



# A Series of Unfortunate Events

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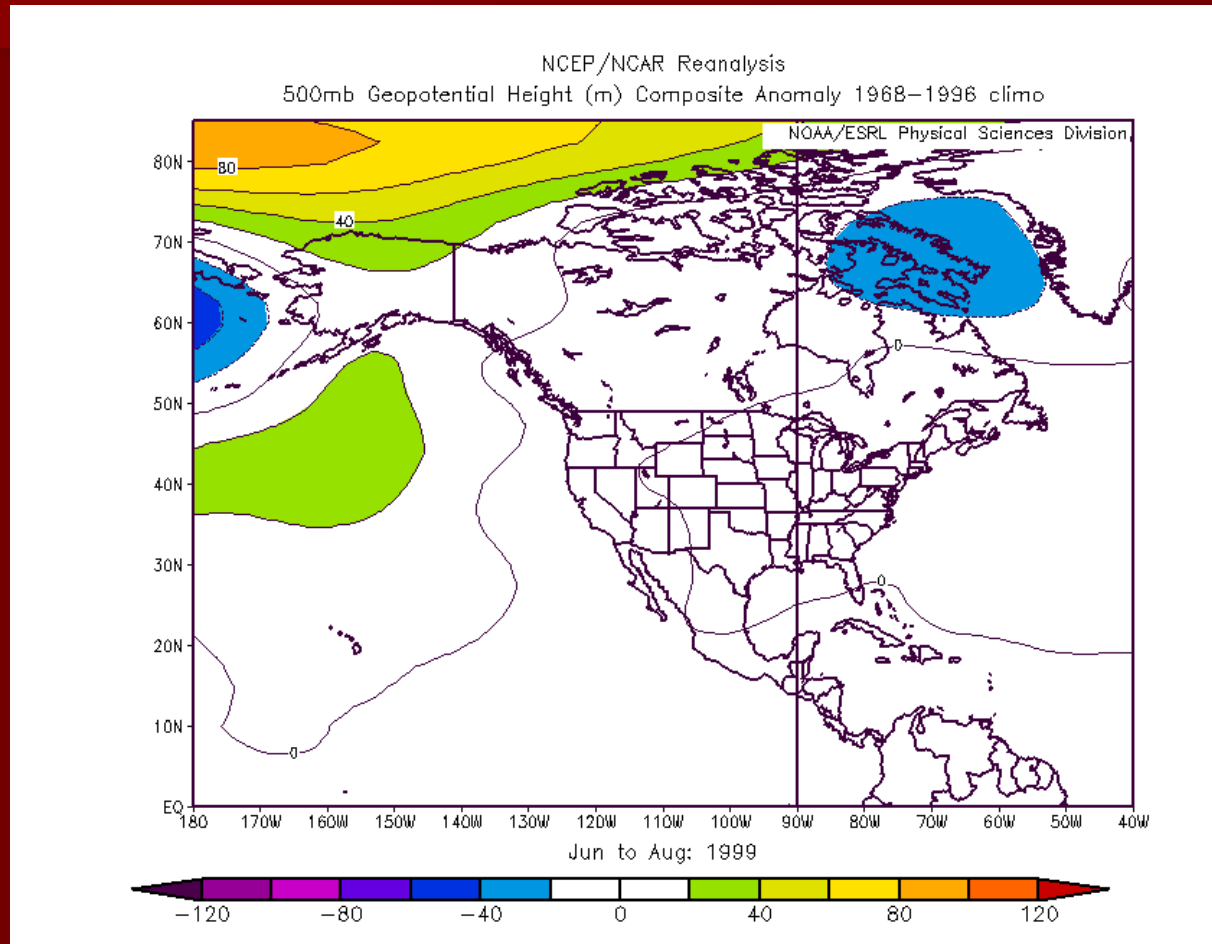
# Data Sources - Methodology

- n NCEP/NCAR Global Reanalysis
- n North American Regional Reanalysis
- n GPS precipitable water measurements
  
- n Synoptic and sub-synoptic scale analysis of pertinent atmospheric dynamics.

