a. % MRE (smaller values are better).

b. % SA (larger values are better)

Rank	a. % MRE (smaller values are better).  Using Med. IQR	Rank	b. % SA (larger values are better) Using Med. IQR
albrecht  1 2 2 2 2 3 3 3 4 china	CART FLASH 32 12 ← CART DE 33 14 ← ABEN DE 42 15 LP4EE 44 13 ← ABEO 45 16 ← RF 46 24 ABEN RD 48 21 ← CART 53 22 CART D54 20 SVM 56 19 ATLM 140 91 out-of-range	allbrecht 1 1 2 2 2 2 3 3 3 3 3 4 china	CART DE 59 19 —— ABEN_DE 52 23 —— ABEO 51 20 —— RF 49 29 —— LP4EE 47 25 —— CART M1 31 —— ABEN_RD 37 33 —— ABEN_RD 37 33 —— ABEN_RD 37 33 —— CART 41 31 —— CART 31 —— CART 32 27 —— SVM 30 18 ——
1 1 2 2 3 3 4 4 5 5 5 5	LP4EE 45 5 ATLM 48 6 CART FLASH 61 5 ABEN_DE 62 6 ABEO 64 5 CART DE 64 6 ABEN_RD 68 7 RF 69 8 SVM 71 7 7 CART 71 5 CART_RD 72 6	1 1 1 1 1 2 2 2 2 3 3 3	LP4EE       32       9       →         CART_FLASH       30       8       →         ABEN_DE       29       13       →         ABE0       28       7       →         CART_DE       27       6       →         SVM       21       3       →         RF       21       11       →         ABEN_RD       20       9       →         ATLM       12       5       →         CART       12       13       →         CART_RD       10       16       →
desharnais 1 1 1 2 2 2 2 2 2 2 2 2 2	CART_DE 35 11	desharnais 1 1 2 2 2 2 2 3 3 3 4 finnish	CART_FLASH       53       11       →         CART_DE       53       11       →         LP4EE       48       12       →         RF       46       11       →         ABEN_DE       46       14       →         ABEO       44       12       →         SVM       43       7       →         CART       39       12       →         ATLM       37       8       →         ABEN_RD       37       13       →         CART_RD       31       10       →
finnish 1 2 3 3 4 4 4 4 5	CART FLASH 42 17 CART_DE 48 16 CART FOR 757 21 RF 57 26 CART RD 56 22 ABEN_DE 62 37 LP4EE 63 33 ABE0 64 48 ABEN_RD 64 42 SVM 74 13 ATLM 87 72  ■  ■  ■  ■  ■  ■  ■  ■  ■  ■  ■  ■  ■	1 2 3 3 3 4 4 4 4 4 4 4 5 isbsg10	CART_FLASH 54 13
isbsg10 1 1 2 2 2 2 2 2 2 3	CART DE 59 20	1 1 1 2 2 2 2 3 3 3 3 3	CART_DE 33 19
kemerer 1 1 2 2 2 2 2 3 3 3 4	CART DE 32 24 —— CART_FLASH 37 27 RF 50 39 —— ABEN_DE 54 22 —— LP4EE 54 23 —— CART RD 55 25 —— CART ABEO 56 33 SVM 59 14 ABEN_RD 60 17 ATLM 76 56	kemerer 1 2 2 2 2 2 2 2 2 2 3 3 3 kitchenham	CART_DE       55       30       →         CART_FLASH       43       27       →         CART       42       25       →         RF       41       29       →         ABEN DE       40       27       →         LP4EE       40       23       →         ABEO       38       25       →         CART_RD       36       27       →         ABEN_RD       32       28       →         ATLM       30       28       →         SVM       28       24       →
kitchenham 1 1 2 2 2 3 3 4 5 6	CART FLASH 34 6 ABEN_DE 35 8 LP4EE 38 6 CART DE 38 7 ABEO 39 9 ABEN_RD 42 10 RF 43 8 CART 49 11 CART_RD 57 12 SVM 60 8 ATLM 106 108 out-of-range	1 1 1 1 2 2 2 2 2 3 3 4 4 4 5 maxwell	LP4EE 52 24
maxwell 1 1 2 2 2 2 2 3 3 3 4	CART_FLASH 36 10	1 1 1 2 2 2 3 3 3 4 4 4 4 5 5 miyazaki	CART_FLASH     55     7     -       LP4EE     52     13     -       CART_DE     51     16     -       RF     44     11     -       ABEN_DE     43     12     -       ABEO     39     10     -       ABEN_RD     39     13     -       CART     37     21     -       CART_RD     36     23     -       SVM     30     11     -       ATLM     -107     99     out-of-range
miyazaki 1 1 1 2 2 2 3 3 3 3 3 3 3	CART_DE 32 11	1 1 1 1 2 2 2 2 3 3 3 3 3	CART_FLASH       53       13       →         CART_DE       53       14       →         LP4EE       52       11       →         ATLM       50       9       →         ABEN_DE       46       18       →         RF       46       19       →         ABE0       45       15       →         CART RD       42       20       →         ABEN_RD       42       24       →         SVM       41       12       →         CART       41       21       →

Fig. 1. % MRE and % SA results from our cross-validation studies. Same format as Figure ??. The gray rows show the \*\*Rank=1+ results\* recommended for each data set. The phrase "out-of-range" denotes results that are so bad that they fall outside of the 0%...100% range shown here. For space reasons, these results are slightly truncated. Not shown here are any \*\*Rank>1\* methods that are listed as \*\*slower\* in Table ?? since such sub-optimal and slower treatments need not be discussed further) For all results, see tiny.cc/oil-18.