Sprinx
THE DOERS

USER MANUAL | UNREGISTERED USER

SHOCK VML Portal

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Microsoft Partner
Gold Independent Software Vendor (ISV)
Silver Midmarket Solution Provider
Silver Software Development
Silver Web Development
Silver Server Platform

Check Point Bronze Partner

Symantec.

CONTENTS

INTRODUCTION

PURPOSE OF THIS DOCUMENT

This document is intended for users who want to use the web portal **Virtual Mission Laboratory** (hereinafter only **VML**). It includes instructions, use cases and describes all features of the portal from the viewpoint of an **unregistered user**.

SW REQUIREMENTS

For proper and full functionality of VML portal, you need to use a web browser with JavaScript and HTML5.

Recommended web browsers:

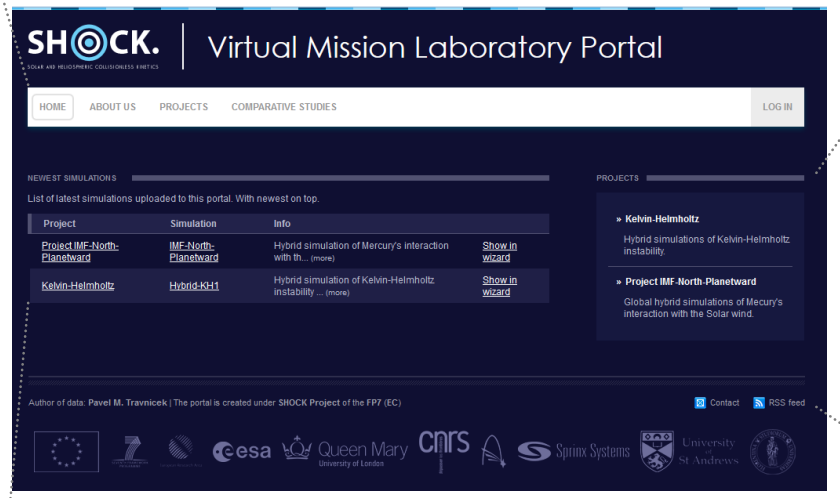
- Mozilla Firefox (version 19 or higher)
- Chrome (version 25 or higher)
- Internet Explorer (version 10 or higher)

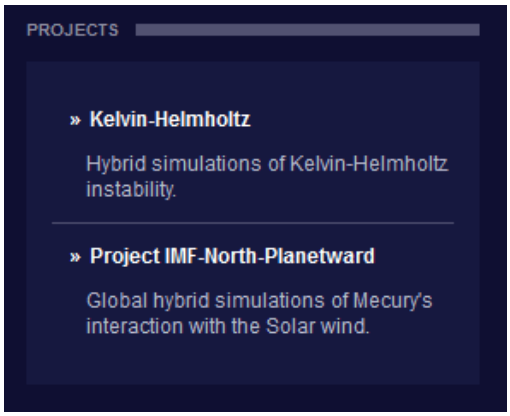
WEB INTERFACE

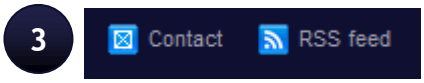
MAIN PAGE

Main page contains 4 basic elements:

1. **Main menu** for basic navigation on web page
2. **List of projects** includes all projects in the VML portal and their short description
3. **Contact | RSS feed** for the possibility to contact us or subscribe for news about new projects and simulations on the portal
4. **List of new simulations** includes 5 newly added simulations







PROJECTS AND SIMULATIONS

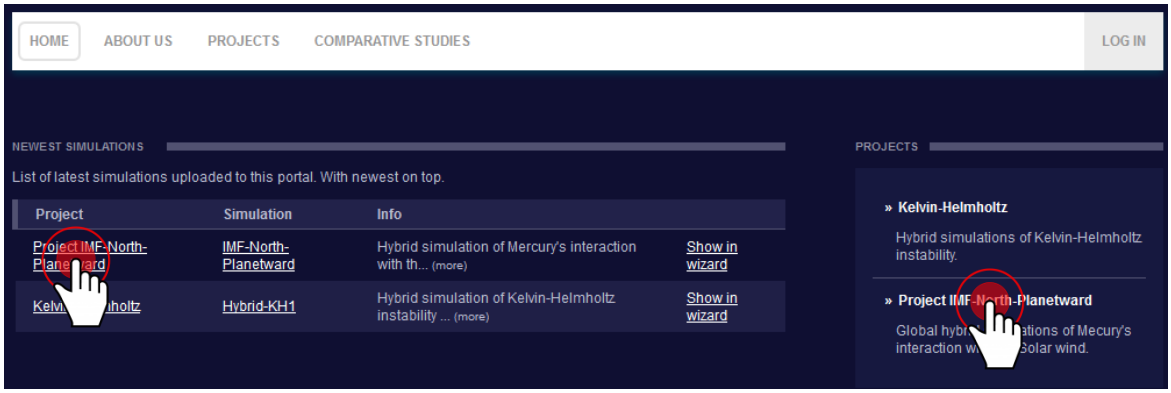
An overview of projects and simulations that VML portal contains can be found in the **Project** tab in main menu. It includes all projects and their simulation including detailed descriptions.

