

**NRL Work on A
Coronal Renderer Program**

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Second
SECCHI Consortium Meeting
RAL Abingdon, UK
July 13, 2001

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NRL 3D R&V Team Approach to 3D Reconstruction

Create the renderer

Old FORTRAN program STREAMER.FOR

Basic approach: render assembly of general geometrical features with adjustable parameters, and a Saito background

Example: **FIGURE 1**: Saito background alone

Cheap “tomography”: guess a solution, render, and compare with observation. Notice don’t need a separated pair of images, but could compare with just a LASCO non-stereo image.

Converted to IDL procedures and functions (Jake Wendt)

To be fixed: a lot

Will need a stripped, optimized part of STREAMER for NRL 3D reconstruction image - data function

Create the 3D reconstruction engine

PIXON algorithm (following talk by Jeff Newmark)

Also use a “toy” problem for earliest work

All LOS 90 degrees (spacecraft at infinity)

Viewing angle of spacecraft 90 degrees

Sun a point source