

# Substantial upgrade of the NDACC and TCCON sites Zugspitze and Garmisch within ACTRIS

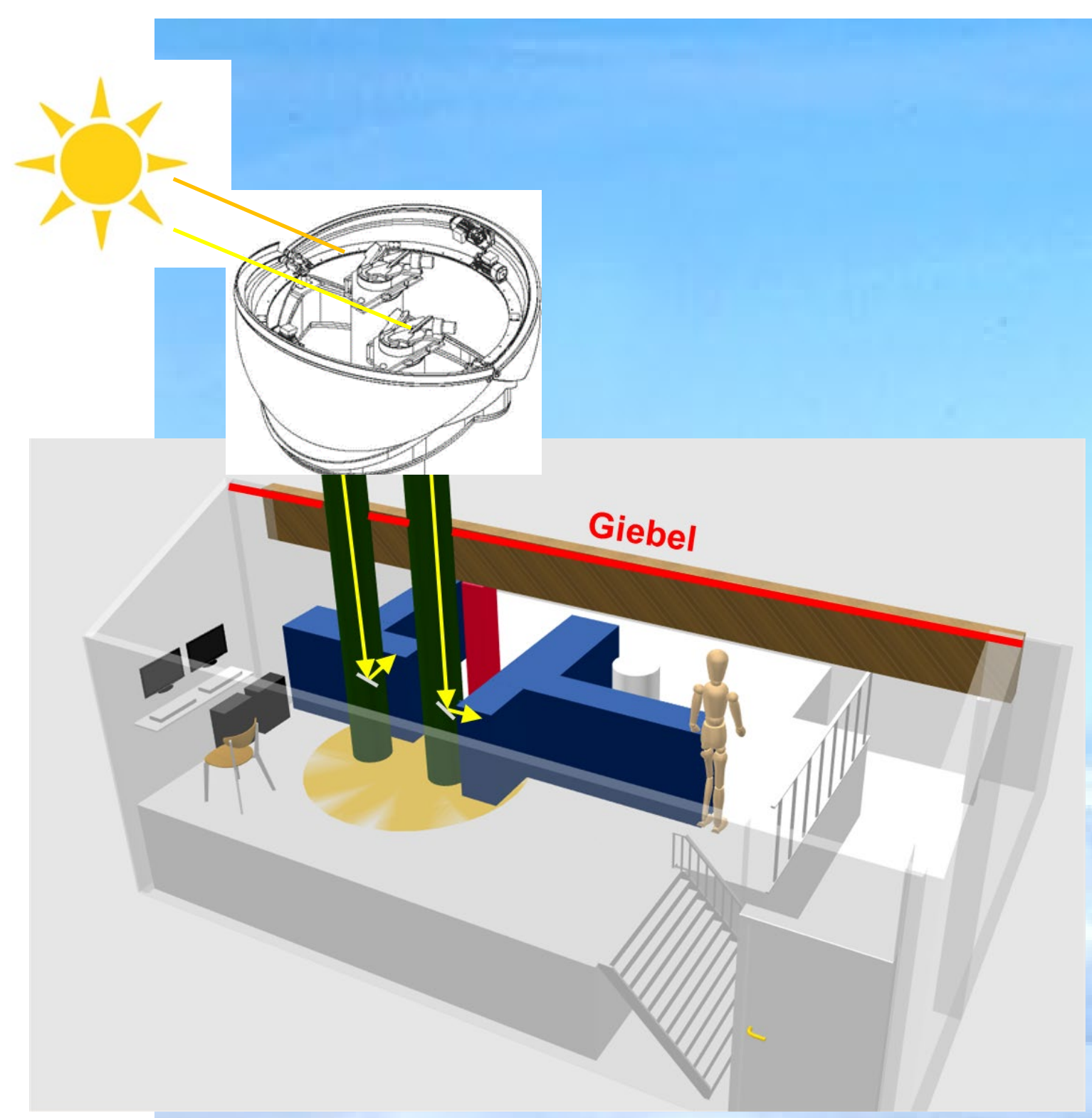
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**Project Funding**  
5.35 Mio €  
2021-2026

