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The overlap of aftershock coda waves and forecasting the first hour aftershocks

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We show that short term post-seismic incompleteness can be interpreted in terms of the overlap of aftershock coda waves. We use this information to develop a novel procedure which gives accurate occurrence probabilities of post-seismic strong ground shaking within 30 minutes after the mainshock. This novel approach uses, as only information, the ground velocity recorded at a single station without requiring that signals are transferred and elaborated by operational units. We will also discuss how this information can be implemented in the Epidemic-Type Aftershock Sequence model in order to reproduce statistical features in time and magnitude of recorded aftershocks.

Main references

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