

# 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

Rsolo(0)=Tuin/100\*Str

Rsub(0)=Ebin/(1-.5^(1/Kkt))/Ad\*86.4

Rsup(0)=Supin/(1-.5^(1/K2t))/Ad\*86.4

Rsup2(0)=0.

FOR I=1 TO ndias

    P(i)= Pr(i)\*Pcof

    Tu(i)=Rsolo(i-1)/Str

    IF P(i) > Ai THEN

        Es(i)=(P(i)-Ai)^2/(P(i)-Ai+Str-Rsolo(i-1))

    ELSE

        Es(i)=0

    END IF

    IF (P(i)-Es(i))>Ep(i)\*kep THEN

        Er(i)=Ep(i)

    ELSE

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

    END IF

    IF Rsolo(i-1) > (Capc/100\*Str) THEN

        Rec(i)=Crec/100\*Tu(i)\*(Rsolo(i-1)-(Capc/100\*Str))

    ELSE

        Rec(i)=0

    END IF

    Rsolo(i)=Rsolo(i-1) + P(i)-Es(i)-Er(i)-Rec(i)

    IF Rsolo(i) > Str THEN

        Es(i)=Es(i)+ Rsolo(i)-Str

        Rsolo(i)= Str

    END IF

    Ed(i)= Rsup(i-1)\* (1-.5^(1/K2t))

    Rsup(i)= Rsup(i-1) + Es(i) - Ed(i)

    IF Rsup(i)> H THEN

        Emarg (i)= (Rsup(i)-H)\* (1-.5^(1/K1t))

        Rsup(i)=H

    ELSE

        Emarg(i)=0

    END IF

    Ed2(i)=Rsup2(i-1)\*(1-.5^(1/K3t))

    Rsup2(i)=Rsup2(i-1) + Emarg(i)

    Eb(i)= Rsub(i-1)\*(1-.5^(1/Kkt))

    Rsub(i)= Rsub (i-1) + Rec(i) - Eb(i)

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

NEXT i