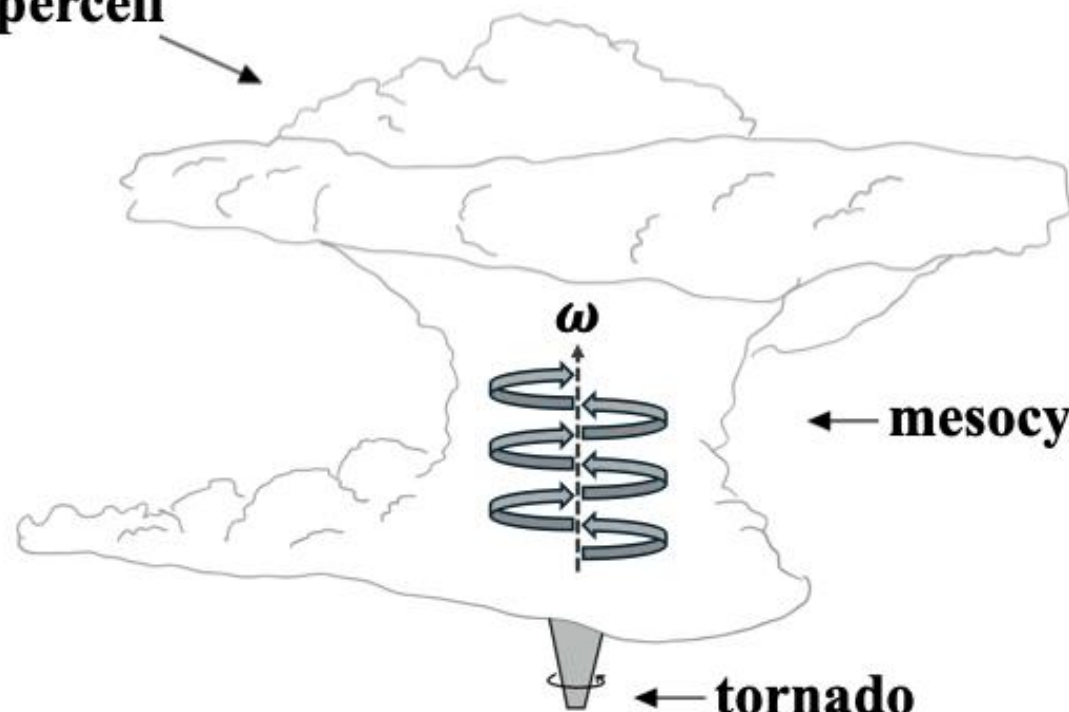


supercell

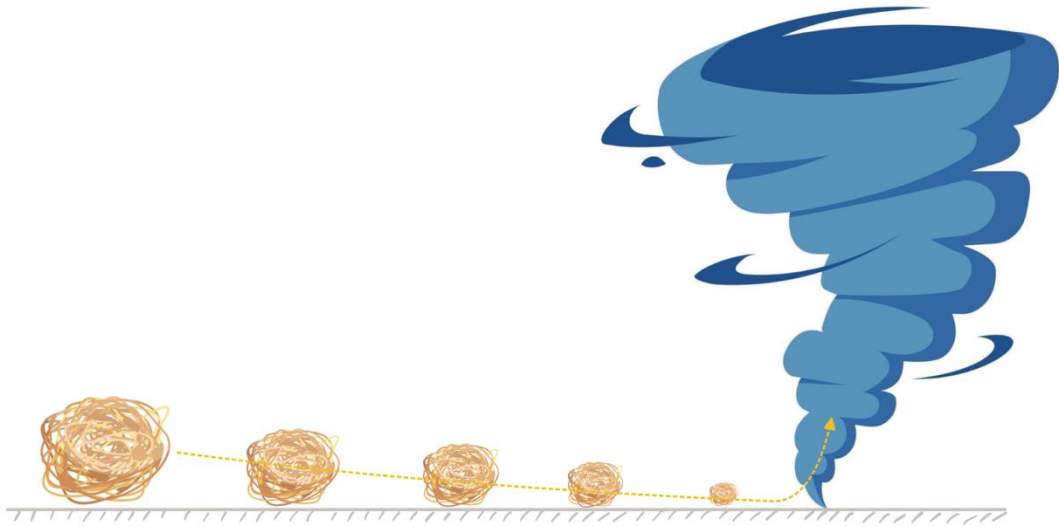


mesocyclone

tornado



The Tumbleweed Problem



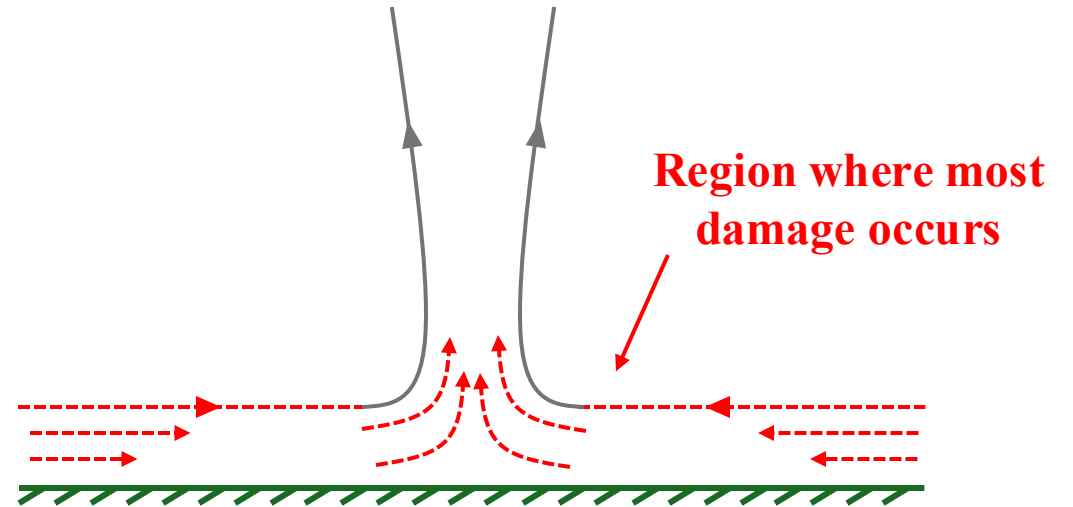