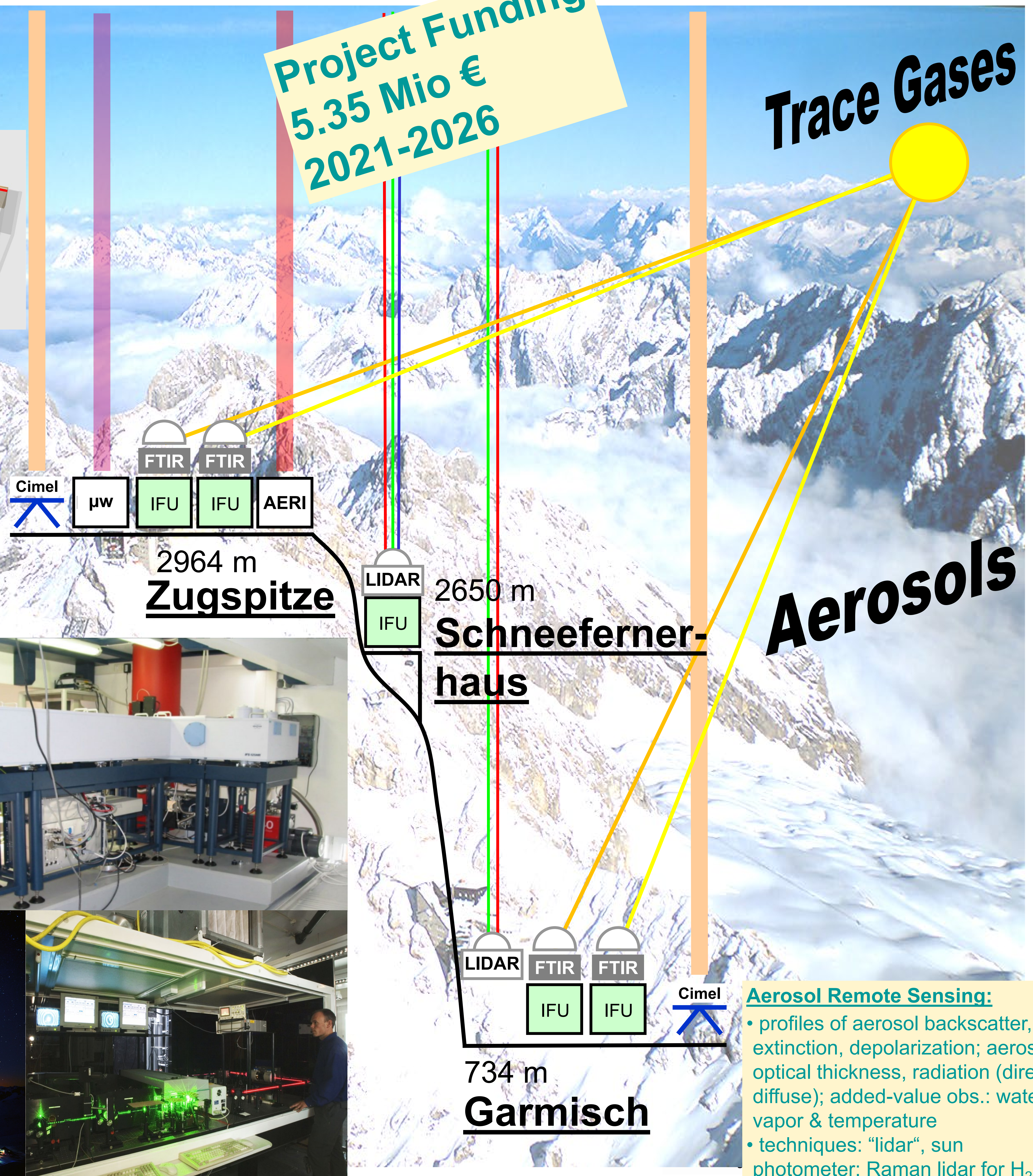
**Trace Gases**

**Aerosols**



**Reactive Trace Gases Remote Sensing:**

- atmospheric columns/profiles of ozone, nitrogen dioxide, formaldehyde, ethane, ammonia
- technique: "solar FTIR"



**Aerosol Remote Sensing:**

- profiles of aerosol backscatter, extinction, depolarization; aerosol optical thickness, radiation (direct & diffuse); added-value obs.: water vapor & temperature
- techniques: "lidar", sun photometer; Raman lidar for H<sub>2</sub>O/T

