CSAR Service - Management Report

March 2005

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

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

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

1. Introduction

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

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

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

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

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

2. Service Quality

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

2.1 CPARS

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

CSAR Service - Service Quality Report - Performance Targets

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

Table 1

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

CSAR Service - Service Quality Report - Actual Performance Achievement

Service Quality Measure	2004/5											
	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
HPC Services Availability												
Availability in Core Time (% of time)	89.39%	94.21%	97.49%	97.97%	100%	99.52%	97.08%	98.50%	99.50%	97.37%	97.85%	97.85%
Availability out of Core Time (% of time)	91.90%	99.73%	97.85%	100%	99.2%	99.80%	98.67%	98.78%	99.2%	99.73%	99.5%	99.80%
Number of Failures in month	5	3	4	2	2	2	3	4	2	3	5	4
Mean Time between failures in 52 week rolling period (hours)	1741	1036	683	607	529	471	396	340	315	284	248	223
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	<3	<2	<2	<1	<2	<3	<1	<0.5	<0.5	<2	<1
Administrative Queries - Max Time to resolve 95% of all queries	<0.5	<0.5	<1	<0.5	<0.5	<1	<1	<0.5	<1	<0.5	<2	<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 Fermat, Green and Newton at installation:

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

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

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

CSAR Service - Service Quality Report - Service Credits

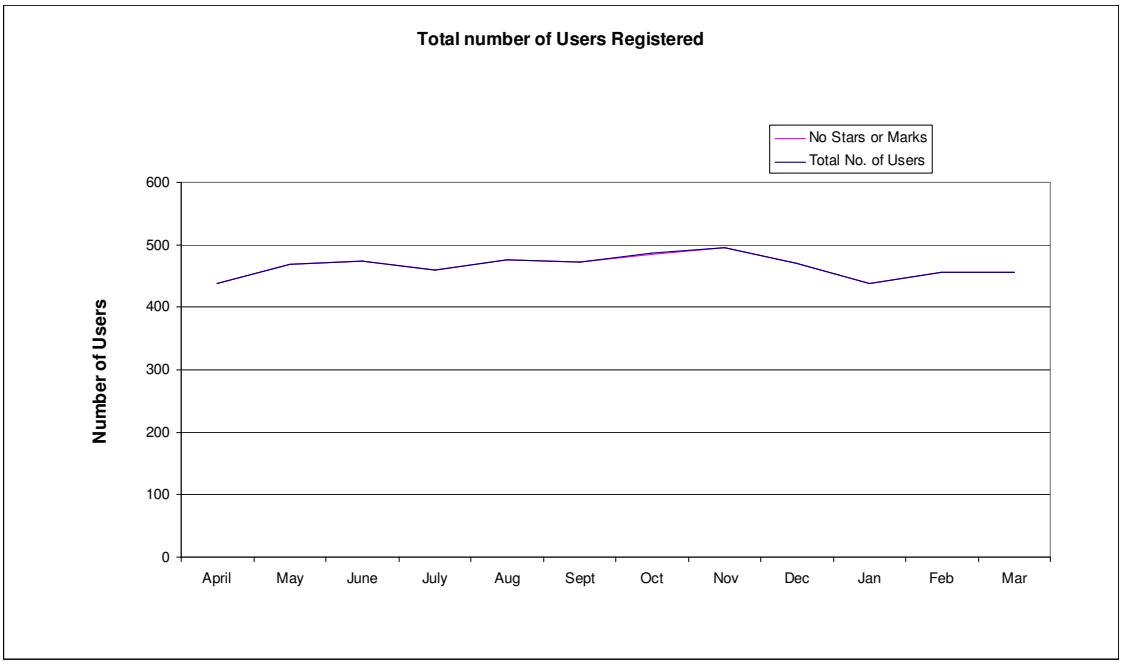
Service Quality Measure	2004/5											
	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
HPC Services Availability												
Availability in Core Time (% of time)	0.195	0.195	0.078	0.078	-0.058	-0.039	0.078	0.039	-0.039	0.078	0.078	0.078
Availability out of Core Time (% of time)	0.039	0	0.078	-0.047	0	-0.047	0	0	0	-0.039	0	-0.047
Number of Failures in month	0.0004	0.0	0.008	0	0	0	0.008	0.008	0	0.008	0.0004	0.008
Mean Time between failures in 52 week rolling period (hours)	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Help Desk												
Non In-depth Queries - Max Time to resolve 50% of all queries	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019
Non In-depth Queries - Max Time to resolve 95% of all queries	0	0.016	0	0	-0.016	0	0.016	-0.016	-0.019	-0.019	0	-0.016
Administrative Queries - Max Time to resolve 95% of all queries	0	-0.019	-0.016	-0.019	-0.019	-0.016	-0.016	-0.019	-0.016	-0.019	0	-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:	0.09	0.07	0.05	-0.02	-0.07	-0.07	0.02	-0.02	-0.06	-0.02	0.02	-0.02

Table 3

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

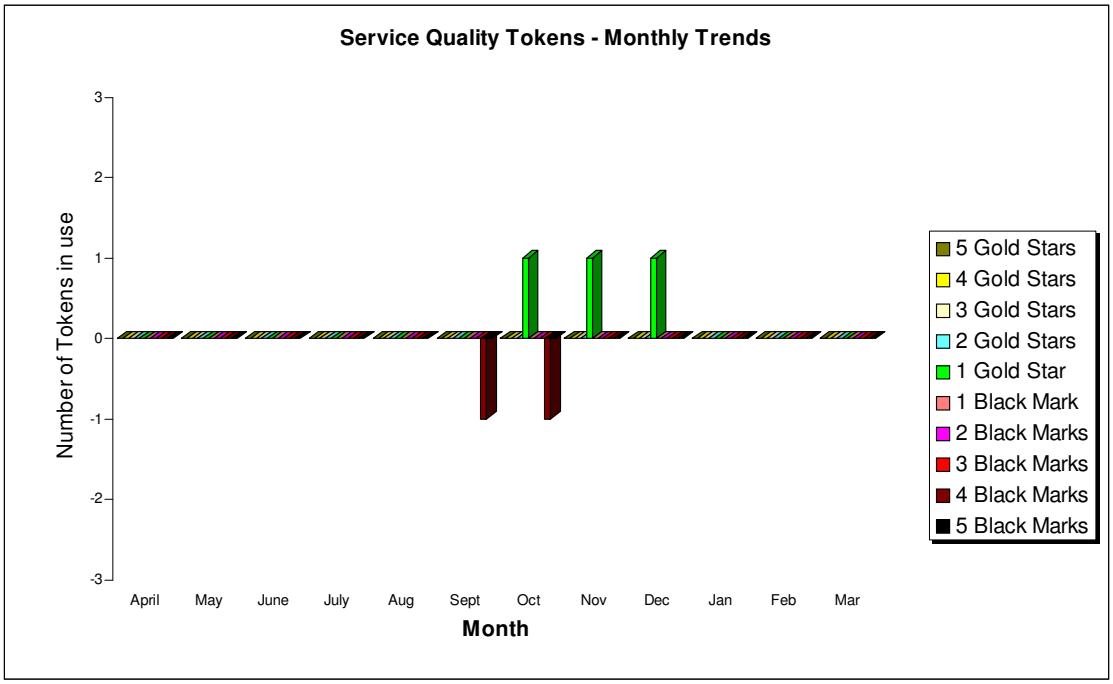
2.2 Service Quality Tokens

The position at the end of March 2005 is that none of the 457 users has awarded a gold star to the service.



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

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



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

2.3 Throughput Target against Baseline

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

The Baseline Target for throughput was achieved this month. The actual usage figure was 262% of Baseline capacity.

Job Throughput Against Baseline CSAR Service Provision

Period: 1st to 31st March 2005

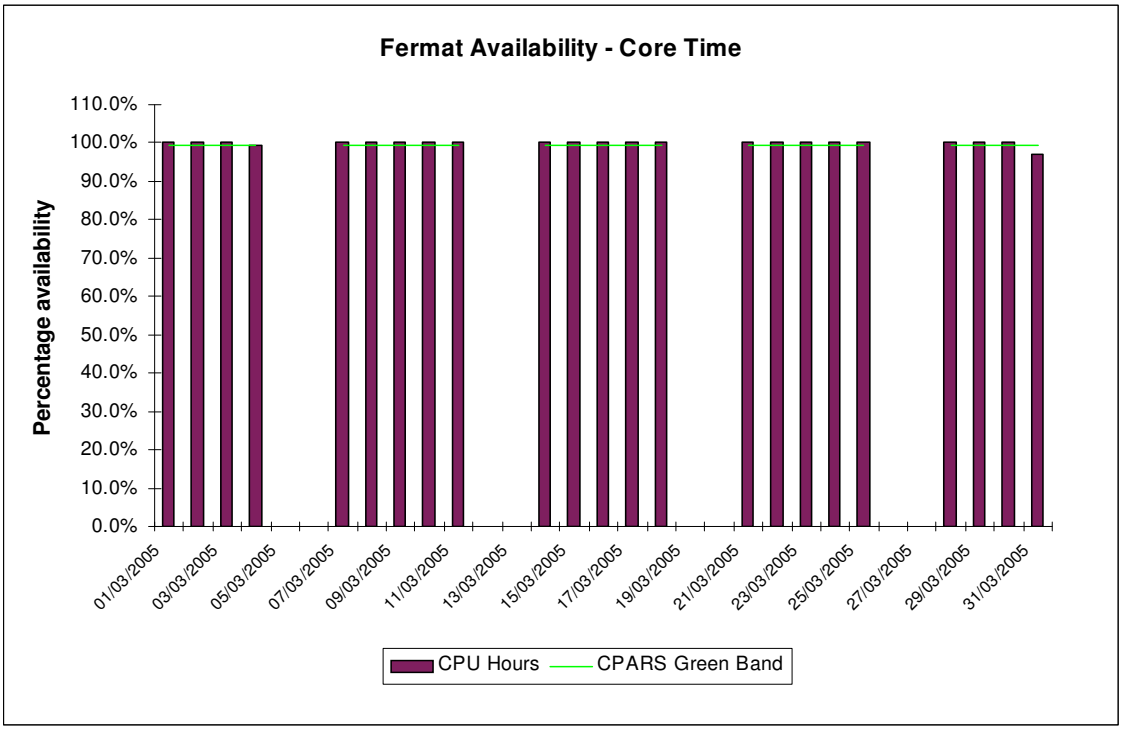
	Baseline Capacity for Period (GFLOP Years)	**Actual Usage in Period (GFLOP Years)**	**Actual % Utilisation c/w Baseline during Period**
1. Has CfS failed to deliver Baseline MPP Computing Capacity for EPSRC?	15.37	40.27	**262.0%**
	Baseline Capacity for Period (GFLOP Years)	**Job Time Demands in Period**	**Job Demand above 110% of Baseline during Period (Yes/No)?**
2. Have Users submitted work demanding > 110% of the Baseline during period?	15.37	41.4	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?		4	Yes
		Minimum Job Time Demands as % of Baseline during Period	**Minimum Job Time Demand above 90% of Baseline during Period (Yes/No)?**
4. Have Users submitted work demands above 90% of the Baseline during period?		83%	No
	Number of standard Job Queues (ignoring priorities)	**Average % of time each queue contained jobs in the Period**	**Average % of time each queue contained jobs in the Period is > 97%?**
5. Majority of Job Queues contained jobs from Users for more than 97% during period?	4	84%	No

3. System Availability

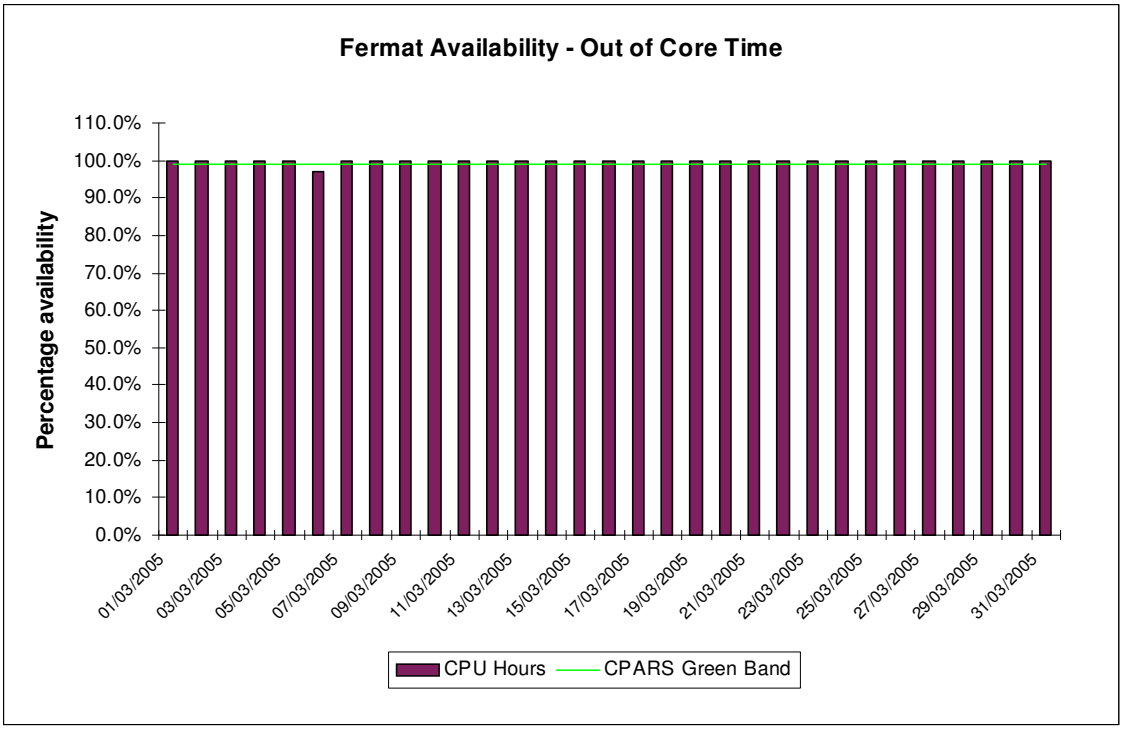
Service availability each reporting period is calculated as a percentage of actual availability time over theoretical maximum time, after accounting for planned breaks in service for preventative maintenance.

3.1 SGI Origin2000 System (Fermat)

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



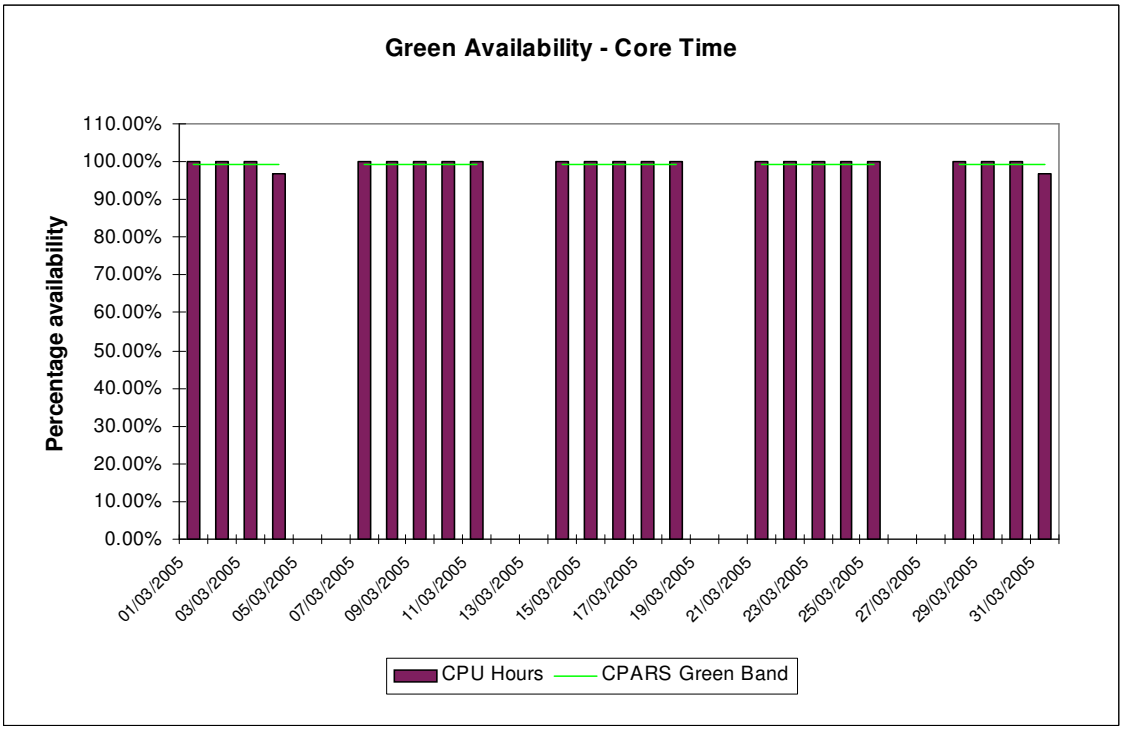
Availability of Fermat in core time during March was good, with two very brief outages.



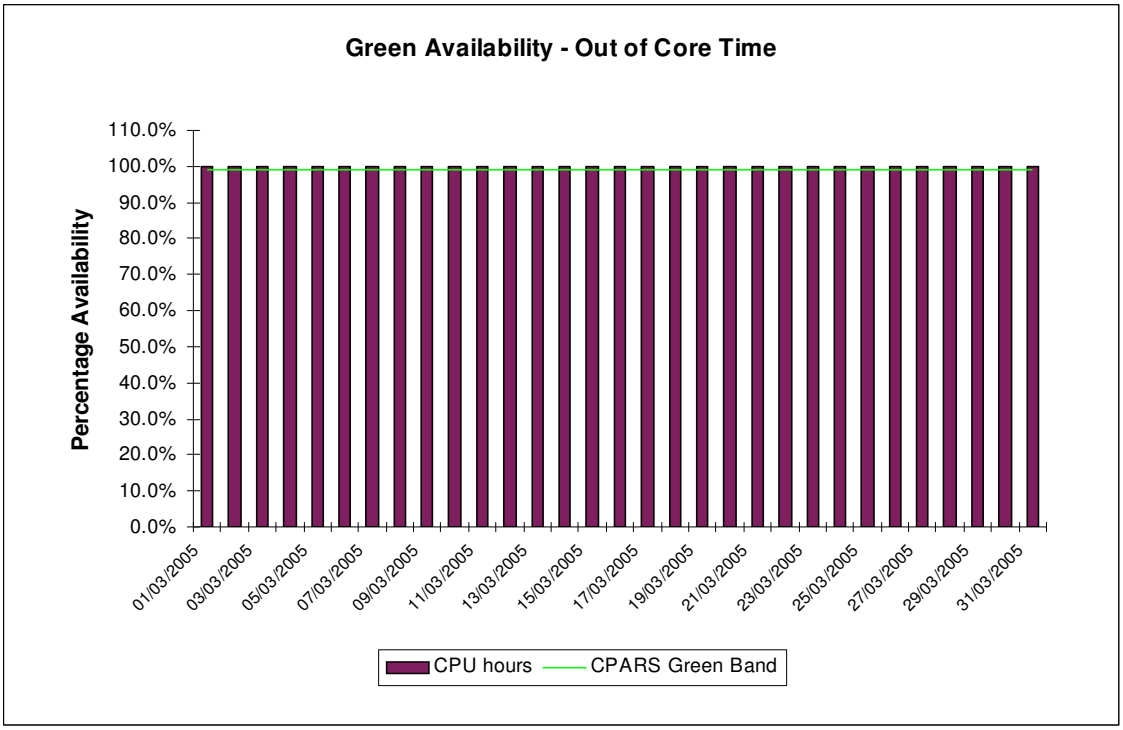
Availability of Fermat out of core time during March was very good, with one short outage on the 6th.

