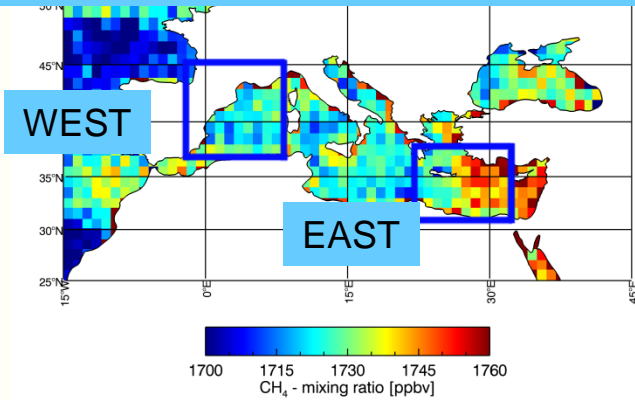


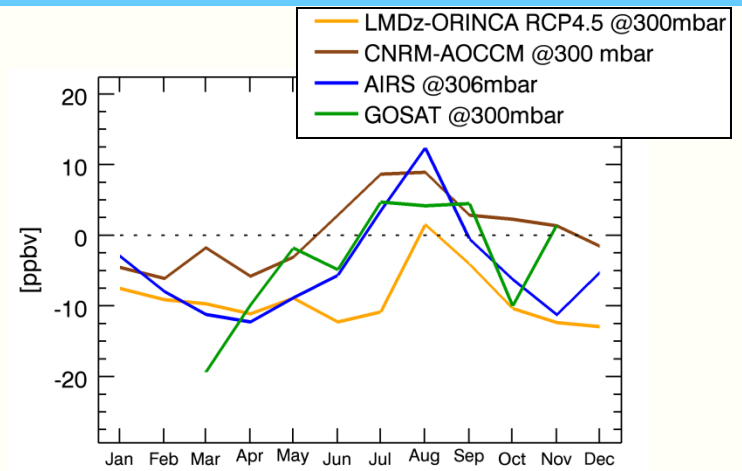
# CHEMICAL CLIMATE EVOLUTION ABOVE THE MEDITERRANEAN BASIN IN THE MID TO UPPER TROPOSPHERE by Ricaud et al.

## 1. IMPACT OF THE ASIAN MONSOON ANTICYCLONE ON THE VARIABILITY OF CH<sub>4</sub> ABOVE THE MEDITERRANEAN BASIN

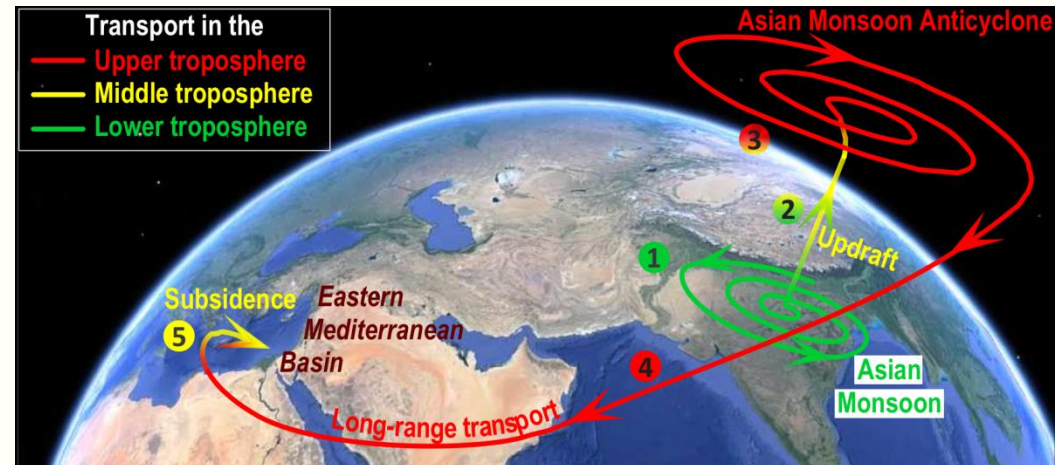
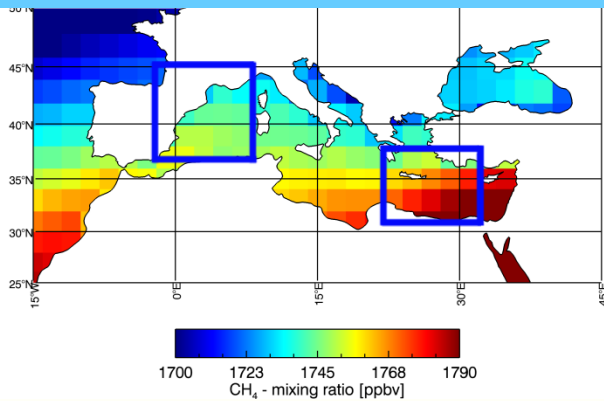
Spaceborne IASI mid-tropospheric CH<sub>4</sub> in summer



