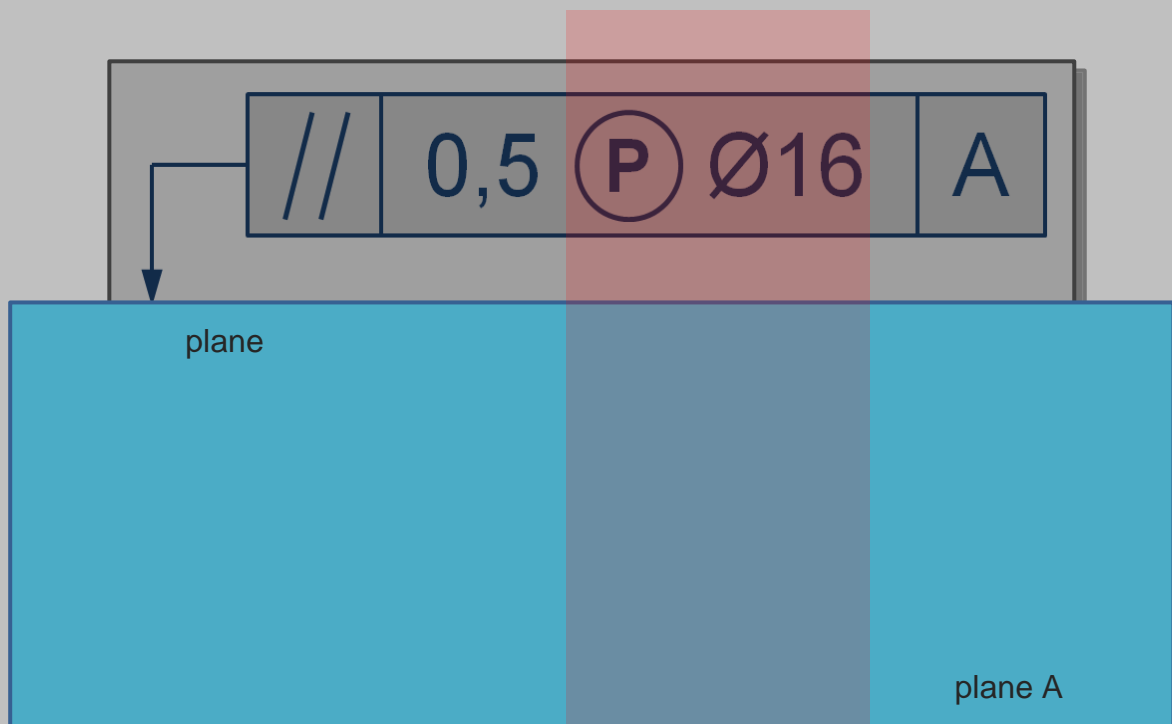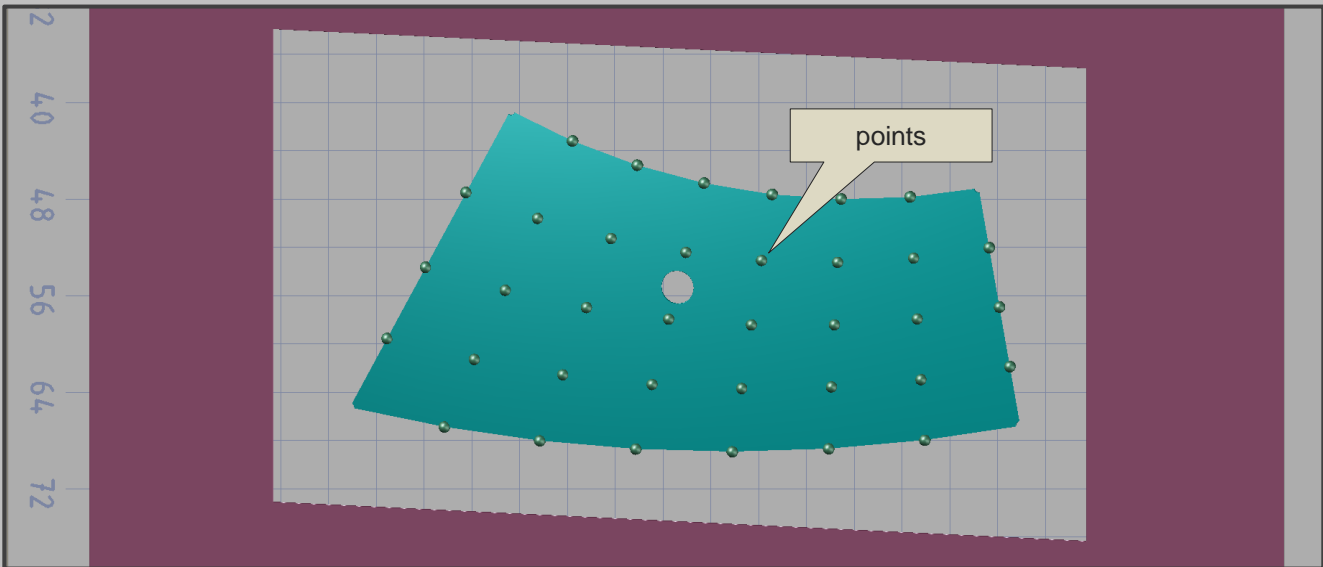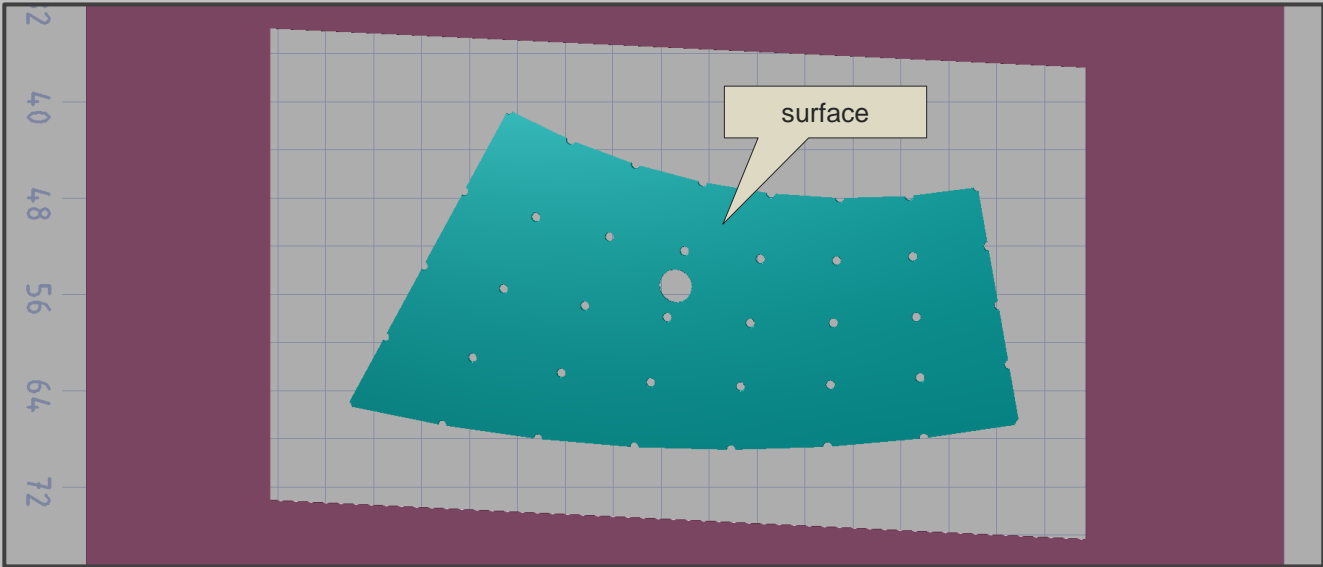# Parallelism and Projected Zone

Designer's decision.

Not necessarily according standard.

// | 0,5 | (P) Ø16 | A

plane

plane A

This callout forces the user to apply Least Squares-evaluation.

Parallelism and Projected Zone

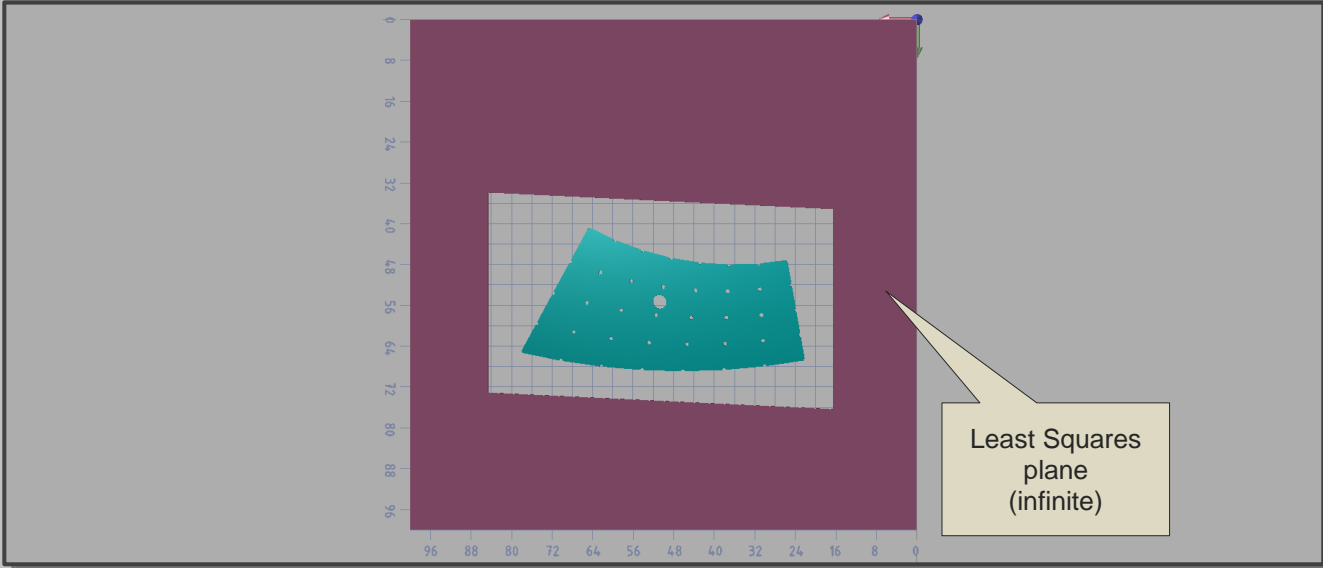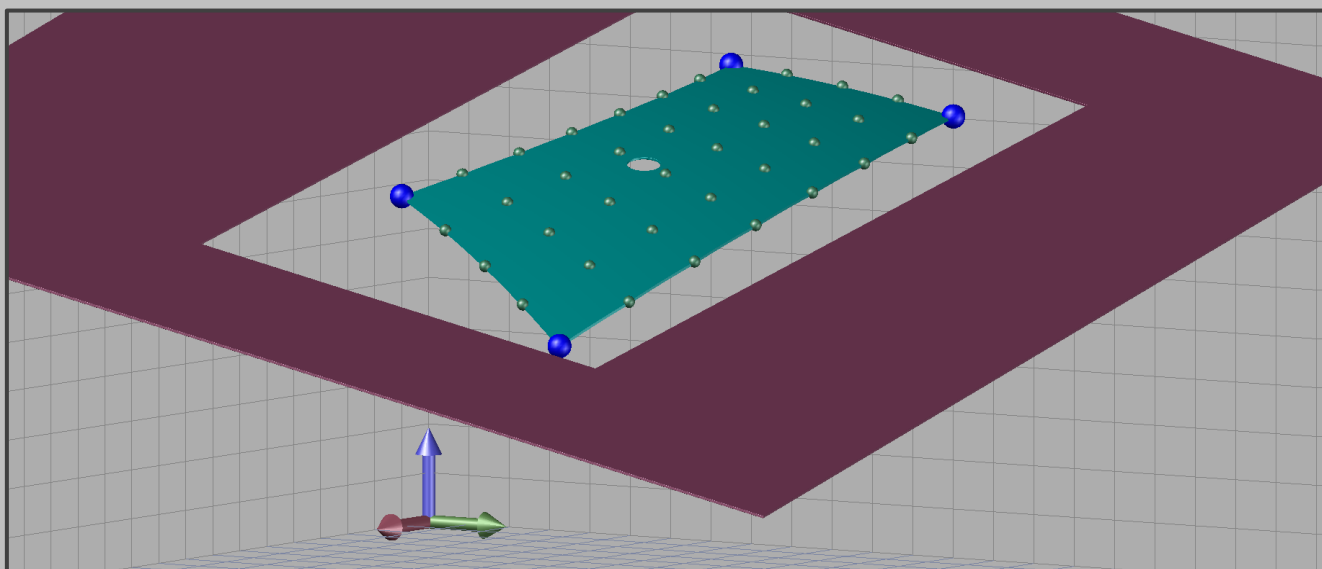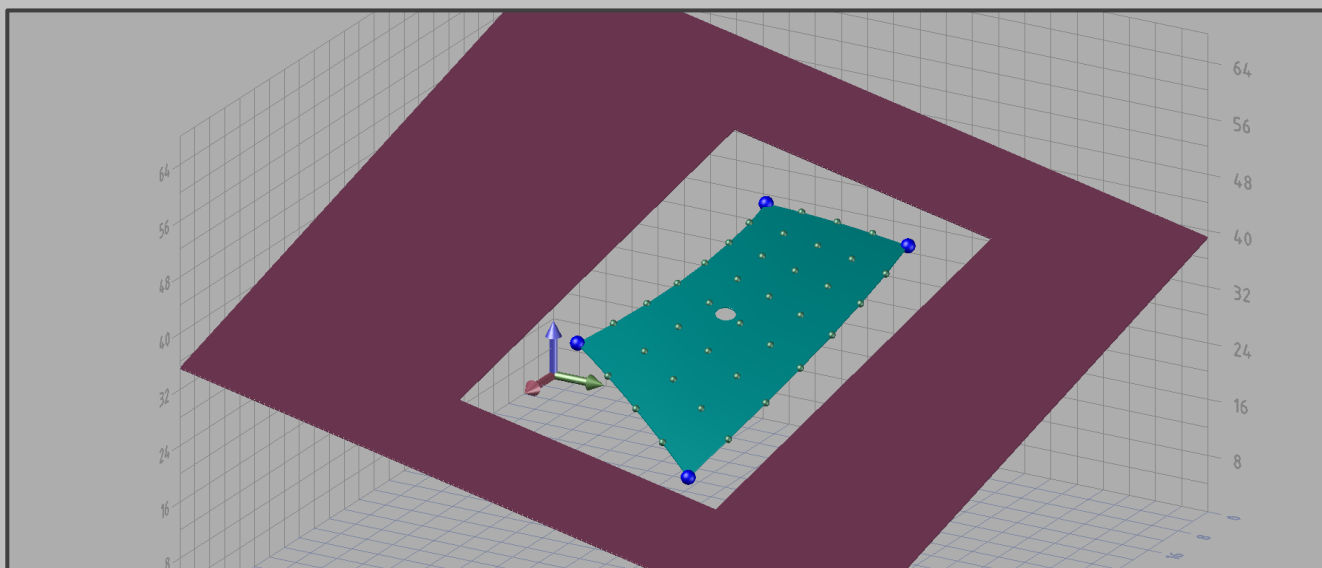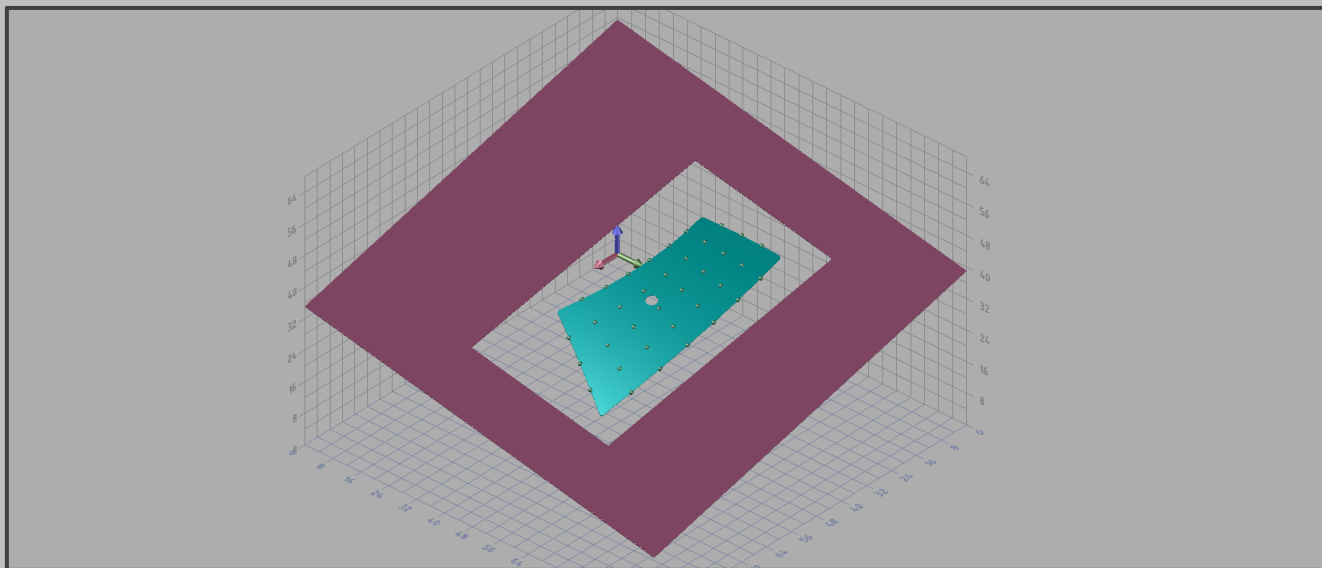Least Squares plane (infinite)

