Plan Overview

A Data Management Plan created using DeiC DMP

Title: HESEL project

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Template: DTU data management plan

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Project abstract:

The numerical code, HESEL (Hot Edge-Sol-ELectro-static), and its generated data

ID: 2690

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Grant number / **URL:** EUROfusion Consortium No 633053

Copyright information:

HESEL project

Data Collection

Describe the data that will be collected.

Numerical data of fluctuations observed on the outboard midplane of medium and larger size Tokamaks.
Data generated by the numerical code, HESEL, a code developed by PPFE at DTU Physic since 2001
The code is normally run on either the local DTU Cluster, jess.dtu.dk, or at the EUROfusion supercomputer, Marconi.
The output from the code is a larger (+3 GB) HDF5 file which contains both raw (plasma field like density, temperature, potential, ..) and manipulated data (partical and energy fluxes, stress fields etc) from the simulation
Data (hdf5 files) is organized like: Tokamak.shot.vers.h5
Where
Tokamak:the specifical machine (JET, MAST, AUG, TCV, EAST, KSTAR, ...)
shot: the specific machine shot
Vers: Version number for the specifical HESEL simulation

Describe any restrictions to the data.

If the project involves use of personal data, a number of requirements have to be taken into account. In particular, DTU's template for registering personal data has to be used. The template and more information can be found on DTU Inside. Follow links in the right hand side of this template in the guidance section under "Ethics and privacy".

No personal data will be generated

Data Storage

Describe the IT infrastructure to be used.

The raw data are transferred to the U-drive (\\aitpdfs.win.dtu.dk\Department) at "U:\FYSIK\FYS-PPFE\Turbulence group\HESEL 2D data" where data is backed and will be stored on a long term basis.

Documentation

Describe the metadata to be associated with the data.

Documentation of the individual simulations are performed using elog (https://elog.psi.ch/elog/)
Source code and documentation of the numerical code HESEL are stored at Github: https://github.com/PPFE-Turbulence/C-HESEL

Describe the types of documentation that will accompany the data.

Documentation of the individual simulations are performed using elog (https://elog.psi.ch/elog/)

Data Sharing

Describe which data will be shared.

Data and source code are shared on-demand.
HESEL code is presently running be groups at the Plasma Physics institutes at Prague, Hefei (China). These groups have access to the Github repository

Describe how the data will be shared for possible reuse.

Results from data are published in high ranking journals and data will/are been shared externally on demand

Long-term Preservation

Describe how data will be archived beyond the scope of the research project.

Data are placed on university drives with long term preservation.