Parallel IO

Additional Notes

Be Boulder.

University of Colorado **Boulder**

Writing data into file - C

Image from: https://support.hdfgroup.org/HDF5/Tutor/phypecont.html
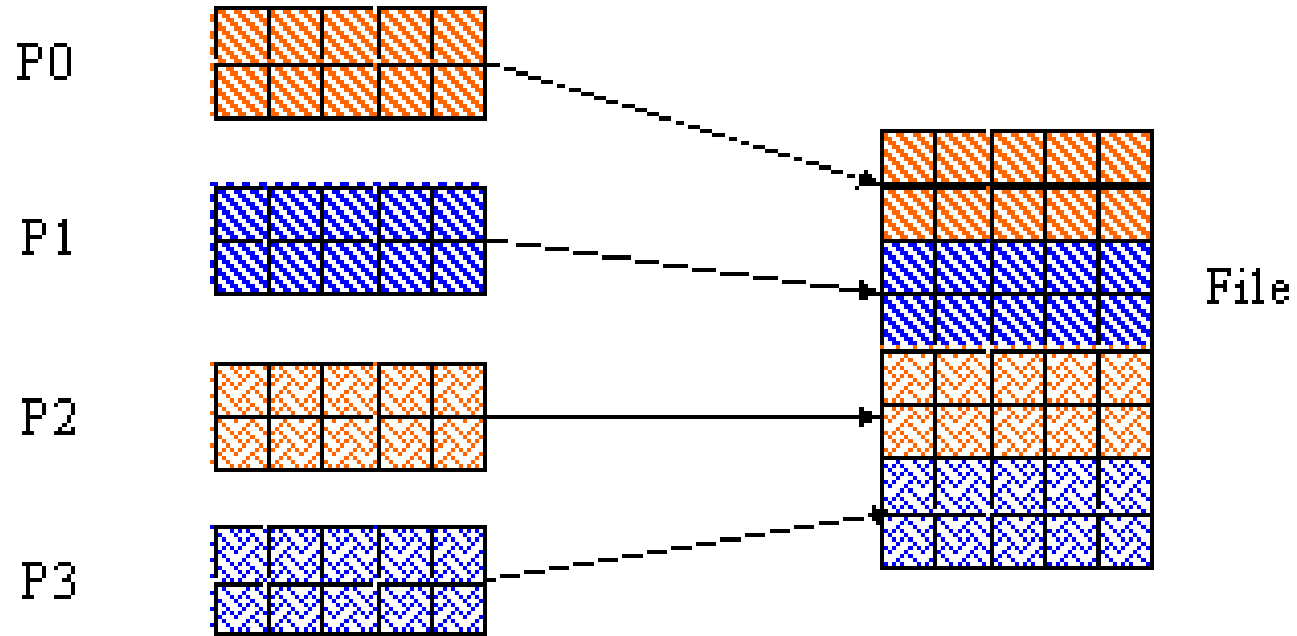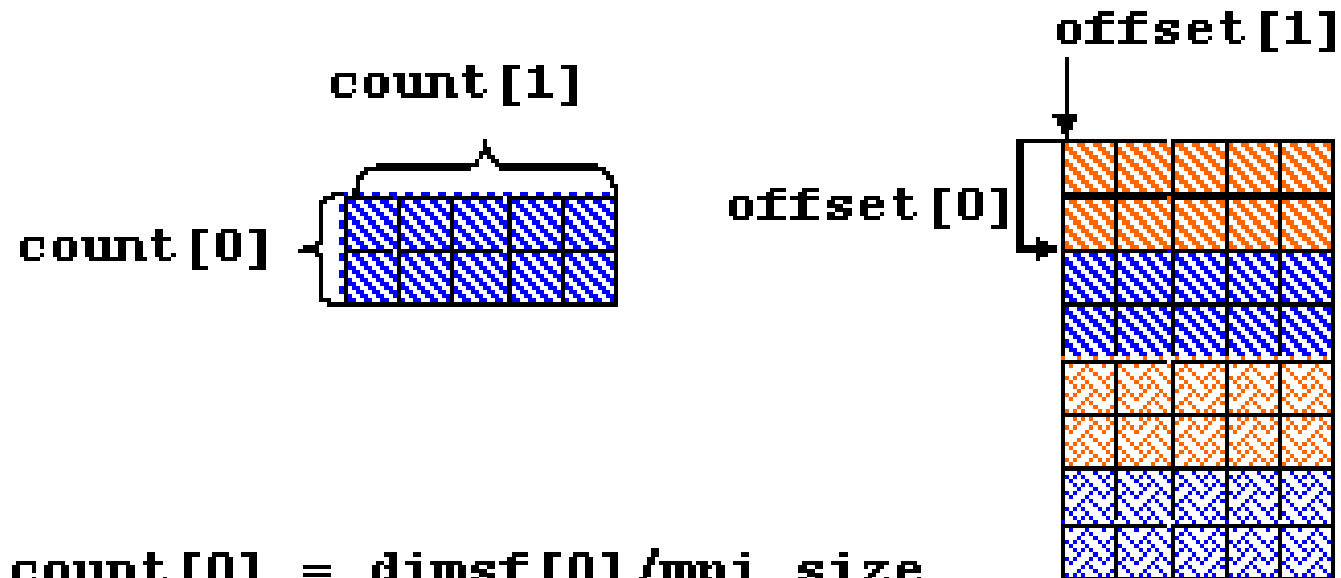
Offsets in C


```
count[0] = dimsf[0]/mpi_size
count[1] = dimsf[1];
offset[0] = mpi_rank * count[0];
offset[1] = 0;
```

