Multistability in a Coupled Ocean-Atmosphere Low Order Model

Oisín Hamilton
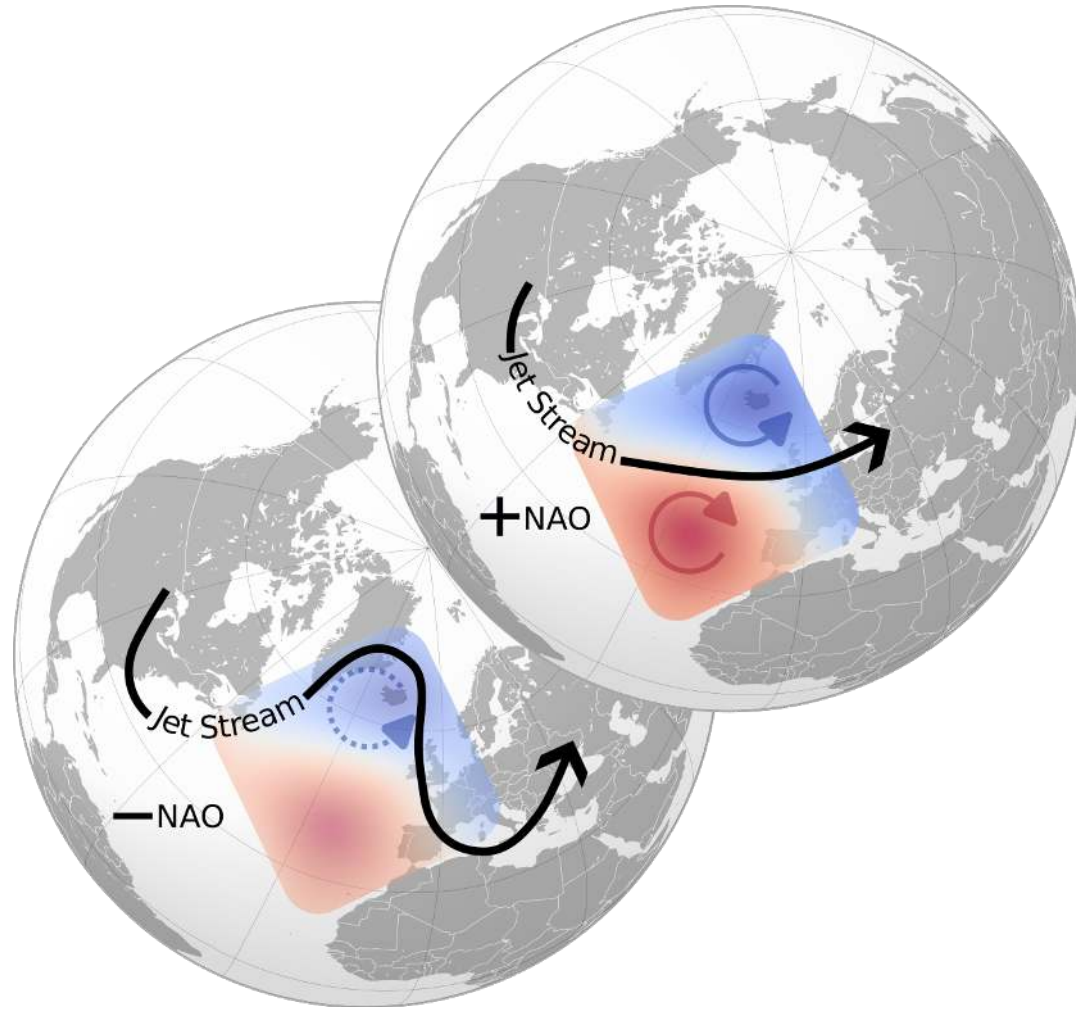
Jonathan Demaeyer
Stéphane Vannitsem
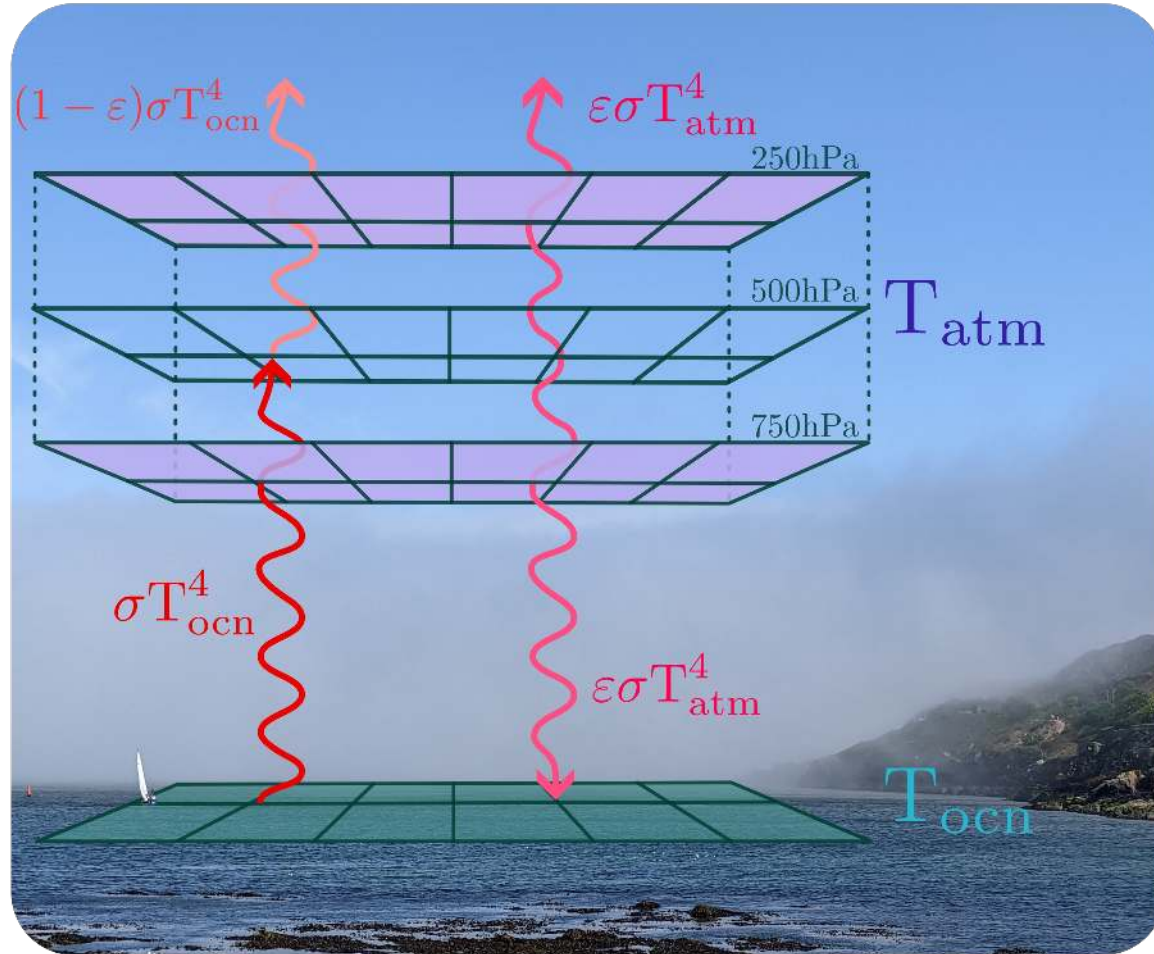Michel Cruicifix

