# CSAR Service - Management Report

# November 2003

This report documents the quality of the CSAR service during the month of November 2003.

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 November 2003. The information, in particular, covers the availability and usage of the main CSAR Service High Performance Computing (HPC) systems:

- Cray T3E-1200E/776 (Turing)
- SGI Origin2000/128 (Fermat)
- SGI Origin3000/512 (Green)
- SGI Origin300/16 (Wren)
- SGI Altix3700/256 (Newton)

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

November has seen the workload of the three primary systems at variable levels and introduces the new Altix system with a reasonable workload during the month.

The CSAR Service has been granted an 18 month extension of service contract until June 30th 2006. With this extension CfS has introduced a 256 processor Itanium-2 (Madison) based SGI Altix 'Newton'.

# 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 November 1st to 30th inclusive.
Overall, the CPARS Performance Achievement in November was satisfactory (see Table 3); i.e. Green measured against the CPARS performance targets.

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

| Service Quality Measure | 2002/3 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dec | Jan | Feb | March | April | May | June | July | Aug | Sept | Oct | Nov |
| HPC Services Availability | | | | | | | | | | | | |
| Availability in Core Time (% of time) | 99.21% | 99.46% | 99.73% | 100% | 99.74% | 97.66% | 99.25% | 98.83% | 98.95% | 96.62% | 98.84% | 98.95% |
| Availability out of Core Time (% of time) | 100% | 99.89% | 100.00% | 99.81% | 99.81% | 99.33% | 99.9% | 99.57% | 100% | 98.48% | 99.28% | 97.74% |
| Number of Failures in month | 0 | 3 | 1 | 1 | 1 | 4 | 1 | 2 | 2 | 4 | 4 | 3 |
| Mean Time between failures in 52 week rolling period (hours) | 515 | 487 | 487 | 515 | 548 | 461 | 548 | 487 | 461 | 417 | 365 | 337 |
| 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 | <0.5 | <1 | <2 | <3 | <1 | <2 | <1 | <0.5 | <5 | <2 | <1 |
| Administrative Queries - Max Time to resolve 95% of all queries | <0.5 | <1 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <1 | <1 | <1 |
| 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 Turing, Fermat, Green and Newton at installation:

   [Turing availability x 143/(143+40+233+343)] + [Fermat availability x 40/ (143+40+233+343)] + [Green availability x 233/(143+40+233+343)] + [Newton availability x 343/(143+40+233+343)]

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

## CSAR Service - Service Quality Report - Service Credits

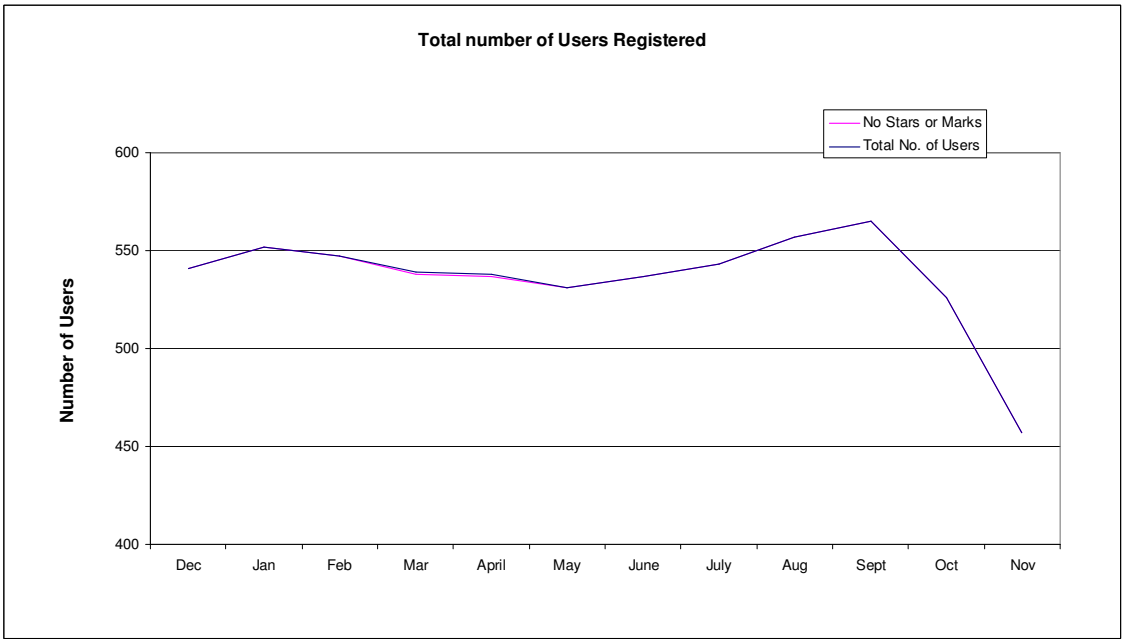
| Service Quality Measure | 2002/3 Dec | Jan | Feb | March | April | May | June | July | Aug | Sept | Oct | Nov |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HPC Services Availability | | | | | | | | | | | | |
| Availability in Core Time (% of time) | 0 | 0 | -0.039 | -0.058 | -0.039 | 0.078 | 0 | 0.039 | 0.039 | 0.078 | 0.039 | 0.039 |
| Availability out of Core Time (% of time) | -0.047 | -0.047 | -0.047 | -0.047 | -0.047 | 0 | -0.047 | -0.039 | -0.047 | 0.078 | -0.039 | 0.078 |
| Number of Failures in month | -0.009 | 0 | -0.008 | -0.008 | -0.008 | 0.008 | -0.008 | 0 | 0 | 0.008 | 0.008 | 0 |
| Mean Time between failures in 52 week rolling period (hours) | -0.008 | 0 | 0 | -0.008 | -0.008 | 0 | -0.008 | 0 | 0 | 0 | 0 | 0 |
| 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 | -0.019 | -0.016 | 0 | 0.016 | -0.016 | 0 | -0.016 | -0.019 | 0.0312 | 0 | -0.016 |
| Administrative Queries - Max Time to resolve 95% of all queries | -0.019 | -0.016 | -0.019 | -0.016 | 0 | -0.019 | -0.019 | -0.019 | -0.016 | -0.01551 | -0.01551 | -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: | -0.06 | -0.06 | -0.09 | -0.09 | -0.07 | 0.00 | -0.06 | -0.04 | -0.04 | 0.07 | -0.03 | 0.02 |

Table 3 gives Service Credit values for the month of November. 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.

**Table 3**

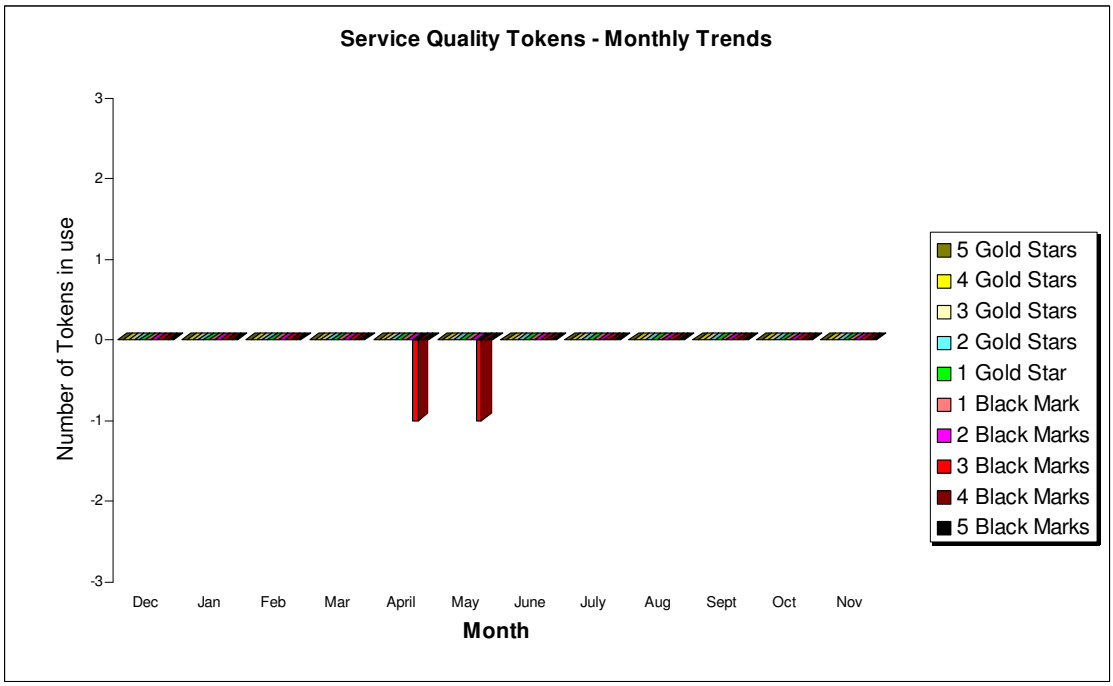
## 2.2 Service Quality Tokens

The position at the end of November 2003 is that none of the 457 users have awarded any tokens 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 number of users has seen a drop over the past two months due to a number of projects which have recently come to an end.

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




The current status of the Stendahl tokens is that there are no black marks or gold stars 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 160.3% of Baseline capacity.

**Job Throughput Against Baseline CSAR Service Provision**

**Period: 1st to 30th November 2003**

| | | | |
|---|---|---|---|
| | **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? | 17.86 | 28.64 | **160.3%** |
| | **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? | 17.86 | 29.4 | 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? | | 3 | 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? | | 77% | 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 | 87% | No |

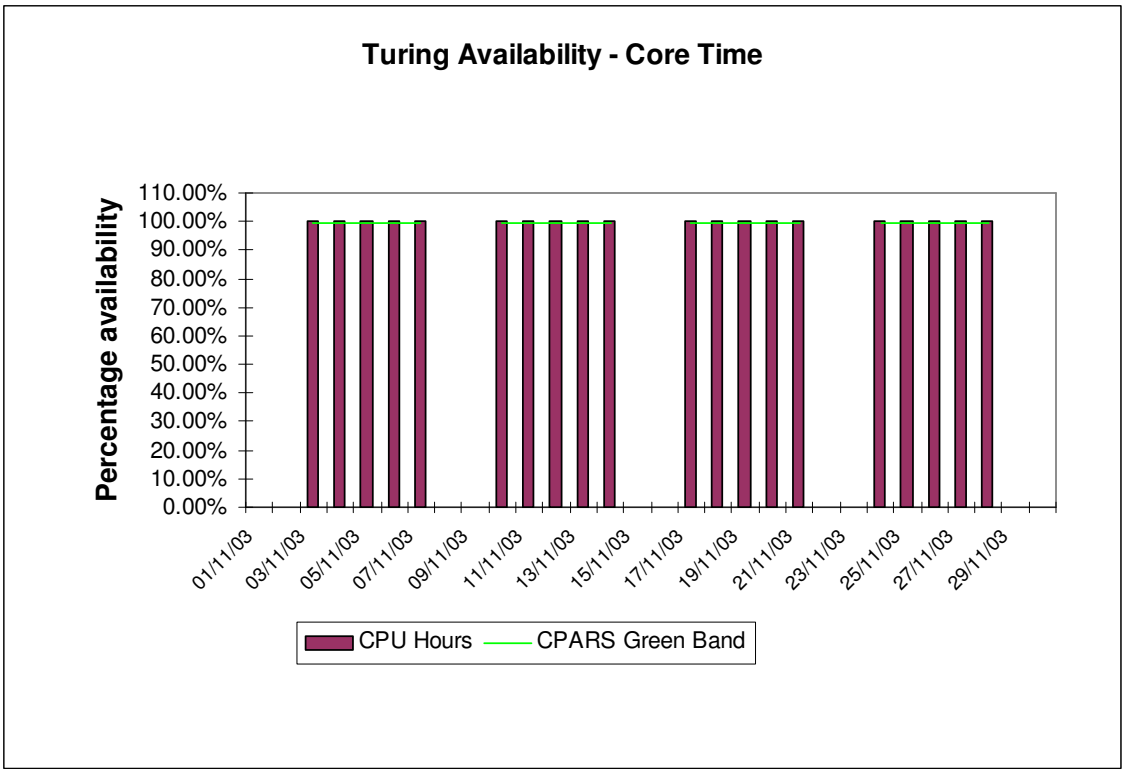
# 3. System Availability

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.

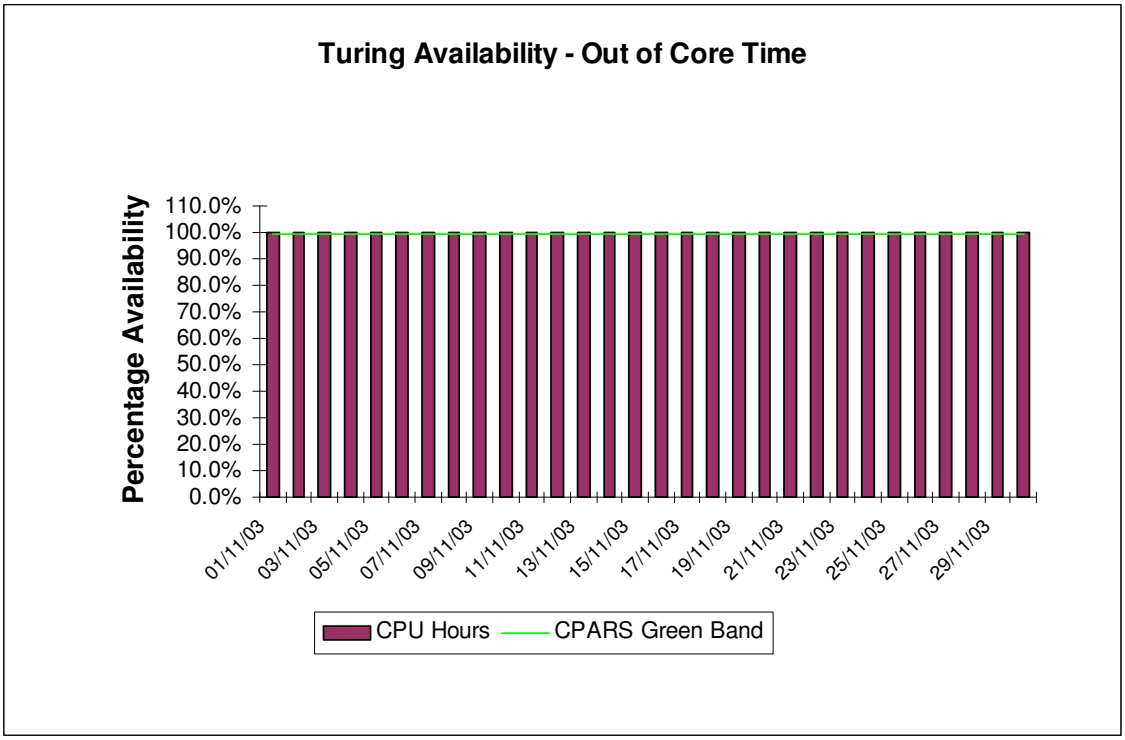
## 3.1 Cray T3E-1200E System (Turing)

The following graphs show the availability of Turing both in core time and out of core time respectively during the period of 1st to 30th November.

Turing availability for November:



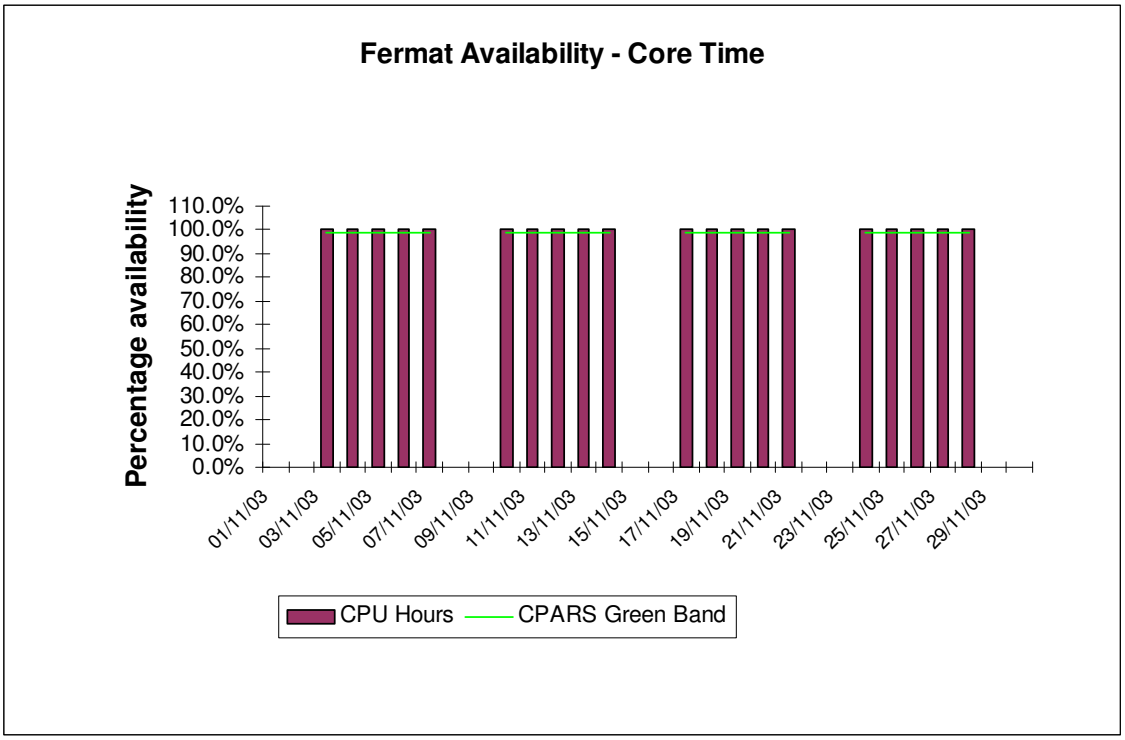

Availability of Turing in core time during November was excellent with no outages.



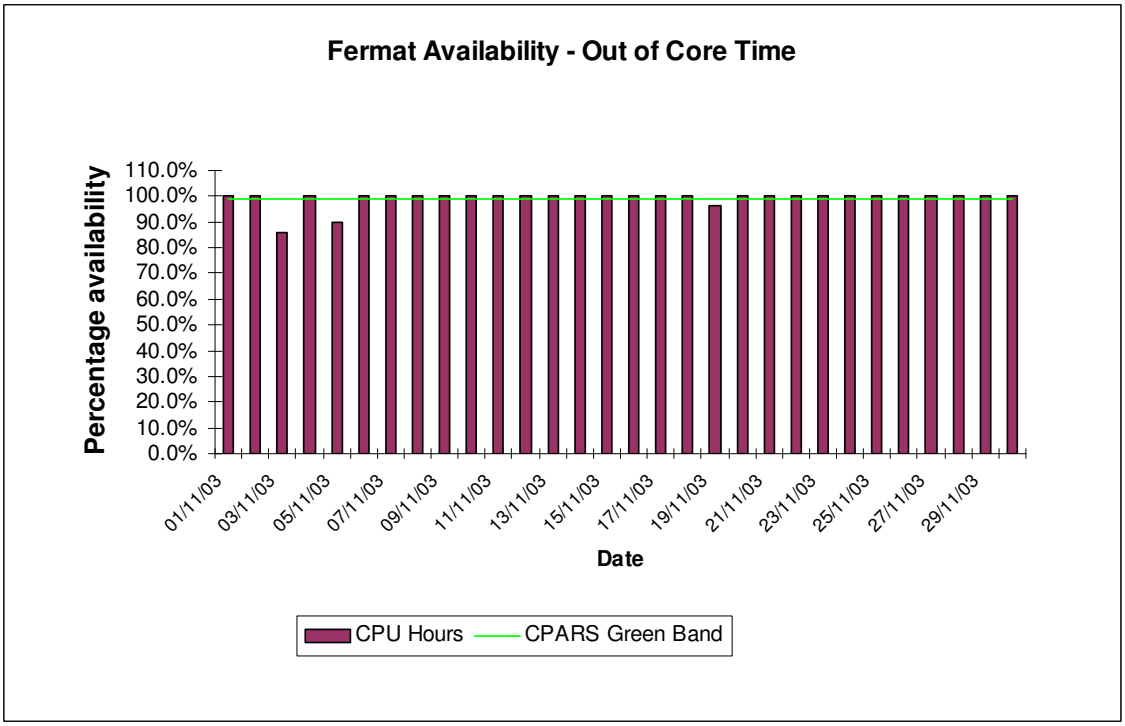

Availability of Turing out of core time during November was excellent. There were no outages this month.

### 3.2 SGI Origin2000 System (Fermat)

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



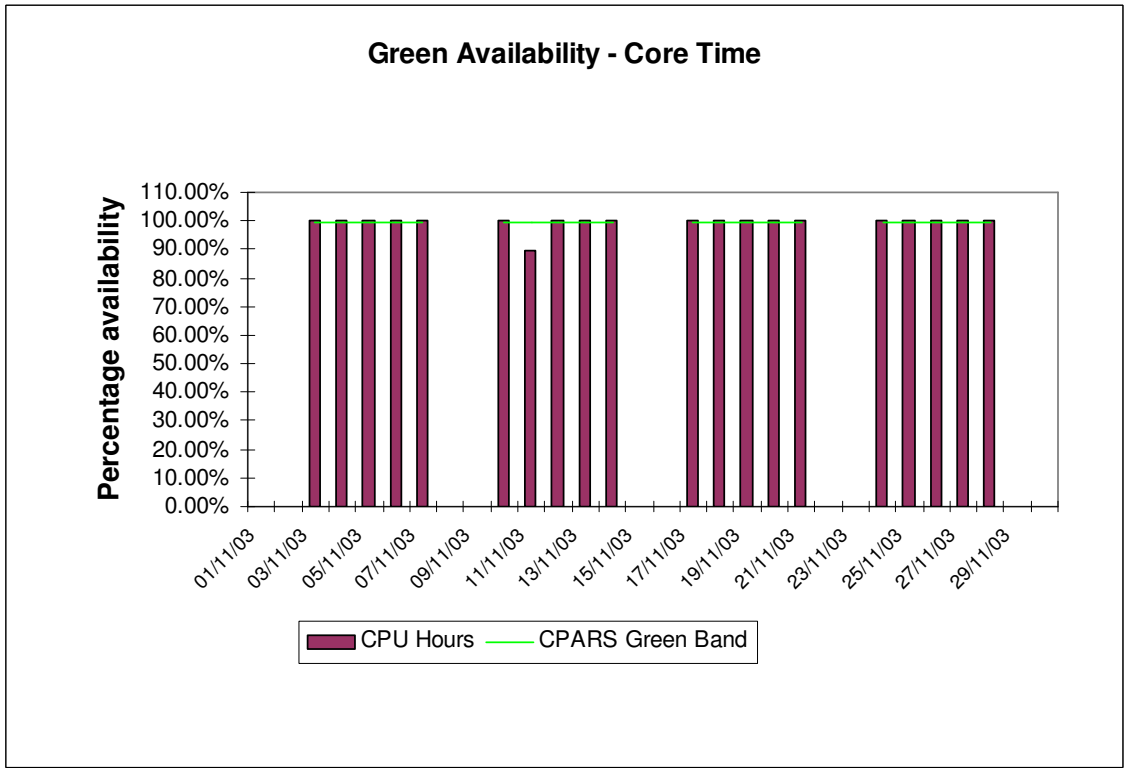

Availability of Fermat in core time during November was excellent, with no outages.



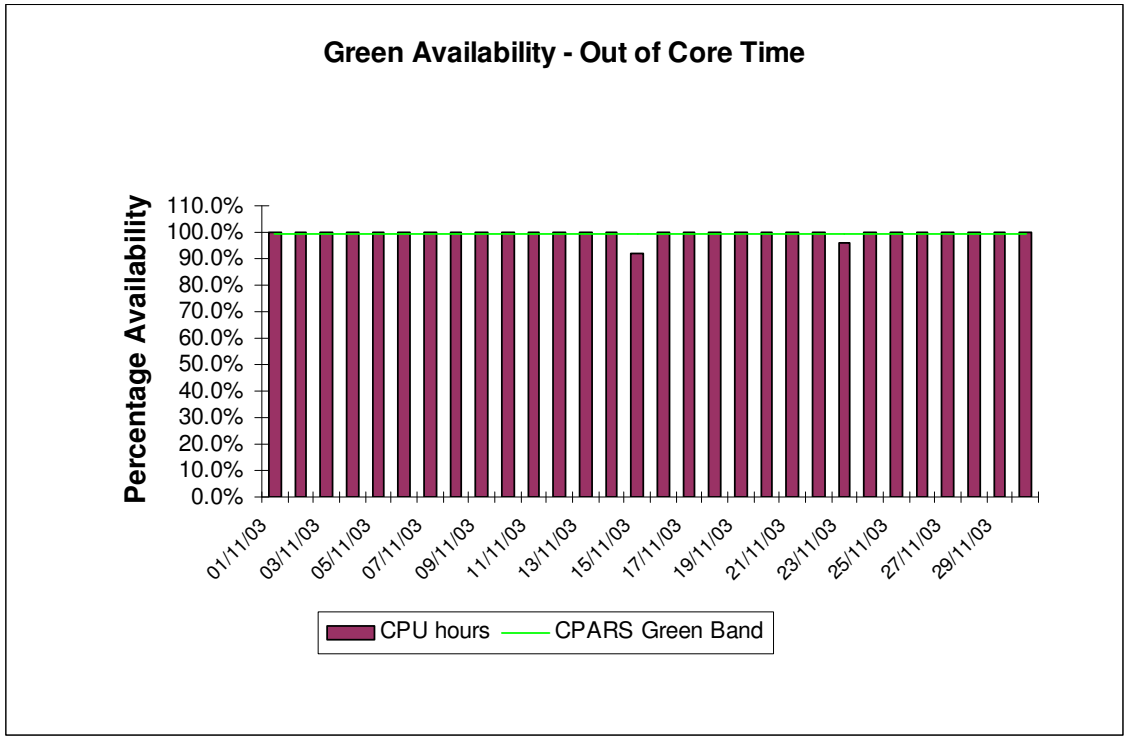

Availability of Fermat out of core time during November was unacceptable, with three outages. These were related to problems encountered with the SAN which have been investigated by SGI and a fix identified, to be applied shortly.

