Py4Incompact3D Documentation

Release 0.0.0

Yorgos Deskos
Paul Bartholomew

Oct 02, 2018

CONTENTS:

CHAPTER

ONE

INTRODUCTION

`Py4Incompact3D` is a library for postprocessing data produced by Xcompact3D simulations. The aim of this project is to facillitate automated postprocessing of Xcompact3D simulations by providing, at first:

- Mesh class: this stores the domain data for the simulation
- Case class: this stores the information of the case: boundary conditions, fields etc.

With these building blocks, complex postprocessing tools may be built - for example, derivative calculateors to compute the vorticity and Q-criterion given the velocity field.

It is hoped that users of Xcompact3D will find this library useful and contribute to its development, for instance by adding additional functionality.