

Pawpaw Creek and Ridgely Ridge:
Overlooked Uplift Constraints on 1811-1812
New Madrid Faulting

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Pawpaw Creek and Ridgely Ridge:
Implications for M_{max} in CNA (CENA?)

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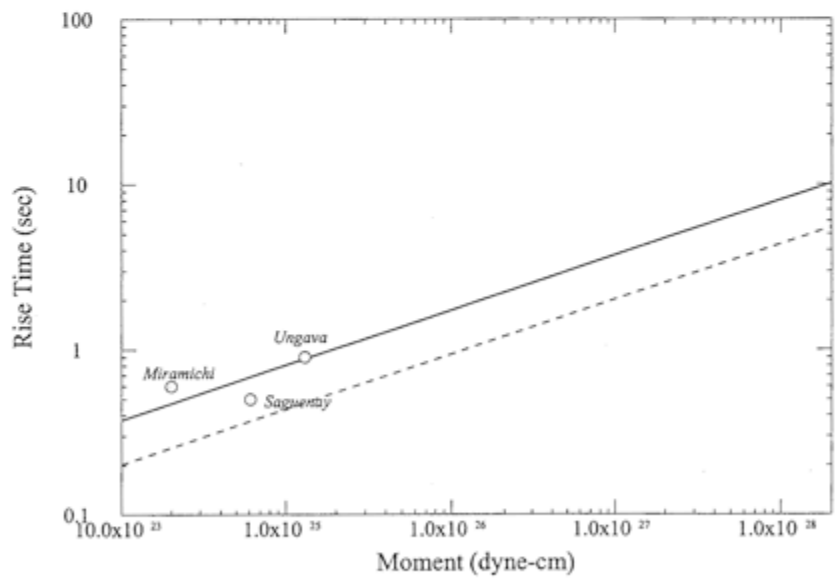
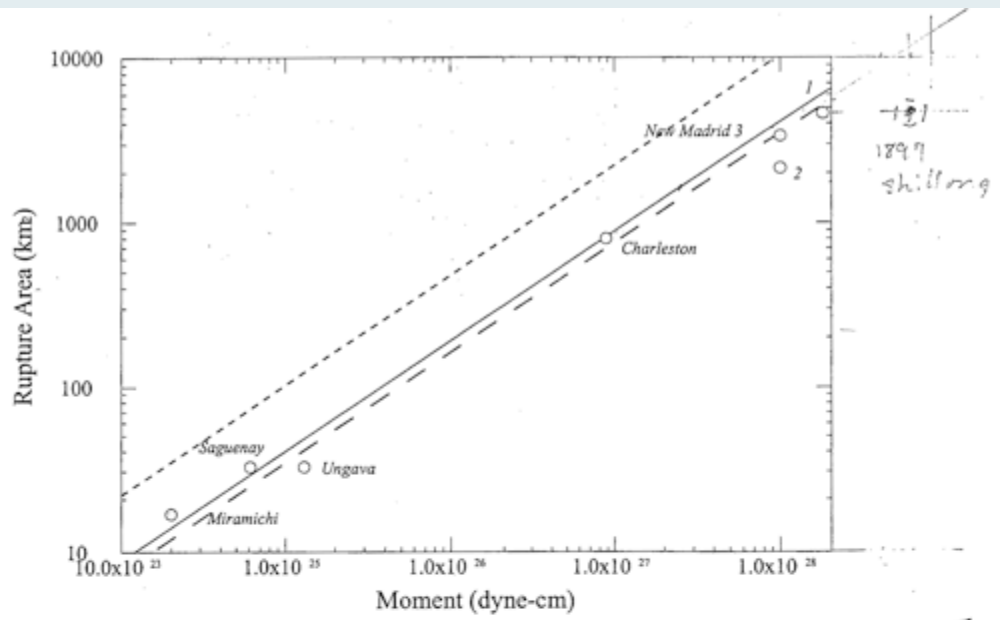
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A Less Subjective (*no Mercalli intensities*) **M**_{max}
for CNA from Seismic Source Scaling

