

DEFINE GEO-GRAPHICS

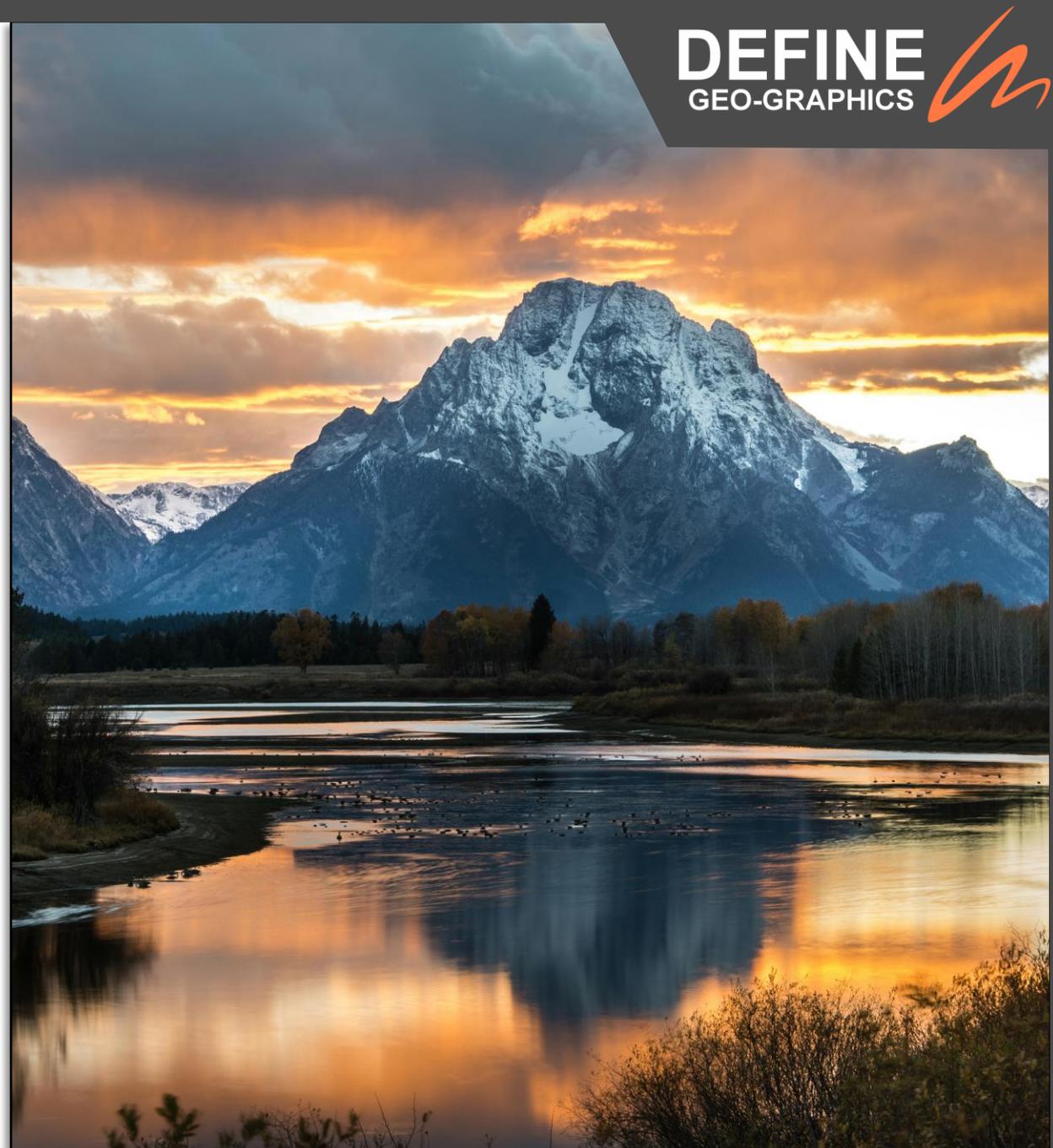
Company Portfolio & Brochure



About Define Geo-Graphics

Define Geo-Graphics is a Geoscience focussed graphics company specialising in transforming complex subsurface issues into clear, digestible messages for both technical and non-technical audiences.

- Key aim is to bridge the gap between geoscientists, investors, management and colleagues.
- We are a UK-based organisation founded in 2022 with the mission fill the gap left by the removal of draftsmen as a staple position in subsurface teams.
- We pride ourselves in generating publishable content for presentations, farm out flyers, investor relations material, conference material, websites, and reports.



Founders Story – Callum Thurley

As an exploration geoscientist with over 10 years' experience, I've always been passionate about clear communication. Having spent 9 years in the Middle East Oil & Gas industry, I witnessed firsthand the challenges subsurface teams face in conveying complex data.

Since the early stages of my career it has been clear to me that the technical jargon of geoscience often creates a barrier, hindering effective communication with key stakeholders. That's why I founded Define Geo in 2022. We empower geoscientists and companies in the Oil & Gas and Mining industries to bridge this communication gap!

We provide clear and impactful communication solutions, from data visualization for drilling decisions to crafting compelling narratives for marketing acreage. This allows companies to make better decisions, improve project efficiency, and achieve stronger stakeholder engagement.

This brochure offers a glimpse into how Define Geo can transform your communication. Let's discuss how we can tailor our services to your specific needs. Contact us today!

Website - www.definegeographics.com

Email – callum@definegeographics.com



The Problem - Why is Geological Drafting Needed?

- It is a **multifaceted** problem where you need expertise in both **geoscience & graphic design**
- There is often a lack of **understanding** with regards to subsurface issues between technical and **non-technical staff**.
- Globally, companies laid off drafting staff in the 1990s & 2000's and as a result there is a **lack of capability** in house.
- In today's world, every subsurface team **lacks the time** to perform these tasks to the required standard.



Define Geographics – Drafting Services

Mapping Solutions

Geo-referencing
Shapefile digitisation.
GIS mapping and displays.

Advanced Services

Seismic and structural interpretation
Chronostratigraphic interpretation
Tectonic evolution interpretation

01

02

03

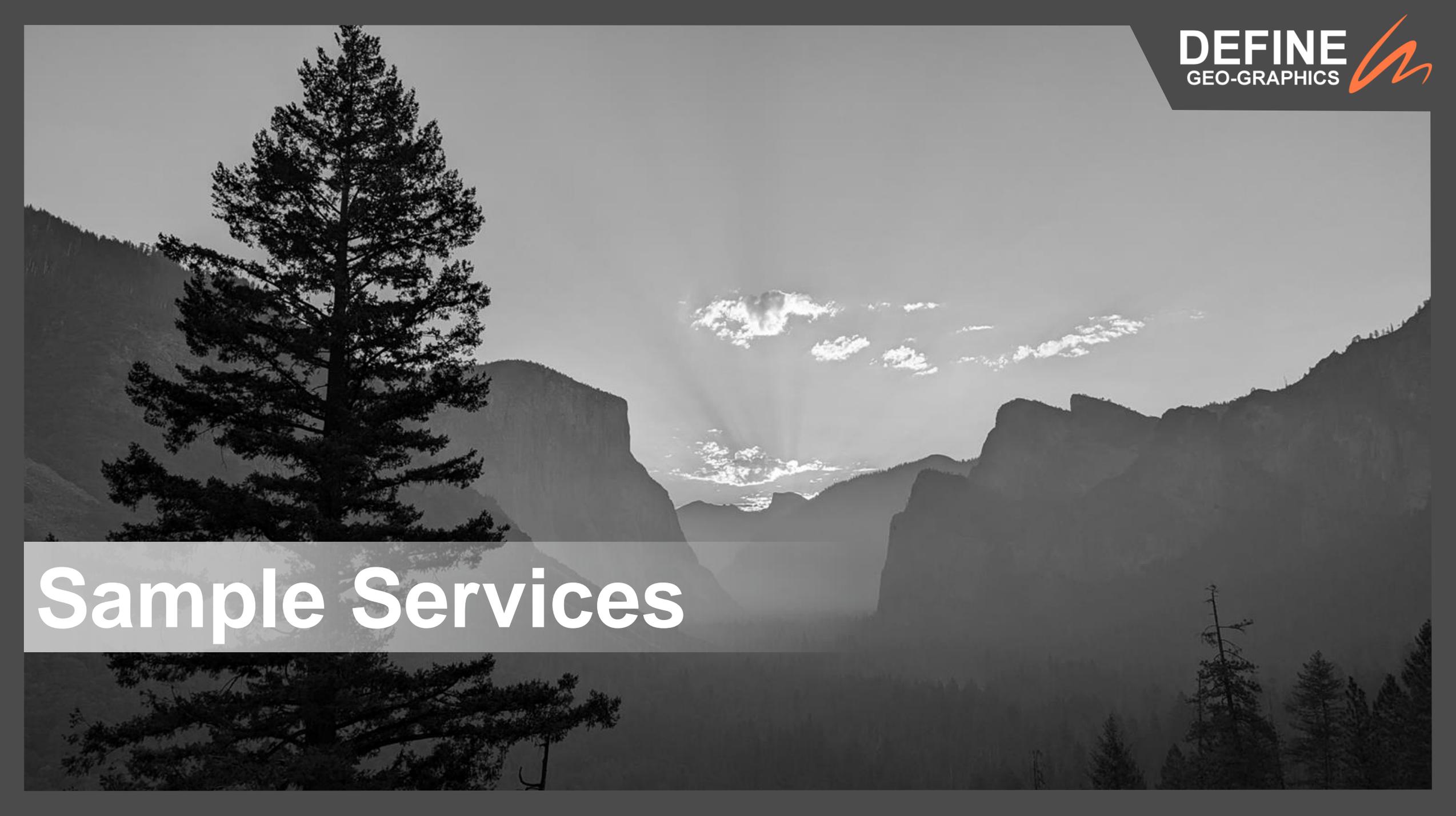
04

Geoscience Services

Geological Cross Sections
Geoseismic & Play Cross Sections.
Well correlation/prognosis panels

Other general services

Technical English language QC
Technical Peer Review.
Digitisation of published figures
Presentation editing



Sample Services

Geo-seismic Sections

Unlock your seismic data

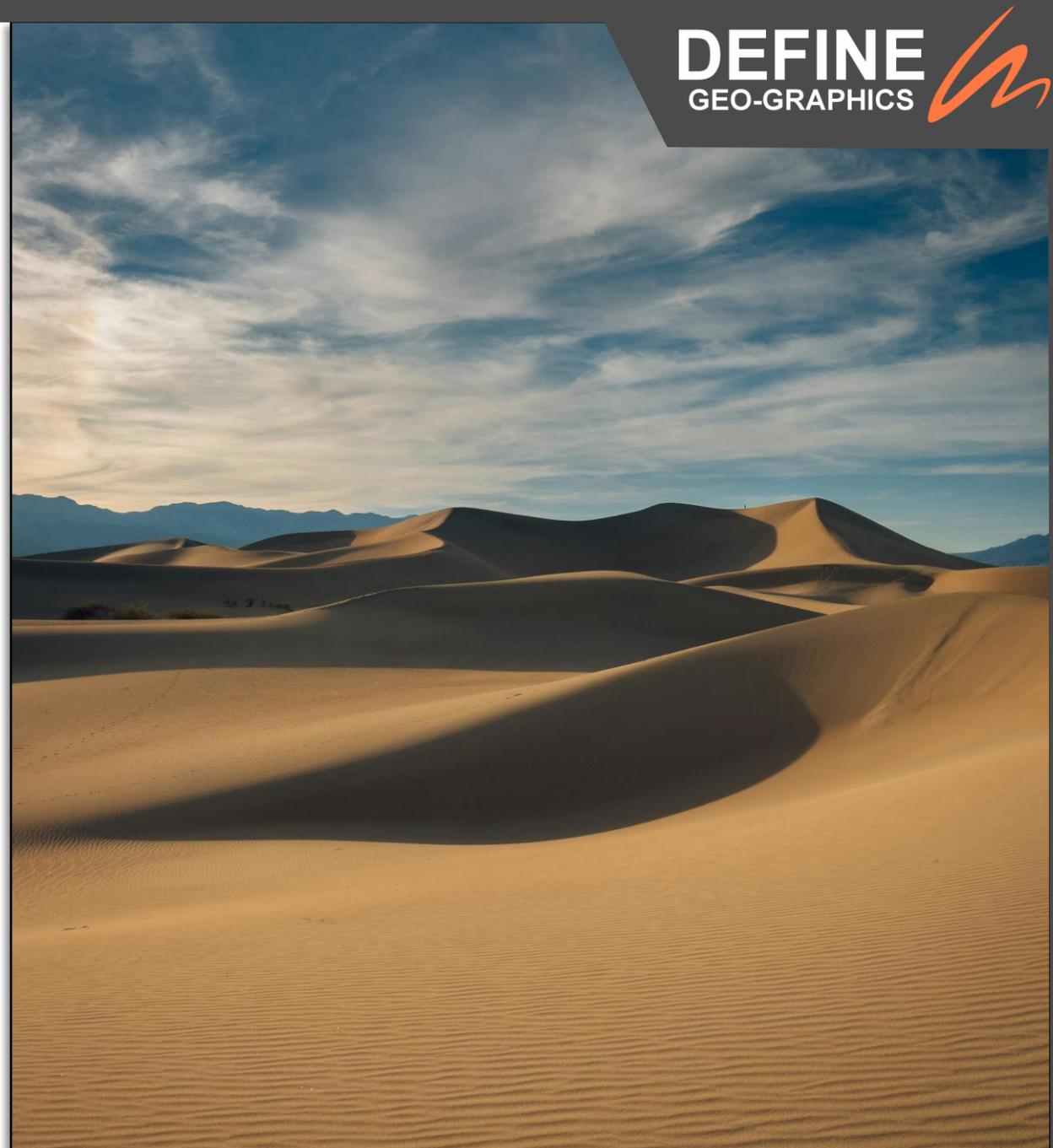
Geoseismic Drafting - Process

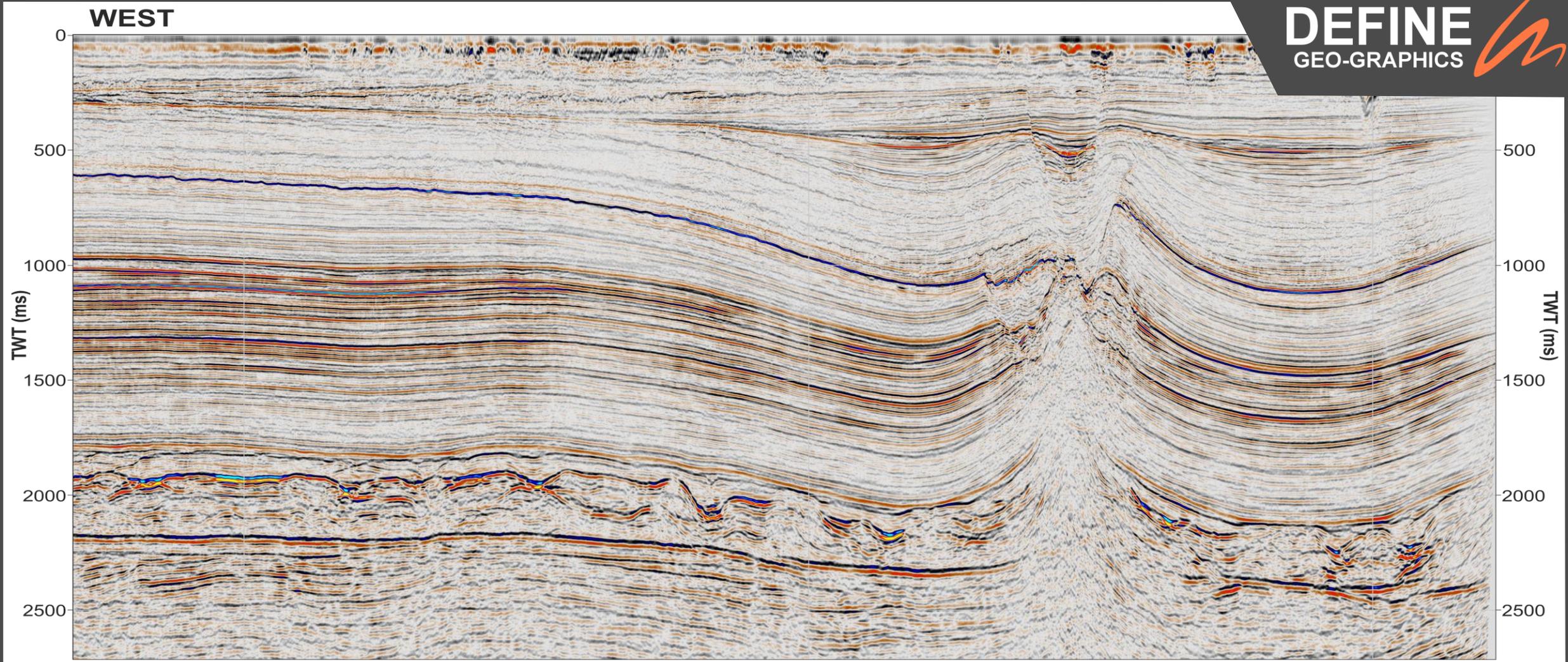
To deliver the perfect geo-seismic section we'll follow this process:

1. Project set up - Customer provides high resolution export of the image both interpreted and uninterpreted.
2. Data loading - We load this into our graphics software, produce a template for the section.
3. Horizon tracing - trace over the seismic horizons you have interpreted.
4. Stratigraphic fill – fill stratigraphic units
5. Seismic stratigraphy - pick seismic stratal patterns
6. Petroleum systems – prepare simplified cross section showing the key petroleum systems elements in a play cross section.**
7. Export images for review

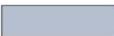
Turnaround time – 10 days (guaranteed)

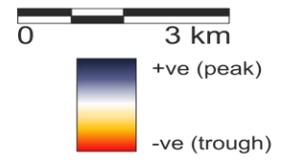
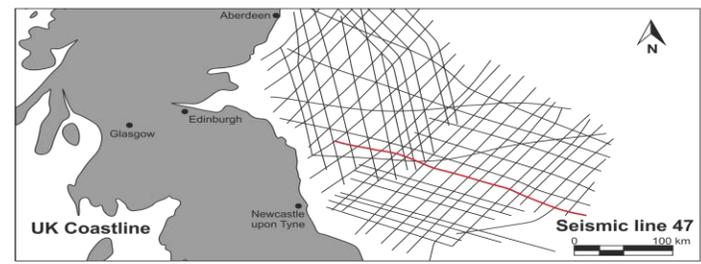
** at the request of the customer

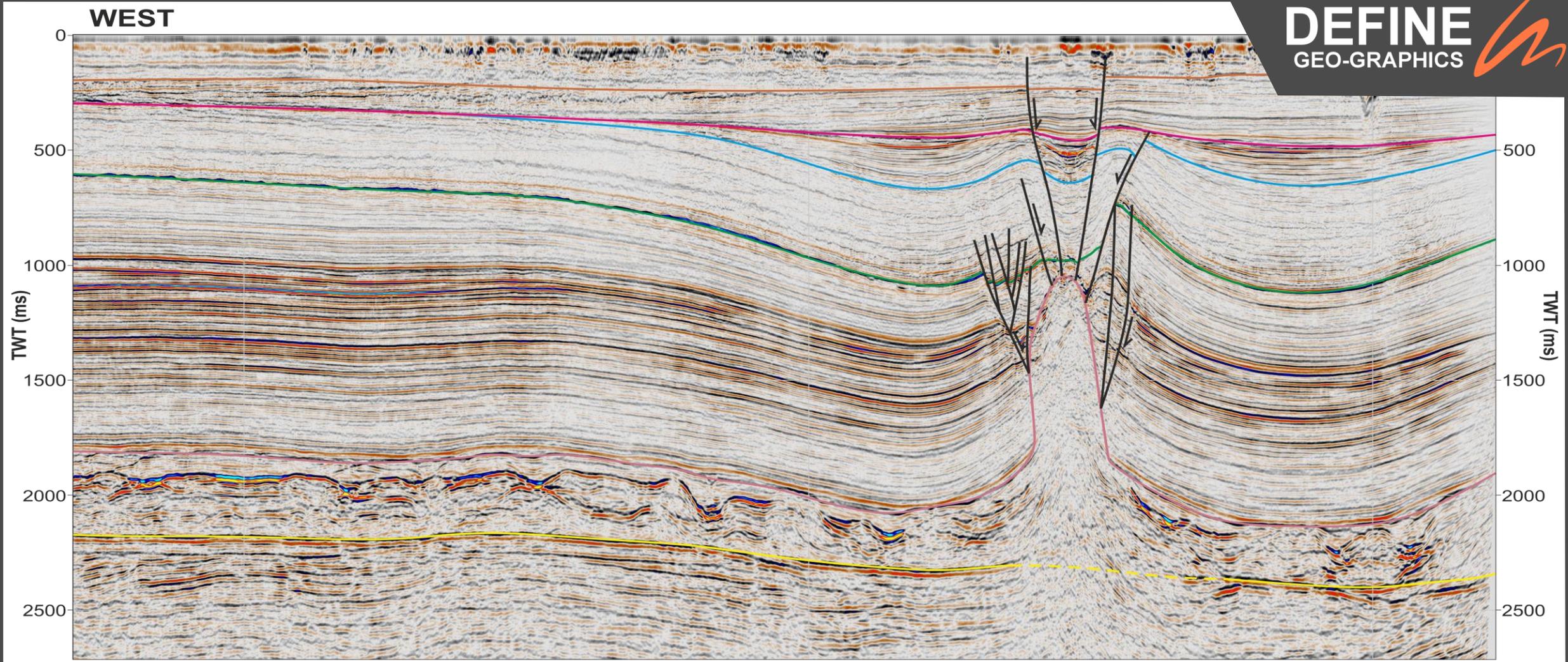




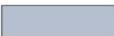
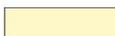
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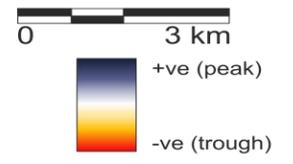
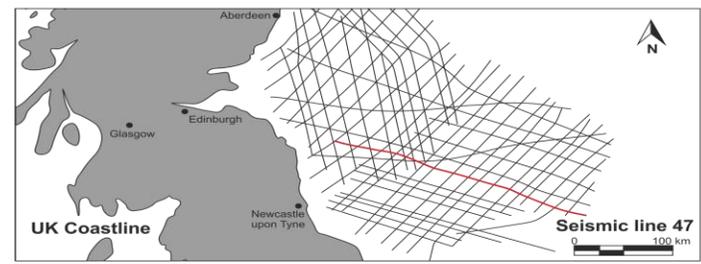
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	Post-Kinematic Unit A		Salt
	Syn-Kinematic Unit A		Pre-Kinematic Unit A
	Pre-Kinematic Unit C		

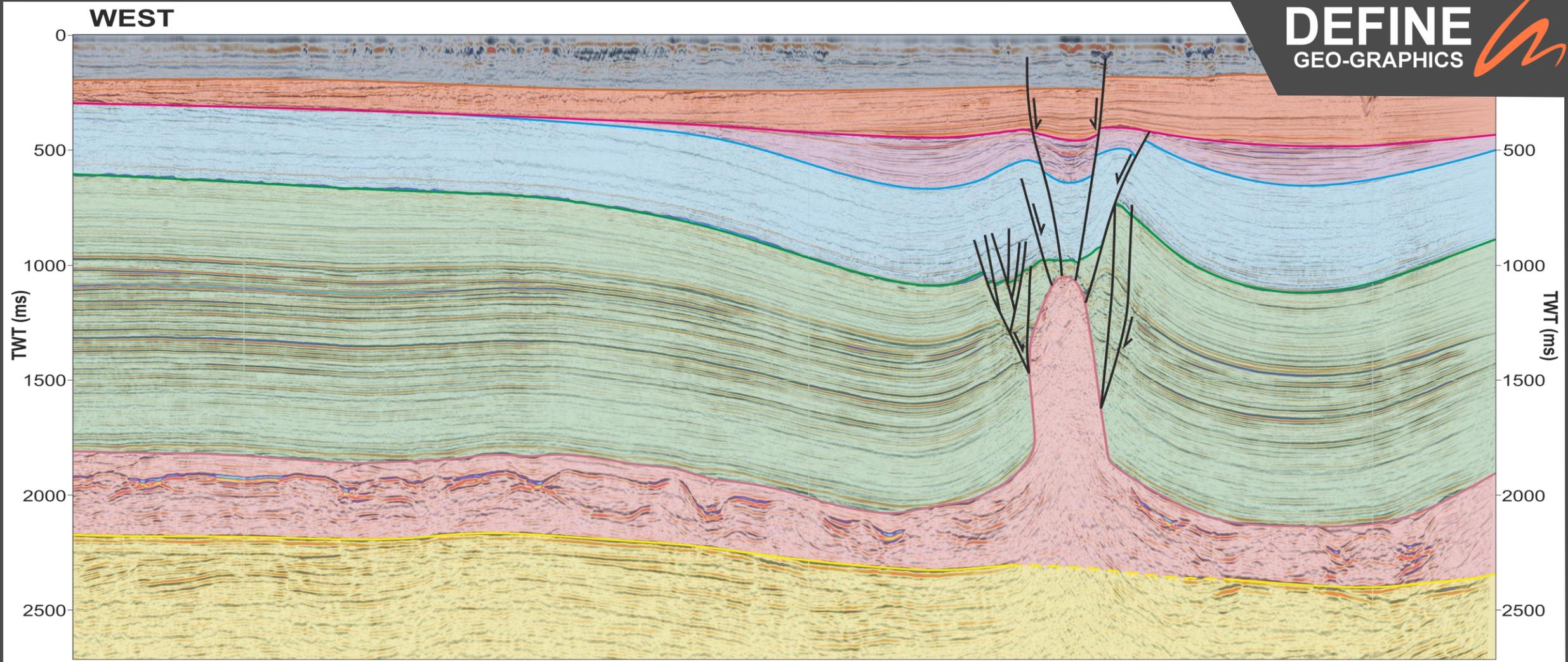




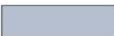
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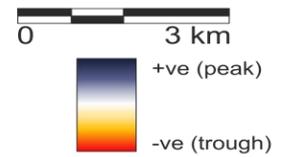
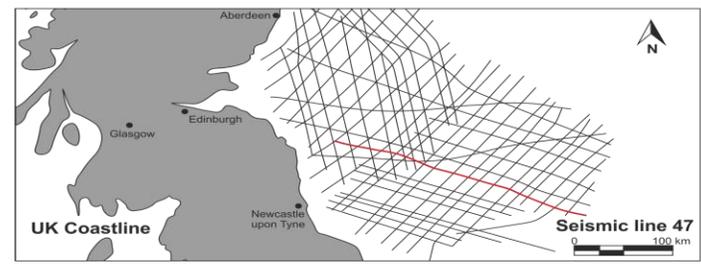
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	Post-Kinematic Unit A		Salt
	Syn-Kinematic Unit A		Pre-Kinematic Unit A
	Pre-Kinematic Unit C		