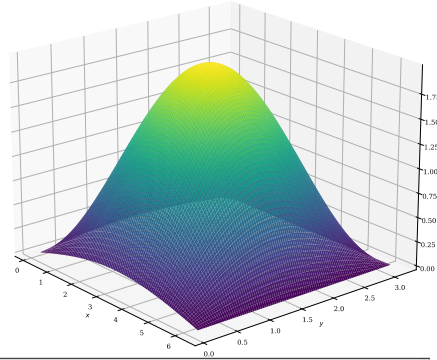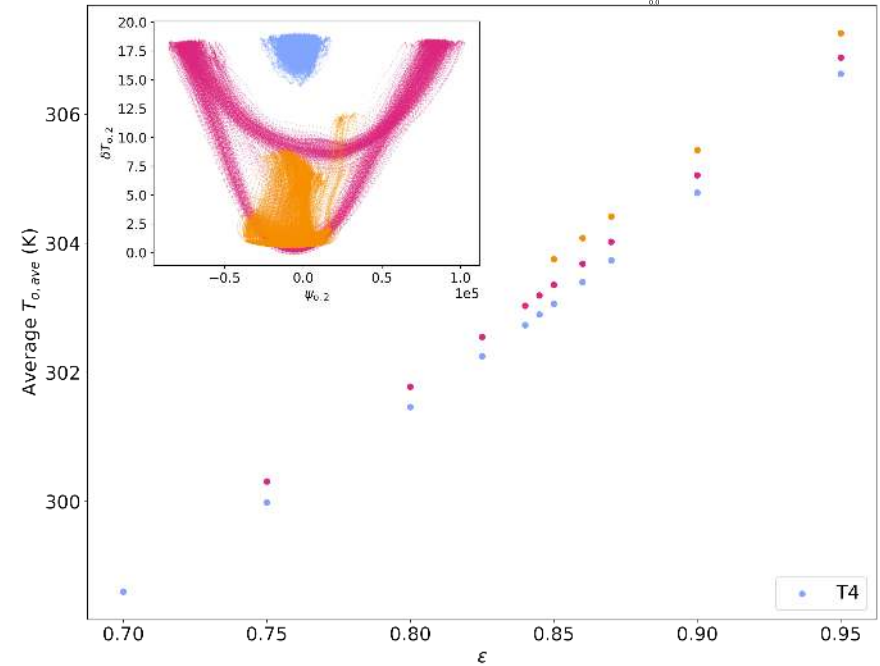