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LAMPIRAN

Lampiran 1. Koefisien *Shapiro-Wilk*

n	15	16	17	18	19	20	21	22	23	24	25
a_1	0.515	0.5056	0.4968	0.4886	0.4808	0.4734	0.4643	0.459	0.4542	0.4493	0.445
a_2	0.3306	0.329	0.3273	0.3253	0.3232	0.3211	0.3185	0.3156	0.3126	0.3098	0.3069
a_3	0.2495	0.2521	0.254	0.2553	0.2561	0.2565	0.2578	0.2571	0.2563	0.2554	0.2543
a_4	0.1878	0.1939	0.1988	0.2027	0.2059	0.2085	0.2119	0.2131	0.2139	0.2145	0.2148
a_5	0.1353	0.1447	0.1524	0.1587	0.1641	0.1686	0.1736	0.1764	0.1787	0.1807	0.1822
a_6	0.0880	0.1005	0.1109	0.1197	0.1271	0.1334	0.1399	0.1443	0.148	0.1512	0.1539
a_7	0.0433	0.0593	0.0725	0.0837	0.0932	0.1013	0.1092	0.1150	0.1201	0.1245	0.1283
a_8		0.0196	0.0359	0.0496	0.0612	0.0711	0.0804	0.0878	0.0941	0.0997	0.1046
a_9				0.0163	0.0303	0.0422	0.053	0.0618	0.0696	0.0764	0.0823
a_{10}						0.014	0.0263	0.0368	0.0459	0.0539	0.061
a_{11}								0.0122	0.0228	0.0321	0.0403
a_{12}									0.0000	0.0107	0.02

