



<b>Experiment title:</b> Holliday Junction Resolvase YDC2		<b>Experiment number:</b> LS-1682 b
<b>Beamline:</b> BM14 ID14-2 BM30	<b>Date of experiment:</b> from: 24/02/00 to: 25/02/00 from: 26/02/00 to: 27/02/00 from: 09/06/00 to: 11/06/00	<b>Date of report:</b> 21/08/00
<b>Shifts:</b> 3 2 6	<b>Local contact(s):</b> Wilhelm Burmeister Wilhelm Burmeister Jean-Luc Ferrer	<i>Received at ESRF:</i>
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BM30

Three wavelength MAD data were collected on Se-Met substituted form 2 crystals to 4.0Å and also data on putative platinum and krypton derivitised crystals.

Due to fact that the crystals diffract only to low resolution the structure solution is proving very difficult. The two forms of the crystal seem to be related by a doubling of one of the axes leading to a translational vector of (0,1/2,0), which is hampering Se site elucidation. Further work is underway to improve the cryoprotection of these crystals to improve the diffraction limit, however as they are grown out of high ammonium sulphate conditions this is also proving difficult.

### Report:

BM14/ID14-3

MAD data were collected on a Se-met substituted form of YDC2 on beamline BM14. Data were collected at three wavelengths (peak, inflection point and high energy remote) to a maximum resolution of 3.8Å. Higher resolution data could not be collected due to time constraints. Structure determination is currently underway using these phases and 3.3Å resolution native data in this crystal form, and also 2.7Å native data in a related form (form2). Additional 'native' data were also collected on beamline ID14-3 for Se-met substituted form 2 crystals to 3.2Å.