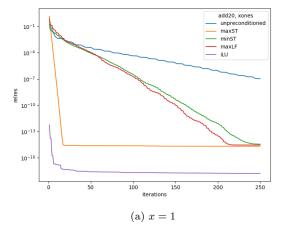
## 1 Test matrices

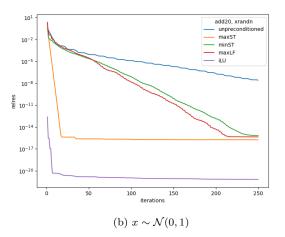
Matrix	Patt. symm.	Num. symm.	Diag. dom.	Pos. def.	NNZ	n	Condition
add20	100%	52.7%	No	No	13,151	2,395	$1.204710\mathrm{e}{+04}$
c-20	100%	100%	No	No	20,445	2,921	1.049837e + 12
cryg2500	99.5%	0%	No	No	12,349	2,500	$3.631392e{+16}$
dw2048	98.5%	94.8%	No	No	10,114	2,048	2.093210e+03
orsreg_ 1	100%	41.2%	Yes	No	14,133	2,204	6.745269e+03
pde2961	100%	50.1%	No	No	14,585	2,961	6.424933e+02
wang1	100%	80.8%	No	No	19,093	2,903	$2.032301\mathrm{e}{+04}$

## $\mathbf{2}$ S coverage

Matrix	maxST	minST	maxLF
add20	0.9997	0.6480	0.9496
c-20	0.9998	0.9996	0.9996
cryg2500	0.9064	0.5744	0.9040
dw2048	0.9437	0.6371	0.9423
orsreg_ 1	0.9954	0.5017	0.9949
pde2961	0.8742	0.6370	0.8730
wang1	0.8905	0.5316	0.8795

## 3 Results





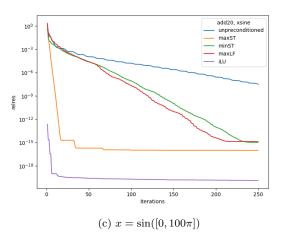
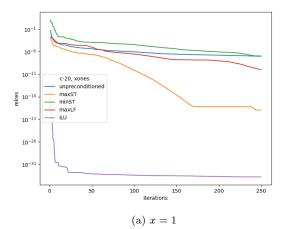
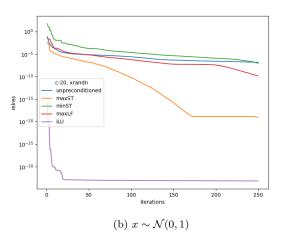


Figure 1: add20





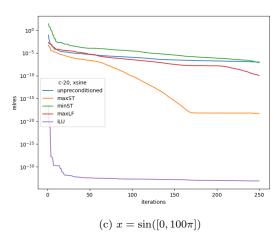
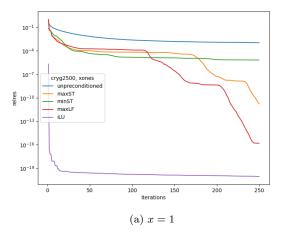
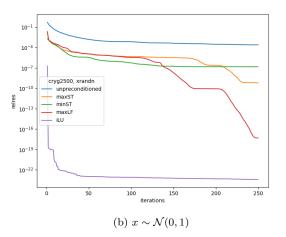


Figure 2: c-20





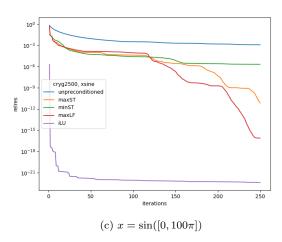
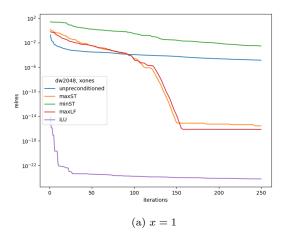
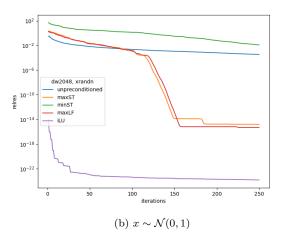


Figure 3: cryg2500





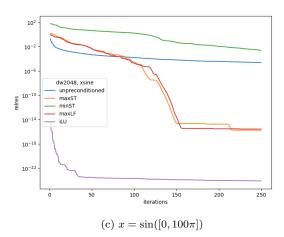
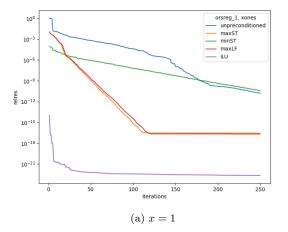
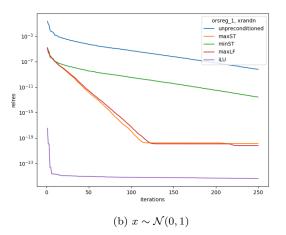


Figure 4: dw2048





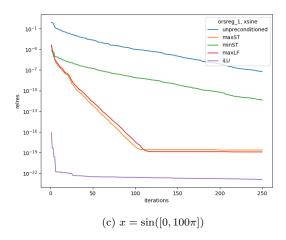
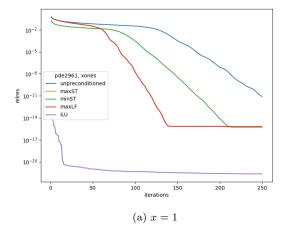
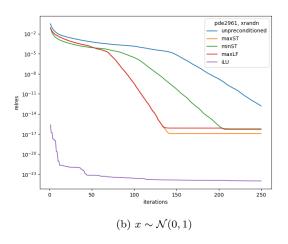


Figure 5: orsreg\_1





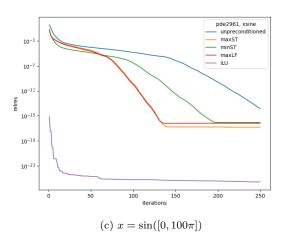
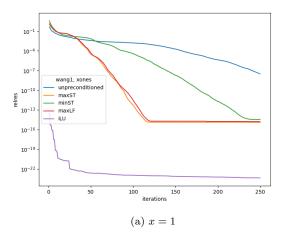
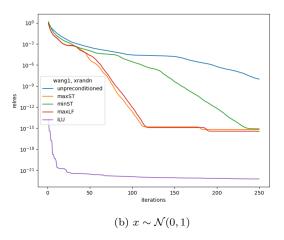


Figure 6: pde2961





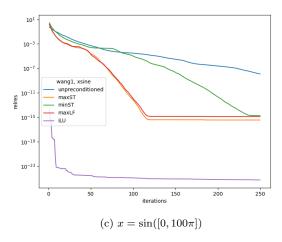


Figure 7: wang1