Lampiran 2. Jarak *Euclidean* antar Lokasi

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	0.000	1.087	0.806	0.255	1.988	0.322	0.299	0.791	0.628	2.513	1.495	2.166	3.155	3.098	0.554	0.783	1.905	1.681	0.315	1.153	0.501	2.395	2.603	1.493
2	1.087	0.000	0.503	1.128	0.955	0.868	1.126	1.836	0.731	1.530	0.414	1.224	2.380	2.099	0.560	0.355	0.825	0.692	0.886	0.223	0.991	1.333	1.563	0.646
3	0.806	0.503	0.000	0.744	1.219	0.738	0.973	1.446	0.797	1.715	0.813	1.364	2.370	2.300	0.507	0.508	1.196	0.902	0.515	0.428	0.959	1.640	1.826	0.690
4	0.255	1.128	0.744	0.000	1.962	0.531	0.554	0.711	0.824	2.453	1.515	2.098	3.019	3.038	0.668	0.881	1.917	1.646	0.243	1.145	0.743	2.381	2.570	1.426
5	1.988	0.955	1.219	1.962	0.000	1.812	2.071	2.664	1.683	0.591	0.566	0.383	1.585	1.146	1.504	1.309	0.297	0.319	1.727	0.836	1.946	0.426	0.616	0.585
6	0.322	0.868	0.738	0.531	1.812	0.000	0.259	1.104	0.306	2.368	1.281	2.037	3.102	2.948	0.309	0.526	1.691	1.523	0.428	0.985	0.249	2.201	2.426	1.379
7	0.299	1.126	0.973	0.554	2.071	0.259	0.000	0.955	0.490	2.626	1.539	2.293	3.343	3.206	0.567	0.780	1.948	1.781	0.564	1.244	0.258	2.459	2.685	1.631
8	0.791	1.836	1.446	0.711	2.664	1.104	0.955	0.000	1.406	3.132	2.226	2.774	3.600	3.714	1.338	1.564	2.628	2.345	0.954	1.855	1.213	3.086	3.266	2.112
9	0.628	0.731	0.797	0.824	1.683	0.306	0.490	1.406	0.000	2.261	1.124	1.952	3.080	2.828	0.292	0.383	1.520	1.422	0.673	0.904	0.277	2.043	2.284	1.332
10	2.513	1.530	1.715	2.453	0.591	2.368	2.626	3.132	2.261	0.000	1.156	0.360	1.080	0.586	2.064	1.883	0.844	0.845	2.230	1.382	2.519	0.454	0.294	1.026
11	1.495	0.414	0.813	1.515	0.566	1.281	1.539	2.226	1.124	1.156	0.000	0.889	2.090	1.709	0.973	0.762	0.412	0.381	1.272	0.386	1.393	0.922	1.160	0.510
12	2.166	1.224	1.364	2.098	0.383	2.037	2.293	2.774	1.952	0.360	0.889	0.000	1.211	0.941	1.737	1.570	0.680	0.532	1.878	1.056	2.201	0.551	0.564	0.674
13	3.155	2.380	2.370	3.019	1.585	3.102	3.343	3.600	3.080	1.080	2.090	1.211	0.000	0.990	2.829	2.700	1.875	1.715	2.843	2.180	3.301	1.531	1.314	1.748
14	3.098	2.099	2.300	3.038	1.146	2.948	3.206	3.714	2.828	0.586	1.709	0.941	0.990	0.000	2.642	2.454	1.350	1.425	2.815	1.963	3.091	0.843	0.573	1.612
15	0.554	0.560	0.507	0.668	1.504	0.309	0.567	1.338	0.292	2.064	0.973	1.737	2.829	2.642	0.000	0.230	1.384	1.219	0.461	0.682	0.473	1.892	2.117	1.090
16	0.783	0.355	0.508	0.881	1.309	0.526	0.780	1.564	0.383	1.883	0.762	1.570	2.700	2.454	0.230	0.000	1.169	1.041	0.656	0.522	0.637	1.684	1.917	0.952
17	1.905	0.825	1.196	1.917	0.297	1.691	1.948	2.628	1.520	0.844	0.412	0.680	1.875	1.350	1.384	1.169	0.000	0.415	1.676	0.774	1.793	0.526	0.782	0.688
18	1.681	0.692	0.902	1.646	0.319	1.523	1.781	2.345	1.422	0.845	0.381	0.532	1.715	1.425	1.219	1.041	0.415	0.000	1.412	0.538	1.675	0.745	0.925	0.282
19	0.315	0.886	0.515	0.243	1.727	0.428	0.564	0.954	0.673	2.230	1.272	1.878	2.843	2.815	0.461	0.656	1.676	1.412	0.000	0.904	0.674	2.144	2.337	1.204
20	1.153	0.223	0.428	1.145	0.836	0.985	1.244	1.855	0.904	1.382	0.386	1.056	2.180	1.963	0.682	0.522	0.774	0.538	0.904	0.000	1.145	1.244	1.451	0.434
21	0.501	0.991	0.959	0.743	1.946	0.249	0.258	1.213	0.277	2.519	1.393	2.201	3.301	3.091	0.473	0.637	1.793	1.675	0.674	1.145	0.000	2.314	2.552	1.561
22	2.395	1.333	1.640	2.381	0.426	2.201	2.459	3.086	2.043	0.454	0.922	0.551	1.531	0.843	1.892	1.684	0.526	0.745	2.144	1.244	2.314	0.000	0.270	1.008
23	2.603	1.563	1.826	2.570	0.616	2.426	2.685	3.266	2.284	0.294	1.160	0.564	1.314	0.573	2.117	1.917	0.782	0.925	2.337	1.451	2.552	0.270	0.000	1.158
24	1.493	0.646	0.690	1.426	0.585	1.379	1.631	2.112	1.332	1.026	0.510	0.674	1.748	1.612	1.090	0.952	0.688	0.282	1.204	0.434	1.561	1.008	1.158	0.000

