

Supplementary Material

1 SUPPLEMENTARY TABLES AND FIGURES

.

1.1 Figures

REFERENCES

Vanhoutte-Brunier, A., Fernand, L., Ménesguen, A., Lyons, S., Gohin, F., and Cugier, P. (2008). Modelling the *Karenia mikimotoi* bloom that occurred in the western English Channel during summer 2003. *Ecological Modelling* 210, 351–376. doi:10.1016/j.ecolmodel.2007.08.025

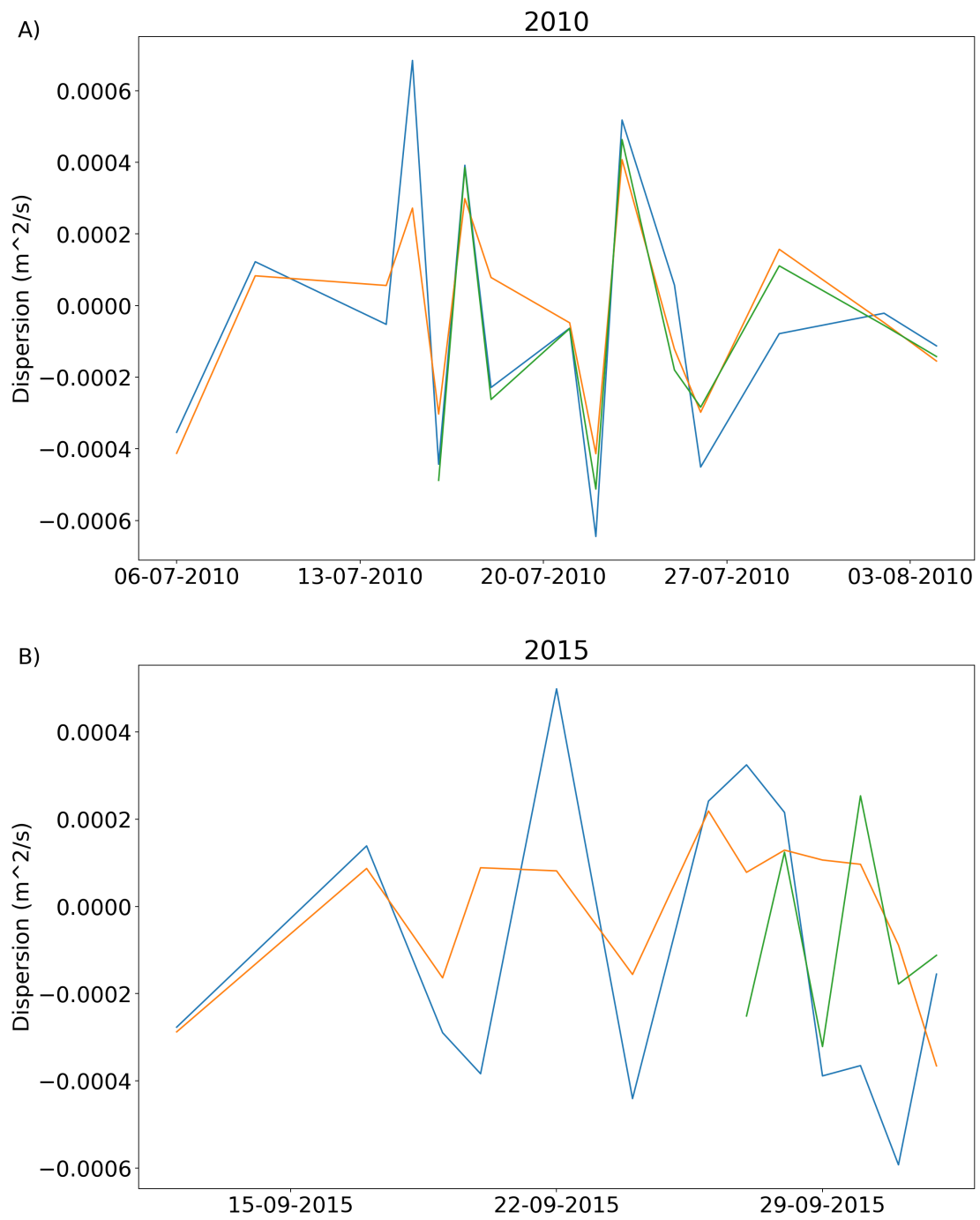


Figure S1. Dispersion for the modelled (orange - first release, green second release) and observed (blue) polygons in 2010 (A) and 2015 (B).