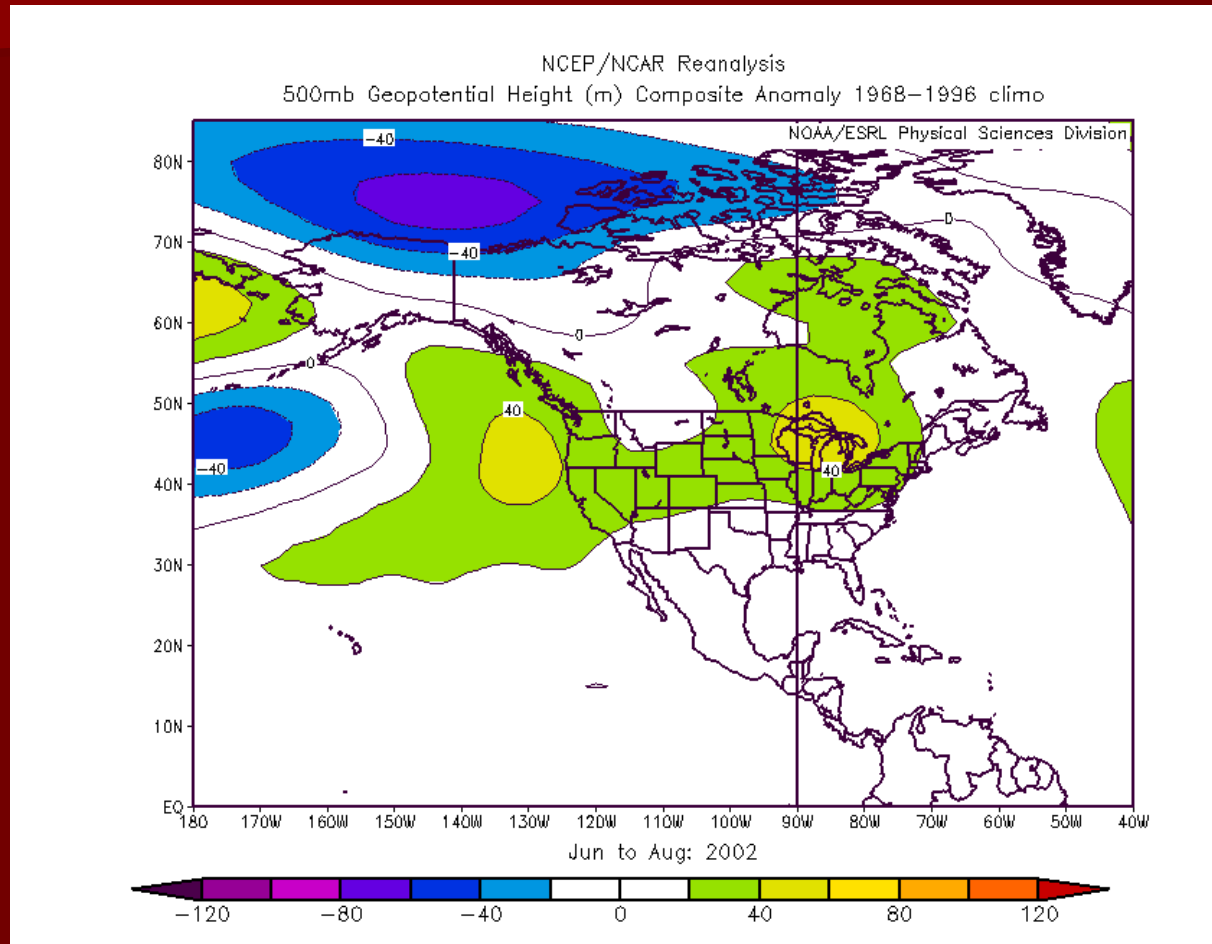
# Why a series of Unfortunate Events?

