Data Merging CalCOFI Krill + Bottles

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Import Data

Load in the Krill Taxonomic File

Load in the Krill Count Data

Most Frequently Counted Krill

ID_Microscopy	n
Nematoscelis difficilis	19038
Euphausia pacifica	19019
Thysanoessa gregaria	11234
Nyctiphanes simplex	9350
Stylocheiron longicorne	7131
Euphausia recurva	5913
Euphausia gibboides	4163
Stylocheiron affine	4077
Thysanoessa spinifera	3204
Stylocheiron maximum	2395
Euphausia eximia	1279
Nematobrachion flexipes	1120

Load in the Bottle Data

Full Merge Into Single Data

Interpolate Values

Filter to the most recent casts

Interopolate values between bottle casts to acquire 1m bins of environmental variables

Create Binned Data

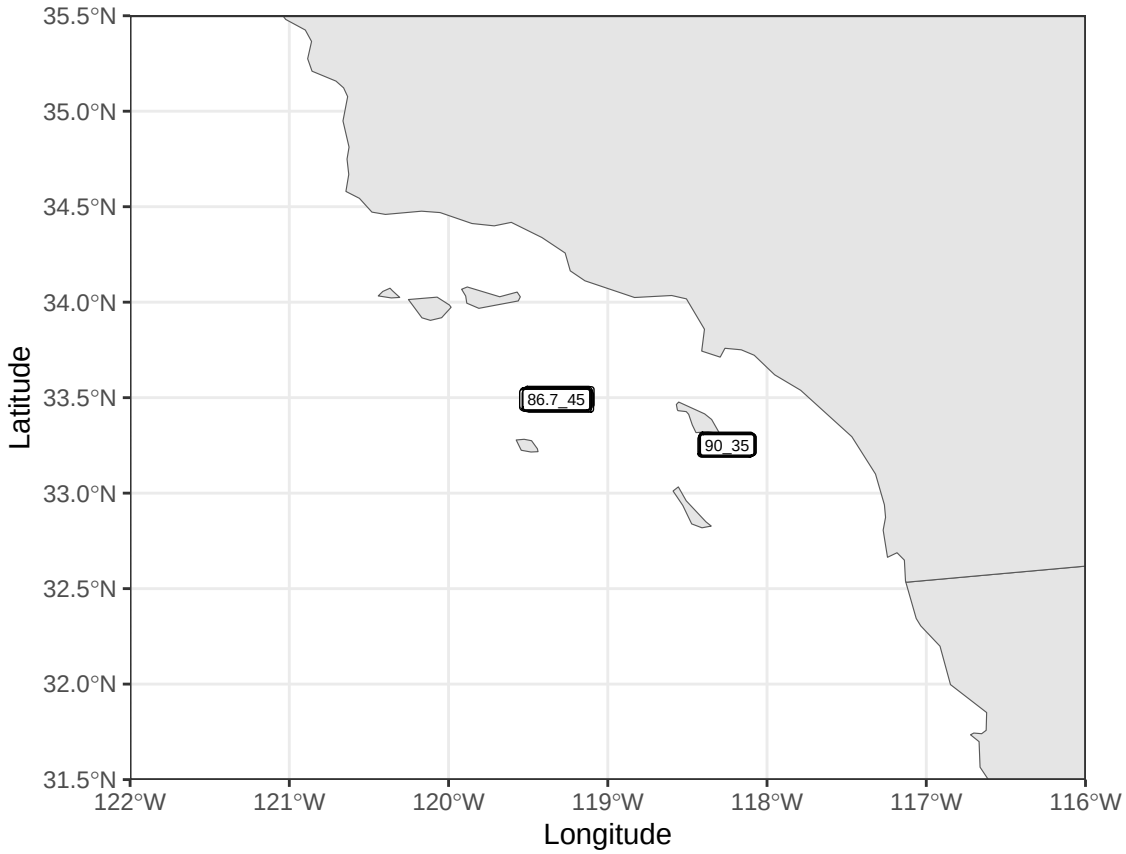
Proportion of Upper 200m That is Hypoxic

Depth of Hypoxia O2 ml/L

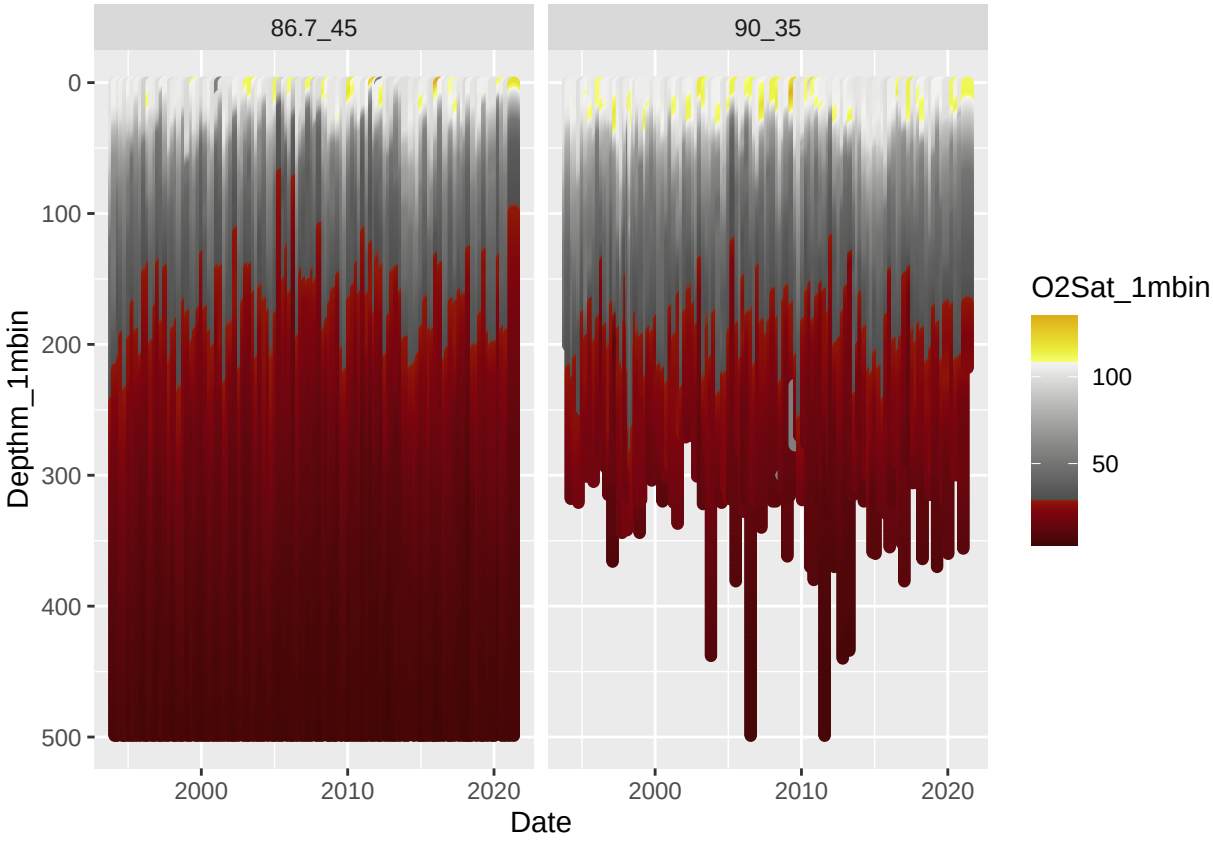
Full Merge with binned environmental data

