

1 Introduction

The application `xia2scan` is designed to scan through a list of provided images and print information about the “quality” of the diffraction on the images. This will end up as an executable `xia2-scan(=> .sh/.bat)` and a python program `xia2scan.py`.

1.1 Appication

This is designed to be useful for

- Selecting the best images for autoindexing from a sweep.
- Optimizing humidity when a humidifier is available.

by printing information about the strength of diffraction in each image.

2 Uses...

This uses the wrappers for `labelit.screen` and `labelit.stats_distl`.

3 Dependencies

This application will depend on having access to a user provided beam centre (by implication then an input argument / command line handler) and also diffraction image name parsing to allow searching of a directory for matching images.

4 Use Cases

4.1 UC 1: Humidifier

Requires:

- The correct beam position (for indexing from single images.)
- The images.

Provides:

- The statistics for each image in the list.

4.2 UC 2: Indexing Image Selection