

Figure 1: True minus regression bias and standard deviation statistics for the scattered brightness temperature and both polarizations as a function of incidence angle. Plots on the left are for the V polarization and plots on the right for the H polarization. The plus symbols represent case A (see Table 1), the star symbols case B, the diamond symbols case C and the triangles case D. The data set used to develop the regression coefficients is the same as that used to compute the true values (computed with the GO model) and is the Garand26 data set. The optical depth is < 2.1 and the wind speed ranges between 0 and 20 ms^{-1} .

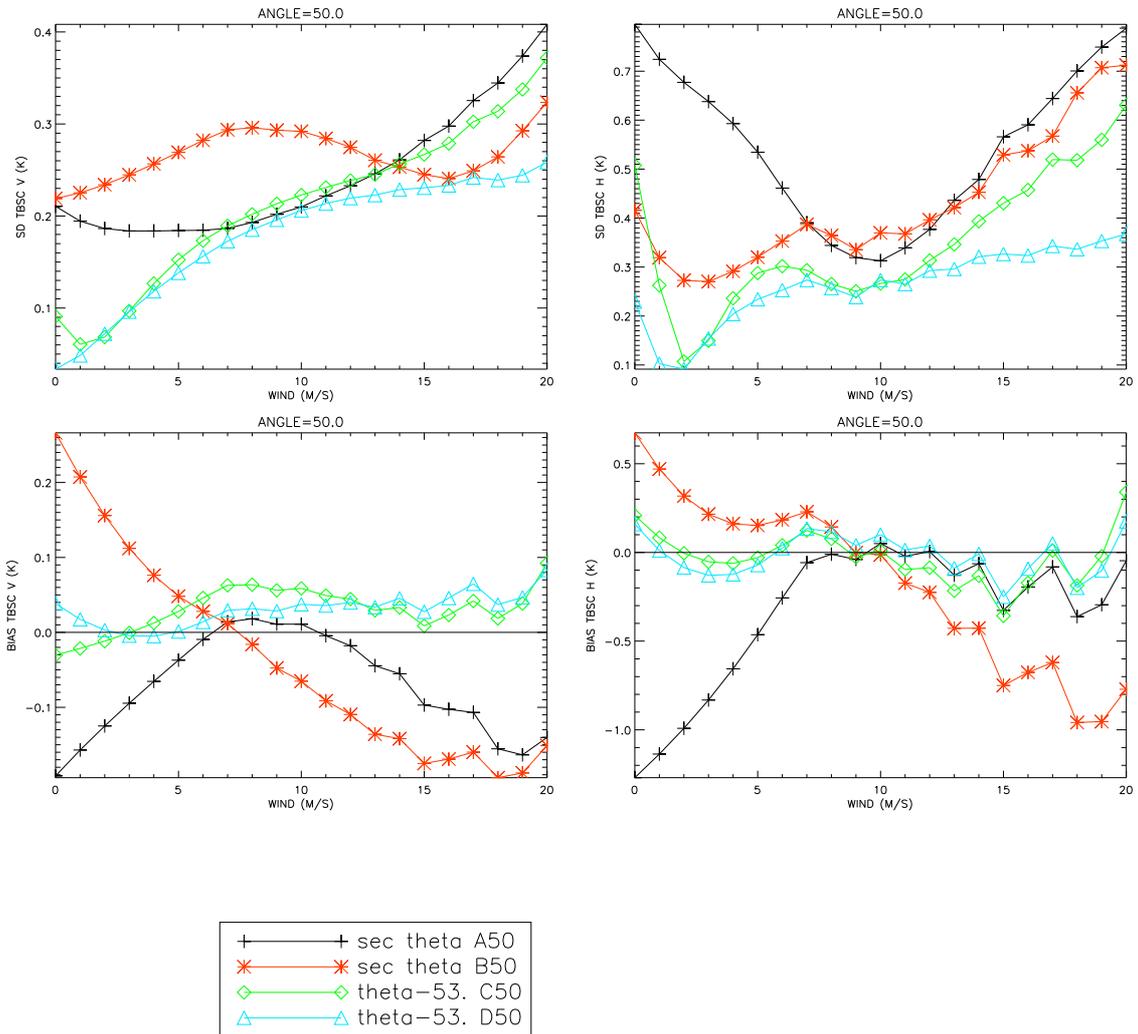


Figure 2: Same statistics as in Fig 1 except that the true minus regression scattered brightness temperatures are illustrated as a function of surface wind speed and for an incidence angle of 50° .