Focus on sites 90_35 & 86.7_45

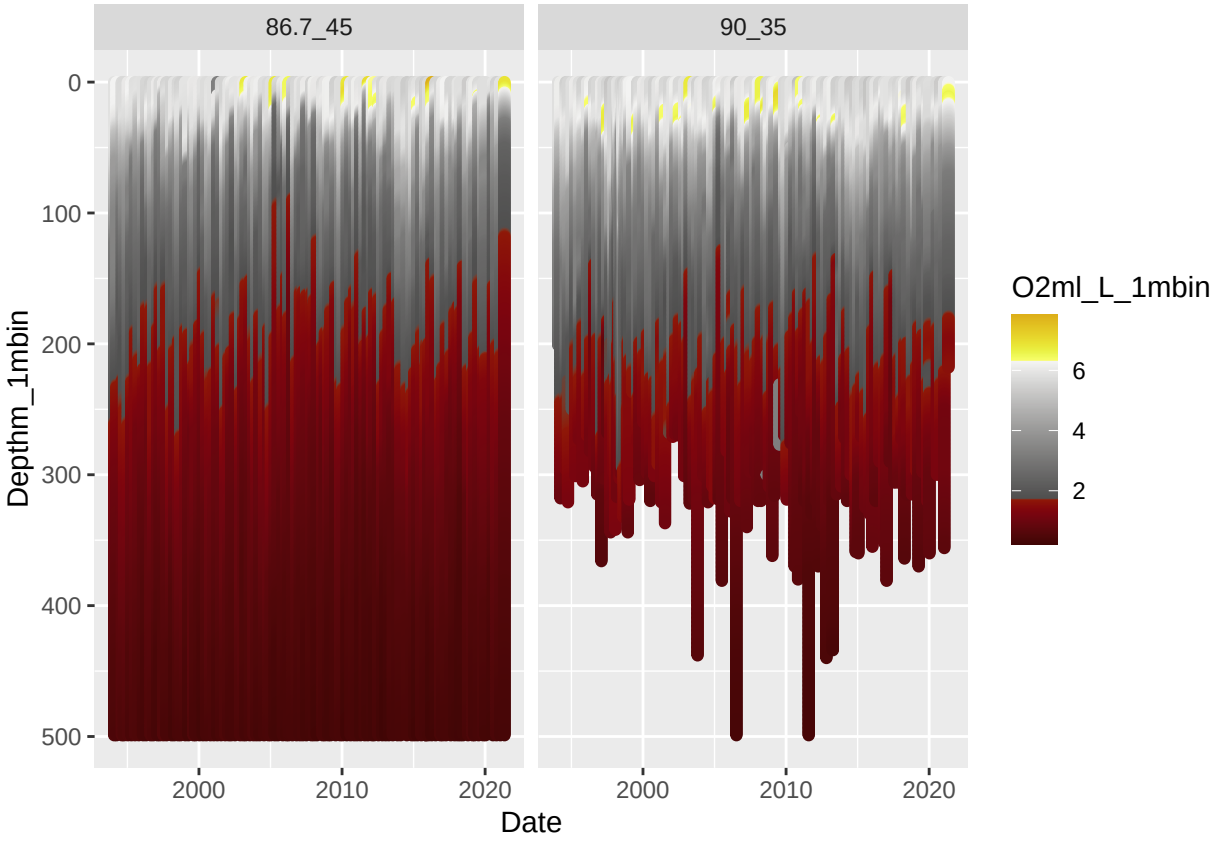
Map of Samples to Find the Hot Zone Site



