High accurate and quick analysis (AQUA) system for source parameters

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We have developed very quick analysis system 'AQUA' for estimation of source parameters with high accuracy.

AQUA system uses one second resolution triggering time with RMS amplitude for hypocenter determination procedure.

These amplitude data during two seconds from first P motion is used by magnitude estimation too.

If the hypocenter is determined, centroid moment tensor inversion is started.

It takes 15-17 seconds for hypocenter determination, and 5-10 minutes for CMT inversion after detection of earthquake.

The final solutions which estimated by this system has enough accuracy for preliminary usage, and very useful for disaster prevention.