



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 $M_S = 7.8$ but the reappraisal of instrumental data yields a much smaller value of $M_S = 7.2$ and a re-assessment 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 and amount 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

Full Text:

PDF

References

DOI: <https://doi.org/10.4401/ag-3614>

Published by INGV, Istituto Nazionale di Geofisica e Vulcanologia - ISSN: 2037-416X

USER

Username
 Password
 Remember me









MOST VIEWED

- OPERATIONAL EARTHQUAKE FORECASTING....
- ObsPy – What can it do for data...
- Twitter earthquake detection:...
- Magnitude and energy of earthquakes
- Comparison between low-cost and...





AUTHOR GUIDELINES

- EARLY PAPERS**
 Vol 61, 2018

FAST TRACKS

-  Vol 56, Fast Track 1, 2013
-  Vol 57, Fast Track 2, 2014
-  Vol 58, Fast Track 3, 2015
-  Vol 59, Fast Track 4, 2016
-  Vol 59, Fast Track 5, 2016
-  Vol 60, Fast Track 6, 2017
-  Vol 60, Fast Track 7, 2017
-  Vol 61, Fast Track 8, 2018

ARTICLE TOOLS

-  Indexing metadata
-  How to cite item
-  Email this article
(Login required)
-  Email the author
(Login required)

ABOUT THE AUTHOR

N. N. Ambraseys
 Department of Civil Engineering, Imperial College of Science, Technology and Medicine, London, U.K

JOURNAL CONTENT

Search

Search

- Browse
- By Issue
- By Author
- By Title

Journal Help

KEYWORDS

Central Italy
Earthquake GPS
Historical seismology
Ionosphere Irpinia
earthquake Italy Mt.
Etna Seismic hazard
Seismic hazard
assessment
Seismology UN/IDNDR
earthquake
earthquakes
historical
earthquakes
ionosphere magnetic
anomalies
paleoseismology
seismic hazard
seismicity
seismology

NOTIFICATIONS

- View
- Subscribe

USAGE STATISTICS INFORMATION

We log anonymous
usage statistics. Please
read the privacy
information for details.