

San José del Palmar Chocó Earthquake –  
August 10, 2026  
Effects in Cali and the Cauca Valley  
Department– Colombia  
Report  
V. 3.0 16/08/2026

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Projects Engineer  
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# General Event Information

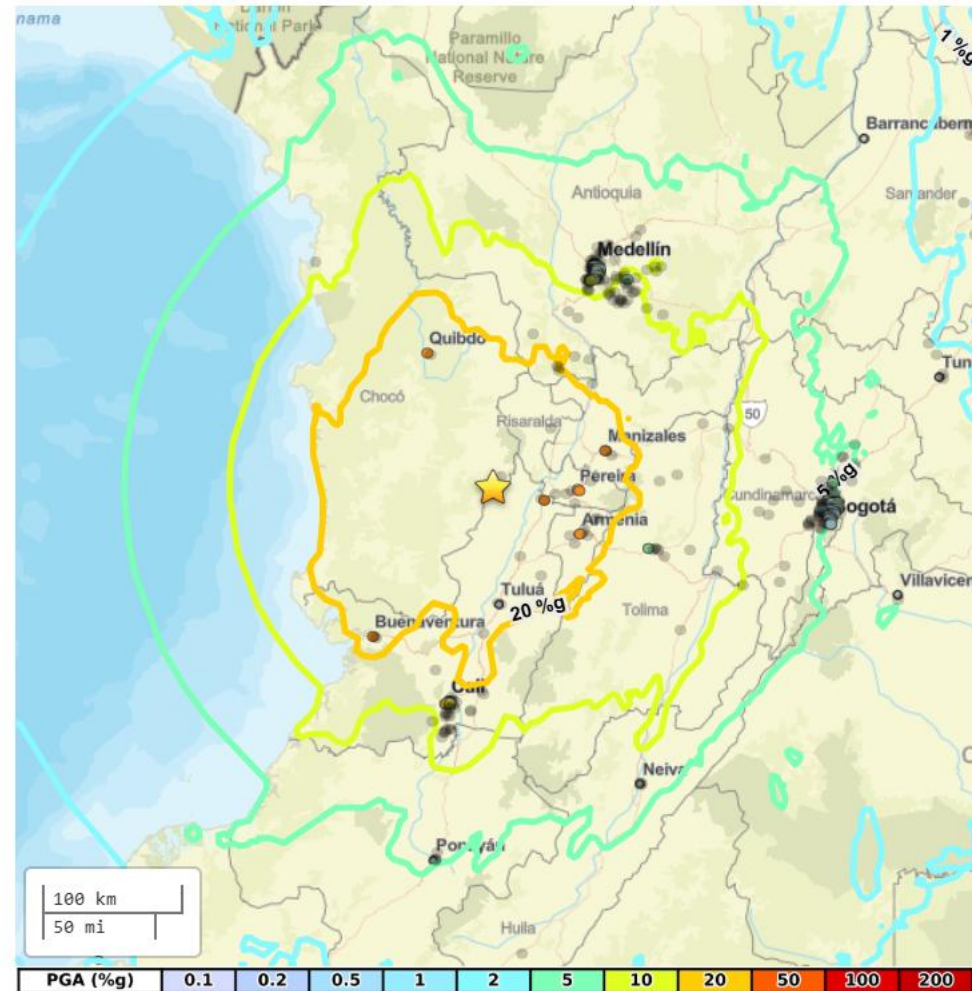
- Magnitude: Mw 7.4
- Time: 7:34 a.m. (UTC-5)
- Epicentro: San José del Palmar, Chocó (5 km to the south)
- Depth: 103 km
- Type: Intermediate-depth intraplate earthquake (Nazca plate)
- Duration: more than a minute
- Most affected cities: Cali, Pereira, Armenia, Manizales, Quibdó

# Transport infrastructure

Airports suspended:

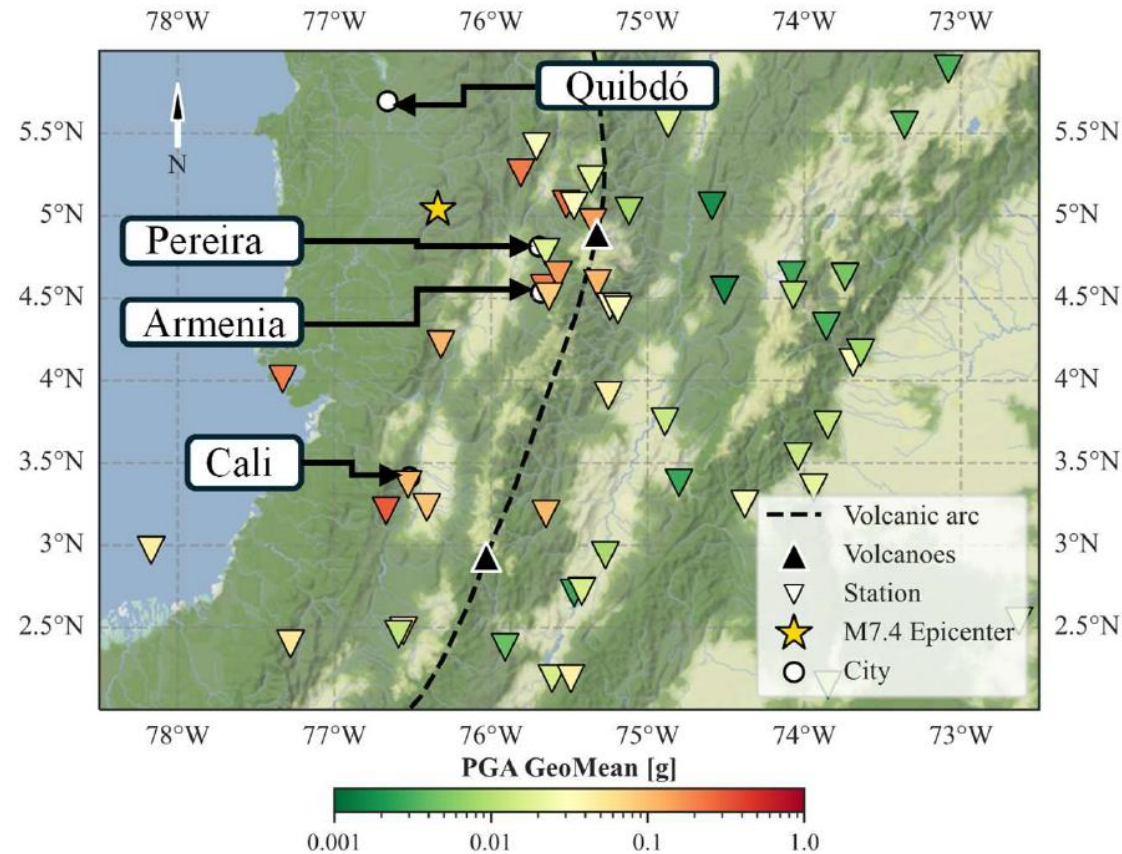
1. Alfonso Bonilla Aragón (Cali/Palmira)
2. Matecaña (Pereira)
3. La Nubia (Manizales)
4. El Caraño (Quibdó)
5. El Edén (Armenia)
6. Santa Ana (Cartago)
7. Gerardo Tobar López (Buenaventura)

# PGA



<https://earthquake.usgs.gov/earthquakes/eventpage/us6000tjl2/shakemap/pga>

# PGA by City



**Figura 1.1.** Localización del epicentro del terremoto Mw 7.4 del 10 de agosto de 2026 y distribución espacial de la aceleración máxima del terreno (PGA) registrada en estaciones de la Red Nacional de Acelerógrafos. Se indican además ciudades principales en la zona y la ubicación aproximada del arco volcánico colombiano. Datos de movimiento fuerte adaptados del Servicio Geológico Colombiano (SGC, 2026).

(CEER 2026)

# PGA by City

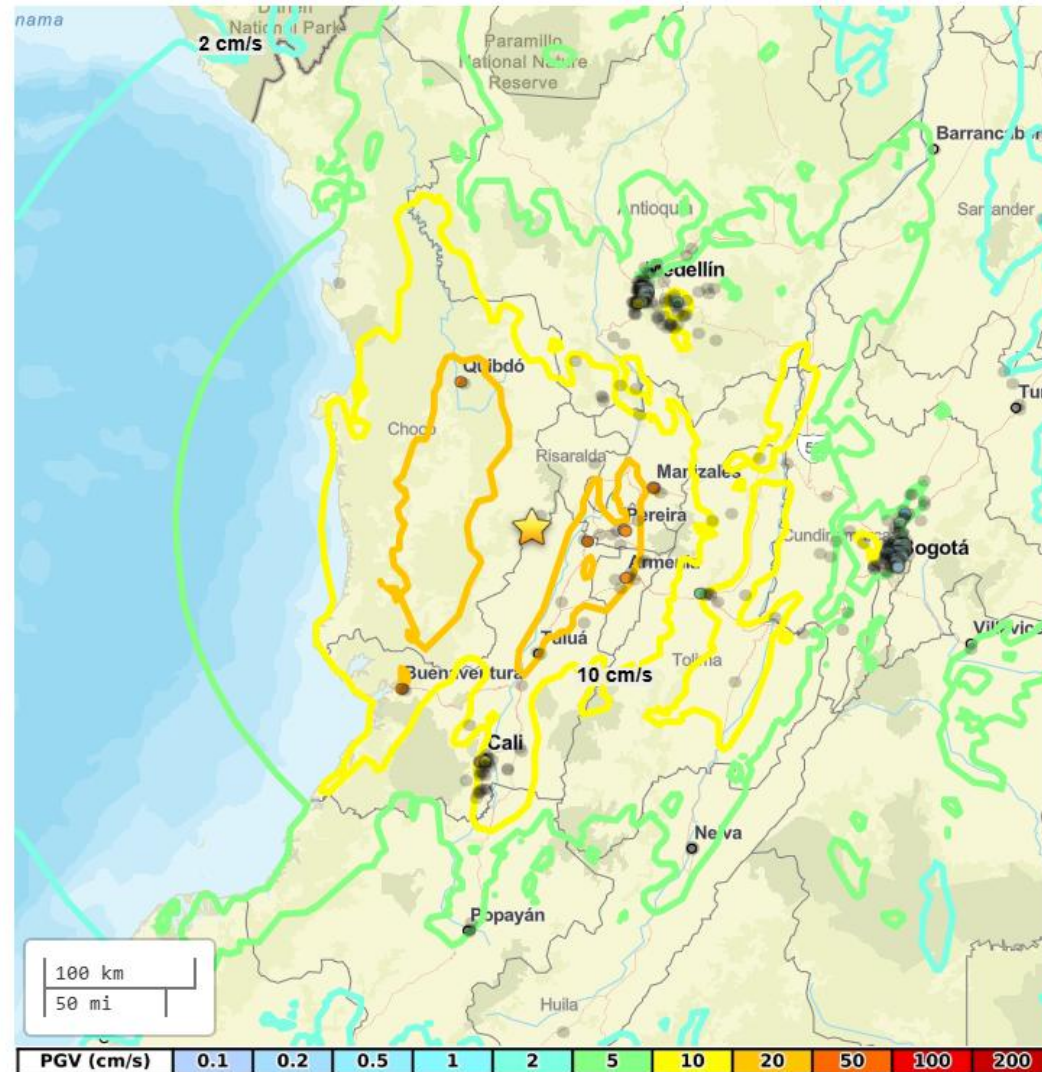
**Tabla 2.1.** Aceleraciones pico del terreno (PGA) registradas en estaciones seleccionadas para el terremoto del 10 de agosto de 2026. Se presentan la distancia hipocentral y las componentes EW, NS y vertical (Z). Fuente: Servicio Geológico Colombiano (SGC, 2026).

| Nombre estación               | Dist.Hip (km) | PGA EW (cm/s <sup>2</sup> ) | PGA NS (cm/s <sup>2</sup> ) | PGA Z (cm/s <sup>2</sup> ) |
|-------------------------------|---------------|-----------------------------|-----------------------------|----------------------------|
| Anserma, Caldas               | 120           | 223.2                       | 201.0                       | 37.2                       |
| *Pereira, Risaralda           | 128           | 17.3                        | 17.9                        | 9.1                        |
| Armenia, Quindío              | 134           | 198.7                       | 221.8                       | 80.8                       |
| Manizales, Caldas             | 134           | 283.0                       | 203.8                       | 70.5                       |
| Salento, Quindío              | 137           | 156.9                       | 142.9                       | 81.0                       |
| Villamaría, Caldas            | 147           | 146.9                       | 139.1                       | 47.1                       |
| Bahia Malaga, Valle del Cauca | 190           | 187.9                       | 212.1                       | 84.7                       |
| *Jamundi, Valle del Cauca     | 227           | 418.7                       | 205.6                       | 151.4                      |
| Punta Ardita, Chocó           | 311           | 217.1                       | 198.8                       | 81.4                       |
| La Cruz, Nariño               | 402           | 277.1                       | 295.6                       | 4.5                        |

\* Los registros y valores de PGA correspondientes a la estación de Jamundí y Pereira requieren revisión adicional antes de su interpretación.

