

Supplementary Material

Intraplate seismicity in mid-plate South America: correlations with geophysical lithospheric parameters

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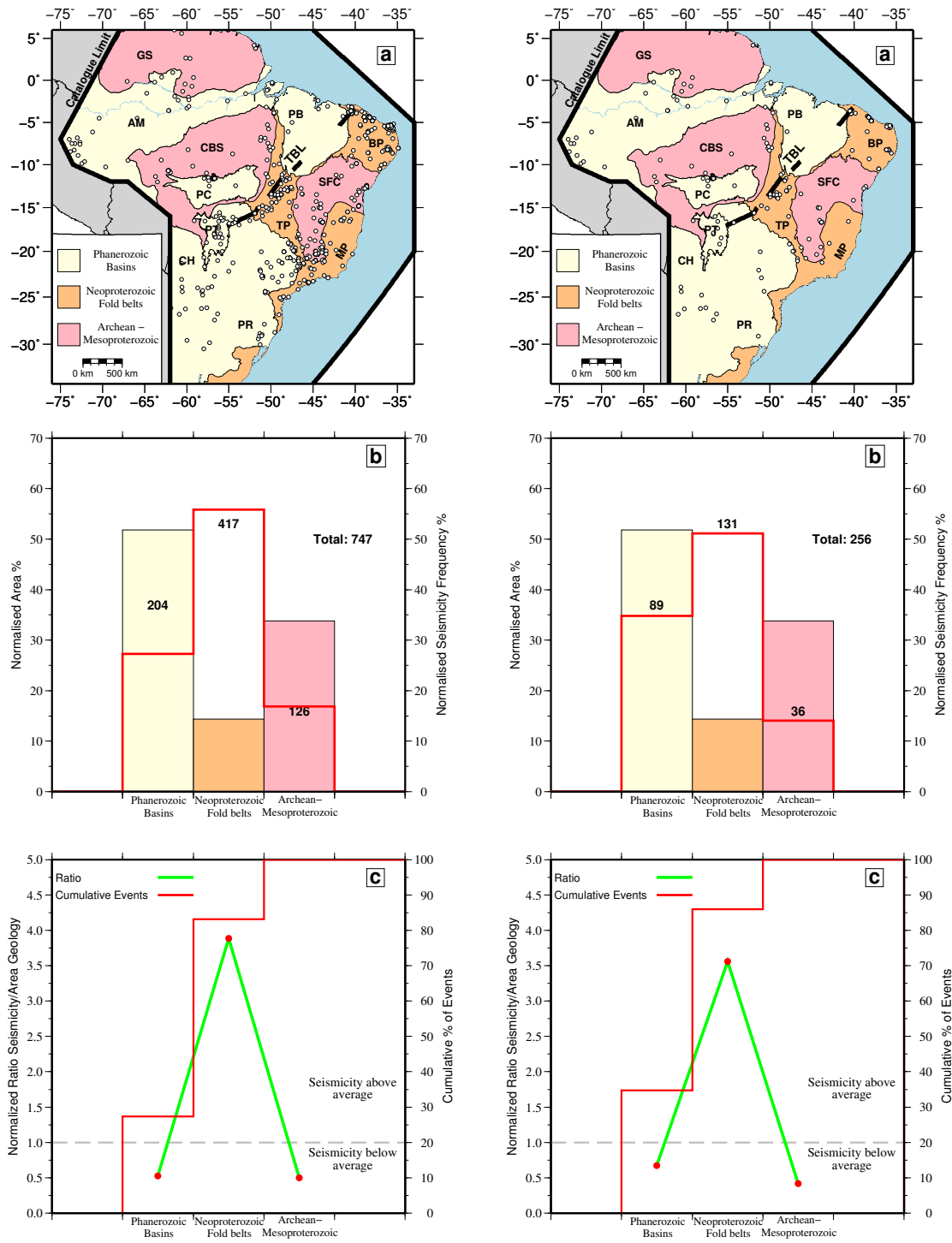
Supplementary Table 1. Median, mean and standard deviation for each geophysical parameter at each earthquake (Q) and total study area (A). *Elastic thickness with values over 100 km were fixed to 101 km.

Supplementary Figures 1-9. Distribution of seismicity and geophysical variables for: (left) non-declusterised catalog, $m \geq 3$, (right) uniform catalogue with time-variable magnitude thresholds (see Assumpção et al., 2014).

