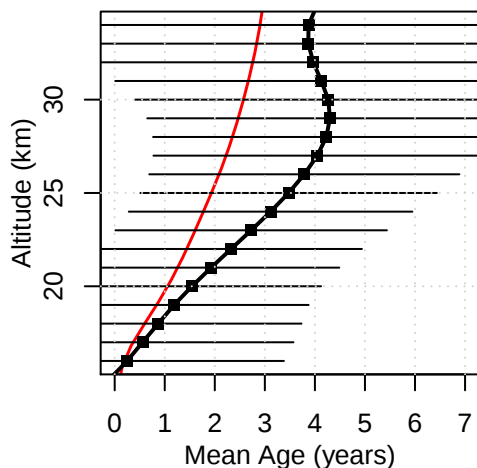
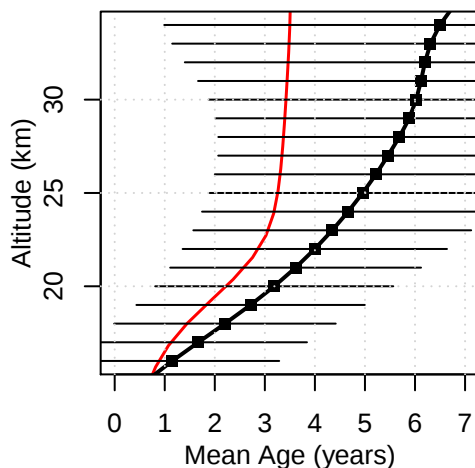


# UKCA xjcir Mean Age of Air

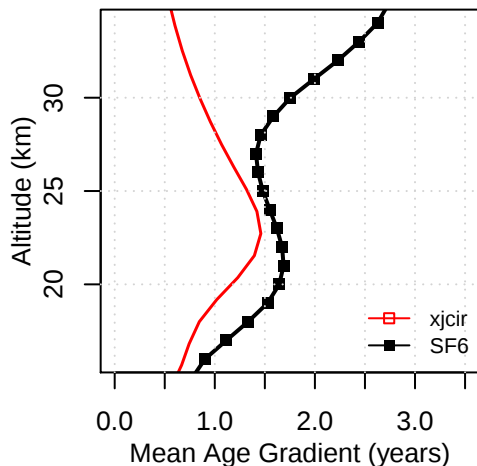
## Tropical Mean Age Profile



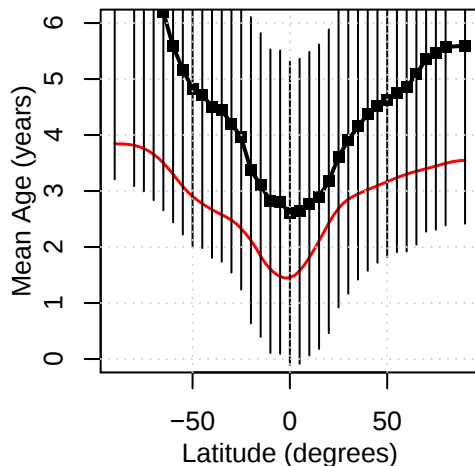
## Midlatitude Mean Age Profile



## Trop-Midlat Mean Age Gradient Prof



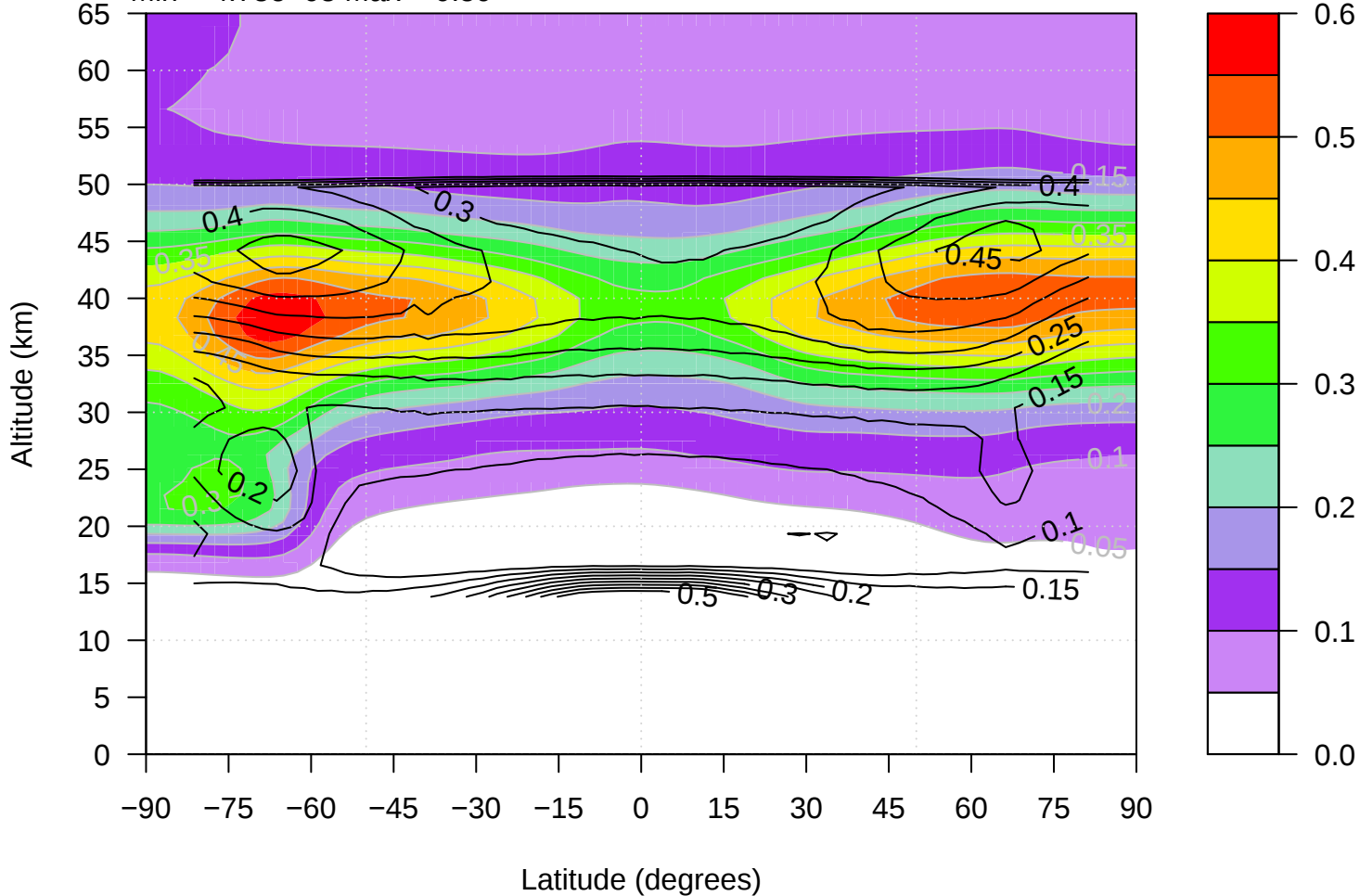
## Mean Age, 23km (~50hPa)

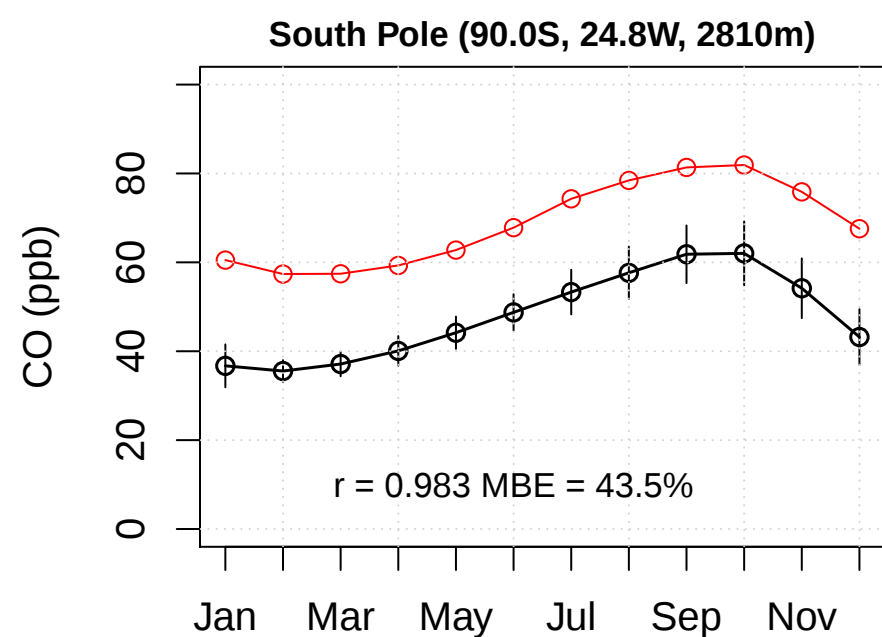
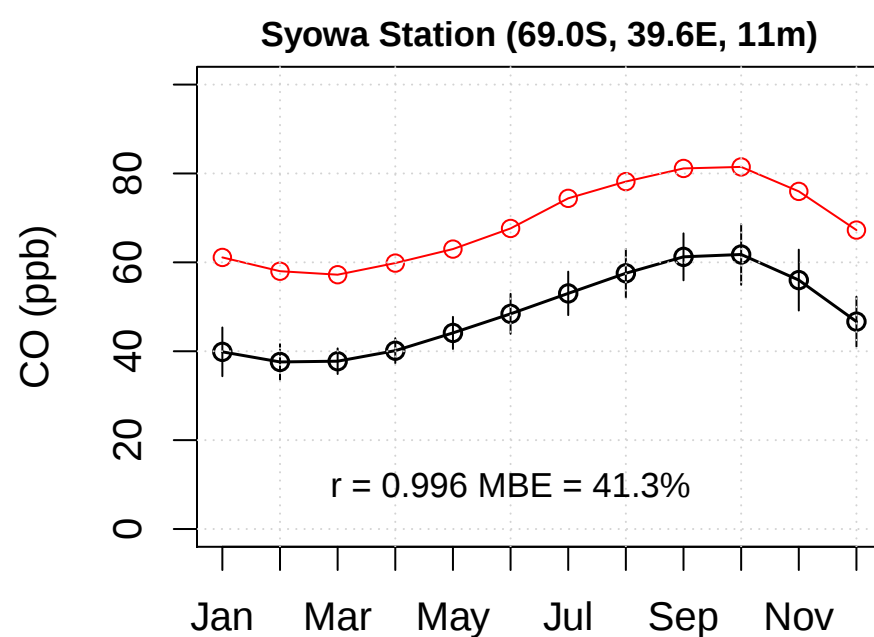
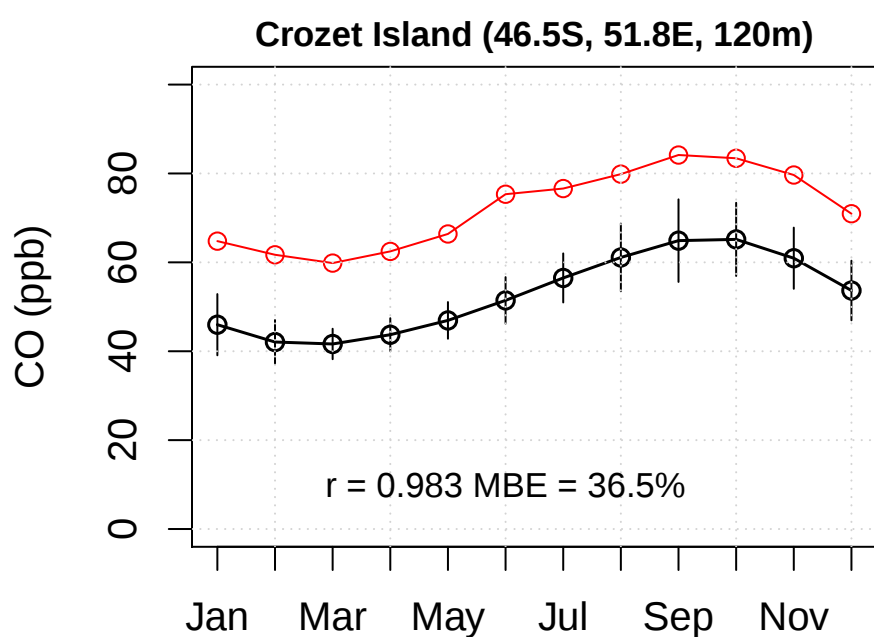
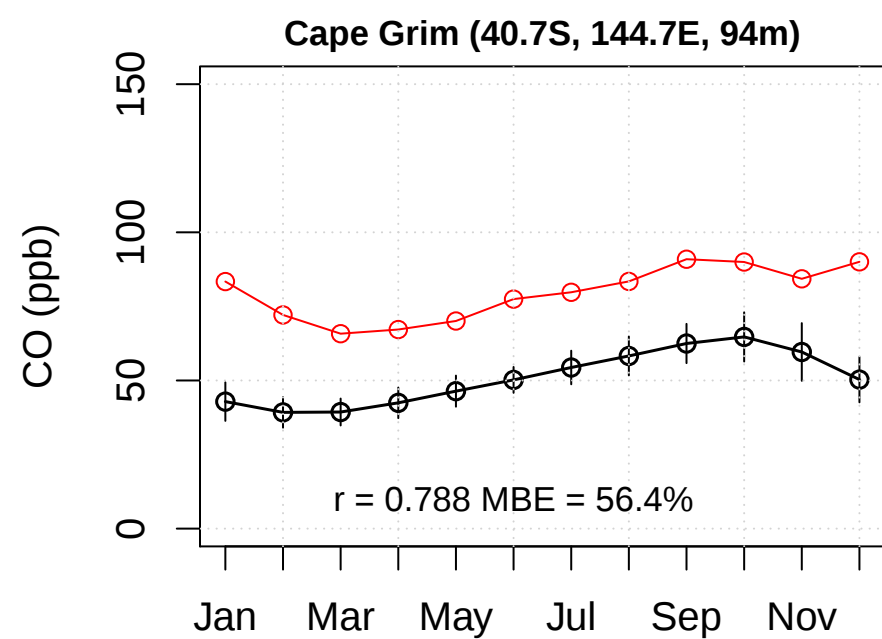
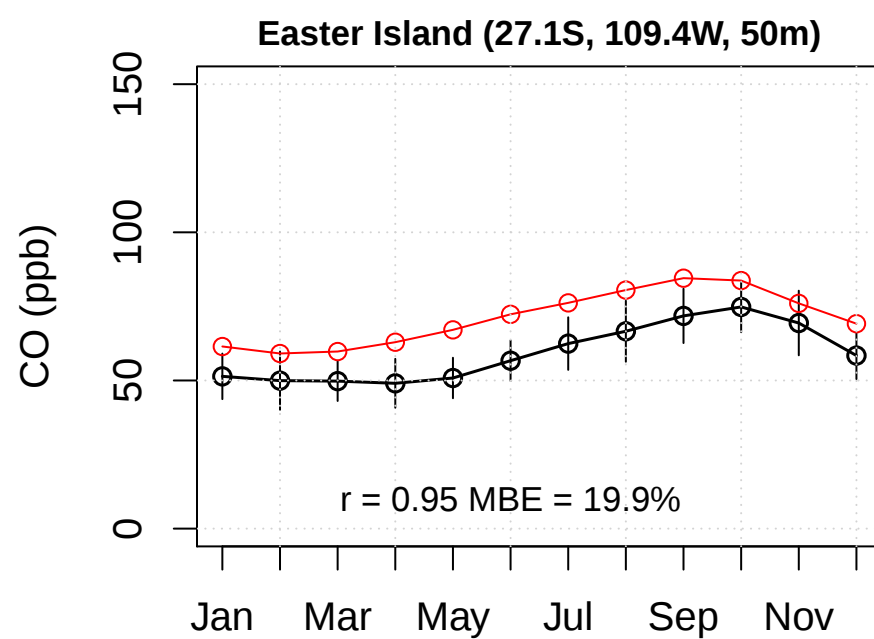
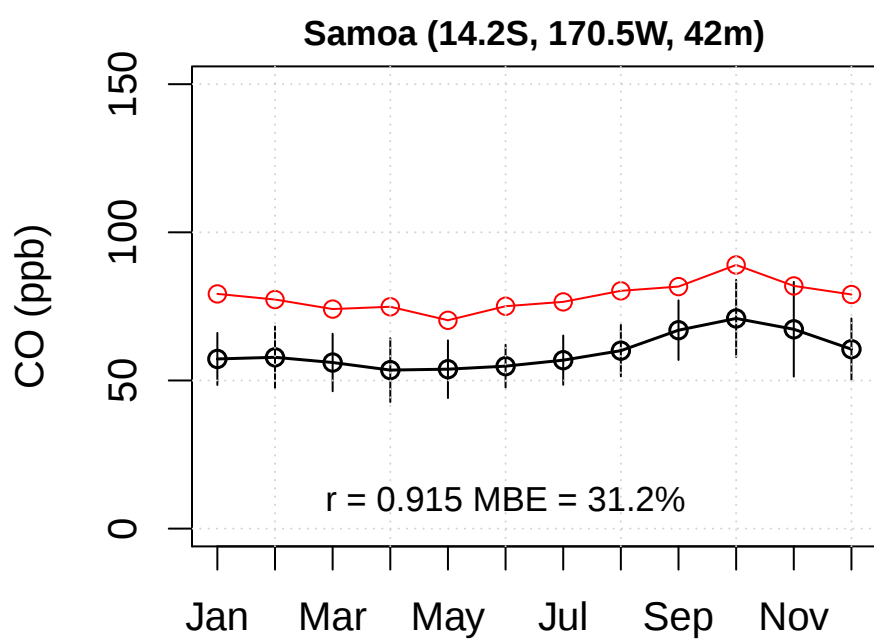
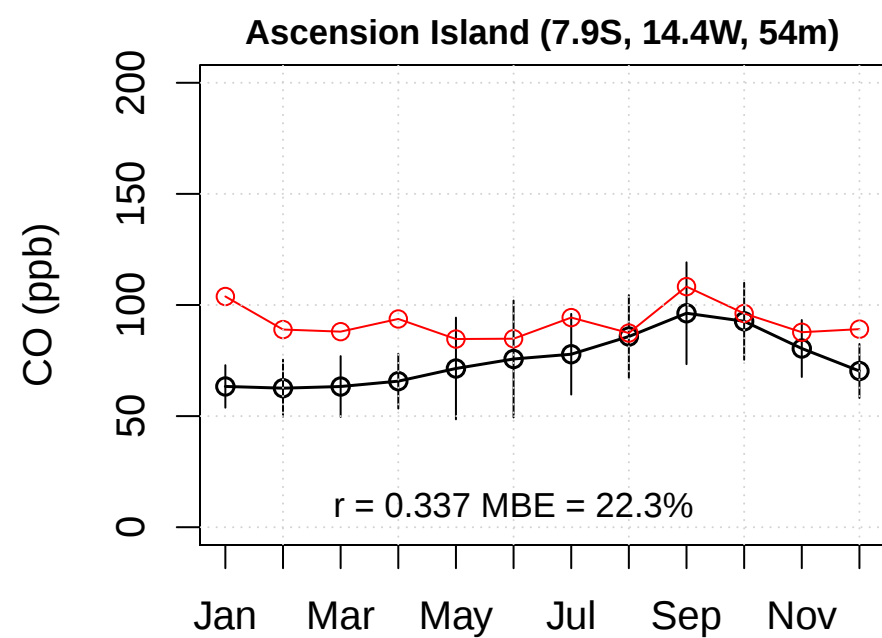
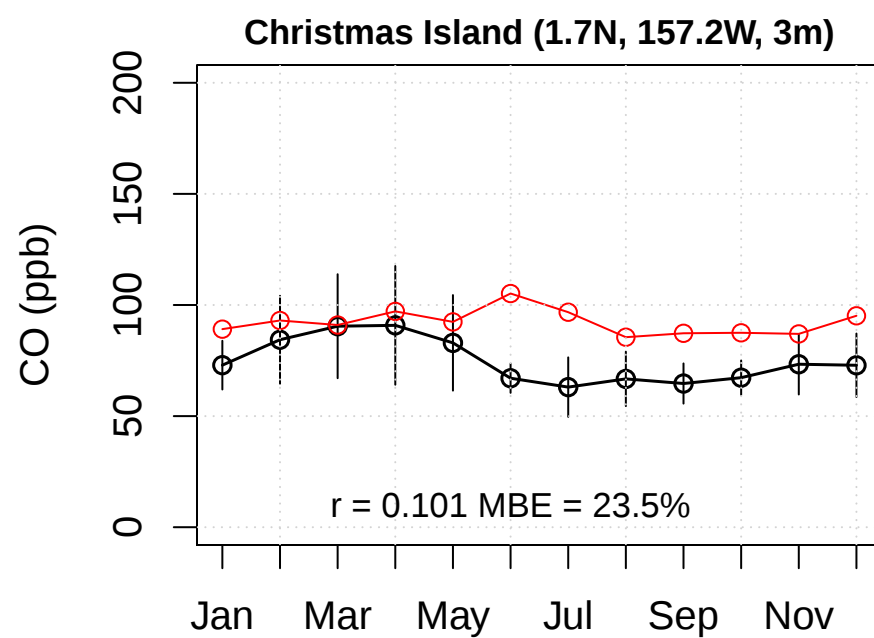
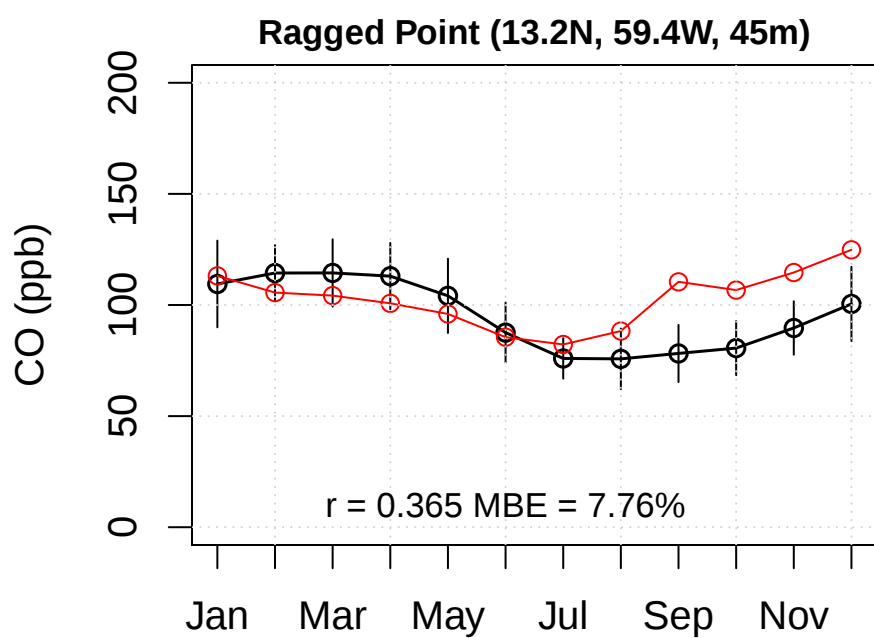
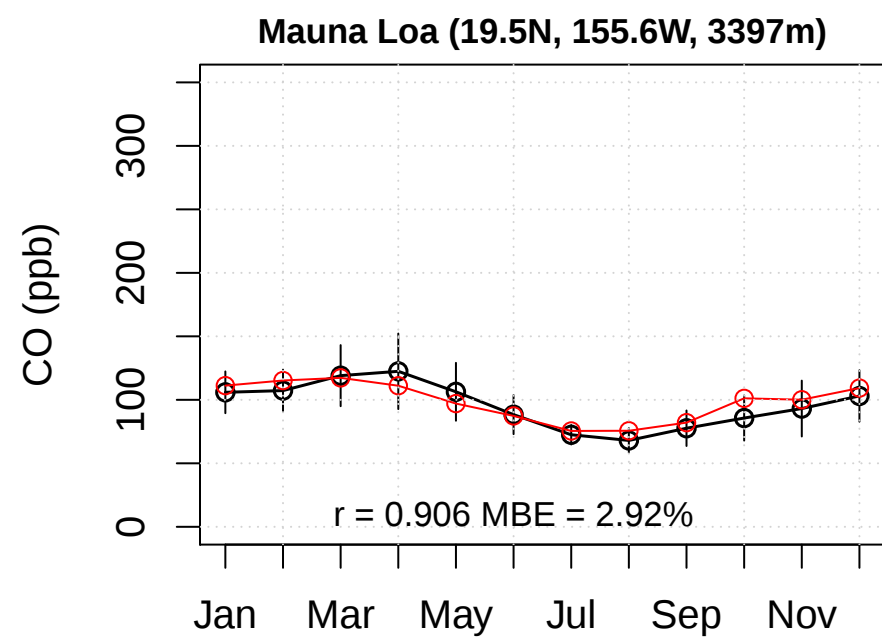
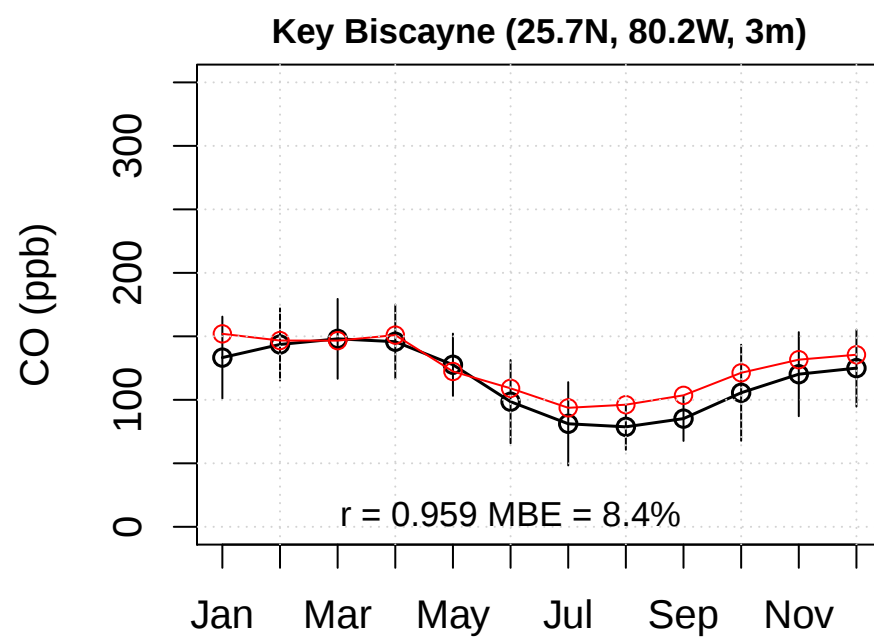
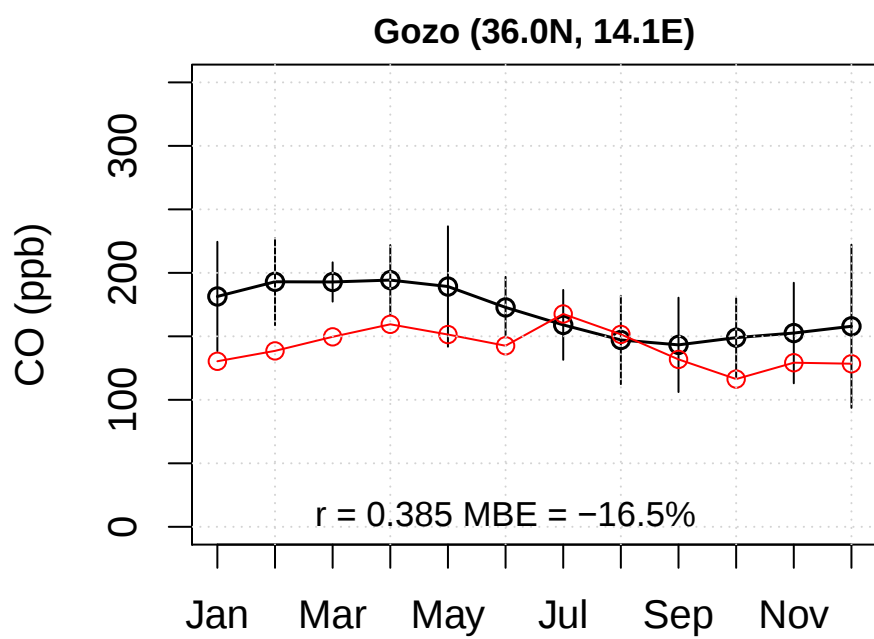
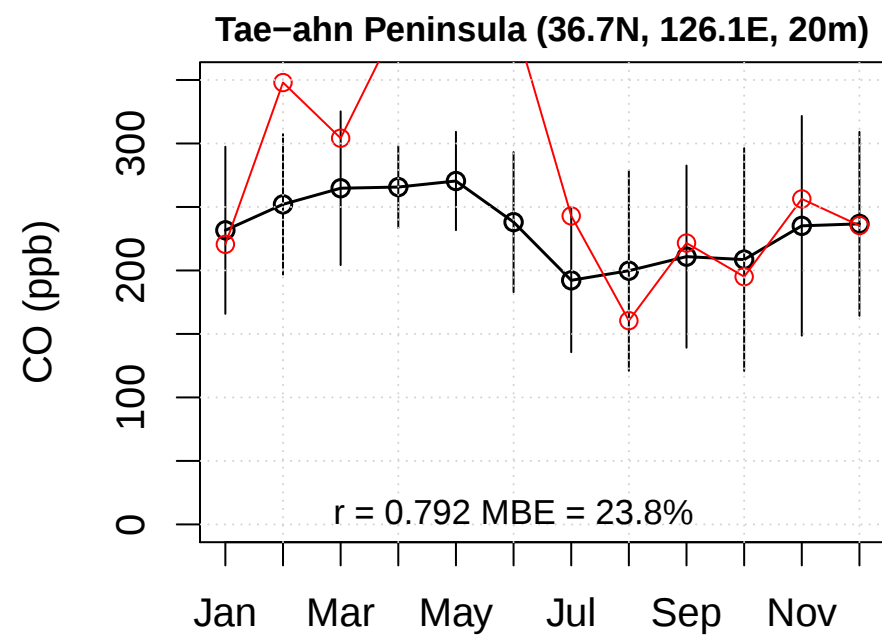
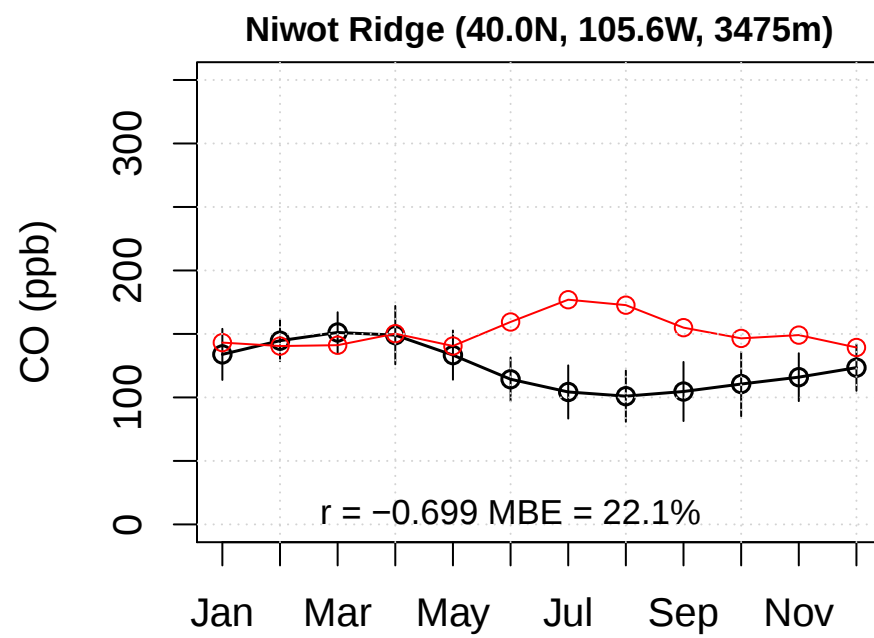
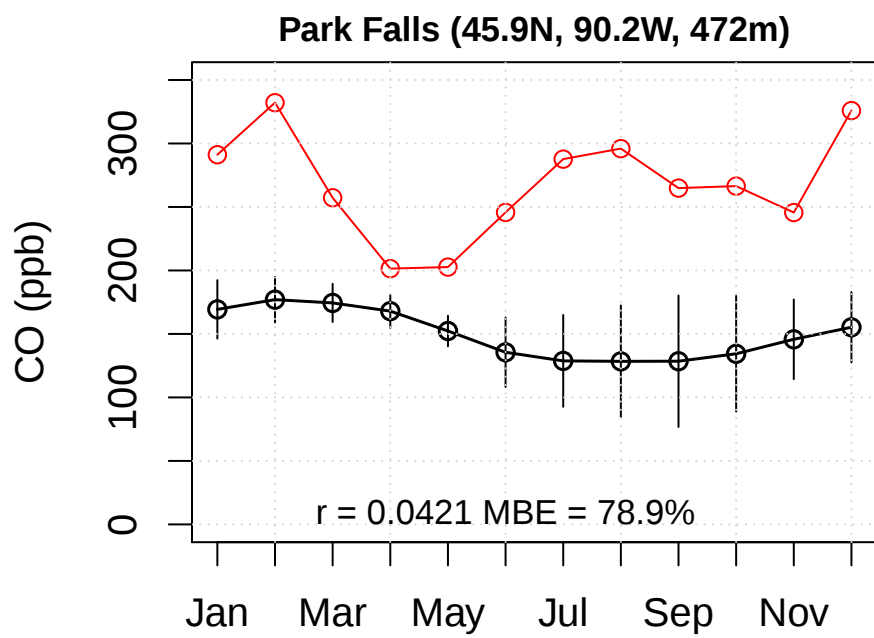
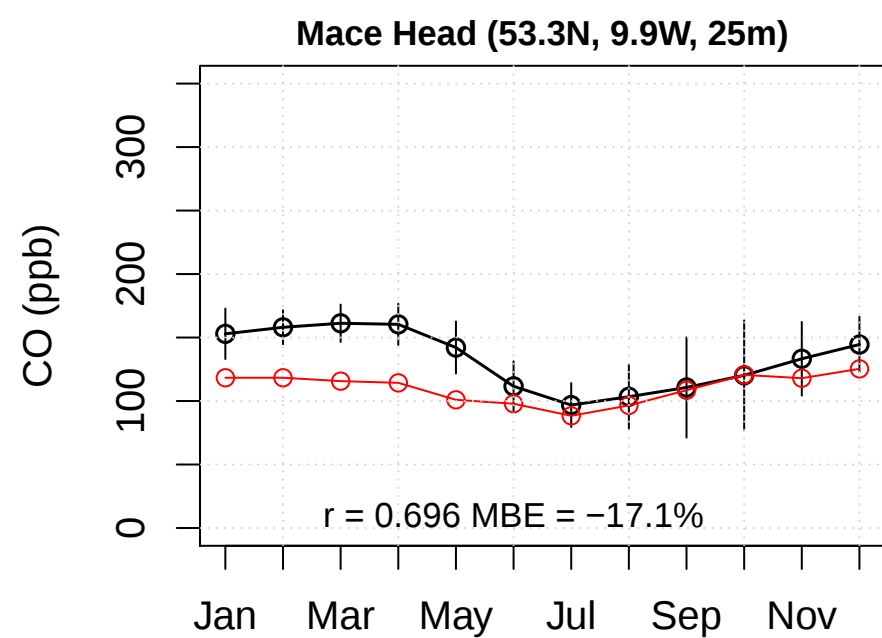
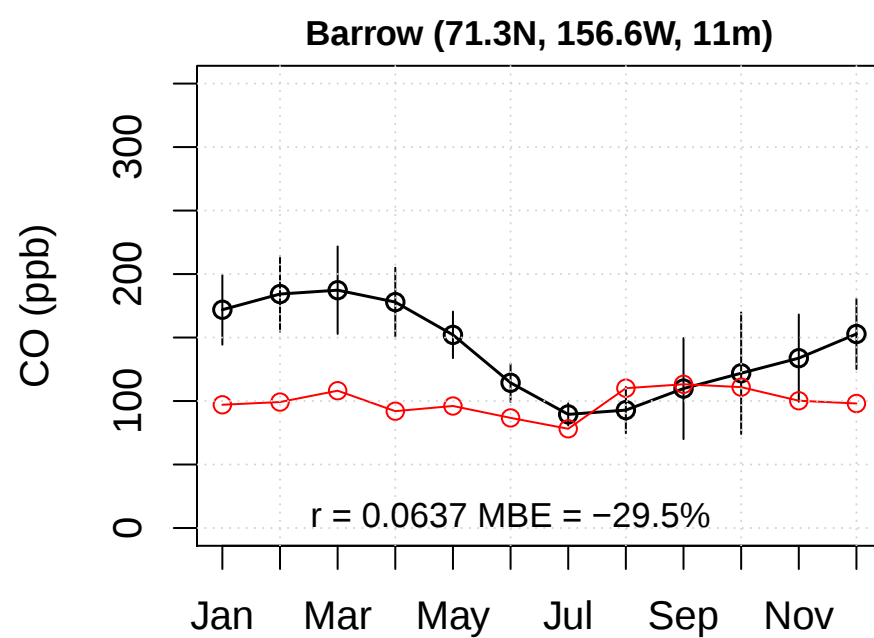
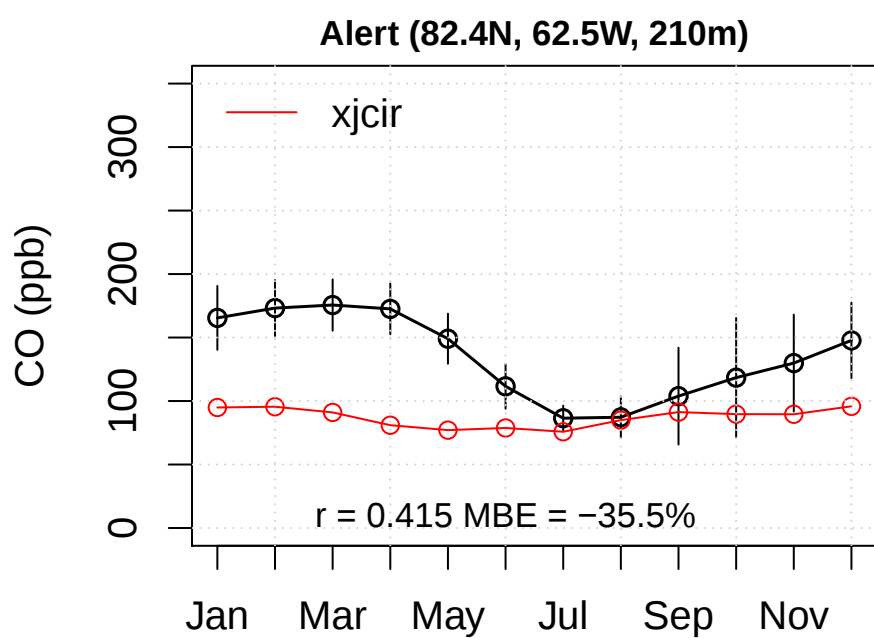