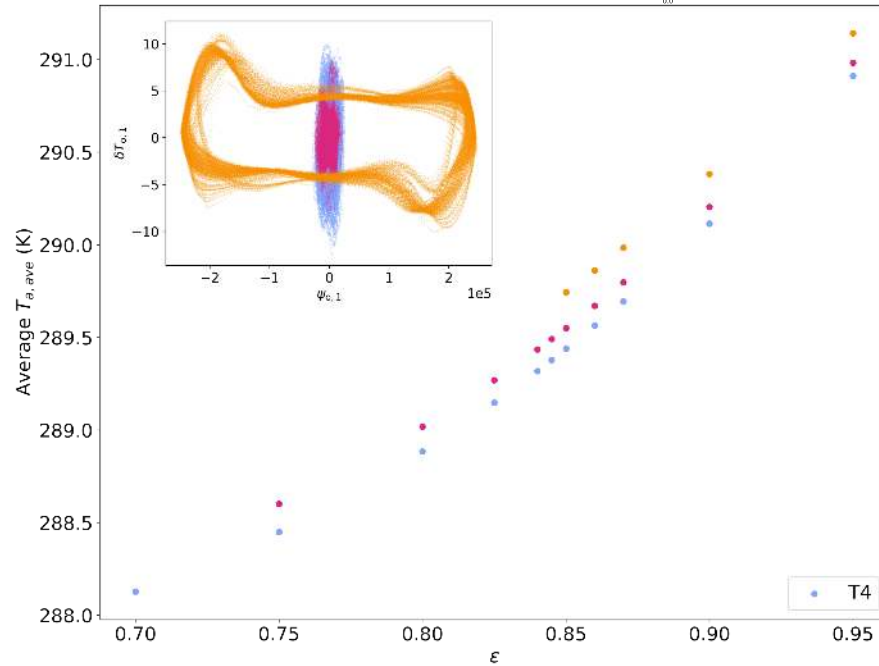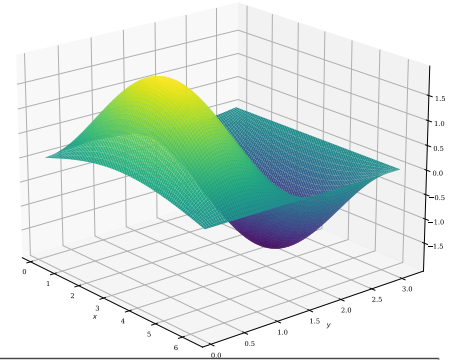