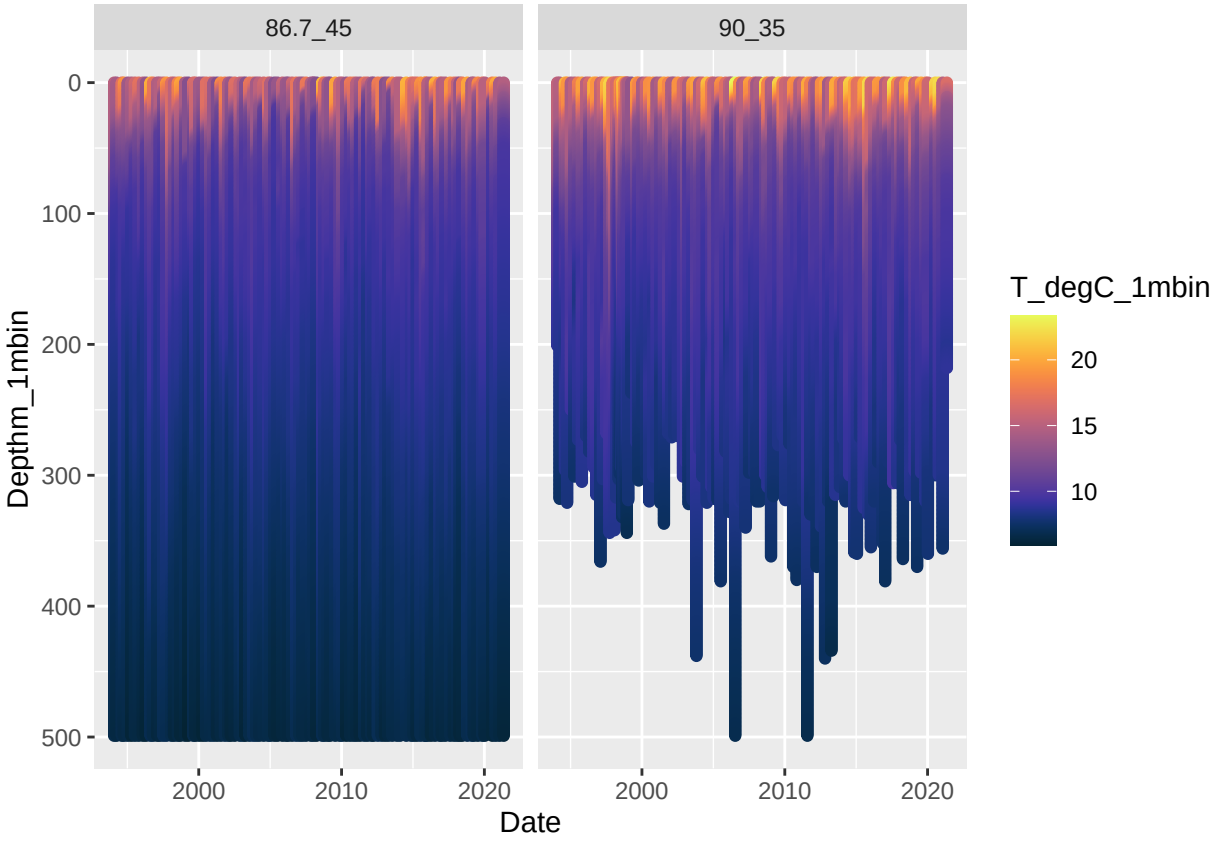
Oxygen Satuation Over Time



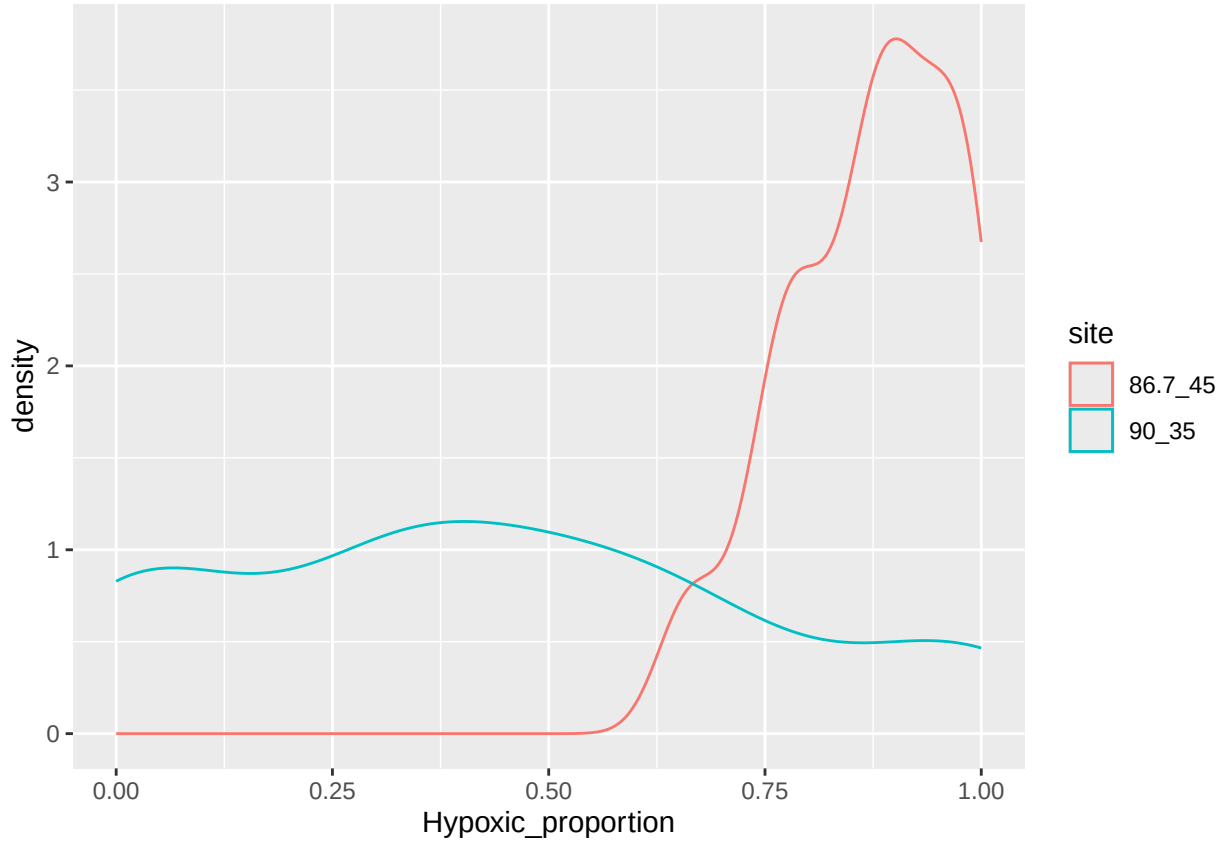
Oxygen mL/L Over Time



Temperature Over Time



