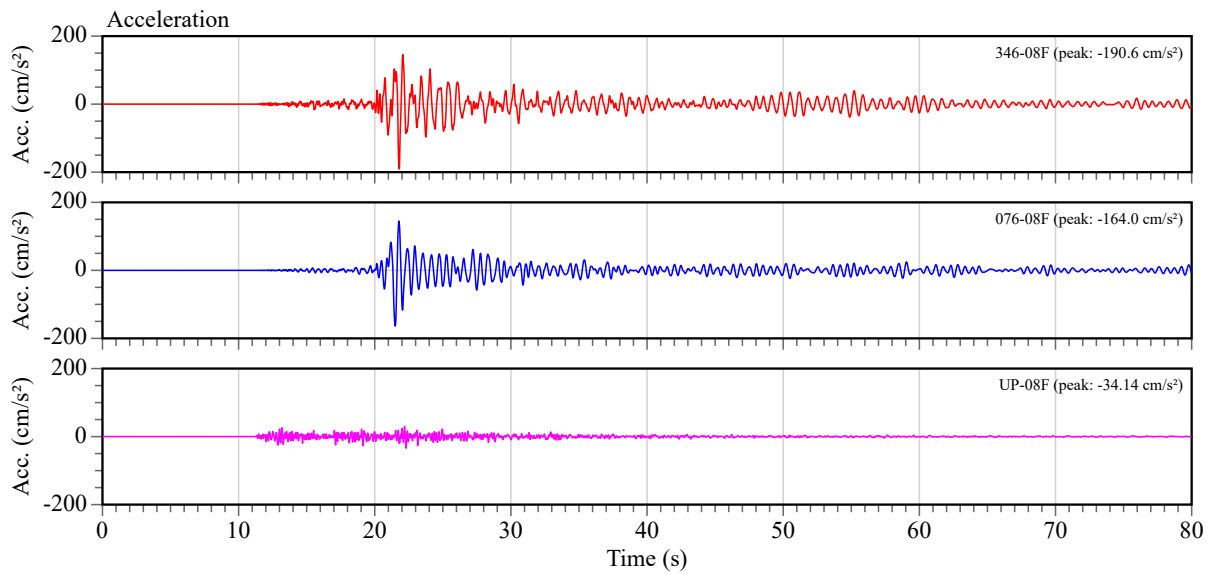


Fig. 3.2 Acceleration waveforms of 08F at the station CHB

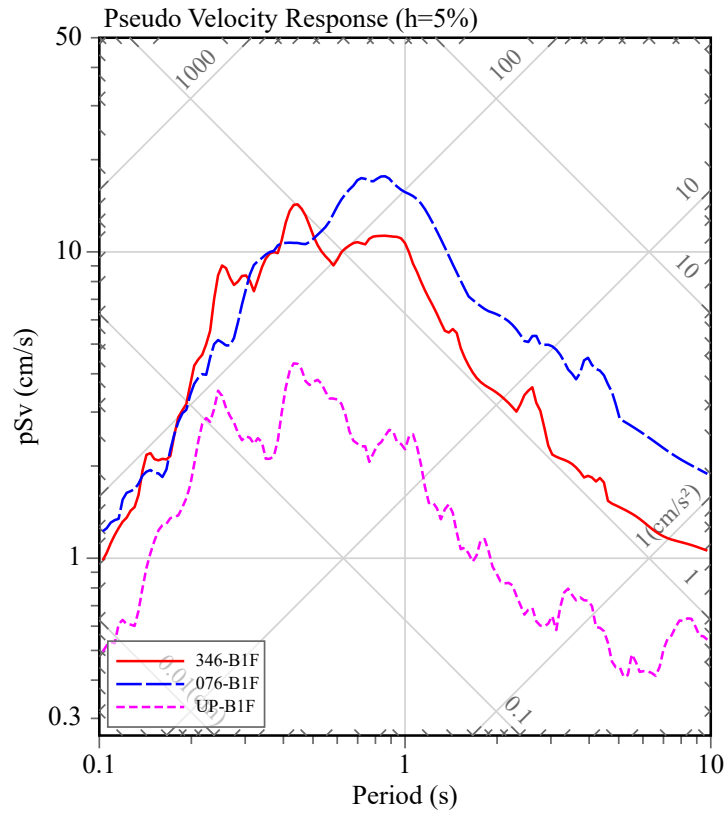


Fig. 3.3 Pseudo response spectra of B1F at the station CHP ( $h=5\%$ )

