



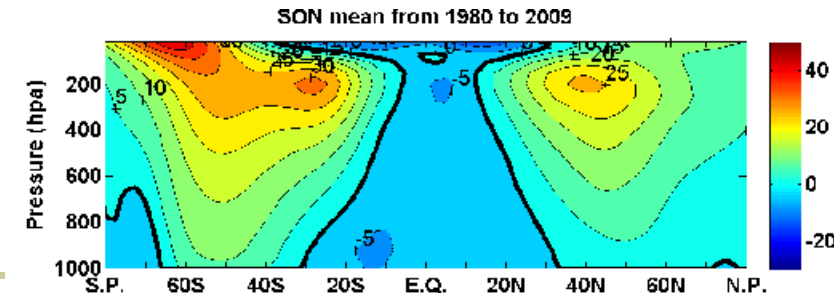
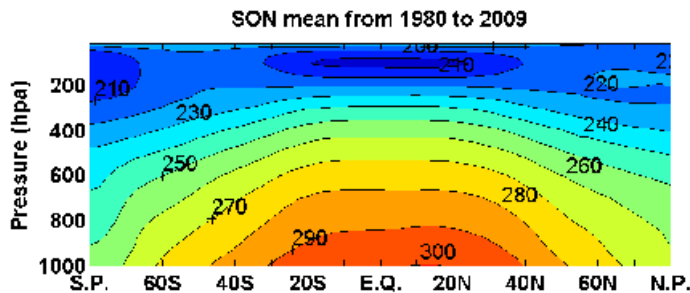
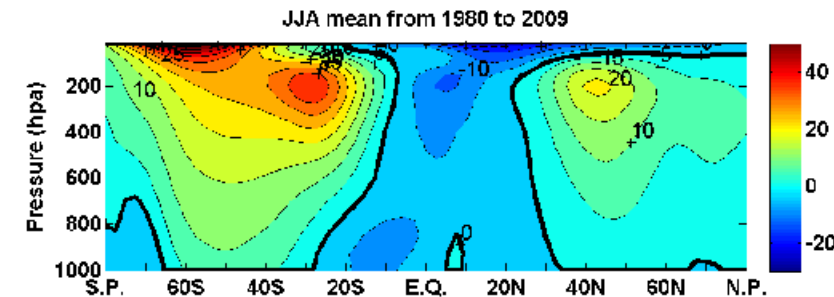
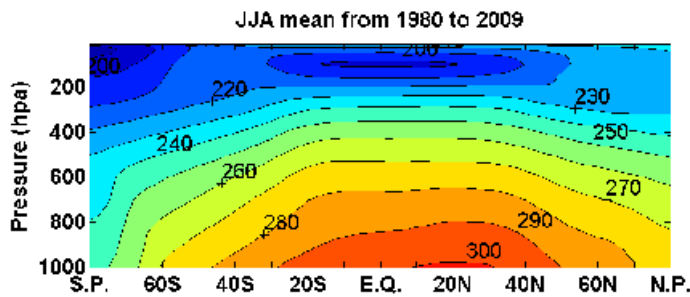
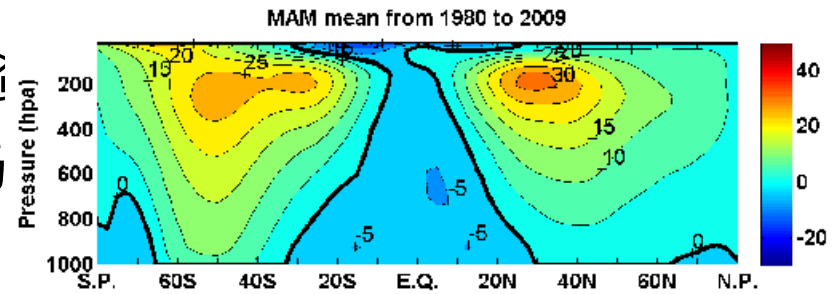
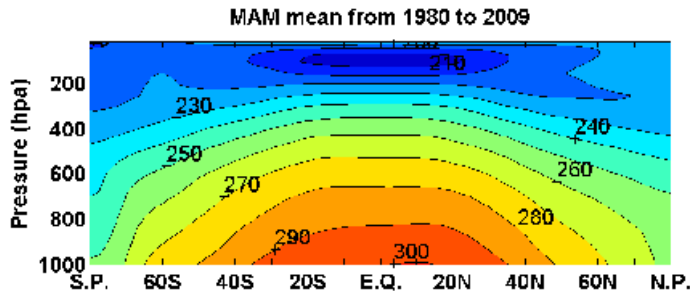
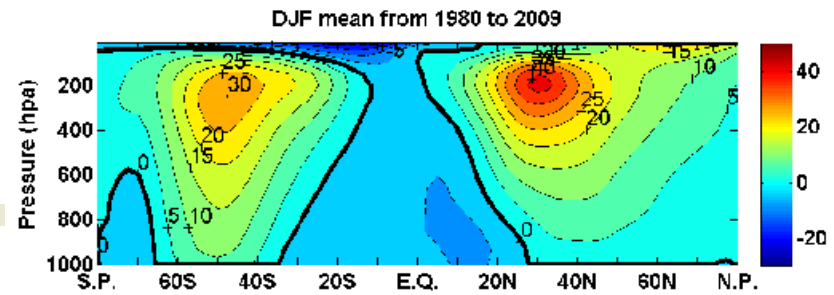
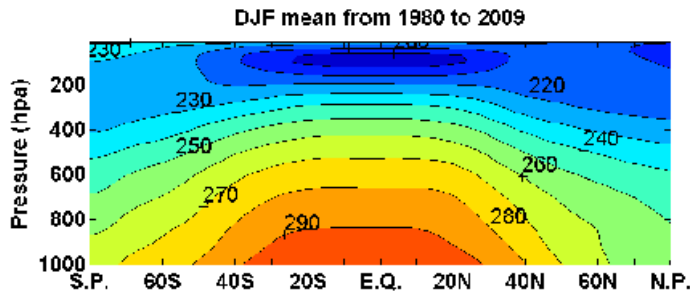
# Assignments 1



- 请使用多年 (>20年) 的月平均再分析资料 (NCEP/NCAR)画出各季节 (至少冬夏两季) 纬向平均温度场, 纬向风场的高度-纬度剖面分布并简述其分布特征和季节变化特征。
- 请使用多年 (>20年) 的月平均再分析资料 (NCEP/NCAR)画出各季节 (至少冬夏两季) 温度场, 纬向风场在各高度 (850、500、100 hPa, 对于温度场请再画出1000hPa) 上的分布, 并简述其分布特征和季节变化特征。



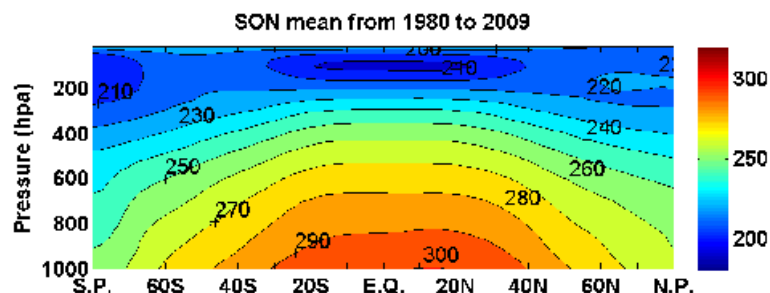
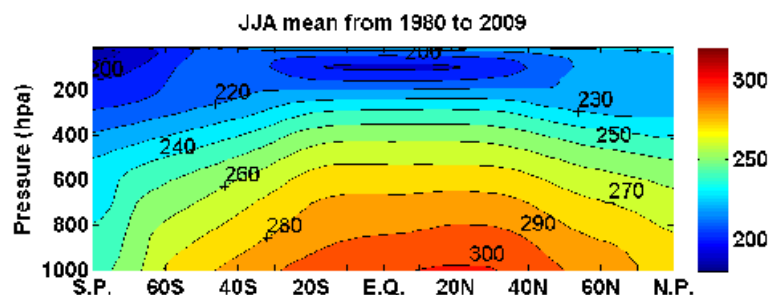
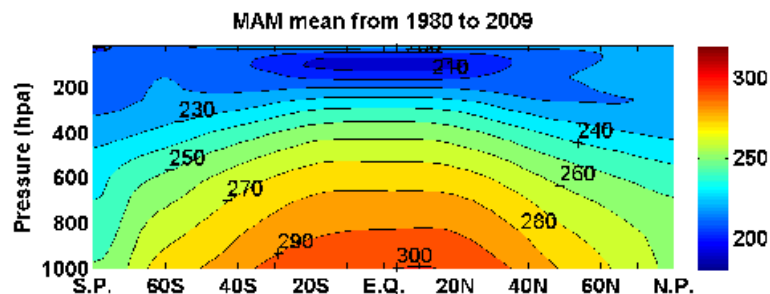
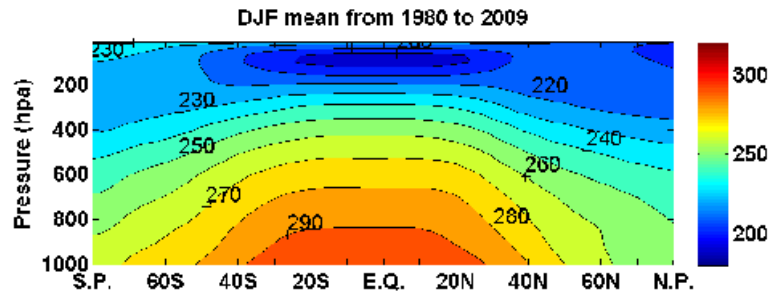
请使  
季节  
面分





