My PhD Research at the University of Michigan:

Ocean-Atmosphere Modeling

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University of Michigan

PhD Student at the University of Michigan

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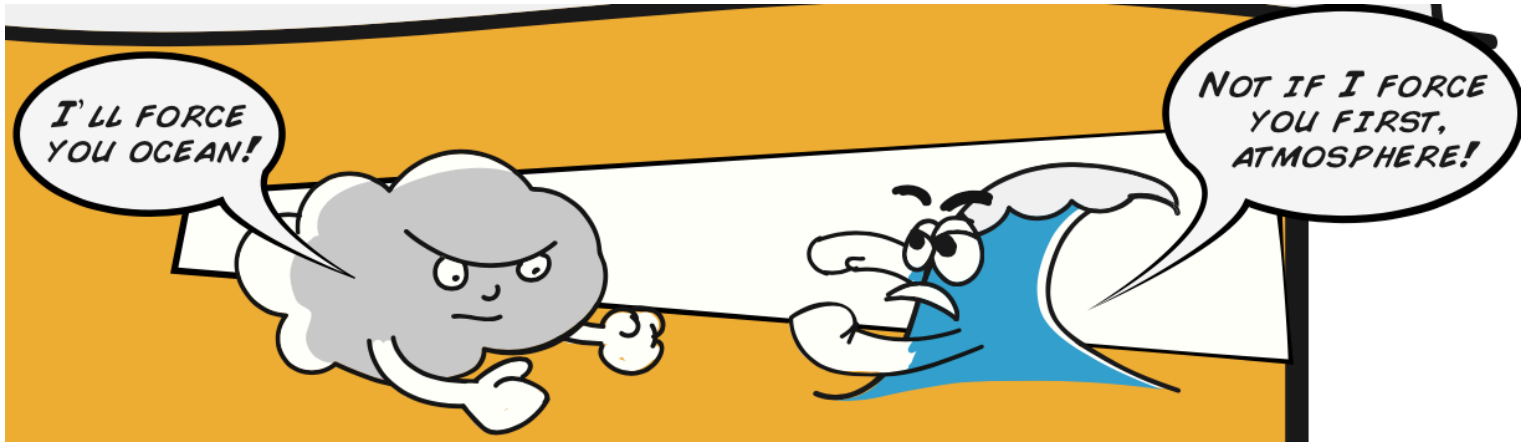
Prof. Brian Arbic's Research Group!

My research: Ocean-Atmosphere Modeling

- **Goal:** to better understand how energy in the ocean affects the atmosphere, and vice versa – can I tell who forces who?



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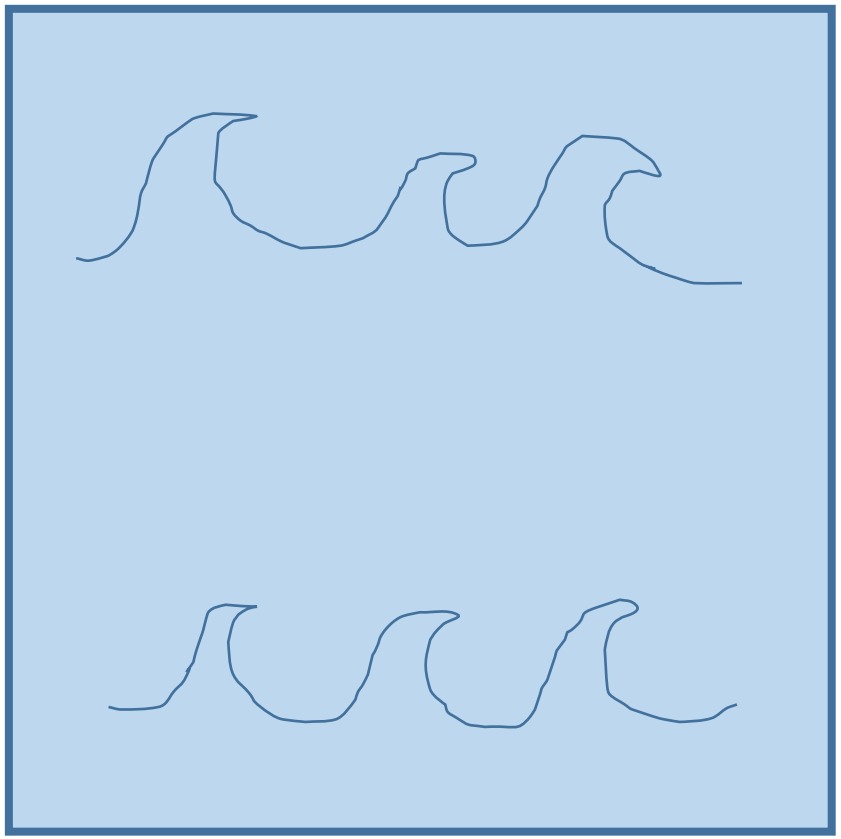

