## Line-up of FLIP Programs (English version)

For flip rose ver.7.4 and ver.8.0 series For flip rose ver.7.2 series or earlier version FLIP ROSE FLIP ROSE FLIP ROSE FI TP Consortium ver.7 Series ver.7 Series Her Member & Academic Subscription Subscription Version Overseas Member Discount Version Program Description Category Version [Number of computers] computers] Stand-alone computers] Stand-alone computers] Stand-alone connected through LAN ith the following addition and modification.) 1) Cookie model element (cohesive soil behavior has been idealized) Change DBSW command Allow use of pore water element (drained) in conjunction with cookie mode flip rose 8.0 series lement (Allow to consider void ratio dependency of coefficient of Modify the specification in FLIP ROSE ver.8.0.0 that cohesion c was proportional to pn0 (initial value on normal consolidation curve) in cookie nodel element in consolidation settlement analysis under the conditions of  $\bigcirc$ Main Program imultaneous specification of overconsolidation and cohesion Ca>0. atest version: ver.8.2.0 ©Allow pile-soil interaction spring element applicable to cookie model elemen Debugging output setting of linear plane element 7)Change the name "gus" in cocktail glass model element and "gusa" in cookie model element to "Sus" and "Susa", respectively. ®Fix a bug in cookie model element and introduce a new input parameter on0c 9Fixed bugs in Cookie model element and I000 error Added eigenvalue analysis function for cocktail glass model element and (FLIP ROSE Ver.7.4 Series have the functions of FLIP ROSE Ver.7.2 Series with the following addition and modification.) DIncorporate the function to represent pile skin friction to pile-soil interaction sprina element 2)Introduce Hirayama's pile end bearing capacity model as a nonlinear spring lement 3 Improve the axial force dependency of trilinear M-φ relationship in onlinear beam element (IEL=16) flip rose 7.4 series 4)Add components of output elements and modify formats of output data (added in ver.7.3.1) Add plane stress element as one of linear plane elements (added in er.7.4.0) Tintroduce the bilinear model corresponding to the Revised Technical Standards and Commentaries for Port and Harbour Facilities (2018) (IHT=2 Main Program and IAX=5) (added in ver.7.4.0) ®Allow to output pore water element - soil element correspondence table to 9Fix the bug in Hirayama Model of pile-soil interaction spring model (IHN=-4) and the bug in Rayleigh damping matrix of pile skin friction simulating @Bug-fix is applied on the fact that flow velocity vector file (#40) erroneously ncludes response data of elements other than pore water ele when FLOW command for output flow velocity vector is executed @Fix the bug in FLOW command from STAT command ②Fix the bug in INIT command in partially drained analysis o @Update the error treatment when the rounding error occurs in the routine s or cocktail glass model element Modify the file open function as measures for Intel compiler upon Program for determination of liquefaction parameters (multi-spring flipsim 5.1 series nodel element) (with drawing figure function) (for FLIP ROSE ver.7.3 0 Pre-Processor (Latest version:ver.5.1.1) D Program implemented with the advanced function specialized for use in flipgen 5.4 series FLIP analysis which are different from commercially available mesh 0 Pre-Processor (Latest version: ver.5.4.3 generators (with basic function used for mesh generation of standard analysis model) (for FLIP ROSE ver.7.4 or later) Program for determination of liquefaction parameters (cocktail glass flipcsim 5.2 series  $\bigcirc$ nodel element) (with simplified setup function of parameters and Pre-Processor (Latest version: ver.5.2.0) drawing figure function) (for FLIP ROSE ver.7.3 or later) File format conversion program for drawing figures of time histories, fileconv10 \* stress paths, stress-strain relations by Excel (for FLIP ROSE Ver.7.3 or 0 Post-Processor File format conversion program for 2D animation (MicroAVS) (for FLIP flip2dtomavs201 \* 0 0 ROSE Ver.7.3 or later) File format conversion program for 2D animation (MicroAVS) for eigen flip2dtomavs201\_eign 📩 0 0 Post-Processor node (for FLIP ROSE Ver.7.3 or later) Time series data extraction program for drawing figures of time fliphist31 ★  $\bigcirc$  $\bigcirc$ nistories, stress paths and stress-strain relations (for FLIP ROSE Post-Processor /er.7.3 or later) Spatial distribution data extraction program for drawing figures of flipsect31 🖈  $\bigcirc$  $\bigcirc$ deformation and excess pore water pressure distribution (for FLIP Post-Processor ROSE Ver.7.3 or later) 2D dynamic effective stress analysis program flip rose 7.2 series Indrained/partially drainage analysis (settlement due to dissipation of Main Program ore water pressure) (Latest version: ver.7.2.3\_7) Incorporated asymmetric modified Takeda model element to nonlinear peam element, etc. Program for determination of liquefaction parameters (multi-spring flipsim 4.0 series 🗼 nodel element) (with drawing figure function) (for FLIP ROSE ver.7.2 Pre-Processor (Latest version: ver.4.0.1)

