

# First results of ALARO-0 test at DHMZ

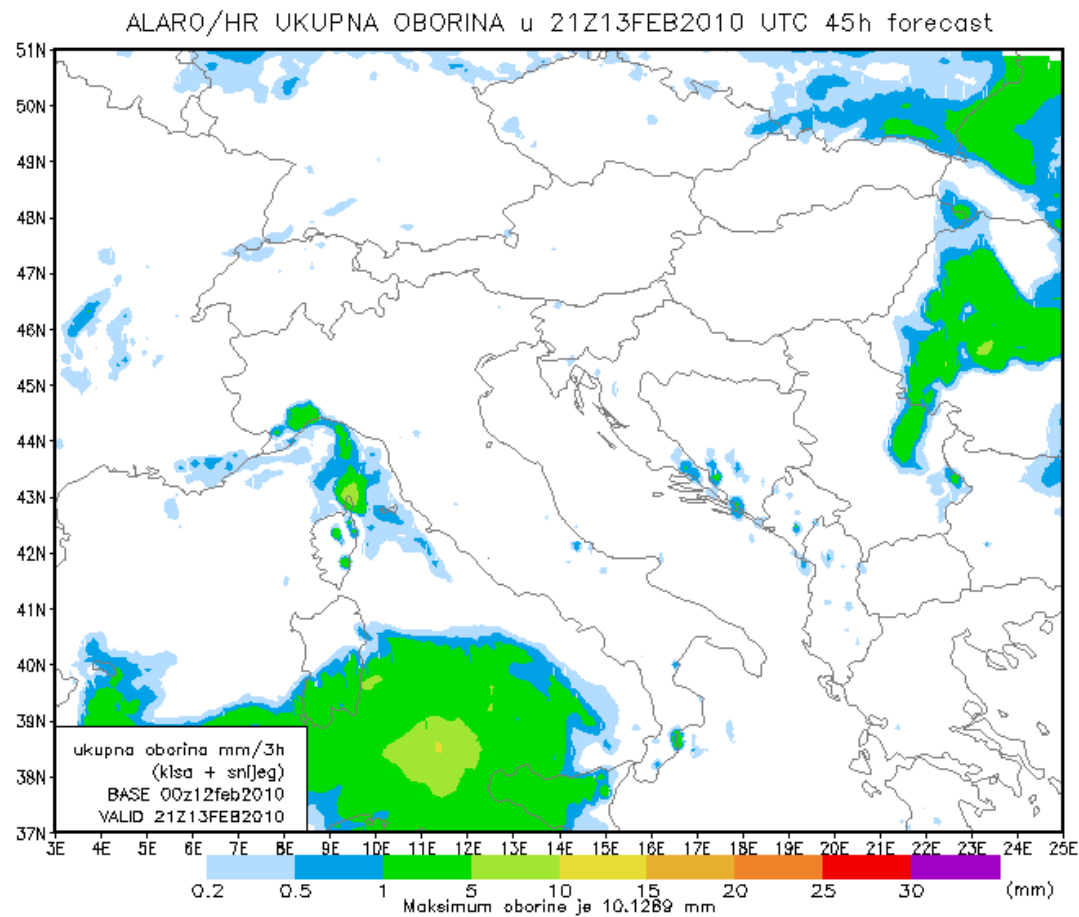
Tomislav Kovačić

Contributions from: **Martina Tudor,**  
**Stjepan Ivatek Sahdan and Antonio**  
**Stanešić**

# Description of experiments

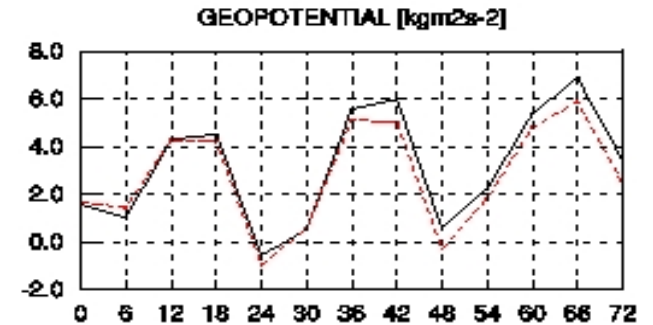
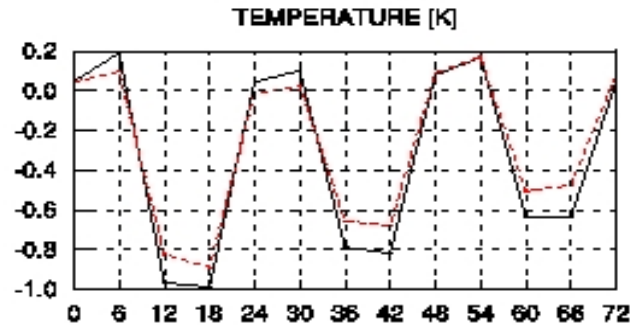
- $\Delta x = 8$  km
- 37 levels
- 00 H
- Dynamical adaptation
- 1 month period: 02-06-2009 to 30-06-2009
- impact of 3MT was tested

# Model domain

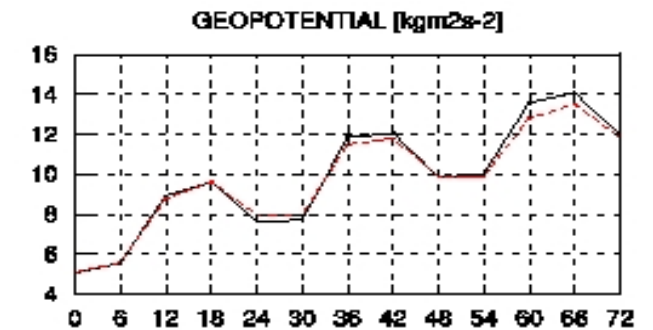
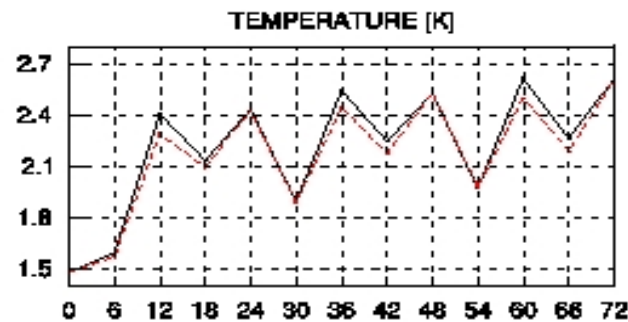