surface

points

Parallelism and Projected Zone

Parallelism and Projected Zone

Parallelism and Projected Zone

Parallelism and Projected Zone

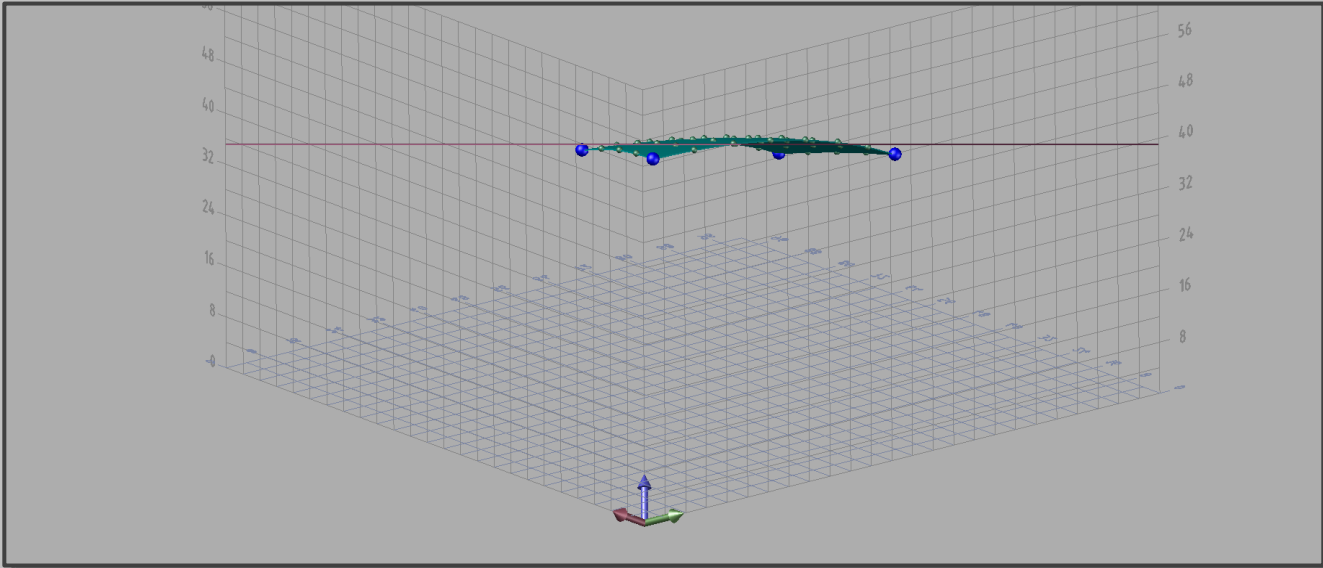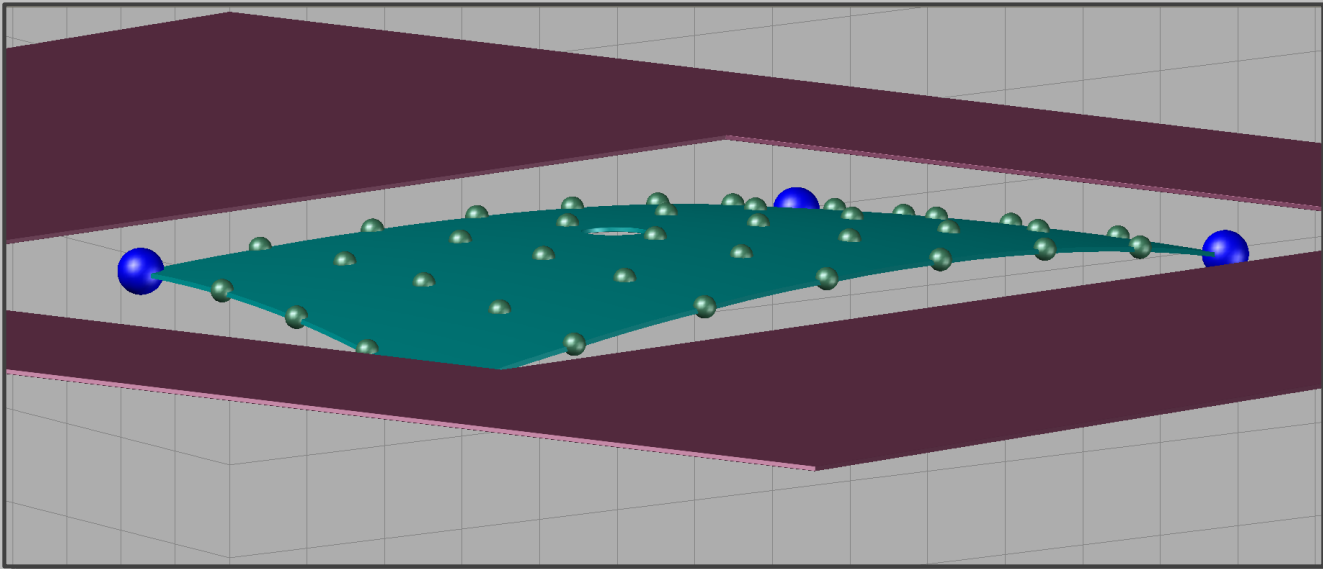Probing point on surface

