

The centennial of the 1925 Santa Barbara earthquake

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Presentation for:
Philatelic Society of Lancaster County
25 June 2025



Introduction (1)

Santa Barbara

- pop. 90,000
- 115 miles northwest of Los Angeles
- situated in between the Santa Ynez Mts. and beautiful beaches
- inhabited by the Chumash Indians
- Spanish contact in the late 18th century
- “American Riviera” - Mediterranean climate, Spanish architecture
- home to
 - Mission Santa Barbara
 - historic Presidio
 - University of California at Santa Barbara
 - Santa Barbara County Courthouse



Chumash Painted Cave State Historic Park



Introduction (2)

Santa Barbara 1925 earthquake

- June 29, 1925 - centennial
- 6:44 am local time
- magnitude 6.8
- 13 deaths
- \$8 million damage (> \$100 million today)
- 85% (?) of commercial district damaged
- Gas and electricity were shut off, sparing San Francisco-like fire

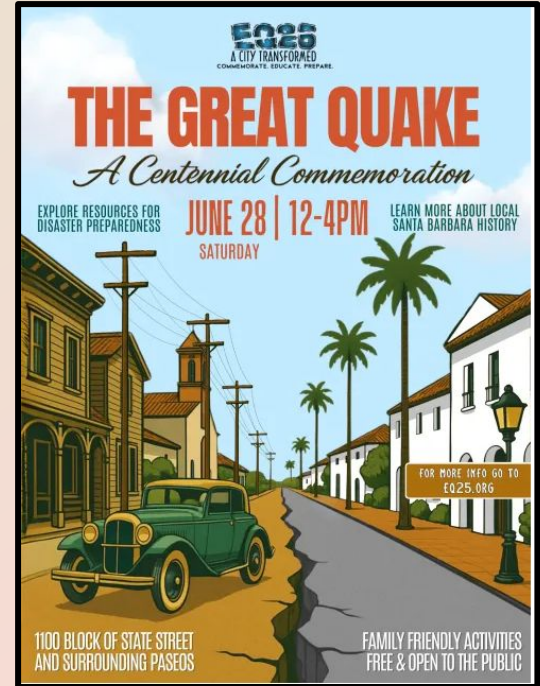
Along with the 1906 San Francisco and 1933 Long Beach earthquakes, it had a major impact on seismological science and the recognition of the earthquake hazard in California and the United States.

Introduction (3)

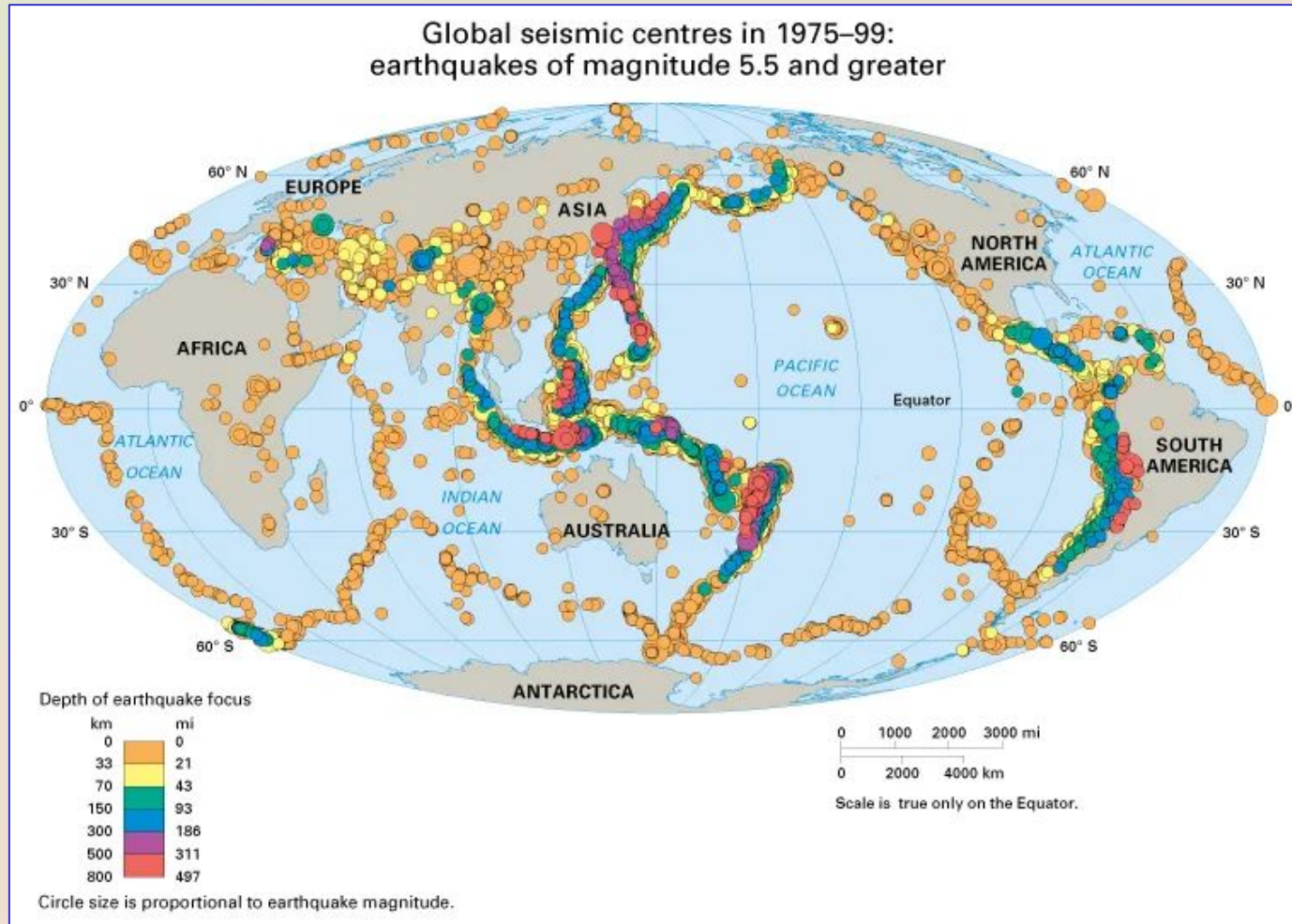
March, 2024 - I spoke to the PSLC on my collection of philatelic items related to North American earthquakes. Here I focus on the 1925 Santa Barbara earthquake.