Seasonal Variation of the East-West Difference in CH<sub>4</sub> at 300 hPa



Modelled MOCAGE mid-tropospheric CH<sub>4</sub> in summer



# 2. CHEMICAL CLIMATE EVOLUTION ABOVE THE MEDITERRANEAN BASIN

CH<sub>4</sub>

O<sub>3</sub>

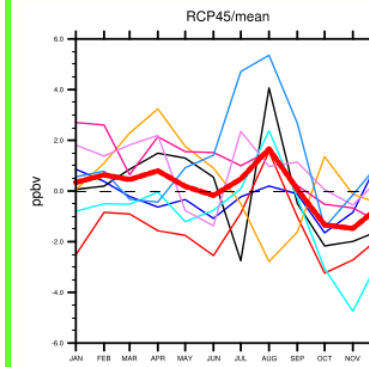
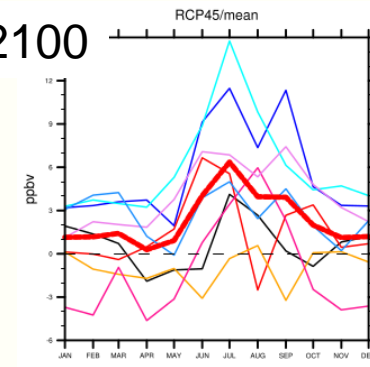
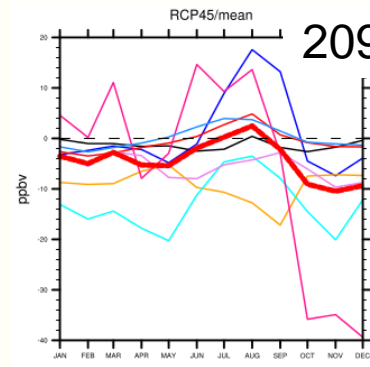
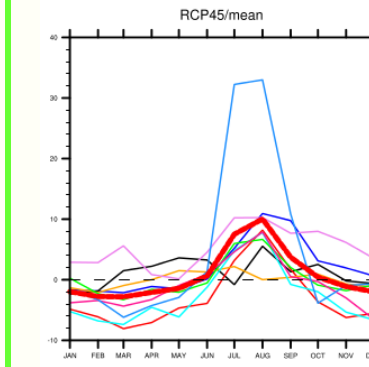
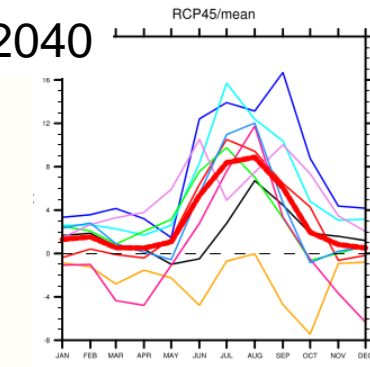
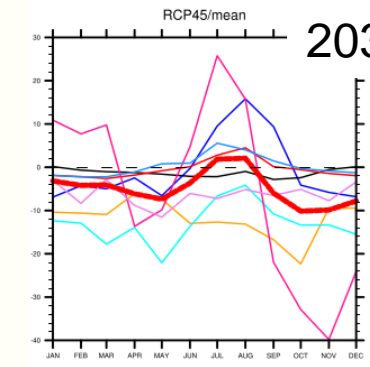
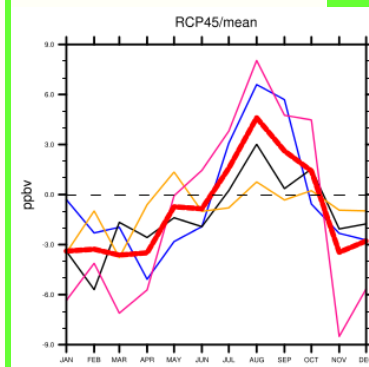
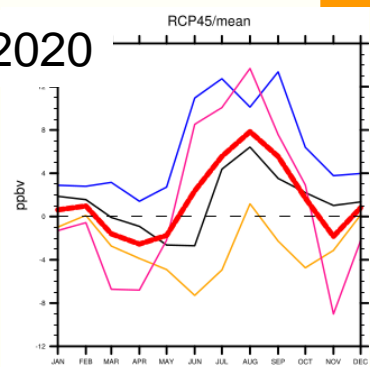
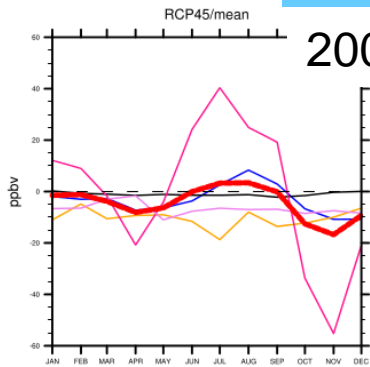
CO