OR?



Sink and roll toward the tornado

Lift and fly into tornado

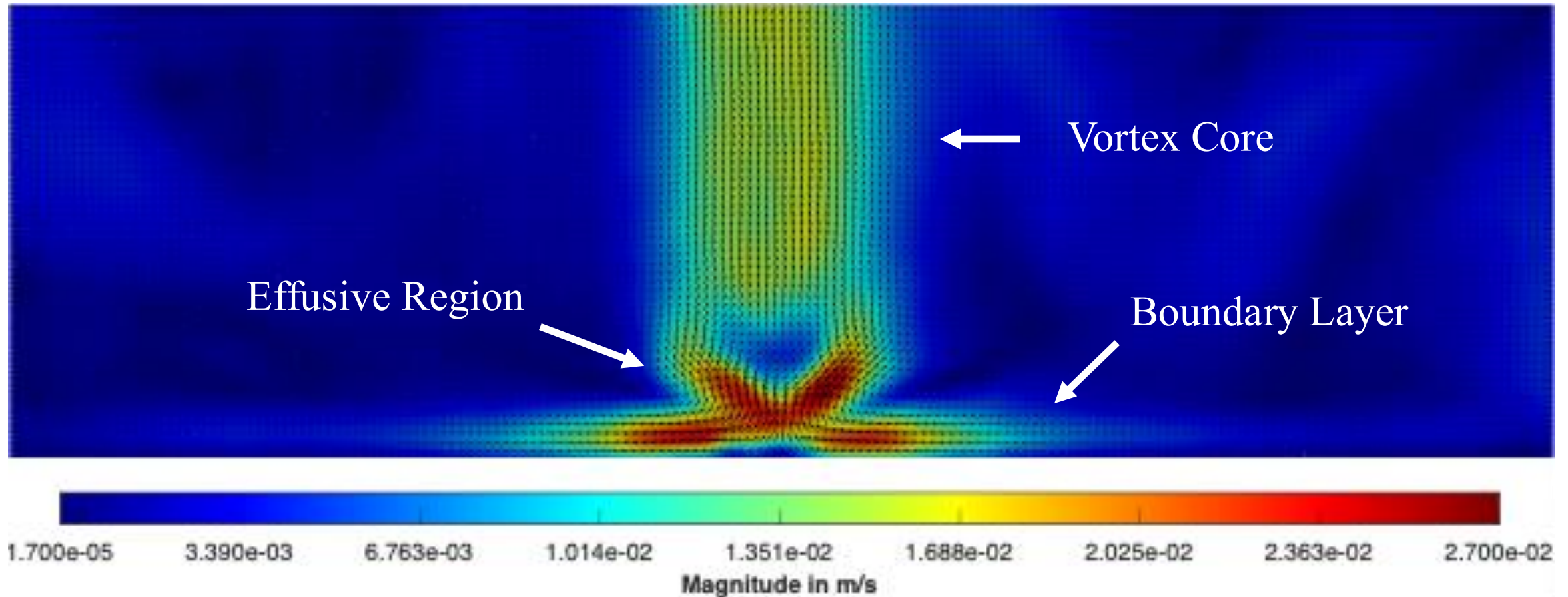
Significance of Tornado **Boundary Layers**



