FORWARD Codes: Now with Widgets!

Blake Forland *1 and Sarah Gibson \dagger1

¹National Center for Atmospheric Research (NCAR) – 3080 Central Green Dr Boulder, CO, 80301 USA, United States

Abstract

The FORWARD suite of SolarSoft IDL codes converts an analytic model or simulation data cube into a form directly comparable to observations. Observables such as extreme ultra violet, soft X-ray, white light, and polarization images from the Coronal Multichannel Polarimeter (CoMP) can be reproduced. The observer's viewpoint is also incorporated in the forward analysis and the codes can output the results in a variety of forms in order to easily create movies, Carrington maps, or simply observable information at a particular point in the plane of the sky. We present a newly developed front end to the FORWARD codes which utilizes IDL widgets to facilitate ease of use by the solar physics community. Our ultimate goal is to provide as useful a tool as possible for a broad range of scientific applications.

Keywords: forward, magnetic fields, models, IDL

^{*}Speaker

[†]Corresponding author: sgibson@ucar.edu