LAMPIRAN

Lampiran 1. Data Angka Partisipasi Kasar Perguruan Tinggi (Y) dan Variabel Independen (X_k) dan Titik Koordinat Indonesia

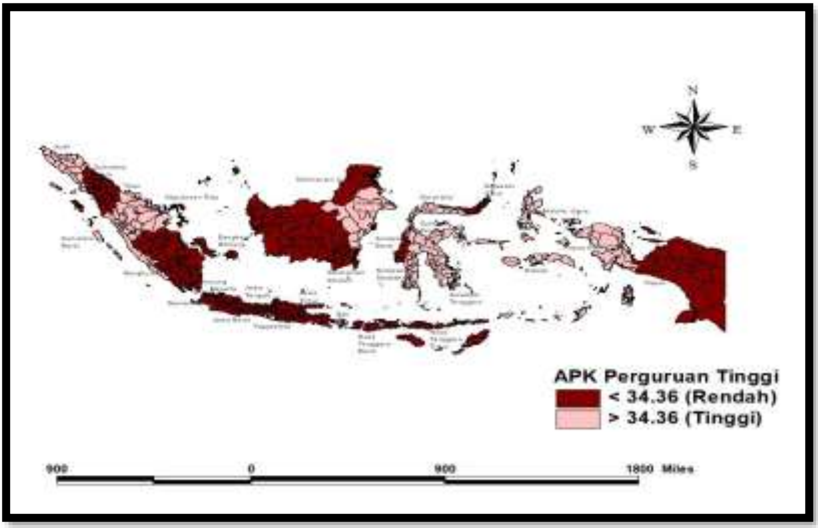
DATA ASLI

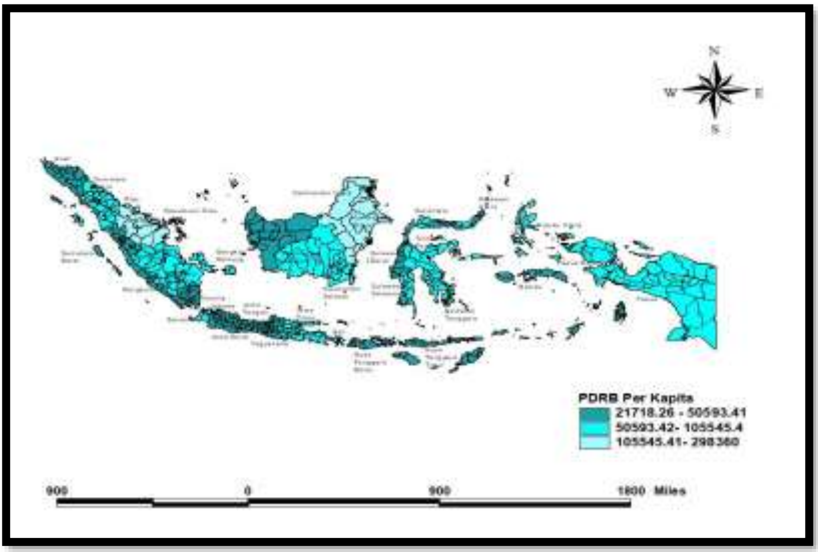
PROVINSI	Y	X1	X2	X3	X4	X5	X6	X7	V	U
ACEH	44.45	39156.01	9963	14.75	13.19	99.94	143	17	4.41533	96.9956
SUMATERA UTARA	30.94	63194.18	10848	8.33	10.67	99.92	318	16	2.36304	99.2161
SUMATERA BARAT	43.79	50593.41	11130	6.04	13.02	99.87	127	17	-0.64261	100.611
RIAU	35.29	149914.1	11158	6.84	10.98	99.92	111	16	0.36688	101.745
JAMBI	30.08	76096.4	10871	7.7	9.67	99.9	61	16	-1.65497	102.823
SUMATERA SELATAN	26.31	68338.1	11109	11.95	8.38	99.95	136	17	-3.09264	104.073
BENGKULU	38.15	43741.71	10840	14.34	12.53	99.85	25	15	-3.48606	102.368
LAMPUNG	21.48	45129.34	10336	11.44	7.07	99.9	111	17	-4.91092	105.059
KEP. BANGKA BELITUNG	14.85	63752.24	13358	4.61	8.38	99.88	20	14	-2.95817	106.819
KEP. RIAU	27.47	141682.7	14469	6.03	12.88	99.96	65	14	-0.14264	104.601
DKI JAKARTA	39.56	298360	18927	4.61	17.94	99.93	379	17	-6.22462	106.837
JAWA BARAT	26.01	49038.41	11277	7.98	9.23	99.97	600	20	-6.90763	107.638
JAWA TENGAH	23.95	42149.54	11377	10.98	7.37	99.96	356	23	-7.2901	109.896
DI YOGYAKARTA	75.59	44044.64	14482	11.49	15.76	99.93	135	24	-7.83533	110.443
JAWA TIMUR	30.07	66364.73	11992	10.49	9.19	99.94	544	19	-7.88129	112.616
BANTEN	32.67	60990.14	12216	6.24	9.61	99.91	164	34	-6.25794	106.167
BALI	38.46	55544.66	13942	4.53	15.56	99.94	73	15	-8.3412	115.179
NUSA TENGGARA BARAT	32.05	28672.54	10681	13.82	9.5	99.88	84	18	-8.57106	116.294
NUSA TENGGARA TIMUR	32.48	21718.26	7877	20.23	9.86	99.27	79	16	-8.58443	120.689
KALIMANTAN BARAT	26.59	46161.33	9355	6.81	8.16	99.89	81	18	-636474	111.304
KALIMANTAN TENGAH	25.84	72945.07	11458	5.22	10.47	99.85	38	12	-1.84217	113.286
KALIMANTAN SELATAN	27.5	60079.32	12469	4.61	10.13	99.92	64	18	-1.84217	115.2838
KALIMANTAN TIMUR	40.62	238700.7	12641	6.44	11.99	99.96	73	14	0.538659	116.4194
KALIMANTAN UTARA	25.66	190611.1	9350	6.86	11.46	99.6	13	10	0.538659	116.532
SULAWESI UTARA	34.36	59043.36	11179	7.34	11.08	99.91	89	15	0.624693	123.975
SULAWESI TENGAH	39.48	105545.4	9696	12.3	11.96	99.82	53	18	-1430025	121.4456
SULAWESI SELATAN	42.63	65593.03	11430	8.66	12.53	99.8	244	19	-3.6688	119.9741
SULAWESI TENGGARA	45.24	58764.27	9708	11.27	15.21	99.91	61	15	-4.14492	130.1453
GORONTALO	36.94	39886.78	10687	15.51	12.32	99.85	14	16	0.699937	122.1746
SULAWESI BARAT	29.43	37070.31	9358	11.92	12.49	99.52	30	13	-2.84414	119.2321
MALUKU	51.36	28533.85	8876	16.23	14.67	99.91	46	17	-3.23846	130.1453
MALUKU UTARA	44.27	53741.05	8398	6.37	12.4	99.87	26	15	1.570999	127.8088
PAPUA BARAT	36.11	77149.68	8101	21.43	14.46	99.66	37	12	-1.33612	133.1747
PAPUA	20.08	59411.79	7146	26.8	8.14	92.04	81	22	-4.46667	135.2

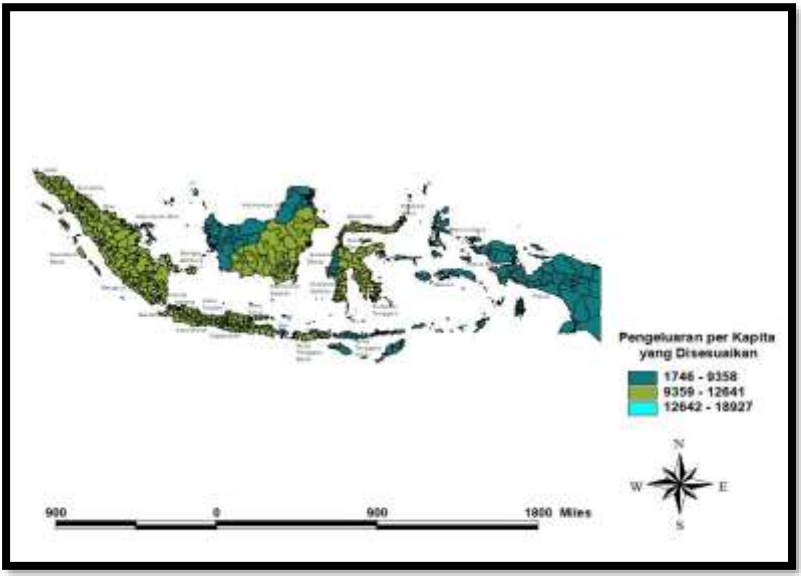
DATA STANDARISASI

PROV	Y	X1	X2	X3	X4	X5	X6	X7	V	U
ACEH	0.91473	-0.61817	-0.49697	0.84207	0.67459	0.23188	0.07734	-0.00697	4.41533	96.9956
SUMATERA UTARA	-0.3155	-0.22048	-0.10306	-0.37254	-0.28552	0.21704	1.28522	-0.24408	2.36304	99.2161
SUMATERA BARAT	0.85463	-0.42895	0.02245	-0.80579	0.60982	0.17996	-0.03309	-0.00697	-0.64261	100.611
RIAU	0.08062	1.21421	0.03491	-0.65444	-0.16742	0.21704	-0.14352	-0.24408	0.36688	101.745
JAMBI	-0.39381	-0.00703	-0.09283	-0.49173	-0.66652	0.20221	-0.48863	-0.24408	-1.65497	102.823
SUMATERA SELATAN	-0.73711	-0.13538	0.0131	0.31233	-1.15801	0.23929	0.02903	-0.00697	-3.09264	104.073
BENGKULU	0.34105	-0.5423	-0.10663	0.7645	0.42313	0.16513	-0.73711	-0.48119	-3.48606	102.368
LAMPUNG	-1.17693	-0.51934	-0.33095	0.21585	-1.65712	0.20221	-0.14352	-0.00697	-4.91092	105.059
KEP. BANGKA BELITUNG	-1.78066	-0.21125	1.01412	-1.07633	-1.15801	0.18738	-0.77162	-0.7183	-2.95817	106.819
KEP. RIAU	-0.63148	1.07803	1.50861	-0.80768	0.55648	0.24671	-0.46102	-0.7183	-0.14264	104.601
DKI JAKARTA	0.46944	3.67009	3.49283	-1.07633	2.48433	0.22446	1.70625	-0.00697	-6.22462	106.837
JAWA BARAT	-0.76443	-0.45467	0.08788	-0.43876	-0.83416	0.25413	3.23161	0.70435	-6.90763	107.638
JAWA TENGAH	-0.95201	-0.56864	0.13239	0.12882	-1.54282	0.24671	1.5475	1.41568	-7.2901	109.896
DI YOGYAKARTA	3.75035	-0.53729	1.5144	0.22531	1.65376	0.22446	0.02213	1.65279	-7.83533	110.443
JAWA TIMUR	-0.39472	-0.16803	0.40612	0.03611	-0.8494	0.23188	2.8451	0.46725	-7.88129	112.616
BANTEN	-0.15796	-0.25694	0.50582	-0.76795	-0.68938	0.20963	0.22229	4.02389	-6.25794	106.167
BALI	0.36928	-0.34703	1.27405	-1.09147	1.57756	0.23188	-0.4058	-0.48119	-8.3412	115.179
NUSA TENGGARA BARAT	-0.21442	-0.7916	-0.1774	0.66612	-0.73129	0.18738	-0.32988	0.23014	-8.57106	116.294
NUSA TENGGARA TIMUR	-0.17526	-0.90665	-1.42543	1.87884	-0.59413	-0.26503	-0.36439	-0.24408	-8.58443	120.689
KALIMANTAN BARAT	-0.71161	-0.50227	-0.76759	-0.66011	-1.24183	0.19479	-0.35059	0.23014	-636474	111.304
KALIMANTAN TENGAH	-0.77991	-0.05916	0.16844	-0.96093	-0.36172	0.16513	-0.64738	-1.19252	-1.84217	113.286
KALIMANTAN SELATAN	-0.62875	-0.27201	0.61843	-1.07633	-0.49126	0.21704	-0.46792	0.23014	-1.84217	115.2838
KALIMANTAN TIMUR	0.56597	2.68309	0.69498	-0.73011	0.21739	0.24671	-0.4058	-0.7183	0.538659	116.4194
KALIMANTAN UTARA	-0.7963	1.8875	-0.76981	-0.65065	0.01546	-0.02029	-0.81993	-1.66674	0.538659	116.532
SULAWESI UTARA	-0.00407	-0.28915	0.04426	-0.55984	-0.12932	0.20963	-0.29537	-0.48119	0.624693	123.975
SULAWESI TENGAH	0.46216	0.48017	-0.61581	0.37855	0.20596	0.14288	-0.54385	0.23014	-1430025	121.4456
SULAWESI SELATAN	0.749	-0.18079	0.15598	-0.31011	0.42313	0.12804	0.77446	0.46725	-3.6688	119.9741
SULAWESI TENGGARA	0.98667	-0.29377	-0.61047	0.18368	1.44421	0.20963	-0.48863	-0.48119	-4.14492	130.1453
GORONTALO	0.23087	-0.60608	-0.17472	0.98586	0.34312	0.16513	-0.81303	-0.24408	0.699937	122.1746
SULAWESI BARAT	-0.453	-0.65267	-0.76625	0.30666	0.40789	-0.07962	-0.7026	-0.95541	-2.84414	119.2321
MALUKU	1.54396	-0.7939	-0.98079	1.12207	1.23847	0.20963	-0.59216	-0.00697	-3.23846	130.1453
MALUKU UTARA	0.89834	-0.37687	-1.19354	-0.74336	0.3736	0.17996	-0.7302	-0.48119	1.570999	127.8088
PAPUA BARAT	0.15528	0.0104	-1.32573	2.10587	1.15846	0.02421	-0.65428	-1.19252	-1.33612	133.1747
PAPUA	-1.30441	-0.28306	-1.75079	3.12183	-1.24945	-5.62721	-0.35059	1.17857	-4.46667	135.2

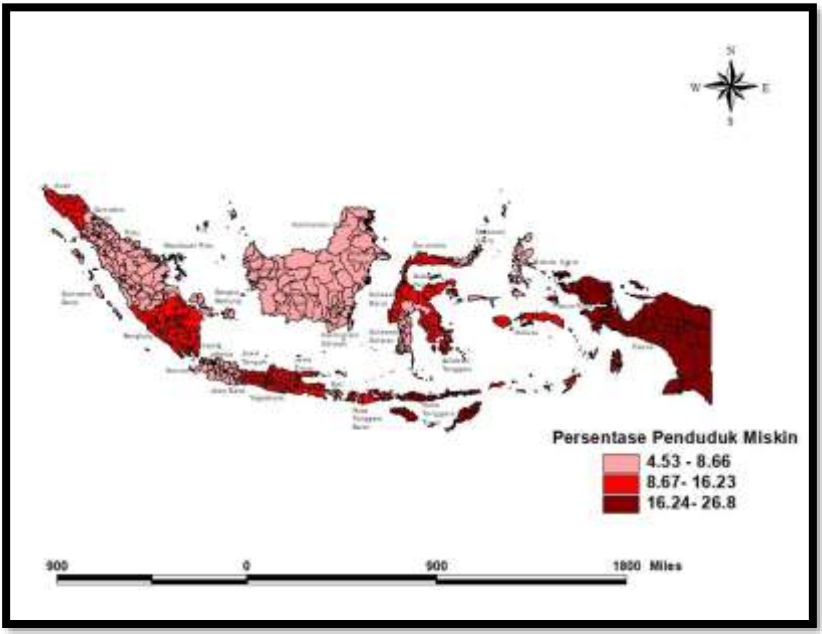
Lampiran 2. Peta Tematik Pada Setiap Variabel



