# CSAR Service - Management Report

# May 2005

This report documents the quality of the CSAR service during the month of May 2005.

A more comprehensive report is provided quarterly, which additionally covers wider aspects of the Service such as information on Training, Application Support and Value-Added services.

This and other such reports are made available through the Web to staff within EPSRC and the other Research Councils, to CfS staff and CSAR Service users. The reports are indexed in a similar way to that which other useful information and news are listed for selection.

## 1. Introduction

This document gives information on Service Quality and on actual usage of the CSAR Service during the reporting period of May 2005. The information, in particular, covers the availability and usage of the main CSAR Service High Performance Computing (HPC) systems:

- SGI Altix3700/512 (Newton)
- SGI Origin3000/512 (Green)
- SGI Origin2000/128 (Fermat)
- SGI Origin300/16 (Wren)

The information is provided in both textual and graphical form, so that it is easier to see trends and variances.

May has seen the workload of the three primary systems at variable levels, with the workload on the Altix system Newton remaining steady.

The CSAR Service has been granted an 18 month extension of service contract until June 30th 2006.

# 2. Service Quality

This section covers overall Customer Performance Assessment Ratings (CPARS), HPC System availability and usage, Service Quality Tokens and other information concerning issues, progress and plans for the CSAR Service.

## 2.1 CPARS

Table 1 gives the measure by which the quality of the CSAR Service is judged. It identifies the metrics and performance targets, with colour coding so that different levels of achievement against targets can be readily identified. Unsatisfactory actual performance will trigger corrective action.

### CSAR Service - Service Quality Report - Performance Targets

| Service Quality Measure | Performance Targets | | | | | |
|---|---|---|---|---|---|---|
| | White | Blue | Green | Yellow | Orange | Red |
| HPC Services Availability | | | | | | |
| Availability in Core Time (% of time) | > 99.9% | > 99.5% | > 99.2% | > 98.5% | > 95% | 95% or less |
| Availability out of Core Time (% of time) | > 99.8% | > 99.5% | > 99.2% | > 98.5% | > 95% | 95% or less |
| Number of Failures in month | 0 | 1 | 2 to 3 | 4 | 5 | > 5 |
| Mean Time between failures in 52 week rolling period (hours) | >750 | >500 | >300 | >200 | >150 | otherwise |
| Help Desk | | | | | | |
| Non In-depth Queries - Max Time to resolve 50% of all queries | < 1/4 | < 1/2 | < 1 | < 2 | < 4 | 4 or more |
| Non In-depth Queries - Max Time to resolve 95% of all queries | < 1/2 | < 1 | < 2 | < 3 | < 5 | 5 or more |
| Administrative Queries - Max Time to resolve 95% of all queries | < 1/2 | < 1 | < 2 | < 3 | < 5 | 5 or more |
| Help Desk Telephone - % of calls answered within 2 minutes | >98% | > 95% | > 90% | > 85% | > 80% | 80% or less |
| Others | | | | | | |
| Normal Media Exchange Requests - average response time | < 1/2 | < 1 | < 2 | < 3 | < 5 | 5 or more |
| New User Registration Time (working days) | < 1/2 | < 1 | < 2 | < 3 | < 4 | otherwise |
| Management Report Delivery Times (working days) | < 1 | < 5 | < 10 | < 12 | < 15 | otherwise |
| System Maintenance - no. of sessions taken per system in the month | 0 | 1 | 2 | 3 | 4 | otherwise |

**Table 1**

Table 2 gives actual performance information for the period of May 1st to 31st inclusive.
Overall, the CPARS Performance Achievement in May was acceptable (see Table 3); i.e. Green measured against the CPARS performance targets.

### CSAR Service - Service Quality Report - Actual Performance Achievement

| Service Quality Measure | 2004/5 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | June | July | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | April | May |
| HPC Services Availability | | | | | | | | | | | | |
| Availability in Core Time (% of time) | 97.49% | 97.97% | 100% | 99.52% | 97.08% | 98.50% | 99.50% | 97.37% | 97.85% | 97.85% | 96.00% | 99.50% |
| Availability out of Core Time (% of time) | 97.85% | 100% | 99.2% | 99.80% | 98.67% | 98.78% | 99.2% | 99.73% | 99.5% | 99.80% | 99.90% | 99.54% |
| Number of Failures in month | 4 | 2 | 2 | 2 | 3 | 4 | 2 | 3 | 5 | 4 | 4 | 1 |
| Mean Time between failures in 52 week rolling period (hours) | 2008 | 1464 | 1082 | 863 | 642 | 506 | 453 | 392 | 326 | 284 | 250 | 241 |
| Help Desk | | | | | | | | | | | | |
| Non In-depth Queries - Max Time to resolve 50% of all queries | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 |
| Non In-depth Queries - Max Time to resolve 95% of all queries | <2 | <2 | <1 | <2 | <3 | <1 | <0.5 | <0.5 | <2 | <1 | <2 | 5> |
| Administrative Queries - Max Time to resolve 95% of all queries | <1 | <0.5 | <0.5 | <1 | <1 | <0.5 | <1 | <0.5 | <2 | <1 | <1 | <0.5 |
| Help Desk Telephone - % of calls answered within 2 minutes | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Others | | | | | | | | | | | | |
| Normal Media Exchange Requests - average response time | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| New User Registration Time (working days) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Management Report Delivery Times (working days) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| System Maintenance - no. of sessions taken per system in the mont | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

**Table 2**

Notes:

1. HPC Services Availability has been calculated using the following formula, based on the relative NPB performance of Fermat, Green and Newton at installation:

   [Fermat availability x 40/ (40+233+343)] + [Green availability x 233/(40+233+343)] + [Newton availability x 343/(40+233+343)]

2 Mean Time between failures for Service Credits is formally calculated based on a rolling 12 month period.

Table 3 gives Service Credit values for the month of May. These will be accounted on a quarterly basis, formally from the Go-Live Date. The values are calculated according to agreed Service Credit Ratings and Weightings.

**CSAR Service - Service Quality Report - Service Credits**

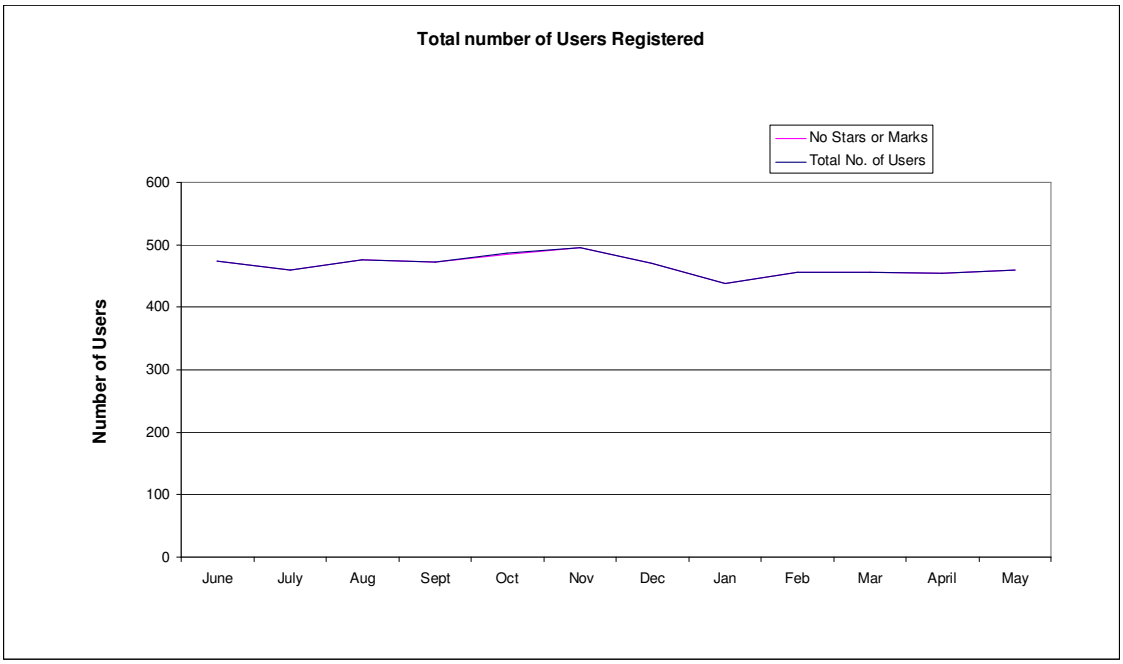
| Service Quality Measure | 2004/5 May | June | July | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | April |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HPC Services Availability | | | | | | | | | | | | |
| Availability in Core Time (% of time) | 0.195 | 0.078 | 0.078 | -0.058 | -0.039 | 0.078 | 0.039 | -0.039 | 0.078 | 0.078 | 0.078 | 0.078 |
| Availability out of Core Time (% of time) | 0 | 0.078 | -0.047 | 0 | -0.047 | 0 | 0 | 0 | -0.039 | 0 | -0.047 | -0.047 |
| Number of Failures in month | 0.0 | 0.008 | 0 | 0 | 0 | 0.008 | 0.008 | 0 | 0.008 | 0.0004 | 0.008 | 0.008 |
| Mean Time between failures in 52 week rolling period (hours) | 0.0002 | 0.0002 | 0.0002 | 0.0002 | 0.0002 | 0.0002 | 0.0002 | 0.0002 | 0.0002 | 0.0002 | 0.0002 | 0.0002 |
| Help Desk | | | | | | | | | | | | |
| Non In-depth Queries - Max Time to resolve 50% of all queries | -0.019 | -0.019 | -0.019 | -0.019 | -0.019 | -0.019 | -0.019 | -0.019 | -0.019 | -0.019 | -0.019 | -0.019 |
| Non In-depth Queries - Max Time to resolve 95% of all queries | 0.016 | 0 | 0 | -0.016 | 0 | 0.016 | -0.016 | -0.019 | -0.019 | 0 | -0.016 | 0 |
| Administrative Queries - Max Time to resolve 95% of all queries | -0.019 | -0.016 | -0.019 | -0.019 | -0.016 | -0.016 | -0.019 | -0.016 | -0.019 | 0 | -0.016 | -0.016 |
| Help Desk Telephone - % of calls answered within 2 minutes | -0.004 | -0.004 | -0.004 | -0.004 | -0.004 | -0.004 | -0.004 | -0.004 | -0.004 | -0.004 | -0.004 | -0.004 |
| Others | | | | | | | | | | | | |
| Normal Media Exchange Requests - average response time | -0.002 | -0.002 | -0.002 | -0.002 | -0.002 | -0.002 | -0.002 | -0.002 | -0.002 | -0.002 | -0.002 | -0.002 |
| New User Registration Time (working days) | -0.019 | -0.019 | -0.019 | -0.019 | -0.019 | -0.019 | -0.019 | -0.019 | -0.019 | -0.019 | -0.019 | -0.019 |
| Management Report Delivery Times (working days) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| System Maintenance - no. of sessions taken per system in the mont | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Monthly Total & overall Service Quality Rating for each period: | 0.07 | 0.05 | -0.02 | -0.07 | -0.07 | 0.02 | -0.02 | -0.06 | -0.02 | 0.02 | -0.02 | -0.01 |

**Table 3**

The Service Availability issues are receiving close management attention, to determine the root causes and the most appropriate solutions to overcome the problems at least risk to the overall service.

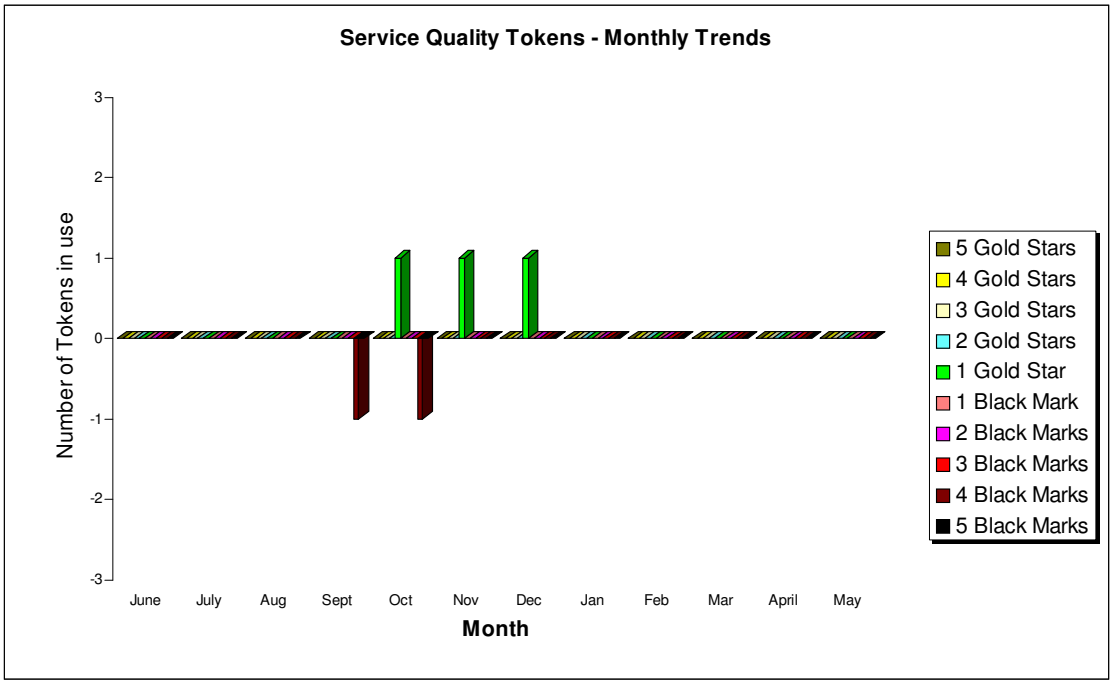
## 2.2 Service Quality Tokens

The position at the end of May 2005 is that none of the 459 users has awarded any marks to the service.




The graph above shows the total number of registered users on the CSAR Service and the number of users holding a neutral view of the service.

The graph below illustrates the monthly usage trend of quality tokens:




The current status of the Stendahl tokens is that there are no gold stars or black marks allocated to the service.

## 2.3 Throughput Target against Baseline

The baseline is shown in GFLOP-Years for consistency with the other information contained within this report.

The Baseline Target for throughput was achieved this month. The actual usage figure was 273.9% of Baseline capacity.

**Job Throughput Against Baseline CSAR Service Provision**

**Period: 1st to 31st May 2005**

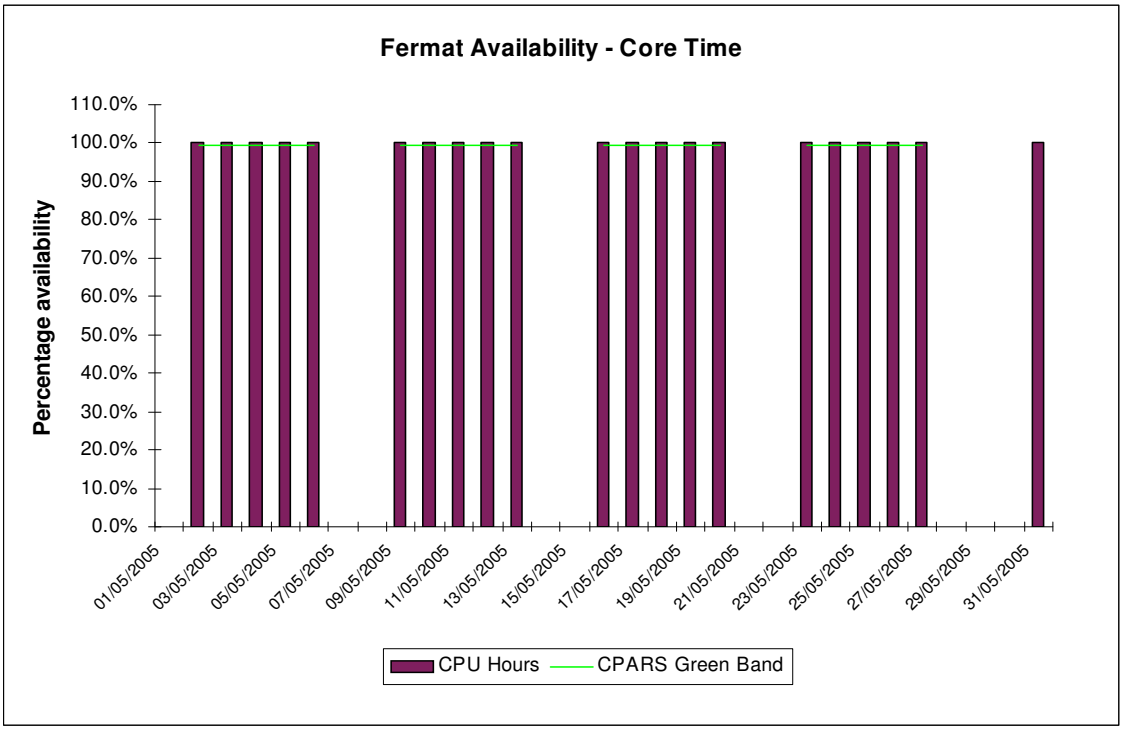
| | | | |
|---|---|---|---|
| | **Baseline Capacity for Period (GFLOP Years)** | **Actual Usage in Period (GFLOP Years)** | **Actual % Utilisation c/w Baseline during Period** |
| 1. Has CfS failed to deliver Baseline MPP Computing Capacity for EPSRC? | 15.37 | 42.11 | **273.9%** |
| | **Baseline Capacity for Period (GFLOP Years)** | **Job Time Demands in Period** | **Job Demand above 110% of Baseline during Period (Yes/No)?** |
| 2. Have Users submitted work demanding > 110% of the Baseline during period? | 15.37 | 43.1 | Yes |
| | | **Number of Jobs at least 4 days old at end Period** | **Number of Jobs at least 4 days old at end Period is not zero (Yes/No)?** |
| 3. Are there User Jobs oustanding at the end of the period over 4 days old? | | 4 | Yes |
| | | **Minimum Job Time Demands as % of Baseline during Period** | **Minimum Job Time Demand above 90% of Baseline during Period (Yes/No)?** |
| 4. Have Users submitted work demands above 90% of the Baseline during period? | | 87% | No |
| | **Number of standard Job Queues (ignoring priorities)** | **Average % of time each queue contained jobs in the Period** | **Average % of time each queue contained jobs in the Period is > 97%?** |
| 5. Majority of Job Queues contained jobs from Users for more than 97% during period? | 4 | 84% | No |

# 3. System Availability

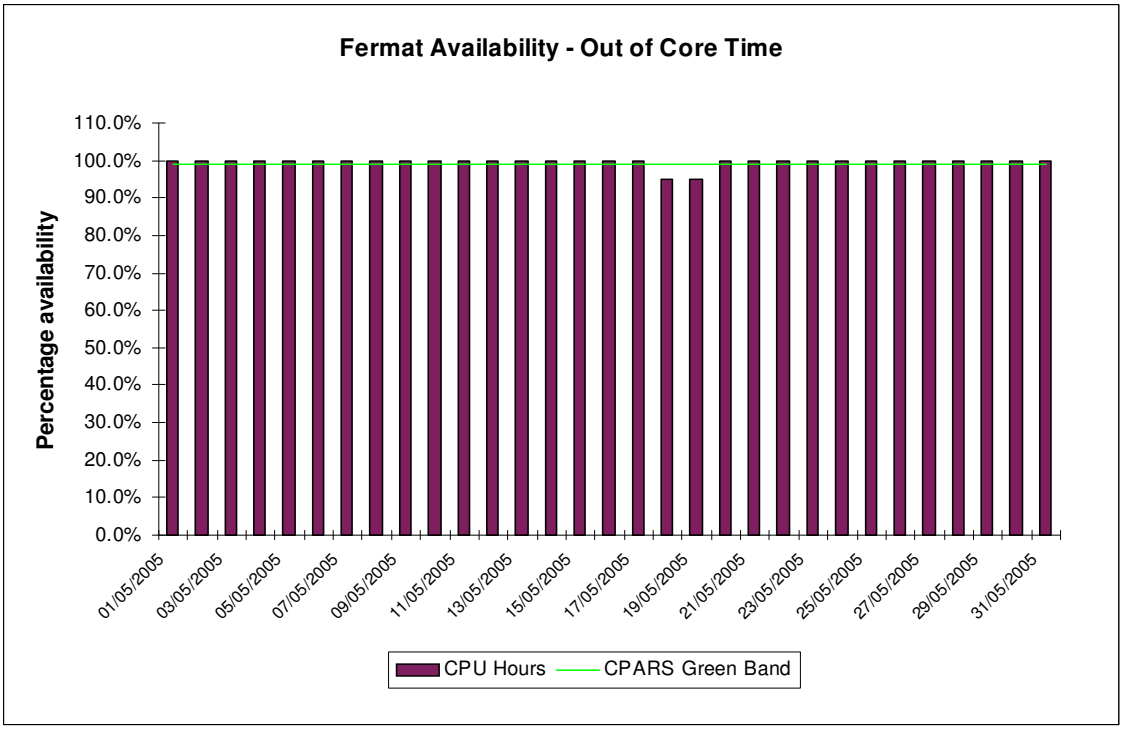
Service availability each reporting period is calculated as a percentage of actual availability time over theoretical maximum time, after accounting for planned breaks in service for preventative maintenance.

## 3.1 SGI Origin2000 System (Fermat)

The following graphs show the availability of Fermat both in core time and out of core time respectively.



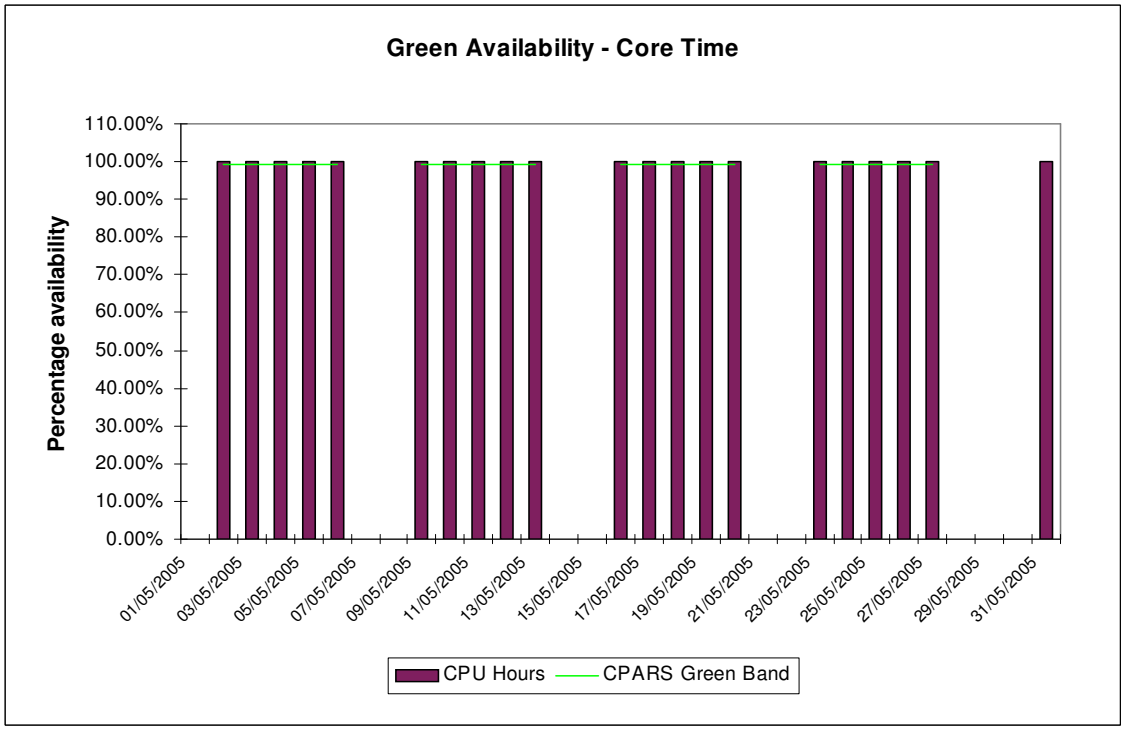

Availability of Fermat in core time during May was excellent, with no outages.



