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The Canadian Earth Impact Database, Wikipedia and the Azuara and Rubielos de la Cédrida (Spain) Impact Case

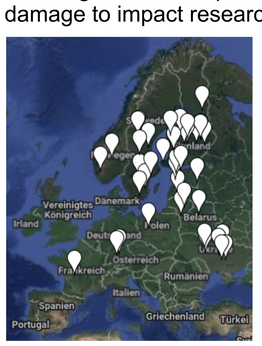
F.M. Claudin[1] and K. Ernstson[2]

[1]Associate Geological Museum Barcelona (Spain); fclaudin@xtec.cat, [2]University of Würzburg, 97074 Würzburg (Germany); kernstson@ernstson.de

The Earth Impact Database and Wikipedia falsifications

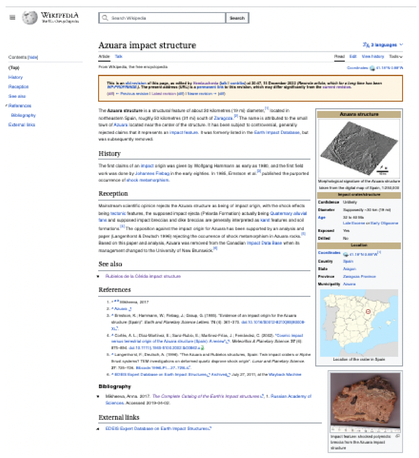
We report on the mid-Tertiary multiple Azuara impact event (Spain) with the Azuara impact structure and the Rubielos de la Cérida impact basin and the chequered history of their discovery and their place in impact research.

Introduction A newly posted revision of the Wikipedia article *Azuara Impact Structure* denies an impact origin for Azuara, citing a "mainstream opinion" and the Canadian Earth Impact Database. It refers to articles more than 20 years old, and removes impact-shock evidence from previous Wikipedia versions. We report here the unspeakable story about one of the world's most remarkable giant impact events, beginning in 1985, reaching a new low-point with the new Wikipedia revision, and causing unimaginable damage to impact research.



Impact structures in Europe: The Canadian Earth Impact datebase ignoring one of the world's most prominent impact events: The Mid-Tertiary Azuara multiple impact event in Spain.

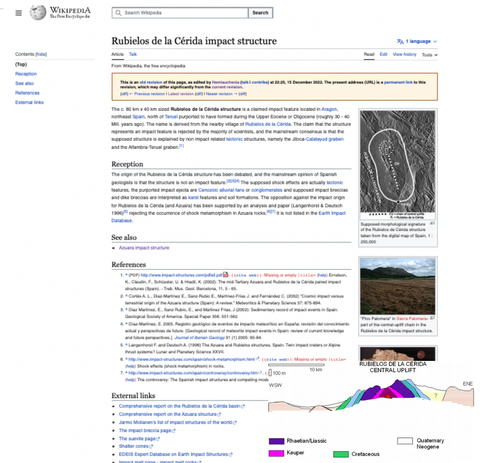
The Azuara multiple impact event comprising the 40 km-diameter Azuara structure, the 80 km x 40 km sized Rubielos de la Cérida crater chain impact basin, the Torrecilla 10 km ring structure, and the 10 km-diameter Singra-Jiloca impact structure.



15 December 2022

Azuara impact structure Wikipedia

The WIKIPEDIA manipulation - falsification



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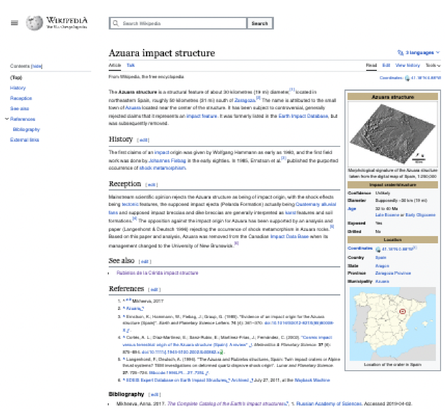
The WIKIPEDIA manipulation - falsification

Rubielos de la Cérida impact structure Wikipedia

21 January 2023



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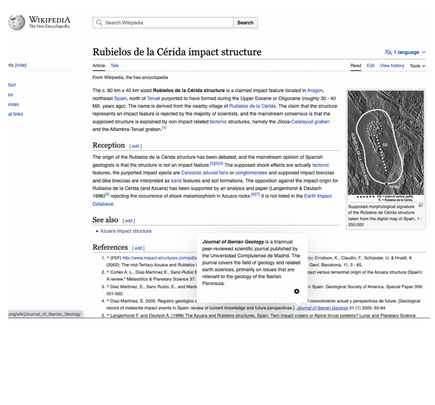
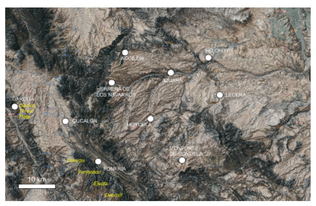
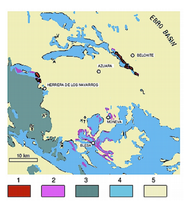