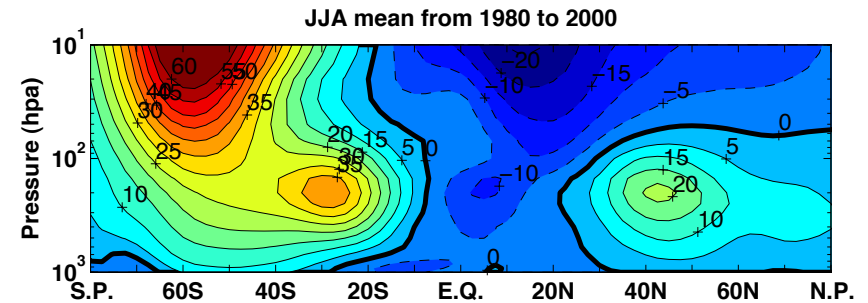
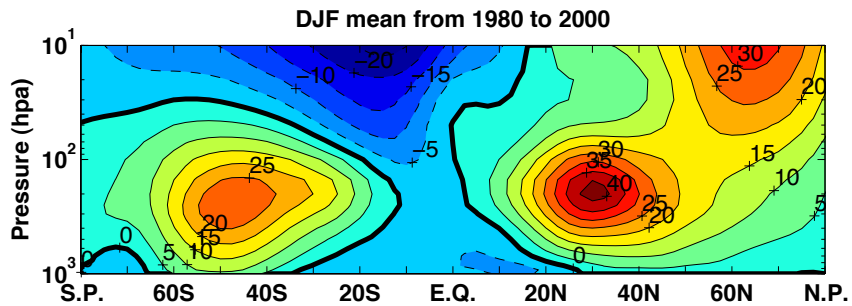
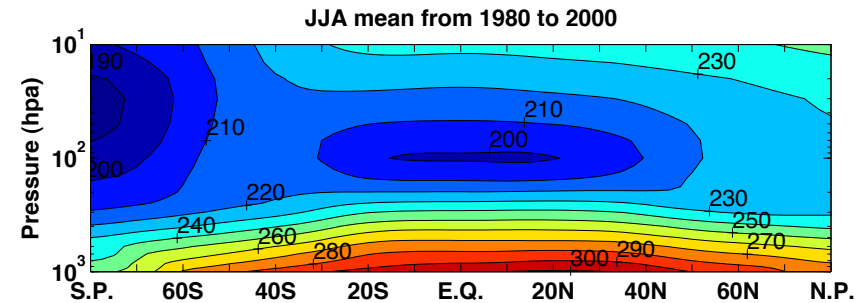
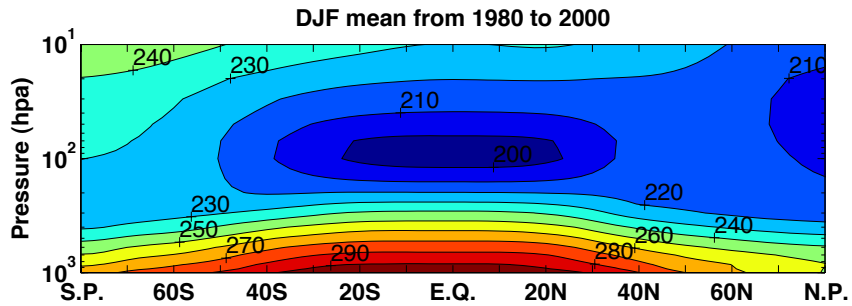
# Question 1

- 温度场:
  - 垂直结构
    - 对流层, 平流层
    - 随纬度的变化
  - 水平结构
    - 对流层, 平流层
    - 随纬度, 高度的变化
  - 季节变化





# Question 1

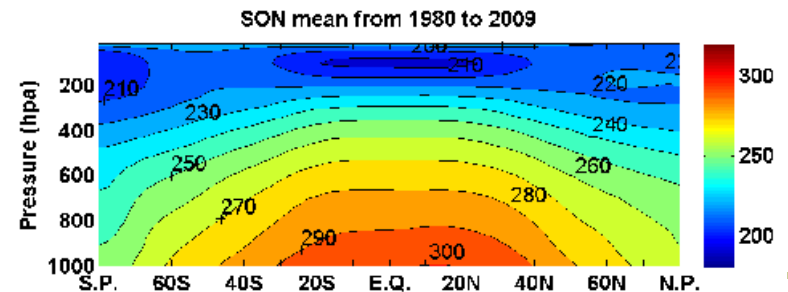
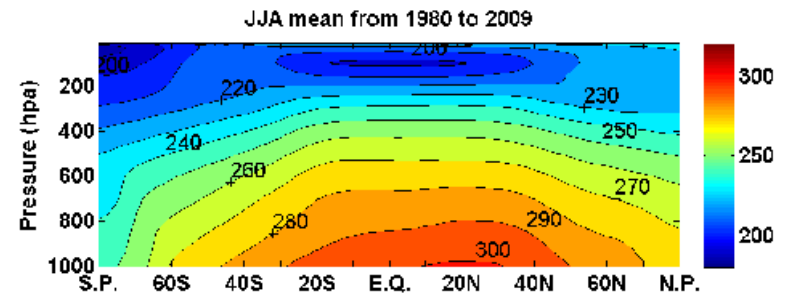
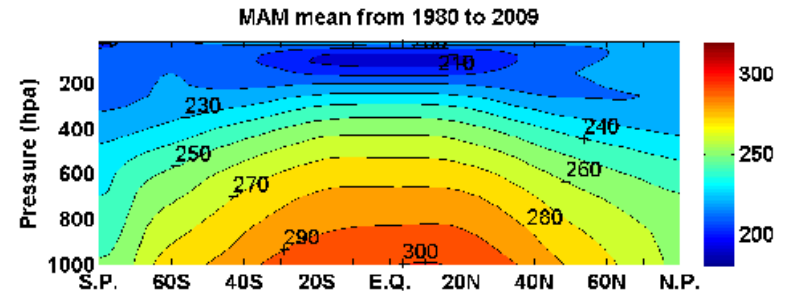
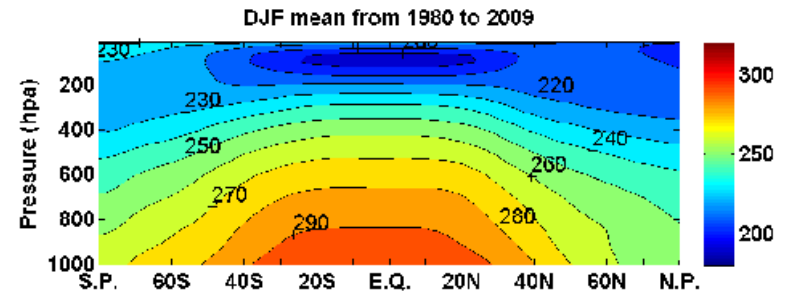






# Question 1

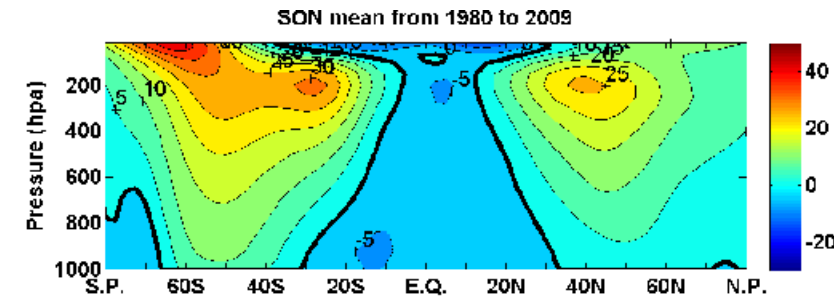
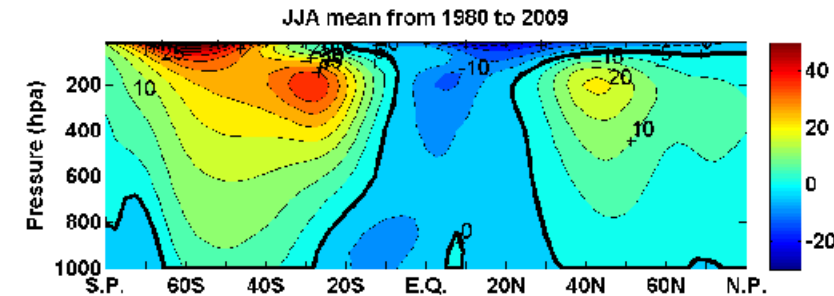
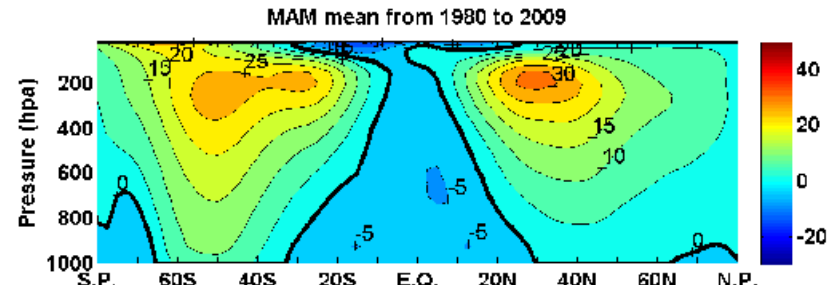
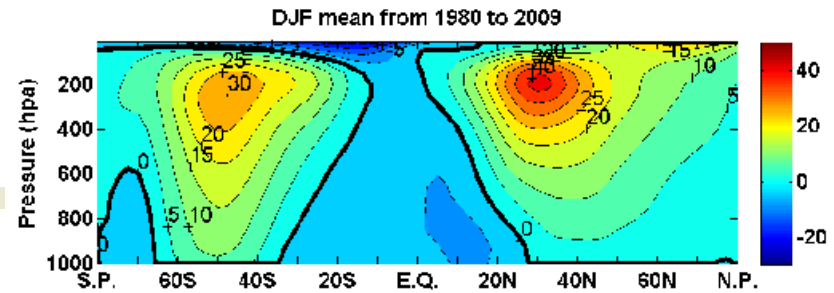
- 温度场:
  - 垂直结构
    - 对流层，平流层
    - 随纬度的变化
  - 水平结构
    - 对流层，平流层
    - 随纬度，高度的变化
  - 季节变化