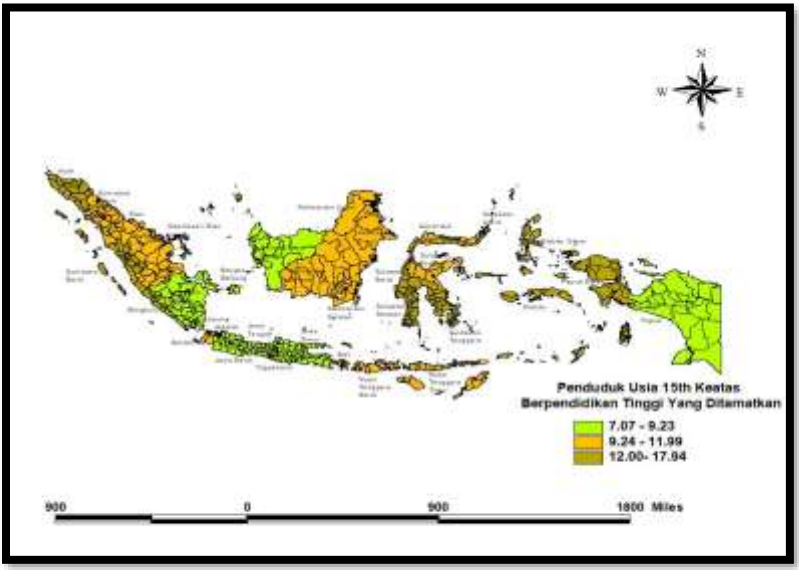


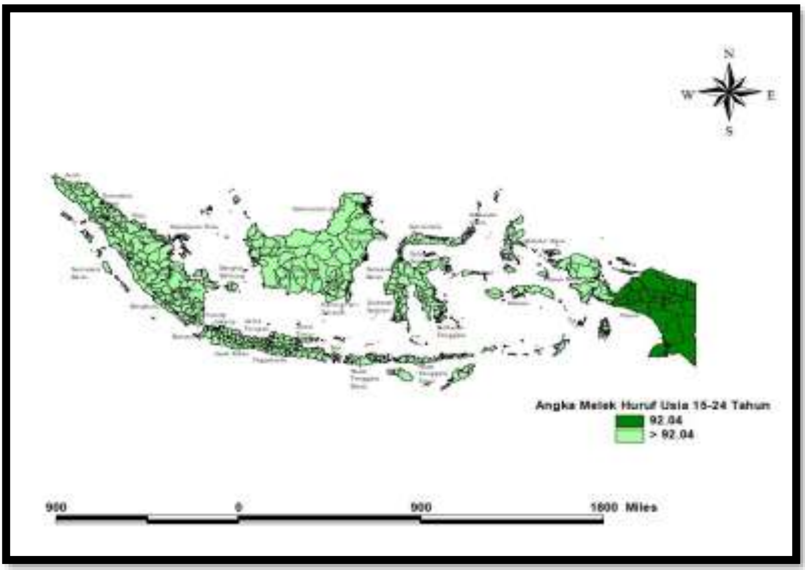


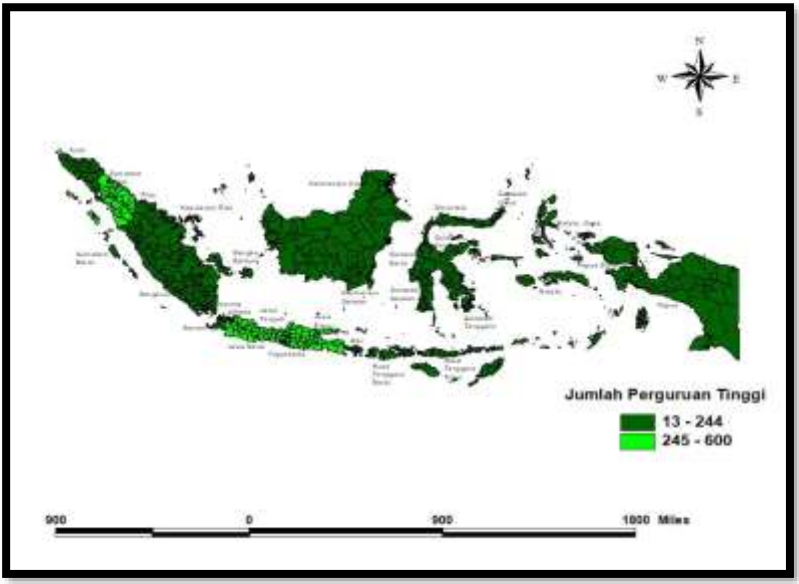
Pengeluaran per Kapita yang Disesuaikan
1746 - 9358
9359 - 12641
12642 - 18927
N
W
E
S
900
0
900
1800 Miles

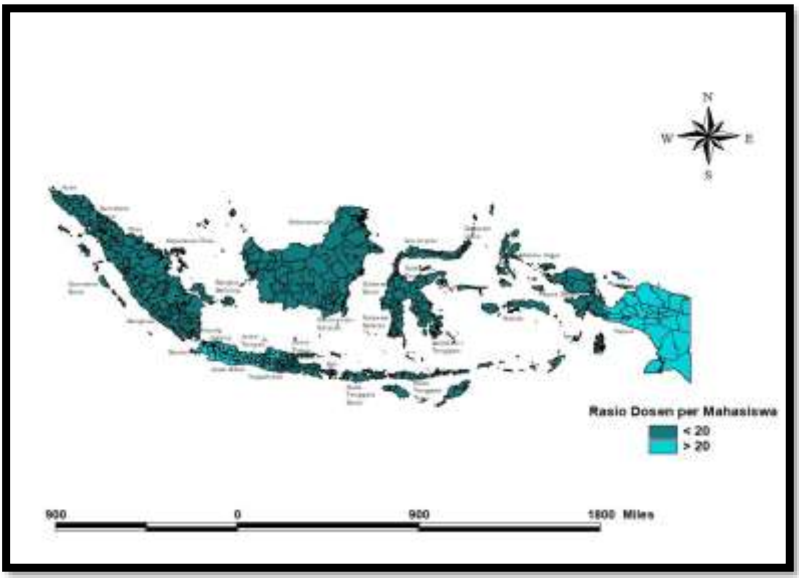


N
W
E
S
Persentase Penduduk Miskin
4.53 - 8.66
8.67- 16.23
16.24- 26.8
900
0
900
1800 Miles


N
W
E
S
Penduduk Usia 15th Keatas
Berpendidikan Tinggi Yang Ditamatkan
7.07 - 9.23
9.24 - 11.99
12.00- 17.94
900
0
900
1800 Miles


N
W
E
S
Angka Melek Huruf Usia 15-24 Tahun
92.04
> 92.04
900
0
900
1800 Miles


N
W
E
S
Jumlah Perguruan Tinggi
13 - 244
245 - 600
900
0
900
1800 Miles


N
W
E
S
Rasio Dosen per Mahasiswa
< 20
> 20
900
0
900
1800 Miles

Lampiran 3. Matriks Jarak Euclidean untuk setiap Provinsi

d_{ij}	1	2	⋯	33	34
1	0	3.023659123	⋯	36.63342	39.22328
2	3.023659123	0	⋯	34.1595	36.6263
3	6.217224809	3.313560614	⋯	32.5711	34.79974
4	6.240733016	3.221799242	⋯	31.47582	33.80237
5	8.414697431	5.399456637	⋯	30.35339	32.49886
6	10.31790843	7.304378392	⋯	29.15468	31.15731
7	9.554823164	6.644279075	⋯	30.88165	32.84664
8	12.32872013	9.330056803	⋯	28.34207	30.14427
9	12.28282092	9.280051954	⋯	26.40558	28.42106
10	8.866633553	5.939324479	⋯	28.59863	30.90301
11	14.4935051	11.48155134	⋯	26.78755	28.41742
12	15.53930825	12.52492403	⋯	26.13744	27.66987
13	17.41945498	14.39594998	⋯	24.02808	25.46103
14	18.19096581	15.16740038	⋯	23.64256	24.98513
15	19.87973238	16.86723502	⋯	21.57545	22.84068
16	14.07242944	11.07412782	⋯	27.45252	29.0882
17	22.21182328	19.21964959	⋯	19.31106	20.39246
18	23.2610096	20.27829409	⋯	18.36581	19.34639
19	27.02537629	24.10254206	⋯	14.43715	15.08393
20	636478.4155	636476.3632	⋯	636472.7	636469.5
21	17.45088646	14.68488601	⋯	19.89515	22.0706
22	19.32907213	16.60883574	⋯	17.89811	20.08842
23	19.80687146	17.29975487	⋯	16.85989	19.43617
24	19.91729704	17.41172209	⋯	16.748	19.32739
25	27.24439504	24.81985251	⋯	9.406355	12.32568
26	1430029.416	1430027.363	⋯	1430024	1430021
27	24.35903208	21.61656065	⋯	13.40518	15.24683
28	34.23709538	31.60644374	⋯	4.131211	5.064954

d_{ij}	1	2	⋯	33	34
29	25.45164899	23.01866336	⋯	11.18695	14.01266
30	23.39146888	20.68221624	⋯	14.02395	16.05014
31	34.02177752	31.43231717	⋯	3.577212	5.201801
32	30.94416909	28.60363699	⋯	6.102844	9.543778
33	36.63342134	34.1594987	⋯	0	3.728557
34	39.2232823	36.62629905	⋯	3.728557	0

Lampiran 4. *Bandwidth* masing-masing Fungsi Kernel tiap Provinsi

Fungsi Pembobot	*Bandwidth*
Fixed Kernel Gaussian	1430029
Fixed Kernel Bisquare	1430022
Fixed Kernel Tricube	1430024

Provinsi	Adaptive Kernel Gaussian	Adaptive Kernel Bisquare	Adaptive Kernel Tricube
Aceh	8,193456	2,22105	2,648956
Sumatera Utara	5,187178	1,921865	2,373351
Sumatera Barat	3,339547	1,647682	2,160068
Riau	3,189161	1,600879	2,077530
Jambi	2,329820	1,404898	1,938146
Sumatera Selatan	2,679998	1,297733	1,815600
Bengkulu	3,312211	1,472464	1,982637
Lampung	5,586289	1,259970	1,734588
Kep.Bangka Belitung	3,353689	1,101235	1,550694
Kep.Riau	3,524461	1,338242	1,797270
DKI Jakarta	3,134572	1,182089	1,603336
Jawa Barat	2,886828	1,228517	1,611154
Jawa Tengah	3,192868	1,087024	1,563990
DI Yogyakarta	3,848127	1,040194	1,568943
Jawa Timur	3,644564	1,160449	1,595598
Banten	3,198764	1,239457	1,651903
Bali	5,323084	1,338276	1,594232

Nusa Tenggara Barat	5,744213	1,441347	1,527573
Nusa Tenggara Timur	5,880883	1,470703	1,794078
Kalimantan Barat	6,364661	6,364722	6,364742
Kalimantan Tengah	5,825922	1,046442	1,401986
Kalimantan Selatan	3,932494	1,128003	1,437990
Kalimantan Timur	4,352148	1,259969	1,457779
Kalimantan Utara	4,297450	1,270129	1,461294
Sulawesi Utara	5,875313	1,798956	2,006341
Sulawesi Tengah	1,430017	1,430023	1,430025
Sulawesi Selatan	5,026707	1,340517	1,586409
Sulawesi Tenggara	6,062058	2,335607	2,601261
Gorontalo	5,568270	1,640660	1,833025
Sulawesi Barat	4,392141	1,350335	1,574745
Maluku	5,332203	2,332767	2,595641
Maluku Utara	6,061959	2,188006	2,400764
Papua Barat	5,902193	2,640543	2,896536
Papua	9,101901	2,841701	3,107073

Lampiran 5. T_Hitung (Parameter Parsial) Model GWR setiap Provinsi > T_Tabel (2,055)

Provinsi	T_X1	T_X2	T_X3	T_X4	T_X5	T_X6	T_X7
Aceh	| -0,17760 |	|-3,53872|	| -0,01865 |	|9,37004|	|1,24596|	|-0,86960|	|4,25269|
Sumatera Utara	| 0,53895 |	|-3,82733|	| -0,39586 |	|7,53407|	|-0,20598|	|-0,54314|	|3,42521|
Sumatera Barat	| 0,45862 |	|-4,08859|	| -0,58319 |	|7,07310|	|-0,12117|	|-0,48660|	|2,98623|
Riau	| 0,45850 |	||-4,16496|	|-0,54951|	|6,89758|	|-0,14388|	|-0,50983|	2,75475|
Jambi	| 0,22446 |	|-4,27255|	|-0,40343|	|6,01239|	|0,14471|	|0,64482|	|2,72156|
Sumatera Selatan	| 0,74603 |	|-3,72823|	|0,13848|	|6,09376|	|0,11422|	|0,17114|	|2,86324|
Bengkulu	| 0,41081 |	|-3,98536|	|-0,06939|	|6,95651|	|0,32911|	|-0,07001|	|2,70585|
Lampung	| -1,27818 |	|-1,36654|	|1,38608|	|6,32955|	|1,33839|	|-1,11689|	|3,30758|
Kep.Bangka Belitung	| -2,67188 |	|-1,59111|	|2,04398|	|9,48105|	|1,09861|	|-0,86490|	|3,53130|
Kep.Riau	| 0,51168 |	|-4,03988|	|0,16389|	|7,09168|	|-0,04115|	|0,04353|	|2,78563|
DKI Jakarta	| -4,63098 |	|1,03879|	|3,27410|	|8,74085|	|1,87024|	|-1,55966|	|2,80046|
Jawa Barat	| -4,96836 |	|1,39266|	|3,65029|	|7,04034|	|0,59506|	|-0,71063|	|3,88464|
Jawa Tengah	| -4,96062 |	|1,97376|	|5,82836|	|7,63459|	|-1,09040|	|0,41400|	|4,30169|

DI Yogyakarta	| -4,35816 |	|1,14303|	|6,33249|	|9,02682|	|1,49976|	|-0,72293|	5,20680|
Jawa Timur	| -2,48885 |	|0,07360|	|6,04054|	|9,42048|	|2,61744|	|-0,66478|	|2,73922|
Banten	| -4,35420 |	|0,70392|	|2,87818|	|9,05276|	|2,25169|	|-1,81612|	|6,33578|
Bali	| 0,16865 |	|-1,45550|	|5,00000|	|10,89934|	|4,02234|	|-1,28987|	|6,78060|
NTB	| 0,32076 |	|-0,54497|	|4,30129|	|10,36846|	|4,31178|	|-1,19394|	|7,18194|
NTT	| 2,31642 |	|-1,18768|	|2,14348|	|9,27642|	|4,95543|	|-1,22200|	|6,79163|
Kalimantan Barat	|-1,32276|	|-2,33906|	|0,78983|	|14,36704|	|3,56006|	|-0,96906|	|5,93652|
Kalimantan Tengah	|0,65820|	|-2,87885|	|4,22605|	|12,22165|	|5,40656|	|-1,86501|	|3,56609|
Kalimantan Selatan	|2,04499|	|-2,05264|	|2,70883|	|8,12019|	|3,56636|	|-1,21670|	|3,11515|
Kalimantan Timur	|2,12593|	|-1,86579|	|1,57011|	|8,06945|	|3,15790|	|-0,09360|	|2,96584|
Kalimantan Utara	|2,12901|	|-1,73070|	|1,52012|	|7,84608|	|3,05071|	|0,01577|	|5,70071|
Sulawesi Utara	|2,46752|	|-2,81908|	|-1,04063|	|7,08831|	|4,34470|	|-1,22682|	|6,77608|
Sulawesi Tengah	|-1,29694|	|-2,34244|	|0,80404|	|14,38574|	|3,56006|	|-0,97281|	|5,93917|
Sulawesi Selatan	|2,93205|	|-1,71456|	|1,30852|	|7,993098|	|3,75294|	|-0,96500|	|4,40607|

Sulawesi Tenggara	|2,22721|	|-2,78465|	|-1,15997|	|4,11252|	|3,64308|	|-1,42458|	|5,67589|
Gorontalo	|2,55367|	|-2,67751|	|-0,55899|	|7,95870|	|4,38835|	|-1,02426|	|5,67589|
Sulawesi Barat	|2,97989|	|-1,40103|	|1,47097|	|6,62908|	|2,22704|	|-0,47896|	|4,53457|
Maluku	|1,92432|	|-2,35206|	|-1,00580|	|3,10950|	|3,03882|	|-1,25094|	|3,90309|
Maluku Utara	|2,19454 |	|-2,54468|	|-1,32573|	|4,38823|	|3,67449|	|-1,15431|	|4,74417|
Papua Barat	|1,79756|	|-2,11533|	|-0,85290|	|2,49883|	|2,63642|	|-1,12581|	|3,61446|
Papua	|2,04033|	|-3,07013|	|-1,33122|	|5,79938|	|4,00705|	|-1,87249|	|5,41600|

