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.SK05
BUKTI BIMBINGAN SKRIPSI

Nama Mahasiswa : Chreensia Ermelinda Mopa
NIM : 192400030
Judul Skripsi : Pendekatan MGWR pada pemodelan AKB di Provinsi NTT tahun 2021
Dosen Pembimbing : Aitanti Indiasetianingsih, S.Si., M.Si

Materi Pembimbingan ~~Proposal~~ Skripsi	Tanda Tangan Dosen Pembimbing
1. Peta penyebaran setiap variabel	
2. Penulisan angka desimal	
3. Penulisan Hipotesis penelitian	
4. Penulisan Indeks	
5. Kesimpulan	
6. Penulisan saran	
7. Penulisan Lampiran	
8. Penulisan Daftar pustaka	

Catatan: *) Coret yang tidak sesuai

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

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FORM F.SK08
PERBAIKAN/REVISI SEMINAR DAN UJIAN SKRIPSI

Nama Mahasiswa : Chresensia Irmelinda Mapa
NIM : 192406030
Judul Skripsi : Pendekatan MGWR pada pemodelan AKB di Provinsi NTT Tahun 2021
Dosen Pembimbing : Artanti Indrasetianingsih, S.Si., M.Si

Materi Revisi Seminar dan Ujian Skripsi	Tanda Tangan Dosen Penguji
1. Penulisan Rumus	
2. Penulisan Bilangan Desimal	
3. Revisi peta	
4. Kesimpulan	
5. Saran	
6. Penulisan Model	

Surabaya, 3 Juli 2021
Dosen Pembimbing,

Artanti Indrasetianingsih, S.Si., M.Si
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

LAMPIRAN

Lampiran 1 Data Angka Kematian Bayi (Y), Variabel Independen (X), dan Titik Koordinat Kabupaten/Kota di Provinsi Nusa Tenggara Timur tahun 2021

Kabupaten/kota	Y	X1	X2	X3	X4	X5	X6	X7	Longitude	Latitude
Sumba Barat	29	1745	6.84	4.96	10	250	32	122	119.45	-9.56667
Sumba Timur	19	3420	7.32	5.68	24	575	58	348	120.25	-9.88333
Kupang	96	6819	7.39	3.57	27	763	49	675	123.8333	-9.91667
Timor Tengah Selatan	100	6222	6.74	3.56	36	841	68	596	124.4	-9.83333
Timor Tengah Utara	33	5238	7.96	5.96	26	512	54	612	124.519	-9.33136
Belu	52	3442	7.36	5.17	17	435	49	255	124.9507	-9.41258
Alor	17	2986	8.42	4.93	26	446	81	497	124.5667	-8.3
Lembata	21	1668	8.23	1.43	12	313	28	322	123.5523	-8.41396
Flores Timur	45	3621	7.72	3.57	21	561	54	693	122.9682	-8.24224

Sikka	51	4548	6.95	4.67	25	645	51	587	122.3667	-8.66667
Ende	23	2282	8.03	2.21	26	662	39	711	121.6639	-8.84056
Ngada	12	2623	8.53	1.22	20	365	55	486	121	-8.66667
Manggarai	96	5635	7.61	2.84	23	577	45	904	120.4167	-8.56667
Rote Ndao	59	2530	7.71	5.04	12	406	51	245	123.1205	-10.7362
Manggarai Barat	67	4563	7.56	3.48	21	492	46	537	119.8828	-8.64484
Sumba Tengah	24	1601	6.47	3.14	9	197	20	128	119.6191	-9.62941
Sumba Barat Daya	42	8217	6.35	5.64	16	554	11	26	119.0891	-9.56216
Nagekeo	28	2265	7.9	2	8	284	34	359	121.2096	-8.8721
Manggarai Timur	49	5113	7.35	3.79	29	578	28	783	120.5976	-8.55533
Sabu Raijua	55	1560	6.66	5.51	6	242	19	186	121.7889	-10.5629
Malaka	15	3381	7.1	4.98	20	474	48	289	124.8948	-9.5632
Kota Kupang	22	7306	11.6	2.59	11	328	123	381	123.6	-10.2167

Lampiran 2 *R Script* Analisis Regresi Linier

```
#menjalankan library

library(readxl)

library(car)

library(lmtest)

library(spgwr)

library(fBasics)

library(AICcmodavg)

library(carData)

library(MLmetrics)

library(sp)

#Input data

DATAFIX <- read_excel("D:/DATA/Data penelitian
skripsi/DATAFIX.xlsx",

                      col_types = c("text", "numeric", "numeric",

                                    "numeric", "numeric", "numeric",

                                    "numeric", "numeric", "numeric",

                                    "numeric", "numeric"))

View(DATAFIX)

DATAFIX


#variabel pada data

Y<-DATAFIX$Y

Y
```

```
X1<-DATAFIX$X1
X1
X2<-DATAFIX$X2
X2
X3<-DATAFIX$X3
X3
X4<-DATAFIX$X4
X4
X5<-DATAFIX$X5
X5
X6<-DATAFIX$X6
X6
X7<-DATAFIX$X7
X7
U<-as.matrix(DATAFIX$Longitude)
V<-as.matrix(DATAFIX$Latitude)
#Analisis Regresi Linear Berganda
Reg<-lm((Y)~(X1)+(X2)+(X3)+(X4)+(X5)+(X6)+(X7))
summary.lm(Reg)
#uji f (melihat signifikansi keseluruhan model)
anova(Reg)
ftabel=qf(.90, df1=7, df2=14)
ftabel
```

```
#uji t (melihat signifikansi model secara parsial)
Reg<-lm((Y)~(X1)+(X2)+(X3)+(X4)+(X5)+(X6)+(X7))
summary.lm(Reg)
ttabel=qt(.05, 14)
ttabel
#uji asumsi klasik
#uji normalitas
resid<-abs(Reg$residuals)
res=Reg$residuals
ks.test(res,"pnorm",mean(res),sd(res),alternative=c("two.sided"))
#uji Autokorelasi
dwtest(Reg)
#heterogenitas spasial
bptest(Reg)
#Uji Multikolineritas
vif(Reg)
AIC(Reg)
```

Lampiran 3 Output R Uji Multikolinieritas

```
      x1       x2       x3       x4       x5       x6       x7
2.244567 7.365428 1.944610 7.688525 8.046307 5.363228 3.545783
```