Outline of presentation

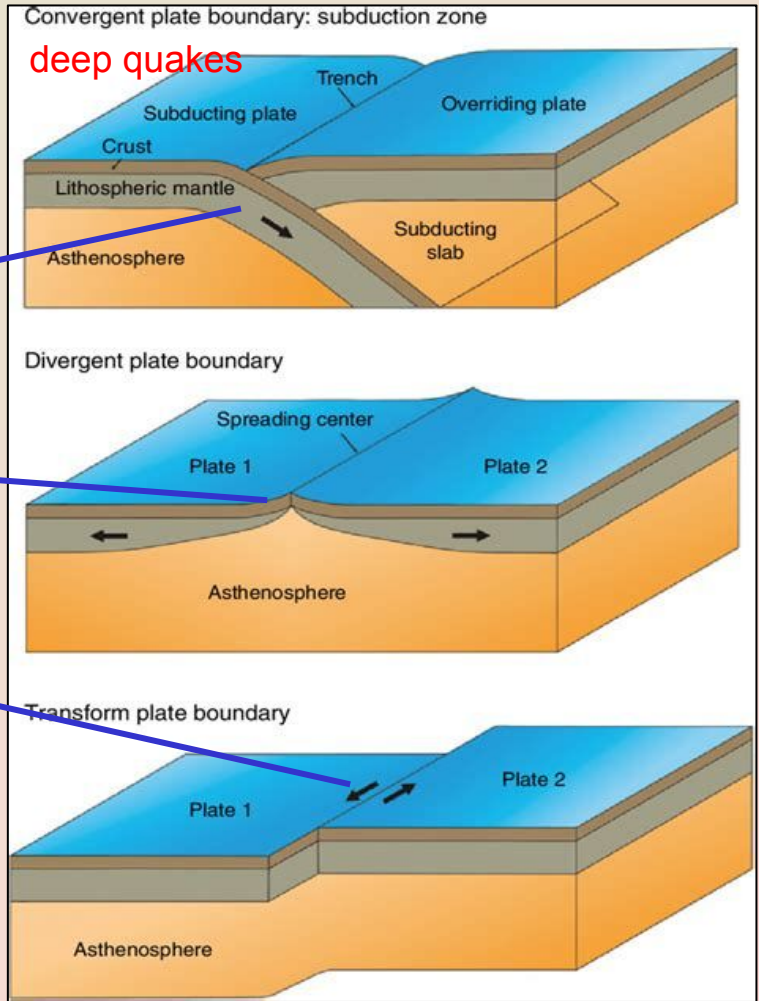
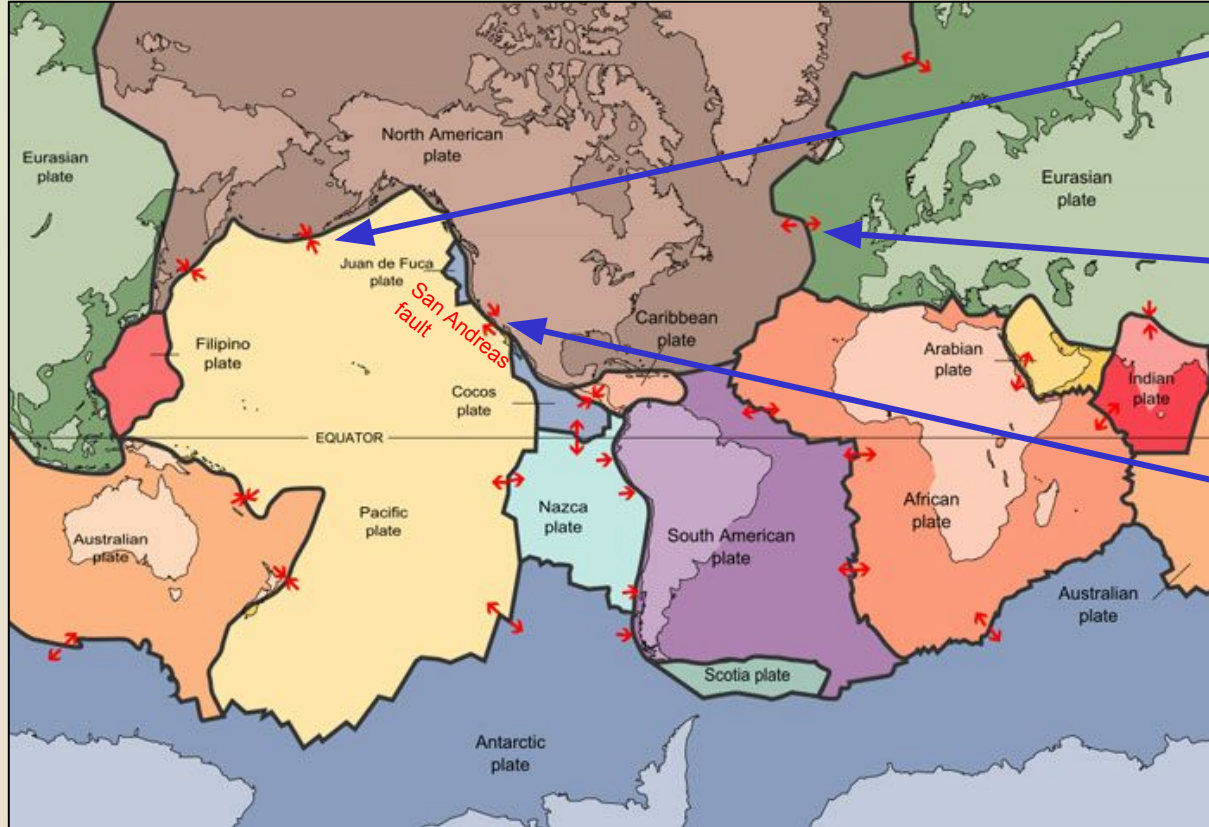
- Earthquake geography
- Earthquake philatelic collection
- Santa Barbara geography
- Santa Barbara research
- Semi-extreme deltiology: postcards images then, and photographs now