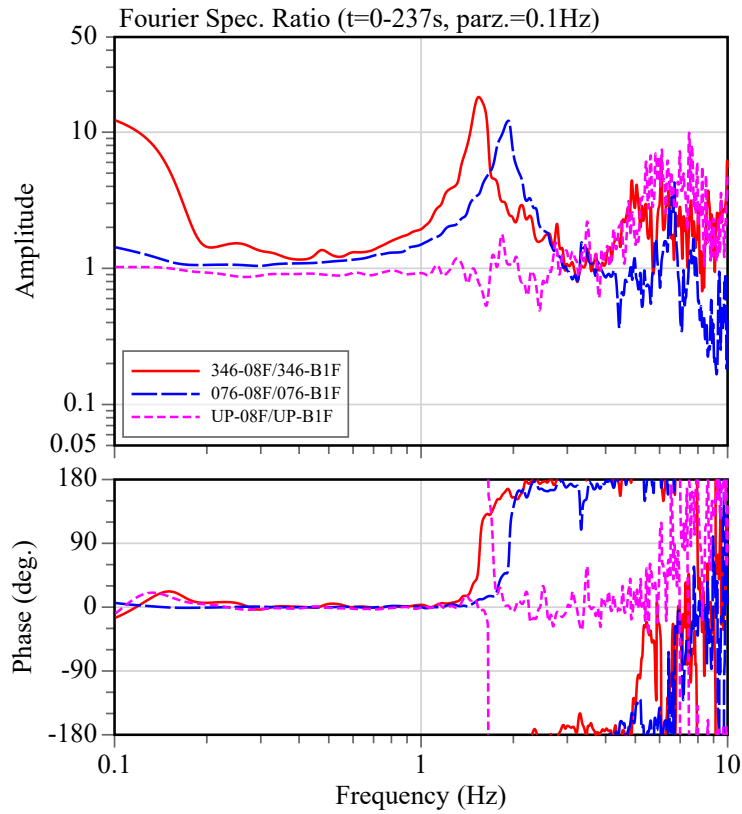


Fig. 3.4 Fourier spectral ratio of 08F/B1F at the station CHP



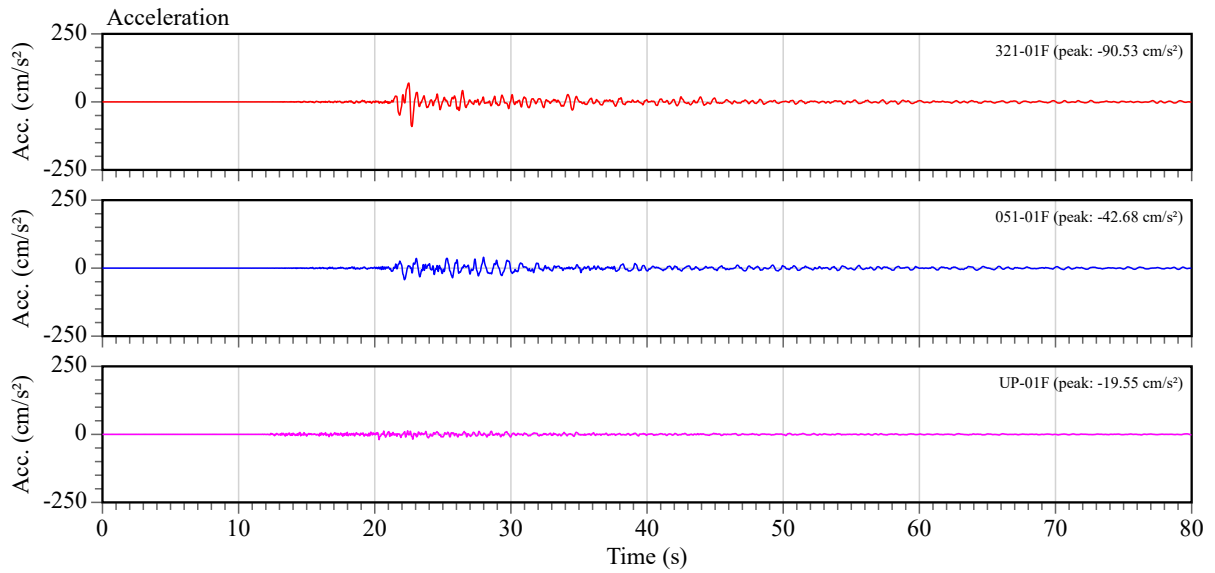


