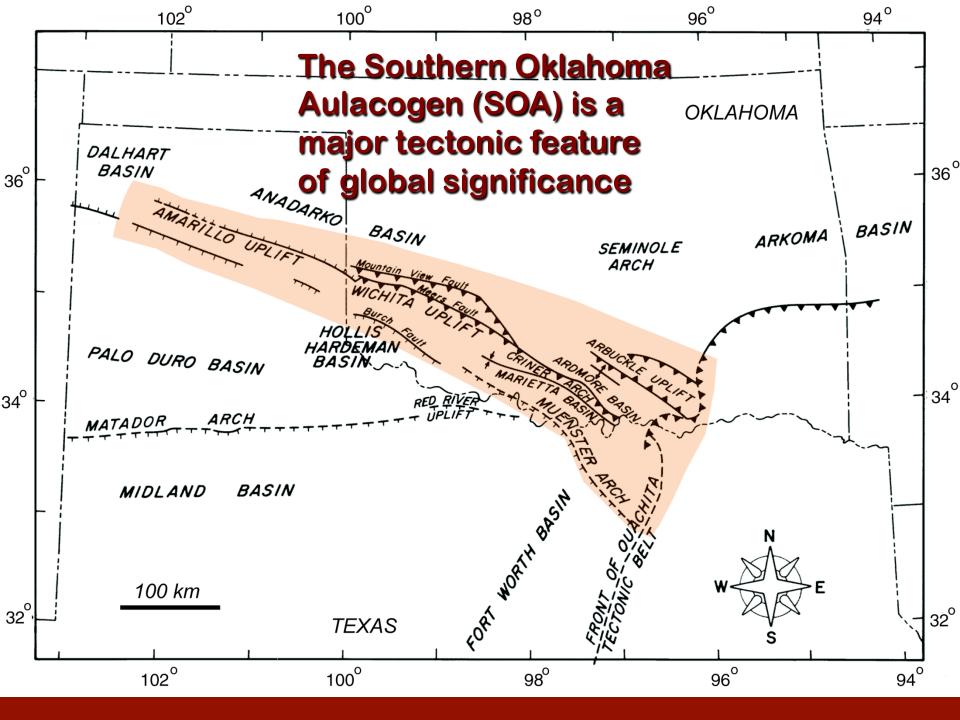




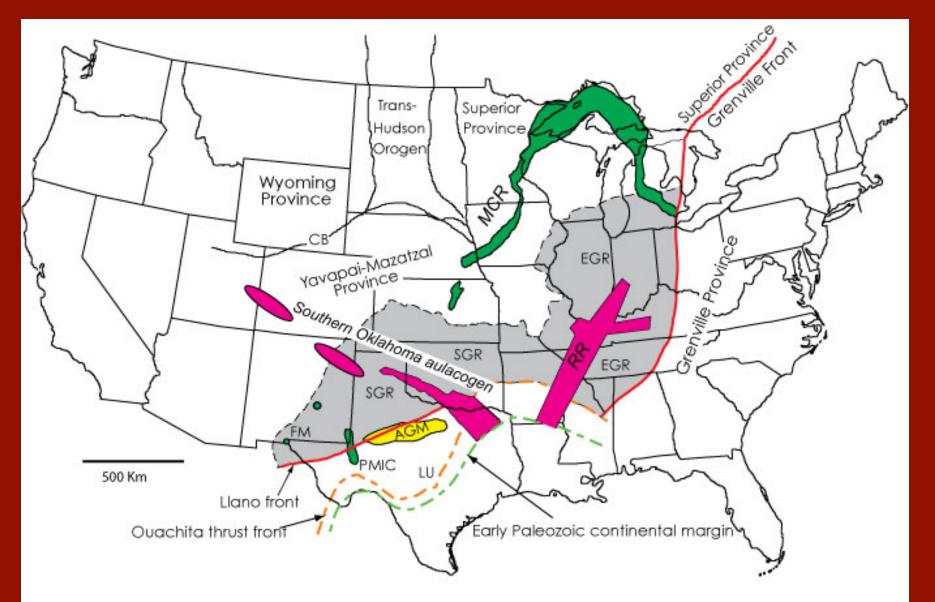
# The Granite Wash: A Few Thoughts About The Big Picture

