

LAMPIRAN I

Input Data Source

Input Data Source :

18

0.0 101 3 8 0 0.50 0.50 0.00 5.000 8.900 0.000 0.00 1.00 0.00 2.530 0.000 0.000 3.020 0.000 0.000 1.00 0.00 0.00
0.0 102 3 9 0 0.50 0.50 0.00 5.000 8.900 0.000 0.00 1.00 0.00 3.730 0.000 0.000 3.890 0.000 0.000 1.00 0.00 0.00
0.0 101 3 8 0 0.50 0.50 0.00 5.000 8.700 0.000 0.00 1.00 0.00 2.670 0.000 0.000 3.550 0.000 0.000 1.00 0.00 0.00
0.0 102 3 9 0 0.50 0.50 0.00 5.000 8.700 0.000 0.00 1.00 0.00 2.950 0.000 0.000 2.040 0.000 0.000 1.00 0.00 0.00
0.0 101 3 8 0 0.50 0.50 0.00 5.000 8.900 0.000 0.00 1.00 0.00 2.260 0.000 0.000 2.850 0.000 0.000 1.00 0.00 0.00
0.0 102 3 9 0 0.50 0.50 0.00 5.000 8.900 0.000 0.00 1.00 0.00 3.220 0.000 0.000 2.510 0.000 0.000 1.00 0.00 0.00
0.0 105 1 11 10 0.34 0.33 0.33 5.000 6.700 0.000 0.00 1.00 0.00 2.300 0.000 0.000 0.390 0.000 0.000 1.00 0.00 0.00
0.0 105 1 11 10 0.34 0.33 0.33 5.000 6.800 0.000 0.00 1.00 0.00 2.300 0.000 0.000 0.650 0.000 0.000 1.00 0.00 0.00
0.0 105 1 11 10 0.34 0.33 0.33 5.000 7.400 0.000 0.00 1.00 0.00 2.300 0.000 0.000 0.830 0.000 0.000 1.00 0.00 0.00
0.0 105 1 11 10 0.34 0.33 0.33 5.000 7.700 0.000 0.00 1.00 0.00 2.300 0.000 0.000 0.370 0.000 0.000 1.00 0.00 0.00
0.0 105 1 11 10 0.34 0.33 0.33 5.000 7.500 0.000 0.00 1.00 0.00 2.300 0.000 0.000 0.420 0.000 0.000 1.00 0.00 0.00
0.0 105 1 11 10 0.34 0.33 0.33 5.000 7.400 0.000 0.00 1.00 0.00 2.300 0.000 0.000 0.420 0.000 0.000 1.00 0.00 0.00
0.0 105 1 11 10 0.34 0.33 0.33 5.000 7.100 0.000 0.00 1.00 0.00 2.300 0.000 0.000 0.870 0.000 0.000 1.00 0.00 0.00
0.0 105 1 11 10 0.34 0.33 0.33 5.000 7.400 0.000 0.00 1.00 0.00 2.300 0.000 0.000 0.770 0.000 0.000 1.00 0.00 0.00
0.0 105 1 11 10 0.34 0.33 0.33 5.000 7.200 0.000 0.00 1.00 0.00 2.300 0.000 0.000 0.870 0.000 0.000 1.00 0.00 0.00
0.0 105 1 11 10 0.34 0.33 0.33 5.000 7.100 0.000 0.00 1.00 0.00 2.300 0.000 0.000 0.800 0.000 0.000 1.00 0.00 0.00
0.0 105 1 11 10 0.34 0.33 0.33 5.000 7.300 0.000 0.00 1.00 0.00 2.300 0.000 0.000 0.660 0.000 0.000 1.00 0.00 0.00
0.0 105 1 11 10 0.34 0.33 0.33 5.000 7.200 0.000 0.00 1.00 0.00 2.300 0.000 0.000 0.710 0.000 0.000 1.00 0.00 0.00

SumateraMegatrust1

5 5.00 50.00 12.00
94.8642 2.3054 96.1073 3.4252
95.3966 1.7952 96.6076 2.9043
96.0389 1.1802 97.3659 2.1208
96.3478 0.6988 97.6804 1.6745
97.0371 -0.3566 98.4462 0.5993

SumateraBenioff1

5 50.00 200.00 36.00
96.1073 3.4252 97.4535 4.6184
96.6076 2.9043 97.9639 4.1386
97.3659 2.1208 98.8090 3.2082
97.6804 1.6745 99.1527 2.7444
98.4462 0.5993 99.9117 1.5589

SumateraMegatrust2

5 5.00 50.00 12.00
97.0371 -0.3566 98.4462 0.5993
97.5409 -1.1433 98.9526 -0.1552
97.9505 -1.7619 99.3803 -0.7654
98.3435 -2.3811 99.8354 -1.3613
98.7222 -2.9062 100.2372 -1.8881

SumateraBenioff2

5 50.00 200.00 40.00
98.4462 0.5993 99.9117 1.5589
98.9526 -0.1552 100.3607 0.8295
99.3803 -0.7654 100.7945 0.2132
99.8354 -1.3613 101.2081 -0.4288
100.2372 -1.8881 101.6010 -0.9881

SumateraMegatrus3

6 5.00 50.00 13.00
98.7222 -2.9062 100.2372 -1.8881
99.2360 -3.5612 100.7433 -2.5677
99.6857 -4.1444 101.1661 -3.1303
100.1456 -4.7141 101.5843 -3.6963

