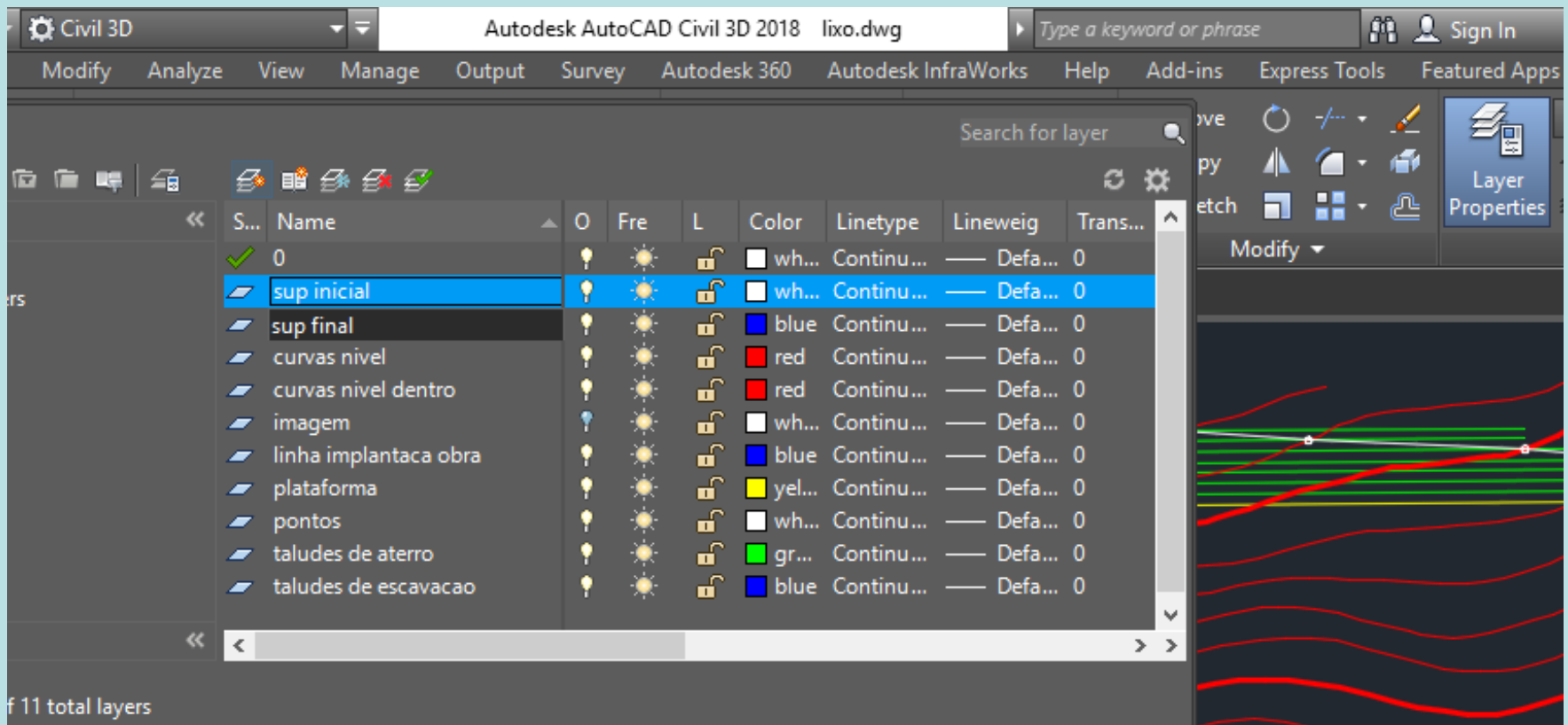


Posicionamento Geoespacial II

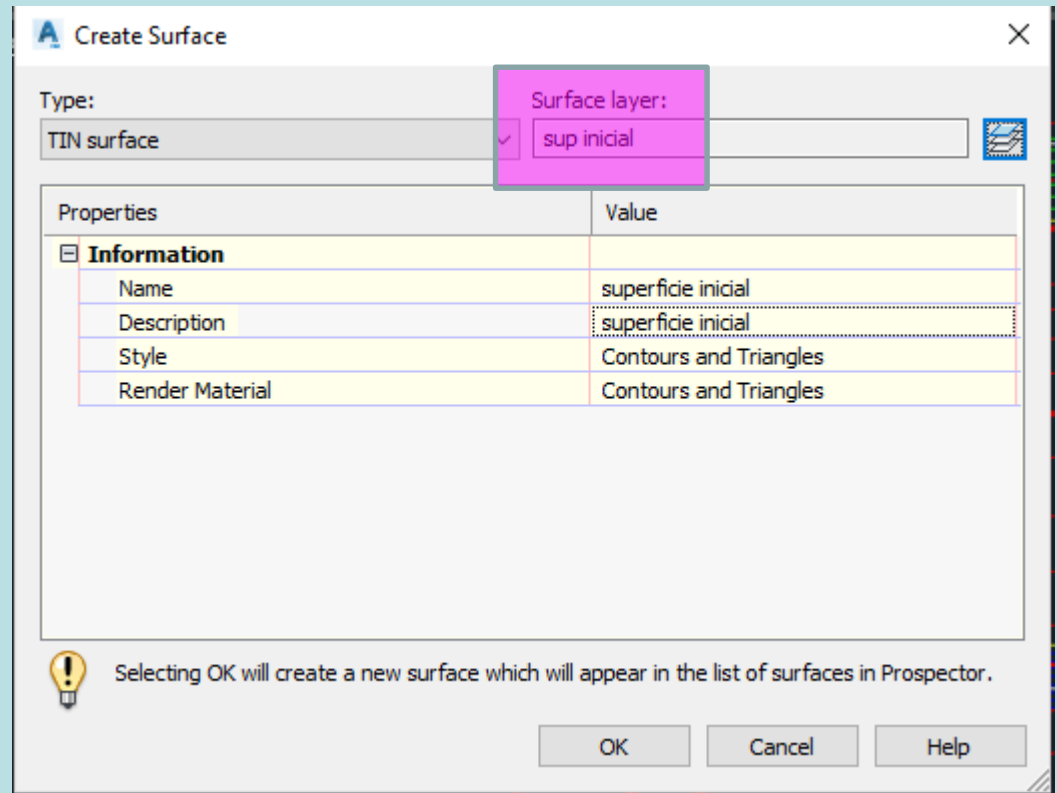
