

| Methods |      | n | Metrics |      |     |     | Metrics |      |     |      | Metrics |      |     |     | Metrics |      |     |     | Metrics |      |     |     |
|---------|------|---|---------|------|-----|-----|---------|------|-----|------|---------|------|-----|-----|---------|------|-----|-----|---------|------|-----|-----|
|         |      |   | SSE     | CRPS | DSS | IS1 | SSE     | CRPS | DSS | IS1  | SSE     | CRPS | DSS | IS1 | SSE     | CRPS | DSS | IS1 | SSE     | CRPS | DSS | IS1 |
| SSE     | 200  |   | 1.0     | 0.88 | 1.0 | 1.0 | 1.0     | 0.81 | 1.0 | 1.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| SSE     | 400  |   | 1.0     | 1.0  | 1.0 | 1.0 | 1.0     | 1.0  | 1.0 | 1.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| SSE     | 800  |   | 1.0     | 1.0  | 1.0 | 1.0 | 1.0     | 0.98 | 1.0 | 1.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| SSE     | 1600 |   | 1.0     | 1.0  | 1.0 | 1.0 | 1.0     | 1.0  | 1.0 | 1.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| CRPS    | 200  |   | 0.99    | 1.0  | 1.0 | 1.0 | 1.0     | 1.0  | 1.0 | 1.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| CRPS    | 400  |   | 0.95    | 1.0  | 1.0 | 1.0 | 0.99    | 1.0  | 1.0 | 1.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| CRPS    | 800  |   | 1.0     | 1.0  | 1.0 | 1.0 | 1.0     | 1.0  | 1.0 | 1.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| CRPS    | 1600 |   | 1.0     | 1.0  | 1.0 | 1.0 | 1.0     | 1.0  | 1.0 | 1.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| DSS     | 200  |   | 0.99    | 0.98 | 1.0 | 1.0 | 0.98    | 0.72 | 1.0 | 1.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| DSS     | 400  |   | 1.0     | 1.0  | 1.0 | 1.0 | 0.99    | 0.95 | 1.0 | 1.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| DSS     | 800  |   | 1.0     | 1.0  | 1.0 | 1.0 | 1.0     | 0.37 | 1.0 | 0.99 | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| DSS     | 1600 |   | 1.0     | 1.0  | 1.0 | 1.0 | 1.0     | 0.45 | 1.0 | 0.96 | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| IS1     | 200  |   | 1.0     | 1.0  | 1.0 | 1.0 | 1.0     | 1.0  | 1.0 | 1.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| IS1     | 400  |   | 1.0     | 1.0  | 1.0 | 1.0 | 1.0     | 1.0  | 1.0 | 1.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| IS1     | 800  |   | 1.0     | 1.0  | 1.0 | 1.0 | 1.0     | 1.0  | 1.0 | 1.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| IS1     | 1600 |   | 1.0     | 1.0  | 1.0 | 1.0 | 1.0     | 0.76 | 1.0 | 1.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |

Table 1: Test data

| Methods |      | n | Metrics |      |      |      | Metrics |      |      |      | Metrics |      |     |     | Metrics |      |     |     | Metrics |      |     |     |
|---------|------|---|---------|------|------|------|---------|------|------|------|---------|------|-----|-----|---------|------|-----|-----|---------|------|-----|-----|
|         |      |   | SSE     | CRPS | DSS  | IS1  | SSE     | CRPS | DSS  | IS1  | SSE     | CRPS | DSS | IS1 | SSE     | CRPS | DSS | IS1 | SSE     | CRPS | DSS | IS1 |
| SSE     | 200  |   | 1.0     | 0.25 | 0.01 | 0.01 | 1.0     | 0.22 | 0.0  | 0.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| SSE     | 400  |   | 1.0     | 0.0  | 0.0  | 0.0  | 1.0     | 0.0  | 0.0  | 0.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| SSE     | 800  |   | 1.0     | 0.0  | 0.0  | 0.0  | 1.0     | 0.0  | 0.0  | 0.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| SSE     | 1600 |   | 1.0     | 0.0  | 0.0  | 0.0  | 1.0     | 0.0  | 0.0  | 0.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| CRPS    | 200  |   | 0.89    | 1.0  | 0.15 | 0.01 | 0.95    | 1.0  | 0.16 | 0.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| CRPS    | 400  |   | 1.0     | 1.0  | 0.64 | 0.22 | 1.0     | 1.0  | 0.47 | 0.15 | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| CRPS    | 800  |   | 1.0     | 1.0  | 0.79 | 0.15 | 1.0     | 1.0  | 0.77 | 0.09 | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| CRPS    | 1600 |   | 1.0     | 1.0  | 0.41 | 0.02 | 1.0     | 1.0  | 0.46 | 0.04 | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| DSS     | 200  |   | 0.98    | 0.15 | 1.0  | 0.07 | 0.99    | 0.37 | 1.0  | 0.14 | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| DSS     | 400  |   | 0.92    | 0.03 | 1.0  | 0.02 | 1.0     | 0.17 | 1.0  | 0.07 | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| DSS     | 800  |   | 0.97    | 0.07 | 1.0  | 0.03 | 1.0     | 0.29 | 1.0  | 0.13 | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| DSS     | 1600 |   | 1.0     | 0.08 | 1.0  | 0.05 | 1.0     | 0.64 | 1.0  | 0.61 | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| IS1     | 200  |   | 0.97    | 0.26 | 0.14 | 1.0  | 0.99    | 0.33 | 0.4  | 1.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| IS1     | 400  |   | 0.88    | 0.07 | 0.04 | 1.0  | 0.98    | 0.08 | 0.16 | 1.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| IS1     | 800  |   | 0.89    | 0.03 | 0.02 | 1.0  | 0.98    | 0.07 | 0.8  | 1.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |
| IS1     | 1600 |   | 1.0     | 0.13 | 0.06 | 1.0  | 1.0     | 0.12 | 0.47 | 1.0  | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM | XXX     | YYY  | ZZZ | MMM |

Table 2: Training data