
**ENSEMBLES stream 1 seasonal simulations
1991-2000**

Nov start dates

SST

multi-model vs perturbed physics vs stochastic physics
(red – IFS/HOPE CASBS
blue – IFS_HOPE control)

23 February 2007

Model drift

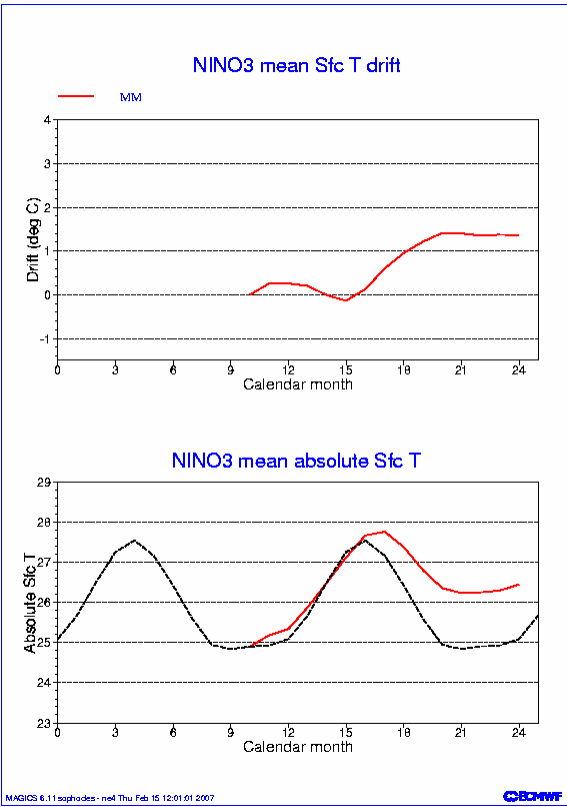
seasonal forecasts 1991-2001 Nov start dates: **mean drift**

SST Nino3

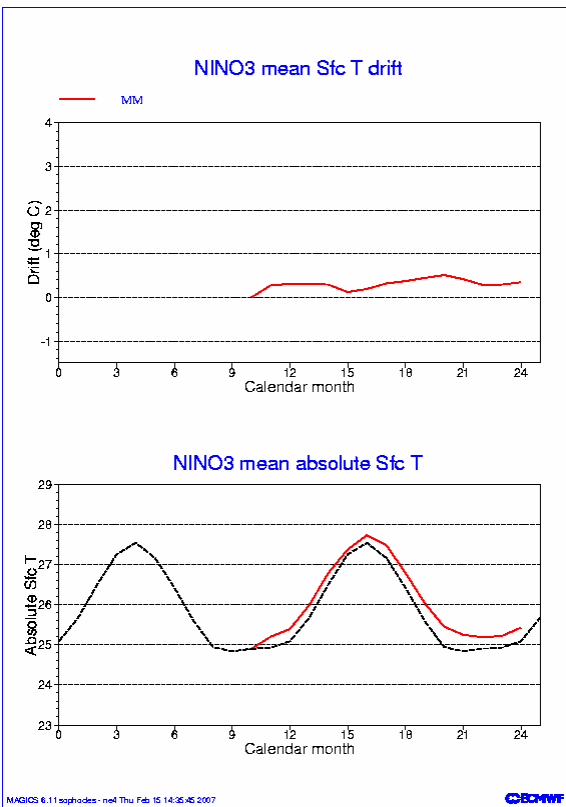
multi-model

perturbed physics

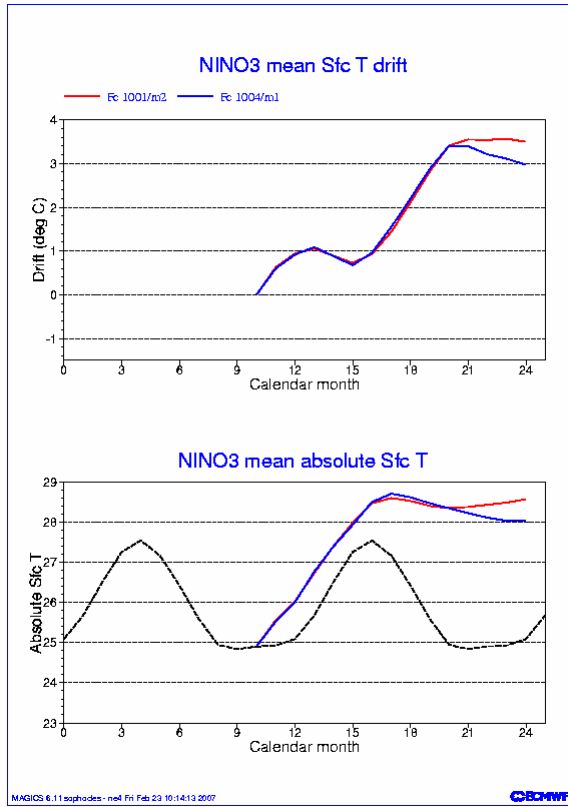
stochastic physics



5 models à 9 members
= 45 members



9 models à 1 members
= 9 members



1 model à 9 members
= 9 members

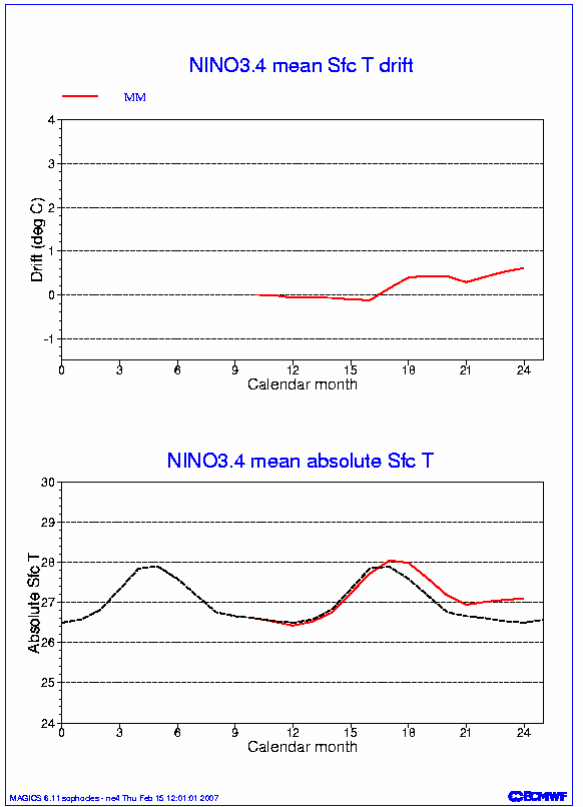
seasonal forecasts 1991-2001 Nov start dates: **mean drift**