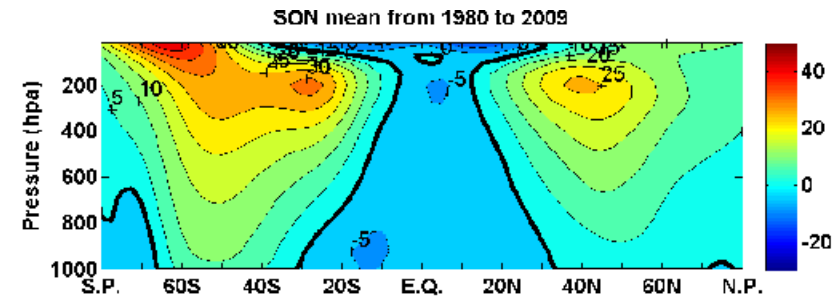
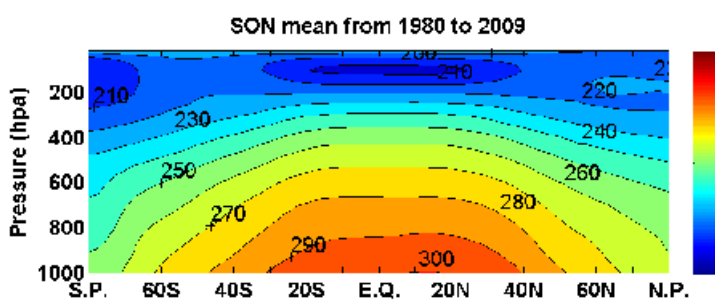
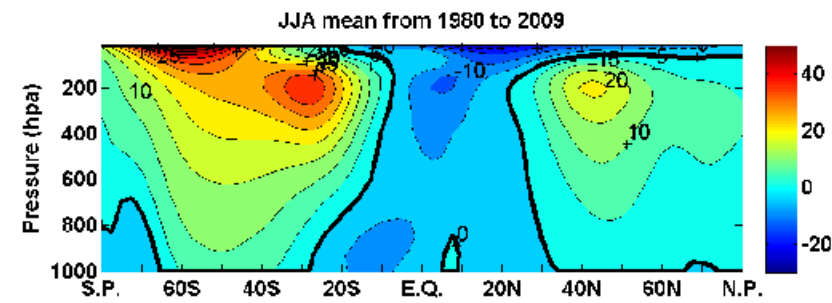
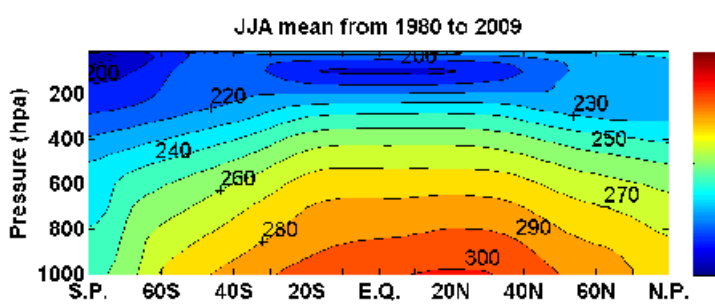
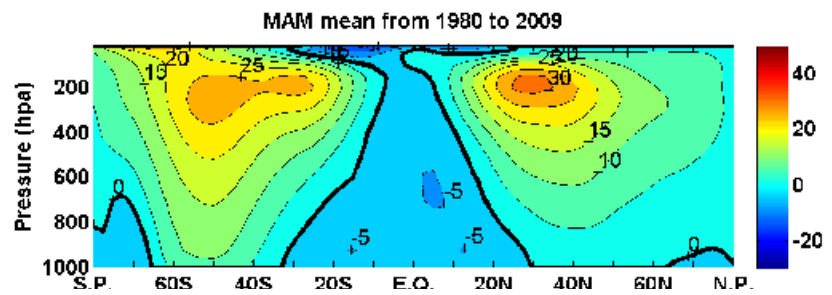
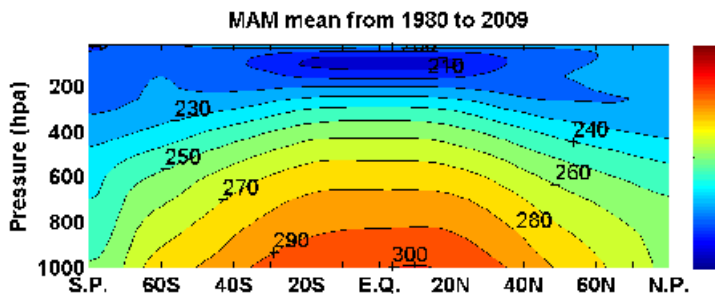
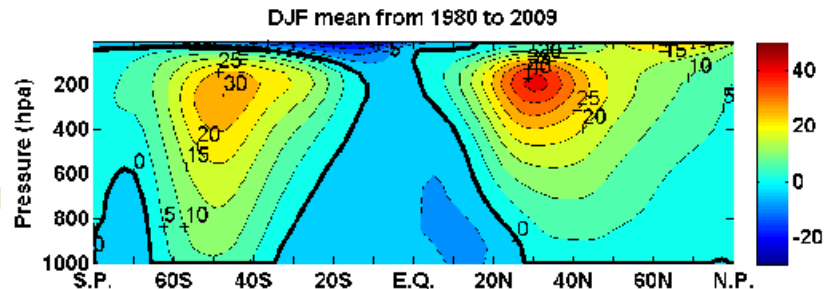
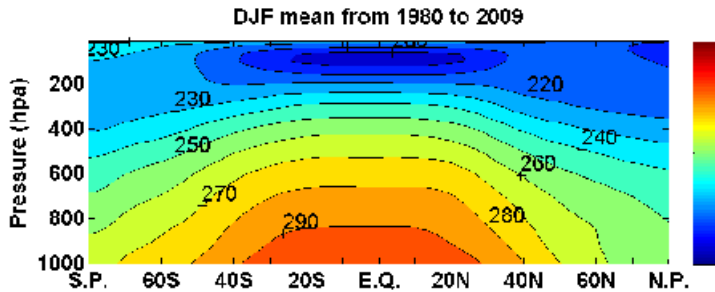




# Question 1

- 风场:
- 西风带, 东风带
  - 对流层低层、高层, 平流层
  - 随纬度的变化
- 水平, 垂直结构
- 季节变化: 位置, 强度, 副热带与温带急流
- 与温度场的匹配





- 风场:
- 西风带
- 对
- 随
- 水平,
- 季节变
- 急流
- 与温度



# Question 2



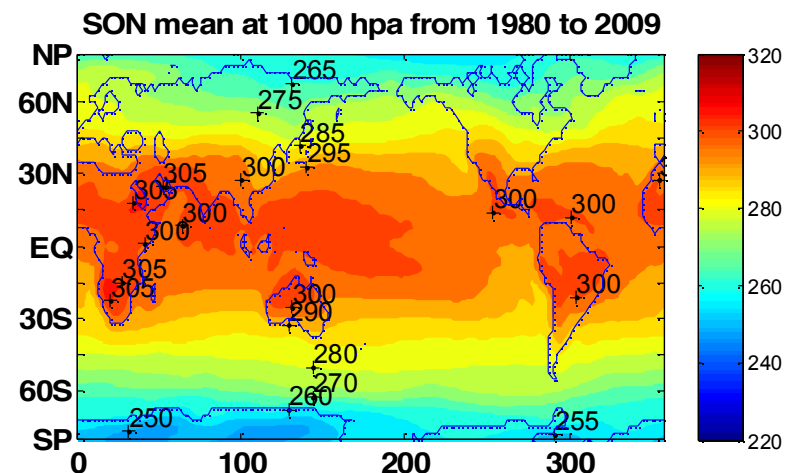
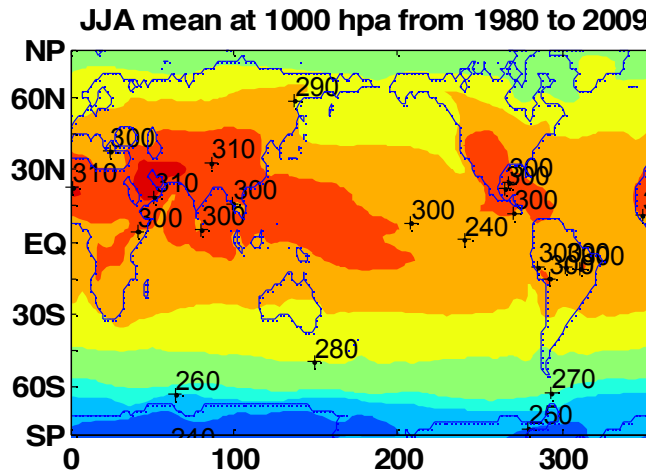
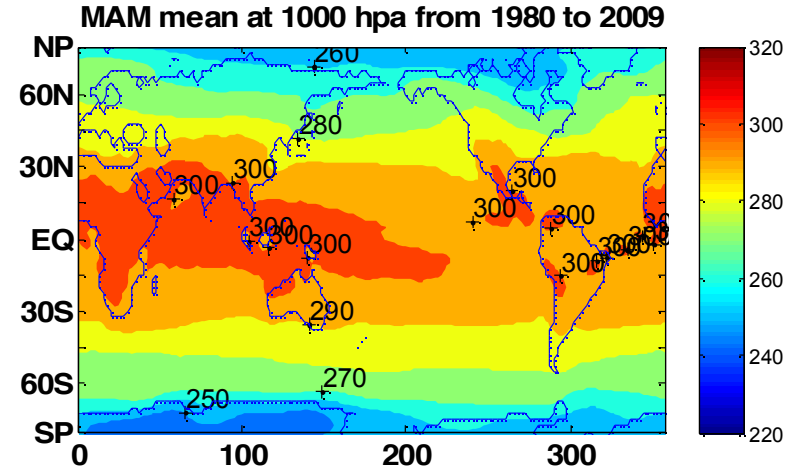
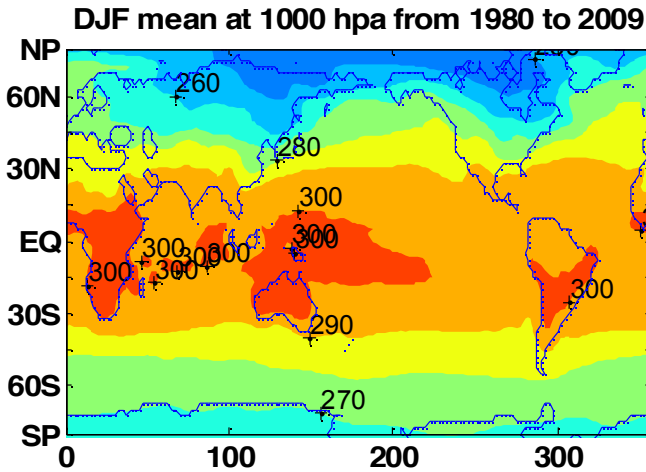
- 温度场—纬向差异:
  - 受海陆分布的影响
  - 垂直变化
  - 季节变化
- 请使用多年 (>20年) 的月平均再分析资料 (NCEP/NCAR)画出各季节温度场, 纬向风场在各高度 (850、500、100 hPa, 对于温度场请再画出1000 hPa) 上的分布, 并简述其特征。



