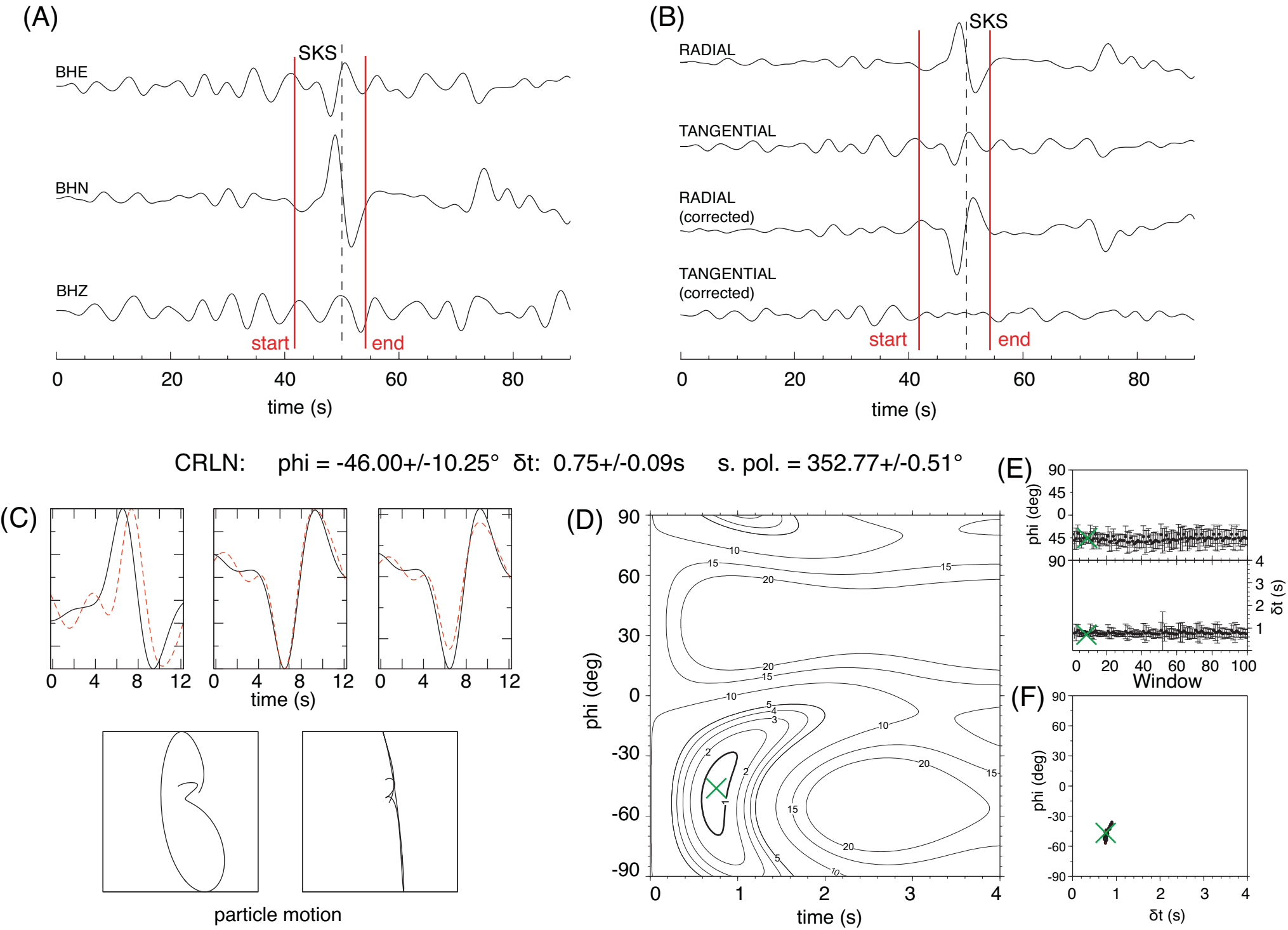
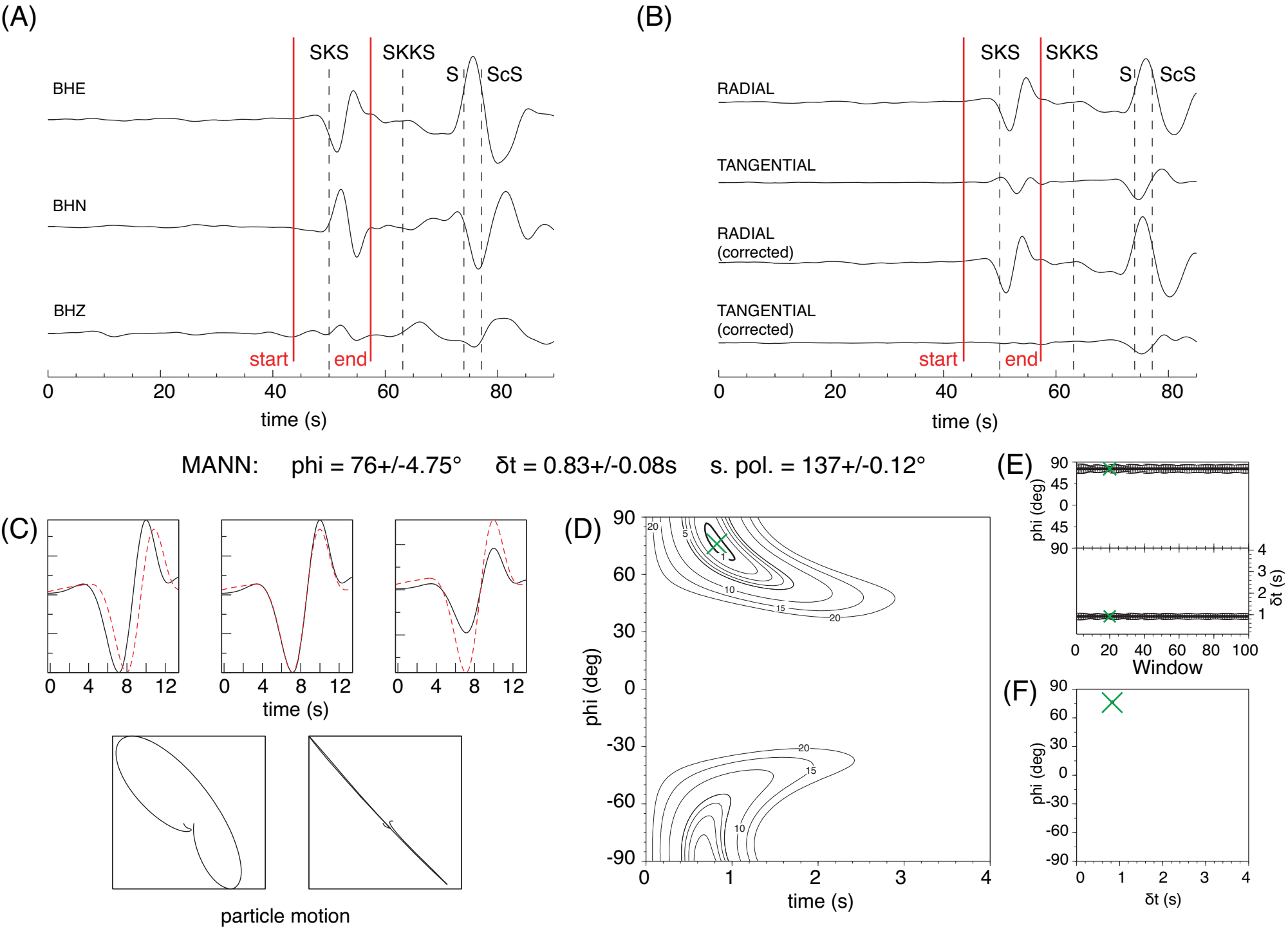
Figures DR1-DR3: Samples of individual shear wave splitting measurements.

