In each year of the late 1990’s, phase readings from around 2500 seismic stations were contributed to the ISC. Since these stations are operated independently, practices probably vary from one station to another too much to refer to them network. Nevertheless, the geographic distribution of reporting stations limits the detection threshold and location accuracy of events in the ISC Bulletin.

The world map above is one view of the joint capability of reporting stations. The shading on the map shows the smallest distance around each point that includes stations with a second azimuthal gap less than 180°. A second azimuthal gap smaller than 180° should ensure that no single arrival time controls a trade-off between origin time and epicentre. It also means that even if data from a critical station are unavailable, the first azimuthal gap at that location will still be less than 180°. Thus, earthquakes large enough to produce reliably measurable arrival times to these distances are most likely to have reliable epicentres computed by the ISC.

All of the stations (shown as blue triangles) that reported even a single phase reading during 1999 January - November are used to compute the distances. Reports for many stations are received by the ISC only occasionally; the assumption in preparing the map is that a report will be sent if there is any nearby seismic activity for which the data from a station will be important.
Shading shows the smallest distance around each point that includes stations with a second azimuthal gap less than 180°. A second azimuthal gap smaller than 180° should ensure that no single arrival time controls a trade-off between origin time and epicentre. Earthquakes large enough to produce reliably measurable arrival times to these distances are most likely to have reliable epicentres computed by the ISC. All stations (blue triangles) that reported even a single phase reading are used to compute the distances.
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Africa

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