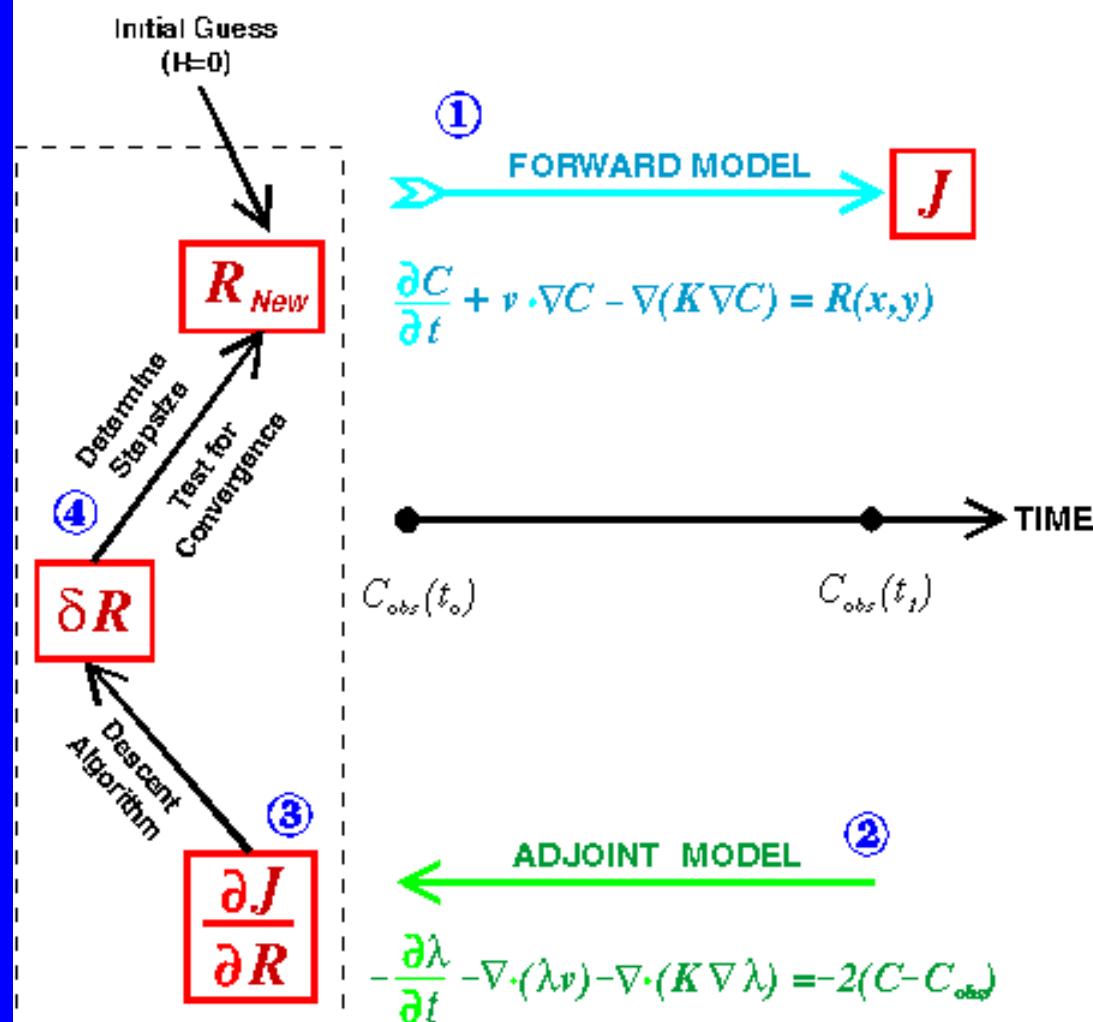


Biological Model Inversion

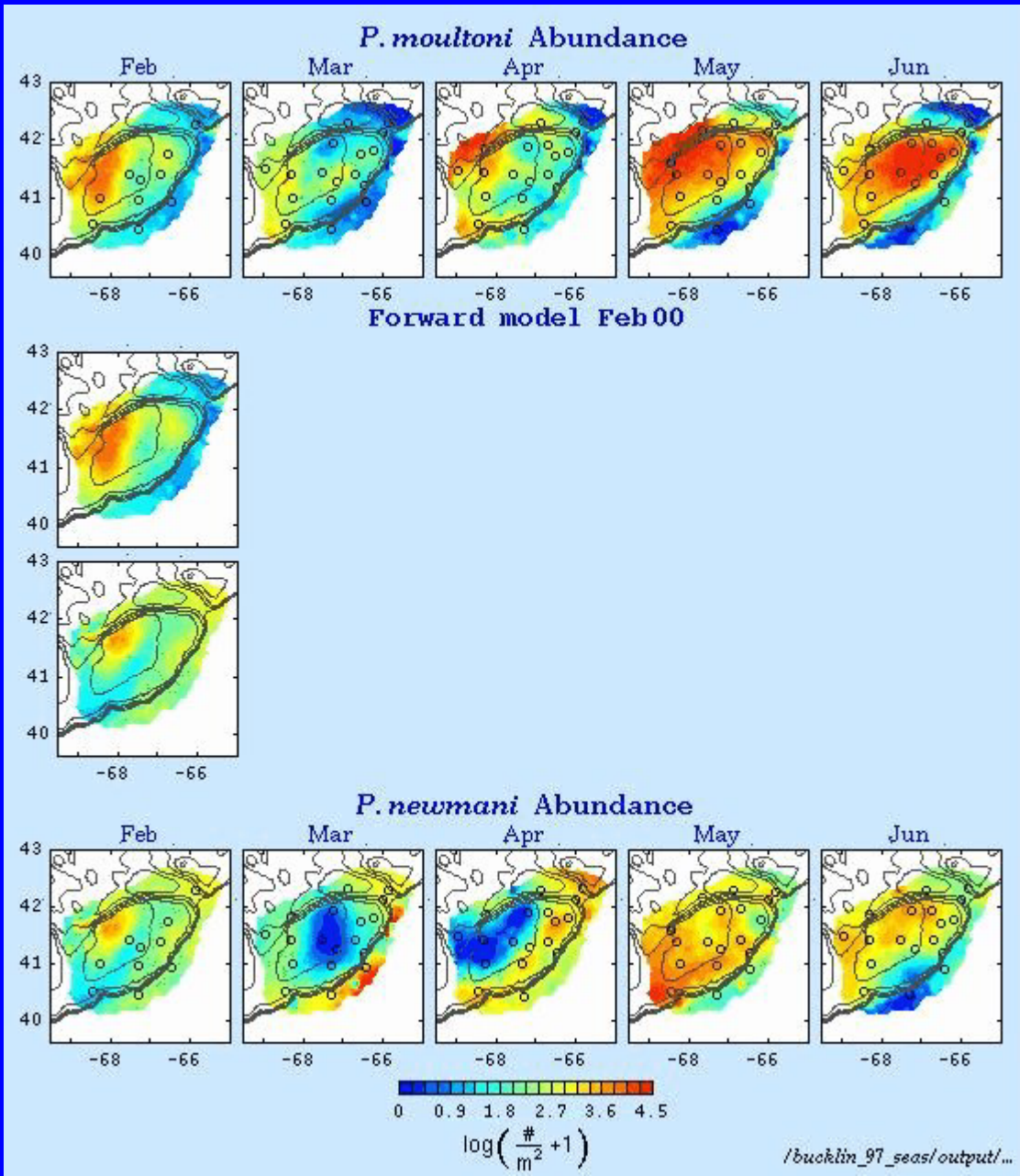


Dennis McGillicuddy
13 November 2002

AN ADJOINT DATA ASSIMILATION PROCEDURE TO INVERT FOR $R(x,y)$



$$J = \int_{-L_x}^{L_x} \int_{-L_y}^{L_y} \int_{t_0}^{t_1} (C - C_{obs})^2 dx dy dt$$