### 3.3 SGI Origin3000 System (Green)

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



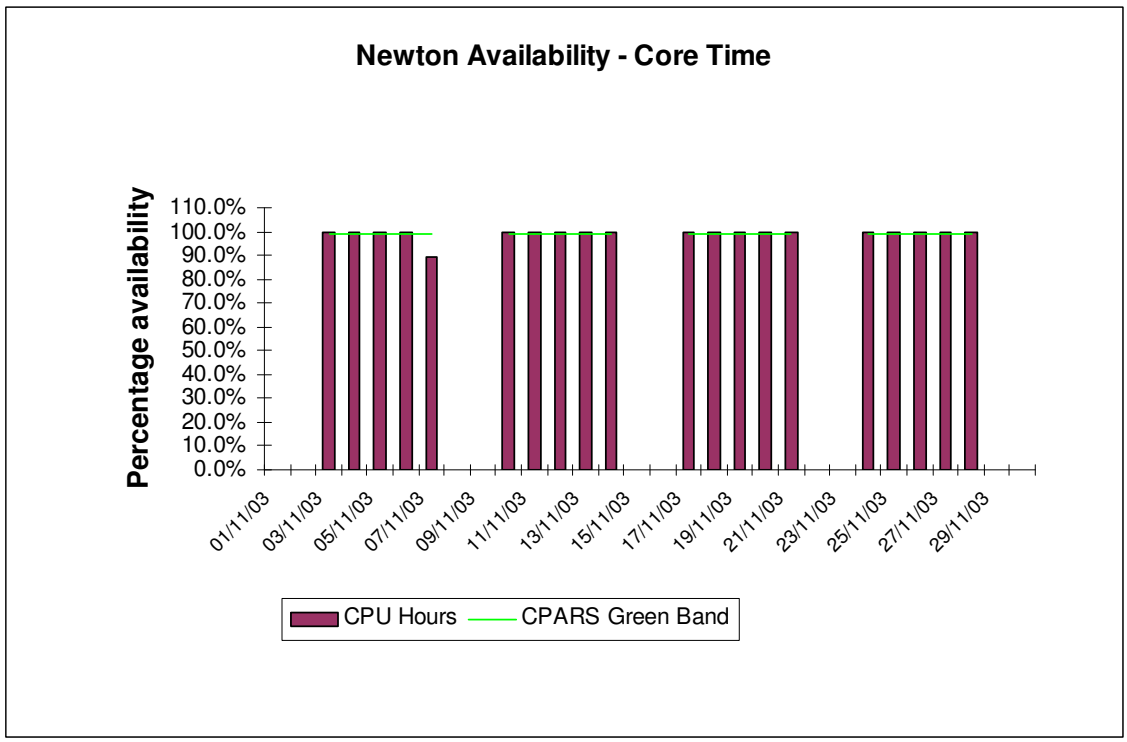

Availability of Green in core time during November was very good, with one outage on the 11th related to the previously-mentioned SAN issues.



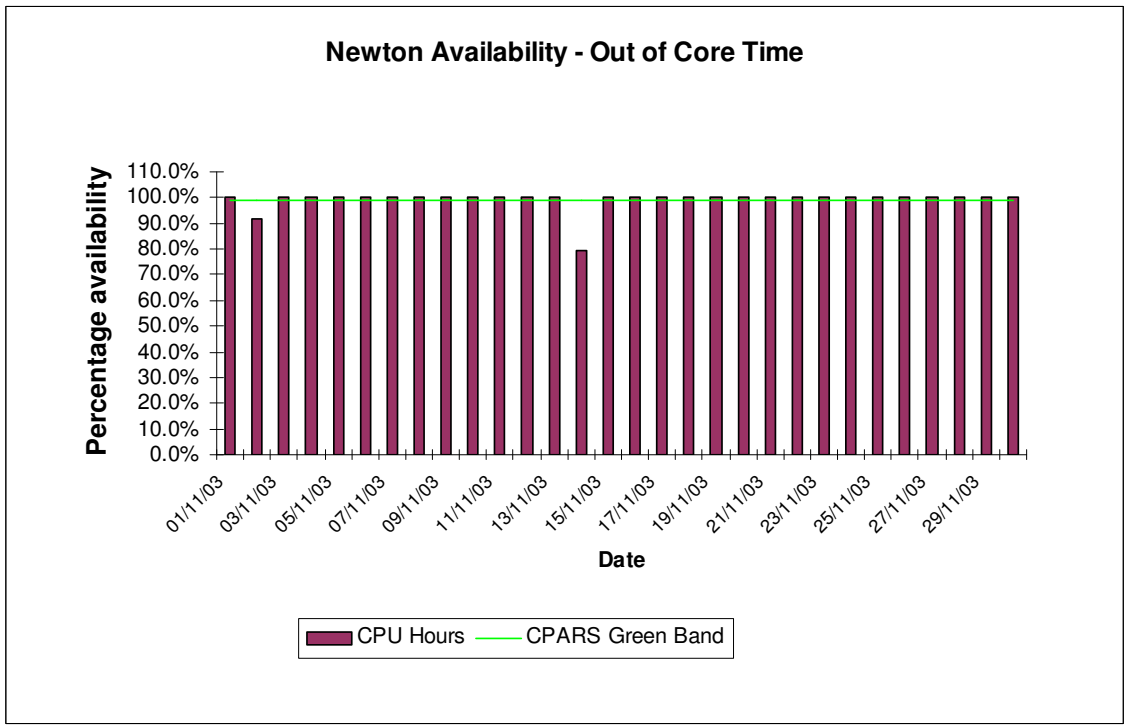

Availability of Green out of core time during November was good, with two outages related to the previously-mentioned SAN issues.

### 3.4 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 in core time during November was very good, with one outage on the 7th related to the previously-mentioned SAN issues.




Availability of Newton out of core time during November was good, with two outages related to the previously-mentioned SAN issues

# 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 November 1st to 30th is provided by Project/User Group, totalled by Research Council and overall. This covers:

| | | |
|---|---|---|
| • CPU usage | Turing: | 315,681 PE Hours |
| | Fermat: | 39,574.6 CPU Hours |
| | Wren (Batch): | 8.77 CPU Hours |
| | Wren (Interactive): | 246.88 CPU Hours |
| | Green: | 189,989 CPU Hours |
| | Newton: | 62,594 CPU Hours |
| • User Disk allocation | Turing: | 60.81 GB Years |
| | Fermat: | 105.75 GB Years |
| | SAN HV: | 28.47 GB Years |
| • HSM/tape usage | | 4,437.41 GB Years |

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

a) MPP/SMP (T3E/Origin) Usage by month, showing usage each month of CPU (GFLOP-Years as per NPB), split by Research Council and by system. The overall Capacity are shown by overlaid horizontal lines.

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. The Baseline and overall Capacity are shown by overlaid horizontal lines.

c) High Performance Disk (T3E) allocated for User Data by month, showing the allocated space each month in GBytes, split by Research Council. The Baseline Capacity (1 Terabyte) is shown by an overlaid horizontal line.

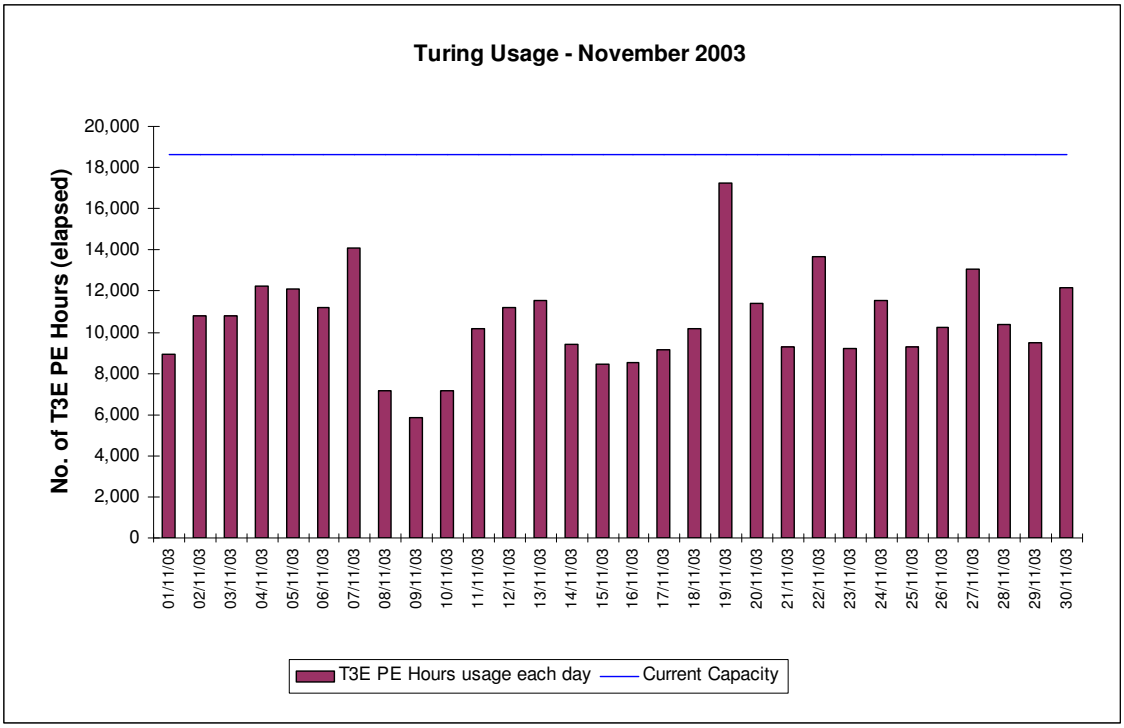
d) Medium Performance Disk (Origin) allocated for User Data by month, showing the allocated space each month in GBytes, split by Research Council. The Baseline Capacity (1.5 Terabytes) is shown by an overlaid horizontal line.

e) HSM/Tape Usage (T3E) 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 Cray T3E-1200E System (Turing)

The following graph shows the usage of Turing during each day of November 2003. Note that there is some variance on a day-to-day basis as the accounts record job times, and thus CPU usage figures, at the time of job completion which could be the second actual day for large jobs. At present, there is a 24 hour limit on jobs so that they are check-pointed, and computational time lost due to any failure is well managed. Higher limits can be set for individual jobs on request.

Turing usage for November:



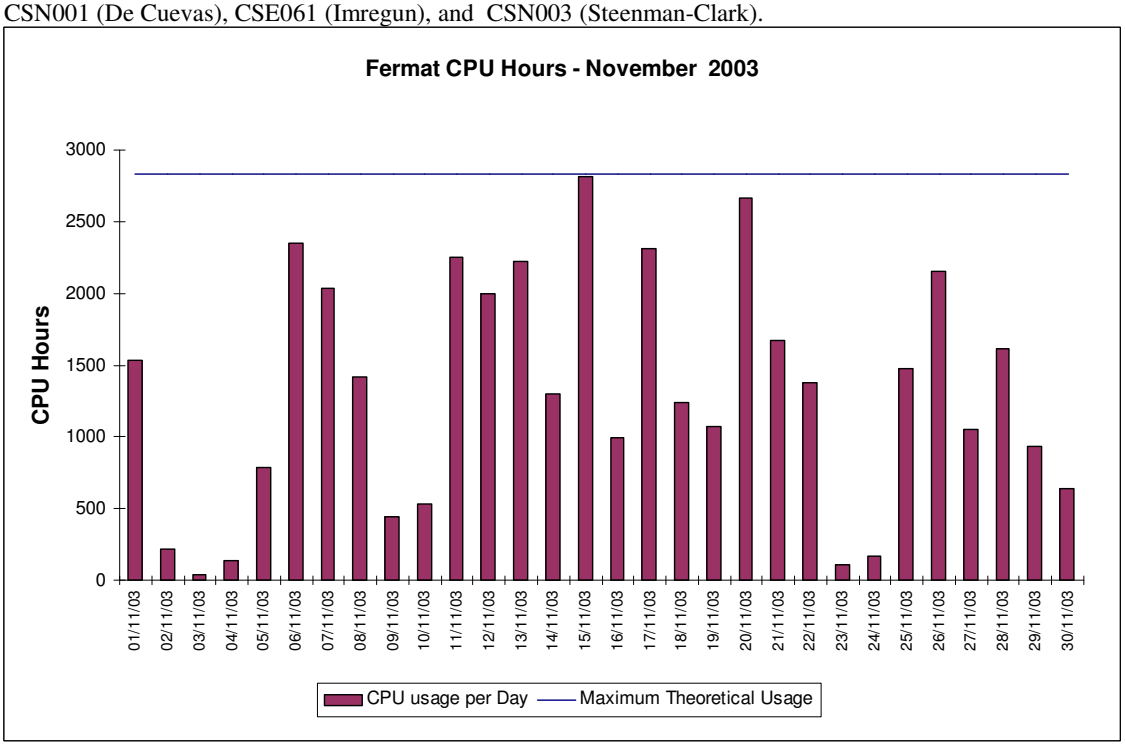

The above usage graph for the Turing system shows that Turing was reasonably utilised during November.

Fine tuning of the CfS scheduling system will continue to ensure minimal wasting of PE resource, in order to fit in a number of different sized jobs (e.g. 32, 64, 128, 256) thus facilitating maximised job throughput.

In particular, Turing will continue to start large jobs above 256 PEs, including 512 PEs, when they are queued subject to the overall workload.

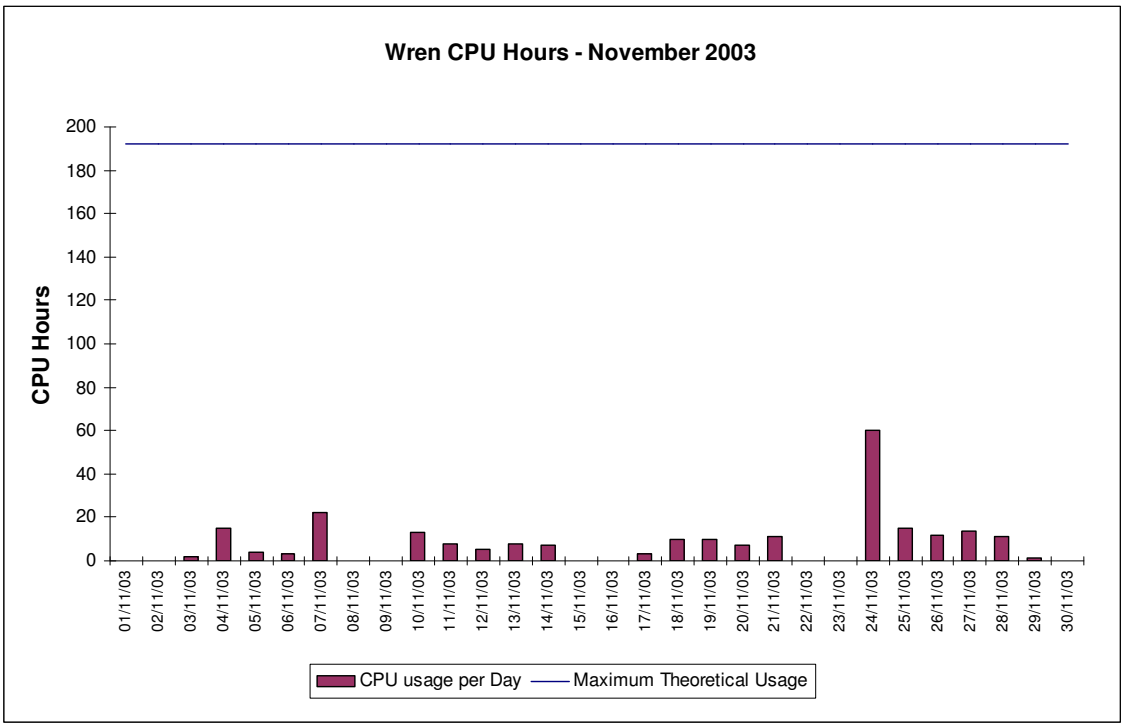
## 4.2 SGI Origin2000 System (Fermat)

The usage of the Origin system was higher this month. The groups most heavily using the Fermat system are CSN001 (De Cuevas), CSE061 (Imregun), and CSN003 (Steenman-Clark).



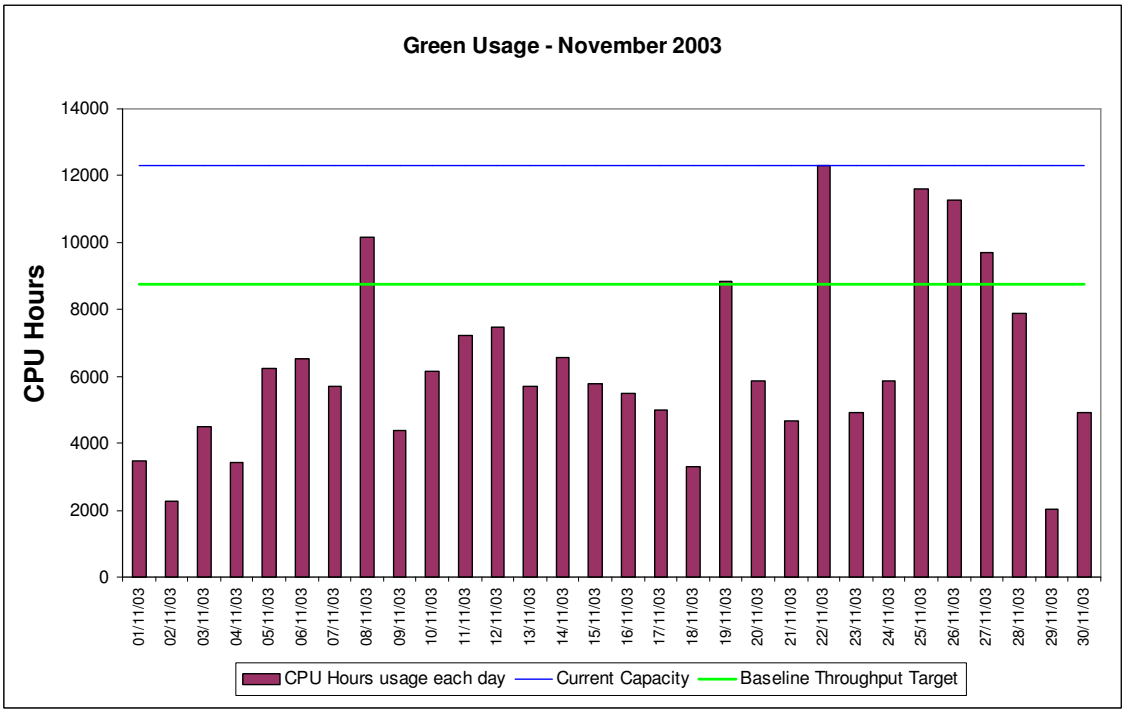

The above graph shows the variable utilisation of the Origin 128. As interactive usage was removed from Fermat at the beginning of March, Fermat is now a dedicated batch system.

## 4.3 SGI Origin300 System (Wren)




The above graph shows the utilisation of the SGI system Wren for the month of November. Wren has taken over from Fermat as the interactive machine.

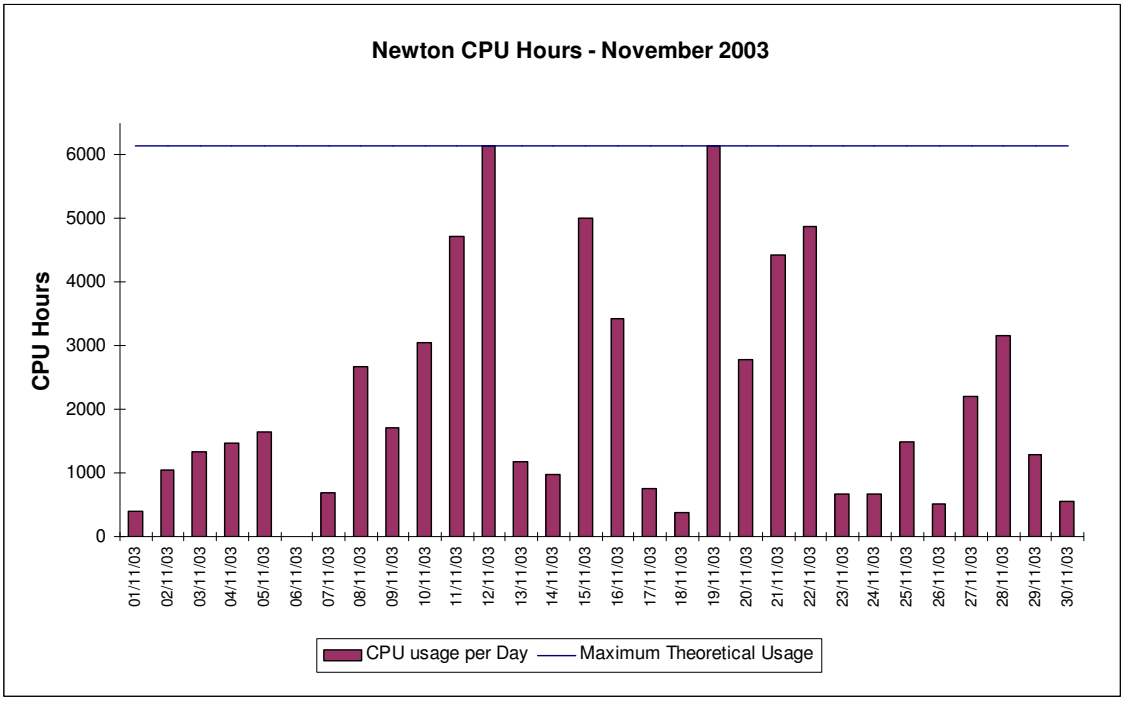
## 4.4 SGI Origin3000 System (Green)




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

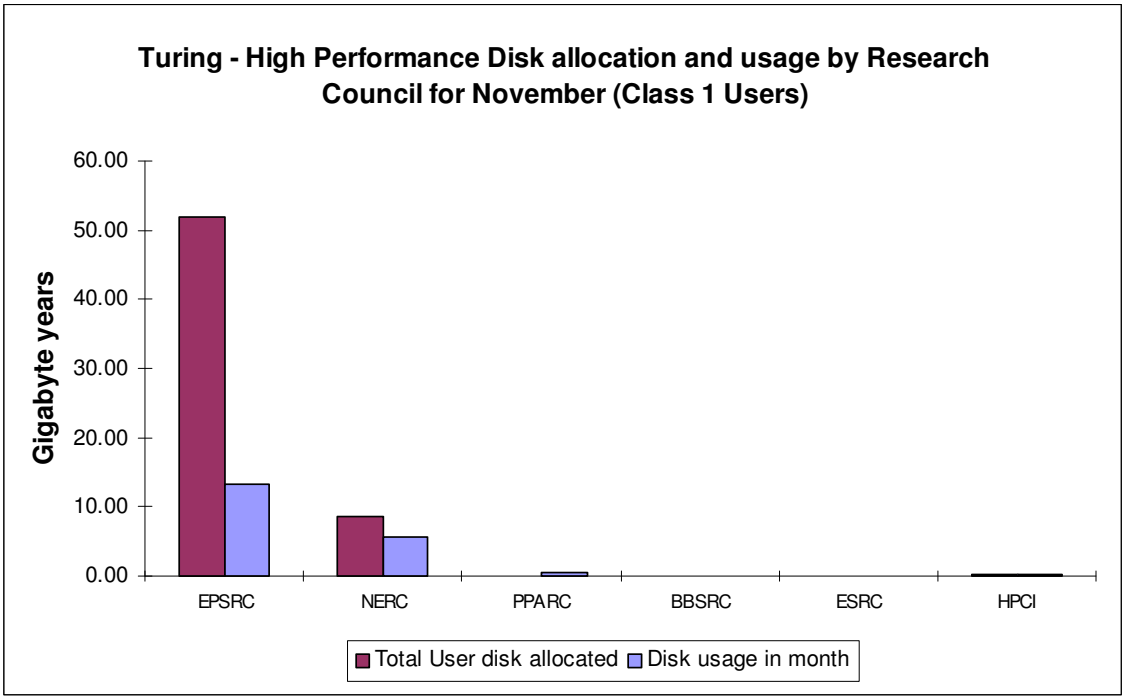
## 4.5 SGI Altix3700 System (Newton)

The following graph shows the daily usage during November for the newly-introduced Altix system Newton.