Earthquake geography (1) - seismicity patterns

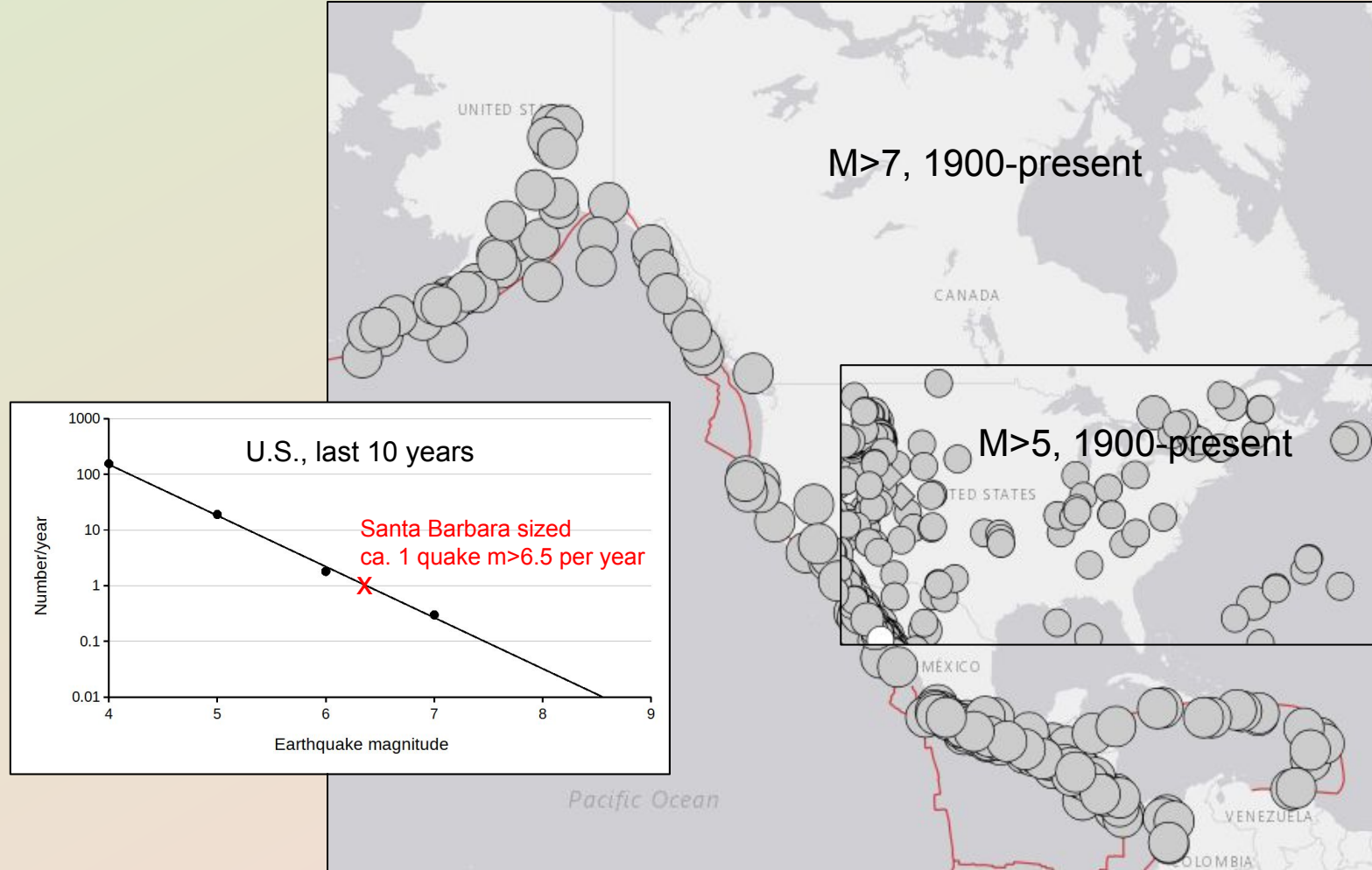


Earthquake geography (2) - plate tectonics



Most earthquakes occur near the boundaries of tectonic plates

Earthquake geography (3) - North American earthquakes



Earthquake philatelic collection (1) - overview

U.S. earthquakes with >10 Fatalities

<u>Date</u>	<u>Location</u>	<u>Magnitude</u>	<u>Fatalities</u>
April 18, 1906	San Francisco	7.9	3,000+
April 1, 1946	Aleutians	8.6	165
March 27, 1964	Alaska	9.2	143
March 10, 1933	Long Beach, CA	6.4	120
Dec. 16, 1811	New Madrid, MO	7.5	100
April 2, 1868	Hawaii	7.9	77
Oct. 17, 1989	Loma Prieta, CA	6.9	63
Aug. 31, 1886	Charleston, SC	7.0	60
Feb. 9, 1971	San Fernando, CA	6.5	58
Jan. 17, 1994	Northridge, CA	6.7	57
Oct. 21, 1868	Hayward, CA	6.5	30
Aug. 18, 1959	Hebgen Lake, MT	7.2	28+
March 26, 1872	Owens Valley, CA	7.5	27
July 21, 1952	Kern County, CA	7.3	14
June 29, 1925	Santa Barbara, CA	6.5	13

Red - events not represented in my collection

Orange - PSLC 2024 open house

Green - included in PSLC 2024 presentation

Blue - shown in this presentation

Earthquake philatelic collection (2) - overview

Items in my collection

35 identified North American quakes

>550 items

<u>items</u>	<u>event</u>
185	San Francisco, 1906
65	Long Beach, 1933, and Old Ironsides
65	Hebgen Lake, 1959
30	Santa Barbara, 1925
30	Alaska, 1964

Earthquake philatelic collection (3) - postcards

For Santa Barbara, postcards only:

picture postcards (b/w)

picture postcards (color)

postcard folders - 2

postcards (posted) - 6

RPPCs (real photo postcards, post-1903) - 11, plus 1 folder of 21

deltiology - collection and study of postcards

Earthquake philatelic collection (4) - criteria

Preferred criteria:

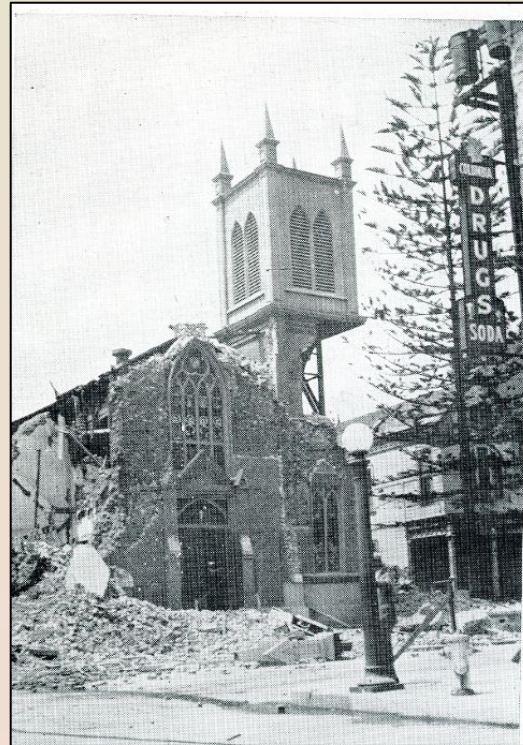
- mailed, stamp not removed
- postmarked soon after earthquake
- postmarked from near the epicenter
- includes a message about the event
- legible with clear markings
- good condition
- not too expensive - eBay, postcard shows

Earthquake philatelic collection (5) - postcard folders

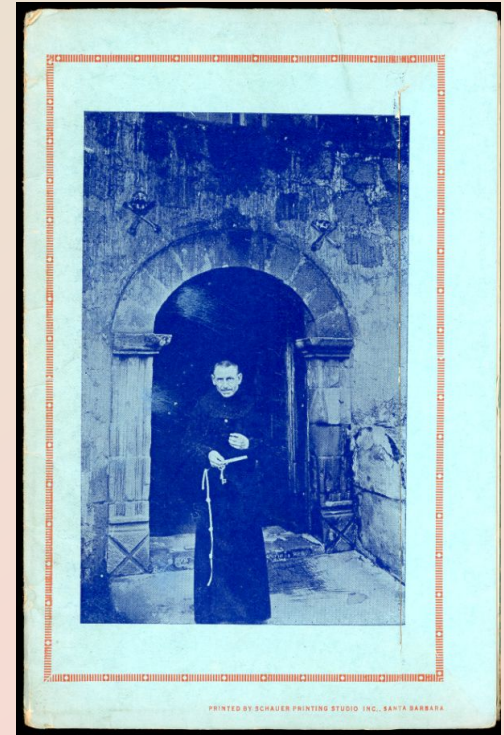
folders, souvenir folders, booklets



SB002 (my number) front - postmarked Santa Barbara, 8/17/1925 (2 mos. after quake), sent to Wisconsin, depicts Mission

