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LAMPIRAN

Lampiran 1 Perhitungan Excel

1.1 Probabilitas Jarak

Koordinat titik pengukuran : 128.32 dan -1.6

Koordinat Sesar Sorong Segmen Obi Kofiau :

Titik A : 128.2561685042080 dan -1.7846782037845

Titik B : 129.0801013157930 dan -1.5983851495347

Titik C : 129.8940451371240 dan -1.3594427164457

Panjang titik pengukuran ke titik A : 10.88183949 km

Panjang titik pengukuran ke titik B : 84.45514694 km

Panjang titik pengukuran ke titik C : 181.3218472 km

R (km)	Probabilitas Jarak	Rata-rata
10.88184	0.010294	
27.92584	0.026417	19.40384
44.96984	0.04254	36.44784
62.01384	0.058663	53.49184
79.05784	0.074786	70.53584
96.10184	0.090909	87.57984
113.1458	0.107032	104.6238
130.1898	0.123155	121.6678
147.2338	0.139278	138.7118
164.2778	0.155401	155.7558
181.3218	0.171524	172.7998
1057.12		

1.2 Probabilitas Magnitudo

Dihitung Berdasarkan magnitudo minimum (Mmin), magnitudo maksimum (mmax) dan fungsi kerapatan distribusi magnitudo.

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

m	f(m)	f(m) (Rata-rata)	Probabilitas f(m)	M (Rata-rata)
5	2.301843			
5.2	1.453116	1.87748	0.368937	5.1
5.4	0.917328	1.185222	0.232904	5.3
5.6	0.579094	0.748211	0.147029	5.5
5.8	0.365573	0.472334	0.092817	5.7
6	0.23078	0.298176	0.058594	5.9
6.2	0.145688	0.188234	0.036989	6.1
6.4	0.09197	0.118829	0.023351	6.3
6.6	0.058059	0.075015	0.014741	6.5
6.8	0.036652	0.047356	0.009306	6.7
7	0.023138	0.029895	0.005875	6.9
7.2	0.014606	0.018872	0.003708	7.1
7.4	0.009221	0.011914	0.002341	7.3
7.6	0.005821	0.007521	0.001478	7.5
7.8	0.003675	0.004748	0.000933	7.7
8	0.00232	0.002997	0.000589	7.9
8.1	0.001843	0.002081	0.000409	8.05
	Total	5.088884		

1.3 Atenuasi Percepatan Tanah

Dihitung berdasarkan fungsi atenuasi Campbell-Bozorgnia NGA (2008) pada persamaan (7), perhitungan dilakukan berdasarkan kombinasi jarak rata-rata dan magnitudo rata-rata.

m	R rata-rata											
	19.40384	36.44784	53.49184	70.53584	87.57984	104.6238	121.6678	138.7118	155.7558	172.7998		
	$\sqrt{Rrup^2 + C4^2}$											
	19.75158	36.63415	53.61896	70.6323	87.65754	104.6889	121.7238	138.7609	155.7995	172.8392		
In Sa												
5.1	0.087766	0.099436	0.103275	0.106041	0.108205	0.109982	0.111491	0.112802	0.113961	0.114999		
5.3	0.087774	0.09944	0.103275	0.106041	0.108205	0.109982	0.111491	0.112802	0.113961	0.114999		
5.5	0.087774	0.09944	0.103275	0.106041	0.108205	0.109982	0.111491	0.112802	0.113961	0.114999		
5.7	0.087774	0.09944	0.103275	0.106041	0.108205	0.109982	0.111491	0.112802	0.113961	0.114999		
5.9	0.087774	0.09944	0.103276	0.106041	0.108205	0.109982	0.111491	0.112802	0.113961	0.114999		
6.1	0.087774	0.09944	0.103276	0.106041	0.108205	0.109982	0.111491	0.112802	0.113961	0.114999		
6.3	0.087774	0.099441	0.103276	0.106041	0.108205	0.109982	0.111492	0.112802	0.113961	0.115		
6.5	0.087774	0.099441	0.103276	0.106041	0.108205	0.109983	0.111492	0.112802	0.113961	0.115		
6.7	0.087774	0.099441	0.103276	0.106041	0.108205	0.109983	0.111492	0.112802	0.113961	0.115		
6.9	0.087774	0.099441	0.103276	0.106041	0.108205	0.109983	0.111492	0.112802	0.113961	0.115		
7.1	0.087775	0.099441	0.103276	0.106041	0.108205	0.109983	0.111492	0.112802	0.113961	0.115		
7.3	0.087775	0.099441	0.103276	0.106041	0.108205	0.109983	0.111492	0.112802	0.113961	0.115		
7.5	0.087775	0.099441	0.103276	0.106041	0.108205	0.109983	0.111492	0.112802	0.113961	0.115		
7.7	0.087775	0.099441	0.103276	0.106041	0.108205	0.109983	0.111492	0.112802	0.113961	0.115		
7.9	0.087775	0.099441	0.103276	0.106041	0.108205	0.109983	0.111492	0.112802	0.113961	0.115		
8.05	0.087775	0.099441	0.103276	0.106041	0.108205	0.109983	0.111492	0.112802	0.113961	0.115		