If you want to go **project details**, use one of the following ways:

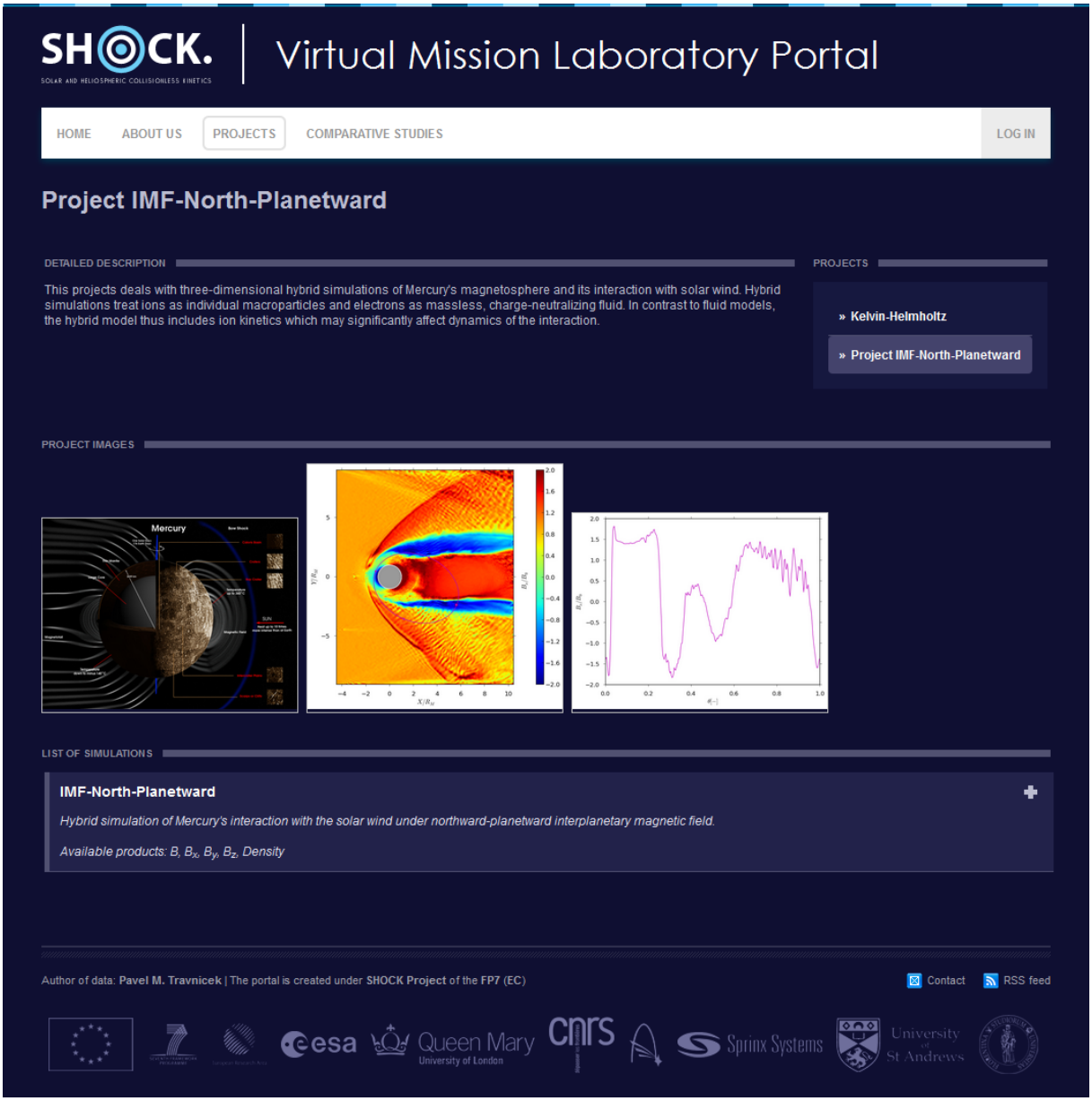
1 From **Projects** tab

Or

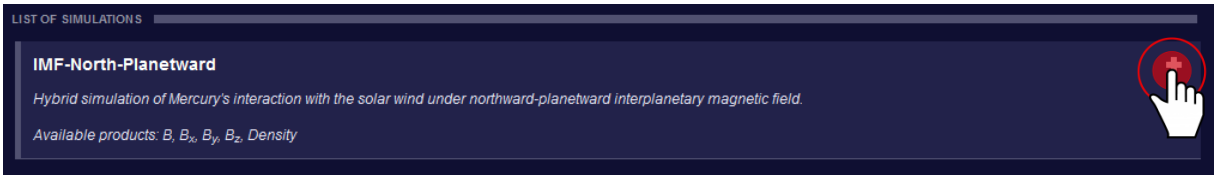
2 From **Home** tab



Page with **project details** shows all information about project, figures and list of their simulations including basic information and available products.



For more detailed information about chosen simulation click on the drop down element.

