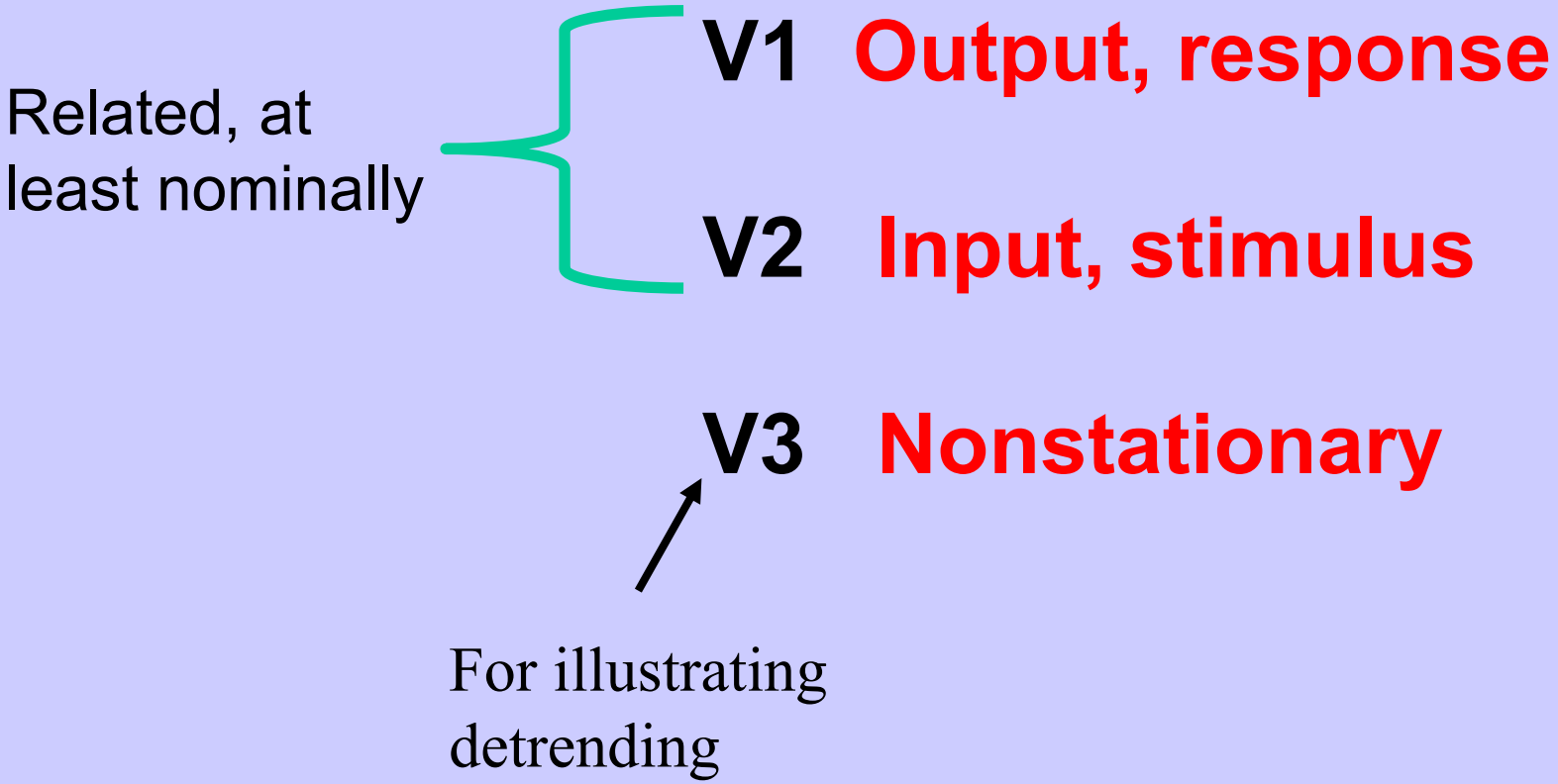
