

## **NXCT IT resources**

## **Data Storage**

Each NXCT facility will have sufficient local data storage capability to store user data for a minimum of 30 days. This will be sufficient for reconstruction and data analysis purposes. We can recommend solutions for longer term storage and can help you manage your data requirements.

Over the first year of operations we will be expanding our data infrastructure to provide extended data storage and direct routes to long term data storage. This is a process that will physically start to be implemented after the NRF launches in November 2020 and is expected to be complete within the first year of operations. Details will be announced on our website when this operational and available to users.

## Reconstruction

All X-ray scanners come with dedicated reconstruction workstations we also have several advanced workstations that are dedicated to deliver advanced reconstructions including iterative reconstruction and utilising ASTRA, TIGRE and other tools. These can be used to reconstruct your scan data collected at the NRF. If you have collected your data elsewhere please contact us for access information.

## Data analysis

We offer all our users, including users who have collected their data elsewhere, access to extensive computing and software resources. We will also be providing training opportunities to help you exploit the software and data understanding you need to make the most of X-ray CT.

Currently each NRF site (Manchester, Southampton, UCL and Warwick) has local computing facilities and software. We embrace a large range of software with Avizo and FIJI (ImageJ) being the most significant among these. We also use VGStudio, Dragonfly ORS, Drishti, Simpleware for FE meshing, LAVision for digital image correlation (DIC) and digital volume correlation (DVC) and others. Please contact us if you have specific needs. These facilities can be accessed in person or remotely (according to local rules).

We are also building a Visualisation and Analysis Support Centre (VASC) which will be due to be completed within the first year of operations. The VASC will provide in person and remote access to computing and software resources based at the hub in Manchester. This will greatly expand our remote access offering to users and will be integral to the expanded data infrastructure capabilities for analysis and long term storage. Further details will be advertised on the NRF website as soon as they are ready.