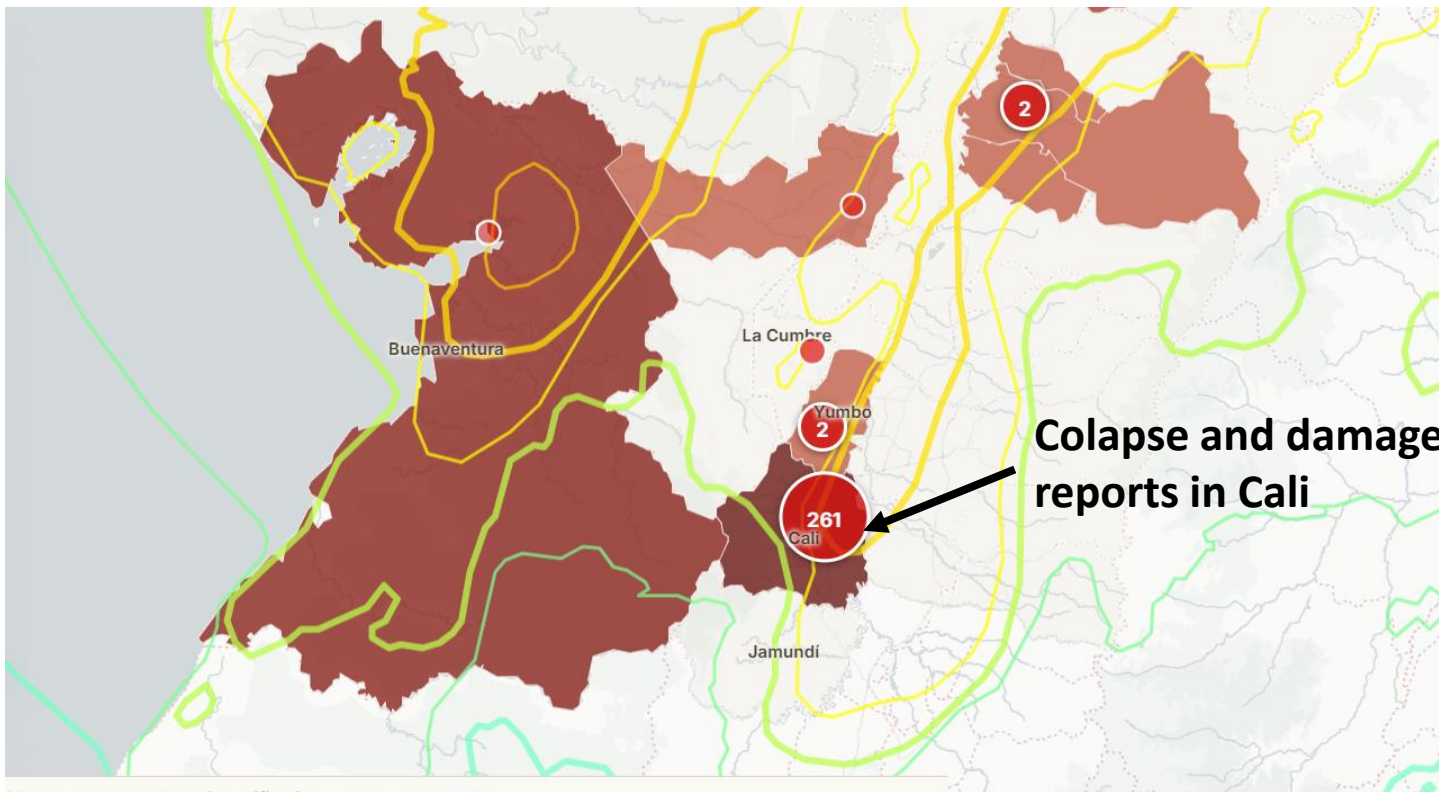
(CEER 2026)

# PGV



<https://earthquake.usgs.gov/earthquakes/eventpage/us6000tjl2/shakemap/pgv>

# Earthquake casualties in the Cauca Valley



*Color lines are intensity contours from USGS*

<https://crisiscolombia.org/>

| SHAKING   | Not felt | Weak   | Light | Moderate   | Strong | Very strong | Severe         | Violent | Extreme    |
|-----------|----------|--------|-------|------------|--------|-------------|----------------|---------|------------|
| DAMAGE    | None     | None   | None  | Very light | Light  | Moderate    | Moderate/heavy | Heavy   | Very heavy |
| PGA(%g)   | <0.0464  | 0.297  | 2.76  | 6.2        | 11.5   | 21.5        | 40.1           | 74.7    | >139       |
| PGV(cm/s) | <0.0215  | 0.135  | 1.41  | 4.65       | 9.64   | 20          | 41.4           | 85.8    | >178       |
| INTENSITY | I        | II-III | IV    | V          | VI     | VII         | VIII           | IX      | X+         |

Scale based on Worden et al. (2012)

△ Seismic Instrument ○ Reported Intensity

★ Epicenter

Version 6: Processed 2026-08-11T12:37:46Z

# Earthquake casualties in Cali

- The latest balance of the PMU of Alcaldía de Cali , reported on today (<https://www.facebook.com/CaliesCaliOFICIAL/photos/desde-el-puesto-de-mando-unificado-pmu-el-alcalde-de-cali-alejandro-eder-entreg%C3%B3/1519353070219229/>):
  - 122 deceased
  - 111 missing people
  - 1,485 injured people

# Collapsed buildings in Cali

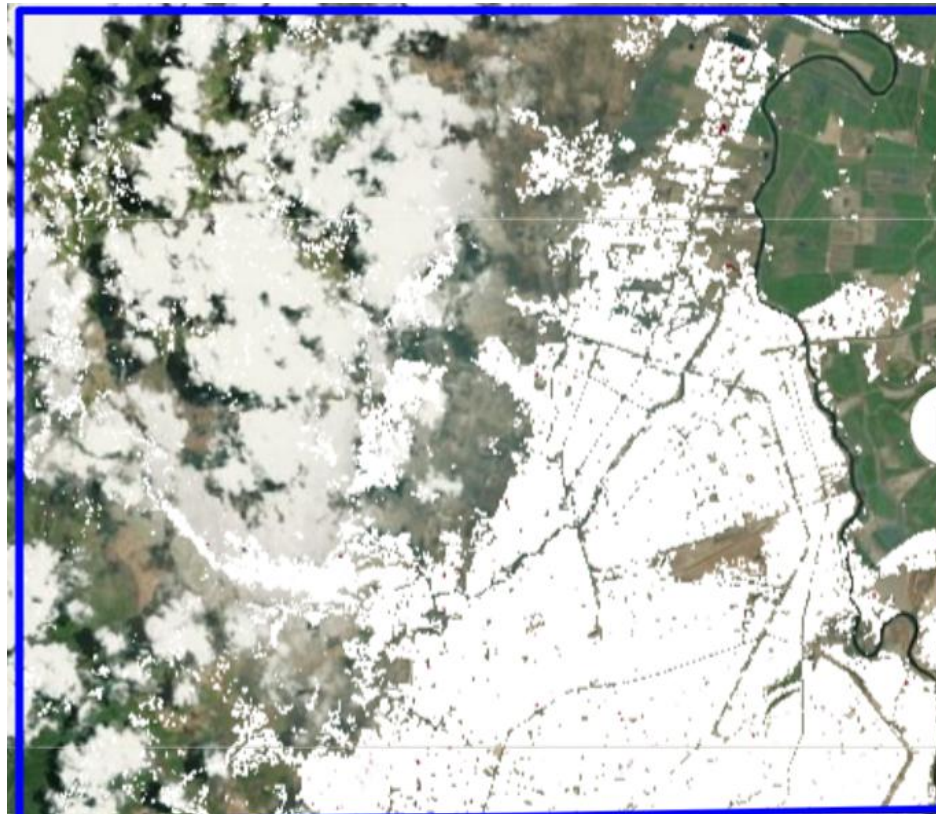
- The 7.4 magnitude earthquake registered in Colombia. So far in Cali Colombia, there are reports of 35 buildings with total collapse and 46 with partial collapse (adding up to more than 80 collapsed structures in total), in addition to hundreds of buildings with structural damage. [1, 2].
- More than 830 buildings evaluated with damages.

# Collapsed buildings in Cali

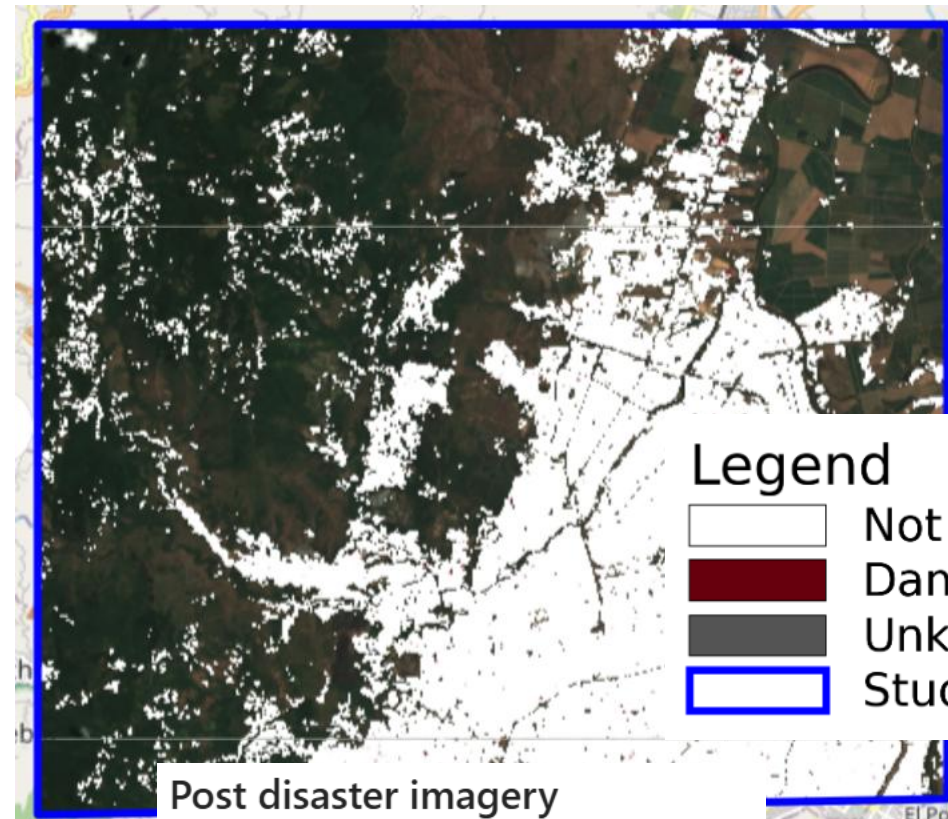
- Preliminary assesment with AI models on satellite imagery from Airbus covering the area around Cali with two different building footprint sets, Overture and Google, done by Juan M. Lavista Ferres ([https://www.linkedin.com/posts/jlavista\\_colombia-share-7493176348857942017-1JSf/?utm\\_source=share&utm\\_medium=member\\_ios&rcm=ACoAAAVEKNUBHNouWbHB3h4FRWsvDUH2bHhKPDQ](https://www.linkedin.com/posts/jlavista_colombia-share-7493176348857942017-1JSf/?utm_source=share&utm_medium=member_ios&rcm=ACoAAAVEKNUBHNouWbHB3h4FRWsvDUH2bHhKPDQ)).
  - He describes the following findings from the Google Footprint results:
    - 320,178 building footprints were identified in the area
    - 0 footprints were obscured by clouds.
    - The model predicted that 621 (0.2%) were damaged to some extent.

# Collapsed buildings in Cali

- [https://visualizers.aiforgood.ai/damage-assessment/colombia\\_earthquake\\_cali\\_august\\_2026.html](https://visualizers.aiforgood.ai/damage-assessment/colombia_earthquake_cali_august_2026.html)



Before



Post disaster imagery

Airbus Pléiades - August 10th, 2026 15:37 UTC

# Collapsed buildings in Cali, some of them

| Building                                                           | Microzone                                                                                                             | Vibration period of the soil tank according to microzone                                                           |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| 1. Hotel La Luna Autopista Sur Oriental # 13-01 Barrio Junin       | 4A Cali Medium Alluvial Fan                                                                                           | 1.0 a 1.3 seg. Average 1.1 seg.                                                                                    |
| 2. Calle 42 con 38 barrio Antonio Nariño                           | 6 Cauca River Alluvial Plain                                                                                          | 1.4 a 2.0 seg. Average 1.75 seg.                                                                                   |
| 3. Calle 44                                                        | ND                                                                                                                    | ND                                                                                                                 |
| 4. Calle 3D con 6                                                  | 4D Melendez Lili Alluvial Fan                                                                                         | 0.50 a 1.3 seg. Average 1.0 seg.                                                                                   |
| 5. Calle 10 con Cra 71 Barrio Limonar, Edificio Torres del Limonar | 4D Melendez Lili Alluvial Fan                                                                                         | 0.50 a 1.3 seg. Average 1.0 seg.                                                                                   |
| 6 Carrera 28D # 72W – 14 (Notaría 20) Barrio El Poblado II         | 6 Cauca River Alluvial Plain                                                                                          | 1.4 a 2.0 seg. Average 1.75 seg.                                                                                   |
| 7. Calle 9 con 24 Barrio Alameda                                   | 4A Cali Medium Alluvial Fan less than 200 meters from microzones 3 Foothill deposits and 4C Cañaveralejo Alluvial fan | 4A: 1.0 a 1.3 seg. Average 1.1 seg.<br>3: 0.6 a 1.20 seg. Average 0.95 seg.<br>4C: 1.5 a 2.0 seg. Average 1.8 seg. |

Source: Made with information from the official report of the Mayor's Office of Cali, location in Geovisor IDESC and decree of MZSC

# Collapsed buildings in Cali, some of them

| Building                                                          | Microzona                                                                           | Vibration period of the soil tank according to microzone           |
|-------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| 8. Cra 41 con Séptima Barrio Los Cámbulos                         | 4C Cañaveralejo Alluvial fan                                                        | 1.5 a 2.0 seg. Average 1.8 seg.                                    |
| 9. Motel Molino Rojo Calle 10 #38-21 Barrio Olímpico              | 4C Cañaveralejo Alluvial fan                                                        | 1.5 a 2.0 seg. Average 1.8 seg.                                    |
| 10. Carrera 44 con 9 Barrio Los Cámbulos                          | 4C Cañaveralejo Alluvial fan                                                        | 1.5 a 2.0 seg. Average 1.8 seg.                                    |
| 11. Edificio Marisol Carrera 39 # 5D-09 barrio Tequendama         | 4C Cañaveralejo Alluvial fan                                                        | 1.5 a 2.0 seg. Average 1.8 seg.                                    |
| 12. Carrera 9 con 53 Barrio Camino Real                           | 4C Cañaveralejo Alluvial fan                                                        | 1.5 a 2.0 seg. Average 1.8 seg.<br>1.5 a 2.0 seg. Average 1.8 seg. |
| 13. Calle 5 con 44 edificio local Drogas La Rebaja barrio El Lido | 4C Cañaveralejo Alluvial fan and less than 200 m from microzone 3 Foothill deposits | 1.5 a 2.0 seg. Average 1.8 seg.                                    |
| 14. Calle 5 con 57 barrio Cuarto de Legua                         | 4C Cañaveralejo Alluvial fan                                                        | 1.5 a 2.0 seg. Average 1.8 seg.                                    |

