Scientific Studies to the Geology of Fuerteventura :

In the area of **Porto de la Pena** on the west-coast of Fuerteventura there is an area which seems to be an "**Ejecta Impact Area**" that was formed by an assumed **Ø 13,5 x 10 km** Secondary Impact Crater from the Permian Triassic (PT) Impact Event → the "**Ajuy Crater**"
In the area in **Detail 5** there is a small area with old oceanic crust from the Mesozoic Age (up to **252 million years** old ! → **P/T-age !**)
I believe that this **fragments of old oceanic crust** from the Mesozoic Age **were pushed upward by the ejecta from the Ajuy Crater**.
The whole area around Porto de la Pena seems to be effected by ejecta from the Ajuy Crater. **Other interesting areas were ejecta material from the Ajuy Crater seems to be present** are the areas indicated by **Detail 1 , Detail 3** and **Detail 13** on this map

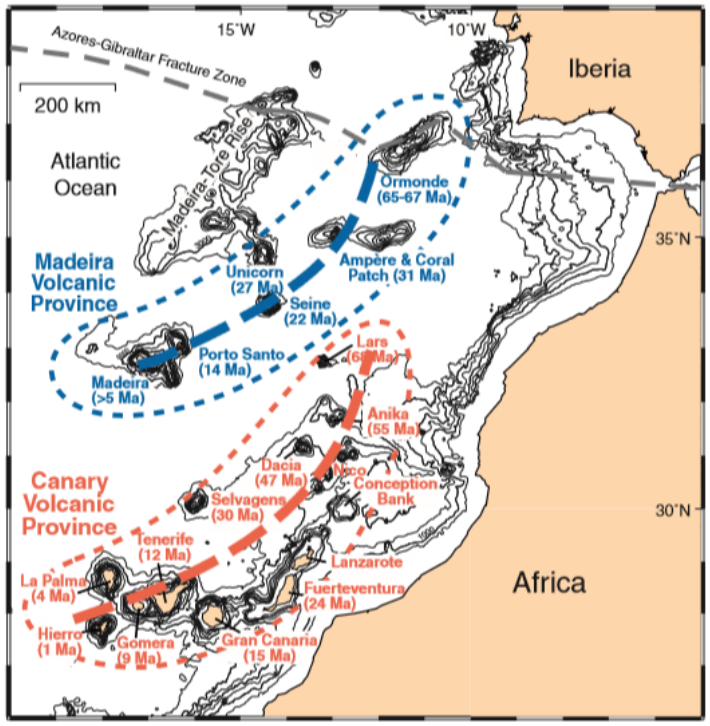
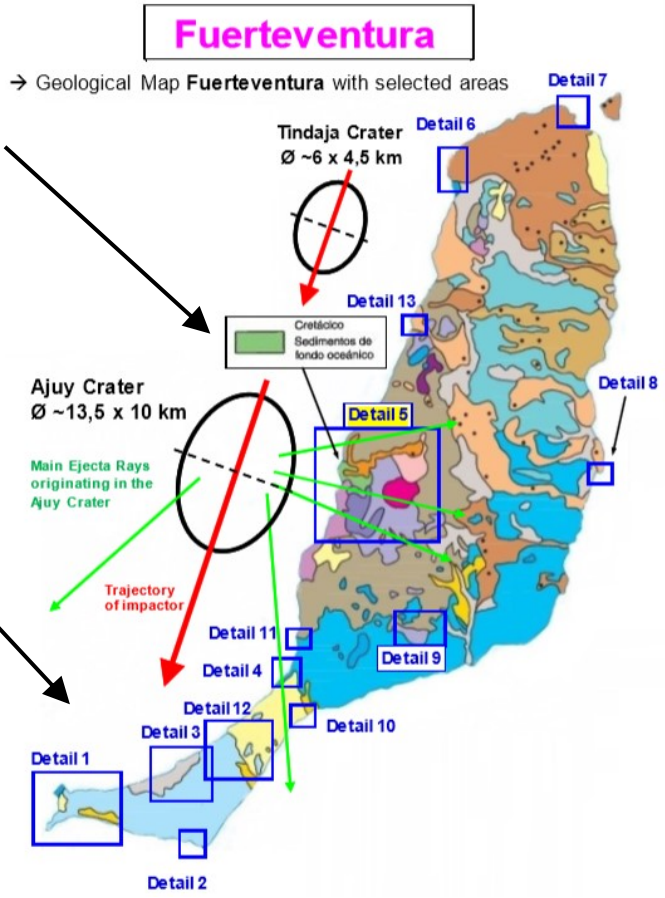