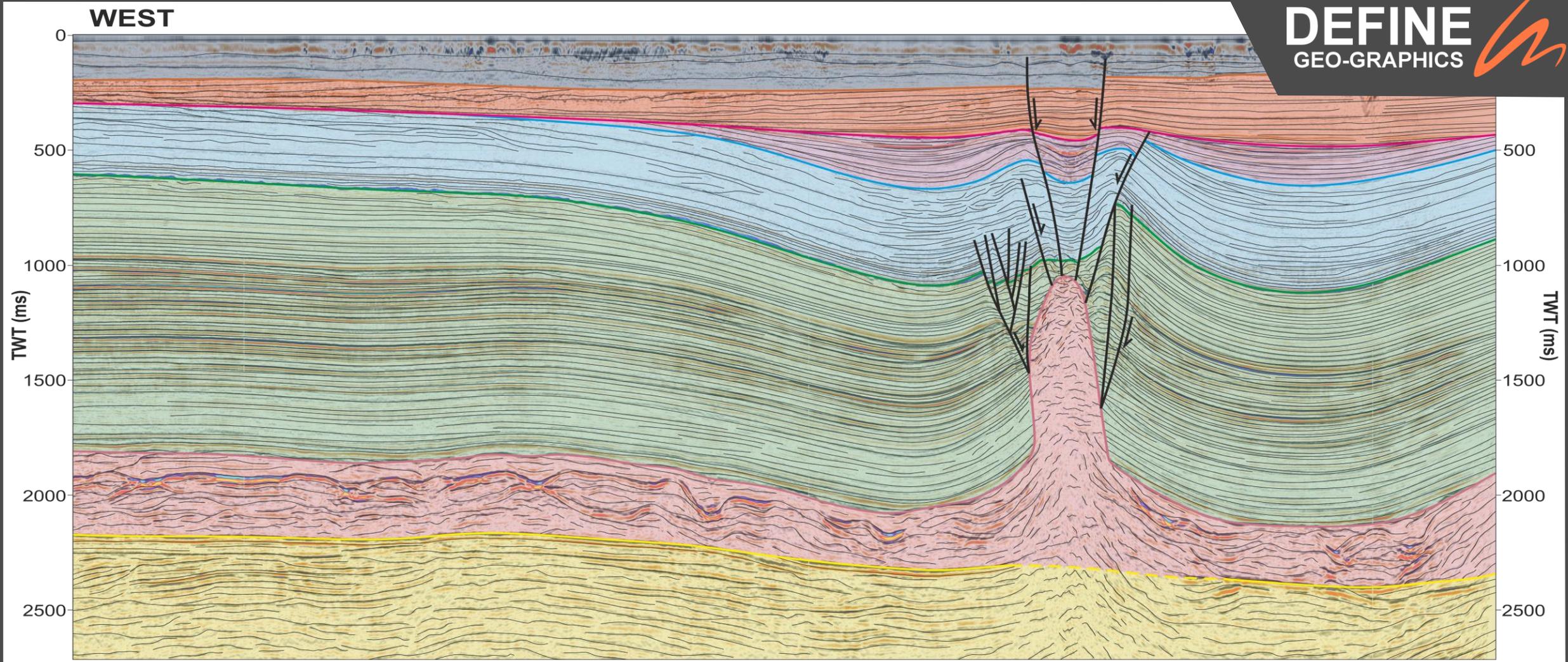




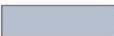
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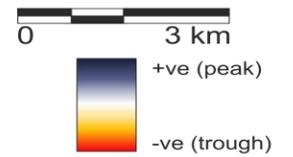
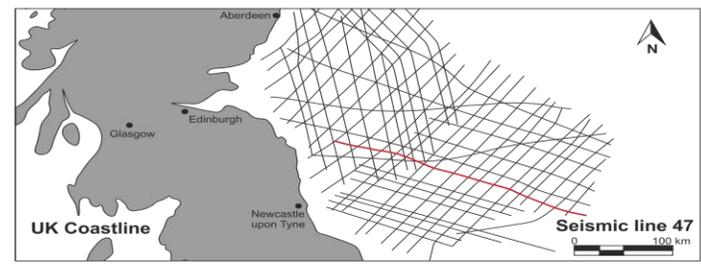
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	Post-Kinematic Unit A		Salt
	Syn-Kinematic Unit A		Pre-Kinematic Unit A
	Pre-Kinematic Unit C		

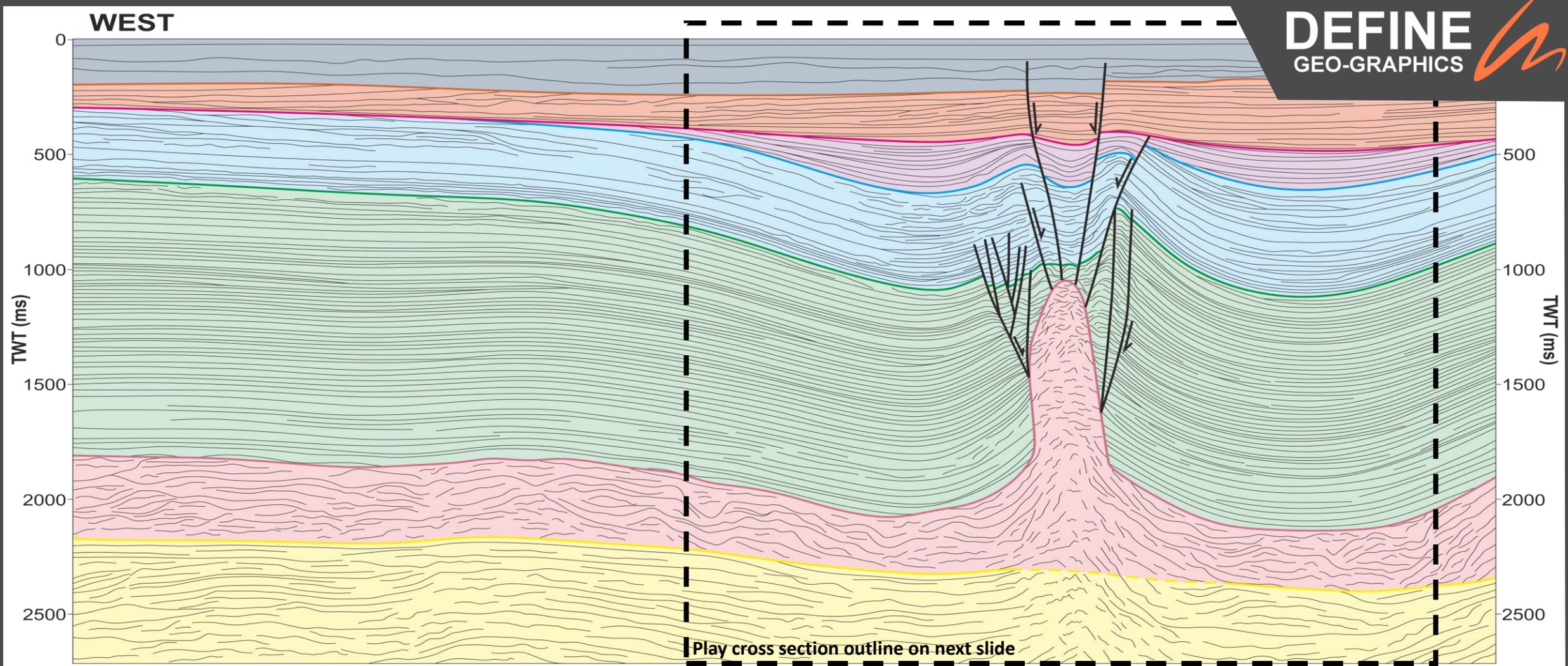




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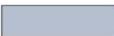
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	Post-Kinematic Unit A		Salt
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	Pre-Kinematic Unit C		

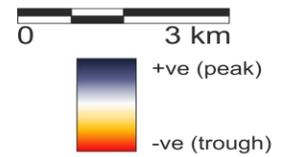
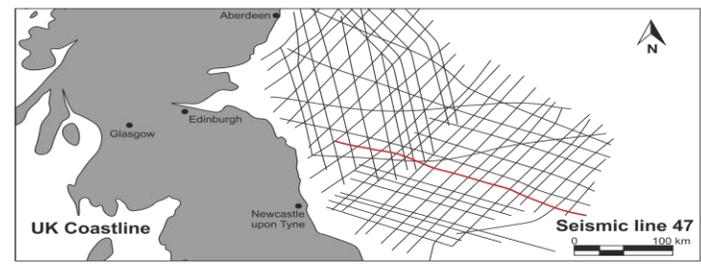


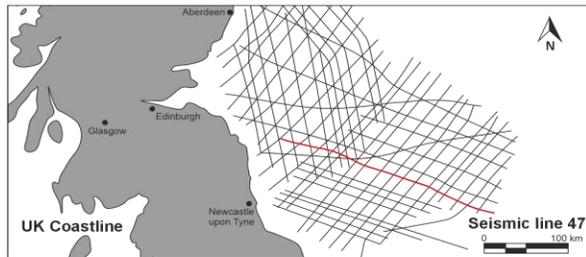
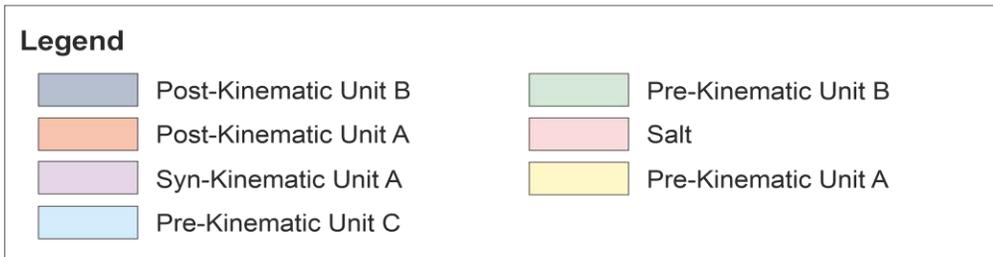
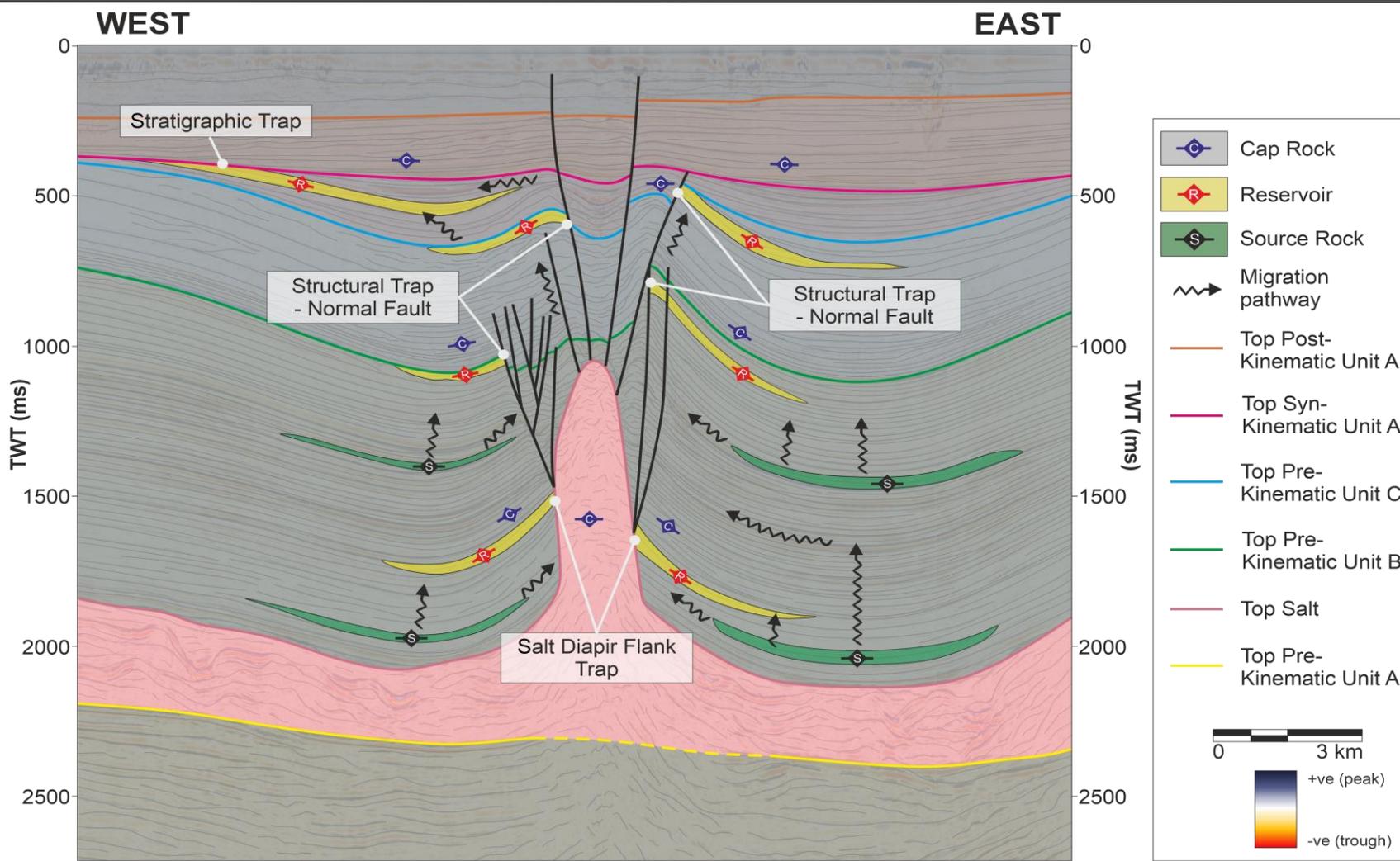


Play cross section outline on next slide

Legend

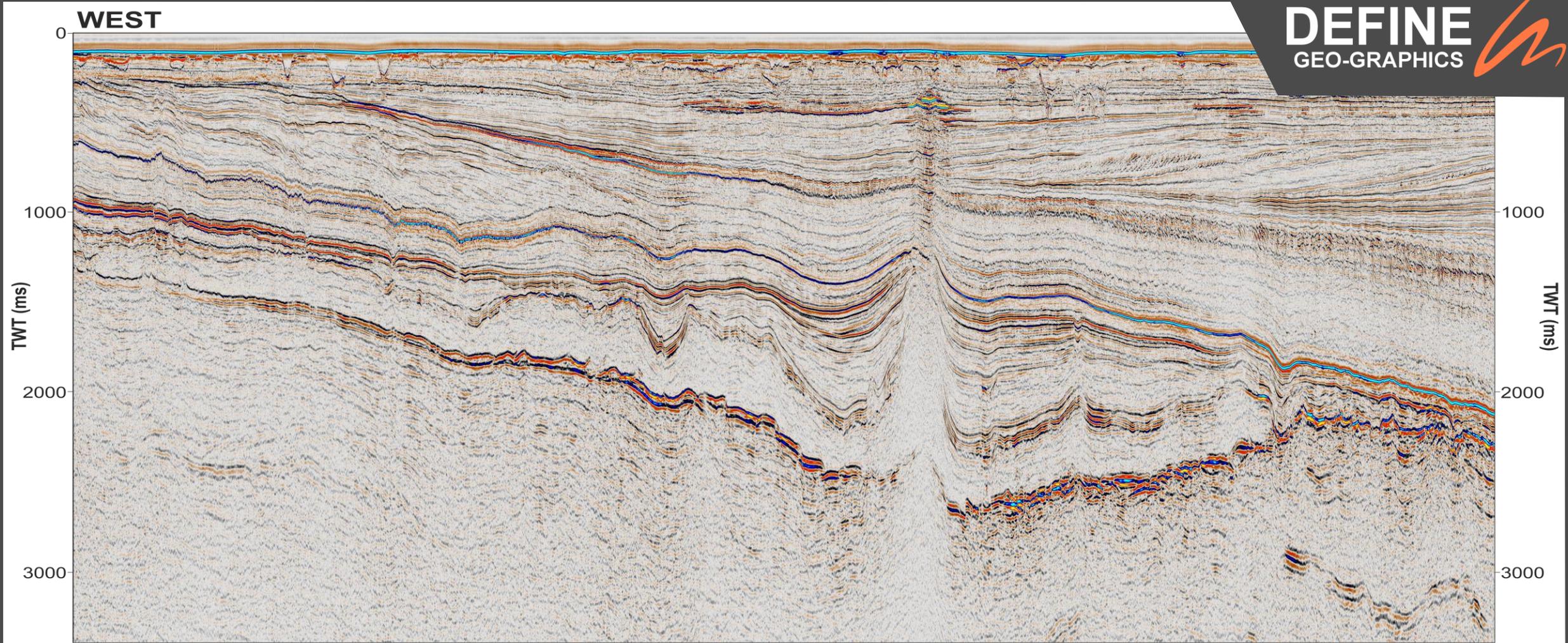
 Post-Kinematic Unit B	 Pre-Kinematic Unit B
 Post-Kinematic Unit A	 Salt
 Syn-Kinematic Unit A	 Pre-Kinematic Unit A
 Pre-Kinematic Unit C	



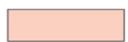
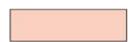
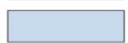


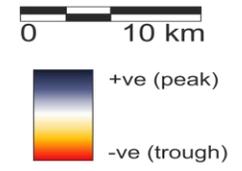
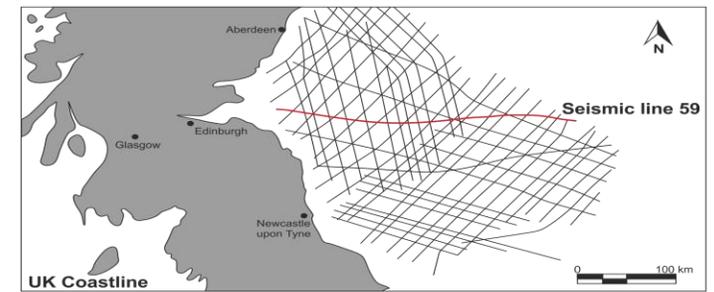
PLAY CROSS-SECTION

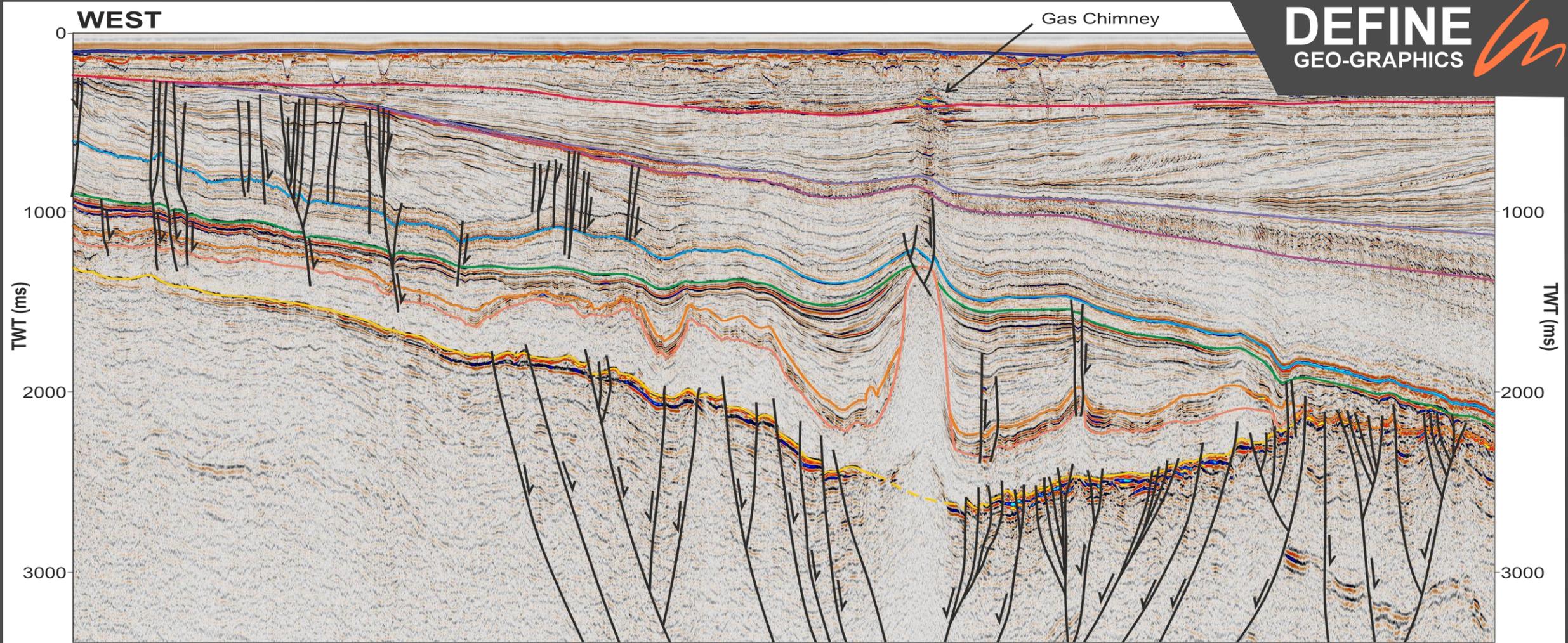
- Realistic play cross sections
- Based upon **YOUR** seismic data
- Perfect for farm-out flyers or technical peer review presentations



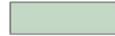
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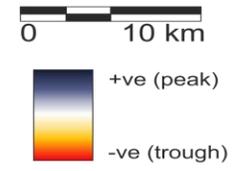
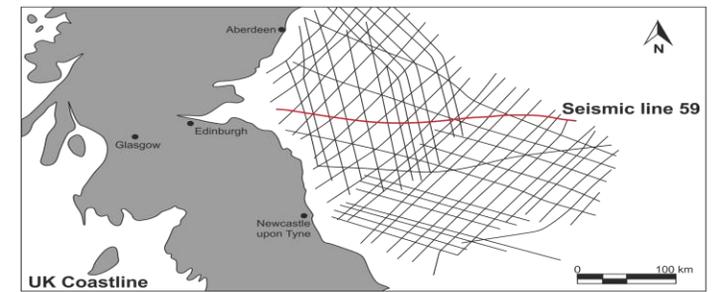
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	Post-Kinematic Unit C		Syn-Kinematic Unit A
	Post-Kinematic Unit B		Salt
	Post-Kinematic Unit A		Pre-Kinematic Unit A
	Syn-Kinematic Unit C		

