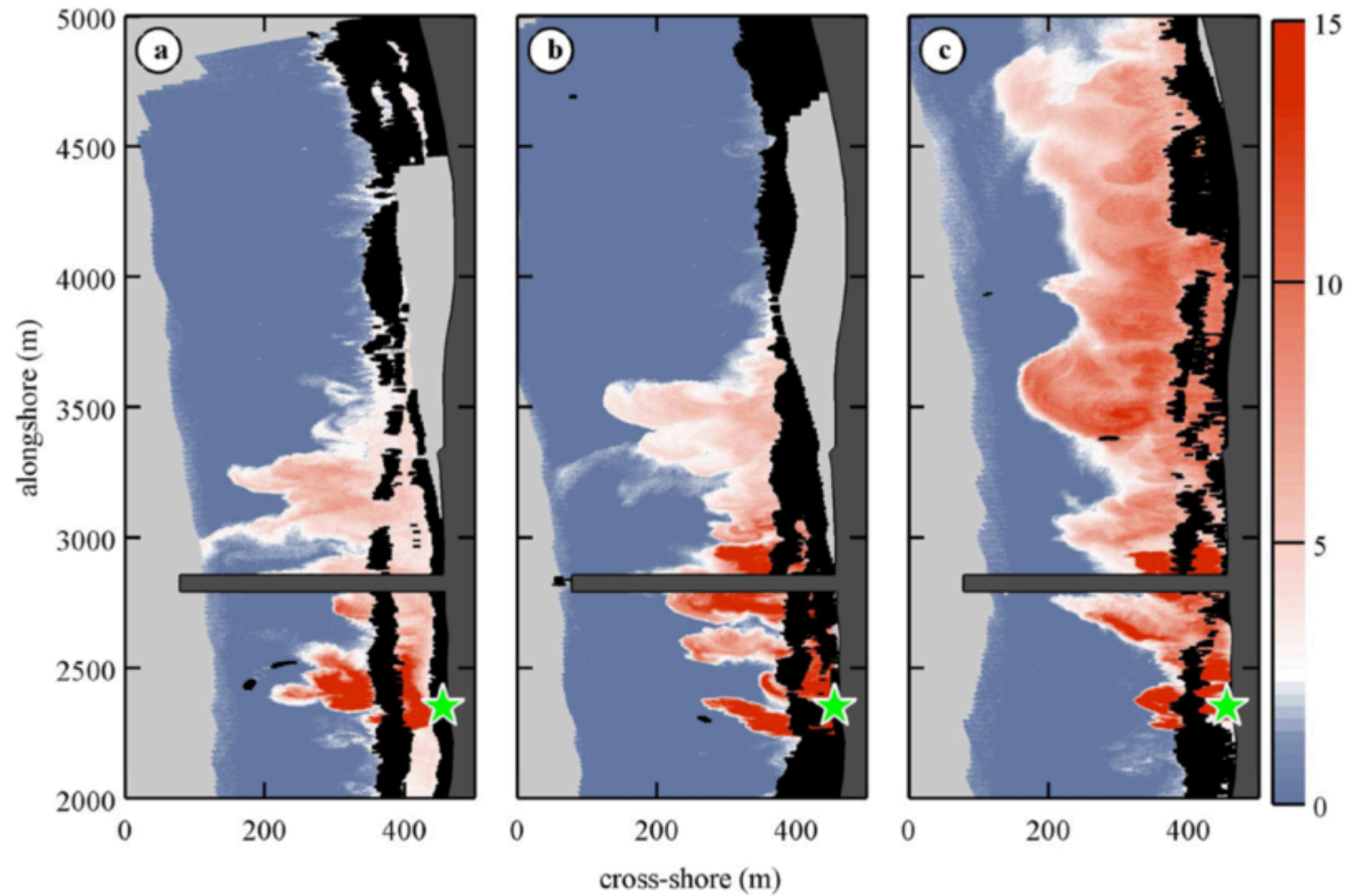


T = 90 min

T = 124 min

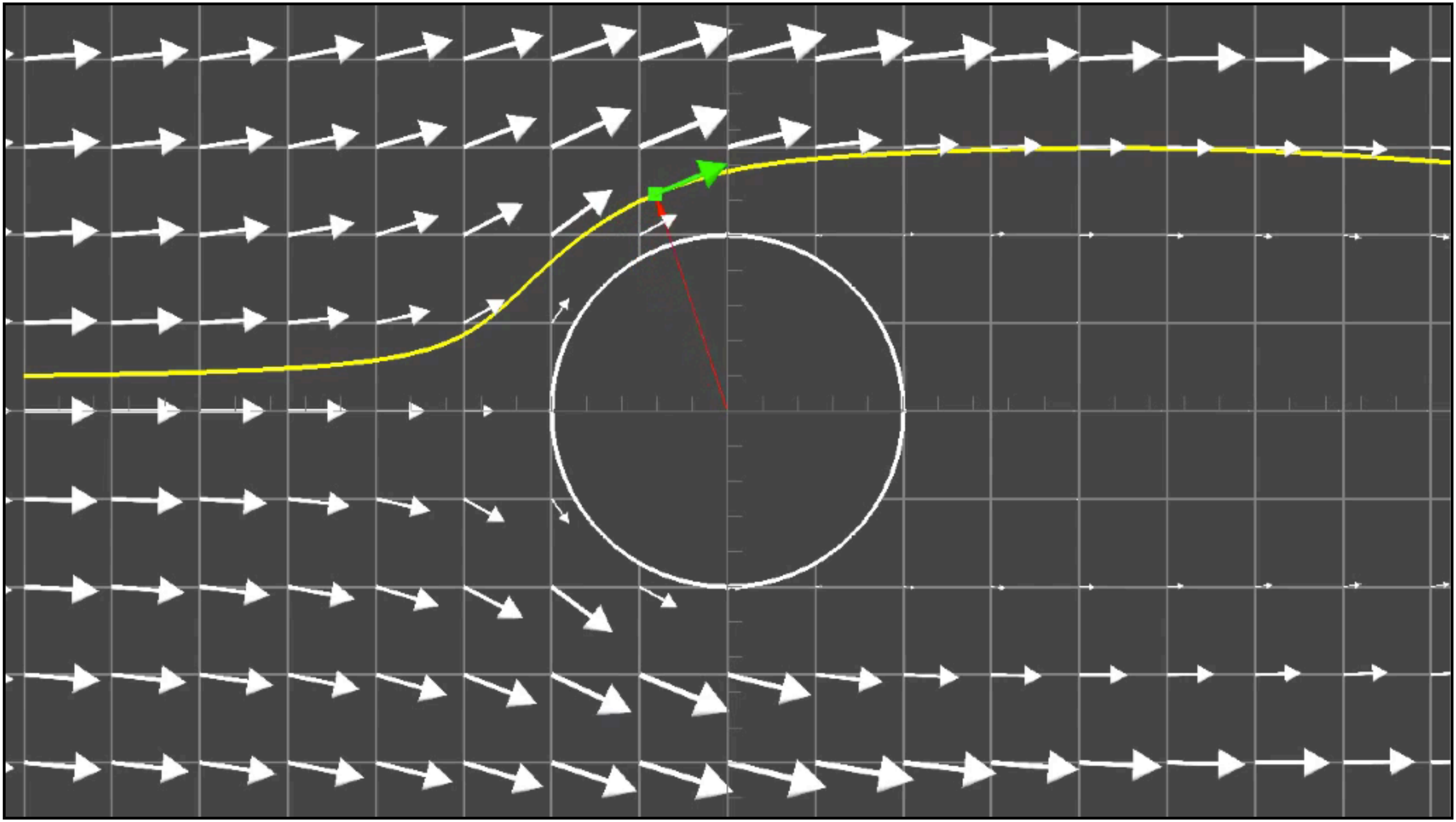
T = 278 min



Particle pathline and velocity vector overlaid on the Eulerian vector
description of the steady flow field around a circular cylinder ($Re=40$).

(Simulations with YAFFA Postprocessing with Paraview Tommi Mikkola)

