

***Interactive comment on “Temporary seismic monitoring of the Sulmona area (Abruzzo, Italy): quality study of microearthquake locations” by M. A. Romano et al.***

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The paper is well written and presents a state-of-the-art application of seismicity monitoring techniques. The results are clearly described and commented. However, just one aspect could require some modification of the present test. It is stated that the b-value deduced for the area under study is relatively low (page 2371) and this could imply that the Sulmona area "might be more stressed than surroundings" (page 2373). I think that empirical arguments supporting this conclusion are rather weak. A visual inspection of figure 11d suggests a clear bending of the G-R relationship around magnitude 2.3: for lower magnitudes a steepest slope is evident (b around 1?). This suggests

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that larger magnitudes are probably "oversampled" with respect to the lower ones as an effect of random fluctuations of larger (and rarest) events. This effect may severely affect G-R parameterization when such a short time interval is considered for monitoring seismicity. Thus I suggest Authors to remove the relevant statements or to put them in a more dubitative form by avoiding unsupported interpretations.

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