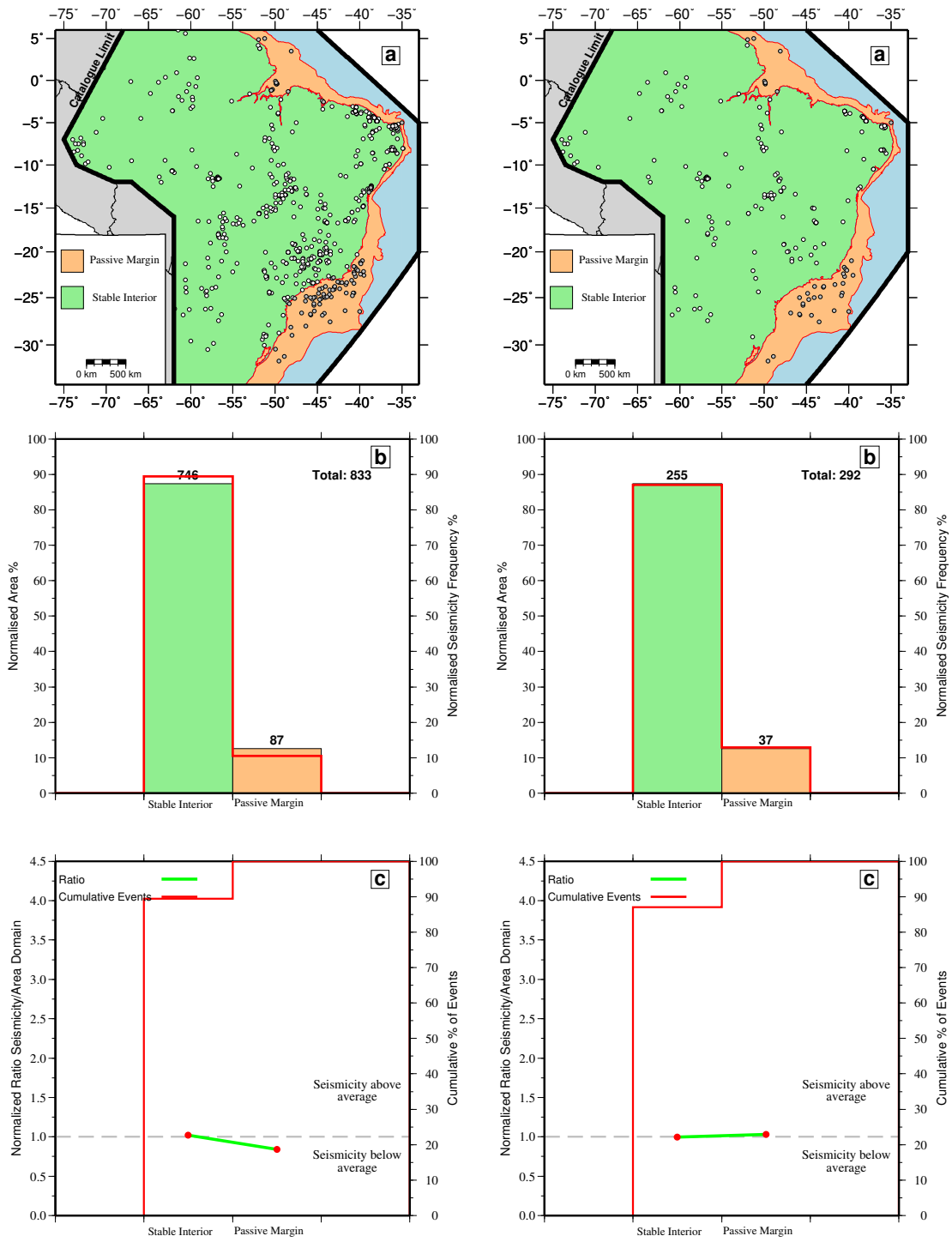
Supplementary Figure 10. Sampled geophysical parameters for inland earthquakes. Red: basins earthquakes; Blue: cratonic areas earthquakes; Green: foldbelts earthquakes. This figure is same as Fig. 11, only separated in three plots.

	Quakes (634)			Study Area		
	Mean Q	Median Q	Sigma Q	Mean A	Median A	Sigma A
Topo	180	247	748	-370	140	1465
Grav	4.23	6.02	19.30	-2.34	-3.02	20.27
Elasthick	59.9	62.3	35.5	70.8	88.1	33.5
Heat	69.2	63.6	21.2	61.4	61.1	15.0
Crust	35.2	36.7	5.9	34.1	37.2	9.0
Tomo	0.32	0.21	3.13	0.97	1.30	2.80
VpVs	1.735	1.731	0.019	1.735	1.731	0.023

