October 15, 2010 dataset. 200x200 px square around disk center. I selected $t = 00:00$ hrs to make these plots.

Scatter plots for $w = [1,3,3,2]$ of B strength, Doppler Width and Chi2:
Scatter plots for $w = [1,5,5,3]$ of B strength, Doppler Width and Chi2:
Changing the chi2_stop value from 1d-6 to 1d-7 results in an increased magnetic field strength. Also, if I remember correctly, the inclination would converge to 90 degrees for more pixels - which is in part responsible for the increase in magnetic field strength. The Doppler width also increases, while chi2 decreases. However, changing the chi2_stop value from 1d-8 to 1d-8 produces more symmetrical scatter plots, indicating that the results do not change that much in terms of the fitting.