# Temperature and geopotential

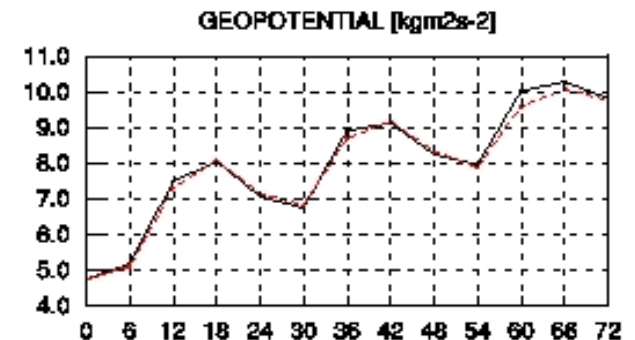
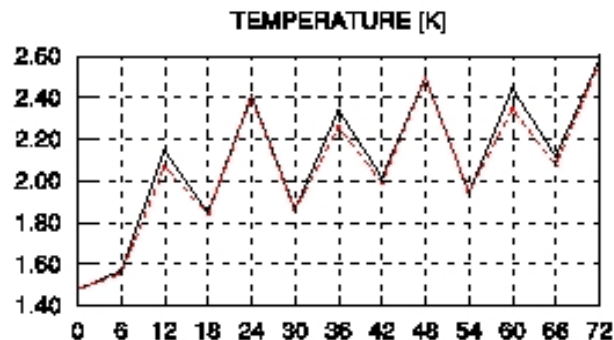
- BIAS



- RMSE

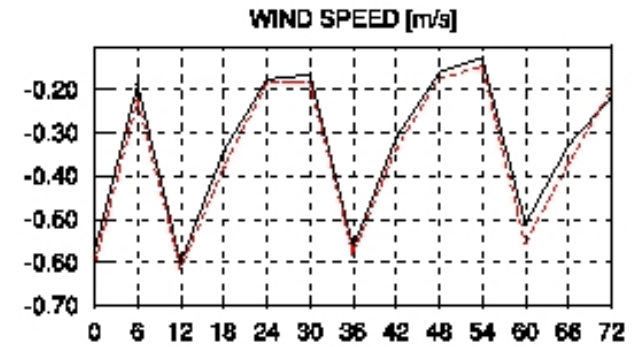
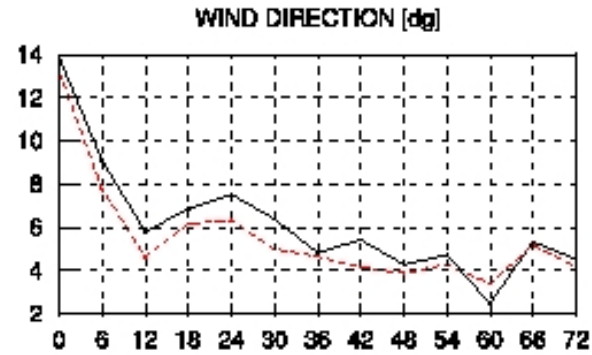


- STD. DEV.

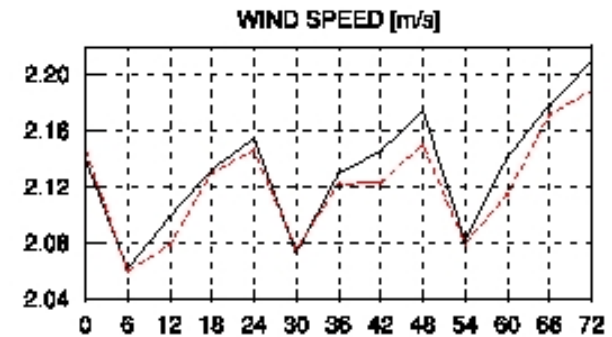
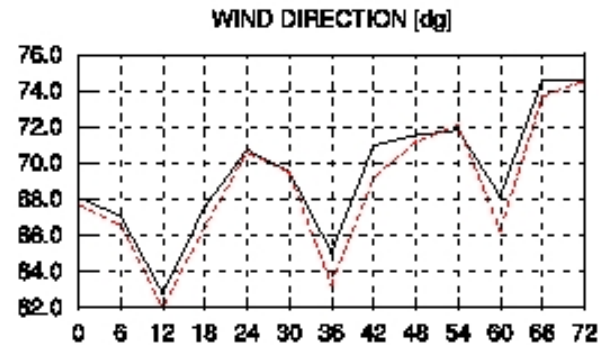


# Wind direction and speed

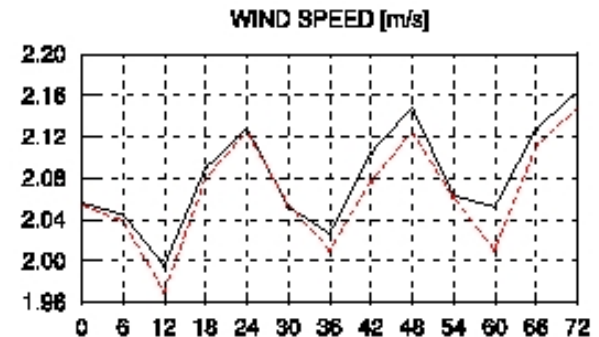
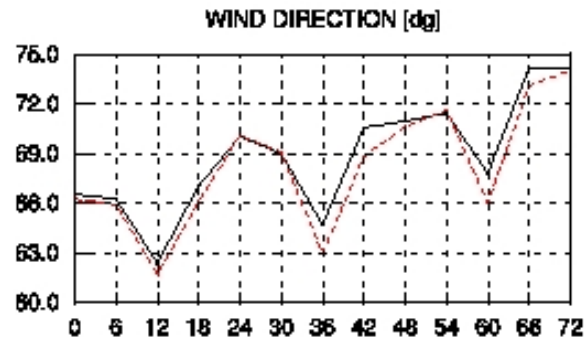
- BIAS



- RMSE

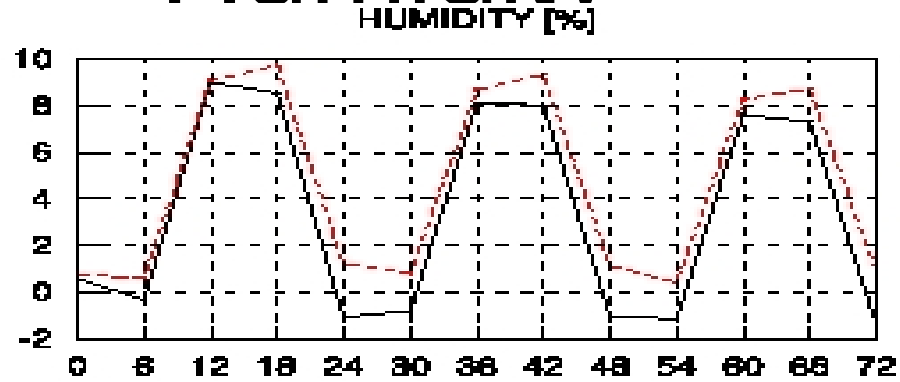


- STD. DEV.

