

A high-resolution image of Earth from space, showing the African continent and surrounding oceans. The Earth is illuminated from the right, creating a bright blue glow along its horizon. The background is a dark, star-filled space.

# ASTROPI MISSION – MOEBIUS



# INTRODUCTION

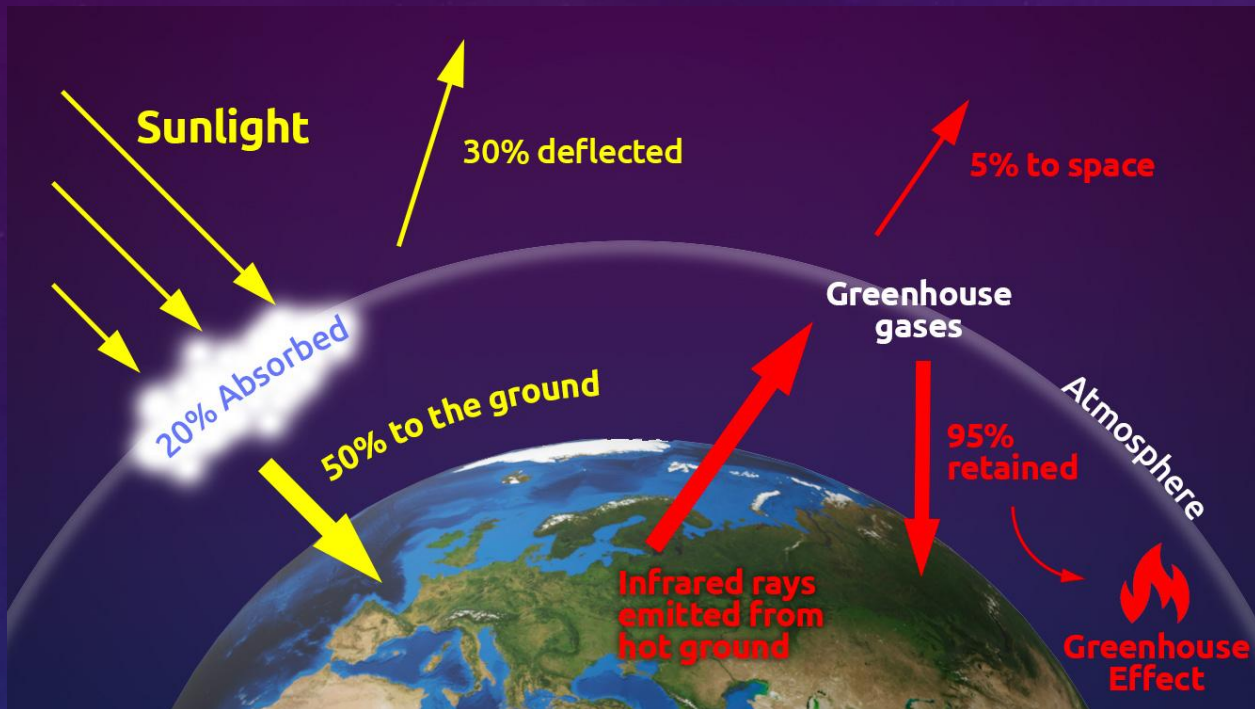
Global warming increase is caused by several humans actions. The aviation-derived impact is around 40% by the rejected CO2 and 60% by the contrails and embedded cirrus.