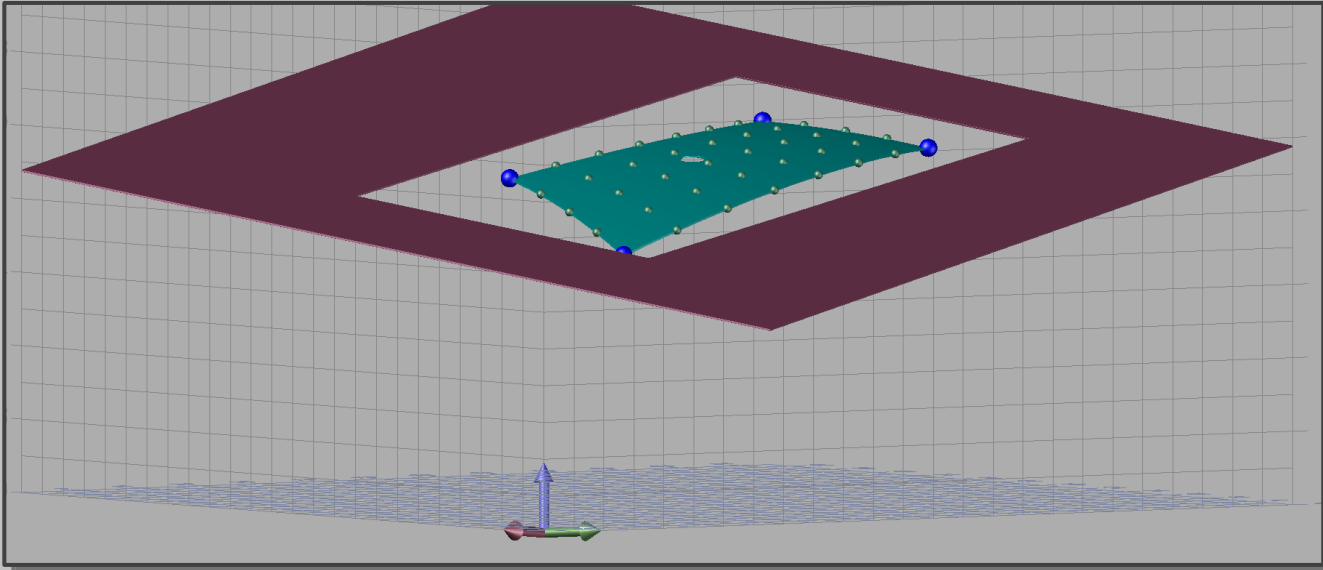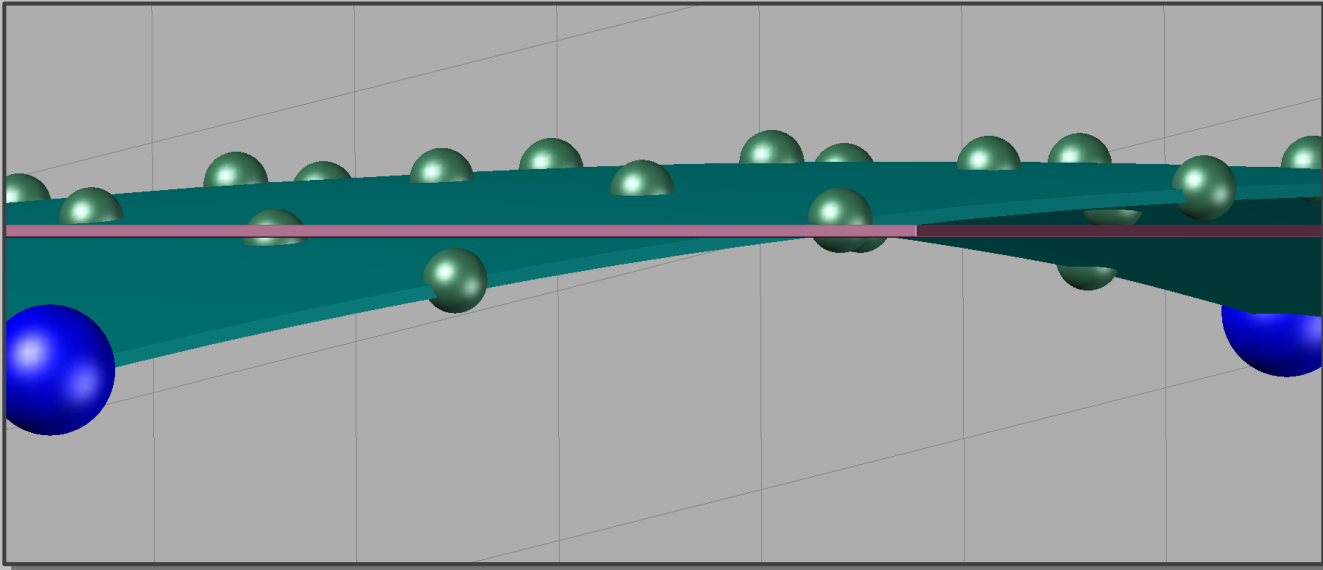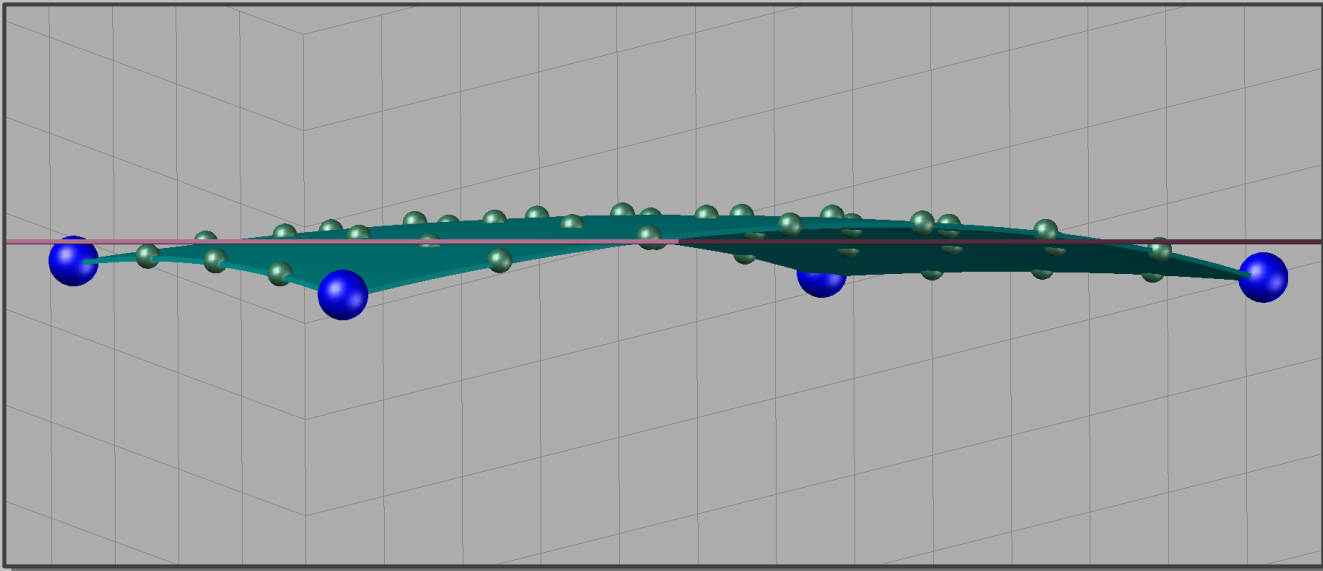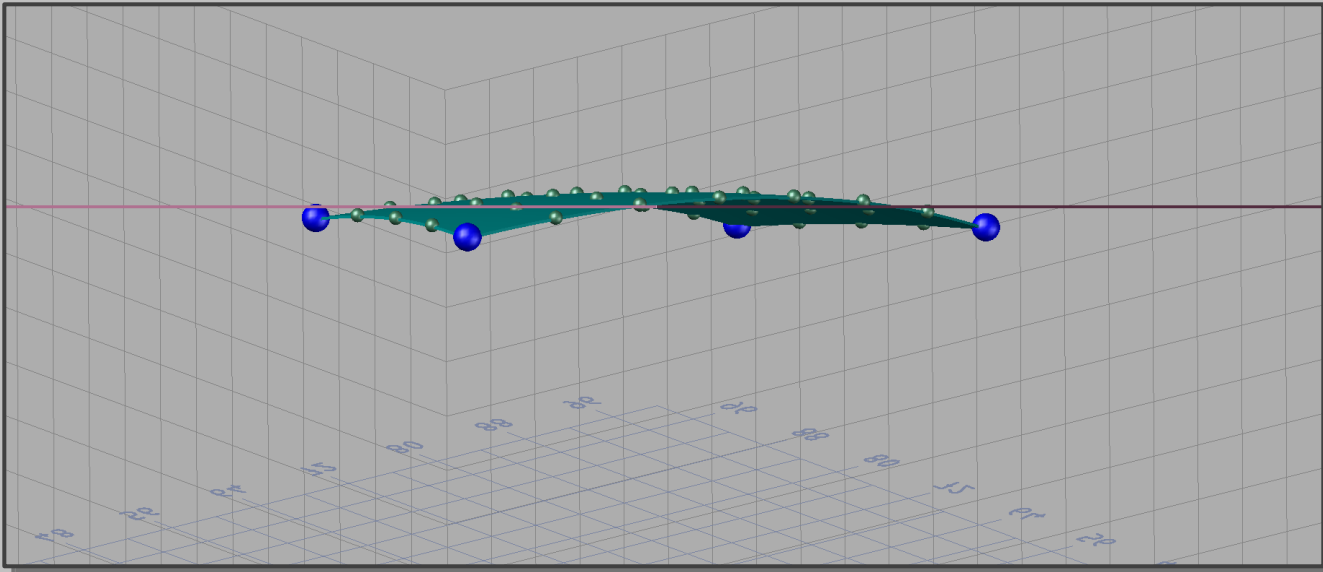Actual surface

Least Sqares plane according callout

Ⓟ Ø16

Parallelism and Projected Zone

Parallelism and Projected Zone

Least Sqares plane according callout

Actual surface

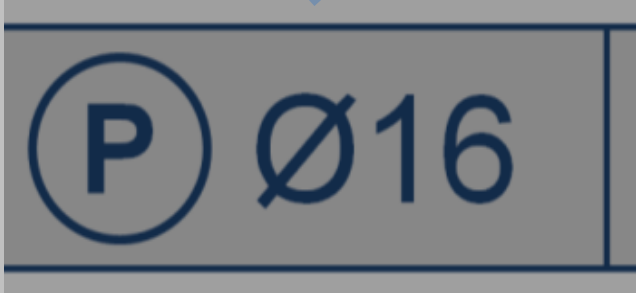This edge is not applicable when it comes to calculation of parallelism

Probing point

Edge point calculated by CALYPSO

Parallelism and Projected Zone

Point of gravity

Parallelism and Projected Zone
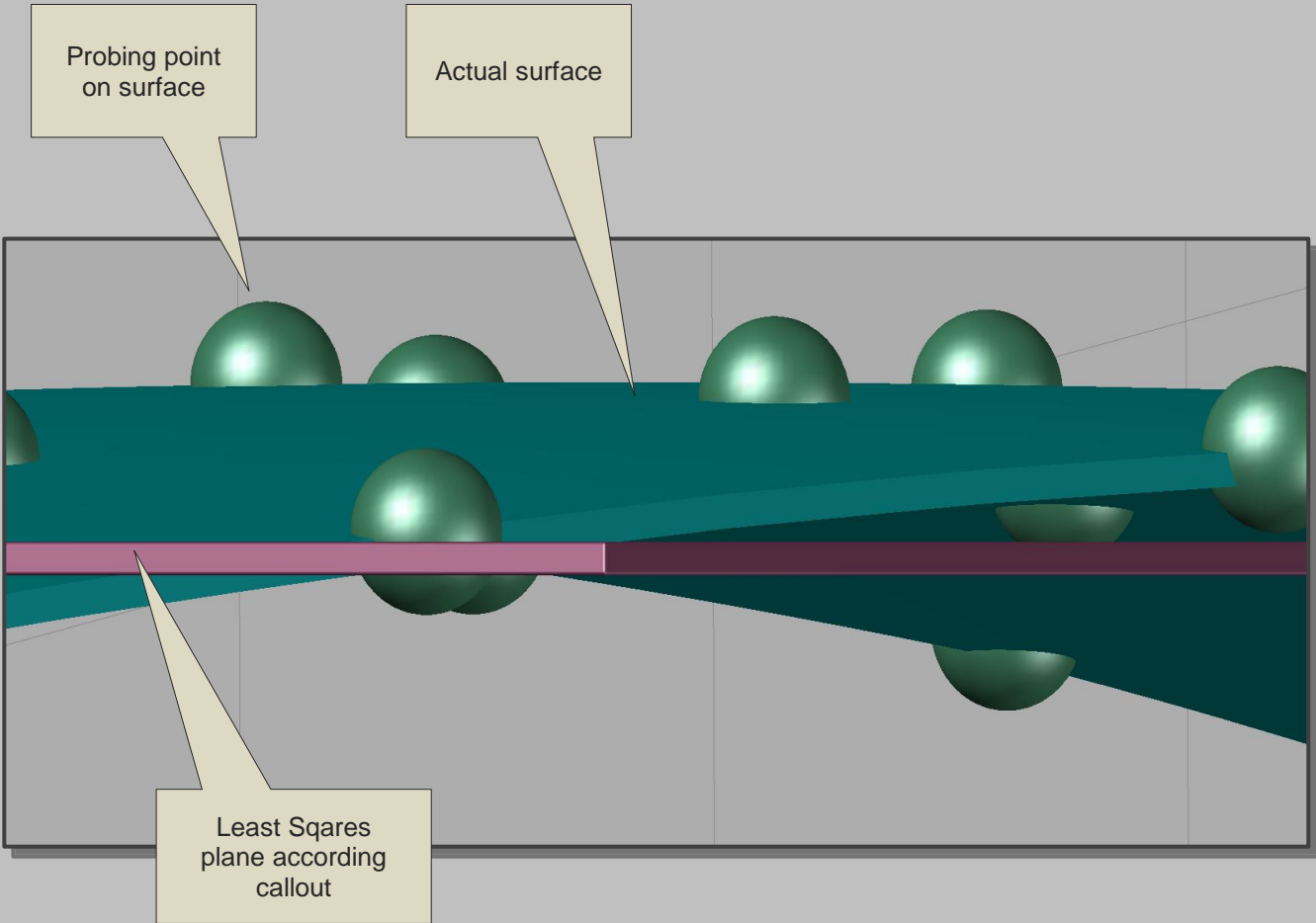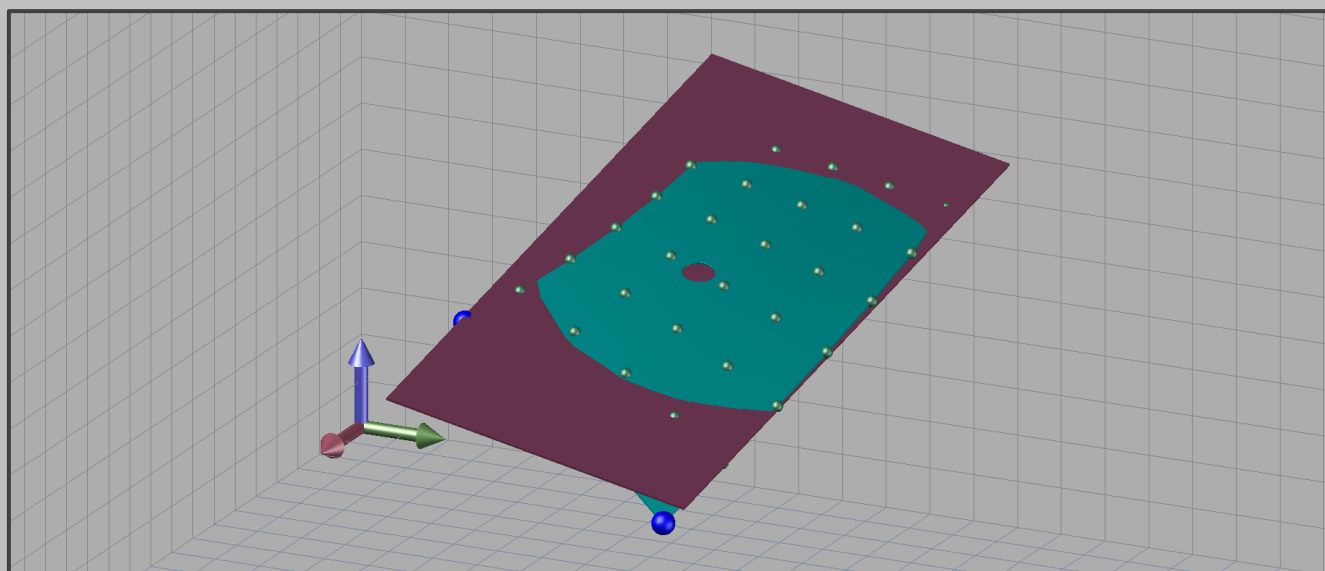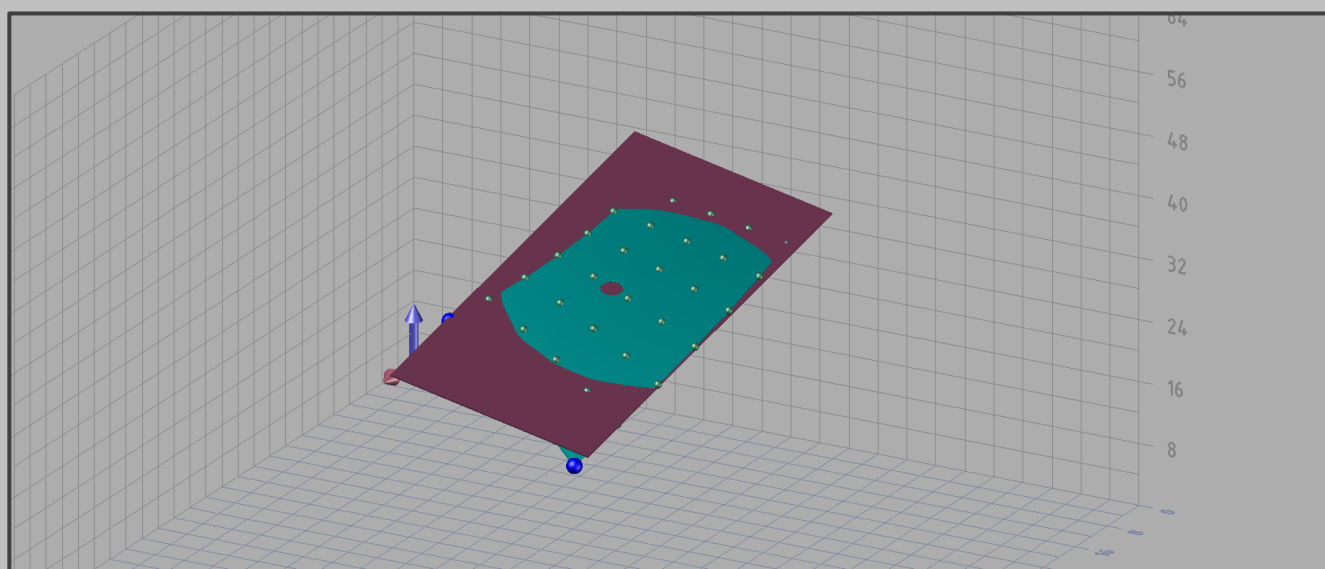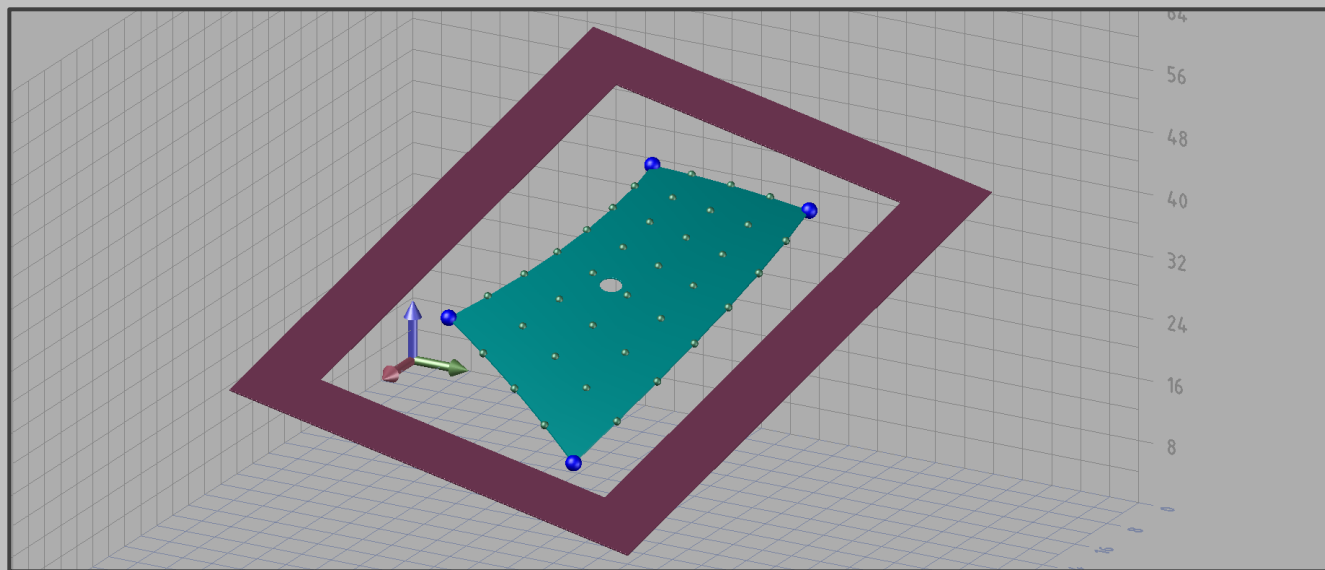

