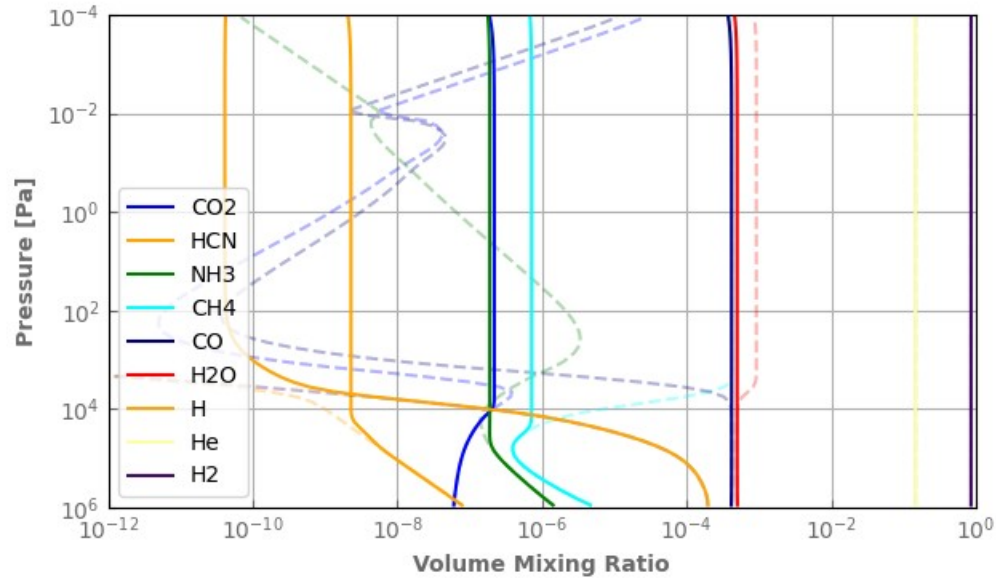


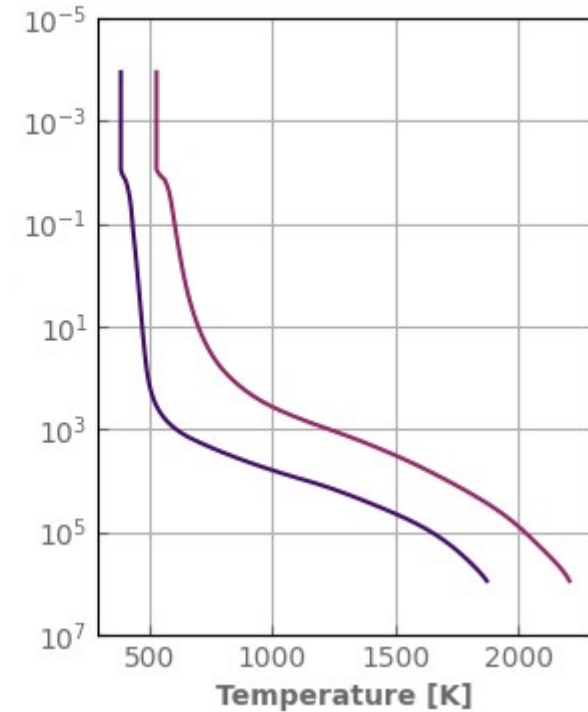
Introduction to atmospheric modeling, spectroscopy and retrievals

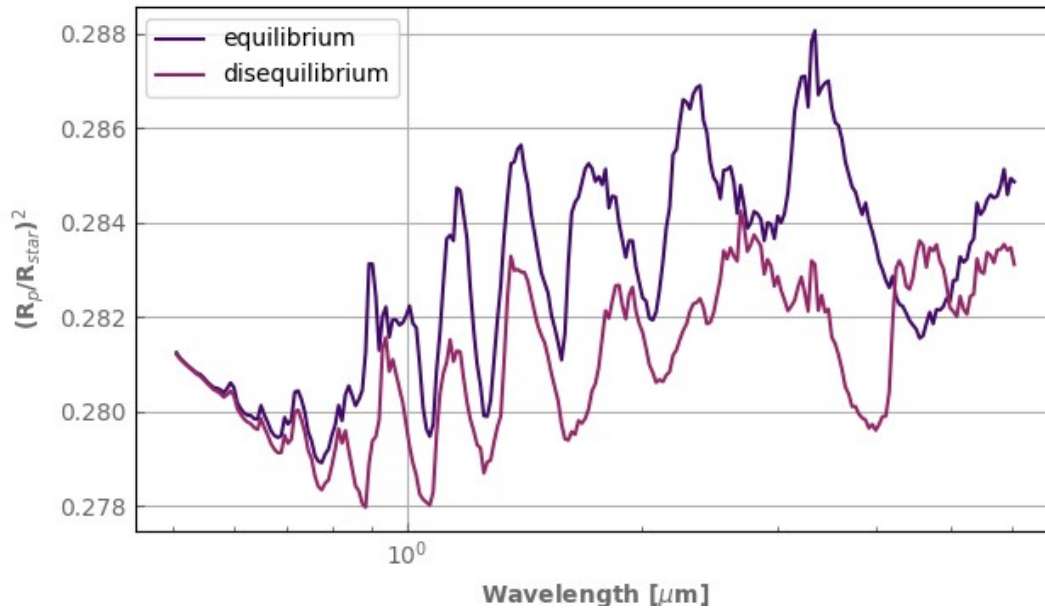
Y. Jaziri, E. Panek, B. Charnay, L. Mugnai, O. Venot, J. Leconte,
and ARES team