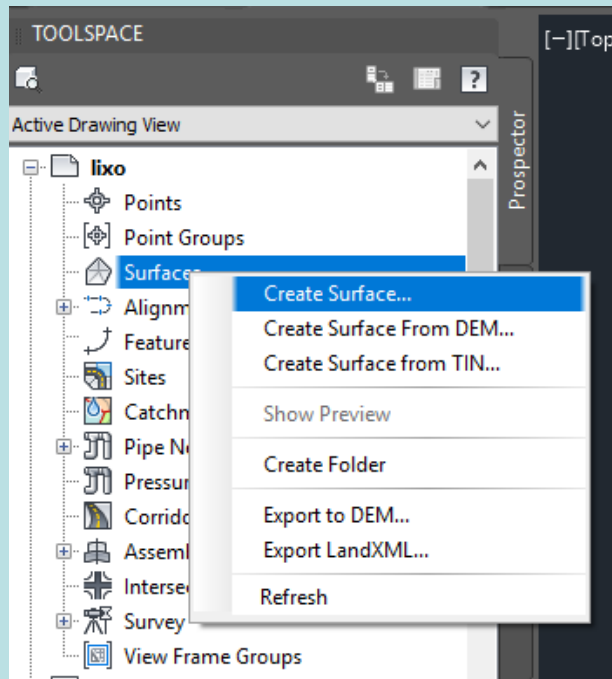
Cálculo de volumes de movimento de terras entre 2 superfícies com o Civil3D