## G. Randy Keller



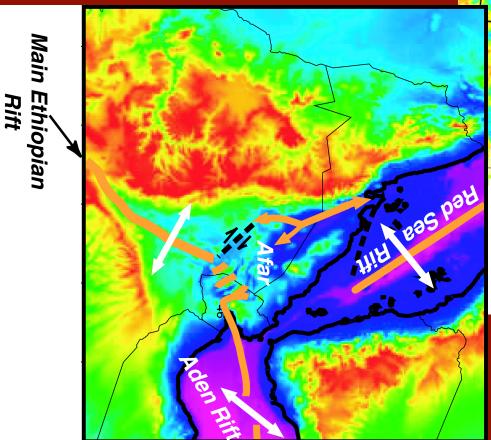


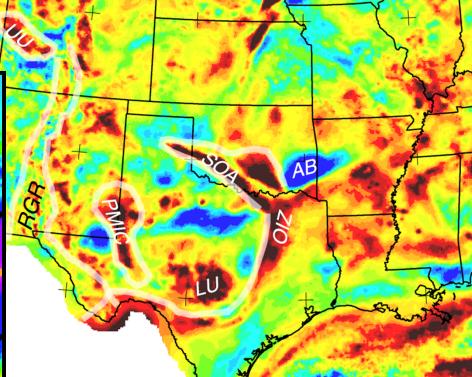
#### **The Late Precambrian Structural Framework**



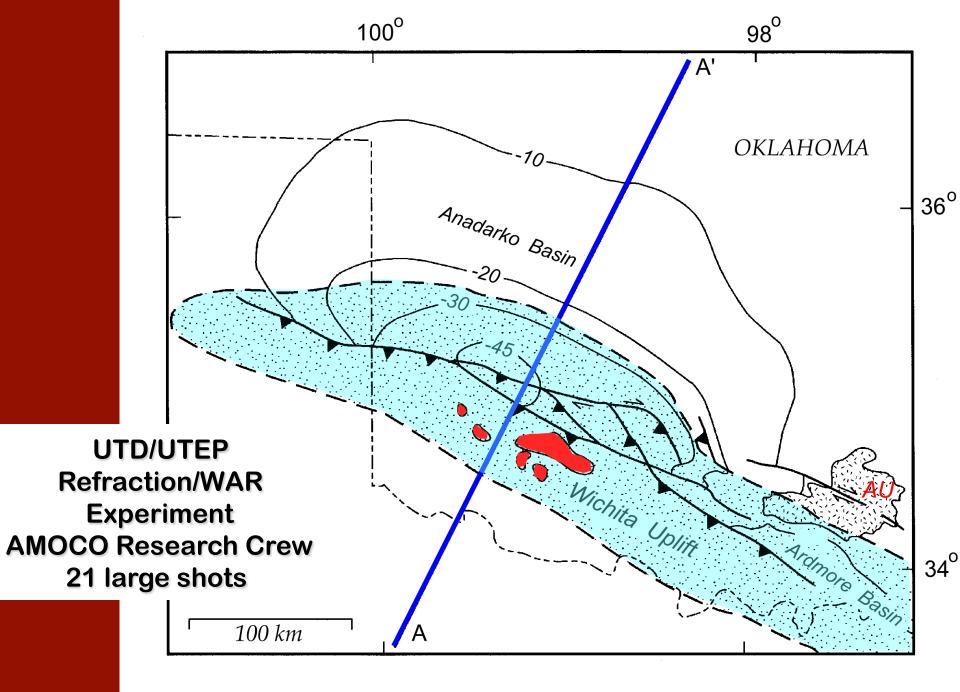
(modified from Barnes and others, 1999, originally modified from Van Schmus and others, 1996).