Chemistry

Temperature

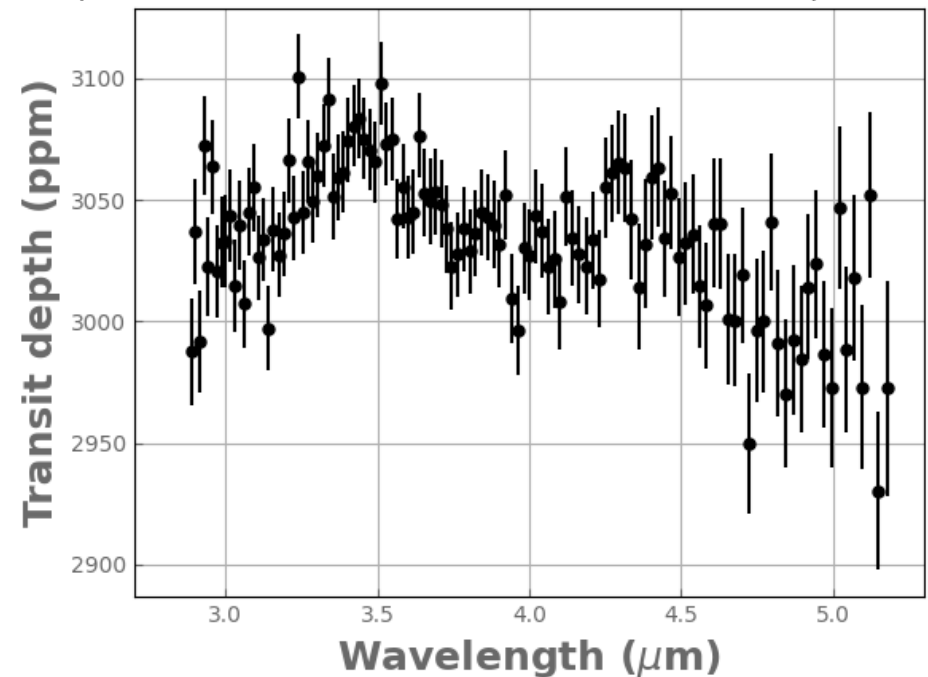


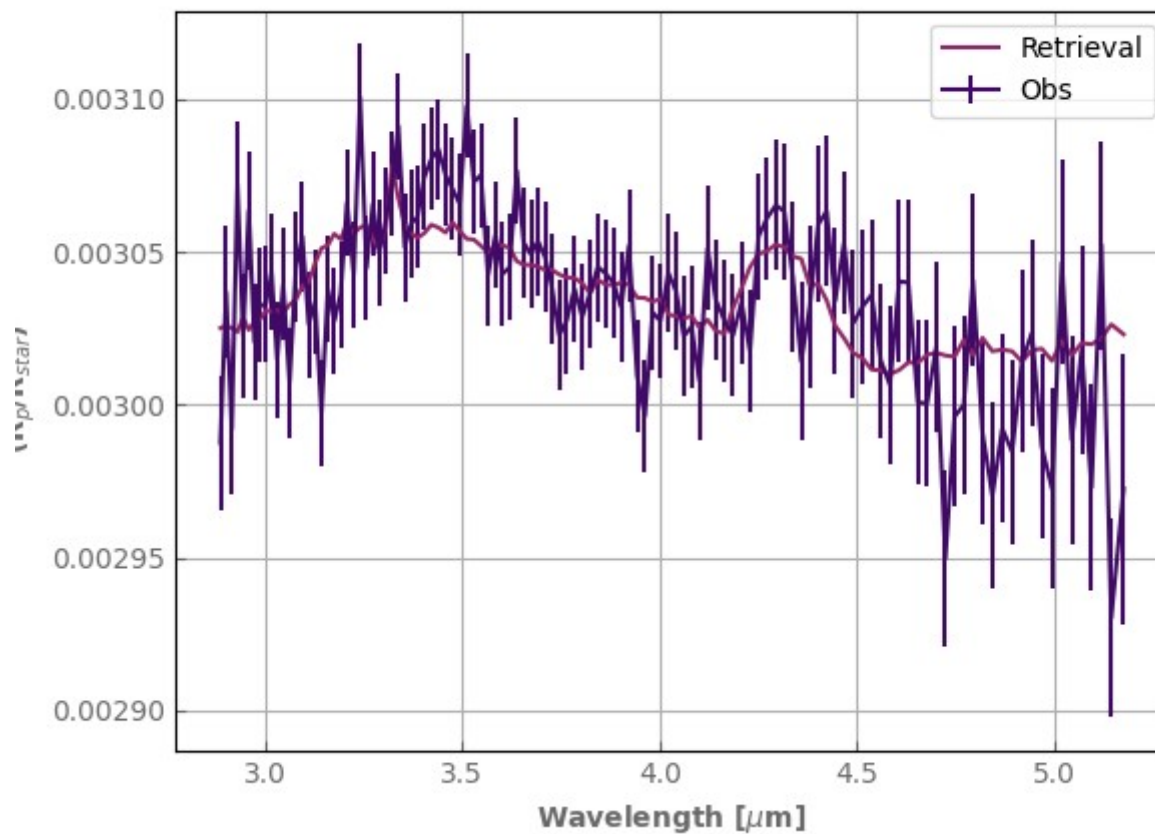


Theoretical spectra

Instrumental spectra

Spectrum at resolution 100 (5 transits with NIRSpec-G395M)





- Anaconda
- Data download
- `git clone https://forge.oasu.u-bordeaux.fr/jleconte/ares_2023.git`
- Move downloaded data to data directory
- `Conda create --name myenv`
`Conda activate myenv:`
 - `pip install taurex`
 - `pip install taurex-ace`
 - `pip install pandexo.engine`
 - `cd pycheqp-master`
`pip install .`
 - `pip install ipykernel`
 - `pip install ipython jupyter`
 - `pip install matplotlib → %matplotlib widget`
- `jupyter notebook filename`

Night gathers, and now my watch begins.

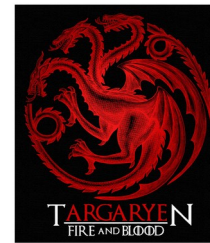


ALICE MAUREL
ALEXANDRA LEHTMETS
VINCENT YARIV

HD15337 c

DEBORAH BARDET
ELISA BALDIT

K2-18 b

