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Stellar Observations made at the Malatya Danjon Astrolabe Station

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Abstract: We give here the first results of astrometric stellar observations made at the Malatya Station with the modified astrolabe of Paris observatory. This campaign is conducted as part of a cooperation between Inönü University and the Paris Observatory. The astrolabe, which is strictly similar to that of Santiago de Chile, can use two reflecting prisms instead of the trnsparent prism of the Danjon Astrolabe. Consequently, it is possible to observe at the two zenith distances of 30° and 60°. The time is supplied by a GPS receiver which gives UTC with the necessary precision. As the station is a new one, the precise mean coordinates of the instrument had to be determined. This determination was done by stellar observations of FK5 stars. We have also carried out solar observations during the same interval. In order to be free of Earth rotation irregulativities, parameters of Earth rotation given by the International Earth Rotation Service/Central Bureau (IERS/CB) have been used to compute the instantaneous apparent latitude and longitude variations to correct the stellar and solar observations. This procedure gives the mean position of the station on the IERS system, which is also used to correct the solar observations.

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