Processing Speed Up

Working to streamline
& fasten the processing of Pablo

Tesla   139.191.148.131   /data/canhemon

Working to streamline
& fasten the processing of Pablo

Tesla	139.191.148.131	/data/canhemon
HPC-MPI	hpc-gw1.jrc.it	/home/hpctest

Working to streamline
& fasten the processing of Pablo

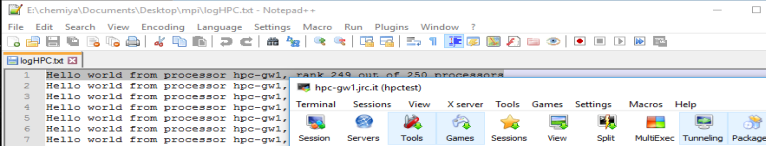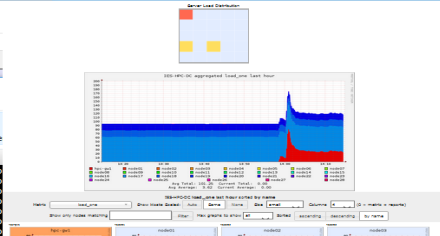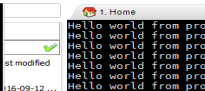| Tesla | 139.191.148.131 | /data/canhemon |
| HPC-MPI | hpc-gw1.jrc.it | /home/hpctest |
| HPC-EOS | ? | ? |

Tesla

- Fiji/ImageJ script streamlined
- GRASS script 15min/tile (Fixed)
- RG, NDVI, cLAI, cLAI2, CaB, CaB2 -> crown
- Subset size impact on crown identification (Done)

HPC-MPI

- MPI + OpenMP hydbrid
- distRS test OK
- PBS qsub issues (ticket filed Tuesday)
- still a test user (2 nodes, 64 cores, 30min)

E:\chemiya\Documents\Desktop\mpi\logHPC.txt - Notepad++

File Edit Search View Encoding Language Settings Macro Run Plugins Window ?

logHPC.txt

```
1  Hello world from processor hpc-gw1, rank 249 out of 250 processors
2  Hello world from processor hpc-gw1,
3  Hello world from processor hpc-gw1,
4  Hello world from processor hpc-gw1,
5  Hello world from processor hpc-gw1,
6  Hello world from processor hpc-gw1,
```

Terminal Sessions View X server Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Package