WIND=3.0 m/s ANGLE=50.0 degrees

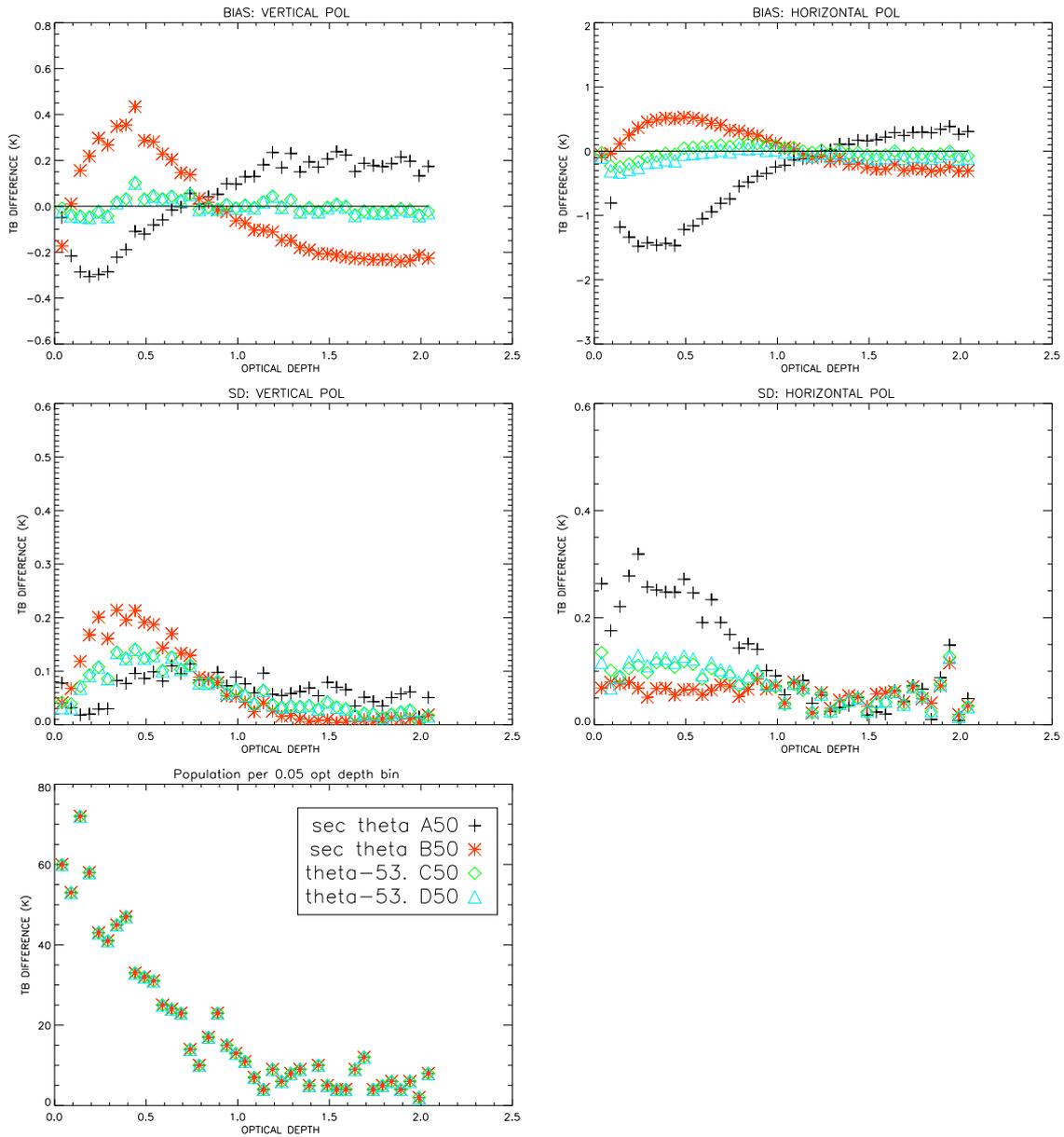


Figure 3: Same statistics as in Fig 1 except that the true minus regression scattered brightness temperatures are illustrated as a function of optical depth. The number of samples contained in each 0.05 interval of optical depth is also illustrated in the bottom left plot. The surface wind speed is 3 ms^{-1} and the incidence angle is 50° .

