Several environment variables are provided to PBS jobs. Some are taken from the user's environment and carried with a job, and others are created by PBS. There are also some environment variables that you can explicitly create for exclusive use by PBS jobs.

All PBS-provided environment variable names start with the characters "PBS_". Some start with "PBS_O_", which indicates that the variable is taken from the job's originating environment (that is, the user's environment).

A few useful PBS environment variables are described in the following list:

PBS_O_WORKDIR
: Contains the name of the directory from which the user submitted the PBS job

PBS_O_PATH
: Value of *PATH* from submission environment

PBS_JOBID
: Contains the PBS job identifier

PBS_JOBDIR
: Pathname of job-specific staging and execution directory

PBS_NODEFILE
: Contains a list of vnodes assigned to the job

TMPDIR
: The job-specific temporary directory for this job. Defaults to /tmp/pbs.*job_id* on the vnodes.

Default Variables Set by PBS

You can use the `env` command--either in a PBS script or on the command line of a PBS interactive session--to find out what environment variables are set within a PBS job. In addition to the PBS_*X* environment variables, the following variables are useful to know:

NCPUS
: Defaults to number of CPUs that you requested for the node.

OMP_NUM_THREADS
: Defaults to 1 unless you explicitly set it to a different number. If your PBS job runs an OpenMP or MPI/OpenMP application, this variable sets the number of threads in the parallel region.

FORT_BUFFERED
: Defaults to 1. Setting this variable to 1 enables records to be accumulated in the buffer and flushed to disk later.