3.2 SGI Origin3000 System (Green)

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



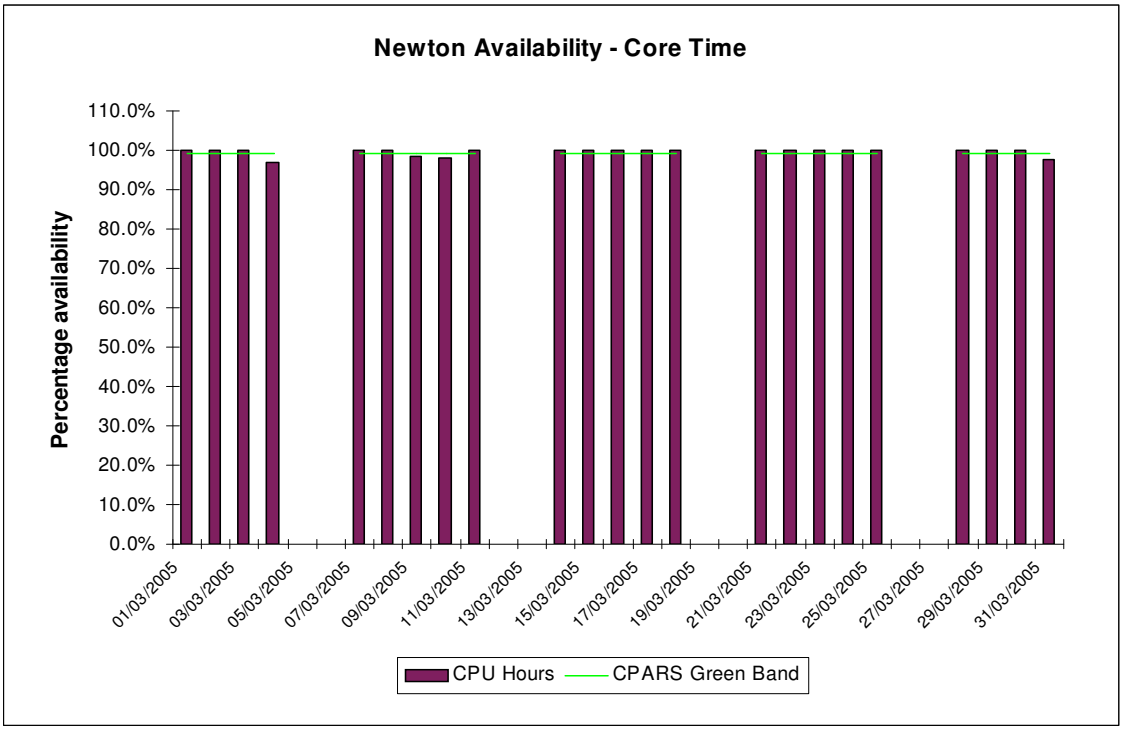
Availability of Green in core time during March was good, with two short outages.



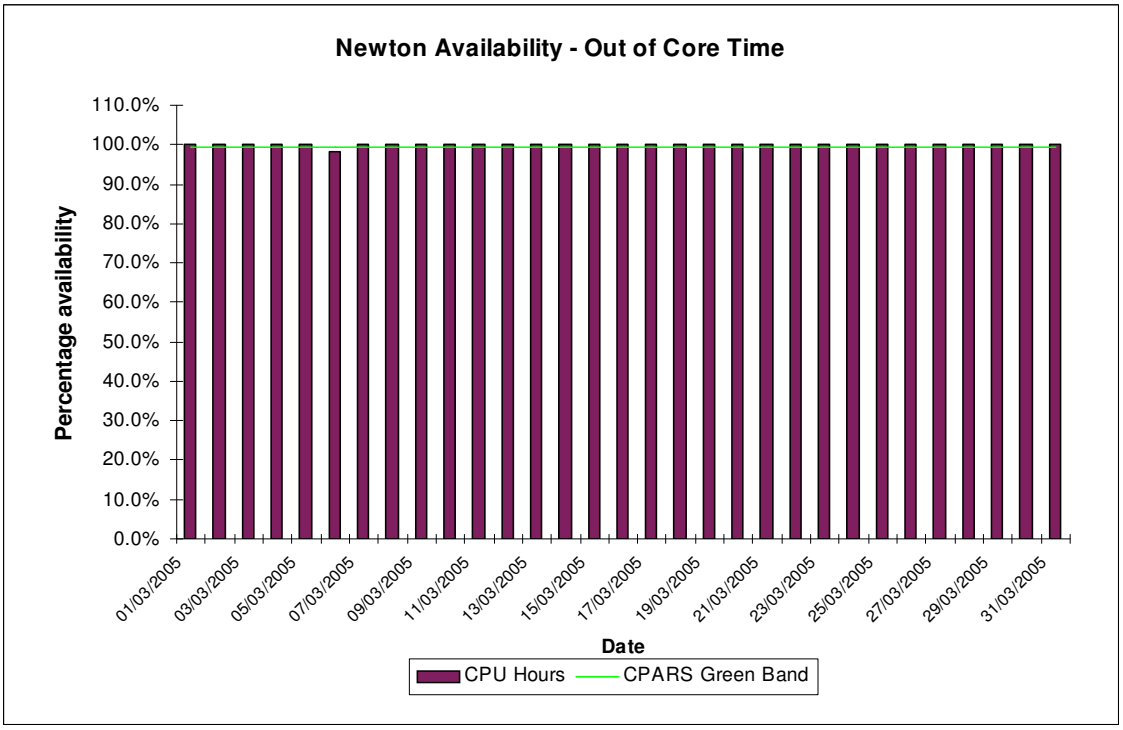
Availability of Green out of core time during March was excellent, with no outages.

3.3 SGI Altix3700 System (Newton)

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



Due to issues with both the CXFS software and two faulty CPU bricks, availability in core time was not acceptable with four outages. The faulty CPU bricks have now been fixed, and the CXFS issues are being addressed in the forthcoming upgrade of the operating system.



Availability of Newton out of core time was very good, with one very brief outage on the 6th.

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 March 1st to 31st is provided by Project/User Group, totalled by Research Council and overall. This covers:

• CPU usage	Newton:	185,276 CPU Hours
	Green:	200,926 CPU Hours
	Fermat:	37,922.83 CPU Hours
	Wren (Batch):	0.66 CPU Hours
	Wren (Interactive):	216.64 CPU Hours
• User Disk allocation	Medium Performance:	104.45 GB Years
	SAN HV:	42.47 GB Years
• HSM/tape usage		4,782.61 GB Years

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

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

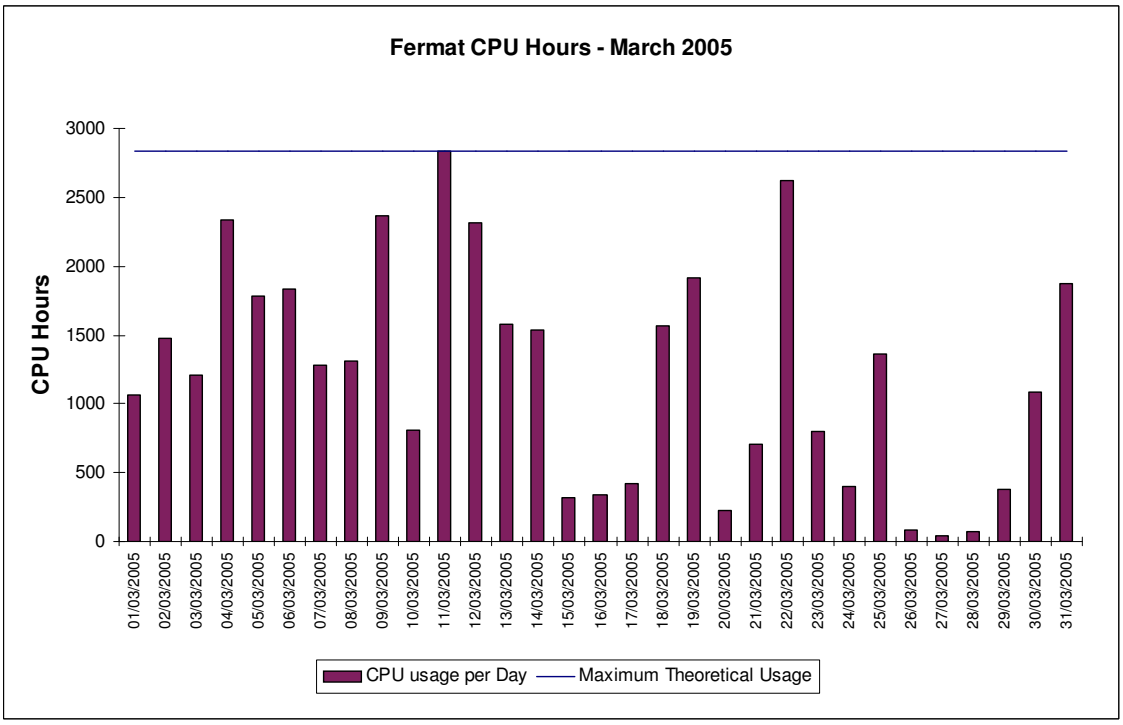
b) SMP (Origin) Usage by month, showing usage each month in CPU Hours, split by Research Council and giving the equivalent GFLOP-Years as per NPB. Overlaid horizontal lines show the Baseline and overall Capacity.

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

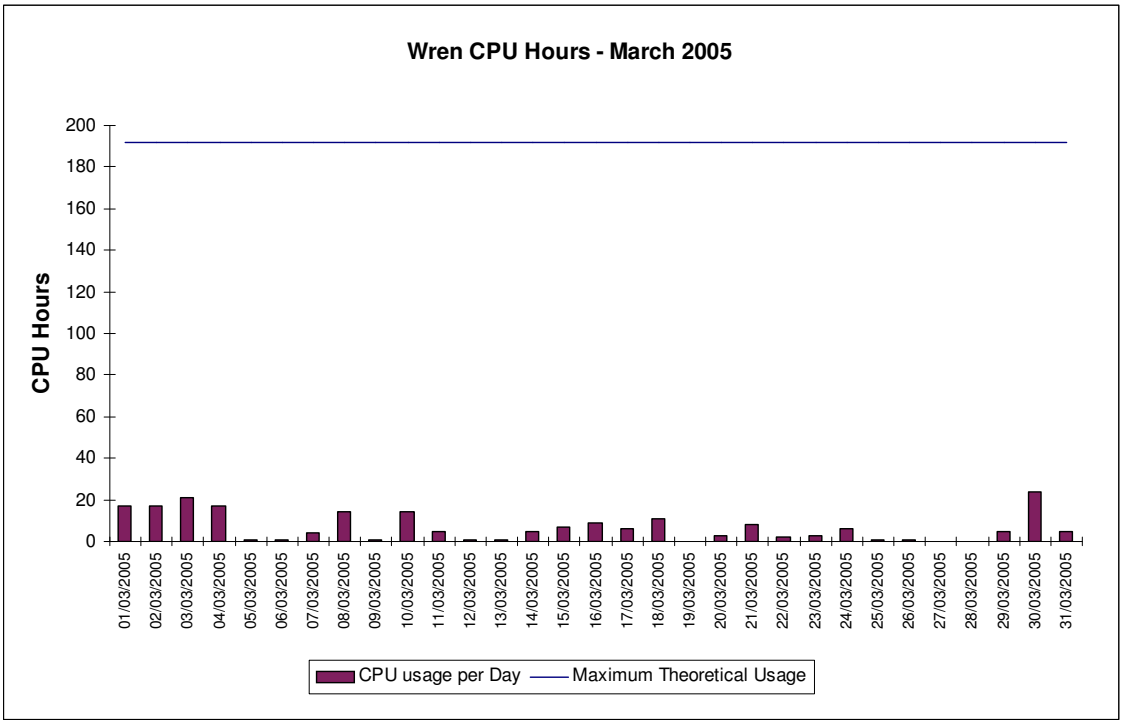
d) HSM/Tape Usage by month, showing the volumes held each in GBytes, split by Research Council. The Baseline Capacity (16 Terabytes) available will be shown by an overlaid horizontal line.

4.1 SGI Origin2000 System (Fermat)

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

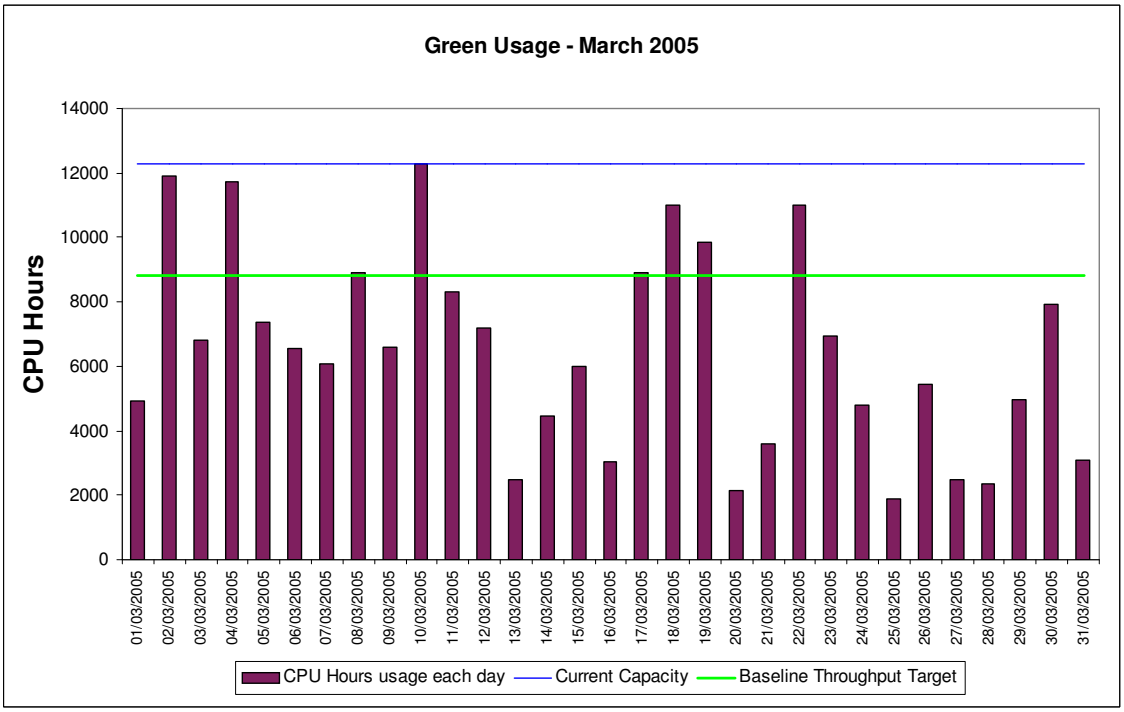


4.2 SGI Origin300 System (Wren)



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

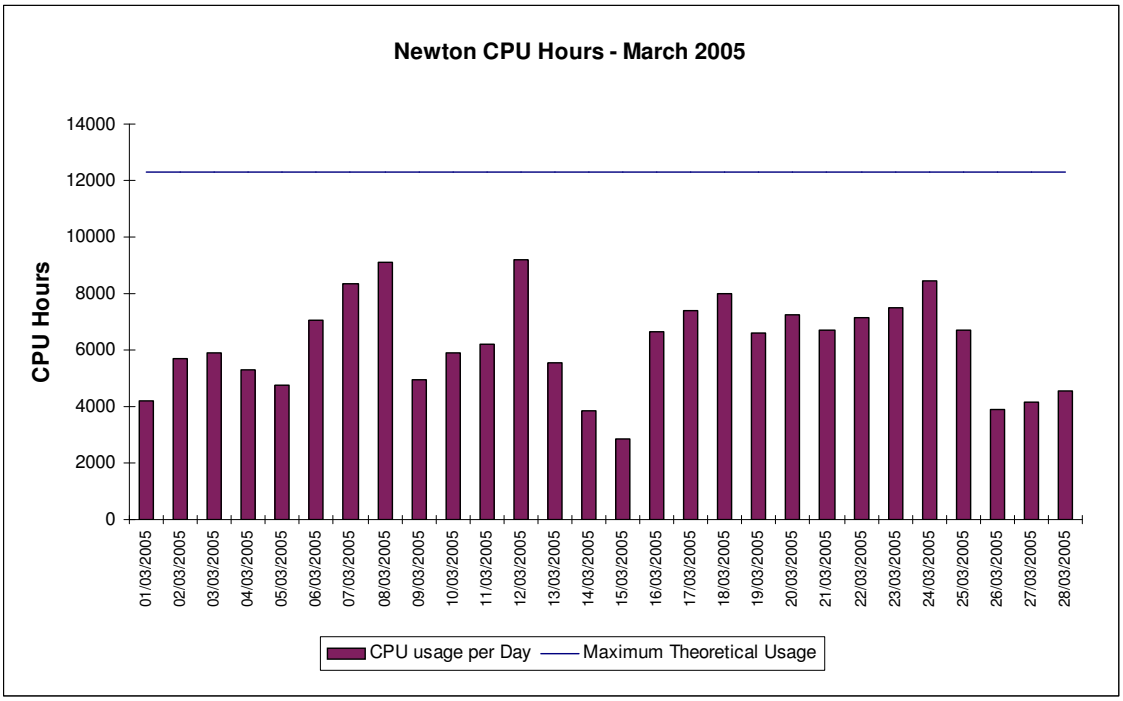
4.3 SGI Origin3000 System (Green)



