

## GLOBAL CONSTANTS

<b>SOLVER</b>		<b>Geometry</b>	
dim	DOF*nodes	elem	Connectivity
step_final	Steps (each block)	elem_c	Corner Connectivity (Quadratic elements)
BODIES	Number of bodies	patch_con	Patch connectivity
Output	Name of the file (each block)	patch_el	Patch element
Element	Element Type	Area	Initial area
NR_iterations	Iterations of Newton Raphson	Area_p	Area of the patch
d_tolerance	Displacement tolerance	x_0	Initial coordinates
r_tolerance	Forces tolerance	ELEMENT	Element type
NR	Update K every NR steps	elements	Number of elements
IMPLICIT	Implicit 1 or explicit 0	nodes	Number of nodes
time_step	Time step without time factor	mat_points	Number of material points
Time_final	Final time	sp	Spatial dimension
DYN	Dynamic or static	df	Degrees of freedom per nodes
OutputType	List of types of outputs	xg_0	Initial material point coordinates
time_factor	Time factor to update time step	H	Maximum height
SAVE_F	Save file each SAVE_F	h_ini	Initial mesh size
SAVE_I	Save vector each SAVE_I	h_nds	Initial mesh size in nodes
INIT_file	Initial file name	node_connect	Element here node n is in
UW	Formulation U-UW-Upw...	material	Material id of every mat_point
PHASES	U-W-Pw and number of each of them	b_dim	Dimension of b matrix
FRAC	Fracture flag	s_dim	Dimension of stress vector
SMALL	Small strain flag	f_dim	Dimension of def. gradient vector
BLOCKS	Total blocks	element_near	Adyacent elements
thickness	Thickness	body	mat_point belongs to this body
TYPE	OTM-MPM-FEM		
INIT_STEP	Number of the initial step	<b>BOUNDARY</b>	
INITIAL_PORE_PRESSURE	Initial conditions	b_mult	Multiplier of every step
Pstab	Stabilization parameter U-Pw	size	Number of boundaries
F_BAR_W	F-bar multiplier (water)	vad	Velocity vector (without multiplying)
F_BAR	F-bar multiplier	dad	Displacement vector (without multiplying)
B_BAR	B-bar flag	constrains	Constrained flag
AXI	Axisymmetric flag	tied	tied nodes
LIN	Linearization flag	Type	Type of boundary condition
REMAPPING	Remapping flag		
		<b>MATERIAL</b>	
<b>LOAD</b>		MAT	Material parameters
ext_forces_s	External forces vector	MODEL	Flag of the employed model / Fracture
ext_acce	Exernal acceleration vector	number	Number of material models
value	Multiplier of very step		
size	Number of external forces	<b>VARIABLE</b>	
ext_forces_w	External water forces vector	g	Gravity

## STRUCTURE ARRAYS

<b>TIME</b>		<b>GLOBAL</b>	
af	alpha f (Time integration scheme)	d	Displacements
am	alpha m (Time integration scheme)	a	accelerations
alpha / beta	alpha (Time integration scheme)	v	velocities
delta / gamma	delta (Time integration scheme)	OutputList	Output results
theta	theta (Time integration scheme)	dgamma	Increment of plastic multiplier
		gamma	Dev. Plastic multiplier
<b>Mat_state</b>		epsv	Vol. Plastic multiplier
F	Deformation gradient	gamma_nds	Dev. Plastic multiplier in the nodes
Be	Finger tensor	Sy	Size of the yield surface
Sigma	Cauchy stress tensor	Sy_r	Reference yield surface (viscosity)
fint	Internal forces	H	Hardening (PZ)
k	Permeability	eta	eta_B (PZ)
Pw	Pore pressure	pw	Pore pressure
Es	Small strain tensor	dpw	Pore pressure gradient
Es_e	Elastic small strain tensor	Ps	Invariant P
Es_w	Water small strain tensor	Qs	Invariant Q
dPw	Pore pressure gradient	F	Deformation gradient
Fw	Water deformation gradient	Be	Finger tensor
w	Strain energy	Sigma	Cauchy stress tensor
Fw	Damage (0,1)	Es	Total strain
		Es_p	Plastic strain
<b>MATRIX</b>		xg	position of material points
mass	Mass	Fw	Water deformation gradient
damp	Damping	Es_w	Water strain
l_mass	Lumped mass	tp	Plot time
l_mass_w	Lumped mass of the water	J	jacobian
l_mass_wn	Lumped mass of the water*n	ste_p	Current plot step
l_damp	Lumped damping	w	Strain energy
<b>Disp_field</b>		status	Damage (0,1)
d	Displacements	E	Energy D(dissipated) - W (strain) - K (kinetic)
a	Accelerations	Force	Summation of forces of the specimen
v	Velocities		
x_a	Nodal position	<b>MAT_POINT</b>	{BLOCK}
		xg	Material point coordinates
<b>Int_var</b>		element	Element where is the mat point
dgamma	Increment of plastic multiplier	near	Neighbor nodes
gamma	Eq. Shear Plastic strain	N	Shape functions
epsv	Eq. Volumetric plastic strain	B	B matrix (Derivatives)
Sy	Size of the yield surface	EP	Stretches
Sy_r	Reference yield surface (viscosity)	J	Jacobian
H	Hardening (PZ)	w	Weight (Gamma in LME)
eta	eta_B (PZ)	xi	Xi coordinates (Lambda in LME)
P0	Initial pressure / vol-shear strain	near_p	Prohibited near nodes (separation between)
		epsilon	Epsilon neighborhood (Eigenerosion)
<b>STEP</b>			
ste	Current step		
ste_p	Current step plot		
BLCK	Block of calculation		
t	time		
dt	time increment		
D	Dissipated energy		
FAIL	step failed		