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LAMPIRAN

Lampiran 1. Contoh Perhitungan Manual

1.1 Probabilitas Jarak

Koordinat titik pengukuran: 119.54 dan -5.47

Koordinat Sesar Palu Koro Segmen Palu dalam longitude dan latitude

Titik A: 119.853 dan -0.873

Titik B: 119.853 dan -1.034

Titik C: 119.899 dan -1.103

Titik D: 119.899 dan -1.217

Panjang titik pengukuran ke titik A: 72.67216 km

Panjang titik pengukuran ke titik B: 46.99953 km

Panjang titik pengukuran ke titik C: 39.33294 km

Panjang titik pengukuran ke titik D: 26.66640 km

R (km)	Probabilitas Jarak $P(r)$	R (rata - rata)
26.6664	0.048807	
31.266976	0.057228	28.96668811
35.867552	0.065648	33.56726432
40.468129	0.074068	38.16784054
45.068705	0.082489	42.76841676
	0.090909	47.36899297
	0.099329	51.96956919
	0.10775	56.5701454
	0.11617	61.17072162
	0.124591	65.77129784
	0.133011	70.37187405



546.36209

1.2 Probabilitas Magnitudo

Probabilitas magnitudo dihitung berdasarkan magnitudo minimum (M_{min}), magnitudo maksimum (M_{max}) dan fungsi kerapatan distribusi magnitudo $f_M(m)$.

$$f_M(m) = \frac{\beta e^{-\beta(m-m_{min})}}{1 - e^{-\beta(m_{max}-m_{min})}}$$

M	f(m)	f(m) rata - rata	Probabilitas Magnitudo	m rata - rata
4.5	2.30184313			
4.6	1.828891715	2.065367423	0.267566495	4.55
4.8	1.154549429	1.491720572	0.19325106	4.7
5	0.728848172	0.941698801	0.121996234	4.9
5.2	0.460109931	0.594479052	0.077014227	5.1
5.4	0.290459875	0.375284903	0.048617822	5.3
5.6	0.921078505	0.60576919	0.078476854	5.5
5.8	0.115753791	0.518416148	0.067160346	5.7
6	0.969030285	0.542392038	0.070266401	5.9
6.2	0.84613229	0.507580187	0.065756557	6.1
71	0.03762563	0.004874367		6.3
19	0.023752445	0.003077108		6.5
41	0.01499453	0.001942528		6.8
62	0.009465802			
	7.719080919			



1.3 Atenuasi Percepatan Tanah

Atenuasi percepatan tanah dihitung berdasarkan persamaan fungsi atenuasi Campbell bozorgnia (2008)

$$\ln(Y) = c_1 + c_2(M - M_{ref}) + c_3(M - M_{ref})^2 + \left(c_4 \ln \sqrt{R_{rup}^2} + c_5 e^{c_6 M} + c_5 M \right) + c_7 \ln \left(\frac{Vs30}{V_{ref}} \right) + c_8 F_{NM} + c_9 F_{RV} + \epsilon$$

Keterangan:

- $\ln(Y)$ = Logaritma natural dari percepatan tanah dan respon spektral.
 M = Magnitudo gempa .
 M_{Ref} = Magnitudo referensi (6.5)
 R = Jarak dari sumber gempa.
 $Vs30$ = kecepatan Gelombang pada kedalaman 30 m.
 V_{ref} = Kecepatan referensi (760 m/s)
 ϵ = Variabel acak skala faktor RMSe
 $C_1 - C_9$ = Koefisien Empiris dari Campbell-Bozorgnia 2008 NGA.
 F_{NM} = koreksi gempa dengan mekanisme patahan normal.
 F_{RV} = koreksi dengan mekanisme patahan reverse.