1. Criar 2 layers adicionais, **sup inicial** e **sup final**

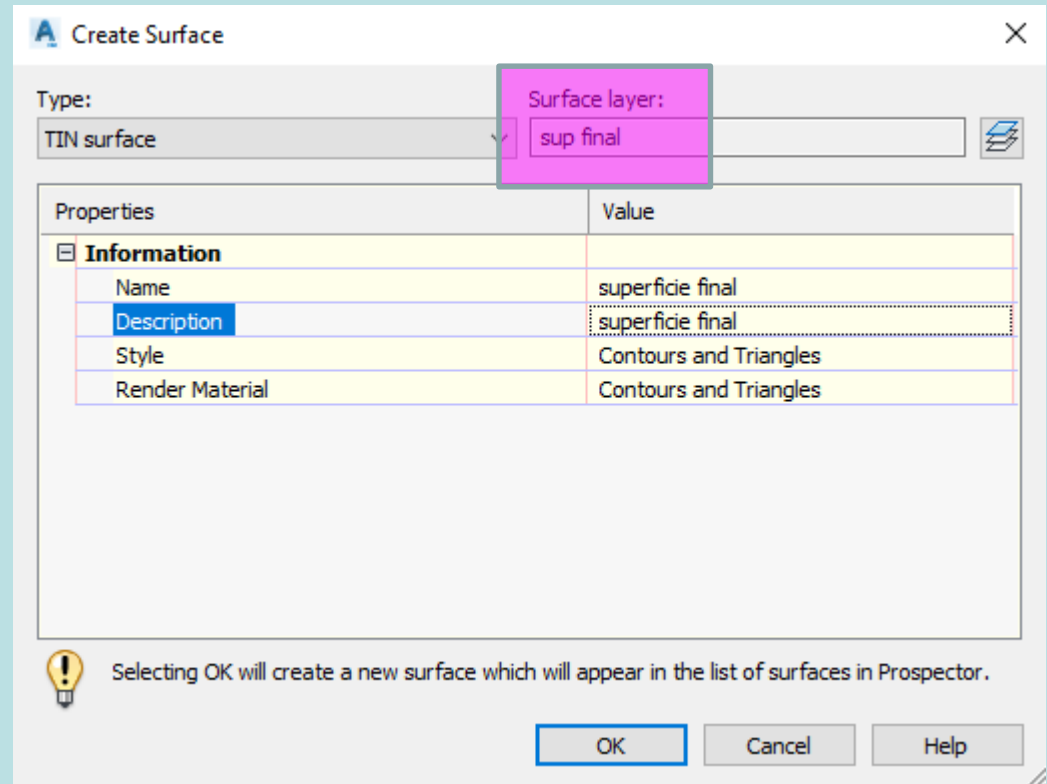
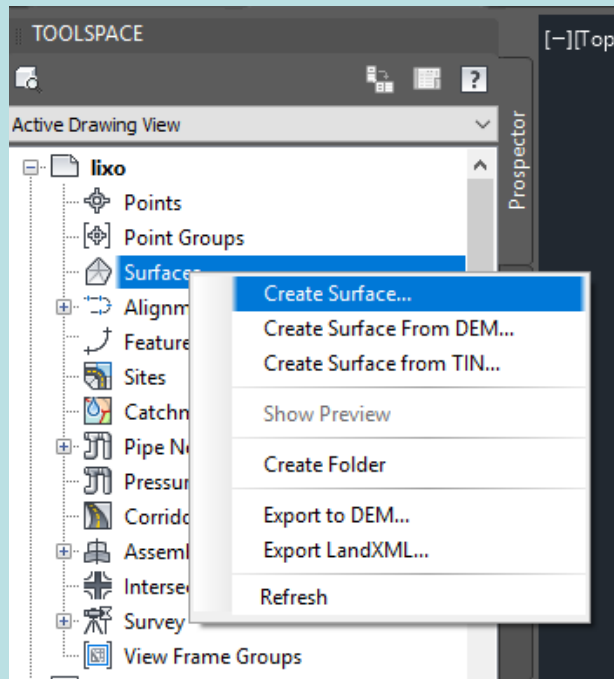