100.6391 -5.2823 101.9922 -4.2529
 101.2087 -5.9599 102.5035 -4.9213
 SumateraBenioff3
 6 50.00 200.00 36.00
 100.2372 -1.8881 101.6010 -0.9881
 100.7433 -2.5677 102.1296 -1.6646
 101.1661 -3.1303 102.5573 -2.1845
 101.5843 -3.6963 103.0128 -2.6836
 101.9922 -4.2529 103.4310 -3.1181
 102.5035 -4.9213 103.9498 -3.7413
 Renun C
 5 3.00 20.00 90.00
 98.1646 2.9083 98.1646 2.9083
 98.1811 2.8437 98.1811 2.8437
 98.2026 2.8035 98.2026 2.8035
 98.2386 2.7669 98.2386 2.7669
 98.3007 2.7311 98.3007 2.7311
 Renun B
 4 3.00 20.00 90.00
 98.0238 3.1522 98.0238 3.1522
 98.0539 3.1296 98.0539 3.1296
 98.1398 3.0322 98.1398 3.0322
 98.2008 2.9261 98.2008 2.9261
 Renun A
 7 3.00 20.00 90.00
 98.2361 2.8779 98.2361 2.8779
 98.3481 2.7217 98.3481 2.7217
 98.4818 2.5765 98.4818 2.5765
 98.6546 2.3757 98.6546 2.3757
 98.8868 2.1243 98.8868 2.1243
 99.0792 1.8264 99.0792 1.8264
 99.2544 1.5703 99.2544 1.5703
 Barumun
 7 3.00 20.00 90.00
 99.2808 1.5245 99.2808 1.5245
 99.5773 1.1250 99.5773 1.1250
 99.8910 0.8173 99.8910 0.8173
 100.0903 0.5454 100.0903 0.5454
 100.1355 0.2229 100.1355 0.2229
 100.2670 -0.0054 100.2670 -0.0054
 100.2534 -0.1358 100.2534 -0.1358
 Angkola
 5 3.00 20.00 90.00
 99.2417 1.4680 99.2417 1.4680
 99.3799 1.2398 99.3799 1.2398
 99.5855 0.6614 99.5855 0.6614
 99.8722 0.4353 99.8722 0.4353
 100.0342 0.2156 100.0342 0.2156
 Sianok
 6 3.00 20.00 90.00
 100.1467 -0.0476 100.1467 -0.0476
 100.4647 -0.4698 100.4647 -0.4698
 100.5432 -0.7107 100.5432 -0.7107
 100.6160 -0.7070 100.6160 -0.7070
 100.5919 -0.6131 100.5919 -0.6131

100.4865 -0.5020 100.4865 -0.5020
Sumani
3 3.00 20.00 90.00
100.6020 -0.7401 100.6020 -0.7401
100.7070 -0.9267 100.7070 -0.9267
100.8259 -1.1266 100.8259 -1.1266
Suliti
3 3.00 20.00 90.00
100.7554 -1.0856 100.7554 -1.0856
100.9951 -1.4172 100.9951 -1.4172
101.2608 -1.7776 101.2608 -1.7776
Siulak
3 3.00 20.00 90.00
101.2051 -1.7860 101.2051 -1.7860
101.4024 -2.0241 101.4024 -2.0241
101.5991 -2.2778 101.5991 -2.2778
Dikit
5 3.00 20.00 90.00
101.5516 -2.3679 101.5516 -2.3679
101.6770 -2.5294 101.6770 -2.5294
101.7856 -2.6221 101.7856 -2.6221
101.8375 -2.7315 101.8375 -2.7315
101.9398 -2.8361 101.9398 -2.8361
Ketaun
5 3.00 20.00 90.00
101.9603 -2.8468 101.9603 -2.8468
102.0660 -2.9170 102.0660 -2.9170
102.2005 -3.0829 102.2005 -3.0829
102.3920 -3.3241 102.3920 -3.3241
102.5090 -3.4280 102.5090 -3.4280
Musi
5 3.00 20.00 90.00
102.3902 -3.4077 102.3902 -3.4077
102.5015 -3.5338 102.5015 -3.5338
102.5543 -3.6204 102.5543 -3.6204
102.6510 -3.7341 102.6510 -3.7341
102.8155 -3.8763 102.8155 -3.8763

LAMPIRAN II

Hasil *Running Multisite* PSHA Batuan Dasar
pada Periode Waktu $T = 0$ detik (PGA)

Dikarenakan jumlah data dari hasil *running* program SR Model mencapai 106.871 data, maka pada lampiran ini data yang disajikan hanya beberapa titik saja yang mewakili data dari hasil analisis. Di bawah ini merupakan contoh *output* dari analisis program Zmap.