m	lny (g)									
4.8	0.01656	0.019508	0.022077	0.024353	0.026396	0.02825	0.029946	0.03151	0.03296	0.034313
5	0.010432	0.01338	0.015949	0.018225	0.020268	0.022122	0.023818	0.025382	0.026832	0.028185
5.2	0.00532	0.008268	0.010837	0.013113	0.015156	0.01701	0.018706	0.02027	0.02172	0.023073
5.4	0.001224	0.004172	0.006741	0.009017	0.01106	0.012914	0.01461	0.016174	0.017624	0.018977
5.6	0.001092	0.003661	0.005937	0.00798	0.009834	0.01153	0.013094	0.014544	0.015897	
5.8	-0.00097	0.001597	0.003873	0.005916	0.00777	0.009466	0.01103	0.01248	0.013833	
6.0	-0.00202	0.000549	0.002825	0.004868	0.006722	0.008418	0.009982	0.011432	0.012785	
6.2	-0.00205	0.000517	0.002793	0.004836	0.00669	0.008386	0.00995	0.0114	0.012753	
6.4	-0.00107	0.001501	0.003777	0.00582	0.007674	0.00937	0.010934	0.012384	0.013737	



6.6	-0.00202	0.000932	0.003501	0.005777	0.00782	0.009674	0.01137	0.012934	0.014384	0.015737
6.8	0.001	0.003948	0.006517	0.008793	0.010836	0.01269	0.014386	0.01595	0.0174	0.018753
7	0.005032	0.00798	0.010549	0.012825	0.014868	0.016722	0.018418	0.019982	0.021432	0.022785

Nilai $z = \ln a - \ln y / \sigma_{\ln y}$, dihitung berdasarkan amplitudo percepatan (a) = 0.3 g dan standar deviasi untuk fungsi atenuasi Campbell Bozorgnia (2008).

S	m	$z = (\ln a - \ln y)/s$									
0.588	4.8	-2.07574	-2.08075	-2.08512	-2.08899	-2.09246	-2.09562	-2.0985	-2.10116	-2.10363	-2.10593
0.588	5	-2.06531	-2.07033	-2.0747	-2.07857	-2.08204	-2.0852	-2.08808	-2.09074	-2.09321	-2.09551
0.588	5.2	-2.05662	-2.06163	-2.066	-2.06987	-2.07335	-2.0765	-2.07939	-2.08205	-2.08451	-2.08681
0.588	5.4	-2.04965	-2.05467	-2.05904	-2.06291	-2.06638	-2.06954	-2.07242	-2.07508	-2.07755	-2.07985
0.588	5.6	-2.04442	-2.04943	-2.0538	-2.05767	-2.06114	-2.0643	-2.06718	-2.06984	-2.07231	-2.07461
0.588	5.8	-2.04091	-2.04592	-2.05029	-2.05416	-2.05763	-2.06079	-2.06367	-2.06633	-2.0688	-2.0711
0.588	6	-2.03912	-2.04414	-2.04851	-2.05238	-2.05585	-2.059	-2.06189	-2.06455	-2.06702	-2.06932
0.588	6.2	-2.03907	-2.04408	-2.04845	-2.05232	-2.0558	-2.05895	-2.06184	-2.06449	-2.06696	-2.06926
0.588	6.4	-2.04074	-2.04576	-2.05012	-2.054	-2.05747	-2.06062	-2.06351	-2.06617	-2.06863	-2.07093
		4414	-2.04916	-2.05353	-2.0574	-2.06087	-2.06403	-2.06691	-2.06957	-2.07204	-2.07434
		4927	-2.05429	-2.05866	-2.06253	-2.066	-2.06915	-2.07204	-2.0747	-2.07717	-2.07947
		5613	-2.06114	-2.06551	-2.06938	-2.07286	-2.07601	-2.0789	-2.08156	-2.08402	-2.08632



1.4 Probabilitas P(z)

Probabilitas P(z) dihitung dengan persamaan pendekatan Abrahamowitz dan Stegun.

