

# Complemento 2017-2020 del Catálogo Sismológico de Referencia de Tierra del Fuego

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El presente trabajo contiene los sismos registrados por la red sismológica de Tierra del Fuego en el período enero 2017 a diciembre 2020, como continuación del Tierra del Fuego Reference Standard Earthquake Catalogue (Sabbione et al., 2007) y del Complemento al Catálogo Sismológico de Referencia para Tierra del Fuego (Sabbione et al., 2017).

Los parámetros hipocentrales (latitud, longitud, profundidad, hora origen y magnitud) se determinaron usando el código HYPOCENTER (Lienert et al., 1986; Lienert y Havskov, 1995) incluido en el paquete SEISAN (Havskov y Ottemoller, 1999), versión 11.0.

La latitud, longitud, hora origen y profundidad del foco se obtuvieron mediante el picado de fases sísmicas P y S, y la magnitud se obtuvo a partir de la medición de amplitud de la onda superficial.

En algunos eventos, la profundidad se fijó en un valor de 10 km, de acuerdo a lo esperable para la mayor parte de los sismos en la región, según estudios previos de sismicidad (Sabbione et al., 2007a; Buffoni et al., 2009) y modelos geotectónicos para la Falla Magallanes-Fagnano (Mendoza et al., 2015), además de ser el valor fijado para este parámetro por otros centros internacionales de cálculo (USGS-NEIC, ISC).

El modelo de velocidades usado para la determinación de todos los parámetros fue publicado en Adaros Cárcamo, (2003), representativo de la estructura cortical en Patagonia sur, incluido el territorio de Tierra del Fuego y zonas aledañas.

Las estaciones sismológicas usadas para la localización fueron: DSPA, TRVA, BETA y EARG, de la FCAG-UNLP y de cuya operación y mantenimiento se encarga la Estación Astronómica Río Grande; y también las estaciones MG01, MG02, MG03, MG04, GO10 (Red Sismológica Nacional, Chile, doi:<http://dx.doi.org/10.7914/SN/C1>).

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#	Año	M	D	H	M	S	Error	L	Latitud	Error	Longitud	Error	Prof	Error	NST	RMS	GAP	Mc	Fuente	MI	Fuente
1	2017	1	3	8	50	12.6	0.36	R	-54.268	3.0	-64.109	4.3	19.5	2.0	4	0.1	317			2.2	EAR
2	2017	1	18	7	38	36.0	0.32	L	-54.901	2.0	-68.004	1.9	0.7	1.5	4	0.1	237			1.4	EAR
3	2017	1	20	0	8	16.6	0.42	L	-54.643	3.8	-66.511	6.1	13.2	2.5	5	0.1	288			2.5	EAR
4	2017	1	29	17	38	50.8	0.93	R	-57.854	21.5	-63.998	56.0	7.8	6.2	9	0.4	345			3.8	EAR
5	2017	2	3	13	28	28.1	1.43	R	-54.488	15.5	-64.006	17.2	17.4	9.7	5	0.6	314			2.3	EAR
6	2017	2	4	3	23	50.8	0.34	L	-54.588	2.2	-66.892	3.6	9.1	3.0	4	0.1	269			1.8	EAR
7	2017	2	7	14	35	20.0	0.78	R	-57.641	13.7	-74.440	12.8	9.2	6.1	6	0.4	314			3.3	EAR
8	2017	2	7	15	40	41.5	0.49	R	-57.313	5.6	-66.859	42.4	24.5	2.8	4	0.2	353			3.0	EAR
9	2017	2	8	16	31	8.8	1.18	R	-55.269	10.6	-72.534	11.5	20.1	8.9	7	0.5	275			2.2	EAR
10	2017	2	23	6	38	0.9	3.48	R	-53.933	27.7	-59.040	34.1	10.9	28.9	10	1.8	164			3.6	EAR
11	2017	3	6	5	26	17.2	1.43	R	-52.416	9.9	-73.553	23.6	6.1	8.9	8	0.6	266			3.5	EAR
12	2017	3	9	10	3	58.2	1.32	R	-57.311	25.9	-71.553	35.7	20.1	8.4	4	0.6	327			2.8	EAR
13	2017	3	11	0	24	35.1	1.53	L	-54.558	3.4	-68.238	6.1	6.1	4.4	10	0.6	105			2.5	EAR
14	2017	3	25	2	16	49.5	0.95	R	-50.635	5.6	-73.460	30.2	32.0	13.9	8	0.4	229			3.8	EAR
15	2017	3	25	21	59	26.0	1.19	L	-54.551	5.1	-69.428	5.3	9.5	4.0	9	0.5	208			2.7	EAR
16	2017	3	27	1	2	9.5	2.20	L	-54.708	26.9	-69.518	25.3	0.0	17.6	4	0.9	237			2.1	EAR
17	2017	3	28	13	51	15.6	1.57	R	-57.526	12.5	-66.211	36.8	12.8	12.0	6	0.7	283			3.1	EAR
18	2017	3	28	15	15	0.4	0.97	R	-50.574	3.5	-73.790	14.0	0.0	3.5	9	0.4	235			3.3	EAR
19	2017	3	30	12	55	0.4	0.84	R	-57.720	8.2	-65.318	17.9	15.0	6.8	8	0.4	283			3.5	EAR
20	2017	4	1	15	14	26.0	0.82	R	-55.043	7.5	-69.925	8.8	6.0	4.8	5	0.3	259			2.4	EAR
21	2017	4	1	16	49	21.7	0.55	D	-54.091	23.4	-53.750	183.2	1.6	62.0	8	0.3	307			3.9	EAR
22	2017	4	4	21	23	39.6	1.73	D	-54.516	30.0	-48.398	21.2	8.7	11.0	10	0.7	329			4.6	EAR
23	2017	4	7	9	27	52.9	3.69	R	-50.535	22.7	-74.516	70.2	32.0	25.4	9	1.6	249			3.8	EAR
24	2017	4	7	11	13	25.2	2.39	R	-52.623	26.1	-75.718	31.2	0.3	11.5	8	1.1	309			3.3	EAR
25	2017	4	7	15	33	34.0	1.76	R	-50.107	41.1	-73.730	59.8	32.0	12.7	6	0.8	340			3.3	EAR
26	2017	4	8	8	6	8.3	1.25	R	-54.751	6.6	-69.550	9.6	0.0	9.0	5	0.5	241			2.3	EAR
27	2017	4	13	11	18	43.0	0.34	R	-52.863	2.8	-72.423	5.4	21.5	2.0	7	0.1	237			3.0	EAR
28	2017	4	14	15	22	36.8	2.17	R	-54.248	27.7	-63.605	17.3	21.3	14.1	8	0.9	203			3.0	EAR
29	2017	4	16	17	27	13.6	1.21	R	-57.968	9.1	-66.738	26.2	23.0	6.8	6	0.5	289			3.0	EAR
30	2017	4	16	17	42	55.2	0.52	R	-54.773	2.5	-69.510	3.1	0.5	2.7	5	0.2	242			2.2	EAR
31	2017	4	20	18	42	24.8	0.75	L	-54.518	2.8	-68.903	10.3	12.5	9.6	8	0.3	186			3.0	EAR
32	2017	4	23	2	36	13.3	5.10	D	-33.538	31.6	-71.031	151.3	0.0	27.0	9	1.9	333				
33	2017	4	23	8	32	18.0	1.51	R	-52.869	26.2	-73.711	26.2	0.8	7.1	6	0.6	329			3.1	EAR
34	2017	4	24	21	38	39.1	3.65	D	-34.077	20.2	-70.952	112.3	0.0	17.2	10	1.4	333				
35	2017	4	30	8	3	3.4	1.21	R	-51.230	7.1	-75.373	24.2	16.8	9.7	6	0.6	245			3.6	EAR
36	2017	4	30	8	7	25.5	1.06	R	-50.701	4.0	-73.466	34.8	32.5	21.7	7	0.5	229			3.7	EAR
37	2017	4	30	20	47	59.8	1.15	R	-50.596	7.6	-74.182	21.9	5.3	5.6	9	0.5	243			3.5	EAR

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38	2017	5	3	5	5	45.2	0.45	R	-49.877	4.1	-63.951	6.5	33.8	13.0	6	0.2	192			3.4	EAR
39	2017	5	5	12	19	14.2	0.65	R	-54.341	8.7	-64.397	8.3	30.4	3.9	5	0.3	321			2.9	EAR
40	2017	5	5	12	21	23.7	0.63	R	-55.403	17.7	-64.707	21.3	77.8	5.8	3	0.2	346			1.2	EAR
41	2017	5	5	12	44	44.2	0.41	R	-53.752	7.1	-64.435	6.2	18.6	2.6	3	0.1	337			2.9	EAR
42	2017	5	6	9	26	13.6	0.91	R	-54.733	4.8	-69.585	6.9	6.0	5.6	5	0.3	241			2.5	EAR
43	2017	5	6	9	52	44.2	1.74	D	3.941	999.9	59.236	999.9	0.9	999.9	7	0.7	355				
44	2017	5	10	23	23	34.0	8.11	D	-55.618	416.0	-26.032	209.1	0.0	166.2	8	3.1	346				
45	2017	5	14	17	6	14.0	0.79	L	-54.570	1.9	-68.078	2.9	0.6	3.3	6	0.3	115			2.3	EAR
46	2017	5	19	9	15	4.4	0.53	R	-54.481	2.5	-71.117	4.5	6.1	2.6	6	0.2	246			2.6	EAR
47	2017	5	19	12	16	39.1	0.52	L	-54.571	1.6	-68.274	2.9	9.4	2.0	6	0.2	121			2.0	EAR
48	2017	5	20	21	1	32.8	1.92	R	-54.811	19.1	-58.896	17.5	11.0	9.8	11	0.9	256			4.0	EAR
49	2017	5	22	2	55	6.7	2.12	R	-54.114	20.4	-64.601	27.4	32.1	14.8	6	0.9	310			2.9	EAR
50	2017	5	22	14	43	8.8	1.76	R	-54.707	22.4	-61.058	18.9	27.0	9.6	6	0.8	232			3.3	EAR
51	2017	5	27	9	4	11.1	0.52	R	-57.361	3.4	-67.508	18.3	15.7	3.1	6	0.2	331			3.2	EAR
52	2017	5	30	19	47	53.1	1.53	L	-54.477	7.0	-69.218	8.3	17.1	6.6	10	0.6	194			3.6	EAR
53	2017	5	30	19	58	40.1	1.60	L	-54.479	8.0	-69.284	7.2	9.0	11.2	7	0.6	196			2.4	EAR
54	2017	6	2	11	15	55.9	1.83	L	-54.491	9.0	-69.358	12.4	31.5	8.8	6	0.7	200			2.1	EAR
55	2017	6	2	19	24	14.2	0.85	L	-54.268	3.8	-69.932	4.7	8.1	3.1	5	0.3	214			2.8	EAR
56	2017	6	4	15	1	59.9	2.04	R	-56.967	13.0	-69.298	27.8	31.8	10.4	8	0.9	313			3.4	EAR
57	2017	6	5	12	31	38.0	1.26	R	-57.342	9.0	-66.648	27.2	18.9	7.0	9	0.6	282			4.2	EAR
58	2017	6	6	13	25	42.8	0.79	L	-54.568	10.2	-66.160	8.8	11.4	7.6	6	0.3	293			2.3	EAR
59	2017	6	6	14	3	42.5	1.19	L	-54.623	11.9	-66.148	13.3	10.8	6.0	6	0.5	296			2.4	EAR
60	2017	6	6	14	53	7.2	1.09	L	-54.623	19.8	-65.752	29.5	5.3	14.3	6	0.4	303			2.5	EAR
61	2017	6	6	14	55	31.5	1.02	L	-54.727	7.7	-66.199	11.4	20.5	3.7	5	0.4	314			2.5	EAR
62	2017	6	6	14	58	46.4	0.46	L	-54.561	4.9	-66.171	5.3	7.3	2.7	5	0.2	293			2.3	EAR
63	2017	6	9	3	38	3.5	0.90	R	-54.554	8.6	-69.248	8.4	4.3	11.3	5	0.3	217			2.4	EAR
64	2017	6	11	20	31	13.7	1.50	R	-53.961	9.1	-71.402	11.2	7.1	8.6	8	0.6	228			3.9	EAR
65	2017	6	14	4	57	24.4	0.90	L	-53.346	3.0	-68.057	8.9	4.2	3.4	5	0.3	214			2.3	EAR
66	2017	6	14	13	41	16.7	1.06	R	-54.783	7.7	-69.470	15.0	7.8	19.5	3	0.4	253			2.4	EAR
67	2017	6	16	14	10	29.1	1.04	L	-54.522	4.1	-68.757	11.2	20.7	6.7	4	0.4	199			2.5	EAR
68	2017	6	17	11	17	20.8	1.71	L	-54.648	7.2	-67.523	8.4	7.7	5.6	9	0.7	170			3.1	EAR
69	2017	6	17	11	24	18.4	0.34	L	-54.776	3.9	-68.424	3.5	49.4	4.5	2	0.0	340			2.3	EAR
70	2017	6	18	2	0	25.5	1.75	R	-56.708	12.9	-69.790	31.0	11.2	11.8	6	0.8	306			3.4	EAR
71	2017	6	21	1	55	35.1	0.56	L	-54.241	4.0	-69.592	5.4	18.6	3.8	4	0.2	219			2.2	EAR
72	2017	6	27	6	28	19.8	0.30	L	-53.708	2.5	-68.629	3.8	10.0	0.0	1	0.0	360			0.8	EAR
73	2017	7	4	3	10	27.8	0.54	R	-54.311	9.6	-52.859	15.3	17.0	7.0	4	0.3	314			4.2	EAR
74	2017	7	8	9	14	9.1	0.56	R	-56.956	5.4	-69.639	19.0	52.0	12.7	5	0.2	311			3.0	EAR