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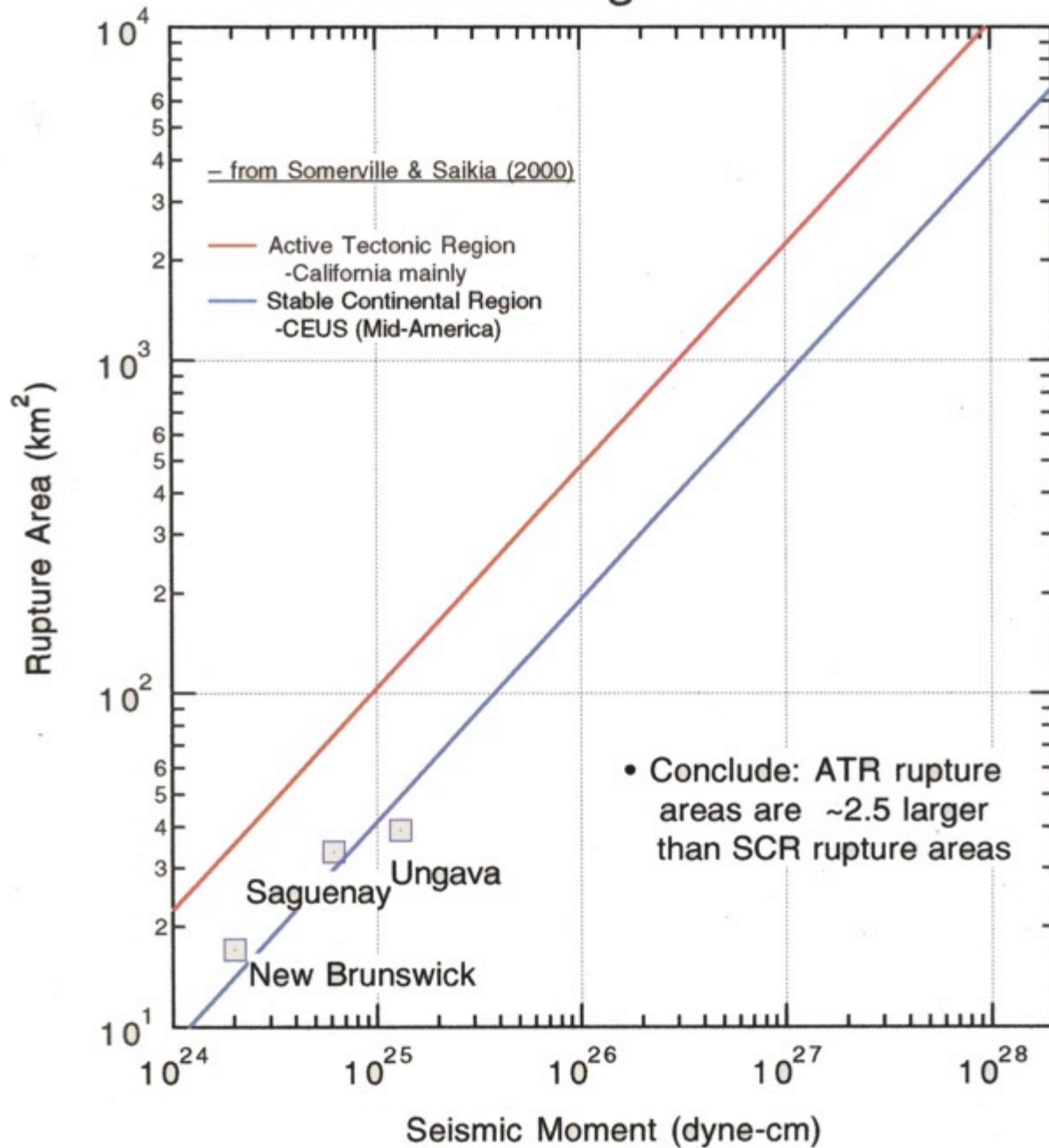


