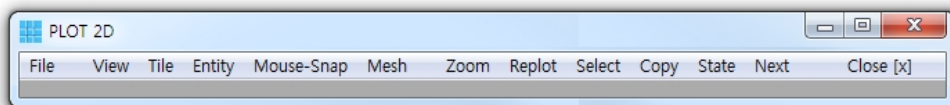


# SMAP Version 7.04 Update Note

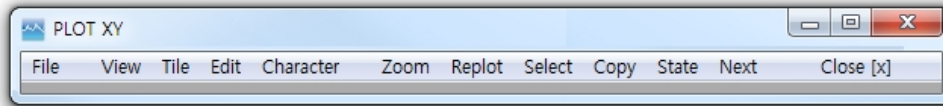
April 1, 2021

SMAP Version 7.04 includes following new features:

- 1. Material Based Element Index Order Change**  
Element index orders can be modified using preprocessing program ADDRGN based on Material Numbers.  
Refer to Users Manual page 8-18 for ADDRGN-2D and 8-31 for ADDRGN-3D .  
Example problem is included in the folder: ADD-2D/ADD-3D > Others > MOD-6
- 2. Shell Element Bottom Surface Color and Local X Axis**  
Shell element bottom surface can be shown as light yellow by following selections:  
PLOT-3D > Plot > Mesh > Mesh Type > Visible Surface with Material Color  
To see local axis, check [Show Shell Local X Axis](#)  
Axis color and line type can be selected by following selections:  
View > General > Shell Local X Axis on Element Top Surface > Select color  
View > Displacement > Display Options > Line Type > Select Solid / Dash
- 3. Element Activity Data Generation**  
(NEL1, -NEL2) in SMAP-S2/2D/3D Users Manual Card Group 8.2 generates the same activity from NEL1+1 to NEL2. It also applies to material based activity.  
Refer to Activity.pdf in Example > Smap > Activity
- 4. Element Surface Traction Generation**  
Element surface traction can be generated based on both material and element numbers.  
(NEL1, -NEL2) generates the same surface traction from NEL1+1 to NEL2.  
It also applies to material based surface traction.  
Refer to Users Manual Card 5.7 for SMAP-2D/3D and Card 5.7 for SMAP-S2.  
Refer to Element\_Load.pdf in Example > Smap > Load
- 5. PLOT-2D includes new Express Style menus which are rearranged so as to quickly access most frequently used menu items in practice.**  
For Express Style, specify 0 in C:\Smap\Ct\Ctdata\MenuStyle\_2D.dat



6. PLOT-XY includes new Express Style menus which are rearranged so as to quickly access most frequently used menu items in practice.  
For Express Style, specify 0 in C:\Smapi\Ct\Ctdata\MenuStyle\_XY.dat



7. SMAP-T2 / T3 includes new verification example VP5 which is an infinitely long plate subjected to sudden application of constant internal heat generating source.
8. LOAD-2D / 3D includes new loading surface generation features based on Node and Element Groups. Refer to SMAP-T2 / T3 load example EX5.

# S M A P Version 7.03 Update Note

May 1, 2020

SMAP Version 7.03 includes following new features:

1. Two-way Reinforced Concrete Shell Element  
SMAP-3D:        Example Problem VP30
  
2. Two-way Reinforced Axisymmetric Shell Element  
SMAP-S2:        Example Problem VP16  
SMAP-2D:        Example Problem VP30
  
3. Load Vector Plot by PLOT-3D  
SMAP-S2:        LOAD-2D\1. Pressure\Running LOAD-2D.pdf  
SMAP-2D:        LOAD-2D\1. Pressure\Running LOAD-2D.pdf  
SMAP-3D:        LOAD-3D\1. Pressure\Running LOAD-3D.pdf
  
4. New Feature in Wedge Block Mesh Generation  
PRESMAP-GP:    Example Problem EX11
  
5. Data Value Option on Contour Plot  
PLOT-3D:        Select View > General > Data Values
  
6. Axial, Shear and Rotational Joint Spring Element (\*)  
SMAP-S2:        Example Problem VP15  
SMAP-2D:        Example Problem VP29  
SMAP-3D:        Example Problem VP28
  
7. Soil and Joint Spring Generation for Shield Tunnel (\*)  
NATM-2D:        Example Problem MODEL2-1  
TUNAPLUS:       Users Manual Card Group 6.5 and 6.6

(\*) Updated in Version 7.02

# **SMAP Version 7.00 Update Note**

April 25, 2019

SMAP Version 7.0 integrates all SMAP programs in unified and consistent way along with complete users manual. Trial Versions can be used for 30 days without registration.

SMAP Version 7.0 includes following new features:

1. 64 Bit Operating System  
SMAP Solvers supporting Windows 64 Bit Operating System
2. Block Mesh Generator  
3D CAD program specially designed to generate finite element meshes
3. PlotXY Generator  
Graphical User Interface to generate or edit Time Histories of results
4. SMAP-T3  
3D Heat Conduction finite element program with phase change