# Question 2



- 温度场 — 纬向差
  - 受海陆分布
  - 垂直变化
  - 季节变化





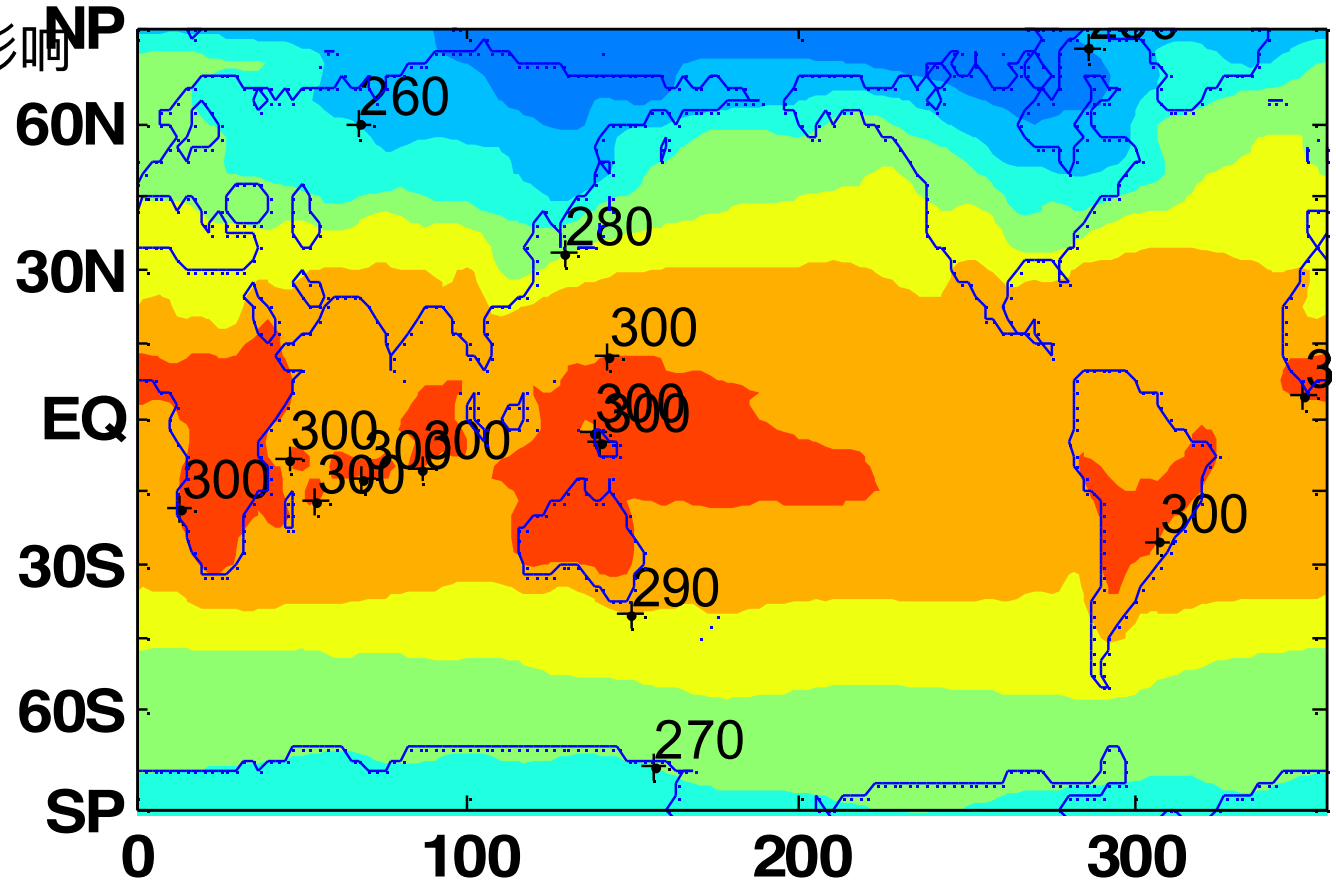
# Question 2



## ■ 温度场—纬向差异:

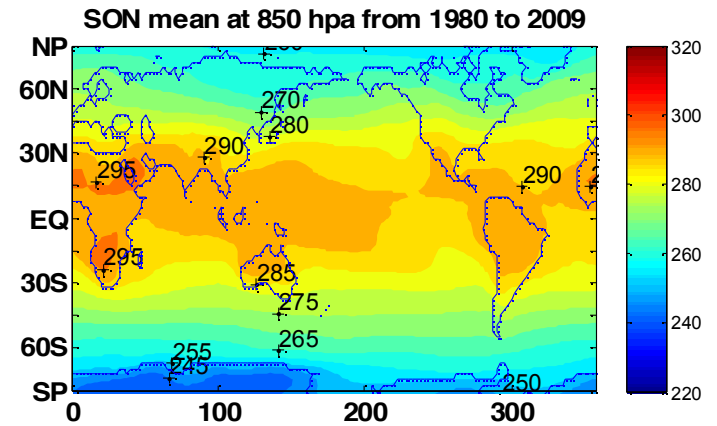
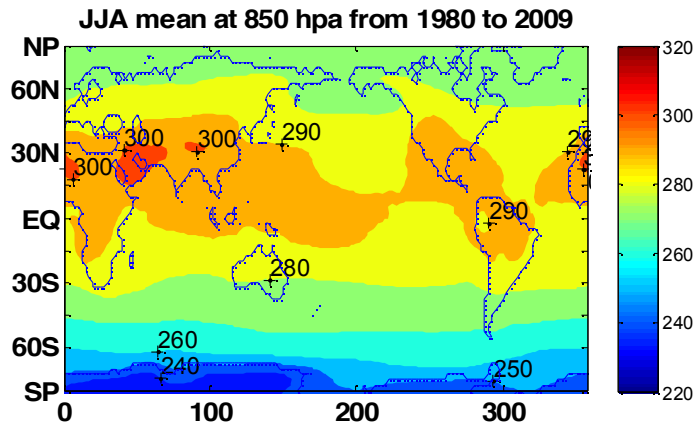
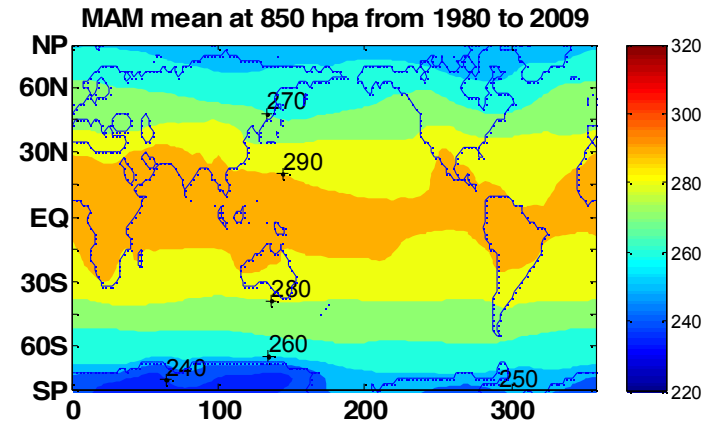
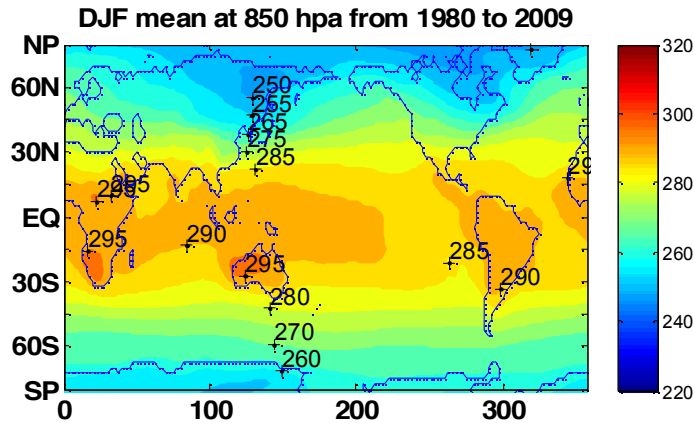
- 受海陆分布的影响
- 垂直变化
- 季节变化

