

# Comparison between GPS Slant TEC observations and Ionosphere/Plasmasphere Model

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We have simulated the GPS slant TEC observations from Japanese MSAS stations using the Global Core Plasma Model (Gallagher et al., 2000). Agreement between the observations and model calculations are good in average sense. Assuming that the differences between them are caused by the satellite- plus receiver-bias and difference between actual and model solar activity level on the specific day, we have estimated the bias and the actual solar activity by the least squares method. Comparing the results with the bias deduced from the Kalman filter, we have confirmed fare agreement between them. Using the estimated results, we can extrapolate the slant TEC values more accurately than the monthly average model.