Posicionamento Geoespacial II

2. Criar as superfícies inicial e final



Posicionamento Geoespacial II



Posicionamento Geoespacial II

3. Alterar características da superfície final

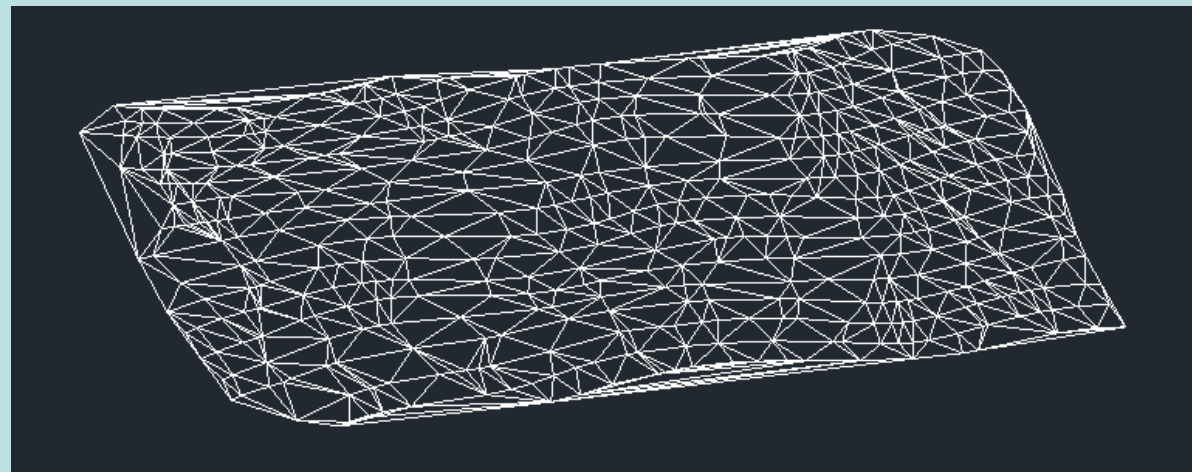
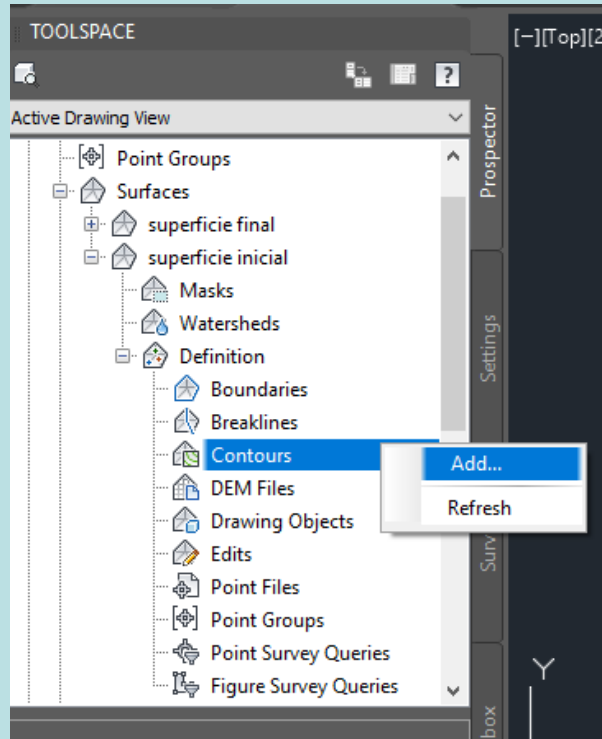
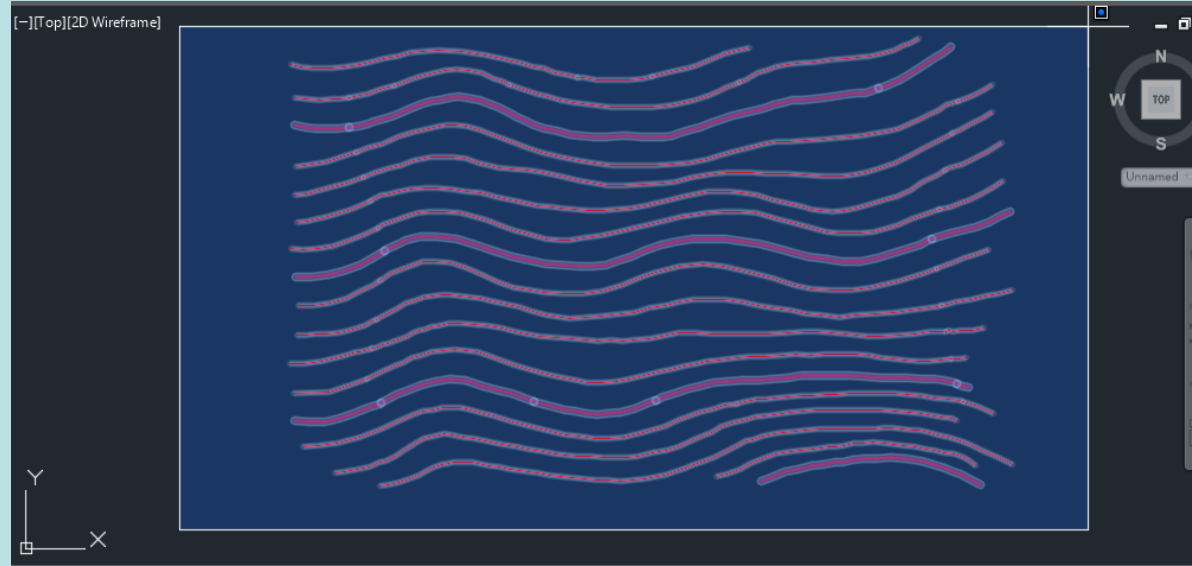
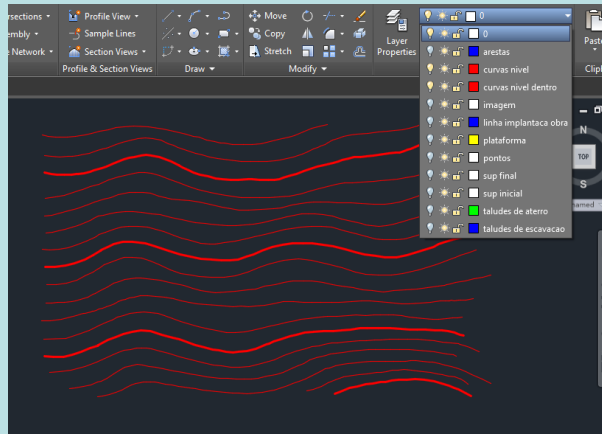
The image shows a screenshot of the AutoCAD software interface. The 'TOOLSPACE' palette is visible on the left, with the 'Surfaces' folder expanded to show 'superfície final' and 'superfície inicial'. The 'Surface Properties' dialog box is open for 'superfície final', with the 'Definition' tab selected. The 'Definition Options' section contains the following table:

Definition Options	Value
Use maximum triangle length	No
Maximum triangle length	0.000m
Convert proximity breaklines to standard	Yes
Allow crossing breaklines	Yes
Elevation to use	Use average breakline elevation at intersection

Below the table, there are sections for 'Data operations' and 'Edit operations', both currently collapsed. At the bottom of the dialog, there are buttons for 'OK', 'Cancel', 'Apply', and 'Help'. Two red arrows are overlaid on the image: one points to the 'Surface Properties...' menu item in the 'TOOLSPACE' palette, and the other points to the 'Allow crossing breaklines' checkbox in the dialog box.

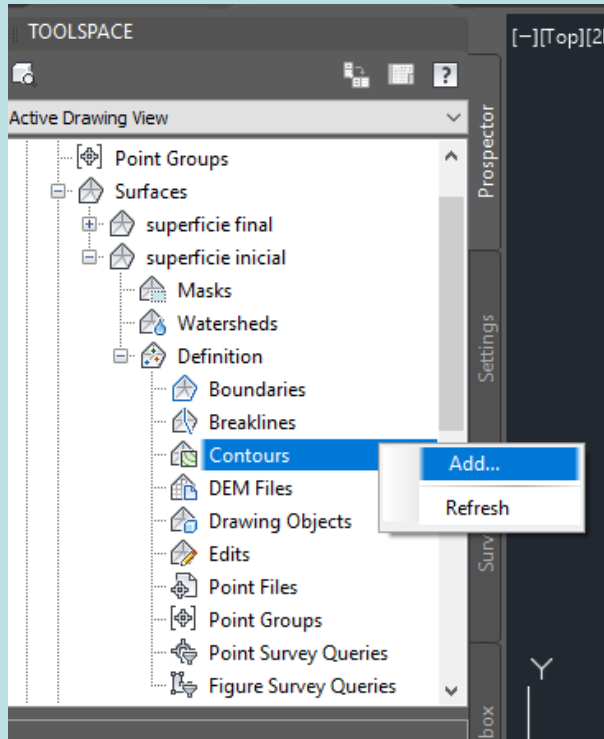
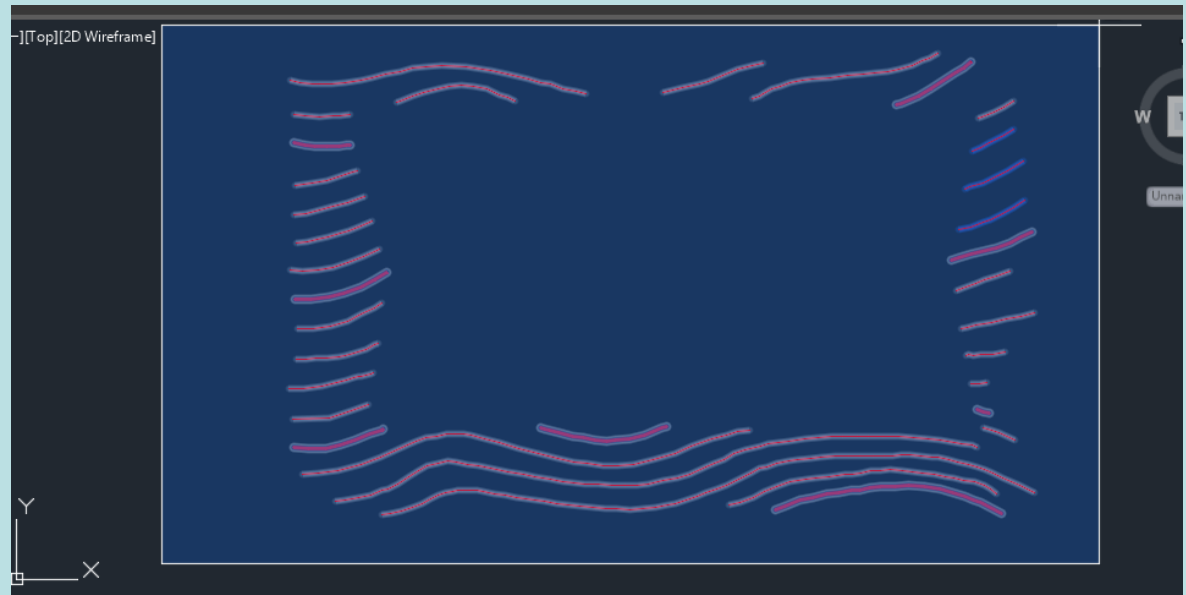
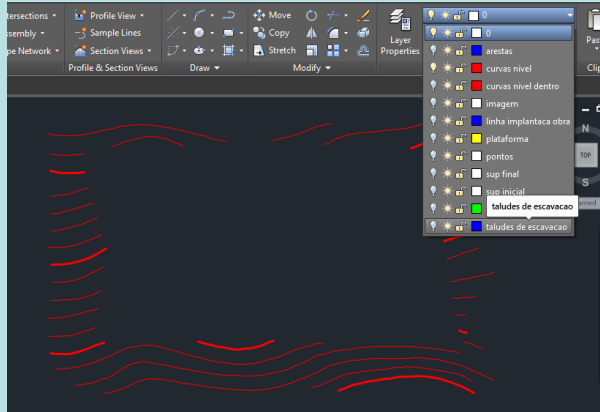
Posicionamento Geoespacial II