With the astro pi mission we tried to identify the contrails and take pictures when we're in a zone with high chances of seeing some. With the taken pictures we will try to :

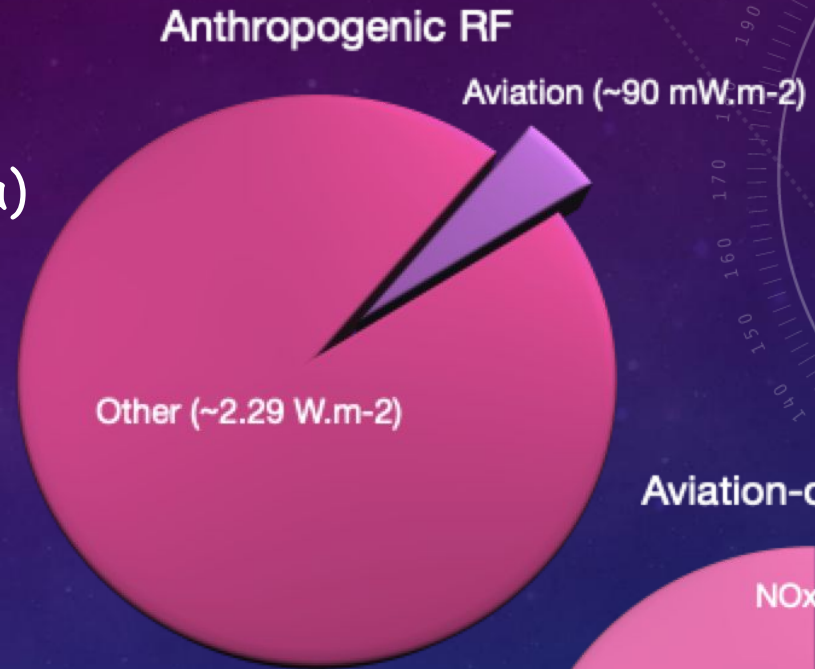
- Study contrails : their extent, duration and opacity
- make a cartography based on these pictures, determining zones that fill the atmospheric condition to form a contrail
- Manage air traffic by avoiding daytime training areas
- Provide data for simulations or weather models.



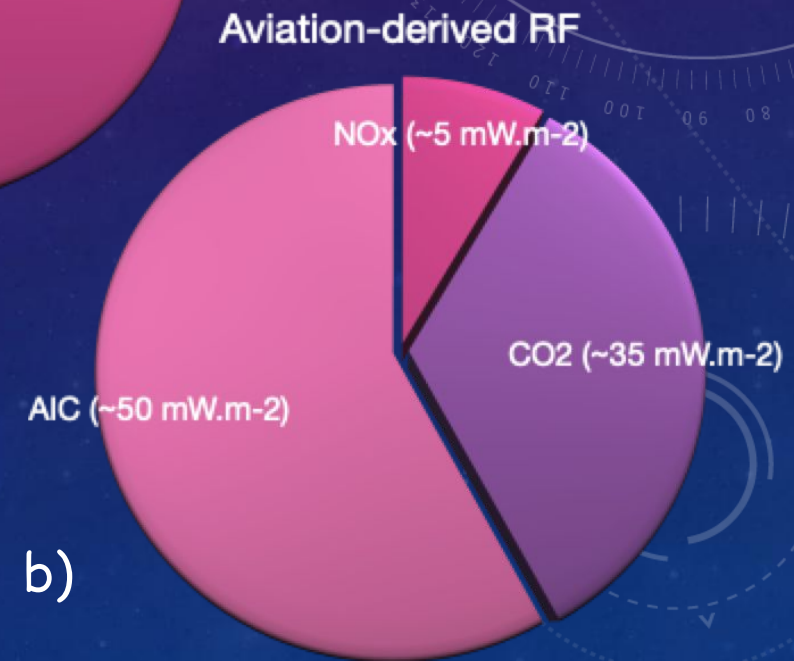
# CONTRAILS' IMPACTS



a)