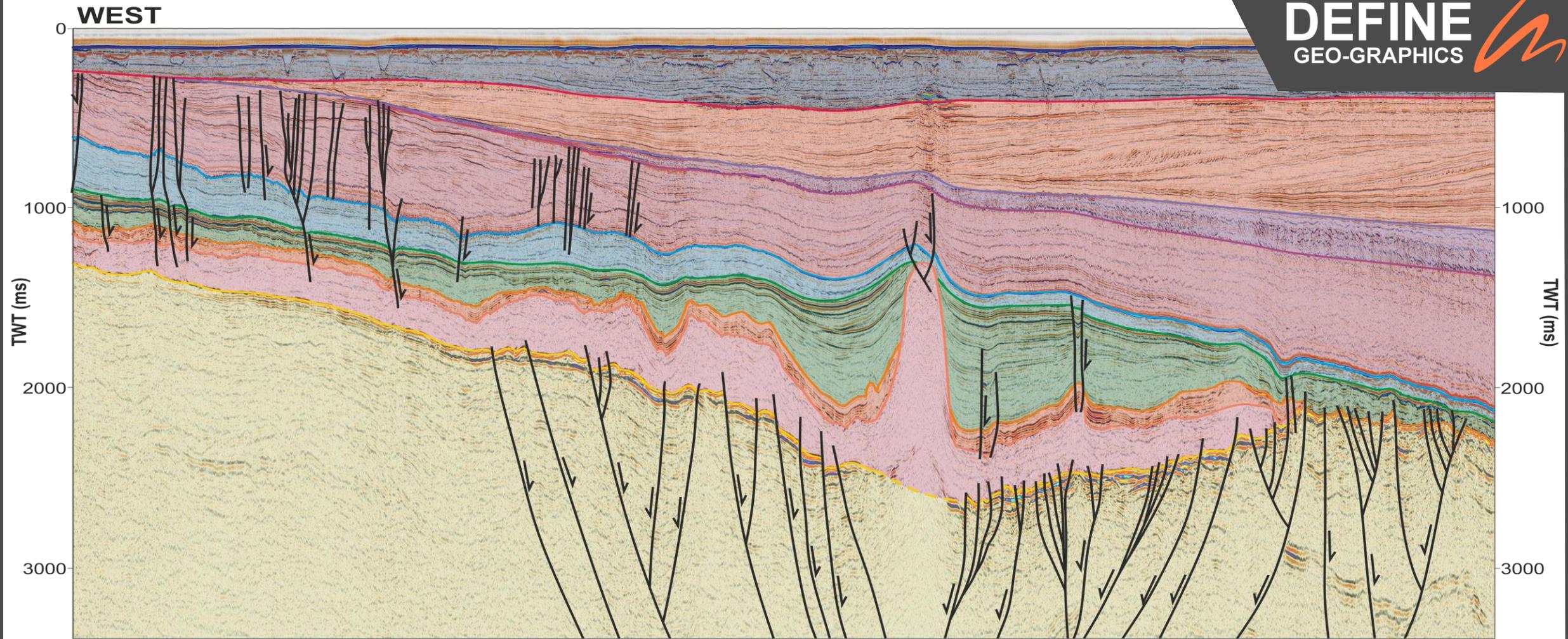




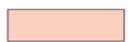
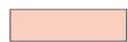
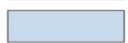
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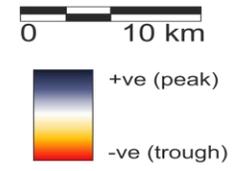
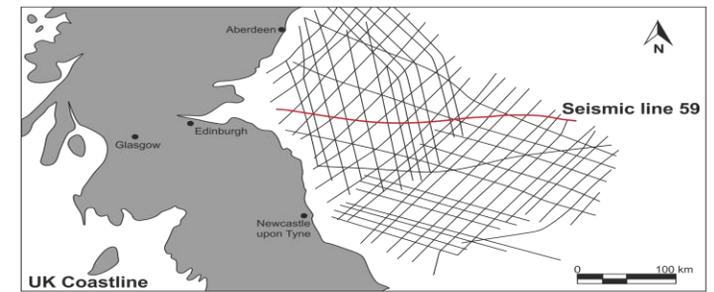
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	Post-Kinematic Unit A		Pre-Kinematic Unit A
	Syn-Kinematic Unit C		

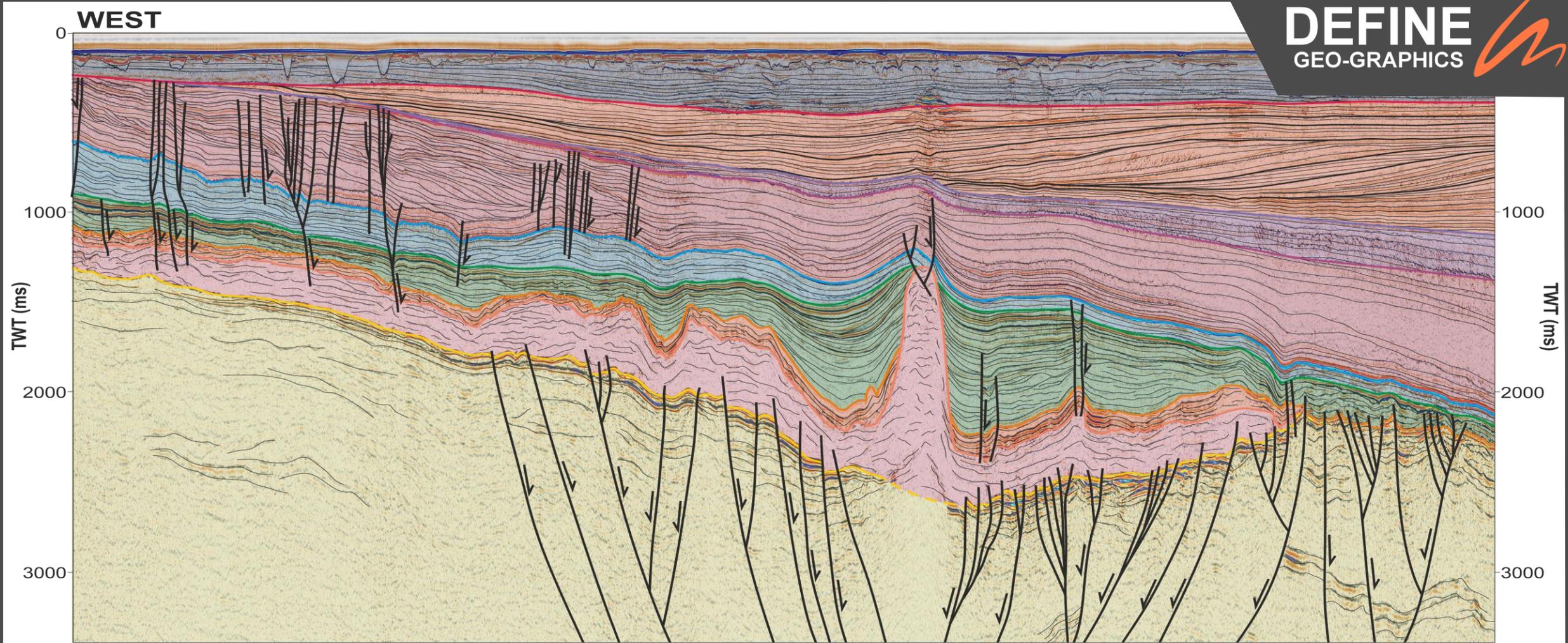




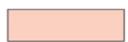
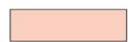
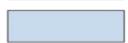
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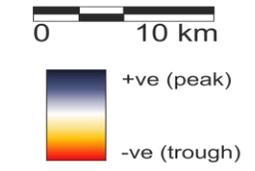
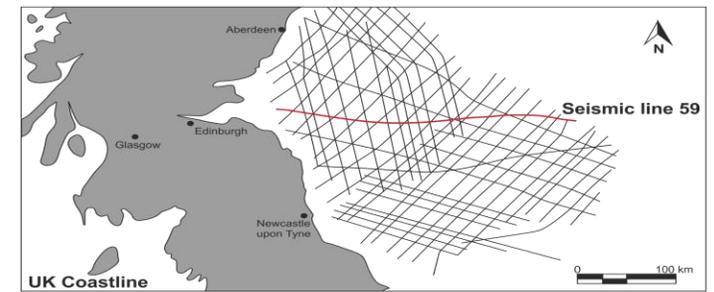
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	Syn-Kinematic Unit C		

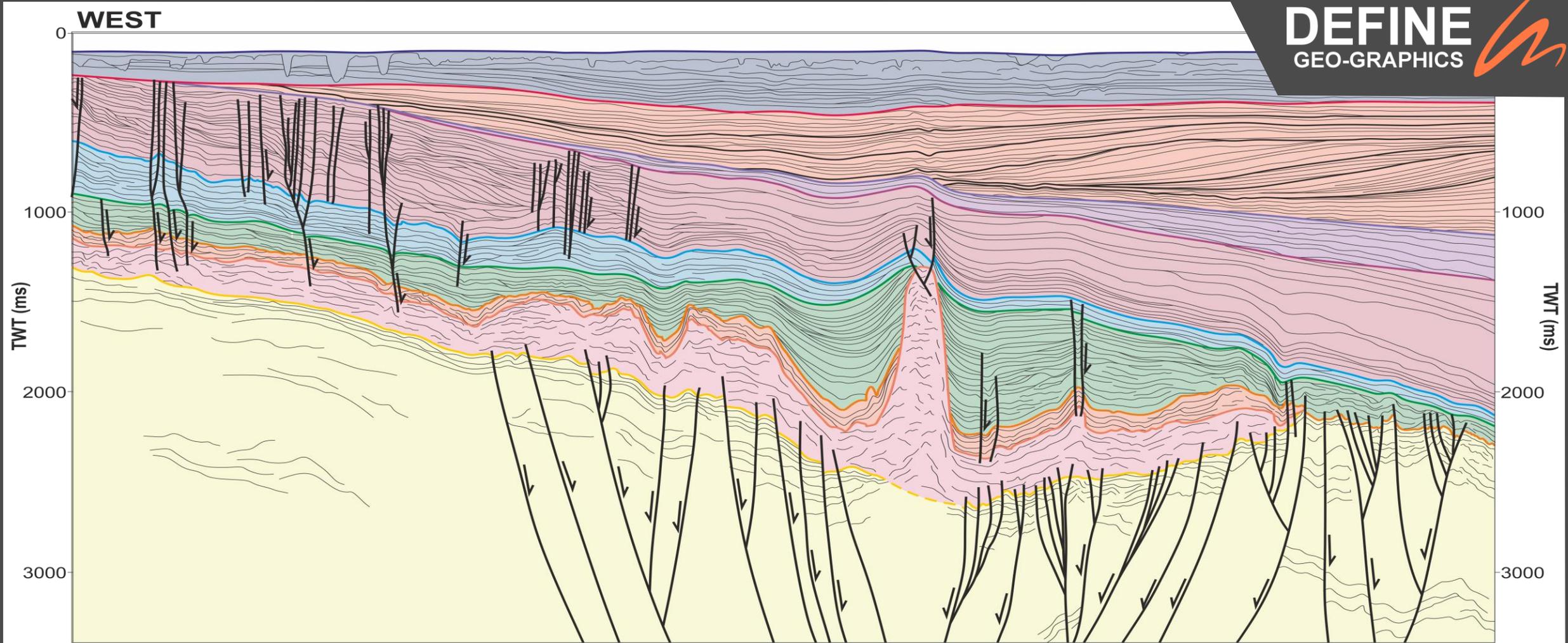




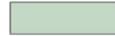
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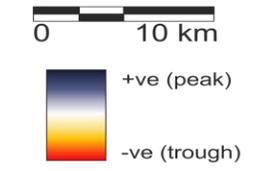
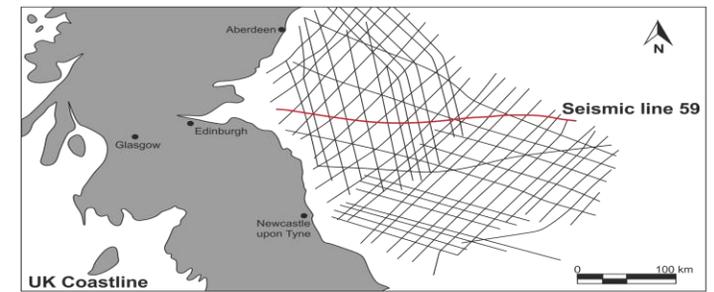
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	Post-Kinematic Unit C		Syn-Kinematic Unit A
	Post-Kinematic Unit B		Salt
	Post-Kinematic Unit A		Pre-Kinematic Unit A
	Syn-Kinematic Unit C		

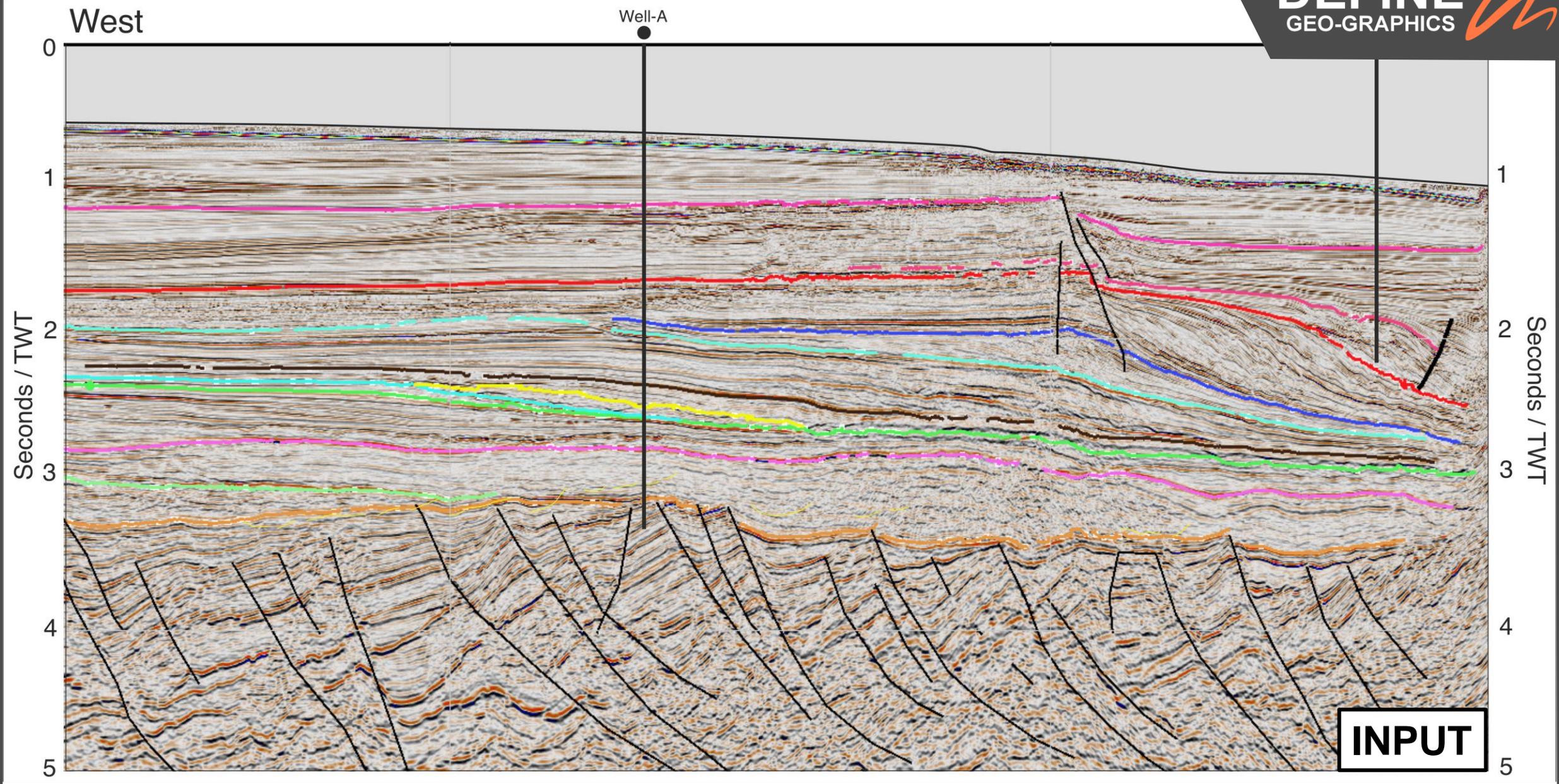




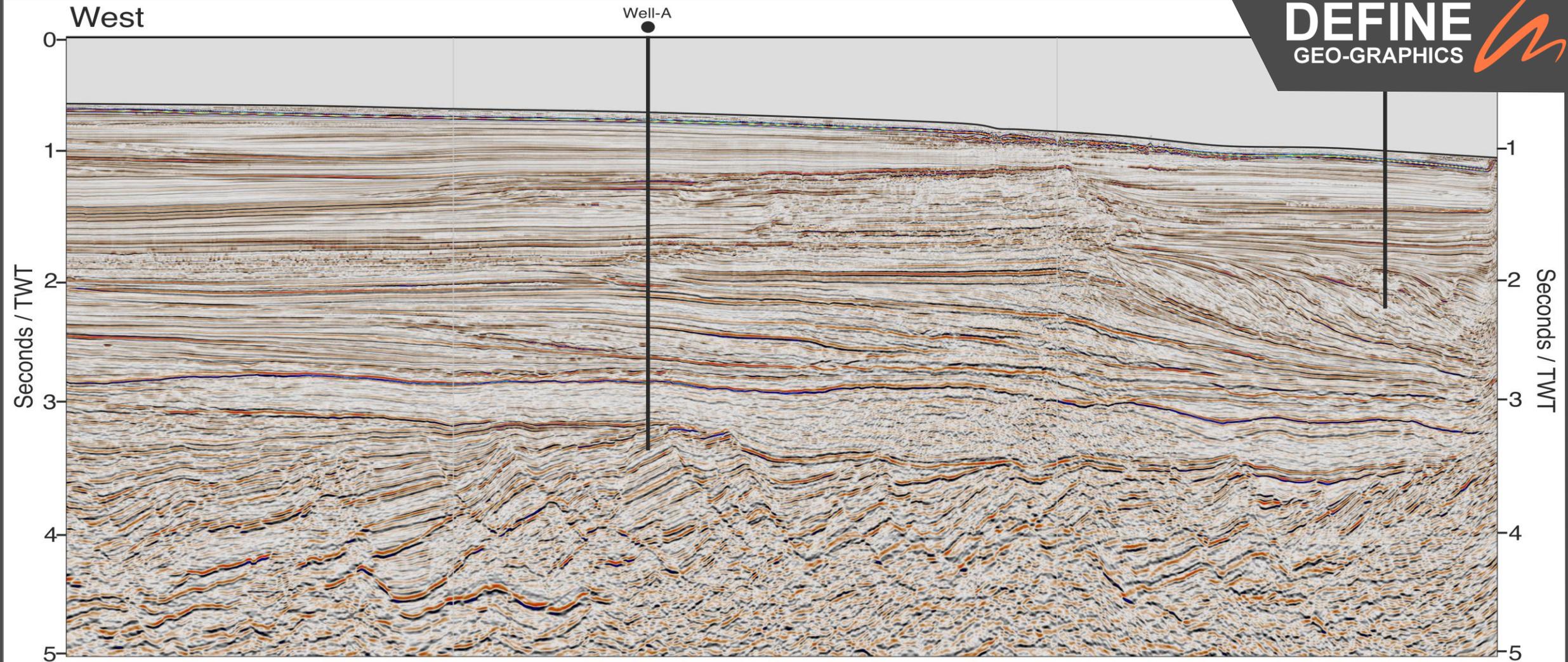
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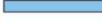
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	Post-Kinematic Unit C		Syn-Kinematic Unit A
	Post-Kinematic Unit B		Salt
	Post-Kinematic Unit A		Pre-Kinematic Unit A
	Syn-Kinematic Unit C		





Step 1 – Typical Input



Legend	
	Pre-Tectonic Unit-A
	Syn-Tectonic Unit-A
	Syn-Tectonic Unit-B
	Post-Tectonic Unit-A
	Post-Tectonic Unit-B
	Post-Tectonic Unit-C (HSST)
	Post-Tectonic Unit-D (LSST)
	Post-Tectonic Unit-E (TSST)
	Post-Tectonic Unit-F (HSST)
	Post-Tectonic Unit-G (LSST)
	Post-Tectonic Unit-H (TSST-HSST)
	Post-Tectonic Unit-I (LSST)
	Post-Tectonic Unit-J (TSST)
	Post-Tectonic Unit-K (HSST)
	Post-Tectonic Unit-L (HSST)

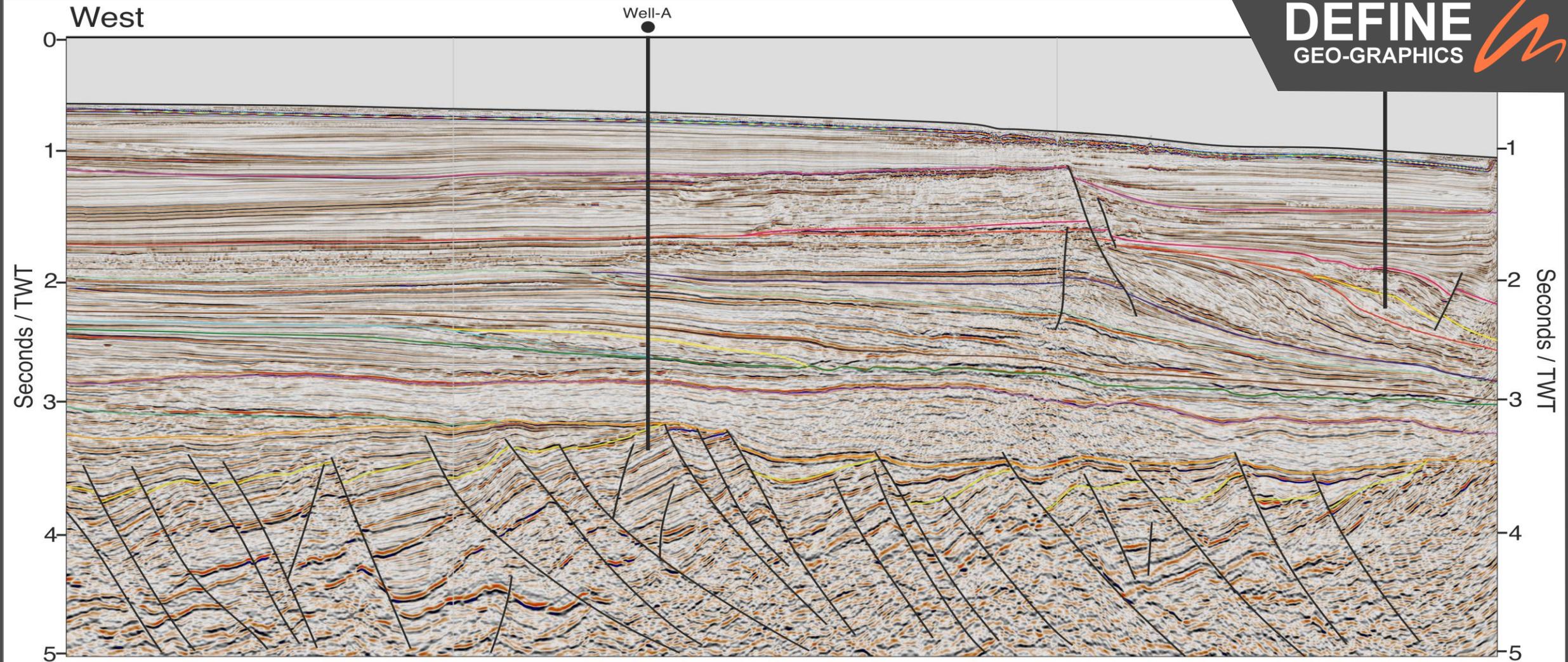
Basemap

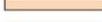
Insert Basemap here to include:

- Survey outline
- Line location
- Structural trends?
- Country borders



Interpreter details, company name date, project name, basin name (optional)



Legend	
	Pre-Tectonic Unit-A
	Syn-Tectonic Unit-A
	Syn-Tectonic Unit-B
	Post-Tectonic Unit-A
	Post-Tectonic Unit-B
	Post-Tectonic Unit-C (HSST)
	Post-Tectonic Unit-D (LSST)
	Post-Tectonic Unit-E (TSST)
	Post-Tectonic Unit-F (HSST)
	Post-Tectonic Unit-G (LSST)
	Post-Tectonic Unit-H (TSST-HSST)
	Post-Tectonic Unit-I (LSST)
	Post-Tectonic Unit-J (TSST)
	Post-Tectonic Unit-K (HSST)
	Post-Tectonic Unit-L (HSST)

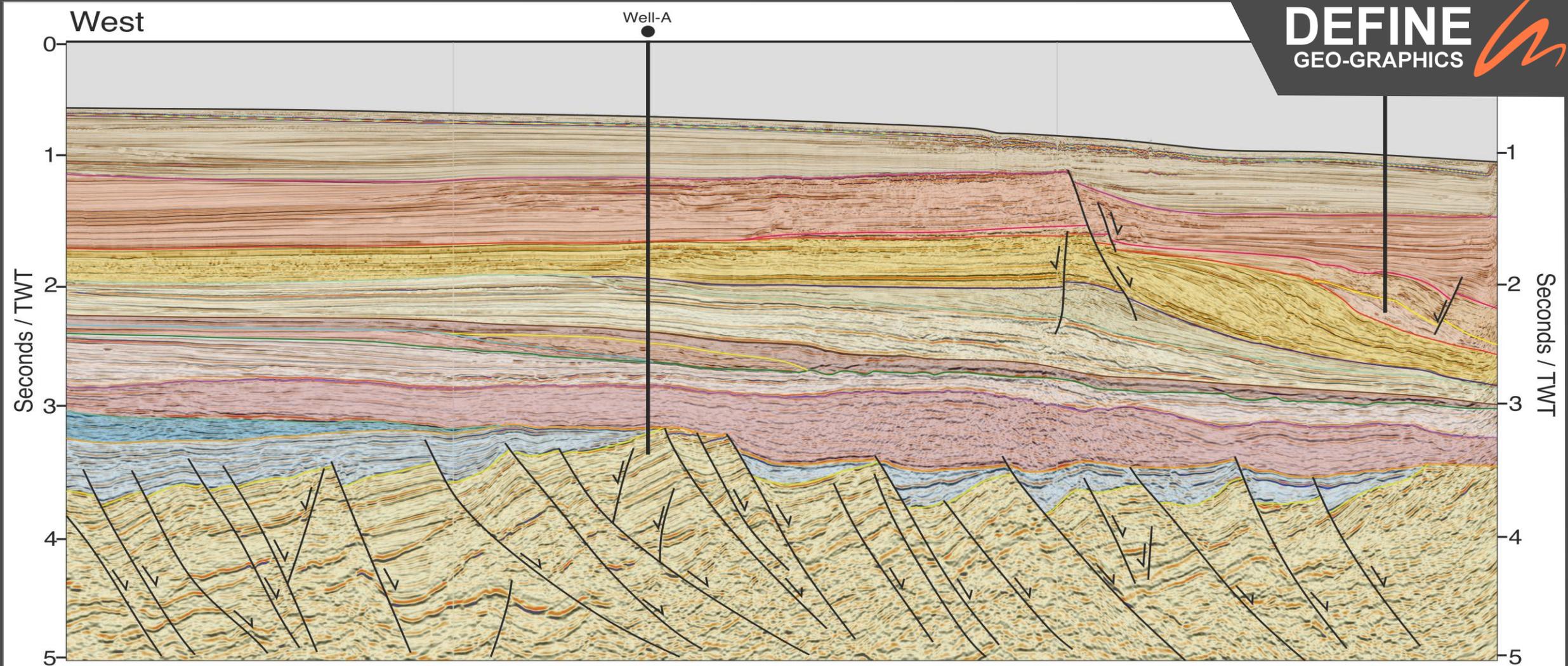
Basemap

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- Country borders



Interpreter details, company name date, project name, basin name (optional)



