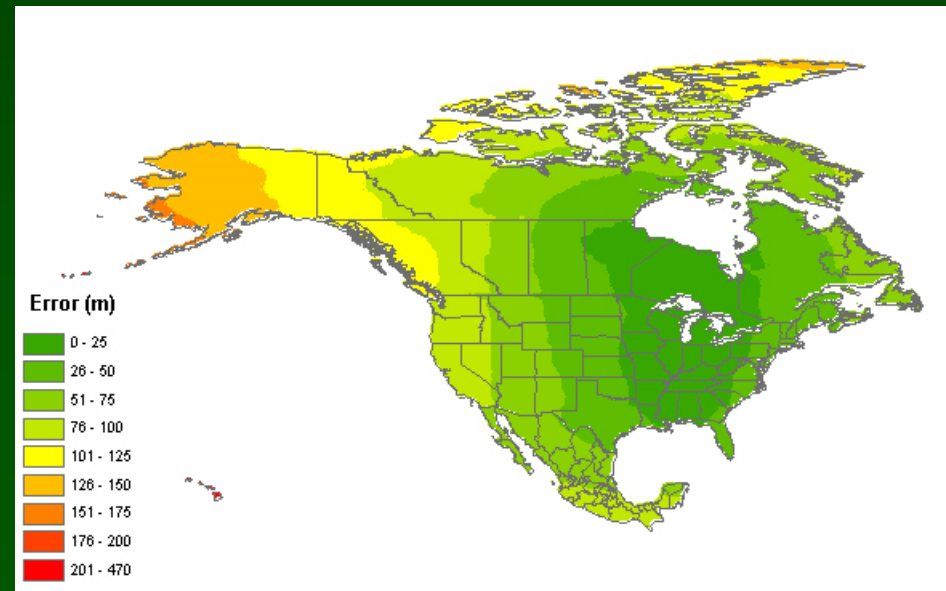
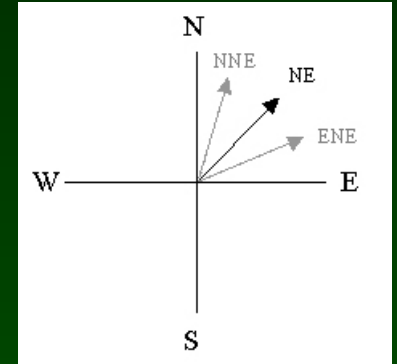


Causes of uncertainty:

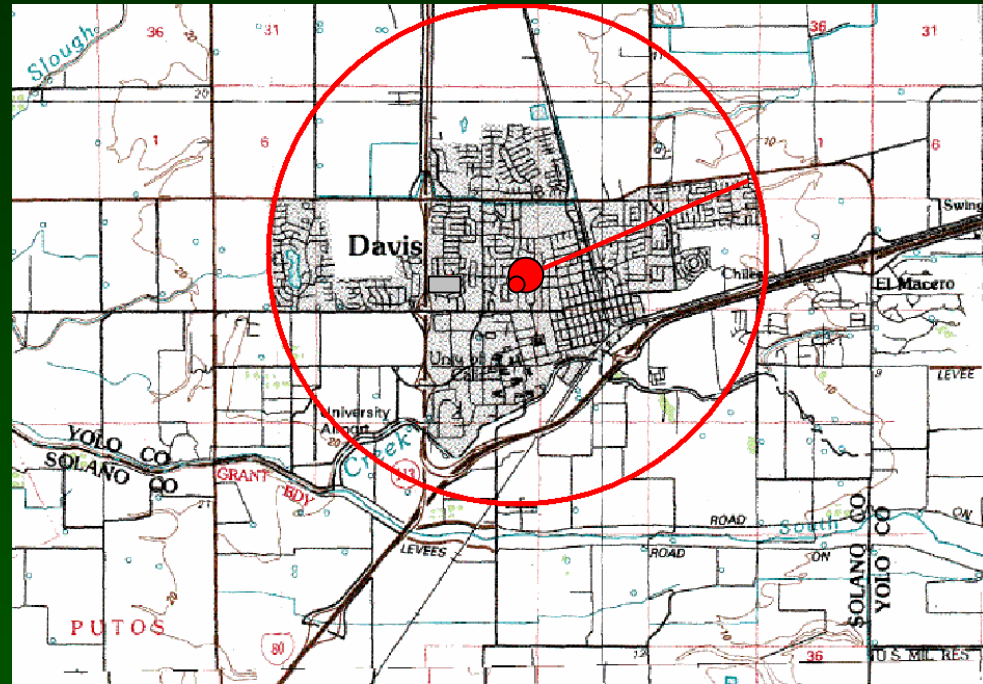
- ▶ Map scale →
- ▶ The extent of the locality
- ▶ GPS accuracy
- ▶ Unknown datum (results in >100 m) →
- ▶ Imprecision in distance measurements
- ▶ Imprecision in direction measurements

Scale	Uncertainty (ft)	Uncertainty (m)
1:1200	3.3 ft	1.0 m
1:2400	6.7 ft	2.0 m
1:4800	13.3 ft	4.1 m
1:10,000	27.8 ft	8.5 m
1:12,000	33.3 ft	10.2 m
1:24,000	40.0 ft	12.2 m
1:25,000	41.8 ft	12.8 m
1:63,360	106 ft	32.2 m
1:100,000	167 ft	50.9 m
1:250,000	417 ft	127 m



Extents:

- ▶ Extent: the geographic range, magnitude or distance that a location may actually represent. (With a town, the extent is the polygon that encompasses the area inside the town's boundaries.)
- ▶ Linear extent- what we use for the Point-Radius Method. Defined as the distance from the geographic center of the location to the furthest point of the geographic extent of the location.



Precision and Accuracy:

- Always use as many decimal places as given by the coordinate source.
- A measurement in decimal degrees give to five decimal places is more precise than a measurement in degrees minutes seconds.
- False precision will result if data are recorded with a greater number of decimal points (e.g. when converting from DMS to decimal degrees).
- Always record the accuracy of your GPS readings (how well the GPS measures the true value of the location). The accuracy is given at the same time as the coordinate, but usually will not be recorded with the coordinates when you output them on most GPS units.

Georeferencing Error Calculator

Version 060123

Georeferencing Calculator

Calculation Type

Locality Type

Step 3) Enter all of the parameters for the locality.

Coordinate Source

Coordinate System

Latitude

Longitude

Datum

Coordinate Precision

Offset Distance

Extent of Named Place

Distance Units

Distance Precision

Direction

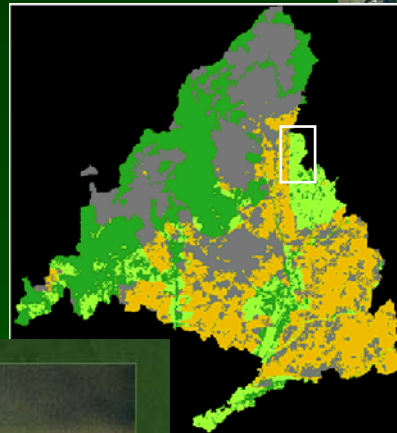
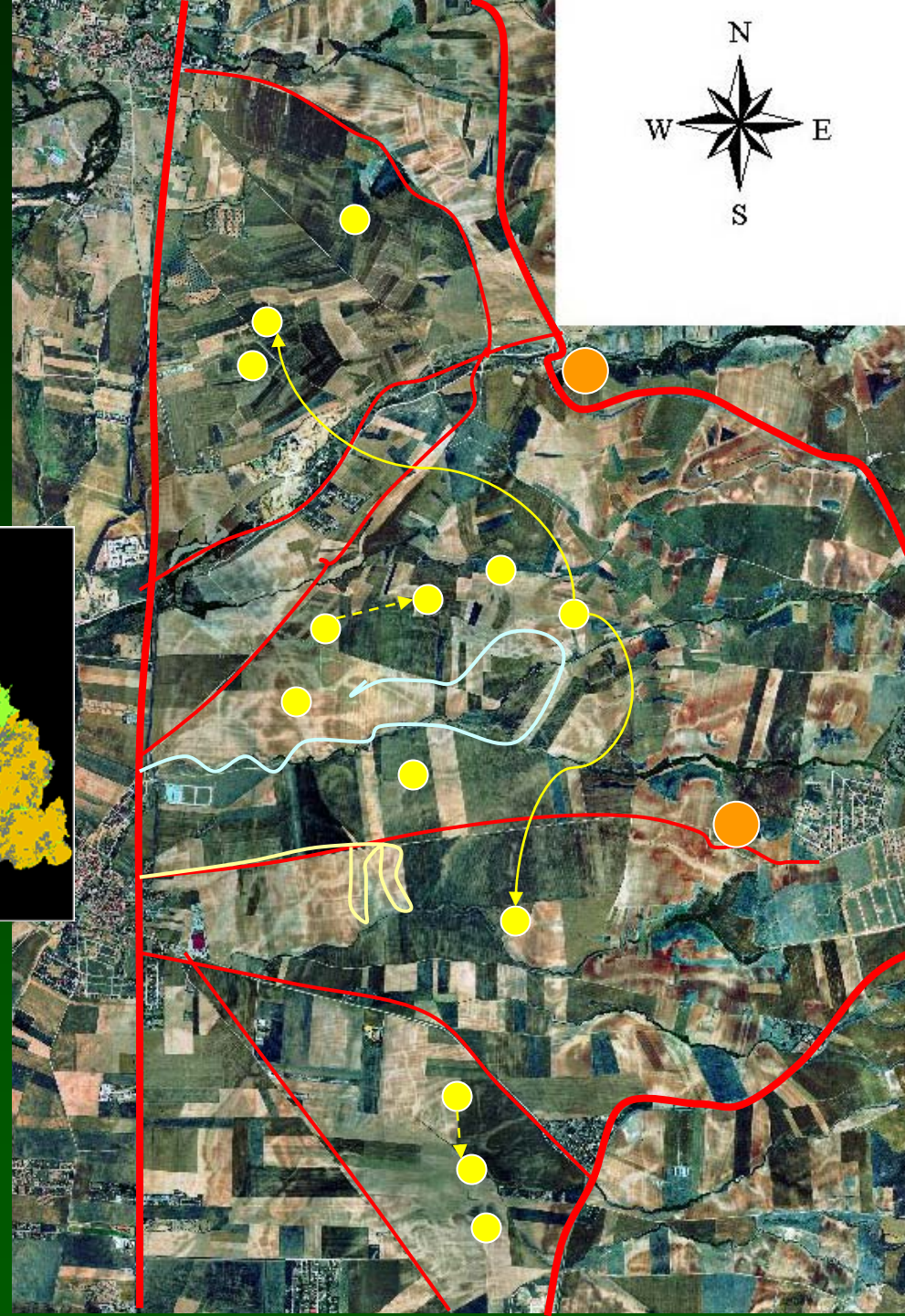
Decimal Latitude	Decimal Longitude	Maximum Error Distance		Calculate
<input type="text" value="30.14518"/>	<input type="text" value="-110.00000"/>	<input type="text" value="15.191"/>	<input type="text" value="mi"/>	

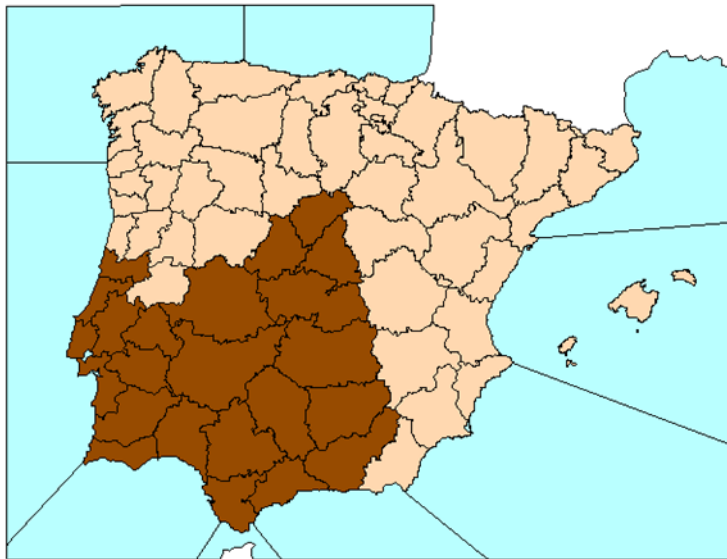
[Georeferencing Calculator Manual](#)

[Georeferencing Guidelines](#)

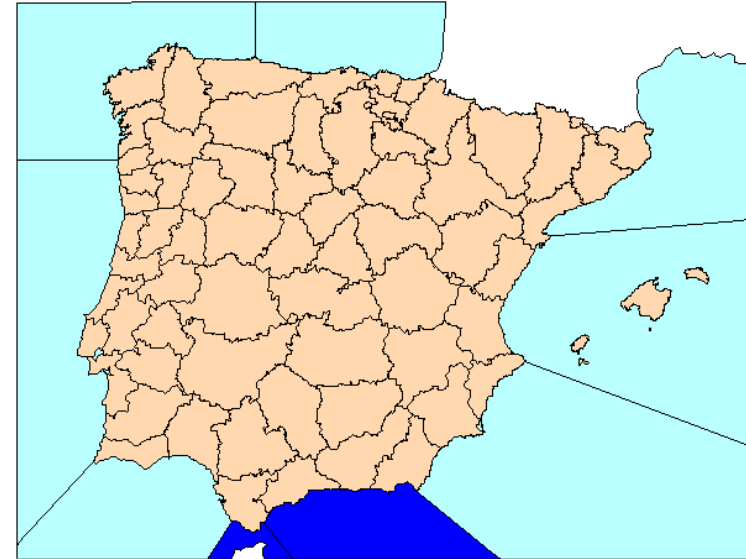
This application was originally written by John Wieczorek. Later versions benefitted from contributions from Qinghua Guo, Carr

Recursos Naturales, Información Geográfica y Ordenación del Territorio en la ZEPA de las Estepas Cerealistas Jarama-Henares



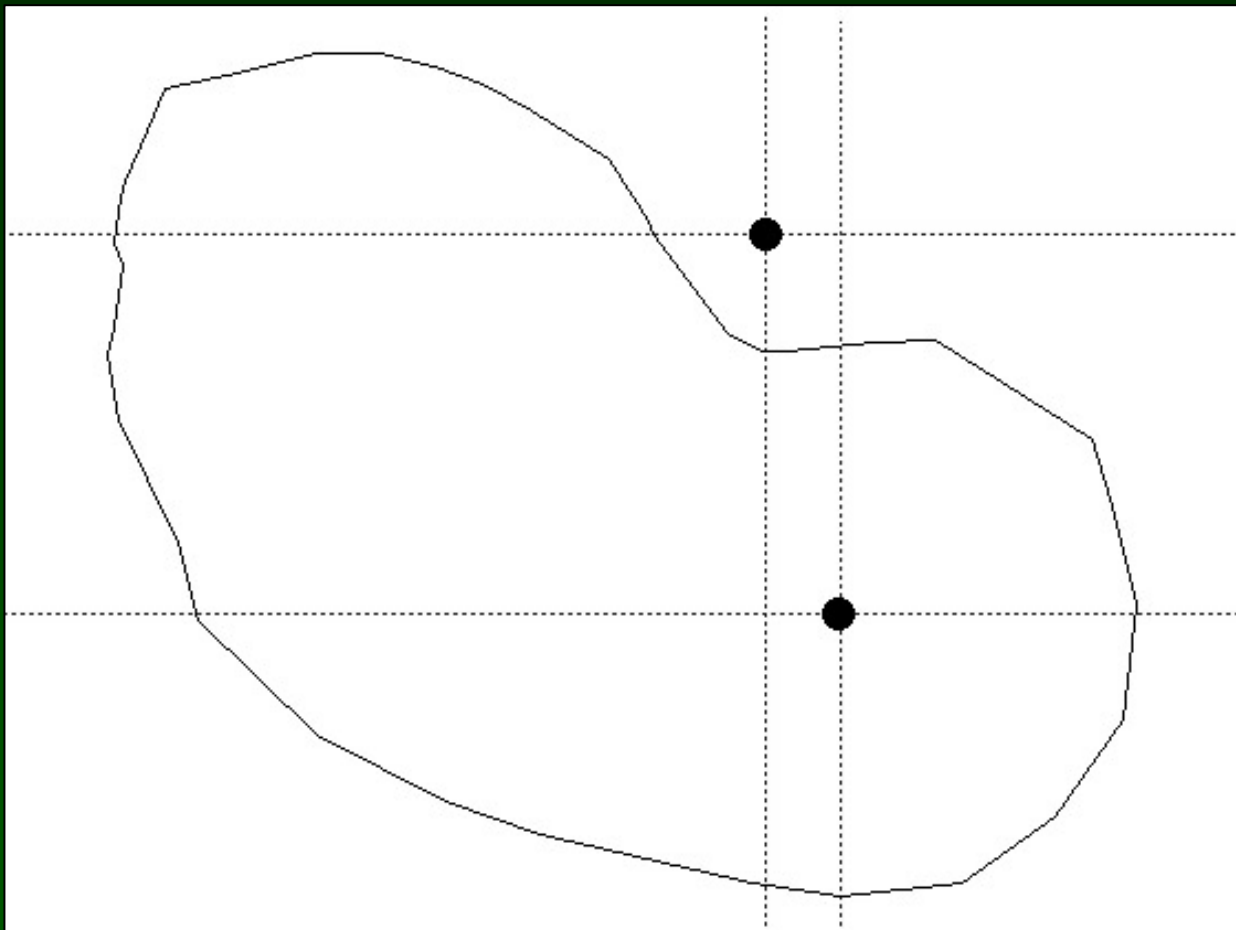


Triturus pygmaeus

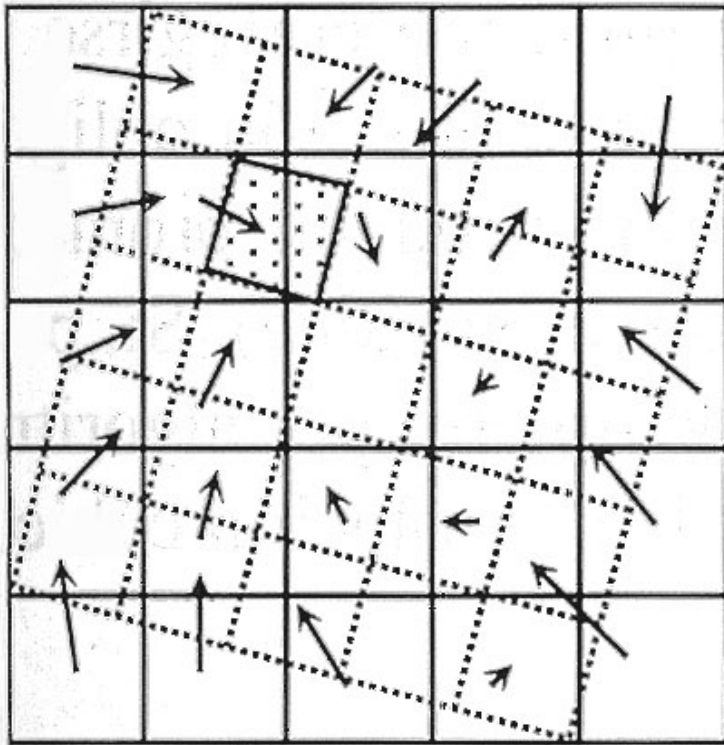


Patella ferruginea

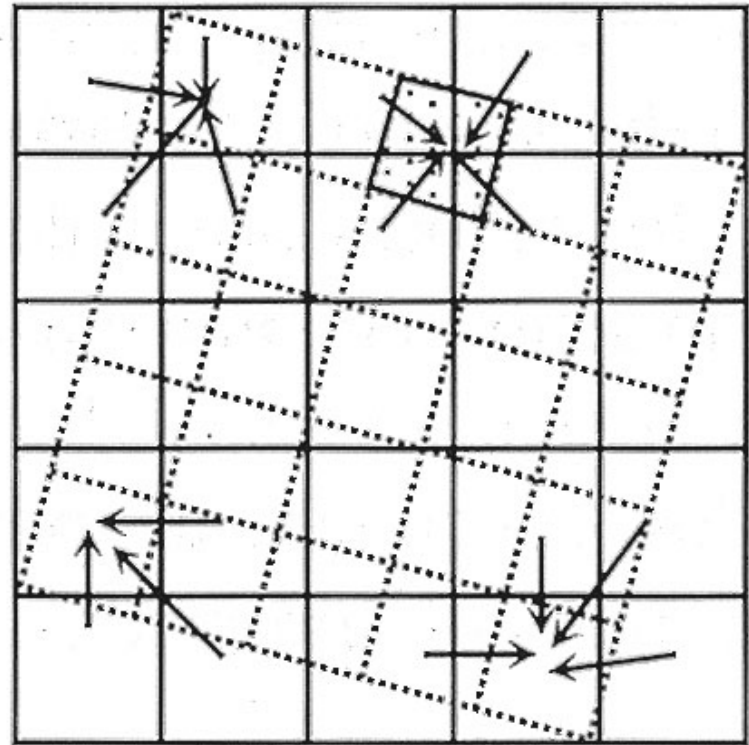
Superposición de puntos en polígonos



