<b>ESRF</b>	<b>Experiment title:</b> Identifying structural contributions to the diffuse intensity in antlerite	<b>Experiment</b> <b>number</b> : HC - 4945
Beamline:	Date of experiment:	Date of report:
ID28	from: 26 April 2022 to: 02 May 2022	
<b>Shifts:</b> 18	Local contact(s): KORSHUNOV Artem, BOSSAK Alexei	Received at ESRF:

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## **Report:**

We measured diffuse diffraction for TiBi<sub>0.5</sub>Yb<sub>0.5</sub>Se<sub>2</sub>, TlBi<sub>0.9</sub>Sm<sub>0.1</sub>Se<sub>2</sub>, Bi<sub>4</sub>Rh<sub>4</sub>Cl<sub>6</sub>I<sub>7</sub>, NaYb<sub>0.8</sub>Lu<sub>0.2</sub>S<sub>2</sub>, NaYb<sub>0.1</sub>Lu<sub>0.9</sub>S<sub>2</sub>, NaYb<sub>0.4</sub>Lu<sub>0.6</sub>S<sub>2</sub> and AC-54E at different temperatures on ID28. Additionally, we measured the dispersion curve for Mn<sub>3</sub>Ge in (4 -2 1) and (0 0 3) gamma points at different temperatures. We used wavelength 0.6968 Å for measurements. Cryostream was used for temperature regulation. Temperature evolution of dispersion curves are shown in Fig. 1. Reciprocal maps for TiBi<sub>0.5</sub>Yb<sub>0.5</sub>Se<sub>2</sub>, TlBi<sub>0.9</sub>Sm<sub>0.1</sub>Se<sub>2</sub>, Bi<sub>4</sub>Rh<sub>4</sub>Cl<sub>6</sub>I<sub>7</sub>, NaYb<sub>0.8</sub>Lu<sub>0.2</sub>S<sub>2</sub>, NaYb<sub>0.1</sub>Lu<sub>0.9</sub>S<sub>2</sub>, NaYb<sub>0.4</sub>Lu<sub>0.6</sub>S<sub>2</sub> and AC-54E at different temperatures are not shown due to space reasons.

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Figure 1: Temperature evolution of dispersion curves