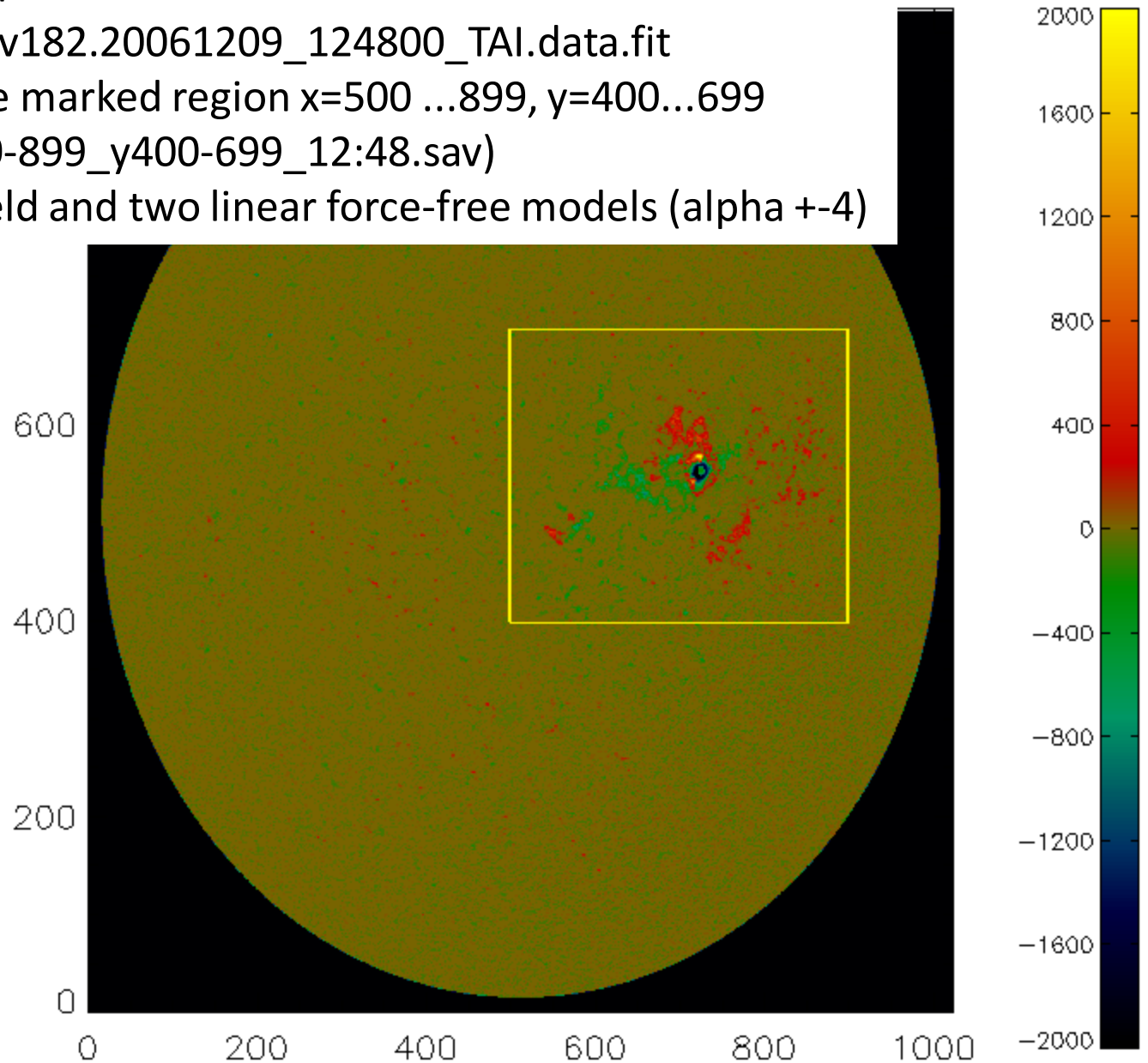


# MDI Magnetogram

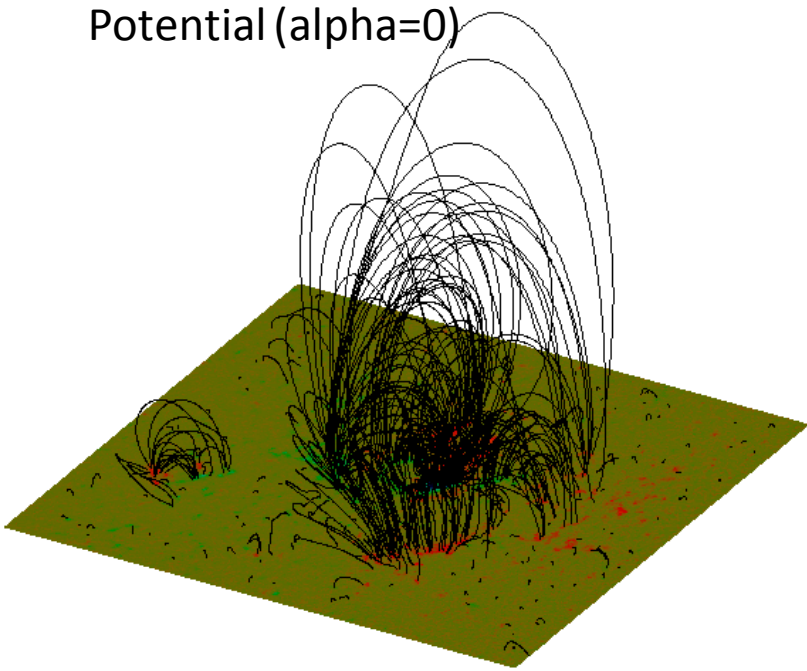
mdi.fd\_M\_96m\_lev182.20061209\_124800\_TAI.data.fit

We extrapolate the marked region  $x=500 \dots 899$ ,  $y=400 \dots 699$   