SST Nino3.4

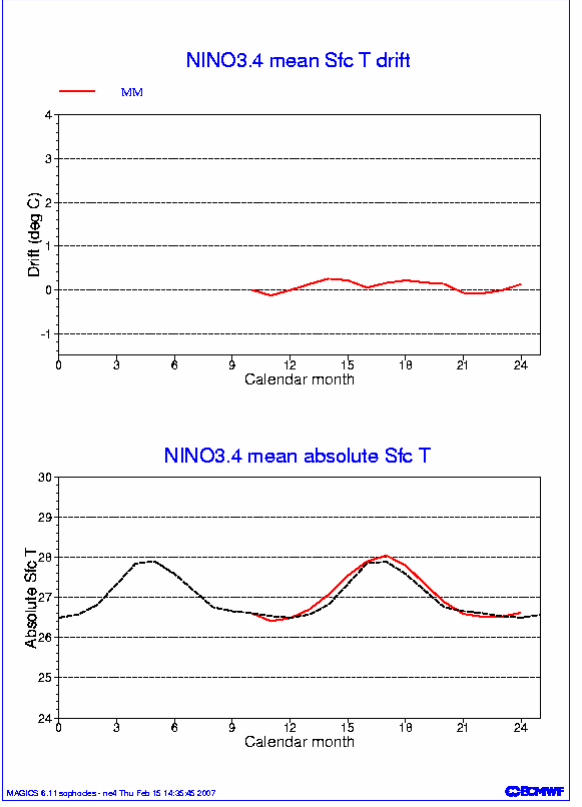
multi-model

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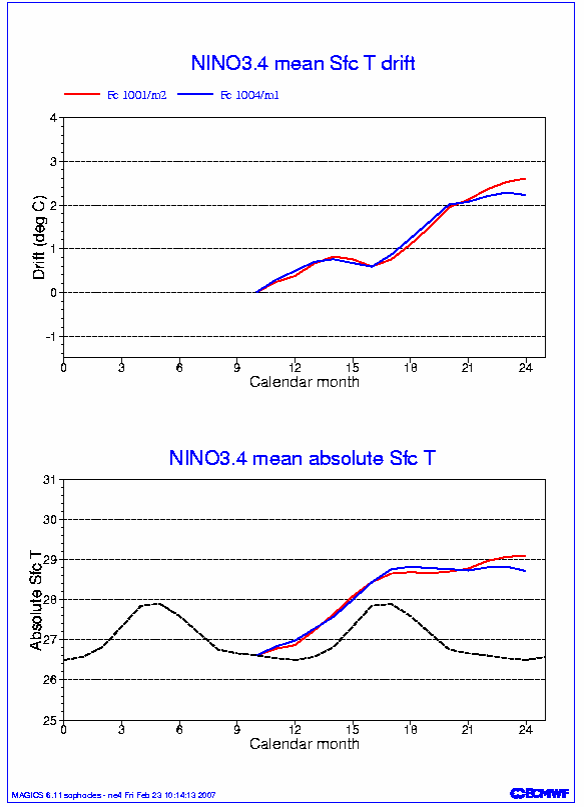
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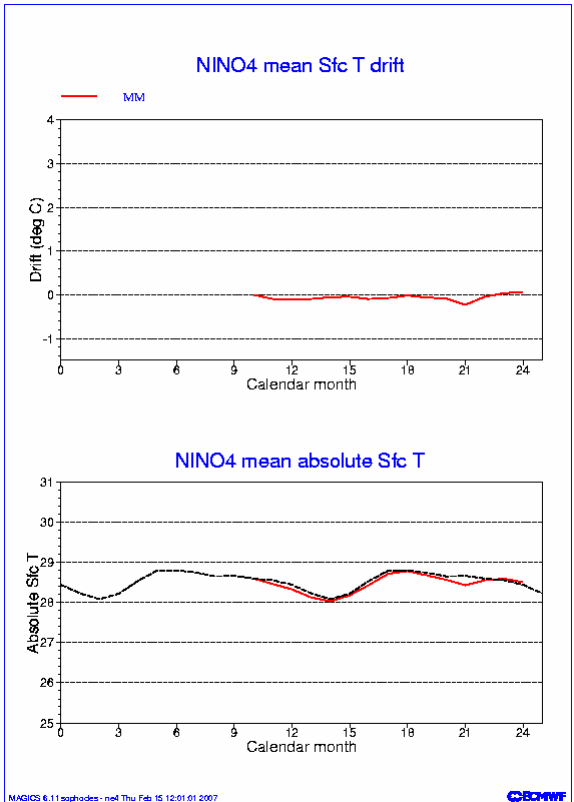
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SST Nino4

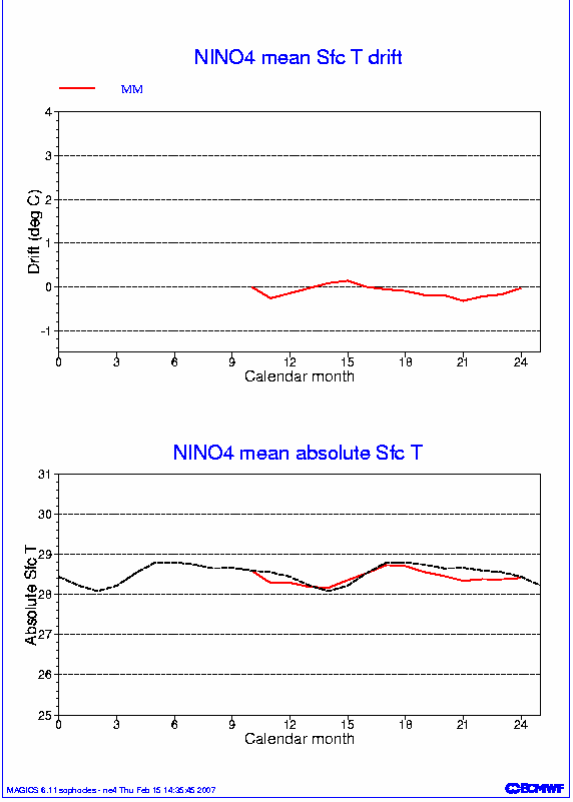
multi-model

perturbed physics

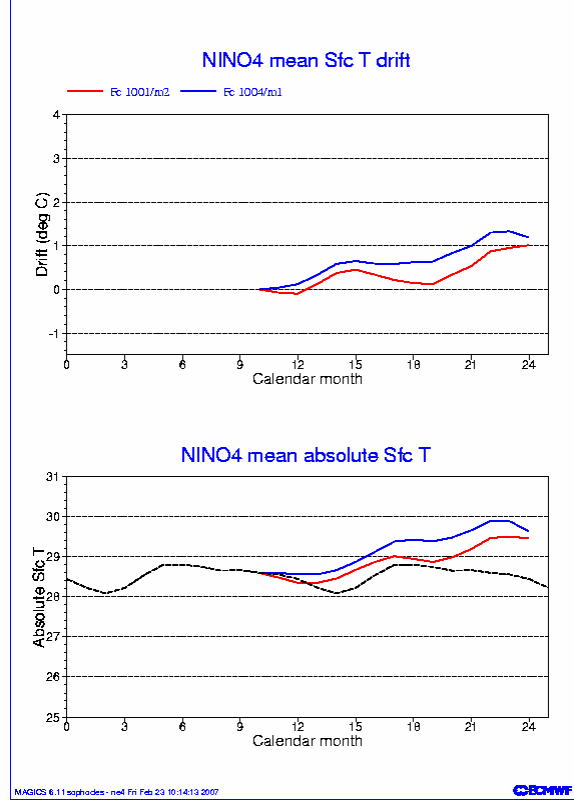
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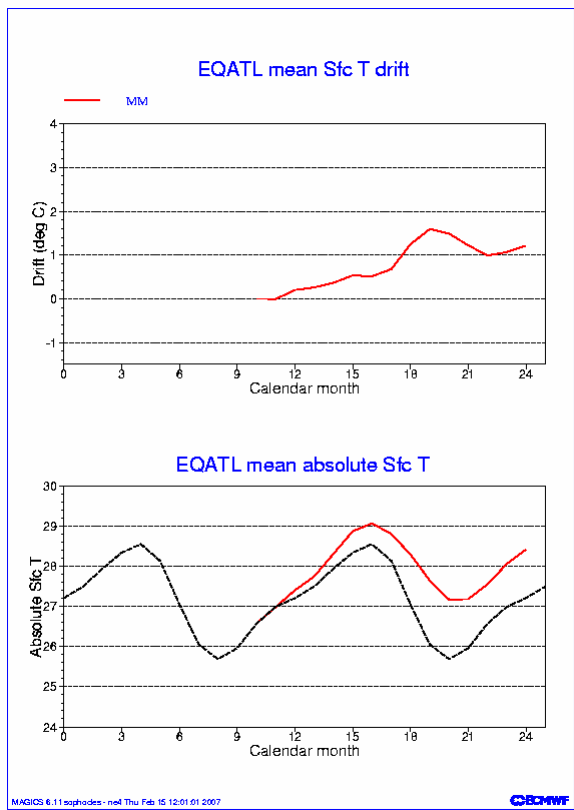
seasonal forecasts 1991-2001 Nov start dates: mean drift

