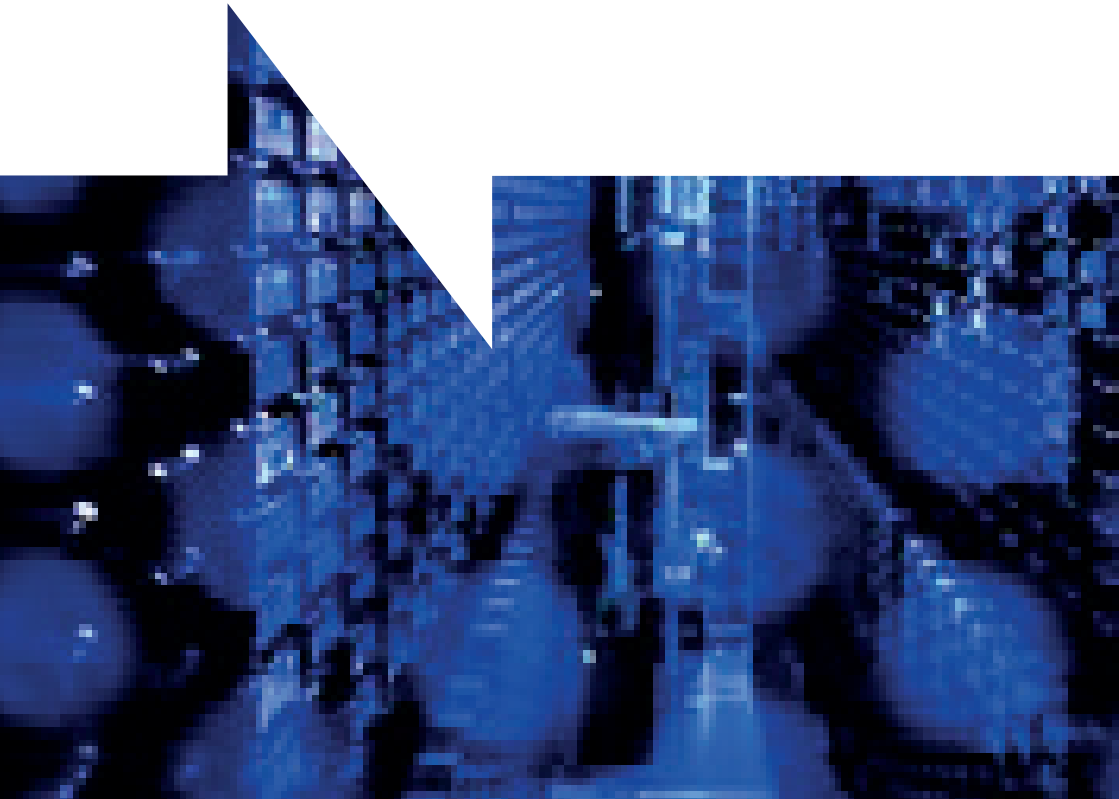
Science and Technology Facilities Council

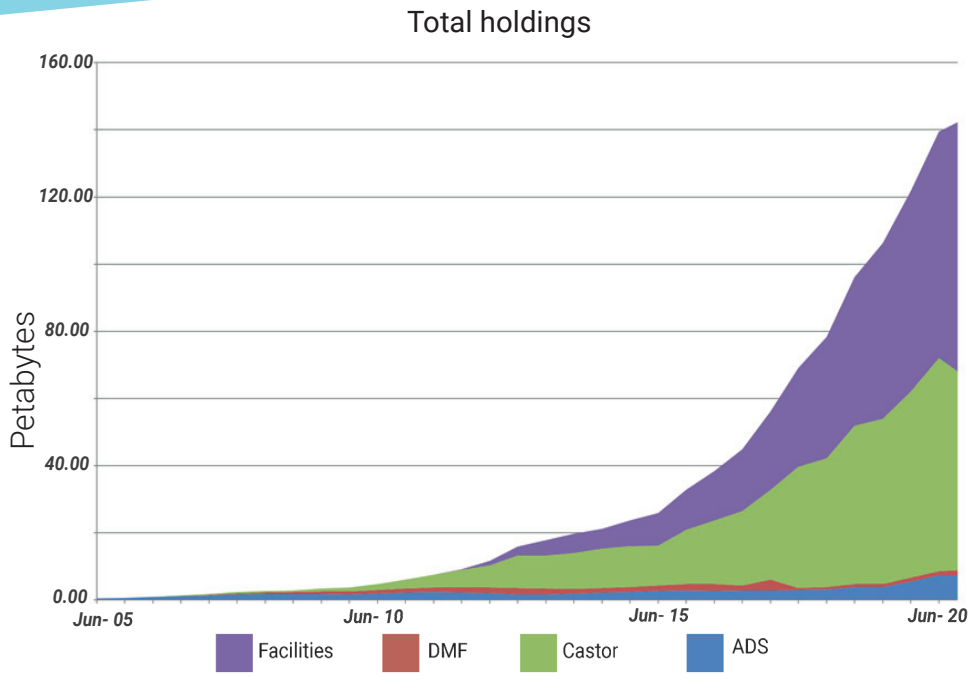
Tape Libraries

A cost-effective and high capacity data storage solution.