Feature
alignment
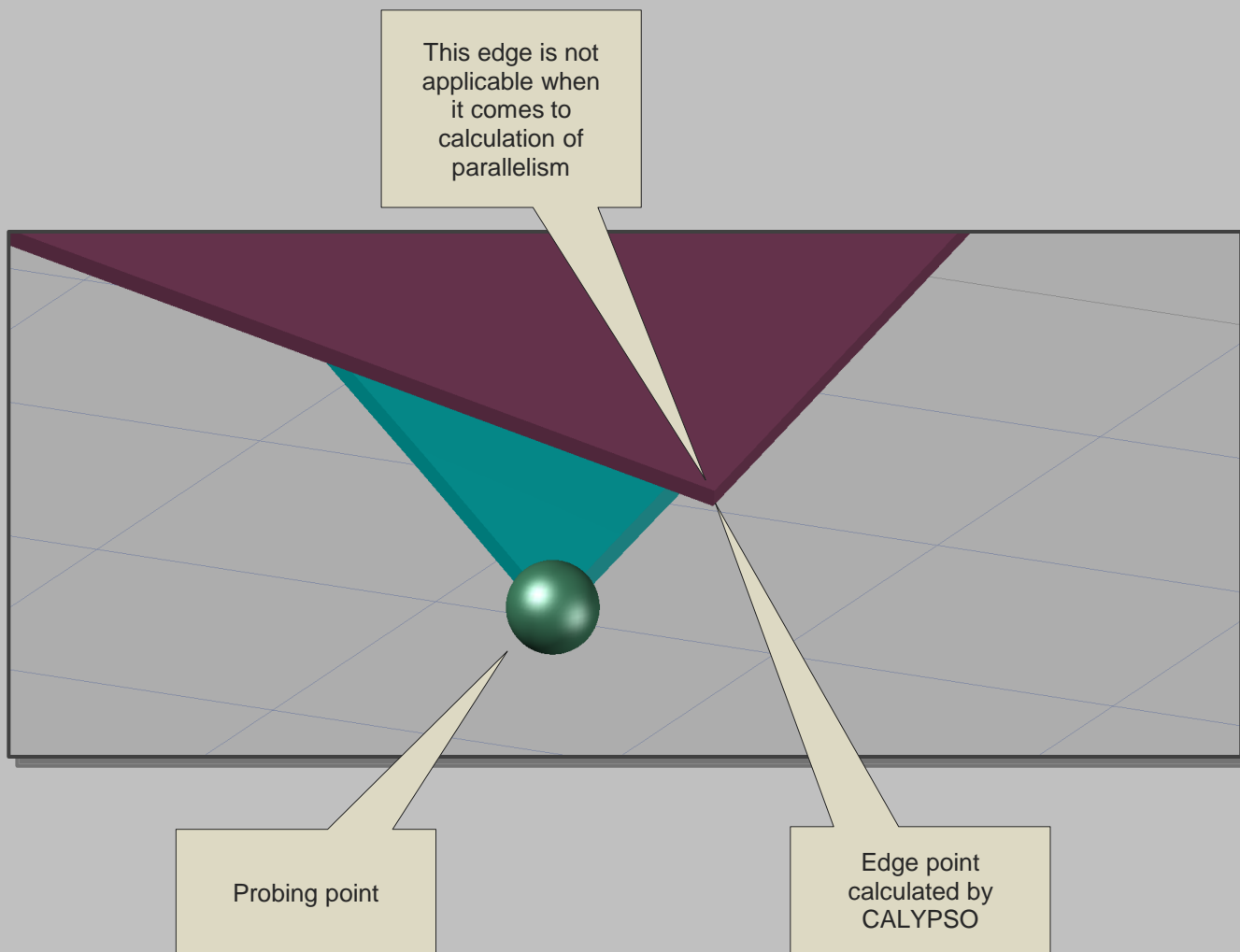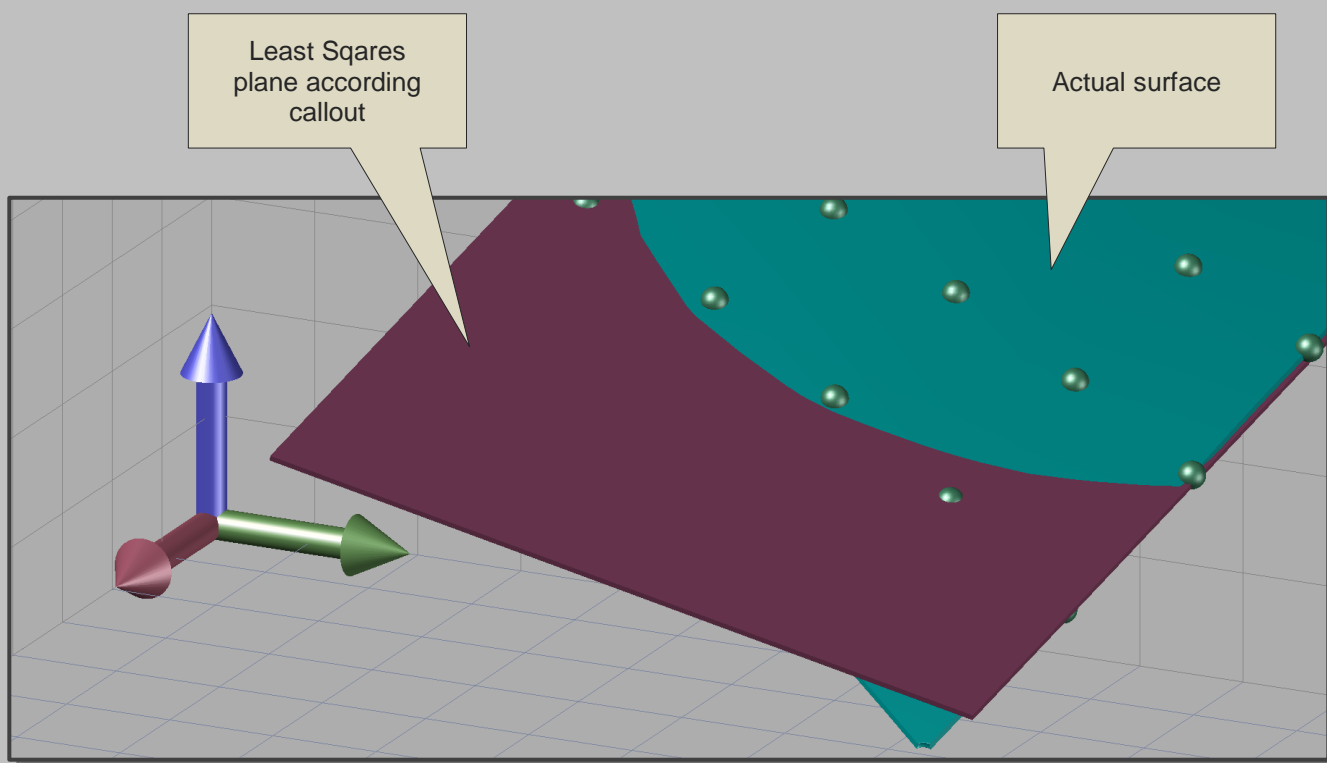