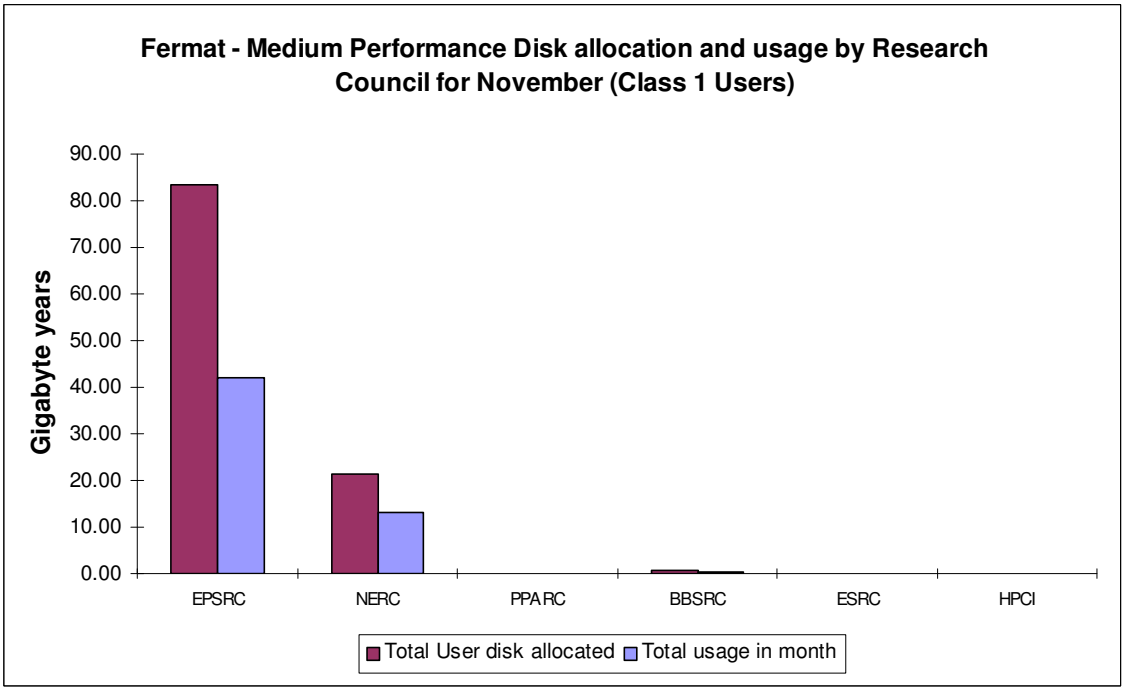


## 4.6 Disk/HSM Usage Chart

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

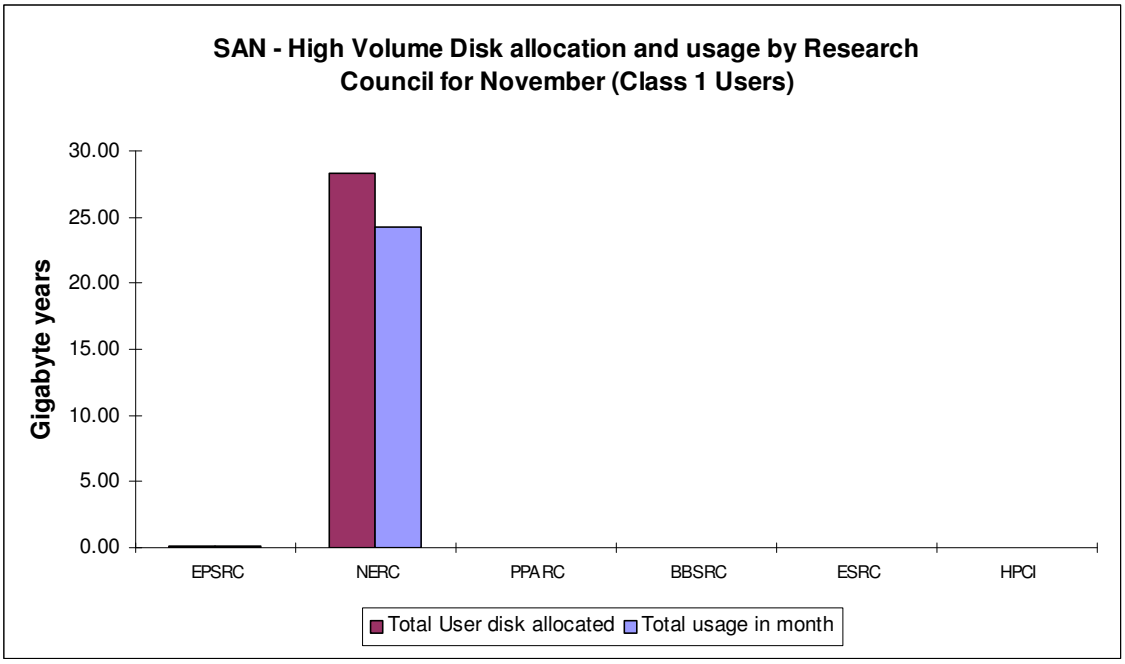


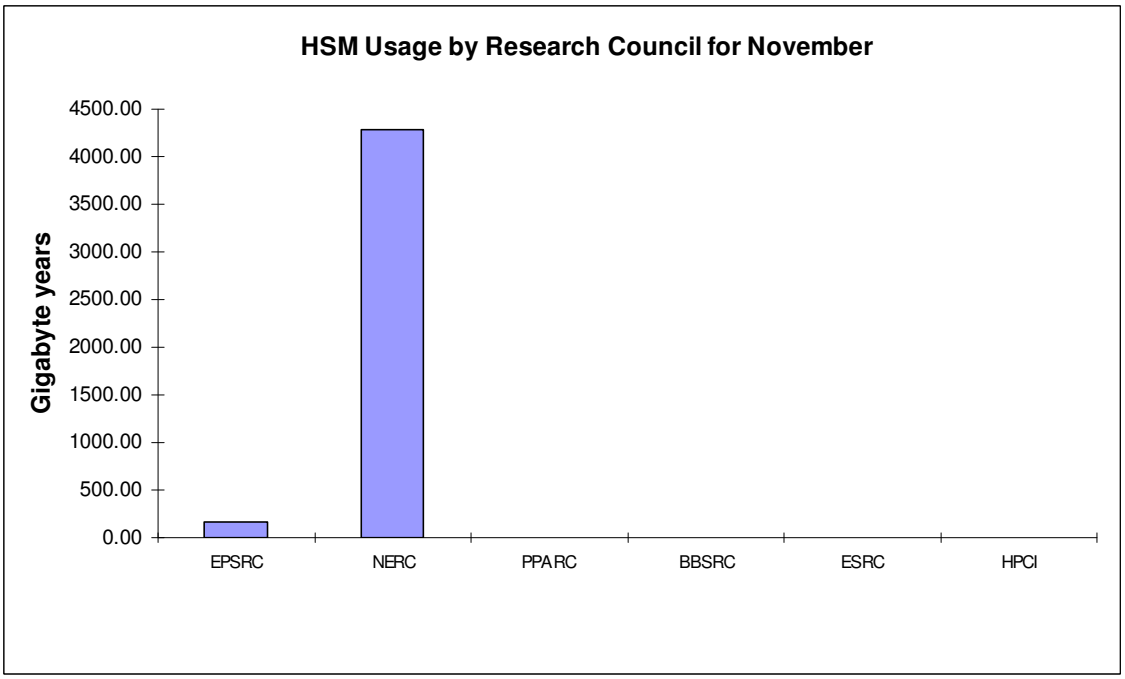

The above graph shows actual usage on average against the current allocation of disk on the Turing system.




Shown above is the disk allocation against usage on average of the disk on Fermat.

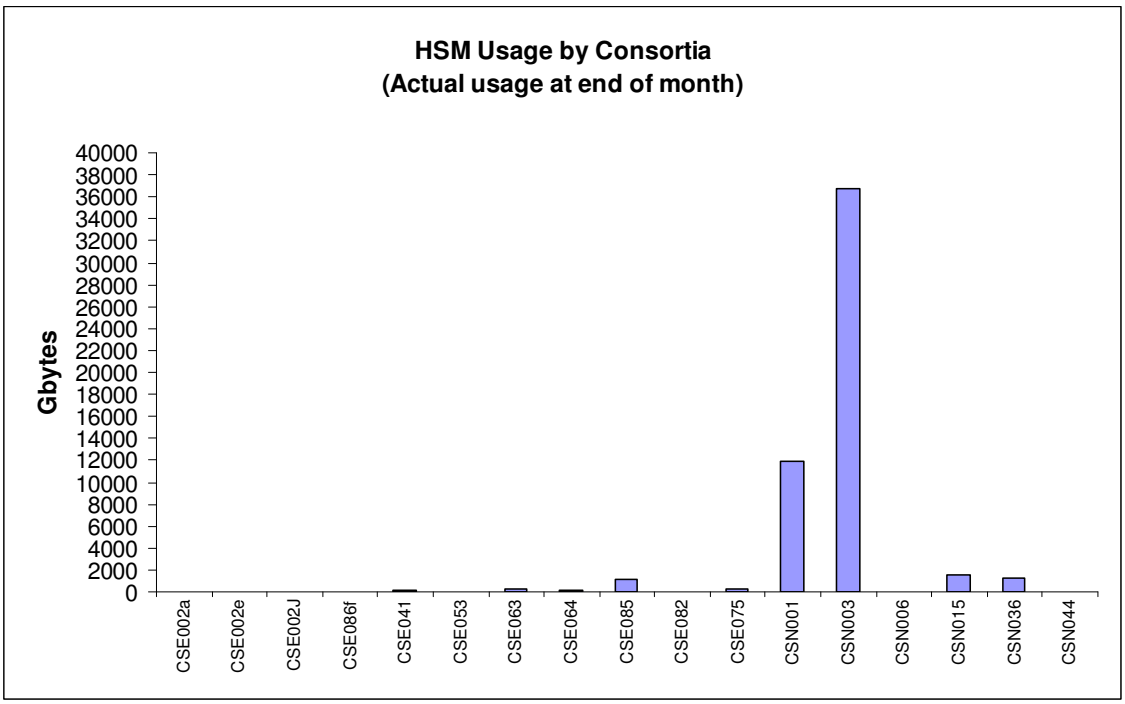
The following graph shows the disk allocation against usage on average of the new SAN High Volume (HV) disk.




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

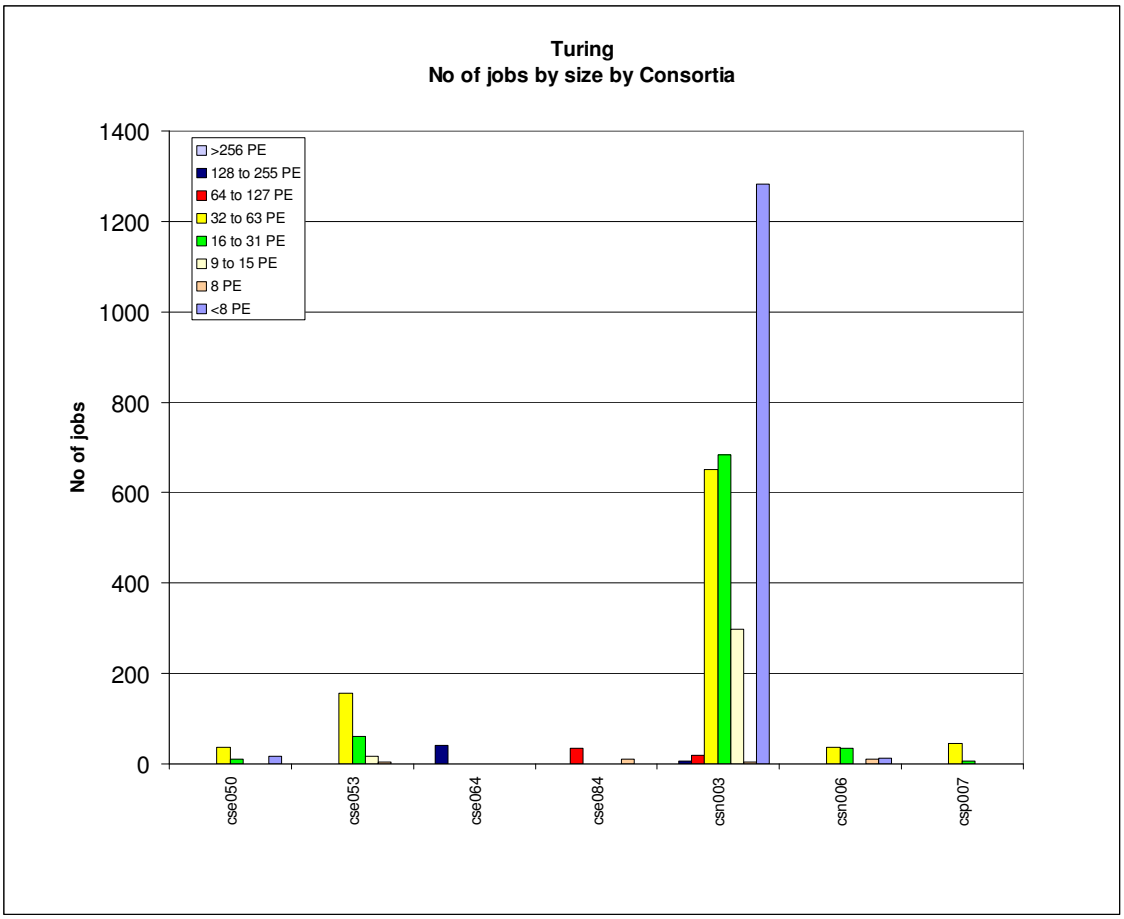
The next graph gives actual usage of HSM by Consortia.




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

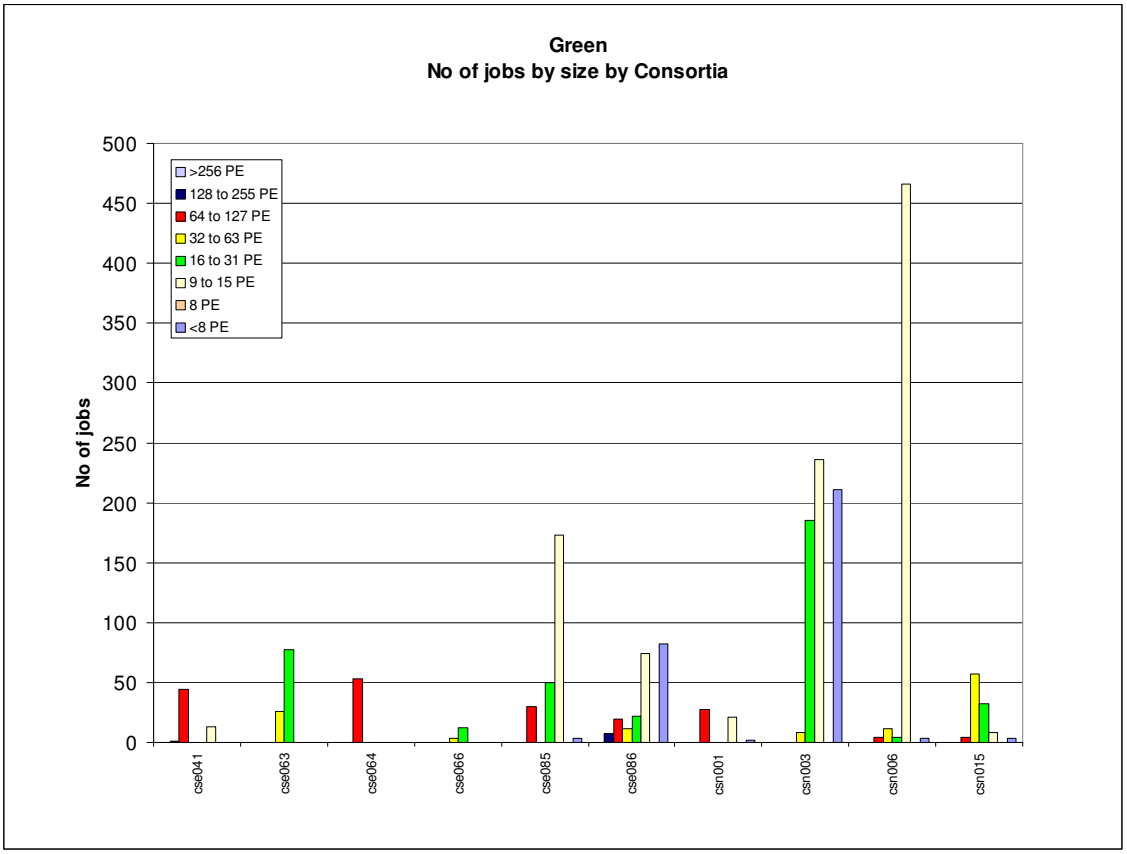
## 4.6 Processor Usage and Job Statistics Charts

Job statistics for Turing:



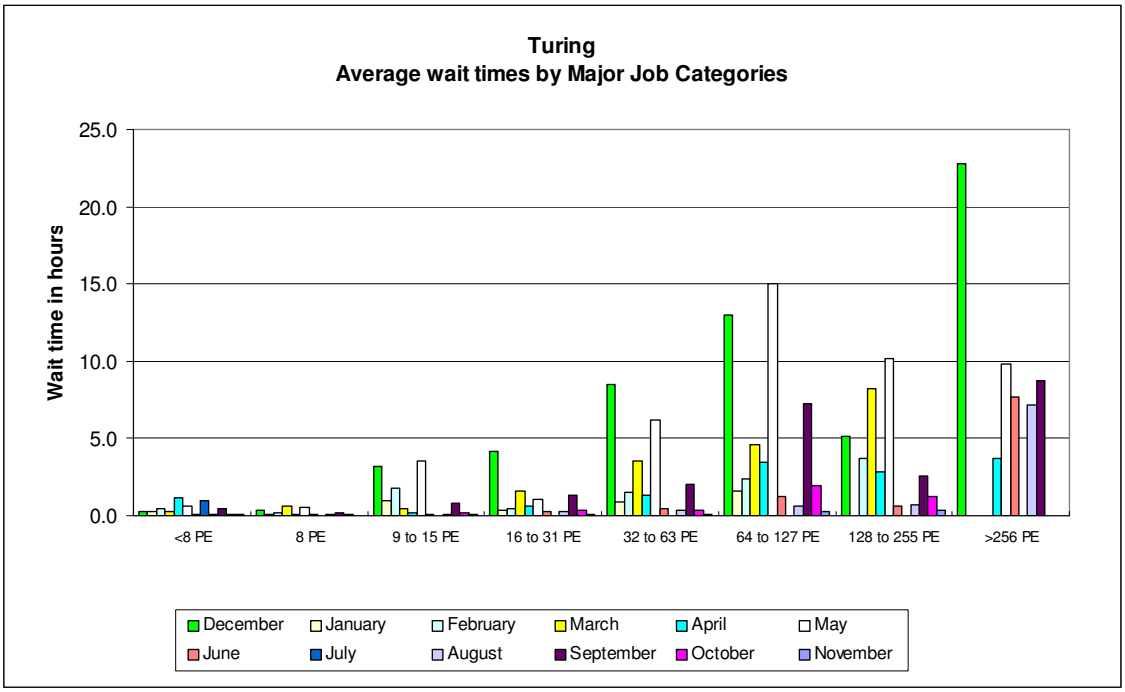

The above graph shows the number of jobs of the major sizes run in the period 1st to 30th November 2003.

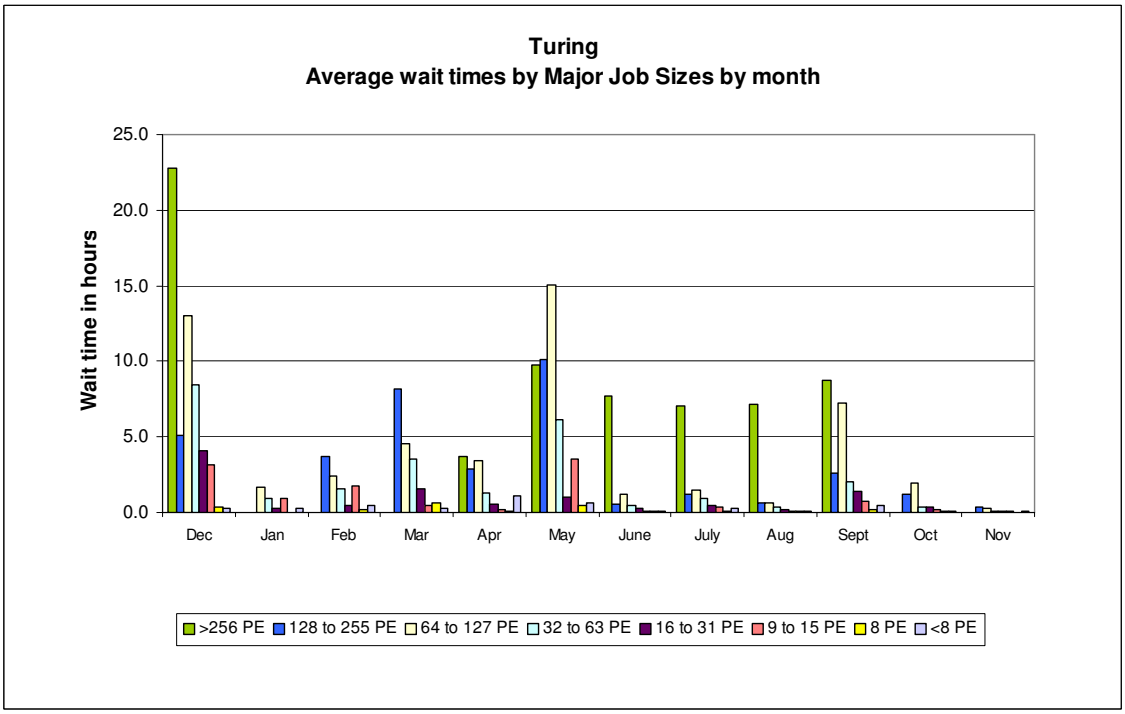
Job statistics for Green:




The above graph shows the number of jobs of the major sizes run in the period 1st to 30th November 2003.

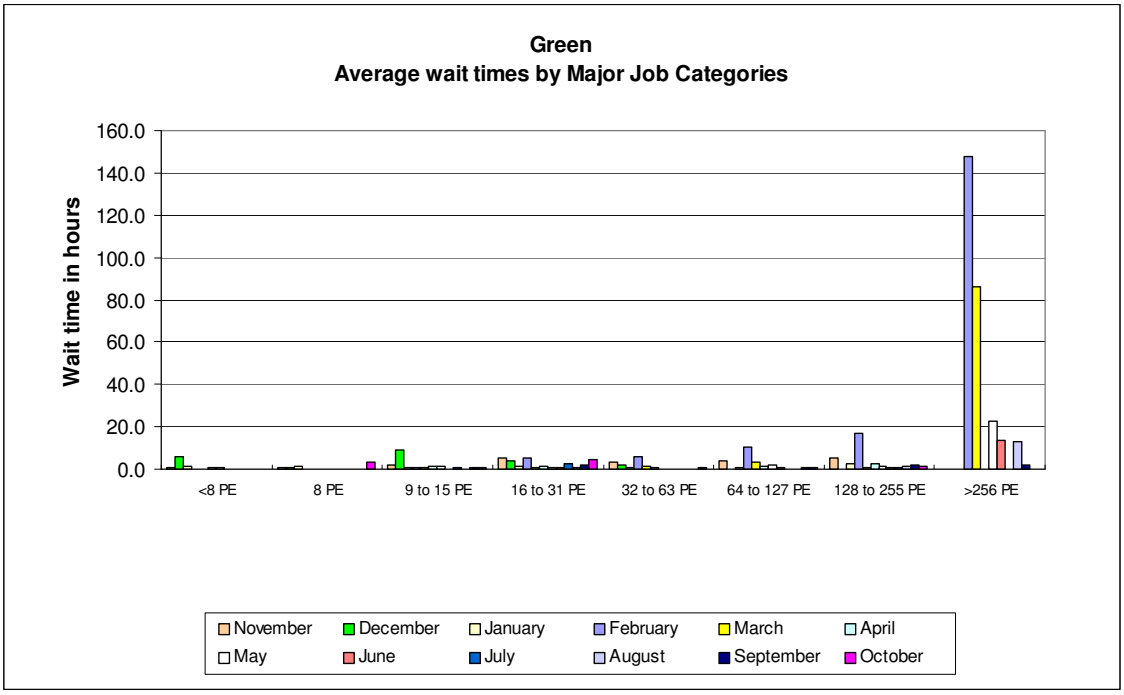
The next graph shows the wait times in hours on Turing for the major categories of jobs.

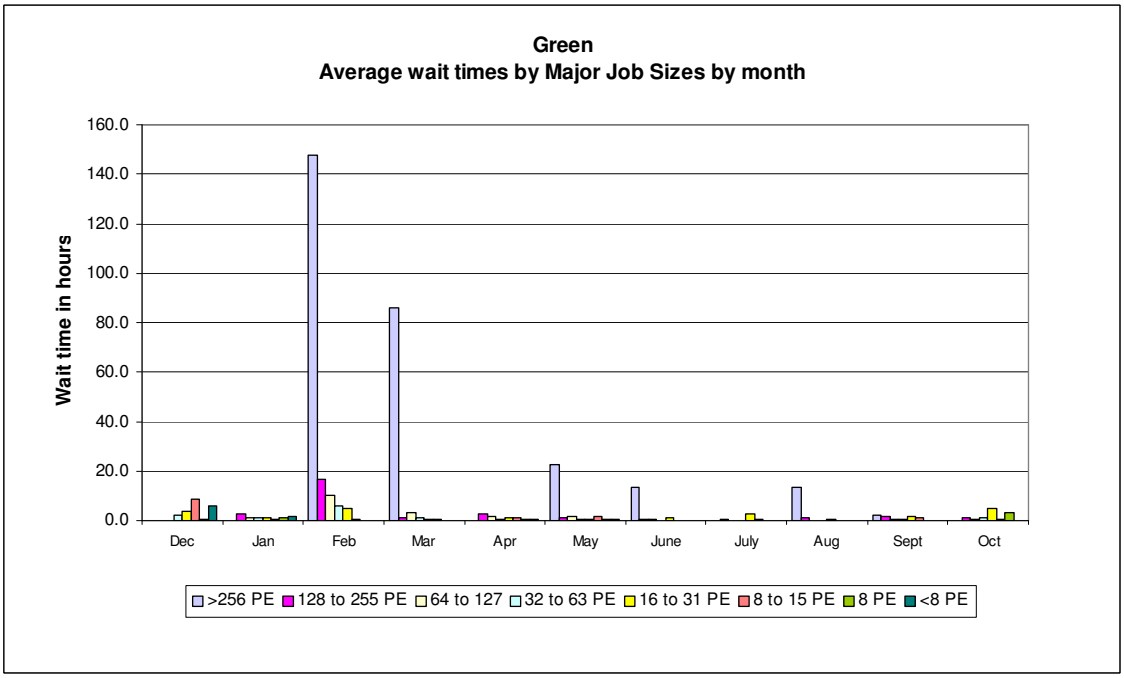


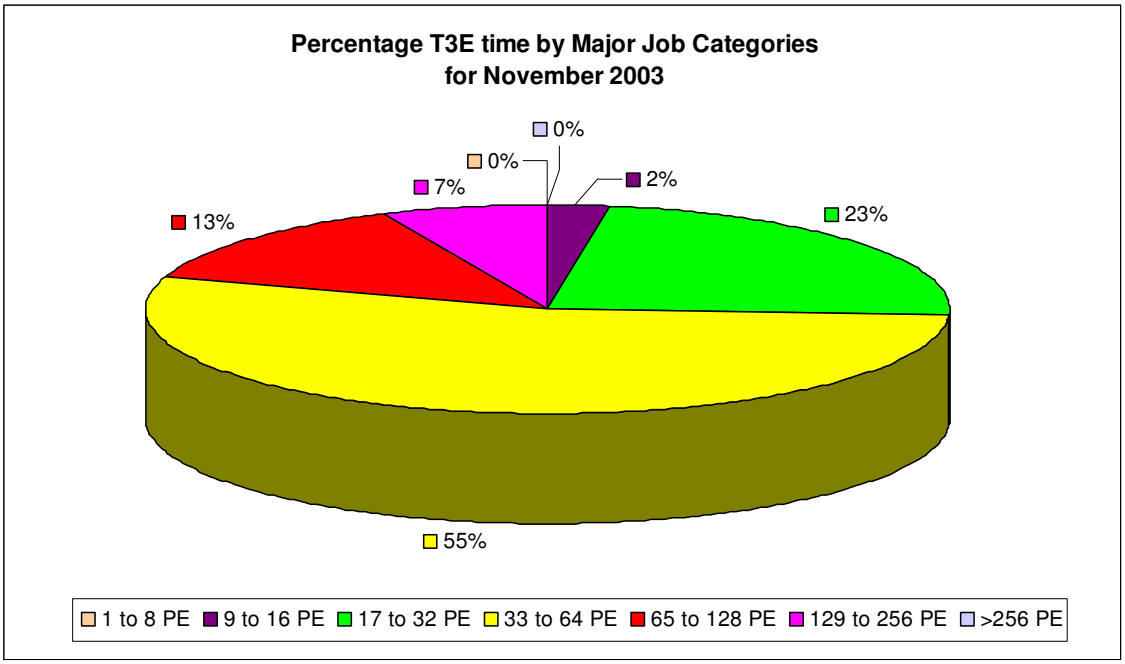

The chart above shows the average wait time trend on Turing over the last 12 months.

