



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
11	01	05	HBV	1P 1PP 1PPP	10	56	59.0	1.5	0.08	0.11	0.13	23.51	+ 7.1	10	51	55.7	8.36 N	126.00 E	123	5.2	
12	01	05	TQV	1P 1PP 1PPP	10	57	28.0	0.7	0.02	0.02	0.03	24.12	+ 6.3	20	34	41.0	36.47 N	70.54 E	212	5.4	
13	01	05	BGV	1P 1PP 1PPP	20	57	36.5	0.6	0.01	0.06	0.05	33.39	+ 4.3	21	41	47.3	51.57 E	179.28 W	33	4.8	
14	01	05	TQV	1P 1PP 1PPP	21	57	04.1	0.3	0.01	0.02	0.06	34.47	+ 3.0	21	41	47.3	51.57 E	179.28 W	33	4.8	
15	01	07	TQV	1P 1PP 1PPP	20	58	52.0	0.4	0.01	0.02	0.06	64.84	- 1.6	21	41	47.3	51.57 E	179.28 W	33	4.8	
16	01	07	HBV	1P 1PP 1PPP	21	58	03.1	0.4	0.01	0.02	0.06	63.94	0	21	41	47.3	51.57 E	179.28 W	33	4.8	
17	01	08	BGV	1P 1PP 1PPP	23	37	48.1	1.0	0.14	0.13	0.36	16.81	- 2.3	23	34	05.3	38.42 N	102.06 E	33	5.1	
18	01	09	TQV	1P 1PP 1PPP	07	38	07.1	0.6	0.03	0.06	0.06	17.83	- 2.1	10	43	59.2	1.25 S	97.78 E	3	4.9	
19	01	10	HBV	1P 1PP 1PPP	05	38	18.0	0.6	0.03	0.03	0.02	23.00	+ 5.4	10	43	59.2	1.25 S	97.78 E	3	4.9	
20	01	11	TQV	1P 1PP 1PPP	13	40	50.0	0.4	0.02	0.03	0.04	22.25	- 4.9	11	18	31.4	40.05 N	118.45 E	33	4.4	
21	01	11	TQV	1P 1PP 1PPP	18	41	11.1	0.4	0.02	0.03	0.04	27.07	+ 3.5	15	24	12.7	2.71 S	119.02 E	34	6.5	
22	01	11	TQV	1P 1PP 1PPP	18	42	28	0.5	-0.16	-0.22	-0.50	28.01	+ 3.0	15	24	12.7	2.71 S	119.02 E	34	6.5	
23	01	11	TQV	1P 1PP 1PPP	18	42	50	0.9	0.02	0.03	0.02	24.51	+ 2.1	15	24	12.7	2.71 S	119.02 E	34	6.5	
24	01	11	TQV	1P 1PP 1PPP	18	42	01.1	2.0	0.02	0.03	0.02	25.15	- 1.2	15	24	12.7	2.71 S	119.02 E	34	6.5	
25	01	11	TQV	1P 1PP 1PPP	18	42	16.1	1.0	0.02	0.03	0.02	28.01	+ 3.0	15	24	12.7	2.71 S	119.02 E	34	6.5	
26	01	11	TQV	1P 1PP 1PPP	18	42	28.1	0.9	0.02	0.03	0.02	24.51	+ 2.1	15	24	12.7	2.71 S	119.02 E	34	6.5	
27	01	11	TQV	1P 1PP 1PPP	18	42	12.9	0.4	0.03	0.03	0.02	25.15	- 1.2	15	24	12.7	2.71 S	119.02 E	34	6.5	
28	01	11	TQV	1P 1PP 1PPP	18	42	34.4	0.5	0.02	0.03	0.02	28.01	+ 3.0	15	24	12.7	2.71 S	119.02 E	34	6.5	
29	01	11	TQV	1P 1PP 1PPP	18	42	58.1	0.5	0.02	0.03	0.02	24.51	+ 2.1	15	24	12.7	2.71 S	119.02 E	34	6.5	
30	01	11	TQV	1P 1PP 1PPP	18	42	56.9	0.9	0.02	0.03	0.02	25.15	- 1.2	15	24	12.7	2.71 S	119.02 E	34	6.5	
31	01	11	TQV	1P 1PP 1PPP	18	42	12.0	0.5	0.02	0.03	0.02	28.01	+ 3.0	15	24	12.7	2.71 S	119.02 E	34	6.5	
32	01	11	TQV	1P 1PP 1PPP	18	42	31.0	0.5	0.02	0.03	0.02	24.51	+ 2.1	15	24	12.7	2.71 S	119.02 E	34	6.5	
33	01	11	TQV	1P 1PP 1PPP	18	42	44.9	0.4	0.01	0.05	0.05	25.15	- 1.2	15	24	12.7	2.71 S	119.02 E	34	6.5	
34	01	11	TQV	1P 1PP 1PPP	18	42	22.6	0.7	-0.02	-0.02	-0.02	28.01	+ 3.0	15	24	12.7	2.71 S	119.02 E	34	6.5	
35	01	11	TQV	1P 1PP 1PPP	18	42	48.6	0.4	0.02	0.03	0.03	24.51	+ 2.1	15	24	12.7	2.71 S	119.02 E	34	6.5	
36	01	11	TQV	1P 1PP 1PPP	18	42	03.1	0.7	+0.03	-0.02	-0.02	25.15	- 1.2	15	24	12.7	2.71 S	119.02 E	34	6.5	
37	01	11	TQV	1P 1PP 1PPP	18	42	57.6	0.7	0.11	0.08	0.10	28.01	+ 3.0	15	24	12.7	2.71 S	119.02 E	34	6.5	
38	01	11	TQV	1P 1PP 1PPP	18	42	42.8	1.5	0.13	0.10	0.06	24.51	+ 2.1	15	24	12.7	2.71 S	119.02 E	34	6.5	
39	01	11	TQV	1P 1PP 1PPP	18	42	52.1	1.5	0.13	0.10	0.06	25.15	- 1.2	15	24	12.7	2.71 S	119.02 E	34	6.5	
40	01	11	TQV	1P 1PP 1PPP	18	42	18.6	1.5	0.13	0.10	0.06	28.01	+ 3.0	15	24	12.7	2.71 S	119.02 E	34	6.5	
41	01	11	TQV	1P 1PP 1PPP	18	42	32.1	1.5	0.13	0.10	0.06	24.51	+ 2.1	15	24	12.7	2.71 S	119.02 E	34	6.5	
42	01	11	TQV	1P 1PP 1PPP	18	42	40.6	1.5	0.13	0.10	0.06	25.15	- 1.2	15	24	12.7	2.71 S	119.02 E	34	6.5	
43	01	11	TQV	1P 1PP 1PPP	18	42	04.6	4.2	-4.34	-4.33	-4.33	28.01	+ 3.0	15	24	12.7	2.71 S	119.02 E	34	6.5	
44	01	11	TQV	1P 1PP 1PPP	18	42	25.5	0.5	0.02	0.03	0.02	24.51	+ 2.1	15	24	12.7	2.71 S	119.02 E	34	6.5	
45	01	11	TQV	1P 1PP 1PPP	18	42	03.8	1.0	0.03	0.02	0.02	25.15	- 1.2	15	24	12.7	2.71 S	119.02 E	34	6.5	
46	01	11	TQV	1P 1PP 1PPP	18	42	03.3	0.5	0.02	0.03	0.02	28.01	+ 3.0	15	24	12.7	2.71 S	119.02 E	34	6.5	
47	01	11	TQV	1P 1PP 1PPP	18	42	32.6	0.7	-0.01	-0.03	+0.05	24.51	+ 2.1	15	24	12.7	2.71 S	119.02 E	34	6.5	
48	01	11	TQV	1P 1PP 1PPP	18	42	07.0	1.0	0.10	0.11	0.12	25.15	- 1.2	15	24	12.7	2.71 S	119.02 E	34	6.5	
49	01	11	TQV	1P 1PP 1PPP	18	42	27.0	0.7	0.03	0.06	0.06	28.01	+ 3.0	15	24	12.7	2.71 S	119.02 E	34	6.5	
50	01	11	TQV	1P 1PP 1PPP	18	42	49.8	1.5	0.07	0.07	0.1	24.51	+ 2.1	15	24	12.7	2.71 S	119.02 E	34	6.5	
51	01	11	TQV	1P 1PP 1PPP	18	42	39.1	0.4	0.02	0.04	0.05	25.15	- 1.2	15	24	12.7	2.71 S	119.02 E	34	6.5	
52	01	11	TQV	1P 1PP 1PPP	18	42	08.5	0.4	0.02	0.04	0.05	28.01	+ 3.0	15	24	12.7	2.71 S	119.02 E	34	6.5	
53	01	11	TQV	1P 1PP 1PPP	18	42	14.1	0.3	0.01	0.02	0.08	24.51	+ 2.1	15	24	12.7	2.71 S	119.02 E	34	6.5	
54	01	11	TQV	1P 1PP 1PPP	18	42	26.0	0.4	0.01	0.04	0.05	25.15	- 1.2	15	24	12.7	2.71 S	119.02 E	34	6.5	
55	01	11	TQV	1P 1PP 1PPP	18	42	55	0.5	-0.03	0.04	0.05	28.01	+ 3.0	15	24	12.7	2.71 S	119.02 E	34	6.5	
56	01	11	TQV	1P 1PP 1PPP	18	42	13.0	0.5	-0.03	0.04	0.05	24.51	+ 2.1	15	24	12.7	2.71 S	119.02 E	34	6.5	
57	01	11	TQV	1P 1PP 1PPP	18	42	41.3	0.5	-0.03	0.04	0.05	25.15	- 1.2	15	24	12.7	2.71 S	119.02 E	34	6.5	
58	01	11	TQV	1P 1PP 1PPP	18	42	31.8	0.5	-0.03	0.04	0.05	28.01	+ 3.0	15	24	12.7	2.71 S	119.02 E	34	6.5	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
22	01	12	TQV	IP	01	39	11.1	0.5	0.02	0.01	0.05	48.32	+ 4.8	01	30	32.9	49.60 N	155.82 E	65	4.3	
23	01	13	TQV	IP	01	10	37.0	0.5	-0.01	+0.02	-0.05	35.15	+ 0.3	01	03	44.2	23.50 N	143.37 E	53	5.3	
24	01	14	TQV	ePP	22	12	03.1	0.4	0.07	0.10	0.02	70.89	+ 1.7	22	14	55.4	34.86 N	25.89 E	33	5.3	
25	01	15	HBV	ePPP	22	26	12.6	1.7			0.12	71.52	+ 2.6	07	10	50.5	56.89 N	152.86 W	3	5.5	
26	01	15	HBV	IP	07	22	54.2	1.5	0.19	0.30	0.58	78.08	+ 1.5	12	01	53.5	19.59 N	94.91 E	33	5.4	
				IPcP	12	04	19.2	2.0		-0.37	+0.43	9.89	+ 2.3								
			TQV	ePPP	12	04	24.3														
				IS	05	05	57.5	1.0		0.03	0.04										
				ISS	06	06	05.0	1.0		0.09	0.13										
				ISSS	06	06	12.0	1.5		0.30	0.58										
				IPcP	09	09	33.0	2.2	0.19	-0.37	+0.43										
				eP	12	04	26.0	2.0													
				eS	05	05	20.0														
27	01	16	TQV	IPKP	12	46	54.6	1.5	-0.22	+0.24	-0.34	145.6	+ 8.6	12	27	13.2	30.21 S	112.11 W	3	6.1	
28	01	17	TQV	IP	02	15	07.0	1.5		+0.57	+1.19	31.54	+ 8.6	02	09	05.8	7.44 S	117.19 E	301	5.7	
29	01	17	HBV	IPP	16	16	31.0														
				IPPP	16	16	47.0														
				eP	11	20	29.8	0.5	0.01	0.02	0.02	34.75	+ 1.6	11	13	45.5	36.95 N	140.86 E	61	5.3	
				ePP	21	21	52.3	0.5													
				ePPP	22	22	09.8	0.5	0.02	0.03	0.04										
				IPcP	29	29	13.8	0.4	0.03	0.04	0.03										
30	01	17	BGV	eP	15	38	38.9	1.2	0.09	0.04		33.86	- 1.3	15	32	00.5	37.05 N	140.90 E	51	5.6	
				IPP	39	39	54.4														
				IPPP	40	40	10.4														
				IPcP	41	41	16.4														
			TQV	IP	15	38	41.5	1.0	0.05	0.11	0.08	34.34	- 4.6								
			HBV	IP	15	38	52.6	0.6	-0.01	0.02	0.02	34.81	+ 2.7								
				IPP	40	40	04.6	0.7	0.03	0.01	0.01										
				IPPP	40	40	24.6	0.5	0.03	0.04	0.03										
				IPcP	41	41	30.1	0.5	0.04	0.03	0.03										
				IS	44	44	11.1														
				ePcS	45	45	17.1														
31	01	17	HBV	IPPP	16	39	57.5	2.0	-0.16	0.22	-0.39	104.32	+ 1.5	16	19	07.5	3.00 S	81.98 W	33	6.0	
32	01	16	TQV	IP	14	15	24.0	0.4	0.02	0.02	0.06	36.05	+ 1.5	14	08	17.5	28.04 N	65.67 E	3	5.5	
				IPP	16	16	51.5	0.4													
				IPPP	17	17	00.0	0.4	0.01	0.01	0.05										
				IPcP	17	17	48.1	0.5	0.03	0.06	0.06										
			HBV	eP	14	15	34.1	0.4	-0.02	0.02	0.02	36.50	+ 8.0								
				IPP	16	16	40.1	0.9	0.02	0.03	0.03										
				IPPP	17	17	09.9	0.9	0.02	0.02	0.03										
				IPcP	17	17	52.0	0.5	0.02	0.03	0.03										
			BGV	eP	14	15	40.1					37.12	+ 8.6								
				ePP	16	16	49.1														
				ePPP	17	17	10.1														
33	01	19	TQV	IP	11	16	21.8	0.2	+0.02	+0.01	-0.01	16.14	+ 0.7	11	12	36.9	24.57 N	122.52 E	33	4.9	
				IPP	16	16	34.5	1.0	0.02	0.09	0.12										
				IPPP	16	16	50.6	0.4	0.04	0.03	0.06										
				eSS	19	19	41.5														
			HBV	eP	11	16	14.4	1.6	0.08	0.09	0.13	16.27	- 6.9								
				IPP	16	16	37.6	0.7	0.02	0.03	0.06										
				IPPP	16	16	46.4	1.2	0.03	0.05	0.06										
				eS	19	19	25.4														
				eSS	19	19	45.6														
				eSSS	19	19	54.4	0.6	0.02	0.02	0.02										