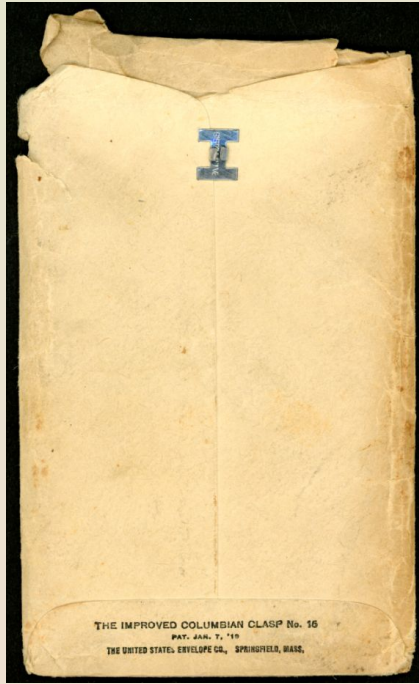
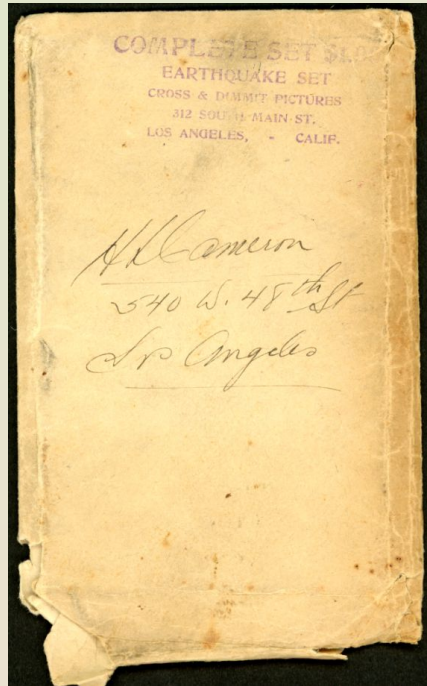


SB002b, Catholic (Our Lady of Sorrows) Church, 12 b/w photos



SB002 back, slot for flap

Earthquake philatelic collection (6) - postcard folders



SB025 - addressed envelope, with 21 RPPCs

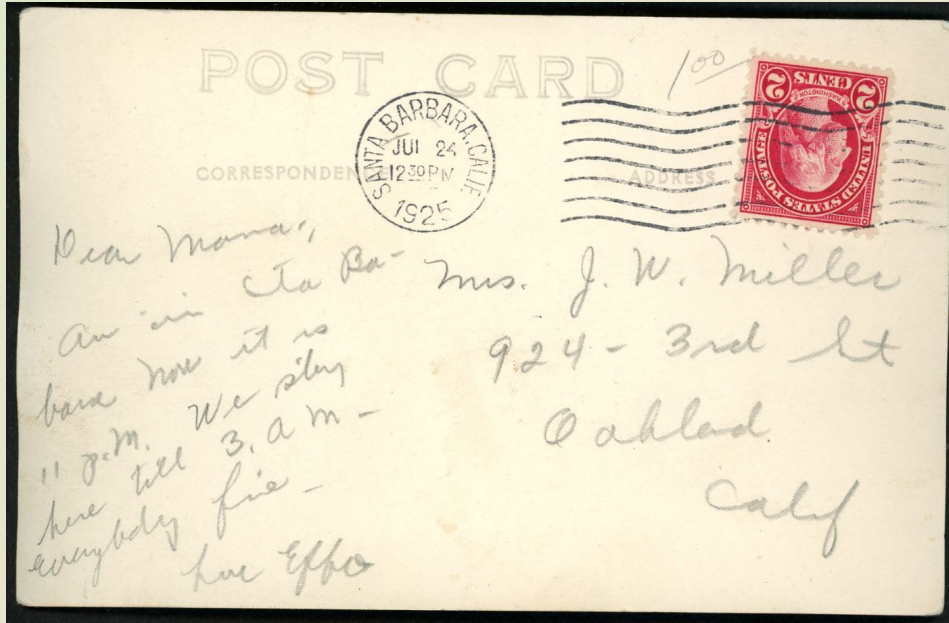


SB025t - "Delivering refreshments to Marines on duty"

SB 025u - "Scenes in Sta. Barbara, time of quake." Living outdoors without water and gas.



Earthquake philatelic collection (7) - posted



SB001 - postmarked Santa Barbara, 7/24/1925 (1 month after quake), sent to Oakland, RPPC, divided (after 1907), Scott 554 is upside down

"Dear Mona, Am in Sta Barbara now it is 11p.m. We stay here till 3 a.m. Everybody fine. Love, Effie" (train travel?, no mention of quake)



Knights of Pythias Hall; Goux building

Marines patrolling. The Knights of Pythias is a fraternal organization and secret society founded in 1864.

Earthquake philatelic collection (8) - posted



SB004 - postmarked Santa Barbara, 7/20/1925 (3 weeks after quake), sent to San Diego, RPPC, divided, Scott 554



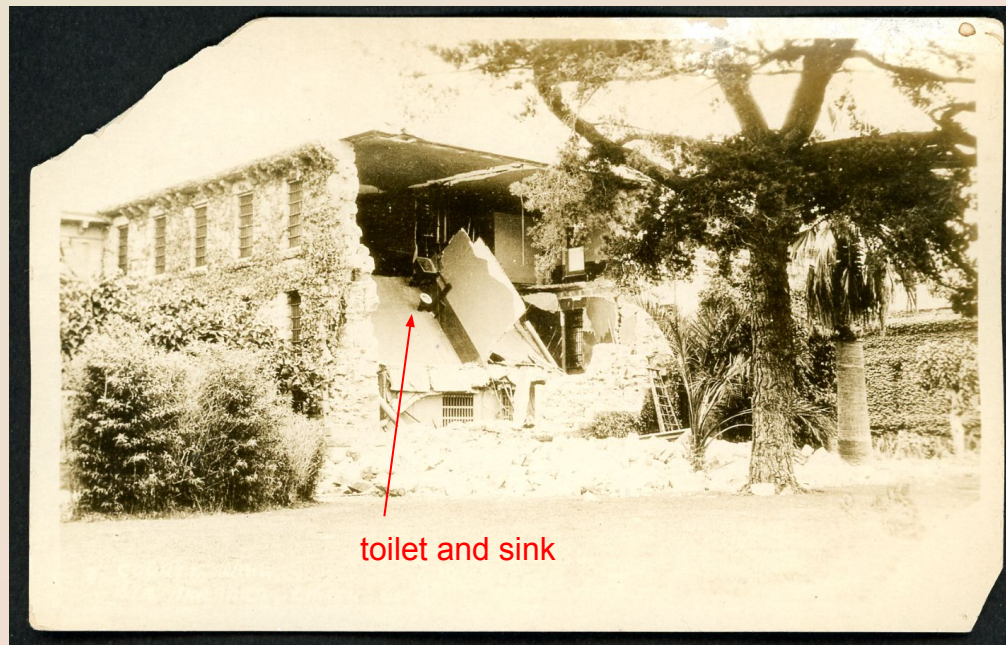
SB004 - County jail

“Dearest Louisa, Sorry you weren't in when I went down to see you. Am having a wonderful time. I don't know how long I will stay here, until I get tired of it I guess. Lots of love, Florence Emberly” (no mention of quake)

Earthquake philatelic collection (9) - posted



SB003 - postmarked Washington, DC, 1/28/1987 (62 years after quake and vintage card), sent to Maryland, RPPC, divided, Great Americans stamps



SB003 - County jail again

"Wednesday, January 28, 1987. This is of the 1925 earthquake in Santa Barbara, California, compliments of Hildegard. Guess she used to live here. Haviland." [joke?]

