

ID	DELTA	Punto Observado	ANGULO			DIST/m	PROYECCION	
			G	M	S		COS	SEN
2	PLACA IGAC 10993	DELTA 1	148	1	5,608	55,160	-46,78733	29,21528
3	DELTA 1	DELTA 2	102	8	2,739	72,705	-15,282624	71,08068
4	DELTA 2	DELTA 3	20	40	27,930	64,320	60,177577	22,70852
5	DELTA 2	DELTA 4	104	29	5,039	46,908	-11,732735	45,41704
6	DELTA 4	DELTA 5	21	43	27,083	52,149	48,444842	19,30224
7	DELTA 4	DELTA 6	80	23	14,925	42,805	7,147739	42,20388
8	DELTA 6	DELTA 7	110	25	4,535	43,813	-15,284959	41,06069
9	DELTA 6	DELTA 8	23	35	34,104	83,679	76,684546	33,49119
10	DELTA 6	DELTA 9	-155	28	19,391	91,972	-83,032043	-39,55455
11	DELTA 7	DELTA 7-1	26	17	41,250	71,767	64,340806	31,79193
12	DELTA 9	DELTA 10	120	42	23,192	86,718	-44,281614	74,55964
13	DELTA 10	DELTA 11	-157	20	2,544	63,065	-57,906725	-24,97937
14	DELTA 11	DELTA 11-1	-154	4	28,275	48,890	-43,913741	-21,48891
15	DELTA 11	DELTA 12	60	6	0,159	105,557	52,618673	91,50684
16	DELTA 12	DELTA 13	86	56	49,622	56,852	3,027803	56,7713
17	DELTA 13	DELTA 14	67	59	19,381	19,187	7,191031	17,78834
18	DELTA 13	DELTA 15	111	53	37,223	87,289	-32,548878	80,99372
19	DELTA 14	DELTA 16	78	51	59,412	52,969	10,228076	51,97209
20	DELTA 16	DELTA 17	67	56	34,711	55,407	20,806901	51,35168
21	DELTA 17	DELTA 18	-58	55	0,179	93,327	50,715695	-78,3444
22	PLACA	DELTA 19	-3	9	40,350	91,704	91,59103	-4,54171
23	PLACA	DELTA 20	-105	5	2,964	89,693	-23,086995	-86,67085
24	PLACA	DELTA 21	-52	37	25,575	93,982	58,663676	-73,42422
25	DELTA 20	DELTA 22	-81	7	48,633	42,933	6,812556	-42,38924
26	DELTA 22	DELTA 23	14	24	24,070	42,593	41,253811	10,59731
27	DELTA 23	DELTA 24	14	9	43,787	41,766	40,49686	10,21883
28	DELTA 24	DELTA 25	-78	37	9,573	25,986	5,67713	-25,35784
29	DELTA 25	DELTA 26	-82	50	30,528	17,236	2,649327	-17,03139
30	DELTA 26	DELTA 27	-170	30	36,160	85,070	-83,643048	-15,51749
31	DELTA 27	DELTA 28	-81	39	59,051	69,875	11,732736	-68,88251
32	DELTA 28	DELTA 29	7	54	5,786	107,371	106,351567	14,76054
33	DELTA 28	DELTA 30	-76	12	34,889	90,968	22,330044	-88,18475
34	DELTA 29	DELTA 31	6	37	14,749	42,674	42,389237	4,92017
35	DELTA 29	DELTA 32	-84	20	24,702	23,991	2,649328	-23,84394
36	DELTA 32	DELTA 33	-84	55	30,294	94,170	11,35426	-93,48341
37	DELTA 33	DELTA 34	8	37	50,884	42,875	42,389237	6,43408
38	DELTA 30	DELTA 36	-163	49	20,973	150,071	-142,868866	-45,93205
39	DELTA 36	DELTA 37	-150	39	4,432	299,298	-257,482363	-152,58556
40	DELTA 37	DELTA 38	-57	0	8,982	94,379	51,406161	-79,151
41	DELTA 38	DELTA 39	-67	18	42,025	83,890	33,197904	-77,04146
42	DELTA 39	DELTA 40	-75	9	30,033	196,426	51,362972	-189,59184
43	DELTA 40	DELTA 41	17	44	21,370	124,397	118,481952	37,90191
44	DELTA 40	PLACA IGAC 10983	-8	29	18,341	88,126	87,369613	-11,52038
45	DELTA 41	DELTA 42	106	35	14,419	37,121	-10,597309	35,57668
46	DELTA 41	DELTA 43	11	15	27,746	81,425	79,858295	15,89597
47	DELTA 43	DELTA 44	-44	28	7,672	52,204	37,847533	-35,95516
48	DELTA 44	DELTA 45	-160	31	48,715	98,207	-91,969505	-34,44125
49	DELTA 45	DELTA 46	-160	46	57,584	67,199	-62,826905	-23,84395

