
Lab6 地圖學與GIS

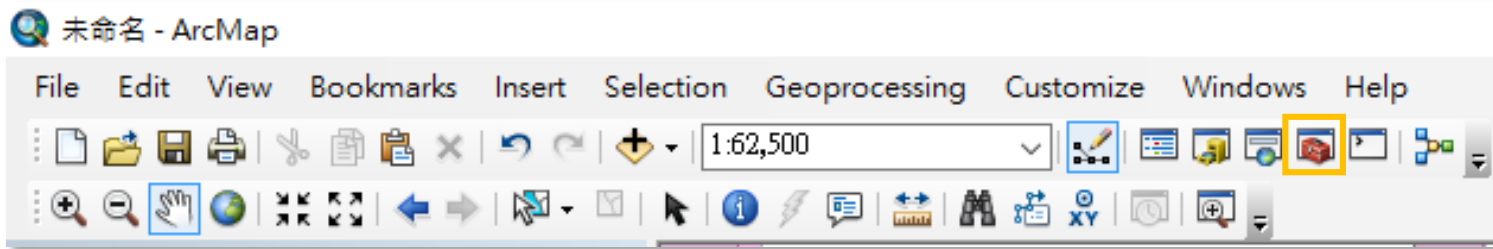
— 資料蒐集、地圖概括化 —

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本週實習內容

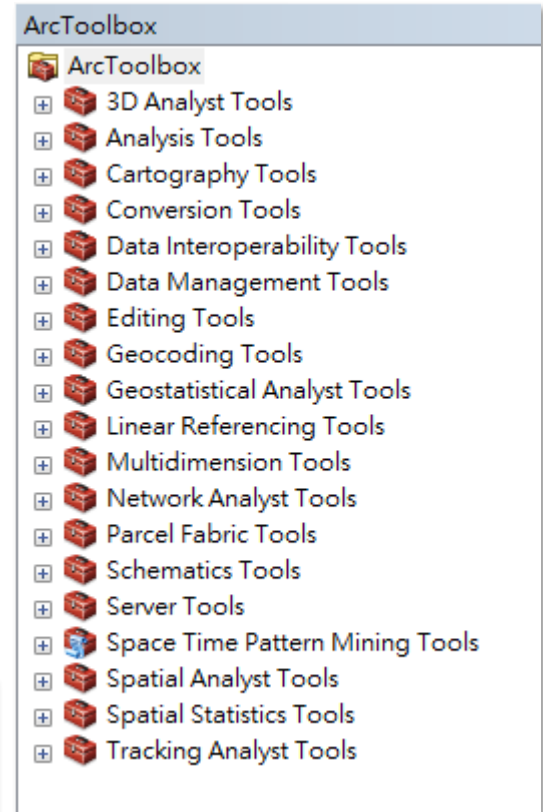
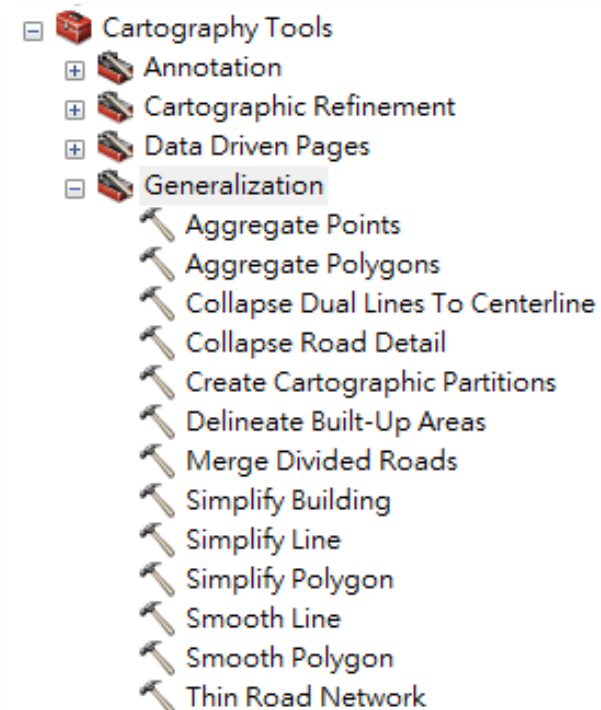
- Arc Toolbox



- Generalization in ArcMap

- ① **Simplify** line/ polygon
 - 移除過小面積 (Minimum Area)
- ② **Smooth** line/ polygon

Arc Toolbox → Cartography tools → Generalization



Simplify polygon

- Simplification algorithm:
 - Point remove
 - Bend simplicity
- Maximum allowable offset (簡化程度)
- **Minimum area (移除過小面積)**

