

**THE METEORITE FALL OF 1704 AT BARCELONA.** Jordi Llorca<sup>1,2</sup>, Josep M. Trigo-Rodríguez<sup>3</sup>, and Salvador Vega<sup>4</sup>. <sup>1</sup>Dept. Química Inorgànica, Universitat de Barcelona; <sup>2</sup>Institut d'Estudis Espacials de Catalunya; <sup>3</sup>Dept. Ciències Experimentals, Universitat Jaume I. <sup>4</sup>Associació d'Història Rural de les Comarques Gironines. [jordi.llerca@qi.ub.es](mailto:jordi.llerca@qi.ub.es)

Around 5:00-6:00 PM on December 25, 1704, a fall of stones occurred at Barcelona. The event was immediately recorded in the *Dietari del Antich Consell Barceloní* [1] and several black stones up to 1.2 kg were also recovered ca. 30 km far from Barcelona [2], although at present they no longer exist. Prior to the fall, a great fireball with a long tail was seen and several detonations “*lasted nearly three creeds*” [1]. A smoky trail persisted over a serene sky one hour and a half [2]. It is believed that the Barcelona fall of 1704 was studied by E.F. Chladni among other meteorite falls in order to connect the occurrence of fireballs to falling stones [3]. Now, a previously unknown document in the form of an affidavit which reports the same fireball but seen from the village of Verges, about one hundred kilometers north from Barcelona, also on 1704, December 25, has been discovered by chance in the Historical Archive of Girona and provides additional insight for that meteorite fall, the oldest known record of a fall in Catalonia [4]. The affidavit belongs to the notarial files of Verges, notary Joan Ferrer, n. 83, f. 385 r-v, and was written in Latin. The fall was clearly interpreted in the affidavit as a divine sign (in addition to the frightening appearance it occurred on a Christmas Day) that announced misfortunes, such as the tragic Spanish Succession War that started a few months later and stroke the country for nearly ten years: “*In nomine Sanctissimæ Trinitatis, Patris et Filii et Spiritus Sancti. Ad futuram rei memoriam, sciant lectores presentem scripturam legentes qualiter die iouis intitulata festiuitate Natalis Domini Nostri Iesuchristi /.../ inter quintam et sextam horas serotinæ, serenitate eolisque tranquillitate fuentes, vidimus in emisferio nostro et precipue a parte meridie de celo ignis ardentis signum descendentem versus ocassum ad instar fulguris, magno cum splendore, et terrore omnium circumstantium in terra decurrentem. Postque visionem hanc fere medii quarti spatium magnum audiuius terremotum Gerundam versus vbi ad aparien-tiam dictum signum descendit pro vt in illo statu tormentum belli iecissent pugnamque magnam tenuissent. Ex quo pronosticum facimus alicuius rei euenturæ. Placeat omnipotentis Domino Nostro Deo vt sit bona /.../*”.

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**References:** [1] Manual de Novells Ardits vulgarment Apellat Dietari del Antich Consell Barceloní, vol. XXIV, 1702-1704, fol 114 v; [2] Galí i Barba, J.B. *Llibre de notes dels hereus de Can Torres. Matadepera 1699-1824*. Terme, 8, Centre d'Estudis Històrics/Arxiu Històric Comarcal, 1993, 29-37; [3] Grady, M.M. (2000) *Catalogue of Meteorites*, 5<sup>th</sup> Ed. Cambridge Univ. Press; [4] Faura i Sans, M. (1921) *Meteorits caiguts a Catalunya*. Butlletí del Centre Excursionista de Catalunya, 322, 270-288.