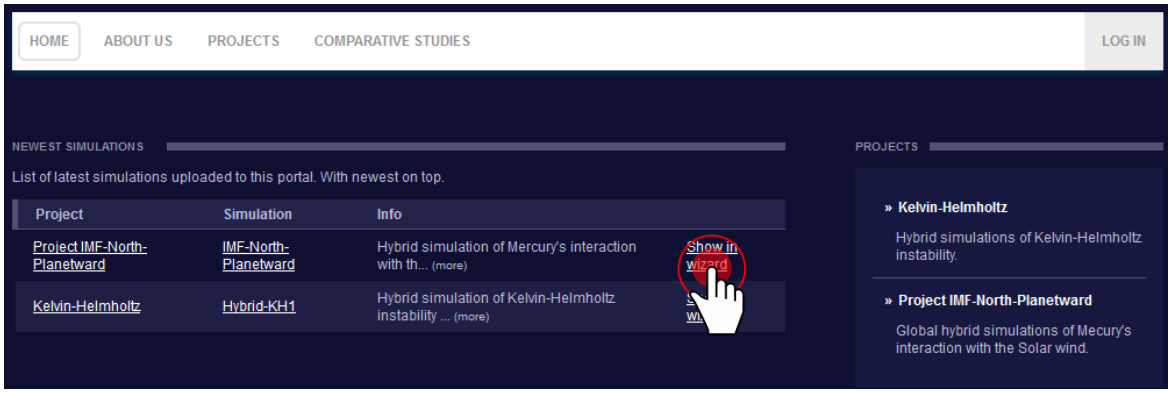


Then you can find information about all available products, coordinate system, initial conditions and parameters of the simulation. There are also predefined wizard settings (**simulation presets**). Presets usually are interesting settings defined by administrator of the project.

VISUALISATION WIZARD

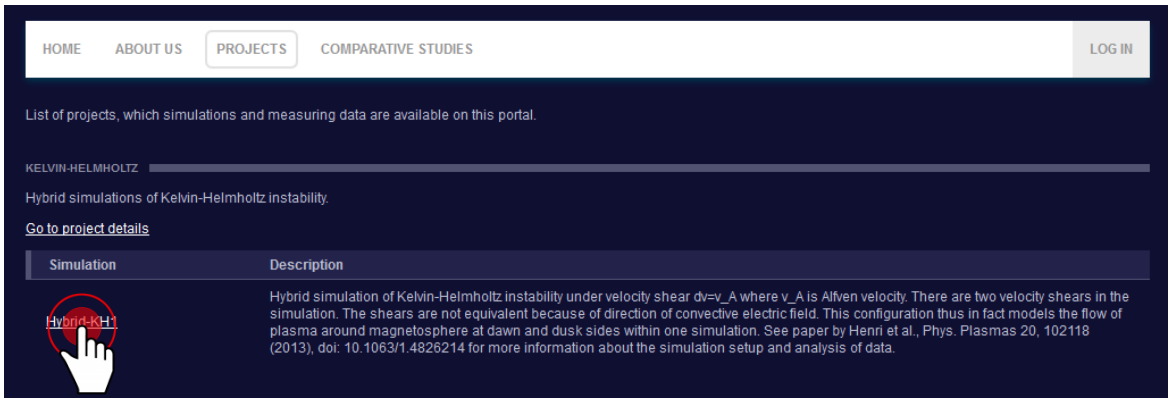
There are 4 ways how to get into visualization wizard of the simulation:

1 From **Home** tab



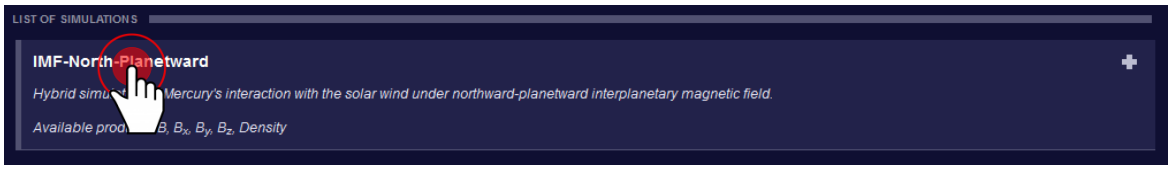
Or

2 From **Projects** tab



Or

3 From **Simulation list** in the project details page



Or

4 From unrolled **Simulation details** in the project details page

You can choose one of the simulation preset.

BASIC OVERVIEW

Information about the simulation

Allow/Disable helper

Product selection

Time selection

Plane selection

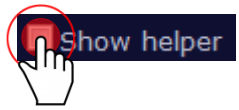
Three-dimensional situational picture

Queue for processing button

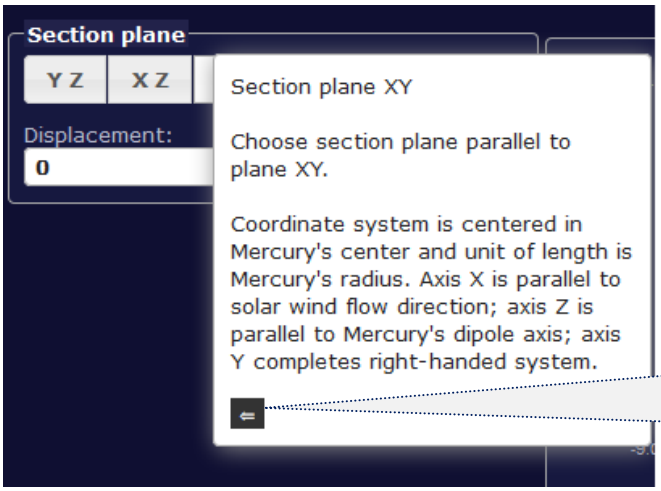
Two-dimensional situational picture

WORKING WITH HELPER

For new users we highly recommend to **allow helper**.



After clicking on the element help guide pops up with additional information and what to do in this step (similarly as shown below).



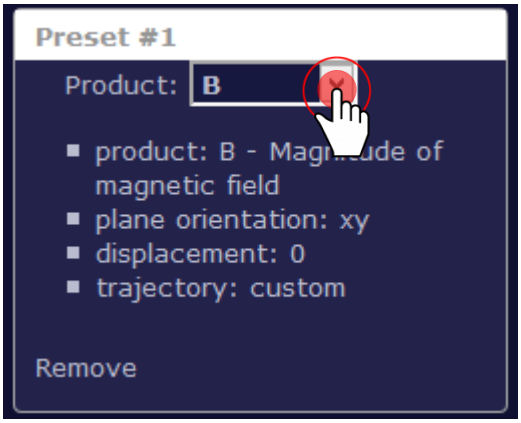
Note: If there is a button in the helper window you can change settings by click on them or move to the next step.