SST eq. Atlantic

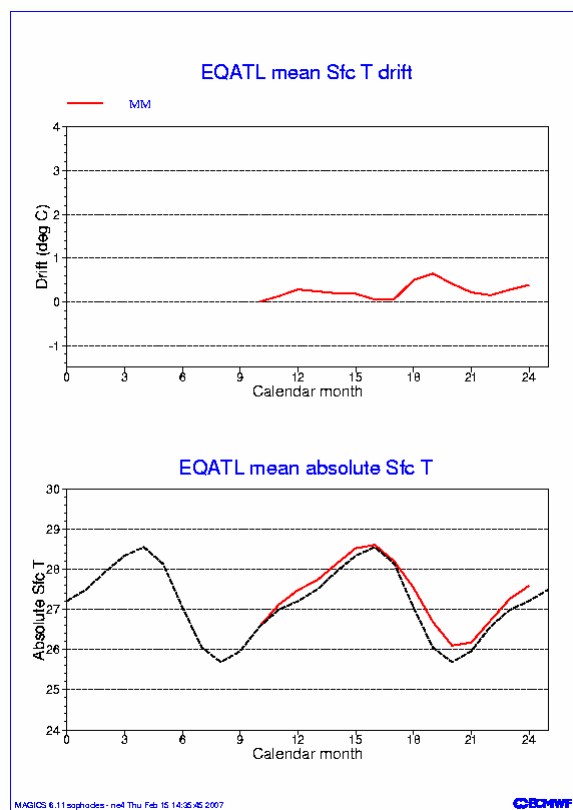
multi-model

perturbed physics

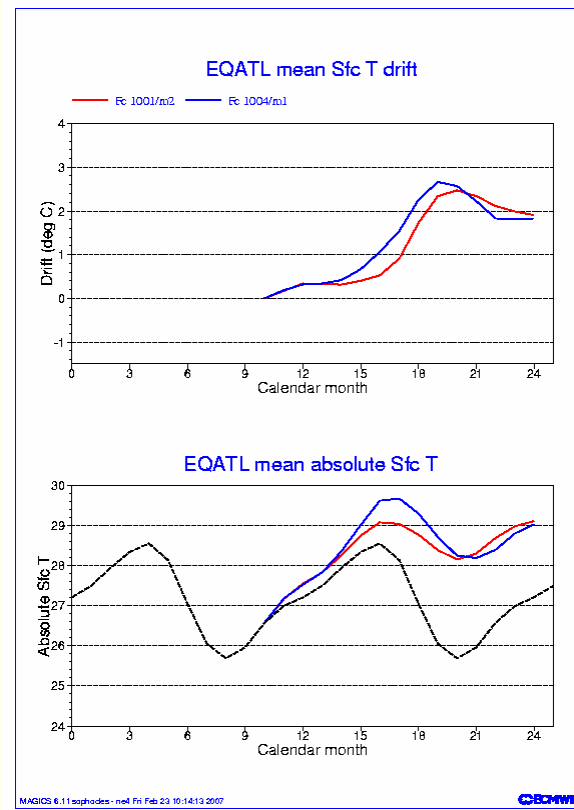
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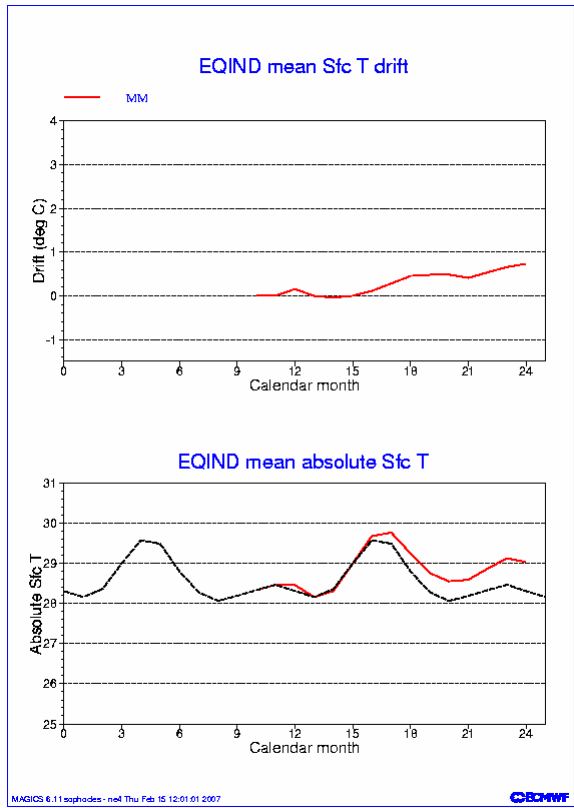
seasonal forecasts 1991-2001 Nov start dates: mean drift