### DJF mean at 1000 hpa from 1980 to 2009





# Question 2

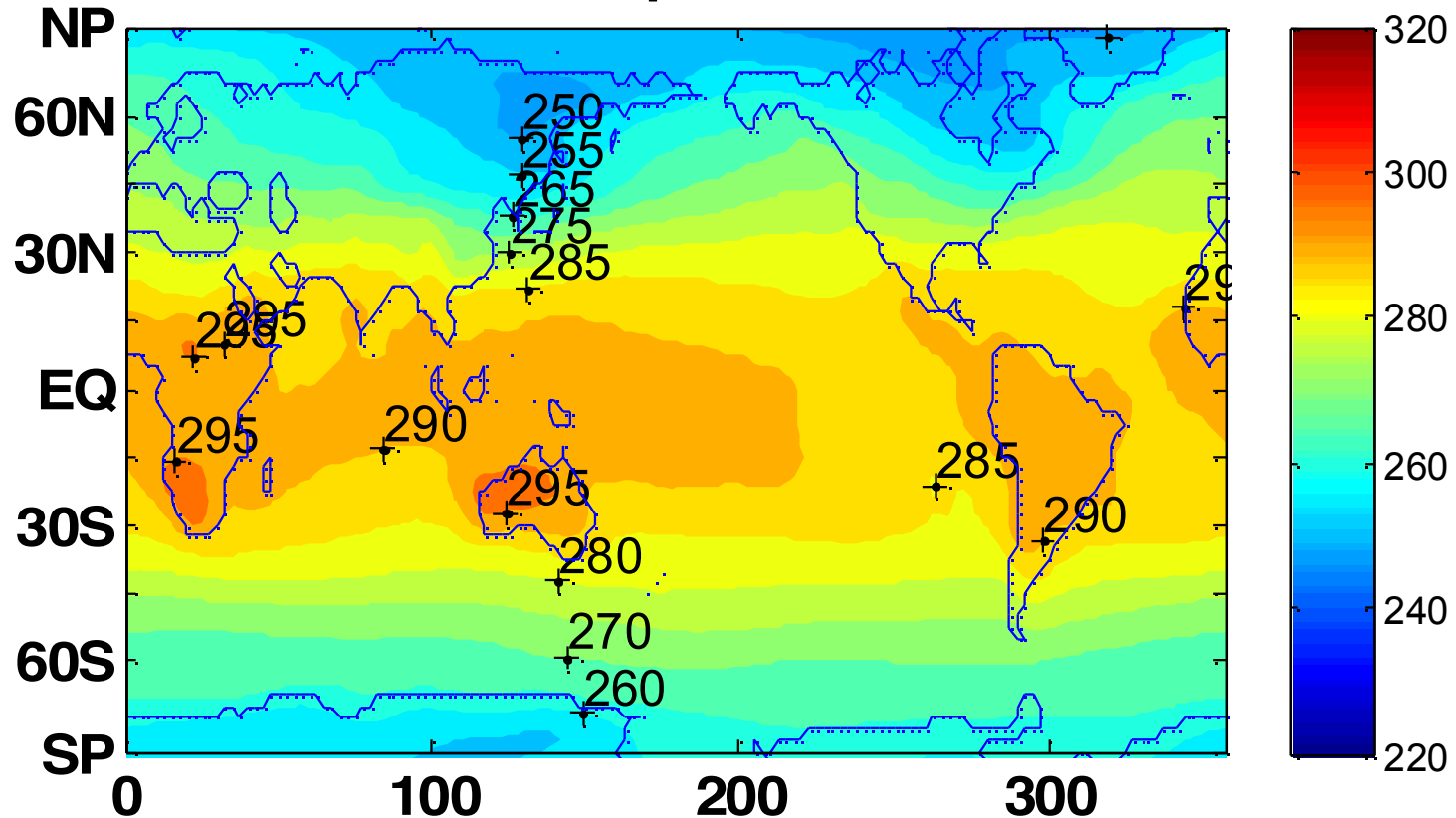




# Question 2



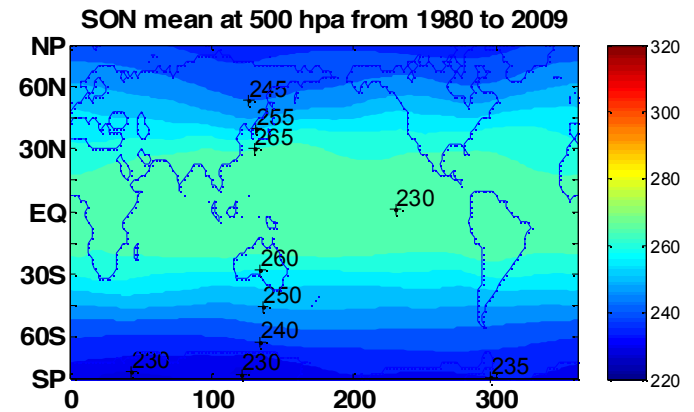
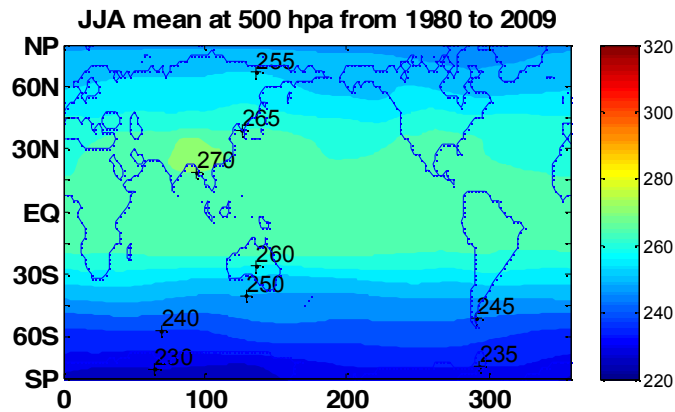
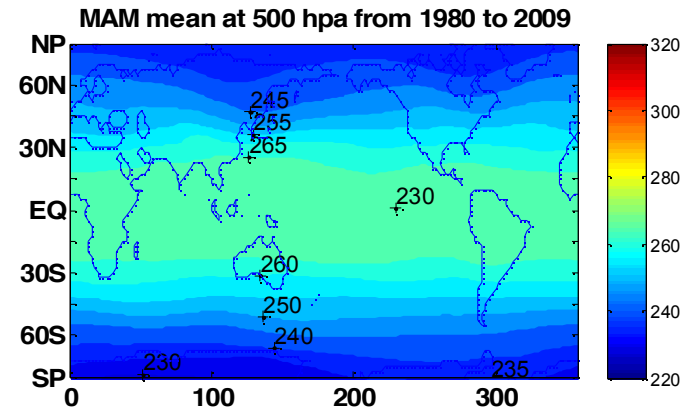
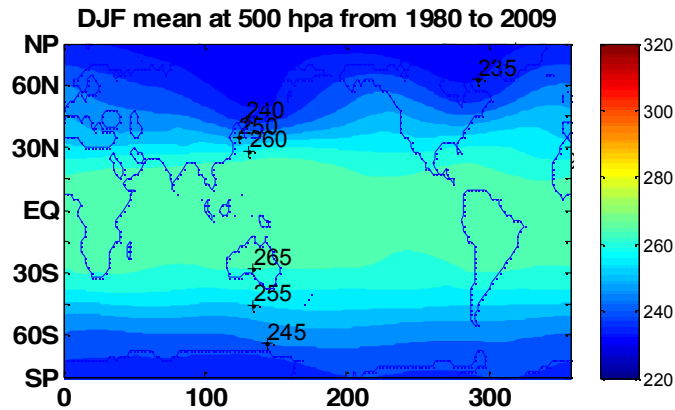
DJF mean at 850 hpa from 1980 to 2009







