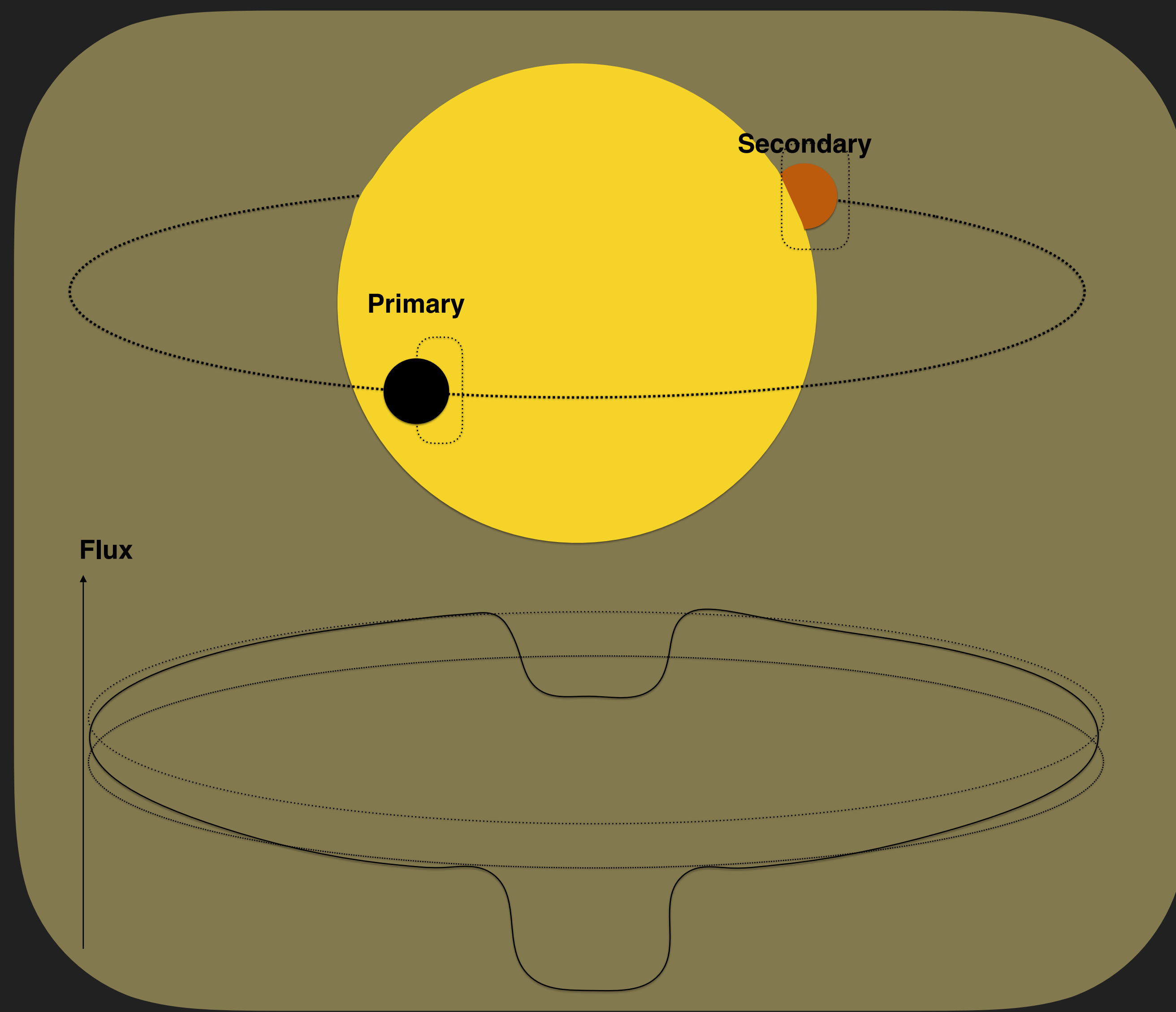


# A SIMPLE GUIDE TO PLANNING A TRANSITING EXOPLANET OBSERVATION WITH JWST USING PANDEXO

## STEP 1: GATHER SOME INFO ABOUT THE PLANET SYSTEM OF INTEREST



- ✓ STELLAR TEMPERATURE
- ✓ STELLAR METALLICITY
- ✓ STELLAR LOGG
- ✓ STELLAR BRIGHTNESS
- ✓ PLANET RADIUS
- ✓ TRANSIT DURATION