Earthquake philatelic collection (10) - posted



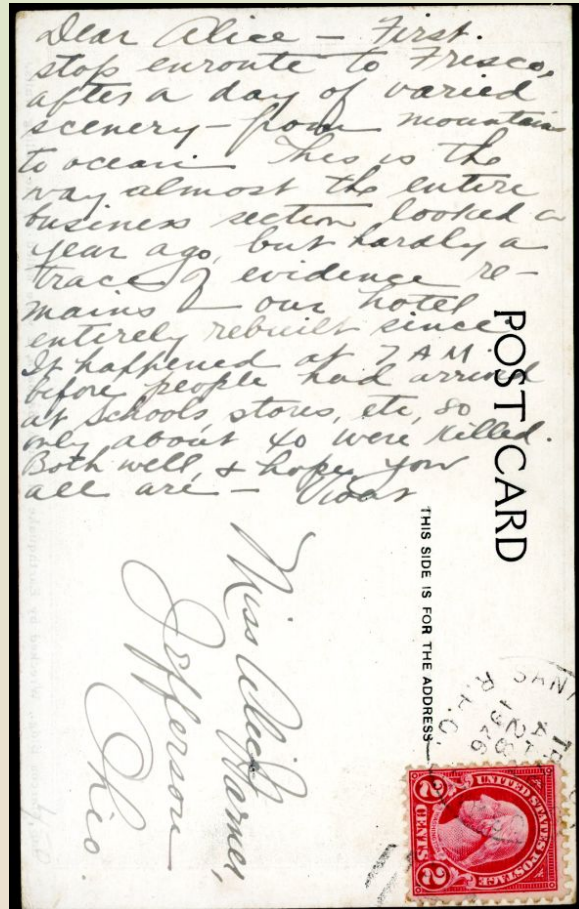
SB026 - no postmarked (sent in envelope?), 8/3/1925 (2 months after quake), divided

"Aug. 3, 1925. Dear cousin Ora, would like to hear from you again. The Earthquake only cost me \$2.00. The Hotel on reverse side of this just finished, new. During July I had a delightful 11 days to Los Angeles, Orange Co. & Pasadena took in the great New That Congress. As ever, Clayton"



SB026 - Hotel Californian

Earthquake philatelic collection (11) - posted



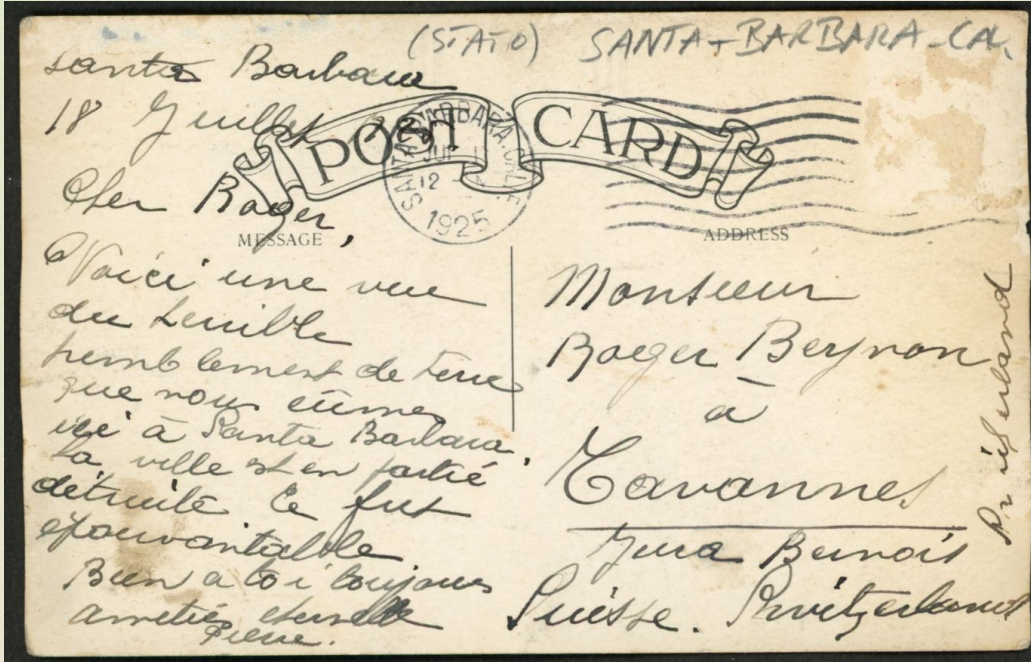
SB028 - postmarked San[ta Barbara?] R.P.O., 4/28/1926 (10 months after quake), sent to Ohio, RPPC, divided, Scott 554, nice handwriting

"Dear Alice - First stop enroute to Frisco, after a day of varied scenery - from mountains to ocean. This is the way almost the entire business section looked a year ago, but hardly a trace of evidence remains. Our hotel entirely rebuilt since it happened at 7a.m. before people had arrived at schools, stores, etc. so only about 40 were killed. Both well, + hope you all are - Vidas"



SB028 - San Marcos building. Two of the deaths. First floor was a drug store.

Earthquake philatelic collection (12) - posted



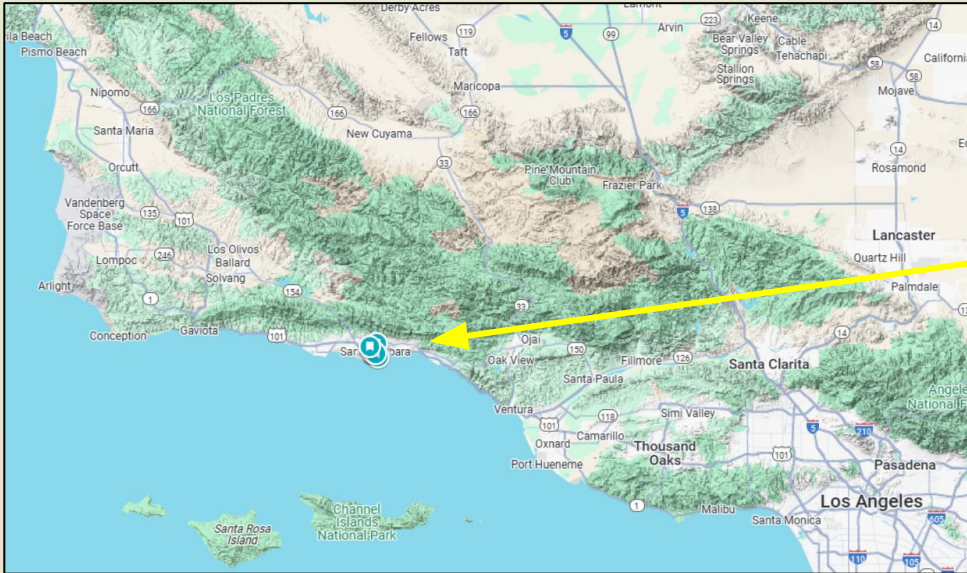
SB017 - postmarked Santa Barbara, 7/18/1927 (3 weeks after quake), sent to Switzerland, RPPC, divided, stamp removed

from French: "Santa Barbara 18 July 1925. Dear Roger, Here is a view of the terrible earthquake which we ? in Santa Barbara. The city is partly destroyed. It was appalling. Dear friendship ..., Pierre"



SB017 - Santa Barbara Mission

Santa Barbara geography (1) - Transverse Ranges



Google maps



Wikipedia

Transverse Ranges are due to complex interactions of the North American and Pacific tectonic plates across the San Andreas fault.