# Question 2

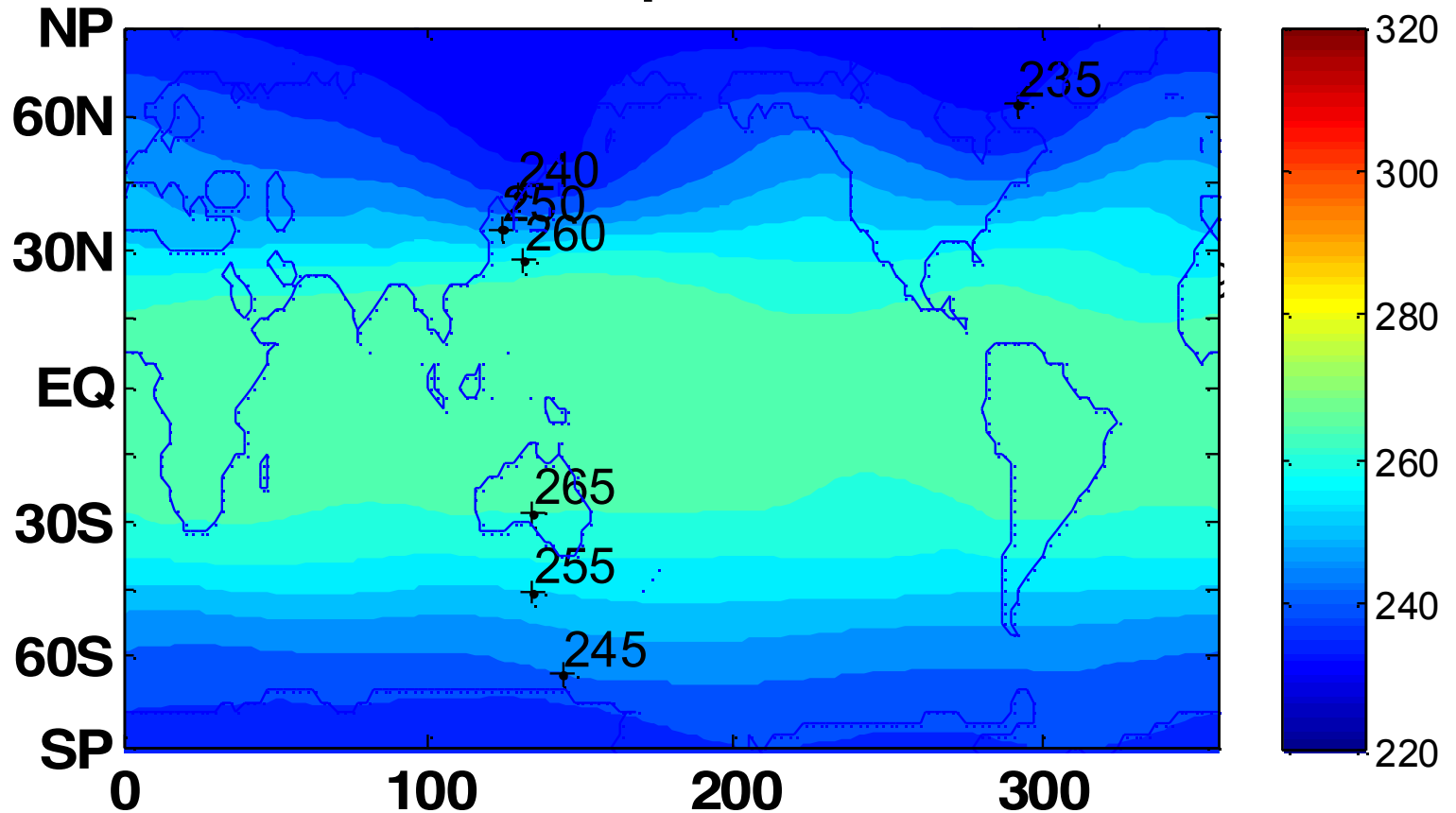




# Question 2



DJF mean at 500 hpa from 1980 to 2009

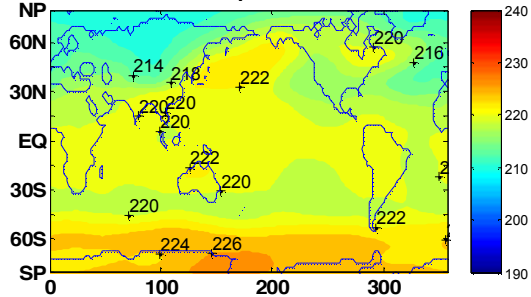




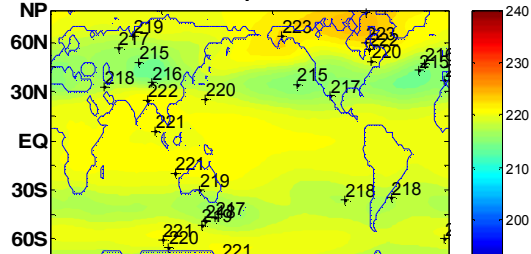
# Question 2



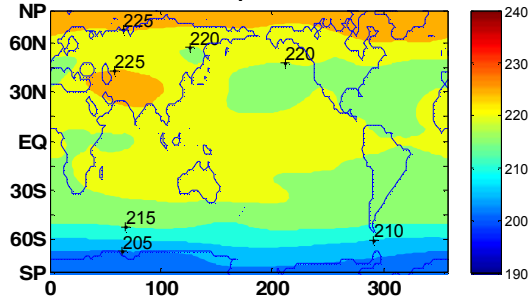
DJF mean at 200 hpa from 1980 to 2009



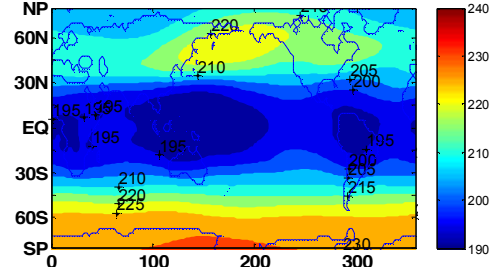
MAM mean at 200 hpa from 1980 to 2009



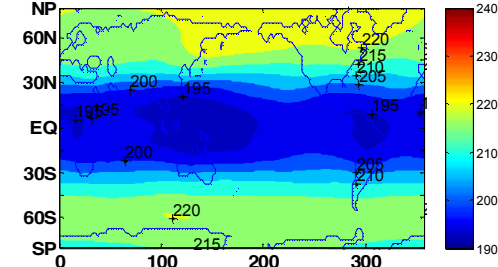
JJA mean at 200 hpa from 1980 to 2009



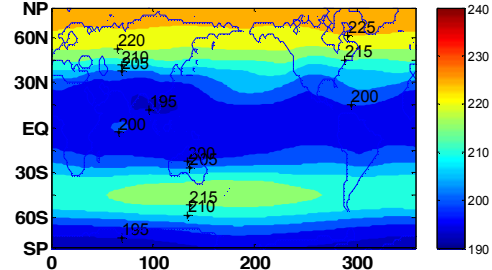
DJF mean at 100 hpa from 1980 to 2009



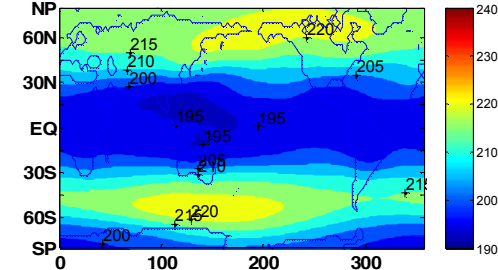
MAM mean at 100 hpa from 1980 to 2009



JJA mean at 100 hpa from 1980 to 2009



SON mean at 100 hpa from 1980 to 2009

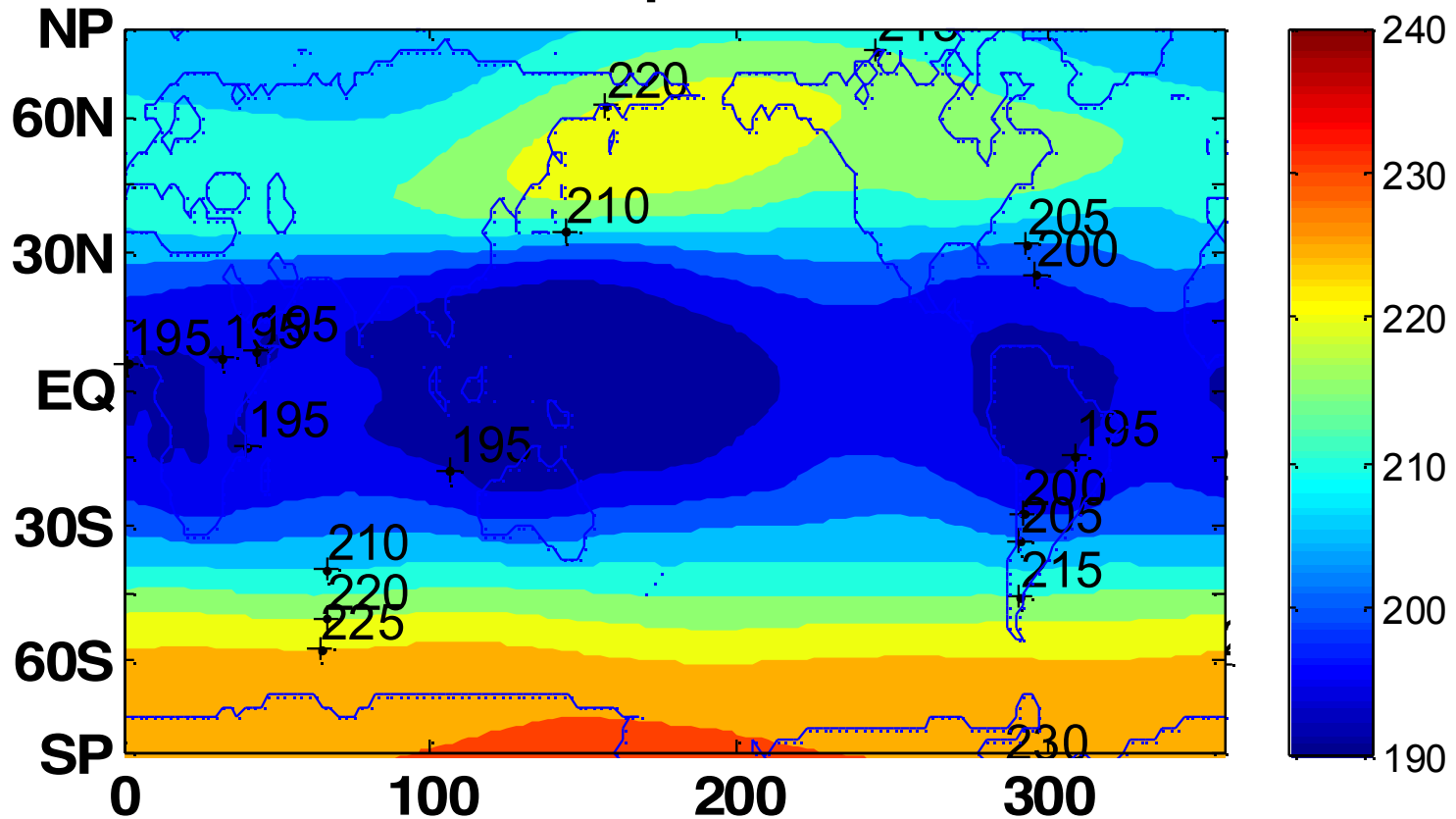




# Question 2



DJF mean at 100 hpa from 1980 to 2009





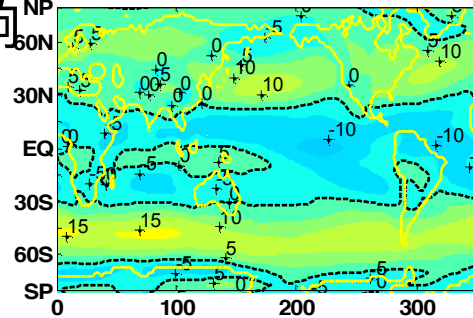
# Question 2



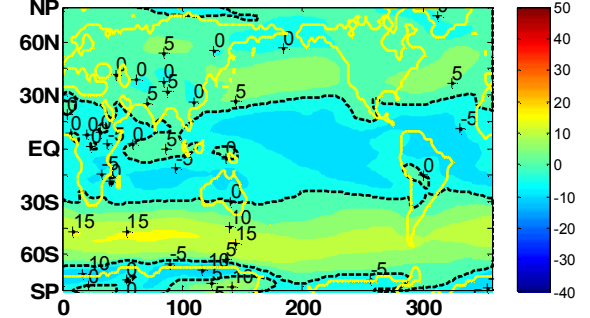
## ■ 风场—纬向差异:

- 受海陆分布的影响
- 垂直变化
- 季节变化

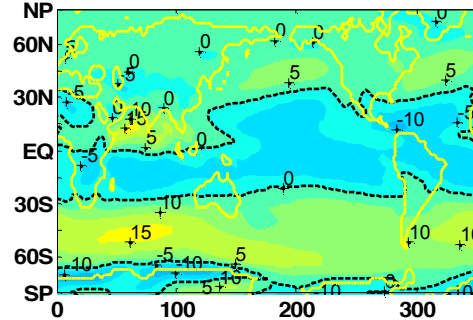
DJF mean at 850 hpa from 1980 to 2009



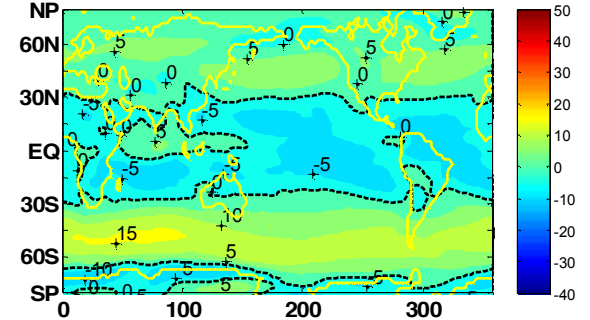
MAM mean at 850 hpa from 1980 to 2009



JJA mean at 850 hpa from 1980 to 2009



SON mean at 850 hpa from 1980 to 2009

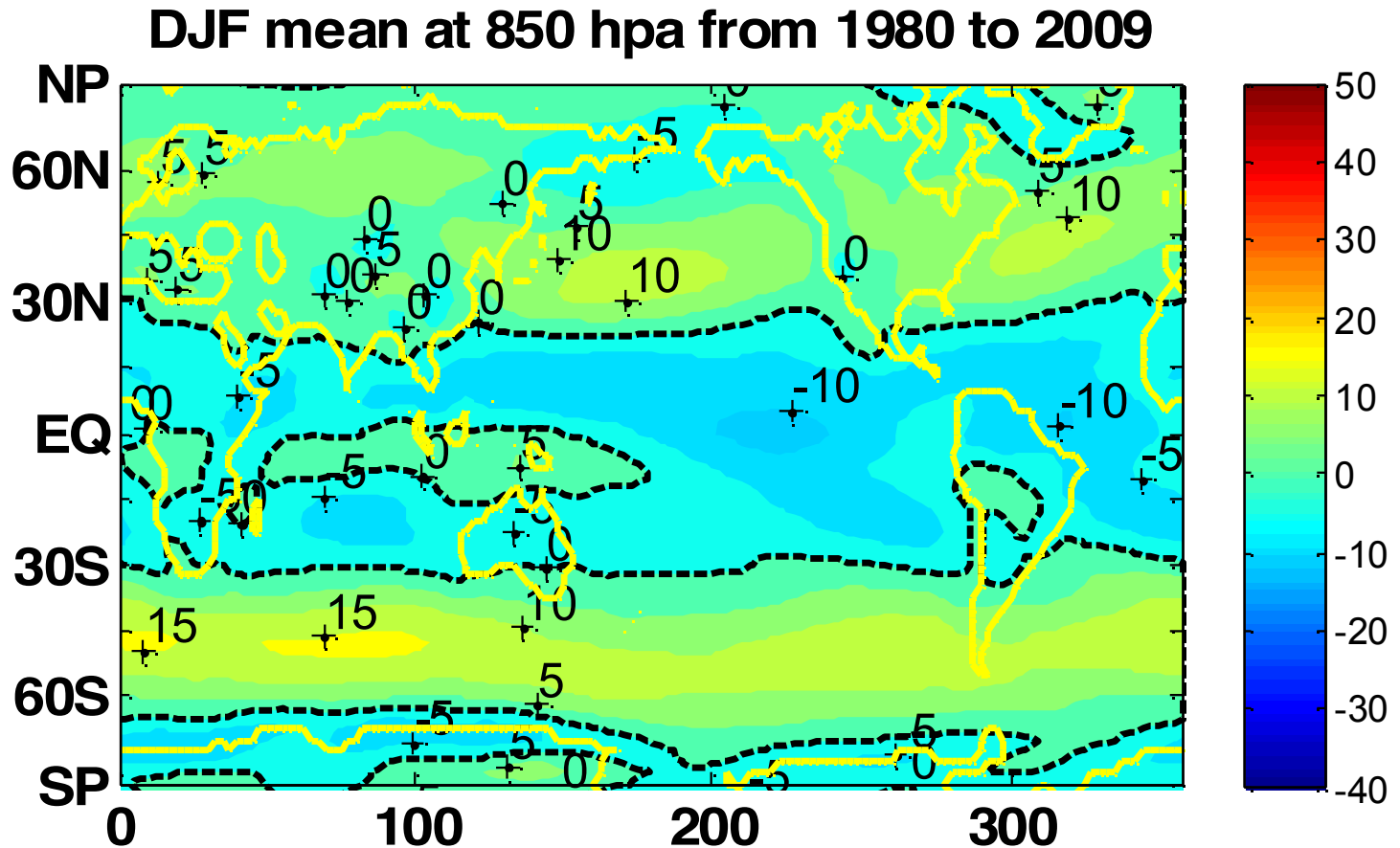


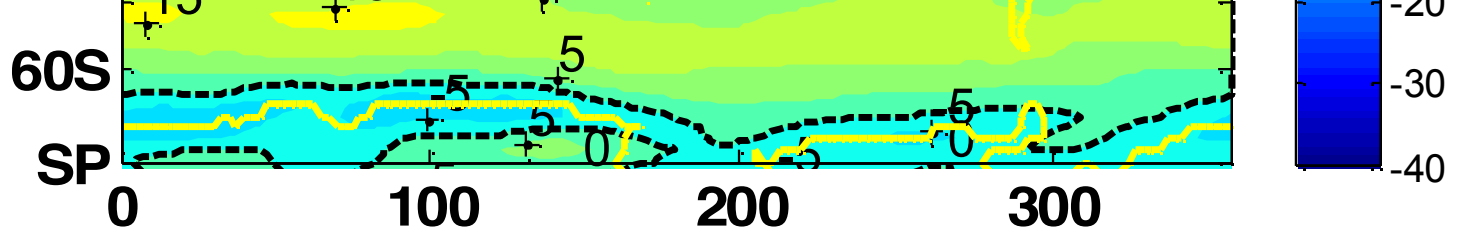


# Question 2



- 风场—纬向差异:

