1 $1 + 1 + 4 + 4 + 3 + 2 + 1 + 3 = 19$

                                          BNE

1.2 The arrays $O[j]$ and $O[j-1]$ have loop carry dependencies which affects
          φf4

2 24 different combos : Start values, $w = -1$, $x = 4$, $y = 3$, $z = 2$

Combo	Result w, x, y, z		Combo	Result w, x, y, z		Combo	Result w, x, y, z
1,2,3,4	4,1,3,0.25		3,2,4,1	13, 13.30769, 6, 0.30769		4,1,3,2	-14,-5,-9,-4
2,1,3,4	7,1,6,0.142857		2,3,4,1	25, 25.16, 6, 0.16		1,4,3,2	4,1,0,-1
3,1,2,4	13,15,17,1.153846		4,3,2,1	13,9,0,-4		3,4,1,2	see below
1,3,2,4	4,1,3,0.25		3,4,2,1	13,13.30769,4.30769, 0.30769	4,3,1,2	13,9,5,-4
2,3,1,4	25,27,6,1.08		2,4,3,1	25,21,6,-4		1,3,4,2	4,1,1.25,0.25
3,2,1,4	13,15,6,1.153846		4,2,3,1	1,-3,0,-4		3,1,4,2	13,15,16.1538S 1.1538S

3 Space $= (R + R) \times$ sizeof (float point) + $(m+1) \times$ size of index

    R = non-zero elements $= 3+3+3+2+1+3+3+2+3+2+2+2 = 29$

    M = number of rows $= 11$

    single precision float size $= 4$ bytes ; index size $= 2$ bytes

    $(29 + 29) \times 4 + (11+1) \times 2 = 256$

→ 2 continued

Combo	Result w, x, y, z		Combo	Result w, x, y, z
2,1,4,3	7,1,6,-1		3,4,1,2	13, 13.30769, 13.61538, 0.30769
1,2,4,3	4,1,3,-1			
4,2,1,3	1,-5,0,-4			
2,4,1,3	-29,-5,6,-4			
1,4,2,3	1,1,0,-1			
4,1,2,3	46,-5,-9,-4			