16-01-1725 - Structural studies of neuroprotection by inert gas

Thursday 22 of October 9 a.m. to Sunday 25 of October 8 a.m.

$$\begin{split} \lambda &= 0.979 \text{ Å} \\ \text{Energy} &= 12.6606 \text{ keV} \\ \text{Multi-bunch mode} \\ \text{Beam size } 100 * 100 \, \mu\text{m} \end{split}$$

Local contacts : Randolf Butzbach et Mickael Cherrier

56 full data collection of very good quality

55 data collection at room temperature, under gas pressure, using our own pressurization cell.

Lysosyme : 11 full data collection, the best data set diffracts at 1.4 Å Glusose isomerase : 8 full data collection, the best data set diffracts at 1.7 Å Neuroglobin : 17 full data collection, the best data set diffracts at 1.7 Å Myoglobin : 19 full data collection, the best data sets diffracts at 1.4 Å

Gas used : xenon (Xe), nitrous oxide (N₂O), mixture of Xe and N₂O, oxygen (O₂), carbon monoxide (CO), argon (Ar).

1 data collection in cryo condition

Urate oxidase : diffraction at 1.75 Å

Small problems

Problems with MXcube twice (Friday morning and Friday afternoon), intervention of the local contacts.

The ampoule which light the crystal has broke on Saturday afternoon, intervention of Mickael Cherrier.