4. Importar informação para a superfície inicial

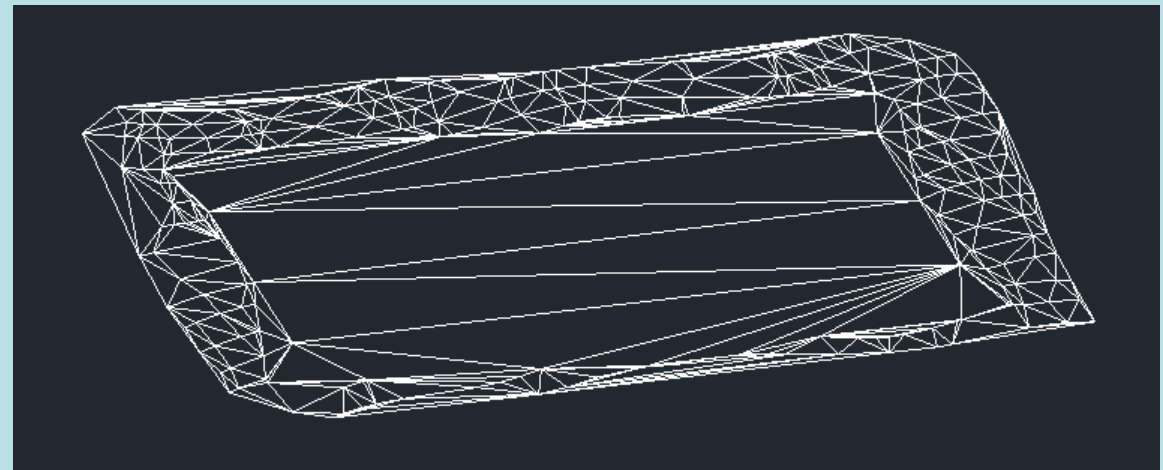
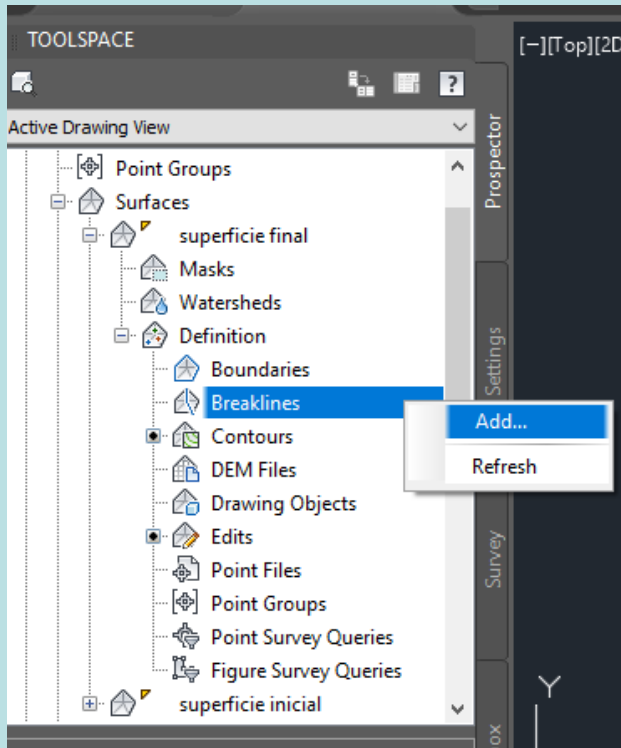
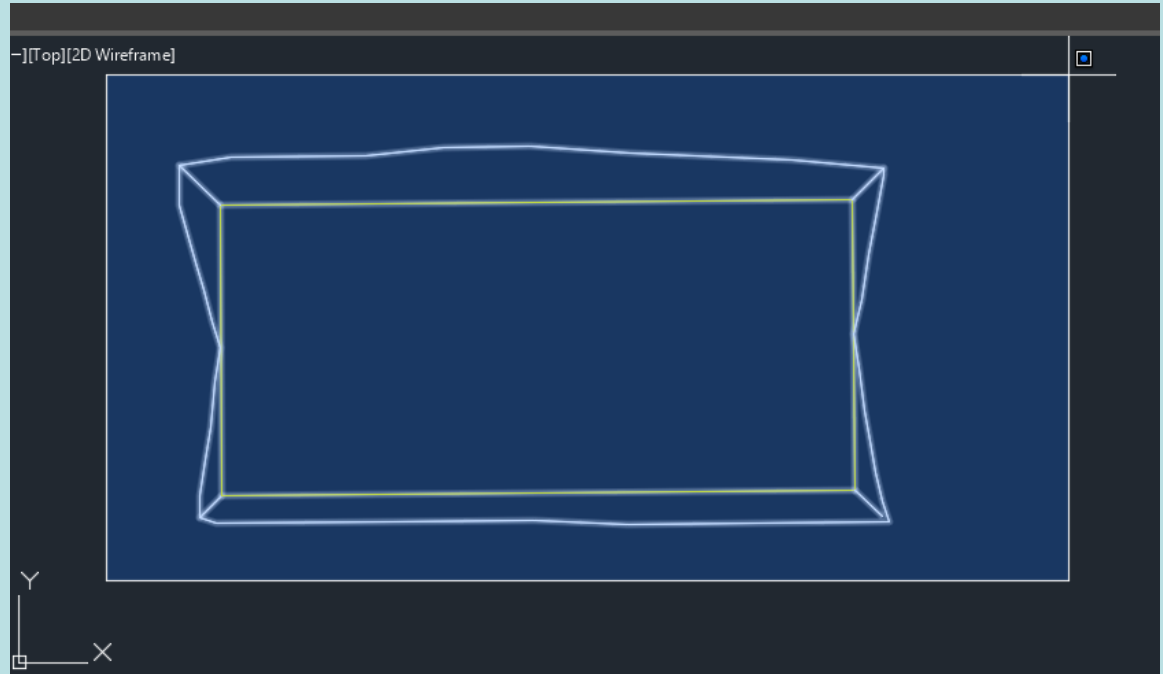
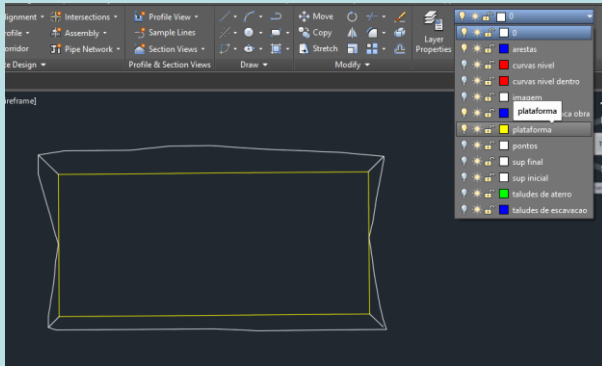