Lampiran 2.2 Output R Estimasi Parameter Regresi Linier

```
Coefficients:
             Estimate Std. Error t value Pr(>|t|)
(Intercept) 226.389790  73.363719   3.086  0.00806 **
X1            0.006385   0.002856   2.236  0.04216 *
X2          -31.034316   9.504494  -3.265  0.00564 **
X3           -3.201916   3.647366  -0.878  0.39483
X4           -3.794454   1.312366  -2.891  0.01184 *
X5            0.070554   0.062564   1.128  0.27840
X6            0.849950   0.369863   2.298  0.03749 *
X7            0.091186   0.029960   3.044  0.00876 **
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 17.27 on 14 degrees of freedom
Multiple R-squared:  0.726,     Adjusted R-squared:  0.5889
F-statistic: 5.298 on 7 and 14 DF,  p-value: 0.003969
```

Lampiran 4 Output R Uji Asumsi Residual Identik

```
        studentized Breusch-Pagan test

data:  Reg
BP = 12.229, df = 7, p-value = 0.09329
```

Lampiran 5 Output R Uji Asumsi Residual Independen

```
        Durbin-Watson test

data:  Reg
DW = 1.6393, p-value = 0.1888
alternative hypothesis: true autocorrelation is greater than 0
```

Lampiran 6 Output R Uji Asumsi Distribusi Normal

```
        Exact one-sample Kolmogorov-Smirnov test

data:  res
D = 0.12599, p-value = 0.8337
alternative hypothesis: two-sided
```

Lampiran 7 *R Script* Analisis GWR

```
#Mencari jarak euclidian GWR
j<-nrow(U)
i<-nrow(V)
jarak<-matrix(0,22,22)
for (i in 1:22){
  for (j in 1:22) {
    jarak[i,j]<-sqrt((U[i,]-U[j,])^2+(V[i,]-V[j,])^2)
  }
}
jarak
#Mencari nilai matrikspembobot GWR
h<-as.matrix(gwr.adapttricube$bandwidth)
i<-nrow(h)
W<-matrix(0,22,22)
W<-matrix(0,22,22)
for (i in 1:22) {
  for (j in 1:22) {
    W[i,j]<-(1-(jarak[i,j]/h[i,])^3)^3
    W[i,j]<-ifelse(jarak[i,j]<h[i,],W[i,j],0)
  }
}
W
```

```
View(W)

#Analisis GWR pemilihan bandwidth dan pembobot optimum

# FIXED GAUSSIAN

#bandwidth

fixgauss=gwr.sel(Y~X1+X2+X3+X4+X5+X6+X7,data=DATAFIX,ada
pt=FALSE,coords=cbind(DATAFIX$Latitude,DATAFIX$Longitude),g
weight=gwr.Gauss)

#estimasi parameter

gwr.fixgauss=gwr(Y~X1+X2+X3+X4+X5+X6+X7,data=DATAFIX,ba
ndwidth=fixgauss,coords=cbind(DATAFIX$Latitude,DATAFIX$Longit
ude),hatmatrix=TRUE,gweight=gwr.Gauss)

gwr.fixgauss

gwr.fixgauss$bandwidth

# GAUSSIAN Addaptive

#bandwidth

adaptgauss=gwr.sel(Y~X1+X2+X3+X4+X5+X6+X7,data=DATAFIX,a
dapt


=TRUE,coords=cbind(DATAFIX$Latitude,DATAFIX$Longitude),gwei
ght=gwr.Gauss)

#estimasi parameter

gwr.adaptgauss=gwr(Y~X1+X2+X3+X4+X5+X6+X7,data=DATAFIX,
adapt=adaptgauss,


coords=cbind(DATAFIX$Latitude,DATAFIX$Longitude),hatmatrix=T
RUE,gweight=gwr.Gauss)

gwr.adaptgauss
```

```
gwr.adaptgauss$bandwidth

# FIXED TRICUBE

#bandwidth

fixtricube=gwr.sel(Y~X1+X2+X3+X4+X5+X6+X7,data=DATAFIX,ad
apt=
FALSE,coords=cbind(DATAFIX$Latitude,DATAFIX$Longitude),gwei
ght=gwr.tricube)

#estimasi parameter

gwr.fixtricube=gwr(Y~X1+X2+X3+X4+X5+X6+X7,data=DATAFIX,b
andwidth=fixtricube,coords=cbind(DATAFIX$Latitude,DATAFIX$Lon
gitude),hatmatrix=TRUE, gweight=gwr.tricube)

gwr.fixtricube

gwr.fixtricube$bandwidth

# TRICUBE ADAPTIVE

#bandwidth

adapttricube=gwr.sel(Y~X1+X2+X3+X4+X5+X6+X7,data=DATAFIX,
adapt=TRUE,coords=cbind(DATAFIX$Latitude,DATAFIX$Longitude),
gweight=gwr.tricube)

#estimasi parameter

gwr.adapttricube=gwr(Y~X1+X2+X3+X4+X5+X6+X7,data=DATAFIX
,adapt=adapttricube,coords=cbind(DATAFIX$Latitude,DATAFIX$Long
itude),hatmatrix=TRUE,gweight=gwr.tricube)

gwr.adapttricube

gwr.adapttricube$bandwidth

# FIXED BISQUARE

#bandwidth
```

```
fixbisquare=gwr.sel(Y~X1+X2+X3+X4+X5+X6+X7,data=DATAFIX,a
dapt


=FALSE,coords=cbind(DATAFIX$Latitude,DATAFIX$Longitude),gwe
ight=gwr.bisquare)

#estimasi parameter

gwr.fixbisquare=gwr(Y~X1+X2+X3+X4+X5+X6+X7,data=DATAFIX,
bandwidth=fixbisquare,coords=cbind(DATAFIX$Latitude,DATAFIX$L
ongitude),hatmatrix=TRUE,gweight=gwr.bisquare)

gwr.fixbisquare

gwr.fixbisquare$bandwidth

# BISQUARE ADAPT

#bandwidth

adaptbisquare=gwr.sel(Y~X1+X2+X3+X4+X5+X6+X7,
data=DATAFIX,adapt=TRUE,coords=cbind(DATAFIX$Latitude,DATA
FIX$Longitude),gweight=gwr.bisquare)

#estimasi parameter

gwr.adaptbisquare=gwr(Y~X1+X2+X3+X4+X5+X6+X7,data=DATAFI
X,adapt=adaptbisquare,coords=cbind(DATAFIX$Latitude,DATAFIX$L
ongitude),hatmatrix=TRUE,gweight=gwr.bisquare)

gwr.adaptbisquare

gwr.adaptbisquare$bandwidth

#membaca output GWR

gwr.adapttricube

anova(gwr.adapttricube)

names(gwr.adapttricube)

names(gwr.adapttricube$SDF)
```

```
#estimasi tiap parameter gwr masing-masing Kabupaten/kota

gwr.adapttricube$SDF$`(Intercept)`

gwr.adapttricube$SDF$Y

gwr.adapttricube$SDF$X1

gwr.adapttricube$SDF$X2

gwr.adapttricube$SDF$X3

gwr.adapttricube$SDF$X4

gwr.adapttricube$SDF$X5

gwr.adapttricube$SDF$X6

gwr.adapttricube$SDF$X7

Kabupaten=DATAFIX$`Kabupaten/kota`#Kabupaten/Kota

Bandwidth=gwr.adapttricube$bandwidth #Nilai bandwidth adaptive
tricube

R2=gwr.adapttricube$SDF$localR2 #nilai r2 lokal

#Uji kesesuaian model

BFC02.gwr.test(gwr.adapttricube)

ftabelgwr=qf(.90, df1=14.000, df2=8.4203)

ftabelgwr

#uji pengaruh pengaruh geografis setiap prediktor GWR

LMZ.F3GWR.test(gwr.adapttricube)

#menampilkan t hitung

t_Y=gwr.adapttricube$SDF$Y/gwr.adapttricube$SDF$Y_se

t_Y

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