Table DR1. Huble earthquake hypocenter and shear-wave splitting information.

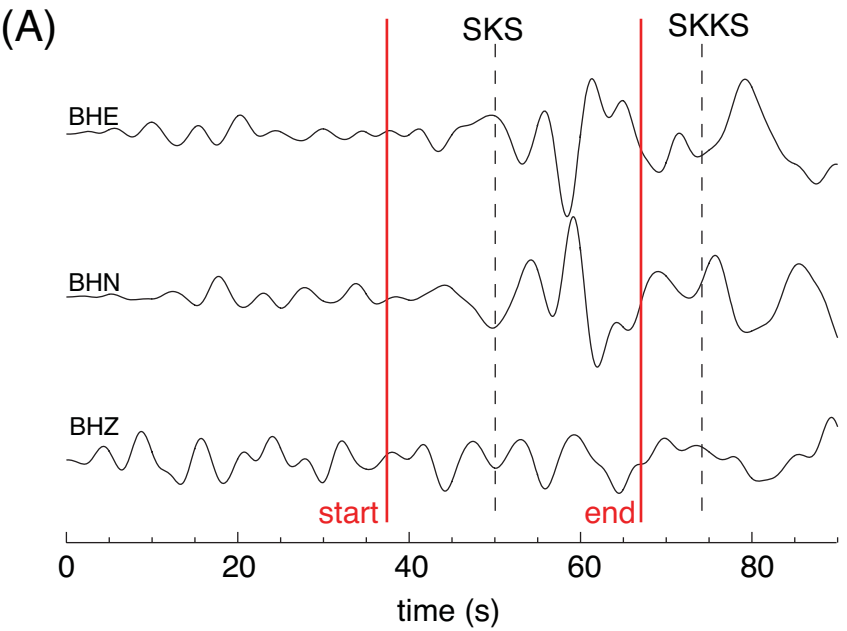
STATION: CRLN DATE: 04/04/2009 Dist. = 107.2° Baz. = 328° 5.15°N 127.20°E 48.0km

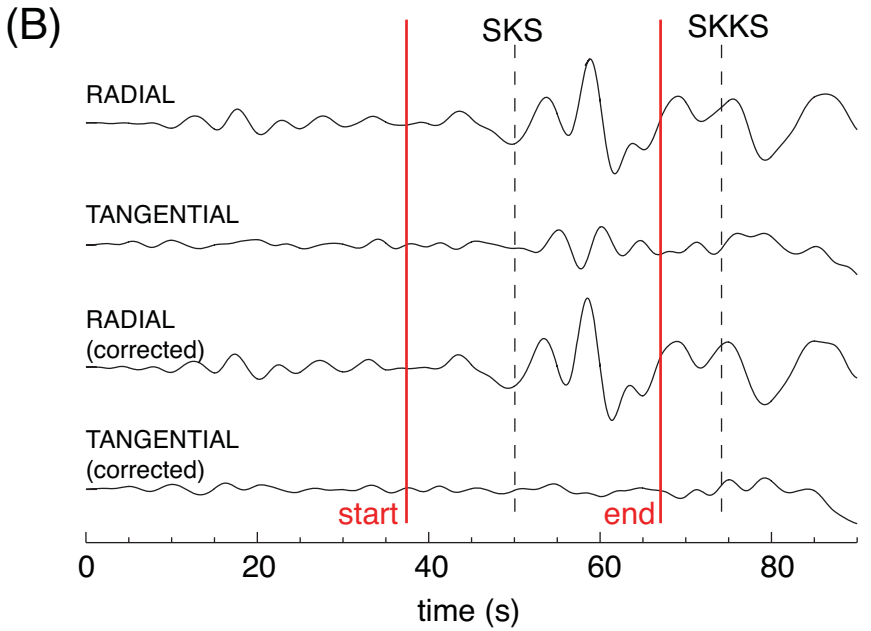


Station: MANN DATE: 28/08/2007 Dist. = 89.5° Baz. = 321.4° 22.00°N 142.65°E 276.1km