7.3
7.6
7.7
8.0

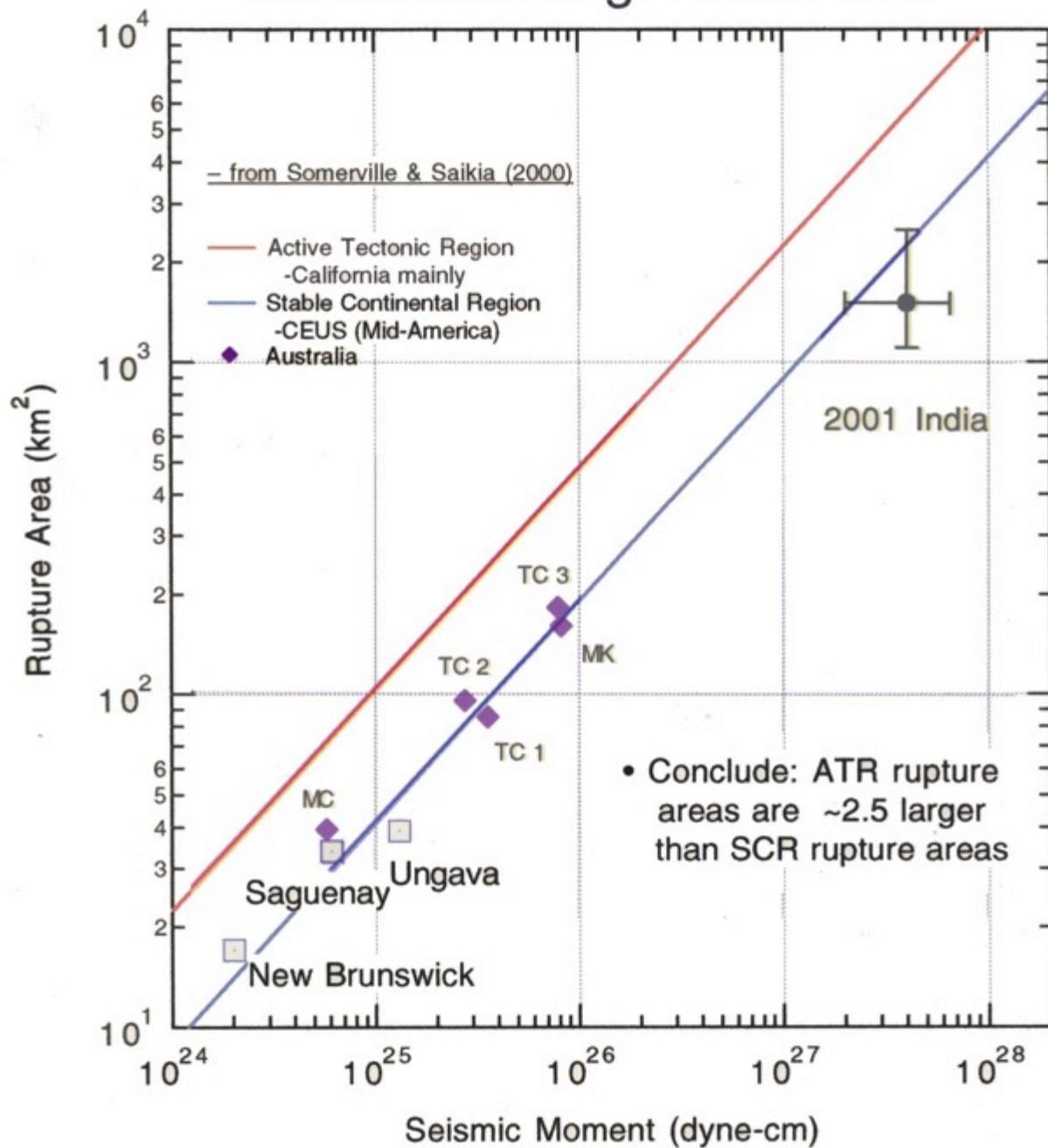
———— ENAM - Hartzell et al., 1994
 - - - - ENAM - Somerville et al., 1987
 - - - - WNAM - Somerville et al., 1999

Figure 1. Scaling relations of eastern North American earthquakes and comparison with western North America.