WIND=20.0 m/s ANGLE=50.0 degrees

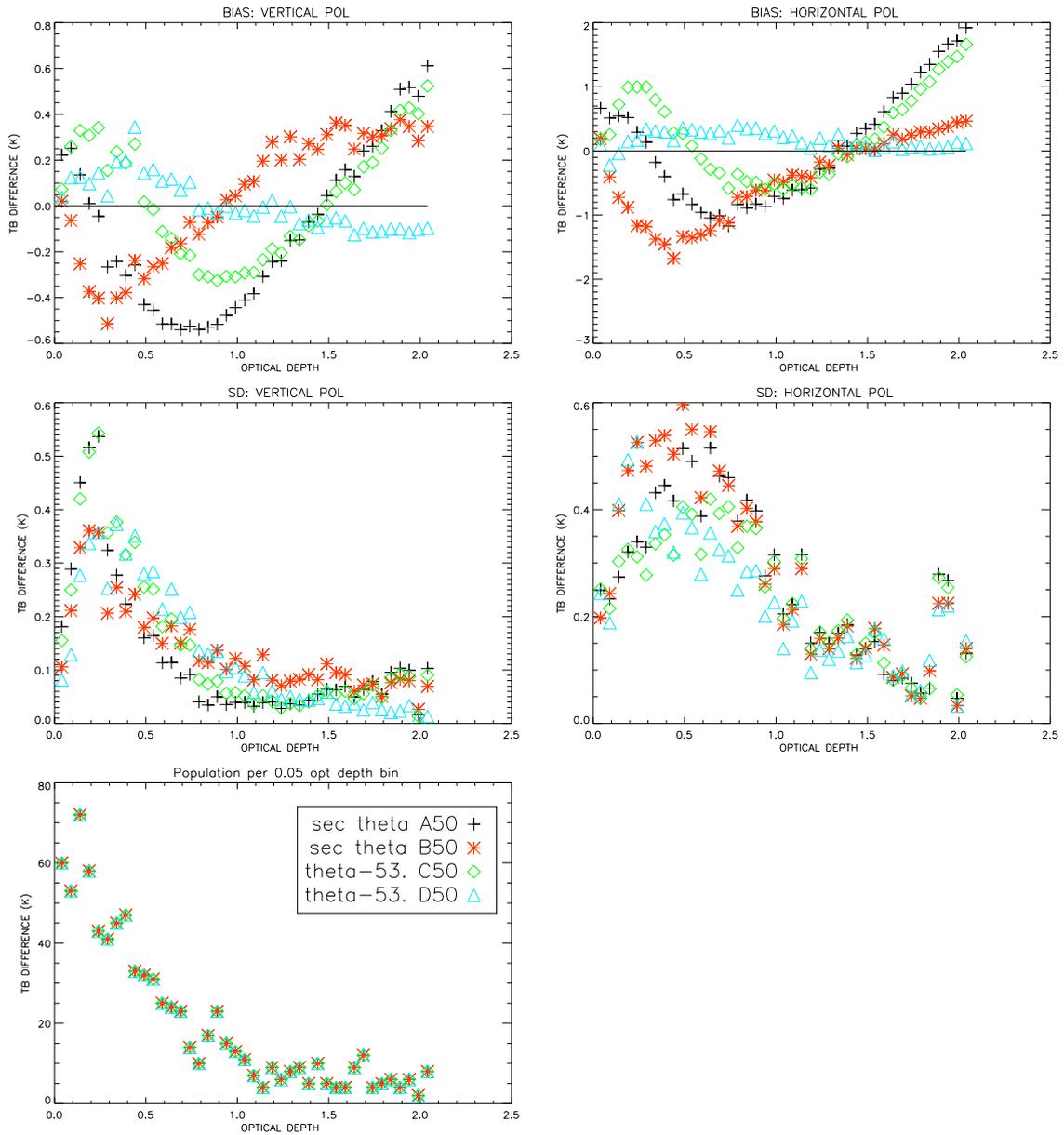


Figure 4: Same statistics as in Fig 1 except that the true minus regression scattered brightness temperatures are illustrated as a function of optical depth. The number of samples contained in each 0.05 interval of optical depth is also illustrated in the bottom left plot. The surface wind speed is 20 ms^{-1} and the incidence angle is 50° .