```
t_X1
t_X2=gwr.adapttricube$SDF$X2/gwr.adapttricube$SDF$X2_se
t_X2
t_X3=gwr.adapttricube$SDF$X3/gwr.adapttricube$SDF$X3_se
t_X3
t_X4=gwr.adapttricube$SDF$X4/gwr.adapttricube$SDF$X4_se
t_X4
t_X5=gwr.adapttricube$SDF$X5/gwr.adapttricube$SDF$X5_se
t_X5
t_X6=gwr.adapttricube$SDF$X6/gwr.adapttricube$SDF$X6_se
t_X6
t_X7=gwr.adapttricube$SDF$X7/gwr.adapttricube$SDF$X7_se
t_X7
```

Lampiran 8 Jarak *Euclidean*

Kabupaten/Kota	**1**	**2**	**3**	**4**	**5**	**6**
Sumba Barat	0	0,8603	4,3972	4,9571	5.0744	5.5028
Sumba Timur	0,8603	0	3,5834	4,1503	4.3045	4.7241
Kupang	4,3972	3,5834	0	0,5727	0.9015	1.2257
Timur Tengah Selatan	4,9571	4,1503	0,5727	0	0.5158	0.6930
Timur Tengah Utara	5,0744	4,3045	0,9015	0,5158	0	0.4391
Belu	5,5028	4,7241	1,2257	0,6930	0.4391	0
Alor	5,2711	4,5978	1,7752	1,5423	1.0324	1.1769
Lembata	4,2611	3,6144	1,5287	1,6532	1.3327	1.7183
Flores Timur	3,7592	3,1751	1,8847	2,1404	1.8950	2.3021
Sikka	3,0523	2,4414	1,9270	2,3442	2.2526	2.6894
Ende	2,3299	1,7568	2,4216	2,9106	2.8970	3.3361
Ngada	1,7923	1,4292	3,0968	3,5945	3.5812	4.0204
Manggarai	1,3908	1,3271	3,6736	4,1798	4.1730	4.6122
Rote Ndao	3,8523	2,9945	1,0861	1,5659	1.9822	2.2589
Manggarai Barat	1,0183	1,2917	4,1502	4,6709	4.6867	5.1256
Sumba Tengah	0,1804	0,6800	4,2239	4,7852	4.9089	5.3359
Sumba Barat Daya	0,3609	1,2045	4,7575	5,3178	5.4348	5.8635
Nagekeo	1,8917	1,3940	2,8239	3,3320	3.3411	3.7798
Manggarai Timur	1,5296	1,3727	3,5104	4,0114	3.9974	4.4366
Sabu Raijua	2,5422	1,6822	2,1440	2,7110	2.9950	3.3644
Malaka	5,4448	4,6558	1,1187	0,5637	0.4415	0.1606
Kota Kupang	4,2005	3,3665	0,3800	0,8871	1.2760	1.5718

Kabupaten/Kota	7	8	9	10	11	12
Sumba Barat	5.2711	4.2611	3.7592	3.0523	2.3299	1.7923
Sumba Timur	4.5978	3.6144	3.1751	2.4414	1.7568	1.4292
Kupang	1.7752	1.5287	1.8847	1.9270	2.4216	3.0968
Timur Tengah Selatan	1.5423	1.6532	2.1404	2.3442	2.9106	3.5945
Timur Tengah Utara	1.0324	1.3327	1.8950	2.2526	2.8970	3.5812
Belu	1.1769	1.7183	2.3021	2.6894	3.3361	4.0204
Alor	0	1.0208	1.5995	2.2303	2.9526	3.5812
Lembata	1.0208	0	0.6087	1.2122	1.9359	2.5647
Flores Timur	1.5995	0.6087	0	0.7361	1.4349	2.0134
Sikka	2.2303	1.2122	0.7361	0	0.7239	1.3666
Ende	2.9526	1.9359	1.4349	0.7239	0	0.6862
Ngada	3.5854	2.5647	2.0134	1.3666	0.6862	0
Manggarai	4.1585	3.1392	2.5720	1.9526	1.2769	0.5918
Rote Ndao	2.8330	2.3619	2.4985	2.2025	2.3906	2.9630
Manggarai Barat	4.6965	3.6766	3.1115	2.4839	1.7918	1.1174
Sumba Tengah	5.1230	4.1166	3.6249	2.9113	2.1916	1.6833
Sumba Barat Daya	5.6211	4.6085	4.0975	3.3977	2.6740	2.1103
Nagekeo	3.4054	2.3869	1.8679	1.1751	0.4553	0.2935
Manggarai Timur	3.9772	2.9580	2.3911	1.7725	1.1037	0.4175
Sabu Raijua	3.5827	2.7797	2.6030	1.9822	1.7268	2.0537
Malaka	1.3051	1.7672	2.3359	2.6823	3.3107	3.9966
Kota Kupang	2.1466	1.8033	2.0730	1.9808	2.3753	3.0269

Kabupaten/Kota	13	14	15	16	17	18
Sumba Barat	1.3908	3.8523	1.0183	0.1804	0.3609	1.8917
Sumba Timur	1.3271	2.9945	1.2917	0.6800	1.2045	1.3940
Kupang	3.6736	1.0861	4.1502	4.2239	4.7575	2.8239
TimurTengah Selatan	4.1798	1.5659	4.6709	4.7852	5.3178	3.3320
Timur Tengah Utara	4.1730	1.9822	4.6867	4.9089	5.4348	3.3411
Belu	4.6122	2.2585	5.1256	5.3359	5.8635	3.7798
Alor	4.1585	2.8330	4.6965	5.1230	5.6211	3.4054
Lembata	3.1392	2.3619	3.6766	4.1166	4.6085	2.3869
Flores Timur	2.5720	2.4985	3.1115	3.6249	4.0975	1.8679
Sikka	1.9525	2.2025	2.4839	2.9113	3.3977	1.1751
Ende	1.2769	2.3906	1.7918	2.1916	2.6740	0.4553
