

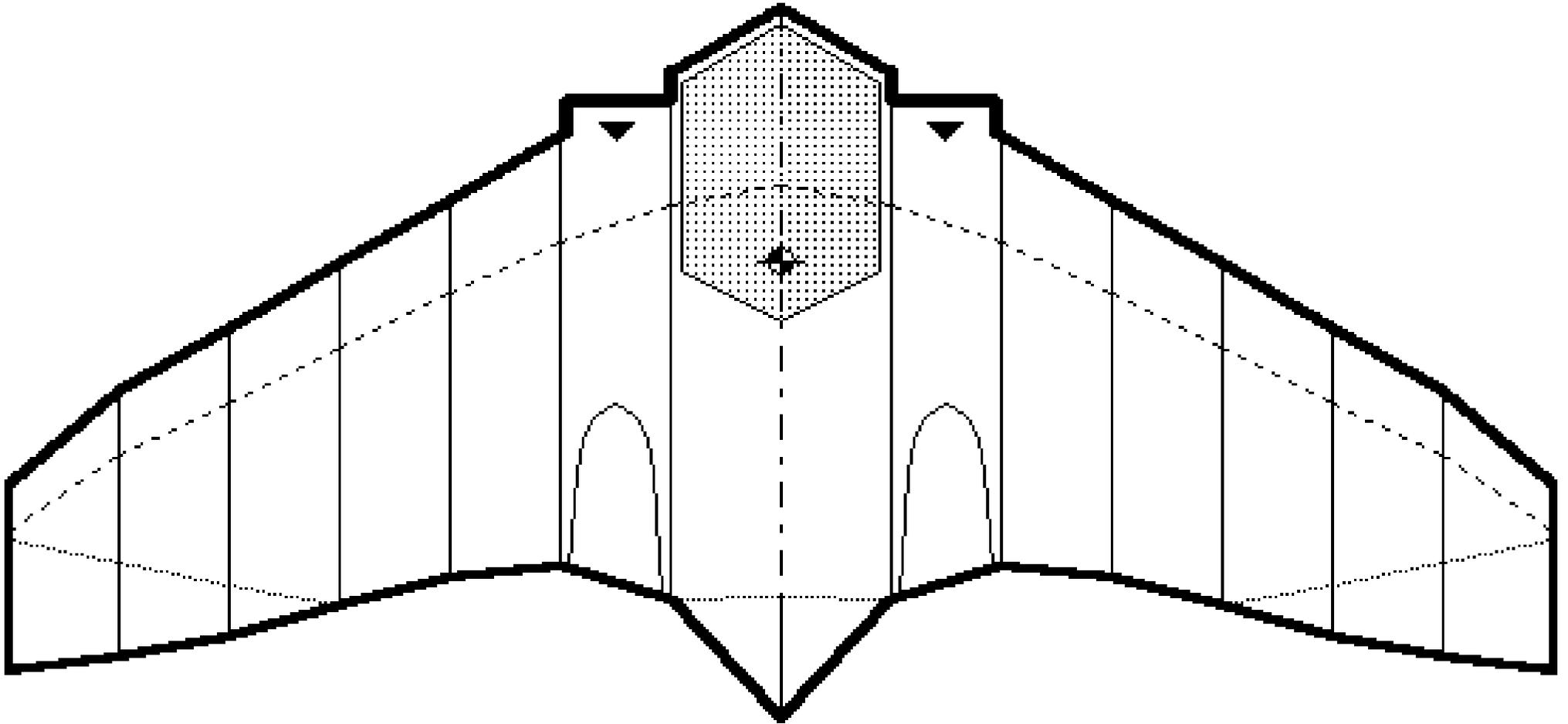
Konstruktionspläne zum Bau des Nurflügelflugzeuges

ScV13e

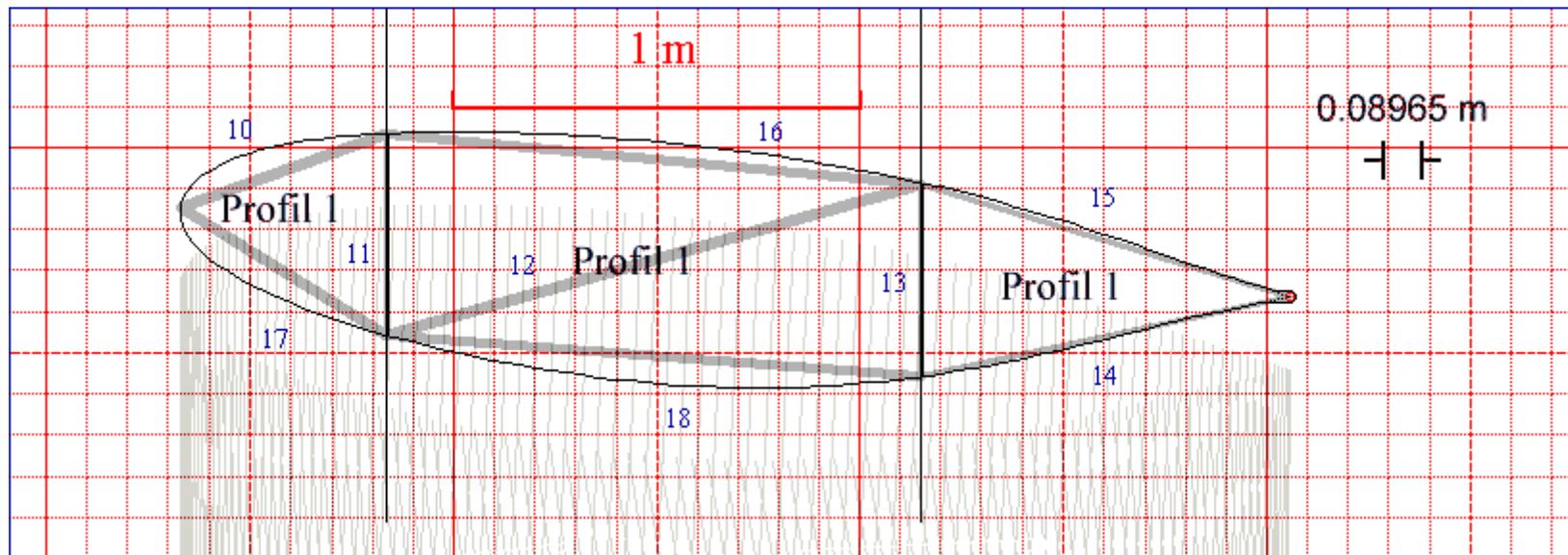
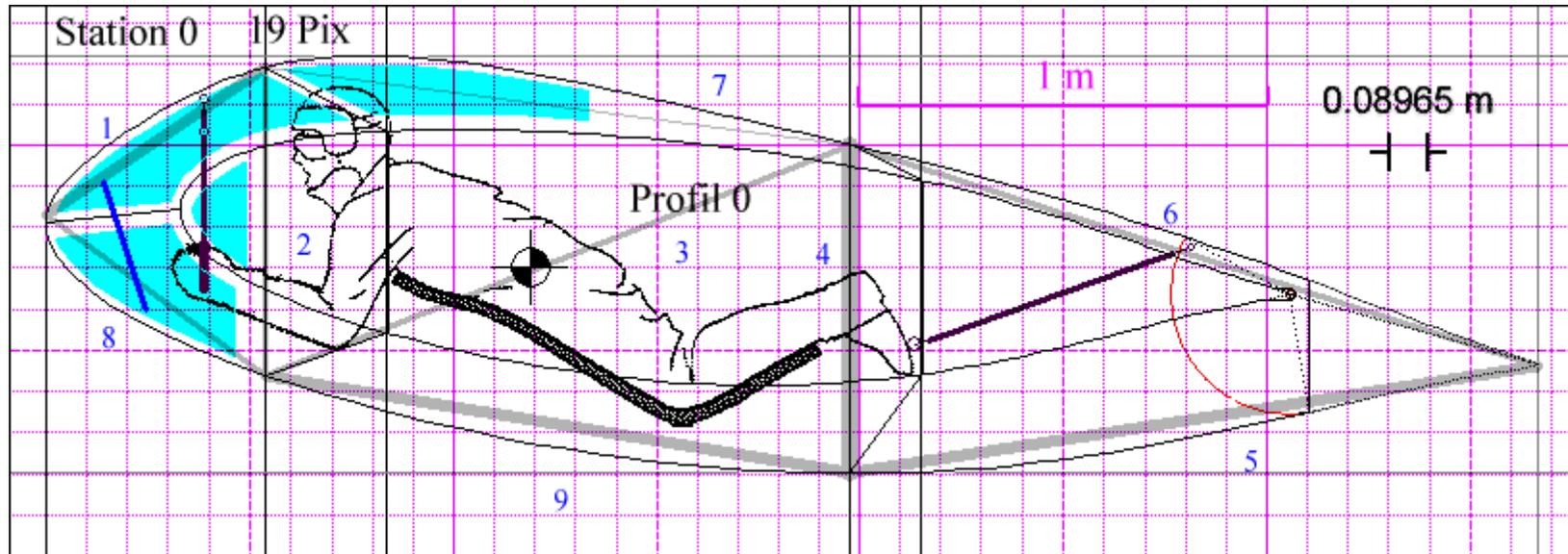
Dipl.Ing. (FH) Kapt. Wolf Scheuermann

Forschungskontor, Hamburg 2015

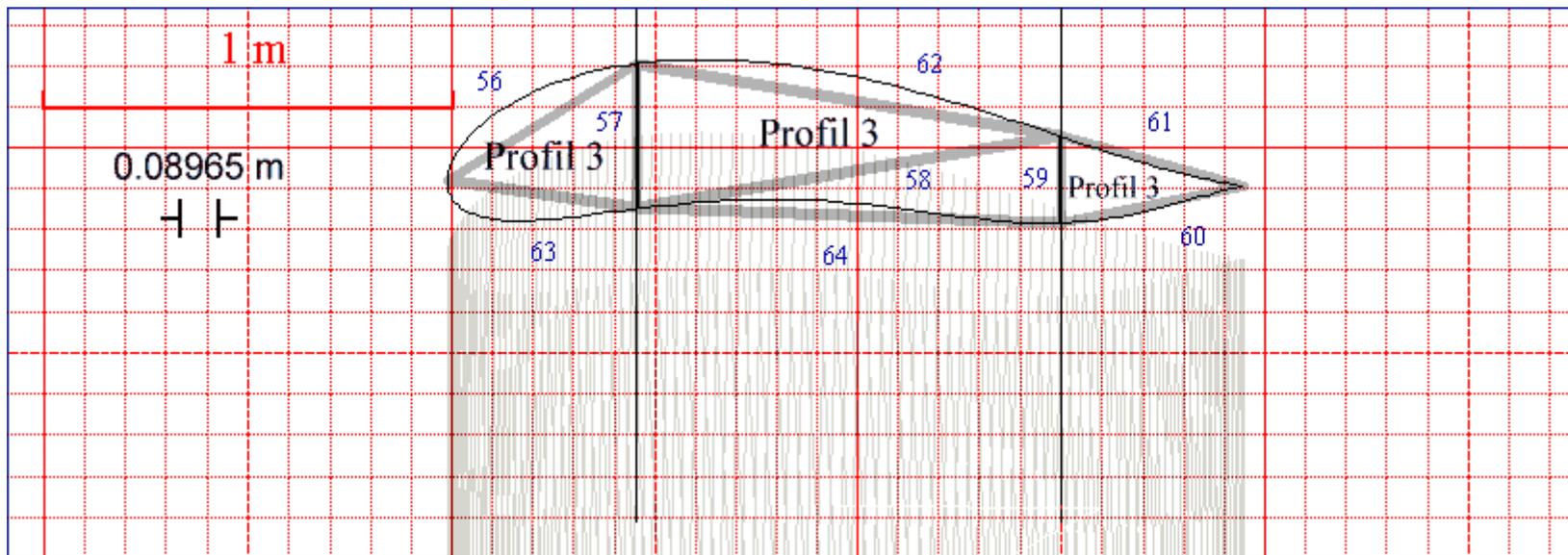
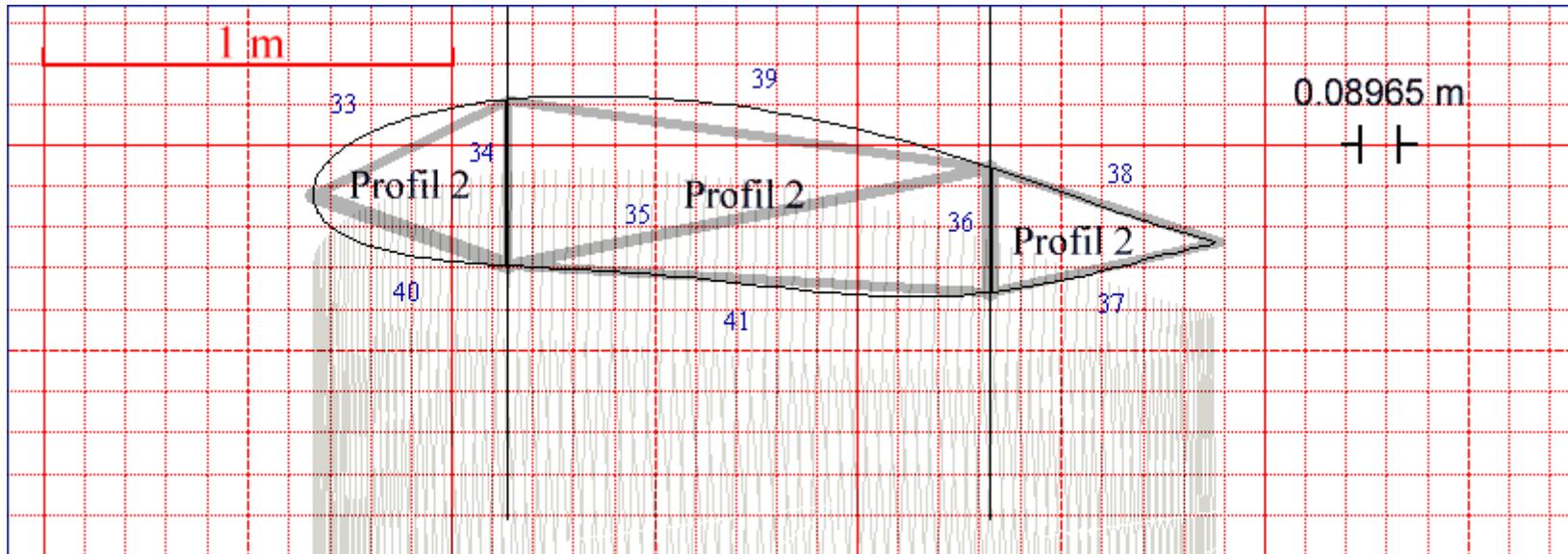
Horizontalplan

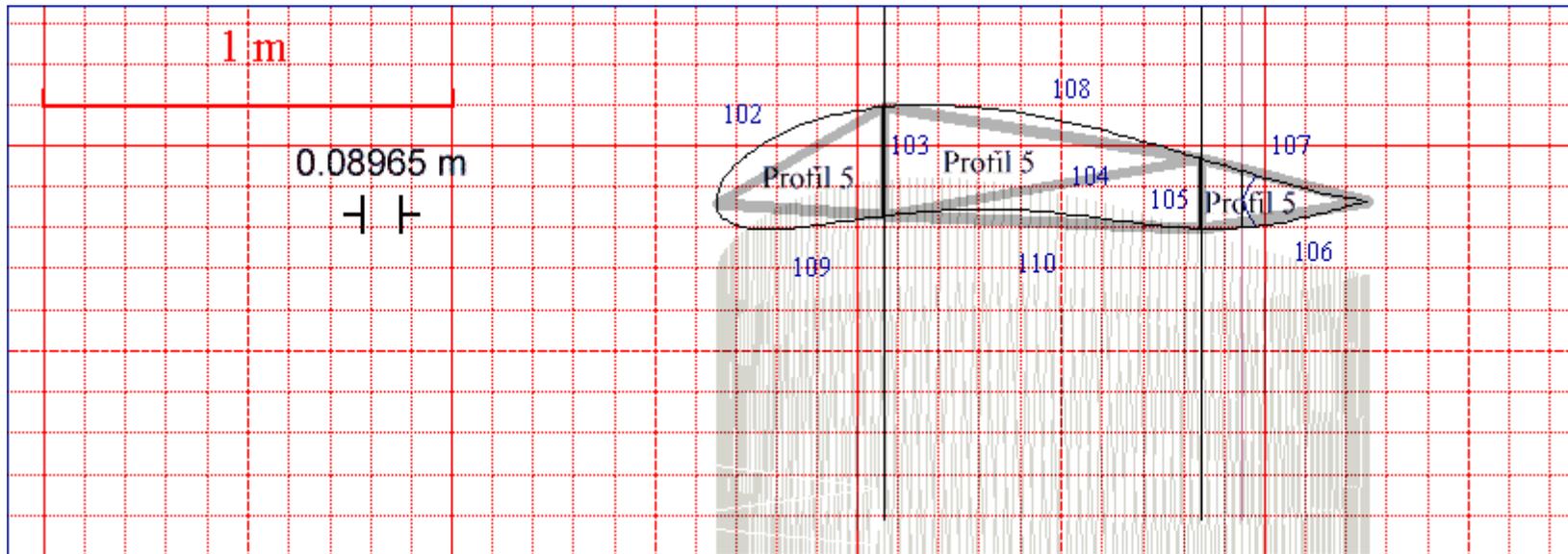
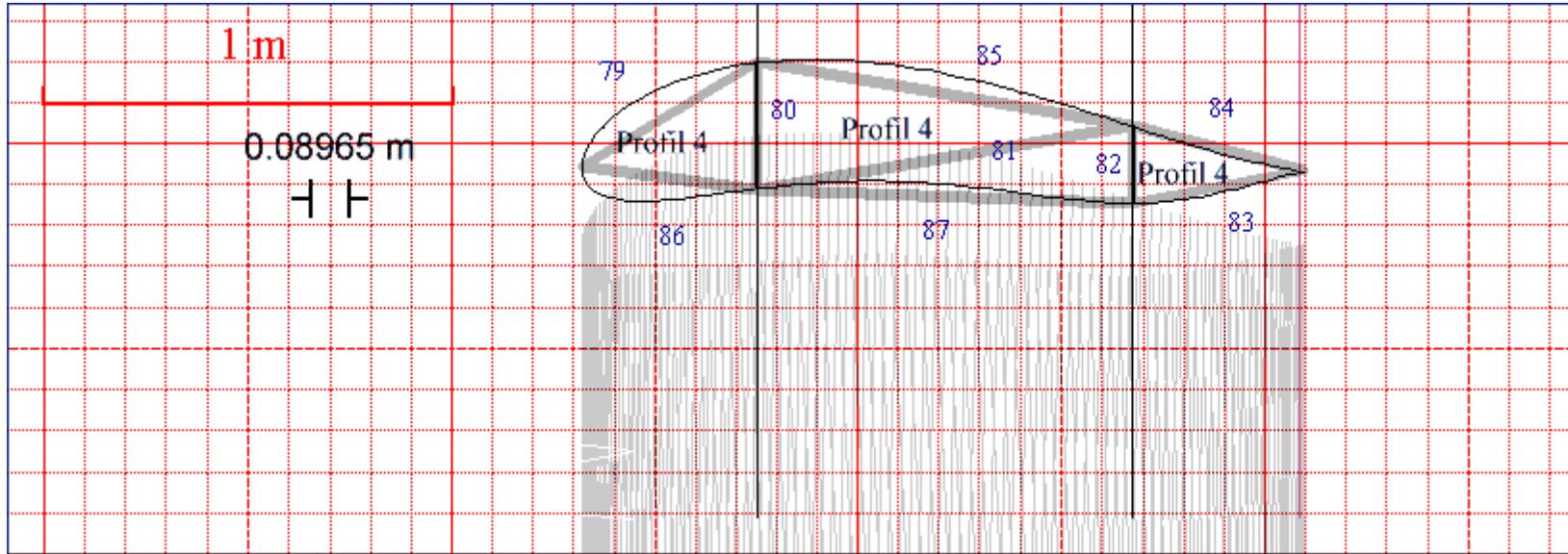


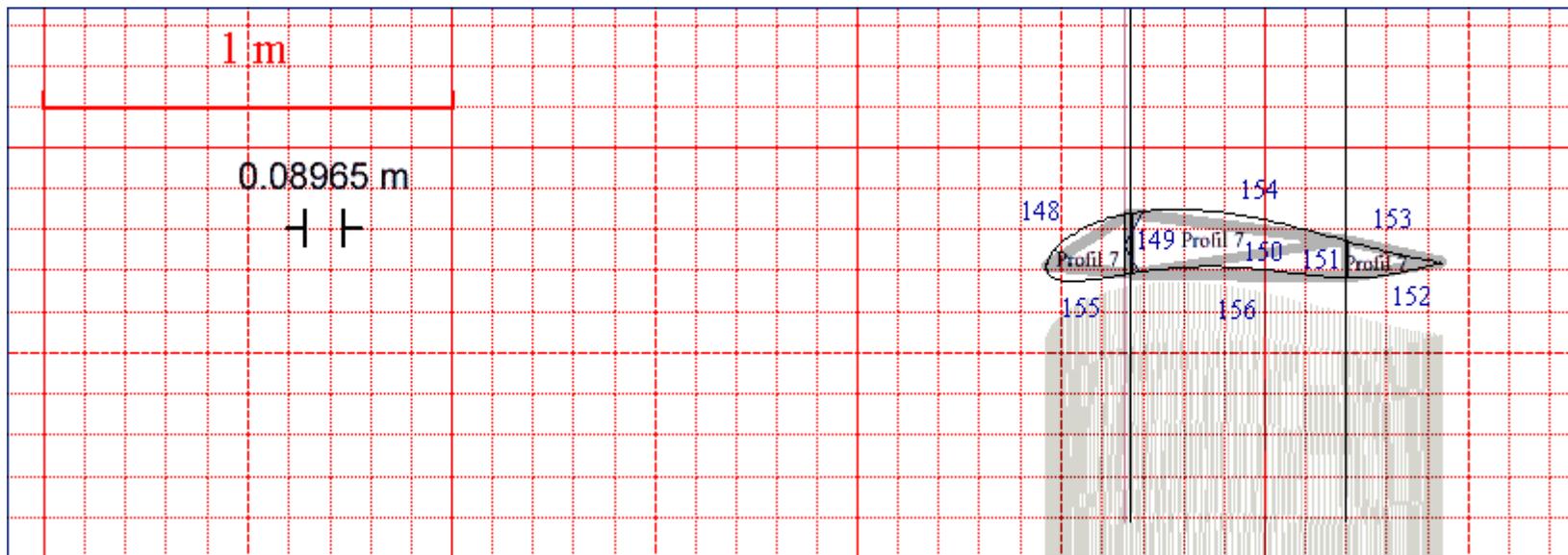
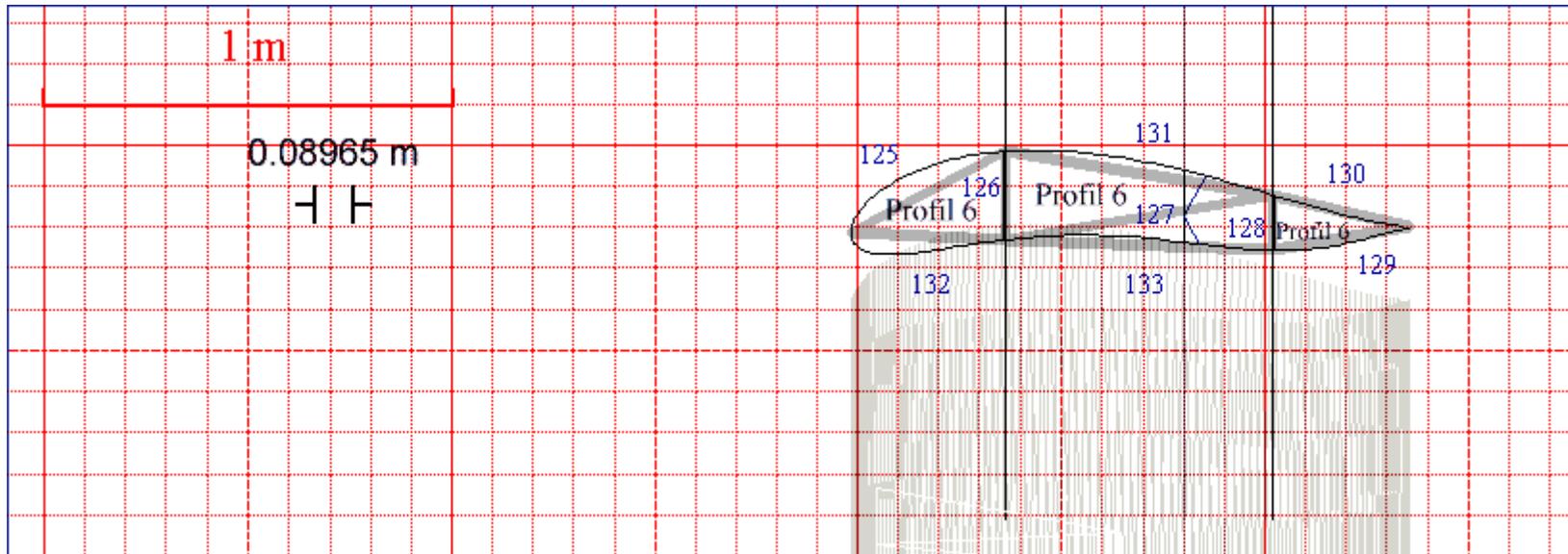
Spanten



Stabnummern entsprechen Materiallisten!

