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LAMPIRAN

Lampiran 1. Tabel integral fungsi *Bessel*

Bessel functions of imaginary argument $I_\nu(z)$ and $K_\nu(z)$

8.406

1. $I_\nu(z) = e^{-\frac{\pi}{2}\nu i} J_\nu(e^{\frac{\pi}{2}i} z) \qquad \left[-\pi < \arg z \leq \frac{\pi}{2}\right].$ WA 92

2. $I_\nu(z) = e^{\frac{3}{2}\pi\nu i} J_\nu(e^{-\frac{3}{2}\pi i} z) \qquad \left[\frac{\pi}{2} < \arg z \leq \pi\right].$ WA 92

For integral ν,

3. $I_n(z) = i^{-n} J_n(iz).$ KU 46(1)

8.407

1. $K_\nu(z) = \frac{\pi i}{2} e^{\frac{\pi}{2}\nu i} H_\nu^{(1)}(iz).$

2. $K_\nu(z) = \frac{\pi i}{2} e^{-\frac{\pi}{2}\nu i} H_{-\nu}^{(1)}(iz).$ WA 92(8)

For the differential equation defining these functions, see **8.494**.

8.485 $K_\nu(z) = \frac{\pi}{2} \frac{I_{-\nu}(z) - I_\nu(z)}{\sin \nu\pi} \qquad [\nu \text{ not an integer}]$

(see also 8.407) WA 92(6)

8.486 Recursion formulas for the functions $I_\nu(z)$ and $K_\nu(z)$ and their consequences:

1. $zI_{\nu-1}(z) - zI_{\nu+1}(z) = 2\nu I_\nu(z).$ WA 93(1)
2. $I_{\nu-1}(z) + I_{\nu+1}(z) = 2\frac{d}{dz} I_\nu(z).$ WA 93(2)
3. $z\frac{d}{dz} I_\nu(z) + \nu I_\nu(z) = zI_{\nu-1}(z).$ WA 93(3)
4. $z\frac{d}{dz} I_\nu(z) - \nu I_\nu(z) = zI_{\nu+1}(z).$ WA 93(4)
5. $\left(\frac{d}{z\,dz}\right)^m \{z^\nu I_\nu(z)\} = z^{\nu-m} I_{\nu-m}(z).$ WA 93(5)
6. $\left(\frac{d}{z\,dz}\right)^m \{z^{-\nu} I_\nu(z)\} = z^{-\nu-m} I_{\nu+m}(z).$ WA 93(6)
7. $I_{-n}(z) = I_n(z) \qquad [n \text{ — a natural number}].$ WA 93(8)
8. $I_2(z) = -\frac{2}{z} I_1(z) + I_0(z).$
9. $\frac{d}{dz} I_0(z) = I_1(z).$ WA 93(7)
10. $zK_{\nu-1}(z) - zK_{\nu+1}(z) = -2\nu K_\nu(z).$ WA 93(1)
11. $K_{\nu-1}(z) + K_{\nu+1}(z) = -2\frac{d}{dz} K_\nu(z).$ WA 93(2)
12. $z\frac{d}{dz} K_\nu(z) + \nu K_\nu(z) = -zK_{\nu-1}(z).$ WA 93(3)
13. $z\frac{d}{dz} K_\nu(z) - \nu K_\nu(z) = -zK_{\nu+1}(z).$ WA 93(4)
14. $\left(\frac{d}{z\,dz}\right)^m \{z^\nu K_\nu(z)\} = (-1)^m z^{\nu-m} K_{\nu-m}(z).$ WA 93(5)
15. $\left(\frac{d}{z\,dz}\right)^m \{z^{-\nu} K_\nu(z)\} = (-1)^m z^{-\nu-m} K_{\nu+m}(z).$ WA 93(6)
16. $K_{-\nu}(z) = K_\nu(z).$ WA 93(8)
17. $K_2(z) = \frac{2}{z} K_1(z) + K_0(z).$
18. $\frac{d}{dz} K_0(z) = -K_1(z).$ WA 93(7)

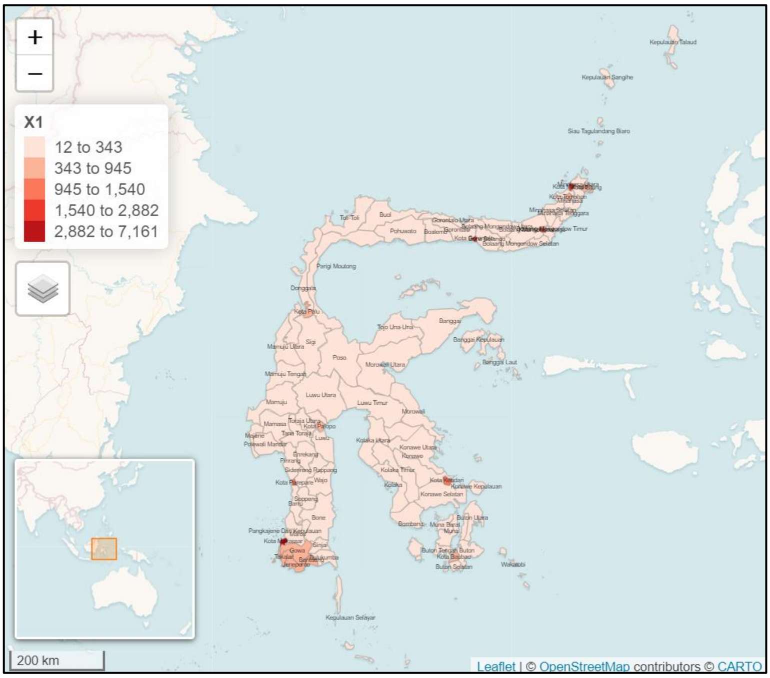
Lampiran 2. Data penelitian dan koordinat geografis kabupaten/kota

Kabupaten/Kota	Y_1	Y_2	X_1	X_2	X_3
Bolaang Mongondow	3	40	87	7.58	71.07
Minahasa	3	40	313	7.67	81.09
Kepulauan Sangihe	1	7	303	11.02	84.22
Kepulauan Talaud	5	16	77	9.00	86.09
Minahasa Selatan	1	22	169	9.37	78.43
Minahasa Utara	3	35	247	7.11	88.49
Bolaang Mongondow Utara	6	30	50	8.03	71.39
Siau Tagulandang Biaro	1	19	261	8.94	93.60
Minahasa Tenggara	0	18	165	12.47	78.56
Bolaang Mongondow Selatan	0	5	44	12.85	67.62
Bolaang Mongondow Timur	0	4	99	6.10	56.06
Kota Manado	1	49	2882	6.19	87.31
Kota Bitung	5	50	750	6.43	89.33
Kota Tomohon	0	3	883	5.69	95.19
Kota Kotamobagu	2	9	1143	5.74	71.55
Banggai Kepulauan	0	6	48	13.72	75.35
Banggai	2	21	37	7.83	82.46
Morowali	0	12	53	13.75	78.34
Poso	0	1	34	15.92	88.09
Donggala	0	26	70	16.73	64.90
Toli-Toli	1	9	55	13.51	68.09
Buol	2	8	36	14.06	70.20
Parigi Moutong	2	15	86	15.28	63.98
Tojo Una-Una	2	13	29	16.60	71.10
Sigi	3	26	50	13.05	78.31
Banggai Laut	0	6	97	14.17	61.77
Morowali Utara	0	4	12	13.90	79.88
Kota Palu	2	25	945	7.17	91.74
Kepulauan Selayar	9	13	102	12.45	75.57
Bulukumba	7	54	343	7.43	92.08
Bantaeng	0	24	500	9.41	77.80
Jeneponto	2	25	574	14.28	81.48
Takalar	2	20	534	8.25	90.15
Gowa	5	72	411	7.54	97.20
Sinjai	9	40	327	8.84	87.13
Maros	2	19	245	9.57	87.74
Pangkajene Dan Kepulauan	3	29	308	14.28	86.35
Barru	2	15	158	8.68	93.92
Bone	14	100	177	10.52	94.28
Soppeng	1	23	151	7.53	92.39
Wajo	2	33	152	6.46	95.03
⋮	⋮	⋮	⋮	⋮	⋮
Mamuju Utara	1	7	108	4.77	79.15
Mamuju Tengah	0	5	107	7.13	81.21