Legend	
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	Syn-Tectonic Unit-A
	Syn-Tectonic Unit-B
	Post-Tectonic Unit-A
	Post-Tectonic Unit-B
	Post-Tectonic Unit-C (HSST)
	Post-Tectonic Unit-D (LSST)
	Post-Tectonic Unit-E (TSST)
	Post-Tectonic Unit-F (HSST)
	Post-Tectonic Unit-G (LSST)
	Post-Tectonic Unit-H (TSST-HSST)
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	Post-Tectonic Unit-L (HSST)

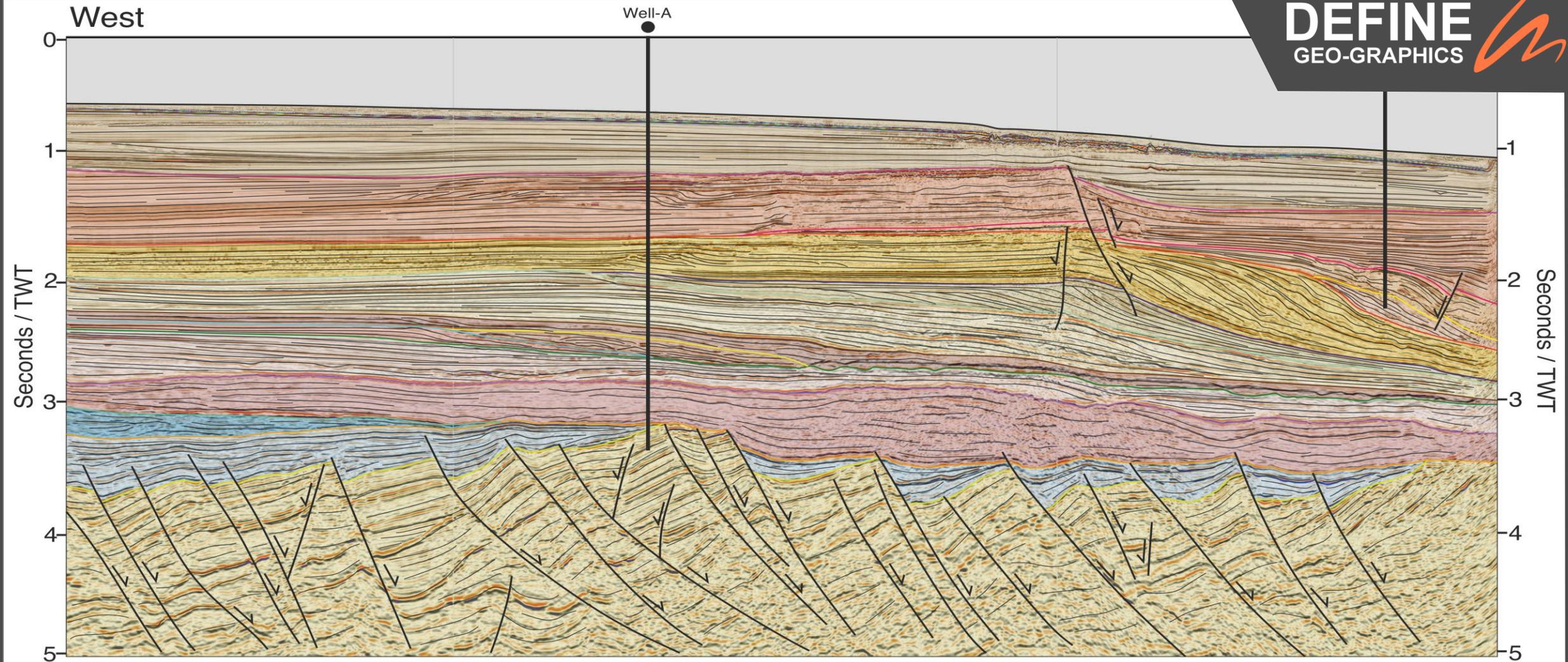
Basemap

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Interpreter details, company name date, project name, basin name (optional)



Legend	
	Pre-Tectonic Unit-A
	Syn-Tectonic Unit-A
	Syn-Tectonic Unit-B
	Post-Tectonic Unit-A
	Post-Tectonic Unit-B
	Post-Tectonic Unit-C (HSST)
	Post-Tectonic Unit-D (LSST)
	Post-Tectonic Unit-E (TSST)
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	Post-Tectonic Unit-L (HSST)

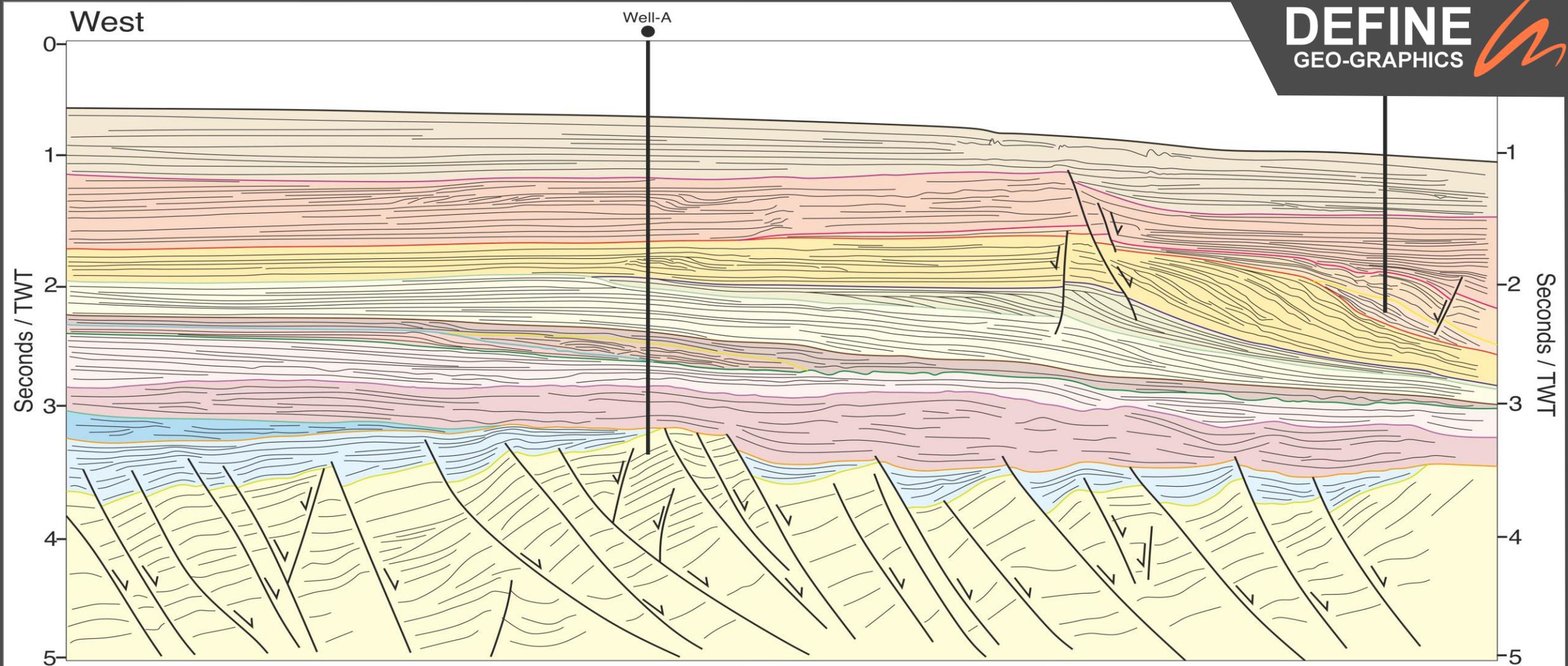
Basemap

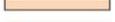
Insert Basemap here to include:

- Survey outline
- Line location
- Structural trends?
- Country borders



Interpreter details, company name date, project name, basin name (optional)



Legend	
	Pre-Tectonic Unit-A
	Syn-Tectonic Unit-A
	Syn-Tectonic Unit-B
	Post-Tectonic Unit-A
	Post-Tectonic Unit-B
	Post-Tectonic Unit-C (HSST)
	Post-Tectonic Unit-D (LSST)
	Post-Tectonic Unit-E (TSST)
	Post-Tectonic Unit-F (HSST)
	Post-Tectonic Unit-G (LSST)
	Post-Tectonic Unit-H (TSST-HSST)
	Post-Tectonic Unit-I (LSST)
	Post-Tectonic Unit-J (TSST)
	Post-Tectonic Unit-K (HSST)
	Post-Tectonic Unit-L (HSST)

Basemap

Insert Basemap here to include:

- Survey outline
- Line location
- Structural trends?
- Country borders



Interpreter details, company name date, project name, basin name (optional)

3D Depositional Models

Levelling-up Communication

3D Depositional Models

The process for producing 3D geological models will close involve interaction between the customer and our drafts-people.

You will provide:

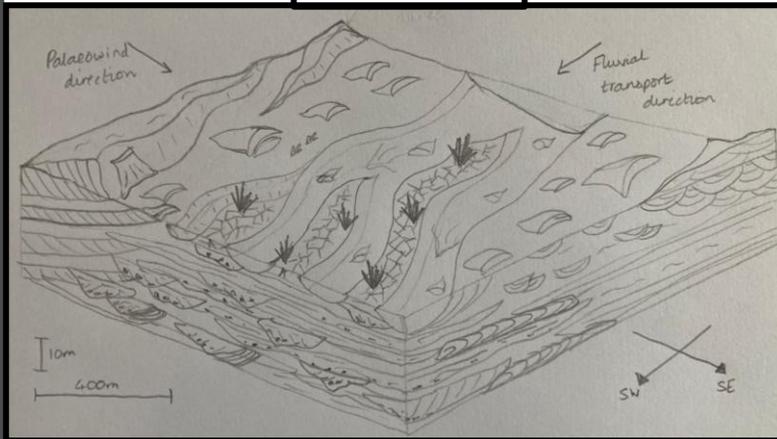
1. A rough sketch for the vision you have for your model
2. An introduction to the depositional setting

We will then bring to life your 3D geological model in a digital format.