RESULT OF MULTI SITE HAZARD ANALYSIS

Spectral Period (Second) 0.0

Time Period or Life Time, Years

50.00 50.00 50.00 50.00 50.00

Return Period, Years

224.07 474.56 974.79 2474.92 4974.96

Probabilty, %

20.000 10.000 5.000 2.000 1.000

| Latitude | Longitude | PGA/Spectral Acceleration (g) | | | | | Vs30 | No |
|----------|-----------|-------------------------------|-------|-------|-------|-------|-------|---------------|
| 100.0500 | 1.3840 | .2946 | .3824 | .4744 | .6364 | .7347 | 215.7 | 1 |
| 100.0500 | 1.3756 | .2821 | .3603 | .4428 | .5934 | .6839 | 244.7 | 2 |
| 100.0500 | 1.3672 | .2918 | .3776 | .4677 | .6277 | .7119 | 224.7 | 3 |
| 100.0500 | 1.3589 | .3370 | .4283 | .5416 | .6883 | .8672 | 180.0 | 4 |
| 100.0500 | 1.3505 | .2961 | .3850 | .4782 | .6419 | .7501 | 218.0 | 5 |
| 100.0500 | 1.3421 | .3096 | .3967 | .4945 | .6635 | .8063 | 203.1 | 6 |
| 100.0583 | 1.3840 | .2814 | .3590 | .4408 | .5905 | .6822 | 242.3 | 7 |
| 100.0583 | 1.3756 | .2807 | .3577 | .4390 | .5882 | .6811 | 245.3 | 8 |
| 100.0583 | 1.3672 | .2968 | .3862 | .4798 | .6438 | .7547 | 211.3 | 9 |
| 100.0583 | 1.3589 | .3347 | .4252 | .5367 | .6861 | .8618 | 180.0 | 10 |
| 100.0583 | 1.3505 | .2706 | .3391 | .4115 | .5498 | .6609 | 271.8 | 11 |
| 100.0583 | 1.3421 | .2996 | .3910 | .4867 | .6532 | .7799 | 208.8 | 12 |
| 100.0583 | 1.3337 | .2979 | .3882 | .4829 | .6483 | .7674 | 214.0 | 13 |
| 100.0583 | 1.3253 | .2781 | .3531 | .4326 | .5800 | .6771 | 260.8 | 14 |
| 100.0667 | 1.4008 | .2778 | .3525 | .4312 | .5767 | .6748 | 244.3 | 15 |
| 100.0667 | 1.3924 | .2960 | .3847 | .4776 | .6404 | .7449 | 207.3 | 16 |
| 100.0667 | 1.3840 | .2665 | .3313 | .3999 | .5321 | .6513 | 270.5 | 17 |
| 100.0667 | 1.3756 | .2726 | .3430 | .4172 | .5574 | .6647 | 259.6 | 18 |
| 100.0667 | 1.3672 | .3225 | .4089 | .5107 | .6748 | .8339 | 186.0 | 19 |
| 100.0667 | 1.3589 | .2877 | .3706 | .4578 | .6142 | .6951 | 230.3 | 20 |
| . | . | . | . | . | . | . | . | . |
| . | . | . | . | . | . | . | . | . |
| . | . | . | . | . | . | . | . | . |
| 103.8000 | .0167 | .0460 | .0488 | .0521 | .0670 | .0804 | 510.8 | 106869 |
| 103.8000 | .0083 | .0463 | .0490 | .0536 | .0676 | .0820 | 522.9 | 106870 |
| 103.8000 | -.0001 | .0464 | .0490 | .0533 | .0674 | .0813 | 472.8 | 106871 |

LAMPIRAN III

Hasil *Running Multisite* PSHA Batuan Dasar
pada Periode Waktu $T = 0.2$ detik

Dikarenakan jumlah data dari hasil *running* program SR Model mencapai 106.871 data, maka pada lampiran ini, data yang disajikan hanya beberapa titik saja yang mewakili data dari hasil analisis. Di bawah ini merupakan contoh *output* dari analisis program Zmap.