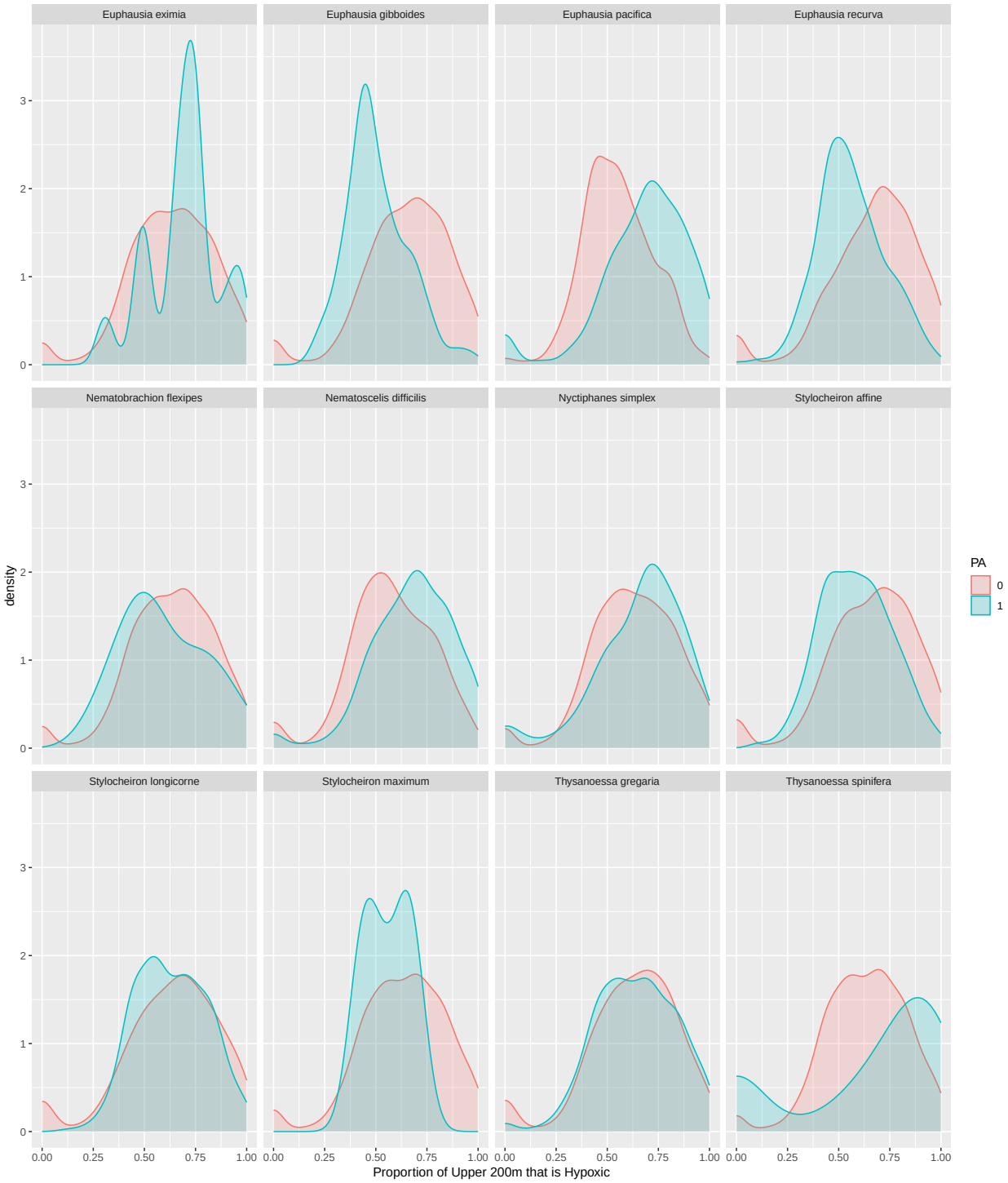
Density hypoxia proportion



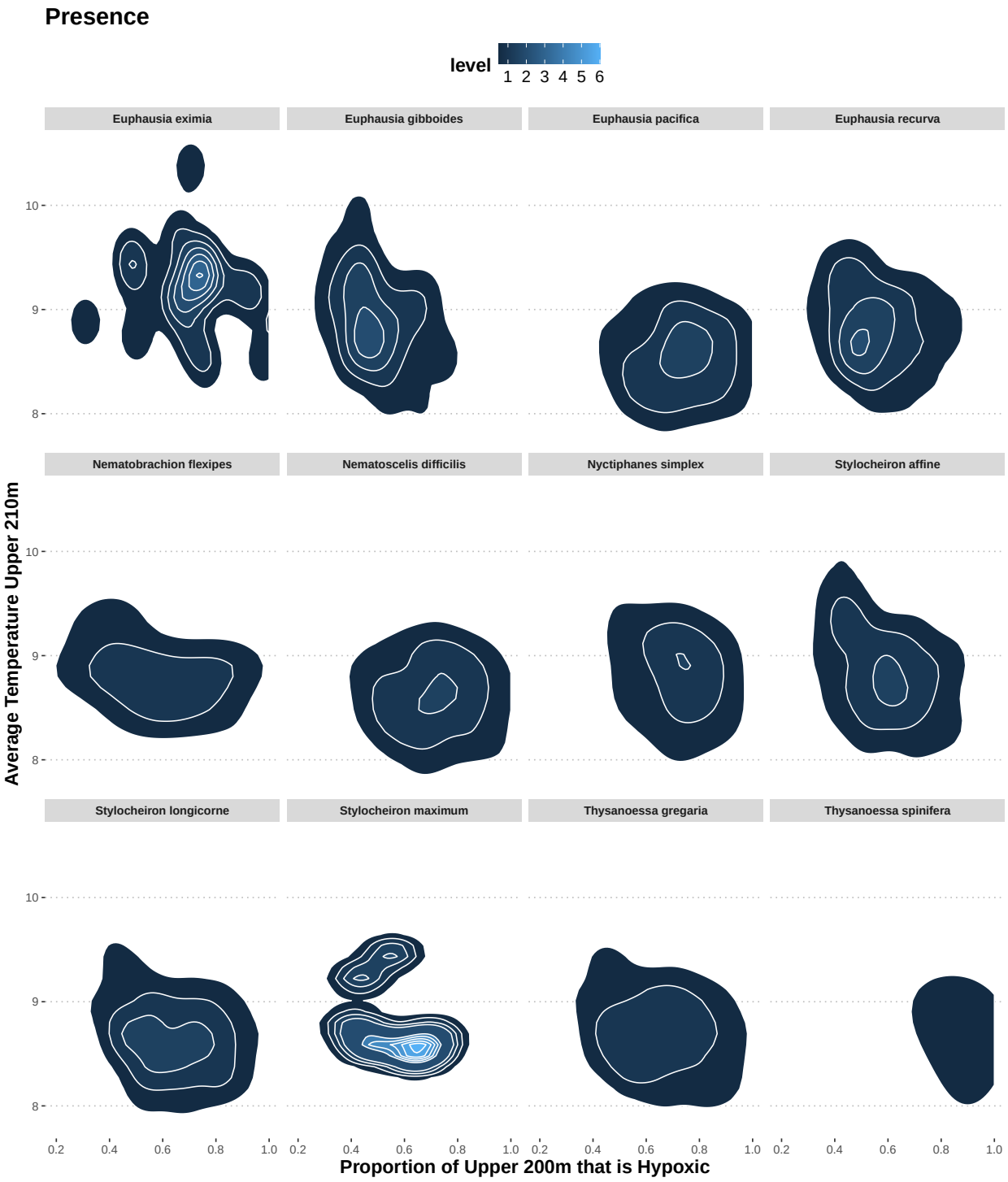
Krill

Proportion of of 200m that is Hypoxic

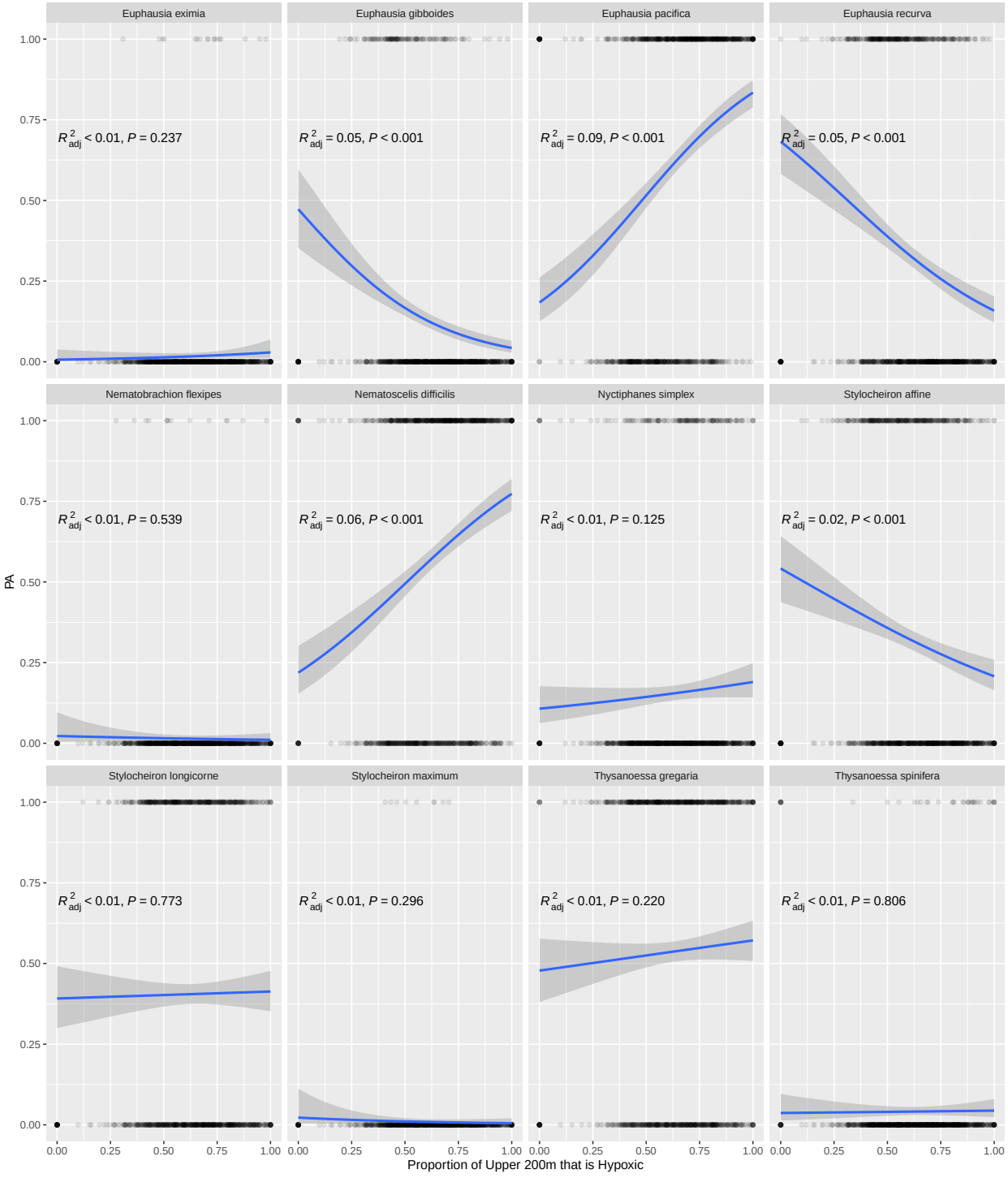
Krill Presence Absence Distribution Across Proportion of of 200m that is Hypoxic



Krill Presences Across Average Water Column Temperature and Proportion of of 200m that is Hypoxic

