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*

A three	her kerren .	1	Induited .	+ Owner (Lantenatik, Institution G.
	Contractory (Note	* because
O Louiseana	- American's		B. context	0
	100		Barris	0
🖨 Learning	marrier b		IT 101	O man suble dels semenaur
	Sectors.		C montheast	🖒 Cartificates for paracelet intelligatinger.
A Connunity			8. wit	O falmonigaficannelis, malacostinelle
			0.0	O Averge function interface for apphenearing closes
			S non-senser	0
			(i) mite	0
			B arrests	O basistern positienvector.
			III memprov	O Proble systematic region and provider to gyther developers
			B (41	C Tool and identify for membering data with ut syntax
			III daka uranan	0
			ID egen	O contension lowy for cherring con
			(i) more	C Rose and same library in a
			E Pros	O transition materials and covertant cover advantables.
Description			III THEAH	O After high suicity and conservative angles
			B sta	0
			E ster	0
Descine Fra			8 ws	0
			8 mil	C Liney with site of a firmer for storing and managing standardware markines.
-			5.0	O with hadde multilling and the forms to many and menality data

3. Open Terminal

Environment>myenvironment> open terminal

		_	
Search Environments	٩	Installed	~ Ch
base (root)		Name	✓ T Description
Anaconda3		ca-certificates	O Certificate
myenvironment	► Open	Terminal	O Openssl is
vatm	Open	with Python	O Pypa reco
	Open	with IPython	O General p
	Open	with Jupyter Notebook	0
		setuptools	O Download
		sqlite	O Implemen

4. install visan:

• conda install -c conda-forge visan

(myenvironment) C:\Users\alyazidi>conda install -c conda-forge visan ollecting package metadata (current_repodata.json): done

Proceed ([y]/n)? y

• Press yes to proceed.

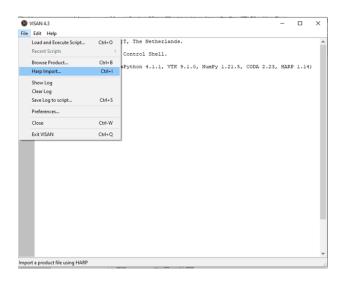
Step2:

• In this example, we are viewing CH4 concentration nc file from Sentinel-5P

download the data

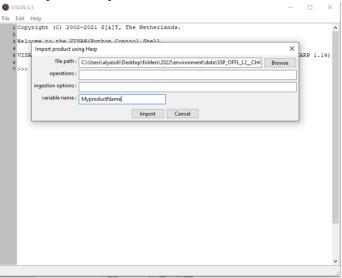
Step3:

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



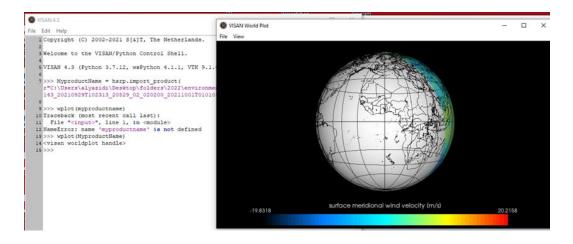
2. Choose directory

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



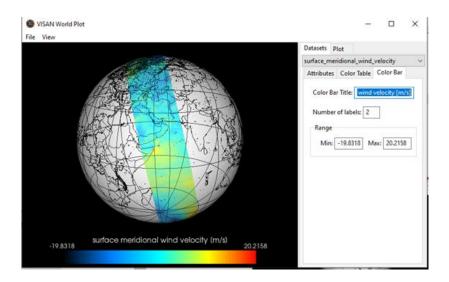
3. Worldview plot

• 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