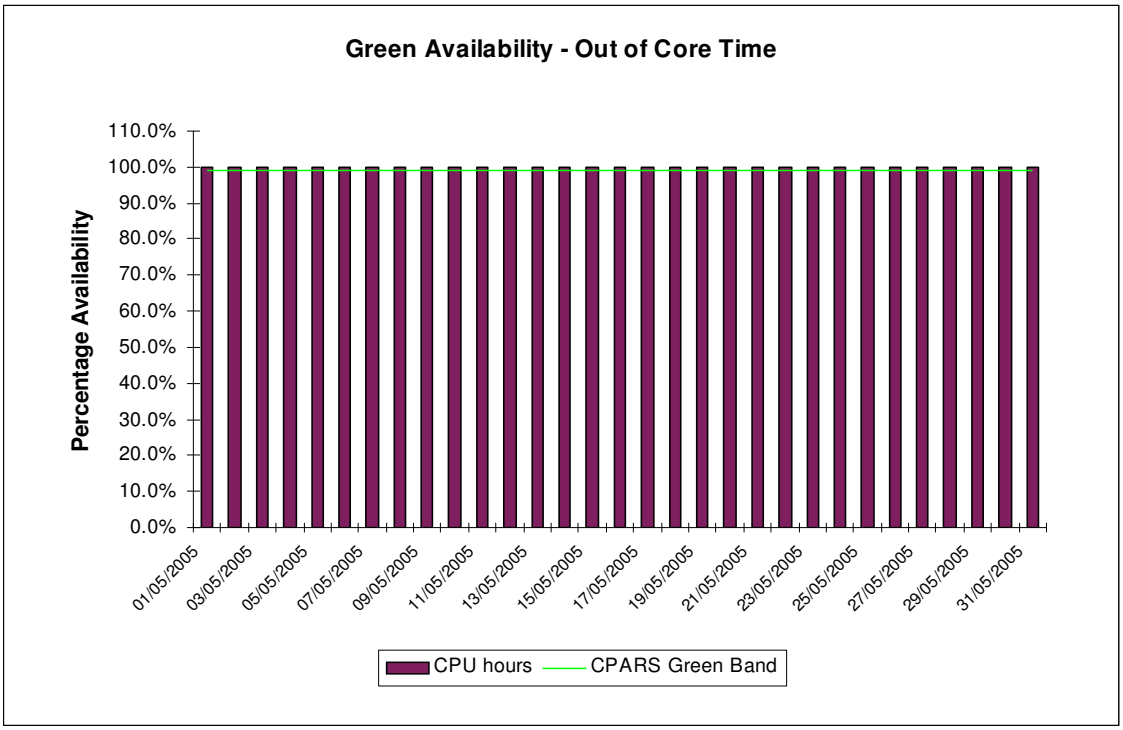

Availability of Fermat out of core time during May was good, with two short outages.

## 3.2 SGI Origin3000 System (Green)

The following graphs show the availability of Green both in core time and out of core time respectively.



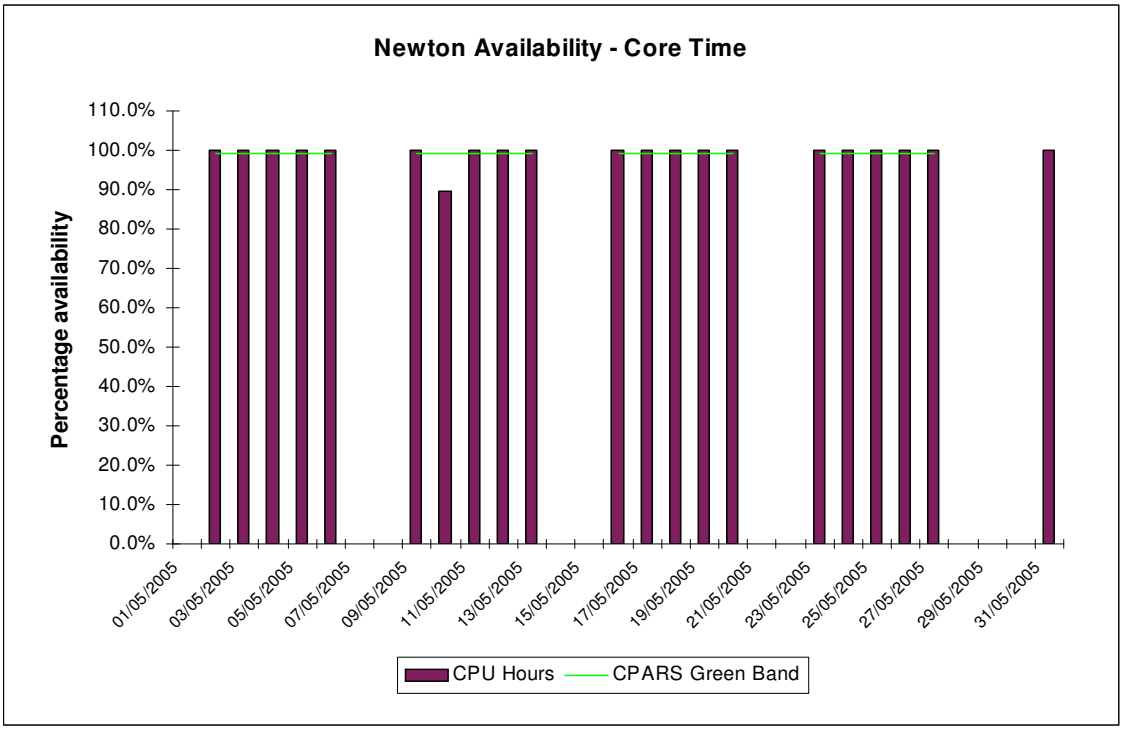

Availability of Green in core time during May was excellent, with no outages.



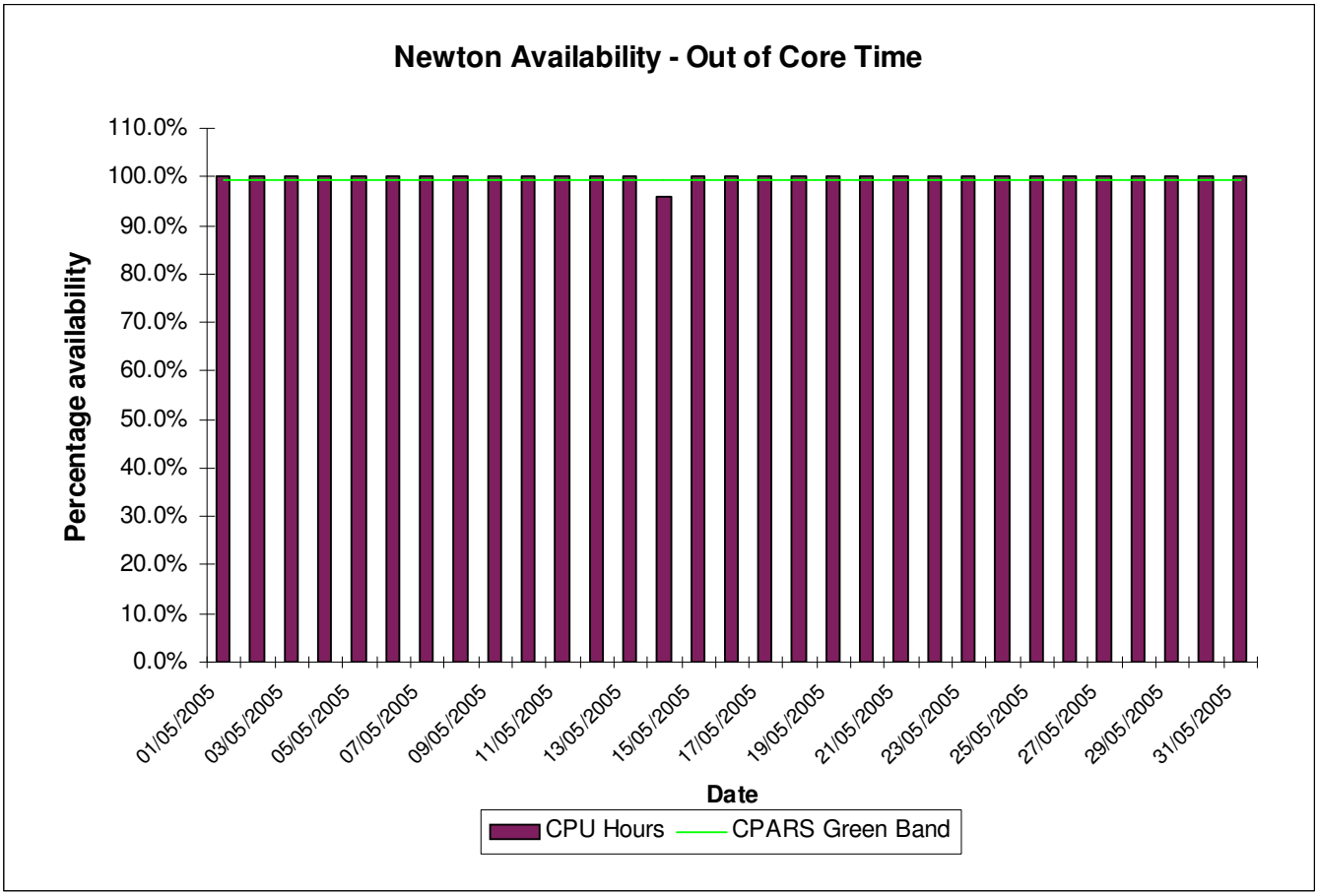

Availability of Green out of core time during May was excellent, with no outages.

### 3.3 SGI Altix3700 System (Newton)

The following graphs show the availability of Newton both in core time and out of core time respectively.




Availability of Newton during core time was very good, with one outage on the 10th.




Availability of Newton out of core time was very good, with one brief outage on the 14th.

## 4. HPC Services Usage

Usage information is given in tabular form, in Appendices, and in graphical format. The system usage information for the period of May 1st to 31st is provided by Project/User Group, totalled by Research Council and overall. This covers:

| | | |
|---|---|---|
| • CPU usage | Newton: | 220,508 CPU Hours |
| | Green: | 143,139 CPU Hours |
| | Fermat: | 23,858.13 CPU Hours |
| | Wren (Batch): | 2.26 CPU Hours |
| | Wren (Interactive): | 142.41 CPU Hours |
| • User Disk allocation | Medium Performance: | 99.13 GB Years |
| | SAN HV: | 42.47 GB Years |
| • HSM/tape usage | | 4,909.98 GB Years |

In addition, the following graphs are provided to illustrate usage per month, historically:

a) SMP (Altix/Origin) Usage by month, showing usage each month of CPU (GFLOP-Years as per NPB), split by Research Council and by system. Overlaid horizontal lines show the overall Capacities.

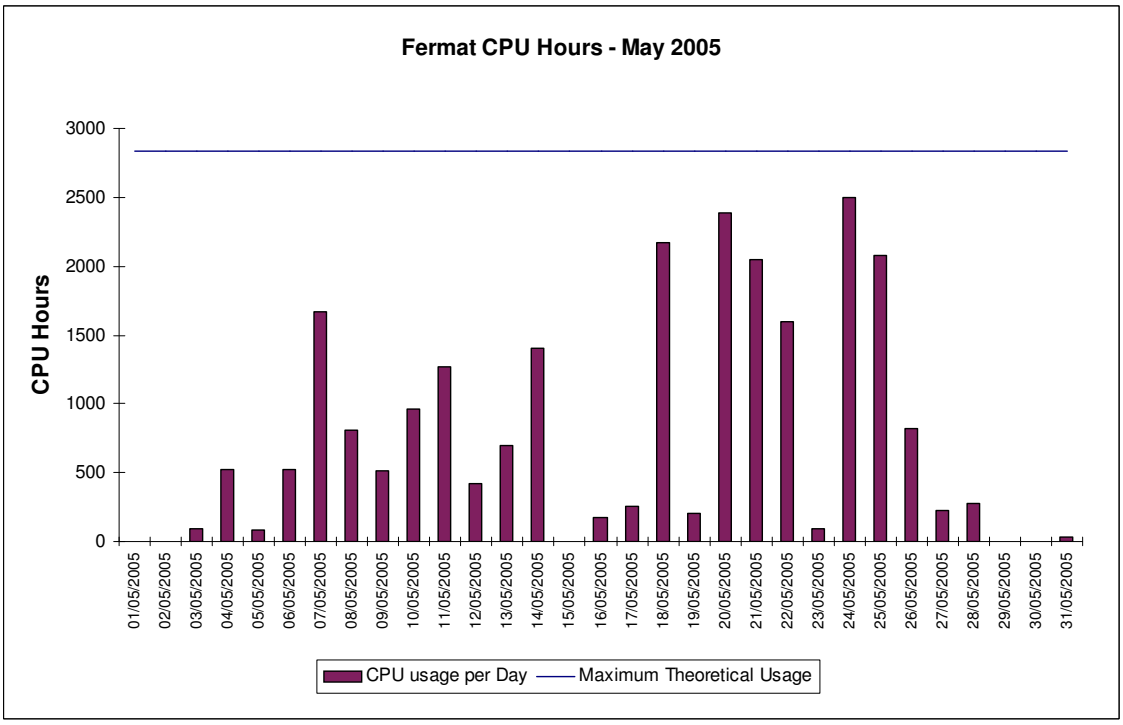
b) SMP (Origin) Usage by month, showing usage each month in CPU Hours, split by Research Council and giving the equivalent GFLOP-Years as per NPB. Overlaid horizontal lines show the Baseline and overall Capacity.

c) Medium Performance Disk, combined Origin and SAN, allocated for User Data by month, showing the allocated space each month in GBytes, split by Research Council. The Baseline Capacity (1.5 Terabytes) is shown by an overlaid horizontal line.

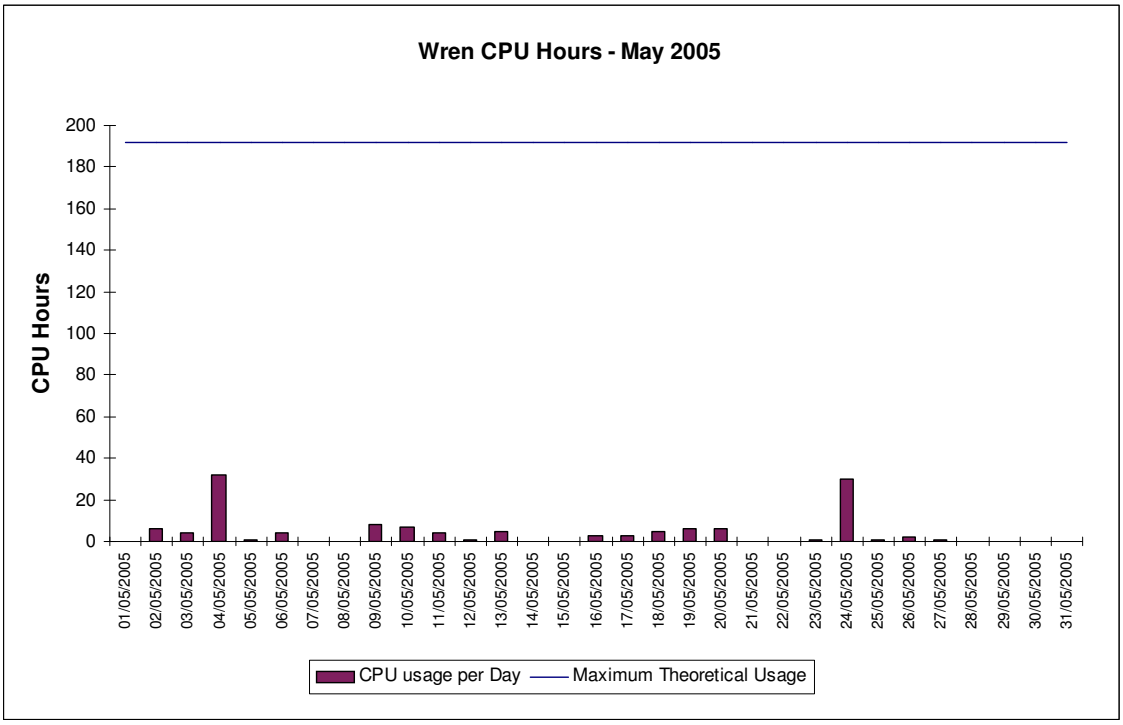
d) HSM/Tape Usage by month, showing the volumes held each in GBytes, split by Research Council. The Baseline Capacity (16 Terabytes) available will be shown by an overlaid horizontal line.

## 4.1 SGI Origin2000 System (Fermat)

The Origin2000 was reasonably utilised this month. The groups most heavily using the Fermat system are CSE086 (Taylor) and CSN003 (Steenman-Clark).

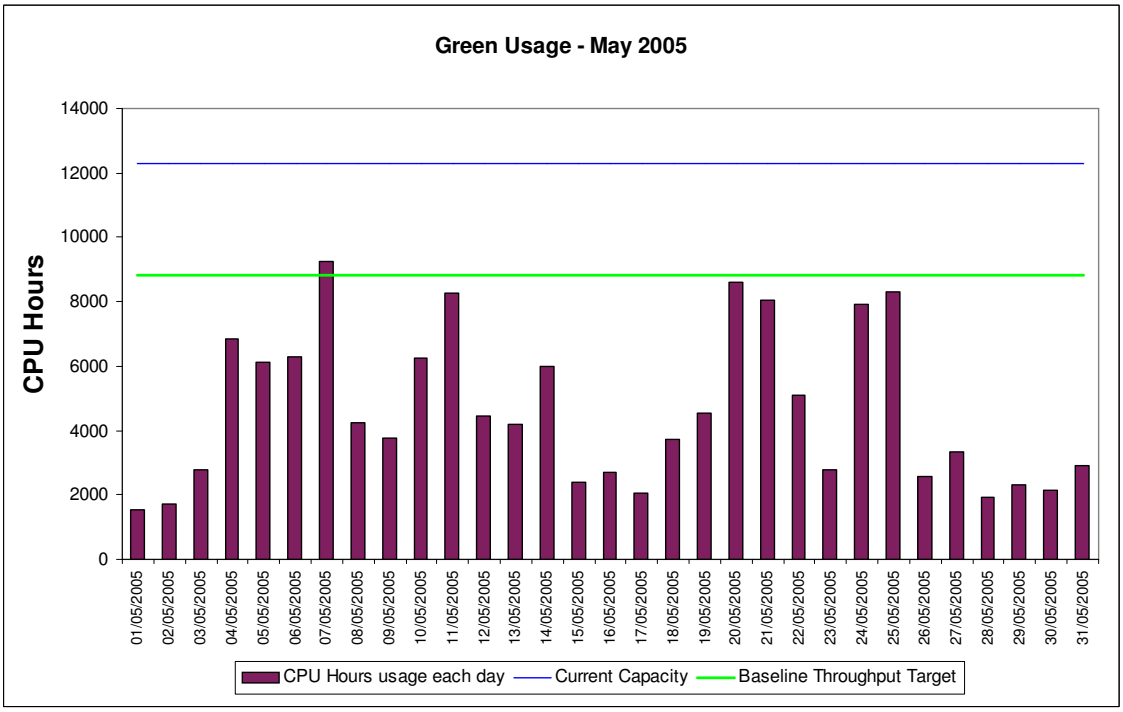



## 4.2 SGI Origin300 System (Wren)




The above graph shows the utilisation of the interactive system Wren for the month of May.

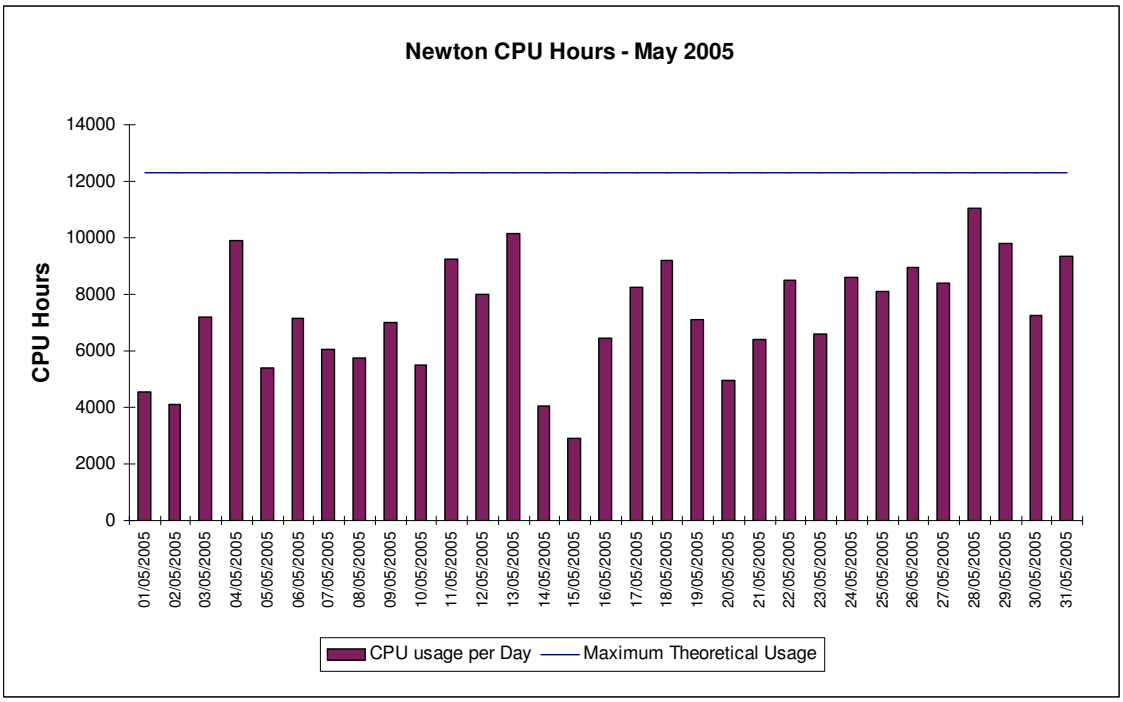
## 4.3 SGI Origin3000 System (Green)




The above graph shows the utilisation of Green for the month of May, which was slightly below Baseline.

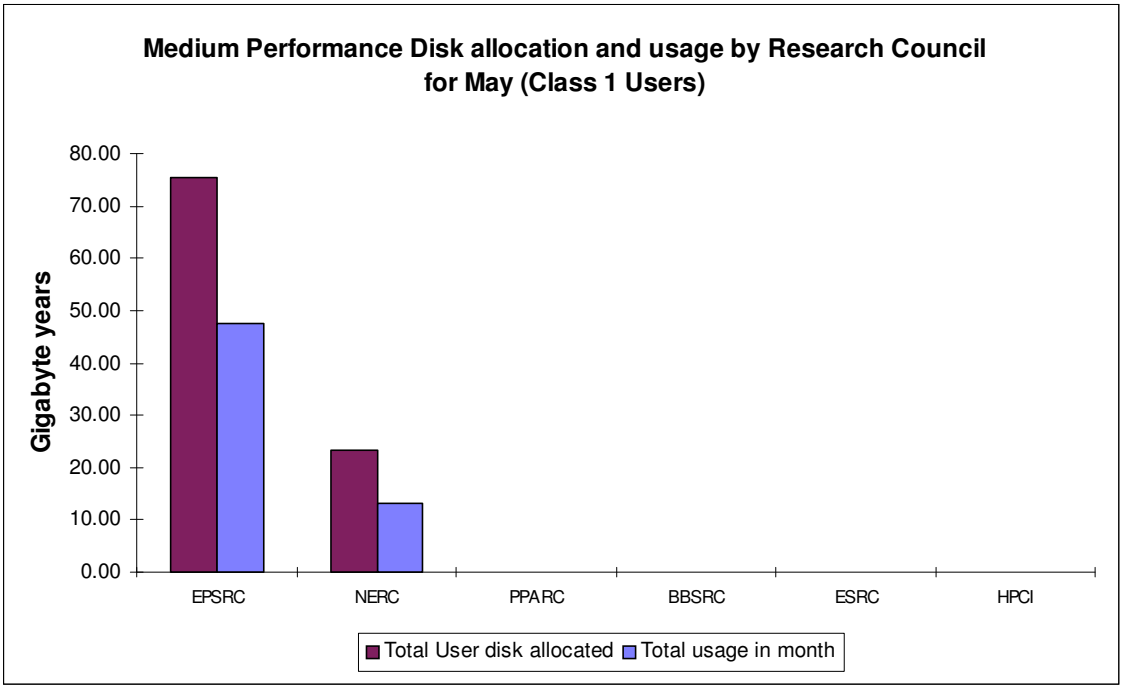
## 4.4 SGI Altix3700 System (Newton)

The following graph shows the daily usage during May for the Altix system Newton.