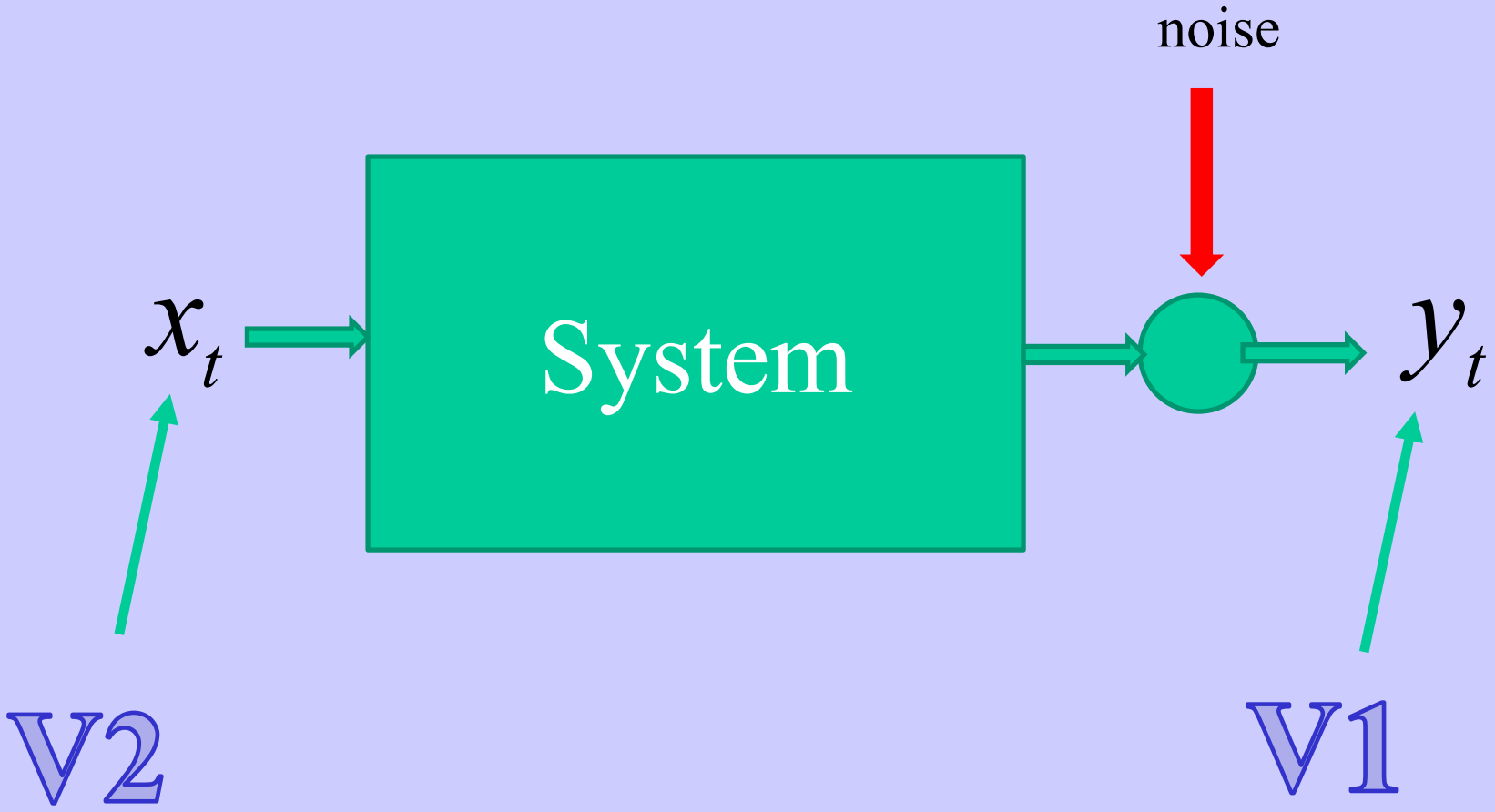
Tues 1-15-19