Ngada	0.5918	2.9630	1.1174	1.6833	2.1103	0.2935
Manggarai	0	3.4666	0.5395	1.3287	1.6593	0.8497
Rote Ndao	3.4666	0	3.8544	3.6721	4.1989	0.6695
Manggarai Barat	0.5395	3.8544	0	1.0192	1.2130	1.3461
Sumba Tengah	1.3287	3.6721	1.0192	0	0.5343	1.7615
Sumba Barat Daya	1.6593	4.1989	1.2130	0.5343	0	2.2300
Nagekeo	0.8497	2.6695	1.3461	1.7615	2.2300	0
Manggarai Timur	0.1812	3.3348	0.7203	1.4529	1.8136	0.6891
Sabu Raijua	2.4223	1.3428	2.7040	2.3620	2.8793	1.7872
Malaka	4.5876	2.1269	5.0954	5.2760	5.8057	3.7494
Kota Kupang	3.5855	0.7069	4.0358	4.0239	4.5581	2.7425

Kabupaten/Kota	19	20	21	22
Sumba Barat	1.5296	2,5422	5,4448	4,2005
Sumba Timur	1.3727	1,6822	4,6558	3,3665
Kupang	3.5104	2,1440	1,1187	0,3800
TimurTengah Selatan	4.0114	2,7110	0,5637	0,8871
Timur Tengah Utara	3.9974	2,9950	0,4415	1,2760
Belu	4.43666	3,3644	0,1606	1,5718
Alor	3.9772	3,5827	1,3051	2,1466
Lembata	2.9580	2,7797	1,7672	1,8033
Flores Timur	2.3911	2,6030	2,3359	2,0730
Sikka	1.7725	1,9822	2,6823	1,9808
Ende	1.1037	1,7268	3,3107	2,3753
Ngada	0.4175	2,0537	3,9966	3,0269
Manggarai	0.1812	2,4223	4,5876	3,5855
Rote Ndao	3.3348	1,3428	2,1269	0,7069
Manggarai Barat	0.7203	2,7040	5,0954	4,0358
Sumba Tengah	1.4529	2,3620	5,2760	4,0239
Sumba Barat Daya	1.8136	2,8793	5,8057	4,5581
Nagekeo	0.6891	1,7872	3,7494	2,7425
Manggarai Timur	0	2,3344	4,4138	3,4313
Sabu Raijua	2.3344	0	3,2627	1,8438
Malaka	4.4138	3,2627	0	1,4503
Kota Kupang	3.4313	1,8438	1,4503	0

Lampiran 9 Matriks Pembobot *Adaptive Tricube*

Kabupaten/Kota	**1**	**2**	**3**	**4**	**5**	**6**
Sumba Barat	1	0.9885	0.1174	0.0194	0.0100	0
Sumba Timur	0.9819	1	0.1789	0.0333	0.0144	0
Kupang	0.0092	0.1876	1	0.9947	0.9797	0.9495
Timur Tengah Selatan	0.0068	0.1443	0.9962	1	0.9972	0.9933
Timur Tengah Utara	0.0064	0.1272	0.9863	0.9974	1	0.9984
Belu	0.0051	0.1084	0.9728	0.9950	0.9987	1
Alor	0.0053	0.0927	0.9084	0.9392	0.9815	0.9727
Lembata	0.0091	0.1385	0.8944	0.8677	0.9291	0.8523
Flores Timur	0.0117	0.1527	0.7354	0.6303	0.7315	0.5566
Sikka	0.0207	0.2487	0.5463	0.3027	0.3556	0.1279
Ende	0.2866	0.6227	0.2354	0.0378	0.0411	0
Ngada	0.7570	0.8711	0.1600	0.0232	0.0252	0
Manggarai	0.9199	0.9302	0.1210	0.0167	0.0174	0
Rote Ndao	0.0117	0.2586	0.9489	0.8522	0.7163	0.6019
Manggarai Barat	0.9766	0.9527	0.1032	0.0143	0.0130	0
Sumba Tengah	0.999	0.9938	0.1279	0.0216	0.0108	0
Sumba Barat Daya	0.9993	0.9742	0.1010	0.0163	0.0084	0
Nagekeo	0.6690	0.8569	0.1981	0.0312	0.0296	0
Manggarai Timur	0.8820	0.9137	0.1285	0.0177	0.0193	0
Sabu Raijua	0.2654	0.7204	0.4849	0.1819	0.0718	0.0050
Malaka	0.0053	0.1134	0.9786	0.9972	0.9986	0.9999
Kota Kupang	0.0102	0.2127	0.9982	0.9780	0.9355	0.8819

Kabupaten/Kota	7	8	9	10	11	12
Sumba Barat	0.0017	0.1536	0.3160	0.5703	0.7891	0.8998
Sumba Timur	0.0004	0.1683	0.3376	0.6404	0.8535	0.9192
Kupang	0.8520	0.9036	0.8247	0.8135	0.6541	0.3796
Timur Tengah Selatan	0.9285	0.9125	0.8168	0.7643	0.5842	0.3300
Timur Tengah Utara	0.9795	0.9563	0.8781	0.8011	0.6108	0.3637
Belu	0.9759	0.9263	0.8291	0.7374	0.5428	0.3110
Alor	1	0.9821	0.9324	0.8240	0.6250	0.4059
Lembata	0.9677	1	0.9930	0.9463	0.7936	0.5668
Flores Timur	0.8318	0.9901	1	0.9826	0.8765	0.6845
Sikka	0.3686	0.8698	0.9697	1	0.9712	0.8171
Ende	0.0288	0.5208	0.7797	0.9696	1	0.9741
Ngada	0.0245	0.4058	0.6685	0.8867	0.9851	1
Manggarai	0.0190	0.3209	0.5647	0.7892	0.9376	0.9936
Rote Ndao	0.3324	0.5553	0.4916	0.6264	0.5421	0.2727