(As of November 2025)

## Line-up of FLIP Programs (English version)

For flip rose ver.7.4 and ver.8.0 series For flip rose ver.7.2 series (As of November 2025) FLIP ROSE FLIP ROSE FLIP ROSE ver.7 series ver.7 Series FLIP Consortium Academic Subscription Subscription User Member & Version Discount Version Overseas Member Program Description Category Version [Number of computers] Maximum of ten computers connected through LAN computers] Stand-alone computers] Stand-alone computers] Stand-alone Program implemented with the advanced function specialized for use in flipgen 5.0 series FLIP analysis which are different from commercially available mesh  $\bigcirc$ Pre-Processor generators (with basic function used for mesh generation of standard (Latest version: ver.5.0.5) nalysis model) (for FLIP ROSE ver.7.2 series) rogram for determination of liquefaction parameters (cocktail glass flincsim 4.0 series \* nodel element) (with drawing figure function) (for FLIP ROSE ver.7.2  $\bigcirc$ Pre-Processor (Latest version: ver.4.0.2) File format conversion program for drawing figures of time histories, fileconv6 \* stress paths, stress-strain relations by Excel (for FLIP ROSE ver.7.2 Post-Processor File format conversion program for 2D animation (MicroAVS) (for FLIP flip2dtomavs17 🖈 0 0 Post-Processor ROSF ver.7.2 series) Time series data extraction program for drawing figures of time 0 fliphist23 ★ histories, stress paths and stress-strain relations (FLIP ROSE ver.7.2 Post-Processor Spatial distribution data extraction program for drawing figures of 0 flipsect25 ★ deformation and excess pore water pressure distribution (for FLIP 0 Post-Processor patial distribution data selection program for drawing figures of pickupdata6 🖈 🖈 0 bending moment distribution (section force) of structure members, Post-Processor D ool for format conversion among the files of wave data waveconv33 🜟 🖈 0 0 \*available in FLIP ROSE ver.7.4 or later in case of file conversion Post-Processor For FLIP ROSE ver.7.4.2 or later flowplot \* ool for drawing flow velocity vectors from structural file (#30) and  $\bigcirc$  $\circ$ Post-Processor ool for converting spatial distribution data of displacement, acceleration, strain, stress, excess pore water pressure, dynamic water VtkConv111 2D 🛨 🛨  $\bigcirc$ ressure and flow velocity vector (including eigen mode) output by Post-Processor (Latest version: ver.1.1.1) FLIP ROSE 2D to the data for drawing figure by ParaView (applicable to he data of FLIP TULIP) flip rose 3d 2.1/2.0 series 3D dynamic effective stress analysis program (Latest version cocktail glass model element and seepage analysis functions  $\bigcirc$ Main Program -Members: ver.2.1.0 -Subscription: ver.2.0.0 Input data generator for FLIP ROSE 3D with limited function flinmesh20  $\circ$ Pre-Processor (Latest version: ver.2.0) (Supported version for AutoCAD data) flip3dtomavs201 ile format conversion program from data output FLIP to 3D animation Post-Processor 0 flip3dtomavs201 eign File format conversion program for 3D animation for eigen mode Post-Processor File format conversion program for 3D animation for fluid freedom 0 flip3dtomavs201\_eign\_fluid 0 Post-Processor ime series data extraction program for drawing figures of time 0 0 flip3dhist21 Post-Processor nistories, stress paths and stress-strain relations for FLIP ROSE 3D Spatial distribution data extraction program for drawing figures of D flip3dsect21 0 deformation and excess pore water pressure distribution for FLIP ROSE Post-Processor VtkConv111 3D 0 (FLIP ROSE 3D version of VtkConv 2D) (Latest version: ver.1.1.1) 2D dynamic effective stress analysis program based on the Total and flip tulip 6.6 series Main Program Jpdated Lagrangian methods (for Windows 64 bit) Time series data extraction program for drawing figures of time  $\circ$ Post-Processor tuliphist10 histories, stress paths and stress-strain relations for FLIP TULIP

## System requirements:

tulipsect10

The FLIP programs for FLIP ROSE ver.7 Series and subscription version users are the executable modules compiled by Intel Fortran. For the operating environment of the executable modules, please refer to "system environment and pre-post programs" on FLIP Consortium website.

Post-Processor

Spatial distribution data extraction program for drawing figures of

deformation and excess pore water pressure distribution for FLIP TULIP

## Bugs

FLIP Consortium will provide the bug fix release to FLIP Consortium User Members and Overseas Members and FLIP ROSE Ver.7 series Support Service Members as soon as the bug has been fixed. If a serious bug is found in a program, FLIP Consortium will arrange so that the bug fix release can be obtained by all the customers who have purchased FLIP ROSE Ver. 7 Series, including those who are not Support Service Members.