

MAIPARK - IMPACT

Statistical Report on Catastrophic Event

TELUK DALAM EARTHQUAKE - 25 April 2023

EARTHQUAKE DETAILS

General Information

Seismic Source Zone:
Megathrust Segmen Siberut
Date of Event:
25 April 2023
03:00:57 Local Time



Magnitude
7.3 M

Depth
84 km

Epicenter
0.93°S; 98.39°E
<https://www.bmkg.go.id/gempabumi/gempabumi-dirasakan.bmkg>



Magnitude
7.1 M_w

Depth
15.5 km

Epicenter
0.781°S 98.534°E
<https://earthquake.usgs.gov/earthquakes/eventpage/us7000jvl3/executive>

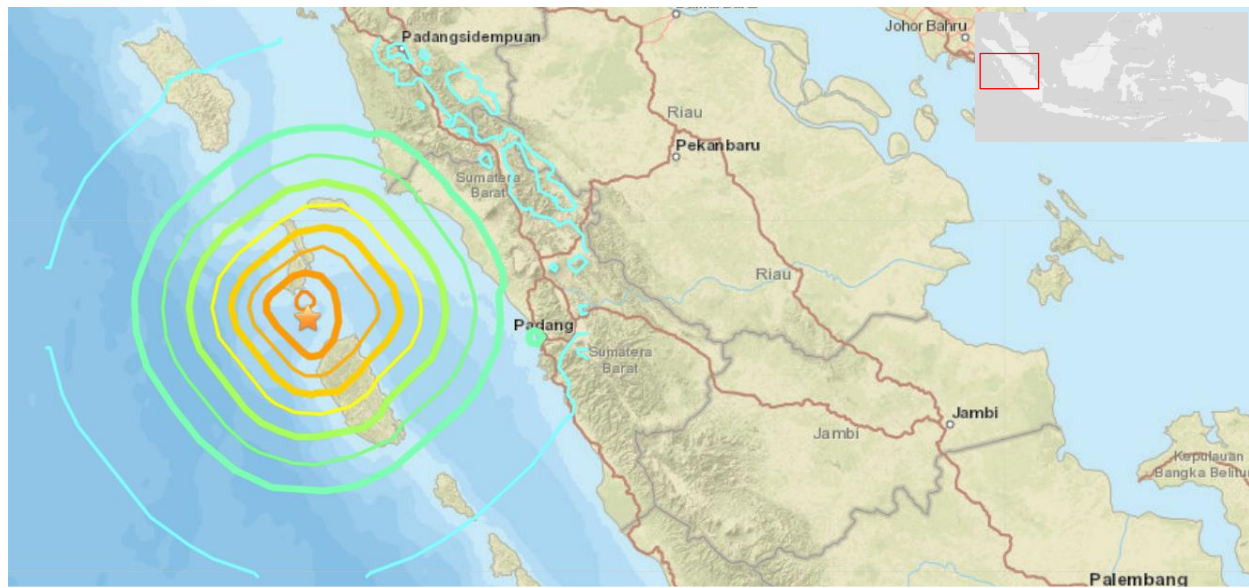


Magnitude
6.9 M_w

Depth
22 km

Epicenter
0.80°S 98.62°E
<https://geofon.gfz-potsdam.de/old/eqinfo/event.php?id=gfz2023hzzm>

AFFECTED CITIES as reported by USGS (accessed at <http://earthquake.usgs.gov> - latest update on 26 April 2023 at 03:03 AM Jakarta local time)



TELUK DALAM EARTHQUAKE - 25 April 2023

On April 25, 2023 at 03:00:57 local time, there was a 7.3 Mw Earthquake (BMKG) which was triggered by the movement of the Plate Tectonics with the epicenter in Siberut area, Mentawai, 207 Km northwest of Padang City. The earthquake had a depth of 84 km above sea level and the epicenter of the earthquake occurred in the area of Mentawai Seismic Gap Zone which MAIPARK has delineated in the 2023 risk zone map.

Since April 23 2023 there have been three significant events with magnitudes of 5.9, 6.1 and 5.5 Mw which can be considered as foreshock earthquakes. Based on beach ball analysis, the earthquake occurred with a vertical movement mechanism (thrust fault), meaning that it has the possibility to cause Tsunami.