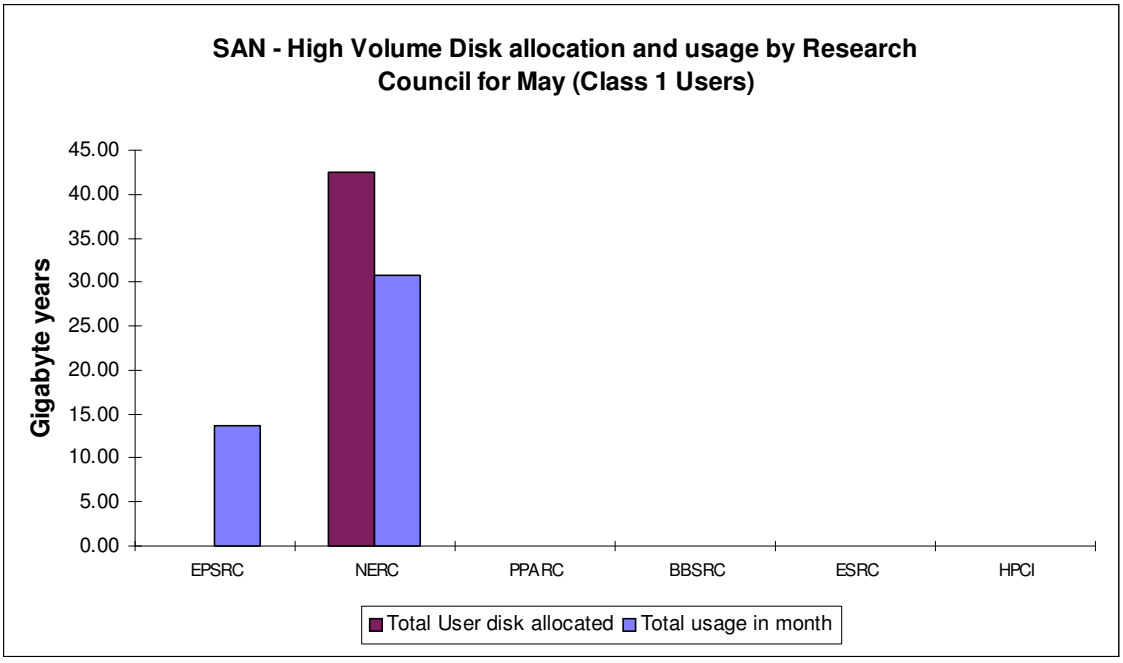
## 4.5 Disk/HSM Usage Chart

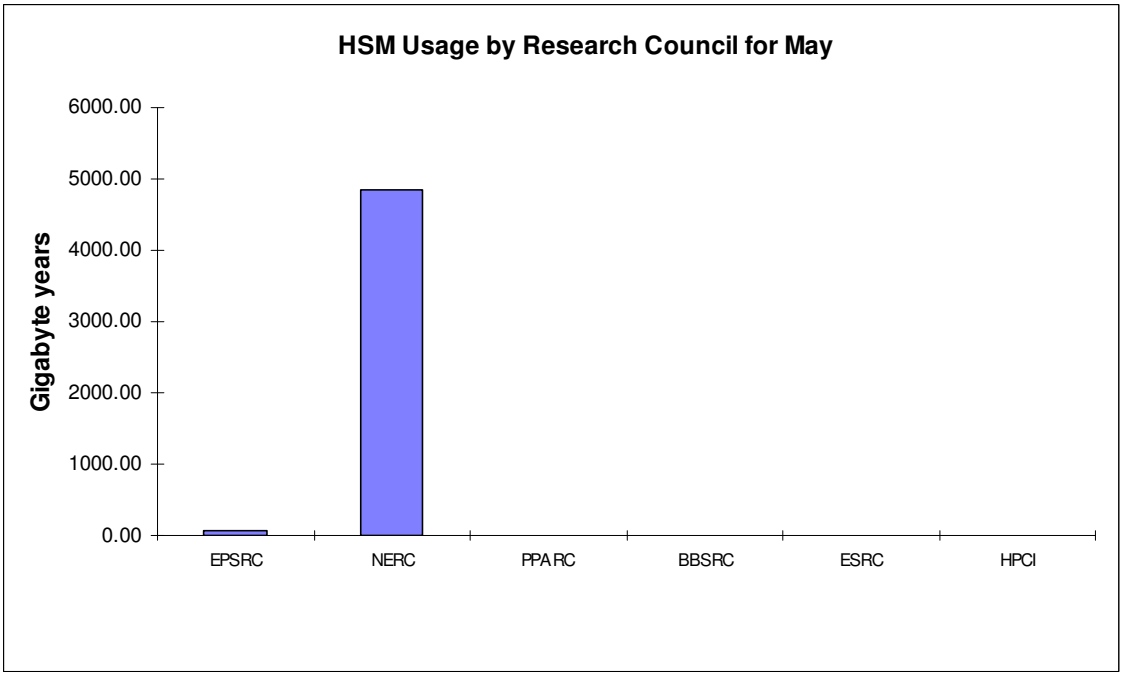
The graphs below show current disk and HSM allocations and usage.




Shown above is the disk allocation against usage on average of the Medium Performance (MP) disk.

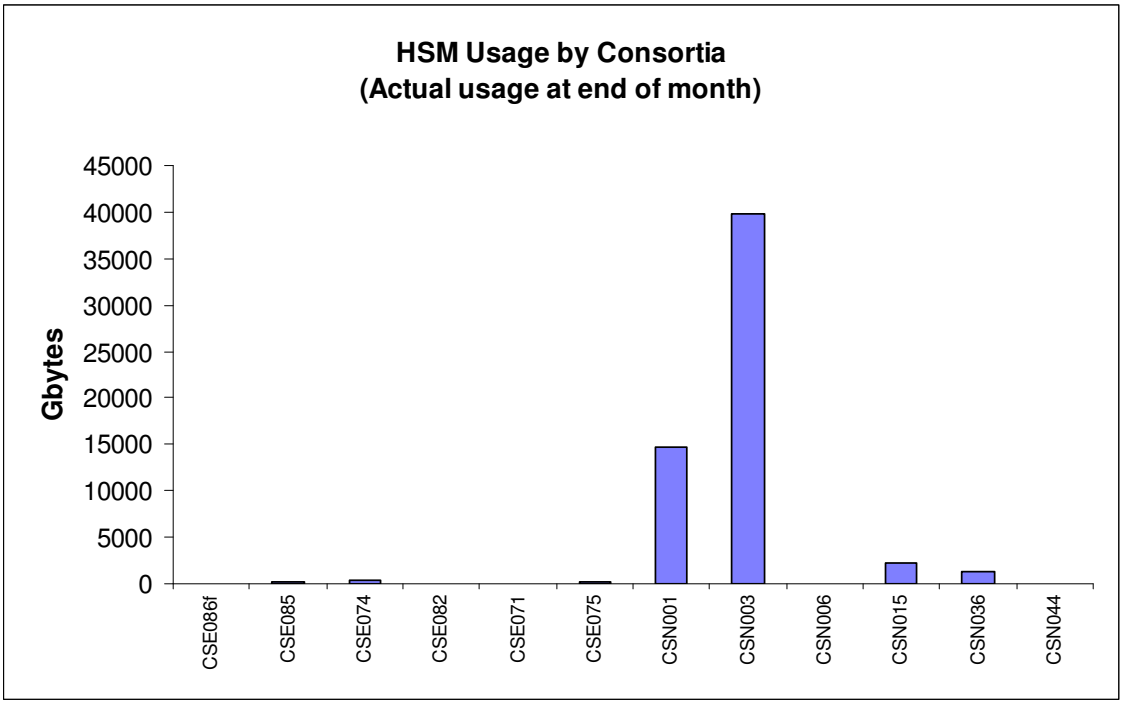
The following graph shows the disk allocation against usage on average of the SAN High Volume (HV) disk.






The above graph shows the total usage of the HSM facility by Research Council.

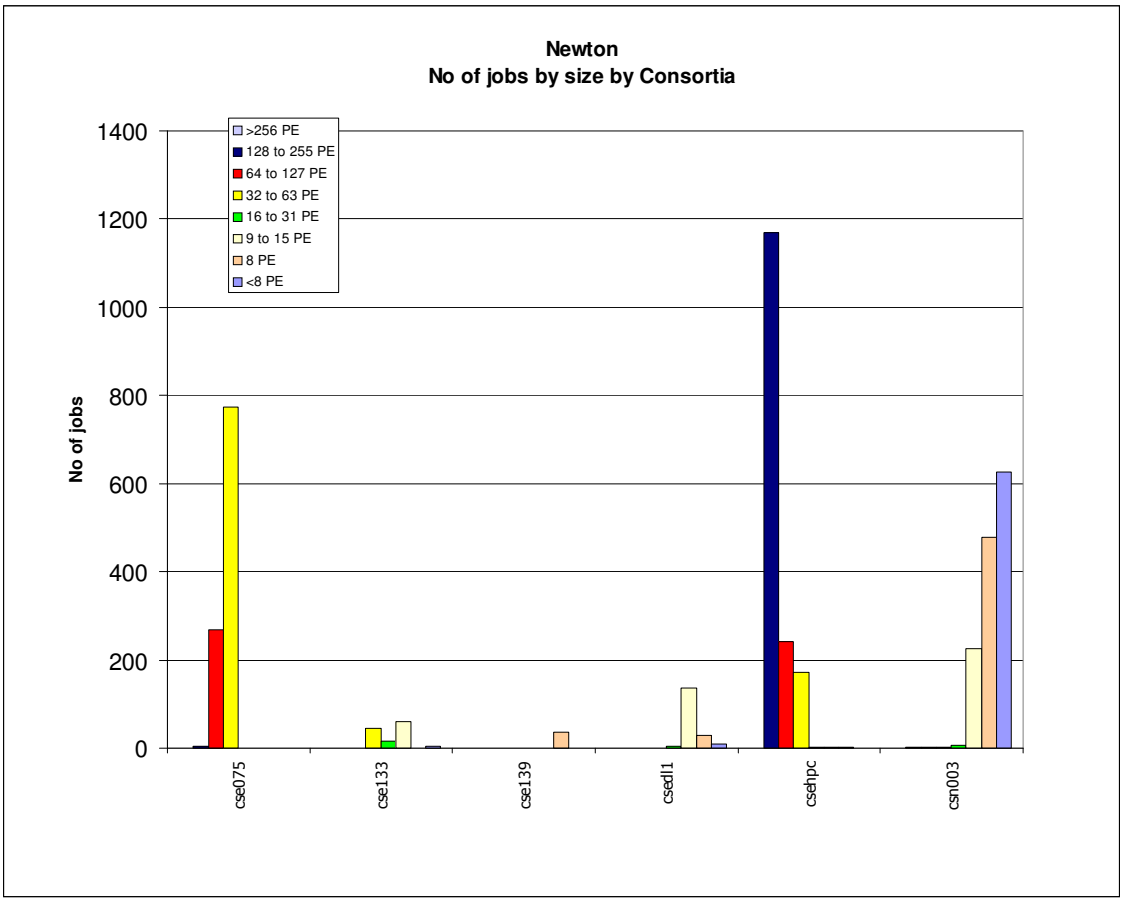
The next graph gives actual usage of HSM by Consortia.




CSE085 (Sandham), CSN001 (De Cuevas), CSN003 (Steenman-Clark), CSN015 (Proctor) & CSN036 (Woolf) were the major users of HSM resource.

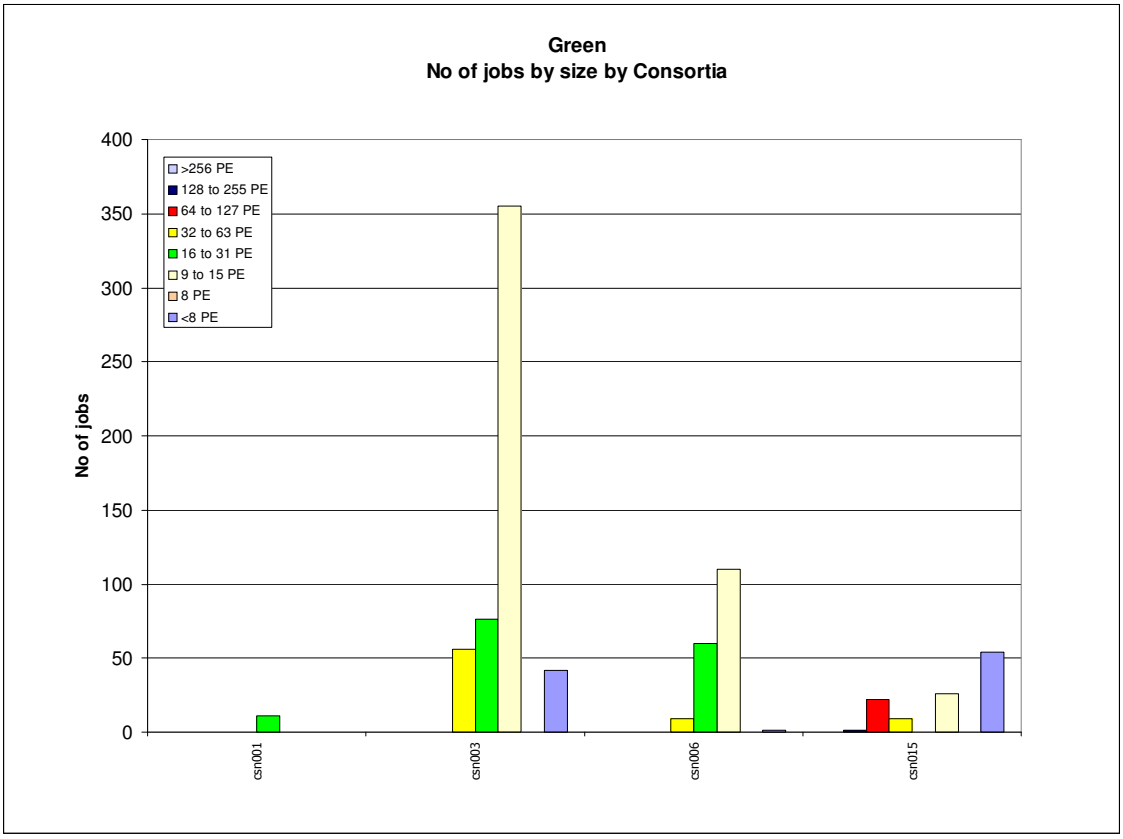
## 4.6 Processor Usage and Job Statistics Charts

Job statistics for Newton:



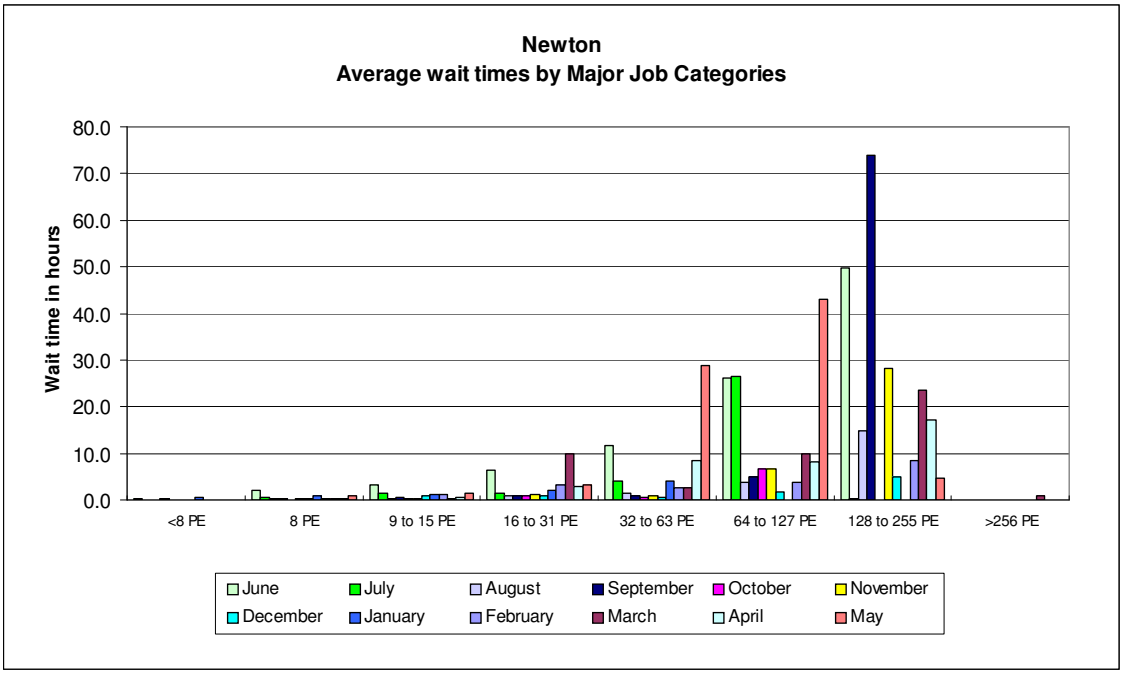

The above graph shows the number of jobs of the major sizes run in the period 1st to 31st May 2005.

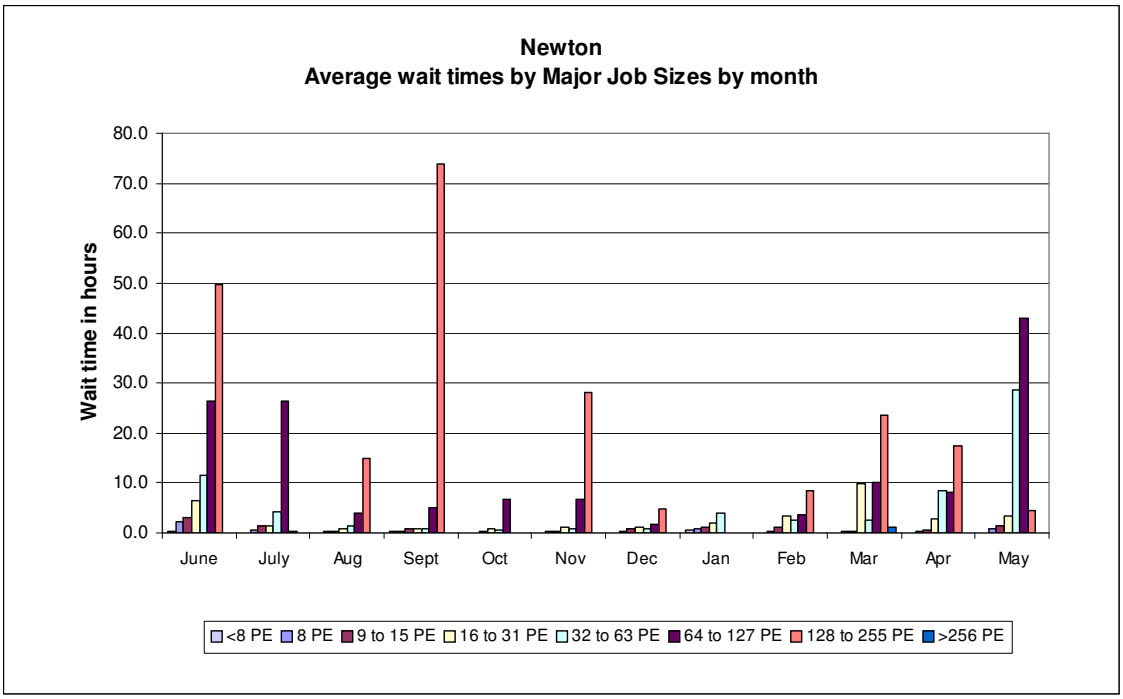
Job statistics for Green:




The above graph shows the number of jobs of the major sizes run in the period 1st to 31st May 2005.

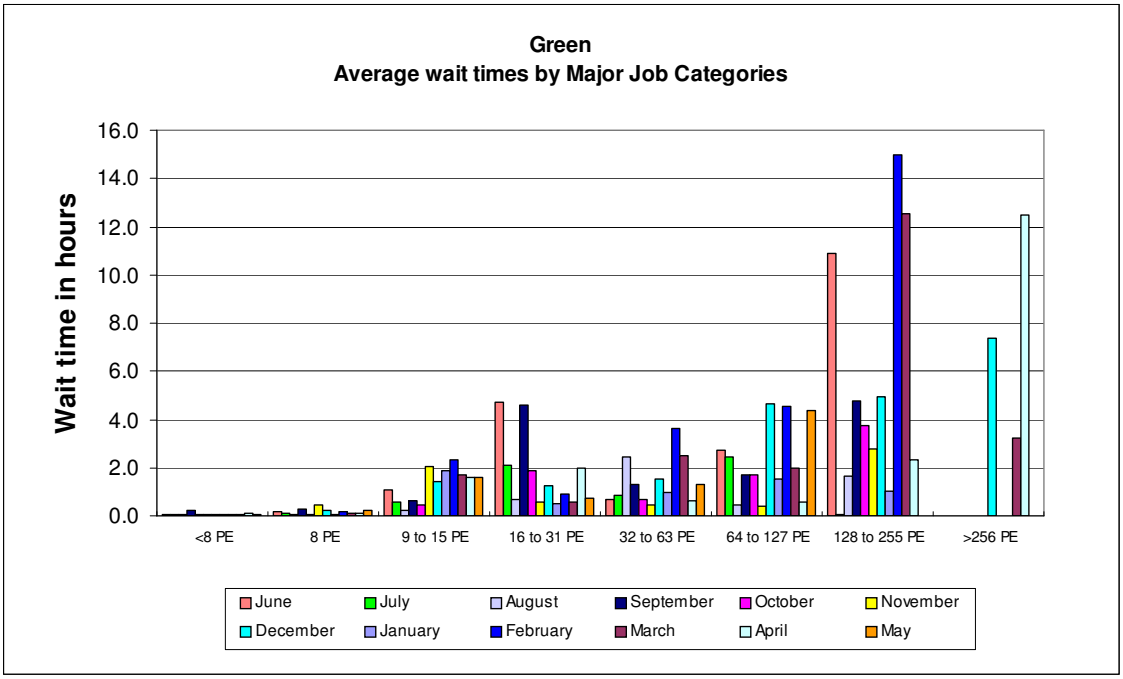
The next graph shows the wait times in hours on Newton for the major categories of jobs, larger jobs requesting tiling across multiple nodes having to wait the longest times.

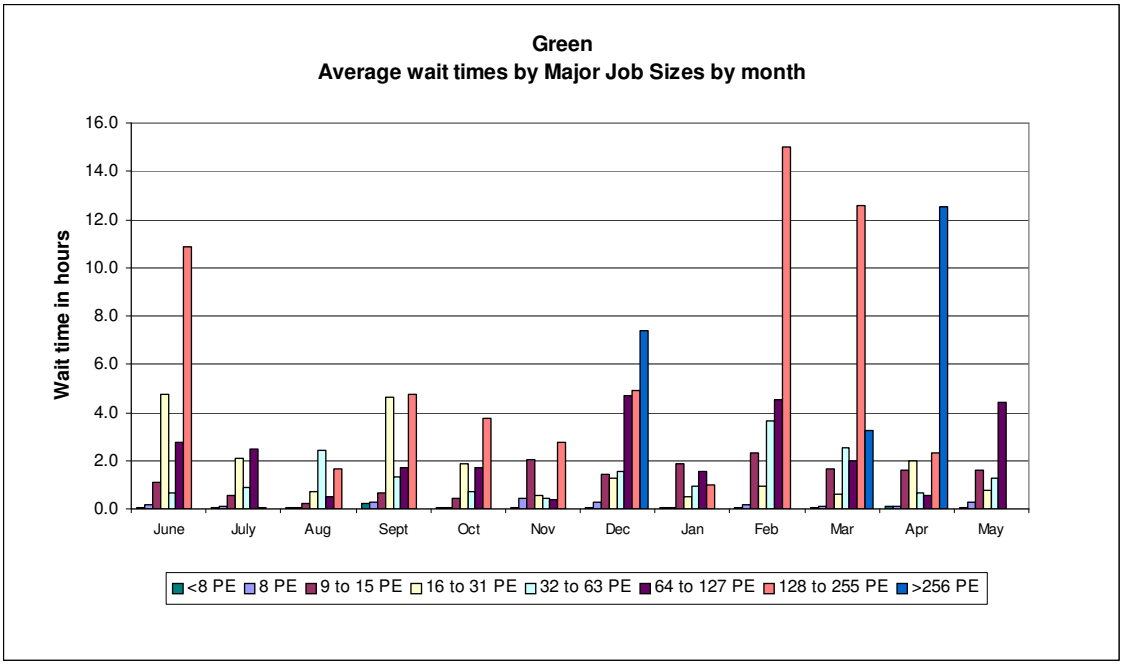


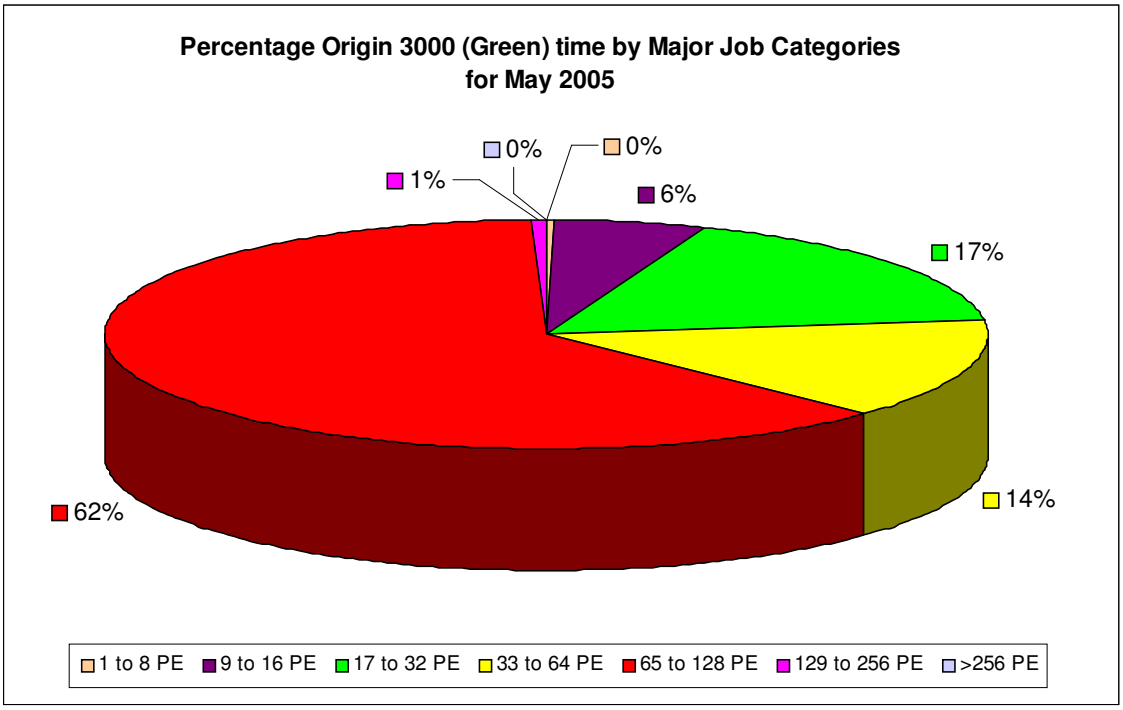

The chart above shows the average wait time trend on Newton so far this year.

