DEPARTMENT OF SPACE RESEARCH
BIRMINGHAM UNIVERSITY
Asterix Data Analysis
ASTERIX Programming Note 009

PROG/009

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The ASTERIX Directory Structure

Contents

1 INTRODUCTION

ASTERIX applications are organised into ADAM shared image monoliths. Each monolith contains a group of related applications, for instance spectral analysis programs. Fortran source files are stored separately for each monolith in subdirectories below [.SOURCE]. They are held in text libraries and there is a corresponding object library for each monolith. The only other source files are held in a library called ASTLIB which is held in [.LIB]. This is a general library which applications from all monoliths link into. All the files needed to run ASTERIX monoliths are contained in [.EXE]. These include the executable code for the monoliths as well as compiled interface files and ICL command definition files. Individual Atask versions of the applications reside in a subdirectory of this called [.TASKS] and ICL procedures are held in the [.PROCS] subdirectory.

The whole directory structure is set up as a substructure of the pseudo-device AST_ROOT: which points to an [ASTERIX.] directory level, whose location is system dependent.

2 DIRECTORY STRUCTURE

```
[ASTERIX]*--|--[.DATA]----------[.EXOSAT]
            |                |--[.ROSAT]---------[.WFC]
            |                |--[.SPECTRUM]
            |                |--[.DEMO]
            |                |--[.SRC]
            |                |--[.PSF]
            |                +--[.CTABLE]
            |
            |--[.DEV]-----------[.INCLUDE]
            |                +--[.TOOLS]
            |--[.DOCS]
            |
            |--[.EXE]-----------[.TASKS]
            |                +--[.PROCS]
            |--[.HELP]
            |
            |--[.LIB]
            |
            |--[.SOURCE]--------[.EXOSAT]
            |                |--[.GRAFIX]
            |                |--[.HED]
            |                |--[.IMAGE]
            |                |--[.ROSAT]
            |                |--[.SPECTRUM]
            |                |--[.TIME]
            |                |--[.SRC]
            |                +--[.UTIL]
            |--[.SYSTEM]
```

3 SUBDIRECTORY CONTENTS

3.1 [.DATA]

Contains instrument specific data, such as calibration and orbital element files. The data for each satellite is stored in a separate subdirectory e.g. [.EXOSAT]. These are the default locations for these data files and individual sites may choose to redefine logical names to point elsewhere.

3.2 [.DEV]

Routines to help in the development of ASTERIX, divided into subdirectories as follows.

3.2.1 [.INCLUDE]

Header templates for different types of file e.g. subroutine, function, block data ...

3.2.2 [.TOOLS]

Development tools.

3.3 [.EXE]

Contains all the executable images for monoliths as well as the compiled interface files. Also contains the following sub-directories:

3.3.1 [.TASKS]

Contains executable code for individual Atasks.

3.3.2 [.PROCS]

Contains ICL procedures.

3.4 [.HELP]

Contains the help libraries for ASTHELP.

3.5 [.LIB]

Contains the source and object code for the main library ASTLIB

3.6 [.SOURCE]

Contains all source and object files not in ASTLIB. It is split into several subdirectories, one for each monolith. Each of these contain a text library of Fortran source code, an object library, an IFL file for the monolith and command files to link individual applications and the whole monolith.

3.7 [.SYSTEM]

Command files to define logicals and symbols (see 4).

```
STARTUP.COM    -   Starts the ASTERIX system
LOGNAM.COM     -   Defines logicals for users
DATLOGNAM.COM  -   Defines logicals for data files
COMMANDS.COM   -   Sets up ASTERIX commands as DCL symbols
DEVLOGNAM.COM  -   Defines logicals and symbols for ASTERIX
                   development
```

4 DCL LOGICAL AND SYMBOL NOMENCLATURE

All ASTERIX logicals are prefixed by "AST_". The logical pointing to a particular directory is of the form 'AST_(directory abbreviation)' e.g. the directory [ASTERIX.EXE] is pointed to by AST_EXE, the directory [ASTERIX.SOURCE.EXOSAT] has the logical AST_EXO. Some of these logicals are set up when ASTERIX is entered, and more are added by ASTDEV. For a list of those currently defined, type "SHO LOG AST_*".