

$P(J) = p_j$
 $TLIMA(J) =$ value of Δt_j for next time step
 $CSP(J) =$ sound speed in cell J
 $E(J) = E_j$
 $ENT(J) = s_j$
 $TMP(J) = T_j$
 $NSA(J) =$ switching index
 = 1, phase I
 = 2, mixed phase
 = 3, phase II

MAIN

$X(J) = x_j$ (Fig. 5.2)
 $MASS(J) =$ mass of cell J
 $JSTAR =$ cell label just ahead of shock front at which
 computation stops for each time cycle
 $TIMES = t$
 $CYCLE =$ number of times t has been incremented
 $JCRIT =$ value of J for which $TLIMA$ is minimum
 $LAST =$ switching index for halting program after
 writing last output.
 $PPEAK =$ maximum computed pressure in each cycle
 $TLIMB = TLIMA(JCRIT)$
 $PLEFT =$ pressure applied to left boundary
 $DFNU =$ mass in cell J+1
 $XA = x(t + \Delta t)$
 $VN = v(t + \Delta t)$
 $QA = Q(t + \Delta t)$
 $JPMAX =$ value of J at which p is maximum

ZMIX

FRACT(J) = α_j

XEQ(J) = α_j^{eq}

V1(J) = $v_{1j}(p,T)$

LEAR = value of α_j for each time step
 XEQ(J) = sound speed in cell J
 R(L) = α_j
 RNT(L) = α_j^{eq}
 T(L) = T
 RVAL(L) = weighting factor
 I = 1 phase I
 A = mixed phase
 II = phase II
 MASS(I) = mass of cell I
 LTRN = cell label just ahead of shock front at which
 computation stopped for each time step
 TIME = t
 CYCLE = number of times E has been unreacted
 PRIT = value of I for which TIME is minimum
 LAST = weighting factor for holding program after
 writing last output
 PEAK = maximum output pressure in each cycle
 TIME = TIME(LAST)
 ELEFT = pressure field to left of boundary
 GRU = mass in cell I
 KA = $k(T)$
 VA = $v(T)$
 QA = $Q(T)$
 LEAR = value of α_j for each time step