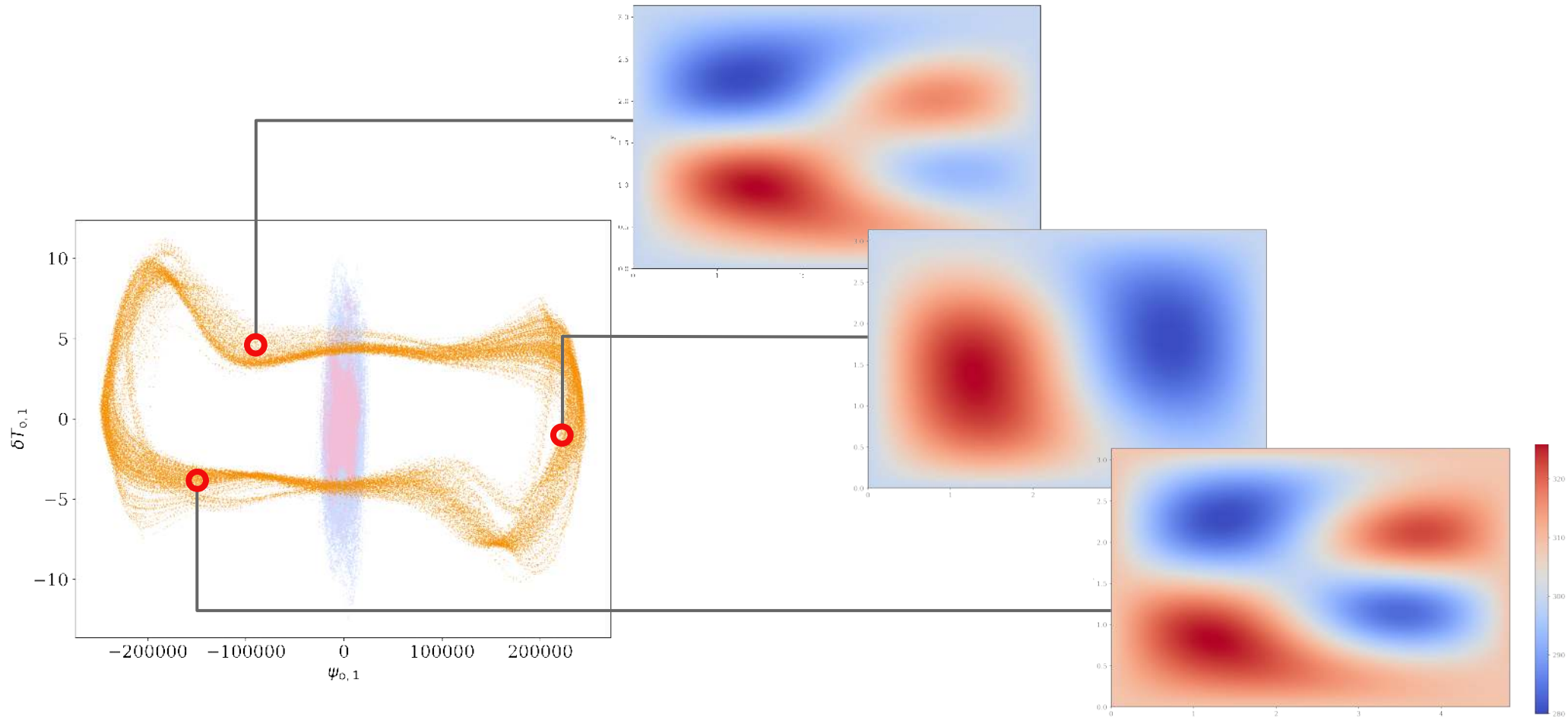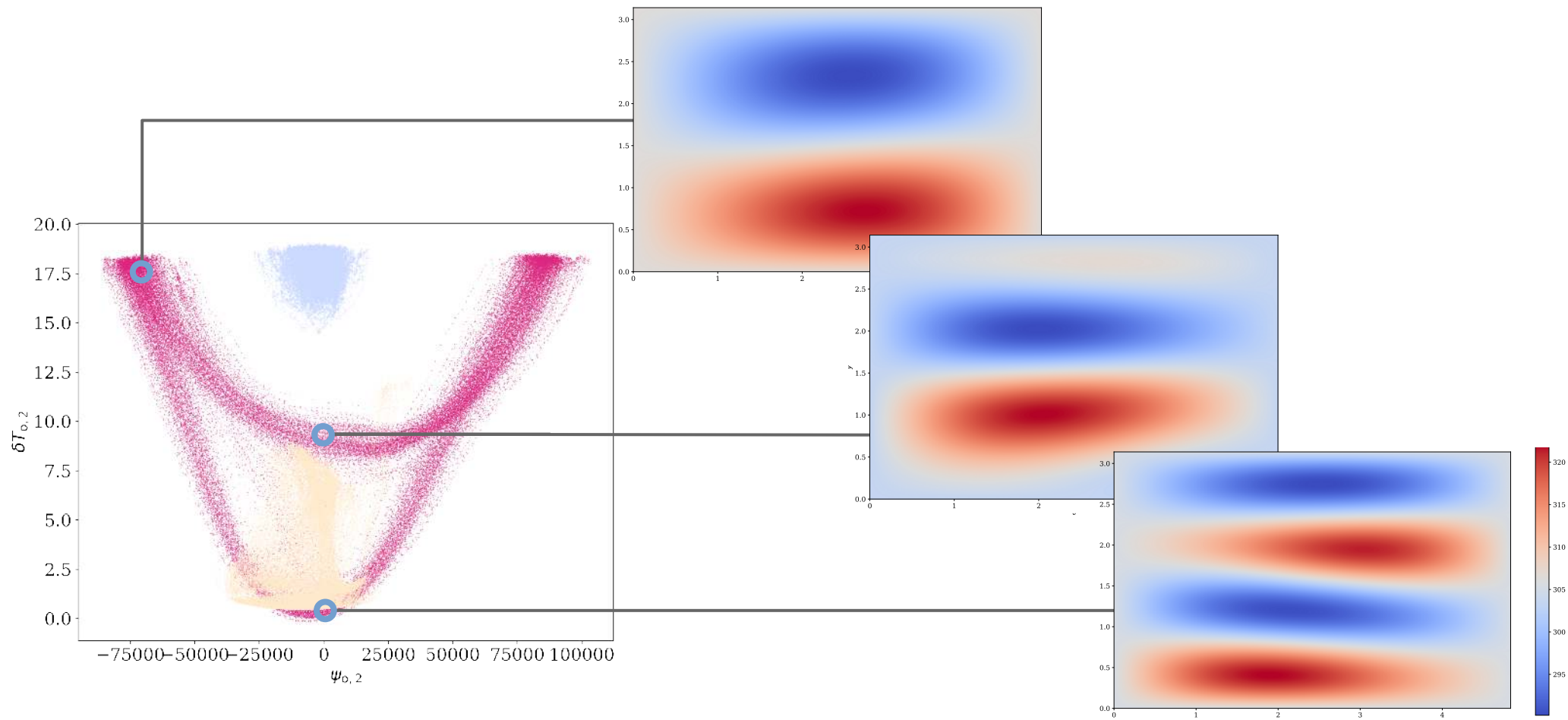