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Magnitude 9 Earthquake Risk in the Eastern Mediterranean and the 365AD Catastrophe

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Following the Magnitude 9 Tohoku, Japan earthquake and tsunami of March 2011, attention has focused on all subduction zone plate boundaries worldwide to see whether they have the potential for comparable catastrophes. One such candidate is the Hellenic Arc subduction zone that runs E-W through the eastern Mediterranean where the African plate dips down to the north under the Aegean Sea and Turkey. The question as to whether this subduction zone is capable of generating a Magnitude 9 earthquake may already have been answered by the July 21st 365AD catastrophe. Piecing together all the evidence from documentary records, as well as geological and archaeological discoveries, we have indications that this was indeed a giant Magnitude 9 sized earthquake, accompanied by a tsunami that in some locations exceeded 30m elevation. This talk will consider how all this forensic evidence can be evaluated and re-assembled. A recurrence of the 365AD event would have catastrophic impacts on coastal communities throughout the eastern Mediterranean, including in Greece, Turkey, Cyprus, Egypt, Libya and Italy.