Image from: https://support.hdfgroup.org/HDF5/Tutor/phypecont.html

Writing data into file - Fortran

Image from: https://support.hdfgroup.org/HDF5/Tutor/phypecont.html
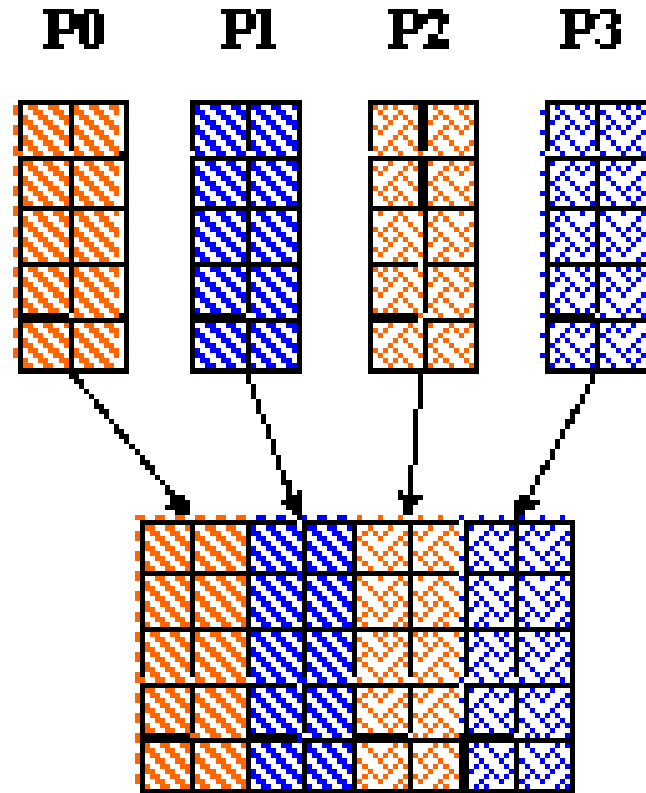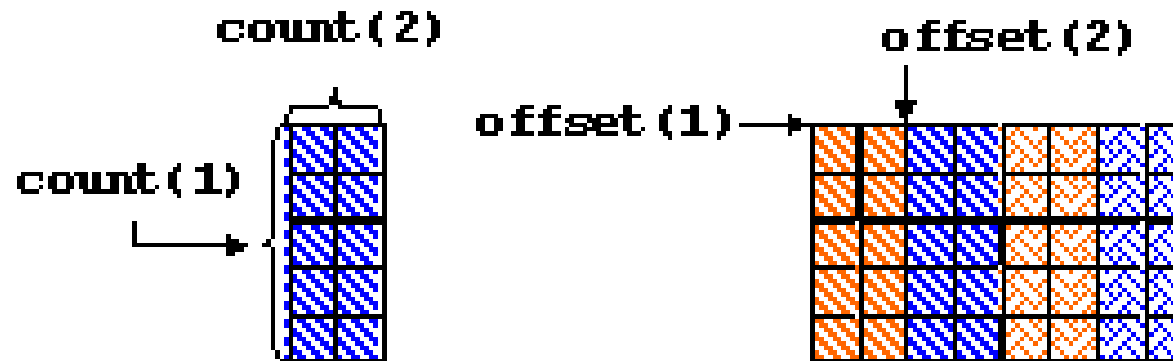
Offsets in Fortran

P1 (memory space)   File


```
count(1)  = dimsf(1)
count(2)  = dimsf(2)/mpi_size
offset(1) = 0
offset(2) = mpi_rank * count(2)
```

Image from: https://support.hdfgroup.org/HDF5/Tutor/phypecont.html