RESULT OF MULTI SITE HAZARD ANALYSIS

Spectral Period (Second) .200

Time Period or Life Time, Years

50.00 50.00 50.00 50.00 50.00

Return Period, Years

224.07 474.56 974.79 2474.92 4974.96

Probabilty, %

20.000 10.000 5.000 2.000 1.000

| Latitude | Longitude | PGA/Spectral Acceleration (g) | | | | | Vs30 | No |
|----------|-----------|-------------------------------|-------|-------|--------|--------|-------|---------------|
| 100.0500 | 1.3840 | .5969 | .7074 | .9092 | 1.2604 | 1.6516 | 215.7 | 1 |
| 100.0500 | 1.3756 | .5732 | .6916 | .8903 | 1.1988 | 1.6222 | 244.7 | 2 |
| 100.0500 | 1.3672 | .5955 | .7070 | .9099 | 1.2693 | 1.6566 | 224.7 | 3 |
| 100.0500 | 1.3589 | .6417 | .7956 | .9508 | 1.4232 | 1.7312 | 180.0 | 4 |
| 100.0500 | 1.3505 | .6086 | .7334 | .9227 | 1.3205 | 1.6820 | 218.0 | 5 |
| 100.0500 | 1.3421 | .6254 | .7656 | .9377 | 1.3771 | 1.7096 | 203.1 | 6 |
| 100.0583 | 1.3840 | .5650 | .6873 | .8810 | 1.1575 | 1.6013 | 242.3 | 7 |
| 100.0583 | 1.3756 | .5662 | .6881 | .8831 | 1.1689 | 1.6072 | 245.3 | 8 |
| 100.0583 | 1.3672 | .6028 | .7192 | .9149 | 1.2828 | 1.6627 | 211.3 | 9 |
| 100.0583 | 1.3589 | .6373 | .7863 | .9461 | 1.4028 | 1.7210 | 180.0 | 10 |
| 100.0583 | 1.3505 | .5549 | .6841 | .8775 | 1.1639 | 1.6061 | 271.8 | 11 |
| 100.0583 | 1.3421 | .6151 | .7452 | .9279 | 1.3382 | 1.6904 | 208.8 | 12 |
| 100.0583 | 1.3337 | .6135 | .7433 | .9274 | 1.3392 | 1.6913 | 214.0 | 13 |
| 100.0583 | 1.3253 | .5770 | .6947 | .8987 | 1.2456 | 1.6468 | 260.8 | 14 |
| 100.0667 | 1.4008 | .5476 | .6786 | .8627 | 1.0800 | 1.5624 | 244.3 | 15 |
| 100.0667 | 1.3924 | .5907 | .6981 | .9008 | 1.2184 | 1.6300 | 207.3 | 16 |
| 100.0667 | 1.3840 | .5307 | .6717 | .8510 | 1.0511 | 1.5491 | 270.5 | 17 |
| 100.0667 | 1.3756 | .5458 | .6787 | .8647 | 1.1014 | 1.5739 | 259.6 | 18 |
| 100.0667 | 1.3672 | .6234 | .7579 | .9322 | 1.3446 | 1.6921 | 186.0 | 19 |
| 100.0667 | 1.3589 | .5821 | .6953 | .8970 | 1.2191 | 1.6317 | 230.3 | 20 |
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| . | . | . | . | . | . | . | . | . |
| 103.8000 | .0167 | .0732 | .0935 | .1116 | .1447 | .1791 | 510.8 | 106869 |
| 103.8000 | .0083 | .0756 | .0947 | .1137 | .1486 | .1810 | 522.9 | 106870 |
| 103.8000 | -.0001 | .0750 | .0942 | .1124 | .1456 | .1794 | 472.8 | 106871 |

LAMPIRAN IV

Hasil *Running Multisite* PSHA Batuan Dasar
pada Periode Waktu $T = 1$ detik

Dikarenakan jumlah data dari hasil *running* program SR Model mencapai 106.871 data, maka pada lampiran ini, data yang disajikan hanya beberapa titik saja yang mewakili data dari hasil analisis. Di bawah ini merupakan contoh *output* dari analisis program Zmap.

RESULT OF MULTI SITE HAZARD ANALYSIS

Spectral Period (Second) 1.000

Time Period or Life Time, Years

50.00 50.00 50.00 50.00 50.00

Return Period, Years

224.07 474.56 974.79 2474.92 4974.96

Probabilty, %

20.000 10.000 5.000 2.000 1.000

| Latitude | Longitude | PGA/Spectral Acceleration (g) | | | | | Vs30 | No |
|----------|-----------|-------------------------------|-------|-------|-------|-------|-------|---------------|
| 100.0500 | 1.3840 | .2946 | .3824 | .4744 | .6364 | .7347 | 215.7 | 1 |
| 100.0500 | 1.3756 | .2821 | .3603 | .4428 | .5934 | .6839 | 244.7 | 2 |
| 100.0500 | 1.3672 | .2918 | .3776 | .4677 | .6277 | .7119 | 224.7 | 3 |
| 100.0500 | 1.3589 | .3370 | .4283 | .5416 | .6883 | .8672 | 180.0 | 4 |
| 100.0500 | 1.3505 | .2961 | .3850 | .4782 | .6419 | .7501 | 218.0 | 5 |
| 100.0500 | 1.3421 | .3096 | .3967 | .4945 | .6635 | .8063 | 203.1 | 6 |
| 100.0583 | 1.3840 | .2814 | .3590 | .4408 | .5905 | .6822 | 242.3 | 7 |
| 100.0583 | 1.3756 | .2807 | .3577 | .4390 | .5882 | .6811 | 245.3 | 8 |
| 100.0583 | 1.3672 | .2968 | .3862 | .4798 | .6438 | .7547 | 211.3 | 9 |
| 100.0583 | 1.3589 | .3347 | .4252 | .5367 | .6861 | .8618 | 180.0 | 10 |
| 100.0583 | 1.3505 | .2706 | .3391 | .4115 | .5498 | .6609 | 271.8 | 11 |
| 100.0583 | 1.3421 | .2996 | .3910 | .4867 | .6532 | .7799 | 208.8 | 12 |
| 100.0583 | 1.3337 | .2979 | .3882 | .4829 | .6483 | .7674 | 214.0 | 13 |
| 100.0583 | 1.3253 | .2781 | .3531 | .4326 | .5800 | .6771 | 260.8 | 14 |
| 100.0667 | 1.4008 | .2778 | .3525 | .4312 | .5767 | .6748 | 244.3 | 15 |
| 100.0667 | 1.3924 | .2960 | .3847 | .4776 | .6404 | .7449 | 207.3 | 16 |
| 100.0667 | 1.3840 | .2665 | .3313 | .3999 | .5321 | .6513 | 270.5 | 17 |
| 100.0667 | 1.3756 | .2726 | .3430 | .4172 | .5574 | .6647 | 259.6 | 18 |
| 100.0667 | 1.3672 | .3225 | .4089 | .5107 | .6748 | .8339 | 186.0 | 19 |
| 100.0667 | 1.3589 | .2877 | .3706 | .4578 | .6142 | .6951 | 230.3 | 20 |
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| 103.8000 | .0167 | .0445 | .0483 | .0511 | .0672 | .0825 | 510.8 | 106869 |
| 103.8000 | .0083 | .0450 | .0485 | .0525 | .0677 | .0837 | 522.9 | 106870 |
| 103.8000 | -.0001 | .0448 | .0484 | .0507 | .0669 | .0816 | 472.8 | 106871 |

LAMPIRAN V

Hasil *Running Multisite* PSHA Permukaan
pada Periode Waktu $T = 0$ detik (PGA)

Dikarenakan jumlah data dari hasil *running* program SR Model mencapai 106.871 data, maka pada lampiran ini, data yang disajikan hanya beberapa titik saja yang mewakili data dari hasil analisis. Di bawah ini merupakan contoh *output* dari analisis program Zmap.

