

OCG 350

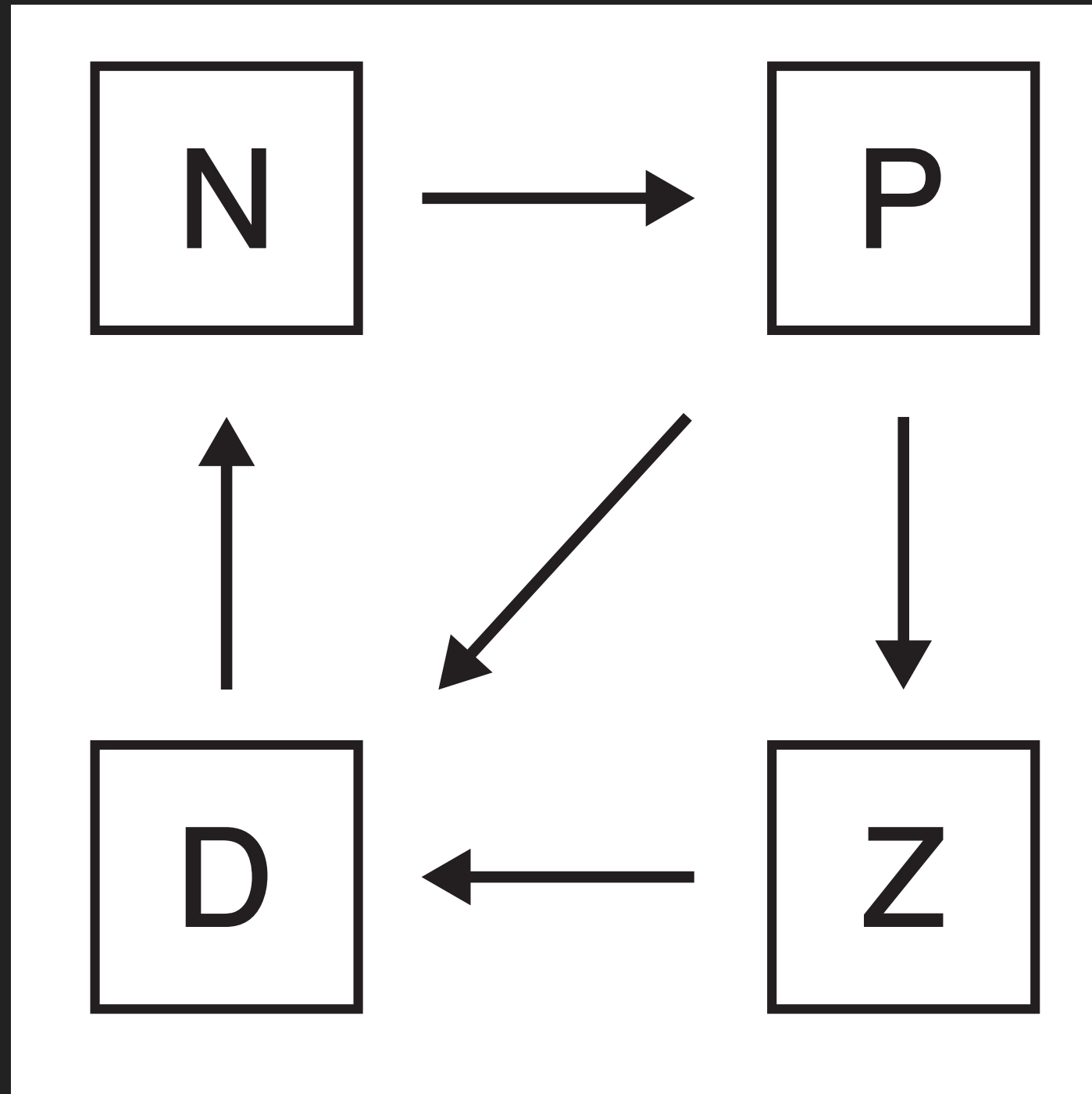
NPZD MODELS

OUTLINE

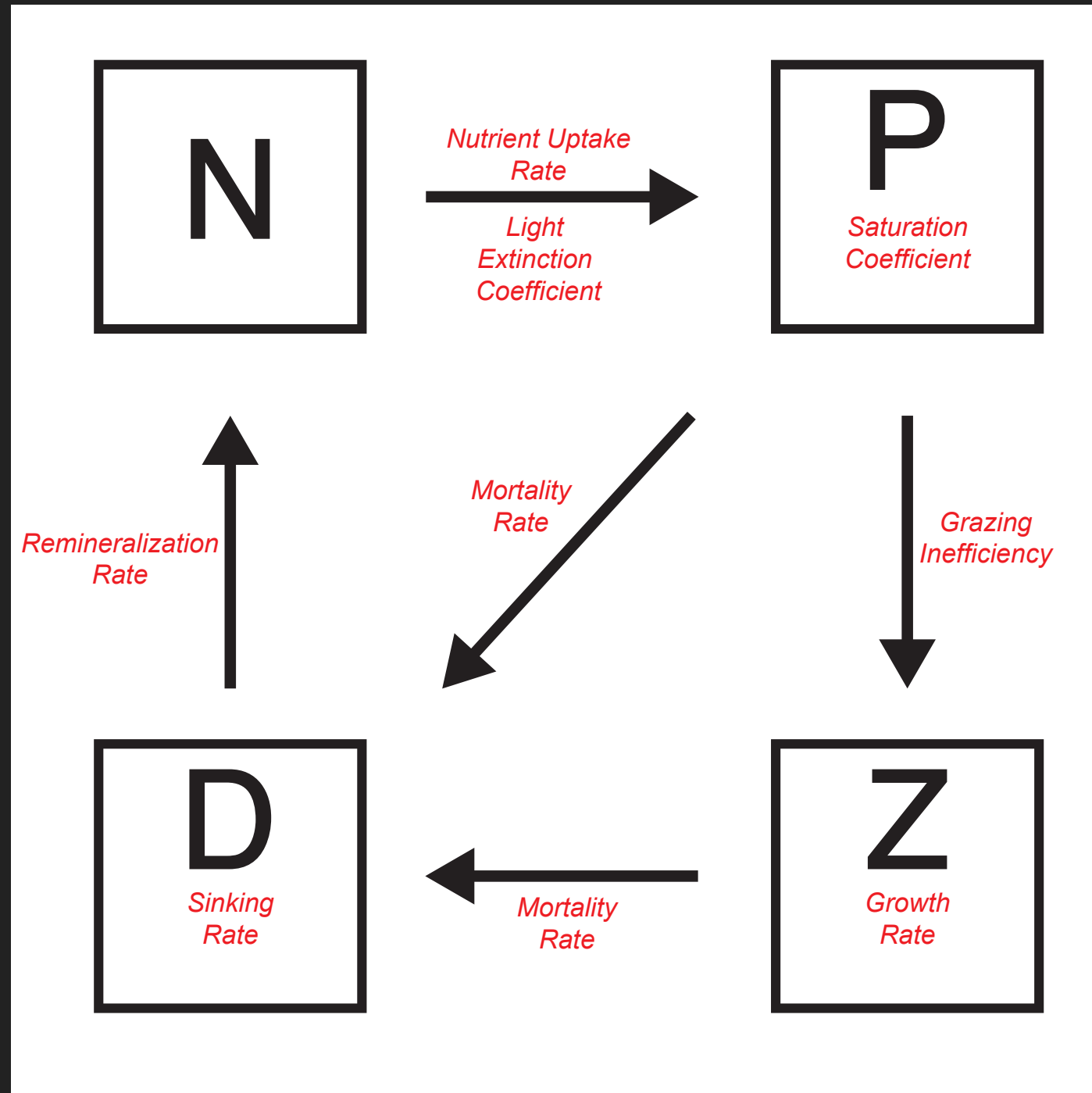
- ▶ Variables and Coefficients
- ▶ Example: Narragansett Bay
- ▶ Narragansett Bay Knowns and Unknowns