# MLS – UKCA xjcir CIO comparison

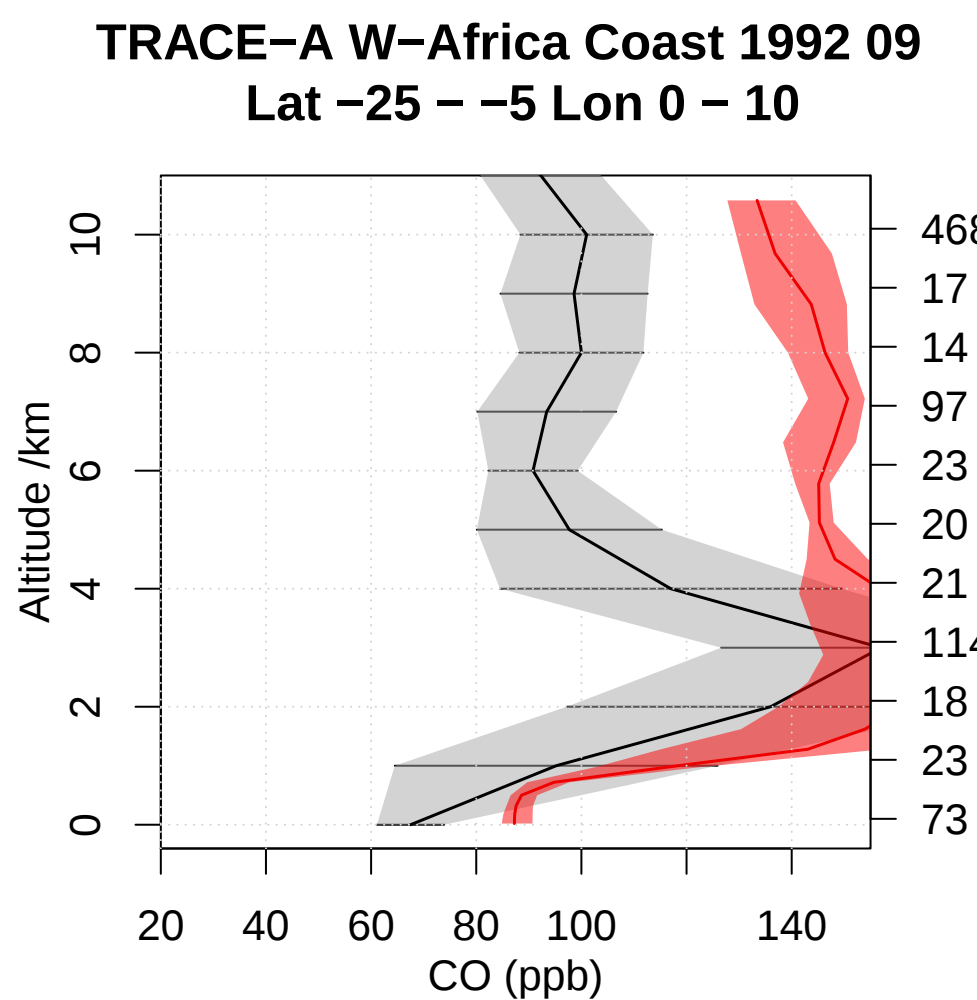
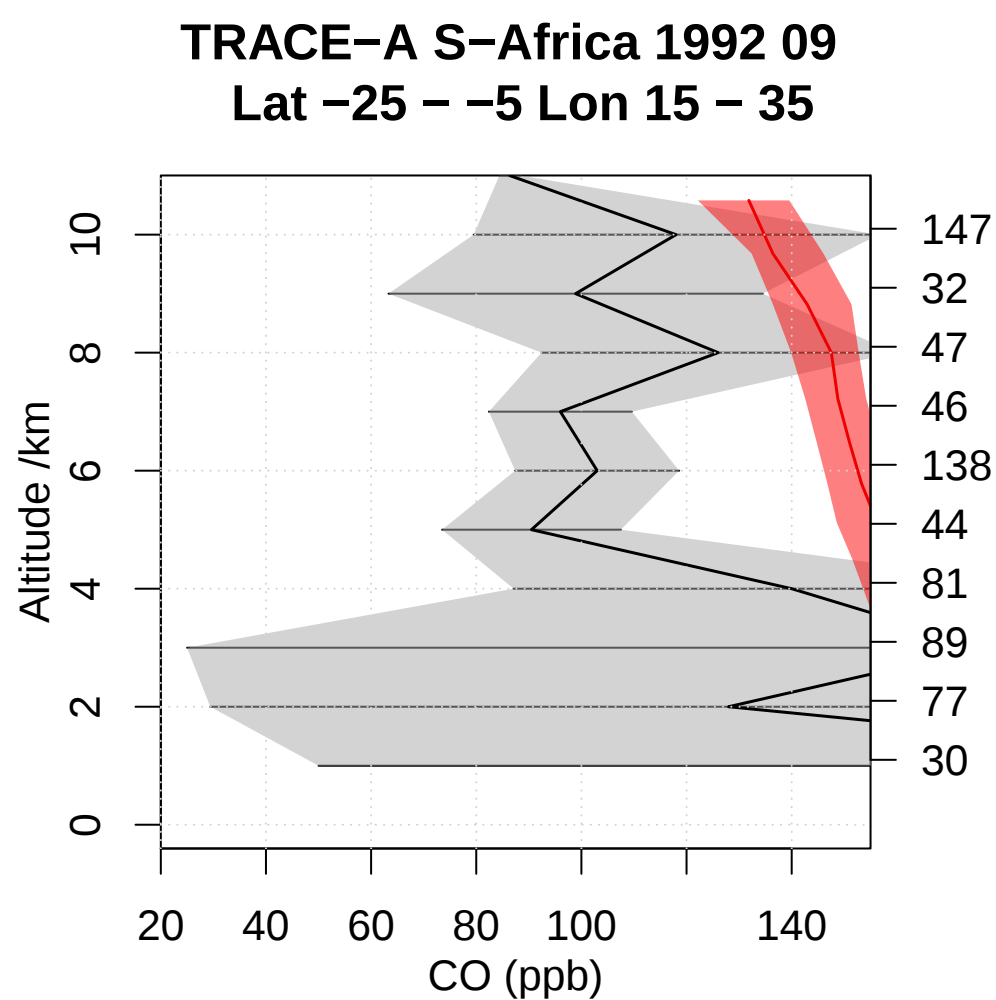
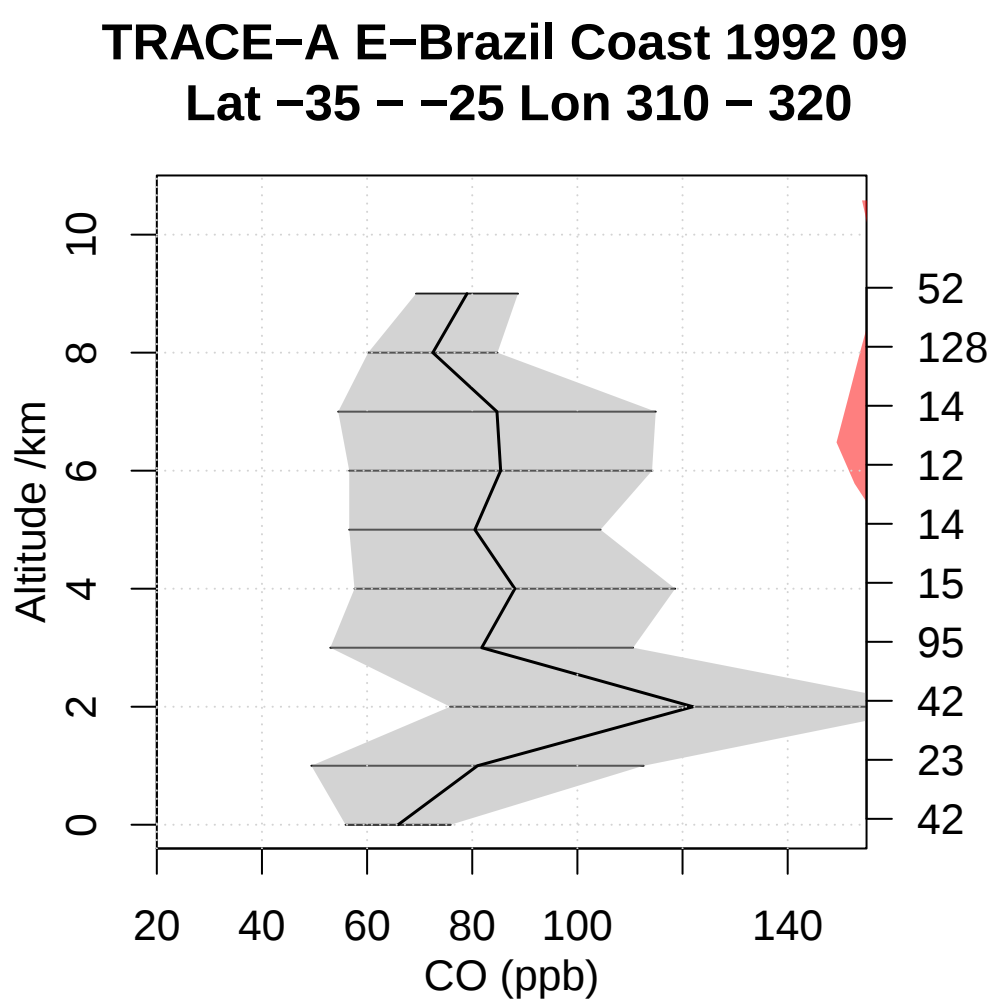
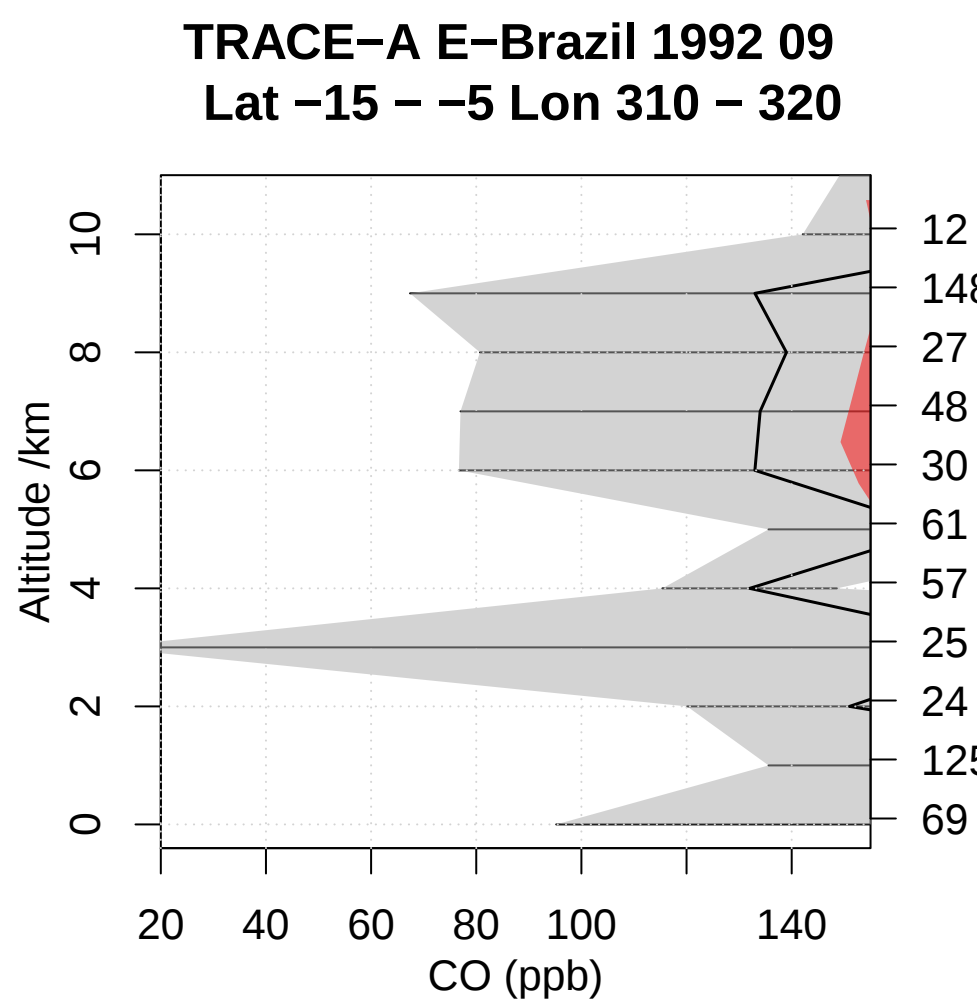
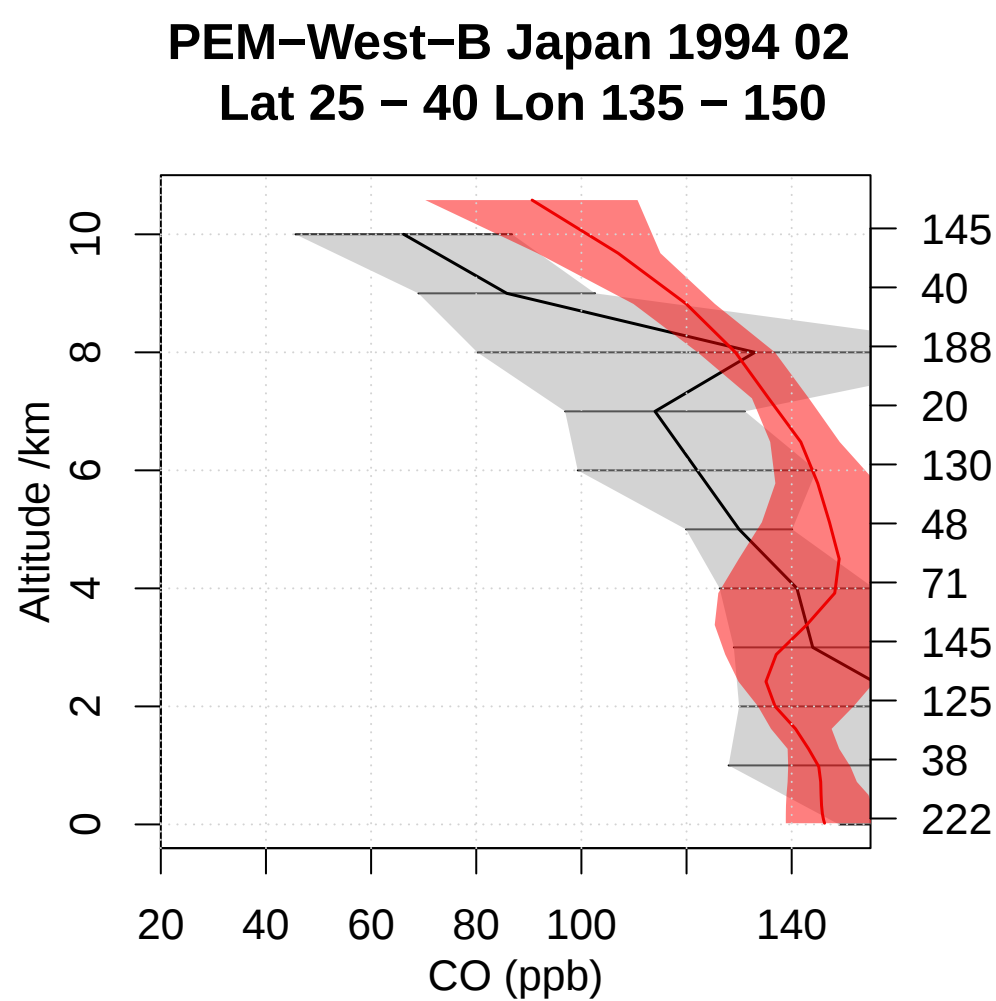
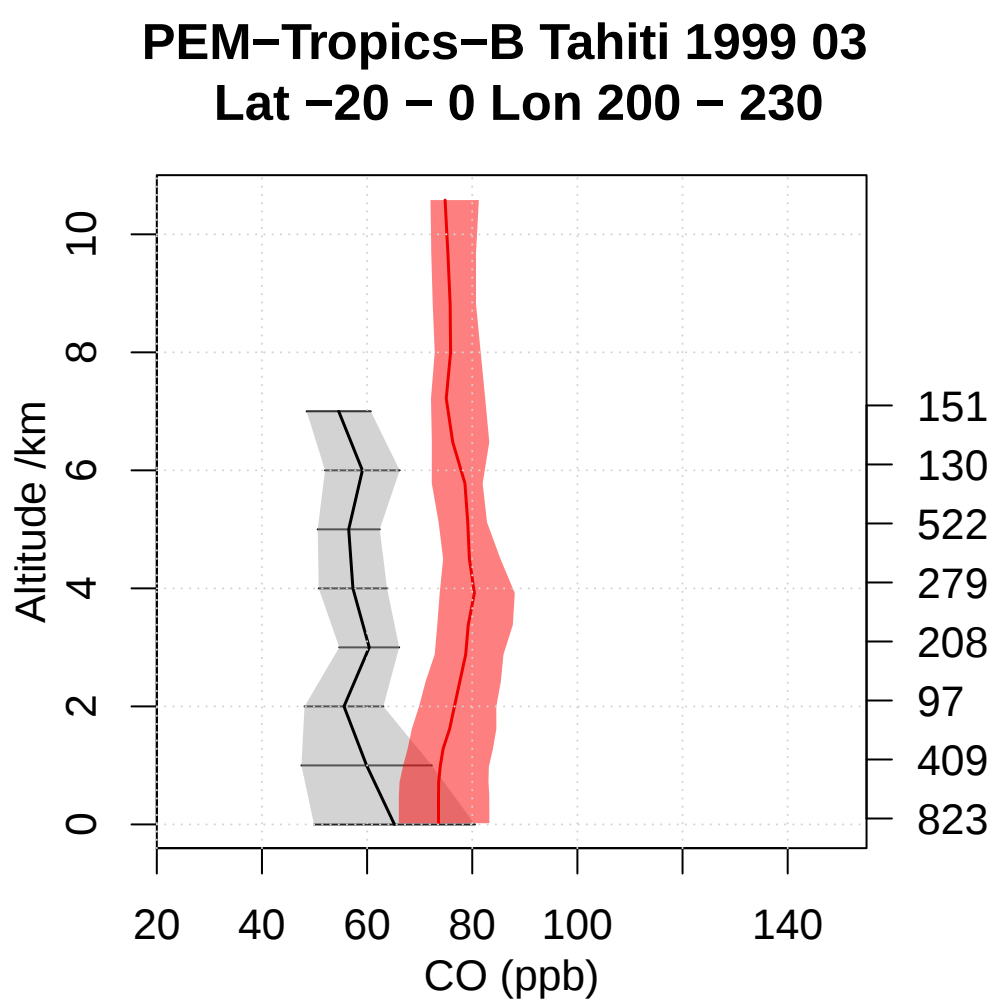
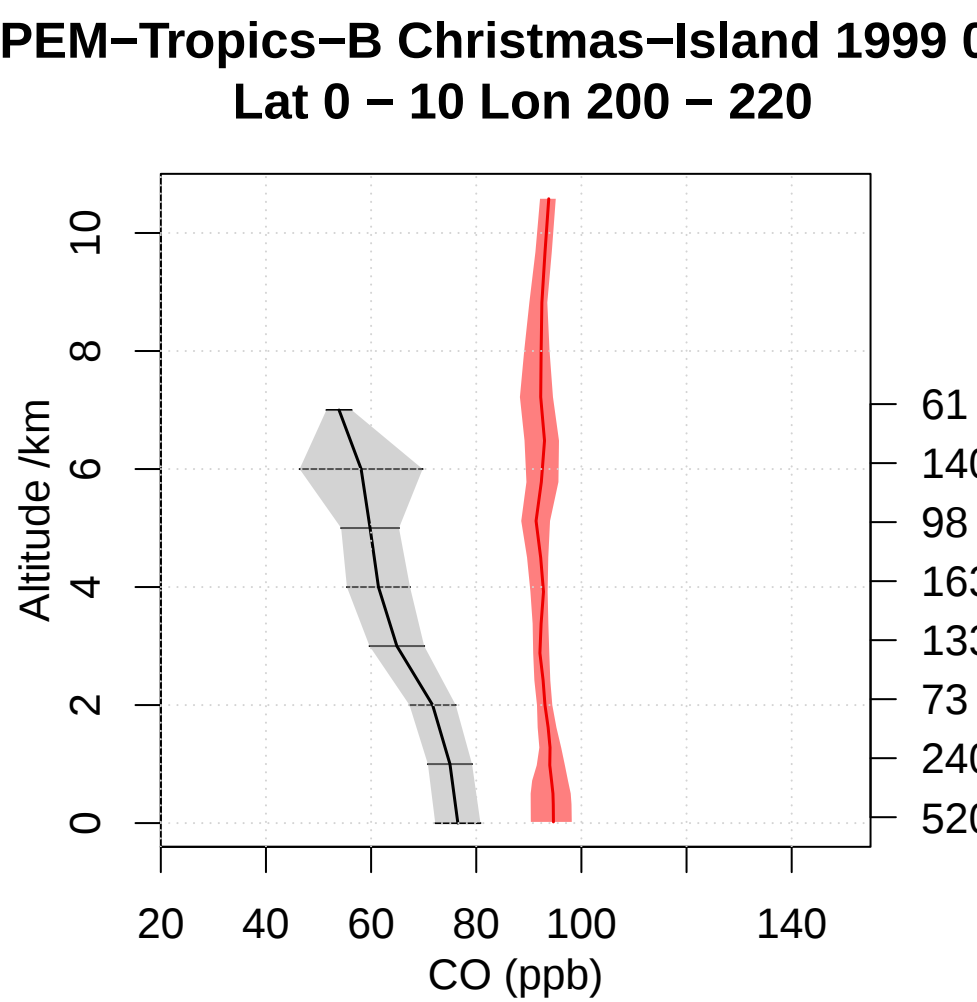
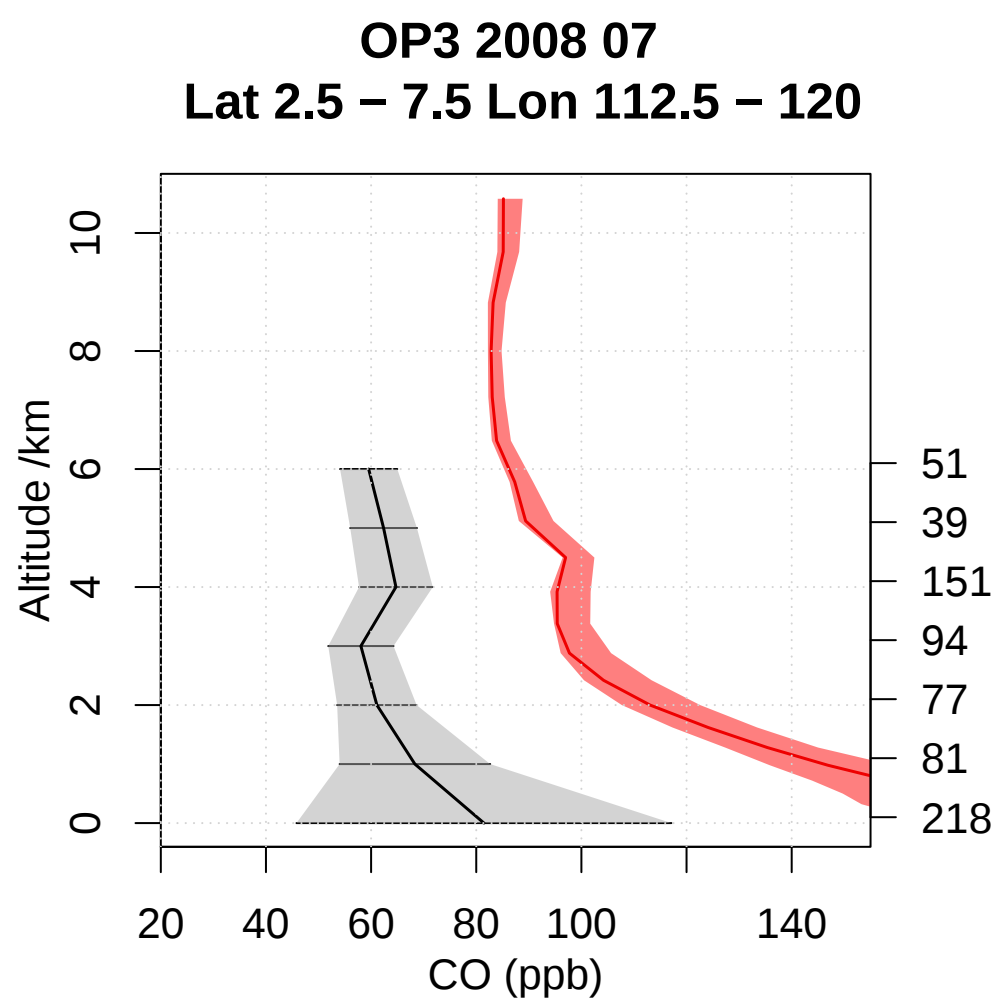
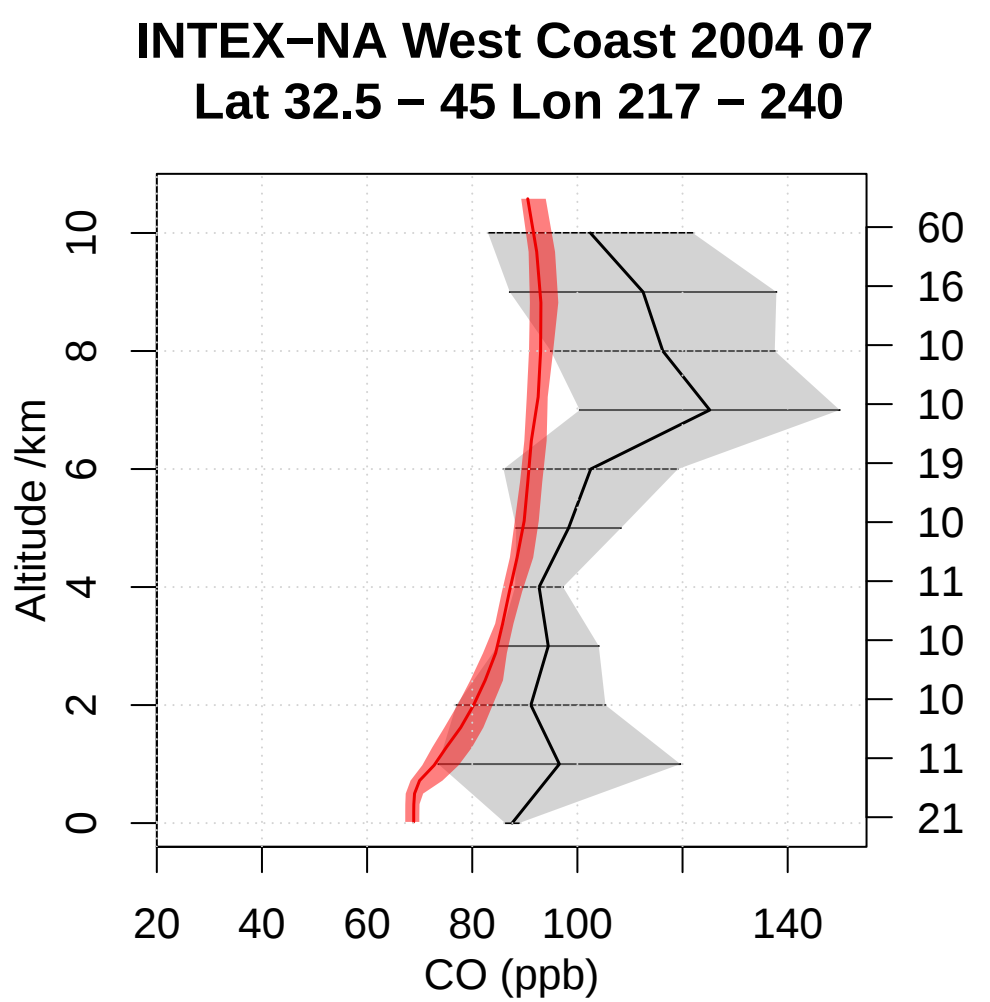
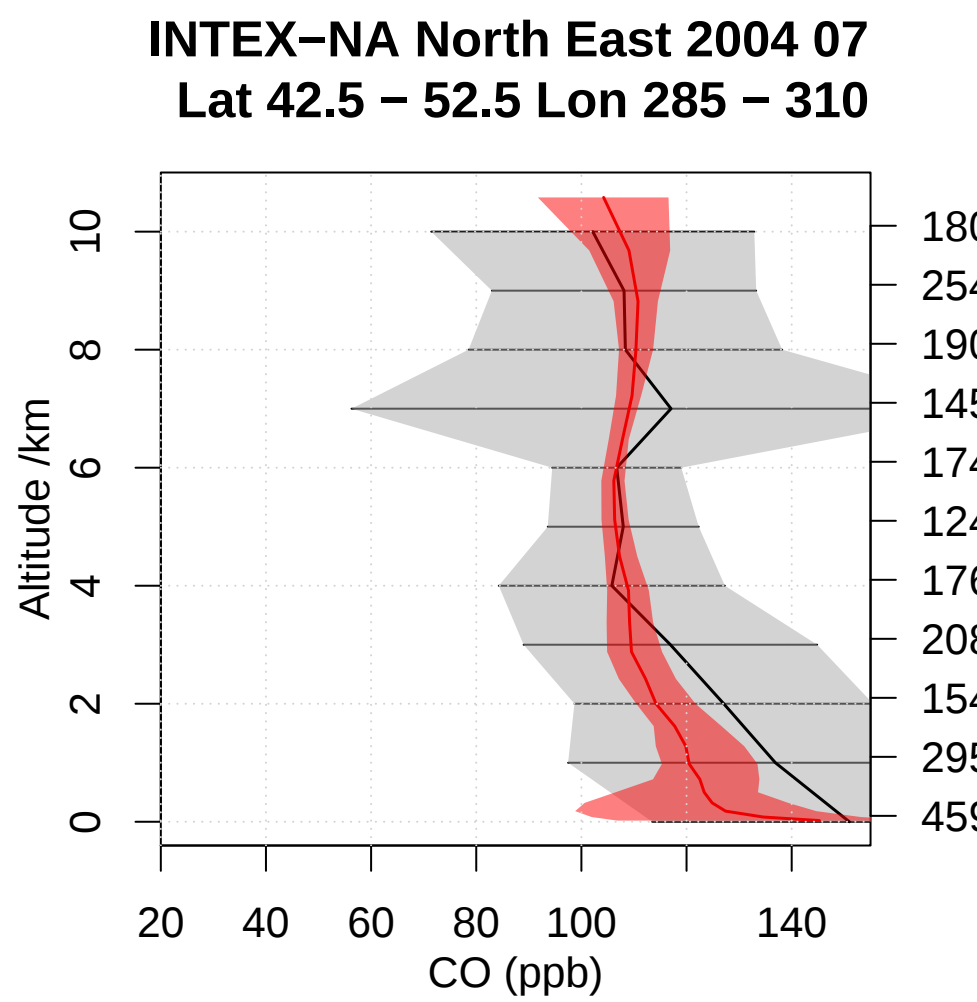
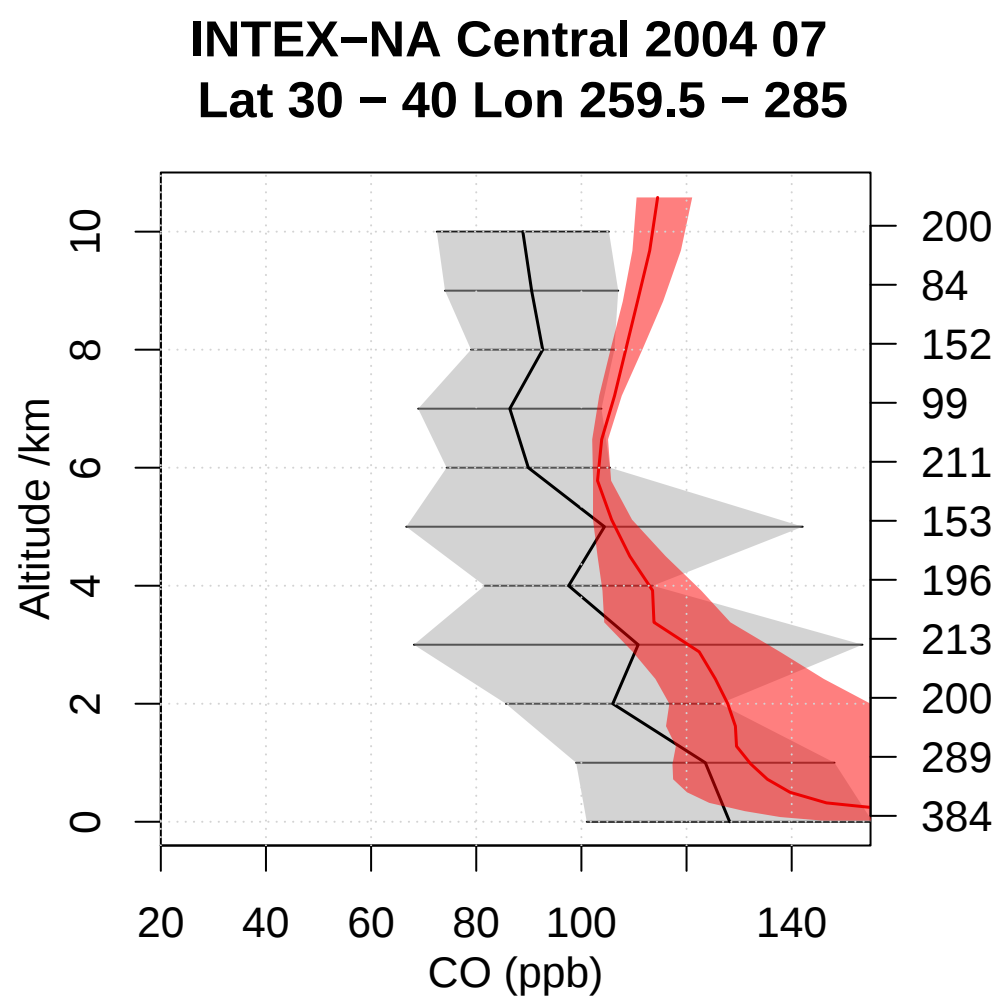
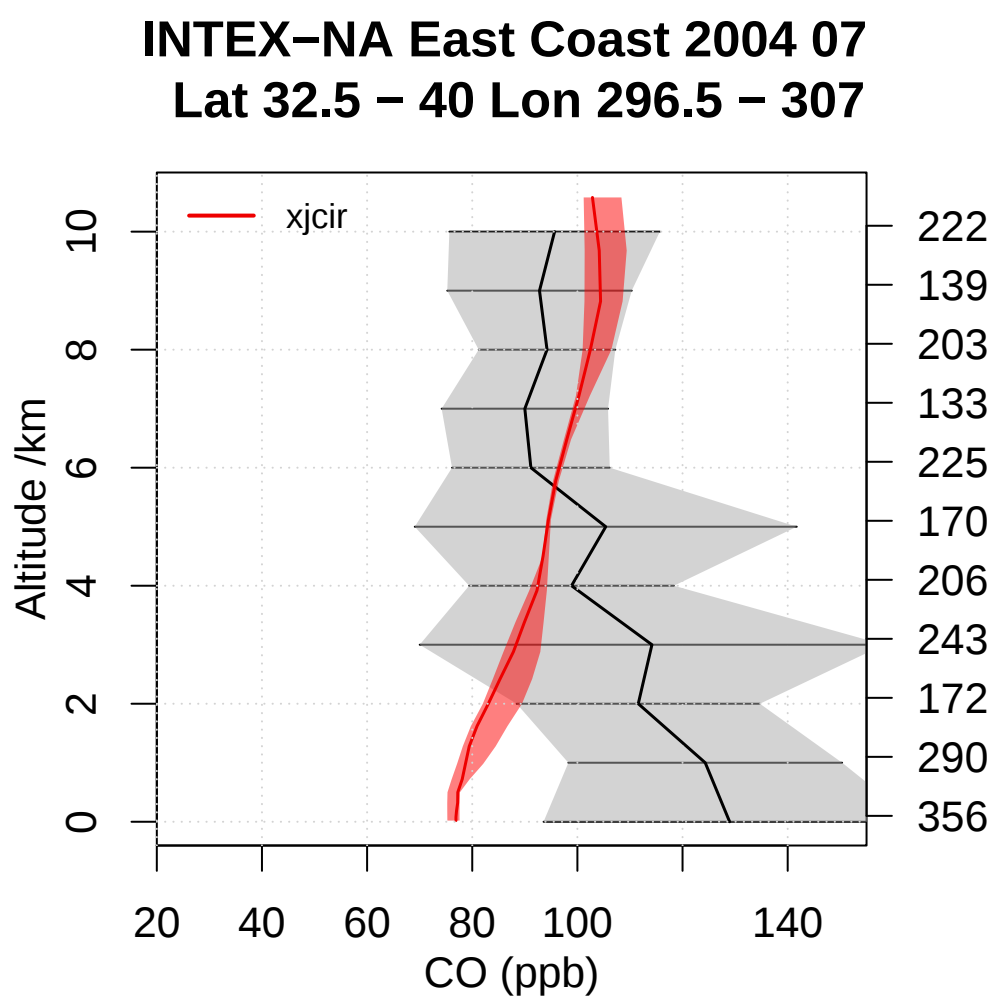
ppm

