The Optical Detector Team WWW Pages

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1. Introduction

ESO's Optical Detector Team (ODT) was formed in the first half of 1995 in order to improve the quality of ESO's optical detector systems. One of our first tasks was to improve communication of system performance to the ESO community. The World Wide Web (WWW) is the best avenue for this communication. Although some data had been posted on the Web, in the summer of 1995, this information was, in general, disorganised, incomplete and in some cases obsolete. Thus, we initiated the development of a new ODT *Web cluster,* a cohesive whole designed to maximise usability and completeness of information on optical detectors within the ESO Web. The deadline for going on-line was fixed for beginning of September 1995.

The design of our Web cluster was constrained by the following questions: Who is the typical user of ESO's Web? What kind of information does this user require? The typical user of the ODT WWW is an astronomer who is proceeding through the complete observation cycle: preparation of an observing proposal, preparation for an observing run, making the observations and finally, reducing the data. The information we need to provide must therefore address all CCD-related questions which could arise during this process:

• the list of optical detectors presently offered in combination with the different instruments and telescopes.

• *quick look* information on a specific detector, such as CCD type, pixel and detector size, quantum efficiency curves, read-out noise, conversion factor, dark current, and full frame readout time.

• advanced level information: linearity curves, cosmetic quality, charge transfer efficiency, available readout modes.

• general information on optical detectors, such as planned upgrades and detector history.

• on-line manuals.

To fully serve the purpose, the information on the Web must be kept up-to-date, be continuously available on the network, and it must be unambiguous. Ambiguity is avoided by designating the ODT Web cluster as the only source of information about optical detectors at ESO.

2. Structure and Content of the ODT Web Cluster

The World Wide Web offers much freedom in the way of structuring and presenting information. However, for the sake of efficiency, clarity and completeness of our Web cluster, we decided to
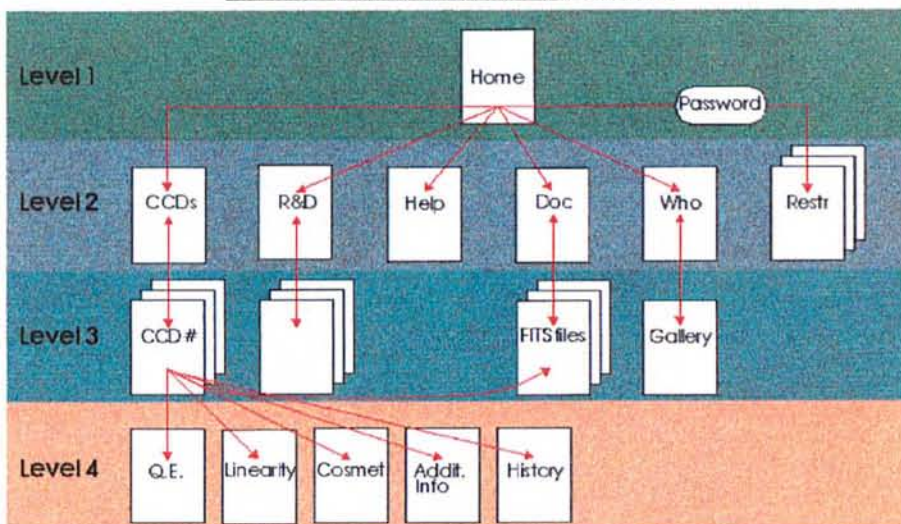
The ODT Web Cluster structure

Figure 1: Diagram of the ESO-Optical Detector Team Web Cluster structure. The different levels can be identified by their corresponding background colour.

Figure 2: The ODT main index page. This page provides access to the different information and services.

organise it in a tree-like structure, limited to 4 hierarchical levels (Fig. 1) containing the following pages:

- Level 1 – ODT homepage (main index), see Figure 2.
- Level 2 – Information on CCDs at La Silla (present and past).
  - Research, developments and planned upgrades.
  - The helpdesk mailbox.
  - Document archive (FITS images and ps files).
  - Who is Who in the ODT.
  - ODT's internal Web area (restricted to ODT staff).
- Level 3 – Specific detector pages (see Fig. 3).
  - ODT activities.
- Level 4 – Advanced information on detectors.

The ODT Web cluster is linked to the ESO Web through the *Telescopes, Instrumentation and Detectors link* in the ESO portal. This structure is supported by navigation links, which allow the user to move to the upper adjacent level, the ODT homepage or the ESO portal.

The most relevant pages for the typical user are those containing technical information on CCDs in levels 3 and 4. These pages follow a well-defined structure, consisting of three main parts:

1. The upper part contains a table with the key characteristics of the CCD system. If variations of these values are discovered during routine tests, Web pages are updated within a few days of the test.

2. The middle part of the page contains a plot of the detector quantum efficiency and provides links to more detailed information on the linearity, cosmetic quality and an image archive, from which low-level flat fields and bias images can be retrieved in FITS format. These images are not meant to replace standard calibration images taken by the observer during the run, but allow a first estimation of the cosmetic quality of the CCD. (Clicking on the quantum efficiency curve gives access to a magnified version of the plot (also available in postscript format) and to a text table of q.e. data.

3. The third part of the page provides various services: access to advanced-level information (e.g.: (CTE, full well) for different read-out anodes, information on the history of the detector and a warning area for special comments and a mailbox report form.

The bottom of the page is reserved for the navigation area.

We have established a restricted area, accessible from the homepage by ODT members (password restricted), that the ODT is using as an *Intranet*. The ODT is using the Intranet to put all of our project information, scheduling plans and documentation on-line, so that team members working in Garching and Chile are literally "working from the same page".

Figure 3: Example of the layout of a specific detector page (CCD #25 mounted on NTT with SUSI).

3. Layout and Styles

The graphical layout of a WWW page depends on the user browser and its settings. The layout of the ODT Web cluster is optimised for viewing with the Netscape Navigator version 1.1N (or greater). The pages are sized to A4 format in order to limit the use of scroll bars. The length of the blue marble bar shows the optimum page width. All pages are recognisable by the ODT logo, which is a spectrum with shaded letters "odt". The background colours of the pages are used to denote the level within the tree: light green (1), pastel blue (2), light blue (3) and light orange (4). Report/comment forms and special pages have a grey background.

4. ODT Helpdesk and Access Statistics

The ODT helpdesk provides a contact point for all users who need additional information or who have special requests. Access is made by sending e-mail to odteam@eso.org or using the report/comment forms that are within the ODT Web cluster. The incoming e-mail is checked daily by ODT members; we strive to respond to queries within one day.

We registered an average of 11,000 monthly accesses during the first six months on-line; 50% of these accesses are local.

5. General Remarks

The planning and implementation of the new ODT WWW cluster was led by ODT fellows in Garching with assistance from the optical detector engineers at La Silla. The response of the ESO community has been very encouraging and we have received many useful comments that have helped us to improve the quality of the pages. Providing high-quality information to the astronomical community is considered a top-priority task for the Optical Detector Team; regular updating and improvement of the Web cluster is part of this goal.

The ODT home page can be accessed at the following URL: "http://www.eso.org/odt".

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