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

s	m	R rata-rata									
		19.75158	36.63415	53.61896	70.6323	87.65754	104.6889	121.7238	138.7609	155.7995	172.8392
		$R = \sqrt{r_{jb}^2 + h^2}$									
$z = (\ln(a) - \ln(y))/\text{Standar Deviasi}$											
0.588	5.1	-2.19683	-2.21668	-2.22321	-2.22791	-2.23159	-2.23462	-2.23718	-2.23941	-2.24138	-2.24315
0.588	5.3	-2.19685	-2.21669	-2.22321	-2.22791	-2.23159	-2.23462	-2.23718	-2.23941	-2.24138	-2.24315
0.588	5.5	-2.19685	-2.21669	-2.22321	-2.22791	-2.23159	-2.23462	-2.23718	-2.23941	-2.24138	-2.24315
0.588	5.7	-2.19685	-2.21669	-2.22321	-2.22791	-2.23159	-2.23462	-2.23718	-2.23941	-2.24138	-2.24315
0.588	5.9	-2.19685	-2.21669	-2.22321	-2.22791	-2.23159	-2.23462	-2.23718	-2.23941	-2.24138	-2.24315
0.588	6.1	-2.19685	-2.21669	-2.22321	-2.22791	-2.23159	-2.23462	-2.23718	-2.23941	-2.24138	-2.24315
0.588	6.3	-2.19685	-2.21669	-2.22321	-2.22791	-2.23159	-2.23462	-2.23718	-2.23941	-2.24138	-2.24315
0.588	6.5	-2.19685	-2.21669	-2.22321	-2.22791	-2.23159	-2.23462	-2.23718	-2.23941	-2.24138	-2.24315
0.588	6.7	-2.19685	-2.21669	-2.22321	-2.22791	-2.23159	-2.23462	-2.23718	-2.23941	-2.24138	-2.24315
0.588	6.9	-2.19685	-2.21669	-2.22321	-2.22791	-2.23159	-2.23462	-2.23718	-2.23941	-2.24138	-2.24315
0.588	7.1	-2.19685	-2.21669	-2.22321	-2.22791	-2.23159	-2.23462	-2.23718	-2.23941	-2.24138	-2.24315
0.588	7.3	-2.19685	-2.21669	-2.22321	-2.22791	-2.23159	-2.23462	-2.23718	-2.23941	-2.24138	-2.24315
0.588	7.5	-2.19685	-2.21669	-2.22321	-2.22791	-2.23159	-2.23462	-2.23718	-2.23941	-2.24138	-2.24315
0.588	7.7	-2.19685	-2.21669	-2.22321	-2.22791	-2.23159	-2.23462	-2.23718	-2.23941	-2.24138	-2.24315
0.588	7.9	-2.19685	-2.21669	-2.22321	-2.22791	-2.23159	-2.23462	-2.23718	-2.23941	-2.24138	-2.24315
0.588	8.05	-2.19685	-2.21669	-2.22321	-2.22791	-2.23159	-2.23462	-2.23718	-2.23941	-2.24138	-2.24315

1.4 Probabilitas P(z)

Dihitung berdasarkan nilai z dan tabel distribusi normal.

