

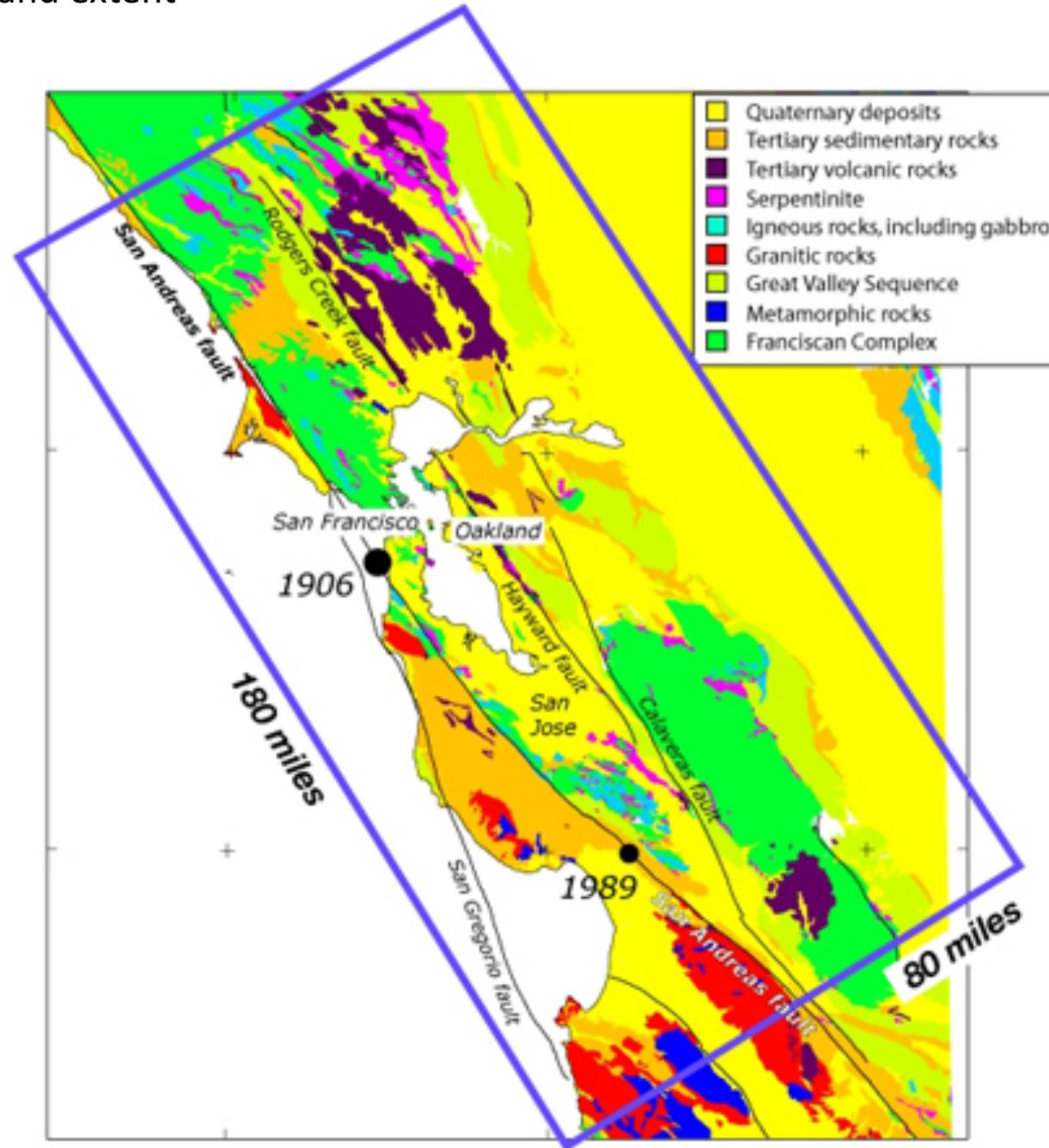
Gravity and aeromagnetic data for Bay Area Seismic Velocity Model

Gravity and aeromagnetic data useful for defining fault geometry where faults juxtapose rocks of differing density or magnetization

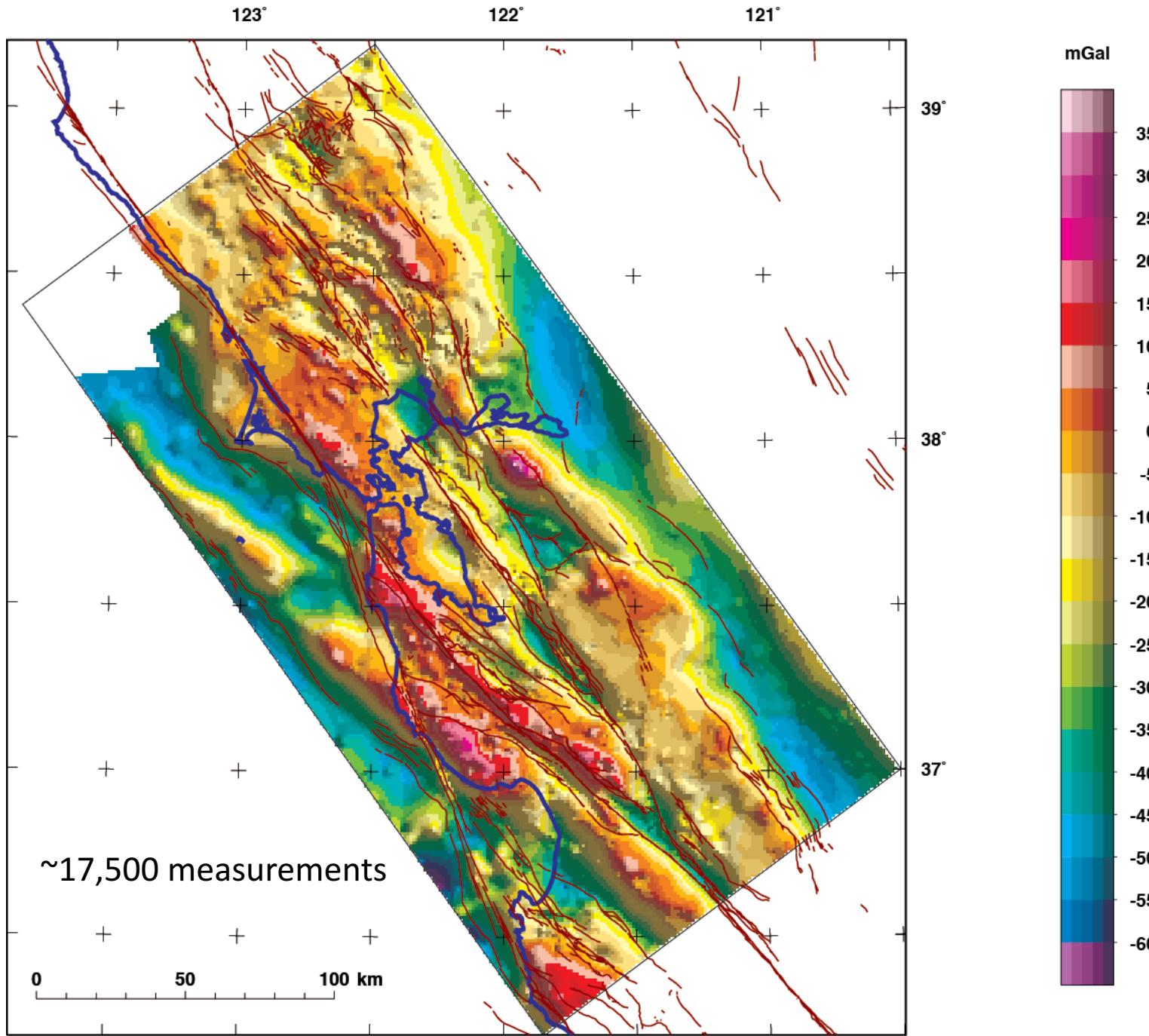
Gravity data particularly useful for basin geometry; density related to seismic velocity