Fig. 4.1 Acceleration waveforms of 01F at the station ICK

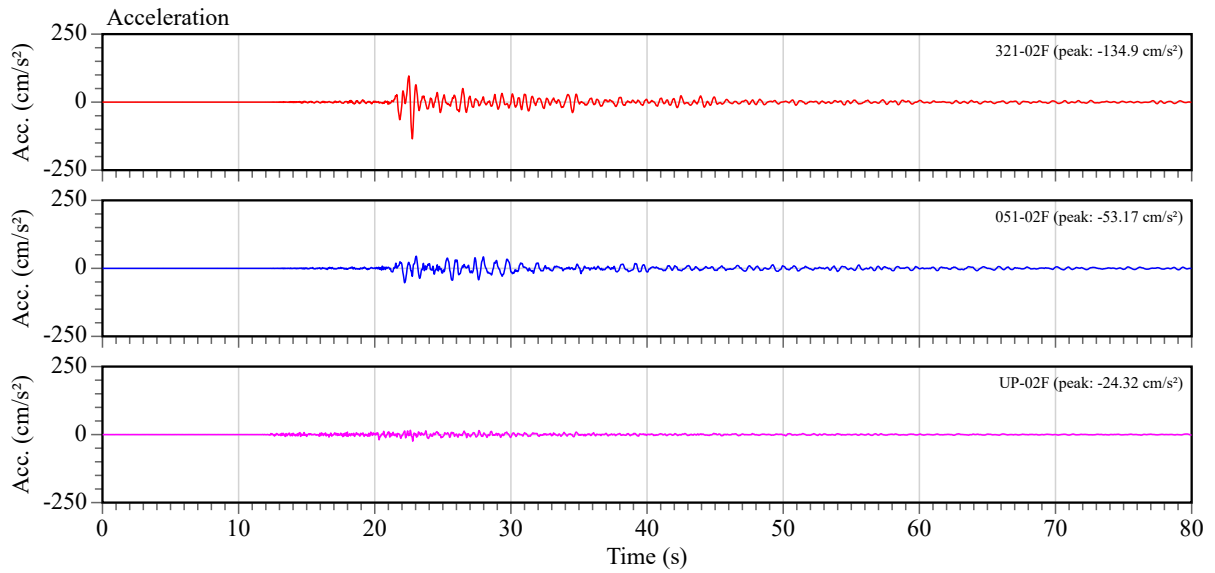


Fig. 4.2 Acceleration waveforms of 02F at the station ICK

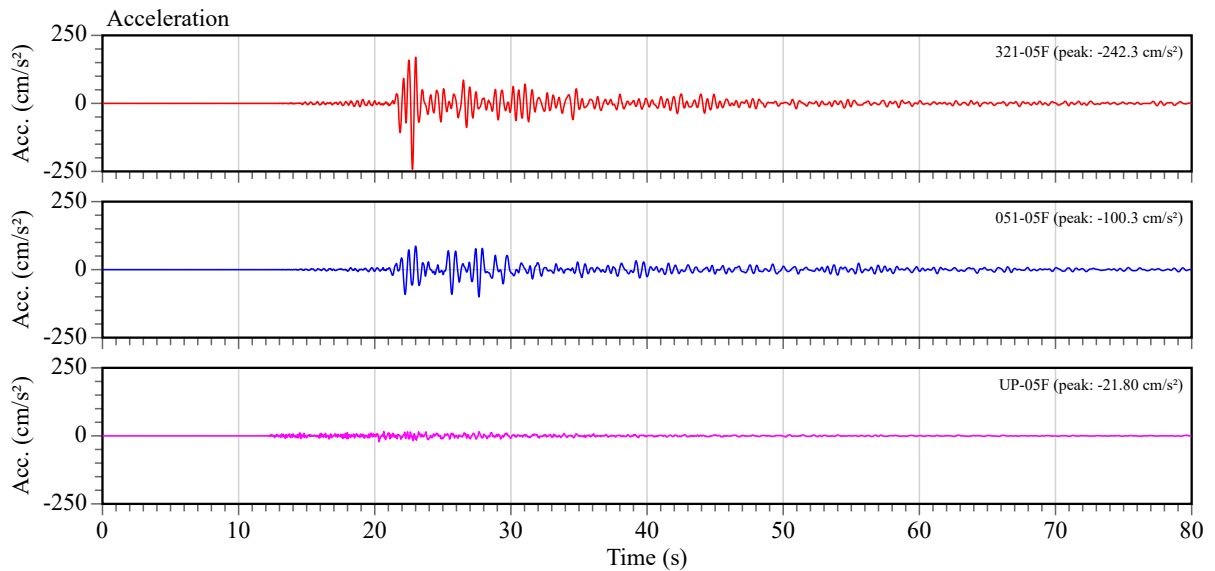


