

Supplementary Data

Pativilca Valley sites

Carretería: Size unknown because of modern farming; one rectangular platform mound and the remains of an associated circular plaza. The mound measures 60 X 32 X 7 m. The radiocarbon sample consisted of a fragment of a shicra bag used in the construction of the mound and dated to 3760 RCYBP (2167 Cal B.C.). Carretería and Pampa San Jose are only 1 km apart and it appears from the dates that both sites were occupied at the same time and this may have been one large site.

Provenience	Material	Lab No.	Cal. B.C.	RCYBP	12c/13c	Weight of sample in grams	Calibrated Age Range 1 sigma (68.3%)	Calibrated Age Range 2 sigma (95.4%)
Carreteria Main mound construction fill	Fiber bag	ISGS-5286	2180	3760±70	-12.2	15	228702246(18.5),2239-2112(57.3),2097-2039(24.3)	2456-2447(.5),2432-2422(.5),2404-2361(3.7),2354-2007(91.6),2003-1975(3),1972-1961(.7)

Huayto: The site's large U-shaped mound complex covers 8 hectares with a main mound (76 X 68 X 7) and two side arms (127 X 55 X 9 and 95 X 50 X 8). Two radiocarbon samples from a test trench in the eastern arm of the "U" yielded dates of 3820 RCYBP (2256 Cal B.C.) and 3800 RCYBP (2247 Cal B.C.).

Provenience	Material	Lab No.	Cal. B.C.	RCYBP	12c/13c	Weight of sample in grams	Calibrated Age Range 1 sigma (68.3%)	Calibrated Age Range 2 sigma (95.4%)
Huayto Mound C Profile 1	Fiber bag	ISGS-5285	2240	3800±70	-12.0	12.6	2397-2384(4.6),2345,2138(95.4)	2460-2111(89.8),2101-2036(10.2)
Huayto Mound C Profile 1	Fiber bag	Beta-177312	2270	3820±70	-9.7	11	2401-2377(9.3),2350-2191(76.8),2178-2142(13.9)	2466-2123(94.2),2096-2040(5.8)

Pampa San José: Size unknown because of modern farming; three large platform mounds and a sunken circular plaza. The largest of the mounds measures 100 by 73 meters at its base, with a maximal height of twenty meters. The radiocarbon samples taken from Pampa San Jose were taken from levels exposed in the main platform mound. Six dates reveal a series of consecutive construction periods running from 3790 to 3540 RCYBP (2220 to 1850 Cal B.C.).

Provenience	Material	Lab No.	Cal. B.C.	RCYBP	12c/13c	Weight of sample in grams	Calibrated Age Range 1 sigma (68.3%)	Calibrated Age Range 2 sigma (95.4%)
Pampa San Jose Mound A Looter's pit	Mixed Plant Fibers	Beta-177314	1870	3540±70	-14.9	15	1949-1767(96.7),1759-1752(3.3)	2114-2099(1.1),2034-1688(98.8)
Pampa San Jose Mound A Looter's pit	Mixed Plant Fibers	GX-30125	1950	3600±40	-22.7	15	2014-1998(15.4),1979-1890(84.6)	2125-2096(3.3),2090-2084(.4),2040-1877(91.5),1841-1825(2.9),1819-1815(.3),1796-1780(1.6)
Pampa San Jose Mound A Looter's pit	Mixed Plant Fibers	Beta-177315	1950	3600±60	-25.4	15	2033-1880(97),1838-1831(3)	2137-2076(10.5),2071-1858(76.9),1845-1770(12.6)
Pampa San Jose Mound A Looter's pit	Mixed Plant Fibers	ISGS-5276	2100	3710±70	-14.4	10	2200-2018(.929),1997-1980(.071)	2297-1891
Pampa San Jose Mound A Looter's pit	Mixed Plant Fibers	ISGS-5282	2100	3710±70	-11.6	7	2200-2018(.929),1997-1980(.071)	2297-1891
Pampa San Jose Mound A Looter's pit	Mixed Plant Fibers	GX-30122	2230	3790±60	-13.3	15	2330-2322(2.5),2309-2136(94.2),2078-2067(3.3)	2456-2437(1.7),2424-2421(1.3),2404-2358(6.2),2354-2110(79.5),2102-2035(11.4)

Potao: The site consists of one primary platform mound (73 X 69 X 17) and two smaller mounds and covers approximately 20 ha. A test pit in the primary mound yielded a single date on charcoal of 3215 RCYBP (1480 Cal B.C.). It thus appears that Potao was not occupied during the Late Archaic despite of the lack of ceramics on the surface or in construction fill. It represents a later, Initial Period occupation consistent with the location of the site out on the valley floor and the "U" shaped configuration of mounds.