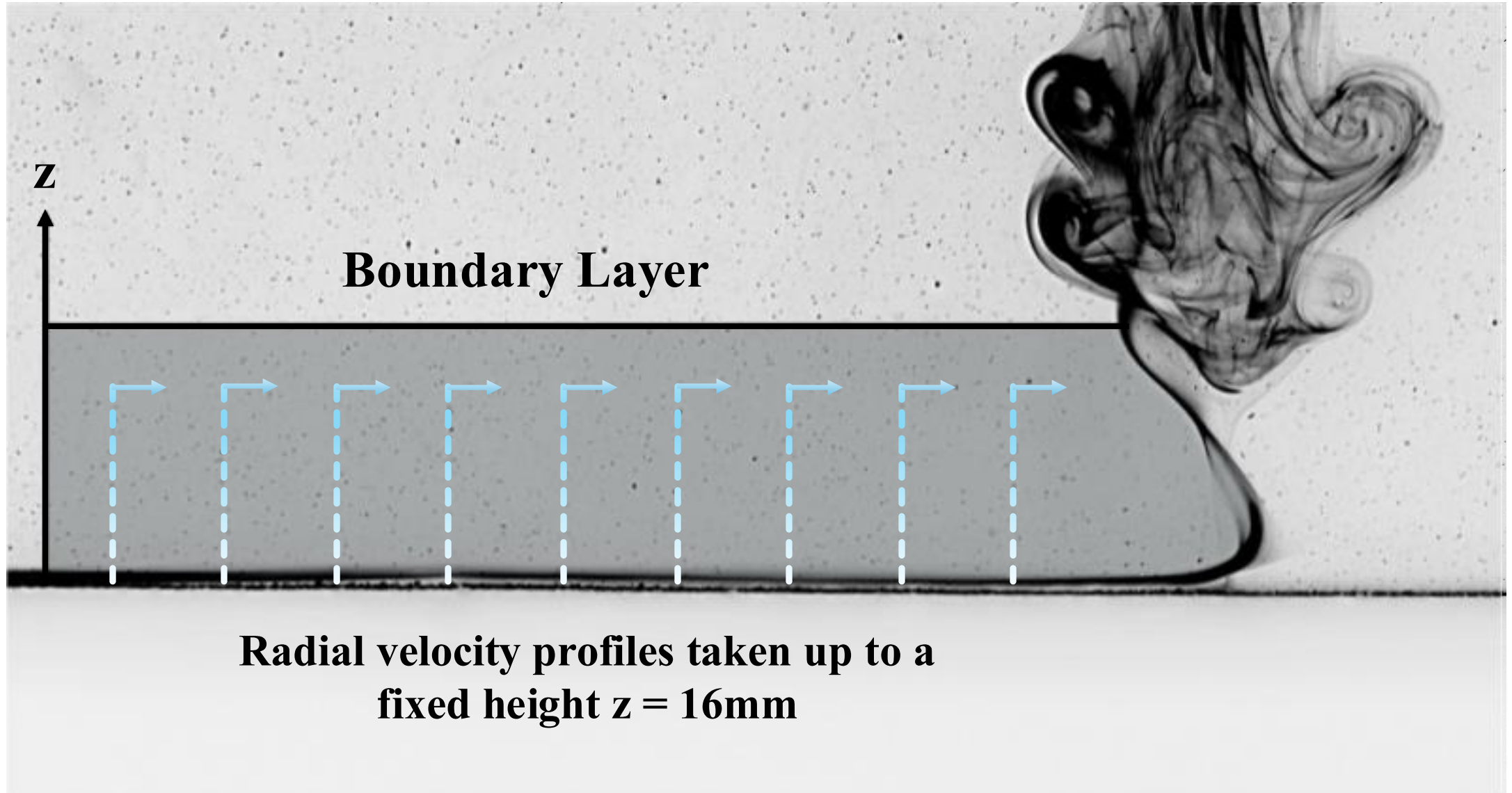
**2011: 321 deaths
\$10.22 Billion in damage**