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75	2017	7	8	18	44	15.7	0.71	R	-54.481	3.3	-67.669	7.5	9.0	60.9	3	0.3	170			2.3	EAR
76	2017	7	11	17	39	32.0	0.37	R	-54.573	9.1	-66.041	4.9	7.6	5.1	3	0.1	327			2.4	EAR
77	2017	7	12	22	56	50.6	1.34	R	-54.621	11.7	-59.047	13.6	0.0	5.6	5	0.6	254			3.5	EAR
78	2017	7	13	2	1	56.1	1.18	L	-54.957	7.5	-68.047	7.9	7.7	5.3	5	0.5	271			2.6	EAR
79	2017	7	13	5	57	21.0	0.89	R	-54.494	7.9	-64.024	6.0	13.5	4.5	7	0.4	209			3.0	EAR
80	2017	7	13	15	19	8.9	0.75	L	-54.928	6.9	-67.956	7.7	6.2	3.4	6	0.3	258			2.7	EAR
81	2017	7	13	15	21	50.1	0.58	L	-54.944	16.1	-68.033	10.5	6.5	20.1	3	0.2	281			2.4	EAR
82	2017	7	13	15	33	40.7	1.47	L	-54.970	9.3	-68.079	10.1	8.6	6.4	6	0.6	263			2.2	EAR
83	2017	7	13	22	14	41.5	0.44	L	-54.962	3.2	-68.043	3.1	8.5	4.5	4	0.1	285			2.1	EAR
84	2017	7	14	3	18	49.8	0.71	L	-54.907	5.0	-68.011	4.2	0.9	4.9	4	0.3	274			2.3	EAR
85	2017	7	18	20	18	40.5	0.74	L	-54.592	4.2	-66.637	8.3	1.6	5.6	4	0.3	299			2.3	EAR
86	2017	7	19	7	56	12.2	0.41	R	-54.732	3.9	-69.350	6.6	3.1	2.2	4	0.1	274			2.2	EAR
87	2017	7	19	13	45	28.2	1.32	R	-54.610	66.7	-67.229	20.7	16.4	43.0	4	0.5	305			1.7	EAR
88	2017	7	19	23	27	32.6	0.92	R	-50.490	14.4	-69.471	19.9	25.0	6.0	6	0.4	287			2.8	EAR
89	2017	7	20	3	6	18.8	1.57	R	-52.809	11.8	-72.607	22.3	16.9	6.8	8	0.6	237			2.7	EAR
90	2017	7	21	9	20	41.1	0.82	R	-55.028	6.1	-67.027	21.4	10.6	3.8	3	0.3	328			2.0	EAR
91	2017	7	23	9	38	55.8	0.36	L	-54.768	3.3	-69.883	5.1	13.1	2.8	4	0.1	284			2.6	EAR
92	2017	7	24	16	17	16.5	0.82	L	-54.470	3.6	-69.147	6.1	0.0	5.4	4	0.3	254			2.4	EAR
93	2017	7	24	22	58	14.7	0.62	L	-53.775	2.4	-66.538	6.0	9.7	2.7	4	0.2	266			2.5	EAR
94	2017	7	25	22	9	31.5	0.81	L	-54.178	17.4	-71.682	42.0	32.1	28.0	4	0.3	260			2.9	EAR
95	2017	7	26	4	16	23.4	0.91	R	-52.687	6.3	-66.264	13.7	32.4	5.9	3	0.4	291			2.8	EAR
96	2017	7	29	21	53	55.6	0.33	L	-55.124	10.6	-65.798	8.0	3.1	4.0	3	0.1	341			2.7	EAR
97	2017	7	29	22	8	11.1	1.00	L	-54.645	11.4	-65.410	13.8	1.9	7.7	5	0.4	319			3.0	EAR
98	2017	8	2	20	8	19.3	0.71	R	-52.470	4.1	-71.153	7.0	23.9	4.8	6	0.3	138			3.0	EAR
99	2017	8	3	21	34	26.9	2.27	R	-54.475	52.0	-59.809	60.0	0.0	31.6	8	1.1	243			3.7	EAR
100	2017	8	6	21	13	28.0	0.54	R	-57.526	25.4	-62.975	41.3	31.5	3.4	4	0.2	352			2.6	EAR
101	2017	8	6	21	28	12.9	2.26	R	-57.033	23.6	-65.837	86.4	23.9	11.1	5	1.0	342			3.3	EAR
102	2017	8	10	13	22	23.0	0.65	R	-54.585	3.2	-68.053	4.0	3.0	4.2	4	0.2	162			2.4	EAR
103	2017	8	16	23	7	19.8	2.05	R	-52.414	7.4	-71.497	19.0	5.0	14.7	6	0.8	134			3.2	EAR
104	2017	8	17	12	45	17.3	1.44	R	-51.789	22.5	-71.388	55.2	5.3	7.0	2	0.4	193			3.0	EAR
105	2017	8	18	9	8	33.3	0.67	R	-52.606	7.0	-72.374	13.8	21.6	2.9	5	0.3	237			2.9	EAR
106	2017	8	21	20	55	45.7	0.39	R	-54.226	15.1	-66.938	27.8	183.1	5.2	3	0.1	273			2.7	EAR
107	2017	8	29	10	53	22.5	1.85	R	-56.901	14.9	-68.433	62.4	26.3	17.7	5	0.8	300			3.2	EAR
108	2017	9	5	21	16	25.9	1.28	L	-54.592	3.1	-67.623	11.5	6.3	557.3	3	0.3	149			2.7	EAR
109	2017	9	5	21	18	30.8	0.75	L	-54.566	4.0	-67.501	11.9	16.4	4.7	4	0.3	171			2.5	EAR
110	2017	9	8	1	33	10.2	0.51	R	-56.090	37.6	-70.128	41.4	0.0	28.2	4	0.2	318			3.0	EAR
111	2017	9	8	3	16	16.0	1.72	R	-52.931	18.3	-71.602	41.9	86.6	21.1	6	0.7	210			2.4	EAR

#	Año	M	D	H	M	S	Error	L	Latitud	Error	Longitud	Error	Prof	Error	NST	RMS	GAP	Mc	Fuente	MI	Fuente
112	2017	9	12	4	4	5.7	0.91	L	-54.567	4.0	-67.582	9.4	0.0	5.9	5	0.4	158			3.0	EAR
113	2017	9	16	20	0	31.2	0.69	R	-58.303	59.6	-63.333	17.2	0.0	37.4	6	0.3	291			3.8	EAR
114	2017	10	2	20	22	55.2	0.48	R	-59.460	8.3	-72.868	23.1	4.6	2.5	4	0.2	344			3.7	EAR
115	2017	10	6	23	41	5.6	0.51	R	-54.514	2.4	-69.066	5.3	5.3	6.6	4	0.2	240			2.3	EAR
116	2017	10	7	3	51	57.7	2.02	R	-54.511	9.2	-69.240	11.5	6.7	10.9	7	0.8	205			3.6	EAR
117	2017	10	7	15	39	46.6	1.67	R	-54.373	14.2	-69.009	26.1	76.0	21.0	7	0.7	189			3.9	EAR
118	2017	10	7	19	56	11.3	0.45	L	-54.619	1.6	-67.557	10.3	3.8	7.4	3	0.1	148			1.9	EAR
119	2017	10	10	5	17	45.0	0.63	R	-53.203	23.1	-57.730	56.4	14.3	29.7	6	0.3	257			3.8	EAR
120	2017	10	11	22	47	27.3	0.79	L	-54.500	1.3	-67.490	8.3	15.0	0.0	3	0.4	324			2.1	EAR
121	2017	10	13	7	31	59.4	1.03	L	-54.580	10.6	-67.225	29.8	26.6	7.1	4	0.4	247			2.3	EAR
122	2017	10	29	17	54	5.3	1.20	R	-55.628	36.2	-73.921	84.0	7.8	55.3	6	0.5	296			3.5	EAR
123	2017	11	5	15	56	11.2	0.58	L	-55.098	12.8	-65.497	12.0	0.0	6.2	3	0.2	333			2.2	EAR
124	2017	11	6	4	24	47.6	0.35	L	-54.563	1.1	-67.153	6.0	14.9	1.7	4	0.1	252			1.7	EAR
125	2017	11	7	13	10	57.6	0.51	R	-54.780	7.6	-68.061	26.0	80.0	6.0	4	0.2	221			2.5	EAR
126	2017	11	7	13	56	19.3	2.00	R	-54.524	24.4	-70.524	31.8	20.0	21.7	4	0.8	243			2.4	EAR
127	2017	11	9	22	46	29.3	1.04	R	-53.153	4.0	-67.245	10.3	8.2	4.8	5	0.4	238			2.1	EAR
128	2017	11	14	18	33	49.7	1.54	R	-54.245	24.3	-53.694	40.7	6.1	18.6	4	0.9	309			3.9	EAR
129	2017	11	16	15	51	51.1	0.61	R	-58.144	23.0	-63.002	65.5	26.6	5.1	7	0.3	350			4.3	EAR
130	2017	11	23	14	31	49.0	0.33	R	-54.423	7.6	-70.414	11.1	5.0	4.4	3	0.1	244			2.6	EAR
131	2017	12	3	13	50	50.5	1.30	R	-57.426	10.9	-67.439	82.5	14.0	7.9	4	0.6	334			3.2	EAR
132	2017	12	6	22	40	56.3	0.72	L	-54.539	2.7	-68.723	8.6	9.6	5.2	4	0.3	229			2.7	EAR
133	2017	12	18	23	34	6.0	1.17	R	-56.435	21.1	-69.803	28.6	32.0	8.8	4	0.5	325			3.0	EAR
134	2017	12	19	17	35	47.2	1.59	R	-55.000	46.9	-60.720	23.8	13.2	13.1	6	0.8	332			2.8	EAR
135	2017	12	21	1	25	52.7	0.83	R	-56.406	11.5	-69.555	20.5	33.5	37.6	4	0.3	307			3.2	EAR
136	2017	12	28	6	4	27.6	0.34	L	-54.743	6.1	-67.317	2.2	16.5	1.4	2	0.0	336			2.0	EAR
137	2018	1	2	11	37	32.7	1.38	L	-54.628	23.6	-71.047	38.8	32.0	30.7	3	0.6	257			2.5	EAR
138	2018	1	10	6	41	29.6	0.78	R	-56.947	32.0	-63.835	59.1	1.6	4.0	4	0.3	351			3.0	EAR
139	2018	1	15	23	55	18.1	0.49	R	-54.397	25.8	-53.554	180.4	0.0	62.5	6	0.3	307			3.9	EAR
140	2018	1	19	23	53	6.8	2.09	L	-53.503	21.5	-73.007	41.0	31.9	53.0	8	1.0	258			4.2	EAR
141	2018	1	21	15	3	1.0	0.55	R	-56.001	6.3	-71.386	12.3	7.2	3.6	4	0.2	338			3.2	EAR
142	2018	1	24	21	53	25.1	0.55	L	-53.463	4.0	-70.228	6.5	28.5	3.8	4	0.2	171			2.1	EAR
143	2018	1	26	4	30	18.4	2.15	L	-56.330	68.3	-64.095	104.4	0.0	12.0	4	0.9	346			1.7	EAR
144	2018	2	1	4	30	13.1	1.13	R	-52.757	36.4	-58.842	56.7	6.7	29.4	3	0.6	221			3.4	EAR
145	2018	2	1	4	30	21.4	1.03	R	-54.022	42.1	-58.943	17.4	32.2	49.9	3	0.5	342			3.3	EAR
146	2018	2	3	1	23	53.0	0.53	R	-56.565	58.9	-69.637	21.4	14.8	48.7	4	0.2	307			2.7	EAR
147	2018	2	6	19	7	43.1	0.30	L	-54.159	2.2	-69.438	5.5	20.0	0.0	1	0.5	360			2.6	EAR
148	2018	2	8	20	41	41.9	1.61	R	-52.596	13.4	-73.844	25.0	3.0	6.4	7	0.7	254			3.4	EAR

