

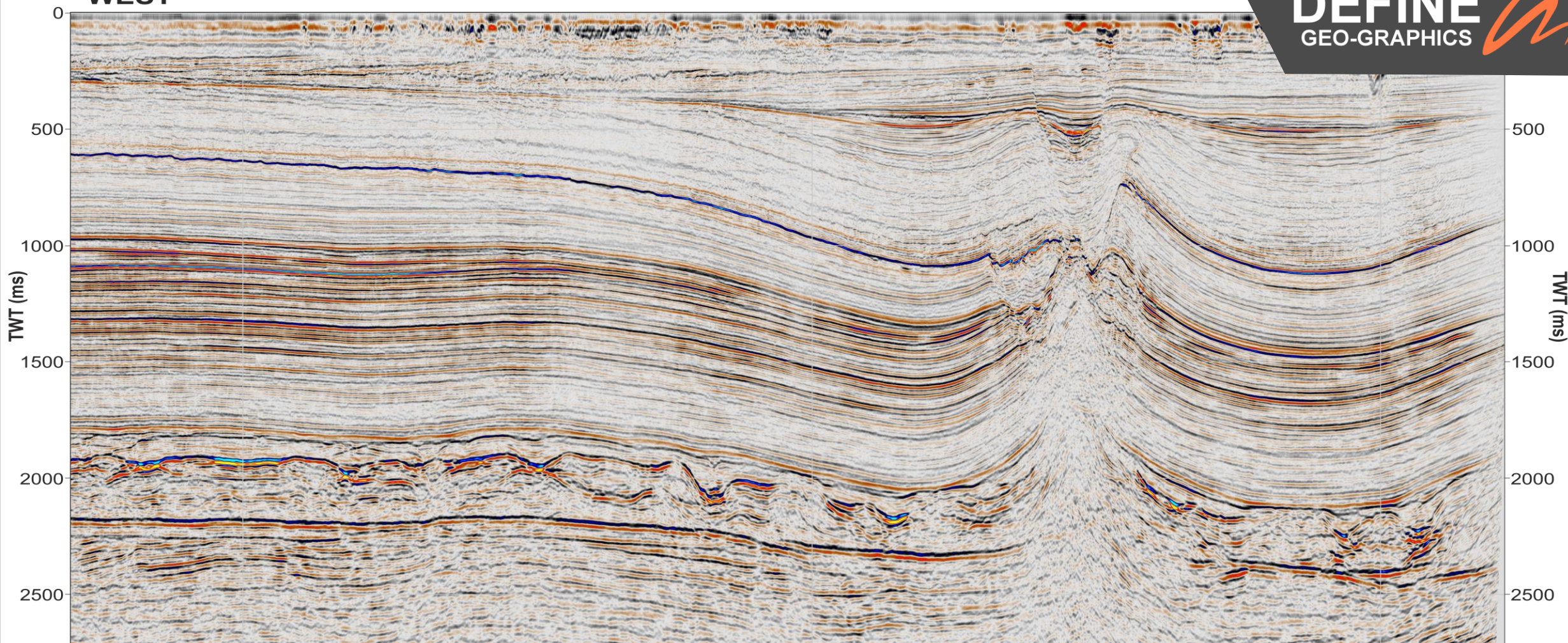


Sample Services

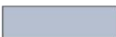




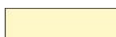

Geo-seismic Sections

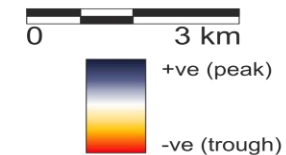
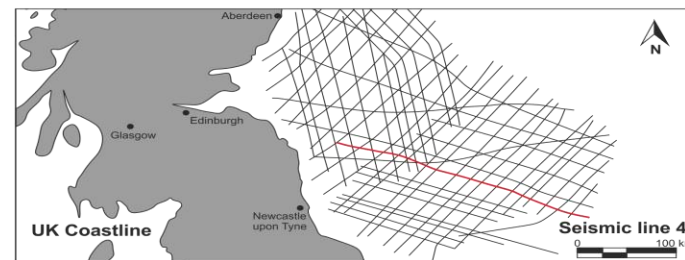
Unlock your seismic data

