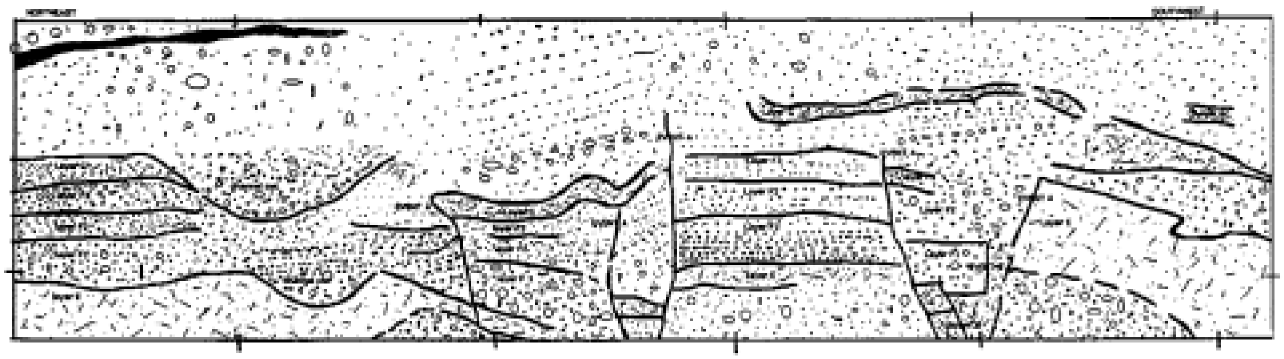

Figure 6. Log of trench 2, exposure 2 of the lower wall, showing offset layers E,G, and F. G is certainly disturbed. The log also illustrates faulting events A and B. Tick marks are 1 meter apart. After McGill, 1997.

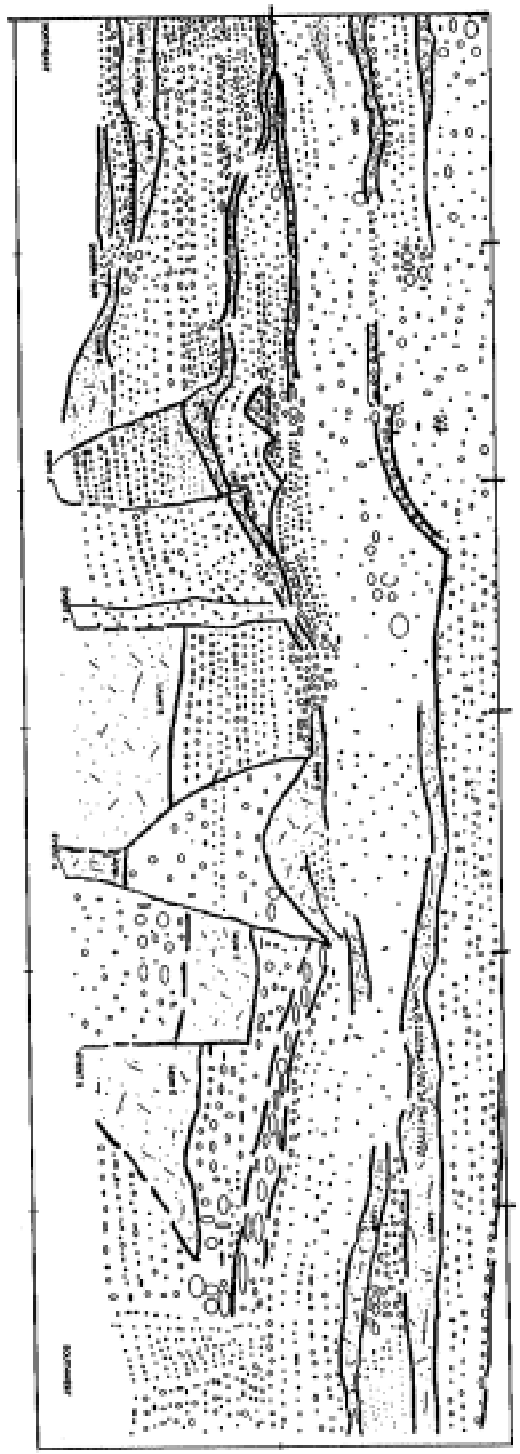

Figure 7. Log of trench 2, exposure 3 of the lower wall and part of the upper wall showing offset layers E,G, and F. G is certainly disturbed. The log also illustrates faulting events A and B. Tick marks are 1 meter apart. After McGill, 1997.

sample	**Stratigraphic unit**	**Sample material**	**C14 age, years B.P.**	**Calibrated age.**
PC-7E-51	K	Charcoal	308±68 B.P.	A.D.1445-1680 or 1758-1804, or 1938-1954
PC-7E-53	K	Charcoal	387±67B.P.	A.D.1415-1655

PC-7E-55	Channel on top of layer G	Charcoal	377±40B.P.	A.D. 1441-1643
Event A				
PC-7E-29	G	Charcoal	373±46B.P.	A.D.1439-1648
PC-7E-26	G	Charcoal	484±68B.P.	A.D.1315-1348, or 1391-1517, 1587-1623.
Event B				
PC-7E-54	E	Charcoal	678±67B.P.	A.D.1235-1410

Table 1: Radiocarbon ages of charcoal samples.

