

Near-inertial internal waves in the Black Sea

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DATA

Central west part: measurements of currents at 100 m

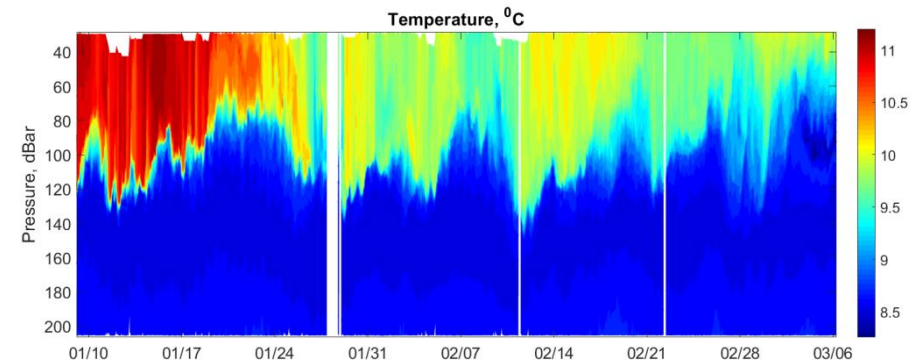
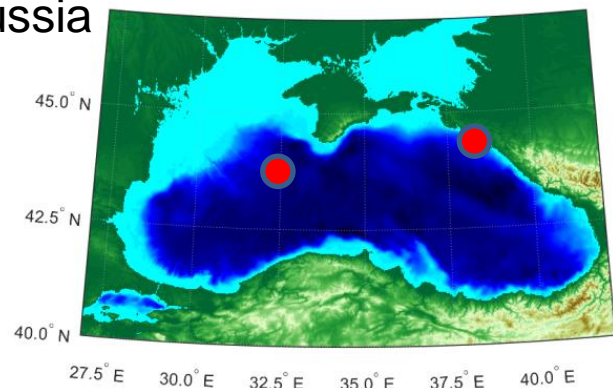
December 2016 – October 2017

$\Delta t = 15$ min

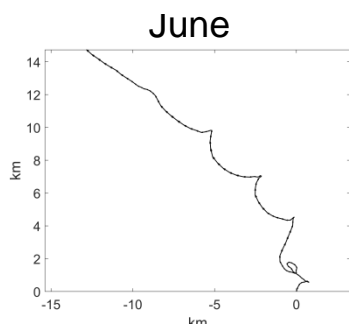
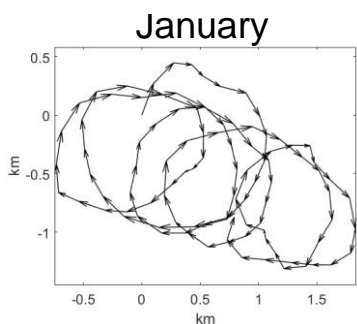
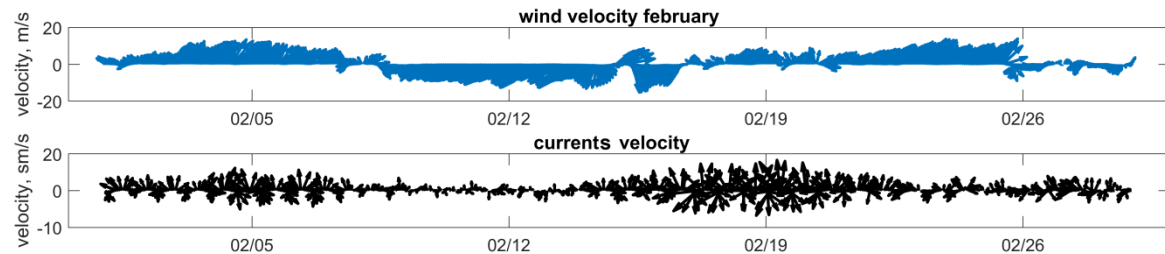
N-E shelf: vertical profiles of T, S, ρ and currents

$\Delta t = 2-3$ h

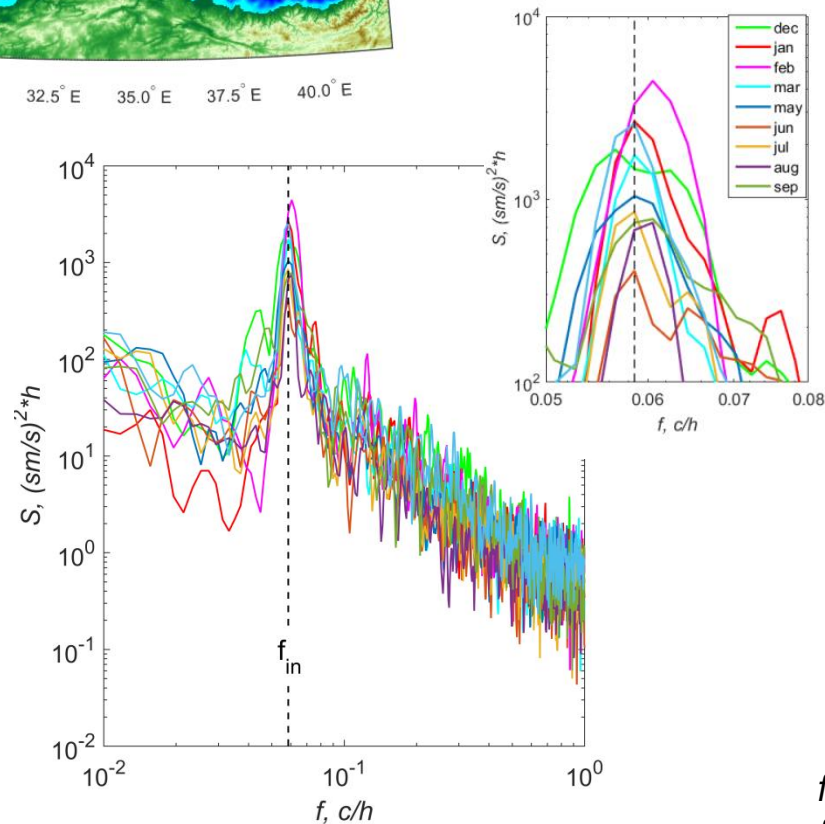
Since 2014-ongoing



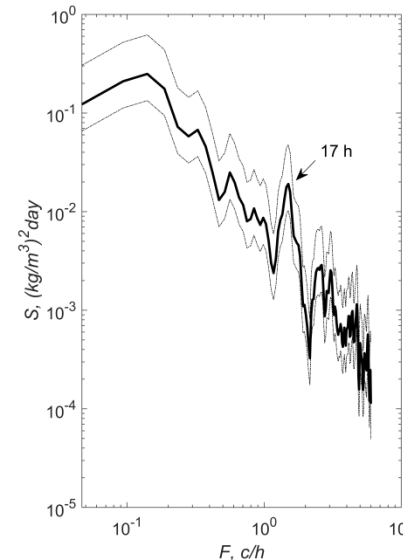
Temporal variability of temperature structure



Examples of near-inertial velocity hodographs



Frequency spectra of velocity u-component at 100 m depth for different seasons



Frequency spectra of density fluctuations at 120 m depth

$$f_{in} = 0.0577 \text{ c/h (17.34 h)}$$

$$f_{obs} = 0.058 - 0.06 \text{ c/h (17.24 - 16.67 h)}$$