## Afar vs. SOA Triple Junctions

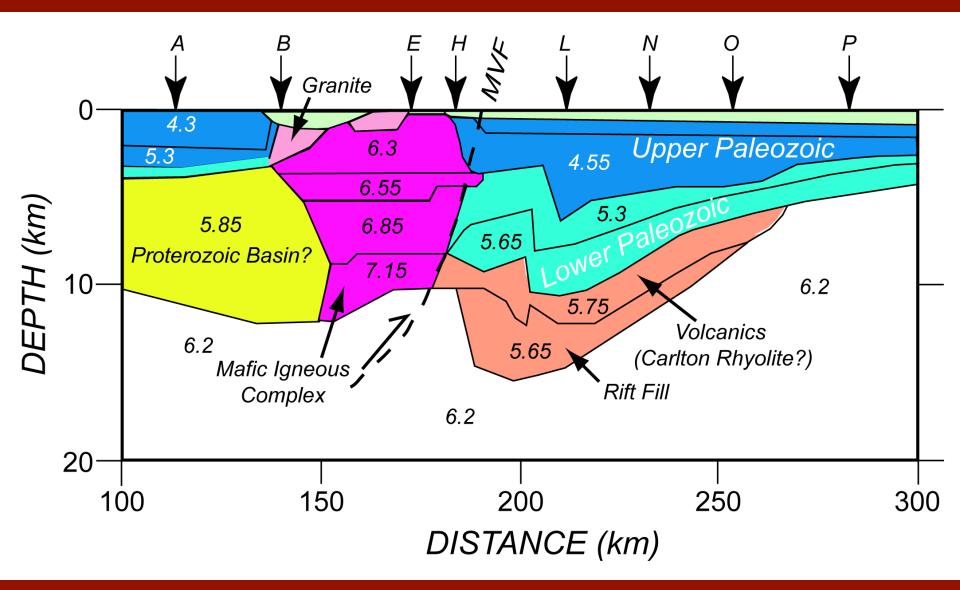




The scales are approximately the same

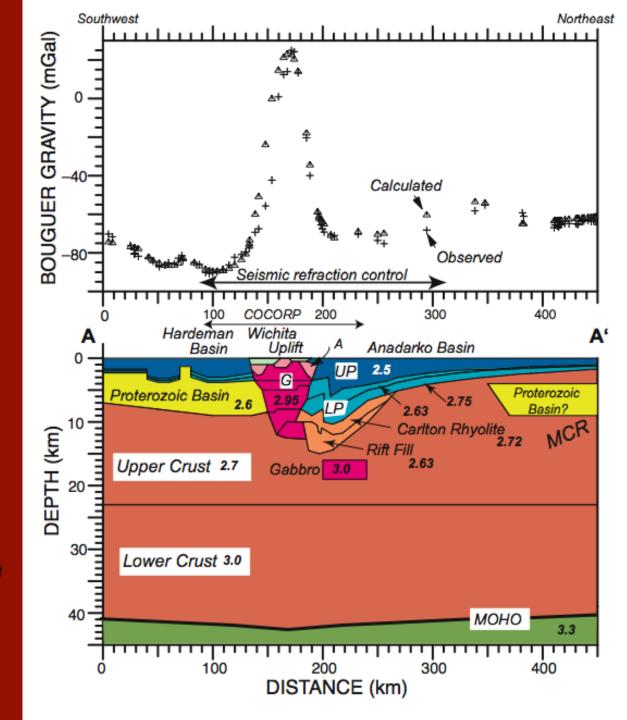


# **SOA Velocity Model-Upper Crust**

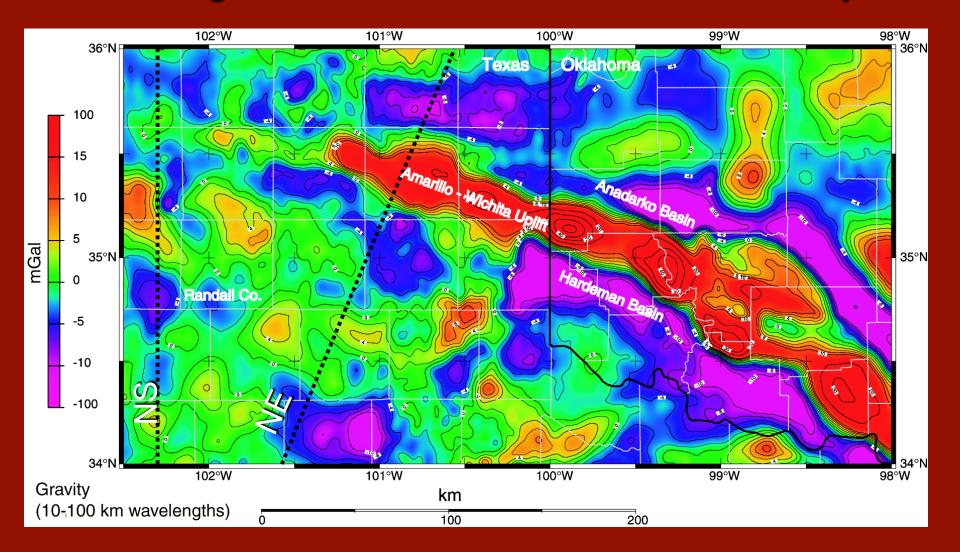


Crustal model derived by integrated analysis of seismic, geologic, and gravity data

The mafic core of the Wichita uplift resides almost completely in the upper plate of the Mountain View thrust system