FIGURE 1 Bathymetric map showing the Canary (red) and Madeira (blue) volcanic provinces, including islands and associated seamounts, in the eastern central North Atlantic. Thick dashed lines mark centers of possible hotspot tracks. For clarity, only depth contours above 3500 m are shown. Bathymetric data from Smith and Sandwell (1997); ages and location of the Azores–Gibraltar fracture zone from Geldmacher *et al.* (2005) and Guillou *et al.* (1996).



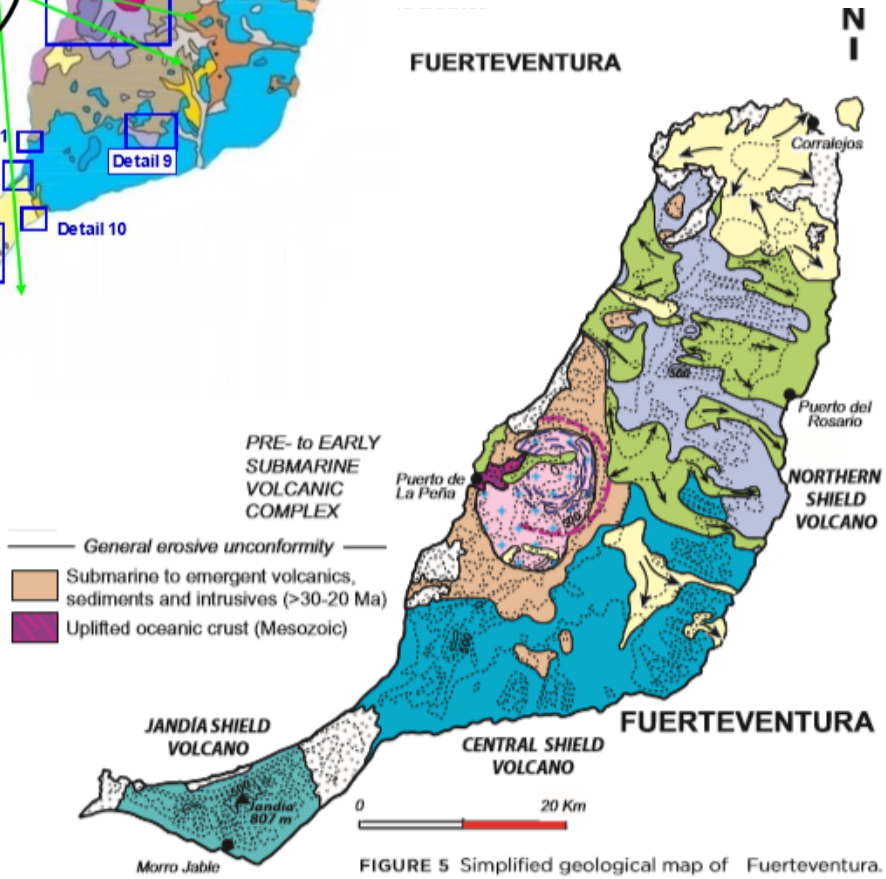


FIGURE 5 Simplified geological map of Fuerteventura. Modified from Carracedo *et al.* (2002).

Weblinks to some studies referring to the Geology of Fuerteventura and the Canarian Islands :

The Geology of the Canary Islands - Juan Carlos Carracedo & Valentin R . Troll

Weblink to Google Books :

https://books.google.de/books?id=DztUCwAAQBAJ&pg=PA537&lpg=PA537&dq=fuerteventura+%2B+mineral+deposits&source=bl&ots=sAaj02GVF6&sig=W-JjBIJ4y2Mqd_fEZUKFhdFoCAk&hl=de&sa=X&ved=2ahUKEwiSupX0us7aAhXkDpoKHT39D244ChDoATACegQIABA7#v=onepage&q=fuerteventura%20%2B%20mineral%20deposits&f=false

