## **Marine Geology**

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| pp. 93-103             |   |
| Title:                 | Boulders transport by catastrophic waves along the Ionian coast of Apulia (southern Italy)  |
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| Keywords:              | Boulder accumulations; Tsunami; Southern Apulia; Italy  |
| Abstract<br>(English): | Several tracts of the Ionian coast of Apulia (southern Italy) are<br>characterized by large boulders, up to 80t in weight, scattered some<br>meters above present sea level. The largest boulder is about 80t in<br>weight and slid for about 40m from the mean sea level up to about 1.8m<br>of altitude. Elongated boulders show a remarkably narrow range of<br>orientation of the long axis as well as of the imbrication axis, suggesting<br>that they had been transported by a single catastrophic event, most likely<br>a tsunami, connected to a wave train approaching the coast from the<br>South. |
|                        | Stratigraphic, morphological and historical data suggest that this event<br>occurred during the late Holocene. Conventional radiocarbon age<br>determination performed on Lithophag shells collected from a large<br>boulder yielded a calibrated age between 1421 and 1568 A.D. Then, the  |

catastrophic wave train, probably a tsunami, could be a local effect of the strong earthquake which hit southern Italy on December 5th, 1456.

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