

Introducing Geofacets

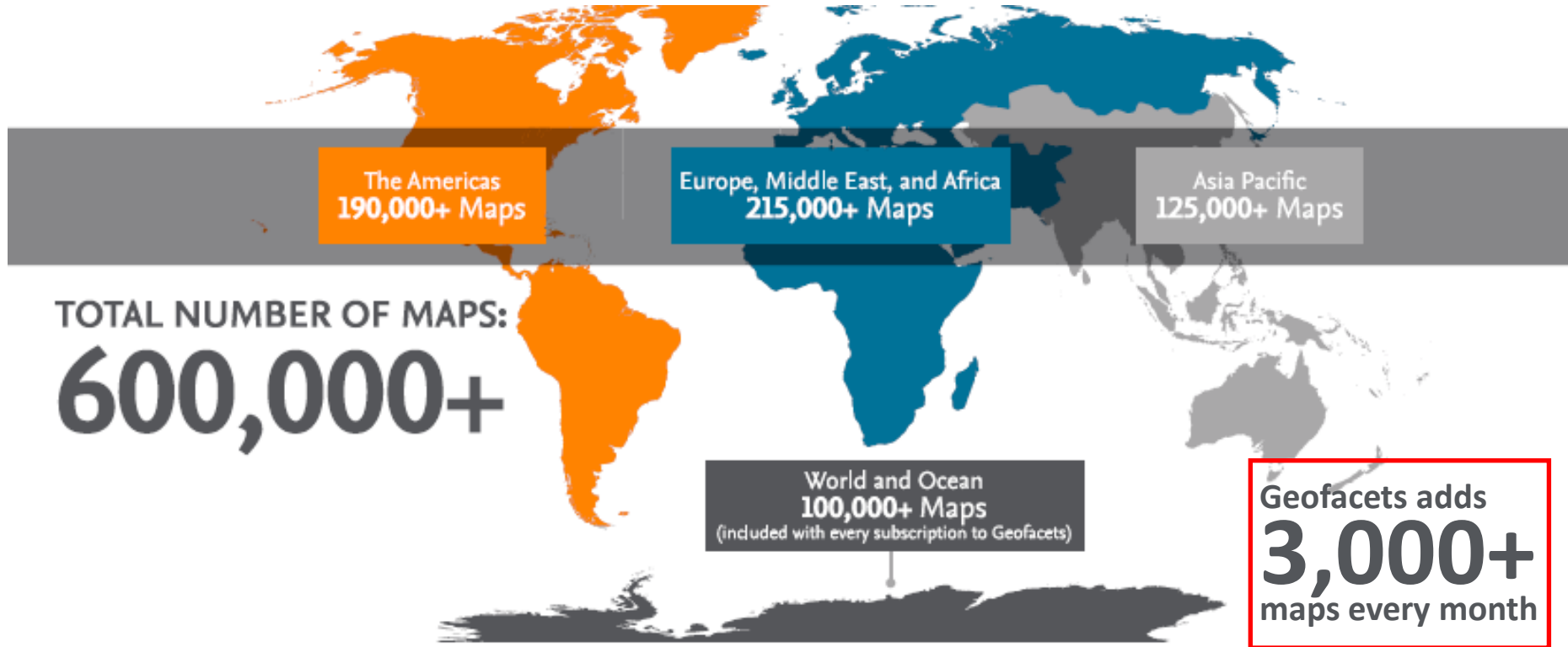
Supporting Research, Field Work & Teaching

Presented by:
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Essential Geologic Knowledge for Research, Field Work & Teaching

WORLDWIDE AND REGIONAL GEOLOGIC MAP CONTENT EXTRACTED FROM SIGNIFICANT GEOLOGIC PUBLICATIONS. NEW MAPS ARE ADDED ON A WEEKLY BASIS, WITH NEW PUBLISHER PARTNERSHIPS BEING ACTIVELY PURSUED



What Makes Geofacets Unique?