50	DELTA 45	DELTA 47	-17	18	2,713	102,736	98,403586	-29,52108
51	DELTA 47	DELTA 48	21	48	5,078	87,641	81,372196	32,54888
52	DELTA 48	DELTA 49	118	39	50,247	32,350	-15,517489	28,38565
53	DELTA 48	DELTA 50	-148	46	0,496	123,776	-104,080716	-66,99013
54	DELTA 50	DELTA 51	-163	8	43,959	37,231	-35,576681	-10,97578
55	DELTA 50	DELTA 52	-46	4	33,418	33,190	23,086995	-23,84395
56	DELTA 52	DELTA 53	-34	27	50,249	39,049	32,548879	-21,57309
57	DELTA 52	DELTA 54	-155	58	12,040	114,087	-102,566814	-49,95874
58	DELTA 54	DELTA 55	-35	37	14,573	186,498	153,920108	-105,30958
59	DELTA 55	DELTA 56	-35	24	52,835	96,635	79,557556	-54,85301
60	DELTA 56	DELTA 57	-35	24	18,488	288,429	237,430858	-163,76117
61	DELTA 57	DELTA 58	21	49	40,090	112,586	104,514156	41,86152
62	DELTA 57	DELTA 59	-35	28	1,136	120,266	99,075325	-68,17668
63	DELTA 58	DELTA 60	31	36	26,998	95,858	81,63853	50,23909
64	DELTA 60	DELTA 61	24	10	10,608	201,582	183,910975	82,53566
65	DELTA 61	DELTA 62	-18	19	44,222	106,396	101,375319	-32,29656
66	DELTA 62	DELTA 63	-62	54	8,478	98,378	47,547715	-86,12417
67	DELTA 63	DELTA 64	-33	58	55,943	182,550	154,781186	-96,78487
68	DELTA 64	DELTA 65	30	24	45,580	111,635	96,274117	56,51229
69	DELTA 65	DELTA 66	-53	50	31,884	57,991	35,576681	-45,79551
70	DELTA 65	DELTA 67	34	48	34,520	155,805	127,924661	88,94171
71	DELTA 67	DELTA 68	34	46	0,329	134,071	110,136321	76,45201
72	DELTA 67	DELTA 69	-52	11	55,263	146,888	90,834079	-115,43498
73	DELTA 69	DELTA 70	-145	25	42,244	69,207	-56,392824	-40,11838
74	DELTA 69	DELTA 71	24	1	29,344	141,301	129,060088	57,52825
75	DELTA 71	DELTA 72	59	18	0,996	70,426	35,955156	60,55605
76	DELTA 72	DELTA 73	105	43	55,212	83,753	-22,708519	80,61525
77	DELTA 72	DELTA 74	48	50	10,500	92,001	60,556053	69,26099
78	DELTA 74	DELTA 75	24	19	52,482	47,767	43,524663	19,68072
79	DELTA 75	DELTA 76	10	56	53,590	117,575	115,434976	22,33004
80	DELTA 64	DELTA 76-1	-143	59	3,350	190,454	-150,112104	-117,21405
81	DELTA 76-1	DELTA 77	-6	33	26,039	451,300	449,265549	-42,80646
82	DELTA 77	DELTA 78	-110	54	23,429	75,692	-24,759585	-71,52769
83	DELTA 77	DELTA 79	15	48	27,724	147,632	142,048338	40,21625
84	DELTA 79	DELTA 80	-20	42	50,887	48,187	45,482588	-15,91518
85	DELTA 79	DELTA 81	8	1	31,820	112,611	111,508146	15,72207
86	DELTA 81	DELTA 82	14	39	10,666	103,316	99,955359	26,13511
87	DELTA 81	DELTA 83	35	40	35,949	111,827	90,839515	65,2187
88	DELTA 82	DELTA 84	15	32	18,697	195,121	187,989437	52,27024
89	DELTA 83	DELTA 85	92	23	30,477	154,174	-6,43408	154,03946
90	DELTA 83	DELTA 86	18	13	20,928	193,651	183,939011	60,55605
91	DELTA 85	DELTA 87	13	8	2,469	69,956	68,125559	15,89596
92	DELTA 86	DELTA 88	101	30	17,335	130,934	-26,114798	128,30314
93	DELTA 86	DELTA 89	15	26	22,734	123,683	119,219729	32,92736
94	DELTA 89	DELTA 90	62	34	59,486	113,112	52,083413	100,40698
95	DELTA 89	DELTA 91	37	30	50,274	53,013	42,0502	32,28254
96	DELTA 91	DELTA 92	30	59	49,031	93,116	79,818856	47,95423
97	DELTA 92	DELTA 93	9	54	45,900	158,295	155,931836	27,25022
98	DELTA 93	DELTA 94	12	44	3,466	68,679	66,990134	15,13902
99	DELTA 94	DELTA 95	-80	5	36,675	73,425	12,868161	-72,28879