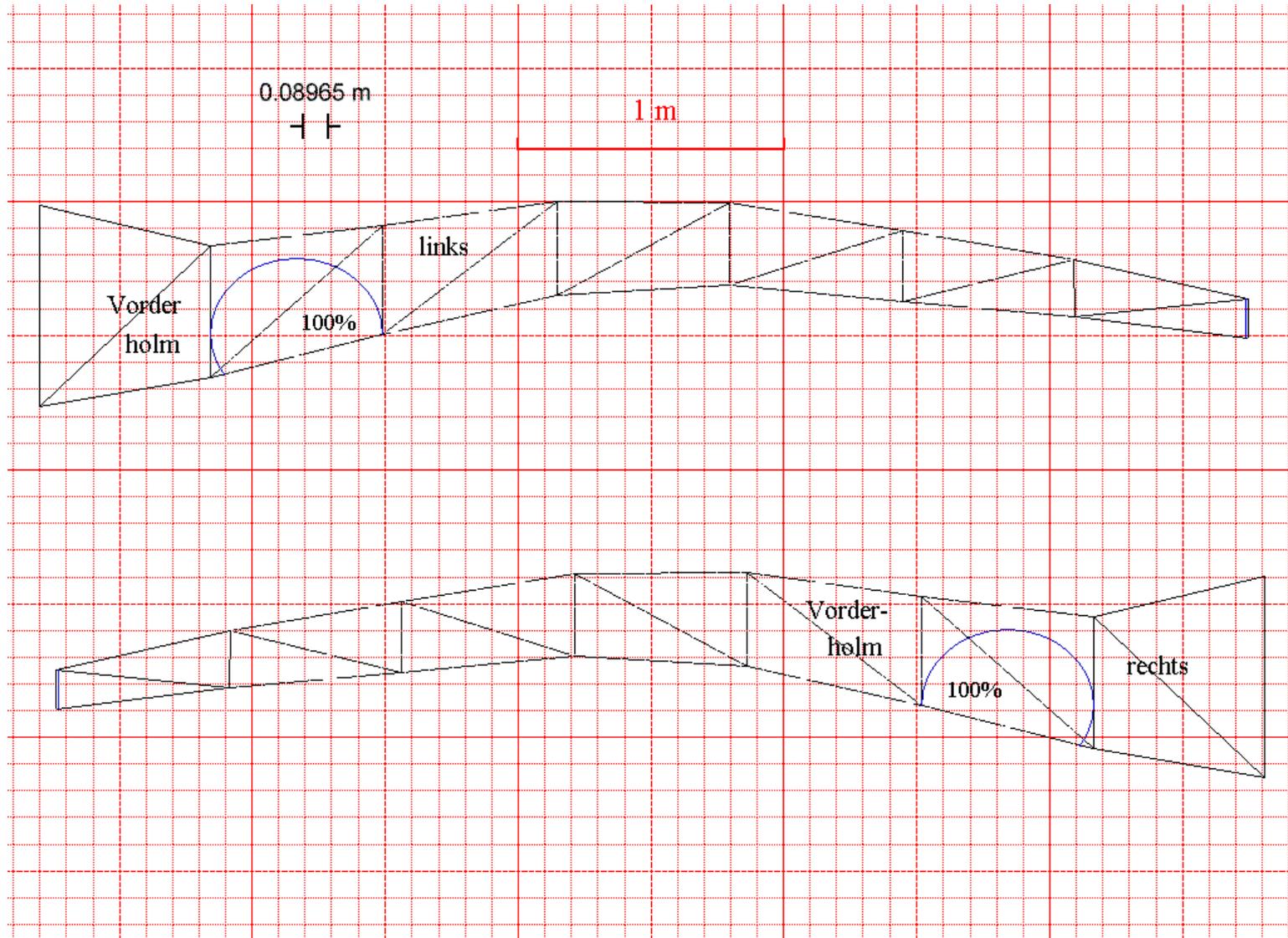




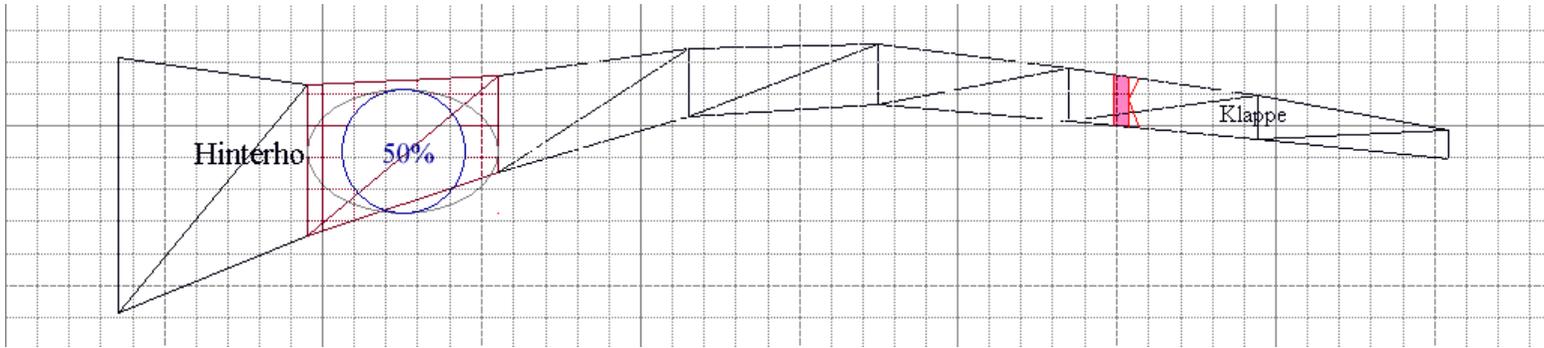


Die Stäbe sind natürlich innerhalb der Profile zu verlegen!

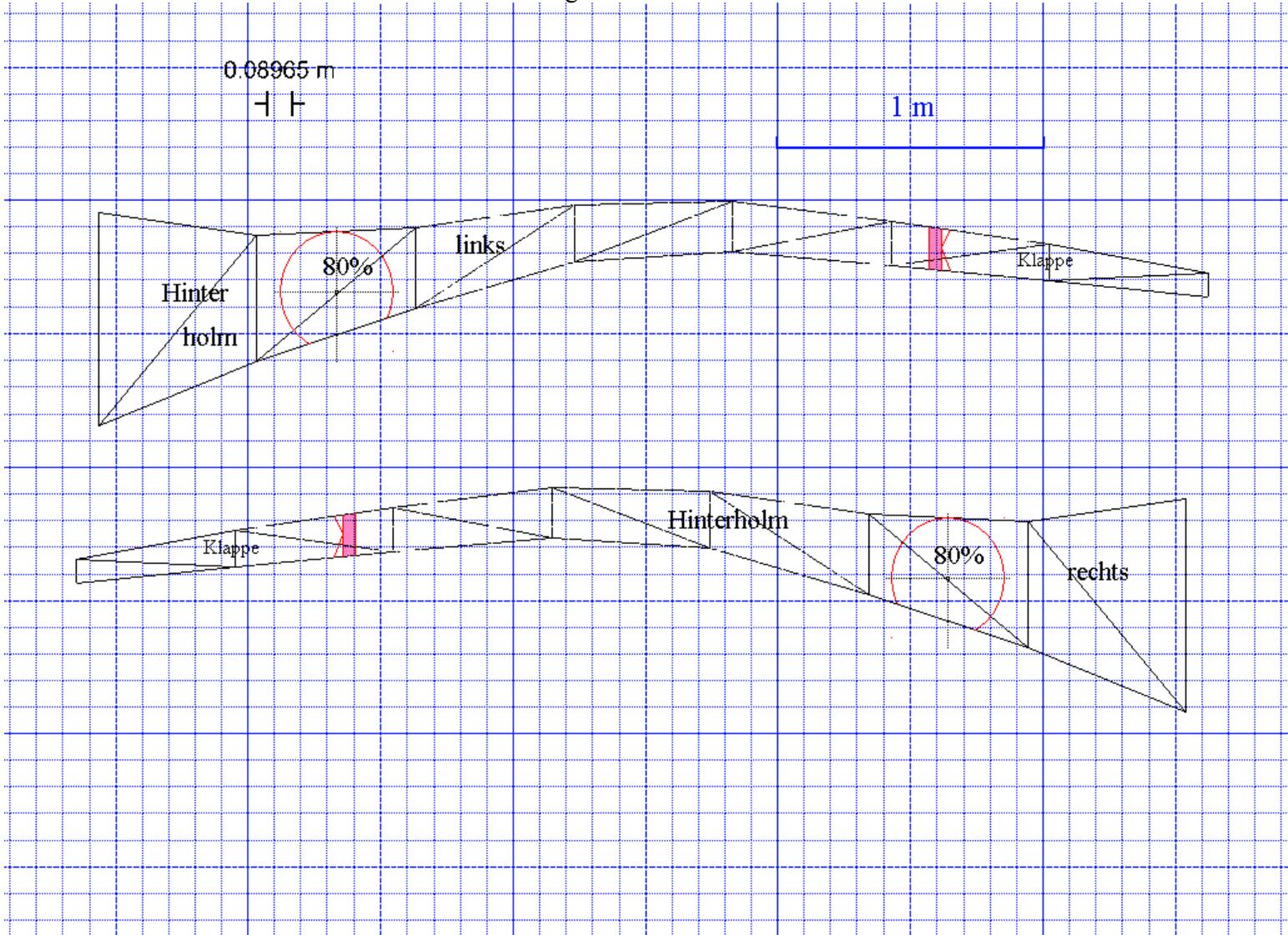
Holme



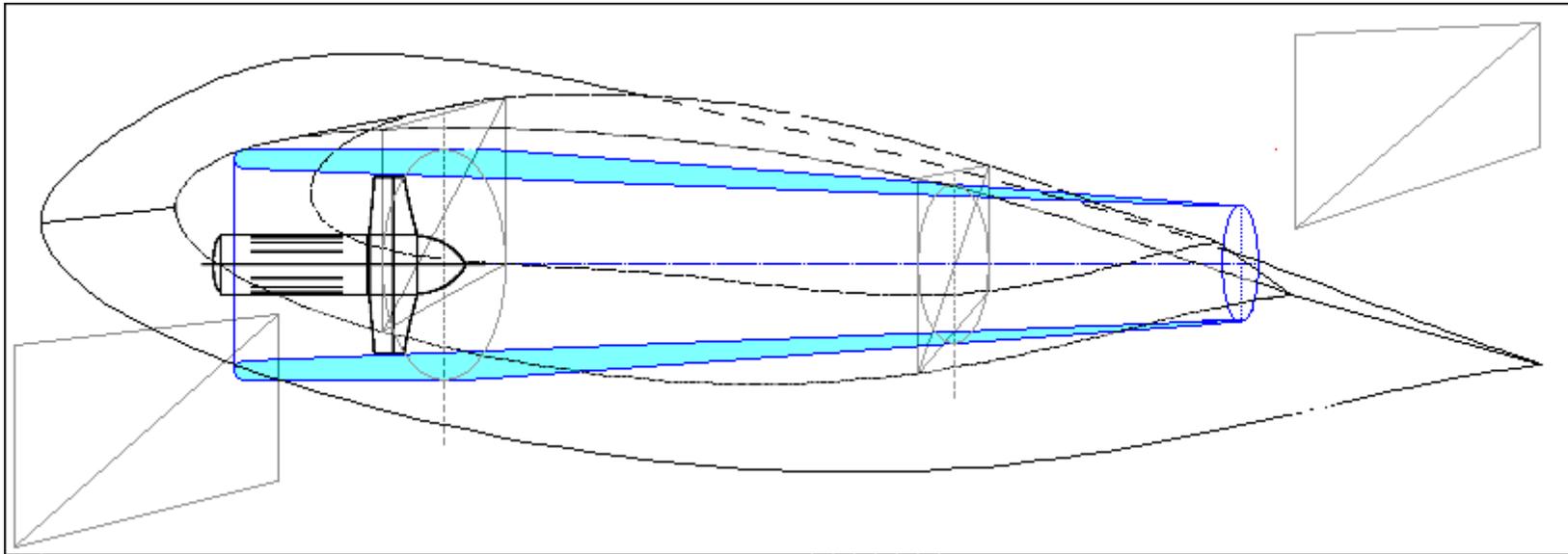
Vordere Triebwerkshalterungen



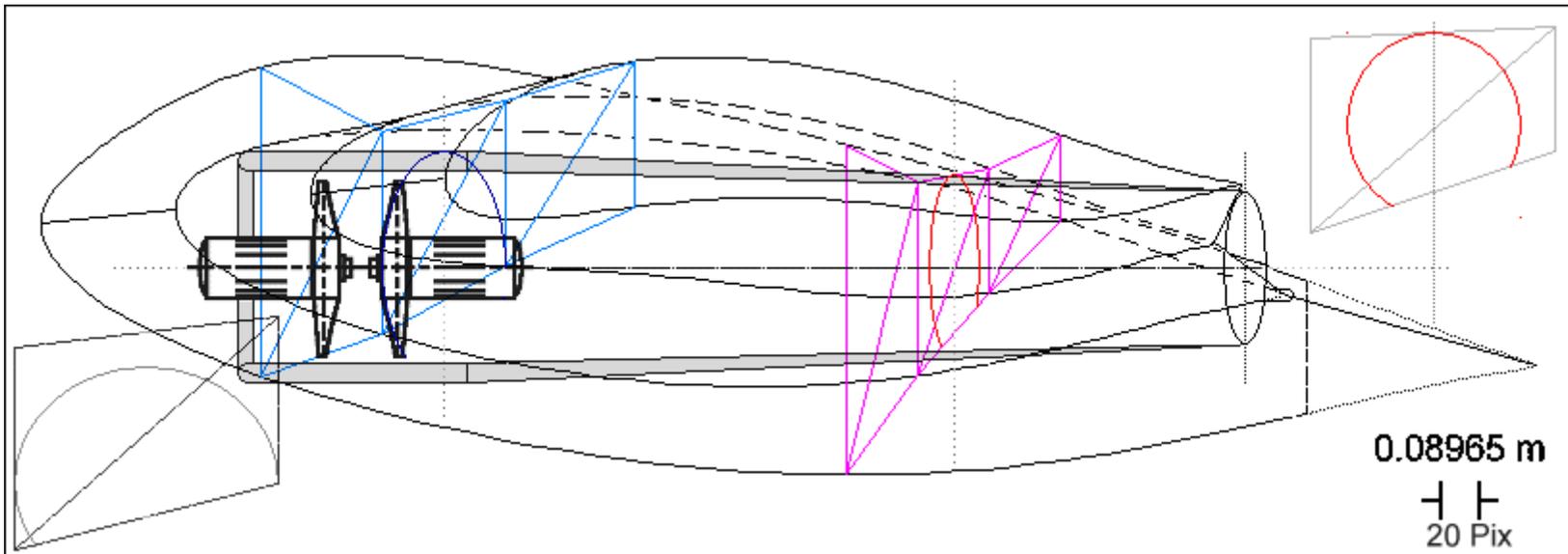
Hintere Triebwerkshalterungen bei verschiedenen Auslaßverhältnissen



Triebwerke: elektrische Impeller

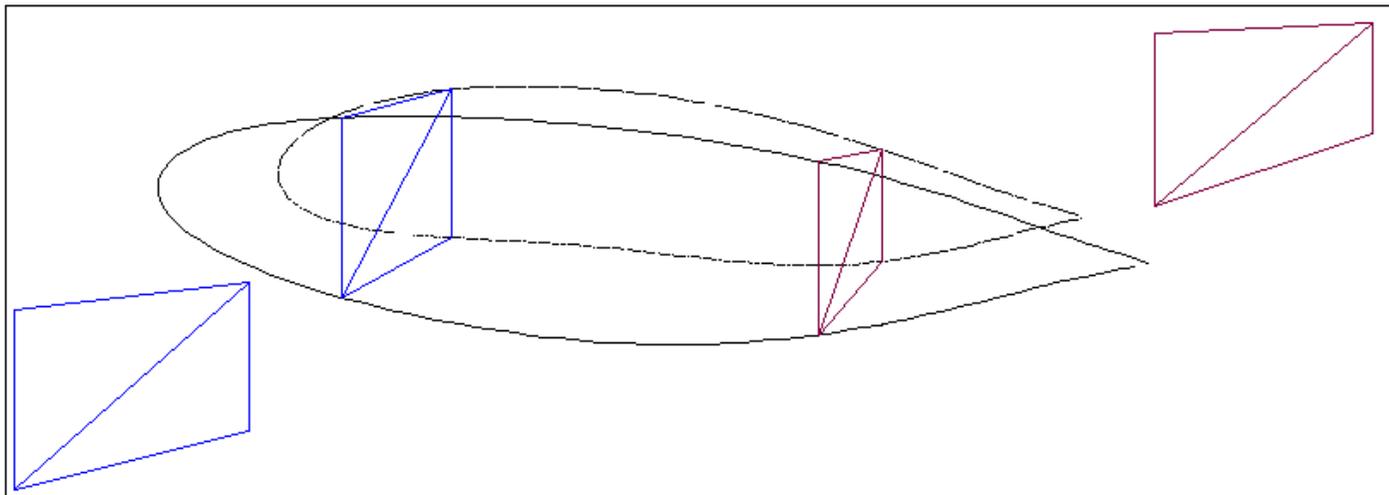
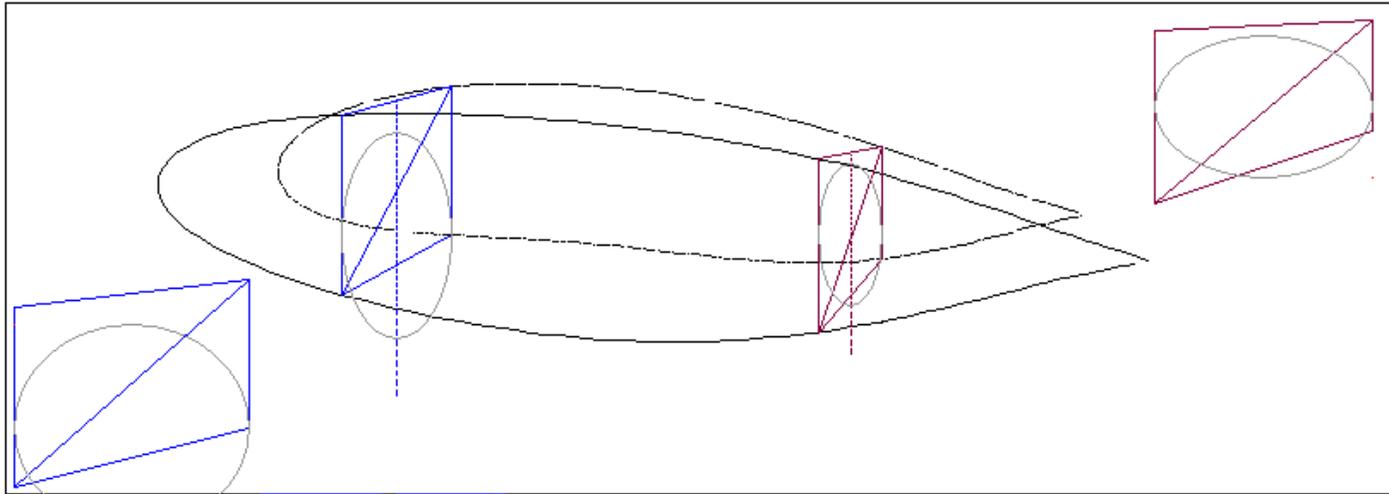