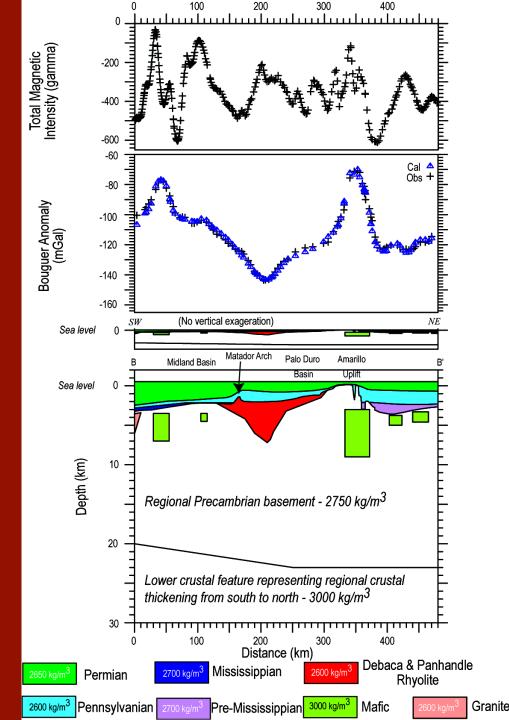


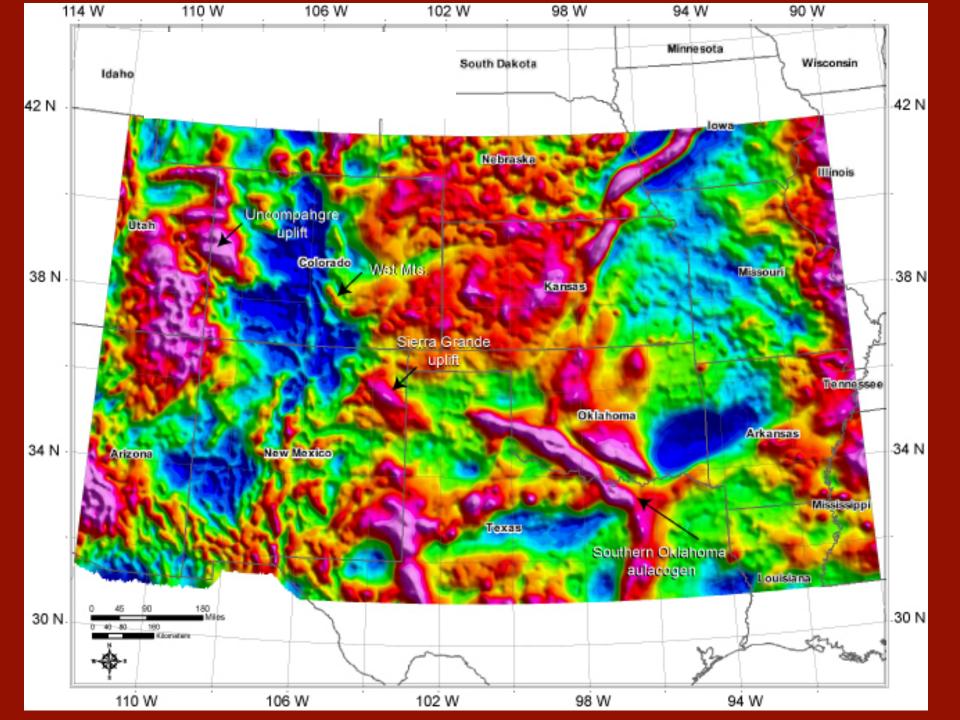
# **Gravity Anomalies - Amarillo Uplift**



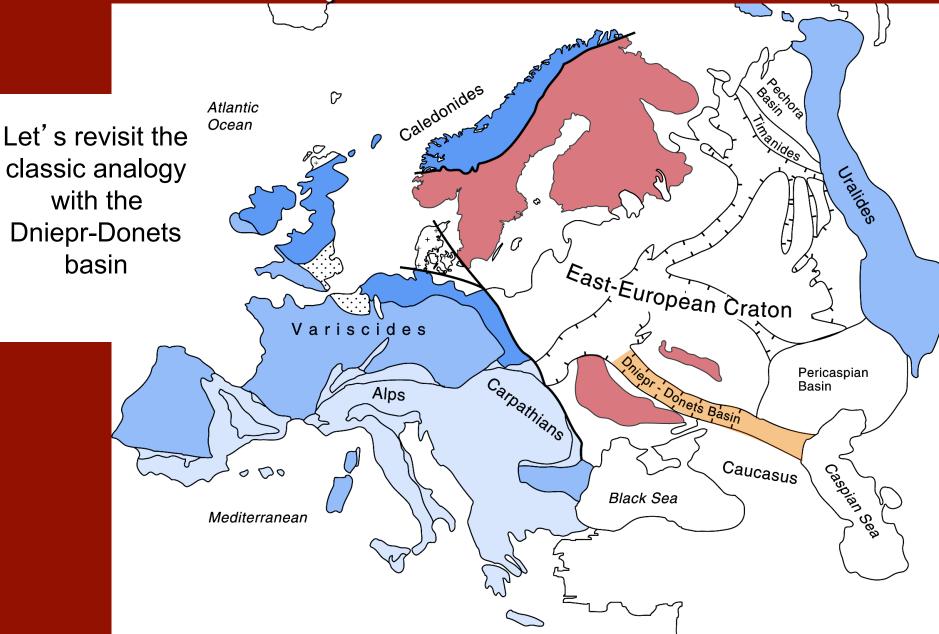
# Integrated model for the NE profile (by Diana Smith)

A large mafic core and a nearly vertical fault on the north side of the uplift are required to fit the observed data.