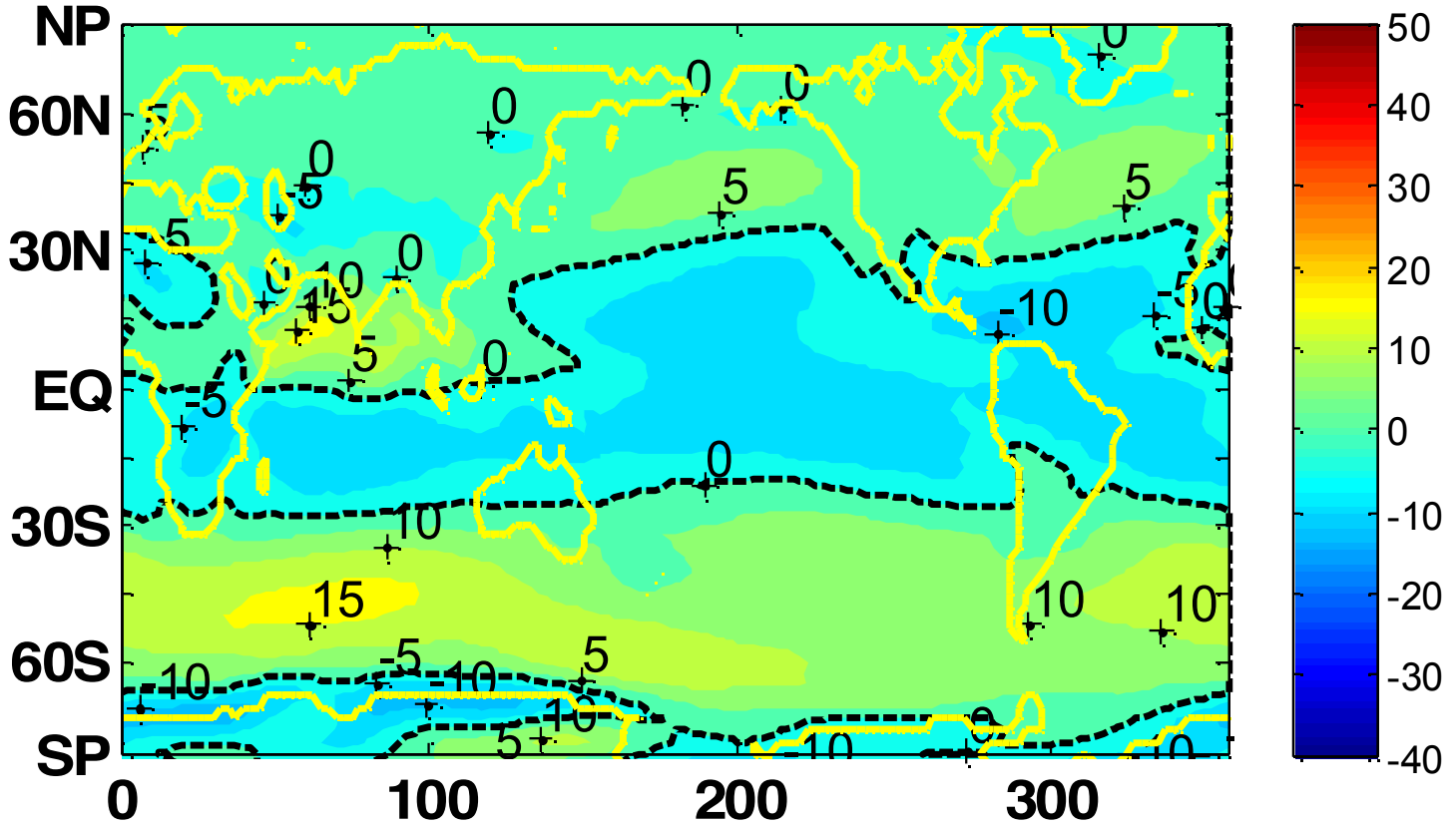




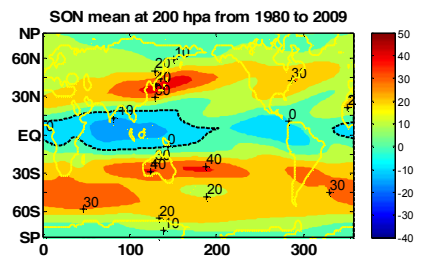
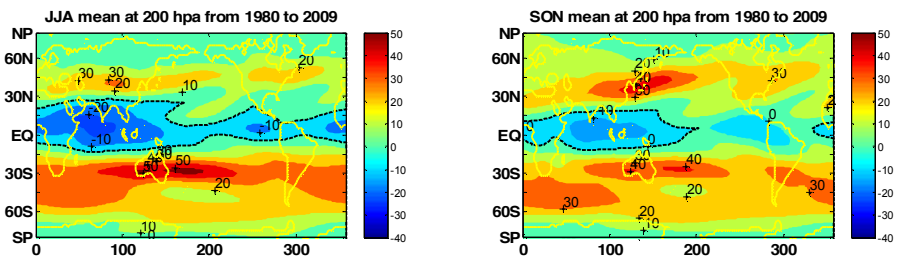
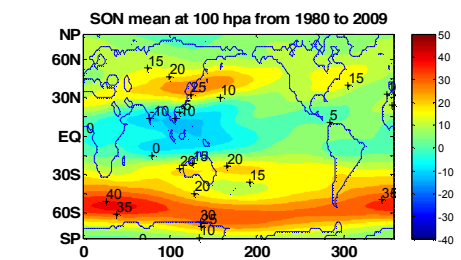
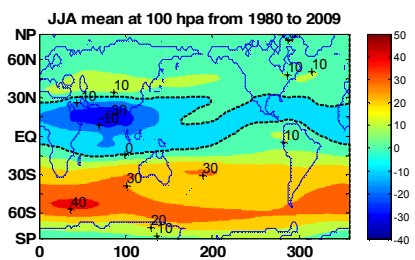
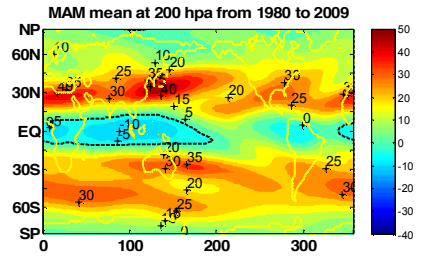
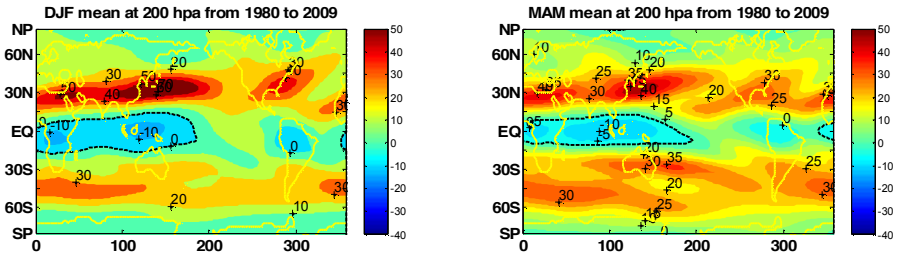
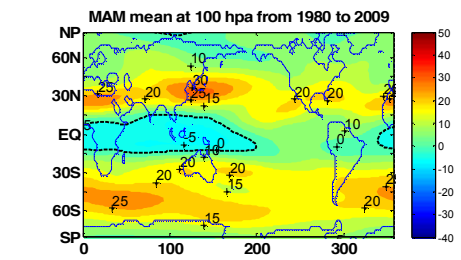
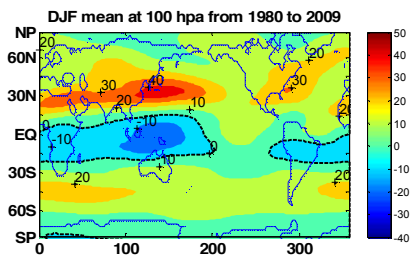
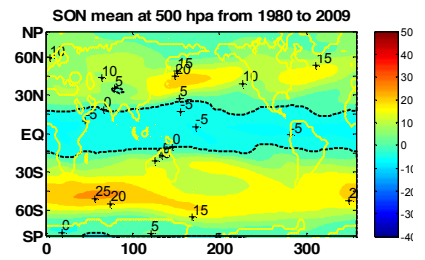
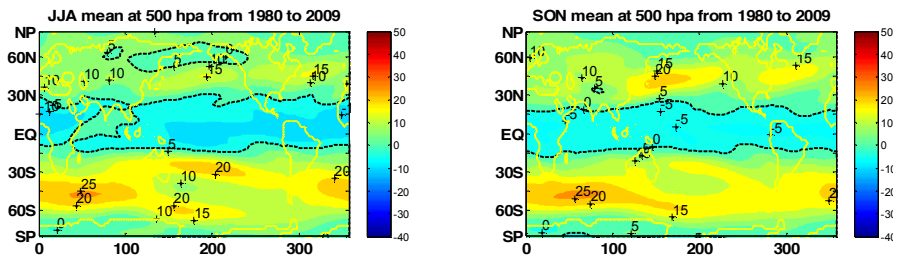
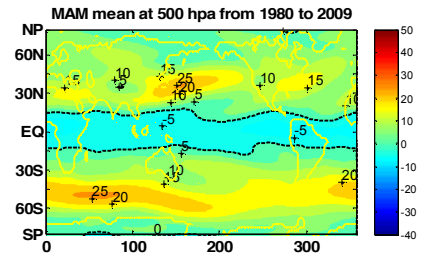
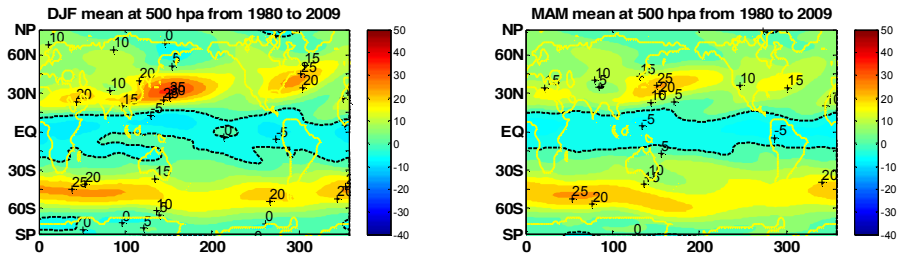
■ 风场