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149	2018	2	13	2	15	8.6	1.13	R	-57.372	10.7	-66.046	68.8	28.6	6.5	5	0.5	338			3.3	EAR
150	2018	2	15	15	6	36.0	0.37	L	-54.597	1.9	-67.465	5.7	17.6	2.2	4	0.1	169			2.3	EAR
151	2018	2	19	13	11	10.0	0.30	L	-54.370	1.4	-69.483	2.4	1.1	1.8	3	0.0	261			2.3	EAR
152	2018	2	22	23	27	2.2	0.97	L	-54.728	3.3	-67.194	13.0	3.4	3.6	3	0.4	271			1.7	EAR
153	2018	2	23	4	9	25.9	0.60	L	-54.671	2.5	-69.493	3.4	1.9	3.1	5	0.2	221			2.2	EAR
154	2018	2	23	23	17	30.9	0.57	L	-54.691	3.7	-69.743	5.5	0.2	5.7	3	0.2	243			2.3	EAR
155	2018	3	1	13	17	58.3	1.26	R	-58.264	30.2	-53.850	20.8	4.9	8.2	4	0.8	310			3.5	EAR
156	2018	3	7	2	57	46.4	0.49	L	-54.628	1.9	-67.513	4.2	8.4	3.1	5	0.2	147			3.1	EAR
157	2018	3	19	7	33	43.6	0.30	L	-54.014	2.2	-70.134	4.2	5.0	0.0	2	0.0	360			2.5	EAR
158	2018	3	20	6	35	49.9	0.90	L	-54.632	5.5	-67.021	13.4	18.4	4.4	4	0.3	266			3.2	EAR
159	2018	3	20	6	44	32.0	0.30	L	-54.610	1.2	-67.747	5.8	15.0	0.0	1	0.0	360			1.3	EAR
160	2018	3	23	12	41	33.9	0.80	L	-54.507	8.6	-69.523	8.2	15.2	8.6	4	0.3	254			2.8	EAR
161	2018	3	23	12	44	23.5	0.61	R	-58.319	10.5	-70.922	36.2	42.1	28.3	5	0.3	325			3.5	EAR
162	2018	4	6	19	31	2.5	1.05	R	-57.423	9.0	-68.412	30.8	30.7	6.0	5	0.4	328			3.0	EAR
163	2018	5	3	10	28	28.1	0.61	R	-57.018	6.1	-66.090	18.6	19.2	3.3	5	0.2	337			2.9	EAR
164	2018	5	3	13	43	15.5	0.30	L	-54.965	2.6	-66.898	4.1	15.0	0.0	1	0.0	360			1.2	EAR
165	2018	5	4	9	21	25.9	0.54	R	-54.633	3.9	-67.087	11.4	22.8	2.3	4	0.2	273			2.4	EAR
166	2018	5	7	4	40	2.6	1.72	R	-56.753	12.4	-66.829	74.6	25.6	11.7	6	0.7	331			3.0	EAR
167	2018	5	8	18	19	0.7	0.98	R	-53.338	19.8	-58.192	18.0	51.2	24.6	4	0.5	250			3.1	EAR
168	2018	5	9	5	5	42.2	1.10	R	-57.718	32.5	-63.977	82.3	47.3	27.4	6	0.5	347			3.3	EAR
169	2018	5	11	6	28	10.1	0.33	R	-56.600	5.4	-66.367	14.4	8.0	5.0	5	0.1	334			3.0	EAR
170	2018	5	11	22	8	20.5	0.34	L	-54.626	2.4	-69.775	3.7	1.5	6.4	3	0.0	239			2.1	EAR
171	2018	5	11	22	54	39.6	0.76	R	-54.137	4.8	-70.503	10.7	12.3	4.5	8	0.3	217			3.7	EAR
172	2018	5	12	11	16	47.0	1.31	L	-53.686	30.3	-72.379	22.0	23.2	8.6	4	0.5	346			2.7	EAR
173	2018	5	13	8	51	2.3	0.58	L	-54.604	7.9	-66.766	16.2	13.9	5.3	4	0.2	291			1.8	EAR
174	2018	5	14	2	47	24.4	0.60	L	-54.172	2.3	-70.595	6.4	5.9	5.5	7	0.2	226			2.1	EAR
175	2018	5	14	8	44	0.9	1.12	L	-54.772	15.2	-69.704	19.1	5.6	12.4	4	0.4	247			2.0	EAR
176	2018	5	14	17	3	39.2	0.34	L	-54.934	3.8	-69.625	3.3	5.8	2.3	4	0.1	256			1.8	EAR
177	2018	5	17	7	0	0.6	0.97	L	-54.739	4.3	-69.477	5.7	6.0	5.7	5	0.4	226			2.1	EAR
178	2018	5	17	8	32	31.6	0.36	R	-56.945	2.9	-69.665	10.8	6.3	2.9	6	0.1	320			2.8	EAR
179	2018	5	17	8	45	17.3	0.29	L	-54.660	3.6	-69.558	2.3	13.3	2.4	5	0.0	234			2.1	EAR
180	2018	5	17	18	24	4.5	0.66	L	-54.899	4.0	-68.688	9.6	5.0	8.3	4	0.2	240			2.1	EAR
181	2018	5	19	11	2	13.8	1.28	R	-53.867	17.5	-63.900	14.3	32.1	8.2	5	0.5	335			3.1	EAR
182	2018	5	23	4	37	56.3	0.59	L	-54.385	5.3	-69.623	7.6	17.4	3.6	4	0.2	212			2.1	EAR
183	2018	5	23	4	55	33.1	0.66	L	-54.695	3.2	-69.459	3.8	0.0	4.1	4	0.2	235			2.1	EAR
184	2018	5	23	8	11	55.8	0.47	L	-55.433	13.1	-70.103	17.7	21.9	16.5	4	0.2	281			2.5	EAR
185	2018	5	23	8	53	58.7	0.34	L	-54.589	1.7	-69.912	2.3	0.0	2.1	4	0.1	242			2.1	EAR

#	Año	M	D	H	M	S	Error	L	Latitud	Error	Longitud	Error	Prof	Error	NST	RMS	GAP	Mc	Fuente	MI	Fuente
186	2018	5	26	21	42	15.8	0.30	L	-54.773	2.7	-67.270	2.1	5.0	0.0	1	0.0	360			0.8	EAR
187	2018	5	29	14	38	29.3	0.42	R	-50.527	8.7	-73.145	14.2	40.6	7.5	7	0.2	336			3.4	EAR
188	2018	6	1	2	34	18.2	0.54	L	-54.732	4.9	-66.798	9.2	20.3	3.2	6	0.2	285			2.9	EAR
189	2018	6	4	9	28	42.9	0.68	R	-53.890	9.8	-63.152	10.2	26.7	4.3	5	0.3	322			2.6	EAR
190	2018	6	7	5	39	12.1	1.27	R	-57.256	9.1	-67.153	51.5	19.9	9.8	6	0.5	332			2.9	EAR
191	2018	6	9	1	29	30.9	0.37	L	-54.636	2.2	-67.900	5.2	1.9	3.5	5	0.1	169			2.0	EAR
192	2018	6	10	14	0	53.0	0.29	L	-54.611	1.2	-67.391	5.7	10.9	3.5	4	0.0	195			2.1	EAR
193	2018	6	10	23	23	31.9	0.35	L	-54.987	2.9	-68.038	2.4	8.2	3.9	5	0.1	232			2.2	EAR
194	2018	6	11	3	38	59.8	0.57	L	-54.696	3.0	-67.364	4.7	24.3	1.9	5	0.1	171			2.2	EAR
195	2018	6	11	20	16	35.7	0.41	L	-54.704	2.0	-69.553	2.4	0.0	2.5	5	0.1	238			2.3	EAR
196	2018	6	12	6	8	0.5	1.27	L	-54.731	6.6	-69.669	11.1	13.6	5.8	5	0.5	243			2.2	EAR
197	2018	6	13	8	2	8.5	0.67	R	-57.212	5.2	-67.721	18.9	13.6	4.7	6	0.3	329			2.7	EAR
198	2018	6	14	0	49	47.9	0.76	L	-54.647	3.4	-69.500	5.8	5.3	5.0	5	0.3	219			2.1	EAR
199	2018	6	14	3	44	31.2	0.42	L	-54.615	3.9	-69.632	4.1	15.9	2.3	4	0.1	234			2.1	EAR
200	2018	6	14	12	47	57.4	1.37	R	-54.595	8.1	-69.428	7.0	12.7	8.0	4	0.5	226			2.1	EAR
201	2018	6	14	18	47	7.4	2.34	R	-54.735	21.8	-59.079	25.6	24.7	13.0	6	1.1	256			3.4	EAR
202	2018	6	22	12	8	35.9	0.70	L	-54.637	2.9	-67.796	3.8	5.9	7.9	7	0.3	122			3.8	EAR
203	2018	6	26	1	28	54.5	1.11	R	-56.980	8.6	-67.448	48.1	4.3	7.6	5	0.5	329			3.1	EAR
204	2018	6	26	12	53	17.9	1.14	R	-54.236	40.4	-60.889	17.7	10.5	7.9	4	0.5	350			3.4	EAR
205	2018	6	26	18	27	46.9	1.54	L	-54.530	7.0	-69.519	11.1	3.8	11.2	5	0.6	210			2.5	EAR
206	2018	6	30	17	17	37.3	0.34	R	-54.435	7.4	-66.556	9.7	21.5	3.4	3	0.0	331			1.2	EAR
207	2018	6	30	17	23	58.2	1.48	R	-54.108	11.9	-54.506	23.4	21.6	12.6	5	0.8	303			3.9	EAR
208	2018	7	1	11	26	57.2	0.75	L	-54.367	6.5	-69.438	6.4	0.0	4.7	4	0.3	201			2.3	EAR
209	2018	7	6	12	54	35.8	0.42	R	-53.915	6.5	-63.379	3.7	28.2	3.2	6	0.1	189			2.8	EAR
210	2018	7	7	6	19	57.8	0.67	R	-57.970	7.2	-65.633	53.2	32.1	5.4	5	0.3	341			2.9	EAR
211	2018	7	8	5	31	55.8	0.59	L	-54.776	2.7	-69.366	3.3	0.2	3.6	5	0.2	226			1.6	EAR
212	2018	7	8	23	24	28.3	0.49	L	-54.526	3.4	-69.649	3.2	11.9	3.0	4	0.2	227			1.9	EAR
213	2018	7	8	23	38	45.0	0.90	L	-54.680	4.6	-69.454	7.2	6.0	6.6	4	0.3	233			2.1	EAR
214	2018	7	9	17	26	59.5	0.42	R	-57.251	5.7	-66.053	11.1	9.5	3.0	5	0.1	338			3.1	EAR
215	2018	7	13	15	16	49.1	0.62	R	-57.946	19.3	-66.875	48.2	57.3	18.4	5	0.2	337			3.2	EAR
216	2018	7	18	15	10	9.1	0.39	R	-57.614	4.2	-67.581	40.4	25.4	3.2	4	0.1	350			2.9	EAR
217	2018	7	18	22	0	47.5	0.36	R	-54.806	2.7	-69.907	8.5	6.6	5.2	4	0.1	313			1.2	EAR
218	2018	7	19	19	32	33.8	0.35	R	-55.940	29.5	-62.078	15.5	58.4	10.0	4	0.1	349			1.9	EAR
219	2018	7	24	3	17	18.6	0.46	L	-54.679	2.9	-67.974	3.2	26.4	2.2	4	0.1	155			1.6	EAR
220	2018	7	30	15	49	19.9	0.68	R	-53.947	9.0	-64.273	8.1	30.9	4.5	5	0.3	181			3.4	EAR
221	2018	8	1	16	5	59.3	1.51	R	-52.831	17.9	-72.920	23.9	11.4	8.3	5	0.6	328			2.9	EAR
222	2018	8	1	23	46	25.1	0.52	R	-56.827	4.3	-68.219	18.4	4.5	2.7	4	0.2	346			3.1	EAR