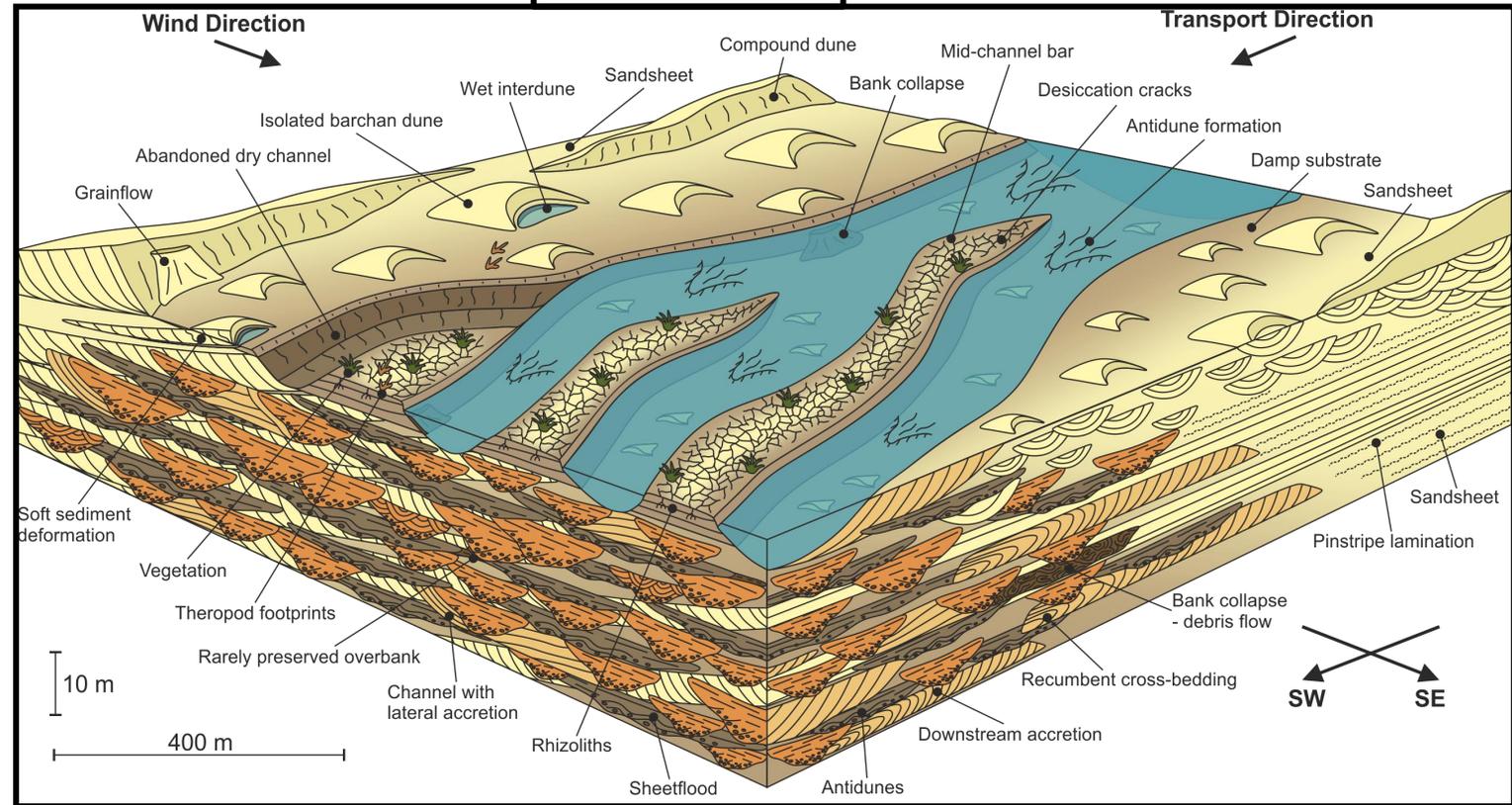


Ephemeral 3D Facies Model

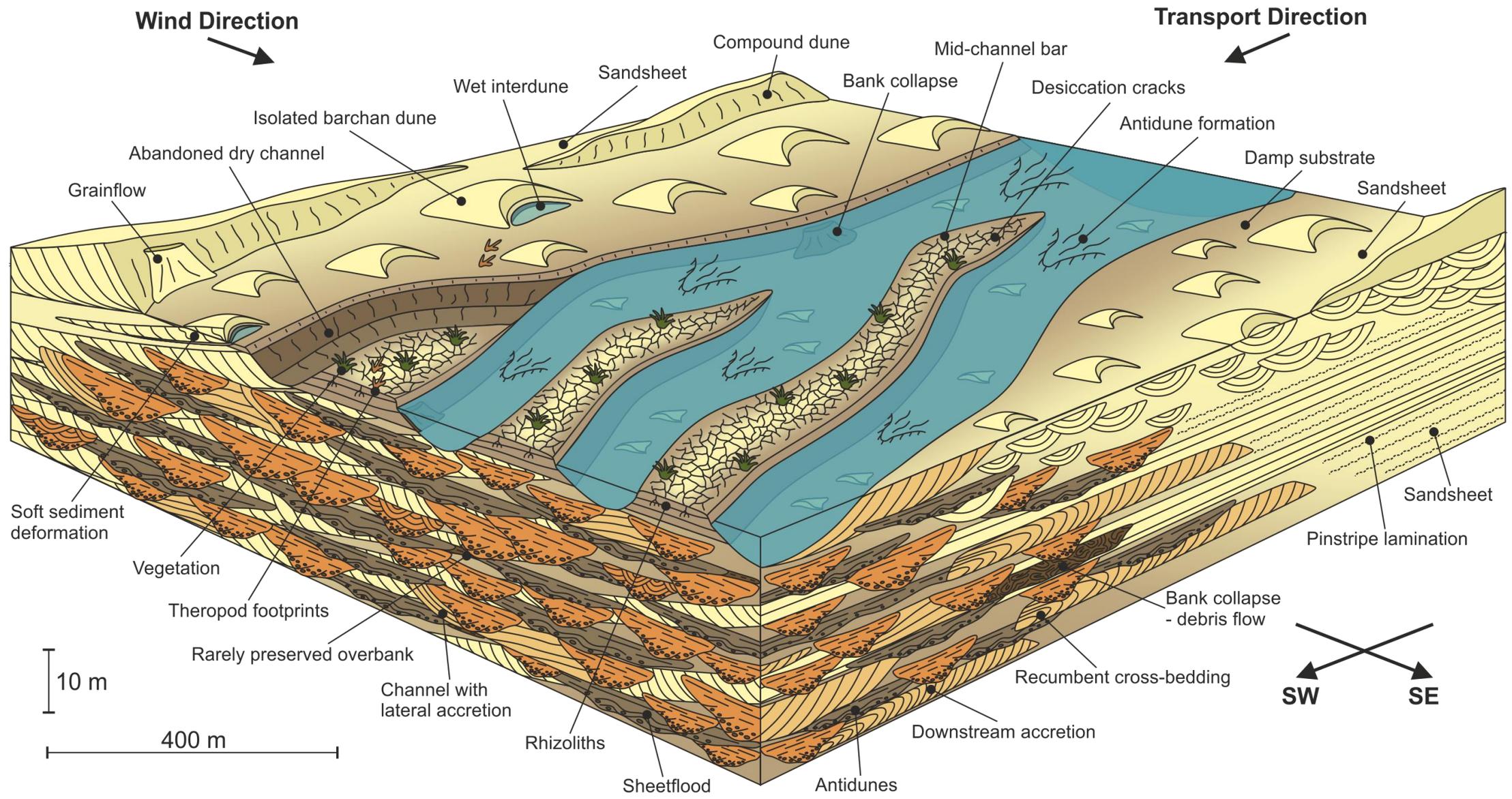
INPUT



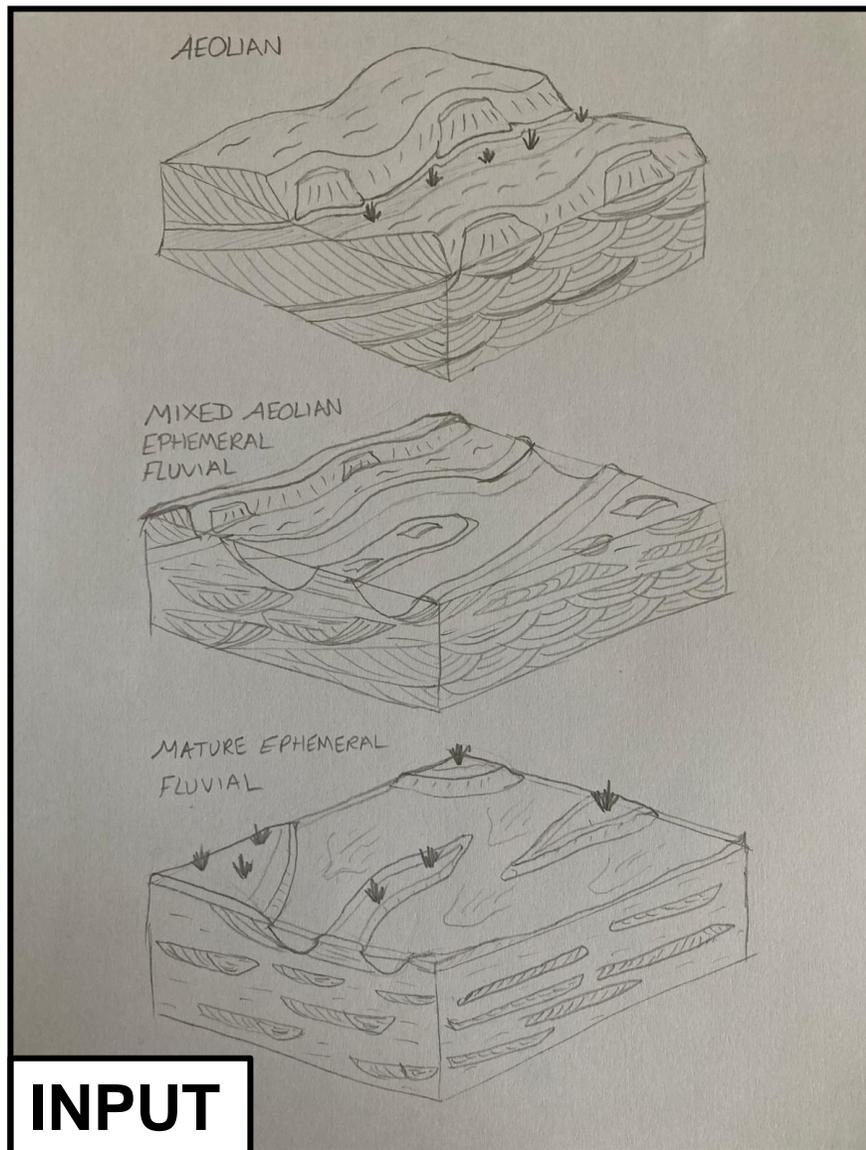
OUTPUT



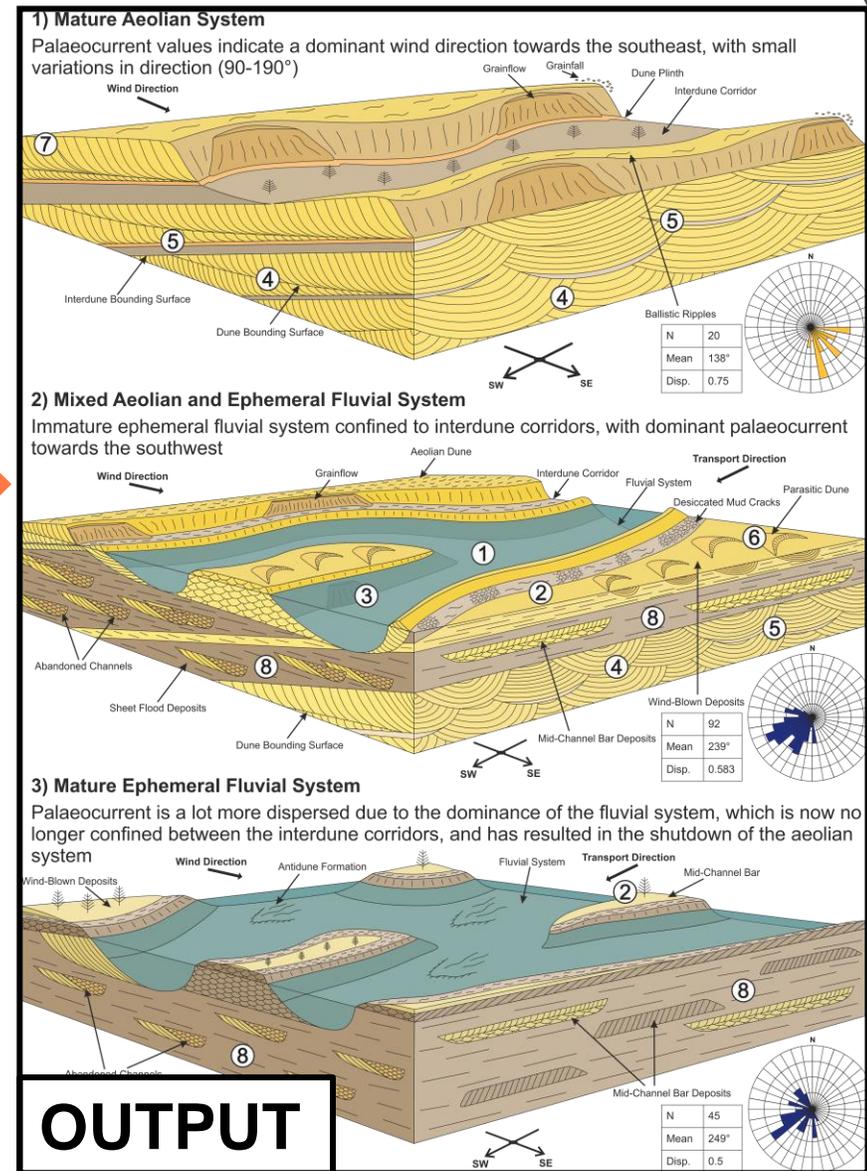
Ephemeral 3D Facies Model



Aeolian 3D Facies Model

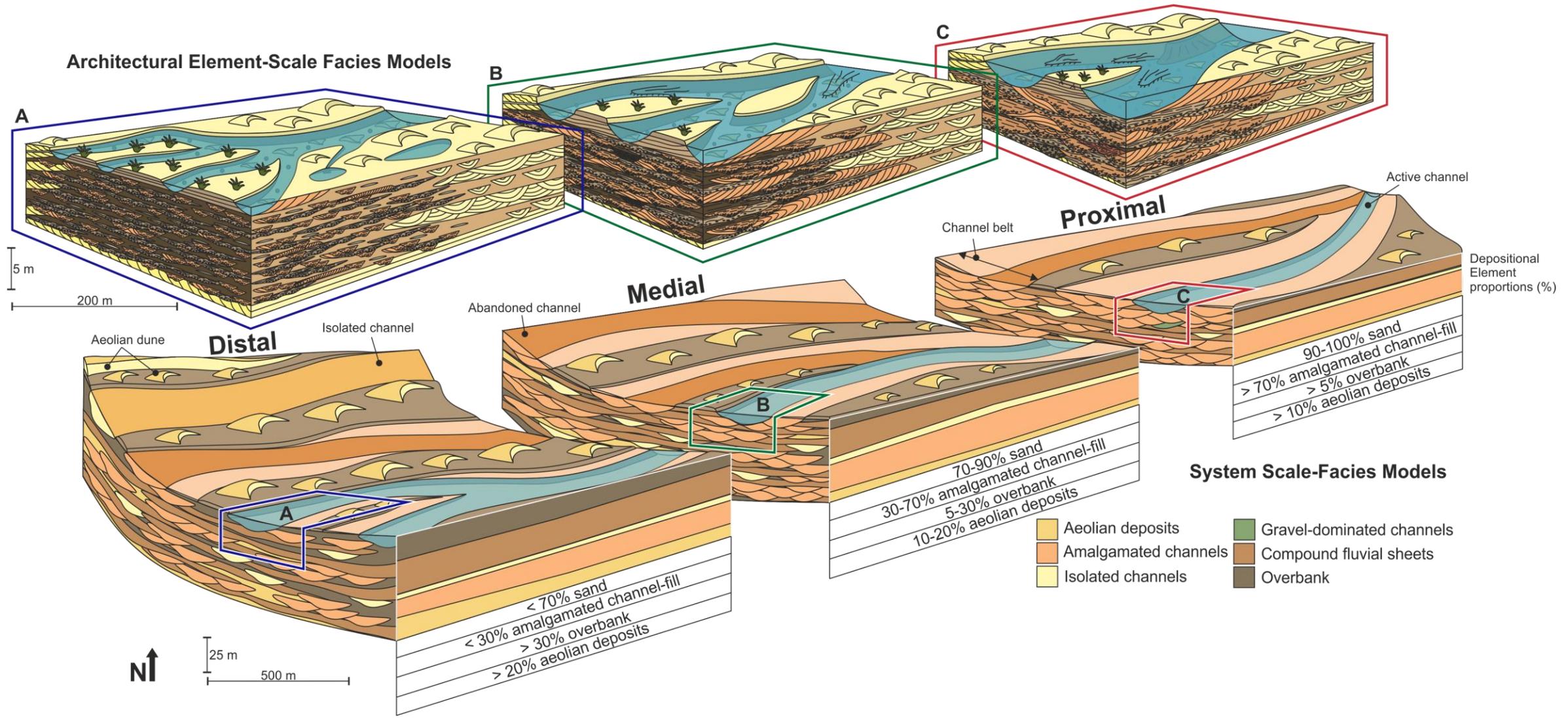


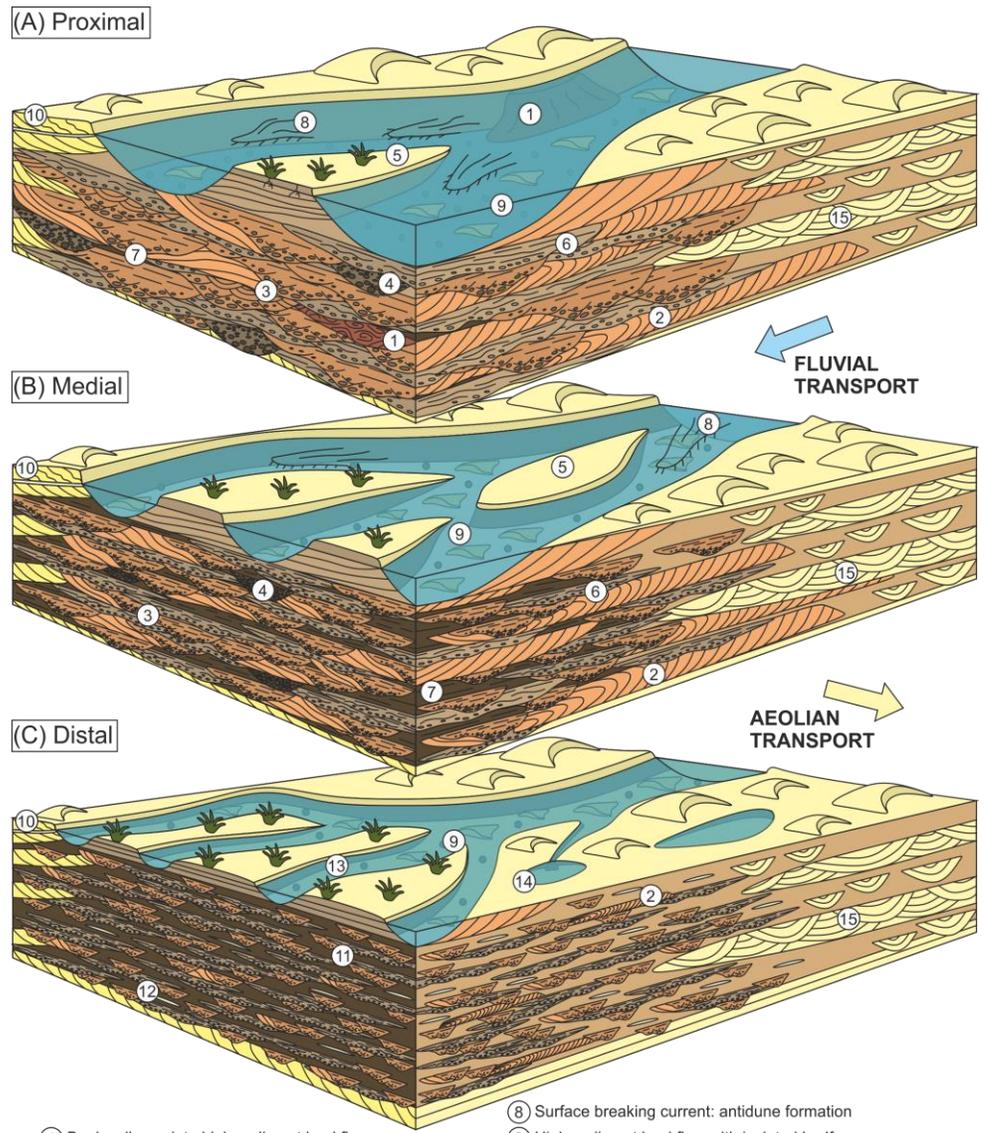
INPUT



OUTPUT

Element Scale Facies Models





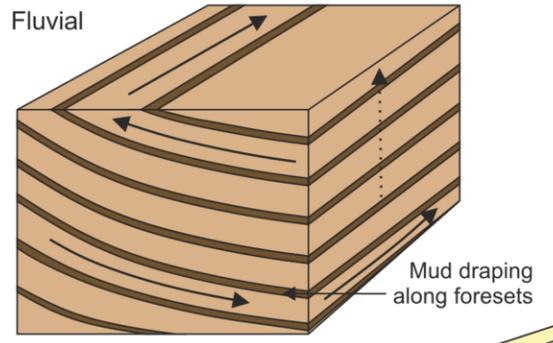
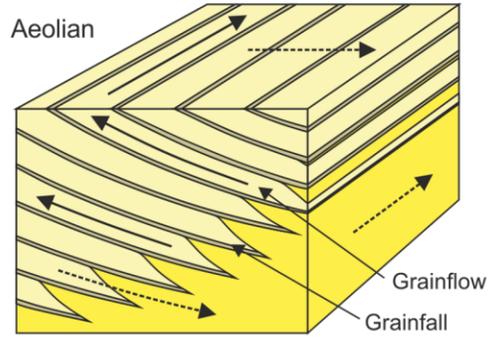
Element Scale Facies Models

- Sample 3D depositional models

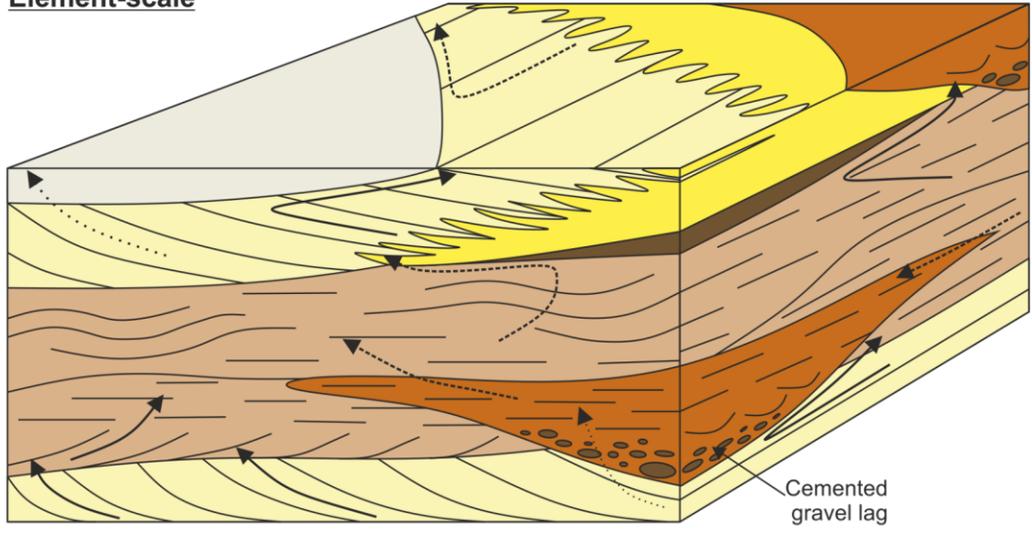
- | | |
|--|--|
| <ul style="list-style-type: none"> ① Bank collapse into high sediment load flow ② Accretionary barforms with recumbent cross-bedding ③ Amalgamated channel and sheetflood deposits ④ Highly erosive, gravel-dominated debris flows ⑤ Exposed downstream migrating barforms ⑥ Sheetflood deposits with upper flow regime structures ⑦ Isolated pockets of overbank | <ul style="list-style-type: none"> ⑧ Surface breaking current: antidune formation ⑨ High sediment load flow with isolated bedforms ⑩ Aeolian dune deposits with soft sediment deformation ⑪ Channel and sheetflood deposits within extensive overbank ⑫ Isolated lenses of siliciclastic-rich limestone ⑬ Isolated small channels dying out within overbank deposits ⑭ Isolated ponds with sediment input from the fluvial system ⑮ Interfingering of the aeolian system |
|--|--|

Fluid Flow Models

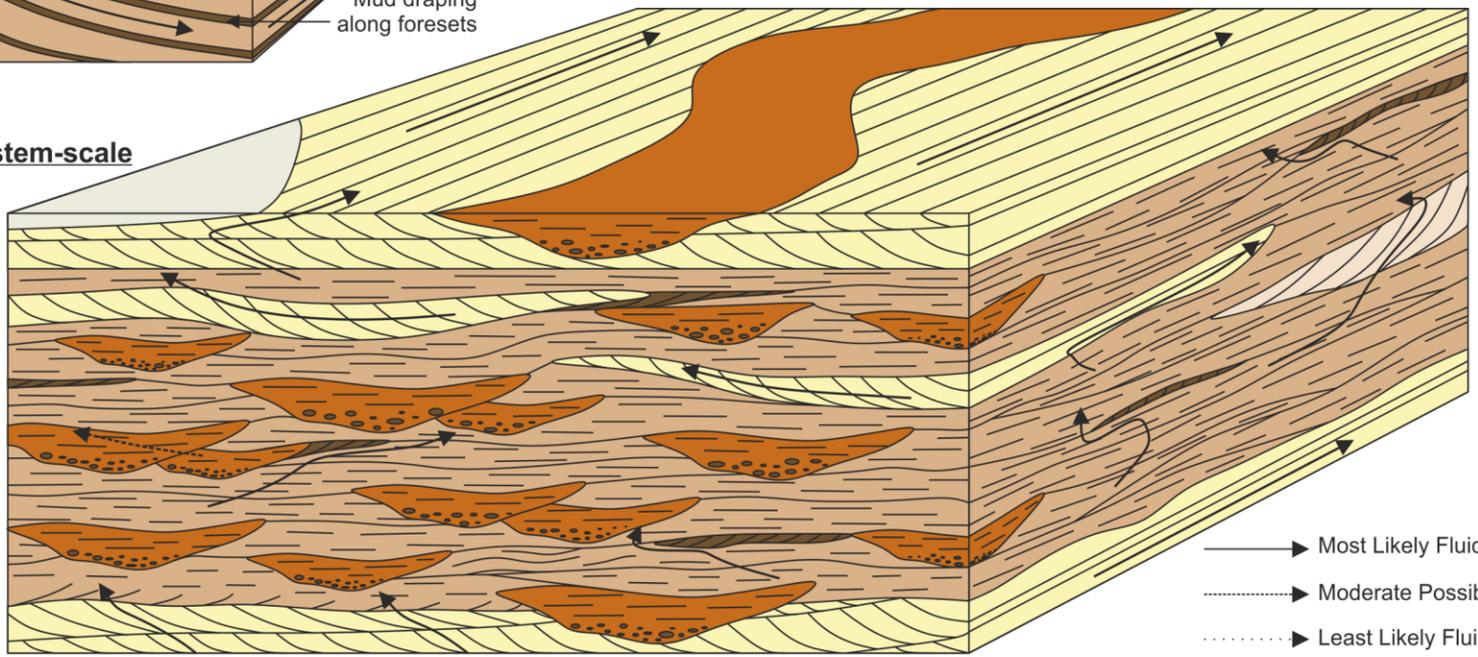
Facies-scale



Element-scale



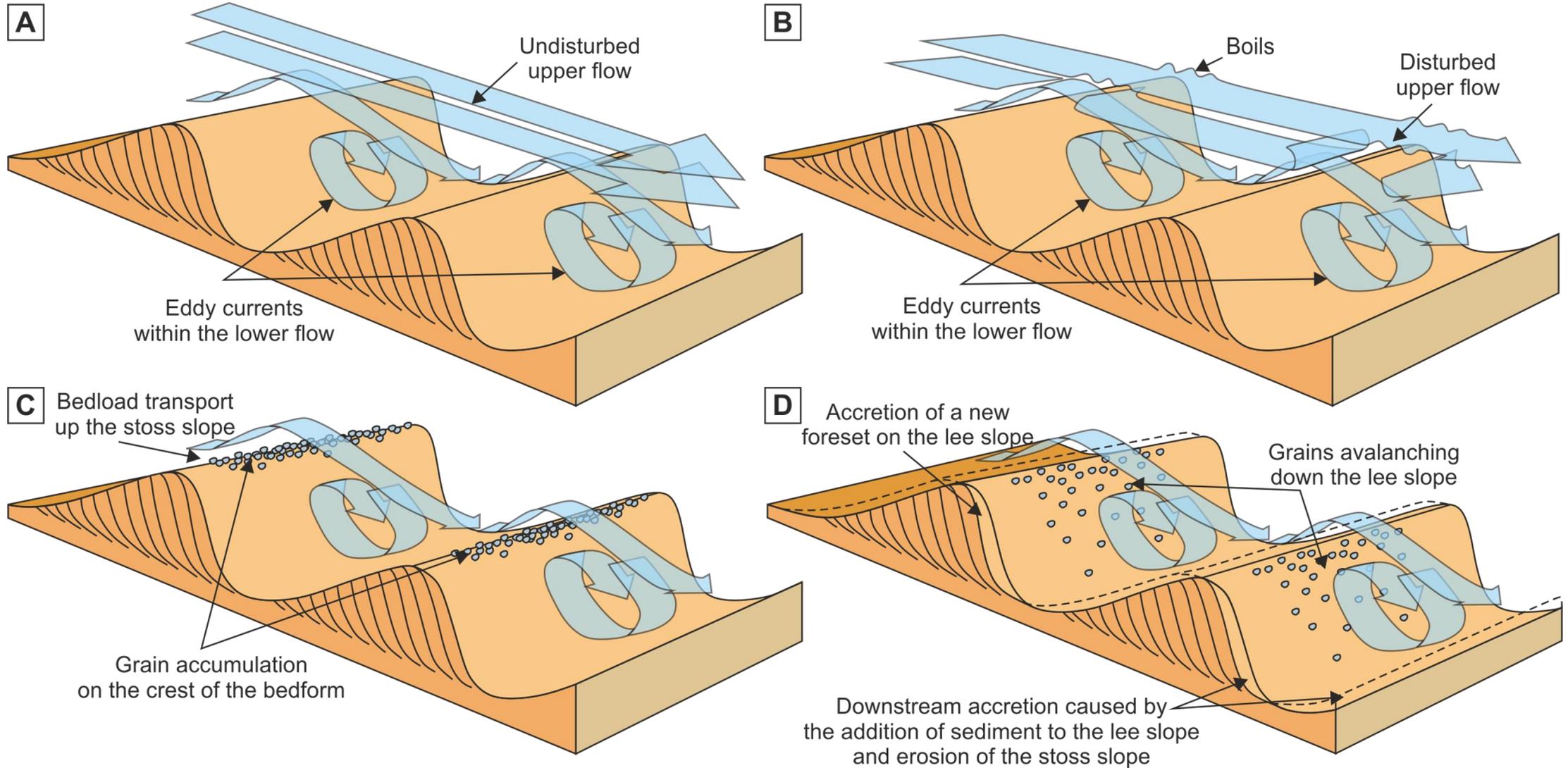
System-scale



-  Aeolian Dune
-  Dune Plinth
-  Interdune
-  Fluvial Channel
-  Fluvial Overbank
-  Fluvial Sheetflood

-  Most Likely Fluid Flow Pathway
-  Moderate Possibility Fluid Flow Pathway
-  Least Likely Fluid Flow Pathway

Geological Process Description - Bedform Migration



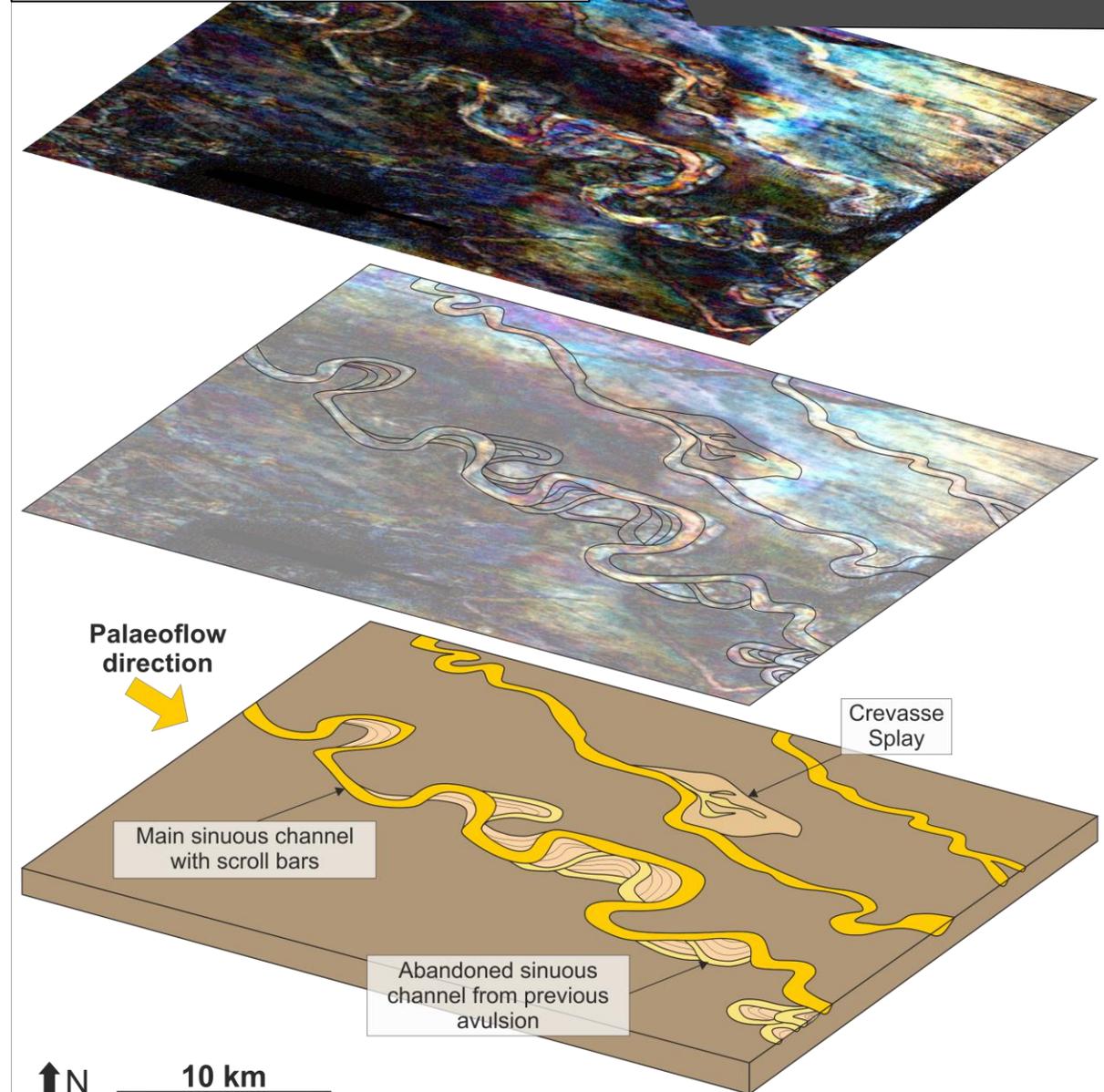
Seismic Attributes

Unveil Geology from Seismic

Uncovering Geology from Seismic Attributes

- To a highly trained geophysicists seismic attributes reveal information about the rocks in the subsurface such as their density, frequency content, and perhaps fluid content.
- This information is not easy even for geologists to understand, let alone a non technical investor or member of the upper management without a subsurface background.
- Therefore, clear geological interpretation of geophysical features is of paramount importance to ensure that their full impact is realised.

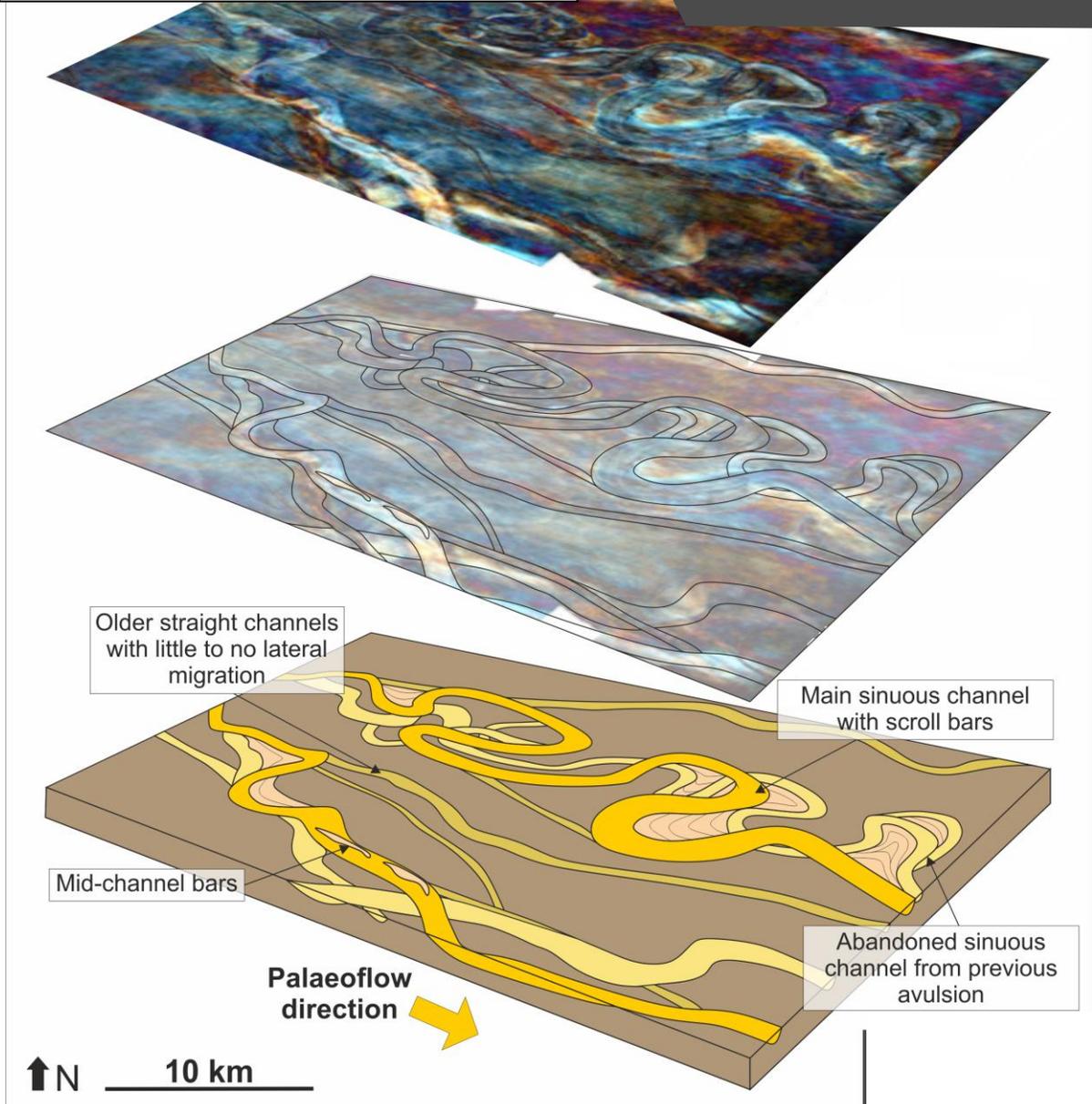
Spectral Decomposition attribute
Showing river channels



Uncovering Geology from Seismic Attributes

- To a highly trained geophysicists seismic attributes reveal information about the rocks in the subsurface such as their density, frequency content, and perhaps fluid content.
- This information is not easy even for geologists to understand, let alone a non technical investor or member of the upper management without a subsurface background.
- Therefore, clear geological interpretation of geophysical features is of paramount importance to ensure that their full impact is realised.