RESULT OF MULTI SITE HAZARD ANALYSIS

Spectral Period (Second) 0.00

Time Period or Life Time, Years

50.00 50.00 50.00 50.00 50.00

Return Period, Years

224.07 474.56 974.79 2474.92 4974.96

Probabilty, %

20.000 10.000 5.000 2.000 1.000

| Latitude | Longitude | PGA/Spectral Acceleration (g) | | | | | Vs30 | No |
|----------|-----------|-------------------------------|-------|-------|-------|-------|-------|--------|
| 100.0500 | 1.3840 | .2832 | .3454 | .3981 | .4946 | .6133 | 215.7 | 1 |
| 100.0500 | 1.3756 | .2754 | .3300 | .3911 | .4867 | .5990 | 244.7 | 2 |
| 100.0500 | 1.3672 | .2827 | .3447 | .3981 | .4953 | .6154 | 224.7 | 3 |
| 100.0500 | 1.3589 | .2986 | .3763 | .4448 | .5600 | .6533 | 180.0 | 4 |
| 100.0500 | 1.3505 | .2867 | .3531 | .4079 | .5037 | .6267 | 218.0 | 5 |
| 100.0500 | 1.3421 | .2923 | .3643 | .4259 | .5316 | .6401 | 203.1 | 6 |
| 100.0583 | 1.3840 | .2733 | .3252 | .3885 | .4829 | .5907 | 242.3 | 7 |
| 100.0583 | 1.3756 | .2735 | .3258 | .3890 | .4838 | .5929 | 245.3 | 8 |
| 100.0583 | 1.3672 | .2855 | .3502 | .4019 | .4979 | .6200 | 211.3 | 9 |
| 100.0583 | 1.3589 | .2974 | .3739 | .4406 | .5528 | .6496 | 180.0 | 10 |
| 100.0583 | 1.3505 | .2692 | .3186 | .3862 | .4818 | .5910 | 271.8 | 11 |
| 100.0583 | 1.3421 | .2891 | .3578 | .4153 | .5144 | .6317 | 208.8 | 12 |
| 100.0583 | 1.3337 | .2883 | .3565 | .4136 | .5129 | .6312 | 214.0 | 13 |
| 100.0583 | 1.3253 | .2758 | .3323 | .3931 | .4907 | .6084 | 260.8 | 14 |
| 100.0667 | 1.4008 | .2678 | .3131 | .3823 | .4742 | .5725 | 244.3 | 15 |
| 100.0667 | 1.3924 | .2821 | .3425 | .3963 | .4916 | .6063 | 207.3 | 16 |
| 100.0667 | 1.3840 | .2626 | .3035 | .3783 | .4705 | .5675 | 270.5 | 17 |
| 100.0667 | 1.3756 | .2671 | .3129 | .3828 | .4762 | .5783 | 259.6 | 18 |
| 100.0667 | 1.3672 | .2930 | .3652 | .4259 | .5280 | .6373 | 186.0 | 19 |
| 100.0667 | 1.3589 | .2786 | .3365 | .3941 | .4900 | .6049 | 230.3 | 20 |
| . | | | | | | | | . |
| . | | | | | | | | . |
| . | | | | | | | | . |
| 103.8000 | .0167 | .0699 | .0915 | .1069 | .1345 | .1739 | 510.8 | 106869 |
| 103.8000 | .0083 | .0721 | .0928 | .1093 | .1390 | .1761 | 522.9 | 106870 |
| 103.8000 | -.0001 | .0719 | .0925 | .1085 | .1367 | .1749 | 472.8 | 106871 |

LAMPIRAN VI

Hasil *Running Multisite* PSHA Permukaan
pada Periode Waktu $T = 0.2$ detik

Dikarenakan jumlah data dari hasil *running* program SR Model mencapai 106.871 data, maka pada lampiran ini, data yang disajikan hanya beberapa titik saja yang mewakili data dari hasil analisis. Di bawah ini merupakan contoh *output* dari analisis program Zmap.