Essential Geological
Knowledge for
Natural Resource
Exploration

- **Over 600,000 multi-disciplinary scientific maps sourced from trusted, geologically significant journal articles** from essential publications like *Tectonophysics*, *Marine and Petroleum Geology* and *Geology*
- **Source article included with each map**, for added context and insight

Easy Discovery of
Maps and Other
Spatial Data

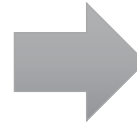
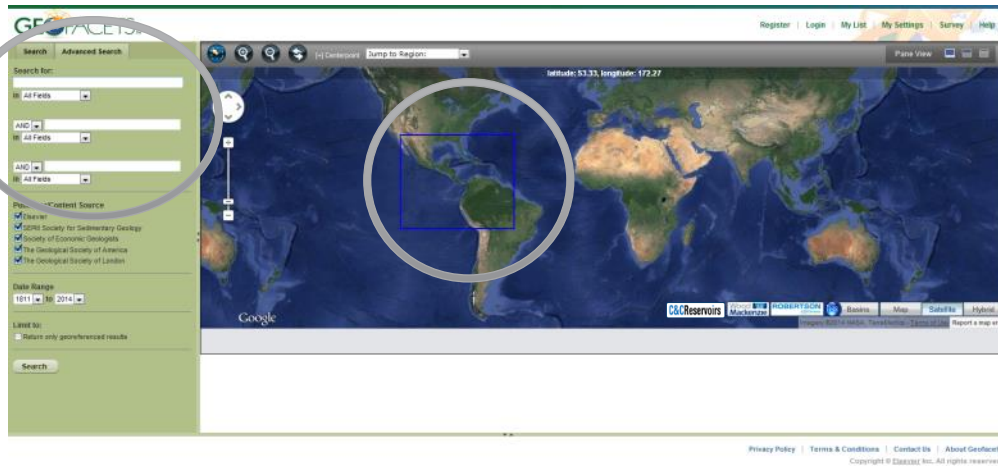
- **Geoscience domain-based searches** for worldwide and subject area-based discovery
- **Metadata-enhanced map data** allows for simple search refinements

Seamless
Workflow
Integrations

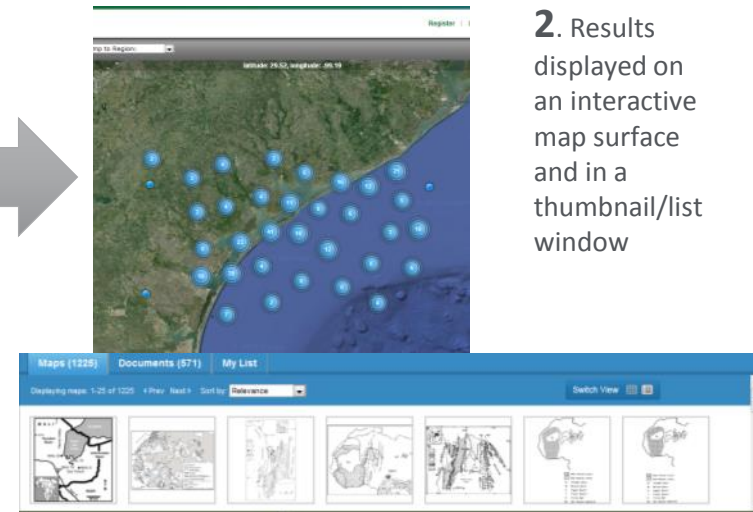
- **Ability to download and integrate maps into essential workflow tools like:**
 - ArcGIS (via GeoTIFF files)
 - Petrel (via Geofacets Connector for Petrel and Studio)
 - Web Services, WMS & WFS
 - Google Earth (via KMZ files)
 - PowerPoint (via JPEG files)
 - Tables of Data (Export to Excel)

How does Geofacets work?