Simplify Polygon

Input Features

Output Feature Class

Simplification Algorithm

- POINT_REMOVE
- POINT_REMOVE
- BEND_SIMPLIFY

Maximum Allowable Offset

Minimum Area (optional)

Handling Topological Errors (optional)

☒ Keep collapsed points (optional)

Simplification Algorithm

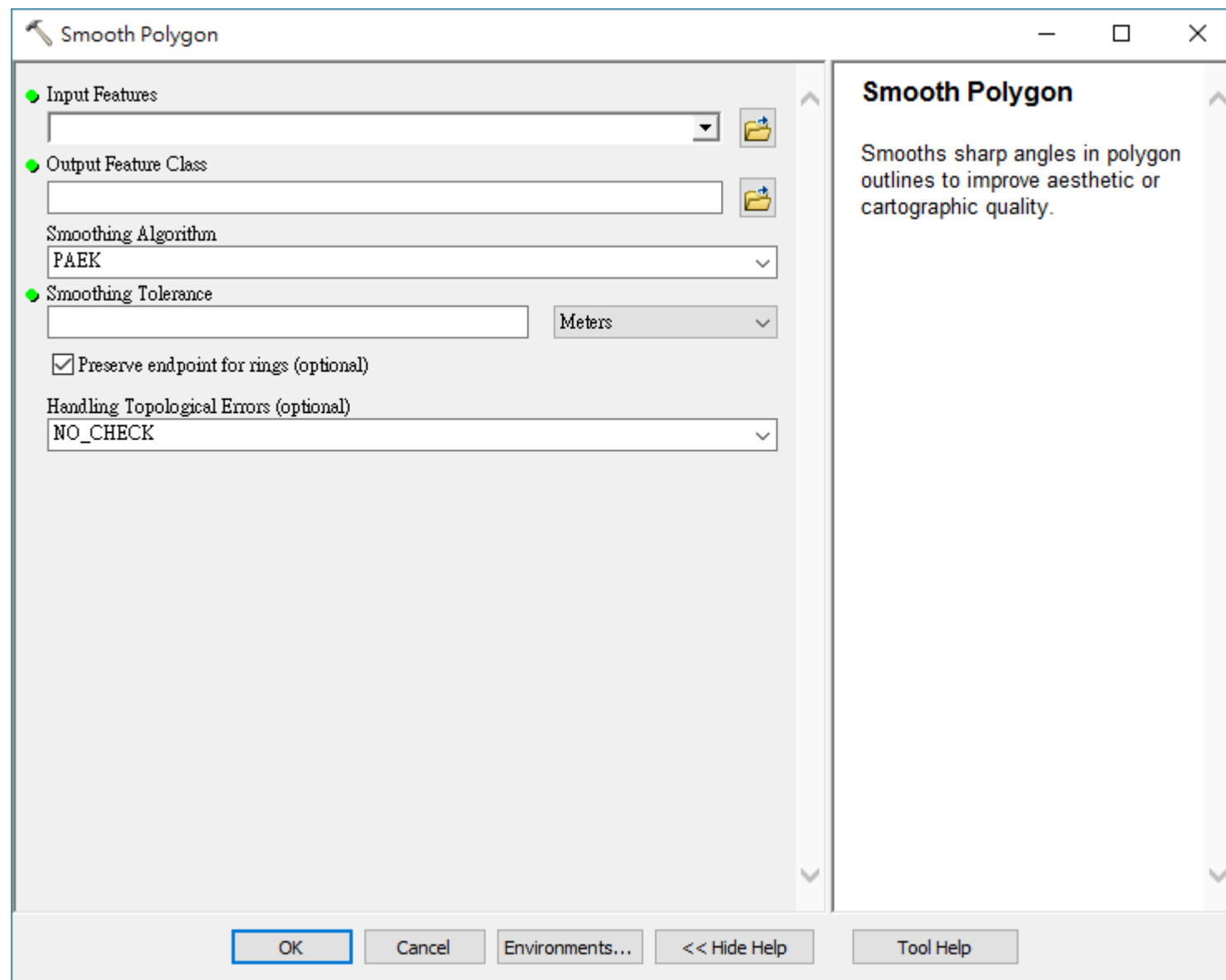
Specifies the polygon simplification algorithm.

- POINT_REMOVE—Keeps the critical points that depict the essential shape of a polygon and removes all other points. This is the default.
- BEND_SIMPLIFY—Keeps the main shape of a polygon by removing extraneous bends in the outline.

