

Spatio-temporal models for ecologists

An overview

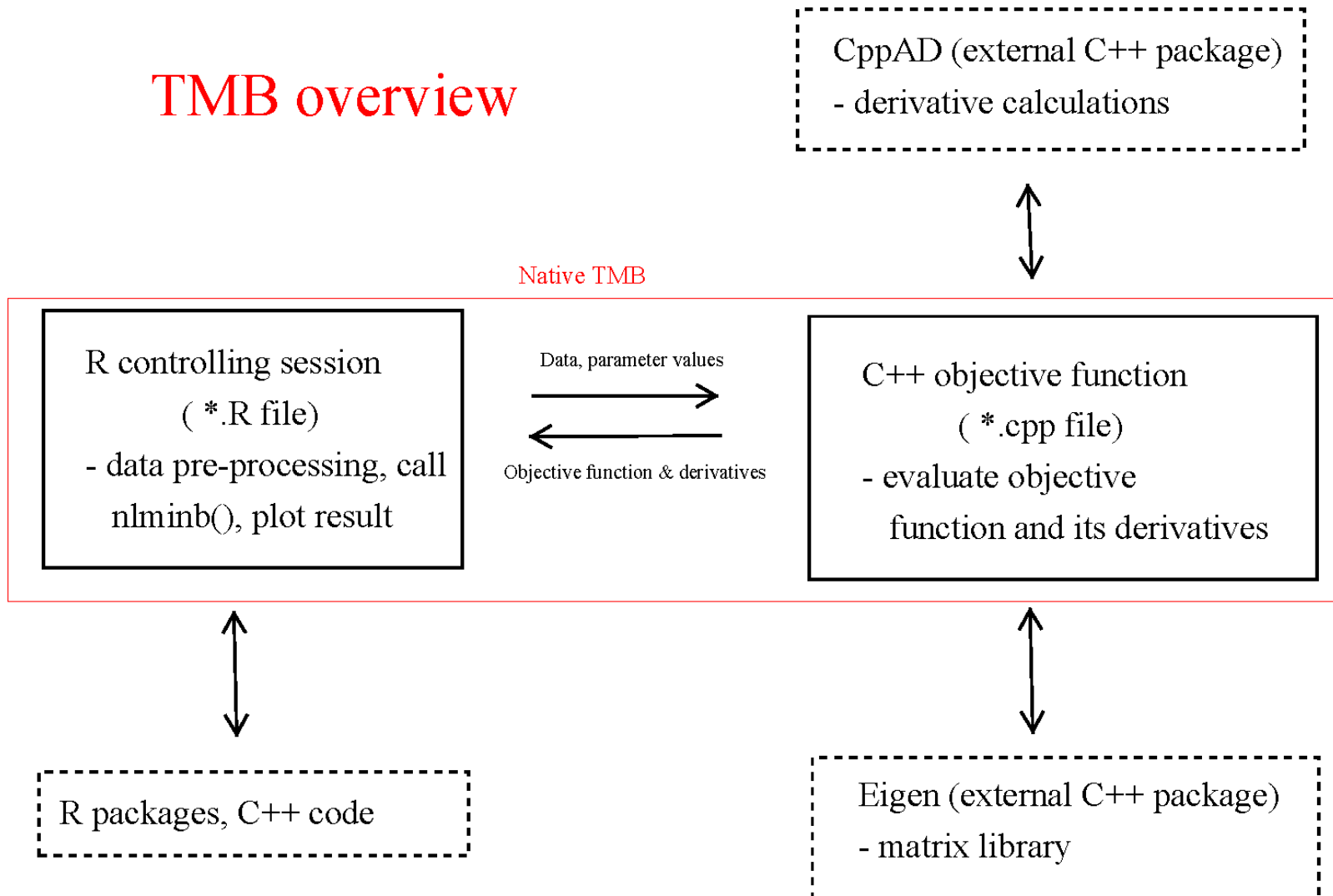
Jim Thorson