Magnetic data particularly useful for mapping basement rock units, such as serpentinite, mafic/ultramafic rocks of Coast Range ophiolite, Franciscan Complex and volcanic rocks

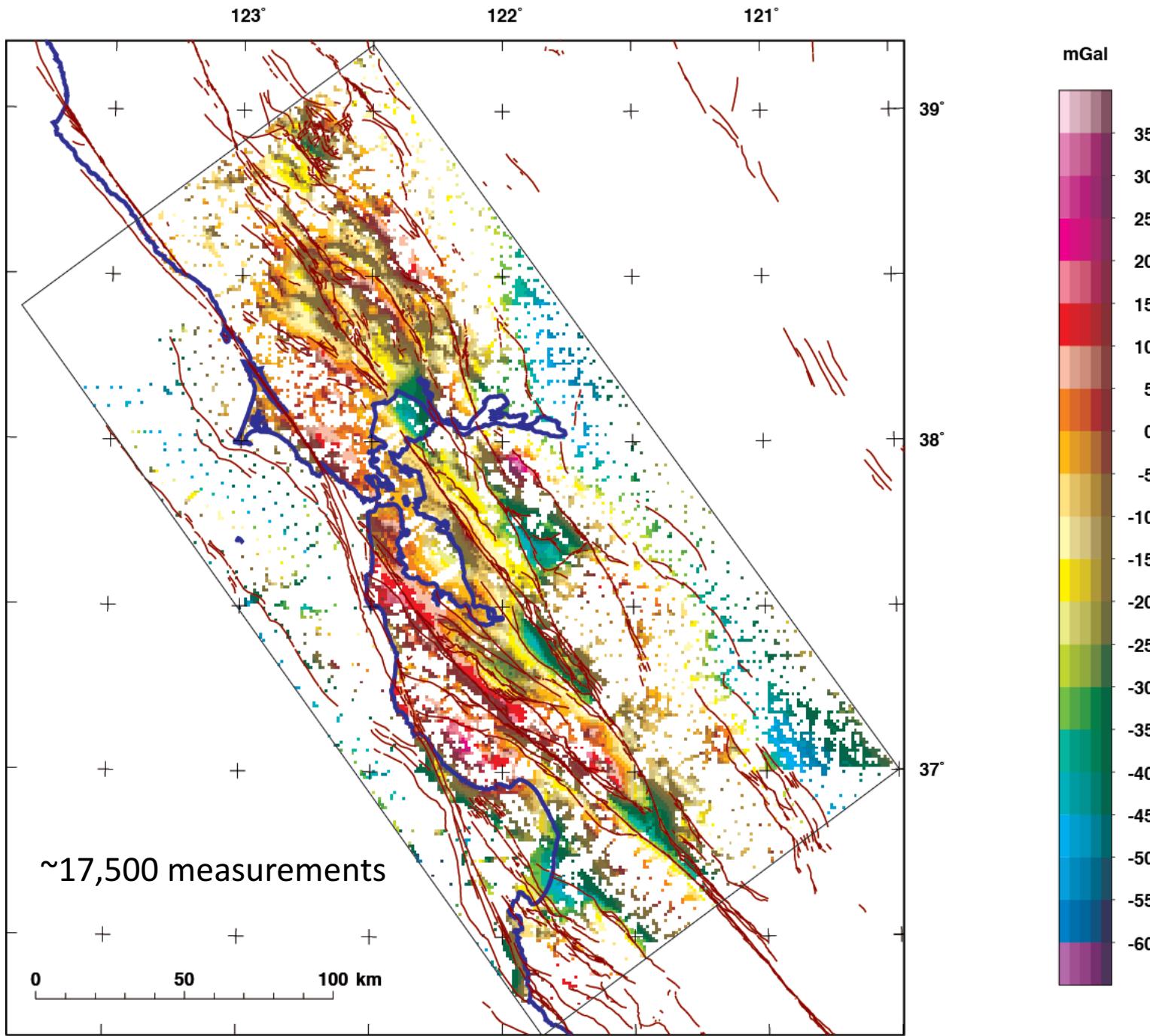
Simplified Geology and extent of Bay Area Seismic Velocity Model



Isostatic Gravity (2006)