Auslaßöffnung 50% der Einlaßöffnung

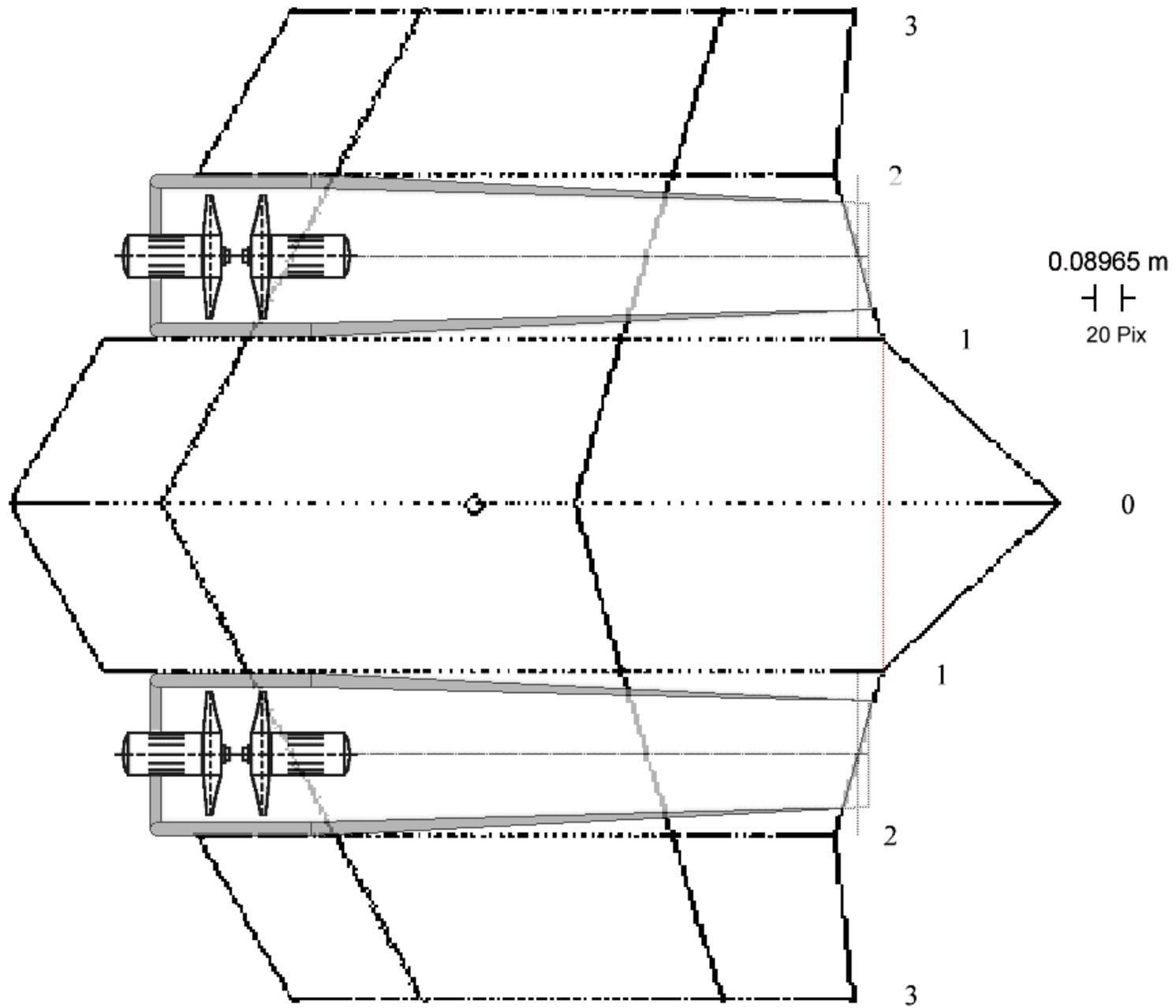


Auslaßöffnung 80% der Einlaßöffnung

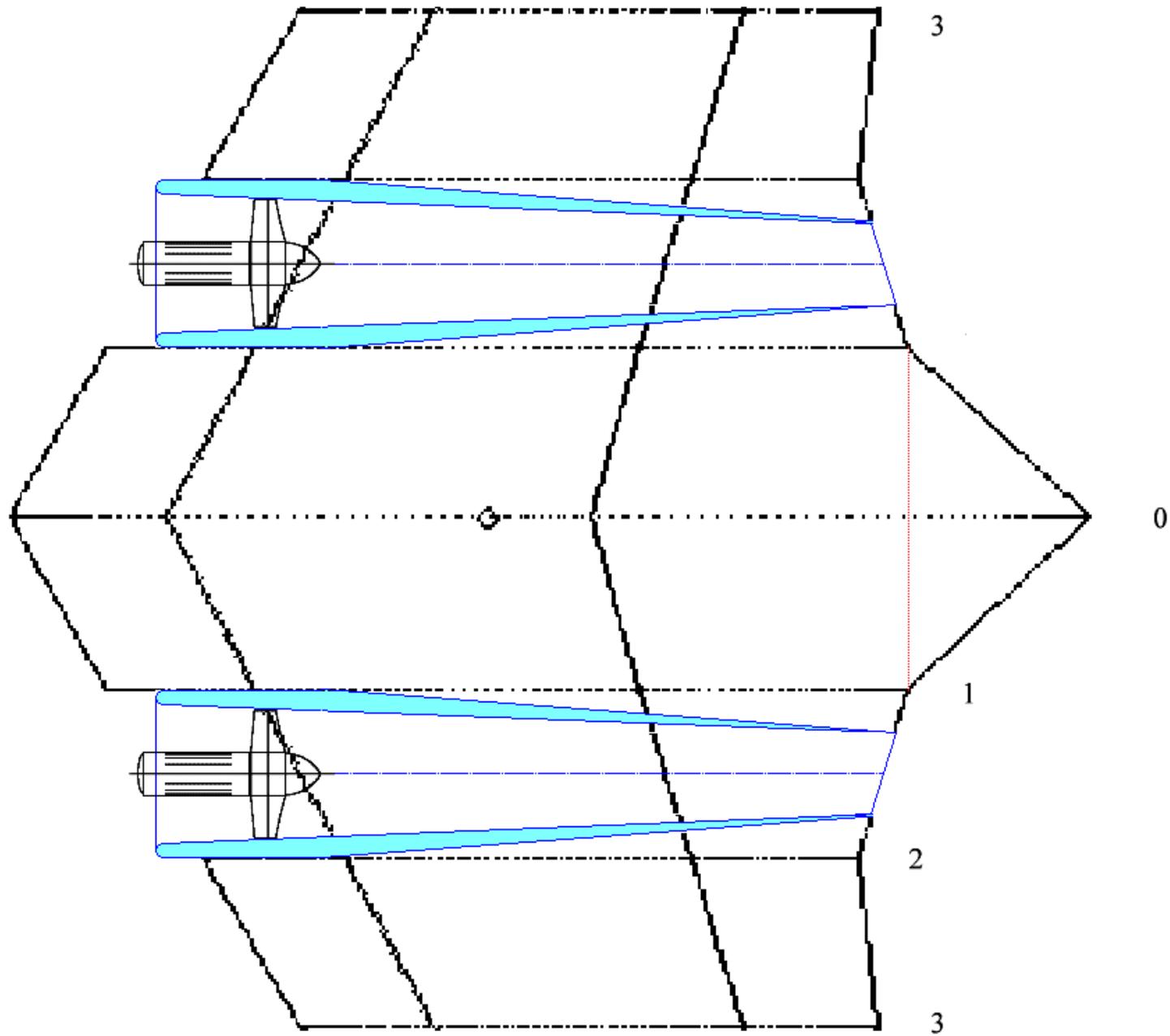
Triebwerksaufhängung



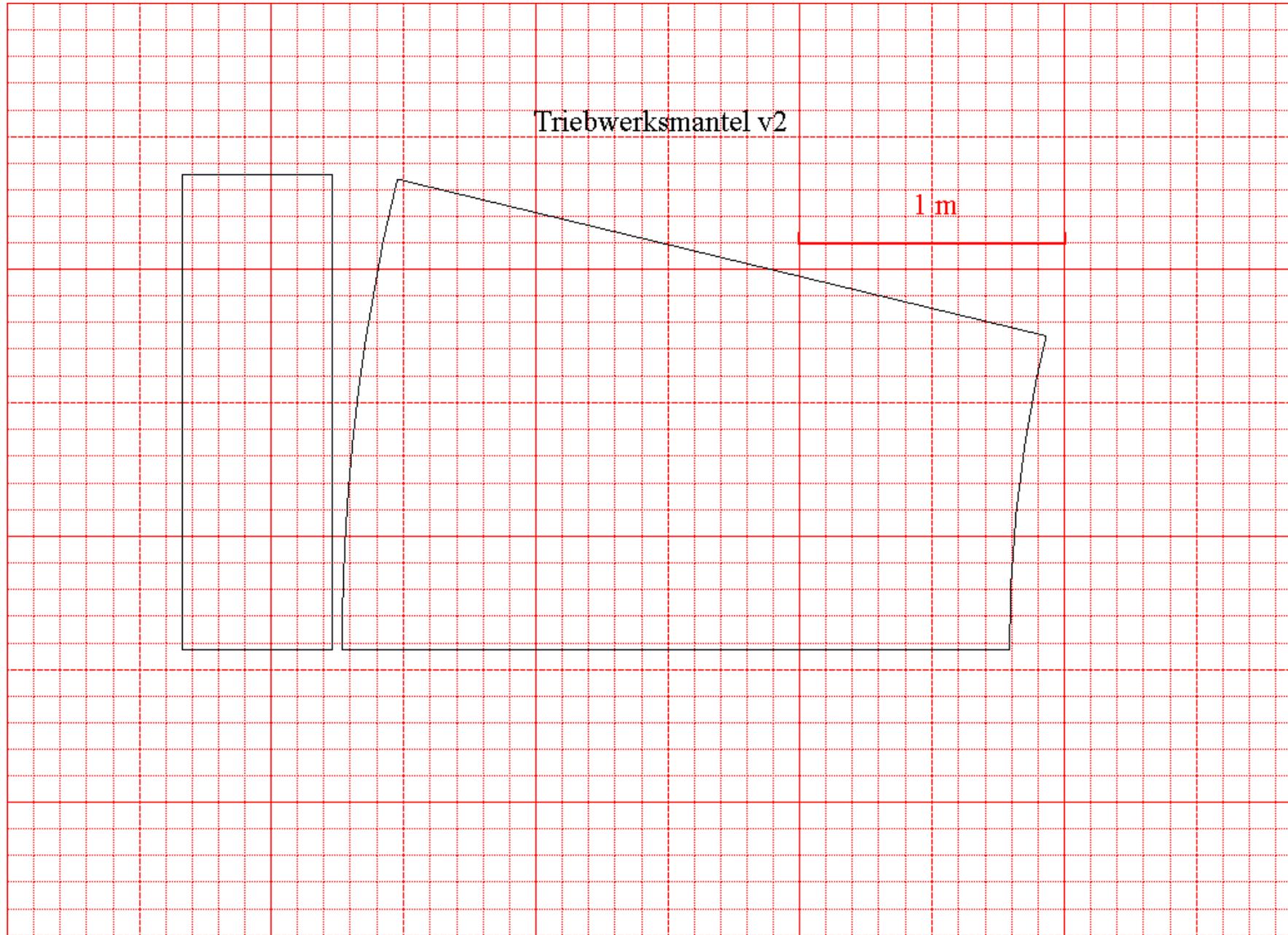
Auslaßöffnung 80% der Einlaßöffnung



Auslaßöffnung 50% der Einlaßöffnung

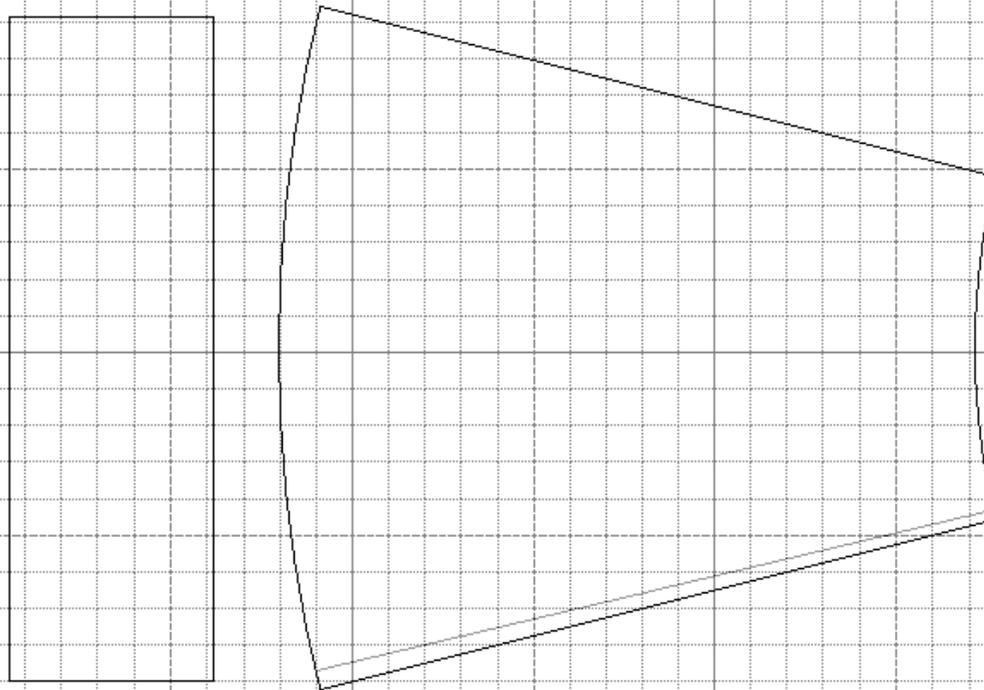


Triebwerksmantel-Abwicklung



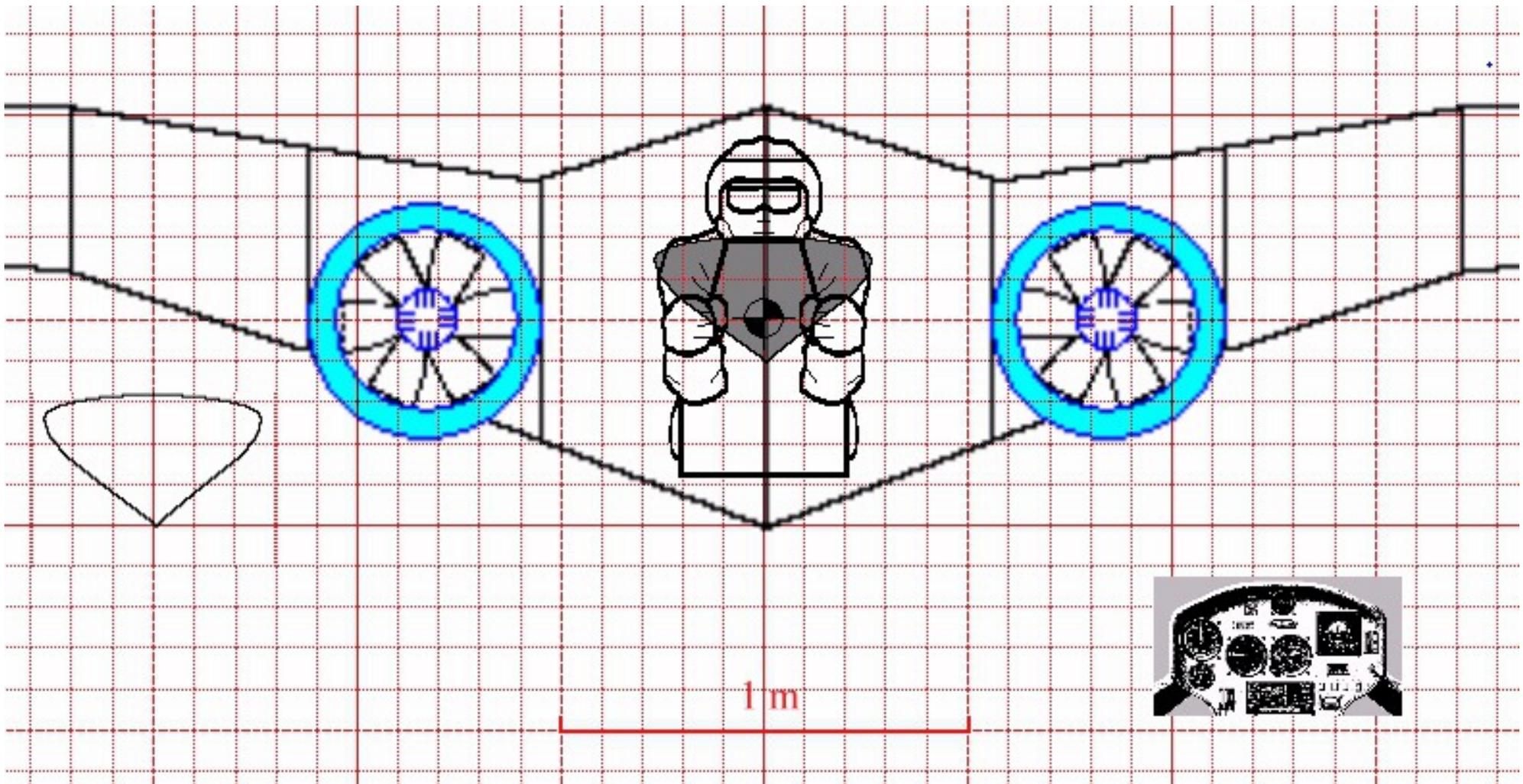
Auslaßöffnung 80% der Einlaßöffnung

Triebwerksmantel v1

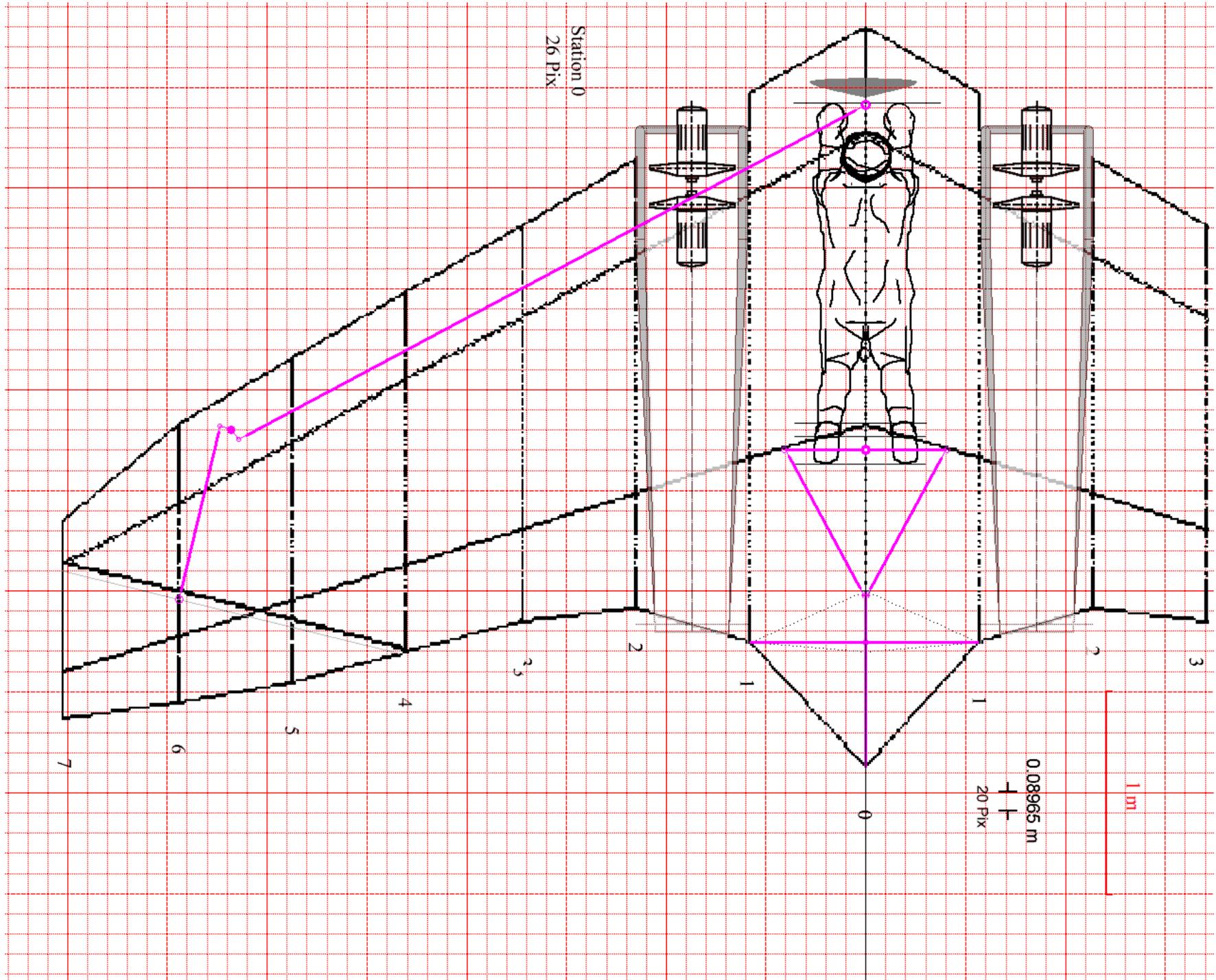


Auslaßöffnung 50% der Einlaßöffnung

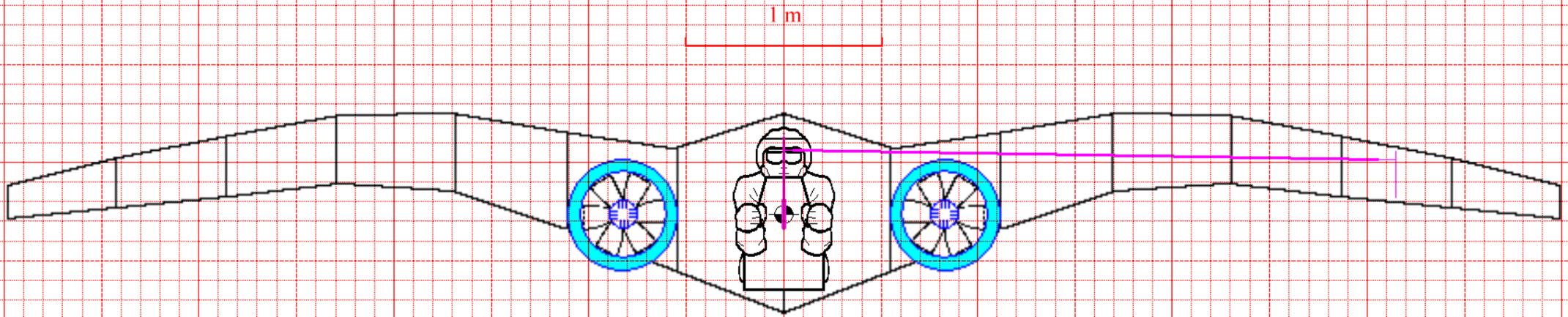
Triebwerke, Cockpit und Instrumentenbrett



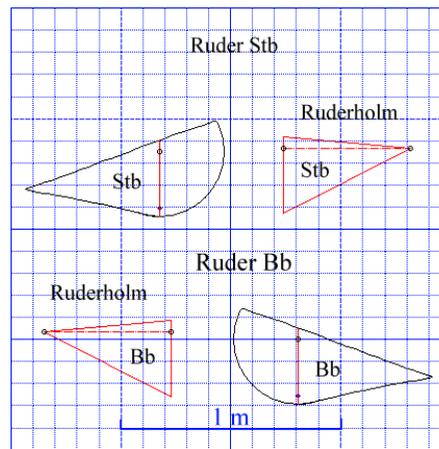
Steuergestänge



Top View

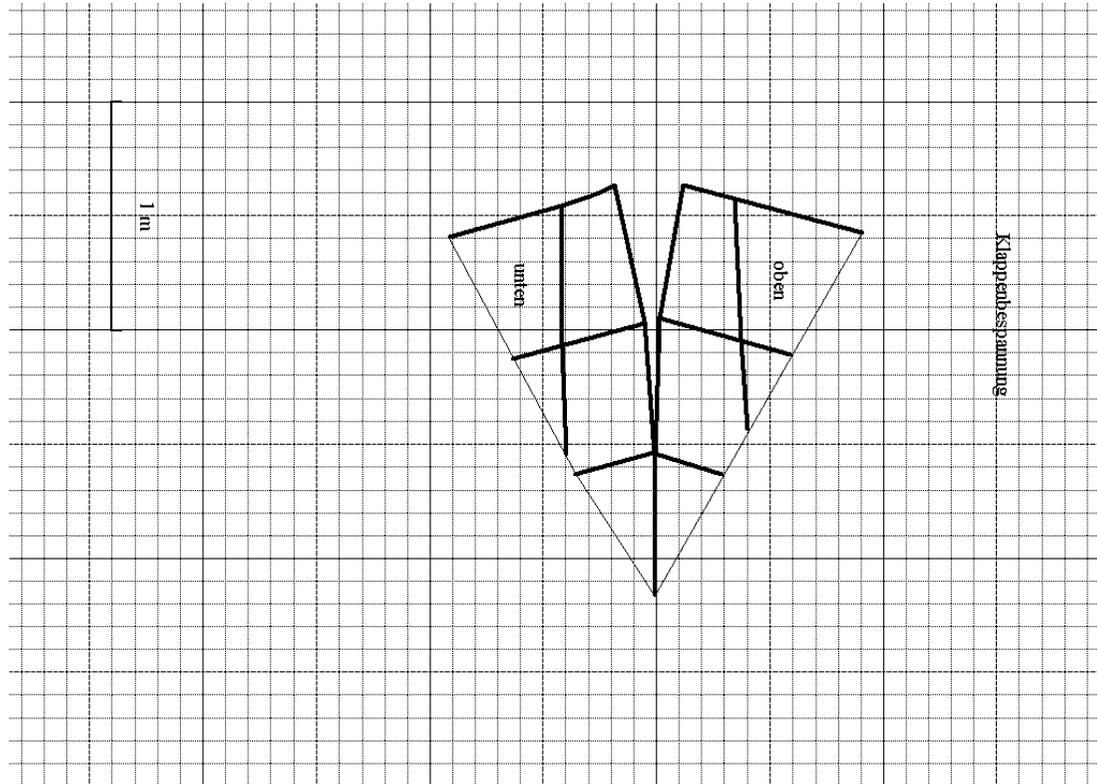
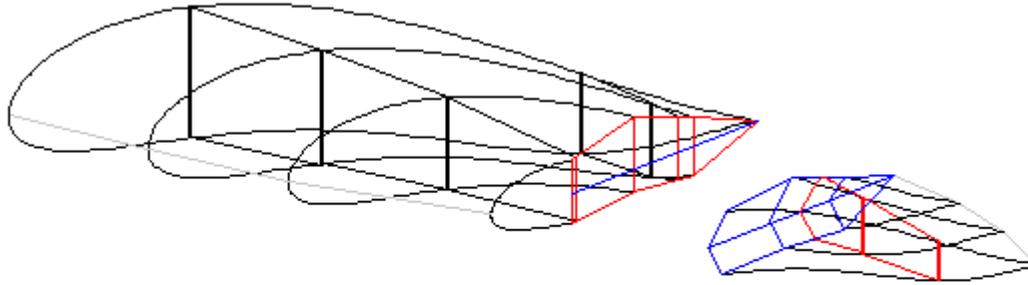