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

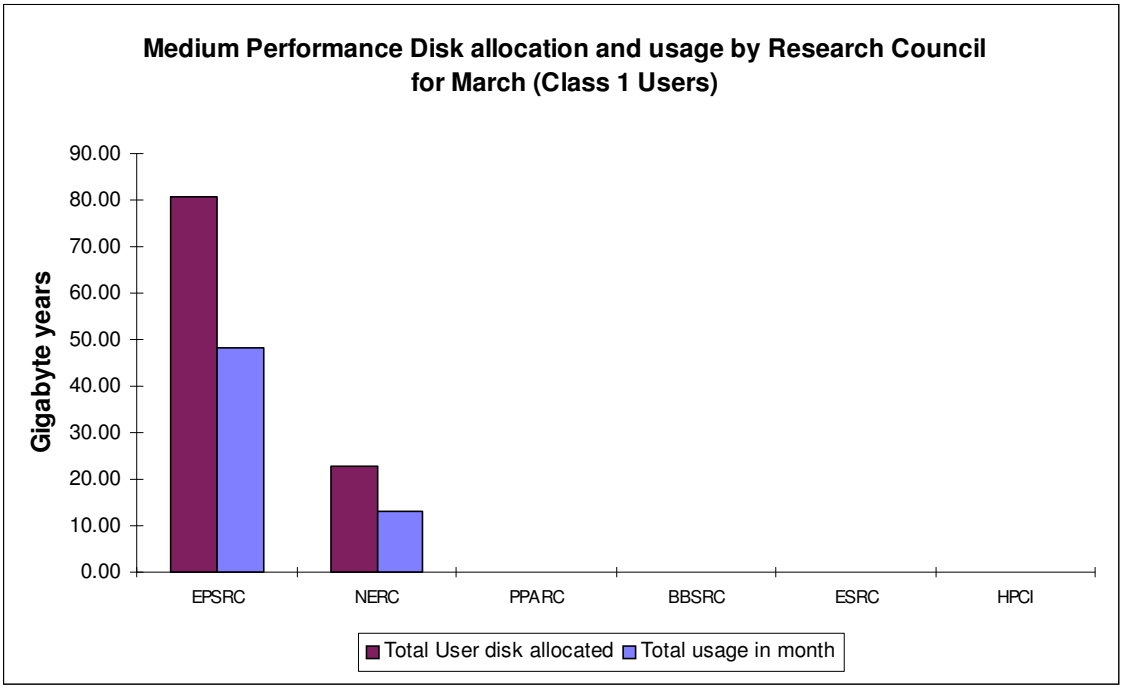
4.4 SGI Altix3700 System (Newton)

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



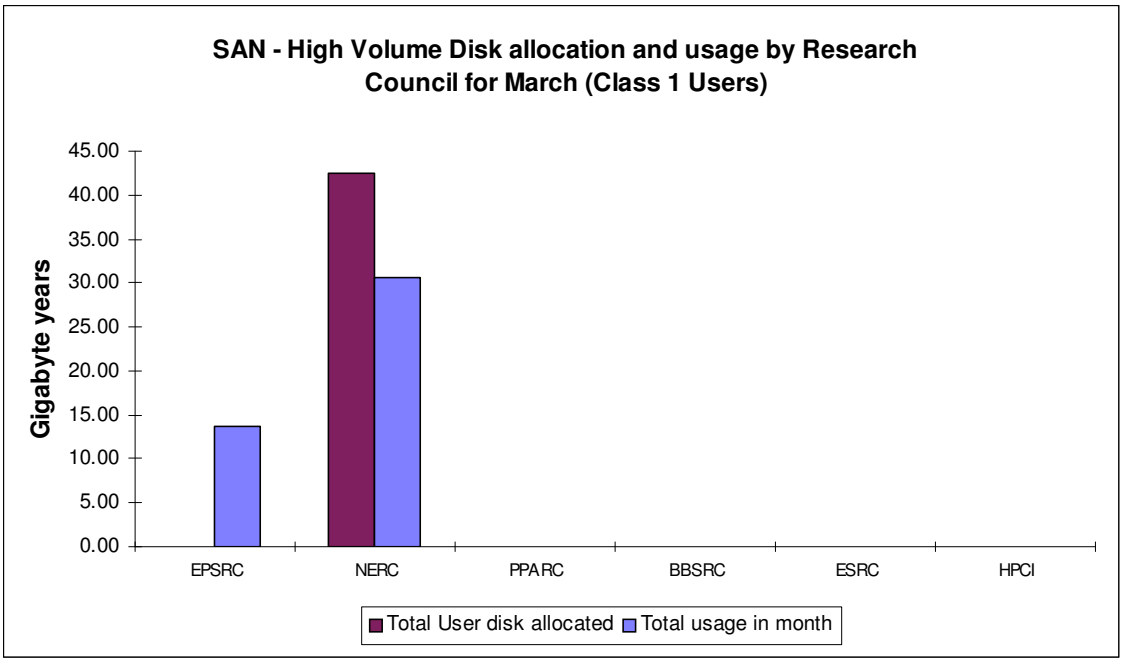
4.5 Disk/HSM Usage Chart

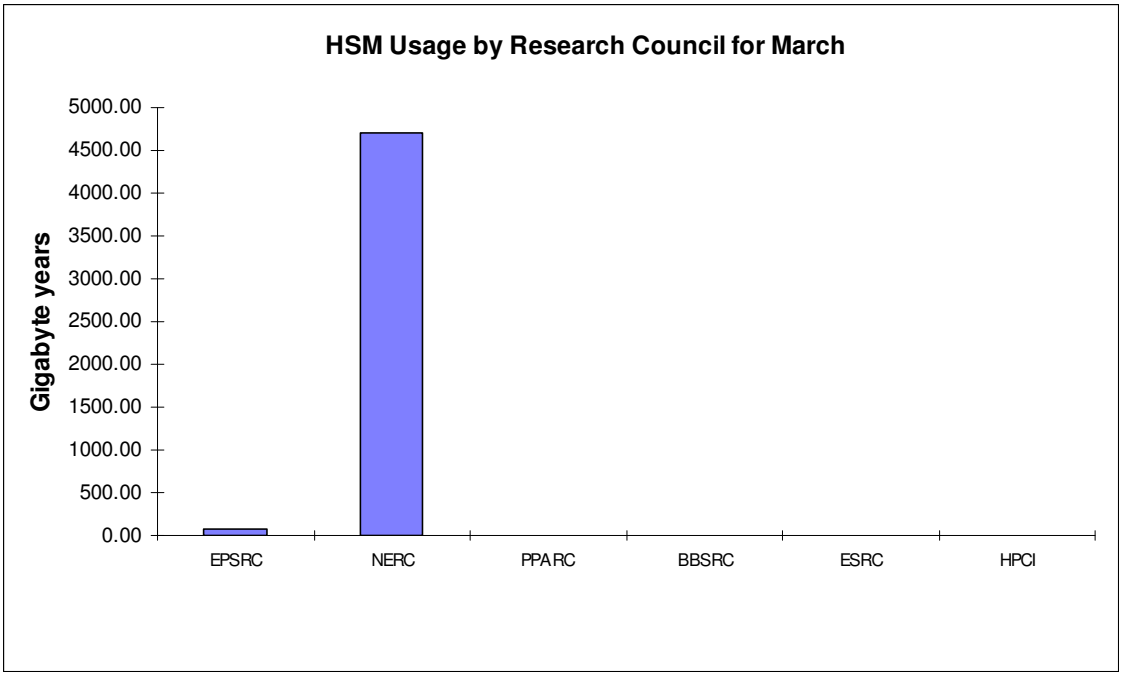
The graphs below show current disk and HSM allocations and usage.



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

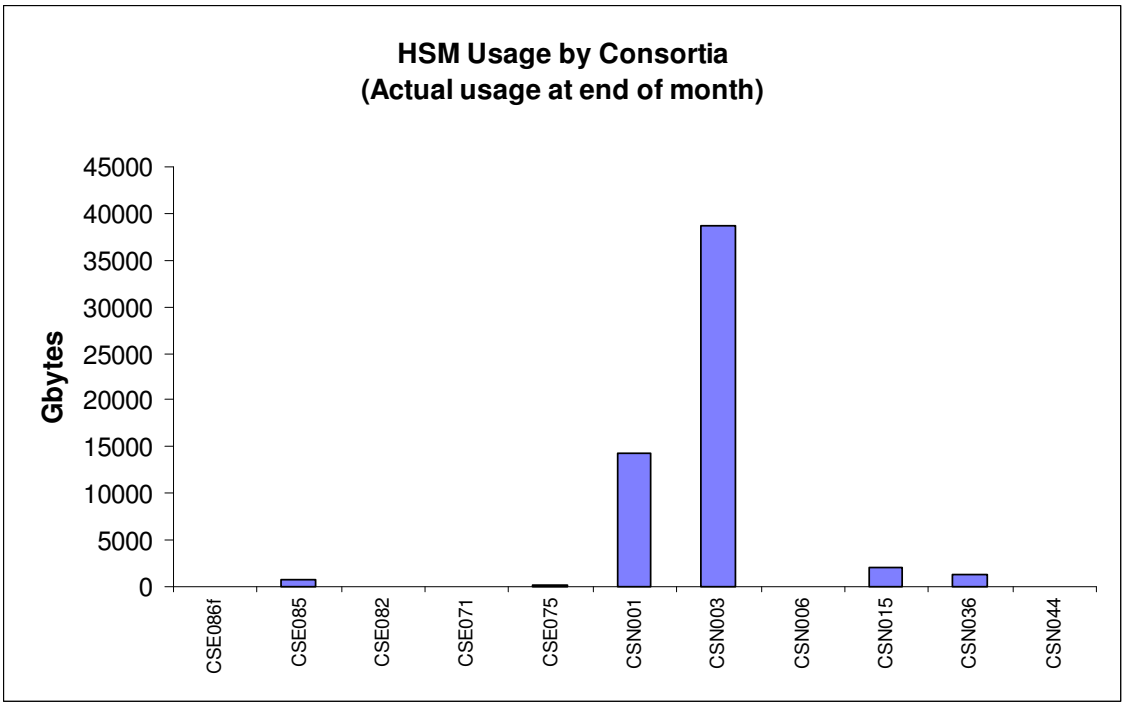
The following graph shows the disk allocation against usage on average of the SAN High Volume (HV) disk.





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

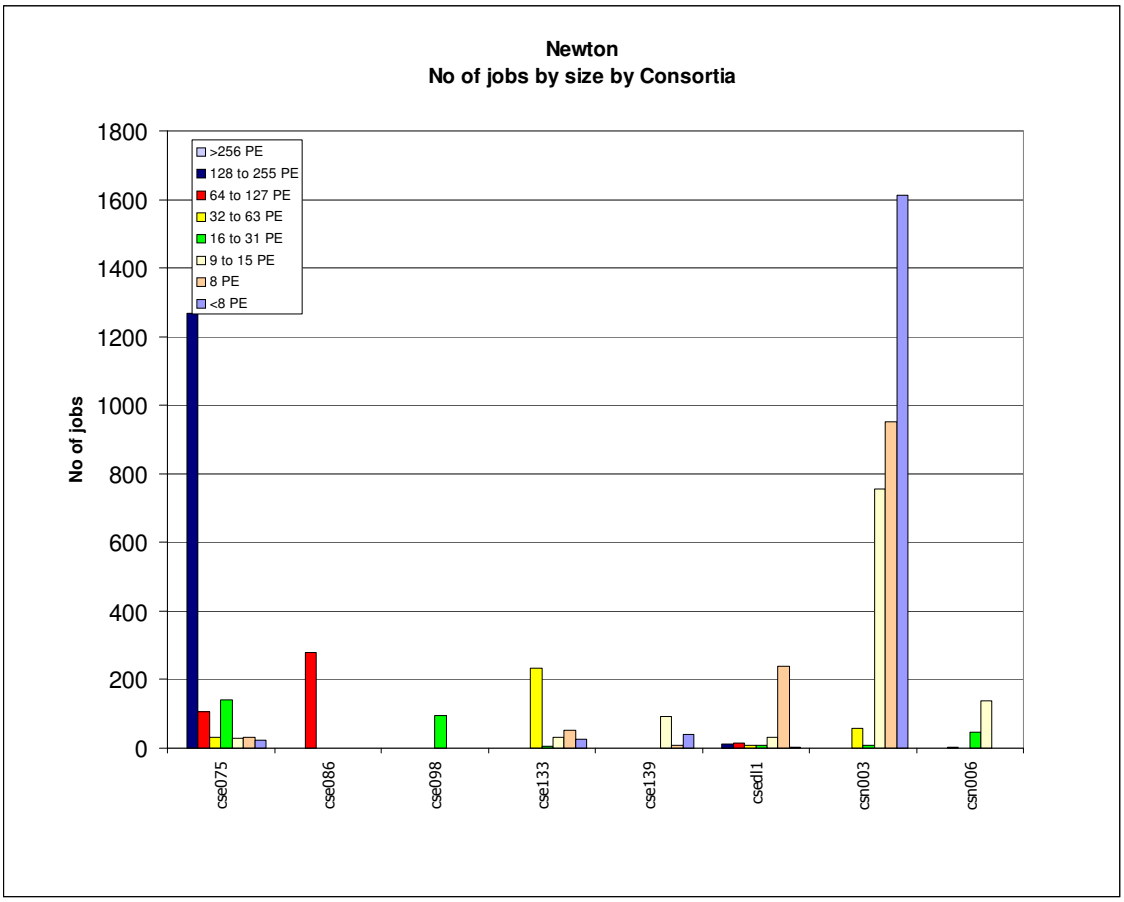
The next graph gives actual usage of HSM by Consortia.



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

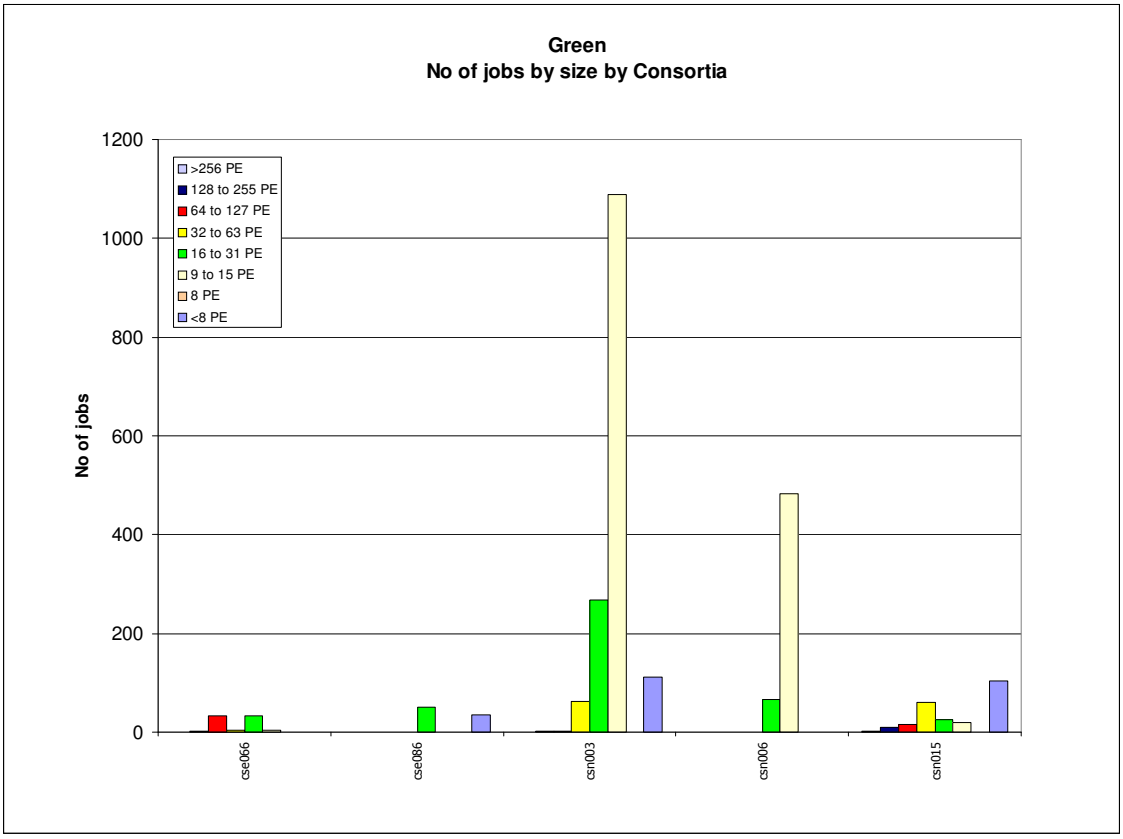
4.6 Processor Usage and Job Statistics Charts

Job statistics for Newton:



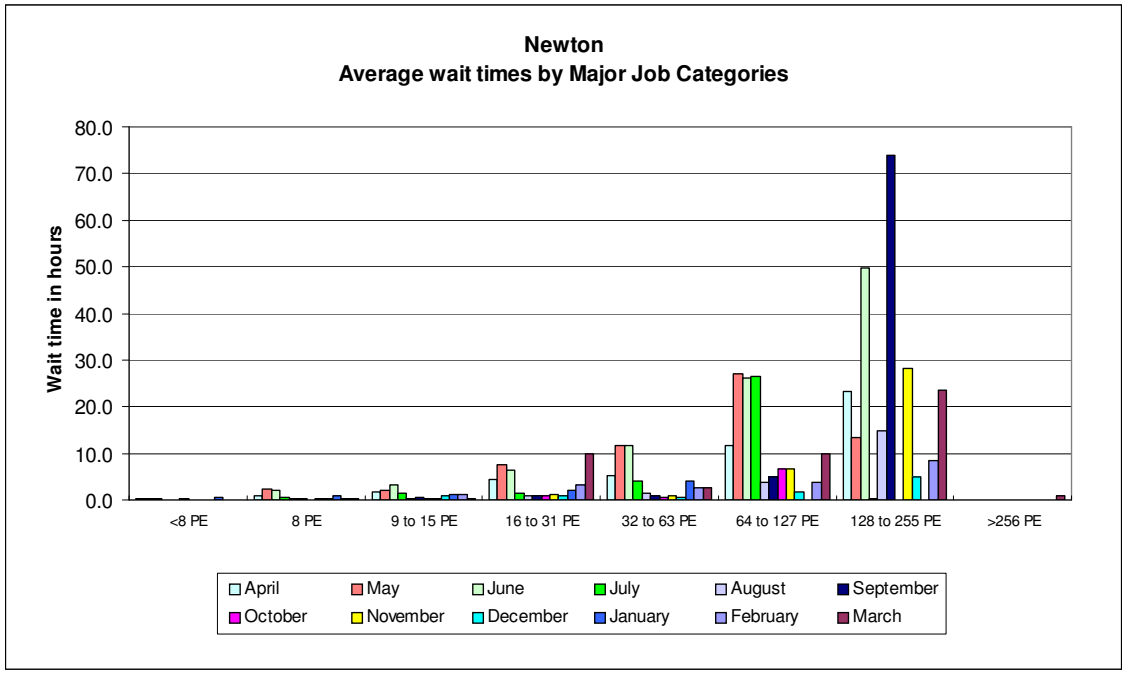
The above graph shows the number of jobs of the major sizes run in the period 1st to 31st March 2005.

