**Data for Paper: ‘Wavevector Difference of Magnetic Bragg Reflections and Low Energy Magnetic Excitations in Charge-stripe Ordered La2NiO4.11.’**

These files contain the data files for all the data reported in the titled paper.

The PUMA data files including instrument logfiles can be found in the folder ’puma\_02102010‘ and contains all data measured on PUMA for La2NiO4.11, some of which have previously been reported in P G Freeman et al, J. Phys.: Conf. Ser. **340,** 012060 (2012).

In the folder ‘Rita data on Offset plus alignment’ is all the data taken on RITA-II that is reported in the titled paper, including alignment scans. The remaining data from this experiment will be reported on in a second paper that is being prepared for submission.

The data files from RITA-II and PUMA can be opened as text files.

The data folder ‘ISIS\_2018-2-05\_11-32-08’ contains all the data from the Hi-fi weak transverse field measurements, with ‘WeakTransFieldLa2NiO4\_11.txt’ showing the processed results from this data in a tab delimited table.

Sample growth is reported in the paper D. Prabhakaran, P. Isla, and A. T. Boothroyd, J. Cryst. Growth **237**, 815 (2002).