The next graph shows the wait times in hours on Green for the major categories of jobs:

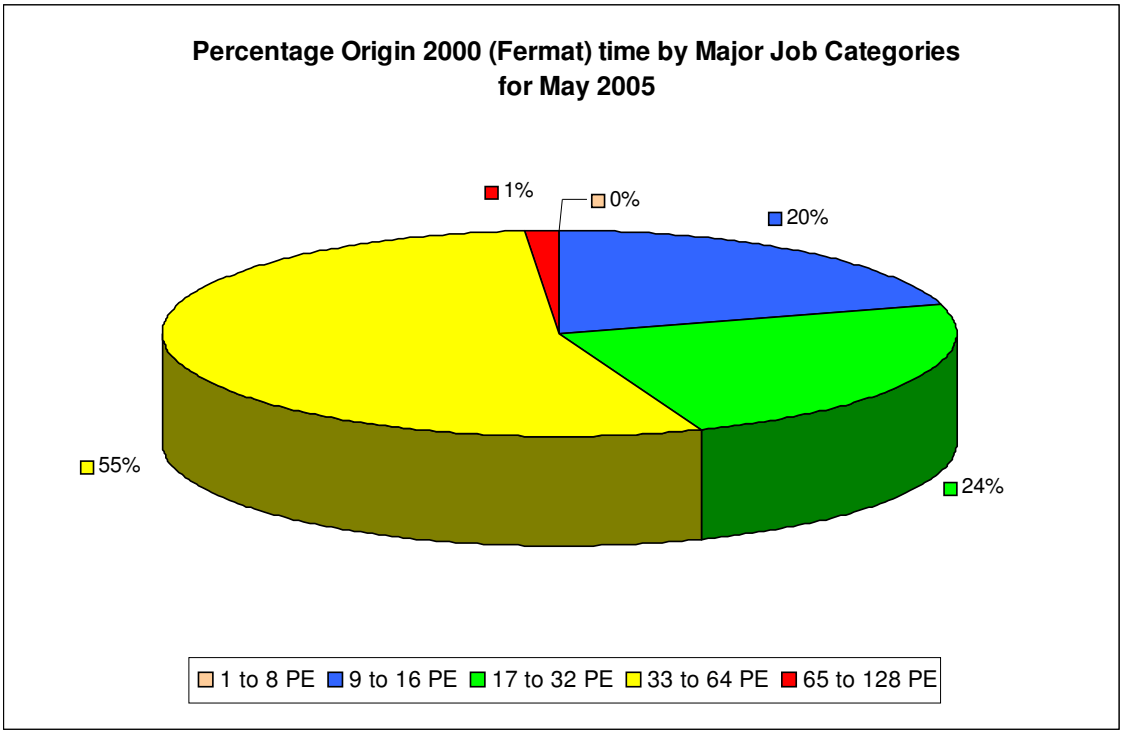


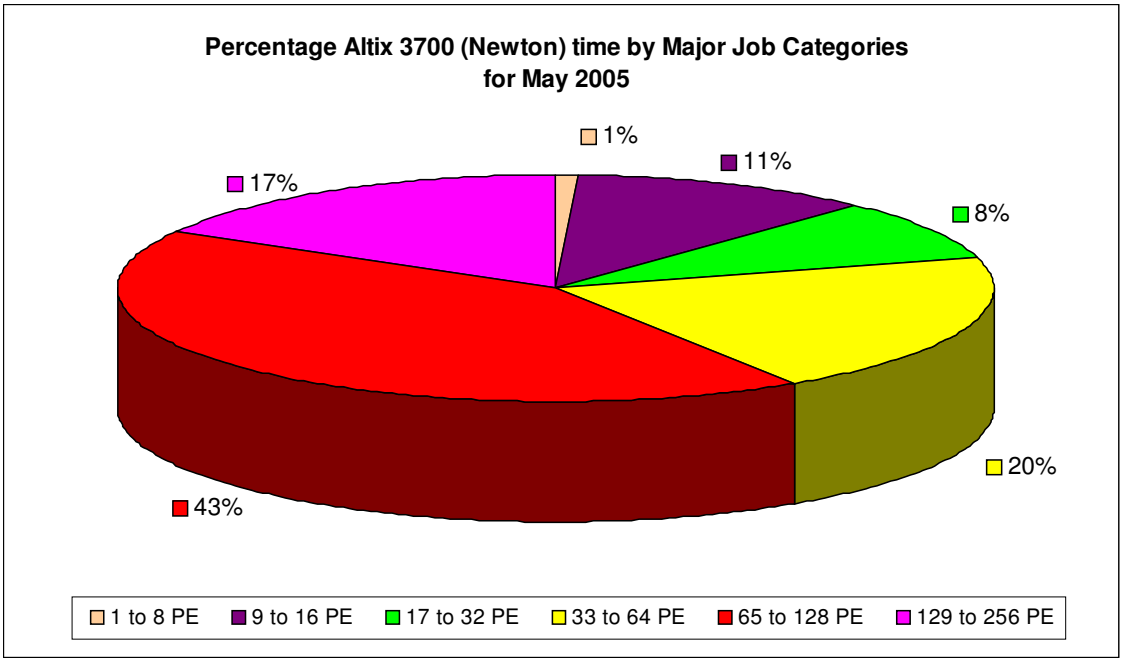

The chart above shows the average wait time trend on Green for the last 12 month period.



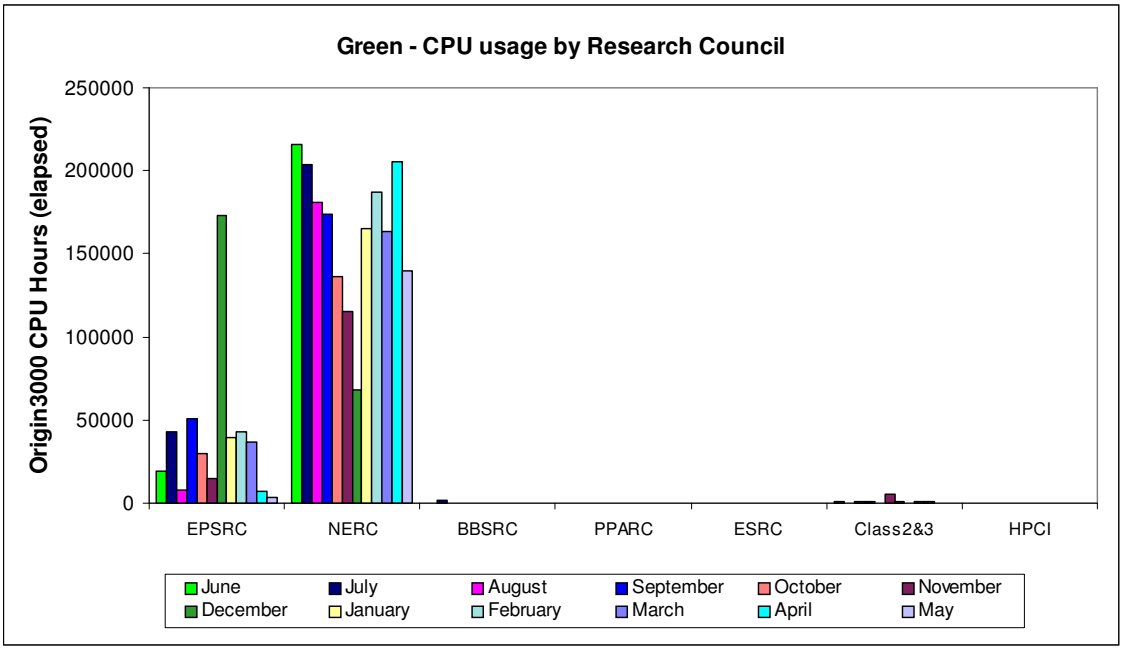

A large proportion of the work on Green during May was in the 65 to 128 PE range.



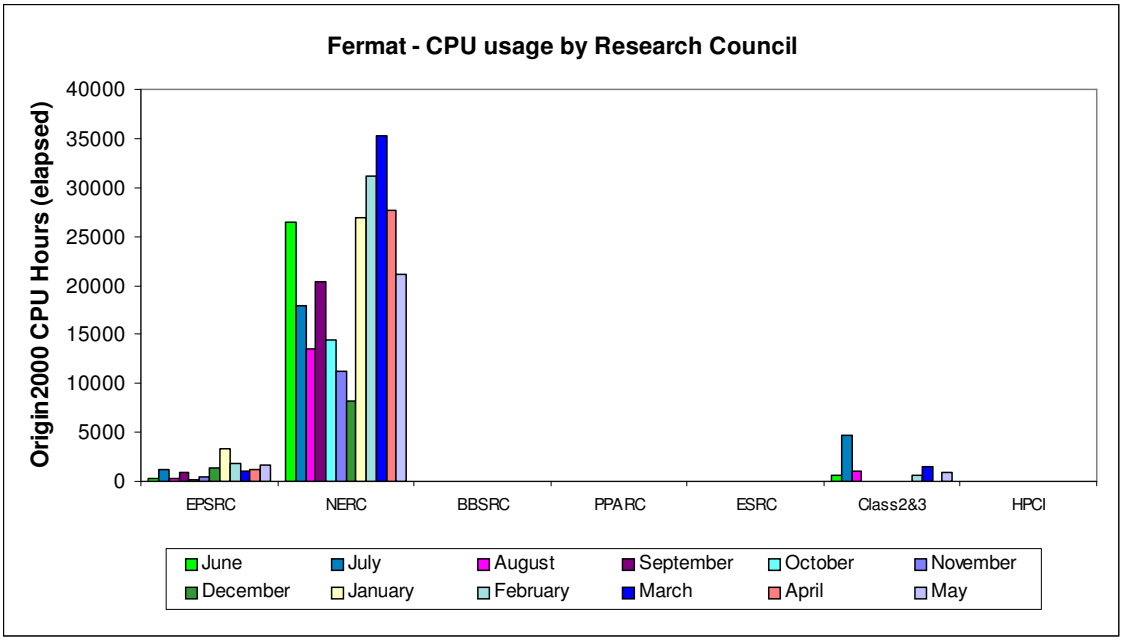

The highest percentage of workload on Fermat during May was in the 33 to 64 PE range, at 55%.




There was a good spread of work across the PE ranges on Newton during May.

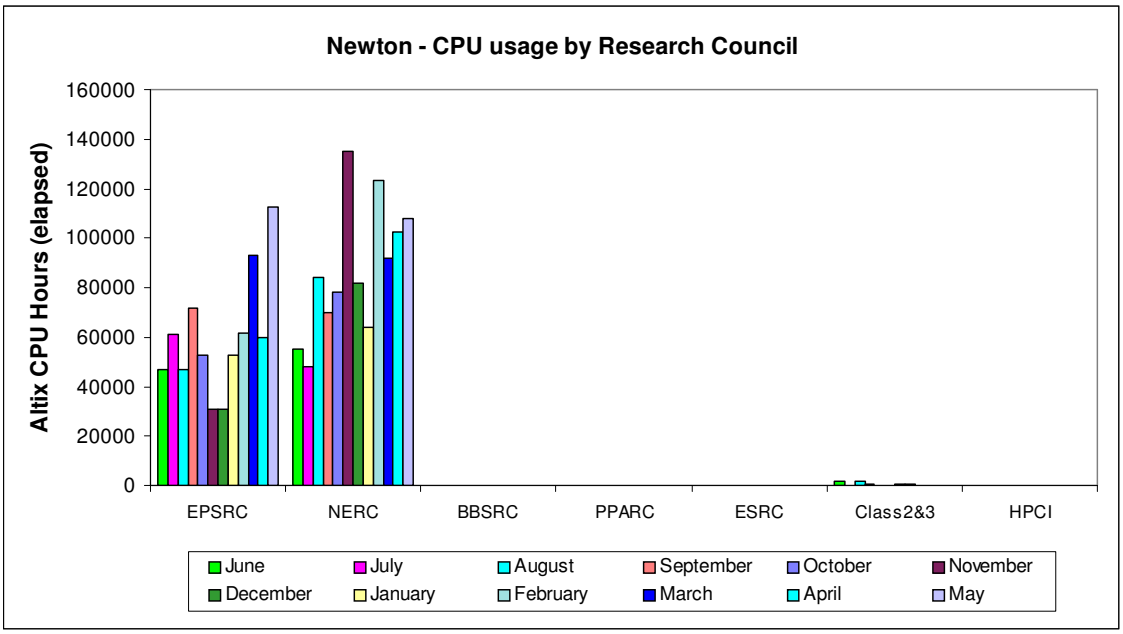



The above chart shows Green CPU usage by Research Council during the past 12 months of service.



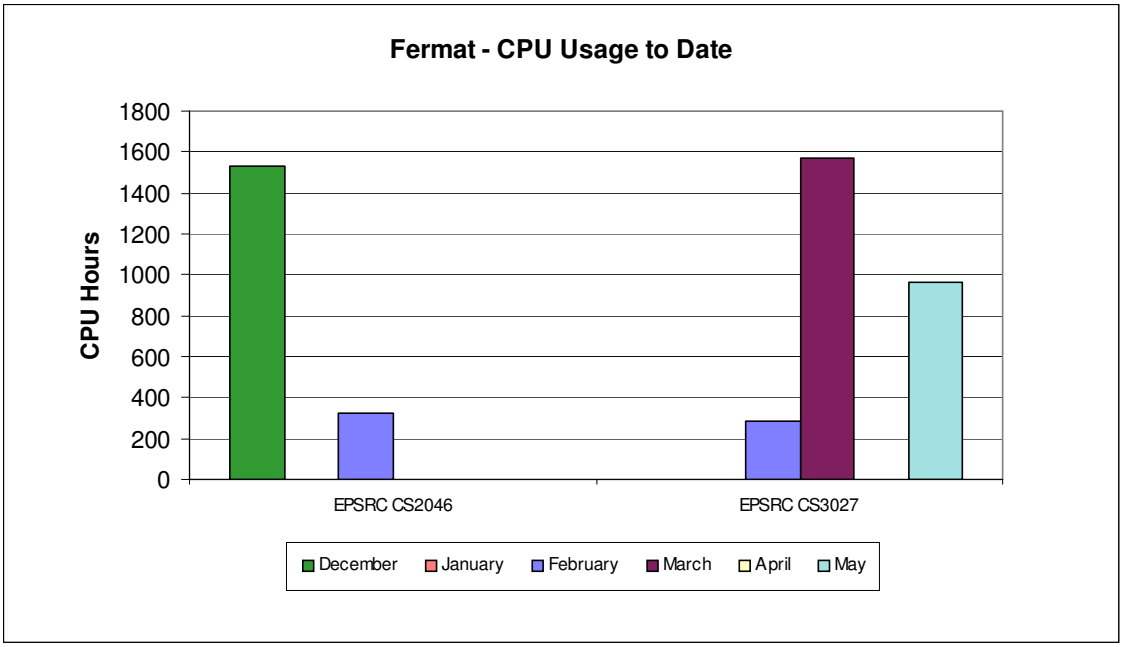

Origin 2000 CPU usage is shown by Research Council during the past 12 months of service in the above chart.

The following chart shows CPU usage to date of the Altix 3700 Newton.

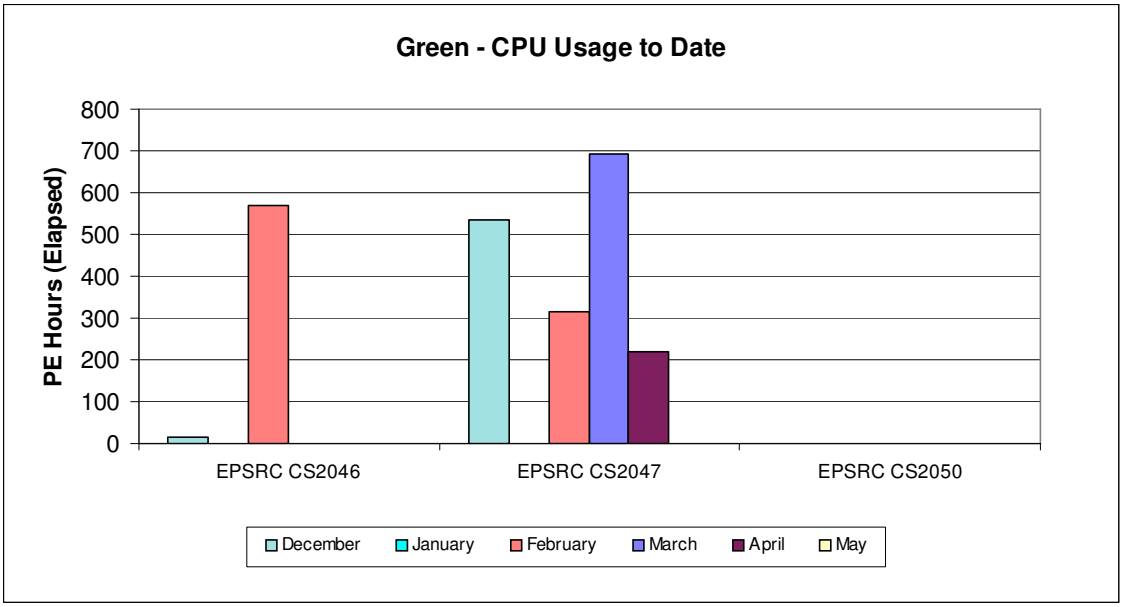


## 4.7 Class 2 & 3 Usage Charts

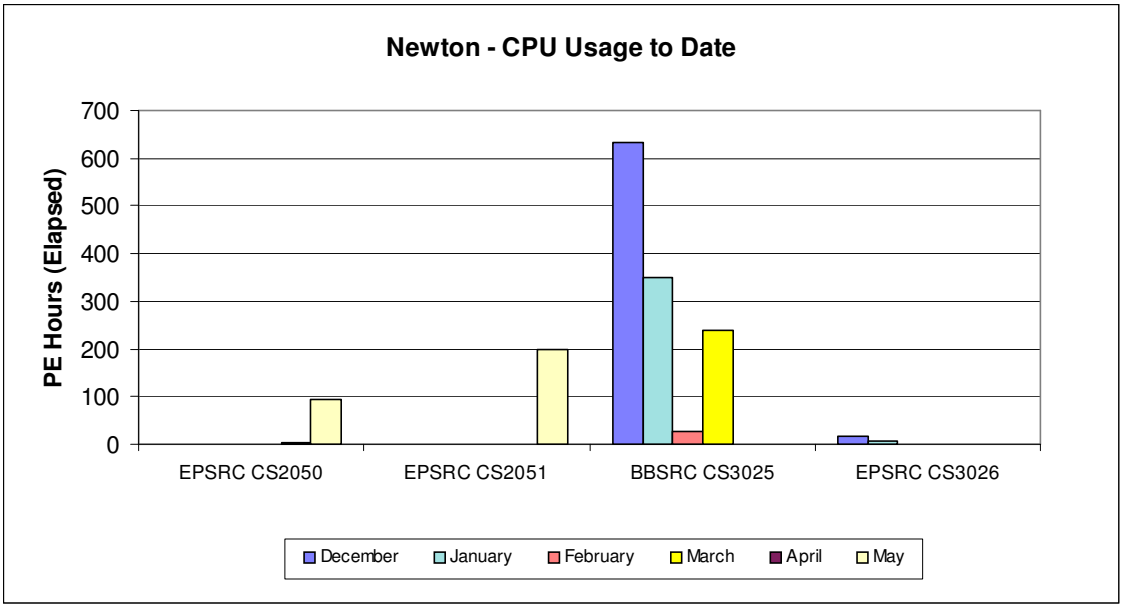
The next series of charts show the usage of the system by the class 2 & class 3 users. The usage is shown by project and identifies the Research Council of the individual projects.




The above chart shows the CPU usage of the Fermat system by class 2 and class 3 users.




This chart details the CPU usage of Green by class 2 and class 3 users.



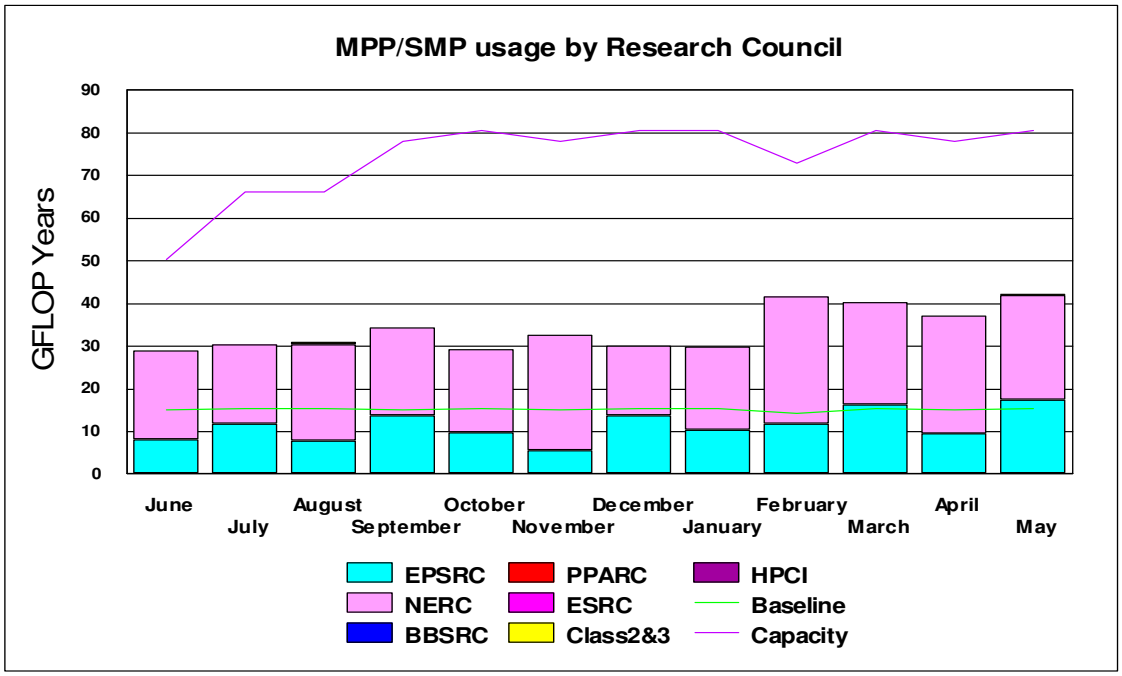

The above chart shows Newton usage by class 2 and class 3 users.

There is currently no MP disk or HSM usage by class 2 and class 3 users.

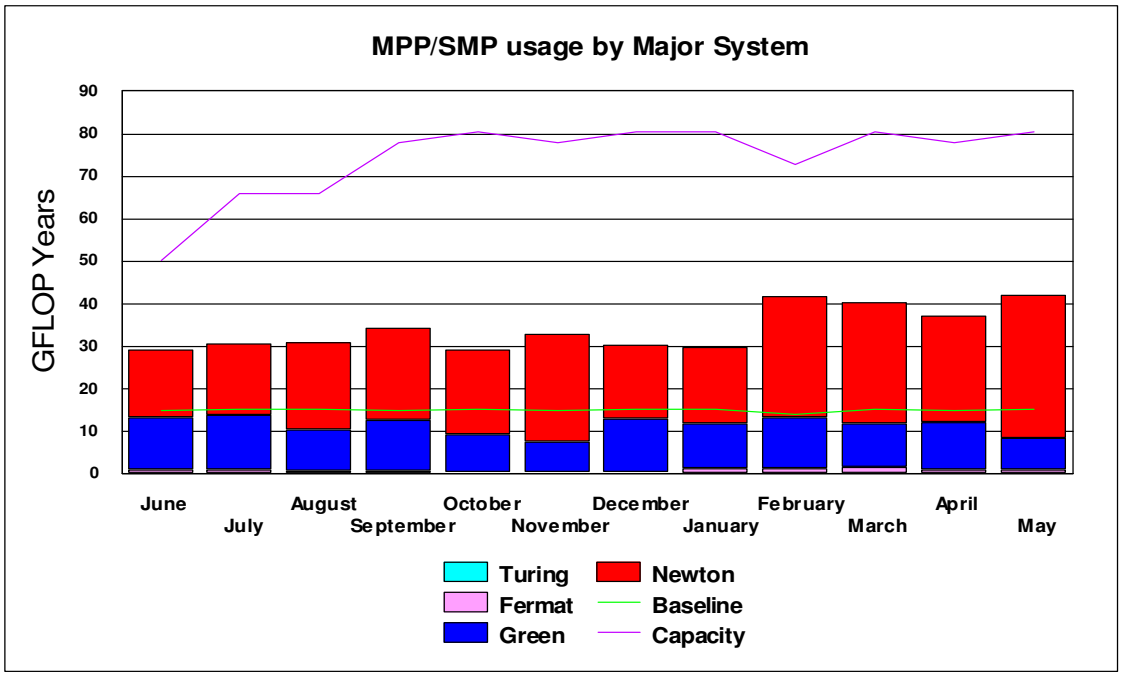
## 4.9 Charts of Historical Usage

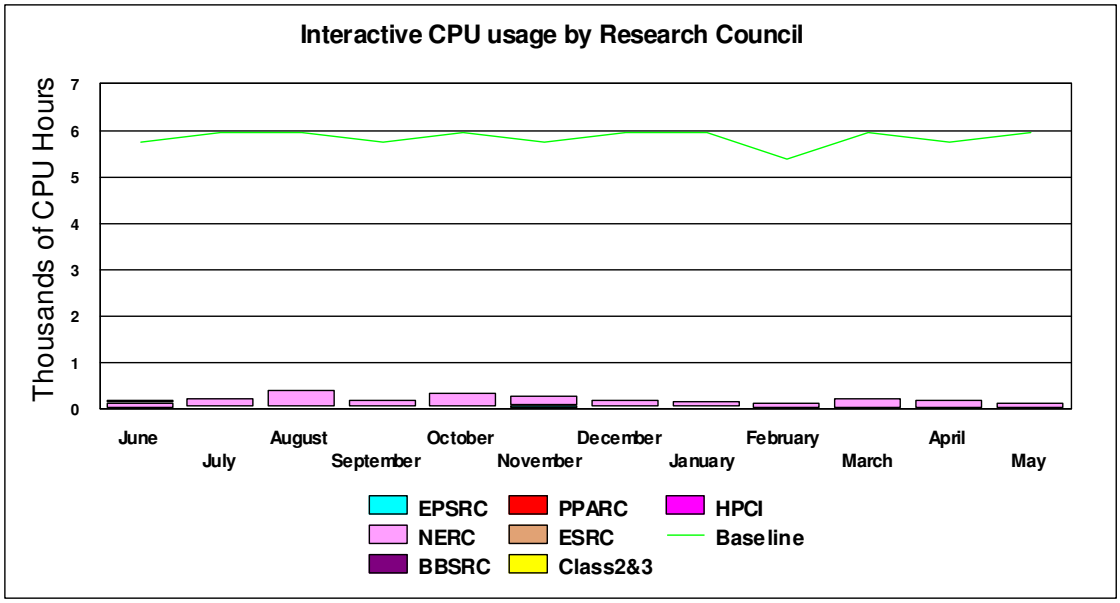
In all the Usage Charts, the baseline varies dependant upon the number of days in each month, within a 365-day year.