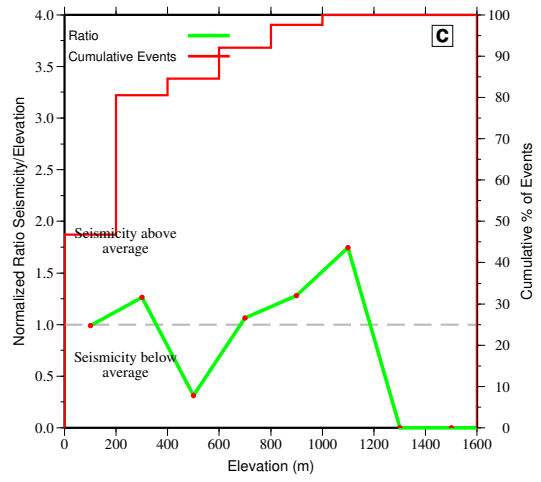
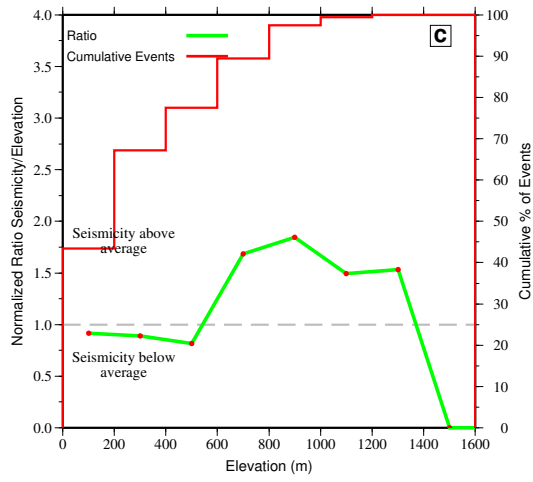
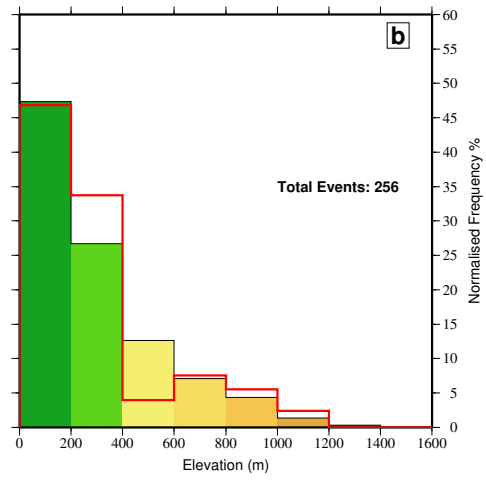
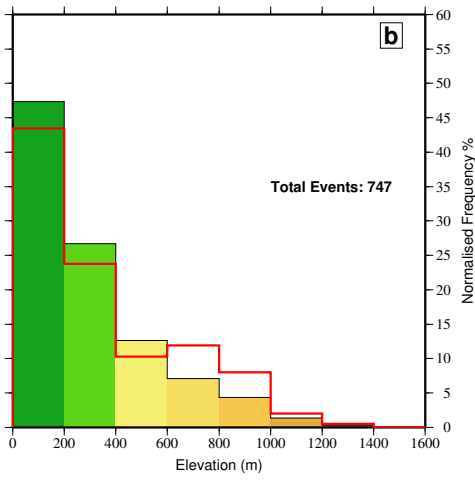
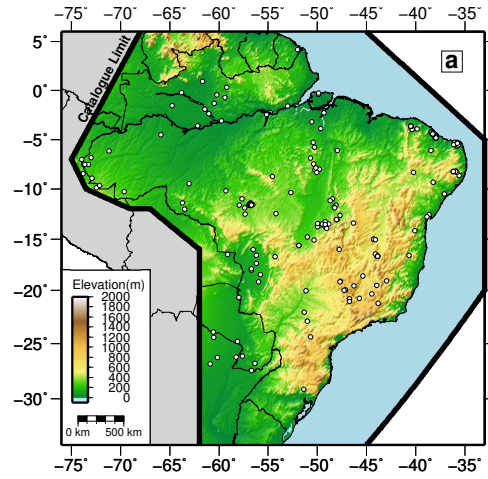
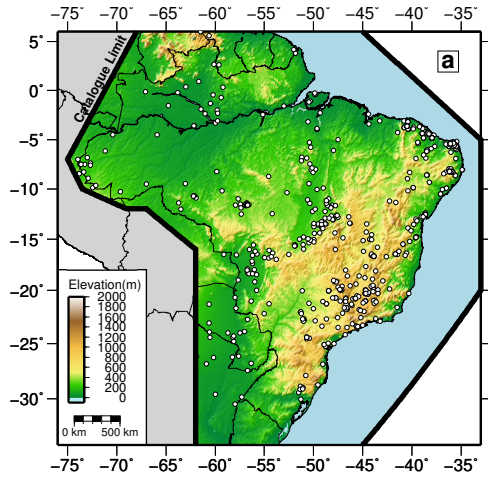
Supplementary Table 1.