#	Año	M	D	H	M	S	Error	L	Latitud	Error	Longitud	Error	Prof	Error	NST	RMS	GAP	Mc	Fuente	MI	Fuente
223	2018	8	3	10	1	46.7	3.74	D	-54.100	43.4	-59.135	81.3	0.0	86.6	8	1.4	242			3.7	EAR
224	2018	8	4	20	32	59.5	0.39	R	-52.032	6.6	-71.896	18.0	9.6	5.8	5	0.1	326			3.2	EAR
225	2018	8	5	3	19	33.0	1.19	R	-52.710	17.6	-72.874	22.5	16.9	5.7	5	0.5	335			3.2	EAR
226	2018	8	5	23	2	16.9	1.50	R	-54.007	33.6	-70.902	38.6	0.0	26.6	4	0.6	220			2.5	EAR
227	2018	8	5	23	2	32.3	1.00	L	-54.255	7.5	-69.243	17.5	24.0	5.3	4	0.4	297			2.1	EAR
228	2018	8	5	23	37	38.9	0.58	L	-54.039	8.4	-70.052	6.6	5.0	5.4	4	0.2	323			2.2	EAR
229	2018	8	6	20	36	2.0	1.82	L	-54.677	58.0	-67.341	48.6	22.2	20.0	2	0.4	250			0.8	EAR
230	2018	8	8	5	16	27.1	0.61	L	-54.525	7.1	-70.105	17.2	2.2	5.3	3	0.2	326			2.1	EAR
231	2018	8	18	14	41	21.9	1.78	R	-52.048	37.0	-59.954	30.2	5.2	9.2	5	0.9	183			3.4	EAR
232	2018	8	25	10	16	45.9	0.42	L	-54.596	1.9	-67.437	2.4	12.5	4.6	4	0.1	183			1.2	EAR
233	2018	8	27	20	9	19.3	2.67	D	-61.653	11.9	-57.922	54.4	7.6	28.8	11	1.0	167			4.6	EAR
234	2018	9	2	4	11	18.6	2.15	R	-54.673	82.3	-53.209	36.7	20.0	18.5	8	1.5	330			4.1	EAR
235	2018	9	3	20	36	41.0	4.22	D	-60.291	75.5	-32.047	194.4	224.4	125.7	11	1.6	252				
236	2018	9	4	7	26	37.8	0.84	R	-52.540	71.3	-59.040	94.3	13.2	22.3	4	0.4	208			3.3	EAR
237	2018	9	5	5	13	40.5	1.05	R	-52.816	18.6	-60.388	19.1	12.9	8.1	6	0.5	190			3.7	EAR
238	2018	9	6	4	21	54.1	1.11	R	-60.265	76.1	-63.175	221.6	24.4	31.4	7	0.5	185			3.8	EAR
239	2018	9	10	16	3	58.4	0.58	R	-53.042	13.9	-60.377	14.0	21.6	9.6	6	0.2	198			3.3	EAR
240	2018	9	14	14	35	17.0	1.57	L	-54.684	73.9	-67.317	90.5	29.1	13.5	2	0.3	323			2.5	EAR
241	2018	9	14	22	36	54.0	1.13	R	-54.418	10.4	-57.970	23.5	18.8	16.0	4	0.5	265			3.2	EAR
242	2018	9	16	4	53	8.4	1.58	R	-56.823	68.8	-67.131	38.1	32.0	91.5	6	0.7	276			2.9	EAR
243	2018	9	16	9	48	15.8	0.34	R	-54.721	7.2	-69.618	7.0	19.1	6.0	3	0.0	241			2.4	EAR
244	2018	9	18	9	53	29.4	0.58	R	-55.093	22.5	-70.269	27.1	3.3	12.5	4	0.2	277			2.4	EAR
245	2018	9	21	9	12	2.1	0.85	R	-56.547	10.7	-70.533	19.1	30.6	6.6	4	0.3	341			2.9	EAR
246	2018	9	30	16	11	47.6	0.51	R	-54.332	6.3	-65.140	6.3	1.3	5.9	6	0.2	186			2.7	EAR
247	2018	10	6	21	4	27.4	0.97	L	-54.742	4.6	-67.471	9.2	26.4	2.6	3	0.2	236			2.2	EAR
248	2018	10	16	5	46	35.4	1.08	R	-54.247	12.2	-64.478	12.9	3.8	9.3	6	0.4	189			3.2	EAR
249	2018	10	22	23	16	48.8	1.15	R	-58.859	10.5	-66.072	36.1	11.7	9.6	7	0.5	296			3.2	EAR
250	2018	10	24	0	28	32.2	1.04	R	-56.743	11.4	-69.546	25.1	5.9	7.1	6	0.4	317			2.1	EAR
251	2018	10	24	3	5	54.3	1.17	L	-54.814	15.3	-69.563	14.2	0.0	9.5	4	0.5	246			2.1	EAR
252	2018	10	26	13	18	54.3	0.34	L	-54.920	6.5	-69.914	7.3	2.5	2.8	3	0.0	261			0.7	EAR
253	2018	10	26	13	20	36.8	0.64	L	-54.839	7.6	-69.473	23.8	0.0	6.4	2	0.1	348			1.6	EAR
254	2018	10	27	14	0	28.9	0.80	L	-54.621	6.2	-68.052	6.0	0.0	7.3	4	0.3	183			1.4	EAR
255	2018	10	28	14	40	5.9	1.49	R	-53.009	31.8	-60.214	33.3	20.0	11.7	7	0.7	200			2.9	EAR
256	2018	10	29	6	54	24.3	0.91	R	-57.389	6.3	-66.562	19.2	5.7	4.9	9	0.4	282			5.7	EAR
257	2018	10	29	7	1	15.4	1.15	R	-57.481	8.3	-66.614	26.3	22.8	8.8	7	0.5	283			3.9	EAR
258	2018	10	29	8	5	38.0	1.60	R	-57.265	11.8	-66.488	35.8	14.4	12.0	7	0.7	280			3.3	EAR
259	2018	10	29	9	19	18.5	1.74	R	-57.354	12.6	-66.325	39.0	24.4	10.7	6	0.8	281			3.2	EAR

#	Año	M	D	H	M	S	Error	L	Latitud	Error	Longitud	Error	Prof	Error	NST	RMS	GAP	Mc	Fuente	MI	Fuente
260	2018	10	29	11	29	25.4	0.64	R	-57.415	8.7	-65.210	32.9	30.2	4.1	3	0.1	352			3.3	EAR
261	2018	10	29	14	1	39.8	1.44	R	-57.744	9.9	-66.724	35.6	14.0	9.0	6	0.6	287			3.4	EAR
262	2018	10	29	15	41	39.1	0.58	R	-57.514	3.9	-66.570	13.6	6.6	3.6	7	0.2	284			3.3	EAR
263	2018	10	29	20	17	28.9	1.77	R	-57.369	12.1	-66.787	37.3	14.6	13.4	9	0.8	283			5.3	EAR
264	2018	10	29	21	7	21.4	0.92	R	-57.191	6.3	-66.449	17.8	21.1	6.9	8	0.4	279			4.2	EAR
265	2018	10	29	22	32	57.4	0.98	R	-57.262	7.6	-66.208	21.5	9.1	7.4	7	0.4	279			3.1	EAR
266	2018	10	30	0	30	1.4	1.16	R	-57.189	16.3	-65.408	85.5	23.4	9.1	5	0.5	341			2.3	EAR
267	2018	10	30	2	47	2.7	1.46	R	-57.424	12.5	-66.404	34.9	32.0	11.4	6	0.7	282			2.7	EAR
268	2018	10	30	6	2	42.6	1.33	R	-57.510	10.4	-66.304	31.3	12.7	10.2	6	0.6	283			2.5	EAR
269	2018	10	31	12	36	36.1	1.76	R	-57.292	11.9	-66.483	34.7	18.4	13.2	10	0.8	280			4.2	EAR
270	2018	10	31	13	10	2.9	0.98	R	-57.367	7.3	-66.599	22.7	14.3	7.5	6	0.4	282			2.4	EAR
271	2018	10	31	13	28	37.2	0.88	R	-57.264	6.6	-66.505	19.9	25.9	6.7	6	0.4	280			2.3	EAR
272	2018	11	1	2	24	23.1	1.26	R	-57.467	9.5	-66.570	29.8	31.9	9.6	6	0.6	283			2.7	EAR
273	2018	11	1	5	21	3.5	1.71	R	-57.430	13.3	-66.223	39.1	24.1	13.0	7	0.7	282			3.2	EAR
274	2018	11	1	6	5	59.5	1.48	R	-57.235	13.1	-66.295	33.8	7.6	11.4	6	0.6	279			3.1	EAR
275	2018	11	1	6	18	21.5	0.99	R	-57.013	13.8	-65.114	43.8	28.9	6.3	3	0.2	352			3.2	EAR
276	2018	11	1	18	14	47.3	1.43	R	-57.417	11.1	-66.353	33.0	15.0	10.9	6	0.6	282			2.8	EAR
277	2018	11	2	10	15	44.6	1.59	R	-57.059	11.6	-66.644	34.8	21.7	11.9	6	0.7	278			3.2	EAR
278	2018	11	2	10	26	12.5	0.83	R	-54.627	5.6	-69.468	5.6	12.2	5.1	4	0.3	230			2.5	EAR
279	2018	11	2	11	12	5.9	0.80	R	-57.441	6.4	-66.499	15.4	0.0	3.3	6	0.3	283			3.1	EAR
280	2018	11	3	4	49	18.2	1.02	R	-56.983	7.4	-66.212	21.0	30.9	6.2	7	0.4	275			3.2	EAR
281	2018	11	5	18	26	45.0	1.35	R	-57.416	10.4	-66.597	32.0	14.7	10.3	5	0.6	283			2.8	EAR
282	2018	11	6	11	58	13.9	1.29	R	-57.523	9.9	-66.302	30.2	9.6	9.8	7	0.6	283			3.3	EAR
283	2018	11	6	12	11	37.6	1.85	R	-57.803	14.0	-66.535	46.7	10.8	14.4	7	0.8	287			3.6	EAR
284	2018	11	7	2	9	24.7	1.26	R	-57.337	76.7	-66.276	31.2	32.4	97.0	6	0.6	280			2.6	EAR
285	2018	11	7	2	44	16.8	0.84	R	-57.304	7.0	-66.306	19.3	13.2	6.4	4	0.4	280			2.8	EAR
286	2018	11	7	2	48	53.5	1.11	R	-57.129	9.3	-66.035	23.7	20.0	8.4	5	0.5	277			2.6	EAR
287	2018	11	7	11	47	1.8	1.45	R	-57.166	11.2	-66.228	31.3	11.3	10.9	7	0.6	278			2.6	EAR
288	2018	11	8	16	8	4.2	1.09	R	-57.110	8.5	-66.286	23.5	30.6	8.1	6	0.5	277			4.1	EAR
289	2018	11	8	17	38	46.1	1.61	R	-57.611	11.9	-66.391	37.8	7.7	11.6	7	0.7	284			3.5	EAR
290	2018	11	9	5	2	47.9	1.06	R	-57.375	8.4	-66.128	23.9	19.4	8.1	7	0.5	281			3.3	EAR
291	2018	11	9	5	10	50.1	1.27	R	-57.169	10.3	-66.079	27.4	32.0	9.6	6	0.5	278			3.3	EAR
292	2018	11	12	0	28	45.0	2.27	R	-57.296	15.9	-66.598	46.1	15.8	16.0	7	0.7	281			3.0	EAR
293	2018	11	16	7	19	16.0	1.13	R	-57.488	8.7	-66.162	25.7	17.1	8.1	7	0.5	282			4.1	EAR
294	2018	11	16	7	53	6.4	1.25	R	-57.410	9.6	-66.151	27.9	18.6	8.9	7	0.6	281			4.6	EAR
295	2018	11	16	8	5	13.7	1.16	R	-57.578	18.1	-65.301	77.6	4.5	6.4	6	0.5	342			3.6	EAR
296	2018	11	16	10	9	22.3	1.87	R	-57.496	14.5	-66.245	43.4	14.3	14.2	7	0.8	282			3.4	EAR