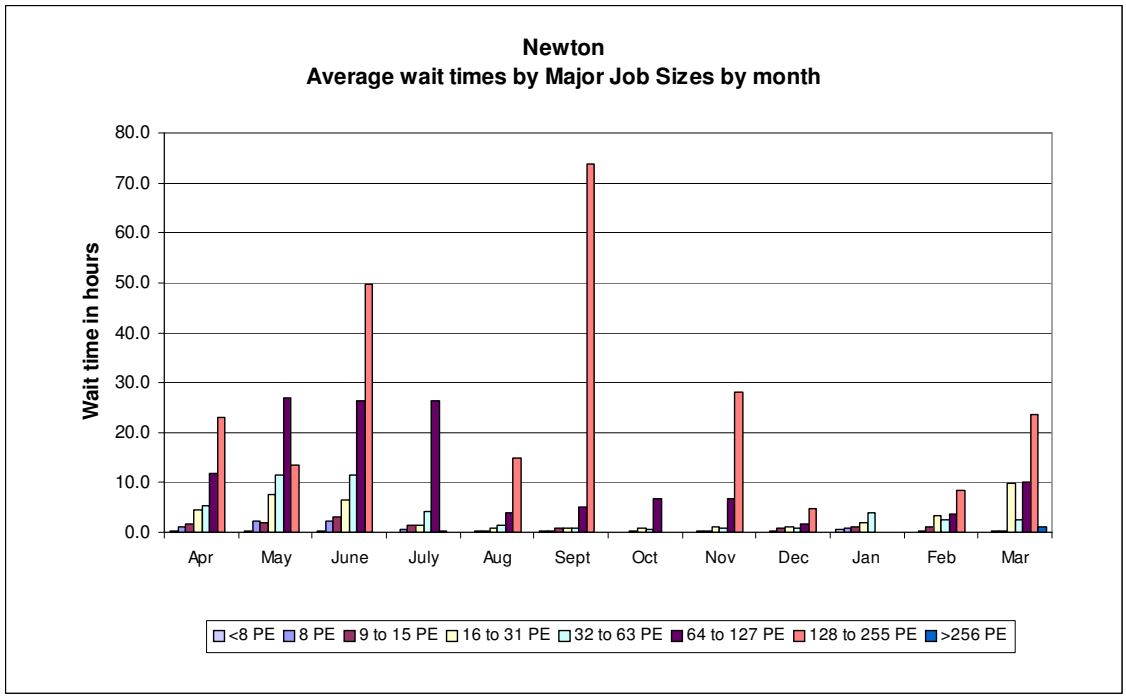
Job statistics for Green:



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

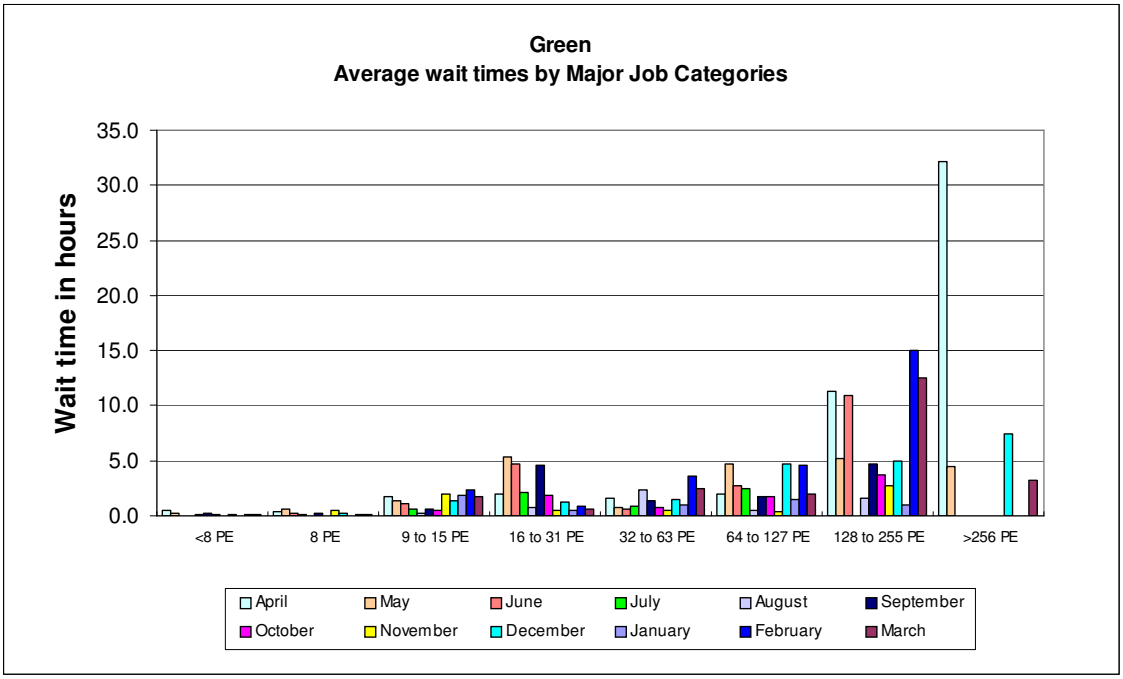
The next graph shows the wait times in hours on Newton for the major categories of jobs, larger jobs requesting tiling across multiple nodes having to wait the longest times.

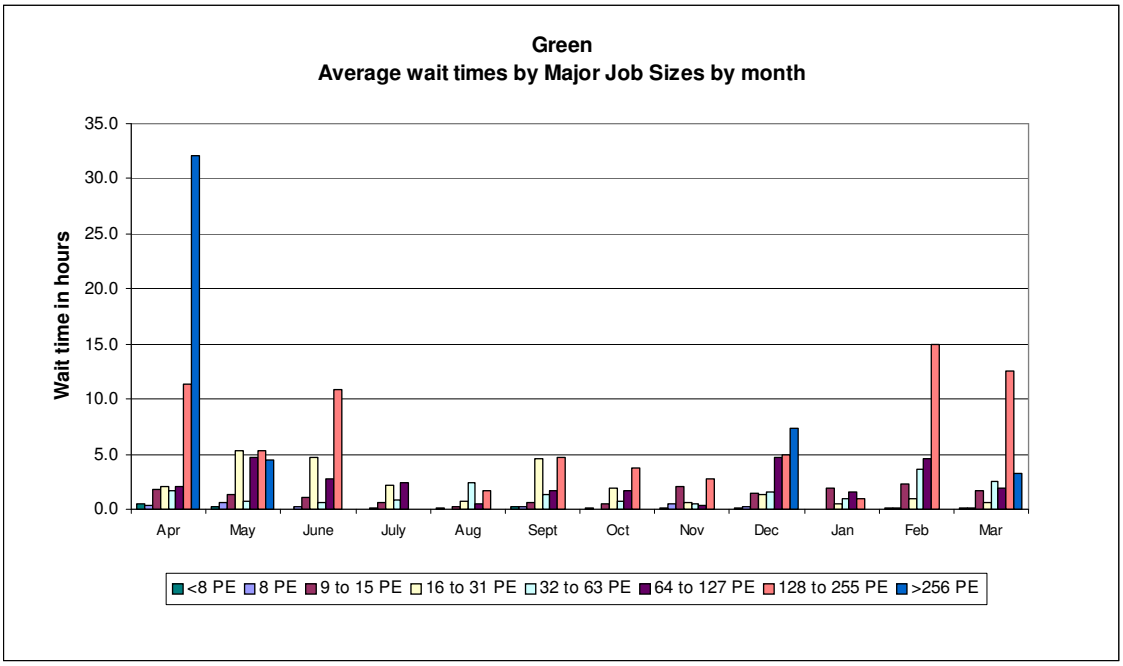




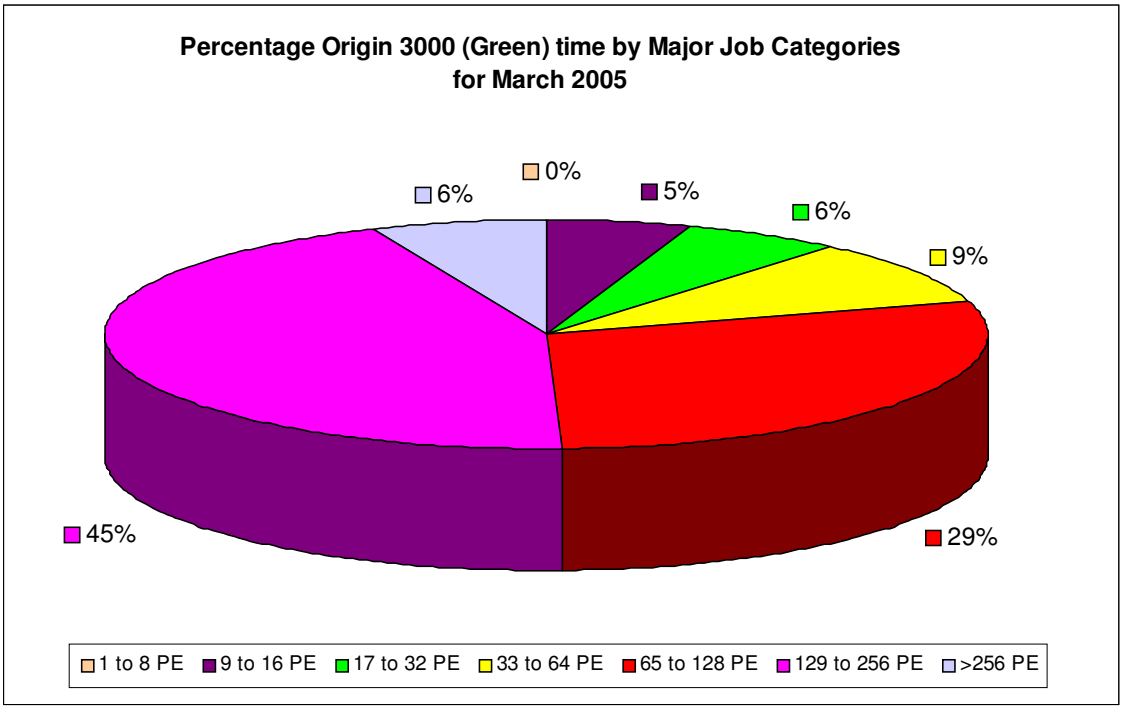
The chart above shows the average wait time trend on Newton so far this year.

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

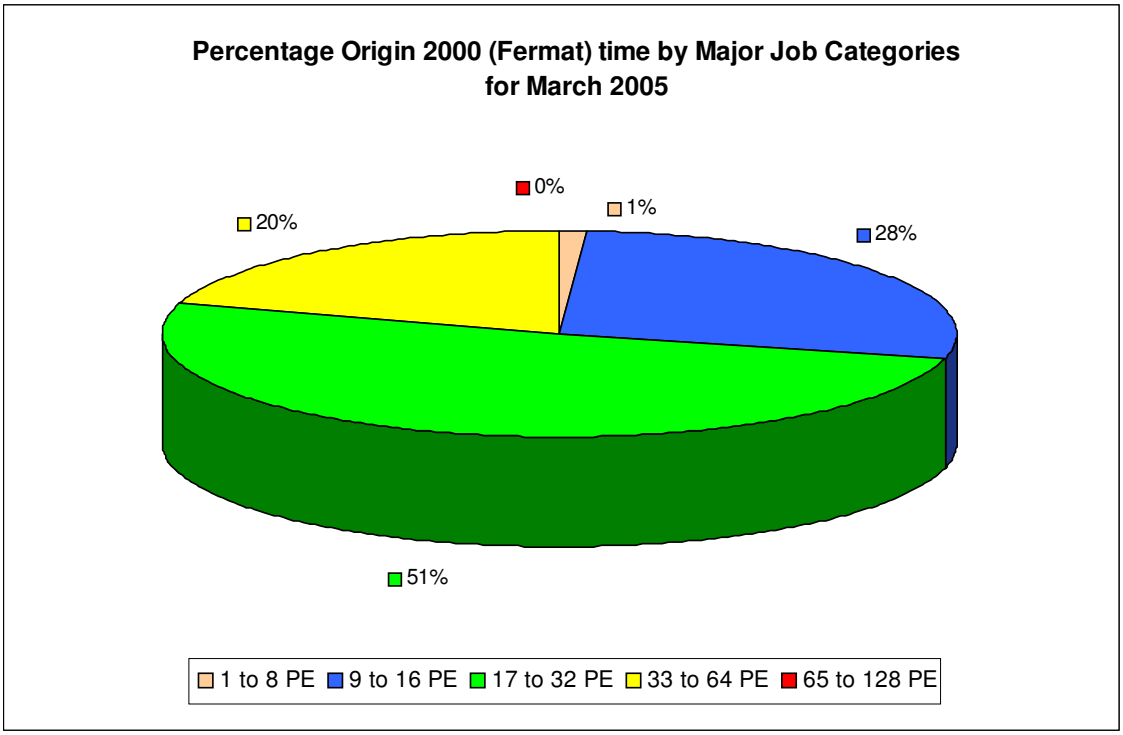




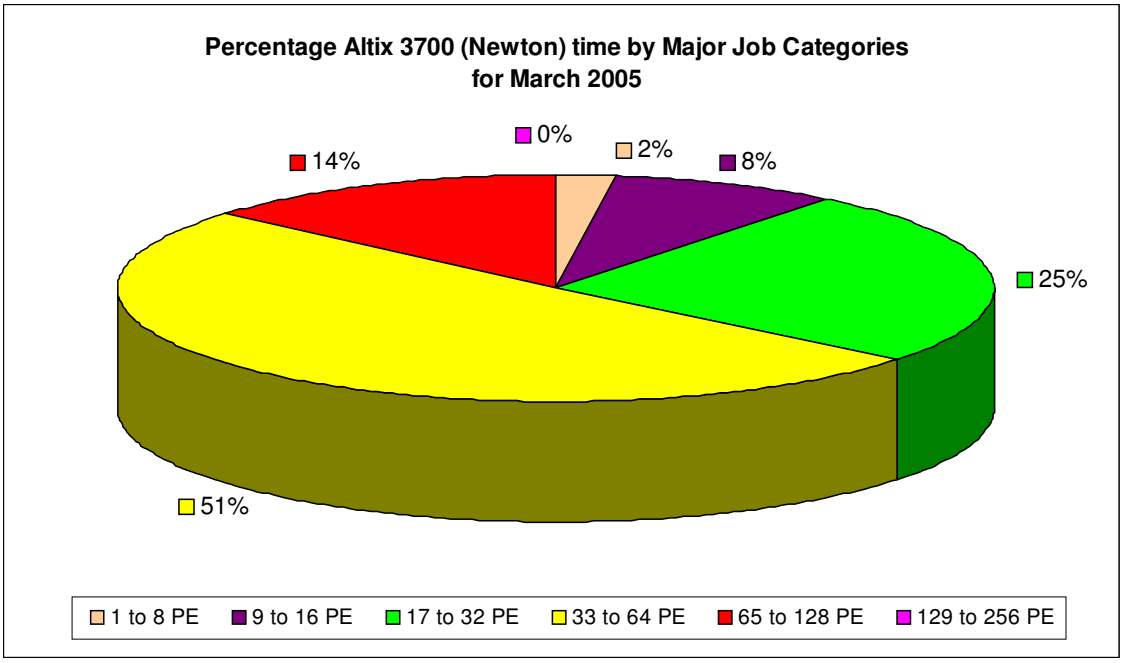
The chart above shows the average wait time trend on Green for the last 12 month period.



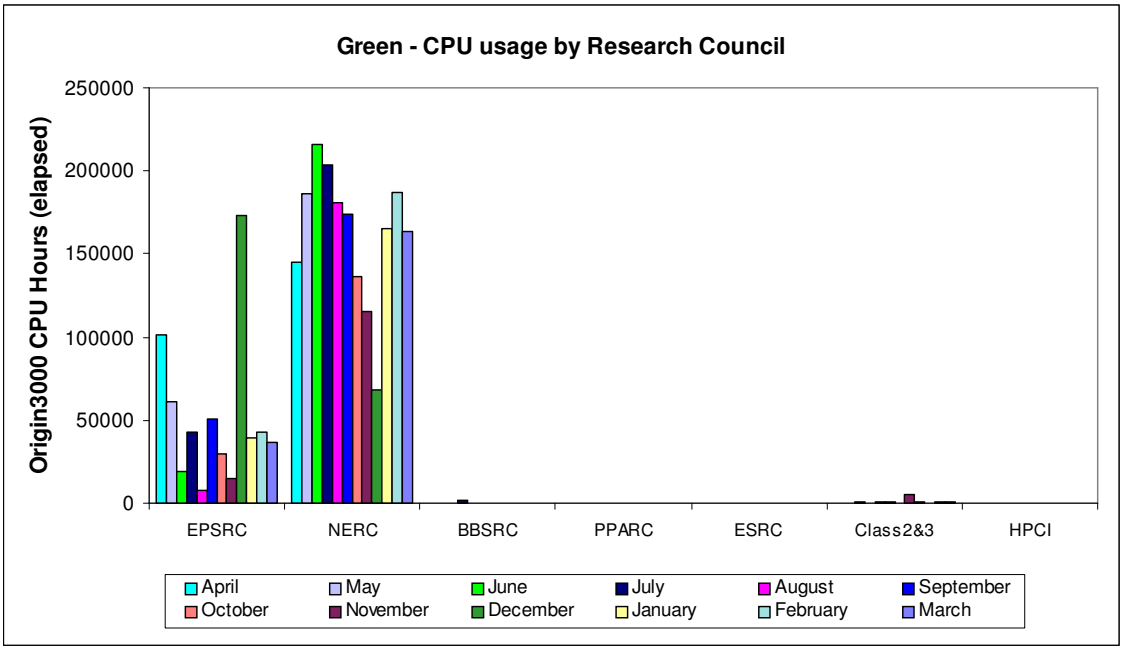
Work on Green during March was mostly concentrated in the mid- to high-end PE ranges.



