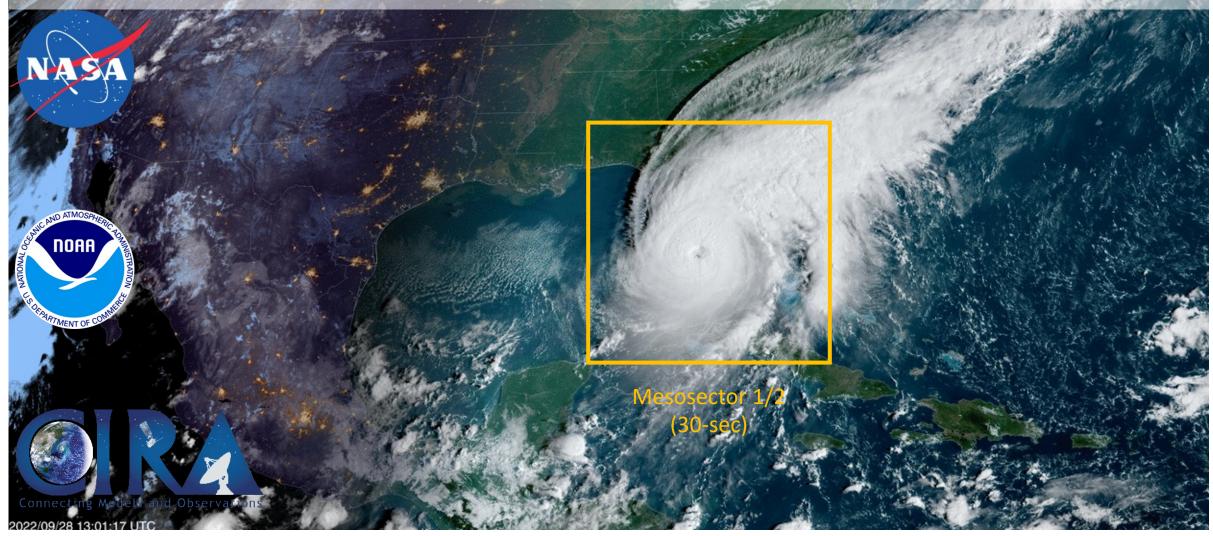
Optical Flow Applications at CIRA

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Evaluation of OF Temporal Interpolation

- OF temporal interpolation provides unprecedented proxy fine temporal resolution imagery over much larger domains than native ABI alone.
- Temporal interpolation also improves compositing algorithms which blend imagery from multiple instruments scanning at different times.
- Research at CIRA aims to find the best practices for computing OF to render the most accurate temporal interpolation outputs.
- To evaluate performance, we compared 5-min to 30-sec interpolated imagery from the GOES-R CONUS sector to overlapping 30-sec refresh mesosectors considered Ground Truth.
- Interpolation algorithm has tunable settings for OF smoothness (α) and adherence to tracking consistent brightness gradients (λ) which we are studying as a function of temporal interpolation performance.