|  |  |  |
| --- | --- | --- |
| **Models** | **MAPE** | **AIC** |
| AR(1) | 0.06328462 | -664.2 |
| AR(6) | 0.06487424 | -754.81 |
| Exponential smoothing  (optimal alpha=0.999922) | 0.06273692 | \_ |
| Holt-Winters – Additive  (0.7759488,0,1) | 0.08821809 | \_ |
| ARMA(6,6) | 0.06524994 | -775.5 |
| ARIMA(6,2,6) | 0.06489309 | -755.13 |
| ARIMA(3,0,3) (Optimal) | 0.06448967 | -803.36 |
| GARCH(6,6) – ARMA(6,6) | 0.06465604 | 8 |

Exponential smoothing

0.07814952 0.4

0.07414948 0.5

0.07102846 0.6

0.06843422 0.7

0.06620384 0.8

0.06422051 0.9

Holt-Winters – Additive

alpha=0.3 , beta=0.1 ,gamma=0.1 0.1204516

alpha=0.4 , beta=0.1 ,gamma=0.1 0.1159834

alpha=0.5 , beta=0.1 ,gamma=0.1 0.11231

alpha=0.6 , beta=0.1 ,gamma=0.1 0.1091451

alpha=0.6 , beta=0.1 ,gamma=0.1 0.1091451

alpha=0.6 , beta=0.2 ,gamma=0.1 0.113533

alpha=0.6 , beta=0.3 ,gamma=0.1 0.1175868

alpha=0.6 , beta=0.4 ,gamma=0.1 0.1212095

alpha=0.6 , beta=0.1 ,gamma=0.1 0.1091451

alpha=0.6 , beta=0.1 ,gamma=0.2 0.1043696

alpha=0.6 , beta=0.1 ,gamma=0.3 0.1010747

alpha=0.6 , beta=0.1 ,gamma=0.4 0.0992485

|  |  |  |  |
| --- | --- | --- | --- |
| Models | MAPE | | AIC |
| AR(1) | | 0.06328462 | -664.2 |
| Exponential smoothing  (optimal alpha=0.999922) | | 0.06273692 | \_ |
| Holt-Winters – Additive  (0.7759488,0,1) | | 0.08821809 | \_ |
| ARMA(6,6) | | 0.06524994 | -775.5 |
| ARIMA(6,2,6) | | 0.06489309 | -755.13 |
| ARIMA(3,0,3) (Optimal) | | 0.06448967 | -803.36 |
| GARCH(6,6) – ARMA(6,6) | | 0.06465604 | 8 |