Did the Central Iapetus Magmatic Province (CIMP) trigger and drive the Gaskiers Glaciation and the Cambrian Bioradiation?

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The 615-540 Ma Central Iapetus Magmatic Province (CIMP) was emplaced in multiple pulses during Ediacaran-Cambrian times, and has been linked to the disruption of the Rodinia supercontinent leading to the opening of the Central Iapetus Ocean. In Africa, CIMP is well represented in the West African craton (WAC), particularly in the Anti-Atlas of Morocco, as the 606-541 Ouarzazate Supergroup (volcano-sedimentary) that covered ca. 2×10^6 km^2 with an estimated magma volume of ca. 1×10^6 km^3 and volcanic thicknesses greater than 3000 m. In some Inliers the volcanic rocks (mainly silicic) of the lower unit of the Ouarzazate Supergroup present well-documented glaciogenic features (Vernhet et al., 2012, Prec. Res.) and reinforce the idea of synchrony of the c. 580 Ma CIMP pulse with the ca. 580 Ma Gaskiers glaciation. In addition, three sandstone samples show strong detrital U-Pb peaks of 552 Ma and 541 Ma (Karaoui et al., 2015, Prec. Res.) placing the age for the youngest pulse of CIMP at the uppermost Ediacaran (Upper Ouarzazate Supergroup), i.e. close to the Precambrian-Cambrian transition. The most important links are the following: 1) The c. 580 Ma CIMP pulse (mainly silicic) helped trigger a Volcanic Winter and subsequent Snowball Earth conditions ("Icehouse"), i.e. the Gaskiers glaciation. 2) The subsequent c. 570 Ma flood basalt CIMP pulse helped trigger a "Volcanic Summer" and succeeding global warming conditions ("Greenhouse") that ended the ice age and contributed to consequent expansion and diversification of the life on Earth, i.e. the Cambrian Bioradiation.