

-hard_sub_pc_factor_mat_solver_type superlu_dist
 -hard_sub_mat_superlu_dist_rowperm NOROWPERM
 -hard_sub_mat_superlu_dist_parsymbfact
 -hard_sub_mat_superlu_dist_colperm PARMETIS



velocity, nplane=4, 32partitions, memory in MB, time in second

	V_mesh	A_mxn	A_nnz	Total memory		Mem_superlu		Solve time		mumps		
										mem	time	
16F	5255	756720	566961120	234330	↓ 11%	4771	↓ 43%	23	↓	31%	11687	19
				208600		2710		16				
32B	9614											
32H	19218	2767392	2080528416	867930	↓ 11%	24057	↓ 45%	59	↓	34%	41036	49
				773170		13248		39				
32J	21955	3161520	2374774848	995700	↓ 11%	28578	↓ 45%	72	↓	34%	50296	61
				881080		15680		46				
32K	49494	7127136	5365160064			OOM					122398	181