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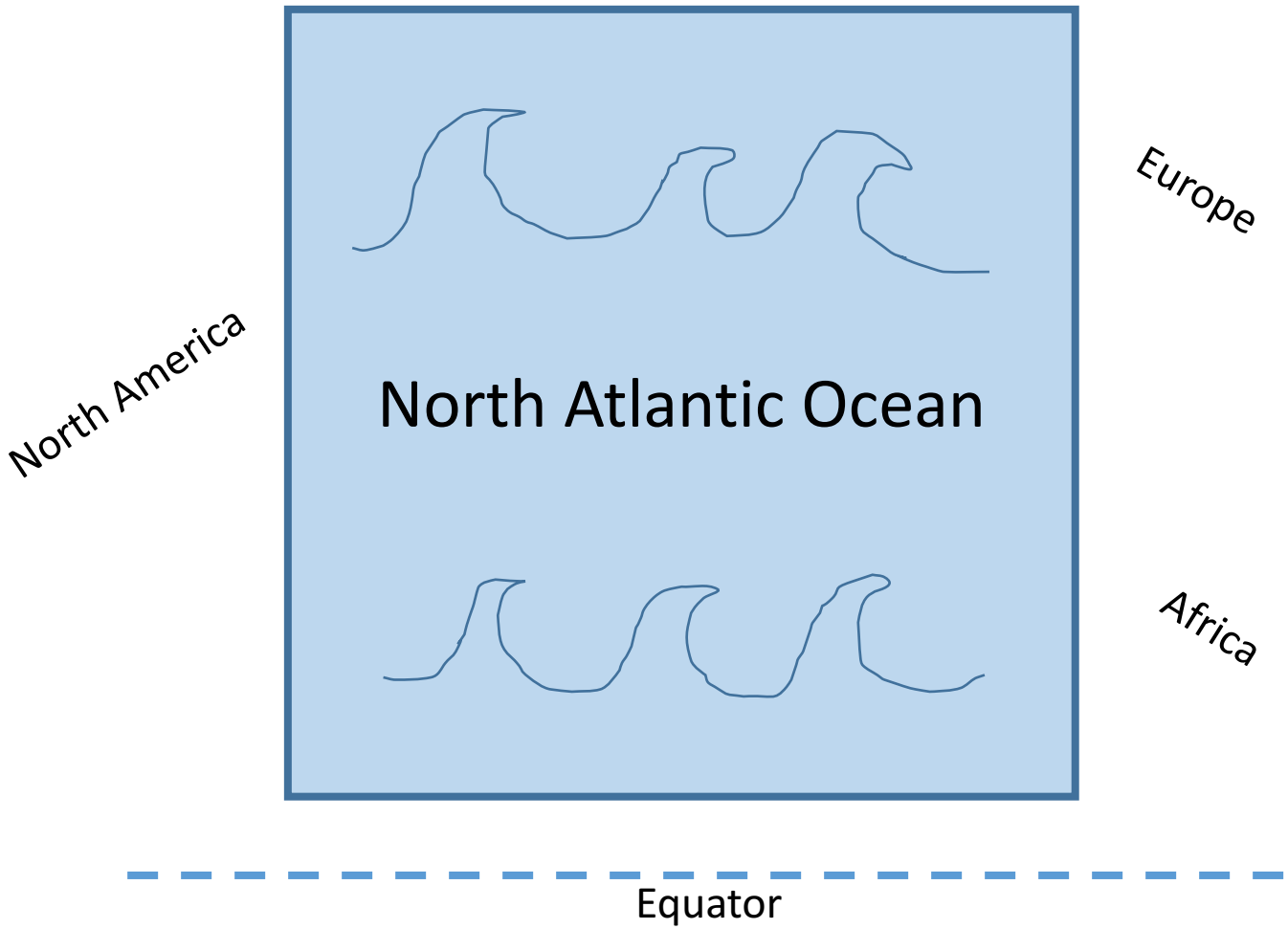