SST eq. Indian

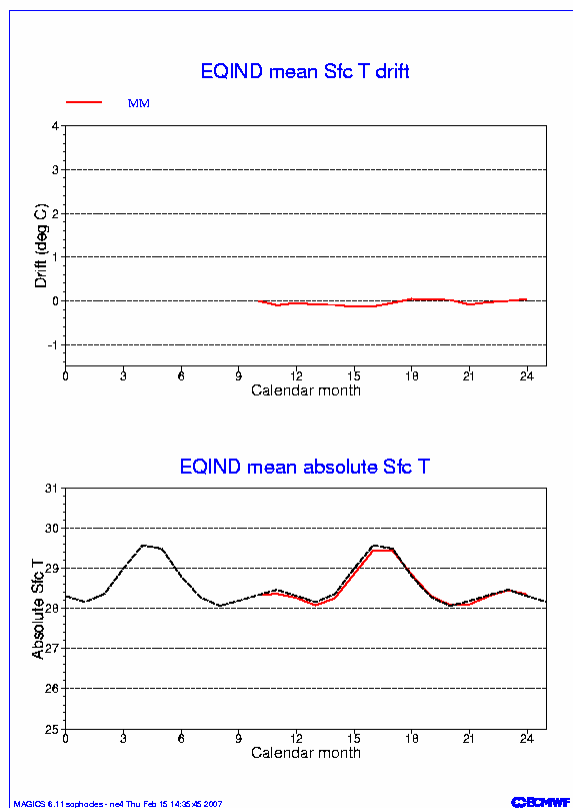
multi-model

perturbed physics

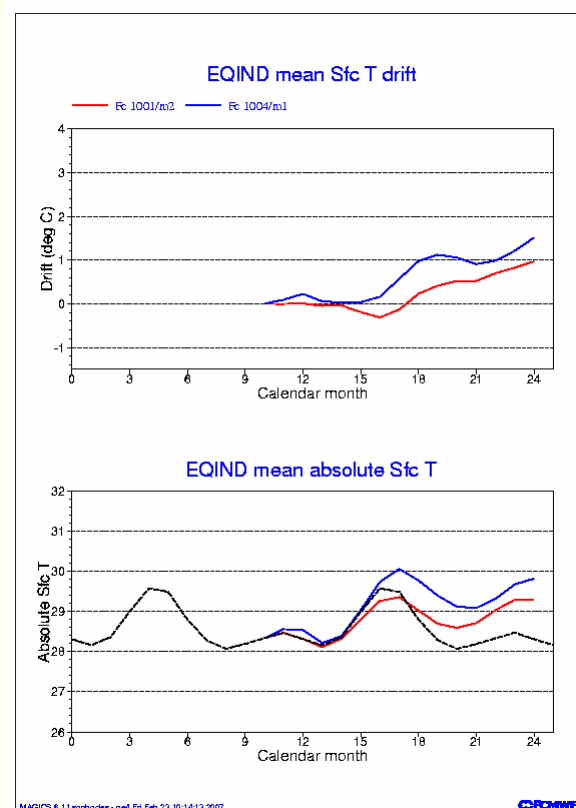
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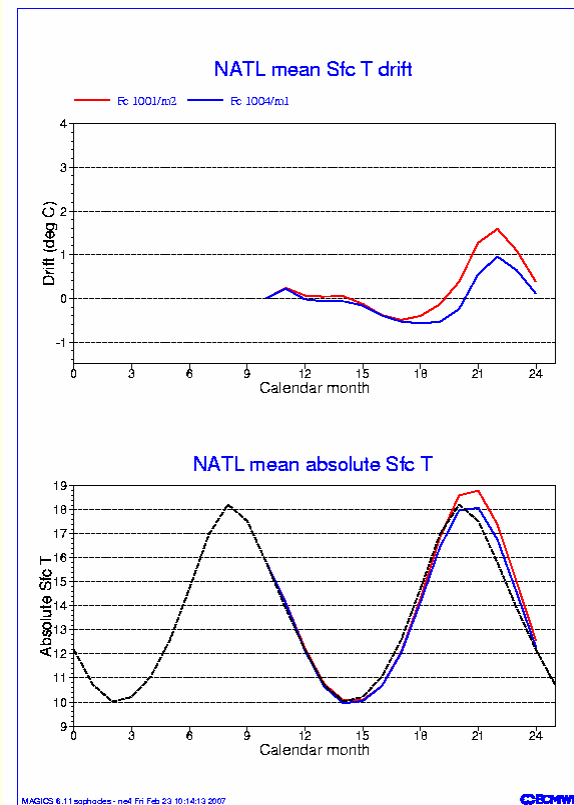
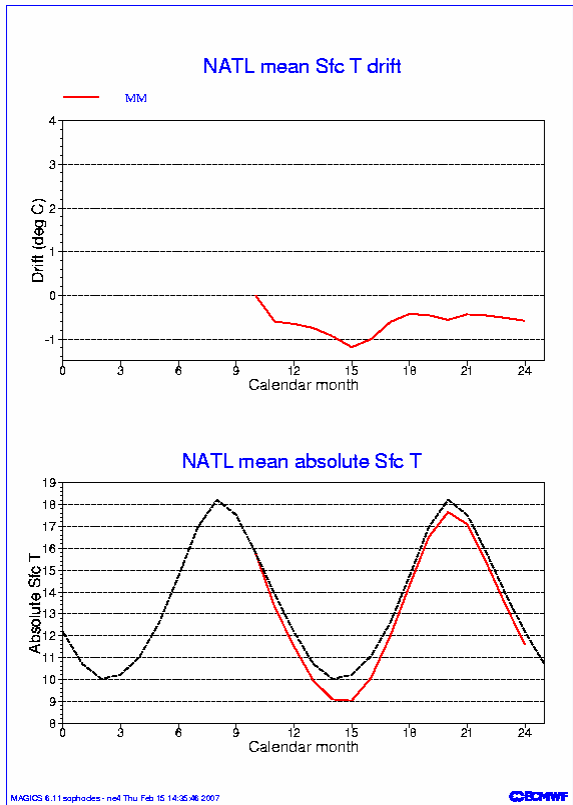
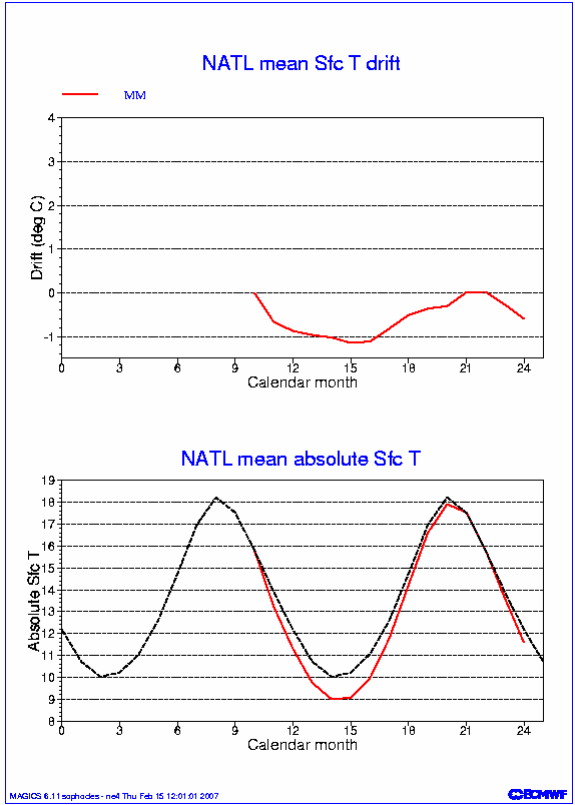
seasonal forecasts 1991-2001 Nov start dates: **mean drift**

SST North Atlantic

multi-model

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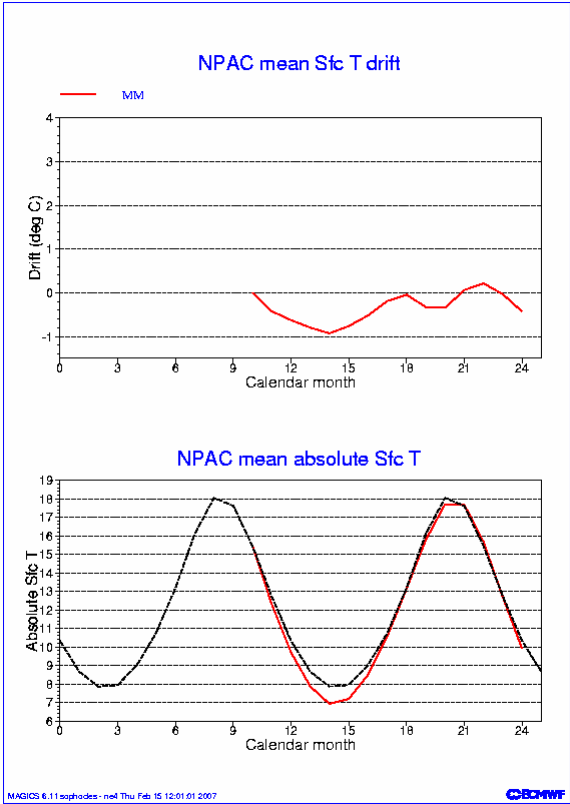
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SST North Pacific

