



ESRF

Experiment title: BAG Marseille

**Experiment
number:
LS-1363**

Beamline:

Date of experiment:

from: 16 Feb 1999 7am to: 17 Feb 1999 7am

Date of report:

22.2.99

Shifts:

Local contact(s):

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Received at ESRF:

Names and affiliations of applicants (* indicates experimentalists):

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Report: 15 shifts have been attributed to the BAG, 3 on ID14, 3 on BM14 and 9 on ID2.

We report here the 3 shifts on ID14-EH4, which took place one week ago. Despite problems on the line (shutter, etc) leading to the lost of one shift (start at 1 pm), 18 data sets have been collected, 2 of which have been integrated to date, the others being still underway. Most crystals have been transported frozen in liquid N₂. A few frames have been evaluated on the line for each data set, however. All of them showed improved quality of the diffraction pattern. These 3 shifts have produced a tremendous amount of valuable data with huge improvements in the diffraction quality.

Table 1: List of the data sets:

- Enzyme GlmU with effectors 3 data sets at 2.2 Å (ca 3Å at home)
- Acetyl choline esterase with inhibitors. 3 data sets.
- Lipase HGL with inhibitors. 3 data sets at 3.2-2.8 Å (between 6 Å at home.
- Nitrate reductase. Intermediates along the d heme reduction (after micro-spectrophotometric characterization at ESRF: 2 data sets at 2.8 Å.

- Odorant Binding Proteins (native) at very high resolution: porcine at 1.4Å resolution, Bovine at 1.2 Å resolution (with natural ligand bound inside).
- Aphrodisin Se-Met. A data set has been collected at 2.1 Å resolution at the Se absorption edge. Test data set for ulterior MAD experiment.
- Hyperthermophilic Threonine Dehydrogenase 3 data sets of native and derivatives.
- Hyperthermophilic enzyme AARE : 1 data set.

Table 2:

Project:	GlmU-Glc-Nac	HGL (cubic: I23)
Resolution	30-2.2	30-3.2
Overall I/σI	6.0	5.5
Overall Rsym	6.7	9.8
Multiplicity	3.5	7.5
Completeness	98	99.9