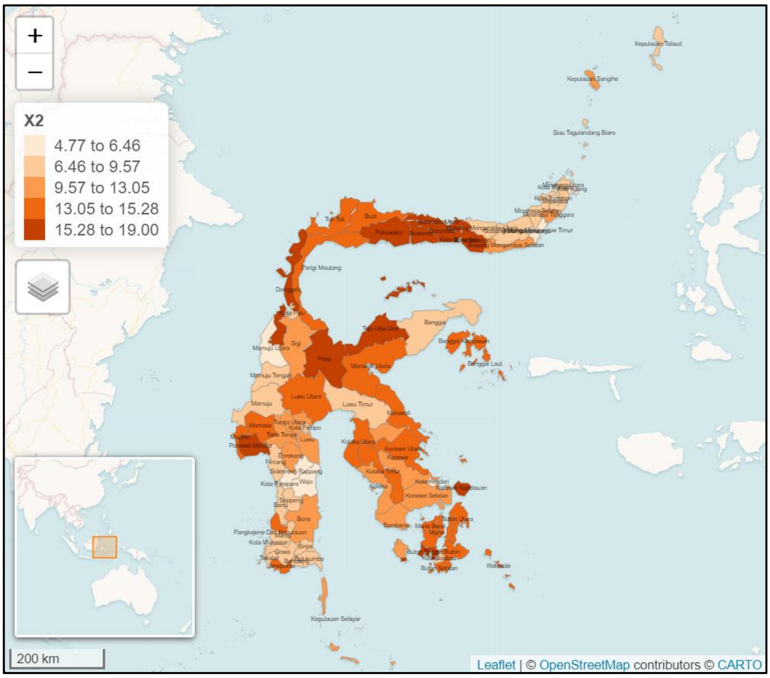
Kabupaten/Kota	X_4	X_5	X_6	u	v
Bolaang Mongondow	88.57	21	54	-1.02233	122.58354
Minahasa	88.01	27	164	-1.37489	123.14097
Kepulauan Sangihe	9.51	22	63	-1.62501	123.53943
Kepulauan Talaud	84.61	25	34	-5.48819	119.98691
Minahasa Selatan	90.78	23	91	-4.44180	119.69425
Minahasa Utara	88.20	22	134	0.65597	122.32569
Bolaang Mongondow Utara	79.62	13	32	0.70791	124.04030
Siau Tagulandang Biaro	96.71	14	58	0.44424	123.93271
Minahasa Tenggara	92.98	15	54	0.71935	124.51200
Bolaang Mongondow Selatan	86.10	10	25	0.76790	123.48117
Bolaang Mongondow Timur	91.61	8	24	-4.65271	121.82434
Kota Manado	95.89	65	1065	-4.69509	120.12905
Kota Bitung	96.68	20	107	0.53313	123.29114
Kota Tomohon	96.34	12	91	-5.43158	120.23520
Kota Kotamobagu	98.06	19	54	0.97790	121.37243
Banggai Kepulauan	96.89	31	58	-5.31309	122.92549
Banggai	95.18	31	135	-5.59134	122.70578
Morowali	93.17	16	100	-5.30057	122.44821
Poso	89.77	20	120	-4.69202	123.01508
Donggala	89.42	20	89	-0.00763	119.93368
Toli-Toli	85.92	28	78	-3.50372	119.87203
Buol	85.25	29	48	0.69379	122.71076
Parigi Moutong	76.15	32	142	0.88603	122.65822
Tojo Una-Una	94.08	20	60	-5.30917	119.71888
Sigi	78.08	16	75	-5.56749	119.69856
Banggai Laut	92.44	21	40	3.55547	125.54036
Morowali Utara	83.00	23	76	-6.09329	120.49634
Kota Palu	98.23	82	437	4.28708	126.78071
Kepulauan Selayar	89.51	16	0	-4.07412	121.53090
Bulukumba	87.43	32	85	-3.79536	121.61224
Bantaeng	97.23	27	69	-3.24547	121.15193
Jeneponto	98.54	23	60	-3.78249	121.99933
Takalar	97.04	27	81	-4.11442	123.09505
Gowa	95.46	29	122	-4.26269	122.42068
Sinjai	88.41	22	92	-3.38315	121.99035
Maros	83.38	24	122	-5.43005	122.67551
Pangkajene Dan Kepulauan	89.34	31	74	1.49390	125.14522
Barru	97.01	16	53	0.53945	123.05579
Bone	90.09	49	129	-4.00049	122.53216
Soppeng	96.58	19	42	0.71080	124.31906
Wajo	87.87	37	86	-5.13662	119.46603
⋮	⋮	⋮	⋮	⋮	⋮
Mamuju Utara	88.56	16	45	-4.00654	120.17100
Mamuju Tengah	77.42	11	27	-5.31129	123.58393

Lampiran 3. Peta variabel prediktor

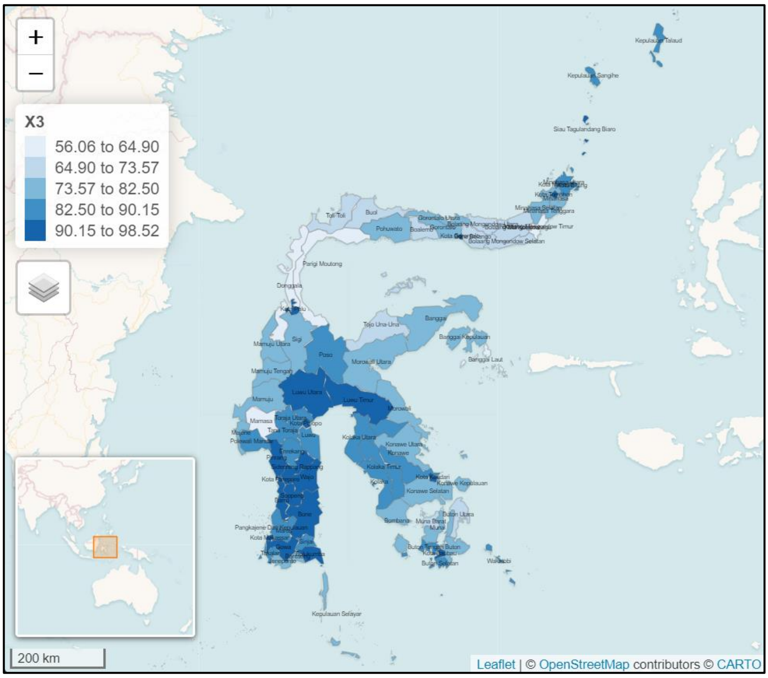
(a) Kepadatan Penduduk (X_1)



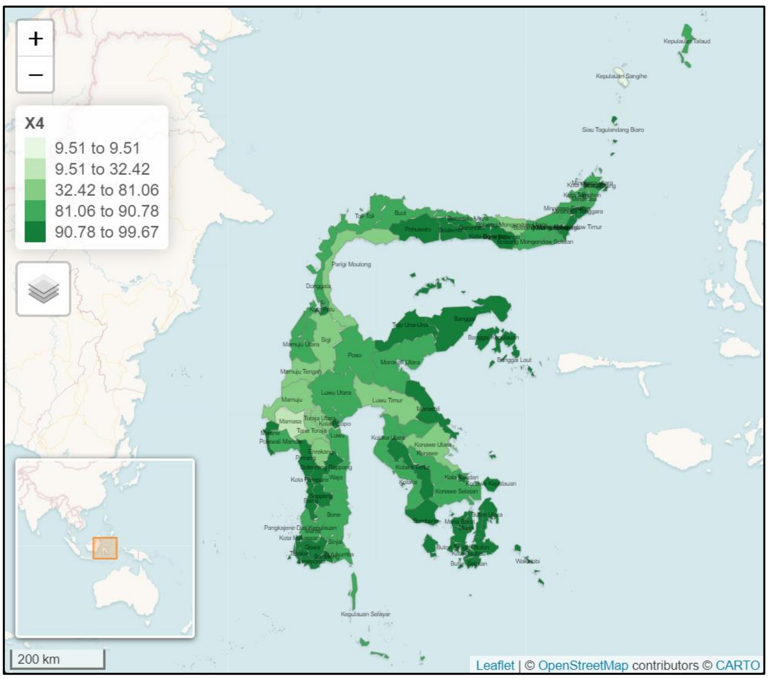
(b) Persentase Penduduk Miskin (X_2)



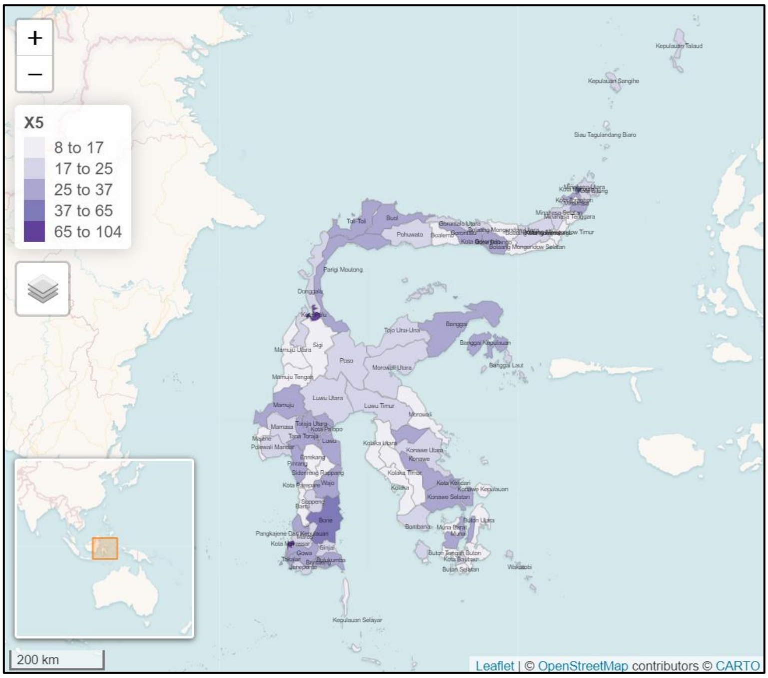
(c) Persentase Rumah Tangga yang Memiliki Akses Terhadap Layanan Sanitasi Layak (X_3)



