Space weather is the physical and phenomenological state of natural space environment. It aims at the understanding and predicting the state of the Sun, the interplanetary and planetary environments. The total solar eclipse provides unique opportunity to study the sudden blocking of solar radiation. In the present paper, I have analyzed various space weather parameters for ten events of total solar eclipse days occurred during 1991 – 2006. I have studied various space weather parameters during many storm, solar eclipse and no-storm (quiet) days and have presented comparative results. I have concluded that during eclipse days proton density lowers than the storm and no-storm days which is normal, while the other parameters during solar eclipse days show their variability comparable to quiet days or some higher values.