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297	2018	11	16	10	42	22.1	1.23	R	-57.303	8.8	-66.244	26.7	30.2	6.8	6	0.5	280			3.4	EAR
298	2018	11	16	14	46	29.3	0.53	R	-57.089	4.2	-66.380	11.5	28.5	4.0	5	0.2	277			2.5	EAR
299	2018	11	16	17	10	27.6	1.53	R	-57.342	12.8	-66.143	84.4	26.9	11.9	6	0.7	338			3.5	EAR
300	2018	11	16	17	43	40.4	2.02	R	-57.466	14.8	-66.090	43.0	20.0	14.4	8	0.9	281			4.0	EAR
301	2018	11	16	18	5	23.5	1.15	R	-57.692	8.5	-66.424	27.5	10.3	8.3	7	0.5	285			3.7	EAR
302	2018	11	16	18	22	9.4	1.35	R	-57.368	10.5	-66.426	31.0	6.8	10.2	5	0.6	281			2.5	EAR
303	2018	11	16	18	39	17.3	2.11	R	-57.563	21.8	-67.668	110.7	20.0	16.7	2	0.5	349			2.6	EAR
304	2018	11	17	14	48	3.2	0.76	R	-57.422	9.0	-65.551	48.4	4.0	4.2	6	0.3	341			3.0	EAR
305	2018	11	17	17	46	3.4	1.14	R	-57.431	14.7	-65.432	75.4	10.0	8.8	6	0.5	341			3.0	EAR
306	2018	11	17	18	16	44.3	0.78	R	-57.696	12.3	-65.066	63.9	18.7	6.3	5	0.3	343			2.3	EAR
307	2018	11	17	18	27	11.8	1.52	R	-57.557	12.2	-66.165	35.8	1.2	8.4	6	0.7	283			2.4	EAR
308	2018	11	19	23	37	58.4	1.16	R	-57.455	8.8	-66.509	27.1	19.7	8.8	6	0.5	283			2.7	EAR
309	2018	11	19	23	55	44.6	0.57	R	-57.372	9.7	-65.125	47.2	4.5	3.3	3	0.2	343			2.7	EAR
310	2018	11	20	21	41	20.6	2.03	R	-57.344	14.8	-66.290	41.3	13.1	14.4	7	0.6	281			3.1	EAR
311	2018	11	20	22	30	51.5	0.56	R	-58.455	17.0	-64.137	70.8	39.7	17.7	5	0.2	346			3.7	EAR
312	2018	11	21	1	30	3.3	1.13	R	-57.062	15.1	-65.524	78.1	24.2	8.8	6	0.5	341			3.1	EAR
313	2018	11	21	2	10	10.4	0.98	R	-57.111	6.8	-66.693	43.9	17.4	7.5	6	0.4	334			3.0	EAR
314	2018	11	21	4	23	35.4	0.42	R	-55.173	6.6	-64.693	7.3	32.3	0.0	1	0.1	360			2.2	EAR
315	2018	11	21	4	23	32.0	2.60	R	-54.904	44.5	-70.286	39.4	29.8	19.4	2	0.6	352			2.3	EAR
316	2018	11	21	4	31	59.7	0.79	R	-58.047	18.7	-64.726	88.0	46.0	15.4	4	0.3	345			3.3	EAR
317	2018	11	21	4	38	53.3	0.55	R	-54.254	6.5	-65.170	6.5	12.5	8.2	6	0.2	182			2.7	EAR
318	2018	11	21	23	39	35.8	0.49	R	-55.416	14.2	-63.795	4.0	27.2	3.8	4	0.2	244			2.1	EAR
319	2018	11	21	23	39	38.3	1.49	R	-55.156	36.6	-63.822	12.9	30.3	11.1	5	0.6	233			2.1	EAR
320	2018	11	25	11	29	11.5	0.68	R	-57.299	5.6	-66.156	39.4	0.0	3.0	6	0.3	338			3.2	EAR
321	2018	11	27	18	51	34.2	0.63	R	-54.257	10.9	-53.521	14.1	0.0	4.8	7	0.3	310			3.3	EAR
322	2018	11	28	23	28	41.9	0.89	R	-57.504	6.8	-66.411	21.0	11.5	6.8	6	0.4	283			2.3	EAR
323	2018	12	7	13	13	2.8	1.22	R	-54.892	9.0	-67.466	6.0	13.6	9.1	3	0.3	283			1.5	EAR
324	2018	12	8	5	24	39.6	0.95	R	-54.320	10.4	-58.054	33.9	32.0	7.6	8	0.5	260			4.2	EAR
325	2018	12	8	5	46	33.4	1.26	R	-54.655	18.8	-57.221	20.1	0.0	6.5	7	0.6	276			3.7	EAR
326	2018	12	12	0	30	57.6	0.78	R	-50.458	5.2	-74.586	30.7	0.0	12.8	8	0.3	242			4.8	EAR
327	2018	12	14	13	28	31.2	0.94	R	-50.615	29.0	-74.878	39.0	14.6	6.5	6	0.4	342			3.5	EAR
328	2018	12	15	6	36	15.7	1.20	R	-54.482	80.6	-57.551	170.1	0.0	50.7	4	0.6	270			3.0	EAR
329	2018	12	20	21	33	18.6	1.54	R	-56.633	10.2	-67.113	30.6	32.0	11.2	7	0.6	273			3.1	EAR
330	2018	12	23	23	28	3.8	1.09	R	-54.674	20.8	-67.317	23.0	23.8	10.2	3	0.2	281			2.0	EAR
331	2018	12	26	14	55	24.4	1.37	R	-53.847	67.0	-62.483	54.1	14.3	80.2	5	0.6	199			2.5	EAR
332	2018	12	27	5	3	5.2	2.66	R	-57.805	20.0	-66.498	68.4	24.7	16.9	5	1.2	287			3.1	EAR
333	2018	12	27	16	42	49.9	0.62	R	-54.930	15.2	-62.604	6.7	16.5	3.8	3	0.2	232			2.4	EAR

#	Año	M	D	H	M	S	Error	L	Latitud	Error	Longitud	Error	Prof	Error	NST	RMS	GAP	Mc	Fuente	MI	Fuente
334	2018	12	28	22	41	41.5	0.69	R	-53.730	11.5	-62.640	14.6	10.1	3.9	6	0.3	325			3.1	EAR
335	2018	12	29	5	44	50.3	1.26	R	-53.760	20.1	-59.470	18.9	0.0	7.7	7	0.6	230			3.3	EAR
336	2018	12	31	14	5	34.2	0.84	R	-51.031	13.9	-72.581	21.6	26.2	7.2	6	0.4	330			3.4	EAR
337	2019	1	16	5	53	48.5	0.75	R	-56.299	34.4	-69.357	18.4	32.0	42.2	6	0.3	277			3.1	EAR
338	2019	1	18	18	2	45.5	0.95	R	-51.069	13.3	-72.572	15.7	27.9	8.0	6	0.4	315			3.4	EAR
339	2019	1	19	6	56	48.5	0.30	R	-54.677	0.4	-67.560	4.8	5.0	0.0	1	0.0	360			1.5	EAR
340	2019	1	19	16	25	0.8	0.77	R	-53.518	14.9	-63.799	22.5	27.3	5.9	4	0.3	334			2.2	EAR
341	2019	1	26	15	40	51.7	0.34	R	-54.456	5.6	-57.680	6.0	0.0	1.7	6	0.1	269			3.6	EAR
342	2019	1	30	19	5	52.2	0.70	R	-55.084	13.2	-69.971	19.5	15.7	17.8	3	0.3	271			2.3	EAR
343	2019	1	31	3	42	22.4	0.31	L	-54.601	1.9	-68.068	4.0	19.9	3.4	4	0.0	155			2.8	EAR
344	2019	1	31	3	42	22.4	0.31	L	-54.601	1.9	-68.068	4.0	19.9	3.4	4	0.0	155			2.8	EAR
345	2019	2	8	14	32	50.7	0.30	L	-54.797	2.4	-67.249	2.0	0.0	0.0	1	0.0	360			0.6	EAR
346	2019	2	9	2	37	41.5	0.76	L	-53.046	5.7	-71.548	9.5	20.9	3.0	7	0.3	195			4.5	EAR
347	2019	2	17	10	26	42.1	1.05	R	-50.850	20.1	-76.142	32.5	0.0	6.8	7	0.5	328			4.4	EAR
348	2019	2	17	15	35	20.8	0.55	R	-50.661	11.8	-75.262	14.0	7.9	4.7	6	0.2	342			3.6	EAR
349	2019	2	22	22	23	47.6	0.59	L	-54.376	4.3	-69.194	7.5	0.0	6.9	4	0.2	238			1.7	EAR
350	2019	3	6	21	49	53.4	1.03	L	-56.156	38.9	-68.838	24.5	0.0	30.3	5	0.4	278			2.9	EAR
351	2019	3	7	15	39	28.9	1.03	L	-53.275	46.3	-68.887	149.4	32.1	17.7	3	0.4	186			2.4	EAR
352	2019	3	18	20	8	43.2	0.60	L	-54.623	19.5	-67.450	37.7	9.4	30.9	3	0.1	199			2.1	EAR
353	2019	3	20	0	42	47.8	0.99	R	-54.315	17.6	-61.007	20.8	0.7	13.5	4	0.5	223			2.9	EAR
354	2019	3	31	6	51	27.4	0.39	L	-54.607	1.9	-67.526	13.6	6.1	8.1	3	0.1	158			2.4	EAR
355	2019	4	1	6	26	45.1	0.30	R	-54.253	4.6	-64.806	8.3	0.0	0.0	1	0.0	360			2.2	EAR
356	2019	4	2	13	17	37.7	0.88	R	-51.238	10.2	-72.798	24.7	20.0	5.8	8	0.4	301			4.7	EAR
357	2019	4	2	17	19	46.9	0.37	L	-54.813	1.8	-69.357	2.6	7.5	1.9	4	0.1	229			3.1	EAR
358	2019	4	3	1	49	6.4	1.21	R	-51.129	19.3	-72.777	23.4	18.9	8.2	7	0.5	326			3.4	EAR
359	2019	4	5	17	44	15.8	1.06	R	-50.114	9.8	-72.469	14.7	28.7	7.4	4	0.5	323			3.4	EAR
360	2019	4	9	11	41	55.4	0.82	R	-53.404	3.7	-72.563	7.7	16.9	4.4	6	0.3	242			3.3	EAR
361	2019	4	9	11	50	22.2	0.61	R	-53.397	5.9	-72.636	9.1	24.0	4.0	5	0.2	248			3.0	EAR
362	2019	4	10	9	29	13.3	1.70	L	-54.649	9.6	-67.232	41.5	30.6	4.9	4	0.7	252			2.3	EAR
363	2019	4	14	1	33	35.3	0.35	R	-56.055	29.1	-70.547	28.2	32.1	26.8	4	0.1	304			2.5	EAR
364	2019	4	14	16	27	7.1	1.05	R	-53.860	36.9	-60.520	30.9	58.9	21.9	6	0.5	220			3.2	EAR
365	2019	4	22	16	16	29.3	0.37	L	-55.453	14.2	-70.047	15.5	5.7	8.9	4	0.1	281			1.9	EAR
366	2019	4	24	17	22	29.6	0.78	L	-55.302	5.8	-66.968	24.7	11.1	3.9	4	0.3	334			1.5	EAR
367	2019	4	26	5	58	11.0	0.83	R	-54.625	26.4	-64.006	17.9	0.0	10.0	4	0.3	207			2.2	EAR
368	2019	4	26	22	13	10.9	1.41	R	-50.458	21.1	-74.119	38.5	17.9	12.3	7	0.6	315			3.4	EAR
369	2019	4	29	8	9	51.6	0.48	R	-53.038	4.8	-73.778	10.3	1.7	2.9	6	0.2	270			2.8	EAR
370	2019	4	30	4	27	7.2	0.45	R	-54.339	5.7	-65.196	64.4	0.0	24.4	5	0.1	305			2.0	EAR

