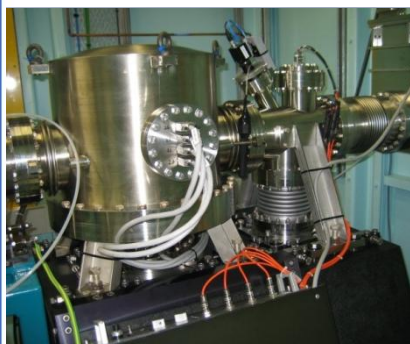


Highlights

- High power slits & cooled mask - windowless interface for undulator.
- HFM focusing mirror- striped.
- Cryo-horizontal double crystal mono Si(111) & Si(311).
- Beam diagnostics including high resolution CCD camera & quad diode system.
- Small KB mirrors in He environment 240mm.
- Sub micron repeatability V & H secondary source aperture.
- 44 axis motion control & software.
- EPICS software.

ID5 Micro-Spectroscopy Beamline at the Australian Synchrotron

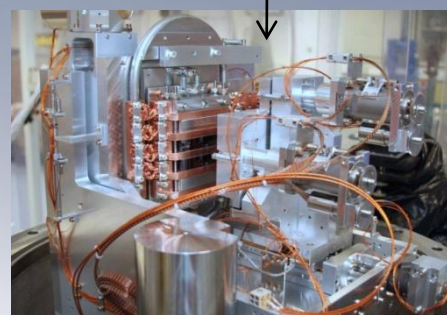
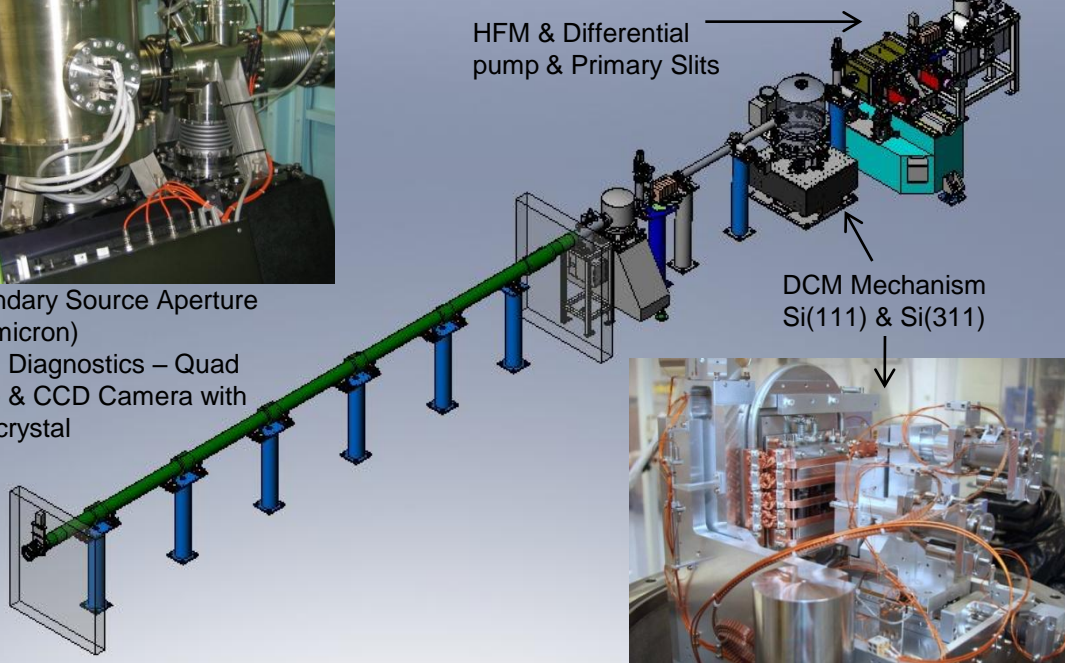


Secondary Source Aperture (sub micron)
Beam Diagnostics – Quad Diode & CCD Camera with YAG crystal

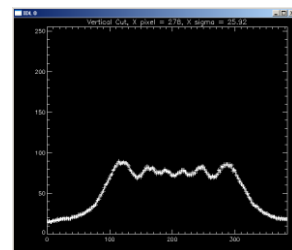
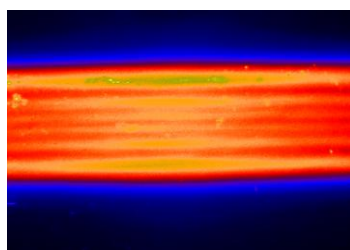
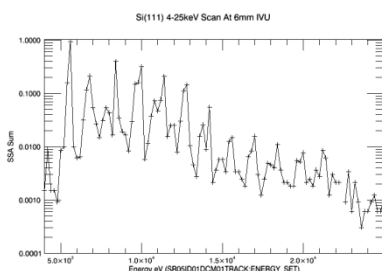
ID5 Beamline Layout

HFM & Differential pump & Primary Slits

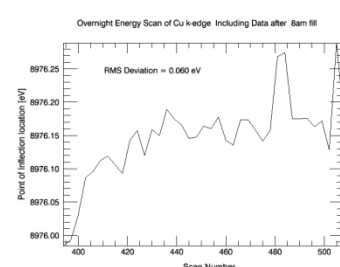
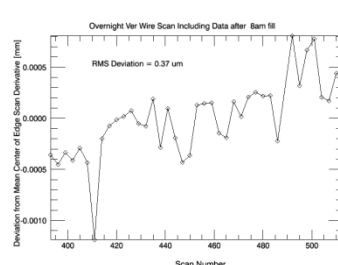
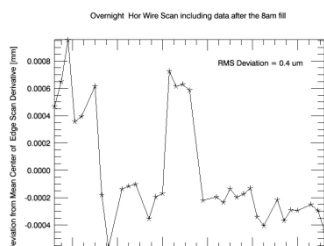
DCM Mechanism Si(111) & Si(311)



Commissioning results:



Left :4-25 keV Energy Scan With Si(111) Crystals Using The Quad Diode Ti Foil
Above: Beam viewed on sample camera with 0.6µm pixel size. SSA 700 x 128 µm



Above: 10 Hour overnight beam stability results including 8µm fill
Left: Horizontal stability 0.4µm RMS Centre: Vertical stability 0.4µm RMS
Right: Cu k edge stability 0.06 eV RMS