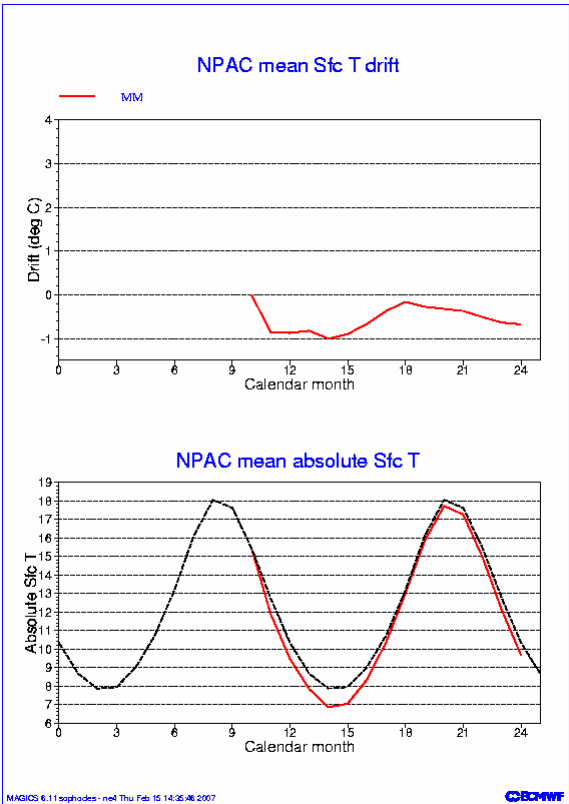
multi-model

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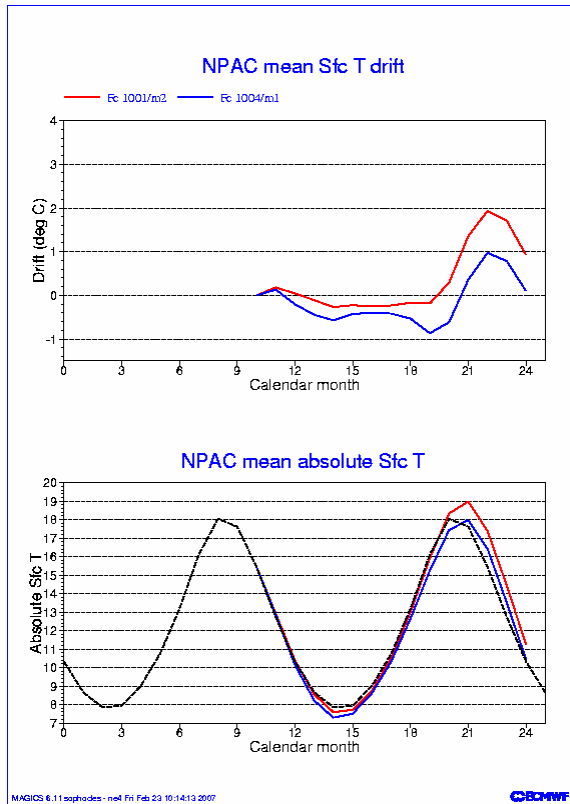
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RMSE & ensemble spread and Anomaly correlation



RMSE



ensemble st.dev



RMSE of persistence

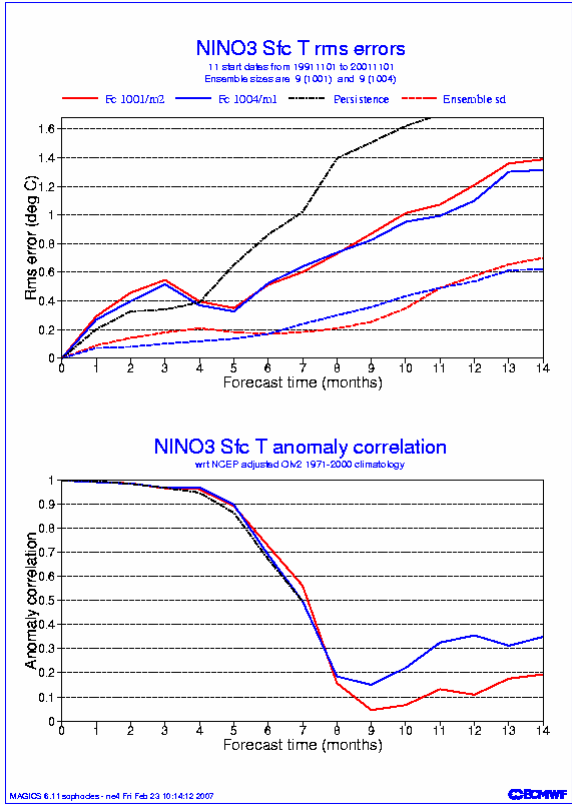
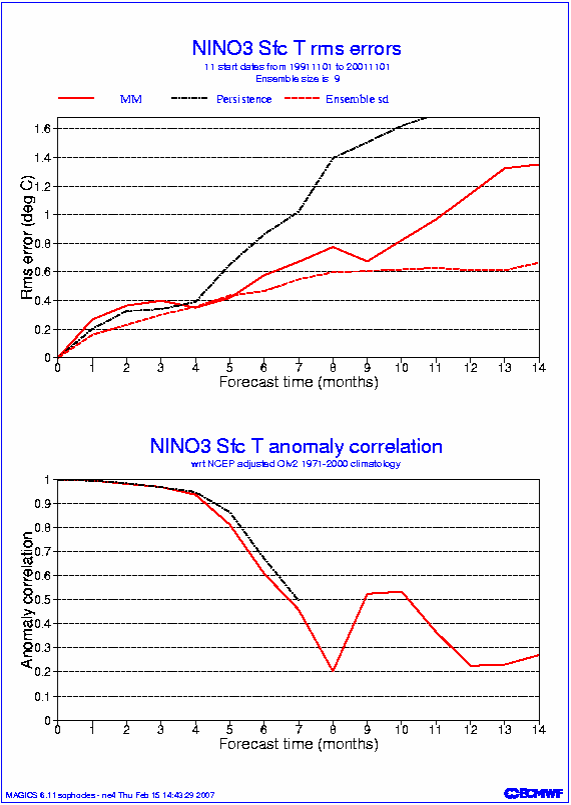
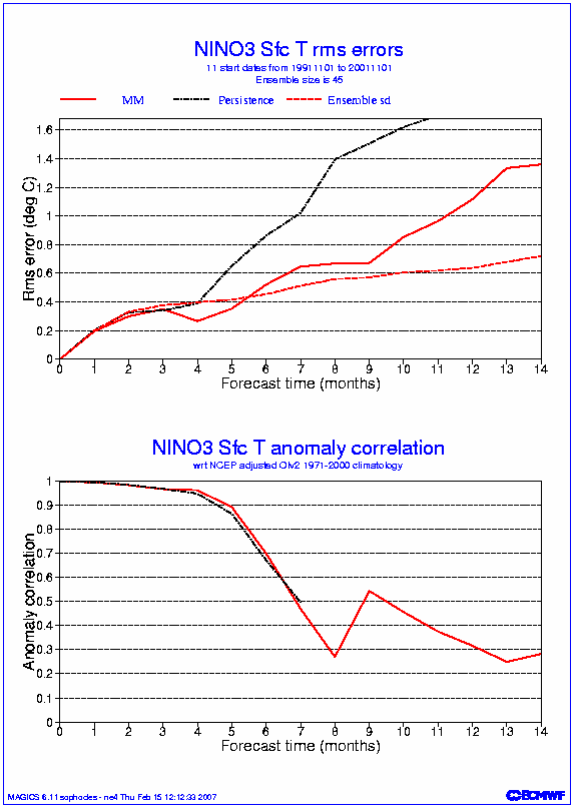
seasonal forecasts 1991-2001 Nov start dates: RMSE & spread and ACC