#	Año	M	D	H	M	S	Error	L	Latitud	Error	Longitud	Error	Prof	Error	NST	RMS	GAP	Mc	Fuente	MI	Fuente
371	2019	5	1	21	12	26.1	0.45	R	-54.033	9.0	-62.886	7.9	16.2	6.9	4	0.2	197			3.0	EAR
372	2019	5	9	8	26	38.8	0.61	R	-57.465	5.0	-66.197	14.4	32.0	4.7	6	0.3	282			3.1	EAR
373	2019	5	12	23	38	8.8	0.46	R	-54.754	8.1	-69.820	10.7	16.6	8.6	4	0.1	239			2.4	EAR
374	2019	5	16	7	51	21.2	0.52	R	-56.246	9.9	-70.366	23.1	5.7	5.3	3	0.2	338			2.4	EAR
375	2019	5	25	14	6	57.7	2.38	L	-54.401	71.4	-64.221	31.4	6.1	20.2	3	1.0	338			2.3	EAR
376	2019	5	25	14	39	57.4	0.30	L	-54.543	4.3	-64.843	8.4	10.0	0.0	1	0.0	360			1.9	EAR
377	2019	5	30	10	36	55.0	0.42	L	-54.964	10.9	-69.538	13.0	8.8	11.3	4	0.1	245			1.8	EAR
378	2019	6	5	2	36	15.8	0.34	L	-54.397	4.1	-69.411	4.6	22.5	7.7	3	0.0	194			2.1	EAR
379	2019	6	6	18	31	14.1	1.32	R	-55.106	19.0	-59.823	13.4	47.2	22.4	5	0.6	251			3.7	EAR
380	2019	6	7	10	0	26.2	2.19	R	-55.575	40.1	-59.260	29.4	4.5	13.5	6	1.1	263			3.4	EAR
381	2019	6	12	5	31	31.9	0.46	L	-55.520	24.5	-70.863	37.0	28.4	26.6	4	0.1	295			2.8	EAR
382	2019	6	12	14	34	26.6	0.34	L	-54.425	6.1	-69.630	5.7	22.7	5.7	3	0.0	218			2.2	EAR
383	2019	6	12	19	50	14.5	1.27	L	-54.718	11.2	-69.710	13.4	27.1	12.8	4	0.5	232			2.3	EAR
384	2019	7	12	15	0	31.3	1.19	R	-57.483	32.2	-69.640	33.3	8.7	25.0	3	0.6	292			3.7	EAR
385	2019	7	17	6	6	50.0	1.35	R	-53.058	17.1	-76.671	19.7	46.8	17.1	7	0.6	310			3.0	EAR
386	2019	7	25	8	37	38.4	0.46	R	-52.938	4.9	-72.408	5.6	7.7	4.1	4	0.1	243			3.4	EAR
387	2019	8	1	8	54	34.2	1.81	R	-58.073	24.0	-63.771	39.5	31.9	15.2	6	0.9	287			3.3	EAR
388	2019	8	21	22	43	6.6	1.52	L	-54.518	11.2	-64.655	21.5	32.0	8.1	5	0.6	315			2.9	EAR
389	2019	8	22	22	17	0.6	1.02	R	-52.967	5.9	-74.111	13.5	19.6	7.3	7	0.5	282			3.0	EAR
390	2019	8	24	23	54	3.9	0.29	L	-54.589	0.8	-67.351	4.1	14.5	1.7	4	0.0	216			2.6	EAR
391	2019	8	26	13	40	53.2	0.52	L	-54.269	7.1	-64.795	6.6	1.8	5.5	5	0.2	187			2.0	EAR
392	2019	8	29	6	23	10.1	1.57	R	-57.334	17.9	-66.428	59.4	0.0	12.3	6	0.7	336			3.4	EAR
393	2019	9	2	8	28	25.8	0.34	R	-53.810	7.7	-70.515	13.1	15.1	3.1	3	0.0	318			2.5	EAR
394	2019	9	3	23	27	30.3	1.38	R	-54.016	23.1	-60.970	16.4	17.7	11.1	7	0.6	216			3.3	EAR
395	2019	9	4	5	41	20.0	0.72	R	-53.624	12.3	-61.584	8.9	9.0	4.8	5	0.3	198			3.1	EAR
396	2019	9	4	14	13	35.0	0.49	R	-54.021	16.3	-61.107	13.5	19.6	3.9	4	0.2	218			3.1	EAR
397	2019	9	5	0	47	4.8	1.12	L	-54.628	12.2	-69.569	6.6	10.7	10.4	4	0.4	233			2.1	EAR
398	2019	9	5	16	6	9.8	1.28	R	-57.319	10.8	-66.451	26.6	8.7	10.1	8	0.6	280			4.4	EAR
399	2019	9	5	16	6	9.8	1.28	R	-57.319	10.8	-66.451	26.6	8.7	10.1	8	0.6	280			4.4	EAR
400	2019	9	8	23	7	29.8	1.33	L	-54.693	6.5	-69.367	8.4	6.0	7.1	4	0.5	219			2.0	EAR
401	2019	9	9	16	33	52.2	0.36	L	-54.587	5.1	-67.455	49.2	6.1	22.8	3	0.1	182			2.2	EAR
402	2019	9	12	18	34	7.8	2.24	R	-53.504	56.9	-59.871	35.6	3.3	10.3	4	1.1	347			3.4	EAR
403	2019	9	17	22	51	42.4	0.78	L	-54.625	5.0	-69.690	6.6	2.6	7.5	4	0.3	236			2.3	EAR
404	2019	9	19	13	11	59.8	0.68	L	-54.960	4.5	-67.193	17.9	26.2	1.8	4	0.2	295			2.7	EAR
405	2019	9	22	18	55	30.7	0.31	L	-54.711	13.5	-67.535	27.8	16.8	13.3	3	0.0	221			1.8	EAR
406	2019	9	22	20	42	55.0	0.34	L	-54.711	3.1	-67.570	9.7	3.5	5.8	3	0.0	219			2.0	EAR
407	2019	9	22	21	51	48.6	0.44	L	-54.601	1.4	-67.438	11.9	4.0	5.5	5	0.1	175			2.0	EAR

#	Año	M	D	H	M	S	Error	L	Latitud	Error	Longitud	Error	Prof	Error	NST	RMS	GAP	Mc	Fuente	MI	Fuente
408	2019	10	1	7	47	20.7	3.65	R	-54.858	33.1	-58.942	38.7	19.1	19.0	8	1.8	256			3.5	EAR
409	2019	10	11	16	11	35.3	0.52	L	-54.748	6.7	-69.539	7.9	0.0	4.5	2	0.0	348			2.3	EAR
410	2019	10	11	23	48	46.2	0.74	L	-54.576	2.3	-67.008	9.8	10.5	4.4	4	0.3	262			2.7	EAR
411	2019	10	15	6	24	23.7	0.46	R	-53.914	8.0	-63.238	9.9	18.6	3.5	4	0.2	321			2.8	EAR
412	2019	10	16	16	46	28.0	0.90	R	-58.108	8.5	-67.004	31.8	5.6	4.2	5	0.4	303			2.9	EAR
413	2019	10	17	16	58	20.2	2.61	R	-45.562	15.4	-68.213	18.4	0.0	9.3	9	1.4	256			5.0	EAR
414	2019	10	24	20	29	31.2	0.69	L	-54.253	5.4	-69.204	13.8	0.0	5.0	4	0.3	233			2.2	EAR
415	2019	10	25	12	12	48.8	0.73	L	-55.048	29.4	-69.624	50.4	2.1	18.3	4	0.3	281			2.3	EAR
416	2019	10	29	13	23	59.7	0.93	L	-54.280	5.8	-65.071	10.3	0.0	7.2	5	0.4	184			3.1	EAR
417	2019	11	25	23	52	22.7	0.47	L	-54.650	2.0	-69.345	4.3	3.8	2.6	4	0.2	256			2.8	EAR
418	2019	12	1	3	22	9.4	0.56	R	-57.223	4.4	-66.892	35.3	19.9	4.3	5	0.2	333			2.8	EAR
419	2019	12	1	20	54	21.3	0.68	R	-57.129	8.9	-66.907	54.0	23.1	4.3	3	0.3	352			2.6	EAR
420	2019	12	2	0	0	56.3	2.13	L	-54.619	11.4	-67.517	13.2	0.0	16.7	4	0.9	150			1.6	EAR
421	2019	12	3	12	12	11.2	0.49	L	-54.745	2.3	-69.533	4.8	0.3	3.0	4	0.2	266			2.3	EAR
422	2019	12	3	21	48	18.5	0.34	R	-54.174	5.0	-66.301	8.1	10.6	3.5	3	0.0	305			2.4	EAR
423	2019	12	4	23	54	16.1	0.59	L	-54.574	2.7	-68.251	6.3	0.0	3.9	4	0.2	208			2.1	EAR
424	2019	12	5	1	43	9.3	0.84	R	-53.646	16.5	-62.305	14.7	18.7	6.1	5	0.4	191			3.6	EAR
425	2019	12	11	6	51	9.0	2.13	D	-64.389	29.9	-53.480	47.1	288.2	28.6	6	0.8	261			4.2	EAR
426	2019	12	12	7	25	43.2	1.86	L	-54.753	9.7	-69.686	17.9	0.7	11.4	3	0.8	280			2.4	EAR
427	2019	12	12	22	20	30.2	0.83	L	-52.861	15.1	-66.087	36.3	5.7	16.2	4	0.3	290			2.6	EAR
428	2019	12	13	10	44	47.1	0.51	L	-53.642	4.2	-66.593	6.3	0.0	8.2	3	0.2	311			2.2	EAR
429	2019	12	17	5	25	47.6	0.67	L	-54.193	7.1	-65.056	95.7	0.0	38.6	4	0.3	305			2.6	EAR
430	2019	12	19	21	14	28.9	0.41	L	-54.644	1.0	-67.401	8.0	7.8	6.3	3	0.1	172			2.6	EAR
431	2019	12	21	20	34	50.2	0.72	R	-57.046	18.1	-65.932	71.0	27.3	4.2	3	0.3	354			4.7	EAR
432	2019	12	23	20	7	25.4	0.39	L	-53.919	2.1	-69.962	4.3	0.0	2.6	3	0.1	264			2.6	EAR
433	2019	12	27	3	33	31.0	0.38	L	-54.645	1.0	-67.434	8.5	6.0	13.6	3	0.1	158			2.3	EAR
434	2019	12	29	22	10	18.1	0.40	L	-54.718	3.8	-67.378	18.8	15.4	4.2	3	0.1	184			1.3	EAR
435	2020	1	1	15	18	8.1	0.47	L	-56.009	33.1	-70.744	47.4	24.7	38.1	4	0.2	316			1.9	EAR
436	2020	1	3	0	34	41.0	0.82	L	-56.153	8.7	-68.788	29.2	73.3	15.1	3	0.3	326			2.8	EAR
437	2020	1	7	21	8	24.5	0.54	L	-54.677	3.9	-67.945	15.3	45.0	20.0	3	0.2	202			2.2	EAR
438	2020	1	8	21	3	25.3	1.86	R	-50.444	9.0	-74.750	35.8	12.9	13.4	4	0.8	250			3.8	EAR
439	2020	1	23	0	24	20.5	0.51	L	-55.513	7.7	-70.258	11.1	45.7	111.6	4	0.2	286			2.5	EAR
440	2020	1	23	0	38	7.4	0.77	L	-55.286	7.4	-70.052	6.7	15.0	4.6	4	0.3	274			2.3	EAR
441	2020	1	23	15	5	14.0	0.92	L	-55.242	19.3	-69.843	29.8	0.0	20.3	4	0.4	268			2.3	EAR
442	2020	1	24	7	0	11.4	1.27	R	-49.951	10.7	-71.491	14.6	30.2	0.0	6	0.6	313			3.2	EAR
443	2020	1	24	23	8	26.9	1.06	D	-52.222	62.1	-57.081	33.8	120.1	365.0	5	0.4	342			3.6	EAR
444	2020	1	27	14	31	26.2	0.74	L	-55.374	8.9	-70.053	8.9	32.2	0.0	3	0.4	284			2.5	EAR

