

OHRFC CPC 6-10 Day Temperature & Precipitation Forecasts Adjustment Procedures

Thomas Adams
thomas.adams@noaa.gov

National Weather Service
Ohio River Forecast Center, Wilmington, OH

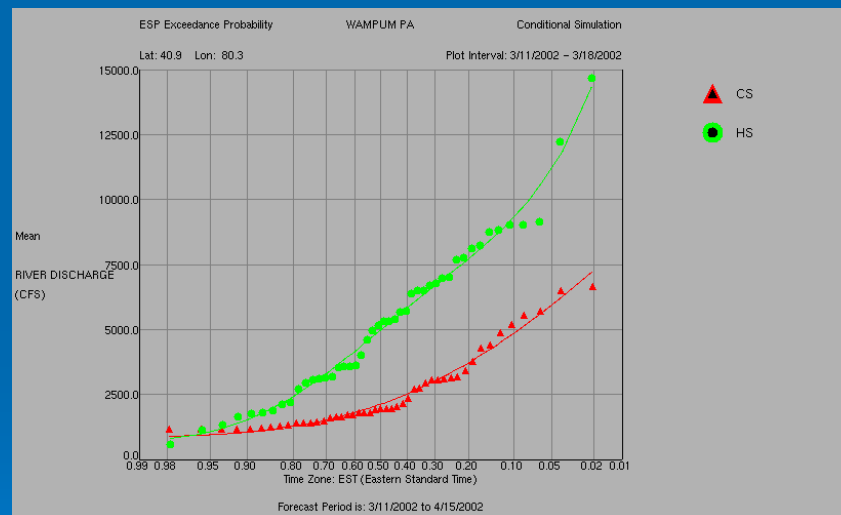
Wednesday, June 16, 2004

Ohio River Forecast Center



Preliminary Comments

- Assumptions
 - Use of OHD's recommended procedures, i.e, those currently available to **all** RFCs
 - ESP long lead-time forecasts are being generated
 - Near-term weather & climate forecasts (Days 1-5 & 6-10) influence long lead-time ESP forecasts
- OHRFC generates ESP/AHPS forecasts on a weekly basis, every Monday afternoon (but this may need to change)
- Minimize subjectivity in ESP CPC climate adjustments
- Helpful if you or your staff is lazy & you would like an easier way to do things





Steps for Making Long Lead-time (30-90 Days) ESP Forecasts

- Carryover is saved
- The script *ens_get_cpc* is run to obtain CPC monthly/seasonal grids
- Run *ESPADP* to generate the ESPADP input file
- Run *ens_pre* to make time series adjustments
- Run *ESP* to generate ESP time series
- Run *ESPADP* in batch mode to generate AHPS graphics
- *Ensemble post processing*
- *Probabilistic (ESP) forecast verification*



ESPADP Climate Adjustments

ICPCPreAdj

Initial Parameters
 Contributing Region: AGU
 Initial Date (m/d/y): 10 23 2002

1-5 Day Forecast
 Start Day: 23 Start Month: 10
 Temp Min Anomaly (degF): 0
 Temp Max Anomaly (degF): 1
 Precipitation Total (inches): 0

6-10 Day Forecast
 Start Day: 23 Start Month: 10
 Temperature: much_below_normal
 Precipitation: no_precip

Seasonal Forecast
 Initial Period: Nov 2002

Period	Precipitation		Temperature	
	Category	Prob. Anomaly (%)	Category	Prob. Anomaly (%)
Nov 2002	climatology	0	climatology	0
Nov - Jan (NDJ) 2002	climatology	0	climatology	0
Dec - Feb (DJF) 2002	climatology	0	climatology	0
Jan - Mar (JFM) 2003	climatology	0	climatology	0
Feb - Apr (FMA) 2003	climatology	0	climatology	0
Mar - May (MAM) 2003	climatology	0	climatology	0
Apr - Jun (AMJ) 2003	climatology	0	climatology	0
May - Jul (MJJ) 2003	climatology	0	climatology	0
Jun - Aug (JJA) 2003	climatology	0	climatology	0
Jul - Sep (JAS) 2003	climatology	0	climatology	0
Aug - Oct (ASO) 2003	climatology	0	climatology	0
Sep - Nov (SON) 2003	climatology	0	climatology	0
Oct - Dec (OND) 2003	climatology	0	climatology	0
Nov - Jan (NDJ) 2003	climatology	0	climatology	0