1. Home

hpc-gw1.jrc.it (hpctest)

```
server: hpc-gw1

Queue              Memory  CPU  Time  Walltime  Node  Run  Que  Lm  State
h05                  --     --   --   00:30:00    2    0    0   --   E R
low                  --     --   --   12:00:00   10    0    0   --   E R
high                 --     --   --   12:00:00   22    0    0   --   E R
test                 --     --   --   00:30:00    2    0    0   --   E R
workq
agri4cl
acqua

2439.hp

hpc-gw1

Job ID

2439.hpc-gw1   hpctest   test    run.pbs   --   2  64  --  00:10 R  --
[hpctest@hpc-gw1 mpirs]$ mail
Heirloom Mail version 12.5 7/5/10.  Type ? for help.
"/var/spool/mail/hpctest": 1 message
> 1 root              Wed Sep 14 10:53  17/608  "PBS JOB 2438.hpc-gw1"
& q
Held 1 message in /var/spool/mail/hpctest/
[hpctest@hpc-gw1 mpirs]$ qstat -a
```
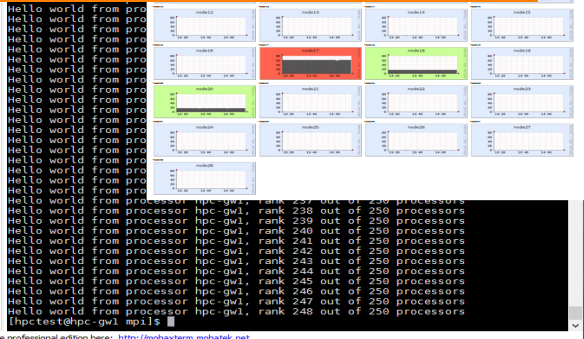
```
[hpctest@hpc-gw1 mpirs]$ bash run.sh

server: hpc-gw1

Queue              Memory  CPU  Time  Walltime  Node  Run  Que  Lm  State
h05                  --     --   --   00:30:00    2    0    0   --   E R
low                  --     --   --   12:00:00   10    0    0   --   E R
high                 --     --   --   12:00:00   22    0    0   --   E R
test                 --     --   --   00:30:00    2    0    0   --   E R
workq                --     --   --        --     0    0    0   --   E R
agri4climate         --     --   --   12:00:00    3    0    0   --   E R
acqua                --     --   --  120:00:0     4    0    0   --   E R

2438.hpc-gw1:

                                              Req'd  Req'd   Elap
Job ID       Username  Queue  Jobname  SessID NDS TSK Memory Time S Time
2438.hpc-gw1  hpctest  test     run.pbs    --    2  64   --  00:29 R  --
[hpctest@hpc-gw1 mpirs]$
```
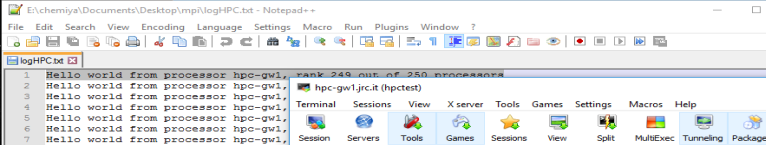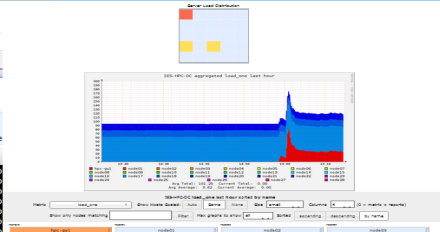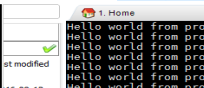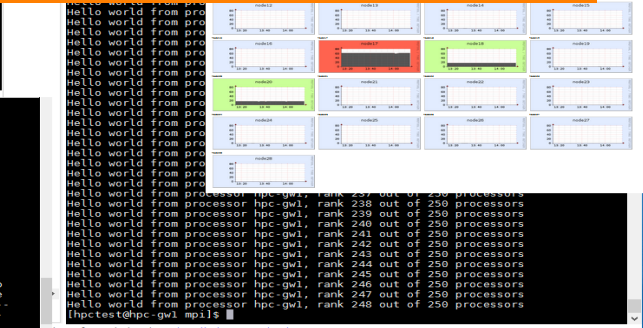
HPC-BigData

```
Hello world from pro
Hello world from pro
...
Hello world from processor hpc-gw1, rank 237 out of 250 processors
Hello world from processor hpc-gw1, rank 238 out of 250 processors
Hello world from processor hpc-gw1, rank 239 out of 250 processors
Hello world from processor hpc-gw1, rank 240 out of 250 processors
Hello world from processor hpc-gw1, rank 241 out of 250 processors
Hello world from processor hpc-gw1, rank 242 out of 250 processors
Hello world from processor hpc-gw1, rank 243 out of 250 processors
Hello world from processor hpc-gw1, rank 244 out of 250 processors
Hello world from processor hpc-gw1, rank 245 out of 250 processors
Hello world from processor hpc-gw1, rank 246 out of 250 processors
Hello world from processor hpc-gw1, rank 247 out of 250 processors
Hello world from processor hpc-gw1, rank 248 out of 250 processors
[hpctest@hpc-gw1 mpi]$
```

- Docker container
- Debian Linux OS
- GRASS 7.3 Dev version (compile svn)
- Fiji/ImageJ install?

Thank you