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LAMPIRAN

Lampiran 1. Data Penelitian

Kabupaten/kota	Lintang	Bujur	Y	X1	X2	X3
Kepulauan Selayar	-6.1286	120.521	1.49	53.76	8.09	10.46
Bulukumba	-5.3935	120.2582	1.26	38.88	8.01	10.37
Bantaeng	-5.5007	119.9673	2.72	61	6.81	4.85
Jeneponto	-5.5897	119.6969	2.21	28.69	6.75	4.19
Takalar	-5.4056	119.4788	2.63	40.18	7.64	7.32
Gowa	-5.2723	119.7169	3.26	32.7	8.4	6.62
Sinjai	-5.1985	120.1523	1.8	51.29	7.79	3.78
Maros	-5.0403	119.6674	5.04	58.31	8.02	4.41
Pangkep	-4.8541	119.5373	5.23	86.74	8.05	9.64
Barru	-4.4829	119.6829	5.32	47.5	8.25	6.86
Bone	-4.6715	120.1492	2.27	53.67	7.36	5.33
Soppeng	-4.3336	119.8737	3.4	58.22	7.96	4.15
Wajo	-4.0310	120.1498	2.54	64.14	7.16	9.46
Sidrap	-3.8188	119.9839	3.56	51	8.04	5.59
Pinrang	-3.6391	119.6063	2.79	57.71	8.04	6.87
Enrekang	-3.4909	119.8744	0.58	39.13	8.93	8.83
Luwu	-3.2871	120.2062	3.85	54.03	8.48	8.74
Tana Toraja	-3.1116	119.7481	2.32	30.09	8.52	17.78
Luwu Utara	-2.3680	120.1804	2.81	48.96	7.87	7.24
Luwu Timur	-2.5040	121.075	4.48	92.98	8.92	3.16
Toraja Utara	-2.8922	119.8693	1.99	42.18	8.26	9.92
Makassar	-5.1319	119.4534	11.82	145.89	11.55	1.23
Pare Pare	-4.0077	119.6301	5.6	56.16	10.66	3.18
Palopo	-3.0076	120.2017	8.2	51.18	11.09	3.56

Lampiran 2. Hasil Analisis Regresi Linier Berganda

```
> reg=lm(Y~X1+X2+X3, data=apa)
> reg
```

```
Call:
lm(formula = Y ~ X1 + X2 + X3, data = apa)
```

```
Coefficients:
(Intercept)          X1          X2          X3
   -6.48012    0.04045    1.04138   -0.12620
```

```
> err.reg=residuals(reg)
> summary(reg)
```

```
Call:
lm(formula = Y ~ X1 + X2 + X3, data = apa)
```

```
Residuals:
    Min       1Q   Median       3Q      Max
-2.7078 -0.6557  0.2082  0.6333  2.1532
```

```
Coefficients:
              Estimate Std. Error t value Pr(>|t|)
(Intercept) -6.48012     2.07159   -3.128 0.005296 **
X1           0.04045     0.01270    3.186 0.004646 **
X2           1.04138     0.24236    4.297 0.000351 ***
X3          -0.12620     0.08069   -1.564 0.133514
```

```
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
Residual standard error: 1.211 on 20 degrees of freedom
Multiple R-squared:  0.784,    Adjusted R-squared:  0.7516
F-statistic: 24.2 on 3 and 20 DF,  p-value: 7.323e-07
```