- ▶ Improving the Narragansett Bay NPZD Model

VARIABLES AND COEFFICIENTS

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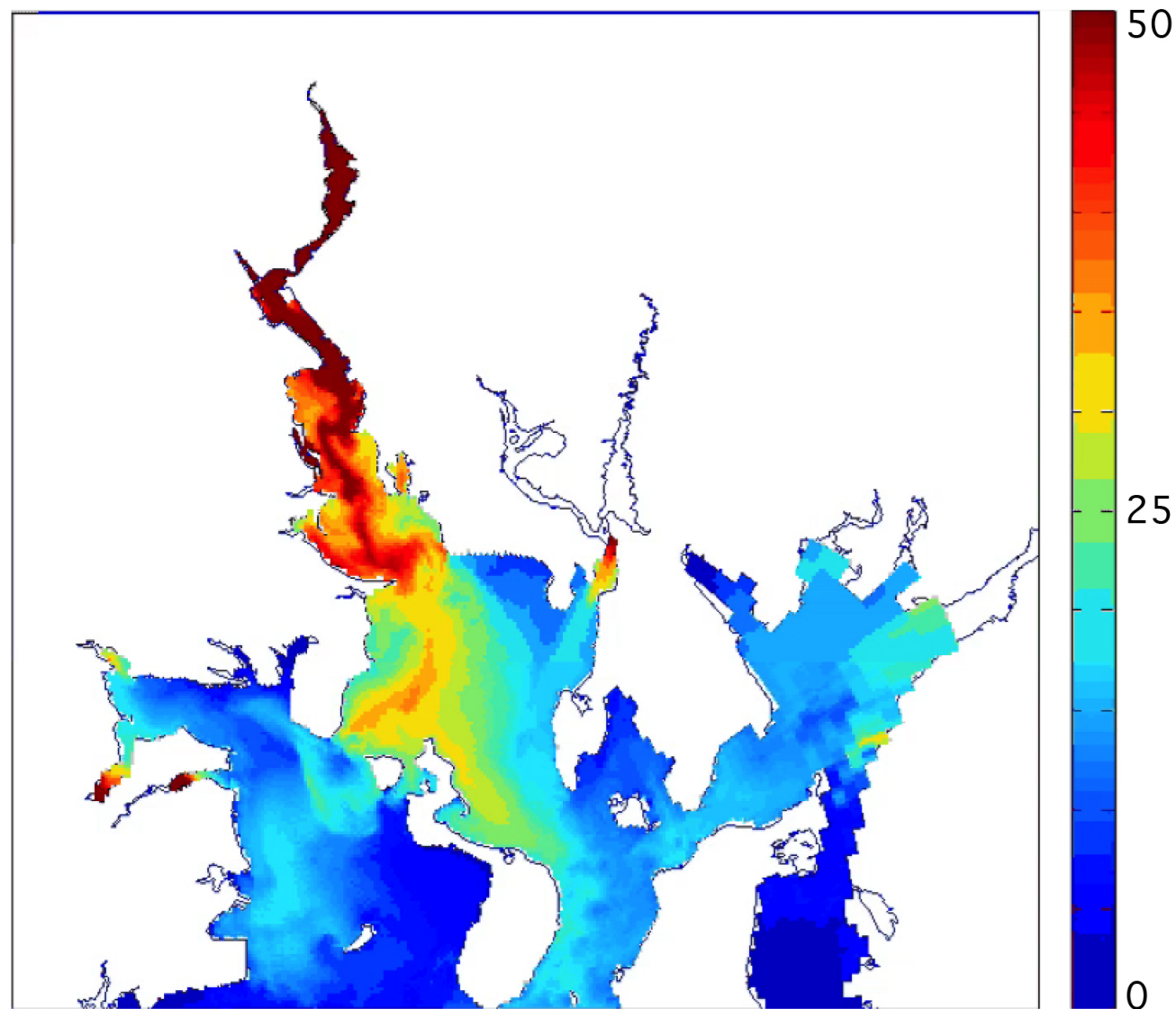
VARIABLES AND COEFFICIENTS