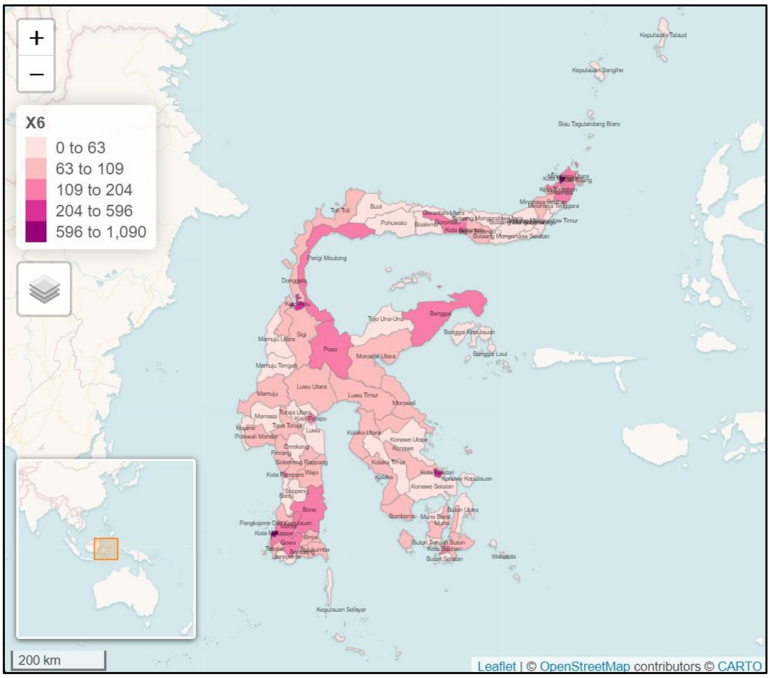
(d) Persentase Rumah Tangga yang Memiliki Akses Terhadap Layanan Sumber Air Minum Layak (X_4)



(e) Jumlah Fasilitas Kesehatan (X_5)



(f) Jumlah Tenaga Medis (X_6)



Lampiran 4. *Output* pengujian distribusi *Poisson*

```
> S2y1 <- sum((y1-mean(y1))^2)/n
> S2y2 <- sum((y2-mean(y2))^2)/n
> m11 <- sum((y1-mean(y1))*(y2-mean(y2)))/n
> IB <- (n*(mean(y2)*S2y1-
2*m11^2+mean(y1)*S2y2))/(mean(y1)*mean(y2)-m11^2)
> db2 <- 2*n-3
> chisqpois <- qchisq(1-alpha, db2)
> ujidist <- cbind(IB, chisqpois)
> ujidist
           IB chisqpois
[1,] 117.3971  189.4242
```

Lampiran 5. *Output* pengujian korelasi variabel respon

```
> kor <- cor.test(y1, y2, method = "pearson")
> db1 <- n-2
> ttabel <- qt(1-alpha/2, db1)
> ujikor <- cbind(kor$estimate, kor$statistic, ttabel)
> colnames(ujikor) <- c("", "t hitung", "t tabel")
> ujikor
              t hitung t tabel
cor 0.7352197 9.640744 1.99045
```

Lampiran 6. *Output* pendeteksian overdispersi

```
> Dy1 <- 2 * sum(ifelse(y1 == 0, 0, y1 * log(y1 / mean(y1)) -
(y1 - mean(y1))))
> Dy2 <- 2 * sum(ifelse(y2 == 0, 0, y2 * log(y2 / mean(y2)) -
(y2 - mean(y2))))
> dbdev <- n-p-1
> phitopi <- cbind(Dy1/dbdev, Dy2/dbdev
> Dy1
[1] 127.141
> Dy2
[1] 1214.842
> phitopi
         [,1]     [,2]
[1,] 1.741657 16.64167
```

Lampiran 7. *Output* pengujian multikolinieritas

```
> vif <- cbind(vif(modely1), vif(modely2))
> vif
       [,1]     [,2]
x1 3.564283 3.564283
x2 1.452264 1.452264
x3 1.352517 1.352517
x4 1.076887 1.076887
x5 2.815775 2.815775
x6 4.649696 4.649696
```

Lampiran 8. *Output* estimasi parameter dan uji signifikansi parameter model regresi *Bivariate Poisson Inverse Gaussian*

```
> parsial_bpigr
      Estimate Standard Error        Z value       p-value
 [1,]  2.27898        0.00001 439391.66000  0.000000e+00
 [2,] -0.00050        0.00055     -0.91043  3.625941e-01
 [3,] -0.00941        0.00004   -254.55459  0.000000e+00
 [4,]  0.00073        0.00042      1.73880  8.206925e-02
 [5,]  0.00008        0.00040      0.19147  8.481596e-01
 [6,]  0.00798        0.00006    139.81909  0.000000e+00
 [7,] -0.00075        0.00014     -5.34693  8.945801e-08
 [8,]  0.10424        0.00001  13436.26192  0.000000e+00
 [9,]  0.00070        0.00083      0.84823  3.963079e-01
[10,] -0.03045        0.00006   -550.40612  0.000000e+00
[11,]  0.01645        0.00063     26.11027 2.787677e-150
[12,]  0.01541        0.00060     25.65835 3.411836e-145
[13,]  0.02138        0.00009    250.56237  0.000000e+00
[14,]  0.00016        0.00021      0.77450  4.386332e-01
[15,]  0.26001        0.00008   3421.94495  0.000000e+00
> cat(paste('BPIGR (Iterasi ke: ', iterasi,', epsilon : ',
eps,')\n', sep=""))
BPIGR (Iterasi ke: 155, epsilon : 0.00147482392142364)
```

```
> table <- cbind(likelihood, chisqtable, pvalue)
> table
          G^2 Chisq table p-value
[1,] 14416.18    21.02607       0
```

Lampiran 9. *Output* pengujian heterogenitas spasial

```
> bp1 <- 0.5*fteball1%*%zztzz1%*%fteball1
> bp2 <- 0.5*fteball2%*%zztzz2%*%fteball2
> chisqsp <- qchisq(alpha/2, p-1)
> heterosp <- cbind(bp1, bp2, chisqsp)
> heterosp
        BP_Y1    BP_Y2    chi-sq
[1,] 38.05889 48.2082 1.237344
```