The graph below shows the GFLOP Year utilisation by Research Council for the previous 12 months.



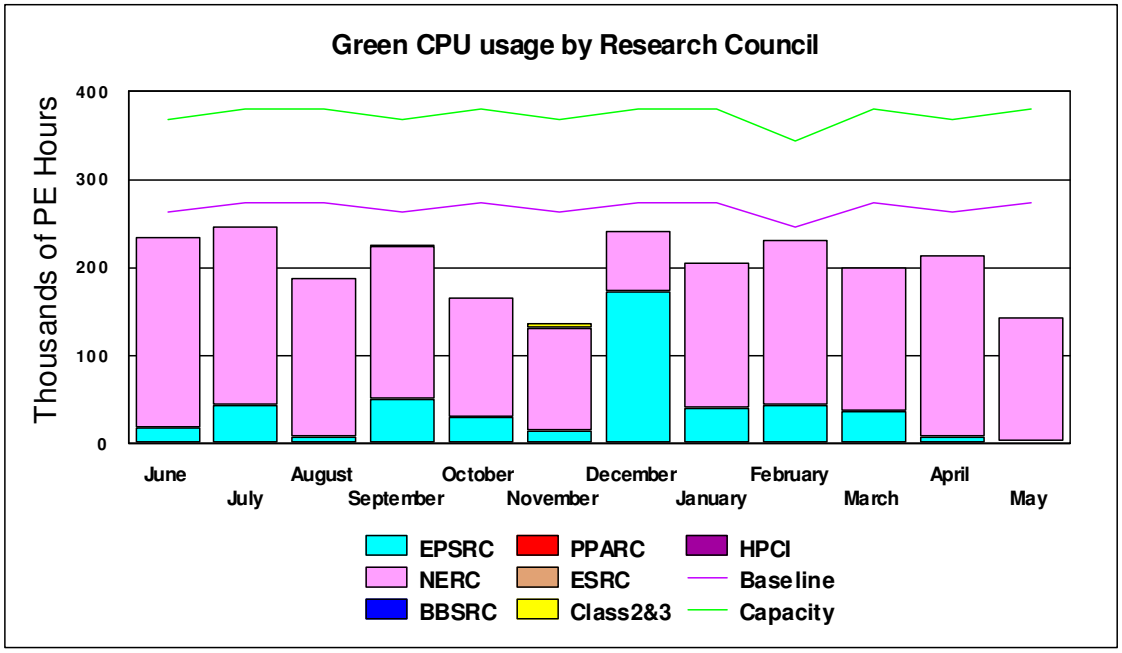

The next graph shows the historic SMP/MPP usage on the major systems. The increase in capacity reflects the expansion of the Altix system Newton by an extra 128 1.3Ghz CPU node in July, with the new node being upgraded by a further 128 1.5Ghz CPUs in September.



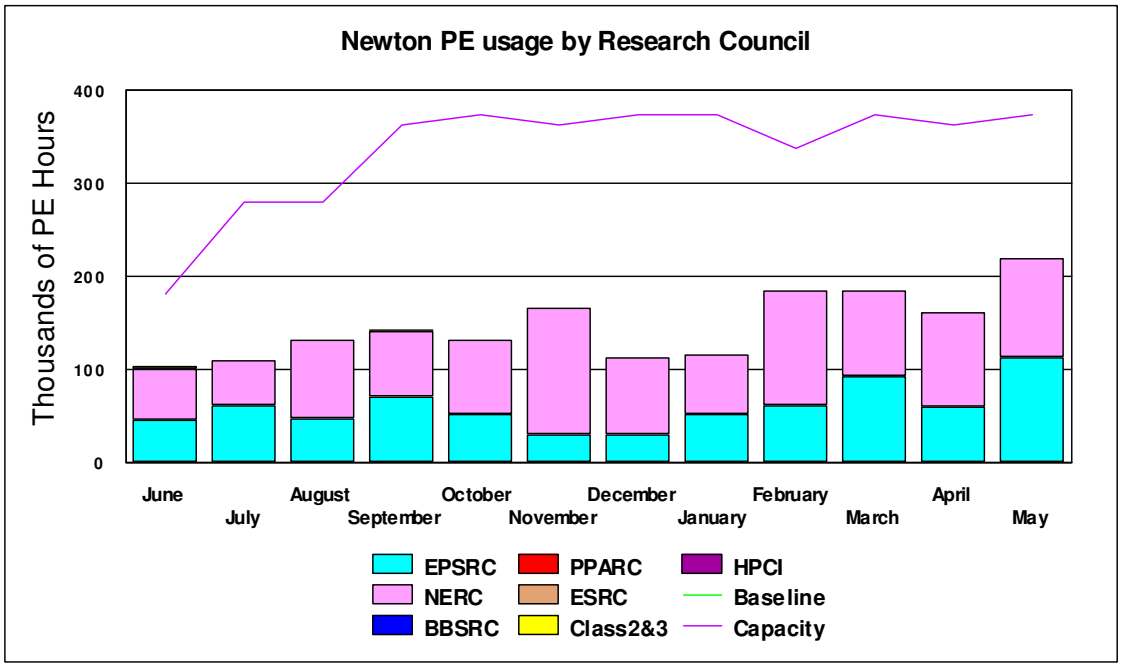



The above graph shows the historic interactive usage of the Origin 300 system (Wren). Eight of the higher speed 500Mhz CPUs in Wren deliver the baseline capacity equivalent to that which was previously available on the Origin 3000 system (Fermat) for interactive usage.

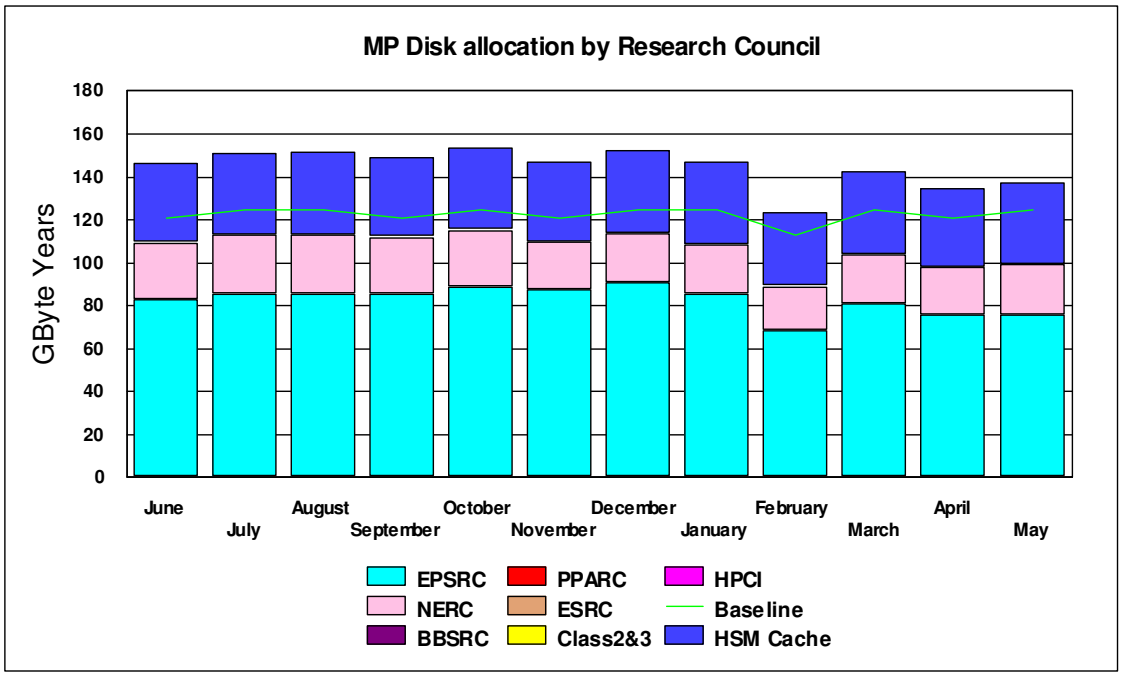
The following graph details the historic usage by Research council of the Origin 3000 system (Green).



The graph below displays the historic usage by Research Council of the Altix 3700 system (Newton). The increase in capacity reflects the expansion of Newton by a new 128 1.3 GHz CPU node in July, and the further expansion of the new node by 128 1.5Ghz CPUs in September.

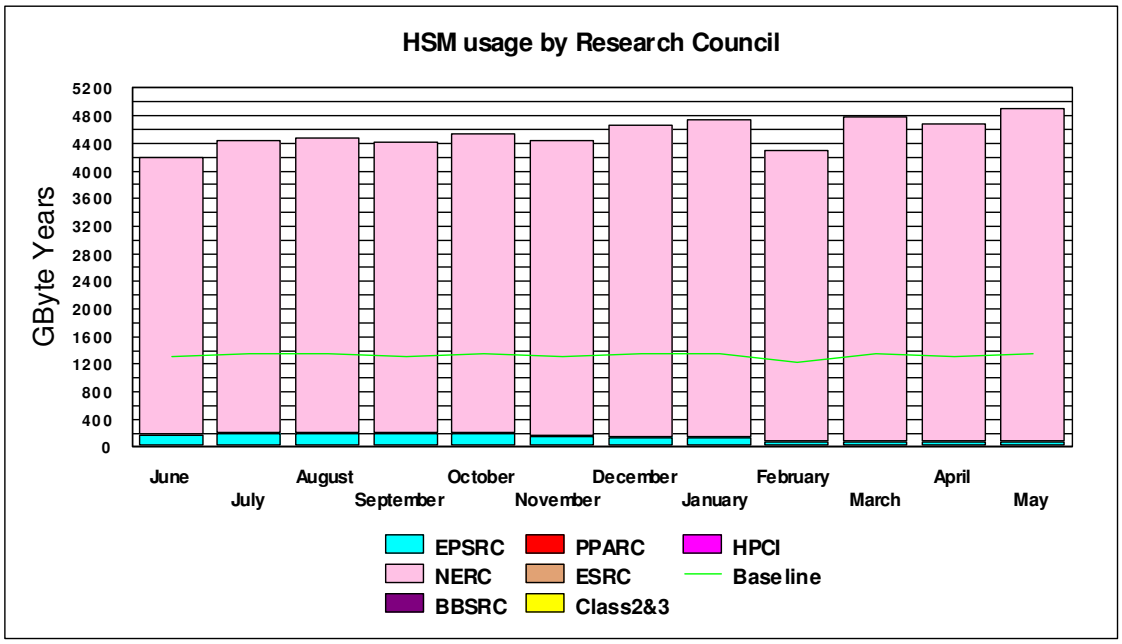



The next series of graphs illustrates the usage of the disk and HSM resources of the system.




The graph above illustrates the historic allocation of the Medium Performance Disk on Fermat and the SAN.

The graph below shows the historic HSM usage by Research Council funded projects, now above Baseline at 48 Terabytes. The primary usage is by NERC.




## 4.8 Guest System Usage Charts

There is currently no Guest System usage.

# 5. Capability Incentives

Capability incentives were historically given on the T3E system Turing for jobs of 512 PEs and above. In May 2003 it was announced that discounts for capability jobs available on all CSAR systems had been aproved to include the SGI Origin 3000 system (Green) and the SGI Altix 3700 system (Newton).

These capability incentives were agreed with the Research Councils to encourage capability usage of the national supercomputers for greater scientific achievement, and offer the following discounts:

| System | No of Processors | Discount |
|---|---|---|
| newton | 192+ CPUs | 15% discount |
| newton | 128+ CPUs | 10% discount |
| green | 384+ CPUs | 15% discount |
| green | 256+ CPUs | 10% discount |

Discounts are given in the form of refunded Service Tokens.

Changes in usage patterns will be monitored and, subject to reviews, CfS reserve the right to change the incentives at any future date.

The following table displays the capability incentive discounts granted for May.

| Service Tokens Refunded: May 2005 Usage | | | | | | | |
|---|---|---|---|---|---|---|---|
| System | Consortia | | | | | | Total |
| | cse121 | cse075 | | | | | |
| **Green** 256+ PEs | | | | | | | 0 |
| **Green** 384+ PEs | | | | | | | 0 |
| **Newton** 128+ PEs | 51.75 | | | | | | 51.75 |
| **Newton** 192+ PEs | | 258.4 | | | | | 258.4 |
| **Total Tokens** | | | | | | | **310.15** |

# 6. Service Status, Issues and Plans

## 6.1 Status

The service utilisation in May exceeded baseline.

Thanks to the operating system and CXFS upgrades carried out at the end of April, stability of all systems, most notably the Altix systems, was greatly improved during May, with few outages encountered.

During the month there was a balanced spread of work across all major systems.

## 6.2 Issues

There are no issues to report for May.

## 6.3 Plans

It is planned to combine the two 256 PE Newton nodes into one 512 processor physical node, expected to be carried during the second quarter this year.

This physical combination will mean that the system can additionally at a future date be converted into a 512 PE Single System Image.

More information will be given nearer the time for both sets of planned work.
.

# 7. Conclusion

May 2005 saw the overall CPARS rating at Green with the baseline being exceeded by 173%.

Continued management attention will be given to maximise the throughput of the Service, whilst balancing as fairly as practicable the shares between Projects and jobs of the varying sizes.

**Appendix 1** contains the accounts for May 2005

**Appendix 2** contains the Percentage shares by Consortium for May 2005

**Appendix 3** contains the Percentage shares by Research Council for May 2005

**Appendix 4** contains the Training, Applications and Optimisation support figures to the end of May 2005

**Appendix 5** contains a breakdown of resource usage by Consortia to the end of May 2005.

**Appendix 6** contains a reference table of the Consortium name, the subject area and the PI name.

**Appendix 1**

The summary accounts for the month of May 2005 can be found at the URL below

http://www.csar.cfs.ac.uk/admin/accounts/summary.shtml

**Appendix 2**

**Percentage CPU time per consortia for Green in May 2005**

| Consortia | % Machine Time |
|---|---|
| CSE086 | 0.07 |
| CSE112 | 0.00 |
| CSE075 | 0.00 |
| CSE110 | 0.00 |
| CSN001 | 0.03 |
| CSN003 | 47.42 |
| CSN006 | 32.60 |
| CSN015 | 17.78 |
| CS2050 | 0.00 |
| CSEdl1 | 2.10 |
| CSEHPCX | 0.00 |

**Percentage CPU time per consortia for Newton in May 2005**

| Consortia | % Machine Time |
|---|---|
| CSEdl1 | 14.85 |
| CSE086 | 1.97 |
| CSE120 | 0.03 |
| CSE121 | 10.62 |
| CSE139 | 0.88 |
| CSE133 | 14.04 |
| CSE075 | 8.16 |
| CSE131 | 0.03 |
| CSE118 | 0.12 |
| CSN003 | 33.27 |
| CSN006 | 15.55 |
| CS2050 | 0.04 |
| CS2051 | 0.09 |

**Percentage CPU time per consortia for Fermat in May 2005**

| Consortia | % Machine Time |
|---|---|
| csedl1 | 7.24 |
| CSE086 | 0.02 |
| CSN003 | 86.73 |
| CSN006 | 0.00 |
| CSN015 | 1.97 |
| CS3027 | 4.02 |

**Percentage CPU time per consortia for Wren in May 2005**

| Consortia | % Machine Time |
|---|---|
| csedl1 | 0.37 |
| CSE086 | 2.60 |
| CSE112 | 0.10 |
| CSE129 | 0.01 |
| CSE131 | 0.01 |
| CSE110 | 0.01 |
| CSN001 | 8.81 |
| CSN003 | 78.25 |
| CSN006 | 1.26 |
| CSN015 | 8.34 |
| CSP007 | 0.09 |
| CS2050 | 0.01 |
| CS3027 | 0.10 |
| CSEHPCX | 0.01 |

**Percentage Medium Performance disc allocation by Consortia in May 2005**

| Consortia | %Allocation |
|---|---|
| CSEdl1 | 1.11 |
| CSE057 | 2.74 |
| CSE086 | 11.99 |
| CSE098 | 0.03 |
| CSE120 | 0.90 |
| CSE050 | 1.80 |
| CSE074 | 0.17 |
| CSE139 | 0.17 |
| CSE071 | 0.17 |
| CSE133 | 0.17 |
| CSE066 | 0.01 |
| CSE075 | 55.39 |
| CSE131 | 0.25 |
| HPCI Daresbury | 0.04 |
| HPCI Edinburgh | 0.08 |
| CSN001 | 8.56 |
| CSN003 | 3.85 |
| CSN005 | 42.84 |
| CSN006 | 5.14 |
| CSN015 | 3.39 |
| CSN052 | 2.57 |
| CS3025 | 0.01 |
| CSEHPCX | 0.86 |

**Percentage usage of HSM by Consortium for May 2005**

| Consortium | % Usage |
|---|---|
| CSE086 | 0.03 |
| CSE085 | 0.45 |
| CSE074 | 0.64 |
| CSE082 | 0.00 |
| CSE071 | 0.01 |
| CSE075 | 0.35 |
| CSN001 | 25.03 |
| CSN003 | 67.60 |
| CSN006 | 0.01 |
| CSN015 | 3.74 |
| CSN036 | 2.12 |
| CSN044 | 0.01 |

**Percentage CPU usage on Green by Research Council for May 2005**

| Research Council | % Usage |
|---|---|
| EPSRC | 2.17 |
| HPCI | 0.00 |
| NERC | 97.83 |
| BBSRC | 0.00 |
| ESRC | 0.00 |
| PPARC | 0.00 |

**Percentage CPU usage on Newton by Research Council for May 2005**

| Research Council | % Usage |
|---|---|
| EPSRC | 51.18 |
| HPCI | 0.00 |
| NERC | 48.82 |
| BBSRC | 0.00 |
| ESRC | 0.00 |
| PPARC | 0.00 |

**Percentage PE usage on Fermat by Research Council for May 2005**

| Research Council | % Usage |
|---|---|
| EPSRC | 11.29 |
| HPCI | 0.00 |
| NERC | 88.71 |
| BBSRC | 0.00 |
| ESRC | 0.00 |
| PPARC | 0.00 |

**Percentage CPU usage on Wren by Research Council for May 2005**

| Research Council | % Usage |
|---|---|
| EPSRC | 3.25 |
| HPCI | 0.00 |
| NERC | 96.66 |
| BBSRC | 0.00 |
| ESRC | 0.00 |
| PPARC | 0.09 |

**Percentage MP Disc allocated by Research Council for May 2005**

| Research Council | % Allocated |
|---|---|
| EPSRC | 76.68 |
| HPCI | 0.12 |
| NERC | 23.52 |
| BBSRC | 0.01 |
| ESRC | 0.00 |
| PPARC | 0.00 |

**Percentage Disc allocated as SAN HV by Research Council for May 2005**

| | |
|---|---|
| EPSRC | 0.00 |
| HPCI | 0.00 |
| NERC | 100.00 |
| BBSRC | 0.00 |
| ESRC | 0.00 |
| PPARC | 0.00 |
| PPARC | 0.00 |

**Percentage HSM usage by Research Council for May 2005**

| Research Council | % usage |
|---|---|
| EPSRC | 1.48 |
| HPCI | 0.00 |
| NERC | 98.52 |
| BBSRC | 0.00 |
| ESRC | 0.00 |
| PPARC | 0.00 |

**Appendix 4**

The following tables show the training and support resource usage by current consortia in person days to the current month.

| Project | PI Name | Subject | Liaison Officer | Support Bought | Apps Support | Total Apps Support | Opt Support | Total Opt Support | Total Support Used | Training Bought | Training Used |
|---|---|---|---|---|---|---|---|---|---|---|---|
| csedl1 | Blake, R | | | | | | | | | 6 | 6 |
| cse064 | Leschziner, M (Prof) | Improvement of predictive performance of anisotropy-resolving turbulence models in post-reattachment recovery region of separated flow using Large Eddy Simulation | Mike Pettipher | 10 | | | | | | 8 | |
| cse066 | Coveney, P V (Prof) | New clay-polymer nanocomposites using diversity-discovery methods: synthesis, processing and testing | Neil Stringfellow | 21 | | | | | | 6 | 3 |
| cse071 | Iacovides (Dr) | The Practical Computation of Three-Dimensional Time-Dependent Turbulent Flows in Rotating Cavities | Mike Pettipher | 5 | | 0.5 | | 1 | 1.5 | 6 | 2 |
| cse072 | Karlin, V (Dr) | Structure & Dynamics of Unstable Premixed Laminar Flames | Jon Gibson | 18 | | | | | | 9 | 7 |
| cse074 | Luo (Dr) | Consortium on Computational Combustion for Engineering Applications | Jon Gibson | | | | | | | | |
| cse075 | Coveney, PV (Dr) | The Reality Grid - a tool for investigating condensed matter & materials | Kevin Roy | 14 | | 5 | | | 5 | 14 | |
| cse076 | Briddon, P (Dr) | HPC facilities for the first principles simulation of covalently bonded materials | Adrian Tate | 20 | | | | 11 | 11 | | |
| cse077 | Kronenburg, A (Dr) | Combustion Model Development for Large-Eddy Simulation of Non-Premixed Reactive Flows. | Jon Gibson | | | | | | | 2 | |
| cse082 | Barakos, G (Dr) | CFD Study of Three-Dimensional Dynamic Shelf | Keith Taylor | 5 | | | | | | 1 | |
| cse084 | Needs, R (Dr) | The Consortium for Computational Quantum Many-Body Theory | Adrian Tate | 19 | | | | | | | 10 |
| cse085 | Sandham, N (Prof) | UK Turbulence Consortium | Adrian Tate | 15 | | | | 2 | 2 | 8 | 8 |
| cse086 | Taylor, K (Prof) | Multiphoton, Electron Collisions and BEC HPC Consortium 2002-2005 | Kevin Roy | 35 | | | | 5 | 5 | 116 | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| cse089 | Wiercigroch, M (Dr) | Nonlinear Dynamics & Rock Contact Fracture Mechanics in Modelling of Vibration Enhanced Drilling | Jon Gibson | 15 | | | | | | 7 | |
| cse098 | De Souza M M (Dr) | Indium interactionsin silicon for ULSI technologies | Andrew Jones | 5 | | | | | | 5 | |
| cse106 | Augarde (Dr) | Parametric Studies of multiple tunnels | | 25 | | | | | | 10 | 2 |
| cse108 | Holden, AV (Prof) | Large-scale parallelisation of electro-physiological & mechanical cardiac virtual tissues | | 10 | | | | | | 6 | 3 |
| cse110 | Leach, S A (Dr) | Application of HE Computing to Develop Complex Stochastic Models to aid Public Health & National Operational Responses to Infectious Disease Threats | | 30 | | | | | | 25 | 4 |
| cse111 | Avital, Eldad (Dr) | A numerical study of three dimensional wakes generated by free surface piecing circular cylinders | | | | | | | | | |
| cse112 | Chemyshenko, S I (Prof) | Master-mode analysis of the genesis of organised structures in turbulent flows | | | | | | | | | |
| cse116 | John, N (Dr) | An advanced environment for enabling visual supercomputing | | 16 | | | | | | 8 | |
| cse117 | Theodoropoulos K (Dr) | Modelling of Microreactors: An Integrated Multi-Scale Approach | | | | | | | | | |
| cse118 | Gavaghan, David (Dr) | EPSRC e-Science pilot in Integrative Biology | | | | | | | | | |
| cse127 | Silvester, D (Prof) | Efficient Parallel 'Black-Box' Preconditioners for Finite element Problems | | 20 | | | | | | 5 | 4 |
| csn001 | Webb, D J (Dr) | OCCAM | Zoe Chaplin | 70.5 | | 1 | | 58 | 61 | 20 | 3 |
| csn003 | O'Neill, A (Prof) | UGAMP | Zoe Chaplin | 9.25 | | | | 8.25 | 1 | 34 | 30 |
| csn006 | Price, D (Dr) | HPC for Mineral Physics | Zoe Chaplin | | | | | | | | |
| csn015 | Proctor, R (Dr) | A Testbed for Zooplankton Models of the Irish Sea | Zoe Chaplin | 20 | | 2 | | | 2 | 10 | 3 |
| csn043 | Haines | | | 20 | | | | | | 36 | |
| csn044 | Steenman-Clark, L (Dr) | Earth Observation Project | Zoe Chaplin | | | | | | | | |
| csn050 | Challenor | The probability of rapid climate change | | | | | | | | | |
| csn052 | Mackay, R (Prof) | Quantifying the scaling of physical transport in structured heterogeneous porous media. | Zoe Chaplin | | | | | | | 5 | 5 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| csn059 | Watson, A J (Prof) | Circulation, overflow & deep connection in the Nordic seas | | 45 | | | | | | 4 | |
| csb006 | Sansom, M (Prof) | DFT calculations for ion channels and transport proteins | Neil Stringfellow | | | | | | | | |
| csp007 | Hibbert, A (Prof) | A Programme for Atomic Physics for Astrophysics at Queen's University Belfast (2003-2007) | Kevin Roy | | | | | | | | |
| HPCID | Allan, R (Dr) | | | | | | | | | 1 | 1 |
| HPCIE | Henty, D (Dr) | | | | | | | | | | |
| cs3019 | Bengough (Dr) | Lattice-Boltzmann simulation of water & solute transport in porous media. | Neil Stringfellow | 2 | | | | | | | |
| cs3022 | Clint, M | Evaluation of Grab & Go Computational Models for Grid-based Iterative Eigensolvers | | | | | | | | | |
| cs3023 | Bryce, Richard | Computer simulation of glycolipids as micellas and bilayers | Neil Stringfellow | | | | | | | | |
| cs3024 | Fernando, T (Prof) | Collosion Detection | Jo Leng | 10 | | | | | | | |
| cs3025 | Welbourne, Stephen | Modelling Recovery after Damage in Single Word Reading | | | | | | | | | |
| cs3026 | Smith, Lorna | HPCx/CSAR collaboration | | | | | | | | | |
| cs4001 | White, P | | | | | | | | | | |
| cs4002 | Cooper, A (Miss) | | | | | | | | | | |