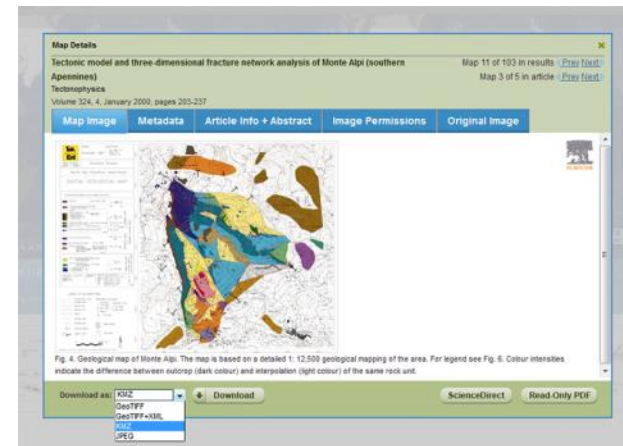
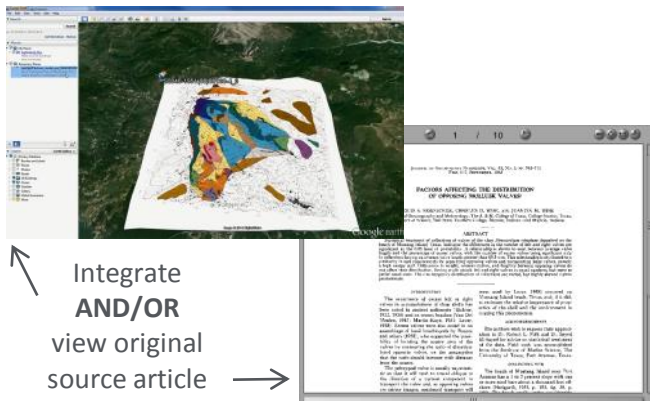
1. Search geographically or by keyword on an interactive map interface



2. Results displayed on an interactive map surface and in a thumbnail/list window



4. Download map image as a GeoTIFF, KMZ, TIF or JPEG file for integration into GIS, PowerPoint, Google Earth or other software OR view the original document in read-only PDF format or full view if user is a member of that society



3. Click on a cluster or on a thumbnail to view individual map details including metadata, source article information, and related maps

Integrate
AND/OR
view original
source article



Geofacets gives you access to the original research paper

Map Details

Geomorphology and age of the oxygen isotope stage 2 (last lowstand) sequence boundary on the northwestern Gulf of Mexico continental shelf

Geological Society Special Publication
Volume 277, January 2007, pages 29–46

Map 1 of 19 in cluster [Prev](#) [Next](#)
Map 3 of 9 in article [Prev](#) [Next](#)

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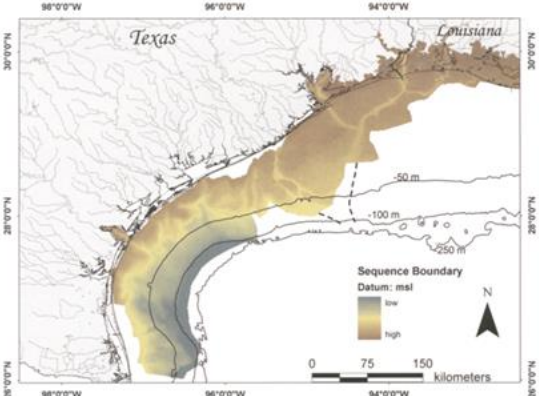


Fig. 4. Structure map of OIS2 sequence boundary showing locations of lowstand incised valleys. Dashed lines show the approximate locations of the valleys, based on the work of Abdulah et al. (2004) and Wellner et al. (2004).

