



# Verification

## SON 2007 -DJF 2008 - MA 2008

### COSMO ME - COSMO I2

*Adriano Raspanti and Lucio Torrissi*

CNMCA, Italian Met Service  
Pratica di Mare, Roma (Italy)

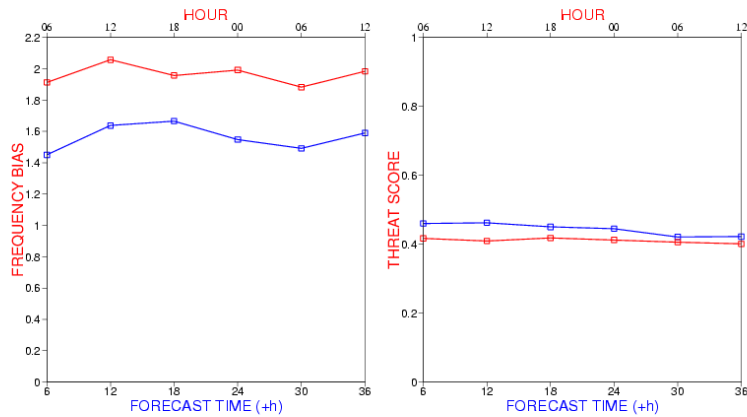




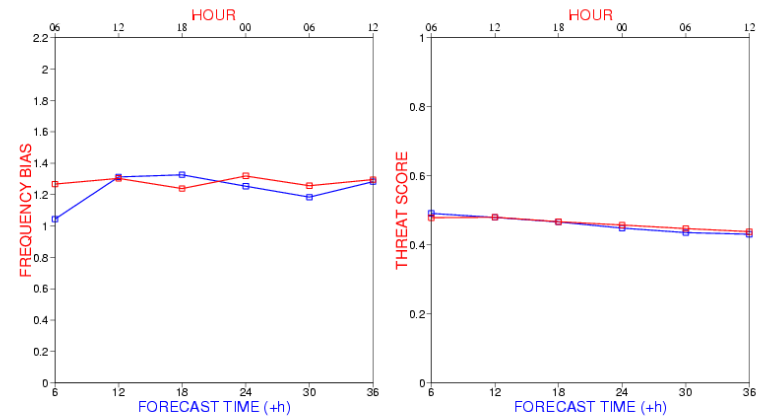
# September October November 2007

## Cosmo- Me Cosmo - IT

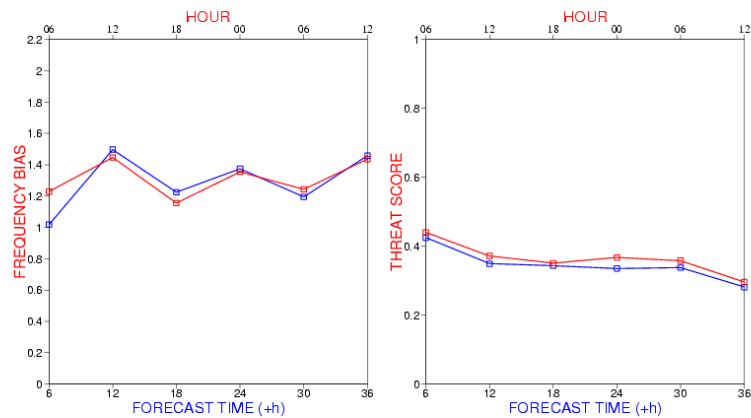
6h ACCUMULATED PRECIPITATION (> 0 mm) - 00 UTC RUN  
 Verification from 01/09/07 to 30/11/07  
 COSMO-ME: Blue COSMO-IT: Red



6h ACCUMULATED PRECIPITATION (> 0.1 mm) - 00 UTC RUN  
 Verification from 01/09/07 to 30/11/07  
 COSMO-ME: Blue COSMO-IT: Red



6h ACCUMULATED PRECIPITATION (> 2 mm) - 00 UTC RUN  
 Verification from 01/09/07 to 30/11/07  
 COSMO-ME: Blue COSMO-IT: Red