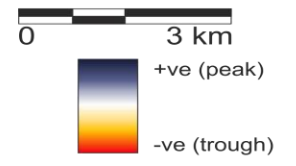
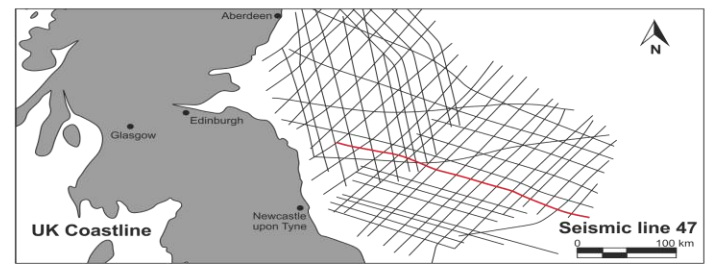
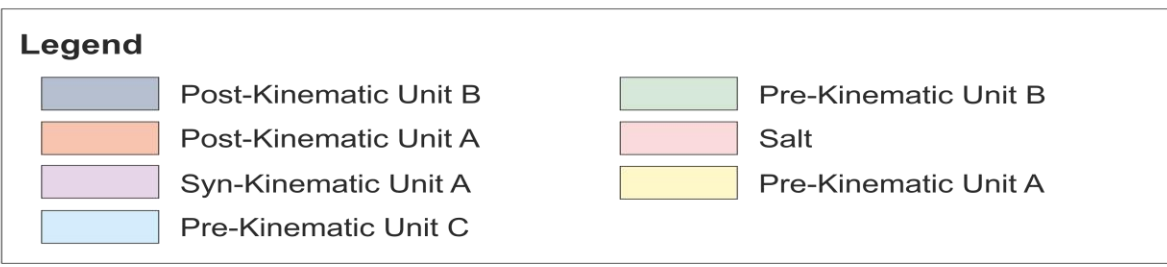
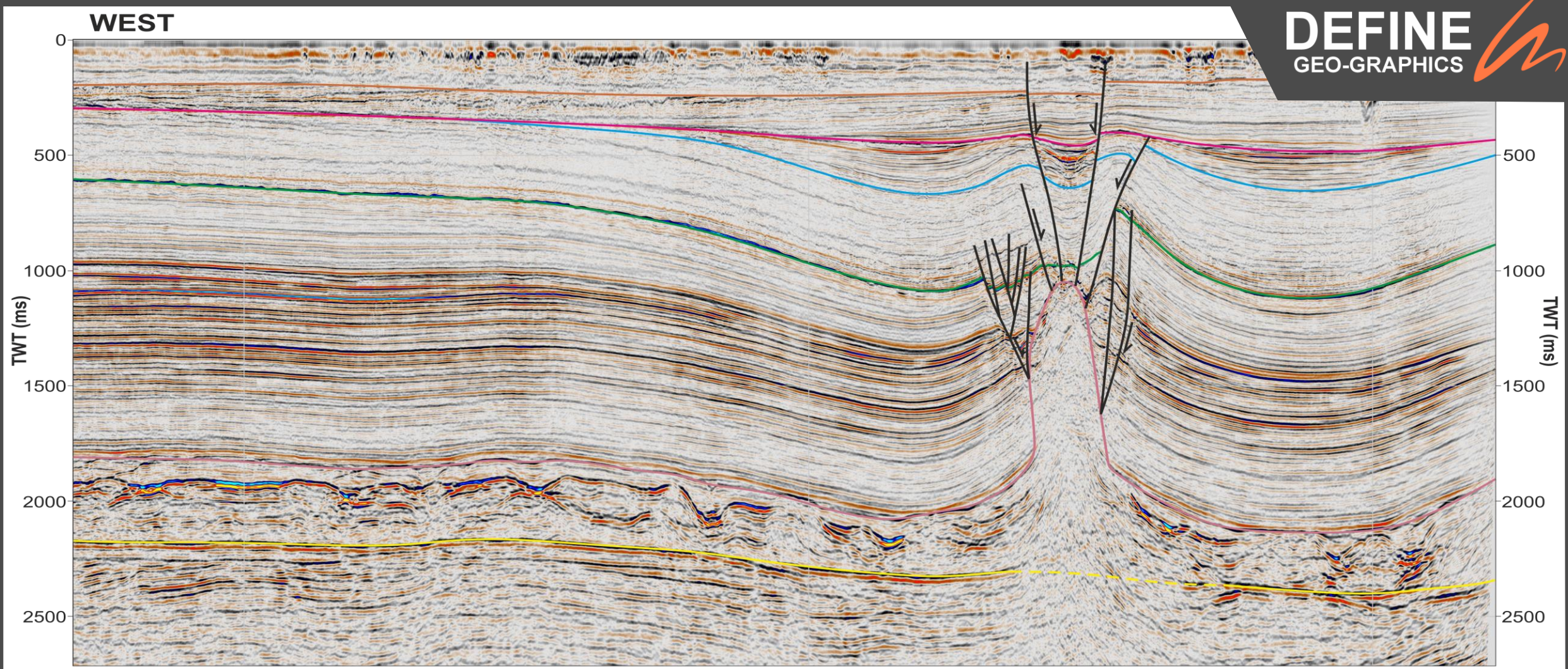
WEST