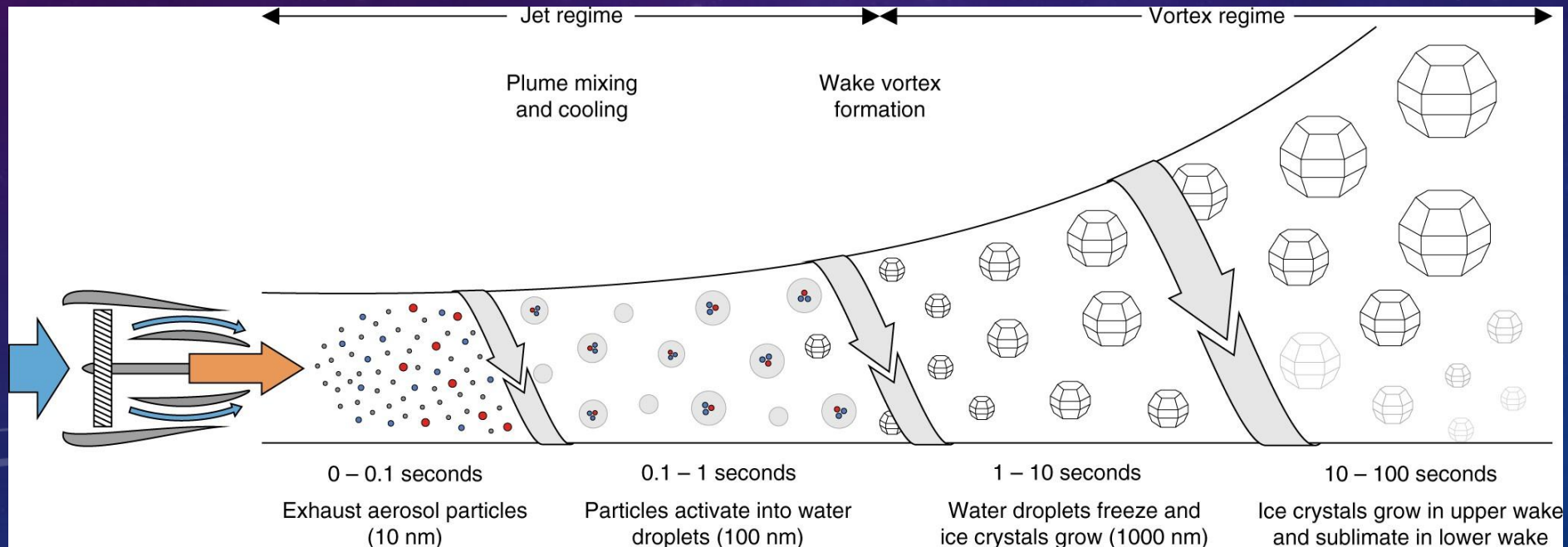
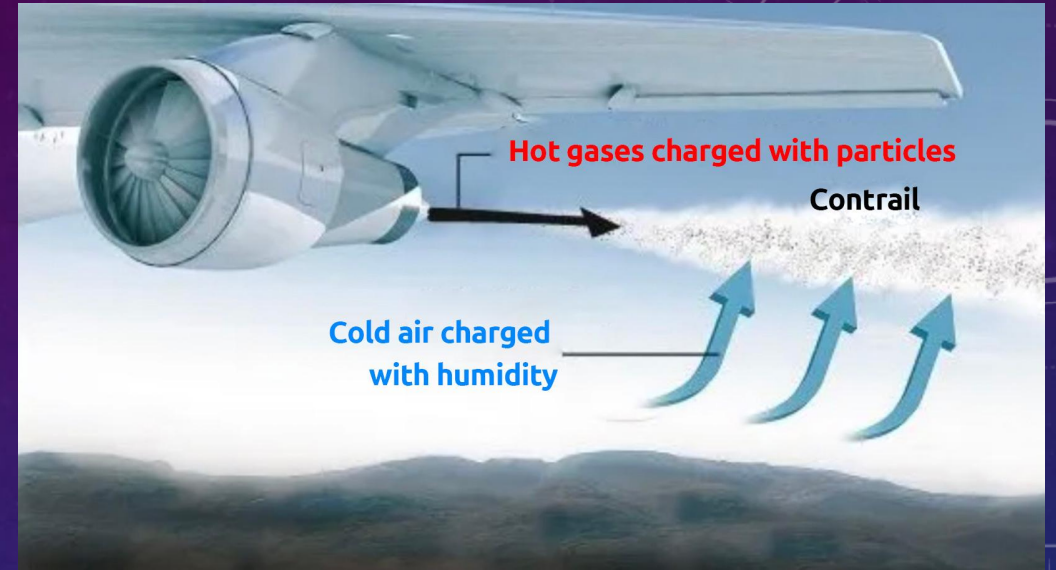
b)