Front View



Seitenruder

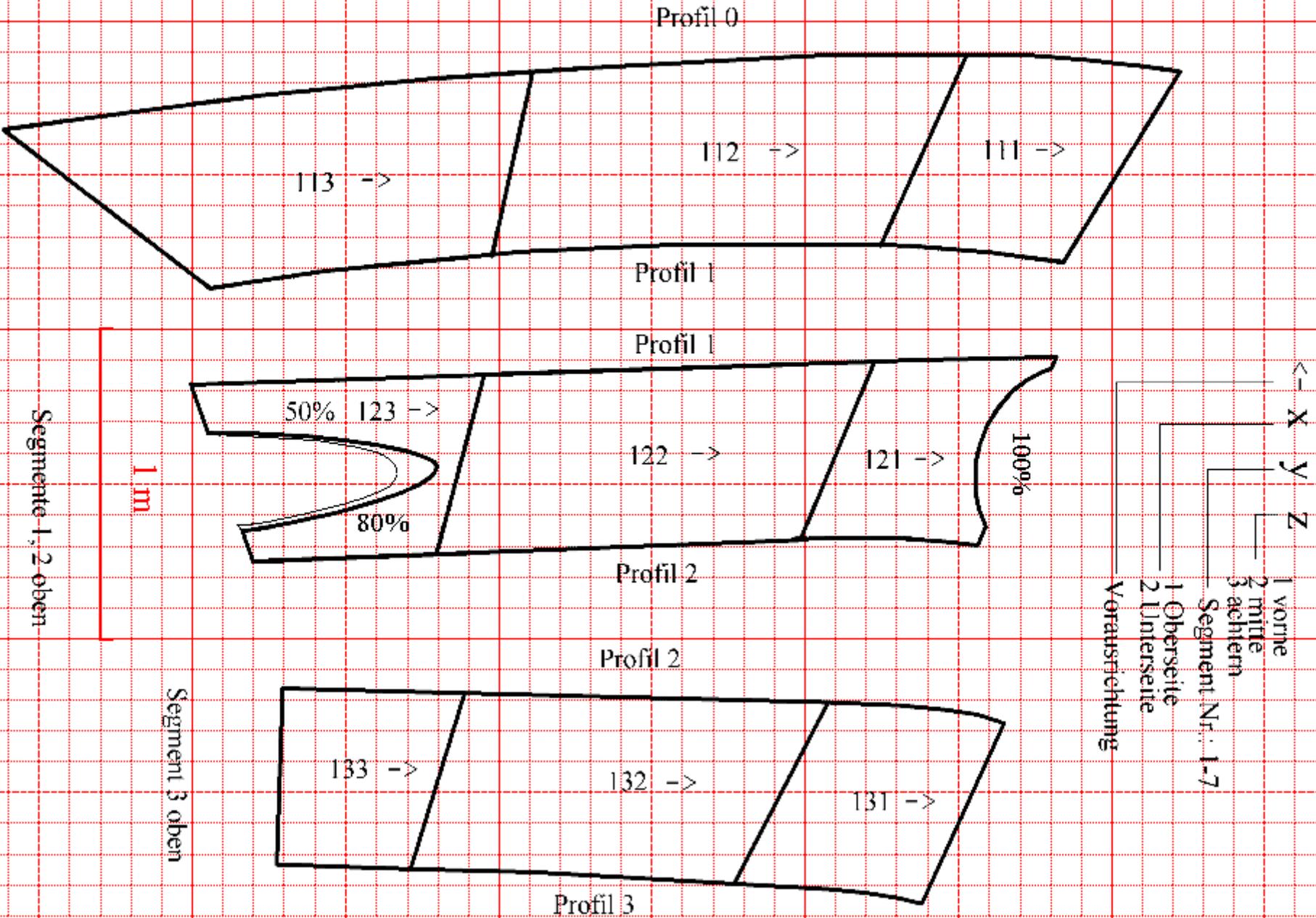
Klappen



Bespannung der Klappen

Abwicklung der Bespannung

Abwicklung ScV13e



1 m

Profil 3

233 ->

232 ->

231 ->

Profil 2

Profil 1

80%

50%

213 ->

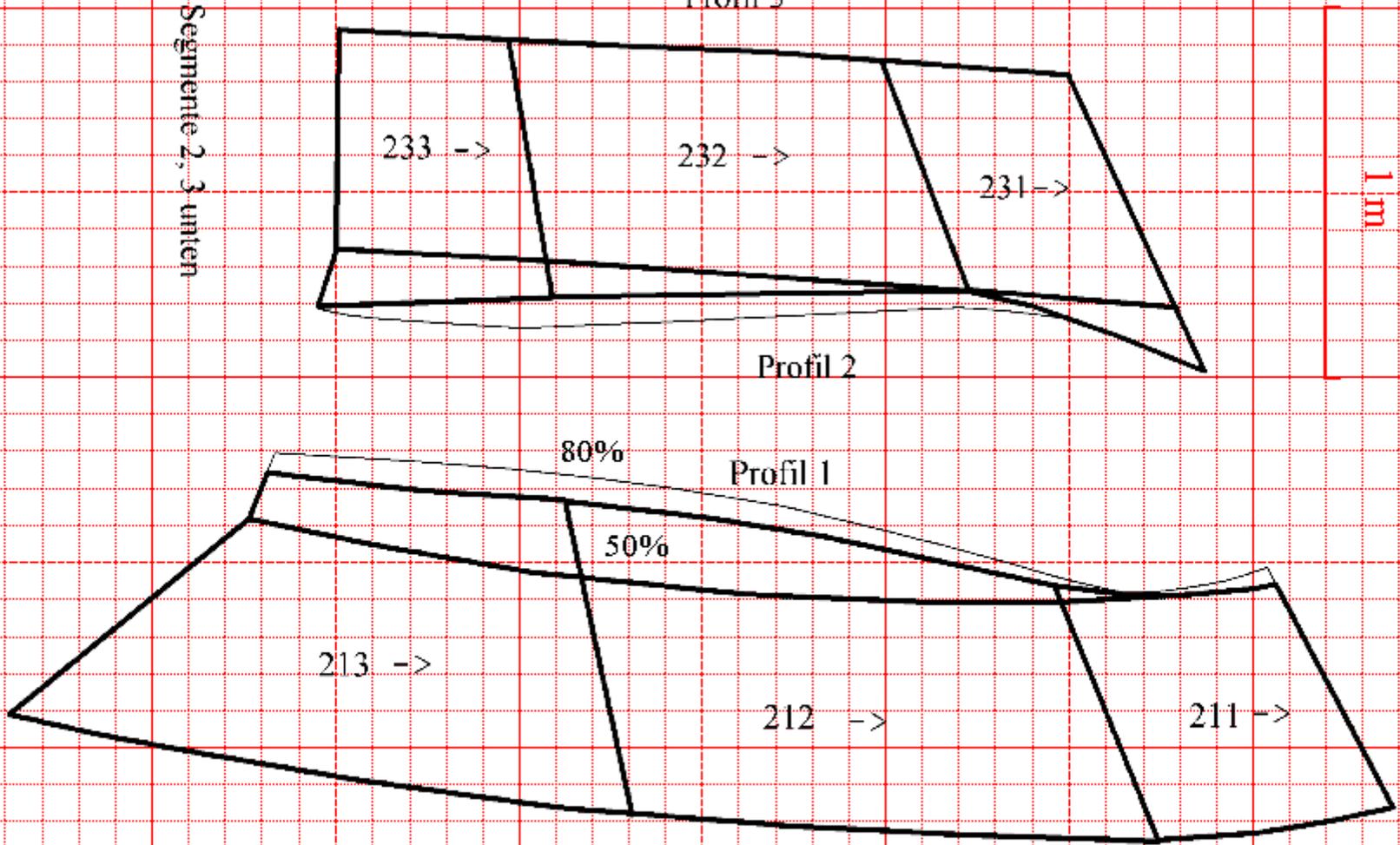
212 ->

211 ->

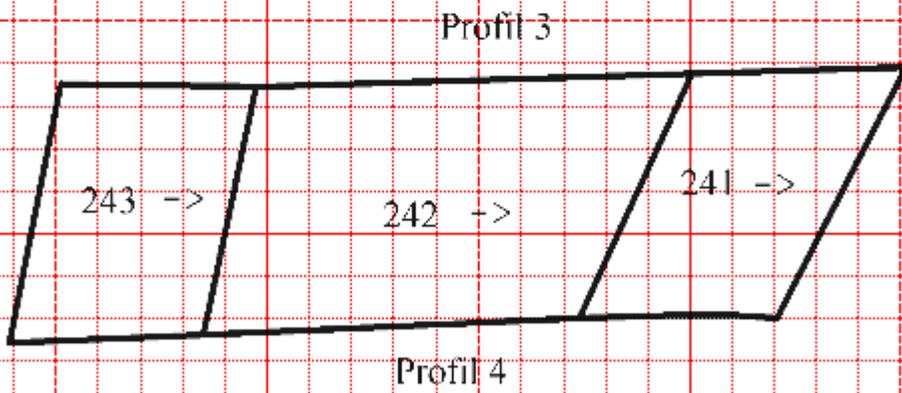
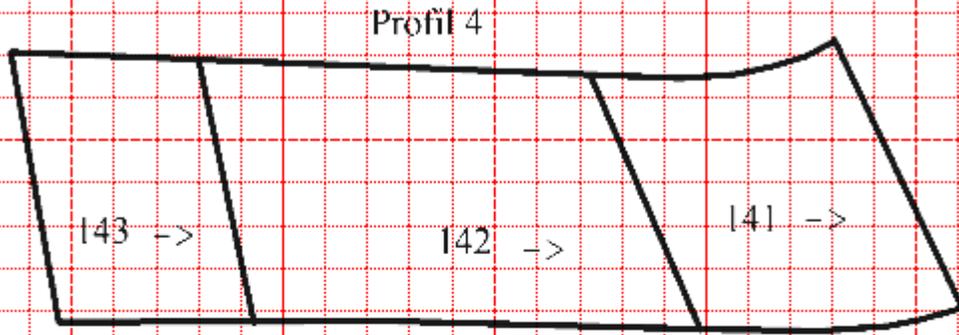
Profil 0

Segmente 2, 3 unten

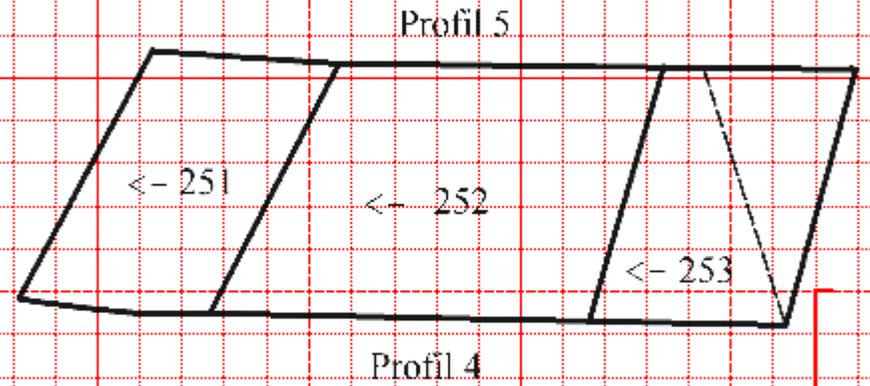
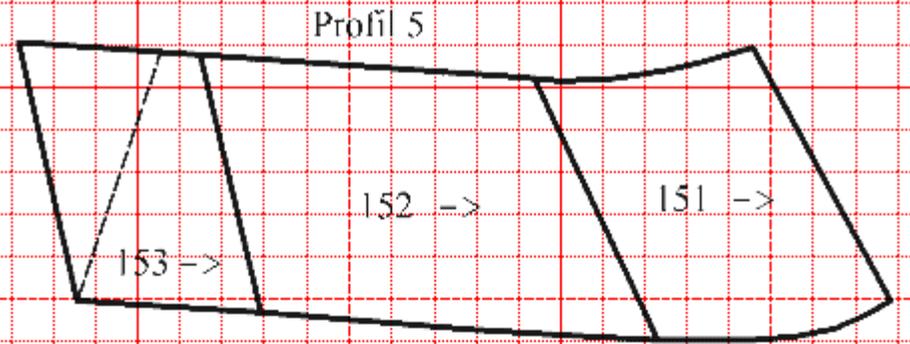
Segmente 1, 2 unten