Timing of faulting events:

Faulting A happened when layer G was at the surface. We gc A.D. 1439-1648 received from precise date on three targets, from samp layer G. Therefore the age is precise enough to be considered. In add on 3 targets was also obtained from sample PC-7E-55 which dated to be This sample was collected from a channel that caps faulting event A. identical, and thus the faulting event is bracketed between A.D.1439- midpoint of this range as our preferred age for event A in table 2.

Event B happened when layer E was at the surface. Layer E dated to be A.D. 1235-1410. Therefore, event B occurred during or shortly after this time period. Since event B occurred before layer G was deposited, it probably occurred prior to A.D. 1439-1648 (the age of the youngest sample from layer G). We used the sedimentation rate shown in figure 8 to estimate our preferred age of A.D. 1380 for event B (see table 2).

When radiocarbon dates on detrital charcoal are the only age control, it is not possible to place a limit on the youngest possible age for an earthquake horizon with 100 % certainty. Because radiocarbon ages on detrital charcoal samples represent maximum ages for the sedimentary layers from which the samples were collected, we dated multiple samples from most layers. We consider the youngest date from each layer to be the most reliable.

Recurrence intervals:

Table 2 shows the recurrence interval calculated using faulting event. The average recurrence interval is about 160 years, a have gone unrecorded. We have opened up another trench a few hundred the southeast, astride the San Andreas Fault to confirm these result younger events. The trench will also be deepened to extend the paleo back in time.

Event	Preferred age	From bracketing carbon sample	Recurrence interval
B	A.D. 1380	A.D. 1235-1410	163 YEARS
A	A.D. 1543	A.D. 1439-1648	

Table 2: Ages of faulting events and recurrence interval.

Discussion and previous work:

Previous paleoseismic and geomorphic work on the San Bernardino segments has helped to constrain the ages of prehistoric earthquakes continuity and length of the fault rupture. Exceptional site stratig paleoseismic studies at Pallett Creek, Wrightwood, and Pitman Canyon paleoseismic location is available at Cajon Creek at Cajon Pass, and sedimentation rate, where the San Andreas Fault cuts a thick section flow gravel, fluvial sands, and peat characterize all sites. This set paleoseismic investigation because prehistoric and historic earthquak At Pallett Creek, 55 km northeast of Los Angeles, Sieh (1978, 1984) a described sandblows and other liquefaction features, buried scarps an strands in dated peat and alluvium that record a history of 12 earth 1700 years.

Table 3 summarizes the youngest 6 earthquake events at Pallett and the interval between them. The 1857 Fort Tejon and the 1812 San earthquakes were recorded in the sediments and they are referred to a respectively. The third youngest event, V, is dated to be A.D. 1480.

Events	Dates	Recurrence intervals
Z	1857	
X	1812	44 years
V	1480	332 years
T	1346	134 years
R	1100	246 years
N	1048	52 years

Table 3: summary of events, recurrence intervals, and dates at Pallett Creek, Sieh

At Wrightwood, Fumal et al. (1993) used upward termination of fault r fissure, and folding to identify event horizons where the San Andreas Swarthout Creek, 3 km northwest of Wrightwood and 22 km southeast of addition, the authors used the conventional carbon dates to analyze 2 from peat layers and 1 sample of wood from debris flow deposit. The y 1857 Fort Tejon earthquake, was recorded in the offset layers. The se San Juan Capistrano earthquake, was also recorded by the folding of t the youngest earthquake horizon. Table 4 summarizes the youngest 5 ev recurrence intervals.

Events	Dates	Recurrence intervals
1	1857	
2	1812	44 years
3	1700	88 years
4	1610	90 years
5	1470	140 years

Table 4: summary of events, dates, and recurrence intervals at Wrightwood.

At Pitman canyon, along the southwest flank of the San Bernardino Mou southeast of Wrightwood, Seitz et al. (1994) demonstrated that the 18 did not extend that far southeast into Pitman canyon. However, they r events occurred in the past 1150 years. Table 5 lists the events and intervals.

Events	Dates	Recurrence inter
1	1812	
2	1690	122 years
3	1590	100 years
4	1450	140 years
5		
6	1190	
7	1060	130years

Table 5: summary of events, dates, and recurrence intervals at Pitman canyon.

Table 6 illustrates different interpretations of the same data obtai discussed above. Seitz et al., 1994 and Fumal et al., 1993 interprete data differently. That proves that more work needs to be done to inv ambiguity left behind. Some of the primary concerns are to see how fa earthquake has ruptured, to get more precise carbon dates, and to re