Lampiran 6. Pemodelan GWR untuk setiap Provinsi

Provinsi	Model
Aceh	$\hat{y} = -0{,}2638 - 0{,}0208X_1 - 0{,}5305X_2 - 0{,}0029X_3 + 0{,}9656X_4 + 1{,}9130X_5 - 0{,}3026X_6 + 0{,}3026X_7$
Sumatera Utara	$\hat{y} = 0{,}2930 + 0{,}0935X_1 - 0{,}7053X_2 - 0{,}0716X_3 + 0{,}9246X_4 - 0{,}7773X_5 - 0{,}0729X_6 + 0{,}2859X_7$
Sumatera Barat	$\hat{y} = 0{,}2445 + 0{,}0928X_1 - 0{,}7824X_2 - 0{,}1163X_3 + 0{,}9103X_4 - 0{,}5104X_5 - 0{,}0734X_6 + 0{,}2679X_7$
Riau	$\hat{y} = 0{,}2704 + 0{,}0945X_1 - 0{,}7956X_2 - 0{,}1094X_3 + 0{,}9060X_4 - 0{,}6145X_5 - 0{,}0806X_6 + 0{,}2901X_7$
Jambi	$\hat{y} = 0{,}0526 + 0{,}0485X_1 - 0{,}8111X_2 - 0{,}0832X_3 + 0{,}8988X_4 + 0{,}7510X_5 + 0{,}1107X_6 + 0{,}1995X_7$
Sumatera Selatan	$\hat{y} = 0{,}0563 + 0{,}1275X_1 - 0{,}7127X_2 + 0{,}0261X_3 + 0{,}8910X_4 + 0{,}5469X_5 + 0{,}0171X_6 + 0{,}1960X_7$
Bengkulu	$\hat{y} = -0{,}1295 + 0{,}0671X_1 - 0{,}7044X_2 - 0{,}0127X_3 + 0{,}9458X_4 + 1{,}5206X_5 - 0{,}0067X_6 + 0{,}2037X_7$
Lampung	$\hat{y} = -1{,}2783 - 0{,}2289X_1 - 0{,}2769X_2 + 0{,}2753X_3 + 1{,}0048X_4 + 6{,}7691X_5 - 0{,}1160X_6 + 0{,}1979X_7$
Kep.Bangka Belitung	$\hat{y} = -0{,}5222 - 0{,}3415X_1 - 0{,}2751X_2 + 0{,}3435X_3 + 1{,}1373X_4 + 3{,}7672X_5 - 0{,}0715X_6 + 0{,}2296X_7$
Kep.Riau	$\hat{y} = 0{,}2217 + 0{,}0813X_1 - 0{,}7038X_2 + 0{,}0288X_3 + 0{,}9267X_4 - 0{,}1694X_5 + 0{,}0042X_6 + 0{,}2446X_7$
DKI Jakarta	$\hat{y} = -1{,}4281 - 0{,}6956X_1 + 0{,}2338X_2 + 0{,}6495X_3 + 1{,}1589X_4 + 7{,}4744X_5 - 0{,}3111X_6 + 0{,}1992X_7$

Jawa Barat	$\hat{y} = -0{,}4652 - 0{,}7901X_1 + 0{,}3988X_2 + 0{,}8373X_3 + 1{,}1510X_4 + 2{,}6418X_5 - 0{,}0586X_6 + 0{,}2033X_7$
Jawa Tengah	$\hat{y} = 0{,}5920 - 0{,}7469X_1 + 0{,}5037X_2 + 1{,}0521X_3 + 1{,}0800X_4 - 3{,}0242X_5 + 0{,}0344X_6 + 0{,}2586X_7$
DI Yogyakarta	$\hat{y} = -0{,}2125 - 0{,}5119X_1 + 0{,}2333X_2 + 1{,}0031X_3 + 1{,}0977X_4 + 1{,}6974X_5 - 0{,}0502X_6 + 0{,}2858X_7$
Jawa Timur	$\hat{y} = -0{,}3821 - 0{,}2649X_1 + 0{,}0138X_2 + 0{,}9847X_3 + 1{,}1353X_4 + 2{,}8430X_5 - 0{,}0528X_6 + 0{,}3946X_7$
Banten	$\hat{y} = -1{,}8224 - 0{,}6449X_1 + 0{,}1464X_2 + 0{,}5499X_3 + 1{,}1605X_4 + 9{,}4370X_5 - 0{,}1597X_6 + 0{,}1967X_7$
Bali	$\hat{y} = -0{,}2176 + 0{,}0132X_1 - 0{,}1812X_2 + 0{,}6502X_3 + 1{,}0330X_4 + 2{,}4470X_5 - 0{,}0920X_6 + 0{,}4622X_7$
Nusa Tenggara Barat	$\hat{y} = -0{,}0915 + 0{,}0250X_1 + 0{,}0637X_2 + 0{,}5175X_3 + 0{,}9361X_4 + 1{,}2053X_5 - 0{,}0851X_6 + 0{,}4992X_7$
Nusa Tenggara Timur	$\hat{y} = 0{,}0693 + 0{,}1942X_1 - 0{,}1548X_2 + 0{,}2458X_3 + 0{,}8443X_4 + 0{,}4252X_5 - 0{,}1008X_6 + 0{,}7319\,X_7$
Kalimantan Barat	$\hat{y} = 0{,}0008 - 0{,}0867X_1 - 0{,}1926X_2 + 0{,}0623X_3 + 0{,}8677X_4 + 0{,}2375X_5 - 0{,}0550X_6 + 0{,}4073X_7$
Kalimantan Tengah	$\hat{y} = -0{,}2348 + 0{,}0493X_1 - 0{,}3284X_2 + 0{,}4639X_3 + 1{,}0051X_4 + 2{,}8546X_5 - 0{,}1147X_6 + 0{,}3893X_7$
Kalimantan Selatan	$\hat{y} = -0{,}2908 + 0{,}0493X_1 - 0{,}3335X_2 + 0{,}4197X_3 + 0{,}9668X_4 + 3{,}4862X_5 - 0{,}1033X_6 + 0{,}4781X_7$

Kalimantan Timur	$\hat{y} = -0{,}2721 + 0{,}2020X_1 - 0{,}3061X_2 + 0{,}2454X_3 + 0{,}9192X_4 + 2{,}8266X_5 - 0{,}0096X_6 + 0{,}4910X_7$
Kalimantan Utara	$\hat{y} = -0{,}2668 + 0{,}2039X_1 - 0{,}2982X_2 + 0{,}2406X_3 + 0{,}9171X_4 + 2{,}7921X_5 + 0{,}0016X_6 + 0{,}4898X_7$
Sulawesi Utara	$\hat{y} = 0{,}2094 + 0{,}2588X_1 - 0{,}4510X_2 - 0{,}1173X_3 + 0{,}7443X_4 + 0{,}4123X_5 - 0{,}1878X_6 + 1{,}0381X_7$
Sulawesi Tengah	$\hat{y} = 0{,}0011 - 0{,}0856X_1 - 0{,}1930X_2 + 0{,}0633X_3 + 0{,}8681X_4 + 0{,}2383X_5 - 0{,}0553X_6 + 0{,}4080X_7$
Sulawesi Selatan	$\hat{y} = 0{,}1064 + 0{,}2660X_1 - 0{,}2340X_2 + 0{,}1615X_3 + 0{,}8197X_4 + 0{,}5399X_5 - 0{,}0909X_6 + 0{,}7927X_7$
Sulawesi Tenggara	$\hat{y} = 0{,}2708 + 0{,}2831X_1 - 0{,}5439X_2 - 0{,}1419X_3 + 0{,}6243X_4 + 0{,}4960X_5 - 0{,}3069X_6 + 1{,}2349X_7$
Gorontalo	$\hat{y} = 0{,}1794 + 0{,}2572X_1 - 0{,}3980X_2 - 0{,}0657X_3 + 0{,}7873X_4 + 0{,}4268X_5 - 0{,}1414X_6 + 0{,}9572X_7$
Sulawesi Barat	$\hat{y} = 0{,}0590 + 0{,}2823X_1 - 0{,}2214X_2 + 0{,}2130X_3 + 0{,}8128X_4 + 0{,}9296X_5 - 0{,}0506X_6 + 0{,}7501X_7$
Maluku	$\hat{y} = 0{,}3088 + 0{,}2909X_1 - 0{,}5516X_2 - 0{,}1339X_3 + 0{,}5815X_4 + 0{,}5275X_5 - 0{,}3284X_6 + 1{,}2706X_7$
Maluku Utara	$\hat{y} = 0{,}2813 + 0{,}2711X_1 - 0{,}5175X_2 - 0{,}1549X_3 + 0{,}6482X_4 + 0{,}4647X_5 - 0{,}2555X_6 + 1{,}1751X_7$
Papua Barat	$\hat{y} = 0{,}3406 + 0{,}2854X_1 - 0{,}5555X_2 - 0{,}1241X_3 + 0{,}5561X_4 + 0{,}5460X_5 - 0{,}3074X_6 + 1{,}2799X_7$

Papua	$\hat{y} = 0,1953 + 0,2035X_1 - 0,4765X_2 - 0,1533X_3 + 0,7028X_4 + 0,4026X_5 - 0,2452X_6 + 1,0667X_7$

Lampiran 7. Mengubah Nilai Estimasi Parameter OLS dan Uji F dalam Bentuk Pangkat Eksponen dari Hasil R Studio ke Bentuk Angka Biasa

Nilai Estimasi	I (sebelum)	II (sesudah)
β_0	-6,947e-07	$-6,947 \times 10^{-07}$
β_1	-8,659e-02	-0,08659
β_2	-1,912e-01	0,1912
β_3	6,431e-02	0,0643
β_4	8,686e-01	0,8686
β_5	2,377e-01	0,2377
β_6	-5,472e-02	-0,0547
β_7	4,070e-01	0,4070
Uji F (P-value)	**3,98e-06**	**0,000004**

Lampiran 8. Script Sintax beserta Output Program R Studio

#LIBRARY (package)

```
library(AICcmodavg)
library(foreign)
library(lattice)
library(zoo)
library(lmtest)
library(ape)
library(Matrix)
library(mvtnorm)
library(emulator)
library (spgwr)
library(car)
library(lmtest)
library(fBasics)
library (Gwmodel)
library (MLmetrics)
```

```
library (sp)
```

#INPUT DATA

```
library(readxl)
datastand <- read_excel("datastand.xlsx",
    col_types = c("text", "numeric", "numeric",
        "numeric", "numeric", "numeric",
        "numeric", "numeric", "numeric",
        "numeric", "numeric"))
View(datastand)
```

Lampiran 8.1. DESKRIPTIF DATA

Deskriptif Data Menggunakan Data Asli

```
attach(DATAKU)
summary(DATAKU)
```

```
##    PROVINSI                Y               X1               X2
##  Length:34          Min.   :14.85   Min.   : 21718   Min.   : 7146
##  Class :character   1st Qu.:26.81   1st Qu.: 44316   1st Qu.: 9699
##  Mode  :character   Median :32.58   Median : 59228   Median :10990
##                     Mean   :34.40   Mean   : 76521   Mean   :11080
##                     3rd Qu.:39.54   3rd Qu.: 71793   3rd Qu.:11858
##                     Max.   :75.59   Max.   :298360   Max.   :18927
##       X3               X4               X5              X6
##  Min.   : 4.530   Min.   : 7.070   Min.   :92.04   Min.   : 13.00
##  1st Qu.: 6.388   1st Qu.: 9.527   1st Qu.:99.85   1st Qu.: 47.75
##  Median : 8.495   Median :11.270   Median :99.91   Median : 80.00
##  Mean   :10.299   Mean   :11.419   Mean   :99.63   Mean   :131.79
##  3rd Qu.:12.213   3rd Qu.:12.793   3rd Qu.:99.93   3rd Qu.:135.75
##  Max.   :26.800   Max.   :17.940   Max.   :99.97   Max.   :600.00
##       X7              V                    U
##  Min.   :10.00   Min.   :-1430025.0   Min.   : 97.0
##  1st Qu.:15.00   1st Qu.:      -6.7   1st Qu.:105.3
##  Median :16.50   Median :      -3.2   Median :113.0
##  Mean   :17.03   Mean   :  -60782.2   Mean   :113.7
##  3rd Qu.:18.00   3rd Qu.:      -0.3   3rd Qu.:120.5
##  Max.   :34.00   Max.   :       4.4   Max.   :135.2
```

Lampiran 8.2. DETEKSI MULTIKOLINEARITAS

```
vif(regols)

##       X1        X2        X3        X4        X5
X6       X7
```

```
## 1.842544 2.884373 2.650785 1.562263 1.911451 1.38
4840 1.539246
```

Lampiran 8.3. REGRESI OLS

```
regols<-lm(formula=Y~X1+X2+X3+X4+X5+X6+X7,data=datas
tand)
summary(regols)

##
## Call:
## lm(formula = Y ~ X1 + X2 + X3 + X4 + X5 + X6 + X7
, data = datastand)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -1.11059 -0.20784  0.03478  0.21397  1.81756
##
## Coefficients:
##               Estimate Std. Error t value Pr(>|t|
)
## (Intercept) -6.947e-07  9.950e-02   0.000   1.000
0
## X1          -8.659e-02  1.371e-01  -0.632   0.533
2
## X2          -1.912e-01  1.715e-01  -1.115   0.275
2
## X3           6.431e-02  1.644e-01   0.391   0.698
9
## X4           8.686e-01  1.262e-01   6.881 2.64e-0
7 ***
## X5           2.377e-01  1.396e-01   1.703   0.100
6
## X6          -5.472e-02  1.189e-01  -0.460   0.649
0
## X7           4.070e-01  1.253e-01   3.248   0.003
2 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05
'.' 0.1 ' ' 1
```

```
##
## Residual standard error: 0.5802 on 26 degrees of
freedom
## Multiple R-squared:  0.7348, Adjusted R-squared:
0.6634
## F-statistic: 10.29 on 7 and 26 DF,  p-value: 3.98
e-06
```

Lampira 8.4 PENGUJIAN ASUMSI RESIDUAL

##Identik (Uji heterokedasitisitas/uji heterogenitas spasial)

```
bptest(lm(regols$residuals~X1+X2+X3+X4+X5+X6+X7, dat
a=datastand))

##
##  studentized Breusch-Pagan test
##
## data:  lm(regols$residuals ~ X1 + X2 + X3 + X4 +
X5 + X6 + X7, data = datastand)
## BP = 15.109, df = 7, p-value = 0.03463
```

Independen residual

```
dwtest(lm(regols$residuals~X1+X2+X3+X4+X5+X6+X7, dat
a = datastand))

##
##  Durbin-Watson test
##
## data:  lm(regols$residuals ~ X1 + X2 + X3 + X4 +
X5 + X6 + X7, data = datastand)
## DW = 1.8527, p-value = 0.2333
## alternative hypothesis: true autocorrelation is g
reater than 0
```

##uji normalitas residual

```
resid<-abs(regols$residuals)
res=regols$residual
ks.test(res,"pnorm",mean(res),sd(res),alternative=c(
"two.sided"))
```

```
##
##  Exact one-sample Kolmogorov-Smirnov test
##
## data:  res
## D = 0.15319, p-value = 0.3647
## alternative hypothesis: two-sided
```

#GEOGRAPHICALLY WEIGHTED REGRESSION

Lampiran 8.5. Bandwidth dan CV

##Mencari Bandwidth optimal (adaptive bandwidth) dan Cross Validation

```
b <- gwr.sel(Y~X1+X2+X3+X4+X5+X6+X7,coords=cbind(datastand$V,datastand$U),data=datastand, adapt=TRUE,gweight=gwr.Gauss)

## Adaptive q: 0.381966 CV score: 71.22671
## Adaptive q: 0.618034 CV score: 87.03931
## Adaptive q: 0.236068 CV score: 54.45302
## Adaptive q: 0.145898 CV score: 39.08884
## Adaptive q: 0.09016994 CV score: 101.167
## Adaptive q: 0.1803399 CV score: 47.81575
## Adaptive q: 0.1246118 CV score: 32.87288
## Adaptive q: 0.1114562 CV score: 31.98775
## Adaptive q: 0.1128785 CV score: 31.62339
## Adaptive q: 0.1168137 CV score: 31.65952
## Adaptive q: 0.1143816 CV score: 31.47737
## Adaptive q: 0.1147411 CV score: 31.47421
## Adaptive q: 0.1146539 CV score: 31.47393
## Adaptive q: 0.1146132 CV score: 31.47402
## Adaptive q: 0.1146946 CV score: 31.47398
## Adaptive q: 0.1146539 CV score: 31.47393

b

## [1] 0.1146539
```

