A robust, proven calculation tool, according to Eurocodes. More than 200 operating licences in France and abroad.

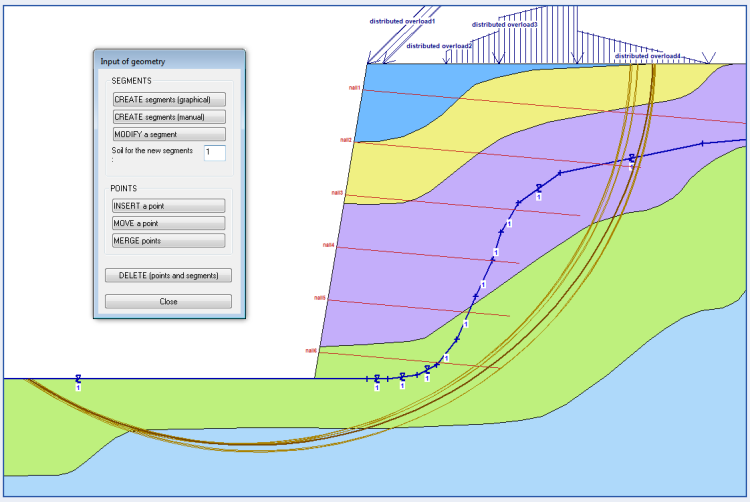
GEOSTAB

Slope stability analysis

Soil reinforcement and nailed walls design

A VARIETY OF ANALYSIS

- **Natural and man-made slopes**
- **Cuttings, embankments and reinforced soils**
- **Retaining walls**
- **Nailed or anchored slopes** with an automatic optimisation of nails and anchor lengths

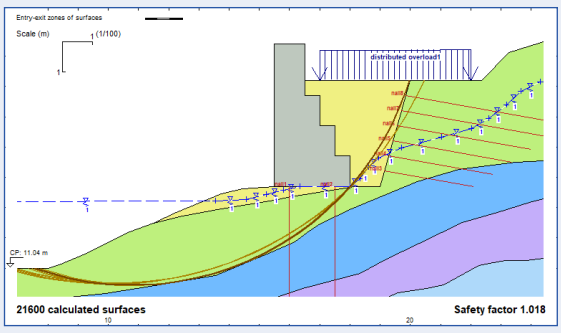


GEOSTAB CAN TACKLE

- **Complex problems**
- **Different types of reinforcements**: pins, nails, anchors, geotextile and geogrid layers
- **Any type of slide surfaces**: circles, plans, spirals, combined surfaces
- **Different loading conditions**: spread, punctual, inclined; uniform or not
- **Seismic loads**: pseudo – static method

AN INTUITIVE AND USER-FRIENDLY INTERFACE

- **Performant** modelling tools
- Easy management of **phases** and **cases**
- Option to import **GEOMUR files** (external stability), **Autocad plans** or **images**



	SOILS	(γ ; γsat)	C	φ	qs	Ks	pl
	1	(18.00; 18.00) * 1.00	0.000 / 1.00	25.00 / 1.00	120.0 / 1.00	6000 / 1.00	500.0 / 1.00
	2	(20.00; 20.00) * 1.00	0.000 / 1.00	35.00 / 1.00	0.000 / 1.00	5600 / 1.00	200.0 / 1.00
	3	(17.50; 17.50) * 1.00	100.0 / 1.00	45.00 / 1.00	0.000 / 1.00	5600 / 1.00	200.0 / 1.00
	4	(18.00; 18.00) * 1.00	5.000 / 1.00	35.00 / 1.00	250.0 / 1.00	28000 / 1.00	1000 / 1.00
	5	(18.00; 18.00) * 1.00	5.000 / 1.00	23.00 / 1.00	0.000 / 1.00	3739 / 1.00	200.0 / 1.00
	6	(18.00; 18.00) * 1.00	5.000 / 1.00	23.00 / 1.00	0.000 / 1.00	3739 / 1.00	200.0 / 1.00

	Yhead	L	α	Spa	Ø	F rein	EI	Madm
NAIL 1	14.7000	8.000	90.0	4.00	0.800	878.0 / 1.000	204700	330.0 / 1.000
NAIL 2	14.7000	8.000	90.0	4.00	0.800	878.0 / 1.000	204700	330.0 / 1.000