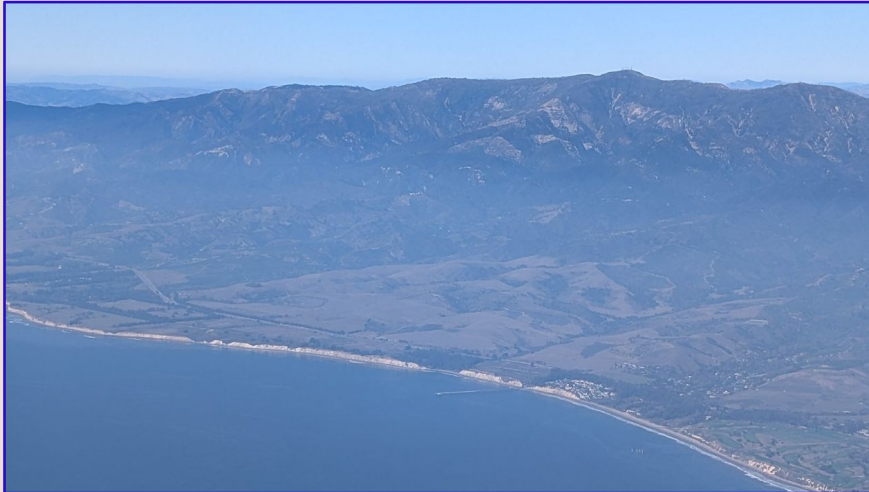
Santa Barbara geography (2) - deformation from the air



Visited Santa Barbara, Dec. 2024
All photos shown are mine

deformation - folding and faulting

- Santa Ynez Mountains
- folded layers
- uplifted marine terraces



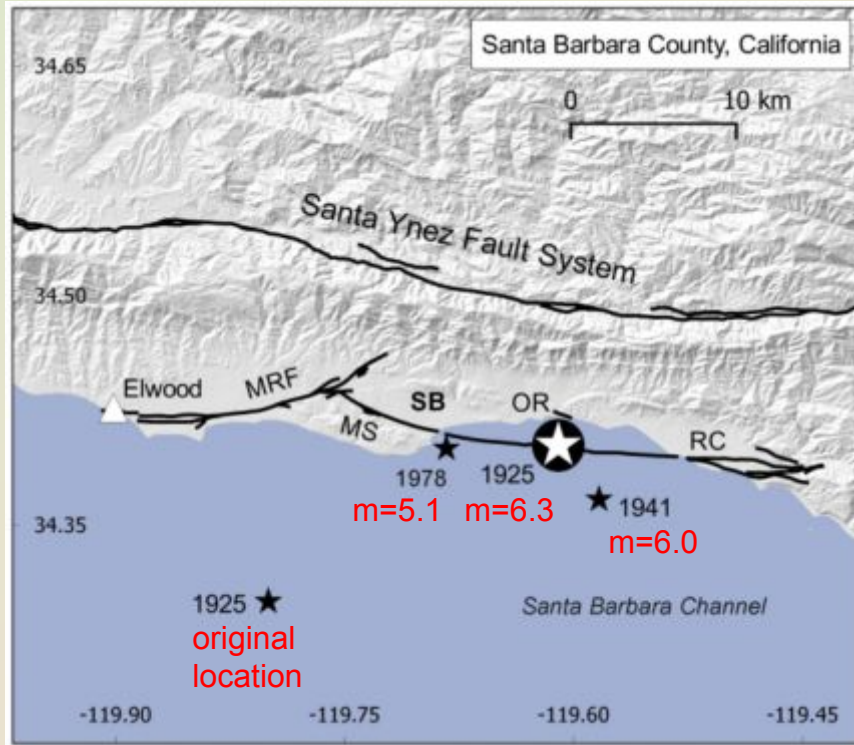
Santa Barbara geography (3) - deformation from the ground



deformation - folding and faulting

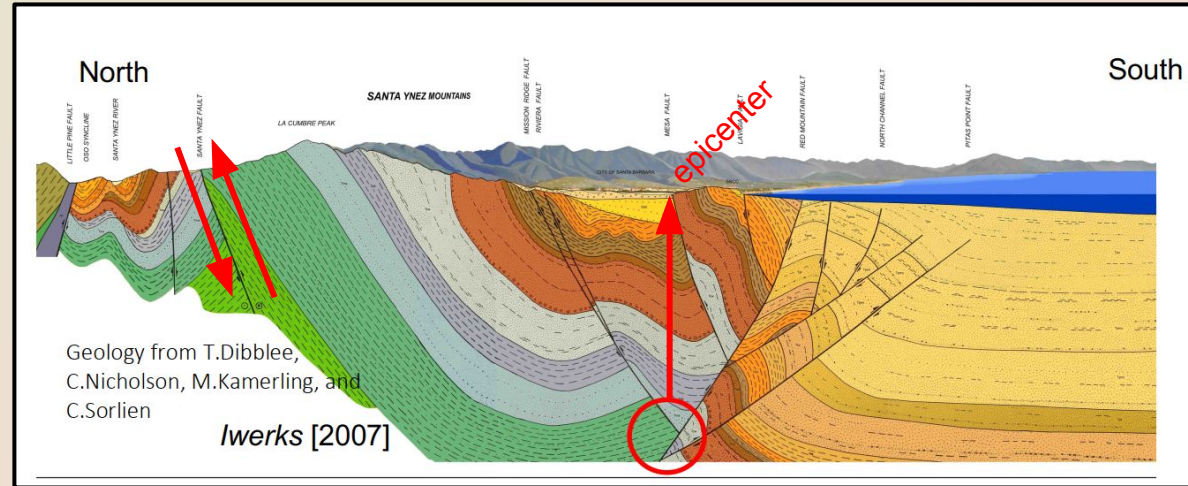
- folding, foothills of Santa Ynez Mountains
- tilted (folded) strata from Sheffield Reservoir open space
- tilted (folded) strata, Arroyo Burro Beach

Santa Barbara geography (4) - faults and historic quakes



A proposed rupture scenario for the 1925 MW 6.5 Santa Barbara, California, earthquake
Susan E. Hough and Stacey S. Martin
Tectonophysics, 2018, 211-224