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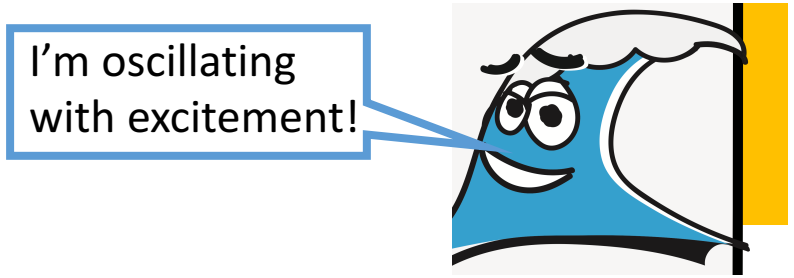
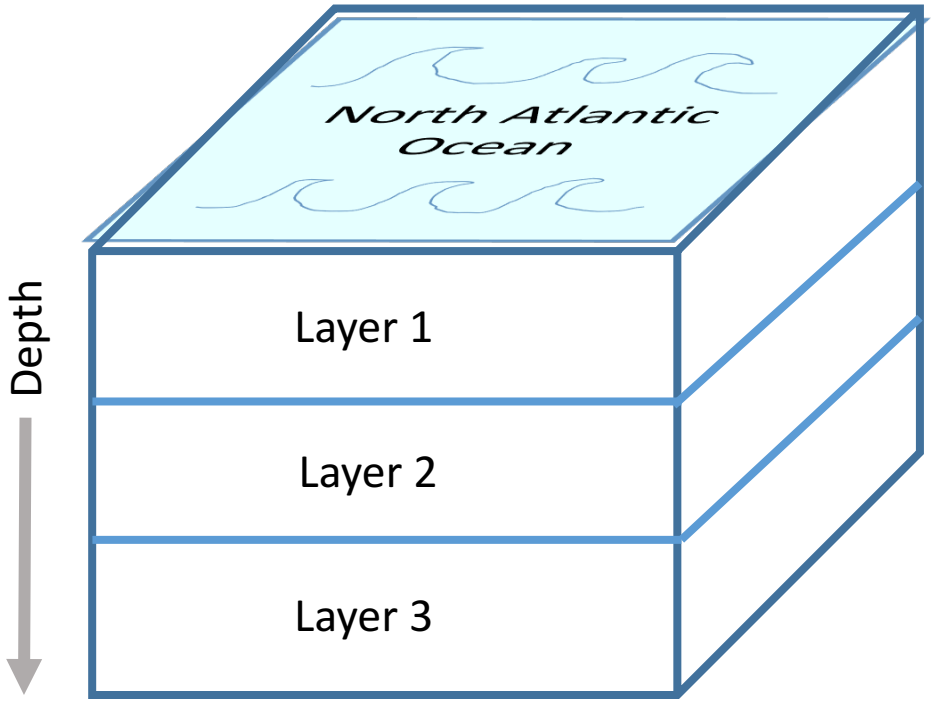
- Regional model: North Atlantic Ocean
- 3-layer model