Lampiran 10. Jarak *euclidean* antar lokasi

i	1	2	3	4	5	6	7	⋯	80	81
1	0	0.660	1.130	5.166	4.477	1.698	2.262	⋯	3.837	4.404
2	0.660	0	0.470	5.183	4.614	2.188	2.269	⋯	3.968	3.961
3	1.130	0.470	0	5.248	4.767	2.584	2.386	⋯	4.125	3.687
4	5.166	5.183	5.248	0	1.087	6.574	7.404	⋯	1.493	3.601
5	4.477	4.614	4.767	1.087	0	5.737	6.739	⋯	0.646	3.986
6	1.698	2.188	2.584	6.574	5.737	0	1.715	⋯	5.136	6.098
7	2.262	2.269	2.386	7.404	6.739	1.715	0	⋯	6.099	6.036
8	1.993	1.984	2.106	7.125	6.468	1.621	0.285	⋯	5.828	5.766
9	2.599	2.503	2.538	7.682	7.060	2.187	0.472	⋯	6.417	6.102
10	2.003	2.170	2.394	7.166	6.441	1.161	0.562	⋯	5.810	6.080
11	3.709	3.532	3.480	2.018	2.141	5.332	5.801	⋯	1.775	1.879
12	4.417	4.483	4.589	0.806	0.503	5.784	6.670	⋯	0.690	3.509
13	1.709	1.914	2.172	6.868	6.139	0.973	0.769	⋯	5.509	5.852
14	4.996	4.990	5.041	0.255	1.128	6.436	7.223	⋯	1.426	3.351
15	2.338	2.943	3.387	6.613	5.674	1.006	2.681	⋯	5.127	6.667
16	4.304	3.944	3.739	2.944	3.347	5.999	6.123	⋯	3.049	0.658
17	4.571	4.239	4.053	2.721	3.223	6.259	6.439	⋯	2.989	0.922
18	4.280	3.986	3.834	2.468	2.885	5.958	6.216	⋯	2.619	1.136
19	3.695	3.320	3.112	3.131	3.330	5.392	5.496	⋯	2.926	0.841
20	2.837	3.487	3.952	5.481	4.441	2.482	4.168	⋯	4.006	6.438
21	3.676	3.901	4.121	1.988	0.955	4.829	5.926	⋯	0.585	4.129
22	1.721	2.113	2.462	6.755	5.956	0.387	1.330	⋯	5.343	6.068
23	1.910	2.312	2.661	6.911	6.097	0.404	1.394	⋯	5.488	6.266
24	5.156	5.214	5.308	0.322	0.868	6.510	7.408	⋯	1.379	3.865
25	5.383	5.425	5.504	0.299	1.126	6.755	7.631	⋯	1.631	3.894
26	5.450	5.483	5.553	10.613	9.906	4.329	3.219	⋯	9.274	9.080
27	5.484	5.409	5.406	0.791	1.836	6.993	7.669	⋯	2.112	3.185
28	6.768	6.731	6.742	11.904	11.243	5.747	4.508	⋯	10.605	10.117
29	3.228	3.143	3.167	2.094	1.873	4.796	5.400	⋯	1.362	2.397
30	2.938	2.863	2.902	2.347	2.024	4.508	5.116	⋯	1.457	2.487
31	2.644	2.730	2.885	2.527	1.886	4.074	4.896	⋯	1.242	3.191
32	2.821	2.665	2.651	2.638	2.398	4.450	4.932	⋯	1.842	2.202
33	3.134	2.740	2.529	3.398	3.417	4.832	4.914	⋯	2.926	1.293
34	3.244	2.976	2.865	2.725	2.732	4.920	5.228	⋯	2.264	1.566
35	2.434	2.315	2.343	2.906	2.528	4.053	4.576	⋯	1.923	2.501
36	4.409	4.082	3.902	2.689	3.141	6.096	6.288	⋯	2.881	0.916
37	3.591	3.500	3.508	8.681	8.059	2.941	3.591	⋯	7.416	6.982
38	1.632	1.916	2.218	6.764	6.009	0.739	1.632	⋯	5.384	5.875
39	2.979	2.695	2.580	2.948	2.872	4.661	2.979	⋯	2.361	1.681
40	2.453	2.395	2.462	7.563	6.924	1.994	2.453	⋯	6.282	6.067
41	5.162	5.259	5.378	0.628	0.731	6.460	5.162	⋯	1.332	4.122
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋱	⋮	⋮
80	3.837	3.968	4.125	1.493	0.646	5.136	6.099	⋯	0	3.654
81	4.404	3.961	3.687	3.601	3.986	6.098	6.036	⋯	3.654	0

Lampiran 11. *Bandwidth optimum*

i	*fixed gaussian*	*adaptive gaussian*	*fixed bisquare*	*adaptive bisquare*	*fixed tricube*
1	13.91945	2.33831	36.80225	4.38091	39.53074
2	13.91945	2.50311	36.80225	4.39287	39.53074
3	13.91945	2.58021	36.80225	4.55890	39.53074
4	13.91945	1.98779	36.80225	6.76195	39.53074
5	13.91945	1.22429	36.80225	5.99698	39.53074
6	13.91945	2.23682	36.80225	5.71360	39.53074
7	13.91945	2.26183	36.80225	6.27112	39.53074
8	13.91945	1.98396	36.80225	5.99220	39.53074
9	13.91945	2.20363	36.80225	6.52377	39.53074
10	13.91945	1.81555	36.80225	6.10023	39.53074
11	13.91945	1.76975	36.80225	5.49342	39.53074
12	13.91945	1.36392	36.80225	5.99213	39.53074
13	13.91945	1.91393	36.80225	5.84671	39.53074
14	13.91945	1.87658	36.80225	6.60601	39.53074
15	13.91945	2.79170	36.80225	5.91002	39.53074
16	13.91945	2.69291	36.80225	6.10274	39.53074
17	13.91945	2.47576	36.80225	6.34141	39.53074
18	13.91945	2.21691	36.80225	6.02657	39.53074
19	13.91945	2.35885	36.80225	5.49253	39.53074
20	13.91945	2.86429	36.80225	5.30439	39.53074
21	13.91945	1.30569	36.80225	5.12788	39.53074
22	13.91945	2.19658	36.80225	5.74589	39.53074
23	13.91945	2.22495	36.80225	5.90061	39.53074
24	13.91945	1.81196	36.80225	6.72748	39.53074
25	13.91945	2.07107	36.80225	6.96409	39.53074
26	13.91945	3.92845	36.80225	9.38358	39.53074
27	13.91945	2.26574	36.80225	7.13596	39.53074
28	13.91945	5.34435	36.80225	10.66484	39.53074
29	13.91945	1.58214	36.80225	5.02604	39.53074
30	13.91945	1.67586	36.80225	4.74753	39.53074
31	13.91945	1.57325	36.80225	4.23671	39.53074
32	13.91945	1.83958	36.80225	4.62109	39.53074
33	13.91945	2.12862	36.80225	4.91189	39.53074
34	13.91945	1.68141	36.80225	4.99347	39.53074
35	13.91945	1.92319	36.80225	4.25673	39.53074
36	13.91945	2.44033	36.80225	6.17804	39.53074
37	13.91945	2.56262	36.80225	7.47544	39.53074
38	13.91945	1.93527	36.80225	5.78595	39.53074
39	13.91945	1.68064	36.80225	4.76317	39.53074
40	13.91945	2.29580	36.80225	6.39522	39.53074
41	13.91945	1.68263	36.80225	6.70586	39.53074
⋮	⋮	⋮	⋮	⋮	⋮
80	13.91945	1.33194	36.80225	5.37442	39.53074
81	13.91945	3.18508	36.80225	6.09420	39.53074

i	*adaptive tricube*	*fixed exponential*	*adaptive exponential*	*fixed boxcar*	*adaptive boxcar*
1	3.95358	3.79305	3.79304	4.54428	3.95358
2	3.97818	3.79305	5.32845	4.54428	3.97818
3	4.10453	3.79305	3.90164	4.54428	4.10453
4	5.24831	3.79305	4.00594	4.54428	5.24831
5	4.52224	3.79305	5.76609	4.54428	4.52224
6	5.12047	3.79305	3.89673	4.54428	5.12047
7	5.92557	3.79305	5.44199	4.54428	5.92557
8	5.66354	3.79305	4.39141	4.54428	5.66354
9	6.13914	3.79305	4.94421	4.54428	6.13914
10	5.67765	3.79305	4.13060	4.54428	5.67765
11	4.27552	3.79305	3.91309	4.54428	4.27552
12	4.58870	3.79305	3.84165	4.54428	4.58870
13	5.41566	3.79305	8.24958	4.54428	5.41566
14	5.04067	3.79305	4.44141	4.54428	5.04067
15	5.29146	3.79305	6.48527	4.54428	5.29146
16	5.40313	3.79305	3.61855	4.54428	5.40313
17	5.52172	3.79305	3.41226	4.54428	5.52172
18	5.14111	3.79305	6.74588	4.54428	5.14111
19	4.95568	3.79305	7.03605	4.54428	4.95568
20	5.01512	3.79305	6.46407	4.54428	5.01512
21	3.90104	3.79305	4.19411	4.54428	3.90104
22	5.36330	3.79305	4.92095	4.54428	5.36330
23	5.47448	3.79305	4.72273	4.54428	5.47448
24	5.30589	3.79305	4.99864	4.54428	5.30589
25	5.50413	3.79305	4.87691	4.54428	5.50413
26	9.03673	3.79305	4.76335	4.54428	9.03673
27	5.48378	3.79305	4.28881	4.54428	5.48378
28	10.23017	3.79305	4.54428	4.54428	10.23017
29	3.62677	3.79305	4.30134	4.54428	3.62677
30	3.41945	3.79305	4.99744	4.54428	3.41945
31	3.19099	3.79305	4.20089	4.54428	3.19099
32	3.61720	3.79305	4.26680	4.54428	3.61720
33	4.57531	3.79305	3.65242	4.54428	4.57531
34	4.25309	3.79305	4.57531	4.54428	4.25309
35	3.29361	3.79305	4.19286	4.54428	3.29361
36	5.36760	3.79305	6.75914	4.54428	5.36760
37	7.12026	3.79305	3.52103	4.54428	7.12026
38	5.33621	3.79305	3.34288	4.54428	5.33621
39	4.11455	3.79305	6.94169	4.54428	4.11455
40	6.06680	3.79305	3.69802	4.54428	6.06680
41	5.24657	3.79305	5.24657	4.54428	5.24657
⋮	⋮	⋮	⋮	⋮	⋮
80	4.00594	3.79305	3.97818	4.54428	4.00594
81	5.76609	3.79305	3.95358	4.54428	5.76609

