AN IMPORTANT NUMBER OF RECENT SIGNIFICANT EARTHQUAKES IN GREECE


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ABSTRACT

Since 2002, a series of large earthquakes with intermediate-depth have occurred in the South-Eastern Mediterranean. The source parameters of these events were calculated using body-wave modeling techniques (Agelos et al., 2008; Mousou et al., 2013). The first one occurred on 22 January, 2002, 22:43 GMT, close to the Kamaropsis (Mw=6.2). The focal depth was 18 km, while the first phase arrivals indicated strike-slip faulting with the fault planes oriented approximately parallel to the Hellenic arc, on depths that vary significantly.

The first earthquake was the 1979 Methoni earthquake (Mw=6.3) which is located close to the town of Methoni, on southern Greece. The earthquake was caused by a strike-slip faulting mechanism, with the fault plane oriented approximately parallel to the strike of the Methoni Fault System. The magnitude of the earthquake was determined to be 6.3 using body-wave modeling techniques (Agelos et al., 2008). The focal depth was 6 km, while the first phase arrivals indicated strike-slip faulting with the fault planes oriented approximately parallel to the Hellenic arc, on depths that vary significantly.

The second earthquake was the 2003 Andrasida earthquake (Mw=6.3) which is located close to the town of Andrasida, on southern Greece. The earthquake was caused by a strike-slip faulting mechanism, with the fault plane oriented approximately parallel to the strike of the Methoni Fault System. The magnitude of the earthquake was determined to be 6.3 using body-wave modeling techniques (Mousou et al., 2013). The focal depth was 18 km, while the first phase arrivals indicated strike-slip faulting with the fault planes oriented approximately parallel to the Hellenic arc, on depths that vary significantly.

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