Vison atmospheric toolbox : Ch4 concentration

The Atmospheric Toolbox aims to provide scientists with tools for ingesting, processing, and analyzing atmospheric remote sensing data. The toolbox consists of several software components, with the main components being CODA, HARP, VISAN, and QDOAS.

VISAN is a cross-platform visualization and analysis application for atmospheric data.
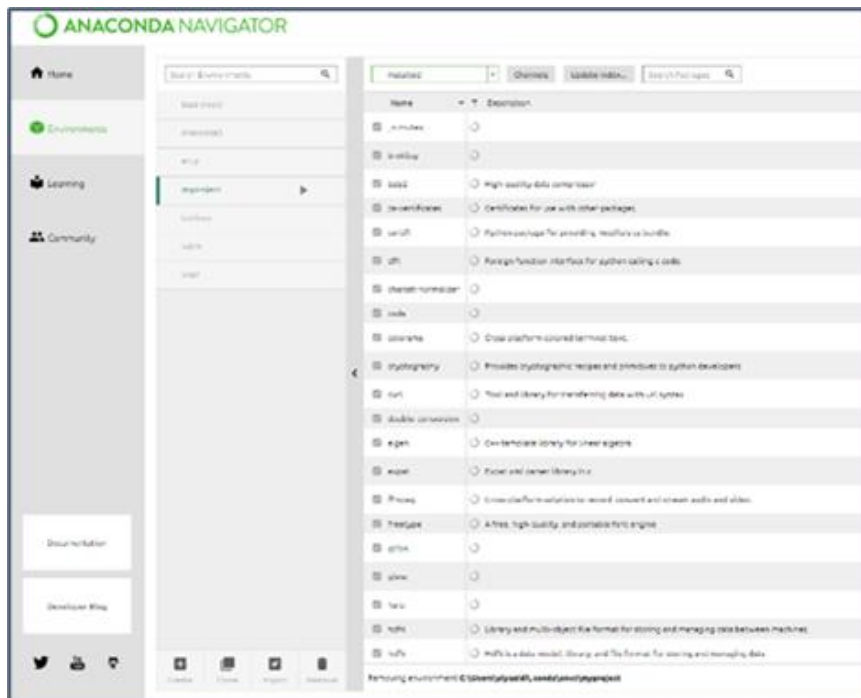
In this activity, we will use VISAN.

Step1: Visan installation

1. **install anaconda or miniconda**

You must download and install conda first, either via miniconda or Anaconda. If disk space is an issue (Anaconda is quite large), we recommend miniconda as this is a more minimal system that requires less disk space.
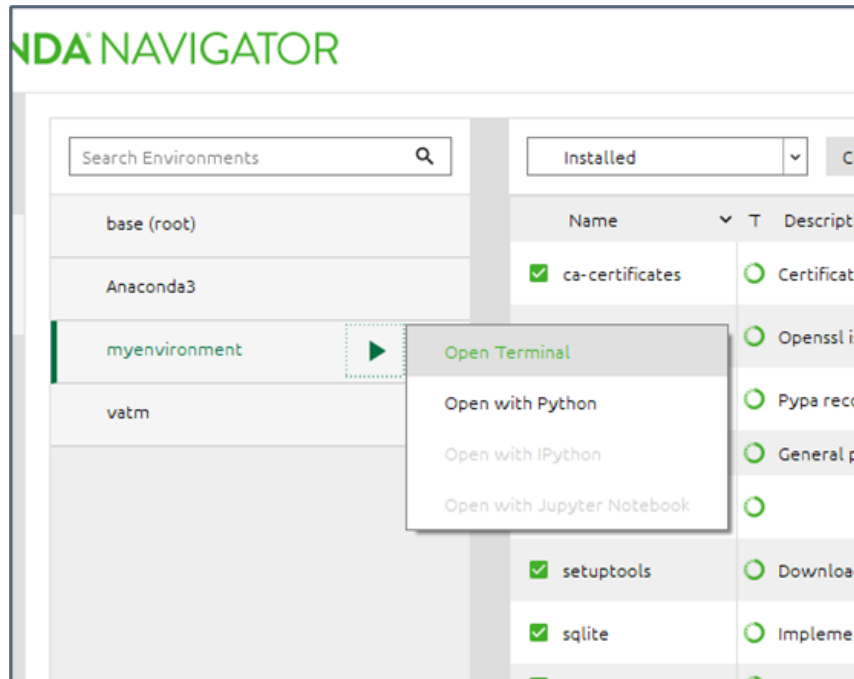
2. **Create a new environment**

- Environment>create>choose name e.g myenvironment > inPackages>python3.7*

3. **Open Terminal**

   Environment>myenvironment> open terminal

4. **install visan:**

   - conda install -c conda-forge visan

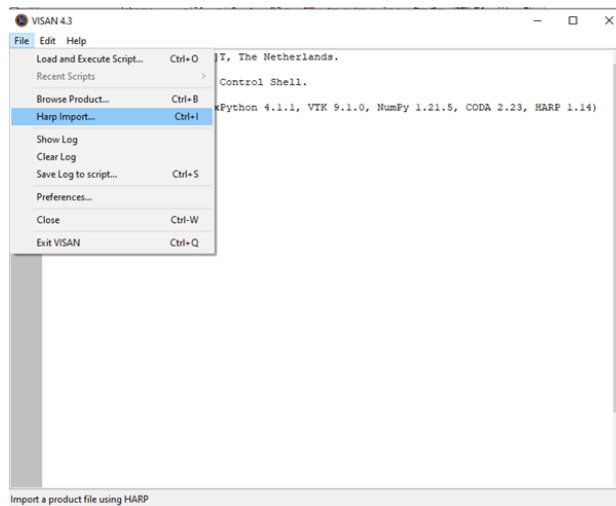   - Press yes to proceed.