1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	19	20	21	22	
34	01	19	HBV	1PcP 1P 1PP	16	21 27 31	21.4 25.3 15.6	1.1 3.0 2.5	0.04 -0.64 0.04	0.06 -0.75 0.03	0.02 +1.6 0.03	86.37	16	15	08.0	23.47 S	178.47 W	250	5.5	
35	01	19	TQV HBV	1P 1PP 1P 1PP	16 16 16	27 42 44	28.5 40.2 15.6	1.0 1.5 0.6	0.05 0.10 0.02	0.01 0.03 0.05	0.08 0.13 0.03	- 0.3 + 9.6 + 1.6	16	34	45.9	6.25 N	146.71 E	33	5.5	
36	01	20	TQV	1PP 1P 1PP	14 14	44 56	22.5 28.0	0.9 0.5	+0.05 0.02	+0.11 0.05	-0.13	10.33	14	53	58.4	28.48 N	96.47 E	33	4.5	
37	01	20	HBV	1P 1PP 1PPP 1S 1SS 1SSS	14	56 56 56 58 58	39.1 50.1 56.6 42.3 57.1	0.3 0.4 0.4 0.3 1.5	0.03 0.03 0.03 0.03 0.07	0.02 0.03 0.06 0.04 0.15	0.04 0.03 0.03 0.03 0.17	0.04 0.04 0.05 0.06 0.05	11.12	16	01	12.9	12.76 N	95.77 E	3	4.3
38	01	20	TQV	1P 1PP 1PPP	17	39 39 39	29.5 34.5 43.0	0.2 0.3	0.04 0.03	0.04 0.05	0.04 0.05	13.53	17	36	13.6	11.57 N	95.99 E	3	5.1	
39	01	20	TQV	1PP 1PPP	21	12 12	16.5 20.5	0.3	0.04	0.05	0.05	12.97	21	09	11.4	13.34 N	94.91 E	3	5.1	
40	01	21	TQV	1P	20	41	24.6	0.4	0.05	0.05	0.05	39.19	20	33	57.1	13.33 N	145.47 E	33	5.2	
41	01	21	TQV	1P 1PP 1PPP	20	50 50 50	04.1 16.1 23.1	0.5 0.5 0.7	+0.03 0.03 0.03	-0.04 0.04 0.01	-0.06 0.06 0.04	- 1.1 - 1.0	20 20	47	26.0	30.73 N	96.53 E	33	5.8	
42	01	22	HBV	1P 1PP 1PPP	20	50 50 50	14.0 26.5 35.7	0.4 0.7 0.8	0.02 0.02 0.03	-0.03 0.02 0.03	-0.02 0.02 0.02	12.69	20							
43	01	23	TQV TQV HBV	1P 1PP 1PPP 1P 1PP 1PPP	14 07 07	07 40 40 40 40	17.5 10.1 24.6 42.9 13.7	1.5 0.9 1.1 2.0	0.12 0.03 0.05	-0.20 0.05 0.07	-0.34 0.06 0.10	83.10	13 07	51 34	55.2 53.4	24.42 S 29.65 N	176.30 E 150.28 E	33 33	5.6 5.9	
44	01	24	HBV	1P 1PP 1PPP 1P 1PP 1PPP	16	26 27	50.7 00.0	3.5 3.5	-1.30 0.35	-1.80 1.30	-2.01 1.83	19.41	16	22	20.1	12.75 N	123.81 E	3	5.1	



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
04	02	02	TQV	ePcP	15	31	24.3	1.0	0.019	0.031	0.057	35.26	- 1.1	15	15	25.3	43.10 N	71.29 E	3	4.6	
05	02	03	HBV	eS	15	34	08.5	1.0	0.019	0.026	0.023	36.08	- 1.3	04	50	21.3	17.60 N	147.20 E	3	5.1	
06	02	03	HBV	eP	04	22	22.5	0.8	+0.015	-0.010	0.016	39.64	+ 4.2	04	05	33.6	11.07 S	166.22 E	33	5.5	
07	02	04	HBV	ePP	04	23	49.3	0.7		0.014	0.006	39.55	+ 1.6	19	08	39.1	7.11 S	127.61 E	150	5.1	
08	02	06	HBV	ePP	19	16	30.5	0.8	-0.010	+0.028	-0.041	67.77	+ 0.4	22	22	16.4	3.58 S	125.04 E	33	5.2	
09	02	07	TQV	ePP	08	17	02.5	0.8	0.008	0.019	0.028	31.11	- 4.3	05	12	46.3	26.12 S	178.72 E	33	5.9	
10	02	08	HBV	ePP	22	18	57.9	0.8	+0.01	0.014	0.019	20.37	+ 0.3	14	37	13.7	2.57 N	96.06 E	33	5.1	
11	02	11	HBV	ePP	22	28	42.4	0.8	0.01	0.001	0.001	31.96	+ 1.0	05	19	49.9	15.50 S	172.73 W	33	5.2	
12	02	12	TQV	ePP	15	29	44.1	0.8	0.01	0.001	0.001	88.19	+ 0.2	15	19	23.8	5.88 N	125.35 E	70	4.8	
13	02	13	HBV	ePP	20	06	49.1	1.0	+0.04	+0.02	+0.09	25.17	+ 7.6	20	01	51.5	25.72 N	122.42 E	200	5.7	
14	02	13	TQV	ePP	04	52	33.3	0.7	0.03	0.06	0.06	16.42	+ 2.6	04	48	55.6	35.76 N	138.86 E	33	4.6	
15	02	15	HBV	ePP	10	55	12.7	0.8	0.02	0.04	0.03	32.40	- 0.7	16	52	47.9	40.17 N	67.58 E	17	4.9	
16	02	15	TQV	ePP	16	59	23.7	1.0	+0.02	0.02	+0.06	32.85	+ 3.6	10	49	52.5	40.18 N	67.60 E	3	4.6	
17	02	15	HBV	ePP	17	00	37.3	1.1	0.02	-0.01	0.02	34.55	- 0.1	21	57	00.8	41.02 N	71.06 E	3	5.0	
18	02	16	HBV	ePP	10	57	00.9	1.0	-0.01	+0.03	+0.08	36.71	+ 2.5	13	41	49.7	33.83 N	137.25 E	340	4.4	
			TQV	ePP	13	47	44.0	1.2	+0.19	+0.22	-0.71	30.61	+ 9.9								

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
19	02	16	HBV	ePPP 15	17	49	24.0	0.8	+0.20	-0.18	+0.80	33.82	+ 4.3	17	18	34.9	36.49 N	70.87 E	191	5.8		
20	02	17	TQV	eSS 1P 1P 1PP eP ePP ePPP eS eSS eP ePP ePPP	17 17 02 02	54 25 24 26 41 41 41 44 44 41 41 41	09.0 06.6 24.5 25.0 20.6 37.0 49.0 02.4 53.1 28.9 37.3 44.3	1.0 1.0 1.0 1.0 1.0 1.0 1.0	0.14 0.01	0.18	0.50 0.04 0.02	33.14 16.65	- 1.8	02	37	26.2	38.00 N	100.62 E	3	4.7		
21	02	17	TQV	ePPP 1P 1PP 1PPP 1P ePP ePPP	23	13 14 14 51 52	17.5 37.0 59.0 43.7 23.0	0.9 0.9 1.0 1.0	0.02 0.01 +0.02	0.03 0.03 +0.03	0.01 0.03 0.06 0.03 -0.06	34.59	+ 3.9	23	06	22.1	41.05 N	71.02 E	3	4.8		
22	02	19	HBV	ePP ePPP	15	51 52	49.2 31.5	0.8	0.01	0.09	0.02	23.74	+ 6.3	19	21	57.3	5.71 S	150.33 E	3	5.2		
23	02	19	HBV	ePP ePPP	19	30 32	46.1 32.6	1.0	0.02	0.02	0.05	48.61	+ 1.5	19	21	57.3	5.71 S	150.33 E	3	5.2		
24	02	20	TQV	ePP ePPP	15	51 52	49.2 31.5	0.8	0.01	0.09	0.02	23.74	+ 6.3	19	21	57.3	5.71 S	150.33 E	3	5.2		
25	02	21	HBV	ePP ePPP	11	58	28.7	0.8	-0.03	0.02	+0.04	62.95	+ 8.1	18	32	35.4	84.70 N	95.67 E	3	4.0		
26	02	22	HBV	ePP ePPP	02	10	24.0	1.0	-0.01	0.01	0.03	33.77	+ 2.7	11	51	52.5	36.56 N	139.74 E	59	5.4		
27	02	22	TQV	ePP ePPP	02	11	29.5	1.0	0.02	0.02	0.04	30.60	+ 4.9	02	04	06.1	3.41 S	128.29 E	3	4.9		
28	02	22	HBV	ePP ePPP	05	53	17.8	1.0	0.02	0.02	-0.04	47.31	+ 3.9	05	44	36.8	39.35 N	54.13 E	3	5.8		
29	02	23	HBV	ePcP ePP ePP ePP	05	54 54 53	38.2 56.9 19.2	0.9	-0.01	-0.02	0.07	46.63	+ 0.7	05	44	36.8	39.35 N	54.13 E	3	5.8		
30	02	24	HBV	ePP ePP ePP ePcP 1S 1P ePcP ePP ePP ePP ePcP	12	57 59 59 00 03 33 33	59.6 35.9 50.0 57.1 05.9 09.5 18.5	0.5 0.8 0.8 0.8 1.0 1.0 1.0	-0.14 0.02 0.02 0.01 0.02 -0.02 0.02	-0.24 0.02 0.02 0.01 0.02 -0.03 0.02	-0.19 0.03 0.03 0.01 0.02 +0.05 0.03	32.60 37.48	+ 8.9 - 1.4	15 15	22 22	46.3 45.5	34.72 N 40.18 N	139.46 E 67.55 E	33 3	4.6 4.9		
31	02	24	HBV	ePP ePP ePP ePcP 1S 1P ePcP ePP ePP ePP ePcP	13	00 03 33 33	57.1 05.9 09.5 18.5	0.8 1.0 1.0 1.0	-0.01	-0.02	0.02	34.22	+ 3.6	12	51	29.7	36.52 N	70.36 E	206	4.6		
32	02	26	TQV	ePP ePP ePP ePcP 1S 1P ePcP ePP ePP ePP ePcP	19	05 05 09	20.3 12.7 52.5	0.9 0.5 0.3	-0.03	-0.01	0.01	79.95	-0.2	21	21	02.4	21.23 S	170.11 E	33	5.3		
33	02	27	EGV	ePP ePPP eS eSS	18	10 10 12 12	07.0 12.0 37.2 49.5	0.5 0.5 0.5 0.5	-0.03 0.05 0.05	-0.03 -0.03 0.04 0.04	0.04 0.04 0.03 0.03	37.62 38.17 14.42	+ 6.7 - 5.2 - 3.6	18 18	58 06	00.2 32.5	41.02 N 19.11 N	143.72 E 121.42 E	33 33	4.9 5.6		

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
				eSSS iPcP iP	13 15 18	02.5 17.8 02.3	0.8 1.0 0.5	0.04 0.04 +0.01	0.06 0.04 +0.01	0.04 0.03 0.02	0.04 0.03 -0.04	15.20 143.11 142.70 46.69	- 2.3	19	21	28.3	4.66 S	105.82 W	3	5.4		
01	03	01	HBV	eFKP iFKP iP	19 41 21	02.2 09.2 23.4	1.0 1.3 1.0	0.01 0.03 -0.02	0.01 0.03 0.02	0.03 0.10 -0.04	0.03 0.10 -0.04	53.00	0	10	00	42.9	6.37 S	154.80 E	33	5.3		
02	03	01	TQV	eFP eP ePcP	10 09 11	57.5 57.5 12.0	0.8 0.8 1.2	+0.02 +0.02 0.01	+0.02 +0.02 0.01	-0.04 +0.04 0.02	-0.04 +0.04 0.02	51.49 40.22 53.42	- 4.8 + 2.8	10	37	56.9	4.16 S	153.08 E	33	5.1		
03	03	03	TQV	eP ePcP	14 13	42.8 59.7	0.9 1.0	-0.02 0.01	+0.02 0.01	+0.04 0.02	+0.04 0.02	40.22 53.42	+ 2.8	14	04	11.5	43.54 N	146.26 E	61	4.2		
04	03	03	TQV	eP ePcP	10	44.0	0.8	-0.02	+0.02	+0.05	+0.05	53.42	- 7.0	10	01	33.7	43.09 N	45.50 E	25	5.2		
05	03	04	TQV	ePcP	10	00.8	0.8	-0.01	+0.02	0.02	0.02	54.15	- 0.6	10								
06	03	04	HBV	eP	10	57.9	1.2	-0.01	+0.02	-0.08	-0.08	54.15	- 0.6	10								
07	03	04	TQV	iP	19	05.2	1.1	+0.02	+0.02	-0.08	-0.08	53.35	+ 3.4	19	24	44.9	43.05 N	45.59 E	25	5.3		
08	03	04	TQV	iPcP	35	14.2	1.0	0.01	0.01	0.04	0.04	112.64		22	34	25.3	26.77 S	70.36 W	33	5.7		
09	03	05	TQV	iPPP iP	03 03	03.5 08.1	1.0 1.0	0.02 0.02	0.01 0.01	0.02 0.04	+0.28 0.40	22.51	+ 0.9	03 33	33	54.0	9.27 N	123.87 E	686	6.3		
10	03	05	HBV	eS eSS iSSS iP iPcP	07 09 10 07	15.5 22.9 36.2 57.5	1.2 1.5 1.0 1.0	+0.03 0.02 0.02 -0.02	-0.03 0.01 0.01 0.01	-0.05 0.02 0.04	-0.05 0.02 0.04	51.5		06	58	51.4	50.93 N	160.42 E	33	5.4		
11	03	05	TQV	eFP iP iPP iP	07 10 11	17.5 03.5 02.3	1.0 1.0 1.0	-0.02	+0.03	-0.10	-0.10	31.38	+ 6.0	11	01	07.3	29.15 N	139.15 E	522	4.4		
12	03	06	TQV	eP eP	00 02	47.5 10.7	1.2 0.8	+0.16 1.45	+0.05 +0.19	+0.05 -1.23	+0.05 -1.23	39.17 31.39	+ 3.4 + 9.5	00 02	24 17	50.6 20.0	29.90 S 29.38 N	179.17 W 138.84 E	33 441	5.8 6.9		
13	03	06	HBV	iPcS iP eP	02 03	57.2 03.5	3.0 1.0	1.45 +0.19	+0.19 +0.01	-1.23 +0.02	-1.23 +0.02	31.14 26.05	+ 3.8 + 4.3	03	16	10.7	4.76 N	125.52 E	180	5.3		
14	03	06	TQV	eFP ePPP iP	22 04	29.0 38.0	1.0 1.2	0.01	0.01	0.02	0.02	26.05		03	16	10.7	4.76 N	125.52 E	180	5.3		
15	03	06	HBV	iP iP	06 15	37.4 23.8	1.2 1.3	+0.02 +0.05	+0.02 0.05	-0.14 0.08	-0.14 0.08	86.51 37.71	+ 0.4 + 4.4	05 14	51 55	56.4 17.9	16.05 S 40.80 N	174.86 W 142.97 E	33 120	5.3 4.9		
16	03	06	TQV	iPP iPPP iP	03 04	47.3 19.8	1.3 1.3	0.05	0.05	0.08	0.08	33.29	+ 6.0	09	40	54.8	36.66 N	70.73 E	71	5.3		
17	03	07	TQV	iP ePP ePPP	09 48 48	30.0 43.0 56.3	1.0 1.0 1.0	-0.02 0.01 0.01	-0.02 0.01 0.01	+0.06 0.03 0.02	+0.06 0.03 0.02	33.29	+ 6.0	09	40	54.8	36.66 N	70.73 E	71	5.3		
18	03	08	HBV	iPcP iP eP	00 00	39.8 46.3	1.0 1.3	-0.02 0.01	-0.02 0.01	0.04 0.03	0.04 0.03	89.26	+ 2.6	00	40	43.3	38.51 S	176.68 E	33	6.1		
19	03	09	HBV	ePcP iP eP	05 02 04	49.0 11.5 34.8	1.3 0.7 0.5	-0.01 0.02 0.01	-0.02 0.03 0.02	0.04 -0.03 0.02	0.04 -0.03 0.02	90.04	+ 1.2	04	58	44.9	19.44 N	120.56 E	50	5.0		
				eP ePcP iP	05 02 04	42.0 49.0 11.5	1.0 1.0 1.0	0.01 0.01 0.01	0.01 0.01 0.01	0.02 0.03 0.02	0.02 0.03 0.02	14.35	+ 6.1	04	58	44.9	19.44 N	120.56 E	50	5.0		
				iP iPcP iP	05 02 04	53.8 05.1 16.0	0.7 0.9 1.0	0.01 0.02 0.02	0.01 0.02 0.02	0.02 0.03 0.02	0.02 0.03 0.02	14.56	- 3.0	05 02 04	58 58 58	44.9 44.9 44.9	19.44 N 19.44 N 19.44 N	120.56 E 120.56 E 120.56 E	50 50 50	5.0 5.0 5.0		