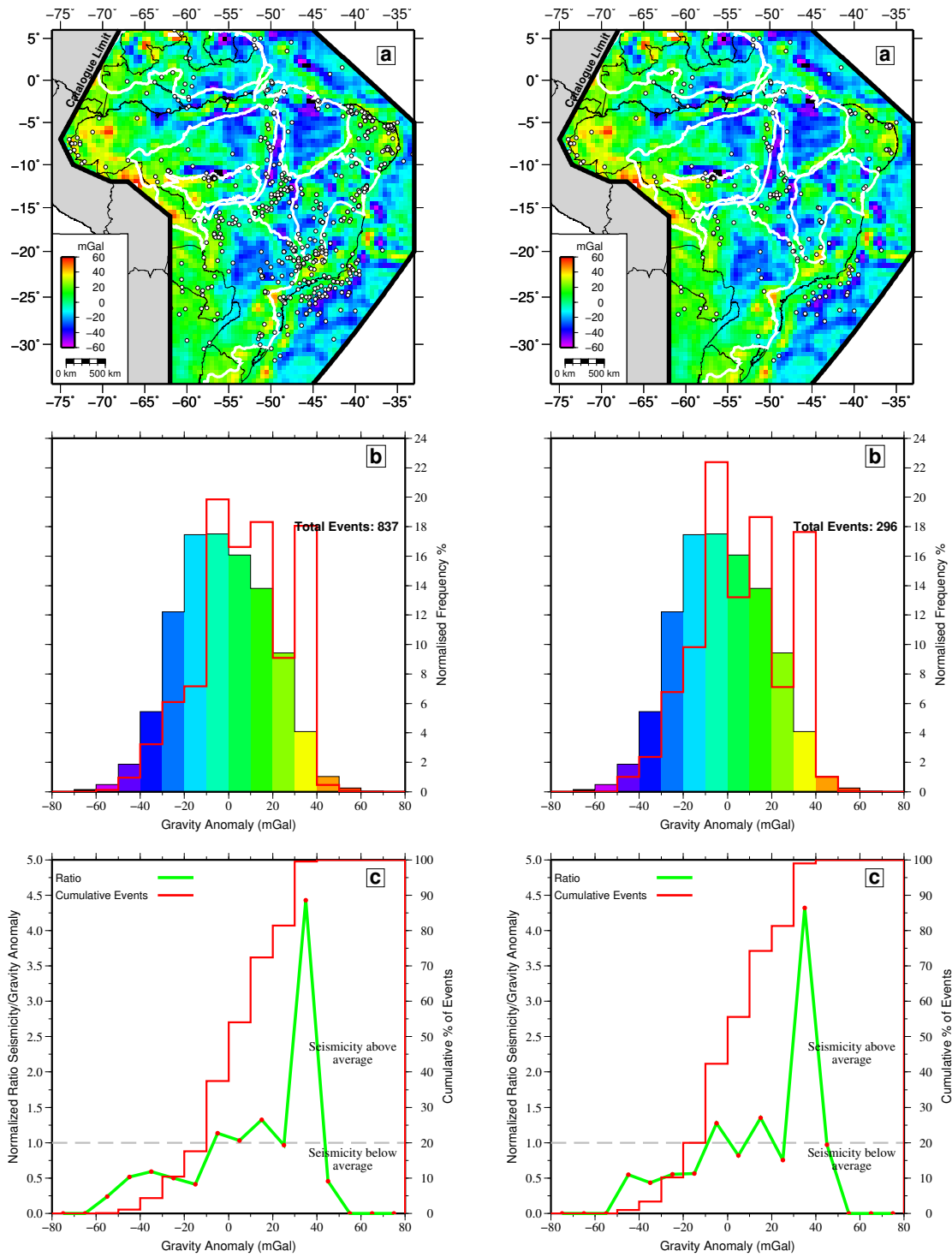
Supplementary Figure 1. Distribution of seismicity vs geotectonic province.



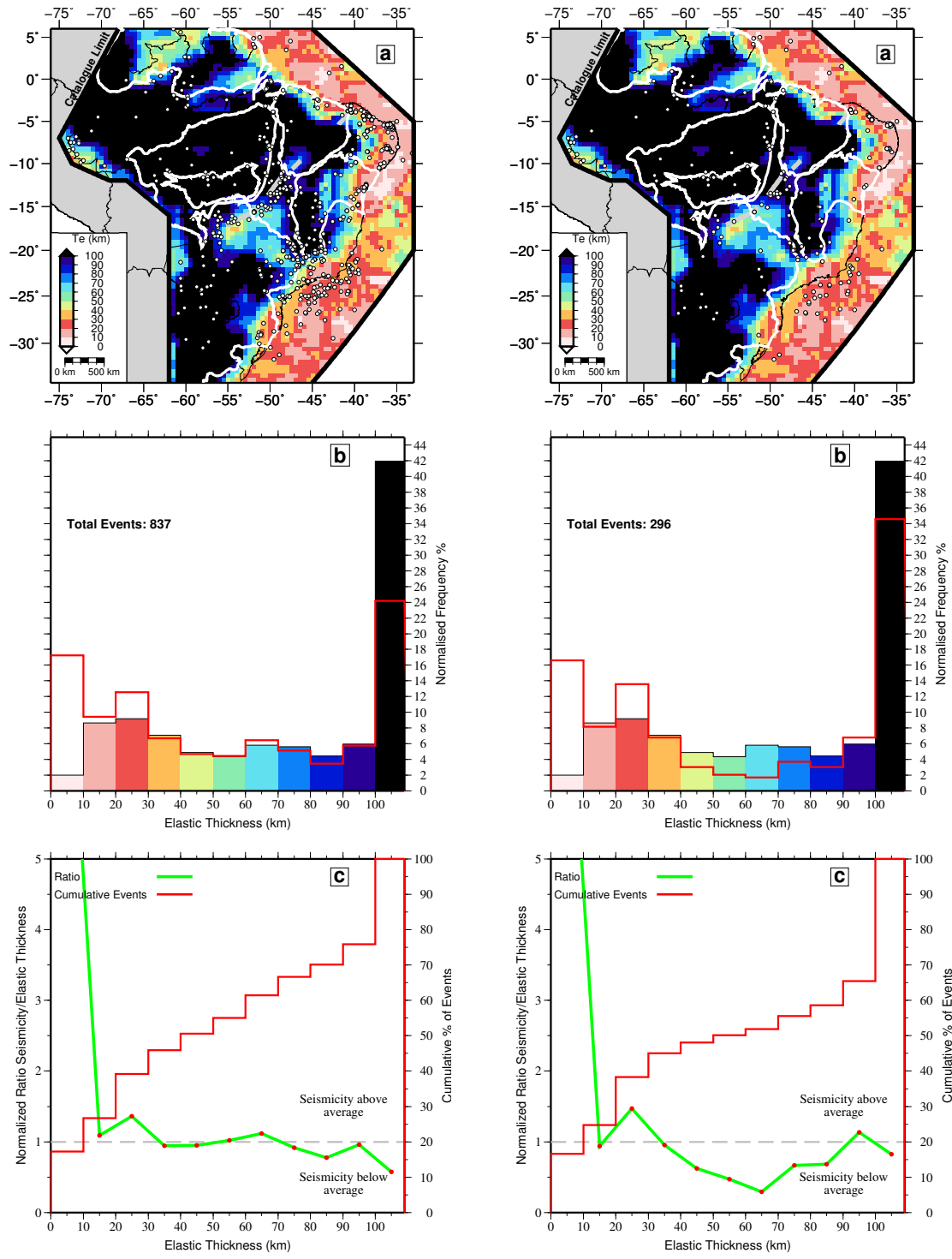
Supplementary Figure 2. Distribution of seismicity vs rifted/non-rifted crust.