m	R									
	19.75158	36.63415	53.61896	70.6323	87.65754	104.6889	121.7238	138.7609	155.7995	172.8392
P(z)										
5.1	1.714995	1.767077	1.785149	1.798469	1.809075	1.817911	1.825499	1.832157	1.838095	1.843458
5.3	1.715029	1.767097	1.785149	1.798469	1.809075	1.817911	1.825499	1.832157	1.838095	1.843458
5.5	1.71503	1.767097	1.785149	1.798469	1.809075	1.817911	1.825499	1.832157	1.838095	1.843458
5.7	1.71503	1.767097	1.78515	1.798469	1.809075	1.817911	1.825499	1.832157	1.838095	1.843458
5.9	1.71503	1.767098	1.78515	1.798469	1.809075	1.817911	1.825499	1.832157	1.838095	1.843458
6.1	1.715031	1.767098	1.78515	1.79847	1.809075	1.817911	1.825499	1.832157	1.838095	1.843458
6.3	1.715031	1.767098	1.78515	1.79847	1.809075	1.817911	1.825499	1.832158	1.838095	1.843458
6.5	1.715031	1.767098	1.78515	1.79847	1.809075	1.817911	1.825499	1.832158	1.838095	1.843458
6.7	1.715031	1.767098	1.78515	1.79847	1.809075	1.817911	1.825499	1.832158	1.838096	1.843458
6.9	1.715032	1.767098	1.78515	1.79847	1.809075	1.817912	1.825499	1.832158	1.838096	1.843458
7.1	1.715032	1.767099	1.78515	1.79847	1.809075	1.817912	1.8255	1.832158	1.838096	1.843458
7.3	1.715032	1.767099	1.785151	1.79847	1.809075	1.817912	1.8255	1.832158	1.838096	1.843458
7.5	1.715033	1.767099	1.785151	1.79847	1.809076	1.817912	1.8255	1.832158	1.838096	1.843458
7.7	1.715033	1.767099	1.785151	1.79847	1.809076	1.817912	1.8255	1.832158	1.838096	1.843459
7.9	1.715033	1.767099	1.785151	1.79847	1.809076	1.817912	1.8255	1.832158	1.838096	1.843459
8.05	1.715033	1.7671	1.785151	1.79847	1.809076	1.817912	1.8255	1.832158	1.838096	1.843459

1.5 Probabilitas Total

Dihitung berdasarkan probabilitas atenuasi, $P(z)$, Probabilitas Magnitudo, $F(m)$, dan Probabilitas Jarak (r).

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 ($P(x>X|m,R) = 1.800575796$

Contoh Perhitungan laju tahunan terlampaui

Dik: $M_{max} = 8.1$, $M_{min} = 5$, Slip Rate = 10 mm/y, $\beta = 1$

Dit: T_{max} , α , Rate(v), λ (laju Tahunan terlampaui)?

Penyelesaian

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

$$T_{max} = \left(\frac{1000}{10} \right) 10^{(0.92-5.46)} = 1520.54753 \text{ tahun}$$

$$b. \quad \alpha = \beta M_{max} - \ln T_{max}$$

$$\alpha = 1(8.1) - \ln 1520.54753 = 0.773174234$$

$$c. \quad \text{Rate kejadian gempa } (v) = \exp(\alpha - \beta m_0)$$

$$v = \exp(0.773174234 - 1(5)) = 0.014598657 \text{ kejadian/tahun}$$

$$d. \quad \lambda = v \int_M \int_R P(X > x|m, r) f_M(m) f_R(r) dr dm$$

$$\lambda = 0.773174234 \times 1.800575796 = 1.392158812$$

Lampiran 2 Tabel nilai PGA Provinsi Maluku Utara

2.1 Tabel Nilai Percepatan Tanah Maksimum di Batuan Dasar Provinsi Maluku Utara.

Long	Lat	PGA
128.5	2.55	1.6854
128.6	2.55	1.8369
128.4	2.45	1.5195
128.5	2.45	1.6431
128.6	2.45	1.7904
128.3	2.35	1.3822
128.4	2.35	1.4787
128.5	2.35	1.5988
128.6	2.35	1.7418
127.8	2.25	1.1688
128.3	2.25	1.3447
128.4	2.25	1.4378
128.5	2.25	1.5529
128.6	2.25	1.6903
128	2.15	1.1581
128.3	2.15	1.3083
128.4	2.15	1.3958
128.5	2.15	1.5046
127.9	2.05	1.1276
128.3	2.05	1.2739
127.8	1.95	1.1489
127.7	1.85	1.2137
127.8	1.85	1.1497
127.6	1.75	1.3318
127.7	1.75	1.2227
127.8	1.75	1.1508
127.9	1.75	1.1077
127.6	1.65	1.3747
127.7	1.65	1.2302
127.8	1.65	1.152
127.9	1.65	1.1038
127.6	1.55	1.4083
127.7	1.55	1.2361
127.8	1.55	1.1527
127.9	1.55	1.0987
128	1.55	1.0721
128.6	1.55	1.3137
128.7	1.55	1.3887
127.6	1.45	1.4388