EXAMPLE:
NARRAGANSETT BAY

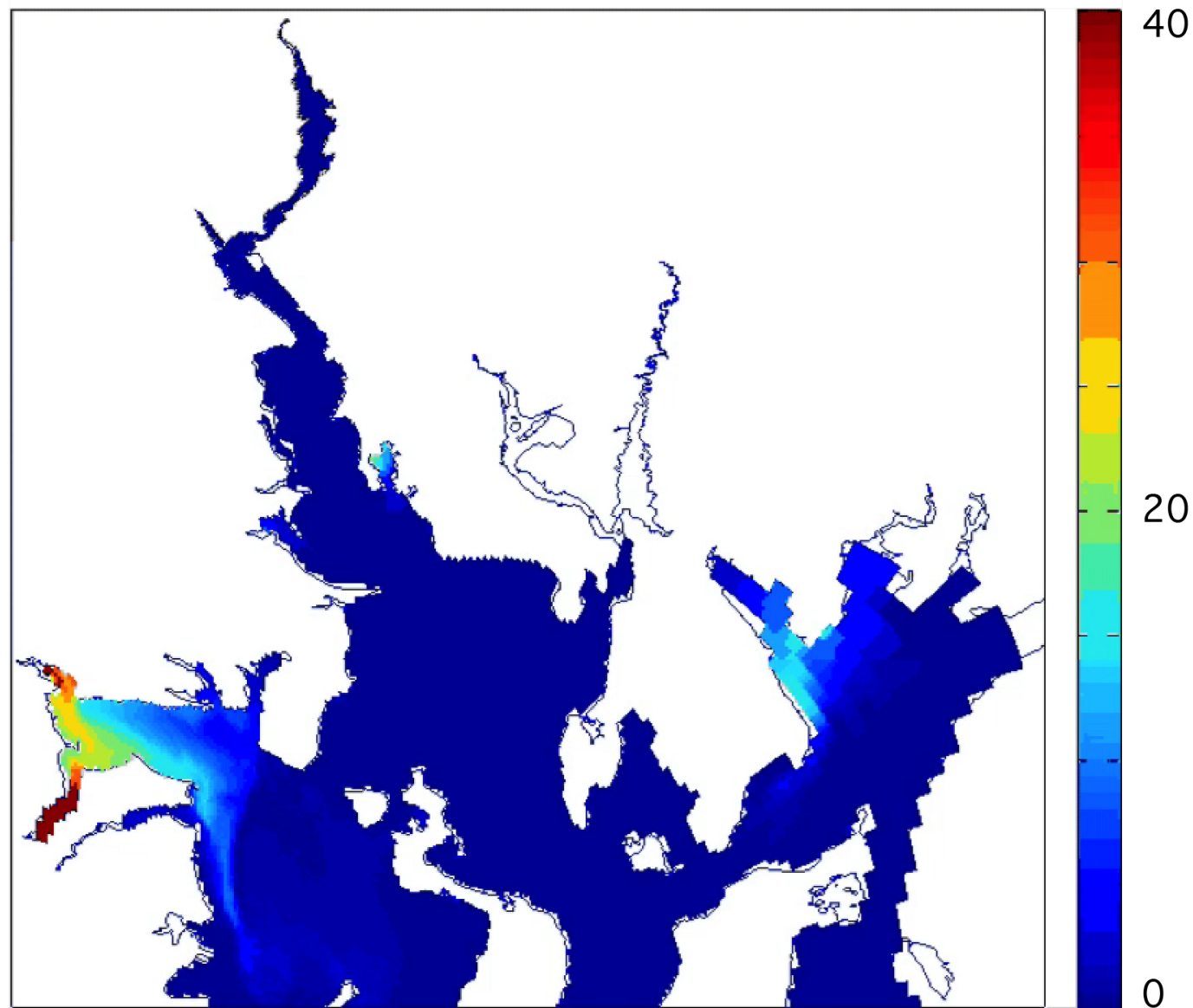
EXAMPLE: NARRAGANSETT BAY

Nitrogen (mmolN/m³)