RESULT OF MULTI SITE HAZARD ANALYSIS

Spectral Period (Second) .200

Time Period or Life Time, Years

50.00 50.00 50.00 50.00 50.00

Return Period, Years

224.07 474.56 974.79 2474.92 4974.96

Probabilty, %

20.000 10.000 5.000 2.000 1.000

| Latitude | Longitude | PGA/Spectral Acceleration (g) | | | | | Vs30 | | |
|----------|-----------|-------------------------------|-------|-------|--------|--------|-------|---------------|--|
| 100.0500 | 1.3840 | .6101 | .7317 | .9212 | 1.3108 | 1.6771 | 215.7 | 1 | |
| 100.0500 | 1.3756 | .5912 | .6994 | .9063 | 1.2633 | 1.6547 | 244.7 | 2 | |
| 100.0500 | 1.3672 | .6104 | .7342 | .9233 | 1.3245 | 1.6845 | 224.7 | 3 | |
| 100.0500 | 1.3589 | .6506 | .8123 | .9592 | 1.4594 | 1.7497 | 180.0 | 4 | |
| 100.0500 | 1.3505 | .6220 | .7578 | .9347 | 1.3699 | 1.7071 | 218.0 | 5 | |
| 100.0500 | 1.3421 | .6366 | .7863 | .9479 | 1.4198 | 1.7313 | 203.1 | 6 | |
| 100.0583 | 1.3840 | .5838 | .6955 | .8979 | 1.2264 | 1.6360 | 242.3 | 7 | |
| 100.0583 | 1.3756 | .5850 | .6964 | .8999 | 1.2368 | 1.6414 | 245.3 | 8 | |
| 100.0583 | 1.3672 | .6162 | .7443 | .9273 | 1.3352 | 1.6892 | 211.3 | 9 | |
| 100.0583 | 1.3589 | .6465 | .8037 | .9548 | 1.4407 | 1.7403 | 180.0 | 10 | |
| 100.0583 | 1.3505 | .5767 | .6935 | .8960 | 1.2351 | 1.6418 | 271.8 | 11 | |
| 100.0583 | 1.3421 | .6274 | .7679 | .9391 | 1.3850 | 1.7142 | 208.8 | 12 | |
| 100.0583 | 1.3337 | .6263 | .7665 | .9389 | 1.3864 | 1.7152 | 214.0 | 13 | |
| 100.0583 | 1.3253 | .5958 | .7112 | .9146 | 1.3067 | 1.6776 | 260.8 | 14 | |
| 100.0667 | 1.4008 | .5667 | .6871 | .8800 | 1.1513 | 1.5983 | 244.3 | 15 | |
| 100.0667 | 1.3924 | .6040 | .7170 | .9132 | 1.2717 | 1.6570 | 207.3 | 16 | |
| 100.0667 | 1.3840 | .5549 | .6825 | .8723 | 1.1354 | 1.5915 | 270.5 | 17 | |
| 100.0667 | 1.3756 | .5675 | .6883 | .8840 | 1.1784 | 1.6127 | 259.6 | 18 | |
| 100.0667 | 1.3672 | .6339 | .7778 | .9422 | 1.3882 | 1.7143 | 186.0 | 19 | |
| 100.0667 | 1.3589 | .5984 | .7105 | .9119 | 1.2799 | 1.6625 | 230.3 | 20 | |
| . | | | | | | | | . | |
| . | | | | | | | | . | |
| . | | | | | | | | . | |
| 103.8000 | .0167 | .1285 | .1740 | .1969 | .2674 | .2960 | 510.8 | 106869 | |
| 103.8000 | .0083 | .1300 | .1767 | .1982 | .2706 | .2975 | 522.9 | 106870 | |
| 103.8000 | -.0001 | .1296 | .1758 | .1975 | .2684 | .2962 | 472.8 | 106871 | |

LAMPIRAN VII

Hasil *Running Multisite* PSHA Permukaan
pada Periode Waktu $T = 1$ detik

Dikarenakan jumlah data dari hasil *running* program SR Model mencapai 106.871 data, maka pada lampiran ini, data yang disajikan hanya beberapa titik saja yang mewakili data dari hasil analisis. Di bawah ini merupakan contoh *output* dari analisis program Zmap.

