Creation of Random Temperature Profiles for Inversion 0000 **HSRA** Model Cool Umbra Model Parameter Space 9000 Upper Limit for $B > 5000 \,\mathrm{G}$ Upper Limit for B > 4000 GUpper Limit for $B > 3000 \,\mathrm{G}$ 8000 Upper Limit for $B > 2000 \,\mathrm{G}$ 7000 6000 5000 4000 3000 -3 $\log \tau_c$