

New features Version 7.11 (13/03/2019):

The CALCUL NONLINEAIRE command of the PH3 module has been modified: the user has more options to control the evolution of the calculus (see the user guide).

The limit number of nodes and elements has increased from 20,000 to 50,000.

Warning messages have been added in the CDS command of the ETU module.

In the installation guide, precisions details the installation of GMSH, the mesh generator.

Correction of chapter 13 related to the finite elements of the PCP guide and of messages of the console related to this module.

New features Version 7.10 (July 25, 2018):

Method option added in the PRAMETRES RHEOLOGIQUES command of the PH3 module. This option indicates the calculation method of creep : the superposition method, which is the already existing method and the default one, or the Kelvin method (see document R07.01.01 *Relations of behavior BETON_GTO ARRANGE and BETON_GRANGER_V for the clean creep of the concrete* of Code_Aster documentation).

Bugs correction in the mesh module related to the surface modeling: non-homogeneous sections are correctly managed now in the geometry, mesh and command files (generation of surfaces and their width). These files are also correctly edited when the user does not indicate the segments of the model: when no TRONCON option appears, the whole beam is treated by default, the bug related to the last section that does not appear is now fixed.

Correction of a bug that prevented the activation of the option “Phases sorting”.

New features Version 7.03 (April 18, 2018):

Improvement of errors management in the “dynamic” module.

Bug correction in the “envelop” module. The bug generated a problem during the calculation of the envelop during the call of particular supports.

Modification of the possibilities to the positioning of concentrated loads (from vehicule_droi to vehicule_inte) relative to the traffic lanes in the traffic.don file (pcp/appli/cnfg/env).

New features Version 7.02 (December 21, 2017):

During the use of commands COMBINAISON, PONDERATION and ENVELOPPE of “study” module, if the weighting coefficients are not in the expected intervals, then there is no more an error but a warning, letting the software make the calculation.

The user can now change the color of the background and of the font int the computation window.

The user can change the language of the interface and of the documentation more easily thanks to the “Options” tab of the main window.

New features Version 7.01 (October 13, 2017):

Clarifications added in the user guide about the following commands: SECTION CONTOURS ENTIERE of chapter 3 (clarifications about forbidden sections), ENVELOPPES of chapter 9 and COMBINAISON of chapter 12, which clarify the use of these commands for a non-linear calculation.

Correction of modules relative to graphic displays, which returned an error when PCP was used on previous versions of Windows X, and on Windows X since a recent update.

New features Version 7.00 (September 14, 2017):

Mesh modulus added. This modulus will create a 1D, 2D or 3D mesh from the PCP model and a Code Aster command file to do a finite element study. A new chapter in the user guide describes this new module, and some sample files “maillage.don” are provided in the following cases: “bicaisson”, “encorb_sci”, “pont” and ‘stabilite_pile”.

“Relatif” option added in the commands PLACER ARTICULATIONS and REMPLACER ARTICULATIONS, which allows the user to set a relative displacement and not an absolute displacement, which can be useful for jacks.

Correction of the commands COMBINAISON, WEIGHTING and ENVELOPPE about the control of the consistency of the weighting coefficient of the user. The user guide has been modified too.

Correction of a bug concerning the display of the forces on the structure for several effects during the display of the results on the structure.

New features Version 6.61 (May 19, 2017):

More precise documentation about variables and scalar expressions in chapter 2 – pseudo-programming, Edit/Do not edit, Chains and Thermal loading commands in chapter 8 – phases, and Circulation command in chapter 9 – operating loads.

Possibility to change the interface colors for graphical output, in Options/Screen/colors of graphical output. White background is available and convenient for screen prints.

The use of “Phases sorting” option generates, during the running of the phase modulus, a file named XXX.PHASES_TRIEES.dec, where XXX is the name of the phase file created by the user, including the construction phases in a chronological order.

Correction of bugs concerning the display of influence line.

New features Version 6.60 (October 17, 2016):

Interface and documentation available in English

Search factors of concentrated loads have been modified in the file traffic.don. It expands the search field to apply the operating loads.

Bug fixes

New features Version 6.50 (September 7, 2016):

Takeda’s law for seismic calculations added

Static limits abolished

64-bits compilation

English version of the documentation

Bugs fixes, including in the dynamic module, which may lead to differences of results between the versions 6.45 and 6.50

New features Version 6.45 (September 3, 2015):

MAI and OAE modules separated

Infinite rigidity terms increased

New features Version 6.44 (June 22, 2015):

Maximum number of vehicle lines per lane which can be studied has been increased (until 20)

New features Version 6.43 (march 24, 2015):

Weighting coefficients of favorable and unfavorable effects of the prestressing added

Bug fixes

New features Version 6.42 (January 21, 2015):

New material laws added

New features Version 6.41 (October 1, 2014):

Bug fixes

Installation process improved

New features Version 6.40 (June 19, 2014):

Upper modes filtered

Elastoplastic supports, elements and articulations added. Possibility of modeling elastoplastic soils, prestressed dampers, unilateral dampers...

Bug fixes

New features Version 6.30 (march 13, 2014):

Seismic analysis using modal superposition method in the dynamic module added

Linear articulations with articulation threshold added

New features Version 6.20 (december 9, 2013):

Decoder change: all expressions must be enclosed within parentheses

Pedestrian loads of the Eurocode added

EXPORTER command modified and IMPORTER command added

New features Version 6.10 (January 29, 2013):

Railway laws added

New features Version 5.24 (July 13, 2012):

Bug fixes

New features Version 5.23 (May 16, 2012):

Orientation of the fourth component in local planes modified (downwards)

Creep laws of the CEB 90 design code and of the Canadian norm S6-06 added

Traffic loads models related to the fatigue of road bridges (European Eurocode 1) added

COMBINAISON and ENVELOPPE commands of the Study module modified

Exporting format of study results (EXPORTER command) modified

st1pcp utility modified: prestressed cables can be retrieved

New features Version 5.22 (February 10, 2012):

Skew angle of the support taken into account

Number of values in the traffic table increased

Max and min functions added

New features Version 5.21 (December, 2011):

Bug fixes for printing

Limits of number of supports increased

New features Version 5.20 (November 24, 2011):

Protection modified

Network protection version

New features Version 5.10_3 (September 15, 2011):

Pseudo-programming added

can be used to write a comment

New features Version 5.10_2 (May 24, 2011):

Bug fixes in RES module

Loading of curvilinear beam in PH3 module

New features Version 5.10_1 (March 4, 2011):

New generation of more robust 3D files

Online help for the main window

List of persistent data files (liste.don)

New features Version 5.10_0 (December 1, 2009):

European (Eurocodes) Operating loads updated

Behaviour laws of generalized materials

Delayed laws of Eurocodes updated

Eurocodes Spectrum updated

Nonlinear dumping updated

Dongles as new protection keys

New features Version 4.10:

New look of the HMI

Influencing area and loads in VRML

New features Version 3.10:

Step by step calculation

Stochastic calculus

New features Version 2.10:

Dynamic calculation

First Windows version

New features Version 1.10:

First UNIX version

New features Version 1.00:

First IBM version