Lampiran 1

Hasil Estimasi Parameter Curah Hujan

Model SARIMA	Non Musiman		Musiman	
	Estimasi Parameter	*p-value*	Esrimasi parameter	*p-value*
SARIMA$(1,1,0)(0,1,1)^{12}$	$\phi_1 = -0{,}4849$	0,000*	$\Theta_1 = 0{,}8006$	0,000*
SARIMA$(3,1,0)(0,1,1)^{12}$	$\phi_1 = -0{,}5663$ $\phi_2 = -0{,}2694$ $\phi_3 = -0{,}3414$	0,000 0,067 0,007	$\Theta_1 = 0{,}7963$	0,000
SARIMA$(0,1,1)(0,1,1)^{12}$	$\theta_1 = 0{,}6055$	0,000*	$\Theta_1 = 0{,}3627$	0,000*
SARIMA$(0,1,3)(0,1,1)^{12}$	$\theta_1 = 0{,}6486$ $\theta_2 = -0{,}0001$ $\theta_3 = 0{,}2098$	0,000 0,999 0,131	$\Theta_1 = 0{,}8046$	0,000
SARIMA$(1,1,0)(0,1,3)^{12}$	$\phi_1 = -0{,}4966$	0,000*	$\Theta_1 = 0{,}5692$ $\Theta_2 = 0{,}6311$ $\Theta_3 = 0{,}6250$	0,001* 0,003* 0,009*
SARIMA$(0,1,1)(0,1,3)^{12}$	$\theta_1 = 0{,}8876$	0,000*	$\Theta_1 = 0{,}4816$ $\Theta_2 = 0{,}6052$ $\Theta_3 = -0{,}6342$	0,003* 0,005* 0,001*

Hasil Estimasi Parameter Kelembaban

No.	Model Arima	Estimasi Parameter	*p-value*
1	ARIMA (0,1,1)	θ_1 =0,4877	0,000*
2	ARIMA (1,1,0)	$\phi_1 = -0{,}3839$	0,002*
3	ARIMA (1,1,1)	$\phi_1 = 0{,}4644$ $\theta_1 = 1{,}0059$	0,000* 0,000*

Ket : simbol (*) merupakan model yang signifikan pada $\alpha = 0{,}05$.

Uji kecukupan model ARIMA curah hujan

No,	Model	Lag			
		12	24	36	48
1	SARIMA$(1,1,0)(0,1,1)^{12}$	0,015	0,035	0,033	0,004
2	SARIMA$(0,1,1)(0,1,1)^{12}$	0,164*	0,417*	0,655*	0,080*
3	SARIMA$(1,1,0)(0,1,3)^{12}$	0,003	0,001	0,002	0,011
4	SARIMA$(0,1,1)(0,1,3)^{12}$	0,129	0,048	0,112	0,057

Uji kecukupan model ARIMA Kelembaban

No.	Model	Lag			
		12	24	36	48
1	ARIMA (1,1,0)	0,213*	0,610*	0,510*	0,245*
2	ARIMA (0,1,1)	0,322*	0,565*	0,568*	0,382*
3	ARIMA (1,1,1)	0,265*	0,659*	0,698*	0,486*

Uji Kenormalan Residual Model ARIMA Curah Hujan

Model	*p-value* Shapiro-Wilk	AIC
SARIMA$(0,1,1)(0,1,1)^{12}$	0,5358	37,855

Uji Kenormalan Residual Model ARIMA Kelembaban

No	Model	*p-value* Shapiro-Wilk	AIC
1	ARIMA (1,1,0)	0,4478*	-412,4069
2	ARIMA (0,1,1)	0,3133*	-413,0326
3	ARIMA (1,1,1)	0,296*	-418,5525

Lampiran 2

Estimasi Parameter Model Fungsi Transfer Multivariat

Model Fungsi Transfer	Estimasi Parameter	*Standard Error*
$y_t = \frac{\omega_0 - \omega_1 B}{(1-\delta_1 B - \delta_2 B^2)} x_{t-1}^1 + \omega_0 x_{t-2}^2 + \frac{1}{(1-\phi_1 B)} a_t$	$\omega_0 = 0{,}0792$ $\omega_1 = -0{,}0930$ $\delta_1 = -0{,}1397$ $\delta_2 = 0{,}5275$ $\omega_0 = 1{,}9396$ $\phi_1 = -0{,}1068$	0,0380 0,0429 0,3588 0,3475 1,5613 0,1343
$y_t = \frac{\omega_0 - \omega_1 B}{(1-\delta_1 B - \delta_2 B^2)} x_{t-1}^1 + \omega_0 x_{t-2}^2 + (1 - \theta_1 B) a_t$	$\omega_0 = 0{,}0799$ $\omega_1 = -0{,}0940$ $\delta_1 = -0{,}1395$ $\delta_2 = 0{,}5261$ $\omega_0 = 1{,}9172$ $\theta_1 = 0{,}0948$	0,0381 0,0429 0,3535 0,3430 1,5627 0,1342
$y_t = \frac{\omega_0 - \omega_1 B}{(1-\delta_1 B - \delta_2 B^2)} x_{t-1}^1 + \omega_0 x_{t-2}^2 + \frac{(1-\theta_1 B)}{(1-\phi_1 B)} a_t$	$\omega_0 = 0{,}0723$ $\omega_1 = -0{,}0888$ $\delta_1 = -0{,}1270$ $\delta_2 = 0{,}5294$ $\omega_0 = 1{,}9159$ $\phi_1 = -0{,}7799$ $\theta_1 = -0{,}6760$	0,0413 0,0435 0,3933 0,3806 1,5234 0,5305 0,6015

Sumber: data diolah (2017)

Pemilihan Model Terbaik Fungsi Transfer Multivariat

Model Fungsi Transfer	AIC
$y_t = \frac{0,0792+0,0931B}{(1+0,1397B-0,5275B^2)} x_{t-1}^1 + 1,9396x_{t-2}^2 + \frac{1}{(1+0,1068B)} a_t$	-24,411
$y_t = \frac{0,0799+0,0940B}{(1+0,1395B-0,5261B^2)} x_{t-1}^1 + 1,9172x_{t-2}^2 + (1 - 0,0948B) a_t$	-24,332
$y_t = \frac{0,0723+0,0888B}{(1+0,1270B-0,5294B^2)} x_{t-1}^1 + 1,9159x_{t-2}^2 + \frac{(1+0,6760B)}{(1+7799B)} a_t$	-23,213

Sumber: data diolah (2017)