So-P001

The improvement for precise earthquake location determined by Japan Meteorological Agency (Part2)

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The earthquake detection capability and the earthquake location precision are much improved since JMA incorporated seismic data provided by universities and relevant organizations into routine hypocenter determination. The new situation stimulated us to reconsider the velocity structure of shallow depth and data weight function for better hypocenter determination. As a first step, we tried to modify the shallow velocity structure by analyzing many recent explosion observation data and data weight as a function of hypocentral distance in consideration with several weighting functions employed by other seismological organizations. The result shows that more reliable hypocenters with reasonable focal depth are obtained using modified velocity structure and modified weight function.