The aim of this study is to investigate the heart rate and oxygen saturation values of U13 footballers at competition occasion who stand in different cities. 34 footballers participated to the study totally who are playing U13 teams of Ankara Keçiören Bağlum Sport Club and Isparta Iyaş Youth and Sport Club. Height, weight, heart rate and oxygen saturation measurements were taken from research groups. In analyzing handled datas, Independent t Test was used at SPSS 18.0 for Windows. ResearchGroups' height means found in Isparta Iyaş Youth and Sport Club 156.1±6.1 cm, found in Ankara Bağlum Sport Club 152.7±5.6 cm; weight means found in Isparta Iyaş Youth and Sport Club 47.0±3.7 kg, Ankara Bağlum Sport Club 48.4±4.0 kg. As comparing the heart rate values pre and during competition, differences found insignificant too (p>0.05). While comparing the oxygen saturation measurements in pre and 30th minute, differences were found statistically significant (p<0.05); No significant difference was found in the comparison of the oxygen saturation measurements before the competition and at the 10th, 20th and 40th minutes (p>0.05). Based on the obtained data, we think that studying with more higher areas and groups will be useful for sharpening some differences and similarities.