Lampiran 12. Matriks pembobot spasial *adaptive bisquare kernel*

i	1	2	3	4	5	6	7	⋯	80	81
1	1	0.992	0.975	0.546	0.646	0.944	0.902	⋯	0.733	0.657
2	0.992	1	0.996	0.544	0.627	0.909	0.902	⋯	0.716	0.717
3	0.975	0.996	1	0.534	0.605	0.874	0.892	⋯	0.695	0.752
4	0.546	0.544	0.534	1	0.977	0.333	0.215	⋯	0.957	0.762
5	0.646	0.627	0.605	0.977	1	0.460	0.309	⋯	0.992	0.713
6	0.944	0.909	0.874	0.333	0.460	1	0.943	⋯	0.551	0.405
7	0.902	0.902	0.892	0.215	0.309	0.943	1	⋯	0.405	0.414
8	0.924	0.924	0.915	0.254	0.349	0.949	0.998	⋯	0.446	0.455
9	0.872	0.881	0.878	0.179	0.263	0.909	0.996	⋯	0.357	0.404
10	0.923	0.910	0.891	0.248	0.353	0.974	0.994	⋯	0.449	0.408
11	0.749	0.771	0.777	0.922	0.912	0.521	0.450	⋯	0.939	0.932
12	0.655	0.646	0.631	0.987	0.995	0.453	0.319	⋯	0.991	0.774
13	0.944	0.930	0.910	0.290	0.399	0.982	0.988	⋯	0.495	0.442
14	0.571	0.572	0.565	0.999	0.975	0.354	0.240	⋯	0.961	0.792
15	0.896	0.838	0.788	0.328	0.470	0.980	0.864	⋯	0.552	0.320
16	0.670	0.719	0.745	0.838	0.793	0.420	0.401	⋯	0.826	0.992
17	0.633	0.679	0.705	0.860	0.807	0.381	0.353	⋯	0.833	0.983
18	0.674	0.713	0.733	0.884	0.844	0.426	0.387	⋯	0.870	0.975
19	0.751	0.796	0.820	0.817	0.795	0.512	0.496	⋯	0.840	0.986
20	0.849	0.776	0.718	0.499	0.652	0.883	0.689	⋯	0.711	0.354
21	0.753	0.725	0.695	0.924	0.982	0.596	0.431	⋯	0.993	0.694
22	0.943	0.915	0.885	0.307	0.427	0.997	0.966	⋯	0.520	0.409
23	0.930	0.898	0.866	0.284	0.405	0.997	0.962	⋯	0.498	0.379
24	0.548	0.539	0.525	0.998	0.985	0.343	0.215	⋯	0.963	0.729
25	0.513	0.507	0.495	0.998	0.975	0.307	0.185	⋯	0.949	0.725
26	0.503	0.498	0.488	0.000	0.002	0.667	0.808	⋯	0.025	0.038
27	0.498	0.510	0.510	0.988	0.935	0.272	0.180	⋯	0.915	0.811
28	0.305	0.310	0.309	0.000	0.000	0.458	0.642	⋯	0.000	0.000
29	0.807	0.816	0.813	0.916	0.933	0.601	0.511	⋯	0.964	0.891
30	0.838	0.846	0.842	0.895	0.921	0.642	0.554	⋯	0.959	0.883
31	0.868	0.859	0.844	0.879	0.932	0.702	0.586	⋯	0.970	0.811
32	0.850	0.866	0.867	0.869	0.891	0.650	0.581	⋯	0.935	0.907
33	0.817	0.859	0.879	0.787	0.785	0.595	0.583	⋯	0.840	0.968
34	0.805	0.834	0.846	0.860	0.859	0.583	0.537	⋯	0.902	0.953
35	0.887	0.898	0.895	0.842	0.879	0.705	0.632	⋯	0.929	0.881
36	0.656	0.701	0.724	0.864	0.816	0.405	0.376	⋯	0.844	0.984
37	0.764	0.775	0.774	0.069	0.133	0.838	0.964	⋯	0.214	0.274
38	0.949	0.929	0.906	0.305	0.418	0.989	0.981	⋯	0.513	0.439
39	0.834	0.863	0.874	0.837	0.845	0.620	0.579	⋯	0.894	0.946
40	0.886	0.891	0.885	0.194	0.282	0.924	0.998	⋯	0.377	0.410
41	0.547	0.532	0.514	0.992	0.990	0.350	0.213	⋯	0.966	0.695
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋱	⋮	⋮
80	0.733	0.716	0.695	0.957	0.992	0.551	0.405	⋯	1	0.756
81	0.657	0.717	0.752	0.762	0.713	0.405	0.414	⋯	0.756	1

Lampiran 13. Hasil estimasi parameter model *Geographically Weighted Bivariate Poisson Inverse Gaussian Regression*

i	β_{10}	β_{11}	β_{12}	β_{13}	β_{14}	β_{15}	β_{16}
1	2.43990	-0.00056	-0.00522	-0.00023	-0.00026	0.00777	-0.00062
2	2.45232	-0.00055	-0.00509	-0.00034	-0.00034	0.00774	-0.00060
3	2.46345	-0.00055	-0.00493	-0.00043	-0.00040	0.00771	-0.00059
4	2.36998	-0.00057	-0.00762	0.00063	-0.00013	0.00674	-0.00080
5	2.36530	-0.00057	-0.00712	0.00043	0.00008	0.00705	-0.00079
6	2.44357	-0.00056	-0.00606	0.00039	-0.00039	0.00693	-0.00058
7	2.47350	-0.00056	-0.00679	0.00072	-0.00068	0.00525	-0.00053
8	2.47069	-0.00056	-0.00650	0.00052	-0.00060	0.00572	-0.00054
9	2.48537	-0.00055	-0.00701	0.00086	-0.00079	0.00454	-0.00052
10	2.46214	-0.00056	-0.00662	0.00064	-0.00059	0.00584	-0.00055
11	2.40660	-0.00056	-0.00603	0.00034	-0.00048	0.00726	-0.00078
12	2.37262	-0.00057	-0.00706	0.00047	-0.00007	0.00705	-0.00079
13	2.45797	-0.00056	-0.00634	0.00046	-0.00051	0.00629	-0.00056
14	2.37439	-0.00057	-0.00745	0.00063	-0.00020	0.00680	-0.00080
15	2.43479	-0.00057	-0.00579	0.00049	-0.00035	0.00725	-0.00060
16	2.43691	-0.00056	-0.00550	0.00045	-0.00097	0.00709	-0.00079
17	2.43073	-0.00056	-0.00586	0.00060	-0.00100	0.00696	-0.00080
18	2.42282	-0.00056	-0.00592	0.00050	-0.00082	0.00708	-0.00079
19	2.43911	-0.00055	-0.00510	0.00017	-0.00079	0.00734	-0.00076
20	2.39884	-0.00057	-0.00452	0.00019	0.00001	0.00786	-0.00069
21	2.37096	-0.00056	-0.00640	0.00027	0.00010	0.00732	-0.00078
22	2.44920	-0.00056	-0.00625	0.00046	-0.00045	0.00662	-0.00057
23	2.44953	-0.00056	-0.00637	0.00057	-0.00048	0.00648	-0.00057
24	2.36505	-0.00057	-0.00765	0.00059	-0.00002	0.00677	-0.00079
25	2.45988	-0.00055	-0.00479	0.00035	-0.00120	0.00711	-0.00078
26	2.61371	-0.00047	-0.00455	0.00247	-0.00308	0.00011	-0.00134
27	2.45988	-0.00055	-0.00479	0.00035	-0.00120	0.00711	-0.00078
28	2.45988	-0.00055	-0.00479	0.00035	-0.00120	0.00711	-0.00078
29	2.40055	-0.00056	-0.00590	0.00022	-0.00031	0.00740	-0.00077
30	2.40298	-0.00056	-0.00570	0.00014	-0.00029	0.00749	-0.00076
31	2.39522	-0.00056	-0.00566	0.00009	-0.00014	0.00756	-0.00075
32	2.41201	-0.00055	-0.00547	0.00007	-0.00036	0.00754	-0.00075
33	2.44250	-0.00055	-0.00480	-0.00006	-0.00066	0.00756	-0.00073
34	2.42176	-0.00055	-0.00540	0.00013	-0.00054	0.00744	-0.00076
35	2.41321	-0.00055	-0.00531	-0.00003	-0.00030	0.00765	-0.00073
36	2.42951	-0.00056	-0.00580	0.00053	-0.00093	0.00703	-0.00079
37	2.51112	-0.00054	-0.00814	0.00172	-0.00124	0.00211	-0.00058
38	2.45393	-0.00056	-0.00626	0.00042	-0.00047	0.00649	-0.00056
39	2.42539	-0.00055	-0.00521	0.00003	-0.00051	0.00754	-0.00074
40	2.48024	-0.00055	-0.00691	0.00080	-0.00074	0.00485	-0.00052
41	2.36056	-0.00057	-0.00767	0.00054	0.00009	0.00679	-0.00079
42	2.50104	-0.00054	-0.00800	0.00161	-0.00115	0.00266	-0.00057
43	2.37752	-0.00056	-0.00594	0.00017	0.00008	0.00747	-0.00077
44	2.38851	-0.00056	-0.00476	0.00008	0.00011	0.00780	-0.00072