Based on MAIPARK Catastrophe Modeling, the estimated loss for the Indonesian general insurance industry is minor, which is IDR 202,483,027 (exposure data was updated on April 25, 2023 at 13.48).

Further information can be accessed at sena.maipark.com

ACCUMULATION SUMMARY - INDONESIA EQ INSURANCE on-risk as at 25 April 2023

Earthquake intensity (MMI) simulated using MAIPARK Cat Model (MCM) ver. 2.1.

| Intensity (MMI) | II | III | IV | V | VI | VII | VIII | IX+ |
|------------------------------|----------------------|------------|-----------|------------|-------------|----------------|----------------|------------|
| Perceived Shaking | Weak | Light | Moderate | Strong | Very Strong | Severe | Violent | Extreme |
| Potential Damage | Resistant Structure | None | None | Very Light | Light | Moderate | Moderate/Heavy | Very Heavy |
| | Vulnerable Structure | None | None | Light | Moderate | Moderate/Heavy | Heavy | Very Heavy |
| Number of Risk | ~ | 21,679 | 13,215 | ~ | 42 | ~ | ~ | ~ |
| Total Exposure (billion IDR) | ~ | 144,283.31 | 52,752.76 | ~ | 110.78 | ~ | ~ | ~ |

IMPACT-Statistical Report on Catastrophic Event

MAIPARK - IMPACT

Statistical Report on Catastrophic Event

Annex 1 - Affected Portfolio per Occupation

| Intensity Scale MMI | City / Kabupaten | Number of Risk | Premium (million IDR) | Exposure per Occupation (billion IDR) | | | | |
|------------------------|-------------------------|-------------------|--------------------------|---------------------------------------|------------------|-------------------|------------------|-------------------|
| | | | | Agriculture | Commercial | Industrial | Residential | Total |
| VI | KAB. KEPULAUAN MENTAWAI | 31 | 123.82 | - | 50.95 | - | 7.88 | 58.84 |
| | KAB. NIAS SELATAN | 11 | 99.74 | - | 51.01 | - | 0.94 | 51.94 |
| V | - | - | - | - | - | - | - | - |
| IV | KAB. AGAM | 313 | 969.95 | 0.40 | 149.64 | 234.43 | 71.29 | 455.76 |
| | KAB. KAMPAR | 612 | 3,920.91 | 30.00 | 285.86 | 2,323.63 | 66.59 | 2,706.09 |
| | KAB. KUANTAN SINGINGI | 125 | 3,095.42 | - | 71.42 | 2,083.99 | 5.55 | 2,160.96 |
| | KAB. LIMA PULUH KOTA | 191 | 316.25 | - | 71.43 | 70.47 | 9.82 | 151.72 |
| | KAB. MANDAILING NATAL | 123 | 9,798.18 | - | 50.23 | 4,862.58 | 13.66 | 4,926.48 |