Lampiran 3. Jarak *Euclidean*

	1	2	3	4	5	6	7	8	9	10	...	20	21	22	23	24
1	0.0000	0.7806	0.8372	0.9847	1.2684	1.1747	1.0005	1.3831	1.6100	1.8468	...	3.6667	3.3014	1.4606	2.3005	3.1373
2	0.7806	0.0000	0.3100	0.5947	0.7795	0.5548	0.2219	0.6884	0.9004	1.0771	...	3.0028	2.5314	0.8463	1.5216	2.3866
3	0.8372	0.3100	0.0000	0.2848	0.4977	0.3389	0.3542	0.5495	0.7765	1.0567	...	3.1949	2.6103	0.6326	1.5306	2.5041
4	0.9847	0.5947	0.2848	0.0000	0.2853	0.3180	0.6003	0.5502	0.7527	1.1069	...	3.3795	2.7030	0.5185	1.5835	2.6310
5	1.2684	0.7795	0.4977	0.2853	0.0000	0.2728	0.7046	0.4111	0.5546	0.9450	...	3.3117	2.5436	0.2749	1.4061	2.5047
6	1.1747	0.5548	0.3389	0.3180	0.2728	0.0000	0.4416	0.2372	0.4552	0.7901	...	3.0836	2.3850	0.2986	1.2677	2.3161
7	1.0005	0.2219	0.3542	0.6003	0.7046	0.4416	0.0000	0.5100	0.7049	0.8558	...	2.8482	2.3237	0.7021	1.3003	2.1915
8	1.3831	0.6884	0.5495	0.5502	0.4111	0.2372	0.5100	0.0000	0.2272	0.5576	...	2.9008	2.1576	0.2328	1.0333	2.1018
9	1.6100	0.9004	0.7765	0.7527	0.5546	0.4552	0.7049	0.2272	0.0000	0.3987	...	2.8085	1.9898	0.2902	0.8515	1.9624
10	1.8468	1.0771	1.0567	1.1069	0.9450	0.7901	0.8558	0.5576	0.3987	0.0000	...	2.4196	1.6016	0.6884	0.4782	1.5639
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
19	3.7760	3.0265	3.1399	3.2578	3.1176	2.9411	2.8307	2.7211	2.5679	2.1727	...	0.9050	0.6095	2.8579	1.7295	0.6399
20	3.6667	3.0028	3.1949	3.3795	3.3117	3.0836	2.8482	2.9008	2.8085	2.4196	...	0.0000	1.2667	3.0880	2.0854	1.0081
21	3.3014	2.5314	2.6103	2.7030	2.5436	2.3850	2.3237	2.1576	1.9898	1.6016	...	1.2667	0.0000	2.2780	1.1408	0.3519
22	1.4606	0.8463	0.6326	0.5185	0.2749	0.2986	0.7021	0.2328	0.2902	0.6884	...	3.0880	2.2780	0.0000	1.1381	2.2523
23	2.3005	1.5216	1.5306	1.5835	1.4061	1.2677	1.3003	1.0333	0.8515	0.4782	...	2.0854	1.1408	1.1381	0.0000	1.1519
24	3.1373	2.3866	2.5041	2.6310	2.5047	2.3161	2.1915	2.1018	1.9624	1.5639	...	1.0081	0.3519	2.2523	1.1519	0.0000

Lampiran 4. Matriks Pembobot Jarak *Exponential*

	1	2	3	4	5	6	7	8	9	10	...	20	21	22	23	24
1	1	0.4221	0.3965	0.3369	0.2462	0.2731	0.331	0.2169	0.1688	0.1299	...	0.0174	0.026	0.1991	0.0787	0.0312
2	0.4221	1	0.71	0.5183	0.4226	0.5417	0.7825	0.4674	0.3697	0.3042	...	0.0362	0.061	0.3925	0.1861	0.0716
3	0.3965	0.71	1	0.73	0.577	0.6876	0.6761	0.5449	0.424	0.3111	...	0.0293	0.0559	0.4971	0.1843	0.0628
4	0.3369	0.5183	0.73	1	0.7296	0.7037	0.5151	0.5445	0.4353	0.2943	...	0.0239	0.0504	0.5639	0.1738	0.0546
5	0.2462	0.4226	0.577	0.7296	1	0.7397	0.4591	0.6349	0.5418	0.352	...	0.0257	0.0602	0.738	0.2114	0.0628
6	0.2731	0.5417	0.6876	0.7037	0.7397	1	0.6139	0.7694	0.6047	0.4177	...	0.0331	0.0717	0.719	0.2464	0.0774
7	0.331	0.7825	0.6761	0.5151	0.4591	0.6139	1	0.5692	0.4589	0.3884	...	0.043	0.0767	0.4603	0.2377	0.0888
8	0.2169	0.4674	0.5449	0.5445	0.6349	0.7694	0.5692	1	0.778	0.54	...	0.0405	0.0922	0.7732	0.3192	0.098
9	0.1688	0.3697	0.424	0.4353	0.5418	0.6047	0.4589	0.778	1	0.6437	...	0.0449	0.1109	0.7256	0.3903	0.1144
10	0.1299	0.3042	0.3111	0.2943	0.352	0.4177	0.3884	0.54	0.6437	1	...	0.069	0.1704	0.4674	0.5895	0.1776
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
19	0.0154	0.0353	0.0311	0.0273	0.0319	0.0388	0.0438	0.0494	0.0586	0.0906	...	0.3679	0.5099	0.0425	0.1479	0.4931
20	0.0174	0.0362	0.0293	0.0239	0.0257	0.0331	0.043	0.0405	0.0449	0.069	...	1	0.2467	0.033	0.0998	0.3282
21	0.026	0.061	0.0559	0.0504	0.0602	0.0717	0.0767	0.0922	0.1109	0.1704	...	0.2467	1	0.0807	0.2835	0.6779
22	0.1991	0.3925	0.4971	0.5639	0.738	0.719	0.4603	0.7732	0.7256	0.4674	...	0.033	0.0807	1	0.2843	0.083
23	0.0787	0.1861	0.1843	0.1738	0.2114	0.2464	0.2377	0.3192	0.3903	0.5895	...	0.0998	0.2835	0.2843	1	0.28
24	0.0312	0.0716	0.0628	0.0546	0.0628	0.0774	0.0888	0.098	0.1144	0.1776	...	0.3282	0.6779	0.083	0.28	1

