				mpirank 0	mpirank 1	mpirank 2
mpirank 2	A_{20}	A_{21}	A_{22}	A_{20}	A_{21}	A_{22}
mpirank 1	A_{10}	A_{11}	A_{12}	A_{10}	A_{11}	A_{12}
mpirank 0	A_{00}	A_{01}	A_{02}	A_{00}	A_{01}	A_{02}