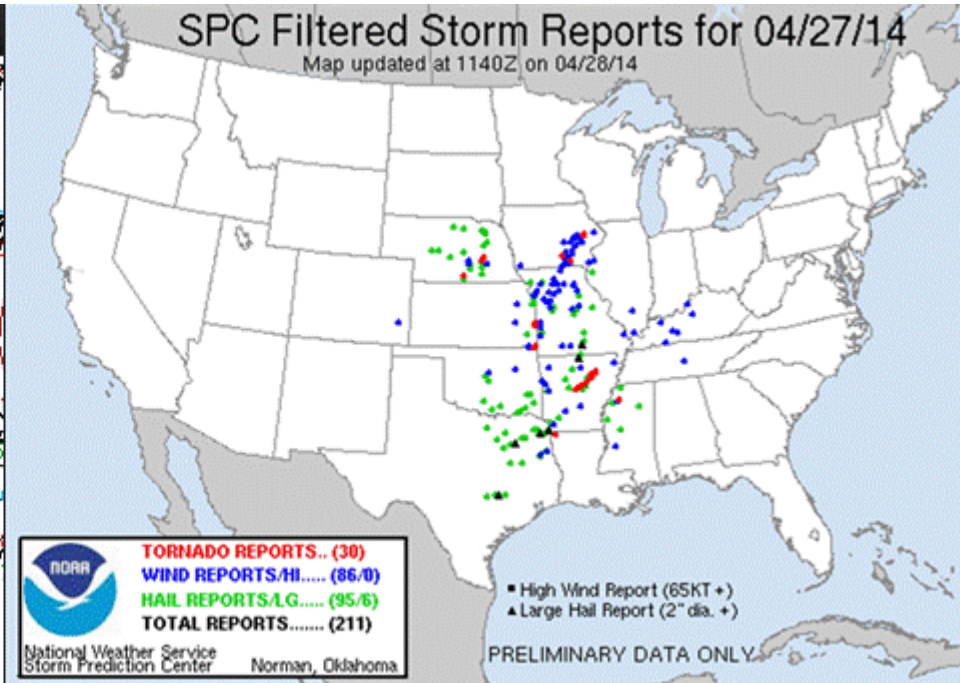
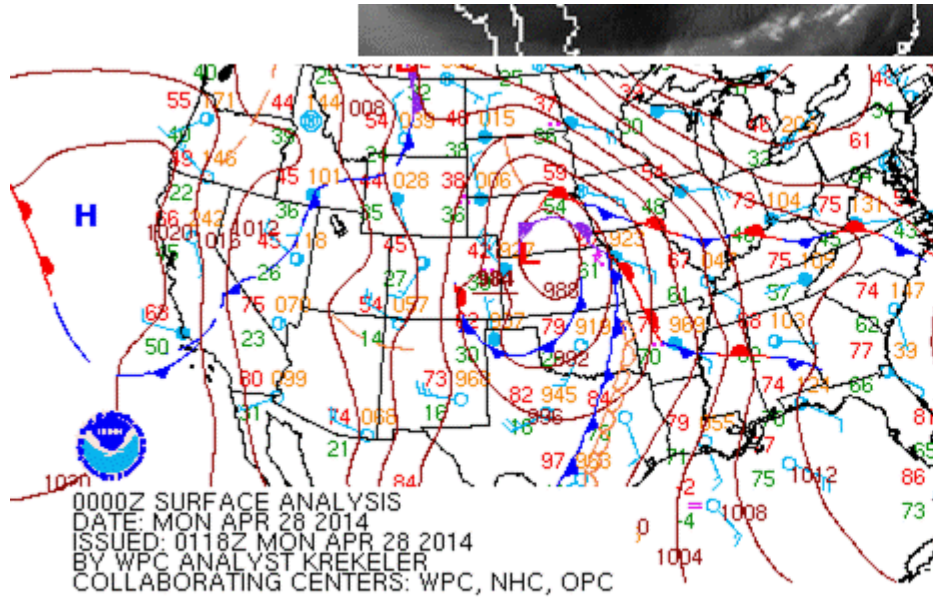