Read Adjustment File WriteAdjustmentFile Cancel

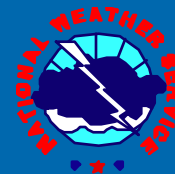
AGU.cpc
 Printed: Tuesday, November 05, 2002 12:00:47 PM Page 1 of 1

```
# File generated by...
# program:  espadp 5.2.2r22L (26 Aug 2002)
# user:      oper
# date:     Wed Oct 23 10:11:39 EDT 2002
# host:     del15-tlr
# directory: /awips/hydroapps/lx/rfc/nwarfs/ens/files/oper/preadjust/AREAS
# command:  espadp
#
#ESPADP CPC PreAdjustment File
#Automatically Generated
#Do not Edit or Delete
#Printed in fixed width format at the request of HRL CPC PreAdj Team
#-----
Region:      AGU
Date:       Nov 04 2002

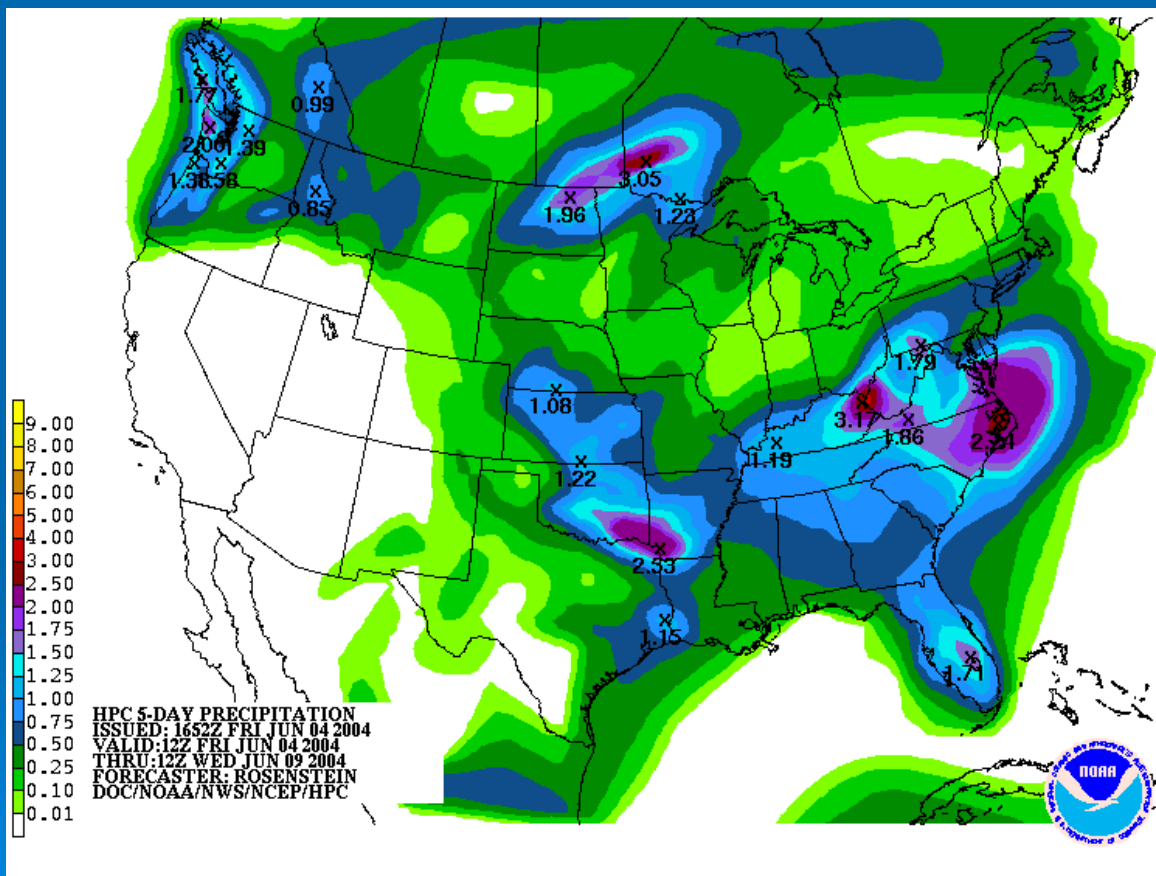
1- TO 5-DAY FORECAST:
Temp. anomaly (oF)      Precipitation
Start date              min.      max.      (inches)
-----
Nov 04                  -4.00    -8.00     0.25

6- TO 10-DAY FORECAST:
Start date              Temperature categ.  Precipitation categ.
-----
Nov 10                  below_normal      near_normal

MONTHLY/SEASONAL OUTLOOKS
Period                  Temperature          Precipitation
                        Category Anomaly(%)  Category Anomaly(%)
-----
Nov 2002                near_normal 33.00    near_normal 33.00
Nov - Jan (NDJ) 2002   above_normal 5.00    climatology 0.00
Jan - Mar (JFM) 2003   above_normal 5.00    below_normal 5.00
Feb - Apr (FMA) 2003   climatology 0.00    climatology 0.00
Mar - May (MAM) 2003   climatology 0.00    climatology 0.00
Apr - Jun (AMJ) 2003   climatology 0.00    climatology 0.00
May - Jul (MJJ) 2003   climatology 0.00    climatology 0.00
Jun - Aug (JJA) 2003   climatology 0.00    climatology 0.00
Jul - Sep (JAS) 2003   climatology 0.00    climatology 0.00
Aug - Oct (ASO) 2003   climatology 0.00    climatology 0.00
Sep - Nov (SON) 2003   climatology 0.00    climatology 0.00
Oct - Dec (OND) 2003   climatology 0.00    climatology 0.00
Nov - Jan (NDJ) 2003   climatology 0.00    climatology 0.00
```