The following table shows resource utilisation by Consortia to the end of May 2005.

cs2050 - Hayhurst
Last Trade: Thu Feb 3 10:16:43 2005
Usage:
97.0 of 450.0 Hour Newton CPU (14.9 of 68.9 G.S.T), 21.6%
0.0 of 10.0 Hour Wren CPU (0.0 of 0.5 G.S.T), 0.4%
0.0 of 1.0 GByteYear MP Disk SAN (0.0 of 2.4 G.S.T), 0.0%
50.1 of 540.3 Hour Green CPU (2.6 of 28.2 G.S.T), 9.3%
Total usage for project cs2050 17.5 of 100.0 Generic Service Tokens, 17.5%

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cs2051 - Shevlin
Last Trade: Thu Apr 14 13:52:49 2005
Usage:
200.0 of 571.5 Hour Newton CPU (30.6 of 87.5 G.S.T), 35.0%
0.0 of 10.1 Hour Wren CPU (0.0 of 0.5 G.S.T), 0.1%
0.0 of 5.0 GByteYear MP Disk SAN (0.0 of 12.0 G.S.T), 0.0%
Total usage for project cs2051 30.6 of 100.0 Generic Service Tokens, 30.6%

---

cs2052 Houseman
Last Trade: Thu May 12 15:12:56 2005
Usage:
0.0 of 625.8 Hour Newton CPU (0.0 of 95.8 G.S.T), 0.0%
0.0 of 10.1 Hour Wren CPU (0.0 of 0.5 G.S.T), 0.0%
0.0 of 0.0 GByteYear HP Disk SAN - /d (0.0 of 0.0 G.S.T)
0.0 of 1.5 GByteYear MP Disk SAN (0.0 of 3.7 G.S.T), 0.0%
Total usage for project cs2052 0.0 of 100.0 Generic Service Tokens, 0.0%

---

cs3026 - Smith (EPCC)
Last Trade: Wed Jun 2 08:28:44 2004
Usage:
288.4 of 3200.6 Hour Newton CPU (44.1 of 490.0 G.S.T), 9.0%
0.0 of 0.3 Hour Wren CPU (0.0 of 0.0 G.S.T), 8.3%
0.0 of 4.2 GByteYear MP Disk SAN (0.0 of 10.0 G.S.T), 0.0%
Total usage for project cs3026 44.1 of 500.0 Generic Service Tokens, 8.8%

---

cs3027 - Walker
Last Trade: Tue Mar 1 12:04:26 2005
Usage:
0.0 of 1303.4 Hour Newton CPU (0.0 of 199.5 G.S.T), 0.0%
1.1 of 66.8 Hour Wren CPU (0.1 of 3.3 G.S.T), 1.7%
0.0 of 29.5 GByteYear MP Disk SAN (0.0 of 70.3 G.S.T), 0.0%
2820.1 of 4768.1 Hour SMP CPU (109.6 of 185.2 G.S.T), 59.1%
0.0 of 30.0 GByteYear HSM/Tape (0.0 of 18.9 G.S.T), 0.0%
0.0 of 2.1 Day Training (0.0 of 22.4 G.S.T), 0.0%
Total usage for project cs3027 109.6 of 499.7 Generic Service Tokens, 21.9%

---

cs3028 - Li
Last Trade: Tue Nov 2 09:07:16 2004
Usage:
9.3 of 52.7 Hour Wren CPU (0.5 of 2.6 G.S.T), 17.6%
0.0 of 20.0 GByteYear MP Disk SAN (0.0 of 47.6 G.S.T), 0.0%

5535.0 of 5950.1 Hour Green CPU (289.2 of 310.9 G.S.T), 93.0%
Total usage for project cs3028 289.7 of 361.1 Generic Service Tokens, 80.2%

---

CSE001 - Admin users
Last Trade: Fri Oct 8 15:16:30 1999
Usage:
0.0 of 12.4 PEHour MPP PE CPU (0.0 of 0.3 G.S.T), 0.0%
0.1 of 0.1 GByteYear HP Disk (0.4 of 0.5 G.S.T), 72.9%
Total usage for project cse001 0.4 of 0.8 Generic Service Tokens, 46.8%

---

cse071 GR/R23657 Iacovides
Last Trade: Thu Jul 15 10:25:10 2004
Usage:
14155.3 of 15314.9 Hour Newton CPU (2167.1 of 2344.6 G.S.T), 92.4%
3.9 of 223.3 Hour Wren CPU (0.2 of 11.1 G.S.T), 1.7%
3.0 of 13.6 GByteYear MP Disk SAN (7.1 of 32.5 G.S.T), 21.8%
677.9 of 22708.5 Hour SMP CPU (26.3 of 882.3 G.S.T), 3.0%
5.2 of 11.3 GByteYear HSM/Tape (3.3 of 7.1 G.S.T), 45.5%
3236.6 of 16991.9 Hour Green CPU (169.1 of 887.9 G.S.T), 19.0%
1.5 of 5.0 PersonDay Support (46.9 of 156.2 G.S.T), 30.0%
4.0 of 6.0 Day Training (43.5 of 65.2 G.S.T), 66.7%
Total usage for project cse071 2463.4 of 4386.9 Generic Service Tokens, 56.2%

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cse072 GR/R66692 Karlin
Last Trade: Tue Apr 27 14:30:50 2004
Usage:
41583.1 of 41583.1 PEHour MPP PE CPU (1005.4 of 1005.4 G.S.T), 100.0%
0.9 of 0.8 GByteYear HP Disk (5.3 of 4.5 G.S.T), 118.1%
16194.6 of 20478.9 Hour Newton CPU (2479.3 of 3135.2 G.S.T), 79.1%
0.5 of 15.7 Hour Wren CPU (0.0 of 0.8 G.S.T), 3.1%
0.0 of 4.6 GByteYear MP Disk SAN (0.0 of 10.9 G.S.T), 0.0%
0.0 of 12.0 Hour SMP CPU (0.0 of 0.5 G.S.T), 0.0%
0.0 of 4.0 GByteYear MP Disk (0.0 of 9.5 G.S.T), 0.0%
0.0 of 0.0 GByteYear HSM/Tape (0.0 of 0.0 G.S.T)
0.0 of 18.0 PersonDay Support (0.0 of 562.5 G.S.T), 0.0%
7.0 of 9.0 Day Training (76.1 of 97.8 G.S.T), 77.8%
Total usage for project cse072 3566.1 of 4827.1 Generic Service Tokens, 73.9%

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cse074 GR/R66197 Luo
Last Trade: Mon Apr 11 09:33:56 2005
Usage:
0.0 of 0.0 PEHour MPP PE CPU (0.0 of 0.0 G.S.T)
0.0 of 0.0 GByteYear HP Disk (0.0 of 0.0 G.S.T)
0.0 of 160.8 Hour Newton CPU (0.0 of 24.6 G.S.T), 0.0%
0.0 of 1.3 Hour Wren CPU (0.0 of 0.1 G.S.T), 0.1%
0.0 of 600.0 Hour SMP CPU (0.0 of 23.3 G.S.T), 0.0%
0.3 of 9.0 GByteYear MP Disk (0.7 of 21.4 G.S.T), 3.3%
51.9 of 606.5 GByteYear HSM/Tape (32.7 of 382.7 G.S.T), 8.6%
Total usage for project cse074 33.5 of 452.1 Generic Service Tokens, 7.4%

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cse075 GR/R67699 Coveney
Last Trade: re-enabled
Usage:
8401.8 of 8401.8 PEHour MPP PE CPU (203.1 of 203.1 G.S.T), 100.0%
76.3 of 76.3 GByteYear HP Disk (454.2 of 454.2 G.S.T), 100.0%

44839.4 of 137582.2 Hour Newton CPU (6864.6 of 21062.8 G.S.T), 32.6%
69.7 of 169.3 Hour Wren CPU (3.5 of 8.4 G.S.T), 41.2%
159.5 of 200.5 GByteYear MP Disk SAN (379.8 of 477.4 G.S.T), 79.6%
7704.1 of 7704.1 Hour SMP CPU (299.3 of 299.3 G.S.T), 100.0%
1269.5 of 1530.5 GByteYear MP Disk (3022.6 of 3644.1 G.S.T), 82.9%
608.0 of 1959.4 GByteYear HSM/Tape (383.6 of 1236.2 G.S.T), 31.0%
145639.5 of 145639.1 Hour Green CPU (7610.0 of 7609.9 G.S.T), 100.0%
0.0 of 10.0 PersonDay Support (0.0 of 312.5 G.S.T), 0.0%
5.0 of 14.0 Day Training (54.3 of 152.2 G.S.T), 35.7%
Total usage for project cse075 19275.0 of 35460.2 Generic Service Tokens, 54.4%

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cse077 GR/R69792 Kronenburg
Last Trade: Thu Mar 10 16:58:06 2005
Usage:
0.0 of 0.0 PEHour MPP PE CPU (0.0 of 0.0 G.S.T)
0.0 of 0.0 GByteYear HP Disk (0.0 of 0.0 G.S.T)
63570.3 of 63798.1 Hour Newton CPU (9732.1 of 9767.0 G.S.T), 99.6%
0.4 of 30.0 Hour Wren CPU (0.0 of 1.5 G.S.T), 1.2%
0.0 of 15.0 GByteYear MP Disk SAN (0.0 of 35.7 G.S.T), 0.0%
31.1 of 33.6 Hour SMP CPU (1.2 of 1.3 G.S.T), 92.5%
0.0 of 0.0 Hour Green CPU (0.0 of 0.0 G.S.T)
0.0 of 2.0 Day Training (0.0 of 21.7 G.S.T), 0.0%
Total usage for project cse077 9733.4 of 9827.3 Generic Service Tokens, 99.0%

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cse082 GR/R79654 Barakos
Last Trade: re-enabled
Usage:
10.5 of 15.7 Hour Wren CPU (0.5 of 0.8 G.S.T), 66.9%
9174.1 of 9264.7 Hour SMP CPU (356.4 of 359.9 G.S.T), 99.0%
167.4 of 15.5 GByteYear MP Disk (398.6 of 36.8 G.S.T), 1082.4%
0.8 of 28.7 GByteYear HSM/Tape (0.5 of 18.1 G.S.T), 2.9%
1446.5 of 1379.8 Hour Green CPU (75.6 of 72.1 G.S.T), 104.8%
0.0 of 5.0 PersonDay Support (0.0 of 156.3 G.S.T), 0.0%
0.0 of 1.0 Day Training (0.0 of 10.9 G.S.T), 0.0%
Total usage for project cse082 831.6 of 654.9 Generic Service Tokens, 127.0%

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cse086 GR/R83118 Taylor
Last Trade: Tue Feb 8 15:02:42 2005
Usage:
884647.5 of 884647.5 PEHour MPP PE CPU (21389.6 of 21389.6 G.S.T), 100.0%
132.7 of 132.7 GByteYear HP Disk (789.9 of 790.0 G.S.T), 100.0%
167606.6 of 316221.5 Hour Newton CPU (25659.3 of 48411.1 G.S.T), 53.0%
1073.4 of 3262.8 Hour Wren CPU (53.2 of 161.7 G.S.T), 32.9%
0.0 of 12.9 GByteYear HP Disk SAN - /d (0.0 of 47.6 G.S.T), 0.0%
0.0 of 46.6 GbyteYear HV Disk SAN /v (0.0 of 55.5 G.S.T), 0.0%
28018.0 of 42000.5 Hour SMP CPU (1088.5 of 1631.8 G.S.T), 66.7%
364.2 of 497.0 GByteYear MP Disk (867.2 of 1183.3 G.S.T), 73.3%
50.5 of 3750.0 GByteYear HSM/Tape (31.8 of 2365.9 G.S.T), 1.3%
509743.9 of 574394.1 Hour Green CPU (26635.2 of 30013.3 G.S.T), 88.7%
5.0 of 16.0 PersonDay Support (156.2 of 500.0 G.S.T), 31.3%
0.0 of 11.0 Day Training (0.0 of 119.6 G.S.T), 0.0%
Total usage for project cse086 76671.0 of 106669.4 Generic Service Tokens, 71.9%

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cse086a MP1
Last Trade: never
Usage:

721660.7 of 750000.0 PEHour MPP PE CPU (17448.8 of 18134.0 G.S.T), 96.2%
8.5 of 10.0 GByteYear HP Disk (50.6 of 59.5 G.S.T), 85.0%
158349.2 of 200000.0 Hour Newton CPU (24242.1 of 30618.5 G.S.T), 79.2%
86.8 of 210.0 Hour Wren CPU (4.3 of 10.4 G.S.T), 41.3%
0.0 of 50.0 Hour SMP CPU (0.0 of 1.9 G.S.T), 0.0%
92.9 of 150.0 GByteYear MP Disk (221.2 of 357.1 G.S.T), 61.9%
0.0 of 1000.0 GByteYear HSM/Tape (0.0 of 630.9 G.S.T), 0.0%
26162.4 of 30000.0 Hour Green CPU (1367.0 of 1567.6 G.S.T), 87.2%
Total usage for subproject cse086a 43334.0 of 51380.0 Generic Service Tokens, 84.3%

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cse086b MP2
Last Trade: never
Usage:
48449.5 of 56000.0 PEHour MPP PE CPU (1171.4 of 1354.0 G.S.T), 86.5%
37.6 of 50.0 GByteYear HP Disk (223.8 of 297.6 G.S.T), 75.2%
1940.4 of 15000.0 Hour Newton CPU (297.1 of 2296.4 G.S.T), 12.9%
338.9 of 500.0 Hour Wren CPU (16.8 of 24.8 G.S.T), 67.8%
16665.4 of 20000.0 Hour SMP CPU (647.5 of 777.0 G.S.T), 83.3%
38.1 of 60.0 GByteYear MP Disk (90.8 of 142.9 G.S.T), 63.5%
334345.3 of 350000.0 Hour Green CPU (17470.2 of 18288.2 G.S.T), 95.5%
Total usage for subproject cse086b 19917.6 of 23180.9 Generic Service Tokens, 85.9%

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cse086d MP4
Last Trade: never
Usage:
0.1 of 0.1 GByteYear HP Disk (0.5 of 0.6 G.S.T), 87.4%
0.2 of 0.1 GByteYear MP Disk (0.4 of 0.2 G.S.T), 156.4%
Total usage for subproject cse086d 0.9 of 0.8 Generic Service Tokens, 107.1%

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cse086e MP5
Last Trade: never
Usage:
48.8 of 500.0 PEHour MPP PE CPU (1.2 of 12.1 G.S.T), 9.8%
1.8 of 2.0 GByteYear HP Disk (10.5 of 11.9 G.S.T), 88.1%
0.0 of 10000.0 Hour Newton CPU (0.0 of 1530.9 G.S.T), 0.0%
468.8 of 1500.0 Hour Wren CPU (23.2 of 74.3 G.S.T), 31.3%
0.0 of 5.0 GbyteYear HV Disk SAN /v (0.0 of 6.0 G.S.T), 0.0%
7362.0 of 10000.0 Hour SMP CPU (286.0 of 388.5 G.S.T), 73.6%
36.2 of 40.0 GByteYear MP Disk (86.1 of 95.2 G.S.T), 90.4%
143889.2 of 150000.0 Hour Green CPU (7518.5 of 7837.8 G.S.T), 95.9%
Total usage for subproject cse086e 7925.5 of 9956.8 Generic Service Tokens, 79.6%

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cse086f EC1
Last Trade: never
Usage:
71.1 of 5000.0 PEHour MPP PE CPU (1.7 of 120.9 G.S.T), 1.4%
3.8 of 5.0 GByteYear HP Disk (22.8 of 29.8 G.S.T), 76.6%
0.8 of 200.0 Hour Wren CPU (0.0 of 9.9 G.S.T), 0.4%
4.8 of 50.0 Hour SMP CPU (0.2 of 1.9 G.S.T), 9.6%
37.5 of 50.0 GByteYear MP Disk (89.3 of 119.0 G.S.T), 75.0%
50.5 of 100.0 GByteYear HSM/Tape (31.8 of 63.1 G.S.T), 50.5%
0.0 of 10000.0 Hour Green CPU (0.0 of 522.5 G.S.T), 0.0%
Total usage for subproject cse086f 145.9 of 867.2 Generic Service Tokens, 16.8%

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cse086g EC2

Last Trade: never
Usage:
577.1 of 5000.0 PEHour MPP PE CPU (14.0 of 120.9 G.S.T), 11.5%
43.5 of 50.0 GByteYear HP Disk (258.9 of 297.6 G.S.T), 87.0%
177.5 of 200.0 Hour Wren CPU (8.8 of 9.9 G.S.T), 88.7%
1424.3 of 1800.0 Hour SMP CPU (55.3 of 69.9 G.S.T), 79.1%
117.2 of 140.0 GByteYear MP Disk (279.1 of 333.3 G.S.T), 83.7%
0.0 of 50.0 GByteYear HSM/Tape (0.0 of 31.5 G.S.T), 0.0%
3960.4 of 10000.0 Hour Green CPU (206.9 of 522.5 G.S.T), 39.6%
Total usage for subproject cse086g 823.0 of 1385.8 Generic Service Tokens, 59.4%

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cse086h EC3
Last Trade: never
Usage:
46335.1 of 50000.0 PEHour MPP PE CPU (1120.3 of 1208.9 G.S.T), 92.7%
7.0 of 10.0 GByteYear HP Disk (41.5 of 59.5 G.S.T), 69.7%
0.0 of 200.0 Hour Wren CPU (0.0 of 9.9 G.S.T), 0.0%
219.9 of 250.0 Hour SMP CPU (8.5 of 9.7 G.S.T), 87.9%
15.1 of 20.0 GByteYear MP Disk (35.9 of 47.6 G.S.T), 75.3%
0.0 of 0.0 Hour Green CPU (0.0 of 0.0 G.S.T)
Total usage for subproject cse086h 1206.2 of 1335.7 Generic Service Tokens, 90.3%

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cse086i EC4
Last Trade: never
Usage:
0.1 of 0.1 GByteYear HP Disk (0.5 of 0.6 G.S.T), 86.8%
0.2 of 0.1 GByteYear MP Disk (0.4 of 0.2 G.S.T), 156.4%
Total usage for subproject cse086i 0.9 of 0.8 Generic Service Tokens, 106.7%

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cse086j BEC1
Last Trade: never
Usage:
67505.3 of 70000.0 PEHour MPP PE CPU (1632.2 of 1692.5 G.S.T), 96.4%
1.7 of 3.0 GByteYear HP Disk (9.8 of 17.9 G.S.T), 55.1%
7317.0 of 9000.0 Hour Newton CPU (1120.2 of 1377.8 G.S.T), 81.3%
0.0 of 200.0 Hour Wren CPU (0.0 of 9.9 G.S.T), 0.0%
0.0 of 0.1 Hour SMP CPU (0.0 of 0.0 G.S.T), 0.2%
0.6 of 5.0 GByteYear MP Disk (1.5 of 11.9 G.S.T), 12.3%
0.0 of 1000.0 Hour Green CPU (0.0 of 52.3 G.S.T), 0.0%
Total usage for subproject cse086j 2763.7 of 3162.3 Generic Service Tokens, 87.4%

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cse086k BEC2
Last Trade: never
Usage:
0.1 of 0.1 GByteYear HP Disk (0.5 of 0.6 G.S.T), 86.8%
0.6 of 200.0 Hour Wren CPU (0.0 of 9.9 G.S.T), 0.3%
2341.7 of 4000.0 Hour SMP CPU (91.0 of 155.4 G.S.T), 58.5%
24.4 of 35.0 GByteYear MP Disk (58.0 of 83.3 G.S.T), 69.7%
1385.0 of 10000.0 Hour Green CPU (72.4 of 522.5 G.S.T), 13.8%
Total usage for subproject cse086k 221.9 of 771.8 Generic Service Tokens, 28.8%

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cse089 GR/R85556 Wiercigroch
Last Trade: re-enabled
Usage:
0.0 of 0.0 PEHour MPP PE CPU (0.0 of 0.0 G.S.T), 100.0%

0.0 of 0.0 GByteYear HP Disk (0.0 of 0.0 G.S.T)
1.1 of 1952.1 Hour Wren CPU (0.1 of 96.7 G.S.T), 0.1%
0.0 of 44.0 GByteYear HP Disk SAN - /d (0.0 of 162.4 G.S.T), 0.0%
0.0 of 0.0 Hour SMP CPU (0.0 of 0.0 G.S.T), 101.9%
0.0 of 2083.0 Hour Green CPU (0.0 of 108.8 G.S.T), 0.0%
0.0 of 15.0 PersonDay Support (0.0 of 468.8 G.S.T), 0.0%
0.0 of 7.0 Day Training (0.0 of 76.1 G.S.T), 0.0%
Total usage for project cse089 0.1 of 912.8 Generic Service Tokens, 0.0%

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cse106 GR/S42712 Augarde
Last Trade: Wed Nov 5 15:06:00 2003
Usage:
0.2 of 2500.0 Hour Wren CPU (0.0 of 123.9 G.S.T), 0.0%
0.0 of 37.4 GByteYear MP Disk SAN (0.0 of 89.2 G.S.T), 0.0%
0.0 of 50000.0 Hour Green CPU (0.0 of 2612.6 G.S.T), 0.0%
0.0 of 25.0 PersonDay Support (0.0 of 781.2 G.S.T), 0.0%
3.0 of 10.0 Day Training (32.6 of 108.7 G.S.T), 30.0%
Total usage for project cse106 32.6 of 3715.6 Generic Service Tokens, 0.9%

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cse108 GR/S43498 Holden
Last Trade: Wed Nov 5 15:55:15 2003
Usage:
0.3 of 700.0 Hour Wren CPU (0.0 of 34.7 G.S.T), 0.0%
0.0 of 832.1 GByteYear MP Disk SAN (0.0 of 1981.3 G.S.T), 0.0%
0.0 of 40000.0 Hour Green CPU (0.0 of 2090.1 G.S.T), 0.0%
0.0 of 10.0 PersonDay Support (0.0 of 312.5 G.S.T), 0.0%
3.0 of 6.0 Day Training (32.6 of 65.2 G.S.T), 50.0%
Total usage for project cse108 32.6 of 4483.8 Generic Service Tokens, 0.7%

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cse110 GR/S43214 Leach
Last Trade: Wed Nov 5 16:16:25 2003
Usage:
1.0 of 6000.0 Hour Wren CPU (0.1 of 297.3 G.S.T), 0.0%
0.0 of 67.6 GByteYear HP Disk SAN - /d (0.0 of 249.4 G.S.T), 0.0%
0.0 of 20.0 GByteYear MP Disk SAN (0.1 of 47.6 G.S.T), 0.1%
57.6 of 42000.0 Hour Green CPU (3.0 of 2194.6 G.S.T), 0.1%
0.0 of 30.0 PersonDay Support (0.0 of 937.5 G.S.T), 0.0%
5.0 of 25.0 Day Training (54.3 of 271.7 G.S.T), 20.0%
Total usage for project cse110 57.5 of 3998.1 Generic Service Tokens, 1.4%