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

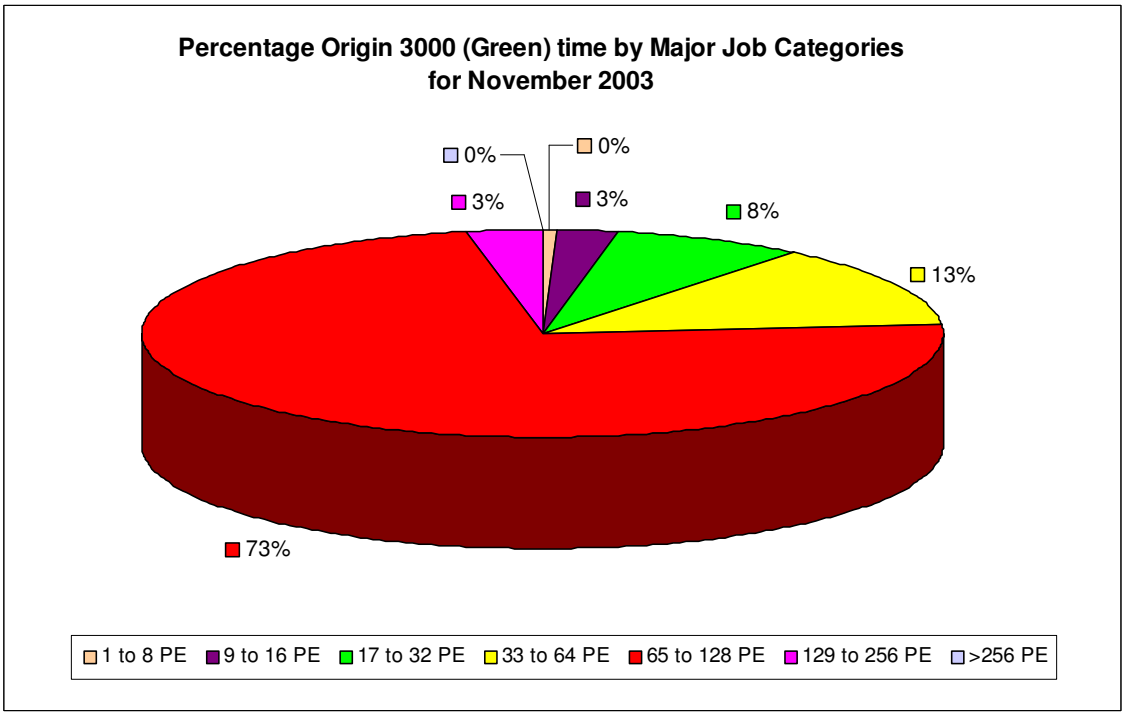


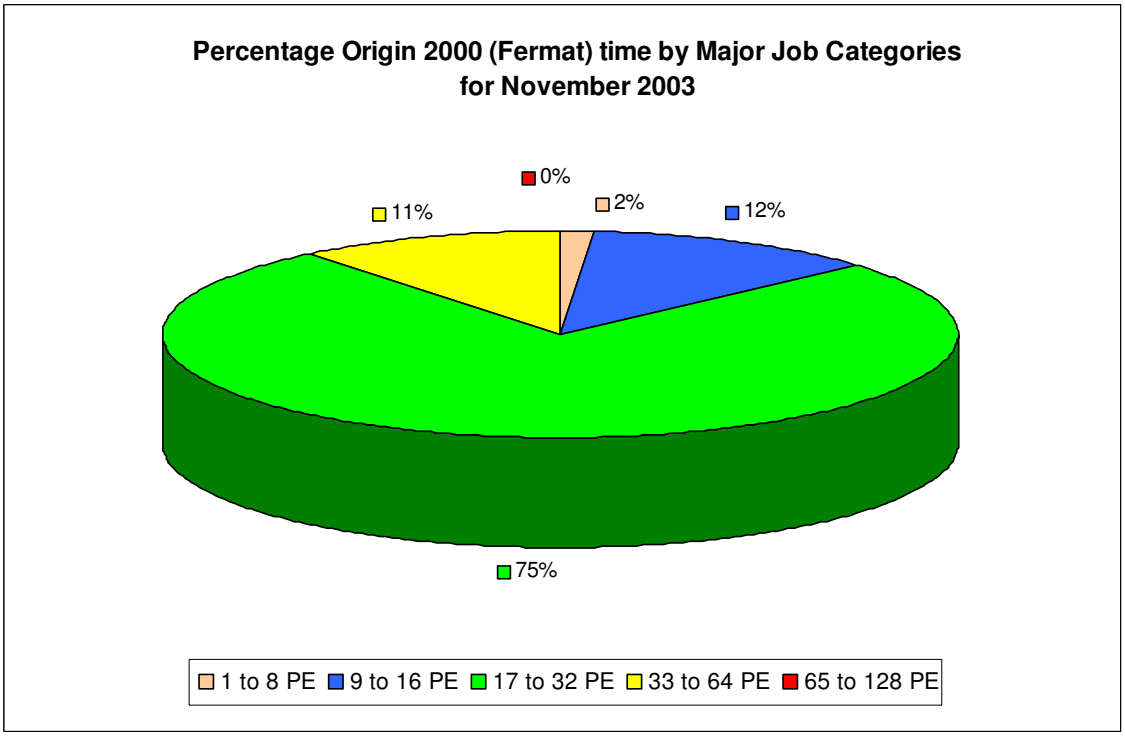

The chart above shows the average wait time trend on Green for the last 12 month period.



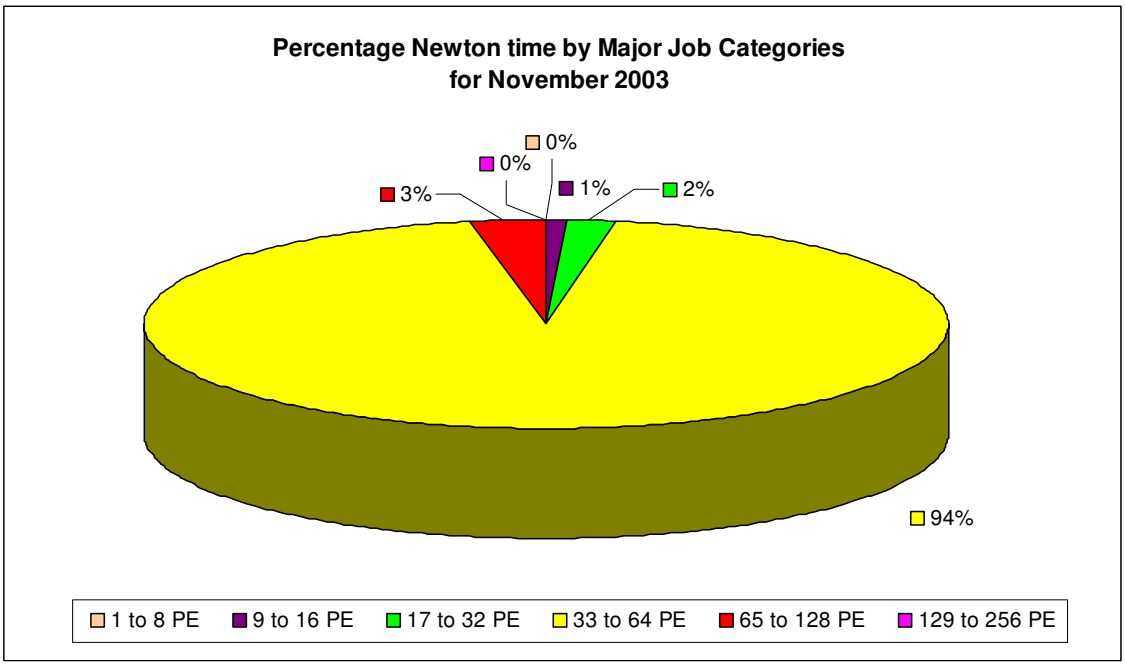

The greatest workload on Turing for November was in the PE range 33 to 64 with 62% of the total usage.



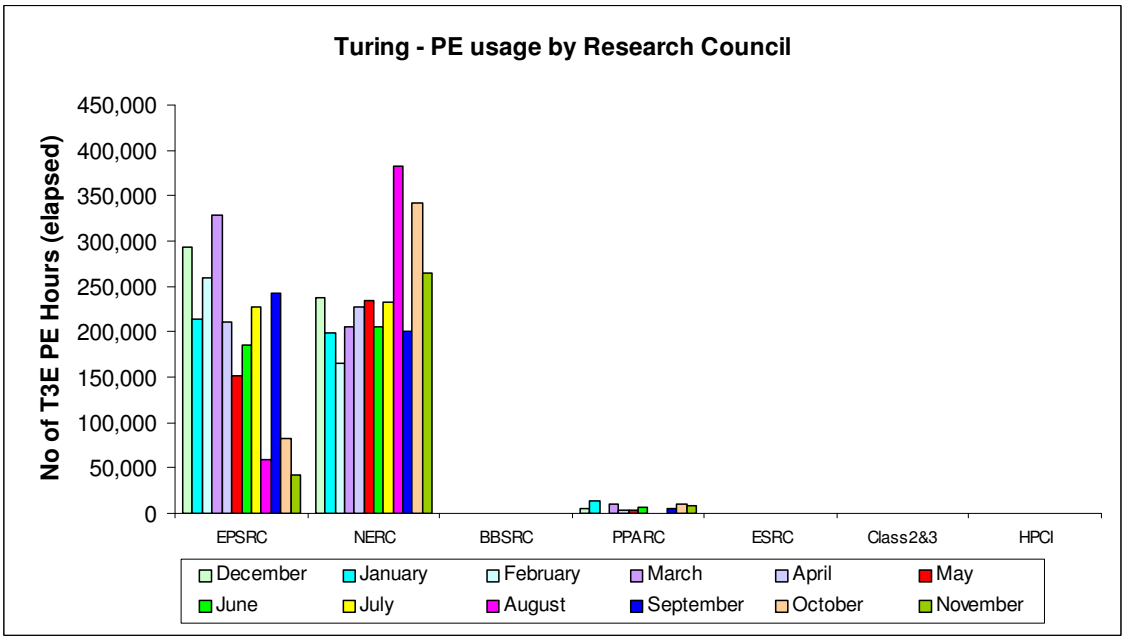

The greatest percentage of workload on Green was in the 129 to 256 PE range at 52% of total usage.



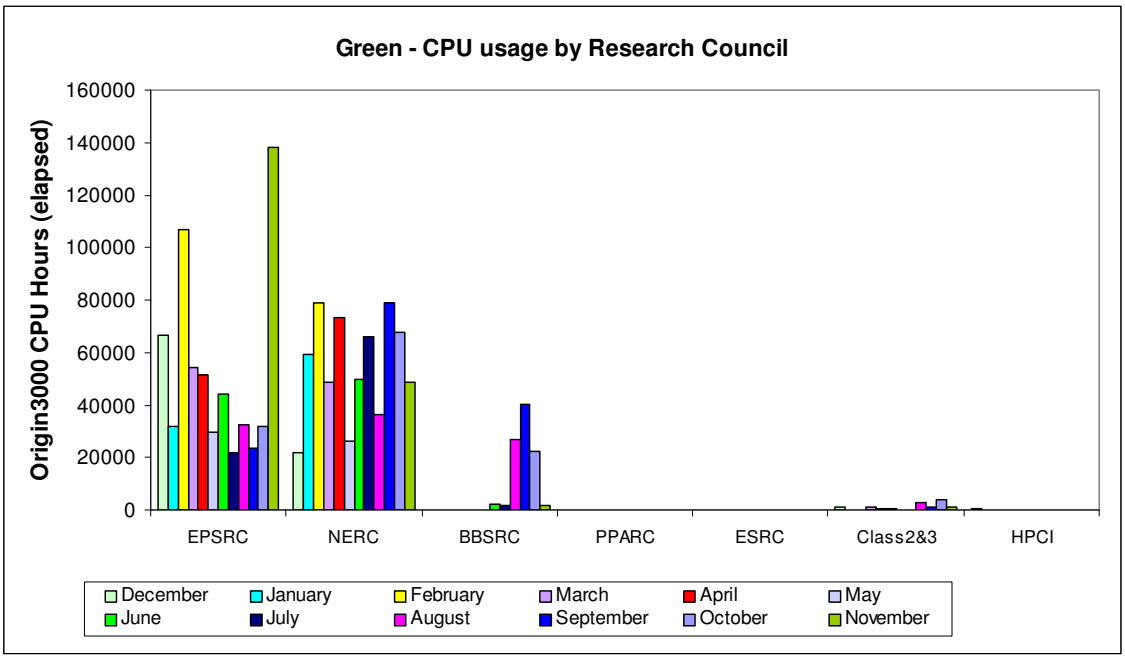

The greatest proportion of work on Fermat for November was in the 17 to 32 PE range at 62% of the total usage.



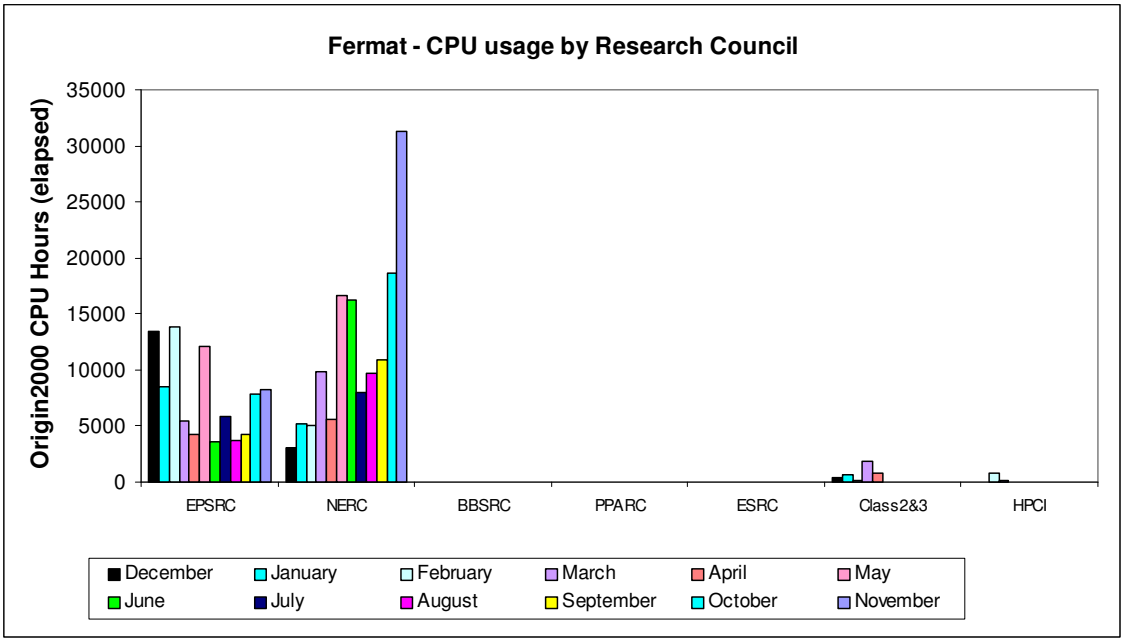

The majority of the workload during November for the new Altix system Newton was in the 33 to 64 PE range.




Turing PE usage is shown by Research Council during the past 12 months of service in the above chart.




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

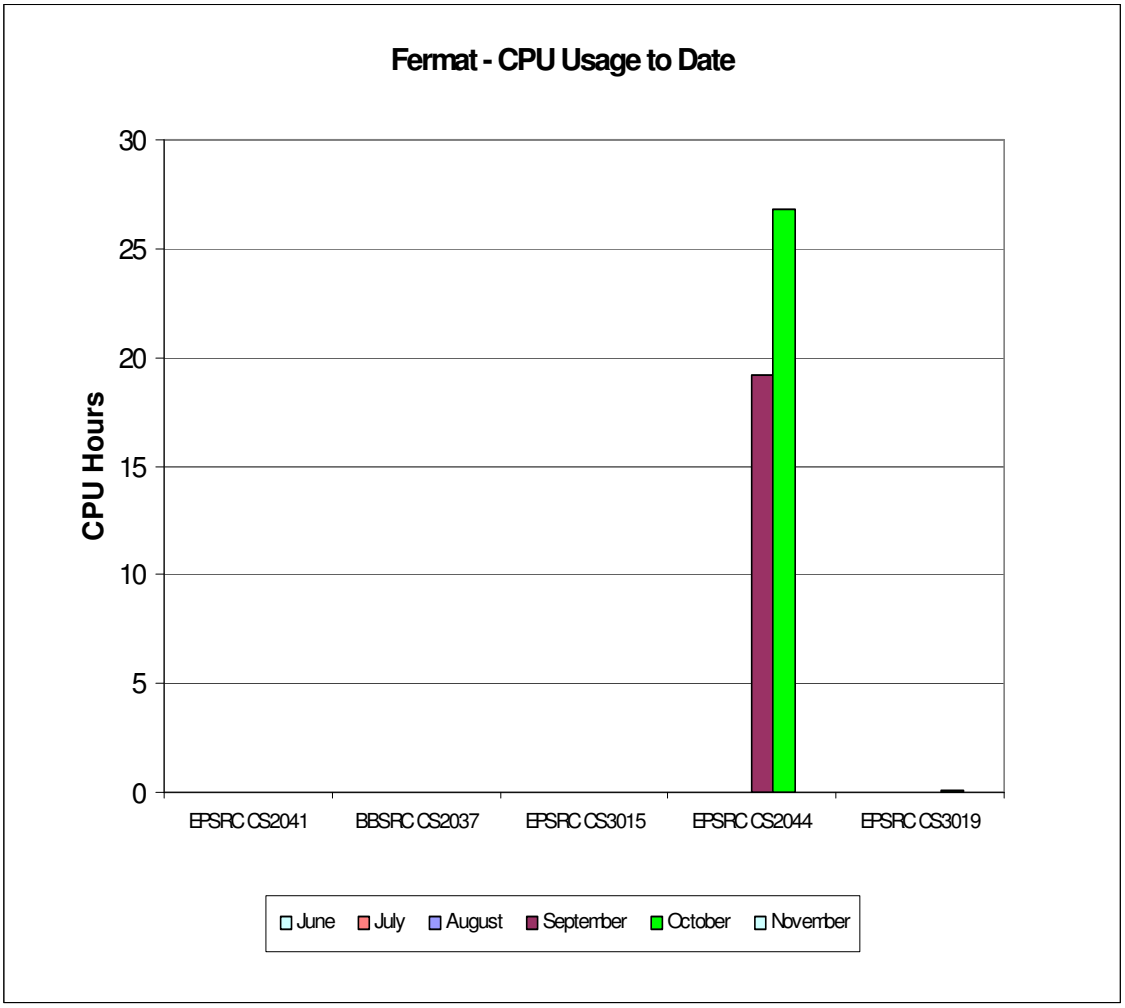



Origin 2000 CPU usage is shown by Research Council during the past 12 months of service in the above chart.

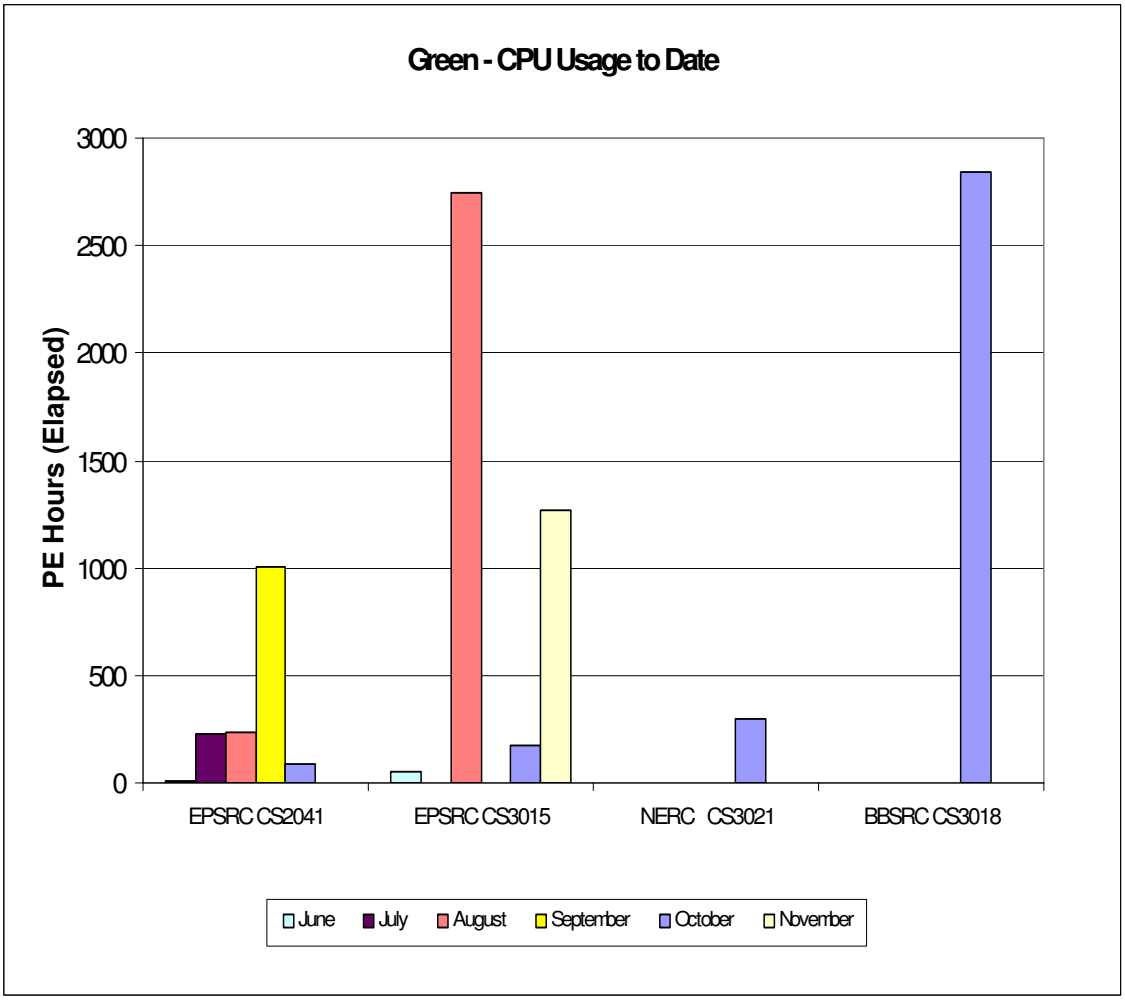
## 4.7 Class 2 & 3 Usage Charts

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.

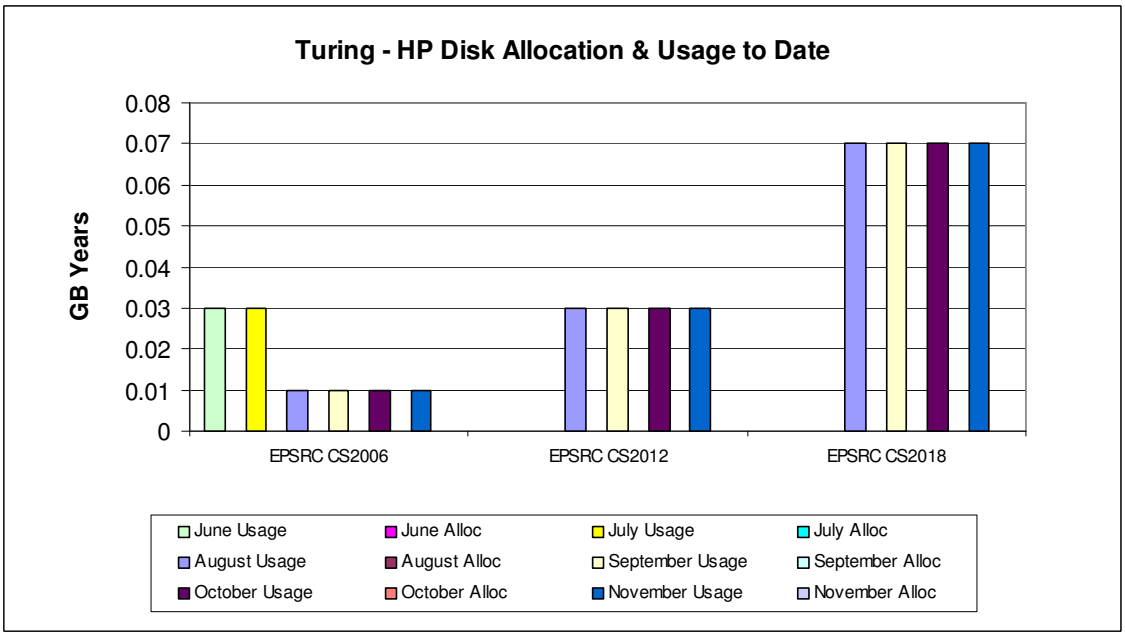
There is currently no PE usage of the Turing system by class 2 and class 3 users.