HPC 5-day Precipitation

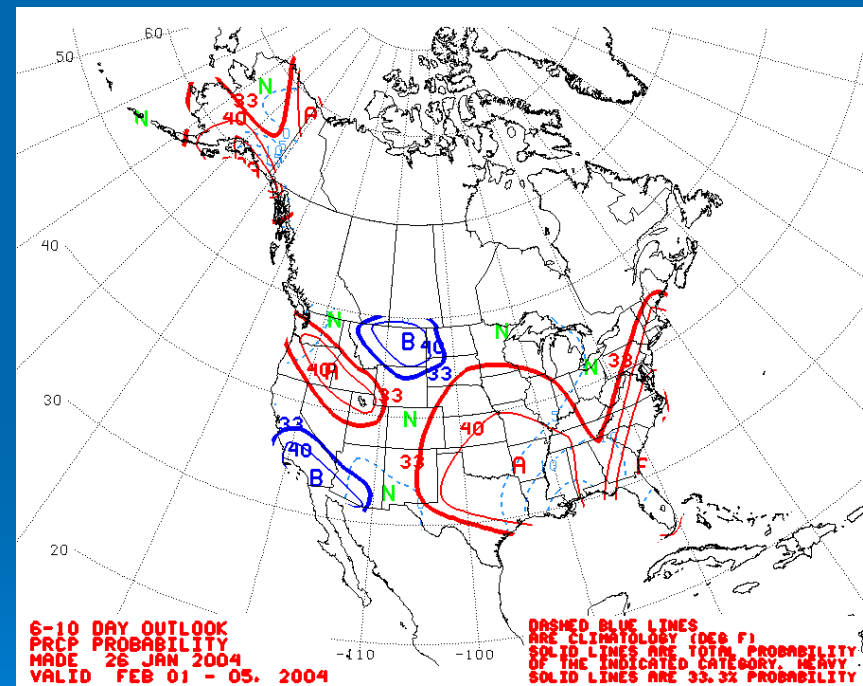
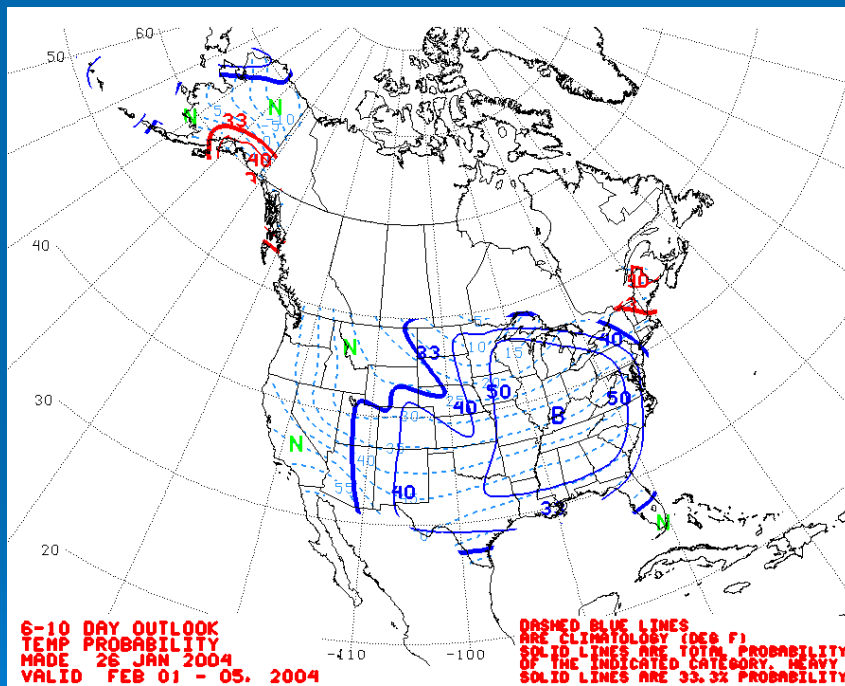