Canary Islands, Geology - Kaj Hoernle & Juan-Carlos Carracedo

https://core.ac.uk/download/pdf/11896861.pdf
https://www.researchgate.net/publication/285098408_Canary_Islands_geology

Alkaline and carbonatitic intrusive complexes from Fuerteventura (Canary Islands) : Radiometric exploration, chemical composition and stable isotope

https://www.researchgate.net/publication/39663461_Alkaline_and_carbonatitic_intrusive_complexes_from_Fuerteventura_Canary_Islands_Radiometric_exploration_chemical_composition_and_stable_isotope?enrichId=rgreq-673c7bc63f0e4ed2352b32ba22f5dd7a-XXX&enrichSource=Y292ZXJQYWdlOzM5NjYzNDYxO0FTOjI4Njk1NTgzMDAzODUzN0AxNDQ1NDI3MDA5OTk4&el=1_x_3&_esc=publicationCoverPdf

Mantle Xenoliths from Tenerife (Canary Islands): Evidence for Reactions between Mantle Peridoties and Silicic Carbonatite Melts inducing Ca Metasomatism

(PDF) Mantle Xenoliths from Tenerife (Canary Islands): Evidence for Reactions between Mantle Peridotites and Silicic Carbonatite Melts inducing Ca Metasomatism (researchgate.net)
Alternative : pet02$p034 (silverchair.com)

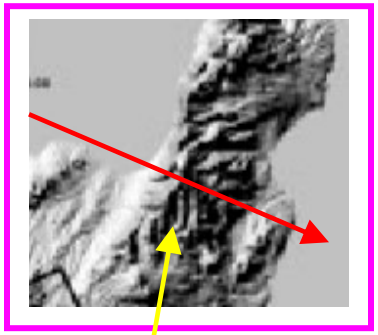
Rare earth minerals in carbonatites of Basal Complex of Fuerteventura (Canary Islands, Spain) - J. Mangas & E J. Pérez Torra

➔ **Calcio-Carbonatites as Breccias along the coastline between Puerto de la Pena and Cueva de Lobos**

https://accedacris.ulpgc.es/bitstream/10553/1784/1/4459.pdf
alternative : https://www.semanticscholar.org/paper/Rare-earth-minerals-in-carbonatites-of-Basal-of-j-J./9a9ff8543343f722e2257a473e5e0a277764adf8

Assessment and Modelling of Lava Flow Hazard on Lanzarote (Canary Islands)

https://www.researchgate.net/publication/226464881_Assessment_and_Modelling_of_Lava_Flow_Hazard_on_Lanzarote_Canary_Islands?enrichId=rgreq-320fa47b0f032f10a3acf7799afce0c2-XXX&enrichSource=Y292ZXJQYWdlOzIyNjQ2NDg4MTtBUzoyOTQ2NDIwMTc5NDc2NTNAMTQ0NzI1OTUzOTYxMw%3D%3D&el=1_x_3&_esc=publicationCoverPdf



Mountain Range formed by Ejecta from Tinajo Crater ?

Lanzarote

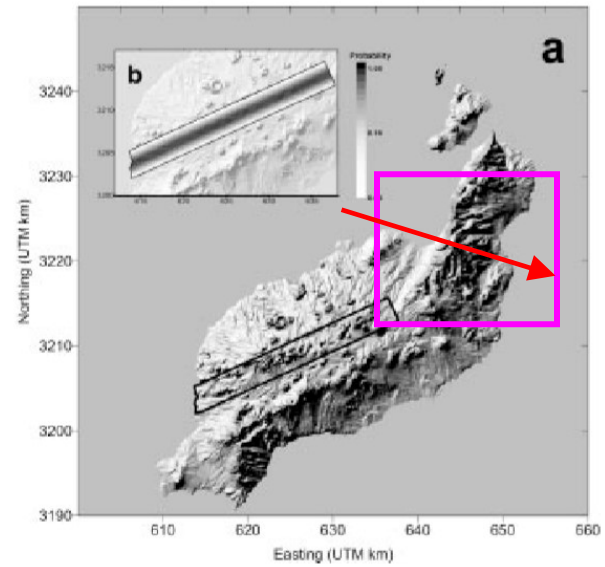


Figure 3. (a) Area selected for containing emission centres. The background is a shaded image of Lanzarote's topography. (b) Probability of each point being an emission centre for simulation 2.