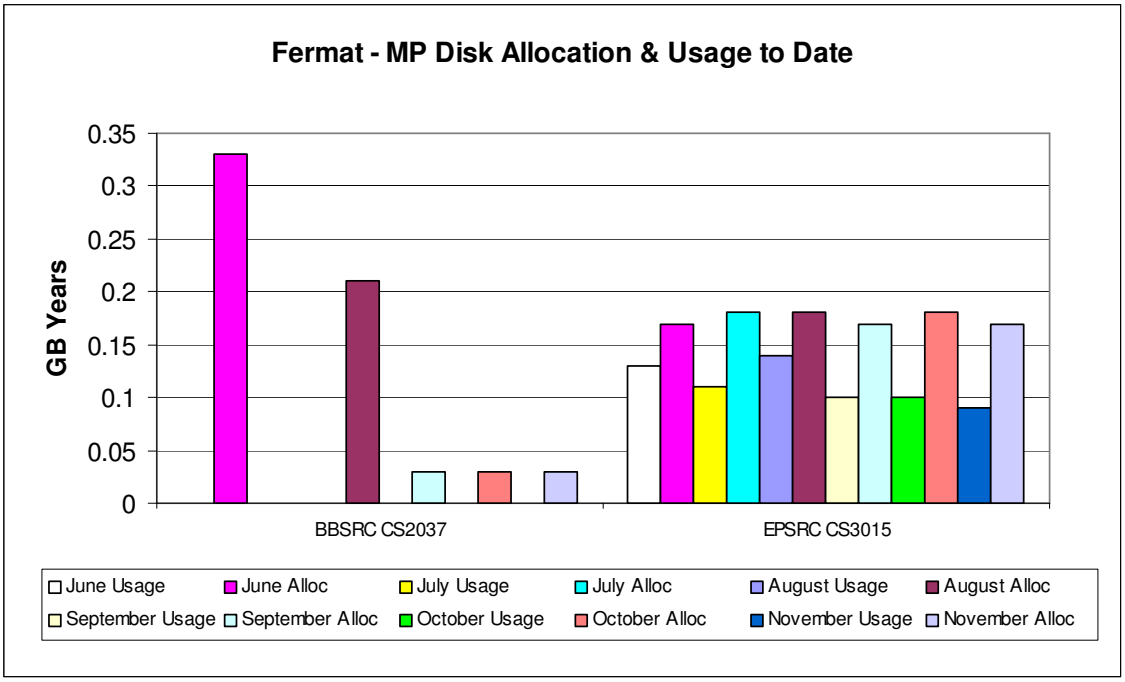

The above chart shows the CPU usage of the Fermat system by class 2 and class 3 users.




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




The above chart shows the most significant disk allocations on the Turing system for class 2 and class 3 users.

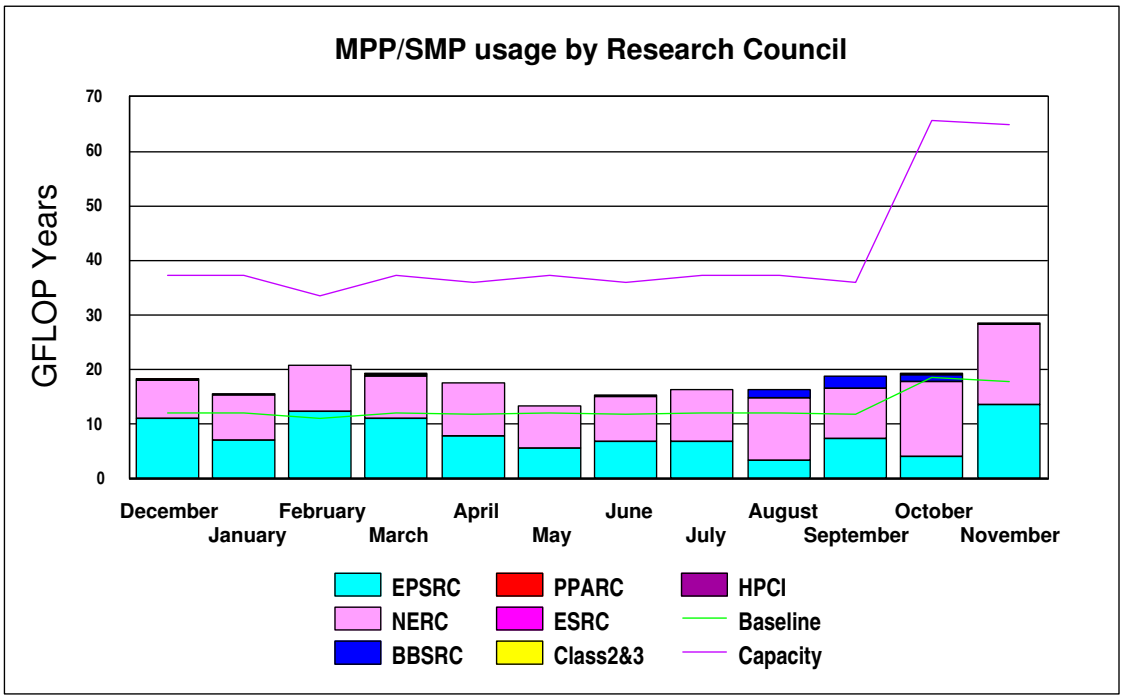



The above chart shows the most significant disk allocations on the Fermat system for class 2 and class 3 users. There is currently no HSM usage by class 2 and class 3 users.

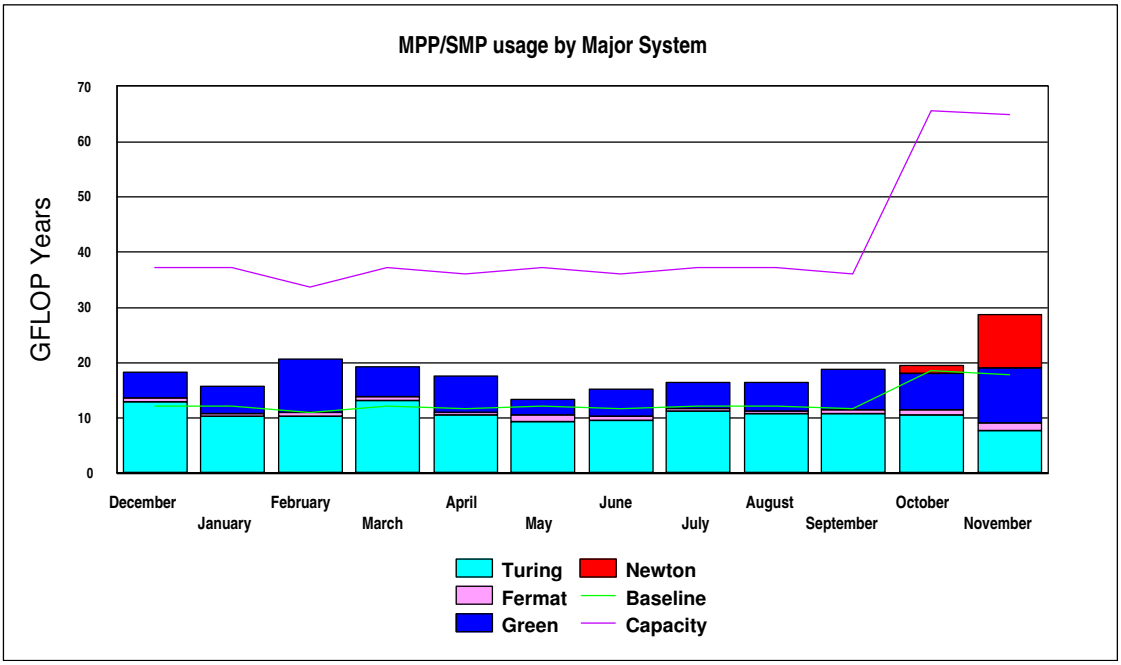
## 4.9 Charts of Historical Usage

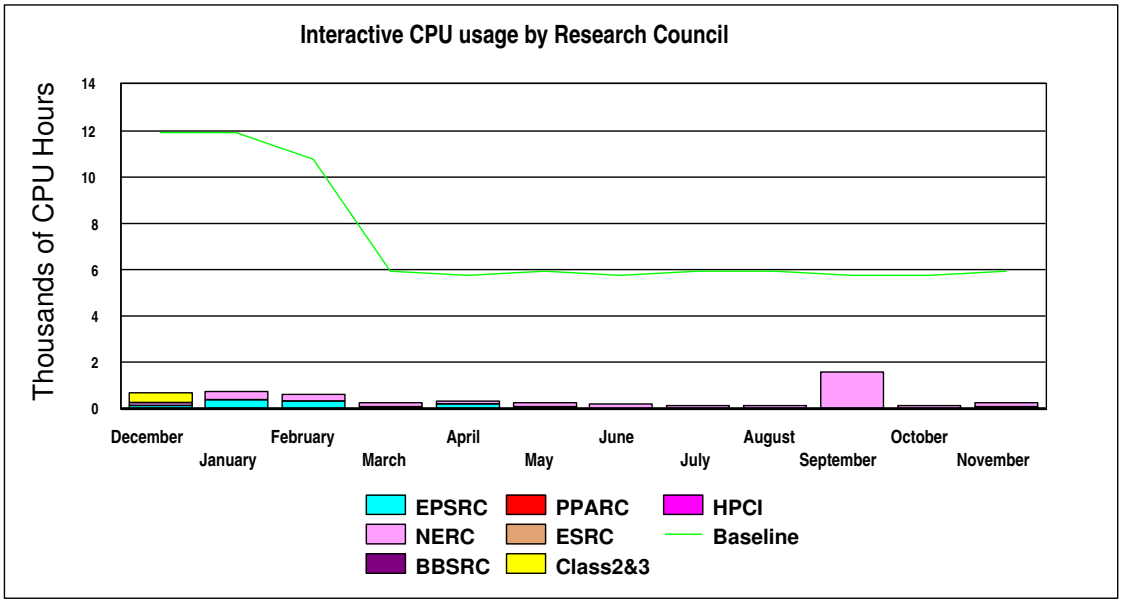
In all the Usage Charts, the baseline varies dependant on the number of days in each month, within a 365-day year.

The graph below shows the GFLOP Year utilisation by Research Council for the previous 12 months, showing the raise in baseline and capacity with the introduction of the new Altix system Newton.



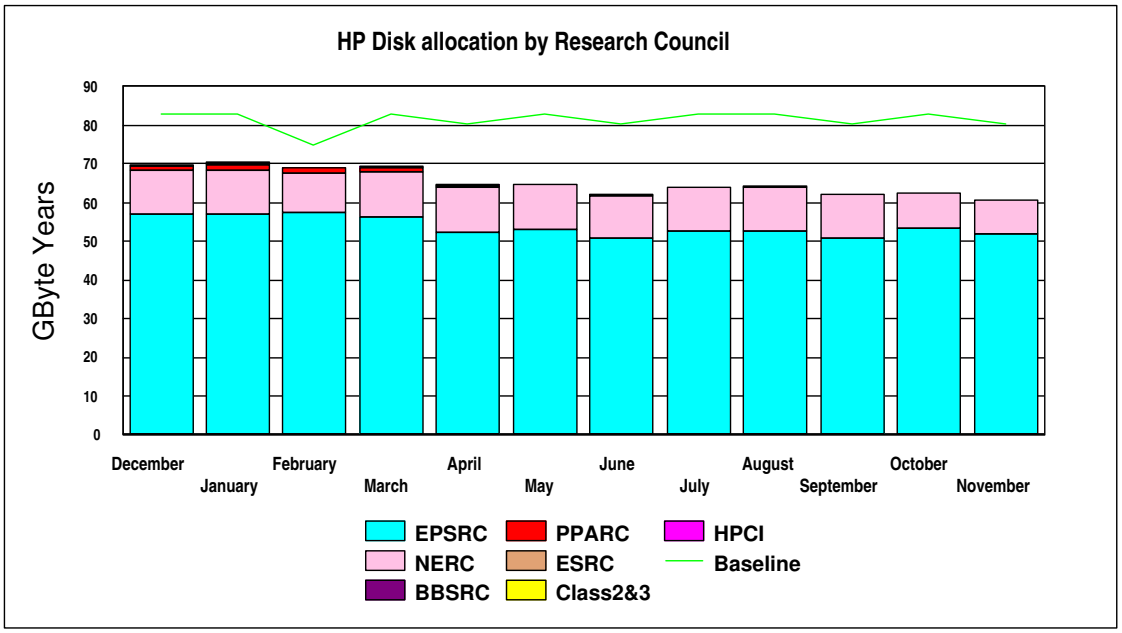

The graph below shows the historic SMP/MPP usage on the major systems.



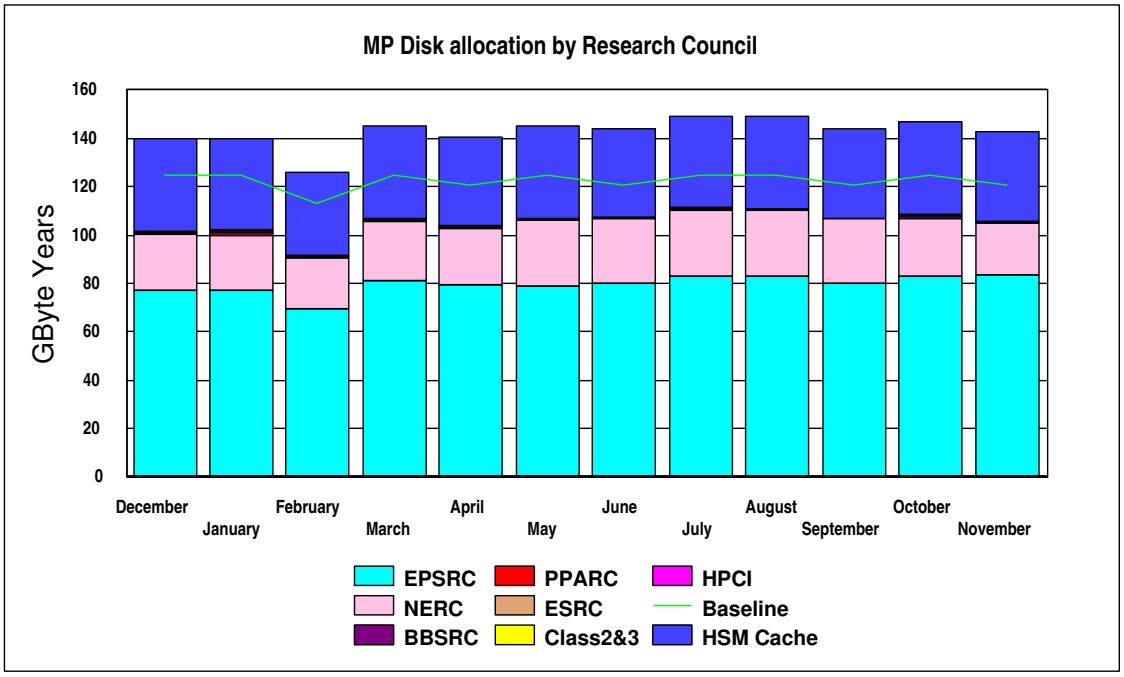



The above graph shows the historic interactive usage of the 'baseline' Fermat system (equivalent to 16@250Mhz CPUs) up to the end of February 2003, at which point the interactive usage was transferred to Wren and Fermat became a batch-only system. Eight of the higher speed 500Mhz CPUs in the Origin 300 system (Wren) deliver the baseline capacity equivalent to that which was previously available on Fermat for interactive usage.

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

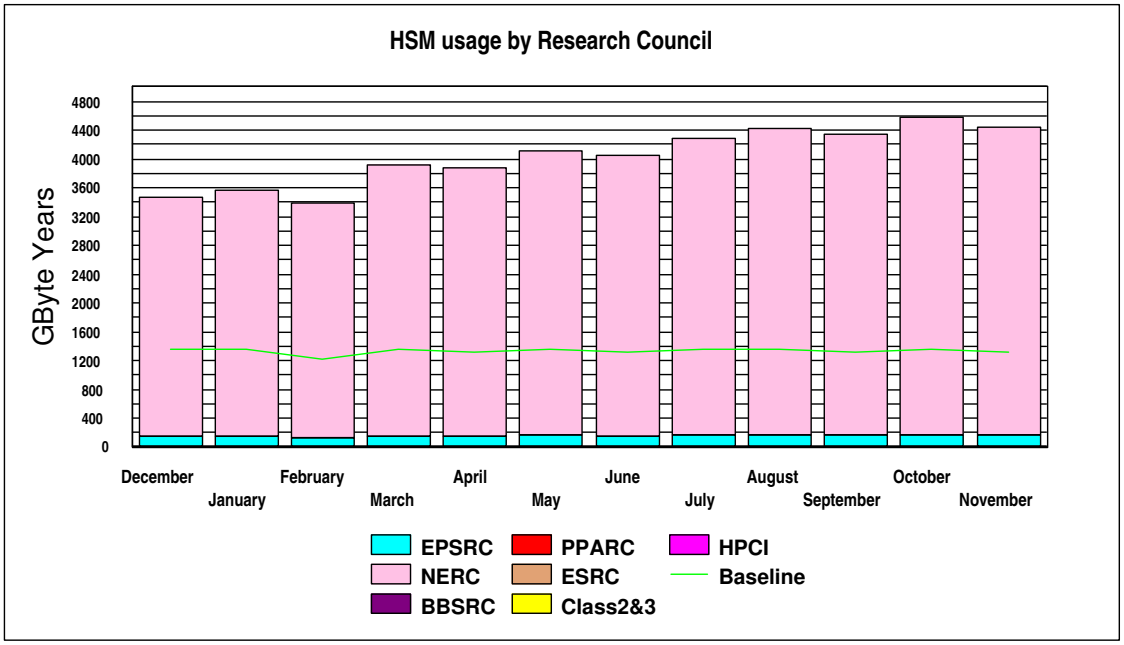



The preceding graph illustrates the historic allocation of the High Performance Disk on Turing.




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

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




## 4.8 Guest System Usage Charts

There is currently no Guest System usage.

# 5. Capability Incentives

Capability incentives are already given on the T3E system Turing for jobs of 512 PEs and above. In July 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 forthcoming 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 |
| turing | 512+ 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 November.

| Service Tokens Refunded: November 2003 Usage | | | | | | | |
|---|---|---|---|---|---|---|---|
| System | Consortia | | | | | | Total |
| | cse086 | cse075 | csb005 | csn003 | | | |
| **Turing** 512+ PEs | | | | | | | 0 |
| **Green** 256+ PEs | | | 6.04 | | | | 6.04 |
| **Green** 384+ PEs | | | | | | | 0 |
| **Newton** 128+ PEs | | | | | | | 0 |
| **Newton** 192+ PEs | | | | | | | 0 |
| **Total Tokens** | | | | | | | **6.04** |

# 6. Service Status, Issues and Plans

## 6.1 Status

The service utilisation in November exceeded baseline.

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

## 6.2 Issues

There have been some outage issues during November due to a discovered bug in the SAN CXFS software. This bug has been identified and a fix generated, which is due to be applied very shortly.

## 6.3 Plans

The T3E system Turing is due to be retired at the end of December due to end of life. Codes are being ported over to the new SGI Altix 3700 system Newton, and encouraging results of this porting are being seen.

# 7. Conclusion

November 2003 saw the overall CPARS rating at Green with the baseline being exceeded by 60.3%.

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 November 2003

**Appendix 2** contains the Percentage shares by Consortium for November 2003

**Appendix 3** contains the Percentage shares by Research Council for November 2003

**Appendix 4** contains the Training, Applications and Optimisation support figures to the end of November 2003

**Appendix 5** contains a breakdown of resource usage by Consortia to the end of November 2003.

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

**Appendix 1**

The summary accounts for the month of November 2003 can be found at the URL below

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

**Percentage PE time per consortia for Turing in November 2003**

| Consortia | % Machine Time |
|---|---|
| CSE002 | 0.00 |
| CSE084 | 6.85 |
| CSE086 | 0.39 |
| CSE050 | 0.07 |
| CSE053 | 3.90 |
| CSE063 | 0.48 |
| CSE064 | 1.33 |
| CSE085 | 0.48 |
| CSE061 | 0.00 |
| CSE009 | 0.00 |
| CSE060 | 0.00 |
| CSE066 | 0.00 |
| CSE075 | 0.00 |
| CSE076 | 0.00 |
| CSN001 | 0.00 |
| CSN003 | 81.50 |
| CSN006 | 2.30 |
| CSN015 | 0.02 |
| CSP007 | 2.68 |

**Percentage CPU time per consortia for Fermat in November 2003**

| Consortia | % Machine Time |
|---|---|
| CSE002 | 0.00 |
| CSE084 | 0.00 |
| CSE086 | 16.16 |
| CSE050 | 0.00 |
| CSE041 | 4.78 |
| CSE063 | 0.00 |
| CSE064 | 0.00 |
| CSE085 | 0.00 |
| CSE061 | 5.69 |
| CSE009 | 0.00 |
| CSE060 | 0.00 |
| CSE066 | 0.00 |
| CSE075 | 1.78 |
| CSE076 | 0.00 |
| CSN001 | 35.10 |
| CSN003 | 43.78 |
| CSN006 | 0.16 |
| CSN015 | 0.00 |
| CSP007 | 0.00 |

**Percentage CPU time per consortia for Green in November 2003**

| Consortia | % Machine Time |
|---|---|
| CSE002 | 0.00 |
| CSE084 | 0.00 |
| CSE086 | 8.58 |
| CSE098 | 0.48 |
| CSE041 | 5.14 |
| CSE063 | 7.80 |
| CSE064 | 2.10 |
| CSE085 | 24.04 |
| CSE009 | 0.00 |
| CSE071 | 0.65 |
| CSE066 | 0.00 |
| CSE075 | 0.60 |
| CSE076 | 0.00 |
| CSN001 | 4.36 |
| CSN003 | 14.83 |
| CSN006 | 1.25 |
| CSN015 | 5.17 |
| CSB005 | 1.00 |
| CSP007 | 0.00 |
| CS2041 | 0.00 |
| CS3015 | 0.67 |
| CS3019 | 0.00 |
| CS3022 | 0.09 |

**Percentage CPU time per consortia for Wren in November 2003**

| Consortia | % Machine Time |
|---|---|
| CSE002 | 0.00 |
| CSE084 | 0.04 |
| CSE086 | 10.84 |
| CSE098 | 0.00 |
| CSE041 | 0.10 |
| CSE063 | 0.09 |
| CSE064 | 2.43 |
| CSE085 | 1.20 |
| CSE009 | 0.19 |
| CSE071 | 0.30 |
| CSE066 | 0.01 |
| CSE075 | 2.81 |
| CSE076 | 3.38 |
| CSN001 | 6.93 |
| CSN003 | 41.45 |
| CSN006 | 21.67 |
| CSN015 | 3.75 |
| CSB005 | 0.28 |
| CSP007 | 1.68 |
| CS2041 | 0.09 |
| CS3015 | 0.03 |
| CS3019 | 0.00 |
| CS3022 | 0.00 |

**Percentage CPU time per consortia for Newton in November 2003**

| Consortia | % Machine Time |
|---|---|
| CSEETF | 36.43 |
| CSEdl1c | 5.16 |
| CSE086 | 1.54 |
| CSE085 | 0.14 |
| CSE076 | 9.70 |
| CSN003 | 46.65 |
| CSEHPCX | 0.37 |

**Appendix 2**

**Percentage disc allocation by Consortia for Turing in November 2003**

| Consortia | %Allocation |
|---|---|
| CSE002 | 30.74 |
| CSE055 | 0.13 |
| CSE057 | 0.05 |
| CSE084 | 1.63 |
| CSE086 | 10.10 |
| CSE098 | 0.00 |
| CSE040 | 0.03 |
| CSE041 | 0.07 |
| CSE043 | 0.00 |
| CSE050 | 0.23 |
| CSE053 | 0.54 |
| CSE056 | 0.00 |
| CSE063 | 1.35 |
| CSE064 | 0.03 |
| CSE072 | 0.26 |
| CSE085 | 20.28 |
| CSE082 | 0.00 |
| CSE061 | 0.26 |
| CSE009 | 7.24 |
| CSE066 | 2.93 |
| CSE075 | 7.93 |
| CSE076 | 0.13 |
| CSE036 | 0.03 |
| HPCI Daresbury | 0.13 |
| HPCI Edinburgh | 0.13 |
| CSN001 | 2.70 |
| CSN003 | 4.19 |
| CSN005 | 46.64 |
| CSN006 | 6.76 |
| CSN012 | 0.00 |
| CSN015 | 0.41 |
| CSN036 | 0.05 |
| CSN052 | 0.13 |
| CSB005 | 0.00 |
| CS2037 | 0.00 |
| CS3015 | 0.00 |

**Percentage disc allocation by Consortia for Fermat in November 2003**

| Consortia | %Allocation |
|---|---|
| CSE002 | 7.71 |
| CSE055 | 0.00 |
| CSE057 | 0.00 |
| CSE084 | 1.55 |
| CSE086 | 7.76 |
| CSE098 | 0.24 |
| CSE040 | 0.39 |
| CSE041 | 4.04 |
| CSE043 | 0.01 |
| CSE050 | 0.00 |
| CSE053 | 0.46 |
| CSE056 | 0.01 |
| CSE063 | 0.00 |
| CSE064 | 0.08 |
| CSE072 | 0.00 |
| CSE085 | 8.55 |
| CSE082 | 7.77 |
| CSE061 | 0.15 |
| CSE009 | 1.55 |
| CSE066 | 0.04 |
| CSE075 | 37.63 |
| CSE076 | 0.43 |
| CSE036 | 0.01 |
| HPCI Daresbury | 0.04 |
| HPCI Edinburgh | 0.08 |
| CSN001 | 11.66 |
| CSN003 | 2.34 |
| CSN005 | 0.00 |
| CSN006 | 2.09 |
| CSN012 | 0.15 |
| CSN015 | 1.55 |
| CSN036 | 0.18 |
| CSN052 | 2.34 |
| CSB005 | 0.62 |
| CS2037 | 0.03 |
| CS3015 | 0.16 |