SST Nino3

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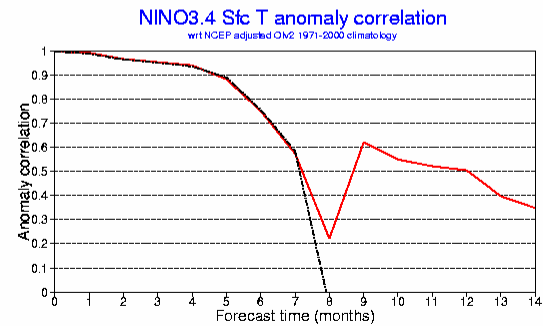
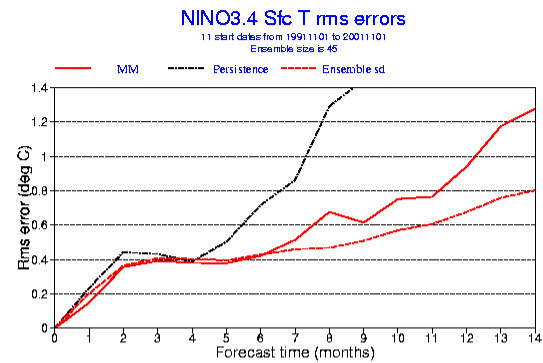
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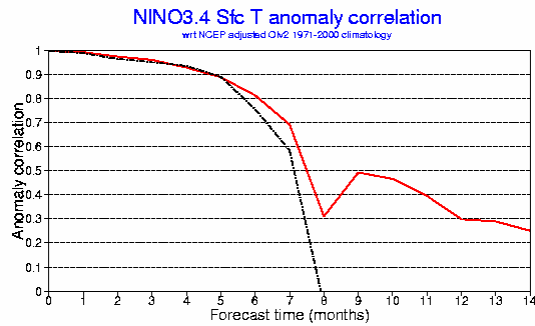
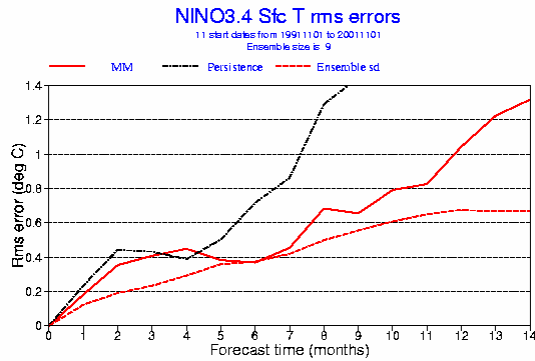
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stochastic physics



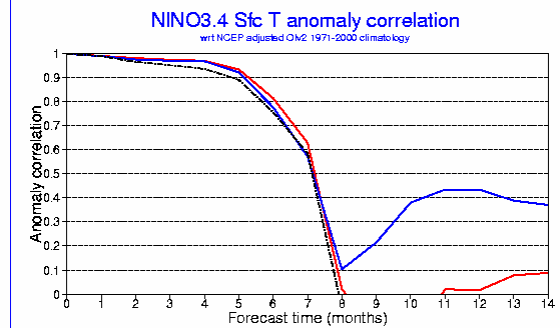
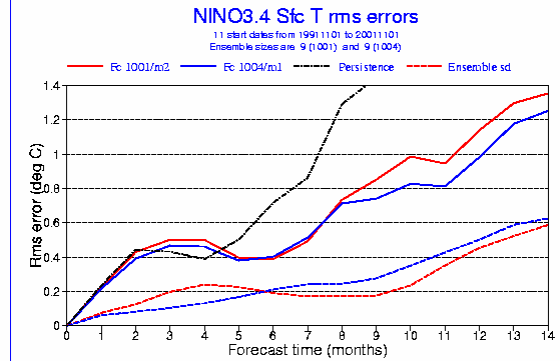
MAGICS 6.11 sophodes - ne1 Thu Feb 15 12:12:33 2007