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
20	03	10	HBV	eSS	15	04	52.3														
21	03	11	HBV	eSSS	14	05	13.0	0.8	0.01	0.02	0.03	38.31	+ 5.1	15	19	13.0	6.88 S	72.43 E	3	4.9	
22	03	11	TQV	eP	22	02	42.1	1.3	0.03	+0.05	0.08	148.30		13	43	01.8	35.09 S	108.83 W	33	5.5	
23	03	12	TQV	eP	08	29	40.8	1.3	0.02	0.02	-0.19	148.69	+ 2.9	22	22	24.6	38.63 N	135.38 E	330	5.3	
24	03	12	HBV	eP	09	29	45.5	1.0	-0.01	0.02	+0.02	30.79	- 2.6	08	34	37.3	38.84 N	70.33 E	3	4.0	
25	03	12	TQV	eP	09	53	11.0	1.0	0.02	0.02	-0.02	26.22	+ 9.1	09	48	15.8	3.71 N	125.78 E	38	5.7	
26	03	13	HBV	eP	11	53	58.5	1.0	-0.01	0.04	0.02	26.96	+ 3.3	10	50	54.7	21.73 S	178.54 W	550	5.1	
27	03	13	TQV	eP	11	02	54.6	0.6	+0.01	-0.1	+0.04	85.59	- 1.9	10	59	28.4	40.96 N	70.92 E	3	4.3	
28	03	13	HBV	eP	14	03	28.5	1.2	+0.03	0.41	-0.1	86.14	- 1.8	07	35	30.1	41.00 N	70.99 E	3	4.4	
29	03	13	TQV	ePcP	14	03	31.5	1.2	0.03	0.06	0.05	26.86	+ 9.4	20	35	08.3	35.05 N	23.82 E	60	4.3	
30	03	14	TQV	eP	20	06	32.5	1.4	0.01	0.06	2.5	70.89	+ 3.3	00	39	16.0	5.20 N	118.45 E	33	5.1	
31	03	14	HBV	eP	00	46	33.5	1.0	-0.05	-0.08	+0.02	20.17	+ 0.4	00	36	27.4	19.66 S	177.90 W	520	5.4	
32	03	14	TQV	eP	00	46	37.6	1.0	0.04	0.14	0.09	21.00	-1.0	11	32	33.6	34.23 N	79.68 E	33	4.2	
33	03	14	NHA	eS	00	47	47.5	1.0	0.02	2.48	0.03	11.47	+ 5.8	05	38	08.0	1.65 S	134.89 E	33	5.1	
34	03	16	HBV	eP	05	42	20.5	1.5	0.01	0.01	0.01	35.59	+ 10	11	36	27.4	19.66 S	177.90 W	520	5.4	
35	03	16	TQV	eP	11	48	10.6	1.2	-0.02	-0.04	+0.1	85.29	+ 6.2	11	36	27.4	19.66 S	177.90 W	520	5.4	
36	03	17	TQV	ePcP	11	48	09.6	1.2	0.02	0.04	0.05	85.80	+ 4.7	11	36	27.4	19.66 S	177.90 W	520	5.4	
33	03	14	NHA	eP	11	48	17.5	0.7	+0.01	+0.01	-0.04	85.80	+ 4.7	11	36	27.4	19.66 S	177.90 W	520	5.4	
34	03	16	TQV	eP	11	48	32.5	1.0	0.02	0.02	0.02	78.45	+ 10	15	32	33.6	34.23 N	79.68 E	33	4.2	
35	03	16	HBV	eP	15	47	15.5	0.9	-0.02	+0.02	-0.06	25.01	+ 1.1	15	32	33.6	34.23 N	79.68 E	33	4.2	
36	03	17	TQV	eP	17	48	03.7	1.2	0.01	0.01	0.02	26.30	- 4.2	17	10	48.4	43.25 N	14.43 E	62	4.4	
35	03	16	HBV	eP	17	48	14.3	1.0	+0.05	-0.03	+0.1	39.55	+ 2.5	17	10	48.4	43.25 N	14.43 E	62	4.4	
36	03	17	TQV	eP	17	48	45.0	1.0	+0.01	-0.01	-0.03	40.15	+ 4.4	22	53	55.5	20.78 S	170.02 E	33	5.1	
36	03	17	TQV	eP	23	05	46.5	0.7	0.02	0.02	0.02	76.26	0	22	53	55.5	20.78 S	170.02 E	33	5.1	
36	03	17	TQV	eP	23	05	44.9	1.2	-0.03	+0.05	0.05	75.65	+ 1.9	03	43	51.8	24.56 N	125.08 E	33	4.7	
36	03	17	TQV	eP	03	48	05.5	1.2	0.04	0.03	-0.08	18.45	- 1.0	03	43	51.8	24.56 N	125.08 E	33	4.7	
36	03	17	TQV	eP	48	48	13.6	1.2	0.04	0.03	0.03	18.45	- 1.0	03	43	51.8	24.56 N	125.08 E	33	4.7	
36	03	17	TQV	eP	48	48	34.2	1.2	0.04	0.03	0.03	18.45	- 1.0	03	43	51.8	24.56 N	125.08 E	33	4.7	
36	03	17	TQV	eSS	51	51	48.3	1.2	0.04	0.03	0.03	18.45	- 1.0	03	43	51.8	24.56 N	125.08 E	33	4.7	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
37	03	17	HBV	1P 1PP 1PPP	03	48	07.0	1.5	+0.05	-0.12	+0.13	18.57	- 1.0	15	17	21.1	3.88 N	122.48 E	600	4.7		
38	03	18	HBV	1P 1PP 1PPP eP eS	07	51	24.4	0.7	0.01	0.02	15.07	- 3.0	07	17	58.8	19.33 N	121.32 E	65	4.9			
39	03	19	TQV	1P 1PP 1PPP eP eS	03	09	40.0	1.0	0.02	0.03	21.15	+ 0.7	03	04	55.4	26.01 N	127.92 E	32	5.0			
40	03	19	TQV	1P 1PP 1PPP eP eS	20	36	14.5	1.0	-0.03	+0.03	39.83	+ 3.0	20	28	37.6	40.40 N	63.40 E	15	7.2			
41	03	20	TQV	1P 1PP 1PPP eP eS	02	53	29.0	2.0	0.15	0.13	49.07	- 2.9	02	47	31.3	33.11 N	135.74 E	35	4.7			
42	03	20	TQV	1P 1PP 1PPP eP eS	06	36	16.0	1.0	0.08	0.09	29.21	+ 0.4	06	28	38.3	40.29 N	63.27 E	3	5.1			
43	03	20	HBV	1P 1PP 1PPP eP eS	06	38	18.7	1.5	+0.05	+0.08	40.62	+ 1.9	07	13	15.8	0.33 N	121.75 E	38	5.5			
44	03	20	HBV	1P 1PP 1PPP eP eS	07	18	23.4	0.8	-0.03	+0.02	26.87											
45	03	20	TQV	1P 1PP 1PPP eP eS	08	45	34.6	0.7	0.01	0.02	26.01	+ 2.1	08	33	58.2	20.07 S	169.42 E	66	5.4			
46	03	21	TQV	1P 1PP 1PPP eP eS	02	57	19.0	1.0	0.02	0.04	22.26	- 0.5	20	51	46.1	0.47 N	98.77 E	35	5.1			
47	03	21	HBV	1P 1PP 1PPP eP eS	02	53	00.4	1.0	-0.05	-0.06	47.87	+ 4.4	02	44	26.0	49.19 N	155.28 E	60	5.5			
48	03	22	NHA HBV	1P 1PP 1PPP eP eS	08 05	38 39	02 49.9	1.5 1.2	0.05 -0.03	0.04 +0.03	62.79 13.59	+ 6.4	05	36	30.7	12.98 N	93.73 E	33	5.2			

INTERNATIONAL SEISMOLOGICAL CENTRE

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
49	03	22	TQV	eS	14	42	54.6	1.0	-0.04		+0.13	89.15	- 1.9	14	13	16.0	14.79 S	171.82 W	33	5.4	
50	03	22	TQV	eP	22	26	07.5	1.0	0.04		0.07	32.91	+ 6.0	22	14	18.6	36.57 N	71.20 E	240	5.0	
51	03	23	TQV	iPPP	08	22	03.6	0.6	+0.02	+0.02	+0.08	76.86	+ 3.6	08	37	57.8	58.97 N	153.79 W	52	5.7	
52	03	23	TQV	eS	20	25	16.1	1.0	0.02	0.02	0.04	87.89	- 2.0	20	31	32.6	14.89 S	173.28 W	33	5.7	
53	03	24	TQV	ePcP	09	44	35.2	1.3	0.02	0.03	0.05	41.76	+ 0.7	09	44	01.2	44.21 N	148.20 E	33	7.4	
54	03	24	NHA	iP	09	51	49.5	0.8	-0.02	+0.02	-0.11										
55	03	24	TQV	iP	07	52	23.5	1.0	0.07	0.08	0.20	46.26	- 0.1	18	22	19.0	44.13 N	148.67 E	33	5.3	
56	03	25	HBV	iP	07	53	35.3	1.2	0.03	0.06	0.13	42.05	+ 1.5	21	04	41.6	52.29 N	168.96 W	33	5.1	
57	03	25	TQV	iP	19	53	59.0	1.0	+0.01	-0.03	+0.02	14.99	- 1.3	07	47	27.4	18.69 N	121.12 E	33	4.4	
58	03	26	HBV	iP	19	56	04.4	1.0	+0.01	0.06	0.14	35.02	+ 1.2	18	59	32.2	37.42 N	141.66 E	42	4.5	
59	03	26	TQV	eP	09	06	22.8	1.0	0.01	+0.02	0.04	35.50	+ 4.5	09	36	42.5					
60	03	27	TQV	eP	20	08	07.8	1.2	0.03	0.03	0.04	25.21	+ 2.2	09	36	42.5	7.36 N	126.62 E	37	5.3	
61	03	27	HBV	eP	13	17	46.4	1.0	0.01	+0.05	0.04	51.00	+ 3.1	20	09	09.6	50.92 N	159.61 E	56	4.5	
62	03	27	TQV	eP	17	19	05.1	0.8	0.01	0.01	0.03	42.15	+ 4.0	13	26	57.0	44.12 N	148.82 E	54	4.8	
63	03	27	HBV	ePcP	17	19	29.1	1.4	0.01	0.02	0.05	44.06	+ 6.6	17	09	11.2	2.73 S	145.10 E	3	4.9	
64	03	27	HBV	eP	18	19	10.7	0.8	0.04	0.03	0.04	69.90	- 2.5	18	02	03.6	51.80 N	169.93 W	33	5.0	
65	03	28	TQV	eP	18	13	09.7	0.8	0.01	0.01	0.01	53.12	- 9.3	18	46	00.2	7.33 S	155.74 E	33	5.3	
66	03	29	TQV	eP	20	14	48.3	1.2	0.07	0.07	0.06	44.58	+ 0.3	20	06	37.6	3.81 S	145.70 E	36	6.3	
67	03	29	TQV	iPPP	09	16	40.0	0.6	0.01	0.02	0.02	16.37	- 0.5	09	11	19.2	24.61 N	122.77 E	33	5.8	
01	04	01	HBV	eP	09	15	07.5	0.8	0.02	0.02	0.06										
02	04	01	HBV	iPPP	10	15	21.1	1.0	0.02	0.07	0.01										
03	04	02	TQV	ePcP	05	15	30.6	1.0	0.02	0.06	0.01										
04	04	02	HBV	iP	05	18	40.6	1.5	0.05	0.03	0.05	16.50	- 0.3	09	55	41.1	1.64 S	138.73 E	37	5.1	
04	04	02	TQV	iP	20	18	43.6	1.2	0.04	0.06	0.02	39.29	+ 7.6	13	55	26.2	42.47 N	142.89 E	70	5.3	
04	04	02	HBV	eP	14	03	15.0	1.0	0.01	0.01	-0.03	37.54	+ 2.2	20	25						
04	04	02	HBV	eP	20	32	33.6	0.8	0.01	0.01	-0.04	32.61	+ 3.1	09	59	03.3	5.59 S	124.83 E	621	5.7	
02	04	01	HBV	iP	10	04	47.9	1.0	+0.08	+0.06	-0.04										
03	04	01	HBV	iP	06	06	42.9	1.0	0.03	0.04	0.04										
03	04	02	TQV	iPPP	06	06	53.9	1.0	0.02	0.03	0.03										
04	04	02	HBV	ePcP	08	08	28.0	2.0	0.48	0.44	0.02	72.17	- 6.2	21	28	06.9	16.90 S	168.10 E	3	5.6	
04	04	02	HBV	eS	09	09	17.5	1.0	0.01	0.01	0.01										
04	04	02	TQV	eP	21	39	29.2	1.0	0.01	0.01	0.01	33.56	0	04	59	23.6	30.20 N	68.87 E	33	4.9	
04	04	02	HBV	eP	05	07	14.5	0.5	0.01	0.01	0.02	34.07	+6.7	04	04						
04	04	02	HBV	eP	05	06	13.1	0.5	0.01	0.01	0.01										
04	04	02	TQV	ePPP	07	07	24.6	0.5	0.01	0.01	0.01	37.99		20	04	13.5	45.27 N	141.16 E	37	4.2	
04	04	02	TQV	iP	20	12	01.5	0.8	0.02	0.01	-0.03										

