DARTS PYTHON - NAIVESEASONAL MODEL

START

Training and Validation sets

```
train, val =
series.split_before(pd
.Timestamp("19580101")
```

NaiveSeasonal Model

```
from darts.models import NaiveSeasonal

naive_model = NaiveSeasonal(K=1)
naive_model.fit(train)
naive_forecast = naive_model.predict(36)

series.plot(label="actual")
naive_forecast.plot

(label="naive forecast (K=1)")
```

Plot acf

```
from darts.utils.statistics import plot_acf,

check_seasonality

plot_acf(train, m=12, alpha=0.05)
```

Check Seasonality

```
for m in range(2, 25):
    is_seasonal, period = check_seasonality(train,
m=m, alpha=0.05)

    if is_seasonal:
        print("There is  seasonality of order
{}.".format(period))
```

A less Naive Model

```
from darts.models import NaiveDrift
drift_model = NaiveDrift()
drift_model.fit(train)
drift_forecast = drift_model.predict(36)

combined_forecast = drift_forecast + seasonal_forecast
- train.last_value()

series.plot()
combined_forecast.plot(label="combined")
drift_forecast.plot(label="drift")
```

Computing error metrics

```
from darts.metrics import mape
print(
    "Mean absolute percentage error
: {:.2f}%.".format(
        mape(series, combined_forecast))
)
```