Provenience	Material	Lab No.	Cal. B.C.	RCYBP	12c/13c	Weight of sample in grams	Calibrated Age Range 1 sigma (68.3%)	Calibrated Age Range 2 sigma (95.4%)
Potao Mound A Profile 1	Charcoal	ISGS-A-429	1480	3215±35	-10.3		1517-1487(42.3),1483-1444(57.7)	1598-1588(1.5),1581-1568(1.8),1528-1410(.967)

Punta y Suela: Total site area is 100 ha, with one main mound (60 X 50 X 12 m) with associated circular plaza, 4 extant secondary mounds and a second circular plaza (Fig. 2). Radiocarbon dates from excavations revealed repeated cultural use of the area over a period of almost 9000 years. Two small charcoal samples from exposed profiles in two of the mounds in the central core of the site yielded dates of 3935 and 3775 RCYBP (2444 and 2200 Cal B.C.). In contrast, one sample of wood taken from a third mound outside the central core yielded a later date of 3210 RCYBP (1478 Cal B.C.) indicating an Initial Period occupation. Three samples taken from test pits on the north side of the site area also gave later dates of 2600, 2550, and 2430 RCYBP (713, 655, and 562 Cal B.C.), while a single sample from one of these pits dated to 3520 RCYBP (1835 Cal B.C.). Another sample taken from the very bottom of Pit 1 on the north side dated to 9750 RCYBP (9129 Cal B.C.) indicating a possible Early Archaic occupation in the site area. Three samples recovered from a single test pit on the south side of the site yielded dates of 7410, 6450, 6440 RCYBP (6300, 5400 and 5418 Cal B.C.), represent a Middle Archaic occupation.

Provenience	Material	Lab No.	Cal. B.C.	RCYBP	12c/13c	Weight of sample in grams	Calibrated Age Range 1 sigma (68.3%)	Calibrated Age Range 2 sigma (95.4%)
Punta y Suela Mound B S/D	Charcoal	ISGS-A-422	2200	3775±35	-10.7	1	2278-2252(23.7),2230-2220(8.4),2207-2140(68.1)	2303-2125(91.4),2095-2092(.3),2084-2041(8.3)
Punta y Suela Mound B S/D	Mixed Plant Fibers	ISGS-A-421	2420	3935±35	-14.9	1	2472-2401(73.8),2379-2349(26.2)	2558-2536(4.6),2495-2302(95.4)
Punta y Suela Mound C Profile 1	Wood	ISGS-5284	1480	3210±70	-27.1	18	1599-1587(5.6),1581-1570(4),1529-1407(90.4)	1682-1668(1.3),1661-1649(.9),1640-1370(94.2),1358-1350(.5),1342-1317(3.1)
Punta y Suela Mound D-N1 Test Pit 1	Mixed Plant Fibers	Beta-177317	560	2430±70	-25.8	5	758-684(30.5),660-644(6),586-584(1.1),544-404(62.4)	765-396
Punta y Suela Mound D-N1 Test Pit 1	Charcoal	GX-30120	640	2550±70	-26.1	12	803-756(26.5),699-540(73.5)	823-483(94.1),466-448(2.4),442-413(3.5)
Punta y Suela Mound D-N1 Test Pit 1 Lev 10	Mixed Plant Fibers	ISGS-5393	9170	9750±110	-22.8	15	9307-9117(71.9),8991-8907(22.5),8876-8857(4),8850-8843(1.6)	9597-9560(1.5),9454-9441(.5),9392-8779(97.2),8770-8748(.8)
Punta y Suela Mound D-N2 Test Pit 2	Mixed Plant Fibers	ISGS-5292	750	2600±70	-26.2	18	833-759(56.4),683-663(9.3),640-588(20.9),581-545(13.4)	903-516(98.1),462-451(.8),439-429(.7),421-414(.4)
Punta y Suela Mound D-N2 Test Pit 2	Charcoal	ISGS-5272	1840	3520±70	-25.2	15	1935-1934(.9),1921-1744(99.1)	2032-1683(99.7),1667-1663(.2),1646-1644(.1)
Punta y Suela Mound D-S1 Test Pit 1	Charcoal	Beta-177318	5410	6440±70	-23.8	18	5475-5361(97.2),5346-5344(2.1),5236-5325(.7)	
Punta y Suela Mound D-S1 Test Pit 1	Charcoal	GX-30119	5410	6450±90	-25.7	18	5479-5338(94.9),5332-5322(5.1)	5613-5586(2.7),5560-5259(97),5236-5235(.1),5217-5214(.2)
Punta y Suela Mound D-S1 Test Pit 1	Charcoal	ISGS-5271	6280	7410±70	-25.1	18	6383-6218	6415-6197(82.5),6194(7.2),6139-6089(10.4)

Upaca: 100+ ha, one main mound with associated circular plaza, three smaller platform mounds and secondary circular plaza, and two large compounds of regular storeroom structures. The dates from the main mound complex range from 4180 to 3770 RCYBP (2751 to 2182 Cal B.C.), with most dates clustering between 3880 and 3770 RCYBP (2375 to 2182 Cal B.C.). A second, smaller mound to the south of the main mound and one test pit in an area of shallow trash in the southwest part of the site yielded dates from 2950 to 2700 RCYBP (1157 to 853 Cal B.C.). One test pit in one of the storerooms yielded a date of 2160 RCYBP (224 Cal B.C.) Although these chronological data are limited, they indicate that while the main mound complex was built and utilized during the 3rd millennium B.C., at least some of the secondary mounds were occupied 1000 years later, and the storerooms were probably built another 1000 years after that.