Posicionamento Geoespacial II

5. Importar informação para a superfície final

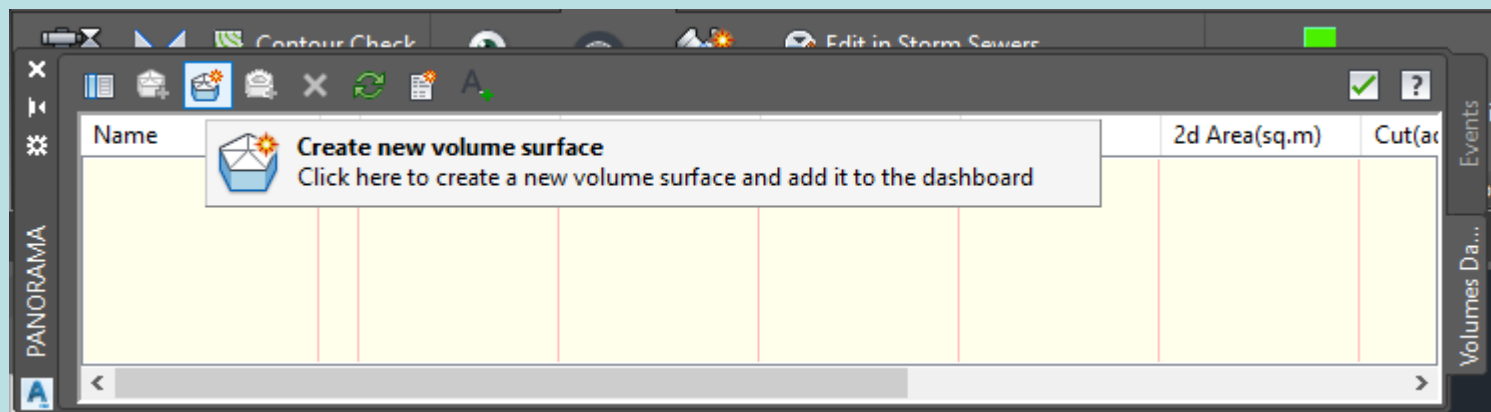
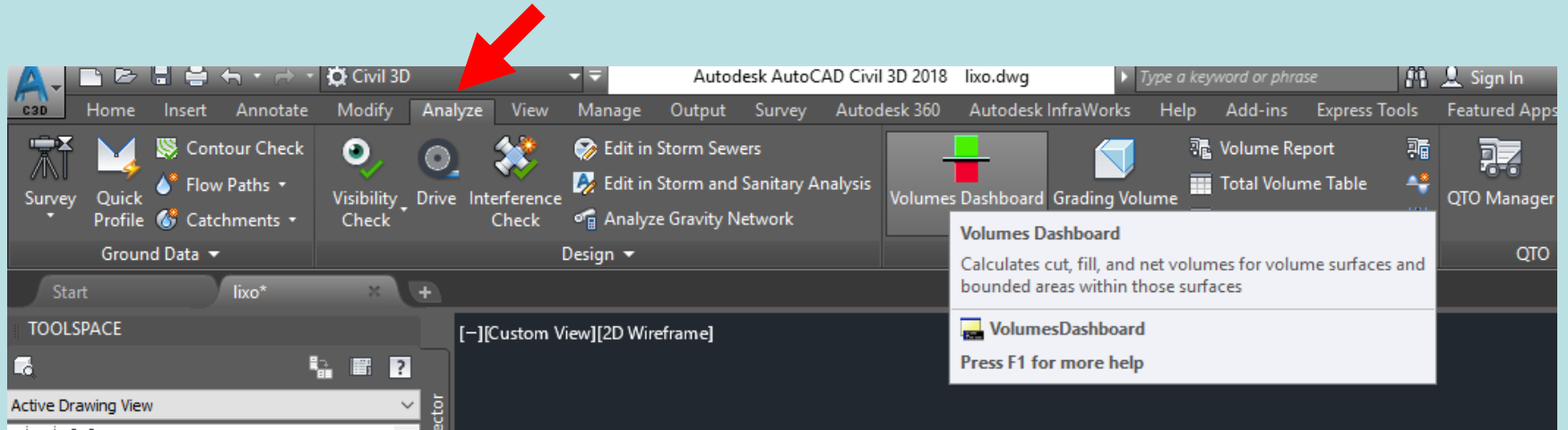


Posicionamento Geoespacial II



Posicionamento Geoespacial II

6. Cálculo do volume de escavação e aterro



Posicionamento Geoespacial II

Create Surface

Type: TIN volume surface | Surface layer: C-TOPO

Properties	Value
Information	
Name	volumes
Description	volumes
Style	Contours 2m and 10m (Background)
Render Material	Contours 2m and 10m (Background)
Volume surfaces	
Base Surface	superficie inicial
Comparison Surface	superficie final
Cut Factor	1.000
Fill Factor	1.000

Selecting OK will create a new surface which will appear in the list of surfaces in Prospector.

OK Cancel Help

volume de escavação (m³)

volume de aterro (m³)

Name	B	Mid-Ordinate ...	Cut Factor	Fill Factor	Style	2d Area(sq.m)	Cut(adjusted)(Cu.)	Fill(adjusted)(Cu.)	Net(adjusted)(Cu.)	Net Graph
✓ volumes			1.000	1.000	Contours 2...	14320.06	9131.92	10586.91	1454.98<Fill>	