Lampiran 3. Matriks Pembobot Spasial (*Inverse Distance Weight*)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	0.000	0.031	0.042	0.132	0.017	0.104	0.112	0.042	0.053	0.013	0.022	0.016	0.011	0.011	0.061	0.043	0.018	0.020	0.107	0.029	0.067	0.014	0.013	0.022
2	0.030	0.000	0.065	0.029	0.034	0.038	0.029	0.018	0.045	0.021	0.079	0.027	0.014	0.016	0.059	0.093	0.040	0.048	0.037	0.148	0.033	0.025	0.021	0.051
3	0.046	0.074	0.000	0.050	0.030	0.050	0.038	0.026	0.047	0.022	0.046	0.027	0.016	0.016	0.073	0.073	0.031	0.041	0.072	0.087	0.039	0.023	0.020	0.054
4	0.147	0.033	0.050	0.000	0.019	0.070	0.067	0.052	0.045	0.015	0.025	0.018	0.012	0.012	0.056	0.042	0.019	0.023	0.154	0.033	0.050	0.016	0.015	0.026
5	0.018	0.037	0.029	0.018	0.000	0.019	0.017	0.013	0.021	0.060	0.062	0.092	0.022	0.031	0.023	0.027	0.119	0.110	0.020	0.042	0.018	0.083	0.057	0.060
6	0.092	0.034	0.040	0.056	0.016	0.000	0.114	0.027	0.097	0.013	0.023	0.015	0.010	0.010	0.096	0.056	0.018	0.019	0.069	0.030	0.119	0.013	0.012	0.021
7	0.117	0.031	0.036	0.063	0.017	0.135	0.000	0.037	0.072	0.013	0.023	0.015	0.010	0.011	0.062	0.045	0.018	0.020	0.062	0.028	0.136	0.014	0.013	0.021
8	0.088	0.038	0.048	0.098	0.026	0.063	0.073	0.000	0.050	0.022	0.031	0.025	0.019	0.019	0.052	0.045	0.027	0.030	0.073	0.038	0.058	0.023	0.021	0.033
9	0.053	0.046	0.042	0.041	0.020	0.109	0.068	0.024	0.000	0.015	0.030	0.017	0.011	0.012	0.115	0.087	0.022	0.024	0.050	0.037	0.121	0.016	0.015	0.025
10	0.017	0.028	0.025	0.018	0.073	0.018	0.016	0.014	0.019	0.000	0.037	0.120	0.040	0.074	0.021	0.023	0.051	0.051	0.019	0.031	0.017	0.095	0.147	0.042
11	0.024	0.086	0.044	0.024	0.063	0.028	0.023	0.016	0.032	0.031	0.000	0.040	0.017	0.021	0.037	0.047	0.087	0.094	0.028	0.093	0.026	0.039	0.031	0.070
12	0.019	0.034	0.030	0.020	0.108	0.020	0.018	0.015	0.021	0.115	0.046	0.000	0.034	0.044	0.024	0.026	0.061	0.077	0.022	0.039	0.019	0.075	0.073	0.061
13	0.027	0.036	0.037	0.029	0.055	0.028	0.026	0.024	0.028	0.080	0.042	0.072	0.000	0.088	0.031	0.032	0.046	0.051	0.031	0.040	0.026	0.057	0.066	0.050
14	0.021	0.032	0.029	0.022	0.058	0.023	0.021	0.018	0.024	0.113	0.039	0.071	0.067	0.000	0.025	0.027	0.049	0.047	0.024	0.034	0.022	0.079	0.116	0.041
15	0.054	0.054	0.059	0.045	0.020	0.097	0.053	0.022	0.103	0.015	0.031	0.017	0.011	0.011	0.000	0.131	0.022	0.025	0.065	0.044	0.064	0.016	0.014	0.028
16	0.041	0.091	0.064	0.037	0.025	0.061	0.041	0.021	0.084	0.017	0.042	0.021	0.012	0.013	0.140	0.000	0.028	0.031	0.049	0.062	0.051	0.019	0.017	0.034
17	0.020	0.047	0.032	0.020	0.129	0.023	0.020	0.015	0.025	0.046	0.093	0.057	0.020	0.028	0.028	0.033	0.000	0.093	0.023	0.050	0.021	0.073	0.049	0.056
18	0.020	0.049	0.038	0.021	0.106	0.022	0.019	0.014	0.024	0.040	0.089	0.064	0.020	0.024	0.028	0.033	0.082	0.000	0.024	0.063	0.020	0.045	0.037	0.120
19	0.108	0.038	0.066	0.140	0.020	0.080	0.060	0.036	0.051	0.015	0.027	0.018	0.012	0.012	0.074	0.052	0.020	0.024	0.000	0.038	0.051	0.016	0.015	0.028
20	0.028	0.146	0.076	0.028	0.039	0.033	0.026	0.018	0.036	0.024	0.084	0.031	0.015	0.017	0.048	0.062	0.042	0.060	0.036	0.000	0.028	0.026	0.022	0.075
21	0.069	0.035	0.036	0.046	0.018	0.138	0.133	0.028	0.124	0.014	0.025	0.016	0.010	0.011	0.073	0.054	0.019	0.021	0.051	0.030	0.000	0.015	0.013	0.022
22	0.017	0.031	0.025	0.018	0.098	0.019	0.017	0.014	0.020	0.092	0.045	0.076	0.027	0.050	0.022	0.025	0.079	0.056	0.020	0.034	0.018	0.000	0.155	0.041
23	0.017	0.028	0.024	0.017	0.070	0.018	0.016	0.013	0.019	0.147	0.037	0.077	0.033	0.076	0.020	0.023	0.055	0.047	0.019	0.030	0.017	0.160	0.000	0.037
24	0.025	0.058	0.054	0.026	0.064	0.027	0.023	0.018	0.028	0.036	0.073	0.055	0.021	0.023	0.034	0.039	0.054	0.132	0.031	0.086	0.024	0.037	0.032	0.000

