

**402 Earthquakes Generating Strong Peak Ground Accelerations (PGA  $\geq$  1.4%g or Modified Mercalli Intensities IV+)  
Recorded in Anderson Springs over 58 Months (from July 10, 2003 through May 2, 2008)\***

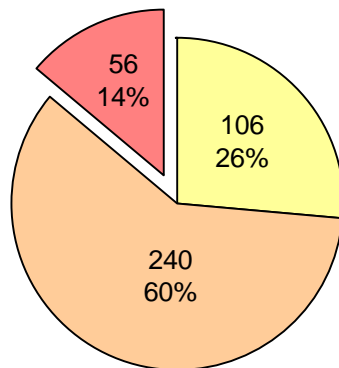
<u>Magnitude of Earthquakes</u>	<u>Avg. PGA (%g)</u>	<u>Min. PGA (%g)</u>	<u>Max. PGA (%g)</u>	<u># Events</u>	<u>% Events</u>
M1.0s	2.2%	1.4%	6.5%	106	26%
M2.0s	3.4%	1.4%	19.5%	240	60%
M3.0s	5.8%	1.6%	23.6%	56	14%
<b>Combined Earthquakes</b>	<b>3.4%</b>	<b>1.4%</b>	<b>23.6%</b>	<b>402</b>	<b>100%</b>

\* Approximately one event  $\geq$  1.4%g every 4 days, 86% of which are smaller than M3.0 earthquakes.

<u>Summary of Frequency</u>	<u>Total</u>	<u>Mercalli Intensity<sup>†</sup> (%g Peak Ground Acceleration)</u>			
		<u>IV (1.4%-3.9%g)</u>	<u>V (3.9%-9.2%g)</u>	<u>VI (9.2%-18%g)</u>	<u>VII (18%-34%g)</u>
Total Recorded Events:	<b>402</b>	300	84	14	4
Events/Day:	<b>0.23</b>	0.17	0.05	0.01	0.002
Events/Month:	<b>6.9</b>	5.2	1.4	0.2	0.1
Events/Year:	<b>83</b>	62	17	3	1
% Distribution:	<b>100%</b>	75%	21%	3%	1%

**Combined Distribution**

■ M1.0s ■ M2.0s ■ M3.0s



<sup>†</sup> **Definitions of Modified Mercalli Intensity Scale** (per USGS website)

**IV** = Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.

**V** = Felt by nearly everyone; many awakened. Some dishes, windows broken. unstable objects overturned. Pendulum clocks may stop.

**VI** = Felt by all; many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.

**VII** = Damage negligible in building of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.