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445	2020	1	27	21	44	1.2	0.56	R	-54.914	11.5	-74.680	10.3	30.4	0.0	4	0.3	335			3.3	EAR
446	2020	1	28	0	0	17.5	1.68	L	-54.769	8.6	-69.532	12.9	0.0	9.8	4	0.7	242			2.4	EAR
447	2020	1	28	0	37	14.9	0.30	L	-54.593	5.0	-67.399	3.4	15.0	0.0	1	0.0	360			1.0	EAR
448	2020	1	28	12	14	46.7	0.30	L	-54.625	2.0	-67.118	8.0	20.0	0.0	1	0.0	360			1.3	EAR
449	2020	1	28	12	30	28.0	0.30	L	-54.720	1.2	-67.499	4.6	5.0	0.0	1	0.0	360			0.8	EAR
450	2020	1	29	5	22	30.4	0.54	R	-54.469	27.0	-58.933	8.8	23.4	4.7	4	0.2	343			3.7	EAR
451	2020	1	29	13	40	50.3	0.59	L	-55.230	12.5	-69.982	5.9	25.6	4.5	3	0.2	277			2.7	EAR
452	2020	2	3	12	25	55.8	1.99	R	-53.110	17.2	-64.378	17.9	32.4	85.5	10	0.9	153			4.2	EAR
453	2020	2	4	14	47	1.5	1.68	D	-61.151	18.9	-73.984	53.3	25.0	0.0	6	0.8	320			3.8	EAR
454	2020	2	6	8	37	36.2	1.33	L	-55.259	21.2	-69.922	23.9	13.4	21.0	4	0.5	271			2.4	EAR
455	2020	2	7	18	52	50.3	1.23	D	-59.413	6.6	-60.114	19.8	10.0	0.0	11	0.5	151			3.6	EAR
456	2020	2	8	14	32	49.8	2.76	D	-61.157	110.6	-23.644	35.8	9.9	0.0	10	1.2	344			5.3	EAR
457	2020	2	8	17	2	5.9	2.08	R	-55.786	29.5	-61.803	17.9	7.8	13.7	5	0.9	252			3.2	EAR
458	2020	2	11	5	31	46.0	2.56	L	-55.529	79.0	-69.920	92.1	0.0	66.4	3	1.1	288			2.4	EAR
459	2020	2	11	15	32	24.4	2.26	R	-56.606	79.2	-68.955	50.5	0.0	59.8	7	1.0	280			3.1	EAR
460	2020	2	12	17	22	33.7	0.49	L	-54.635	8.2	-66.755	8.4	16.7	5.8	3	0.2	293			2.4	EAR
461	2020	2	15	6	9	5.9	0.76	L	-54.594	2.3	-67.246	13.1	13.2	5.3	3	0.3	255			1.1	EAR
462	2020	2	23	3	38	59.1	1.54	R	-53.515	24.7	-57.518	35.7	10.0	0.0	6	1.0	265			3.6	EAR
463	2020	3	10	3	56	26.8	0.93	R	-57.811	13.8	-65.718	66.3	0.0	4.3	5	0.4	341			2.9	EAR
464	2020	3	10	6	23	20.9	0.54	L	-55.283	11.1	-69.836	10.0	26.8	10.5	3	0.2	277			2.4	EAR
465	2020	3	10	7	8	50.7	0.93	R	-55.669	8.9	-70.356	17.7	32.2	0.0	4	0.5	297			2.6	EAR
466	2020	3	10	7	47	40.6	0.34	L	-55.157	11.7	-69.745	10.6	32.0	15.3	3	0.0	270			2.2	EAR
467	2020	3	10	18	21	51.7	0.34	L	-54.558	3.1	-69.349	20.4	0.4	18.9	2	0.0	310			2.0	EAR
468	2020	3	10	18	24	59.3	0.80	R	-57.673	5.7	-67.144	39.9	10.0	3.2	5	0.3	335			2.9	EAR
469	2020	3	11	6	1	2.0	1.17	R	-52.576	4.8	-73.281	14.3	9.5	6.5	6	0.5	260			3.1	EAR
470	2020	3	11	12	9	45.8	0.42	R	-52.801	5.1	-65.200	7.9	25.6	3.1	3	0.1	202			2.1	EAR
471	2020	3	11	12	15	52.8	0.31	L	-54.096	7.7	-69.278	3.9	23.0	4.7	3	0.0	171			1.9	EAR
472	2020	3	11	23	45	12.9	1.58	R	-57.887	10.6	-67.262	33.2	26.3	9.4	5	0.7	290			2.4	EAR
473	2020	3	12	2	32	16.0	0.65	L	-55.290	6.3	-70.105	7.4	22.7	0.0	3	0.3	282			1.9	EAR
474	2020	3	30	6	44	26.5	2.91	D	-55.993	35.0	-59.948	48.5	8.7	18.0	6	1.1	238			3.7	EAR
475	2020	4	1	16	53	31.1	1.08	L	-54.638	10.2	-69.981	12.9	10.0	0.0	3	0.5	248			2.2	EAR
476	2020	4	1	17	3	16.3	0.28	L	-54.075	2.8	-65.051	4.9	10.0	0.0	4	0.1	327			2.3	EAR
477	2020	4	3	4	45	35.5	0.85	L	-54.266	6.7	-69.618	4.5	9.6	5.5	7	0.3	189			2.7	EAR
478	2020	4	5	16	11	5.9	0.31	L	-55.812	4.3	-68.632	4.6	9.1	2.0	4	0.0	297			2.8	EAR
479	2020	4	8	21	31	20.4	1.49	L	-55.396	8.9	-70.170	16.2	11.9	7.8	4	0.6	286			2.7	EAR
480	2020	4	8	23	33	54.4	0.99	L	-55.619	25.5	-70.219	27.3	32.1	25.0	4	0.4	290			2.8	EAR
481	2020	4	9	15	10	2.4	0.39	L	-54.688	1.9	-69.494	2.3	0.3	2.7	3	0.1	235			2.4	EAR

#	Año	M	D	H	M	S	Error	L	Latitud	Error	Longitud	Error	Prof	Error	NST	RMS	GAP	Mc	Fuente	MI	Fuente
482	2020	4	11	8	6	47.9	0.34	L	-54.712	0.6	-67.573	1.8	6.2	0.0	2	0.1	255			1.2	EAR
483	2020	4	20	1	3	4.1	0.57	L	-55.270	13.0	-69.908	17.2	5.5	11.8	3	0.2	278			2.7	EAR
484	2020	4	20	2	54	4.1	0.35	R	-59.677	54.6	-68.697	52.7	14.4	44.2	4	0.1	341			3.6	EAR
485	2020	4	23	0	3	47.8	0.52	L	-54.699	3.2	-69.568	5.1	0.0	5.3	3	0.2	238			2.4	EAR
486	2020	4	23	0	7	44.5	0.51	R	-56.804	85.7	-68.498	15.9	0.0	52.7	5	0.2	321			3.1	EAR
487	2020	4	23	0	14	58.3	0.85	R	-57.485	8.1	-68.051	34.2	62.4	15.5	4	0.4	330			3.2	EAR
488	2020	4	23	7	37	5.8	0.63	L	-54.829	12.0	-69.860	29.6	0.0	15.8	4	0.2	245			2.4	EAR
489	2020	4	29	13	1	50.7	0.34	L	-54.865	2.0	-67.184	10.9	14.8	1.2	3	0.0	283			1.0	EAR
490	2020	5	2	5	33	42.8	1.69	R	-51.055	25.5	-72.746	34.4	31.6	11.5	6	0.7	323			3.1	EAR
491	2020	5	5	4	54	27.1	0.42	L	-54.746	6.4	-69.783	11.1	5.9	6.1	3	0.1	248			2.3	EAR
492	2020	5	7	4	31	37.2	0.64	L	-54.756	3.3	-69.335	4.2	0.0	4.3	5	0.2	223			2.2	EAR
493	2020	5	7	4	38	9.5	5.03	L	-54.449	28.9	-71.684	60.0	10.0	23.3	4	2.1	266			2.5	EAR
494	2020	5	8	14	6	12.8	1.96	R	-50.826	27.1	-72.906	45.5	27.4	14.0	5	0.8	336			3.2	EAR
495	2020	5	8	20	35	1.3	0.48	L	-54.629	1.2	-67.525	7.7	11.8	10.2	3	0.2	149			1.2	EAR
496	2020	5	8	20	43	6.4	0.46	R	-54.845	4.6	-72.675	7.5	9.1	3.7	3	0.2	312			2.7	EAR
497	2020	5	9	21	41	19.8	0.63	L	-54.751	3.5	-69.307	6.6	4.8	6.5	3	0.2	236			2.0	EAR
498	2020	5	10	13	44	18.3	1.15	L	-54.730	15.5	-70.243	19.8	31.5	17.3	4	0.5	247			2.3	EAR
499	2020	5	10	14	35	27.8	0.81	L	-54.394	9.2	-71.067	12.3	7.4	8.0	5	0.3	243			2.1	EAR
500	2020	5	11	20	10	32.0	0.93	L	-54.767	6.1	-70.065	11.1	22.9	8.2	4	0.4	258			2.4	EAR
501	2020	5	12	3	24	54.5	0.75	L	-54.385	4.6	-67.354	14.1	6.0	13.1	5	0.3	214			2.5	EAR
502	2020	5	12	3	32	25.1	0.31	L	-54.764	1.8	-69.422	3.3	0.0	3.2	3	0.0	239			2.4	EAR
503	2020	5	15	22	37	2.4	0.35	L	-54.594	2.6	-67.591	15.8	12.9	2.0	3	0.1	212			2.1	EAR
504	2020	5	17	1	58	57.7	1.29	R	-52.628	11.9	-72.444	22.5	3.9	7.3	5	0.5	227			2.8	EAR
505	2020	5	17	10	0	52.8	1.32	R	-57.320	9.5	-67.545	67.2	5.3	6.4	4	0.6	334			3.0	EAR
506	2020	5	18	4	36	6.4	0.63	L	-54.665	3.3	-69.413	3.6	0.0	6.7	3	0.2	218			2.1	EAR
507	2020	5	26	14	37	21.6	0.99	R	-54.445	7.7	-54.857	23.2	10.0	0.0	7	0.6	297			4.2	EAR
508	2020	5	28	21	15	19.7	0.57	L	-54.787	8.3	-70.102	14.2	17.9	12.3	3	0.2	260			1.1	EAR
509	2020	6	7	1	19	48.0	0.37	R	-54.632	13.7	-69.630	18.6	9.6	11.9	3	0.1	305			2.6	EAR
510	2020	6	7	1	23	38.5	1.69	R	-54.700	10.5	-69.287	16.9	0.0	12.9	3	0.7	271			2.4	EAR
511	2020	6	7	1	35	48.4	0.61	R	-54.694	3.0	-69.423	7.1	0.0	3.8	3	0.2	273			2.4	EAR
512	2020	6	17	18	21	49.3	0.74	R	-56.421	11.5	-58.797	7.8	10.0	3.9	7	0.4	281			3.8	EAR
513	2020	6	23	5	26	45.1	1.14	R	-50.746	17.3	-72.802	24.4	25.9	9.9	6	0.5	325			3.8	EAR
514	2020	6	30	22	9	0.1	0.84	R	-54.489	24.5	-61.291	23.2	53.1	17.0	4	0.4	338			2.9	EAR
515	2020	6	30	23	11	3.1	0.61	R	-54.437	4.5	-69.871	4.9	5.8	6.0	3	0.2	229			2.0	EAR
516	2020	7	1	2	46	21.1	0.79	L	-54.756	3.9	-69.374	4.7	0.0	5.5	3	0.3	237			2.1	EAR
517	2020	7	2	9	41	2.3	0.34	L	-55.508	17.4	-69.818	14.0	24.1	13.4	3	0.0	286			2.3	EAR
518	2020	7	2	9	49	15.3	0.34	L	-54.584	5.1	-69.524	2.6	10.8	4.7	3	0.1	228			1.8	EAR