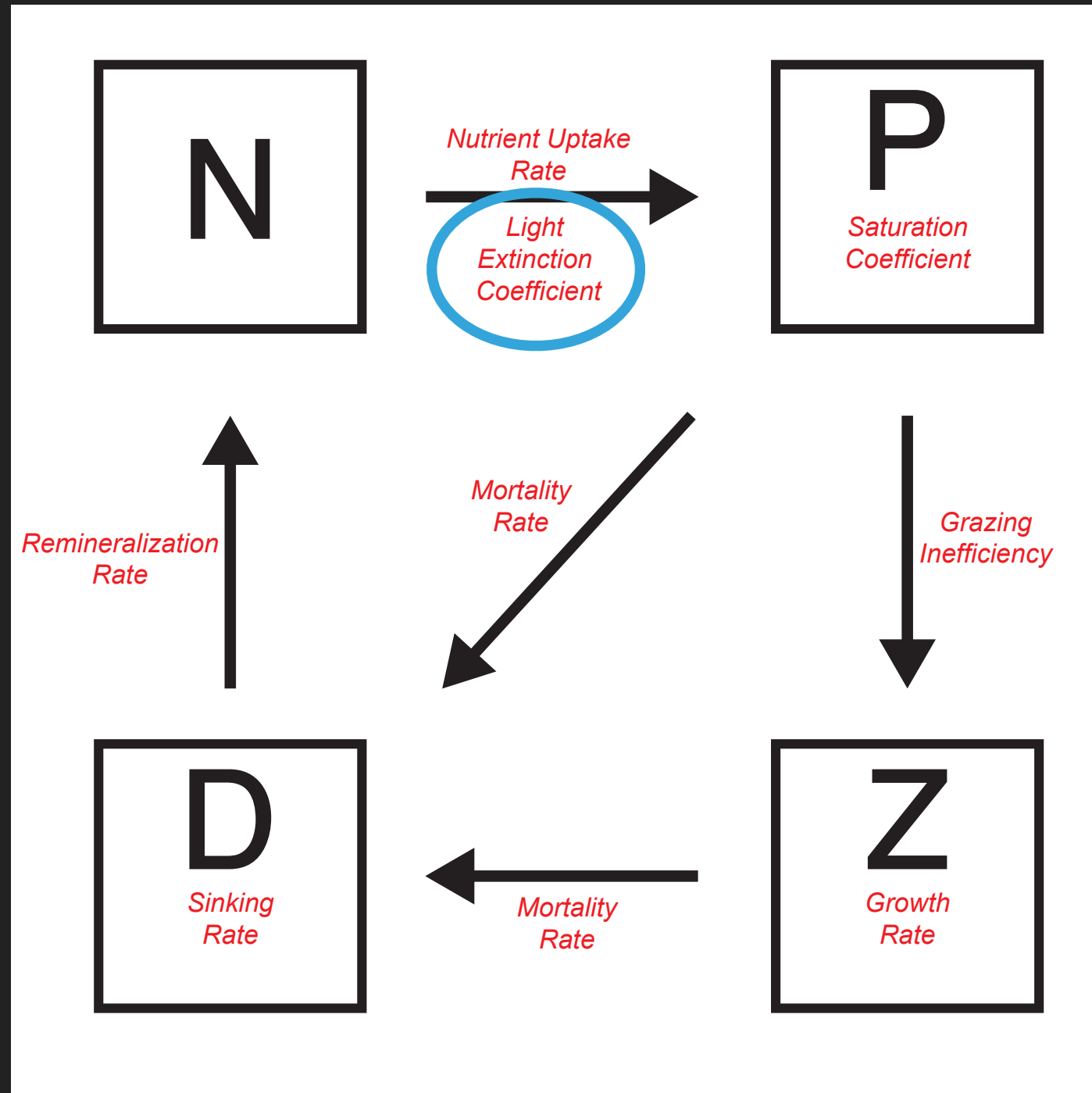


EXAMPLE: NARRAGANSETT BAY

Phytoplankton(mmolN/m^3)