Lampiran 5. Dekomposisi Matriks *MWM*

1	2	3	4	5	6	7	8	9	10	...	20	21	22	23	24
0.9530	0.2368	0.1921	0.1490	0.0464	0.0298	0.1115	-0.0395	-0.0741	-0.1191	...	0.0067	-0.1149	-0.0265	-0.1487	-0.1197
0.2368	0.6765	0.3674	0.1922	0.0846	0.1602	0.4248	0.0727	-0.0114	-0.0831	...	-0.1127	-0.2182	0.0287	-0.1796	-0.2176
0.1921	0.3674	0.6383	0.3848	0.2199	0.2870	0.2993	0.1312	0.0238	-0.0953	...	-0.1387	-0.2423	0.1141	-0.2005	-0.2454
0.1490	0.1922	0.3848	0.6713	0.3890	0.3195	0.1547	0.1472	0.0516	-0.0956	...	-0.1277	-0.2313	0.1974	-0.1945	-0.2371
0.0464	0.0846	0.2199	0.3890	0.6475	0.3437	0.0868	0.2257	0.1462	-0.0498	...	-0.1377	-0.2335	0.3597	-0.1687	-0.2408
0.0298	0.1602	0.2870	0.3195	0.3437	0.5604	0.1981	0.3167	0.1656	-0.0277	...	-0.1739	-0.2655	0.2971	-0.1773	-0.2698
0.1115	0.4248	0.2993	0.1547	0.0868	0.1981	0.6080	0.1403	0.0436	-0.0331	...	-0.1402	-0.2367	0.0622	-0.1623	-0.2346
-0.0395	0.0727	0.1312	0.1472	0.2257	0.3167	0.1403	0.5342	0.3257	0.0816	...	-0.1796	-0.2581	0.3381	-0.1176	-0.2623
-0.0741	-0.0114	0.0238	0.0516	0.1462	0.1656	0.0436	0.3257	0.5613	0.1988	...	-0.1616	-0.2258	0.3042	-0.0330	-0.2324
-0.1191	-0.0831	-0.0953	-0.0956	-0.0498	-0.0277	-0.0331	0.0816	0.1988	0.5489	...	-0.1437	-0.1726	0.0397	0.1601	-0.1753
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
-0.0410	-0.1593	-0.1825	-0.1699	-0.1772	-0.2139	-0.1850	-0.2163	-0.1936	-0.1677	...	0.3478	0.3597	-0.1925	-0.0889	0.3328
0.0067	-0.1127	-0.1387	-0.1277	-0.1377	-0.1739	-0.1402	-0.1796	-0.1616	-0.1437	...	1.0256	0.1421	-0.1564	-0.0913	0.2136
-0.1149	-0.2182	-0.2423	-0.2313	-0.2335	-0.2655	-0.2367	-0.2581	-0.2258	-0.1726	...	0.1421	0.7652	-0.2388	-0.0378	0.4331
-0.0265	0.0287	0.1141	0.1974	0.3597	0.2971	0.0622	0.3381	0.3042	0.0397	...	-0.1564	-0.2388	0.5958	-0.1217	-0.2465
-0.1487	-0.1796	-0.2005	-0.1945	-0.1687	-0.1773	-0.1623	-0.1176	-0.0330	0.1601	...	-0.0913	-0.0378	-0.1217	0.5921	-0.0513
-0.1197	-0.2176	-0.2454	-0.2371	-0.2408	-0.2698	-0.2346	-0.2623	-0.2324	-0.1753	...	0.2136	0.4331	-0.2465	-0.0513	0.7452