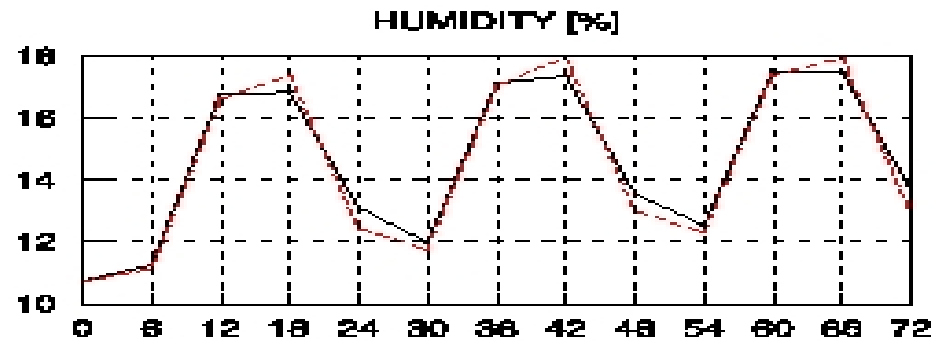


# Humidity

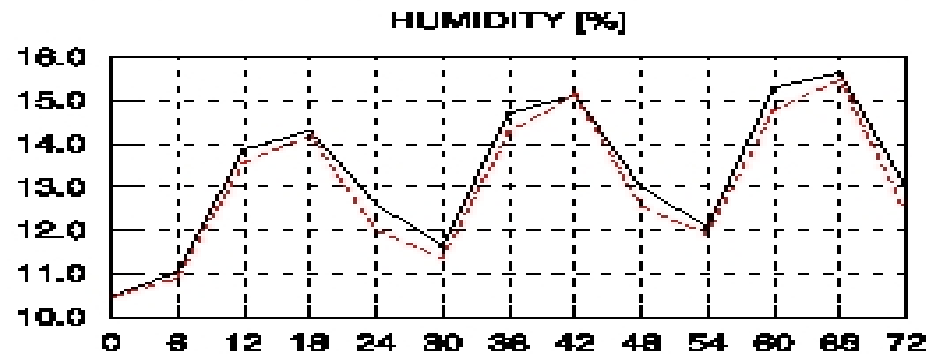
- BIAS



- RMSE



- STD. DEV.

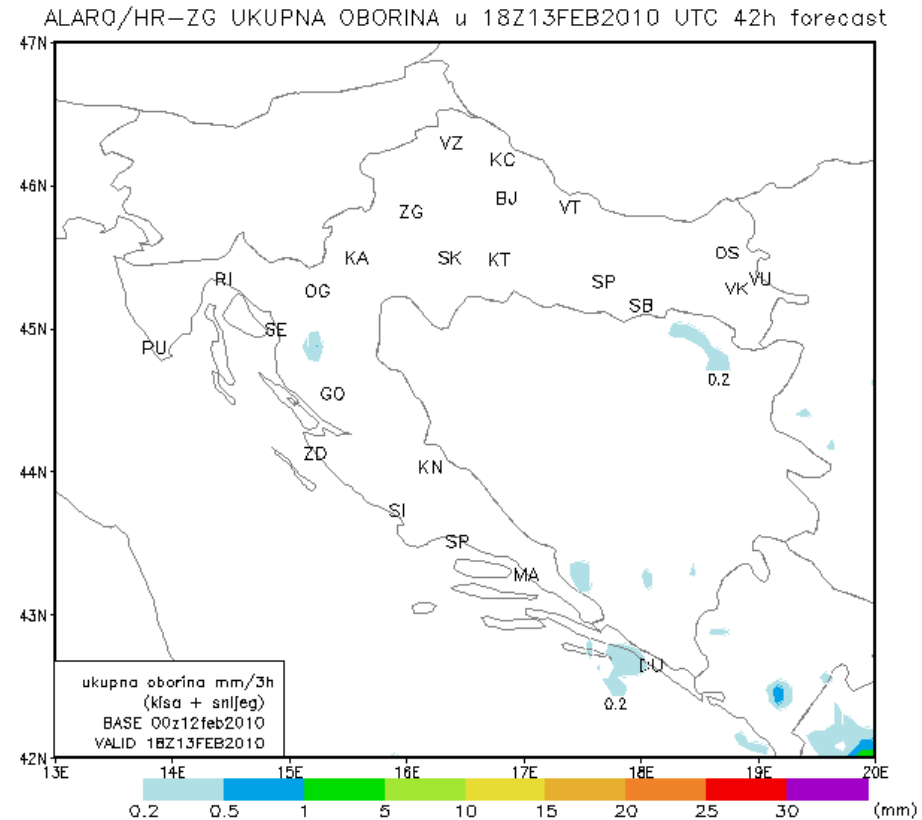


# Conclusions(1)

	T	H	dd	ff	U
BIAS	+0	+0	+	-0	-0
RMSE	+0	0	+0	+0	0
STD. DEV.	+0	0	+0	+0	-0

# Convective vs. non convective days

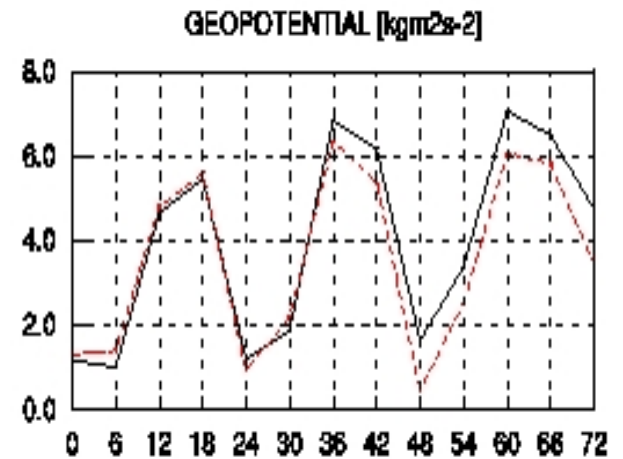
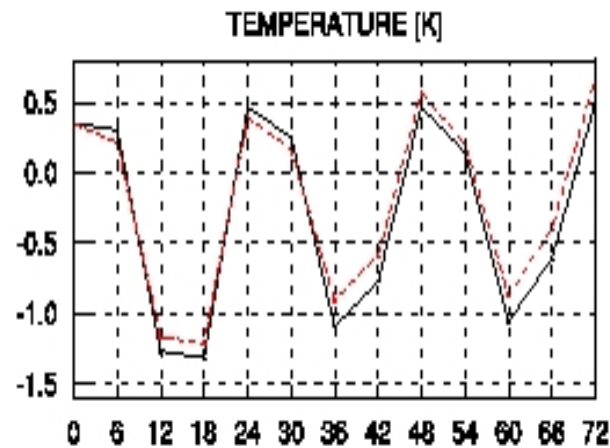
- Verification on smaller domain