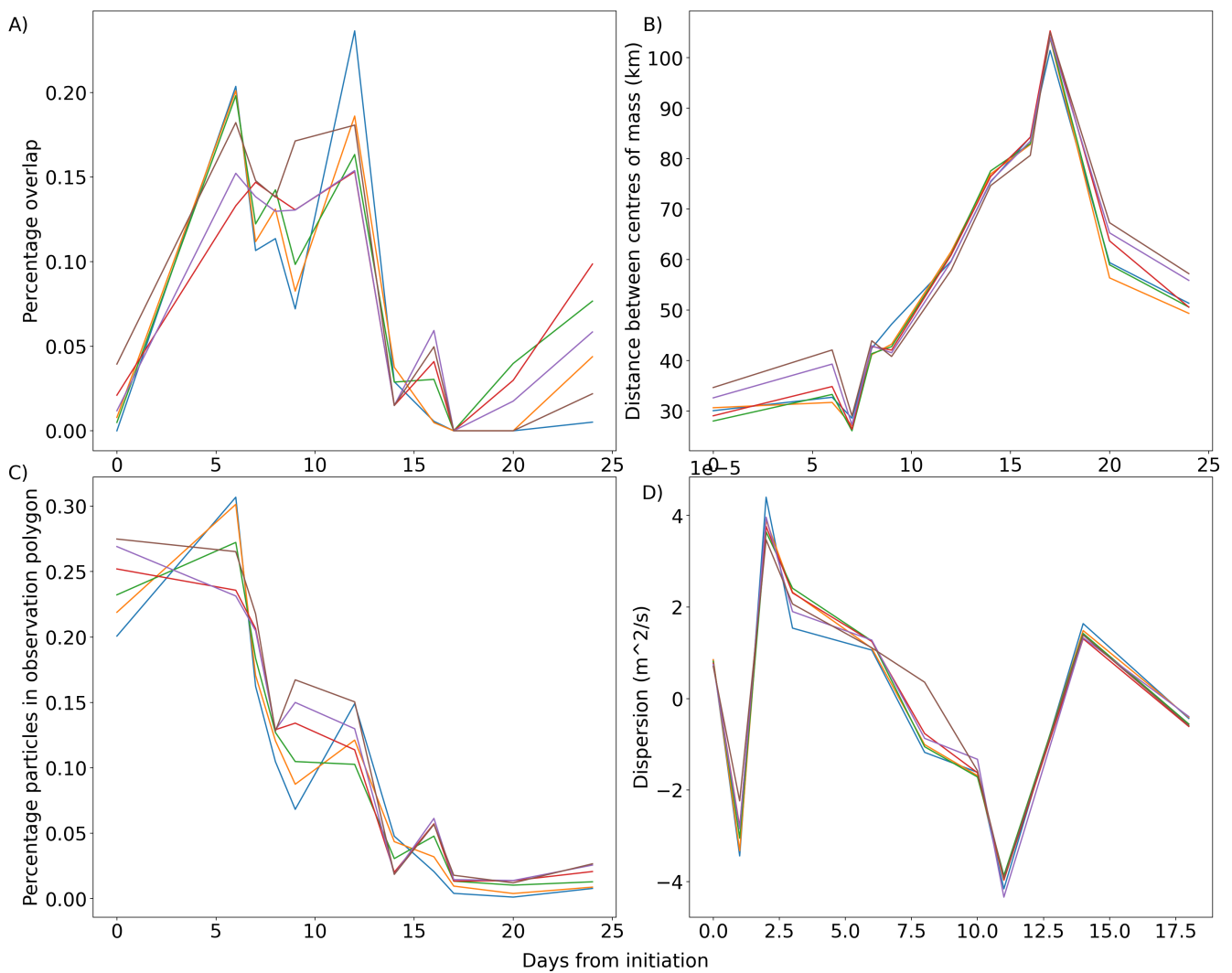


Figure S2. Sensitivity to different start times of the 2010 run. The particle model was started across a 6 hour period at hourly intervals and the corresponding statistics for every run plotted. A) Percentage overlap, B) Centre of Mass separation, C) percentage of particles in observed polygon, and D) dispersion.