**Percentage usage of HSM by Consortium for November 2003**

| Consortium | % Usage |
|---|---|
| CSE002 | 0.03 |
| CSE086 | 0.03 |
| CSE041 | 0.19 |
| CSE053 | 0.04 |
| CSE063 | 0.56 |
| CSE064 | 0.16 |
| CSE085 | 2.13 |
| CSE082 | 0.00 |
| CSE075 | 0.48 |
| CSN001 | 22.33 |
| CSN003 | 68.94 |
| CSN006 | 0.01 |
| CSN015 | 2.82 |
| CSN036 | 2.27 |
| CSN044 | 0.02 |

**Percentage PE usage on Turing by Research Council for November 2003**

| Research Council | % Usage |
|---|---|
| EPSRC | 13.51 |
| HPCI | 0.00 |
| NERC | 83.81 |
| BBSRC | 0.00 |
| ESRC | 0.00 |
| PPARC | 2.68 |

**Percentage CPU usage on Fermat by Research Council for November 2003**

| Research Council | % Usage |
|---|---|
| EPSRC | 20.97 |
| HPCI | 0.00 |
| NERC | 79.03 |
| BBSRC | 0.00 |
| ESRC | 0.00 |
| PPARC | 0.00 |

**Percentage PE usage on Green by Research Council for November 2003**

| Research Council | % Usage |
|---|---|
| EPSRC | 73.38 |
| HPCI | 0.00 |
| NERC | 25.62 |
| BBSRC | 1.00 |
| ESRC | 0.00 |
| PPARC | 0.00 |

**Percentage CPU usage on Wren by Research Council for November 2003**

| Research Council | % Usage |
|---|---|
| EPSRC | 24.24 |
| HPCI | 0.00 |
| NERC | 73.80 |
| BBSRC | 0.28 |
| ESRC | 0.00 |
| PPARC | 1.68 |

**Percentage Disc allocated on Turing by Research Council for November 2003**

| Research Council | % Allocated |
|---|---|
| EPSRC | 85.50 |
| HPCI | 0.26 |
| NERC | 14.24 |
| BBSRC | 0.00 |
| ESRC | 0.00 |
| PPARC | 0.00 |

**Percentage Disc allocated on Fermat by Research Council for November 2003**

| Research Council | % Allocated |
|---|---|
| EPSRC | 78.93 |
| HPCI | 0.12 |
| NERC | 20.30 |
| BBSRC | 0.65 |
| ESRC | 0.00 |
| PPARC | 0.00 |

**Percentage Disc allocated as SAN UHP by Research Council for November 2003**

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

**Percentage Disc allocated as SAN HV by Research Council for November 2003**

| | |
|---|---|
| EPSRC | 0.39 |
| HPCI | 0.00 |
| NERC | 99.61 |
| BBSRC | 0.00 |
| ESRC | 0.00 |
| PPARC | 0.00 |

**Percentage HSM usage by Research Council for November 2003**

| Research Council | % usage |
|---|---|
| EPSRC | 3.61 |
| HPCI | 0.00 |
| NERC | 96.39 |
| BBSRC | 0.00 |
| ESRC | 0.00 |
| PPARC | 0.00 |

**Appendix 4**

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

| Project | PI | Subject | Discipline/ Department | Liaison Officer | Support Bought | Apps Support for November 2003 | Total Apps Support from July 2000 | Opt Support for November 2003 | Total Opt Support from July 2000 | Total Support Used | Training Bought | Training Used |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| cse002 | Wander, A (Dr ) | Support for the UKCP | Physics | Neil Stringfellow | 446.7 | | 12.25 | | | 144.25 | 74 | 3 |
| cse003 | Dundas, D (Dr) | HPC Consortiums 98-2000 | | Martyn Foster | 25.27 | | 6 | | 15.5 | 24.5 | 10 | 6 |
| cse004 | Sandham, N (Prof) | UK Turbulence | | Keith Taylor | | | | | | | 2 | 2 |
| cse006 | Briddon, P (Dr) | Covalently Bonded Materials | | Kevin Roy | 4 | | | | 4 | 4 | | |
| cse007 | Foulkes, M (Dr) | Quantum Many Body Theory | | Martyn Foster | 4 | | | | | 1 | 2 | 2 |
| cse008 | Vincent, M (Dr) | Model Chemical Reactivity | | Robin Pinning | | | | | | | | |
| cse009 | Slater, Ben | HPC Computing Applications in Materials Chemistry | Chemistry | Kevin Roy | 275.5 | | 6 | | 3 | 9 | 26.5 | |
| cse010 | Williams, J (Dr) | Free Surface Flows | | Dan Kidger | 15.95 | | | | | 15.95 | | |
| cse011 | Williams, J (Dr) | Open Channel Flood Plains | | Dan Kidger | 2.18 | | | | | 2.18 | 1 | |
| cse012 | | | | | | | | | | | | |
| cse013 | Leschziner, M (Prof) | Large Eddy Simulation for Aerospace & Turbomachinery Dynamics | Mechanical Engineering | Mike Pettipher | 9 | | | | | | 57.5 | 10 |
| cse014 | de Oliverira, C (Dr) | Problems in Nuclear Safety | | Dan Kidger | 3 | | | | | | | |
| cse016 | Cant, S (Dr) | Turbulent Combustion | | Keith Taylor | | | | | | | | |
| cse017 | Luo, K (Dr) | Large Eddy Simulation & Modelling of Buoyant Plumes & Smoke Spread in Enclosures | | Keith Taylor | 2.44 | | | | | | 5 | |
| cse018 | Jaffri, K | | | Keith Taylor | | | | | | | | |
| cse019 | Lander, J (Dr) | | | Kevin Roy | | | | | | | | |
| cse020 | | | | Kevin Roy | | | | | | | | |
| cse021 | Staunton, J (Dr) | | | John Brooke | 0.2 | | | | | | 1.04 | 1 |
| cse022 | Jones, W P (Prof) | | | Keith Taylor | | | | | | | | |
| cse023 | Allen, M (Prof) | | | Robin Pinning | | | | | | | | |
| cse024 | Allan, R J (Dr) | | | Ben Jesson | 24 | | | | | | 300 | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| cse025 | Walet, N R (Dr) | | | Martyn Foster | | | | | | | 2 | 1.5 |
| cse026 | Neal, M (Dr) | | | | | | | | | | | |
| cse027 | | | | | | | | | | | | |
| cse028 | | | | | | | | | | | | |
| cse029 | Apsley, D D (Dr) | | | Keith Taylor | | | | | | | | |
| cse030 | Desplat, J C (Dr) | High Performance Computing for Complex Fluids | Physics | Andrew Jones | 103 | | 21 | | 5 | 51 | 31 | 7 |
| cse031 | | | | | | | | | | | | |
| cse033 | Breard, C (Dr) | | | | | | | | | | | |
| cse034 | | | | Kevin Roy | | | | | | | | |
| cse035 | Jenkins, S (Dr) | Ab Initio Simulations of Catalytic Processes at Extended Metal Surfaces | Chemistry | Neil Stringfellow | | | | | | | | |
| cse036 | Duff, I (Prof) | Research & Development of Algorithms & Software for Large-Scale Linear & Non-Linear Systems | Maths | Adrian Tate | | | | | | | | |
| cse040 | Badcock, K (Dr) | Prediction of Non-Linear Flutter Characteristics by Numerical Path Following & Model Reduction | Aerospace Engineering | | | | | | | | | |
| cse041 | Wu, X (Dr) | Flutter & Noise Generation Mechanisms - Turbomachinery Fan Assemblies | Mechanical Engineering | Keith Taylor | 60 | | | | | | 5 | |
| cse043 | Williams, J (Dr) | Numerical Simulation of Flow over a Rough Bed | Engineering | Neil Stringfellow | 4 | | 2 | | 2 | 4 | 4 | 4 |
| cse050 | Bradley, D (Prof) | Flame Instabilities: their influence on turbulent combustion & incorporation in mathematical models. | Mechanical Engineering | | 20 | | | | | | 10 | |
| cse051 | | | | | | | | | | | | |
| cse052 | Di Mare, F (Miss) | Heat Transfer in Turbine Combustors | Mechanical Engineering | Jon Gibson | 10 | | | | | | 25 | |
| cse053 | Leschziner, M (Prof) | Coupling RANS Near-Wall Turbulence Models with Large Eddy Simulation Strategies | Aerospace Engineering | Mike Pettipher | 15 | | | | | | 8 | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| cse055 | Staunton, J (Dr) | Ab-initio theory of magnetic anisotropy in transition metal ferromagnets | Physics | Andrew Jones | 5 | | | | | | 10 | |
| cse056 | Zheng, Y (Dr) | Aerothermalelasticity Modelling of Air Riding Seals for Large Gas Turbines | Mechanical Engineering | Keith Taylor | 5 | | | | | | 10 | |
| cse057 | Evans, R (Dr) | Relativistic Particle Generation from Ultra-Intense Laser Plasma Interactions | Physics | Andrew Jones | 20 | | | | | | 10 | |
| cse060 | Robb, M (Prof) | CCP1 Renewal plus falgship project on Car-Parrinello in Chemistry | Chemistry | Neil Stringfellow | 10 | | | | | | 10 | |
| cse061 | Imregun, M (Prof) | Casing treatment modelling for the investigation of stall, flutter and noise mechanisms in turbomachinery compressors. | Mechanical Engineering | | 5 | | | | | | 5 | |
| cse063 | Sandham, N (Prof) | Computational Aerocaustics for Turbulent Plane Jets | Aerospace Engineering | Adrian Tate | 30 | | | | | | 10 | |
| 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 | Mike Pettipher | 10 | | | | | | 8 | |
| cse066 | Coveney, P V (Prof) | New clay-polymer nanocomposites using diversity-discovery methods: synthesis, processing and testing | IT | Neil Stringfellow | 21 | | | | | | 6 | 3 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| cse071 | Iacovides (Dr) | The Practical Computation of Three-Dimensional Time-Dependent Turbulent Flows in Rotating Cavities | Mechanical Engineering | Mike Pettipher | 5 | | | | | | 6 | |
| cse072 | Karlin, V (Dr) | Structure & Dynamics of Unstable Premixed Laminar Flames | Engineering | Jon Gibson | 18 | | | | | | 9 | 6 |
| cse074 | Luo (Dr) | Consortium on Computational Combustion for Engineering Applications | Engineering | Jon Gibson | | | | | | | | |
| cse075 | Coveney, PV (Dr) | The Reality Grid - a tool for investigating condensed matter & materials | IT | Neil Stringfellow | 14 | | 5 | | | 5 | 14 | |
| cse076 | Briddon, P (Dr) | HPC facilities for the first principles simulation of covalently bonded materials | IT | Adrian Tate | 20 | | | | 11 | 11 | | |
| cse077 | Kronenburg, A (Dr) | Combustion Model Development for Large-Eddy Simulation of Non-Premixed Reactive Flows. | Mechanical Engineering | | | | | | | | 2 | |
| cse082 | Barakos, G (Dr) | CFD Study of Three-Dimensional Dynamic Shelf | Aerospace Engineering | | 5 | | | | | | 1 | |
| cse084 | Needs, R (Dr) | The Consortium for Computational Quantum Many-Body Theory | Physics | Adrian Tate | 19 | | | | | | | 10 |
| cse085 | Sandham, N (Prof) | UK Turbulence Consortium | Engineering | Adrian Tate | 15 | | | | | | 6 | 6 |
| cse086 | Taylor, K (Prof) | Multiphoton, Electron Collisions and BEC HPC Consortium 2002-2004 | Physics | Kevin Roy | 35 | | | | 5 | 5 | 116 | |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| cse089 | Wiercigroch, M (Dr) | Nonlinear Dynamics & Rock Contact Fracture Mechanics in Modelling of Vibration Enhanced Drilling | Engineering | Keith Taylor | 15 | | | | | 7 | |
| cse098 | De Souza M M (Dr) | Indium interactionsin silicon for ULSI technologies | Physics | | 5 | | | | | 5 | |
| 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 ofDiesel Combustion | Mechanical Engineering | | | | | | | | |
| cse102 | Williams, J (Prof) | Numerical Modelling of Flow around Bridge Piers | Engineering | | | | | | | | |
| cse103 | Neil, MP (Prof) | Simulation and Modelling of liquid crystal mesopases linked to the design ofmolecular and material properties | Mathematics | | | | | | | | |
| cse104 | Greaves, DM (Dr) | CFD Modelling of free surface waves driven by moving bodies using adaptively refined cut cell hierarchical grids | | | | | | | | | |
| cse105 | Chemyshenko, SI (Prof) | Optimal database of the direct numerical simulation of turbulent channel flow | Aerodynamics and 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 Science | | | | | | | | |
| cse109 | Allen, M (Prof) | University of Warwick New HPC Projects | 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 | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| cse111 | Avital, Eldad (Dr) | 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 | | | | | | | | | |
| cse113 | Wirth, T (Prof) | Stereoselective Halocyclisations | Chemistry | | | | | | | | | |
| cse114 | Jiang, X (Dr) | Direct numerical simulation of fuel injection & spray comustion | Engineering | | | | | | | | | |
| cse115 | De Leeuw, N (dr) | A computational Study of bio-mineralisation: nucleation and growth of bone material on biological templates | Chemistry | | | | | | | | | |
| cse116 | John, N (Dr) | An advanced environment for enabling visual supercomputing | Visualization | | | | | | | | | |
| cse117 | Theodoropoulos, K (Dr) | Modelling of Microreactors: An integrated Multi-Scale Approach | | | | | | | | | | |
| cse118 | Gavaghan, David, (Dr) | EPSRC e-Sience pilot in Integrative Biology | Biology | | | | | | | | | |
| csn001 | De Cuevas, B (Mrs) | OCCAM | Ocean/Earth Sciences | Zoe Chaplin | 70.5 | | 1 | | 58 | 61 | 20 | 3 |
| csn002 | Vincent, Mark (Dr) | | | Robin Pinning | | | | | | | | |
| csn003 | Steenman-Clark, L (Dr) | UGAMP | Meteorology | Zoe Chaplin | 4.8 | | | | 4 | 1 | 22.79 | 22 |
| csn005 | Huw Davies, J (Dr) | | | Fumie Costen | 27 | | | | | 27 | 6 | 6 |
| csn006 | Brodholt, J (Dr) | | Geological Sciences | Neil Stringfellow | | | | | | | | |
| csn007 | | | | Stephen Pickles | | | | | | | | |
| csn008 | | | | Michael Bane | | | | | | | | |
| csn009 | Proctor, R (Dr) | | | Michael Bane | | | | | | | | |
| csn010 | | | | Kevin Roy | 2 | | | | | | 5 | |
| csn011 | Gray, S L (Dr) | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| csn012 | Tennyson, J (Prof) | Calculated Absorption by water vapour at near infra-red & optical wavelengths | Physics & Astronomy | Andrew Jones | | | | | | | | |
| 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 | Keith Taylor | | | | | | | | |
| csn014 | Llewellyn Jones (Prof) | | Physics & Astronomy | Andrew Jones | | | | | | | | |
| csn015 | Proctor, R (Dr) | A Testbed for Zooplankton Models of the Irish Sea | Coastal & Marine Sciences | Zoe Chaplin | 20 | | 2 | | | 2 | 10 | 3 |
| csn017 | Payne, A (Dr) | Stability of the Antarctic Ice Sheet | Geography | Kevin Roy | 16 | | | | 2 | 2 | 18 | 2 |
| csn036 | Haines, K (Dr) | Assimilation of Altimeter, Radiometer & in situ data into the OCCAM model. Analysis of water properties & transports | Environmental Science | Zoe Chaplin | 2 | | | | | | 5 | |
| csn042 | Gray, SL (Dr) | Transport & Mixing in Fronts | | | | | | | | | | |
| csn044 | Steenman-Clark, L (Dr) | Earth Observation Project | Meteorology | Zoe Chaplin | | | | | | | | |
| csn049 | Srokosz | Climate impact changes in Atlantic Thermohaline | | | | | | | | | | |
| csn050 | Challenor | The probability of rapid climate change | | | | | | | | | | |
| csn051 | Proctor | Ultra-fine scale modeling of the northern North Atlantic Thermohaline | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| csn052 | Mackay, R (Prof) | Quantifying the scaling of physical transport in structured heterogeneous porous media. | Earth Science | Zoe Chaplin | | | | | | | 5 | 5 |
| 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 | Vocadio, L (Dr) | The structure and anisotropy of Earth's inner core | Earth Sciences | | | | | | | | | |
| csn056 | Hosskins, B (Prof) | Atmospheric water vapour budget & its relevance to the thermohaline circulation. | Meterology | | | | | | | | | |
| 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 Science | | | | | | | | | |
| csb001 | Houldershaw, D (Dr) | Use of Cray T3E for multiple long trajectories of protein unfolding | Crystallography | Zoe Chaplin | 6 | | 1.5 | | | 3.5 | 4 | 2 |
| csb002 | Mulholland, A (Dr) | | | Robin Pinning | | | | | | | | |
| csb003 | Carling, J (Dr) | | | | | | | | | | 3 | |
| csb005 | Haley, C | Genetic Analysis of Complex Traits | | | 10 | | | | | | | |
| csb006 | Sansom, M (Prof) | DFT calculations for ion channels and transport proteins | Biochemistry | | | | | | | | | |
| csp002 | Chapman, S (Dr) | | | | 2 | | | | | | 8 | 4 |
| csp003 | Ord, S M (Mr) | | | Stephen Pickles | 11.79 | | 10 | | | 11 | 12 | 12 |
| csp004 | Bell, K L (Prof) | A Programme for Atomic Physics for Astrophysics at Queen's University Belfast (2001-2005) | Astronomy | Keith Taylor | 7 | | | | | | 8 | |
| csp006 | Jain, R (Dr) | Numerical Simulation of forced magnetic reconnection in the solar corona | Physics | Jon Gibson | | | | | | | 12 | |
| css001 | Boyle, P (Dr) | | | John Brooke | | | | | | | 20 | |
| css002 | Crouchley, R (Dr) | | | John Brooke | | | | | | | 2.5 | 2 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HPCID | Allan, R (Dr) | | | | | | | | | | 1 | 1 |
| HPCIE | Henty, D (Dr) | | | | | | | | | | | |
| HPCIS | Nicole, D (Dr) | | | | | | | | | | | |
| UKHEC | Allan, R (Dr) | UK HEC Collaboration, Core Support for High-End Computing 1999-2002 | | Andrew Jones | | | | | | | 2 | 2 |
| cs2001 | | | | Stephen Pickles | | | | | | | 10 | |
| cs2002 | | | | John Brooke | 0.25 | | | | | 0.25 | | |
| cs2003 | | | | | | | | | | | | |
| cs2004 | | | | Keith Taylor | | | | | | | | |
| cs2005 | | | | | | | | | | | | |
| cs2006 | | | | Mike Pettipher | | | | | | | | |
| cs2007 | | | | | | | | | | | 1 | 1 |
| cs2008 | | | | Robin Pinning | 7.91 | | | | | 7.91 | | |
| cs2009 | Pennington, V (Dr) | | | Michael Bane | | | | | | | | |
| cs2010 | | | | | | | | | | | | |
| cs2011 | Mallinger, F (Dr) | | | | | | | | | | | |
| cs2012 | Qin, N (Prof) | | | | | | | | | | 1.5 | 1.5 |
| cs2014 | Karlin, V (Dr) | | | | | | | | | | 2 | 2 |
| cs2015 | Tejera Cuesta, P (Mr) | | | Keith Taylor | | | | | | | 3 | 1.5 |
| cs2016 | Miles, J J (Dr) | | | | 2 | | | | | | | |
| cs2017 | Eisenbach, M (Mr) | | | | | | | | | | | |
| cs2018 | | | | | | | | | | | | |
| cs2019 | | | | | | | | | | | | |
| cs2020 | | | | | 1 | | | | | | | |
| cs2021 | | | | | | | | | | | 6 | 1 |
| cs2022 | | | | | | | | | | | 3 | 2 |
| cs2023 | | | | | | | | | | | | |
| cs2024 | | | | | | | | | | | | |
| cs2026 | | | | | | | | | | | 1 | |
| cs2027 | | | | | 6 | | | | | | 4 | |
| cs2028 | Annett (Dr) | | | | 2 | | | | | | 2 | |
| cs2029 | | | | | | | | | | | | |
| cs2030 | McKenna, K (Mr) | | | | | | | | | | 1 | 1 |
| cs2031 | Ess | | | | | | | | | | | |
| cs2032 | Jain, R (Dr) | | | | | | | | | | | |
| cs2033 | | | | | | | | | | | | |
| cs2034 | De Souza, M M (Dr) | Indium interactions in silicon for future ULSI technologies. | Physics | Jon Gibson | | | | | | | | |
| cs2035 | Barakos, G (Dr) | Detached Eddy Simulation of Aerodynamics & Aerocautics of Cavity Flows | Aerospace Engineering | Keith Taylor | | | | | | | | |
| cs2036 | Farid, Vakili-Tahami (Mr) | MPI Evaluation | Mechanical Aerospace & Manufacturing Engineering | Jon Gibson | 1.7 | | | | 1 | 1 | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| cs2037 | Domene, Carmen (Dr) | Ab initio molecular dynamics of ion in membrane proteins | | | | | | | | | | |
| cs2038 | Excell, P (Prof) | Computational Bioelectromagnetic Modelling of Human Cellular Processes for Mobile Phone Safety Research. | Informatics | | 1 | | | | | | | |
| 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 Science | | | | | | | | | |
| cs2043 | Theodoropoulos, K (Dr) | Design of Microchannel structures for Microreactor applications | Process integration | | | | | | | | | |
| cs2044 | Mota-Furtado, F (Dr) | Statistical Properties of Quantum Transport | Maths | | | | | | | | | |
| cs3001 | | | | | 6.8 | | | | | | 10.45 | 3 |
| cs3002 | Novik, K (Dr) | | | | | | | | | | 2 | 2 |
| cs3003 | Chambers, E (Dr) | | | | | | | | | | | |
| cs3004 | Avis, N (Prof) | | | Jo Leng | 19 | | | | | | 12 | 1 |
| cs3005 | Zarei, B (Mr) | | | John Brooke | 10 | | | | | | 5 | 3 |
| cs3006 | | | | | 4 | | | | | | 5 | 1 |
| cs3007 | Finch, E | | | | 37 | | 7 | | 5 | 12 | 5 | |
| cs3008 | Alsberg, B (Dr) | | | | 3 | | | | | | 13 | |
| cs3009 | Flower, D (Dr) | | | | 2 | | | | | | 3 | |
| cs3010 | Kemsley, K (Dr) | | | | 4 | | | | | | 8 | 1 |
| cs3012 | Austin, J (Prof) | | | | 5 | | | | 3 | 3 | 3 | 2 |
| cs3013 | Raval, R (Prof) | | | | 2 | | | | | | | |
| cs3014 | MacLaren, J (Dr) | | | | 2 | | | | | | | |
| cs3015 | Hampshire, D (Dr) | High Performance Computational Solutions for the Ginzburg-Landau Equations that describe Flux Pinning in High-Field Superconductors | Physics | Keith Taylor | 2 | | | | | | 5 | |
| cs3016 | Petchey, O (Dr) | Randomisation test for the significance of functional diversity for eco-system processes | Animal & Plant Sciences | Adrian Tate | 2 | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| cs3017 | Gross, M (Mr) | Numerical Simulation of Laser Materials Processing | Engineering | | 3 | | | | | | | |
| cs3018 | Durrant, M (Dr) | Functional modelling of oxalate-degrading enzymes & of lipoxygenase using quantum calculations. | Biology | | 3 | | | | | | 3 | |
| cs3019 | Bengough (Dr) | Lattice-Boltzmann simulation of water & solute transport in porous media. | Physics | | 2 | | | | | | | |
| cs3020 | Gajjar | Flow past a circular cylunder at large Reynolds numbers | | | | | | | | | | |

The following table shows resource utilisation by Consortia to the end of November 2003.