Spectral Decomposition attribute
Showing river channels



Well Sections

From Core and Correlations

Well Sections

We can help to bring together the age old dichotomy between drilling and subsurface teams.

Communication between drilling and subsurface is possibly the most important chain within an organisations armour and our graphics can significantly reduce the drain on resources that poor communication exacerbates.

With our well sections, we can promise clear, concise information to make sure your drilling teams can instantly understand key information such as, well design, formation evaluation and prognosed facies.

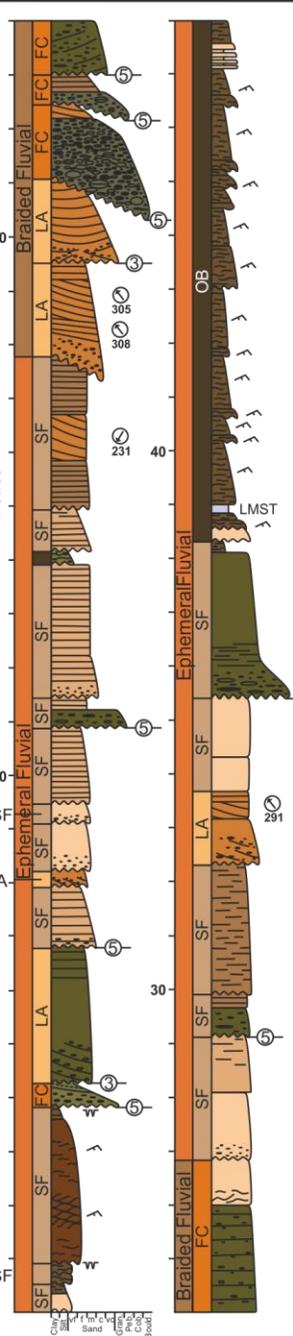
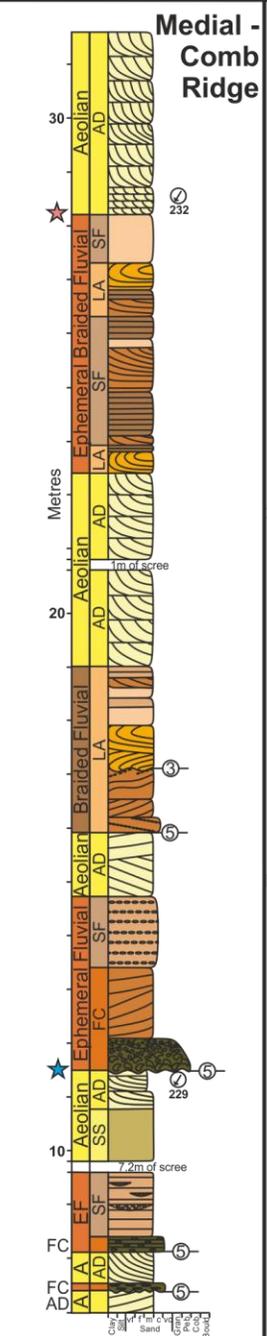
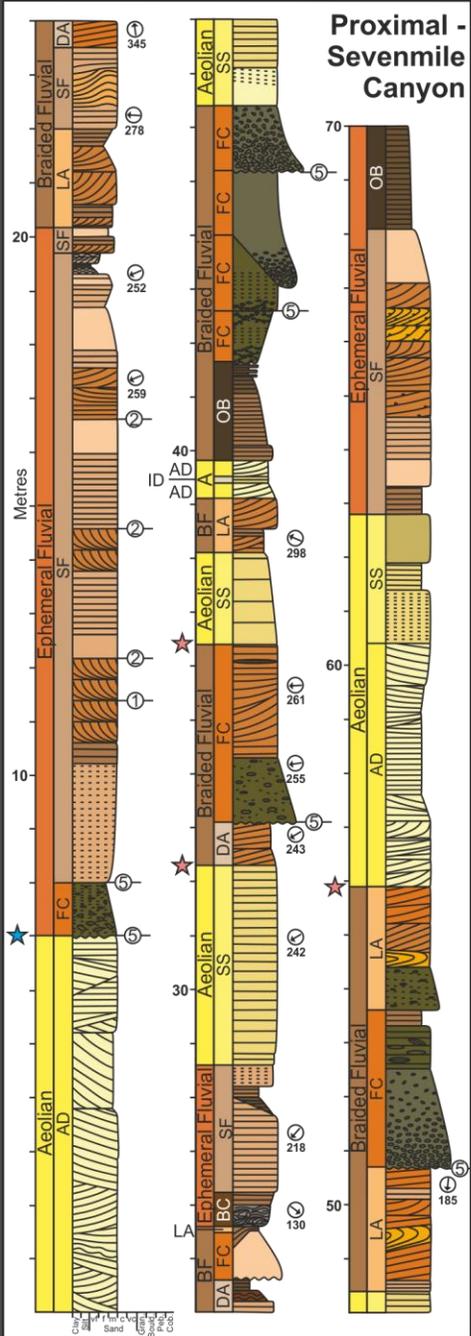
We also offer core log digitization services which lock in the work for the ages, ensuring that future geoscientists can easily understand prior work.

These sections also work perfectly for publications as well as conference presentations.



Graphic Log Display

Utah, USA



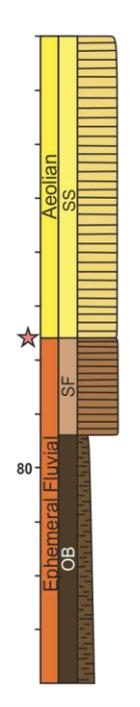
Lithofacies Key

Fluvial		Aeolian	
	Sxb & Stxb		Smtx & Smtxb
	Slxb		Smpb
	Spb		Smwb
	Spl		Sm
	Sfrl		
	Stpl		
	Smf		
	Sma		
	Srb		
	Sfl		

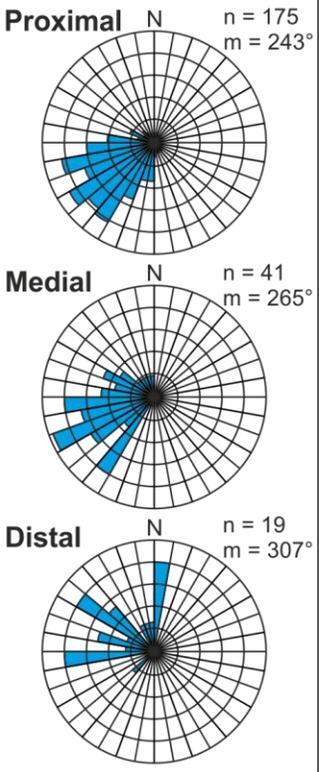
Additional Structures			
	Roots		Rip up Clasts
	Ripples		Intraformational Clasts
	Bioturbation		Extraformational Clasts
	Desiccation		Mud draped foresets

**Please refer to Table 4.3 for full facies descriptions and Figure 4.4 for architectural element descriptions*

Distal - Colorado City



Palaeocurrents



Bespoke Well Prognosis Diagrams

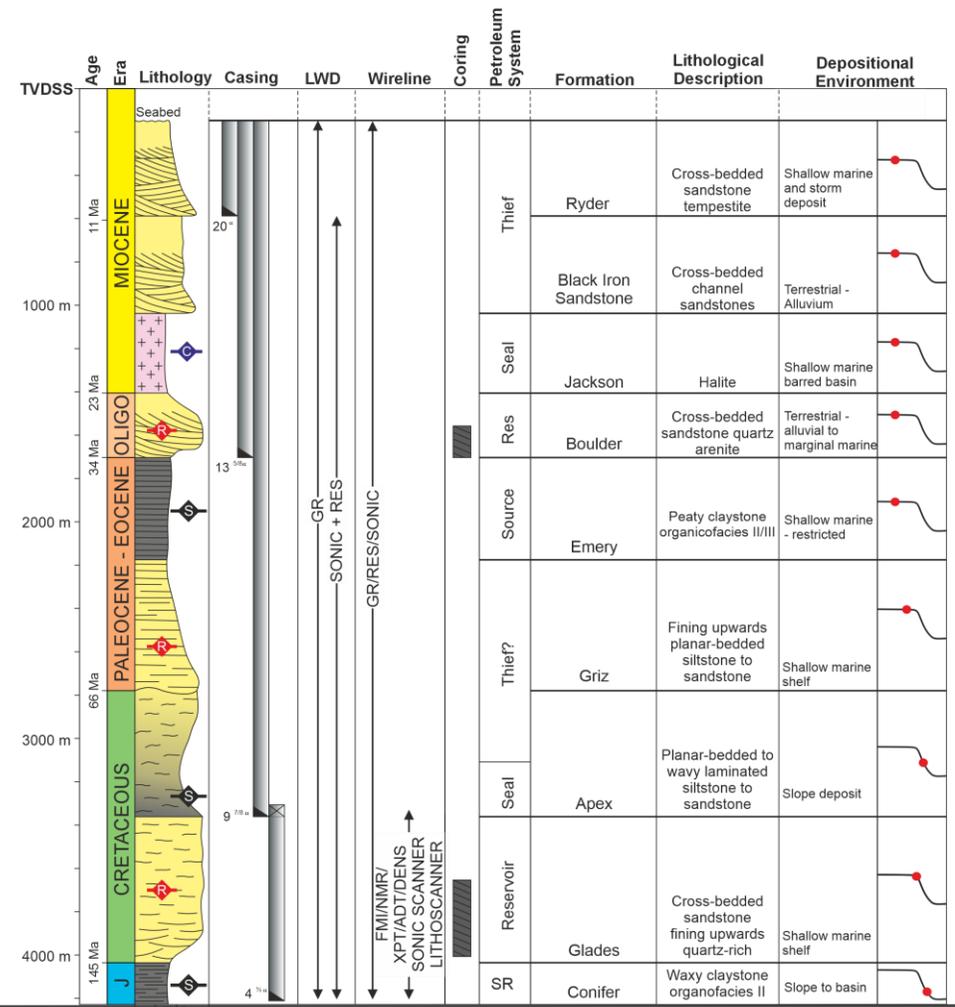
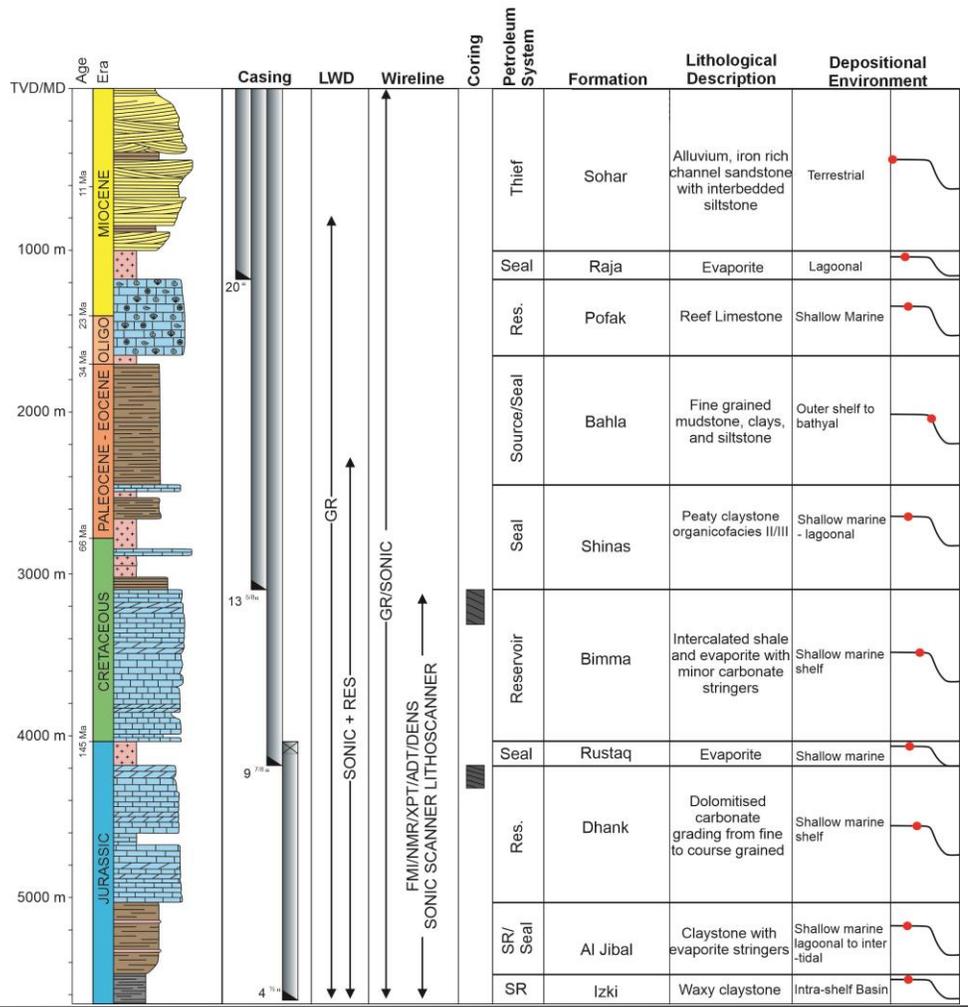
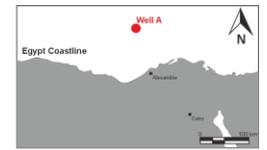
Well Name: Exploration Well-1
 Block Name : Block 47
 Country : Oman
 Coordinates: X- 2658923 Y- 466562
 CRS : WGS84 UTM 40N
 Spud Date: January 2026

Well Class: Exploration
 Well Type: Vertical
 Ground Elev : 300m
 Expected Fluid : Oil & Gas



Well Name: Exploration Well-1
 Block Name : Block A
 Country : Egypt
 Coordinates: X- -134005 Y-3207866
 CRS : WGS84 UTM 37N
 Spud Date: September 2025

Well Class: Exploration
 Well Type: Vertical
 Water Depth : 200m
 Expected Fluid : Oil



Structural/GIS Basemaps

Prospect Scale Displays

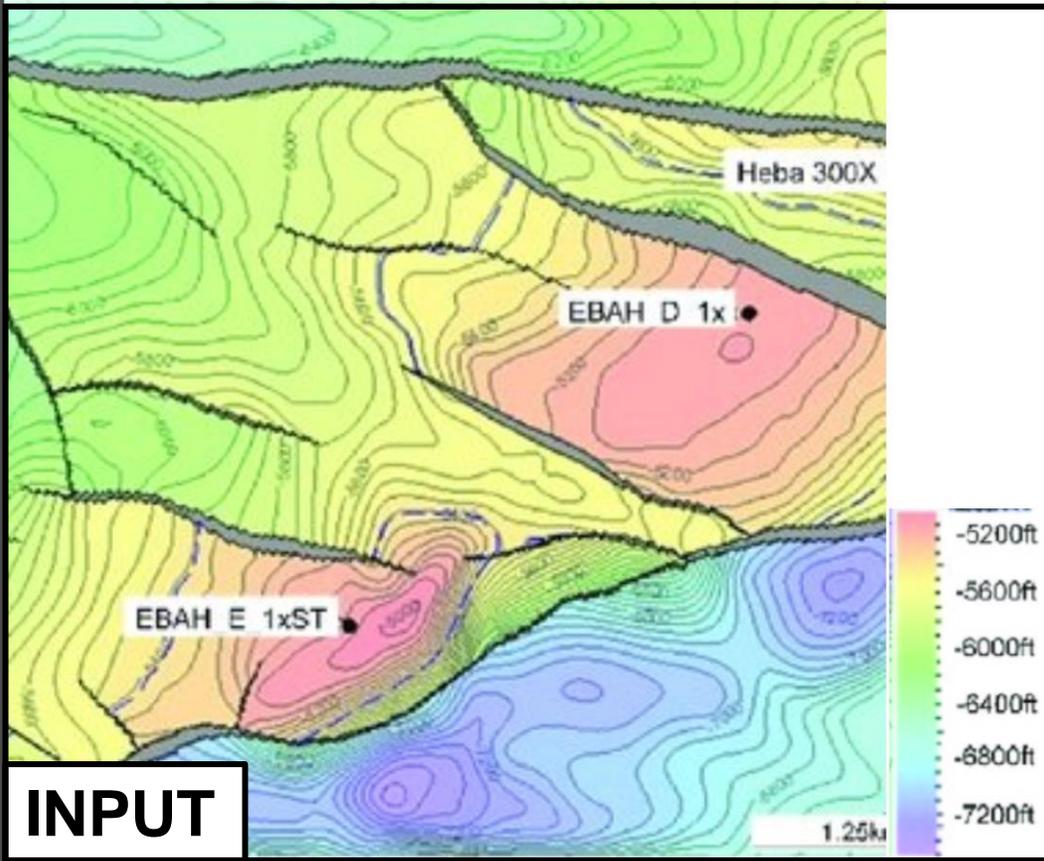
Basemaps and Prospect Displays

Nothing enables a prospective investor focus on the key information in an opportunity like a well drafted and clear basemap.

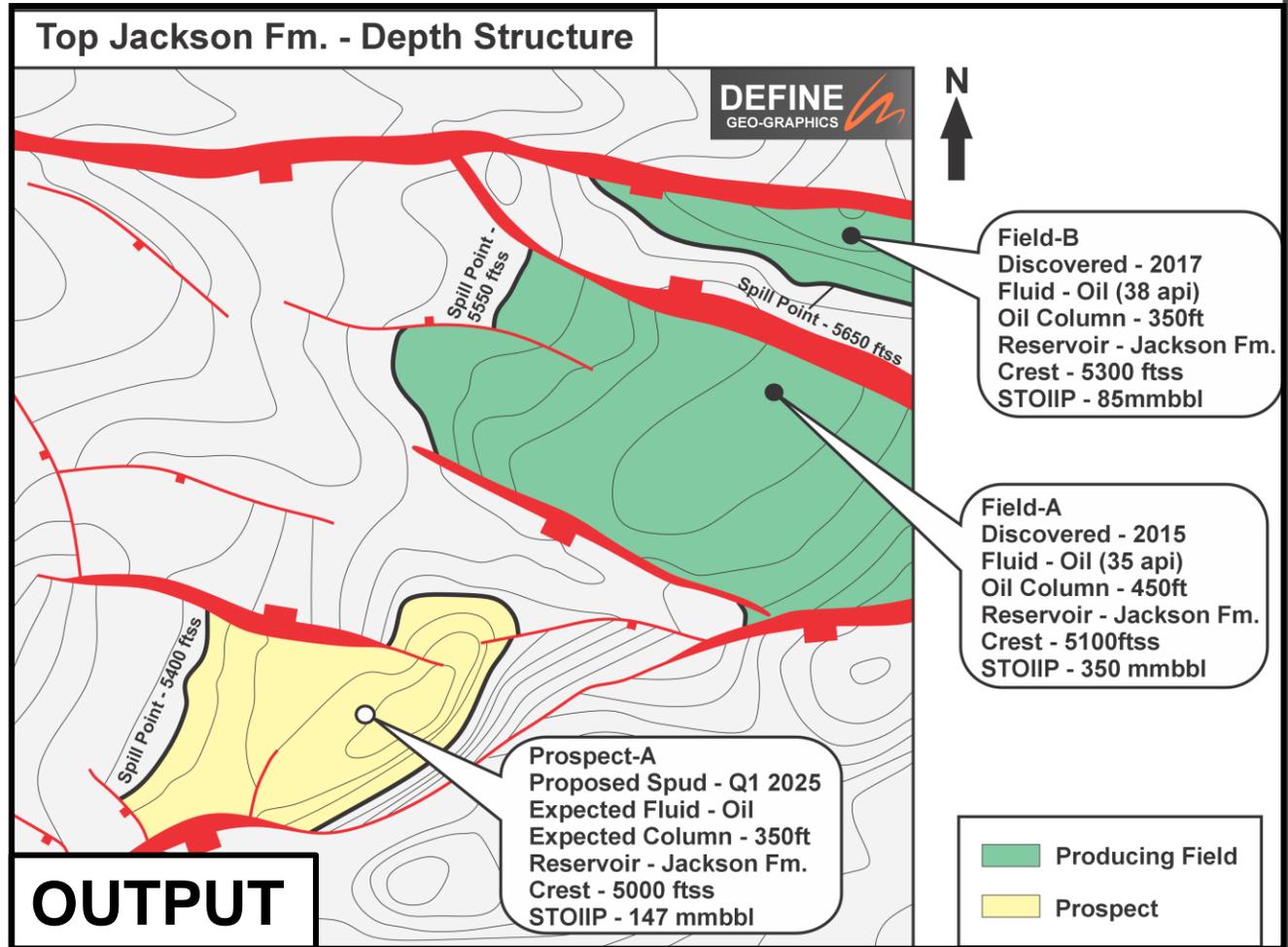
Our basemaps can help to streamline communication between your subsurface team and the outside world.



Prospect Map Displays



INPUT



OUTPUT

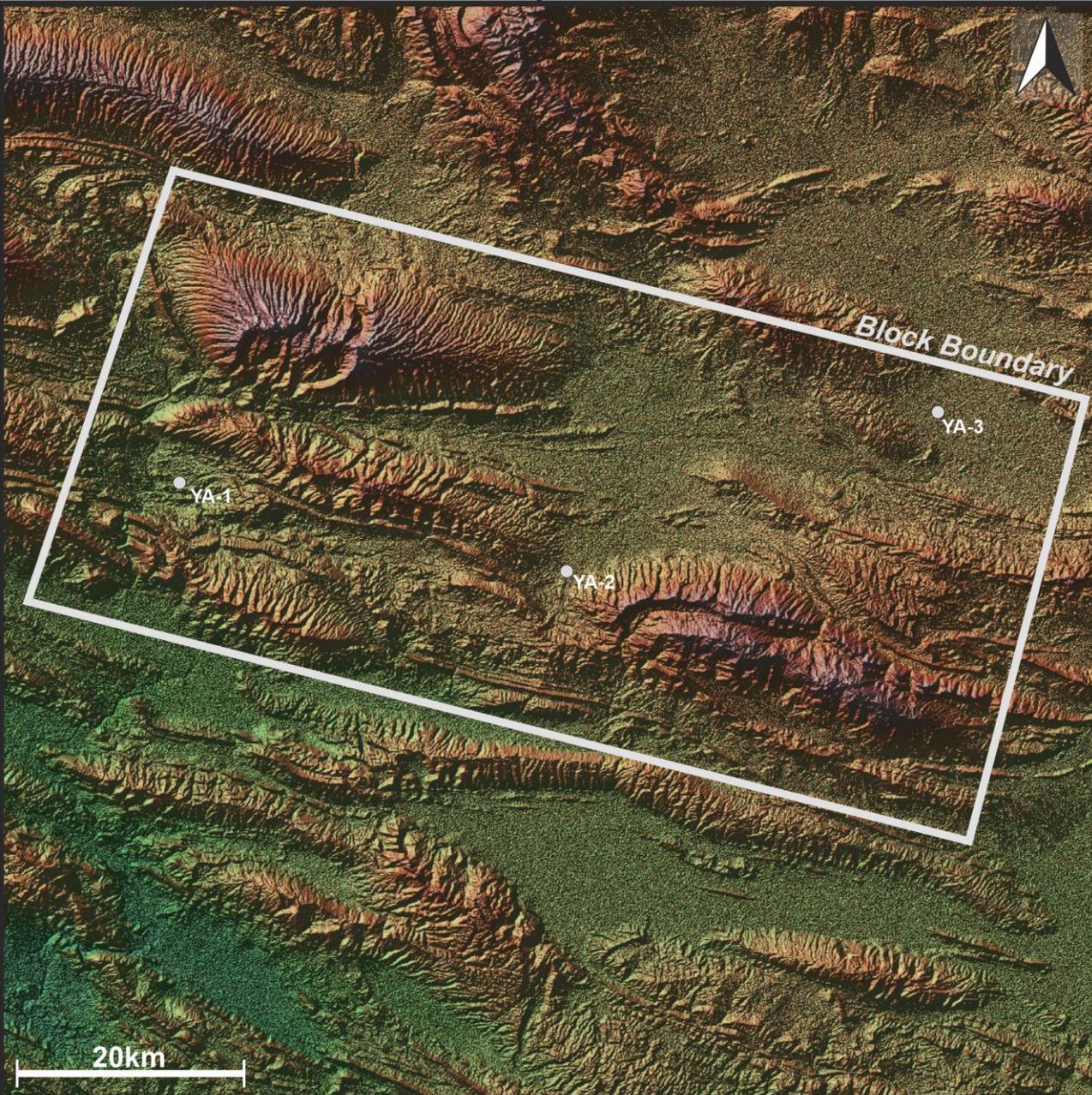
29°N, 53°E

53.5

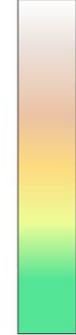
29°N, 54°E

Basemap Iran, Block

28.5°



2775 m



Elevation
(m above
sea level)

519m

Information

Country - Iran

Block Name - Yabut

Basin - Zagros Foldbelt

Commitment - 800km² 3D seismic
+ one exploration well

Operator - Company A (60%)

Partner - Company B (40%)

