Success Story

University of Leicester

The WASP Consortium

"Our research work is aimed at finding new worlds around other stars, which is an essential step to discovering life beyond the Earth. The storage system from SGI, Engenio and ADIC is playing a big part in enabling these discoveries"

– Dr. Peter Wheatley
WASP,
University of Leicester

Planet Hunting UK Research Project

Wide Angle Search for Planets (WASP) project identifies combined solution from storage-leaders as out of this world

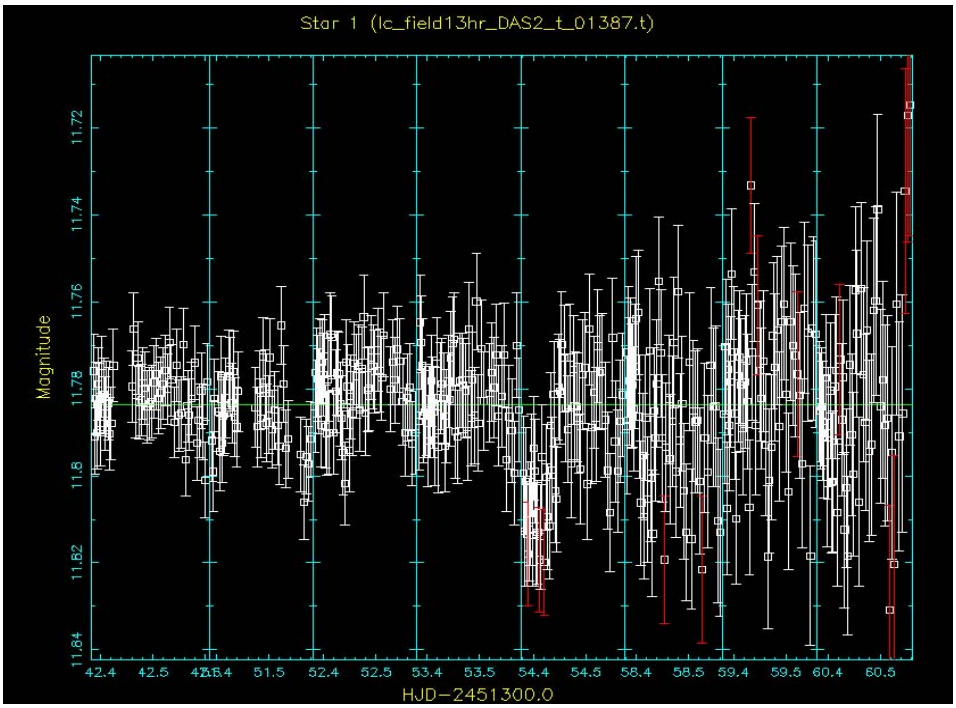
The world leading Department of Physics and Astronomy at the University of Leicester has selected a solution based on a combination of SGI, Engenio and ADIC technologies to store data captured by the Wide Angle Search for Planets (WASP) Consortium project, a collaborative venture involving a number of UK universities.

Dr. Peter Wheatley (WASP, University of Leicester) said: "Our research work is aimed at finding new worlds around other stars, which is an essential step to discovering life beyond the Earth. The storage system from SGI, Engenio and ADIC is playing a big part in enabling these discoveries."

Planets are identified by searching for slight dips in the brightness of stars as a planet passes in front of them, blocking some of the star's light. WASP telescopes tens of thousands of stars every minute. Scientists then analyze the data, searching for evidence of new planets. The images and processed data are stored at the University of Leicester in a database of observations of tens of millions of different stars. The project will make the observational data available to academics worldwide, and over the initial five year life of the WASP project it is estimated 100TB of data will be collated.

Leicester has selected a highly flexible and robust storage infrastructure designed to support the WASP project's specific data storage and access requirements. A mixture of tape and disk units offers the cost-effectiveness, speed and reliability required.

ADIC's Scalar i2000 is supplying 140TB of tape storage to hold the vast amounts of raw data and the SGI® TP9300, based on Engenio technology, offers an additional 30TB of space for fast access to the smaller, processed data files. SGI's DMF data migration software ensures



The WASP Consortium

SuperWASP measurements of the brightness of one particular star. The slight dip in the middle (just 3 percent) may be the signature of a new planet

that retrieval of data from the ADIC tape library is almost as fast as access to data on disk for further flexibility.

Dr. Chris Rudge, Manager of the UK Astrophysical Fluids Facility (UKAFF), based at Leicester, said: "UKAFF has worked closely with SGI for several years and has always been impressed with the performance and reliability of their systems."

He continued, "The selection of the ADIC Scalar i2000 tape library was also an easy choice – partly due to the extremely flexible and attractive 'capacity on demand' license arrangement that it offers. This enables us to control our costs as data volumes grow – critical to a government funded project such as WASP. We had no reservations in choosing this technology and are delighted with its responsiveness and the speed of data transfer."

Raw data is received from telescopes on the island of La Palma in the Canary Islands and in South Africa. The processed images are transferred directly onto the ADIC i2000, and star brightness measurements are held on SGI's TP9300 for fast access.

For further information on the WASP project please visit www.wasp.le.ac.uk

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Manager,
Astrophysical Fluids Facility (UKAFF)

About the WASP Consortium:

The WASP Consortium consists of astronomers from the University of Leicester, University of Cambridge (Wide Field Astronomy Unit), Instituto de Astrofisica de Canarias, Isaac Newton Group (La Palma), Keele University, the Open University, Queen's University Belfast and the University of St. Andrews. The SuperWASP and WASP-S Cameras were constructed and operated with funds from consortium universities and PPARC.

The WASP Consortium

Five wide-angle camera units of the SuperWASP instrument on the island of La Palma (Canary Islands).

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