ESRF

Experiment title:	Experiment
MS2: Bacteriophage MS2 protein capsids.	number:
BAG: Unnsala (II)	LS-1376 c

Beamline:	Date of experiment:	Date of report:
ID14-EH3	from: 16 June 1999 to: 18 June 1999	16 Feb 2000
Shifts:	Local contact(s):	Received at ESRF:
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Names and affiliations of applicants (* indicates experimentalists):

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Report:

Data was collected for four complexes between recombinant MS2 icosahedral capsids and RNA molecules corresponding to variants of the wild-type translational operator. Totally 615 images, each corresponding to a rotation of 0.5°. A resolution of 2.4-2.6 Å was obtained. Two of the data sets were close to complete at intermediate resolution, but all were only about 10% complete at the high resolution edge. When the high non-crystallographic symmetry is applied, also this very incomplete data contribute significantly to the quality of the maps. The merging R-values were between 0.15 and 0.19 for all reflections, which is the normal values for these crystals. All complexes have been solved and three of them have been fully refined (the fourth complex was identical to one of the others in all ordered parts). Two articles describing these results are presently under preparation.

Articles published in 1999 based on experiments at ESRF:

Grahn, E., Stonehouse, N. J., Murray, J. B., van den Worm, S., Valegård, K., Fridborg, K., Stockley, P. G. & Liljas, L. (1999). Crystallographic studies of RNA hairpins in complexes with recombinant MS2 capsids and implications for binding requirements. RNA 5: 131-138

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