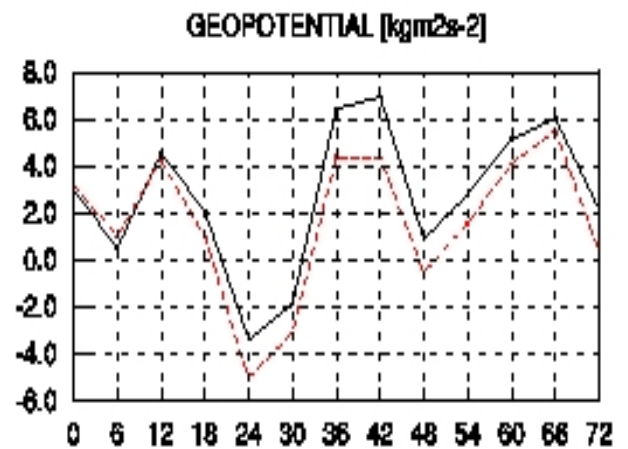
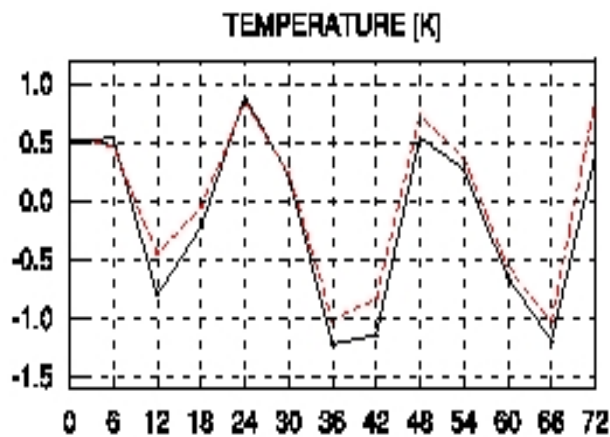


# Temperature and geopotential BIAS

- non convective

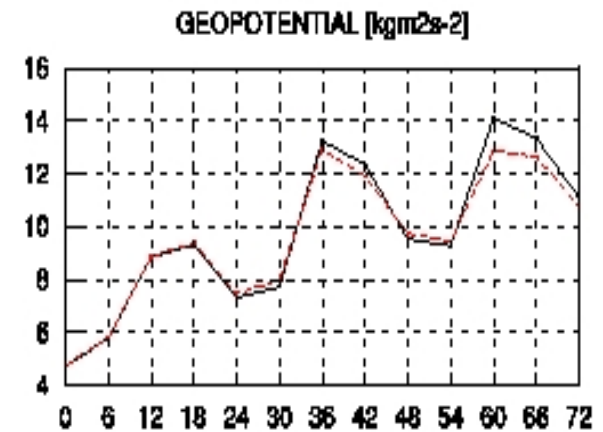
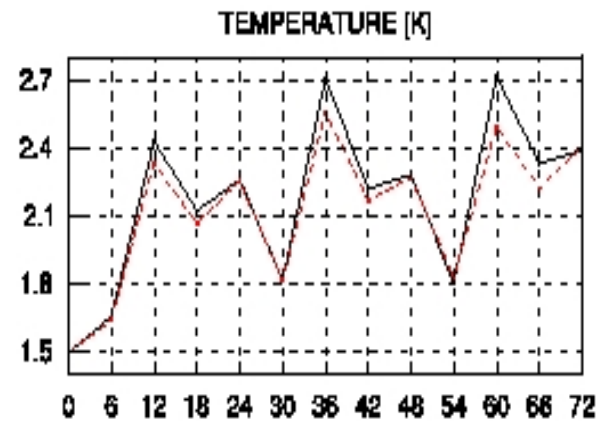


- convective

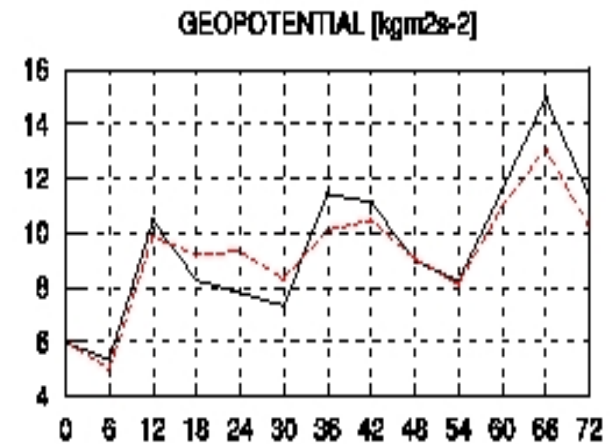
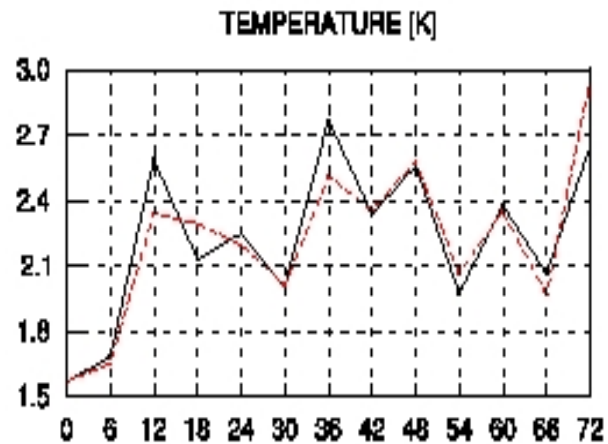


# Temperature and geopotential RMSE

- non convective

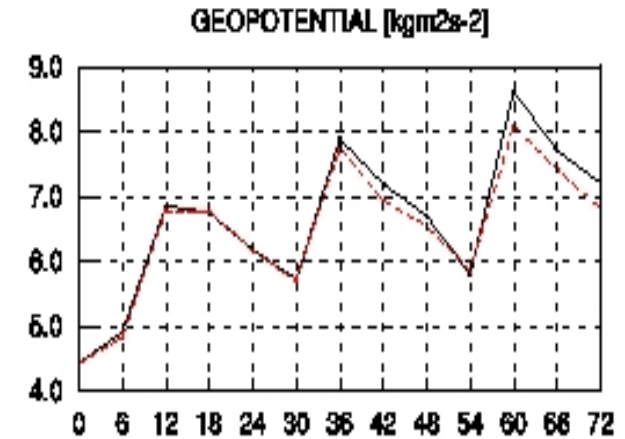
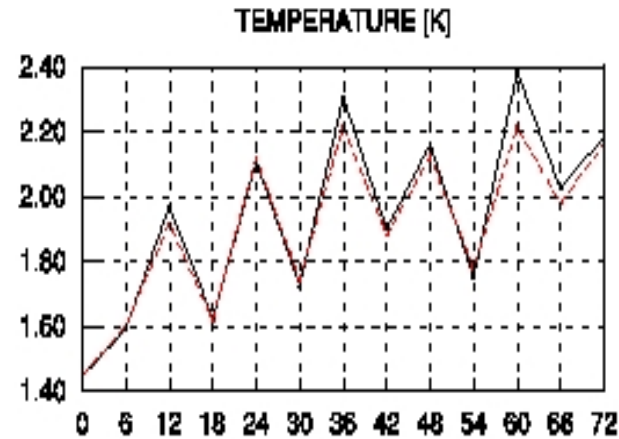


