PROGRESS REPORT 2013

IASPEI Commission on Seismological Observation and Interpretation (CoSOI) Working Group (WG) on Magnitudes

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Since 2011, WG members have focused effort on explaining the rationale for the IASPEI standard magnitude procedures in the second edition of the *New Manual of Seismological Observatory Practice (NMSOP)*. We have also continued our task of removing procedural ambiguities that have become evident as agencies or individuals implement the procedures. During the decade of its existence, the WG has seen many of its recommendations adopted. Some long-standing issues have not been completely resolved, however, and new issues have emerged with changes in the global seismograph network and changes in procedures at some seismological agencies. First, for many agencies, publically accessible documentation of magnitude procedures continues to be inadequate. Second, there continue to be cases of significant disagreement in values computed by independent agencies for what are nominally the same magnitude-types. Third, it is clear that many agencies will not adopt the IASPEI magnitudes but will retain their traditional magnitudes. Fourth, with the large increase in the number of digital seismographs, some agencies, such as the NEIC, are overwhelmed (automatic procedures slowed down and proper human review impossible) by the large number of station magnitudes that can in principle be computed; these agencies perceive a need to identify a subset of stations and magnitude types that have highest priority for computation of magnitudes. Fifth, new magnitudes continue to be introduced, and, when these are adopted by more than one agency, it commonly becomes necessary for more precise or unambiguous definition of procedures. These issues point to the desirability of maintaining a WG devoted to magnitudes within CoSOI.