

VERSÃO MODELO SMAP DIÁRIO ONS – ALGORITMO - 4 RESERVATÓRIOS

SUB ModeloSmapDiario

INPUT ndias, Ad

INPUT Str, K2t, Crec, Ai, Capc, Kkt

INPUT Ep(i), Pr(i), Pcof

$R_{solo}(0) = T_{uin} / 100 * Str$

$R_{sub}(0) = E_{bin} / (1 - .5^{(1/Kkt)}) / Ad * 86.4$

$R_{sup}(0) = S_{upin} / (1 - .5^{(1/K2t)}) / Ad * 86.4$

$R_{sup2}(0) = 0.$

FOR I=1 TO ndias

$P(i) = Pr(i) * Pcof$

$Tu(i) = R_{solo}(i-1) / Str$

IF $P(i) > A_i$ THEN

$Es(i) = (P(i) - A_i)^2 / (P(i) - A_i + Str - R_{solo}(i-1))$

ELSE

$Es(i) = 0$

END IF

IF $(P(i) - Es(i)) > Ep(i) * k_{ep}$ THEN

$Er(i) = Ep(i)$

ELSE

$Er(i) = (P(i) - Es(i)) + (Ep(i) - (P(i) - Es(i))) * Tu(i)$

END IF

IF $R_{solo}(i-1) > (Capc / 100 * Str)$ THEN

$Rec(i) = C_{rec} / 100 * Tu(i) * (R_{solo}(i-1) - (Capc / 100 * Str))$

ELSE

$Rec(i) = 0$

END IF

$R_{solo}(i) = R_{solo}(i-1) + P(i) - Es(i) - Er(i) - Rec(i)$

IF $R_{solo}(i) > Str$ THEN

$Es(i) = Es(i) + R_{solo}(i) - Str$

$R_{solo}(i) = Str$

END IF

$Ed(i) = R_{sup}(i-1) * (1 - .5^{(1/K2t)})$

$R_{sup}(i) = R_{sup}(i-1) + Es(i) - Ed(i)$

IF $R_{sup}(i) > H$ THEN

$Emarg(i) = (R_{sup}(i) - H) * (1 - .5^{(1/K1t)})$

$R_{sup}(i) = H$

ELSE

$Emarg(i) = 0$

END IF

$Ed2(i) = R_{sup2}(i-1) * (1 - .5^{(1/K3t)})$

$R_{sup2}(i) = R_{sup2}(i-1) + Emarg(i)$

$Eb(i) = R_{sub}(i-1) * (1 - .5^{(1/Kkt)})$

$R_{sub}(i) = R_{sub}(i-1) + Rec(i) - Eb(i)$

$Q(i) = (Ed(i) + Eb(i) + Ed2(i)) * Ad / 86.4$

NEXT i