

# PRELIMINARY REPORT ON March 24, 2010 ELAZIG-KOVANCILAR EARTHQUAKES (EASTERN TURKEY)

*PREPARED BY EARTHQUAKE DEPARTMENT WORKING GROUPS\**

\* Disaster And Emergency Management Presidency, Earthquake Department Presidency, Eskişehir Yolu 06530, Lodumlu, Ankara, TURKEY

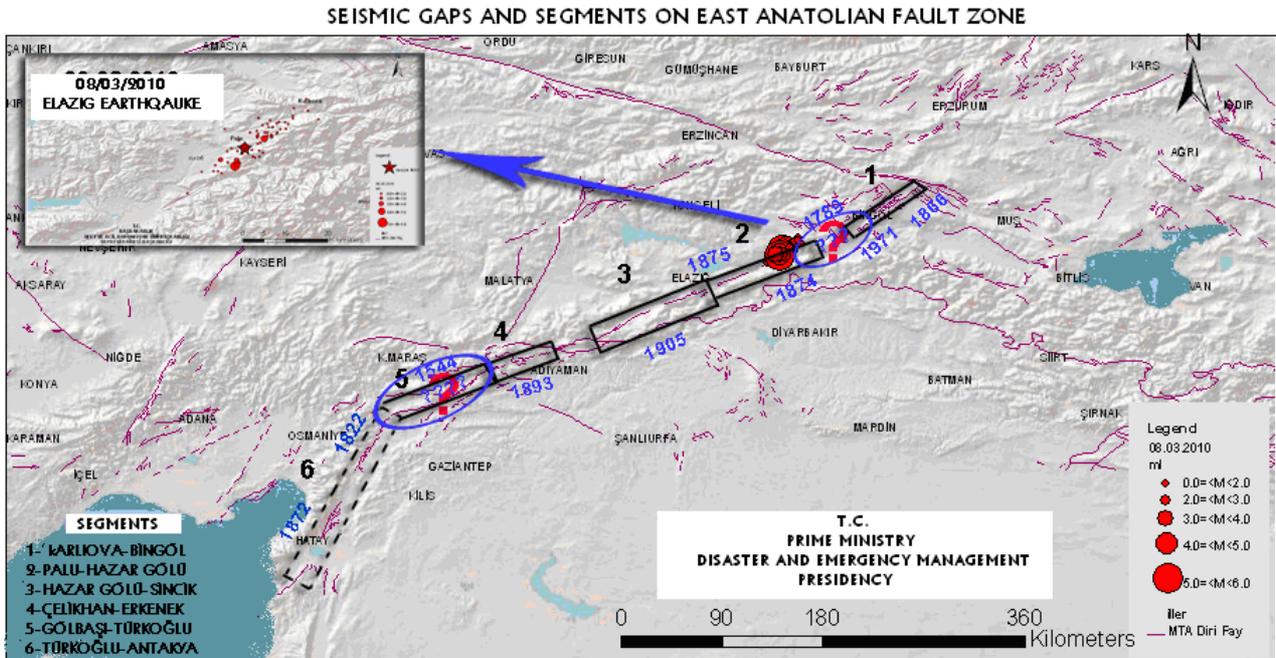
An earthquake with magnitude  $M_L=5.0$  occurred at local time 16:11 on March 24, 2010. Epicentral coordinates of the earthquake is determined as 38.77 K- 40.09 D with focal depth 22.57 km. After the earthquakes one aftershock which magnitude was  $M=3.0$  occurred.

Elazığ-Kovancılar region where the earthquake occurred, join in the first and second degree earthquake zone in the Earthquake Zoning Map of Turkey.