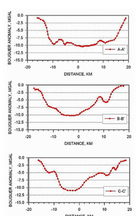
The Scientific Truth about Azuara and Rubielos de la Cérida



Azuara impact : Digital Terrain Model



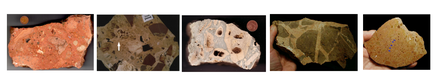
Geological general map



Azuara: geomagnetic profile

Bouguer gravity residual profiles

Azuara - Pelarda Fm., one of the the most prominent terrestrial impact ejecta deposits

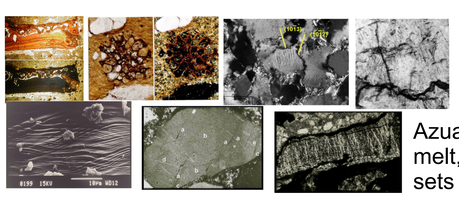


Azuara - suevite, polymictic impact breccias, lapillistone

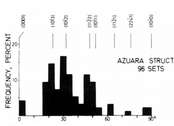
Azuara - extended megabreccia deposit Almonacid de la Cuba, Belchite

Azuara impact structure

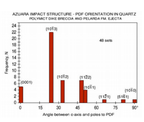
Azuara - breccia dikes



Azuara - Shock metamorphism: shock melt, diaplectic glass, PDFs (3x), multiple sets of PFs, extremely kinked mica



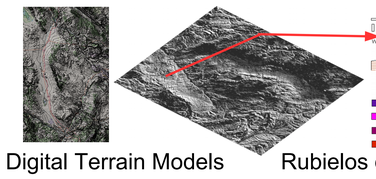
Ernstson et al. 1985



Therriault. 2000

Azuara PDF

Rubielos de la Cérida impact basin and crater chain

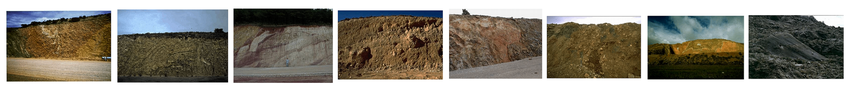


Digital Terrain Models

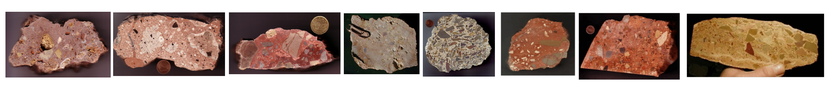
Rubielos de la Cérida central uplift

central uplift chain

Impact ejecta Puerto Mínguez

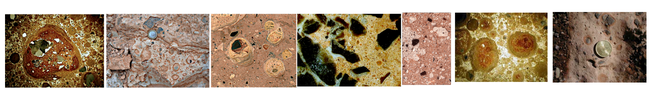


Megabreccias



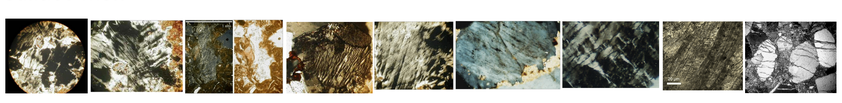
Suevites, polymictic breccias

Breccia dikes



Accretionary lapilli, lapillistones

Impact melt: silicate melt (5x) - carbonate-phosphate melt - cabonate melt (2x) - sulface melt



Shock metamorphism: Quartz PDF + diaplectic glass - diaplectic plagioclase - feldspar diaplectic twin lamellae - quartz PDF + diaplectic glass - quartz PDF, kink banding - PDF - shock spallation

Funereal science

The early years: Azuara as established impact structure

In 1985, *Lunar and Planetary Science Letters* publishes the first article on the impact origin of the Azuara structure. Because of the shock effects with the impact-typical crystallographic directions of the PDF published there as photos and histograms and more shock evidence, Azuara is generally regarded as an established impact, published in corresponding lists and articles and included in the impact database of the Canadian Geological Survey under R.A.F. Grieve.

The manipulation of F. Langenhorst and A. Deutsch (Article Lunar & Planetary Science Conference)

1996 the LPSC article of F. Langenhorst and A. Deutsch appears, in which the shock effects for Azuara are questioned and Azuara is explained as tectonic. They deduce this from a single thin section that K.E. had sent them with a question about basal planar features in quartz, which came from a sample far outside the Azuara structure. K.E. alerts the two authors to their glaring error and asks for the article to be withdrawn, which is refused. K.E. accuses them of scientific dishonesty. This dishonesty should have consequences for the impact research, which last until today, as not only the Wikipedia revision proves.