- convective

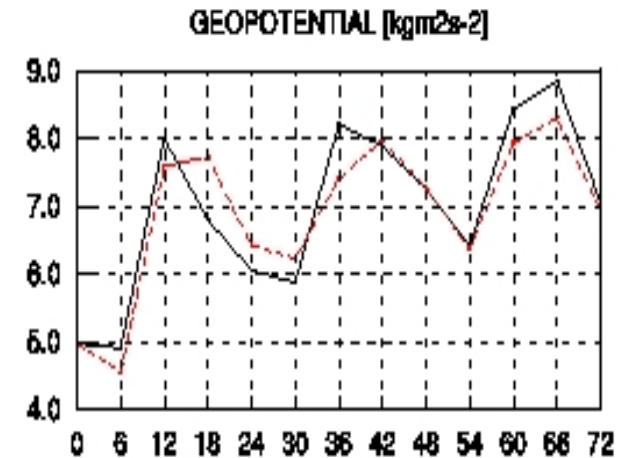
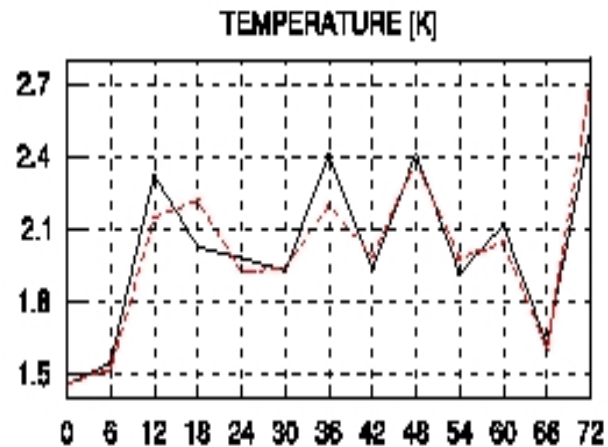


# Temperature and geopotential STANDARD DEVIATION

- non convective

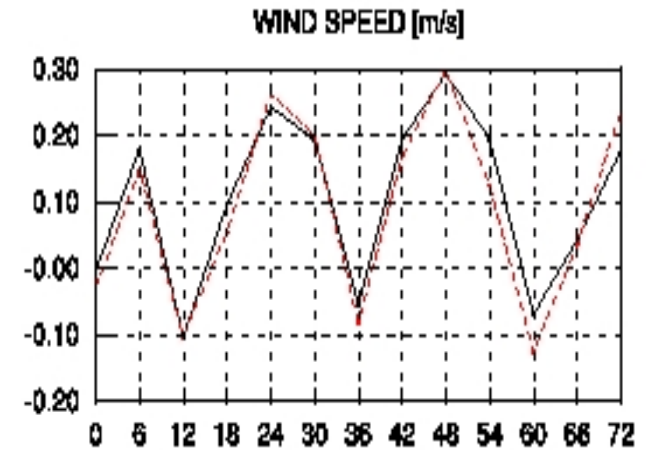
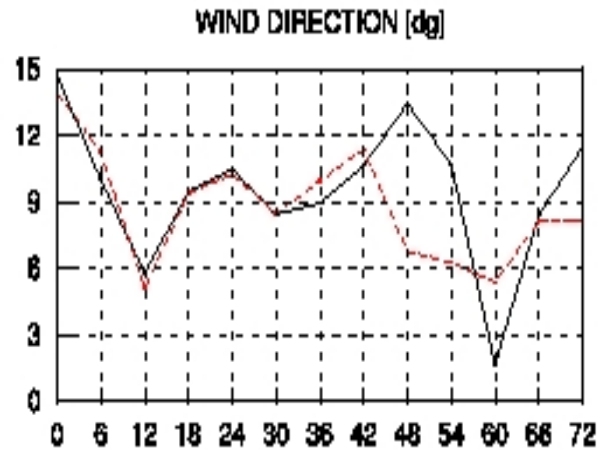


- convective

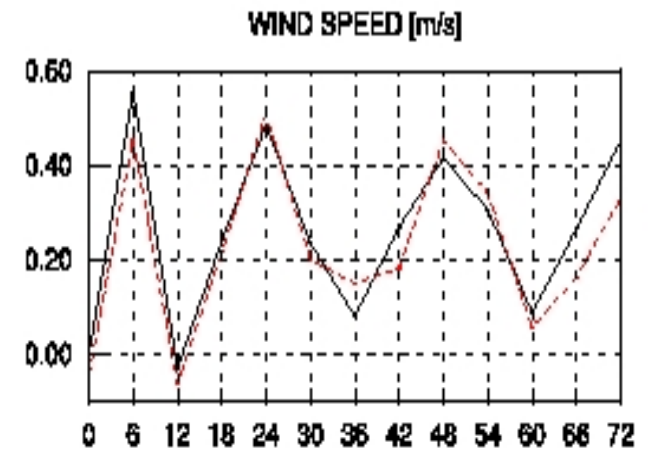
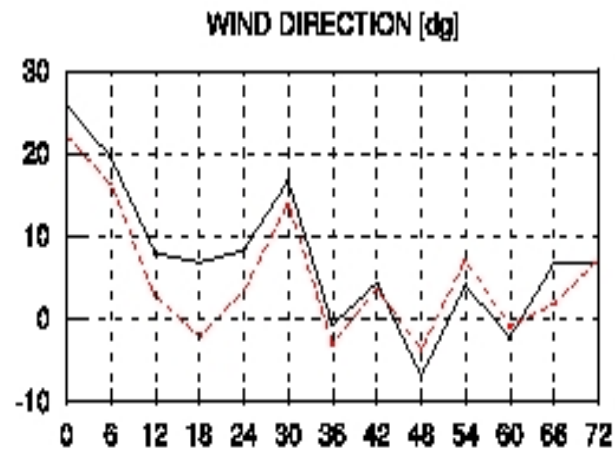