Provenience	Material	Lab No.	Cal. B.C.	RCYBP	12c/13c	Weight of Sample in grams	Calibrated Age Range 1 sigma (68.3%)	Calibrated Age Range 2 sigma (95.4%)
Upaca Mound A Profile 1	Fiber bag	Beta-177319	2350	3880±60	-9.5	15	2461-2289	2500-2541(.7),2491-2196(94.7)
Upaca Mound A Profile 1	Mixed Plant Fibers	ISGS-5395	2650	4080±70	-11.5	10	2857-2813(19.0),2739-2725(4.9),2697-2559(62.3),2535-2531(1.4),2524-2496(12.5)	2873-2799(18.1),2784-2470(81.9)
Upaca Mound A Profile 1	Mixed Plant Fibers	GX-30117	2740	4180±110	-24.3	6.6	2885-2621(97.8),2907-2601(2.2)	3021-2468
Upaca Mound A Profile 1	Fiber bag	ISGS-5291	2310	3850±70	-10.9	15	2455-2441(5.8),2435-2421(5.5),2404-2360(20.2),2354-2269(42),2260-2203(26.5)	2546-2455(.1),2488-2479(.5),2474-2133(97.4),2080-2047(2)
Upaca Mound A Profile 2	Mixed Plant Fibers	ISGS-5280	2190	3770±70	-11.2	15	2294-2124(80.9),2096-2090(1.9),2084-2040(17.2)	2456-2421(2.7),2404-2358(4.9)2354-2014(90.7).1997-1979(1.8)
Upaca Mound A Profile 2	Mixed Plant Fibers	ISGS-5294	2270	3820±70	-10.8	12	2401-2377(9.2),2350-2191(76.8),2178-2142(13.9)	2466-2123(94.2),2096-2040(5.8)
Upaca Mound A Profile 2	Mixed Plant Fibers	ISGS-5295	2270	3820±70	-12.8	11.8	2401-2377(9.2),2350-2191(76.8),2178-2142(13.9)	2466-2123(94.2),2096-2040(5.8)
Upaca Mound A Profile 2	Mixed Plant Fibers	ISGS-5296	2330	3860±70	-12.2	8.6	2457-2417(17.7),2409-2278(65.5),2252-2230(10.9),2220-2201(5.9)	2554-2539(.9),2483-2136(98.5),2078-2066(.6)
Upaca Mound B Profile 3	Fiber bag	Beta-177321	870	2700±60	-25.4	14	898-808	996-989(.9),974-792(99.1)
Upaca Mound B Profile 3	Mixed Plant Fibers	ISGS-5281	1110	2910±70	-25.1	12	1255-1244(4.3),1212-1198(6),1193-1138(24.1),1133-1001(65.5)	1367-1362(.4),1314-916(99.6)
Upaca Mound B Profile 3	Fiber bag	GX-30118	1110	2910±80	-22.1	5.5	1257-1237(7.2),1215-998(92.8)	1371-1357(.012),1317-902(.97.9),1352-1314(.9)
Upaca Mound D Test Pit 1	Charcoal	ISGS-5273	210	2160±70	-26.3	6	356-288(34.2),257-256(4.9),233-107(60.9)	383-44
Upaca Mound E Test Pit 2	Charcoal	ISGS-5275	1160	2950±70	-26.0	5	1287-1283(1),1261-1046(99)	1380-1335(5.4),1321-973(93.5),956-942(1.1)

Vinto Alto: The total site area cannot be determined due to modern farming. Two very large adjoining mounds, A (85 X 74 X 23) and B (91 X 58 X 18), and a separate construction, Mound C (106 X 86 X 30), dominate the site area. Mound C uses a natural hill as a base for the constructed platform. The 2 m deep profile of a pit in the top of Mound C revealed at least 7 distinct floor layers with a cluster of 5 dates between 4040 (2583 Cal B.C.) and 3860 (2348 Cal B.C.) RCYBP, and a single outlier of 3700 RCYBP (2087 Cal B.C.). Three dates from an excavated trench in Mound A clustered between 4010 (2554 Cal. B.C.) and 3970 (2469 Cal B.C.).

