

Go

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## Examples

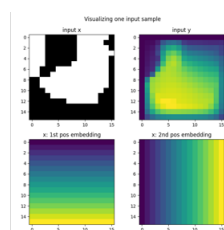
[Data](#)[Layers](#)[Losses](#)[Models](#)[Training and Meta-Algorithms](#)**Installing NeuralOperator****User Guide****API reference****Examples**[Data](#)[Layers](#)[Losses](#)[Models](#)[Training and Meta-Algorithms](#)**NeuralOperator Developer's Guide**

# Examples

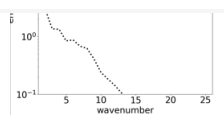
A gallery of interactive examples that showcase how the tools we provide in **neuraloperator** can be applied to a variety of problems. Check out the [User Guide](#) for more detailed information on the theory behind neural operators.

## Data

Examples of NO layers in action.



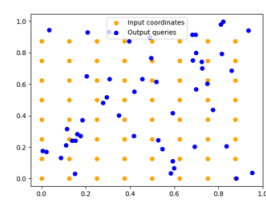
A simple Darcy-Flow dataset



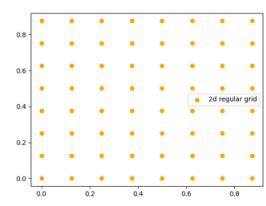
A simple Darcy-Flow  
spectrum analysis

## Layers

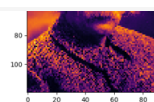
Examples of individual layers which comprise operators or parts of operators for composition into end-to-end models.



Visualizing neighbor  
search



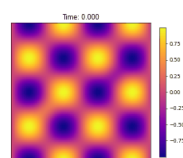
Grid embeddings



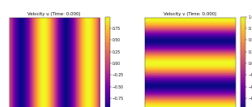
Visualizing discrete-continuous convolutions

## Losses

Examples demonstrating the functionality available in **neuralop.losses**



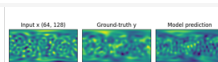
A simple finite-difference solver



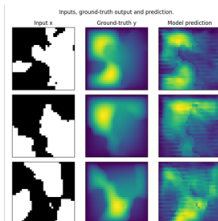
A Numerical Solver for Burgers' Equation in 2 Dimensions

## Models

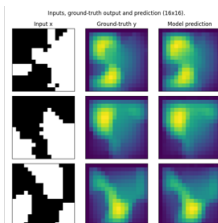
Examples showcasing our end-to-end NO architectures.



Training a SFNO on  
the spherical Shallow  
Water equations



U-NO on Darcy-Flow



Training an FNO on  
Darcy-Flow

## Training and Meta- Algorithms

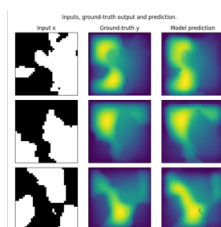
Examples to highlight  
our flexible **Trainer**  
module and the meta-  
algorithms built on top  
of it.



Using torchtnt to  
count FLOPS



Checkpointing and  
loading training  
states

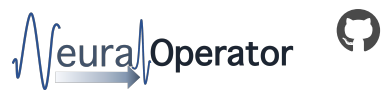


Training an FNO with  
incremental meta-  
learning

Download all examples in  
Python source code:  
[auto\\_examples\\_python.zip](#)

Download all examples in  
Jupyter notebooks:  
[auto\\_examples\\_jupyter.zip](#)

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