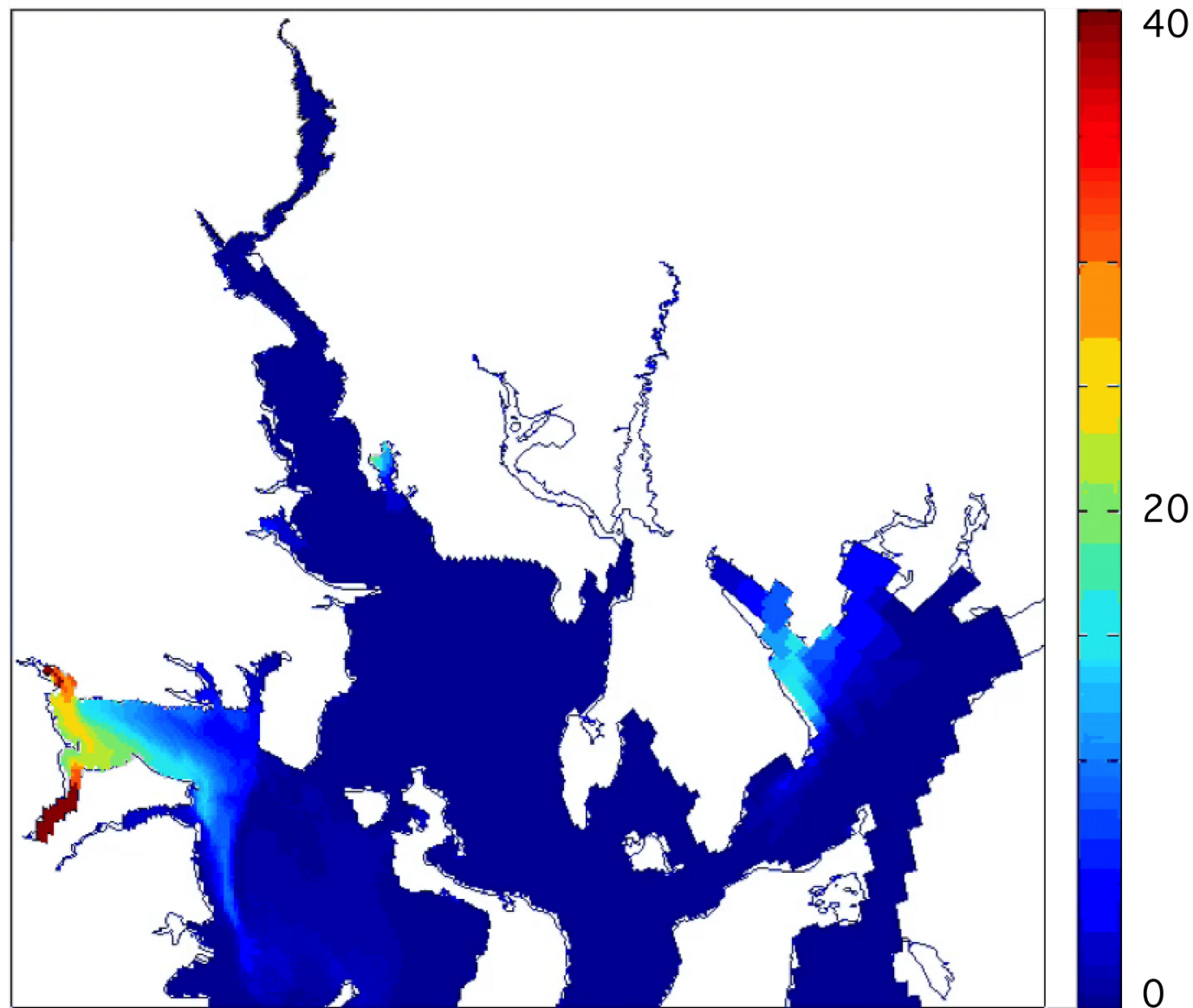


EXAMPLE: NARRAGANSETT BAY

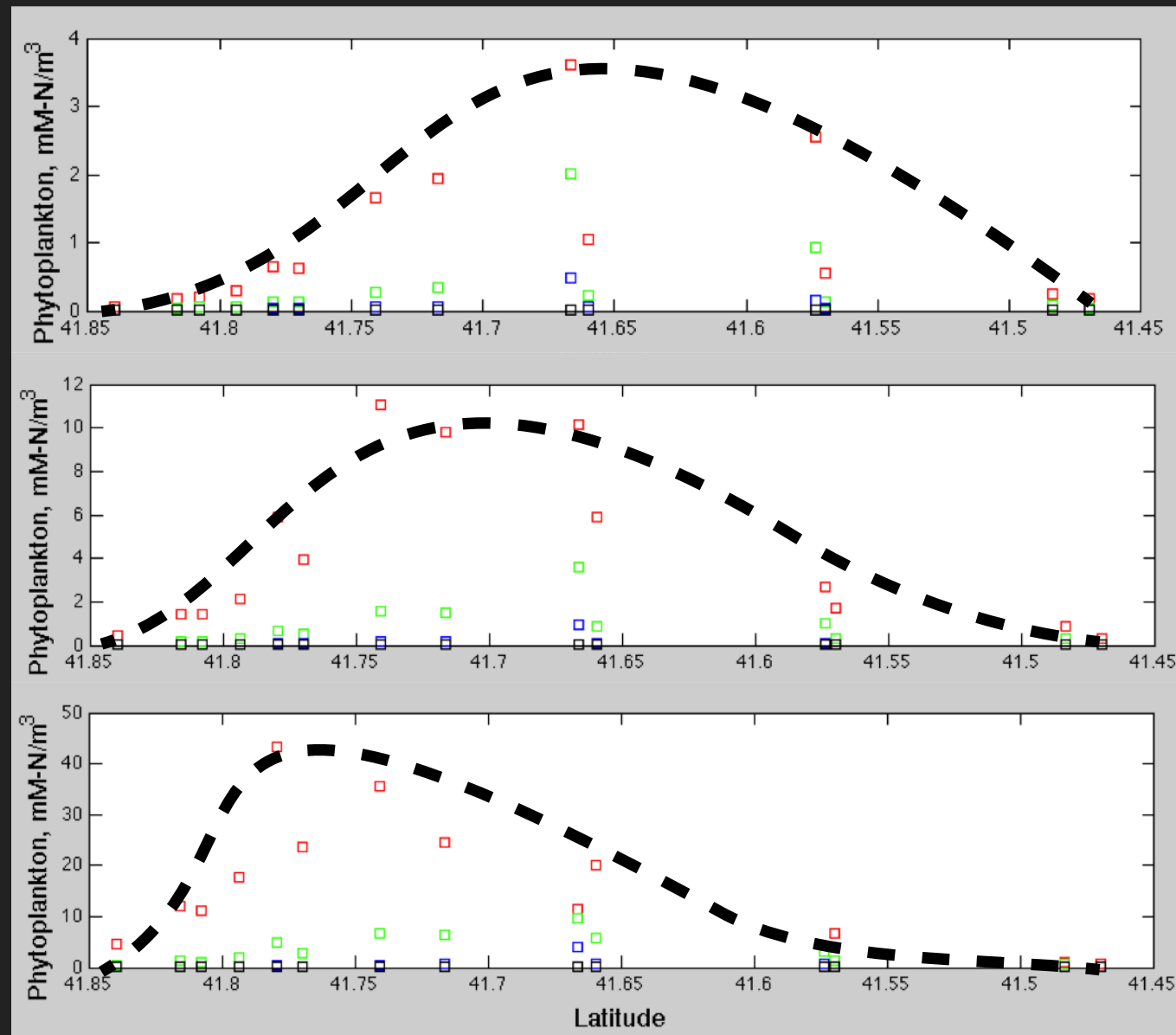


EXAMPLE: NARRAGANSETT BAY

Phytoplankton(mmolN/m^3)