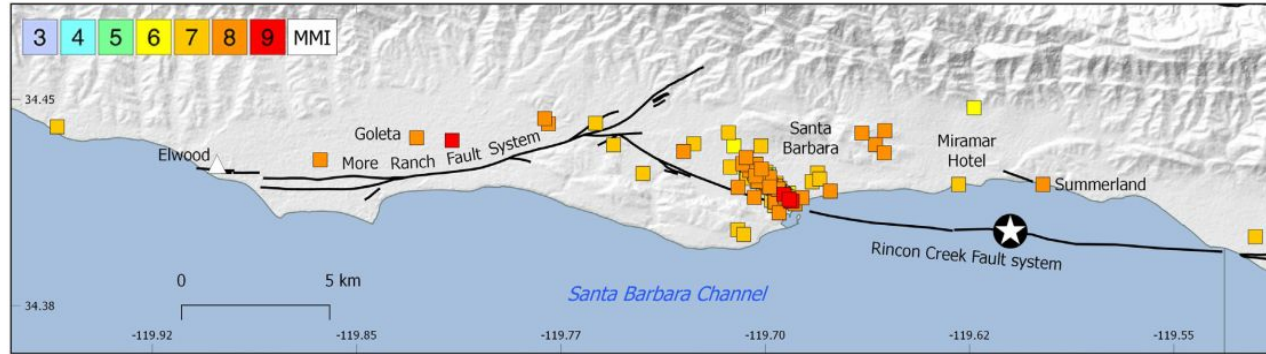
folds, faults, tilted strata



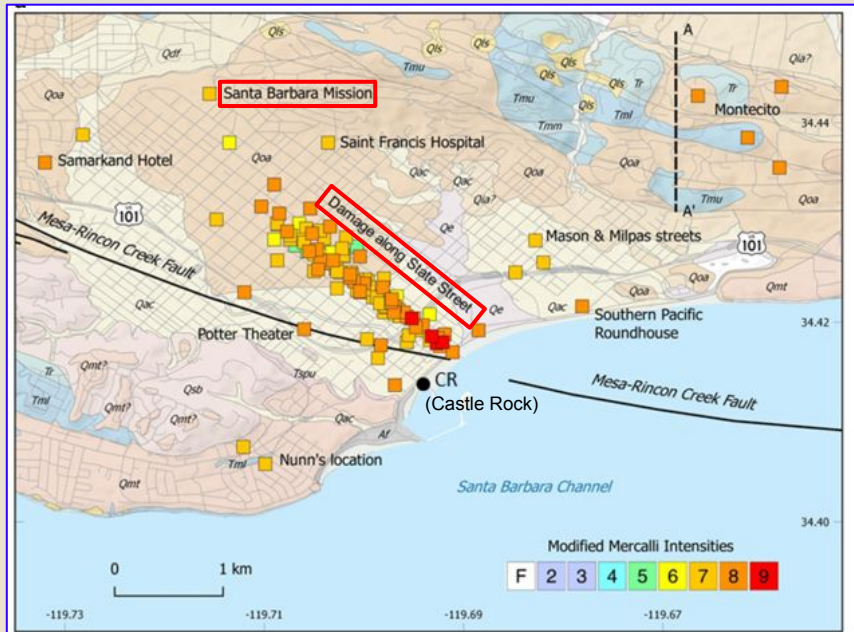
Subsurface 3D fault geometry and its relation to major earthquakes in the Santa Barbara area
Craig Nicholson, 2025

Richter magnitudes are measures of energy released.

Santa Barbara geography (5) - 1925 earthquake



A proposed rupture scenario for the 1925 MW 6.5 Santa Barbara, California, earthquake
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Tectonophysics, 2018, 211-224



Modified Mercalli Intensity Scale - estimate of impact

- 5. Felt indoors by practically all, outdoors by many or most
- 6. Felt by all, indoors and outdoors
- 7. Frightened all - general alarm, all ran outdoors
- 8. Fright general - alarm approaches panic
- 9. Panic general

Santa Barbara research (1) - Gledhill Library



Santa Barbara Historical Society



Gledhill Library



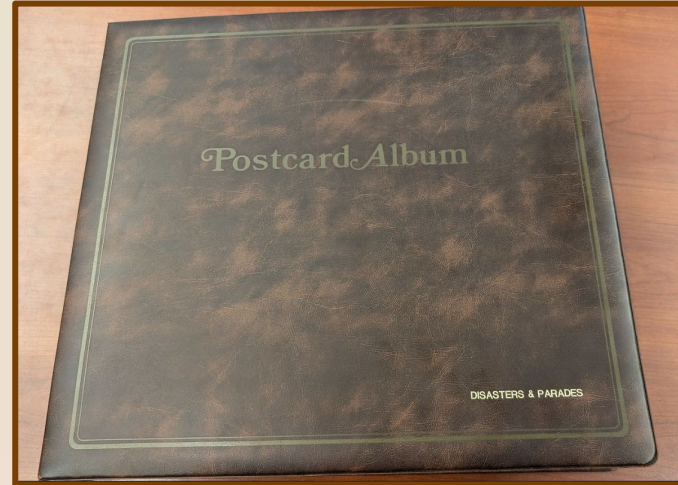
Santa Barbara research (2) - Fritsche collection

Used to identify some of my postcard images

Used as a proxy for frequency of images

Arlington Hotel	23
Hotel Californian	23
San Marcos Building	20
Santa Barbara Mission	16
Our Lady of Sorrows Church	14
Potter Theater	10
Public library	10
Power plant	7
Grand Hotel	7
Marines on patrol	7
County jail	6
Saint Anthony College (Seminary)	4
Devil of the Quake (face)	3
Red Cross	1

bold - in my collection



John C. Fritsche (1929-2020) postcard collection:

7300 cards total, in 25 binders

Series 16 - notebook on disasters and parades postcards

Earthquake cards are sorted by building

41 album pages on the 1925 quake, about 360 cards

Semi-extreme deltiology (2) - Hotel Arlington



SB009



- 1875 - Arlington Hotel built
- 1909 - gutted by fire in 1909
- 1911 - hotel reopened
- 1925 - seriously damaged in earthquake, two killed
- 1930 - opened as movie theater
- 1970s - theater expanded

Semi-extreme deltiology (3) - Hotel Californian

SB026



1925 - opened

1925 - seriously damaged in earthquake 11 days later

2017 - re-opened across the street, left

original site, above

Semi-extreme deltiology (4) - San Marcos Building



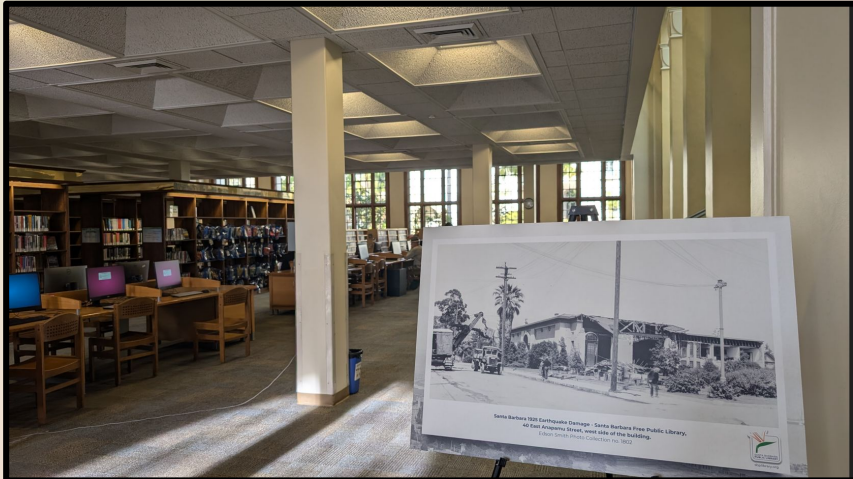
- 1914 - housed Sterling Drug Store
- 1925 - seriously damaged in earthquake, three killed
- 1926 - rebuilt, reduced from 4 stories to 2 stories

Semi-extreme deltiology (5) - Public library



SB002j

CITY LIBRARY



**EDSON SMITH
PHOTO
COLLECTION**

Semi-extreme deltiology (6) - County jail and courthouse



The jail was in the old county courthouse complex.

Both were damaged.

20 prisoners escaped, most returned.

New jail in the new courthouse complex on the same block, cornerstone showing reopening date of 1927.

Semi-extreme deltiology (7) - Santa Barbara Mission



The facade of the Mission was severely damaged and lost its statues.
Twin towers collapsed. One death.