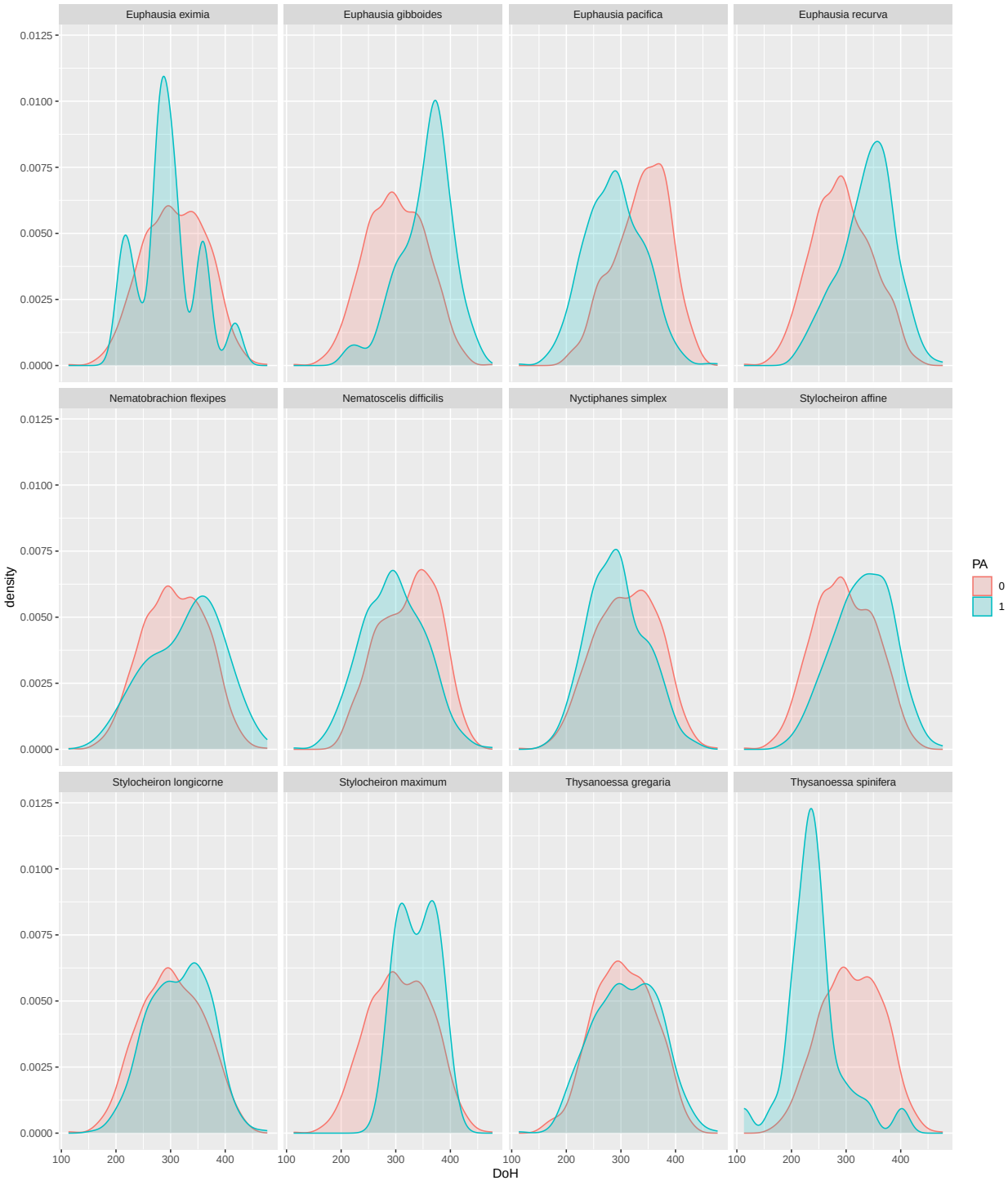


Binomial Regressons of Krill Detections As a Function of Depth of Hypoxia

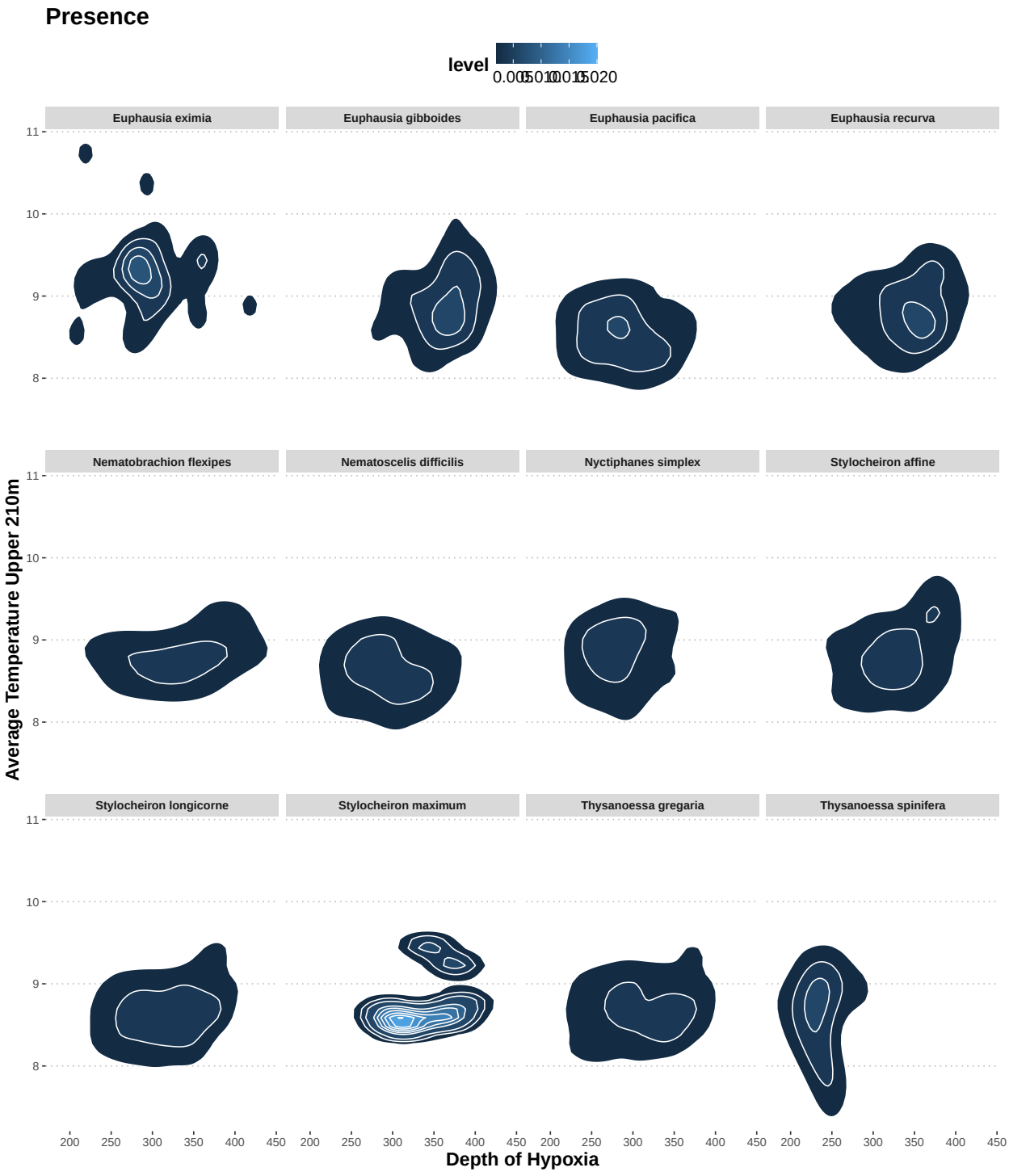