Provenience	Material	Lab No.	Cal. B.C.	RCYBP	12c/13c	Weight of sample in grams	Calibrated Age Range 1 sigma (68.3%)	Calibrated Age Range 2 sigma (95.4%)
Vinto Alto Mound A Profile 2	Mixed Plant Fibers	GX-30121	2480	3970±70	-12.8	18	2575-2508(35.9),2504-2401(52.2),2378-2350(11.9)	2839-2817(1.4),2665-2646(1.3),2642-2277(95.2),2252-2229(1.4),2221-2206(.7)
Vinto Alto Mound A Profile 2	Mixed Plant Fibers	ISGS-5287	2480	3970±70	-16.8	10	2575-2508(35.9),2504-2401(52.2),2378-2350(11.9)	2839-2817(1.4),2665-2646(1.3),2642-2277(95.2),2252-2229(1.4),2221-2206(.7)
Vinto Alto Mound A Profile 2	Fiber bag	ISGS-5392	2540	4010±70	-14.1	13	2831-2821(2.6),2661-2650(3),2624-2456(91.6),2624-2456(2.9),2418-2406(2.9)	2860-2810(6),2653-2722(2.2),2701-2328(90.7),2324-2307(1.1)
Vinto Alto Mound C Profile 1	Fiber bag	Beta-177323	2100	3700±110	-13.4	15	2278-2252(6.6),2230-2220(2.4),2207-1937(89.7),1930-1923(1.4)	2457-2418(2),2407-1869(94.3),1843-1810(2.2),1801-1776(1.5)
Vinto Alto Mound C Profile 1	Fiber bag	GX-30124	2330	3860±60	-15.7	18	2456-2420(17.4),2405-2280(67.4),2251-2231(10.4),2219(2209),4.9)	2471-2189(95.3),2180-2142(4.7)
Vinto Alto Mound C Profile 1	Fiber bag	ISGS-5277	2580	4040±70	-12.7	18	2836-2818(6.5),2664-2646(6),2637-2467(87.5)	2867-2804(11.1),2782-2767(1),2763-276(5.6),2712-2428(79.3),2424-2403(1.6),2375-2353(1.4)
Vinto Alto Mound C summit NE	Fiber bag	ISGS-5394	2410	3930±70	-12.7	18	2251-2541(4.4),2491-2304(95.6)	2617-2612(.4),2581-2201(99.6)
Vinto Alto Mound C summit NE	Fiber bag	Beta-177324	2400	3930±60	-11.4	18	2584-2543(1.7),2489-2478(5),2474-2331(87.4),2322-2309(5.8)	2575-2508(12.6),2504-2276(82.6),2253-2229(2.9),2221-2206(1.6)
Vinto Alto Mound C summit NW	Fiber bag	GX-30123	2420	3940±70	-13.0	18	2559-2536(10.4),2530-2524(2.3), 2496-2334 (83.3), 2320-2310 (3.9)	2619-2610(.8),2597-2590(.5), 2583-2266 (92.6), 2263-2203 (6.1)

Fortaleza Valley sites

Caballete: The site area covers 100 ha and is dominated by one large platform mound, Mound A, (142 X 66 X 20 m) and 4 smaller mounds. There are three circular plazas at the site, one associated with Mound A and the other two with smaller mounds. The circular plaza attached to Mound A is unique in the Norte Chico in that it consists of a ring of large stone stela or "huancas" (16). As at Porvenir, test units in these areas indicated up to 2 m of subsurface stratified material in residential areas. The 14 dates for Caballete range from 4450 to 3330 RCYBP (3129 to 1617 Cal B.C.). The two earliest dates of 4450, associated with construction of a secondary platform mound, and 4440 RCYBP (3127 Cal B.C.), associated with construction of a circular plaza, appear to indicate an early initial occupation at the beginning of the 3rd millennium B.C. Eleven of the remaining dates fall between 4050 and 3590 RCYBP (2605 and 1827 Cal B.C.) indicating extensive occupation through most of the rest of the 3rd millennium B.C.