RESULT OF MULTI SITE HAZARD ANALYSIS

Spectral Period (Second) 1.000

Time Period or Life Time, Years

50.00 50.00 50.00 50.00 50.00

Return Period, Years

224.07 474.56 974.79 2474.92 4974.96

Probabilty, %

20.000 10.000 5.000 2.000 1.000

| Latitude | Longitude | PGA/Spectral Acceleration (g) | | | | | Vs30 | |
|----------|-----------|-------------------------------|-------|-------|-------|-------|-------|--------|
| 100.0500 | 1.3840 | .3126 | .3950 | .4894 | .6550 | .7820 | 215.7 | 1 |
| 100.0500 | 1.3756 | .2957 | .3801 | .4672 | .6244 | .7003 | 244.7 | 2 |
| 100.0500 | 1.3672 | .3077 | .3922 | .4853 | .6495 | .7678 | 224.7 | 3 |
| 100.0500 | 1.3589 | .3541 | .4456 | .5649 | .6973 | .8889 | 180.0 | 4 |
| 100.0500 | 1.3505 | .3184 | .3979 | .4935 | .6606 | .7971 | 218.0 | 5 |
| 100.0500 | 1.3421 | .3345 | .4177 | .5191 | .6776 | .8406 | 203.1 | 6 |
| 100.0583 | 1.3840 | .2948 | .3786 | .4651 | .6215 | .6985 | 242.3 | 7 |
| 100.0583 | 1.3756 | .2945 | .3780 | .4642 | .6202 | .6979 | 245.3 | 8 |
| 100.0583 | 1.3672 | .3185 | .3982 | .4941 | .6614 | .7991 | 211.3 | 9 |
| 100.0583 | 1.3589 | .3520 | .4427 | .5604 | .6954 | .8842 | 180.0 | 10 |
| 100.0583 | 1.3505 | .2891 | .3672 | .4472 | .5958 | .6849 | 271.8 | 11 |
| 100.0583 | 1.3421 | .3261 | .4059 | .4999 | .6693 | .8197 | 208.8 | 12 |
| 100.0583 | 1.3337 | .3227 | .4009 | .4972 | .6657 | .8105 | 214.0 | 13 |
| 100.0583 | 1.3253 | .2941 | .3770 | .4623 | .6173 | .6963 | 260.8 | 14 |
| 100.0667 | 1.4008 | .2917 | .3728 | .4566 | .6097 | .6922 | 244.3 | 15 |
| 100.0667 | 1.3924 | .3141 | .3960 | .4911 | .6574 | .7884 | 207.3 | 16 |
| 100.0667 | 1.3840 | .2855 | .3604 | .4370 | .5815 | .6774 | 270.5 | 17 |
| 100.0667 | 1.3756 | .2892 | .3679 | .4489 | .5986 | .6864 | 259.6 | 18 |
| 100.0667 | 1.3672 | .3419 | .4290 | .5384 | .6858 | .8609 | 186.0 | 19 |
| 100.0667 | 1.3589 | .2992 | .3869 | .4776 | .6391 | .7407 | 230.3 | 20 |
| . | . | . | . | . | . | . | . | . |
| . | . | . | . | . | . | . | . | . |
| . | . | . | . | . | . | . | . | . |
| 103.8000 | .0167 | .0939 | .1177 | .1517 | .1931 | .2427 | 510.8 | 106869 |
| 103.8000 | .0083 | .0950 | .1194 | .1548 | .1941 | .2457 | 522.9 | 106870 |
| 103.8000 | -.0001 | .0940 | .1172 | .1501 | .1923 | .2397 | 472.8 | 106871 |

LAMPIRAN VIII

Hasil *Running Single Site* PSHA Batuan
Dasar pada Periode Waktu $T = 0$ detik di
PLTA Koto Panjang

RESULT OF SINGLE SITE SEISMIC HAZARD ANALYSIS

Name of Site :PLTA

Koordinate : 100.8854 long .2955 lat

TABEL OF SEISMIC HAZARD CURVE

| | Spectral Period (second) | | | | | | | | | | |
|--------|---------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | .000 | .050 | .100 | .200 | .300 | .400 | .500 | .750 | 1.000 | 2.000 | 3.000 |
| Acc(g) | Annual Rate of Exceedance | | | | | | | | | | |
| .0001 | .82255E+02 | .80544E+02 | .82072E+02 | .84140E+02 | .86850E+02 | .89497E+02 | .88980E+02 | .85962E+02 | .81703E+02 | .62867E+02 | .39534E+02 |
| .0005 | .46577E+02 | .51428E+02 | .57428E+02 | .61340E+02 | .59917E+02 | .58546E+02 | .56313E+02 | .46005E+02 | .37129E+02 | .19822E+02 | .10160E+02 |
| .0010 | .27100E+02 | .32109E+02 | .38381E+02 | .42800E+02 | .40561E+02 | .38568E+02 | .36322E+02 | .27099E+02 | .20502E+02 | .10222E+02 | .50834E+01 |
| .0050 | .40159E+01 | .51454E+01 | .73158E+01 | .93992E+01 | .87495E+01 | .81132E+01 | .73761E+01 | .50196E+01 | .36292E+01 | .19404E+01 | .90709E+00 |
| .0100 | .15050E+01 | .19143E+01 | .29515E+01 | .41049E+01 | .39133E+01 | .36252E+01 | .32316E+01 | .22380E+01 | .16390E+01 | .87122E+00 | .33788E+00 |
| .0200 | .49059E+00 | .64310E+00 | .10952E+01 | .16903E+01 | .16597E+01 | .15403E+01 | .13460E+01 | .94292E+00 | .68478E+00 | .32195E+00 | .93017E-01 |
| .0500 | .72869E-01 | .11605E+00 | .22251E+00 | .40898E+00 | .42280E+00 | .39284E+00 | .33134E+00 | .21755E+00 | .14359E+00 | .62384E-01 | .11371E-01 |
| .0700 | .30584E-01 | .55383E-01 | .11119E+00 | .21375E+00 | .22433E+00 | .20743E+00 | .17116E+00 | .10823E+00 | .68986E-01 | .31673E-01 | .47424E-02 |
| .1000 | .10962E-01 | .23212E-01 | .49585E-01 | .97523E-01 | .10302E+00 | .94372E-01 | .75714E-01 | .46122E-01 | .29044E-01 | .14531E-01 | .17405E-02 |
| .1300 | .48194E-02 | .11498E-01 | .26096E-01 | .51098E-01 | .53773E-01 | .48775E-01 | .38268E-01 | .22814E-01 | .14594E-01 | .77478E-02 | .78477E-03 |
| .2000 | .10924E-02 | .31754E-02 | .83782E-02 | .15597E-01 | .15950E-01 | .14103E-01 | .10656E-01 | .62414E-02 | .43005E-02 | .24093E-02 | .18704E-03 |
| .3000 | .22063E-03 | .78991E-03 | .26145E-02 | .45055E-02 | .43291E-02 | .36616E-02 | .26634E-02 | .15711E-02 | .12084E-02 | .66647E-03 | .41371E-04 |
| .4000 | .60463E-04 | .26008E-03 | .10658E-02 | .17426E-02 | .15679E-02 | .12624E-02 | .88996E-03 | .53511E-03 | .44984E-03 | .23679E-03 | .12821E-04 |
| .5000 | .19855E-04 | .10152E-03 | .50409E-03 | .79524E-03 | .67420E-03 | .51731E-03 | .35474E-03 | .21836E-03 | .19708E-03 | .98461E-04 | .48607E-05 |
| .7000 | .30197E-05 | .21279E-04 | .14645E-03 | .21944E-03 | .16893E-03 | .11917E-03 | .78033E-04 | .50680E-04 | .50949E-04 | .23054E-04 | .10123E-05 |
| 1.0000 | .30578E-06 | .32919E-05 | .33463E-04 | .47007E-04 | .32581E-04 | .20884E-04 | .13014E-04 | .92506E-05 | .10411E-04 | .41554E-05 | .16552E-06 |
| 2.0000 | .13844E-08 | .43308E-07 | .10713E-05 | .12297E-05 | .69478E-06 | .37210E-06 | .21896E-06 | .21311E-06 | .29188E-06 | .87485E-07 | .30679E-08 |
| 3.0000 | .31774E-10 | .21376E-08 | .96947E-07 | .92606E-07 | .46427E-07 | .22697E-07 | .13818E-07 | .17649E-07 | .26365E-07 | .65536E-08 | .21924E-09 |