Jie Cao

Spring, 2018

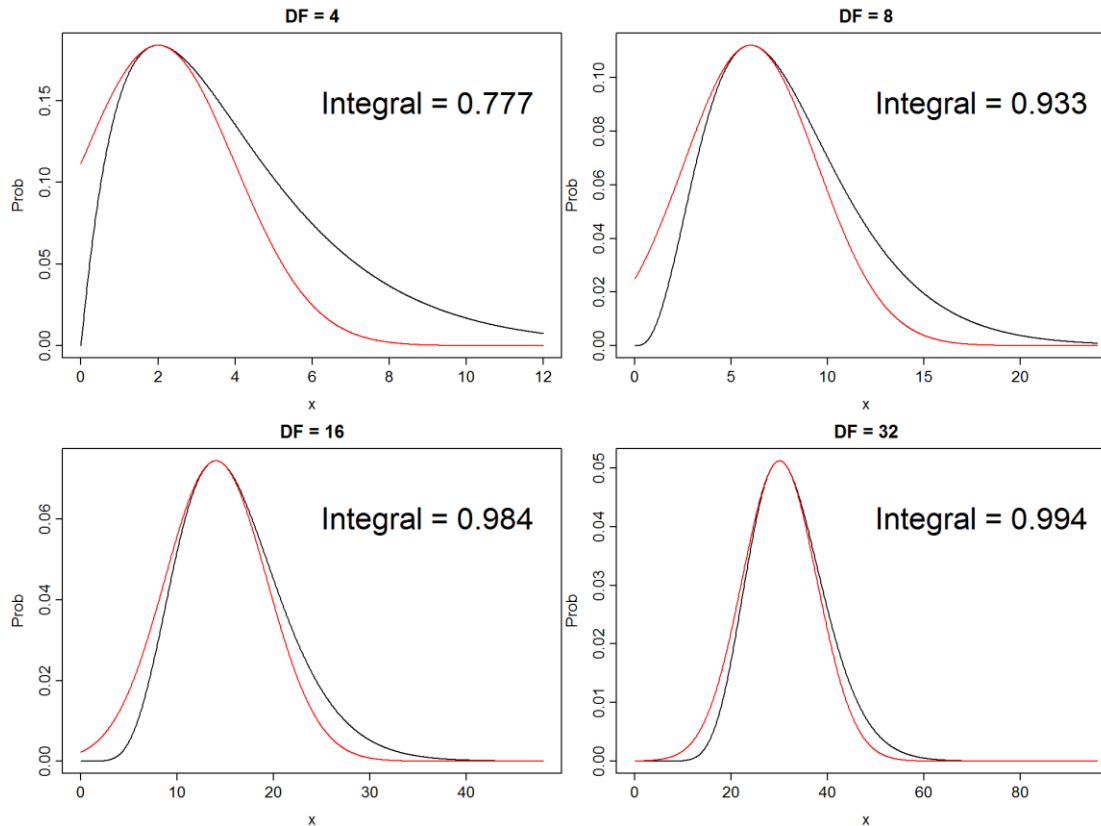
Week 1

TMB overview