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Abstract: The sequence boundary associated with the last glacial–eustatic lowstand was mapped across the northwestern Gulf of Mexico continental shelf. The geomorphology of incised fluvial valleys varies widely across the shelf. These differences are due to differences in shelf physiography and the interval of the eustatic cycle the valleys were occupied. Incision begins during the falling limb of sea level and results in terraced valleys. Rivers that abandoned their valleys during the fall in sea level to cut new valleys during the lowstand generally have u-shaped profiles. Incised valleys connected to turbidite systems only occurred in two valleys (the Colorado and Rio Grande), but this may be because sea level did not fall below the shelf break during the last eustatic cycle. Some valleys deepen in an offshore direction, others become shallower. The timing of fluvial incision was constrained using radiocarbon dates so that incision can be tied directly to the sea-level curve for the last glacial–eustatic cycle. The results show that the fluvial incision occurred throughout the falling limb of sea level and lowstand; however, maximum incision occurred during the lowest position of sea level. The resulting surface has significant relief; extends across the shelf, and has time significance. The associated conformable surface, on the other hand, is much harder to recognize and occurs at different stratigraphic levels relative to different shelf-margin deltas.

Despite its predictive and organizational power, analysis of late Quaternary strata of the northern Gulf of Mexico. Using high-resolution seismic data and platform borings and cores, they examined the nature of the three important bounding surfaces (sequence boundary, maximum flooding surface and transgressive surface). They found all three surfaces to be discernable and useful for sequence

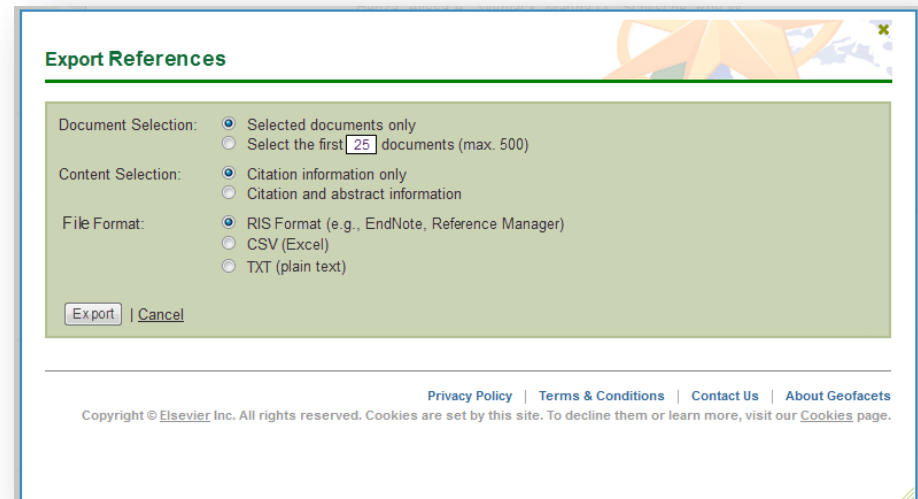
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Export references to easily manage and cite your sources

- For geoscientists in academia and industry alike, the ability to trace decisions or insights back to reputable sources is imperative
- By exporting references, geoscientists can more easily manage and cite sources they've used from Geofacets
- Saves time
- Integrates directly with Excel or reference management software



After any search, users can export references in the documents tab



Users have the ability to select number of documents, type of content, and file format

How can Geofacets help you to be more productive?

- Traditional workflow for map extraction & analysis is tedious and time-consuming
- Geofacets **simplifies the workflow from a five-step to a two-step process**

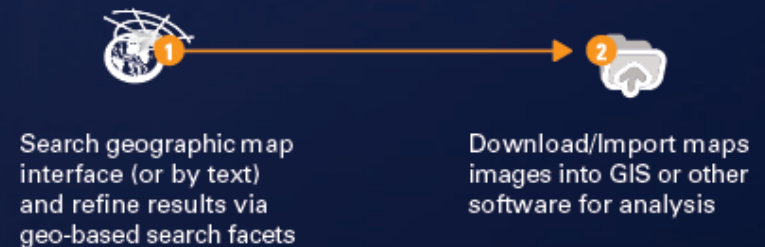
Interviews and product testing with over 200 geoscientists helped to shape Geofacets

TRADITIONAL WORKFLOW



VS.

GEOFACETS WORKFLOW



Who is using Geofacets to support research, field work and teaching?

Imperial College
London



ETH zürich



UNIVERSITY OF BERGEN



Questions?