Example PIV Data of the entire flow field

Previously we could not observe the surface flow with such clarity

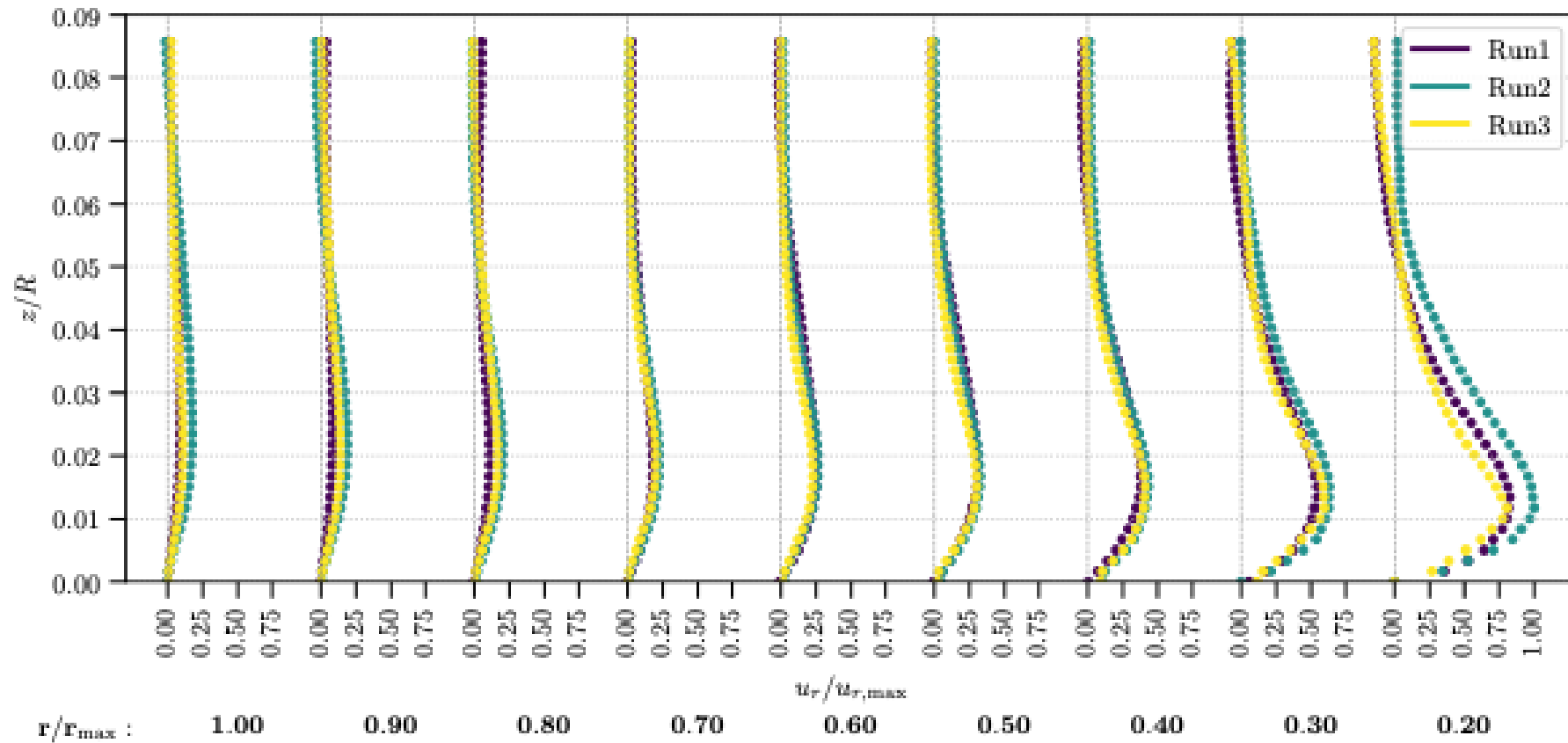


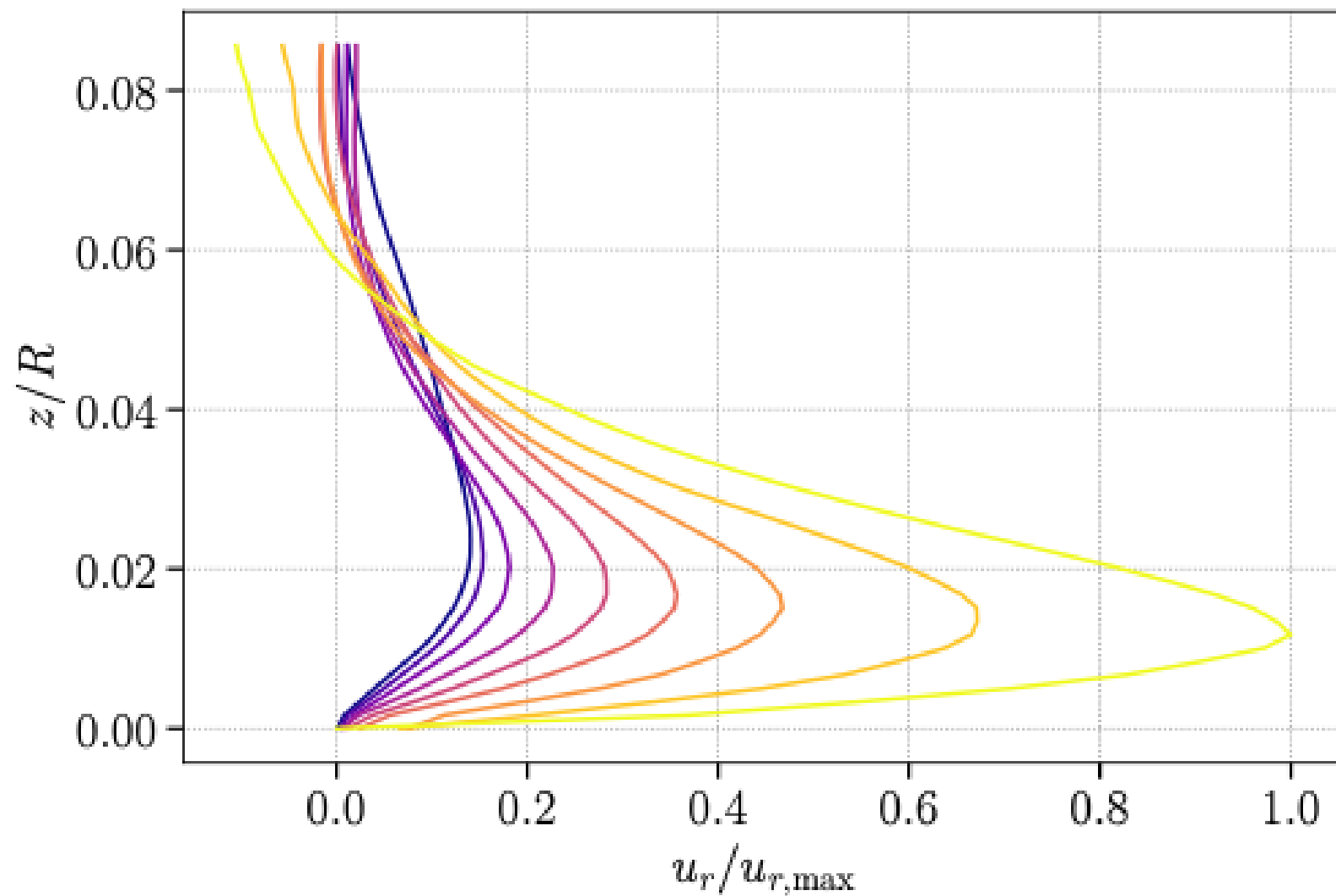
Region of Radial Velocity Measurement