Min = 4.73e-08 Max = 0.59

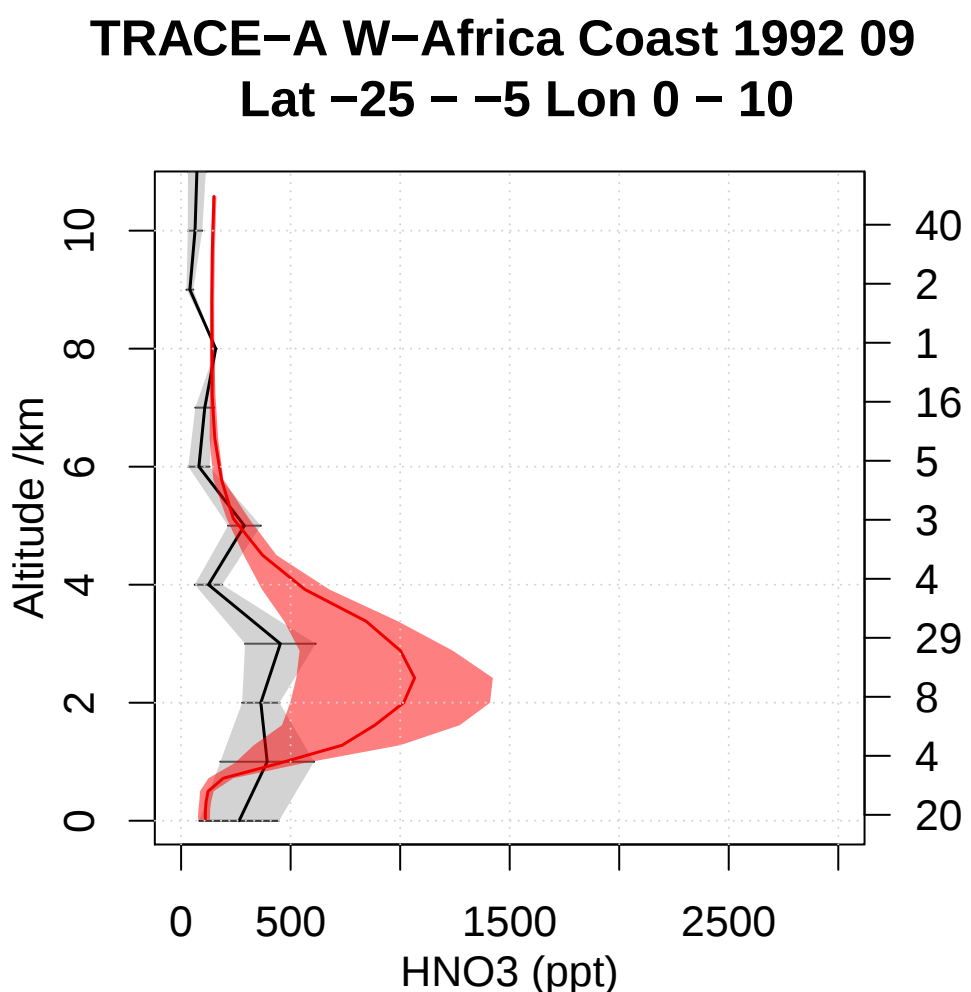
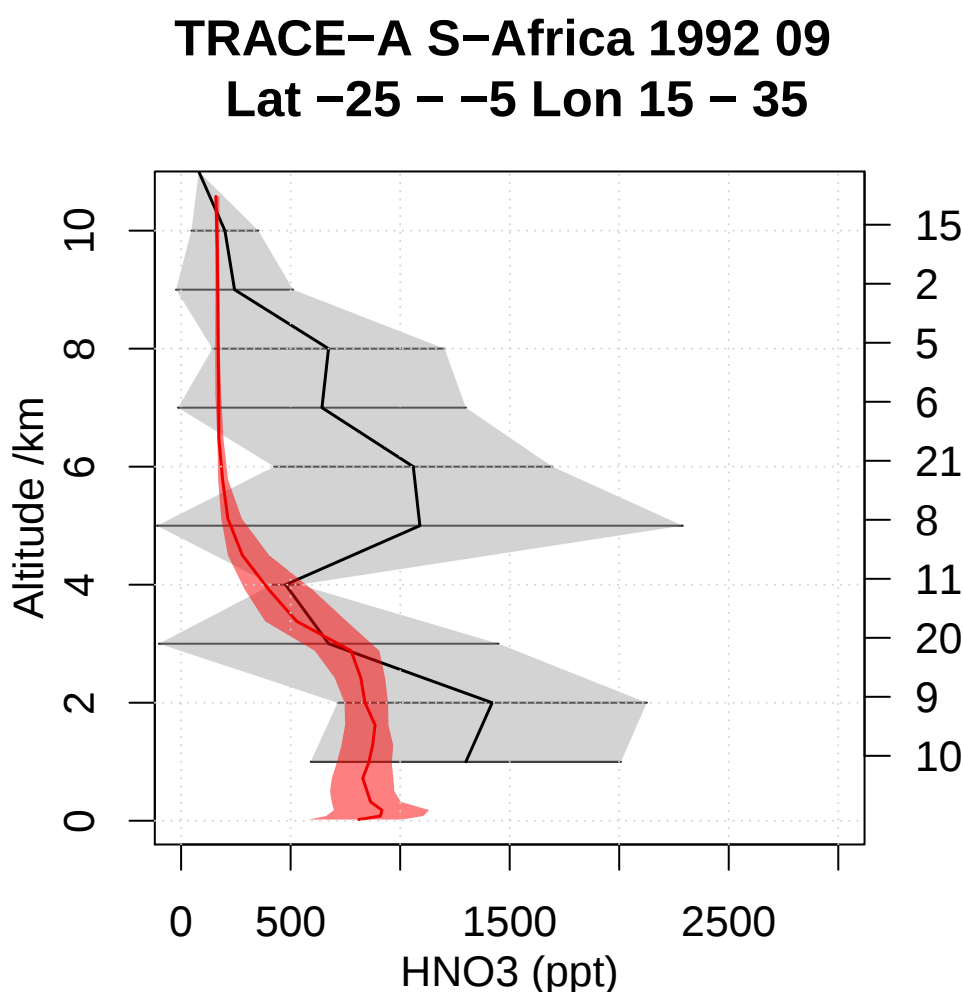
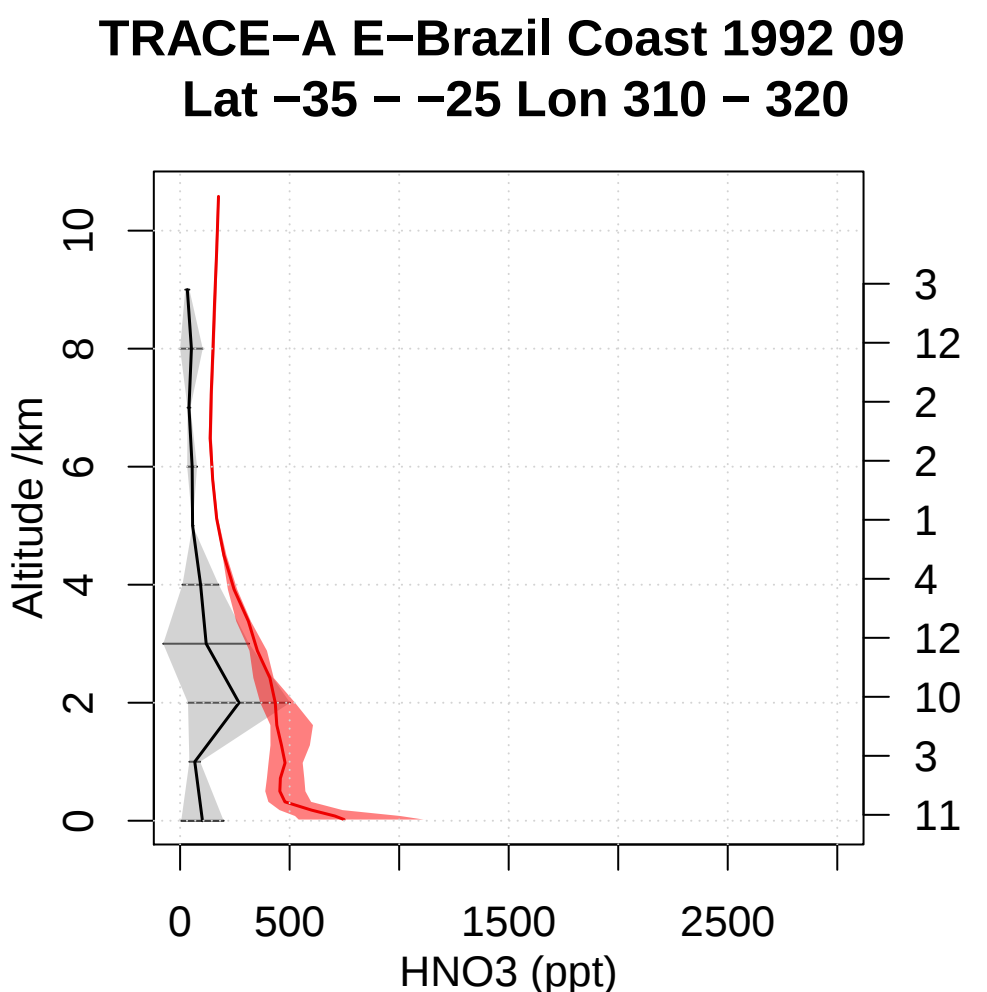
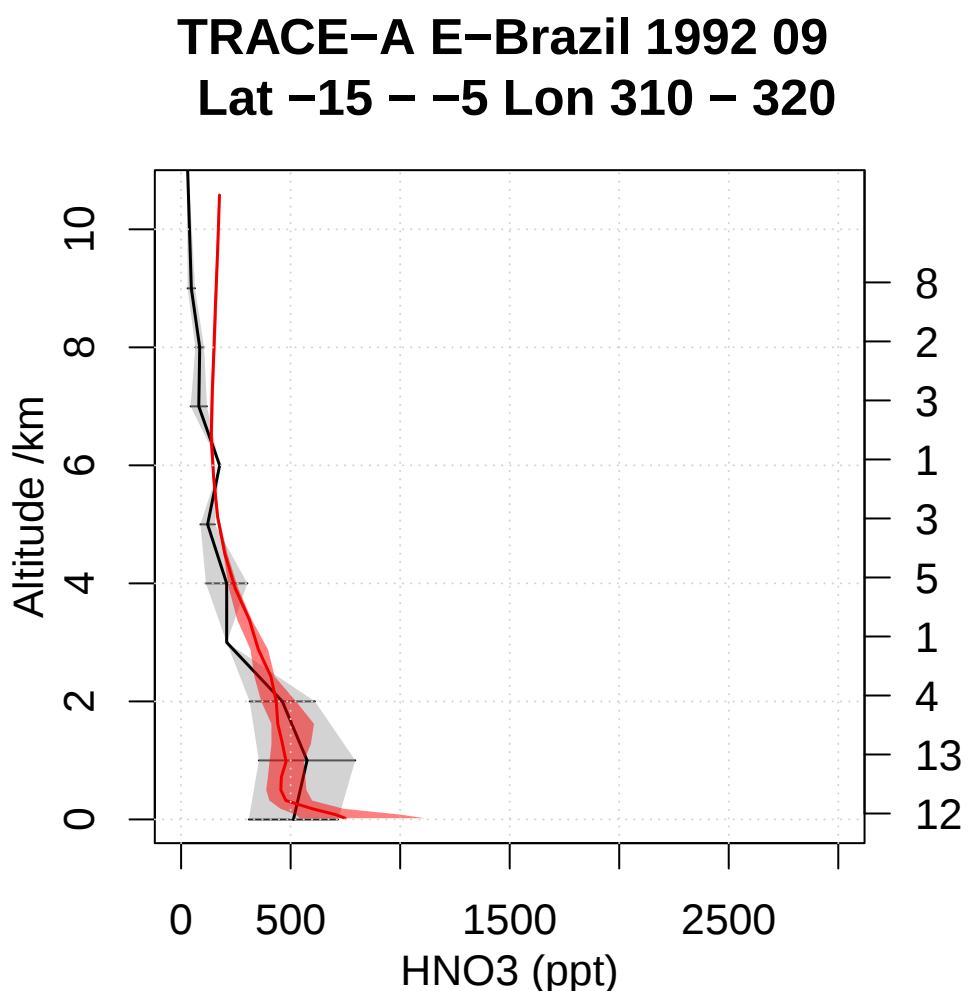
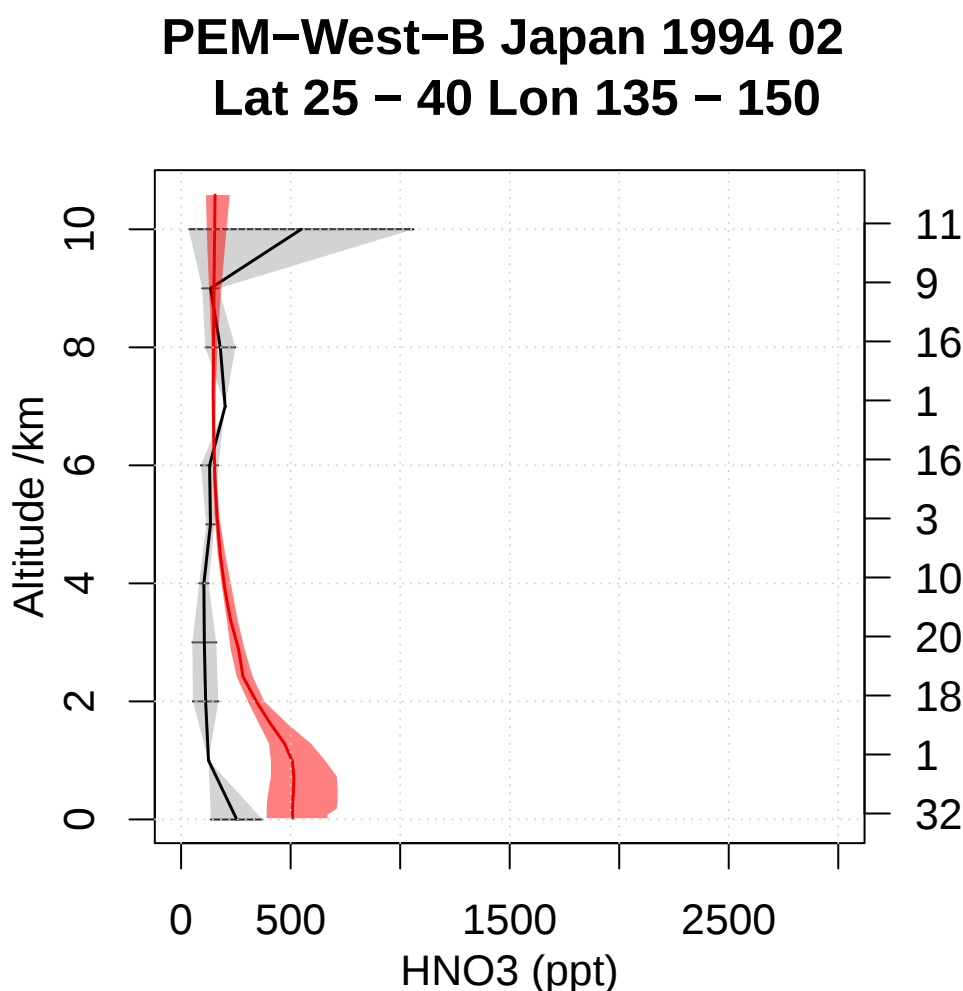
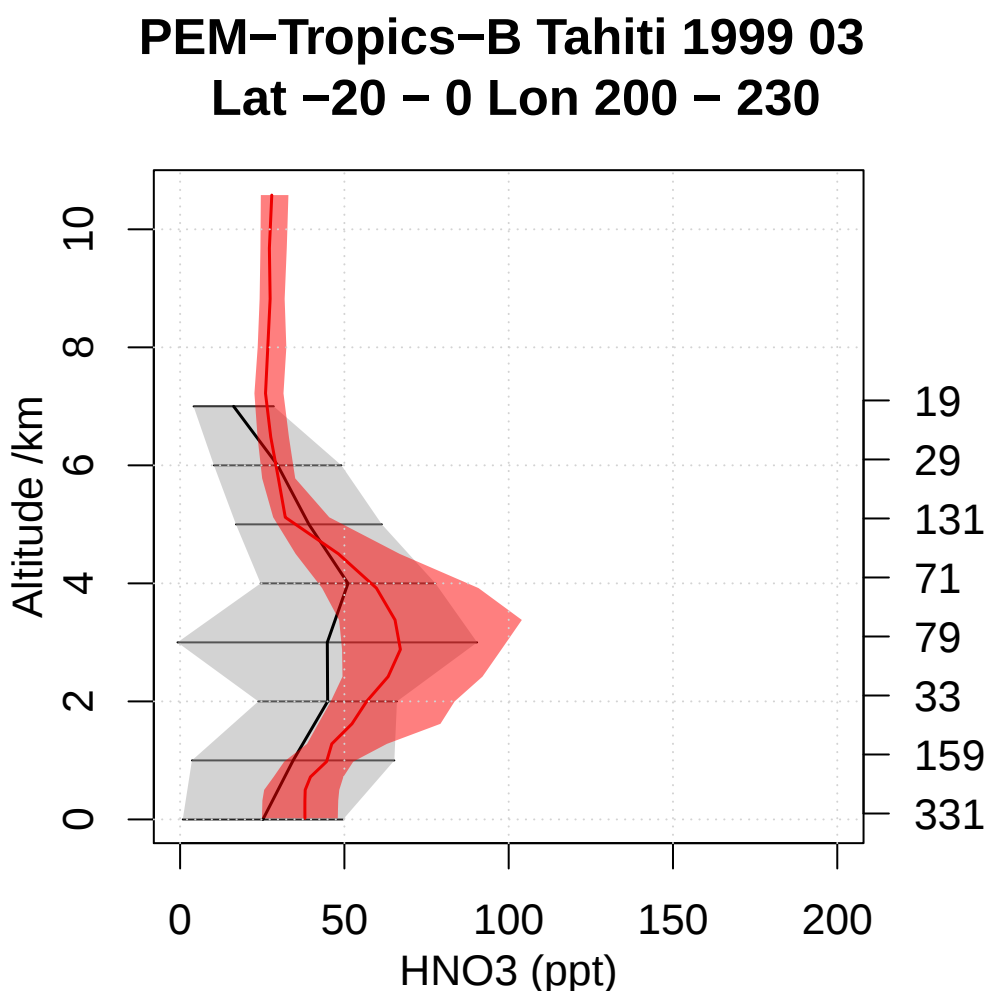
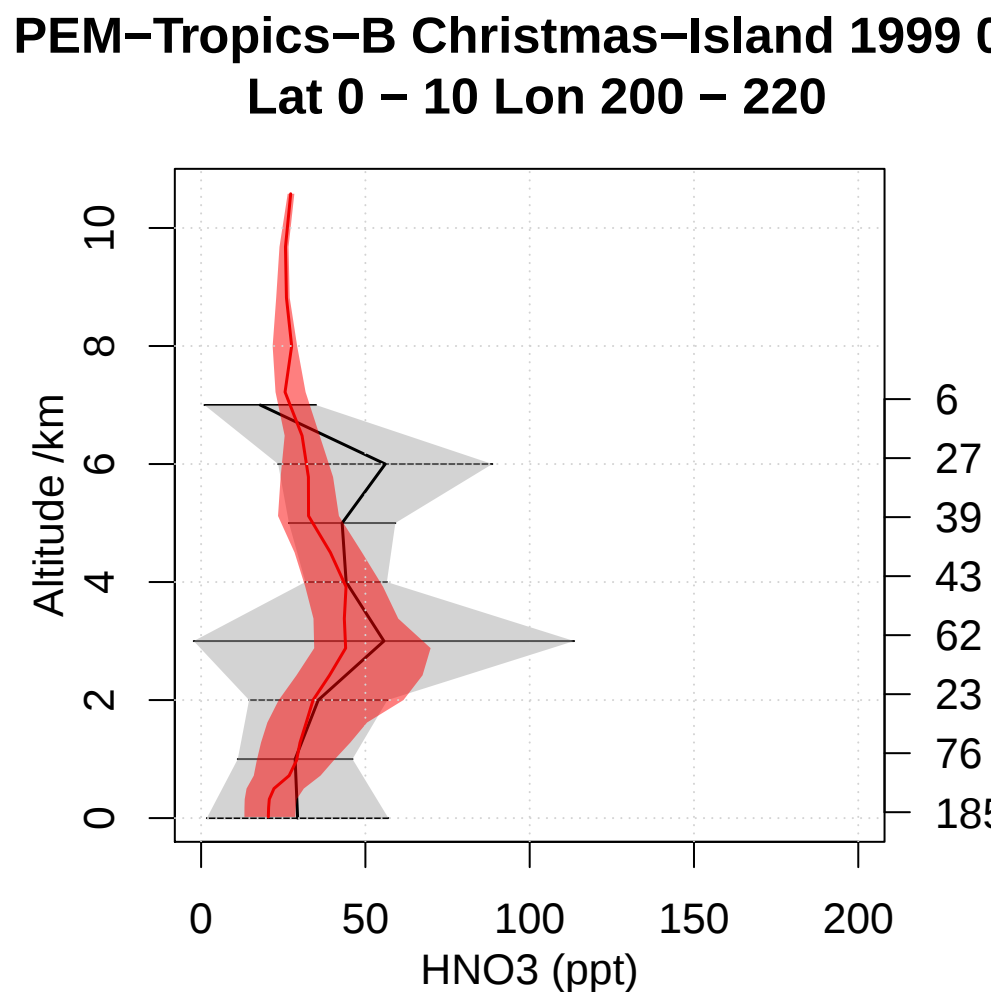
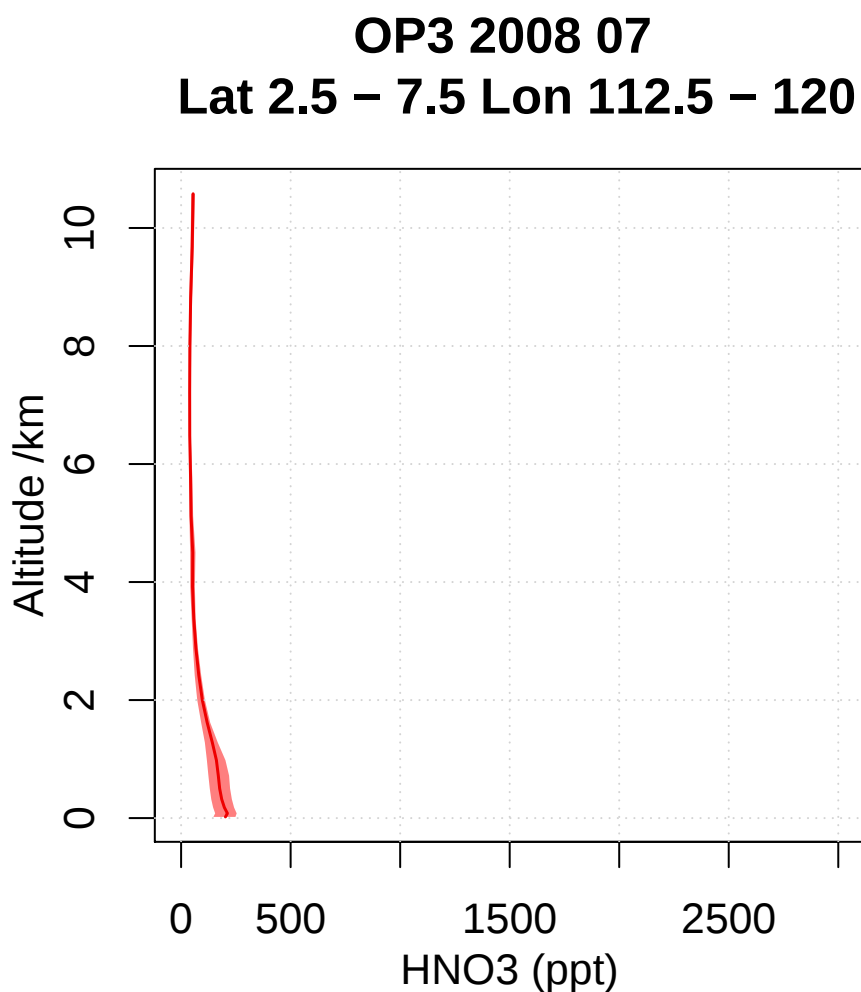
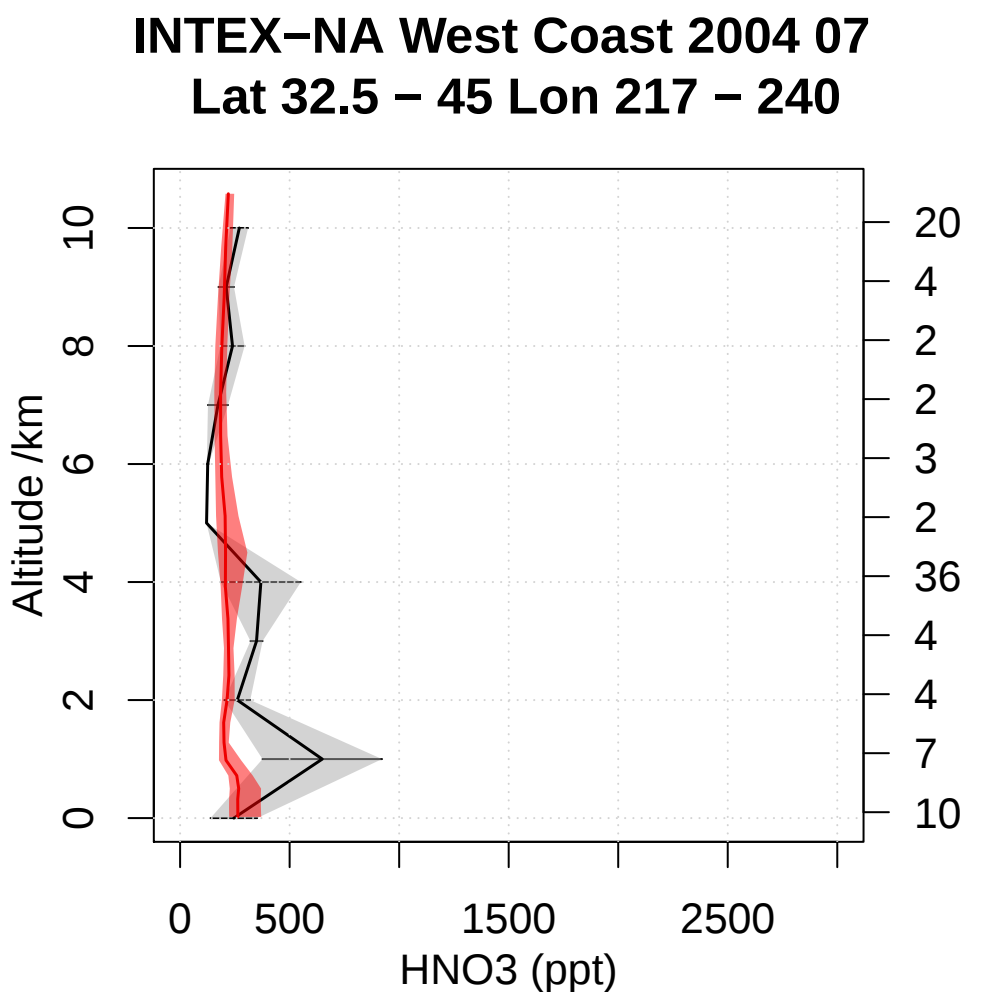
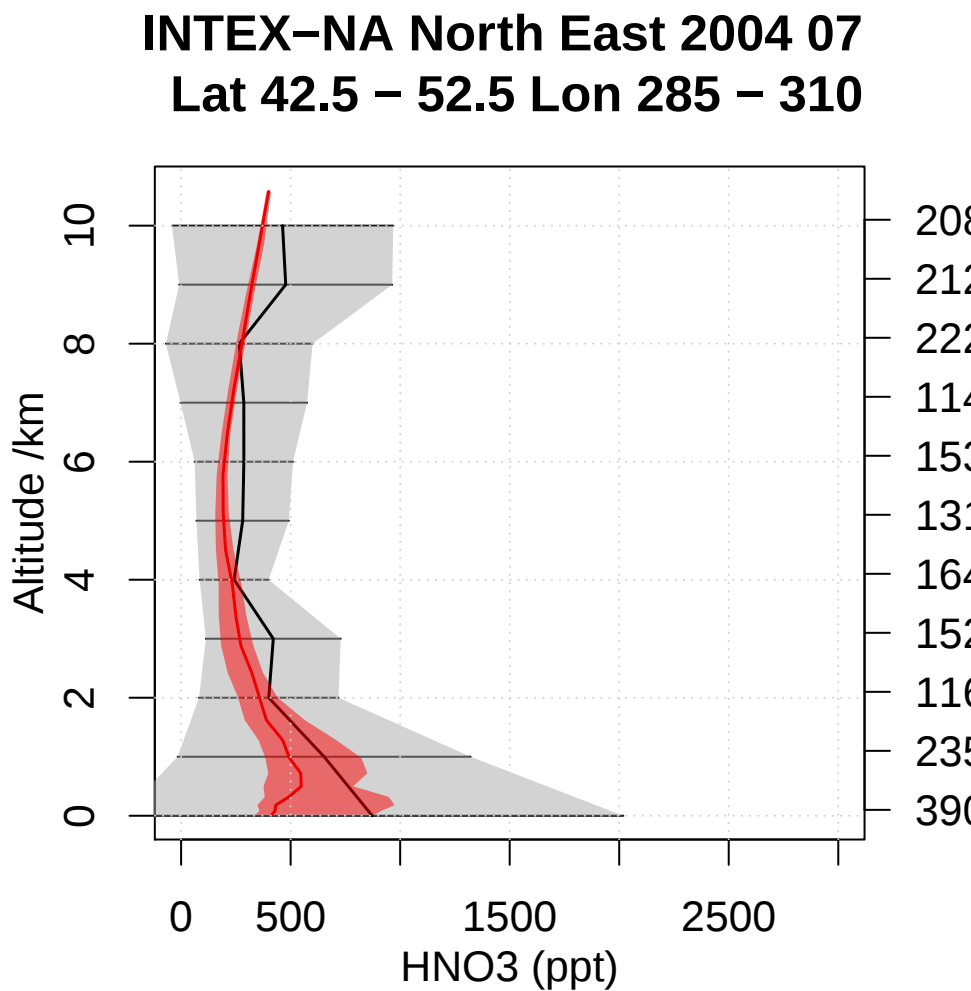
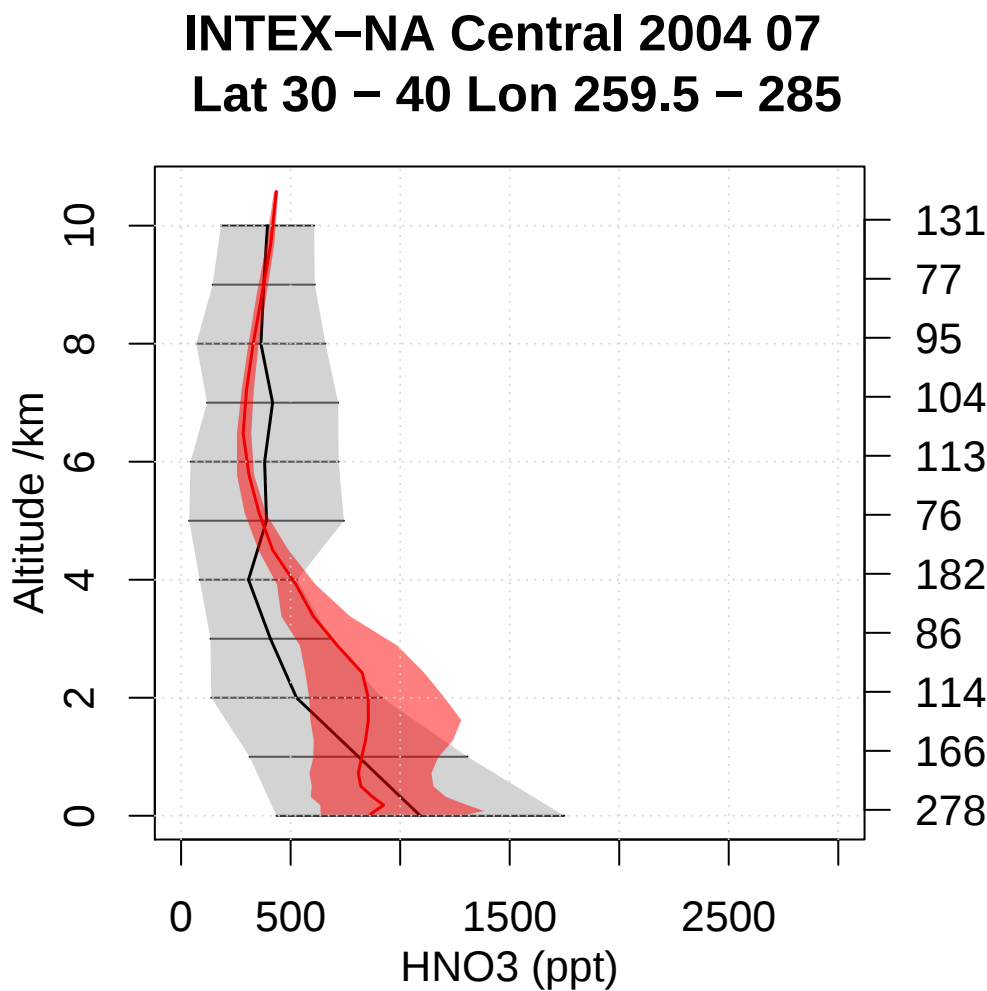
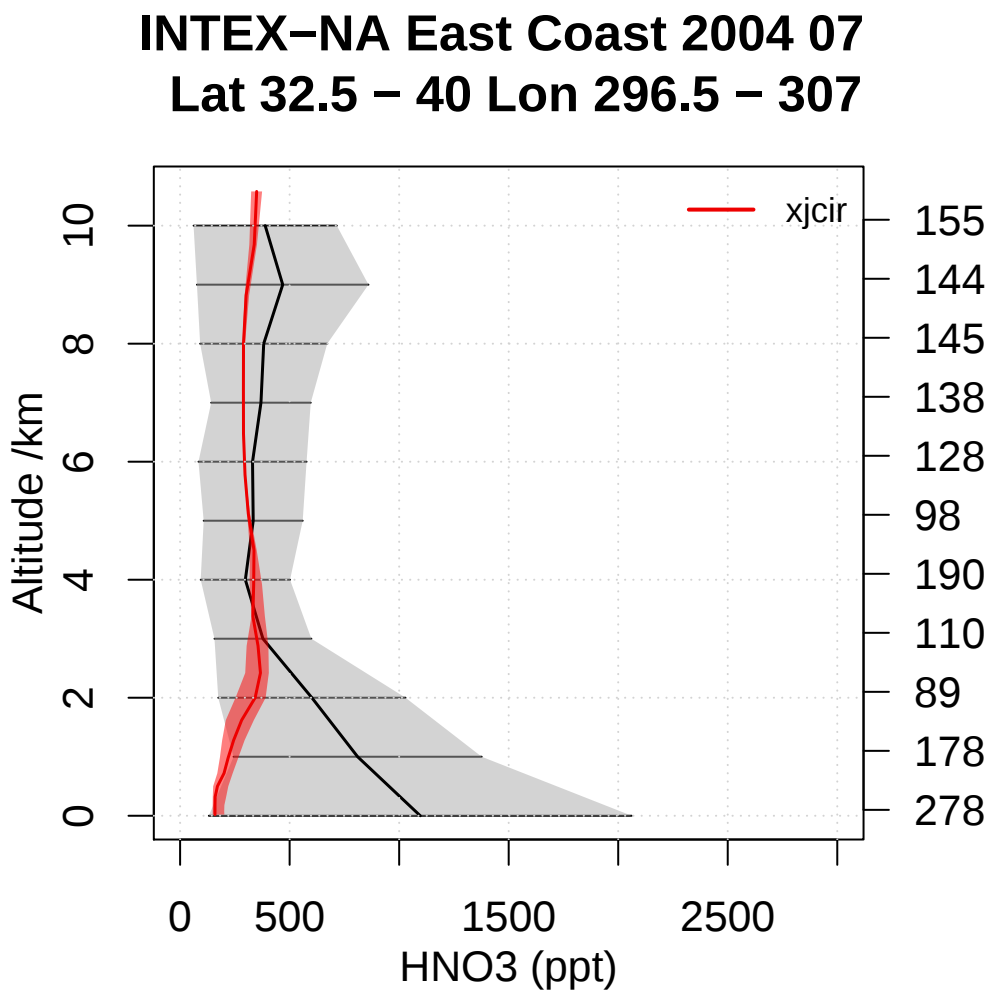