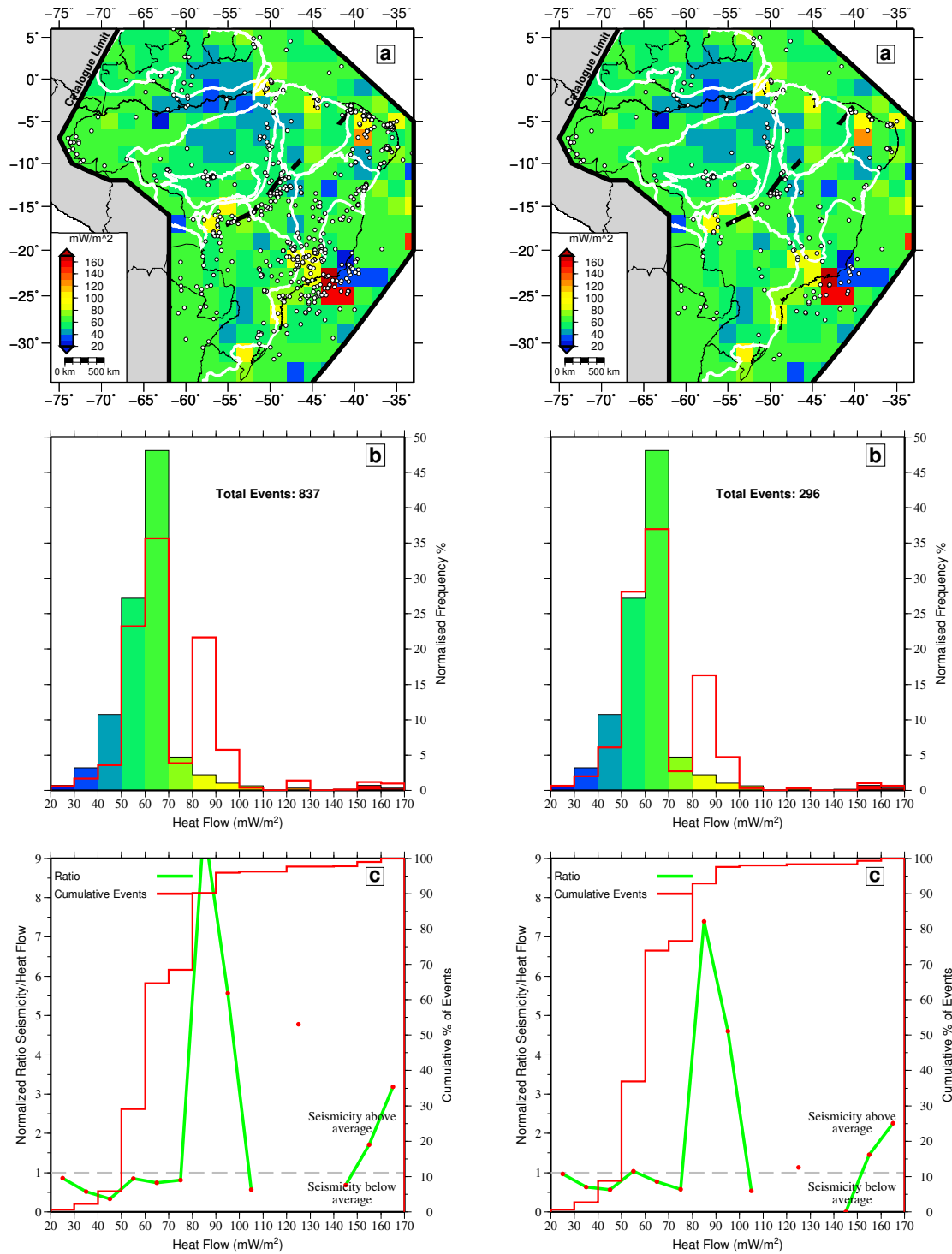
Supplementary Figure 3. Distribution of seismicity vs topography.