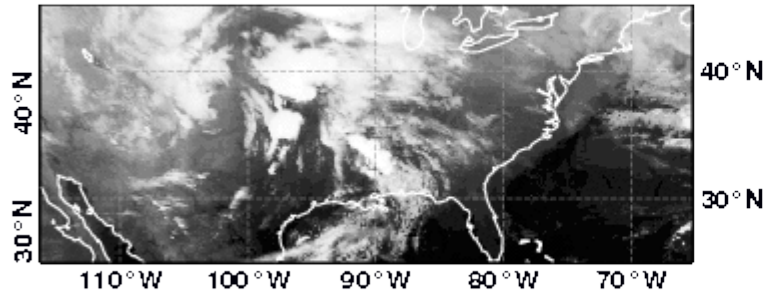
27 April 2014



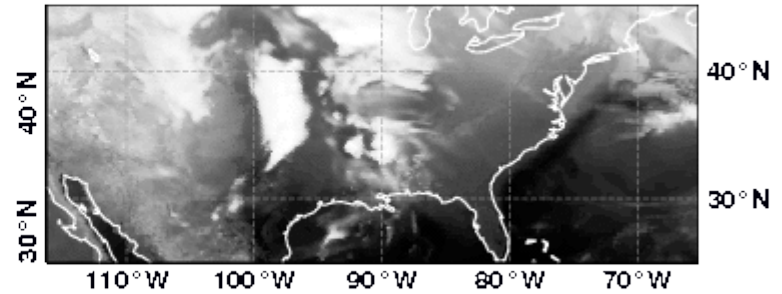
27 April 2014

Obs and Fc IR10.8 Satellite images

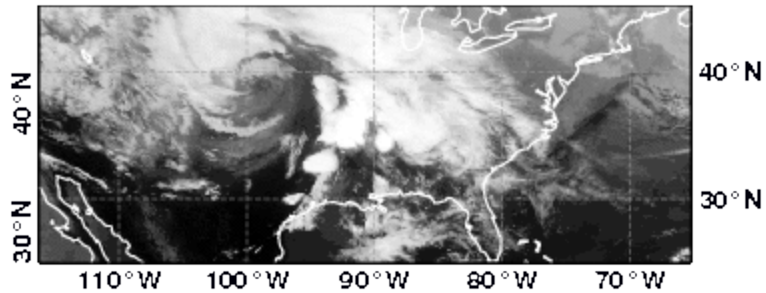
GOESIR10.8 20140427 12 UTC



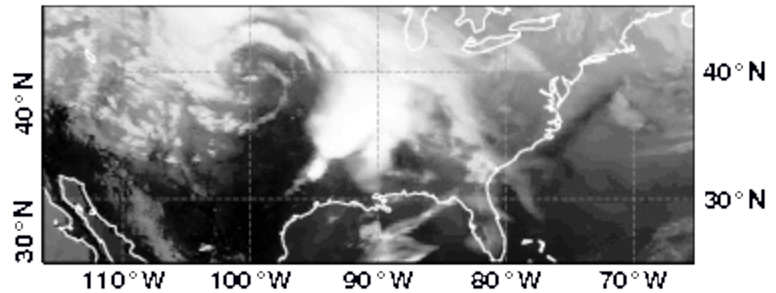
ECMWF 1 Fc 20140427 00 UTC+12h:



GOESIR10.8 20140428 0 UTC



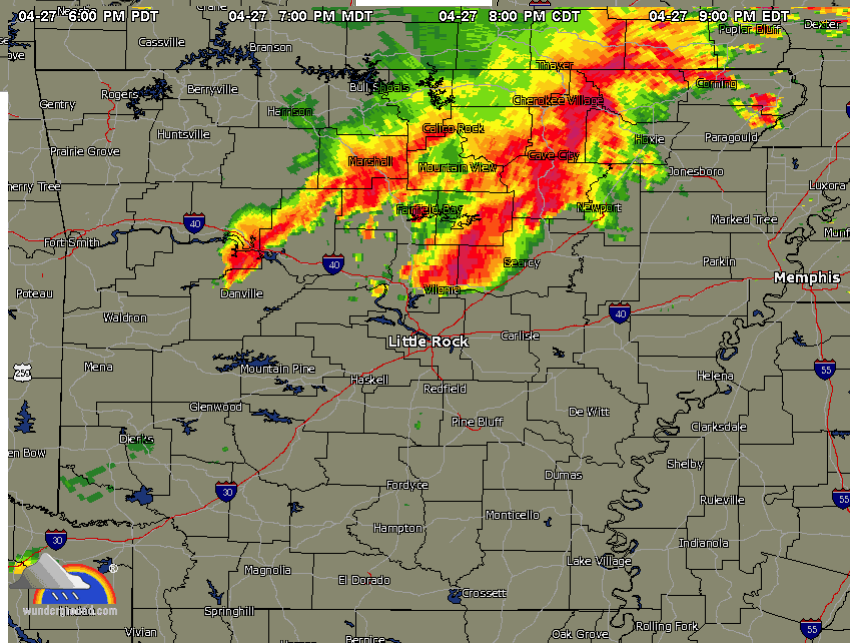
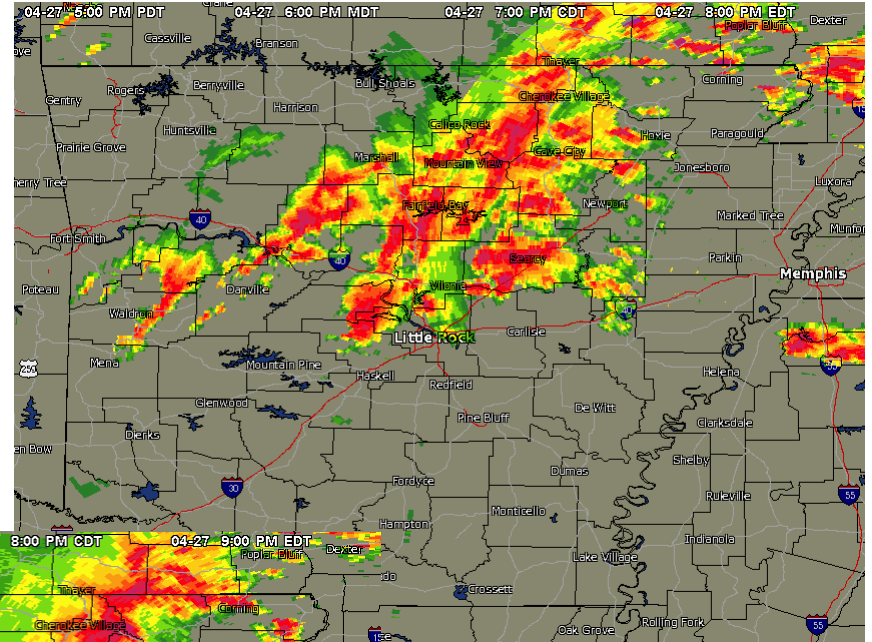
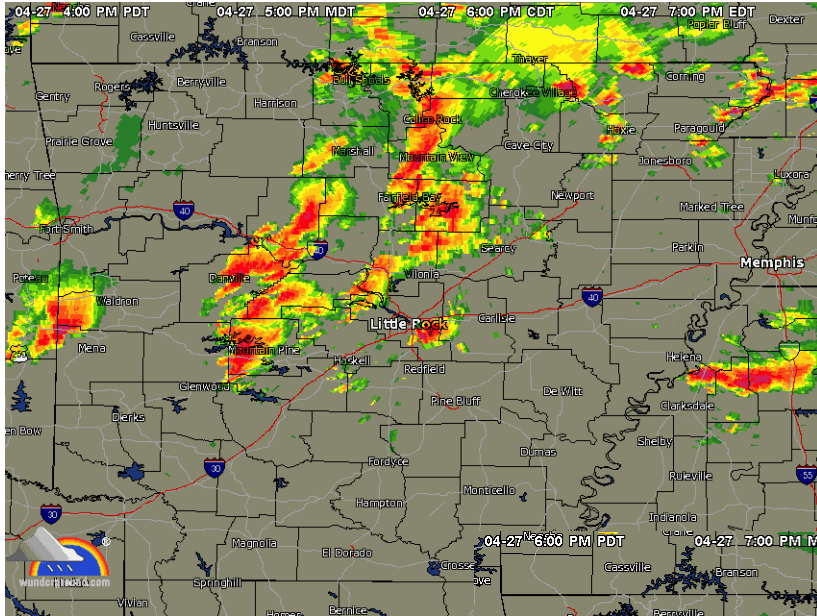
ECMWF 1 Fc 20140427 00 UTC+24h:

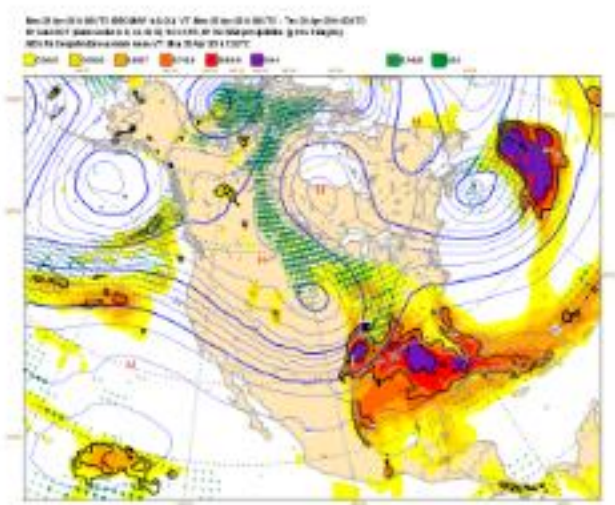


27 April 2014

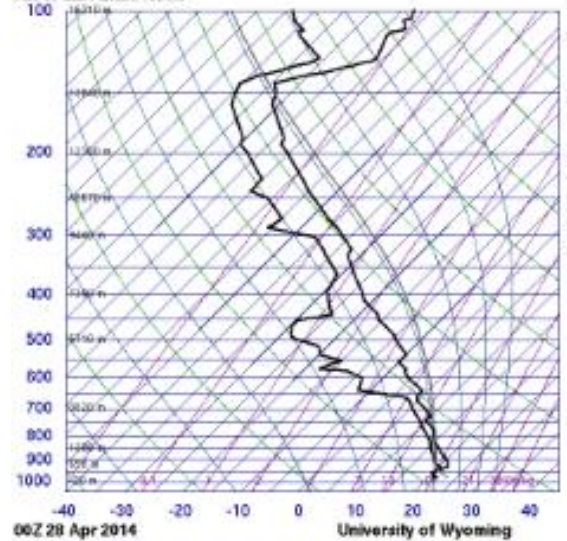


NEXRAD 18-20 LT



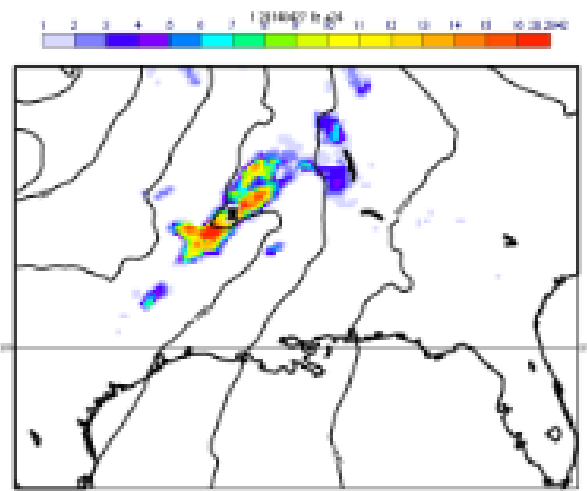


72340 LZK Little Rock



Handwritten notes:
 1000
 900
 800
 700
 600
 500
 400
 300
 200
 100
 0
 10
 20
 30
 40

