

# Physical Oceanography

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**Title: Horizontal velocity in the central Arctic from in-situ observations**

Data: In situ observations

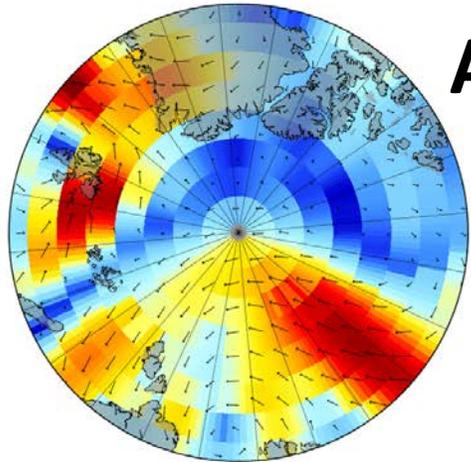
# Horizontal velocity in the central Arctic from in-situ observations

**Main question:**  
What is the vertical atmosphere-ice-ocean coupling and Arctic Ocean regional upper ocean circulation?

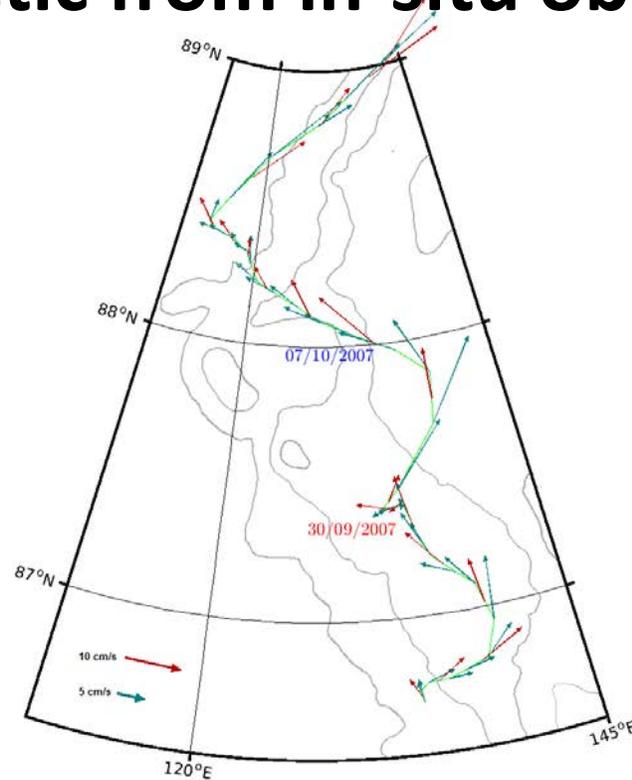
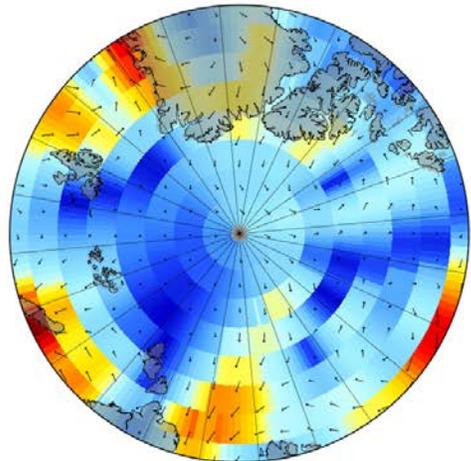
**Data:**  
In-situ ocean current velocity  
(Acoustic Doppler Current Profiler)

- vessel-mounted (ships, various years)
- autonomous buoy (ITAC, 2007)

a) Wind vectors 07/10/2007



b) Wind vectors 30/09/2007



c) Ice velocities and surface water velocities (23m) averaged daily

**Ice drift track**  
**Ice velocity**  
**Ocean velocity (23 m)**