Lampiran 4. Pendeteksian Pencilan Berdasarkan Nilai LISA

No	Kabupaten/Kota	L_i	Keterangan	No	Kabupaten/Kota	L_i	Keterangan
1	Bantaeng	0.0160	Bukan Pencilan	13	Luwu Timur	0.0154	Bukan Pencilan
2	Barru	-0.1761	Pencilan	14	Luwu Utara	-0.1032	Pencilan
3	Bone	-0.1390	Pencilan	15	Maros	-0.0227	Pencilan
4	Bulukumba	0.0514	Bukan Pencilan	16	Pangkajene Dan Kepulauan	-0.0334	Pencilan
5	Enrekang	-0.0028	Pencilan	17	Pinrang	0.0067	Bukan Pencilan
6	Gowa	-1.0123	Pencilan	18	Sidenreng Rappang	-0.0028	Pencilan
7	Jeneponto	-0.0523	Pencilan	19	Sinjai	-0.0081	Pencilan
8	Kepulauan Selayar	-0.0185	Pencilan	20	Soppeng	-0.0100	Pencilan
9	Kota Makassar	0.0038	Bukan Pencilan	21	Takalar	-0.3380	Pencilan
10	Kota Palopo	-0.0031	Pencilan	22	Tana Toraja	0.0523	Bukan Pencilan
11	Kota Parepare	0.0042	Bukan Pencilan	23	Toraja Utara	-0.1117	Pencilan
12	Luwu	-0.1415	Pencilan	24	Wajo	-0.0056	Pencilan

Lampiran 5. Hasil Perhitungan Nilai Estimasi Seluruh Iterasi (S-*Estimator*)

Iterasi	**Parameter**										
	$\boldsymbol{\alpha}$	$\boldsymbol{\beta_1}$	$\boldsymbol{\beta_2}$	$\boldsymbol{\beta_3}$	$\boldsymbol{\beta_4}$	$\boldsymbol{\beta_5}$	$\boldsymbol{\theta_1}$	$\boldsymbol{\theta_2}$	$\boldsymbol{\theta_3}$	$\boldsymbol{\theta_4}$	$\boldsymbol{\theta_5}$
SDM	13585.602	0.753	-3.910	-12.185	-83.871	11.290	3.686	-13.000	-72.493	-287.406	-224.919
1	13797.642	0.792	-5.885	-11.866	-82.500	18.245	3.905	-62.885	-38.926	-278.451	-330.915
2	15699.499	0.817	-11.232	-12.882	-88.251	11.558	4.060	-120.155	-13.180	-276.500	-437.818
3	16657.290	0.829	-13.426	-14.118	-93.110	11.612	4.112	-147.901	-0.155	-276.456	-492.410
4	16720.246	0.831	-13.668	-14.336	-94.002	12.151	4.119	-152.614	2.961	-275.791	-500.680
5	16706.023	0.832	-13.664	-14.346	-94.070	12.273	4.119	-153.027	3.402	-275.656	-501.214
6	16703.589	0.832	-13.662	-14.346	-94.076	12.292	4.120	-153.075	3.460	-275.652	-501.284
7	16703.347	0.832	-13.662	-14.346	-94.077	12.295	4.120	-153.083	3.469	-275.655	-501.300
8	16703.330	0.832	-13.662	-14.345	-94.077	12.296	4.120	-153.084	3.470	-275.656	-501.303
9	16703.330	0.832	-13.662	-14.345	-94.077	12.296	4.120	-153.084	3.470	-275.656	-501.304
10	16703.330	0.832	-13.662	-14.345	-94.077	12.296	4.120	-153.084	3.470	-275.656	-501.304
11	16703.330	0.832	-13.662	-14.345	-94.077	12.296	4.120	-153.084	3.470	-275.656	-501.304

Lampiran 6. Hasil Perhitungan Nilai Estimasi Seluruh Iterasi (MM-*Estimator*)

Iterasi	**Parameter**										
	$\boldsymbol{\alpha}$	$\boldsymbol{\beta_1}$	$\boldsymbol{\beta_2}$	$\boldsymbol{\beta_3}$	$\boldsymbol{\beta_4}$	$\boldsymbol{\beta_5}$	$\boldsymbol{\theta_1}$	$\boldsymbol{\theta_2}$	$\boldsymbol{\theta_3}$	$\boldsymbol{\theta_4}$	$\boldsymbol{\theta_5}$
Estimasi-S	16703.330	0.832	-13.662	-14.345	-94.077	12.296	4.120	-153.084	3.470	-275.656	-501.304
1	16714.865	0.832	-13.687	-14.370	-94.237	12.257	4.123	-153.334	3.670	-276.761	-502.121
2	16721.557	0.832	-13.694	-14.388	-94.347	12.237	4.126	-153.452	3.780	-277.566	-502.577
3	16726.083	0.832	-13.698	-14.402	-94.423	12.226	4.128	-153.525	3.851	-278.122	-502.881
4	16729.287	0.833	-13.700	-14.411	-94.476	12.218	4.129	-153.575	3.900	-278.517	-503.093
5	16731.616	0.833	-13.702	-14.418	-94.515	12.212	4.130	-153.612	3.936	-278.803	-503.248
6	16733.342	0.833	-13.703	-14.423	-94.544	12.207	4.130	-153.638	3.962	-279.016	-503.362
7	16734.639	0.833	-13.703	-14.427	-94.566	12.204	4.131	-153.658	3.981	-279.176	-503.447
8	16735.624	0.833	-13.704	-14.430	-94.582	12.202	4.131	-153.673	3.996	-279.297	-503.512
9	16736.377	0.833	-13.704	-14.432	-94.595	12.200	4.131	-153.685	4.007	-279.389	-503.562
10	16736.957	0.833	-13.705	-14.434	-94.604	12.198	4.132	-153.694	4.016	-279.461	-503.600
11	16737.421	0.833	-13.705	-14.435	-94.612	12.197	4.132	-153.701	4.023	-279.517	-503.630
12	16737.800	0.833	-13.705	-14.437	-94.618	12.196	4.132	-153.707	4.029	-279.563	-503.655
13	16738.110	0.833	-13.706	-14.437	-94.624	12.195	4.132	-153.712	4.033	-279.601	-503.676
14	16738.363	0.833	-13.706	-14.438	-94.628	12.195	4.132	-153.715	4.037	-279.632	-503.692
15	16738.571	0.833	-13.706	-14.439	-94.631	12.194	4.132	-153.719	4.040	-279.657	-503.706
16	16738.742	0.833	-13.706	-14.439	-94.634	12.194	4.132	-153.721	4.043	-279.678	-503.717
17	16738.883	0.833	-13.706	-14.440	-94.636	12.193	4.132	-153.724	4.045	-279.695	-503.727
18	16738.999	0.833	-13.706	-14.440	-94.638	12.193	4.132	-153.725	4.047	-279.709	-503.734
19	16739.095	0.833	-13.706	-14.440	-94.640	12.193	4.132	-153.727	4.048	-279.721	-503.740

Lampiran 6. Hasil Perhitungan Nilai Estimasi Seluruh Iterasi (MM-*Estimator*)

