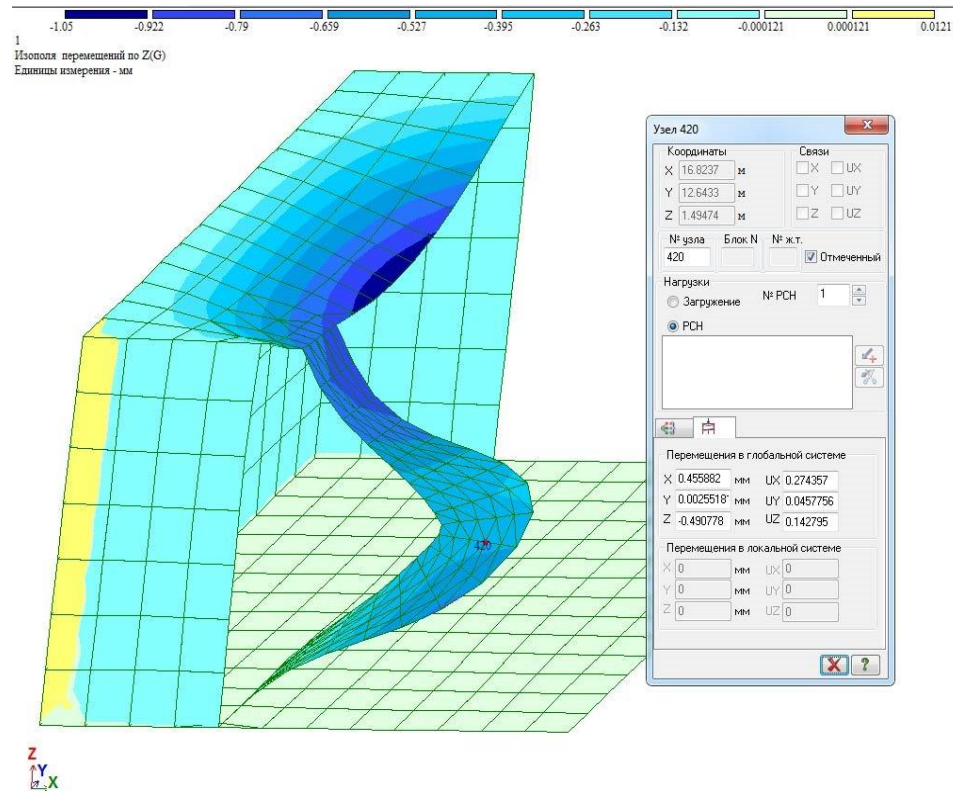


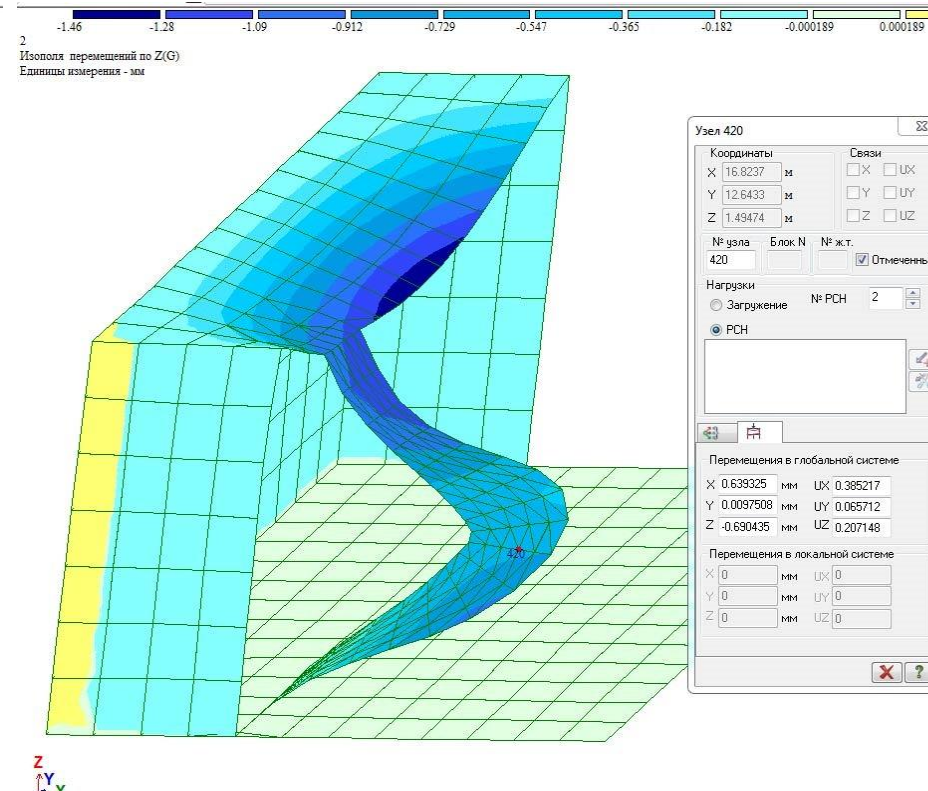
Isofield of displacements along Z and calculation of sway