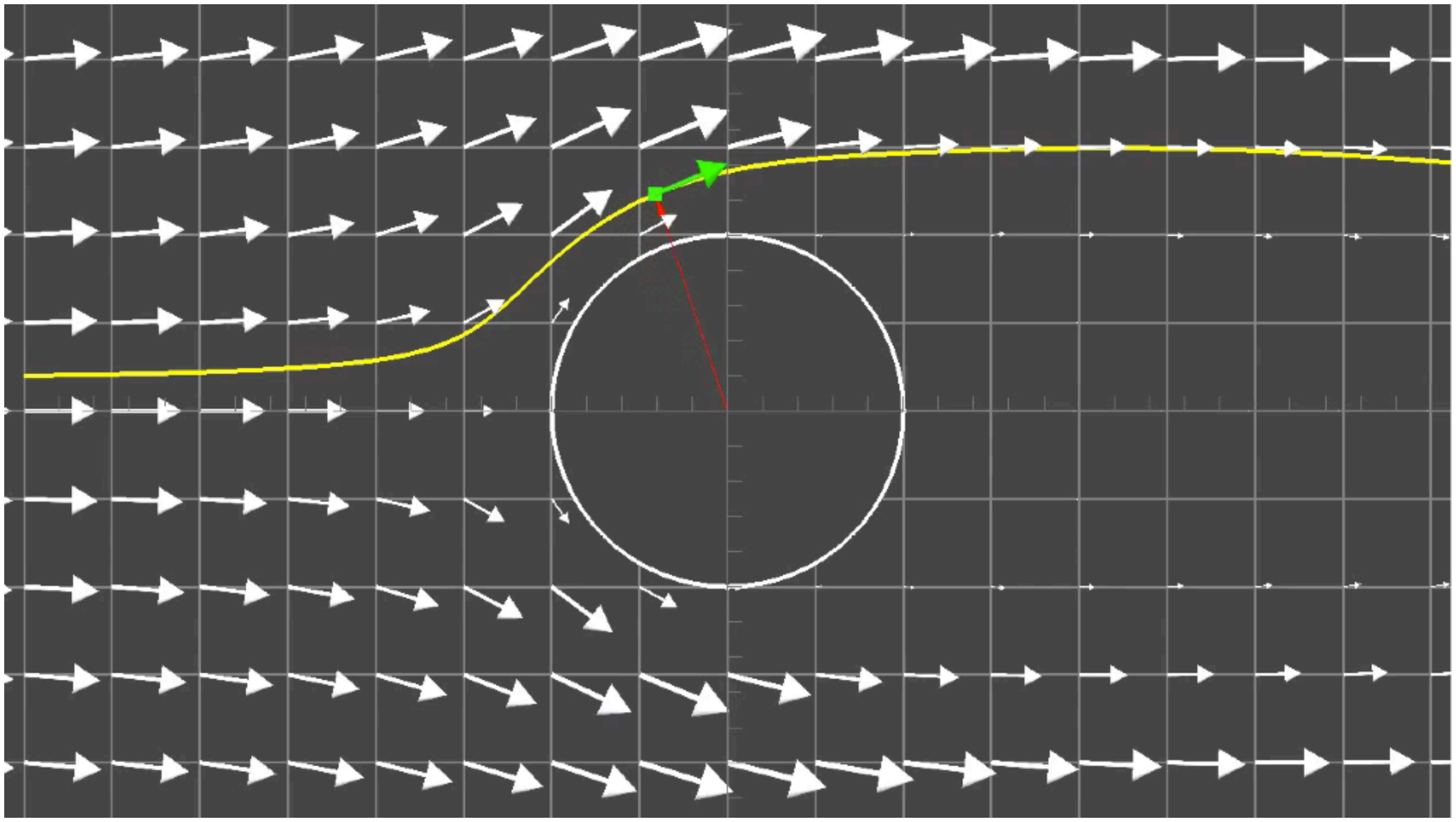
Eulerian vs Lagrangian approach

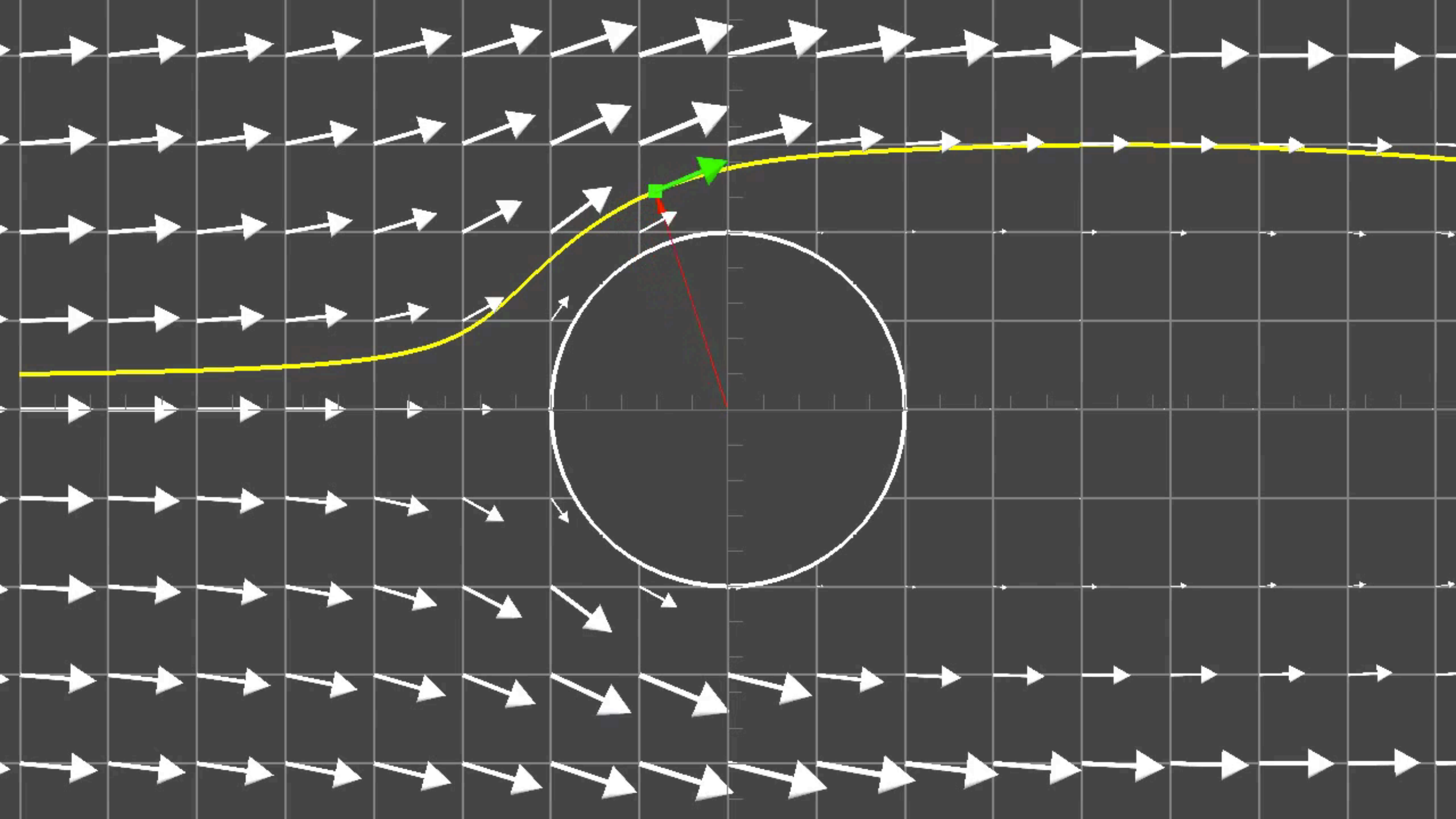


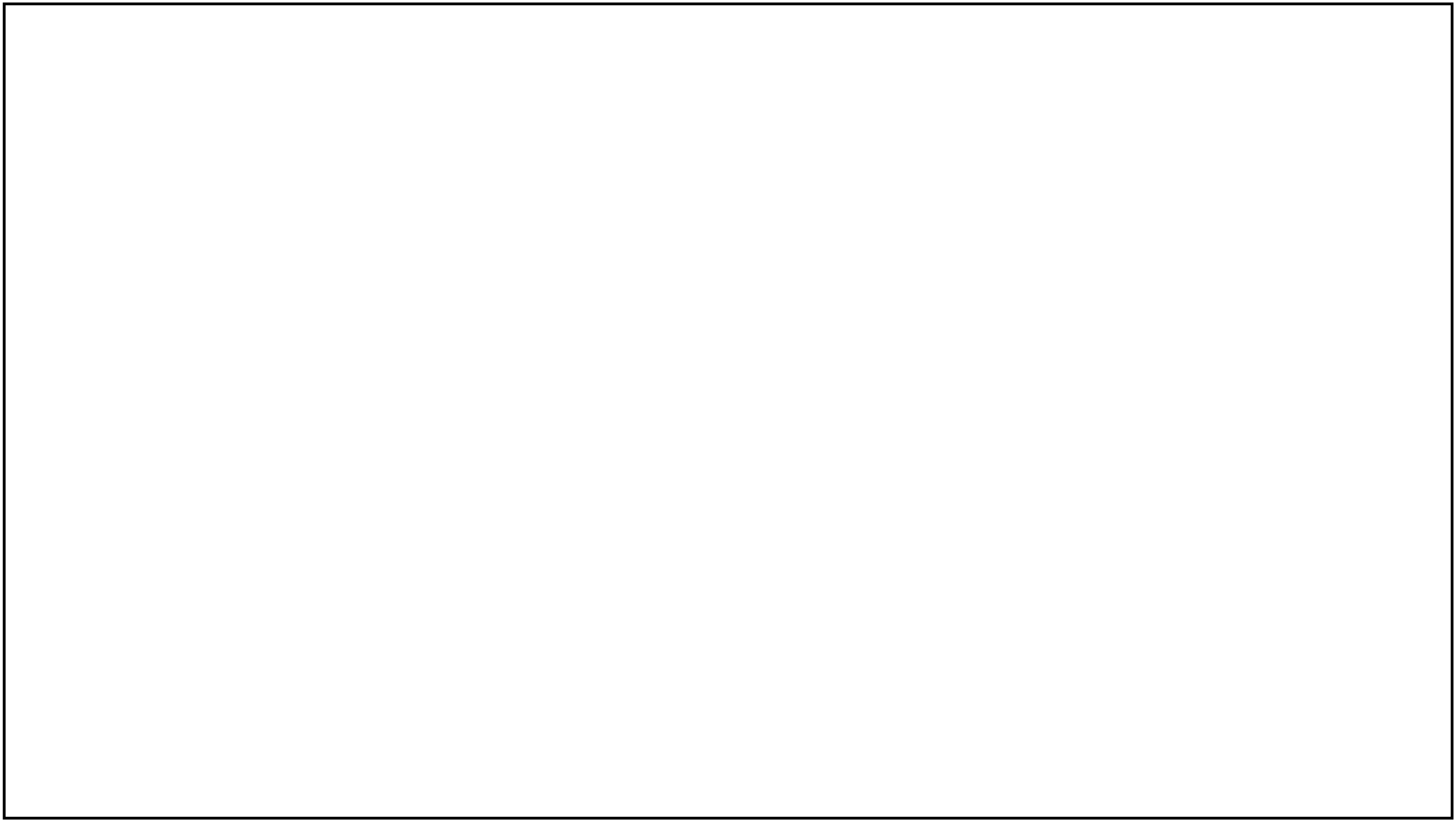
Photographs of non-toxic fluorescent
dye tracer (pink water) one hour after
continual surfzone dye release at
Imperial Beach California
(Clark et al. 2014)