$$P(z) = \frac{1}{\sqrt{2\pi}} e^{-z^2/2} \left[\frac{0.43618}{(1 + 0.33267z)} - \frac{0.12017}{(1 + 0.33267z)} + \frac{0.93730}{(1 + 0.33267z)} \right]$$

m	P(z)									
4.8	1.470466	1.478619	1.485839	1.492329	1.49823	1.503646	1.508655	1.513318	1.517682	1.521786
5	1.453962	1.461829	1.468794	1.475054	1.480745	1.485968	1.490797	1.495293	1.499499	1.503454
5.2	1.440634	1.448272	1.455034	1.46111	1.466634	1.471702	1.476389	1.48075	1.484832	1.488668
5.4	1.430233	1.437695	1.444299	1.450234	1.455627	1.460576	1.465152	1.46941	1.473395	1.47714
5.6	1.42257	1.429902	1.436392	1.442222	1.447521	1.452383	1.456878	1.46106	1.464974	1.468652
5.8	1.417509	1.424756	1.43117	1.436932	1.442169	1.446973	1.451415	1.455548	1.459414	1.463049
6	1.414961	1.422166	1.428542	1.43427	1.439475	1.444251	1.448666	1.452774	1.456617	1.46023
6.2	1.414884	1.422087	1.428462	1.434189	1.439393	1.444168	1.448582	1.452689	1.456532	1.460144
6.4	1.417275	1.424518	1.430929	1.436687	1.441921	1.446723	1.451162	1.455293	1.459157	1.46279
6.6	1.422175	1.429501	1.435985	1.44181	1.447104	1.451961	1.456452	1.460631	1.46454	1.468215
6.8	1.429671	1.437123	1.44372	1.449646	1.455033	1.459976	1.464546	1.468798	1.472777	1.476517
7	1.439895	1.44752	1.454271	1.460337	1.465852	1.470911	1.47559	1.479944	1.484018	1.487849



1.5 Probabilitas Total

Probabilitas total dihitung berdasarkan probabilitas jarak, probabilitas magnitudo dan probabilitas atenuasi.

P(m)	P(r)									
	0.057227572	0.065648	0.074068	0.082489	0.090909	0.099329	0.10775	0.11617	0.124591	0.133011
	P(x>X m,R)									
0.267566495	0.022516048	0.025972	0.029447	0.032938	0.036443	0.039963	0.043495	0.047039	0.050594	0.054159
0.19325106	0.016079784	0.018546	0.021024	0.023514	0.026014	0.028524	0.031043	0.033569	0.036104	0.038646
0.121996234	0.010057856	0.011599	0.013148	0.014704	0.016266	0.017834	0.019407	0.020986	0.022569	0.024156
0.077014227	0.006303519	0.007269	0.008239	0.009213	0.010191	0.011173	0.012158	0.013146	0.014138	0.015131
0.048617822	0.003957988	0.004564	0.005173	0.005784	0.006398	0.007014	0.007632	0.008228	0.008874	0.009497
0.078476854	0.006366088	0.00734	0.008319	0.009302	0.010289	0.011279	0.012273	0.01327	0.014269	0.015272
0.067160346	0.005438295	0.00627	0.006298	0.007946	0.008789	0.009635	0.010483	0.011335	0.012188	0.013044
0.070266401	0.005689495	0.00656	0.007434	0.008313	0.009195	0.01008	0.010967	0.011858	0.012751	0.013647
0.065756557	0.005333329	0.006149	0.006969	0.007793	0.00862	0.009449	0.010282	0.011117	0.011954	0.012794
0.004874367	0.000396713	0.000457	0.000518	0.00058	0.000641	0.000703	0.000765	0.000827	0.000889	0.000952
0.003077108	0.000251759	0.00029	0.000329	0.000368	0.000407	0.000446	0.000486	0.000525	0.000565	0.000604
0.001942528	0.000160068	0.000185	0.000209	0.000234	0.000259	0.000284	0.000309	0.000334	0.000359	0.000384



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1.6 Kurva Seismic Hazard

Hasil akhir perhitungan adalah probabilitas total yang merupakan penjumlahan seluruh nilai ($P(x > X|m, R)$). Hasil penjumlahan ini adalah ($P(x > X|m, R) = 1.400517053$).