500 hPa

ACC-MIP models

-  LMDz
-  AM3
-  CMAM
-  E2R
-  EMAC
-  UEDI
-  NIWA
-  NIES
-  CESM
-  JPL
-  MF
-  GEOSCCM
-  NCAR
-  OSLO
-  UKMO

 Mean



# THE AIRBORNE GLAM CAMPAIGN by Ricaud et al.

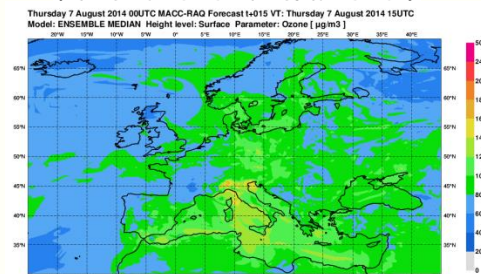
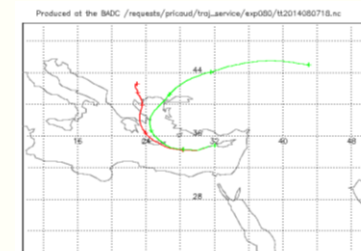
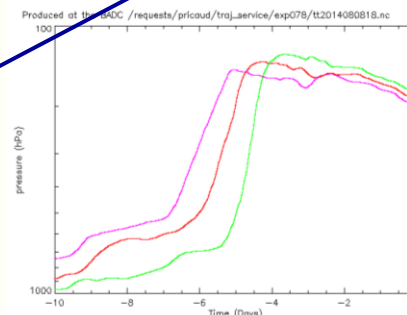
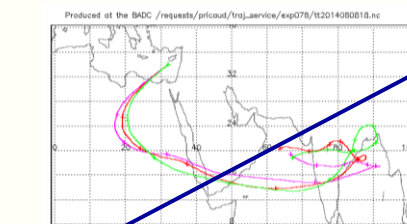
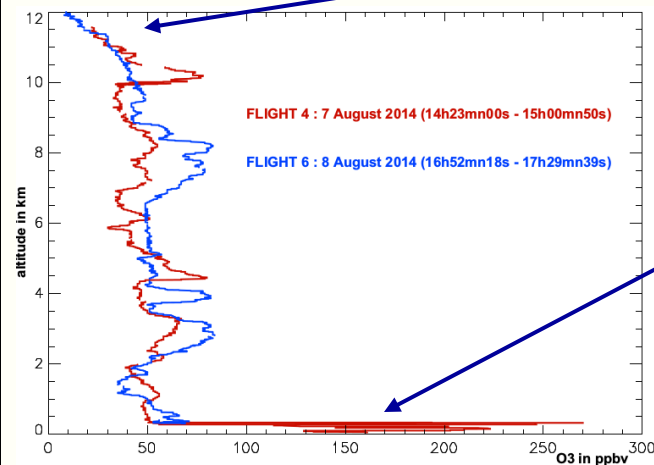


