A first measure of the **theoretical computational cost** and of the **memory footprint** of the different algorithms is given by the **operator complexity**:

$$\text{opc} = \frac{\sum_{l=0}^{n_{\text{lev}}} \text{nnz}(A_l)}{\text{nnz}(A)} = \text{``the total number of nonzeroes in the linear operators on all grids divided by the number of nonzeroes in the fine grid operator''}$$

Computing Units	VBM	Matching Smoothed	Matching Unsmoothed	AMGX Classical	AMGX Matching
32	1,584	1,93	1,143	4,49595	1,31887
64	1,587	1,93	1,143	4,50135	1,31914
128	1,588	1,936	1,143	4,49925	1,31421
256	1,587	1,905	1,144	4,49252	1,31314
512	1,589	1,937	1,143	4,4952	1,31329
1024	1,588	1,942	1,144	4,49503	1,31091