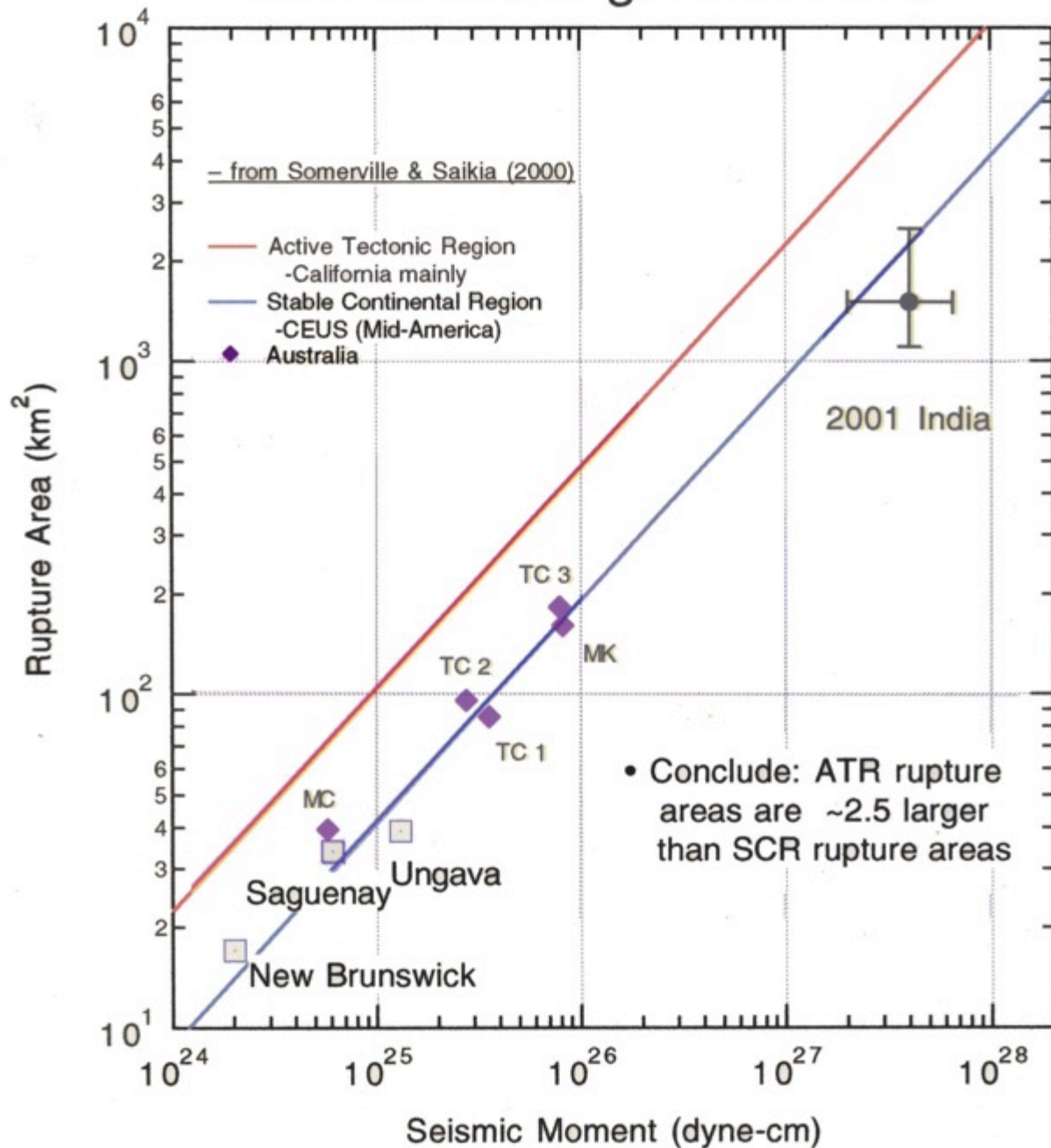
Source Scaling: Fault Area



