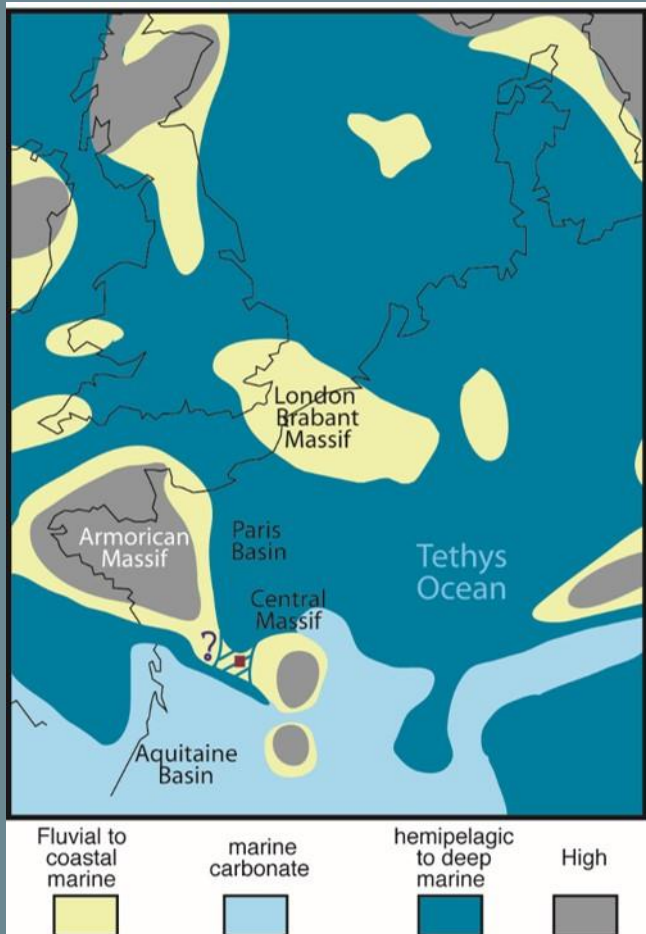
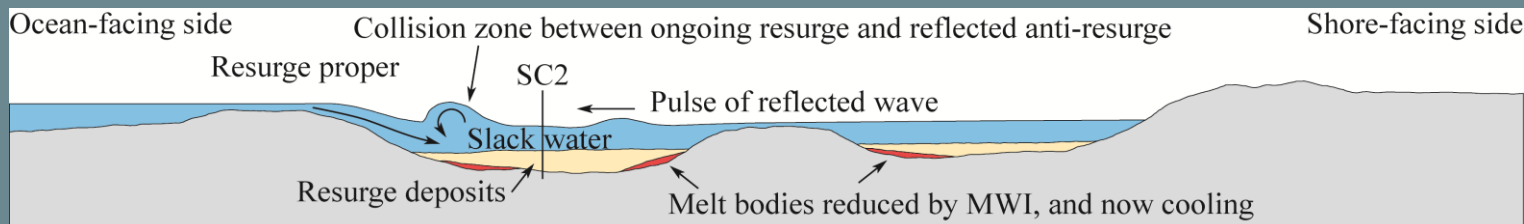


# Impact Crater Refines both Paleoenvironment and Age of Formation in Area with Limited Data



The Rochechouart impact structure, located in the western part of the Massif Central in France, has been suggested to be one of the largest impact structures in western Europe. Various age datings have placed the event in a span from the Late Triassic to the Early Jurassic, but the most recent works favour a Late Triassic age. Very little is known about the target environment at the time and location of the impact event. Seemingly coeval, potential tsunamites along palaeoshorelines of the sea that covered parts of continental Europe at the time have been suggested to be related to the impact event and may indicate a marine target setting. Here we apply the method of visual line-logging of the graded suevite in the Chassenon SC2 drill core. This method has previously been used to investigate the depositional environment of similar deposits in several marine target impact craters. It allowed us to compare the deposits at these craters with those at Rochechouart, and in this way not only confirm the marine target setting, but also estimate the target water depth to be ~200 m. Altogether, our results indicate a palaeogeographic target setting in a newly opened seaway connecting the Paris Basin with the Aquitaine Basin, which may indicate an age of impact at the younger end of the hitherto suggested age-span, i.e. in the late Rhaetian – Early Jurassic.



Ormö J, Sturkell E, Lambert P, Bourquin S, and Cherfils J-B. Oceanic resurge deposits at the Rochechouart impact structure (France) suggest a marine target environment. *Geological Magazine*  
<https://doi.org/10.1017/S001675682200125X>