Fig. 4.3 Acceleration waveforms of 05F at the station ICK

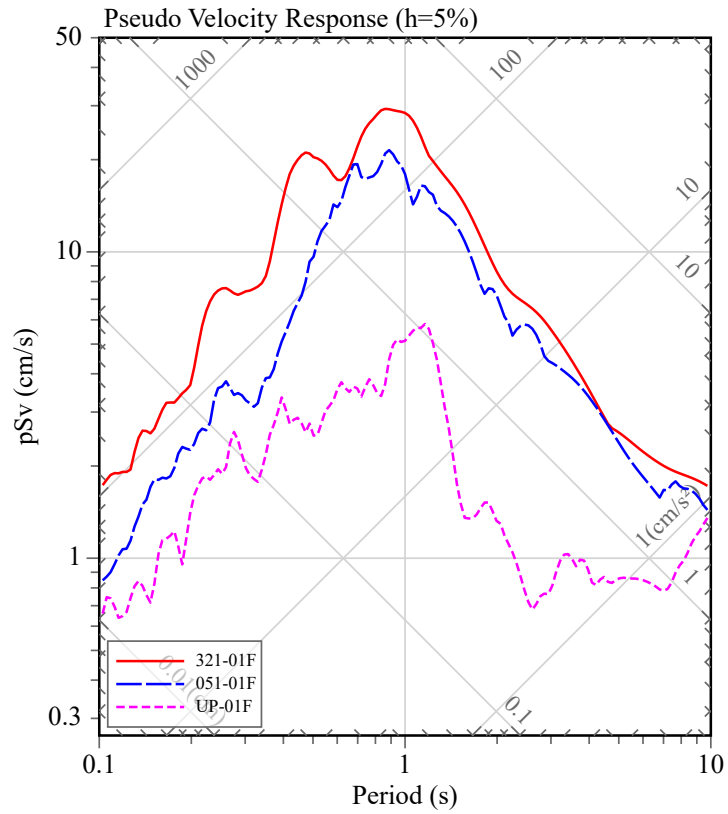


Fig. 4.4 Pseudo response spectra of 01F at the station ICK ( $h=5\%$ )