40
32
24
16

Feature
alignment

Parallelism and Projected Zone

Parallelism and Projected Zone
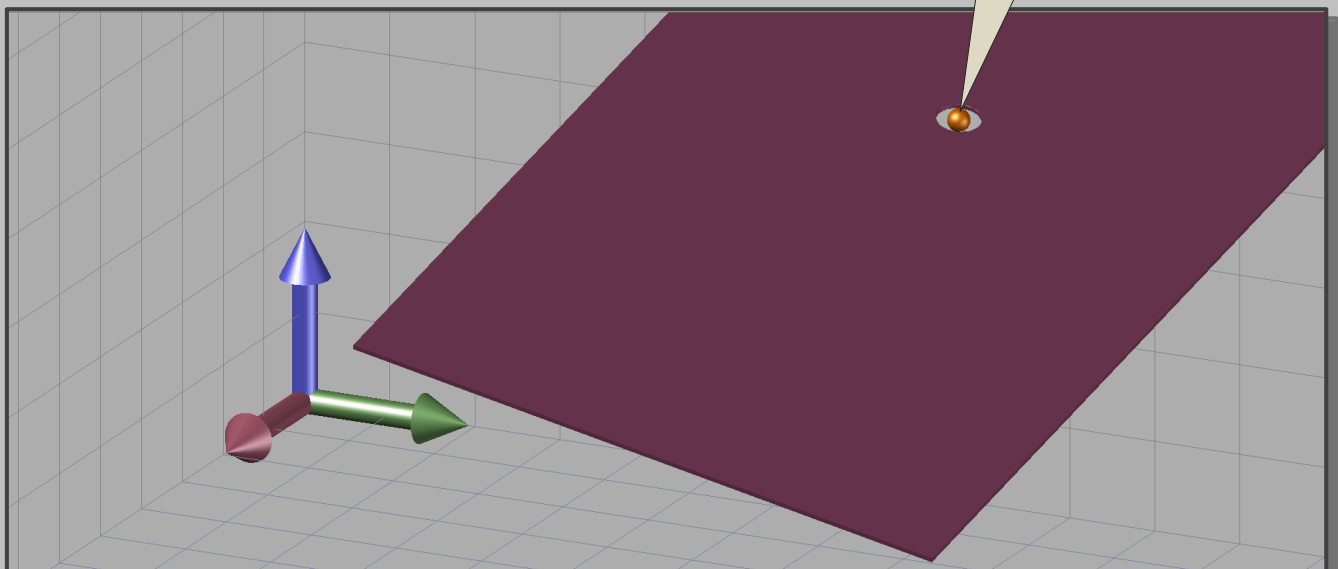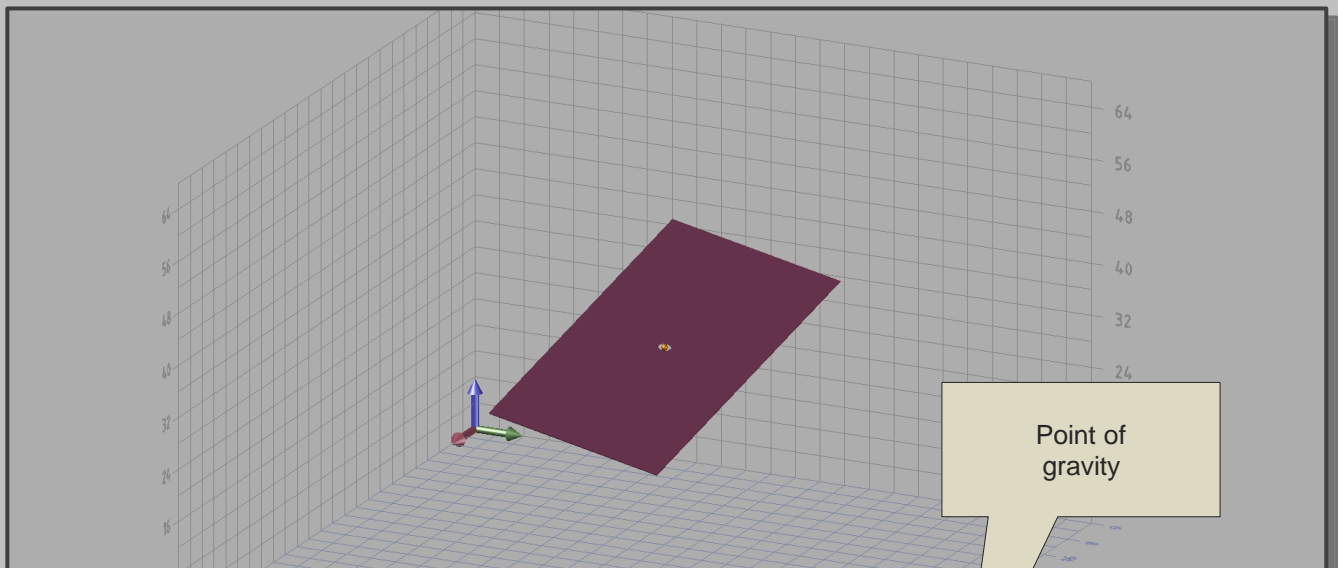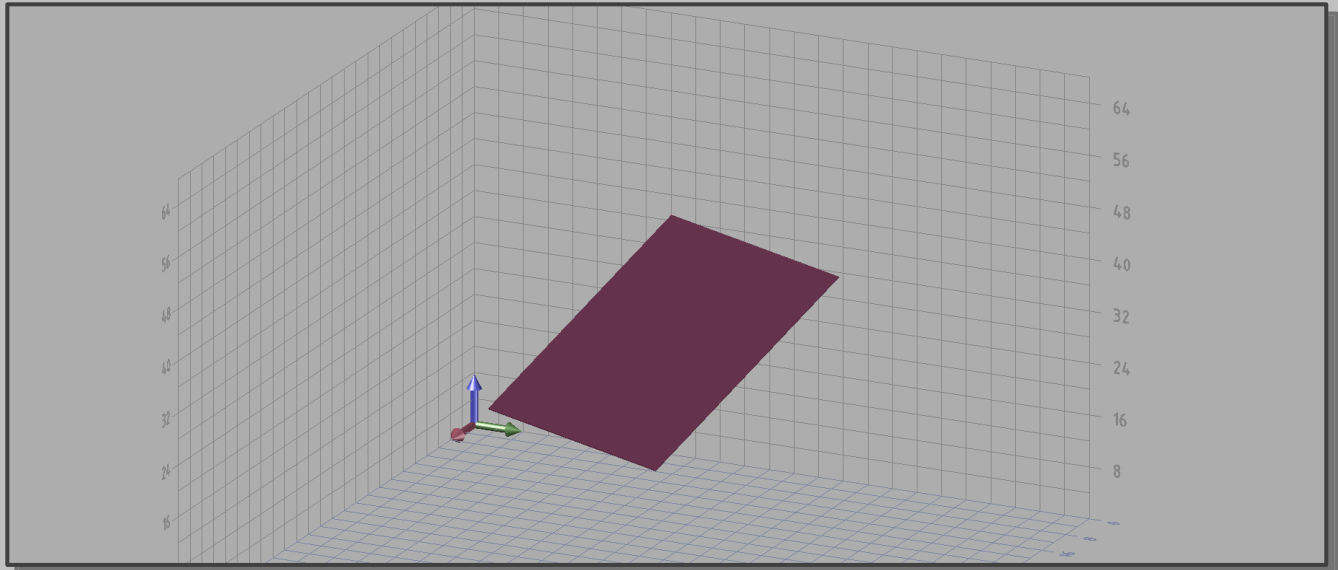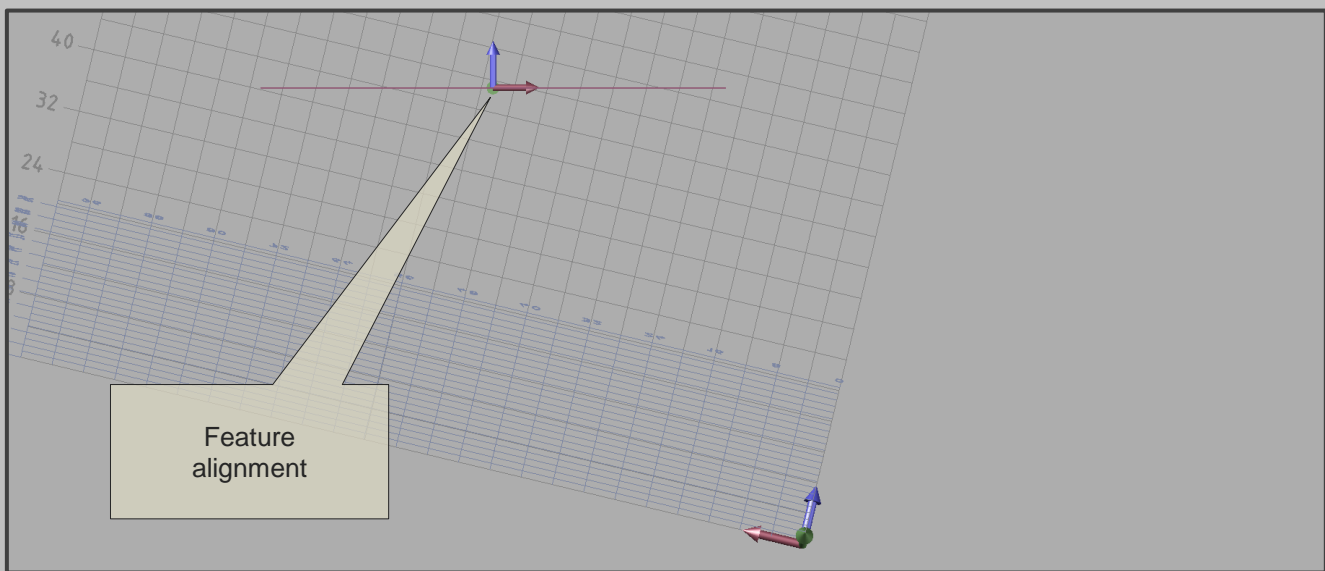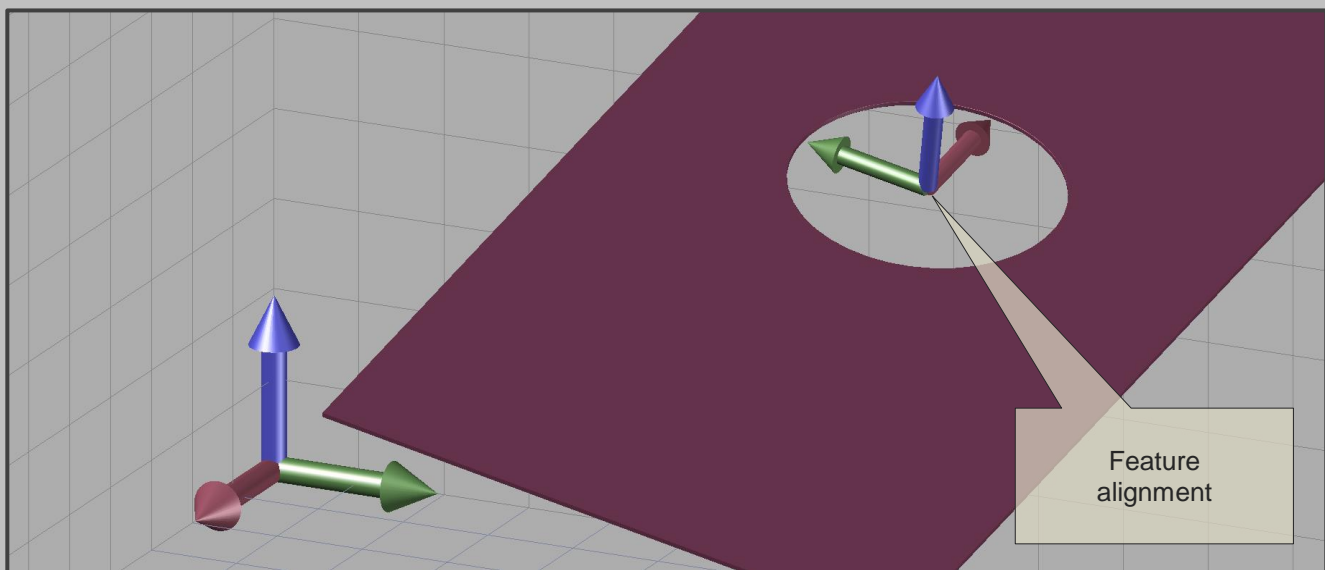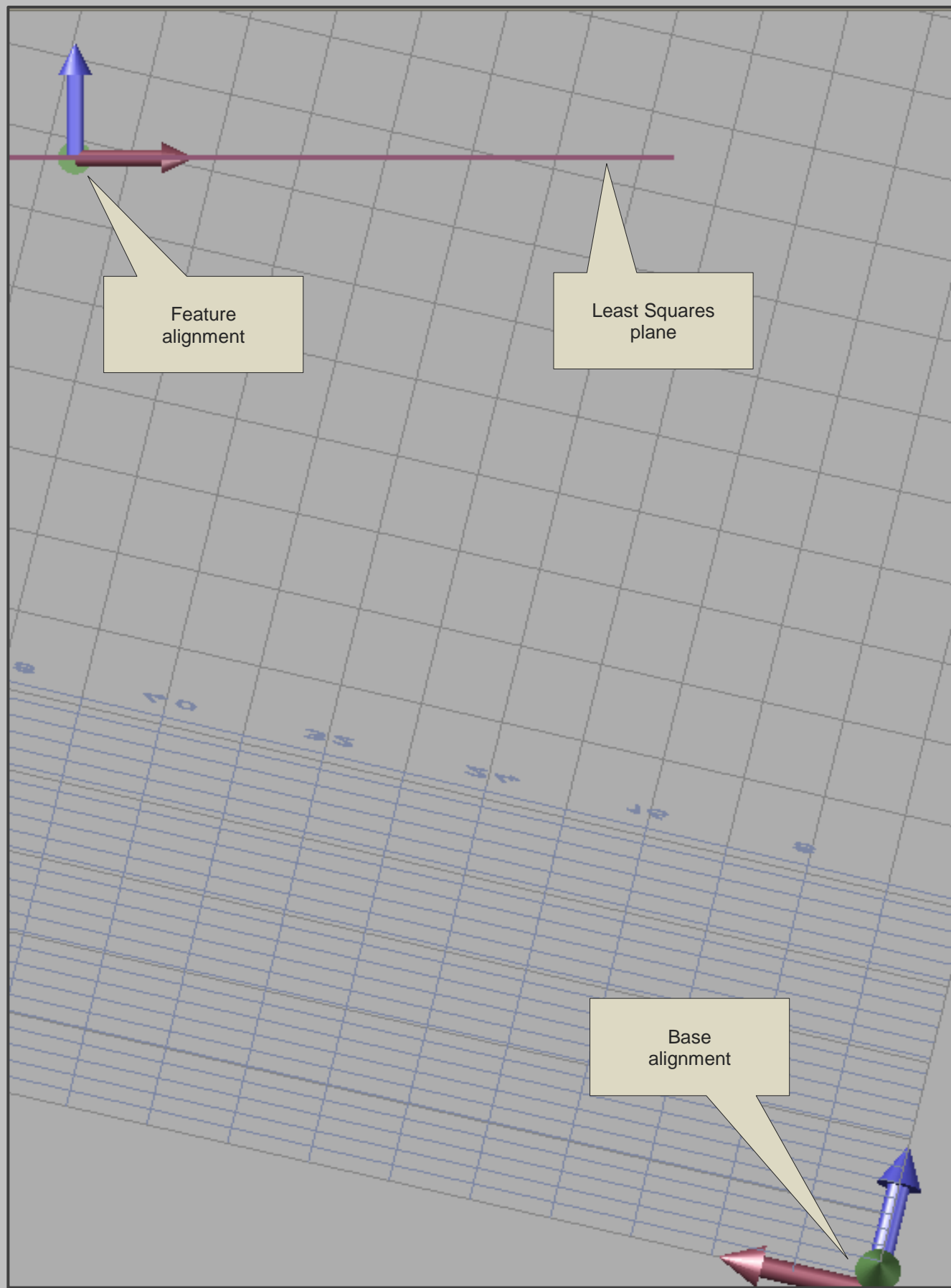