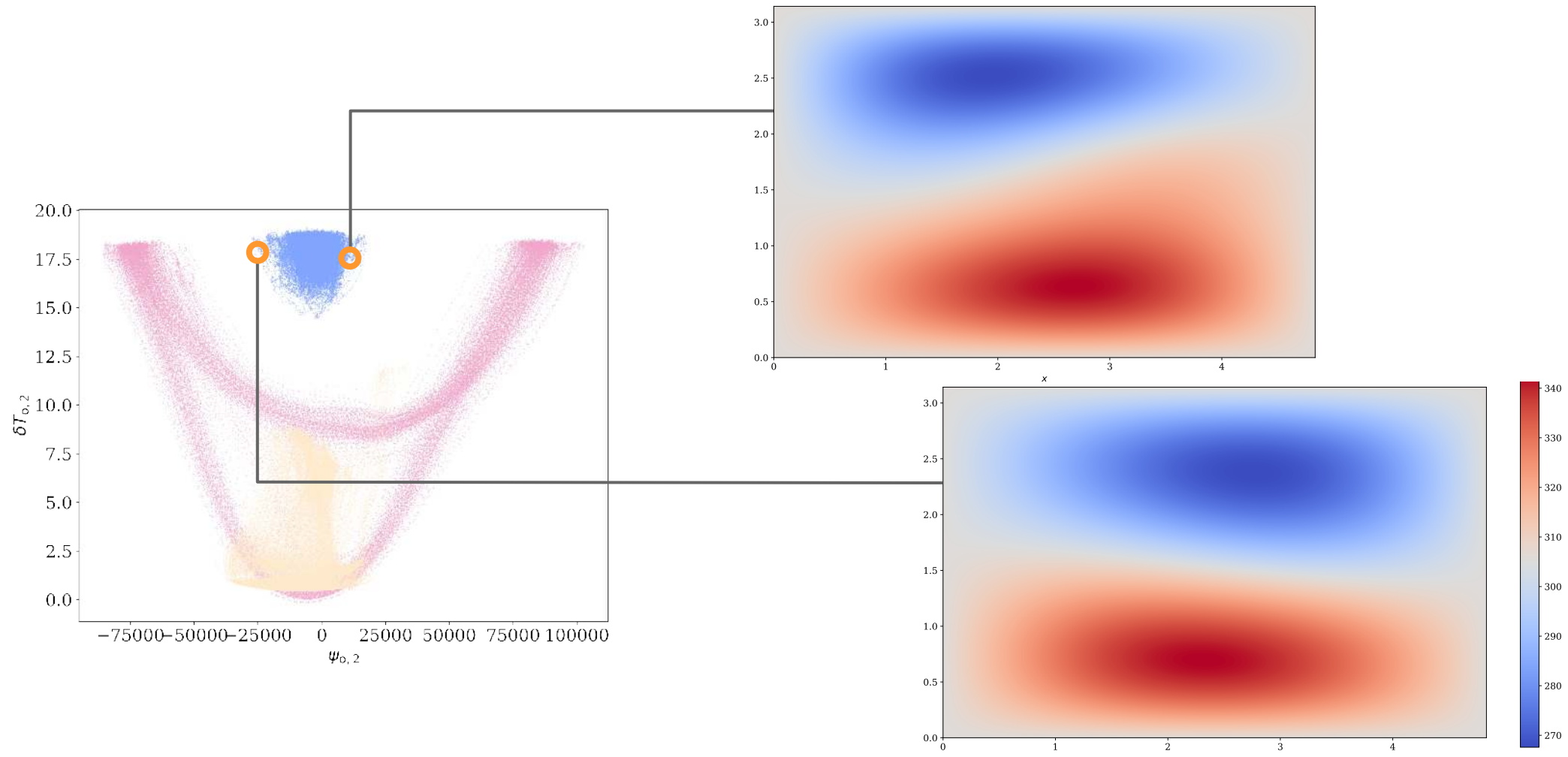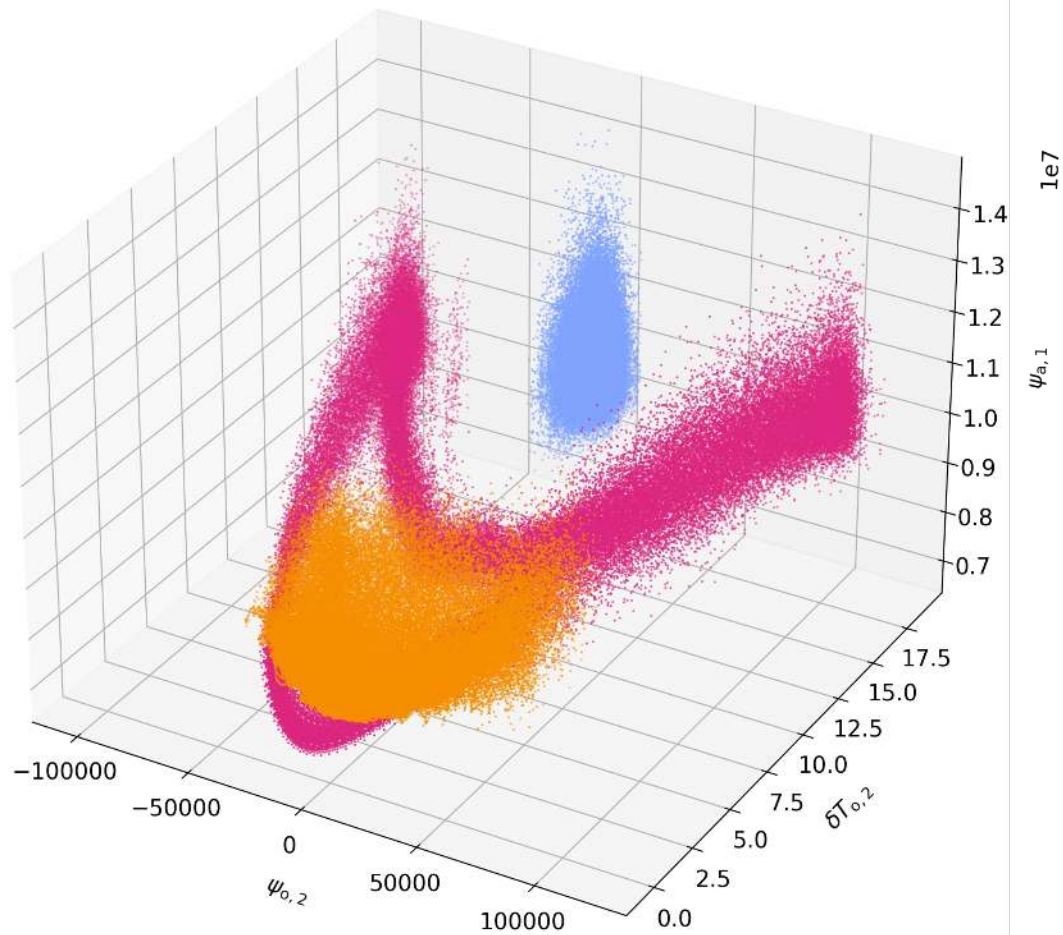# Motivation