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cse111 GR/S46239 Avital
Last Trade: Fri Apr 16 14:41:37 2004
Usage:
0.0 of 800.1 Hour Wren CPU (0.0 of 39.6 G.S.T), 0.0%
0.0 of 272.3 GByteYear MP Disk SAN (0.0 of 648.4 G.S.T), 0.0%
0.0 of 56.3 GbyteYear HV Disk SAN /v (0.0 of 67.1 G.S.T), 0.0%
0.0 of 849.9 Hour SMP CPU (0.0 of 33.0 G.S.T), 0.0%
0.0 of 84.6 GByteYear HSM/Tape (0.0 of 53.4 G.S.T), 0.0%
0.0 of 94500.0 Hour Green CPU (0.0 of 4937.8 G.S.T), 0.0%
0.0 of 5.0 PersonDay Support (0.0 of 157.3 G.S.T), 0.0%
0.0 of 6.0 Day Training (0.0 of 65.5 G.S.T), 0.0%
Total usage for project cse111 0.0 of 6002.1 Generic Service Tokens, 0.0%

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cse112 GR/S67029 Chernyshenko
Last Trade: Fri May 13 09:57:47 2005

Usage:
0.1 of 0.5 Hour Wren CPU (0.0 of 0.0 G.S.T), 26.0%
0.0 of 300.0 GByteYear MP Disk SAN (0.0 of 714.3 G.S.T), 0.0%
3.3 of 159999.5 Hour Green CPU (0.2 of 8360.3 G.S.T), 0.0%
0.0 of 16.5 PersonDay Support (0.0 of 514.9 G.S.T), 0.0%
0.0 of 5.0 Day Training (0.0 of 54.5 G.S.T), 0.0%
Total usage for project cse112 0.2 of 9644.0 Generic Service Tokens, 0.0%

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cse116 GR/S46567 John
Last Trade: Thu Nov 6 10:47:31 2003
Usage:
0.0 of 558.1 Hour Wren CPU (0.0 of 27.7 G.S.T), 0.0%
0.0 of 2.0 GByteYear MP Disk SAN (0.0 of 4.8 G.S.T), 0.0%
0.0 of 2.0 GByteYear HSM/Tape (0.0 of 1.3 G.S.T), 0.0%
0.0 of 5950.0 Hour Green CPU (0.0 of 310.9 G.S.T), 0.0%
0.0 of 16.0 PersonDay Support (0.0 of 500.0 G.S.T), 0.0%
0.0 of 8.0 Day Training (0.0 of 87.0 G.S.T), 0.0%
Total usage for project cse116 0.0 of 931.5 Generic Service Tokens, 0.0%

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cse117 GR/S79398/1 Theodoropoulos
Last Trade: Thu Apr 1 11:47:27 2004
Usage:
0.0 of 4000.1 Hour Wren CPU (0.0 of 198.2 G.S.T), 0.0%
0.0 of 26.5 GByteYear MP Disk SAN (0.0 of 63.1 G.S.T), 0.0%
0.0 of 11499.9 Hour SMP CPU (0.0 of 446.8 G.S.T), 0.0%
0.0 of 15500.1 Hour Green CPU (0.0 of 809.9 G.S.T), 0.0%
Total usage for project cse117 0.0 of 1518.0 Generic Service Tokens, 0.0%

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cse118 GR/S72023 Gavaghan
Last Trade: Wed Apr 28 14:12:37 2004
Usage:
271.3 of 150000.0 Hour Newton CPU (41.5 of 22963.9 G.S.T), 0.2%
0.0 of 40.4 Hour Wren CPU (0.0 of 2.0 G.S.T), 0.0%
0.0 of 184.2 GByteYear MP Disk SAN (0.0 of 438.5 G.S.T), 0.0%
0.0 of 22.0 PersonDay Support (0.0 of 687.5 G.S.T), 0.0%
0.0 of 11.0 Day Training (0.0 of 119.6 G.S.T), 0.0%
Total usage for project cse118 41.5 of 24211.4 Generic Service Tokens, 0.2%

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cse120 Harding
Last Trade: Thu Nov 11 09:23:00 2004
Usage:
5270.2 of 553999.0 Hour Newton CPU (806.8 of 84813.1 G.S.T), 1.0%
0.1 of 3.1 Hour Wren CPU (0.0 of 0.2 G.S.T), 2.2%
3.4 of 100.0 GByteYear MP Disk SAN (8.1 of 238.0 G.S.T), 3.4%
0.0 of 10.0 Day Training (0.0 of 108.8 G.S.T), 0.0%
Total usage for project cse120 815.0 of 85160.0 Generic Service Tokens, 1.0%

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cse121 GR/S80080 Shluger
Last Trade: Tue Jul 6 15:32:01 2004
Usage:
24942.4 of 280118.3 Hour Newton CPU (3818.5 of 42884.0 G.S.T), 8.9%
0.0 of 20.2 Hour Wren CPU (0.0 of 1.0 G.S.T), 0.0%
0.0 of 10.1 GByteYear MP Disk SAN (0.0 of 24.0 G.S.T), 0.0%
0.0 of 40.1 PersonDay Support (0.0 of 1253.0 G.S.T), 0.0%
0.0 of 10.1 Day Training (0.0 of 110.0 G.S.T), 0.0%

Total usage for project cse121 3818.5 of 44272.0 Generic Service Tokens, 8.6%

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cse126 GR/T18608/01 Ziebart
Last Trade: Thu Sep 30 09:40:08 2004
Usage:
0.0 of 10000.0 Hour Newton CPU (0.0 of 1530.9 G.S.T), 0.0%
0.0 of 400.0 Hour Wren CPU (0.0 of 19.8 G.S.T), 0.0%
0.0 of 20.0 GByteYear MP Disk SAN (0.0 of 47.6 G.S.T), 0.0%
0.0 of 15999.9 Hour Green CPU (0.0 of 836.0 G.S.T), 0.0%
0.0 of 60.0 PersonDay Support (0.0 of 1875.0 G.S.T), 0.0%
0.0 of 15.0 Day Training (0.0 of 163.1 G.S.T), 0.0%
Total usage for project cse126 0.0 of 4472.4 Generic Service Tokens, 0.0%

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cse127 - EP/C00528 Silvester
Last Trade: Thu Sep 30 10:21:57 2004
Usage:
0.0 of 4000.0 Hour Newton CPU (0.0 of 612.4 G.S.T), 0.0%
0.1 of 400.0 Hour Wren CPU (0.0 of 19.8 G.S.T), 0.0%
0.0 of 62.0 GByteYear MP Disk SAN (0.0 of 147.6 G.S.T), 0.0%
0.0 of 20000.0 Hour Green CPU (0.0 of 1045.0 G.S.T), 0.0%
0.0 of 20.0 PersonDay Support (0.0 of 625.0 G.S.T), 0.0%
5.0 of 5.0 Day Training (54.3 of 54.3 G.S.T), 100.0%
Total usage for project cse127 54.4 of 2504.2 Generic Service Tokens, 2.2%

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cse129 - GR/T18615 Pitts
Last Trade: Fri Oct 1 11:40:41 2004
Usage:
0.0 of 27000.0 Hour Newton CPU (0.0 of 4133.5 G.S.T), 0.0%
6.3 of 600.1 Hour Wren CPU (0.3 of 29.7 G.S.T), 1.0%
0.0 of 196.9 GByteYear MP Disk SAN (0.0 of 468.8 G.S.T), 0.0%
0.0 of 25.0 GbyteYear HV Disk SAN /v (0.0 of 29.8 G.S.T), 0.0%
0.0 of 0.0 GByteYear MP Disk (0.0 of 0.0 G.S.T)
16.0 of 37500.0 Hour Green CPU (0.8 of 1959.5 G.S.T), 0.0%
3.0 of 54.0 PersonDay Support (93.8 of 1687.5 G.S.T), 5.6%
0.0 of 20.0 Day Training (0.0 of 217.4 G.S.T), 0.0%
Total usage for project cse129 94.9 of 8526.2 Generic Service Tokens, 1.1%

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cse131 - GR/T18455 Bull
Last Trade: Thu Feb 24 12:56:12 2005
Usage:
63.4 of 12000.0 Hour Newton CPU (9.7 of 1837.1 G.S.T), 0.5%
0.3 of 399.0 Hour Wren CPU (0.0 of 19.8 G.S.T), 0.1%
0.3 of 200.3 GByteYear MP Disk SAN (0.8 of 477.0 G.S.T), 0.2%
0.0 of 389.5 GbyteYear HV Disk SAN /v (0.0 of 464.2 G.S.T), 0.0%
0.3 of 1.3 Hour SMP CPU (0.0 of 0.0 G.S.T), 24.3%
0.0 of 2000.0 GByteYear HSM/Tape (0.0 of 1261.8 G.S.T), 0.0%
0.0 of 30008.4 Hour Green CPU (0.0 of 1568.0 G.S.T), 0.0%
0.0 of 10.0 PersonDay Support (0.0 of 313.0 G.S.T), 0.0%
0.0 of 10.0 Day Training (0.0 of 109.0 G.S.T), 0.0%
Total usage for project cse131 10.5 of 6050.0 Generic Service Tokens, 0.2%

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cse132 GR/T04465 Clarke
Last Trade: Mon Mar 7 14:44:16 2005
Usage:
0.0 of 3000.0 Hour Newton CPU (0.0 of 459.3 G.S.T), 0.0%

0.0 of 140.1 Hour Wren CPU (0.0 of 6.9 G.S.T), 0.0%
0.0 of 100.1 GByteYear MP Disk SAN (0.0 of 238.3 G.S.T), 0.0%
0.0 of 110.0 GByteYear HSM/Tape (0.0 of 69.4 G.S.T), 0.0%
0.0 of 97000.0 Hour Green CPU (0.0 of 5068.4 G.S.T), 0.0%
0.0 of 1.9 PersonDay Support (0.0 of 60.6 G.S.T), 0.0%
Total usage for project cse132 0.0 of 5903.0 Generic Service Tokens, 0.0%

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cse133 GR/S13422 Catlow
Last Trade: Mon May 10 14:48:07 2004
Usage:
83358.6 of 399686.4 Hour Newton CPU (12761.6 of 61189.0 G.S.T), 20.9%
0.1 of 8.0 Hour Wren CPU (0.0 of 0.4 G.S.T), 0.8%
0.7 of 20.0 GByteYear MP Disk SAN (1.7 of 47.6 G.S.T), 3.5%
Total usage for project cse133 12763.2 of 61237.0 Generic Service Tokens, 20.8%

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cse135 GR/T18622 Ingram
Last Trade: Fri Apr 1 16:11:24 2005
Usage:
0.0 of 399994.5 Hour Newton CPU (0.0 of 61236.2 G.S.T), 0.0%
0.0 of 10.1 Hour Wren CPU (0.0 of 0.5 G.S.T), 0.0%
0.0 of 20.1 GByteYear HP Disk SAN - /d (0.0 of 74.0 G.S.T), 0.0%
0.0 of 60.0 PersonDay Support (0.0 of 1875.0 G.S.T), 0.0%
0.0 of 5.0 Day Training (0.0 of 54.4 G.S.T), 0.0%
Total usage for project cse135 0.0 of 63240.0 Generic Service Tokens, 0.0%

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cse137 - GR/T28126 Leschziner
Last Trade: re-enabled
Usage:
2.8 of 948.6 Hour Wren CPU (0.1 of 47.0 G.S.T), 0.3%
0.0 of 200.3 GByteYear MP Disk SAN (0.0 of 477.0 G.S.T), 0.0%
0.0 of 625.1 GbyteYear HV Disk SAN /v (0.0 of 745.0 G.S.T), 0.0%
0.0 of 1049.3 GByteYear HSM/Tape (0.0 of 662.0 G.S.T), 0.0%
5660.8 of 266298.2 Hour Green CPU (295.8 of 13914.6 G.S.T), 2.1%
0.0 of 47.0 PersonDay Support (0.0 of 1468.7 G.S.T), 0.0%
0.0 of 22.0 Day Training (0.0 of 239.1 G.S.T), 0.0%
Total usage for project cse137 295.9 of 17553.5 Generic Service Tokens, 1.7%

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cse139 GR/S71552 McDougall
Last Trade: Tue Aug 3 10:44:04 2004
Usage:
8797.6 of 89000.0 Hour Newton CPU (1346.9 of 13625.2 G.S.T), 9.9%
0.1 of 500.0 Hour Wren CPU (0.0 of 24.8 G.S.T), 0.0%
1.0 of 157.0 GByteYear MP Disk SAN (2.3 of 373.8 G.S.T), 0.6%
0.0 of 105.0 GByteYear HSM/Tape (0.0 of 66.2 G.S.T), 0.0%
0.0 of 15000.0 Hour Green CPU (0.0 of 783.8 G.S.T), 0.0%
0.0 of 34.0 PersonDay Support (0.0 of 1062.5 G.S.T), 0.0%
0.0 of 16.0 Day Training (0.0 of 173.9 G.S.T), 0.0%
Total usage for project cse139 1349.1 of 16110.2 Generic Service Tokens, 8.4%

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cse152 - Coveney
Last Trade: Fri Apr 1 15:23:26 2005
Usage:
0.0 of 6496.1 Hour Newton CPU (0.0 of 994.5 G.S.T), 0.0%
0.0 of 10.1 Hour Wren CPU (0.0 of 0.5 G.S.T), 0.0%
0.0 of 19.9 GByteYear MP Disk SAN (0.0 of 47.5 G.S.T), 0.0%

0.0 of 2.0 PersonDay Support (0.0 of 62.5 G.S.T), 0.0%
Total usage for project cse152 0.0 of 1105.0 Generic Service Tokens, 0.0%

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cse154 - Essex
Last Trade: Fri Apr 1 15:20:13 2005
Usage:
0.0 of 3399.9 Hour Newton CPU (0.0 of 520.5 G.S.T), 0.0%
0.0 of 10.1 Hour Wren CPU (0.0 of 0.5 G.S.T), 0.0%
0.0 of 54.6 GByteYear MP Disk SAN (0.0 of 130.0 G.S.T), 0.0%
Total usage for project cse154 0.0 of 651.0 Generic Service Tokens, 0.0%

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csedl1 - Castep port to Altix
Last Trade: Fri May 27 23:32:27 2005
Usage:
130351.9 of 167659.9 Hour Newton CPU (19955.9 of 25667.5 G.S.T), 77.7%
57.0 of 500.0 Hour Wren CPU (2.8 of 24.8 G.S.T), 11.4%
17.4 of 69.2 GByteYear MP Disk SAN (41.5 of 164.8 G.S.T), 25.2%
2335.7 of 3941.8 Hour SMP CPU (90.7 of 153.1 G.S.T), 59.3%
0.0 of 125.0 GByteYear HSM/Tape (0.0 of 78.9 G.S.T), 0.0%
9360.9 of 14648.4 Hour Green CPU (489.1 of 765.4 G.S.T), 63.9%
6.0 of 8.1 Day Training (65.2 of 87.5 G.S.T), 74.5%
Total usage for project csedl1 20645.3 of 26942.0 Generic Service Tokens, 76.6%

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csedl1a Computational Cemistry
Last Trade: never
Usage:
4898.9 of 18374.4 Hour Newton CPU (750.0 of 2813.0 G.S.T), 26.7%
0.0 of 150.0 Hour Wren CPU (0.0 of 7.4 G.S.T), 0.0%
2.5 of 19.5 GByteYear MP Disk SAN (6.0 of 46.4 G.S.T), 12.9%
0.0 of 37.0 GByteYear HSM/Tape (0.0 of 23.3 G.S.T), 0.0%
Total usage for subproject csedl1a 756.0 of 2890.2 Generic Service Tokens, 26.2%

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csedl1b Molecular Simulation
Last Trade: never
Usage:
1.8 of 12000.0 Hour Newton CPU (0.3 of 1837.1 G.S.T), 0.0%
0.0 of 50.0 Hour Wren CPU (0.0 of 2.5 G.S.T), 0.0%
1.0 of 5.0 GByteYear MP Disk SAN (2.4 of 11.9 G.S.T), 20.2%
0.0 of 13.0 GByteYear HSM/Tape (0.0 of 8.2 G.S.T), 0.0%
Total usage for subproject csedl1b 2.7 of 1859.7 Generic Service Tokens, 0.1%

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csedl1c Materials
Last Trade: never
Usage:
38355.8 of 53989.9 Hour Newton CPU (5872.0 of 8265.4 G.S.T), 71.0%
6.2 of 100.0 Hour Wren CPU (0.3 of 5.0 G.S.T), 6.2%
5.6 of 15.0 GByteYear MP Disk SAN (13.3 of 35.7 G.S.T), 37.1%
0.0 of 25.0 GByteYear HSM/Tape (0.0 of 15.8 G.S.T), 0.0%
Total usage for subproject csedl1c 5885.6 of 8321.9 Generic Service Tokens, 70.7%

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csedl1d - Band Theory
Last Trade: never
Usage:
49704.0 of 45007.1 Hour Newton CPU (7609.3 of 6890.3 G.S.T), 110.4%

0.0 of 50.0 Hour Wren CPU (0.0 of 2.5 G.S.T), 0.1%
1.0 of 7.5 GByteYear MP Disk SAN (2.4 of 17.9 G.S.T), 13.4%
0.0 of 13.0 GByteYear HSM/Tape (0.0 of 8.2 G.S.T), 0.0%
Total usage for subproject csedl1d 7611.7 of 6918.8 Generic Service Tokens, 110.0%

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csedl1e High End Computing
Last Trade: never
Usage:
28127.5 of 27980.6 Hour Newton CPU (4306.1 of 4283.6 G.S.T), 100.5%
50.7 of 100.0 Hour Wren CPU (2.5 of 5.0 G.S.T), 50.7%
7.3 of 15.0 GByteYear MP Disk SAN (17.5 of 35.7 G.S.T), 48.9%
2335.7 of 3900.0 Hour SMP CPU (90.7 of 151.5 G.S.T), 59.9%
0.0 of 37.0 GByteYear HSM/Tape (0.0 of 23.3 G.S.T), 0.0%
9360.9 of 9400.0 Hour Green CPU (489.1 of 491.2 G.S.T), 99.6%
Total usage for subproject csedl1e 4905.9 of 4990.3 Generic Service Tokens, 98.3%

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csedl1g - Engineering
Last Trade: never
Usage:
7196.7 of 9000.0 Hour Newton CPU (1101.8 of 1377.8 G.S.T), 80.0%
0.0 of 49.0 Hour Wren CPU (0.0 of 2.4 G.S.T), 0.0%
0.0 of 7.2 GByteYear MP Disk SAN (0.0 of 17.1 G.S.T), 0.0%
0.0 of 4000.0 Hour Green CPU (0.0 of 209.0 G.S.T), 0.0%
Total usage for subproject csedl1g 1101.8 of 1606.4 Generic Service Tokens, 68.6%

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csehec - (NAG)
Last Trade: Mon Oct 11 11:49:24 2004
Usage:
427.0 of 18995.1 Hour Newton CPU (65.4 of 2908.0 G.S.T), 2.2%
0.2 of 989.0 Hour Wren CPU (0.0 of 49.0 G.S.T), 0.0%
0.0 of 22.7 GByteYear MP Disk SAN (0.0 of 54.0 G.S.T), 0.0%
Total usage for project csehec 65.4 of 3011.0 Generic Service Tokens, 2.2%

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csehpcx - benchmarking
Last Trade: Mon Mar 21 10:41:34 2005
Usage:
11200.6 of 11200.4 PEHour MPP PE CPU (270.8 of 270.8 G.S.T), 100.0%
16.1 of 15.6 GByteYear HP Disk (95.9 of 92.8 G.S.T), 103.3%
12409.6 of 15405.7 Hour Newton CPU (1899.8 of 2358.5 G.S.T), 80.6%
30.6 of 477.7 Hour Wren CPU (1.5 of 23.7 G.S.T), 6.4%
1760.7 of 1356.9 Hour SMP CPU (68.4 of 52.7 G.S.T), 129.8%
16.7 of 61.9 GByteYear MP Disk (39.7 of 147.3 G.S.T), 26.9%
37568.8 of 36481.7 Hour Green CPU (1963.0 of 1906.2 G.S.T), 103.0%
Total usage for project csehpcx 4339.2 of 4852.0 Generic Service Tokens, 89.4%

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csn001 Webb & GST/02/2846 Killworth & T/S/2001/00187 New
Last Trade: Tue Apr 26 15:05:23 2005
Usage:
403672.6 of 403672.5 PEHour MPP PE CPU (9760.3 of 9760.3 G.S.T), 100.0%
307.2 of 306.0 GByteYear HP Disk (1828.6 of 1821.4 G.S.T), 100.4%
1585.2 of 36127.7 Hour Newton CPU (242.7 of 5530.9 G.S.T), 4.4%
1373.0 of 3815.0 Hour Wren CPU (68.0 of 189.0 G.S.T), 36.0%
246622.0 of 246862.1 Hour SMP CPU (9581.6 of 9591.0 G.S.T), 99.9%
658.0 of 1653.6 GByteYear MP Disk (1566.8 of 3937.1 G.S.T), 39.8%
44801.7 of 48951.9 GByteYear HSM/Tape (28266.1 of 30884.5 G.S.T), 91.5%

1162419.3 of 1209696.2 Hour Green CPU (60738.8 of 63209.1 G.S.T), 96.1%
61.0 of 61.5 PersonDay Support (1906.2 of 1921.9 G.S.T), 99.2%
3.0 of 5.3 Day Training (32.6 of 57.5 G.S.T), 56.7%
Total usage for project csn001 113991.7 of 126902.6 Generic Service Tokens, 89.8%

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csn003 UGAMP O'Neill
Last Trade: Fri May 13 11:24:45 2005
Usage:
7500413.8 of 7500414.8 PEHour MPP PE CPU (181350.4 of 181350.4 G.S.T), 100.0%
113.5 of 113.5 GByteYear HP Disk (675.6 of 675.6 G.S.T), 100.0%
1092130.1 of 1202184.9 Hour Newton CPU (167196.9 of 184045.5 G.S.T), 90.8%
4375.4 of 25229.2 Hour Wren CPU (216.8 of 1250.0 G.S.T), 17.3%
875.2 of 1905.2 GbyteYear HV Disk SAN /v (1043.2 of 2270.8 G.S.T), 45.9%
396659.6 of 515011.5 Hour SMP CPU (15410.8 of 20009.0 G.S.T), 77.0%
159.1 of 373.8 GByteYear MP Disk (378.8 of 889.9 G.S.T), 42.6%
123697.0 of 142087.3 GByteYear HSM/Tape (78042.3 of 89645.0 G.S.T), 87.1%
1373568.6 of 1862892.5 Hour Green CPU (71771.8 of 97340.0 G.S.T), 73.7%
16.0 of 20.8 PersonDay Support (500.0 of 650.9 G.S.T), 76.8%
32.0 of 34.0 Day Training (347.8 of 369.9 G.S.T), 94.0%
Total usage for project csn003 516934.3 of 578496.8 Generic Service Tokens, 89.4%

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csn006 GR9/3550 Price
Last Trade: Mon May 16 11:31:38 2005
Usage:
1618734.3 of 1618734.0 PEHour MPP PE CPU (39138.9 of 39138.9 G.S.T), 100.0%
191.1 of 192.2 GByteYear HP Disk (1137.6 of 1144.3 G.S.T), 99.4%
255312.5 of 343912.2 Hour Newton CPU (39086.4 of 52650.4 G.S.T), 74.2%
644.5 of 2096.8 Hour Wren CPU (31.9 of 103.9 G.S.T), 30.7%
87314.1 of 87287.6 Hour SMP CPU (3392.3 of 3391.3 G.S.T), 100.0%
134.4 of 169.5 GByteYear MP Disk (319.9 of 403.6 G.S.T), 79.3%
18.3 of 20.3 GByteYear HSM/Tape (11.5 of 12.8 G.S.T), 90.3%
1176092.9 of 1395921.4 Hour Green CPU (61453.3 of 72939.8 G.S.T), 84.3%
Total usage for project csn006 144572.0 of 169784.8 Generic Service Tokens, 85.2%

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csn015 Proctor
Last Trade: re-enabled
Usage:
257682.2 of 257682.2 PEHour MPP PE CPU (6230.4 of 6230.4 G.S.T), 100.0%
6.8 of 6.8 GByteYear HP Disk (40.4 of 40.4 G.S.T), 100.0%
0.0 of 204.2 Hour Newton CPU (0.0 of 31.3 G.S.T), 0.0%
495.5 of 20565.3 Hour Wren CPU (24.5 of 1018.9 G.S.T), 2.4%
3180.1 of 6776.8 Hour SMP CPU (123.6 of 263.3 G.S.T), 46.9%
116.5 of 599.3 GByteYear MP Disk (277.4 of 1426.8 G.S.T), 19.4%
6363.0 of 8180.3 GByteYear HSM/Tape (4014.5 of 5161.1 G.S.T), 77.8%
835059.1 of 956784.0 Hour Green CPU (43633.6 of 49993.9 G.S.T), 87.3%
19.0 of 22.0 PersonDay Support (593.8 of 688.0 G.S.T), 86.3%
3.0 of 6.0 Day Training (32.6 of 65.2 G.S.T), 50.0%
Total usage for project csn015 54970.8 of 64919.4 Generic Service Tokens, 84.7%