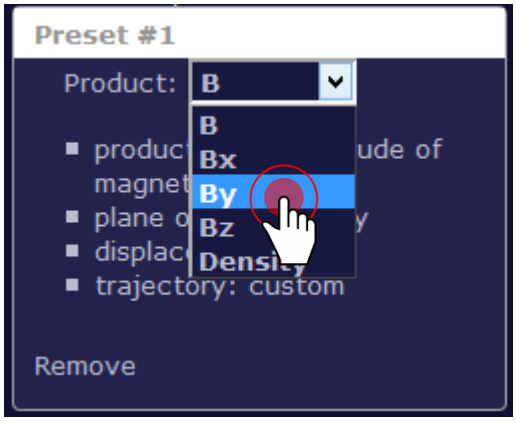
STEP BY STEP VISUALIZATION

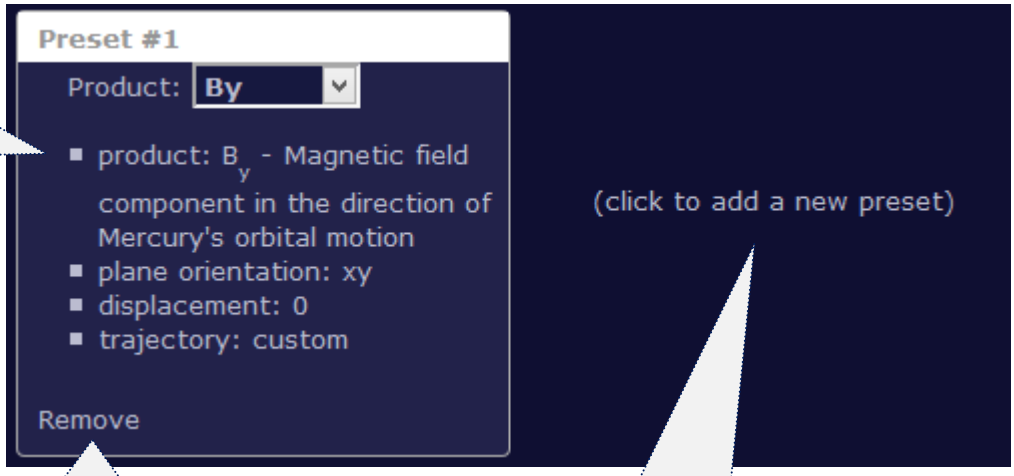
VISUALIZATION STEP BY STEP

1 **Product** selection

Choose required **product** from the list. The term **product** means a physical quantity that you want to visualize.







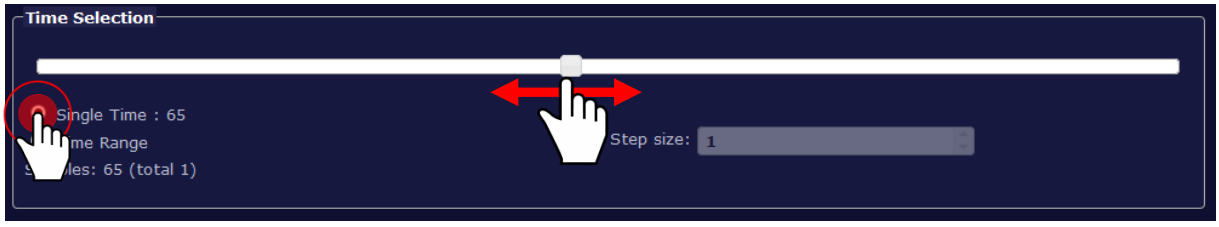
Here you can see information about product and chosen parameters.

For removing product from visualization use this button.

If you want to visualize more than one product, click here.

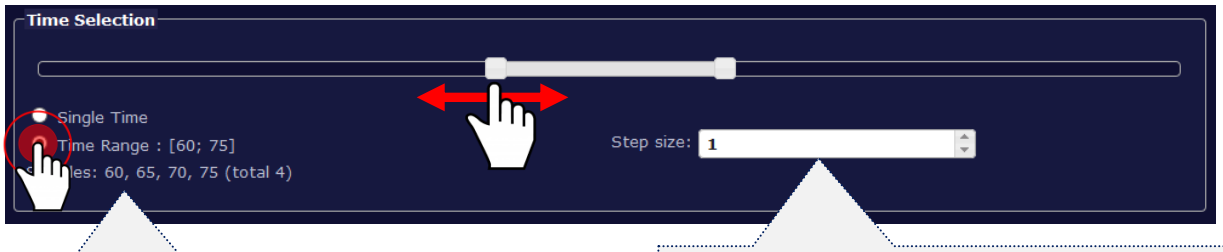
2 **Time** selection

Here you have 2 options. First one is to select only one time. Then all the products will be shown in this **single time** (static figure). Select time by moving with the time cursor.