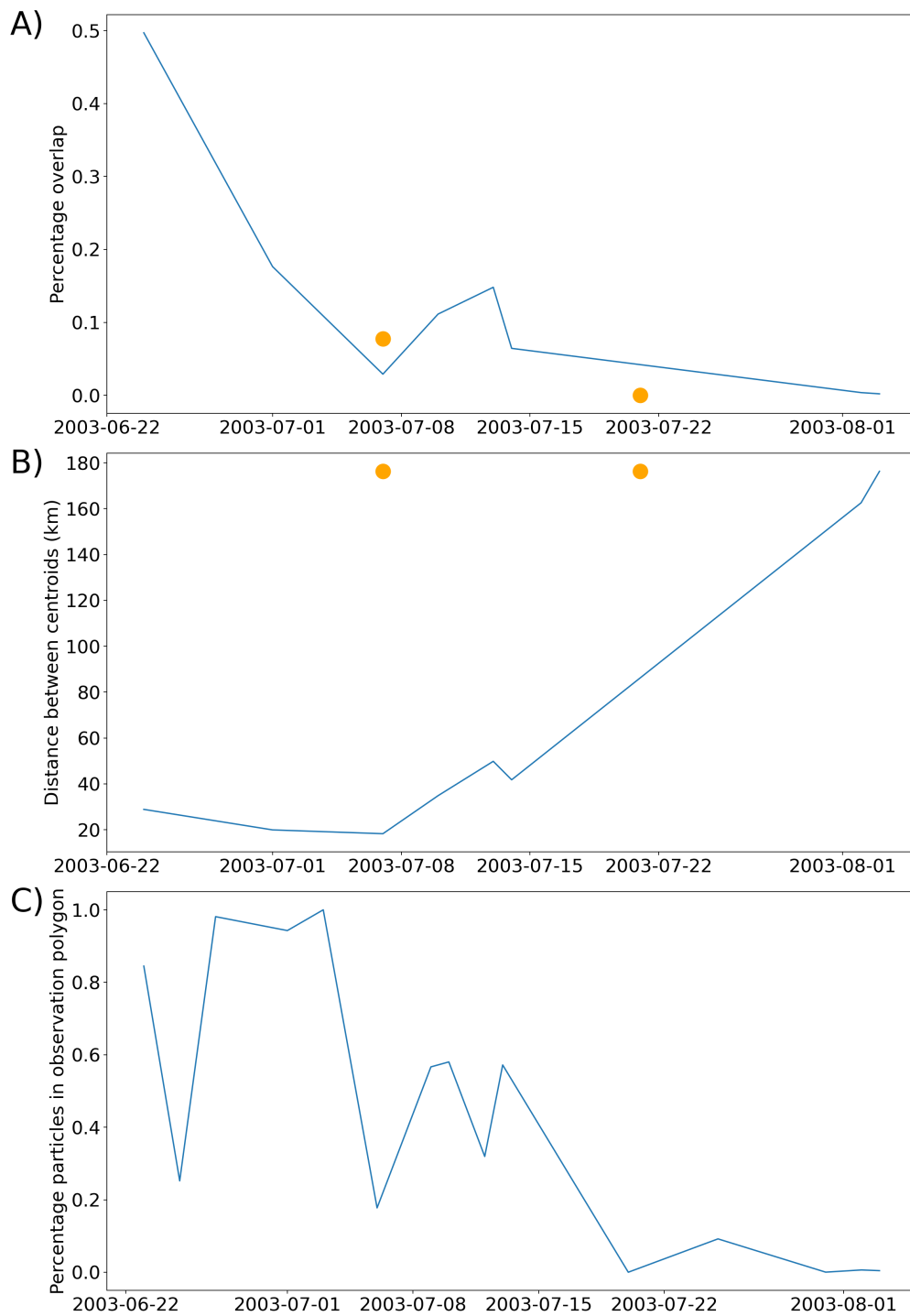


Figure S3. Statistics for the ifremer model run in 2003 compared to cci CHI data. Percentage overlap (A), centroid separation (B), and percentage particles within observation (C). For the first two metrics estimates have been made for the Vanhoutte-Brunier et al. (2008) eulerian results and shown in orange.

