# Updating the ISC Bulletin

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Internationally funded to publish the definitive global seismicity bulletin, the ISC has avoided changes that might alter the fundamental content of the Bulletin. This conservative approach has been mandated by the need for hypocentres, magnitudes and other earthquake parameters that are as uniform as possible. It is now possible, however, to compute new locations and magnitudes for the ISC's entire Bulletin back to 1964 and to provide data more flexibly, for example giving users residuals with respect to their own choice of location or earth model. Thus, the ISC could now change models or procedures occasionally as required to best serve seismologists, and compute new parameters of past events according to the updated practices.

Over more than 30 years of operation, possibilities for many types of changes have arisen. Seismologists might be well-served by adding new features to the Bulletin as soon as they are ready, but most would probably prefer a single change of all procedures for computing earthquake location and size. Changes that the ISC may consider over the next few years include

- Using updated travel times, based on a modern homogenous earth model such as IASP91 or PREM, a 3-dimensional or anisotropic model, or regional models.
- Computing locations from more phases (S or PKP) and more readings (vector slowness).
- Using station travel time and amplitude corrections, either static or source-dependent.
- Implementing alternative location algorithms, e.g., epicentres from only differences of arrival time, depths from waveform fits, or relative locations using JHD.
- Computing magnitude on alternative scales, such as ML or MW.