- n Analysis on seasonal time scales suggests that the drought cannot really be described by a typical pattern.
- n Rather what is needed is analysis on smaller time scales (i.e. monthly to synoptic time scales)

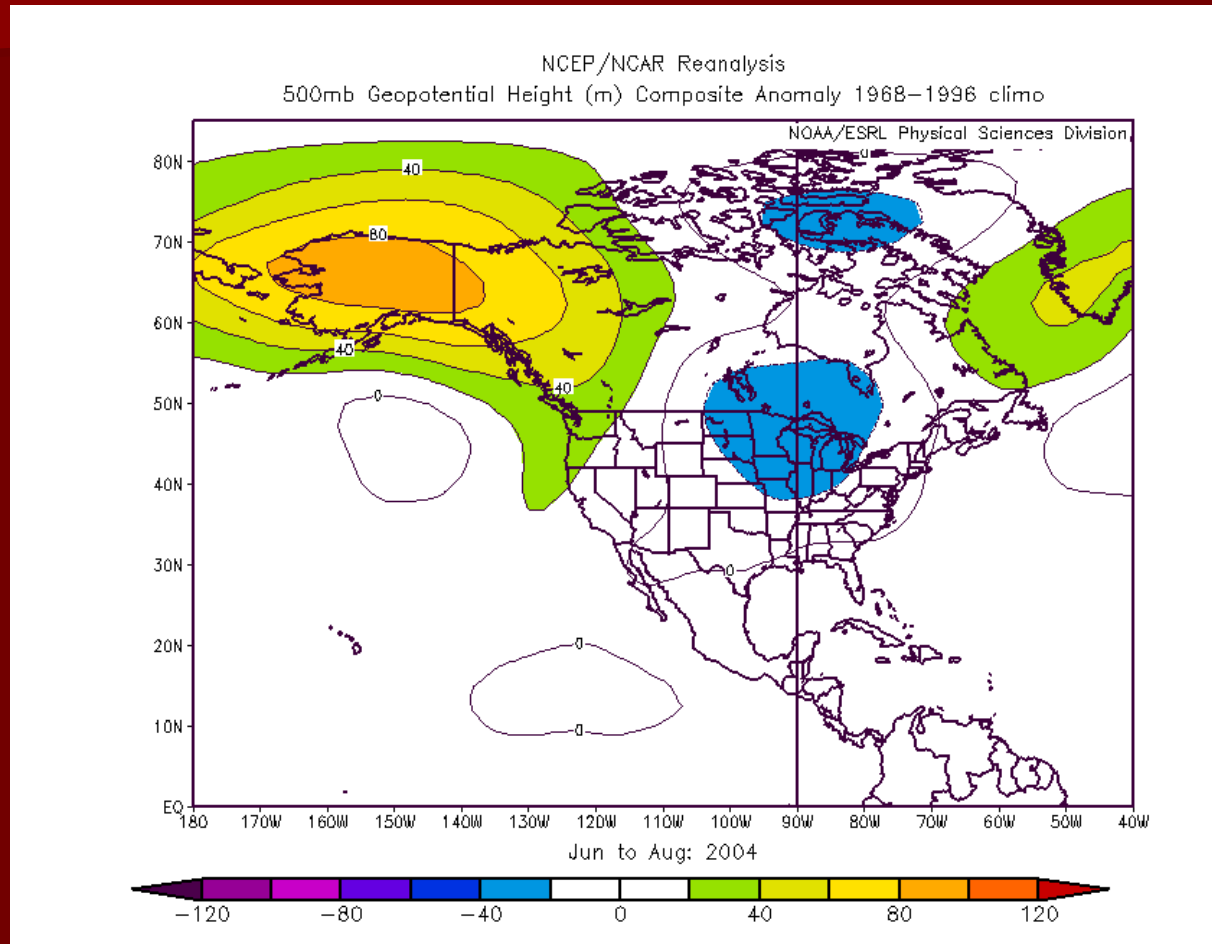
# 500 hPa anomaly Summer 1999



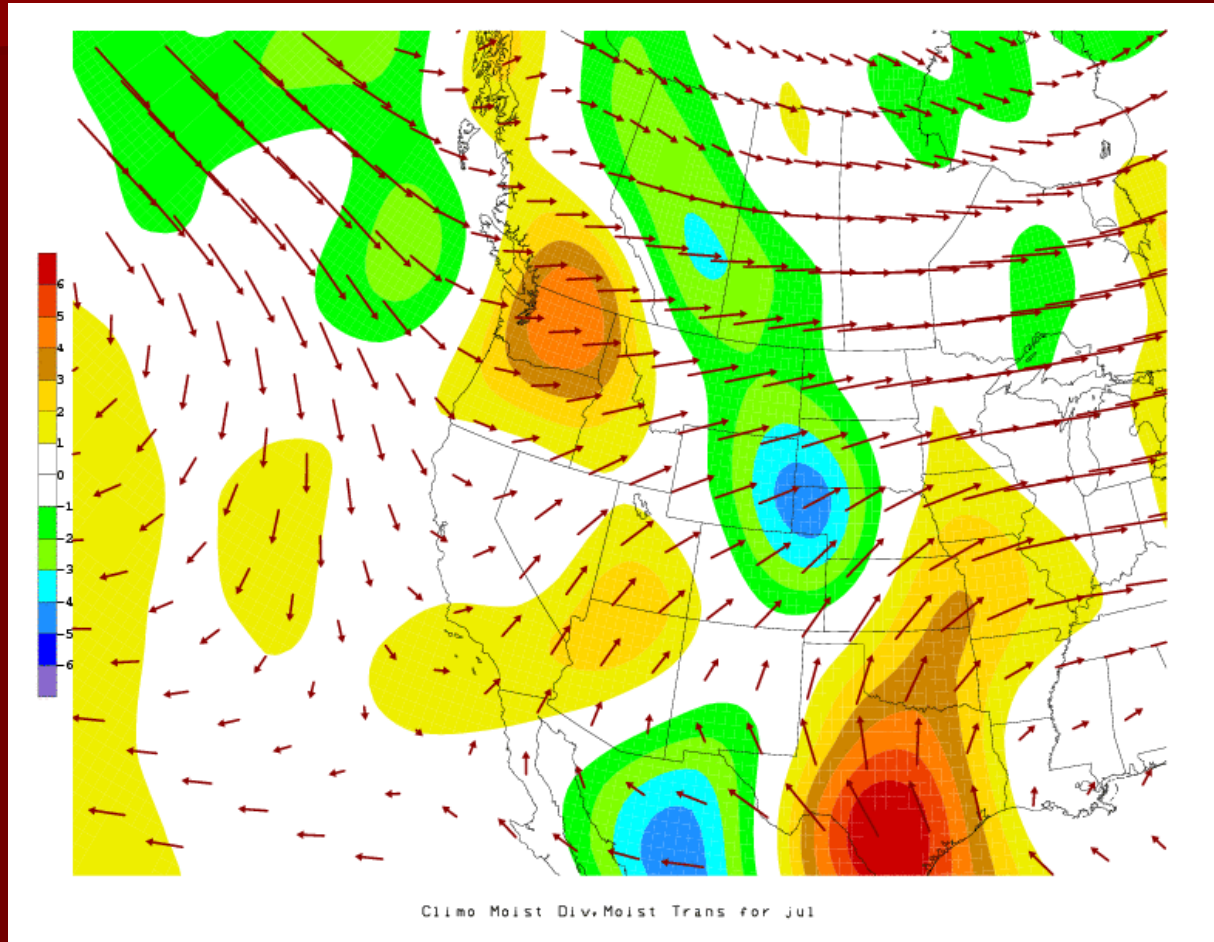
# 500 hPa anomaly Summer 2002