# Wind direction and speed BIAS

- non convective

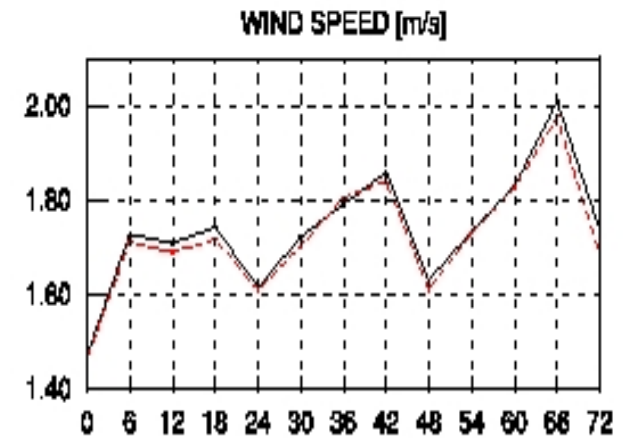
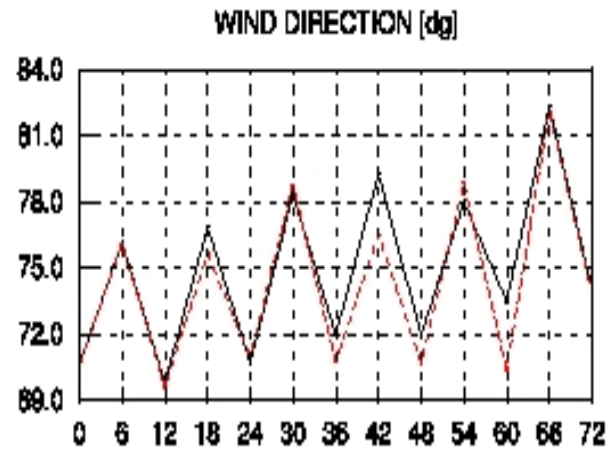


- convective

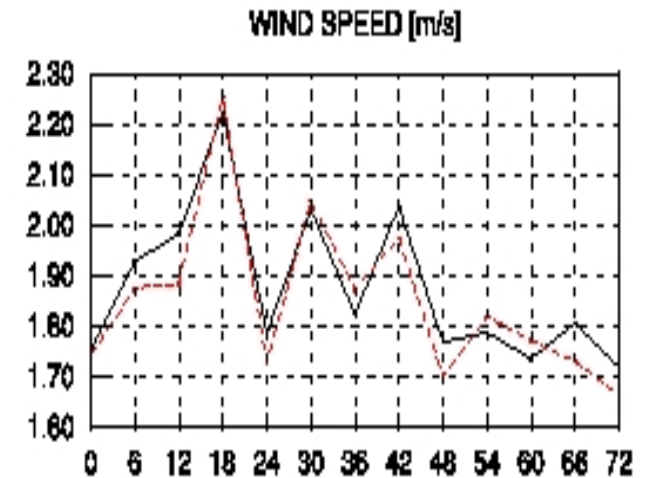
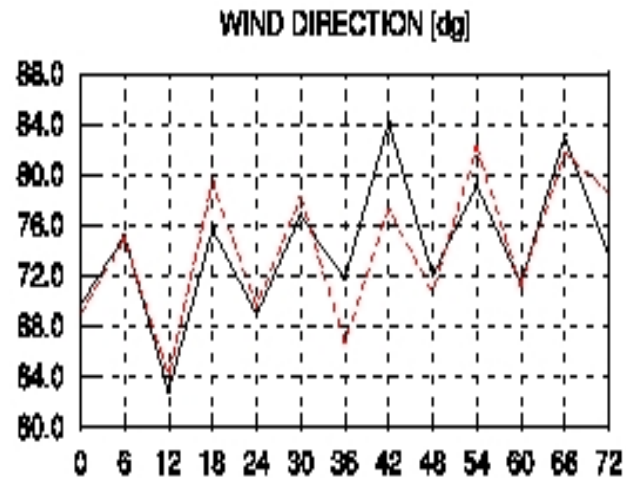


# Wind direction and speed RMSE

- non convective

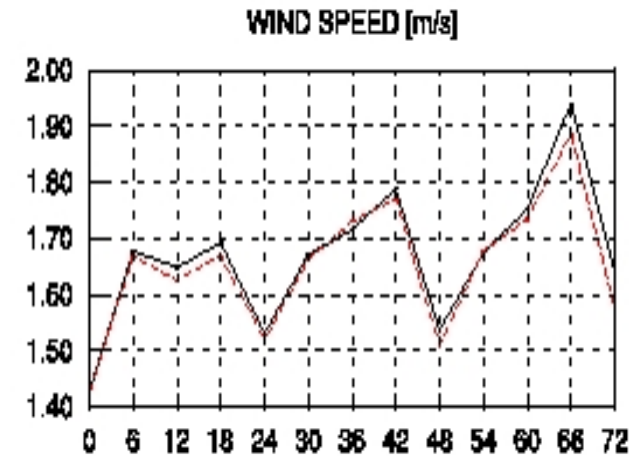
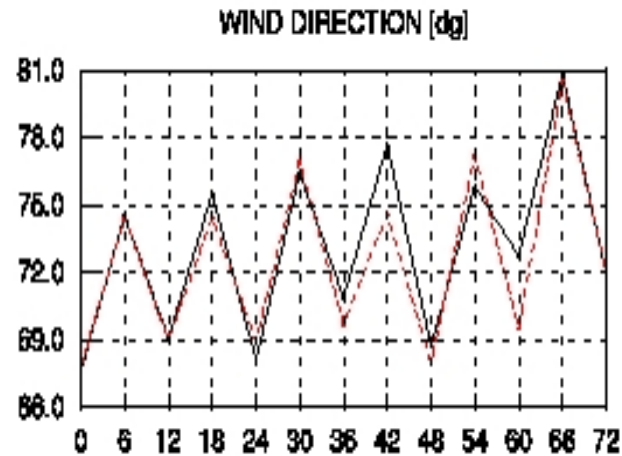