Lampiran 8.6. Jarak Euclidean GWR

```
v=datastand[10]
u=datastand[11]
v<-as.matrix(v)
u<-as.matrix(u)
j<-nrow(v)
i<-nrow(u)
jarak<-matrix(0,34,34)
for (i in 1:34) {
  for (j in 1:34) {
    jarak[i,j]<-sqrt((u[i,]-u[j,])**2+(v[i,]-v[j,])**2)
  }
}
jarak
```

```
##                      [,1]            [,2]            [,3]
[,4]                                                     [,5]
##  [1,] 0.000000e+00 3.023659e+00 6.217225e+00 6.240
733e+00                                  8.414697e+00
##  [2,] 3.023659e+00 0.000000e+00 3.313561e+00 3.221
799e+00                                  5.399457e+00
##  [3,] 6.217225e+00 3.313561e+00 0.000000e+00 1.518
232e+00                                  2.432656e+00
##  [4,] 6.240733e+00 3.221799e+00 1.518232e+00 0.000
000e+00                                  2.291279e+00
##  [5,] 8.414697e+00 5.399457e+00 2.432656e+00 2.291
279e+00                                  0.000000e+00
##  [6,] 1.031791e+01 7.304378e+00 4.241238e+00 4.169
877e+00                                  1.905099e+00
##  [7,] 9.554823e+00 6.644279e+00 3.342492e+00 3.902
983e+00                                  1.886774e+00
##  [8,] 1.232872e+01 9.330057e+00 6.164670e+00 6.231
995e+00                                  3.949797e+00
##  [9,] 1.228282e+01 9.280052e+00 6.625789e+00 6.066
418e+00                                  4.203135e+00
## [10,] 8.866634e+00 5.939324e+00 4.021203e+00 2.901
094e+00                                  2.334187e+00
## [11,] 1.449351e+01 1.148155e+01 8.361932e+00 8.329
246e+00                                  6.082261e+00
## [12,] 1.553931e+01 1.252492e+01 9.414308e+00 9.361
941e+00                                  7.125634e+00
## [13,] 1.741945e+01 1.439595e+01 1.141930e+01 1.118
339e+01                                  9.043341e+00
## [14,] 1.819097e+01 1.516740e+01 1.218209e+01 1.195
539e+01                                  9.811282e+00
## [15,] 1.987973e+01 1.686724e+01 1.401851e+01 1.364
591e+01                                  1.160474e+01
```

```
## [16,] 1.407243e+01 1.107413e+01 7.899434e+00 7.965
069e+00                                         5.689435e+00
## [17,] 2.221182e+01 1.921965e+01 1.647710e+01 1.600
947e+01                                         1.404907e+01
## [18,] 2.326101e+01 2.027829e+01 1.757318e+01 1.707
513e+01                                         1.514266e+01
## [19,] 2.702538e+01 2.410254e+01 2.159163e+01 2.095
235e+01                                         1.916276e+01
## [20,] 6.364784e+05 6.364764e+05 6.364734e+05 6.364
744e+05                                         6.364723e+05
## [21,] 1.745089e+01 1.468489e+01 1.273164e+01 1.175
051e+01                                         1.046467e+01
## [22,] 1.932907e+01 1.660884e+01 1.472171e+01 1.371
779e+01                                         1.246216e+01
## [23,] 1.980687e+01 1.729975e+01 1.585246e+01 1.467
539e+01                                         1.377221e+01
## [24,] 1.991730e+01 1.741172e+01 1.596474e+01 1.478
798e+01                                         1.388338e+01
## [25,] 2.724440e+01 2.481985e+01 2.339835e+01 2.223
150e+01                                         2.127449e+01
## [26,] 1.430029e+06 1.430027e+06 1.430024e+06 1.430
025e+06                                         1.430023e+06
## [27,] 2.435903e+01 2.161656e+01 1.959810e+01 1.867
043e+01                                         1.726888e+01
## [28,] 3.423710e+01 3.160644e+01 2.974121e+01 2.875
642e+01                                         2.743550e+01
## [29,] 2.545165e+01 2.301866e+01 2.160536e+01 2.043
232e+01                                         1.949436e+01
## [30,] 2.339147e+01 2.068222e+01 1.875077e+01 1.777
944e+01                                         1.645211e+01
## [31,] 3.402178e+01 3.143232e+01 2.964813e+01 2.862
820e+01                                         2.736812e+01
## [32,] 3.094417e+01 2.860364e+01 2.728770e+01 2.609
157e+01                                         2.519316e+01
## [33,] 3.663342e+01 3.415950e+01 3.257110e+01 3.147
582e+01                                         3.035339e+01
## [34,] 3.922328e+01 3.662630e+01 3.479974e+01 3.380
237e+01                                         3.249886e+01
##                     [,6]             [,7]             [,8]
[,9]                                                    [,10]
```

```
##  [1,] 1.031791e+01 9.554823e+00 1.232872e+01 1.228
282e+01                                    8.866634e+00
##  [2,] 7.304378e+00 6.644279e+00 9.330057e+00 9.280
052e+00                                    5.939324e+00
##  [3,] 4.241238e+00 3.342492e+00 6.164670e+00 6.625
789e+00                                    4.021203e+00
##  [4,] 4.169877e+00 3.902983e+00 6.231995e+00 6.066
418e+00                                    2.901094e+00
##  [5,] 1.905099e+00 1.886774e+00 3.949797e+00 4.203
135e+00                                    2.334187e+00
##  [6,] 0.000000e+00 1.749801e+00 2.068412e+00 2.749
291e+00                                    2.996882e+00
##  [7,] 1.749801e+00 0.000000e+00 3.044947e+00 4.482
195e+00                                    4.020541e+00
##  [8,] 2.068412e+00 3.044947e+00 0.000000e+00 2.628
845e+00                                    4.790225e+00
##  [9,] 2.749291e+00 4.482195e+00 2.628845e+00 0.000
000e+00                                    3.584235e+00
## [10,] 2.996882e+00 4.020541e+00 4.790225e+00 3.584
235e+00                                    0.000000e+00
## [11,] 4.177198e+00 5.241343e+00 2.210677e+00 3.266
500e+00                                    6.479984e+00
## [12,] 5.221433e+00 6.283315e+00 3.261609e+00 4.033
484e+00                                    7.415421e+00
## [13,] 7.178160e+00 8.434542e+00 5.390461e+00 5.313
525e+00                                    8.895124e+00
## [14,] 7.941662e+00 9.171792e+00 6.126960e+00 6.076
188e+00                                    9.659527e+00
## [15,] 9.793569e+00 1.115076e+01 8.119812e+00 7.605
414e+00                                    1.114123e+01
## [16,] 3.795253e+00 4.702735e+00 1.744170e+00 3.363
567e+00                                    6.312627e+00
## [17,] 1.228375e+01 1.370015e+01 1.068556e+01 9.943
169e+00                                    1.338322e+01
## [18,] 1.339276e+01 1.482534e+01 1.181617e+01 1.101
273e+01                                    1.441404e+01
## [19,] 1.750003e+01 1.901716e+01 1.605589e+01 1.496
769e+01                                    1.816831e+01
## [20,] 6.364709e+05 6.364705e+05 6.364691e+05 6.364
710e+05                                    6.364739e+05
```

```
## [21,] 9.297475e+00 1.104106e+01 8.780703e+00 6.562
587e+00                                    8.849725e+00
## [22,] 1.128028e+01 1.301995e+01 1.067534e+01 8.538
008e+00                                    1.081710e+01
## [23,] 1.286933e+01 1.461643e+01 1.259985e+01 1.021
740e+01                                    1.183801e+01
## [24,] 1.297739e+01 1.472470e+01 1.270146e+01 1.032
326e+01                                    1.195042e+01
## [25,] 2.024619e+01 2.199456e+01 1.970934e+01 1.752
613e+01                                    1.938919e+01
## [26,] 1.430022e+06 1.430022e+06 1.430020e+06 1.430
022e+06                                    1.430025e+06
## [27,] 1.591149e+01 1.760700e+01 1.496669e+01 1.317
423e+01                                    1.577227e+01
## [28,] 2.609350e+01 2.778509e+01 2.509797e+01 2.335
644e+01                                    2.585591e+01
## [29,] 1.849464e+01 2.024411e+01 1.801182e+01 1.578
532e+01                                    1.759379e+01
## [30,] 1.516111e+01 1.687629e+01 1.432298e+01 1.241
360e+01                                    1.487839e+01
## [31,] 2.607268e+01 2.777838e+01 2.514196e+01 2.332
796e+01                                    2.573119e+01
## [32,] 2.418959e+01 2.593852e+01 2.365517e+01 2.147
286e+01                                    2.327095e+01
## [33,] 2.915468e+01 3.088165e+01 2.834207e+01 2.640
558e+01                                    2.859863e+01
## [34,] 3.115731e+01 3.284664e+01 3.014427e+01 2.842
106e+01                                    3.090301e+01
##               [,11]        [,12]        [,13]        [
,14]                                              [,15]
##  [1,] 1.449351e+01 1.553931e+01 1.741945e+01 1.819
097e+01                                    1.987973e+01
##  [2,] 1.148155e+01 1.252492e+01 1.439595e+01 1.516
740e+01                                    1.686724e+01
##  [3,] 8.361932e+00 9.414308e+00 1.141930e+01 1.218
209e+01                                    1.401851e+01
##  [4,] 8.329246e+00 9.361941e+00 1.118339e+01 1.195
539e+01                                    1.364591e+01
##  [5,] 6.082261e+00 7.125634e+00 9.043341e+00 9.811
282e+00                                    1.160474e+01
```

```
##  [6,] 4.177198e+00 5.221433e+00 7.178160e+00 7.941
662e+00                                      9.793569e+00
##  [7,] 5.241343e+00 6.283315e+00 8.434542e+00 9.171
792e+00                                      1.115076e+01
##  [8,] 2.210677e+00 3.261609e+00 5.390461e+00 6.126
960e+00                                      8.119812e+00
##  [9,] 3.266500e+00 4.033484e+00 5.313525e+00 6.076
188e+00                                      7.605414e+00
## [10,] 6.479984e+00 7.415421e+00 8.895124e+00 9.659
527e+00                                      1.114123e+01
## [11,] 0.000000e+00 1.052665e+00 3.239248e+00 3.949
383e+00                                      6.011771e+00
## [12,] 1.052665e+00 0.000000e+00 2.290163e+00 2.954
429e+00                                      5.072327e+00
## [13,] 3.239248e+00 2.290163e+00 0.000000e+00 7.723
243e-01                                      2.783506e+00
## [14,] 3.949383e+00 2.954429e+00 7.723243e-01 0.000
000e+00                                      2.173486e+00
## [15,] 6.011771e+00 5.072327e+00 2.783506e+00 2.173
486e+00                                      0.000000e+00
## [16,] 6.708280e-01 1.608085e+00 3.869211e+00 4.557
668e+00                                      6.650178e+00
## [17,] 8.606328e+00 7.676054e+00 5.386548e+00 4.762
940e+00                                      2.603937e+00
## [18,] 9.743748e+00 8.814382e+00 6.524972e+00 5.897
076e+00                                      3.742121e+00
## [19,] 1.405157e+01 1.315828e+01 1.087033e+01 1.027
335e+01                                      8.103563e+00
## [20,] 6.364678e+05 6.364671e+05 6.364667e+05 6.364
662e+05                                      6.364661e+05
## [21,] 7.797145e+00 7.586751e+00 6.416544e+00 6.633
296e+00                                      6.076172e+00
## [22,] 9.515965e+00 9.171505e+00 7.662107e+00 7.703
954e+00                                      6.602114e+00
## [23,] 1.172877e+01 1.151347e+01 1.019039e+01 1.028
790e+01                                      9.239118e+00
## [24,] 1.182094e+01 1.159957e+01 1.026283e+01 1.035
371e+01                                      9.286035e+00
## [25,] 1.845601e+01 1.798982e+01 1.615123e+01 1.595
892e+01                                      1.419080e+01
```

```
## [26,] 1.430019e+06 1.430018e+06 1.430018e+06 1.430
017e+06                                     1.430017e+06
## [27,] 1.338336e+01 1.275415e+01 1.070892e+01 1.040
197e+01                                     8.478563e+00
## [28,] 2.340087e+01 2.267620e+01 2.049208e+01 2.004
492e+01                                     1.792305e+01
## [29,] 1.682830e+01 1.640695e+01 1.464940e+01 1.450
798e+01                                     1.284540e+01
## [30,] 1.284779e+01 1.228555e+01 1.034064e+01 1.010
742e+01                                     8.315371e+00
## [31,] 2.349878e+01 2.280439e+01 2.065064e+01 2.023
143e+01                                     1.813371e+01
## [32,] 2.237380e+01 2.188029e+01 1.998465e+01 1.974
966e+01                                     1.789318e+01
## [33,] 2.678755e+01 2.613744e+01 2.402808e+01 2.364
256e+01                                     2.157545e+01
## [34,] 2.841742e+01 2.766987e+01 2.546103e+01 2.498
513e+01                                     2.284068e+01
##              [,16]        [,17]        [,18]        [
,19]            [,20]                        [,21]
##  [1,] 1.407243e+01 2.221182e+01 2.326101e+01 2.702
538e+01         636478.4            1.745089e+01
##  [2,] 1.107413e+01 1.921965e+01 2.027829e+01 2.410
254e+01         636476.4            1.468489e+01
##  [3,] 7.899434e+00 1.647710e+01 1.757318e+01 2.159
163e+01         636473.4            1.273164e+01
##  [4,] 7.965069e+00 1.600947e+01 1.707513e+01 2.095
235e+01         636474.4            1.175051e+01
##  [5,] 5.689435e+00 1.404907e+01 1.514266e+01 1.916
276e+01         636472.3            1.046467e+01
##  [6,] 3.795253e+00 1.228375e+01 1.339276e+01 1.750
003e+01         636470.9            9.297475e+00
##  [7,] 4.702735e+00 1.370015e+01 1.482534e+01 1.901
716e+01         636470.5            1.104106e+01
##  [8,] 1.744170e+00 1.068556e+01 1.181617e+01 1.605
589e+01         636469.1            8.780703e+00
##  [9,] 3.363567e+00 9.943169e+00 1.101273e+01 1.496
769e+01         636471.0            6.562587e+00
## [10,] 6.312627e+00 1.338322e+01 1.441404e+01 1.816
831e+01         636473.9            8.849725e+00
```

```
## [11,] 6.708280e-01 8.606328e+00 9.743748e+00 1.405
157e+01            636467.8             7.797145e+00
## [12,] 1.608085e+00 7.676054e+00 8.814382e+00 1.315
828e+01            636467.1             7.586751e+00
## [13,] 3.869211e+00 5.386548e+00 6.524972e+00 1.087
033e+01            636466.7             6.416544e+00
## [14,] 4.557668e+00 4.762940e+00 5.897076e+00 1.027
335e+01            636466.2             6.633296e+00
## [15,] 6.650178e+00 2.603937e+00 3.742121e+00 8.103
563e+00            636466.1             6.076172e+00
## [16,] 0.000000e+00 9.249655e+00 1.038781e+01 1.470
718e+01            636467.7             8.377302e+00
## [17,] 9.249655e+00 0.000000e+00 1.138447e+00 5.515
366e+00            636465.7             6.769109e+00
## [18,] 1.038781e+01 1.138447e+00 0.000000e+00 4.395
020e+00            636465.4             7.370619e+00
## [19,] 1.470718e+01 5.515366e+00 4.395020e+00 0.000
000e+00            636465.4             1.001312e+01
## [20,] 6.364677e+05 6.364657e+05 6.364654e+05 6.364
654e+05                            0.0  6.364722e+05
## [21,] 8.377302e+00 6.769109e+00 7.370619e+00 1.001
312e+01            636472.2             0.000000e+00
## [22,] 1.012987e+01 6.499874e+00 6.804304e+00 8.641
453e+00            636472.2             1.997758e+00
## [23,] 1.230062e+01 8.966073e+00 9.110582e+00 1.007
275e+01            636474.5             3.935286e+00
## [24,] 1.239462e+01 8.982341e+00 9.112827e+00 1.002
555e+01            636474.5             4.025510e+00
## [25,] 1.909177e+01 1.256013e+01 1.198164e+01 9.777
820e+00            636474.6             1.096997e+01
## [26,] 1.430019e+06 1.430017e+06 1.430016e+06 1.430
016e+06            793551.0             1.430023e+06
## [27,] 1.404772e+01 6.695063e+00 6.129841e+00 4.967
351e+00            636470.3             6.933010e+00
## [28,] 2.407120e+01 1.554343e+01 1.454127e+01 1.044
655e+01            636469.9             1.701581e+01
## [29,] 1.745438e+01 1.143156e+01 1.097875e+01 9.402
473e+00            636474.7             9.244977e+00
## [30,] 1.350371e+01 6.829725e+00 6.436610e+00 5.922
296e+00            636471.2             6.029907e+00
```

```
## [31,] 2.416764e+01 1.581225e+01 1.484232e+01 1.086
280e+01                636470.8                1.691699e+01
## [32,] 2.301431e+01 1.605499e+01 1.534442e+01 1.240
257e+01                636475.6                1.491846e+01
## [33,] 2.745252e+01 1.931106e+01 1.836581e+01 1.443
715e+01                636472.7                1.989515e+01
## [34,] 2.908820e+01 2.039246e+01 1.934639e+01 1.508
393e+01                636469.5                2.207060e+01
##              [,22]        [,23]        [,24]        [
,25]          [,26]                                 [,27]
##  [1,] 1.932907e+01 1.980687e+01 1.991730e+01 2.724
440e+01                 1430029                2.435903e+01
##  [2,] 1.660884e+01 1.729975e+01 1.741172e+01 2.481
985e+01                 1430027                2.161656e+01
##  [3,] 1.472171e+01 1.585246e+01 1.596474e+01 2.339
835e+01                 1430024                1.959810e+01
##  [4,] 1.371779e+01 1.467539e+01 1.478798e+01 2.223
150e+01                 1430025                1.867043e+01
##  [5,] 1.246216e+01 1.377221e+01 1.388338e+01 2.127
449e+01                 1430023                1.726888e+01
##  [6,] 1.128028e+01 1.286933e+01 1.297739e+01 2.024
619e+01                 1430022                1.591149e+01
##  [7,] 1.301995e+01 1.461643e+01 1.472470e+01 2.199
456e+01                 1430022                1.760700e+01
##  [8,] 1.067534e+01 1.259985e+01 1.270146e+01 1.970
934e+01                 1430020                1.496669e+01
##  [9,] 8.538008e+00 1.021740e+01 1.032326e+01 1.752
613e+01                 1430022                1.317423e+01
## [10,] 1.081710e+01 1.183801e+01 1.195042e+01 1.938
919e+01                 1430025                1.577227e+01
## [11,] 9.515965e+00 1.172877e+01 1.182094e+01 1.845
601e+01                 1430019                1.338336e+01
## [12,] 9.171505e+00 1.151347e+01 1.159957e+01 1.798
982e+01                 1430018                1.275415e+01
## [13,] 7.662107e+00 1.019039e+01 1.026283e+01 1.615
123e+01                 1430018                1.070892e+01
## [14,] 7.703954e+00 1.028790e+01 1.035371e+01 1.595
892e+01                 1430017                1.040197e+01
## [15,] 6.602114e+00 9.239118e+00 9.286035e+00 1.419
080e+01                 1430017                8.478563e+00
```

```
## [16,] 1.012987e+01 1.230062e+01 1.239462e+01 1.909
177e+01              1430019              1.404772e+01
## [17,] 6.499874e+00 8.966073e+00 8.982341e+00 1.256
013e+01              1430017              6.695063e+00
## [18,] 6.804304e+00 9.110582e+00 9.112827e+00 1.198
164e+01              1430016              6.129841e+00
## [19,] 8.641453e+00 1.007275e+01 1.002555e+01 9.777
820e+00              1430016              4.967351e+00
## [20,] 6.364722e+05 6.364745e+05 6.364745e+05 6.364
746e+05                     793551        6.364703e+05
## [21,] 1.997758e+00 3.935286e+00 4.025510e+00 1.096
997e+01              1430023              6.933010e+00
## [22,] 0.000000e+00 2.637803e+00 2.688197e+00 9.034
552e+00              1430023              5.033432e+00
## [23,] 2.637803e+00 0.000000e+00 1.125910e-01 7.556
103e+00              1430026              5.508025e+00
## [24,] 2.688197e+00 1.125910e-01 0.000000e+00 7.443
519e+00              1430026              5.436044e+00
## [25,] 9.034552e+00 7.556103e+00 7.443519e+00 0.000
000e+00              1430026              5.868702e+00
## [26,] 1.430023e+06 1.430026e+06 1.430026e+06 1.430
026e+06                             0     1.430021e+06
## [27,] 5.033432e+00 5.508025e+00 5.436044e+00 5.868
702e+00              1430021              0.000000e+00
## [28,] 1.503886e+01 1.450296e+01 1.439645e+01 7.798
811e+00              1430021              1.018236e+01
## [29,] 7.344800e+00 5.757475e+00 5.644929e+00 1.801
969e+00              1430026              4.891655e+00
## [30,] 4.073471e+00 4.399378e+00 4.328260e+00 5.876
062e+00              1430022              1.109321e+00
## [31,] 1.492696e+01 1.423610e+01 1.412758e+01 7.279
849e+00              1430022              1.018032e+01
## [32,] 1.298174e+01 1.143607e+01 1.132394e+01 3.948
831e+00              1430027              9.425405e+00
## [33,] 1.789811e+01 1.685989e+01 1.674800e+01 9.406
355e+00              1430024              1.340518e+01
## [34,] 2.008842e+01 1.943617e+01 1.932739e+01 1.232
568e+01              1430021              1.524683e+01
##           [,28]        [,29]        [,30]        [
,31]                                             [,32]
```

```
##  [1,] 3.423710e+01 2.545165e+01 2.339147e+01 3.402
178e+01                                     3.094417e+01
##  [2,] 3.160644e+01 2.301866e+01 2.068222e+01 3.143
232e+01                                     2.860364e+01
##  [3,] 2.974121e+01 2.160536e+01 1.875077e+01 2.964
813e+01                                     2.728770e+01
##  [4,] 2.875642e+01 2.043232e+01 1.777944e+01 2.862
820e+01                                     2.609157e+01
##  [5,] 2.743550e+01 1.949436e+01 1.645211e+01 2.736
812e+01                                     2.519316e+01
##  [6,] 2.609350e+01 1.849464e+01 1.516111e+01 2.607
268e+01                                     2.418959e+01
##  [7,] 2.778509e+01 2.024411e+01 1.687629e+01 2.777
838e+01                                     2.593852e+01
##  [8,] 2.509797e+01 1.801182e+01 1.432298e+01 2.514
196e+01                                     2.365517e+01
##  [9,] 2.335644e+01 1.578532e+01 1.241360e+01 2.332
796e+01                                     2.147286e+01
## [10,] 2.585591e+01 1.759379e+01 1.487839e+01 2.573
119e+01                                     2.327095e+01
## [11,] 2.340087e+01 1.682830e+01 1.284779e+01 2.349
878e+01                                     2.237380e+01
## [12,] 2.267620e+01 1.640695e+01 1.228555e+01 2.280
439e+01                                     2.188029e+01
## [13,] 2.049208e+01 1.464940e+01 1.034064e+01 2.065
064e+01                                     1.998465e+01
## [14,] 2.004492e+01 1.450798e+01 1.010742e+01 2.023
143e+01                                     1.974966e+01
## [15,] 1.792305e+01 1.284540e+01 8.315371e+00 1.813
371e+01                                     1.789318e+01
## [16,] 2.407120e+01 1.745438e+01 1.350371e+01 2.416
764e+01                                     2.301431e+01
## [17,] 1.554343e+01 1.143156e+01 6.829725e+00 1.581
225e+01                                     1.605499e+01
## [18,] 1.454127e+01 1.097875e+01 6.436610e+00 1.484
232e+01                                     1.534442e+01
## [19,] 1.044655e+01 9.402473e+00 5.922296e+00 1.086
280e+01                                     1.240257e+01
## [20,] 6.364699e+05 6.364747e+05 6.364712e+05 6.364
708e+05                                     6.364756e+05
```

```
## [21,] 1.701581e+01 9.244977e+00 6.029907e+00 1.691
699e+01                                          1.491846e+01
## [22,] 1.503886e+01 7.344800e+00 4.073471e+00 1.492
696e+01                                          1.298174e+01
## [23,] 1.450296e+01 5.757475e+00 4.399378e+00 1.423
610e+01                                          1.143607e+01
## [24,] 1.439645e+01 5.644929e+00 4.328260e+00 1.412
758e+01                                          1.132394e+01
## [25,] 7.798811e+00 1.801969e+00 5.876062e+00 7.279
849e+00                                          3.948831e+00
## [26,] 1.430021e+06 1.430026e+06 1.430022e+06 1.430
022e+06                                          1.430027e+06
## [27,] 1.018236e+01 4.891655e+00 1.109321e+00 1.018
032e+01                                          9.425405e+00
## [28,] 0.000000e+00 9.327604e+00 1.099044e+01 9.064
584e-01                                          6.175029e+00
## [29,] 9.327604e+00 0.000000e+00 4.606401e+00 8.890
587e+00                                          5.701101e+00
## [30,] 1.099044e+01 4.606401e+00 0.000000e+00 1.092
032e+01                                          9.646401e+00
## [31,] 9.064584e-01 8.890587e+00 1.092032e+01 0.000
000e+00                                          5.346977e+00
## [32,] 6.175029e+00 5.701101e+00 9.646401e+00 5.346
977e+00                                          0.000000e+00
## [33,] 4.131211e+00 1.118695e+01 1.402395e+01 3.577
212e+00                                          6.102844e+00
## [34,] 5.064954e+00 1.401266e+01 1.605014e+01 5.201
801e+00                                          9.543778e+00
##                        [,33]                [,34]
##            [1,]      3.663342e+01      3.922328e+01
##            [2,]      3.415950e+01      3.662630e+01
##            [3,]      3.257110e+01      3.479974e+01
##            [4,]      3.147582e+01      3.380237e+01
##            [5,]      3.035339e+01      3.249886e+01
##            [6,]      2.915468e+01      3.115731e+01
##            [7,]      3.088165e+01      3.284664e+01
##            [8,]      2.834207e+01      3.014427e+01
##            [9,]      2.640558e+01      2.842106e+01
##        [10,]       2.859863e+01        3.090301e+01
##        [11,]       2.678755e+01        2.841742e+01
```

```
##         [12,]        2.613744e+01        2.766987e+01
##         [13,]        2.402808e+01        2.546103e+01
##         [14,]        2.364256e+01        2.498513e+01
##         [15,]        2.157545e+01        2.284068e+01
##         [16,]        2.745252e+01        2.908820e+01
##         [17,]        1.931106e+01        2.039246e+01
##         [18,]        1.836581e+01        1.934639e+01
##         [19,]        1.443715e+01        1.508393e+01
##         [20,]        6.364727e+05        6.364695e+05
##         [21,]        1.989515e+01        2.207060e+01
##         [22,]        1.789811e+01        2.008842e+01
##         [23,]        1.685989e+01        1.943617e+01
##         [24,]        1.674800e+01        1.932739e+01
##         [25,]        9.406355e+00        1.232568e+01
##         [26,]        1.430024e+06        1.430021e+06
##         [27,]        1.340518e+01        1.524683e+01
##         [28,]        4.131211e+00        5.064954e+00
##         [29,]        1.118695e+01        1.401266e+01
##         [30,]        1.402395e+01        1.605014e+01
##         [31,]        3.577212e+00        5.201801e+00
##         [32,]        6.102844e+00        9.543778e+00
##         [33,]        0.000000e+00        3.728557e+00
## [34,] 3.728557e+00 0.000000e+00
```

