

```
In [14]: import os
import pandas as pd
from neuralforecast.losses.numpy import mae, mse
```

```
In [15]: folder_path = 'Exchange_rate'
exchange_result = []

for filename in os.listdir(folder_path):
    if filename.endswith('.csv'):
        file_path = os.path.join(folder_path, filename)
        df = pd.read_csv(file_path, low_memory=False, index_col = 0)
        exchange_result.append(df)
```

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In [16]: Exchange_results = exchange_result[0]
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In [17]: Exchange_results['AutoNHITS'] = exchange_result[1]['AutoNHITS']
Exchange_results['Informer'] = exchange_result[2]['Informer']
Exchange_results['NBEATS'] = exchange_result[3]['NBEATS']
Exchange_results['NHITS'] = exchange_result[4]['NHITS']
```

```
In [18]: models = ['AutoNHITS', 'NBEATS', 'Autoformer', 'Informer']
metrics = ['MSE', 'MAE']

results = {}

for model in models:
    for metric in metrics:
        y_true = Exchange_results['y']
        y_pred = Exchange_results[model]

        if metric == 'MSE':
            result = mse(y_true, y_pred)
        elif metric == 'MAE':
            result = mae(y_true, y_pred)

        key = f'{model}_{metric}'
        results[key] = result

exchange_rate = pd.DataFrame.from_dict(results, orient='index', columns=['Ex
exchange_rate = exchange_rate.rename(columns={"AutoNHITS_MSE": "NHITS_MSE",
exchange_rate
```

```
Out[18]:
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	NHITS_MSE	NHITS_MAE	NBEATS_MSE	NBEATS_MAE	Autoform
Exchange_rate	0.086735	0.208902	0.088692	0.207726	(

```
In [19]: folder_path = 'Ettm2'
ettm2_result = []

for filename in os.listdir(folder_path):
    if filename.endswith('.csv'):
        file_path = os.path.join(folder_path, filename)
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```
df = pd.read_csv(file_path, low_memory=False, index_col = 0)
ettm2_result.append(df)
```

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In [20]: ettm2_results = ettm2_result[2]
ettm2_results['Autoformer'] = ettm2_result[0]['Autoformer']
ettm2_results['Informer'] = ettm2_result[1]['Informer']
```

```
In [21]: models = ['NBEATS', 'Autoformer', 'Informer']
metrics = ['MSE', 'MAE']

results = {}

for model in models:
    for metric in metrics:
        y_true = ettm2_results['y']
        y_pred = ettm2_results[model]

        if metric == 'MSE':
            result = mse(y_true, y_pred)
        elif metric == 'MAE':
            result = mae(y_true, y_pred)

        key = f'{model}_{metric}'
        results[key] = result

Ettm2 = pd.DataFrame.from_dict(results, orient='index', columns=['Ettm2']).T
Ettm2.insert(0, 'NHITS_MSE', 0.18279484416711375)
Ettm2.insert(1, 'NHITS_MAE', 0.26096806135482414)
Ettm2
```

```
Out[21]:
```

	NHITS_MSE	NHITS_MAE	NBEATS_MSE	NBEATS_MAE	Autoformer_MSE
<b>Ettm2</b>	0.182795	0.260968	0.184381	0.267878	0.255369

```
In [22]: import pandas as pd
NHITS_wea = pd.read_csv('Weather/df_NHITS.csv', index_col=0)
NBEATS_wea = pd.read_csv('Weather/df_NBEATS.csv', index_col=0)
Auto_wea = pd.read_csv('Weather/df_Autoformer.csv', index_col=0)
informer_wea = pd.read_csv('Weather/df_Informer.csv', index_col=0)
```

```
In [23]: Weather = pd.concat([NHITS_wea, NBEATS_wea, Auto_wea, informer_wea], axis=1)
Weather
```

```
Out[23]:
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	NHITS_MSE	NHITS_MAE	NBEATS_MSE	NBEATS_MAE	Autoformer_MSE
<b>Weather</b>	0.165567	0.197574	0.178303	0.207848	0.23056

```
In [24]: results = pd.concat([Ettm2, exchange_rate, Weather], axis=0)
results = results.round(3)
```

```
In [25]: results
```

Out[25]:

	NHITS_MSE	NHITS_MAE	NBEATS_MSE	NBEATS_MAE	Autoform
<b>Ettm2</b>	0.183	0.261	0.184	0.268	
<b>Exchange_rate</b>	0.087	0.209	0.089	0.208	
<b>Weather</b>	0.166	0.198	0.178	0.208	

In [26]: `results.to_csv('final_results.csv',index=0)`

In [ ]: