# Suggested Block Width for text label, polylines and polygons

With **Suggested Block Width,** You can change the block width of the stream requests that are sent from TerraExplorer to the remote server. Changing the block width can improve performance. The block size is influenced by three intersected compulsions:
Layer Absolute Max Viewing Altitude.
Mean features density per block.
Layer precision level (relevant only for polyline or polygon layers).
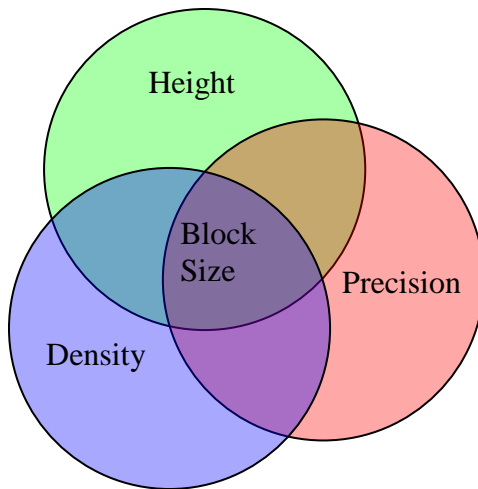
Layer's Absolute Max Generally, in latitude degrees, the block size function of the Layer's Viewing Altitude, at which the data becomes visible:
Max Viewing Altitude * 0.235 = Suggested Block Width

Viewing Altitude 30 degrees up to -30 is determined as a Absolute Max

Suggested Block Width (Km.)	Max Viewing Altitude (Km.)
1.222	5
2.445	10
4.891	21
9.783	42
19	81
39	166
78	332
156	664
313	1332
626	2664

According to this function, it requires approximately 9 requests in order to fill the viewing screen with data. This way, the users do not wait long time until they receive all the data in their viewing screen and will not ask for extra-data outside the viewing screen.

Mean features density per block
The denser the data, i.e. the mean objects per square kilometer, the smaller the request should be. If the layer contains feature points, it is recommended that each block cover less than ~ 100 points.
In case the layer contains high-density features, it is recommended to present the layer from low altitude and small block size. In parallel, create a simplified layer that is presented from high altitude and large block size. E.g., large cities layer can be divided, based on the population size, into two layers:

Layer	Max Viewing Altitude	Suggested Block Width
Population < 10,000	150,000 m.	39 Km.
Population > 10,000	3,000,000 m.	156 Km.

Layer's precision level (relevant only for polyline or polygon layers)
Layer's precision level is expressed by number of vertices in each polyline or polygon feature, relates to the distance or the area the feature covers. The higher the precision level, the smaller the requests should be.
In case the layer contains high-precise features, it is recommended to present the layer from low altitude and small block size. In parallel, create a simplified layer that is presented from high altitude and large block size. E.g., layer that presents rivers with scale 1:10,000 can be simplified and produce a 1:250,000 scale layer:

Layer	Max Viewing Alt.	Min Viewing Alt.	Suggested Block Width
Rivers 1:10,000	40,000 m.	0 m.	9783 m.
Rivers 1:100,000	2,500 Km.	40,000 m.	313 Km.

Note   3D models and Image label are much larger (in size), and therefore their fetch time is longer. In this case, we should reduce the block size.

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