SLAT	34.84
SLON	-92.28
SLV	112.9
SLW	-25.0
LFT	-0.24
LFTV	-0.66
SWET	437.5
KMK	39.33
CROT	24.73
VROT	26.13
TYS	30.89
CAPE	2110
CAPV	2045
CNS	-04.5
CNV	-02.8
DOLV	188.5
ROT	156.6
LPCV	828.9
LPCV	828.1
BRCH	0.79
BRCV	0.36
LCLT	292.2
LCLP	342.3
MLTH	288.2
MLMR	15.44
THCK	5730
PWAT	487.3



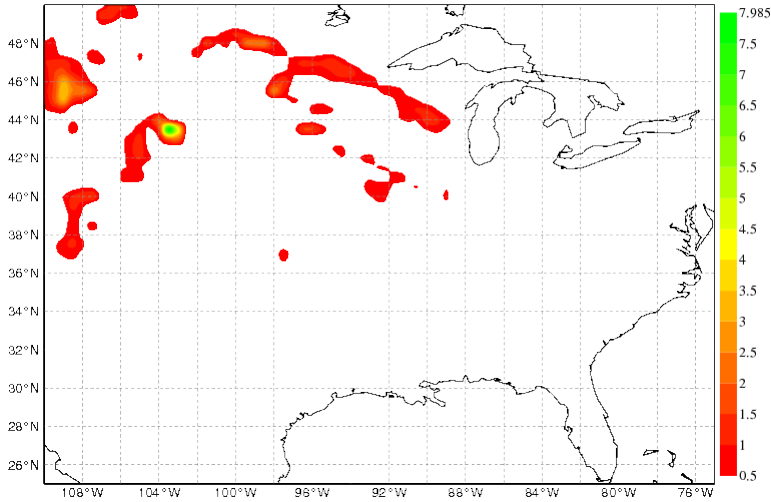
Excercises for Open IFS

- Run T255 from 20140427 00 + 30h
- Plot hourly precipitation rates
- Plot CAPE, CIN, 850 hPa Theta_e (compute with metview) and 200 hPa wind: Determine area of maximum “Threat”
- Plot soundings (Tephigram) on point 9 or are average) in threat area before and after “Tornadic event” to see convective adjustment
- Run T255 (a) without diurnal cycle option (RCAPDCYCL=0 in namcumf) and (b) without deep convection (LMFPEN=false in namcumf)

Hourly Rainfall rate

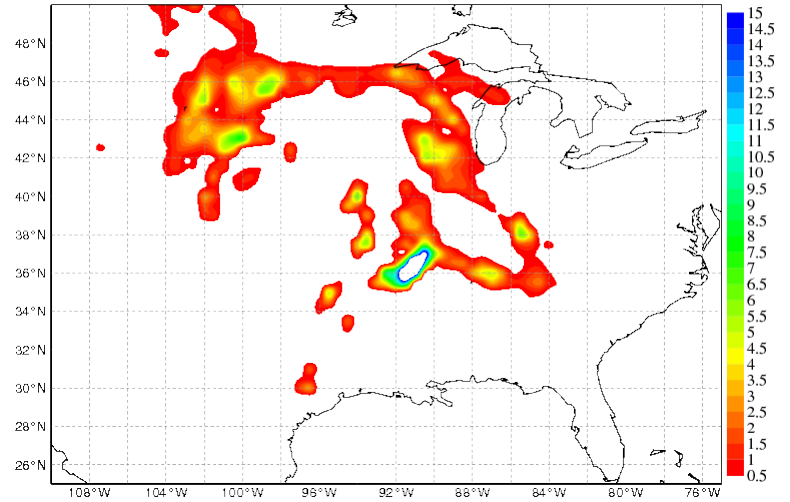
NEXRAD 27/04 6UTC

Sunday 27 April 2014 06UTC ECMWF Analysis +- VT: 06UTC 0m Total precipitation from observations
NEXRAD