Segment 4 oben, unten



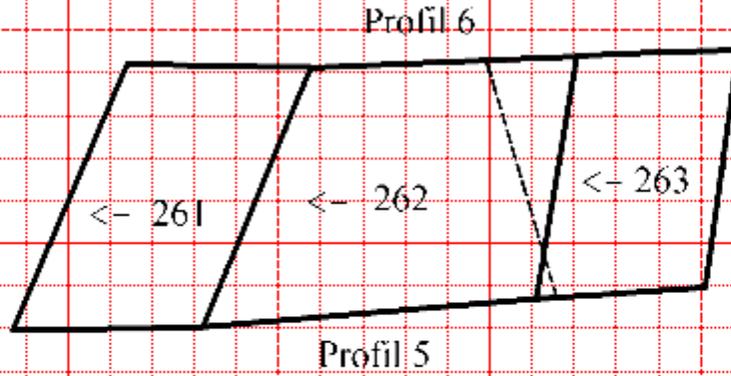
Abwicklung ScV 13e



Segment 5 oben, unten

1 m

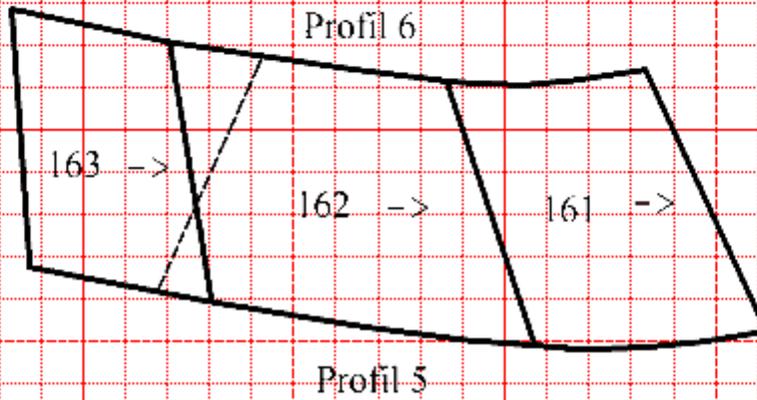
Segment 6 unten



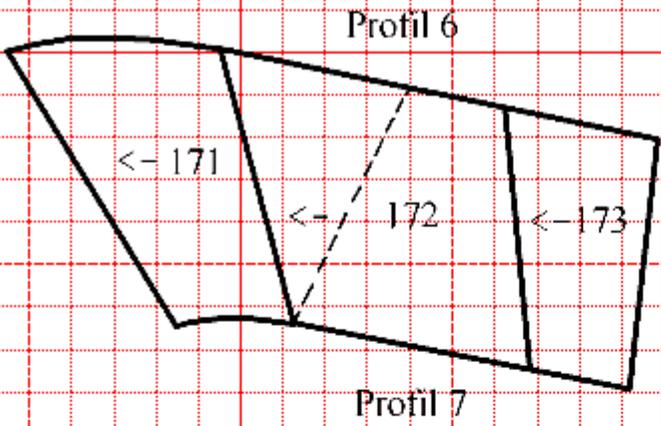
Abwicklung SeV 13e

1 m

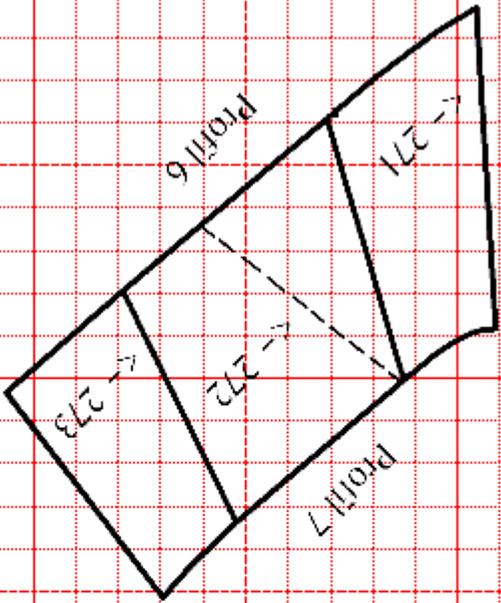
Segment 6 oben



Abwicklung ScV13e

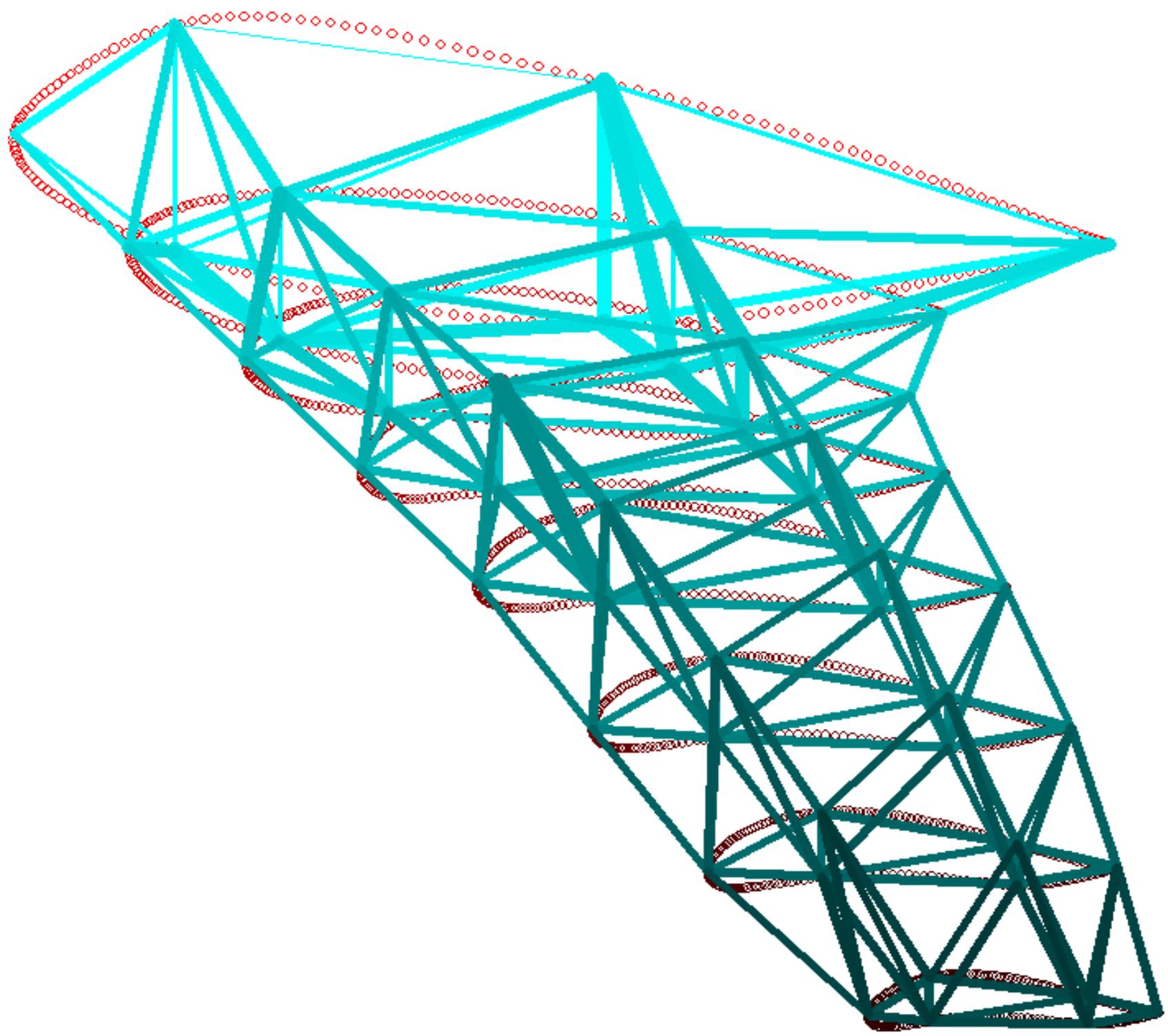


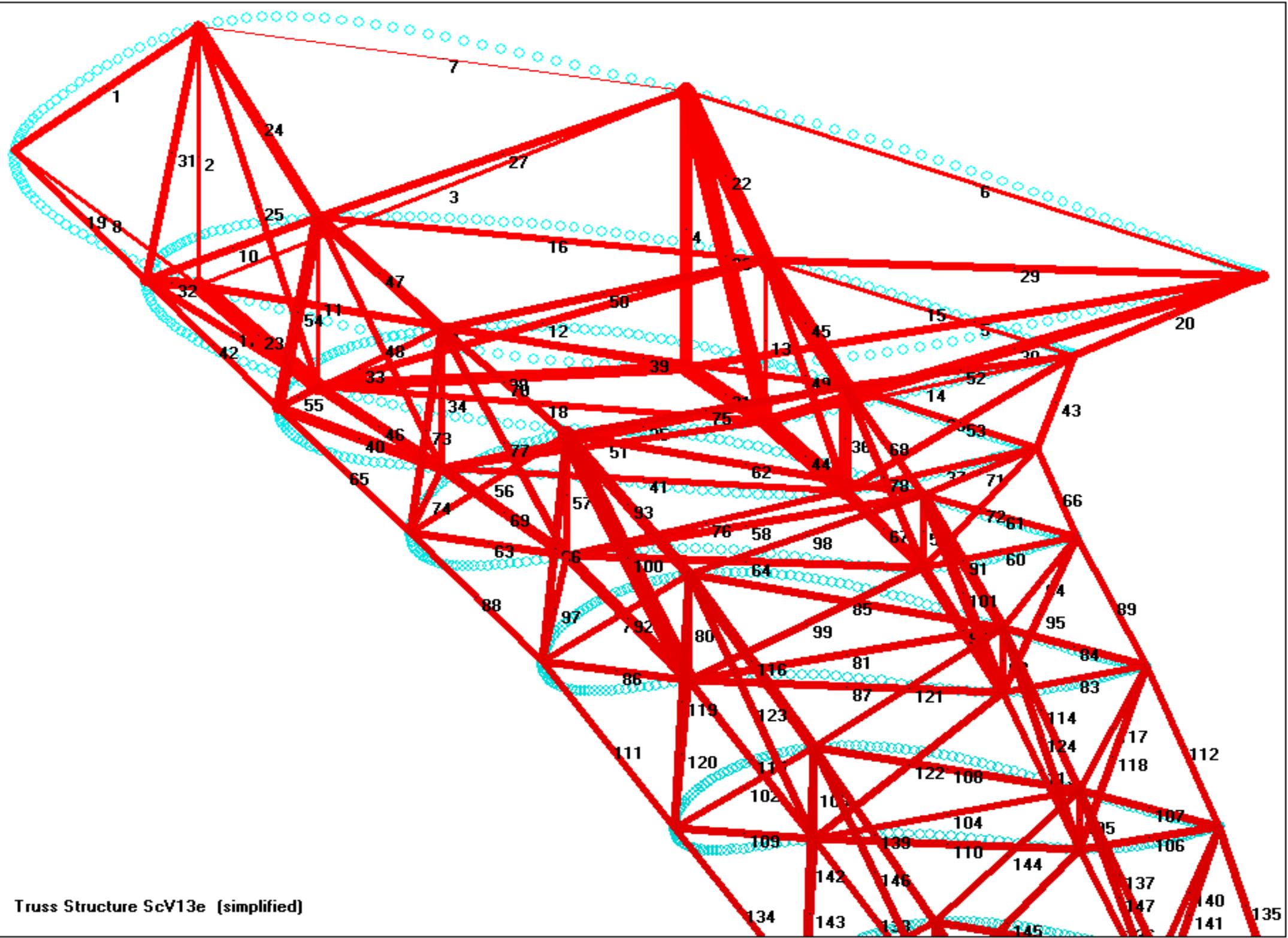
1 m



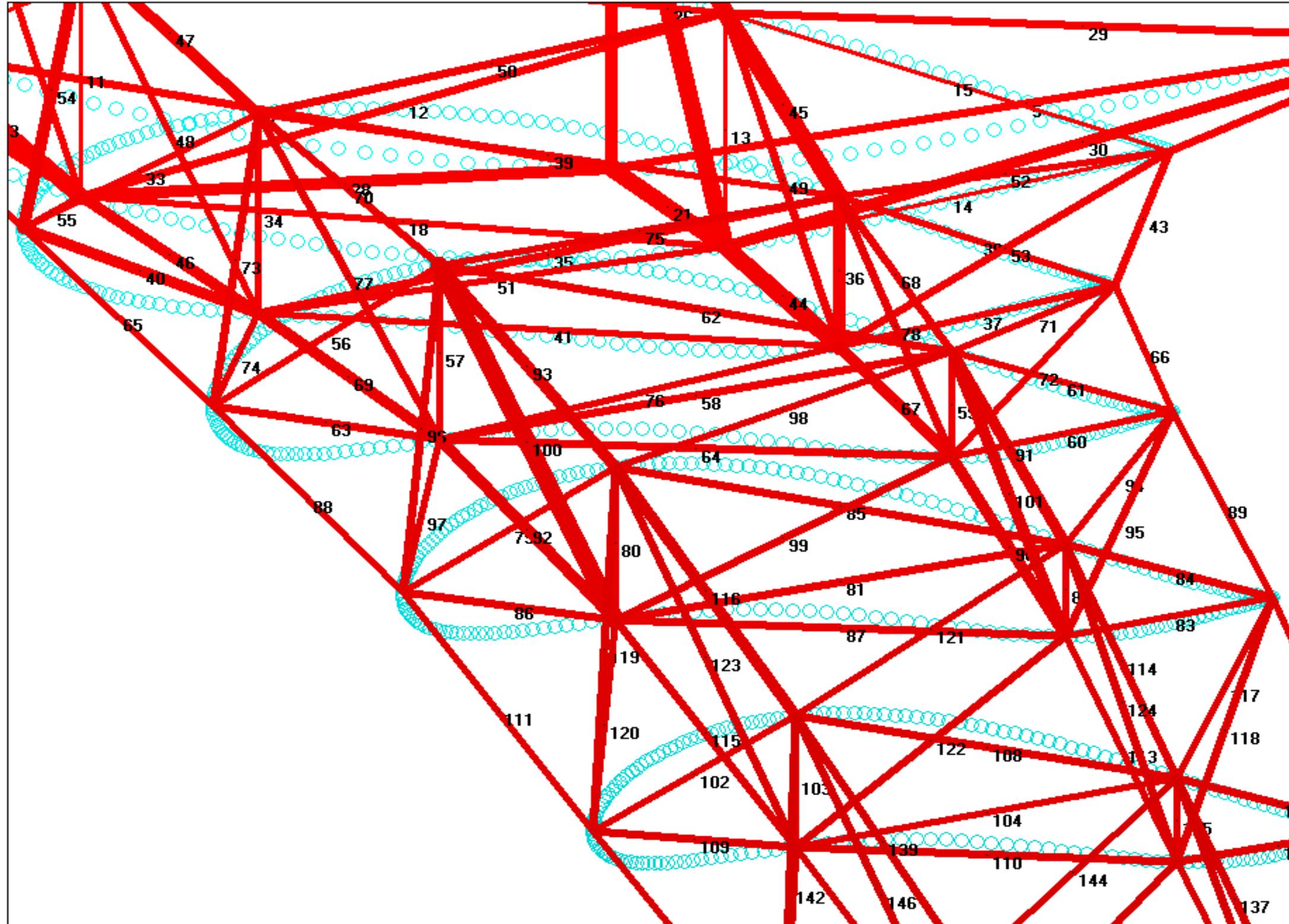
Segment 7 oben, unten

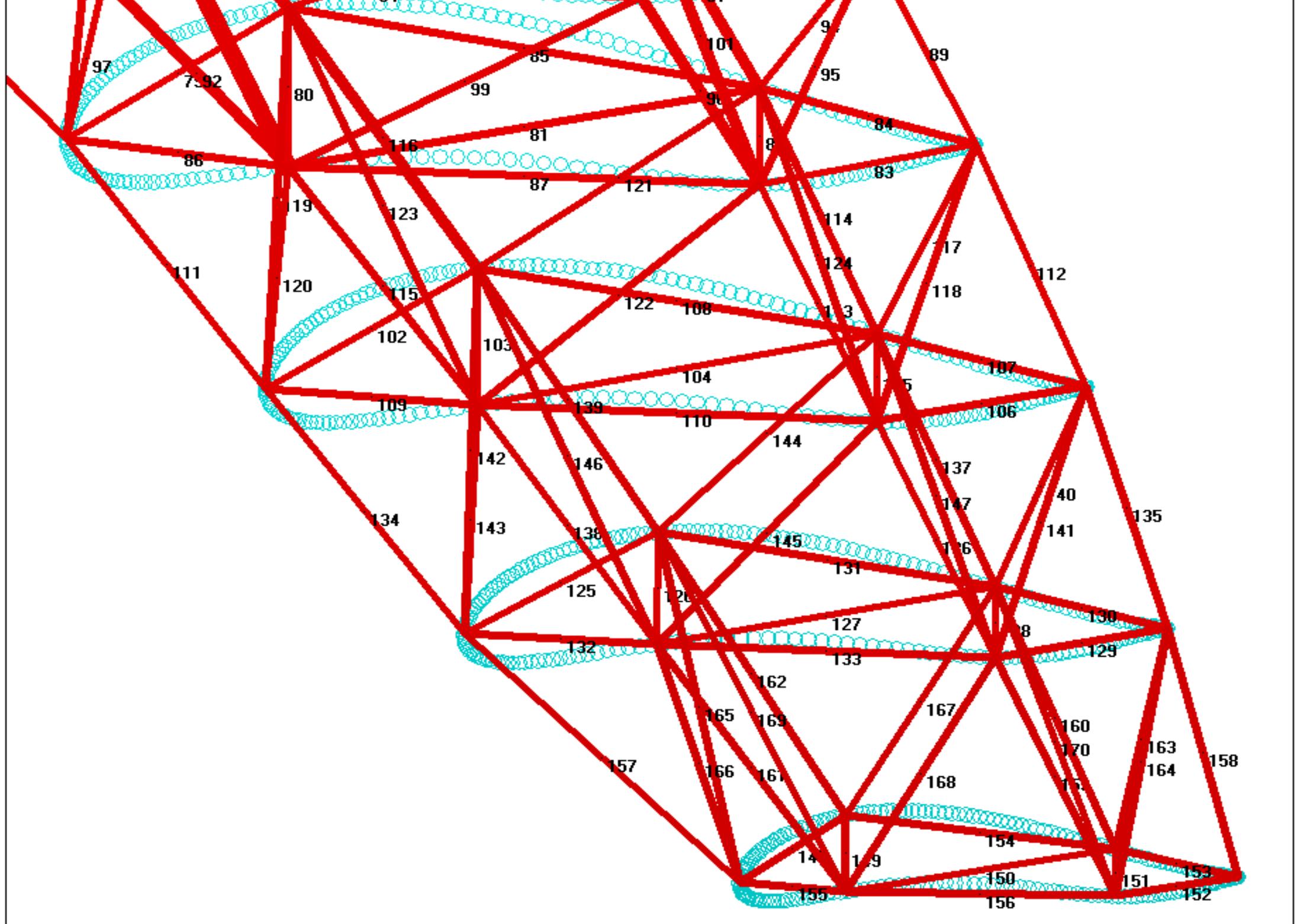
Truss Structure ScV13e (simplified)





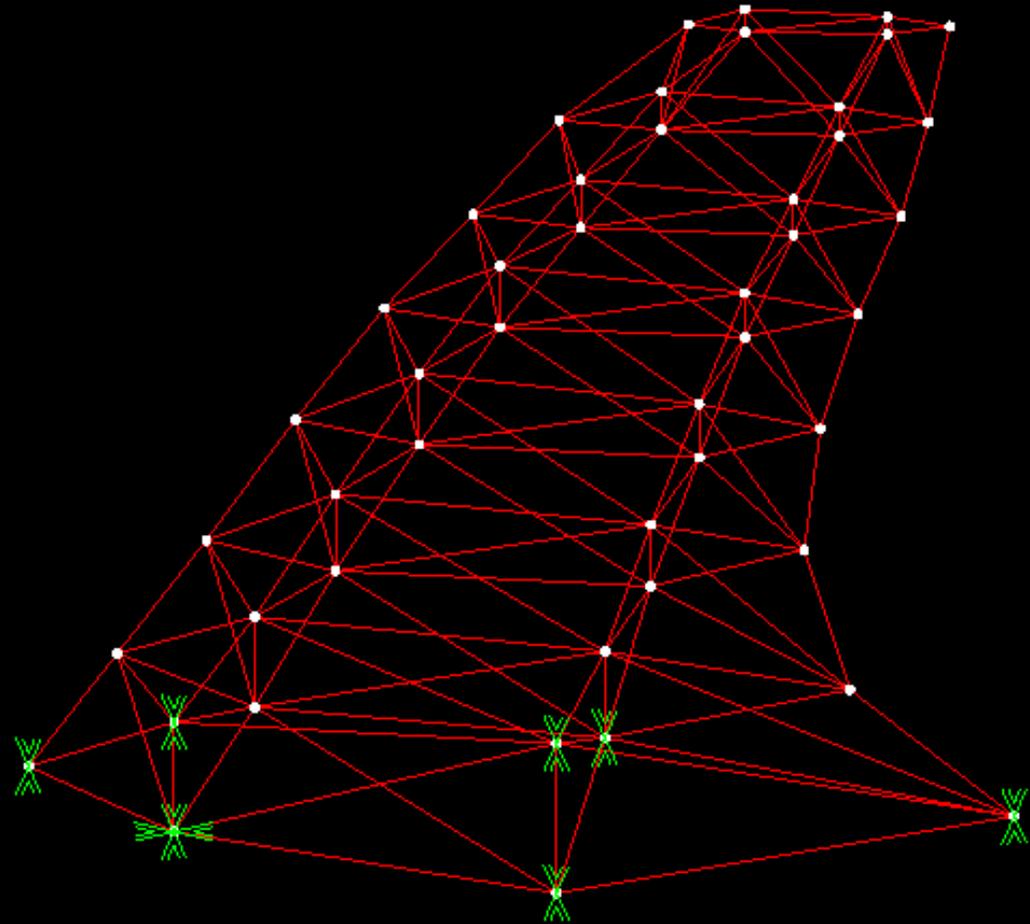
Truss Structure ScV13e (simplified)