Manggarai Barat	0.0122	0.2511	0.4678	0.6959	0.8772	0.9692
Sumba Tengah	0.0015	0.1581	0.3234	0.5875	0.8061	0.9087
Sumba Barat Daya	0.0016	0.1361	0.2858	0.5224	0.7415	0.8665
Nagekeo	0.0193	0.4187	0.6798	0.9125	0.9947	0.9985
Manggarai Timur	0.0218	0.3483	0.6000	0.8206	0.9545	0.9975
Sabu Raijua	0	0.1512	0.2341	0.5730	0.7002	0.5345
Malaka	0.9662	0.9177	0.8169	0.7322	0.5403	0.3057
Kota Kupang	0.7181	0.8254	0.7434	0.7733	0.6326	0.3534

Kabupaten/Kota	13	14	15	16	17	18
Sumba Barat	0.9523	0.2834	0.9811	0.9998	0.9991	0.8829
Sumba Timur	0.9349	0.4139	0.9399	0.9910	0.9510	0.9248
Kupang	0.1569	0.9647	0.0379	0.0269	0	0.4945
Timur Tengah Selatan	0.1360	0.9253	0.0334	0.0199	0	0.4285
Timur Tengah Utara	0.1638	0.8613	0.0460	0.0181	0	0.4522
Belu	0.1351	0.8381	0.0365	0.0149	0	0.3923
Alor	0.2106	0.6629	0.0723	0.0143	0	0.4701
Lembata	0.3197	0.6479	0.1191	0.0236	0	0.6382
Flores Timur	0.4262	0.4622	0.1774	0.0290	0	0.7417
Sikka	0.5317	0.3850	0.2260	0.0509	0	0.8809
Ende	0.8410	0.2524	0.6035	0.3678	0.1141	0.9923
Ngada	0.9904	0.2156	0.9369	0.7955	0.6258	0.9988
Manggarai	1	0.1904	0.9952	0.9299	0.8666	0.9813
Rote Ndao	0.0835	1	0.0115	0.0362	0	0.4100
Manggarai Barat	0.9965	0.1898	1	0.9765	0.9607	0.9466
Sumba Tengah	0.9543	0.3062	0.9792	1	0.9969	0.8958
Sumba Barat Daya	0.9335	0.2533	0.9736	0.9977	1	0.8438
Nagekeo	0.9663	0.2717	0.8705	0.7260	0.5017	1
Manggarai Timur	0.9997	0.1904	0.9872	0.8982	0.8087	0.9887
Sabu Raijua	0.3297	0.8501	0.1851	0.3630	0.1111	0.6718
Malaka	0.1299	0.8595	0.0339	0.0154	0	0.3899
Kota Kupang	0.1351	0.9888	0.0285	0.0303	0	0.4784

Kabupaten/Kota	19	20	21	22
Sumba Barat	0.9369	0.7323	3.05269E-05	0.1711
Sumba Timur	0.9281	0.8705	7.79832E-05	0.2598
Kupang	0.2140	0.7497	0.9614	0.9984
Timur Tengah Selatan	0.1858	0.6527	0.9964	0.9861
Timur Tengah Utara	0.2181	0.5772	0.9983	0.9616
Belu	0.1819	0.5334	0.9999	0.9432
Alor	0.2692	0.4068	0.9629	0.8420
Lembata	0.3978	0.4754	0.8401	0.8307
Flores Timur	0.5143	0.4110	0.5406	0.6595
Sikka	0.6315	0.5146	0.1309	0.5154
Ende	0.8952	0.6389	1.16397E-05	0.2609
Ngada	0.9966	0.6510	5.48009E-06	0.1883
Manggarai	0.9998	0.6252	3.99018E-06	0.14902
Rote Ndao	0.1241	0.9050	0.658478887	0.9857
Manggarai Barat	0.9916	0.6210	5.42251E-06	0.1340
Sumba Tengah	0.9406	0.7616	3.66883E-05	0.1862
Sumba Barat Daya	0.9138	0.6851	2.49618E-05	0.1490
Nagekeo	0.9819	0.7151	1.37249E-05	0.2360
Manggarai Timur	1	0.6235	3.61626E-06	0.1551
Sabu Raijua	0.3784	1	0.0146	0.6442
Malaka	0.1760	0.5563	1	0.9539
Kota Kupang	0.1883	0.8142	0.9064	1

Lampiran 9 Pemilihan *Bandwidth* Fungsi *Kernel Adaptive*

Kabupaten/Kota	*Adaptive Gaussian*	*Adaptive Bisquare*	*Adaptive Tricube*
Sumba Barat	4.2611	5.0746	5.5027
Sumba Timur	3.5835	4.3047	4.7240
Kupang	3.5104	4.1502	4.7570
TimurTengahSelatan	4.0114	4.6709	5.3174
Timur Tengah Utara	3.9975	4.6869	5.4344
Belu	4.4367	5.1257	5.8630
Alor	3.9773	4.6967	5.6207
Lembata	2.9581	3.6769	4.6080
Flores Timur	2.5720	3.1754	4.0971
Sikka	2.4414	2.6896	3.3973
Ende	2.4218	2.9106	3.3361
Ngada	3.0269	3.5854	4.0204
Manggarai	3.5855	4.1730	4.6121
Rote Ndao	2.9947	3.6722	4.1985
Manggarai Barat	4.0359	4.6867	5.1256
Sumba Tengah	4.1166	4.9090	5.3358
Sumba Barat Daya	4.6086	5.4349	5.8634
Nagekeo	2.7426	3.3411	3.7798
Manggarai Timur	3.4314	3.9974	4.4366
Sabu Raijua	2.7110	2.9951	3.5825
Malaka	4.4139	5.0955	5.8053
Kota Kupang	3.3665	4.0239	4.5577

Lampiran 10 0utput Uji Kesesuaian Model GWR