| | KAB. NIAS | 28 | 32.44 | - | 5.98 | - | 10.03 | 16.00 |
| | KAB. NIAS BARAT | 3 | 3.23 | - | - | - | 1.93 | 1.93 |
| | KAB. NIAS UTARA | 6 | 5.91 | - | 1.44 | - | 1.80 | 3.24 |
| | KAB. PADANG LAWAS | 95 | 970.14 | 1.96 | 13.61 | 481.19 | 14.07 | 510.83 |
| | KAB. PADANG LAWAS UTARA | 72 | 363.09 | - | 7.94 | 169.99 | 10.90 | 188.83 |
| | KAB. PADANG PARIAMAN | 469 | 3,391.45 | - | 180.33 | 1,316.74 | 77.15 | 1,574.22 |
| | KAB. PASAMAN | 104 | 134.46 | 3.85 | 24.09 | 20.58 | 17.29 | 65.81 |
| | KAB. PASAMAN BARAT | 266 | 1,028.49 | 36.52 | 52.28 | 421.90 | 33.01 | 543.71 |
| | KAB. PESISIR SELATAN | 440 | 1,022.15 | 94.45 | 135.42 | 247.13 | 54.11 | 531.12 |
| | KAB. ROKAN HULU | 176 | 1,633.04 | 13.97 | 83.23 | 1,017.53 | 19.16 | 1,133.90 |
| | KAB. SIJUNJUNG | 105 | 272.58 | - | 16.21 | 157.38 | 14.72 | 188.31 |
| | KAB. SOLOK | 295 | 591.35 | - | 78.52 | 192.90 | 20.15 | 291.56 |
| | KAB. SOLOK SELATAN | 74 | 806.69 | 48.40 | 17.20 | 328.32 | 28.21 | 422.13 |
| | KAB. TANAH DATAR | 177 | 368.07 | - | 121.73 | 10.01 | 58.92 | 190.66 |
| | KAB. TAPANULI SELATAN | 109 | 216.15 | 50.85 | 10.96 | 46.52 | 5.40 | 113.73 |
| | KAB. TAPANULI TENGAH | 97 | 268.87 | - | 66.05 | 68.93 | 7.26 | 142.25 |
| | KAB. TAPANULI UTARA | 95 | 292.81 | - | 47.09 | 98.82 | 6.03 | 151.94 |
| | KOTA BUKITTINGGI | 423 | 1,309.45 | - | 417.95 | 5.27 | 138.35 | 561.57 |
| | KOTA GUNUNGSITOLI | 55 | 152.44 | - | 71.54 | - | 3.90 | 75.45 |
| | KOTA PADANG | 7,835 | 83,553.81 | - | 7,318.48 | 9,151.51 | 18,322.65 | 34,792.65 |
| | KOTA PADANG PANJANG | 116 | 249.86 | - | 92.57 | 1.66 | 32.32 | 126.54 |
| | KOTA PADANGSIDIMPUAN | 184 | 321.41 | - | 103.26 | 24.79 | 36.31 | 164.36 |
| | KOTA PARIAMAN | 151 | 252.83 | - | 57.19 | 15.24 | 29.76 | 102.18 |
| | KOTA PA YAKUMBUH | 185 | 166.36 | - | 73.10 | 7.00 | 27.77 | 107.87 |
| | KOTA SAWAH LUNTO | 43 | 22.49 | - | 4.84 | 2.25 | 3.19 | 10.28 |
| | KOTA SIBOLGA | 92 | 211.81 | - | 49.46 | - | 65.34 | 114.81 |
| KOTA SOLOK | 156 | 434.20 | - | 93.75 | 1.04 | 131.10 | 225.89 | |
| III | 56 Kab / Kota lainnya | 21,679 | 216,350.59 | 3,273.94 | 34,194.72 | 91,274.97 | 15,539.67 | 144,283.31 |
| | TOTAL | 34,936 | 332,750.42 | 3,554.36 | 44,069.51 | 114,636.77 | 34,886.20 | 197,146.84 |