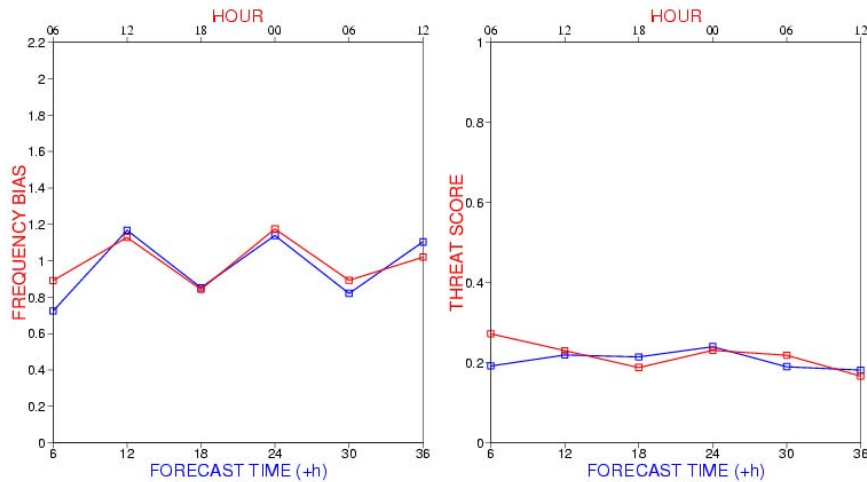
C-IT tends to be more noisy than C-ME  
 But when the threshold starts to increase  
 He behaves better





# September October November Cosmo IT

6h ACCUMULATED PRECIPITATION (> 10 mm) - 00 UTC RUN  
Verification from 01/09/07 to 30/11/07  
COSMO-ME: Blue COSMO-IT: Red



6h ACCUMULATED PRECIPITATION (> 30 mm) - 00 UTC RUN  
Verification from 01/09/07 to 30/11/07  
COSMO-ME: Blue COSMO-IT: Red



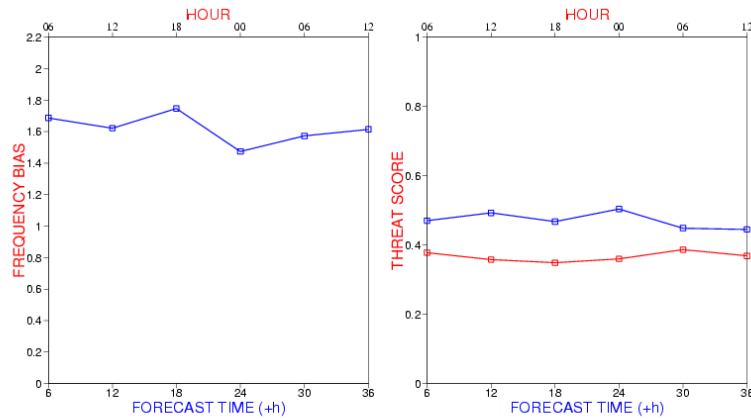
When thresholds start to be too high the behaviour is comparable  
But the sample is going to be probably too small and the contingency  
table has no sense anymore (new score for extreme events?)