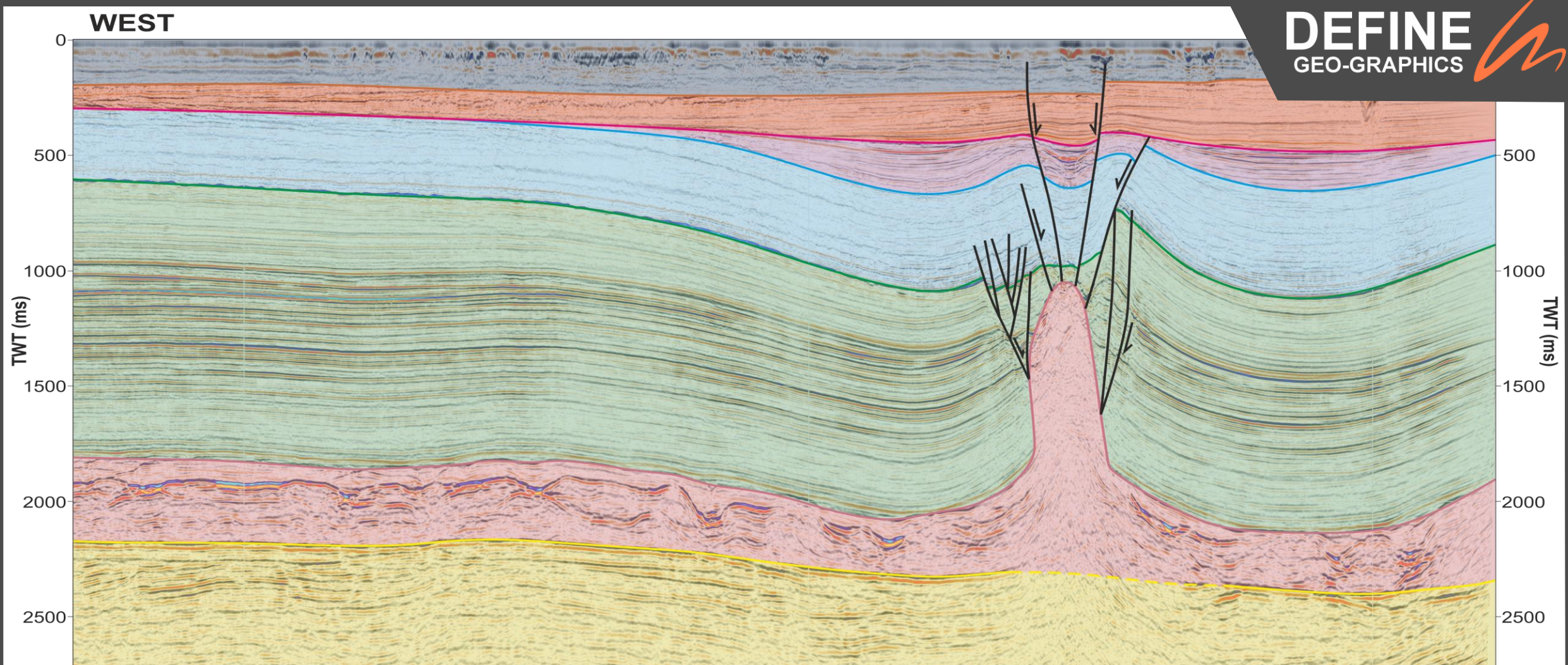


Legend

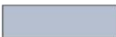




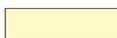

	Post-Kinematic Unit B		Pre-Kinematic Unit B
	Post-Kinematic Unit A		Salt
	Syn-Kinematic Unit A		Pre-Kinematic Unit A
	Pre-Kinematic Unit C		

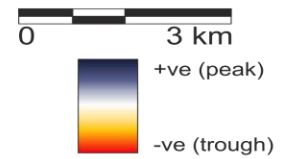
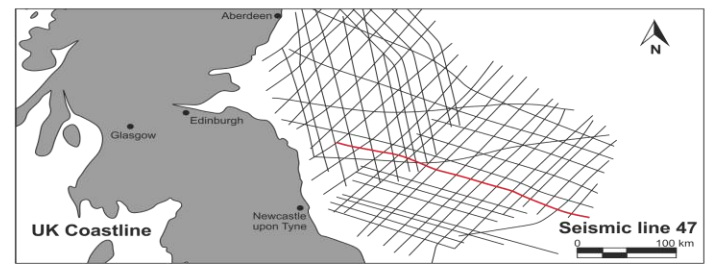