Remuestreo de capas ráster

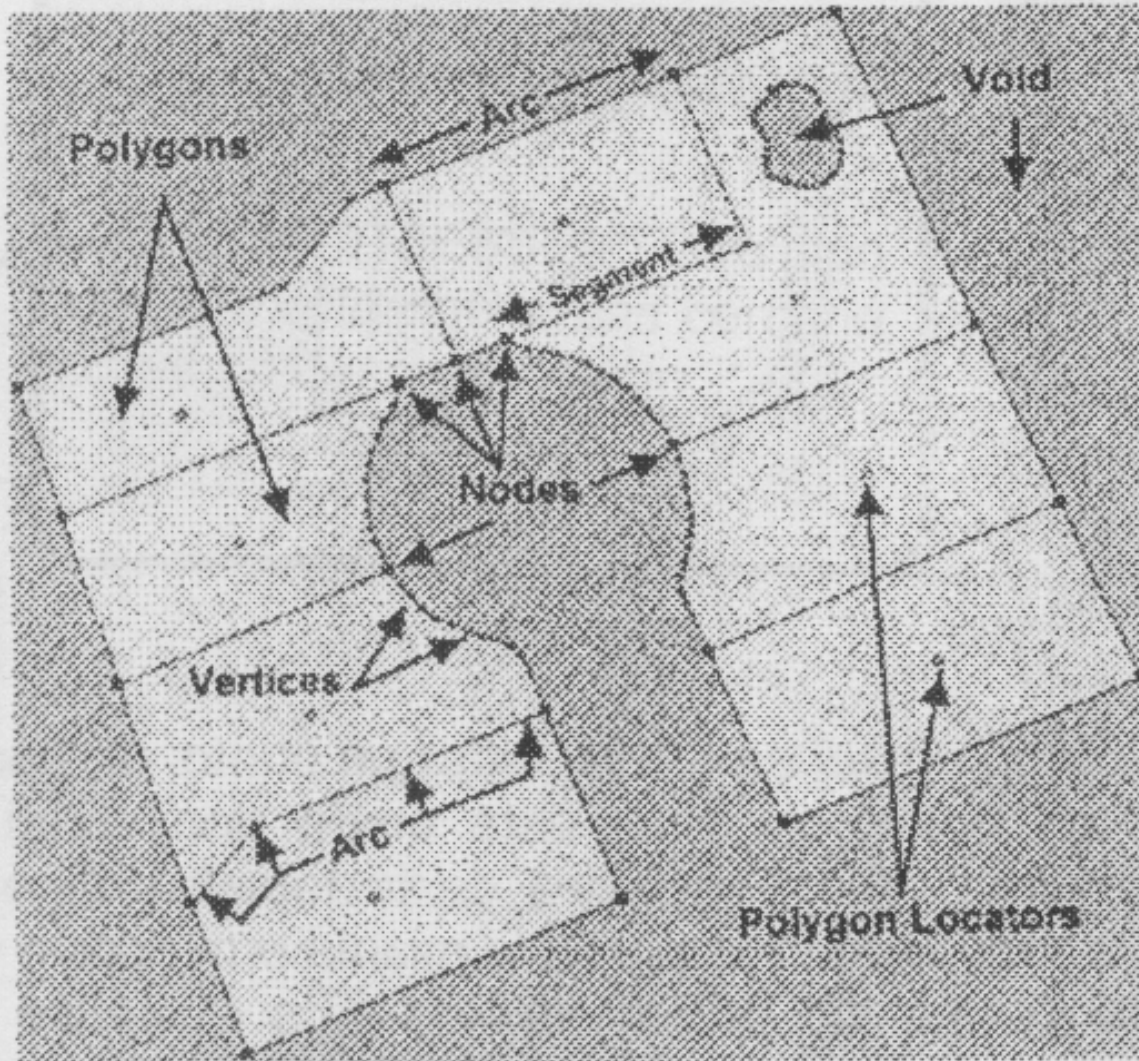


VECINO MAS PRÓXIMO



INTERPOLACIÓN BILINEAL

Digitalización: Elementos gráficos

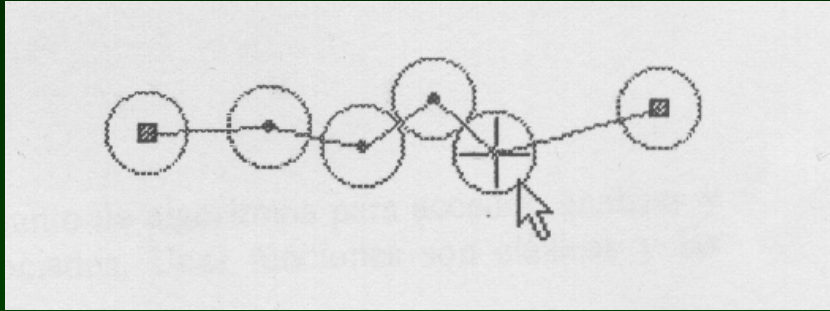


Punto
