Time Series Data Prep

Dr. Chelsea Parlett-Pelleriti

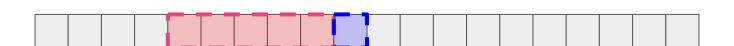
Generating Training Data from a Sequence



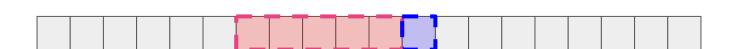


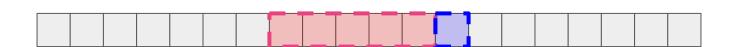




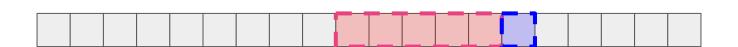


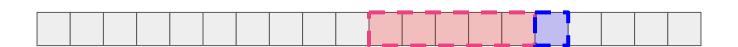
















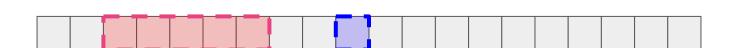


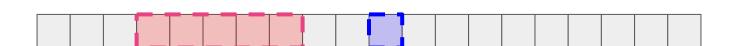


Predicting "Far" Future



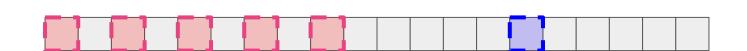




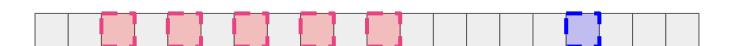




Step Size



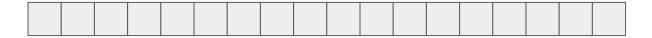




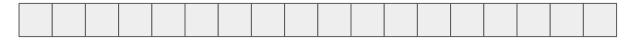
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Temperature Data Example

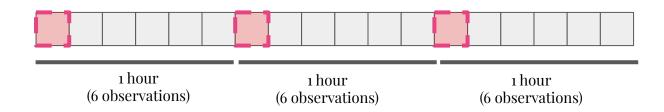
1 hour (6 observations)



1 hour (6 observations)



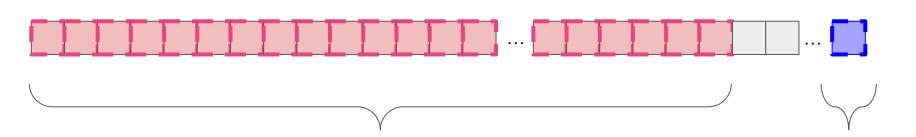
1 hour (6 observations)



v sample once per hour

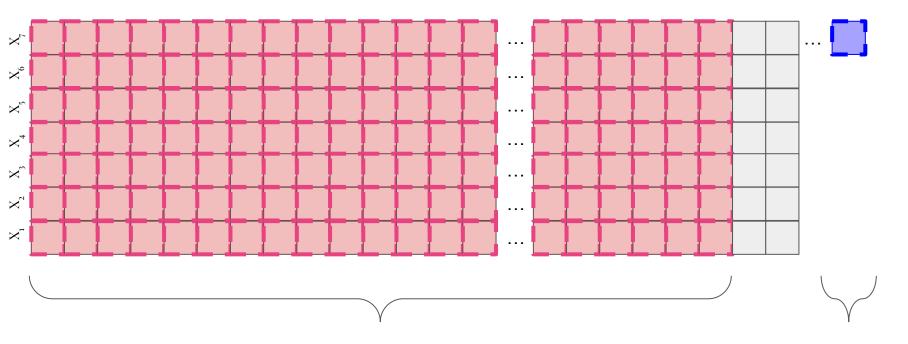
720 observations (120 hours, 6 observations per hour)

sample once per hourUse 120 hours of data as predictors



120 observations (once per hour) **Predictors** 1 Observation
12 hours
(72 observations) later
Outcome

- **v** sample once per hour
- ✓ Use 120 hours of data as *predictors*
- ✓ Get *outcome* value from 12 hours later



120 observations (once per hour) **Predictors**

sample once per hour

✓ Use 120 hours of data as *predictors*

Get *outcome* value from 12 hours later

1 Observation 12 hours (72 observations) later

Outcome