Or

The second option is to set **time range**. Then all the products will be shown in this time range (animation). Select the time by moving start time and end time cursor.



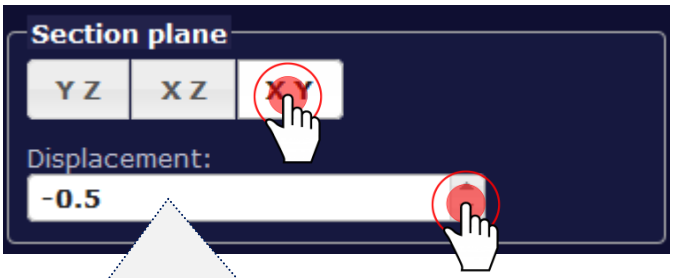
Selected time range and available samples

If there are too many samples in the dataset you can choose to calculate every n^{th} sample.

3 **Plane** selection

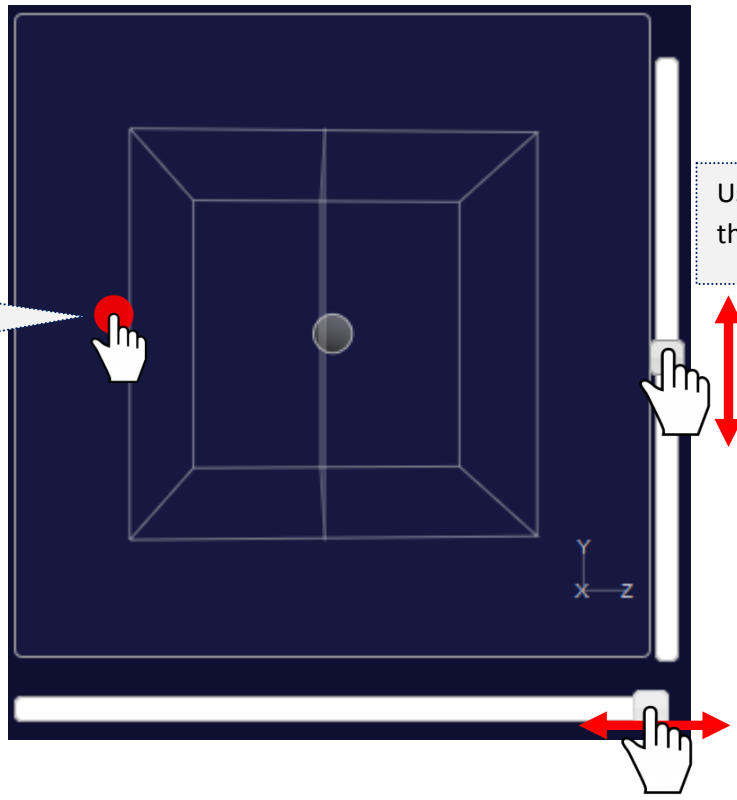
Note: This step is present only in case of three-dimensional simulation. Naturally, there is no plane selection in two-dimensional simulation.

In this step you select parameters of the plane you want to visualize. There are 3 options of an **orientation of the plane**. First choose one of the following options – XY | XZ | YZ. Secondly select **displacement** of the plane in space.



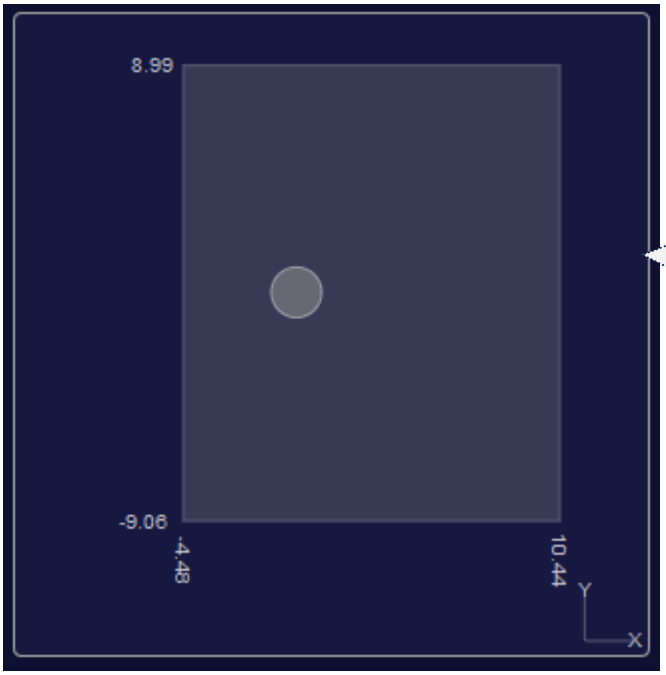
Displacement you can select by writing a value or by clicking on increase/decrease buttons.