Earthquake activity of this region (and all of Turkey) has been observed in Earthquake Department data center Ankara 7 day/24 hours with 164 seismic station and 280 accelerometer. Obtained results has shared with public, press and relevant authorized

## ACCELERATION VALUE OF ELAZIG-KOVANCILAR (MI=5.0) EARTHQUAKE

No	Station City	Station District	Equipment Type	NS (gal)	EW (gal)	Vertical (gal)	Distance of station to epicenter (km)
1	Bingöl	Merkez	CMG-5TD	14.15	8.09	7.58	38



### Segments of East Anatolian Fault Zone

The earthquakes which occurred in historical and instrumental period in Hazar-Sincik and Palu Hazar Segment are given below

## Hazar-Sincik Segment

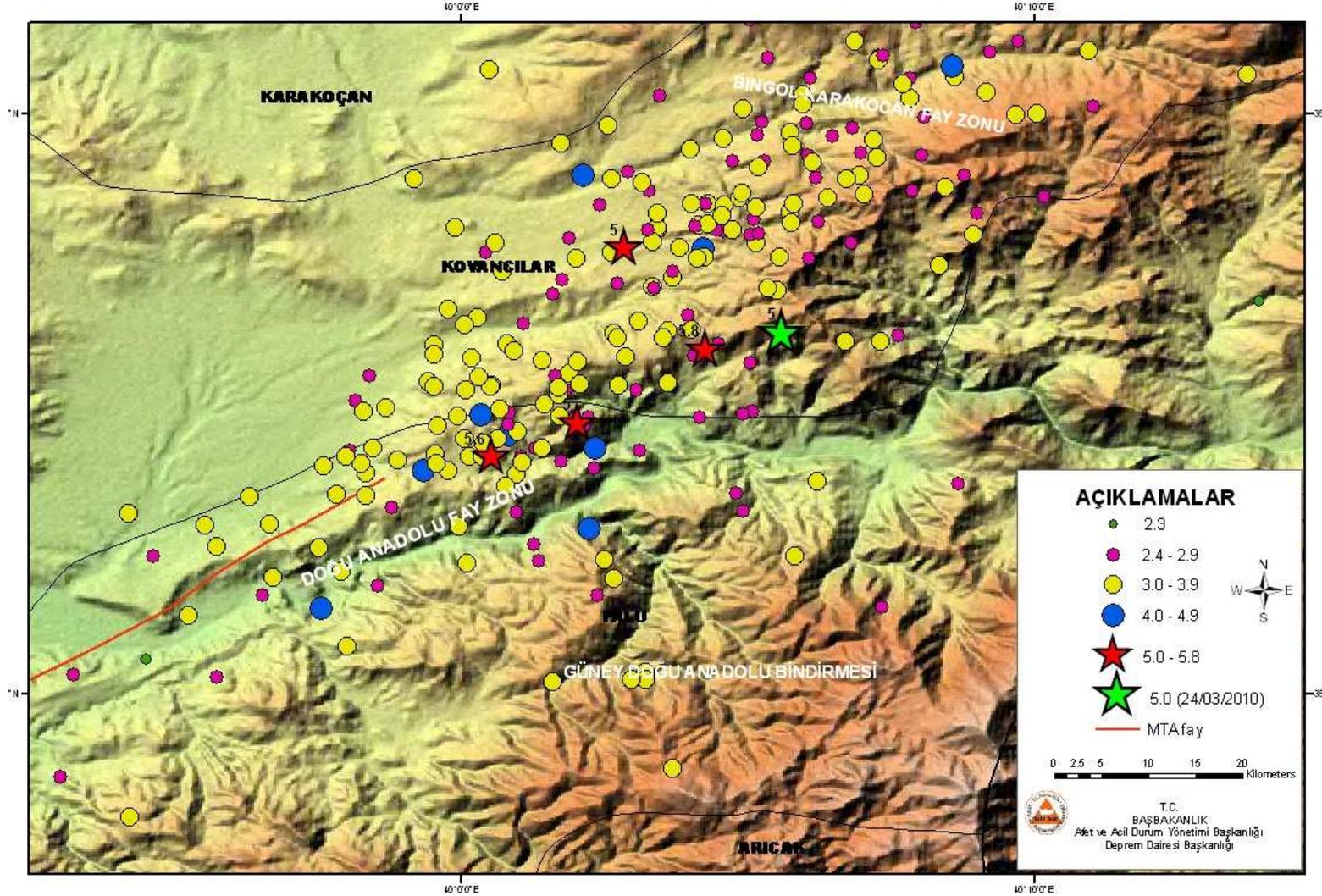
Historical Period	Insturmental Period
(year) 1875 M=6.7	(year) 1905 M=6.8
	2003 M=5.7
	2004 M=5.3
	2005 M=5.2
	2007 M=5.0