OK Cancel Environments... << Hide Help Tool Help

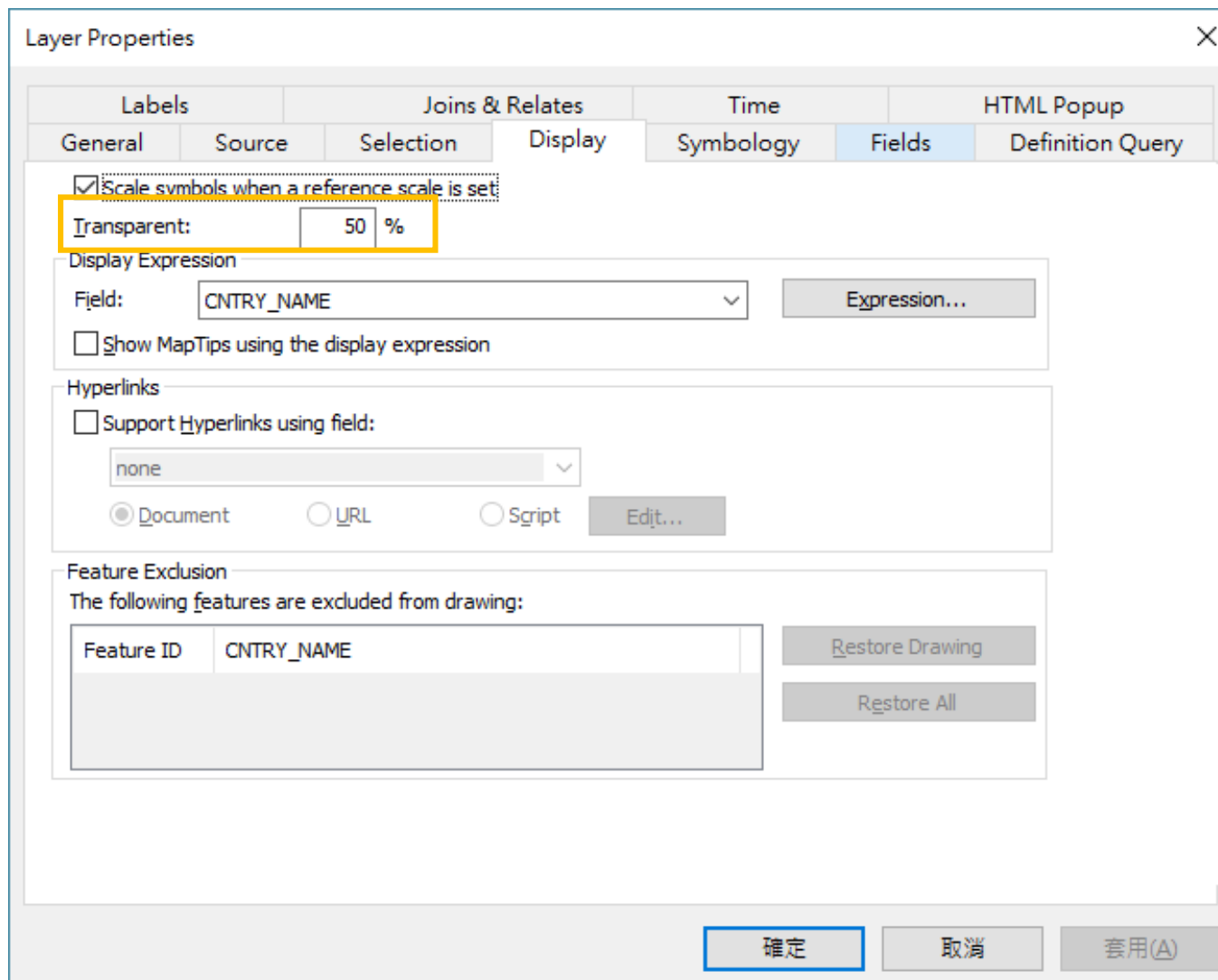
Smooth polygon

- 讓製圖時，線條更圓滑



圖層透明度調整

- Properties →
Display →
Transparent



本週作業

- ① 以TWN_county.shp或country.shp自行練習simplify polygon, smooth polygon功能 (不須繳交)
 - ② 文獻研讀與心得：重點摘要(300-500字)、閱讀心得(1000字以上)
 - 賴進貴、葉高華 (2005) 地圖概括化對環境變遷研究之影響 - 以臺灣地圖資料為例，地理學報，41:1-25。
 - 心得可思考方向：期末報告是否可能遇到的問題？可如何處理？
- 繳交檔案：PDF檔上傳至ceiba作業區
 - 繳交期限：5/4 (五) 中午12點截止