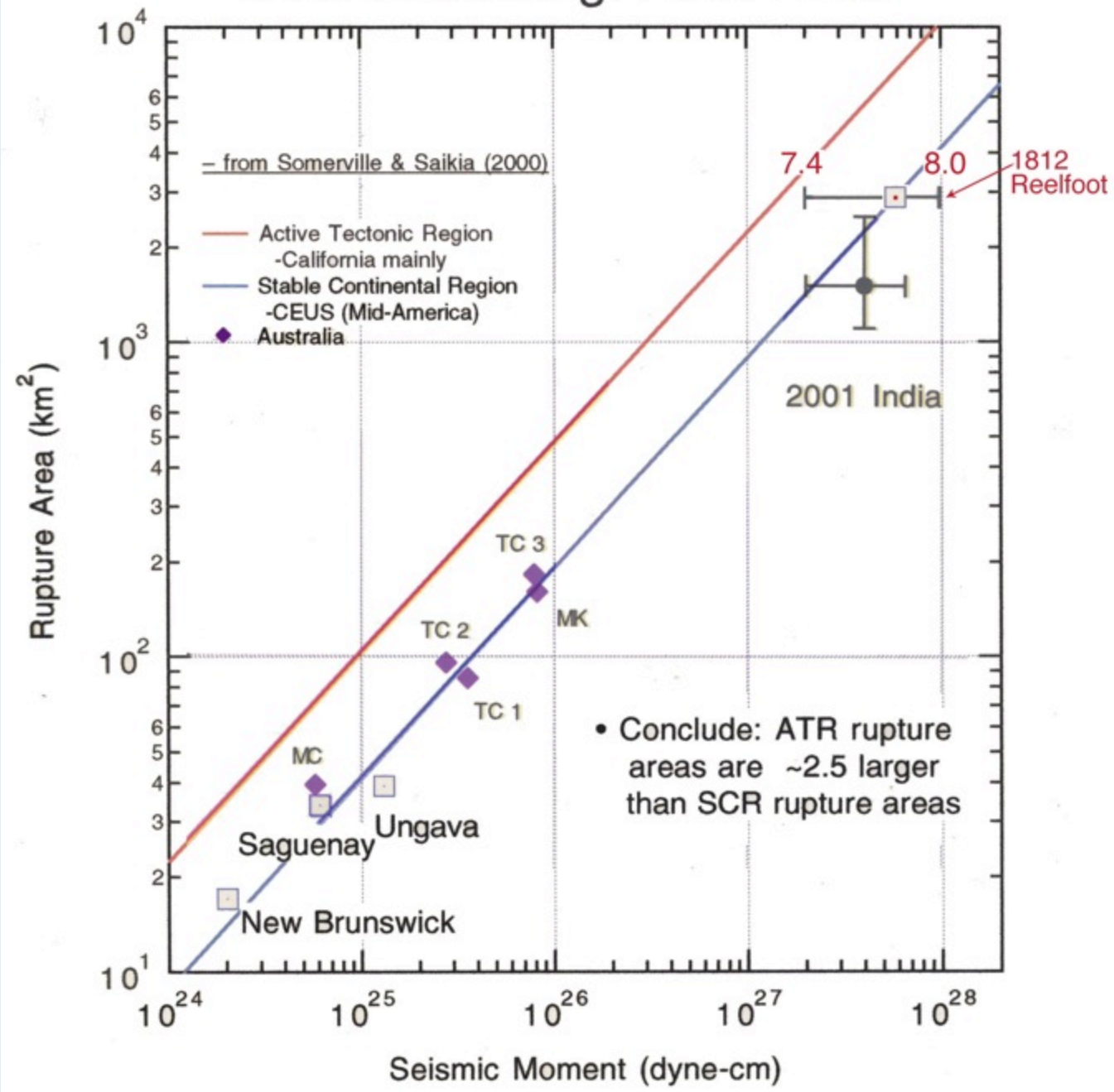
Source Scaling: Fault Area

