

$$\Theta = \frac{(m_{sed_2}K_{sed_2} + m_{bio_2}K_{bio_2} + m_{DOC_2}K_{DOC_2} + v_2)}{(m_{sed_1}K_{sed_1} + m_{bio_1}K_{bio_1} + m_{DOC_1}K_{DOC_1} + v_1)}$$