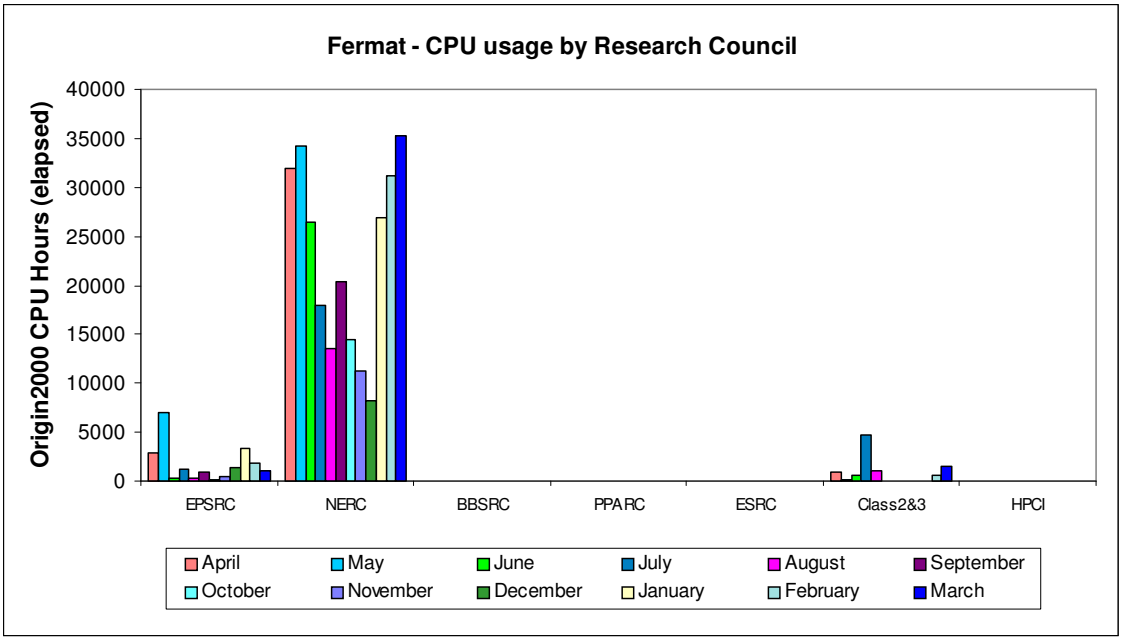
The highest percentage of workload on Fermat during March was in the 17 to 32 PE range, at 51%.



The highest concentration of work on Newton during March was in the 33 to 64 PE range, at 51%.

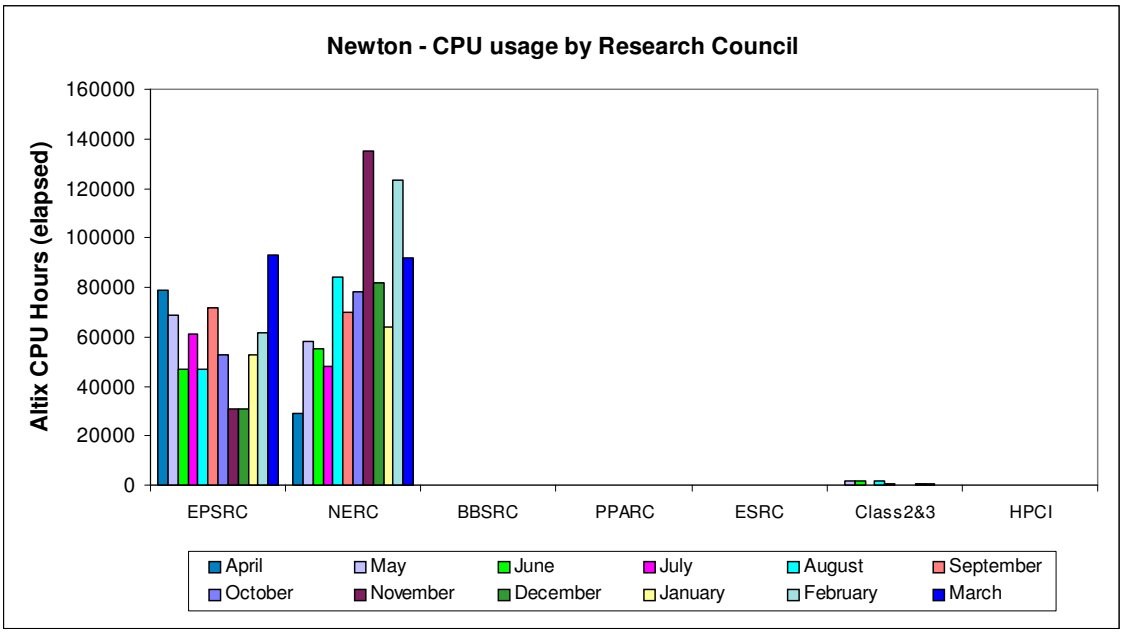


The above chart shows Green CPU usage by Research Council during the past 12 months of service.



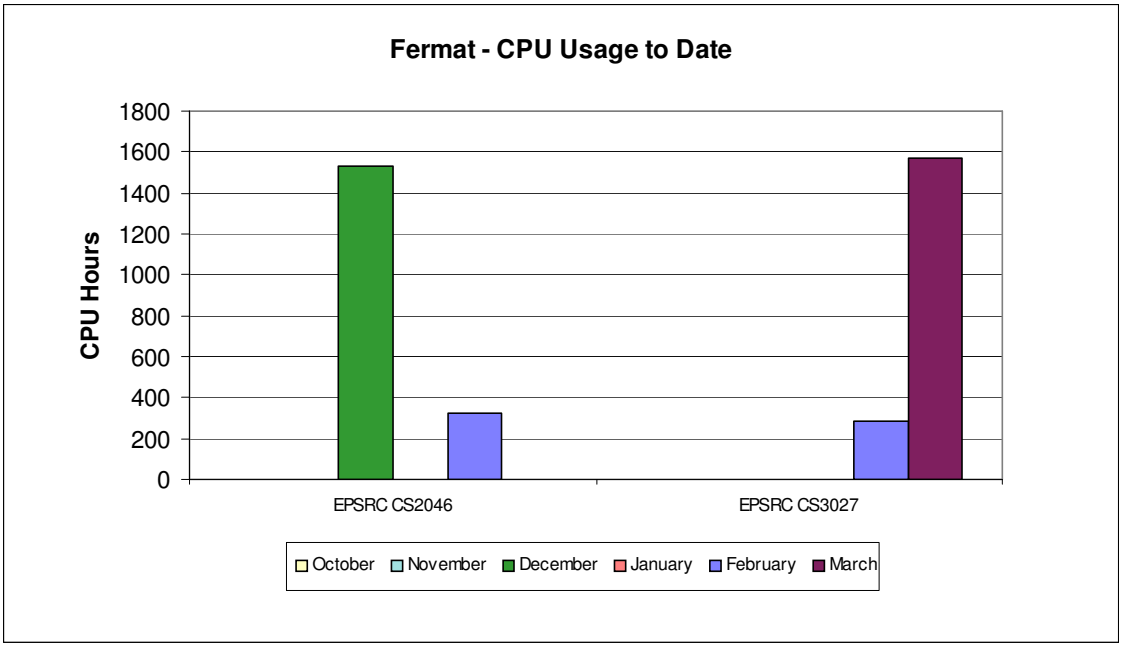
Origin 2000 CPU usage is shown by Research Council during the past 12 months of service in the above chart.

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

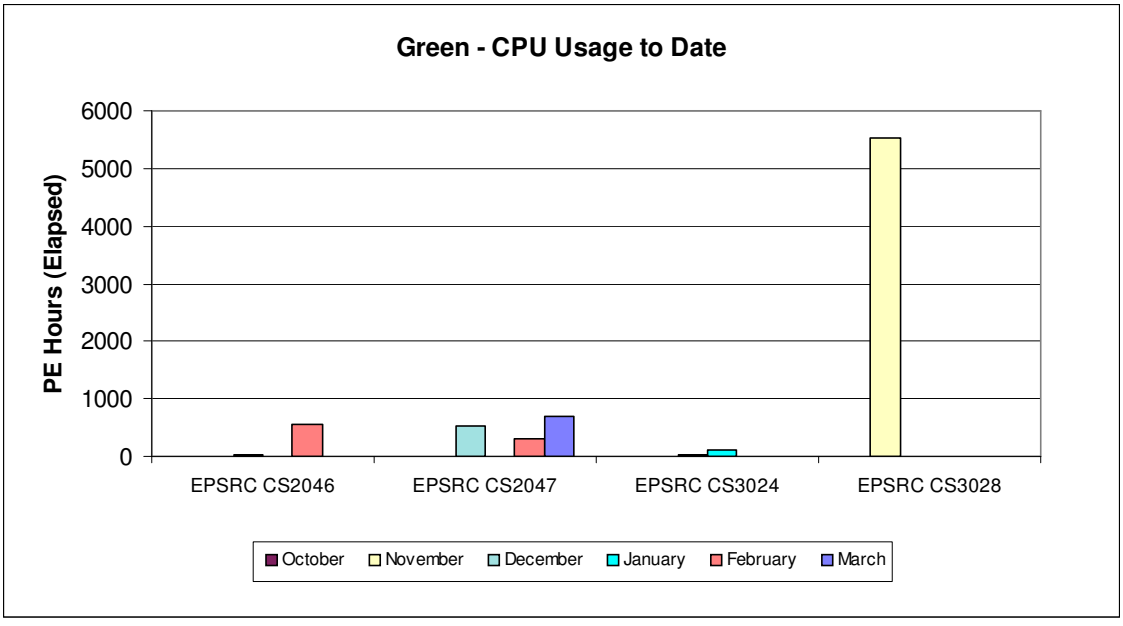


4.7 Class 2 & 3 Usage Charts

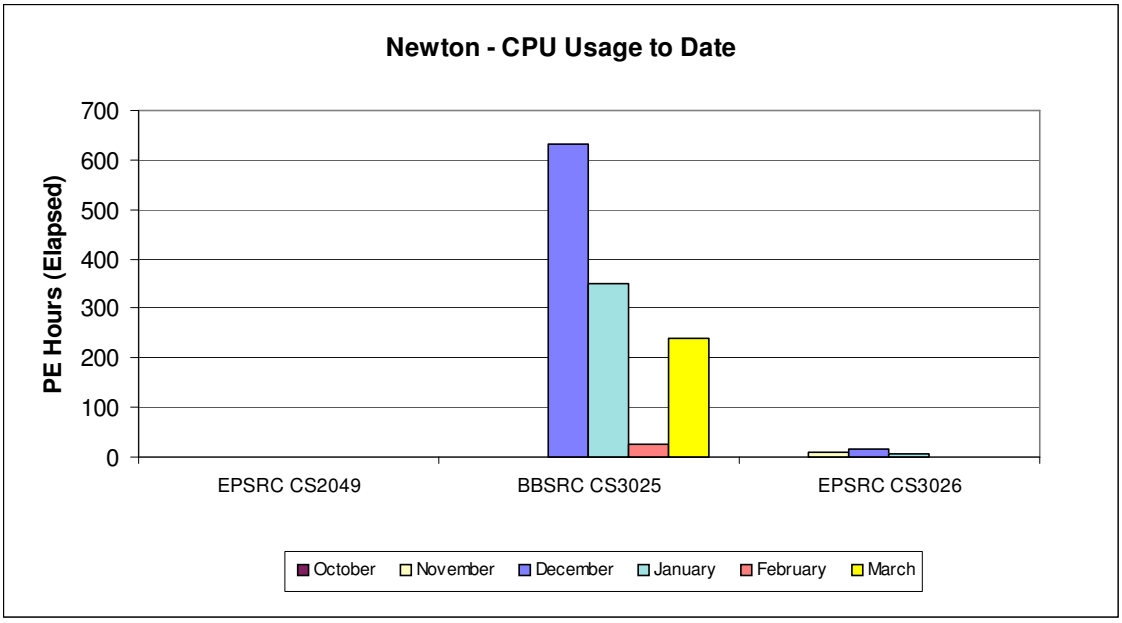
The next series of charts show the usage of the system by the class 2 & class 3 users. The usage is shown by project and identifies the Research Council of the individual projects.



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



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



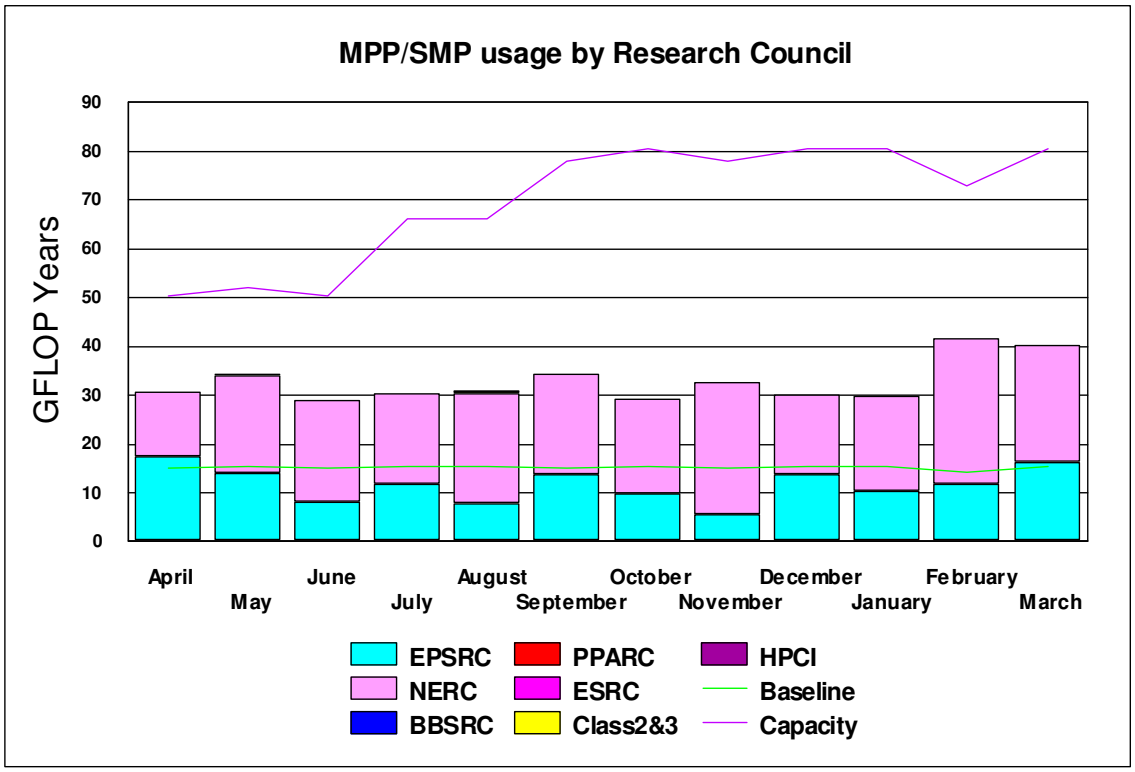
The above chart shows Newton usage by class 2 and class 3 users.

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

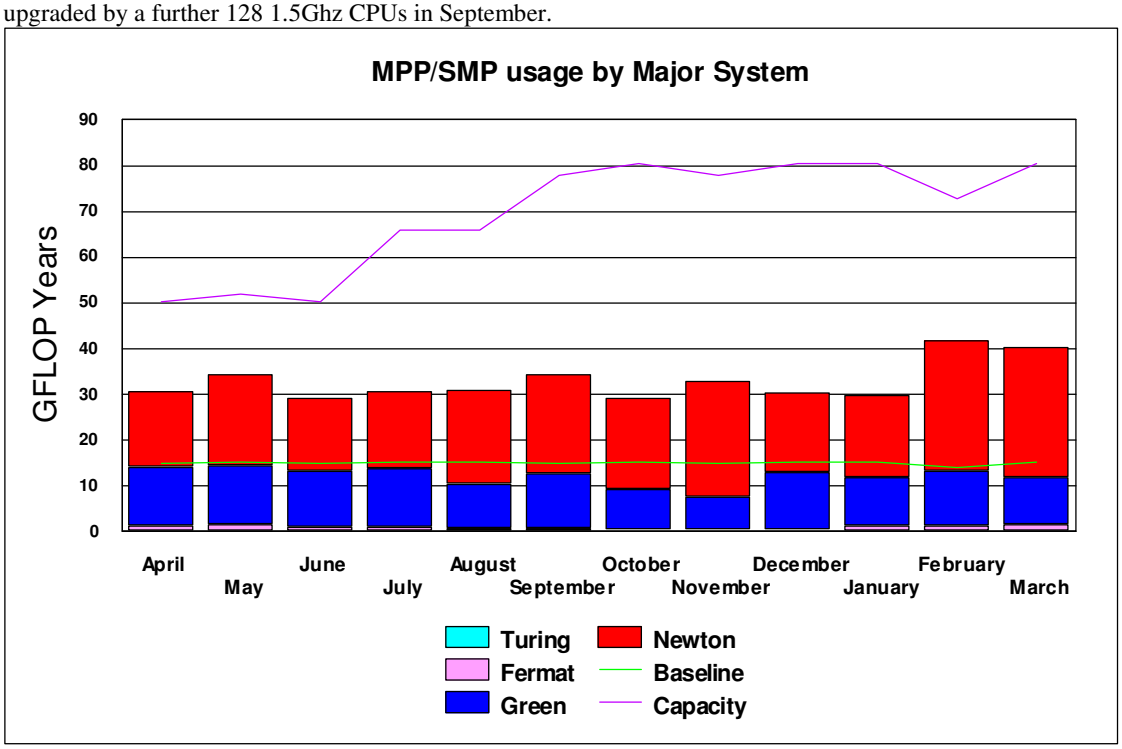
4.9 Charts of Historical Usage

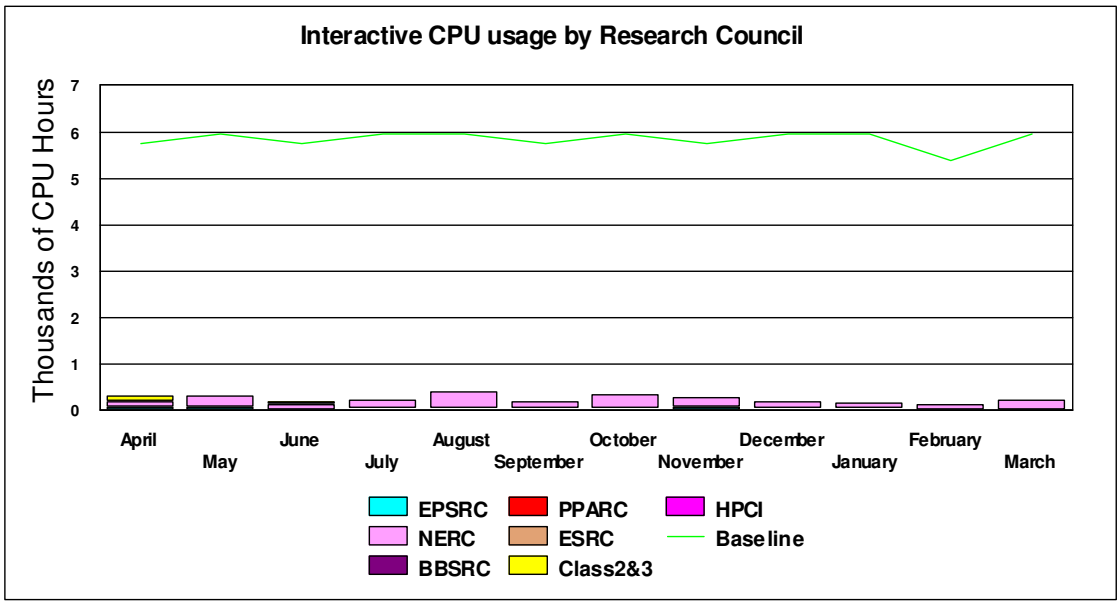
In all the Usage Charts, the baseline varies dependant upon the number of days in each month, within a 365-day year.