(stored in AR\_x500-899\_y400-699\_12:48.sav)

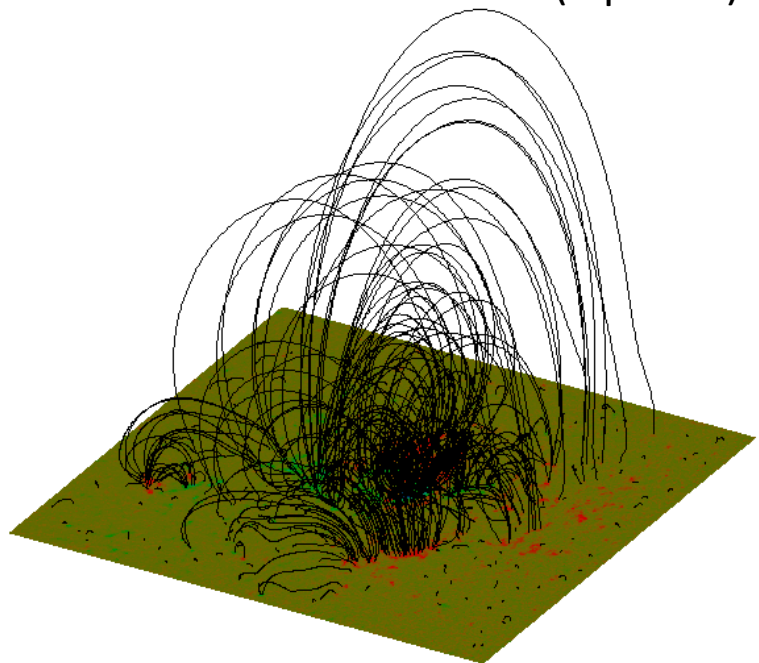
with a potential field and two linear force-free models ( $\alpha \pm 4$ )



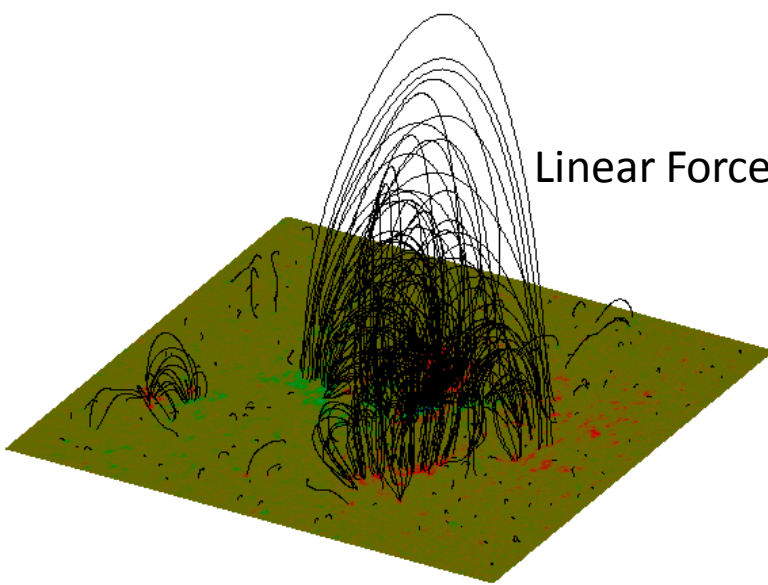
Potential (alpha=0)