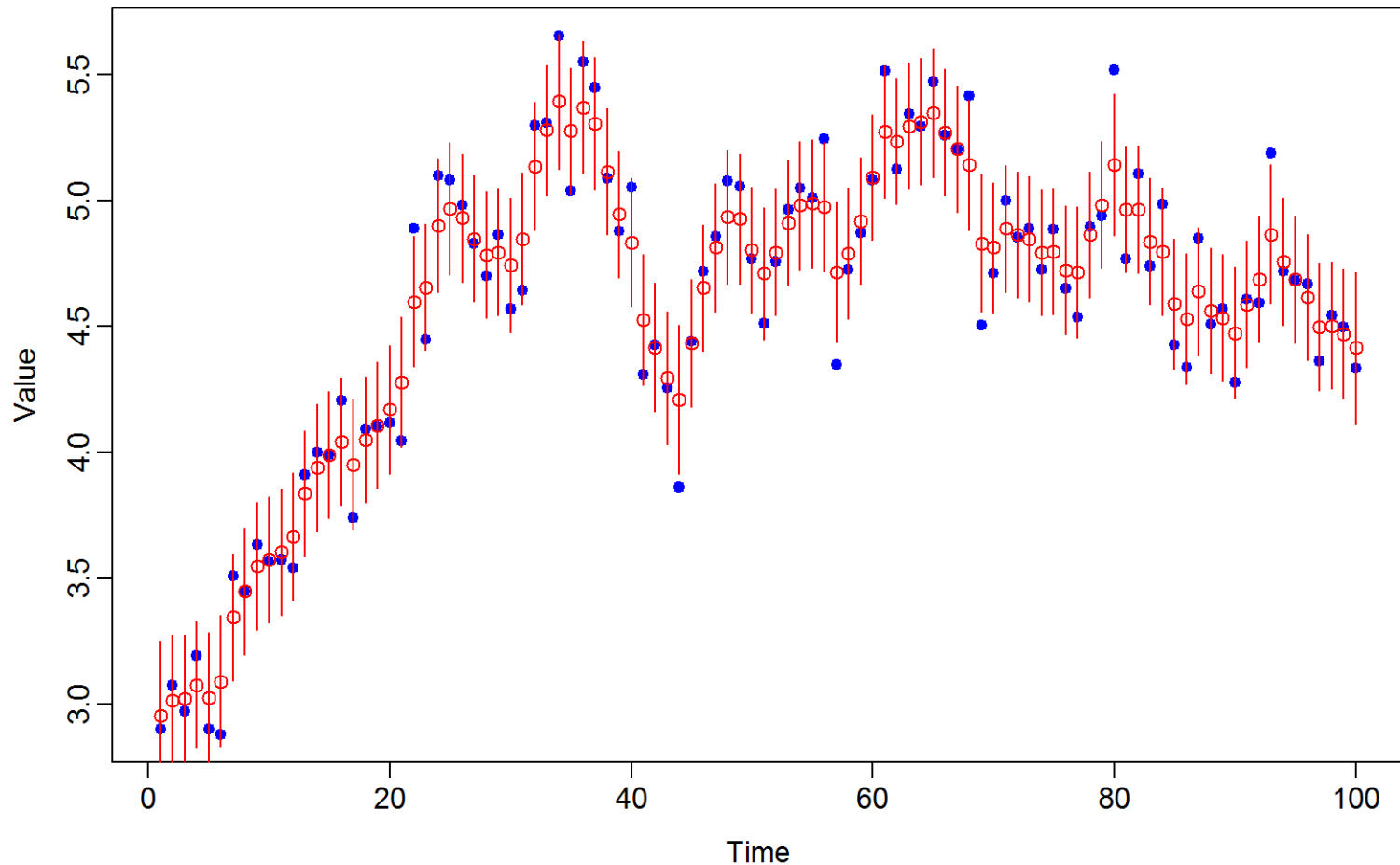
Week 2

- Generalized Linear Mixed Models
- Laplace approximation