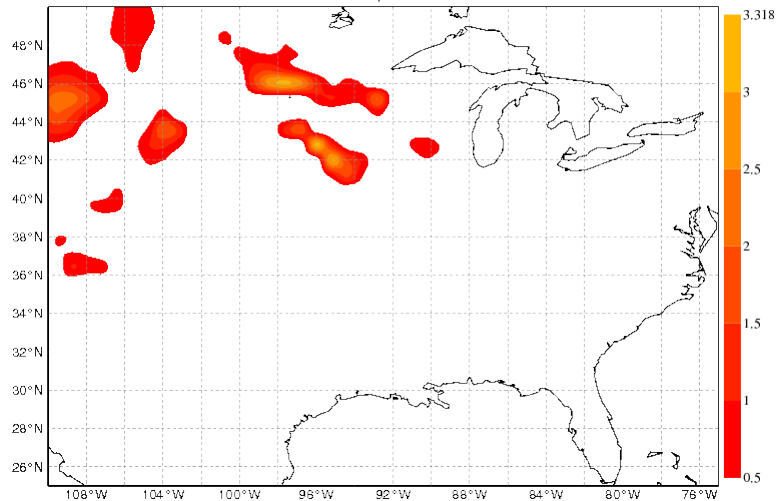
NEXRAD 28/04 2 UTC

Monday 28 April 2014 02UTC ECMWF Analysis +- VT: 06UTC 0m Total precipitation from observations
NEXRAD



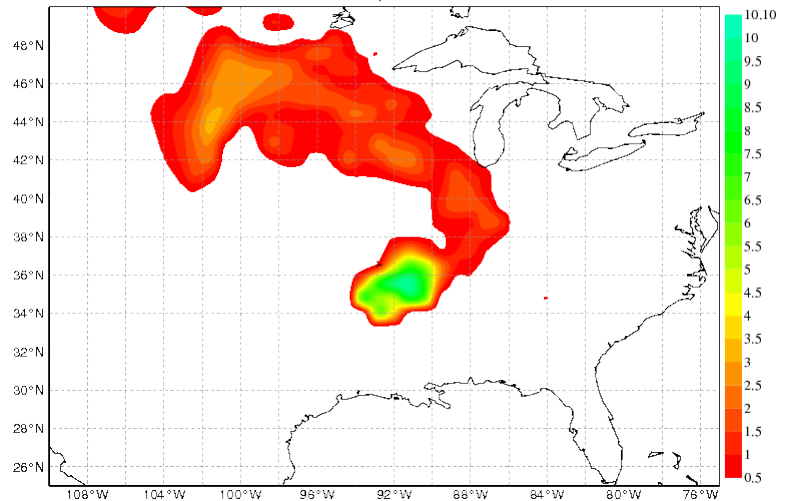
OpenIFS 40r1 T255 27/04 6UTC

Sunday 27 April 2014 00UTC ECMWF Forecast t+6 VT: Sunday 27 April 2014 06UTC Surface: **Convective precipitation
oper