Contoh hitungan laju tahunan terlampaui

Diketahui : $M_{max} = 7.6$, $M_{min} = 4.5$, slip rate = 10 mm/year, $b = 1$

Ditanya : T_{max} , a , rate (v), laju tahunan terlampaui (λ) ?

Penyelesaian :

$$a) \quad T_{max} = \left(\frac{1000}{\text{slip rate}}\right) 10^{(0.92M_{max} - 5.46)}$$

$$T_{max} = \left(\frac{1000}{10}\right) 10^{(0.92(7.6) - 5.46)}$$

$$T_{max} = 591.562 \text{ tahun}$$

$$b) \quad a = -bM_{max} - \ln T_{max}$$

$$a = -1(7.6) - \ln 591.562$$

$$a = 1.21723$$

$$c) \quad \text{Rate Kejadian Gempa}(v) = \exp(a - bm_o)$$

$$v = \exp(1.21723 - (1)(4.5))$$

$$v = 0.0375243 \text{ kejadian/tahun}$$

$$d) \quad \lambda = v \times 1.383661987$$

$$\lambda = 0.0375243 \times 1.383661987$$

$$\lambda = 0.051911 \text{ per tahun}$$



Lampiran 2. Tabel Nilai Percepatan Tanah Maksimum (PGA) Provinsi Sulawesi Barat untuk Probabilitas Terlampai 2 % dalam 50 Tahun

2.1 Tabel Nilai Percepatan Tanah Maksimum di Batuan Dasar Provinsi Sulawesi Barat

Longitude	Latitude	PGA (g)	PGA (gal)
119.48	-1.03	0.29	284.3914
119.48	-1.13	0.258	253.01028
119.58	-1.13	0.269	263.79754
119.38	-1.23	0.23	225.5518
119.48	-1.23	0.237	232.41642
119.38	-1.33	0.22	215.7452
119.38	-1.43	0.222	217.70652
119.48	-1.43	0.228	223.59048
119.58	-1.43	0.243	238.30038
119.38	-1.53	0.231	226.53246
119.48	-1.53	0.233	228.49378
119.58	-1.53	0.245	240.2617
119.38	-1.63	0.243	238.30038
119.48	-1.63	0.241	236.33906
119.58	-1.63	0.251	246.14566
119.68	-1.63	0.268	262.81688
119.38	-1.73	0.252	247.12632
119.48	-1.73	0.249	244.18434
119.58	-1.73	0.255	250.0683
119.68	-1.73	0.268	262.81688
119.78	-1.73	0.291	285.37206
119.38	-1.83	0.255	250.0683
119.48	-1.83	0.252	247.12632
119.58	-1.83	0.255	250.0683
119.68	-1.83	0.264	258.89424
119.78	-1.83	0.282	276.54612
119.38	-1.93	0.251	246.14566
119.48	-1.93	0.247	242.22302
119.58	-1.93	0.248	243.20368
119.68	-1.93	0.253	248.10698
119.78	-1.93	0.265	259.8749
119.88	-2.03	0.248	243.20368
	-2.03	0.243	238.30038
	-2.03	0.238	233.39708
	-2.03	0.236	231.43576
	-2.03	0.239	234.37774
	-2.03	0.248	243.20368
	-2.13	0.238	233.39708