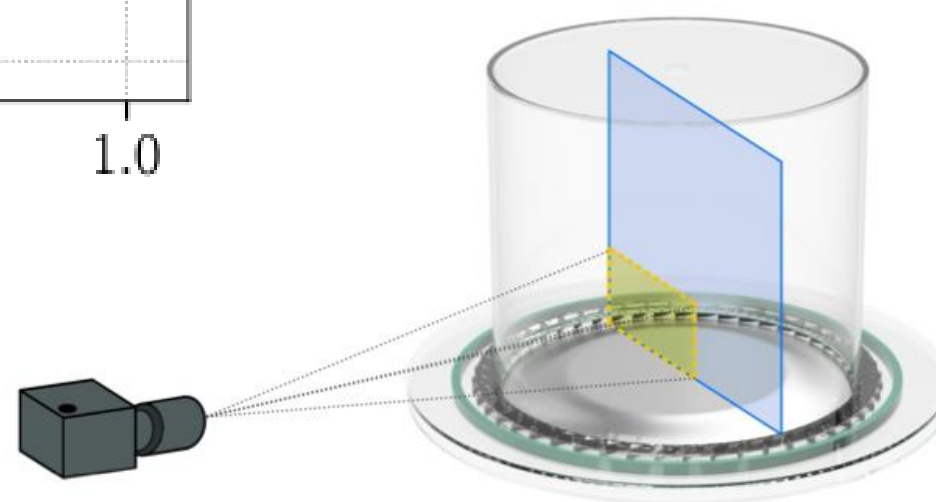
Example Radial Velocity Profiles

Data from three independent runs 5 minutes apart





Radial Velocity Profiles



Do Radial Profiles Agree With The Analytical Model?

It appears so.