Provenience	Material	Lab No.	Cal. B.C.	RCYBP	12c/13c	Weight of sample in grams	Calibrated Age Range 1 sigma (68.3%)	Calibrated Age Range 2 sigma (95.4%)
Caballete Mound A Looter's pit	Fiber bag	ISGS-5521	2400	3920±70	-12.8	16.9	2547-2544 (1.1), 2488-2479 (3.7), 2474-2293 (95.2)	2578-2200 (100.0)
Caballete Mound B Profile 1	Fiber bag	BETA 183312	1940	3590±70	-26.2	37.5	2107-2104 (1.3), 2034-1877 (85.6), 1841-1826 (6.2), 1818-1814 (1.3), 1797-1780 (5.7)	2136-2077 (9.7), 2069-1745 (90.3)
Caballete Mound B Profile 1	Fiber bag	GEO 30511	2120	3720±70	-11.0	44.1	2268-2261 (2.6), 2203-2024 (91.8), 1996-1980 (5.6)	2395-2392 (0.1), 2336-2319 (0.9), 2312-1915 (98.9),
Caballete Mound B Profile 1	Mixed Plant Fibers	ISGS-5523	3120	4450±290	-13.5	5.7	3621-3601 (1.9), 3522-2861 (91.0), 2809-2756 (5.3), 2721-2702 (1.8)	3889-3883 (0.1), 3797-2335 (99.8), 2320-2311 (0.1)
Caballete Mound B Test Pit 1 Lev 5	Mixed Plant Fibers	GEO 30512	2060	3680±70	-14.7	38.2	2189-2180 (3.5), 2142-1954 (96.5)	2285-2248 (3.2), 2233-2219 (1.3), 2213-1881 (95.2), 1837-1832 (0.3)
Caballete Mound B Test Pit 1 Lev 6	Fiber bag	BETA 183313	2360	3890±80	-26.7	68	2469-2281 (89.5), 2251-2231 (7.4), 2219-2209 (3.2)	2575-2509 (7.0), 2504-2139 (93.0)
Caballete Mound B 1		ISGS-5537	2260	3810±70	-15.8	15	2398-2383 (5.5), 2346-2141 (94.5)	2463-2117 (92.1), 2098-2036 (7.9)
Caballete Mound C Profile 2	Fiber bag	BETA 183314	2050	3670±50	-9.6	31.7	2136-2077 (42.7), 2069-2009 (39.8), 2002-1976 (17.5)	2198-2160 (5.8), 2148-1912 (93.6), 1900-1894 (0.5)
Caballete Mound C Test Pit 2 Lev 8	Fiber bag	ISGS-5516	2490	3980±70	-14.2	43.3	2616-2614 (0.7), 2579-2403 (90.9), 2376-2353 (8.4)	2856-2814 (2.6), 2678-2284 (96.3), 2249-2233 (0.8), 2217-2212 (0.3)
Caballete Mound C Test Pit 2 Lev 13	Fiber bag	BETA 183315	2000	3630±70	-9.3	26	2126-2084 (19.0), 2041-1891 (81.0)	2198-2158 (3.8), 2151-1862 (89.2), 1844-1807 (4.1), 1803-1773 (2.9)
Caballete Mound C Test Pit 2 Lev 14	Mixed Plant Fibers	ISGS-5511	2600	4050±80	-13.3	33.8	2855-2851 (1.4), 2845-2815 (10.5), 2675-2469 (88.1)	2876-2429 (97.6), 2423-2403 (1.5), 2365-2352 (0.9)
Caballete Mound D Profile 3	Fiber bag	Beta 184859	2140	3740±50	-25.6	46.2	2266-2264 (0.9), 2202-2116 (60.5), 2099-2038 (38.5)	2293-2014 (97.5), 1998-1979 (2.5)
Caballete Mound D Profile 3	Fiber bag	GEO 30513	1620	3330±90	-14.1	11.7	1737-1711 (9.8), 1693-1517 (90.2)	1877-1841 (3.3), 1826-1814 (0.6), 1814-1797 (1.4), 178901425 (94.7)
Caballete Mound D Profile 3	Mixed Plant Fibers	ISGS-5532	2400	3920±70	-10.7	33	2547-2544 (1.1), 2488-2479 (3.7), 2474-2293 (95.2)	2578-2200 (100.0)
Caballete Mound E Trench	Mixed Plant Fibers	ISGS-A0477	2520	4000±70	-13.1	.15	2656-2654 (0.5), 2488-2479 (5.5), 2602-2455 (83.4), 2447-2434 (5.1), 2422-2404 (5.1), 2361-2354 (1.9)	2858-2812 (4.6), 2743-2724 (1.1), 2698-2296 (94.2)
Caballete Mound E Trench	Charcoal	GEO 30514	3100	4440±40	-28.3	60.7	3311-3236 (34.3), 3171-3161 (4.1), 3116-3113 (1.3), 3103-3017 (53.6), 2977-2969 (2.8), 2947-2937 (3.8)	3333-3213 (32.6), 3189-3154 (6.8), 3125-2922 (60.6)

Cerro Blanco 1: This is actually one component of a 2 km string of sites stretched along the south side of the Fortaleza River, 10-12 km from the mouth of the river. The site consists of a row of four medium sized mounds with no circular plazas. There are no visible ceramics on the surface of these mounds but excavations in trash and mounds encountered a small number of ceramic fragments and later textile fragments. Radiocarbon dates for the site indicate that it was occupied during the ceramic-bearing Initial Period from 3420 to 2950 RCYBP (1729 to 1157 Cal B.C.).

