

A CATALOGUE OF LARGE METEORITE SPECIMENS FROM CAMPO DEL CIELO METEORITE SHOWER, CHACO PROVINCE, ARGENTINA.

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Introduction: The Campo del Cielo meteorite field in Chaco Province, Argentina, (S 27° 30', W 61 °42') consists, at least, of 20 meteorite craters with an age of about 4000 years.

The area is composed of sandy-clay sediments of Quaternary-recent age. The impactor was an Iron-Nickel Apollo-type asteroid (Octahedrite meteorite type IA) and plenty of meteorite specimens survived the impact. Impactor's diameter is estimated 5 to 20 meters. The impactor came from the SW and entered into the Earth's atmosphere in a low angle of about 9°. As a consequence, the asteroid broke in many pieces before creating the craters. The first meteorite specimens were discovered during the time of the Spanish colonization. Craters and meteorite fragments are widespread in an oval area of 18.5 x 3 km (SW-NE), thus Campo del Cielo is one of the largest meteorite's crater fields known in the world.

Crater n° 3, called "Laguna Negra" is the largest (diameter: 115 meters). Inside crater n° 10, called "Gómez", (diameter about 25 m.), a huge meteorite specimen called "El Chaco", of 37,4 Tons, was found in 1980. Inside crater n° 9, called "La Perdida" (diameter : 25 x 35 m.) several meteorite pieces were discovered weighing in total about 5200 kg.

The following is a catalogue of large meteorite specimens (more than 200 Kg.) from this area as 2005. Information given is the name of the meteorite, its weight and date of discovery and its current location.

References: [1] EL ABIPON: 460 Kg.- 1936-Museo Argentino de Ciencias Naturales,(MACN), Buenos Aires city, Argentina. [2] EL CHACO: 37,4 Tons -1980-Gancedo, Chaco, Argentina. This specimen is the second heaviest meteorite known in the World. [3] EL MATACO: 998 Kg.-1937- Museo Provincial, Rosario, Santa Fe, Argentina. [4] EL MOCOVI: 732 Kg.-1925-MACN, Buenos Aires city, Argentina. [5] EL PATIO: 350 Kg.-Found before 1960-Estancia El Taco, Chaco, Argentina. [6] EL TACO: 1998 Kg.-1962-Main mass at National Museum of Natural History, Smithsonian Institution, Washington ,DC; USA; 600 Kg. at Planetarium of Buenos Aires city, Argentina. [7] EL TOBA: 4210 Kg.-1923-MACN, Buenos Aires city, Argentina. [8] EL TONOCOTE: 850 Kg.-1931-Planetarium, Buenos Aires city, Argentina. [9] LA PERDIDA(1): 1625 Kg.-1965- Planetarium, Buenos Aires city, Argentina. [10] LA PERDIDA(2): 3370 Kg.-1965-Still in the crater. [11] MESON DE FIERRO: 15 Tons – 1576 – Lost. [12] RUNA POCITO: 750 Kg.-1803- British Museum, London, United Kingdom. [13] NO NAME: 10 Tons.-1997-Near its find site, Chaco, Argentina. [14] LA SORPRESA: 7-10 Tons-2005-Still in the crater.

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