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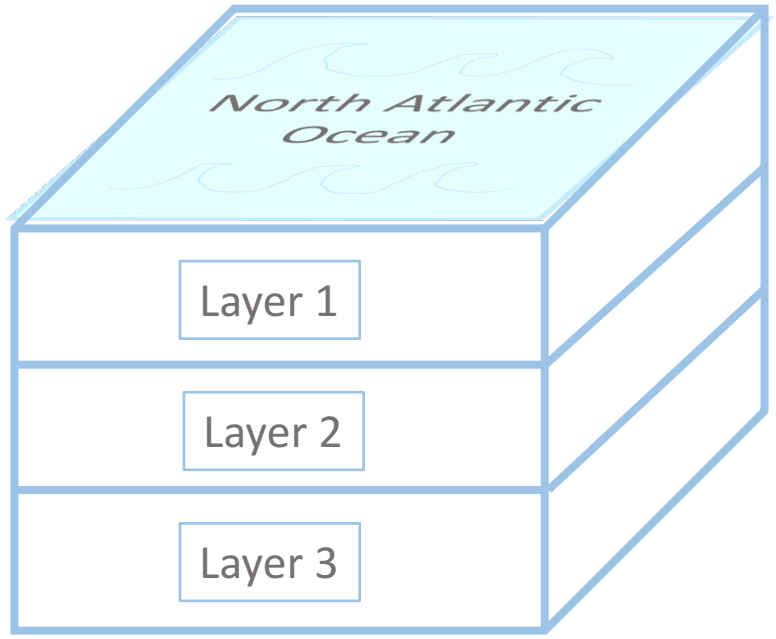

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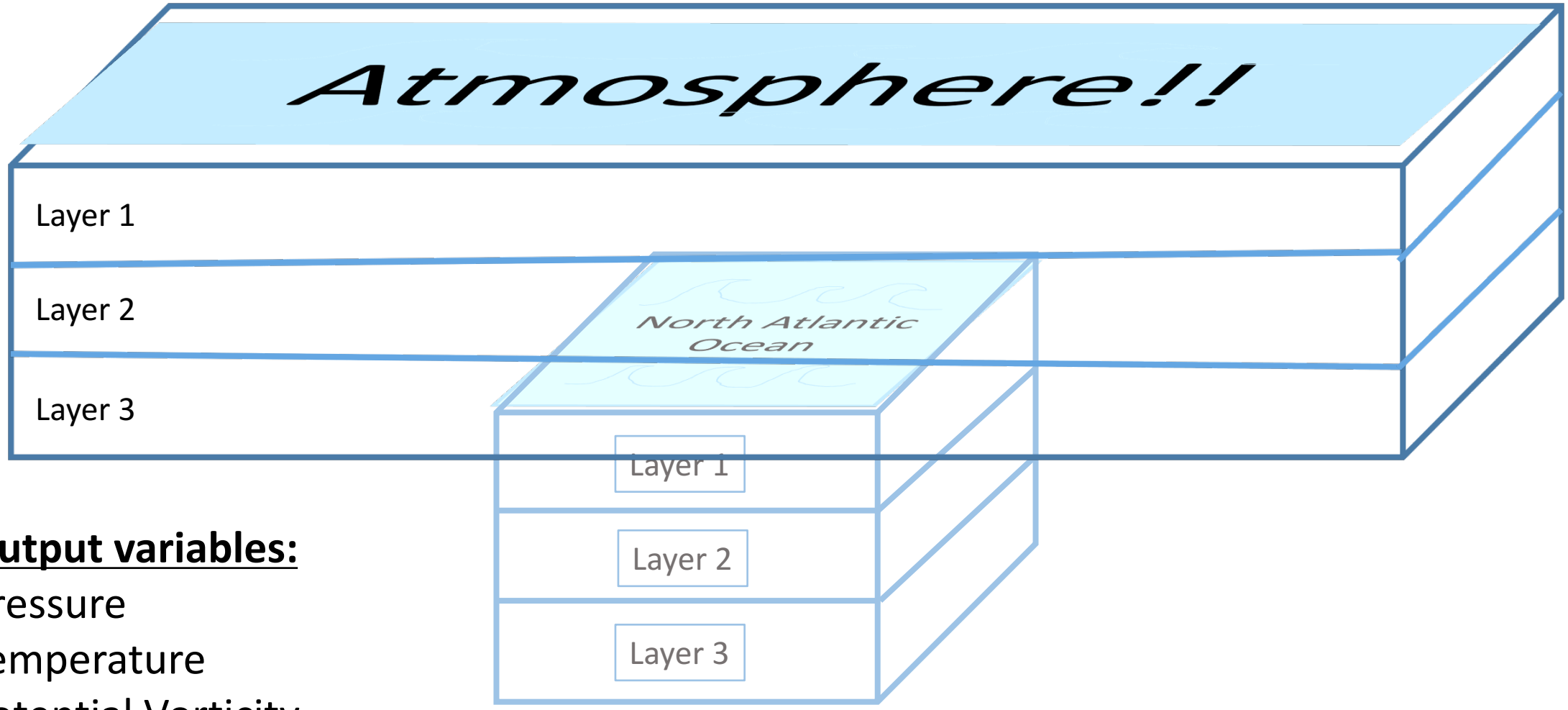