ECMWF



MAGICS 6.11 sophodes - ne1 Thu Feb 15 14:43:23 2007

ECMWF



MAGICS 6.11 sophodes - ne1 Fri Feb 23 10:14:13 2007

ECMWF

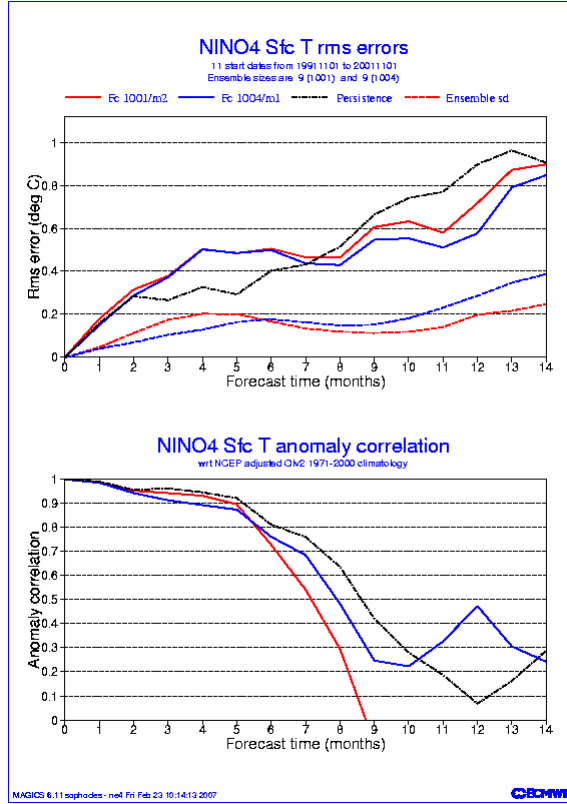
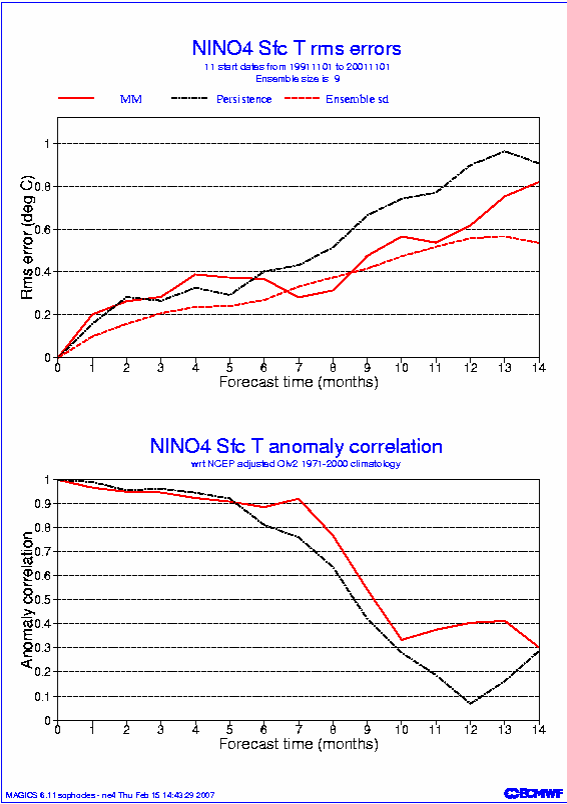
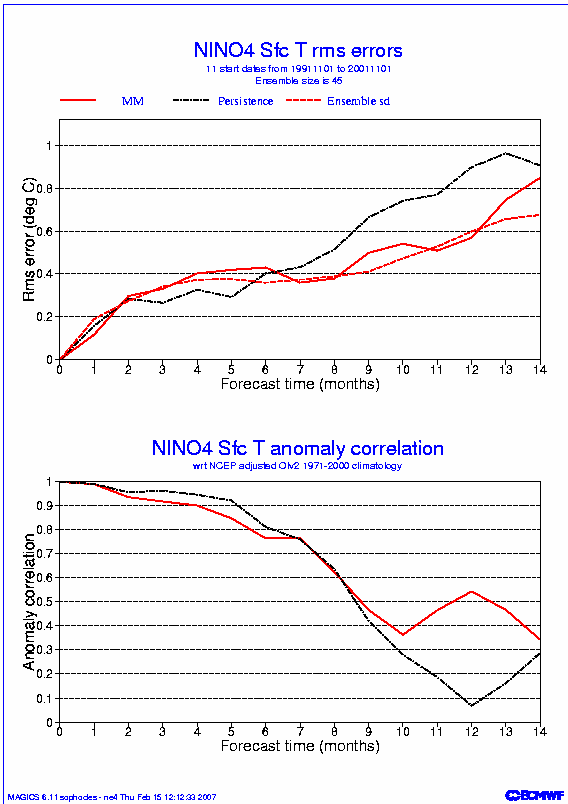
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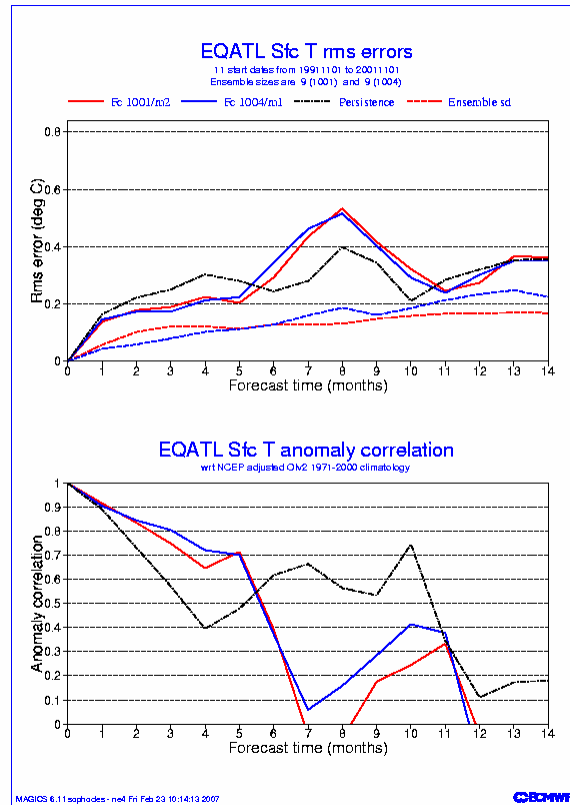
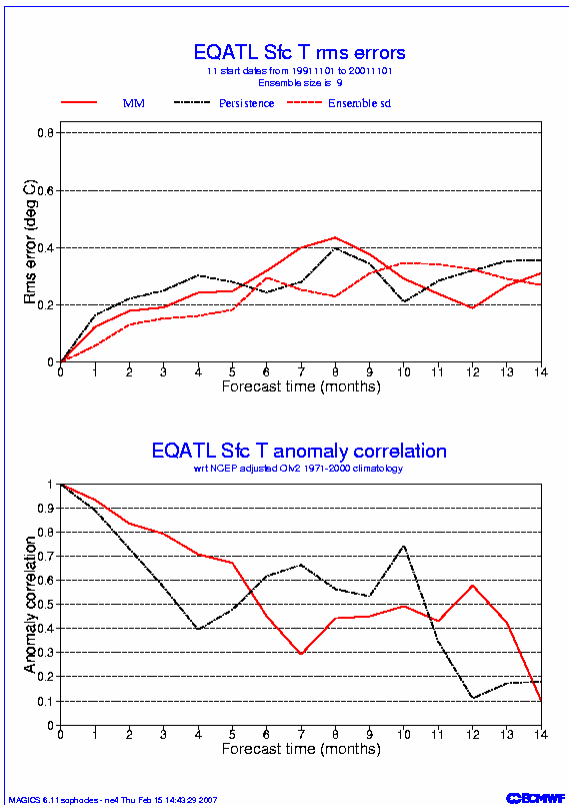
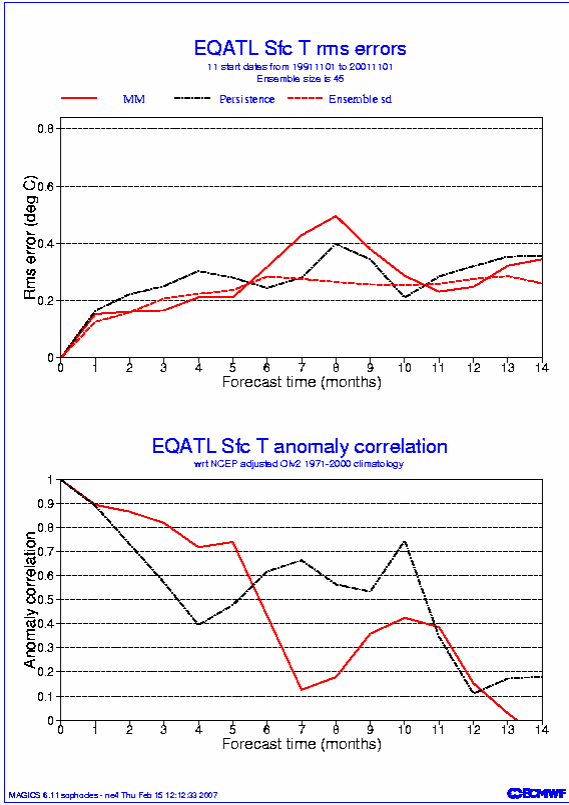