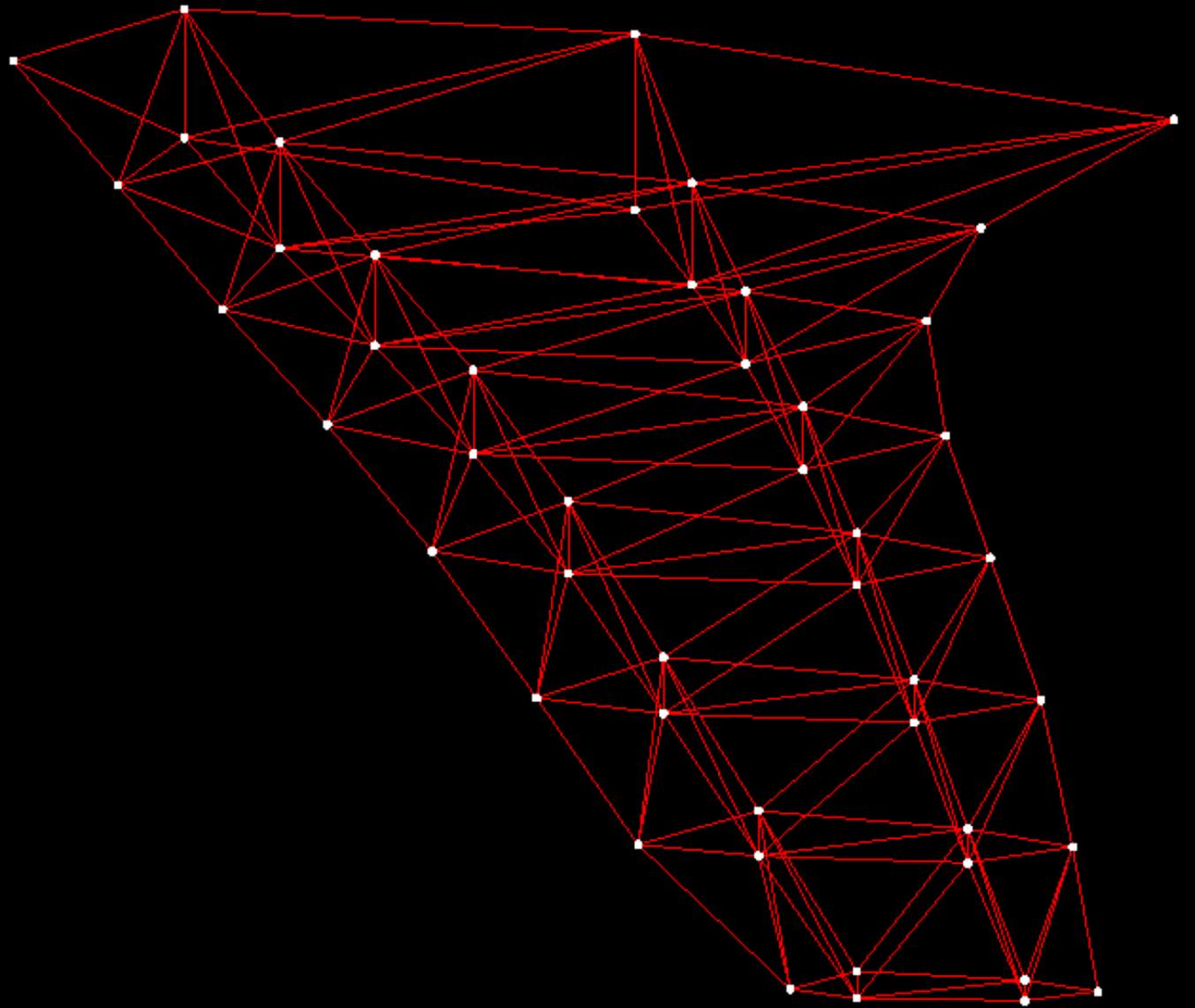


Tragwerkstruktur ScV13e

View in XY plane

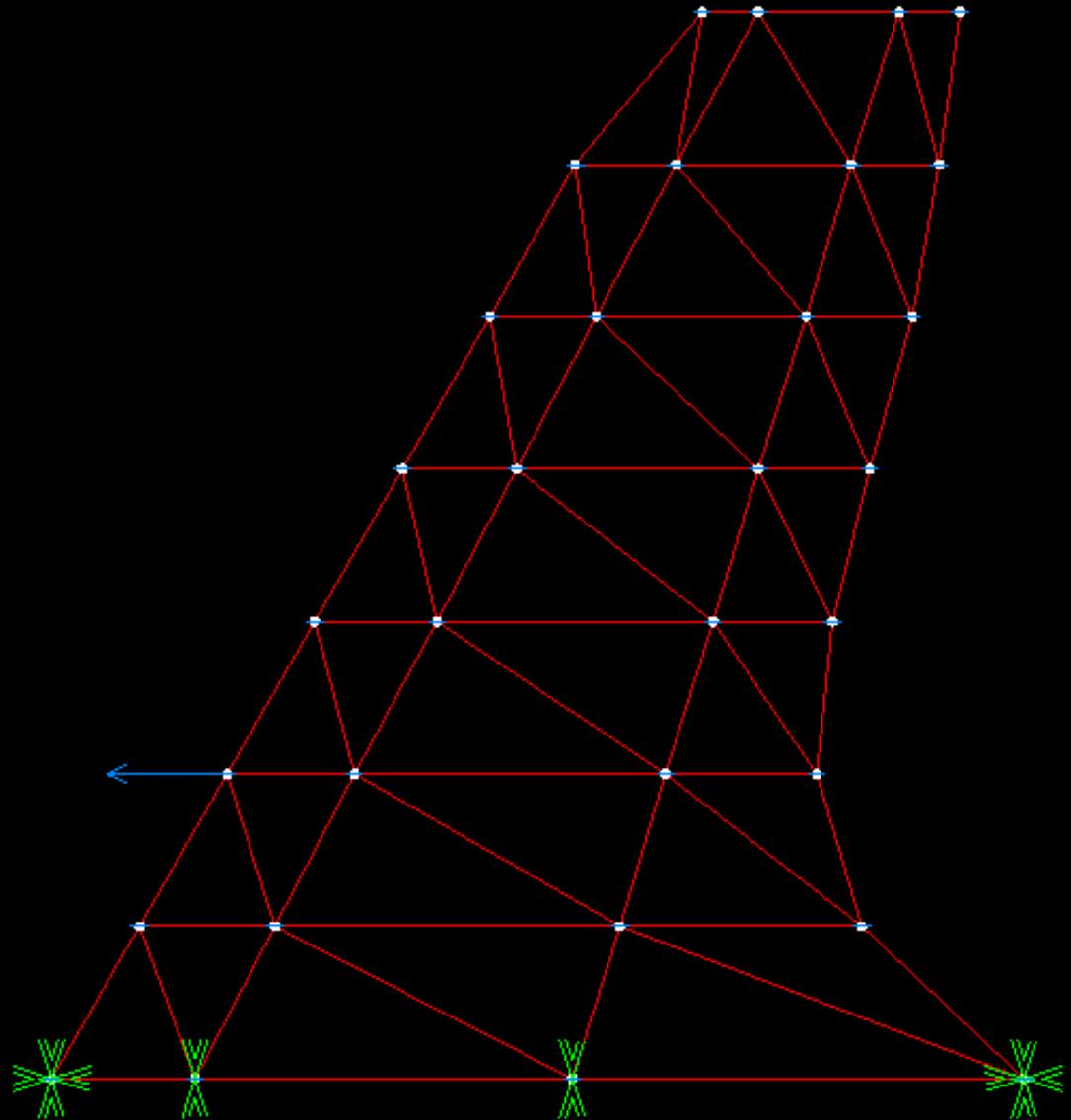


Undeformed Shape

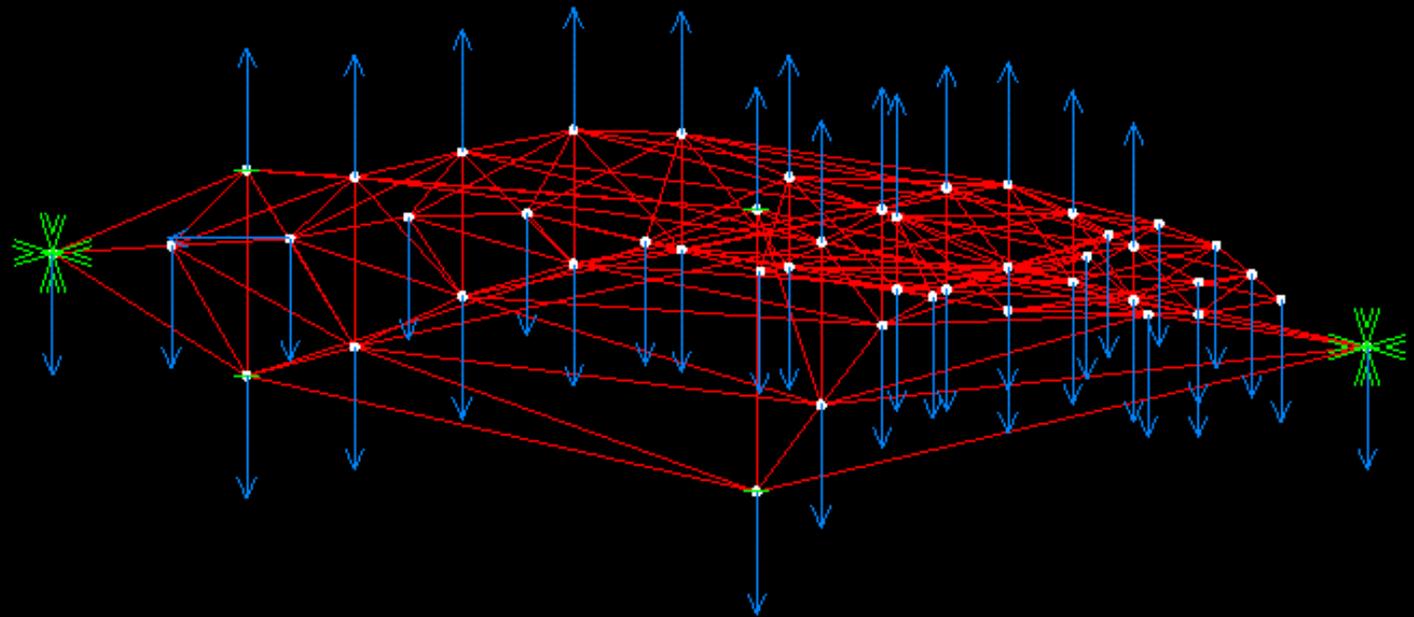


Berechnung der Kräfte im Tragwerk in der Luft

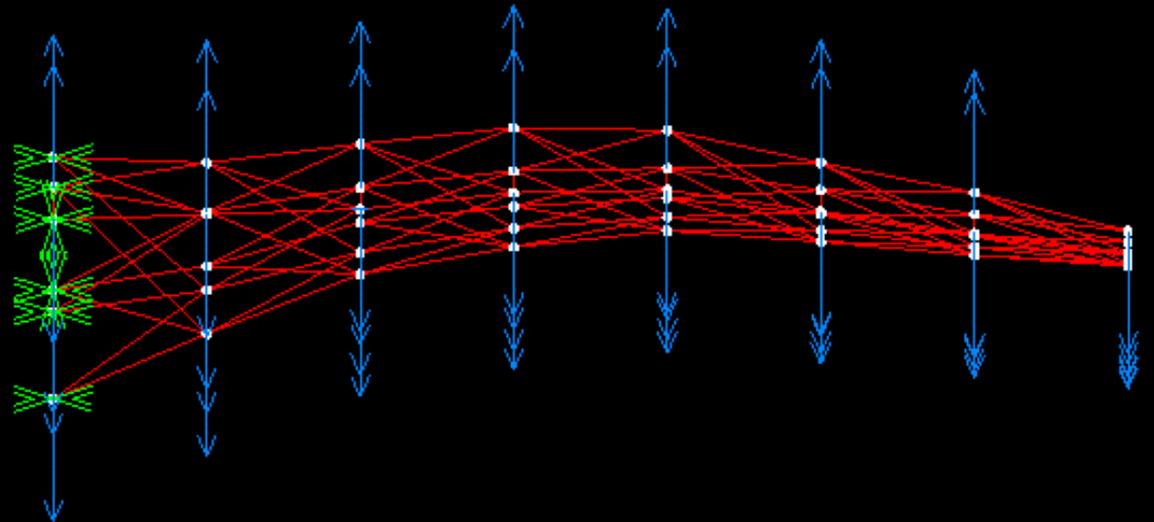
View in XY plane



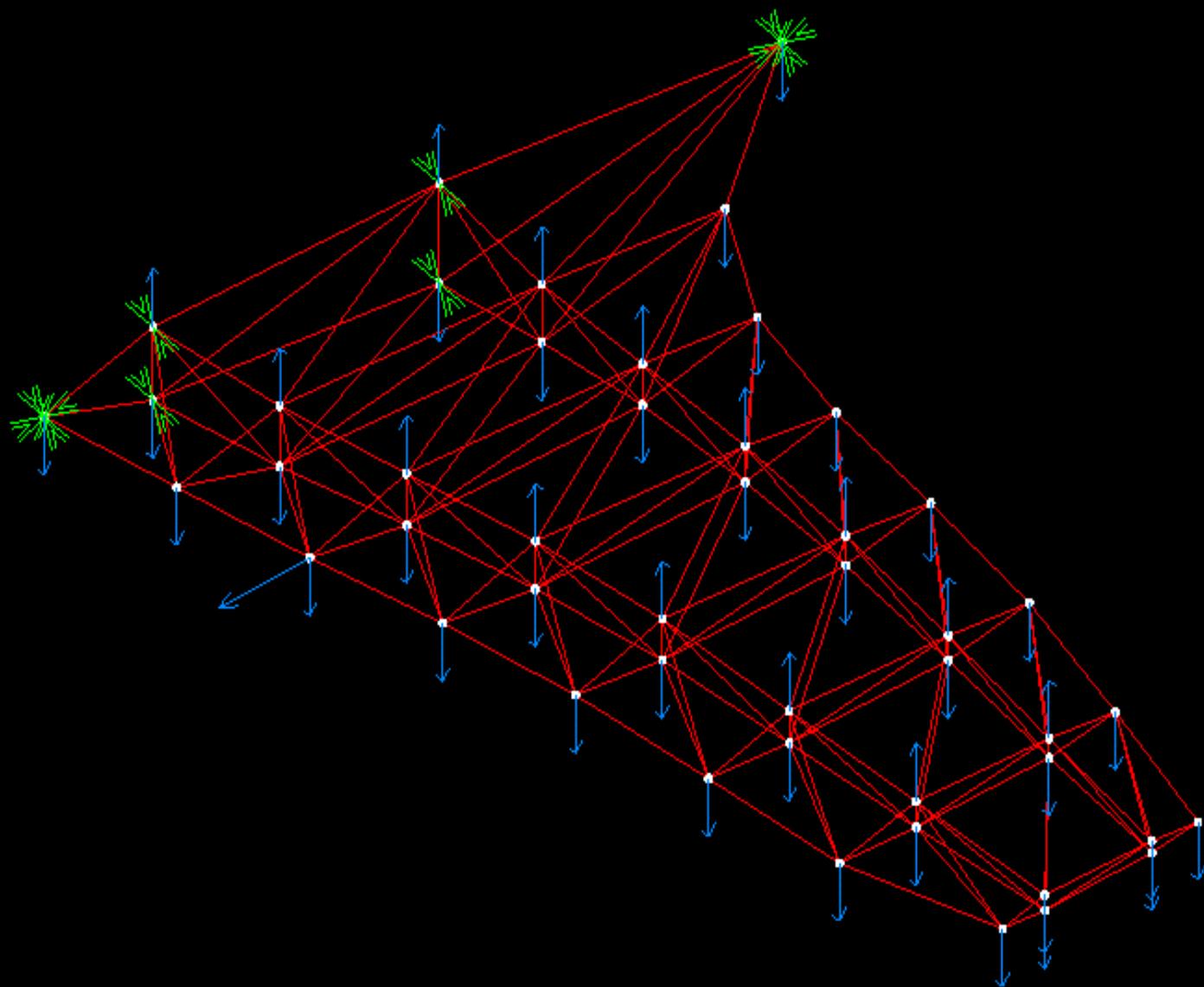
View in XZ plane



View in YZ plane



View in XY plane



Element Forces

Max: 1206.98

Min: -1177.03

1206.98



968.581



730.18



491.779



253.378



14.9766



-223.425



-461.826



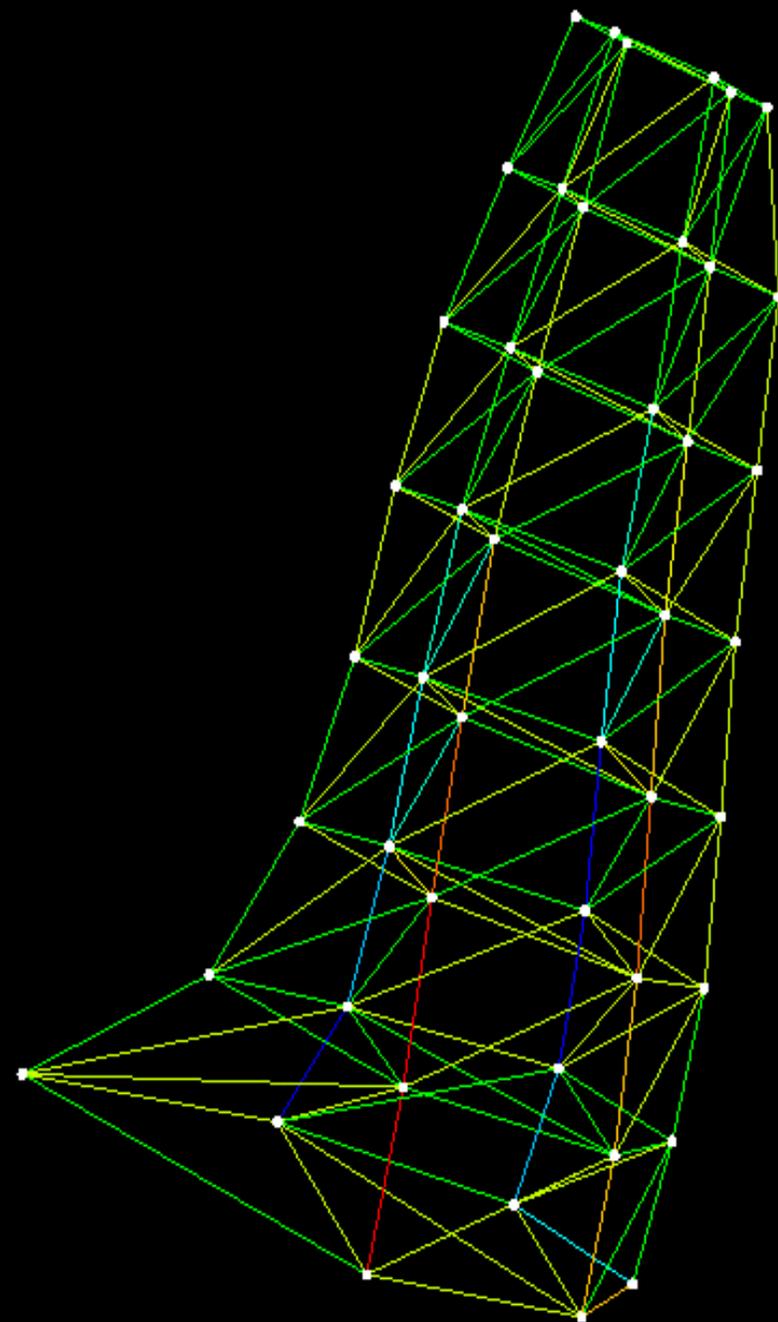
-700.227



-938.628



-1177.03



Element Forces

Max: 1206.98

Min: -1177.03

1206.98



968.581



730.18



491.779



253.378



14.9766



-223.425



-461.826



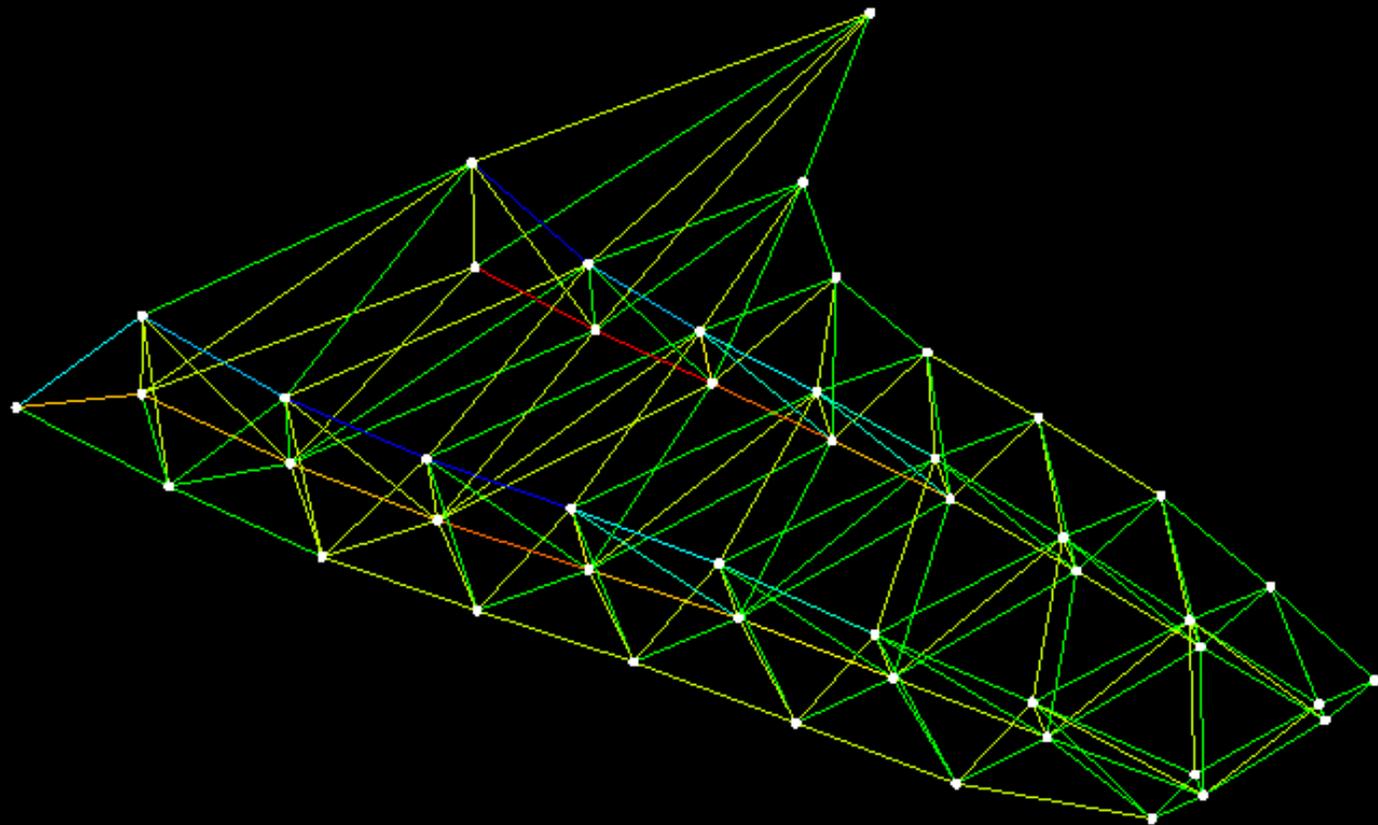
-700.227



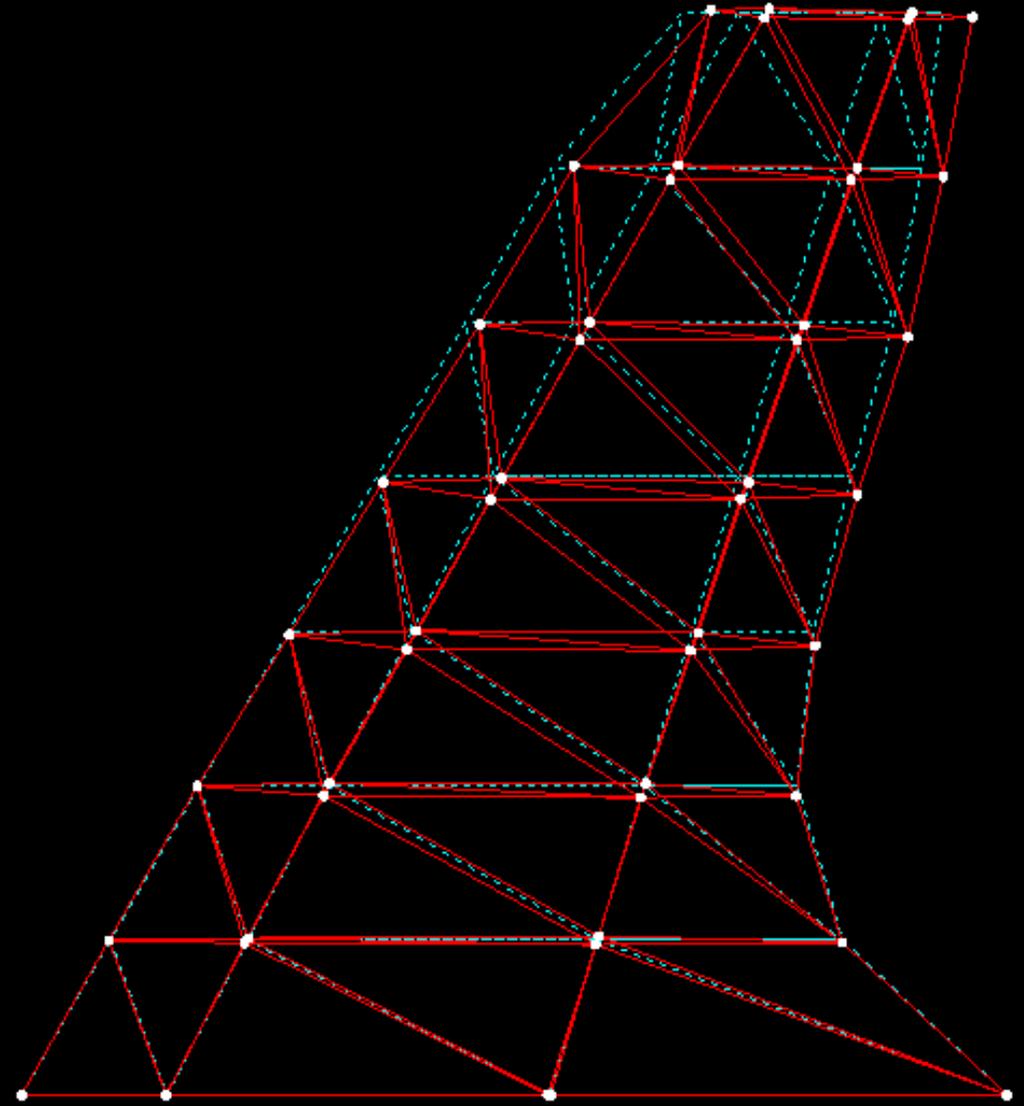
-938.628



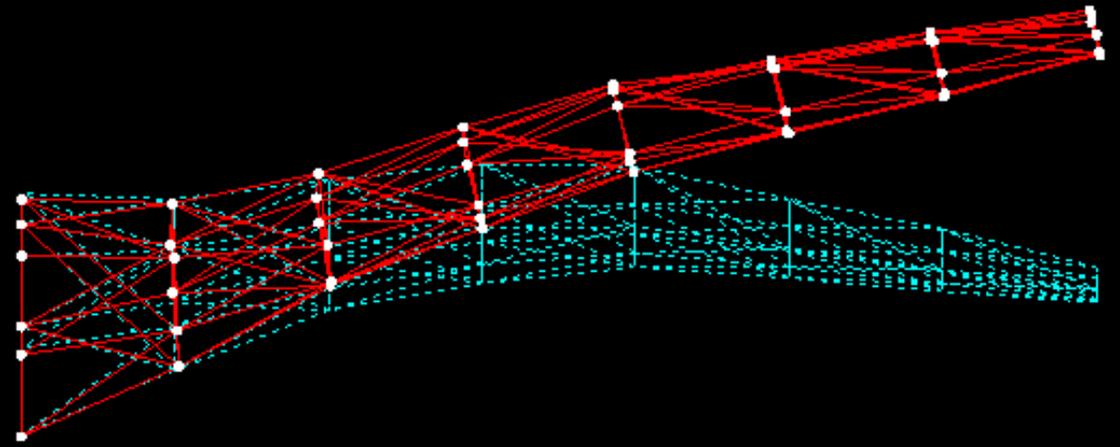
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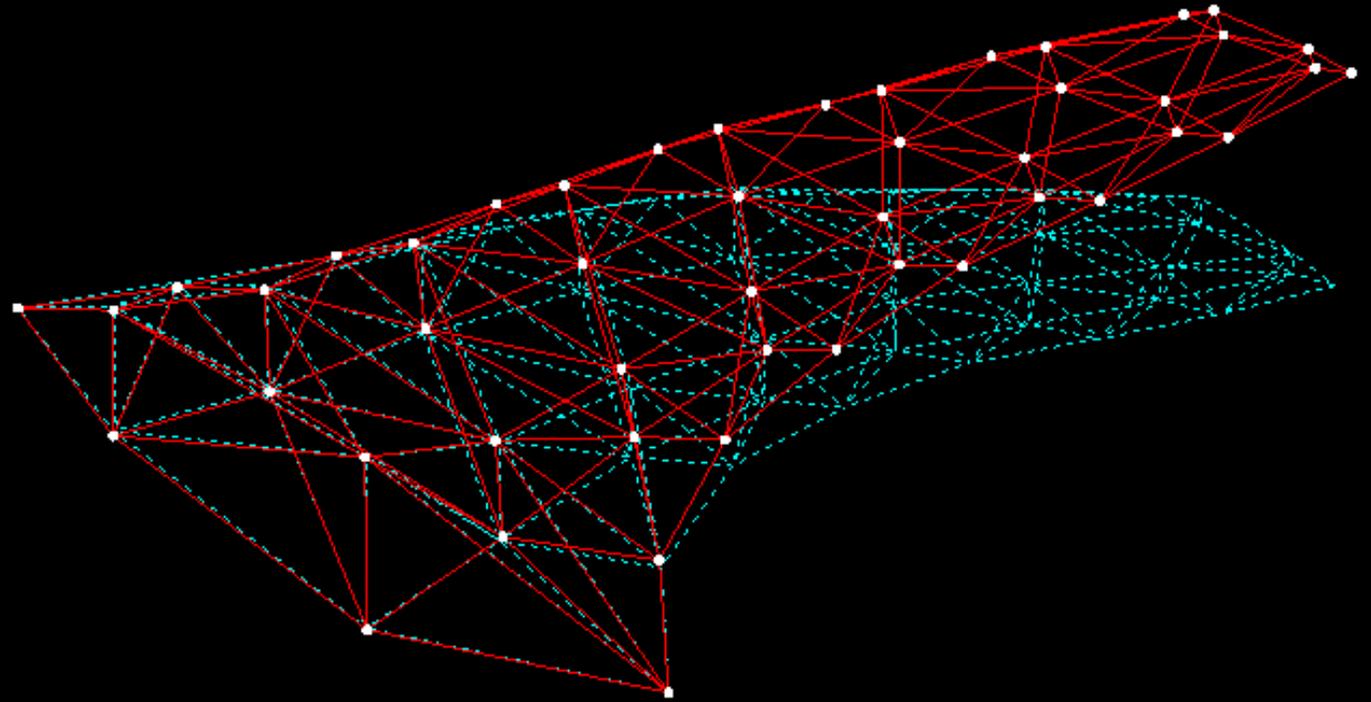
Def. + Undef. Shape



