





20 *Figure S1: Sea level budget residual trends computed over January 2005 to June 2022 using*  
 21 *the low degrees of each component up to degree 4, and subtracting each order/degree*  
 22 *contribution one by one.*

23 *Table S1: Root mean square (RMS) of the residual trends computed using the low degrees of*  
 24 *each component up to degree 4, and subtracting each order/degree contribution one by one.*  
 25 *The RMS is computed over the global oceans and over the North Atlantic, South Atlantic,*  
 26 *Indian and Pacific Oceans. Bold font indicates RMS values which are lower than 0.1 mm/yr*  
 27 *below the value for the sum up to degree 4 without any subtraction (first line).*

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Component removed from the sum of all components up to degree 4	Residual trends RMS over oceans (mm/yr)				
	Global	North Atlantic	South Atlantic	Indian	Pacific
None	0.94	2.11	1.00	0.55	0.64
l1m0	0.87	<b>1.86</b>	<b>0.87</b>	0.54	0.65
l1m1	0.92	<b>1.91</b>	1.18	0.60	0.60
l2m0	0.94	2.11	0.99	0.51	0.65
l2m1	<b>0.74</b>	<b>1.50</b>	<b>0.48</b>	0.69	0.56

l2m2	0.93	2.08	0.96	0.51	0.64
l3m0	0.92	2.01	0.92	0.59	0.64
l3m1	0.93	2.13	0.98	0.50	0.61
l3m2	0.93	<b>1.93</b>	<b>0.76</b>	0.58	0.76
l3m3	0.90	<b>1.95</b>	1.04	0.46	0.63
l4m0	0.94	2.08	1.04	0.61	0.62
l4m1	0.91	2.03	0.97	0.52	0.61
l4m2	0.90	2.03	1.16	<b>0.43</b>	<b>0.52</b>
l4m3	0.84	<b>1.80</b>	<b>0.80</b>	0.64	0.57
l4m4	0.93	2.07	1.03	0.47	0.65

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