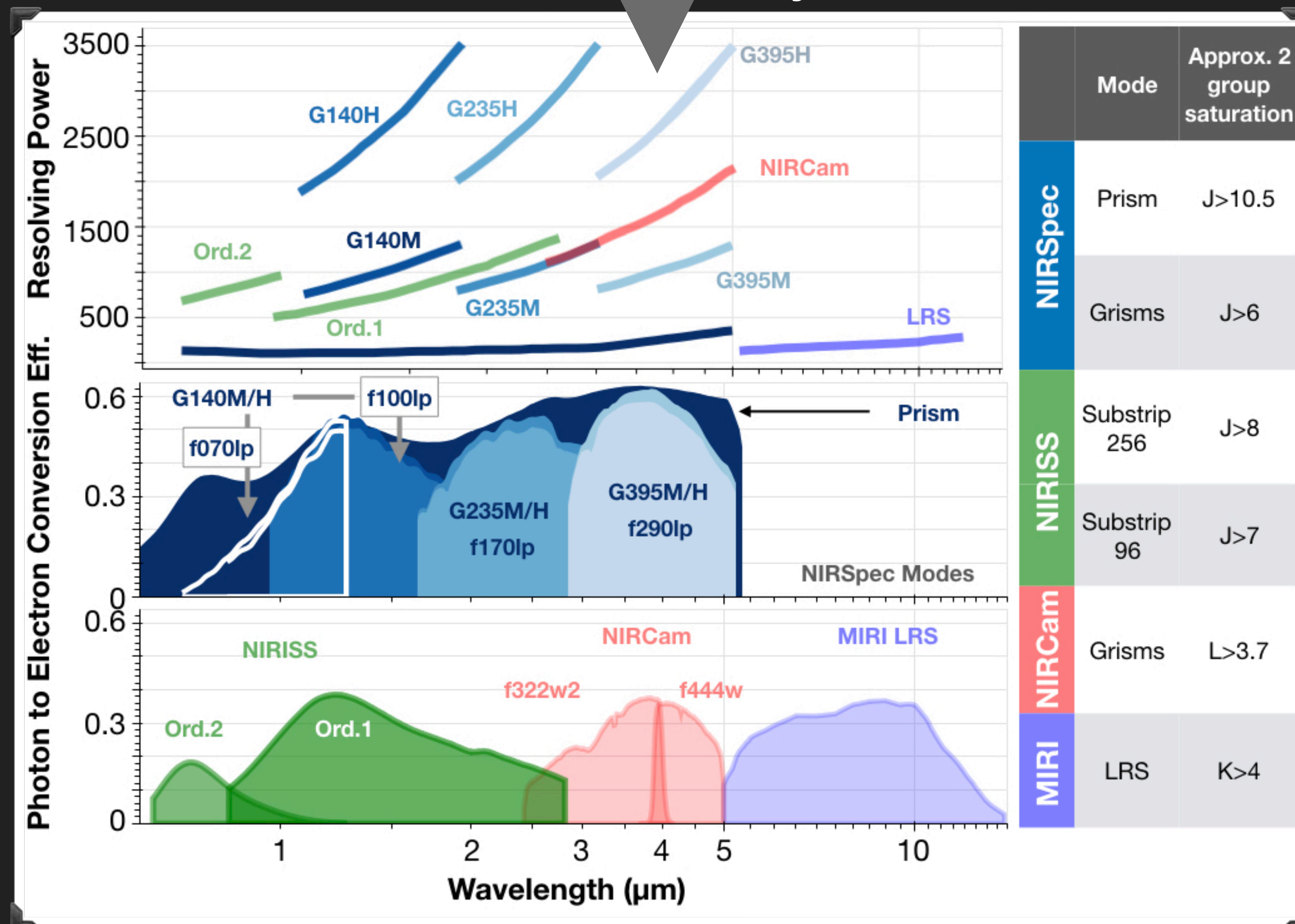
TROUBLE FINDING THOSE:

EXOPLANETS.ORG  
[HTTP://EXOPLANETARCHIVE.IPAC.CALTECH.EDU](http://exoplanetarchive.ipac.caltech.edu)  
[HTTP://WWW.ASTRO.KEELE.AC.UK/JKT/TEPCAT/](http://www.astro.keele.ac.uk/jkt/TEPCAT/)

## STEP 2: PICK YOUR OBSERVING MODE

1. How bright is your target ?
2. What wavelength range do you need ?
3. Do you need high resolution to resolve your molecular feature?

