5 TC Passage Frequency

TC passage frequency is the number of TCs passing through a square area during a certain period of time. Here, we define the square area to be 2.5° in latitude by 2.5° in longitude. First we show the TC passage frequency for the entire 38-year period of 1966 to 2003. On this plot, we find TC activity is mainly confined between 10°N to 30°N over the CNP, with the highest TC passage frequency being located to the southeast of the Hawaiian Islands, around 15-17°N and 142.5-145°W (Figure 5.1). The maximum value is as large as 35, which indicates that 35 TCs have passed though the area during the 38 years period. That is, on average, approximately one TC passage per year is expected in this location. The second highest frequency is found to the south of the Big Island at 15°N, where a total of 25 TCs have passed through that area during 1966 to 2003.

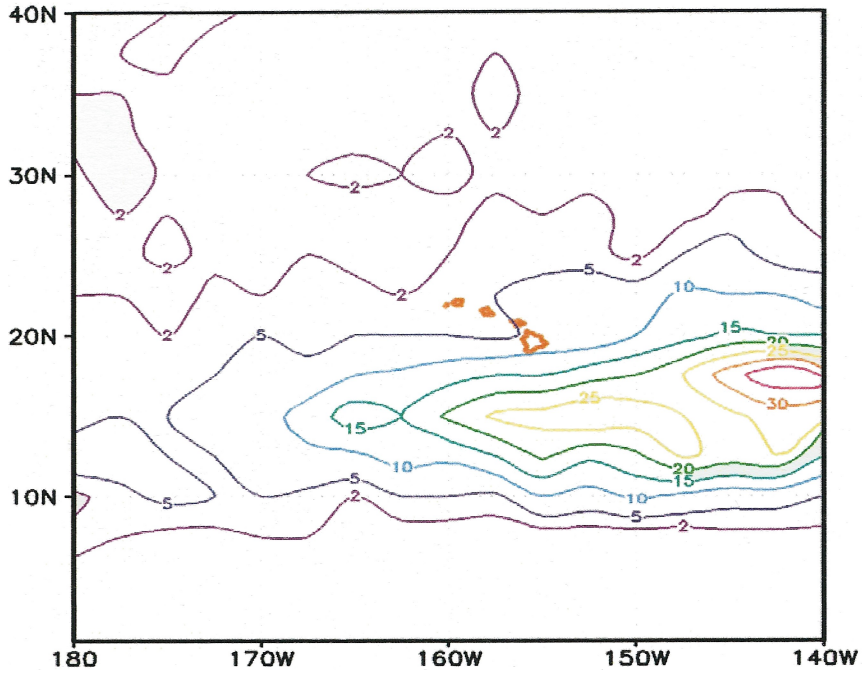

Figure 5.1. TC Passage Frequency. **TC (hurricane, tropical storm and tropical depression) passage frequency during the 38 years from 1966 to 2003.**