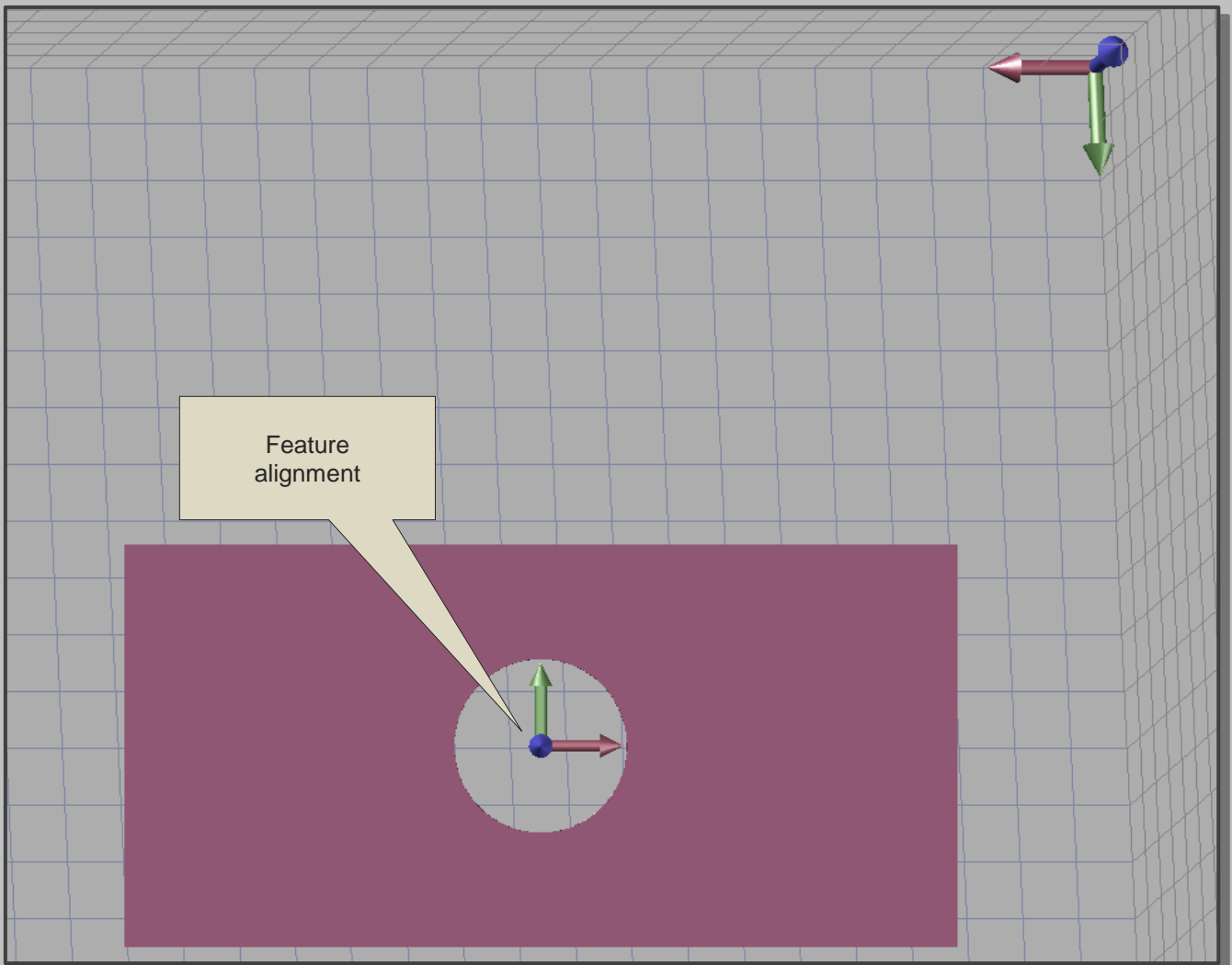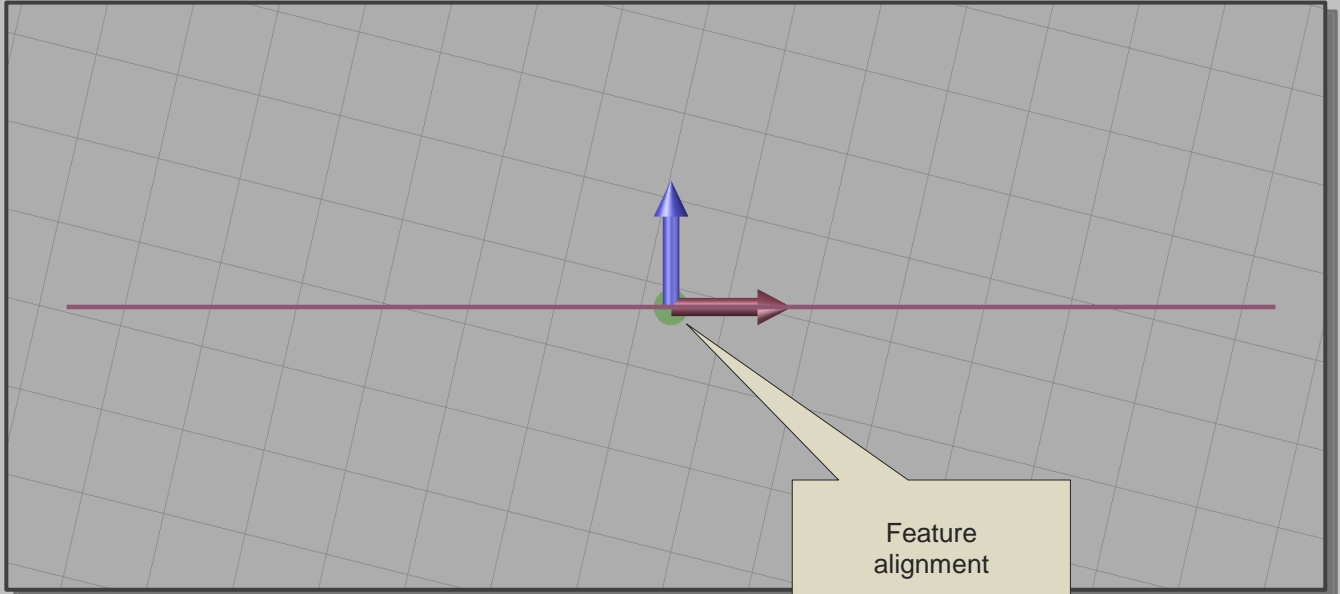Feature alignment

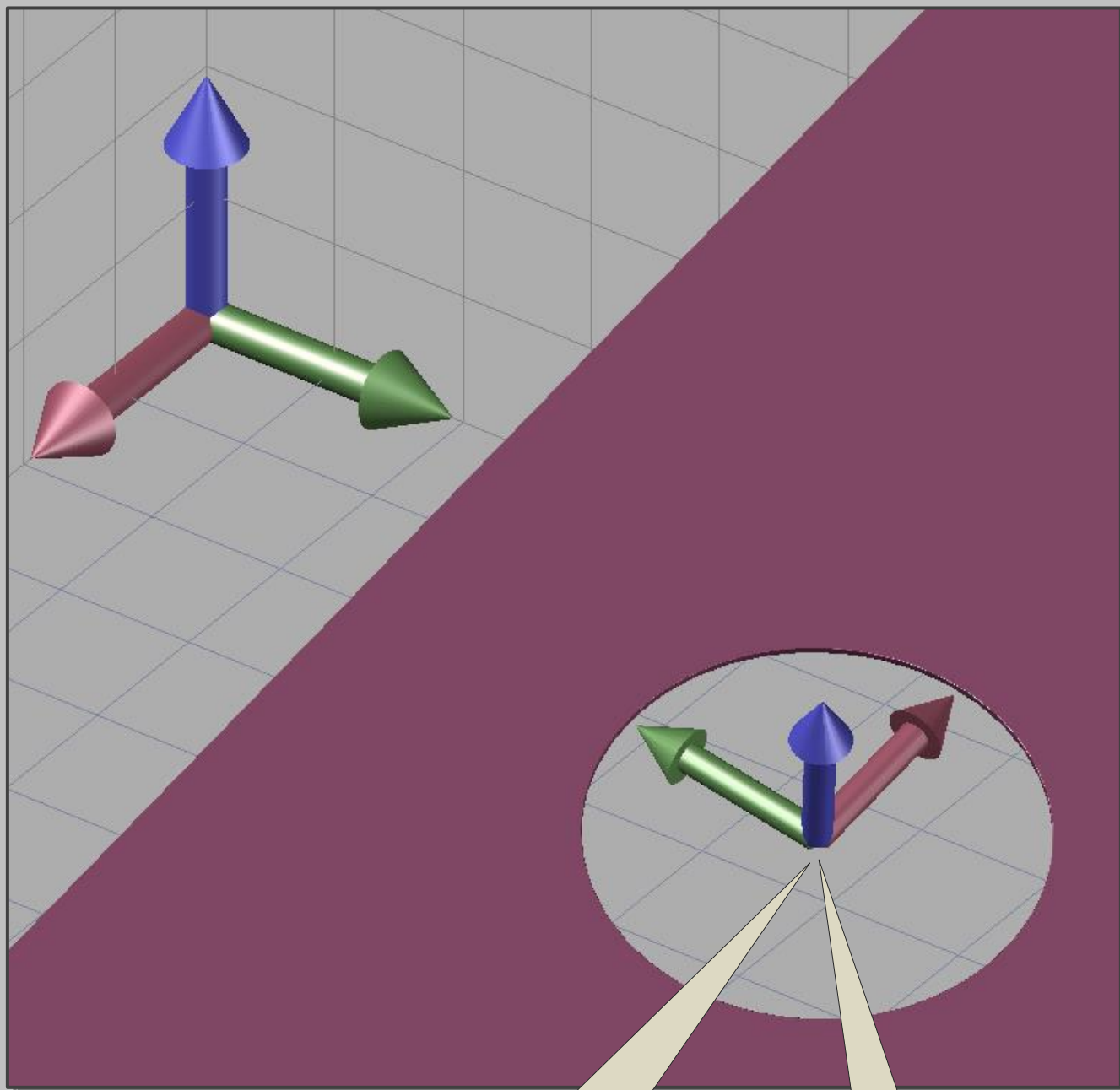Feature alignment
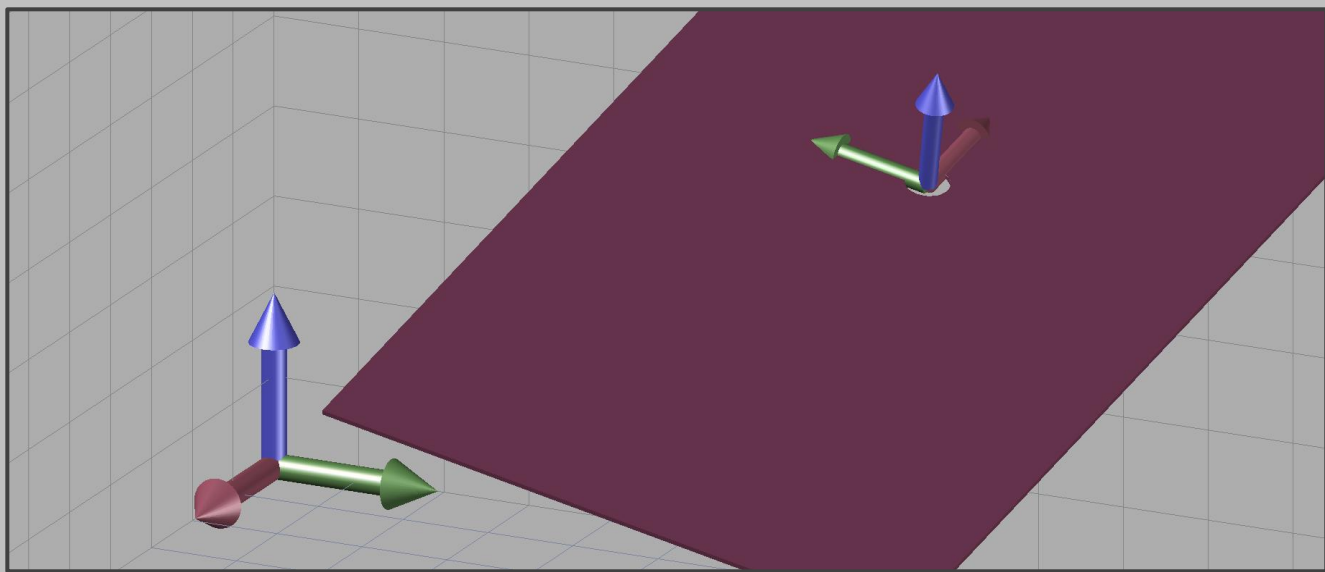
Parallelism and Projected Zone