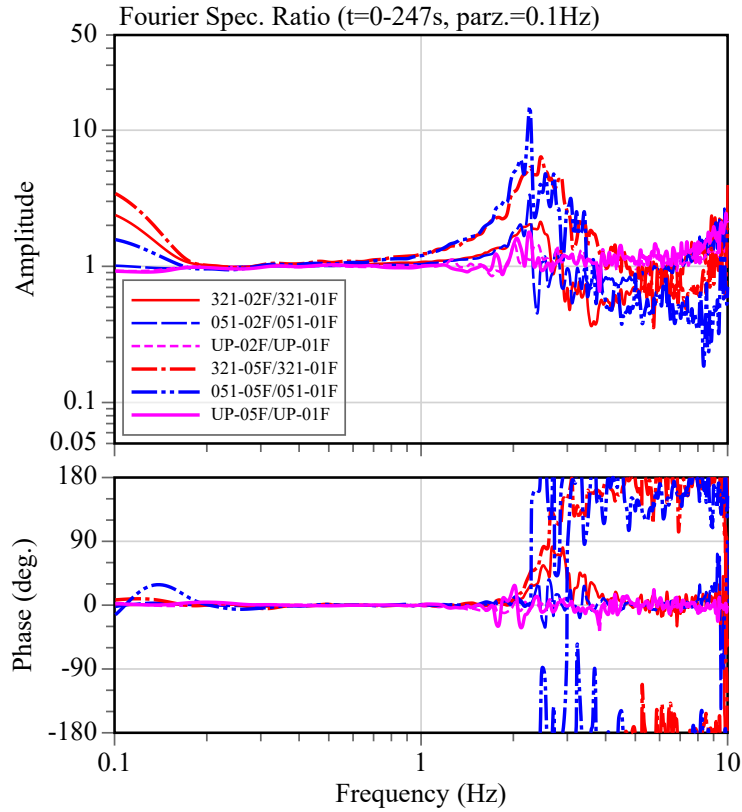


Fig. 4.5 Fourier spectral ratio of 02F/01F and 05F/01F at the station ICK

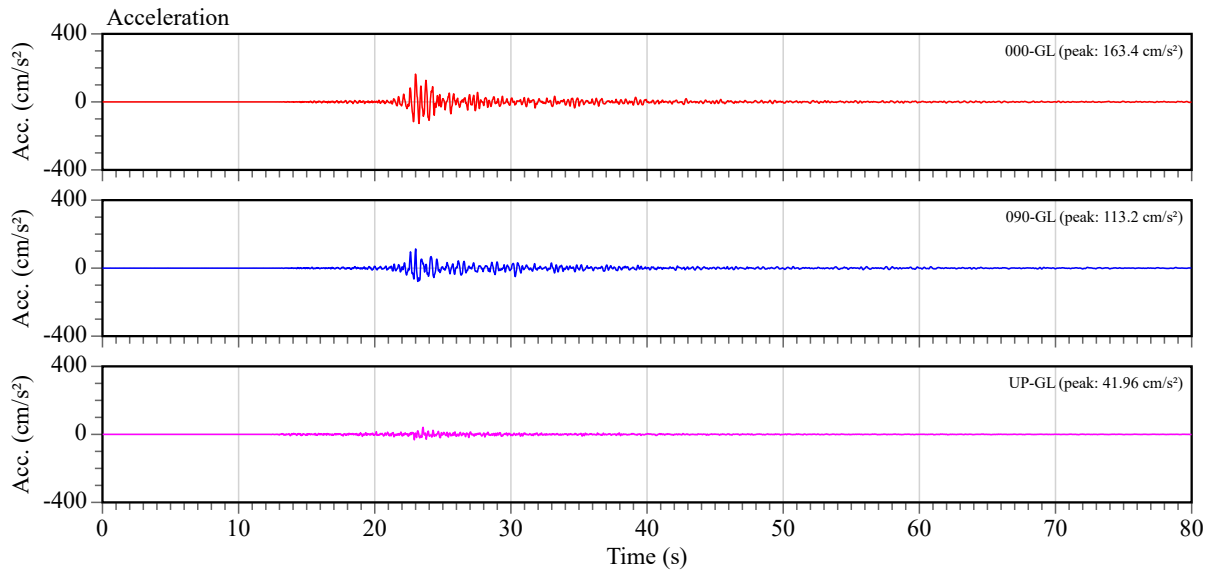


Fig. 5.1 Acceleration waveforms of GL at the station TUF