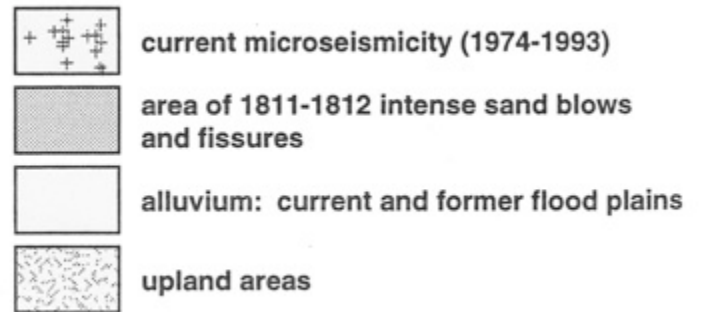
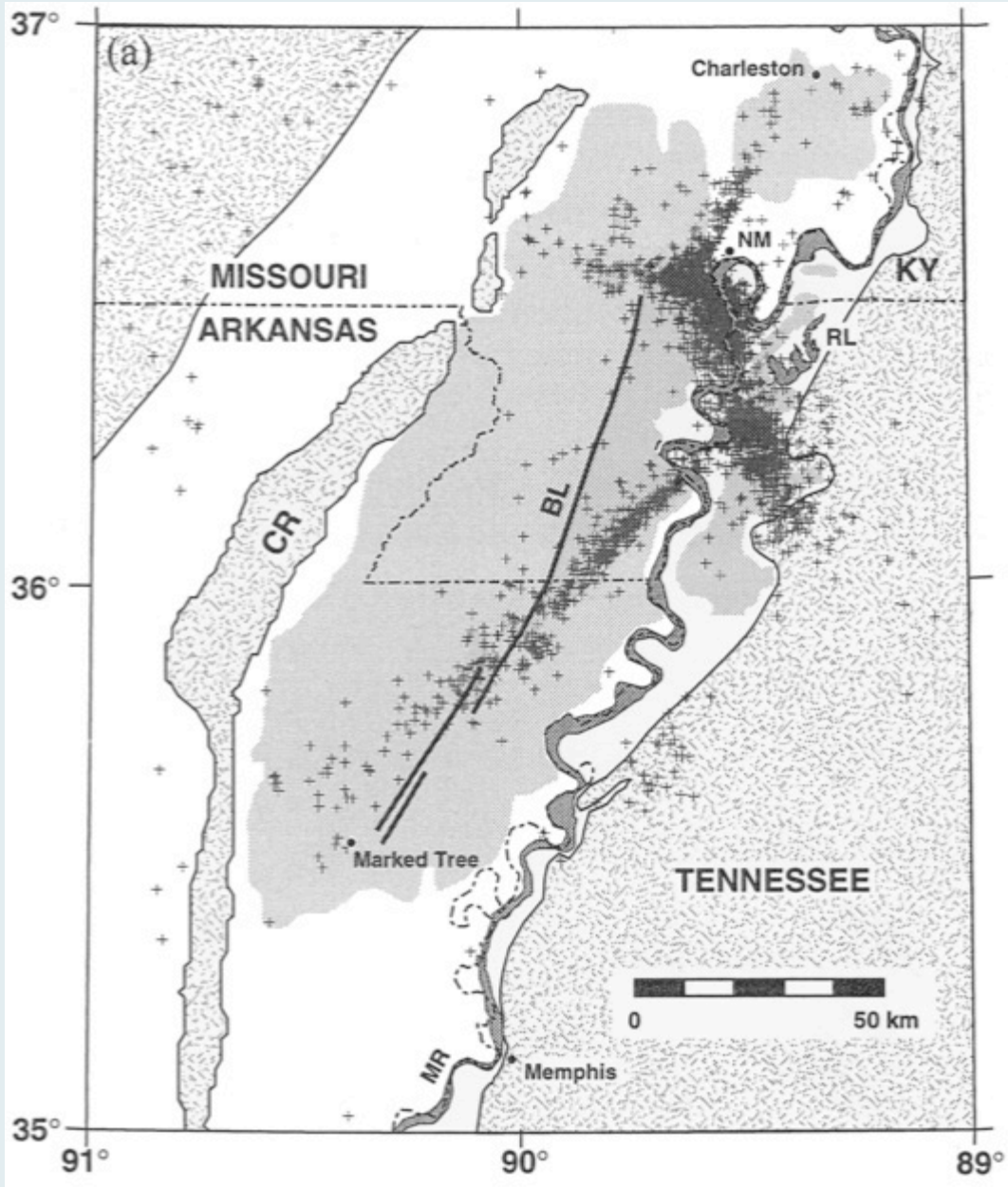