## Palu-Hazar Segment

Historical Period	Insturmental Period
(year) 1874 M=7.1	(year) 1910 M=5.0
	1977 M=5.1

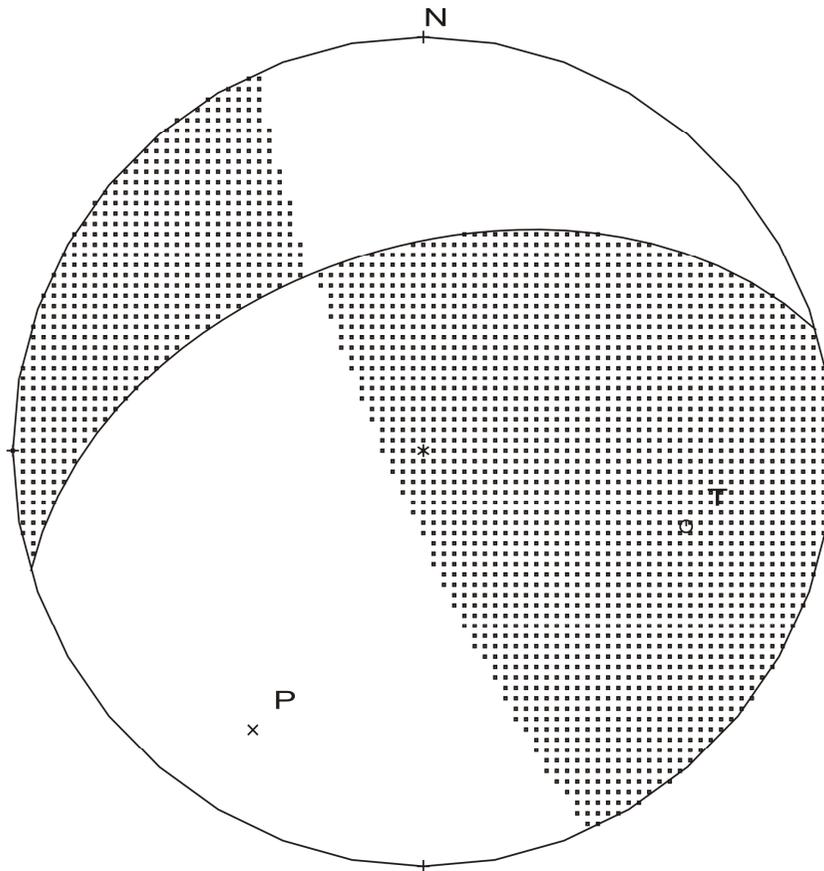
ELAZIĞ KOVANCILAR EARTHQUAKES (08-03-2010\_ 04:32, M=5.8 ) and PALU EARTHQUAKE (08-03-2010\_ 09:47, M=5.6 )  
AFTERSHOCKS and 24-03-2010 16:11 MI=5.0 ELAZIĞ KOVANCILAR EARTHQUAKES

