The three macromolecular crystallography (MX) beamlines at the Swiss Light Source (SLS) rank among the most productive in Europe. The very successful design of the first beamline, X06SA, inaugurated in 2001, was the basis for the second beamline, X10SA, operated by the Paul Scherrer Institut and financed by the partners Max Planck Society, Novartis and Hofmann-La Roche. To keep up with the increasing demand for high throughput crystallographic experiments, especially in an industrial environment, as well as the rising interest in more challenging targets, the beamline is under constant development. Here we will present the recent advances in usability and performance, including software integration and automation with the completely new data acquisition software DA+, in-situ screening for diffraction candidates, (serial) micro-crystallography with micro-beam, and beamline hardware.

Keywords: Macromolecular Crystallography, Beamline, Software