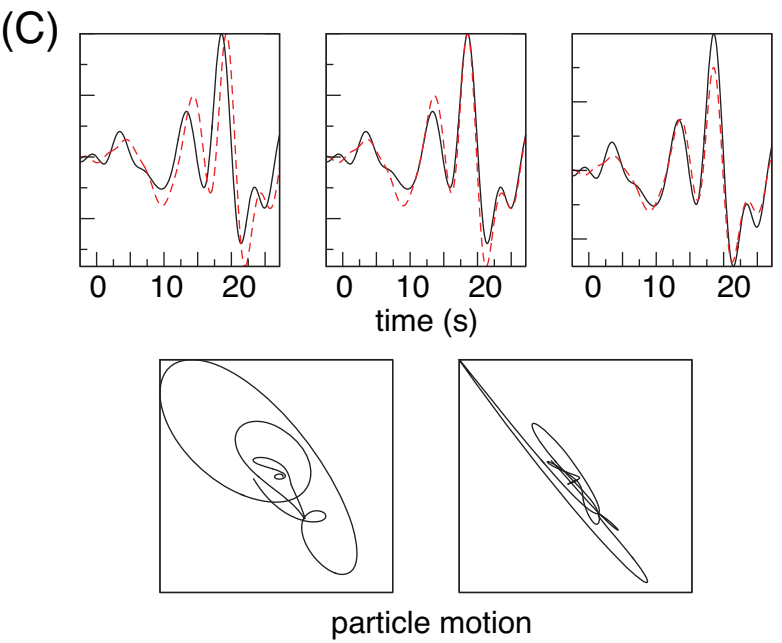


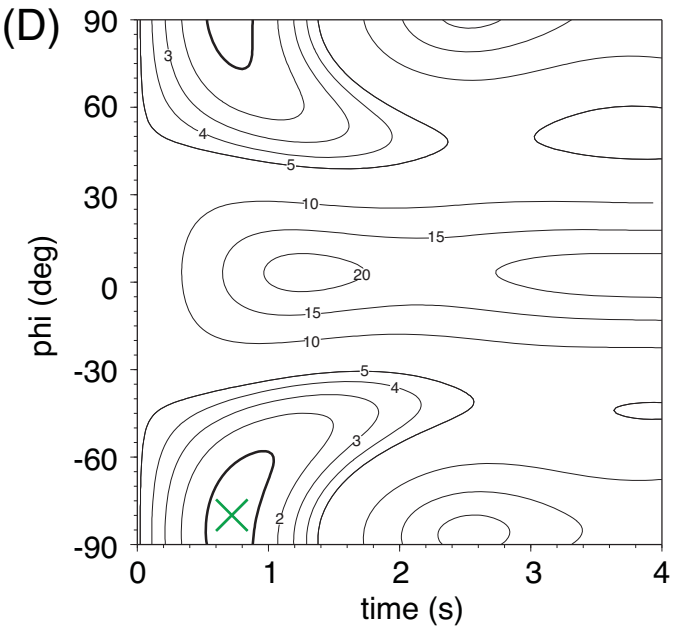
Station: SHMN DATE: 30/09/2007 Dist. = 96.4° Baz. = 310.9° 10.45°N 145.72°E 14km