2010 MART AYI ELAZIĞ DEPREMLERİ DAĞILIMI

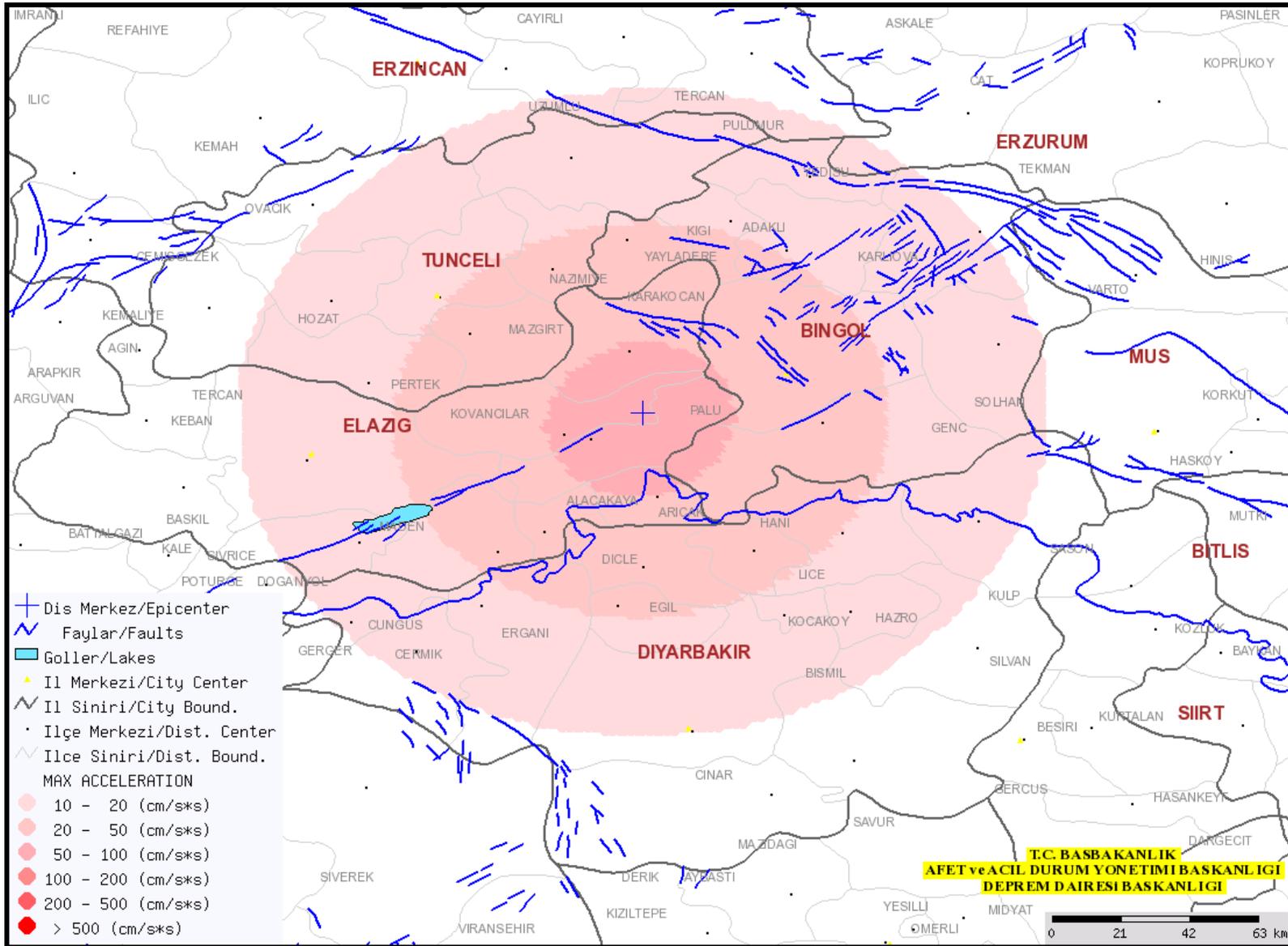


STRK1 253  
DIP1 49  
RAKE1 10  
STRK2 156  
DIP2 82  
RAKE2 139

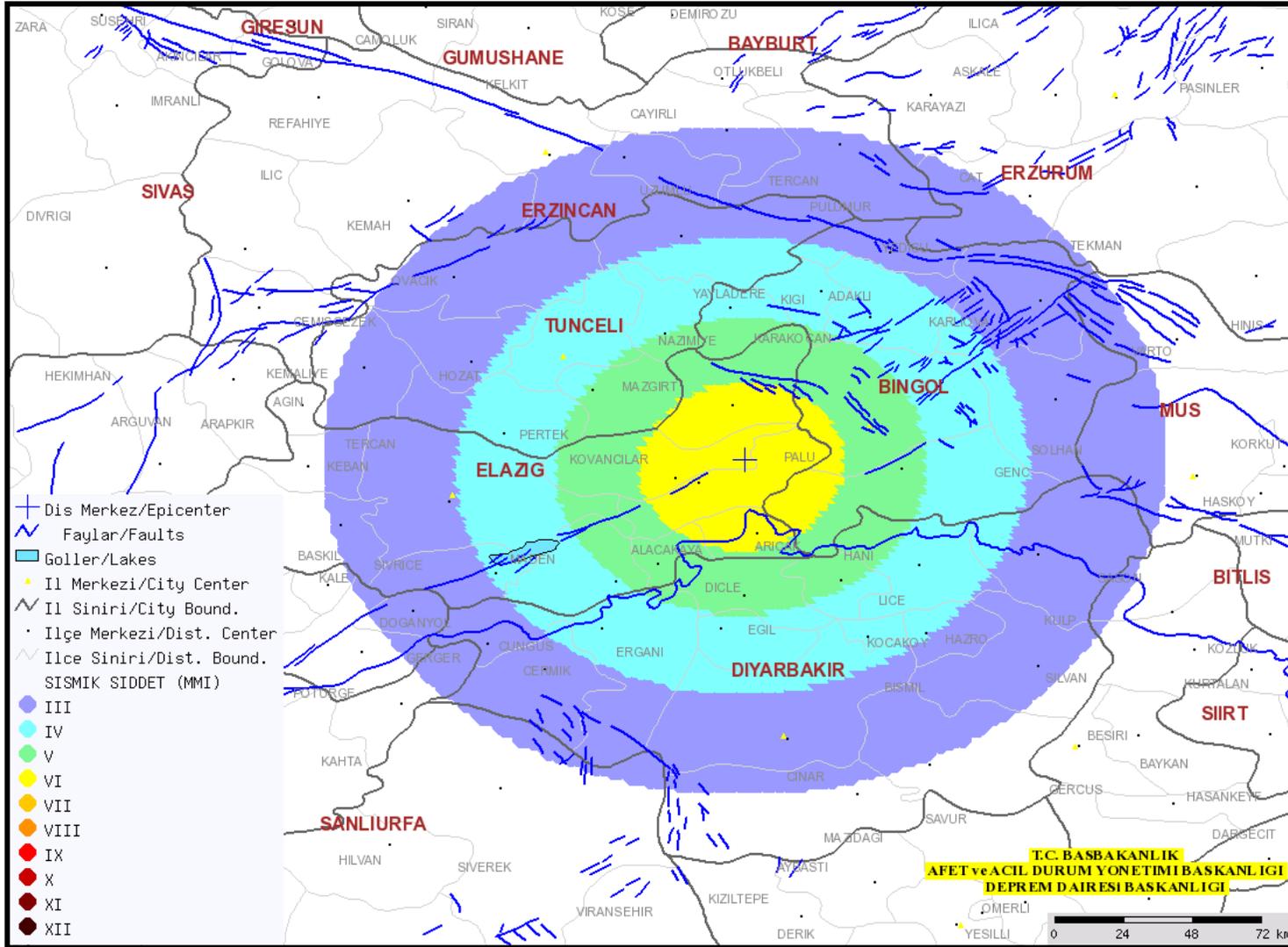
P-axis; plunge= 22  
azimuth= 212  
T-axis; plunge= 34  
azimuth= 106



**FOCAL MECHANISM SOLUTION OF ELAZIĞ-KOVANCILAR EARTHQUAKES MI=5.0**



**Estimated Peak Ground Acceleration Distribution Map of Elazığ-Kovancılar Earthquakes (MI=5.0)**



**Estimated Seismic Intensity Map 24 March 2010 Elazığ-Kovancılar Earthquakes MI=5.0**