Source: Made with information from the official report of the Mayor's Office of Cali, location in Geovisor IDESC and decree of MZSC

# Collapsed buildings in Cali, some of them

| Building                                                            | Microzona                                                                           | Vibration period of the soil tank according to microzone |
|---------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------|
| 15. Carrera 44 con Calle 9A Edificio Vanessa barrio Los Cámbulos    | 4C Cañaveralejo Alluvial fan                                                        | 1.5 a 2.0 seg. Average 1.8 seg.                          |
| 16. Ana Pilar Cra. 56 # 3-00 barrio Cuarto de Legua                 | 4C Cañaveralejo Alluvial fan                                                        | 1.5 a 2.0 seg. Average 1.8 seg.                          |
| 17. Conjunto Guadalupe Calle 2A # 55B-72 barrio Cuarto de Legua     | 4C Cañaveralejo Alluvial fan and less than 200 m from microzone 3 Foothill deposits | 1.5 a 2.0 seg. Average 1.8 seg.                          |
| 18. María / Edificio Liliana Cra. 50 # 3-138 barrio Cuarto de Legua | 3 Foothill deposits                                                                 | 0.6 a 1.20 seg. Average 0.95 seg.                        |
| 19. Edificio Carrera 56 con Calle 9 Barrio Camino Real              | 4C Cañaveralejo Alluvial fan                                                        | 1.5 a 2.0 seg. Average 1.8 seg.                          |
| 20. Edificio Carretero Calle 9B con Cra. 45 Barrio Nueva Tequendama | 4C Cañaveralejo Alluvial fan                                                        | 1.5 a 2.0 seg. Average 1.8 seg.                          |
| 21. Torres de la Novena Calle 9 con Cra. 44 Barrio Nueva Tequendama | 4C Cañaveralejo Alluvial fan                                                        | 1.5 a 2.0 seg. Average 1.8 seg.                          |

Source: Made with information from the official report of the Mayor's Office of Cali, location in Geovisor IDESC and decree of MZSC

# Collapsed buildings in Cali, some of them

| Building                                                                 | Microzona                    | Vibration period of the soil tank according to microzone |
|--------------------------------------------------------------------------|------------------------------|----------------------------------------------------------|
| 22. Cra. 36 con Calle 7 Barrio Eucarístico                               | 4C Cañaveralejo Alluvial fan | 1.5 a 2.0 seg. Average 1.8 seg.                          |
| 23. Edificio Pampalinda Calle 11 – 12 con Cra. 42 – 44 barrio Pampalinda | 4C Cañaveralejo Alluvial fan | 1.5 a 2.0 seg. Average 1.8 seg.                          |
| 24. Pio XII Calle 4A Cra. 40 barrio el Lido                              | 3 Foothill deposits          | 0.6 a 1.20 seg. Average 0.95 seg.                        |

## 24. Pio XII Calle 4A Cra. 40 barrio el Lido



<https://www.facebook.com/Elreporterocali/posts/el-conjunto-residencial-p%C3%ADo-xii-ubicado-entre-la-carrera-40-y-la-calle-5-qued%C3%B3-e/1371487895138684/>

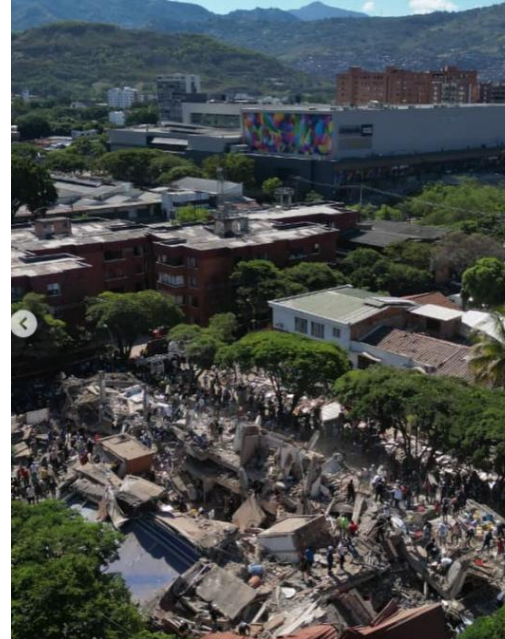
## 24. Pio XII Calle 4A Cra. 40 barrio el Lido



# 5. Calle 10 con Cra 71 Barrio Limonar, Edificio Torres del Limonar, 5 stories



From Google Earth



[https://www.instagram.com/p/Db3709TGrpf/?img\\_index=2](https://www.instagram.com/p/Db3709TGrpf/?img_index=2)

## 5. Calle 10 con Cra 71 Barrio Limonar, Edificio Torres del Limonar, 5 stories



Photos courtesy of Jaime Duque, PE

# 9. Motel Molino Rojo Calle 10 #38-21 Barrio Olímpico, 5 stories



From Google Earth



<https://www.instagram.com/reel/Db3WS3HExsS/>

[https://web.facebook.com/calialdianoticias/videos/edici3n-del-motel-molino-rojo-autopista-con-39/1078264604554957/?\\_rdc=1&\\_rdr#](https://web.facebook.com/calialdianoticias/videos/edici3n-del-motel-molino-rojo-autopista-con-39/1078264604554957/?_rdc=1&_rdr#)

# 11. Edificio Marisol Carrera 39 # 5D-09 barrio Tequendama, 6 stories



From Google Earth



[https://x.com/LeMonda\\_\\_\\_/status/2086947717561884859](https://x.com/LeMonda___/status/2086947717561884859)

# 13. Calle 5 con 44 edificio local Drogas La Rebaja barrio El Lido, 4 stories



From Google Earth



[https://web.facebook.com/DenunciasCiudadanasCALIOFICIAL/videos/calle-5ta-con-carrera-44-edificio-de-drogas-la-rebaja-la-estructura-se-cay%C3%B3denun/1695729828580641/?\\_rdc=1&\\_rdr#](https://web.facebook.com/DenunciasCiudadanasCALIOFICIAL/videos/calle-5ta-con-carrera-44-edificio-de-drogas-la-rebaja-la-estructura-se-cay%C3%B3denun/1695729828580641/?_rdc=1&_rdr#)

# 13. Calle 5 con 44 edificio local Drogas La Rebaja barrio El Lido, 4 stories

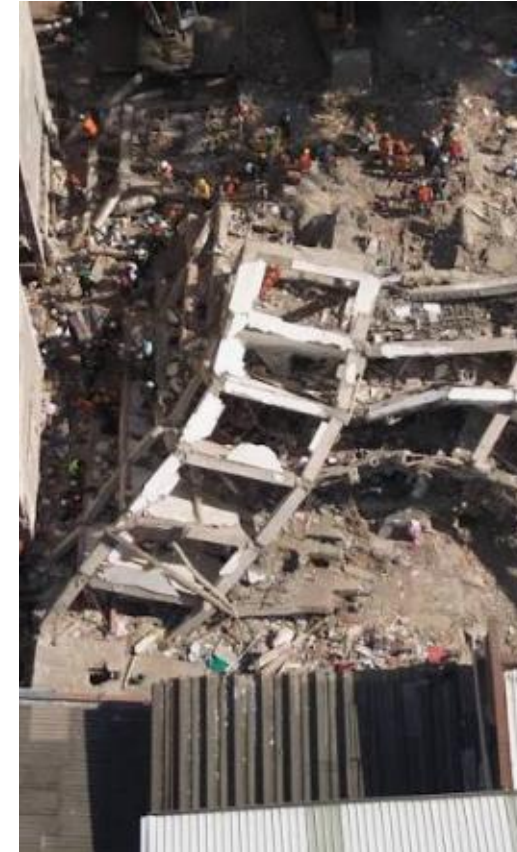


Photos courtesy of Andrés Rodríguez, DGE, PE

# 15. Carrera 44 con Calle 9A Edificio Vanessa barrio Los Cámbulos

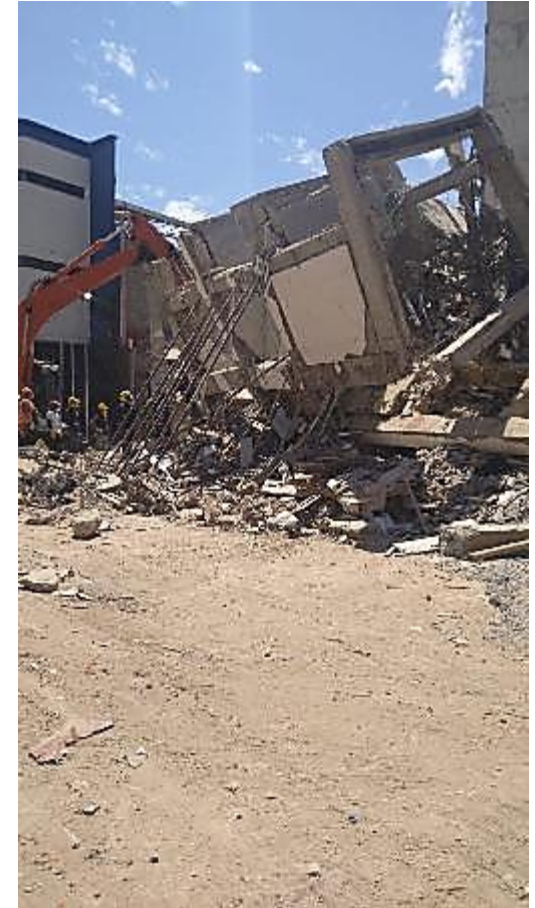


From Google Earth



[https://www.instagram.com/reel/Db8vovfPO\\_r/](https://www.instagram.com/reel/Db8vovfPO_r/)

# 15. Carrera 44 con Calle 9A Edificio Vanessa barrio Los Cámbulos



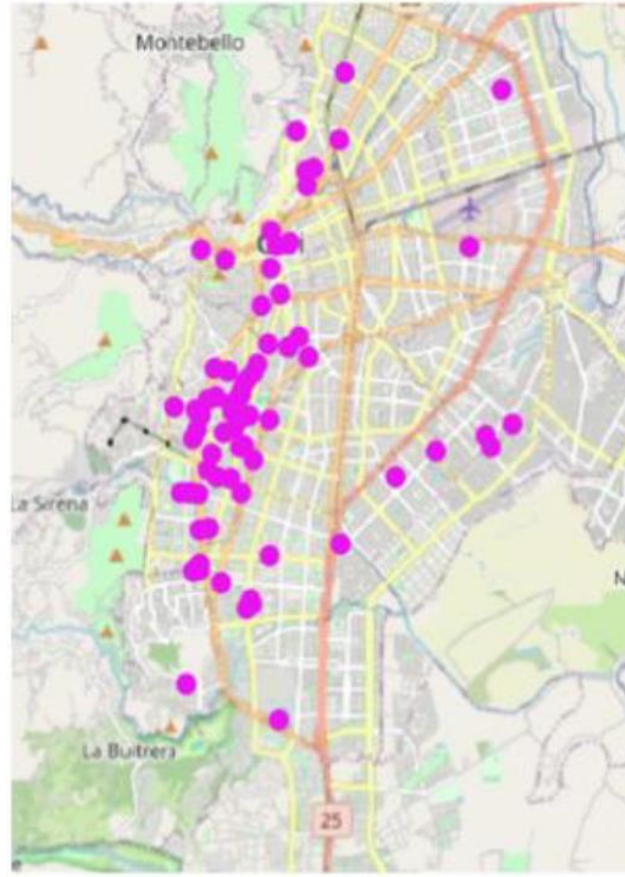
Photos courtesy of Jaime Duque, PE

# 15. Carrera 44 con Calle 9A Edificio Vanessa barrio Los Cámbulos



Photos courtesy of Jaime Duque, PE

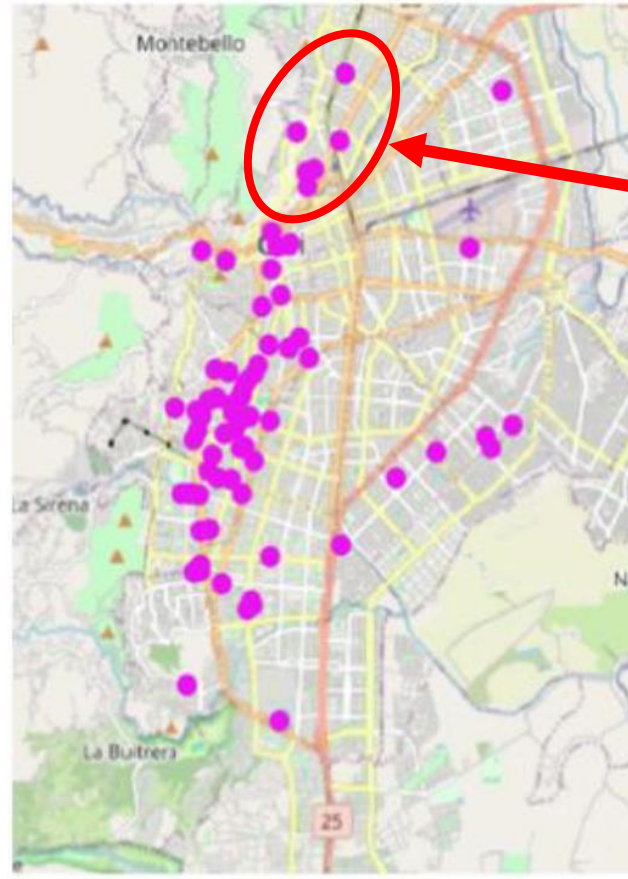
# Collapsed buildings in Cali, location



En puntos violeta, principales edificios y viviendas con daños graves o colapso.