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



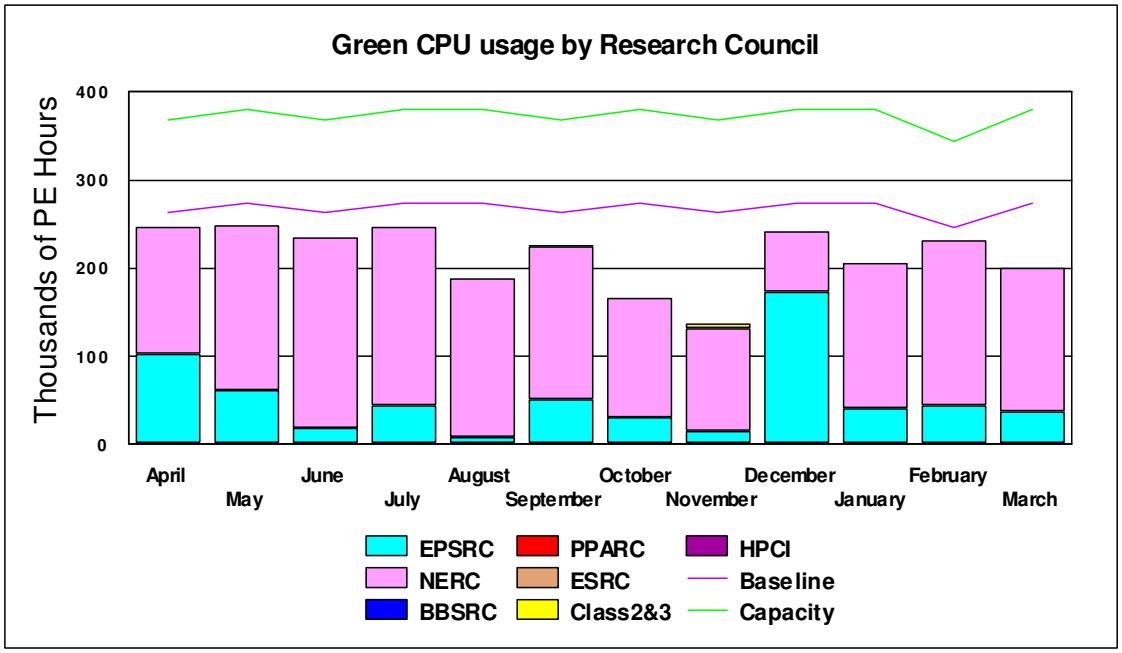
The next graph shows the historic SMP/MPP usage on the major systems. The increase in capacity reflects the expansion of the Altix system Newton by an extra 128 1.3Ghz CPU node in July, with the new node being upgraded by a further 128 1.5Ghz CPUs in September.



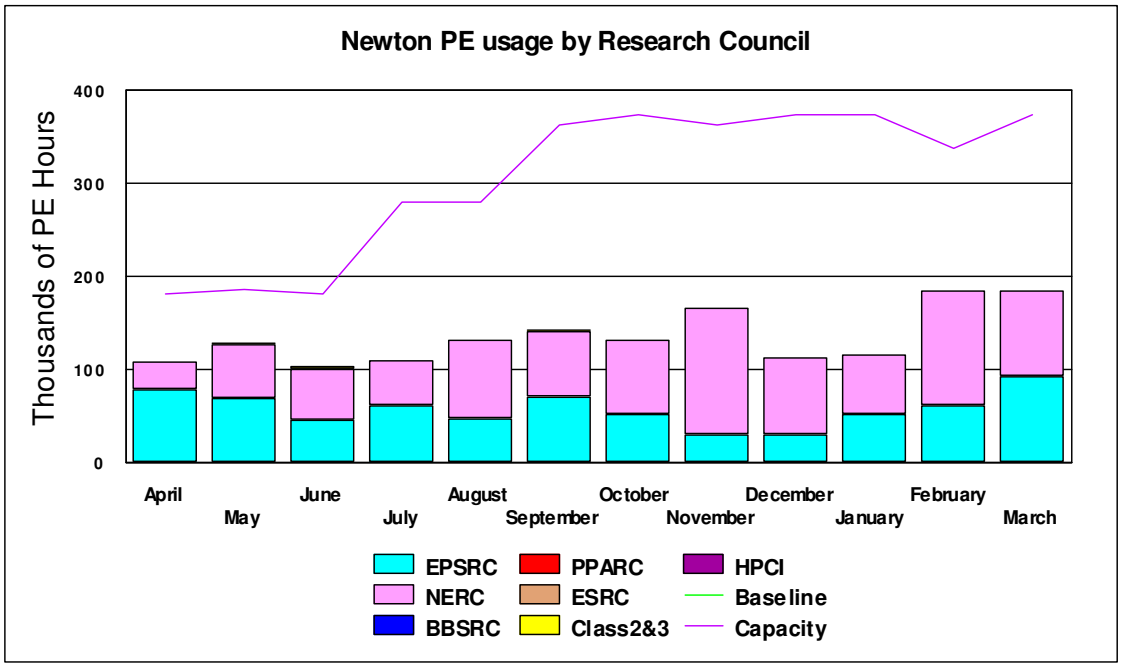


The above graph shows the historic interactive usage of the Origin 300 system (Wren). Eight of the higher speed 500Mhz CPUs in Wren deliver the baseline capacity equivalent to that which was previously available on the Origin 3000 system (Fermat) for interactive usage.

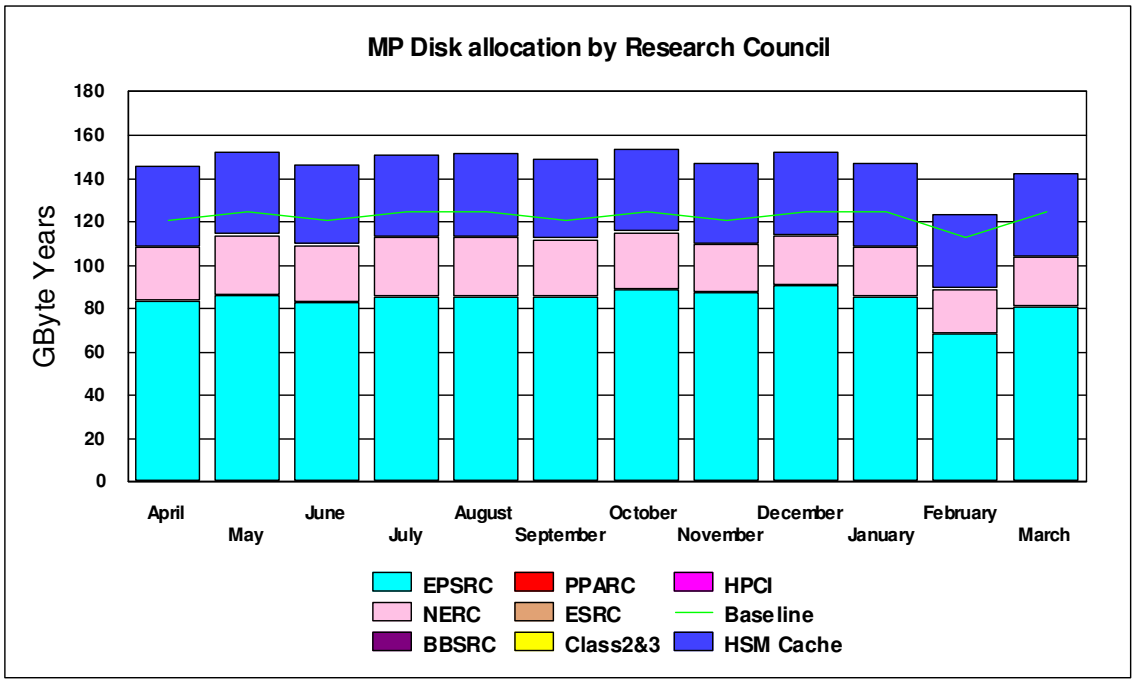
The following graph details the historic usage by Research council of the Origin 3000 system (Green).



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

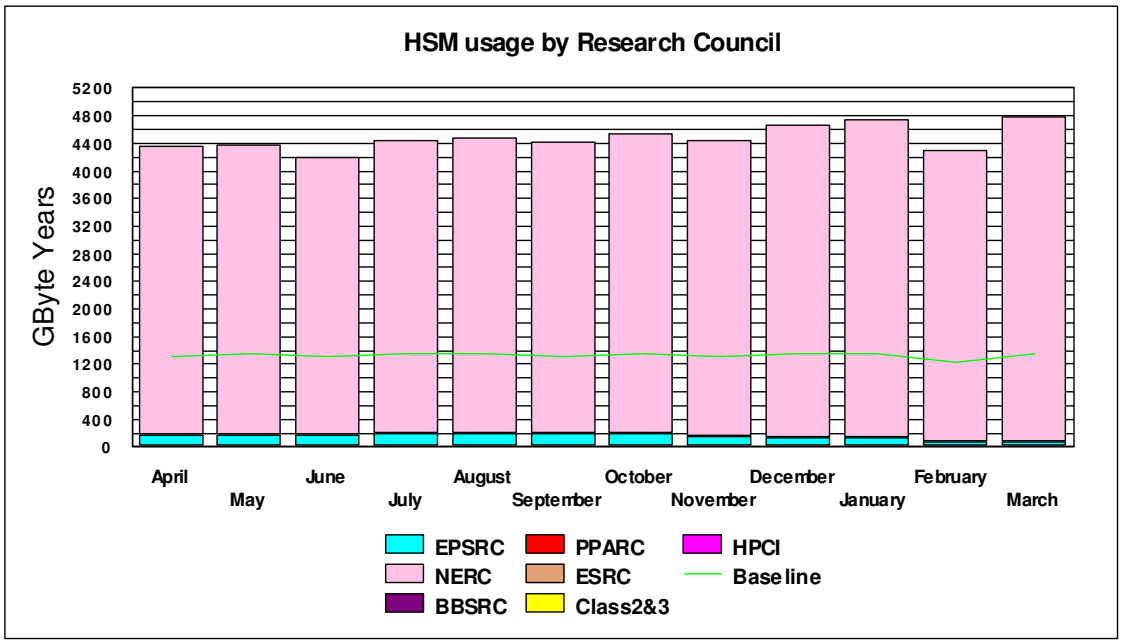


The next series of graphs illustrates the usage of the disk and HSM resources of the system.



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

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



4.8 Guest System Usage Charts

There is currently no Guest System usage.

5. Capability Incentives

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

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

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

Discounts are given in the form of refunded Service Tokens.

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

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

Service Tokens Refunded: March 2005 Usage							
System	Consortia						Total
	csn015	csn003	csn006	cse075			
Green 256+ PEs	145.54	16.14					161.68
Green 384+ PEs							0
Newton 128+ PEs			32.86	27.02			59.88
Newton 192+ PEs				137.65			137.65
Total Tokens							**359.21**

6. Service Status, Issues and Plans

6.1 Status

The service utilisation in March exceeded baseline.

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

6.2 Issues

There were some issues during March on the Altix system Newton. Further issues with known problems in the CXFS SAN software caused the majority of the failures this month, with two faulty CPU bricks being responsible for the rest. The faulty components have since been fixed, with the CXFS software issues being addressed in the forthcoming operating software upgrade.

6.3 Plans

It is planned to upgrade both Irix and Altix operating systems during the latter half of April, which will at the same time upgrade the version of the CXFS SAN software on both sets of systems. This is a critical upgrade, intended to address the CXFS issues encountered over recent months.

7. Conclusion

March 2005 saw the overall CPARS rating at Green with the baseline being exceeded by 162%.

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 March 2005

Appendix 2 contains the Percentage shares by Consortium for March 2005

Appendix 3 contains the Percentage shares by Research Council for March 2005

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

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

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

Appendix 1

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

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

Appendix 2

Percentage CPU time per consortia for Green in March 2005

Consortia	% Machine Time
CSE086	0.13
CSE137	0.34
CSE066	11.67
CSN001	0.12
CSN003	35.10
CSN006	20.78
CSN015	25.32
CS2047	0.34
CS2047	0.00
CSEHPCX	5.57

Percentage CPU time per consortia for Newton in March 2005

Consortia	% Machine Time
CSEdl1	4.83
CSE086	14.95
CSE098	7.95
CSE072	1.02
CSE077	5.03
CSE139	0.15
CSE133	2.88
CSE075	9.92
CSN001	0.00
CSN003	34.40
CSN006	11.33
CSN015	0.00
CS2046	0.00
CS2047	0.00
CS3025	0.12

Percentage CPU time per consortia for Fermat in March 2005

Consortia	% Machine Time
CSE086	0.19
CSE066	0.00
CSE131	0.00
CSN003	87.41
CSN006	5.63
CSN015	0.02
CS2046	0.00
CS3027	4.15
CSEHPCX	2.60

Percentage CPU time per consortia for Wren in March 2005

Consortia	% Machine Time
csedl1	0.33
CSE086	3.80
CSE129	0.04
CSE137	0.28
CSE071	0.05
CSE066	0.14
CSE075	0.03
CSE127	0.04
HPCI Daresbury	0.01
CSN001	0.53
CSN003	55.57
CSN006	0.47
CSN015	37.92
CS2046	0.01
CS2047	0.25
CS3027	0.33
CSEHPCX	0.05

Percentage Medium Performance disc allocation by Consortia in March 2005

Consortia	%Allocation
CSEdl1	0.98
CSE057	2.61
CSE086	11.15
CSE085	4.62
CSE098	0.20
CSE050	1.71
CSE085	4.62
CSE139	0.16
CSE071	0.16
CSE133	0.16
CSE066	0.04
CSE075	52.42
CSE076	0.64
HPCI Daresbury	0.04
HPCI Edinburgh	0.08
CSN001	8.16
CSN003	3.67
CSN006	4.90
CSN015	2.85
CSN052	2.45
CS3024	0.16
CS3025	0.08
CSEHPCX	0.82

Percentage usage of HSM by Consortium for March 2005

Consortium	% Usage
CSE086	0.03
CSE085	1.29
CSE082	0.00
CSE071	0.01
CSE075	0.36
CSN001	25.10
CSN003	67.36
CSN006	0.01
CSN015	3.64
CSN036	2.18
CSN044	0.01

Percentage CPU usage on Green by Research Council for March 2005

Research Council	% Usage
EPSRC	18.69
HPCI	0.00
NERC	81.31
BBSRC	0.00
ESRC	0.00
PPARC	0.00

Percentage CPU usage on Newton by Research Council for March 2005

Research Council	% Usage
EPSRC	50.28
HPCI	0.00
NERC	49.59
BBSRC	0.13
ESRC	0.00
PPARC	0.00

Percentage PE usage on Fermat by Research Council for March 2005

Research Council	% Usage
EPSRC	6.94
HPCI	0.00
NERC	93.06
BBSRC	0.00
ESRC	0.00
PPARC	0.00

Percentage CPU usage on Wren by Research Council for March 2005

Research Council	% Usage
EPSRC	5.50
HPCI	0.00
NERC	94.50
BBSRC	0.00
ESRC	0.00
PPARC	0.00

Percentage MP Disc allocated by Research Council for March 2005

Research Council	% Allocated
EPSRC	77.65
HPCI	0.12
NERC	22.04
BBSRC	0.08
ESRC	0.00
PPARC	0.00

Percentage Disc allocated as SAN HV by Research Council for March 2005

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

Percentage HSM usage by Research Council for March 2005

Research Council	% usage
EPSRC	1.68
HPCI	0.00
NERC	98.32
BBSRC	0.00
ESRC	0.00
PPARC	0.00

Appendix 4

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

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

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

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

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

Usage Report run on Fri Apr 1 08:50:01 2005 for the CSAR service

cs2047 Tucker
Last Trade: Tue Jul 20 12:37:16 2004
Usage:
1.0 of 20.0 Hour Wren CPU (0.0 of 1.0 G.S.T), 4.8%
0.0 of 2.1 GByteYear MP Disk SAN (0.0 of 5.0 G.S.T), 0.0%
1544.5 of 1800.0 Hour Green CPU (80.7 of 94.1 G.S.T), 85.8%
Total usage for project cs2047 80.8 of 100.0 Generic Service Tokens, 80.8%

---

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

---

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

---

cs3027 - Walker
Last Trade: Tue Mar 1 12:04:26 2005
Usage:
0.0 of 1303.4 Hour Newton CPU (0.0 of 199.5 G.S.T), 0.0%
1.0 of 66.8 Hour Wren CPU (0.0 of 3.3 G.S.T), 1.4%
0.0 of 29.5 GByteYear MP Disk SAN (0.0 of 70.3 G.S.T), 0.0%
1859.9 of 4768.1 Hour SMP CPU (72.3 of 185.2 G.S.T), 39.0%
0.0 of 30.0 GByteYear HSM/Tape (0.0 of 18.9 G.S.T), 0.0%
0.0 of 2.1 Day Training (0.0 of 22.4 G.S.T), 0.0%
Total usage for project cs3027 72.3 of 499.7 Generic Service Tokens, 14.5%