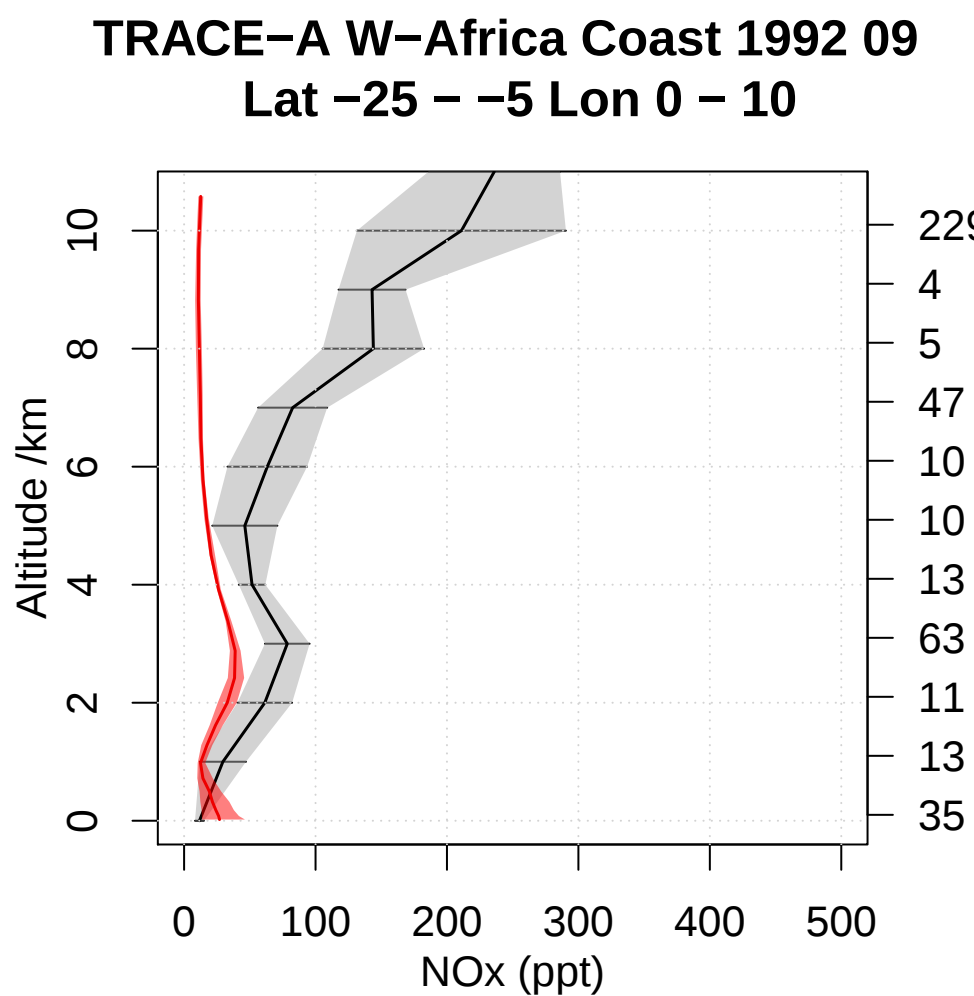
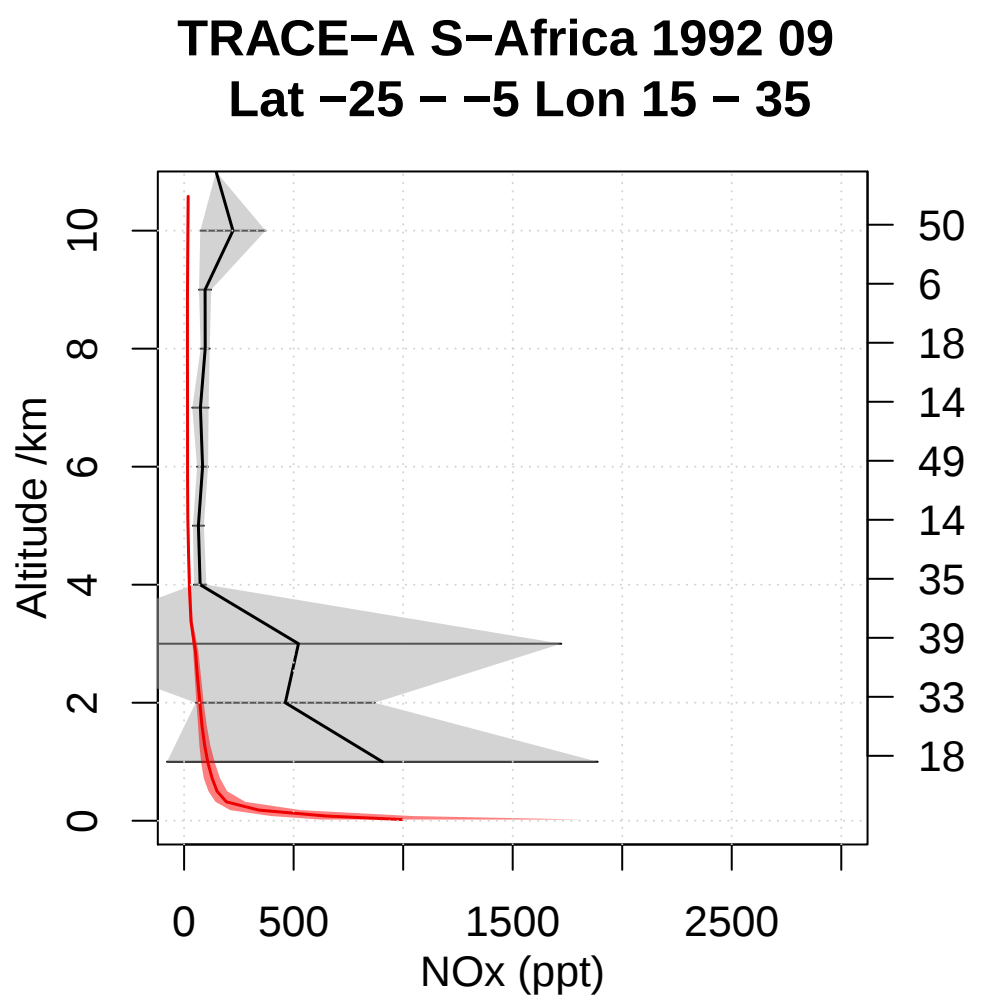
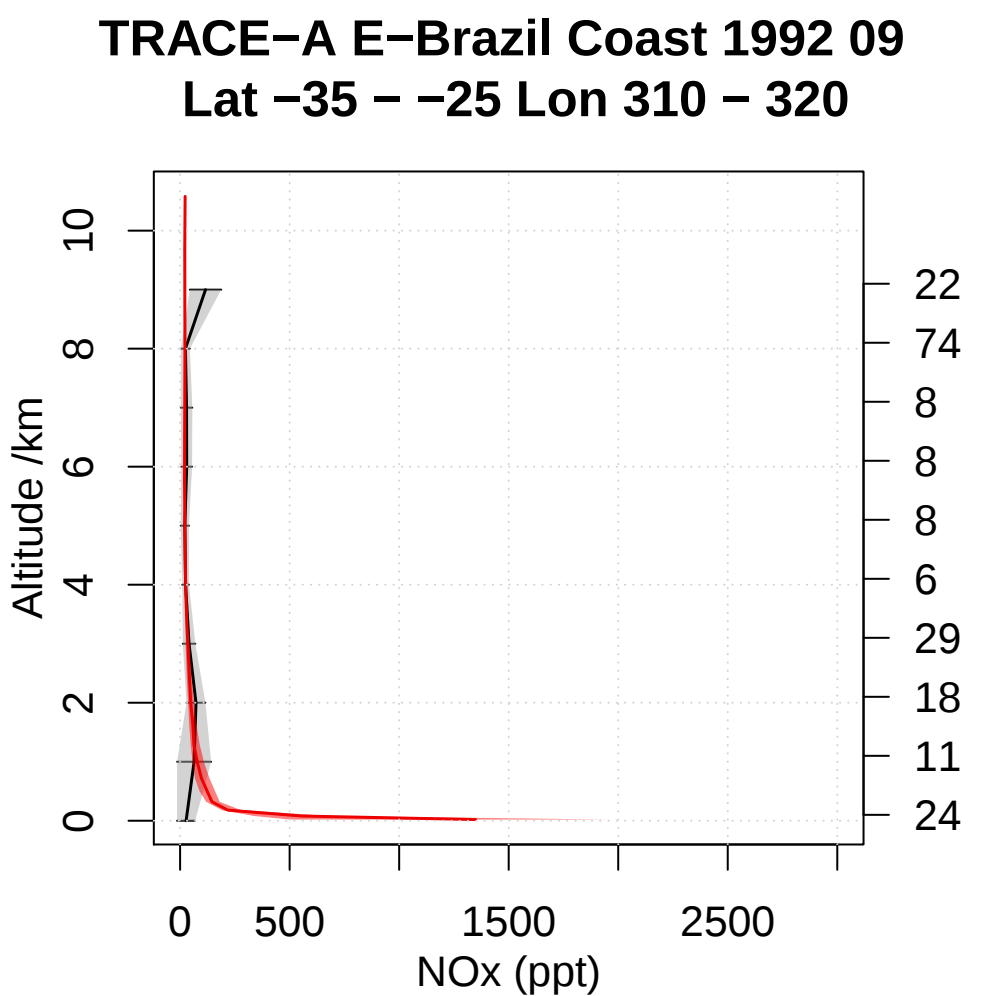
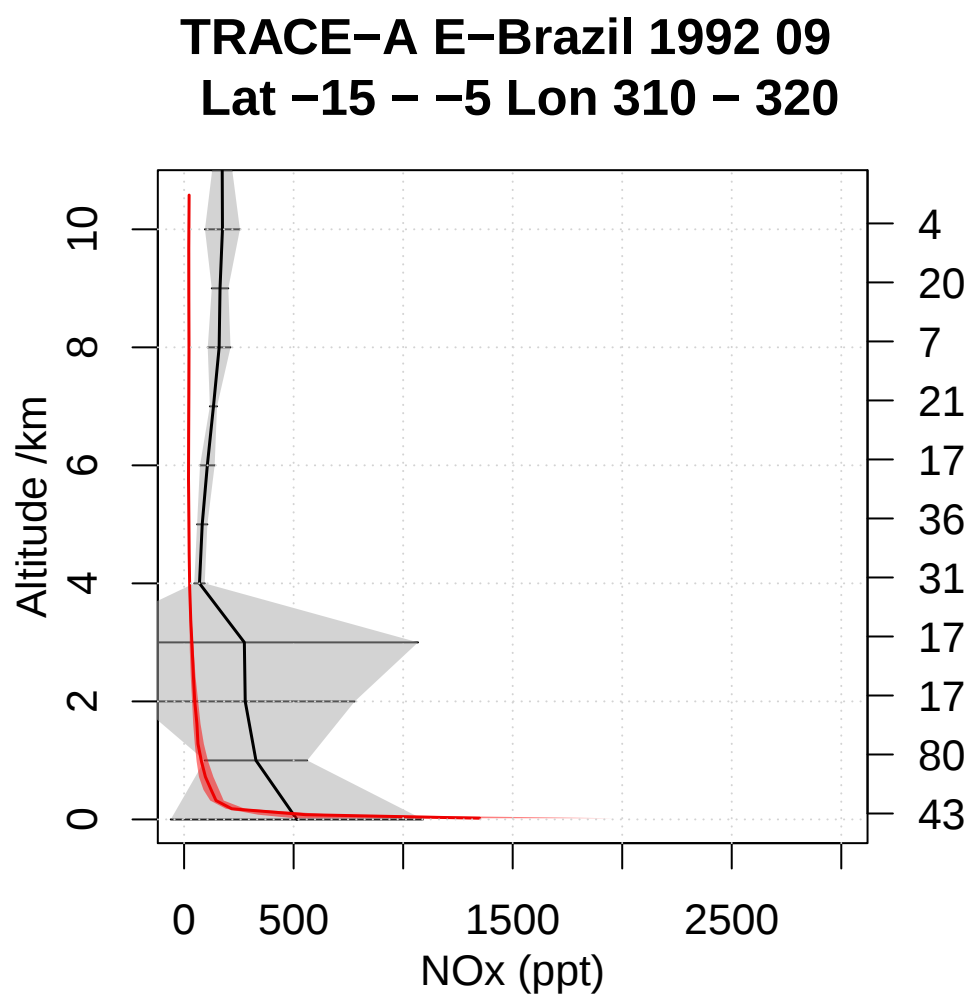
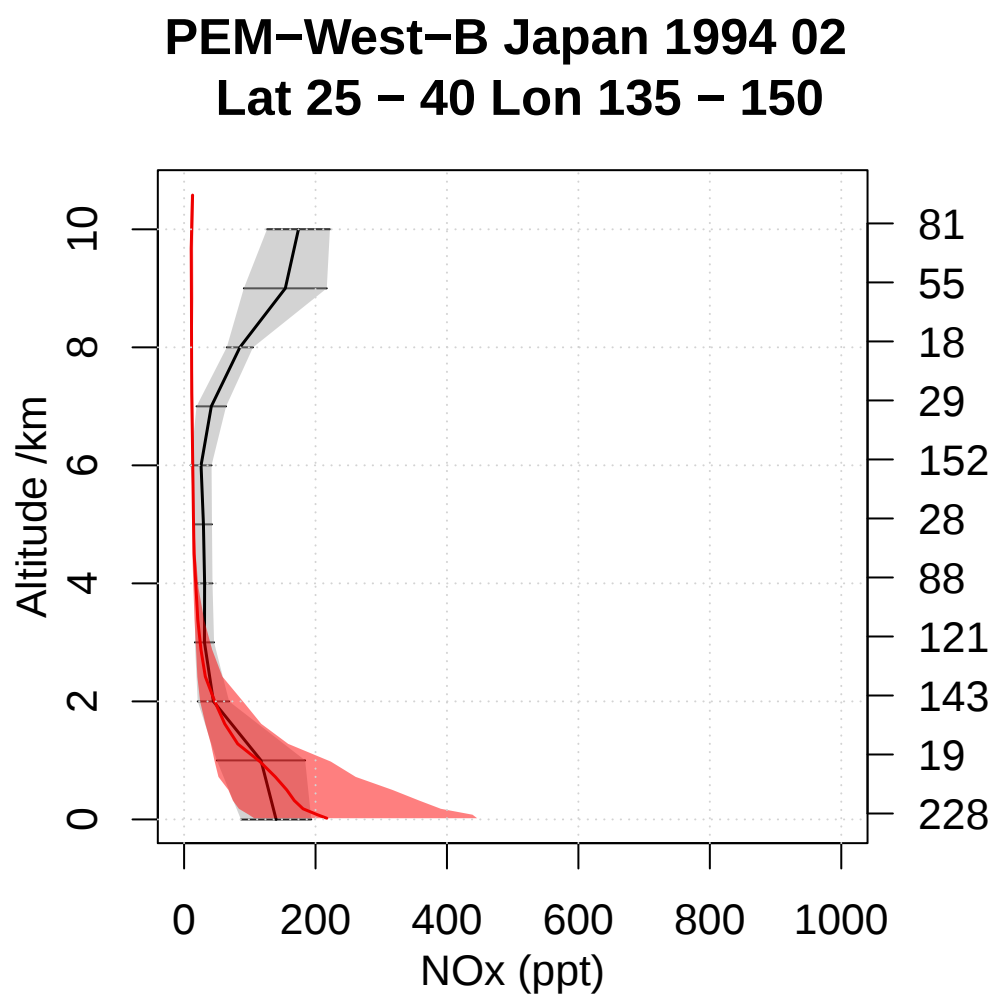
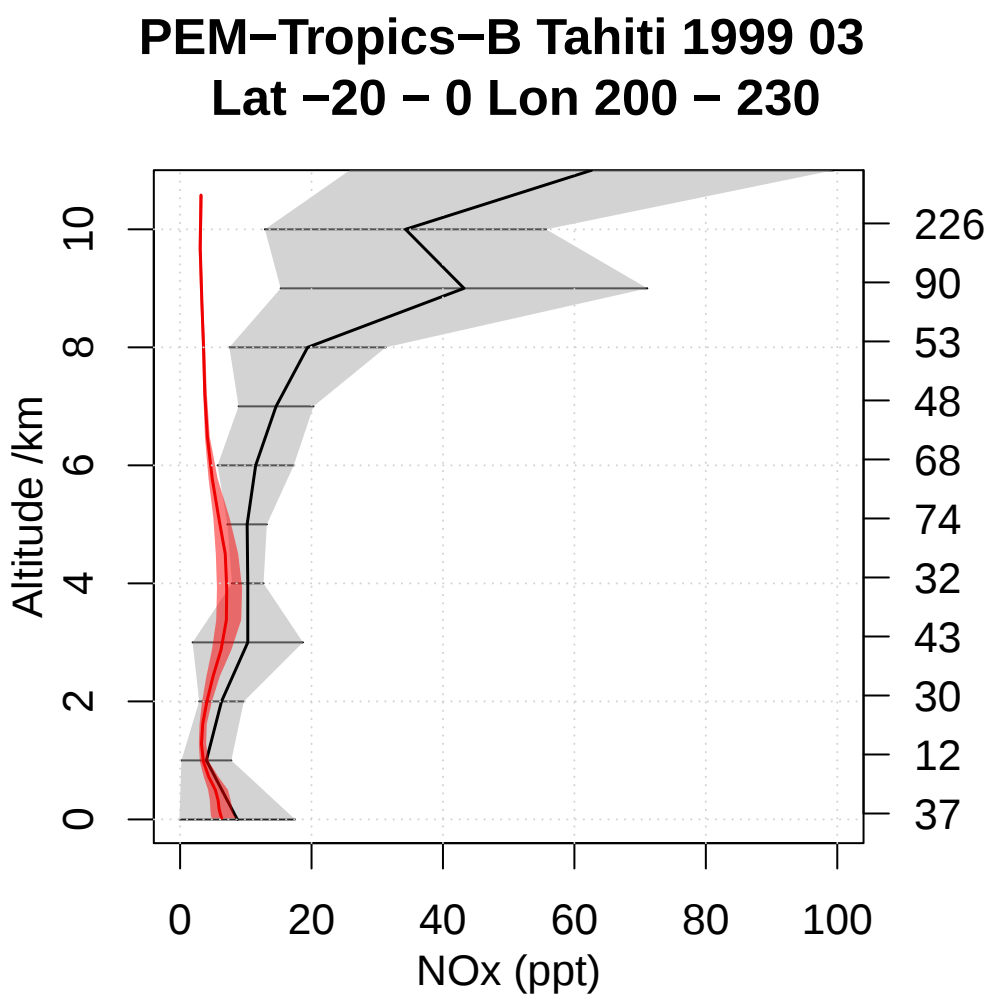
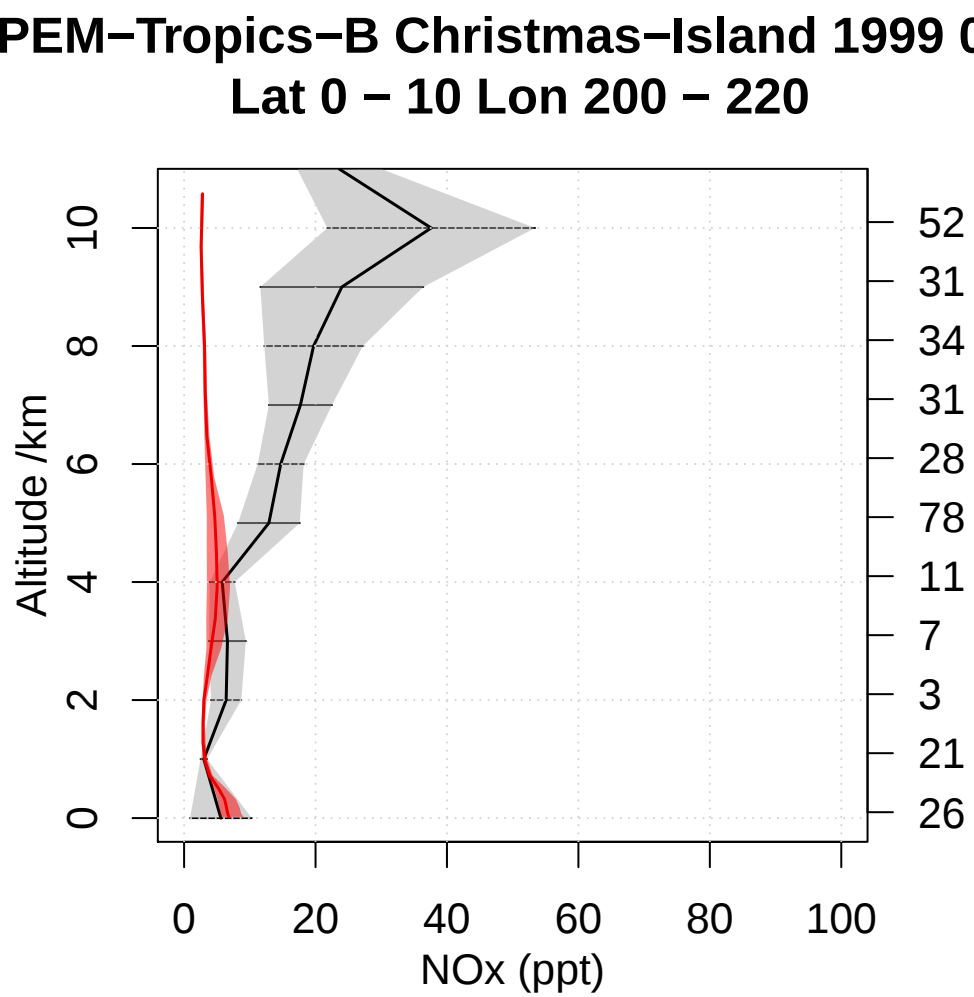
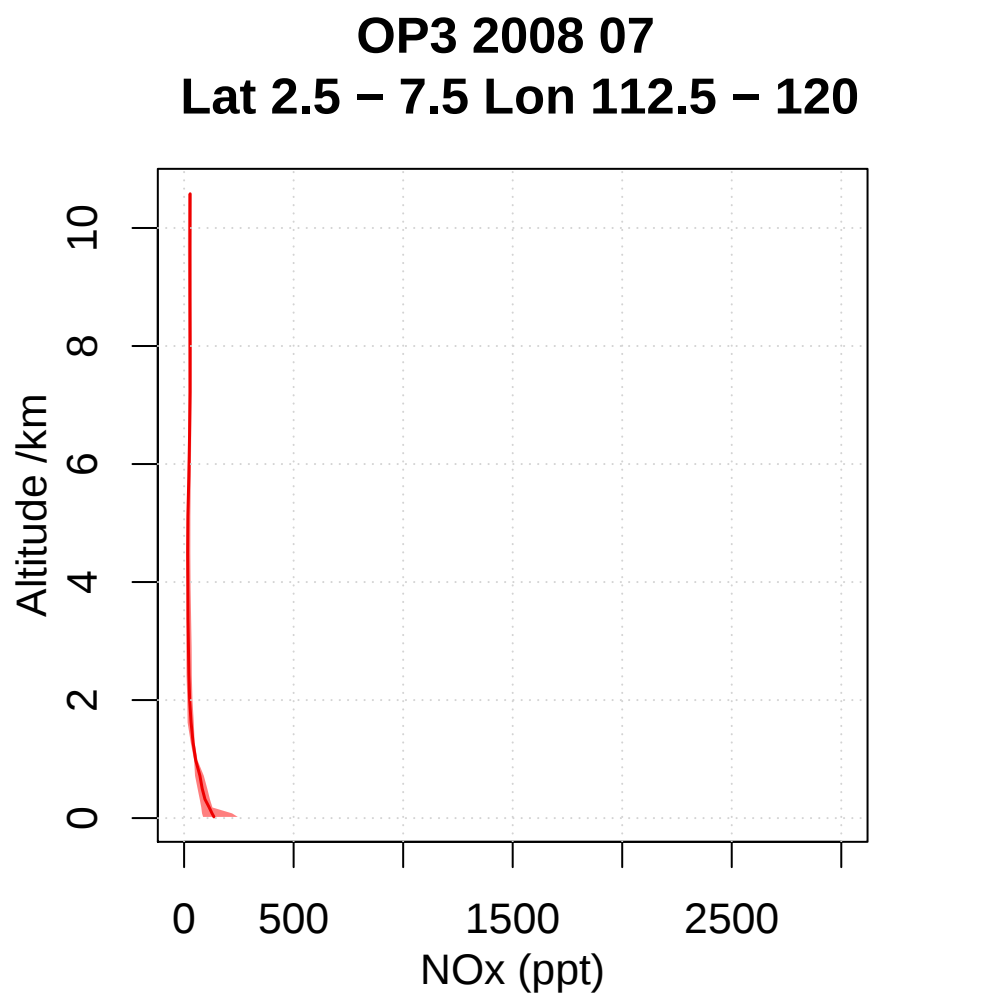
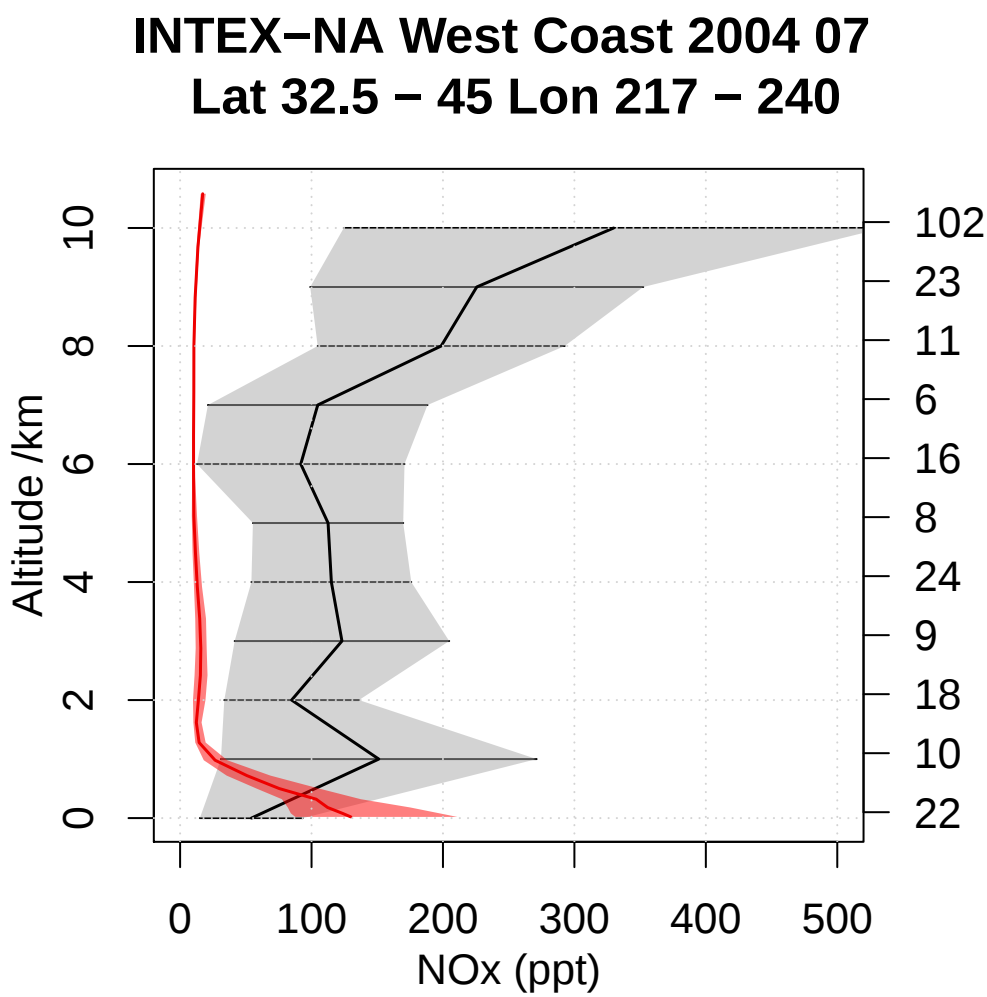
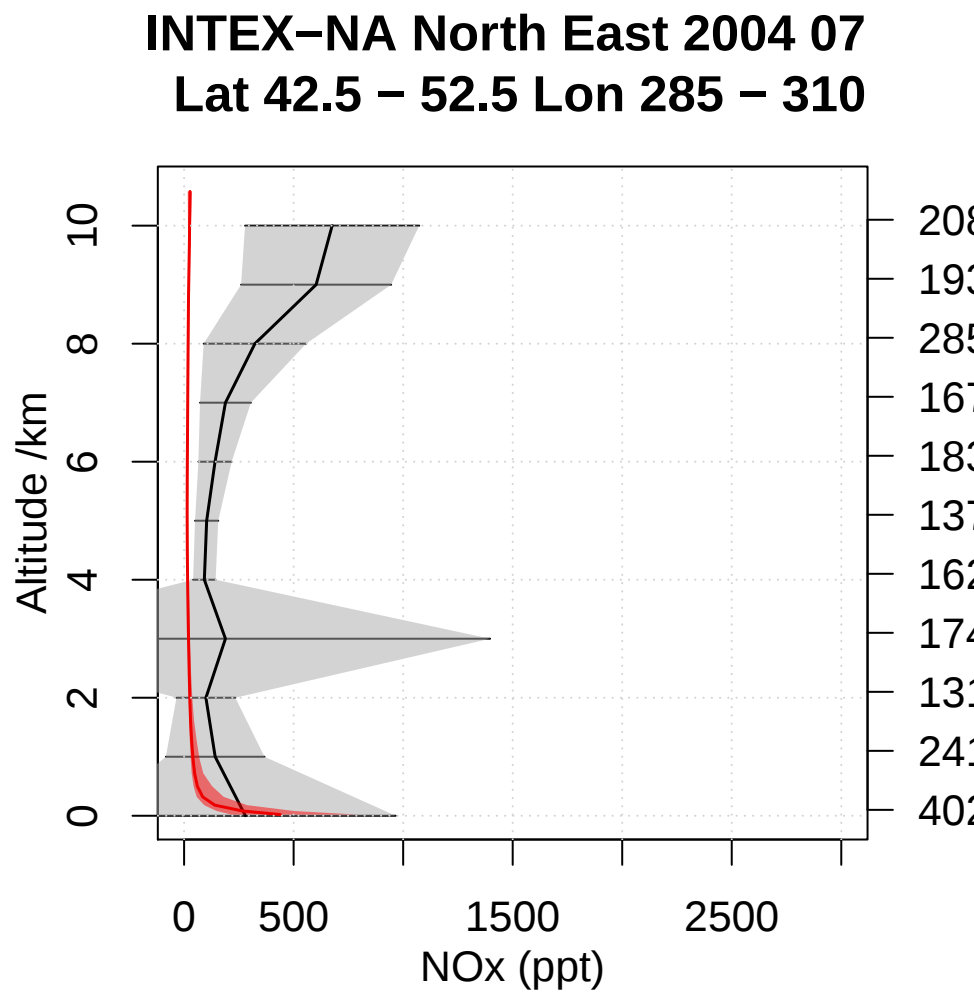
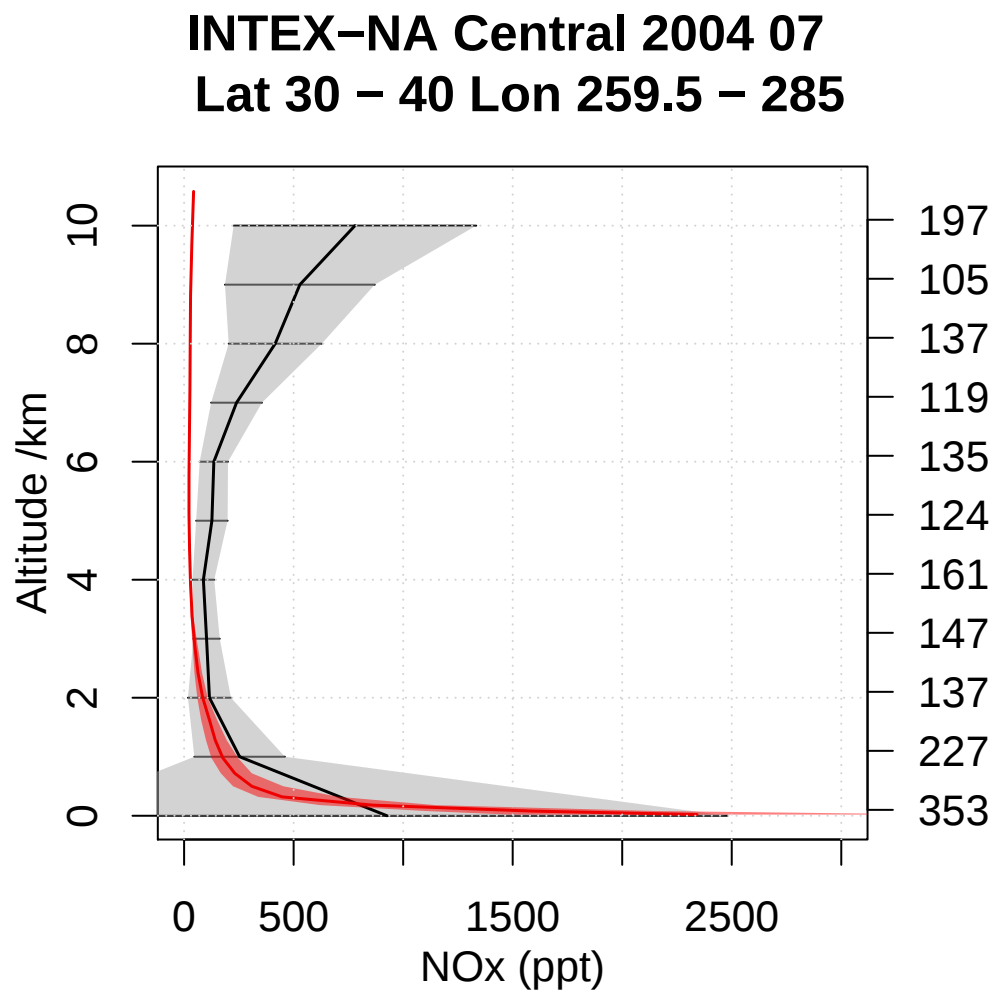
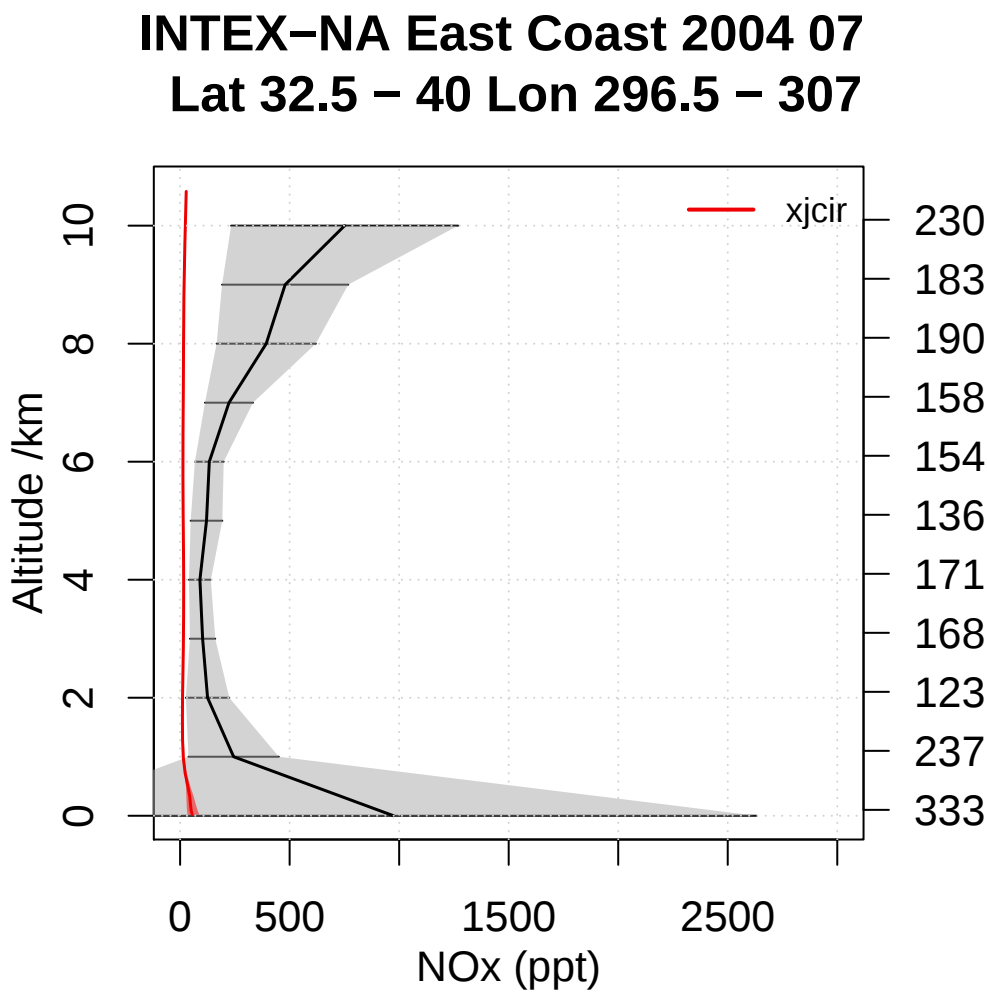
**Emmons CO comparison**



