Cloud outlook for Wednesday and Friday:

The northern part of the Aura track will head straight through the upper level wave that is bringing our fundamental weather change. Further south we can expect both low and high clouds associated with the ample moisture in the Gulf and some lifting associated with the approaching system mentioned above. Middle cloud is suggested only in the northern Oklahoma area. Thus, the track will either be in cloud, or at the edge of cloud. The eta model basically confirms this picture, with the difference that there is more high cloud than the GFS model suggests. I have attached the forecasts for tomorrow (total, high, low and middle – the first four plots).

For Friday, the latest total cloud forecast did not come in, so I have attached a plot from the NOAA ARL web site. The basic difference is that the region of cloud cover (forecast) has now penetrated further north along the Aura flight track than the previous 120 hour forecast would suggest (the fifth and sixth plots show 120 hour and 90 hour forecasts for total cloud cover from the GFS). There does appear to be significant high and middle cloud along the Aura track for this flight day (seventh and eight plots). The low cloud (not shown) is mostly over the Gulf. Clouds and relative humidity are, of course, closely related (!), and one trend in the forecasts can be seen by comparing the 300mb RH for the 120 hour and 96 hour forecasts. Things are clearly moister in the later run at high levels.

I have turned the phone off in the bedroom, so you can call me at home if you want.

408 730 5282.
18 UTC on 10 November, 2004 at 500.0 mb

NMC, Grid: GG1X1
Seq: E01, Spec: SAVN170L42
42 hr fcst

Total CF ()

Z (dam)  Ascent (6 mb/hr)  Descent (6 mb/hr)  Trop (EPV=2.5)
18 UTC on 10 November, 2004 at 850.0 mb

NMC, Grid: GG1X1
Seq: E01, Spec: SAVN170L42
42 hr fcst

Low CF ()

Z (dam) Ascent (6 mb/hr) Descent (6 mb/hr) T (K)
18 UTC on 10 November, 2004 at 500.0 mb

NMC, Grid: GG1X1
Seq: E01, Spec: SAVN170L42
42 hr fcst

Middle CF ()

Z (dam)  Ascent (6 mb/hr)  Descent (6 mb/hr)  Trop (EPV=2.5)
18 UTC on 10 November, 2004 at 300.0 mb

NMC, Grid: GG1X1
Seq: E01, Spec: SAVN170L42
42 hr fcst

High CF ()

Z (dam) Ascent (4 mb/hr) Descent (4 mb/hr) Trop (EPV=2.5)
Map centered over: 40.25 -98.74

Runtime messages

NOAA Air Resources Laboratory

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MEANDGDASET INFORMATION

Initialization time: 06 UTC 09 Nov 2004

AVERAGE TOTAL CLOUD COVER

TCLD (PCT). LVL=SFC. 00 UTC 13 NOV 2004 (+90 H)
00 UTC on 13 November, 2004 at 500.0 mb

NMC, Grid: GG1X1
Seq: E01, Spec: SAVN170L42
96 hr fcst

Middle CF ()

Z (dam) Ascent (6 mb/hr) Descent (6 mb/hr) Trop (EPV=2.5)
00 UTC on 13 November, 2004 at 300.0 mb