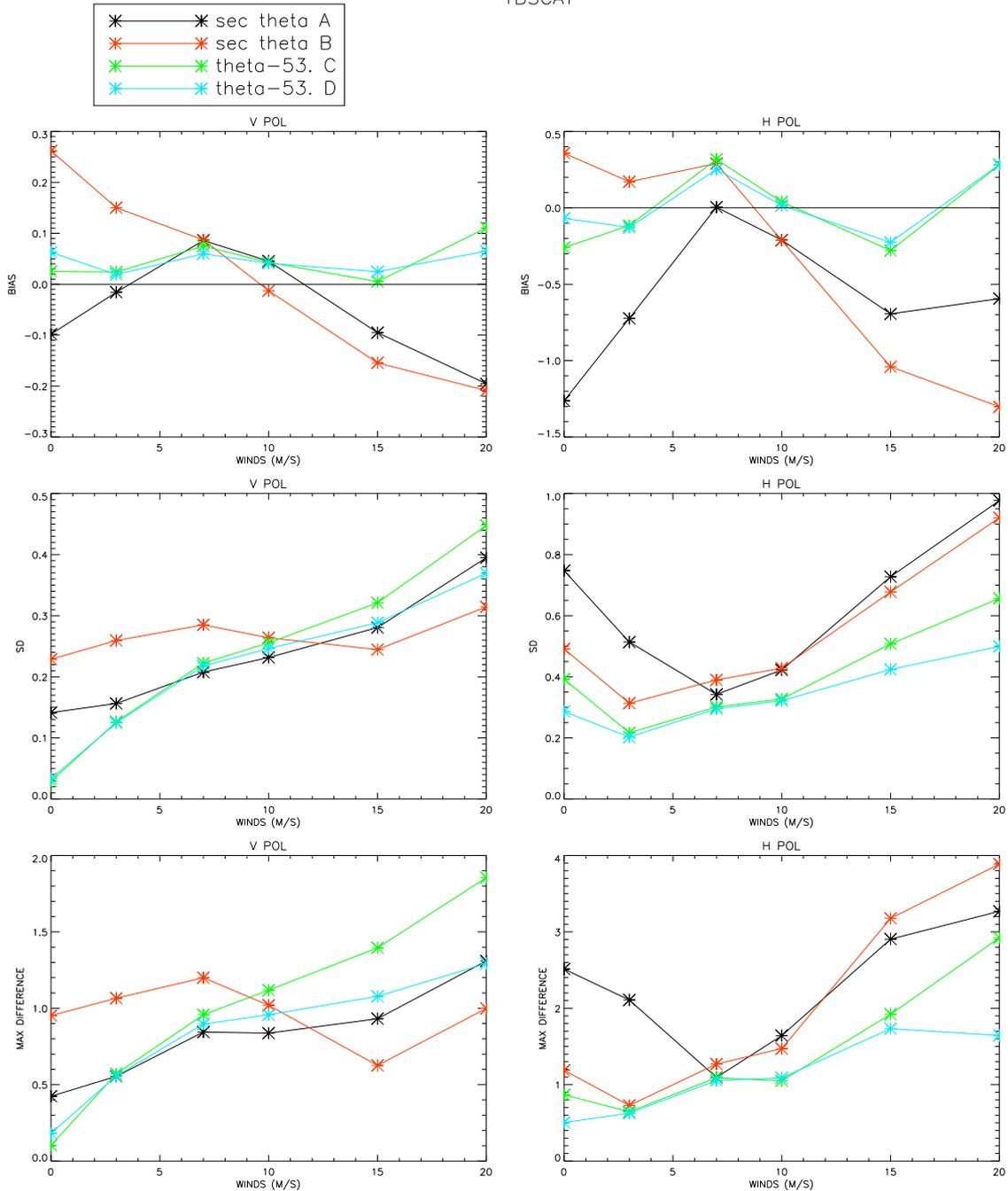


Figure 5: True minus regression bias and standard deviation statistics for the scattered brightness temperature and both polarizations as a function of surface wind speed. The maximum absolute differences between the true and regressed values are also illustrated in the bottom plots. Plots on the left are for the V polarization and plots on the right for the H polarization. The plus symbols represent case A (see Table 1), the star symbols case B, the diamond symbols case C and the triangles case D. The data set used to develop the regression coefficients is the Garand26 data set and that used to compute the true values (computed with the GO model) is the TIGR3 1193 warm data set. The optical depth is < 2.1 and the incidence angle is 53° . The optical depths were computed at frequency intervals of 5 GHz between 15 and 220 GHz.