Emmons HNO3 comparison

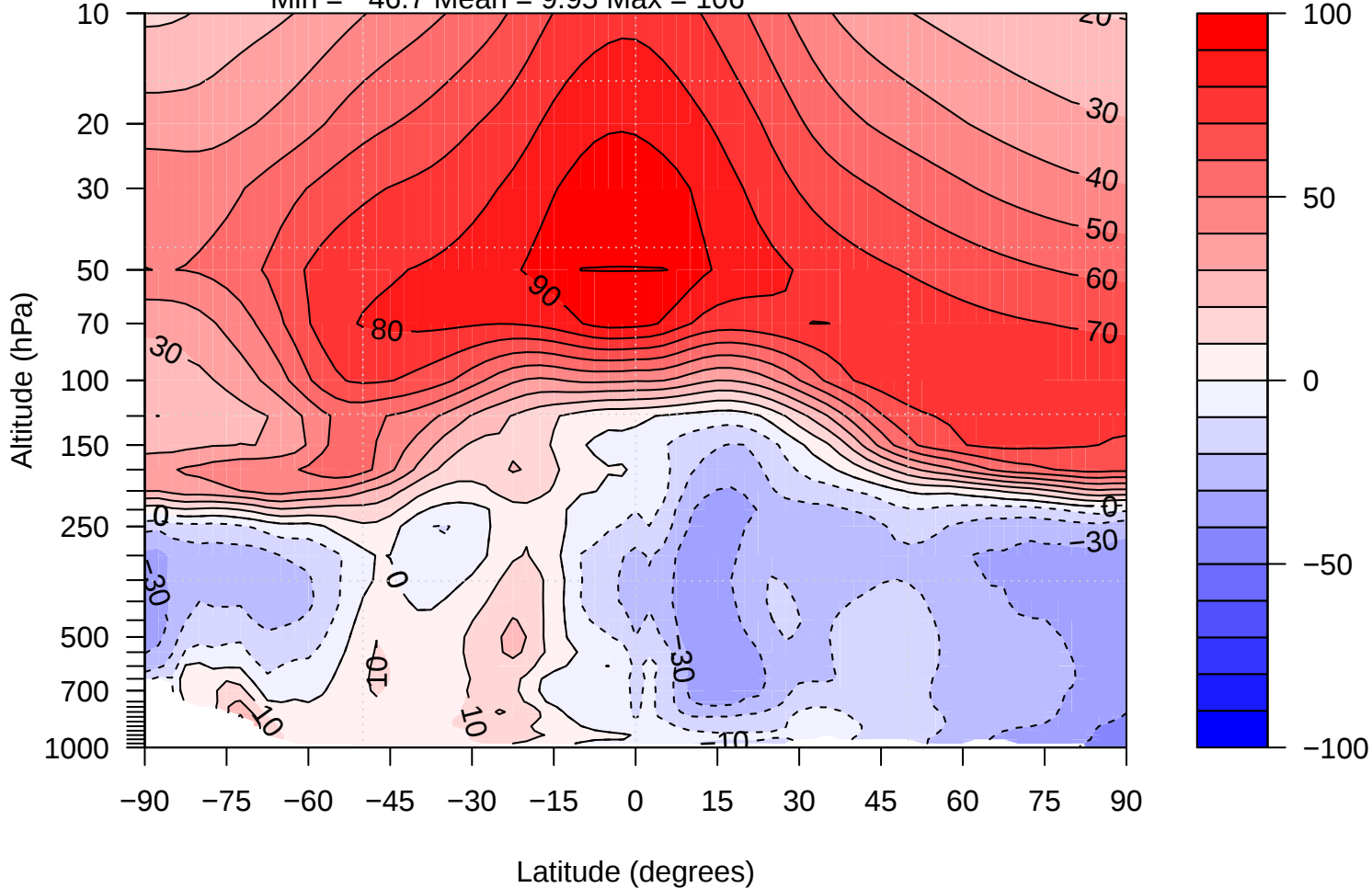


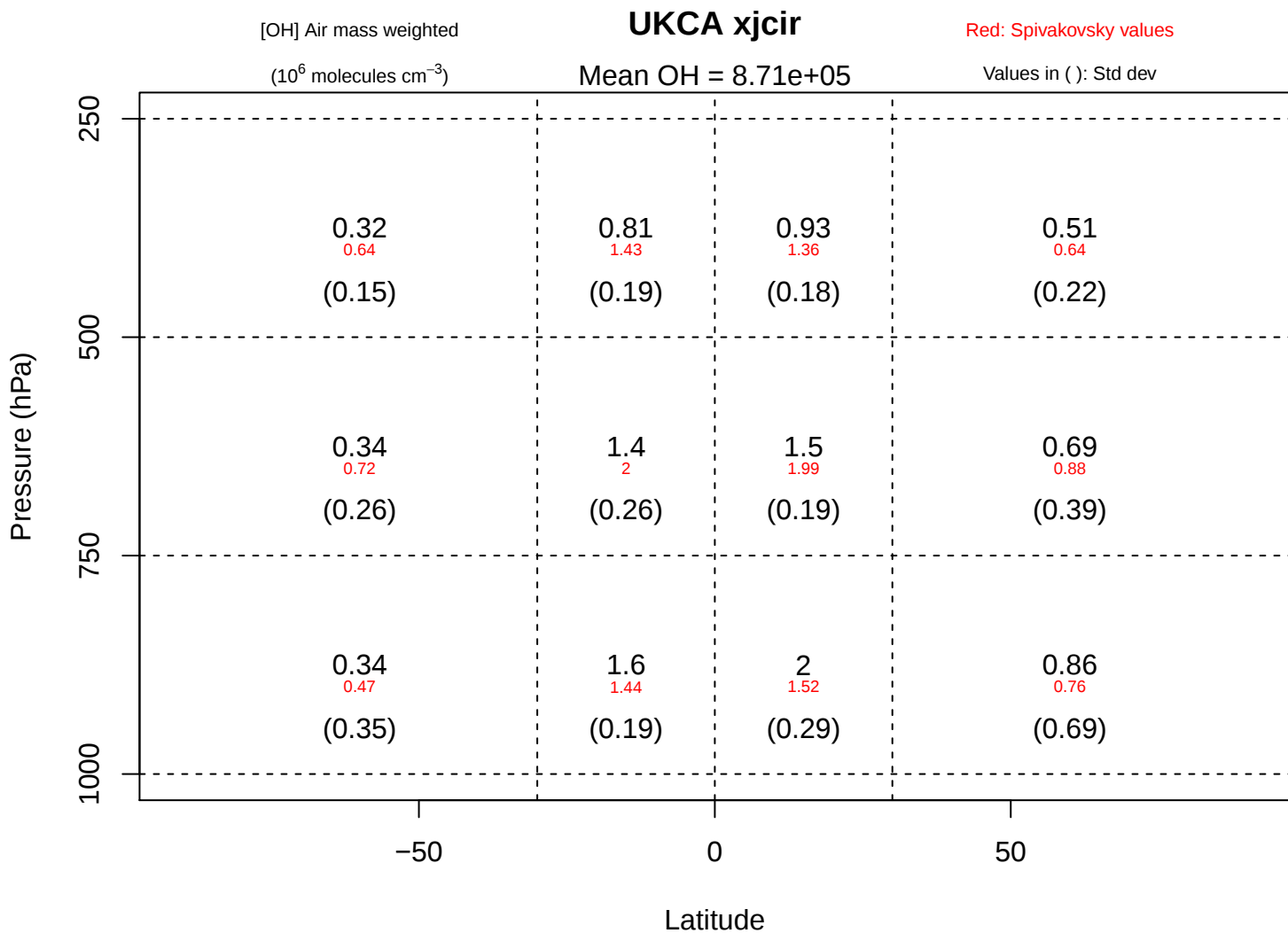
Emmons NOx comparison



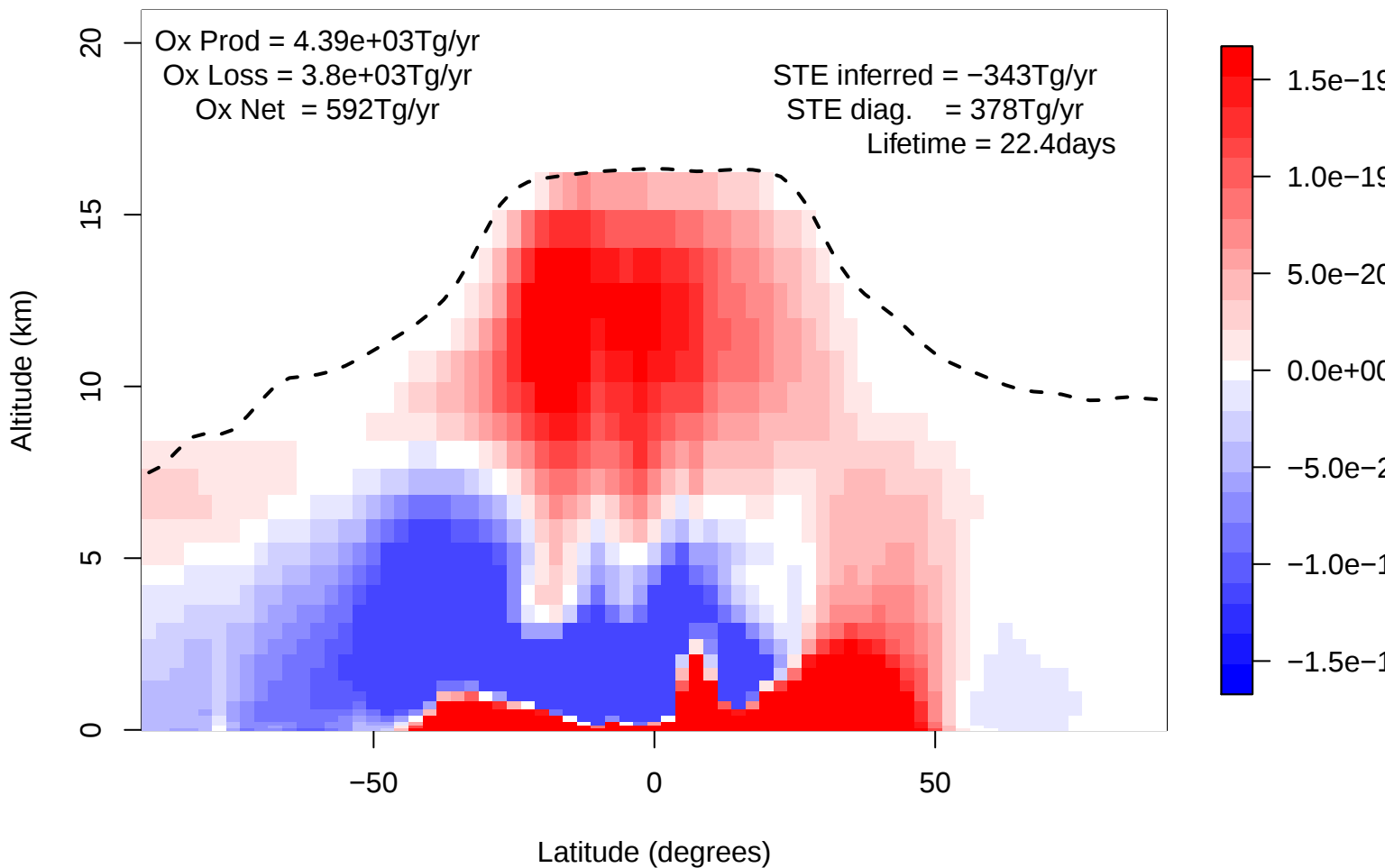
# xjcir - ERA Q bias

Min = -46.7 Mean = 9.95 Max = 106

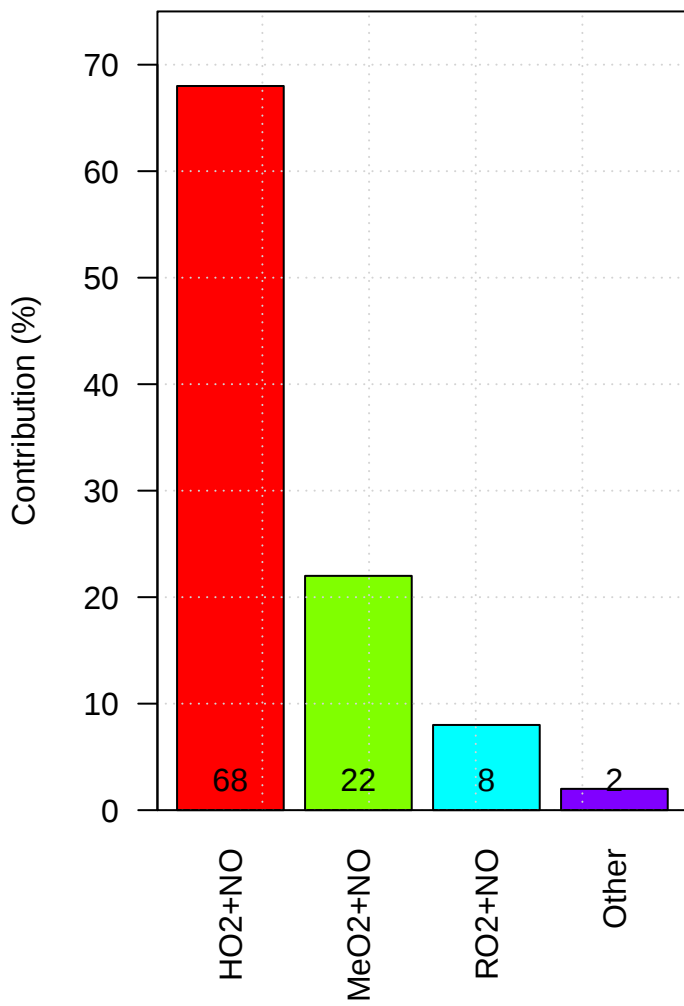




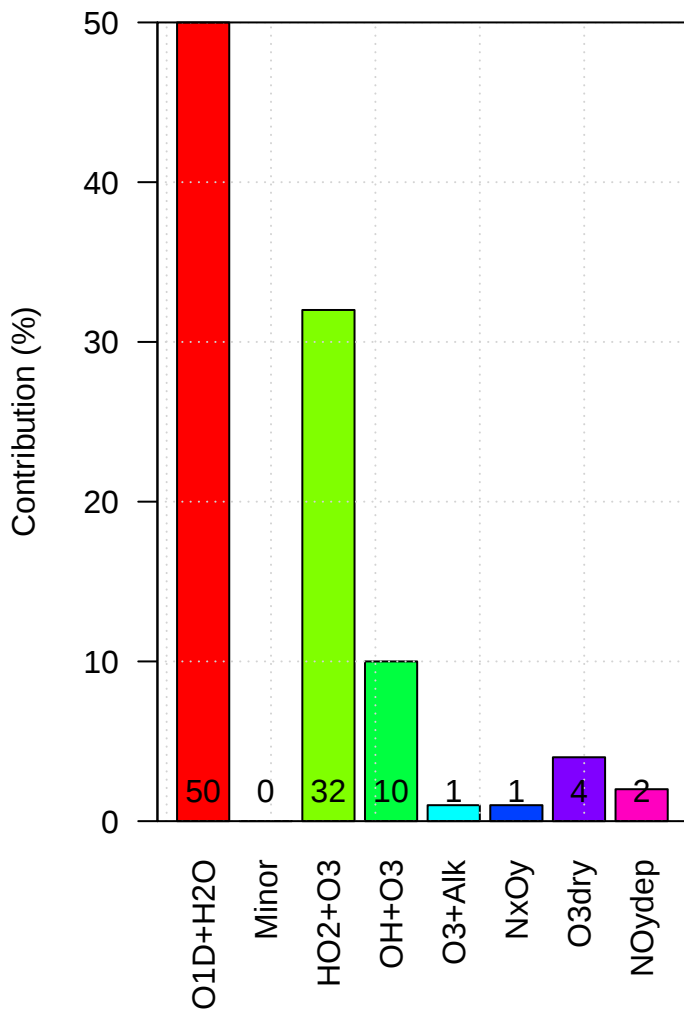
# UKCA xjcir Ox Net Chemical Production



**xjcir Production of Tropospheric Ox**

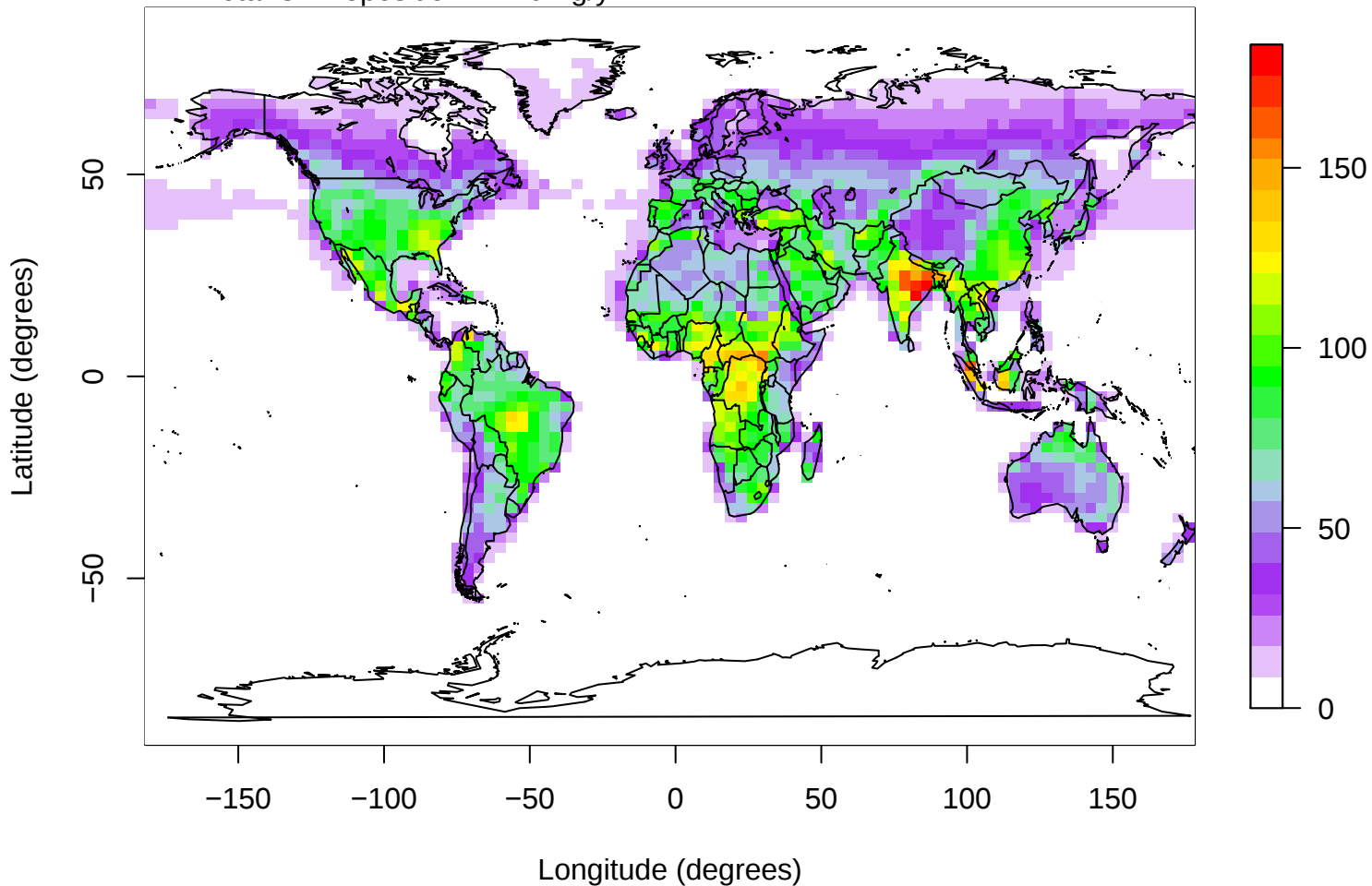


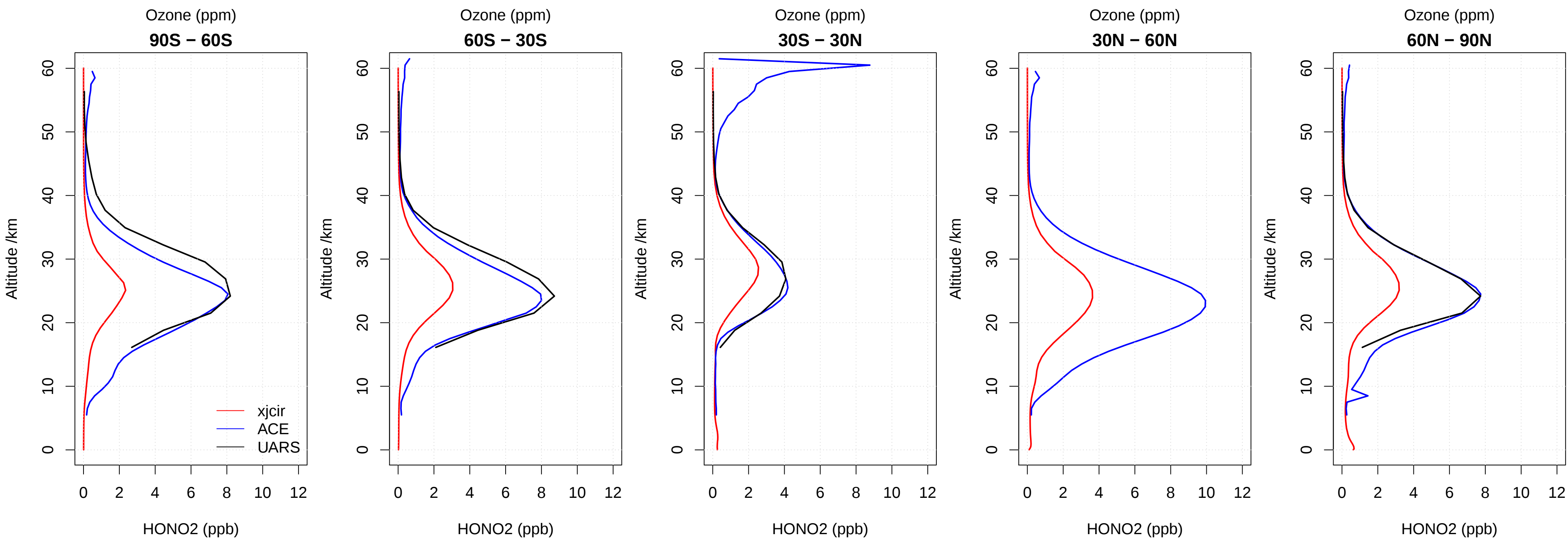
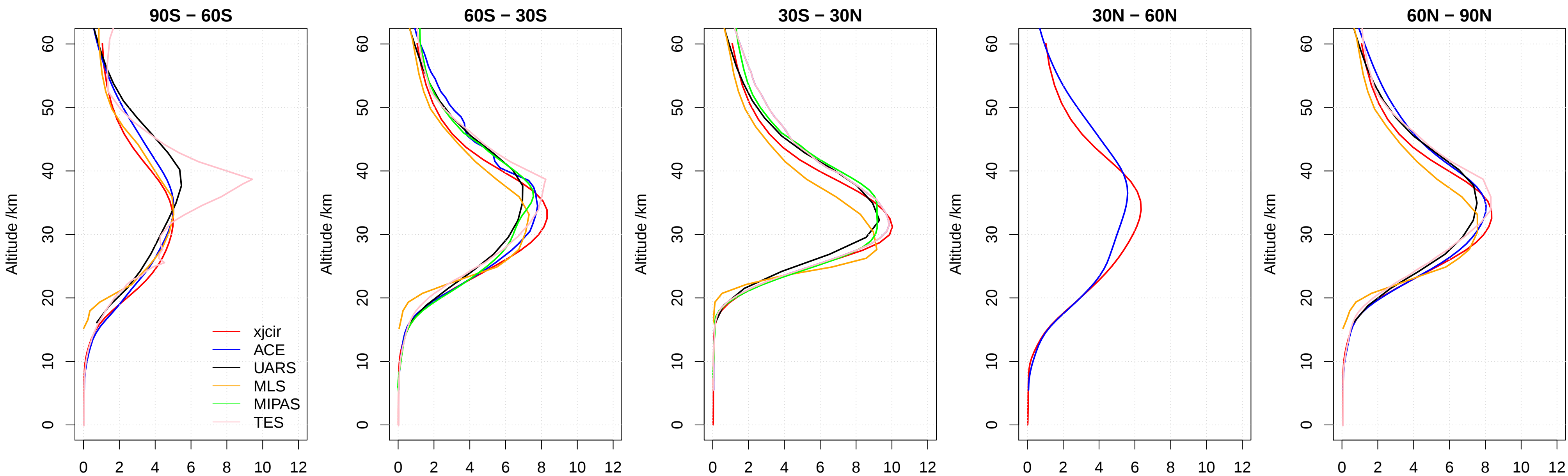
**xjcir Loss of Tropospheric Ox**

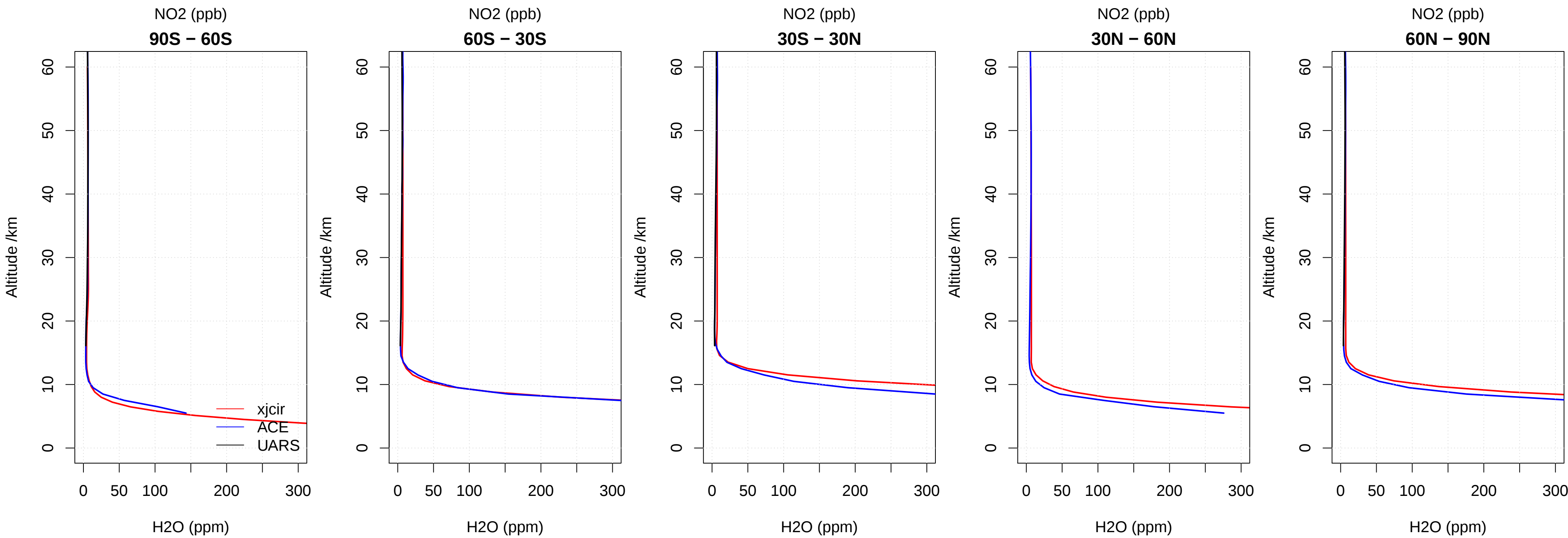
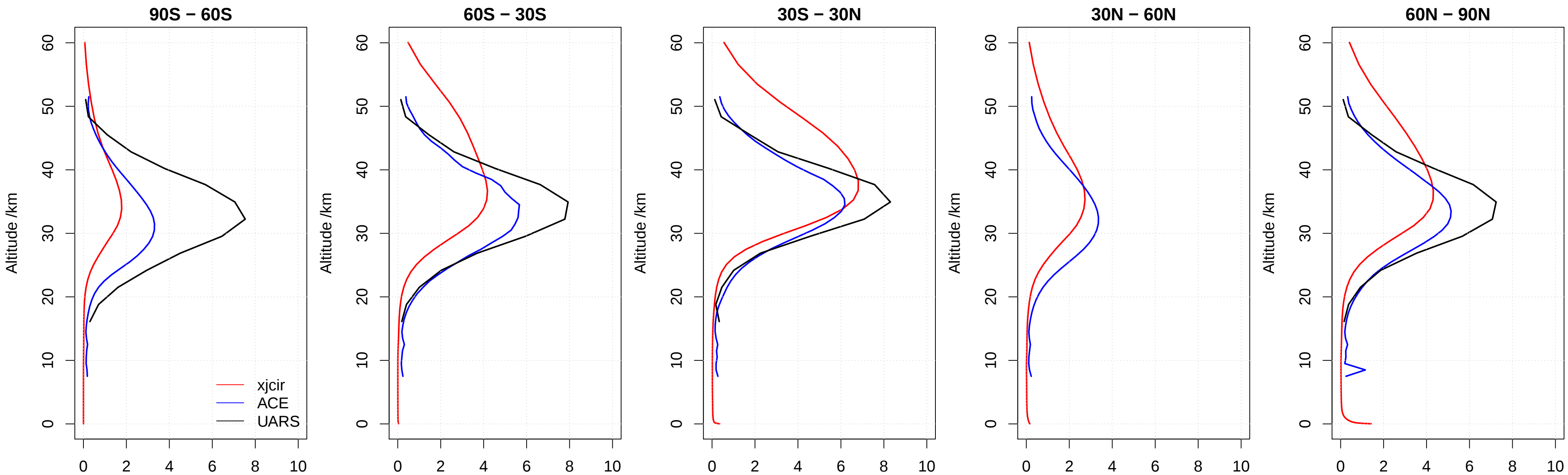