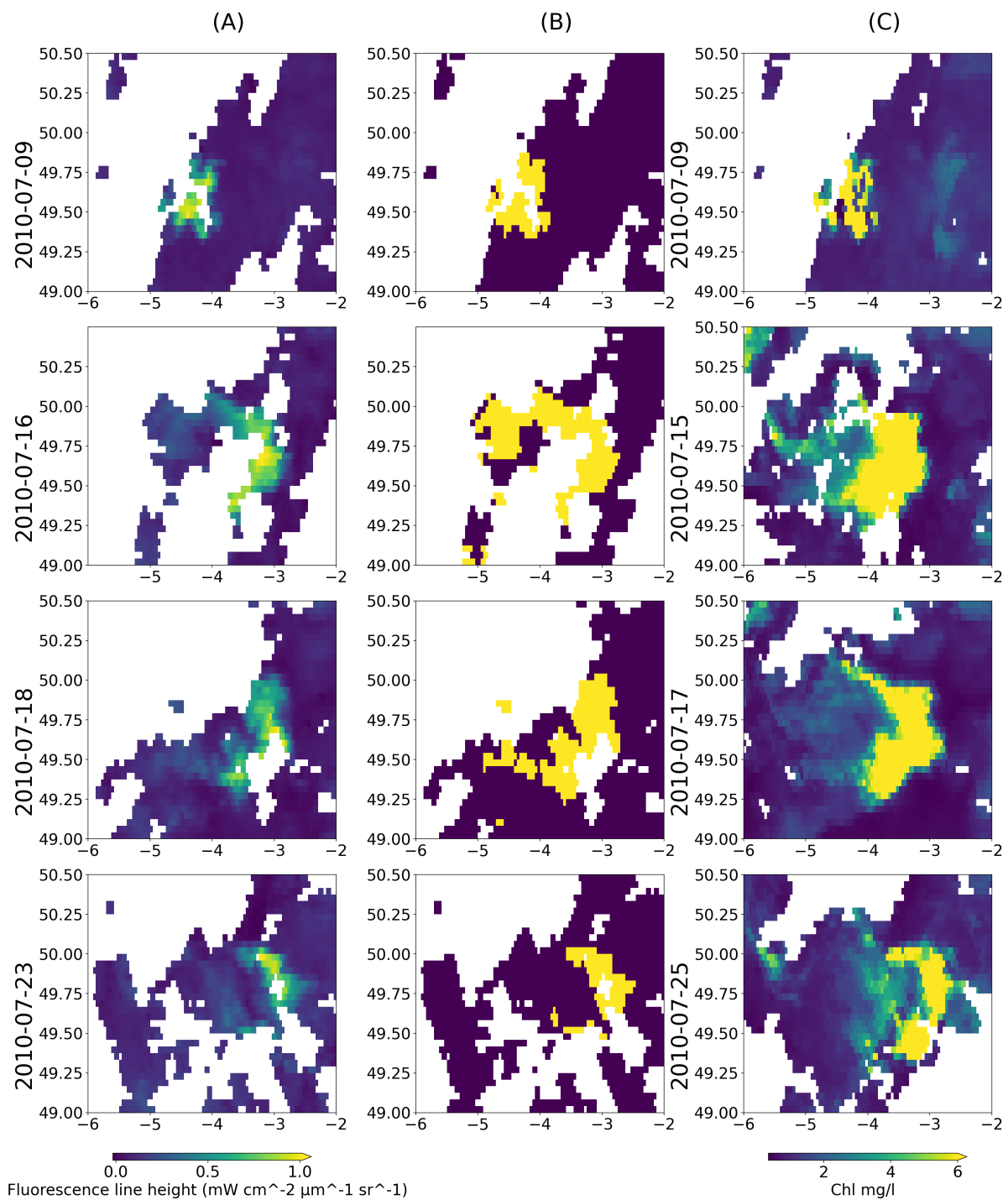


Figure S4. Normalized Fluorescence Line Height (A) and $R_s - NFLH$ (B) both from data retrieved from <https://oceancolor.gsfc.nasa.gov> (accessed 03/22), and Chl from CCI (C) shown for snapshots of the 2010 event when both products had clear scenes on nearby dates (shown on left of figures).