Provenience	Material	Lab No.	Cal. B.C.	RCYBP	12c/13c	Weight of sample in grams	Calibrated Age Range 1 sigma (68.3%)	Calibrated Age Range 2 sigma (95.4%)
Cerro Blanco 1 Sec A test pit de Huaqueo	Fiber bag	BETA 183316	1160	2950±70	-24.2	81.4	1287-1283(1.0),1261-1046(99.0)	1380-1335(5.4),1321-974(93.5),956-942(1.1)
Cerro Blanco 1 Sec A Profile 1	Fiber bag	BETA 183317	1330	3080±70	-25.6	26.0	1427-1260(98.7),1227-1224(1.3)	1502-1188(94.2),1182-1148(3.8),1144-1129(2.1)
Cerro Blanco 1 Sec A Profile 1	Fiber bag	GEO 30515	1370	3110±70	-10.8	61	1486-1484(1.2),1443-1293(92.5),1277-1264(6.2)	1520-1210(97.5),1200-1191(0.8),1177-1164(1.0),1140-1132(0.8)
Cerro Blanco 1 Sec A Profile 1	Mixed Plant Fibers	ISGS-5526	1640	3370±80	-28.4	9.3	1741-1599(76.6),1588-1578(3.7),1572-1528(19.7)	1880-1838(6.1),1830-1495(93.1),1472-1462(0.7)
Cerro Blanco 1 Sec A Profile 2	Fiber bag	GEO 30516	1180	2960±70	-26.4	81.2	1290-1280(3.4),1263-1050(96.6)	1389-1329(7.8),1323-996(91.2),989-975(1.0)
Cerro Blanco 1 Sec B Profile 3	Fiber bag	BETA 183318	1340	3090±70	-24.6	42.2	1430-1287(89.0),1283-1261(11.0)	1516-1207(94.5),1202-1189(1.6),1179-1156(2.4),1142-1130(1.4)
Cerro Blanco 1 Sec C Test Pit 1	Mixed Plant Fibers	BETA 183319	1720	3420±70	-25.5	22.5	1875-1842(14.5),1811-1800(4.7),1777-1678(59.0),1672-1624(21.9)	1884-1596(90.9),1592-1525(9.1)

Cerro Blanco 2: The site, a single platform mound (60 X 40 X 5) with an attached circular plaza, was built on the end of a ridge to increase its apparent size. Excavation of a trench into the side of the mound revealed a complex internal stratigraphy in which some areas had ceramics and others did not. Three radiocarbon dates from the site confirmed the intermediate date for this site with samples of 3720, 3630 and 3390 RCYBP (2120, 1996 Cal B.C. and 1663 Cal B.C.).

Provenience	Material	Lab No.	Cal. B.C.	RCYBP	12c/13c	Weight of sample in grams	Calibrated Age Range 1 sigma (68.3%)	Calibrated Age Range 2 sigma (95.4%)
Cerro Blanco 2 Trench	Mixed Plant Fibers	GEO 30629	1680	3390±70	-15.4	15	1768-1759(3.3),1752-1602(86.1),1562-1533(10.6)	1878-1829(7.5),1829-1788(5.9),1784-1521(86.6)
Cerro Blanco 2 Trench	Fiber bag	BETA 184860	2000	3630±80	-10.1	42.3	2133-2080(21.6),2049-1884(78.4)	2202-1767(99.4),1760-1751(0.6)
Cerro Blanco 2 Trench	Mixed Plant Fibers	ISGS-5538	2120	3720±90	-26.7	4.1	2280-2251(8.3),2230-2219(3.1),2208-2010(80.6), 2001-1977(8.0),	2454-2450(0.3),2430-2423(0.3),2404- 2363(2.6),2353-1882,(96.7),1836-1833(0.1)

Huaricanga: This is a combined Initial Period/Late Archaic site covering an area of 100 ha. The main Late Archaic occupation consists of a single large mound complex, Mound C, represents the largest Late Archaic construction in the Norte Chico region (264 X 85 X 12). No circular plaza can be identified. Samples from the south end of Mound C yielded four dates ranging from 4230 to 3840 RCYBP (2783 to 2235 Cal B.C.). At the north end of the mound, two samples yielded dates of 3860 and 3770 RCYBP (2336 and 2182 Cal B.C.). Three samples from two test pits in trash adjacent to Mound C gave dates of 4780, 4110 and 3940 RCYBP (3585, 2704 and 2419 Cal B.C.) An associated residential mound complex had two dates of 3970 and 3870 RCYBP (2475 and 2370 Cal B.C.). If the single very early date of 4780 RCYBP (3585 Cal B.C.) is considered an outlier, mound construction and associated occupation would have extended from approximately 4200 to 3800 RCYBP (ca. 2900 to 2200 Cal B.C.).

Immediately above the river floodplain at Huaricanga is a large U-shaped mound complex, Mound A, also called El Castillo de Huaricanga, with Initial Period ceramics in situ. A secondary mound, B, with no associated ceramics, is located between this Initial Period mound and Mound C. Only the secondary mound was tested and the results were ambiguous. A sample of charcoal from a lower stratum yielded a date of 3940 RCYBP (2423 Cal B.C.), while a sample of fiber taken from later wall plaster yielded a much later date of 2580 RCYBP (686 Cal B.C.).