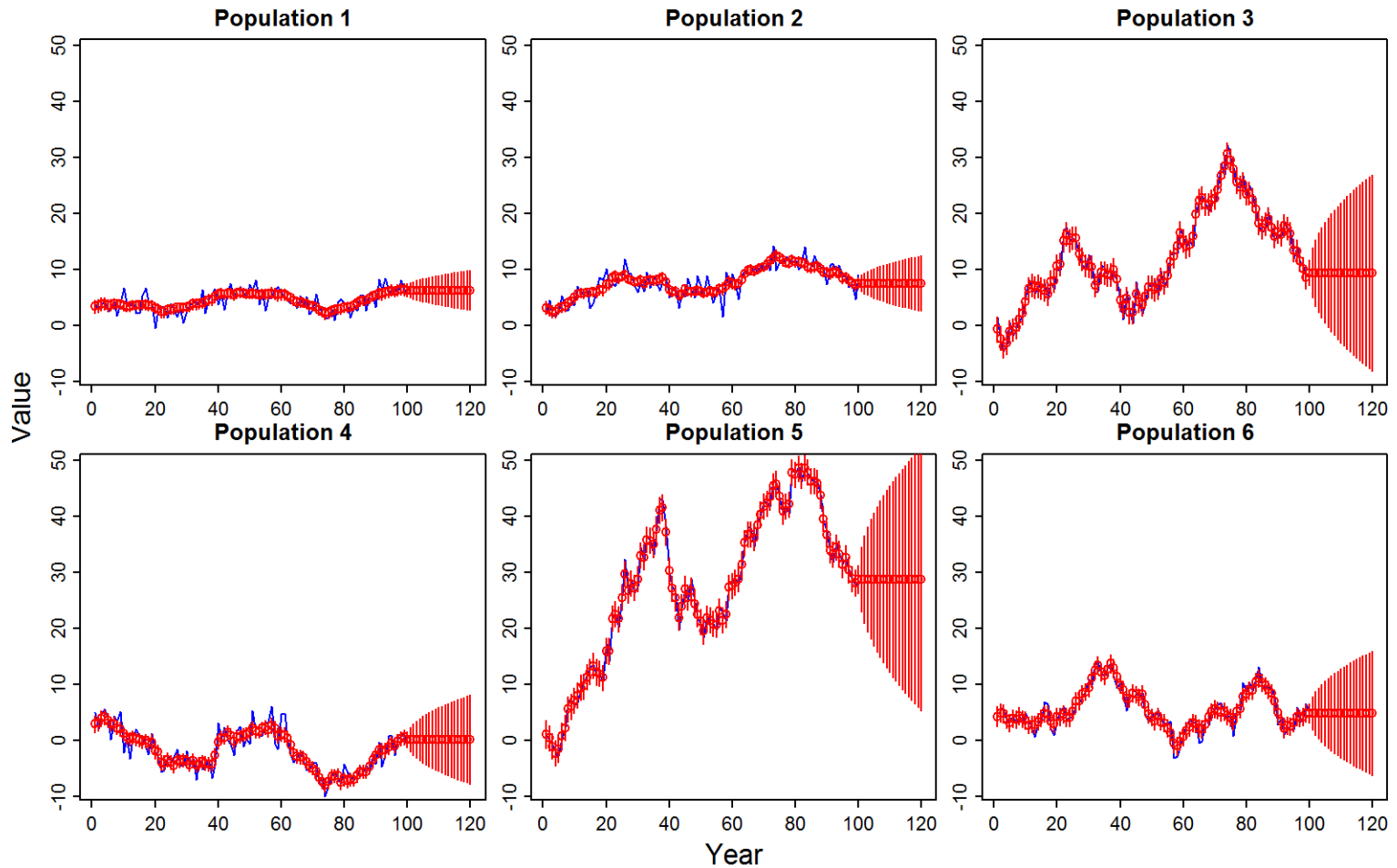
Week 3

- Kalman filter and state-space models