CRS - WGS84 UTM39 N

Legend

-  - Block Boundary
-  - Drilled Wells

28°N, 53°E

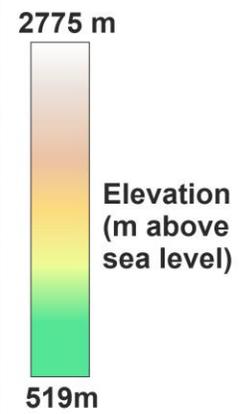
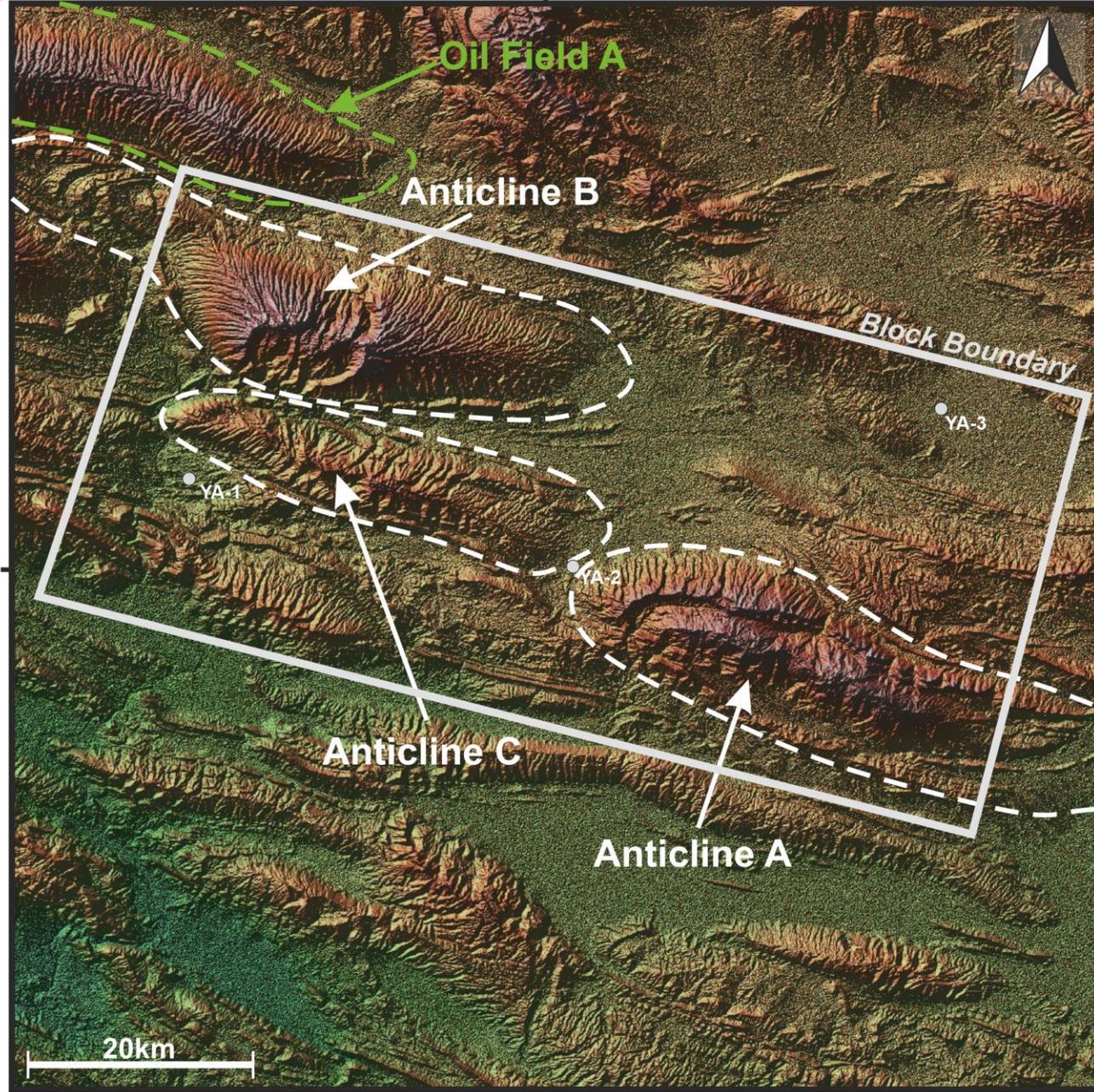
53.5

28°N, 54°E

29°N, 53°E 53.5 29°N, 54°E

Basemap Iran, Block & Structures

28.5°



Information
Country - Iran
Block Name - Yabut
Basin - Zagros Foldbelt
Commitment - 800km² 3D seismic + one exploration well
Operator - Company A (60%)
Partner - Company B (40%)
CRS - WGS84 UTM39 N

Legend
 - Block Boundary
 - Drilled Wells

28°N, 53°E 53.5 28°N, 54°E

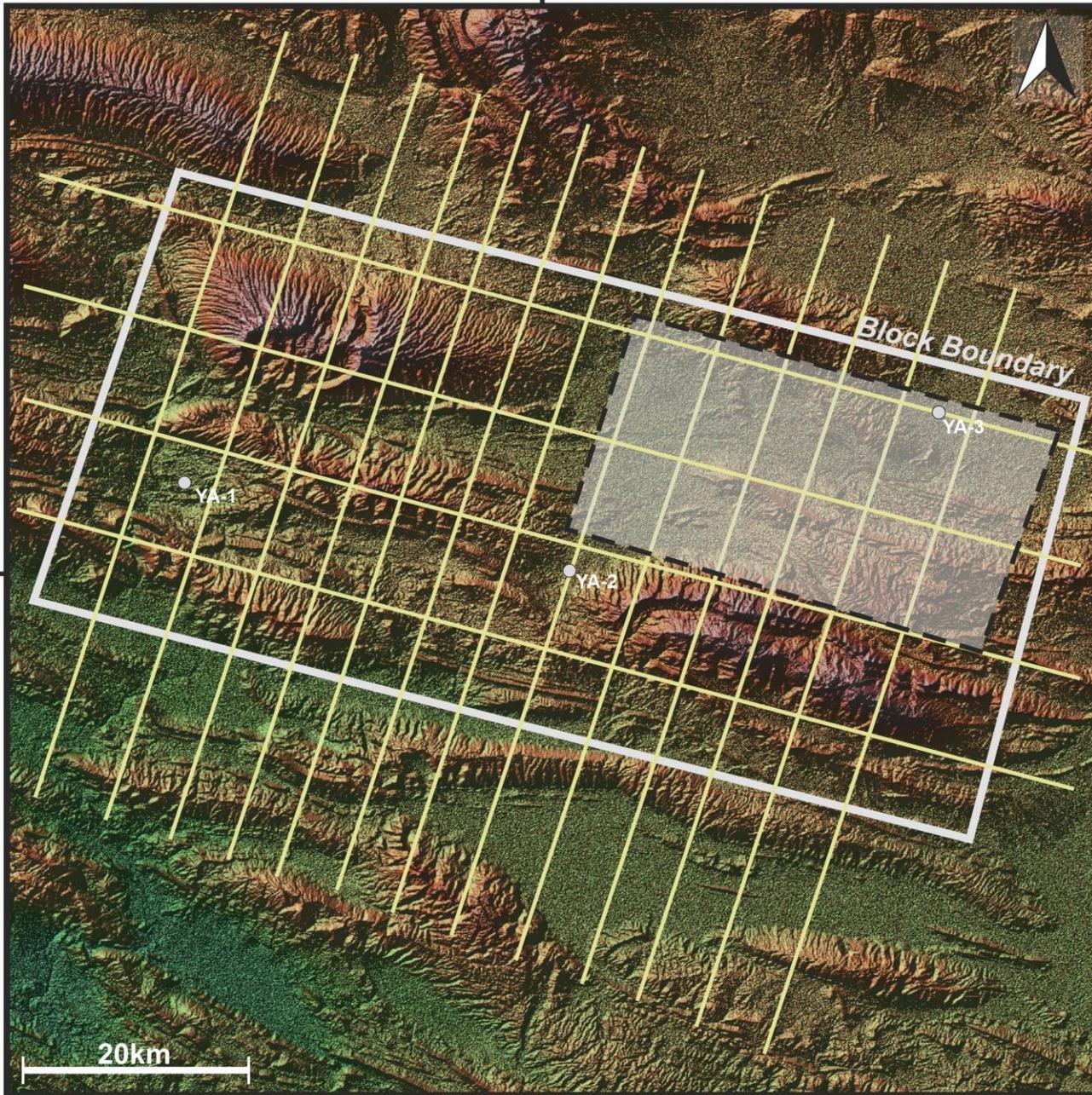
29°N, 53°E

53.5

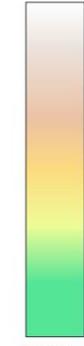
29°N, 54°E

Basemap Iran, Block & Dataset

28.5°



2775 m



Elevation
(m above
sea level)

519m

Information

Country - Iran

Block Name - Yabut

Basin - Zagros Foldbelt

Commitment - 800km² 3D seismic
+ one exploration well

Operator - Company A (60%)

Partner - Company B (40%)

CRS - WGS84 UTM39 N

Legend

 - Block Boundary

 - 2D Seismic

 - Proposed 3D Seismic

 - Drilled Wells

28°N, 53°E

53.5

28°N, 54°E

Outcrop Interpretation

From Outcrop to Subsurface

Outcrop Interpretation

Our favourite, outcrop interpretation!

Outcrops are where geology was first conceptualized, where every geologist feels most at home, and we are no exception to this rule! We believe that outcrops are the most powerful tool to communicate subsurface issues with **any** stakeholder!

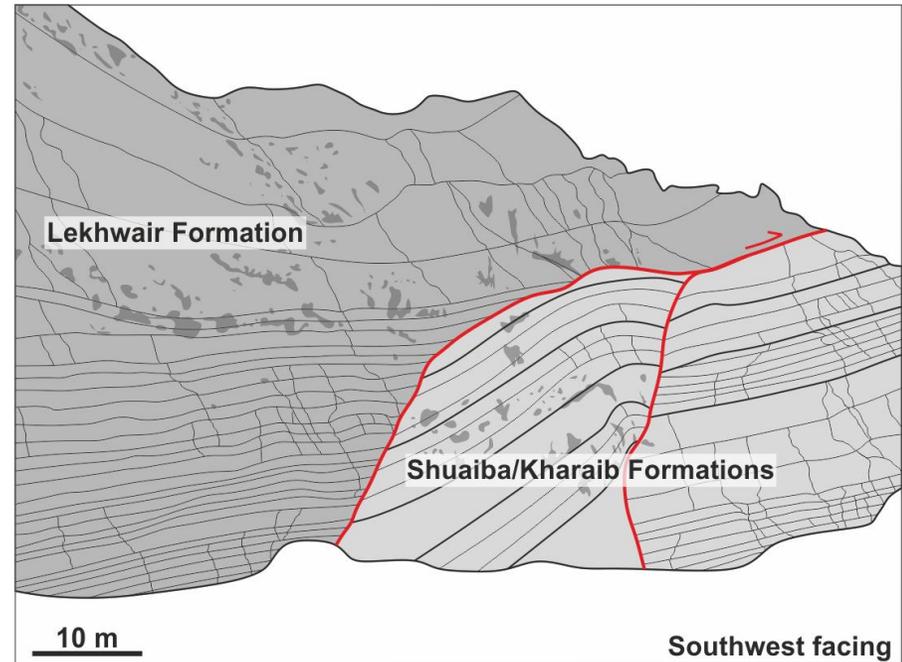
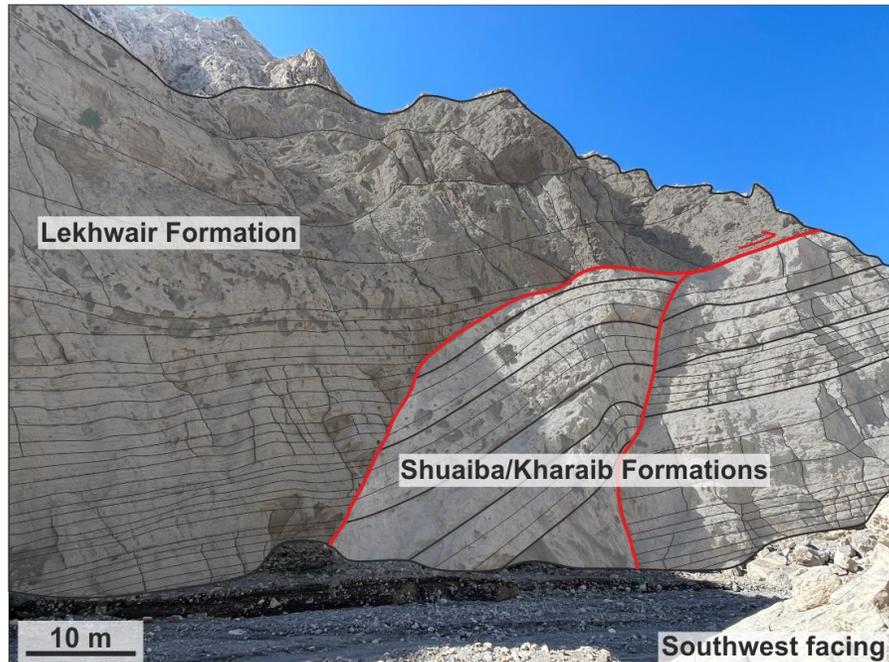
Our outcrop interpretations have been used for countless purposes by our customers but to name a few, they have aided the understanding of:

- Wireline log response and conceptualization.
- Structural complexities encountered while drilling.
- Seismic response and resolving structure below seismic resolution.
- Log response from LWD in horizontal wells
- Reservoir architecture in clastic/carbonate reservoirs.

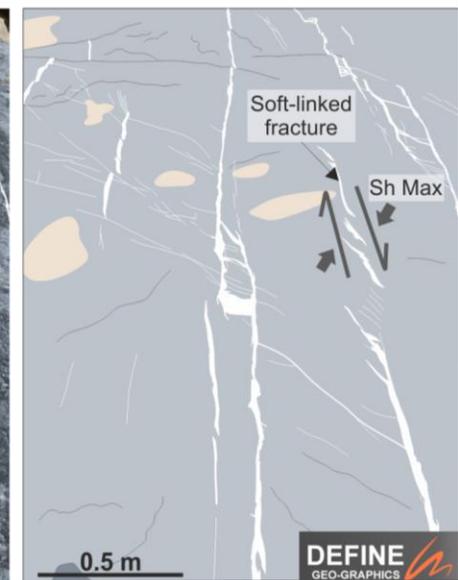
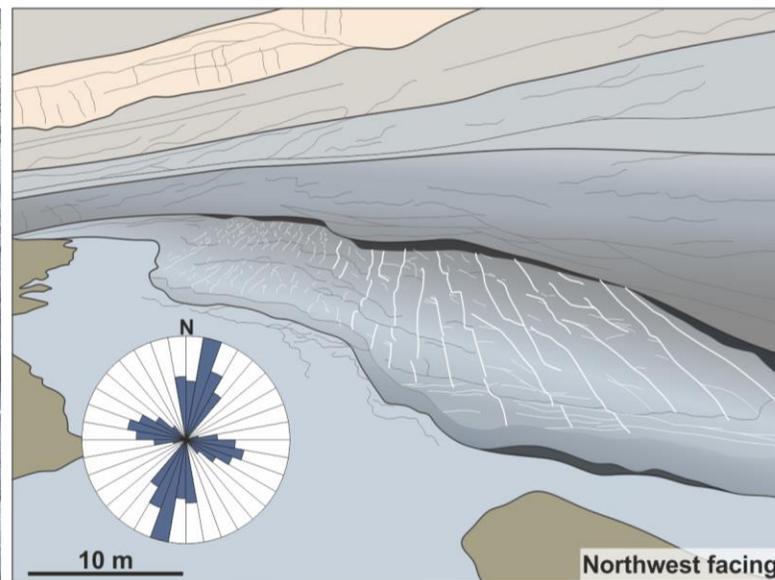
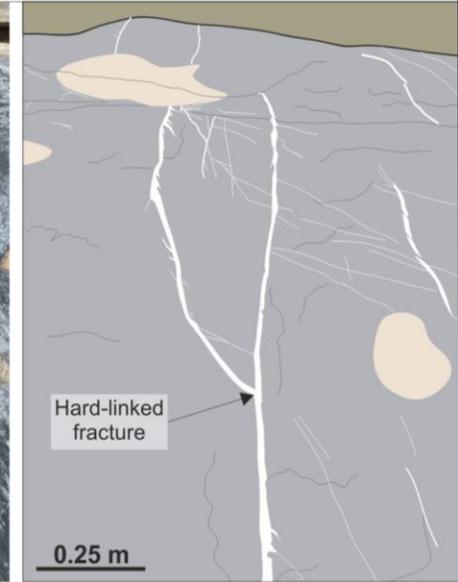
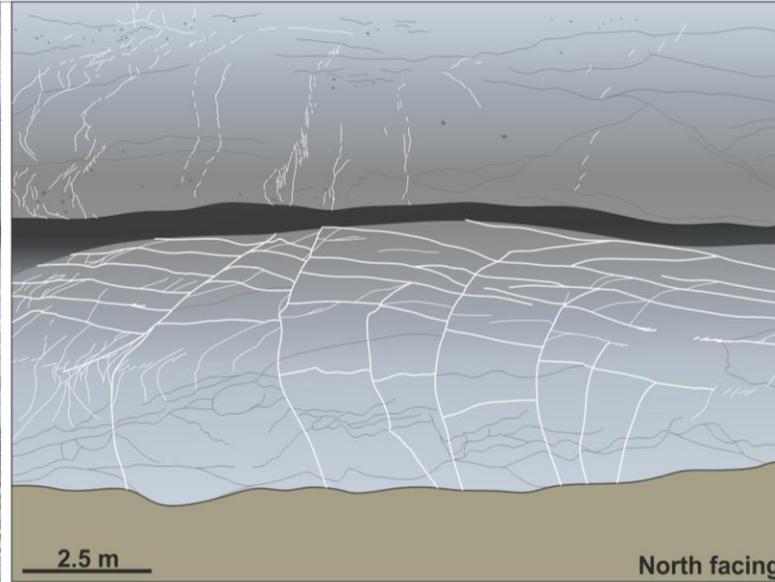


Structural deformation in a carbonate thrust belt.

Ras al Khaimah,
United Arab
Emirates



Fractures Carbonates – Wadi Damm, Oman

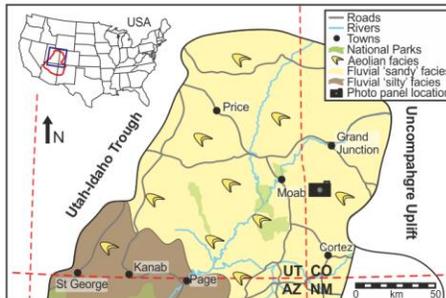


Architectural Elements

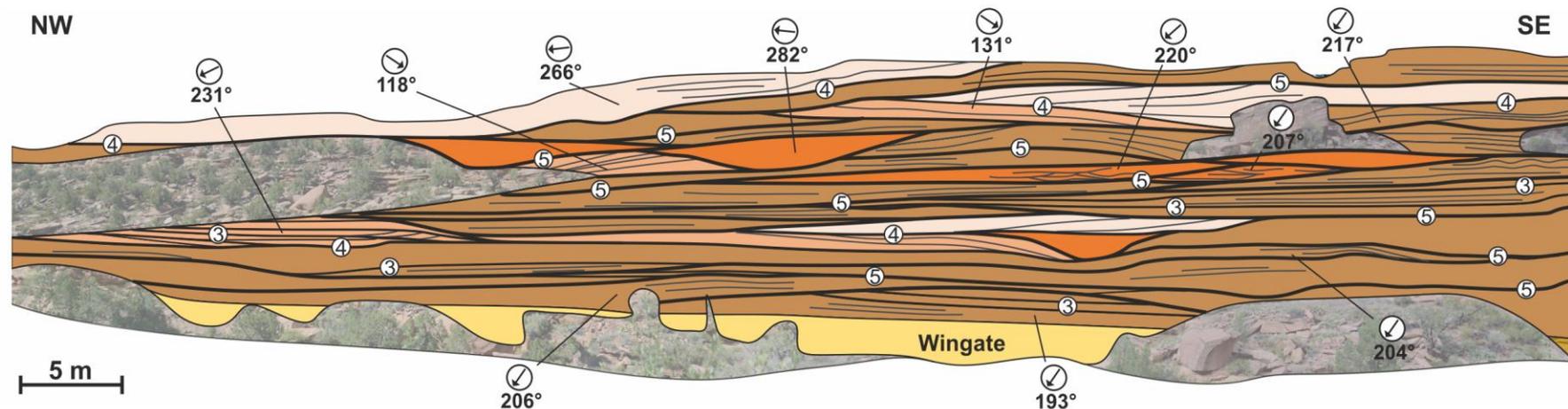
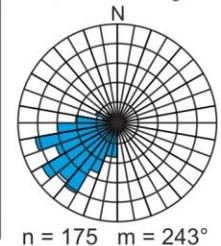
- Aeolian Dune; includes facies Smxb, Smtxb, Smpb, Smwb
- Fluvial Channel; includes facies Cms, Ccs, Sxb, Stxb, Spb, Smf
- Sheetflood; includes facies Cru, Spb, Sma, Smf, Sfrl
- Lateral Accretion; includes facies Stxb, Slxb, Srb, Sfrl
- Downstream Accretion; includes facies Sxb, Slxb, Srpl, Sfrl

Legend

- 1st and 2nd order surfaces
- 3rd order surface
- 4th order surface
- 5th order surface
- Covered outcrop



Palaeocurrent Summary



Aeolian System Proximal Setting

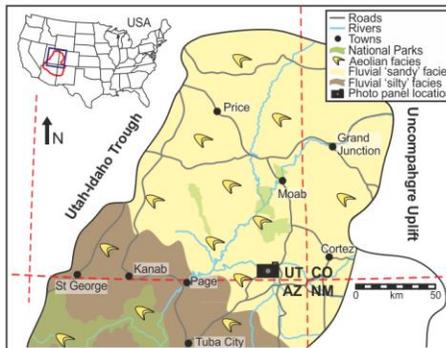
Utah, USA

Architectural Elements

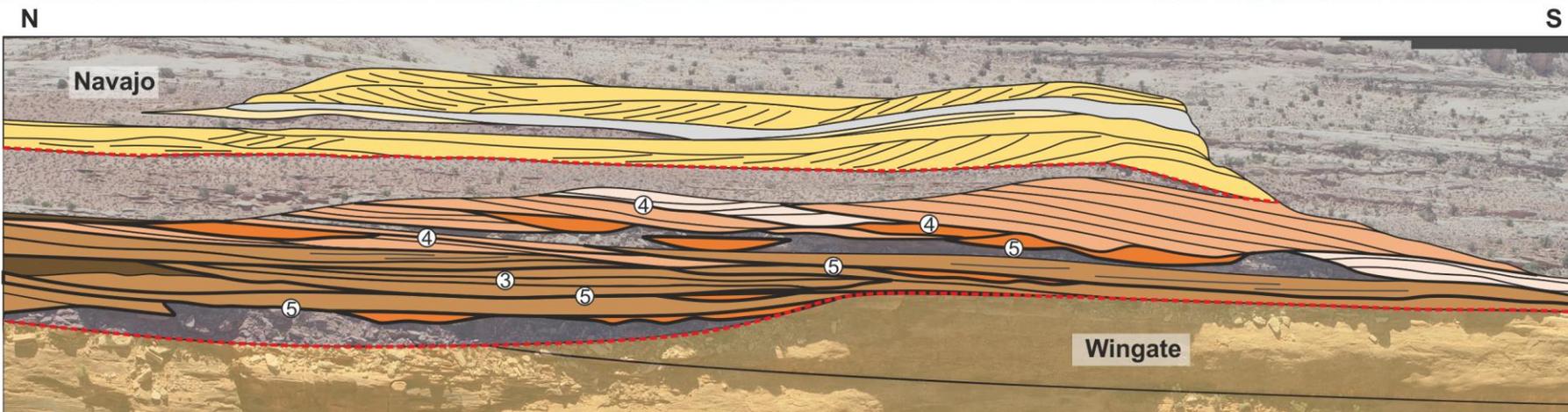
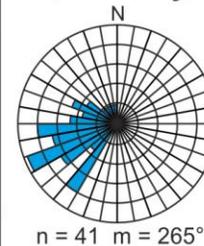
- Aeolian Dune; includes facies Smxb, Smtxb, Smpb, Smwb
- Sandsheet; includes facies Smpb, Smwb, Sm
- Interdune; includes facies Sm, Spl
- Fluvial Channel; includes facies Cms, Ccs, Sxb, Stxb, Spb, Smf
- Sheetflood; includes facies Cru, Spb, Sma, Smf, Sfrl
- Lateral Accretion; includes facies Stxb, Slxb, Srb, Sfrl
- Downstream Accretion; includes facies Sxb, Slxb, Srpl, Sfrl
- Overbank; includes facies Spl, Stpl

Legend

- 1st and 2nd order surfaces
- 3rd order surface
- 4th order surface
- 5th order surface
- Formation boundary
- Covered outcrop