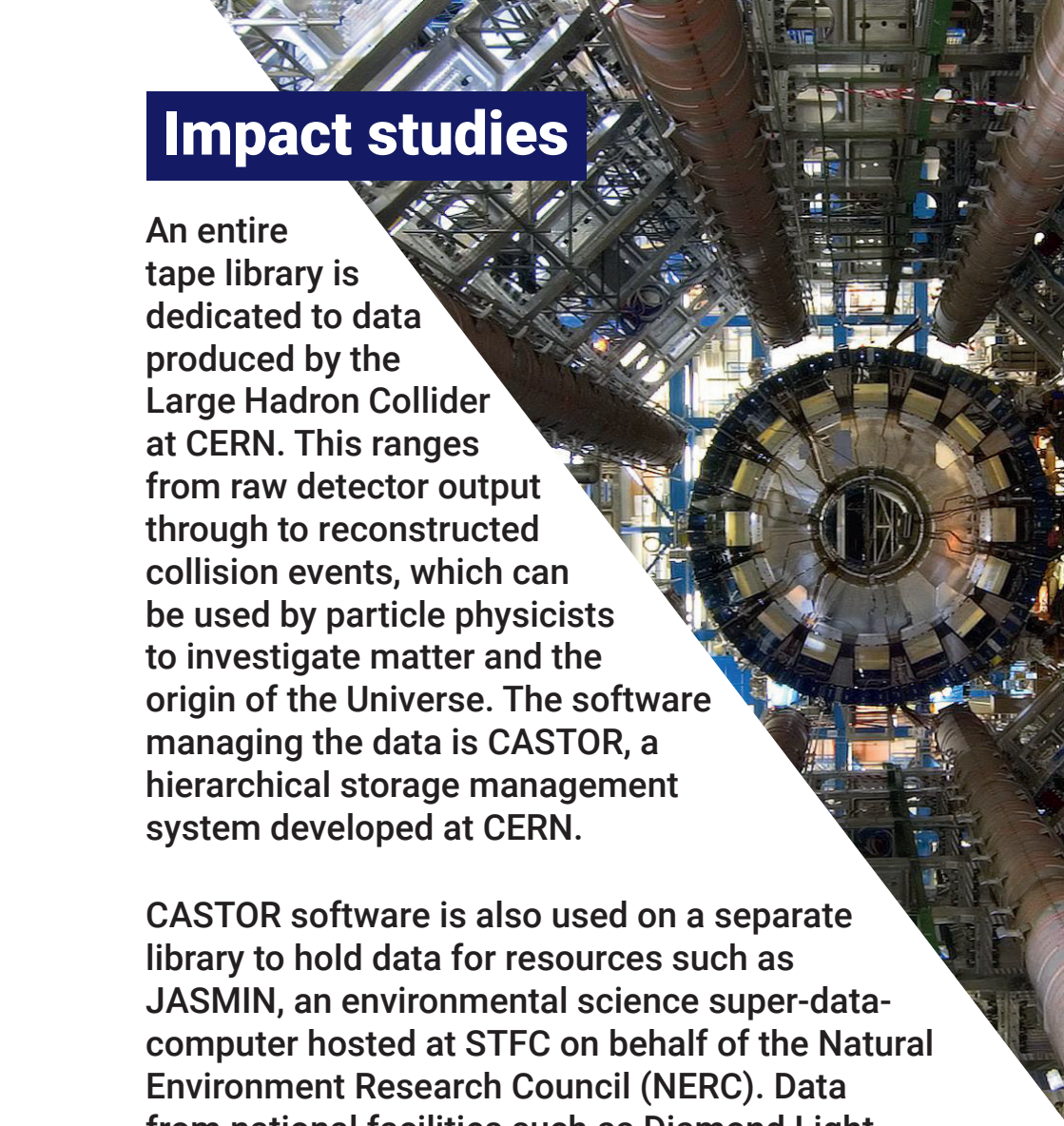


About the tape libraries

The high-capacity automated tape libraries housed in STFC's Scientific Computing Department provide data storage for a number of projects and facilities. They are made up of two Oracle libraries that are currently under a 12-month transition period to move all the data over to two Spectra TFinity libraries. With a low cost per gigabyte, these libraries are ideal for fields in which the volume of data continues to grow at a rapid pace, including particle physics data from the Large Hadron Collider and data from the Centre for Environmental Data Analysis (CEDA).



Impact studies



An entire tape library is dedicated to data produced by the Large Hadron Collider at CERN. This ranges from raw detector output through to reconstructed collision events, which can be used by particle physicists to investigate matter and the origin of the Universe. The software managing the data is CASTOR, a hierarchical storage management system developed at CERN.

CASTOR software is also used on a separate library to hold data for resources such as JASMIN, an environmental science super-data-computer hosted at STFC on behalf of the Natural Environment Research Council (NERC). Data from national facilities such as Diamond Light Source are also stored in this library, alongside comparatively small quantities of data relating to systems backup and proprietary managed file-systems software.

240PB
data capacity

103
drives installed

up to
400MB/s
throughput per drive

over
179M
files held

One of our Spectra TFinity libraries with custom panels

credit: Spectralogic