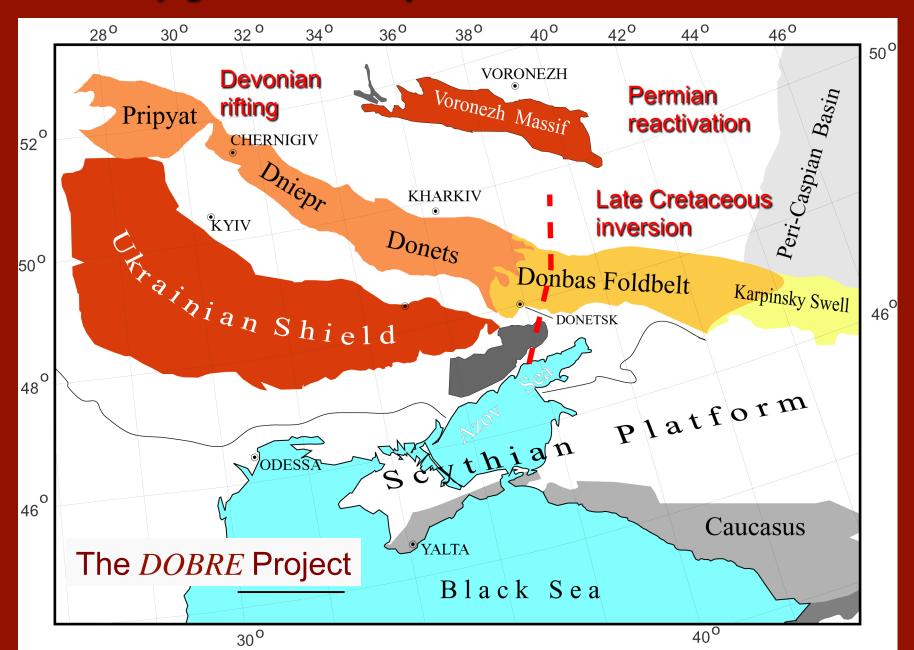




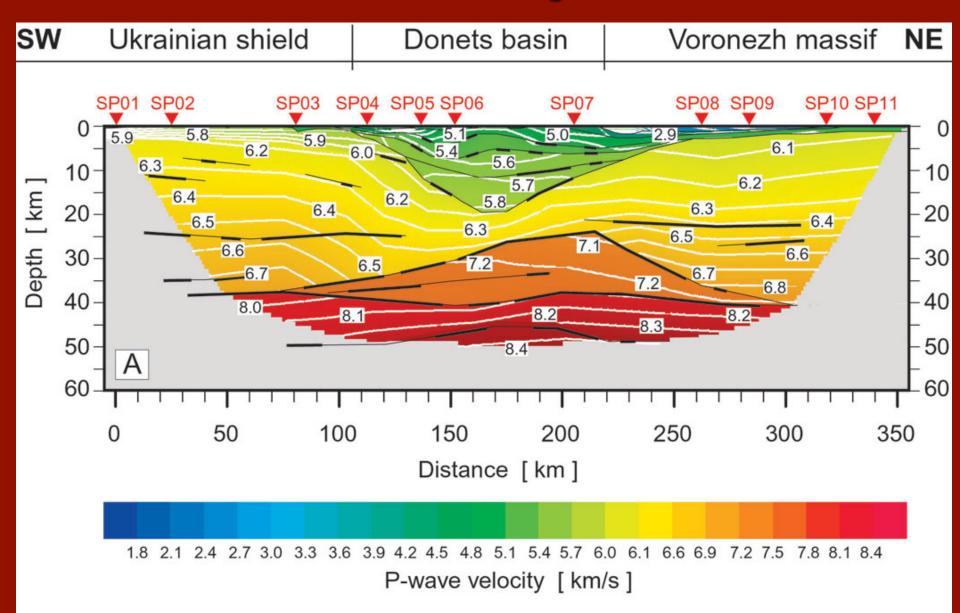
#### **European Tectonics**



# **Pripyat-Dniepr-Donets-Basin**



## **DOBRE - Velocity Structure**



Major tectonic inversion that involved thrusting and strike-slip created the structures that were the source of the "Granite Wash". A better understanding of these structures should help our efforts to exploit the "Granite Wash" and perhaps even find new fields.