# AxisVM Report Generation Example

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# 1 Model Information

N Node	280
N Line	682
N Surface	404
N Member	6
N Domain	4

### 1.1 Domains

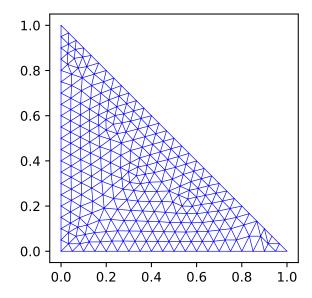


Figure 1: Domain 1

## 2 Results

### 2.1 ULS

#### 2.1.1 Degree of freedom solution of a domain for a single load case.

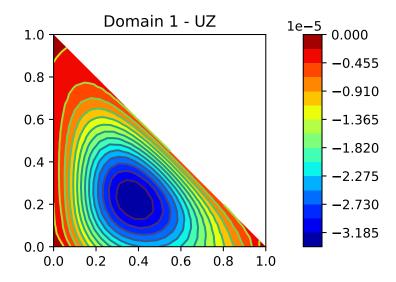


Figure 2: Degree of Freedom Solution for Domain 1

### 2.1.2 Von-Mises stress distribution of a domain for a single load case.

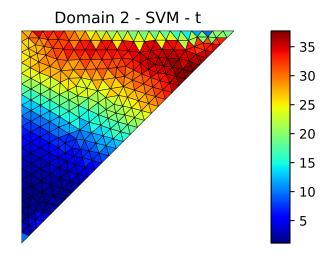


Figure 3: Von Mises Stresses for Domain 1

### 3 XLAM

#### 3.1 Stresses

Stresses of a domain for a single load case

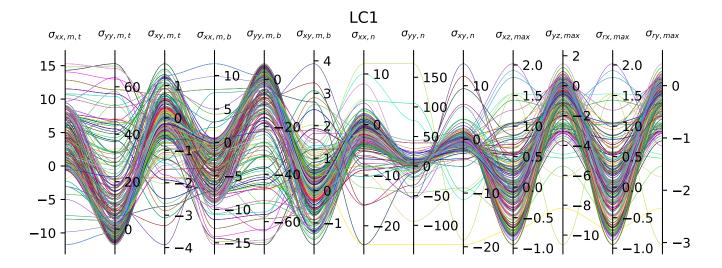


Figure 4: Parallel coordinates plot about the stresses of all the points of a domain.

### 3.2 Critical combinations

Critical combinations for a single node of a domain Ciritcal combination for Node 161 of Surface 347 of Domain 4  $1.5 \cdot LC1 + 1.05 \cdot LC3 + 1.05 \cdot LC4$ 

Critical combinations for a domainCiritcal combination for Domain 4

 $1.05 \cdot LC1 + 1.05 \cdot LC2 + 1.5 \cdot LC3 + 1.05 \cdot LC4$ 

Critical combinations for all domains

The combination resulting the highest maximum efficiency is

$$1.05 \cdot LC1 + 1.05 \cdot LC2 + 1.5 \cdot LC3 + 1.05 \cdot LC4$$
 (1)

Surface stresses:

#### 1.05 \* LC1 + 1.05 \* LC2 + 1.5 \* LC3 + 1.05 \* LC4 $\sigma_{xy,\,n}$ $\sigma_{xx, m, t}$ $\sigma_{yy,m,t}$ $\sigma_{xy,m,t}$ $\sigma_{xx,m,b}$ $\sigma_{yy,m,b}$ $\sigma_{xy,m,b}$ $\sigma_{xx,m,b}$ $\sigma_{yy,\,n}$ $\sigma_{xz,\,max}$ $\sigma_{yz,\,max}$ $\sigma_{rx,\,max}$ $\sigma_{ry,\,max}$ <del>-</del> 40 300 20 20 - 50 40 100 500 10 10 10 200 10 0 5 0 -100 0 -50 **4100** 0 **-10** -20 **-**5 <del>-</del>500 <del>-</del>20 <u>-100</u>+ -100-200 #10 -10 -10 **-30 -40** 125 -100 -150-20 -300

Figure 5: Stresses of a domain.

-1000

-15

Efficiancies:

-40 <sup>]</sup>