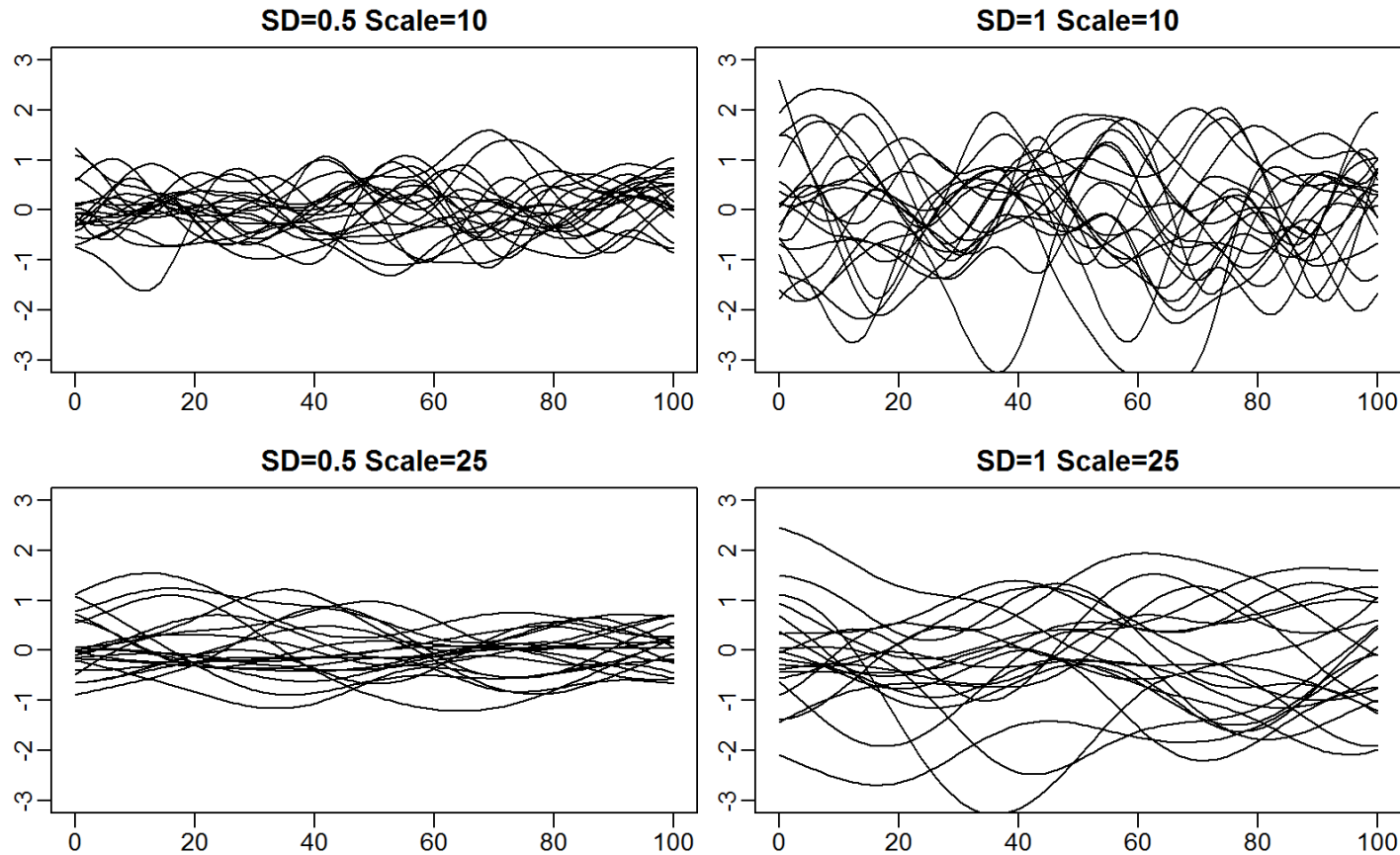
Week 4

- Geostatistical Models

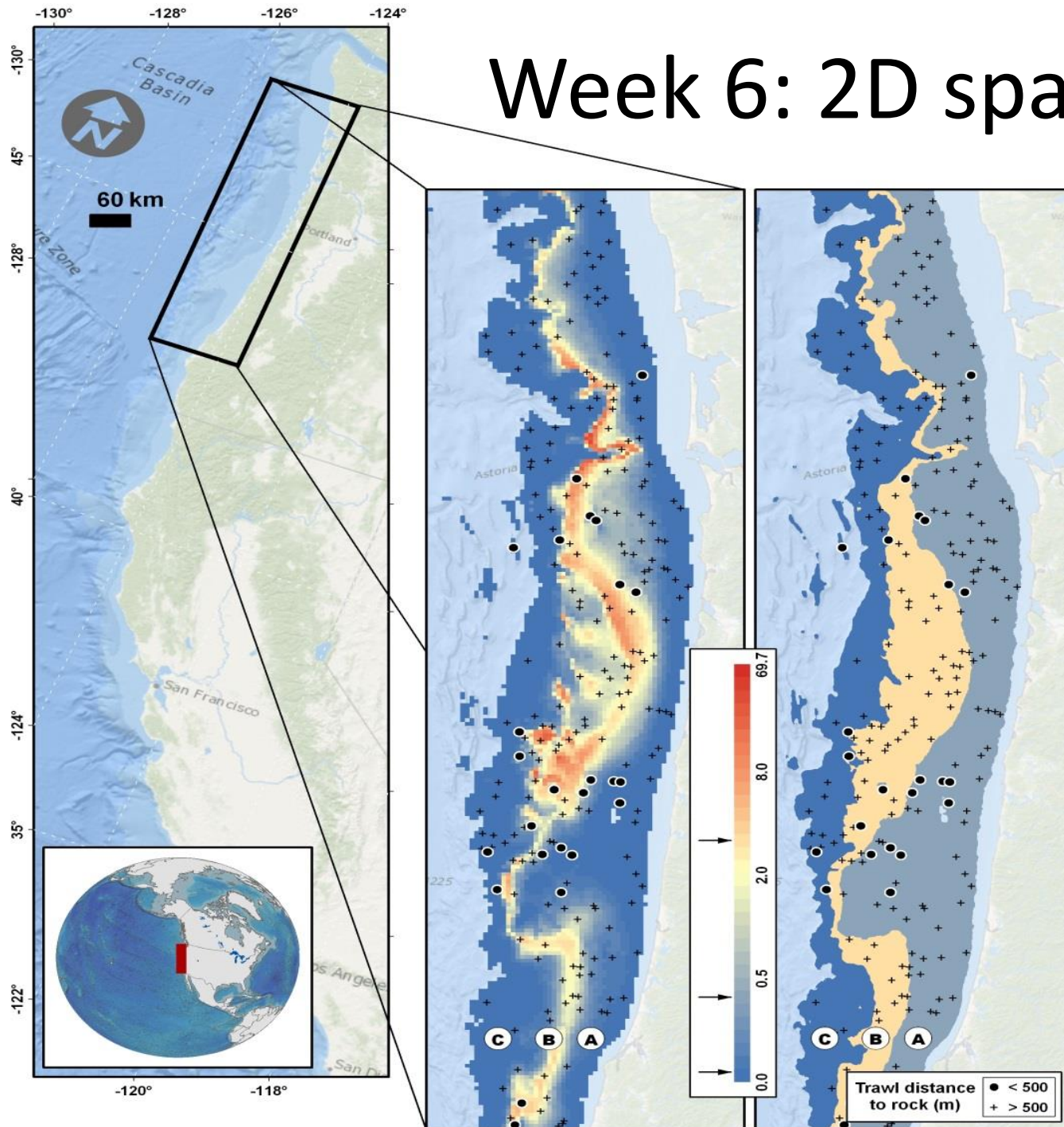