119.38	-2.13	0.233	228.49378
119.48	-2.13	0.228	223.59048
119.58	-2.13	0.224	219.66784
119.68	-2.13	0.226	221.62916
119.18	-2.23	0.236	231.43576
119.28	-2.23	0.23	225.5518
119.38	-2.23	0.224	219.66784
119.48	-2.23	0.219	214.76454
119.58	-2.23	0.215	210.8419
119.18	-2.33	0.231	226.53246
119.28	-2.33	0.225	220.6485
119.38	-2.33	0.22	215.7452
119.48	-2.33	0.214	209.86124
119.58	-2.33	0.209	204.95794
119.18	-2.43	0.23	225.5518
119.28	-2.43	0.224	219.66784
119.38	-2.43	0.219	214.76454
119.48	-2.43	0.214	209.86124
119.58	-2.43	0.21	205.9386
119.68	-2.43	0.209	204.95794
119.08	-2.53	0.239	234.37774
119.18	-2.53	0.232	227.51312
119.28	-2.53	0.226	221.62916
119.38	-2.53	0.222	217.70652
119.48	-2.53	0.218	213.78388
119.58	-2.53	0.215	210.8419
119.68	-2.53	0.213	208.88058
118.88	-2.63	0.29	284.3914
118.98	-2.63	0.26	254.9716
119.08	-2.63	0.244	239.28104
119.18	-2.63	0.235	230.4551
119.28	-2.63	0.23	225.5518
119.38	-2.63	0.227	222.60982
119.48	-2.63	0.224	219.66784
119.58	-2.63	0.222	217.70652
119.68	-2.63	0.22	215.7452
119.78	-2.63	0.218	213.78388
	-2.73	0.523	512.88518
	-2.73	0.378	370.68948
	-2.73	0.278	272.62348
	-2.73	0.25	245.165
	-2.73	0.239	234.37774
	-2.73	0.235	230.4551



119.38	-2.73	0.232	227.51312
119.48	-2.73	0.23	225.5518
119.58	-2.73	0.228	223.59048
119.68	-2.73	0.226	221.62916
118.78	-2.83	0.918	900.24588
118.88	-2.83	0.41	402.0706
118.98	-2.83	0.283	277.52678
119.08	-2.83	0.252	247.12632
119.18	-2.83	0.241	236.33906
119.28	-2.83	0.238	233.39708
119.38	-2.83	0.236	231.43576
119.48	-2.83	0.235	230.4551
118.88	-2.93	0.39	382.4574
118.98	-2.93	0.278	272.62348
119.08	-2.93	0.25	245.165
119.18	-2.93	0.241	236.33906
119.28	-2.93	0.239	234.37774
119.38	-2.93	0.238	233.39708
119.48	-2.93	0.237	232.41642
118.88	-3.03	0.363	355.97958
118.98	-3.03	0.27	264.7782
119.08	-3.03	0.246	241.24236
119.18	-3.03	0.239	234.37774
119.28	-3.03	0.237	232.41642
119.38	-3.03	0.236	231.43576
119.48	-3.03	0.235	230.4551
118.88	-3.13	0.387	379.51542
118.98	-3.13	0.276	270.66216
119.08	-3.13	0.247	242.22302
119.18	-3.13	0.237	232.41642
119.28	-3.13	0.233	228.49378
119.38	-3.13	0.231	226.53246
119.48	-3.13	0.229	224.57114
119.58	-3.13	0.227	222.60982
118.88	-3.23	0.458	449.14228
118.98	-3.23	0.29	284.3914
119.08	-3.23	0.249	244.18434
	-3.23	0.234	229.47444
	-3.23	0.227	222.60982
	-3.23	0.224	219.66784
	-3.33	0.42	411.8772
	-3.33	0.288	282.43008
	-3.33	0.247	242.22302



119.18	-3.33	0.228	223.59048
119.28	-3.33	0.218	213.78388
119.38	-3.33	0.213	208.88058
118.88	-3.43	0.296	290.27536
118.98	-3.43	0.288	282.43008
119.08	-3.43	0.247	242.22302
119.18	-3.43	0.223	218.68718
119.28	-3.43	0.21	205.9386
119.38	-3.43	0.2	196.132
118.98	-3.53	0.351	344.21166