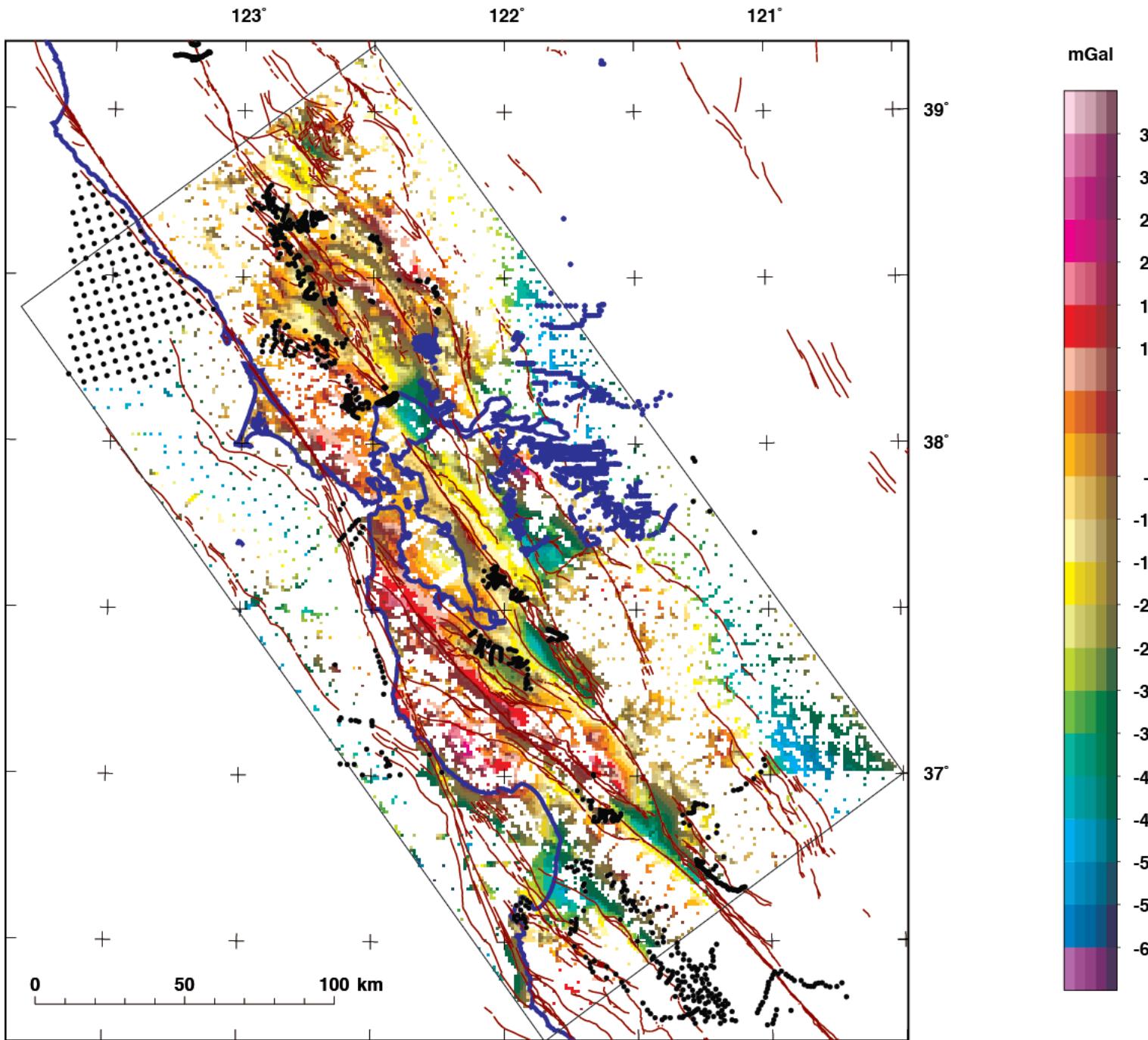
Isostatic Gravity
(2006)—
color 1-km
radius around
measurement



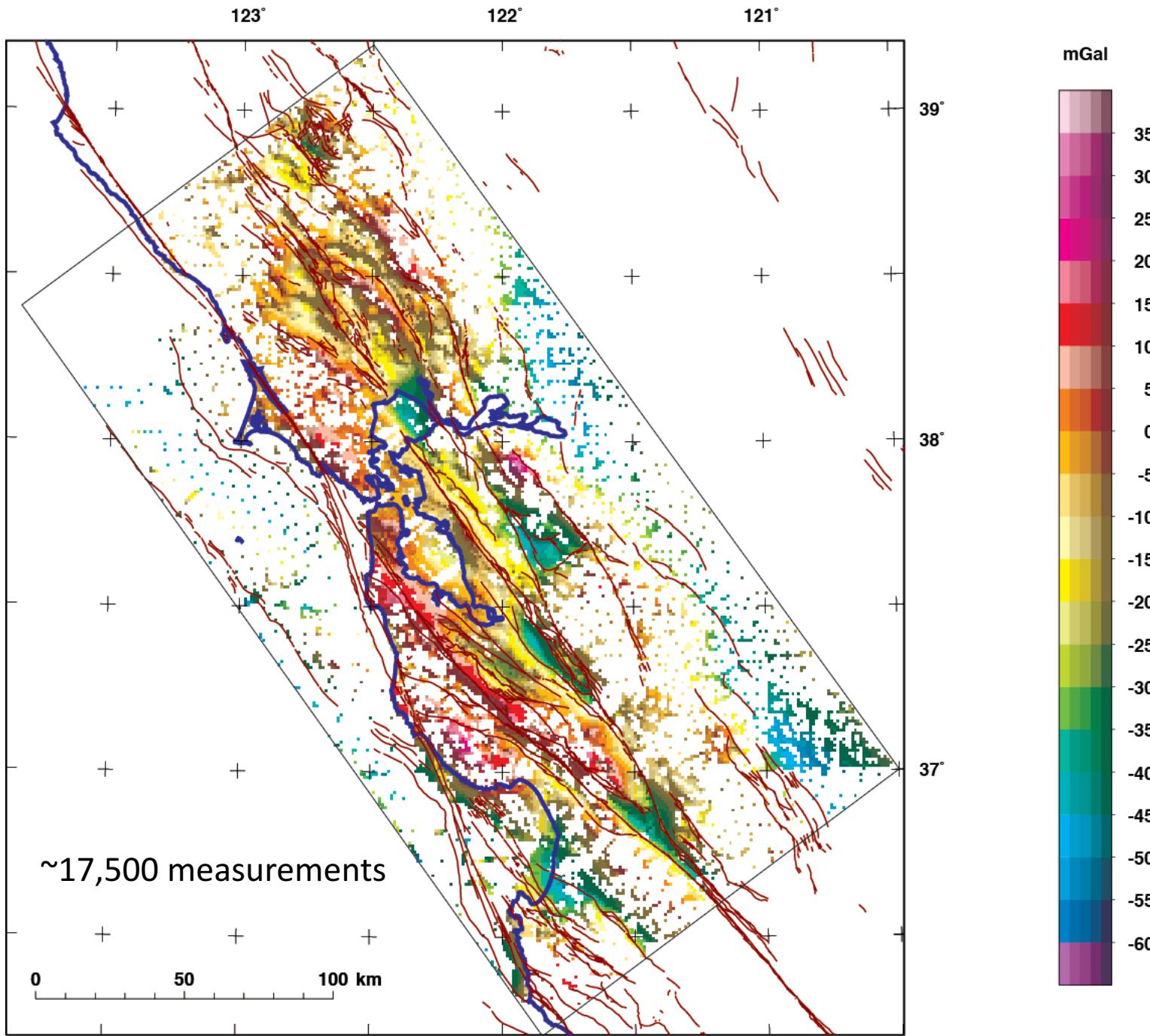
Isostatic Gravity
(2006)—
color 1-km
radius around
measurement