Lampiran 6. Eigenvektor dari Matriks Pembobot Spasial

E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	...	E20	E21	E22	E23	E24
-0.1159	-0.2248	0.4465	0.0038	-0.3754	0.6461	-0.3242	0.0769	0.0679	-0.0613	...	-0.0030	-0.0511	0.0166	0.0043	-0.2041
-0.2085	-0.1389	0.3909	0.0397	0.2280	-0.0980	0.1823	0.1395	0.1179	0.1366	...	0.0598	0.6063	-0.1280	0.0575	-0.2041
-0.2477	-0.1649	0.1948	0.1488	0.0240	-0.1654	0.1284	-0.1119	-0.1427	0.1524	...	0.0599	-0.3074	0.2530	-0.1728	-0.2041
-0.2458	-0.1652	-0.0282	0.1980	-0.2020	-0.1607	0.0055	-0.3227	-0.3314	0.0315	...	-0.1677	0.0769	-0.3876	0.0657	-0.2041
-0.2406	-0.0938	-0.2623	0.1533	-0.2191	-0.0986	-0.0785	-0.2037	-0.1275	-0.1031	...	0.1344	0.0704	0.4668	-0.2741	-0.2041
-0.2607	-0.0622	-0.1649	0.1093	-0.0085	-0.1270	-0.0026	-0.0321	0.0286	-0.0457	...	0.1482	0.1829	0.0485	0.5383	-0.2041
-0.2124	-0.0634	0.2828	-0.0088	0.3310	-0.1579	0.1750	0.1692	0.1508	0.0264	...	-0.1133	-0.5618	0.0426	-0.0094	-0.2041
-0.2256	0.0603	-0.2694	-0.0285	0.0924	0.0524	-0.0522	0.2023	0.2363	-0.0464	...	-0.0787	0.2208	-0.1278	-0.6709	-0.2041
-0.1698	0.1485	-0.3062	-0.1146	0.0736	0.2095	-0.0464	0.2476	0.1807	0.0826	...	0.0226	0.0451	0.4121	0.3157	-0.2041
-0.0481	0.3128	-0.0716	-0.2276	0.0973	0.2391	0.0514	-0.0275	-0.3002	0.2639	...	0.2226	-0.0557	-0.2911	-0.1001	-0.2041
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	
0.2054	-0.3183	-0.1120	-0.3366	0.0512	0.1242	0.2661	-0.5399	0.4769	0.1205	...	-0.0249	0.0042	0.0017	-0.0003	-0.2041
0.1450	-0.2835	-0.0195	-0.6031	-0.3941	-0.3233	0.1170	0.3847	-0.2160	-0.1350	...	0.0022	-0.0006	0.0021	-0.0006	-0.2041
0.2714	-0.2253	-0.1264	0.1077	0.2651	0.2075	0.0871	-0.0870	-0.1992	-0.2672	...	0.1804	-0.0304	-0.0030	-0.0003	-0.2041
-0.2229	0.0165	-0.3696	0.0349	-0.0842	0.0581	-0.0973	0.1029	0.1889	-0.0764	...	-0.1337	-0.3126	-0.4611	0.1794	-0.2041
0.1090	0.3129	0.0418	0.0298	-0.2125	0.0870	0.3103	-0.0559	-0.0744	0.2943	...	0.1916	-0.0089	-0.0147	-0.0110	-0.2041
0.2721	-0.2195	-0.0929	0.0123	0.2057	-0.0412	-0.3105	0.0146	-0.0995	0.3548	...	-0.0008	0.0032	-0.0061	0.0000	-0.2041