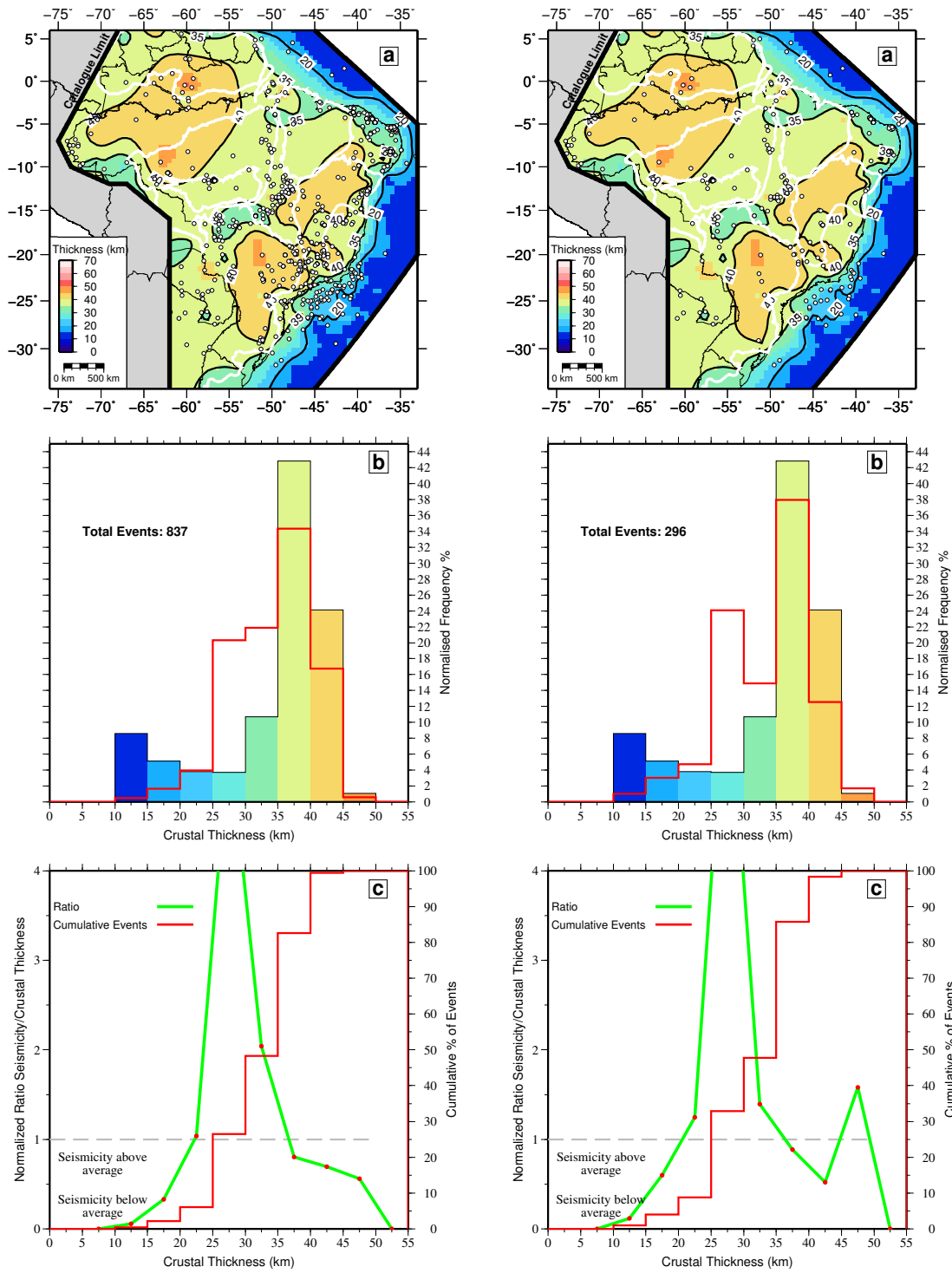
Supplementary Figure 4. Distribution of seismicity vs gravity anomaly.