Step2:

- In this example, we are viewing CH4 concentration nc file from Sentinel-5P
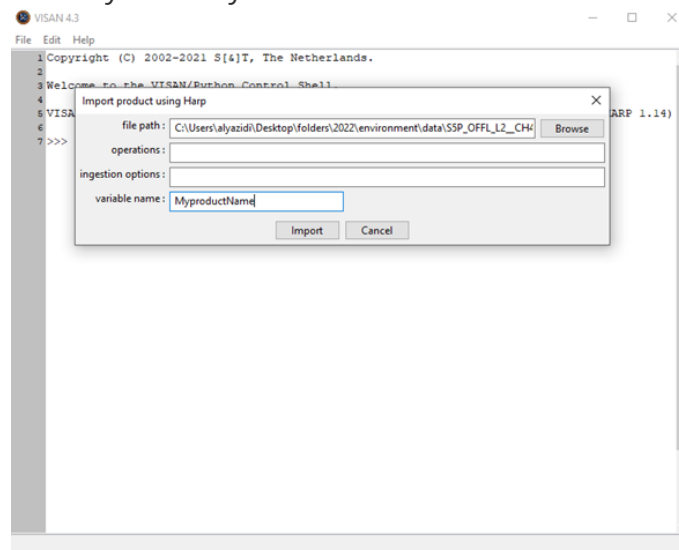
▼ **download the data**

Step3:

1. **Harp import**
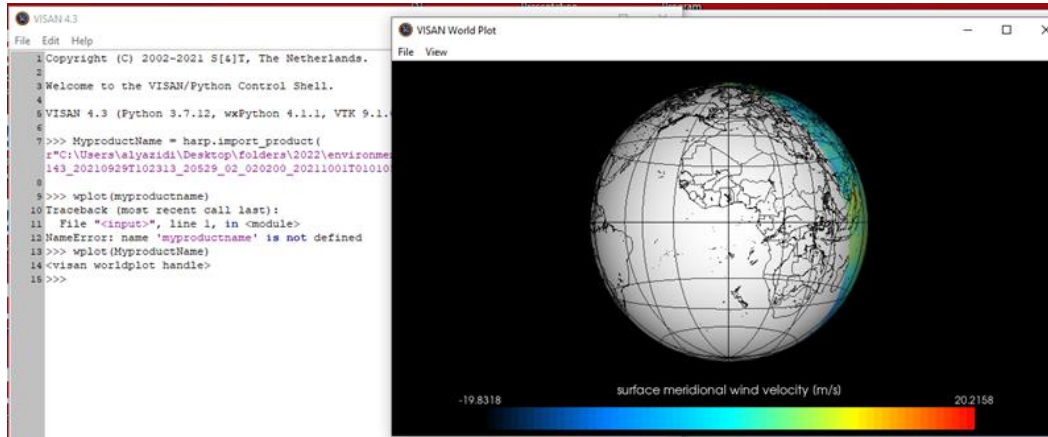
- In visan window>file>import harp

2. **Choose directory**

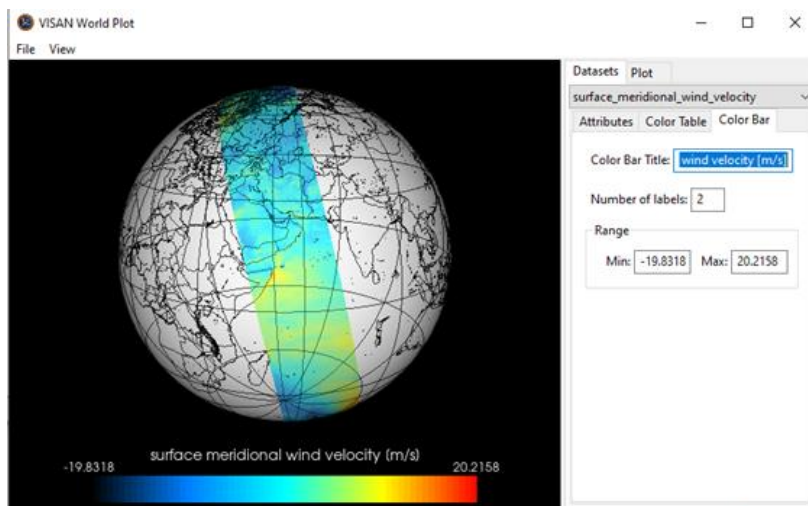- Browse to the directory where you downloaded the data and assign a name

3. Worldview plot

- wplot(MyproductName)

4. Image properties
- Choose image title, colour scale and range in the graphical window (VISAN World Plot)

5. Save the image

File/Save

Well Done