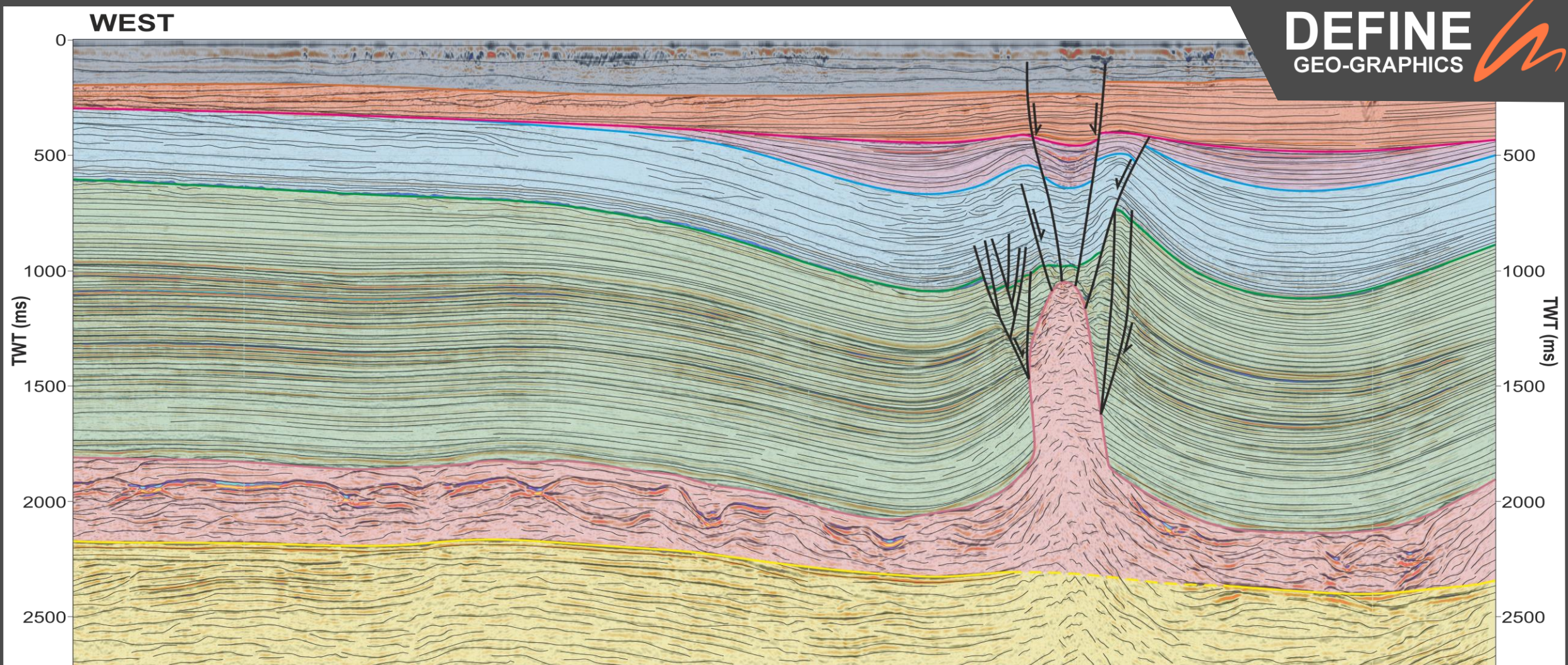




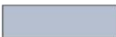




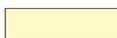

Legend

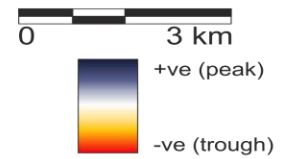
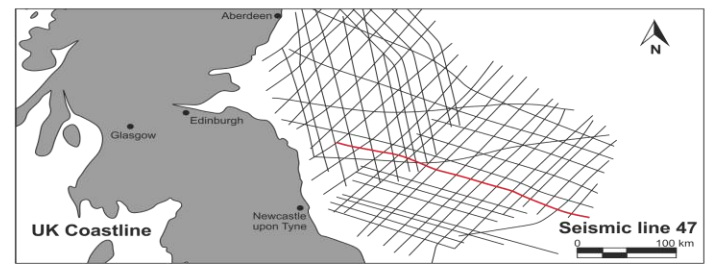
 Post-Kinematic Unit B	 Pre-Kinematic Unit B
 Post-Kinematic Unit A	 Salt
 Syn-Kinematic Unit A	 Pre-Kinematic Unit A
 Pre-Kinematic Unit C	