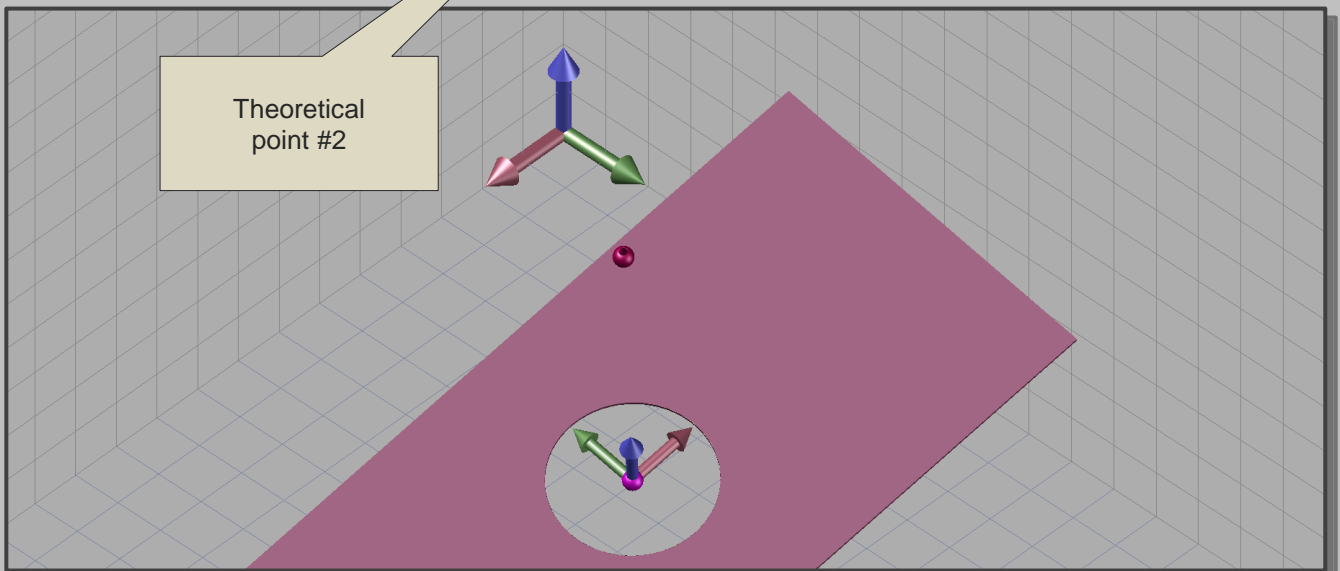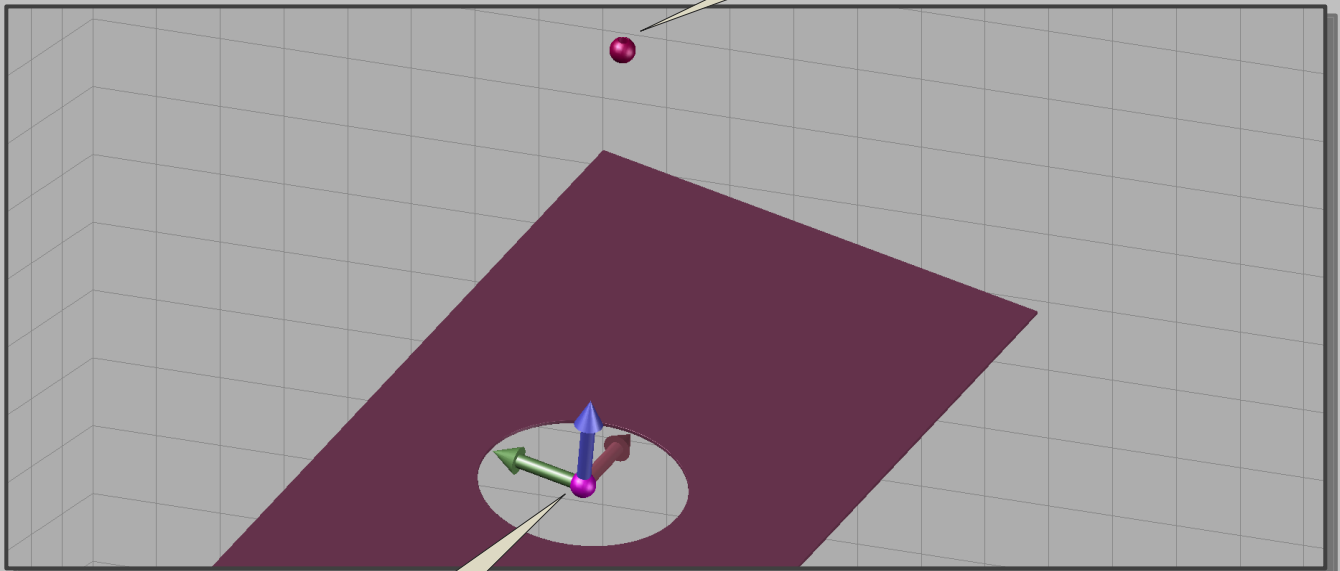Creation of an alignment in order to construct a "Plane-Vector".

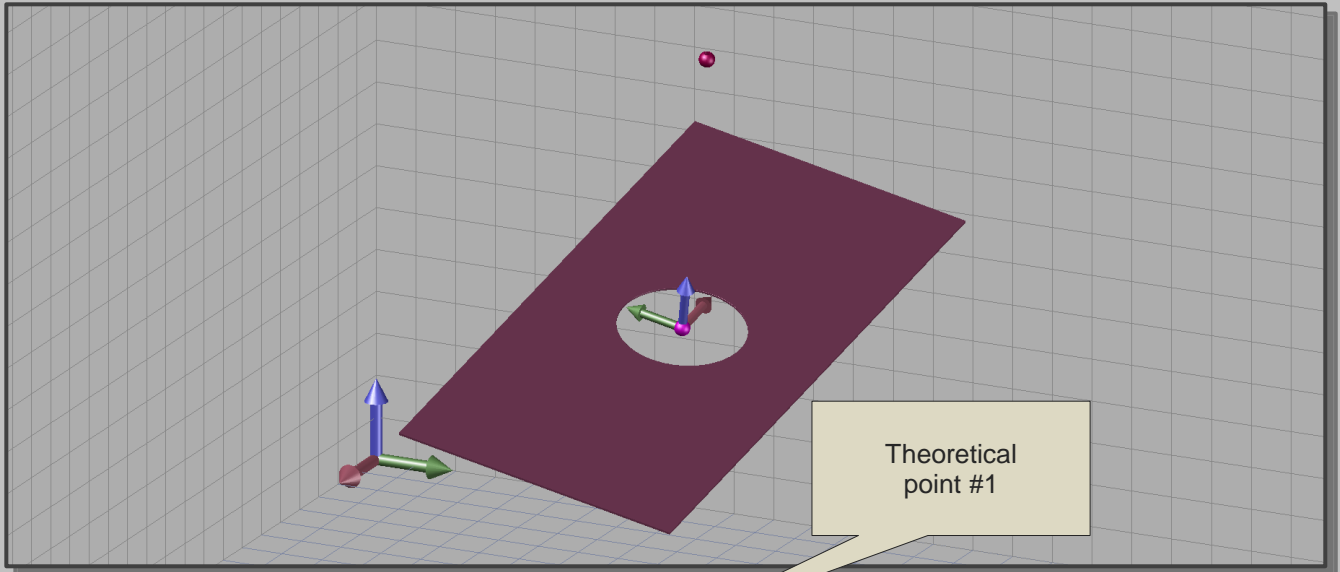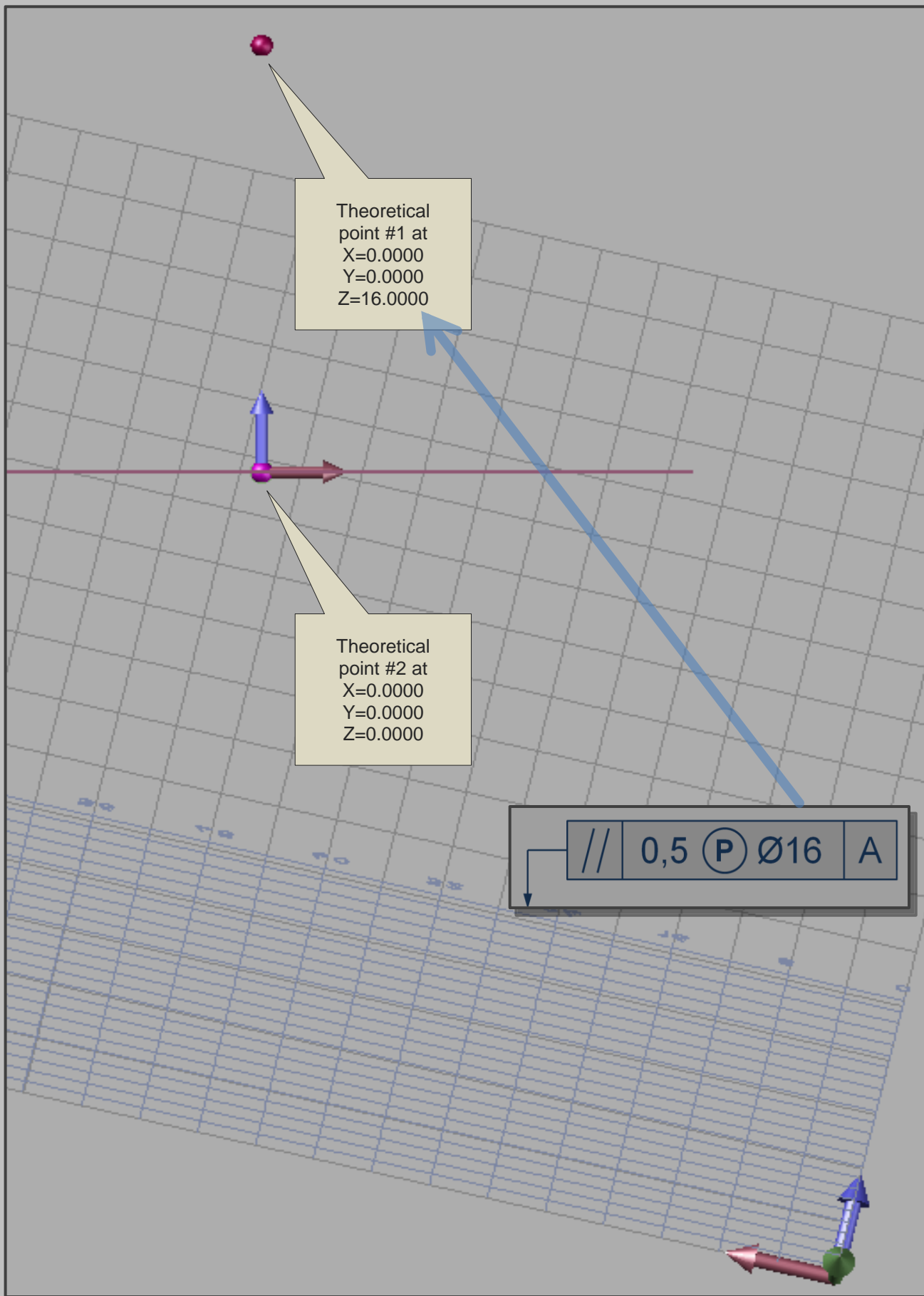"Point of Gravity" as the origin is optional.

Spatial alignment
of Least Squares plane.
Point of gravity is
origin in X/Y/Z.
Planar alignment optional.