EXAMPLE: NARRAGANSETT BAY



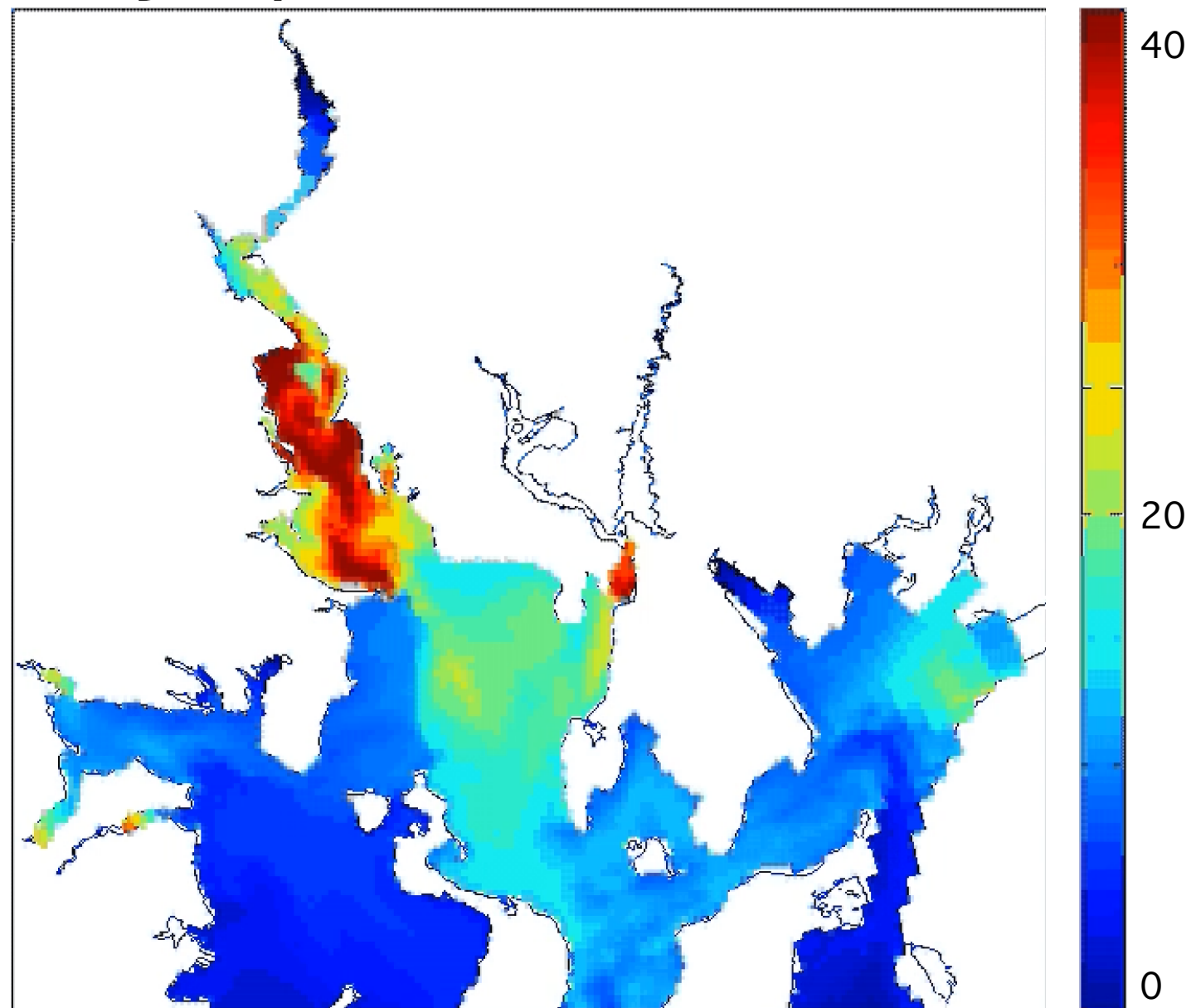
Day 160

Day 163

Day 166

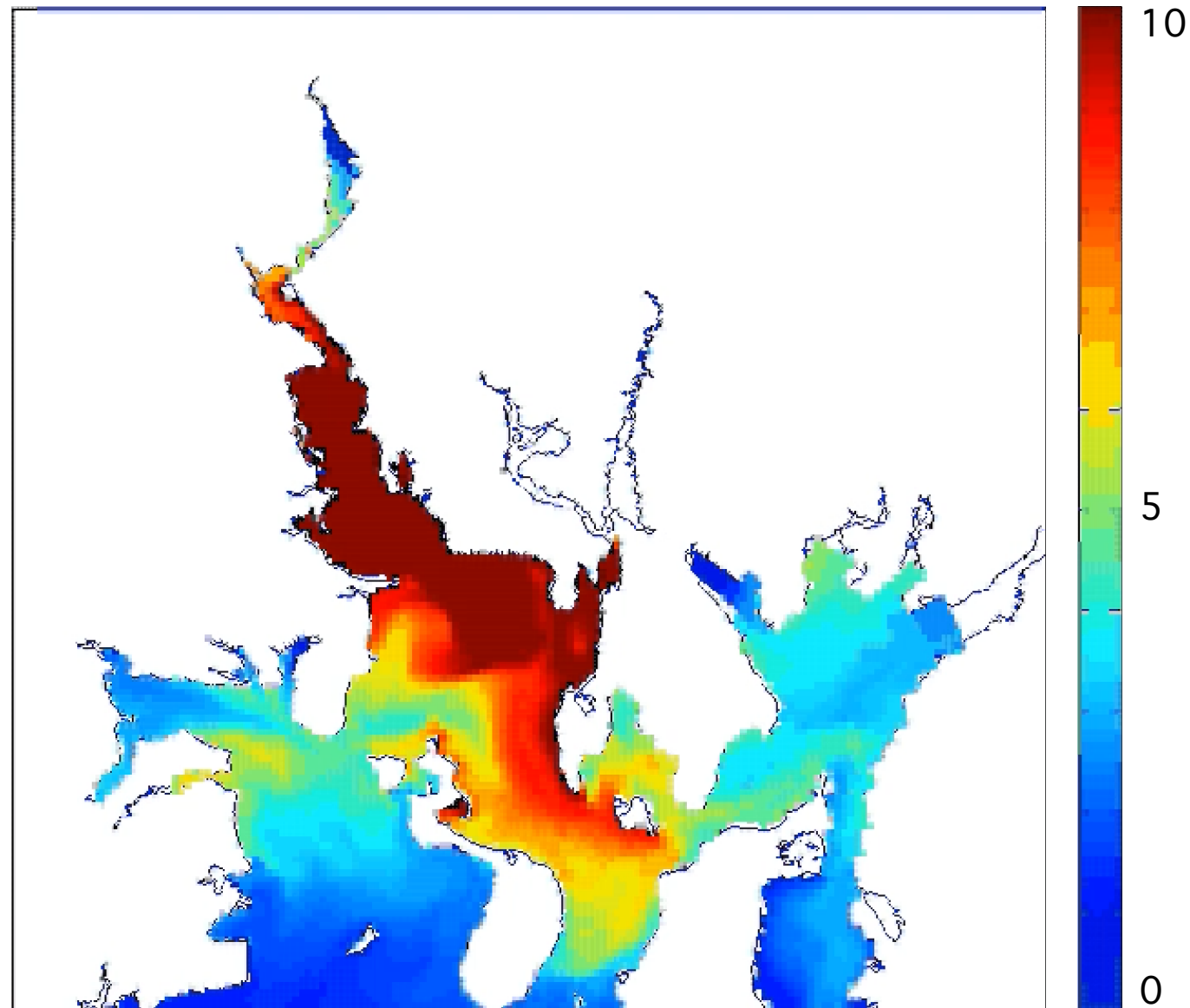
EXAMPLE: NARRAGANSETT BAY

Phytoplankton(mmolN/m^3)

