

AR-NW12A における 2011 年度の実施と成果 2011 implementations and results at AR-NW12A

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The year 2011 has seen a lot of activities and developments at the Photon Factory and Photon Factory Advanced Ring. After the Tohoku earthquakes in March, the recovery actions undertaken at PF and PF-AR allowed the protein crystallography beamlines to be operational in the shortest delay, ready to accept users no later than two months after the events. In parallel to the recovery process of the beamline, various new developments were underway at AR-NW12A. Already started the previous year, high-pressure studies in collaboration with Prof. Watanabe (Nagoya Univ.) revealed to be successful, and although optional, this approach is now routine at the beamline. To favor a better stability of the beam during data collection, the beam position feedback system already implemented at BL-5A, BL-17A, and AR-NE3A has also been incorporated at AR-NW12A. To help crystal centering, a newly developed lighting system has been installed. This system takes advantage of low power UV-LED to facilitate crystal visualization without sensibly damaging the samples. Initial reports by various users expressed a high satisfaction in the use of the UV-LED for a clearer identification of the crystals. Together with the remote access, the availability of an external mode allows users to collect data sets from outside the PF without the necessity to be physically present at the beamline. During the presentation, these new features will be described in more details, and some scientific results reported during the year will be highlighted.