## **Mobile Weather Station and Databank**

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MOBILE WEATHER STATION AND DATABANK Berk BEKTEMUR, Asli DOGU Private Anabilim Anatolian High School, Istanbul, Turkey PURPOSE In order to produce more accurate data for climate and weather, air measurement data should be increased. Thus, the number of meteorological stations should be increased. However, this is expensive and will not happen in a short time. For this purpose, this project was implemented in order to create new meteorological stations in our country with fewer resources and in a shorter time. PROCEDURE However, the high cost of maintenance due to the importation of the devices prevented the widespread use of existing meteorological stations. It was decided that within this framework, data will be obtained using cheaper and more easily controlled devices by combining STEM training with maker and coding training. We decided to establish a meteorological station. Using these criteria; The device was manufactured in three versions within two months. The aim here was to produce better quality data. In the first version, only temperature and humidity could be measured. In the second version, air pressure and wind speed meter were added to the system. In the third version, a soil moisture meter was added. Data transmission and data communication network was used. RESULTS After the measurements were obtained, we analyzed the data. We decided that the data should be interpreted in order to be effective. We examined the methods of geographical interpretation and found various approaches. CONCLUSIONS In this study measurements and analysis showed that global warming affects Turkey's climate.

## Awards Won:

American Meteorological Society: First Award of \$2,000