

```

/* Wait for previous communications */
49. MPI_Barrier(MPI_COMM_WORLD);

50. float *temp = d_output;
51. d_output = d_input;
52. d_input = temp;

/* Send the output, skipping halo points */
53. cudaMemcpy(h_output, d_output, num_bytes, cudaMemcpyDeviceToHost);
float *send_address = h_output + num_ghost_points;
54. MPI_Send(send_address, dimx * dimy * dimz, MPI_REAL,
server_process, DATA_COLLECT, MPI_COMM_WORLD);
55. MPI_Barrier(MPI_COMM_WORLD);

/* Release resources */
56. free(h_input); free(h_output);
57. cudaFreeHost(h_left_ghost_own); cudaFreeHost(h_right_ghost_own);
58. cudaFreeHost(h_left_ghost); cudaFreeHost(h_right_ghost);
59. cudaFree( d_input ); cudaFree( d_output );
)

```