Lampiran 8.7. Matriks Pembobot GWR setiap lokasi

```
h<-as.matrix(gwr.adaptgauss$bandwidth)
i<-nrow(h)
W<-matrix(0,34,34)
for (i in 1:34) {
  for (j in 1:34) {
    W[i,j]<-exp(-(1/2)*(jarak[i,j]/h[i,])**2)
    W[i,j]<-ifelse(jarak[i,j]<h[i,],W[i,j],0)
  }
}
```

```
W
```

```
##             [,1]      [,2]      [,3]      [,4]      [
,5]                  [,6]                        [,7]
##   [1,] 1.0000000 0.9341737 0.7498429 0.7482091 0.00
00000               0.0000000               0.0000000
```

```
##  [2,] 0.8437558 1.0000000 0.8154365 0.8245745 0.00
00000                0.0000000                0.0000000
##  [3,] 0.0000000 0.6112503 1.0000000 0.9018198 0.76
69670                0.0000000                0.0000000
##  [4,] 0.0000000 0.0000000 0.8928680 1.0000000 0.77
25248                0.0000000                0.0000000
##  [5,] 0.0000000 0.0000000 0.0000000 0.6165633 1.00
00000                0.7158259                0.7204223
##  [6,] 0.0000000 0.0000000 0.0000000 0.0000000 0.77
67322                1.0000000                0.8080378
##  [7,] 0.0000000 0.0000000 0.0000000 0.0000000 0.85
02321                0.8697547                1.0000000
##  [8,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.7262882                0.0000000
##  [9,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.7146085                0.0000000
## [10,] 0.0000000 0.0000000 0.0000000 0.7126445 0.80
30737                0.6966215                0.0000000
## [11,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [12,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [13,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [14,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [15,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [16,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [17,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [18,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [19,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [20,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [21,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
```

```
## [22,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000                0.0000000
## [23,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000                0.0000000
## [24,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000                0.0000000
## [25,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000                0.0000000
## [26,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000                0.0000000
## [27,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000                0.0000000
## [28,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000                0.0000000
## [29,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000                0.0000000
## [30,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000                0.0000000
## [31,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000                0.0000000
## [32,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000                0.0000000
## [33,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000                0.0000000
## [34,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000                0.0000000
##            [,8] [,9]     [,10]     [,11]     [,12]
[,13]                                            [,14]
##  [1,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                    0.0000000
##  [2,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                    0.0000000
##  [3,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                    0.0000000
##  [4,] 0.0000000    0 0.6611646 0.0000000 0.0000000
0.0000000                                    0.0000000
##  [5,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                    0.0000000
##  [6,] 0.7424242    0 0.0000000 0.0000000 0.0000000
0.0000000                                    0.0000000
```

```
##  [7,] 0.6553636    0 0.0000000 0.0000000 0.0000000
0.0000000                                   0.0000000
##  [8,] 1.0000000    0 0.0000000 0.6939785 0.0000000
0.0000000                                   0.0000000
##  [9,] 0.7354861    1 0.0000000 0.6222957 0.0000000
0.0000000                                   0.0000000
## [10,] 0.0000000    0 1.0000000 0.0000000 0.0000000
0.0000000                                   0.0000000
## [11,] 0.7798190    0 0.0000000 1.0000000 0.9451714
0.0000000                                   0.0000000
## [12,] 0.0000000    0 0.0000000 0.9356791 1.0000000
0.7300267                                   0.0000000
## [13,] 0.0000000    0 0.0000000 0.0000000 0.7731815
1.0000000                                   0.9711683
## [14,] 0.0000000    0 0.0000000 0.0000000 0.7447357
0.9800610                                   1.0000000
## [15,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.7470293                                   0.8370890
## [16,] 0.8618653    0 0.0000000 0.9782499 0.8812939
0.0000000                                   0.0000000
## [17,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                   0.6701140
## [18,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                   0.0000000
## [19,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                   0.0000000
## [20,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                   0.0000000
## [21,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                   0.0000000
## [22,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                   0.0000000
## [23,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                   0.0000000
## [24,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                   0.0000000
## [25,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                   0.0000000
## [26,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                   0.0000000
```

```
## [27,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                   0.0000000
## [28,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                   0.0000000
## [29,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                   0.0000000
## [30,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                   0.0000000
## [31,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                   0.0000000
## [32,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                   0.0000000
## [33,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                   0.0000000
## [34,] 0.0000000    0 0.0000000 0.0000000 0.0000000
0.0000000                                   0.0000000
##           [,15]     [,16]     [,17]     [,18]     [
,19]                 [,20]                   [,21]
##  [1,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000               0.0000000
##  [2,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000               0.0000000
##  [3,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000               0.0000000
##  [4,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000               0.0000000
##  [5,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000               0.0000000
##  [6,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000               0.0000000
##  [7,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000               0.0000000
##  [8,] 0.0000000 0.7966008 0.0000000 0.0000000 0.00
00000               0.0000000               0.0000000
##  [9,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000               0.0000000
## [10,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000               0.0000000               0.0000000
## [11,] 0.0000000 0.9773602 0.0000000 0.0000000 0.00
00000               0.0000000               0.0000000
```

```
## [12,] 0.0000000 0.8562884 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [13,] 0.6838561 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [14,] 0.8525624 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [15,] 1.0000000 0.0000000 0.7747346 0.0000000 0.00
00000                0.0000000                0.0000000
## [16,] 0.0000000 1.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [17,] 0.8872330 0.0000000 1.0000000 0.9773894 0.00
00000                0.0000000                0.0000000
## [18,] 0.8088033 0.0000000 0.9805519 1.0000000 0.74
62420                0.0000000                0.0000000
## [19,] 0.0000000 0.0000000 0.6441793 0.7563442 1.00
00000                0.0000000                0.0000000
## [20,] 0.0000000 0.0000000 0.6065311 0.6065313 0.60
65313                1.0000000                0.0000000
## [21,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                1.0000000
## [22,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.8789400
## [23,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.6644444
## [24,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.6448595
## [25,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [26,] 0.0000000 0.0000000 0.0000000 0.6065307 0.60
65308                0.8572973                0.0000000
## [27,] 0.0000000 0.0000000 0.0000000 0.0000000 0.61
36923                0.0000000                0.0000000
## [28,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [29,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [30,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [31,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
```

```
## [32,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [33,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
## [34,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                0.0000000                0.0000000
##           [,22]     [,23]     [,24]     [,25] [,26
]                      [,27]                     [,28]
##  [1,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.0000000
##  [2,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.0000000
##  [3,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.0000000
##  [4,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.0000000
##  [5,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.0000000
##  [6,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.0000000
##  [7,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.0000000
##  [8,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.0000000
##  [9,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.0000000
## [10,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.0000000
## [11,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.0000000
## [12,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.0000000
## [13,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.0000000
## [14,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.0000000
## [15,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.0000000
## [16,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.0000000
```

```
## [17,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.0000000
## [18,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.0000000
## [19,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.6999643                                    0.0000000
## [20,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.0000000
## [21,] 0.9429018 0.7960163 0.7876381 0.0000000     0
0.0000000                                    0.0000000
## [22,] 1.0000000 0.7985427 0.7916429 0.0000000     0
0.0000000                                    0.0000000
## [23,] 0.8322072 1.0000000 0.9996654 0.0000000     0
0.0000000                                    0.0000000
## [24,] 0.8223034 0.9996569 1.0000000 0.0000000     0
0.0000000                                    0.0000000
## [25,] 0.0000000 0.0000000 0.0000000 1.0000000     0
0.6072132                                    0.0000000
## [26,] 0.0000000 0.0000000 0.0000000 0.0000000     1
0.0000000                                    0.0000000
## [27,] 0.0000000 0.0000000 0.0000000 0.0000000     0
1.0000000                                    0.0000000
## [28,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    1.0000000
## [29,] 0.0000000 0.0000000 0.0000000 0.9489844     0
0.6798589                                    0.0000000
## [30,] 0.6504586 0.0000000 0.6153515 0.0000000     0
0.9686076                                    0.0000000
## [31,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.9856544
## [32,] 0.0000000 0.0000000 0.0000000 0.8088283     0
0.0000000                                    0.0000000
## [33,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.7827346
## [34,] 0.0000000 0.0000000 0.0000000 0.0000000     0
0.0000000                                    0.8565603
##           [,29]     [,30]     [,31]     [,32]     [
,33]                                             [,34]
##  [1,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                        0.0000000
```

```
##  [2,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
##  [3,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
##  [4,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
##  [5,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
##  [6,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
##  [7,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
##  [8,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
##  [9,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
## [10,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
## [11,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
## [12,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
## [13,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
## [14,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
## [15,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
## [16,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
## [17,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
## [18,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
## [19,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
## [20,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
## [21,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                            0.0000000
```

```
## [22,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                         0.0000000
## [23,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                         0.0000000
## [24,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                         0.0000000
## [25,] 0.9540559 0.0000000 0.0000000 0.7978274 0.00
00000                                         0.0000000
## [26,] 0.0000000 0.0000000 0.0000000 0.0000000 0.00
00000                                         0.0000000
## [27,] 0.6228224 0.9759430 0.0000000 0.0000000 0.00
00000                                         0.0000000
## [28,] 0.0000000 0.0000000 0.9888827 0.0000000 0.79
27780                                         0.7053617
## [29,] 1.0000000 0.7102213 0.0000000 0.0000000 0.00
00000                                         0.0000000
## [30,] 0.0000000 1.0000000 0.0000000 0.0000000 0.00
00000                                         0.0000000
## [31,] 0.0000000 0.0000000 1.0000000 0.0000000 0.79
84899                                         0.6213607
## [32,] 0.6425931 0.0000000 0.6777275 1.0000000 0.00
00000                                         0.0000000
## [33,] 0.0000000 0.0000000 0.8322124 0.0000000 1.00
00000                                         0.8191095
## [34,] 0.0000000 0.0000000 0.8493277 0.0000000 0.91
95187 1.0000000
```