100	DELTA 94	DELTA 96	8	54	17,353	83,131	82,129146	12,86816
101	DELTA 96	DELTA 97	-86	25	11,534	78,578	6,055605	-78,3444
102	DELTA 96	DELTA 98	104	55	53,100	82,257	-21,194618	79,47982
103	DELTA 96	DELTA 99	1	23	9,300	93,889	93,861882	2,27085
104	DELTA 98	DELTA 100	135	49	23,369	186,284	-133,601791	129,81704
105	DELTA 98	DELTA 101	101	9	44,832	115,346	-22,330044	113,16412
106	DELTA 101	DELTA 102	21	22	14,236	84,129	78,344393	30,6565
107	DELTA 102	DELTA 103	25	41	49,195	55,862	50,337219	24,22242
108	DELTA 99	DELTA 104	14	14	36,454	101,525	98,403586	24,97937
109	DELTA 104	DELTA 105	12	18	54,084	55,009	53,743497	11,73274

NORTE	ESTE	COTA
924453,953	1068479,14	240,529
924407,166	1068508,36	242,624
924391,883	1068579,44	243,510
924452,061	1068602,15	242,181
924380,151	1068624,85	243,786
924428,596	1068644,16	243,122
924387,298	1068667,06	245,500
924372,014	1068708,12	244,948
924463,983	1068700,55	243,067
924304,266	1068627,5	250,578
924436,354	1068739,91	243,455
924259,985	1068702,06	254,428
924202,078	1068677,08	259,090
924158,164	1068655,59	263,573
924210,783	1068747,1	258,459
924213,811	1068803,87	254,978
924221,002	1068821,66	254,429
924181,262	1068884,87	255,638
924231,23	1068873,63	251,407
924252,037	1068924,98	246,723
924302,753	1068846,64	247,054
924545,544	1068474,6	235,675
924430,866	1068392,47	241,451
924512,617	1068405,72	238,301
924437,679	1068350,08	240,984
924478,933	1068360,68	241,049
924519,43	1068370,9	238,535
924525,107	1068345,54	238,710
924527,756	1068328,51	238,943
924444,113	1068312,99	240,459
924455,846	1068244,11	239,818
924562,197	1068258,87	238,785
924478,176	1068155,92	240,926
924604,587	1068263,79	236,259
924564,847	1068239,94	236,493
924576,201	1068165,38	236,493
924618,59	1068171,82	235,675
924335,307	1068109,99	261,538
924077,825	1067957,41	252,550
924129,231	1067878,25	252,650
924162,429	1067801,21	261,395
924213,792	1067611,62	257,974
924332,274	1067649,52	258,902
924301,161	1067600,1	259,666
924321,676	1067685,1	259,118
924412,132	1067665,42	257,497
924449,979	1067629,46	255,576
924358,01	1067595,02	257,796
924295,183	1067571,18	257,348

924393,587	1067541,66	256,861
924474,959	1067574,21	255,533
924459,441	1067602,59	256,313
924370,878	1067507,22	256,536
924335,301	1067496,24	256,690
924393,965	1067483,37	256,482
924426,514	1067461,8	256,049
924291,398	1067433,41	256,914
924445,318	1067328,1	256,807
924524,876	1067273,25	255,942
924762,307	1067109,49	250,092
924866,821	1067151,35	248,487
924861,382	1067041,31	248,322
924948,459	1067201,59	228,021
925132,37	1067284,13	219,854
925233,746	1067251,83	219,523
925281,293	1067165,71	219,398
925436,075	1067068,92	219,098
925532,349	1067125,43	216,451
925567,925	1067079,64	213,003
925660,273	1067214,37	216,677
925770,41	1067290,83	216,112
925751,108	1067098,94	212,139
925694,715	1067058,82	212,673
925880,168	1067156,47	208,319
925916,123	1067217,02	209,453
925893,414	1067297,64	210,217
925976,679	1067286,28	209,538
926020,203	1067305,97	209,330
926135,638	1067328,3	205,516
925285,963	1066951,71	206,873
925735,228	1066908,9	230,618
925710,469	1066837,37	232,493
925877,276	1066949,12	229,403
925922,759	1066933,2	229,345
925988,785	1066964,84	228,959
926088,74	1066990,97	227,685
926079,624	1067030,06	223,804
926276,729	1067043,24	223,348
926073,19	1067184,1	210,563
926263,563	1067090,61	222,125
926141,316	1067199,99	209,108
926237,448	1067218,92	204,623
926382,783	1067123,54	220,298
926434,866	1067223,95	200,739
926424,833	1067155,82	220,242
926504,652	1067203,78	204,005
926660,584	1067231,03	204,737
926727,574	1067246,17	205,383
926740,442	1067173,88	206,958

926809,703	1067259,03	204,991
926815,759	1067180,69	207,892
926788,508	1067338,51	205,879
926903,565	1067261,31	204,785
926769,963	1067391,12	211,031
926881,235	1067374,47	204,002
926959,579	1067405,13	203,551
927009,916	1067429,35	201,293
927001,968	1067286,28	204,318
927055,712	1067298,02	200,817