IMPACT-Statistical Report on Catastrophic Event

MAIPARK - IMPACT

Statistical Report on Catastrophic Event

Annex 2 - Affected Portfolio per Interest

| Intensity Scale MMI | City / Kabupaten | Number of Risk | Exposure per Interest (billion IDR) | | | | | BI | Total |
|------------------------|-------------------------|-------------------|-------------------------------------|------------------|------------------|------------------|-----------------|-------------------|-------|
| | | | Building | Machinery | Stock | Others | | | |
| VI | KAB. KEPULAUAN MENTAWAI | 31 | 43.97 | 3.38 | 2.82 | 8.67 | - | 58.84 | |
| | KAB. NIAS SELATAN | 11 | 42.11 | - | 5.02 | 4.81 | - | 51.94 | |
| V | - | - | - | - | - | - | - | - | |
| IV | KAB. AGAM | 313 | 281.90 | 32.58 | 41.58 | 83.47 | 16.22 | 455.76 | |
| | KAB. KAMPAR | 612 | 800.43 | 1,114.20 | 252.68 | 399.27 | 139.51 | 2,706.09 | |
| | KAB. KUANTAN SINGINGI | 125 | 1,974.47 | 74.01 | 58.35 | 54.13 | - | 2,160.96 | |
| | KAB. LIMA PULUH KOTA | 191 | 75.51 | 36.75 | 23.56 | 15.90 | - | 151.72 | |
| | KAB. MANDAILING NATAL | 123 | 3,900.77 | 252.33 | 23.46 | 96.60 | 653.32 | 4,926.48 | |
| | KAB. NIAS | 28 | 10.24 | - | 2.00 | 3.77 | - | 16.00 | |
| | KAB. NIAS BARAT | 3 | 1.33 | - | - | 0.61 | - | 1.93 | |
| | KAB. NIAS UTARA | 6 | 1.06 | - | 0.41 | 1.77 | - | 3.24 | |
| | KAB. PADANG LAWAS | 95 | 161.15 | 255.07 | 55.53 | 29.73 | 9.34 | 510.83 | |
| | KAB. PADANG LAWAS UTARA | 72 | 70.60 | 77.63 | 6.12 | 27.23 | 7.25 | 188.83 | |
| | KAB. PADANG PARIAMAN | 469 | 551.56 | 547.44 | 275.53 | 199.69 | - | 1,574.22 | |
| | KAB. PASAMAN | 104 | 28.17 | 0.55 | 11.87 | 25.22 | - | 65.81 | |
| | KAB. PASAMAN BARAT | 266 | 317.04 | 146.61 | 22.30 | 38.67 | 19.09 | 543.71 | |
| | KAB. PESISIR SELATAN | 440 | 402.75 | 23.75 | 19.45 | 75.81 | 9.36 | 531.12 | |
| | KAB. ROKAN HULU | 176 | 245.47 | 715.61 | 52.41 | 120.40 | - | 1,133.90 | |
| | KAB. SIJUNJUNG | 105 | 66.01 | 80.81 | 18.48 | 23.00 | - | 188.31 | |
| | KAB. SOLOK | 295 | 185.28 | 46.25 | 21.50 | 20.93 | 17.60 | 291.56 | |
| | KAB. SOLOK SELATAN | 74 | 259.84 | 76.88 | 18.31 | 45.04 | 22.05 | 422.13 | |
| | KAB. TANAH DATAR | 177 | 168.73 | 1.12 | 7.51 | 13.31 | - | 190.66 | |
| | KAB. TAPANULI SELATAN | 109 | 50.09 | 38.82 | 12.79 | 10.28 | 1.74 | 113.73 | |
| | KAB. TAPANULI TENGAH | 97 | 63.61 | 23.27 | 39.17 | 16.20 | - | 142.25 | |
| | KAB. TAPANULI UTARA | 95 | 92.79 | 13.40 | 18.53 | 9.67 | 17.55 | 151.94 | |
| | KOTA BUKITTINGGI | 423 | 337.30 | 3.98 | 134.02 | 85.03 | 1.23 | 561.57 | |
| | KOTA GUNUNGSITOLI | 55 | 30.65 | 0.56 | 28.42 | 15.81 | - | 75.45 | |
| | KOTA PADANG | 7,835 | 24,372.96 | 5,877.02 | 2,695.88 | 1,716.58 | 130.21 | 34,792.65 | |
| | KOTA PADANG PANJANG | 116 | 90.62 | 1.38 | 23.23 | 11.32 | - | 126.54 | |
| | KOTA PADANGSIDIMPUAN | 184 | 72.75 | 4.57 | 71.97 | 14.76 | 0.32 | 164.36 | |
| | KOTA PARIAMAN | 151 | 69.25 | 10.91 | 11.21 | 10.82 | - | 102.18 | |
| | KOTA PA YAKUMBUH | 185 | 54.17 | 1.36 | 25.83 | 26.51 | - | 107.87 | |
| | KOTA SAWAH LUNTO | 43 | 3.42 | - | 1.55 | 5.31 | - | 10.28 | |
| | KOTA SIBOLGA | 92 | 61.77 | 15.06 | 26.20 | 11.70 | 0.08 | 114.81 | |
| KOTA SOLOK | 156 | 184.87 | 1.34 | 24.36 | 15.32 | - | 225.89 | | |
| III | 56 Kab / Kota lainnya | 21,679 | 50,409.38 | 22,031.59 | 20,438.27 | 47,834.48 | 3,569.61 | 144,283.31 | |
| | TOTAL | 34,936 | 85,482.01 | 31,508.20 | 24,470.32 | 51,071.84 | 4,614.47 | 197,146.84 | |

IMPACT-Statistical Report on Catastrophic Event