- convective

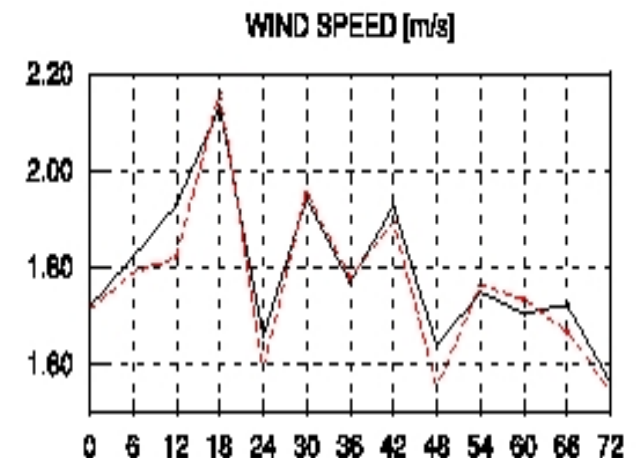
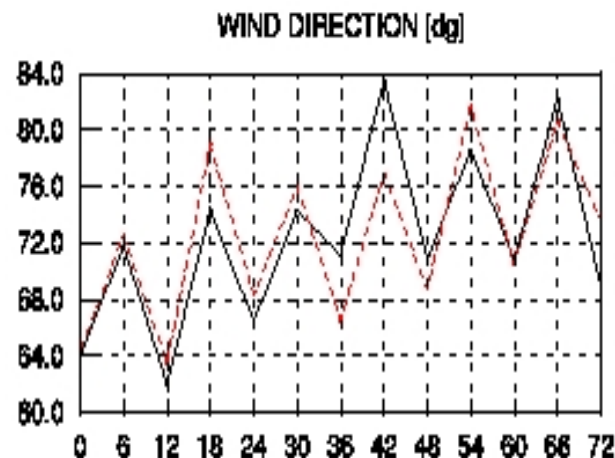


