

# Tapered Gutenberg-Richter Frequency-Magnitude Distributions by Plate Boundary Class:

## Monte Carlo set #5 of subcatalogs

(All ranges are 95%-confidence limits.)

Abbreviation	CCB	CTF	CRB	OSR		OTF			OCB	SUB	INT
Class	Continental Convergent Boundary	Continental Transform Fault	Contin- ental Rift Boundary	Oceanic Spreading Ridge		Oceanic Transform Fault, by plate velocity, mm/a:			Oceanic Convergent Boundary	SUB- duction zone	plate INTERior
				normal	other	3-39	40-68	69-263			
	Harvard CMT catalog (1977.01.01-2002.09.30)										
threshold, $m_t$	5.66	5.66	5.33	5.33	5.33	5.50	5.50	5.50	5.66	5.66	5.66
all earthquakes*	321*	272*	356*	468*	108*	418*	432*	400*	150*	2733*	535*
excluding orogens	242	190	292	432	94	392	401	371	132	2056	199
slope, $\beta$	.63 $\pm$ .10	.62 $\pm$ .12	.65 $\pm$ .10	.92 .60-1	.82 .61-1	.63 $\pm$ .08	.64 .54-.77	.68 .57-.81	.52 $\pm$ .12	.65 $\pm$ .04	.69 $\pm$ .13
corner magnitude, $m_c$	7.50 7.18-?	7.99 7.49-?	7.57 7.11-?	5.87 5.71-6.06	7.36 6.69-?	7.97 7.42-?	6.53 6.39-6.82	6.60 6.42-6.93	7.73 7.41-?	8.23 7.97-9.11	8.23 7.60-?
	<i>Pacheco &amp; Sykes</i> [1992] catalog (1900-1975) + <i>Ekström &amp; Nettles</i> [1997] catalog (1976): $M_s \geq 7$										
threshold, $m_t$	7.10	7.10	7.10	7.10		7.10	7.10	7.10	7.10	7.10	7.10
all earthquakes*	34*	30*	16*	2*		5*	3*	5*	25*	272*	77*
excluding orogens	21	23	12	2		5	3	4	22	214	14(3?)
	three catalogs merged (1900-2002): $M_s \geq 7$										
threshold, $m_t$	7.10	7.10	7.10			7.10			7.10	7.10	
all earthquakes*	48*	37*	18*			8*			33*	385*	
slope, $\beta$	[.63]	[.62]	[.65]			[.63]			[.52]	.65*	
corner magnitude, $m_c$	8.51* 8.14-?	8.00* 7.77-8.59	7.77* 7.51-8.48			8.15* 7.71-?			8.00* 7.80-8.46	9.58* 9.13-?	

\*including earthquakes in the 13 orogens.

[] copied from CMT results