Black dots—
data published
since 2006

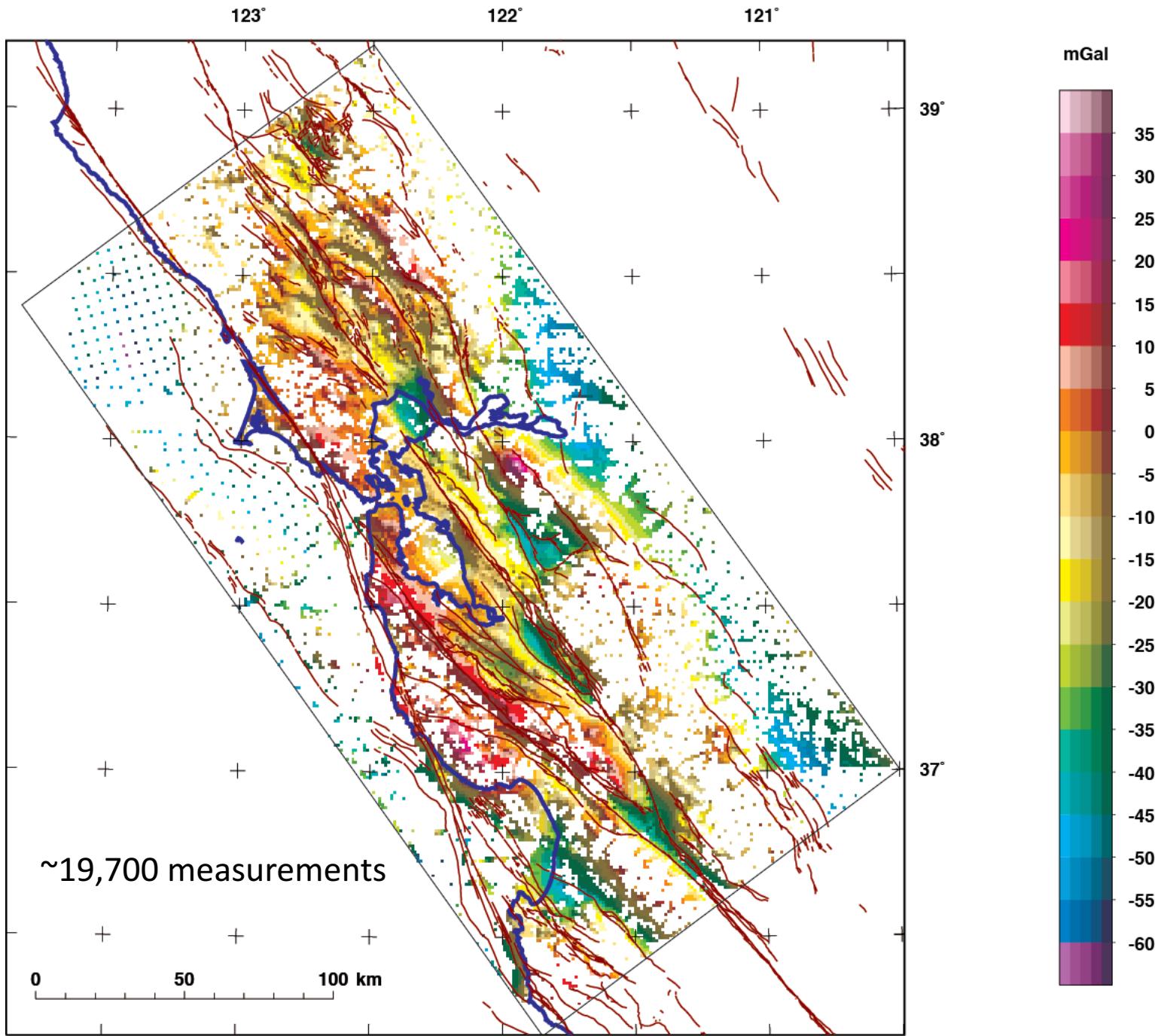
Dark blue dots—
data that will be
published within
5 years



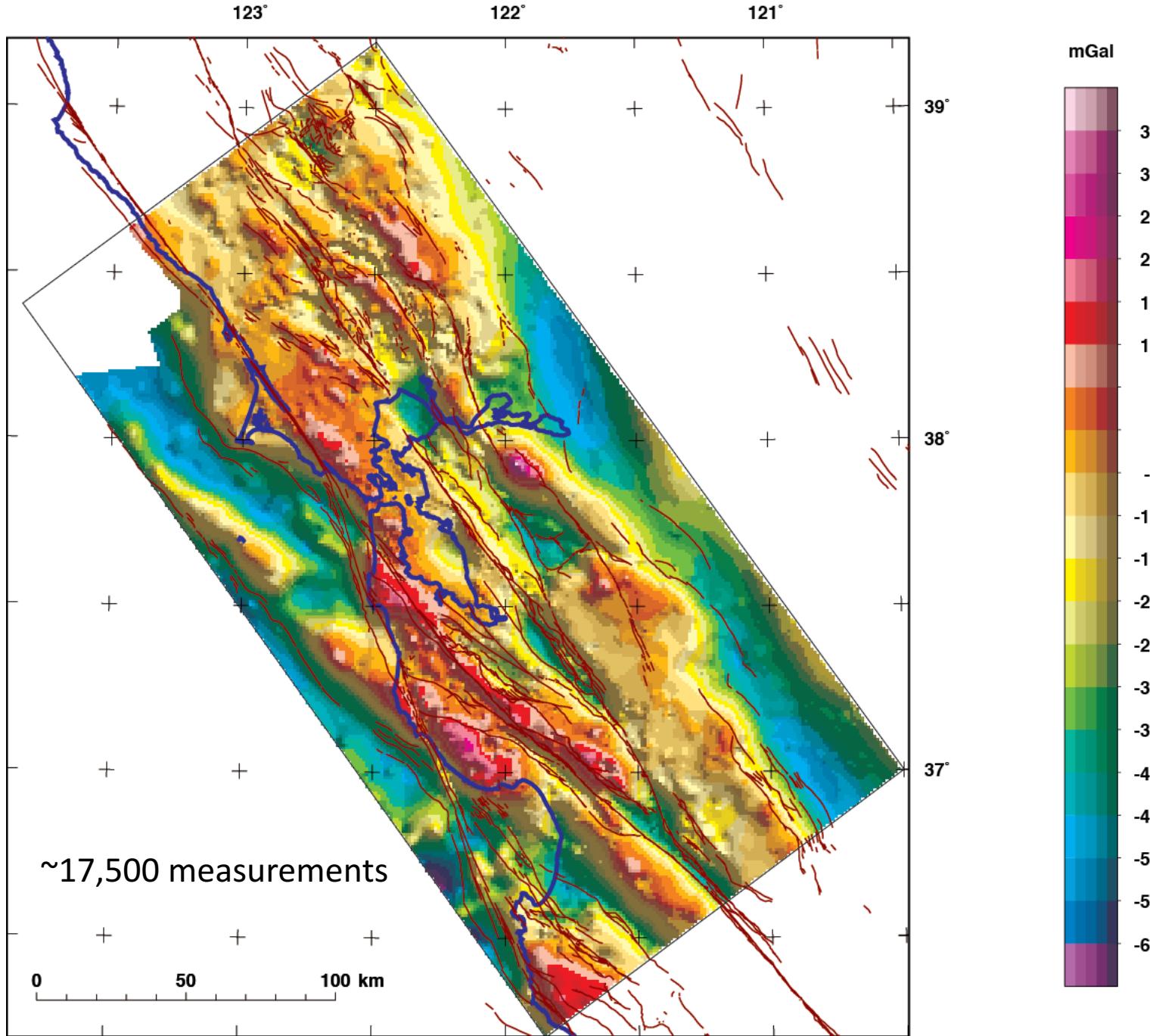
Isostatic Gravity
(2006)—
color 1-km
radius around
measurement