```
        Brunsdon, Fotheringham & Charlton (2002, pp. 91-2) ANOVA

data:  gwr.adapttricube
F = 1.7067, df1 = 14.0000, df2 = 8.4203, p-value = 0.2198
alternative hypothesis: greater
sample estimates:
SS OLS residuals SS GWR residuals
        4173.483         2445.355
```

Lampiran 11 Estimasi Parameter Model GWR *Adaptive Tricube*

Kabupaten/Kota	Intercept	X1	X2	X3	X4	X5	X6	X7
Sumba Barat	143,4705	0,0069	-20,3303	3,2908	-3,5493	0,0047	0,4431	0,1279
Sumba Timur	148,8219	0,0066	-21,1211	3,0949	-3,6952	0,0155	0,4652	0,1266
Kupang	189,1268	0,0095	-23,6091	-3,3426	-2,9753	0,1005	0,3569	0.0140
Timor Tengah Selatan	185,9153	0,0092	-23,2908	-3,5048	-2,9337	0,1028	0,3647	0,0131
Timor Tengah Utara	186,2386	0,0094	-23,2837	-3,4841	-2,8134	0,0972	0,3580	0,0134
Belu	183,5853	0,0091	-23,0266	-3,9543	-2,8282	0,1013	0,3629	0,0124
Alor	187,5386	0,0098	-23,3799	-3,9320	-2,5674	0,0850	0,3476	0,0147
Lembata	194,1358	0,0104	-24,0953	-4,0024	-2,5426	0,0746	0,3387	0,0182
Flores Timur	196,4331	0,0111	-24,2236	-3,0270	-2,3762	0,0605	0,3067	0,0209
Sikka	184,8705	0,0119	-22,4542	0,9889	-2,5466	0,0584	0,1685	0,0251
Ende	141,4415	0,0086	-18,4322	2,4795	-3,2475	0,0252	0,2060	0,0951
Ngada	137,3745	0,0072	-18,6957	2,9224	-3,2051	0,0001	0,3322	0,1180

Manggarai	134,6796	0,0071	-18,5647	-3,1343	-3,2131	-0,0048	0,3518	0,1220
Rote Ndao	191,5050	0,0099	-23,8376	3,1357	-3,4527	0,1210	0,3233	0,0101
Manggarai Barat	135,3722	0,0071	-18,8492	3,1367	-3,2784	-0,0051	0,3770	0,1244
Sumba Tengah	144,2560	0,0068	-20,4417	3,2636	-3,5716	0,0065	0,4453	0,1276
Sumba Barat Daya	143,2161	0,0070	-20,3332	3,3372	-3,5431	0,0028	0,4485	0,1286
Nagekeo	140,4835	0,0071	-19,0775	2,2748	-3,2923	0,0075	0,3349	0,1557
Manggarai Timur	134,9025	0,0071	-18,5194	2,8095	-3,1931	-0,0044	0,3438	0,1210
Sabu Raijua	192,7770	0,0072	-26,6900	-0,1482	-4,5969	0,0937	0,5958	0,0936
Malaka	183,6309	0,0091	-23,0429	-3,4334	-2,8616	0,1027	0,3648	0,0124
Kota Kupang	190,0382	0,0095	-23,7207	-3,2615	-3,0895	0,1049	0,3539	0,0136

Lampiran 12 Model GWR *Adaptive Tricube*

Kabupaten/Kota	**Model**
Sumba Barat	143,4705+0,0069X1-20,3303X2+3,2908X3-3,5493X4+0,0047X5+0,4431X6+0,1279X7
Sumba Timur	148,8219+0,0066X1-21,1211X2+3,0949X3-3,6952X4+0,0155X5+0,4652X6+0,1266X7
Kupang	189,1268+0,0095X1-23,6091X2-3,3426X3-2,9753X4+0,1005X5+0,3569X6+0.0140X7
Timor Tengah Selatan	185,9153+0,0092X1-23,2908X2-3,5048X3-2,9337X4+0,1028X5+0,3647X6+0,0131X7
Timor Tengah Utara	186,2386+0,0094X1-23,2837X2-3,4841X3-2,8134X4+0,0972X5+0,3580X6+0,0134X7
Belu	183,5853+0,0091X1-23,0266X2-3,9543X3-2,8282X4+0,1013X5+0,3629X6+0,0124X7
Alor	187,5386+0,0098X1+23,3799X2-3,9320X3-2,5674X4+0,0850X5+0,3476X6+0,0147X7
Lembata	194,1358+0,0104X1-24,0953X2-4,0024X3-2,5426X4+0,0746X5+0,33876+0,0182X7
Flores Timur	196,4331+0,0111X1-24,2236X2-3,0270X3-2,3762X4+0,0605X5+0,3067X6+0,0209X7
Sikka	184,8705+0,0119X1-22,4542X2+0,9889X3-2,5466X4+0,0584X5+0,1685X6+0,0251X7
Ende	141,4415+0,0086X1-18,4322X2+2,4795X3-3,2475X4+0,0252X5+0,2060X6+0,0951X7
Ngada	137,3745+0,0072X1-18,6957X2+2,9224X3-3,2051X4+0,0001X5+0,3322X6+0,1180X7

Manggarai	134,6796+0,0071X1-18,5647X2-3,1343X3-3,2131X4-0,0048X5+0,3518X6+0,1220X7
Rote Ndao	191,5050+0,0099X1-23,8376X2+3,1357X3-3,4527X4+0,1210X5+0,3233X6+0,0101X7
Manggarai Barat	135,3722+0,0071X1-18,8492X2+3,1367X3-3,2784X4-0,0051X5+0,3770X6+0,1244X7
Sumba Tengah	144,2560+0,0068X1-20,4417X2+3,2636X3-3,5716X4+0,0065X5+0,4453X6+0,1276X7
Sumba Barat Daya	143,2161+0,0070X1-20,3332X2+3,3372X3-3,5431X4+0,0028X5+0,4485X6+0,1286X7
Nagekeo	140,4835+0,0071X1-19,0775X2+2,2748X3-3,2923X4+0,0075X5+0,3349X6+0,1557X7
Manggarai Timur	134,9025+0,0071X1-18,5194X2+2,8095X3-3,1931X4-0,0044X5+0,3438X6+0,1210X7
Sabu Raijua	192,7770+0,0072X1-26,6900X2-0,1482X3-4,5969X4+0,0937X5+0,5958X6+0,0936X7
Malaka	183,6309+0,0091X1-23,0429X2-3,4334X3-2,8616X4+0,1027X5+0,3648X6+0,0124X7
Kota Kupang	190,0382+0,0095X1-23,7207X2-3,2615X3-3,0895X4+0,1049X5+0,3539X6+0,0136X7

Lampiran 13 Nilai T hitung GWR

Kabupaten/Kota	X1	X2	X3	X4	X5	X6	X7
Sumba Barat	2,4182	-1,6667	0,6143	-2,1840	0,0643	0,9175	3,9881
Sumba Timur	2,3658	-1,8026	0,5977	-2,3078	0,2149	0,9964	3,9849
Kupang	2,3458	-2,0818	-0,8492	-2,1363	1,4276	0,7263	0,3285
Timor Tengah Selatan	2,2485	-2,0305	-0,8364	-2,0732	1,4355	0,7337	0,3030
Timor Tengah Utara	2,3238	-2,0491	-0,8821	-2,0136	1,3824	0,7280	0,3126
Belu	2,2356	-2,0043	-0,8625	-1,9914	1,4152	0,7288	0,2866
Alor	2,4800	-2,0833	-1,0025	-1,8709	1,2390	0,7189	0,3512
Lembata	2,6818	-2,1965	-1,0304	-1,9294	1,1142	0,7236	0,4552
Flores Timur	2,8806	-2,2366	-1,0668	-1,8413	0,9094	0,6708	0,5384
Sikka	3,0398	-2,0476	-0,7910	-1,9604	0,8717	0,3583	0,6333
Ende	2,8911	-1,6151	0,2027	-2,0913	0,3542	0,4348	2,9939
Ngada	2,5241	-1,6205	0,4818	-2,0277	0,0027	0,7199	3,7819

Manggarai	2,4759	-1,5582	0,5488	-2,0042	-0,0661	0,7469	3,8577
Rote Ndao	2,3232	-2,0630	-0,8071	-2,4024	1,6324	0,6347	0,2319
Manggarai Barat	2,4616	-1,5489	0,5791	-2,0247	-0,0691	0,7879	3,9005
Sumba Tengah	2,4085	-1,6895	0,6133	-2,2040	0,0888	0,9279	3,9882
Sumba Barat Daya	2,4307	-1,6404	0,6160	-2,1687	0,0387	0,9168	3,9953
Nagekeo	2,5495	-1,6836	0,4519	-2,0970	0,1052	0,7353	3,7420
Manggarai Timur	2,4869	-1,5670	0,5316	-1,9994	-0,0602	0,7338	3,8372
Sabu Raijua	2,4654	-2,7257	-0,0350	-3,0739	1,3812	1,5155	3,0986
Malaka	2,2175	-2,0014	-0,8490	-2,0099	1.4280	0,7310	0,2853
Kota Kupang	2,3382	-2,0823	-0,8344	-2,2031	1,4756	0,7156	0,3160

Lampiran 14 *R Script* Analisis MGWR

