

A scenic view of the University of Colorado Boulder campus. In the foreground, a large brick building with a central tower and an American flag on top is visible. The building is surrounded by lush green trees with some autumn-colored foliage. In the background, a large, rugged mountain with rocky peaks and green slopes rises under a blue sky with light clouds.

Parallel IO

Additional Notes

Be Boulder.



University of Colorado **Boulder**

Writing data into file - C

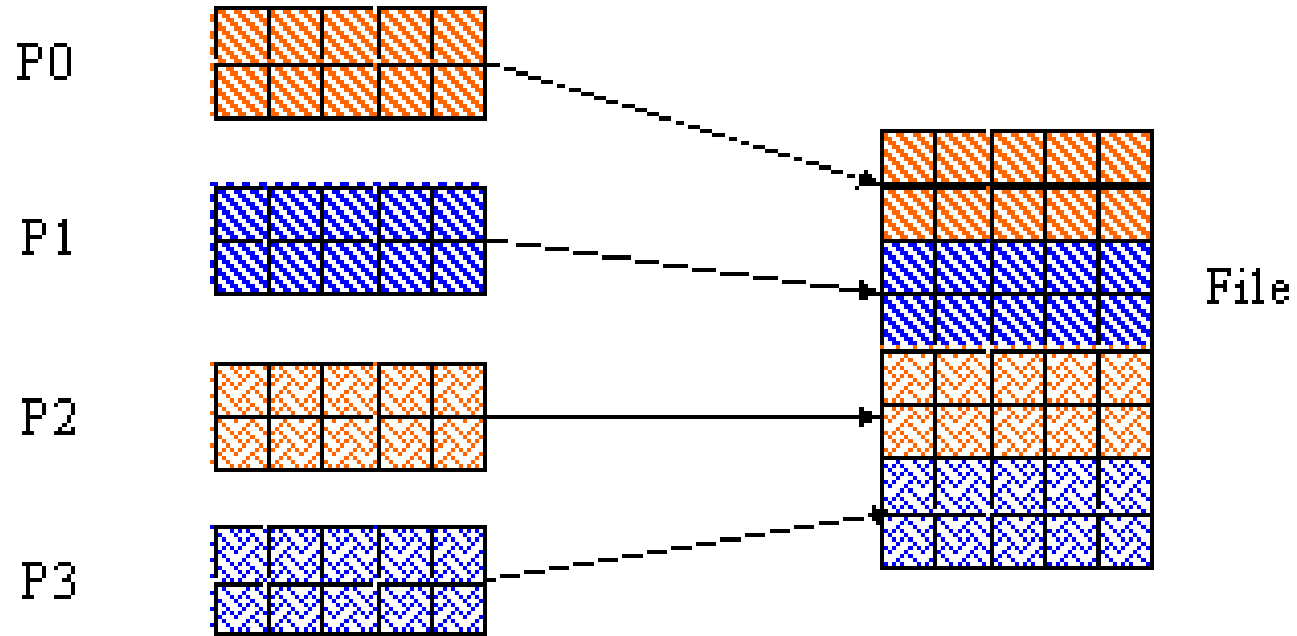
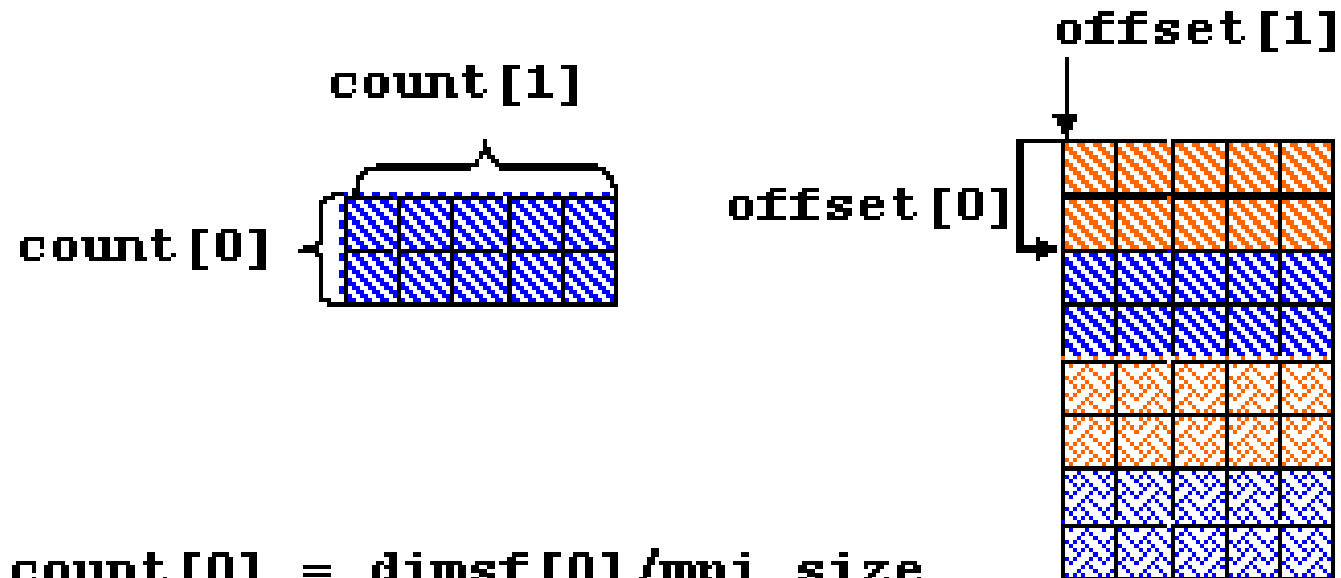