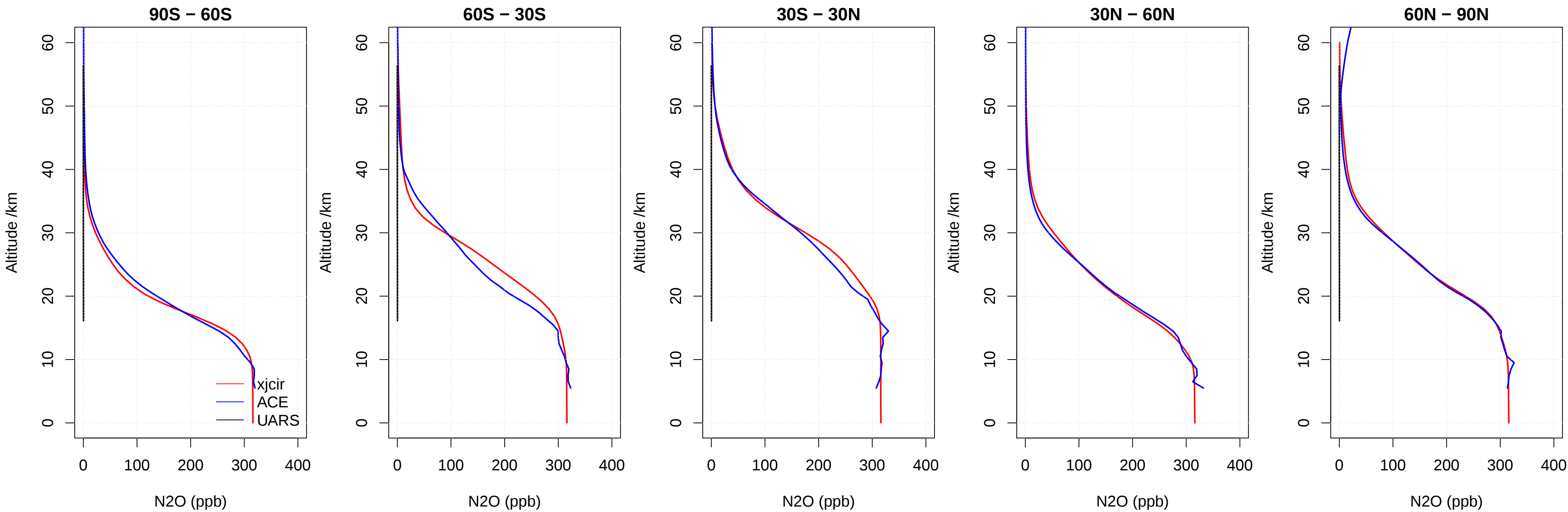
# UKCA Ox deposition xjcir

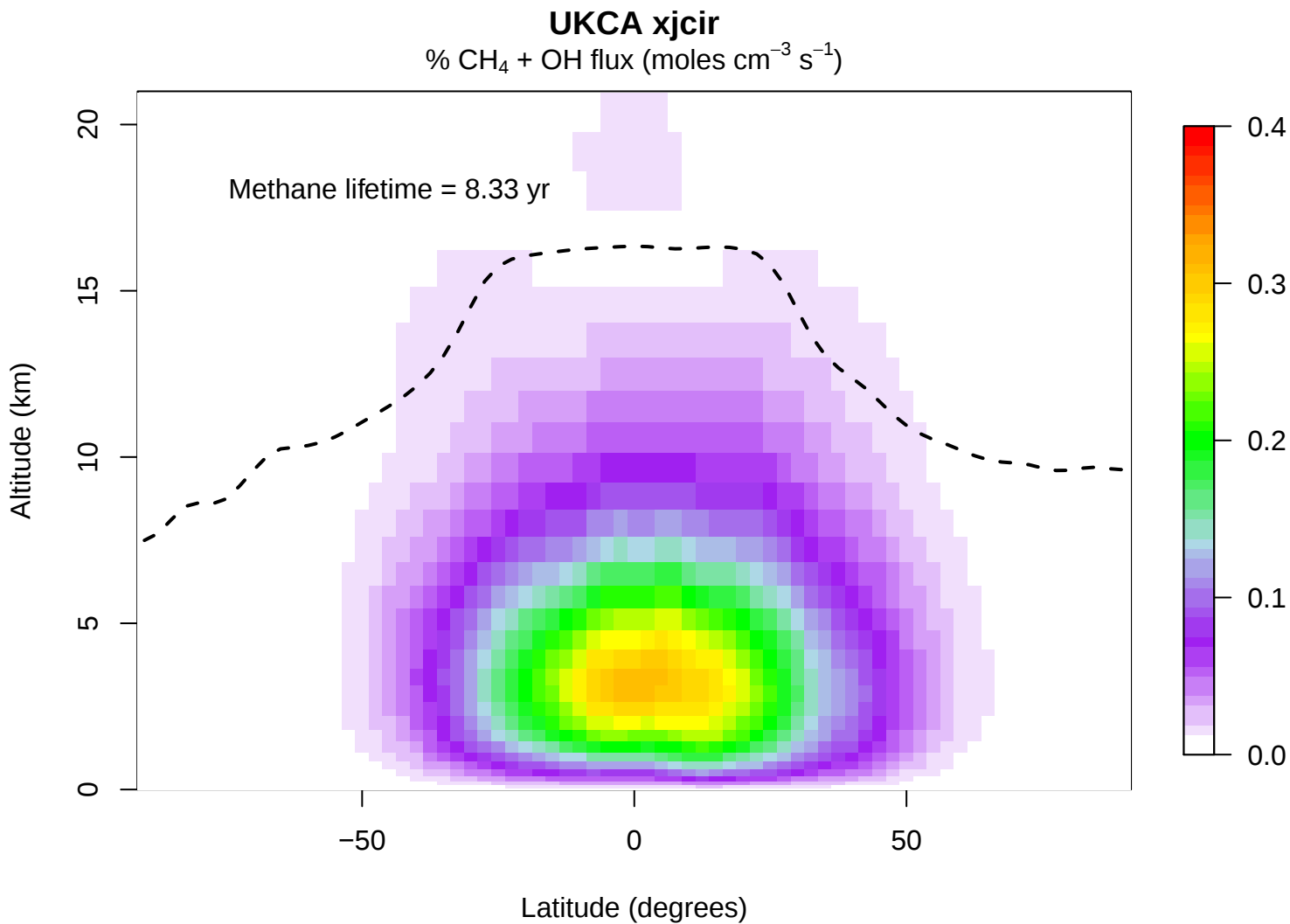
Total Ox Deposition = 249 Tg/yr



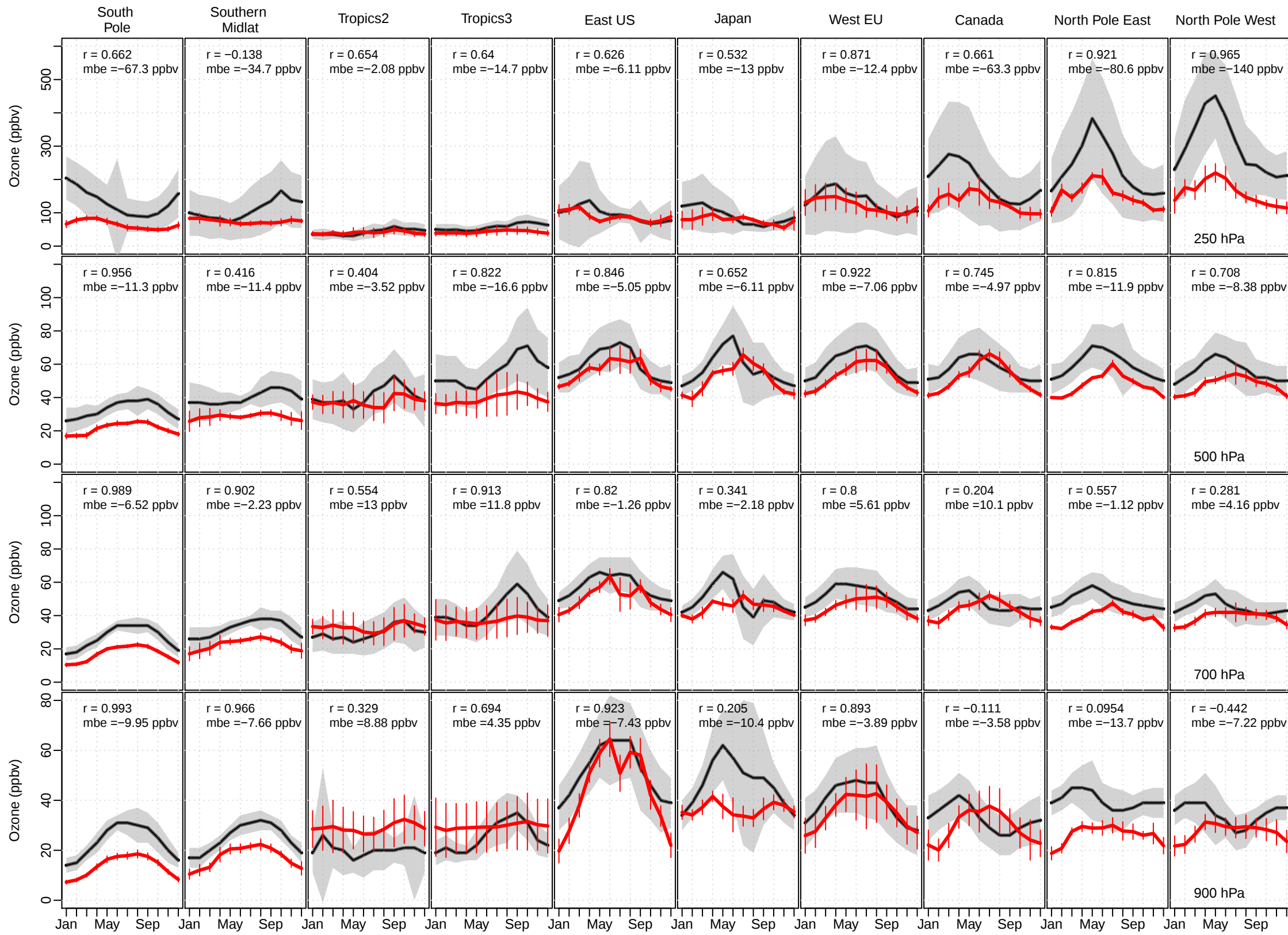


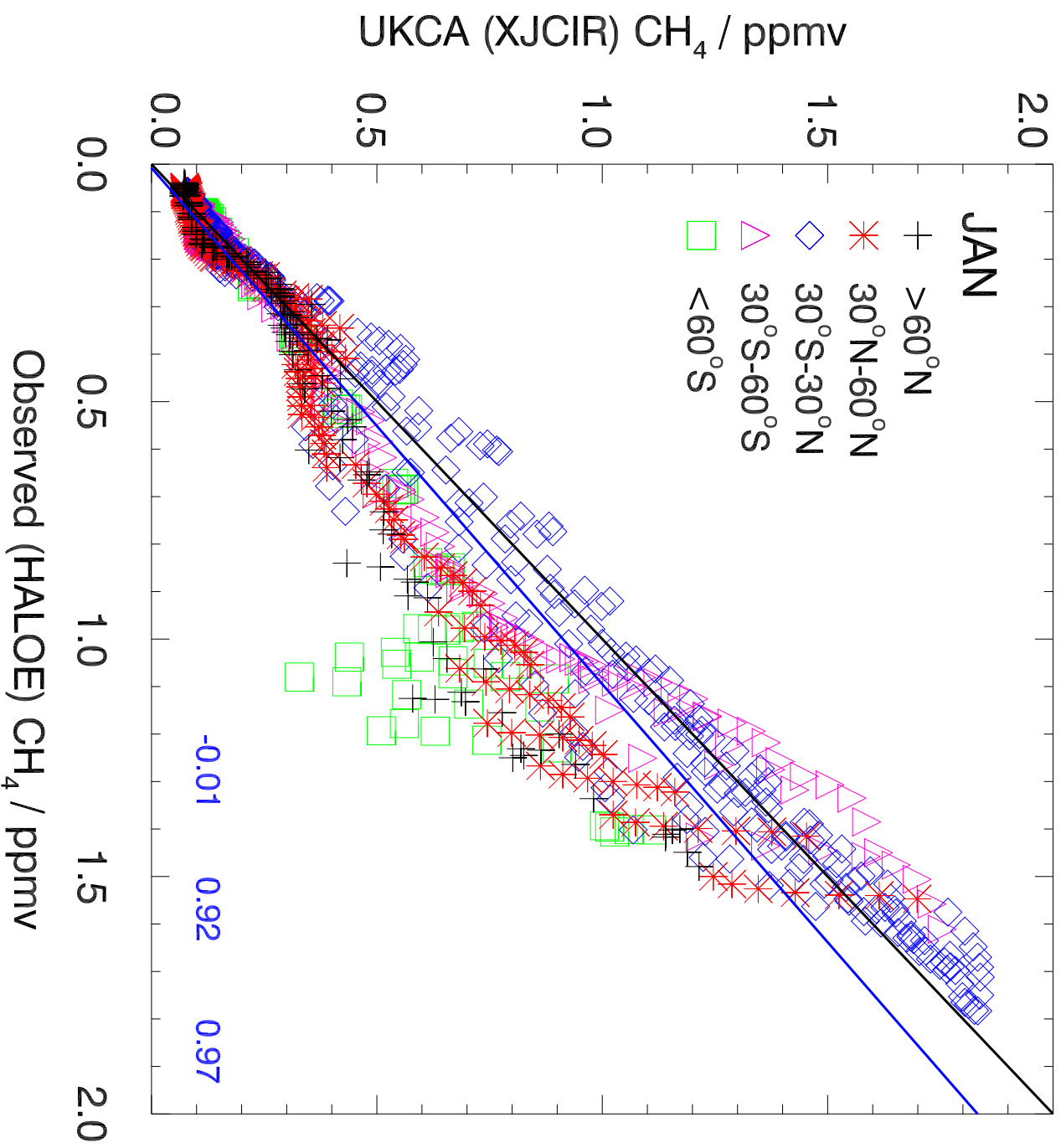


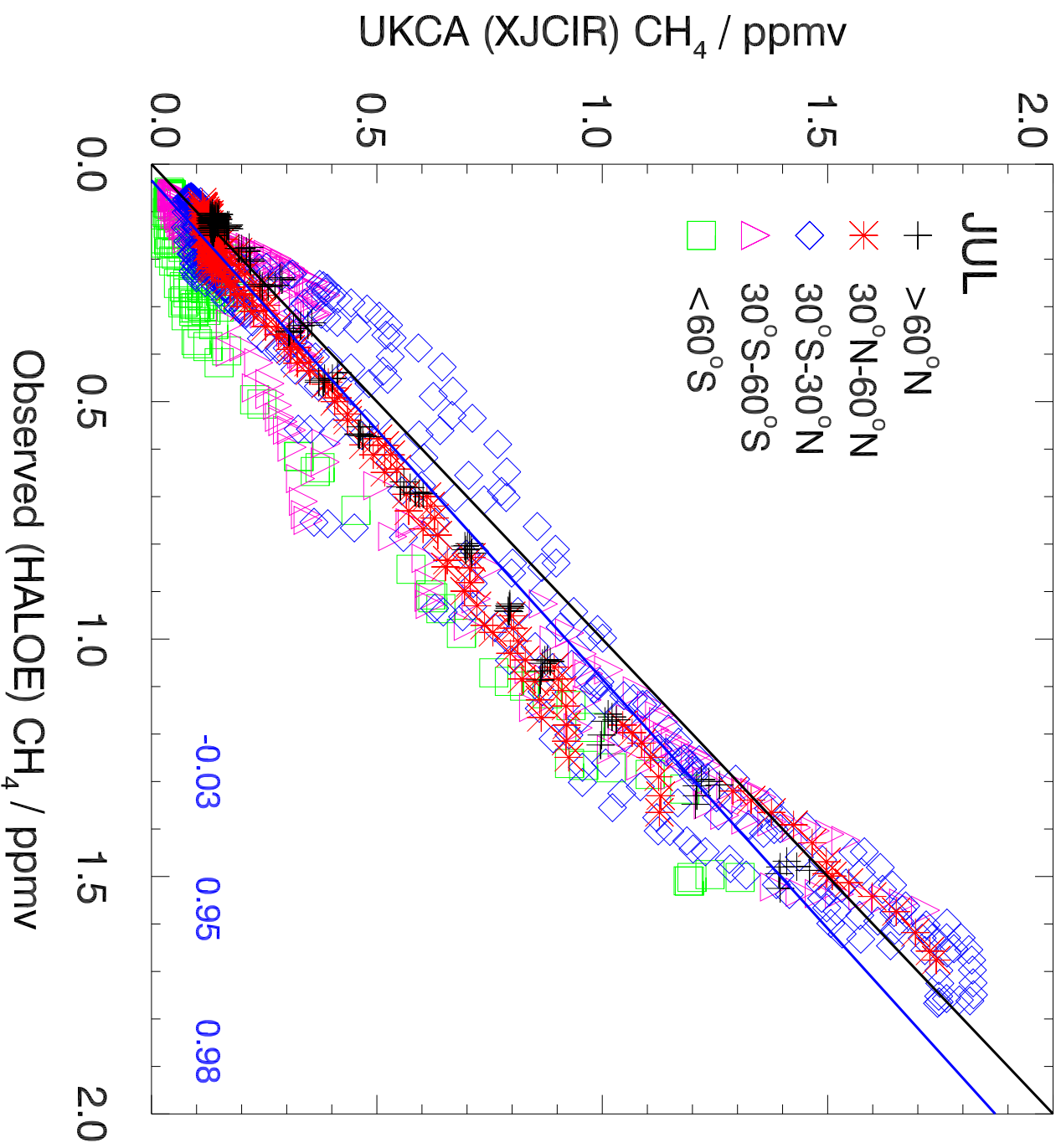


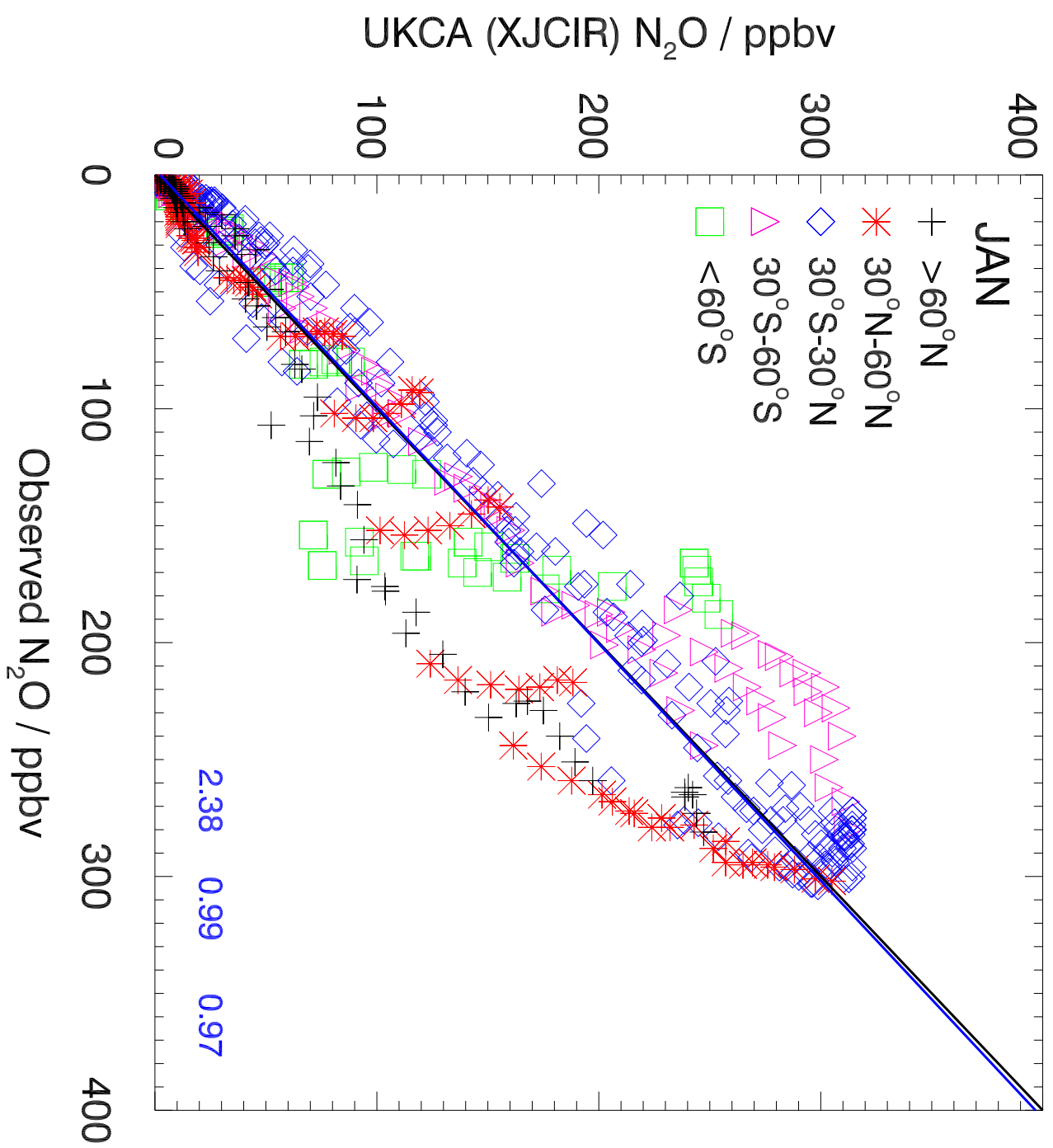


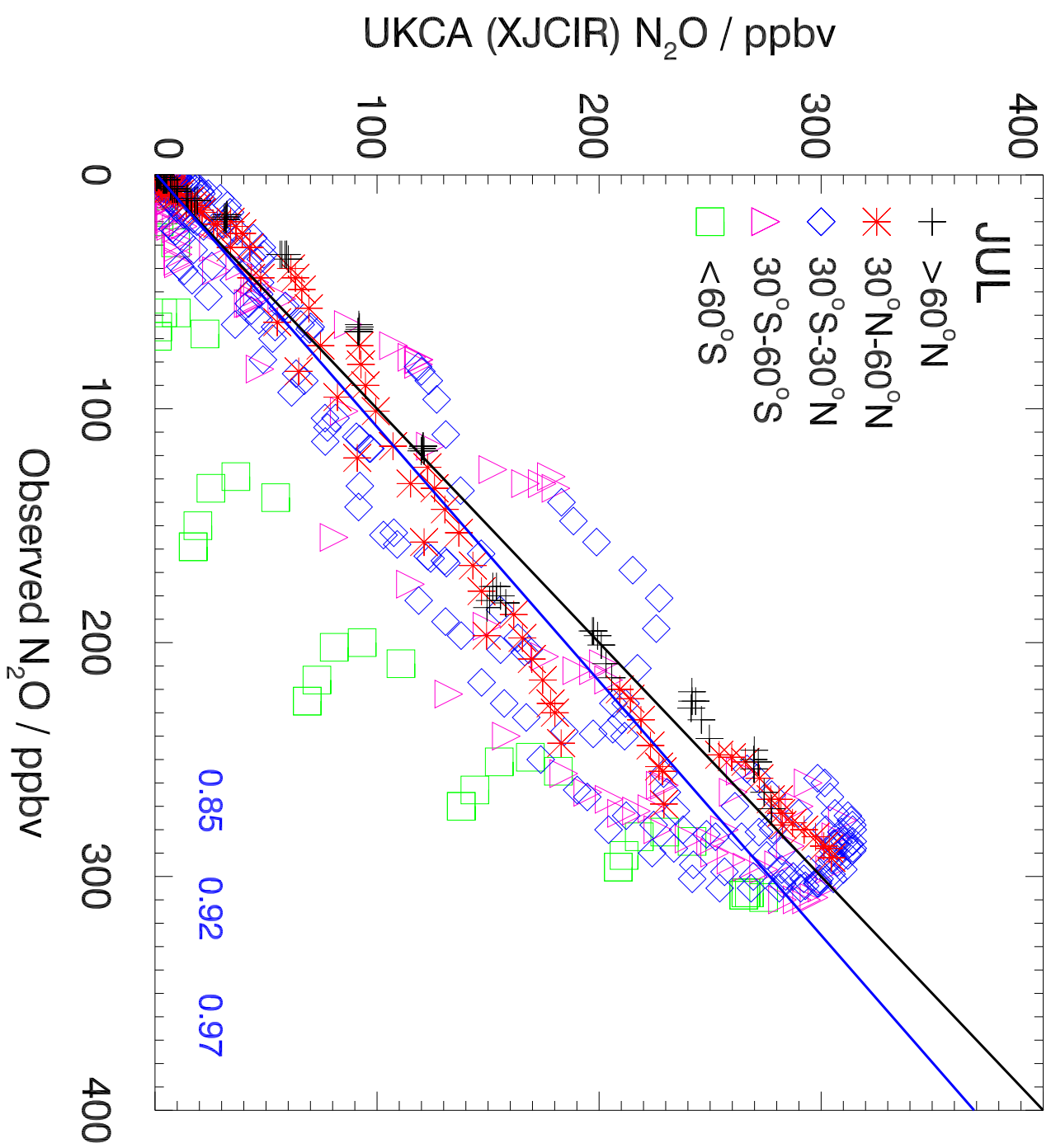
# **xjcir Tilmes ozone sonde comparison**

