The Development of the Eddy Engine#

What is the Eddy Engine?

The Eddy Engine is a (Computation Fluid Dynamics) CFD Simulation Engine written in C with C Library SDL2. Eddy/Eddies in the context of fluid dynamics refers to the flow of the current that deviate from the main flow.

This document provides a walkthrough of the development of the eddy engine.

All Eddies are modelled by a dimensionless number called Reynold Number denoted **Re**. Dimensionless refers to a number without out any unit attached. 4m^2 is **not** a dimensional number however 4 is.

Eddy number directly map a set of dimensionless number to a range of value.

Types of Eddies:

1.Static -   
2. Transient Re(<2300)-  
3.MesoScale -  
4.Vortex Street Eddies Re(2300<3500)- -  
5. Turbulent Eddies -