2.2 Tabel Nilai Percepatan Tanah Maksimum pada Kondisi 0.2 detik Provinsi Sulawesi Barat

Longitude	Latitude	PGA (g)	PGA (gal)
119.48	-1.03	0.656	643.31296
119.48	-1.13	0.577	565.84082
119.58	-1.13	0.607	595.26062
119.38	-1.23	0.513	503.07858
119.48	-1.23	0.527	516.80782
119.38	-1.33	0.49	480.5234
119.38	-1.43	0.49	480.5234
119.48	-1.43	0.501	491.31066
119.58	-1.43	0.536	525.63376
119.38	-1.53	0.505	495.2333
119.48	-1.53	0.505	495.2333
119.58	-1.53	0.531	520.73046
119.38	-1.63	0.525	514.8465
119.48	-1.63	0.515	505.0399
119.58	-1.63	0.533	522.69178
119.68	-1.63	0.575	563.8795
119.38	-1.73	0.538	527.59508
119.48	-1.73	0.523	512.88518
119.58	-1.73	0.535	524.6531
119.68	-1.73	0.569	557.99554
119.78	-1.73	0.629	616.83514
8	-1.83	0.539	528.57574
8	-1.83	0.525	514.8465
8	-1.83	0.531	520.73046
8	-1.83	0.556	545.24696
8	-1.83	0.607	595.26062
8	-1.93	0.53	519.7498
8	-1.93	0.517	507.00122



119.58	-1.93	0.518	507.98188
119.68	-1.93	0.535	524.6531
119.78	-1.93	0.571	559.95686
119.28	-2.03	0.533	522.69178
119.38	-2.03	0.516	506.02056
119.48	-2.03	0.503	493.27198
119.58	-2.03	0.499	489.34934
119.68	-2.03	0.509	499.15594
119.78	-2.03	0.539	528.57574
119.28	-2.13	0.515	505.0399
119.38	-2.13	0.499	489.34934
119.48	-2.13	0.486	476.60076
119.58	-2.13	0.479	469.73614
119.68	-2.13	0.488	478.56208
119.18	-2.23	0.519	508.96254
119.28	-2.23	0.502	492.29132
119.38	-2.23	0.486	476.60076
119.48	-2.23	0.469	459.92954
119.58	-2.23	0.461	452.08426
119.18	-2.33	0.511	501.11726
119.28	-2.33	0.494	484.44604
119.38	-2.33	0.477	467.77482
119.48	-2.33	0.461	452.08426
119.58	-2.33	0.452	443.25832
119.18	-2.43	0.51	500.1366
119.28	-2.43	0.494	484.44604
119.38	-2.43	0.477	467.77482
119.48	-2.43	0.462	453.06492
119.58	-2.43	0.453	444.23898
119.68	-2.43	0.453	444.23898
119.08	-2.53	0.535	524.6531
119.18	-2.53	0.514	504.05924
119.28	-2.53	0.499	489.34934
119.38	-2.53	0.486	476.60076
119.48	-2.53	0.473	463.85218
119.58	-2.53	0.464	455.02624
119.68	-2.53	0.461	452.08426
8	-2.63	0.69	676.6554
8	-2.63	0.599	587.41534
8	-2.63	0.549	538.38234
8	-2.63	0.523	512.88518
8	-2.63	0.507	497.19462
8	-2.63	0.497	487.38802



119.48	-2.63	0.489	479.54274
119.58	-2.63	0.481	471.69746
119.68	-2.63	0.476	466.79416
119.78	-2.63	0.473	463.85218
118.78	-2.73	1.29	1265.0514
118.88	-2.73	0.949	930.64634
118.98	-2.73	0.654	641.35164
119.08	-2.73	0.567	556.03422
119.18	-2.73	0.533	522.69178
119.28	-2.73	0.517	507.00122
119.38	-2.73	0.509	499.15594
119.48	-2.73	0.502	492.29132
119.58	-2.73	0.497	487.38802
119.68	-2.73	0.491	481.50406
118.78	-2.83	2.41	2363.3906
118.88	-2.83	1.06	1039.4996
118.98	-2.83	0.669	656.06154
119.08	-2.83	0.573	561.91818
119.18	-2.83	0.538	527.59508
119.28	-2.83	0.525	514.8465
119.38	-2.83	0.518	507.98188
119.48	-2.83	0.513	503.07858
118.88	-2.93	1	980.66
118.98	-2.93	0.655	642.3323
119.08	-2.93	0.569	557.99554
119.18	-2.93	0.538	527.59508
119.28	-2.93	0.527	516.80782
119.38	-2.93	0.522	511.90452
119.48	-2.93	0.517	507.00122
118.88	-3.03	0.92	902.2072
118.98	-3.03	0.634	621.73844
119.08	-3.03	0.56	549.1696
119.18	-3.03	0.533	522.69178
119.28	-3.03	0.524	513.86584
119.38	-3.03	0.519	508.96254
119.48	-3.03	0.514	504.05924
119.08	-3.13	0.995	975.7567
8	-3.13	0.655	642.3323
8	-3.13	0.566	555.05356
8	-3.13	0.532	521.71112
8	-3.13	0.518	507.98188
8	-3.13	0.51	500.1366
8	-3.13	0.504	494.25264



