IMRED Package Revisions Summary: IRAF Version 2.10

Francisco Valdes

IRAF Group - Central Computer Services
National Optical Astronomy Observatories††
P.O. Box 26732, Tucson, Arizona 85726
September 1990

ABSTRACT

This paper summarizes the changes in Version 2 of the IRAF **imred** package which is part of IRAF Version 2.10. The major changes are:

- New multifiber reduction packages **argus**, **nessie**, and **kpcoude.fiber**.
- New spectrophotmetric slit spectra reduction packages **goldcam**, **specred**, and **kpcoude.slit**.
- New versions of the **msred** and **echelle** packages based on the new versions of **apextract** and **onedspec**.

††Operated by the Association of Universities for Research in Astronomy, Inc. under cooperative agreement with the National Science Foundation.

IMRED Package Revisions Summary: IRAF Version 2.10

Francisco Valdes

IRAF Group - Central Computer Services
National Optical Astronomy Observatories††
P.O. Box 26732, Tucson, Arizona 85726
September 1990

1. Introduction

A number of new specialized image reduction packages and new versions of the generic echelle and multiobject spectroscopy packages have been added to the **imred** package in IRAF Version 2.10. The new subpackages will be made available as external packages prior to the release of V2.10. The major changes are:

- New multifiber reduction packages **argus**, **nessie**, and **kpcoude.fiber**.
- New spectrophotmetric slit spectra reduction packages **goldcam**, **specred**, and **kpcoude.slit**.
- New versions of the **msred** and **echelle** packages based on the new versions of **apextract** and **onedspec**.

In additions there have been some minor changes in the other spectroscopy packages required by changes in the **onedspec** package.

The new packages are specialized to specific instruments or types of data. They contain tasks collected from the various general spectroscopy packages which are appropriate for a particular type of data. However, the most important contribution of these packages are special reduction tasks which are streamlined to perform the complete calibration and reduction of the data in as simple and automated manner as possible. The tasks combine operations from both two dimensional extraction and one dimensional spectral calibrations and collects all the useful parameters in two parameter sets while fixing and hiding parameters which are irrelevent.

The new packages are as follows. The **argus** package is for the flat fielding, throughput correction, extraction, dispersion correction, and sky correction of data from the CTIO *Argus* multifiber instrument. The **nessie** package is similar and is for the KPNO *Nessie* multifiber plugboard instrument. The **kpcoude.fiber** package is specialized for the three fiber (two arc and one object) instrument at the KPNO Coude. It is similar to the other multifiber packages except there is no sky subtraction.

The other three packages are for sky subtracted extraction, dispersion correction, extinction correction, and flux calibration of slit instruments. The packages are for the KPNO *Goldcam*, the KPNO Coude, and for the CTIO *2DFRUTTI*. They are all fairly general and could be used for other instruments. They are distinguished by choices of default parameters.

There are user's guides for the powerful new reduction tasks in the new packages. These are available both as nicely typeset documents and as on-line IRAF manual pages.

Tasks from the revised **apextract** and **onedspec** packages appear in many of the **imred** packages. In particular the **echelle** and **msred** packages are now based on this new software.

Some minor changes are the replacement of the **specphot** package by **specred** and the renaming and reorganization of the **coude** package.

---

††Operated by the Association of Universities for Research in Astronomy, Inc. under cooperative agreement with the National Science Foundation.