

GLOBAL CONSTANTS

SOLVER		Geometry	
dim	Dimension	elem	Connectivity
step_final	Steps	patch_con	Patch connectivity
SAVE_F	Save file each SAVE_F	patch_el	Patch element
SAVE_I	Save vector each SAVE_I	Area	Initial area
NR_iterations	Iterations of Newton Raphson	Area_p	Area of the patch
abs_tolerance	Abslute tolerance	x_0	Initial coordinates
rel_tolerance	Relative tolerance	elements	Number of elements
NR	Update K every NR steps	nodes	Number of nodes
IMPLICIT	Implicit 1 or explicit 0	mat_points	Number of material points
time_step	Time step without time factor	sp	Spatial dimension
time_factor	Time factor to update time step	df	Degrees of freedom per nodes
Time_final	Final time	xg_0	Initial material point coordinates
INITIAL_d	Initial displacements	h_ini	Initial mesh size
UW	Formulation U-UW-Upw...	h_nds	Initial mesh size in nodes
DYN	Dynamic or static	node_connect	Element here node n is in
BLOCKS	Total blocks	material	Material id of every mat_point
INIT_file	Initial file name	b_dim	Dimension of b matrix
thickness	Thickness	s_dim	Dimension of stress vector
TYPE	OTM-MPM-FEM	f_dim	Dimension of def. gradient vector
INIT_STEP	Number of the initial step	element_near	Adyacent elements
INITIAL_COND	Initial conditions	BOUNDARY	
F_BAR_W	F-bar multiplier (water)	b_mult	Multiplier of every step
F_BAR	F-bar multiplier	size	Number of boundaries
B_BAR	B-bar flag	vad	Velocity vector (without multiplying)
AXI	Axisymmetric flag	dad	Displacement vector (without multiplying)
LIN	Linearization flag	constrains	Constrained flag
REMAPPING	Remapping flag	MATERIAL	
STEP0	Initial calculations flag	MAT	Material parameters
OutputType	List of types of outputs	MODEL	Flag of the employed model
OUTPUT	Name of the file	number	Number of material models
LOAD		VARIABLE	
ext_forces_s	External forces vector	g	Gravity
ext_acce	Exernal acceleration vector		
load_mult	Multiplier of very step		
size	Number of external forces		

STRUCTURE ARRAYS

TIME		GLOBAL	
t	Time in each step	d	Displacements
af	alpha f (Time integration scheme)	a	accelerations
am	alpha m (Time integration scheme)	v	velocities
alpha	alpha (Time integration scheme)	xg	position of material points
delta	delta (Time integration scheme)	J	jacobian
theta	theta (Time integration scheme)	dgamma	Increment of plastic multiplier
gamma	gamma (Time integration scheme)	gamma	Dev. Plastic multiplier
Mat_state		gamma_nds	Dev. Plastic multiplier in the nodes
F	Deformation gradient	epsv	Vol. Plastic multiplier
Be	Finger tensor	Sy	Size of the yield surface
Sigma	Cauchy stress tensor	Sy_r	Reference yield surface (viscosity)
fint	Internal forces	P0	Initial pressure
k	Permeability	F	Deformation gradient
Pw	Pore pressure	Be	Finger tensor
dPw	Pore pressure gradient	Sigma	Cauchy stress tensor
Fw	Water deformation gradient	fint	Internal forces
MATRIX		k	Permeability
mass	Mass	pw	Pore pressure
damp	Damping	dpw	Pore pressure gradient
l_mass	Lumped mass	Fw	Water deformation gradient
l_mass_w	Lumped mass of the water	Es	Total strain
l_mass_wn	Lumped mass of the water*n	Es_p	Plastic strain
l_damp	Lumped damping	tp	Plot time
Disp_field		eta	eta of PZ
d	Displacements	H	H of PZ
a	Accelerations	Ps	Invariant P
v	Velocities	Qs	Invariant Q
x_a	Nodal position	ste_p	Current pilot step
Int_var		MAT_POINT	
dgamma	Increment of plastic multiplier	xg	Material point coordinates
gamma	Plastic multiplier	element	Element where is the mat point
Sy	Size of the yield surface	near	Neighbor nodes
Sy_r	Reference yield surface (viscosity)	N	Shape functions
P0	Initial pressure	B	B matrix (Derivatives)
		EP	Stretches
		J	Jacobian
		w	Weight (Gamma in LME)
		xi	Xi coordinates (Lambda in LME)