JJA mean at 850 hpa from 1980 to 2009



# 2



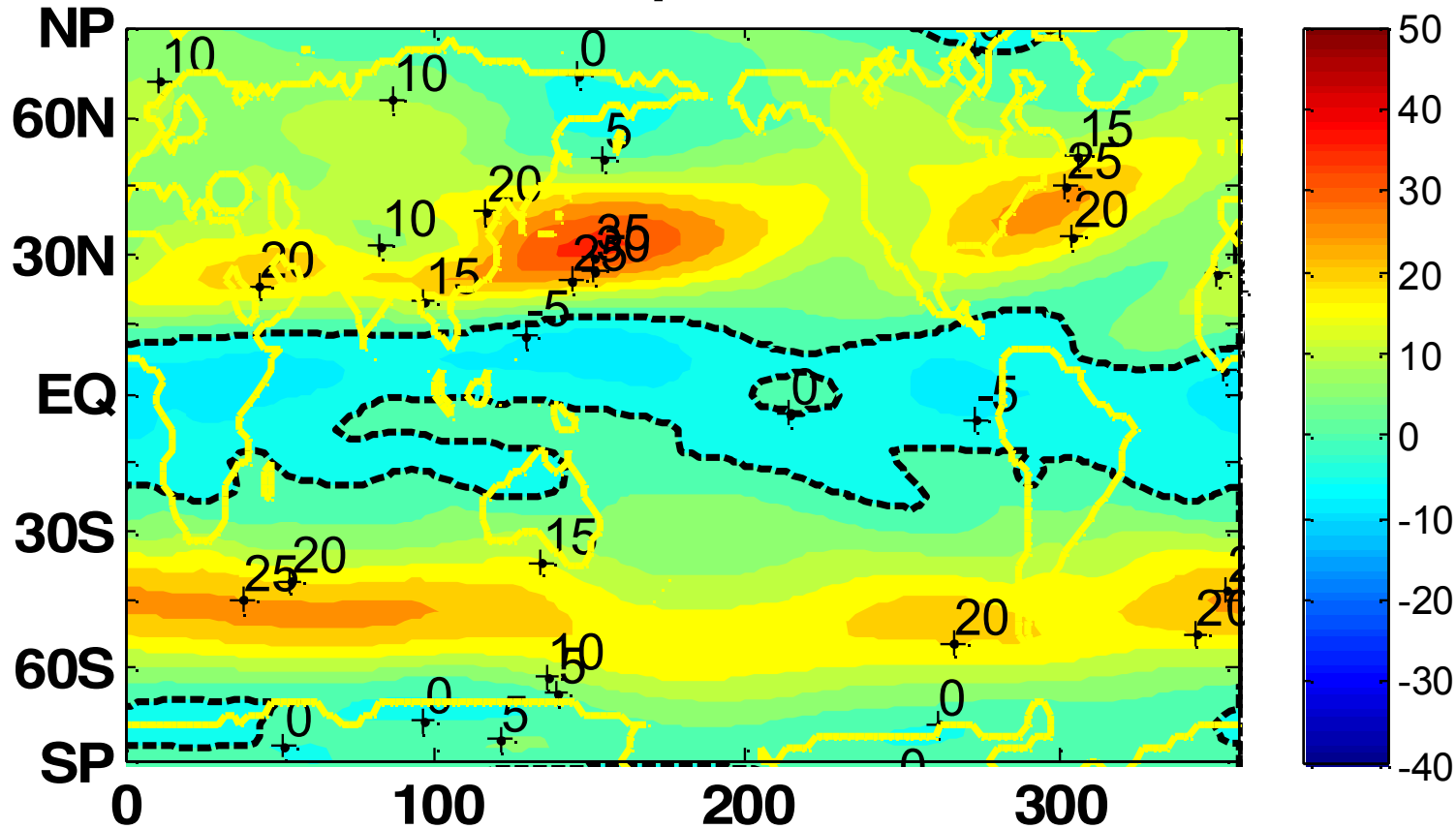




# Question 2



### DJF mean at 500 hpa from 1980 to 2009



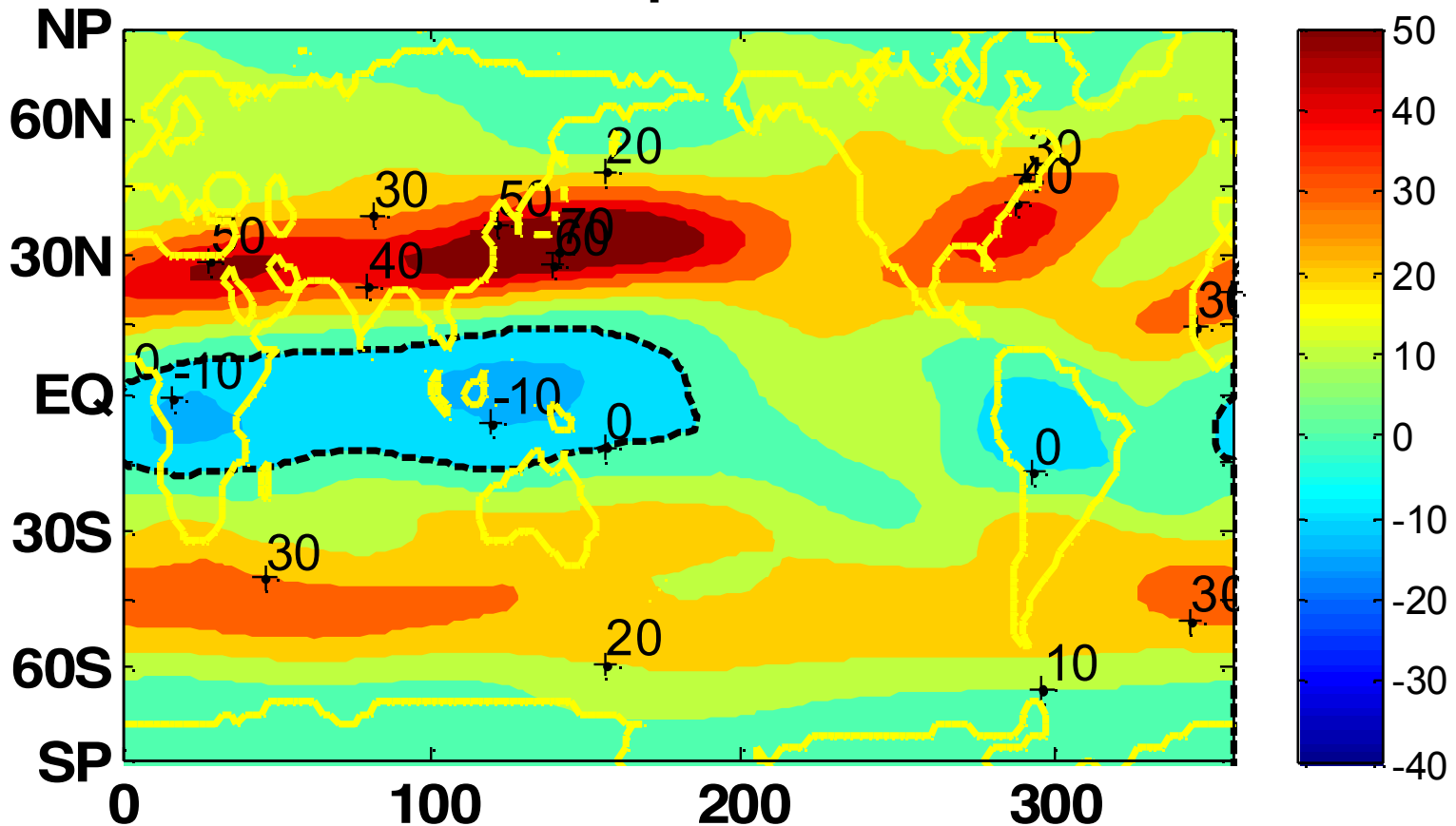
### JJA mean at 500 hpa from 1980 to 2009

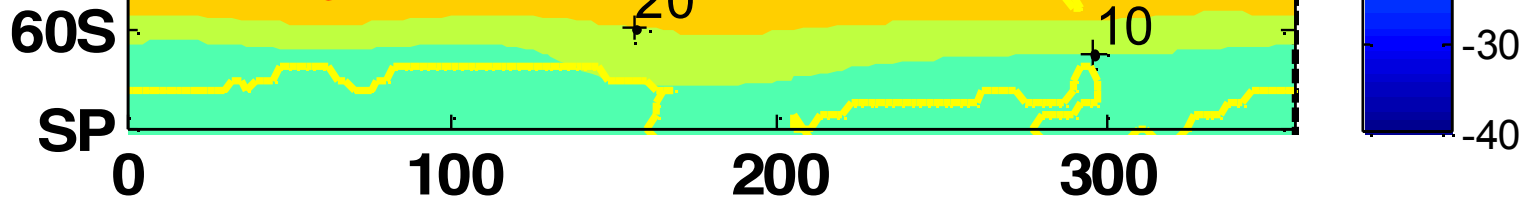


# Question 2

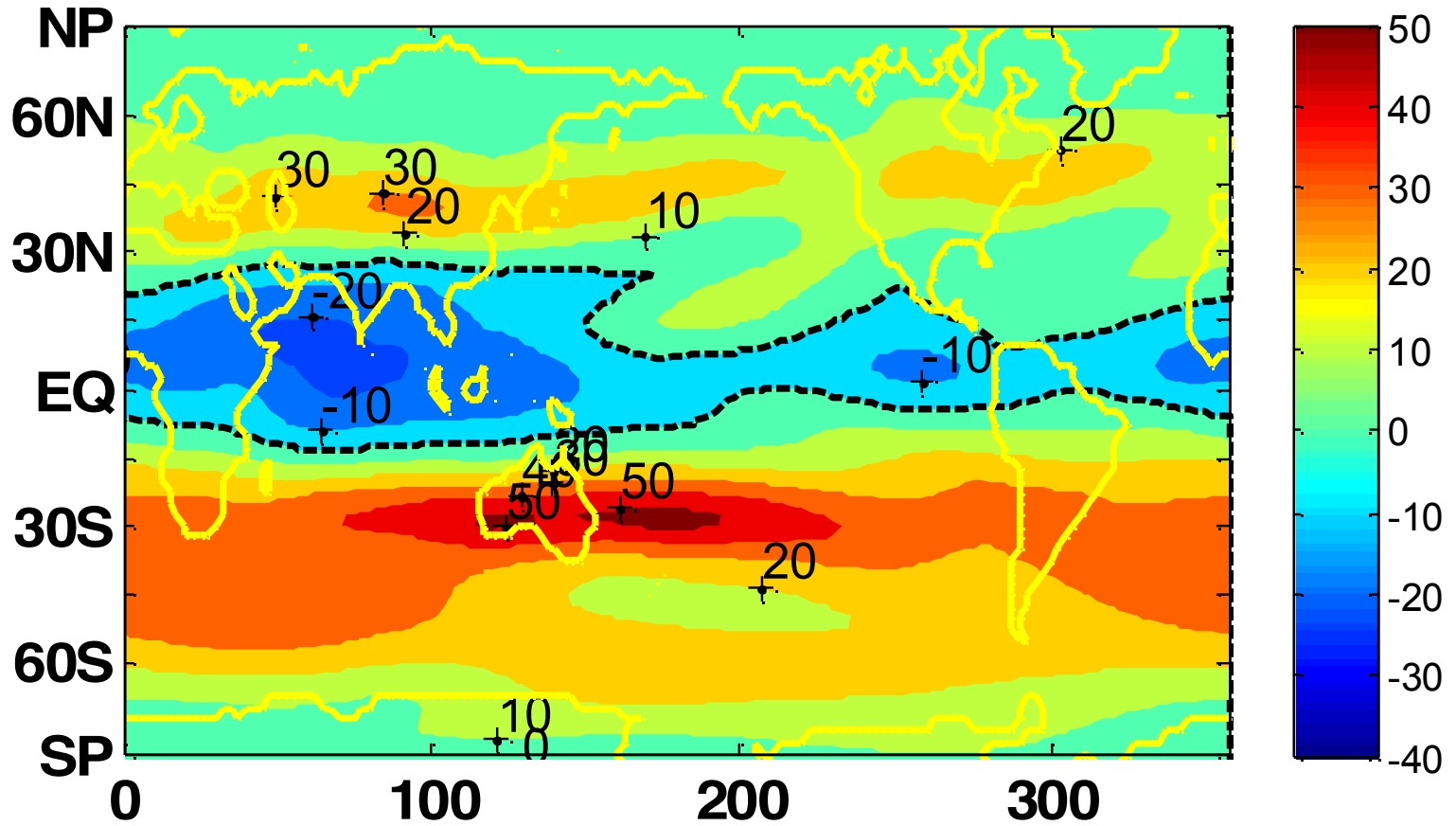


DJF mean at 200 hpa from 1980 to 2009





**JJA mean at 200 hpa from 1980 to 2009**



# 2