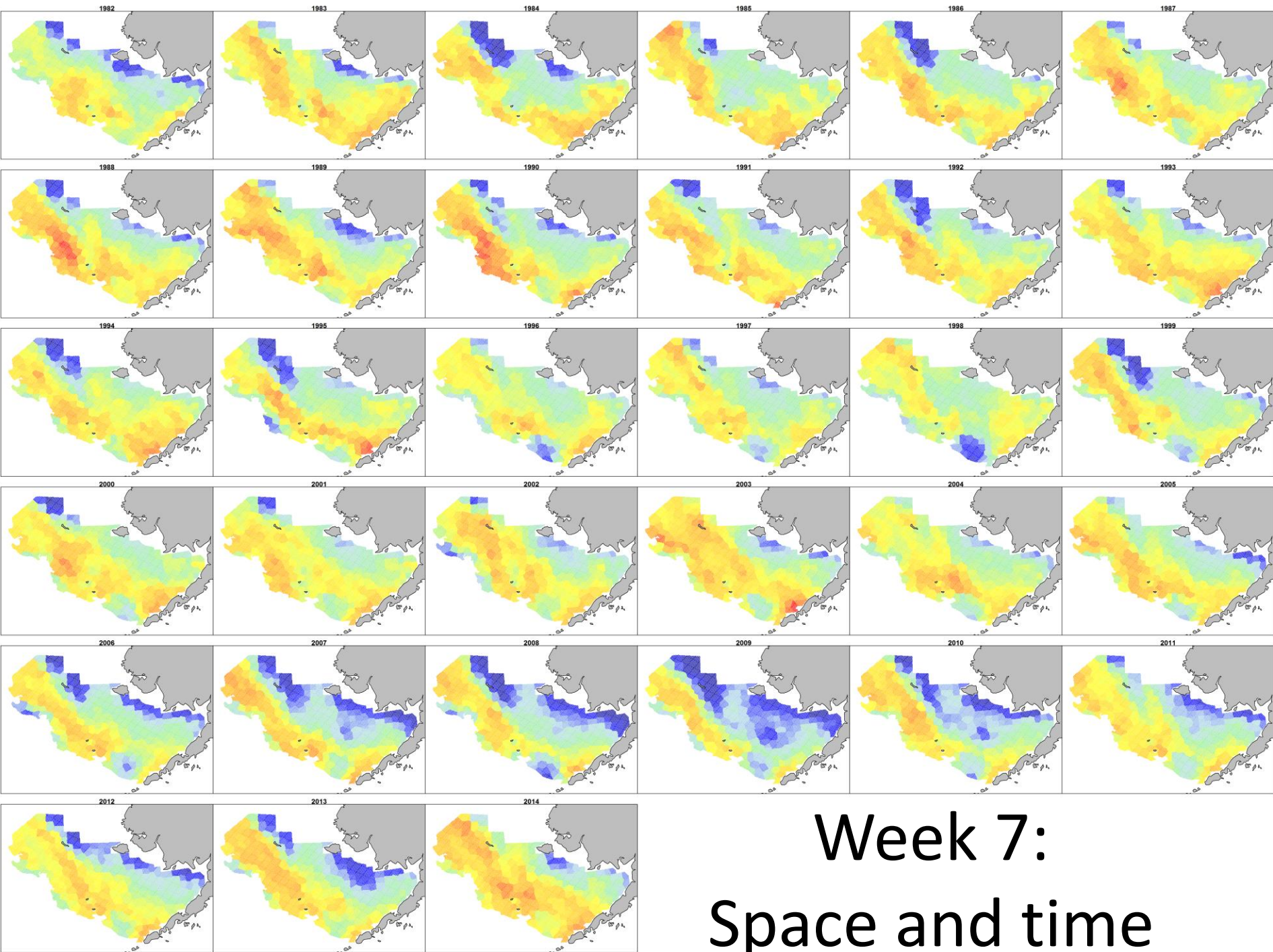
Week 5

- 1-D spatial models and Gaussian Process



