**Abstract**

Frequency of cloudiness effects on the climate in the southern coasts of Caspian Sea are through increasing humidity, precipitation and cooling. The clouds format in different synoptic patterns and special thermodynamic and dynamic conditions. In this research, sea level pressure levels patterns were studied and compared in convective, nonconvective and heavier precipitation events in the Southern coasts of Caspian Sea. For this aim, on the basis of daily precipitation and with regard to 25 and 50 percent probability, precipitation events were divided into 2 groups of heavy and super heavy precipitations as well. Clouds synoptic indexes were grouped into two classes of convective and nonconvective clouds. The results show that there are 16 slp patterns in heavier precipitation groups. In general, Black Sea high pressure and Siberian high pressure generated heaviest and the most cover in convective and nonconvective precipitation events respectively.

**Keywords:** Convective and Nonconvective Clouds, Heavy and Super Heavy Precipitation, Southern coasts of Caspian Sea.