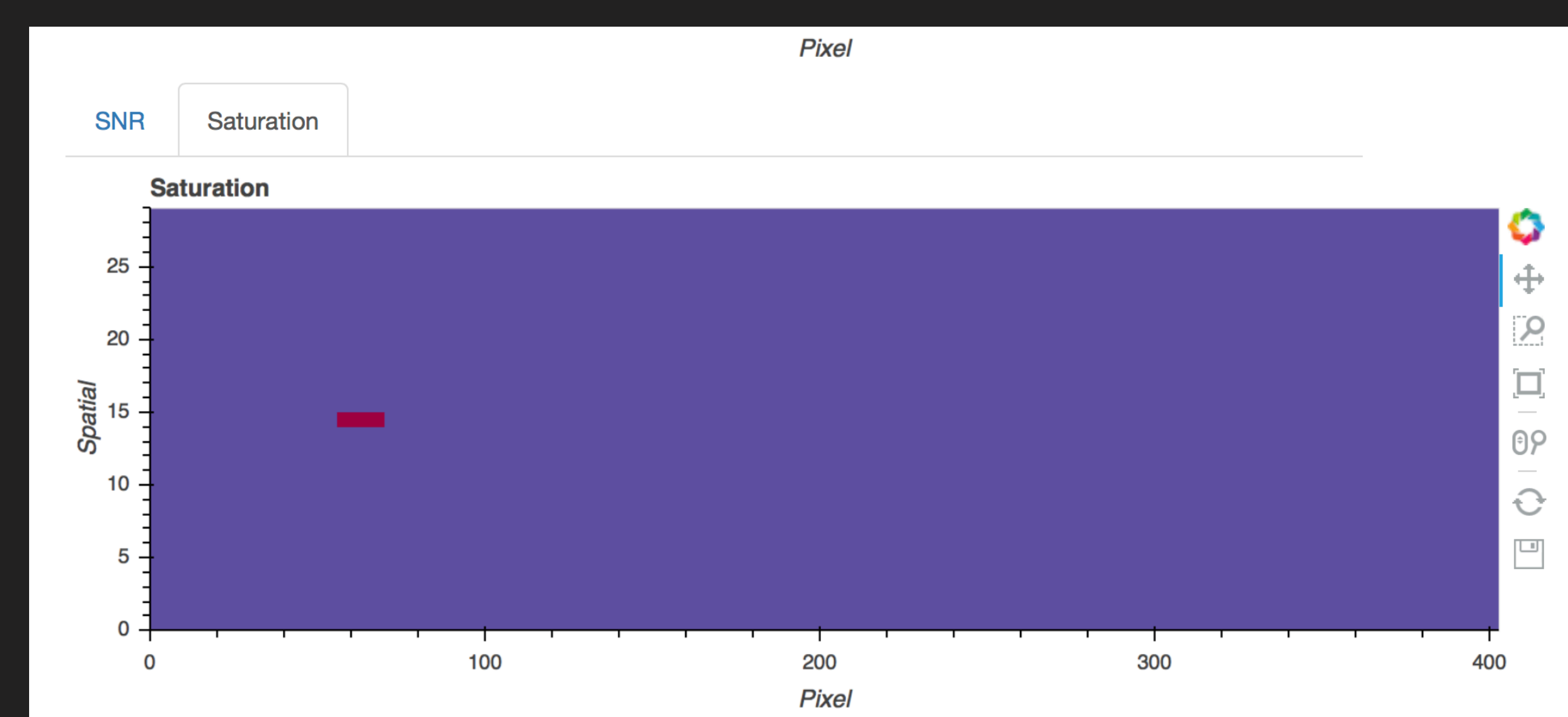
Lastly, check the resolution



First eliminate anything that will saturate

Each molecule absorbs at different wavelengths. Next, eliminate the modes that cannot access what you are interested in.

## STEP 3: GOT TO [EXOCTK.STSCI.EDU/PANDEXO](http://exoctk.stsci.edu/pandexo) TO RUN YOUR SIMULATION



Are your absorption features visible? Yes!  
 Are you saturated? Uh-oh! Yes!

Might want to pick another observing mode

## PANDEXO LEVELS THE PLAYING FIELD FOR PLANNING JWST OBSERVATIONS

More resources below, including in-depth tutorials