



ESRF

Experiment title:

Crystallographic studies of the Src-Kinase domain

Experiment

number:

LS452

Beamline: Date of Experiment:

from: 27 April, 1996 to: 28 April, 1996

Date of Report:

17 June, 1996

Shifts: Local contact(s):

3 Dr A. Thompson

Received at ESRF:

20 JUN 1996

Names and affiliations of applicants (*indicates experimentalists):

J. Williams*
A. Weijland*
R.K. Wierenga*

Report:

During this visit data was collected for SrcU⁻ crystals.

The purpose of this visit was twofold:

- (i) to optimise cryo-conditions for the SrcU⁻ crystals.
- (ii) to collect a native dataset, as well as heavy atom derivative datasets.

(i) After some tests it was found that data could be collected from a native crystal, grown in the presence of 5% octanol, 5% mpd. Prior to freezing, the crystal was transferred to a mother liquor containing 5% octanol, 15% mpd. Very small loops were used (with a diameter of approximately 0.2mm, similar to the crystal diameter). After processing till 2.7Å the mosaicity of this crystal refined to 1.1°.

(ii) A similar procedure was followed for the first heavy atom derivative dataset (1mM HgCl₂, soaking time 3 hours, 5% PEG400). Prior to freezing the concentration of PEG400 was raised to 20%. After processing the mosaicity of this dataset is 0.8°.

An incomplete dataset was collected from an unfrozen crystal mounted in a glass capillary. The half life of this crystal in the beam is about 10 minutes. The mosaicity of the processed data refined to approximately **0.2°**.