Point of
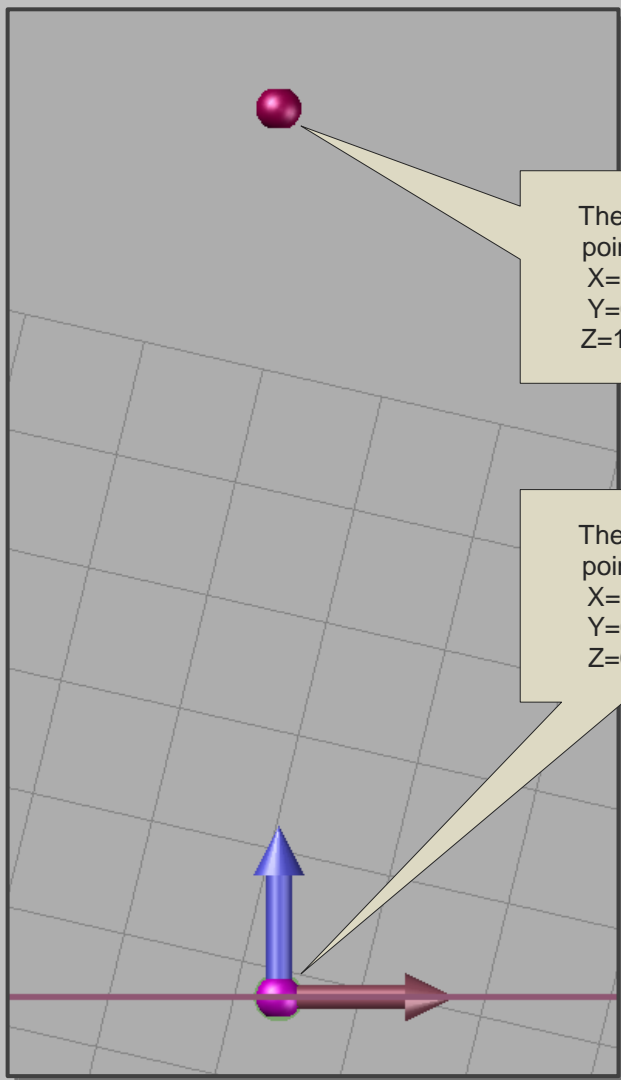gravity

Parallelism and Projected Zone

Theoretical point #1

Theoretical point #2

Parallelism and Projected Zone

Theoretical
point #1 at
X=0.0000
Y=0.0000
Z=16.0000

Theoretical
point #2 at
X=0.0000
Y=0.0000
Z=0.0000
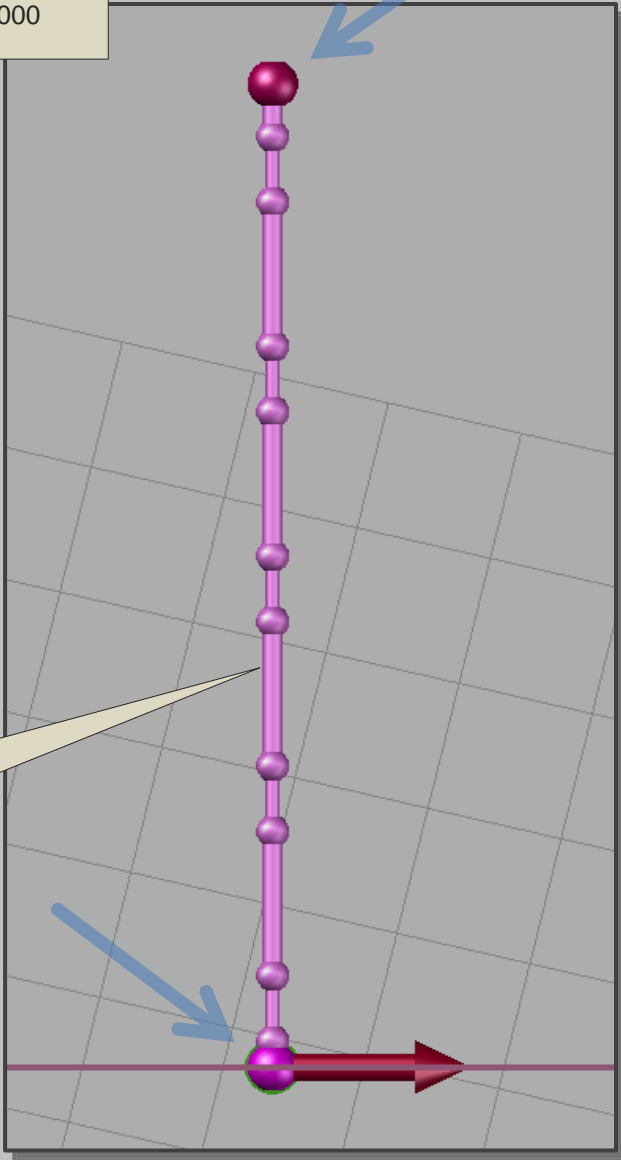
// | 0,5 (P) Ø16 | A

Parallelism and Projected Zone
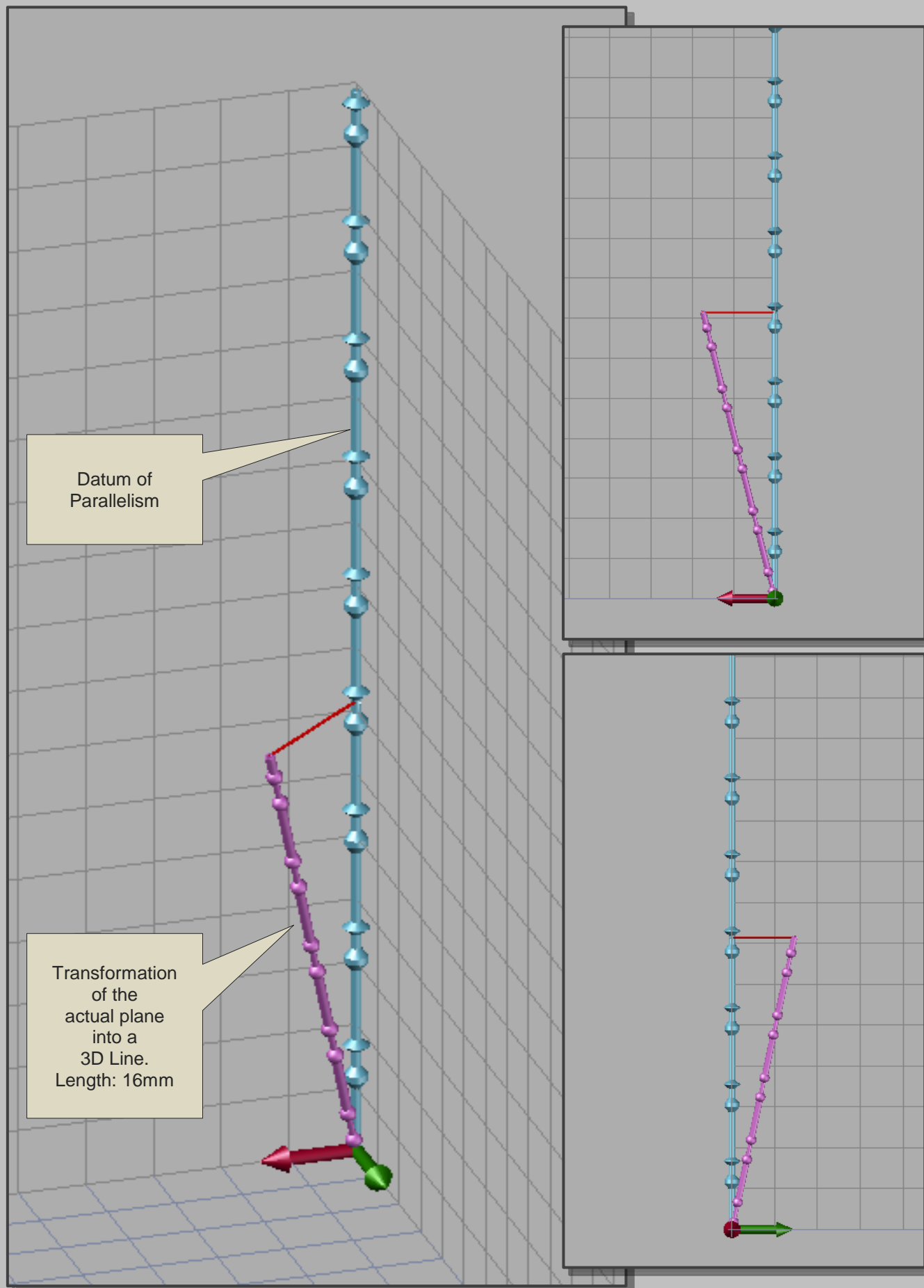
Theoretical
point #1 at
X=0.0000
Y=0.0000
Z=16.0000

Theoretical
point #2 at
X=0.0000
Y=0.0000
Z=0.0000

3D Line
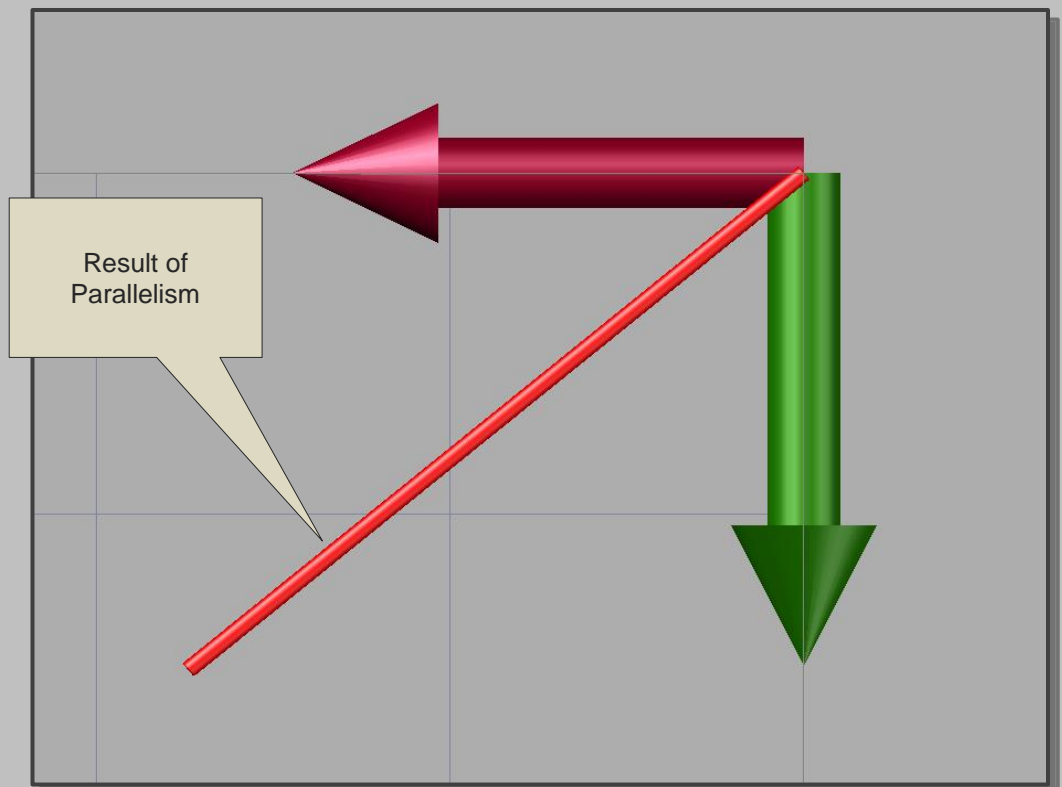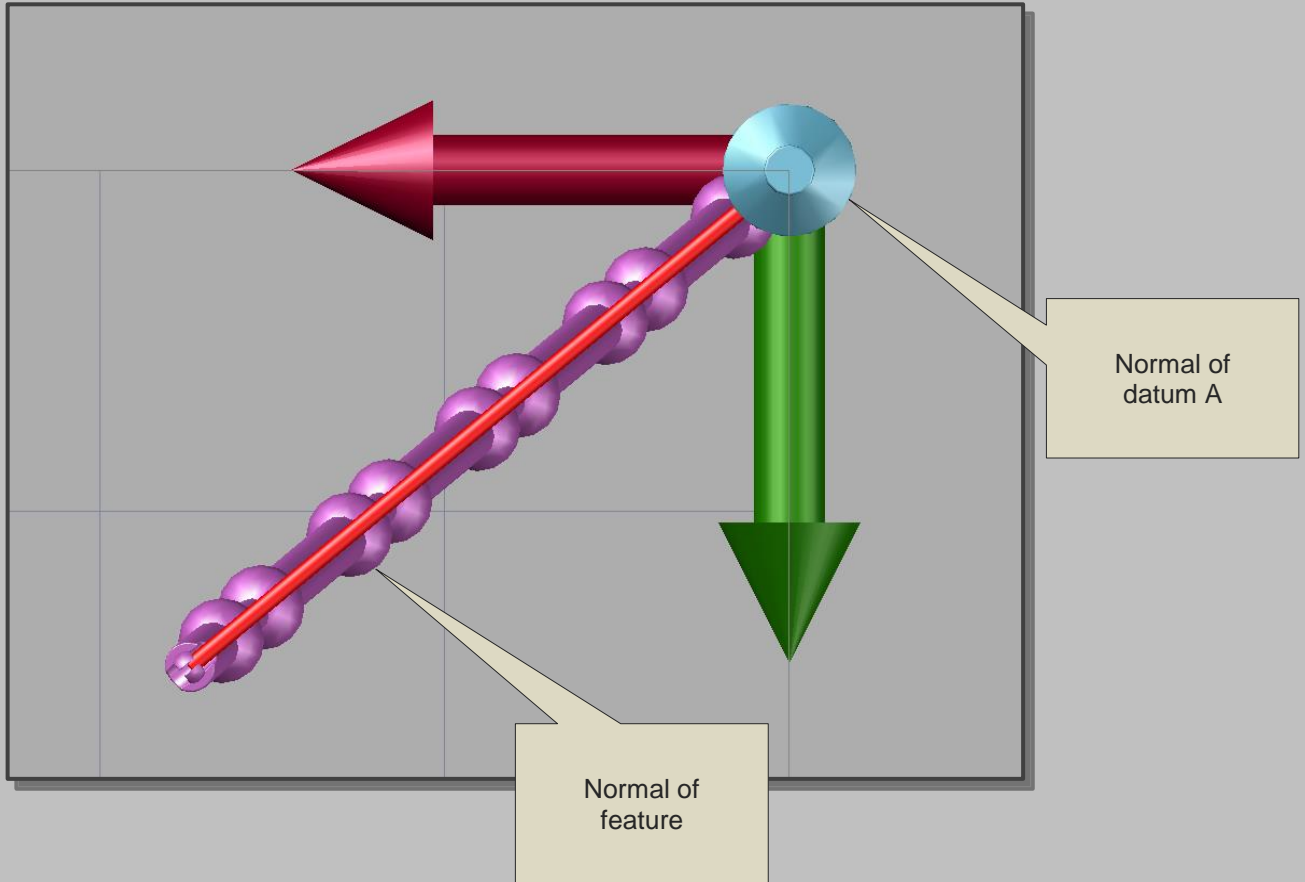made of
two points

A feature of Parallelism

Parallelism and Projected Zone

Datum of Parallelism

Transformation of the actual plane into a 3D Line. Length: 16mm

Parallelism and Projected Zone

Normal of datum A

Normal of feature

Result of Parallelism

Parallelism and Projected Zone

Result of Parallelism.

(P) Ø16