Output variables:

Pressure

Temperature

Potential Vorticity

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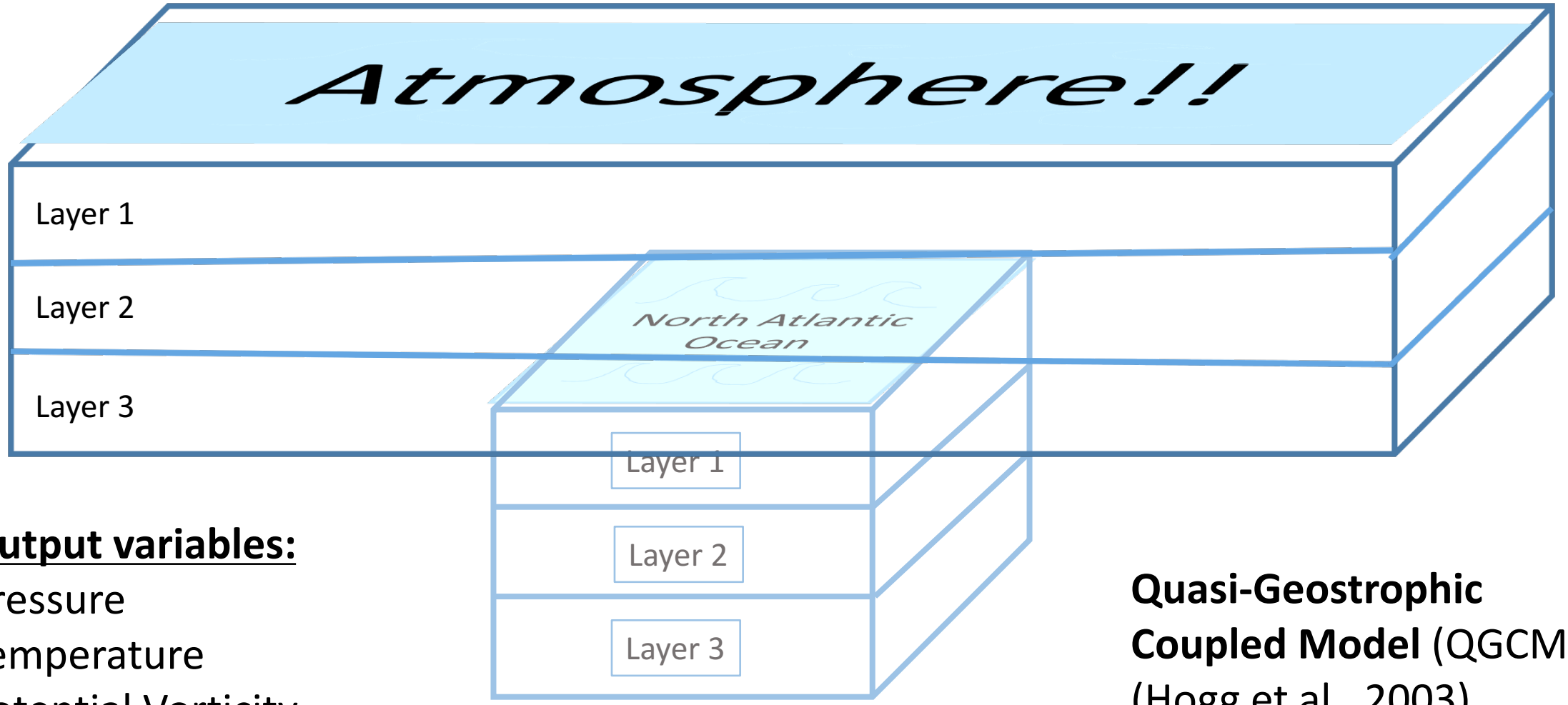

