ESRF	**Experiment title:** Data collection on sensory rhodopsin II	**Experime number** LS1924
Beamline: ID14EH3	**Date of experiment**: from: 15 June 2001 to: 16 June 2001	**Date of rep** 21 August 2
Shifts: 3	**Local contact(s)**: J. MacCarthy	*Received at E*

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Report:

1) In order to understand the photocycle of sensory rhodopsin II, similarly to the work done on bacteriorhodopsin, we trapped early intermediates of SRII. The trapping protocol was prepared off-line and improved on-line. Crystals were first screened for their diffraction quality then trapped and data were collected. We obtained one data set from an excited SRII crystal. The data are under analysis.

Unit cell (Å) and space group	Resolution (Å)	Rsym (%)	Completeness (%)	redundancy

85.5 128.6 50.8 $C222_1$	2.3	13.9	99	6

2) we tested some heavy atom derivatives of the ADP/ATP carrier. None of them diffracted enough to be collected.

The visualisation of the crystals on ID14EH3 is very difficult in particular with small crystals. Most of the crystal alignments were done blindly according to the loop and not to the crystal itself. This prevents to close the slits adequately in order to optimise efficiently the signal to noise ratio.