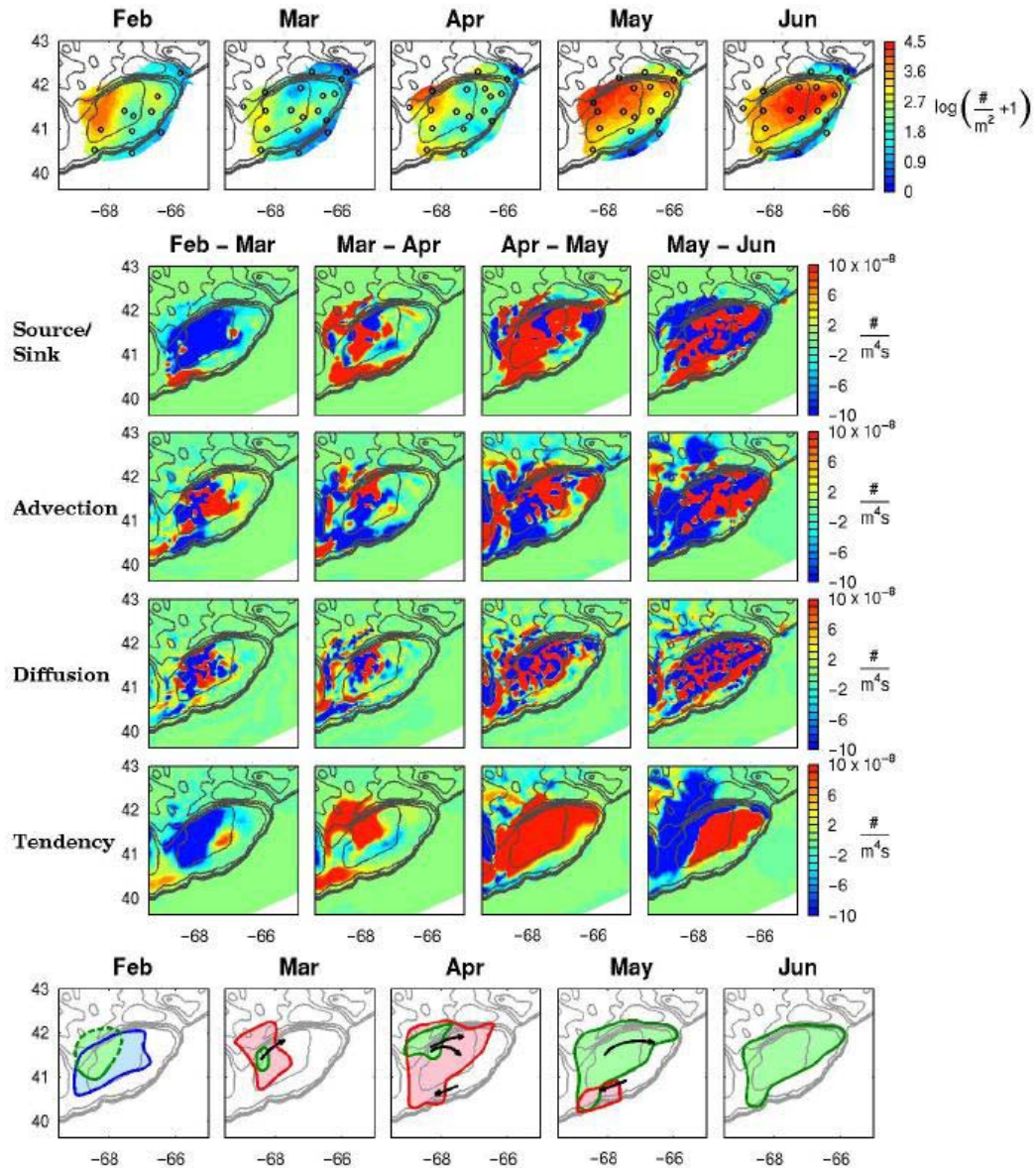


Observations:
P. Moultoni

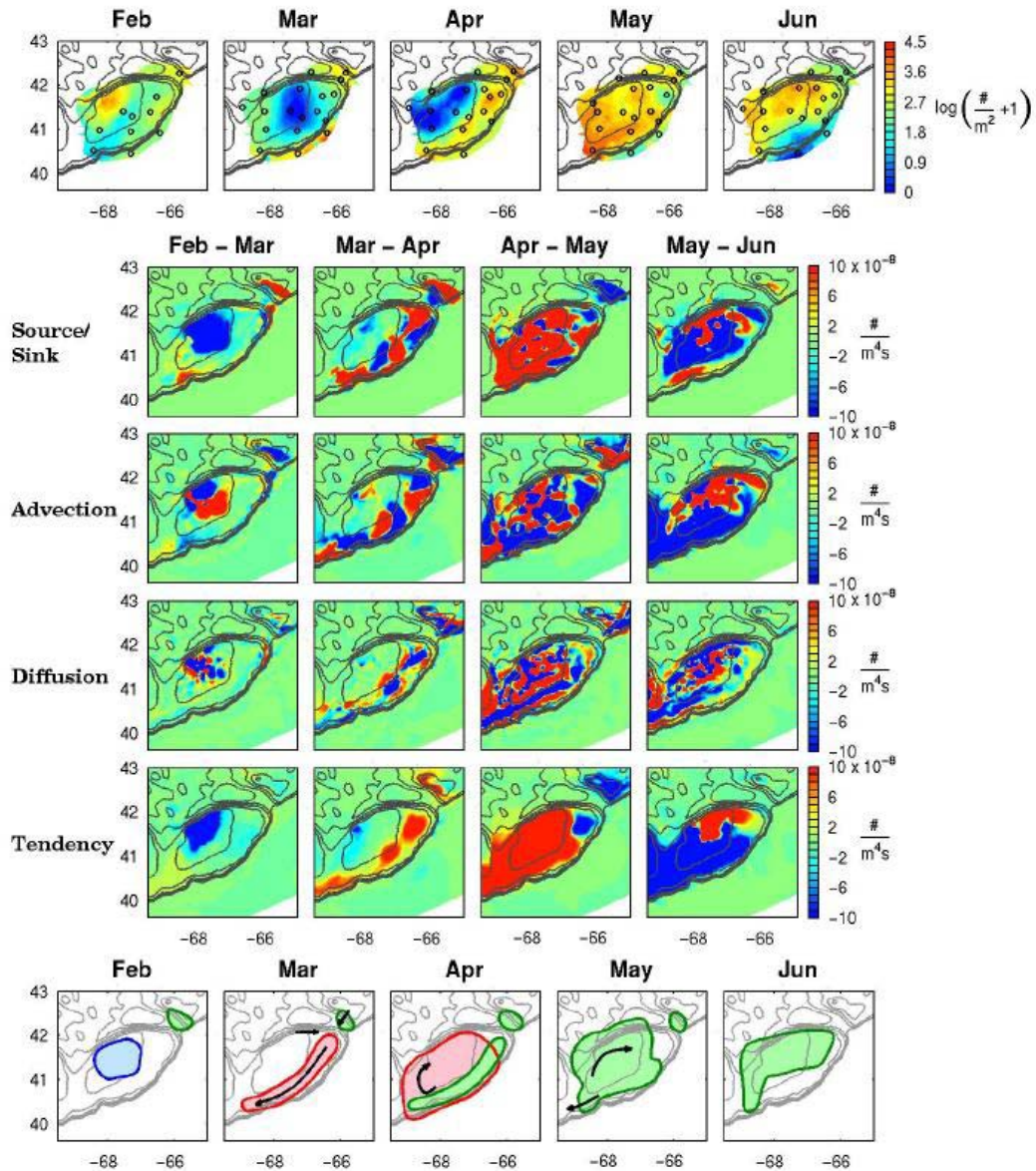
Models

Observations:
P. newmani