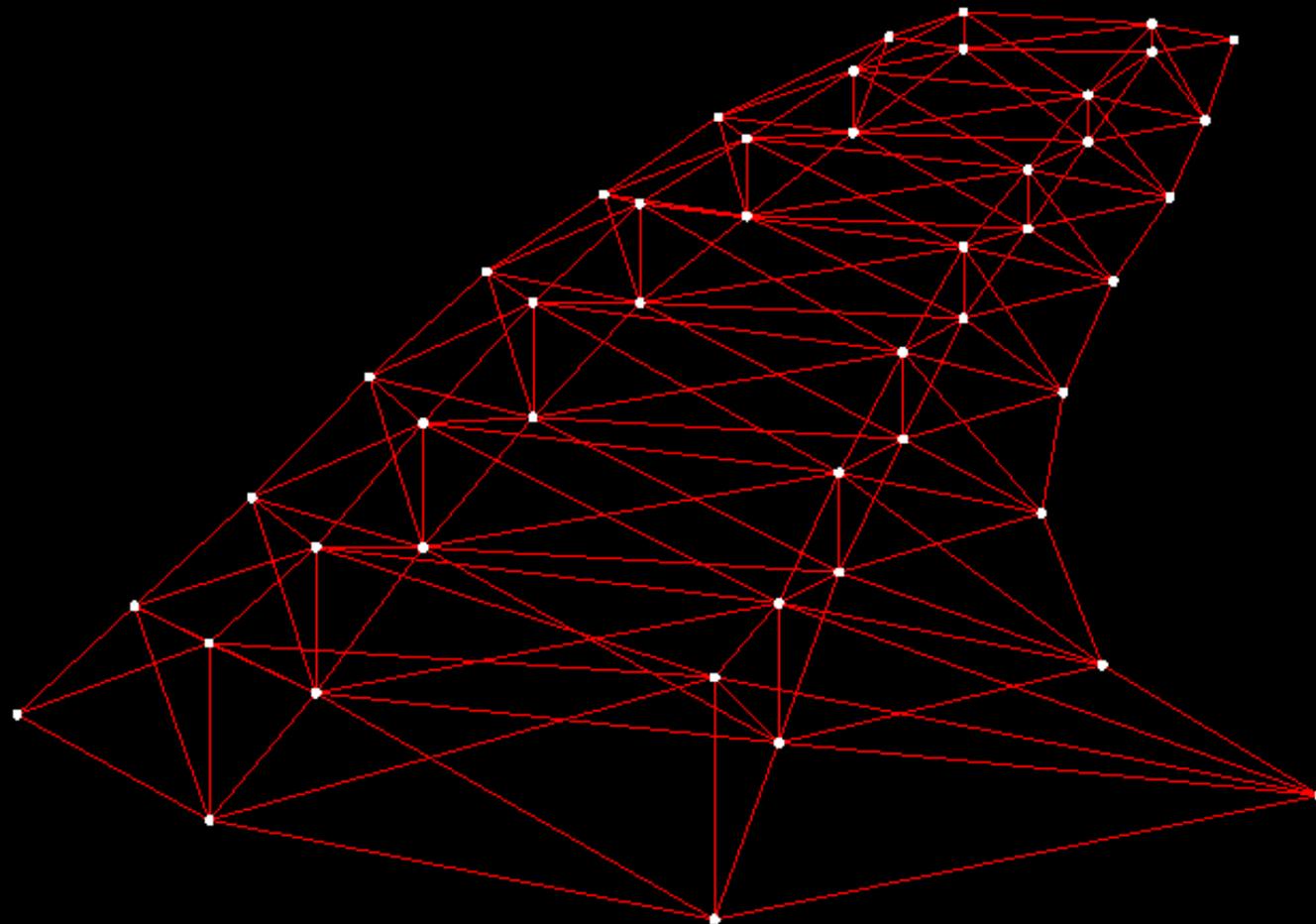
Def. + Undef. Shape



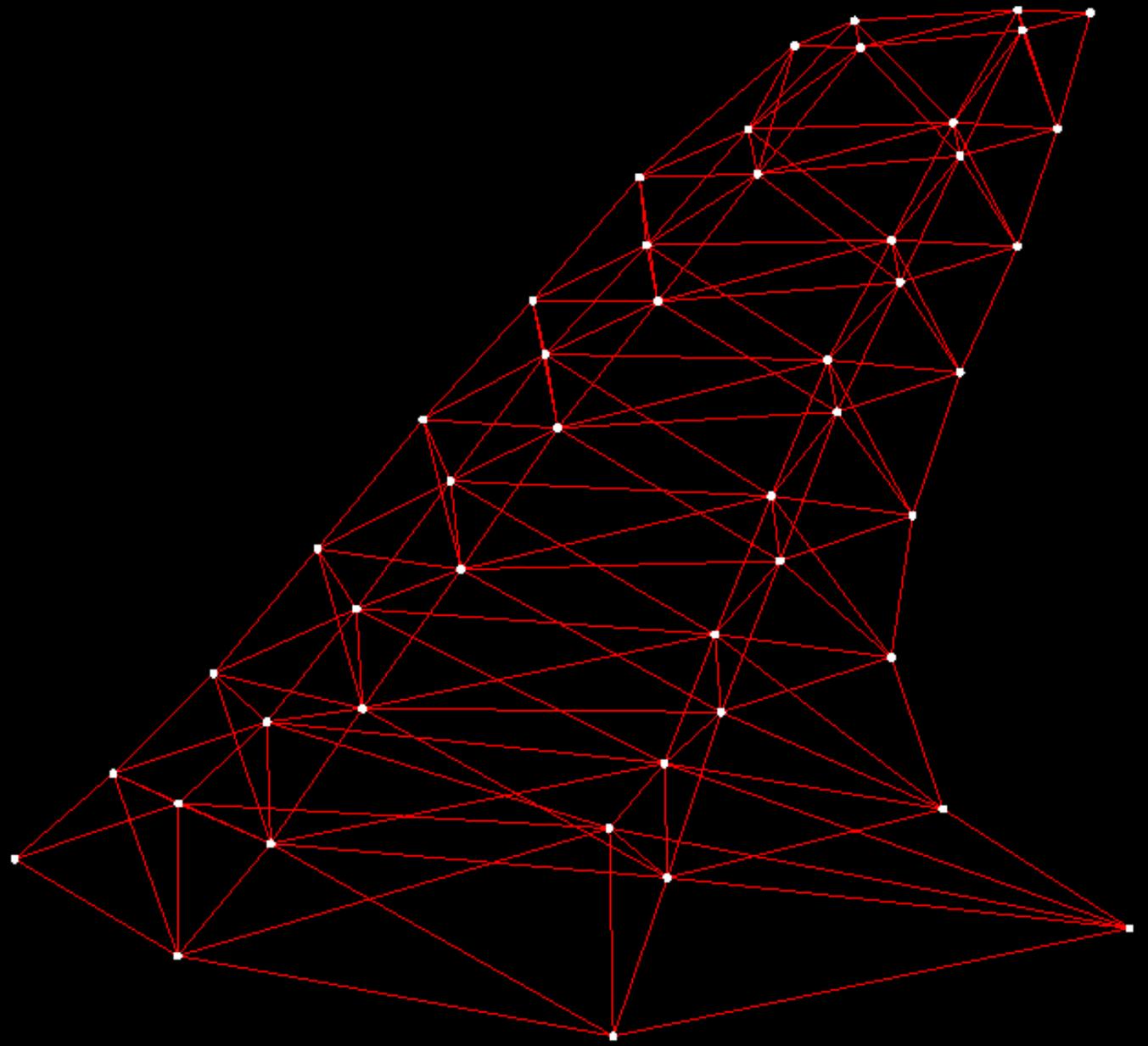
Def. + Undef. Shape



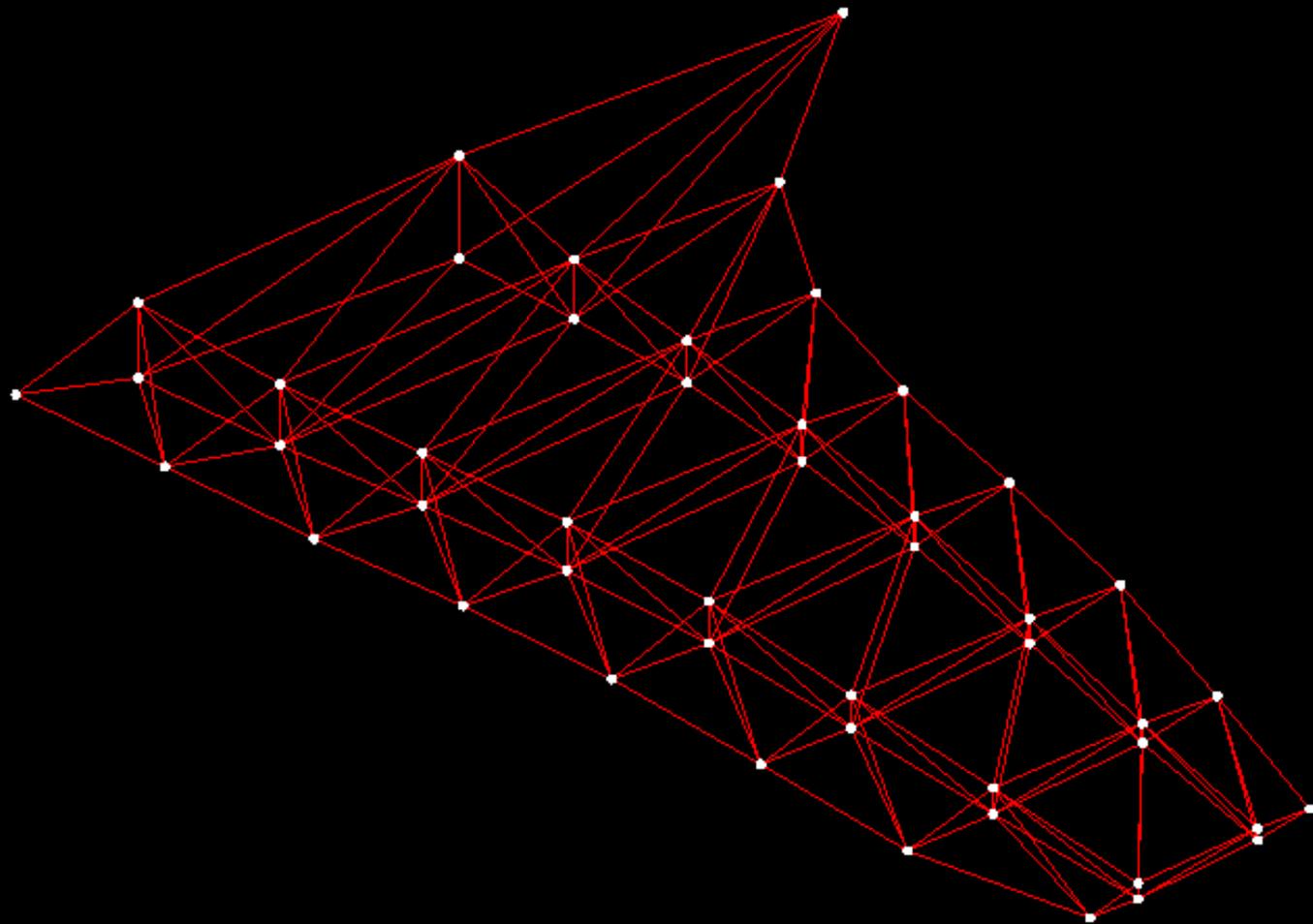
Undeformed Shape



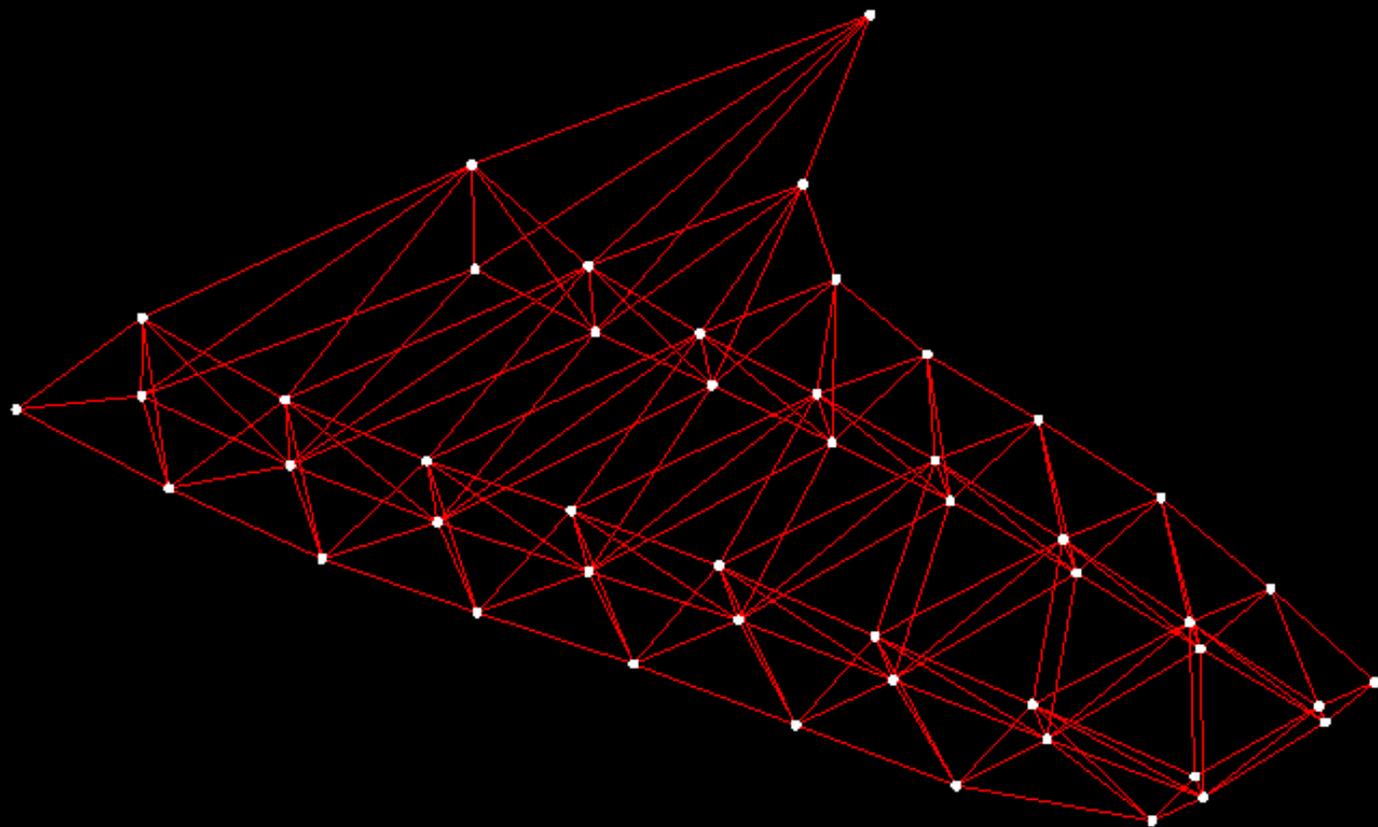
Deformed Shape



Undeformed Shape

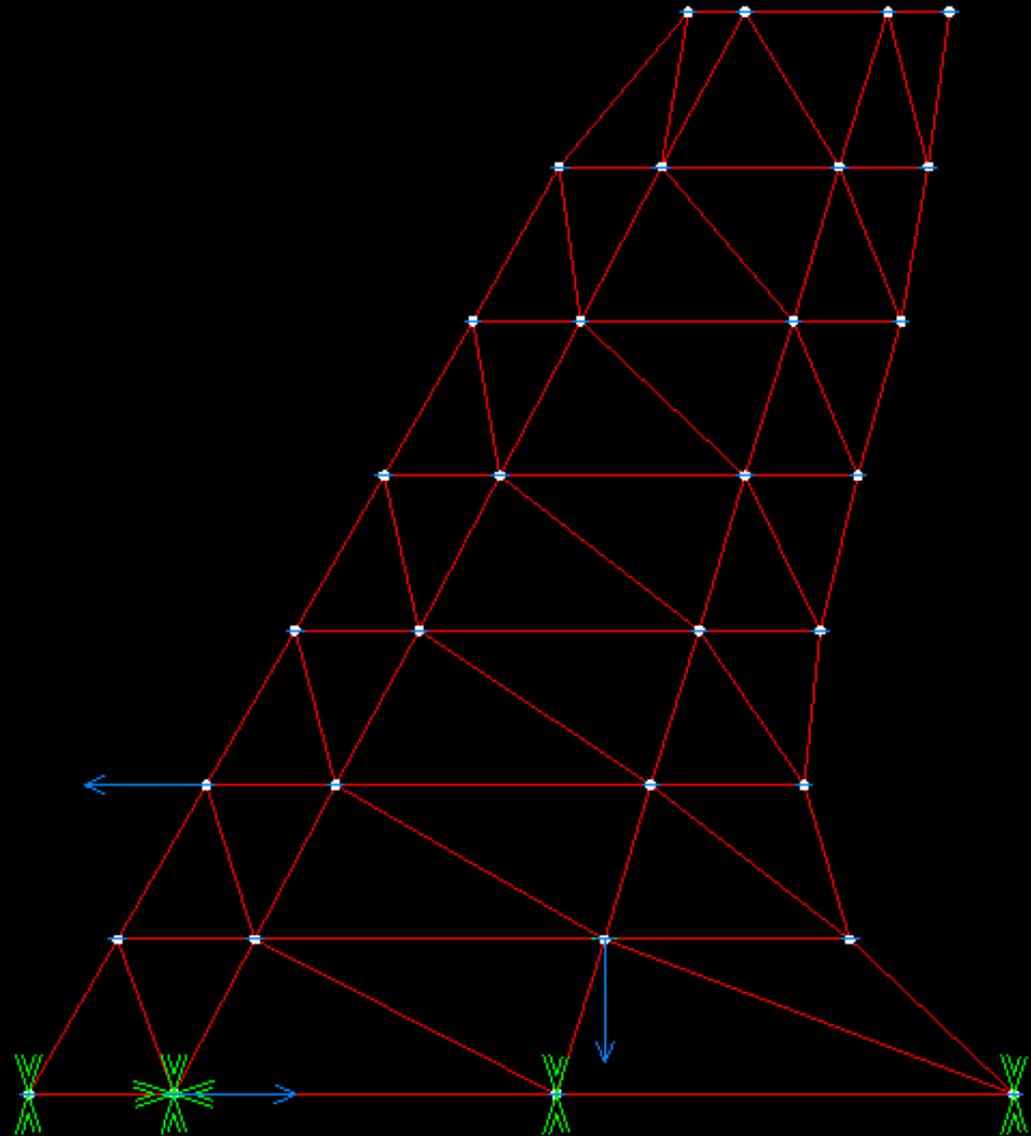


Deformed Shape

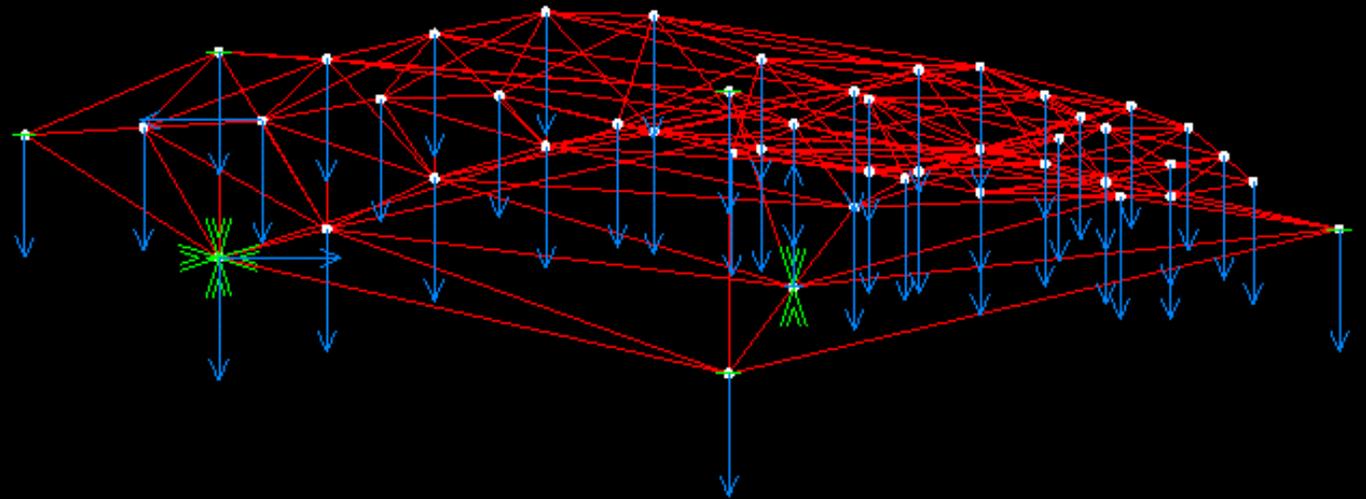


Berechnung der Kräfte im Tragwerk am Boden

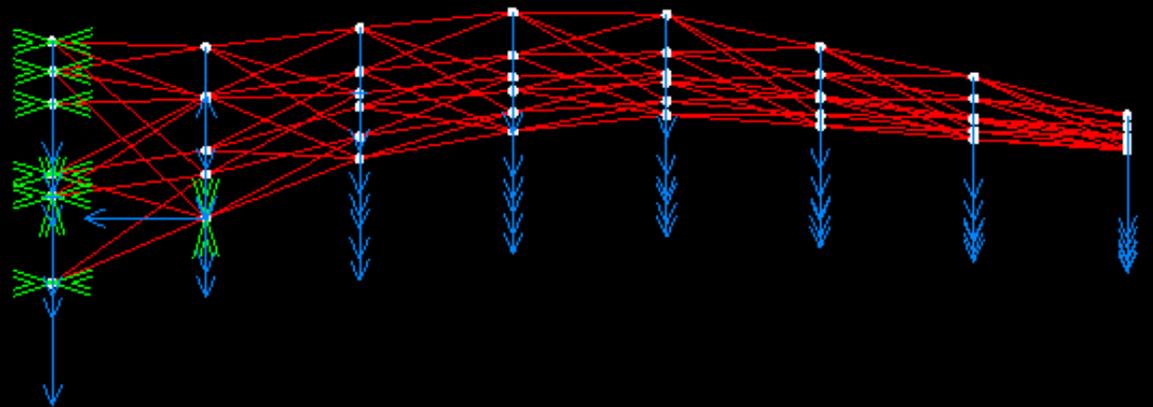
View in XY plane



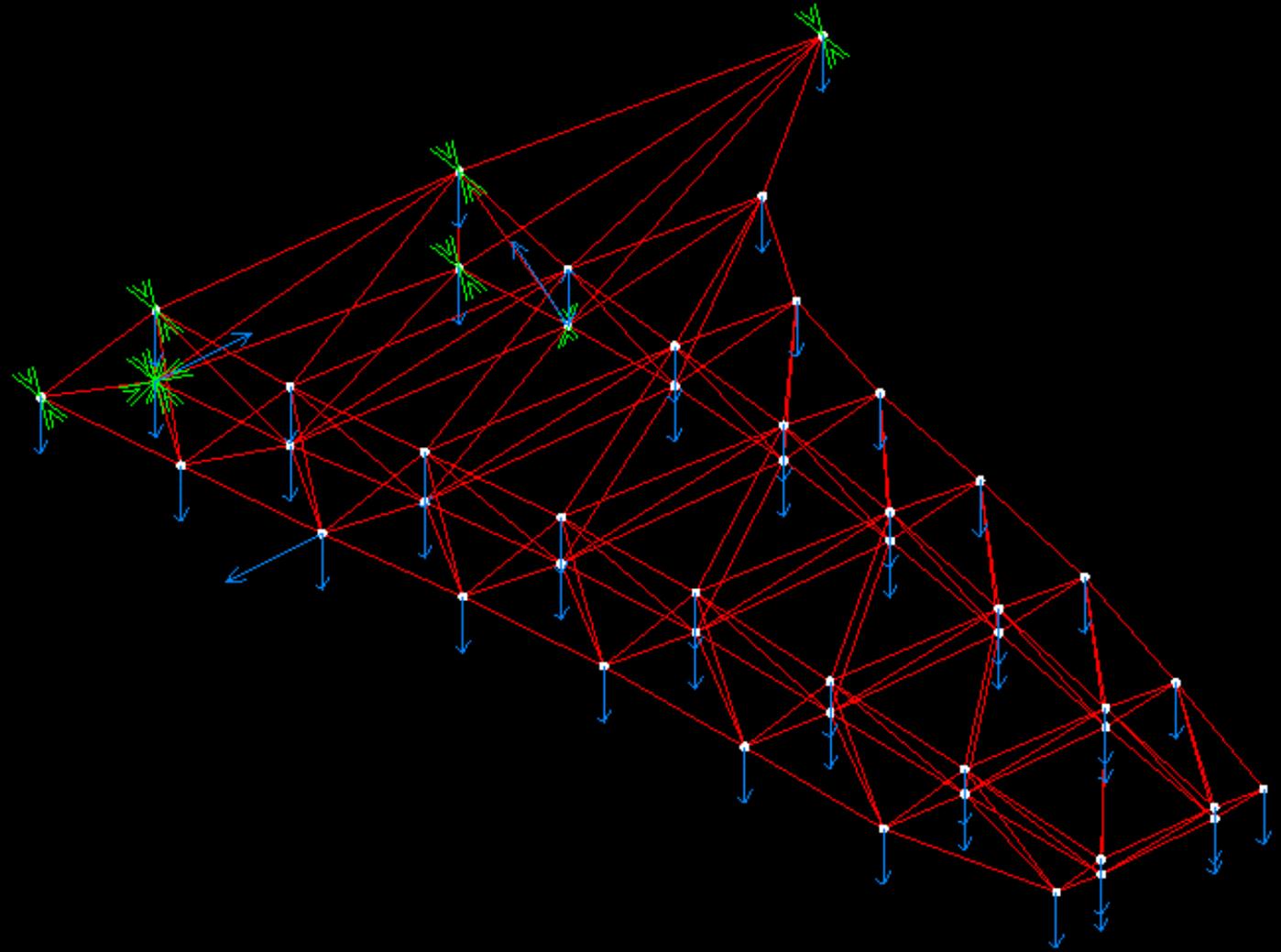
View in XZ plane



View in YZ plane



View in XY plane



Element Forces

Max: 1331.28

Min: -1761.65

1331.28



1021.98



712.691



403.398



94.1048



-215.188



-524.482



-833.775



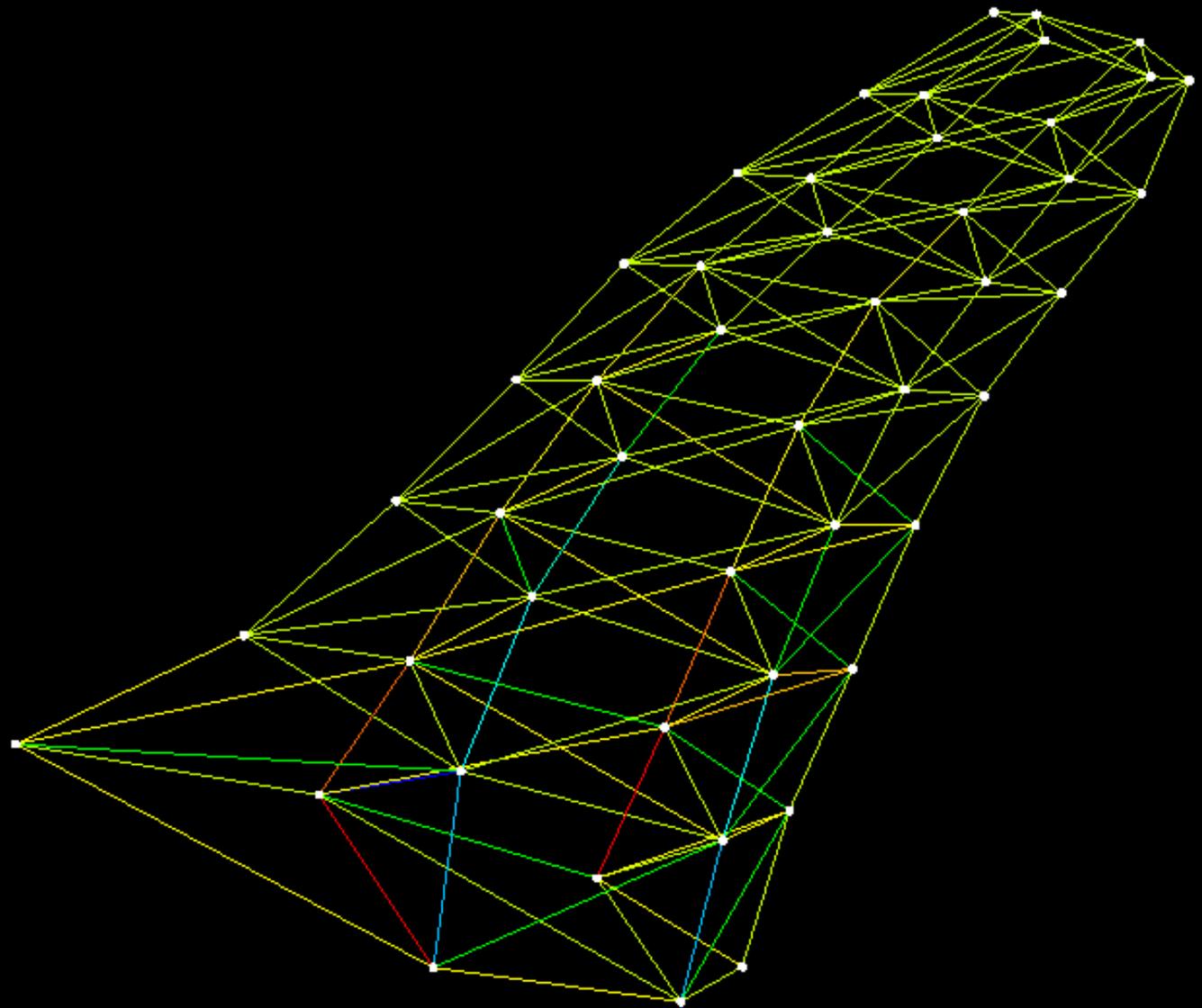