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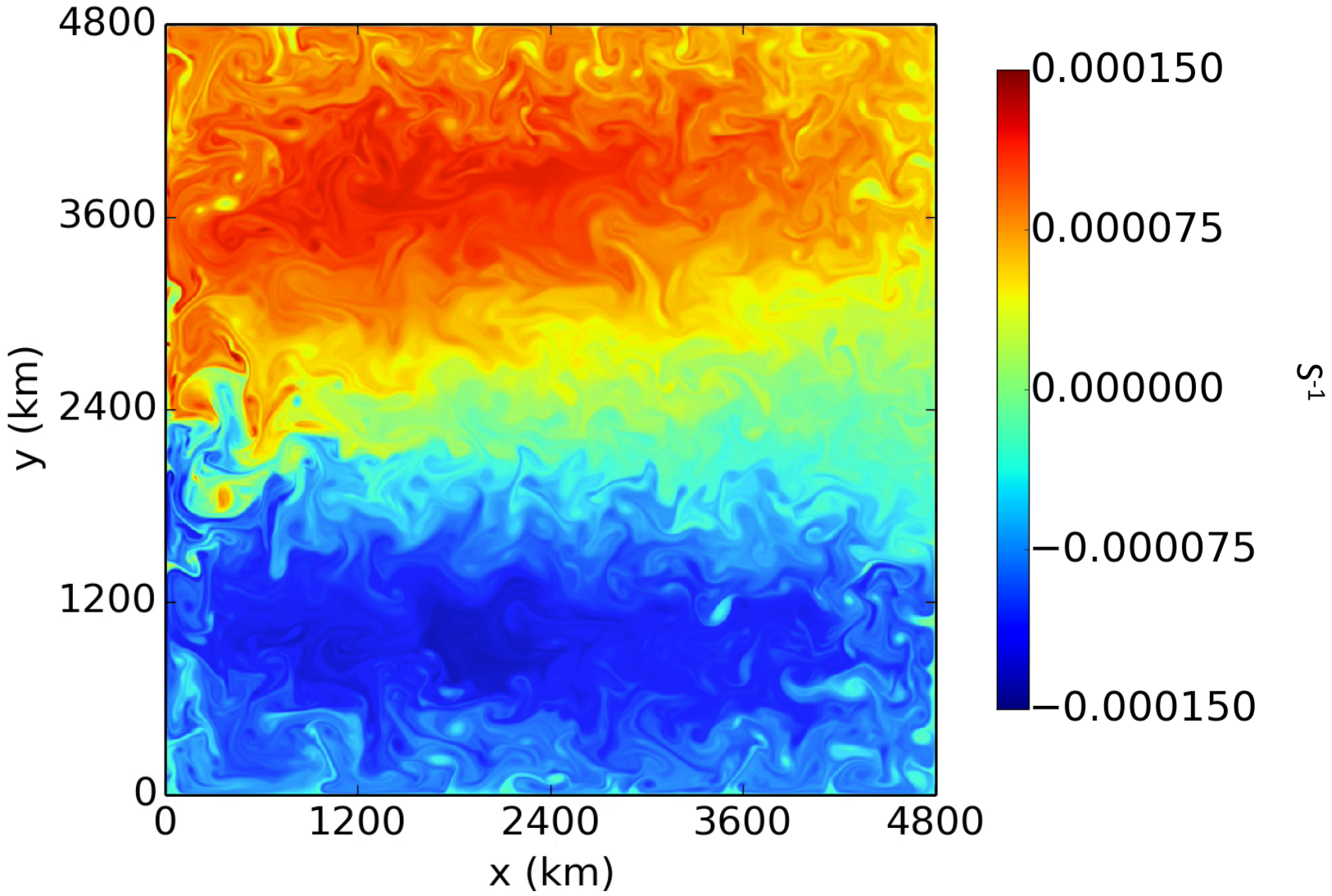