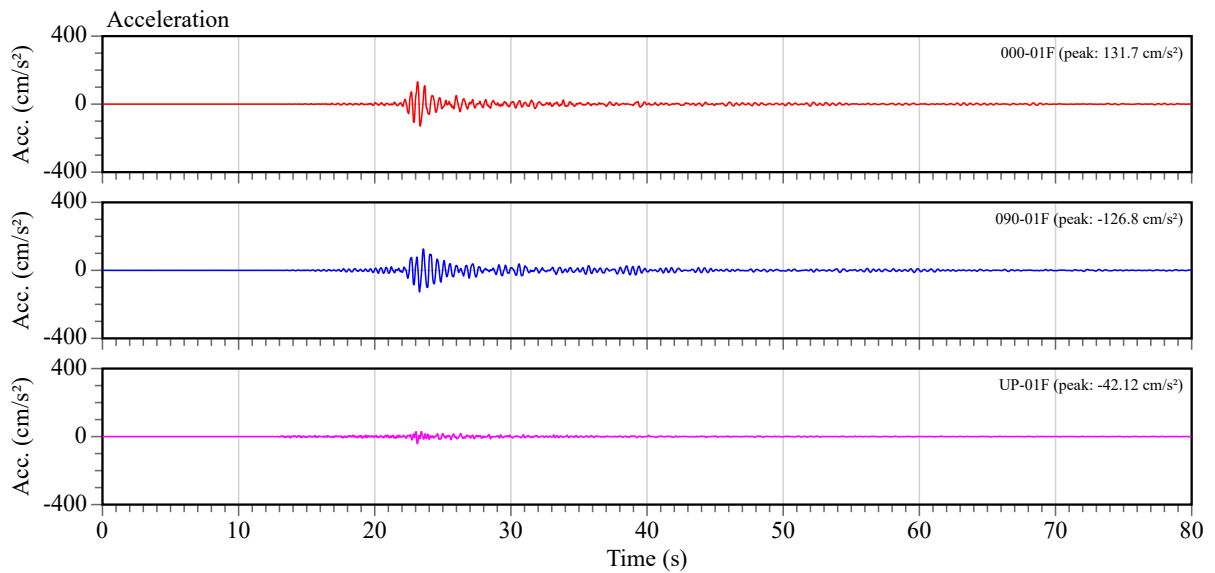


Fig. 5.2 Acceleration waveforms of 01F at the station TUF

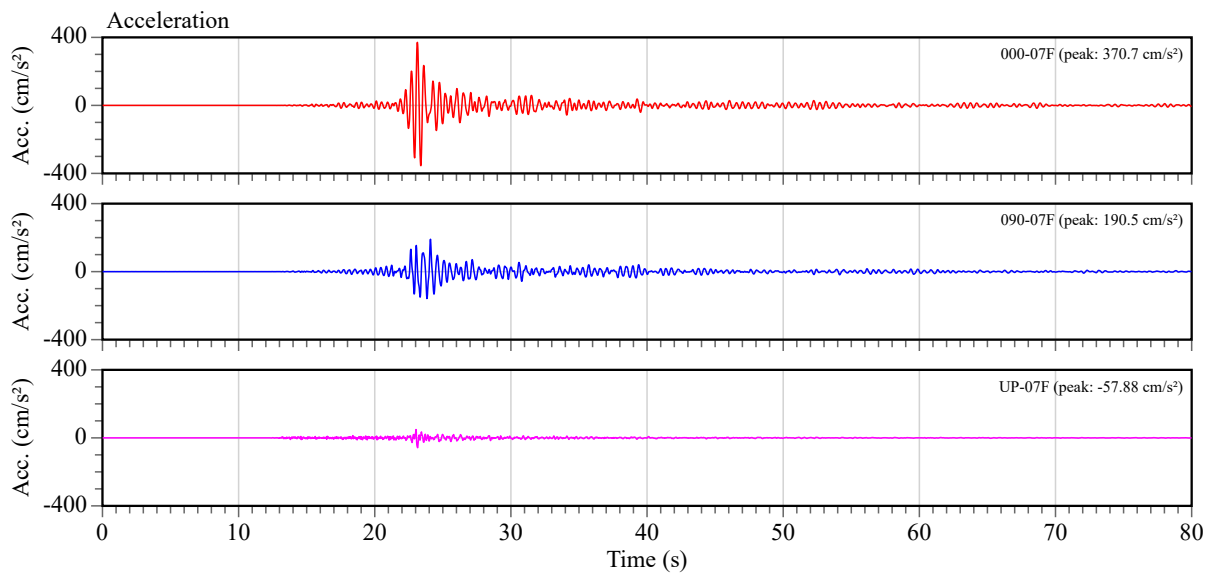


Fig. 5.3 Acceleration waveforms of 07F at the station TUF