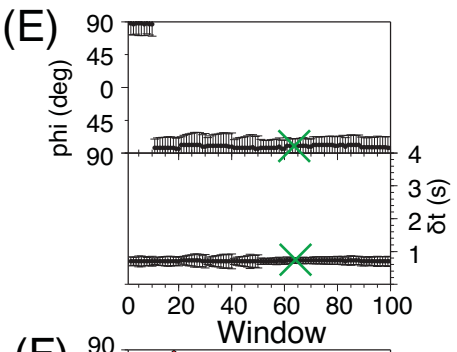




SHMN: phi = 80+/-12.50° δt = 0.73+/-0.13s s. pol. = 320°+/-0.8°







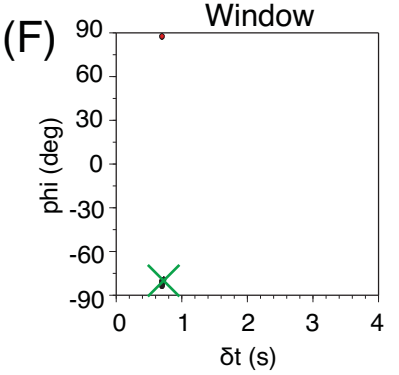


Table DR1. HUBLE EARTHQUAKE HYPOCENTER AND SHEAR-WAVE SPLITTING INFORMATION

Year	Day	Lat (◦N)	Lon (◦E)	Depth (km)	Δ (◦)	BAZ (◦)	φ (◦)	σφ (◦)	δt (s)	σδt (s)	Station
2006	237	-24.41	-67.03	184	92.66	156.33	56	2.00	0.98	0.09	BULN
2010	75	-36.22	-73.26	18	103.43	163.59	70	5.5	1.65	0.26	BULN
2009	245	-7.78	107.30	46	123.46	7.56	-56	11.25	0.93	0.19	CDKN
2009	297	-6.13	130.38	130	120.77	340.54	-62	10.75	0.95	0.13	CDKN
2009	277	6.74	123.38	620	107.53	351.85	-23	2.00	1.18	0.11	CMBN
2010	57	25.93	128.43	25	88.14	348.42	85	9.50	1.40	0.22	CMBN
2009	94	5.15	127.20	48	107.18	328.00	-46	10.25	0.75	0.09	CRLN
2008	130	12.52	143.18	76	96.99	315.27	51	1.75	1.63	0.23	CTSN
2008	155	-10.51	161.27	84	111.13	288.97	39	4.50	1.68	0.21	CTSN
2007	271	22.00	142.65	276	88.82	324.10	-77	3.50	1.18	0.05	DORN
2007	304	18.90	145.36	223	91.06	320.78	89	4.25	1.00	0.09	DORN
2008	130	12.52	143.18	76	97.74	320.97	89	3.75	1.33	0.08	DORN
1996	197	18.73	145.63	176	93.60	327.76	-78	8.25	0.63	0.06	FRB
1997	113	13.99	144.90	100	98.34	327.26	89	7.75	0.80	0.13	FRB
1997	141	-20.44	169.29	57	122.20	290.24	82	13.75	0.78	0.14	FRB
1997	149	-35.96	-102.51	10	102.97	207.71	69	11.75	0.73	0.10	FRB
1998	210	-32.31	-71.29	51	95.76	182.33	32	12.25	0.78	0.21	FRB
1999	137	-5.16	152.88	27	114.34	313.67	-80	13.50	0.50	0.11	FRB
1999	344	-36.21	-97.32	10	102.21	203.47	62	9.50	1.15	0.11	FRB
2000	57	13.80	144.78	132	98.55	327.33	-60	4.75	0.85	0.04	FRB
2000	127	-11.30	165.43	12	115.52	298.46	-78	9.75	0.90	0.21	FRB
2000	127	-11.30	165.43	12	115.52	298.46	76	9.75	0.88	0.08	FRB
2000	166	-25.52	178.05	604	122.91	278.98	-87	5.25	1.50	0.21	FRB
2000	173	14.11	144.96	112	98.20	327.23	-81	3.75	0.85	0.04	FRB
2001	118	-18.06	-176.94	351	114.17	278.30	85	5.00	1.13	0.21	FRB