i	β_{10}	β_{11}	β_{12}	β_{13}	β_{14}	β_{15}	β_{16}
45	2.36572	-0.00057	-0.00686	0.00036	0.00012	0.00716	-0.00078
46	2.49749	-0.00055	-0.00780	0.00144	-0.00106	0.00306	-0.00055
47	2.37739	-0.00056	-0.00614	0.00022	0.00004	0.00741	-0.00077
48	2.39857	-0.00056	-0.00536	-0.00003	-0.00008	0.00772	-0.00073
49	2.38072	-0.00056	-0.00557	0.00010	0.00010	0.00759	-0.00075
50	2.35544	-0.00057	-0.00657	0.00029	0.00038	0.00722	-0.00078
51	2.36327	-0.00056	-0.00624	0.00024	0.00027	0.00734	-0.00078
52	2.45988	-0.00055	-0.00479	0.00035	-0.00120	0.00711	-0.00078
53	2.37130	-0.00056	-0.00547	0.00015	0.00023	0.00754	-0.00076
54	2.37463	-0.00056	-0.00510	0.00014	0.00023	0.00763	-0.00075
55	2.36513	-0.00057	-0.00746	0.00053	0.00002	0.00688	-0.00079
56	2.49814	-0.00055	-0.00776	0.00140	-0.00105	0.00309	-0.00054
57	2.48697	-0.00055	-0.00739	0.00114	-0.00089	0.00397	-0.00053
58	2.49240	-0.00055	-0.00743	0.00115	-0.00093	0.00373	-0.00053
59	2.50626	-0.00054	-0.00809	0.00168	-0.00121	0.00235	-0.00058
60	2.41413	-0.00055	-0.00515	-0.00014	-0.00021	0.00780	-0.00071
61	2.40877	-0.00056	-0.00511	-0.00014	-0.00009	0.00787	-0.00069
62	2.42552	-0.00056	-0.00565	0.00036	-0.00075	0.00721	-0.00078
63	2.45988	-0.00055	-0.00479	0.00035	-0.00120	0.00711	-0.00078
64	2.36364	-0.00057	-0.00738	0.00049	0.00007	0.00694	-0.00079
65	2.40904	-0.00056	-0.00482	0.00012	-0.00006	0.00786	-0.00066
66	2.36586	-0.00056	-0.00661	0.00031	0.00017	0.00725	-0.00078
67	2.43584	-0.00057	-0.00579	0.00035	-0.00033	0.00727	-0.00060
68	2.35894	-0.00057	-0.00659	0.00029	0.00031	0.00724	-0.00078
69	2.39256	-0.00056	-0.00514	-0.00001	0.00004	0.00778	-0.00072
70	2.45988	-0.00055	-0.00479	0.00035	-0.00120	0.00711	-0.00078
71	2.37177	-0.00056	-0.00656	0.00031	0.00006	0.00727	-0.00078
72	2.38423	-0.00056	-0.00504	0.00006	0.00013	0.00773	-0.00073
73	2.37242	-0.00057	-0.00737	0.00058	-0.00014	0.00687	-0.00079
74	2.36902	-0.00057	-0.00695	0.00041	0.00003	0.00712	-0.00079
75	2.45988	-0.00055	-0.00479	0.00035	-0.00120	0.00711	-0.00078
76	2.36956	-0.00056	-0.00620	0.00023	0.00017	0.00738	-0.00077
77	2.41609	-0.00056	-0.00507	-0.00016	-0.00011	0.00791	-0.00067
78	2.42613	-0.00057	-0.00531	0.00045	-0.00027	0.00757	-0.00062
79	2.37305	-0.00056	-0.00598	0.00019	0.00014	0.00744	-0.00077
80	2.37475	-0.00056	-0.00659	0.00033	-0.00001	0.00725	-0.00078
81	2.45988	-0.00055	-0.00479	0.00035	-0.00120	0.00711	-0.00078

i	β_{20}	β_{21}	β_{22}	β_{23}	β_{24}	β_{25}	β_{26}	τ
1	-0.06110	0.00070	-0.03108	0.01703	0.01669	0.02188	0.00016	0.26016
2	-0.07364	0.00069	-0.03102	0.01706	0.01681	0.02184	0.00017	0.26016
3	-0.08492	0.00069	-0.03099	0.01709	0.01692	0.02182	0.00017	0.26017
4	0.01307	0.00070	-0.03147	0.01657	0.01684	0.02081	0.00024	0.26022
5	0.01701	0.00070	-0.03153	0.01671	0.01656	0.02097	0.00022	0.26019
6	-0.06452	0.00071	-0.03044	0.01672	0.01677	0.02240	0.00013	0.26016
7	-0.09374	0.00070	-0.02938	0.01632	0.01729	0.02277	0.00015	0.26019
8	-0.09117	0.00070	-0.02967	0.01647	0.01719	0.02263	0.00014	0.26018

i	β_{20}	β_{21}	β_{22}	β_{23}	β_{24}	β_{25}	β_{26}	τ
9	-0.10538	0.00070	-0.02898	0.01615	0.01751	0.02296	0.00015	0.26020
10	-0.08257	0.00071	-0.02972	0.01646	0.01710	0.02263	0.00014	0.26018
11	-0.02546	0.00069	-0.03140	0.01690	0.01687	0.02083	0.00025	0.26019
12	0.00964	0.00070	-0.03148	0.01671	0.01665	0.02091	0.00023	0.26020
13	-0.07862	0.00070	-0.03001	0.01659	0.01699	0.02250	0.00014	0.26017
14	0.00847	0.00070	-0.03145	0.01661	0.01685	0.02079	0.00024	0.26021
15	-0.05609	0.00071	-0.03072	0.01676	0.01663	0.02244	0.00013	0.26015
16	-0.05606	0.00068	-0.03135	0.01692	0.01731	0.02057	0.00029	0.26022
17	-0.04941	0.00068	-0.03134	0.01684	0.01735	0.02052	0.00029	0.26022
18	-0.04157	0.00068	-0.03136	0.01686	0.01718	0.02063	0.00028	0.26021
19	-0.05890	0.00068	-0.03138	0.01703	0.01714	0.02075	0.00027	0.26020
20	-0.02043	0.00071	-0.03169	0.01699	0.01627	0.02195	0.00015	0.26015
21	0.01043	0.00070	-0.03157	0.01685	0.01642	0.02109	0.00022	0.26018
22	-0.06999	0.00071	-0.03022	0.01664	0.01686	0.02246	0.00014	0.26016
23	-0.07024	0.00071	-0.03012	0.01659	0.01688	0.02252	0.00014	0.26016
24	0.01800	0.00070	-0.03150	0.01658	0.01676	0.02085	0.00023	0.26021
25	-0.07968	0.00067	-0.03135	0.01701	0.01752	0.02048	0.00031	0.26023
26	-0.23450	0.00064	-0.02762	0.01412	0.02047	0.02433	0.00063	0.26029
27	-0.07968	0.00067	-0.03135	0.01701	0.01752	0.02048	0.00031	0.26023
28	-0.07968	0.00067	-0.03135	0.01701	0.01752	0.02048	0.00031	0.26023
29	-0.01969	0.00069	-0.03144	0.01694	0.01670	0.02096	0.00024	0.26018
30	-0.02240	0.00069	-0.03145	0.01698	0.01666	0.02102	0.00023	0.26018
31	-0.01478	0.00069	-0.03149	0.01699	0.01652	0.02113	0.00022	0.26017
32	-0.03170	0.00069	-0.03143	0.01702	0.01672	0.02102	0.00024	0.26018
33	-0.06285	0.00068	-0.03140	0.01711	0.01703	0.02094	0.00025	0.26019
34	-0.04140	0.00069	-0.03140	0.01702	0.01689	0.02090	0.00025	0.26019
35	-0.03321	0.00069	-0.03144	0.01705	0.01667	0.02113	0.00023	0.26017
36	-0.04833	0.00068	-0.03135	0.01687	0.01728	0.02057	0.00029	0.26022
37	-0.13010	0.00070	-0.02752	0.01535	0.01820	0.02369	0.00022	0.26024
38	-0.07466	0.00071	-0.03014	0.01663	0.01693	0.02246	0.00014	0.26017
39	-0.04533	0.00069	-0.03141	0.01706	0.01687	0.02097	0.00024	0.26018
40	-0.10035	0.00070	-0.02915	0.01623	0.01741	0.02288	0.00015	0.26020
41	0.02250	0.00070	-0.03153	0.01658	0.01669	0.02089	0.00023	0.26021
42	-0.12019	0.00070	-0.02782	0.01551	0.01801	0.02352	0.00020	0.26023
43	0.00328	0.00070	-0.03159	0.01693	0.01637	0.02117	0.00021	0.26017
44	-0.00945	0.00070	-0.03174	0.01702	0.01624	0.02166	0.00017	0.26015
45	0.01625	0.00070	-0.03155	0.01676	0.01648	0.02102	0.00022	0.26019
46	-0.11681	0.00070	-0.02808	0.01566	0.01789	0.02341	0.00018	0.26022
47	0.00367	0.00070	-0.03155	0.01690	0.01642	0.02111	0.00022	0.26017
48	-0.01865	0.00070	-0.03152	0.01703	0.01645	0.02130	0.00021	0.26016
49	-0.00042	0.00070	-0.03163	0.01698	0.01632	0.02128	0.00020	0.26016
50	0.02619	0.00070	-0.03171	0.01679	0.01629	0.02117	0.00021	0.26018
51	0.01793	0.00070	-0.03168	0.01685	0.01629	0.02118	0.00021	0.26017
52	-0.07968	0.00067	-0.03135	0.01701	0.01752	0.02048	0.00031	0.26023
53	0.00895	0.00070	-0.03175	0.01695	0.01622	0.02134	0.00020	0.26016
54	0.00513	0.00070	-0.03180	0.01698	0.01619	0.02146	0.00019	0.26016
55	0.01765	0.00070	-0.03150	0.01663	0.01668	0.02089	0.00023	0.26021