For better imagination what you set up you can watch **situational figures**.



Tip: Instead of sliders you can do **left-click** into the area and rotate it directly.

Use sliders to rotate with the figure.



Two-dimensional situational picture is for preview with planet position and selected trajectory (this possibility is available when the user logs in).

4 **Final step –** "Queue for processing"

If you are satisfied with your settings click the "**Queue for processing**" button. Then your job will be moved into the queue for processing. When your job is finished you'll see the visualization output.

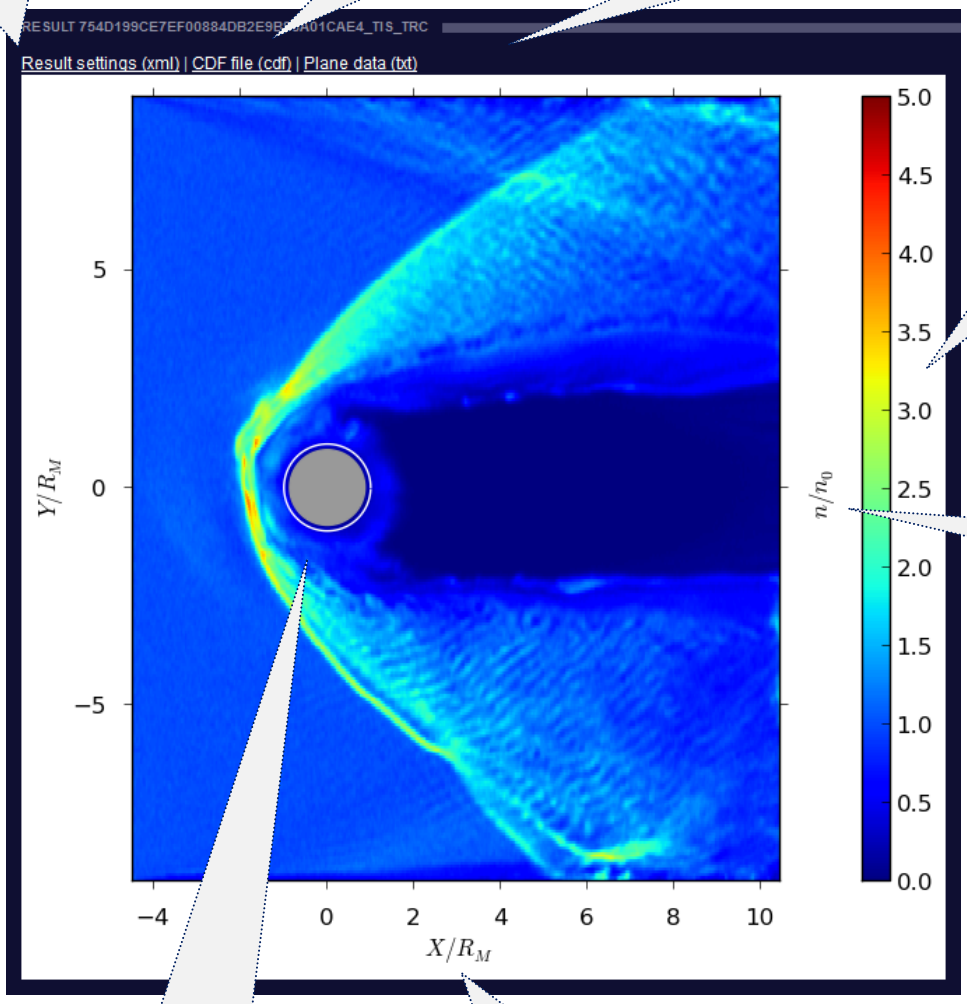
VISUALIZATION OUTPUTS

SINGLE TIME

Result settings (xml) is the output where you can find all selected settings in xml form. **It is for information purposes.**

CDF file (cdf) is the output containing all the numerical values of selected plane in CDF file form.

Plane data (txt) is the output containing all the numerical values of selected plane in textual form.



Color bar for the correct interpretation of the values in the figure

Product name with units

Illustration of the planet

The **gray color** indicates cross section the planet.