Burbano and Velásquez (2026)

# Collapsed buildings in Cali

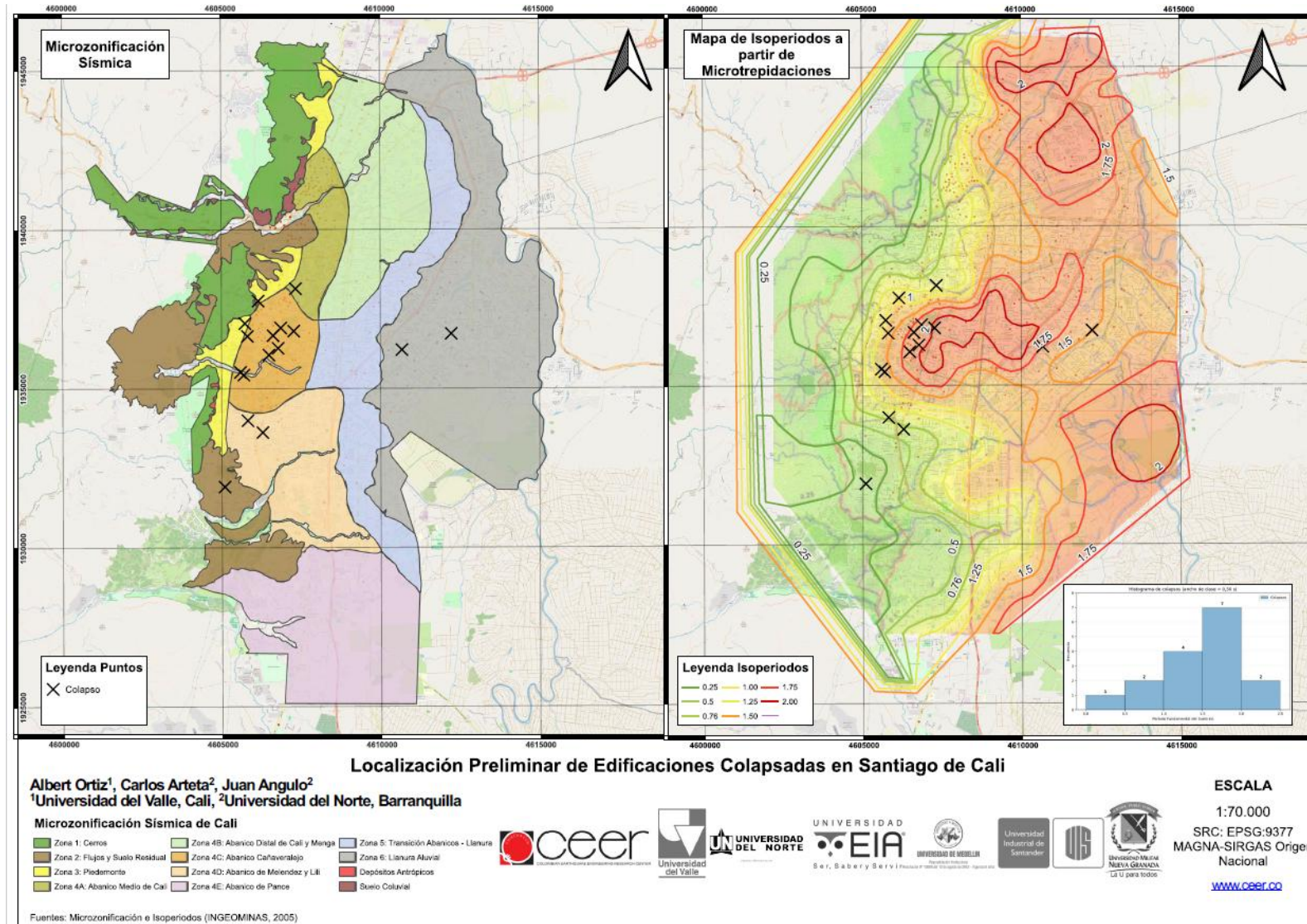


Zone with expansive  
silty clays

En puntos violeta, principales edificios y  
viviendas con daños graves o colapso.

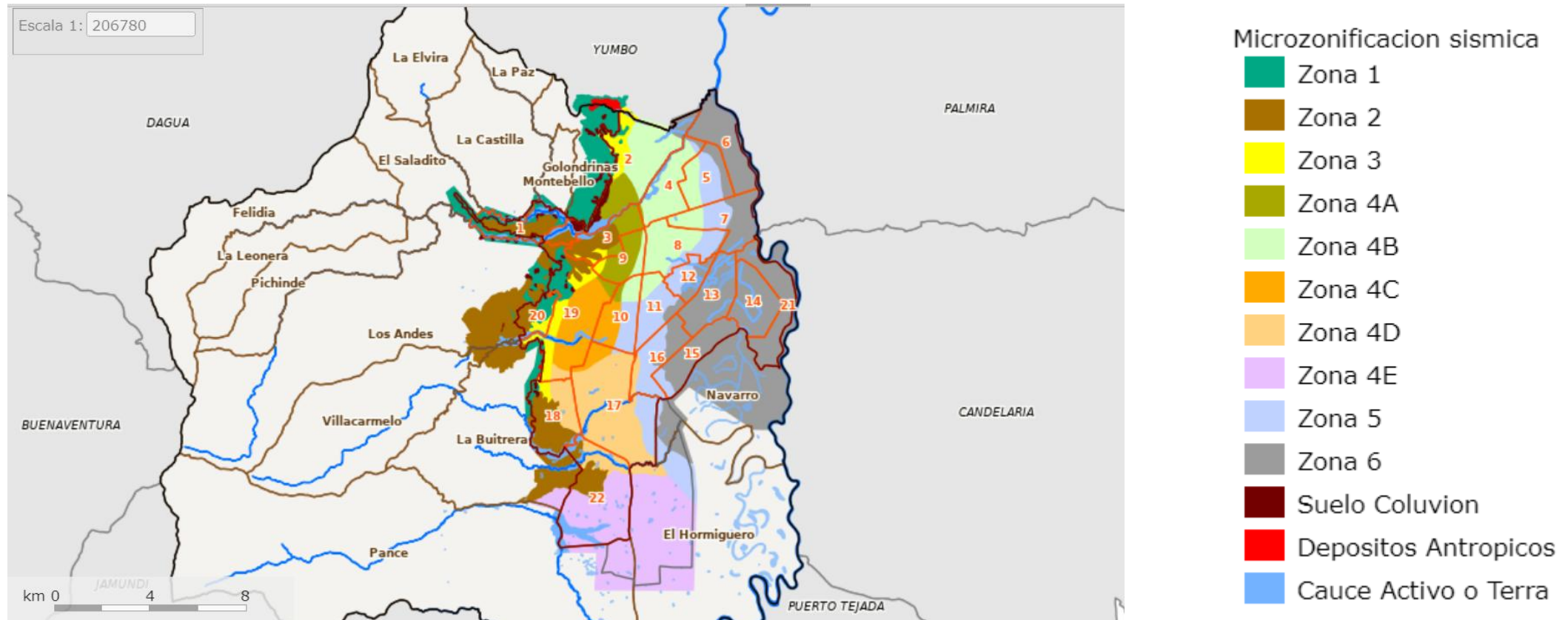
Burbano and Velásquez (2026)

# Collapsed buildings in Cali, some of them in the Microzone 4C Cañaveralejo Alluvial Fan



(CEER 2026)

# Characteristics of Cali soils by Microzone



Retrieved from the IDESC Geoviewer, Santiago de Cali Mayor's Office

# Characteristics of Cali's soils by Microzone

| Microzone                                    | Description                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Microzone 1 Hills</b>                     | This microzone is made up of a complex stratigraphic sequence that includes volcanic rocks of basic composition (diabase and microgabbros) and clastic sedimentary rocks of the Guachinte formation (sandstones, siltstones, claystones and conglomerates), which are weathered in a weathering profile of approximately 10 meters thick.                                                            |
| <b>Microzone 2 Flows and residual soil</b>   | Quaternary deposits of fluvial-torrential and volcanic origin, as well as residual soils developed from the underlying rocks. This includes the Terrón Colorado flow, the Alto Nápoles flow and the Cañasgordas flow.                                                                                                                                                                                |
| <b>Microzone 3 Foothill deposits</b>         | In this microzone appear the piedmont deposits located in the western sector of the city and made up of the fans of Cañaveralejo, Cali, Bosque and Menga. They are deposits, of alluvial origin, they have been formed from the accumulation of sediments transported and deposited by the rivers that drain the small sedimentary basins of the area; with average soil thicknesses of up to 100 m. |
| <b>Microzone 4A Cali Medium Alluvial fan</b> | The stratigraphic sequence is composed of a surface layer of clays and silts between 5 and 15 m thick, overlying a series of layers of alluvial deposits with a predominance of gravels and boulders interspersed with layers of clay. The total thickness of these Tertiary deposits can reach 400 m.                                                                                               |

# Characteristics of Cali soils by Microzone

| Microzone                                            | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Microzone 4B Cali Menga Distal Alluvial Fan</b>   | The fan of the Cali River presents a stratigraphic sequence composed of a surface layer of silty clays between 10 and 15 m thick that overlies a series of alluvial deposits with a predominance of gravels and boulders interspersed with layers of clay. The Menga River fan is composed of silt and clay strata in the upper part and where its consistency increases in depth. Both fans have considerable soil thicknesses of between 500 and 600 m in the Tertiary. |
| <b>Microzone 4C Cañaveralejo Alluvial Fan</b>        | Composed of a sequence of layers of clays and silts, with intercalations of organic material. Surface materials exhibit high pre-consolidation stresses. The total thickness of these deposits can reach 1.2 kilometers.                                                                                                                                                                                                                                                  |
| <b>Microzone 4D Meléndez and Lili's Alluvial Fan</b> | Composed of a surface layer of hard silts, with an approximate thickness of 10 meters, overlying a sequence of granular materials such as pebbles, gravels and diabasic rock blocks, embedded in a sandy-clayey matrix; with intercalations of fine materials, mainly hard clays. The total thickness of these deposits can reach 600 meters.                                                                                                                             |

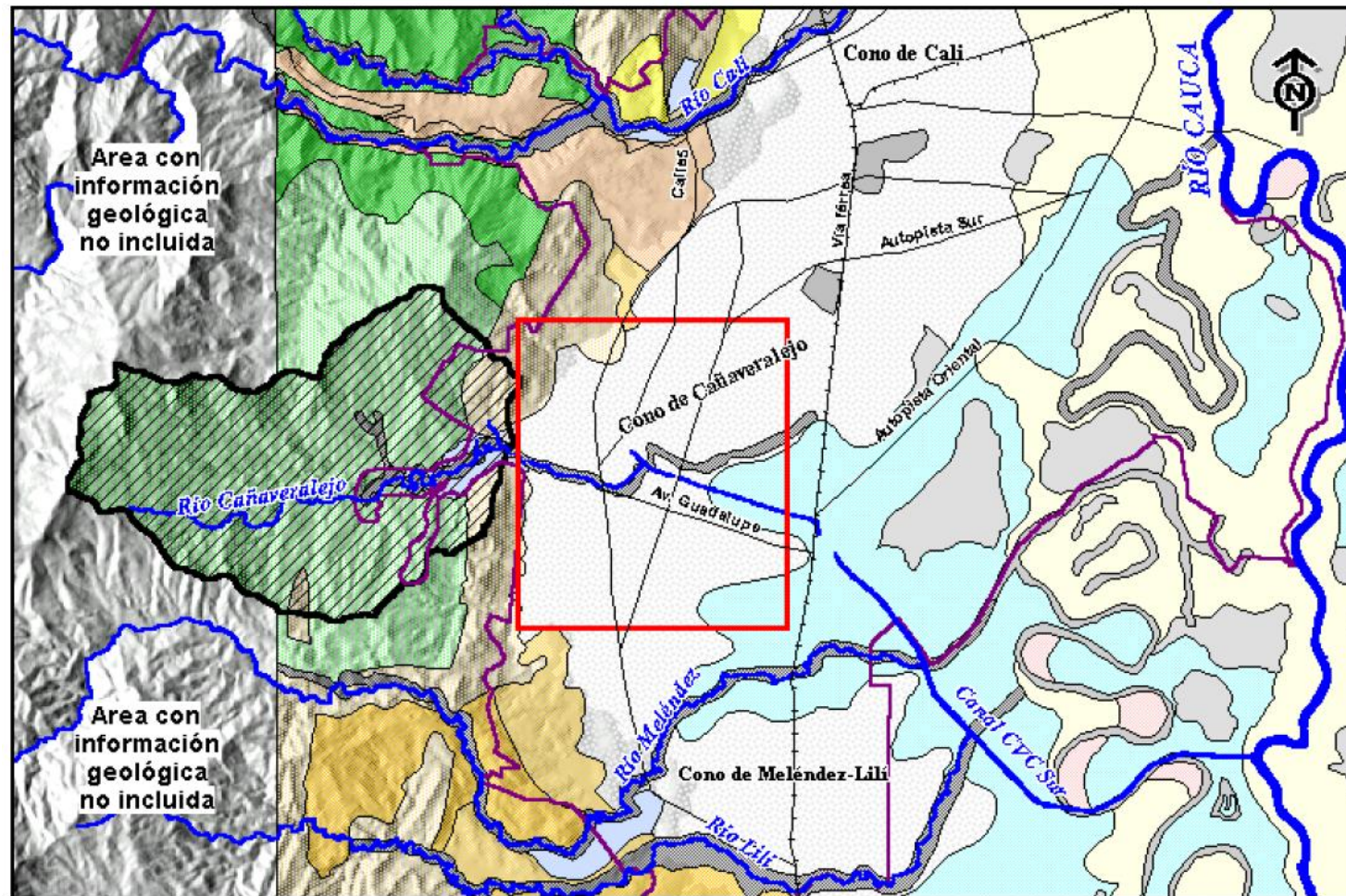
# Characteristics of Cali soils by Microzone

| Microzone                                   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Microzone 4E Pance Alluvial Fan</b>      | Composed of a surface layer of silt, with a thickness of more than 4 meters, overlying a layer of gravels and pebbles embedded in a compact silty matrix. The total thickness of these deposits can reach 700 meters.                                                                                                                                                                                                                                                                                                                                                   |
| <b>Microzone 5 Transition fans – plains</b> | Two main units are distinguished: an upper unit composed of pre-consolidated clays and silts, and a lower unit that corresponds to typical alluvial deposits, with the presence of gravels embedded in clayey matrices that extend between 15 and 20 m deep; under this second unit appears the stratigraphic profile typical of the alluvial plain of the Cauca River that is mixed with the materials of the fan. In the latter unit, intercalations of very hard green silt and organic material are observed. The total thickness of these deposits can reach 2 km. |
| <b>Microzone 6 Alluvial plain</b>           | A surface layer of overconsolidated clay silts, with a thickness between 5 and 10 meters, can be distinguished, overlying a sequence of fine sands of loose to medium density. At depth, larger fine gravels are observed and, from 50 metres upwards, there are strata of green silts of very hard consistency with intercalations of organic material. The total thicknesses of these deposits can reach 2.2 km.                                                                                                                                                      |