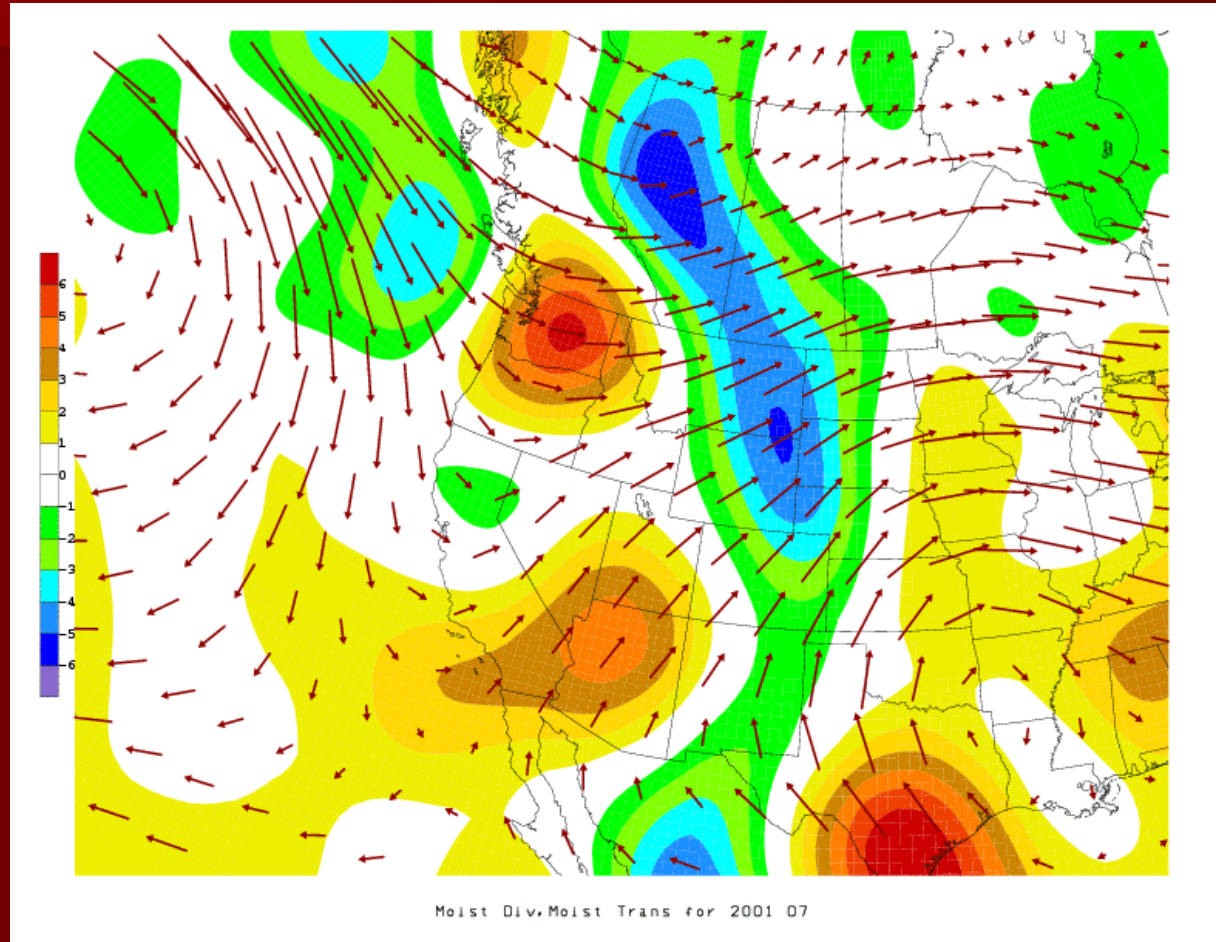
# 500 hPa anomaly Summer 2004



# Climatological moisture transport for July

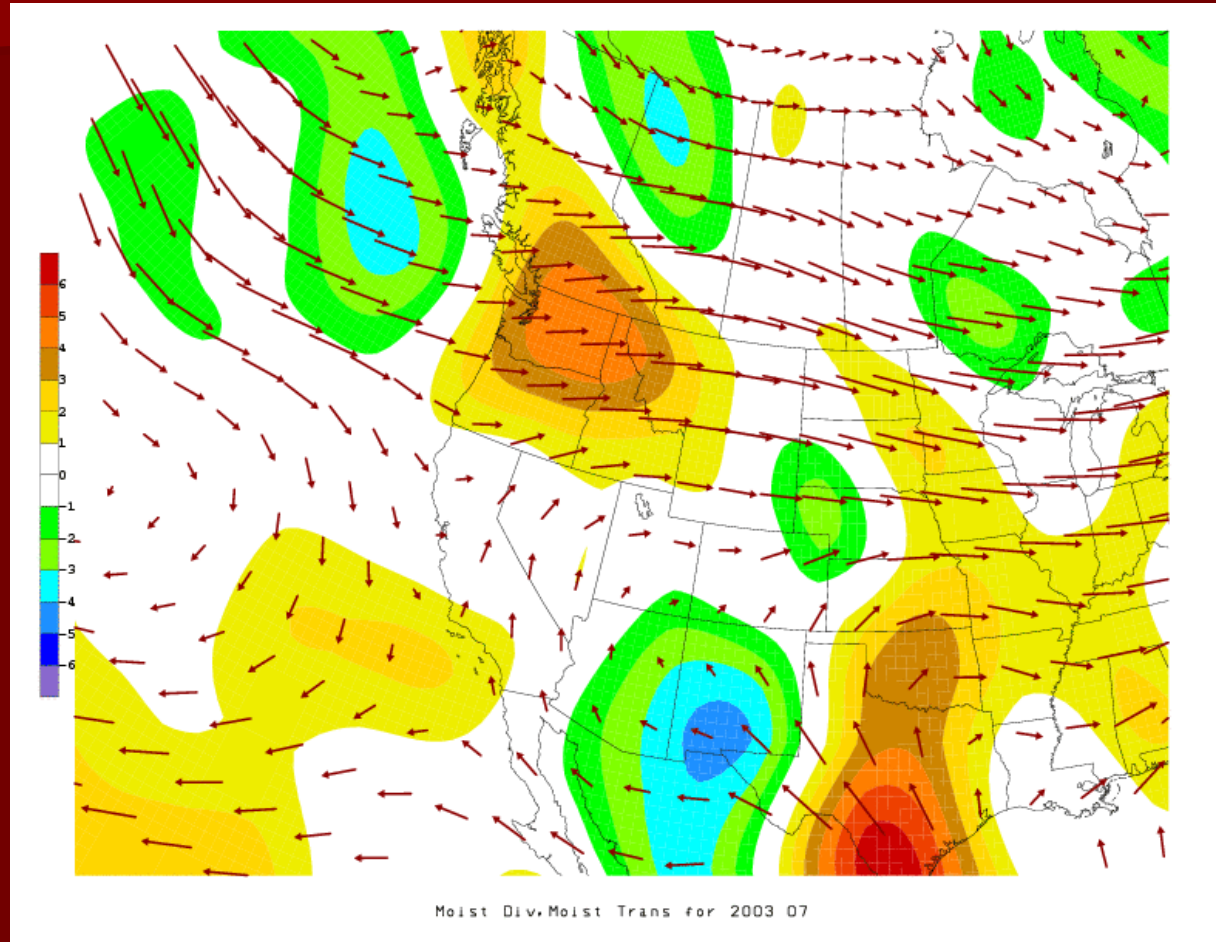