i	β_{20}	β_{21}	β_{22}	β_{23}	β_{24}	β_{25}	β_{26}	τ
56	-0.11749	0.00070	-0.02810	0.01568	0.01789	0.02340	0.00018	0.26022
57	-0.10667	0.00070	-0.02862	0.01595	0.01763	0.02314	0.00016	0.26021
58	-0.11205	0.00070	-0.02850	0.01590	0.01771	0.02321	0.00017	0.26021
59	-0.12531	0.00070	-0.02765	0.01542	0.01812	0.02362	0.00021	0.26024
60	-0.03453	0.00069	-0.03145	0.01708	0.01658	0.02132	0.00021	0.26016
61	-0.02944	0.00070	-0.03147	0.01707	0.01646	0.02151	0.00019	0.26016
62	-0.04467	0.00068	-0.03137	0.01693	0.01710	0.02070	0.00027	0.26021
63	-0.07968	0.00067	-0.03135	0.01701	0.01752	0.02048	0.00031	0.26023
64	0.01902	0.00070	-0.03152	0.01665	0.01663	0.02092	0.00023	0.26020
65	-0.03056	0.00071	-0.03150	0.01698	0.01636	0.02201	0.00015	0.26015
66	0.01578	0.00070	-0.03159	0.01681	0.01641	0.02108	0.00022	0.26018
67	-0.05703	0.00071	-0.03072	0.01679	0.01665	0.02236	0.00013	0.26015
68	0.02269	0.00070	-0.03167	0.01680	0.01633	0.02114	0.00021	0.26018
69	-0.01299	0.00070	-0.03161	0.01703	0.01633	0.02147	0.00019	0.26016
70	-0.07968	0.00067	-0.03135	0.01701	0.01752	0.02048	0.00031	0.26023
71	0.00982	0.00070	-0.03154	0.01682	0.01647	0.02104	0.00022	0.26018
72	-0.00470	0.00070	-0.03172	0.01701	0.01625	0.02150	0.00019	0.26016
73	0.01029	0.00070	-0.03146	0.01663	0.01678	0.02083	0.00024	0.26021
74	0.01308	0.00070	-0.03151	0.01674	0.01656	0.02097	0.00023	0.26019
75	-0.07968	0.00067	-0.03135	0.01701	0.01752	0.02048	0.00031	0.26023
76	0.01158	0.00070	-0.03162	0.01688	0.01635	0.02115	0.00021	0.26017
77	-0.03708	0.00070	-0.03139	0.01706	0.01648	0.02170	0.00017	0.26015
78	-0.04780	0.00071	-0.03108	0.01683	0.01651	0.02239	0.00013	0.26015
79	0.00782	0.00070	-0.03162	0.01691	0.01634	0.02118	0.00021	0.26017
80	0.00690	0.00070	-0.03151	0.01682	0.01652	0.02101	0.00023	0.26018
81	-0.07968	0.00067	-0.03135	0.01701	0.01752	0.02048	0.00031	0.26023

Lampiran 14. Hasil uji signifikansi parameter model *Geographically Weighted Bivariate Poisson Inverse Gaussian Regression*

(a) Uji signifikansi secara simultan

```
> simult <- cbind(SimultanGW, chisq_simult, pv_simult)
> simult
          G^2 Chisq table p-value
[1,] 44709.58    1045.642       0
```

(b) Uji signifikansi secara parsial

i	$Z(\beta_{11})$	$Z(\beta_{12})$	$Z(\beta_{13})$	$Z(\beta_{14})$	$Z(\beta_{15})$	$Z(\beta_{16})$
1	-7.62	-0.58	-0.10	-0.12	1.95	-1.25
2	-7.43	-0.56	-0.15	-0.16	1.90	-1.17
3	-7.20	-0.53	-0.18	-0.18	1.84	-1.10
4	-10.24	-0.89	0.23	-0.05	1.77	-1.77
5	-10.40	-0.87	0.17	0.03	1.93	-1.88
6	-6.13	-0.57	0.15	-0.16	1.52	-1.00
7	-4.93	-0.57	0.26	-0.25	1.00	-0.72
8	-5.24	-0.57	0.19	-0.23	1.13	-0.77
9	-4.51	-0.57	0.30	-0.28	0.81	-0.64
10	-5.32	-0.58	0.24	-0.23	1.17	-0.80
11	-9.77	-0.74	0.14	-0.21	1.97	-1.73
12	-10.41	-0.87	0.18	-0.03	1.94	-1.86
13	-5.68	-0.58	0.18	-0.20	1.32	-0.87
14	-10.24	-0.88	0.23	-0.08	1.80	-1.78
15	-6.08	-0.52	0.18	-0.13	1.56	-1.05
16	-8.65	-0.60	0.17	-0.38	1.72	-1.50
17	-8.78	-0.64	0.22	-0.39	1.69	-1.52
18	-9.14	-0.68	0.19	-0.33	1.79	-1.59
19	-8.68	-0.58	0.07	-0.33	1.83	-1.51
20	-7.28	-0.45	0.07	0.00	1.82	-1.41
21	-10.25	-0.80	0.11	0.05	2.05	-1.91
22	-5.89	-0.58	0.18	-0.18	1.42	-0.94
23	-5.73	-0.58	0.22	-0.19	1.36	-0.91
24	-10.28	-0.90	0.21	-0.01	1.78	-1.79
25	-7.86	-0.49	0.13	-0.45	1.61	-1.36
26	-1.92	-0.23	0.47	-0.58	0.01	-0.58
27	-7.86	-0.49	0.13	-0.45	1.61	-1.36
28	-7.86	-0.49	0.13	-0.45	1.61	-1.36
29	-9.96	-0.74	0.09	-0.14	2.07	-1.79
30	-9.87	-0.72	0.06	-0.13	2.10	-1.78
31	-9.94	-0.72	0.04	-0.06	2.15	-1.82
32	-9.60	-0.68	0.03	-0.17	2.08	-1.71
33	-8.61	-0.55	-0.03	-0.29	1.91	-1.48
34	-9.31	-0.65	0.05	-0.24	1.98	-1.64
35	-9.51	-0.66	-0.01	-0.14	2.12	-1.69
36	-8.87	-0.64	0.20	-0.37	1.73	-1.54