1. Examples of time series
2. V1, V2 and V3 data
3. Some online sources of data
4. Software needed in course
5. Targets:
   -Matlab installed 1/17
   -Time series gathered 1/24

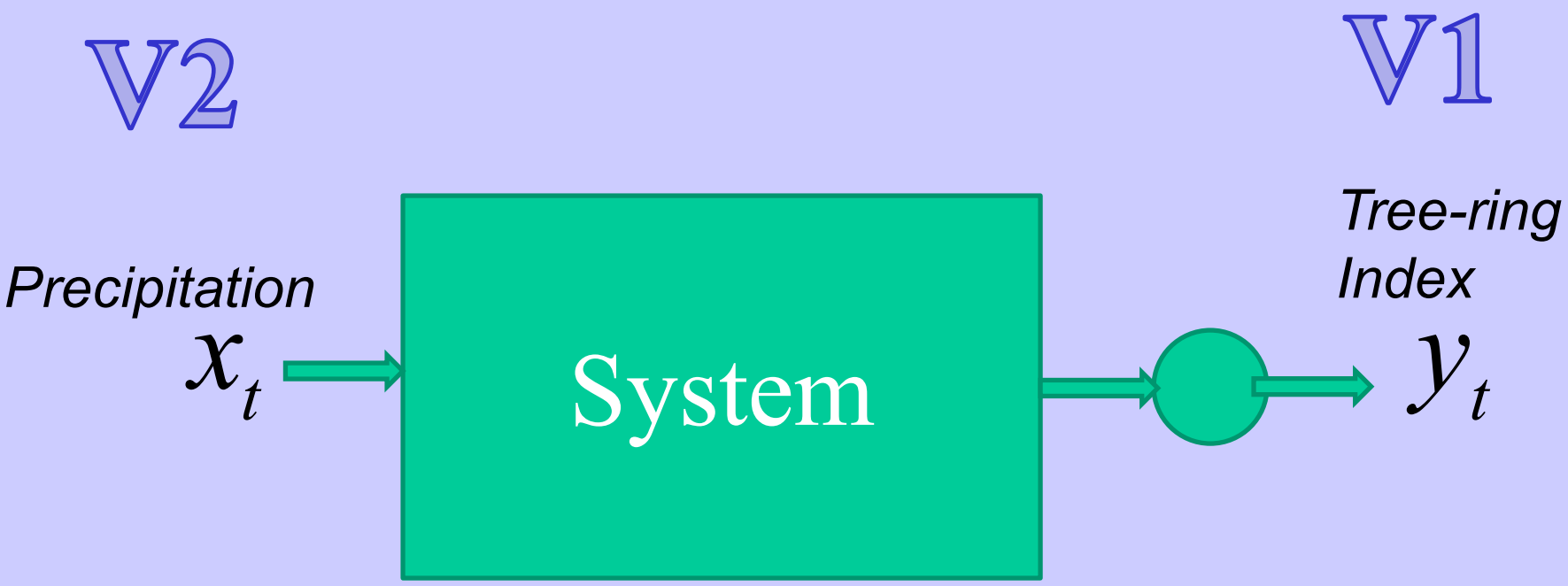
V1, V2, V3 time series



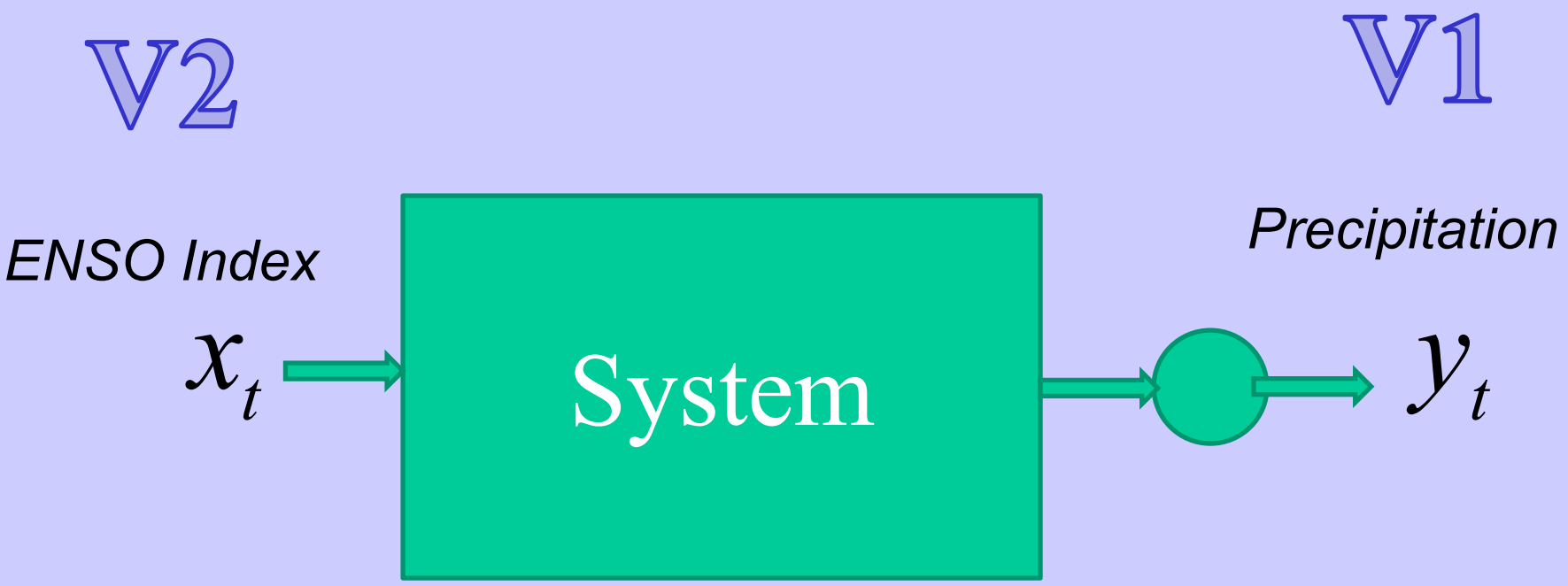
Nominal “causal” system



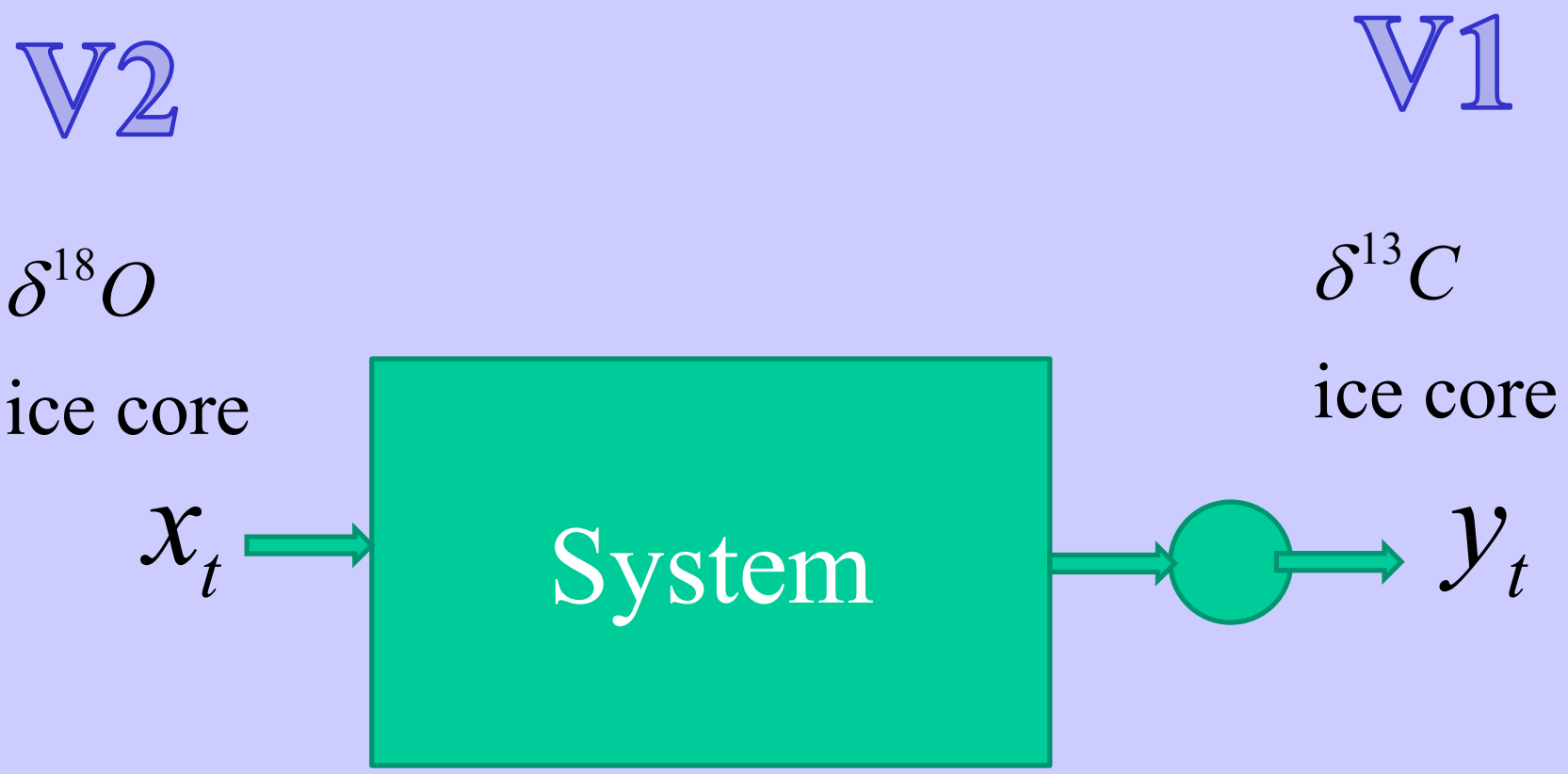
Example 1



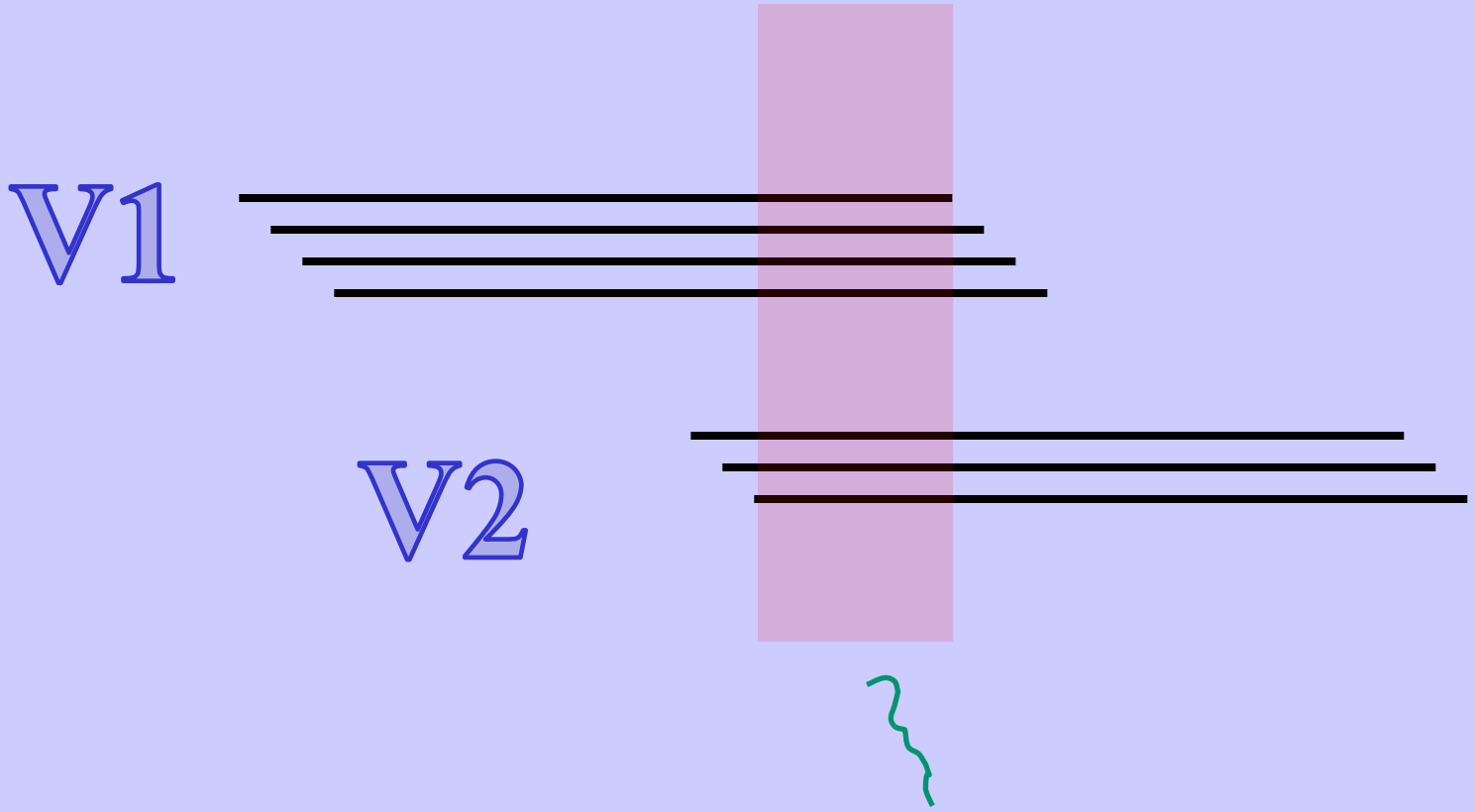
Example 2