Vértice
Nodo

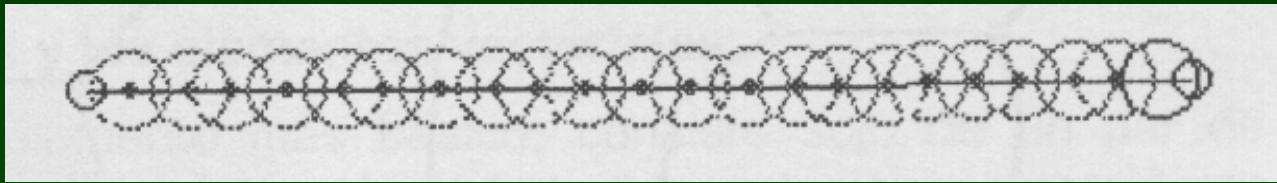
Segmento
Línea
Arco

Polígono
Hueco

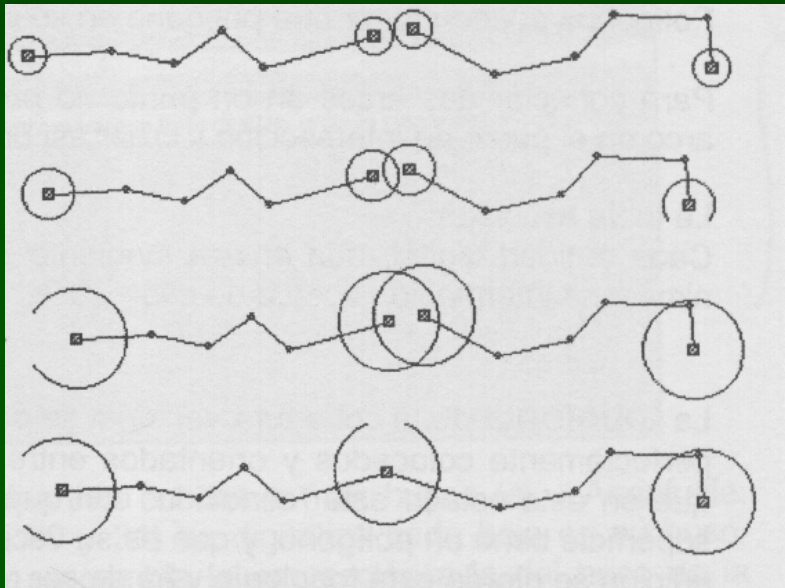
Digitalización: Tolerancia



Selección



Entre
vértices



Fusión de nodos