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The Oklo spontaneous nuclear reactor case: a fireball startup creating the South Atlantic

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ABSTRACT

There is a need to clarify continental formation processes and the Oklo natural nuclear reactor happens to be in the exact position where such a natural phenomena needs to be to explain continental separation. New research points of the author are shown to fit with findings of the French Commissariat à l'énergie atomique here.

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The Oklo spontaneous nuclear reactor case asks a question, for those reading about it. The question can be answered by looking at the geographical position in a ¾th central place in Africa, with water on the 4th side, and a quite consistent repartition of masses around.

Indeed, unaware readers might consider the option that a small military accident with an antitank rocket caused a soil boiling effect, this option is excluded by the quality of the basalts formed around that demonstrates, together with the first isotopic data given, the naturality and ancientness of the event.

Secondly, it is posited a central contribution of this small fireball event and subsequent open air natural reactor in the separation of Africa and Southern America i.e. formation of the Southern Atlantic ocean. The Pangaea hypothesis has to be crossed with the demonstration in [1] to understand. The Pangaea was the immediate result from natural set up of masses by the black hole eruption and lasted only a few seconds, but South Atlantic formation happened ended only circa 730 million years ago and the fireball itself could have happened in a very uncertain time, perhaps 2 billion years ago, perhaps 900 million years ago, with a more rapid hypothesis for continental drift, but descent of heaviest isotopes from the fireball underground makes impossible precise verification.

At the time of the fireball impact, Africa as we know it was to the south-west of its actual position, stuck with South America as a single landmass. It is the very powerful fireball impact that triggered the natural reactor phenomenon and started the breaking in two of the continent, with Africa drifting in the direction of the north-east, eventually meeting Gibraltar and the Arabic peninsula circa 700 million years ago. A closer study shows it was a cluster of fireballs (fireball chapelet) that compressed the landmasses and propped up nuclear reactor catalysis.

A double impact, of a U236-shape (see [2] for explanations) can be seen just south of the area, with the Oklo natural nuclear reactor in the epicenter.

The remains of the bigger fireball impact can be seen as a pale circle from Komono, R.d. Congo (-3,26 ; 13,22), Bambama, R.d. Congo (-2,65 ; 13,59), Mpassa, Gabon (-1,75 ; 13,37), Lemboumbi-Leyou, Gabon (-1,58 ; 13,18), Mayoko, R.d. Congo (-2,47 ; 12,8), Mossendjo (-3,01 ; 12,81) – the droplet shape shows that most of the mass impacted the southern area. Both are somehow merged, the U236-shape fireball did not break up significantly before impact.

Another fireball impact remains can be seen in a circle in Gabon from Ogooué-Lolo (-0,66 ; 12,79), (-0,69 ; 12,96), (-0,56 ; 13,02), (-0,45 ; 12,93), (-0,55 ; 12,84). A third fireball impact is suggested just north of the Oklo reactor, around Lemboumbi-Leyou : (-1,31 ; 13,19), (-1,28 ; 13,24), (-1,24 ; 13,21), (-1,26 ; 13,17). A fourth fireball impact is obvious in (-1,10 ; 13,30), (-1,06 ; 13,35), (-1,05 ; 13,25), (-1,09 ; 13,26). These major impacts, in a single “fireball chapelet” event, triggered the slow tectonic move of the African continent north-eastwards. The chapelet event happened as Oklo was, obviously, located where the island of St-Helens is now. Through the drift process that the chapelet impact started, at some times the nuclear reactor went supercritical (as the area is located inbetween the impact area the shockwaves could bring a localized area supercritical and start the nuclear reactor) and for each supercriticity the resulting lighter materials from magmatism stayed under it, because the density of the crust, together with the already existing lateral movement (given by the fireball impact energy) made later resurfacing in the rear an easier liberation process than volcanism. So through this process the accretions of fission products and ternary fission products merged as well under the weight to form lighter blocks of materials resurfaced behind the continent as it drifted. The continent drifted first more to the north than to the north-east, then met the Iberian peninsula, bounced,

and thanks to the elasticity of the manteau drifted back to the south-east – which is why a first cluster of underwater islets is found around (-0,56; 1,59) (1,11 ; 2,41) (-0,38 ; 2,72) before another cluster in a S-curve (-2,40 ; 2,04) (-1,86; 3,69) (-1,46; 5,67) giving the group a strange V-shape. That feedback movement after soft impact on the Iberian peninsula, which also explains the big underwater plateau formed south of Accra (and its strong declivity from the north-to-south pressure from the later part of the tectonic dynamism) let out, later, patches of seashore fragilized from very early by the fireball impacts to form the islands of the Gulf (Bioko, Principe, Sao Tomé de Principe, Pale) – one for each fireball impact, because of the deep faults these impacts created at the beginning and that simply travelled together with the rest of the continent until the feedback movement disbanded the fragile equilibrium.

The natural nuclear reactor had obviously some contribution to the continuing drift of the African continent, by pumping matter - the initial direction given by the impact of the fireball creating a cycle of entry of materials into the Oklo reactor from the east visible by the shape of the mountains east of Oklo (forming a triangle from Moyabi and Beka-Beka to Mbounga and Otoundou, and an echo of this triangle visible behind with another tip in Lekei, then from Kalami to Aboumi - much farther away the shape of the Great Lakes also echoes with the tip in Bukavu, and Lake Eyasi in Tanzania also shows the pull forces that seem to conclude with the formation of Lake Magadi, remain of the last point of uncoupling of the pull forces from the Oklo reactor) - these shapes show the underground absorption process by the natural nuclear reactor ; a limited "vacuum effect" took place, creating as well a movement of the manteau, contributing to the continental drift to the east.

References

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