QGS Model

Model Results

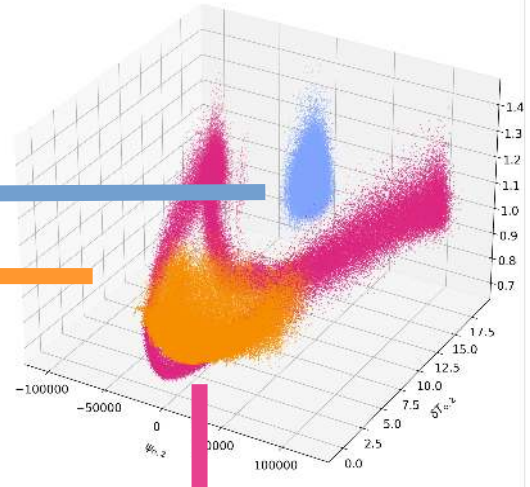ϕ_1

ϕ_2

Model Results

Model Results

Model Results
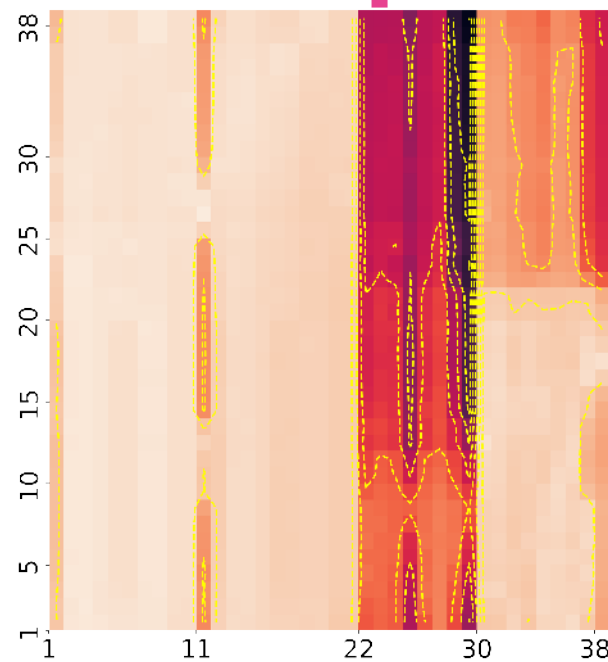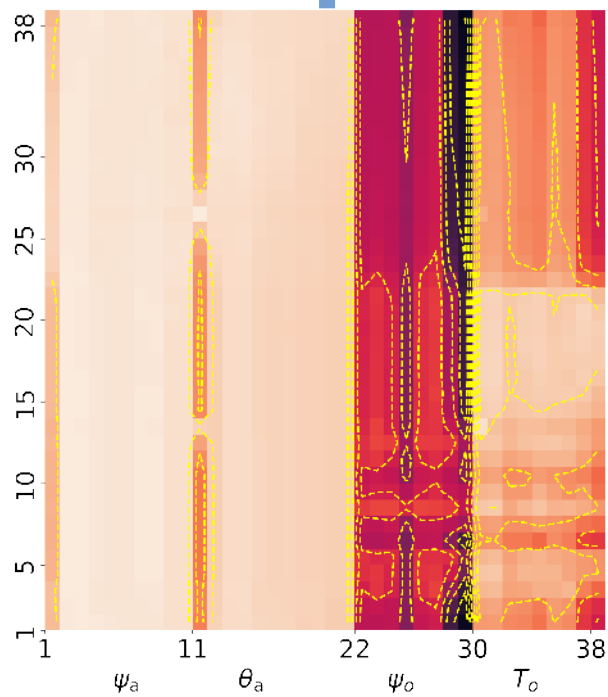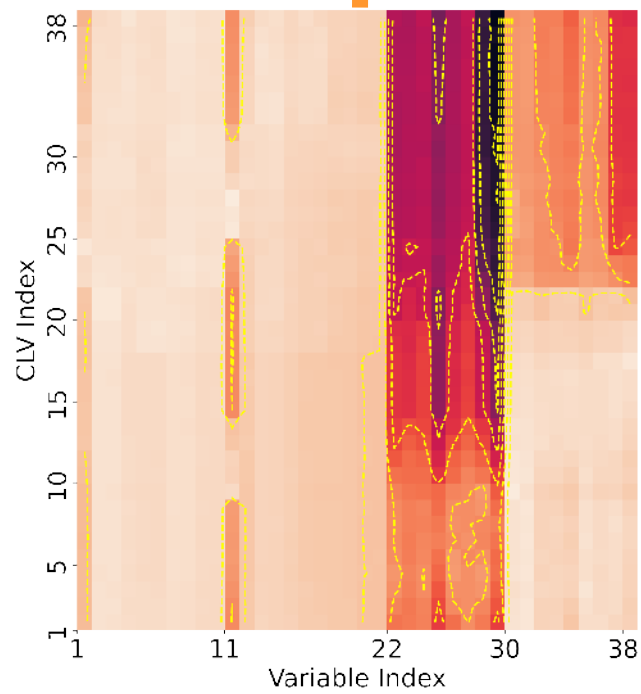
Coupling