Lampiran 8.8. Fungsi Pembobot Kernel

###Fixed Kernel Gaussian

```
gwr.fixgauss=gwr(Y~X1+X2+X3+X4+X5+X6+X7,data = datas
tand,bandwidth = fixgauss,coords = cbind(datastand$U
,datastand$V),hatmatrix = TRUE,gweight = gwr.Gauss)
gwr.fixgauss

## Call:
## gwr(formula = Y ~ X1 + X2 + X3 + X4 + X5 + X6 + X
7, data = datastand,
##     coords = cbind(datastand$U, datastand$V), ban
dwidth = fixgauss,
```

```
##     gweight = gwr.Gauss, hatmatrix = TRUE)
## Kernel function: gwr.Gauss
## Fixed bandwidth: 1430029
## Summary of GWR coefficient estimates at data poin
ts:
##                      Min.     1st Qu.      Median
3rd Qu.        Max.
## X.Intercept. -0.00048269 -0.00048269 -0.00048268
-0.00048268  0.00111168
## X1           -0.08720581 -0.08720581 -0.08720580
-0.08720580 -0.08566959
## X2           -0.19309689 -0.19036224 -0.19036224
-0.19036223 -0.19036222
## X3            0.06333462  0.06444318  0.06444319
0.06444319  0.06444319
## X4            0.86818270  0.86872079  0.86872079
0.86872080  0.86872080
## X5            0.23733650  0.23733651  0.23733651
0.23733651  0.23832118
## X6           -0.05531873 -0.05443206 -0.05443206
-0.05443206 -0.05443206
## X7            0.40642929  0.40642929  0.40642929
0.40642930  0.40800622
##               Global
## X.Intercept.  0.0000
## X1           -0.0866
## X2           -0.1912
## X3            0.0643
## X4            0.8686
## X5            0.2377
## X6           -0.0547
## X7            0.4070
## Number of data points: 34
## Effective number of parameters (residual: 2traceS
- traceS'S): 8.238013
## Effective degrees of freedom (residual: 2traceS -
traceS'S): 25.76199
## Sigma (residual: 2traceS - traceS'S): 0.5828651
## Effective number of parameters (model: traceS): 8
.129758
```

```
## Effective degrees of freedom (model: traceS): 25.
87024
## Sigma (model: traceS): 0.5816443
## Sigma (ML): 0.5073624
## AICc (GWR p. 61, eq 2.33; p. 96, eq. 4.21): 76.35
606
## AIC (GWR p. 96, eq. 4.22): 58.47756
## Residual sum of squares: 8.752165
## Quasi-global R2: 0.734783

anova(gwr.fixgauss)

## Analysis of Variance Table
##                            Df Sum Sq Mean Sq F value
## OLS Residuals    8.00000 8.7526
## GWR Improvement  0.23801 0.0004 0.00188
## GWR Residuals   25.76199 8.7522 0.33973  0.0055
```

###Fixed Kernel Bisquare

```
gwr.fixbisquare=gwr(Y~X1+X2+X3+X4+X5+X6+X7,data=data
stand,bandwidth=fixbisquare,coords=cbind(datastand$U
,datastand$V),hatmatrix=TRUE,gweight=gwr.bisquare)
gwr.fixbisquare

## Call:
## gwr(formula = Y ~ X1 + X2 + X3 + X4 + X5 + X6 + X
7, data = datastand,
##     coords = cbind(datastand$U, datastand$V), ban
dwidth = fixbisquare,
##     gweight = gwr.bisquare, hatmatrix = TRUE)
## Kernel function: gwr.bisquare
## Fixed bandwidth: 1430022
## Summary of GWR coefficient estimates at data poin
ts:
##                     Min.     1st Qu.      Median
3rd Qu.        Max.  Global
## X.Intercept. -0.0015672 -0.0015672 -0.0015672 -0.
0015671  0.0921684  0.0000
## X1           -0.3273513 -0.0883763 -0.0883763 -0.
0883763 -0.0867988 -0.0866
```

```
## X2           -0.1923840 -0.1884919 -0.1884919 -0.
1884918 -0.0972611 -0.1912
## X3            0.0625939  0.0650324  0.0650324  0.
0650325  0.1887749  0.0643
## X4            0.8678802  0.8690160  0.8690160  0.
8690160  0.9053678  0.8686
## X5            0.2365807  0.2365807  0.2365807  0.
2365807  0.3420000  0.2377
## X6           -0.1088335 -0.0538101 -0.0538101 -0.
0538101 -0.0538101 -0.0547
## X7            0.4052983  0.4052983  0.4052983  0.
4052984  0.4401547  0.4070
## Number of data points: 34
## Effective number of parameters (residual: 2traceS
- traceS'S): 9.191767
## Effective degrees of freedom (residual: 2traceS -
traceS'S): 24.80823
## Sigma (residual: 2traceS - traceS'S): 0.5939213
## Effective number of parameters (model: traceS): 9
.104101
## Effective degrees of freedom (model: traceS): 24.
8959
## Sigma (model: traceS): 0.5928747
## Sigma (ML): 0.5073263
## AICc (GWR p. 61, eq 2.33; p. 96, eq. 4.21): 80.35
178
## AIC (GWR p. 96, eq. 4.22): 59.44706
## Residual sum of squares: 8.750919
## Quasi-global R2: 0.7348208

anova(gwr.fixbisquare)

## Analysis of Variance Table
##                       Df Sum Sq Mean Sq F value
## OLS Residuals    8.0000 8.7526
## GWR Improvement  1.1918 0.0017 0.00142
## GWR Residuals   24.8082 8.7509 0.35274   0.004
```

###Fixed Kernel Tricube

```
gwr.fixtricube=gwr(Y~X1+X2+X3+X4+X5+X6+X7,data = dat
astand,bandwidth = fixtricube,coords = cbind(datasta
nd$U,datastand$V),hatmatrix = TRUE,gweight = gwr.tri
cube)
gwr.fixtricube

## Call:
## gwr(formula = Y ~ X1 + X2 + X3 + X4 + X5 + X6 + X
7, data = datastand,
##     coords = cbind(datastand$U, datastand$V), ban
dwidth = fixtricube,
##     gweight = gwr.tricube, hatmatrix = TRUE)
## Kernel function: gwr.tricube
## Fixed bandwidth: 1430024
## Summary of GWR coefficient estimates at data poin
ts:
##                      Min.    1st Qu.     Median
3rd Qu.       Max.  Global
## X.Intercept. -0.0013278 -0.0013278 -0.0013278 -0.
0013278  0.0783002  0.0000
## X1           -0.3160991 -0.0883176 -0.0883176 -0.
0883176 -0.0868550 -0.0866
## X2           -0.1917679 -0.1888889 -0.1888889 -0.
1888889 -0.1049850 -0.1912
## X3            0.0632536  0.0646389  0.0646389  0.
0646389  0.1839243  0.0643
## X4            0.8681775  0.8688380  0.8688381  0.
8688381  0.9022783  0.8686
## X5            0.2366102  0.2366102  0.2366102  0.
2366102  0.3448541  0.2377
## X6           -0.1076793 -0.0539172 -0.0539172 -0.
0539172 -0.0539172 -0.0547
## X7            0.4054550  0.4054550  0.4054550  0.
4054550  0.4679689  0.4070
## Number of data points: 34
## Effective number of parameters (residual: 2traceS
- traceS'S): 9.122666
## Effective degrees of freedom (residual: 2traceS -
traceS'S): 24.87733
## Sigma (residual: 2traceS - traceS'S): 0.5931072
```

```
## Effective number of parameters (model: traceS): 9
.051838
## Effective degrees of freedom (model: traceS): 24.
94816
## Sigma (model: traceS): 0.5922647
## Sigma (ML): 0.507336
## AICc (GWR p. 61, eq 2.33; p. 96, eq. 4.21): 80.12
986
## AIC (GWR p. 96, eq. 4.22): 59.39609
## Residual sum of squares: 8.751253
## Quasi-global R2: 0.7348107

anova(gwr.fixtricube)

## Analysis of Variance Table
##                          Df Sum Sq Mean Sq F value
## OLS Residuals     8.0000 8.7526
## GWR Improvement  1.1227 0.0014 0.00121
## GWR Residuals   24.8773 8.7513 0.35178  0.0034
```

###Adaptive Gaussian

```
gwr.adaptgauss=gwr(Y~X1+X2+X3+X4+X5+X6+X7,data=datas
tand,adapt=adaptgauss,
                   coords=cbind(datastand$U,datastan
d$V),hatmatrix=TRUE,gweight=gwr.Gauss)
gwr.adaptgauss

## Call:
## gwr(formula = Y ~ X1 + X2 + X3 + X4 + X5 + X6 + X
7, data = datastand,
##     coords = cbind(datastand$U, datastand$V), gwe
ight = gwr.Gauss,
##     adapt = adaptgauss, hatmatrix = TRUE)
## Kernel function: gwr.Gauss
## Adaptive quantile: 0.1146539 (about 3 of 34 data
points)
## Summary of GWR coefficient estimates at data poin
ts:
```

```
##                       Min.   1st Qu.    Median   3rd 
Qu.      Max.  Global
## X.Intercept. -1.822431 -0.266092  0.026865  0.218
699  0.592065  0.0000
## X1           -0.790147 -0.086484  0.087076  0.203
873  0.290982 -0.0866
## X2           -0.811107 -0.549694 -0.317311 -0.184
097  0.503738 -0.1912
## X3           -0.154987 -0.080348  0.112449  0.452
917  1.052158  0.0643
## X4            0.556129  0.825912  0.918181  1.005
042  1.160579  0.8686
## X5           -3.024261  0.415594  0.648976  2.754
565  9.437090  0.2377
## X6           -0.328418 -0.127339 -0.078443 -0.051
237  0.110771 -0.0547
## X7            0.196085  0.248156  0.401006  0.745
595  1.279920  0.4070
## Number of data points: 34
## Effective number of parameters (residual: 2traceS
- traceS'S): 26.66044
## Effective degrees of freedom (residual: 2traceS -
traceS'S): 7.339562
## Sigma (residual: 2traceS - traceS'S): 0.3389951
## Effective number of parameters (model: traceS): 2
3.01629
## Effective degrees of freedom (model: traceS): 10.
98371
## Sigma (model: traceS): 0.277111
## Sigma (ML): 0.1575031
## AICc (GWR p. 61, eq 2.33; p. 96, eq. 4.21): 152.5
88
## AIC (GWR p. 96, eq. 4.22): -6.181002
## Residual sum of squares: 0.8434452
## Quasi-global R2: 0.9744411
anova(gwr.adaptgauss)

## Analysis of Variance Table
##                          Df Sum Sq Mean Sq F value
## OLS Residuals    8.0000 8.7526
```

```
## GWR Improvement 18.6604 7.9092 0.42385
## GWR Residuals    7.3396 0.8434 0.11492  3.6883
```

