1 Introduction

1.1 About the Quicklook software

The CDS Quicklook software package presented here is designed to display and manipulate data from the Coronal Diagnostic Spectrometer (CDS) on SOHO. The software uses IDL widgets to lower the threshold for new users and to function as a helpful tool during operations, quickly browsing through newly received data from CDS to assist further planning of new observing sequences.

The Quicklook software may function as a nice starting point for analysis of data, to get an overview of the data at hand. It also supplies routines interfacing with the data structure to simplify the task of writing analysis programs suited to specific observations.

1.2 About this manual

This manual is meant as an overview on how to get started and how to use the Quicklook software to inspect CDS data. It does not include any details about the code itself, but points out most of the useful features.

Once you get going, *don't be shy* — it's generally a lot quicker to press a button to see what it does rather than trying to look it up in this manual, and there's just about no way you can do anything harmful.

Each CDS routine contains a header describing details about the routine, how to use it, input parameters, what other routines are called etc. The header information of a given CDS routine can be displayed calling different help routines available in the CDS software package (e.g. `XDOC`, see Section 2).

This document starts with an overview of some very useful general software and help routines, and a brief introduction to the CDS instrument and the data format. Then the CDS FITS files and the CDS data structure within IDL are briefly discussed.

The main part of the document gives an introduction to the Quicklook software and how to get started. This section is followed by some examples on how to extract and display the CDS data directly from the IDL prompt, to allow personal creativity to be used as well as personal routines.

Other useful documents that can be of help for the user of the CDS Software include:

- CDS Science Report (Blue book), 1993, R. A. Harrison, RAL.
- CDS Software notes (see Appendix A).
- IDL User Manual

A set of routines to support the interoperability between SOHO instruments has also been developed and is called the CDS Interoperability Software. The objective of this software is to allow other SOHO instrument teams to read and display CDS data. The software has deliberately been written so that a minimum of CDS library routines will be needed to support them. A full description of this software is given in CDS Software Note No. 18 (Thompson, 1994)