# Moisture transport for July 2001

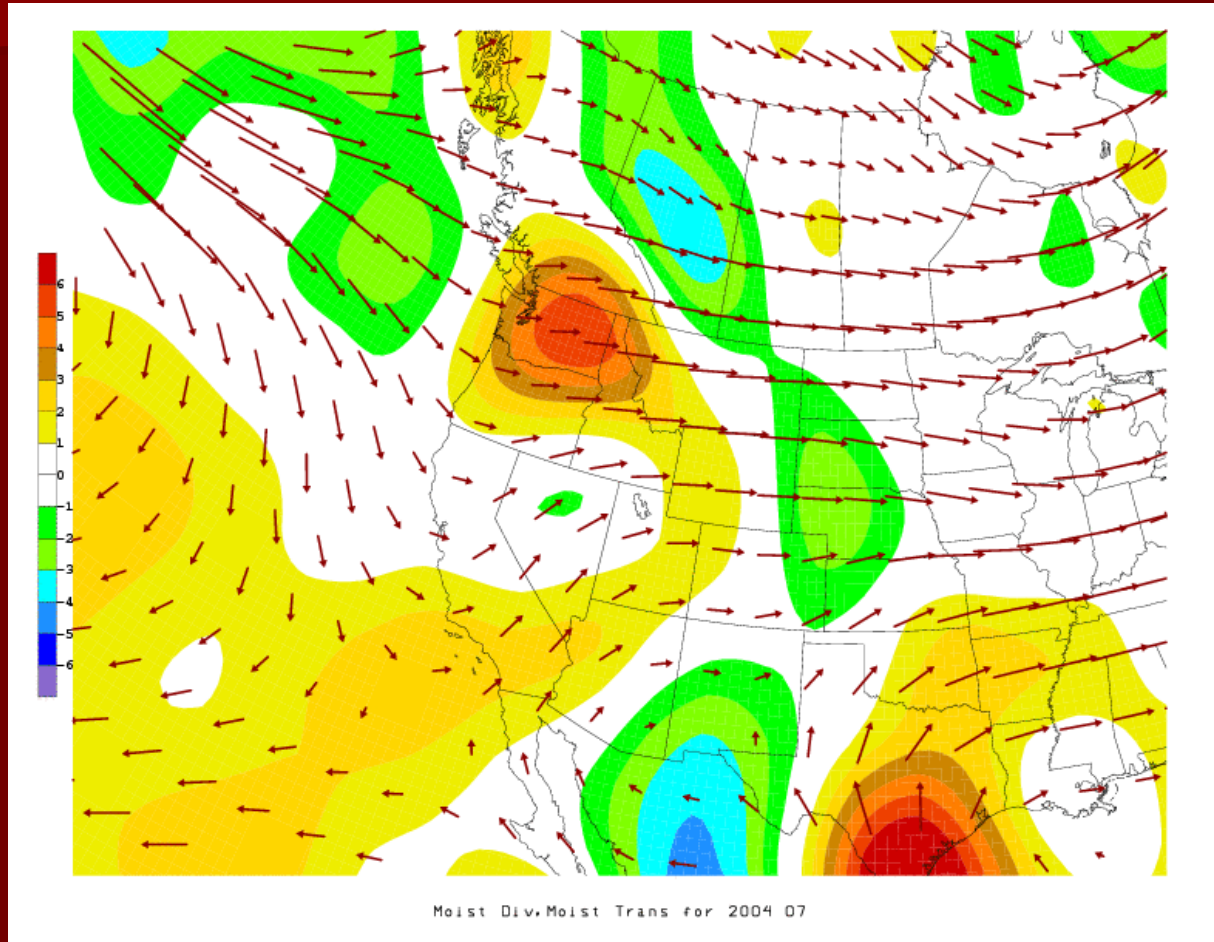




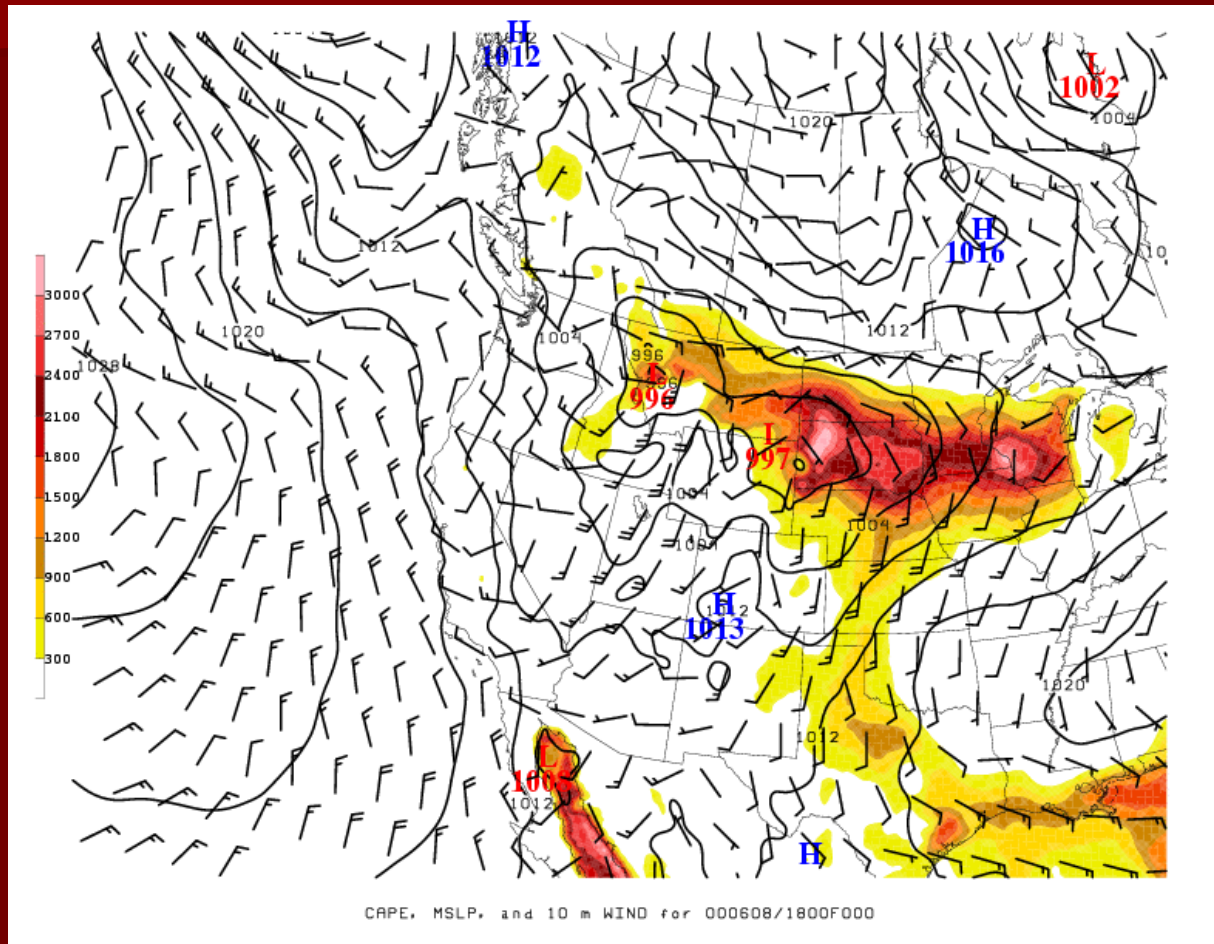
# Moisture transport for July 2003



# Moisture transport for July 2004



# CAPE, Surface Pressure and wind for 18 Z June 8, 2000



# Conclusions and Future Work

- n There is not really one pattern that typified the drought.
- n A main difference for summer months was the lack of moisture transport from the Gulf of Mexico.
- n Work into synoptic typing of wet and dry periods on the time scales of 1-2 weeks really needs to be investigated.