1786 - founded by Franciscans; still active church St. Barbara, patron saint of miners
1812 - partially destroyed by another quake
1820 - 4th structure completed
1824 - Chumash revolt
1925 - towers damaged by earthquake as services started for the Feast Day of Saint Peter and Paul - church rebuilt

Semi-extreme deltiology (8) - Santa Barbara Mission

"Postcard to self, on my recent trip to Santa Barbara as we near the centennial of the 1925 earthquake, I visited the Mission, one of the notable buildings that was damaged by that event. Rob. Mailed from Hotel Californian"

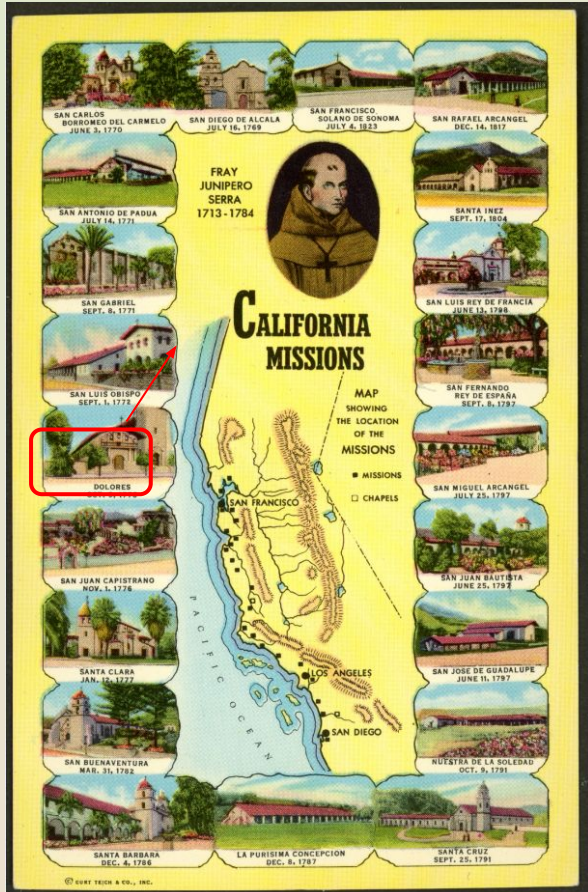


the Old Mission

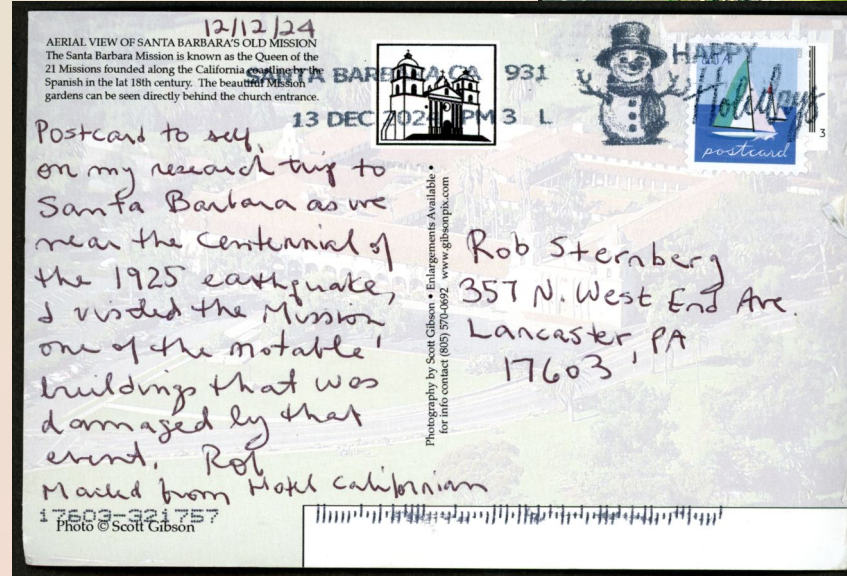
Saint Barbara is the patron saint of miners (almost geologists).

SB023

34



SB027



17603-921757

Semi-extreme deltiology (9) - Saint Anthony Seminary



1901 - built as house for the Franciscan seminary of St. Anthony.

1925 - extensive damage. Walls of the chapel fell and the roof crashed down through the inside of the chapel, 1 dead.

Upper floors were rebuilt in a Spanish Colonial Revival style, while the first floor is Romanesque.

More recently a K-12 school, and auctioned off last year.

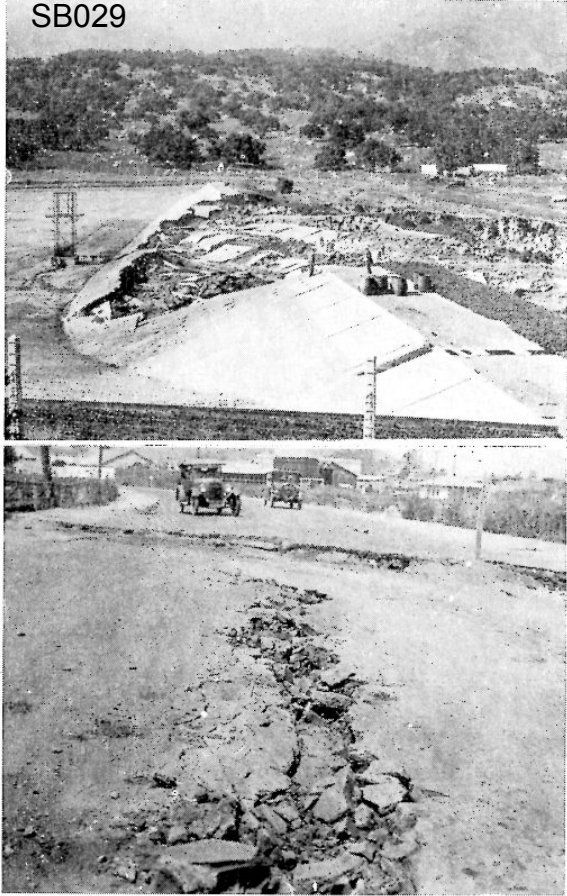


1925



Semi-extreme deltiology (10) - Sheffield dam and reservoir

SB029



SHEFFIELD DAM RIVEN BY THE QUAKE
THE COAST HIGHWAY JUST EAST OF STATE SHOWING
CREVICES MADE BY QUAKE



THE SHEFFIELD DAM WAS ORIGINALLY CONSTRUCTED IN 1917. THE RUBBLE CORE DAM, 800 FEET LONG AND 25 FEET HIGH, HELD 40 MILLION GALLONS OF WATER. THE DAM WAS DESTROYED BY THE 1925 SANTA BARBARA EARTHQUAKE AND REBUILT IN 1936. THE TWO ROWS OF BOULDERS NOW OUTLINE THE ORIGINAL LOCATION OF THE EARTHEN DAM.

- 1917 - build as distribution reservoir for municipal water
- 1925 - destroyed by earthquake, releasing 30 million gallons
- 1936 - rebuilt
- 2004 - converted to underground reservoir
- 2006 - Passive park. Rows of boulders outline former earthen dam.

Acknowledgments

Steve Hausz - architect, eq25.org committee chair

Rick Closson - eq25.org committee member

Chris Ervin - archivist Gledhill Library

Sabina Thomas - geologist

Larry Gurrola - engineering geologist

Neal Graffy - author, eq25.org committee member

Betty Green - author, eq25.org committee member

Sheila Lodge - ex-mayor and civic official, author

Theme song

The Santa Barbara Earthquake was written within two weeks of the event, and was recorded and released quickly by Columbia and Dalhart to capitalize on the widespread interest in the disaster. The song is credited on the record label to "Carlos McAfee", a pseudonym for early country performer and songwriter Carson Robison -- who often recorded with Dalhart.

[Thanks to Tony Russel for tracing the pseudonym.]

The Santa Barbara Earthquake Recorded July 10, 1925



1:54 / 2:56

Vernon Dalhart
recorded 12 days after earthquake
<https://bluegrasswest.com/ideas/dalhart.htm>