

Experiment Report Form

The double page inside this form is to be filled in by all users or groups of users who have had access to beam time for measurements at the ESRF.

Once completed, the report should be submitted electronically to the User Office using the **Electronic Report Submission Application:**

<http://193.49.43.2:8080/smis/servlet/UserUtils?start>

Reports supporting requests for additional beam time

Reports can now be submitted independently of new proposals – it is necessary simply to indicate the number of the report(s) supporting a new proposal on the proposal form.

The Review Committees reserve the right to reject new proposals from groups who have not reported on the use of beam time allocated previously.

Reports on experiments relating to long term projects

Proposers awarded beam time for a long term project are required to submit an interim report at the end of each year, irrespective of the number of shifts of beam time they have used.

Published papers

All users must give proper credit to ESRF staff members and proper mention to ESRF facilities which were essential for the results described in any ensuing publication. Further, they are obliged to send to the Joint ESRF/ ILL library the complete reference and the abstract of all papers appearing in print, and resulting from the use of the ESRF.

Should you wish to make more general comments on the experiment, please note them on the User Evaluation Form, and send both the Report and the Evaluation Form to the User Office.

Deadlines for submission of Experimental Reports

- 1st March for experiments carried out up until June of the previous year;
- 1st September for experiments carried out up until January of the same year.

Instructions for preparing your Report

- fill in a separate form for each project or series of measurements.
- type your report, in English.
- include the reference number of the proposal to which the report refers.
- make sure that the text, tables and figures fit into the space available.
- if your work is published or is in press, you may prefer to paste in the abstract, and add full reference details. If the abstract is in a language other than English, please include an English translation.



	Experiment title: BAG-LEBS-2010-2	Experiment number: MX-1140
Beamline: ID 23-2	Date of experiment: from: 29/10/2010 to:30/10/2010	Date of report:
Shifts: 3	Local contact(s): Dr. Max Nanao	<i>Received at ESRF:</i>
Names and affiliations of applicants (* indicates experimentalists): Ms Samira Zouhir* Mrs Agata Nawrotek* Ms Ingrid Mignot* Mr. Marcel Knossow*		

Report:

A. Nawrotek, I. Mignot and M. Knossow (8 hours).

Structures of complexes of tubulin with stathmin-family proteins

Diffraction was collected on two new complexes. 5 complete data sets were collected.

3 data sets were collected on a crystal form in space group $P2_12_12_1$ ($a = 65.9 \text{ \AA}$, $b = 128.8 \text{ \AA}$, $c = 253.8 \text{ \AA}$). The resolution of these crystals is comprised between 3.4 \AA ($R_{\text{merge}} = 0.16$, data 99% complete, $I/\sigma = 8.9$ (2.1)) and 3.8 \AA ($R_{\text{merge}} = 0.17$, data 93% complete, $I/\sigma = 9$ (2.3)).

2 data sets were collected on a crystal form in space group $C2$ ($a = 650 \text{ \AA}$, $b = 67 \text{ \AA}$, $c = 130 \text{ \AA}$, $\beta = 91^\circ$). These crystals diffract to 6.5 \AA ($R_{\text{merge}} = 0.10$, data 94% complete, $I/\sigma = 9.8$ (1.6)).

In both cases, this is the first time data are collected on these crystal forms. As the results are encouraging, one round of attempts to improve the crystals (and the diffraction) will be initiated.

B. S. Zouhir (12h)

Quorum sensing effector NprR

A truncated form of NprR in complex with an 8aa peptide

We recently solved at SOLEIL a medium resolution (3.5Å) structure of a complex between a truncated form of NprR and a 7aa long form of its cognate NprX peptide, using selenomethionine labeling and SAD phasing. We now try to solve a high resolution structure of this truncated form of NprR in complex with different forms of the NprX peptide.

I tested around 20 different crystals, among which 1 complete data set was collected. The crystal diffracted in space group P1 ($a=92.25\text{\AA}$, $b=160.60\text{\AA}$, $c=171.21\text{\AA}$, $\alpha=118.041^\circ$, $\beta=111.944^\circ$, $\gamma=89.883^\circ$) at a resolution of 3.5Å with good statistics (R_{merge} = 0.17, data 95.8% complete, I/sig = 9.82 (2.24)).

The NprR Apo-form

I also tested around 10 crystals of the native NprR full length but the resolution was lower than 10Å, so no data set was collected.

T3SS effector SlrP

Structure of a truncated form of SlrP in complex with the human Thioredoxine

We already get a native data set at a resolution of 3.6Å and we try to improve this resolution. I tested 12 crystals and 1 complete data set was collected.

The crystal diffracted in space group P2₁2₁2₁ ($a=134.44\text{\AA}$, $b=105.69\text{\AA}$, $c=154.67\text{\AA}$) at a resolution of 6Å (R_{merge} = 0.20, data 96.6% complete, I/sig = 3.42 (2.55)).