Usage Report run on Mon Dec 1 08:50:00 2003 for the CSAR service

cs2042 Smeed
Last Trade: Tue Jul 1 11:36:05 2003
Usage:
0.0 of 100.0 Hour Wren CPU (0.0 of 5.0 G.S.T), 0.0%
0.0 of 2300.0 Hour SMP CPU (0.0 of 89.4 G.S.T), 0.0%
0.0 of 1.0 GByteYear MP Disk (0.0 of 3.7 G.S.T), 0.0%
Total usage for project cs2042 0.0 of 98.0 Generic Service Tokens, 0.0%

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cs2043 Theodoropoulos
Last Trade: Thu Jun 12 15:44:00 2003
Usage:
0.0 of 500.0 Hour Wren CPU (0.0 of 24.8 G.S.T), 0.0%
0.0 of 400.0 Hour SMP CPU (0.0 of 15.5 G.S.T), 0.0%
0.0 of 0.6 GByteYear MP Disk (0.0 of 2.2 G.S.T), 0.0%
0.0 of 450.0 Hour Green CPU (0.0 of 23.5 G.S.T), 0.0%
Total usage for project cs2043 0.0 of 66.0 Generic Service Tokens, 0.0%

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cs2044 Mota-Furtado
Last Trade: Mon Sep 1 09:31:11 2003
Usage:
1.6 of 200.0 Hour Wren CPU (0.1 of 9.9 G.S.T), 0.8%
0.0 of 2.2 GByteYear MP Disk SAN (0.0 of 9.4 G.S.T), 0.0%
45.9 of 2000.0 Hour SMP CPU (1.8 of 77.7 G.S.T), 2.3%
Total usage for project cs2044 1.9 of 97.0 Generic Service Tokens, 1.9%

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cs3015 Hampshire
Last Trade: Tue Oct 28 10:25:30 2003
Usage:
89.0 of 285.3 Hour Wren CPU (4.4 of 14.1 G.S.T), 31.2%
512.4 of 648.8 Hour SMP CPU (19.9 of 25.2 G.S.T), 79.0%
3.2 of 3.6 GByteYear MP Disk (11.5 of 12.8 G.S.T), 89.3%
9690.9 of 17037.1 Hour Green CPU (506.4 of 890.2 G.S.T), 56.9%
0.0 of 2.0 PersonDay Support (0.0 of 58.8 G.S.T), 0.0%
0.0 of 0.0 Day Training (0.0 of 0.0 G.S.T)
Total usage for project cs3015 542.2 of 1001.2 Generic Service Tokens, 54.1%

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cs3017 Gross
Last Trade: Mon Jan 13 10:31:13 2003
Usage:
0.0 of 100.3 Hour Wren CPU (0.0 of 5.0 G.S.T), 0.0%
0.0 of 1.3 Hour SMP CPU (0.0 of 0.1 G.S.T), 0.0%
0.0 of 25.0 GByteYear MP Disk (0.0 of 89.3 G.S.T), 0.0%
0.0 of 6075.3 Hour Green CPU (0.0 of 317.4 G.S.T), 0.0%
0.0 of 3.0 PersonDay Support (0.0 of 88.2 G.S.T), 0.0%
Total usage for project cs3017 0.0 of 500.0 Generic Service Tokens, 0.0%

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cs3018 Durrant
Last Trade: Fri Oct 10 09:05:16 2003
Usage:

0.0 of 1799.4 Hour Wren CPU (0.0 of 89.2 G.S.T), 0.0%
0.1 of 1.3 Hour SMP CPU (0.0 of 0.0 G.S.T), 8.4%
0.0 of 8.0 GByteYear MP Disk (0.0 of 28.6 G.S.T), 0.0%
2845.9 of 4801.2 Hour Green CPU (148.7 of 250.9 G.S.T), 59.3%
0.0 of 3.0 PersonDay Support (0.0 of 88.2 G.S.T), 0.0%
0.0 of 3.0 Day Training (0.0 of 32.3 G.S.T), 0.0%
Total usage for project cs3018 148.7 of 489.2 Generic Service Tokens, 30.4%

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cs3019 Bengough
Last Trade: Tue Dec 17 12:55:36 2002
Usage:
0.0 of 360.1 Hour Wren CPU (0.0 of 17.8 G.S.T), 0.0%
0.5 of 10648.7 Hour SMP CPU (0.0 of 413.7 G.S.T), 0.0%
0.0 of 3.0 GByteYear MP Disk (0.0 of 10.7 G.S.T), 0.0%
0.0 of 2.0 PersonDay Support (0.0 of 58.8 G.S.T), 0.0%
Total usage for project cs3019 0.0 of 501.1 Generic Service Tokens, 0.0%

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cs3022 Clint
Last Trade: Mon Sep 1 10:11:11 2003
Usage:
7.3 of 3872.0 PEHour MPP PE CPU (0.2 of 93.6 G.S.T), 0.2%
0.0 of 4.0 GByteYear HP Disk (0.0 of 23.8 G.S.T), 0.0%
0.0 of 500.0 Hour Wren CPU (0.0 of 24.8 G.S.T), 0.0%
0.0 of 1.7 GByteYear MP Disk SAN (0.0 of 7.2 G.S.T), 0.0%
2.5 of 7744.0 Hour Green CPU (0.1 of 404.6 G.S.T), 0.0%
Total usage for project cs3022 0.3 of 554.0 Generic Service Tokens, 0.1%

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csb005 Haley
Last Trade: Mon Nov 17 08:03:19 2003
Usage:
12.1 of 400.0 Hour Wren CPU (0.6 of 19.8 G.S.T), 3.0%
1.8 of 53.5 GByteYear MP Disk (6.4 of 190.9 G.S.T), 3.4%
94743.4 of 109452.6 Hour Green CPU (4950.5 of 5719.1 G.S.T), 86.6%
0.0 of 1.0 PersonDay Support (0.0 of 29.4 G.S.T), 0.0%
Total usage for project csb005 4957.6 of 5959.3 Generic Service Tokens, 83.2%

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csb006 43/B19843 Sansom
Last Trade: re-enabled
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 4356.6 Hour Newton CPU (0.0 of 667.0 G.S.T), 0.0%
0.0 of 2000.0 Hour Wren CPU (0.0 of 99.1 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 40.5 GByteYear MP Disk SAN (0.0 of 173.7 G.S.T), 0.0%
0.0 of 1.0 Hour SMP CPU (0.0 of 0.0 G.S.T), 0.0%
0.0 of 60000.0 Hour Green CPU (0.0 of 3135.1 G.S.T), 0.0%
Total usage for project csb006 0.0 of 4074.9 Generic Service Tokens, 0.0%

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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), 72.5%
Total usage for project cse001 0.4 of 0.8 Generic Service Tokens, 46.6%

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cse009 GR/20607 Catlow
Last Trade: re-enabled
Usage:
1740839.0 of 1738836.8 PEHour MPP PE CPU (42091.3 of 42042.8 G.S.T), 100.1%
234.6 of 728.3 GByteYear HP Disk (1396.3 of 4335.3 G.S.T), 32.2%
52.8 of 79.4 Hour Wren CPU (2.6 of 3.9 G.S.T), 66.5%
52022.5 of 55111.5 Hour SMP CPU (2021.2 of 2141.2 G.S.T), 94.4%
47.6 of 646.7 GByteYear MP Disk (169.9 of 2309.7 G.S.T), 7.4%
0.0 of 0.9 GByteYear HSM/Tape (0.0 of 0.6 G.S.T), 0.0%
254419.1 of 254206.0 Hour Green CPU (13293.9 of 13282.8 G.S.T), 100.1%
9.0 of 9.5 PersonDay Support (264.7 of 279.4 G.S.T), 94.7%
0.0 of 0.5 Day Training (0.0 of 5.4 G.S.T), 0.0%
Total usage for project cse009 59239.8 of 64401.2 Generic Service Tokens, 92.0%

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cse040 GR/M84350 Badcock
Last Trade: re-enabled
Usage:
18.9 of 5000.0 PEHour MPP PE CPU (0.5 of 120.9 G.S.T), 0.4%
0.4 of 6.0 GByteYear HP Disk (2.3 of 35.8 G.S.T), 6.6%
7.9 of 6.8 GByteYear MP Disk (28.2 of 24.4 G.S.T), 115.4%
0.0 of 2.5 PersonDay Support (0.0 of 72.2 G.S.T), 0.0%
0.0 of 6.3 Day Training (0.0 of 68.1 G.S.T), 0.0%
Total usage for project cse040 31.0 of 321.3 Generic Service Tokens, 9.6%

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cse041 GR/M84879 Imregun
Last Trade: Tue Nov 18 13:23:03 2003
Usage:
588.6 of 588.6 PEHour MPP PE CPU (14.2 of 14.2 G.S.T), 100.0%
1.7 of 1.7 GByteYear HP Disk (10.2 of 10.1 G.S.T), 100.7%
177.6 of 512.5 Hour Wren CPU (8.8 of 25.4 G.S.T), 34.7%
6129.9 of 8216.5 Hour SMP CPU (238.2 of 319.2 G.S.T), 74.6%
7.3 of 123.5 GByteYear MP Disk (26.1 of 440.9 G.S.T), 5.9%
240.9 of 323.9 GByteYear HSM/Tape (151.3 of 203.5 G.S.T), 74.4%
10886.0 of 47319.7 Hour Green CPU (568.8 of 2472.6 G.S.T), 23.0%
0.0 of 3.0 PersonDay Support (0.0 of 88.2 G.S.T), 0.0%
0.0 of 3.0 Day Training (0.0 of 32.3 G.S.T), 0.0%
Total usage for project cse041 1017.6 of 3606.4 Generic Service Tokens, 28.2%

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cse050 GR/N/38152 Bradley
Last Trade: Fri Nov 28 13:28:36 2003
Usage:
1097.8 of 1059.3 PEHour MPP PE CPU (26.5 of 25.6 G.S.T), 103.6%
0.1 of 0.1 GByteYear HP Disk (0.8 of 0.6 G.S.T), 123.1%
0.0 of 16375.2 Hour Newton CPU (0.0 of 2506.9 G.S.T), 0.0%
0.0 of 78.4 Hour Wren CPU (0.0 of 3.9 G.S.T), 0.0%
0.3 of 1200.0 Hour SMP CPU (0.0 of 46.6 G.S.T), 0.0%
0.0 of 18.2 GByteYear MP Disk (0.0 of 64.8 G.S.T), 0.0%
0.0 of 4.5 GByteYear HSM/Tape (0.0 of 2.8 G.S.T), 0.0%
0.0 of 20.0 PersonDay Support (0.0 of 588.2 G.S.T), 0.0%
0.0 of 10.0 Day Training (0.0 of 107.5 G.S.T), 0.0%
Total usage for project cse050 27.3 of 3347.1 Generic Service Tokens, 0.8%

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cse053 GR/R04225 Leschziner
Last Trade: Fri Nov 28 17:33:18 2003

Usage:
143279.8 of 199557.6 PEHour MPP PE CPU (3464.3 of 4825.0 G.S.T), 71.8%
3.5 of 115.0 GByteYear HP Disk (20.6 of 684.5 G.S.T), 3.0%
2.0 of 1579.4 Hour Newton CPU (0.3 of 241.8 G.S.T), 0.1%
2.0 of 78.4 Hour Wren CPU (0.1 of 3.9 G.S.T), 2.5%
73.9 of 13900.0 Hour SMP CPU (2.9 of 540.0 G.S.T), 0.5%
5.1 of 85.0 GByteYear MP Disk (18.1 of 303.6 G.S.T), 6.0%
14.2 of 100.0 GByteYear HSM/Tape (8.9 of 62.8 G.S.T), 14.2%
26395.6 of 52751.5 Hour Green CPU (1379.2 of 2756.4 G.S.T), 50.0%
0.0 of 15.0 PersonDay Support (0.0 of 441.2 G.S.T), 0.0%
0.0 of 8.0 Day Training (0.0 of 86.0 G.S.T), 0.0%
Total usage for project cse053 4894.5 of 9945.2 Generic Service Tokens, 49.2%

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cse055 GR/N66810 Staunton
Last Trade: Mon Aug 6 09:05:54 2001
Usage:
8840.4 of 24604.0 PEHour MPP PE CPU (213.7 of 594.9 G.S.T), 35.9%
2.4 of 2.5 GByteYear HP Disk (14.2 of 14.9 G.S.T), 95.7%
0.0 of 3.1 Hour SMP CPU (0.0 of 0.1 G.S.T), 0.0%
0.0 of 5.0 PersonDay Support (0.0 of 147.1 G.S.T), 0.0%
0.0 of 10.0 Day Training (0.0 of 107.5 G.S.T), 0.0%
Total usage for project cse055 228.0 of 864.5 Generic Service Tokens, 26.4%

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cse057 GR/R23909 Krushelnick
Last Trade: Fri Sep 7 11:39:20 2001
Usage:
2310.0 of 86751.6 PEHour MPP PE CPU (55.9 of 2097.5 G.S.T), 2.7%
0.9 of 30.0 GByteYear HP Disk (5.5 of 178.6 G.S.T), 3.1%
1.7 of 62.2 Hour SMP CPU (0.1 of 2.4 G.S.T), 2.7%
0.5 of 462.7 Hour Green CPU (0.0 of 24.2 G.S.T), 0.1%
0.0 of 20.0 PersonDay Support (0.0 of 588.2 G.S.T), 0.0%
0.0 of 10.0 Day Training (0.0 of 107.5 G.S.T), 0.0%
Total usage for project cse057 61.4 of 2998.5 Generic Service Tokens, 2.0%

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cse060 GR/R17058 Robb
Last Trade: Fri Jul 11 09:24:59 2003
Usage:
113625.7 of 112507.5 PEHour MPP PE CPU (2747.3 of 2720.3 G.S.T), 101.0%
0.0 of 2.0 GByteYear HP Disk (0.0 of 11.9 G.S.T), 0.0%
0.3 of 48.8 Hour Wren CPU (0.0 of 2.4 G.S.T), 0.5%
0.0 of 2.6 GByteYear MP Disk SAN (0.0 of 11.2 G.S.T), 0.0%
14254.4 of 12856.5 Hour Green CPU (744.8 of 671.8 G.S.T), 110.9%
0.0 of 10.0 PersonDay Support (0.0 of 294.1 G.S.T), 0.0%
0.0 of 10.0 Day Training (0.0 of 107.5 G.S.T), 0.0%
Total usage for project cse060 3492.2 of 3819.2 Generic Service Tokens, 91.4%

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cse061 GR/R42672 Imregun
Last Trade: Fri Oct 17 09:11:21 2003
Usage:
1.0 of 5.0 PEHour MPP PE CPU (0.0 of 0.1 G.S.T), 19.1%
0.9 of 1.3 GByteYear HP Disk (5.6 of 7.8 G.S.T), 72.1%
3.4 of 1952.1 Hour Wren CPU (0.2 of 96.7 G.S.T), 0.2%
0.0 of 10.0 GByteYear HP Disk SAN - /d (0.0 of 59.5 G.S.T), 0.0%
14371.9 of 50950.6 Hour SMP CPU (558.4 of 1979.5 G.S.T), 28.2%
0.9 of 64.7 GByteYear MP Disk (3.3 of 231.0 G.S.T), 1.4%
0.0 of 5.0 PersonDay Support (0.0 of 147.1 G.S.T), 0.0%

0.0 of 5.0 Day Training (0.0 of 53.8 G.S.T), 0.0%
Total usage for project cse061 567.5 of 2575.5 Generic Service Tokens, 22.0%

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cse063 GR/R46151 Sandham
Last Trade: Mon Aug 4 11:11:15 2003
Usage:
187813.1 of 208701.7 PEHour MPP PE CPU (4541.1 of 5046.1 G.S.T), 90.0%
20.2 of 100.0 GByteYear HP Disk (120.5 of 595.2 G.S.T), 20.2%
15.1 of 108.4 Hour Wren CPU (0.7 of 5.4 G.S.T), 13.9%
168.0 of 62.9 Hour SMP CPU (6.5 of 2.4 G.S.T), 267.2%
0.0 of 50.0 GByteYear MP Disk (0.0 of 178.6 G.S.T), 0.0%
188.4 of 525.0 GByteYear HSM/Tape (118.4 of 329.8 G.S.T), 35.9%
69691.5 of 106427.4 Hour Green CPU (3641.5 of 5561.1 G.S.T), 65.5%
0.0 of 5.0 PersonDay Support (0.0 of 147.1 G.S.T), 0.0%
0.0 of 0.0 Day Training (0.0 of 0.0 G.S.T)
Total usage for project cse063 8428.8 of 11865.6 Generic Service Tokens, 71.0%

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cse064 GR/R43570 Leschziner
Last Trade: Thu Nov 6 11:37:07 2003
Usage:
55552.0 of 62039.1 PEHour MPP PE CPU (1343.2 of 1500.0 G.S.T), 89.5%
0.5 of 15.0 GByteYear HP Disk (3.2 of 89.3 G.S.T), 3.5%
0.8 of 253.8 Hour Newton CPU (0.1 of 38.9 G.S.T), 0.3%
34.4 of 78.4 Hour Wren CPU (1.7 of 3.9 G.S.T), 43.9%
12193.7 of 19767.0 Hour SMP CPU (473.7 of 768.0 G.S.T), 61.7%
0.9 of 23.0 GByteYear MP Disk (3.4 of 82.1 G.S.T), 4.1%
21.4 of 250.4 GByteYear HSM/Tape (13.4 of 157.3 G.S.T), 8.5%
36308.4 of 48503.8 Hour Green CPU (1897.2 of 2534.4 G.S.T), 74.9%
0.0 of 10.0 PersonDay Support (0.0 of 294.1 G.S.T), 0.0%
2.0 of 8.0 Day Training (21.5 of 86.0 G.S.T), 25.0%
Total usage for project cse064 3757.4 of 5554.0 Generic Service Tokens, 67.7%

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cse066 GR/R30907 Coveney
Last Trade: re-enabled
Usage:
72794.6 of 87981.1 PEHour MPP PE CPU (1760.1 of 2127.3 G.S.T), 82.7%
21.1 of 90.0 GByteYear HP Disk (125.4 of 535.7 G.S.T), 23.4%
0.0 of 78.4 Hour Wren CPU (0.0 of 3.9 G.S.T), 0.0%
2389.1 of 14900.0 Hour SMP CPU (92.8 of 578.9 G.S.T), 16.0%
17.3 of 18.0 GByteYear MP Disk (61.9 of 64.5 G.S.T), 96.0%
13456.3 of 64652.8 Hour Green CPU (703.1 of 3378.2 G.S.T), 20.8%
0.0 of 21.0 PersonDay Support (0.0 of 617.6 G.S.T), 0.0%
3.0 of 6.0 Day Training (32.3 of 64.5 G.S.T), 50.0%
Total usage for project cse066 2775.6 of 7370.6 Generic Service Tokens, 37.7%

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cse071 GR/R23657 Iacovides
Last Trade: Wed Jul 23 10:08:16 2003
Usage:
0.8 of 223.3 Hour Wren CPU (0.0 of 11.1 G.S.T), 0.4%
0.1 of 16.6 GByteYear MP Disk SAN (0.6 of 71.4 G.S.T), 0.8%
0.0 of 42708.5 Hour SMP CPU (0.0 of 1659.3 G.S.T), 0.0%
1241.5 of 46991.9 Hour Green CPU (64.9 of 2455.4 G.S.T), 2.6%
0.0 of 5.0 PersonDay Support (0.0 of 147.1 G.S.T), 0.0%
2.0 of 6.0 Day Training (21.5 of 64.5 G.S.T), 33.3%
Total usage for project cse071 87.0 of 4408.8 Generic Service Tokens, 2.0%

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cse072 GR/R66692 Karlin
Last Trade: Sun Jul 27 00:03:56 2003
Usage:
41583.1 of 165052.0 PEHour MPP PE CPU (1005.4 of 3990.7 G.S.T), 25.2%
0.7 of 6.7 GByteYear HP Disk (4.1 of 40.0 G.S.T), 10.3%
0.0 of 15.7 Hour Wren CPU (0.0 of 0.8 G.S.T), 0.0%
0.0 of 163.0 Hour SMP CPU (0.0 of 6.3 G.S.T), 0.0%
0.0 of 24.0 GByteYear MP Disk (0.0 of 85.7 G.S.T), 0.0%
0.0 of 84.0 GByteYear HSM/Tape (0.0 of 52.8 G.S.T), 0.0%
0.0 of 18.0 PersonDay Support (0.0 of 529.4 G.S.T), 0.0%
6.0 of 9.0 Day Training (64.5 of 96.8 G.S.T), 66.7%
Total usage for project cse072 1074.1 of 4802.5 Generic Service Tokens, 22.4%

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cse074 GR/R66197 Luo
Last Trade: Wed Jan 2 15:22:45 2002
Usage:
0.0 of 15370.1 PEHour MPP PE CPU (0.0 of 371.6 G.S.T), 0.0%
0.0 of 6.0 GByteYear HP Disk (0.0 of 35.7 G.S.T), 0.0%
0.0 of 600.0 Hour SMP CPU (0.0 of 23.3 G.S.T), 0.0%
0.0 of 9.0 GByteYear MP Disk (0.0 of 32.1 G.S.T), 0.0%
Total usage for project cse074 0.0 of 462.8 Generic Service Tokens, 0.0%

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cse075 GR/R67699 Coveney
Last Trade: re-enabled
Usage:
8401.8 of 264758.5 PEHour MPP PE CPU (203.1 of 6401.5 G.S.T), 3.2%
70.4 of 217.0 GByteYear HP Disk (418.8 of 1291.5 G.S.T), 32.4%
49.1 of 263.6 Hour Wren CPU (2.4 of 13.1 G.S.T), 18.6%
25.8 of 350.5 GByteYear MP Disk SAN (110.5 of 1504.4 G.S.T), 7.3%
7411.6 of 31500.0 Hour SMP CPU (288.0 of 1223.8 G.S.T), 23.5%
537.1 of 1013.5 GByteYear MP Disk (1918.3 of 3619.6 G.S.T), 53.0%
290.0 of 1959.4 GByteYear HSM/Tape (182.2 of 1230.8 G.S.T), 14.8%
108574.8 of 398388.6 Hour Green CPU (5673.3 of 20816.6 G.S.T), 27.3%
0.0 of 34.0 PersonDay Support (0.0 of 1000.0 G.S.T), 0.0%
5.0 of 14.0 Day Training (53.8 of 150.5 G.S.T), 35.7%
Total usage for project cse075 8850.4 of 37251.9 Generic Service Tokens, 23.8%

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cse076 GR/R66975 Briddon
Last Trade: Mon Nov 24 09:32:34 2003
Usage:
9437.9 of 4161.1 PEHour MPP PE CPU (228.2 of 100.6 G.S.T), 226.8%
1.8 of 1.3 GByteYear HP Disk (10.7 of 8.0 G.S.T), 133.1%
5714.4 of 130832.3 Hour Newton CPU (874.8 of 20029.4 G.S.T), 4.4%
101.4 of 504.6 Hour Wren CPU (5.0 of 25.0 G.S.T), 20.1%
268169.5 of 267888.9 Hour SMP CPU (10418.8 of 10407.9 G.S.T), 100.1%
10.2 of 23.2 GByteYear MP Disk (36.4 of 82.8 G.S.T), 44.0%
254717.4 of 259907.5 Hour Green CPU (13309.5 of 13580.7 G.S.T), 98.0%
11.0 of 20.0 PersonDay Support (323.5 of 588.2 G.S.T), 55.0%
0.0 of 3670.3 Day Training (0.0 of 39465.1 G.S.T), 0.0%
Total usage for project cse076 25207.0 of 84287.8 Generic Service Tokens, 29.9%

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cse077 GR/R69792 Kronenburg
Last Trade: Thu Oct 17 14:11:09 2002
Usage:
0.0 of 400000.6 PEHour MPP PE CPU (0.0 of 9671.5 G.S.T), 0.0%

0.0 of 22.5 GByteYear HP Disk (0.0 of 134.0 G.S.T), 0.0%
0.0 of 2.0 Day Training (0.0 of 21.5 G.S.T), 0.0%
Total usage for project cse077 0.0 of 9827.0 Generic Service Tokens, 0.0%

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cse082 GR/R79654 Barakos
Last Trade: re-enabled
Usage:
9.9 of 15.7 Hour Wren CPU (0.5 of 0.8 G.S.T), 63.2%
9174.1 of 9264.7 Hour SMP CPU (356.4 of 359.9 G.S.T), 99.0%
55.1 of 15.5 GByteYear MP Disk (196.7 of 55.2 G.S.T), 356.1%
0.3 of 28.7 GByteYear HSM/Tape (0.2 of 18.0 G.S.T), 1.0%
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 147.1 G.S.T), 0.0%
0.0 of 1.0 Day Training (0.0 of 10.8 G.S.T), 0.0%
Total usage for project cse082 629.3 of 663.9 Generic Service Tokens, 94.8%

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cse084 GR/R47066 Needs
Last Trade: re-enabled
Usage:
311572.6 of 306225.8 PEHour MPP PE CPU (7533.4 of 7404.1 G.S.T), 101.7%
25.9 of 270.0 GByteYear HP Disk (154.0 of 1607.1 G.S.T), 9.6%
189.3 of 672.1 Hour Wren CPU (9.4 of 33.3 G.S.T), 28.2%
5516.5 of 14384.3 Hour SMP CPU (214.3 of 558.9 G.S.T), 38.4%
36.1 of 60.6 GByteYear MP Disk (128.9 of 216.5 G.S.T), 59.5%
80487.5 of 89153.1 Hour Green CPU (4205.6 of 4658.4 G.S.T), 90.3%
0.0 of 7.0 PersonDay Support (0.0 of 205.9 G.S.T), 0.0%
0.0 of 6.0 Day Training (0.0 of 64.5 G.S.T), 0.0%
Total usage for project cse084 12245.7 of 14748.8 Generic Service Tokens, 83.0%

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cse085 GR/R64957 Sandham
Last Trade: Mon Nov 17 12:25:20 2003
Usage:
1080236.5 of 1137510.0 PEHour MPP PE CPU (26118.7 of 27503.5 G.S.T), 95.0%
314.8 of 650.0 GByteYear HP Disk (1873.9 of 3869.0 G.S.T), 48.4%
86.4 of 59692.4 Hour Newton CPU (13.2 of 9138.5 G.S.T), 0.1%
44.3 of 78.4 Hour Wren CPU (2.2 of 3.9 G.S.T), 56.4%
3421.8 of 3945.2 Hour SMP CPU (132.9 of 153.3 G.S.T), 86.7%
229.6 of 750.0 GByteYear MP Disk (820.2 of 2678.6 G.S.T), 30.6%
2106.8 of 3205.1 GByteYear HSM/Tape (1323.4 of 2013.2 G.S.T), 65.7%
286940.7 of 579901.3 Hour Green CPU (14993.2 of 30301.0 G.S.T), 49.5%
0.0 of 15.0 PersonDay Support (0.0 of 441.2 G.S.T), 0.0%
7.0 of 8.0 Day Training (75.3 of 86.0 G.S.T), 87.5%
Total usage for project cse085 45353.0 of 76188.3 Generic Service Tokens, 59.5%

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cse086 GR/R83118 Taylor
Last Trade: Wed Nov 26 15:49:01 2003
Usage:
879025.4 of 1021498.4 PEHour MPP PE CPU (21253.7 of 24698.5 G.S.T), 86.1%
125.1 of 162.7 GByteYear HP Disk (744.7 of 968.4 G.S.T), 76.9%
966.5 of 34131.0 Hour Newton CPU (148.0 of 5225.2 G.S.T), 2.8%
552.5 of 3262.8 Hour Wren CPU (27.4 of 161.7 G.S.T), 16.9%
0.0 of 12.9 GByteYear HP Disk SAN - /d (0.0 of 76.8 G.S.T), 0.0%
0.0 of 46.6 GbyteYear HV Disk SAN /v (0.0 of 83.4 G.S.T), 0.0%
14753.6 of 31906.3 Hour SMP CPU (573.2 of 1239.6 G.S.T), 46.2%
164.9 of 497.0 GByteYear MP Disk (588.9 of 1775.0 G.S.T), 33.2%
25.4 of 3750.0 GByteYear HSM/Tape (16.0 of 2355.5 G.S.T), 0.7%