TABEL OF UNIFORM HAZARD SPECTRUM

Time Period/Life Time (years)

50.0 50.0 50.0 50.0 50.0

Return Period, (years)

224.1 474.6 974.8 2474.9 4975.0

Probability of exceedence (%)

20.00 10.00 5.00 2.00 1.00

Annual rate of exceedence

.00446 .00211 .00103 .00040 .00020

Period(s) Spectral Ordinat (g)

| | | | | | |
|-------|-------|-------|-------|-------|-------|
| .000 | .1367 | .1809 | .2076 | .2790 | .3123 |
| .050 | .1892 | .2448 | .2901 | .3728 | .4373 |
| .100 | .2679 | .3328 | .4071 | .5559 | .6695 |
| .200 | .3015 | .3868 | .4757 | .6359 | .7321 |
| .300 | .2988 | .3805 | .4607 | .6069 | .6873 |
| .400 | .2923 | .3648 | .4317 | .5569 | .6589 |
| .500 | .2775 | .3314 | .3923 | .4908 | .6111 |
| .750 | .2381 | .2885 | .3526 | .4414 | .5207 |
| 1.000 | .1989 | .2709 | .3241 | .4181 | .4984 |
| 2.000 | .1731 | .2173 | .2794 | .3611 | .4259 |
| 3.000 | .0728 | .0963 | .1224 | .1746 | .1984 |

LAMPIRAN IX

Hasil *Running* Deagregasi Hazard Gempa
Untuk Probabilitas Terlampaui 2% dalam 50
Tahun pada Periode PGA

DEAGREGATION CALCULATION RESULT

Site PLTA

Koordinat (long ; lat) : 100.885 .296

Acceleration Amplitude : .2790 g

Ocsilation Period : .0000 s

| No. | Hazard Value | Hipocenter R(km) | Magnitude Moment(M) | Hazard (%) | Source Name |
|-----|--------------|------------------|---------------------|------------|--------------------|
| 1 | .23286E-07 | 380.1280 | 8.2942 | .0078 | SumateraMegatrust1 |
| 2 | .00000E+00 | .0000 | .0000 | .0000 | SumateraBenioff1 |
| 3 | .93040E-07 | 313.6037 | 8.0902 | .0311 | SumateraMegatrust2 |
| 4 | .00000E+00 | .0000 | .0000 | .0000 | SumateraBenioff2 |
| 5 | .16596E-05 | 366.7980 | 8.3180 | .5550 | SumateraMegatrus3 |
| 6 | .00000E+00 | .0000 | .0000 | .0000 | SumateraBenioff3 |
| 7 | .00000E+00 | .0000 | .0000 | .0000 | Renun |
| 8 | .00000E+00 | .0000 | .0000 | .0000 | Renun |
| 9 | .00000E+00 | .0000 | .0000 | .0000 | Renun |
| 10 | .19042E-03 | 84.1394 | 7.4364 | 63.6812 | Barumun |
| 11 | .17500E-04 | 110.2492 | 7.2897 | 5.8525 | Angkola |
| 12 | .80973E-04 | 98.9808 | 7.1698 | 27.0799 | Sianok |
| 13 | .67610E-05 | 124.1769 | 6.9481 | 2.2611 | Sumani |
| 14 | .15889E-05 | 157.9629 | 7.2370 | .5314 | Suliti |
| 15 | .00000E+00 | .0000 | .0000 | .0000 | Siulak |
| 16 | .00000E+00 | .0000 | .0000 | .0000 | Dikit |
| 17 | .00000E+00 | .0000 | .0000 | .0000 | Ketaun |
| 18 | .00000E+00 | .0000 | .0000 | .0000 | Musi |

Dominant Source = Barumun
Dominant Distance(Rhipo) = 92.6474 km
Dominant Magnitude (Mw) = 7.3487
Dominant hazard = 63.6812%
Total hazard = 0.29901E-03