```
#Menjalankan library

library(readxl)

library(car)

library(lmtest)

library(spgwr)

library(fBasics)

library(AICcmodavg)

library(sp)

#Input data

DATAFIX <- read_excel("D:/DATA/Data penelitian skripsi/DATAFIX.xlsx",

                      col_types = c("text", "numeric", "numeric",

                                    "numeric", "numeric", "numeric",

                                    "numeric", "numeric", "numeric",

                                    "numeric", "numeric"))

View(DATAFIX)

#Mencari bandwidth

gwr.adapttricube=gwr(Y~X1+X2+X3+X4+X5+X6+X7,data=DATAFIX,adapt=adapttricube,coords=cbind(DATAFIX$Latitude,DATAFIX$Longitude),hatmatrix=TRUE,gweight=gwr.tricube)

bw<-gwr.adapttricube$bandwidth

#Variabel pada data

y=as.matrix(DATAFIX$Y)

lat=as.matrix(DATAFIX$Latitude)
```

```
lon=as.matrix(DATAFIX$Longitude)

xg=as.matrix(cbind(DATAFIX$X1,DATAFIX$X2,DATAFIX$X3,DAT
AFIX$X4,

                DATAFIX$X5,DATAFIX$X6))

xl=as.matrix(cbind(DATAFIX$X7))

x=as.matrix(cbind(xl,xg))

ng=ncol(xg)

nl=ncol(xl)

n=length(y)

I=diag(1,n,n)

w=matrix(0,n,n)

d=matrix(0,n,n)

#Mencari jarak euclidian dan pembobot MGWR

for (i in 1:n){

  for (j in 1:n)

  {

    d[i,j]=sqrt((lat[i,1]-lat[j,1])^2+(lon[i,1]-lon[j,1])^2)

    if (d[i,j]>bw[i]){

      w[i,j]=0

    }else

      W[i,j]=1-((d[i,j]/bw[i])^3)^3

  }

}

#Mencari estimasi parameter global MGWR
```

```
beta.l=matrix(0,nl,n)
Sl=matrix(0,n,n)
for (i in 1:n){
  Sl[i,]=((xl[i,]%*%(solve((t(xl)%*%diag(W[,i]))%*%xl)))%*%t
        (xl))%*%diag(W[,i])
}
beta.g=((((solve(((t(xg)%*%t(I-Sl))%*%(I-Sl))%*%xg))%*%t(xg)
)%*%t(I-Sl))%*%(I-Sl))%*%y
#Mencari estimasi parameter lokal MGWR
for (i in 1:n){
  beta.l[,i]=((solve((t(xl)%*%diag(W[,i]))%*%xl)%*%t(xl)%*%diag
            (W[,i]))%*%(y-(xg%*%beta.g)))
}
Sg=(xg%*%solve(t(xg)%*%xg))%*%t(xg)
S=Sl+((((((I-Sl)%*%xg)%*%solve(((t(xg)%*%t(I-Sl))%*%(I-
Sl))%*%xg))%*%t(xg))%*%t(I-Sl))%*%(I-Sl))
        y.hat=(Sl%*%y)+(((I-Sl)%*%xg)%*%beta.g)
        residual=(I-S)%*%y
        H=(x%*%solve(t(x)%*%x))%*%t(x)
#Pengujian model MGWR
RSS.H0.F1=as.vector(((t(y)%*%(I-H))%*%y))
RSS.H0.F2=as.vector((((t(y)%*%(t(I-Sl)))%*%(I-Sl))%*%y))
RSS.H0.F3=as.vector((((t(y)%*%(t(I-Sg)))%*%(I-Sg))%*%y))
RSS.H0=cbind(RSS.H0.F1,RSS.H0.F2,RSS.H0.F3)
```