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
05	04	05	TQV	1P	03	09	35.6	1.0			-0.08	43.01		03	01	39.2	6.75 S	72.41 E	52	5.3		
06	04	05	TQV	EP	20	13	54.0	0.5			+0.01	51.37	0	20	13	54.0	5.97 S	149.31 E	3	5.2		
07	04	06	TQV	EP	02	15	47.0	0.8	0.8	0.02	-0.05	15.75	+ 4.8	02	54	47.7	18.19 N	121.53 E	47	5.5		
																						58
08	04	06	TQV	EP	03	01	19.0	1.0	1.0	0.04	0.04	0.10	74.99	+ 1.0	23	08	04.3	18.90 S	169.61 E	33	5.9	
09	04	10	NHA TQV	EP	23	18	23.8	1.5	+0.06	-0.06	0.12	25.73	+ 1.0	14	10	34.4	5.20 N	125.49 E	38	5.0		
																						16
10	04	10	TQV	EP	20	28	15.5	0.5	0.01	0.01	0.03	13.71	+ 3.9	20	24	57.3	12.17 N	95.02 E	33	5.2		
																						28
11	04	11	TQV HBV	EP	08	20	59.5	0.5	-0.01	-0.01	+0.03	25.76	+ 2.3	08	15	27.9	34.73 N	79.74 E	33	4.7		
																						08
12	04	11	HBV	EP	13	21	45.8	1.0	0.01	0.01	0.05	18.32	+ 4.2	13	51	03.2	5.54 N	94.92 E	33	5.5		
																						21
13	04	11	TQV	EP	15	09	04.1	1.0	+0.01	+0.03	-0.04	20.73	- 0.3	15	04	24.3	9.07 N	123.07 E	33	4.7		
																						09
14	04	11	HBV	EP	23	37	48.5	0.5	-0.01	0.01	0.02	40.63	+ 3.3	23	30	02.0	40.37 N	63.20 E	3	4.6		
																						03
15	04	12	HBV	EP	06	25	06.9	0.5	-0.01	0.01	+0.02	13.36	+ 2.7	06	21	54.5	11.81 N	95.05 E	39	4.8		
16	04	13	HBV	EP	06	25	12.6	1.0	0.01	0.01	0.02	13.95	+ 2.5									
			TQV	EP	06	25	19.5	1.0	+0.03	0.01	+0.06											
				EP	06	25	23.0	1.0	0.02	0.02	0.04											
				EP	06	25	24.5	1.0	0.01	0.01	0.02											
				EP	06	25	43.5	1.0	0.01	0.01	0.02											
				EP	06	27	51.0	1.0	0.02	0.02	0.04											

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
17	04	13	HBV	1P ePP ePPP eS eSS eP 1PP 1PPP 1S 1SS 1SSS	09	53	21.3 29.0 36.8 45.3 47.3 32.8 35.0 38.5 38.8 01.5 13.0	1.0 1.0 1.0 1.0 0.8 1.0 1.0 1.0 1.0	+0.02 0.02 0.02 0.02 0.01 +0.02 0.02 0.07 0.02	-0.02 0.03 0.03 0.02 0.01	-0.04 0.04 0.04 0.02 0.01 +0.04 0.04 0.12 0.04	13.39 + 0.7 13.99 + 4.4	09	50	13.5	11.70 N	95.12 E	51	4.8			
18	04	13	TQV	eP	11	18	47.5	1.0	+0.04	+0.01	+0.04	60.66	- 1.0	11	08	33.3	26.39 S	67.20 E	3	5.4		
19	04	13	TQV	eP	15	23	21.8	0.5	+0.03	-0.01	+0.03	22.28	- 0.6	16	18	27.0	11.61 N	125.92 E	41	5.4		
20	04	13	TQV	ePP ePPP	22	23	50.8	0.8	0.02	0.01	0.02	50.16	+ 4.7	22	05	10.3	5.67 S	148.04 E	190	5.2		
21	04	14	TQV	1PcP 1PP ePPP	19	15	25.6	0.5	0.02	0.02	0.03	17.29	+ 8.6	19	41	11.6	15.50 N	88.21 E	8	4.8		
22	04	14	TQV	eP ePP ePPP	20	04	26.5	0.8	0.01	0.03	0.02	28.12	+ 3.0	19	57	41.2	2.82 N	126.54 E	59	4.8		
23	04	15	TQV	eP	05	01	44.5	0.8	+0.01	-0.01	-0.03	22.95	- 4.5	04	56	47.7	32.04 N	82.20 E	33	4.4		
24	04	15	TQV	1P ePP ePPP	07	39	39.0	0.5	0.01	-0.01	-0.07	30.19	+ 2.7	07	34	11.9	42.88 N	131.21 E	547	5.2		
25	04	15	TQV	eS eP ePP ePPP	21	41	40.5	0.8	0.01	-0.01	0.01	34.40	+ 1.2	21	49	48.4	30.05 N	67.88 E	3	4.8		
26	04	16	HBV	eP	20	25	34.1	0.5	+0.01	-0.0	-0.02	14.89	- 2.9	20	22	07.3	16.54 N	120.41 E	38	4.9		
27	04	17	HBV	eP ePP ePPP ePcP eS	14	23	00.4	0.5	-0.06	+0.09	+0.09	34.56	+ 4.9	14	16	50.9	6.60 S	126.77 E	469	5.8		
28	04	17	HBV	1P 1PP 1PPP 1PcP eS	14	24	54.4	0.5	0.01	0.01	0.02	35.42	+ 4.8	19	43	29.6	15.00 S	166.37 E	33	5.3		
29	04	17	HBV	eP ePcP eP	20	54	40.7	0.5	0.01	-0.01	-0.02	69.79	+ 2.2	20	23	45.9	25.27 N	122.48 E	33	5.3		
30	04	18	TQV	ePP ePPP eP	01	27	52.4	0.5	0.02	0.04	0.05	15.89	+ 5.8	01	34	16.0	24.67 N	122.24 E	33	4.9		
				ePP ePPP eS eSS ePcP		38	07.0	0.5	0.01	0.01	0.03											
						38	10.5	1.0	0.01	0.03	0.05											
						40	53.0	1.0			0.02											
						41	02.0	0.8			0.02											
						41	12.0	1.0			0.02											
						42	59.0	1.2	0.14	0.09	0.18											

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
31	04	18	TQV HBV	1P eP ePcP	19 19 43	43	13.0 17.5 24.0	0.8 0.5 0.5	+0.03 +0.03 0.02	+0.03 -0.03 0.03	+0.10 -0.08 0.03	76.98 77.80	-1.8 -1.8	19	31	18.6	61.10 N	151.89 W	3	5.3	
32	04	19	TQV	eP uPP ePPP 1PcP eS	02 03 01 01 02 04	59 01 01 02 04	33.0 02.5 14.5 35.0 26.0	0.4 0.8 1.0 0.8 0.8	-0.01 0.02 0.03 0.02 0.03	-0.02 0.04 0.03 0.04 -0.02	+0.08 0.06 0.08 0.03 0.03	33.05	+4.5	02	53	12.2	36.48 N	70.48 E	194	4.8	
33	04	19	TQV	eP ePP ePPP	03	43 45 45	43.0 00.5 17.5	1.0 0.8 0.5	+0.02 0.01 -0.01	-0.02 0.04 -0.03	-0.04 0.03 0.03	36.89	-2.3	03	36	38.0	40.66 N	142.86 E	37	4.6	
34	04	19	TQV	1P ePP ePPP	17	32 33 33	55.8 09.8 14.8	1.0	-0.01	-0.03	+0.05	16.14	+3.7	17	29	06.2	25.16 N	122.44 E	33	5.3	
35	04	20	TQV	eS 1PcP 1P 1PP 1PcP 1PPP 1S 1PS 1PPS eSS 1P eP ePP ePPP ePcP	06	38 40 41 41 44 45 46 49 39 00 01 01 04	52.3 30.5 59.5 03.5 40.0 09.5 55.6 04.5 01.5 24.5 55.6 31.3 41.8 28.8	1.0 0.8 1.0 1.0 1.0 1.0 1.0 1.0 1.5 0.5 1.0 1.0	0.09 +0.1 0.02 0.02 0.05 0.05 0.02 0.03	0.07 +0.08 0.04 0.03 0.04 0.05 0.04 0.03	0.12 -0.40 0.08 0.05 0.08 0.04 0.04 0.04 0.04 0.15 +0.05 0.10 0.05	44.27	+6.2	06	31	08.9	49.38 N	149.04 E	588	5.4	
36	04	20	TQV	eP ePP ePPP ePcP	06 10	00 01 01 04	24.5 55.6 31.3 41.8	1.5 0.5 1.0 1.0	0.03 0.03 0.02	-0.04 0.03 0.03	+0.05 0.10 0.05	25.14	+3.1	09	55	29.0	5.39 N	125.81 E	37	5.8	
37	04	21	NHA HBV	eS eP 1PP ePPP 1P eP ePP ePPP	10 09 04	01 59 33	11.3 00.0 23.5 43.0	0.8 1.0 1.0	0.02 0.05 0.03	0.02 0.04 0.03	0.03 0.08 0.08	25.84	+0.9	04	29	43.5	16.81 N	120.08 E	45	5.1	
38	04	21	HBV	eP ePP ePPP	11	28	00.3	0.5	+0.01	-0.01	+0.02	13.50	-1.4	11	24	50.6	12.22 N	94.48 E	33	5.0	
39	04	21	HBV	eP ePPP ePcP	12	28	10.3	0.8	0.01	0.01	0.01	88.23	-4.9	12	36	07.0	15.19 S	172.55 E	3	5.7	
40	04	22	TQV	eP ePP ePPP	02	49	01.4	0.5	0.01	0.01	0.02	34.26	+0.6	02	45	50.7	36.44 N	69.40 E	3	5.0	
41	04	22	HBV TQV	eP ePP ePPP	02 03	52 44	41.0 46.6 35.0	0.8 0.5 1.0	-0.01 +0.02	-0.02 +0.03	-0.03 +0.12	34.93	+0.4	03	32	52.5	21.76 S	179.19 W	500	5.6	
42	04	22	HBV TQV	eP ePcP 1P ePP	03 13	44 45 47 49	36.6 35.0 41.5 25.5	1.0 1.0 0.8 0.8	-0.01 0.01 0.02	-0.03 0.02 0.01	-0.17 0.01 -0.04 0.01	85.06	+4.6	13	39	30.5	27.42 N	56.79 E	33	4.5	



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
43	04	22	TQV	ePcP eP ePP ePPP eS	17	49	31.0 02.5 25.5 37.0 56.0	0.8 1.0 1.0 1.0	+0.03 0.03 0.03	0.02	+0.08 0.08 0.07	23.75	+ 7.5	17	11	50.8	9.15 N	126.11 E	55	4.4	
44	04	23	TQV	iP ePP ePPP eP eP ePP ePcP	21	33 34 34 33 34 34 36	50.0 25.0 38.5 05.6 24.1 39.6 02.6	0.5 0.8 0.8 1.0 1.0	-0.04 0.01 0.01 -0.03 0.01	-0.04 0.01 0.01 -0.04 0.02	+0.14 0.03 0.03 +0.06 0.02	33.13	+ 6.0	21	26	37.0	36.34 N	70.83 E	195	5.2	
45	04	23	TQV	iP ePP ePcP ePPP eS eP ePP ePcP ePPP	21	47 50 50 50 53 47 50 50 50 53	50.0 07.0 24.5 34.0 36.0 55.2 10.2 22.7 40.7 37.7	1.0 1.0 1.0 1.0 1.0 0.8 0.8 0.8	-0.11 0.05 0.10 0.07 0.13 -0.09 0.03	-0.12 0.06 0.09 0.06 0.03 +0.09 0.04 0.05	+0.46 0.08 0.12 0.12 0.06 +0.25 0.03 0.04	42.02	+ 6.2	21	40	34.1	47.29 N	146.96 E	425	6.1	
46	04	23	NA	eS iP eP iPPP iP bPP ePPP eS eSS eSSS iPcP	21	47 31 32 35 35 35 36 36 36 43	48 26.4 27 32.5 37.0 41.5 25.0 44.0 54.0 05.5 13.5	0.8 1.1 1.0 1.6 0.3 0.3 0.3 0.8 1.0 1.0	0.04 -0.03	0.02 0.47 -0.72 0.56 +0.16 0.13 0.11 0.14 0.20 0.20	47.24 5.77 13.61 5.29	+ 8.0	22	29	58.9	21.86 N	99.26 E	33	5.9		
47	04	24	TQV	iP ePP ePPP iPcP eS eSS eSSS iPcP	03	35 35 35 36 36 36 43	32.5 37.0 41.5 25.0 44.0 54.0 05.5	0.3 0.3 0.3 0.8 0.8 1.0 1.0	+0.10 0.11 0.11 0.15	+0.10 0.11 0.11 0.15	+0.16 0.13 0.19 0.08 0.08 0.1 0.1	30.83	+ 4.3	03	34	11.5	21.86 N	99.51 E	33	4.5	
48	04	24	TQV	iP ePP ePPP iPcP eS eSS eSSS eSCS	04	17 18 18 20 21 24 24 28	13.5 47.0 59.0 42.0 44.0 15.0 36.0 30.5	1.0 1.0 1.0 0.8 1.0 1.0 1.0	+0.07 0.13 0.11 0.05 0.09 0.11	0.03 +0.16 0.15 0.12 0.06 0.12 0.09 0.09	-0.51 0.31 0.19 0.08 0.08 0.1 0.1	30.83	+ 2.9	04	11	33.0	31.37 N	138.16 E	415	6.1	
49	04	25	TQV	eP ePP ePPP ePcP eS eSS eSSS	04	17 18 19 20 21 24	16.0 52.0 03.0 48.5 48.0 40.5	0.3 0.4 0.8 1.0 1.0	+0.05 0.07 0.08 0.05 0.07	-0.11 0.09 0.05 0.26	+0.2 0.08 0.16 0.06 0.10 0.04	31.16	+ 3.0		19	32.6	17.28 S	178.13 W	400	5.6	
50	04	25	HBV	eP ePP ePcP eP ePcP eP iPcP eP	08	08 09 08 09 10 01	15.9 36.4 21.1 36.8 18.6 00.3	1.0 1.0 1.0 1.0 1.0	+0.01 -0.01 -0.01	+0.01 -0.02 0.01	+0.02 -0.04 0.08	51.25	- 3.7	07	59	12.1	3.28 S	151.52 E	3	5.2	
51	04	25	TQV	eP eP iPcP eP	15	01	00.3	0.5	-0.01	0.01	0.03	9.47	+ 2.0	14	58	44.4	25.84 N	95.83 E	192	5.0	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
				1PP 1PPP 1S 1SS 1SSS eP ePP ePPP 1P 1PP 1PcP 1PPP	15	01 01 02 02 03 01 01 01 19 20 20 21	10.3 15.5 36.5 58.0 05.0 08.2 24.7 32.2 18.0 53.0 58.0 31.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 0.8 1.0 0.8 0.8 0.8	0.02 0.02 0.05 0.02 0.02 -0.02 0.02 0.01 -0.02 0.02 +0.01 0.01	0.02 0.03 0.03 0.03 0.03 -0.01 0.01 0.01 -0.02 0.01 0.01	0.04 0.05 0.04 0.04 0.05 -0.03 0.02 0.02 -0.11 0.12 +0.03 0.03 0.02	10.08 43.70 28.16 35.04 69.75 76.59 35.04 47.79 16.94 68.57 10.91 65.72 76.35 32.10 14.97 27.48 27.65 26.63 29.24 47.77 25.40 15.48 24.59 17.81 70.69 69.66 76.39 22.44	- 0.9 + 1.2 + 6.2 - 2.5 + 1.5 + 0.3 + 0.9 + 0.5 + 6.8 - 4.1 - 0.1 + 3.1 - 0.1 + 0.4 - 2.6 + 6.0 + 1.9 + 4.1 + 1.4 + 1.2 + 0.4 + 0.6 - 0.8 - 3.6 - 0.1 - 2.1	10 11 10 06 10 05 01 04 09 09 15 20 18 03 15 16 18 19 00 15 15 15 15 22 22 22 08 09 17 04	08.4 50.4 46.4 52.8 08.9 47.0 45.0 24.3 06.6 12.5 51.4 47.2 42.0 37.4 26.4 02.6 08.1 46.7 51.4 03.7 40.6 55.0 57.1 45.8 54.5	6.80 S 6.32 S 37.19 N 52.07 N 43.84 N 37.48 N 4.56 S 17.13 N 39.07 N 24.12 N 51.77 N 42.07 N 39.54 N 15.58 N 0.97 N 5.79 S 7.19 N 2.85 N 50.90 N 0.81 N 9.04 N 79.67 N 14.00 S 36.62 S 29.77 N	71.52 E 106.07 E 141.77 E 170.10 W 13.01 E 141.66 E 145.92 E 122.48 E 25.68 E 93.62 E 176.76 W 14.12 E 73.71 E 119.58 E 123.58 E 103.91 E 128.70 E 128.10 E 154.28 E 119.84 E 127.06 E 3.05 E 166.15 E 53.03 E 81.83 E	3 53 33 33 36 33 33 3 33 50 60 36 3 13 33 33 33 33 50 200 33 3 3 33 3 3	5.4 5.9 4.4 4.8 5.4 5.6 5.5 4.9 5.4 6.2 5.8 6.0 5.1 5.2 5.0 5.2 5.3 5.3 5.2 5.9 5.8 5.7 6.0 6.0 5.4		