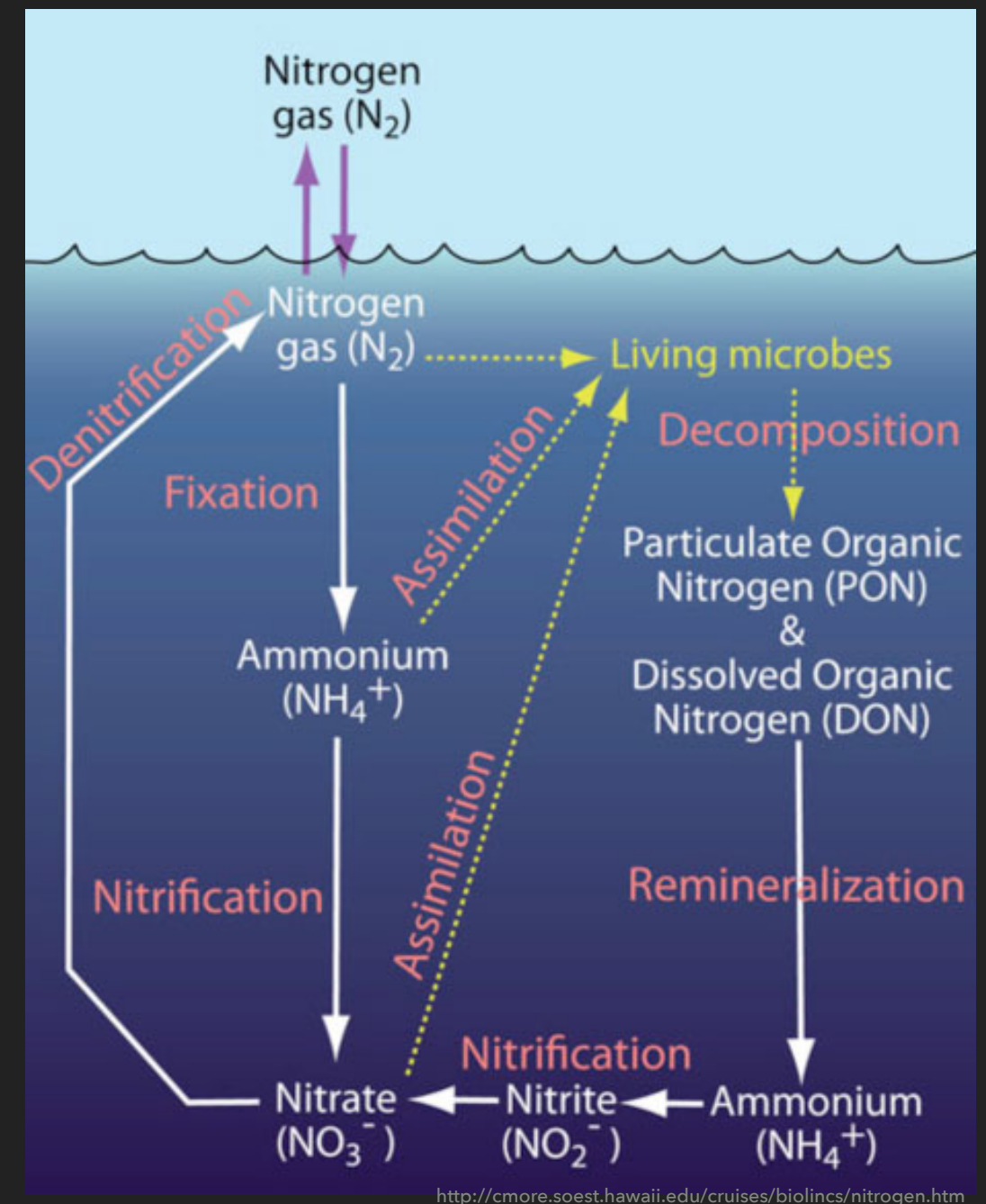
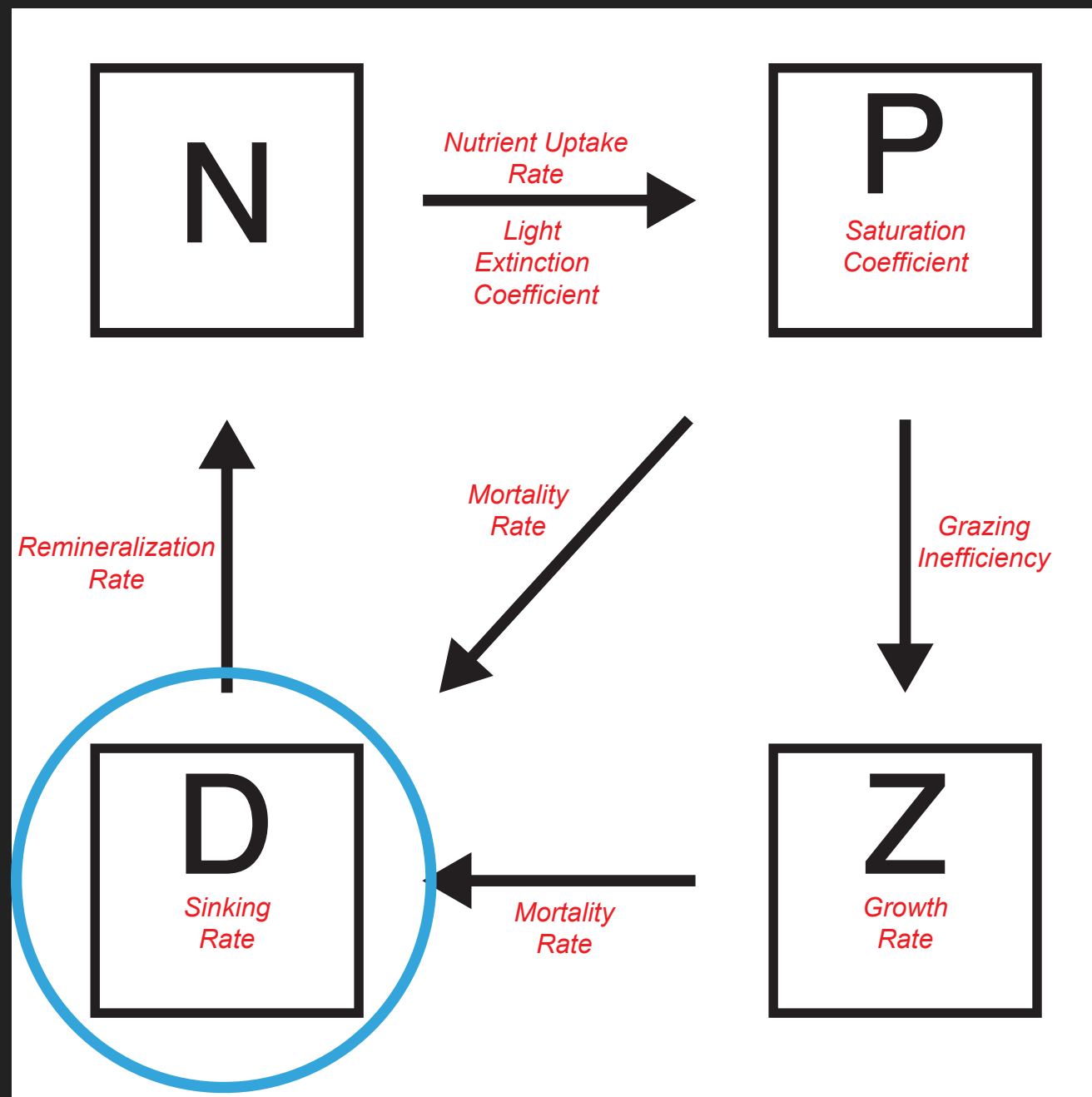


EXAMPLE: NARRAGANSETT BAY

Zooplankton(mmolN/m^3)



EXAMPLE: NARRAGANSETT BAY



NARRAGANSETT BAY KNOWN AND UNKNOWN

KNOWNNS

- ▶ Nutrient Concentrations and Phytoplankton Abundance
 - ▶ Fox Island Only
- ▶ Chl-a Concentration
 - ▶ Can be converted to phytoplankton abundance

UNKNOWNNS

- ▶ Nutrient Concentrations and Phytoplankton Abundance
 - ▶ Rest of Bay
- ▶ Zooplankton Abundance
- ▶ Detritus Concentration

IMPROVING THE NB-NPZD MODEL

IMPROVING THE NARRAGANSETT BAY NPZD MODEL

- ▶ Part 1: Obtaining Zooplankton Abundance
 - ▶ Fox Island Only
- ▶ Part 2: Converting Zooplankton Abundance to mmolN/m^3
 - ▶ Fox Island
 - ▶ Greenwich Bay
 - ▶ Castle Hill (East Passage)

QUESTIONS?