<b>F-20</b>	H <sub>2</sub> O, O <sub>3</sub> , NO, NO <sub>x</sub> , NH <sub>3</sub> , aerosol concentration & size distribution (0.2-3 μm), temperature, upward/ downward SW and LW radiations
<b>SPIRIT</b>	CO, CH <sub>4</sub> , N <sub>2</sub> O, CO <sub>2</sub>

Ozone profiles

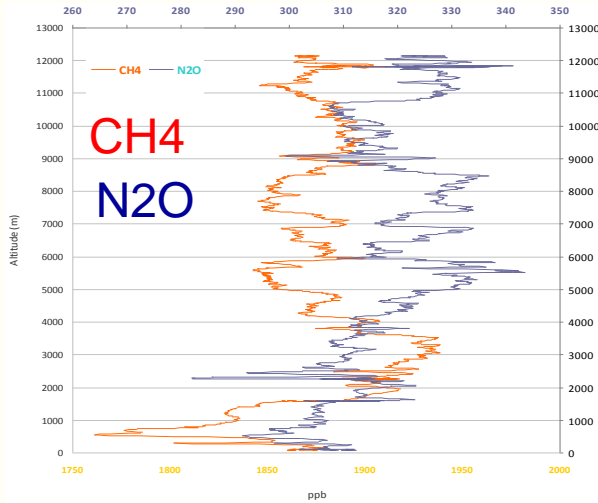
Ozone Minimum at 190 hPa

Ozone Maximum at 970 hPa

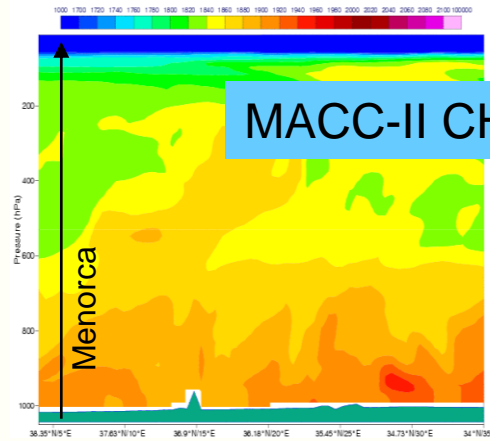


# B) Greenhouse Gases

Menorca

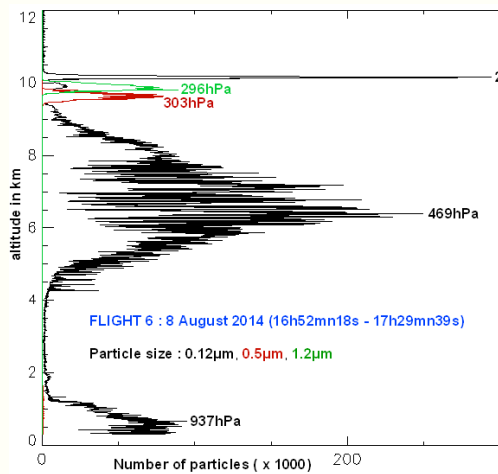


MACC forecast from Monday 04 August 2014 00Z valid at T-060: Wednesday 06 August 2014 12Z  
Vertical cross-section of Methane (ppb) from 38.5°N/4°E to 34°N/35°E



# C) Aerosols

Larnaca



MACC forecast from Wednesday 06 August 2014 00Z valid at T-090: Friday 08 August 2014 12Z  
Vertical cross-section of Total Aerosol Concentration (mg/m<sup>3</sup>EL0.73) from 38.5°N/4°E to 34°N/35°E

