

# User Requirements for bluesky's data collection in reciprocal space using HKL

This document will serve to summarize our requirements for collecting diffraction data using HKL to navigate reciprocal space. Most requirements will be sourced from community discussion from github or other venues as they become available.

**Last Updated:** October 2, 2020

This is a starting format for suggestions, but it may become clear that a different format to describe our requirements is necessary.

1. Default diffractometer geometries
2. Bragg Peak optimization tools
3. Defining orientation matrix or matrices
4. Simulating diffraction and diffractometer modes
5. Built in reciprocal space plans (or scans)
6. Choice of calculation engines other than the *hkl* C++ package