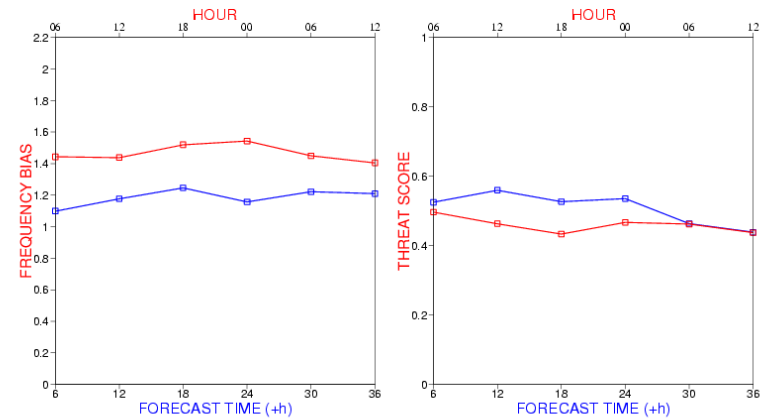


# December January February Cosmo Me - Cosmo IT

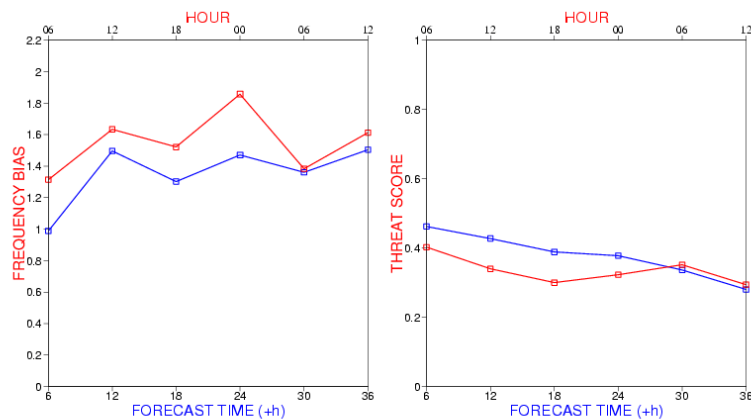
6h ACCUMULATED PRECIPITATION (> 0 mm) - 00 UTC RUN  
Verification from 01/12/07 to 29/02/08  
COSMO-ME: Blue COSMO-IT: Red



6h ACCUMULATED PRECIPITATION (> 0.1 mm) - 00 UTC RUN  
Verification from 01/12/07 to 29/02/08  
COSMO-ME: Blue COSMO-IT: Red



6h ACCUMULATED PRECIPITATION (> 2 mm) - 00 UTC RUN  
Verification from 01/12/07 to 29/02/08  
COSMO-ME: Blue COSMO-IT: Red



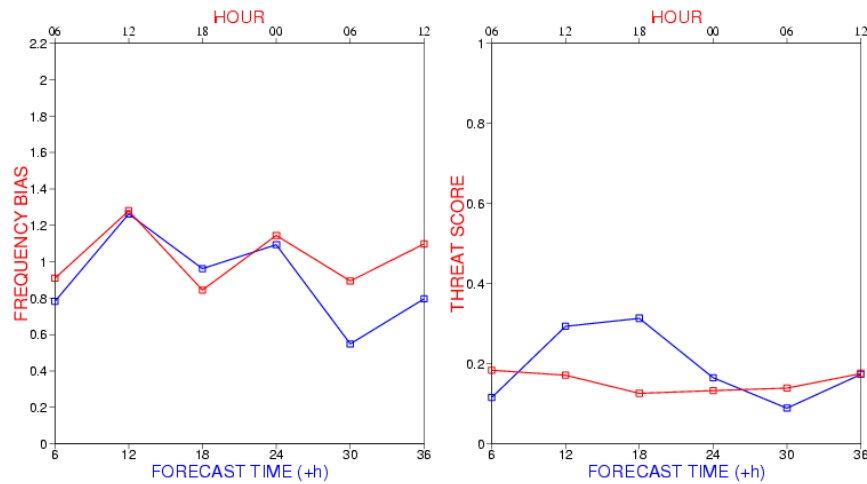
In winter the performance of C-IT seems  
To be generally worse



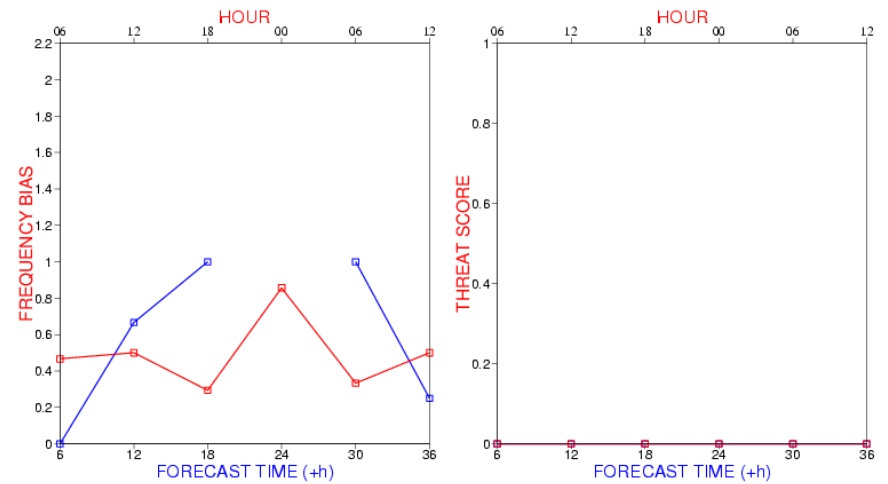


# December January February Cosmo-Me Cosmo IT

6h ACCUMULATED PRECIPITATION (> 10 mm) - 00 UTC RUN  
Verification from 01/12/07 to 29/02/08  
COSMO-ME: Blue COSMO-IT: Red