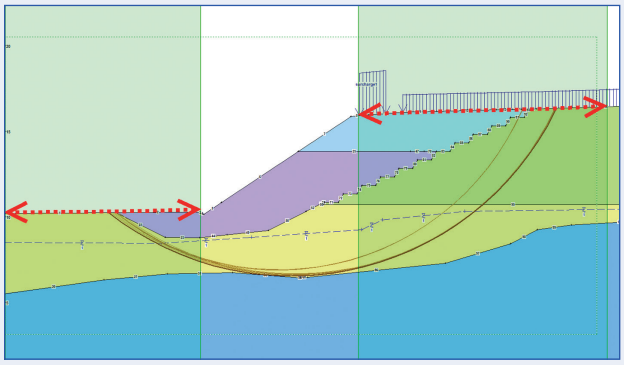
RESULT EXTRACTION FUNCTION

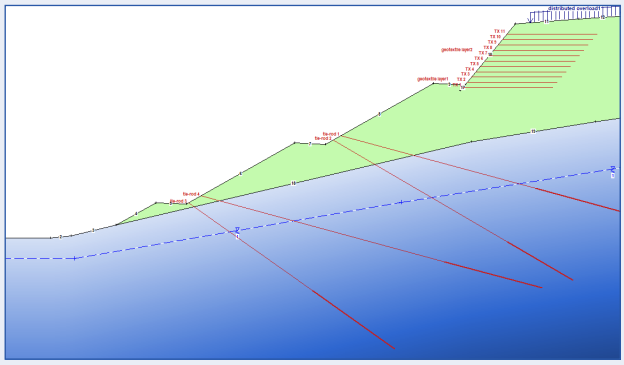
- **Structured report** that can directly be integrated into a PDF file
- Recall of **all the data input**

Geos

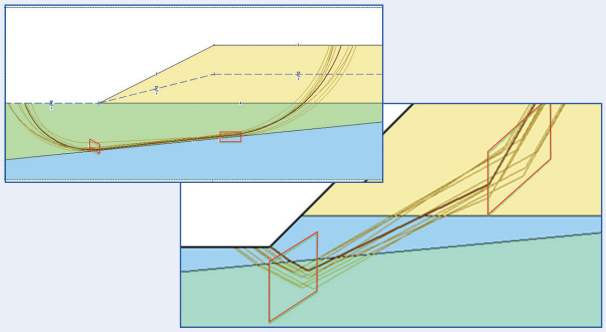
An intuitive and user-friendly interface

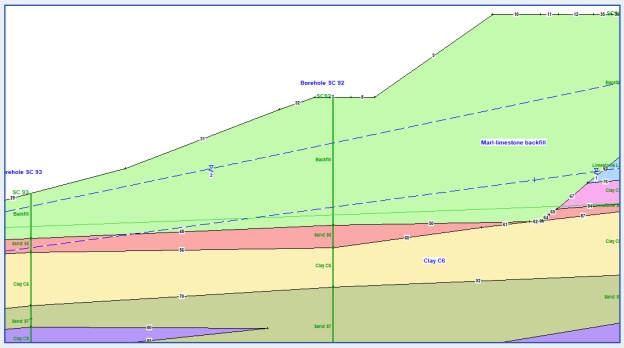
- **Ground profile** input by mouse click, or by coordinate points definition





- **Automatic search** of slip surfaces by defining **entry and exit intervals** (without center grid)
- Consideration of **anisotropy** (c-φ depending on direction) or **variation** of c-φ depending on depth





- Automatic search of **non-circular slip surfaces by box definition**
- Input of **borehole profiles** and addition of **data labels**

Advanced calculation features

- Predefined **partial security factors** in terms of reference documents (Eurocode 7: Approach 2 and 3, Clouterre)
- Calculation of inclusion **efforts**, in order to calculate nailed wall surfaces **(GEOSPAR)**
- Calculation of inclusions in **traction, compression, shear and flexion state**
- **Automatic optimisation** of nails length
- **Automatic** verification of stability in the anchored block, by **Kranz Method (Eurocode NF P 94 – 282)** with one or more anchor or nail layers

Various methods

- Modified **BISHOP** for circular surfaces
- **CARTER** for non-circular surfaces
- **Perturbations method** (circular, non-circular, logarithmic spiral surfaces)

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