Palaeocurrent Summary



Aeolian System Medial Setting

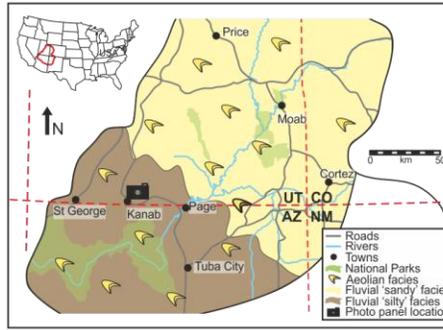
Utah, USA

Architectural Elements

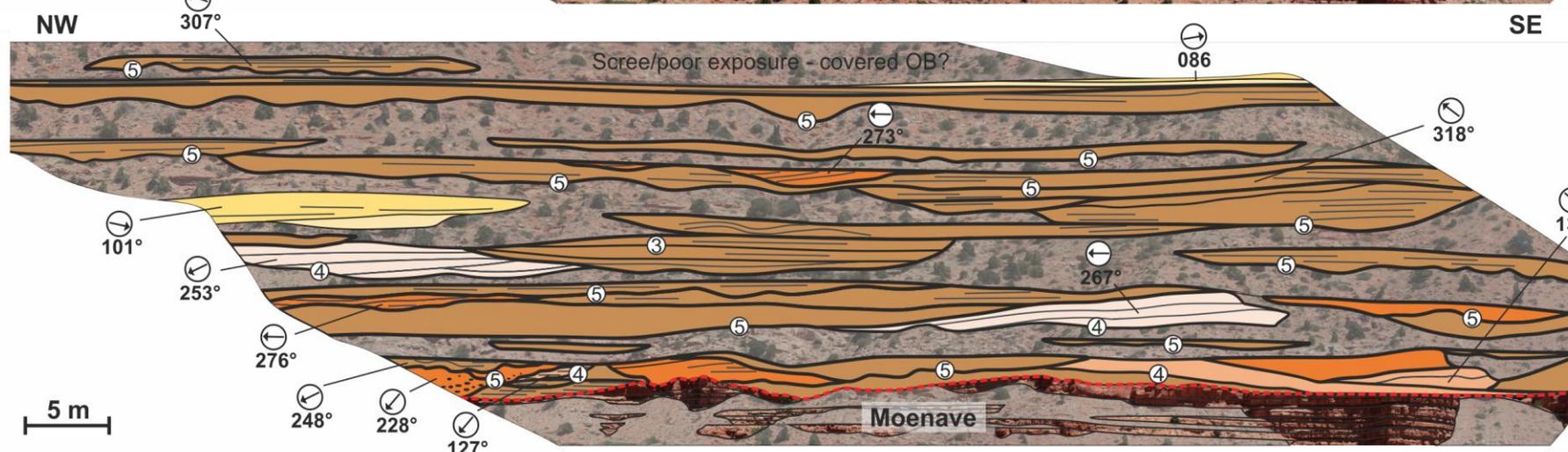
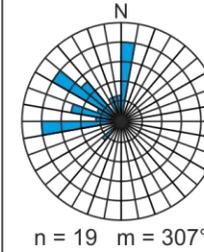
-  Aeolian Dune; includes facies Smxb, Smtxb, Smpb, Smwb
-  Sandsheet; includes facies Smpb, Smwb, Sm
-  Fluvial Channel; includes facies Cms, Ccs, Sxb, Stxb, Spb, Smf
-  Sheetflood; includes facies Cru, Spb, Sma, Smf, Sfrl
-  Lateral Accretion; includes facies Stxb, Slxb, Srb, Sfrl
-  Downstream Accretion; includes facies Sxb, Slxb, Srpl, Sfrl

Legend

-  1st and 2nd order surfaces
-  3rd order surface
-  4th order surface
-  5th order surface
-  Formation boundary
-  Covered outcrop

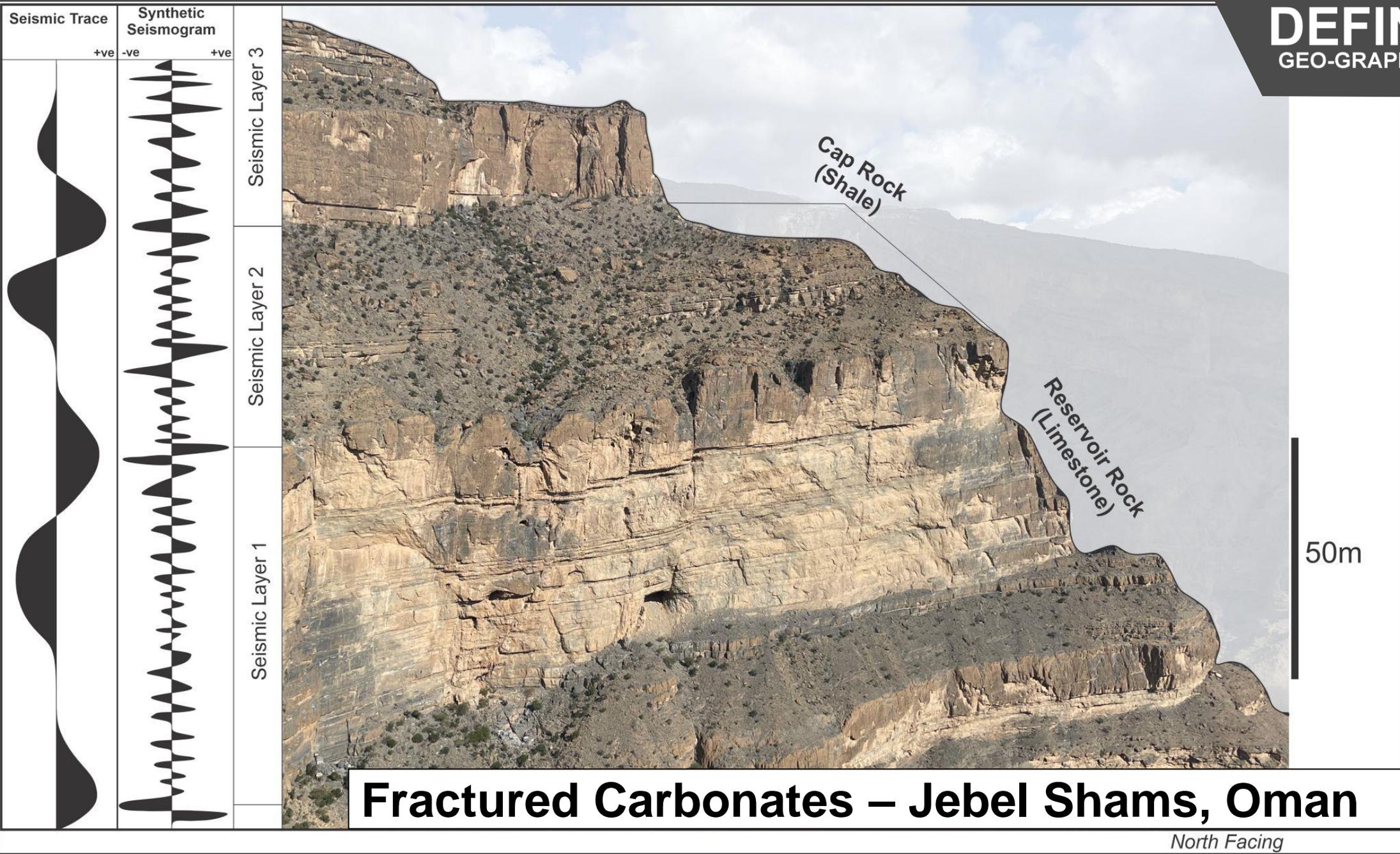


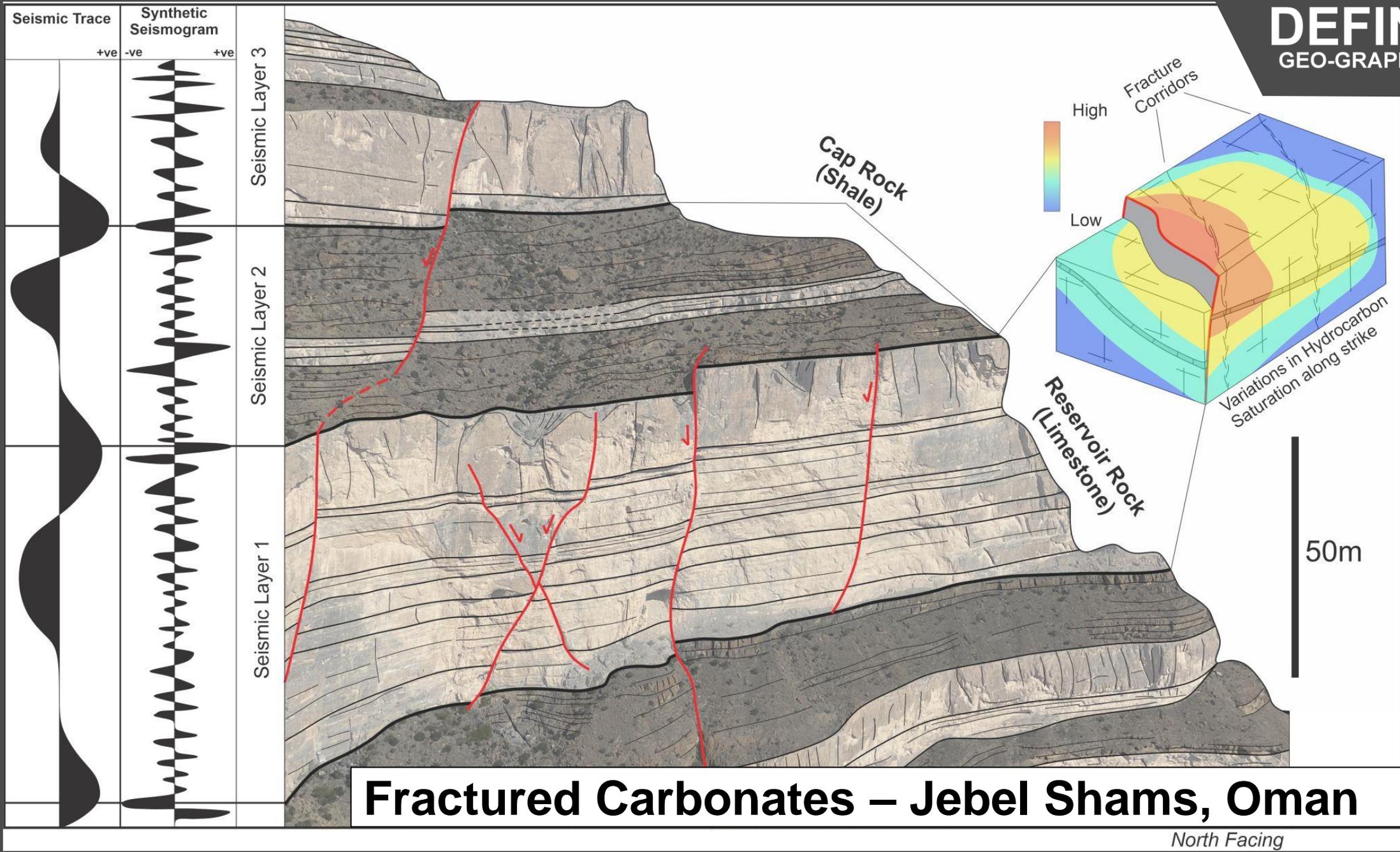
Palaeocurrent Summary



Aeolian System Distal Setting

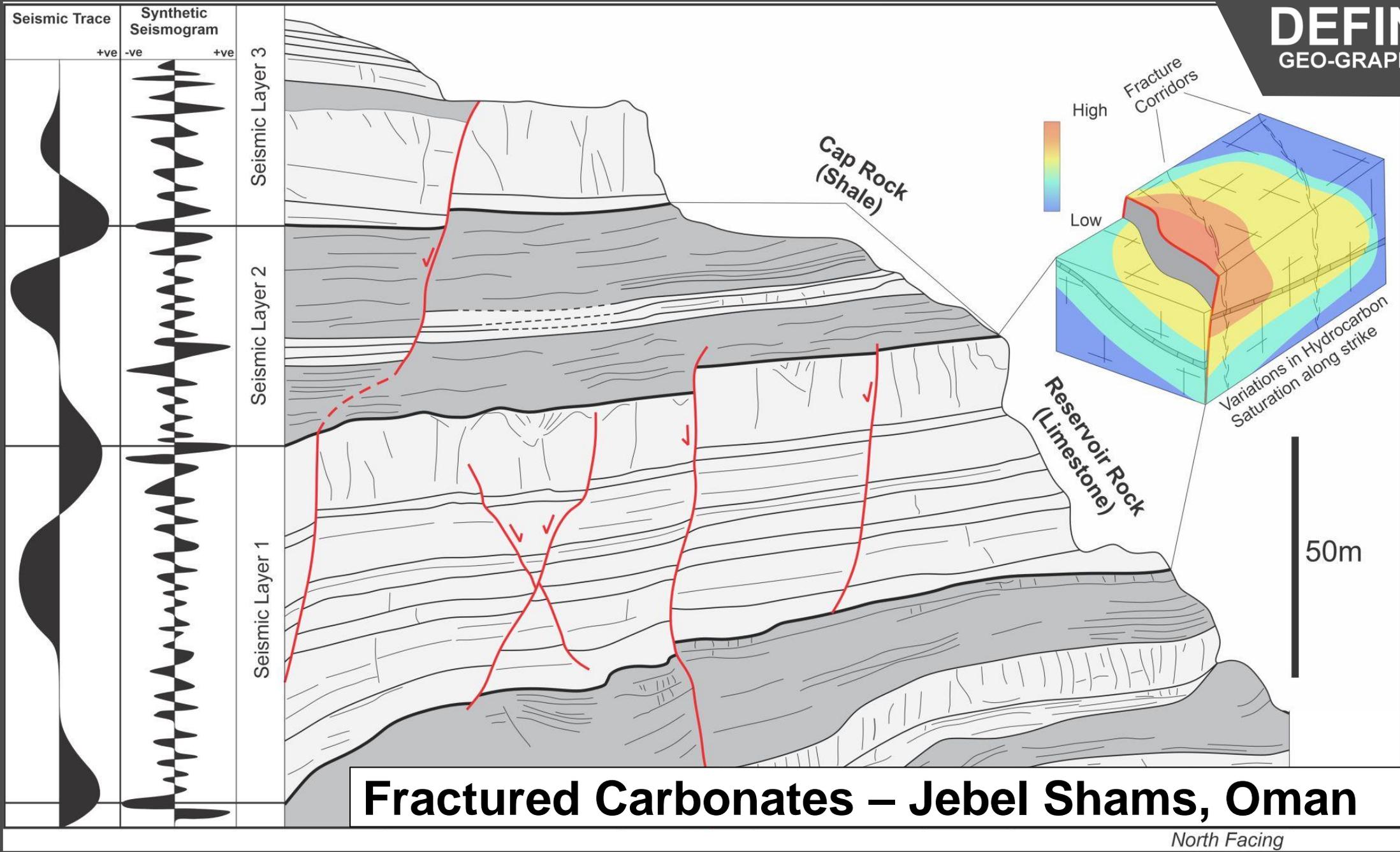
Utah, USA



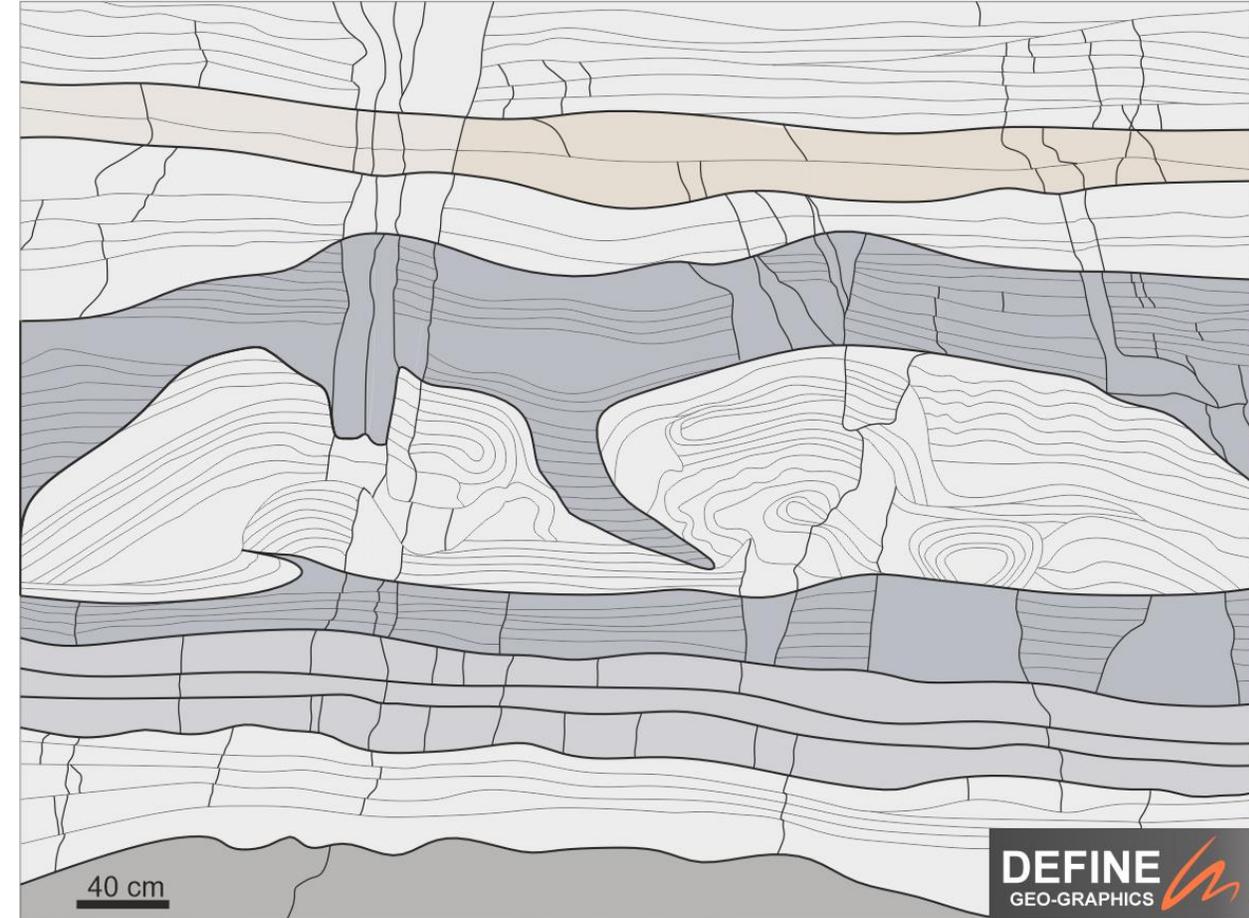
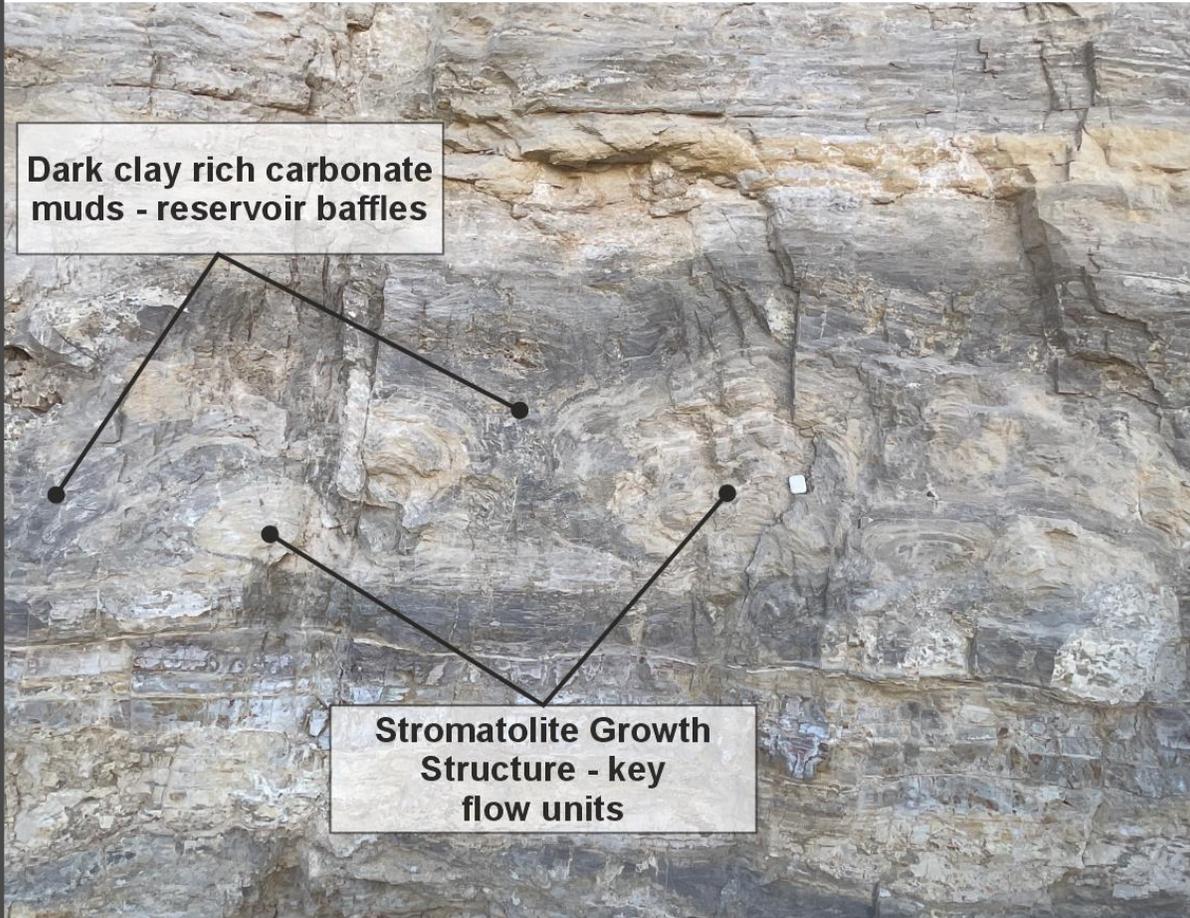


Fractured Carbonates – Jebel Shams, Oman

North Facing



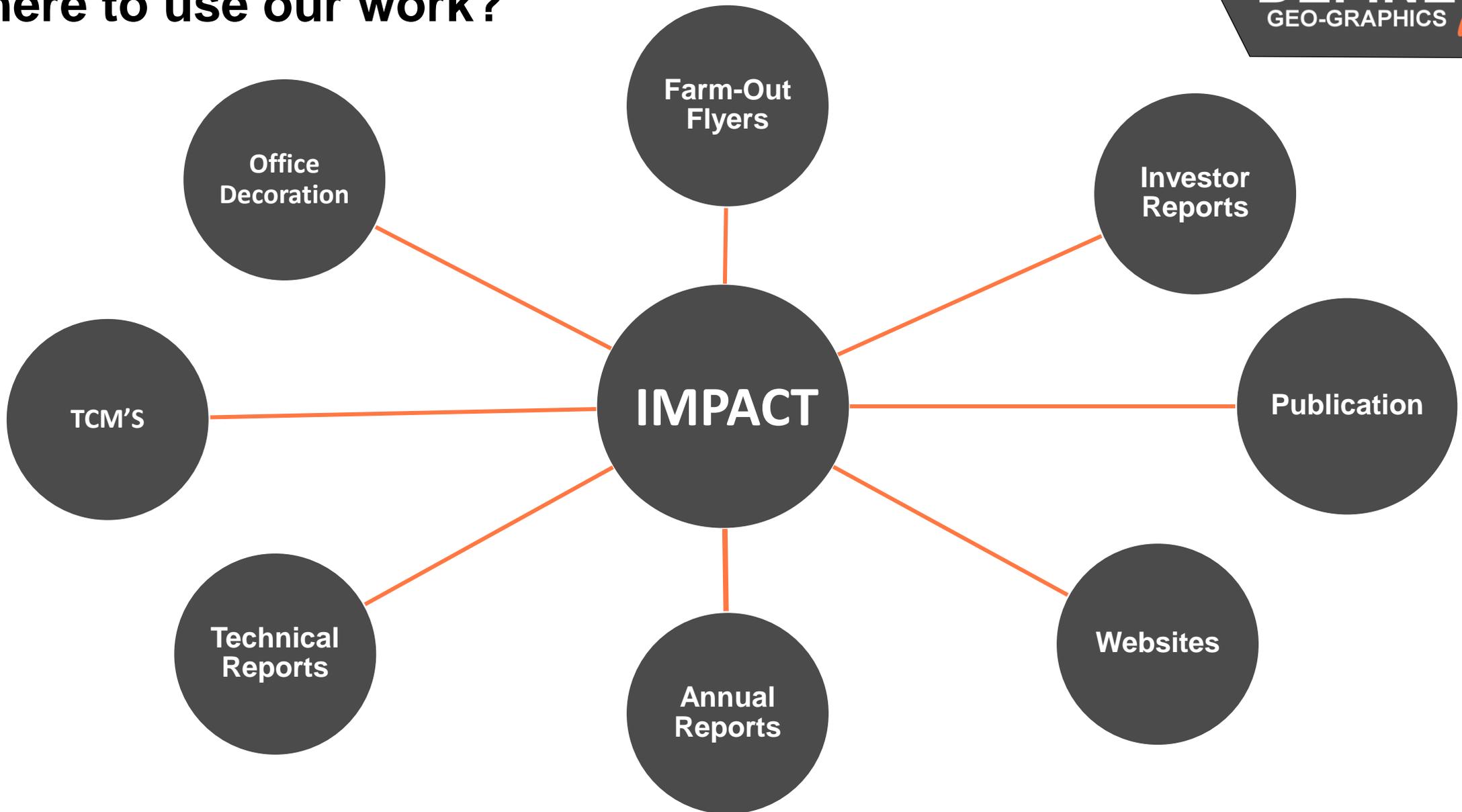
Precambrian Stromatolites – Duqm, Oman



Value Proposition

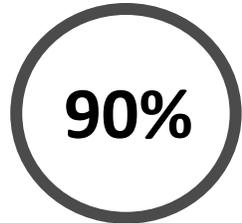
Why work with us?

Where to use our work?



Define Geo-Graphics Value Proposition

Traction



90% of information transmitted by our brain is Visual – your work will gain **CREDIBILITY**.

Productivity



We **INCREASE** the productivity of your team by taking drafting tasks off their plate

Time Saving



The average geoscientist spends more than 30% of their time drafting presentation material – we save this time

Geoscience Background



Every drafts person at Define Geo has an MSc / PhD In Geoscience, ensuring you spend less time explaining the geology behind your graphics.



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Advisors HEA

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