# Microzone 4C Cañaveralejo Alluvial Fan

- Deposit history (Rosales, 2001):
  - S. XX (Historical Condition): Area not suitable for urbanization (wetlands, swampy and floodable sectors).
  - Transformation: Infrastructure and hydraulic works allowed urban expansion.
  - Geomorphology: Deposits "boxed in" by fans of major rivers (Pance, Melendez and Cali), minor rivers (Isabel Pérez and Puente Palma), and modulated by dams of the Cauca River.
- Evolution of the channel:
  - Past: Natural mouth in old channels/lagoons of the Cauca River.
  - Present: Channeled to the South Interceptor Channel.

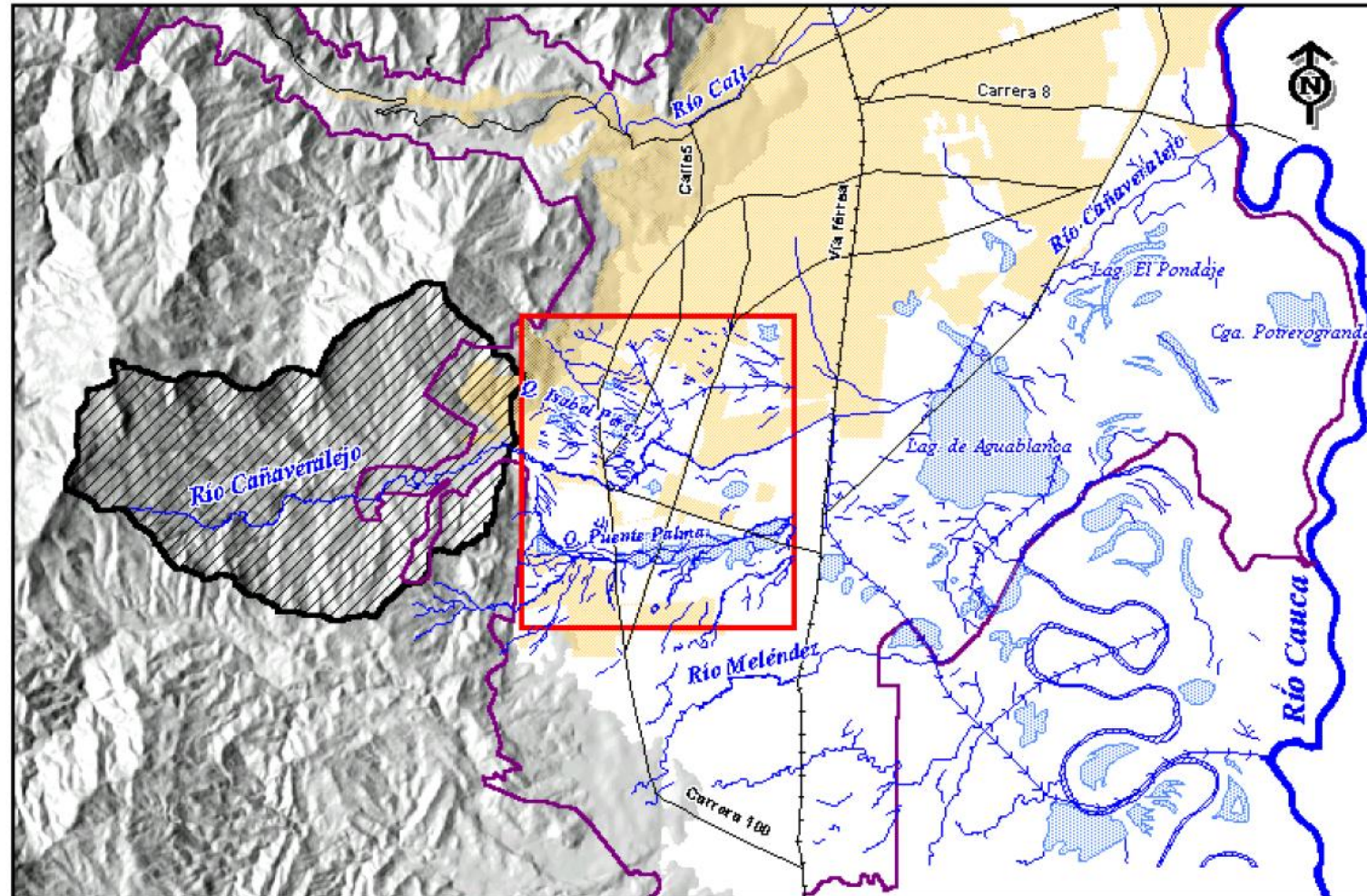
# Microzone 4C Cañaveralejo Alluvial Fan



## Convenciones

|  |                                                                               |  |                                                   |
|--|-------------------------------------------------------------------------------|--|---------------------------------------------------|
|  | Sedimentos en curvas internas de meandros                                     |  | Terrazas aluviales                                |
|  | Depósitos aluviales en llanuras y márgenes de los ríos                        |  | Depósitos de vertiente                            |
|  | Zonas desecadas y rellenos de cauces                                          |  | Depósitos torrenciales antiguos                   |
|  | Albardones (diques) naturales                                                 |  | Depósitos derivados de rocas del Terciario        |
|  | Canales y depósitos de río                                                    |  | Saprolito de diabasas                             |
|  | Depósitos de pantanos aluviales                                               |  | Formación Popayán                                 |
|  | Antiguos humedales                                                            |  | Rocas sedimentarias con intercalaciones de carbón |
|  | Conos aluviales de los ríos Menga, Cali, Cañaveralejo, Meléndez, Lili y Pance |  | Rocas diabásicas                                  |

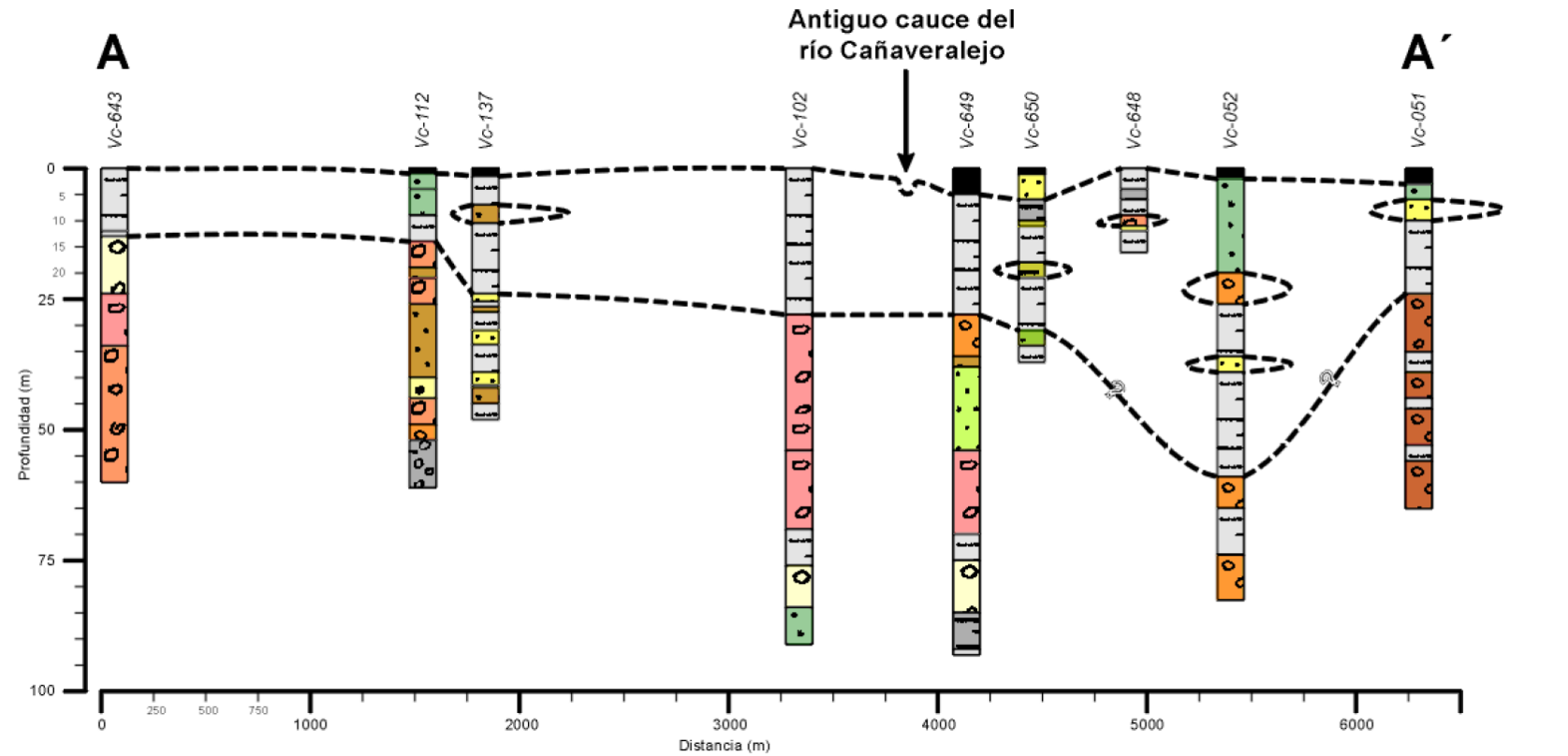
# Microzone 4C Cañaveralejo Alluvial Fan



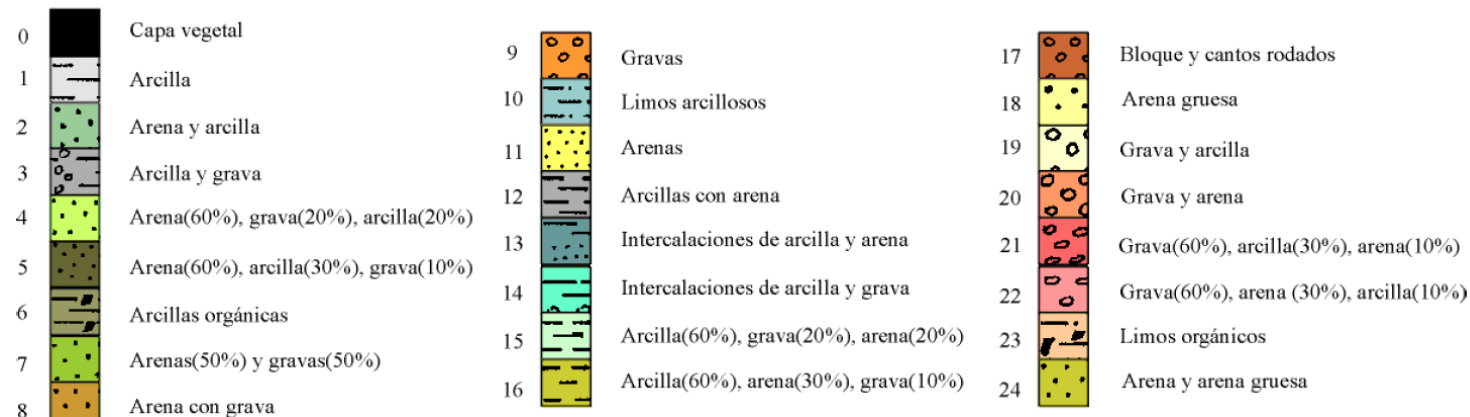
## Convenciones

- |                                                                                       |                           |                                                                                       |                     |
|---------------------------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------------|---------------------|
|    | Área de estudio           |    | Lagunas o humedales |
|    | Cuenca R. Cañaveralejo    |    | Río Cauca           |
|    | Perímetro urbano          |    | Madrevieja          |
|  | Desarrollo urbano en 1961 |  | Paleodrenaje        |
|                                                                                       |                           |  | Canal               |
|                                                                                       |                           |  | Vías principales    |