###Adaptive Bisquare

```
gwr.adaptbisquare=gwr(Y~X1+X2+X3+X4+X5+X6+X7,data=da
tastand,adapt=adaptbisquare,coords=cbind(datastand$U
,datastand$V),hatmatrix=TRUE,gweight=gwr.bisquare)
gwr.adaptbisquare

## Call:
## gwr(formula = Y ~ X1 + X2 + X3 + X4 + X5 + X6 + X
7, data = datastand,
##     coords = cbind(datastand$U, datastand$V), gwe
ight = gwr.bisquare,
##     adapt = adaptbisquare, hatmatrix = TRUE)
## Kernel function: gwr.bisquare
## Adaptive quantile: 0.6176308 (about 20 of 34 data
points)
## Summary of GWR coefficient estimates at data poin
ts:
##                    Min.   1st Qu.    Median   3rd
Qu.      Max.  Global
## X.Intercept. -1.164245 -0.406972 -0.182250  0.201
291  1.358896  0.0000
## X1           -0.844168 -0.317520 -0.049529  0.291
684  0.369996 -0.0866
## X2           -0.538296 -0.479126 -0.360920 -0.223
764  0.756432 -0.1912
## X3           -0.128716  0.045230  0.189793  0.470
742  1.009202  0.0643
## X4            0.715126  0.879676  0.979127  1.118
093  1.222865  0.8686
## X5           -8.057758  0.440728  1.967009  4.081
246  7.087435  0.2377
## X6           -0.237526 -0.141408 -0.107662 -0.072
337  0.116857 -0.0547
## X7            0.246030  0.264844  0.388709  0.885
916  1.187226  0.4070
## Number of data points: 34
## Effective number of parameters (residual: 2traceS
```

```
- traceS'S): 23.54814
## Effective degrees of freedom (residual: 2traceS -
traceS'S): 10.45186
## Sigma (residual: 2traceS - traceS'S): 0.3947194
## Effective number of parameters (model: traceS): 2
0.7423
## Effective degrees of freedom (model: traceS): 13.
2577
## Sigma (model: traceS): 0.3504703
## Sigma (ML): 0.2188496
## AICc (GWR p. 61, eq 2.33; p. 96, eq. 4.21): 124.5
008
## AIC (GWR p. 96, eq. 4.22): 13.91293
## Residual sum of squares: 1.628436
## Quasi-global R2: 0.9506535

anova(gwr.adaptbisquare)

## Analysis of Variance Table
##                          Df Sum Sq Mean Sq F value
## OLS Residuals         8.000 8.7526
## GWR Improvement 15.548 7.1242  0.4582
## GWR Residuals    10.452 1.6284  0.1558  2.9409
```

###Adaptive Tricube

```
adaptricube,coords = cbind(datastand$U,datastand$V),
hatmatrix = TRUE,gweight = gwr.tricube)
gwr.adaptricube

## Call:
## gwr(formula = Y ~ X1 + X2 + X3 + X4 + X5 + X6 + X
7, data = datastand,
##     coords = cbind(datastand$U, datastand$V), gwe
ight = gwr.tricube,
##     adapt = adaptricube, hatmatrix = TRUE)
## Kernel function: gwr.tricube
## Adaptive quantile: 0.754692 (about 25 of 34 data
points)
## Summary of GWR coefficient estimates at data poin
ts:
```

```
##                      Min.   1st Qu.    Median   3rd
Qu.      Max.  Global
## X.Intercept. -0.423364 -0.362474 -0.327217  0.084
622  0.214379  0.0000
## X1           -0.334771 -0.152339 -0.064209  0.216
188  0.289323 -0.0866
## X2           -0.456890 -0.417004 -0.371335 -0.344
785 -0.066748 -0.1912
## X3           -0.109593  0.147060  0.252364  0.476
770  0.690860  0.0643
## X4            0.753617  0.869132  1.040403  1.111
454  1.151079  0.8686
## X5            0.316241  0.417890  2.866828  3.559
954  4.277975  0.2377
## X6           -0.224727 -0.127204 -0.107997 -0.089
911 -0.085669 -0.0547
## X7            0.292803  0.308748  0.371476  0.731
551  1.127024  0.4070
## Number of data points: 34
## Effective number of parameters (residual: 2traceS
- traceS'S): 18.37916
## Effective degrees of freedom (residual: 2traceS -
traceS'S): 15.62084
## Sigma (residual: 2traceS - traceS'S): 0.4932598
## Effective number of parameters (model: traceS): 1
6.3789
## Effective degrees of freedom (model: traceS): 17.
6211
## Sigma (model: traceS): 0.4644206
## Sigma (ML): 0.3343401
## AICc (GWR p. 61, eq 2.33; p. 96, eq. 4.21): 97.63
915
## AIC (GWR p. 96, eq. 4.22): 38.36617
## Residual sum of squares: 3.800633
## Quasi-global R2: 0.8848294

anova(gwr.adaptricube)

## Analysis of Variance Table
##                        Df Sum Sq Mean Sq F value
## OLS Residuals    8.000 8.7526
```

```
## GWR Improvement 10.379 4.9520 0.47711
## GWR Residuals   15.621 3.8006 0.24331  1.9609
```

Lampiran 8.9. Menampilkan Uji Kesesuaian Model GWR

```
BFC02.gwr.test(gwr.adaptgauss)

##
##  Brunsdon, Fotheringham & Charlton (2002, pp. 91-
2) ANOVA
##
## data:  gwr.adaptgauss
## F = 10.377, df1 = 26.0000, df2 = 7.3396, p-value
= 0.001492
## alternative hypothesis: greater
## sample estimates:
## SS OLS residuals SS GWR residuals
##        8.7526129        0.8434452
```

Lampiran 8.10. Menampilkan T_Hitung (pengujian Parsial model GWR Setiap Lokasi GWR

T_hitung X1

```
t_X1=gwr.adaptgauss$SDF$X1/gwr.adaptgauss$SDF$X1_se
t_X1

##  [1] -0.1776033  0.5389591  0.4586257  0.4585029  0.2244662  0.74
60374
##  [7]  0.4108112 -1.2781896 -2.6718860  0.5116806 -4.6309821 -4.96
83680
## [13] -4.9606259 -4.3581653 -2.4888543 -4.3542017  0.1686510  0.3
207633
## [19]  2.3164248 -1.3227660  0.6582084  2.0449955  2.1259378  2.12
90158
## [25]  2.4675257 -1.2969436  2.9320540  2.2272141  2.5536756  2.97
98917
## [31]  1.9243297  2.1945442  1.7975600  2.0403304
```

T_hitung X2

```
t_X2=gwr.adaptgauss$SDF$X2/gwr.adaptgauss$SDF$X2_se
t_X2
```

```
##  [1] -3.53872454 -3.82733709 -4.08859552 -4.16496338 -4.2725583
8 -3.72823180
##  [7] -3.98536431 -1.36654894 -1.59111870 -4.03988736  1.0387924
8  1.39266327
## [13]  1.97376962  1.14303781  0.07360577  0.70392126 -1.4555032
2 -0.54497949
## [19] -1.18768389 -2.33906982 -2.87885091 -2.05264423 -1.8657993
1 -1.73070823
## [25] -2.81908108 -2.34244087 -1.71456384 -2.78465676 -2.6775115
5 -1.40103992
## [31] -2.35206479 -2.54468545 -2.11533278 -3.07013438
```

T_hitung X3

```
t_X3=gwr.adaptgauss$SDF$X3/gwr.adaptgauss$SDF$X3_se
t_X3
```

```
##  [1] -0.01865591 -0.39586996 -0.58319484 -0.54951200 -0.4034381
2  0.13848711
##  [7] -0.06939469  1.38608731  2.04398395  0.16389674  3.27410727
3.65029625
## [13]  5.82836209  6.33249702  6.04054574  2.87818566  5.0000017
2  4.30129322
## [19]  2.14348347  0.78983747  4.22605992  2.70883944  1.5701151
3  1.52012398
## [25] -1.04063725  0.80404732  1.30852195 -1.15997856 -0.5589948
9  1.47097746
## [31] -1.00580773 -1.32573282 -0.85290209 -1.33122830
```

T_hitung X4

```
t_X4=gwr.adaptgauss$SDF$X4/gwr.adaptgauss$SDF$X4_se
t_X4
```

```
##  [1]  9.370046  7.534072  7.073101  6.897589  6.012392  6.093765
6.956515
##  [8]  6.329558  9.481054  7.091686  8.740856  7.040347  7.634598
9.026823
## [15]  9.420487  9.052766 10.899347 10.368463  9.276428 14.36704
6 12.221656
## [22]  8.120192  8.069453  7.846089  7.088313 14.385745  7.993098
```

```
4.112525
## [29]  7.958706  6.629080  3.109504  4.388236  2.498834  5.799383
```

T_hitung X5

```
t_X5=gwr.adaptgauss$SDF$X5/gwr.adaptgauss$SDF$X5_se
t_X5
```

```
##  [1]  1.24596458 -0.20598097 -0.12117396 -0.14388400  0.1447156
7  0.11422592
##  [7]  0.32911352  1.33839624  1.09861495 -0.04115049  1.87024855
0.59506461
## [13] -1.09040211  1.49976436  2.61744986  2.25169404  4.0223422
1  4.31178626
## [19]  4.95543116  3.56000530  5.40656798  3.56636199  3.1579016
9  3.05071394
## [25]  4.34470165  3.56006061  3.75294732  3.64308635  4.3883574
0  2.22704617
## [31]  3.03882151  3.67449804  2.63642694  4.00705432
```

T_hitung X6

```
t_X6=gwr.adaptgauss$SDF$X6/gwr.adaptgauss$SDF$X6_se
t_X6
```

```
##  [1] -0.86960693 -0.54314668 -0.48660322 -0.50983348  0.6448291
2  0.17114498
##  [7] -0.07001017 -1.11689656 -0.86490865  0.04353337 -1.5596644
4 -0.71063786
## [13]  0.41400918 -0.72293857 -0.66478757 -1.81612930 -1.2898760
7 -1.19394943
## [19] -1.22200696 -0.96906365 -1.86501037 -1.21670957 -0.0936025
6  0.01577844
## [25] -1.22682897 -0.97281339 -0.96500970 -1.42458566 -1.0242678
8 -0.47896404
## [31] -1.25094326 -1.15431036 -1.12581680 -1.87249909
```

T_hitung X7

```
t_X7=gwr.adaptgauss$SDF$X7/gwr.adaptgauss$SDF$X7_se
t_X7
```

```
## [1] 4.252693 3.425218 3.015379 2.986231 2.754755 2.721560 2.86
3240 2.705853
## [9] 3.307580 3.531304 2.785634 2.800465 3.884640 4.301696 5.20
6808 2.739225
## [17] 6.335787 6.780602 7.181943 6.791631 5.936523 3.566094 3.11
5155 2.965842
## [25] 5.700719 6.776081 5.939172 4.406072 5.675899 4.534576 3.90
3091 4.744173
## [33] 3.614463 5.416008
```

Lampiran 8.11. Pembentukan Model GWR setiap Lokasi

```
gwr.adaptgauss$SDF$"(Intercept)"

##  [1] -0.2638680385  0.2930386134  0.2445273106  0
.2704423960  0.0526188654
##  [6]  0.0563399683 -0.1295773847 -1.2783660987 -0
.5222901941  0.2217935376
## [11] -1.4281739463 -0.4652775836  0.5920654225 -0
.2125080152 -0.3821316195
## [16] -1.8224311625 -0.2176863505 -0.0915985938  0
.0693828191  0.0008848809
## [21] -0.2348824190 -0.2908493394 -0.2721242941 -0
.2668332786  0.2094142553
## [26]  0.0011117003  0.1064476478  0.2708905024  0
.1794055991  0.0590866778
## [31]  0.3088733714  0.2813646787  0.3406612358  0
.1953524556

gwr.adaptgauss$SDF$X1

##  [1] -0.02082504  0.09350767  0.09284532  0.09455
075  0.04859591  0.12750635
##  [7]  0.06711610 -0.22890127 -0.34158420  0.08130
699 -0.69563750 -0.79014687
## [13] -0.74694330 -0.51199496 -0.26496766 -0.64490
798  0.01328700  0.02505707
## [19]  0.19423874 -0.08675520  0.04936320  0.18455
937  0.20205354  0.20397162
## [25]  0.25881871 -0.08566957  0.26602899  0.28312
689  0.25722041  0.28231991
```

```
## [31]  0.29098153  0.27118014  0.28542199  0.20357
574
```

```
gwr.adaptgauss$SDF$X2
```

```
##  [1] -0.53059316 -0.70533115 -0.78247945 -0.79564
208 -0.81110705 -0.71272508
##  [7] -0.70440374 -0.27692219 -0.27519981 -0.70380
299  0.23389204  0.39888619
## [13]  0.50373841  0.23333398  0.01385129  0.14646
346 -0.18124957 -0.06374421
## [19] -0.15485588 -0.19263873 -0.32846420 -0.33358
870 -0.30615788 -0.29827257
## [25] -0.45108565 -0.19309693 -0.23405966 -0.54392
681 -0.39803288 -0.22143937
## [31] -0.55161588 -0.51756072 -0.55551084 -0.47656
364
```

```
gwr.adaptgauss$SDF$X3
```

```
##  [1] -0.002902851 -0.071650078 -0.116360639 -0.10
9426399 -0.083247015
##  [6]  0.026156935 -0.012742104  0.275334981  0.34
3545589  0.028868672
## [11]  0.649562740  0.837376933  1.052158338  1.00
3111247  0.984794170
## [16]  0.549938535  0.650256189  0.517581071  0.24
5858379  0.062349810
## [21]  0.463975282  0.419741971  0.245433584  0.24
0666341 -0.117383842
## [26]  0.063334599  0.161562666 -0.141946925 -0.06
5793524  0.213098927
## [31] -0.133969299 -0.154987262 -0.124148322 -0.15
3369969
```

```
gwr.adaptgauss$SDF$X4
```

```
##  [1] 0.9656138 0.9246741 0.9103430 0.9060699 0.89
88553 0.8910005 0.9458012
##  [8] 1.0048194 1.1373079 0.9267911 1.1587919 1.15
10380 1.0800029 1.0977296
```

```
## [15] 1.1353149 1.1605786 1.0330381 0.9361127 0.84
43520 0.8677696 1.0051156
## [22] 0.9668415 0.9192589 0.9171027 0.7443152 0.86
81827 0.8197658 0.6243908
## [29] 0.7873800 0.8128576 0.5815554 0.6482950 0.55
61294 0.7028955
```

```
gwr.adaptgauss$SDF$X5
```

```
##  [1]  1.9130524 -0.7773651 -0.5104114 -0.6145062
0.7510207  0.5469309
##  [7]  1.5206126  6.7691547  3.7672742 -0.1694378
7.4744511  2.6418847
## [13] -3.0242605  1.6974163  2.8430176  9.4370902
2.4470837  1.2053616
## [19]  0.4252037  0.2375854  2.8546061  3.4862575
2.8266545  2.7921249
## [25]  0.4123902  0.2383212  0.5399128  0.4960776
0.4268049  0.9296355
## [31]  0.5275408  0.4647274  0.5460163  0.4026440
```

```
gwr.adaptgauss$SDF$X6
```

```
##  [1] -0.076189858 -0.072921087 -0.073435946 -0.08
0695708  0.110770532
##  [6]  0.017118855 -0.006742633 -0.116032987 -0.07
1559684  0.004232098
## [11] -0.131107980 -0.058616442  0.034432827 -0.05
0231948 -0.052867360
## [16] -0.159756722 -0.092081741 -0.085188922 -0.10
0843893 -0.055061797
## [21] -0.114704013 -0.103305474 -0.009653772  0.00
1694356 -0.187872154
## [26] -0.055318744 -0.090983640 -0.306993139 -0.14
1447288 -0.050693272
## [31] -0.328417972 -0.255524133 -0.307417845 -0.24
5263776
```

```
gwr.adaptgauss$SDF$X7
```

```
##  [1] 0.3026653 0.2859792 0.2679817 0.2901019 0.19
95270 0.1960855 0.2037156
##  [8] 0.1979965 0.2296608 0.2446499 0.1992903 0.20
33535 0.2586735 0.2858039
## [15] 0.3946324 0.1967178 0.4622154 0.4992566 0.73
19385 0.4073786 0.3893788
## [22] 0.4781648 0.4910972 0.4898647 1.0381707 0.40
80062 0.7927364 1.2349522
## [29] 0.9572082 0.7501466 1.2706910 1.1751525 1.27
99204 1.0667670
```

Lampiran 8.12. Menampilkan R-Square Lokal

```
gwr.adaptgauss.R2=gwr.adaptgauss$SDF$localR2
gwr.adaptgauss.R2

##  [1] 0.9767323 0.9750033 0.9768122 0.9764161 0.97
65203 0.9809461 0.9813760
##  [8] 0.9847298 0.9843316 0.9803767 0.9857796 0.98
54866 0.9806632 0.9772886
## [15] 0.9682993 0.9858005 0.9611274 0.9590036 0.94
78982 0.9745900 0.9685756
## [22] 0.9536458 0.9503037 0.9495501 0.9574091 0.97
46597 0.9446272 0.9865177
## [29] 0.9509982 0.9401925 0.9883816 0.9713932 0.99
22995 0.9859135

AIC(regols)

## [1] 68.34954
```