127.7	1.45	1.2403
127.8	1.45	1.1526
127.9	1.45	1.0917
128	1.45	1.05
128.4	1.45	1.1968
128.5	1.45	1.2192
128.6	1.45	1.2424
127.5	1.35	1.6764
127.6	1.35	1.4693
127.7	1.35	1.2451
127.8	1.35	1.1522
127.9	1.35	1.0782
128.2	1.35	1.145
128.3	1.35	1.1447
128.4	1.35	1.1437
128.5	1.35	1.1343
128.6	1.35	1.1599
128.7	1.35	1.1953
127.5	1.25	1.7252
127.6	1.25	1.4973
127.7	1.25	1.2557
127.8	1.25	1.1526
127.9	1.25	1.063
128.1	1.25	1.1206
128.2	1.25	1.1115
128.3	1.25	1.0958
128.4	1.25	1.0773
128.5	1.25	1.042
128.6	1.25	1.0556
128.7	1.25	1.0775
127.5	1.15	1.7706
127.6	1.15	1.5224
127.7	1.15	1.27
127.8	1.15	1.1521
128.2	1.15	1.0618
128.3	1.15	1.0162
128.4	1.15	0.97807
128.5	1.15	0.92919
128.6	1.15	0.92278
127.5	1.05	1.8099
127.6	1.05	1.5537
127.7	1.05	1.2809
128	1.05	1.1111
128.1	1.05	1.0634

128.2	1.05	0.99633
128.3	1.05	0.93596
128.4	1.05	0.85617
128.5	1.05	0.83189
128.6	1.05	0.81275
127.6	0.95	1.5923
128	0.95	1.0996
128.1	0.95	1.0132
128.2	0.95	0.93055
128.3	0.95	0.86155
128.4	0.95	0.78584
127.7	0.85	1.2988
127.9	0.85	1.1463
128	0.85	1.067
128.1	0.85	0.95572
128.2	0.85	0.86504
127.4	0.75	1.5408
127.6	0.75	1.5512
127.7	0.75	1.3016
127.8	0.75	1.202
127.9	0.75	1.125
128	0.75	1.0088
128.1	0.75	0.89078
128.2	0.75	0.80021
127.4	0.65	1.5258
127.6	0.65	1.5122
127.7	0.65	1.2879
127.8	0.65	1.174
127.9	0.65	1.0749
128	0.65	0.93408
128.1	0.65	0.82296
128.2	0.65	0.73814
128.3	0.65	0.67674
127.6	0.55	1.4534
127.7	0.55	1.2241
127.8	0.55	1.1242
127.9	0.55	0.9849
128	0.55	0.85647
128.1	0.55	0.75944
128.2	0.55	0.68752
128.3	0.55	0.63487
128.4	0.55	0.59019
128.5	0.55	0.55311
128.6	0.55	0.52141

127.4	0.45	1.584
127.6	0.45	1.3303
127.7	0.45	1.171
127.8	0.45	1.0518
127.9	0.45	0.90444
128.2	0.45	0.64906
128.3	0.45	0.5996
128.4	0.45	0.55539
128.5	0.45	0.51944
128.6	0.45	0.48874
127.4	0.35	1.5895
127.7	0.35	1.1166
127.8	0.35	0.96544
128.6	0.35	0.44675
127.8	0.25	0.88829
127.9	0.25	0.77719
127.7	0.15	0.95639
127.8	0.15	0.82692
127.9	0.15	0.73238
127.8	0.05	0.78003
127.7	-0.05	0.82276
127.8	-0.05	0.74902
127.9	-0.05	0.68636
129.4	-0.05	0.22919
129.6	-0.05	0.21797
127.7	-0.15	0.78094
127.8	-0.15	0.7207
127.9	-0.15	0.6629
129.5	-0.15	0.22538
127.1	-0.25	1.1698
127.7	-0.25	0.74614
127.8	-0.25	0.69259
127.9	-0.25	0.63921
127.2	-0.35	1.0887
127.4	-0.35	0.94929
127.5	-0.35	0.83694
127.9	-0.35	0.61531
128	-0.35	0.56622
127.2	-0.45	1.0243
127.3	-0.45	0.95358
127.4	-0.45	0.86553
127.5	-0.45	0.7819
127.6	-0.45	0.72507
128	-0.45	0.54373