119.58	-3.13	0.497	487.38802
118.88	-3.23	1.15	1127.759
118.98	-3.23	0.697	683.52002
119.08	-3.23	0.574	562.89884
119.18	-3.23	0.528	517.78848
119.28	-3.23	0.506	496.21396
119.38	-3.23	0.494	484.44604
118.88	-3.33	1.08	1059.1128
118.98	-3.33	0.696	682.53936
119.08	-3.33	0.574	562.89884
119.18	-3.33	0.518	507.98188
119.28	-3.33	0.49	480.5234
119.38	-3.33	0.47	460.9102
118.88	-3.43	0.726	711.95916
118.98	-3.43	0.698	684.50068
119.08	-3.43	0.579	567.80214
119.18	-3.43	0.51	500.1366
119.28	-3.43	0.472	462.87152
119.38	-3.43	0.444	435.41304
118.98	-3.53	0.849	832.58034

2.3 Tabel Nilai Percepatan Tanah Maksimum pada Kondisi 1 detik Provinsi Sulawesi Barat

Longitude	Latitude	PGA (g)	PGA (gal)
119.48	-1.03	0.231	226.53246
119.48	-1.13	0.211	206.91926
119.58	-1.13	0.218	213.78388
119.38	-1.23	0.191	187.30606
119.48	-1.23	0.194	190.24804
119.38	-1.33	0.182	178.48012
119.38	-1.43	0.18	176.5188
119.48	-1.43	0.181	177.49946
119.58	-1.43	0.189	185.34474
119.38	-1.53	0.181	177.49946
119.48	-1.53	0.179	175.53814
9.58	-1.53	0.185	181.4221
9.38	-1.63	0.183	179.46078
9.48	-1.63	0.178	174.55748
9.58	-1.63	0.182	178.48012
9.68	-1.63	0.192	188.28672
9.38	-1.73	0.182	178.48012
9.48	-1.73	0.177	173.57682



119.58	-1.73	0.179	175.53814
119.68	-1.73	0.187	183.38342
119.78	-1.73	0.206	202.01596
119.38	-1.83	0.177	173.57682
119.48	-1.83	0.173	169.65418
119.58	-1.83	0.175	171.6155
119.68	-1.83	0.182	178.48012
119.78	-1.83	0.198	194.17068
119.38	-1.93	0.17	166.7122
119.48	-1.93	0.168	164.75088
119.58	-1.93	0.169	165.73154
119.68	-1.93	0.175	171.6155
119.78	-1.93	0.187	183.38342
119.28	-2.03	0.166	162.78956
119.38	-2.03	0.162	158.86692
119.48	-2.03	0.161	157.88626
119.58	-2.03	0.162	158.86692
119.68	-2.03	0.166	162.78956
119.78	-2.03	0.177	173.57682
119.28	-2.13	0.157	153.96362
119.38	-2.13	0.154	151.02164
119.48	-2.13	0.153	150.04098
119.58	-2.13	0.155	152.0023
119.68	-2.13	0.159	155.92494
119.18	-2.23	0.155	152.0023
119.28	-2.23	0.15	147.099
119.38	-2.23	0.148	145.13768
119.48	-2.23	0.147	144.15702
119.58	-2.23	0.149	146.11834
119.18	-2.33	0.151	148.07966
119.28	-2.33	0.145	142.1957
119.38	-2.33	0.142	139.25372
119.48	-2.33	0.141	138.27306
119.58	-2.33	0.143	140.23438
119.18	-2.43	0.15	147.099
119.28	-2.43	0.144	141.21504
119.38	-2.43	0.139	136.31174
9.48	-2.43	0.137	134.35042
9.58	-2.43	0.138	135.33108
9.68	-2.43	0.141	138.27306
9.08	-2.53	0.16	156.9056
9.18	-2.53	0.15	147.099
9.28	-2.53	0.143	140.23438