OpenIFS 40r1 28/04 2 UTC

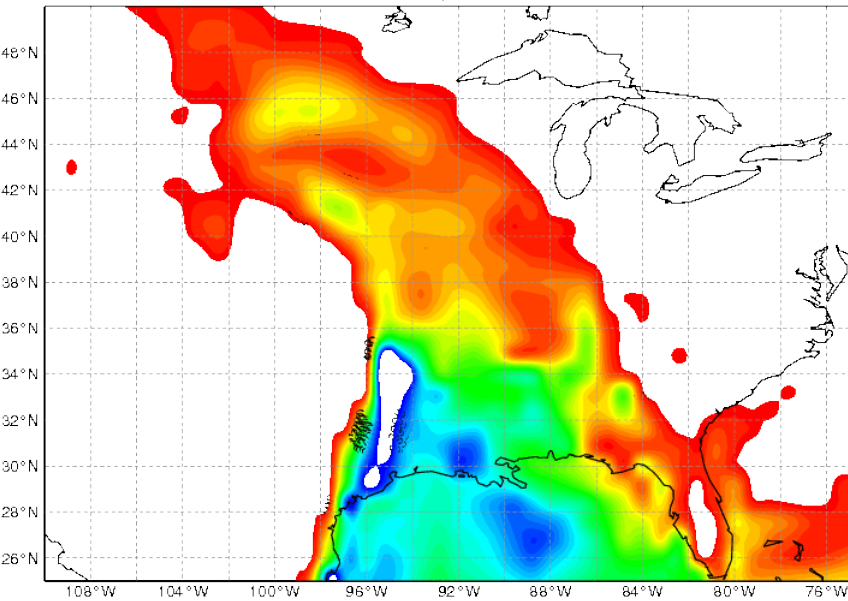
Sunday 27 April 2014 00UTC ECMWF Forecast t+26 VT: Monday 28 April 2014 02UTC Surface: **Convective precipitation
oper



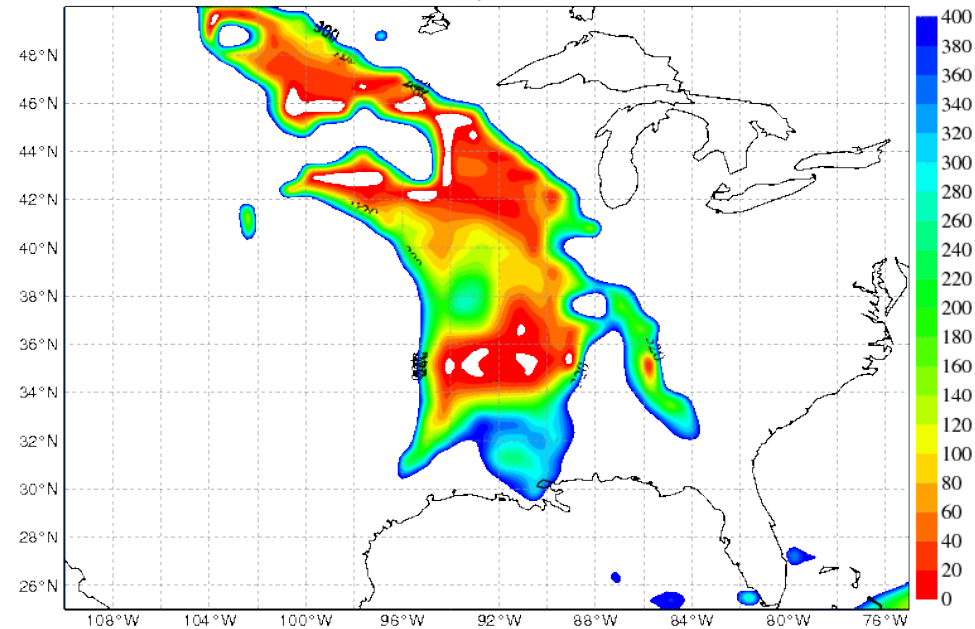
CAPE and CIN (J/kg)

OpenIFS 40r1 28/04 00 UTC

Sunday 27 April 2014 00UTC ECMWF Forecast t+22 VT: Sunday 27 April 2014 22UTC Surface: Convective available potential energy
oper