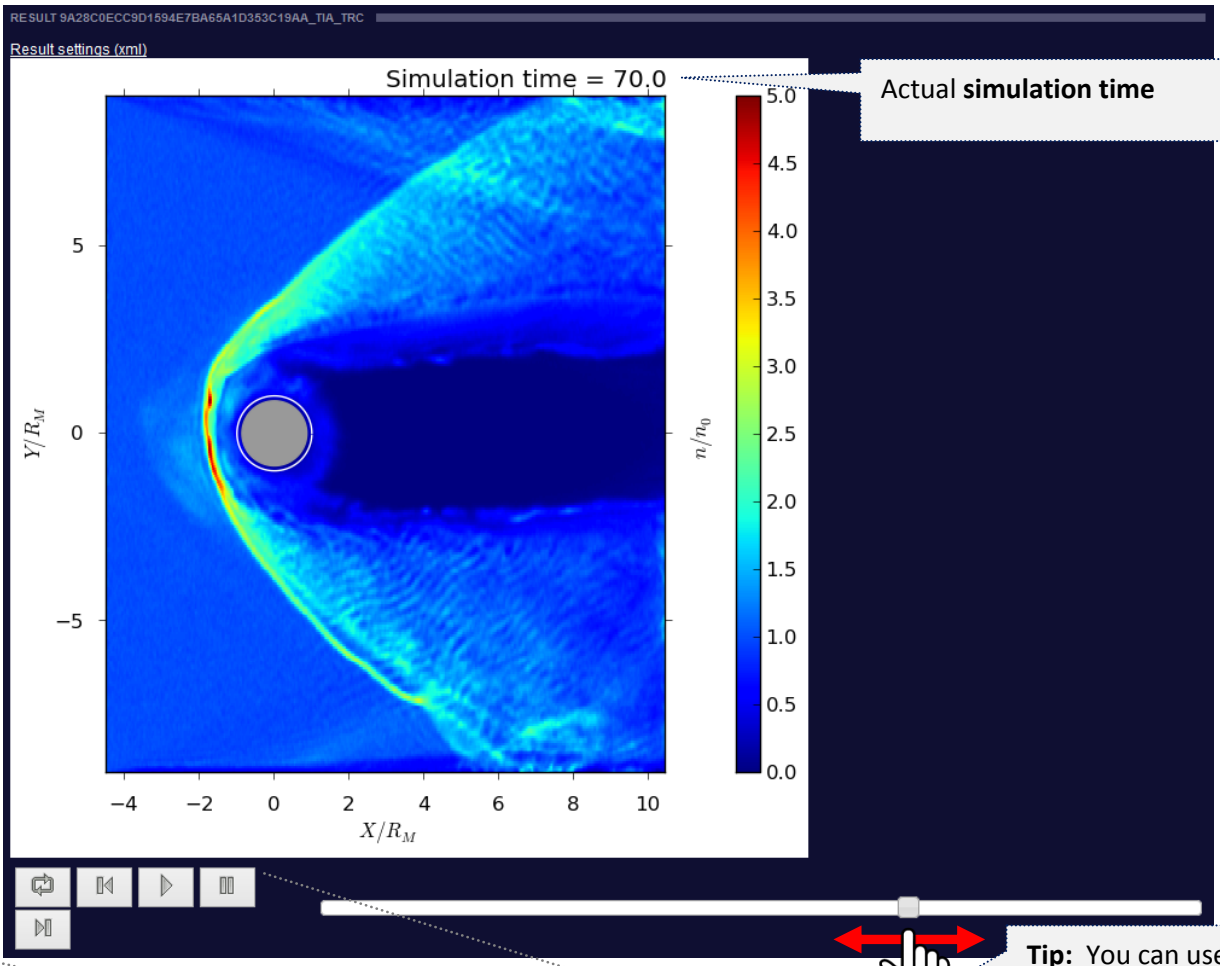
The **white color** indicates contour the planet.

Axis label with units

TIME RANGE

The time range output is similar to the single time output. Description of output elements you can find in the previous chapter.

Note: Outputs in the CDF and textual file format are not listed because of their potential size. If you want to get the output in this format, please select option - single time (step 2).



Note: There are two animation formats (gif and frame format). Gif format is here for the possibility saving animation. In that case use **right-click** and choose option **"save image as"**. Please note that switching between formats may take a few seconds.