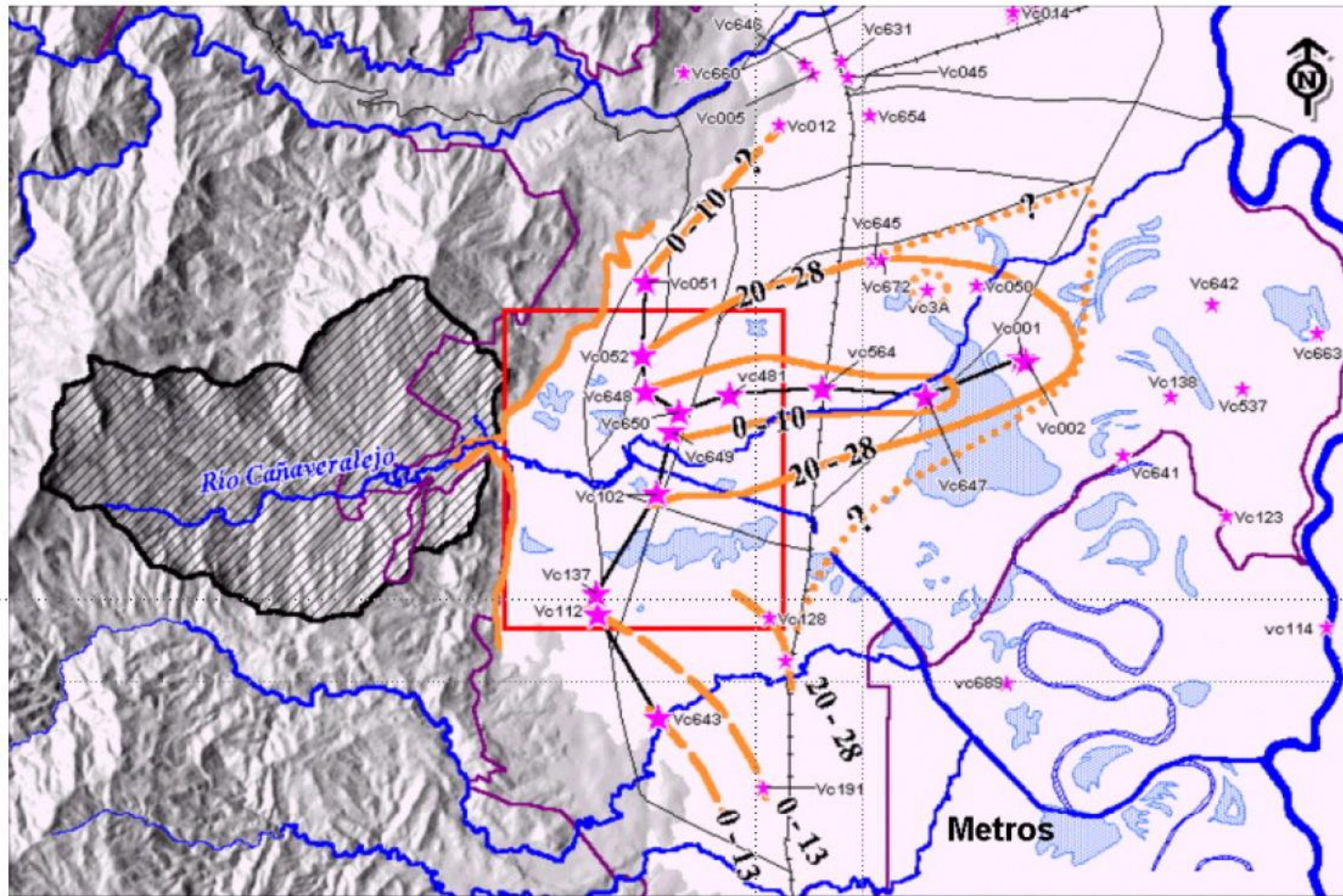
# Microzone 4C Cañaveralejo Alluvial Fan



Rosales (2001)



# Microzone 4C Cañaveralejo Alluvial Fan



## Convenciones

- |  |                        |  |                     |
|--|------------------------|--|---------------------|
|  | Área de estudio        |  | Lagunas o humedales |
|  | Cuenca R. Cañaveralejo |  | Río Cauca           |
|  | Perímetro urbano       |  | Madrevieja          |
|  | Isópaca                |  | Vías principales    |
|  |                        |  | Pozo                |

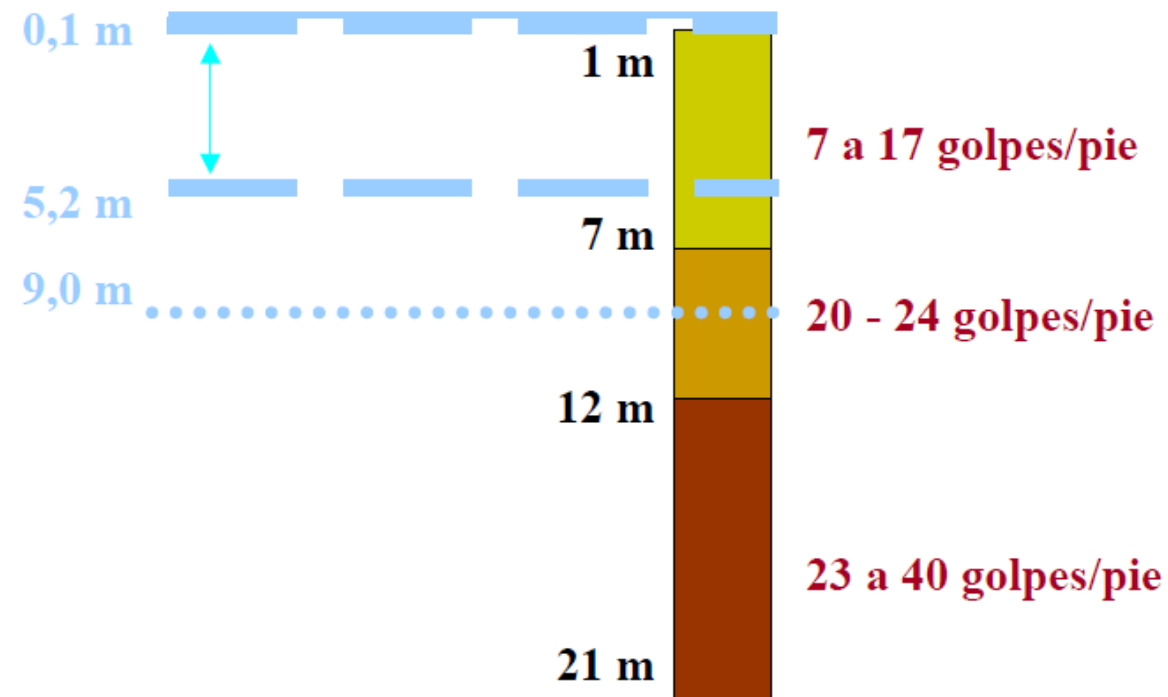
Clay layer thickness (m)

Rosales (2001)

# Microzone 4C Cañaveralejo Alluvial Fan

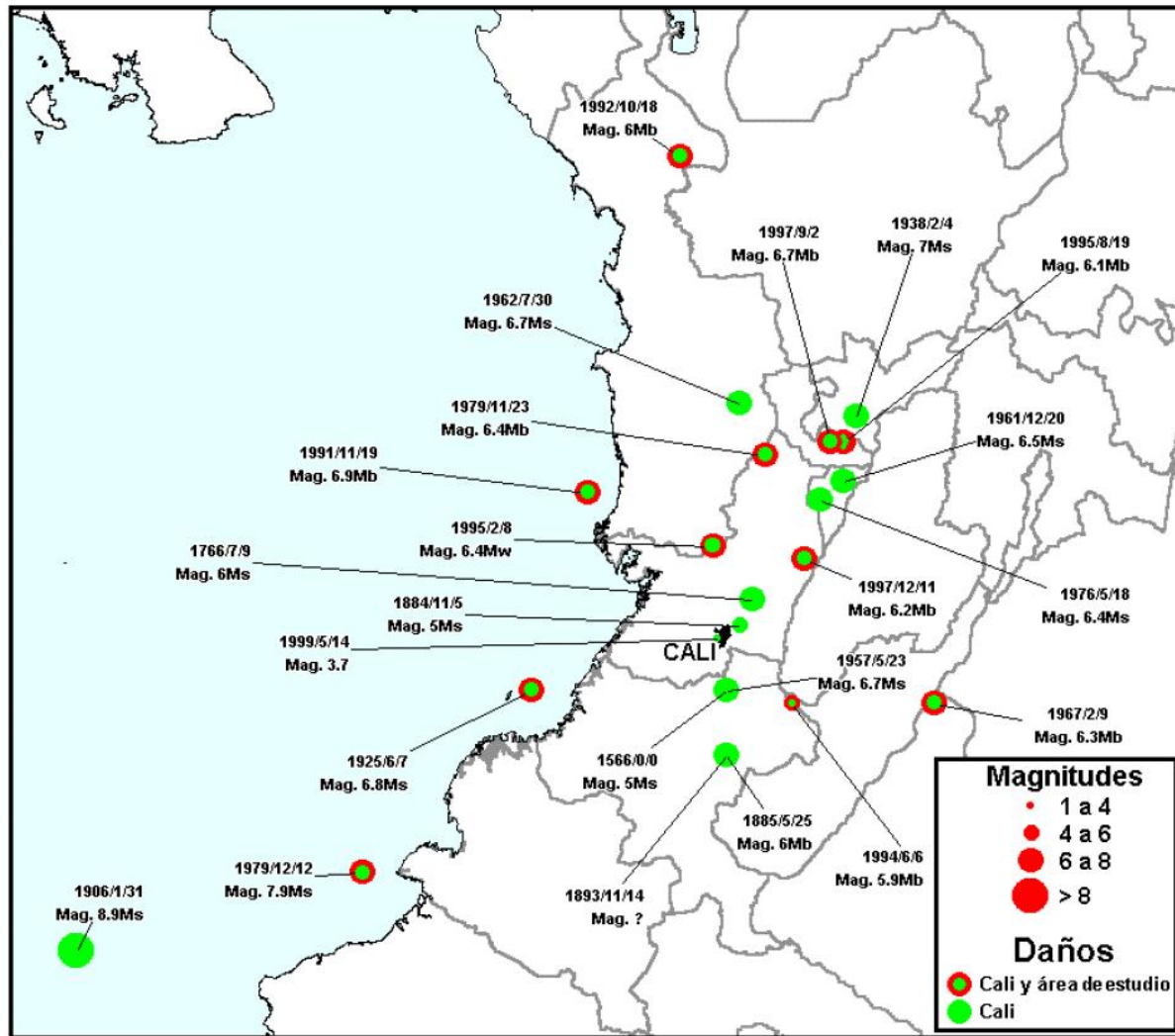
**Nivel freático**

**SPT**



Rosales (2001)

# Microzone 4C Cañaveralejo Alluvial Fan



Rosales (2001)

Damages report

- Cali and Microzone 4C
- Cali

**Figura 28.** Mapa de localización de sismos con daños en Cali, 1566-2001.

# Microzone 4C Cañaveralejo Alluvial Fan

- Previous EQ that caused damages in the Cañaveralejo Alluvial Fan:

| ID | año:mes:día | Hora LT | Prof. | MM       | Mag. | Tipo | N     | W      | Fuente | Dist. a Cali |
|----|-------------|---------|-------|----------|------|------|-------|--------|--------|--------------|
| 1  | 1925:06:07  | 18:41   | 170   | VII-VIII | 6.8  | Ms   | 3     | 78     | 2      | 172          |
| 2  | 1967:02:09  | 10:24   | 36    | VII      | 6.3  | Mb   | 2.95  | 74.83  | 4      | 190          |
| 3  | 1979:11:23  | 18:40   | 105   | VII      | 6.3  | Mb   | 4.81  | 76.203 | 3      | 154          |
| 4  | 1979:12:12  | 2:59    | 24    | VI       | 6.4  | Ms   | 1.598 | 69.355 | 2      | 371          |
| 5  | 1991:11:19  | 17:28   | 33    |          | 6.0  | Mb   | 4.8   | 77.4   | 2      | 165          |
| 6  | 1992:10:18  | 15:11   | 10    |          | 6.6  | Mb   | 7.07  | 76.86  | 1      | 407          |
| 7  | 1994:06:06  | 15:47   | 12    |          | 5.9  | Mb   | 2.91  | 76.065 | 1      | 85           |
| 8  | 1995:02:08  | 13:40   | 70    |          | 6.4  | Mw   | 4.069 | 76.633 | 3      | 72           |
| 9  | 1995:08:19  | 16:43   | 118   |          | 4.7  | Mb   | 4.093 | 75.738 | 3      | 190          |
| 10 | 1997:09:02  | 07:13   | 203   |          | 6.7  | Mb   | 4.017 | 75.717 | 3      | 185          |
| 11 | 1997:12:11  | 02:56   | 170   |          | 6.2  | Mb   | 4.017 | 75.9   | 3      | 92           |

Convenciones: LT = hora local, Prof.: profundidad, Mag.: magnitud, N: coordenada N

W: coordenada W, Dist. a Cali: distancia a Cali

Fuente : fuente sismogénica:

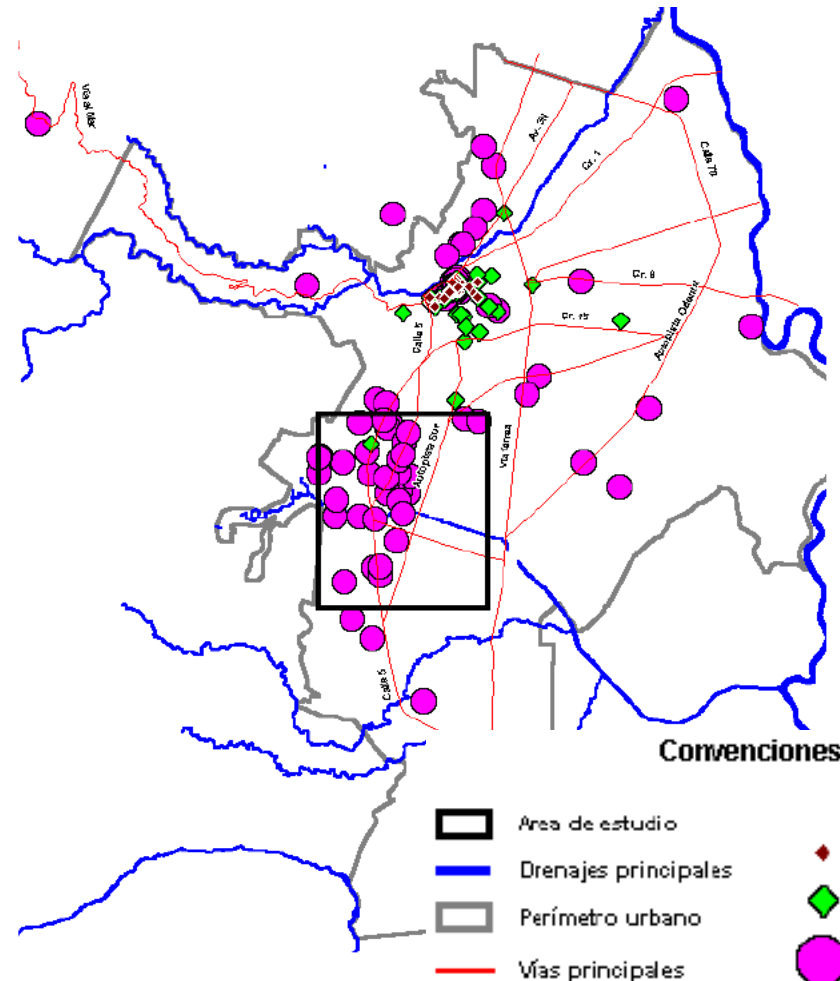
- 1 Falla cortical superficial
- 2 Zona de subducción (superficie frente al Litoral Pacífico)
- 3 Zona de Wadati Benioff (60 a 200 km, bajo el Valle del Cauca, sur del Chocó y Eje Cafetero)
- 4 Fallas del borde llanero, Huila aprox. 33 - 60 km

Fuentes sismogénicas a partir de Meyer (2000)

Rosales (2001)

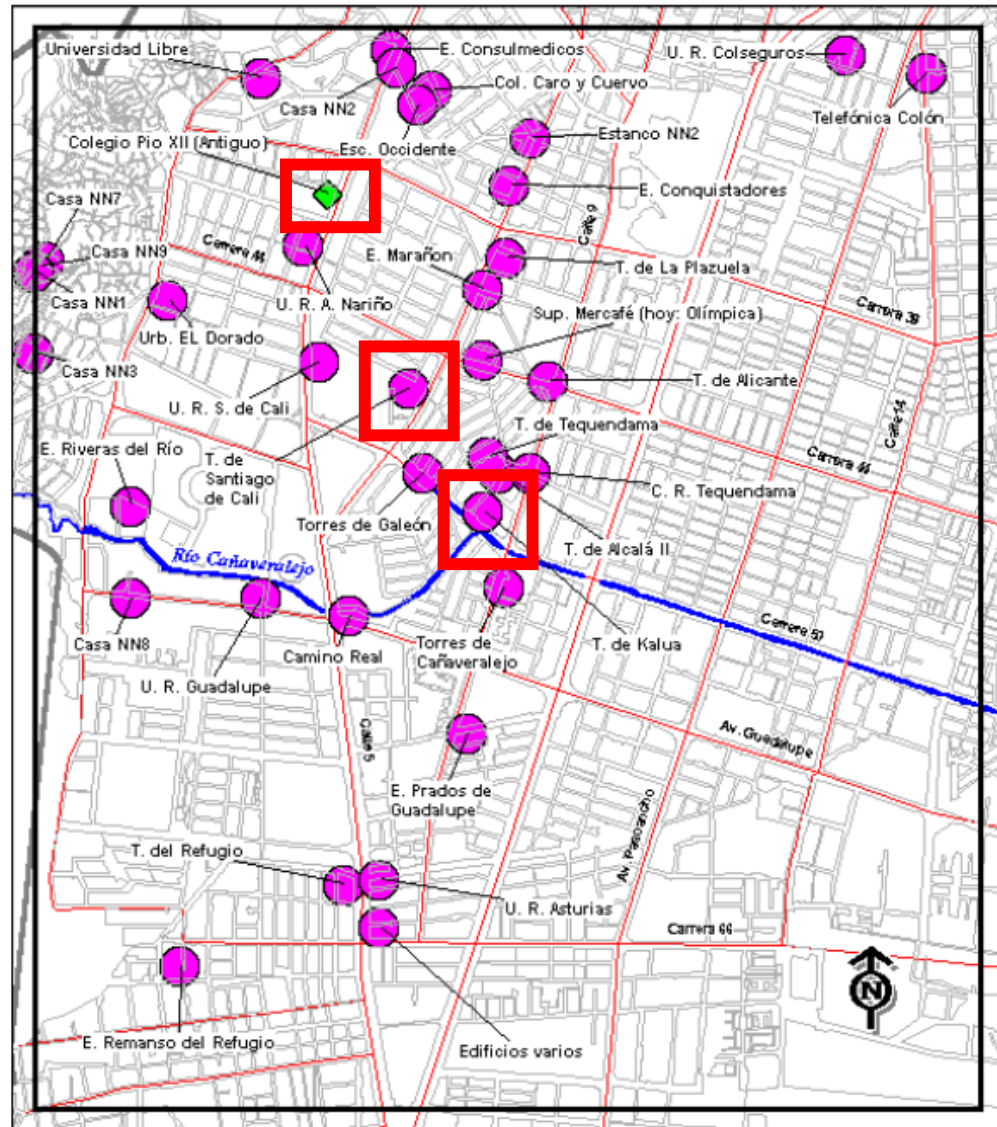
# Microzone 4C Cañaveralejo Alluvial Fan

- Location of damages caused by previous EQ:



Rosales (2001)

# Microzone 4C Cañaveralejo Alluvial Fan



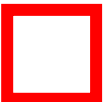
## Convenciones

-  Area de estudio
-  Drenajes principales
-  Perímetro urbano
-  Vías principales

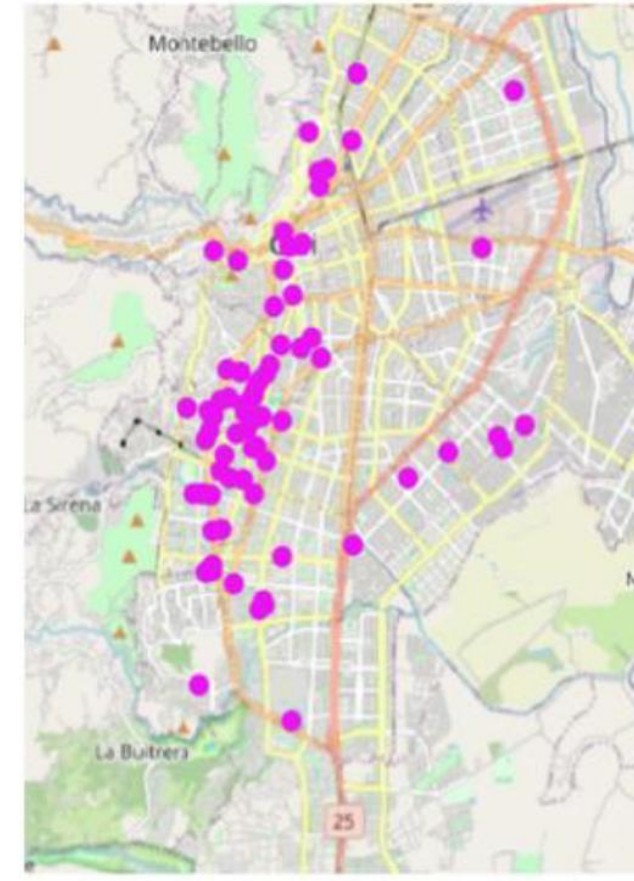
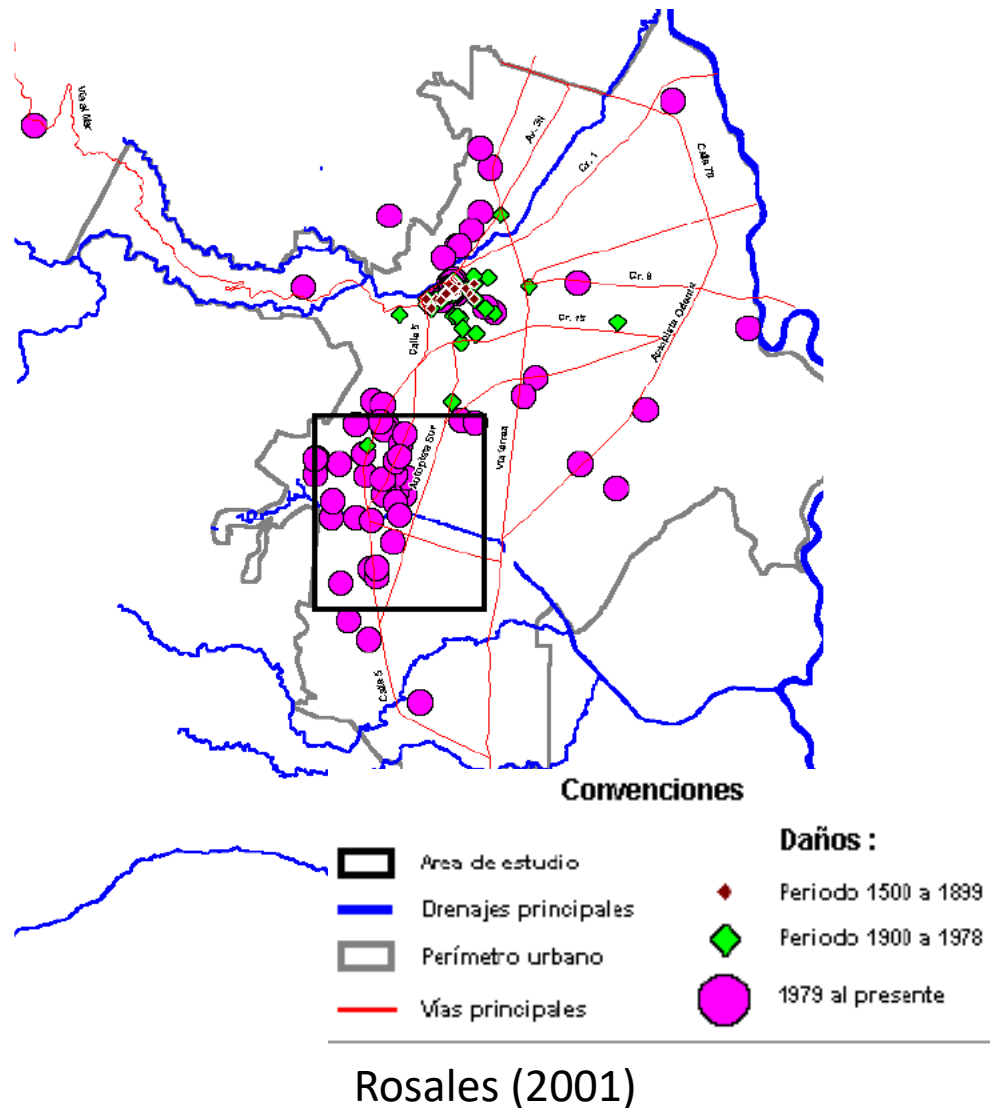
## Daños :

-  Periodo 1500 a 1899
-  Periodo 1900 a 1978
-  1979 al presente

Rosales (2001)

 Buildings that experienced damages again on San José del Palmar Chocó 2026 EQ

# Microzone 4C Cañaveralejo Alluvial Fan



En puntos violeta, principales edificios y viviendas con daños graves o colapso.

Burbano and Velásquez (2026)

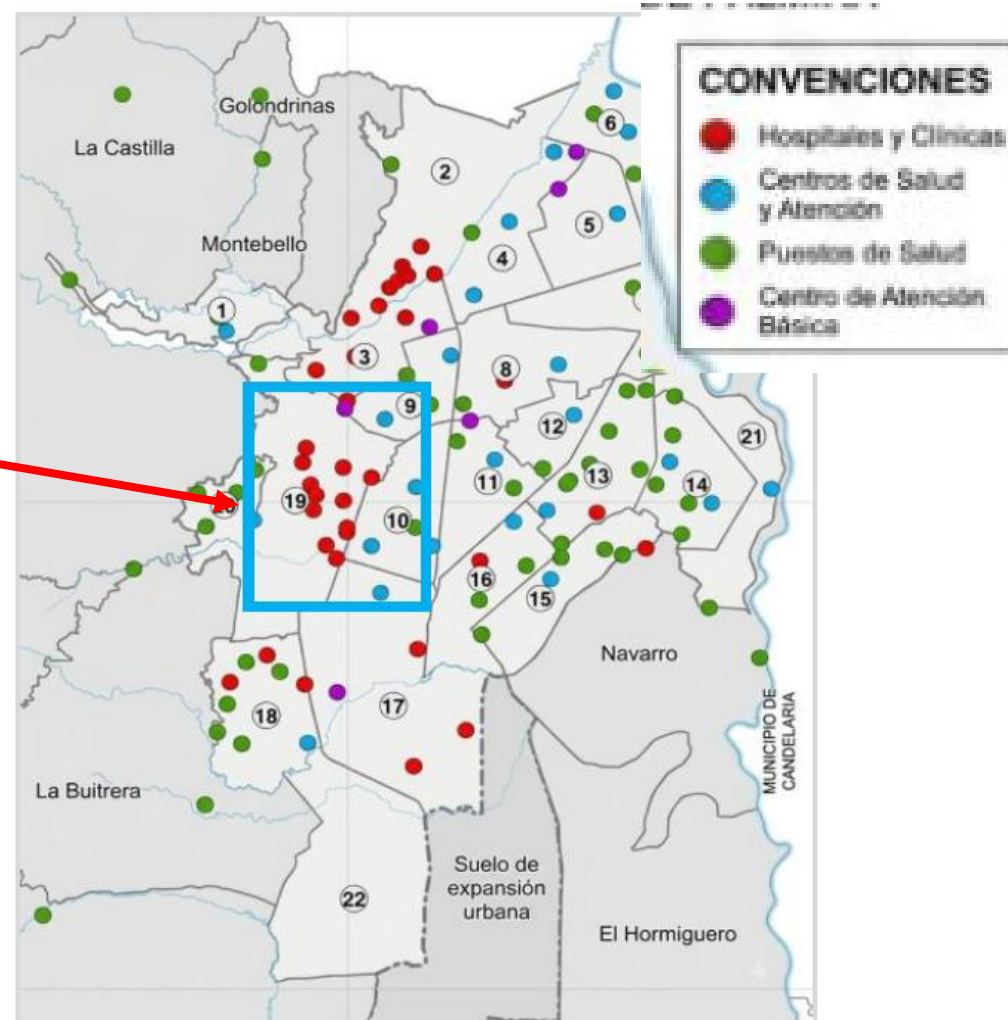
# Clinics affected and evacuated in Cali

At least 25 hospitals, clinics, IPS or health centers were damaged. Some of them are (<https://www.cali.gov.co/boletines/publicaciones/193598/emergencias-y-medidas-por-terremoto-en-cali/>):

1. Clínica Alba
2. Clínica Rey David
3. Clínica Nuestra Señora del Rosario
4. Clínica Sanitas Tequendama
5. Clínica Cali
6. Carlos Holmes Trujillo
7. Urgencias Pasoancho
8. Clínica Colombia
9. Clínica Versalles
10. Hospital Universitario del Valle (HUV)

# Locations of hospitals and clinics in Cali

Several clinics and hospitals are located in the Microzone 4C Cañaveralejo Alluvial Fan



# Clinics affected

- Four large medical centers have serious structural failures(<https://www.cali.gov.co/boletines/publicaciones/193598/emergencias-y-medidas-por-terremoto-en-cali/>):
  1. Hospital Universitario del Valle (HUV)
  2. Clínica Nuestra
  3. Clínica DESSA
  4. Clínica Colombia

# Hospital Universitario del Valle (HUV)

- This hospital was retrofited before the San José del Palmar Chocó Earthquake – August 10, 2026 EQ.