138765.5 of 427900.0 Hour Green CPU (7250.8 of 22358.7 G.S.T), 32.4%
5.0 of 35.0 PersonDay Support (147.1 of 1029.4 G.S.T), 14.3%
0.0 of 116.0 Day Training (0.0 of 1247.3 G.S.T), 0.0%
Total usage for project cse086 30749.7 of 61219.5 Generic Service Tokens, 50.2%

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cse086a MP1
Last Trade: never
Usage:
721660.6 of 750000.0 PEHour MPP PE CPU (17448.8 of 18134.0 G.S.T), 96.2%
8.0 of 10.0 GByteYear HP Disk (47.6 of 59.5 G.S.T), 79.9%
1.1 of 200.0 Hour Wren CPU (0.1 of 9.9 G.S.T), 0.5%
0.0 of 50.0 Hour SMP CPU (0.0 of 1.9 G.S.T), 0.0%
9.4 of 20.0 GByteYear MP Disk (33.7 of 71.4 G.S.T), 47.2%
860.1 of 10000.0 Hour Green CPU (44.9 of 522.5 G.S.T), 8.6%
Total usage for subproject cse086a 17575.1 of 18799.4 Generic Service Tokens, 93.5%

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cse086b MP2
Last Trade: never
Usage:
48448.5 of 56000.0 PEHour MPP PE CPU (1171.4 of 1354.0 G.S.T), 86.5%
35.1 of 50.0 GByteYear HP Disk (208.7 of 297.6 G.S.T), 70.1%
966.5 of 15000.0 Hour Newton CPU (148.0 of 2296.4 G.S.T), 6.4%
123.0 of 200.0 Hour Wren CPU (6.1 of 9.9 G.S.T), 61.5%
5502.1 of 15000.0 Hour SMP CPU (213.8 of 582.8 G.S.T), 36.7%
27.4 of 40.0 GByteYear MP Disk (97.8 of 142.9 G.S.T), 68.4%
114097.1 of 120000.0 Hour Green CPU (5961.8 of 6270.2 G.S.T), 95.1%
Total usage for subproject cse086b 7807.6 of 10953.8 Generic Service Tokens, 71.3%

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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), 82.4%
0.1 of 0.1 GByteYear MP Disk (0.3 of 0.4 G.S.T), 81.8%
Total usage for subproject cse086d 0.8 of 1.0 Generic Service Tokens, 82.2%

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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%
1.7 of 2.0 GByteYear HP Disk (9.9 of 11.9 G.S.T), 83.0%
0.0 of 15000.0 Hour Newton CPU (0.0 of 2296.4 G.S.T), 0.0%
329.9 of 2500.0 Hour Wren CPU (16.3 of 123.9 G.S.T), 13.2%
0.0 of 5.0 GbyteYear HV Disk SAN /v (0.0 of 8.9 G.S.T), 0.0%
6132.8 of 10000.0 Hour SMP CPU (238.3 of 388.5 G.S.T), 61.3%
11.2 of 15.0 GByteYear MP Disk (40.0 of 53.6 G.S.T), 74.7%
20968.5 of 60000.0 Hour Green CPU (1095.6 of 3135.1 G.S.T), 34.9%
Total usage for subproject cse086e 1401.3 of 6030.4 Generic Service Tokens, 23.2%

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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%
3.6 of 5.0 GByteYear HP Disk (21.3 of 29.8 G.S.T), 71.6%
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%

19.5 of 30.0 GByteYear MP Disk (69.5 of 107.1 G.S.T), 64.9%
25.4 of 40.0 GByteYear HSM/Tape (16.0 of 25.1 G.S.T), 63.6%
0.0 of 10000.0 Hour Green CPU (0.0 of 522.5 G.S.T), 0.0%
Total usage for subproject cse086f 108.7 of 817.3 Generic Service Tokens, 13.3%

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cse086g EC2
Last Trade: never
Usage:
577.0 of 5000.0 PEHour MPP PE CPU (14.0 of 120.9 G.S.T), 11.5%
40.3 of 50.0 GByteYear HP Disk (239.6 of 297.6 G.S.T), 80.5%
97.6 of 200.0 Hour Wren CPU (4.8 of 9.9 G.S.T), 48.8%
648.8 of 1000.0 Hour SMP CPU (25.2 of 38.9 G.S.T), 64.9%
67.1 of 80.0 GByteYear MP Disk (239.7 of 285.7 G.S.T), 83.9%
0.0 of 50.0 GByteYear HSM/Tape (0.0 of 31.4 G.S.T), 0.0%
2757.9 of 10000.0 Hour Green CPU (144.1 of 522.5 G.S.T), 27.6%
Total usage for subproject cse086g 667.4 of 1306.9 Generic Service Tokens, 51.1%

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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%
6.6 of 10.0 GByteYear HP Disk (39.1 of 59.5 G.S.T), 65.6%
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%
14.8 of 20.0 GByteYear MP Disk (52.9 of 71.4 G.S.T), 74.1%
0.0 of 10000.0 Hour Green CPU (0.0 of 522.5 G.S.T), 0.0%
Total usage for subproject cse086h 1220.8 of 1882.0 Generic Service Tokens, 64.9%

---

cse086i EC4
Last Trade: never
Usage:
0.1 of 0.1 GByteYear HP Disk (0.5 of 0.6 G.S.T), 81.8%
0.1 of 0.1 GByteYear MP Disk (0.3 of 0.4 G.S.T), 81.8%
Total usage for subproject cse086i 0.8 of 1.0 Generic Service Tokens, 81.8%

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cse086j BEC1
Last Trade: never
Usage:
61884.4 of 70000.0 PEHour MPP PE CPU (1496.3 of 1692.5 G.S.T), 88.4%
1.6 of 3.0 GByteYear HP Disk (9.2 of 17.9 G.S.T), 51.8%
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%
0.3 of 5.0 GByteYear MP Disk (1.1 of 17.9 G.S.T), 6.3%
0.0 of 1000.0 Hour Green CPU (0.0 of 52.3 G.S.T), 0.0%
Total usage for subproject cse086j 1506.6 of 1790.4 Generic Service Tokens, 84.2%

---

cse086k BEC2
Last Trade: never
Usage:
0.1 of 0.1 GByteYear HP Disk (0.5 of 0.6 G.S.T), 81.8%
0.1 of 200.0 Hour Wren CPU (0.0 of 9.9 G.S.T), 0.0%
2245.3 of 5000.0 Hour SMP CPU (87.2 of 194.3 G.S.T), 44.9%
13.9 of 15.0 GByteYear MP Disk (49.5 of 53.6 G.S.T), 92.3%
81.9 of 20000.0 Hour Green CPU (4.3 of 1045.0 G.S.T), 0.4%
Total usage for subproject cse086k 141.5 of 1303.4 Generic Service Tokens, 10.9%

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cse089 GR/R85556 Wiercigroch
Last Trade: Mon Nov 17 09:29:24 2003
Usage:
0.0 of 242.8 PEHour MPP PE CPU (0.0 of 5.9 G.S.T), 0.0%
0.0 of 1.1 GByteYear HP Disk (0.0 of 6.3 G.S.T), 0.0%
0.0 of 1952.1 Hour Wren CPU (0.0 of 96.7 G.S.T), 0.0%
0.0 of 44.0 GByteYear HP Disk SAN - /d (0.0 of 261.9 G.S.T), 0.0%
0.0 of 0.0 Hour SMP CPU (0.0 of 0.0 G.S.T), 39.2%
0.0 of 1850.9 Hour Green CPU (0.0 of 96.7 G.S.T), 0.0%
0.0 of 15.0 PersonDay Support (0.0 of 441.2 G.S.T), 0.0%
0.0 of 7.0 Day Training (0.0 of 75.3 G.S.T), 0.0%
Total usage for project cse089 0.0 of 984.0 Generic Service Tokens, 0.0%

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cse098 GR/S20062 De Souza
Last Trade: Fri Feb 7 10:25:19 2003
Usage:
0.0 of 333000.0 PEHour MPP PE CPU (0.0 of 8051.5 G.S.T), 0.0%
0.0 of 20.0 GByteYear HP Disk (0.0 of 119.0 G.S.T), 0.0%
0.0 of 10.0 Hour Wren CPU (0.0 of 0.5 G.S.T), 0.4%
0.1 of 3975.4 Hour SMP CPU (0.0 of 154.5 G.S.T), 0.0%
1.4 of 10.0 GByteYear MP Disk (5.1 of 35.7 G.S.T), 14.2%
0.0 of 100.0 GByteYear HSM/Tape (0.0 of 62.8 G.S.T), 0.0%
4893.5 of 8500.0 Hour Green CPU (255.7 of 444.1 G.S.T), 57.6%
0.0 of 5.0 PersonDay Support (0.0 of 147.1 G.S.T), 0.0%
0.0 of 5.0 Day Training (0.0 of 53.8 G.S.T), 0.0%
Total usage for project cse098 260.8 of 9069.0 Generic Service Tokens, 2.9%

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cse106 GR/S42712 Augarde
Last Trade: Wed Nov 5 15:06:00 2003
Usage:
0.0 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 160.7 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 735.3 G.S.T), 0.0%
0.0 of 10.0 Day Training (0.0 of 107.5 G.S.T), 0.0%
Total usage for project cse106 0.0 of 3740.0 Generic Service Tokens, 0.0%

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cse108 GR/S43498 Holden
Last Trade: Wed Nov 5 15:55:15 2003
Usage:
0.0 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 3571.4 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 294.1 G.S.T), 0.0%
0.0 of 6.0 Day Training (0.0 of 64.5 G.S.T), 0.0%
Total usage for project cse108 0.0 of 6054.8 Generic Service Tokens, 0.0%

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cse110 GR/S43214 Leach
Last Trade: Wed Nov 5 16:16:25 2003
Usage:
0.0 of 6000.0 Hour Wren CPU (0.0 of 297.3 G.S.T), 0.0%
0.0 of 67.6 GByteYear HP Disk SAN - /d (0.0 of 402.3 G.S.T), 0.0%
0.0 of 20.0 GByteYear MP Disk SAN (0.0 of 85.8 G.S.T), 0.0%
0.0 of 42000.0 Hour Green CPU (0.0 of 2194.6 G.S.T), 0.0%

0.0 of 30.0 PersonDay Support (0.0 of 882.4 G.S.T), 0.0%
0.0 of 25.0 Day Training (0.0 of 268.8 G.S.T), 0.0%
Total usage for project cse110 0.0 of 4131.1 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 8.6 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 470.6 G.S.T), 0.0%
0.0 of 8.0 Day Training (0.0 of 86.0 G.S.T), 0.0%
Total usage for project cse116 0.0 of 905.0 Generic Service Tokens, 0.0%

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csedl1 - Castep port to Altix
Last Trade: Wed Nov 26 17:17:36 2003
Usage:
3232.6 of 49578.0 Hour Newton CPU (494.9 of 7590.0 G.S.T), 6.5%
0.0 of 500.0 Hour Wren CPU (0.0 of 24.8 G.S.T), 0.0%
0.2 of 69.2 GByteYear MP Disk SAN (1.0 of 297.1 G.S.T), 0.3%
0.0 of 125.0 GByteYear HSM/Tape (0.0 of 78.5 G.S.T), 0.0%
0.0 of 6.0 Day Training (0.0 of 64.6 G.S.T), 0.0%
Total usage for project csedl1 495.9 of 8055.0 Generic Service Tokens, 6.2%

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csedl1a Computational Cemistry
Last Trade: never
Usage:
0.0 of 15000.0 Hour Newton CPU (0.0 of 2296.4 G.S.T), 0.0%
0.0 of 150.0 Hour Wren CPU (0.0 of 7.4 G.S.T), 0.0%
0.0 of 19.5 GByteYear MP Disk SAN (0.0 of 83.7 G.S.T), 0.0%
0.0 of 37.0 GByteYear HSM/Tape (0.0 of 23.2 G.S.T), 0.0%
Total usage for subproject csedl1a 0.0 of 2410.8 Generic Service Tokens, 0.0%

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csedl1b Molecular Simulation
Last Trade: never
Usage:
0.0 of 5000.0 Hour Newton CPU (0.0 of 765.5 G.S.T), 0.0%
0.0 of 50.0 Hour Wren CPU (0.0 of 2.5 G.S.T), 0.0%
0.0 of 7.5 GByteYear MP Disk SAN (0.0 of 32.2 G.S.T), 0.0%
0.0 of 13.0 GByteYear HSM/Tape (0.0 of 8.2 G.S.T), 0.0%
Total usage for subproject csedl1b 0.0 of 808.3 Generic Service Tokens, 0.0%

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csedl1c Materials
Last Trade: never
Usage:
3232.6 of 10000.0 Hour Newton CPU (494.9 of 1530.9 G.S.T), 32.3%
0.0 of 100.0 Hour Wren CPU (0.0 of 5.0 G.S.T), 0.0%
0.2 of 15.0 GByteYear MP Disk SAN (1.0 of 64.4 G.S.T), 1.5%
0.0 of 25.0 GByteYear HSM/Tape (0.0 of 15.7 G.S.T), 0.0%
Total usage for subproject csedl1c 495.9 of 1616.0 Generic Service Tokens, 30.7%

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csedl1d - Band Theory
Last Trade: never

Usage:
0.0 of 5000.0 Hour Newton CPU (0.0 of 765.5 G.S.T), 0.0%
0.0 of 50.0 Hour Wren CPU (0.0 of 2.5 G.S.T), 0.0%
0.0 of 7.5 GByteYear MP Disk SAN (0.0 of 32.2 G.S.T), 0.0%
0.0 of 13.0 GByteYear HSM/Tape (0.0 of 8.2 G.S.T), 0.0%
Total usage for subproject csedl1d 0.0 of 808.3 Generic Service Tokens, 0.0%

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csedl1e High End Computing
Last Trade: never
Usage:
0.0 of 15000.0 Hour Newton CPU (0.0 of 2296.4 G.S.T), 0.0%
0.0 of 150.0 Hour Wren CPU (0.0 of 7.4 G.S.T), 0.0%
0.0 of 19.5 GByteYear MP Disk SAN (0.0 of 83.7 G.S.T), 0.0%
0.0 of 37.0 GByteYear HSM/Tape (0.0 of 23.2 G.S.T), 0.0%
Total usage for subproject csedl1e 0.0 of 2410.8 Generic Service Tokens, 0.0%

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cseetf - sc2003 experiment
Last Trade: Fri Nov 21 08:39:39 2003
Usage:
22799.9 of 25000.0 Hour Newton CPU (3490.5 of 3827.3 G.S.T), 91.2%
6.8 of 19.5 Hour Wren CPU (0.3 of 1.0 G.S.T), 34.9%
55.6 of 112.9 GByteYear HP Disk SAN - /d (331.0 of 671.8 G.S.T), 49.3%
0.0 of 0.1 GByteYear MP Disk SAN (0.0 of 0.4 G.S.T), 0.0%
0.1 of 0.3 GbyteYear HV Disk SAN /v (0.2 of 0.6 G.S.T), 32.9%
0.0 of 0.6 Hour SMP CPU (0.0 of 0.0 G.S.T), 1.9%
43119.9 of 53000.0 Hour Green CPU (2253.1 of 2769.4 G.S.T), 81.4%
Total usage for project cseetf 6075.2 of 7270.4 Generic Service Tokens, 83.6%

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csehpcx - benchmarking
Last Trade: Tue Sep 16 22:25:53 2003
Usage:
11200.4 of 44743.4 PEHour MPP PE CPU (270.8 of 1081.8 G.S.T), 25.0%
15.1 of 18.9 GByteYear HP Disk (89.9 of 112.5 G.S.T), 79.9%
1090.8 of 6317.4 Hour Newton CPU (167.0 of 967.1 G.S.T), 17.3%
0.7 of 1464.1 Hour Wren CPU (0.0 of 72.5 G.S.T), 0.0%
0.5 of 1867.0 Hour SMP CPU (0.0 of 72.5 G.S.T), 0.0%
6.0 of 56.4 GByteYear MP Disk (21.3 of 201.3 G.S.T), 10.6%
22393.5 of 46273.2 Hour Green CPU (1170.1 of 2417.9 G.S.T), 48.4%
Total usage for project csehpcx 1719.1 of 4925.7 Generic Service Tokens, 34.9%

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csn001 Webb & GST/02/2846 Killworth & T/S/2001/00187 New
Last Trade: Mon Sep 29 07:46:24 2003
Usage:
403672.5 of 403758.5 PEHour MPP PE CPU (9760.3 of 9762.4 G.S.T), 100.0%
305.2 of 420.3 GByteYear HP Disk (1816.5 of 2501.6 G.S.T), 72.6%
0.0 of 3266.0 Hour Newton CPU (0.0 of 500.0 G.S.T), 0.0%
267.9 of 401.8 Hour Wren CPU (13.3 of 19.9 G.S.T), 66.7%
162143.0 of 209408.6 Hour SMP CPU (6299.5 of 8135.8 G.S.T), 77.4%
462.0 of 902.2 GByteYear MP Disk (1650.1 of 3222.0 G.S.T), 51.2%
24819.0 of 28957.7 GByteYear HSM/Tape (15589.8 of 18189.5 G.S.T), 85.7%
838681.2 of 973632.7 Hour Green CPU (43822.8 of 50874.3 G.S.T), 86.1%
61.0 of 64.5 PersonDay Support (1794.1 of 1897.1 G.S.T), 94.6%
3.0 of 15.3 Day Training (32.3 of 164.4 G.S.T), 19.6%
Total usage for project csn001 80778.6 of 95267.0 Generic Service Tokens, 84.8%

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csn003 UGAMP O'Neill
Last Trade: Fri Nov 14 11:14:28 2003
Usage:
7004245.0 of 7343025.4 PEHour MPP PE CPU (169353.7 of 177544.9 G.S.T), 95.4%
110.4 of 113.9 GByteYear HP Disk (656.9 of 677.7 G.S.T), 96.9%
36911.6 of 74301.0 Hour Newton CPU (5650.9 of 11374.9 G.S.T), 49.7%
2476.6 of 2664.9 Hour Wren CPU (122.7 of 132.0 G.S.T), 92.9%
265.0 of 740.6 GbyteYear HV Disk SAN /v (474.0 of 1324.9 G.S.T), 35.8%
64211.4 of 73954.2 Hour SMP CPU (2494.7 of 2873.2 G.S.T), 86.8%
92.0 of 93.8 GByteYear MP Disk (328.6 of 334.9 G.S.T), 98.1%
69642.1 of 78867.2 GByteYear HSM/Tape (43745.0 of 49539.7 G.S.T), 88.3%
304014.7 of 315175.2 Hour Green CPU (15885.4 of 16468.6 G.S.T), 96.5%
4.0 of 4.8 PersonDay Support (117.6 of 141.1 G.S.T), 83.4%
22.0 of 34.0 Day Training (236.6 of 365.9 G.S.T), 64.7%
Total usage for project csn003 239066.0 of 260778.0 Generic Service Tokens, 91.7%

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csn006 GR9/3550 Price
Last Trade: Thu Nov 20 12:25:45 2003
Usage:
1618734.0 of 1674524.0 PEHour MPP PE CPU (39138.9 of 40487.8 G.S.T), 96.7%
186.1 of 192.2 GByteYear HP Disk (1107.5 of 1144.3 G.S.T), 96.8%
0.0 of 19596.0 Hour Newton CPU (0.0 of 3000.0 G.S.T), 0.0%
606.2 of 78.4 Hour Wren CPU (30.0 of 3.9 G.S.T), 773.0%
71541.1 of 72126.1 Hour SMP CPU (2779.5 of 2802.2 G.S.T), 99.2%
53.0 of 85.5 GByteYear MP Disk (189.2 of 305.4 G.S.T), 62.0%
9.6 of 20.3 GByteYear HSM/Tape (6.0 of 12.7 G.S.T), 47.3%
475549.6 of 626272.8 Hour Green CPU (24848.4 of 32724.0 G.S.T), 75.9%
Total usage for project csn006 68099.5 of 80480.3 Generic Service Tokens, 84.6%

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csn015 Proctor
Last Trade: Mon Oct 20 13:26:01 2003
Usage:
257642.9 of 305776.0 PEHour MPP PE CPU (6229.5 of 7393.3 G.S.T), 84.3%
6.5 of 13.1 GByteYear HP Disk (38.6 of 78.1 G.S.T), 49.5%
0.0 of 19596.0 Hour Newton CPU (0.0 of 3000.0 G.S.T), 0.0%
97.5 of 161.9 Hour Wren CPU (4.8 of 8.0 G.S.T), 60.2%
736.2 of 1562.0 Hour SMP CPU (28.6 of 60.7 G.S.T), 47.1%
65.5 of 99.3 GByteYear MP Disk (233.8 of 354.5 G.S.T), 66.0%
3551.5 of 5042.3 GByteYear HSM/Tape (2230.9 of 3167.3 G.S.T), 70.4%
246254.6 of 381860.8 Hour Green CPU (12867.3 of 19953.0 G.S.T), 64.5%
2.0 of 10.0 PersonDay Support (58.8 of 294.1 G.S.T), 20.0%
3.0 of 753.0 Day Training (32.3 of 8096.8 G.S.T), 0.4%
Total usage for project csn015 21724.6 of 42405.8 Generic Service Tokens, 51.2%

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csn044 Earth Observation
Last Trade: Wed Aug 28 11:09:50 2002
Usage:
9948.9 of 13857.9 PEHour MPP PE CPU (240.6 of 335.1 G.S.T), 71.8%
0.0 of 5.0 GByteYear HP Disk (0.0 of 30.0 G.S.T), 0.0%
0.0 of 28.4 Hour Wren CPU (0.0 of 1.4 G.S.T), 0.0%
0.2 of 73.9 Hour SMP CPU (0.0 of 2.9 G.S.T), 0.3%
0.0 of 5.0 GByteYear MP Disk (0.0 of 17.9 G.S.T), 0.0%
12.7 of 53.8 GByteYear HSM/Tape (8.0 of 33.8 G.S.T), 23.6%
Total usage for project csn044 248.5 of 421.0 Generic Service Tokens, 59.0%

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csn052 GST/02/2658 Mackay

Last Trade: Tue Aug 5 16:21:52 2003
Usage:
3.6 of 5.9 PEHour MPP PE CPU (0.1 of 0.1 G.S.T), 61.4%
1.5 of 2.0 GByteYear HP Disk (9.2 of 11.9 G.S.T), 77.3%
5.0 of 9.0 Hour Wren CPU (0.2 of 0.4 G.S.T), 54.9%
0.0 of 1.0 GByteYear HP Disk SAN - /d (0.0 of 6.0 G.S.T), 0.0%
0.0 of 0.0 GByteYear MP Disk SAN (0.0 of 0.0 G.S.T), 0.0%
1.3 of 1.9 Hour SMP CPU (0.1 of 0.1 G.S.T), 71.0%
17.3 of 17.3 GByteYear MP Disk (61.8 of 61.9 G.S.T), 99.9%
0.0 of 3.7 GByteYear HSM/Tape (0.0 of 2.3 G.S.T), 0.0%
13966.8 of 16544.3 Hour Green CPU (729.8 of 864.5 G.S.T), 84.4%
5.0 of 5.0 Day Training (53.8 of 53.8 G.S.T), 100.0%
Total usage for project csn052 855.0 of 1001.0 Generic Service Tokens, 85.4%

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csp006 PPA/G/S/2001/00050 Browning
Last Trade: Wed Mar 26 11:34:05 2003
Usage:
0.0 of 111.6 Hour Wren CPU (0.0 of 5.5 G.S.T), 0.0%
0.0 of 20699.4 Hour SMP CPU (0.0 of 804.2 G.S.T), 0.0%
0.0 of 20.0 GByteYear MP Disk (0.0 of 71.4 G.S.T), 0.0%
0.0 of 12.0 Day Training (0.0 of 129.0 G.S.T), 0.0%
Total usage for project csp006 0.0 of 1010.2 Generic Service Tokens, 0.0%

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csp007 PPA/G/O/2002/00004 Hibbert
Last Trade: Tue Apr 1 15:29:22 2003
Usage:
35126.7 of 49999.7 PEHour MPP PE CPU (849.3 of 1208.9 G.S.T), 70.3%
0.0 of 80.0 GByteYear HP Disk (0.0 of 476.2 G.S.T), 0.0%
22.0 of 600.0 Hour Wren CPU (1.1 of 29.7 G.S.T), 3.7%
0.0 of 60.0 GByteYear HP Disk SAN - /d (0.0 of 357.1 G.S.T), 0.0%
0.0 of 600.0 Hour SMP CPU (0.0 of 23.3 G.S.T), 0.0%
Total usage for project csp007 850.4 of 2095.3 Generic Service Tokens, 40.6%

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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%
5.0 of 3.8 GByteYear HP Disk (29.7 of 22.7 G.S.T), 130.8%
1.9 of 0.0 Hour Wren CPU (0.1 of 0.0 G.S.T), 485373.5%
4062.9 of 4120.4 Hour SMP CPU (157.8 of 160.1 G.S.T), 98.6%
2.4 of 1.7 GByteYear MP Disk (8.7 of 6.0 G.S.T), 144.0%
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 (10.8 of 10.8 G.S.T), 99.7%
Total usage for project hpcid 1610.9 of 1581.9 Generic Service Tokens, 101.8%

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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%
5.0 of 4.7 GByteYear HP Disk (29.6 of 28.1 G.S.T), 105.3%
698.4 of 770.8 Hour SMP CPU (27.1 of 29.9 G.S.T), 90.6%
3.9 of 2.8 GByteYear MP Disk (13.9 of 10.0 G.S.T), 138.3%
1728.7 of 1739.8 Hour Green CPU (90.3 of 90.9 G.S.T), 99.4%
Total usage for project hpcie 203.5 of 257.4 Generic Service Tokens, 79.0%

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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 (11.2 of 10.7 G.S.T), 104.6%
Total usage for project hpcis 219.4 of 381.5 Generic Service Tokens, 57.5%

| 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 2002-2004 | 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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