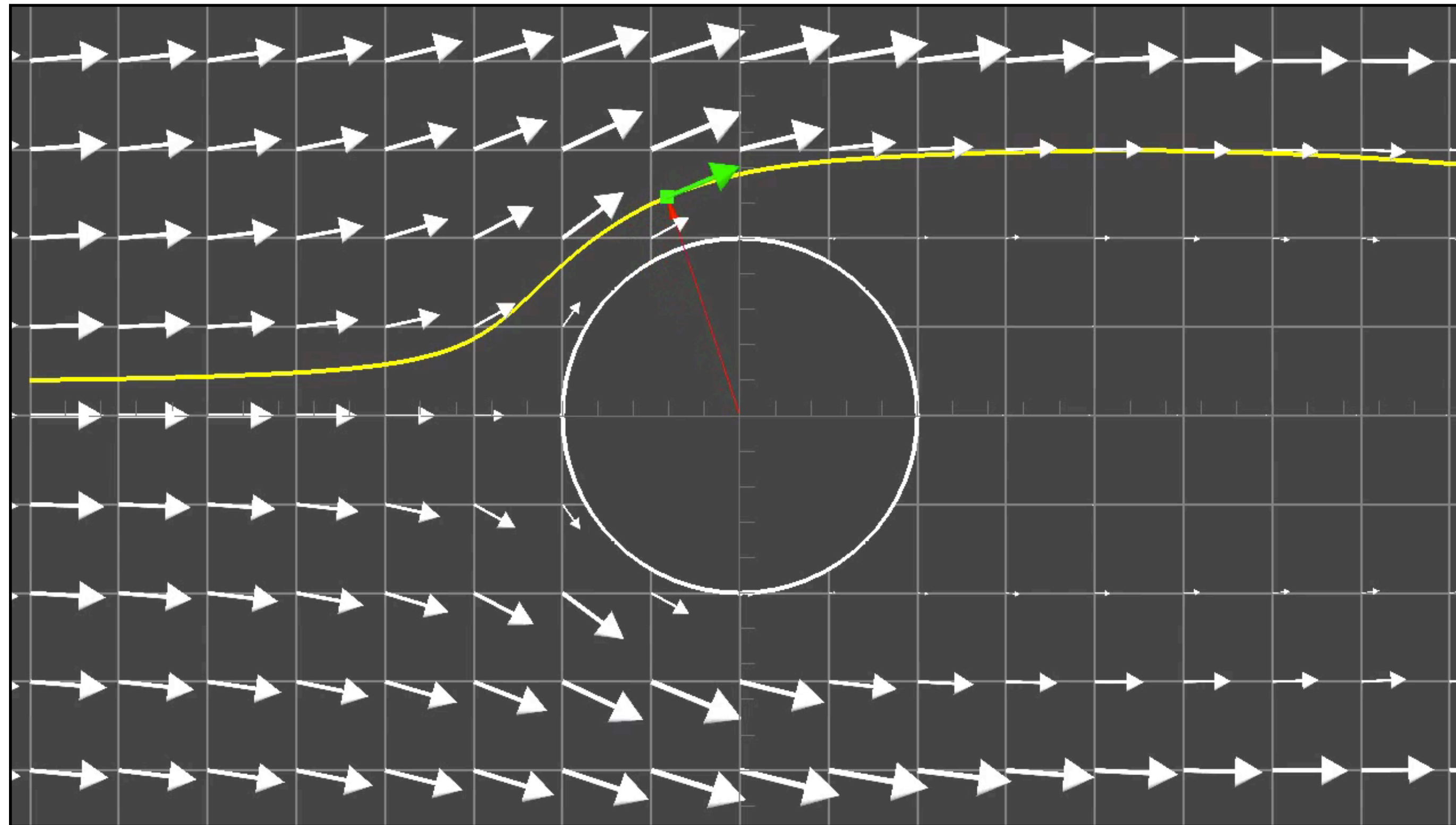
School of Geosciences





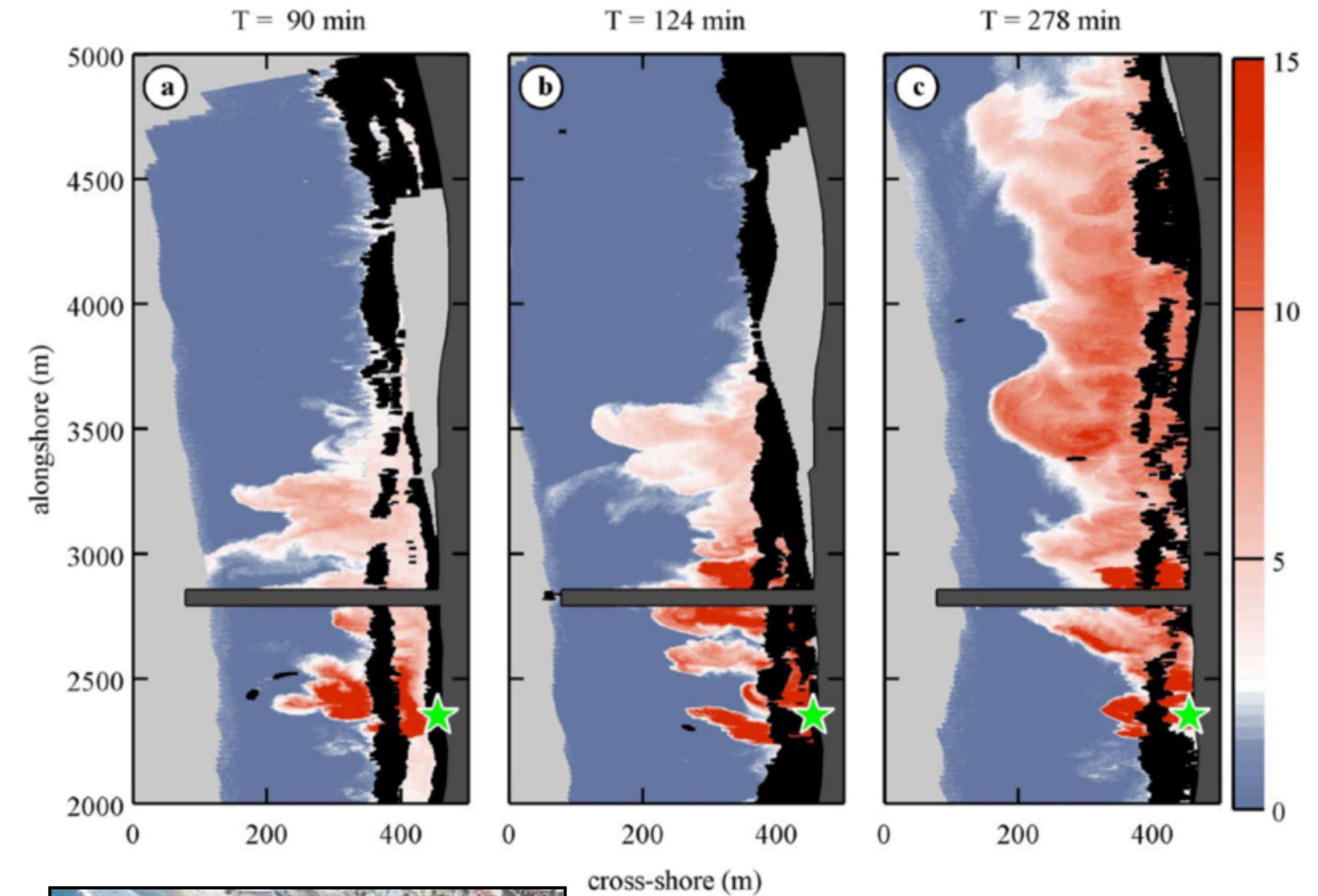


Eulerian vs Lagrangian approach



Particle pathline and velocity vector overlaid on the Eulerian vector description of the steady flow field around a circular cylinder ($Re=40$).