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
21	05	18	TQV	IP IPPP IP IPP IPPP ePcP eP ePP ePPP	04 22	34 34 54 55 55 57 51 51 51	16.5 28.0 33.5 12.0 27.0 44.0 22.5 29.5 36.0	0.5 0.6 0.6 0.3 0.3	0.03 0.04 -0.02 0.01	0.03 0.04 -0.05 0.02	0.05 0.04 +0.07 0.04	28.53	+3.3	22	48	35.6	0.16 S	123.34 E	33	5.7	
22	05	20	TQV	ePcP eP ePP ePPP	12	51 51 51	44.0 22.5 29.5	0.3			0.03	15.80	+7.9	12	47	43.4	25.10 N	122.07 E	33	5.2	
23	05	20	TQV	IP IPF IPPF eS eSS ISSS	18	28 28 28 30 31 31	12.5 19.5 29.7 48.0 12.0 12.0	0.4 0.5	0.01 0.01	0.03 0.04	0.05 0.05	15.71	+9.1	18	24	31.3	24.17 N	122.09 E	33	5.0	
24	05	20	TQV	IP ePP	19	30 31	36.0 20.0	0.5	0.02	0.02	0.06	24.15	+1.8	19	25	20.3	1.58 S	99.11 E	33	5.0	
25	05	20	TQV	IP	22	16	46.0	0.8	0.04	0.04	0.06	71.47	+1.4	22	05	25.6	15.31 S	176.53 E	33	5.9	
26	05	21	TQV	eP	01	56	57.0	0.2			-0.05	28.32	+5.1	01	50	57.2	2.8 N	126.80 E	33	5.5	
27	05	21	TQV	ePPF	10	02	21.5	0.2	0.03	0.05	0.03	12.64		09	59	06.7	23.51 N	51.63 E	3	5.3	
28	05	21	TQV	eS ISS IP IPP IPPP ISS ISS ePcP	15	04 04 42 42 42 45 45 46	07.5 38.5 01.5 17.5 32.0 18.5 38.5 46.5	0.3 1.0	0.03 0.03 +0.02	-0.07	0.05 0.01 -0.07	18.25	-0.7	15	37	51.3	32.59 N	121.83 E	33	5.7	
29	05	21	TQV	IP	22	14	46.5	0.5	0.01	+0.03	-0.05	31.37	+3.1	22	09	16.0	27.55 N	139.83 E	513	4.9	
30	05	22	TQV	IP	02	28	40.5	0.5		0.01	+0.05	38.18	+2.2	02	21	20.3	2.79 S	135.06 E	33	5.7	
31	05	22	TQV	IP	14	08	10.5	0.5	0.01	0.01	-0.04	71.84	+1.6	13	57	01.7	35.85 N	22.38 E	33	5.8	
32	05	26	TQV	IP	04	11	53.5	0.5	0.03	0.04	+0.06	69.60	-4.2	03	58	56.9	43.54 S	36.94 E	3	6.5	
33	05	26	TQV	IP	13	40	11.5	0.9	+0.04	-0.02	+0.07	88.08	+8.7	13	27	14.6	45.45 S	36.02 E	33	5.6	
34	05	26	TQV	IP	22	53	36.5	1.0	+0.08	+0.12	+0.14	65.97	-0.2	22	42	51.6	10.25 S	164.00 E	33	5.8	
35	05	26	NHA TQV	IPF ePP IP	22 23	57 55 29	07.0 07. 02.5	1.5			0.45	58.84	+1.1	23	30	06.6	6.36 S	147.64 E	33	5.7	
36	05	27	TQV	IP IP IP IP IS ISS eSSS	03	44 44 48 49 49	30.5 53.0 21.0 10.0 26.5	1.5 1.5	-0.18 0.09	-0.21 0.12	-0.36 0.14	22.16	+1.0	03	39	35.1	29.08 N	128.46 E	33	5.7	
37	05	28	TQV	eP	06	58	35.8	0.4	-0.02	-0.04	0.06	22.50	+0.3	06	52	37.7	0.76 N	124.91 E	33	5.4	
38	05	29	TQV	IP IP IP IPPP IS ISS	04	40 40 41 43 44	37.4 53.6 05.4 55.4 35.9	0.7 1.0 1.2	+2.13 0.25 7.29	+6.78 0.16 5.65	+5.93 0.23 11.02	19.74	+10.1	04	36	09.6	3.73 N	97.10 E	75	6.1	
39	05	29	NHA TQV	IP eP	04 19	39 01	22 38.2	1.5		0.13	0.19	14.66 37.19	+10 +2.9	18	54	20.8	0.41 S	135.77 E	3	5.6	
40	05	29	TQV	eP	22	02	54.7	0.6	+0.03	+0.04	+0.07	38.49	+2.1	20	07	14.8	1.53 S	136.54 E	33	5.6	
41	05	30	TQV	IP	00	45	45.0	0.6				28.53	+1.9	00	39	48.3	35.13 N	134.11 E	33	5.2	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
42	05	30	TQV	1P	13	08	28.0					62.87	+2.4	12	58	00.8	50.84 N	178.58 E	33	5.3	
43	05	30	TQV	eP	22	32	07.5	0.5	+0.01	+0.05	-0.06	20.13	-7.2	22	27	42.1	28.70 N	84.24 E	33	4.6	
01	06	01	TQV	eP	06	03	51.0	0.5		-0.01	-0.03	51.66	+6.5	05	54	51.1	53.51 N	159.60 E	119	4.2	
				ePcP		05	19.8	0.5			0.03										
				ePP		05	59.0	0.5			0.03										
02	06	01	TQV	1P	12	20	29.0	0.5			+0.03	41.36	-0.4	12	12	44.9	43.78 N	147.82 E	43	4.5	
				ePP		22	08.0	0.5			0.03										
				ePPP		22	40.0	1.0			0.04										
03	06	01	TQV	1P	21	25	40.1	0.8	-0.02	-0.02	+0.03	43.31	+0.7	21	17	39.0	6.81 S	72.06 E	33	4.9	
				ePP		27	23.6	0.8	0.02		0.03										
				ePcP		27	37.8	0.8	0.02		0.03										
04	06	02	TQV	1P	10	38	44.5	1.0	-0.03	-0.03	0.05	32.92	+2.7	10	32	14.7	37.00 N	71.35 E	77	4.4	
				1PP		39	51.8	0.5			0.03										
				1PPP		40	09.5	0.5			0.03										
				ePcP		41	37.5	0.5			0.03										
05	06	03	TQV	eP	14	58	36.3	0.8			0.02	77.30	+1.6	14	46	36.7	22.89 S	169.98 E	3	5.2	
				ePcP		58	44.8	0.5			0.03										
06	06	04	TQV	eP	17	31	00.5	0.5	-0.01	0.01	-0.03	68.90	-5.5	17	20	02.5	52.05 N	171.40 W	44	4.8	
				1PcP		31	26.8	0.5	0.01		0.03										
07	06	04	TQV	1P	18	43	43.7	0.5	+0.01	+0.02	+0.05	45.96	+5.2	18	36	04.5	50.92 N	151.20 E	522	3.9	
				ePcP		46	04.2	0.5	+0.02	+0.06	0.03	20.25	-0.9	21	23	56.3	13.42 N	124.86 E	33	5.2	
08	06	04	TQV	1P	21	28	33.1	0.8			+0.11										
				1PP		28	52.1	1.0	0.07	0.06	0.12										
				1PPP		29	03.6	1.0	0.05	0.06	0.08										
				1S		32	17.1	1.0	0.02	0.02	0.03										
				1PcP		32	44.6	1.0	0.02	0.02	0.04										
09	06	05	TQV	eP	01	55	58.8	0.5			+0.03	75.90	-1.6	01	44	10.3	57.02 N	157.03 W	3	5.2	
				ePcP		56	07.3														
10	06	06	TQV	1P	05	45	01.1	1.0	+0.05	-0.05	0.12	32.76	+2.1	05	38	27.0	4.13 S	125.63 E	33	5.6	
				1PP		45	59.6	1.0	0.02	0.03	0.04										
				1PPP		46	21.6	1.0	0.02	0.03	0.04										
				ePcP		47	51.6	0.8	0.02	0.01	0.03										
11	05	06	TQV	1P	19	31	04.5	1.0	-0.02	-0.03	-0.04	22.60	-6.0	19	26	11.7	0.03 N	99.08 E	43	5.4	
				ePP		31	33.0	0.5	0.01	0.02	0.03										
				ePPP		31	46.0	0.5	0.01	0.02	0.03										
12	06	06	TQV	1P	19	42	16.7	1.0	-0.02	-0.03	+0.04	29.31	+2.1	19	36	30.8	1.90 N	127.30 E	200	4.9	
				ePP		43	27.0	0.8	0.02	0.02	0.03										
				ePPP		43	40.0	0.5	0.01	0.02	0.03										
13	06	08	TQV	1P	01	47	02.0	0.5	+0.02	+0.02	+0.05	26.98	+2.4	01	41	19.0	5.12 S	103.95 E	43	6.0	
				1PP		47	37.0	0.8	0.03	0.02	0.07										
				1PPP		47	45.5	1.0	0.05	0.05	0.07										
				1PcP		50	23.0	0.8	0.02	0.02	0.03										
				1S		51	32.0	0.5	0.02	0.02	0.03										
				eSS		52	30.5														
				eSSS		52	47.8														
14	06	08	TQV	1P	05	08	30.5	0.5	0.01	0.01	0.03	26.51	+5.2	05	02	49.0	4.66 S	104.19 E	33	5.3	
				ePP		09	00.0	0.5			0.03										
				ePPP		09	16.5	0.5			0.03										
15	06	11	TQV	1P	18	49	44.3	0.5	0.01	0.02	+0.03	51.53	+3.8	16	39	30.9	13.35 S	66.82 E	3	5.3	
				ePcP		49	56.3	0.8			0.03										
				ePP		50	35.5	0.8	0.02	0.01	0.03										
16	06	12	TQV	1P	11	20	29.5	0.5	-0.02	-0.02	+0.05	72.54	+1.9	11	09	06.9	53.24 S	165.02 W	3	5.2	
				1PcP		20	50.5	0.5	0.02	0.02	0.03										
				eP		23	11.5														
				ePPP		24	50.5														