Calculated combinations of loads №1



Under this load, the deflection in node №420 is 0.49 mm

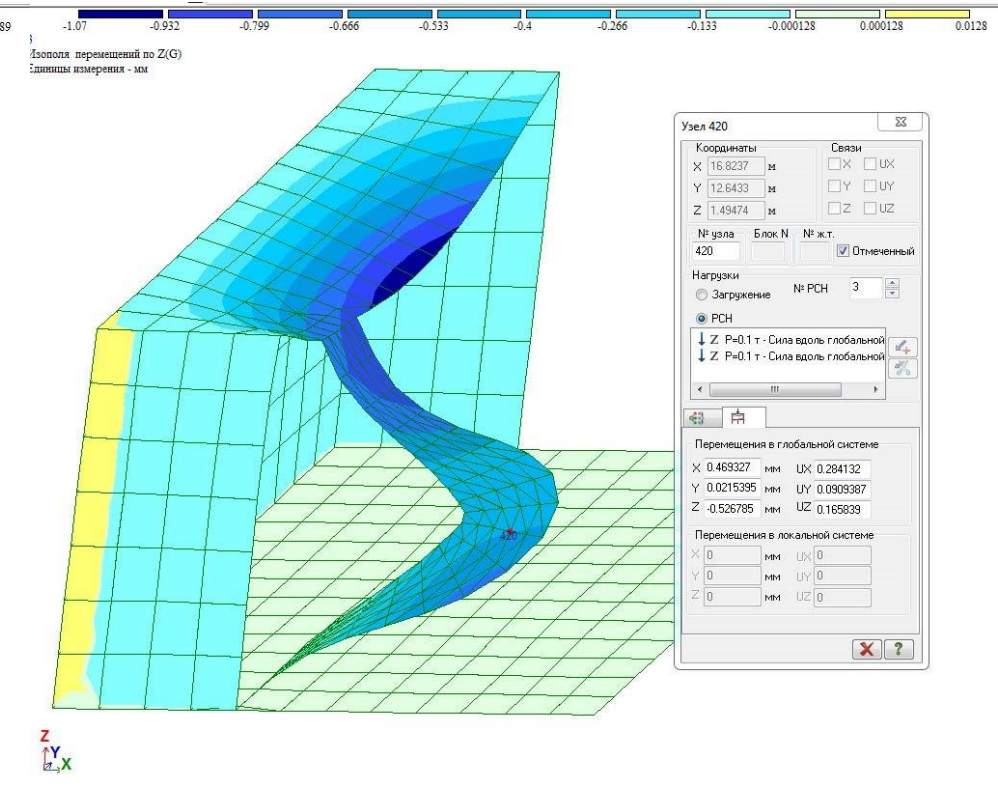
Calculated combinations of loads №2



Under this load, a maximum deflection of 1.46 mm occurs in the floor slab
We calculate the limit deflections in a 6-m-long slab according to Table 1:
 $6000\text{mm}/200=30\text{mm}$
 $1.46<30$, that is, the condition for plate deflection is satisfied

We calculate the limit deflections in the 5.3 m long stair plate according to table 1:
 $5300\text{mm}/200=27\text{mm}$
 $1.09 < 27$, i.e., the condition for the deflection of the stair plate is satisfied

Calculated combinations of loads №3



Under this load, the deflection in node #420 is 0.53 mm
The difference between PCH3 and PCH1 is: $0.53-0.49=0.04\text{mm}$
 $0.04\text{mm}<0.7\text{mm}$, that is, the condition for the error of the stair plate is satisfied

Расчетные сочетания нагрузок

ДБН В.1.2 - 2:2006

	N загруз.	Наименование	Вид	Знакоперем.	Взаимоискл.	отношение коэф	P q / P ch	1	2	3
1	1	Собственный вес	Постоянное(П)	+		1.1	1.0	1.0	1.0	1.0
2	2	Временные нагрузки на	Длительное(Д)	+		1.2	1.0	.0	1.0	.0
3	3	Кратковременное	Кратковременное(К)	+		1.0	.35	.0	.0	1.0

1 основное

2 основное

Аварийное (С)

Аварийное (б/С)

ΣП+Д+К+ (Кр+Т)+М

Коэффициенты

Добавить


Table 1

VERTICAL LIMIT DEFLECTIONS OF STRUCTURAL ELEMENTS (DSTU B V.1.2-3:2006 Deflections and displacements.)

2 Beams, trusses, crossbars, girders, slabs, decks (including transverse ribs of slabs and decks):

a) coverings and ceilings open for review, during the span I, m:

$$I = 1 \text{ l/120}$$
$$I = 3 \text{ I}/150$$
$$I = 6 \text{ I}/200$$
$$I = 24 (12) I/250$$
$$I = 36 \text{ (24) } 1/300$$

						001/19-K3			
						Kiev region, Vyshhorod district, (Lebedivska silska rada) cottage town Riviera villas			
Change	Count	Sheet	No.Doc.	Sign.	Date				
						Construction of concrete monolithic stairs	Stage	Sheet	Sheets
							P	07	15
Developed	Karpov A. Y.					Isofield of displacements along Z and calculation of sway	 Stairs-A		
Verify	Tkach K. G.								