-1143.07



-1452.36



-1761.65



Element Forces

Max: 1331.28

Min: -1761.65

1331.28



1021.98



712.691



403.398



94.1048



-215.188



-524.482



-833.775



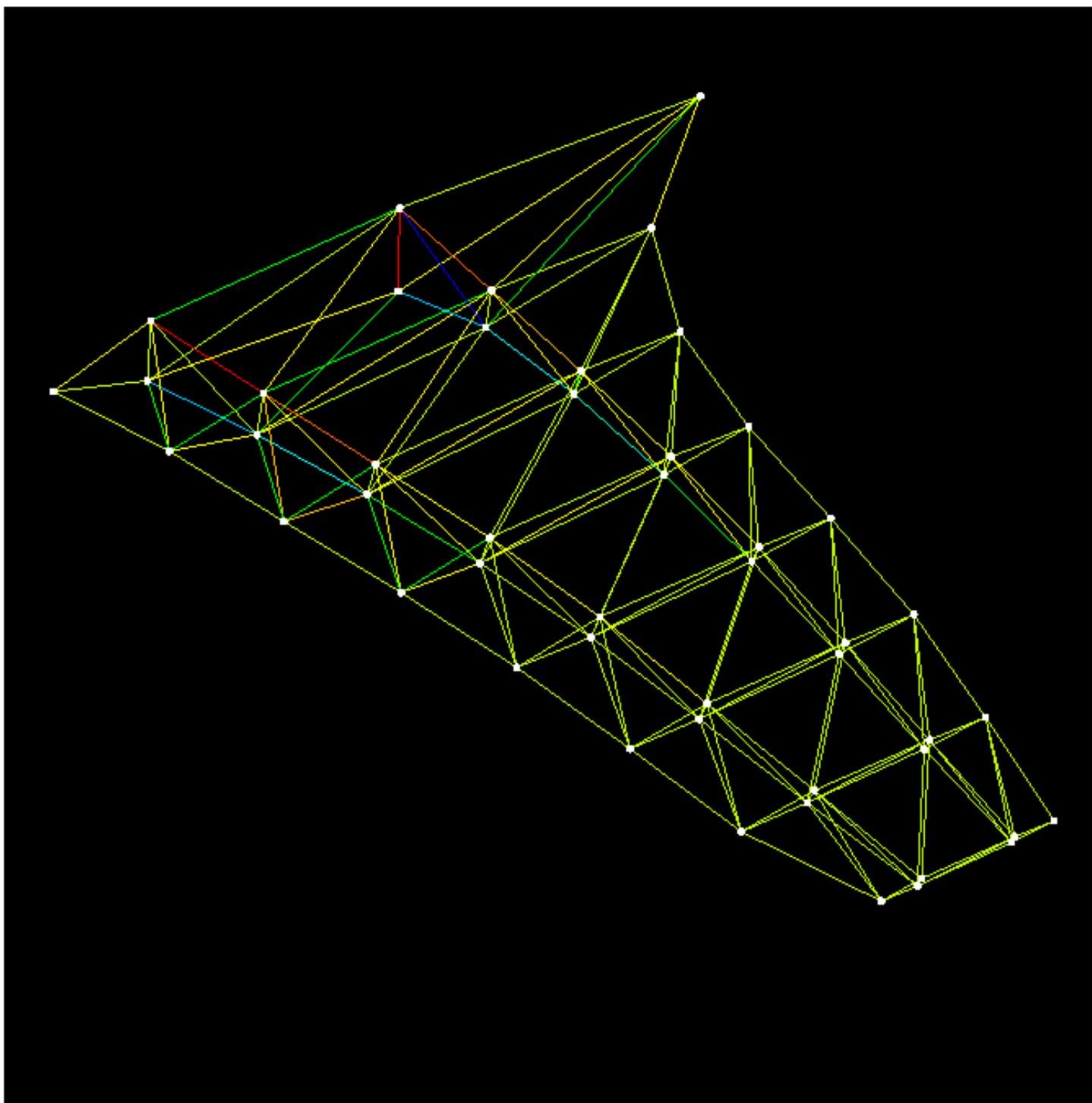
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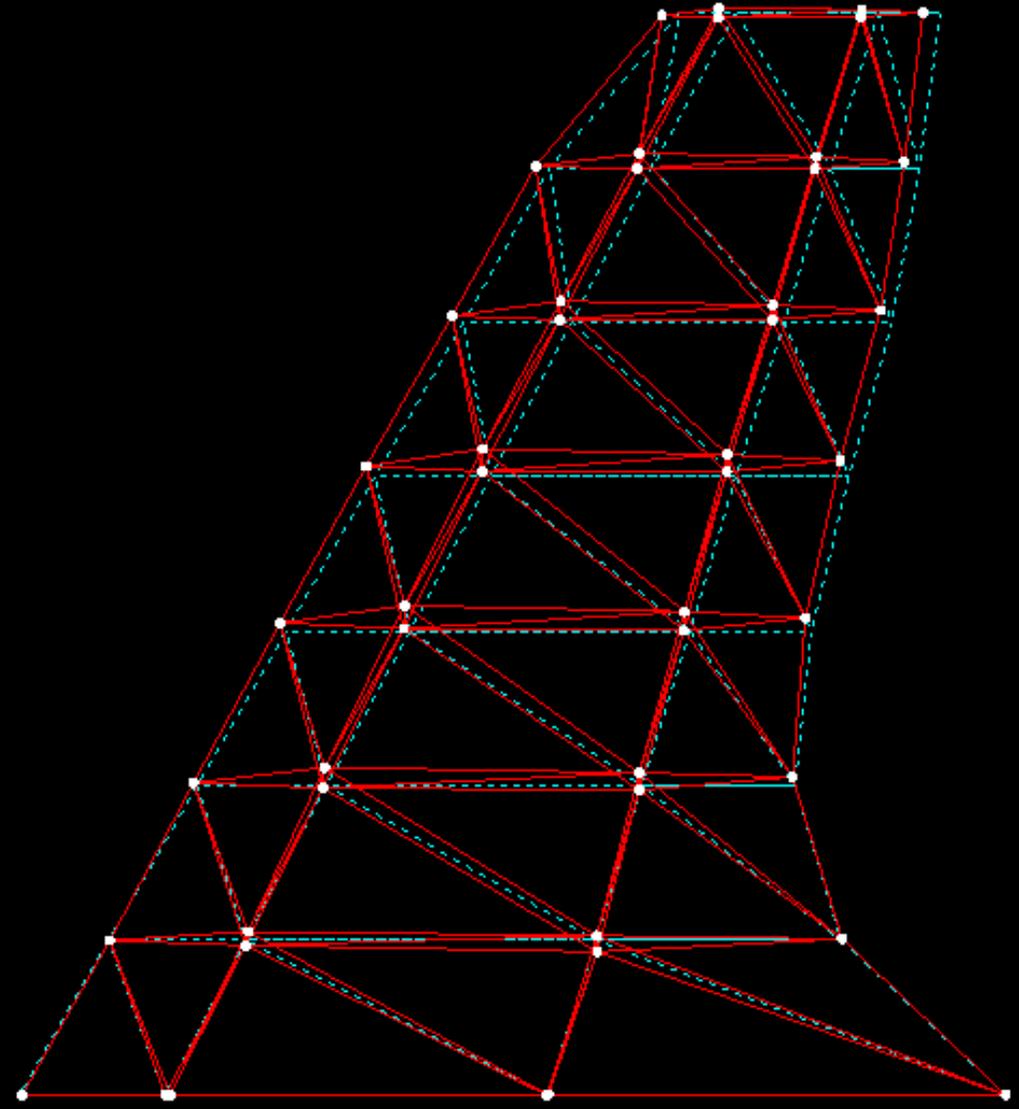
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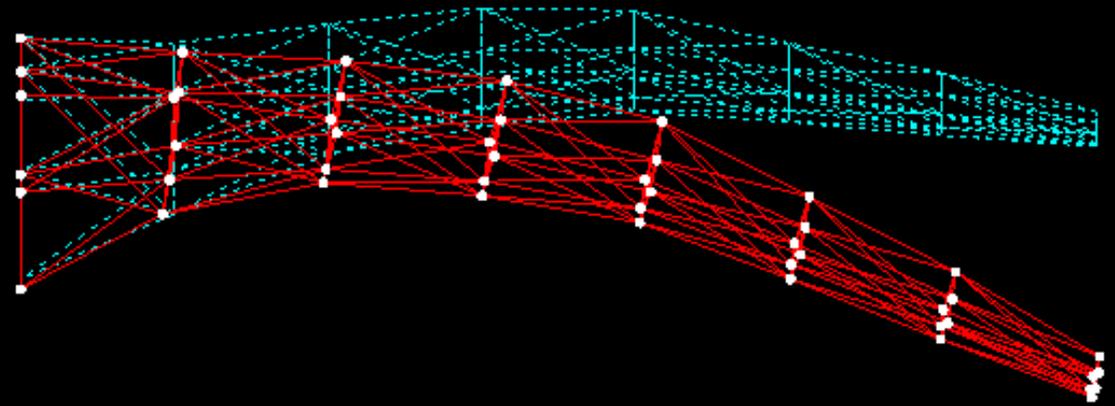
-1761.65



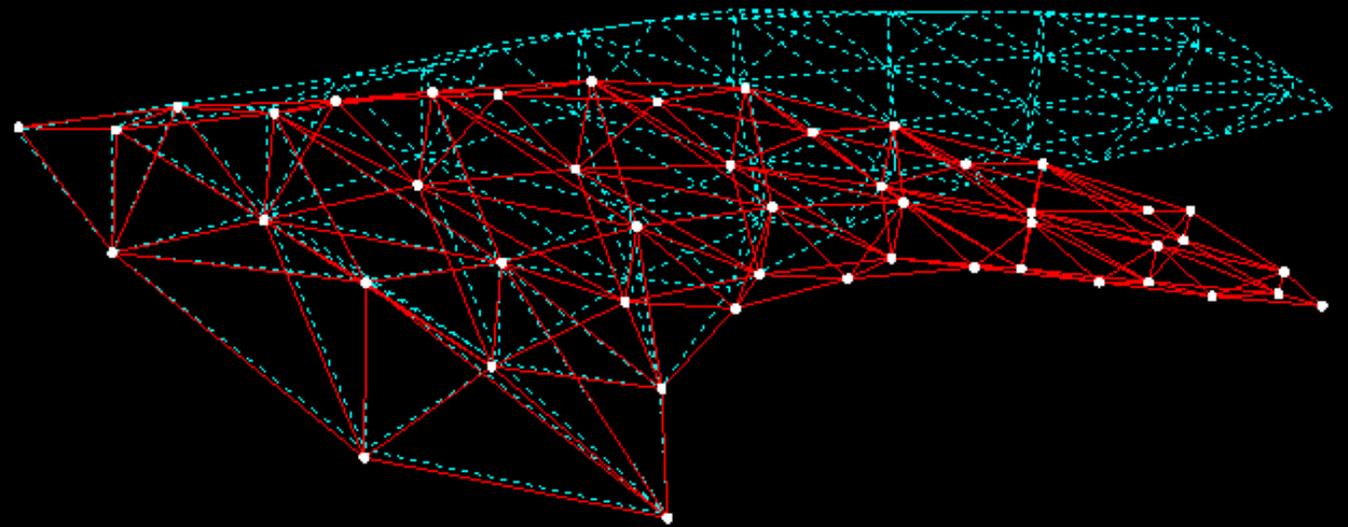
Def. + Undef. Shape



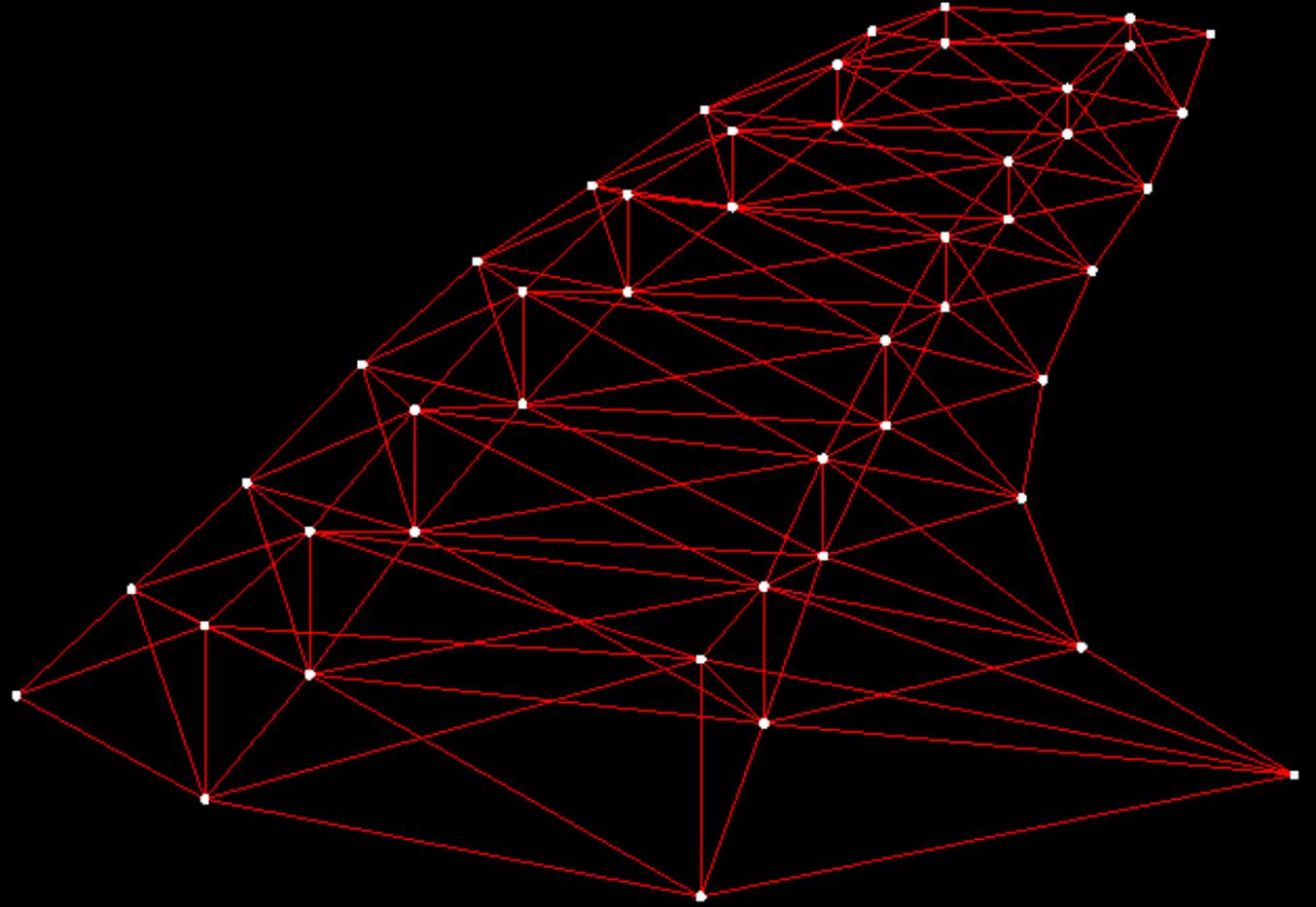
Def. + Undef. Shape



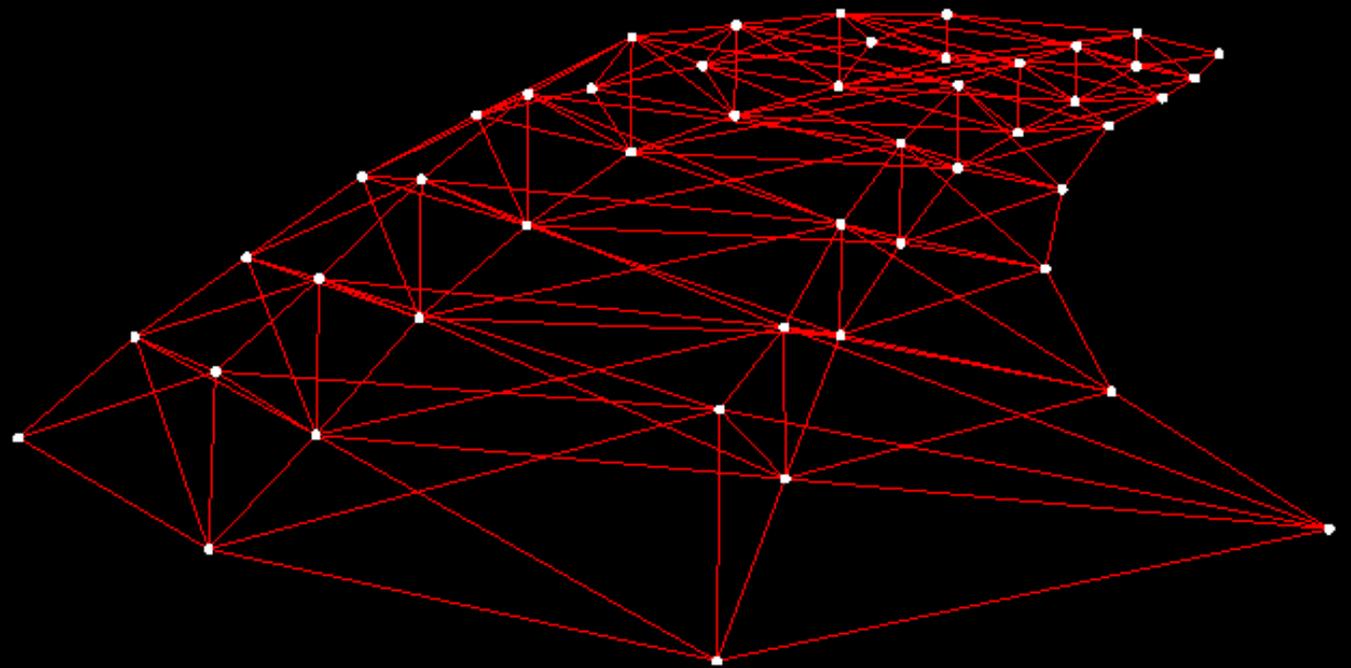
Def. + Undef. Shape



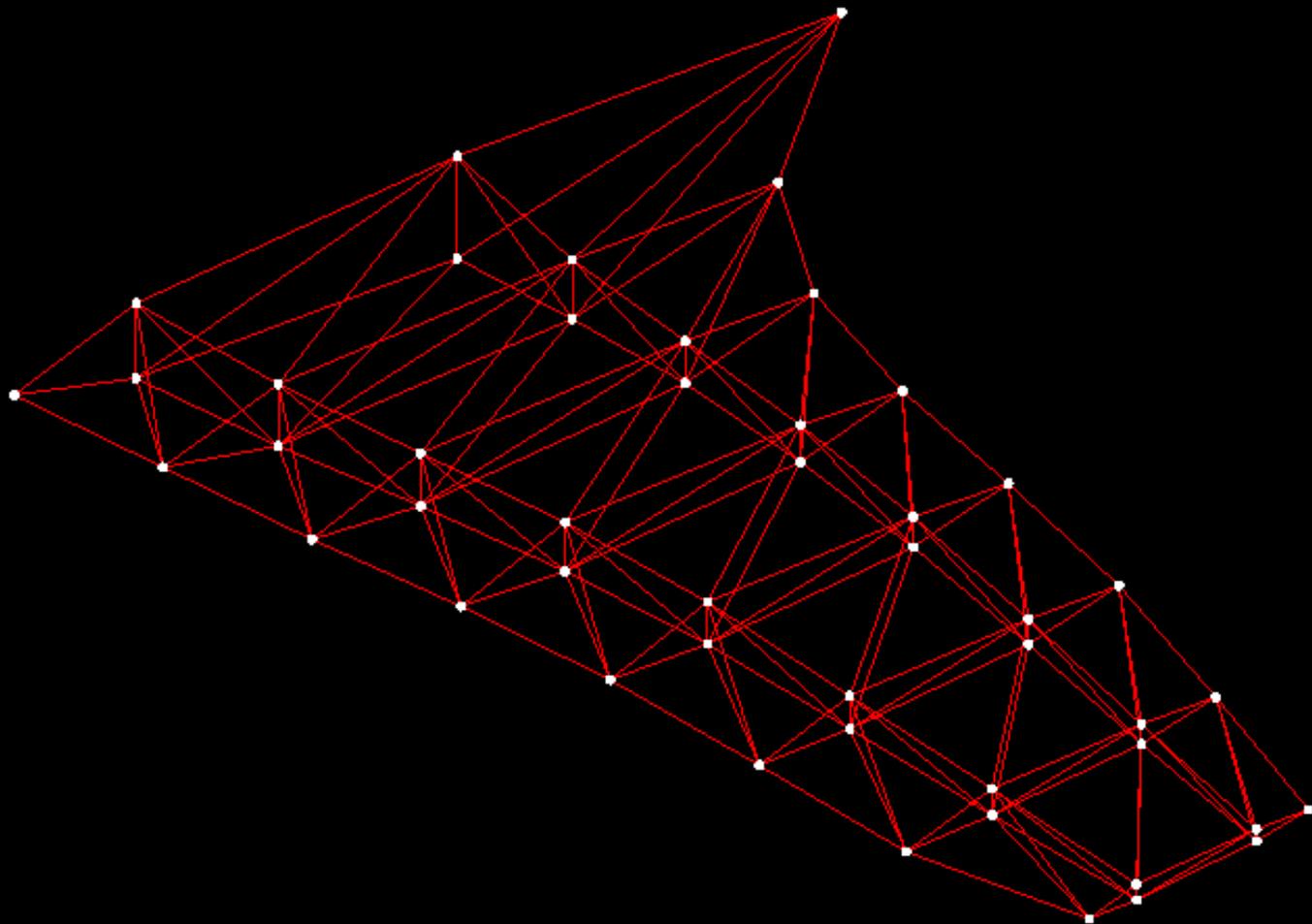
Undeformed Shape



Deformed Shape



Undeformed Shape



Deformed Shape