#	Año	M	D	H	M	S	Error	L	Latitud	Error	Longitud	Error	Prof	Error	NST	RMS	GAP	Mc	Fuente	MI	Fuente
519	2020	7	3	8	44	51.2	0.70	L	-54.957	8.2	-69.158	6.4	18.1	8.3	3	0.3	249			2.2	EAR
520	2020	7	3	13	42	27.8	2.72	D	-54.026	31.1	-47.696	45.0	10.1	0.0	3	1.3	332			4.5	EAR
521	2020	7	11	14	44	55.6	0.66	L	-54.533	3.2	-67.275	13.0	9.7	3.2	4	0.2	228			1.1	EAR
522	2020	7	16	0	50	44.3	0.49	R	-54.406	18.1	-71.649	79.6	16.3	46.6	3	0.2	314			2.4	EAR
523	2020	7	20	2	22	18.6	0.85	L	-54.489	7.9	-67.590	21.0	6.1	11.4	3	0.3	180			1.7	EAR
524	2020	7	27	14	57	17.1	0.64	L	-54.119	17.8	-69.814	4.9	9.0	11.2	3	0.2	193			2.4	EAR
525	2020	7	29	12	35	31.2	0.97	L	-54.318	9.8	-69.334	7.0	9.5	8.0	4	0.4	197			2.3	EAR
526	2020	7	29	13	12	3.9	2.16	L	-54.663	13.6	-69.621	20.5	0.0	21.7	3	0.9	237			2.6	EAR
527	2020	7	30	7	9	31.2	1.50	R	-54.783	26.3	-53.959	27.8	10.0	8.0	5	0.9	305			4.7	EAR
528	2020	8	18	0	24	31.7	0.31	R	-55.587	3.6	-70.751	4.9	3.8	2.7	4	0.0	299			3.0	EAR
529	2020	8	23	4	0	33.1	0.41	R	-54.241	11.9	-62.466	8.8	22.1	5.9	4	0.1	211			3.2	EAR
530	2020	8	23	4	22	51.3	0.50	R	-54.307	18.3	-62.857	254.8	0.0	94.5	4	0.2	331			4.4	EAR
531	2020	8	23	7	59	29.9	0.37	R	-53.709	10.3	-63.537	7.2	7.7	2.5	4	0.1	184			3.2	EAR
532	2020	8	27	20	55	1.9	3.46	R	-54.205	44.8	-62.262	27.6	2.1	13.5	5	1.5	212			3.1	EAR
533	2020	8	27	21	0	50.6	1.25	R	-54.946	21.9	-61.887	10.9	22.5	8.1	5	0.6	236			3.2	EAR
534	2020	8	29	12	46	44.0	0.96	D	-64.171	407.0	-57.425	328.1	93.8	102.7	5	0.4	323			4.7	EAR
535	2020	8	29	12	58	15.1	1.56	R	-54.217	20.3	-61.628	12.0	6.0	8.0	5	0.7	218			2.1	EAR
536	2020	8	30	10	32	2.6	0.30	D	-63.214	4.4	-68.029	54.1	15.0	0.0	1	0.0	360			4.2	EAR
537	2020	9	9	8	1	46.5	1.09	L	-54.673	17.8	-67.324	43.0	22.3	11.6	2	0.2	268			1.3	EAR
538	2020	9	9	9	21	24.2	0.42	L	-54.644	11.4	-66.640	5.5	15.8	5.9	4	0.1	305			2.7	EAR
539	2020	9	9	9	27	51.6	0.32	L	-54.735	8.1	-66.584	5.3	18.5	3.4	4	0.1	316			2.4	EAR
540	2020	9	20	11	32	21.2	1.33	D	-53.970	49.2	-58.230	86.0	8.8	61.0	5	0.5	256			3.8	EAR
541	2020	9	20	11	38	48.5	0.40	L	-54.522	2.6	-69.513	3.4	0.6	4.0	3	0.1	222			2.6	EAR
542	2020	9	26	20	13	18.5	0.95	L	-54.708	1.8	-67.632	5.5	10.6	0.0	2	0.3	253			1.8	EAR
543	2020	9	27	3	51	28.9	1.23	L	-54.695	19.7	-67.326	18.9	22.9	8.1	2	0.3	352			1.5	EAR
544	2020	9	27	5	16	48.8	1.72	L	-54.575	6.5	-67.140	22.5	12.3	6.7	3	0.7	275			2.1	EAR
545	2020	9	30	21	48	35.4	0.85	R	-57.172	23.3	-56.222	17.3	11.3	0.0	5	0.6	298			4.1	EAR
546	2020	10	8	0	7	27.4	1.83	L	-54.271	15.5	-64.755	13.2	5.1	8.0	5	0.8	194			2.6	EAR
547	2020	10	8	2	26	37.2	0.55	L	-56.941	23.6	-66.749	14.9	15.5	25.2	5	0.2	277			2.9	EAR
548	2020	10	8	18	31	40.8	0.72	L	-54.973	23.3	-67.754	42.5	8.9	24.3	3	0.3	265			1.7	EAR
549	2020	10	10	1	13	6.5	0.89	L	-54.535	2.9	-67.020	16.0	5.9	7.5	3	0.3	284			3.3	EAR
550	2020	10	10	13	7	44.8	1.35	L	-54.652	19.4	-67.057	18.7	20.1	7.8	3	0.5	306			1.6	EAR
551	2020	10	10	23	27	18.4	2.42	L	-55.187	51.8	-70.065	62.2	30.6	50.3	2	0.6	277			2.8	EAR
552	2020	10	13	1	50	19.4	1.21	R	-57.113	8.7	-67.042	27.2	15.7	9.0	5	0.5	280			3.1	EAR
553	2020	10	16	18	6	9.5	0.69	R	-56.075	9.7	-71.839	13.9	4.3	3.8	4	0.3	317			3.9	EAR
554	2020	10	22	2	55	3.5	0.45	L	-54.322	3.4	-69.654	2.4	5.9	5.4	4	0.1	209			2.8	EAR
555	2020	10	22	8	18	55.5	0.67	L	-54.354	8.9	-64.584	7.9	31.7	4.4	4	0.3	319			2.5	EAR

#	Año	M	D	H	M	S	Error	L	Latitud	Error	Longitud	Error	Prof	Error	NST	RMS	GAP	Mc	Fuente	MI	Fuente
556	2020	10	22	8	58	8.8	0.34	L	-55.886	30.3	-68.451	23.7	15.0	28.8	2	0.0	335			2.3	EAR
557	2020	10	22	9	1	9.0	0.42	L	-55.971	18.3	-68.870	6.2	8.2	15.2	4	0.1	301			2.8	EAR
558	2020	10	22	17	25	8.4	2.31	R	-54.532	12.0	-55.754	50.6	15.0	16.0	5	1.1	291			4.3	EAR
559	2020	11	12	7	23	20.9	0.30	L	-54.577	1.6	-66.488	5.5	10.0	0.0	1	0.0	360			2.0	EAR
560	2020	11	12	17	50	27.8	0.40	L	-55.587	4.3	-66.158	8.3	35.0	87.5	3	0.1	340			2.6	EAR
561	2020	11	21	4	49	34.3	0.38	R	-57.296	3.3	-67.243	12.8	19.1	2.9	3	0.1	302			3.2	EAR
562	2020	11	23	8	58	40.7	0.73	R	-57.254	6.2	-69.040	33.1	17.6	6.7	3	0.3	314			3.6	EAR
563	2020	11	23	9	54	31.8	1.33	R	-56.839	16.9	-67.383	41.9	32.0	18.6	4	0.6	290			4.6	EAR
564	2020	11	23	11	9	5.4	0.89	R	-57.408	7.9	-67.173	30.6	15.1	6.9	3	0.4	303			3.1	EAR
565	2020	11	23	11	18	3.0	0.34	R	-56.893	8.7	-67.721	33.1	42.6	45.5	3	0.0	302			3.6	EAR
566	2020	11	24	10	50	48.9	1.39	R	-57.256	15.6	-68.041	62.8	27.7	10.8	2	0.3	349			2.9	EAR
567	2020	11	24	10	53	26.5	1.49	R	-58.359	77.4	-70.648	55.7	0.0	58.0	4	0.8	302			3.4	EAR
568	2020	11	26	3	53	45.8	0.77	L	-54.687	6.9	-67.318	20.5	17.9	4.1	2	0.2	337			1.8	EAR
569	2020	12	8	12	54	0.9	1.08	L	-54.489	5.0	-67.414	20.2	3.4	4.4	4	0.4	200			1.9	EAR
570	2020	12	11	6	20	41.5	0.31	L	-54.180	5.0	-64.880	3.9	1.5	3.9	5	0.1	188			2.4	EAR
571	2020	12	17	11	59	31.6	0.73	L	-56.015	33.5	-68.906	11.4	24.2	28.0	4	0.3	303			2.8	EAR
572	2020	12	30	18	1	55.9	1.72	R	-52.325	26.1	-71.186	38.8	23.9	9.8	4	0.7	186			2.9	EAR

L: clasificación Local (L) Regional (R) Distante (D)

GAP: cobertura acimutal residual

NST: cantidad de estaciones utilizadas en el procesamiento

Mc: magnitud estimada con la duración del evento

MI: magnitud local

Los datos procesados corresponden a la red sísmológica propia (FCAG-UNLP) y a estaciones de la Red Sísmológica Nacional de Chile (doi:<http://dx.doi.org/10.7914/SN/C1>).

Procesado en la Estación Astronómica Río Grande con Seisan 8.1 (Universidad de Bergen, Noruega).

Río Grande, mayo 2021.

# Catálogo Sismológico de Referencia de Tierra del Fuego (9no Complemento)