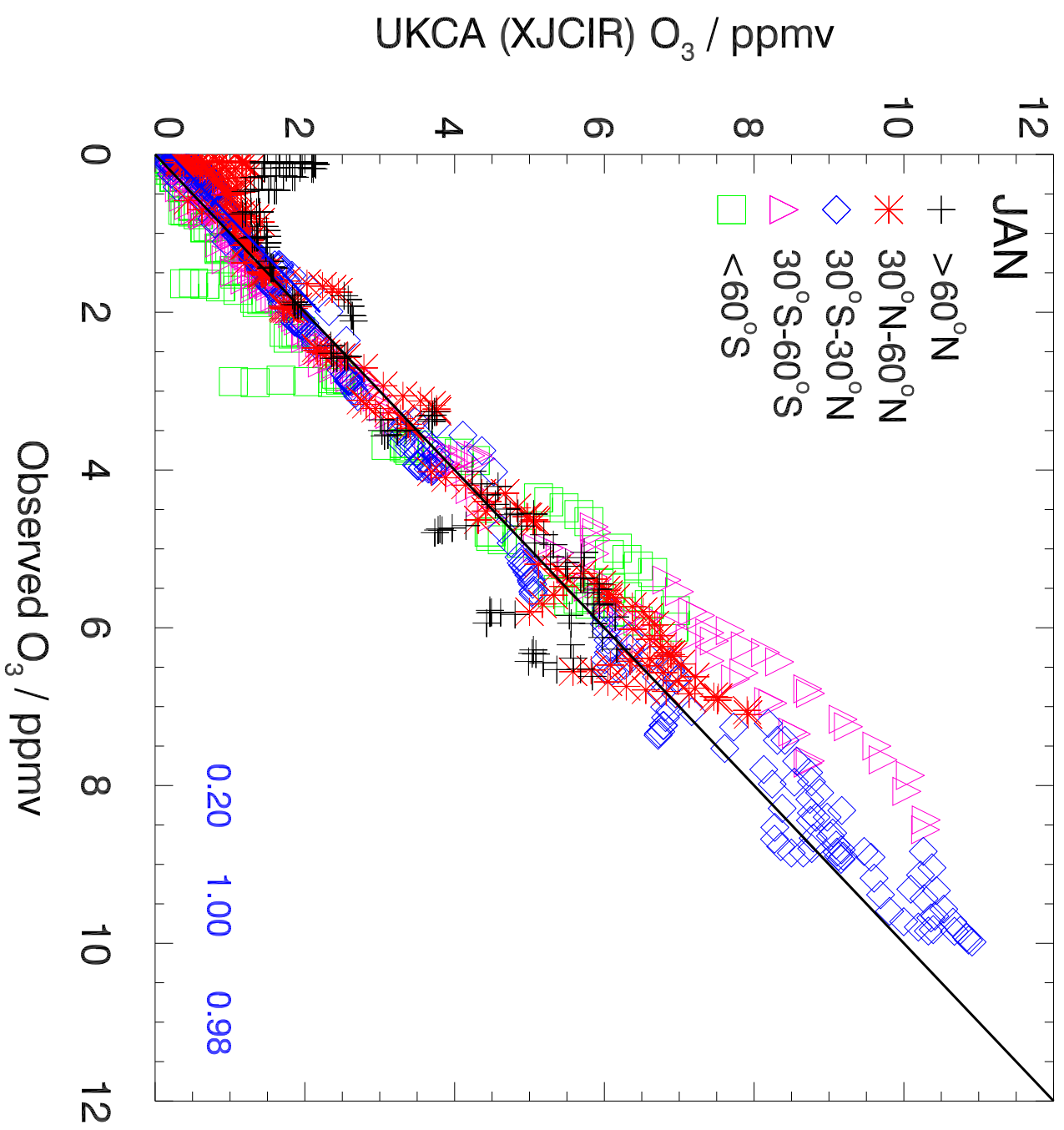


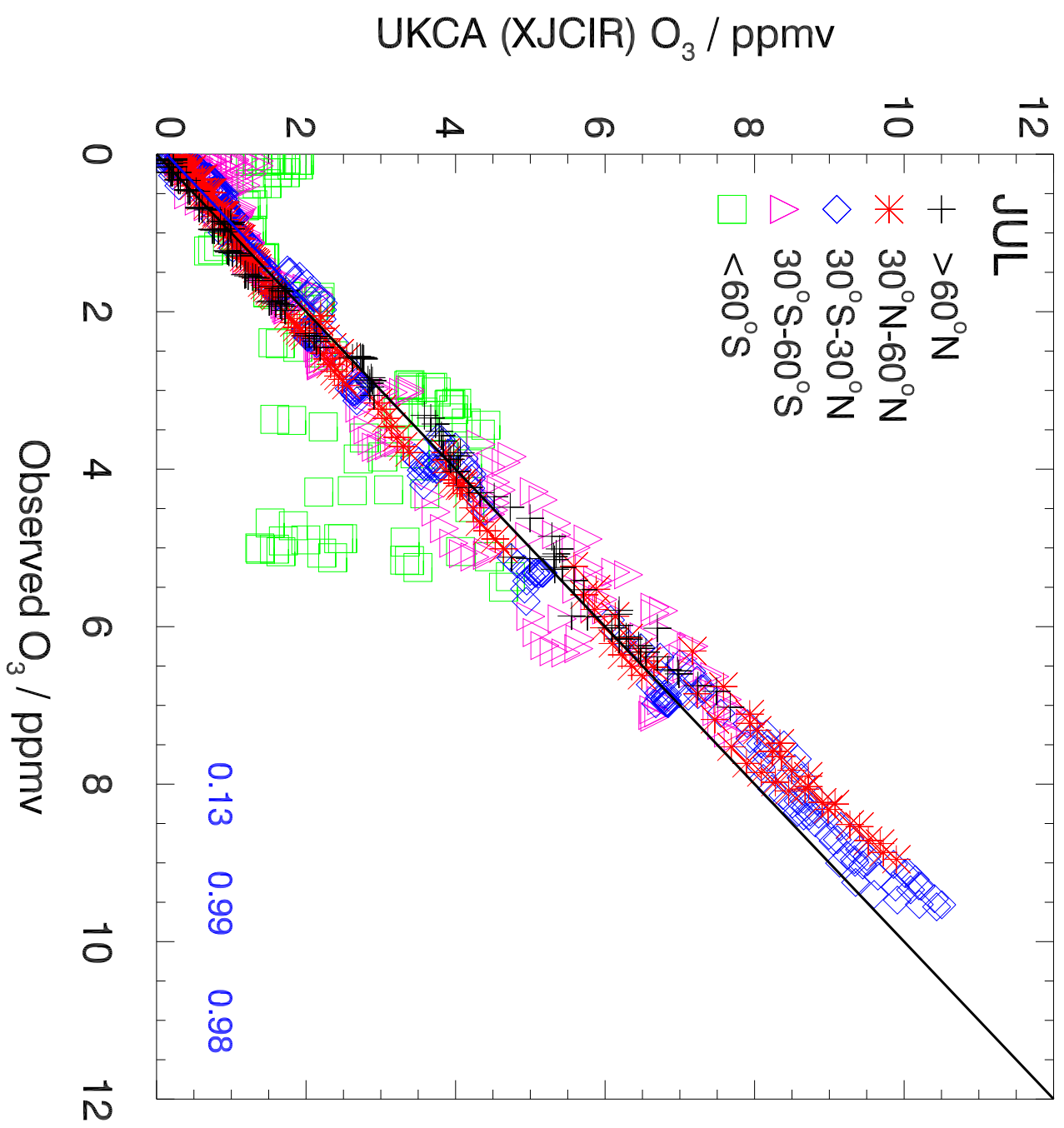


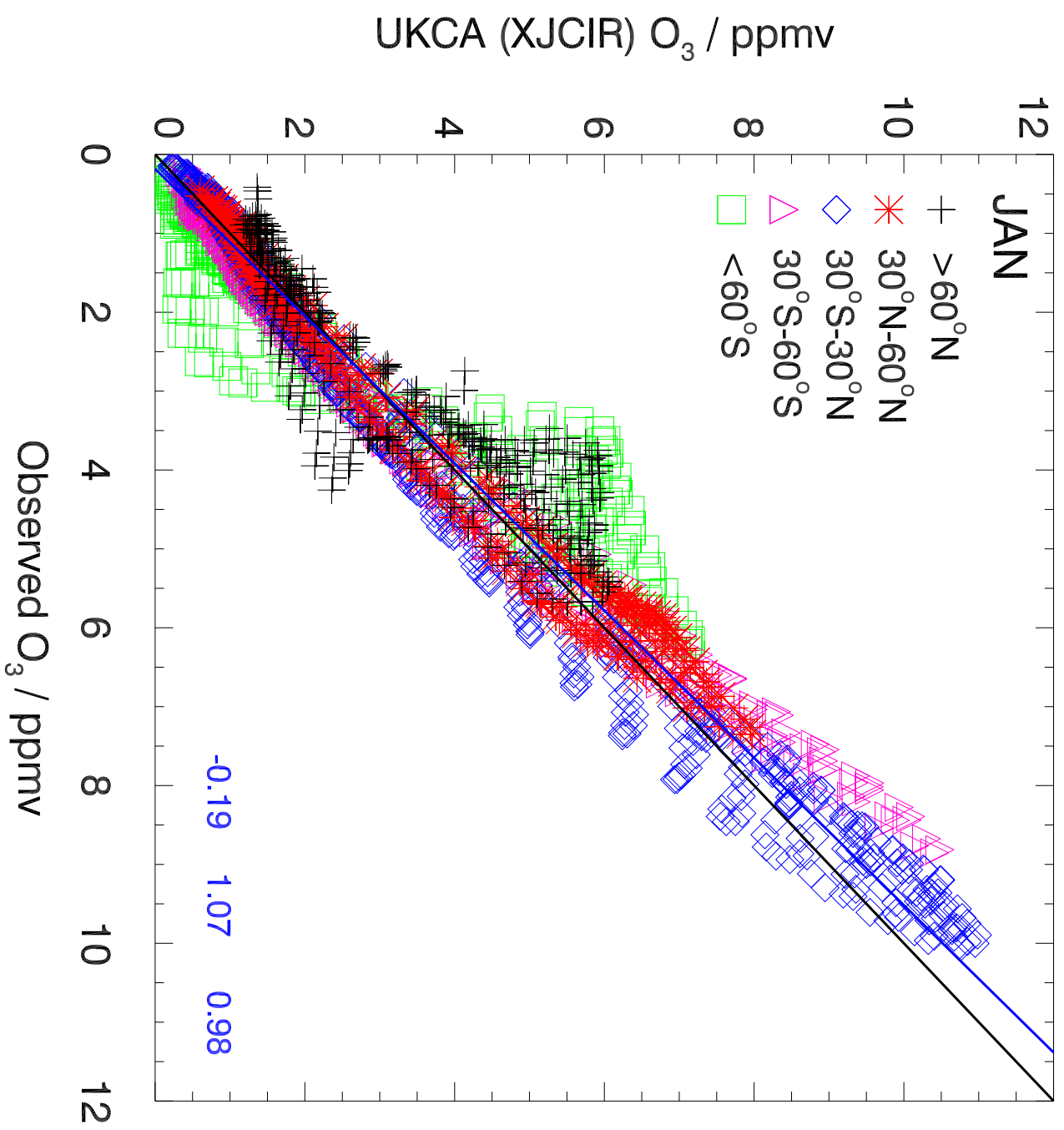


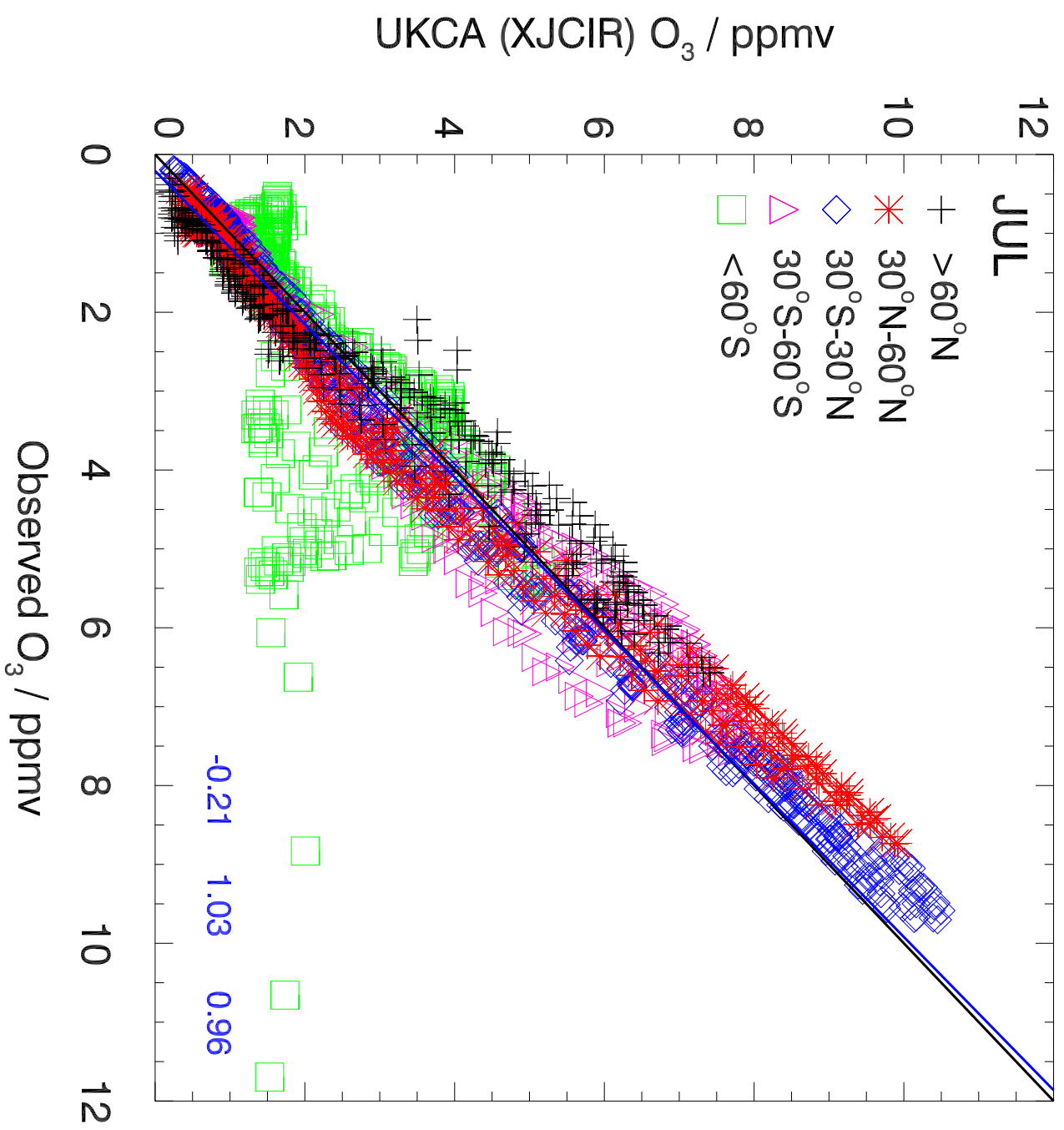




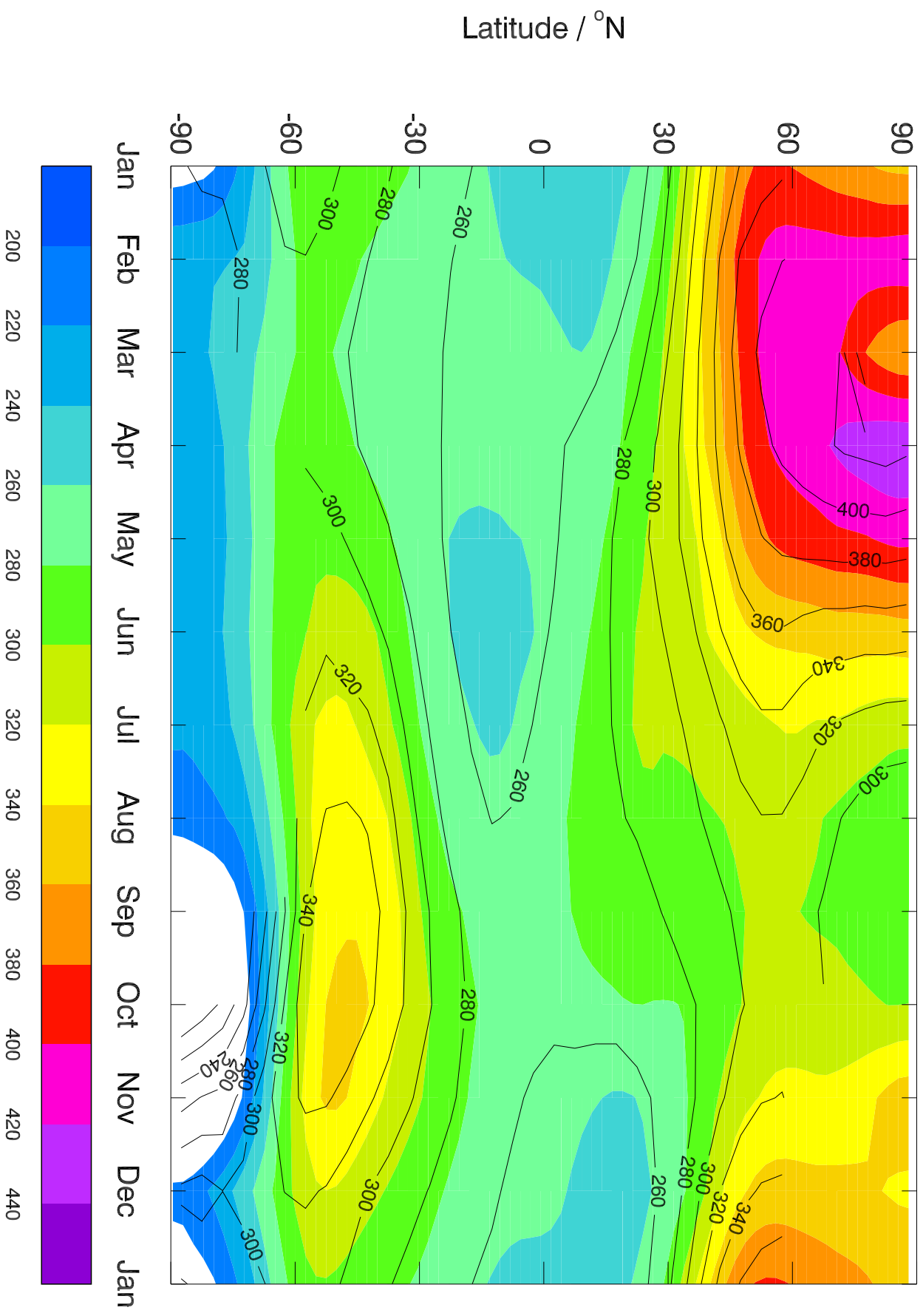




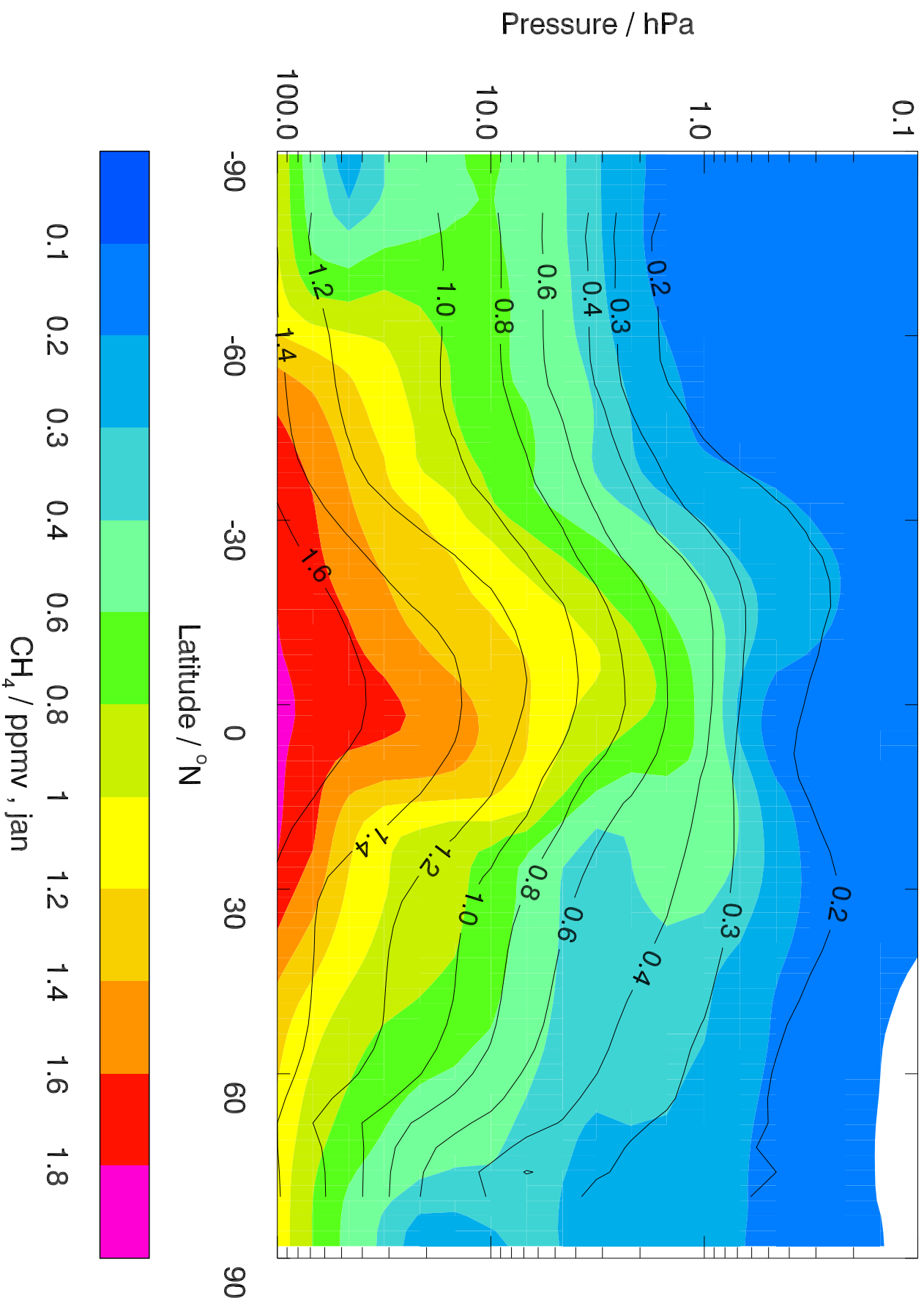




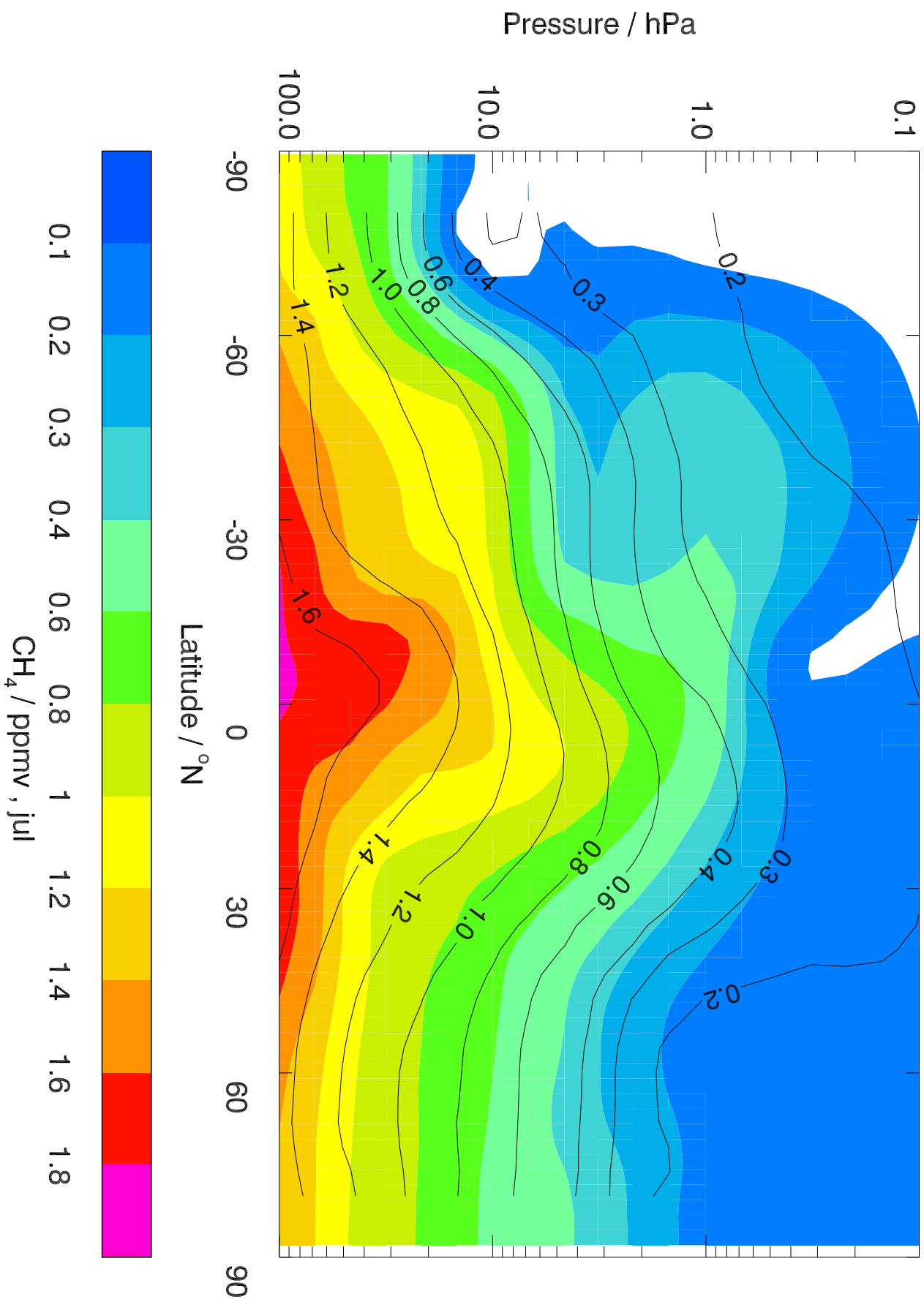
Total Ozone Column (DU). Colours: UKCA (XJClR), Contours: TOMS



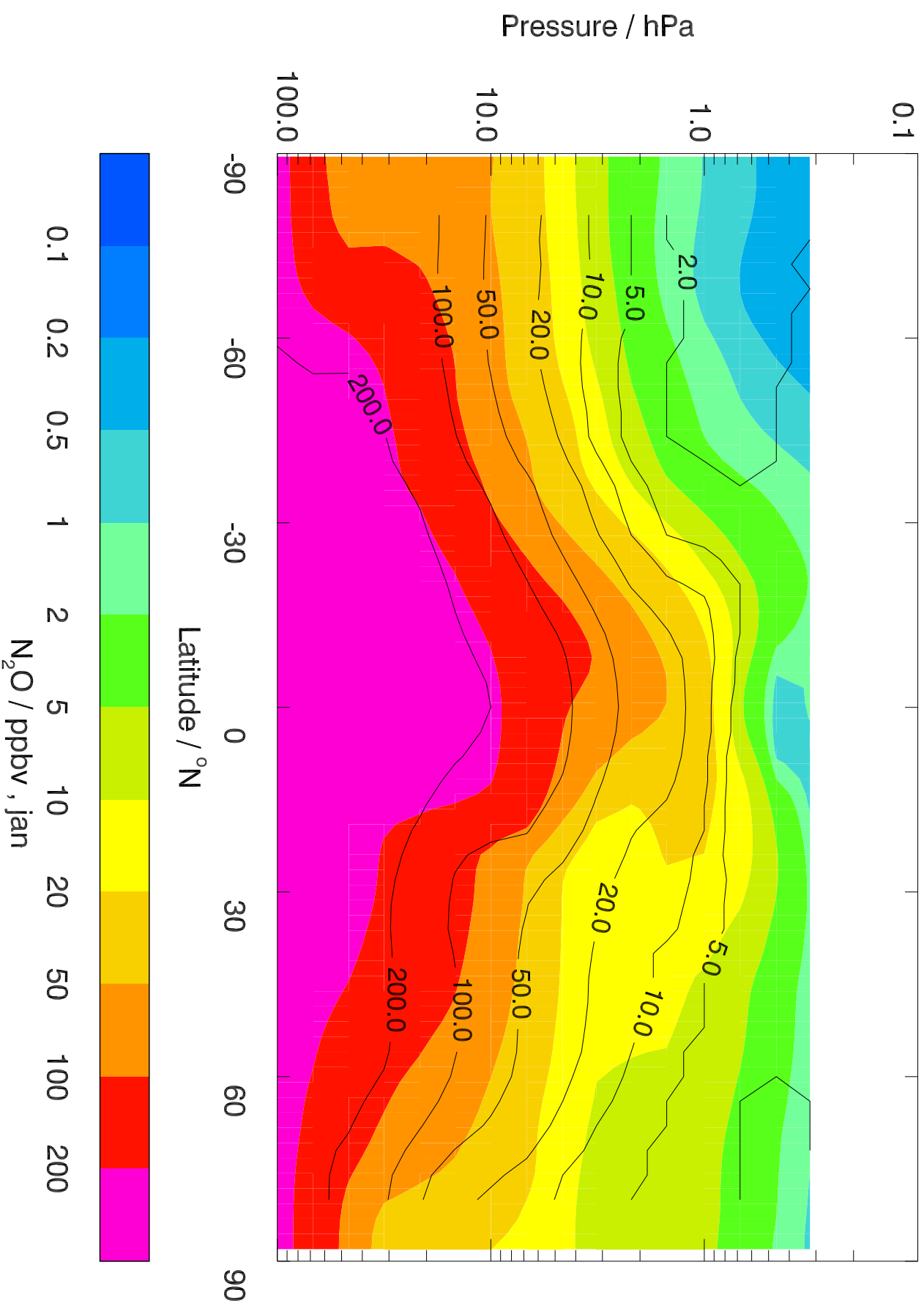
Colours: UKCA (XJGIR), Contours: HALOE