Image from: <https://support.hdfgroup.org/HDF5/Tutor/phypecont.html>

Offsets in C

P1 (memory space)

File



```
count[0] = dims[0]/mpi_size  
count[1] = dims[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

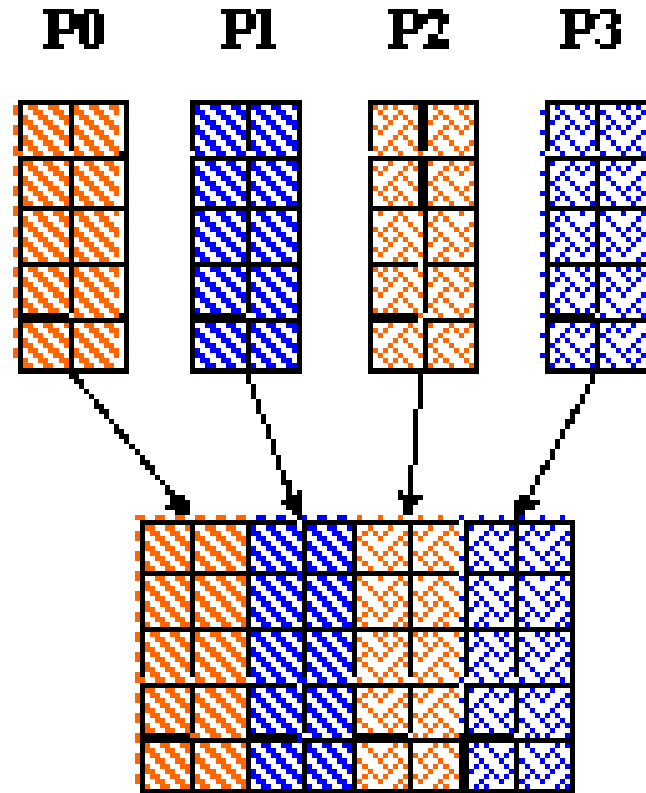
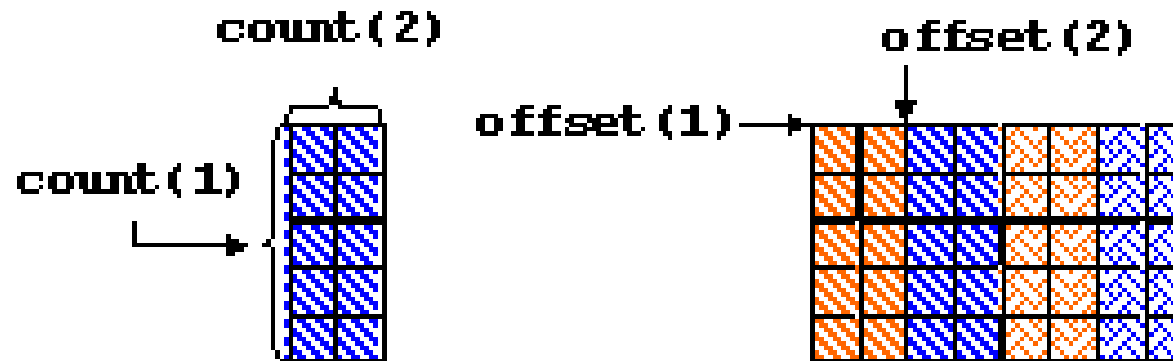


Image from: <https://support.hdfgroup.org/HDF5/Tutor/phypecont.html>

Offsets in Fortran

P1 (memory space)

File



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

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