Langmuir probe RF plasma compensation using simulation method AASIM YOUSIF AZOOZ — The problem of RF compensation in plasma Langmuir probe data is analyzed by simulation procedure. It is pointed out that this type of compensation can be accounted for through proper mathematical transformation applied to the RF contaminated Langmuir probe data to reproduced the actual probe I-V data which are not affected by the RF. Matlab based computer software is presented. The software automatically deduces the value of the probe voltage shift induced by the RF, apply the proper transformation to the I-V data and calculates the actual plasma parameters. These parameters include the plasma potential, plasma electron temperature, plasma electron density and the electron energy distribution function EEDF.

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