Depth of Hypoxia

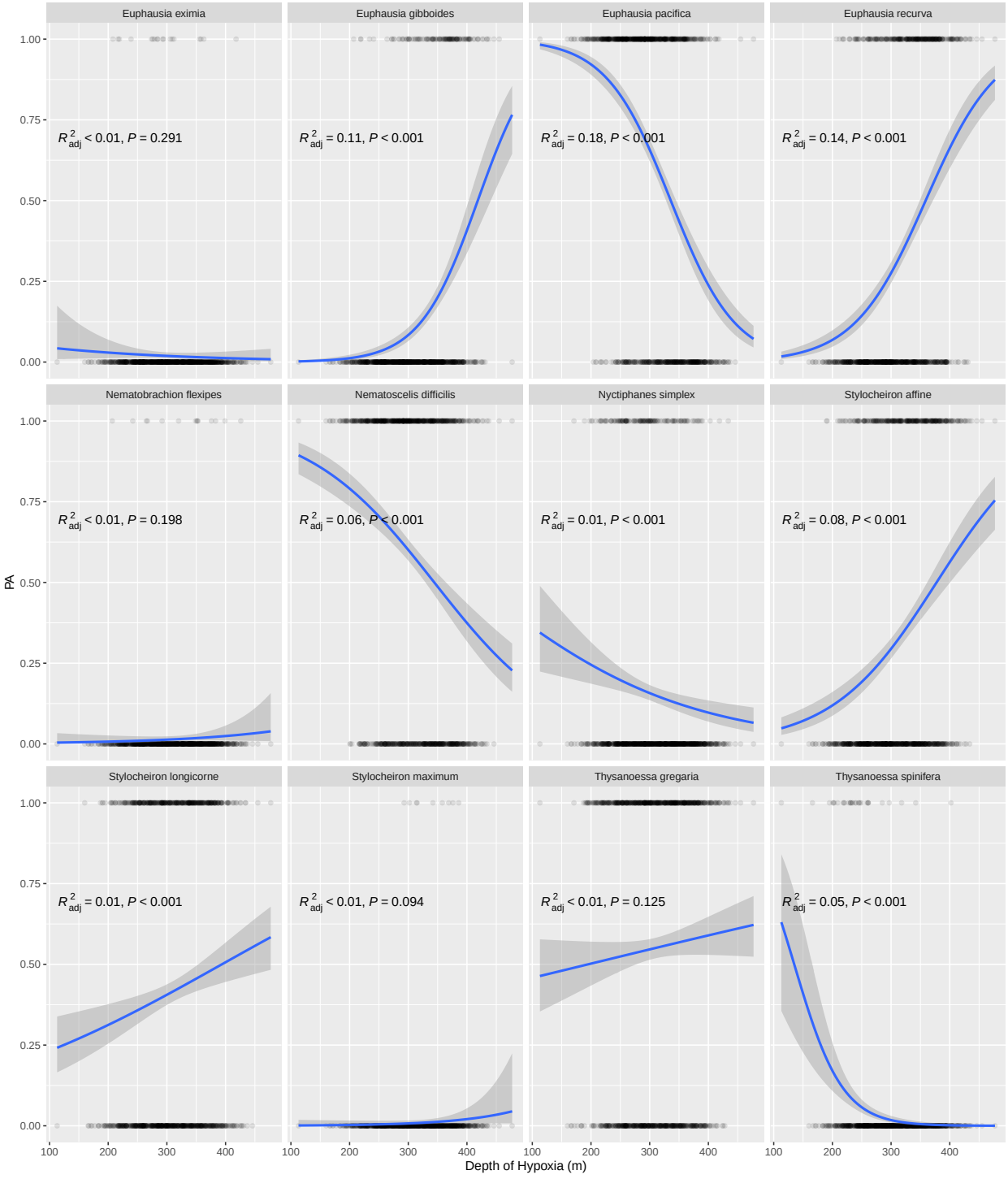
Krill Presence Absence Distribution Across Depth of Hypoxia