2002	148	24.07	122.26	33	92.06	350.12	-64	11.75	0.65	0.13	FRB
2002	181	-22.20	179.25	620	119.49	279.69	83	3.50	0.98	0.11	FRB
2002	231	-21.70	-179.51	580	118.50	278.81	-85	3.75	1.58	0.31	FRB
2003	133	-17.29	167.74	33	120.02	293.38	-88	9.50	1.10	0.23	FRB
2003	208	-21.08	-176.59	212	116.67	276.42	86	4.00	1.25	0.14	FRB
2004	124	-37.69	-73.41	21	101.18	183.92	17	7.25	1.40	0.36	FRB
2006	219	-15.80	167.79	150	118.66	294.05	66	12.25	0.57	0.08	FRB
2007	271	22.01	142.67	260	91.10	331.25	85	1.50	1.05	0.05	FRB
2007	271	22.00	142.65	276	91.60	330.05	-45	2.50	0.78	0.02	KIMN
2008	155	-10.51	161.27	84	116.36	301.26	-66	4.50	1.13	0.11	KIMN
2008	167	-17.74	-179.73	611	114.68	279.42	-71	2.75	1.48	0.17	KIMN
2007	271	22.00	142.65	276	89.53	321.40	76	4.75	0.83	0.08	MANN
2007	304	18.90	145.36	223	91.64	317.99	88	7.00	0.80	0.05	MANN
2007	232	6.13	127.38	8	107.86	339.26	80	3.50	1.20	0.15	MNGN
2007	271	22.00	142.65	276	89.46	327.76	88	4.75	1.23	0.07	MNGN
2007	273	10.45	145.72	14	99.79	321.93	-83	11.75	1.18	0.11	MNGN
2007	304	18.90	145.36	223	91.79	324.51	-89	9.50	1.27	0.16	MNGN
2008	130	12.52	143.18	76	98.47	324.90	-85	13.25	1.02	0.17	MNGN
2008	153	20.13	121.37	35	94.81	347.00	-88	7.25	0.90	0.16	MNGN
2008	167	-17.74	-179.73	611	113.28	277.86	-89	3.25	1.65	0.16	MNGN
2008	321	1.27	122.09	30	113.36	344.15	-85	8.25	1.52	0.24	MNGN
2009	94	5.15	127.20	48	108.86	339.29	83	10.25	1.27	0.30	MNGN
2009	194	24.06	122.20	17	90.84	346.64	88	4.50	1.35	0.14	MNGN
2009	229	23.50	123.50	20	91.26	345.40	83	4.25	1.30	0.23	MNGN
2007	228	-9.83	159.47	10	112.95	295.36	82	12.50	1.60	0.22	NOTN
2007	271	22.00	142.65	276	89.15	322.68	-87	5.00	1.45	0.16	NOTN
2007	304	18.90	145.36	223	91.33	319.32	87	8.25	1.27	0.28	NOTN
2008	130	12.52	143.18	76	98.01	319.38	83	7.75	1.65	0.34	NOTN

2008	153	20.13	121.37	35	95.45	341.63	-82	2.25	1.45	0.12	NOTN
2008	155	-10.51	161.27	84	112.82	293.30	89	5.00	1.68	0.13	NOTN
2007	232	6.13	127.38	8	103.41	320.52	-80	9.50	0.73	0.08	NUNN
2009	3	-0.41	132.88	17	113.08	339.72	-46	4.75	0.88	0.08	PNGN
2009	94	5.15	127.20	48	108.27	346.44	-57	11.00	0.65	0.13	PNGN
2006	237	-24.41	-67.03	184	91.95	162.41	46	3.25	0.85	0.05	QILN
2010	75	66.65	-86.37	18	103.04	169.14	18	5.00	1.30	0.08	QILN
2007	273	10.45	145.72	14	96.39	310.86	-80	12.50	0.73	0.13	SHMN
2009	165	5.36	126.44	35	106.64	328.11	-88	6.25	0.78	0.09	SHMN
2008	153	20.13	121.37	35	93.86	335.19	-42	4.00	0.70	0.10	SHWN
2006	237	-24.41	-67.03	184	91.62	159.65	36	6.25	1.05	0.14	WAGN
2010	63	22.92	120.80	21	88.53	332.32	50	3.25	1.73	0.12	WAGN