119.38	-2.53	0.137	134.35042
119.48	-2.53	0.135	132.3891
119.58	-2.53	0.134	131.40844
119.68	-2.53	0.136	133.36976
118.88	-2.63	0.22	215.7452
118.98	-2.63	0.185	181.4221
119.08	-2.63	0.163	159.84758
119.18	-2.63	0.15	147.099
119.28	-2.63	0.143	140.23438
119.38	-2.63	0.137	134.35042
119.48	-2.63	0.133	130.42778
119.58	-2.63	0.132	129.44712
119.68	-2.63	0.133	130.42778
119.78	-2.63	0.135	132.3891
118.78	-2.73	0.397	389.32202
118.88	-2.73	0.278	272.62348
118.98	-2.73	0.201	197.11266
119.08	-2.73	0.167	163.77022
119.18	-2.73	0.151	148.07966
119.28	-2.73	0.142	139.25372
119.38	-2.73	0.136	133.36976
119.48	-2.73	0.133	130.42778
119.58	-2.73	0.131	128.46646
119.68	-2.73	0.131	128.46646
118.78	-2.83	0.698	684.50068
118.88	-2.83	0.298	292.23668
118.98	-2.83	0.203	199.07398
119.08	-2.83	0.166	162.78956
119.18	-2.83	0.15	147.099
119.28	-2.83	0.141	138.27306
119.38	-2.83	0.135	132.3891
119.48	-2.83	0.131	128.46646
118.88	-2.93	0.284	278.50744
118.98	-2.93	0.196	192.20936
119.08	-2.93	0.162	158.86692
119.18	-2.93	0.148	145.13768
119.28	-2.93	0.139	136.31174
9.38	-2.93	0.133	130.42778
9.48	-2.93	0.13	127.4858
8.88	-3.03	0.265	259.8749
8.98	-3.03	0.188	184.36408
9.08	-3.03	0.158	154.94428
9.18	-3.03	0.145	142.1957



119.28	-3.03	0.136	133.36976
119.38	-3.03	0.13	127.4858
119.48	-3.03	0.127	124.54382
118.88	-3.13	0.282	276.54612
118.98	-3.13	0.196	192.20936
119.08	-3.13	0.161	157.88626
119.18	-3.13	0.146	143.17636
119.28	-3.13	0.135	132.3891
119.38	-3.13	0.128	125.52448
119.48	-3.13	0.124	121.60184
119.58	-3.13	0.121	118.65986
118.88	-3.23	0.329	322.63714
118.98	-3.23	0.213	208.88058
119.08	-3.23	0.166	162.78956
119.18	-3.23	0.146	143.17636
119.28	-3.23	0.133	130.42778
119.38	-3.23	0.125	122.5825
118.88	-3.33	0.306	300.08196
118.98	-3.33	0.214	209.86124
119.08	-3.33	0.168	164.75088
119.18	-3.33	0.146	143.17636
119.28	-3.33	0.13	127.4858
119.38	-3.33	0.122	119.64052
118.88	-3.43	0.224	219.66784
118.98	-3.43	0.21	205.9386
119.08	-3.43	0.169	165.73154
119.18	-3.43	0.145	142.1957
119.28	-3.43	0.129	126.50514
119.38	-3.43	0.119	116.69854
118.98	-3.53	0.235	230.4551



Lampiran 3. Peta Percepatan Tanah Maksimum Provinsi Sulawesi Barat untuk Probabilitas Terlampaui 10 % dalam 50 Tahun