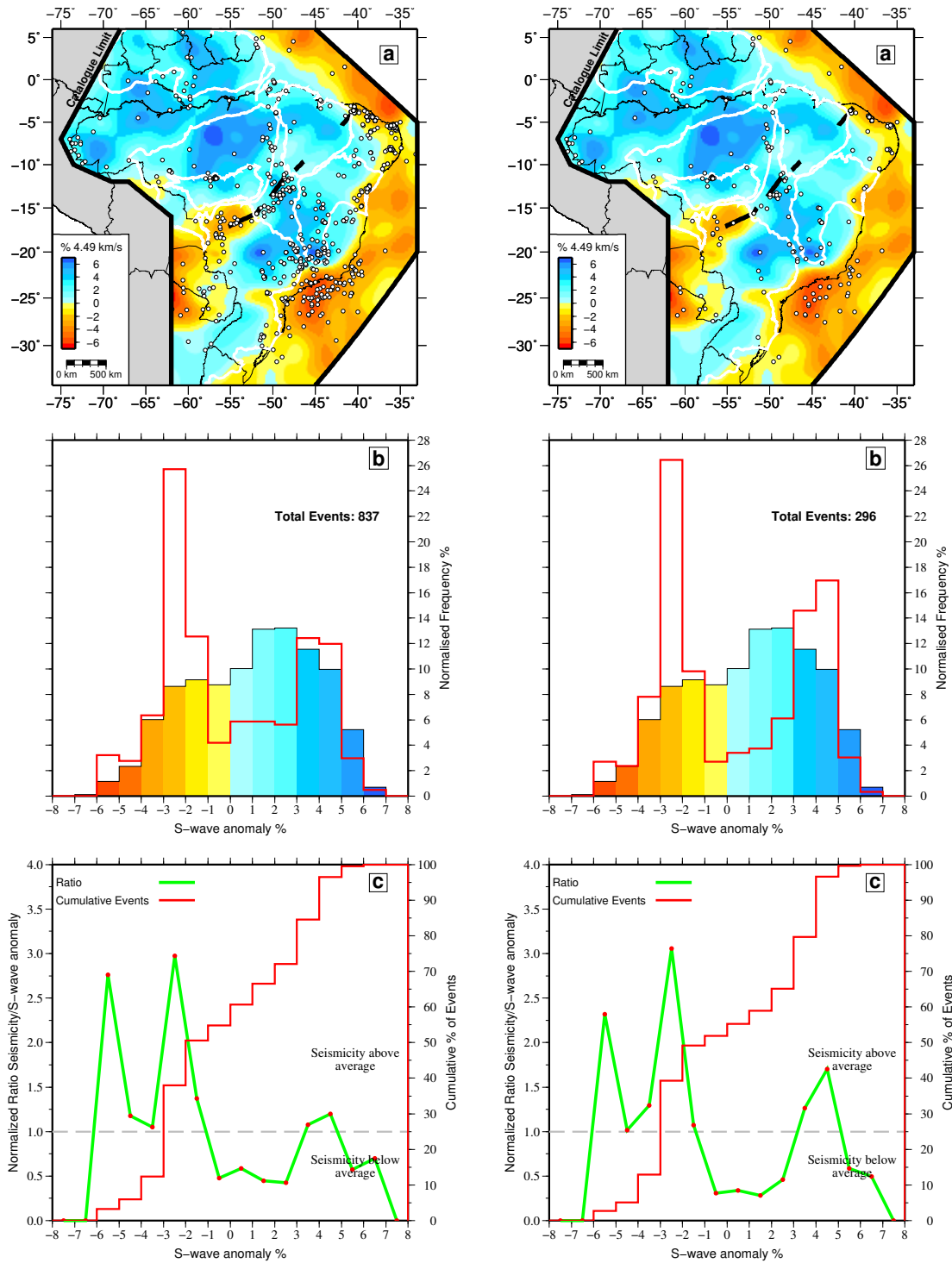
Supplementary Figure 5. Distribution of seismicity vs effective elastic thickness.



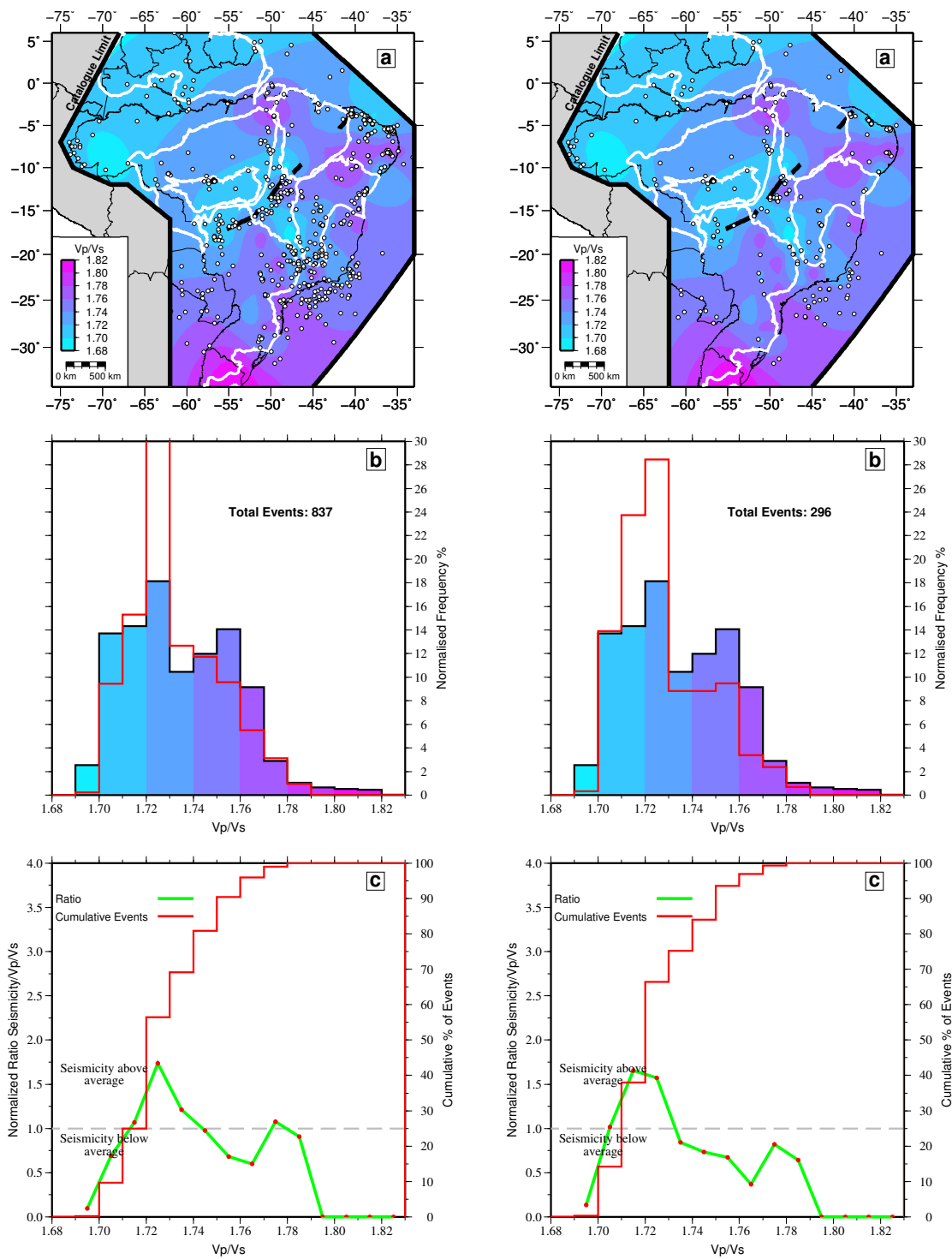
Supplementary Figure 6. Distribution of seismicity vs heat flow.



