AO (AO_1, AO_2, AO_3) =
(0.33 * AO_1) + (0.33 * AO_2) + (0.33 * AO_3)

AO_1 (KE_3) = exp(-1.3863 + 0.5591 * KE_3)/(1 + exp(-1.3863 + 0.5591 * KE_3))

AO_2 (KE_6) = exp(2.5392 + -3.6743 * KE_6)/(1 + exp(2.5392 + -3.6743 * KE_6))

AO_3 (KE_11) = exp(-7.7551 + 0.5091 * KE_11)/(1 + exp(-7.7551 + 0.5091 * KE_11))

KE_1 (MIE) = 1.1025 + 1.2119 * MIE + -0.0173 * log(MIE+0.001)

KE_10 (KE_9) = 0.8545 + 10425.6705 * KE_9 + 0 * log(KE_9+0.001)

KE_11 (KE_10) = 4.6281 + 9.2733 * KE_10 + 0 * log(KE_10+0.001)

KE_2 (KE_1) = 0.000000000225316 + -0.0000000000005116 * KE_1 + 0.0000000000151762 * log(KE_1+0.001)

KE_3 (KE_2) = 4.02 + 39823293940.88 * KE_2 + 0 * log(KE_2+0.001)

KE_4 (MIE) = 1.0035 + 0.0046 * MIE + 0.07 * log(MIE+0.001)

KE_5 (KE_4) = max(0, 1.7644 + -0.9669 * KE_4 + 0.9348 * log(KE_4+0.001))

KE_6 (KE_6_1, KE_6_2) = 0.5 * KE_6_1 + 0.5 * KE_6_2

KE_6_1 (KE_5) = 0.5616 + 0.6663 * KE_5 + 0.1373 * log(KE_5+0.001)

KE_6_2 (KE_8) = 0.669 + 0.102 * KE_8 + 0.996 * log(KE_8+0.001)

KE_7 (MIE) = 0.9785 + -0.0011 * MIE + -0.07 * log(MIE+0.001)

KE_8 (KE_7) = -1.483 + 2.901 * KE_7 + -1.678 * log(KE_7+0.001)

KE_9 (MIE) = 5.93E-06 + 2.02E-07*MIE

MIE (UV) = 18.66698376 + log(28.57017568*UV + 0.001)