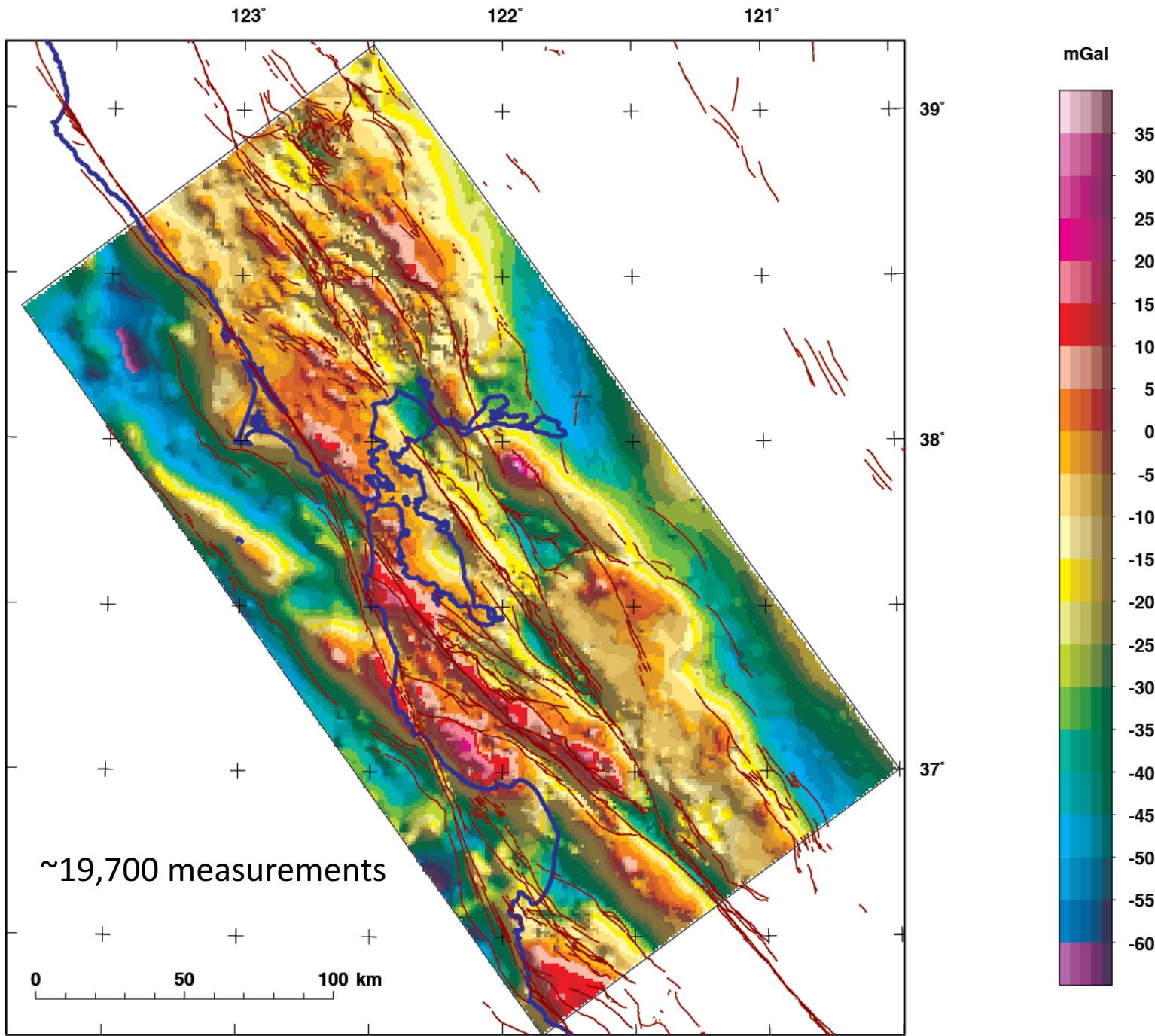
Isostatic Gravity
updated—
color 1-km
radius around
measurement