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csn043 NER/T/S/2001/01159 Haines
Last Trade: Mon Jan 12 10:47:00 2004
Usage:
0.0 of 10.0 Hour Wren CPU (0.0 of 0.5 G.S.T), 0.0%
0.0 of 288.0 GByteYear MP Disk SAN (0.0 of 685.7 G.S.T), 0.0%
0.0 of 25544.0 Hour SMP CPU (0.0 of 992.4 G.S.T), 0.0%
0.0 of 19200.0 Hour Green CPU (0.0 of 1003.2 G.S.T), 0.0%

0.0 of 20.0 PersonDay Support (0.0 of 625.0 G.S.T), 0.0%
0.0 of 36.0 Day Training (0.0 of 391.3 G.S.T), 0.0%
Total usage for project csn043 0.0 of 3698.2 Generic Service Tokens, 0.0%

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csn050 NER/T/S/2002/00450 Challenor
Last Trade: Thu Jan 8 16:12:46 2004
Usage:
0.0 of 32773.8 Hour Newton CPU (0.0 of 5017.4 G.S.T), 0.0%
0.0 of 10.0 Hour Wren CPU (0.0 of 0.5 G.S.T), 0.0%
0.0 of 100.0 GByteYear MP Disk SAN (0.0 of 238.1 G.S.T), 0.0%
0.0 of 100.0 GByteYear HSM/Tape (0.0 of 63.1 G.S.T), 0.0%
Total usage for project csn050 0.0 of 5319.1 Generic Service Tokens, 0.0%

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csn056 NER/T/S/2002/00441 Hoskins - Merged
Last Trade: re-enabled
Usage:
0.0 of 5722.8 Hour Newton CPU (0.0 of 876.1 G.S.T), 0.0%
0.0 of 10.0 Hour Wren CPU (0.0 of 0.5 G.S.T), 0.0%
0.0 of 27.0 GByteYear MP Disk SAN (0.0 of 64.3 G.S.T), 0.0%
0.0 of 56.0 GByteYear HSM/Tape (0.0 of 35.3 G.S.T), 0.0%
0.0 of 0.0 Hour Green CPU (0.0 of 0.0 G.S.T)
Total usage for project csn056 0.0 of 976.2 Generic Service Tokens, 0.0%

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csn057 NER/T/S/2002/00442 Guilyardi - Merged
Last Trade: re-enabled
Usage:
0.0 of 19123.2 Hour Newton CPU (0.0 of 2927.6 G.S.T), 0.0%
0.0 of 10.0 Hour Wren CPU (0.0 of 0.5 G.S.T), 0.0%
0.0 of 14.0 GByteYear MP Disk SAN (0.0 of 33.3 G.S.T), 0.0%
0.0 of 115.0 GByteYear HSM/Tape (0.0 of 72.6 G.S.T), 0.0%
0.0 of 55000.0 Hour Green CPU (0.0 of 2873.9 G.S.T), 0.0%
Total usage for project csn057 0.0 of 5907.9 Generic Service Tokens, 0.0%

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csn058 NER/T/S/2002/00443 Tudhope - Merged
Last Trade: re-enabled
Usage:
0.0 of 7338.0 Hour Newton CPU (0.0 of 1123.4 G.S.T), 0.0%
0.0 of 9.3 Hour Wren CPU (0.0 of 0.5 G.S.T), 0.0%
0.0 of 6.0 GByteYear MP Disk SAN (0.0 of 14.3 G.S.T), 0.0%
0.0 of 105.0 GByteYear HSM/Tape (0.0 of 66.2 G.S.T), 0.0%
0.0 of 52500.0 Hour Green CPU (0.0 of 2743.2 G.S.T), 0.0%
Total usage for project csn058 0.0 of 3947.6 Generic Service Tokens, 0.0%

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csn059 NER/T/S/2002/00446 Watson
Last Trade: Mon Jan 12 16:41:49 2004
Usage:
0.0 of 9.5 Hour Wren CPU (0.0 of 0.5 G.S.T), 0.0%
0.0 of 755.0 GByteYear MP Disk SAN (0.0 of 1797.6 G.S.T), 0.0%
0.0 of 3775.0 GByteYear HSM/Tape (0.0 of 2381.7 G.S.T), 0.0%
0.0 of 246288.7 Hour Green CPU (0.0 of 12869.1 G.S.T), 0.0%
0.0 of 45.0 PersonDay Support (0.0 of 1406.2 G.S.T), 0.0%
0.0 of 4.0 Day Training (0.0 of 43.5 G.S.T), 0.0%
Total usage for project csn059 0.0 of 18498.6 Generic Service Tokens, 0.0%

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csnadm
Last Trade: Mon Feb 23 14:12:27 2004
Usage:
 0.0 of 961.1 Hour Wren CPU (0.0 of 47.6 G.S.T), 0.0%
 0.0 of 1.0 GByteYear MP Disk SAN (0.0 of 2.4 G.S.T), 0.0%
Total usage for project csnadm 0.0 of 50.0 Generic Service Tokens, 0.0%

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csp007 PPA/G/O/2002/00004 Hibbert
Last Trade: Thu Apr 22 14:12:25 2004
Usage:
 36870.0 of 36870.0 PEHour MPP PE CPU (891.5 of 891.5 G.S.T), 100.0%
 0.0 of 0.0 GByteYear HP Disk (0.0 of 0.0 G.S.T)
 22.7 of 600.0 Hour Wren CPU (1.1 of 29.7 G.S.T), 3.8%
 0.0 of 60.0 GByteYear HP Disk SAN - /d (0.0 of 221.4 G.S.T), 0.0%
 0.0 of 17963.6 Hour SMP CPU (0.0 of 697.9 G.S.T), 0.0%
 0.0 of 50.0 GByteYear MP Disk (0.0 of 119.0 G.S.T), 0.0%
Total usage for project csp007 892.6 of 1959.6 Generic Service Tokens, 45.6%

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HPCI Daresbury
Last Trade: Mon Oct  7 10:07:27 2002
Usage:
 34683.7 of 34482.9 PEHour MPP PE CPU (838.6 of 833.8 G.S.T), 100.6%
 5.1 of 3.8 GByteYear HP Disk (30.3 of 22.7 G.S.T), 133.4%
 1.9 of 0.0 Hour Wren CPU (0.1 of 0.0 G.S.T), 496110.8%
 4062.9 of 4120.4 Hour SMP CPU (157.8 of 160.1 G.S.T), 98.6%
 3.2 of 1.7 GByteYear MP Disk (7.6 of 4.0 G.S.T), 188.7%
 10817.5 of 10497.3 Hour Green CPU (565.2 of 548.5 G.S.T), 103.1%
 1.0 of 1.0 Day Training (10.9 of 10.9 G.S.T), 99.7%
Total usage for project hpcid 1610.6 of 1580.0 Generic Service Tokens, 101.9%

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HPCI Edinburgh
Last Trade: Wed Jul 11 12:09:29 2001
Usage:
 1759.1 of 4070.6 PEHour MPP PE CPU (42.5 of 98.4 G.S.T), 43.2%
 5.1 of 4.7 GByteYear HP Disk (30.2 of 28.1 G.S.T), 107.4%
 698.4 of 770.8 Hour SMP CPU (27.1 of 29.9 G.S.T), 90.6%
 5.4 of 2.8 GByteYear MP Disk (12.8 of 6.7 G.S.T), 191.9%
 1728.7 of 1739.8 Hour Green CPU (90.3 of 90.9 G.S.T), 99.4%
Total usage for project hpcie 203.0 of 254.1 Generic Service Tokens, 79.9%

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HPCI Southampton
Last Trade: re-enabled
Usage:
 737.9 of 5825.0 PEHour MPP PE CPU (17.8 of 140.8 G.S.T), 12.7%
 31.7 of 31.6 GByteYear HP Disk (188.9 of 188.2 G.S.T), 100.4%
 37.8 of 1074.0 Hour SMP CPU (1.5 of 41.7 G.S.T), 3.5%
 3.1 of 3.0 GByteYear MP Disk (7.4 of 7.1 G.S.T), 104.6%
Total usage for project hpcis 215.6 of 377.9 Generic Service Tokens, 57.1%

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| Project | PI Name | Subject | Discipline/Department |
|---|---|---|---|
| | | | |
| cse002 | Wander, A (Dr ) | Support for the UKCP | Physics |
| cse003 | Dundas, D (Dr) | HPC Consortiums 98-2000 | |
| cse004 | Sandham, N (Prof) | UK Turbulence | |
| cse006 | Briddon, P (Dr) | Covalently Bonded Materials | |
| cse007 | Foulkes, M (Dr) | Quantum Many Body Theory | |
| Cse008 | Vincent, M (Dr) | Model Chemical Reactivity | |
| cse009 | Slater, Ben | HPC Computing Applications in Materials Chemistry | Chemistry |
| cse010 | William, J (Dr) | Free Surface Flows | |
| cse011 | William, J (Dr) | Open Channel Flood Plains | |
| cse013 | Leschziner, M (Prof) | Large Eddy Simulation for Aerospace & Turbomachinery Dynamics | Mechanical Engineering |
| cse014 | De Oliverira, C (Dr) | Problems in Nuclear Safety | |
| cse016 | Cant, S (Dr) | Turbulent Combustion | |
| cse017 | Luo, K (Dr) | Large Eddy Simulation & Modelling of Buoyant Plumes & Smoke Spread in Enclosures | |
| cse018 | Jaffri, K | | |
| cse019 | Lander, J (Dr) | | |
| cse021 | Staunton, J (Dr) | | |
| cse022 | Jones, WP (Prof) | | |
| cse023 | Allen, M (Prof) | | |
| cse024 | Allan, RJ (Dr) | | |
| cse025 | Walet, NR (Dr) | | |
| cse026 | Neal, M (Dr) | | |
| cse029 | Apsley, DD (Dr) | | |
| cse030 | Desplat, JC (Dr) | High Performance Computing for complex Fluids | Physics |
| cse033 | Breard, CC (Dr) | | |
| cse035 | Jenkins, S (Dr) | Ab Initio Simulations of Catalytic Processes at Extended Metal Surfaces | Chemistry |
| cse036 | Duff, I (Prof) | Research & Development of Algorithms & Software for Large-Scale Linear & Non-Linear Systems | Maths |
| cse040 | Badcock, K (Dr) | Prediction of Non-Linear Flutter Characteristics by Numerical Path Following & Model Reduction | Aerospace Engineeering |
| cse041 | Wu, X (Dr) | Flutter & Noise Generation Mechanisms - Turbomachinery Fan Assemblies | Mechanical Engineering |
| cse042 | Leschziner, M (Prof) | | |
| cse043 | Williams, J (Dr) | Numerical Simulation of Flow over a Rough Bed | Engineering |
| cse050 | Bradley, D (Prof) | Flame Instabilities: their influence on turbulent combustion & incorporation in mathematical models. | Mechanical Engineering |
| cse052 | Di Mare, F (Miss) | Heat Transfer in Turbine Combustors | Mechanical Engineering |
| cse053 | Leschziner, M (Prof) | Coupling RANS Near-Wall Turbulence Models with Large Eddy Simulation Strategies | Aerospace Engineering |
| cse055 | Staunton, J (Dr) | Ab-initio theory of magnetic anisotropy in transition metal ferromagnets | Physics |
| cse056 | Zheng, Y (Dr) | Aerothermalelasticity Modelling of Air Riding Seals for Large Gas Turbines | Mechanical Engineering |
| cse057 | Evans, R (Dr) | Relativistic Particle Generation from Ultra-Intense Laser Plasma Interactions | Physics |
| cse059 | Cross, (Prof) | | |

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|---|---|---|---|
| cse060 | Robb, M (Prof) | CCP1 Renewal plus falgship project on Car-Parrinello in Chemistry | Chemistry |
| cse061 | Imregun, M (Prof) | Casing treatment modelling for the investigation of stall, flutter and noise mechanisms in turbomachinery compressors. | Mechanical Engineering |
| cse063 | Sandham, N (Prof) | Computational Aerocaustics for Turbulent Plane Jets | Aerospace Engineering |
| cse064 | Leschziner, M (Prof) | Improvement of predictive performance of anisotropy-resolving turbulence models in post-reattachment recovery region of separated flow using Large Eddy Simulation | Aerodynamics |
| cse065 | Williams, J (Dr) | | |
| cse066 | Coveney, P V (Prof) | New clay-polymer nanocomposites using diversity-discovery methods: synthesis, processing and testing | IT |
| cse067 | Williams, J (Dr) | | |
| cse068 | Bressloff | | |
| cse069 | Lou (Dr) | | |
| cse071 | Iacovides (Dr) | The Practical Computation of Three-Dimensional Time-Dependent Turbulent Flows in Rotating Cavities | Mechanical Engineering |
| cse072 | Karlin, V (Dr) | Structure & Dynamics of Unstable Premixed Laminar Flames | Engineering |
| cse073 | Alavi | | |
| cse074 | Luo (Dr) | Consortium on Computational Combustion for Engineering Applications | Engineering |
| cse075 | Coveney, PV (Prof) | The Reality Grid - a tool for investigating condensed matter & materials | IT |
| cse076 | Briddon, P (Dr) | HPC facilities for the first principles simulation of covalently bonded materials | IT |
| cse077 | Kronenburg, A (Dr) | Combustion Model Development for Large-Eddy Simulation of Non-Premixed Reactive Flows. | Mechanical Engineering |
| cse078 | Staunton | | |
| cse080 | Gao | | |
| cse081 | Hickey | | |
| cse082 | Barakos, G (Dr) | CFD Study of Three-dDimensional Dynamic Shelf | Aerospace Engineering |
| cse084 | Needs, R (Dr) | The Consortium for Computational Quantum Many-Body Theory | Physics |
| cse085 | Sandham, N (Prof) | UK Turbulence Consortium | Engineering |
| cse086 | Taylor, K (Prof) | Multiphoton, Electron Collisions and BEC HPC Consortium 2002-2005 | Physics |
| cse087 | Williams, J (Dr) | | |
| cse088 | Coleman | | |
| cse089 | Wiercigroch, M (Dr) | Nonlinear Dynamics & Rock Contact Fracture Mechanics in Modelling of Vibration Enhanced Drilling | Engineering |
| cse090 | Imregun, M (Prof) | | |
| cse091 | Avital | | |
| cse092 | Allen | | |
| cse093 | Williams, J (Dr) | | |
| cse094 | John | | |

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|---|---|---|---|
| cse095 | Barford | | |
| cse096 | Lo | | |
| Cse097 | Hickey | | |
| cse098 | De Souza, M M (Dr) | Indium interaction in silicon for ULSI technologies | Physics |
| cse099 | Williams, J (Prof) | | |
| cse100 | Gao, S (Dr) | Dev of Novel Aerodynamic Lenses for Focusing Nanoparticle Beams | Engineering |
| cse101 | Jiang (Dr) | Direct Numerical Simulation of Fuel-Air Mixing with Passive Flow Control of Diesel Combustion. | Mechanical Engineering |
| cse102 | Williams, J (Prof) | Numerical Modelling of Flow around Bridge Piers | Engineering |
| cse103 | Neil, M P (Prof) | Simulation and Modelling of liquid crystalmesopases linked to the design of molecular and material properties. | Mathematics |
| cse104 | Greaves, D M (Dr) | CFD Modelling of free surface waves driven by moving bodies using adaptively refined cut cell hierarchical grids | |
| cse105 | Chemyshenko, S I (Prof) | Optimal database of the direct numerical simulation of turbulent channel flow | Aerodynamics & Flight Mechanics |
| cse106 | Augarde (Dr) | Parametric Studies of multiple tunnels | Engineering |
| cse107 | Hicks, MA (Dr) | Parallel Finite Elements for Stochastic Analysis | Engineering |
| cse108 | Holden, AV (Prof) | Large-scale parallelisation of electro-physiological & mechanical cardiac virtual tissues. | Biomedical Sciences |
| cse109 | Allen, M (Prof) | University of Warwick New HPC Project | Physics |
| cse110 | Leach, SA (Dr) | Application of HE Computing to Develop Complex Stochastic Models to aid Public Health & National Operational Responses to Infectious Disease Threats. | |
| cse111 | Avital, Eldad 9Dr) | A numerical study of three dimensional wakes generated by free surface piecing circular cylinders | Engineering |
| cse112 | Chemyshenko, SI (Prof) | Master-mode analysis of the genesis of organized structures in turbulent flows. | Engineering - Aerodynamics |
| cse113 | Wirth, T (Prof) | Stereoselective Halocyclisations | Chemistry |
| cse114 | Jiang, X (Dr) | Direct numerical simulation of fuel injection & spray combustion | Engineering |
| cse115 | De Leeuw, N (dr) | A computational study of bio-mineralisation: nucleation and growth of bone material on biological templates | |
| cse116 | John, N (Dr) | An Advanced environment for enabling visual supercomputing | |
| cse117 | Theodoropoulos, K (Dr) | Modelling of Microreactors: An integrated Multi-scale Approach | |
| cse118 | Gavaghan, David (Dr) | EPSRC e-science pilot in Integrative Biology | |
| csn001 | De Cuevas, B (Mrs) | OCCAM | Ocean/Earth Sciences |
| csn002 | Vincent, Mark (Dr) | | |
| csn003 | Steenman-Clark, L (Dr) | UGAMP | Meteorology |
| csn005 | Huw Davies, J (Prof) | | |
| csn006 | Brodholt, J (Dr) | HPC for Mineral Physics | Geological Sciences |
| csn009 | Proctor, R (Dr) | | |
| csn011 | Gray, SL (Dr) | | |
| csn012 | Tennyson, J (Prof) | Calculated Absorption by water vapour at near infra-red & optical wavelengths | Physics & Astronomy |
| csn013 | Voke, P (Prof) | Large Eddy Simulation Extended by Extreme Value Theory for the Prediction of Dispersion, Concentration Threshold Boundaries & Field Connectivity | Mechanical & Materials Engineering |
| csn014 | Llewellyn Jones (Prof) | Data Assimilation scheme to optimize info on the surface-atmosphere interface from satellite observations of Top-of-the Atmosphere Brightness Temp. | Physics & Astronomy |
| csn015 | Proctor, R (Dr) | A Testbed for Zooplankton Models of the Irish Sea | Coastal & Marine Sciences |
| csn017 | Payne, A (Dr) | Stability of the Antarctic Ice Sheet | Geography |
| csn029 | Allen, MR (Dr) | | |
| csn030 | New | | |
| csn031 | Richards | | |
| csn032 | Sutton | | |
| csn033 | Saunders | | |
| csn035 | Robinson | | |
| csn036 | Liu, C (Dr) | Assimilation of Altimeter, Radiometer & in situ data into the OCCAM model. Analysis of water properties & transports | Environmental Science |
| csn038 | Oppenheimer | | |
| csn039 | Beven | | |
| csn040 | Slingo | | |
| csn041 | Lawrence | | |
| csn042 | Gray, SL (Dr) | Transport & Mixing in Fronts | |
| csn043 | Haines | | |

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|---|---|---|---|
| csn044 | Steenman-Clark, L (Dr) | Earth Observation Project | Meteorology |
| csn045 | Slingo | | |
| csn046 | Aitken | | |
| csn047 | Gubbins | | |
| csn048 | Brodholt | | |
| csn049 | Srokosz | Climate impact changes in Atlantic Thermohaline. | |
| csn050 | Challenor | The Probability of rapid climate change | |
| csn051 | Proctor | Ultr-fine scale modeling of the northern North Atlantic Thermohaline. | |
| csn052 | Xie, Z (Dr0 | Quantifying the scaling of physical transport in structured heterogeneous porous media | Earth Sciences |
| csn053 | Das, S (Dr) | Rupture History of large earthquakes from analysis of broad band seismograms, and its physical interpretation. | Earth Sciences |
| csn054 | Thuburn, J (Dr) | An Integrated Model of Atmospheric Convection | Meteorology |
| csn055 | Vocadlo, L (Dr0 | The structure and anisotropy of Earths inner core. | Earth Sciences |
| csn056 | Hoskins B (Prof) | Atmospheric water vapour budget & it's relevance to the thermohaline circulation | Meteorology |
| csn057 | Guilyardi, E (Dr) | Role of salinity in ocean circulation and climate response to greenhouse gas forcing. | Atmospheric Modelling |
| csn058 | Tudhope, A (Dr) | Improving ability to predict rapid changes in the el nino southern oscillation climatic phenomenon | Atmospheric Modelling |
| csn059 | Watson, AJ (Prof) | Circulation, overflow & deep connection in the Nordic seas. | Environmental Sciences |
| csb001 | Houldershaw, D (Dr) | Use of Cray T3E for multiple long trajectories of protein unfolding | Crystallography |
| csb002 | Mulholland, A (Dr) | | |
| csb003 | Carling, J (Dr) | | |
| csb004 | Greenall | | |
| csb005 | Haley | Genetic Analysis of Complex Traits | |
| csb006 | Sansom, M (Prof) | DFT calculations for ion channels and transport proteins | Biochemistry |
| csp002 | Chapman, S (Dr) | | |
| csp003 | Ord, SM (Mr) | | |
| csp004 | Bell, K L (Prof) | A Programme for Atomic Physics for Astrophysics at Queen's University Belfast (2001-2005) | Astronomy |
| csp005 | Chapman | | |
| csp006 | Jain, R (Dr) | Numerical Simulation of forced magnetic reconnection in the solar corona | Physics |
| csp007 | Scott, P (Dr) | A Programme for Atomic Physics for Astrophysics at Queens University Belfast (2001-2005) | Astronomy |
| css001 | Boyle, P (dr) | | |
| css002 | Crouchley, R (Dr) | | |
| HPCID | Allan, R (Dr) | | |
| HPCIE | Henty, D (Dr) | | |
| HPCIS | Nicole, D (Dr) | | |
| UKHEC | Allan, R (Dr) | UK HEC Collaboration, Core Support for High-End Computing 1999-2002 | |
| cs2009 | Pennington, V (Dr) | | |
| cs2011 | Mallinger, F (Dr) | | |
| cs2012 | Qin, N (Prof) | | |
| cs2014 | Karlin, V (Dr) | | |
| cs2015 | Tejera Cuesta, P (Mr) | | |
| cs2016 | Miles, JJ (Dr) | | |
| cs2017 | Eisenbach, M (Mr) | | |
| cs2028 | Annett (dr) | | |
| cs2030 | McKenna, K (Mr) | | |
| cs2031 | Ess | | |
| cs2032 | Jain, R (Dr) | | |
| cs2034 | Chichkine, M (Mr) | Indium interaction in silicon for future ULSI technologies | Physics |
| cs2035 | Barakos, G (Dr) | Detached Eddy Simulation of Aerodynamics & Aerocautics of Cavity Flows | Aerospace Engineering |
| cs2036 | Farid, Vakili-Tahami (Mr) | MPI Evaluation | Mechanical Aerospace & Manufacturing Engineering |
| cs2037 | Domene, Carmen (Dr) | Ab initio molecular dynamics of ion in membrane proteins | |
| cs2038 | Excell, P (Prof) | Computational Bioelectromagnetic Modeling of Human Cellular Processes for Mobile Phone Safety Research | Informatics |
| cs2039 | Carlborg (Dr) | Genetic Analysis of Complex Traits | Genetics & Biometry |
| cs2040 | Costen, F (Mrs) | Impulse radio propogation in a dense multipath & shadowed environment for ultra-wideband communication systems | Computer Science |
| cs2041 | Filippone, A (Dr) | Numerical Study of the 3D obstructed shear-driven cavity flow. | Mechanical Aerospace & Manufacturing Engineering |
| cs2042 | Smeed, DA (Dr) | A temporally continuous high-resolution record of global sea level during the Holocene. | Ocean/Earth Sciences |
| cs2043 | Theodoropoulos, K (Dr) | Design of microchannel structures for microreactor applications | Process Intewgration |
| cs2044 | Mota-Furtado, F (Dr) | Statistical Properties of Quantum Transport | Maths |
| cs3002 | Novik, K (~Dr) | | |

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|---|---|---|---|
| cs3003 | Chambers, E (Dr) | | |
| cs3004 | Avis, N (Prof) | | |
| cs3005 | Zarei, B (Mr) | | |
| cs3007 | Finch, E | | |
| cs3008 | Alsberg, B (Dr) | | |
| cs3009 | Flower, D (Dr) | | |
| cs3010 | Kemsley, K (Dr) | | |
| cs3012 | Austin, J (Dr) | | |
| cs3013 | Raval, R (Prof) | | |
| cs3014 | MacLaren, J (Dr) | | |
| cs3015 | Hampshire, D (Dr) | High Performance Computational Solutions for the Ginzburg-Landau Equations that describe Flux Pinning in High-Field Superconductors | Physics |
| cs3016 | Petchey, O (Dr) | Randomisation test for the significance of functional diversity for eco-system processes | Animal & Plant Sciences |
| cs3017 | Gross, M (Mr) | Numerical Simulation of Laser Materials Processing | Engineering |
| cs3018 | Durrant, M (Dr) | Functional modelling of oxalate-degrading enzymes & of lipoxygenase using quantum calculations. | Biology |
| cs3019 | Bengough (Dr) | Lattice-Boltzmann simulation of water & solute transport in porous media. | Physics |
| Cs3020 | Gajjar | Flow past a circular cylunder at large Reynoldss numbers | |
| cs4001 | White P | | |
| cs4002 | Cooper A (Miss) | | |
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