



institut  
universitaire  
de France



# Tutorial on the OSOAA radiative transfer model

*Ocean Successive Orders with Atmosphere - Advanced*

**Dr Bruno LAFRANCE**

[bruno.lafrance@cs-soprasteria.com](mailto:bruno.lafrance@cs-soprasteria.com)

CS GROUP - France

**Pr Malik CHAMI**

[malik.chami@upmc.fr](mailto:malik.chami@upmc.fr)

Sorbonne Université (France)

# Outlines

- Software installation
- Graphical User Interface (GUI)
- Running the model using GUI
- Output files presentation
- Running the model using command files
- Examples of simulations

# Software installation

- Download site (CNES website):  
<https://github.com/CNES/RadiativeTransferCode-OSOAA>
- Deposite on personnal OSOAA root repertory
- Define the OSOAA\_ROOT path



The screenshot shows a terminal window titled "bruno@PO13561LX:~". The menu bar includes "Fichier", "Édition", "Affichage", "Rechercher", "Terminal", and "Aide". The terminal command line shows:

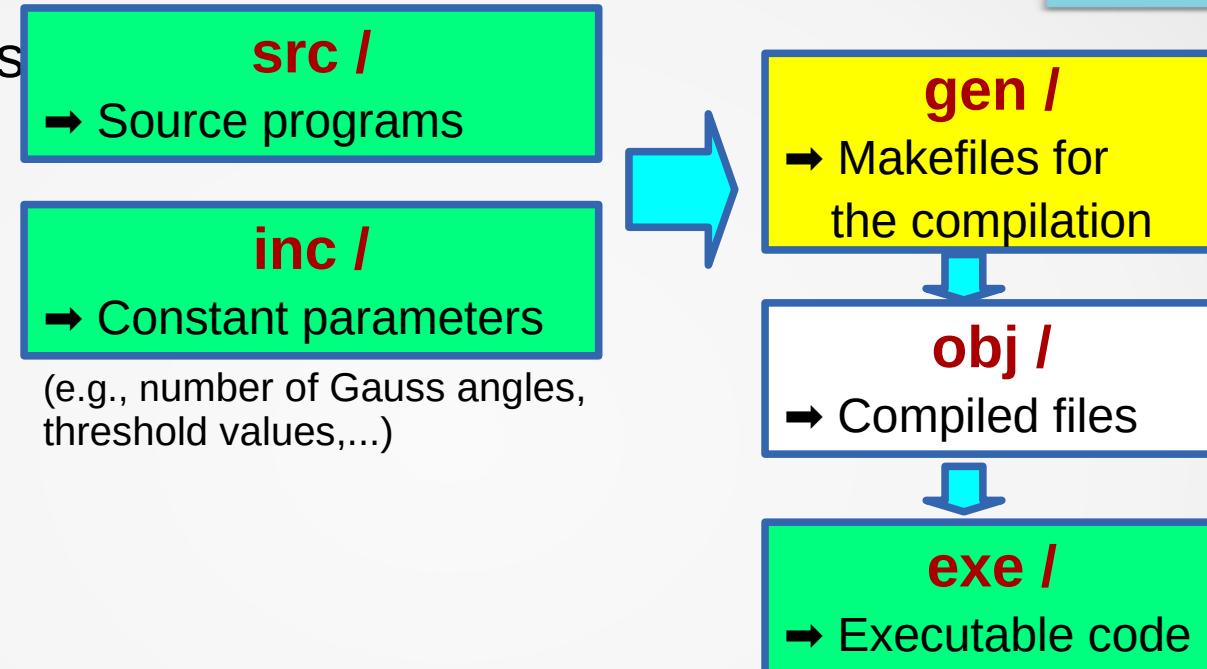
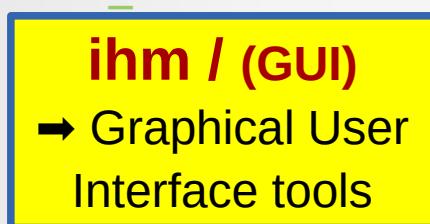
```
[bruno@PO13561LX ~]$ ls -a
.
..
.cache
.config
.bash_history
.bash_logout
.bash_profile
.bashrc
Bureau
.connectVPN.sh
.disconnectVPN.sh
.Documents
.esd_auth
.GlobalProtect
.ICEauthority
.Images
.local
.Modèles
.mozilla
.Musique
[bruno@PO13561LX ~]$ gedit .bashrc&
```

A red arrow points from the terminal command "gedit .bashrc&" to a callout box containing the following text:

```
# .bashrc
#OSOAA ROOT path
export OSOAA_ROOT=/home/bruno/OSOAA_V2.0
```

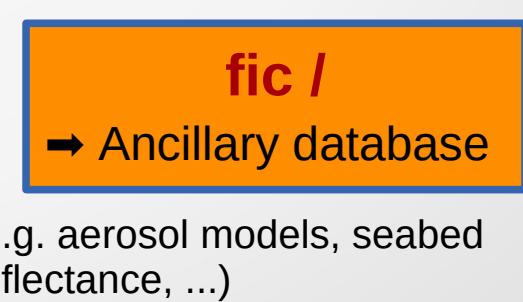
# Software installation

- List of directories



- Compilation :

- `cd $OSOAA_ROOT/gen`
  - `make -f makefile_OSOAA.gfortran`  
(or \*.g77 or \*.f77)



# Launch of OSOAA model

- GUI launch
  - Prerequisite

Test : « java -version »  
Must be version 16 or higher
  - `cd $OSOAA_ROOT/ihm/bin`  
`./runOSOAAUI.bash`