---

cs3028 - Li
Last Trade: Tue Nov 2 09:07:16 2004
Usage:
9.3 of 52.7 Hour Wren CPU (0.5 of 2.6 G.S.T), 17.6%
0.0 of 20.0 GByteYear MP Disk SAN (0.0 of 47.6 G.S.T), 0.0%
5535.0 of 5950.1 Hour Green CPU (289.2 of 310.9 G.S.T), 93.0%
Total usage for project cs3028 289.7 of 361.1 Generic Service Tokens, 80.2%

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

---

cse071 GR/R23657 Iacovides
Last Trade: Thu Jul 15 10:25:10 2004
Usage:
14155.3 of 15314.9 Hour Newton CPU (2167.1 of 2344.6 G.S.T), 92.4%
3.9 of 223.3 Hour Wren CPU (0.2 of 11.1 G.S.T), 1.7%
2.6 of 13.6 GByteYear MP Disk SAN (6.3 of 32.5 G.S.T), 19.3%
677.9 of 22708.5 Hour SMP CPU (26.3 of 882.3 G.S.T), 3.0%
4.4 of 11.3 GByteYear HSM/Tape (2.8 of 7.1 G.S.T), 38.8%
3236.6 of 16991.9 Hour Green CPU (169.1 of 887.9 G.S.T), 19.0%
1.5 of 5.0 PersonDay Support (46.9 of 156.2 G.S.T), 30.0%
2.0 of 6.0 Day Training (21.7 of 65.2 G.S.T), 33.3%
Total usage for project cse071 2440.4 of 4386.9 Generic Service Tokens, 55.6%

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cse072 GR/R66692 Karlin
Last Trade: Tue Apr 27 14:30:50 2004
Usage:
41583.1 of 41583.1 PEHour MPP PE CPU (1005.4 of 1005.4 G.S.T), 100.0%
0.9 of 0.8 GByteYear HP Disk (5.3 of 4.5 G.S.T), 118.1%
15401.4 of 20478.9 Hour Newton CPU (2357.8 of 3135.2 G.S.T), 75.2%
0.5 of 15.7 Hour Wren CPU (0.0 of 0.8 G.S.T), 3.1%
0.0 of 4.6 GByteYear MP Disk SAN (0.0 of 10.9 G.S.T), 0.0%
0.0 of 12.0 Hour SMP CPU (0.0 of 0.5 G.S.T), 0.0%
0.0 of 4.0 GByteYear MP Disk (0.0 of 9.5 G.S.T), 0.0%
0.0 of 0.0 GByteYear HSM/Tape (0.0 of 0.0 G.S.T)
0.0 of 18.0 PersonDay Support (0.0 of 562.5 G.S.T), 0.0%
7.0 of 9.0 Day Training (76.1 of 97.8 G.S.T), 77.8%
Total usage for project cse072 3444.7 of 4827.1 Generic Service Tokens, 71.4%

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cse074 GR/R66197 Luo
Last Trade: Thu Dec 18 10:23:19 2003
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 2660.8 Hour Newton CPU (0.0 of 407.3 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 21.4 G.S.T), 0.0%
Total usage for project cse074 0.0 of 452.1 Generic Service Tokens, 0.0%

---

cse075 GR/R67699 Coveney
Last Trade: Fri Jan 28 15:24:49 2005
Usage:
8401.8 of 8401.8 PEHour MPP PE CPU (203.1 of 203.1 G.S.T), 100.0%
76.3 of 76.3 GByteYear HP Disk (454.2 of 454.2 G.S.T), 100.0%
18127.1 of 137582.2 Hour Newton CPU (2775.1 of 21062.8 G.S.T), 13.2%
69.4 of 169.3 Hour Wren CPU (3.4 of 8.4 G.S.T), 41.0%
134.0 of 200.5 GByteYear MP Disk SAN (319.1 of 477.4 G.S.T), 66.8%
7704.1 of 7704.1 Hour SMP CPU (299.3 of 299.3 G.S.T), 100.0%
1185.1 of 1530.5 GByteYear MP Disk (2821.8 of 3644.1 G.S.T), 77.4%
573.4 of 1959.4 GByteYear HSM/Tape (361.8 of 1236.2 G.S.T), 29.3%
145639.1 of 145639.1 Hour Green CPU (7609.9 of 7609.9 G.S.T), 100.0%
0.0 of 10.0 PersonDay Support (0.0 of 312.5 G.S.T), 0.0%
5.0 of 14.0 Day Training (54.3 of 152.2 G.S.T), 35.7%
Total usage for project cse075 14902.2 of 35460.2 Generic Service Tokens, 42.0%

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cse077 GR/R69792 Kronenburg

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

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cse082 GR/R79654 Barakos
Last Trade: re-enabled
Usage:
10.5 of 15.7 Hour Wren CPU (0.5 of 0.8 G.S.T), 66.9%
9174.1 of 9264.7 Hour SMP CPU (356.4 of 359.9 G.S.T), 99.0%
167.4 of 15.5 GByteYear MP Disk (398.6 of 36.8 G.S.T), 1082.4%
0.8 of 28.7 GByteYear HSM/Tape (0.5 of 18.1 G.S.T), 2.8%
1446.5 of 1379.8 Hour Green CPU (75.6 of 72.1 G.S.T), 104.8%
0.0 of 5.0 PersonDay Support (0.0 of 156.3 G.S.T), 0.0%
0.0 of 1.0 Day Training (0.0 of 10.9 G.S.T), 0.0%
Total usage for project cse082 831.6 of 654.9 Generic Service Tokens, 127.0%

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cse086 GR/R83118 Taylor
Last Trade: Tue Feb 8 15:02:42 2005
Usage:
884647.5 of 884647.5 PEHour MPP PE CPU (21389.6 of 21389.6 G.S.T), 100.0%
132.7 of 132.7 GByteYear HP Disk (789.9 of 790.0 G.S.T), 100.0%
150297.9 of 316221.5 Hour Newton CPU (23009.5 of 48411.1 G.S.T), 47.5%
1065.9 of 3262.8 Hour Wren CPU (52.8 of 161.7 G.S.T), 32.7%
0.0 of 12.9 GByteYear HP Disk SAN - /d (0.0 of 47.6 G.S.T), 0.0%
0.0 of 46.6 GbyteYear HV Disk SAN /v (0.0 of 55.5 G.S.T), 0.0%
27422.0 of 42000.5 Hour SMP CPU (1065.4 of 1631.8 G.S.T), 65.3%
340.4 of 497.0 GByteYear MP Disk (810.6 of 1183.3 G.S.T), 68.5%
47.6 of 3750.0 GByteYear HSM/Tape (30.1 of 2365.9 G.S.T), 1.3%
507532.7 of 574394.1 Hour Green CPU (26519.6 of 30013.3 G.S.T), 88.4%
5.0 of 16.0 PersonDay Support (156.2 of 500.0 G.S.T), 31.3%
0.0 of 11.0 Day Training (0.0 of 119.6 G.S.T), 0.0%
Total usage for project cse086 73823.8 of 106669.4 Generic Service Tokens, 69.2%

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cse086a MP1
Last Trade: never
Usage:
721660.7 of 750000.0 PEHour MPP PE CPU (17448.8 of 18134.0 G.S.T), 96.2%
8.5 of 10.0 GByteYear HP Disk (50.6 of 59.5 G.S.T), 85.0%
141051.7 of 150000.0 Hour Newton CPU (21593.9 of 22963.9 G.S.T), 94.0%
86.0 of 210.0 Hour Wren CPU (4.3 of 10.4 G.S.T), 41.0%
0.0 of 50.0 Hour SMP CPU (0.0 of 1.9 G.S.T), 0.0%
81.9 of 100.0 GByteYear MP Disk (194.9 of 238.1 G.S.T), 81.9%
0.0 of 1000.0 GByteYear HSM/Tape (0.0 of 630.9 G.S.T), 0.0%
26162.4 of 30000.0 Hour Green CPU (1367.0 of 1567.6 G.S.T), 87.2%
Total usage for subproject cse086a 40659.6 of 43606.3 Generic Service Tokens, 93.2%

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cse086b MP2
Last Trade: never
Usage:

48449.5 of 56000.0 PEHour MPP PE CPU (1171.4 of 1354.0 G.S.T), 86.5%
37.6 of 50.0 GByteYear HP Disk (223.8 of 297.6 G.S.T), 75.2%
1929.3 of 15000.0 Hour Newton CPU (295.4 of 2296.4 G.S.T), 12.9%
337.3 of 500.0 Hour Wren CPU (16.7 of 24.8 G.S.T), 67.5%
16079.3 of 20000.0 Hour SMP CPU (624.7 of 777.0 G.S.T), 80.4%
37.4 of 60.0 GByteYear MP Disk (89.2 of 142.9 G.S.T), 62.4%
332238.8 of 350000.0 Hour Green CPU (17360.2 of 18288.2 G.S.T), 94.9%
Total usage for subproject cse086b 19781.4 of 23180.9 Generic Service Tokens, 85.3%

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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), 87.4%
0.1 of 0.1 GByteYear MP Disk (0.4 of 0.2 G.S.T), 148.0%
Total usage for subproject cse086d 0.9 of 0.8 Generic Service Tokens, 104.7%

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cse086e MP5
Last Trade: never
Usage:
48.8 of 500.0 PEHour MPP PE CPU (1.2 of 12.1 G.S.T), 9.8%
1.8 of 2.0 GByteYear HP Disk (10.5 of 11.9 G.S.T), 88.1%
0.0 of 10000.0 Hour Newton CPU (0.0 of 1530.9 G.S.T), 0.0%
468.8 of 1500.0 Hour Wren CPU (23.2 of 74.3 G.S.T), 31.3%
0.0 of 5.0 GbyteYear HV Disk SAN /v (0.0 of 6.0 G.S.T), 0.0%
7362.0 of 10000.0 Hour SMP CPU (286.0 of 388.5 G.S.T), 73.6%
32.8 of 40.0 GByteYear MP Disk (78.0 of 95.2 G.S.T), 81.9%
143883.9 of 150000.0 Hour Green CPU (7518.2 of 7837.8 G.S.T), 95.9%
Total usage for subproject cse086e 7917.2 of 9956.8 Generic Service Tokens, 79.5%

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cse086f EC1
Last Trade: never
Usage:
71.1 of 5000.0 PEHour MPP PE CPU (1.7 of 120.9 G.S.T), 1.4%
3.8 of 5.0 GByteYear HP Disk (22.8 of 29.8 G.S.T), 76.6%
0.8 of 200.0 Hour Wren CPU (0.0 of 9.9 G.S.T), 0.4%
4.8 of 50.0 Hour SMP CPU (0.2 of 1.9 G.S.T), 9.6%
35.5 of 40.0 GByteYear MP Disk (84.5 of 95.2 G.S.T), 88.7%
47.6 of 100.0 GByteYear HSM/Tape (30.1 of 63.1 G.S.T), 47.6%
0.0 of 10000.0 Hour Green CPU (0.0 of 522.5 G.S.T), 0.0%
Total usage for subproject cse086f 139.3 of 843.4 Generic Service Tokens, 16.5%

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cse086g EC2
Last Trade: never
Usage:
577.1 of 5000.0 PEHour MPP PE CPU (14.0 of 120.9 G.S.T), 11.5%
43.5 of 50.0 GByteYear HP Disk (258.9 of 297.6 G.S.T), 87.0%
172.5 of 200.0 Hour Wren CPU (8.5 of 9.9 G.S.T), 86.2%
1414.4 of 1800.0 Hour SMP CPU (55.0 of 69.9 G.S.T), 78.6%
111.9 of 140.0 GByteYear MP Disk (266.4 of 333.3 G.S.T), 79.9%
0.0 of 50.0 GByteYear HSM/Tape (0.0 of 31.5 G.S.T), 0.0%
3860.9 of 10000.0 Hour Green CPU (201.7 of 522.5 G.S.T), 38.6%
Total usage for subproject cse086g 804.5 of 1385.8 Generic Service Tokens, 58.1%

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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%
7.0 of 10.0 GByteYear HP Disk (41.5 of 59.5 G.S.T), 69.7%
0.0 of 200.0 Hour Wren CPU (0.0 of 9.9 G.S.T), 0.0%
219.9 of 250.0 Hour SMP CPU (8.5 of 9.7 G.S.T), 87.9%
15.1 of 20.0 GByteYear MP Disk (35.8 of 47.6 G.S.T), 75.3%
0.0 of 0.0 Hour Green CPU (0.0 of 0.0 G.S.T)
Total usage for subproject cse086h 1206.2 of 1335.7 Generic Service Tokens, 90.3%

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cse086i EC4
Last Trade: never
Usage:
0.1 of 0.1 GByteYear HP Disk (0.5 of 0.6 G.S.T), 86.8%
0.1 of 0.1 GByteYear MP Disk (0.4 of 0.2 G.S.T), 148.0%
Total usage for subproject cse086i 0.9 of 0.8 Generic Service Tokens, 104.3%

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cse086j BEC1
Last Trade: never
Usage:
67505.3 of 70000.0 PEHour MPP PE CPU (1632.2 of 1692.5 G.S.T), 96.4%
1.7 of 3.0 GByteYear HP Disk (9.8 of 17.9 G.S.T), 55.1%
7317.0 of 9000.0 Hour Newton CPU (1120.2 of 1377.8 G.S.T), 81.3%
0.0 of 200.0 Hour Wren CPU (0.0 of 9.9 G.S.T), 0.0%
0.0 of 0.1 Hour SMP CPU (0.0 of 0.0 G.S.T), 0.2%
0.6 of 5.0 GByteYear MP Disk (1.4 of 11.9 G.S.T), 11.6%
0.0 of 1000.0 Hour Green CPU (0.0 of 52.3 G.S.T), 0.0%
Total usage for subproject cse086j 2763.6 of 3162.3 Generic Service Tokens, 87.4%

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cse086k BEC2
Last Trade: never
Usage:
0.1 of 0.1 GByteYear HP Disk (0.5 of 0.6 G.S.T), 86.8%
0.6 of 200.0 Hour Wren CPU (0.0 of 9.9 G.S.T), 0.3%
2341.7 of 4000.0 Hour SMP CPU (91.0 of 155.4 G.S.T), 58.5%
23.2 of 35.0 GByteYear MP Disk (55.2 of 83.3 G.S.T), 66.3%
1385.0 of 10000.0 Hour Green CPU (72.4 of 522.5 G.S.T), 13.8%
Total usage for subproject cse086k 219.1 of 771.8 Generic Service Tokens, 28.4%

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cse089 GR/R85556 Wiercigroch
Last Trade: re-enabled
Usage:
0.0 of 0.0 PEHour MPP PE CPU (0.0 of 0.0 G.S.T), 100.0%
0.0 of 0.0 GByteYear HP Disk (0.0 of 0.0 G.S.T)
1.1 of 1952.1 Hour Wren CPU (0.1 of 96.7 G.S.T), 0.1%
0.0 of 44.0 GByteYear HP Disk SAN - /d (0.0 of 162.4 G.S.T), 0.0%
0.0 of 0.0 Hour SMP CPU (0.0 of 0.0 G.S.T), 101.9%
0.0 of 2083.0 Hour Green CPU (0.0 of 108.8 G.S.T), 0.0%
0.0 of 15.0 PersonDay Support (0.0 of 468.8 G.S.T), 0.0%
0.0 of 7.0 Day Training (0.0 of 76.1 G.S.T), 0.0%
Total usage for project cse089 0.1 of 912.8 Generic Service Tokens, 0.0%

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cse106 GR/S42712 Augarde
Last Trade: Wed Nov 5 15:06:00 2003
Usage:
0.2 of 2500.0 Hour Wren CPU (0.0 of 123.9 G.S.T), 0.0%
0.0 of 37.4 GByteYear MP Disk SAN (0.0 of 89.2 G.S.T), 0.0%
0.0 of 50000.0 Hour Green CPU (0.0 of 2612.6 G.S.T), 0.0%

0.0 of 25.0 PersonDay Support (0.0 of 781.2 G.S.T), 0.0%
3.0 of 10.0 Day Training (32.6 of 108.7 G.S.T), 30.0%
Total usage for project cse106 32.6 of 3715.6 Generic Service Tokens, 0.9%

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

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cse110 GR/S43214 Leach
Last Trade: Wed Nov 5 16:16:25 2003
Usage:
1.0 of 6000.0 Hour Wren CPU (0.0 of 297.3 G.S.T), 0.0%
0.0 of 67.6 GByteYear HP Disk SAN - /d (0.0 of 249.4 G.S.T), 0.0%
0.0 of 20.0 GByteYear MP Disk SAN (0.0 of 47.6 G.S.T), 0.1%
44.0 of 42000.0 Hour Green CPU (2.3 of 2194.6 G.S.T), 0.1%
0.0 of 30.0 PersonDay Support (0.0 of 937.5 G.S.T), 0.0%
5.0 of 25.0 Day Training (54.3 of 271.7 G.S.T), 20.0%
Total usage for project cse110 56.7 of 3998.1 Generic Service Tokens, 1.4%

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

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cse112 GR/S67029 Chernyshenko
Last Trade: Wed Apr 14 14:35:22 2004
Usage:
0.0 of 300.0 GByteYear MP Disk SAN (0.0 of 714.3 G.S.T), 0.0%
0.0 of 160000.0 Hour Green CPU (0.0 of 8360.3 G.S.T), 0.0%
0.0 of 16.5 PersonDay Support (0.0 of 514.9 G.S.T), 0.0%
0.0 of 5.0 Day Training (0.0 of 54.5 G.S.T), 0.0%
Total usage for project cse112 0.0 of 9644.0 Generic Service Tokens, 0.0%

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

Total usage for project cse116 0.0 of 931.5 Generic Service Tokens, 0.0%

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

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

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cse120 Harding
Last Trade: Thu Nov 11 09:23:00 2004
Usage:
4614.0 of 553999.0 Hour Newton CPU (706.4 of 84813.1 G.S.T), 0.8%
0.1 of 3.1 Hour Wren CPU (0.0 of 0.2 G.S.T), 2.1%
1.7 of 100.0 GByteYear MP Disk SAN (4.0 of 238.0 G.S.T), 1.7%
0.0 of 10.0 Day Training (0.0 of 108.8 G.S.T), 0.0%
Total usage for project cse120 710.3 of 85160.0 Generic Service Tokens, 0.8%