2003

Provenience	Material	Lab No.	Cal. B.C.	RCYBP	12c/13c	Weight of sample in grams	Calibrated Age Range 1 sigma (68.3%)	Calibrated Age Range 2 sigma (95.4%)
Huaricanga Mound B Profile 2	Mixed Plant Fibers	BETA-AMS 183320	2350	3870±40	-20.8	.3	2456-2421(21.1),2404-2359(31.7),2354-2290(47.2)	2464-2271(86.8),2256-2227(8.3),2223-2204(4.9)
Huaricanga Mound B Profile 2	Charcoal	ISGS-5525	2480	3970±110	-24.6	3	2826-2824(0.2),2657-2653(0.6),2622-2606(3.7),2603-2290(95.5)	2867-2805(5.6),2781-2768(0.7),2763-2716(3.2),2712-2196(89.2),2169-2144(1.3)
Huaricanga Mound B Test Pit 1 Lev 5	Charcoal	BETA 184861	2690	4110±70	-24.0	19.7	2862-2808(24.7),2776-2774(0.4),2758(2720(15.7),2704-2576(58.6),2507-2505(0.7)	2878-2553(91.7),2540-2492(8.3)
Huaricanga Mound B Test Pit	Charcoal	GEO 30507	3570	4780±50	-24.5	72	3641-3620(19.5),2605-3522(80.5)	3655-3500(86.8),3434-3378(13.2)
Huaricanga Mound B Trench Wall 4	Mixed Plant Fibers	GEO 30506	670	2580±80	-13.1	19.6	828-757(39.3),694-541(60.7)	896-878(2.0),858-853(0.6),843-480(91.6)469-412(5.8)
Huaricanga Mound B Trench C	Charcoal	ISGS-A0481	2430	3940±40	-13.3	10.8	2547-2544(1.8),2489-2478(6.4),2474-2400(67.7),2380-2348(24.2)	2564-2522(10.8),2497-2303(89.2)
Huaricanga Mound C Profile 1	Mixed Plant Fibers	BETA 183322	2330	3860±40	-23.6	23.1	2455-2450(2.5),2432-2422(5.2),2404-2362(26.6),2353-2282(51.9),2249-2232(10.1),2218-2211(3.8)	2460-2268(81.3),2260-2203(18.7)
Huaricanga Mound C Profile 1	Fiber bag	ISGS-5514	2560	4030±70	-10.4	33.8	2835-2819(5.2),2663-2648(5.4),2630-2464(89.4)	2865-2806(9.3),2780-2769(0.7),2763-2717(4.5),2710-2398(82.8),2382-2346(2.7)
Huaricanga Mound C Profile 1	Mixed Plant Fibers	GEO 30508	2790	4230±90	-13.3	17.2	2916-2828(33.6),2817-2665(64.2),2647-2639(2.1)	3082-3066(0.9),3030-2570(98.3),(2516-2501(0.8)
Huaricanga Mound C Profile 1	fibra	ISGS-5531	2440	3950±70	-10.4	20.5	2568-2519(22.5),2499-2396(54.7),2386-2340(21.7),2316-2314(1.1)	2657-2653(0.2),2622-2606(1.4),2603-2268(93.9),2260-2203(4.6)
Huaricanga Mound C Profile de Carretaria	Charcoal	ISGS-5519	2190	3770±70	-25.1	6.7	2294-2124(80.9),2096-2090(1.9),2084-2040(17.2)	2456-2421(2.7),2404-2358(4.9),2354-2414(90.7),1997-1979(1.8)
Huaricanga Mound C Profile de Carretaria	Charcoal	BETA 183321	2390	3910±40	-21.7	9.5	2466-2396(62.0),2385-2341(37.4),2316-2314(0.6)	2548-2543(0.5),2490-2285(97.6)2248-2234(1.5)2216-2213(0.3)
Huaricanga Mound C Test Pit 2 Lev 4	Charcoal	ISGS-5518	2420	3940±70	-20.5	11.8	2559-2536(10.4),2530-2524(2.3),2496-2334(83.3),2320-2310(3.9)	2619-2610(0.8),2595-2590(0.5),2583-2266(92.6),2262-2203(6.1)

Porvenir: The site is over 60 ha in area with 7 platform mound complexes and two associated sunken circular plazas (Fig. 3). The two largest mounds, A and F measure 60 X 80 X 12 m and 80 X 58 X 8 m respectively, while the other five range down to 40 X 40 X 4 m. Test excavations revealed up to 2 m of stratified trash, house floors, and building debris in the residential areas, indicating extensive occupation. Nine dates recovered from Porvenir cover a range from 4930 to 3040 RCYBP (3710 to 1299 Cal B.C.); however, both the early date of 4930 and the late date of 3040 appear as outliers in the larger suite of dates. Two dates of 4160 and 4110 RCYBP (2752 and 2704 Cal B.C.) do indicate an early occupation in the first half of the 3rd millennium B.C. and a cluster of dates from 3780 to 3630 RCYBP (2197 to 1986 Cal B.C.) indicate either a continuous or secondary occupation into the second half of the 3rd millennium B.C.