[https://www.semana.com/nacion/cali/articulo/asi-se-desplomo-parcialmente-el-hospital-universitario-en-cali-tras-el-terremoto-las-imagenes-son-impactantes/202650/#google\\_vignette](https://www.semana.com/nacion/cali/articulo/asi-se-desplomo-parcialmente-el-hospital-universitario-en-cali-tras-el-terremoto-las-imagenes-son-impactantes/202650/#google_vignette)

<https://www.instagram.com/reel/Db4QFbMjHlv/>

# Damage to drinking water network

- 13 damage to main network pipes.
- A damage to the North Exit of the Cauca River treatment plant 24" pipe (Carrera 8 Calle 62 and 63).
- The Río Cauca Water Treatment Plant was temporarily out of operation due to the lack of electricity  
supply(<https://cwmas.com.co/suroccidente/cali/2026/08/10/revisiones-preventivas-de-emcali-tras-terremoto-en-cali/>).



**EMCALI  
INFORMA**  
11 de agosto

**16 cuadrillas** permanecen desplegadas en nuestra ciudad atendiendo labores de **reparación, localización, verificación y atención de acometidas.**

Identificamos **13 daños** en la **red matriz** y un **daño** de 24 pulgadas en la **salida norte de la Planta Río Cauca**, carrera 8 entre calles 62 y 63, que puede **generar baja presión en el servicio en:**

**Las Ceibas, Los Pinos, San Marino, Vipasa, La Flora, Urbanización La Merced, Popular, Prados del Norte y Yumbo.**

Atendemos un daño en la **Carrera 8 con calle 62**, que requiere la suspensión temporal de una planta de la red baja. Pueden haber bajas presiones o ausencia del servicio en las comunas 2, 4, 5 y 6, norte de la ciudad.

[https://www.instagram.com/p/Db6IZ5URzW\\_/](https://www.instagram.com/p/Db6IZ5URzW_/)

# Preliminary Reconnaissance Photos

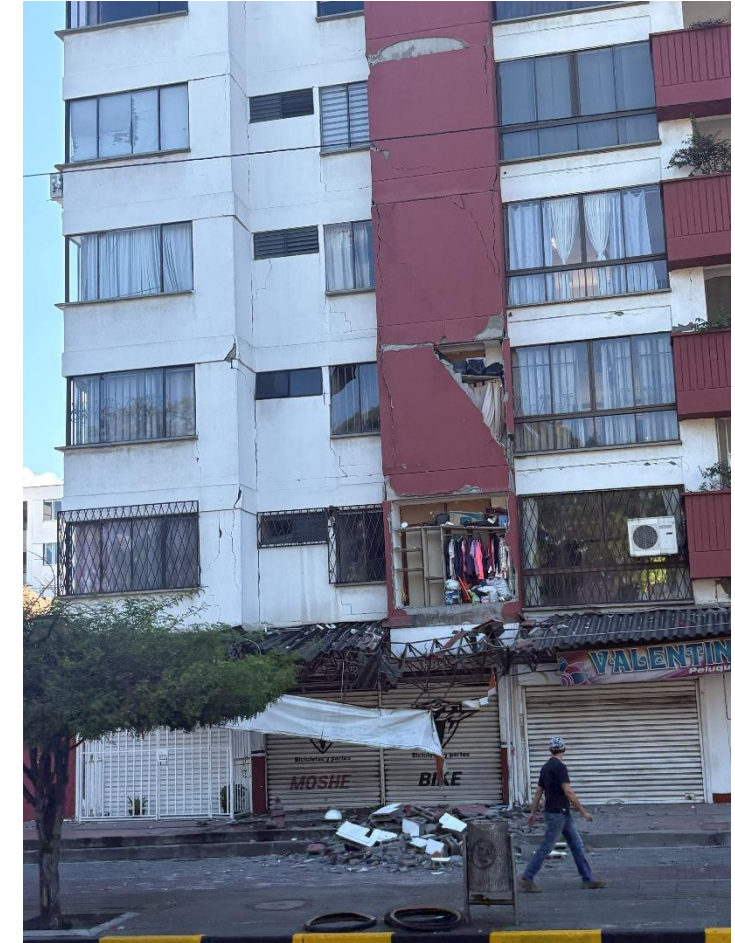


Edificio Av. Roosevelt con 46



Iglesia Tequendama

# Preliminary Reconnaissance Photos



Panadería Quinta Pan Calle 5 Cra 42

Edificio Calle 5 Cra 69

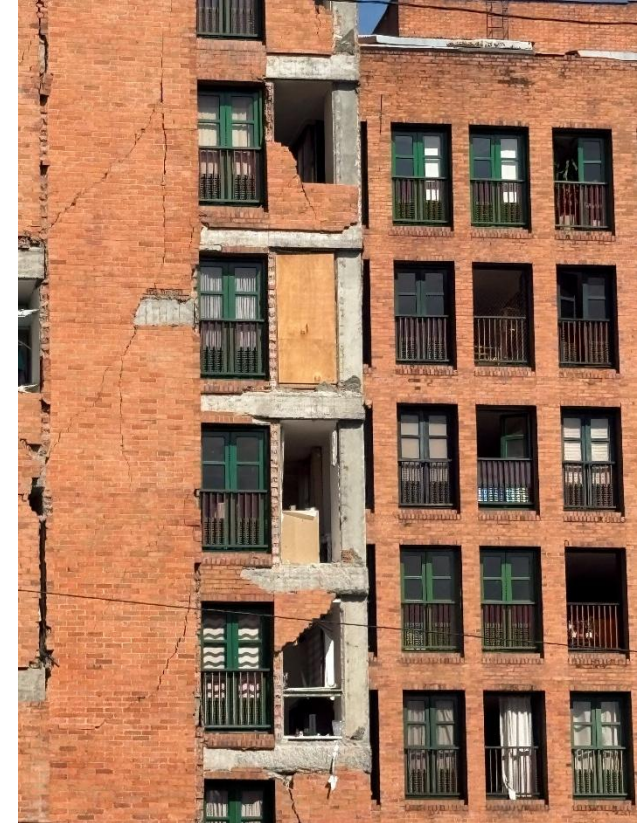
# Preliminary Reconnaissance Photos



Edificio antiguo colegio Pio XII



Edificio Calle 5 Cra 56



# Preliminary Reconnaissance Photos



Edificio barrio Tequendama



Edificio Calle 9

# Preliminary Reconnaissance Photos



Torres de Alcalá

# Preliminary Reconnaissance Photos



Motel Molino Rojo

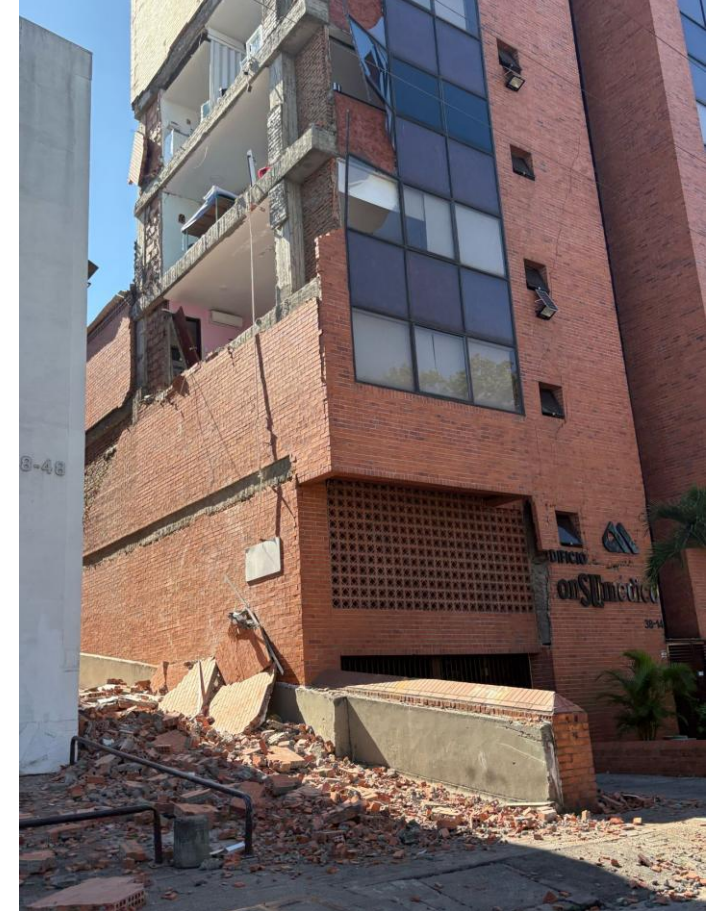


Edificio Calle 9



Edificio Autopistas Suroriental

# Preliminary Reconnaissance Photos



# Geotechnical Effects

# Soil Liquefaction



Levee cracks due to liquefaction at corregimiento El Overo, Bugalagrande, Cauca Valley

Photos courtesy of Alvaro Parra, PE

# Soil Liquefaction



Sand boil, La Victoria, Cauca Valley

Photos courtesy of Alvaro Parra, PE

# Soil Liquefaction



Sand boil, Bolivar, Cauca Valley



Levee cracks due to liquefaction Bolivar, Cauca Valley

Photos courtesy of Alvaro Parra, PE

# Landslides



Close to Calima Dam, Calima Darien, Cauca Valley  
Photos courtesy of Carlos Humberto Parra, DGE, PE

# Landslides



Via Jiguales, Calima Darien, Cauca Valley

Photos courtesy of Carlos Humberto Parra, DGE, PE

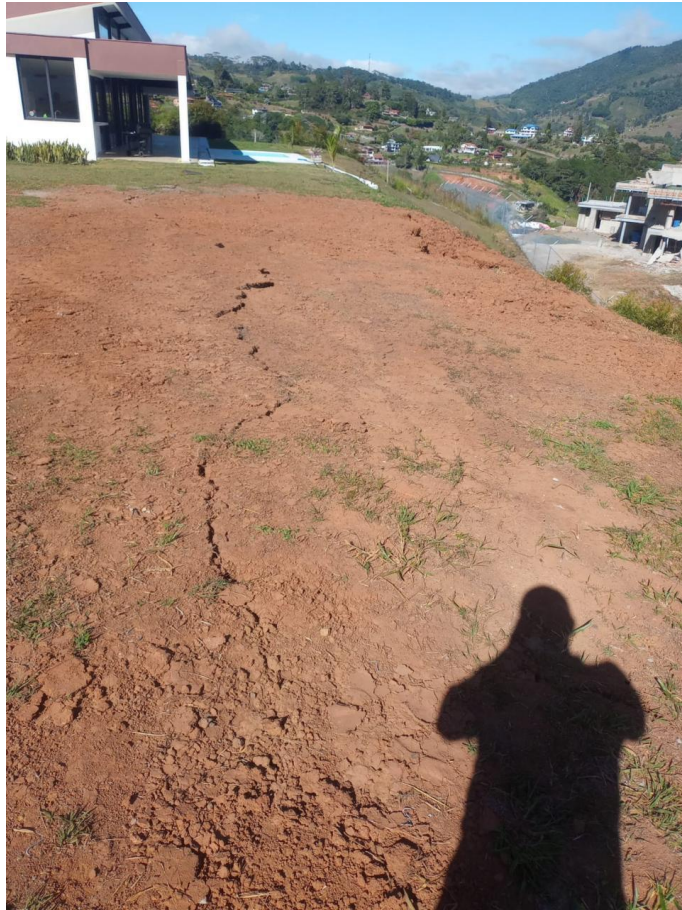
# Landslides



Vereda el Dopo, Yotoco Cauca Valley

Photos courtesy of Jhonny Rivera, PE

# Settlement and cracks due to shaking



Restrepo, Cauca Valley

Photos courtesy of David Khlar

# References

- Burbano, W. A., & Velásquez, A. (11 de agosto de 2026). Efectos anunciados del terremoto en Colombia del 10 de agosto de 2026 (Versión 1).
- Rosales Climent, C. I. (2001). *Sobre el Comportamiento Sísmico de los Depósitos de Suelos del Área de Cañaveralejo, Cali, Colombia*. [Trabajo de grado Universidad del Valle].

# Thank you

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