127.4	-0.55	0.79894
127.5	-0.55	0.73465
127.6	-0.55	0.68755
128	-0.55	0.5233
128.1	-0.55	0.48099
128.4	-0.55	0.35758
127.4	-0.65	0.74322
127.5	-0.65	0.69169
127.6	-0.65	0.65161
128	-0.65	0.50296
128.1	-0.65	0.45916
128.6	-0.65	0.31906
127.2	-0.75	0.75449
127.3	-0.75	0.7308
127.5	-0.75	0.65199
127.6	-0.75	0.61721
127.7	-0.75	0.58555
127.8	-0.75	0.55297
128.2	-0.75	0.40965
127.8	-0.85	0.52679
128.1	-0.85	0.43228
128.3	-0.85	0.38486
128.4	-1.15	0.46414
127.5	-1.25	0.51626
127.6	-1.25	0.50333
127.6	-1.45	0.53634
127.7	-1.45	0.54926
127.8	-1.45	0.56336
127.9	-1.45	0.58947
127.5	-1.55	0.59499
127.6	-1.55	0.60222
127.7	-1.55	0.62997
127.8	-1.55	0.66721
127.9	-1.55	0.73155
128	-1.55	0.82406
124.6	-1.65	1.2344
127.5	-1.65	0.68274
127.6	-1.65	0.74077
127.7	-1.65	0.81957
127.8	-1.65	0.94329
127.9	-1.65	1.1253
128	-1.65	1.3032
128.1	-1.65	1.5725
128.3	-1.65	2.3249

124.4	-1.75	0.55756
124.5	-1.75	0.63009
124.6	-1.75	0.73729
124.7	-1.75	0.91056
124.8	-1.75	1.1549
124.9	-1.75	1.2915
125	-1.75	1.4617
125.1	-1.75	1.6496
124.4	-1.85	0.43975
124.5	-1.85	0.49916
124.6	-1.85	0.55943
124.7	-1.85	0.64782
124.8	-1.85	0.77607
124.9	-1.85	0.92391
125	-1.85	1.1097
125.1	-1.85	1.2753
125.2	-1.85	1.408
125.3	-1.85	1.5681
125.4	-1.85	1.7389
125.5	-1.85	1.7543
125.6	-1.85	1.2514
125.7	-1.85	1.1536
125.8	-1.85	1.1537
125.9	-1.85	1.1579
126	-1.85	1.161
126.1	-1.85	1.1615
126.2	-1.85	1.1605
124.4	-1.95	0.36255
124.5	-1.95	0.41296
124.6	-1.95	0.49652
124.7	-1.95	0.6014
124.4	-2.05	0.31801
125.9	-2.05	1.249
125.9	-2.15	0.71094
126	-2.35	0.40139

2.2 Tabel Nilai Percepatan Tanah Maksimum pada Kondisi 0.2 detik Provinsi Maluku Utara

Long	Lat	PGA
128.5	2.55	0.709
128.6	2.55	0.777
128.4	2.45	0.64
128.5	2.45	0.692

128.6	2.45	0.757
128.3	2.35	0.585
128.4	2.35	0.624
128.5	2.35	0.674
128.6	2.35	0.737
127.8	2.25	0.534
128.3	2.25	0.572
128.4	2.25	0.608
128.5	2.25	0.656
128.6	2.25	0.717
128	2.15	0.507
128.3	2.15	0.558
128.4	2.15	0.593
128.5	2.15	0.638
127.9	2.05	0.505
128.3	2.05	0.546
127.8	1.95	0.53
127.7	1.85	0.585
127.8	1.85	0.531
127.6	1.75	0.693
127.7	1.75	0.589
127.8	1.75	0.532
127.9	1.75	0.499
127.6	1.65	0.722
127.7	1.65	0.592
127.8	1.65	0.533
127.9	1.65	0.498
127.6	1.55	0.743
127.7	1.55	0.594
127.8	1.55	0.534
127.9	1.55	0.496
128	1.55	0.477
128.6	1.55	0.571
128.7	1.55	0.608
127.6	1.45	0.762
127.7	1.45	0.596
127.8	1.45	0.534
127.9	1.45	0.494
128	1.45	0.469
128.4	1.45	0.524
128.5	1.45	0.532
128.6	1.45	0.542
127.5	1.35	1.04
127.6	1.35	0.783