Source Scaling: Fault Area



Source Scaling: Fault Area





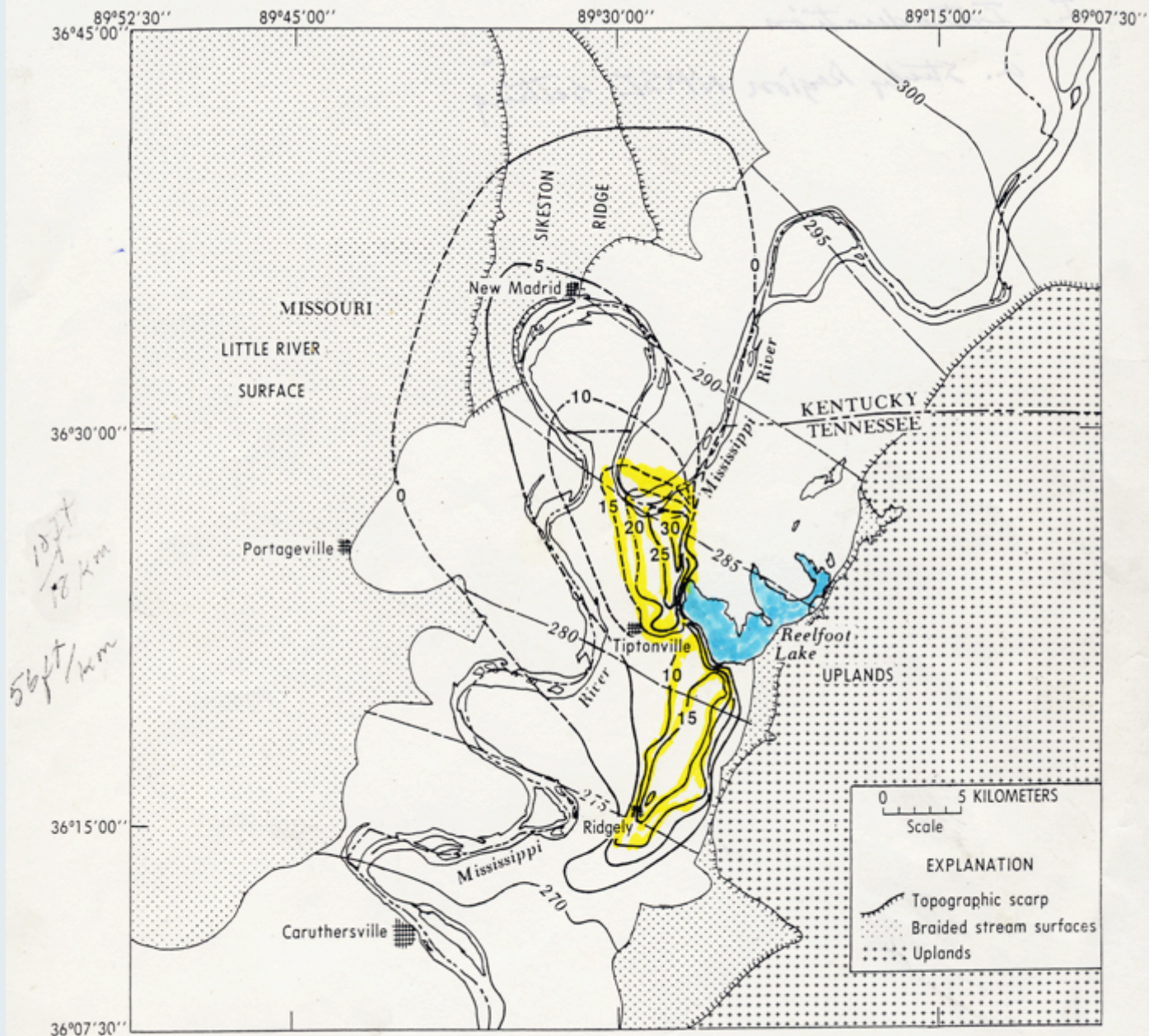


FIGURE 2.—Isobase map showing amount and pattern of deformation of Lake County uplift. Bold lines indicate contours of equal uplift; solid where determined by direct measurement; dashed where calculated by reconstruction process (see text). Thin lines indicate idealized prelift meander-belt contours; solid where determined by direct measurement; long and short dashed where determined by reconstruction process (see text). Values are in feet; to convert to meters divide values by 3.281.

