**Data:** **m4\_monthly, freq: M, N=48,000**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M4 Monthly (N=48,000) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | **Micro** | | | | **Industry** | | | | | | | **Macro** | | | | | | | **Finance** | | | | | | | | **Demographic** | | | | | | | | | **Other** | | | | | | |
| **Method** | **OWA** | **sMAPE** | | **MASE** | **OWA** | **sMAPE** | | | | **MASE** | | **OWA** | **sMAPE** | | | | **MASE** | | **OWA** | | **sMAPE** | | | **MASE** | | | **OWA** | | | **sMAPE** | | | **MASE** | | | **OWA** | | | **sMAPE** | | | **MASE** |
| **Benchmark Methods** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Naïve2 |  | |  |  |  | | |  | |  | |  | | |  | |  | |  | |  | |  | | |  | | |  | | |  | | |  | | |  | | |  | |
| Comb |  | |  |  |  | | |  | |  | |  | | |  | |  | |  | |  | |  | | |  | | |  | | |  | | |  | | |  | | |  | |
| ARIMA |  | |  |  |  | | |  | |  | |  | | |  | |  | |  | |  | |  | | |  | | |  | | |  | | |  | | |  | | |  | |
| ETS |  | |  |  |  | | |  | |  | |  | | |  | |  | |  | |  | |  | | |  | | |  | | |  | | |  | | |  | | |  | |
| ETSARIMA |  | |  |  |  | | |  | |  | |  | | |  | |  | |  | |  | |  | | |  | | |  | | |  | | |  | | |  | | |  | |
| Legaki & Koutsouri |  | |  |  |  | | |  | |  | |  | | |  | |  | |  | |  | |  | | |  | | |  | | |  | | |  | | |  | | |  | |
| **RNN Methods** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DeepAR |  | |  |  |  | |  | |  | |  | | |  | |  | |  | |  | |  | | |  | | |  | | |  | | |  | | |  | | |  | | |
| DeepState |  | |  |  |  | |  | |  | |  | | |  | |  | |  | |  | |  | | |  | | |  | | |  | | |  | | |  | | |  | | |
|  |  | |  |  |  | |  | |  | |  | | |  | |  | |  | |  | |  | | |  | | |  | | |  | | |  | | |  | | |  | | |
|  |  | |  |  |  | |  | |  | |  | | |  | |  | |  | |  | |  | | |  | | |  | | |  | | |  | | |  | | |  | | |

**Data:** **m4\_quarterly, freq: Q, N=24,000**

**Data:** **m4\_yearly, freq: Y, N=23,000**