127.7	1.35	0.598
127.8	1.35	0.535
127.9	1.35	0.492
128.2	1.35	0.511
128.3	1.35	0.507
128.4	1.35	0.504
128.5	1.35	0.498
128.6	1.35	0.509
128.7	1.35	0.527
127.5	1.25	1.08
127.6	1.25	0.802
127.7	1.25	0.605
127.8	1.25	0.537
127.9	1.25	0.489
128.1	1.25	0.507
128.2	1.25	0.499
128.3	1.25	0.488
128.4	1.25	0.475
128.5	1.25	0.457
128.6	1.25	0.462
128.7	1.25	0.473
127.5	1.15	1.11
127.6	1.15	0.821
127.7	1.15	0.615
127.8	1.15	0.539
128.2	1.15	0.482
128.3	1.15	0.456
128.4	1.15	0.436
128.5	1.15	0.412
128.6	1.15	0.408
127.5	1.05	1.13
127.6	1.05	0.847
127.7	1.05	0.623
128	1.05	0.513
128.1	1.05	0.491
128.2	1.05	0.456
128.3	1.05	0.424
128.4	1.05	0.386
128.5	1.05	0.374
128.6	1.05	0.365
127.6	0.95	0.884
128	0.95	0.511
128.1	0.95	0.473
128.2	0.95	0.429

128.3	0.95	0.395
128.4	0.95	0.359
127.7	0.85	0.64
127.9	0.85	0.541
128	0.85	0.5
128.1	0.85	0.448
128.2	0.85	0.401
127.4	0.75	0.846
127.6	0.75	0.851
127.7	0.75	0.643
127.8	0.75	0.577
127.9	0.75	0.53
128	0.75	0.481
128.1	0.75	0.418
128.2	0.75	0.374
127.4	0.65	0.836
127.6	0.65	0.82
127.7	0.65	0.636
127.8	0.65	0.561
127.9	0.65	0.507
128	0.65	0.444
128.1	0.65	0.387
128.2	0.65	0.347
128.3	0.65	0.319
127.6	0.55	0.774
127.7	0.55	0.595
127.8	0.55	0.533
127.9	0.55	0.474
128	0.55	0.406
128.1	0.55	0.358
128.2	0.55	0.325
128.3	0.55	0.302
128.4	0.55	0.283
128.5	0.55	0.267
128.6	0.55	0.253
127.4	0.45	0.934
127.6	0.45	0.676
127.7	0.45	0.564
127.8	0.45	0.502
127.9	0.45	0.432
128.2	0.45	0.309
128.3	0.45	0.287
128.4	0.45	0.268
128.5	0.45	0.253

128.6	0.45	0.241
127.4	0.35	0.968
127.7	0.35	0.531
127.8	0.35	0.465
128.6	0.35	0.229
127.8	0.25	0.424
127.9	0.25	0.368
127.7	0.15	0.461
127.8	0.15	0.392
127.9	0.15	0.346
127.8	0.05	0.368
127.7	-0.05	0.389
127.8	-0.05	0.353
127.9	-0.05	0.324
129.4	-0.05	0.14
129.6	-0.05	0.131
127.7	-0.15	0.368
127.8	-0.15	0.339
127.9	-0.15	0.313
129.5	-0.15	0.133
127.1	-0.25	0.631
127.7	-0.25	0.351
127.8	-0.25	0.326
127.9	-0.25	0.302
127.2	-0.35	0.551
127.4	-0.35	0.466
127.5	-0.35	0.4
127.9	-0.35	0.292
128	-0.35	0.271
127.2	-0.45	0.517
127.3	-0.45	0.477
127.4	-0.45	0.418
127.5	-0.45	0.371
127.6	-0.45	0.342
128	-0.45	0.261
127.4	-0.55	0.382
127.5	-0.55	0.348
127.6	-0.55	0.325
128	-0.55	0.253
128.1	-0.55	0.236
128.4	-0.55	0.191
127.4	-0.65	0.353
127.5	-0.65	0.328
127.6	-0.65	0.309

128	-0.65	0.245
128.1	-0.65	0.23
128.6	-0.65	0.172
127.2	-0.75	0.369
127.3	-0.75	0.35
127.5	-0.75	0.31
127.6	-0.75	0.294
127.7	-0.75	0.281
127.8	-0.75	0.267
128.2	-0.75	0.211
127.8	-0.85	0.258
128.1	-0.85	0.22
128.3	-0.85	0.198
128.4	-1.15	0.211
127.5	-1.25	0.255
127.6	-1.25	0.248
127.6	-1.45	0.249
127.7	-1.45	0.249
127.8	-1.45	0.248
127.9	-1.45	0.252
127.5	-1.55	0.27
127.6	-1.55	0.265
127.7	-1.55	0.268
127.8	-1.55	0.273
127.9	-1.55	0.285
128	-1.55	0.304
124.6	-1.65	0.451
127.5	-1.65	0.292
127.6	-1.65	0.3
127.7	-1.65	0.313
127.8	-1.65	0.334
127.9	-1.65	0.375
128	-1.65	0.446
128.1	-1.65	0.536
128.3	-1.65	0.849
124.4	-1.75	0.219
124.5	-1.75	0.242
124.6	-1.75	0.274
124.7	-1.75	0.323
124.8	-1.75	0.408
124.9	-1.75	0.488
125	-1.75	0.558
125.1	-1.75	0.663
124.4	-1.85	0.181