i	$Z(\beta_{11})$	$Z(\beta_{12})$	$Z(\beta_{13})$	$Z(\beta_{14})$	$Z(\beta_{15})$	$Z(\beta_{16})$
37	-3.44	-0.56	0.51	-0.37	0.31	-0.53
38	-5.83	-0.58	0.16	-0.19	1.38	-0.91
39	-9.19	-0.63	0.01	-0.23	2.00	-1.61
40	-4.69	-0.57	0.28	-0.27	0.89	-0.67
41	-10.29	-0.90	0.20	0.03	1.78	-1.80
42	-3.66	-0.57	0.49	-0.35	0.40	-0.55
43	-10.03	-0.75	0.07	0.03	2.11	-1.89
44	-8.23	-0.52	0.03	0.05	1.96	-1.60
45	-10.36	-0.85	0.14	0.05	1.98	-1.90
46	-3.82	-0.57	0.45	-0.34	0.48	-0.56
47	-10.19	-0.78	0.09	0.02	2.10	-1.90
48	-9.60	-0.68	-0.01	-0.04	2.18	-1.76
49	-9.68	-0.69	0.04	0.05	2.11	-1.84
50	-9.87	-0.77	0.11	0.15	1.92	-1.87
51	-9.90	-0.75	0.10	0.12	2.00	-1.89
52	-7.86	-0.49	0.13	-0.45	1.61	-1.36
53	-9.31	-0.64	0.06	0.10	2.02	-1.82
54	-8.83	-0.58	0.05	0.10	1.98	-1.75
55	-10.36	-0.89	0.20	0.01	1.84	-1.82
56	-3.83	-0.57	0.44	-0.34	0.49	-0.56
57	-4.23	-0.57	0.38	-0.30	0.67	-0.61
58	-4.11	-0.57	0.38	-0.31	0.62	-0.58
59	-3.54	-0.57	0.50	-0.36	0.35	-0.54
60	-9.28	-0.64	-0.06	-0.10	2.16	-1.65
61	-8.98	-0.62	-0.06	-0.05	2.16	-1.62
62	-9.11	-0.65	0.14	-0.31	1.84	-1.59
63	-7.86	-0.49	0.13	-0.45	1.61	-1.36
64	-10.38	-0.89	0.18	0.03	1.87	-1.84
65	-7.30	-0.49	0.05	-0.03	1.86	-1.36
66	-10.26	-0.82	0.12	0.07	2.01	-1.91
67	-6.34	-0.55	0.14	-0.13	1.62	-1.07
68	-10.02	-0.79	0.11	0.13	1.96	-1.89
69	-9.10	-0.62	-0.01	0.02	2.12	-1.71
70	-7.86	-0.49	0.13	-0.45	1.61	-1.36
71	-10.34	-0.82	0.13	0.03	2.04	-1.91
72	-8.84	-0.58	0.02	0.06	2.04	-1.71
73	-10.32	-0.88	0.22	-0.06	1.84	-1.81
74	-10.42	-0.86	0.16	0.01	1.97	-1.89
75	-7.86	-0.49	0.13	-0.45	1.61	-1.36
76	-10.07	-0.77	0.09	0.07	2.05	-1.90
77	-8.43	-0.60	-0.07	-0.05	2.10	-1.49
78	-6.20	-0.48	0.16	-0.10	1.62	-1.12
79	-9.97	-0.74	0.08	0.06	2.08	-1.90
80	-10.38	-0.83	0.14	0.00	2.04	-1.90
81	-7.86	-0.49	0.13	-0.45	1.61	-1.36

i	$Z(\beta_{21})$	$Z(\beta_{22})$	$Z(\beta_{23})$	$Z(\beta_{24})$	$Z(\beta_{25})$	$Z(\beta_{26})$
1	15.13	-8.57	14.61	15.06	11.93	0.78
2	14.75	-8.39	14.34	14.84	11.70	0.79
3	14.31	-8.16	14.00	14.53	11.41	0.80
4	13.75	-8.36	12.10	12.00	11.50	1.06
5	14.82	-8.98	13.17	13.05	12.19	1.07
6	13.41	-7.26	12.96	13.70	10.48	0.57
7	11.56	-6.16	11.29	12.56	9.26	0.53
8	12.07	-6.48	11.79	12.94	9.60	0.55
9	10.80	-5.74	10.57	12.03	8.78	0.52
10	12.22	-6.52	11.90	12.99	9.67	0.54
11	14.68	-8.91	13.78	13.75	12.18	1.21
12	14.79	-8.97	13.26	13.15	12.23	1.11
13	12.78	-6.88	12.43	13.40	10.06	0.57
14	13.91	-8.46	12.35	12.26	11.64	1.09
15	13.14	-7.13	12.62	13.23	10.23	0.53
16	12.79	-7.86	12.34	12.46	10.81	1.23
17	12.63	-7.78	12.09	12.20	10.72	1.22
18	13.33	-8.17	12.68	12.74	11.23	1.22
19	13.51	-8.23	13.09	13.20	11.27	1.21
20	14.08	-8.07	13.22	13.49	10.95	0.67
21	15.60	-9.40	14.14	14.04	12.67	1.09
22	13.09	-7.05	12.69	13.54	10.26	0.56
23	12.83	-6.87	12.44	13.31	10.06	0.55
24	13.87	-8.42	12.13	12.02	11.55	1.04
25	11.87	-7.35	11.72	11.94	10.09	1.22
26	5.11	-3.00	4.79	7.73	5.42	0.59
27	11.87	-7.35	11.72	11.94	10.09	1.22
28	11.87	-7.35	11.72	11.94	10.09	1.22
29	15.42	-9.30	14.45	14.40	12.66	1.20
30	15.62	-9.39	14.69	14.66	12.76	1.19
31	16.07	-9.61	15.04	15.00	13.01	1.15
32	15.42	-9.26	14.63	14.63	12.61	1.18
33	14.04	-8.47	13.64	13.77	11.59	1.17
34	14.65	-8.85	14.00	14.03	12.09	1.21
35	15.69	-9.37	14.92	14.94	12.75	1.15
36	12.91	-7.93	12.35	12.45	10.91	1.22
37	8.72	-4.55	8.40	10.45	7.53	0.56
38	13.02	-7.02	12.65	13.55	10.23	0.57
39	14.80	-8.91	14.19	14.24	12.16	1.18
40	11.13	-5.92	10.89	12.26	8.99	0.52
41	13.92	-8.45	12.12	12.00	11.56	1.02
42	9.15	-4.77	8.85	10.75	7.78	0.54
43	15.95	-9.55	14.65	14.58	12.85	1.09
44	15.01	-8.76	14.00	14.16	11.76	0.82
45	15.14	-9.16	13.54	13.42	12.38	1.07
46	9.49	-4.97	9.22	11.03	7.98	0.52
47	15.86	-9.53	14.53	14.45	12.85	1.11

i	$Z(\beta_{21})$	$Z(\beta_{22})$	$Z(\beta_{23})$	$Z(\beta_{24})$	$Z(\beta_{25})$	$Z(\beta_{26})$
48	16.25	-9.63	15.28	15.30	13.03	1.08
49	15.99	-9.52	14.79	14.77	12.78	1.04
50	14.85	-8.97	13.18	13.11	11.99	0.98
51	15.31	-9.22	13.79	13.72	12.33	1.02
52	11.87	-7.35	11.72	11.94	10.09	1.22
53	15.42	-9.19	14.12	14.13	12.26	0.97
54	15.16	-8.98	13.96	14.02	11.97	0.91
55	14.25	-8.65	12.55	12.43	11.82	1.05
56	9.52	-4.99	9.25	11.05	8.00	0.52
57	10.30	-5.42	10.05	11.63	8.46	0.51
58	10.07	-5.31	9.83	11.48	8.33	0.51
59	8.90	-4.64	8.59	10.58	7.64	0.55
60	16.02	-9.46	15.25	15.34	12.88	1.07
61	16.13	-9.42	15.30	15.44	12.81	0.97
62	13.67	-8.35	13.07	13.12	11.45	1.22
63	11.87	-7.35	11.72	11.94	10.09	1.22
64	14.43	-8.75	12.72	12.60	11.93	1.05
65	14.39	-8.17	13.61	13.94	11.20	0.67
66	15.35	-9.26	13.79	13.69	12.48	1.06
67	13.59	-7.42	13.08	13.70	10.59	0.57
68	15.06	-9.09	13.42	13.34	12.19	1.01
69	15.97	-9.39	14.96	15.04	12.65	0.96
70	11.87	-7.35	11.72	11.94	10.09	1.22
71	15.49	-9.35	14.01	13.91	12.63	1.10
72	15.51	-9.13	14.42	14.50	12.24	0.92
73	14.18	-8.62	12.60	12.50	11.82	1.09
74	15.03	-9.10	13.46	13.35	12.36	1.09
75	11.87	-7.35	11.72	11.94	10.09	1.22
76	15.63	-9.40	14.19	14.11	12.62	1.06
77	15.82	-9.12	15.08	15.32	12.49	0.87
78	13.10	-7.20	12.50	13.00	10.17	0.52
79	15.79	-9.47	14.43	14.37	12.71	1.07
80	15.45	-9.33	14.01	13.90	12.64	1.12
81	11.87	-7.35	11.72	11.94	10.09	1.22

Lampiran 15. Riwayat Hidup Penulis

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B. RIWAYAT PENDIDIKAN

1. SDN 178 Galitin	(2008-2014)
2. MTsN 2 Tana Toraja	(2014-2017)
3. MAN Enrekang	(2017-2020)
4. S1 Program Studi Statistika FMIPA Unhas	(2020-2024)