Provenience	Material	Lab No.	Cal. B.C.	RCYBP	12c/13c	Weight of sample in grams	Calibrated Age Range 1 sigma (68.3%)	Calibrated Age Range 2 sigma (95.4%)
Porvenir Mound A Test Pit	Mixed Plant Fibers	GEO 30510	2000	3630±70	-11.5	26.8	2125-2084 (19.0), 2041-1891 (81.0)	2198-2158 (3.8), 2151-1862(89.2), 1844-1807 (4.1), 1803-1773 (2.9)
Porvenir Mound A Test Pit	Fiber bag	ISGS-5513	2740	4160±70	-13.1	20.8	2875-2836 (19.4), 2818-2664 (75.1), 2647-2636 (5.5)	2895-2571 (98.6), 2515-2501 (1.4)
Porvenir Mound A Test Pit 3 Lev 7	Mixed Plant Fibers	BETA 183323	2370	3890±40	-11.8	14.2	2457-2335 (94.1), 2320-2311 (5.9)	2469-2278 (94.4), 2252-2230 (3.8), 2220-2208 (1.8)
Porvenir Mound A Test Pit 3 Lev 7	Fiber bag	ISGS-5520	2960	4110±70	-14.3	10	2862-2808 (24.7), 2776-2774 (0.4), 2758-2720 (15.7), 2704-2576 (58.6), 2507-2504 (0.7)	2878-2553 (91.7), 2540-2592 (8.3)
Porvenir Mound F Profile 1	Mixed Plant Fibers	ISGS-5512	2100	3710±70	-12.5	15	2200-2018 (92.9), 1997-1980 (7.1)	2297-1891 (100.0)
Porvenir Mound F Profile 1	Fiber bag	GEO 30630	2210	3780±60	-11.7	16	2296-2134 (90.1), 2080-2042 (9.9)	2456-2445 (0.7), 2432-2522 (0.8), 2404-2360 (4.6), 2354-2030 (93.5), 1988-1984 (0.3)
Porvenir Mound F Profile 1	Mixed Plant Fibers	BETA 183324	3720	4930±70	-12.2	14	3775-3649 (100.0)	3940-3840 (12.6), 3820-3632 (85.3), 3576-3574 (0.1), 3559-3539 (2.0)
Porvenir Mound H Test Pit 1 Lev 4	Mixed Plant Fibers	GEO 30509	1280	3040±80	-13.8	12.5	1405-1211 (93.0), 1199-1192 (3.1), 1175-1171 (1.4), 1139-1132 (2.4)	1490-1480 (0.6), 1449-1040 (99.1), 1030-1023 (0.3)
Porvenir Mound H Test Pit 2 Lev 5	Fiber bag	BETA 183325	2320	3850±40	-12.0	16.4	2402-2376 (19.4), 2352-2273 (55.5), 2255-2227 (17.5), 2223-2204 (10.6)	2458-2202 (100.0)

Shaura: More than 80 percent of the site was destroyed through mining of gravel for the adjacent highway. Only a small portion of the main mound (130 X 160 X 10) remains along with two secondary mounds. A circular plaza in front of the main mound, visible on aerial photographs, is completely gone. A trench was excavated into the remaining northeast corner of the mound, which yielded only two samples which gave conflicting dates of 3660 and 3080 RCYBP (2040 and 1337 Cal B.C.). A sample taken from stratified trash fill inside the mound gave a single date of 3540 RCYBP (1850 Cal B.C.). No ceramics were found either in the excavations or in any exposed profiles on or around the mound complex, suggesting a Late Archaic occupation.

Provenience	Material	Lab No.	Cal. B.C.	RCYBP	12c/13c	Weight of sample in grams	Calibrated Age Range 1 sigma (68.3%)	Calibrated Age Range 2 sigma (95.4%)
Shaura Test Pit 1	Charcoal	Beta 183326	1870	3540±60	-25.6	17.7	1944-1857(52.6),1847-1769(47.4)	2030-1736(97.9),1713-1693(2.1)
Shaura Trench Lvl 2	Charcoal	ISGS-5522	1330	3080±70	-26.4	4.8	1427-1260(98.7),1227-1224(1.3)	1502-1188(94.2),1182-1148(3.8)1144-1129(2.1)
Shaura Trench Lvl 3	Charcoal	BETA 183327	2030	3660±60	-23.9	7.3	2135-2079(34.0),2061-1949(66.0)	2199-1882(99.8),1826-1834(0.2)