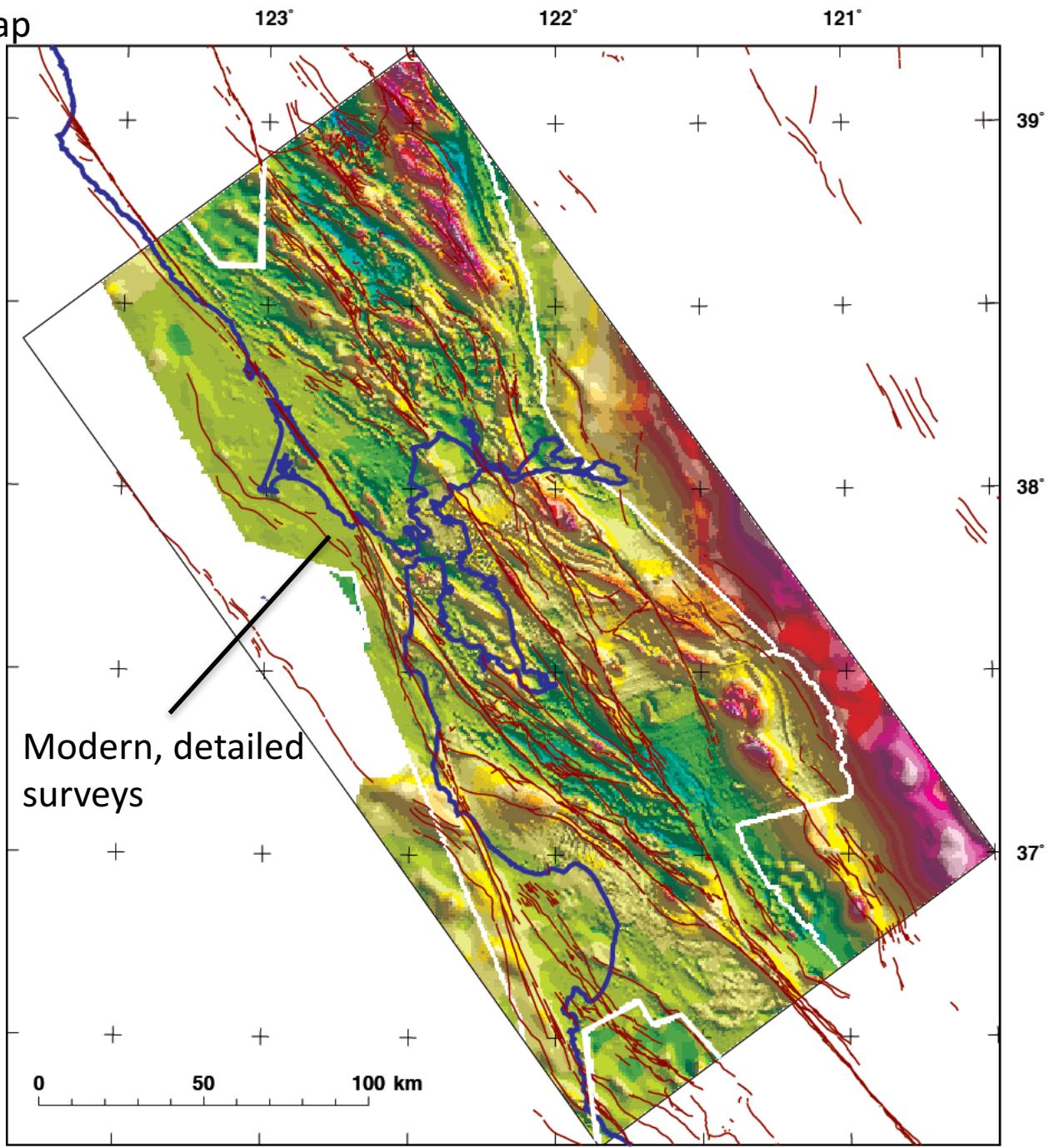
Isostatic Gravity (2006)



