**Update of the Quasi-Analytical Algorithm (QAA\_v6)**

|  |  |
| --- | --- |
|  | *rrs*(**) = *Rrs*(**)/(0.52 + 1.7 *Rrs*(**)) |
|  | , where g0=0.089 and g1=0.1245 |
|  | **IF Rrs(670) < 0.0015 sr-1** | **(else)**  |
| **2** |  |  |
| **3** |  |  |
| **4** |  |
| **5** |  |
| **6** |  |
| **7 & 8** |  |
| **9 & 10** | ,  |

**Derivation of Kd and Zeu**

**Table.** Values of the model parameters.

|  |  |
| --- | --- |
| **Parameter**  | **Value** |
| χ0,χ1, χ2 | -0.057, 0.482, 4.221 (m-1) |
| ζ0, ζ1, ζ2 | 0.183, 0.702, -2.567 (m-1) |
| α0, α1, α2 | 0.090, 1.465, -0.667 (m-1) |
| θα | Sun zenith angle (from image) |

Set the minima for (490) = 0.0195, bb(490) = 0.0016,

Given each value of τE = 4.605 (1%), 2.303 (10%), 0.693 (50%), compute

Then solve the following equation for the smaller positive value,

**See formula used in zeu.xls**

(IMPLEMETED FORMULA)

First root (of three):



Second root (of three):



Third root (of three):