124.5	-1.85	0.198
124.6	-1.85	0.22
124.7	-1.85	0.247
124.8	-1.85	0.282
124.9	-1.85	0.32
125	-1.85	0.373
125.1	-1.85	0.458
125.2	-1.85	0.517
125.3	-1.85	0.587
125.4	-1.85	0.694
125.5	-1.85	0.764
125.6	-1.85	0.51
125.7	-1.85	0.436
125.8	-1.85	0.435
125.9	-1.85	0.435
126	-1.85	0.435
126.1	-1.85	0.435
126.2	-1.85	0.434
124.4	-1.95	0.159
124.5	-1.95	0.173
124.6	-1.95	0.194
124.7	-1.95	0.228
124.4	-2.05	0.146
125.9	-2.05	0.466
125.9	-2.15	0.276
126	-2.35	0.182

2.3 Tabel Nilai Percepatan Tanah Maksimum pada Kondisi 1 detik Provinsi Maluku Utara

Long	Lat	PGA
128.5	2.55	0.709
128.6	2.55	0.777
128.4	2.45	0.64
128.5	2.45	0.692
128.6	2.45	0.757
128.3	2.35	0.585
128.4	2.35	0.624
128.5	2.35	0.674
128.6	2.35	0.737
127.8	2.25	0.534
128.3	2.25	0.572
128.4	2.25	0.608
128.5	2.25	0.656
128.6	2.25	0.717

128	2.15	0.507
128.3	2.15	0.558
128.4	2.15	0.593
128.5	2.15	0.638
127.9	2.05	0.505
128.3	2.05	0.546
127.8	1.95	0.53
127.7	1.85	0.585
127.8	1.85	0.531
127.6	1.75	0.693
127.7	1.75	0.589
127.8	1.75	0.532
127.9	1.75	0.499
127.6	1.65	0.722
127.7	1.65	0.592
127.8	1.65	0.533
127.9	1.65	0.498
127.6	1.55	0.743
127.7	1.55	0.594
127.8	1.55	0.534
127.9	1.55	0.496
128	1.55	0.477
128.6	1.55	0.571
128.7	1.55	0.608
127.6	1.45	0.762
127.7	1.45	0.596
127.8	1.45	0.534
127.9	1.45	0.494
128	1.45	0.469
128.4	1.45	0.524
128.5	1.45	0.532
128.6	1.45	0.542
127.5	1.35	1.04
127.6	1.35	0.783
127.7	1.35	0.598
127.8	1.35	0.535
127.9	1.35	0.492
128.2	1.35	0.511
128.3	1.35	0.507
128.4	1.35	0.504
128.5	1.35	0.498
128.6	1.35	0.509
128.7	1.35	0.527
127.5	1.25	1.08

127.6	1.25	0.802
127.7	1.25	0.605
127.8	1.25	0.537
127.9	1.25	0.489
128.1	1.25	0.507
128.2	1.25	0.499
128.3	1.25	0.488
128.4	1.25	0.475
128.5	1.25	0.457
128.6	1.25	0.462
128.7	1.25	0.473
127.5	1.15	1.11
127.6	1.15	0.821
127.7	1.15	0.615
127.8	1.15	0.539
128.2	1.15	0.482
128.3	1.15	0.456
128.4	1.15	0.436
128.5	1.15	0.412
128.6	1.15	0.408
127.5	1.05	1.13
127.6	1.05	0.847
127.7	1.05	0.623
128	1.05	0.513
128.1	1.05	0.491
128.2	1.05	0.456
128.3	1.05	0.424
128.4	1.05	0.386
128.5	1.05	0.374
128.6	1.05	0.365
127.6	0.95	0.884
128	0.95	0.511
128.1	0.95	0.473
128.2	0.95	0.429
128.3	0.95	0.395
128.4	0.95	0.359
127.7	0.85	0.64
127.9	0.85	0.541
128	0.85	0.5
128.1	0.85	0.448
128.2	0.85	0.401
127.4	0.75	0.846
127.6	0.75	0.851
127.7	0.75	0.643