Wednesday, June 16, 2004

Ohio River Forecast Center

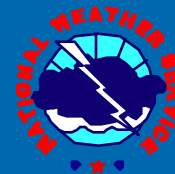


CPC 6-10 Day Outlooks

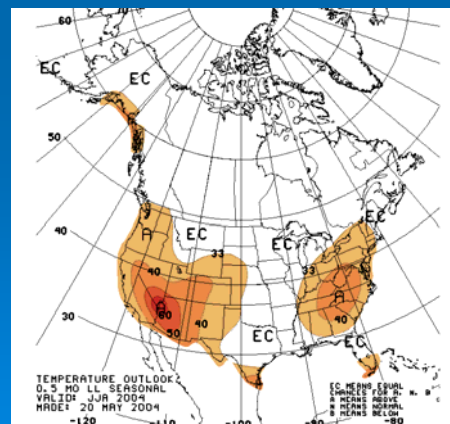
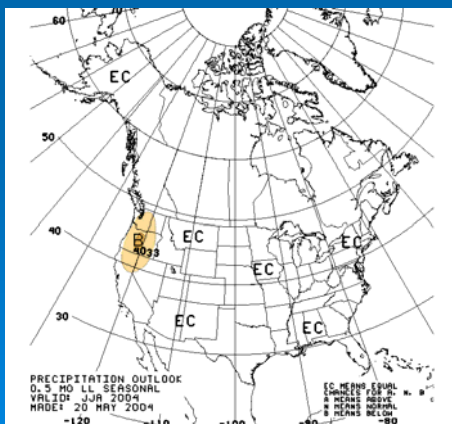
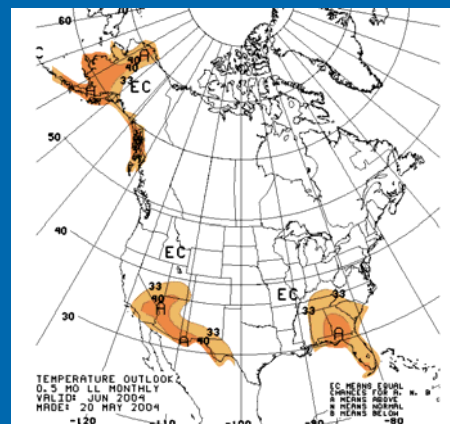
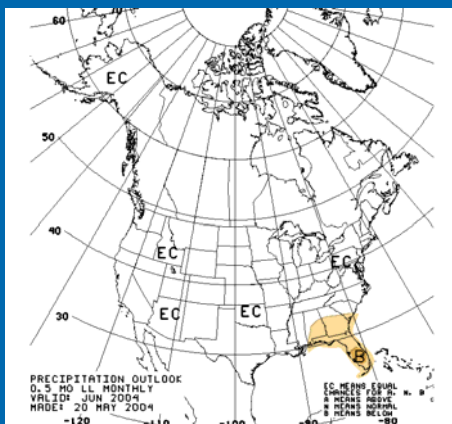