Example 3 ("nominal" system)



Series Overlap (V1 & V2)



>30 observations; >50 preferred

Requirements of V1, V2 and V3 series

- Constant time step, or “observation” interval
- Time step of 1, but this can be defined as a unit of some constant arbitrary-length time block:
  - 1 year
  - 1 quarter (economic data)
  - 1 second
  - 10K years
- Same time step for all series in V1, V2, V3
- Continuous-valued
- More than 30 observations, each
- Overlap of some V1 and/or V2 series (see previous slides)

Some online sources of time series

- http://www.ngdc.noaa.gov/paleo/data.html
  (tree ring indices, reconstructions, other paleo data)
- http://www.cefa.dri.edu/Westmap/
  (monthly and seasonal climatic data through 2010)
- http://www.esrl.noaa.gov/psd/data/climateindices/list/
  (climate indices– SOI, PNA, etc.)
- http://climexp.knmi.nl/start.cgi?id=someone@somewhere
  (climate data, indices)
- http://prism.oregonstate.edu/explorer/
  (climate data)

Software Needed

Matlab

http://softwarelicense.arizona.edu/
(Student Software→Matlab)

Word processor

MS Word (Windows, Mac OS)
LibreOffice (Ubuntu)

Ascii Text Editor

Notepad ++ (Windows)
SciTE (Ubuntu)

Adobe reader or equivalent

Used to annotate when grading assignments