The early 2000's: The controverse and the concerted campaign against the Spanish impact event begins

The Azuara research proposes Rubielos de la Cérida as a nearby large companion impact with all generally accepted impact features.- The 6th IMPACT workshop on „Impact Markers in the Stratigraphic Record" was held in Granada 2001. Four posters by F. Anguita, F. Claudin, K. Ernstson, T. Ernstson, M.Hiltl, K. Hradil, M. Rampino, and U. Schüssler in varying co-authorships were applied to the Spanish Azuara and Rubielos de la Cérida impact structures. In the final discussion under C. Koeberl the Azuara shock evidence (extensive and very thorough PDF analysis made by Dr. A. Therriault from the Canadian Geological Survey) was doubted. A comprehensive article on the newly established Rubielos de la Cérida impact with all evidence etablished in impact research, was submitted to Earth and Planetary Science Letters, but with reviews by R.A.F. Grieve and, especially unsightly, by C. Koeberl rejected. Strong objection to the editor of EPSL gave the answer that the editor must rely on the reviewers.

The falsification by F. Langenhorst and A. Deutsch was a nice gift for the Spanish geologists, who felt fully strengthened in their now quite intensified total rejection of the big impact. In 2002, geologists from the University of Zaragoza publish an article in *Meteoritics & Planetary Science,* in which the conventional geology of the region is contrasted with the new impact hypothesis. The article is a farce, in which all published impact findings are explained by "normal" geology, which is accepted in a peer-review farce of the journal, the Associate Editor of which at that time was A. Deutsch. And we remind that Christian Koeberl belonged to the Publication Committee of the Meteoritical Society, publisher of MAPS. At the same time, the Canadian Earth Impact Database moves to the University of New Brunswick, where John Spray takes over. This goes along with the fact that Azuara is completely deleted from the database. When a little later F.M.C. asks in an email to Spray why Azuara was deleted and Rubielos de la Cérida was not included despite overwhelming published impact evidence and if he, F.M.C., could send him relevant articles, Spray replies that F.M.C. could do that but that he would not read it. The influence of the Spanish geologists from Zaragoza in their rejection of the impact is so great that the large regional daily newspaper El Periódico de Aragón carries a multi-column article with a photo, in which the geologists claim without proof that the impact researchers secretly and "by night and fog" bring alleged impact rocks across the border to Germany to sell them on the internet. Geological *Surrealism (as F.M.C. called it).*

In the same year 2002, the first extensive open access peer-reviewed 60 page-article on the twin impact structure Azuara and Rubielos de la Cérida is published by the University of Barcelona, which is widely ignored in the literature until today. Credit for this publication is basically due to only one geologist in Spain, Prof. Dr. Francisco Anguita of Planetology at the Complutense University of Madrid. He is committed to impact research on Azuara and Rubielos de Cérida, especially as new publications continue to appear from the impact researchers, especially extensively on the Internet. Prof. Anguita organizes an excursion for a larger group of students of geology of the University of Madrid and invites professors and lecturers of all Spanish universities to this excursion together with the impact researchers. Large number of registrations, but in the end only one professor from Salamanca participates in the excursion. The campaigns of Langenhorst, Deutsch, Koeberl and the geologists of the University of Zaragoza do not miss their effect. More shocking is the message from Madrid. There, more and more students are interested in a geological examination thesis in the nearby impact structures, about which in the meantime extensive information has become available on the Internet, and ask their professors about the possibilities. The unanimous answer: If you ever want to make a career in geology, leave the impact structures alone.

Current state

To this day, in none of even the most recent Spanish articles and reference books on the region there appears a discussion of Azuara, even in the latest textbooks Azuara does not even appear in the subject index. In none of the compilations of the last decade (books and articles about the present state of impact research with listings of terrestrial impact structures, Azuara and Rubielos de la Cérida are mentioned at all or at most in a few cases as not proven. For authors of articles submitted to journals that cite Azuara or Rubielos de la Cérida in comparisons, peer reviewers require that this be eliminated because, according to the database, an impact is not verified.

Conclusions

Azuara and the Rubielos de la Cérida crater chain can be considered today as one of the most remarkable impact events worldwide with all the evidence consistently accepted in impact research (Figures), which is met in the Canadian Impact Database in this abundance and stringency by only very few of the impacts considered proven there. The Spanish impacts are easily accessible and verifiable directly or with samples in the laboratory. We leave it to the reader to ponder why a small group of influential impact researchers behave in such a manner, abandoning all honest science. What is almost worse: By this blockade of most exciting and spectacular research results, something tremendously important is taken away and withheld from the younger geology generations, especially in Spain.

The newly posted revision article shows once again that Wikipedia has in many cases completely abandoned its reputation as a reliable encyclopedia and that obviously administrators manipulatively make common cause with anonymous authors who quote "mainstream opinion" without true references.

References:

Listing of terrestrial impact structures in recent articles by impact researchers, in which the Spanish multiple impact event with the Azuara impact structure and the Rubielos de Cérida multiple impact crater basin does not exist.

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Osinski, G.R., R.A.F. Grieve, L. Ferrière, A. Losiak, A. E. Pickersgill, A. J. Cavosie, S. Hibbard, P. Hill, J. Pablo Jaimes, C. L. Marion, J. D. Newman, S. L Simpson . - Earth Sc. Rev., 232, 104112.

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