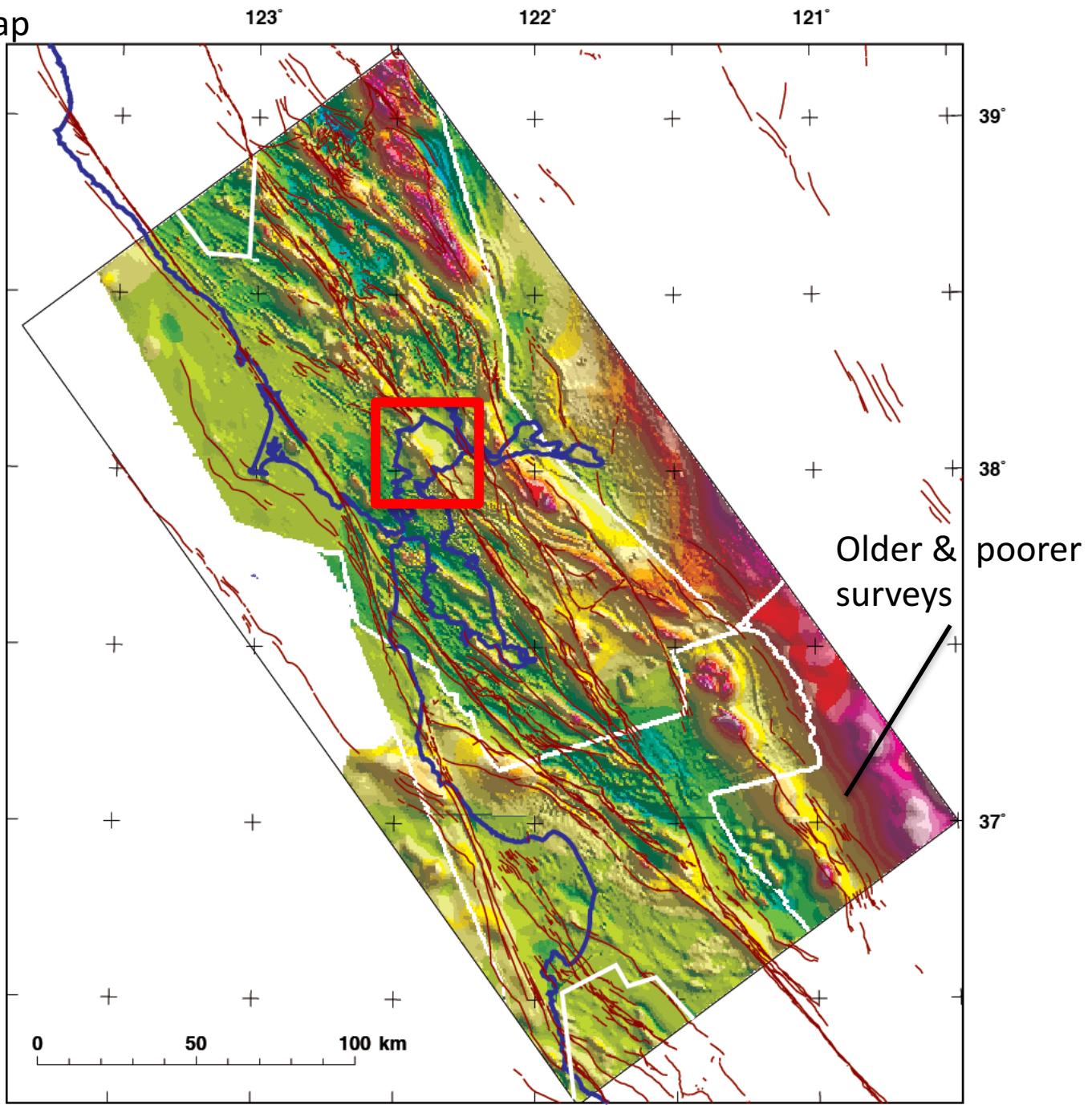
Isostatic Gravity updated

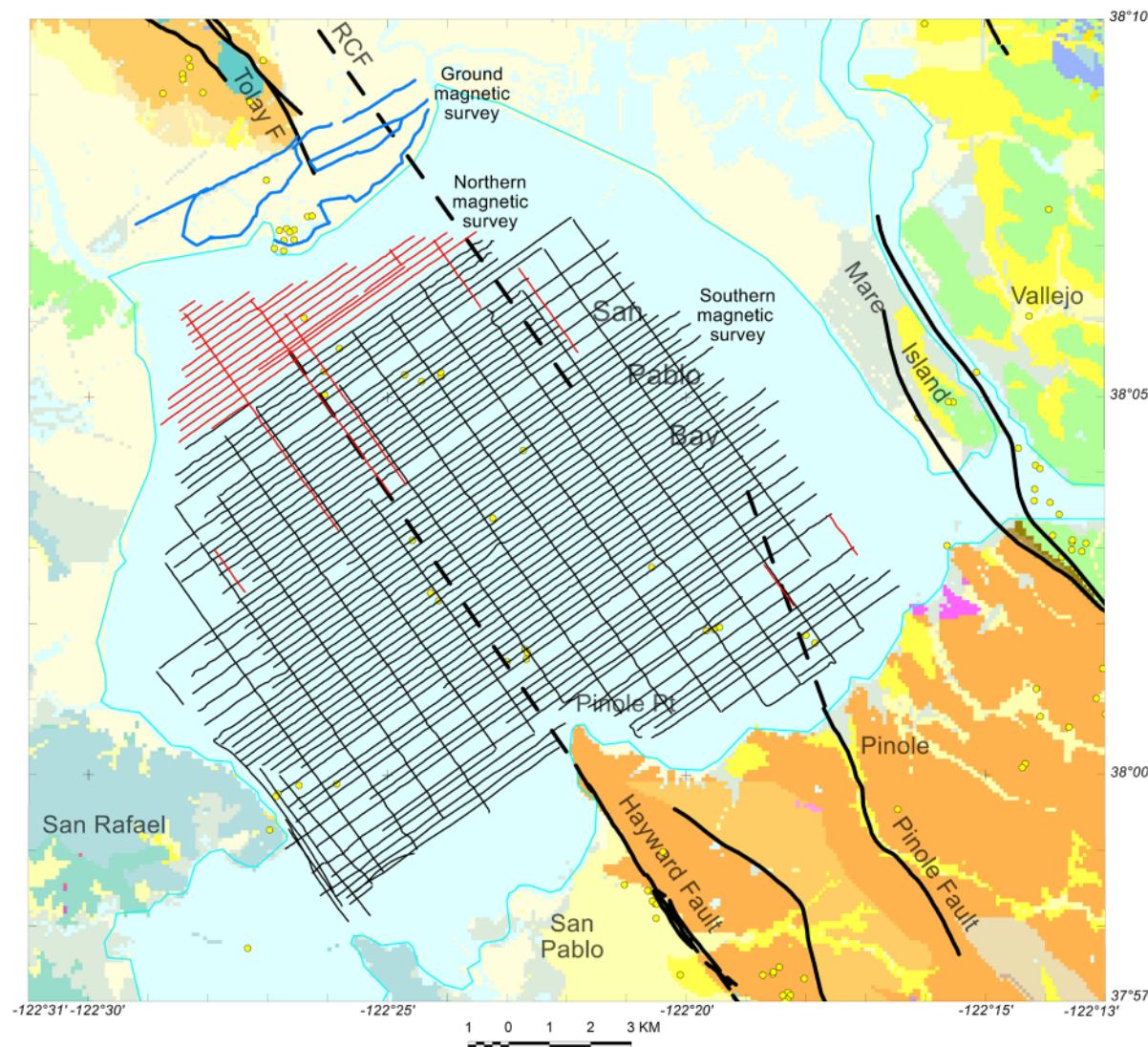


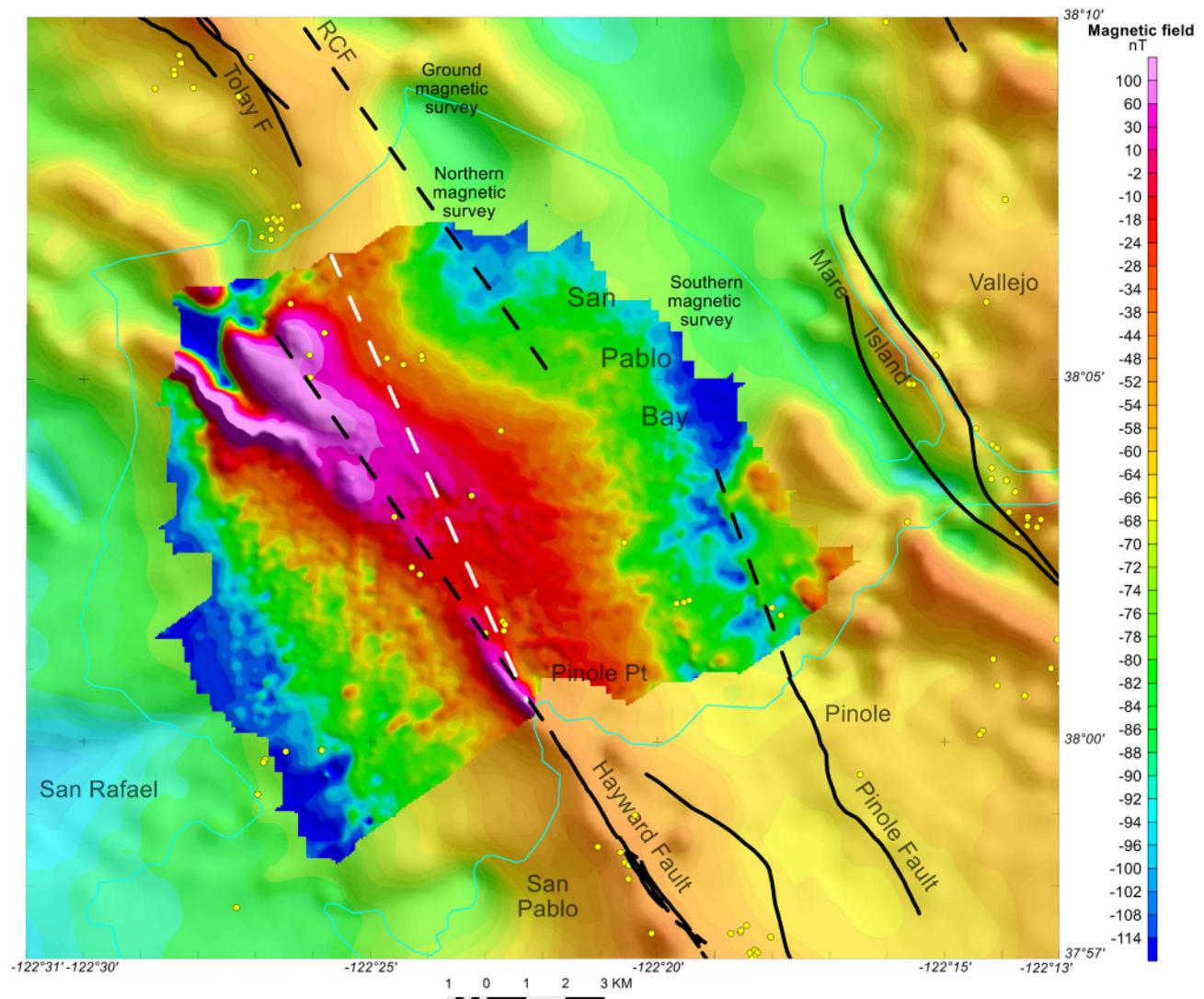
Aeromagnetic Map (2006)



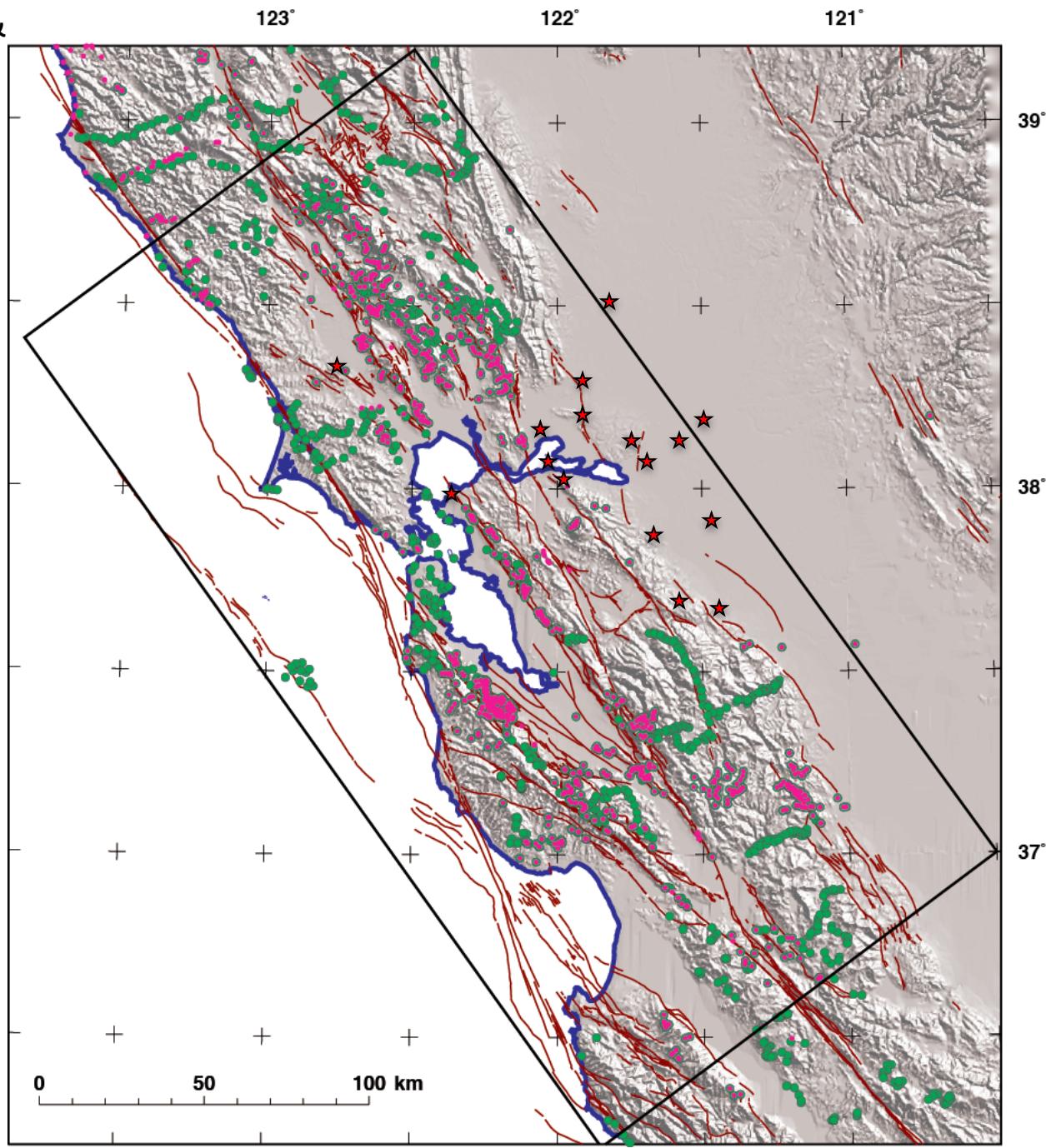
Aeromagnetic Map updated







Density (green) &
magnetic
susceptibility
(magenta)
measurements



Resources

Gravity and magnetic databases:

Pan-American Center for Earth and Environmental Sciences:

<https://research.utep.edu/Default.aspx?alias=research.utep.edu/paces>

National Geophysical Data Center

<https://www.ngdc.noaa.gov/geomag/aromag.shtml>

<https://www.ngdc.noaa.gov/mgg/gravity/gravity.html>

Physical Properties:

<https://pubs.er.usgs.gov/publication/ofr20131282>

<https://pubs.usgs.gov/sim/3188/>