(Simulations with YAFFA Postprocessing with Paraview Tommi Mikkola)



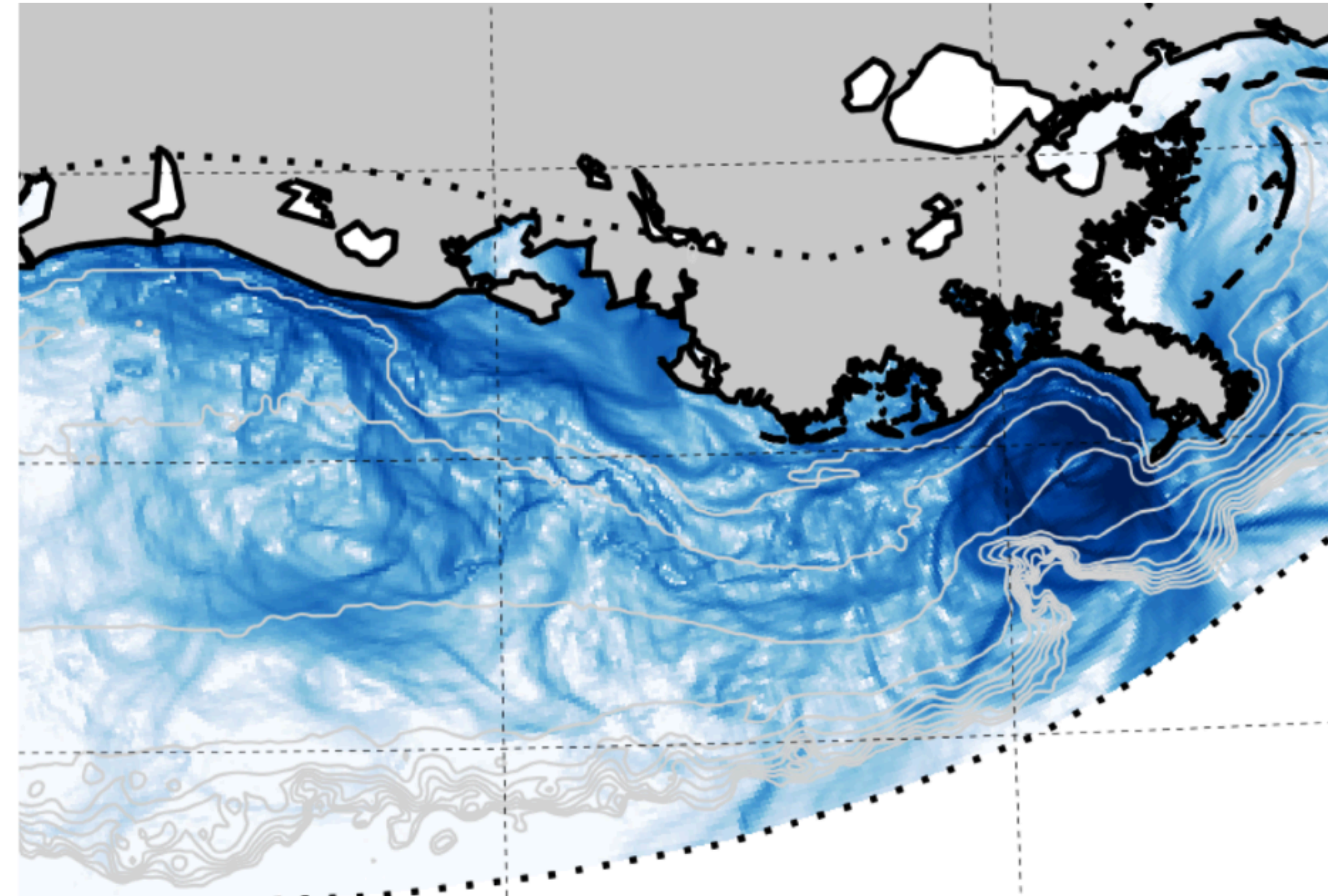
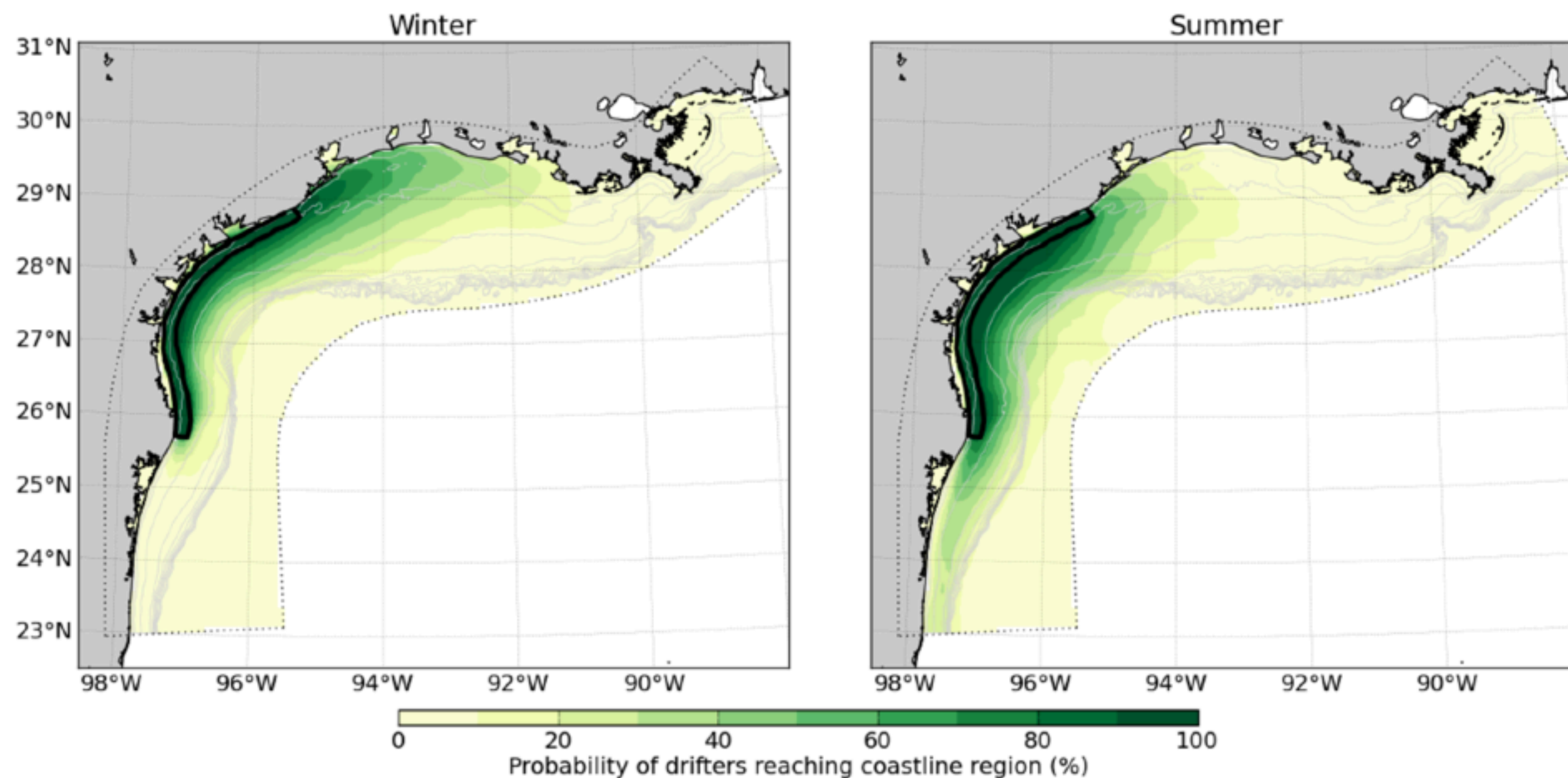
Photographs of non-toxic fluorescent dye tracer (pink water) one hour after continual surfzone dye release at Imperial Beach California
(Clark et al. 2014)

Tracpy model

Drifters in oceanography will often be released on the sea surface, and allowed to be passively transported with the flow, reporting their location via GPS at regular intervals.

In this way, drifters are gathering data in a **Lagrangian perspective**.

Looking at drifter tracks help to better **understand the dynamics of the underlying circulation fields**.



K.M. Thyng

Integrated pathways of drifters in the Gulf of Mexico.

<https://www.youtube.com/watch?v=8polWacun50>

Connectivity of waters over a 30 day time period, for the winter and summer months. Averaged over the years 2004-2010.