Time-dependent flare models with MALI

J. Kašparová, P. Heinzel, M. Varady, M. Karlický

Astronomical Institute of Academy of Sciences of the Czech Republic, Ondřejov

Temporal variations of Hα line profile intensities related to electron beams are presented. We show first results of time dependent simulations of a chromospheric response to a 1 sec monoenergetic electron beam. 1-D hydrodynamic code together with particle representation of the beam have been used to calculate atmospheric evolution. Time dependent radiative transfer problem has been solved for the resulting atmosphere in the MALI approach, using the Crank-Nicholson implicit scheme. Non-thermal collisional rates were included in linearised equations of statistical equilibrium.