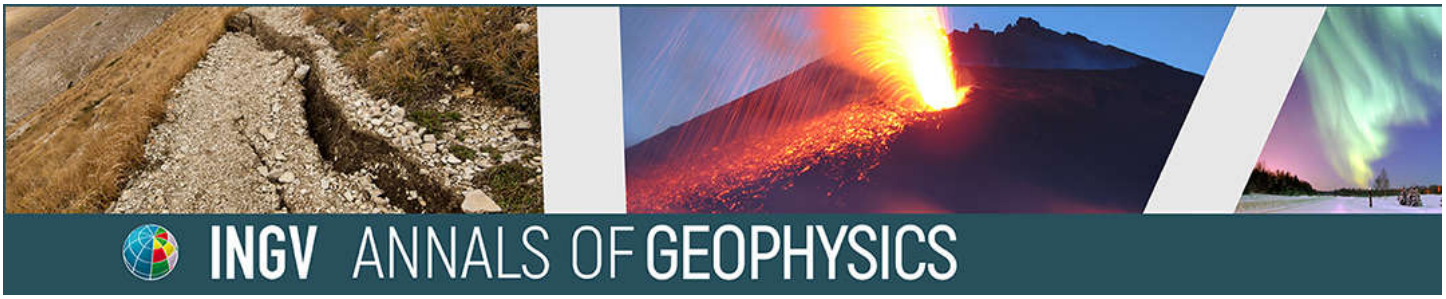

The Kresna earthquake of 1904 in Bulgaria

N. N. Ambraseys

Abstract

The Kresna earthquake in 1904 in Bulgaria is one of the largest shallow 20th century events on land in the Balkans. This event, which was preceded by a large foreshock, has hitherto been assigned a range of magnitudes up to MS = 7.8 but the reappraisal of instrumental data yields a much smaller value of MS = 7.2 and a re-assement of the intensity distribution suggests 7.1. Thus both instrumental and macroseismic data appear consistent with a magnitude which is also compatible with the fault segmentation and local morphology of the region which cannot accommodate shallow events much larger than about 7.0. The relatively large size of the main shock suggests surface faulting but the available field evidence is insufficient to establish the dimensions, attitude andamount of dislocation, except perhaps in the vicinity of Krupnik. This downsizing of the Kresna earthquake has important consequences for tectonics and earthquake hazard estimates in the Balkans.

Keywords

Balkans;Bulgaria;seismicity;magnitude

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References

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KEYWORDS

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