Lampiran 7. Eigenvalue dari Matriks Pembobor Spasial

```

> ###Eigenvektor###
> meig<- meigen(coords=coords,model = "exp")
4/24 eigen-pairs are extracted
> meig
$sf
      [,1]      [,2]      [,3]      [,4]
[1,] -0.11589662  0.22480860  0.44646161 -0.003783247
[2,] -0.20848392  0.13891521  0.39086152 -0.039743025
[3,] -0.24774659  0.16493264  0.19478263 -0.148838864
[4,] -0.24579219  0.16523078 -0.02823954 -0.198001824
[5,] -0.24060591  0.09378630 -0.26234884 -0.153267520
[6,] -0.26071060  0.06217315 -0.16486560 -0.109289253
[7,] -0.21235856  0.06342123  0.28282206  0.008801872
[8,] -0.22561053 -0.06030305 -0.26936772  0.028481570
[9,] -0.16980812 -0.14849598 -0.30620006  0.114636971
[10,] -0.04811343 -0.31282514 -0.07156526  0.227586451
[11,] -0.08764786 -0.18898739  0.16045877  0.240969453
[12,]  0.01026734 -0.34825162  0.06493613  0.219831424
[13,]  0.11378486 -0.27392942  0.17278772  0.070205596
[14,]  0.17891504 -0.25164031  0.12662803 -0.105625384
[15,]  0.19854825 -0.17523278  0.02798958 -0.255242082
[16,]  0.24896275 -0.08482024  0.02563591 -0.286361351
[17,]  0.26260184  0.09161234 -0.02229665 -0.117790179
[18,]  0.26969304  0.12250054 -0.08976657 -0.247751354
[19,]  0.20541904  0.31832453 -0.11204644  0.336646010
[20,]  0.14499065  0.28345090 -0.01953825  0.603097828
[21,]  0.27138265  0.22525781 -0.12641440 -0.107674102
[22,] -0.22289948 -0.01647977 -0.36956976 -0.034868677
[23,]  0.10904894 -0.31291892  0.04177149 -0.029764431
[24,]  0.27205942  0.21947058 -0.09291636 -0.012255884

$ev
[1] 3.5225036 1.1843500 0.3224397 0.1265463

$ev_full
[1] 3.522504e+00 1.184350e+00 3.224397e-01 1.265463e-01
5.551115e-16 -1.390374e-01
[7] -2.422393e-01 -3.504488e-01 -4.013431e-01 -4.944500e-01
-5.372867e-01 -6.063756e-01
[13] -6.665288e-01 -7.014295e-01 -7.351425e-01 -7.591765e-01
-7.736338e-01 -7.845678e-01
[19] -8.044292e-01 -8.087282e-01 -8.160628e-01 -8.171726e-01
-8.304891e-01 -8.498962e-01

```

Lampiran 8. Hasil Prediksi Model *Eigenvector Spatial Filtering*

Kabupaten/kota	Pred_ESF
Kepulauan Selayar	1.347626
Bulukumba	0.957587
Bantaeng	2.04033
Jeneponto	1.695743
Takalar	3.247001
Gowa	3.432696
Sinjai	2.424781
Maros	4.622162
Pangkep	5.062195
Barru	3.470439
Bone	2.325622
Soppeng	3.490283
Wajo	1.92174
Sidrap	2.915452
Pinrang	3.305587
Enrekang	3.200946
Luwu	3.488145
Tana Toraja	1.719238
Luwu Utara	3.267205
Luwu Timur	5.959585
Toraja Utara	3.07123
Makassar	11.54854
Pare Pare	6.024681
Palopo	6.631186

Lampiran 9. Hasil Prediksi Model *Random Effect Eigenvector Spatial Filtering*

Kabupaten/kota	Pred_RE_ESF
Kepulauan Selayar	1.985498593
Bulukumba	1.60711464
Bantaeng	2.150133825
Jeneponto	1.462424187
Takalar	2.921465485
Gowa	3.357939862
Sinjai	2.793308281
Maros	4.352636229
Pangkep	4.879465769
Barru	3.553717985
Bone	2.546516804
Soppeng	3.63466896
Wajo	2.103462838
Sidrap	2.988255861
Pinrang	3.212805515
Enrekang	3.182618564
Luwu	3.269768529
Tana Toraja	1.580912035
Luwu Utara	2.785846851
Luwu Timur	5.751231582
Toraja Utara	2.637446906
Makassar	11.54791772
Pare Pare	6.369632844
Palopo	6.49521013