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
17	06	12	TQV	1P ePP ePPP 1PcP	17	17	36.7 42.7 03.2 25.2	1.0 1.0 1.0 1.0	-0.02 0.02 0.02	+0.03 0.03 0.02	+0.06 0.04 0.04 0.04	33.66	+2.9	17	11	00.3	30.96 N	141.57 E	51	5.2	
18	06	13	TQV	1P 1PcP	02	34	52.5	1.0	0.01	+0.02	+0.04	25.80	-6.0	02	29	28.9	32.01 N	131.91 E	35	5.6	
19	06	13	TQV	1P 1PPP eS ePcP	13	32	43.0 51.5 59.5 11.0 06.0	0.5 0.5 0.5 0.5 0.5	+0.02 0.01 0.01	0.02 0.02 0.02	-0.04 0.03 0.03 0.02	17.98	+1.4	13	28	11.5	4.70 N	95.01 E	33	5.4	
20	06	15	TQV	1P 1PcP 1PP 1PPP	14	34	00.9 22.4 22.4 27.0	1.0 1.0 0.8 0.5	-0.05 0.09 0.02 0.02	+0.02 0.06 0.03 0.02	0.33 0.15 0.04 0.03	86.97	-1.4	14	22	20.5	15.62 S	174.64 W	220	5.6	
21	06	16	TQV	1P ePP ePPP	13	43	27.0 25.0 46.0	0.5 0.5 0.5	-0.01 0.01 0.01	-0.01 0.01 0.01	+0.03 0.03 0.03	32.90	+3.7	13	36	50.1	34.40 N	70.48 E	33	4.5	
22	06	17	TQV	eP 1PP 1PPP	15	44	07.0 17.8 28.0	0.5 0.5 0.5	0.01 0.01 0.01	0.01 0.01 0.01	+0.03 0.03 0.03	19.46	+5.9	15	36	34.5	3.99 N	97.19 E	33	5.1	
23	06	17	TQV	eS 1P 1PcP 1PP ePPP	16	44	29.8 47.5 14.0 15.5 48.0	0.5 0.8 1.0 1.0 1.0	-0.02 0.02 0.02 0.02 0.02	+0.01 0.02 0.02 0.02 0.02	-0.03 0.03 0.04 0.03 0.03	67.89	+1.4	16	26	48.9	51.48 N	173.30 W	33	5.4	
24	06	19	TQV	1P ePP ePPP	13	55	15.5 36.0 44.5	0.5 0.5 0.5	-0.02 0.05 0.05	+0.03 0.06 0.04	-0.04 0.03 0.03	21.67	+4.8	13	50	26.8	1.68 N	97.01 E	33	5.2	
25	06	19	TQV	1P 1PP 1PPP	19	55	45.5 08.5 19.5 25.5	1.0 1.0 1.0 1.0	+0.05 0.05 0.05 0.01	-0.06 0.06 0.04 0.02	+0.03 0.07 0.05 0.04	21.69	+3.4	18	55	58.0	12.15 N	125.54 E	55	5.8	
26	06	19	TQV	eS 1P 1PP 1PPP	23	06	04.5 04.5 14.5 25.6 26.6 48.3	0.5 0.5 0.5 0.8 0.8 0.5	-0.01 0.01 0.01 0.02	-0.02 0.02 0.02 0.02	-0.03 0.03 0.03 0.02	21.96	-0.8	23	01	53.5	11.85 N	125.69 E	38	4.8	
27	06	20	TQV	1P ePP eP	21	35	25.6 26.6 59.1 58.5 16.5	0.8 0.8 0.5 0.4 1.0	-0.02 0.02 0.02	-0.02 0.02 0.02	-0.02 0.02 0.02	32.63	-2.0	21	28	52.0	39.52 N	72.95 E	10	4.7	
28	06	20	TQV	ePP eP ePcP	22	36	26.6 48.3 59.1	0.8 0.8 0.5	-0.02 0.02	-0.02 0.02	0.03 0.03	53.34	-1.5	22	39	31.6	4.26 S	152.77 E	33	5.4	
29	06	21	TQV	1P 1PcP 1PP 1PPP	10	49	59.1 58.5 16.5 34.0	0.5 0.4 1.0 1.0	-0.02 0.05 0.04 0.04	-0.02 0.06 0.03 0.04	+0.05 0.11 0.04 0.04	71.45	-0.5	10	43	34.8	35.16 N	23.08 E	3	5.7	
30	06	21	TQV	1P ePP ePPP ePcP	17	37	09.4 39.9 02.9 38.9 15.4 05.7 16.8 59.5 12.0 32.4 28.0 46.0 49.5	1.0 1.0 1.0 1.0 1.0 0.8 0.8 0.5 0.8 0.8 0.4 0.5 0.5	+0.02 0.02 0.02 0.02 0.02 0.02 0.02	-0.03 0.03 0.03 0.02 -0.02 0.02 0.02 0.02	+0.04 0.04 0.04 0.02 +0.04 0.03 0.03 0.02 0.02 0.02 0.02 0.02	37.41	-0.8	17	30	05.4	43.31 N	142.23 E	80	4.4	
31	06	22	TQV	1P 1PP ePPP eP	08	24	15.4 05.7 16.8 59.5 12.0 32.4 28.0 46.0 49.5	1.0 0.8 0.8 0.5 0.8 0.8 0.4 0.5 0.5	+0.02 0.02 0.02 0.02	-0.02 0.02 0.02 0.02	+0.04 0.03 0.03 0.02	28.95	-0.3	08	18	24.3	2.97 N	127.68 E	80	4.8	
32	06	23	TQV	eP ePPP ePcP	13	25	16.8 59.5 12.0 32.4 28.0 46.0 49.5	0.8 0.5 0.8 0.8 0.4 0.5 0.5	0.02 0.02	0.02 0.02	-0.03 0.03	35.34	+2.9	13	46	02.4	23.39 N	143.56 E	33	4.8	
33	06	23	TQV	1P 1PP	22	56	46.0 49.5	0.5 0.5	+0.01 0.01	-0.02 0.02	+0.03 0.03	15.80	+1.0	22	52	59.6	23.07 N	122.26 E	3	5.0	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
				1PPP 13	22	56	54.0	0.5	0.01	0.02	0.03										
				1SS 23		59	40.5	0.5	0.01	0.02	0.03										
				1SSS 00		00	02.0	0.5	0.01	0.02	0.03										
				1PcP 01		01	13.0	0.5	0.01	0.02	0.03										
34	06	24	TQV	1P 42	13	42	36.0	1.0	0.02	-0.03	+0.06	00.83	+0.2	13	29	43.9	43.74 S	170.76 E	33	5.8	
				1PcP 42		42	38.8	1.0	0.02	0.03	0.04										
				ePP 46		46	07.5	1.0	0.01	0.03	0.04										
35	06	25	TQV	1P 18	05	18	33.5	1.0	0.02	0.03	0.04	17.93	+0.2	05	12	44.1	2.66 S	118.95 E	36	4.5	
				ePP 19		19	19.5	1.0	0.01	0.02	0.03										
				ePPP 19		19	30.5	0.5	0.01	0.02	0.03										
36	06	26	TQV	1P 18	01	18	09.0	1.0	-0.02	-0.03	-0.04	31.34	+6.3	01	11	49.3	1.16 S	127.03 E	48	5.1	
				ePP 19		19	15.5	1.0	0.02	0.03	0.04										
				ePPP 19		19	26.0	1.0	0.02	0.03	0.04										
				ePcP 21		21	05.0	0.5	0.01	0.02	0.03										
37	06	27	TQV	1P 12	02	12	11.5	1.0	-0.02	+0.03	+0.04	36.66	+0.2	02	05	12.4	42.16 N	141.78 E	56	4.4	
				ePP 13		13	36.0	0.5	0.01	0.02	0.03										
				ePPP 13		13	38.5	0.8	0.02	0.02	0.03										
38	06	28	TQV	1P 29	11	29	23.0	1.0	-0.05	+0.04	+0.05	55.35	+0.2	11	19	48.9	9.57 S	151.69 E	33	5.2	
				1PcP 30		30	22.5	1.0	0.04	0.03	0.04										
				1PP 31		31	25.5	1.0	0.02	0.03	0.04										
39	06	28	TQV	1P 57	19	57	10.6	0.8	0.01	0.02	0.03	27.61	+6.9	19	51	23.4	3.19 N	126.19 E	45	5.4	
				1PP 57		57	54.6	1.0	0.04	0.04	0.04										
				1PPP 58		58	06.0	1.0	0.05	0.03	0.04										
				1PcP 00		00	27.1	0.8	0.02	0.02	0.03										
				eS 01		01	30.6	0.5	0.01	0.02	0.02										
				eSU 02		02	51.6														
				eSSS 03		03	15.1														
40	06	29	TQV	1P 31	00	31	57.5	0.5	-0.02	-0.02	+0.03	27.62	+4.7	00	26	11.5	3.21 N	126.22 E	42	4.7	
				ePP 32		32	41.0	1.0	0.03	0.04	0.04										
				ePPP 32		32	51.0	0.5	0.01	0.02	0.03										
				ePcP 35		35	14.0	0.5	0.01	0.02	0.03										
				eS 36		36	18.5	0.8	0.02	0.02	0.02										
41	06	30	TQV	1P 32	20	32	39.0	0.8	-0.02	-0.02	-0.03	25.53	-2.7	20	27	14.5	30.95 N	131.93 E	33	5.0	
				ePP 33		33	13.0	1.0	0.04	0.04	0.05										
				ePPP 33		33	30.5	1.0	0.04	0.04	0.05										
				ePcP 36		36	20.0	0.5	0.01	0.02	0.02										
				eS 37		37	06.0	0.8	0.02	0.02	0.02										
01	07	01	TQV	1P 19	10	19	41.0	0.8	+0.1	-0.16	-0.46	32.99		10	12	18.3	36.34 N	71.00 E	186	5.0	
				1PP 21		21	23.0	0.8	0.05	0.06	0.08										
				1PPP 21		21	44.0	0.8	0.03	0.04	0.06										
				1PcP 21		21	57.5	0.8	0.03	0.03	0.05										
				eS 25		25	14.0	1.0	0.03	0.03	0.04										
02	07	03	TQV	1P 53	13	53	38.2	0.8	-0.02	-0.02	+0.05	83.97	+5.8	13	41	58.2	17.48 S	178.96 W	500	5.4	
				ePcP 54		54	37.2														
03	07	07	TQV	1P 31	05	31	25.0	1.0	-0.05	-0.09	-0.09	55.20	+2.8	05	21	50.4	5.62 S	154.12 E	33	6.2	
				1PcP 32		32	22.0	1.0	0.03	0.04	0.04										
				1PP 33		33	28.0														
				1PPP 34		34	37.0														
				eS 38		38	02.0	1.0	0.03	0.02	0.02										
				eFS 39		39	15.0	1.2	0.07	0.06	0.06										
04	07	05	TQV	eP 49	20	49	24.1	0.8	+0.28	0.02	0.02	14.80	+1.6	20	45	50.1	10.74 N	94.98 E	3	5.3	
				1PP 49		49	30.6	0.8	0.02	0.02	0.02										
				1PPP 49		49	36.6	0.8	0.02	0.02	0.02										
				eS 52		52	08.6	1.0	0.05	0.06	0.06										

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
05	07	08	TQV	eP ePP ePPP	02	33	37.6 58.9 09.9	0.5	+0.01	0.02	0.03	21.77	+0.8	02	28	46.9	0.98 N	98.78 E	41	5.4	
06	07	08	TQV	eP ePP ePPP	02	40	09.6 14.8 25.4 11.6 17.1	0.8			0.03	15.67	+5.4	02	36	29.5	9.54 N	95.09 E	3	5.1	
07	07	08	TQV	eP ePP ePPP	03	43	24.1 40.2 45.5 50.7	0.8		0.01	0.03	14.53	+1.7	03	23	09.7	11.81 N	94.20 E	3	4.9	
08	07	08	TQV	eP ePP ePPP	03	57	16.2 26.7 32.7	0.8		0.03	0.03	15.08	+3.9	03	53	37.2	9.54 N	96.11 E	3	5.0	
09	07	08	TQV	eP ePP ePPP	04	57	17.2 19.2 22.7 58.7	0.8		0.03	0.03	14.91	+5.6	04	20	37.8	10.94 N	94.57 E	3	5.3	
10	07	08	TQV	eP ePP ePPP	05	29	20.2 42.7 45.9 50.5	0.5	0.02	0.02	0.04	14.99	+1.6	05	26	07.2	10.66 N	94.78 E	3	4.5	
11	07	08	TQV	eP ePP ePPP	08	32	29.2 09.7 13.7 18.9 48.9	0.8	0.02	0.03	0.02	15.51	+1.9	08	00	26.2	10.22 N	94.48 E	3	4.4	
12	07	08	TQV	eP ePP ePPP	08	17	26.9 29.9 34.4 00.9	1.0	0.02	0.03	0.04	13.90	+0.3	08	14	05.5	12.06 N	94.85 E	3	5.1	
13	07	08	TQV	eP ePP ePPP	09	08	31.4 42.9 49.4 48.5	1.0	0.02	0.03	0.04	15.01	+2.9	09	04	53.4	10.45 N	94.99 E	3	5.1	
14	07	08	TQV	eP ePP ePPP	12	05	50.0 52.0 18.5 53.0	0.8	0.02	0.02	0.04	13.00	+7.1	12	02	22.1	14.47 N	95.67 E	3	4.5	
15	07	08	TQV	eP ePP ePPP	12	39	55 59.2 33.0 39.5 45.5 30.0	0.8	0.02	0.02	0.03	14.69	+3.0	12	36	22.9	11.11 N	94.72 E	31	4.3	
16	07	08	TQV	eP ePP ePPP	13	05	32.5 39.5 59.2 21.7	1.0	-0.02	0.04	0.02	14.61	+6.4	13	01	53.7	11.12 N	94.82 E	3	5.1	
17	07	08	TQV	eP ePP ePPP	13	36	26.2 32.4 57.7	0.8	0.02	0.02	0.03	14.53	+2.9	13	32	50.0	11.30 N	94.74 E	3	5.2	
18	07	08	TQV	eP ePP ePPP	14	25	33.7	1.0	0.02	0.02	-0.04	14.99	+4.0	14	22	58.4	10.47 N	95.01 E	3	5.3	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
19	07	08	TQV	eS eP ePP ePPP ePcP eS eP ePP ePPP	14 14	29 38 39 40 40 44	21.2 16.2 51.7 13.7 32.7 00.7	0.8 0.8 1.0	0.02 0.02 0.02	0.02 0.02 0.03	0.03 0.03 0.05	39.52	+4.8	14	30	48.7	13.57 N	145.91 E	117	5.6	
20	07	08	TQV	eS eP ePP ePPP ePcP eS eP ePP ePPP	15	17 17 17 20	35.7 43.2 49.2 24.7	1.0 1.0 1.0 0.5	-0.02 0.03 0.02 0.02	+0.03 0.04 0.03 0.03	+0.04 0.04 0.04	15.00	-1.7	15	13	50.9	10.69 N	94.72 E	3	5.5	
21	07	08	TQV	eS eP ePP ePPP ePcP eS eP ePP ePPP	16	25 25 25 26	00.8 06.1 09.3 19.8	1.0 1.0 1.0	0.02 0.02 -0.02	0.02 0.02 -0.03	0.02 0.02 -0.04	14.11	+3.9	16	21	33.6	11.76 N	94.67 E	3	4.6	
22	07	08	TQV	eS eP ePP ePPP ePcP eS eP ePP ePPP	17	26 26 26 28	20.8 27.8 17.3 20.1	1.0 1.0 1.0 0.8	0.03 0.03 0.02	0.04 0.03 +0.02	0.04 0.03 0.03	14.78	+3.2	17	22	43.2	11.01 EN	94.69 E	3	4.9	
23	07	08	TQV	eS eP ePP ePPP ePcP eS eP ePP ePPP	18	13 13 13 16 40 40	23.3 26.5 09.3 49.9 53.9	0.8 1.0	0.02	0.02 0.02	0.03 0.03	14.72	+0.6	18	09	48.2	11.41 N	94.33 E	3	4.4	
24	07	08	TQV	eS eP ePP ePPP ePcP eS eP ePP ePPP	18	40 40	49.9 57.9	1.0	0.02	0.02 0.02	0.03 0.03	15.15	+5.0	18	37	07.6	10.20 N	95.09 E	3	5.0	
25	07	08	TQV	eS eP ePP ePPP ePcP eS eP ePP ePPP	21	02 02 05	45.4 54.4 27.4	1.0	0.02	0.03	0.03	14.86	+1.8	20	59	10.4	10.59 N	95.06 E	3	4.5	
26	07	09	TQV	eS eP ePP ePPP ePcP eS eP ePP ePPP	01	47 47 47	14.0 20.0 25.0	1.0	0.02	0.03	0.03	15.21	+1.6	01	43	34.7	10.46 N	94.67 E	3	4.8	
27	07	09	TQV	eS eP ePP ePPP ePcP eS eP ePP ePPP	05	52 34 34 34 37 39 44	18.7 28.5 32.0 34.5 13.0 36.5 25.0	1.0	0.02	0.03	0.03	14.90	+2.8	05	30	52.0	10.82 N	94.72 E	3	5.0	
28	07	09	TQV	eS eP ePP ePPP ePcP eS eP ePP ePPP	07	44 44 44 46 49	27.0 32.5 35.0 35.5	1.0	0.02	0.03	0.03	14.88	+3.1	07	40	48.5	10.86 N	94.71 E	3	4.9	
29	07	09	TQV	eS eP ePP ePPP ePcP eS eP ePP ePPP	11	55 55 55 58	41.5 48.0 53.0 20.5	0.5 0.5 0.5 0.5	-0.01 0.01	0.02 0.02	0.02 0.02	14.16	+4.4	11	52	13.1	11.52 N	95.06 E	3	4.6	
30	07	09	TQV	eS eP ePP ePPP ePcP eS eP ePP ePPP	12 16	00 29 29 34	58.0 06.6 17.8 23.6	0.5 0.5	0.01	0.02 0.02	0.02 0.02	15.24	-3.7	16	25	30.2	10.29 N	94.83 E	3	4.9	
31	07	09	TQV	eS eP ePP ePPP ePcP eS eP ePP ePPP	20	57 02	42.9 51.9	0.5	0.01	0.02 0.02	0.02 0.02	15.06	+0.3	20	54	06.8	10.42 N	94.69 E	3	5.2	
32	07	10	TQV	eS eP ePP ePPP ePcP eS eP ePP ePPP	00	23 28	43.0 51.0	0.5	0.01	0.02 0.02	0.02 0.02	14.95	-0.5	00	20	09.2	10.79 N	94.69 E	3	5.2	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
33	07	10	TQV	eP ePP ePPP	11	20	55.0 59.0 02.5					14.75	-3.2	11	17	26.5	10.88 N	94.88 E	3	5.3	
34	07	10	TQV	eP 1PP 1PPP 1S 1SS eSSS ePcP	16	50 50 50 53 53 54 55	21.0 28.5 39.0 09.5 44.5 07.5 27.5	0.5 0.8 1.0 1.0	0.02 0.03 0.02 0.02	0.02 0.02 0.03 0.03		15.05	+0.8	16	46	44.6	10.74 N	94.85 E	3	5.0	
35	07	10	TQV	eP ePcP ePP ePPP	19	21 22 24 30	55.5 54.5 00.0 25.7					56.10	-0.7	18	12	13.3	6.22 S	154.81 E	3	4.6	
36	07	11	TQV	eP ePcP ePP ePPP	02	30 30	25.7 32.2					14.80	+1.9	02	26	51.4	10.97 N	94.70 E	3	4.6	
37	07	11	TQV	eP ePP ePPP 1PcP 1S eSS eSSS	05	45 46 46 49 50 51 51	52.3 38.8 49.3 23.8 16.3 28.3 48.8	1.0 1.0 1.0 1.5 1.5	0.05 0.05 0.03 0.06 0.06	0.04 0.03 0.03 0.05		26.10	+0.9	05	40	10.9	5.63 N	126.37 E	41	5.3	
38	07	11	TQV	eP ePP ePPP	13	25 25 25	12.0 14.5 17.3					14.76	+5.5	13	21	34.7	11.08 N	94.64 E	3	4.9	
39	07	11	TQV	eP ePcP ePP ePPP	16	21 21	57.5 51.0					15.17	-3.6	16	18	23.9	10.52 N	94.66 E	3	4.5	
40	07	11	TQV	eP ePcP ePP ePPP	19	48 48	11.5 15.0	0.8	-0.02			14.92	-2.6	19	44	35.0	10.96 N	94.53 E	3	4.7	
41	07	12	TQV	eP ePPP	11	19	45.0	0.8		0.02		14.82	+4.1	11	16	06.3	11.02 N	94.61 E	3	4.8	
42	07	12	TQV	1P ePP ePPP	17	26 28	43.8 46.5	0.5 0.8	+0.03 0.01	-0.03		35.55	+3.4	17	20	23.5	7.27 S	126.04 E	440	4.7	
43	07	16	TQV	ePPP eP ePP ePPP	08	29 45 46	09.0 18.8 01.3	0.8	0.01 0.01			26.34	+1.9	08	39	42.2	5.79 N	126.81 E	37	5.5	
44	07	17	BGV	eP ePP ePPP	07	12 12 13	47.0 53.6 02.2	1.0 1.0				15.07	+1.7	07	09	06.4	11.07 N	94.68 E	3	4.5	
45	07	19	TQV	eP ePP ePPP eS 1P ePPP	16	19 19 19 22 19 19	37.5 41.5 44.0 25.0 48.0 56.6	0.8 0.8 1.0 0.8	0.02 0.02 0.03	0.02 0.02		14.92	-2.6	16	16	06.2	10.70 N	94.84 E	3	4.2	
46	07	19	BGV	eP ePcP eP ePcP	16	57 58	11.0 01.0	0.8 0.8				57.25	+2.0	16	47	22.4	5.65 S	157.76 E	33	5.4	
47	07	19	TQV	eP ePcP 1P ePP ePPP	23	58 30 30 30	15.0 16.0 15.5 32.5 42.5	0.5 0.8 0.8 1.0 1.0	0.03 -0.06 0.11 0.13	0.02 +0.01 0.12 0.15		22.77	+2.1	23	25	12.9	28.47 N	129.32 E	40	5.6	