Week 6: 2D space

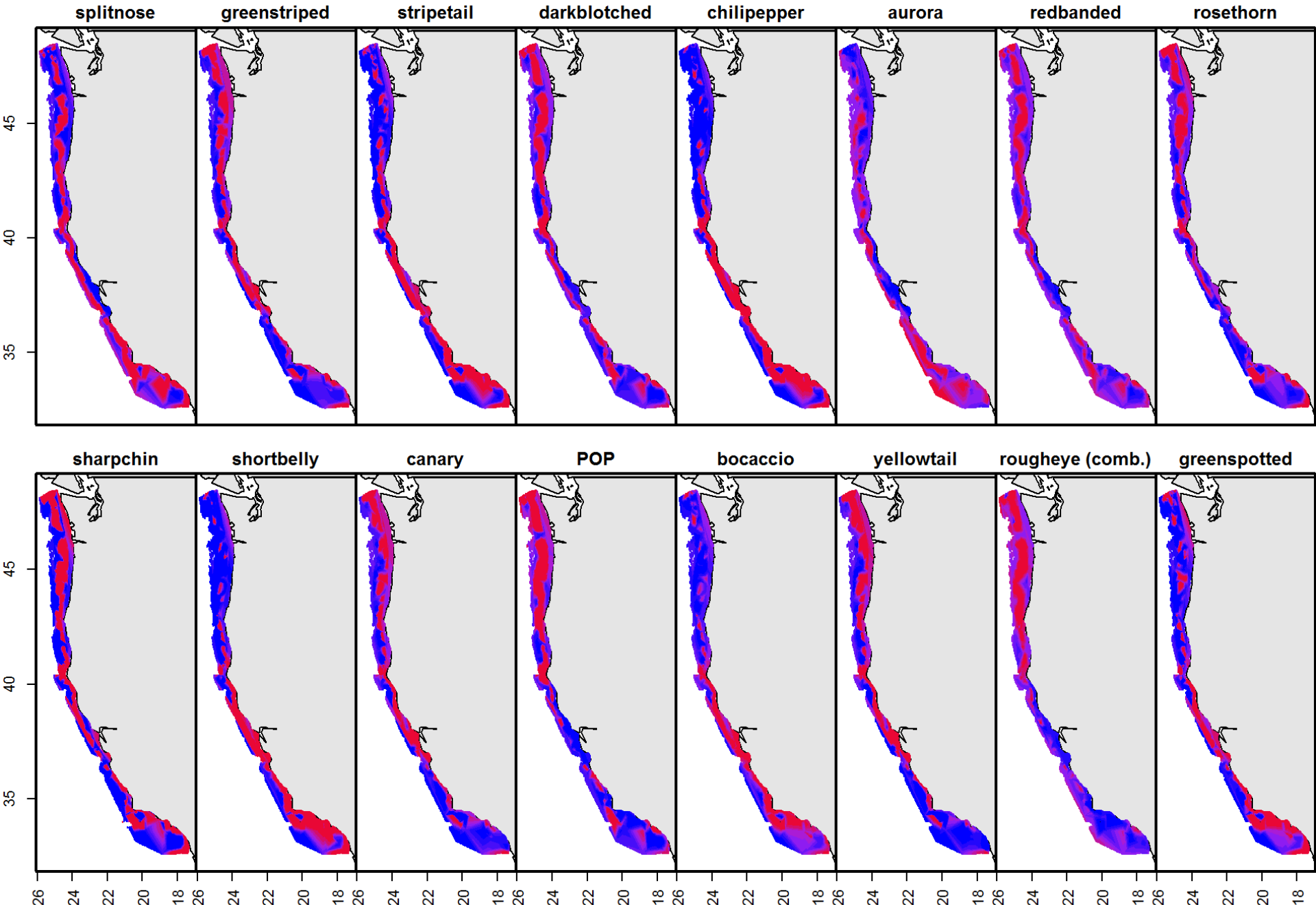




Week 7:
Space and time

