

## **Effectively Are IMS Auxiliary Seismic Data Used in IDC Automatic Processing?**

Paragraph 81 of the draft IDC Operational Manual states that “... Events ... located in an earlier Standard Event List [SEL] give rise to requests for auxiliary seismic station data, whose aim is to confirm the validity of events and to improve the location estimates. ...” We investigate the extent to which the second aim is achieved in current IDC automatic processing. This is assessed from the proportion of auxiliary data requests that contribute to the location of the same event in a later SEL, and from the consequential reduction in the area of the confidence ellipse. Comparison with the same event in the Reviewed Event Bulletin shows the extent to which requested auxiliary data have been used effectively in automatic processing, while comparison with the same event analysed with all auxiliary data reveals the validity of the choice of data requested. Examples, including events located in the Democratic People’s Republic of Korea, are used to illustrate specific issues.

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