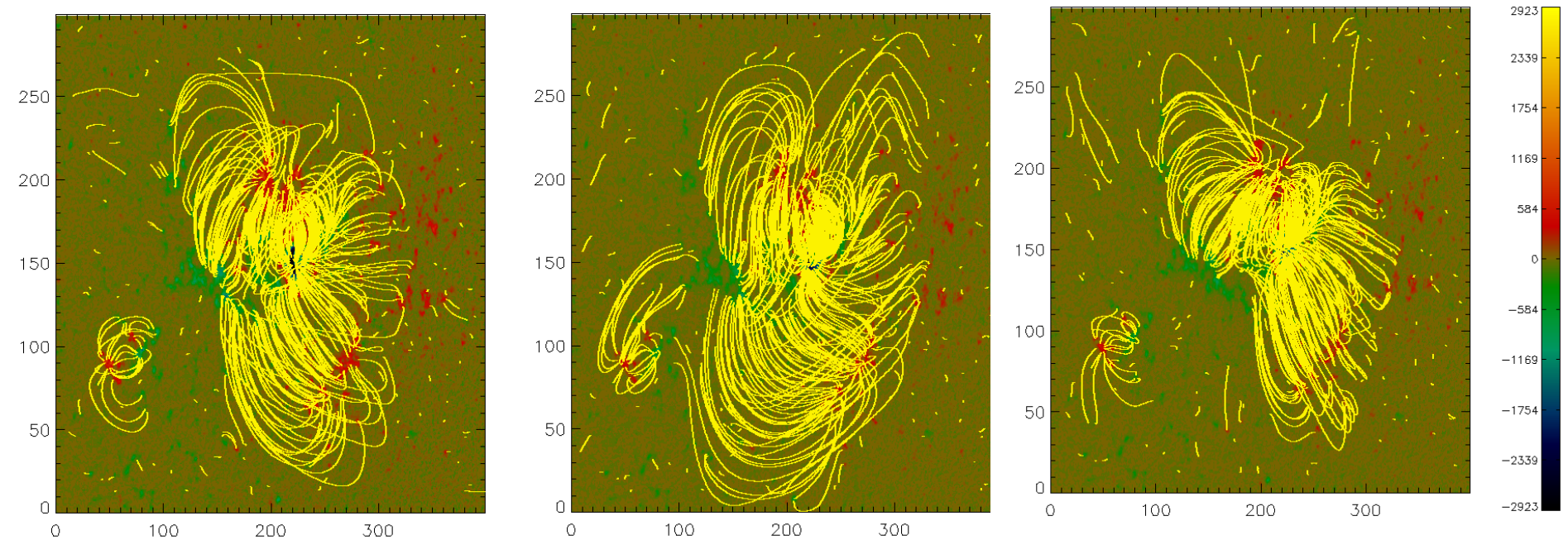


Linear Force-free (alpha=4)



Linear Force-free (alpha=-4)





Potential ( $\alpha=0$ )

Linear Force-free ( $\alpha=4$ )

Linear Force-free ( $\alpha=-4$ )

The shown fieldlines are stored in the files

`alpha_minus4_loops.sav` `alpha_plus4_loops.sav` `pot_loops.sav`

We can compute more and other fieldlines.

The 3D data-cubes (400 x 300 x 200 in x,y,z) are stored in

`Balpha_plus4__AR_x500-899_y400-699_12:48.sav` `full_disk_12:48.sav`,

`Balpha_minus4__AR_x500-899_y400-699_12:48.sav`, `Bpot_AR_x500-899_y400-699_12:48.sav`