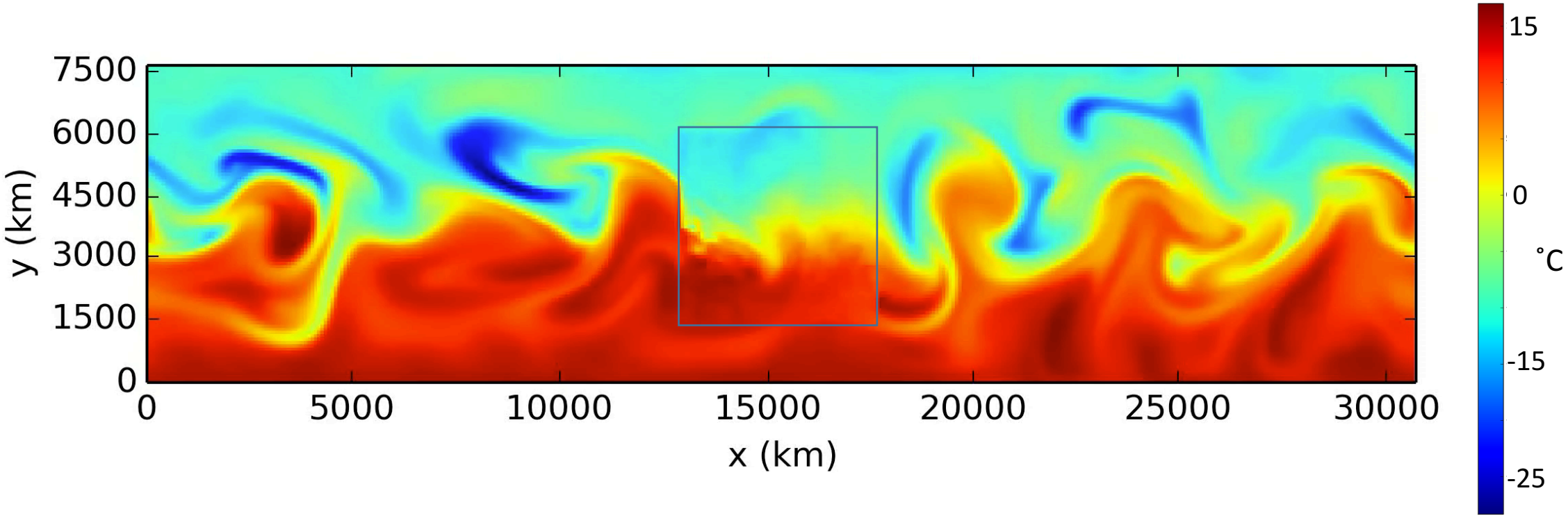
Quasi-Geostrophic Coupled Model (QGCM) (Hogg et al., 2003)

QGCM: Ocean Potential Vorticity



QGCM: Atmospheric Surface Temperature Anomaly



Data Analysis

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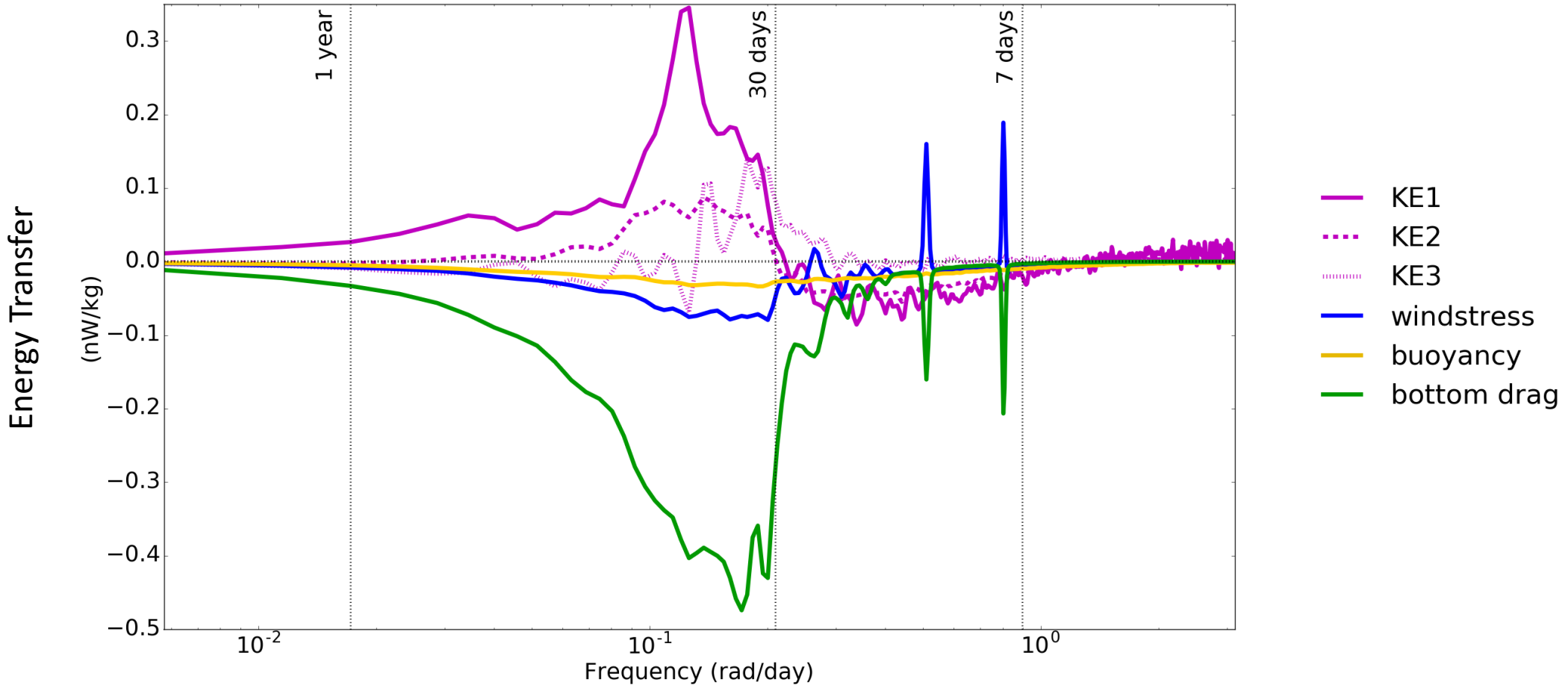
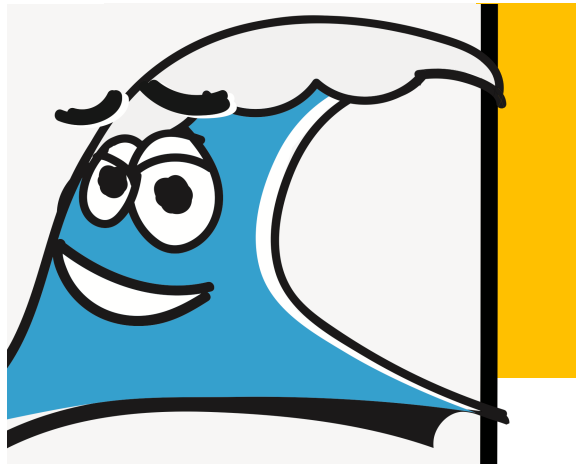
Thank you!