David Russ (1982):

Page 104 “**Somewhat contradictory**, soils data support the hypothesis that Ridgely Ridge is older than Tiptonville Dome. As pointed out by Stearns (1979), soils with ”B” horizons...are much more common on Ridgely Ridge than on Tiptonville Dome. The presence of a textural “B” horizon is **supposedly** indicative of a greater age...unfortunately, Lake County Tn. also has a large amount of soils with “B” horizons that are situated on the lowest flood plain levels outside of the area of uplift, thus the relationship of soil horizon development to relative flood-plain elevation **is not altogether clear.**”

Page 110 “ The seismotectonic framework of the Ridgely Ridge area has **not yet been resolved satisfactorily.**”

(bold face added)

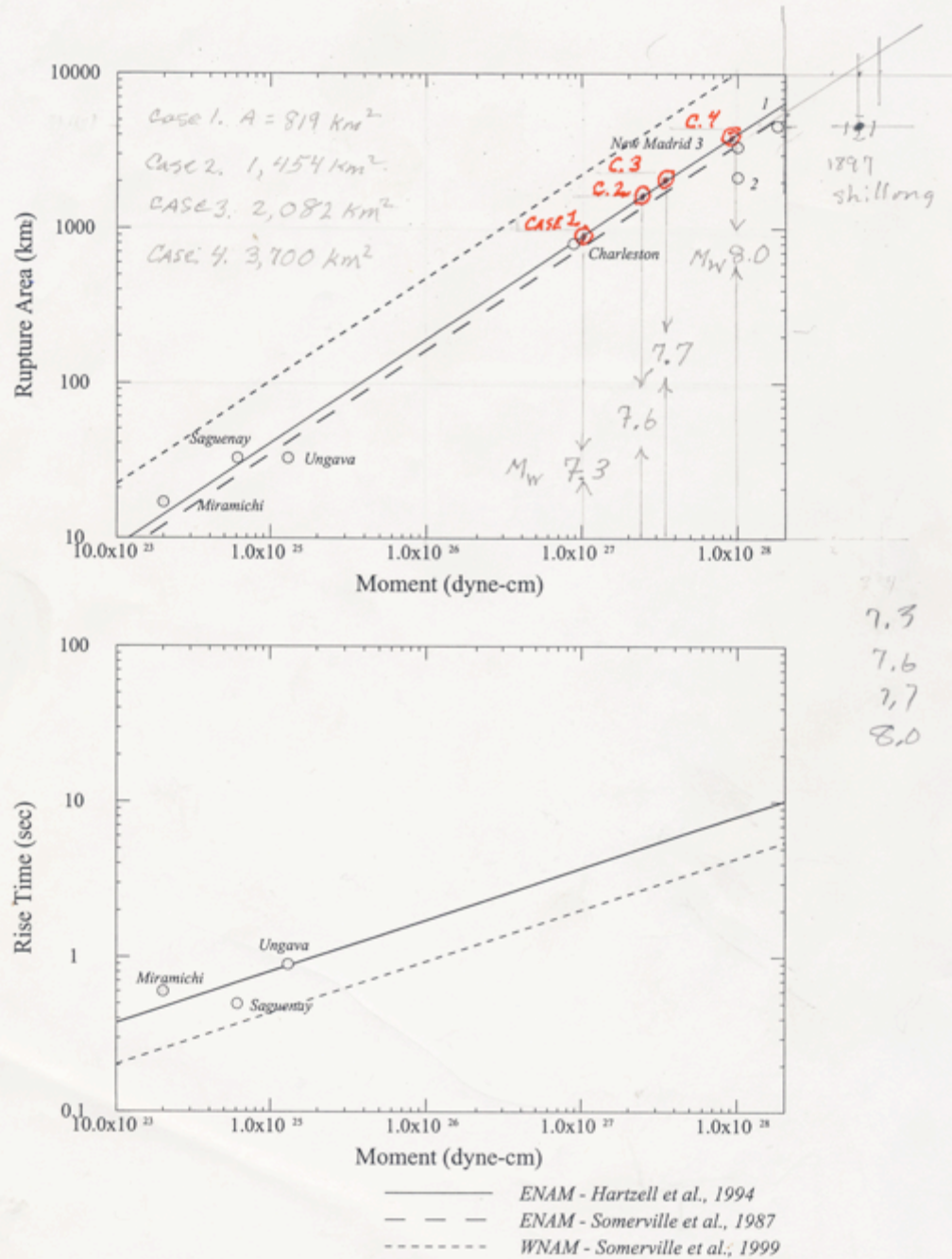


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