127.8	0.75	0.577
127.9	0.75	0.53
128	0.75	0.481
128.1	0.75	0.418
128.2	0.75	0.374
127.4	0.65	0.836
127.6	0.65	0.82
127.7	0.65	0.636
127.8	0.65	0.561
127.9	0.65	0.507
128	0.65	0.444
128.1	0.65	0.387
128.2	0.65	0.347
128.3	0.65	0.319
127.6	0.55	0.774
127.7	0.55	0.595
127.8	0.55	0.533
127.9	0.55	0.474
128	0.55	0.406
128.1	0.55	0.358
128.2	0.55	0.325
128.3	0.55	0.302
128.4	0.55	0.283
128.5	0.55	0.267
128.6	0.55	0.253
127.4	0.45	0.934
127.6	0.45	0.676
127.7	0.45	0.564
127.8	0.45	0.502
127.9	0.45	0.432
128.2	0.45	0.309
128.3	0.45	0.287
128.4	0.45	0.268
128.5	0.45	0.253
128.6	0.45	0.241
127.4	0.35	0.968
127.7	0.35	0.531
127.8	0.35	0.465
128.6	0.35	0.229
127.8	0.25	0.424
127.9	0.25	0.368
127.7	0.15	0.461
127.8	0.15	0.392
127.9	0.15	0.346

127.8	0.05	0.368
127.7	-0.05	0.389
127.8	-0.05	0.353
127.9	-0.05	0.324
129.4	-0.05	0.14
129.6	-0.05	0.131
127.7	-0.15	0.368
127.8	-0.15	0.339
127.9	-0.15	0.313
129.5	-0.15	0.133
127.1	-0.25	0.631
127.7	-0.25	0.351
127.8	-0.25	0.326
127.9	-0.25	0.302
127.2	-0.35	0.551
127.4	-0.35	0.466
127.5	-0.35	0.4
127.9	-0.35	0.292
128	-0.35	0.271
127.2	-0.45	0.517
127.3	-0.45	0.477
127.4	-0.45	0.418
127.5	-0.45	0.371
127.6	-0.45	0.342
128	-0.45	0.261
127.4	-0.55	0.382
127.5	-0.55	0.348
127.6	-0.55	0.325
128	-0.55	0.253
128.1	-0.55	0.236
128.4	-0.55	0.191
127.4	-0.65	0.353
127.5	-0.65	0.328
127.6	-0.65	0.309
128	-0.65	0.245
128.1	-0.65	0.23
128.6	-0.65	0.172
127.2	-0.75	0.369
127.3	-0.75	0.35
127.5	-0.75	0.31
127.6	-0.75	0.294
127.7	-0.75	0.281
127.8	-0.75	0.267
128.2	-0.75	0.211

127.8	-0.85	0.258
128.1	-0.85	0.22
128.3	-0.85	0.198
128.4	-1.15	0.211
127.5	-1.25	0.255
127.6	-1.25	0.248
127.6	-1.45	0.249
127.7	-1.45	0.249
127.8	-1.45	0.248
127.9	-1.45	0.252
127.5	-1.55	0.27
127.6	-1.55	0.265
127.7	-1.55	0.268
127.8	-1.55	0.273
127.9	-1.55	0.285
128	-1.55	0.304
124.6	-1.65	0.451
127.5	-1.65	0.292
127.6	-1.65	0.3
127.7	-1.65	0.313
127.8	-1.65	0.334
127.9	-1.65	0.375
128	-1.65	0.446
128.1	-1.65	0.536
128.3	-1.65	0.849
124.4	-1.75	0.219
124.5	-1.75	0.242
124.6	-1.75	0.274
124.7	-1.75	0.323
124.8	-1.75	0.408
124.9	-1.75	0.488
125	-1.75	0.558
125.1	-1.75	0.663
124.4	-1.85	0.181
124.5	-1.85	0.198
124.6	-1.85	0.22
124.7	-1.85	0.247
124.8	-1.85	0.282
124.9	-1.85	0.32
125	-1.85	0.373
125.1	-1.85	0.458
125.2	-1.85	0.517
125.3	-1.85	0.587
125.4	-1.85	0.694

125.5	-1.85	0.764
125.6	-1.85	0.51
125.7	-1.85	0.436
125.8	-1.85	0.435
125.9	-1.85	0.435
126	-1.85	0.435
126.1	-1.85	0.435
126.2	-1.85	0.434
124.4	-1.95	0.159
124.5	-1.95	0.173
124.6	-1.95	0.194
124.7	-1.95	0.228
124.4	-2.05	0.146
125.9	-2.05	0.466
125.9	-2.15	0.276
126	-2.35	0.182