Coupling

Coupling

Atmosphere Ocean
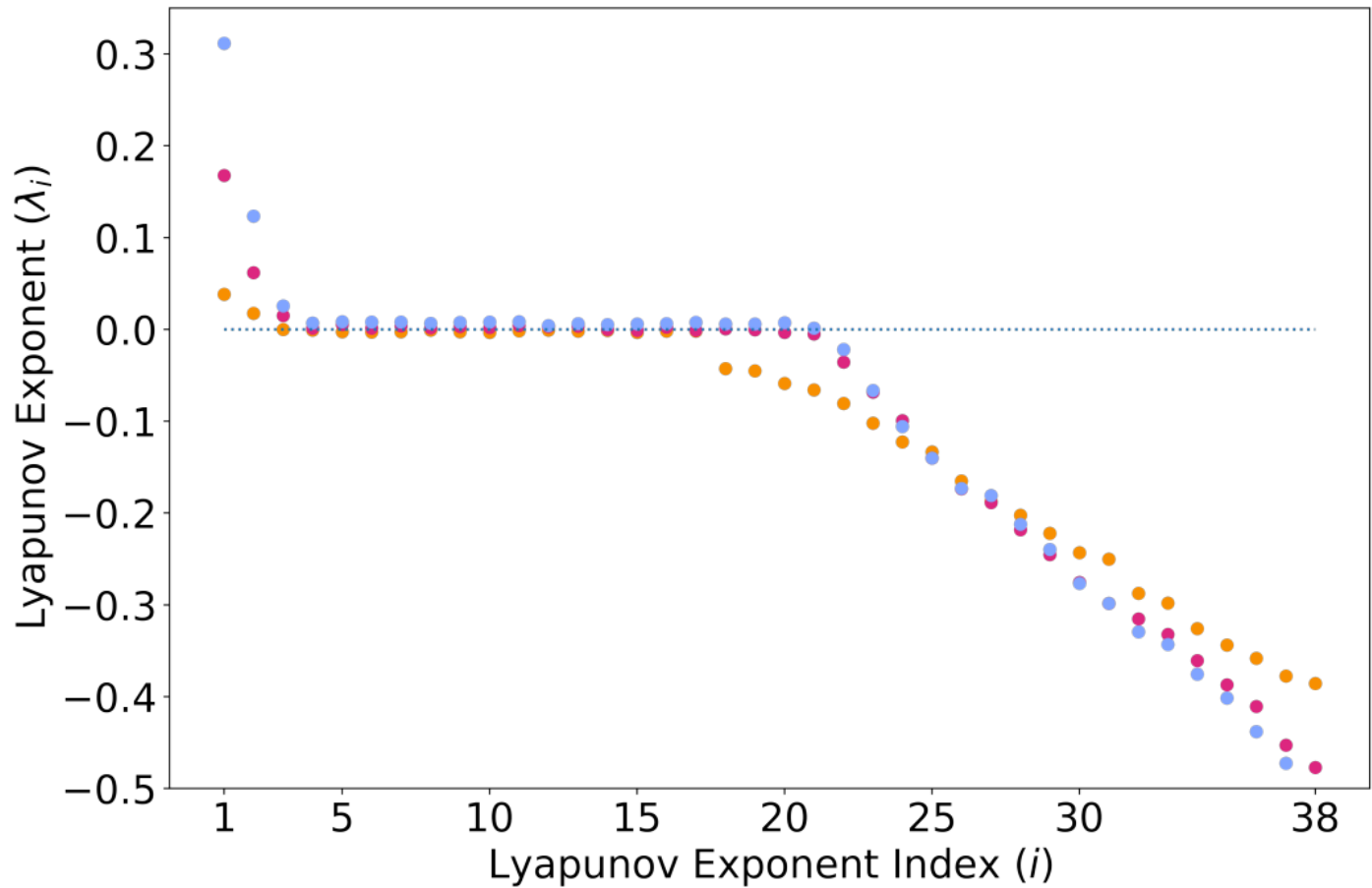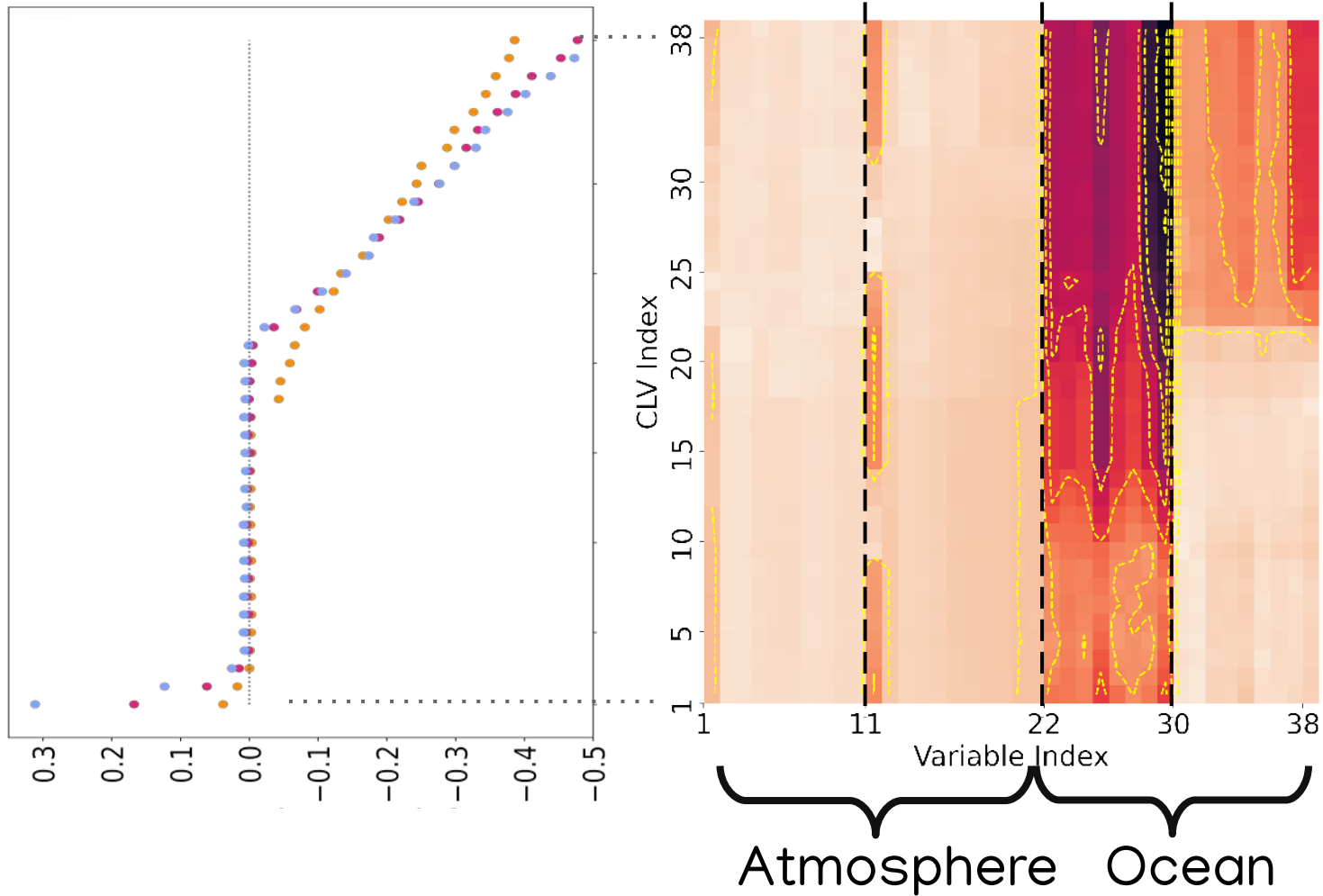
Coupling

Conclusions

Not linearising the σT^4 terms produces multiple equilibria

These equilibria present distinct coupled flows

The coupled flows have different predictability

Multistability in a Coupled Ocean-Atmosphere Reduced Order Model: Non-linear Temperature Equations

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Thank you
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