Wednesday, June 16, 2004

Ohio River Forecast Center



CPC Monthly & Seasonal Outlooks



Wednesday, June 16, 2004

Ohio River Forecast Center

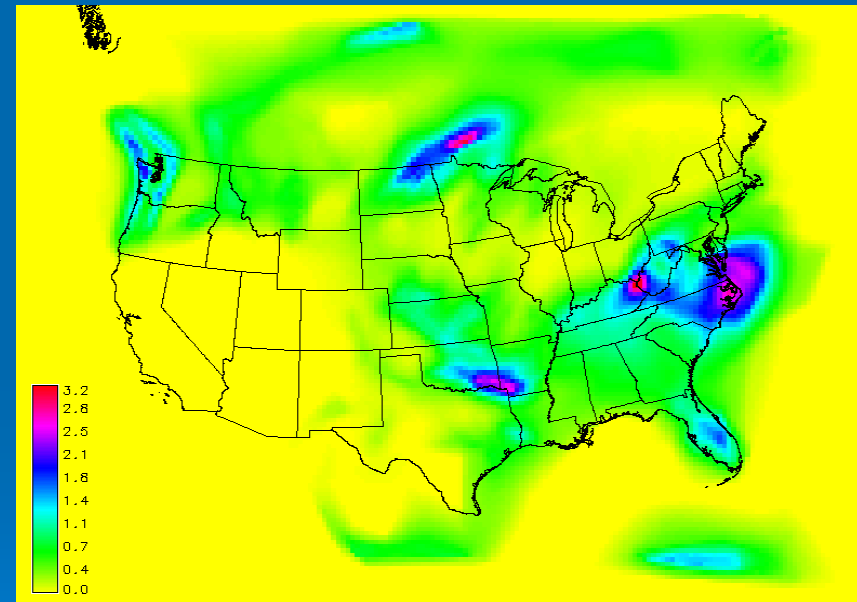
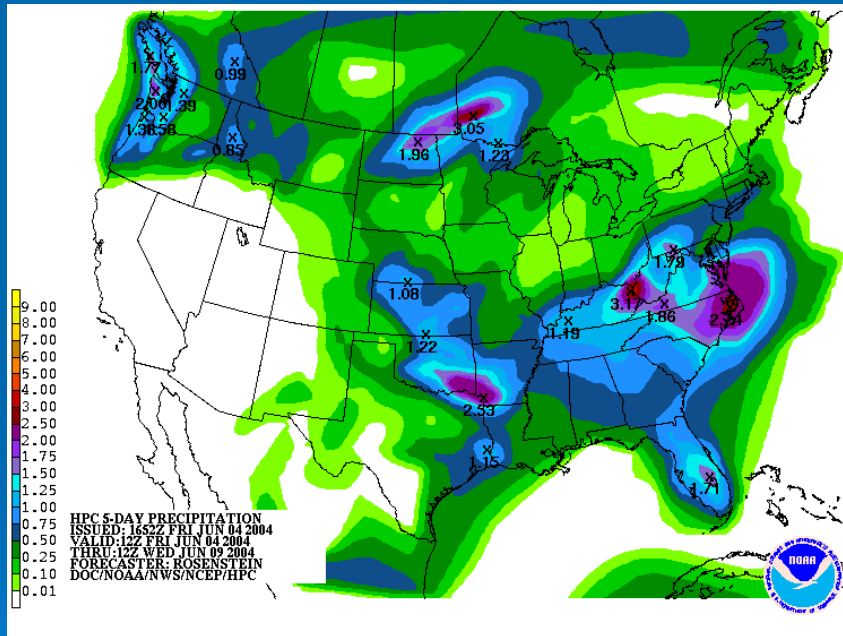


OHRFC Methods

- Automatically generate adjustments from HPC & CPC grids
 - ftp grids from HPC & CPC
 - Run batch scripts to:
 - Reformat grids for GIS import
 - Re-project grids
 - Calculate probability adjustments by Forecast Group
 - Generate ESPADP Input file
 - Follow OHD *ENS* procedures