Lampiran 8.13. Bandwidth Lokal Fungsi Pembobot Kernel Adaptive Gaussian

```
# GAUSSIAN Addaptive ##############
#bandwidth
adaptgauss=gwr.sel(Y~X1+X2+X3+X4+X5+X6+X7,data=datastand,adapt
            =TRUE,coords=cbind(datastand$U,datastand$V),gweight=gwr.Gauss)
#estimasi parameter
gwr.adaptgauss<-gwr(Y~X1+X2+X3+X4+X5+X6+X7,data = datastand,coords =
cbind(datastand$U,datastand$V),adapt = adaptgauss,hatmatrix = TRUE,gweight = gwr.Gauss)
gwr.adaptgauss$bandwidth
```

```
Adaptive q: 0.381966 CV score: 71.22671
Adaptive q: 0.618034 CV score: 87.03931
Adaptive q: 0.236068 CV score: 54.45302
Adaptive q: 0.145898 CV score: 39.08884
Adaptive q: 0.09016994 CV score: 101.167
Adaptive q: 0.1803399 CV score: 47.81575
Adaptive q: 0.1246118 CV score: 32.87288
Adaptive q: 0.1114562 CV score: 31.98775
Adaptive q: 0.1128785 CV score: 31.62339
Adaptive q: 0.1168137 CV score: 31.65952
Adaptive q: 0.1143816 CV score: 31.47737
Adaptive q: 0.1147411 CV score: 31.47421
Adaptive q: 0.1146539 CV score: 31.47393
Adaptive q: 0.1146132 CV score: 31.47402
Adaptive q: 0.1146946 CV score: 31.47398
Adaptive q: 0.1146539 CV score: 31.47393
 [1] 8.193456e+00 5.187178e+00 3.339547e+00 3.189161e+00 2.329820e+00 2.679998e+00
 [7] 3.312211e+00 2.586289e+00 3.353689e+00 3.524461e+00 3.134572e+00 2.888828e+00
[13] 3.192868e+00 3.848127e+00 3.644564e+00 3.198764e+00 5.323084e+00 5.744213e+00
[19] 5.880883e+00 6.364661e+05 5.825922e+00 3.932494e+00 4.352148e+00 4.297450e+00
[25] 5.875313e+00 1.430017e+06 5.026707e+00 6.062058e+00 5.568270e+00 4.392141e+00
[31] 5.332203e+00 6.061959e+00 5.902193e+00 9.101901e+00
```

PROGRAM STUDI STATISTIKA
SK BAN-PT No. 0804/SK/BAN-PT/Akred/S/III/2017
FAKULTAS SAINS DAN TEKNOLOGI
UNIVERSITAS PGRI ADI BUANA SURABAYA

FORM F.SK02
BIMBINGAN PROPOSAL

Nama Mahasiswa : Eufrosiana Go'a Bora
NIM : 192400004
Judul Skripsi : Pemodelan Geographically Weighted Regression Pada APK-PT di Indonesia tahun 2022
Dosen Pembimbing : Artanti Indrasetianingsih, S.Si., M.Si

Materi Pembimbingan Proposal	Tanda Tangan Dosen Pembimbing
1. Konsultasi perbaikan judul (tahun penelitian, variabel dan rumusan masalah). lurgensi.	[signature]
2. Ganti metode penelitian, perbaikan latar belakang, sumber referensi, penelitian terdahulu, font, judul tabel	[signature]
3. Perbaikan latar belakang, penambahan penelitian terdahulu, typo penulisan dan diagram alir.	[signature]
4. Perbaikan latar belakang, APK PT tertinggal peringkat ke-berapa; font rumus, tambah abstrak, judul dipertegas	[signature]
5. Perbaikan Gambar grafik 1.1, paragraf latar belakang, daftar pustaka	[signature]
6. Pengecekan Bab 1, Bab 2, dan Bab 3. terakhir. ACC	[signature]
7.	

Catatan: *) Coret yang tidak sesuai
Lembar ini digunakan untuk mendaftar Seminar Proposal (bimbingan proposal minimal 5 kali)

PROGRAM STUDI STATISTIKA
SK BAN-PT No. 0804/SK/BAN-PT/Akred/S/III/2017
FAKULTAS SAINS DAN TEKNOLOGI
UNIVERSITAS PGRI ADI BUANA SURABAYA

FORM F.SK02

BIMBINGAN PROPOSAL

Nama Mahasiswa : Eufrosiana Go'a Bara

NIM : 192400009

Judul Skripsi : Pemodelan Geographically Weighted Regression pada APK-PT di Indonesia tahun 2022.

Dosen Pembimbing : Fenny Fitriani, S.Si., M.Si

Materi Pembimbingan Proposal	Tanda Tangan Dosen Pembimbing
1. konsultasi perbaikan judul (tahun penelitian, variabel penelitian, dan Rumusan masalah) /urgensi.	[signature]
2. Konsultasi ganti metode penelitian, perbaikan bab I : latar belakang dikurangi paragraf, tambah penelitian terdahulu dan sumber.	[signature]
3. latar belakang perlihatkan grafik APK PT dan SMA, Rumusan masalah, tambah variabel AMH, Batasan masalah, cari data 2022	[signature]
4. latar belakang : APK PT rendah peringkat ke-berapa, Grafik ditambah SD, SMP, SMA, PT, Penelitian terdahulu dibuat 2	[signature]
5. Abstrak, latar belakang Grafik 1.1. dan 1.2 ditambah kalimat. Bab 2 penelitian terdahulu variabel Y1 ditambahkan.	[signature]
6. Perbaikan kalimat tambah dibagian grafik 1.1.	[signature]
7. Pengecekan Gambar grafik 1.1. Acc.	[signature]

Catatan: *) Coret yang tidak sesuai

Lembar ini digunakan untuk mendaftar Seminar Proposal (bimbingan proposal minimal 5 kali)

PROGRAM STUDI STATISTIKA
SK BAN-PT No. 1765/SK/BAN-PT/AK-PPJ/S/III/2022
FAKULTAS SAINS DAN TEKNOLOGI
UNIVERSITAS PGRI ADI BUANA SURABAYA

Unipa Surabaya

FORM F.SK04
PERBAIKAN/REVISI UJIAN PROPOSAL

Nama Mahasiswa : Eufrosiana Ga'a Bara

NIM : 192400004

Judul Skripsi : Pemodelan Geographically Weighted Regression Pada Angka Partisipasi Kasar Perguruan Tinggi Tahun 2022

Dosen Pembimbing : Fenny Fitriani, S.Si.,M.si

Materi Perbaikan/Revisi Proposal	Tanda Tangan Dosen Penguji
1. Perbaikan rumusan masalah	[signature]
2. Perbaikan penulisan persamaan rumus regresi dan gwr	[signature]
3. Perbaikan pengujian asumsi	[signature]
4. Diagram alir	[signature]
5.	
6.	

Surabaya, 28 Februari 2023
Pembimbing,

Fenny F., M.Si

NIP/NPP : 1503717/DY

PROGRAM STUDI STATISTIKA
SK BAN-PT No. 1765/SK/BAN-PT/AK-PPJ/S/III/2022
FAKULTAS SAINS DAN TEKNOLOGI
UNIVERSITAS PGRI ADI BUANA SURABAYA

FORM F.SK04
PERBAIKAN/REVISI UJIAN PROPOSAL

Nama Mahasiswa : Eufrosiana Ga'a Bara

NIM : 192400004

Judul Skripsi : Pemodelan Geographically Weighted Regression Pada Angka Partisipasi Kasar Perguruan Tinggi Tahun 2022

Dosen Pembimbing : Artanti Indrasetianingsih, S.Si.,M.si

Materi Perbaikan/Revisi Proposal	Tanda Tangan Dosen Penguji
1. Perbaikan rumusan masalah	
2. Perbaikan penulisan persamaan rumus regresi dan gwr	
3. Perbaikan pengujian asumsi	
4. Diagram alir	
5.	
6.	

Surabaya, 28 Februari 2023
Pembimbing,

Artanti I.
NIP/NPP : 0609466/DY

PROGRAM STUDI STATISTIKA
SK BAN-PT No. 1765/SK/BAN-PT/AK-PPJ/S/III/2022
FAKULTAS SAINS DAN TEKNOLOGI
UNIVERSITAS PGRI ADI BUANA SURABAYA

Unipa Surabaya

FORM F.SK05
BUKTI BIMBINGAN SKRIPSI

Nama Mahasiswa : Eufrosiana Go'a Bora

NIM : 192400004

Judul Skripsi : Pemodelan Geographically Weighted Regression Pada Angka Partisipasi Kasar Perguruan Tinggi di Indonesia

Dosen Pembimbing : Fenny Fitriani, S.Si., M.Si

Materi Pembimbingan Proposal	Tanda Tangan Dosen Pembimbing
1. Cek pemetaan data yang telah distandarisasi, hitung IPM provinsi yg dipengaruhi untuk variabel x_i, buat pemetaan scatter plot APK PT dgn var	
2. deskriptif pemetaan variabel Y dan x_i, scatter plot prioritas wilayah, nilai parameter model OLS, nilai p-value uji serentak	
3. interpretasi pengujian asumsi, interpretasi model OLS, pemodelan GWR setiap lokasi,	
4. Pemetaan variabel yang signifikan setiap lokasi dan berikan kelompok	
5. Interpretasi pengelompokan variabel yang signifikan dan pengelompokan variabel yg berdekatan	
6. Pengelompokan variabel signifikan setiap lokasi yang saling berdekatan	
7. Artikel, interpretasi model GWR, Kesimpulan dan Saran	
8. Saran dan acc	

Catatan: *) Coret yang tidak sesuai

Lembar ini digunakan untuk mendaftar Seminar dan Ujian Skripsi (bimbingan skripsi minimal 8 kali)

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SK BAN-PT No. 1765/SK/BAN-PT/AK-PPJ/S/III/2022
FAKULTAS SAINS DAN TEKNOLOGI
UNIVERSITAS PGRI ADI BUANA SURABAYA

FORM F.SK05
BUKTI BIMBINGAN SKRIPSI

Nama Mahasiswa : Eufrosiana Go'a Bora
NIM : 192400004
Judul Skripsi : Pemodelan Geographically Weighted Regression pada Angka Partisipasi Kasar Perguruan Tinggi di Indonesia
Dosen Pembimbing : Artanti Indrasetianingsih, S.Si., M.Si

Materi Pembimbingan Proposal	Tanda Tangan Dosen Pembimbing
1. cek analisis deskriptif dan interpretasi pemetaan variabel	(signature)
2. estimasi model OLS dan interpretasi model OLS variabel yang signifikan	(signature)
3. Pengecekan lampiran penentuan bandwidth dan estimasi model GWR	(signature)
4. ukuran gambar pemetaan variabel signifikan	(signature)
5. Interpretasi model GWR sebagai contoh beberapa lokasi.	(signature)
6. Kesimpulan ditambah model GWR lokasi sebagai contoh dan saran	(signature)
7. Saran perbaikan kalimat dan perbaikan artikel.	(signature)
8. acc.	(signature)

Catatan: *) Coret yang tidak sesuai

Lembar ini digunakan untuk mendaftar Seminar dan Ujian Skripsi (bimbingan skripsi minimal 8 kali)

PROGRAM STUDI STATISTIKA
SK BAN-PT No. 1765/SK/BAN-PT/AK-PPJ/S/III/2022
FAKULTAS SAINS DAN TEKNOLOGI
UNIVERSITAS PGRI ADI BUANA SURABAYA

FORM F.SK08

PERBAIKAN/REVISI SEMINAR DAN UJIAN SKRIPSI

Nama Mahasiswa : Eufrosiana Ga'a Bora
NIM : 192400004
Judul Skripsi : Pemodelan Geographically Weighted Regression Pada angka Partisipasi Kasar Perguruan Tinggi di Indonesia
Dosen Pembimbing : Fenny Fitriani, S.Si., M.Si

Materi Revisi Seminar dan Ujian Skripsi	Tanda Tangan Dosen Penguji
1. Intepretasi model OLS	[signature]
2. Hipotesis Setiap Pengujian	[signature]
3. Uji kesesuaian model GWR dan intepretasi	[signature]
4. Uji Serentak dan uji Parsial model OLS. Intepretasi dan tabel	[signature]
5. Saran	[signature]
6.	

Surabaya, 16 Juni 2023.
Dosen Pembimbing,

[signature]

Fenny F, M.S
NIP/NPP : 1503717/DY

*Catatan: *) Coret yang tidak sesuai*

Lembar ini digunakan untuk bukti perbaikan makalah/jurnal dan hasil ujian skripsi Batas waktu revisi proposal dua minggu terhitung dari waktu ujian proposal

PROGRAM STUDI STATISTIKA
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FAKULTAS SAINS DAN TEKNOLOGI
UNIVERSITAS PGRI ADI BUANA SURABAYA

FORM F.SK08

PERBAIKAN/REVISI SEMINAR DAN UJIAN SKRIPSI

Nama Mahasiswa : Eufrosiana Go'a Baro
NIM : 192400004
Judul Skripsi : Pemodelan GWR Pada Angka Partisipasi Kasar Perguruan Tinggi di Indonesia
Dosen Pembimbing : Artanti Indrasetianingsih, S.Si, M.Si

Materi Revisi Seminar dan Ujian Skripsi	Tanda Tangan Dosen Penguji
1. Interprestasi model OLS	[signature]
2. Hipotesis setiap pengujian	[signature]
3. uji kesesuaian model GWR dan model OLS, interpretasi dan tabel	[signature]
4. uji serentak dan uji parsial model OLS. interpretasi dan tabel	[signature]
5. Saran	[signature]
6.	

Surabaya, 16 Juni 2023
Dosen Pembimbing,

Artanti I.
NIP/NPP : 0609466/DY

*Catatan: *) Coret yang tidak sesuai*

Lembar ini digunakan untuk bukti perbaikan makalah/jurnal dan hasil ujian skripsi Batas waktu revisi proposal dua minggu terhitung dari waktu ujian proposal

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FAKULTAS SAINS DAN TEKNOLOGI
UNIVERSITAS PGRI ADI BUANA SURABAYA

FORM F.SK11

BUKTI PESERTA PROPOSAL/SEMINAR HASIL

Nama Mahasiswa : Eufrosiana Goa Bara

NIM : 192400004

Hari , Tanggal	Judul Skripsi	Paraf Dosen
Sabtu 29 Oktober 2022	1. Analisis Sentimen Pengguna twitter terhadap kebijakan Konversi Kompor Gas ke Kompor Listrik menggunakan Naive Bayes Classifier	[signature]
Kamis, 26 Januari 2023	2. Penyebaran Kasus Demam Berdarah Dengue (DBD) di Jawa Timur tahun 2020 menggunakan Analisis Spasial area	[signature]
Kamis, 26 Januari 2023	3. Pengelompokan kab/kota di Jawa Timur Berdasarkan Indikator tenaga Kerja di Jawa Timur dengan metode K-means dan K-Medoids Clustering	[signature]
Kamis, 05 Januari 2023	4. Metode Exponential Smoothing untuk peramalan IHK di provinsi Jawa Tengah.	[signature]
Sabtu 29 Oktober 2022	5. Analisis Faktor Pengaruh Pergerakan harga Saham Sektor Pertambangan menggunakan metode regresi linear dengan dummy.	[signature]

Catatan: digunakan untuk mendaftar seminar proposal skripsi.


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FAKULTAS SAINS DAN TEKNOLOGI
UNIVERSITAS PGRI ADI BUANA SURABAYA

FORM F.SK06

REKOMENDASI VALIDASI SKRIPSI MAHASISWA

Berdasarkan penilaian Tim Validasi Karya Ilmiah/Skripsi Mahasiswa Program Studi Statistika UNIPA Surabaya, maka mahasiswa berikut :

Nama : Eufrosiana Go'a Bara
NIM : 192900004
Judul Skripsi : Pemodelan Geographically Weighted Regression Pada Angka Partisipasi Kasar Perguruan Tinggi di Indonesia tahun 2022

Dinyatakan **layak** / ~~**tidak layak**~~ mengikuti seminar hasil dan ujian skripsi. Demikian rekomendasi ini dibuat dapat dipergunakan sebagaimana mestinya.

Surabaya, 9 - Mei - 2023
Tim Validasi,
Prodi Statistika UNIPA Surabaya

NIP/NPP : 0705195/DY

Catatan: *) Coret yang tidak sesuai

Lembar Validasi Skripsi ini digunakan untuk mendaftar Seminar dan Ujian Skripsi

Tim Validasi :

Rev. Standarisasi data
Uji Kesesuaian model