P. moultoni Abundance

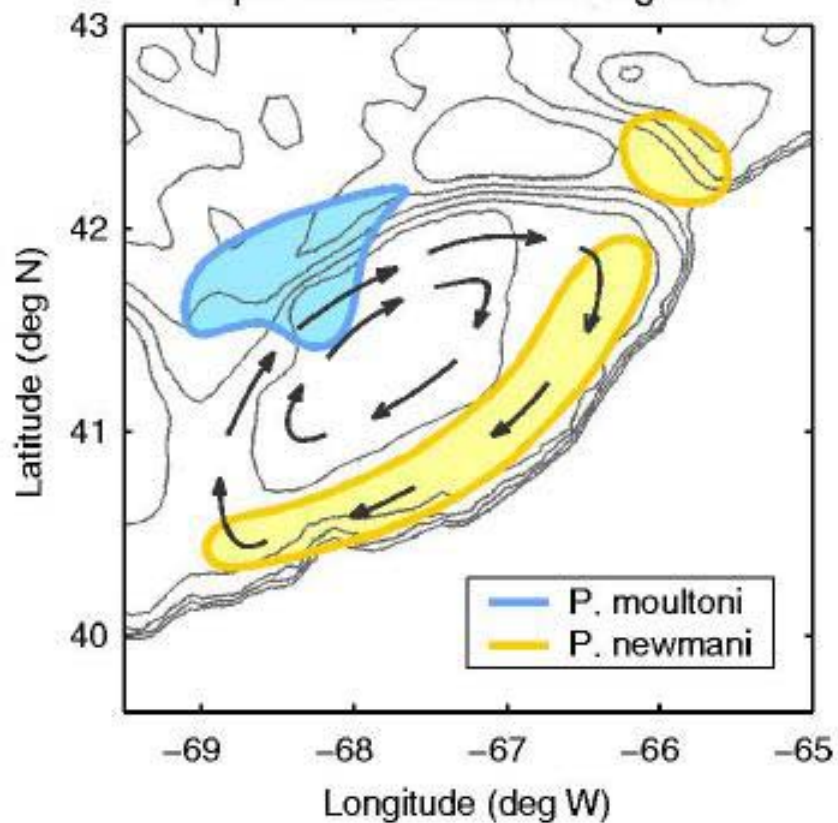


P. newmani Abundance

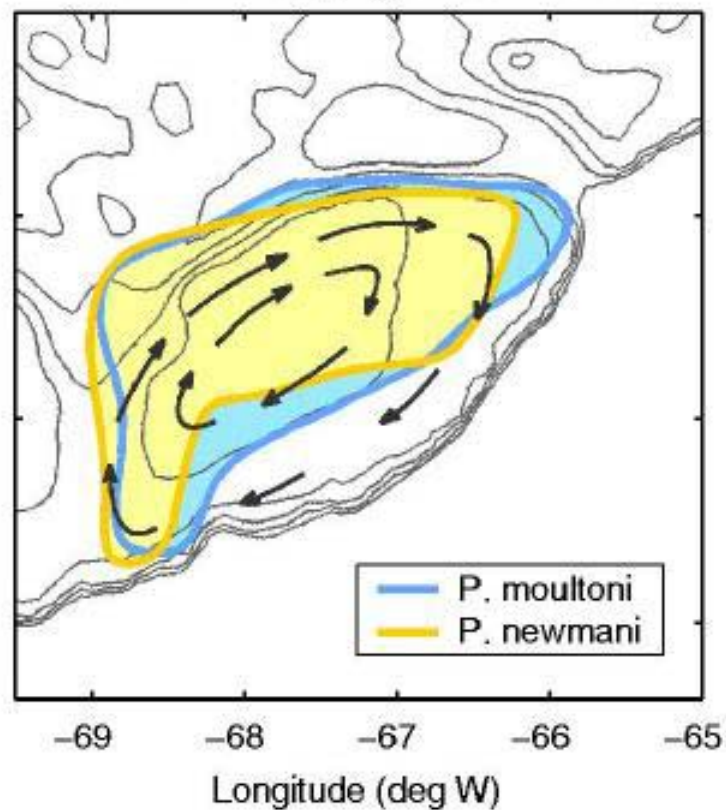


Intermingling of *P. moultoni* and *P. newmani* on Georges Bank

April: Distinct Source Regions



June: Overlapping Distributions



US GLOBEC Georges Bank Broad-scale Survey Stations