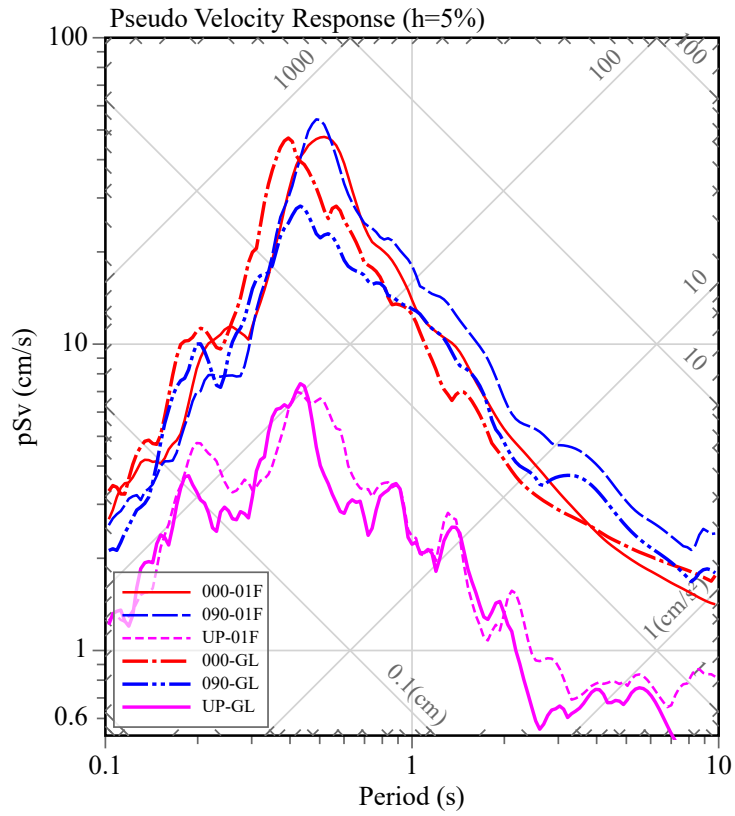


Fig. 5.4 Pseudo response spectra of GL and 01F at the station TUF ( $h=5\%$ )

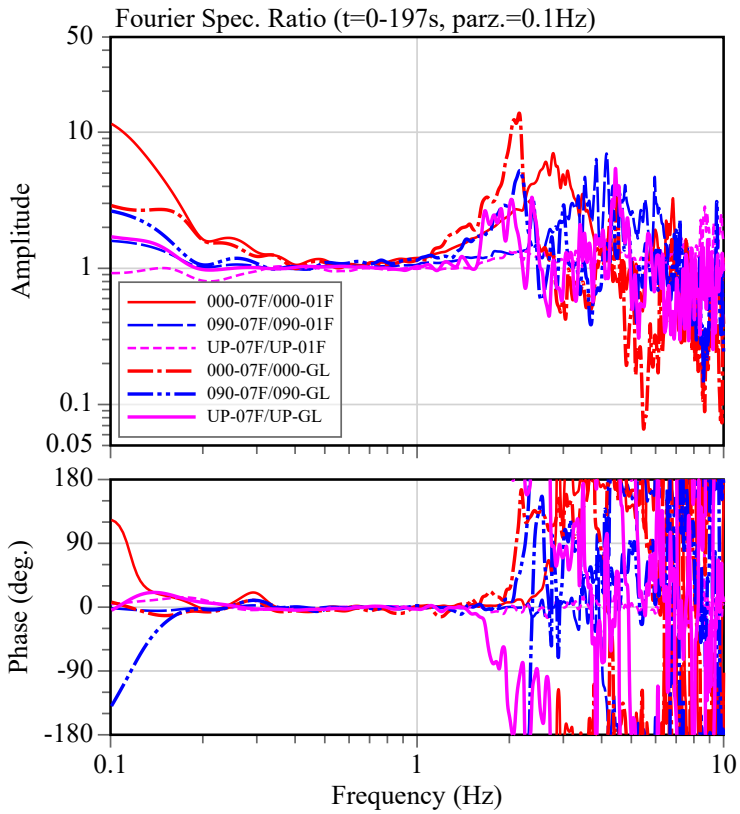


Fig. 4.5 Fourier spectral ratio of 07F/GL and 07F/01F at the station TUF