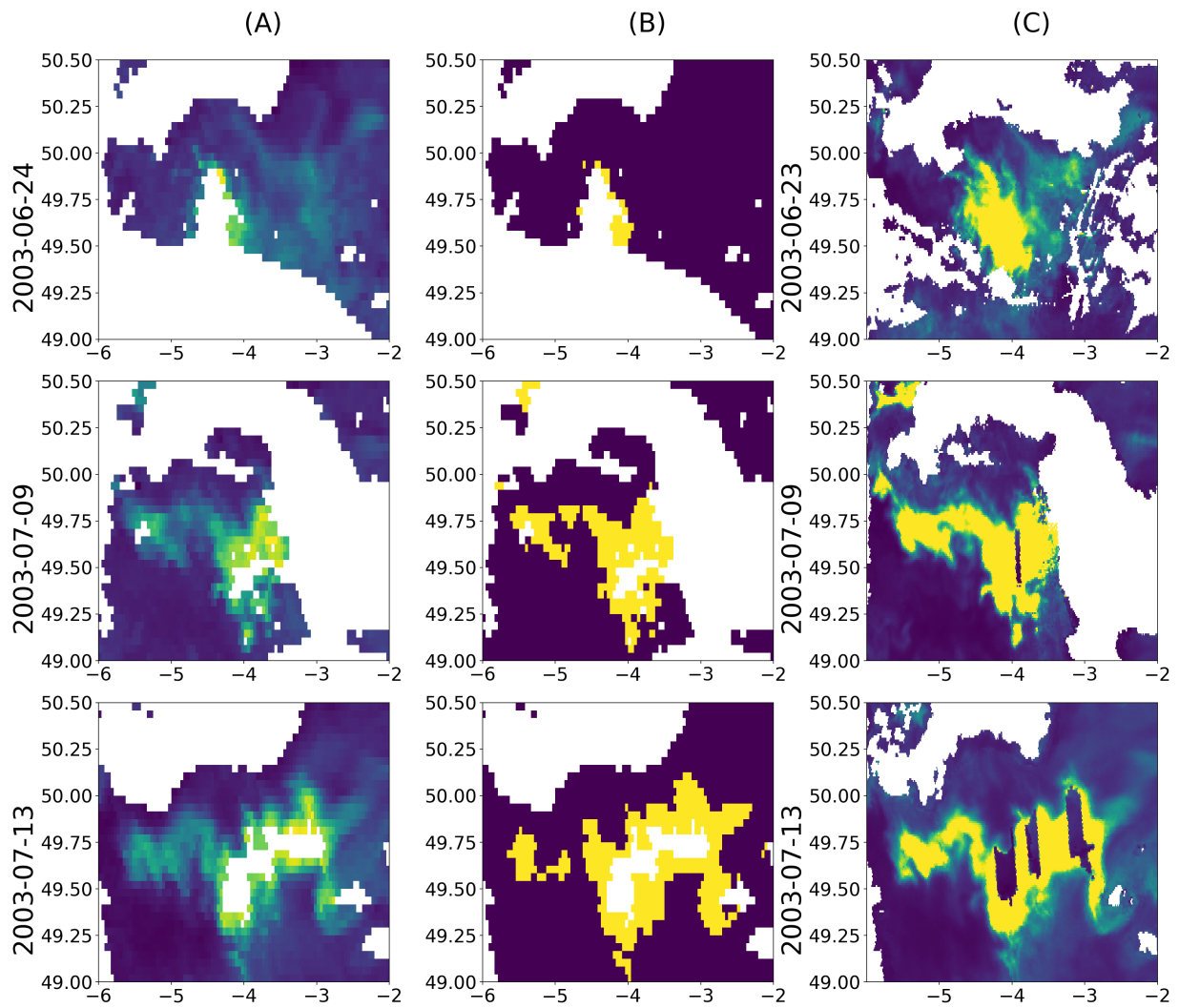


Figure S5. Normalized Fluorescence Line Height (A) and R_s - NFLH (B) both from data retrieved from <https://oceancolor.gsfc.nasa.gov> (accessed 03/22), and Chl from CCI (C) shown for snapshots of the 2003 event when both products had clear scenes on nearby dates (shown on left of figures).