1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
05	08	04	HBV	eP	09	21	41.0	0.9	+0.01	+0.01	+0.01	55.14	+1.3	09	12	05.3	55.48 N	163.60 E	43	5.1		
06	08	06	TQV	ePcP	08	22	41.0	1.2	0.02	0.03	0.08	24.66	+2.1	08	30	08.5	32.78 N	130.18 E	33	5.3		
07	08	06	HBV	1P	08	35	29.5	1.0	0.02	0.01	0.05	25.09	+0.2									
				HBV	08	35	31.9	1.0	0.02	0.01	0.05	25.09	+0.2									
				HBV	12	36	17.8	1.0	+0.08	+0.10	-0.22	26.72	+6.1	12	01	50.4	0.06 N	122.56 E	230	6.6		
				HBV	12	35	26.8	1.0	0.19	0.36	0.27											
				HBV	08	08	00.1	1.0	0.19	0.36	0.27											
				HBV	08	08	20.2	1.0	0.19	0.31	0.15											
				HBV	10	10	57.6	1.0	0.05	0.09	0.08											
				HBV	11	11	15.2	1.0	0.09	0.13	0.06											
				HBV	12	12	01.1	1.2	0.17	0.15	0.08											
				HBV	13	13	16.2	1.5	0.35	0.41	0.20											
				HBV	14	14	26.8	1.5	0.19	0.27	0.19											
				HBV	18	18	30.2	1.1	0.06	0.51	0.66											
				HBV	07	07	20.5	1.1	0.06	0.51	0.66											
				HBV	08	08	0.3	1.5	0.26	1.02	1.51											
				HBV	08	08	18.0	1.5	0.13	0.59	1.51											
				HBV	10	10	26.0	1.5	0.35	0.4	0.5											
				HBV	13	13	33.0	1.5	0.35	0.4	0.5											
				HBV	13	13	47.5	1.3	0.20	0.25	0.82											
08	08	06	TQV	1P	19	12	06.6	1.3	0.20	0.25	0.82	25.90	-6.2	19	06	37.8	32.62 N	131.81 E	37	7.0		
				TQV	12	12	50.0	1.5	0.82	0.61	0.87											
				TQV	13	13	06.0	1.5	0.40	0.34	0.23											
				TQV	15	15	47.0	1.5	0.40	0.34	0.23											
				TQV	17	17	41.4	2.0	0.02	0.31	0.03											
				TQV	17	17	41.4	2.0	0.02	0.31	0.03											
				TQV	12	12	11.8	1.0	-0.04	+0.05	-0.10	26.32	-0.5									
				TQV	12	12	56.4	1.0	0.19	0.17	0.10											
				TQV	13	13	01.2	1.0	0.26	0.23	0.26											
				TQV	15	15	48.6	1.0	0.26	0.23	0.26											
				TQV	16	16	31.5	1.0	0.004	0.01	0.03											
				TQV	17	17	54.7	1.0	0.03	0.04	0.02											
				TQV	13	13	05.7	1.0	0.07	0.05	0.02											
09	08	07	TQV	eP	08	35	38.4	1.2	0.02	0.01	0.03	70.40	-3.7	08	24	28.5	14.30 S	166.85 E	33	5.5		
10	08	08	HBV	eP	05	27	28.3	0.8	0.01	0.01	0.01	34.93	+6.1	05	20	31.6	7.54 S	126.11 E	33	5.3		
11	08	10	TQV	eP	19	31	24.6	0.8	0.01	0.01	0.01	24.63	-1.1	19	26	06.5	30.78 N	130.89 E	46			
				HBV	19	31	24.6	0.8	0.01	0.01	0.01	24.63	-1.1	19	26	06.5	30.78 N	130.89 E	46			
				HBV	31	31	24.6	0.8	0.01	0.01	0.01	24.63	-1.1	19	26	06.5	30.78 N	130.89 E	46			
				HBV	31	31	54.1	1.2	0.02	0.01	0.01	24.98	-4.1									
				HBV	32	32	12.2	1.2	0.02	0.01	0.01	24.98	-4.1									
				HBV	29	29	50.6	1.0	-0.64	-0.47	-0.76	51.34	+1.9	01	20	45.5	4.76 S	152.09 E	33	5.7		
12	08	11	PLV	ePPP	01	29	51.6	2.0	0.64	0.25	-0.76	51.34	+1.9	01	20	45.5	4.76 S	152.09 E	33	5.7		
				PLV	01	31	51.6	2.0	0.64	0.25	-0.76	51.34	+1.9	01	20	45.5	4.76 S	152.09 E	33	5.7		
				PLV	32	32	51.3	2.0	0.64	0.25	-0.76	51.34	+1.9	01	20	45.5	4.76 S	152.09 E	33	5.7		
				PLV	29	29	58.7	1.0	+0.01	+0.02	+0.03	52.49	+1.4									
				PLV	31	31	02.1	1.0	0.01	0.03	0.02	52.49	+1.4									
				PLV	32	32	04.1	1.0	0.01	0.03	0.02	52.49	+1.4									
				PLV	32	32	51.0	0.6	0.01	0.02	0.04	53.03	+4.0	05	09	10.6	9.87 S	113.62 E	33	5.4		
13	08	11	TQV	eP	01	30	05.4	0.6	0.01	0.02	0.04	53.03	+4.0	05	09	10.6	9.87 S	113.62 E	33	5.4		
				HBV	05	15	36.8	0.9	+0.01	+0.01	+0.02	31.75	-1.6									
				HBV	16	16	47.5	1.2	+0.01	+0.01	+0.02	31.75	-1.6									
				HBV	12	00	50.1	1.2	+0.05	+0.04	+0.06	17.70	-4.0	11	56	51.1	6.03 N	95.32 E	160	5.4		
14	08	11	HBV	1P	12	00	50.1	1.2	+0.05	+0.04	+0.06	17.70	-4.0	11	56	51.1	6.03 N	95.32 E	160	5.4		
				HBV	01	01	13.1	1.1	0.96	0.67	0.46	18.30	-9.0									
				HBV	01	01	20.1	1.1	0.96	0.67	0.46	18.30	-9.0									
				HBV	03	03	31.7	1.2	1.09	0.05	0.30	18.30	-9.0									
				HBV	00	00	57.7	1.0	+2.56	-1.29	+1.02	18.30	-9.0									
				PLV	01	01	09.2	1.1	0.96	0.67	0.46	18.30	-9.0									
				PLV	01	01	24.6	1.2	1.09	0.05	0.30	18.30	-9.0									



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
01	10	05	HBV	1P	15	57	11.8	1.0	-0.03	-0.03	-0.03	66.86	+4.0	15	46	21.0	51.62 N	176.02 W	51	4.3	
02	10	07	BGV	1PP	05	20	28.6	1.2			-0.03	8.95		05	12	02.1	24.56 N	97.18 E	33	4.9	
03	10	13	HBV	1SSS	04	00	32.2	0.5	0.01	0.01	0.01	36.16	+7.6	03	53	53.7	7.22 N	128.60 E	400	5.2	
04	10	13	HBV	ePcP	05	44	51.0	1.0	0.01	0.01	0.01	79.74	+6.6	05	32	38.3	15.70 S	177.60 E	33	6.0	
05	10	15	HBV	1PcP	05	44	58.5	1.0				71.36	+7.6	05	44	33.5	51.28 N	168.80 W	75	5.2	
06	10	15	HBV	1PcP	10	33	20.3	1.5			0.09	87.81	+2.2	10	21	03.1	15.64 S	175.21 W	90	6.4	
07	10	19	TQV	ePcP	14	50	56.7	2.0	0.17	0.19	0.55	77.23		14	37	40.6	15.77 S	174.04 W	33	6.1	
08	10	19	HBV	1P	17	50	45.1	0.9	0.01	0.03	0.02	27.49	+5.0	17	45	01.1	1.55 N	125.45 E	53	6.2	
09	10	19	TQV	1PP	20	12	40.1	1.2	0.08	0.09	0.02			19	59	55.7	30.56 S	178.55 W	33	5.9	
10	10	23	TQV	1PPP	08	14	46.1	1.0	0.03	0.05	0.01	89.94	+0.3	08	04	50.5	55.72 N	164.35 E	38	4.2	
11	10	24	TQV	1PcP	02	09	53.1	0.9			0.04	54.87	+1.1	02	04	11.3	2.79 S	102.88 E			
01	11	01	TQV	1PP	06	38	21.0	1.0	-0.04	-0.05	-0.09	131.99	-1.5	04	48	59.8	9.82 N	38.00 E	3	6.9	
02	11	01	TQV	ePPP	05	08	06.4	0.4	0.06	0.04	0.06	87.41	-2.3	09	27	36.2	15.62 S	176.00 W	190	5.8	
03	11	02	TQV	1PP	04	55	21.2	0.5	0.05	0.06	0.09	23.96	-2.1	04	50	11.0	8.57 N	125.95 E	43	4.9	
04	11	02	TQV	1PP	06	55	39.5	0.6	0.06	0.04	0.06			06	33	31.1	9.10 N	125.68 E	33	5.3	
05	11	03	TQV	eP	02	42	12.2	1.0			0.1	23.43	+1.5	06	33	14.8	18.80 S	67.40 E	3	5.3	
06	11	03	TQV	1PPP	15	57	04.0	0.5	0.05	0.06	0.06	54.94	+0.3	02	33	15.9	37.38 N	141.21 E	23	4.9	
07	11	04	TQV	eP	22	35	19.0	0.6	0.06	0.04	0.06	34.66	-2.5	15	50	35.1	24.24 N	122.52 E	33	4.9	
08	11	05	TQV	1PP	06	35	20.5	0.4	0.06	0.04	0.06	16.10	+1.2	22	31						
09	11	05	TQV	1PPP	06	35	36.5	1.0						06	06	13.5	37.63 N	70.22 E	3	5.0	
10	11	05	TQV	eS	11	46	46.0	1.0	+0.05	+0.05	-0.09	33.97	-0.2	11	41	50.0	5.32 S	111.66 E	596	4.9	
				eSS	11	48	16.0	1.0				27.87	+2.4	11	41						
				eSSS	16	48	36.7	1.0				14.92	-1.0	16	37	04.3	23.12 N	121.30 E	33	4.4	
				1PcP	16	48	50.5	1.0													
				1PcP	16	48	21.5	1.0													
				eP	16	40	00.5	1.0													
				eP	16	40	11.0	1.0													
				1P	16	40	57.5	1.0													
				1PP	16	40	22.5	1.0													
				1PPP	16	40	40.0	1.0													
				1P	16	40	37.5	1.0													
				1PPP	16	40	42.5	1.0													
				eS	16	40	57.0	1.0													
				eSS	16	40	26.0	1.0													
				1SSS	16	40	35.5	1.0													
				1PcP	16	45	57.0	1.0													