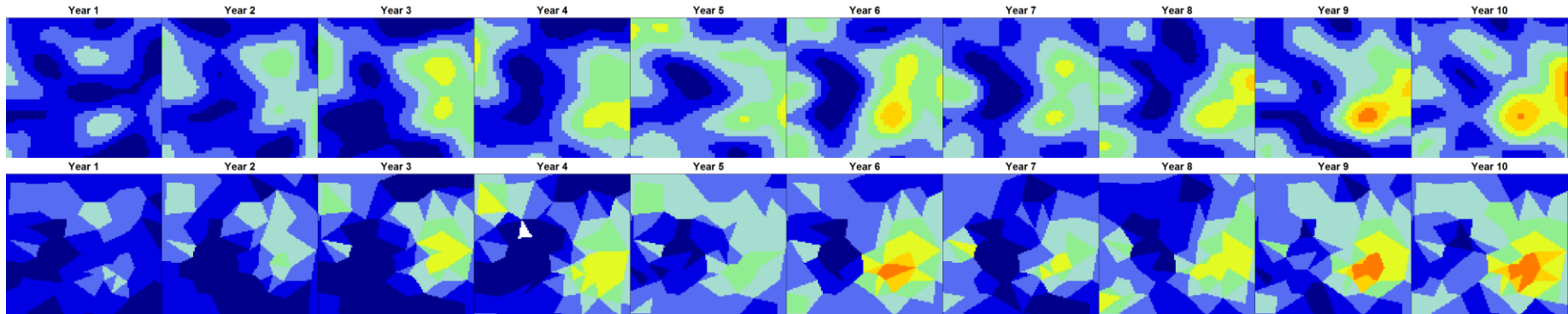
Eastings

Week 8: Multivariate



Week 9: Movement

Est / True



Est / True