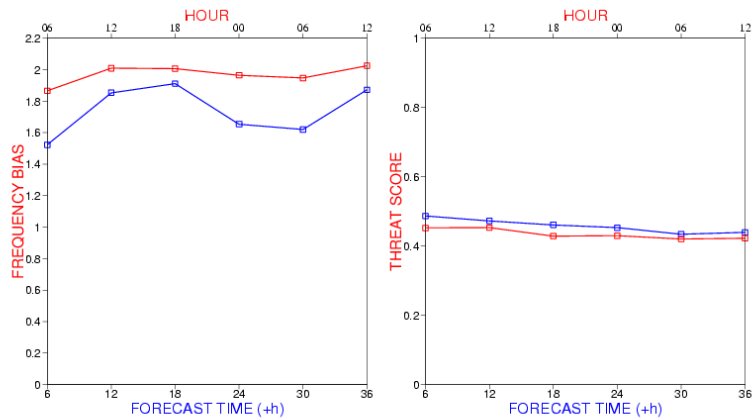
6h ACCUMULATED PRECIPITATION (> 30 mm) - 00 UTC RUN  
Verification from 01/12/07 to 29/02/08  
COSMO-ME: Blue COSMO-IT: Red



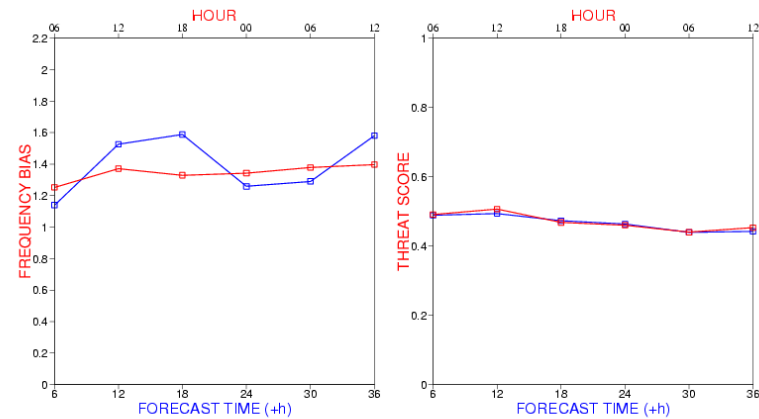


# March April Cosmo Me Cosmo IT

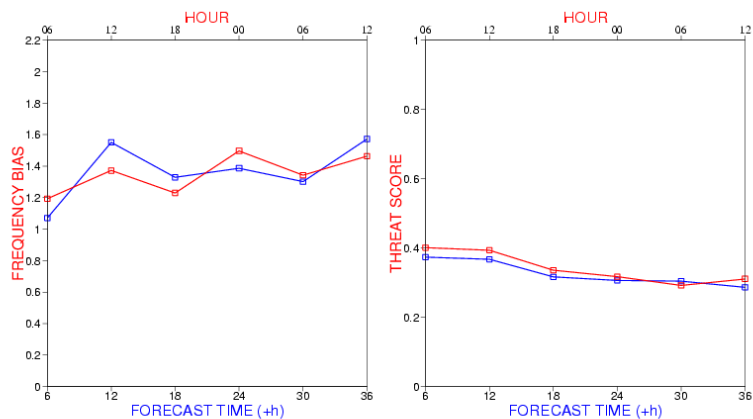
6h ACCUMULATED PRECIPITATION (> 0 mm) - 00 UTC RUN  
Verification from 01/03/08 to 30/04/08  
COSMO-ME: Blue COSMO-IT: Red