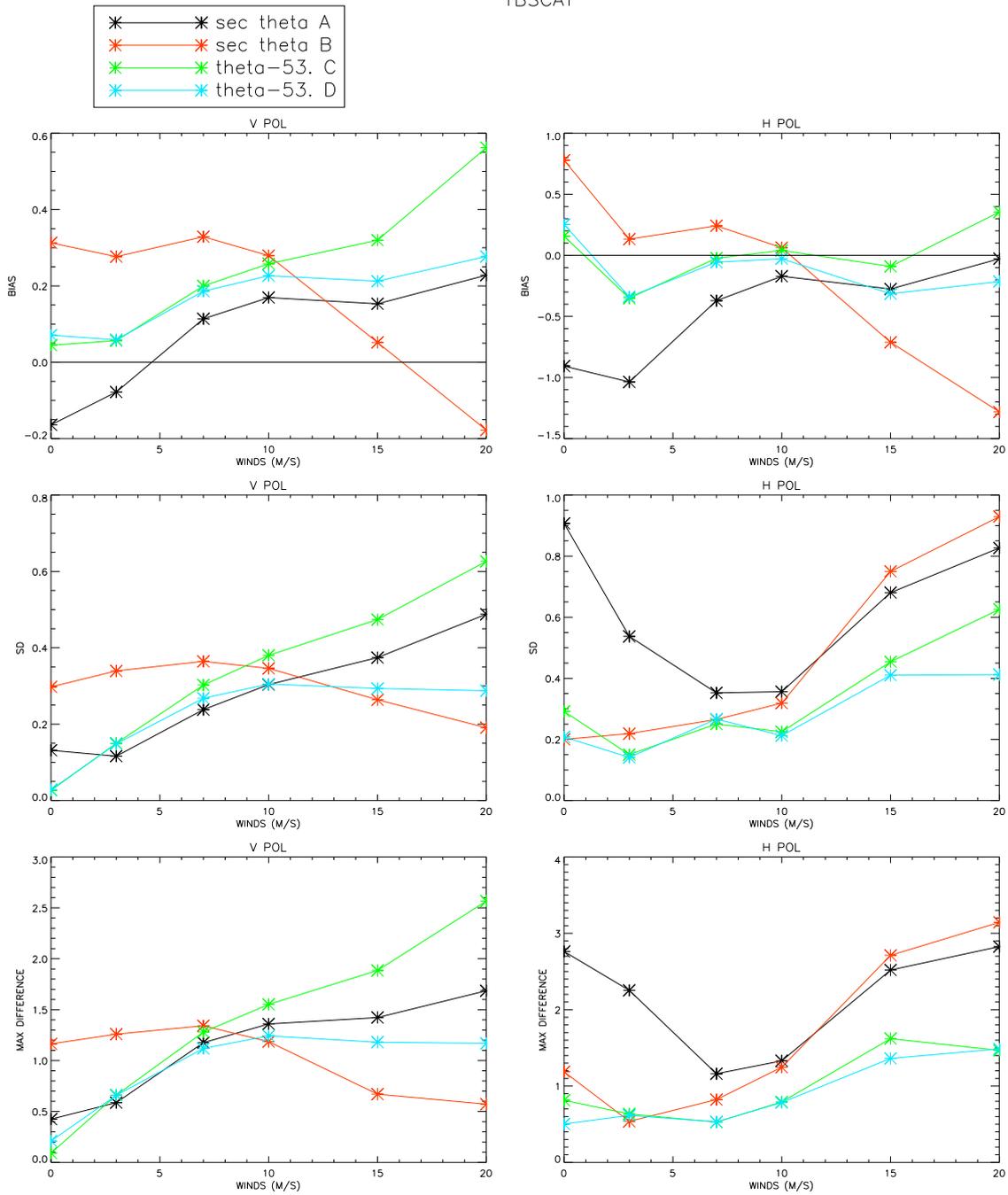


Figure 6: Same as in Fig. 5 but the optical depths were computed for only the SSM/I frequencies of 19.35, 22.235, 37 and 85.5 GHz.