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
27	11	17	TQV	1P 1PcP 1PP 1PPP	10	29 30 31 31	28.4 53.7 05.8 46.6	0.8	-0.02	-0.02	+0.05	46.77	+5.9	10	20	54.5	47.67 N	154.22 E	33	5.7		
28	11	17	TQV	1P eP	11	20	47.6	1.0	+0.05	+0.07	-0.21	46.63 54.75 84.99	+0.6 -2.2 +9.9	11 12 13	12 12 45	20.1 51.5 44.5	47.84 N 4.90 S 18.61 S	153.92 E 154.03 E 178.33 W	33 33 400	5.1 5.6 5.7		
29	11	17	TQV	1P	13	57	38.5	2.5	1.12	1.48		32.28	+7.7	18	26	54.2	27.43 N	140.41 E	323	5.3		
30	11	17	TQV	1PcP	18	07	25.0															
31	11	17	TQV	1S	18	07	21.0															
32	11	17	TQV	1P 1PP 1PPP 1PcP	19	06 07 07 08 26 21	09.0 31.0 49.3 47.5 52.8 29.5	1.0 1.0 1.0 0.8 0.8 1.1	0.02 0.03	0.03 0.03 0.01	0.04 0.03 0.02 -0.03 +0.1	35.06 35.36 63.15	+4.8 -1.0 -1.2	18 19 04	59 19 10	18.8 59.4 43.9	12.56 N 12.33 N 51.48 N	140.70 E 140.94 E 179.06 E	60 44 36	5.3 5.1 5.7		
33	11	17	TQV	1P	19	06	09.0	1.0	0.02	0.03	0.04											
34	11	19	TQV	1P 1PcP	04	21	29.5	1.1	+0.03	+0.03	+0.03											
35	11	19	TQV	eP	12	23	30.5	0.4	0.01	0.01	0.01											
36	11	20	TQV	eP	08	17	09.0	1.2	0.08	0.15	0.13											
37	11	20	TQV	1P	08	20	28.0	1.0	-0.93	+0.65	-1.19											
38	11	21	HBV	1PP	07	21	07.5	1.0	1.47	1.74	1.79											
39	11	21	TQV	1P	08	21	23.2	0.8	+0.09	+0.09	-0.16											
40	11	21	HBV	eS	11	36	51.4															
41	11	21	HBV	eSS	14	44	52.5															
42	11	22	TQV	eP	18	29	27.5	1.0	0.03	0.03	0.04											
43	11	22	TQV	1PcP 1PP 1P 1PcP	17	19 20 23 25	14.5 14.5 14.5 20.0	1.0 1.0 1.0 0.7	+0.05 0.03	-0.07 0.03	+0.21 0.04	51.45 55.86	-0.3 +2.8	13 14	52 37	58.9 35.1	68.45 N 6.14 S	140.77 E 154.58 E	33 33	5.0 5.1		
44	11	23	HBV	1PPP 1P 1PP 1PPP	04	51 52 52 56 57	28.6 47.6 18.1 43.1	0.3 1.0 0.8 1.0	0.03 0.04	0.05 0.08	0.03 0.08	28.52 29.51	+6.6 +5.8	04	45	51.0	7.52 S	102.08 E	33	6.2		
45	11	23	TQV	1P 1PP 1PPP 1PcP 1S 1SS eP 1PP 1PPP 1S 1SS	09	49 49 49 52 52	17.0 32.0 39.8 19.0 37.0	0.8 0.8 0.8 0.8 0.8	0.03 0.03 0.03 0.03 0.03	0.03 0.03 0.03 0.03 0.03	0.03 0.03 0.03 0.03 0.03	16.38 -0.06	-3.7	09	45	30.3	38.17 N	106.50 E	33	4.8		

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
46	11	23	HBV	1SSS eP	09	52	43.5	0.8			0.03	17.38	-1.7								
47	11	24	TQV	eS	09	49	25.7	1.0	-0.13	+0.17	-0.35	22.59	+0.4	21	29	27.4	12.09 N	126.56 E	33	4.9	
48	11	27	HBV	1PPP	21	34	31.7	1.0	0.05	0.05	0.07	85.90	+5.9	17	16	40.4	24.12 S	179.37 W	33	5.7	
49	11	28	TQV	eP	17	29	24.0	0.5	0.03	0.04	-0.02	86.49	+4.7				08.02 N	124.17 E	33	5.8	
50	11	28	HBV	1PPP	23	38	24.7	1.0	-0.07	+0.1	+0.09	22.24	-1.9	23	34	05.7	15.02 N	144.13 E	3	5.3	
				1PPP	08	49	27.9	0.4	0.27	0.14	0.13	37.26	+1.5	08	42	11.3	26.64 N	97.17 E	44	5.6	
				eP	10	31	32.0	1.2	0.42		0.38	8.77	+4.7	10	29	25.2					
				1S		32	54.0	1.2	0.42		0.44										
				ISS		33	06.0	1.2	0.04		0.04										
				1PCP		38	00.0	1.0			0.08										
				1P	10	31	43.4	1.0	0.04	0.07		9.49	+4.3								
				1PP		31	52.4														
				1PPP		31	57.4														
				1S		33	13.4														
				ISS		33	32.4														
				1SSS		33	49.9														
51	11	28	HBV	eP	12	04	43.4					22.60	+5.9	11	59	38.7	7.81 N	124.48 E	33	5.2	
				ePP		04	56.5														
				eP	12	04	47.5					23.27	+3.4								
				ePP		05	14.0														
52	11	29	TQV	eP	12	49	36.0					53.39	+0.8	12	40	11.7	5.27 S	152.20 E	3	5.1	
53	11	30	TQV	1P	10	23	10.2					16.49	-0.5	10	19	20.4	24.86 N	122.38 E	33	5.3	
				1PP		23	13.1														
				1PPP		23	29.8														
				eS		26	13.0	0.3	0.01	0.01	0.01										
				ISS		26	27.0	0.5	0.01	0.01	0.02										
				1SSS		26	41.0	0.5	0.01	0.02	0.02										
				1P	10	23	12.1	1.2	+0.07	+0.05	+0.1	16.64	+6.8								
				1PP		23	19.6														
				1S		26	11.6														
				ISS		26	31.6														
54	11	30	HBV	1PPP	21	12	48.8	1.5	0.14	0.12	0.25	15.82		21	08	51.1	20.22 N	122.23 E	33	5.5	
				1S		15	22.3														
				ISS		15	40.8														
				1SSS		15	45.8														
				eP	21	12	41.5					15.50	+6.9								
				ePP		12	43.5														
				1PPP		12	45.5														
01	12	02	HBV	eP	21	18	38.6	0.8	-0.01	+0.01	+0.01	52.12	-1.3	21	09	30.8	2.99 S	152.11 E	33	5.8	
				1PCP		19	55.1	1.0	0.02	0.01	0.02										
				1PP		20	49.1	0.5	0.01	0.01	0.01										
				1PPP		21	44.1	0.5	0.01	0.01	0.01										
				1P	21	18	40.0	1.0	-0.03	-0.07	+0.09	52.12	+0.1								
				ePCP		19	46.9	1.0	0.03	0.03	0.04										
				ePP		20	39.0														
				ePPP		21	43.5														
02	12	03	TQV	1P	04	16	19.3	1.0	+0.11	+0.07	+0.26	41.78	+3.8	04	08	34.2	44.28 N	148.21 E	57	6.4	
				1PP		18	00.3	1.0	0.08	0.07	0.13										
				ePPP		18	22.8	1.0	0.08	0.07	0.10										





1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
19	12	16	TQV	eP oPP	11	41	20.0				26.30	+1.2	11	35	44.4	6.12 N	127.03 E	33	5.1		
20	12	16	TQV	ePPP iP iPPP eS eSS eSSS	13	41 42 23 24 24 26 27 27	57.0 10.2 51.7 01.5 07.5 46.0 03.5 16.5	1.0 1.0 1.0	-0.03 0.03 0.04	-0.06 0.03 0.03	+0.09 0.04 0.05	16.22	+7.0	13	19	57.8	19.68 N	122.41 E	33	5.5	
21	12	16	BGV	ePop eP iPcP ePP ePPP iP ePcP oPP	20	28 01 02 02 04 01 02 03	44.0 05.6 13.6 13.6 04.9 13.8 23.0 12.0	0.5 0.5 0.5 1.0	-0.01 0.01 0.01 0.01	-0.01 0.02 0.01	+0.02 0.01 0.01 0.01	52.44	+1.3	19	51	52.8	4.26 S	152.96 E	33	5.2	
22	12	17	TQV	ePP eP ePP ePP	21	17 18	18.0 57.5	0.8	-0.02	-0.03	-0.03	42.58	+0.1	21	09	23.4	44.37 N	149.33 E	33	5.0	
23	12	17	TQV	eP ePP ePcP ePPP	23	38 39 40 40	16.6 56.0 16.0 35.5	1.0 1.0 1.0 1.0	-0.03 0.05 0.05 0.03	0.03 0.03 0.04	+0.06 0.05 0.04 0.04	42.42	0	23	30	23.5	44.79 N	143.92 E	33	6.0	
24	12	18	BGV	iP ePP ePP ePPP ePcP	17	40 42 00 02 42 43 43 44	34.1 14.1 41.3 15.8 11.0 31.5 45.0 47.5	0.8	-0.03	-0.03	-0.03	42.13	+0.4	17	32	38.1	44.09 N	149.30 E	3	5.0	
25	12	18	TQV	ePP ePP ePcP	18	00 02	41.3 15.8	0.8	-0.03	-0.03	-0.03	42.47	+5.8	17	52	37.1	44.06 N	149.31 E	3	4.7	
26	12	18	BGV	iP ePP ePPP ePcP iP iPP ePPP	19	42 43 43 44 42 43 43	11.0 31.5 45.0 47.5 14.6 36.6 54.1	1.0	-0.03	-0.03	+0.09	34.23	+1.3	19	35	31.3	37.62 N	141.16 E	61	4.6	
27	12	19	TQV	eP iP iPcP	00	24	47.5	1.0	-0.04	-0.04	-0.04	42.64	-1.2	00	16	49.0	44.11 N	145.54 E	3	4.8	
28	12	19	TQV	iP iPcP	08	03	23.5	1.0	-0.03	-0.03	-0.03	76.64	-1.0	07	51	30.2	17.10 S	172.62 E	3	5.4	
29	12	21	TQV	eP iP iPcP	03	33	04.5	1.0	-0.03	-0.03	-0.09	50.59	-1.4	03	24	03.4	11.41 S	66.32 E	3	5.0	
30	12	21	TQV	iP iPcP	14	36 47	36.9 41.9	1.0	-0.03	-0.03	-0.09	54.11	+4.7	14	37	08.3	7.40 S	153.41 E	33	5.7	
31	12	21	TQV	ePP iP iPPP	18	09 09	42.4 40.8	1.0	-0.03	-0.03	-0.03	16.51	-0.7	18	05	51.0	16.93 N	121.95 E	33	4.9	
32	12	21	TQV	eP ePcP ePP	18	57 58	00.5 11.0	1.0	0.03	0.03	0.04	51.94	+3.2	18	47	49.6	5.53 S	150.03 E	33	5.7	
33	12	22	TQV	iP ePP ePcP	00	08 09 10	16.0 51.0 18.5	1.0	+0.03	-0.03	-0.09	40.75	-0.3	00	00	36.9	50.01 N	142.81 E	33	5.0	
34	12	22	TQV	eP iP iPPP	05	21 21 21	41.0 50.5 59.5	1.0	+0.02	+0.03	-0.3	15.53	+1.6	05	18	05.3	19.39 N	121.28 E	33	5.1	
35	12	22	TQV	iP ePcP ePP	16	13 15 15	35.0 11.5 23.5	0.8	-0.02	+0.01	+0.03	46.14	+1.7	16	05	10.2	27.63 N	54.47 E	33	5.1	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
36	12	23	TQV	eP ePP ePPP	16 11 12	10 11 12	29.5 57.0 12.0					34.00	-0.7	16	03	53.6	34.43 N	141.29 E	51	4.9	
37	12	24	TQV	eP lPcP eP ePPP	05  10	41 42 43 44	35.5 50.0 29.5 30.0	0.8 1.0 1.0	-0.02 0.02 0.03	+0.02 0.03 0.03	-0.07 0.04 0.04	51.25	+6.4	05	32	26.5	5.77 S	149.30 E	33	5.7	
38	12	28	TQV	lP lPcP lPP lPPP	10   16	47 48 49 50 54	19.5 19.0 21.0 27.2 53.5	0.8 1.0 1.0 1.0	-0.04 0.03 0.03 0.03	-0.05 0.04 0.03 0.04	+0.16 0.13 0.05 0.04	54.64	+3.4	10	37	48.4	56.25 N	163.69 E	33	7.5	
39	12	28	TQV	eS lP lPcP	16  01	11 12 10	27.2 19.0 38.5	1.0 1.0 1.0	-0.03 0.02 -0.16	-0.03  +0.16	-0.09 0.03 -0.26	84.97	+6.6	15	59	38.6	23.52 N	179.11 E	450	5.5	
40	12	29	TQV	lP lPP lPPP eS eSS eSSS ePcP ePcS	01   13 13 15 19	10 10 13 13 15 19	43.5 48.0 27.0 38.5 48.0 39.5 17.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0		0.16 0.19 0.06 0.04 0.07 0.52 0.10	0.43 0.21 0.05 0.06 0.13 0.60 0.13	15.94	+0.4	01	06	54.8	24.82 N	122.27 E	33	4.9	
41	12	30	TQV	eP ePcP lPP	21  53	49 49 53	52.1 56.9 22.6	1.5 1.0	0.05 0.03	0.09	0.23 0.05	89.29	+3.8	21	36	54.2	37.17 S	176.52 E	33	6.6	