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cse121 GR/S80080 Shluger
Last Trade: Tue Jul 6 15:32:01 2004
Usage:
0.0 of 280118.3 Hour Newton CPU (0.0 of 42884.0 G.S.T), 0.0%
0.0 of 20.2 Hour Wren CPU (0.0 of 1.0 G.S.T), 0.0%
0.0 of 10.1 GByteYear MP Disk SAN (0.0 of 24.0 G.S.T), 0.0%
0.0 of 40.1 PersonDay Support (0.0 of 1253.0 G.S.T), 0.0%
0.0 of 10.1 Day Training (0.0 of 110.0 G.S.T), 0.0%
Total usage for project cse121 0.0 of 44272.0 Generic Service Tokens, 0.0%

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

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cse127 - EP/C00528 Silvester
Last Trade: Thu Sep 30 10:21:57 2004
Usage:
0.0 of 4000.0 Hour Newton CPU (0.0 of 612.4 G.S.T), 0.0%

0.1 of 400.0 Hour Wren CPU (0.0 of 19.8 G.S.T), 0.0%
0.0 of 62.0 GByteYear MP Disk SAN (0.0 of 147.6 G.S.T), 0.0%
0.0 of 20000.0 Hour Green CPU (0.0 of 1045.0 G.S.T), 0.0%
0.0 of 20.0 PersonDay Support (0.0 of 625.0 G.S.T), 0.0%
5.0 of 5.0 Day Training (54.3 of 54.3 G.S.T), 100.0%
Total usage for project cse127 54.4 of 2504.2 Generic Service Tokens, 2.2%

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

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

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cse132 GR/T04465 Clarke
Last Trade: Mon Mar 7 14:44:16 2005
Usage:
0.0 of 3000.0 Hour Newton CPU (0.0 of 459.3 G.S.T), 0.0%
0.0 of 140.1 Hour Wren CPU (0.0 of 6.9 G.S.T), 0.0%
0.0 of 100.1 GByteYear MP Disk SAN (0.0 of 238.3 G.S.T), 0.0%
0.0 of 110.0 GByteYear HSM/Tape (0.0 of 69.4 G.S.T), 0.0%
0.0 of 97000.0 Hour Green CPU (0.0 of 5068.4 G.S.T), 0.0%
0.0 of 1.9 PersonDay Support (0.0 of 60.6 G.S.T), 0.0%
Total usage for project cse132 0.0 of 5903.0 Generic Service Tokens, 0.0%

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cse133 GR/S13422 Catlow
Last Trade: Mon May 10 14:48:07 2004
Usage:
33464.5 of 399686.4 Hour Newton CPU (5123.2 of 61189.0 G.S.T), 8.4%
0.1 of 8.0 Hour Wren CPU (0.0 of 0.4 G.S.T), 0.8%
0.4 of 20.0 GByteYear MP Disk SAN (0.8 of 47.6 G.S.T), 1.8%
Total usage for project cse133 5124.0 of 61237.0 Generic Service Tokens, 8.4%

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cse137 - GR/T28126 Leschziner
Last Trade: re-enabled
Usage:

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

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cse139 GR/S71552 McDougall
Last Trade: Tue Aug 3 10:44:04 2004
Usage:
4706.2 of 89000.0 Hour Newton CPU (720.5 of 13625.2 G.S.T), 5.3%
0.0 of 500.0 Hour Wren CPU (0.0 of 24.8 G.S.T), 0.0%
0.6 of 157.0 GByteYear MP Disk SAN (1.5 of 373.8 G.S.T), 0.4%
0.0 of 105.0 GByteYear HSM/Tape (0.0 of 66.2 G.S.T), 0.0%
0.0 of 15000.0 Hour Green CPU (0.0 of 783.8 G.S.T), 0.0%
0.0 of 34.0 PersonDay Support (0.0 of 1062.5 G.S.T), 0.0%
0.0 of 16.0 Day Training (0.0 of 173.9 G.S.T), 0.0%
Total usage for project cse139 722.0 of 16110.2 Generic Service Tokens, 4.5%

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csedl1 - Castep port to Altix
Last Trade: Mon Mar 21 11:02:42 2005
Usage:
74880.1 of 105080.3 Hour Newton CPU (11463.6 of 16087.0 G.S.T), 71.3%
50.6 of 500.0 Hour Wren CPU (2.5 of 24.8 G.S.T), 10.1%
15.2 of 69.2 GByteYear MP Disk SAN (36.2 of 164.8 G.S.T), 22.0%
0.0 of 125.0 GByteYear HSM/Tape (0.0 of 78.9 G.S.T), 0.0%
1247.2 of 14649.4 Hour Green CPU (65.2 of 765.5 G.S.T), 8.5%
6.0 of 6.0 Day Training (65.2 of 65.3 G.S.T), 99.9%
Total usage for project csedl1 11632.7 of 17186.2 Generic Service Tokens, 67.7%

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csedl1a Computational Cemistry
Last Trade: never
Usage:
2740.3 of 9500.0 Hour Newton CPU (419.5 of 1454.4 G.S.T), 28.8%
0.0 of 150.0 Hour Wren CPU (0.0 of 7.4 G.S.T), 0.0%
1.5 of 19.5 GByteYear MP Disk SAN (3.6 of 46.4 G.S.T), 7.8%
0.0 of 37.0 GByteYear HSM/Tape (0.0 of 23.3 G.S.T), 0.0%
Total usage for subproject csedl1a 423.1 of 1531.6 Generic Service Tokens, 27.6%

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csedl1b Molecular Simulation
Last Trade: never
Usage:
1.8 of 11993.0 Hour Newton CPU (0.3 of 1836.0 G.S.T), 0.0%
0.0 of 50.0 Hour Wren CPU (0.0 of 2.5 G.S.T), 0.0%
1.0 of 7.5 GByteYear MP Disk SAN (2.4 of 17.9 G.S.T), 13.4%
0.0 of 13.0 GByteYear HSM/Tape (0.0 of 8.2 G.S.T), 0.0%
Total usage for subproject csedl1b 2.7 of 1864.6 Generic Service Tokens, 0.1%

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csedl1c Materials
Last Trade: never
Usage:
38355.8 of 45800.0 Hour Newton CPU (5872.0 of 7011.6 G.S.T), 83.7%
6.2 of 100.0 Hour Wren CPU (0.3 of 5.0 G.S.T), 6.2%
5.6 of 15.0 GByteYear MP Disk SAN (13.2 of 35.7 G.S.T), 37.1%

0.0 of 25.0 GByteYear HSM/Tape (0.0 of 15.8 G.S.T), 0.0%
Total usage for subproject csedl1c 5885.5 of 7068.1 Generic Service Tokens, 83.3%

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csedl1d - Band Theory
Last Trade: never
Usage:
27295.2 of 36001.2 Hour Newton CPU (4178.7 of 5511.5 G.S.T), 75.8%
0.0 of 50.0 Hour Wren CPU (0.0 of 2.5 G.S.T), 0.1%
0.7 of 7.5 GByteYear MP Disk SAN (1.6 of 17.9 G.S.T), 8.8%
0.0 of 13.0 GByteYear HSM/Tape (0.0 of 8.2 G.S.T), 0.0%
Total usage for subproject csedl1d 4180.3 of 5540.1 Generic Service Tokens, 75.5%

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csedl1e High End Computing
Last Trade: never
Usage:
4419.7 of 5000.0 Hour Newton CPU (676.6 of 765.5 G.S.T), 88.4%
44.3 of 150.0 Hour Wren CPU (2.2 of 7.4 G.S.T), 29.6%
6.5 of 19.5 GByteYear MP Disk SAN (15.4 of 46.4 G.S.T), 33.1%
0.0 of 37.0 GByteYear HSM/Tape (0.0 of 23.3 G.S.T), 0.0%
1247.2 of 4000.0 Hour Green CPU (65.2 of 209.0 G.S.T), 31.2%
Total usage for subproject csedl1e 759.4 of 1051.7 Generic Service Tokens, 72.2%

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csedl1g - Engineering
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 5.0 GByteYear MP Disk SAN (0.0 of 11.9 G.S.T), 0.0%
0.0 of 4000.0 Hour Green CPU (0.0 of 209.0 G.S.T), 0.0%
Total usage for subproject csedl1g 0.0 of 988.9 Generic Service Tokens, 0.0%

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csehec - (NAG)
Last Trade: Mon Oct 11 11:49:24 2004
Usage:
128.5 of 18995.1 Hour Newton CPU (19.7 of 2908.0 G.S.T), 0.7%
0.1 of 989.0 Hour Wren CPU (0.0 of 49.0 G.S.T), 0.0%
0.0 of 22.7 GByteYear MP Disk SAN (0.0 of 54.0 G.S.T), 0.0%
Total usage for project csehec 19.7 of 3011.0 Generic Service Tokens, 0.7%

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csehpcx - benchmarking
Last Trade: Mon Mar 21 10:41:34 2005
Usage:
11200.6 of 11200.4 PEHour MPP PE CPU (270.8 of 270.8 G.S.T), 100.0%
16.1 of 15.6 GByteYear HP Disk (95.9 of 92.8 G.S.T), 103.3%
11842.3 of 15405.7 Hour Newton CPU (1813.0 of 2358.5 G.S.T), 76.9%
30.2 of 477.7 Hour Wren CPU (1.5 of 23.7 G.S.T), 6.3%
1760.7 of 1356.9 Hour SMP CPU (68.4 of 52.7 G.S.T), 129.8%
15.0 of 61.9 GByteYear MP Disk (35.6 of 147.3 G.S.T), 24.2%
37568.8 of 36481.7 Hour Green CPU (1963.0 of 1906.2 G.S.T), 103.0%
Total usage for project csehpcx 4248.3 of 4852.0 Generic Service Tokens, 87.6%

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csn001 Webb & GST/02/2846 Killworth & T/S/2001/00187 New
Last Trade: Tue Feb 22 13:12:28 2005
Usage:
403672.6 of 403672.5 PEHour MPP PE CPU (9760.3 of 9760.3 G.S.T), 100.0%

307.2 of 306.0 GByteYear HP Disk (1828.6 of 1821.4 G.S.T), 100.4%
1522.5 of 1526.0 Hour Newton CPU (233.1 of 233.6 G.S.T), 99.8%
1346.1 of 9815.0 Hour Wren CPU (66.7 of 486.3 G.S.T), 13.7%
246622.0 of 246862.1 Hour SMP CPU (9581.6 of 9591.0 G.S.T), 99.9%
641.1 of 941.7 GByteYear MP Disk (1526.3 of 2242.1 G.S.T), 68.1%
42352.9 of 44196.9 GByteYear HSM/Tape (26721.1 of 27884.5 G.S.T), 95.8%
1161154.2 of 1171420.2 Hour Green CPU (60672.7 of 61209.1 G.S.T), 99.1%
61.0 of 61.5 PersonDay Support (1906.2 of 1921.9 G.S.T), 99.2%
3.0 of 5.3 Day Training (32.6 of 57.5 G.S.T), 56.7%
Total usage for project csn001 112329.3 of 115207.6 Generic Service Tokens, 97.5%

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csn003 UGAMP O'Neill
Last Trade: Wed Mar 30 10:04:50 2005
Usage:
7500413.8 of 7500414.8 PEHour MPP PE CPU (181350.4 of 181350.4 G.S.T), 100.0%
113.5 of 113.5 GByteYear HP Disk (675.6 of 675.6 G.S.T), 100.0%
940883.1 of 1033284.8 Hour Newton CPU (144042.1 of 158188.1 G.S.T), 91.1%
4107.1 of 5045.2 Hour Wren CPU (203.5 of 250.0 G.S.T), 81.4%
790.3 of 846.5 GbyteYear HV Disk SAN /v (942.0 of 1008.9 G.S.T), 93.4%
346770.6 of 386316.5 Hour SMP CPU (13472.6 of 15009.0 G.S.T), 89.8%
151.4 of 373.8 GByteYear MP Disk (360.6 of 889.9 G.S.T), 40.5%
117119.9 of 128237.3 GByteYear HSM/Tape (73892.7 of 80906.8 G.S.T), 91.3%
1220029.4 of 1288752.5 Hour Green CPU (63749.1 of 67340.0 G.S.T), 94.7%
16.0 of 20.8 PersonDay Support (500.0 of 650.9 G.S.T), 76.8%
32.0 of 34.0 Day Training (347.8 of 369.9 G.S.T), 94.0%
Total usage for project csn003 479536.2 of 506639.5 Generic Service Tokens, 94.7%

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csn006 GR9/3550 Price
Last Trade: Tue Mar 8 22:41:42 2005
Usage:
1618734.3 of 1618734.0 PEHour MPP PE CPU (39138.9 of 39138.9 G.S.T), 100.0%
191.1 of 192.2 GByteYear HP Disk (1137.6 of 1144.3 G.S.T), 99.4%
188558.9 of 285124.2 Hour Newton CPU (28866.9 of 43650.4 G.S.T), 66.1%
642.0 of 2096.8 Hour Wren CPU (31.8 of 103.9 G.S.T), 30.6%
86963.4 of 87287.6 Hour SMP CPU (3378.7 of 3391.3 G.S.T), 99.6%
124.2 of 169.5 GByteYear MP Disk (295.7 of 403.6 G.S.T), 73.3%
17.3 of 20.3 GByteYear HSM/Tape (10.9 of 12.8 G.S.T), 85.4%
1042206.7 of 1222916.6 Hour Green CPU (54457.5 of 63899.9 G.S.T), 85.2%
Total usage for project csn006 127318.0 of 151745.0 Generic Service Tokens, 83.9%

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csn015 Proctor
Last Trade: re-enabled
Usage:
257682.2 of 257682.2 PEHour MPP PE CPU (6230.4 of 6230.4 G.S.T), 100.0%
6.8 of 6.8 GByteYear HP Disk (40.4 of 40.4 G.S.T), 100.0%
0.0 of 204.2 Hour Newton CPU (0.0 of 31.3 G.S.T), 0.0%
458.4 of 20565.3 Hour Wren CPU (22.7 of 1018.9 G.S.T), 2.2%
2707.4 of 6776.8 Hour SMP CPU (105.2 of 263.3 G.S.T), 40.0%
110.2 of 599.3 GByteYear MP Disk (262.3 of 1426.8 G.S.T), 18.4%
5998.7 of 8180.3 GByteYear HSM/Tape (3784.6 of 5161.1 G.S.T), 73.3%
775498.5 of 956784.0 Hour Green CPU (40521.4 of 49993.9 G.S.T), 81.1%
19.0 of 22.0 PersonDay Support (593.8 of 688.0 G.S.T), 86.3%
3.0 of 6.0 Day Training (32.6 of 65.2 G.S.T), 50.0%
Total usage for project csn015 51593.5 of 64919.4 Generic Service Tokens, 79.5%

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csn043 NER/T/S/2001/01159 Haines
Last Trade: Mon Jan 12 10:47:00 2004

Usage:
0.0 of 10.0 Hour Wren CPU (0.0 of 0.5 G.S.T), 0.0%
0.0 of 288.0 GByteYear MP Disk SAN (0.0 of 685.7 G.S.T), 0.0%
0.0 of 25544.0 Hour SMP CPU (0.0 of 992.4 G.S.T), 0.0%
0.0 of 19200.0 Hour Green CPU (0.0 of 1003.2 G.S.T), 0.0%
0.0 of 20.0 PersonDay Support (0.0 of 625.0 G.S.T), 0.0%
0.0 of 36.0 Day Training (0.0 of 391.3 G.S.T), 0.0%
Total usage for project csn043 0.0 of 3698.2 Generic Service Tokens, 0.0%

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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 11.9 G.S.T), 0.0%
23.7 of 53.8 GByteYear HSM/Tape (15.0 of 33.9 G.S.T), 44.1%
Total usage for project csn044 255.5 of 415.2 Generic Service Tokens, 61.5%

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

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

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

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csn058 NER/T/S/2002/00443 Tudhope - Merged
Last Trade: re-enabled
Usage:
0.0 of 7338.0 Hour Newton CPU (0.0 of 1123.4 G.S.T), 0.0%
0.0 of 9.3 Hour Wren CPU (0.0 of 0.5 G.S.T), 0.0%
0.0 of 6.0 GByteYear MP Disk SAN (0.0 of 14.3 G.S.T), 0.0%
0.0 of 105.0 GByteYear HSM/Tape (0.0 of 66.2 G.S.T), 0.0%

0.0 of 52500.0 Hour Green CPU (0.0 of 2743.2 G.S.T), 0.0%
Total usage for project csn058 0.0 of 3947.6 Generic Service Tokens, 0.0%

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

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

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

HPCI Daresbury
Last Trade: Mon Oct 7 10:07:27 2002
Usage:
34683.7 of 34482.9 PEHour MPP PE CPU (838.6 of 833.8 G.S.T), 100.6%
5.1 of 3.8 GByteYear HP Disk (30.3 of 22.7 G.S.T), 133.4%
1.9 of 0.0 Hour Wren CPU (0.1 of 0.0 G.S.T), 495983.3%
4062.9 of 4120.4 Hour SMP CPU (157.8 of 160.1 G.S.T), 98.6%
3.1 of 1.7 GByteYear MP Disk (7.4 of 4.0 G.S.T), 183.7%
10817.5 of 10497.3 Hour Green CPU (565.2 of 548.5 G.S.T), 103.1%
1.0 of 1.0 Day Training (10.9 of 10.9 G.S.T), 99.7%
Total usage for project hpcid 1610.3 of 1580.0 Generic Service Tokens, 101.9%

HPCI Edinburgh
Last Trade: Wed Jul 11 12:09:29 2001
Usage:
1759.1 of 4070.6 PEHour MPP PE CPU (42.5 of 98.4 G.S.T), 43.2%
5.1 of 4.7 GByteYear HP Disk (30.2 of 28.1 G.S.T), 107.4%
698.4 of 770.8 Hour SMP CPU (27.1 of 29.9 G.S.T), 90.6%
5.2 of 2.8 GByteYear MP Disk (12.4 of 6.7 G.S.T), 185.8%
1728.7 of 1739.8 Hour Green CPU (90.3 of 90.9 G.S.T), 99.4%
Total usage for project hpcie 202.6 of 254.1 Generic Service Tokens, 79.7%

HPCI Southampton

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

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)		

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

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		

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)		

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)		