HPC 5-day Precipitation

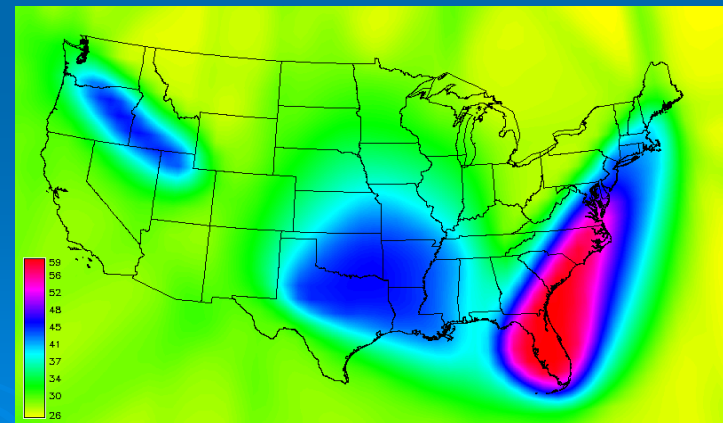
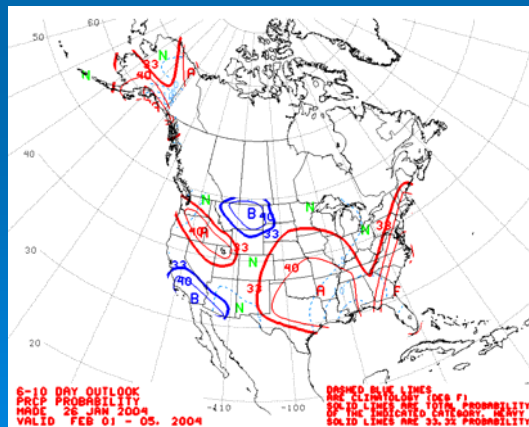
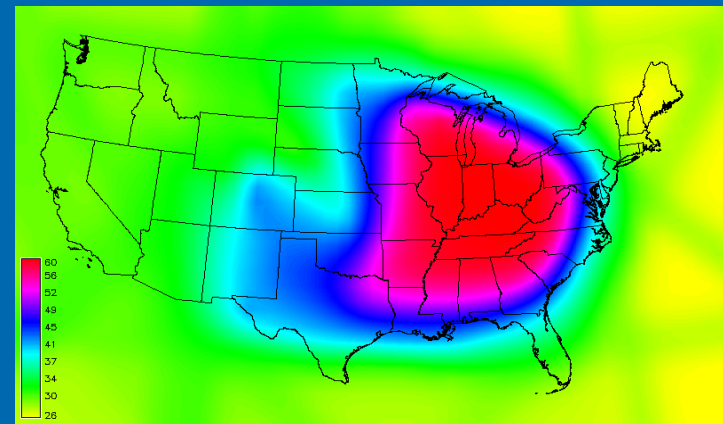
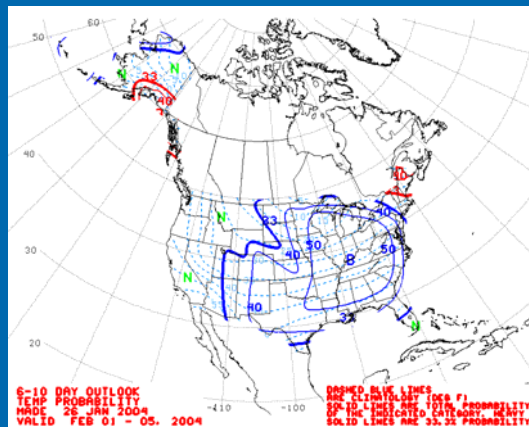