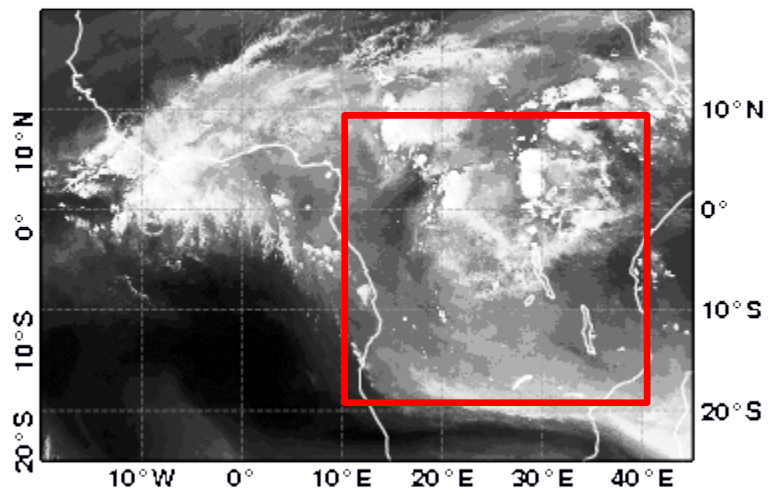
Sunday 27 April 2014 00UTC ECMWF t+24 VT: Monday 28 April 2014 00UTC Surface:
oper



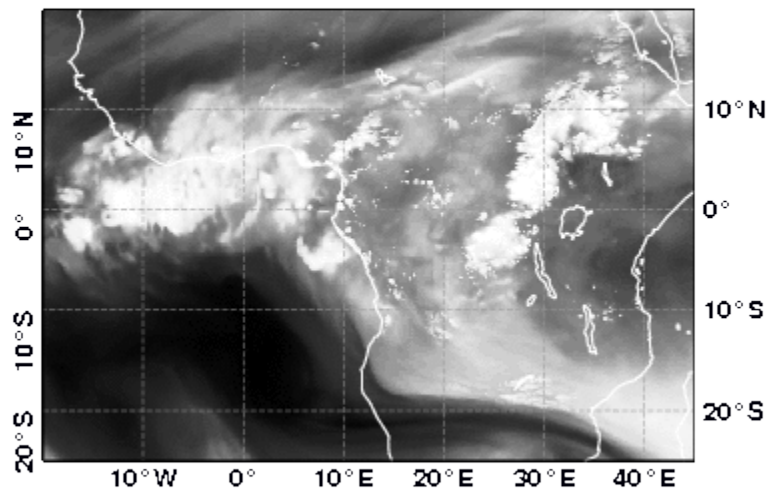
Exercises for Open IFS (continued)

- Evaluate diurnal cycle over Central Africa: plot hourly area average precip for the different runs: Area=[-20S-10N, 10-40E]

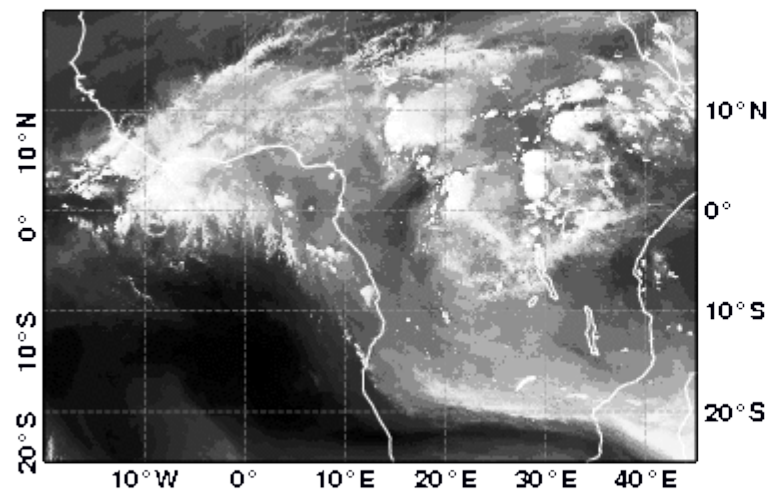
WV6.2 20140427 12 UTC



ECMWF 1 Fc 20140427 00 UTC+12h:



WV6.2 20140427 12 UTC



ECMWF 1 Fc 20140427 00 UTC+12h:

