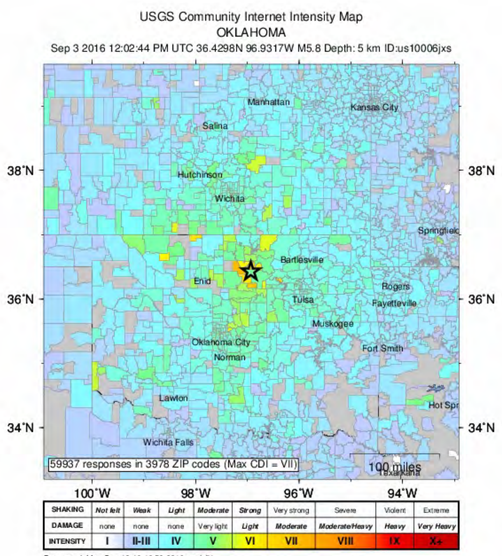
Sept. 3, 2016, Pawnee, Ok., (M 5.8)
12:02:44 UTC / 07:02:44 CDT
University of Kentucky
Kentucky Seismic and Strong Motion Network

University of Kentucky
Kentucky Geological Survey

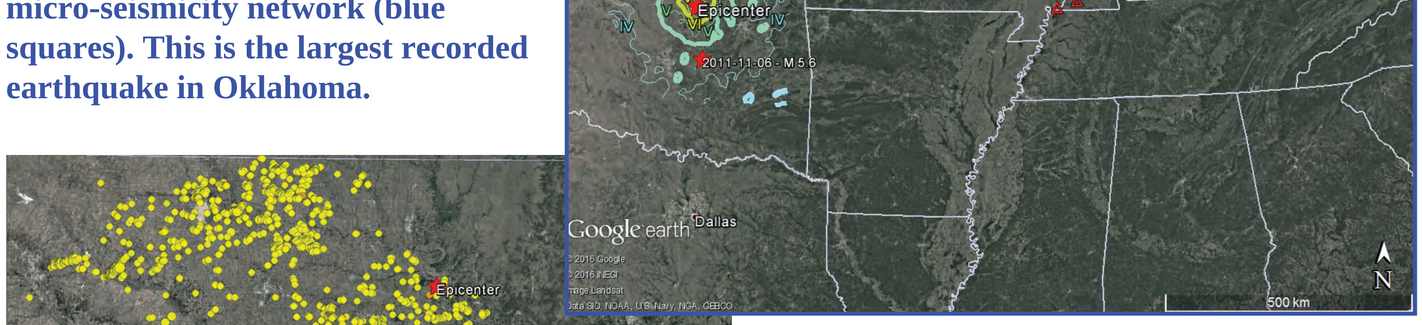
University of Kentucky
College of Arts & Sciences
Department of Earth & Environmental Sciences

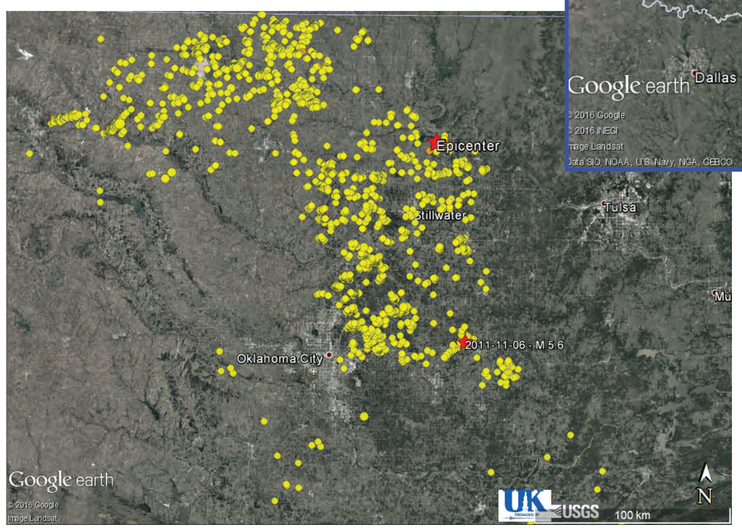
USGS Felt Reports



Figures courtesy of USGS NEIC:
http://earthquake.usgs.gov/earthquakes/eventpage/us10006jxs

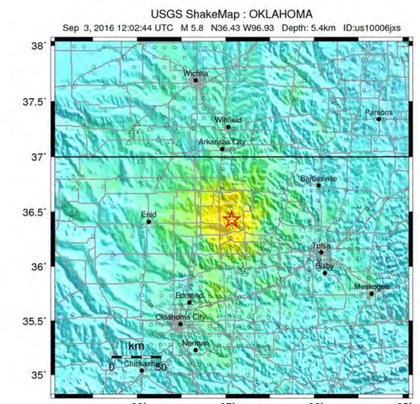
Right: Epicenter of Sept. 3 M 5.8 earthquake, predicted ground-shaking levels (contours colored by severity) , and the real-time KSSMN seismic stations a(red triangles) and temporary eastern Kentucky micro-seismicity network (blue squares). This is the largest recorded earthquake in Oklahoma.





Left: Epicenter of Sept. 3 M 5.8 (northern red star), epicenter of 2011 M 5.6 Prague, Ok., earthquake (southern red star) and the past five years of magnitude 3 and greater earthquakes. This recently increased level of activity is considered by seismologists to be unnatural and to be induced by the injection of large volumes of waste-water.

USGS Shake Map



PERCEIVED SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	none	none	none	Very light	Light	Moderate	Mod./Heavy	Heavy	Very Heavy
PEAK ACC.(%g)	<0.007	0.08	1.0	5.0	8.8	15	27	47	>83
PEAK VEL.(cm/s)	*<0.003*	*0.04*	*0.5*	*3.0*	*6.5*	*14*	*30*	*63*	*>136*
INSTRUMENTAL INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+

Scale based upon Atkinson & Kaka, 2007

Figures courtesy of USGS NEIC:
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USGS W-phase Source Mechanism

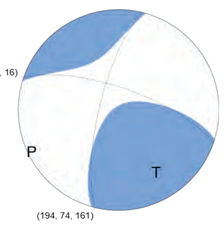
Moment 6.238e+17 N-m
Magnitude 5.8 Mww
Depth 11.5 km
Percent DC 70 %

Nodal Planes

Plane	Strike	Dip	Rake
NP1	289°	72°	16°
NP2	194°	74°	161°

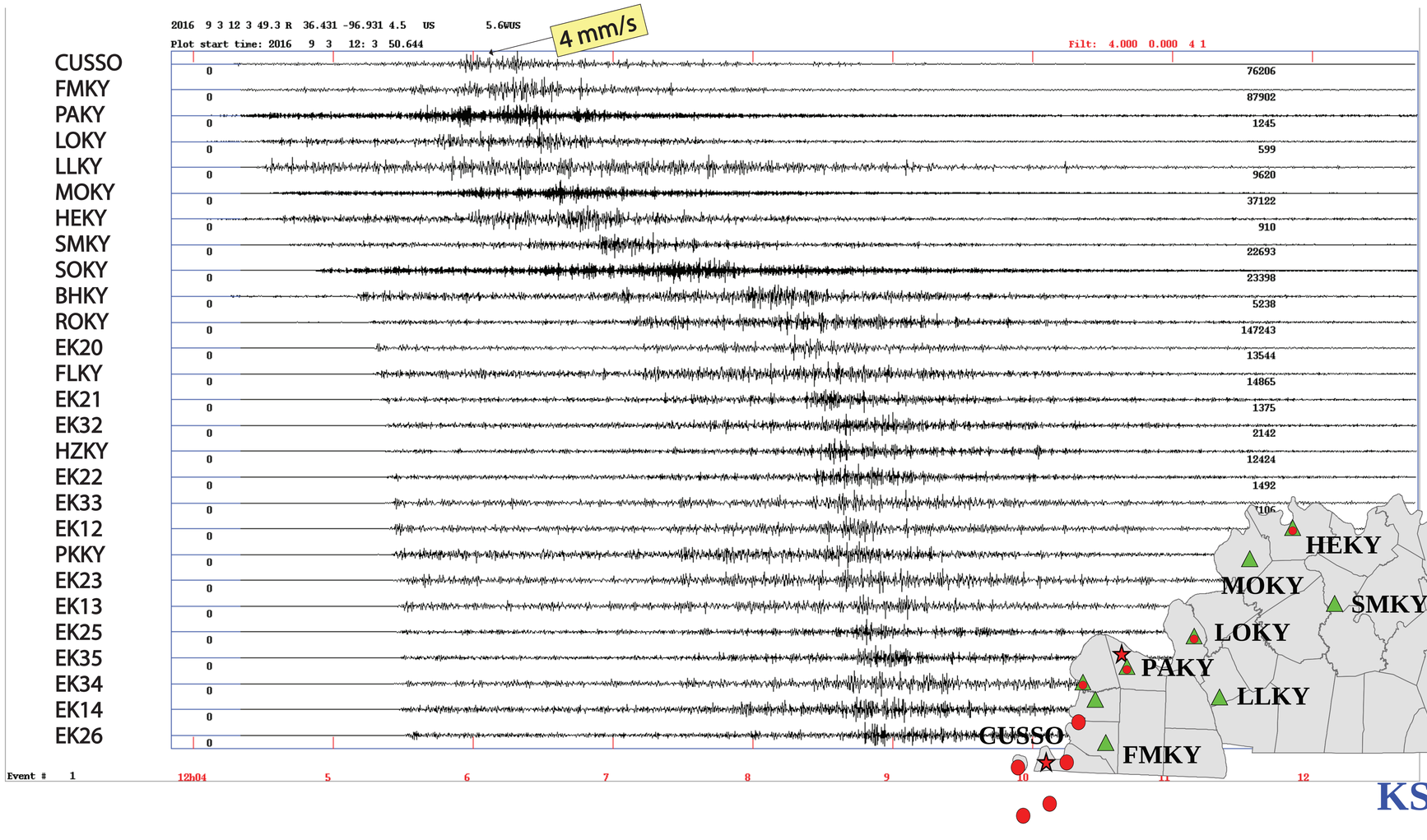
Principal Axes

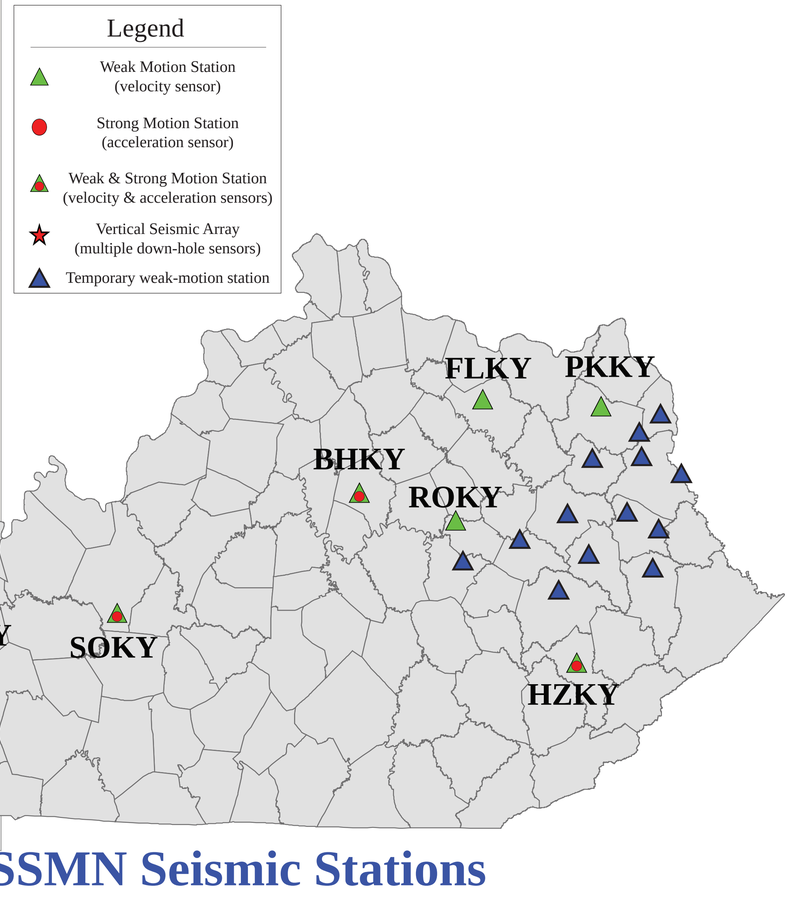
Axis	Value	Plunge	Azimuth
T	6.674e+17 N-m	24°	151°
N	-0.989e+17 N-m	66°	335°
P	-5.685e+17 N-m	2°	242°



(Strike-slip Faulting on NE- or SE-striking fault planes)

KSSMN Seismograms
(ordered by distance)





KSSMN Seismic Stations