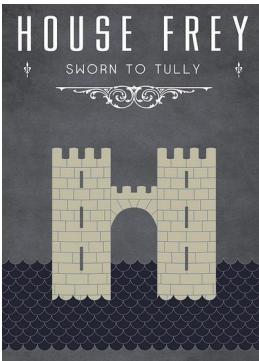
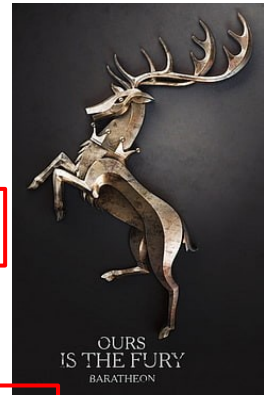


NATALYA REKTSINI
GIULIA ROCCETTI

HD15337 c

ADRIEN MASSON
VIRGINIE BATISTA
SAAD TALEB

K2-18 b



LTT9779 b

THOMAS WINTERHALDER
TARA TAHSEEN

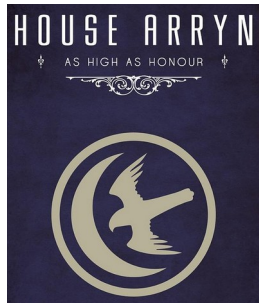


LTT9779 b

CLAUDIA DI MAIO
MARIA PETTYJOHN

TOI-421 b

ANASTASIIA IVANOVNA
MATTIA CLAUDIO

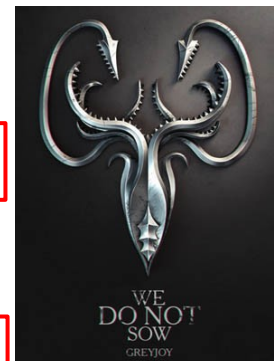


ANTONIA VOJTEKOVA
JAMES THORNE

TOI-421 b

LUCAS TEINTURIER
JACK DAVEY
ANTOINE MAILLOT

V1298 Tau c



Send your spectra

Use the cell to save your spectra by changing the proper « wl_save » and « depth_save »

Send me:

- « spectra_house.out »
- Parameters:
 - free: molecules and abundances
 - eq: Z and C/O
 - diseq: Z, C/O and kzz
- Your House

email: yassin.jaziri@latmos.ipsl.fr



TRAPPIST-1b

TRAPPIST-1c

TRAPPIST-1d

TRAPPIST-1e



Earth

TRAPPIST-1f

TRAPPIST-1g

TRAPPIST-1h