Organizing lagrangian datasets into ragged arrays eases data engineering and analysis!

Accelerating the use of Lagrangian data with Clouddrift

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1 Introduction

• Lagrangian data sometimes refers to oceanic and atmosphere information acquired by observing platforms drifting within the flow they are embedded in.

2 Datasets

- MoSAiC, sea ice trajectories
- GDP, ocean drifter trajectories
- HURDAT2, cyclone trajectories
- Many more...

3 Scope / Features

- Working with trajectories of varying length
- Provide functions and methods for scientific analysis of Lagrangian data
- Process publicly available Lagrangian datasets into ragged array zarr archives
- Making cloud-optimized ragged array datasets easily accessible

4 Data Structure