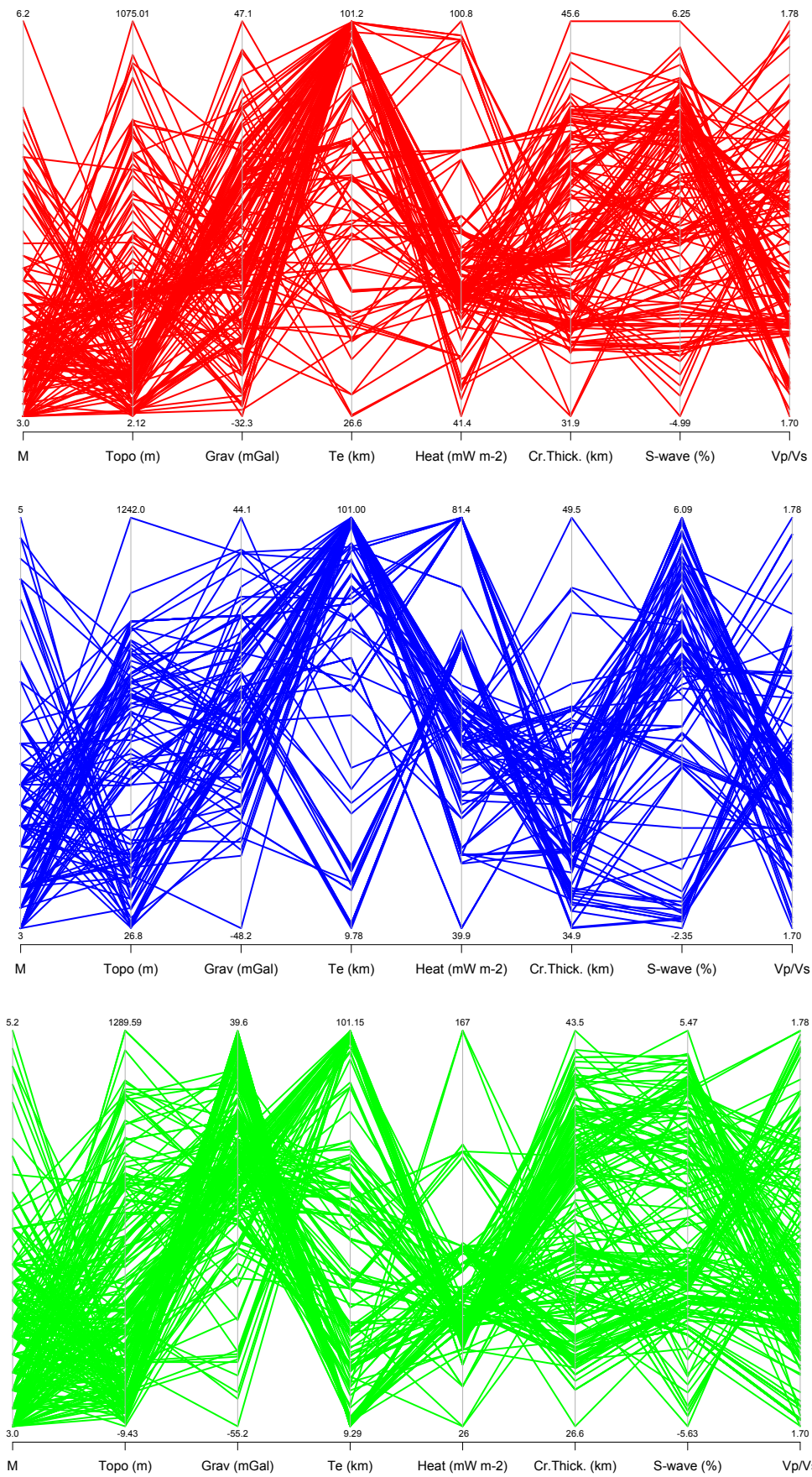
Supplementary Figure 7. Distribution of seismicity vs crustal thickness.



Supplementary Figure 8. Distribution of seismicity vs S-wave anomaly at 100 km depth.



Supplementary Figure 9. Distribution of seismicity vs crustal average Vp/Vs ratios.



Supplementary Figure 10.