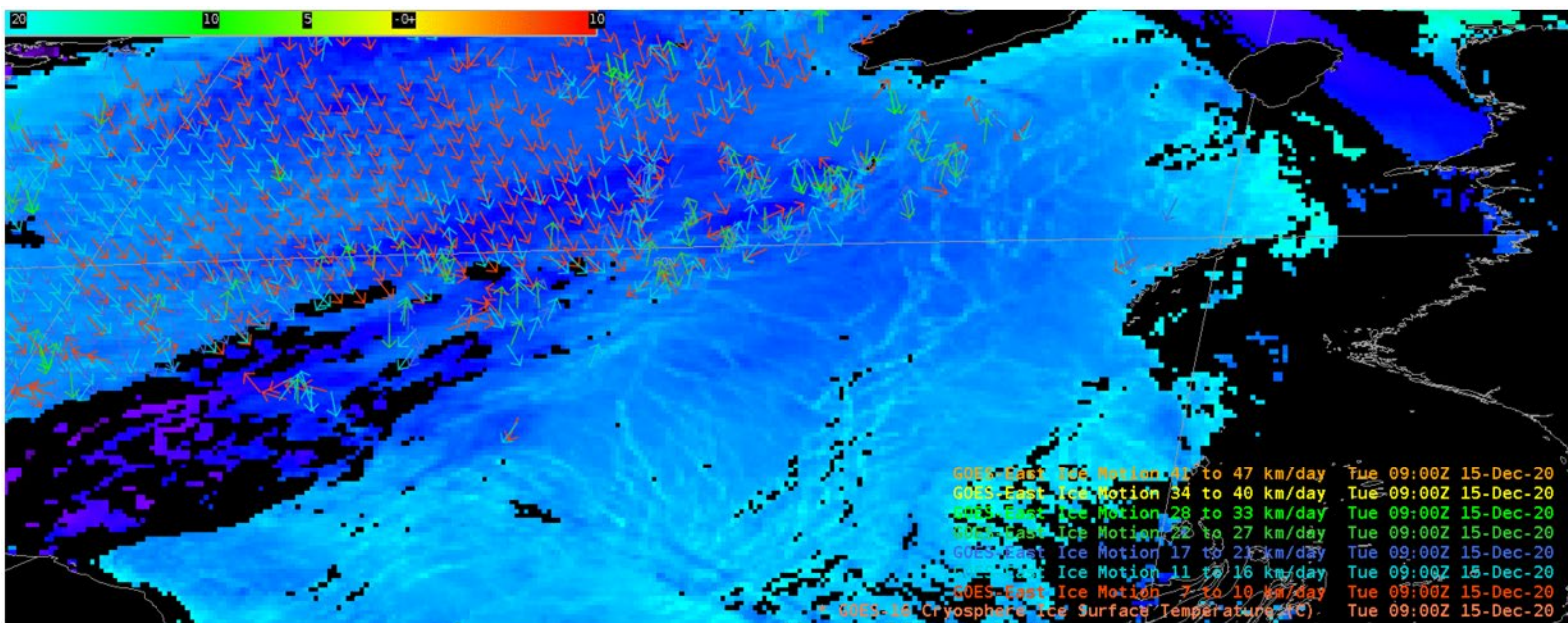


# Ice Motion Quick Guide



Ice Motion Vectors, 0900 UTC 15 December 2020, plotted over Ice Surface Temperature

## Useful Links

Advanced Theoretical Basis  
Document: [Link](#)

## Why is Ice Motion Important?

Ice Motion can be used to support concerns related to navigation, fisheries, transportation. It is produced over oceans and lakes where ice exists. Motion can be caused by currents and winds.

## Operational Information

**How is Ice Motion computed:** Motion is derived from a retrieval based on the cross-correlation between images. Information is created up to latitudes 67°N/67°S.

**Resolution:** FD imagery is produced at full spatial resolution, with values every 3 hours.

**AWIPS:** Sampling in AWIPS will give you the speed, direction, and initial latitude/longitude

## Things to keep in mind

**Accuracy:** Ice Motion is produced for every ice-covered pixel in water regions that are confidently clear. GOES-R Ice Mask and Cloud Mask fields are used.

**24-hour data:** The algorithm uses Band 2 (0.64  $\mu\text{m}$ ) and Band 14 (11.2  $\mu\text{m}$ ) on the Advanced Baseline Imager (ABI).

**Algorithm accuracy:** Resolution of 15 km, with an accuracy of 7.5 km; Measurement precision is 30°, and 3 km/day. Measurement accuracy is 22.5°, and 3 km/day. Calculated speeds range from 0 to 0.6 m/s.