Iterasi	Parameter										
	α	β_1	β_2	β_3	β_4	β_5	θ_1	θ_2	θ_3	θ_4	θ_5
20	16739.174	0.833	-13.706	-14.441	-94.641	12.193	4.132	-153.728	4.049	-279.730	-503.746
21	16739.239	0.833	-13.706	-14.441	-94.642	12.192	4.132	-153.729	4.050	-279.738	-503.750
22	16739.293	0.833	-13.706	-14.441	-94.643	12.192	4.132	-153.730	4.051	-279.745	-503.753
23	16739.337	0.833	-13.706	-14.441	-94.644	12.192	4.132	-153.731	4.052	-279.750	-503.756
24	16739.374	0.833	-13.706	-14.441	-94.645	12.192	4.132	-153.731	4.052	-279.755	-503.759
25	16739.405	0.833	-13.706	-14.441	-94.645	12.192	4.133	-153.732	4.053	-279.758	-503.761
26	16739.430	0.833	-13.706	-14.441	-94.645	12.192	4.133	-153.732	4.053	-279.761	-503.762
27	16739.451	0.833	-13.706	-14.441	-94.646	12.192	4.133	-153.732	4.053	-279.764	-503.764
28	16739.468	0.833	-13.706	-14.441	-94.646	12.192	4.133	-153.733	4.054	-279.766	-503.765
29	16739.482	0.833	-13.706	-14.441	-94.646	12.192	4.133	-153.733	4.054	-279.768	-503.766
30	16739.494	0.833	-13.706	-14.442	-94.647	12.192	4.133	-153.733	4.054	-279.769	-503.767
31	16739.504	0.833	-13.706	-14.442	-94.647	12.192	4.133	-153.733	4.054	-279.770	-503.767
32	16739.512	0.833	-13.706	-14.442	-94.647	12.192	4.133	-153.733	4.054	-279.771	-503.768
33	16739.519	0.833	-13.706	-14.442	-94.647	12.192	4.133	-153.733	4.054	-279.772	-503.768
34	16739.524	0.833	-13.706	-14.442	-94.647	12.192	4.133	-153.733	4.055	-279.773	-503.769
35	16739.529	0.833	-13.706	-14.442	-94.647	12.192	4.133	-153.734	4.055	-279.773	-503.769
36	16739.532	0.833	-13.706	-14.442	-94.647	12.192	4.133	-153.734	4.055	-279.774	-503.769
37	16739.536	0.833	-13.706	-14.442	-94.647	12.192	4.133	-153.734	4.055	-279.774	-503.769
38	16739.538	0.833	-13.706	-14.442	-94.647	12.192	4.133	-153.734	4.055	-279.774	-503.770
39	16739.540	0.833	-13.706	-14.442	-94.647	12.192	4.133	-153.734	4.055	-279.775	-503.770

Lampiran 6. Hasil Perhitungan Nilai Estimasi Seluruh Iterasi (MM-*Estimator*)

Iterasi	Parameter										
	α	β_1	β_2	β_3	β_4	β_5	θ_1	θ_2	θ_3	θ_4	θ_5
40	16739.542	0.833	-13.706	-14.442	-94.647	12.192	4.133	-153.734	4.055	-279.775	-503.770
41	16739.544	0.833	-13.707	-14.442	-94.647	12.192	4.133	-153.734	4.055	-279.775	-503.770
42	16739.545	0.833	-13.707	-14.442	-94.647	12.192	4.133	-153.734	4.055	-279.775	-503.770
43	16739.546	0.833	-13.707	-14.442	-94.647	12.192	4.133	-153.734	4.055	-279.775	-503.770
44	16739.547	0.833	-13.707	-14.442	-94.647	12.192	4.133	-153.734	4.055	-279.776	-503.770
45	16739.547	0.833	-13.707	-14.442	-94.647	12.192	4.133	-153.734	4.055	-279.776	-503.770
46	16739.548	0.833	-13.707	-14.442	-94.647	12.192	4.133	-153.734	4.055	-279.776	-503.770
47	16739.549	0.833	-13.707	-14.442	-94.647	12.192	4.133	-153.734	4.055	-279.776	-503.770
48	16739.549	0.833	-13.707	-14.442	-94.647	12.192	4.133	-153.734	4.055	-279.776	-503.770
49	16739.550	0.833	-13.707	-14.442	-94.647	12.192	4.133	-153.734	4.055	-279.776	-503.770
50	16739.550	0.833	-13.707	-14.442	-94.647	12.192	4.133	-153.734	4.055	-279.776	-503.770