6h ACCUMULATED PRECIPITATION (> 0.1 mm) - 00 UTC RUN  
Verification from 01/03/08 to 30/04/08  
COSMO-ME: Blue COSMO-IT: Red



6h ACCUMULATED PRECIPITATION (> 2 mm) - 00 UTC RUN  
Verification from 01/03/08 to 30/04/08  
COSMO-ME: Blue COSMO-IT: Red



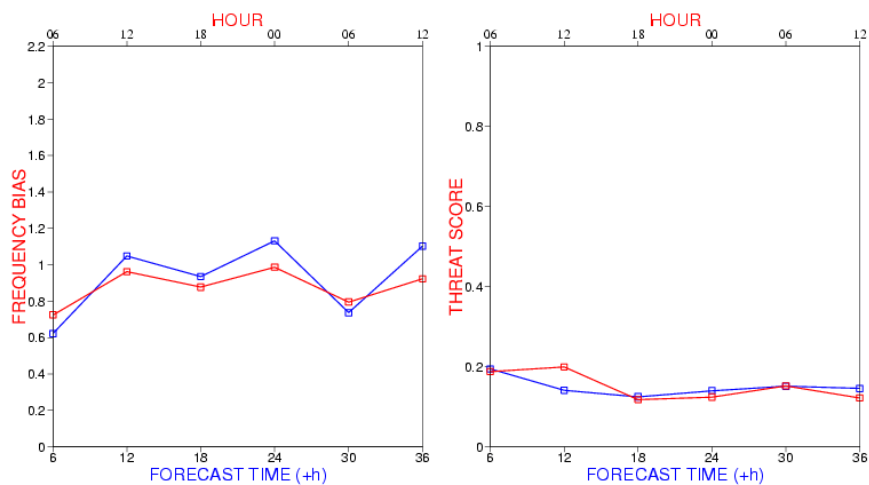
In this part of the spring the results recall what we had during autumn



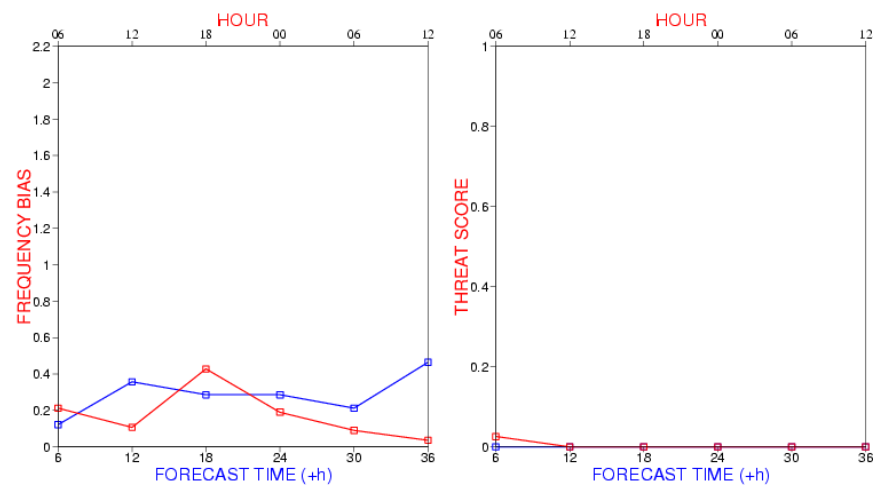
# March April Cosmo IT



6h ACCUMULATED PRECIPITATION (> 10 mm) - 00 UTC RUN  
 Verification from 01/03/08 to 30/04/08  
 COSMO-ME: Blue COSMO-IT: Red



6h ACCUMULATED PRECIPITATION (> 30 mm) - 00 UTC RUN  
 Verification from 01/03/08 to 30/04/08  
 COSMO-ME: Blue COSMO-IT: Red





# Cosmo Me Cosmo IT Comparison Conclusion

- From this comparison and the one I showed during last GM parallel session Cosmo- Me and Cosmo-IT upscaled tends to have a better behaviour for “middle” thresholds, worse for very low ones and almost the same for very high thresholds
- Results seem to be different for different period and weather situation (winter 2007 dominated by weather situation from North)

