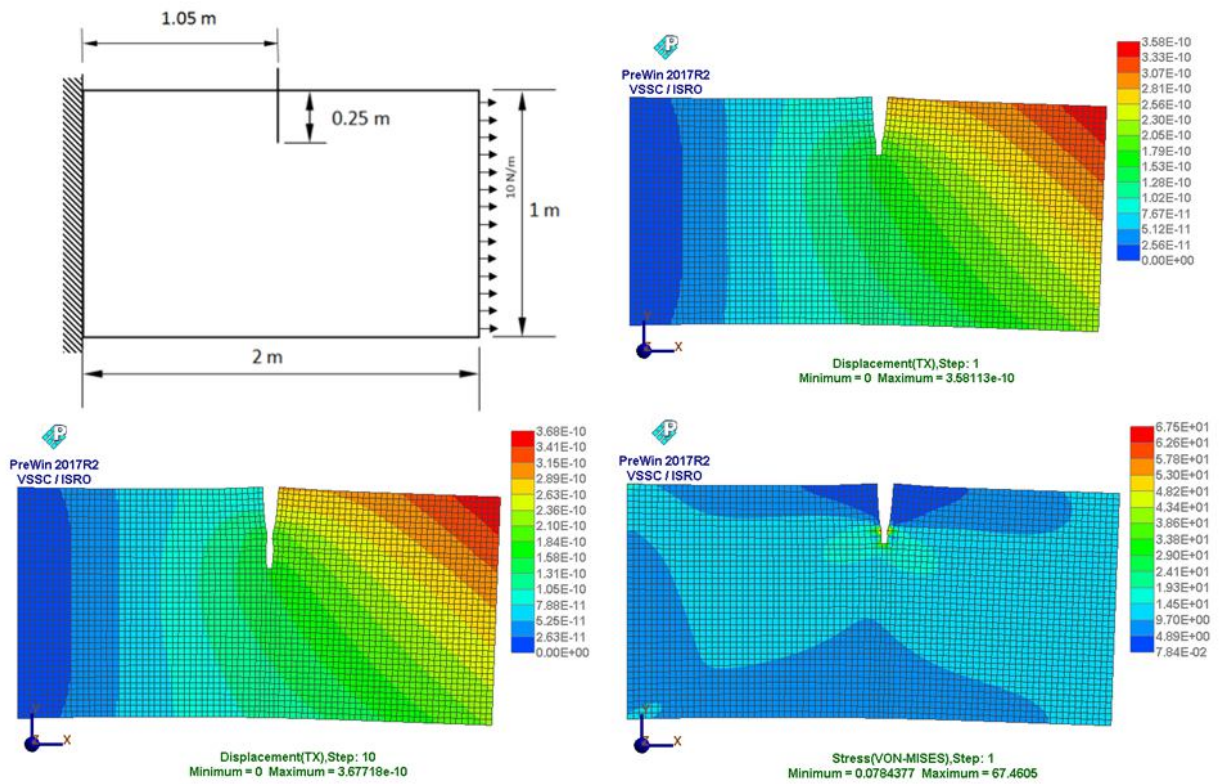


XFEM based fracture analysis using plane strain element



Material property : $E = 70 \text{ GPa}$, $\nu = 0.3$

Element types : Plane strain

Finite element statistics	Number of elements	Number of Nodes	Degrees of freedom
:	3240	3362	6726

		For time step 1	
		FEAST ^{SMT}	ABAQUS
Displacement (m)		3.58e-10	4.04e-10
Stress (von-Mises) (Pa)		67.46	52.96
Stress intensity factor	K_I	11.64	13.11
	K_{II}	-0.0422	-0.0414