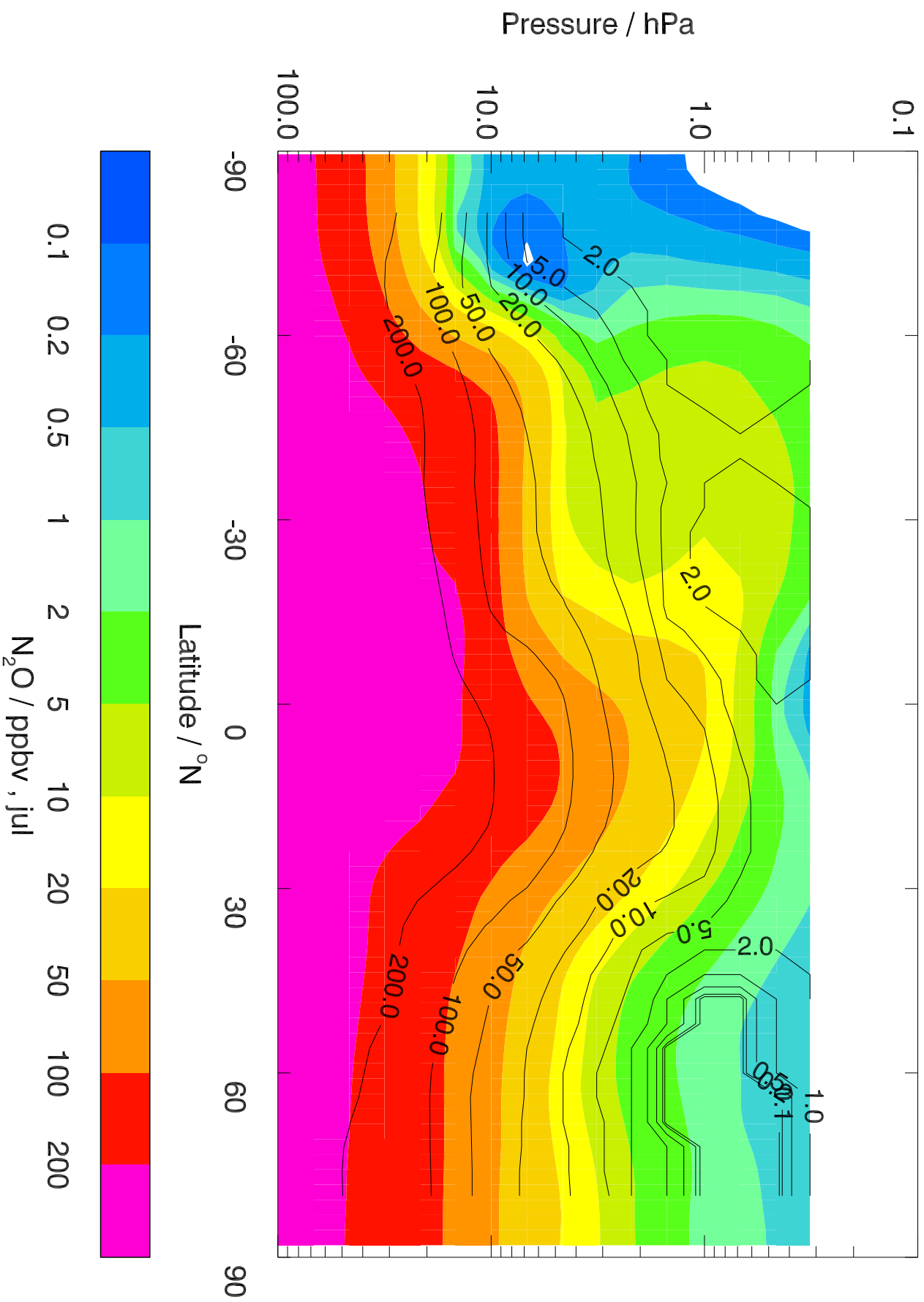
Colours: UKCA (XJClR), Contours: HALOE



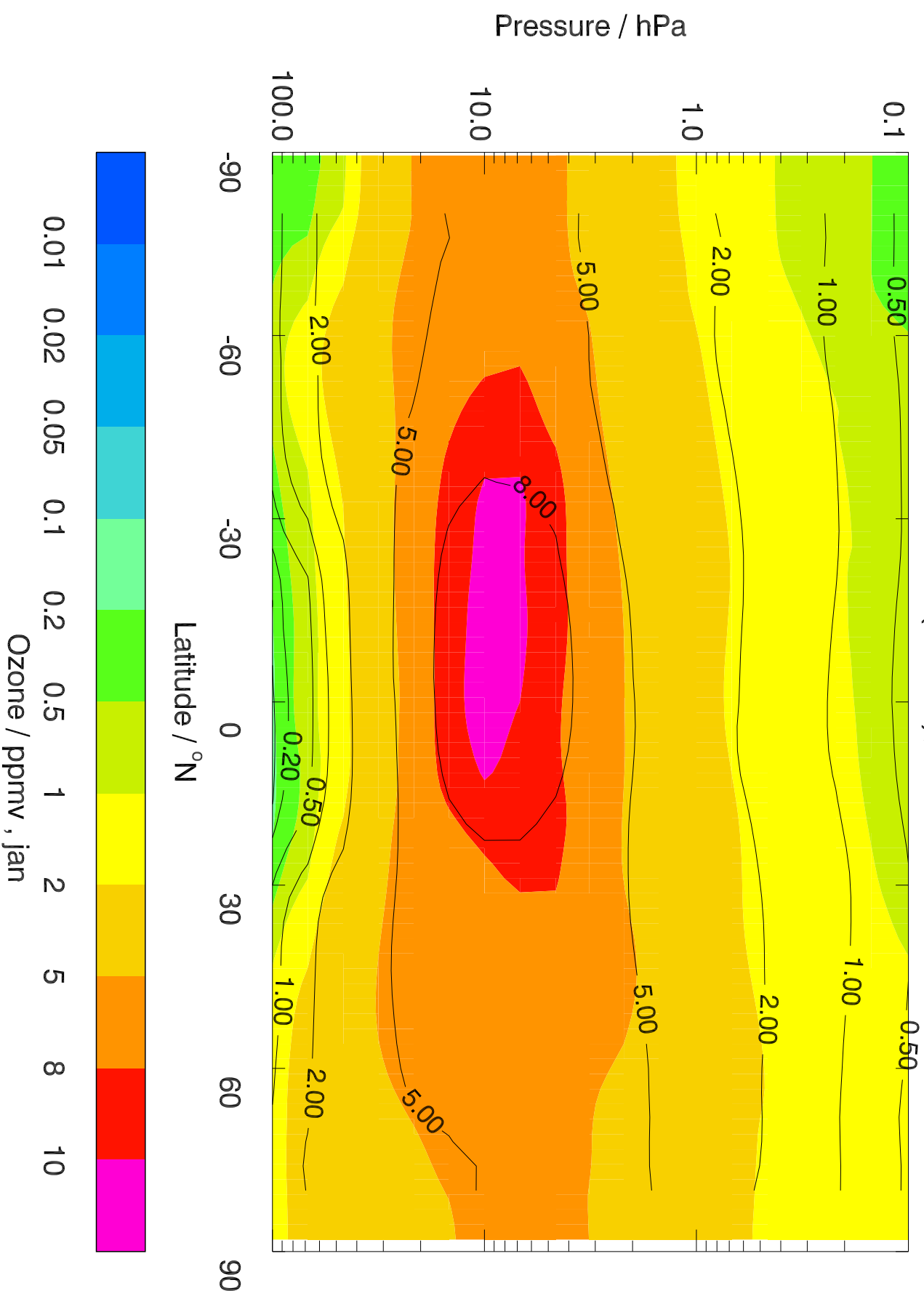
Colours: UKCA (XJClR), Contours: HALOE



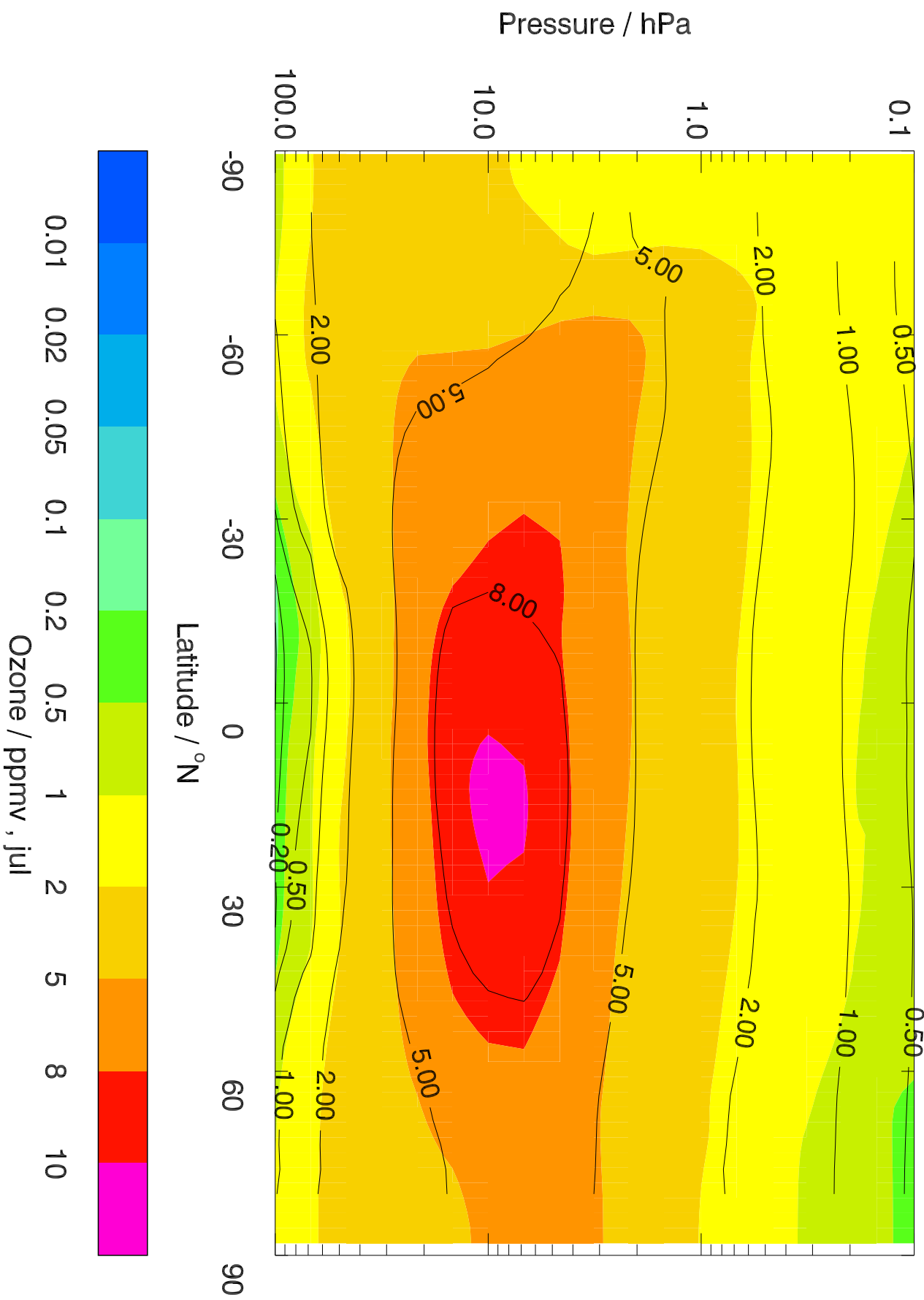
Colours: UKCA (XJGIR), Contours: HALOE



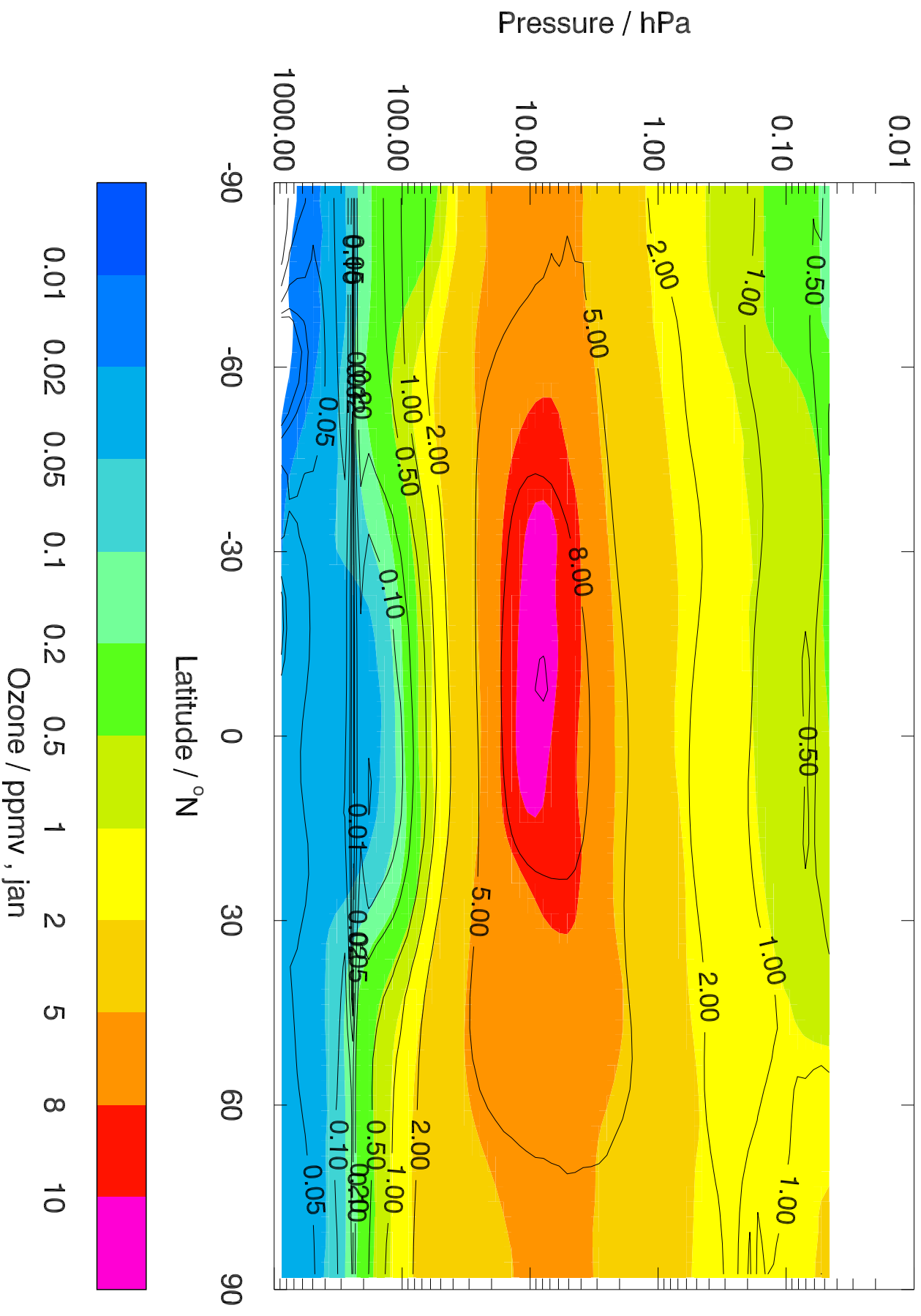
Colours: UKCA (XJClR), Contours: HALOE



Colours: UKCA (XJClR), Contours: HALOE



Colours: UKCA (XJClR), Contours: NIWA-CCMVal



Colours: UKCA (XJGIR), Contours: NIWA-CCMVal