Krill Presences Across Average Water Column Temperature and Depth of Hypoxia

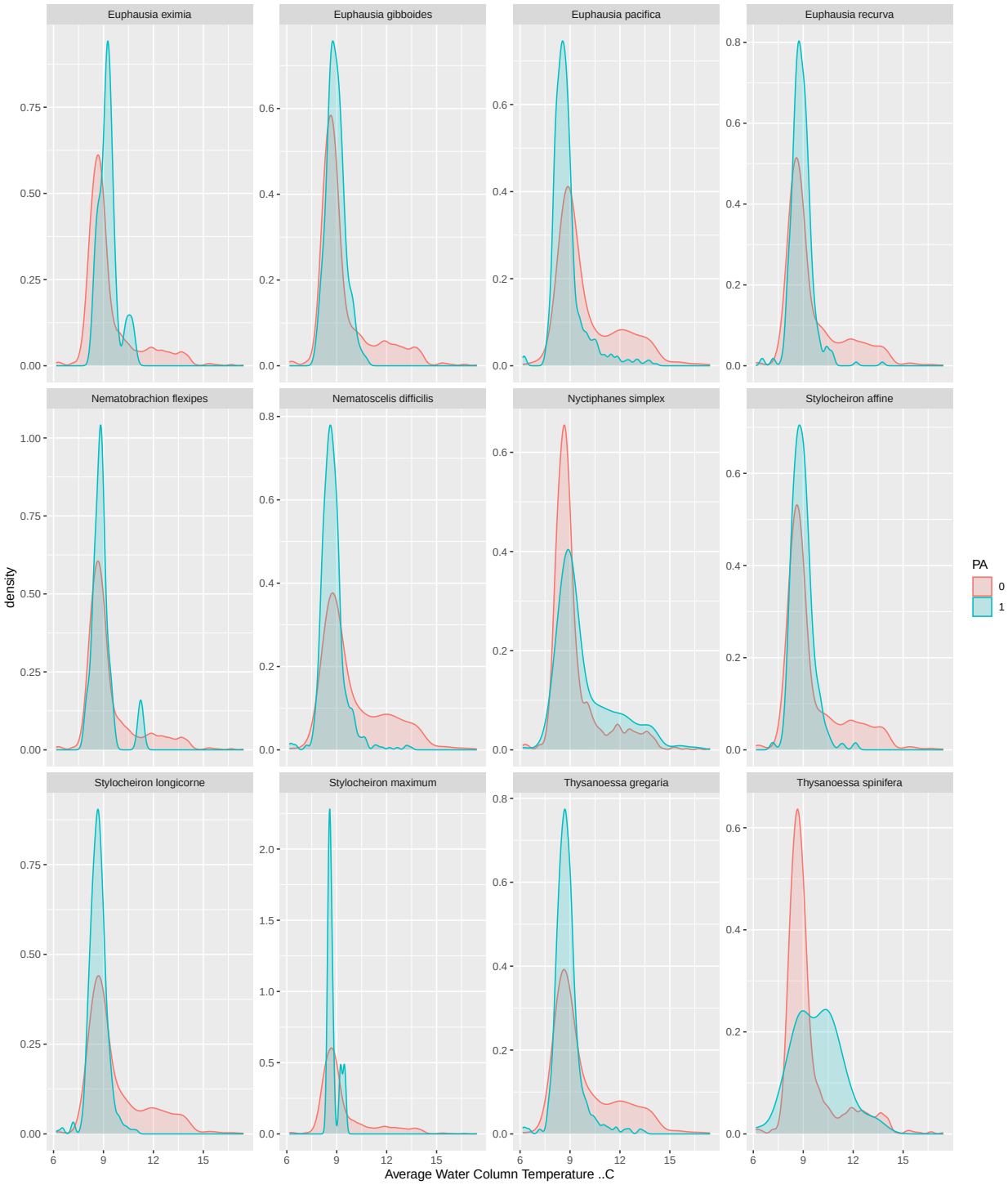


Binomial Regressons of Krill Detections As a Function of Depth of Hypoxia

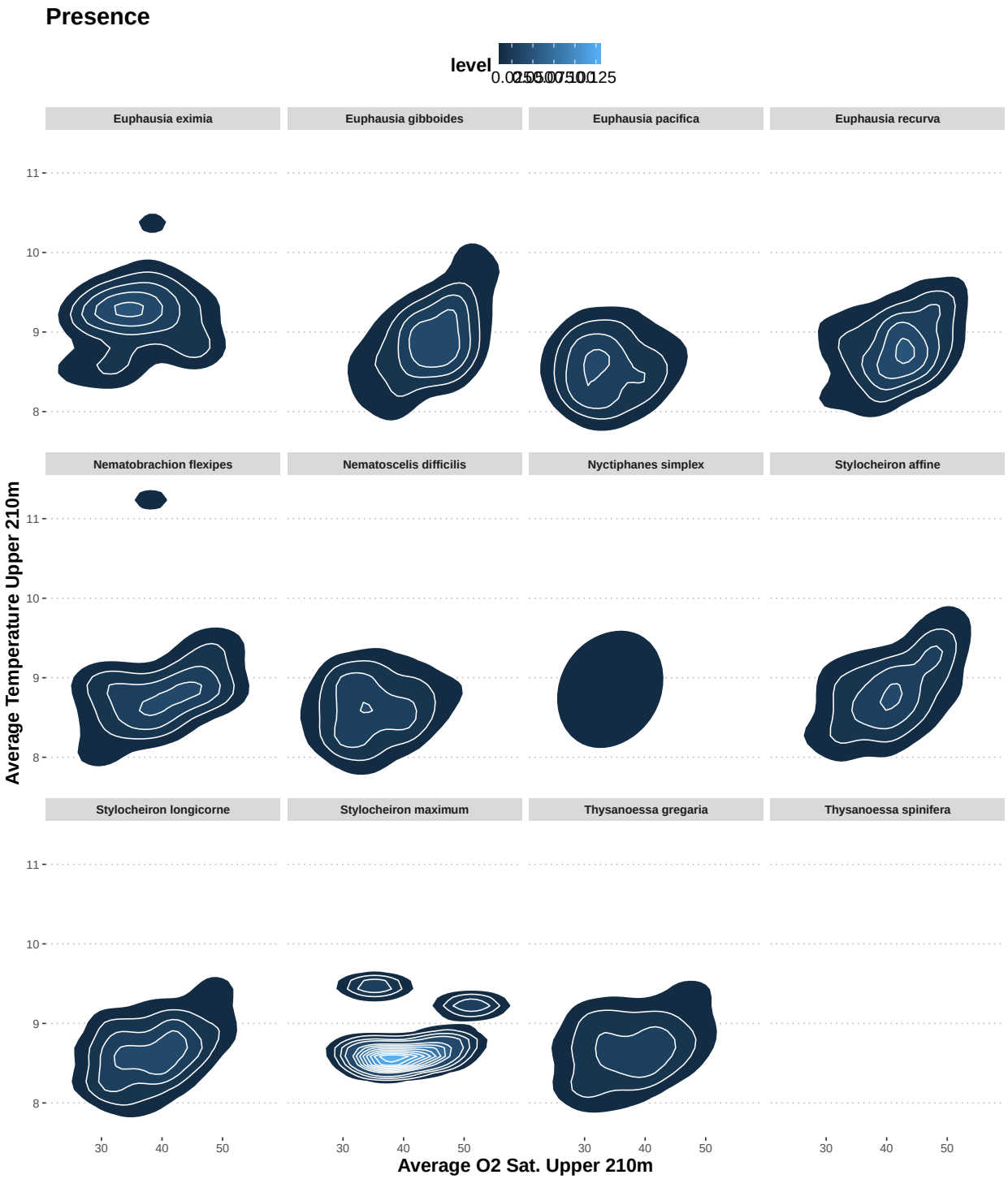


Temperature

Krill Presence Absence Distribution Across Mean Water Column Temperature



Krill Presences Across Average Water Column Temperature and O2 Saturation



Binomial Regressons of Krill Detections As a Function of Depth of Hypoxia