```
RSS.H1=as.vector((((t(y)%*%(t(I-S)))%*%(I-S))%*%y))
DSS1=RSS.H0.F1-RSS.H1
DSS2=RSS.H0.F2-RSS.H1
DSS3=RSS.H0.F3-RSS.H1
DSS=cbind(DSS1,DSS2,DSS3)
v=c(0,0)
u=c(0,0)
r=c(0,0)
t=c(0,0)
library(psych)
      for (i in 1:2)
      {
        v[i]=tr(((I-H)-(t(I-S)%*%(I-S)))^i)
        u[i]=tr((t(I-S)%*%(I-S))^i)
        r[i]=tr((t(I-Sl)%*%(I-Sl)-t(I-S)%*%(I-S))^i)
        t[i]=tr((t(I-Sg)%*%(I-Sg)-t(I-S)%*%(I-S))^i)
      }
#Uji kesesuaian model MGWR
F1=as.vector((((t(y)%*%((I-H)-(t(I-S)%*%(I-S))))%*%y)/v[1])/(
(((t(y)%*%t(I-S))%*%(I-S))%*%y)/u[1]))
df1.1=(v[1]^2/v[2])
df2=(u[1]^2)/u[2]
#Uji serentak parameter global MGWR
```

```
F2=as.vector((((t(y)%*%(((t(I-Sl)%*%(I-Sl))-(t(I-S)%*%(I-S)))
    ))%*%y)/r[1])/((((t(y)%*%t(I-S))%*%(I-S))%*%y)/u[1]))
df1.2=(r[1]^2/r[2])
#Uji serentak parameter lokal MGWR
F3=as.vector((((t(y)%*%(((t(I-Sg)%*%(I-Sg))-(t(I-S)%*%(I-S)))
    ))%*%y)/t[1])/((((t(y)%*%t(I-S))%*%(I-S))%*%y)/u[1]))
df1.3=(t[1]^2/t[2])
F=as.vector(rbind(F1,F2,F3))
df1=c(df1.1,df1.2,df1.3)
p.value=as.vector(matrix(0,3,1))
for (i in 1:3)
    {
     p.value[i]=1-(pf(F[i], df1=df1[i], df2=df2))
    }
    Uji.Serentak=cbind(F,df1,df2,p.value)
#Pengujian parameter secara parsial
#Pengujian parameter global secara parsial
 G=((solve(((t(xg)%*%t(I-Sl))%*%(I-Sl))%*%xg)%*%t(xg))%*%t(I-
Sl))%*%(I-Sl)
    gkk=diag(G%*%t(G))
    t.g=as.vector(matrix(0,ng,1))
    p.val=as.vector(matrix(0,ng,1))
    sigma=as.vector(sqrt(((((t(y)%*%t(I-S))%*%(I-S))%*%y)/n)))
    for (i in 1:ng)
```

```
{
 t.g[i]=beta.g[i]/(sigma*sqrt(gkk[i]))
 df=df2
 p.val[i]=1-pt(abs(t.g[i]), df=df)
}
Uji.Parsial.Global=cbind(t.g,df,p.val)
sigma=as.vector(sqrt(((((t(y)%*%t(I-S))%*%(I-S))%*%y)/n)))
t.hit.l=matrix(0,nl,n)
pvalue=matrix(0,nl,n)
ttabel=qt(.05, 20.36541)
ttabel
#Pengujian parameter lokal secara parsial
ringkasan=matrix(0,n,2*nl)
for (i in 1:n)
{

M=((((solve(((t(xl)%*%diag(W[,i]))%*%xl)))%*%t(xl))%*%diag
    (W[,i]))%*%(I-(xg%*%G)))
 m=diag(M%*%t(M))
 m=as.matrix(m)
 for (j in 1:nl)
 {
  t.hit.l[j,i]=beta.l[j,i]/(sigma*(sqrt(m[j,])))
```

```
    pvalue[j,i]=1-pt(t.hit.l[j,i],df=df2,lower.tail=TRUE)
  }
  ringkasan[i,]=t(cbind(t.hit.l[,i],pvalue[,i]))
}
ttabel=qt(.05, 20.36541)
ttabel
ringkasan #nilai t, nilai pval, dst#
print(beta.g)
print(beta.l)
print(F1)
Uji.Serentak
ftabel1=qf(.90, df1=5.846528, df2=20.36541)
ftabel1
ftabel2=qf(.90, df1=14.474051, df2=20.36541)
ftabel2
ftabel3=qf(.90, df1=9.556459, df2=20.36541)
ftabel3
RSS.H0
RSS.H1
DSS
df1.1
df2
df1.2
```

```
df1.3
print(Uji.Parsial.Global)
ringkasan
#Nilai AIC MGWR
AICc=(2*n*log(sigma))+(n*log(2*pi))+((n*((n+tr(S)))/(n-2-tr(
  S))))
AIC=(2*n*log(sigma))+(n*log(2*pi))+n+tr(S)
resid=y-y.hat
sigu=(t(resid))%*%resid
ym=y-mean(y)
rsqrt1=sigu
rsqrt2=t(ym)%*%ym
rsqrt=1-(rsqrt1/rsqrt2) #r-squared#
rsqrt1=rsqrt1/(n-ng-nl)
rsqrt2=rsqrt2/(n-1)
rbar=1-(rsqrt1/rsqrt2) #rbar-squared#
print(AICc)
AIC
cat("R-Square = ",rsqrt)
cat("Adj-Rsquare= ",rbar)
```

Lampiran 15 Estimasi Parameter Model MGWR *Adaptive Tricube*

Kabupaten/Kota	Intercept	X1	X2	X3	X4	X5	X6	X7
Sumba Barat	17,9324	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0649
Sumba Timur	41,4661	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0652
Kupang	83,4247	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0649
Timor Tengah Selatan	60,2628	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0648
Timor Tengah Utara	48,4930	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0647
Belu	35,7398	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0665
Alor	17,7550	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0649
Lembata	16,9784	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0651
Flores Timur	63,0453	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0652
Sikka	65,1440	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0653
Ende	54,2322	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0652

Ngada	10,1578	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0651
Manggarai	76,8943	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0647
Rote Ndao	41,6430	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0652
Manggarai Barat	45,7830	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0640
Sumba Tengah	8,1220	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0650
Sumba Barat Daya	62,3694	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0658
Nagekeo	32,0561	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0652
Manggarai Timur	54,5220	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0649
Sabu Raijua	36,1527	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0653
Malaka	34,1051	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0663
Kota Kupang	33,3093	0.0031	-2.5459	3.7960	-3.0871	0.1443	-0.0639	0.0650