RF= radiative forcing



# HOW CONTRAILS ARE MADE ?

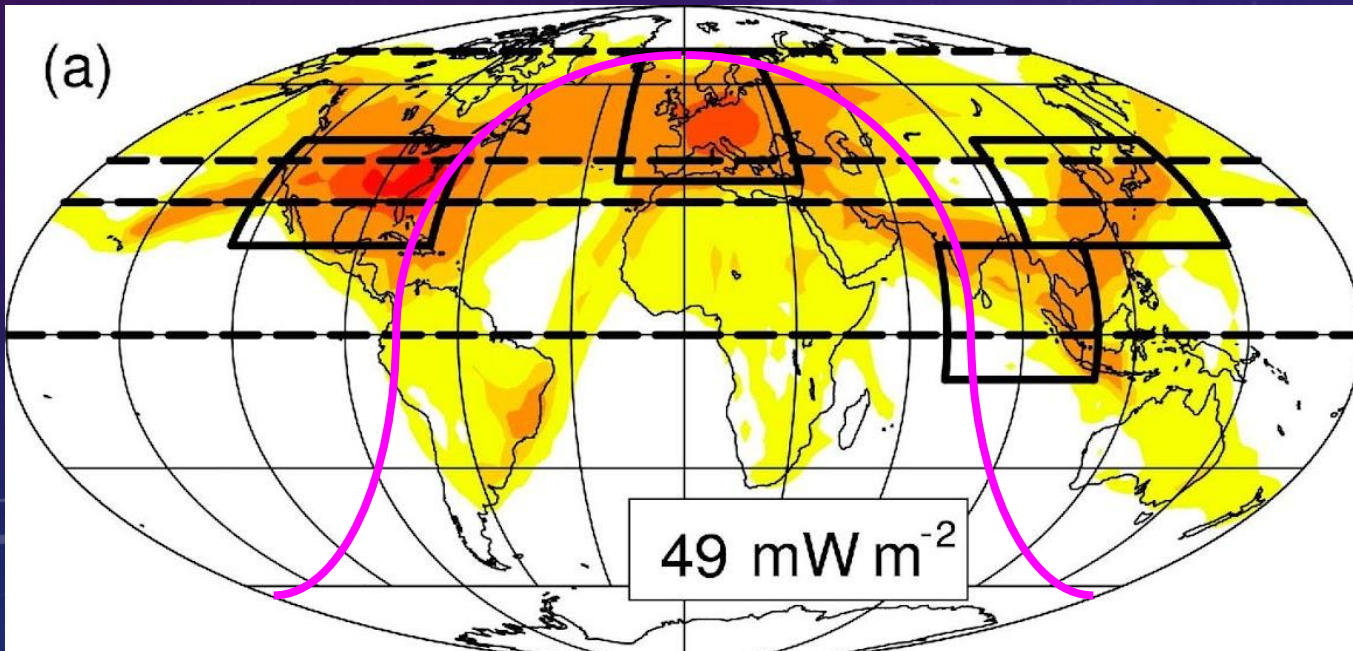


## Solutions to limit contrails :

- fly at a **lower altitude** to minimized contrail formation
- **avoid** as much as possible the **proximity of flight routes**
- fly in areas where the **weather conditions do not allow the contrails to remain**



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# THANK YOU FOR LISTENING