Wednesday, June 16, 2004

Ohio River Forecast Center



CPC 6-10 Day Outlooks

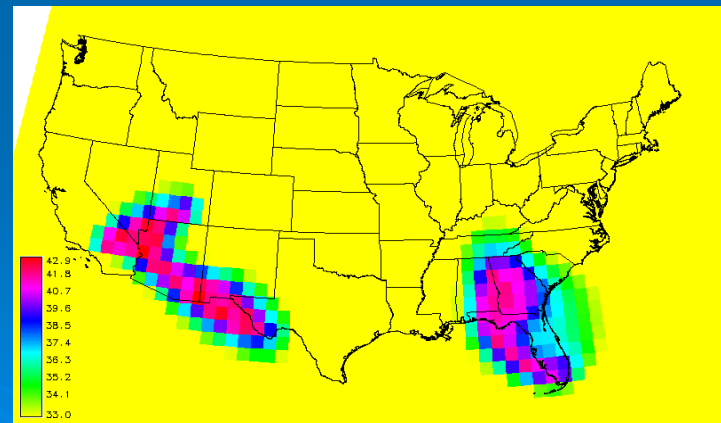
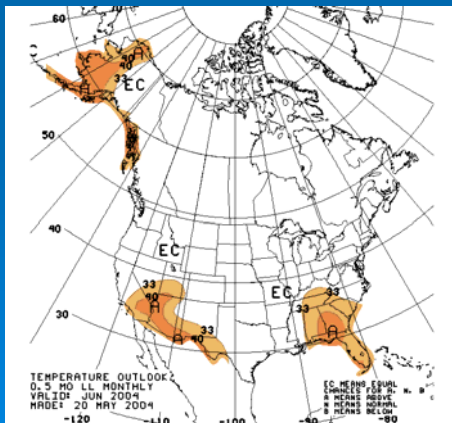
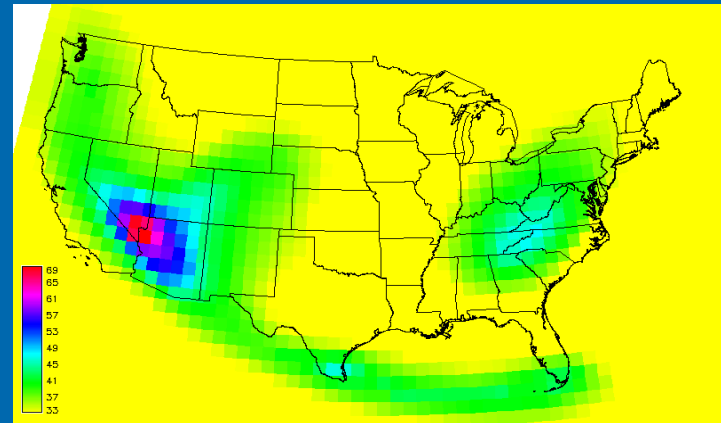
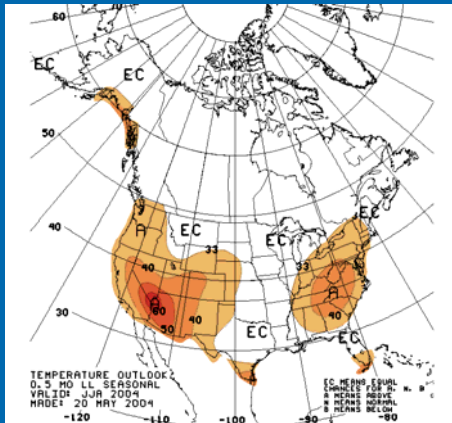


Wednesday, June 16, 2004

Ohio River Forecast Center



CPC Monthly & Seasonal



Wednesday, June 16, 2004

Ohio River Forecast Center



Generated Probabilities

33	33	33	33	33	33	738819
33	33	33	33	33	33	738990
33	33	33	33	33	33	738640
33	33	33	33	33	33	738673
33	33	33	33	33	33	738957
33	33	33	33	33	33	738879
33	33	33	33	33	33	739036
33	33	33	33	33	33	738747
33	33	33	33	33	33	739200
33	33	33	33	33	33	739133
33	33	33	33	33	33	738050
33	33	33	33	33	33	738729
33	33	33	33	33	33	738913
33	33	33	33	33	33	738678
33	33	33	33	33	33	738590
33	33	33	33	33	33.43	738943
33	33	33	33	33	33	738565
33	33	33	33	33	33	739016
33	33	33	33.2	33.43	35.28	738368
33	33.48	35.28	34.76	35.4	35.4	738532
33	33	33	33	33	33	738969
33	33	33	33	33	33	738463
33	33	33	33	33	33	738583

Wednesday, June 16, 2004

Ohio River Forecast Center