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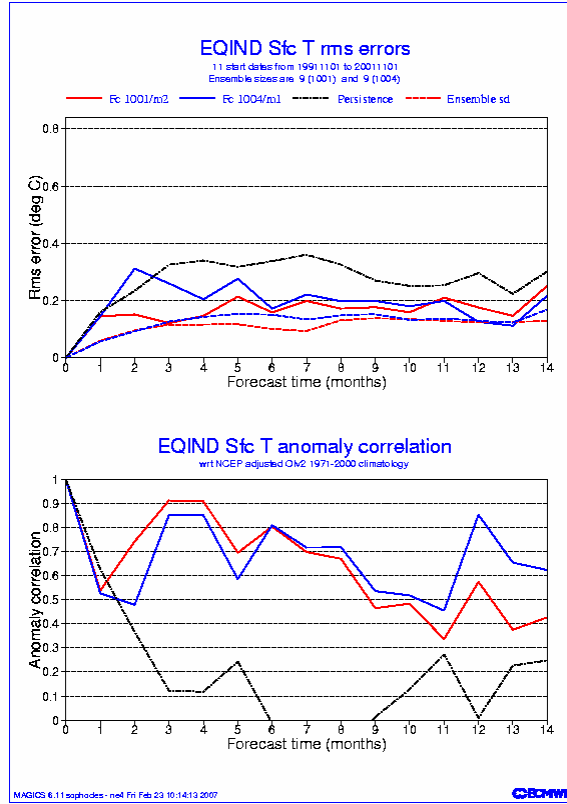
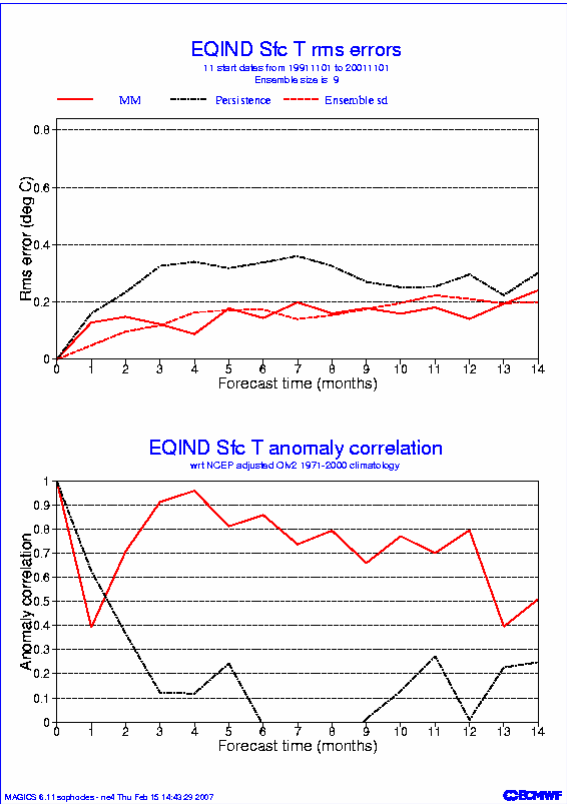
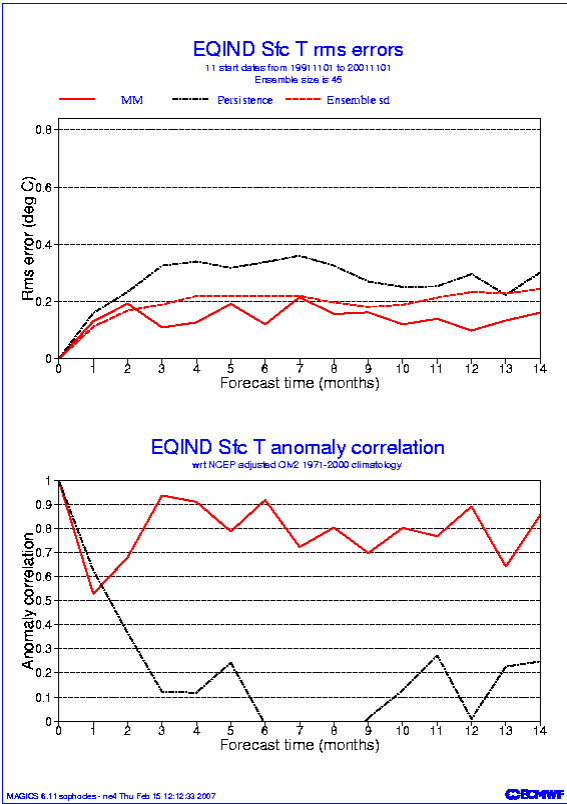
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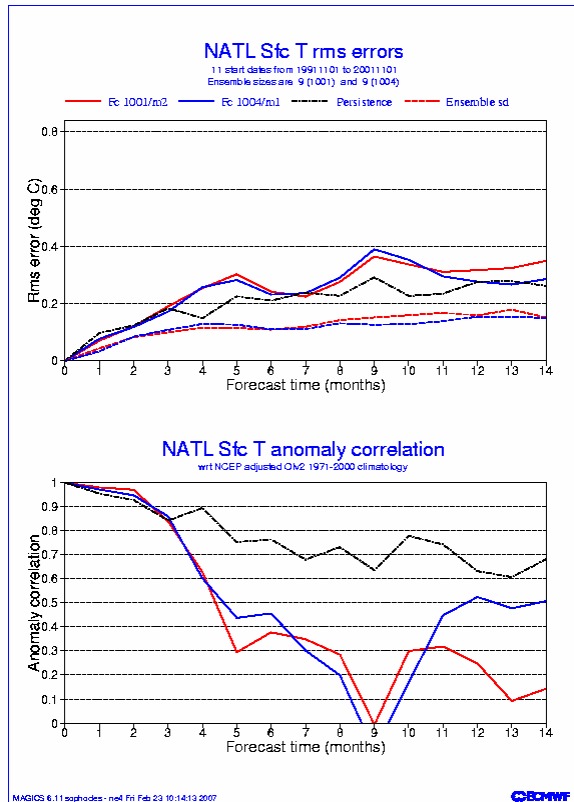
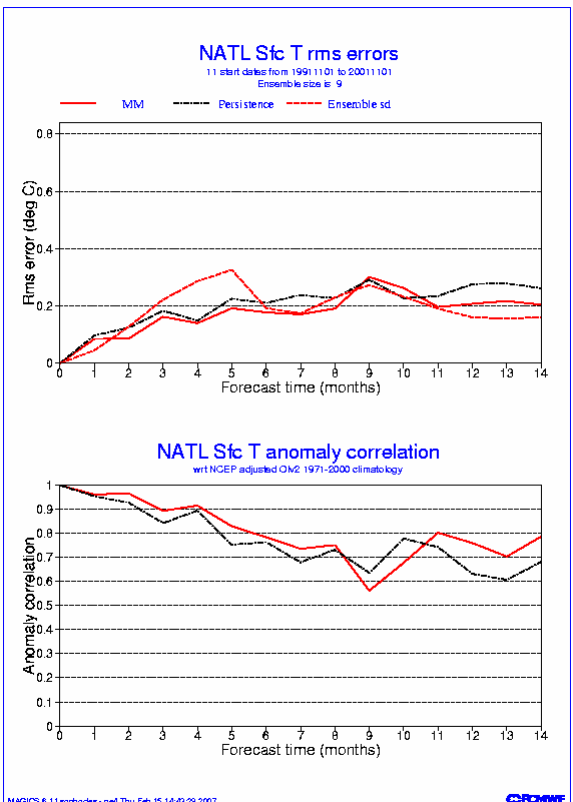
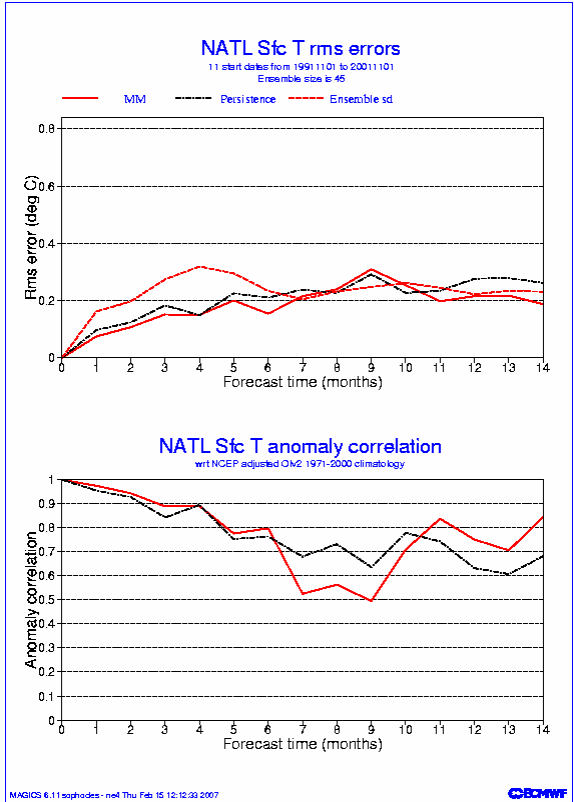
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