

Problem			Sparsity		Jacobian computation ¹				
N	Inputs	Outputs	Zeros	Colors ²	AD (prepared)	ASD (prepared) ³		ASD (noprepared) ³	
6	72	72	91.67%	9	\$1.79 $\cdot 10^{\{-5\}}$	\$ $\cdot \mathbf{2.69}$	(6.7)	\$3.59 $\cdot 10^{\{-5\}}$	(0.5)
12	288	288	97.92%	10	\$2.61 $\cdot 10^{\{-4\}}$	\$ $\cdot \mathbf{1.15}$	(22.8)	\$1.76 $\cdot 10^{\{-4\}}$	(1.5)
24	1152	1152	99.48%	10	\$4.97 $\cdot 10^{\{-3\}}$	\$ $\cdot \mathbf{4.62}$	(107.7)	\$1.42 $\cdot 10^{\{-3\}}$	(3.5)
48	4608	4608	99.87%	10	\$9.14 $\cdot 10^{\{-2\}}$	\$ $\cdot \mathbf{2.23}$	(409.8)	\$2.07 $\cdot 10^{\{-2\}}$	(4.4)
96	18432	18432	99.97%	10	\$1.51 $\cdot 10^{\{0\}}$	\$ $\cdot \mathbf{9.06}$	(1662.9)	\$3.22 $\cdot 10^{\{-1\}}$	(4.7)
192	73728	73728	99.99%	10	\$2.58 $\cdot 10^{\{1\}}$	\$ $\cdot \mathbf{3.91}$	(6600.0)	\$1.04 $\cdot 10^{\{1\}}$	(2.5)

¹Wall time in seconds.

²Number of colors resulting from greedy column coloring.

³In parentheses: Wall time ratio compared to prepared AD (higher is better).