# Wind direction and speed STANDARD DEVIATION

- non convective

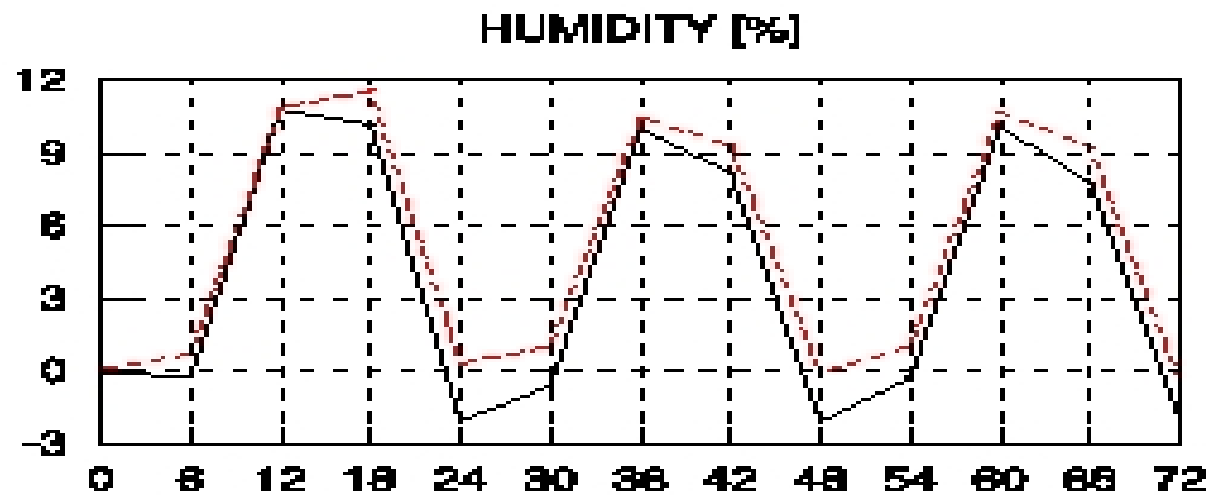


- convective

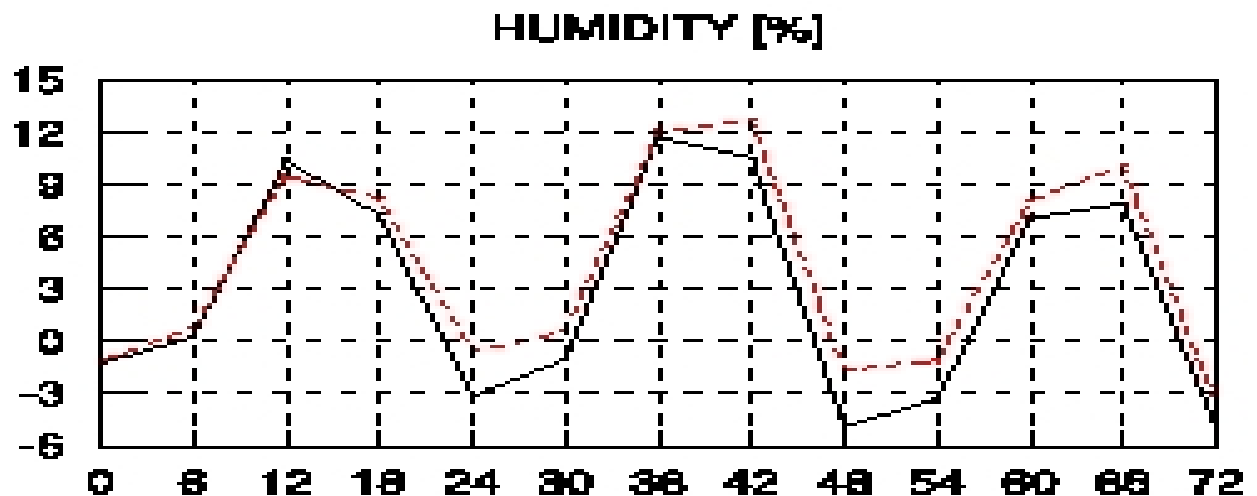


# Humidity BIAS

- non convective

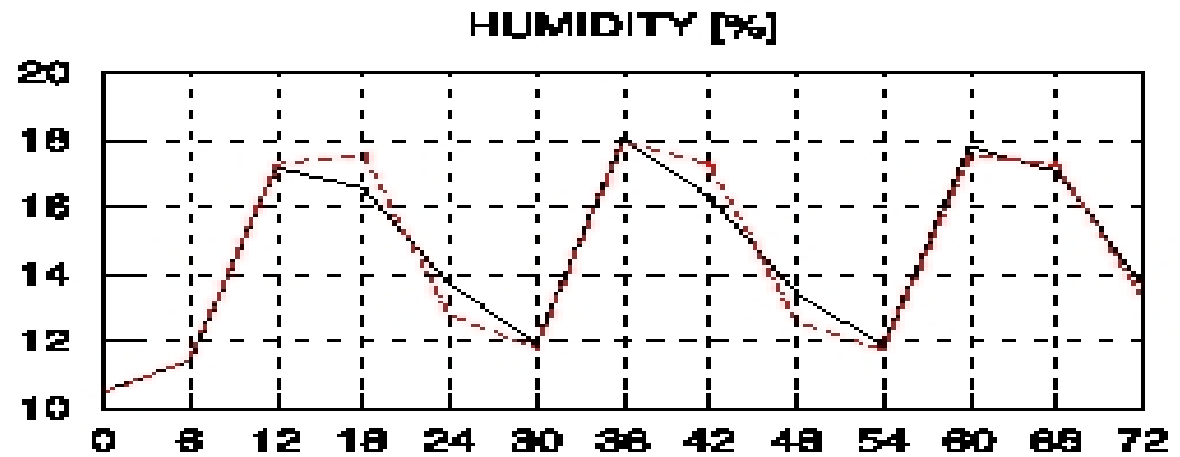


- convective

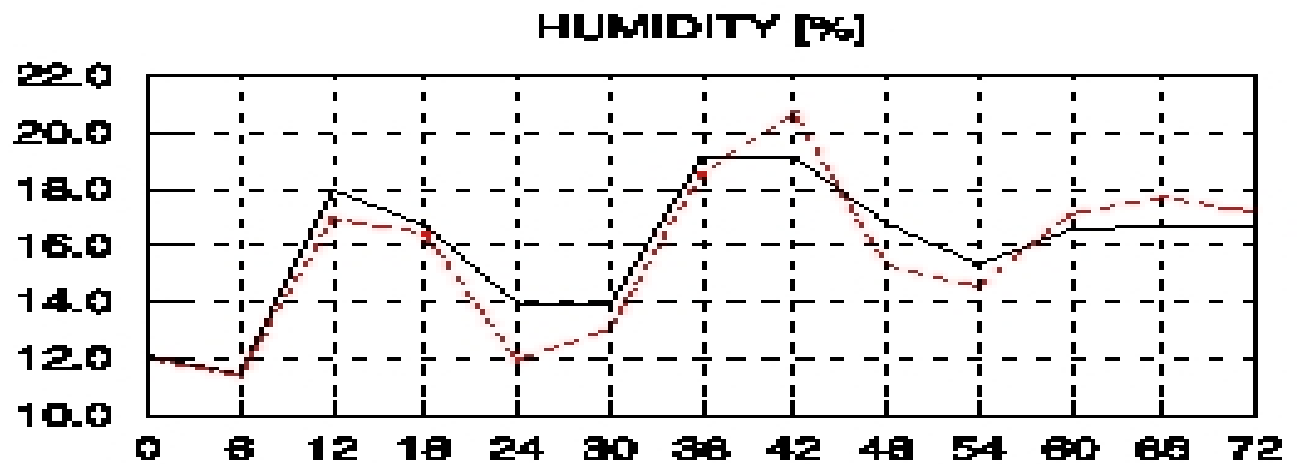


# Humidity RMSE

- non  
convective



- convective

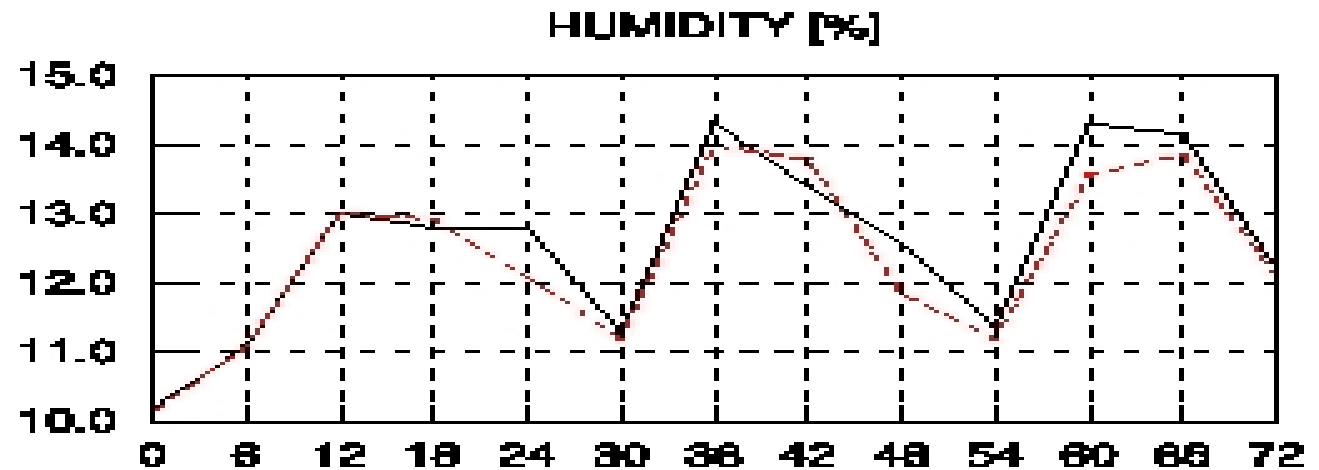




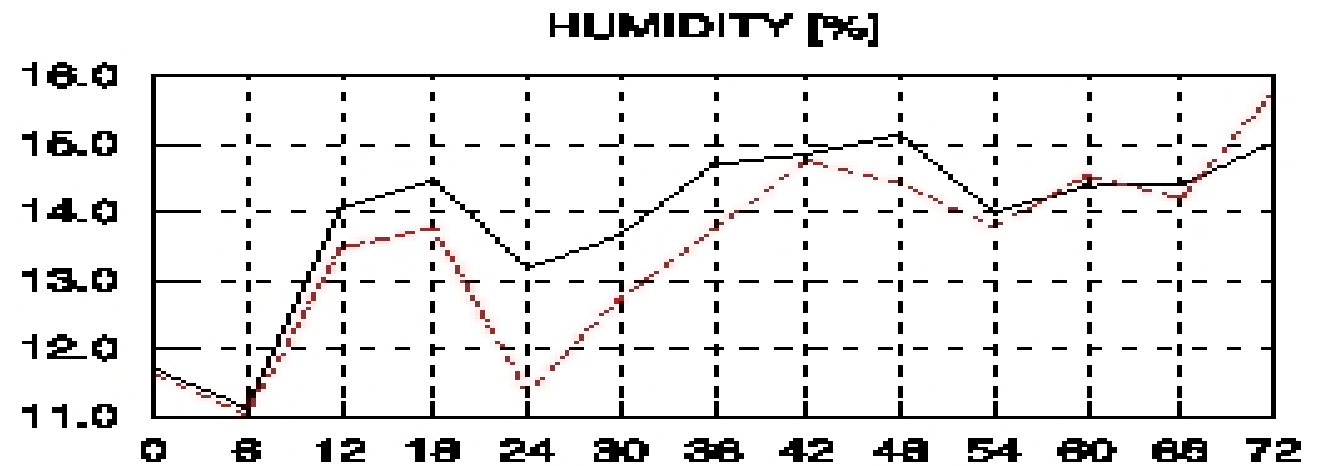
# Humidity

## STANDARD DEVIATION

- non convective



- convective



# Conclusion (2)