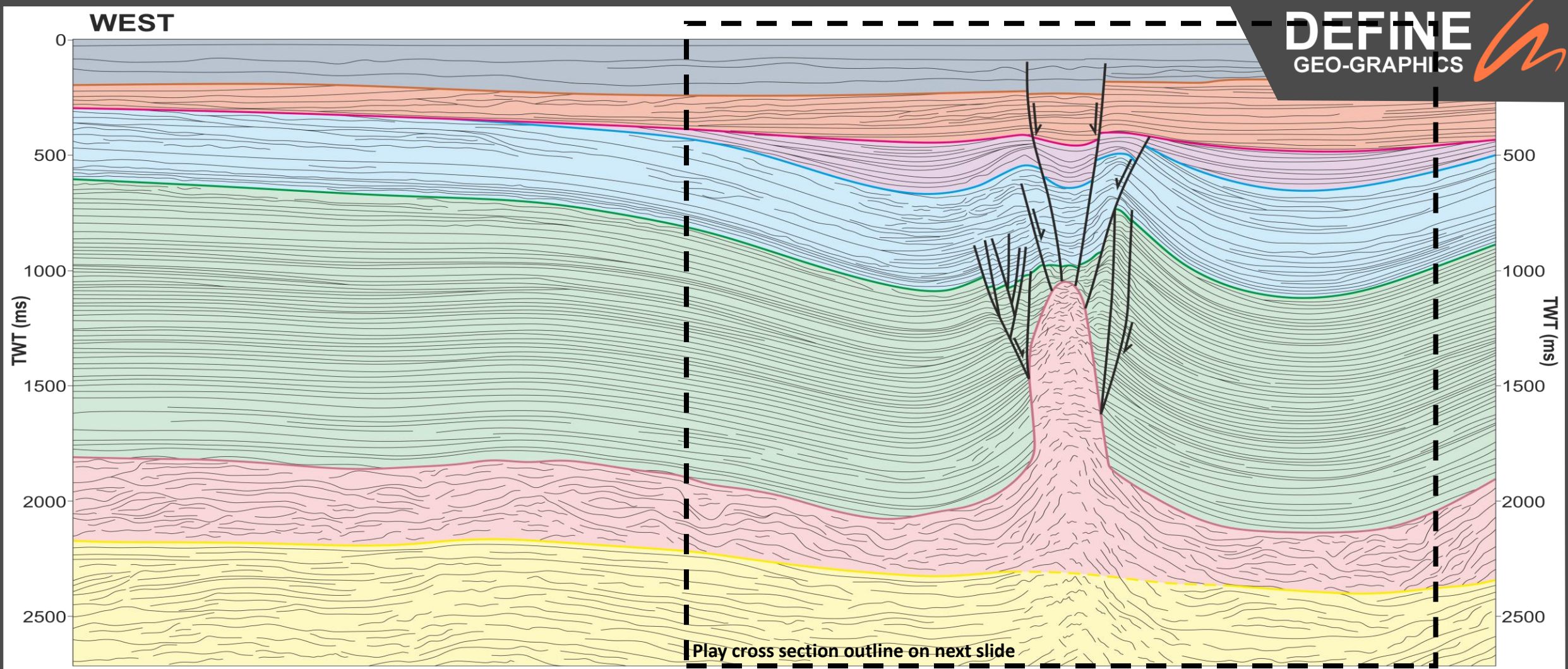




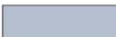




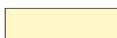

Legend

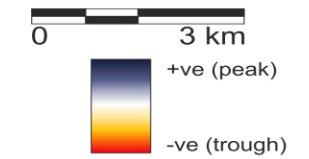
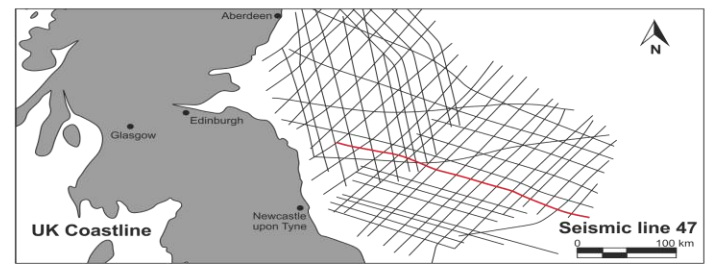
 Post-Kinematic Unit B	 Pre-Kinematic Unit B
 Post-Kinematic Unit A	 Salt
 Syn-Kinematic Unit A	 Pre-Kinematic Unit A
 Pre-Kinematic Unit C	

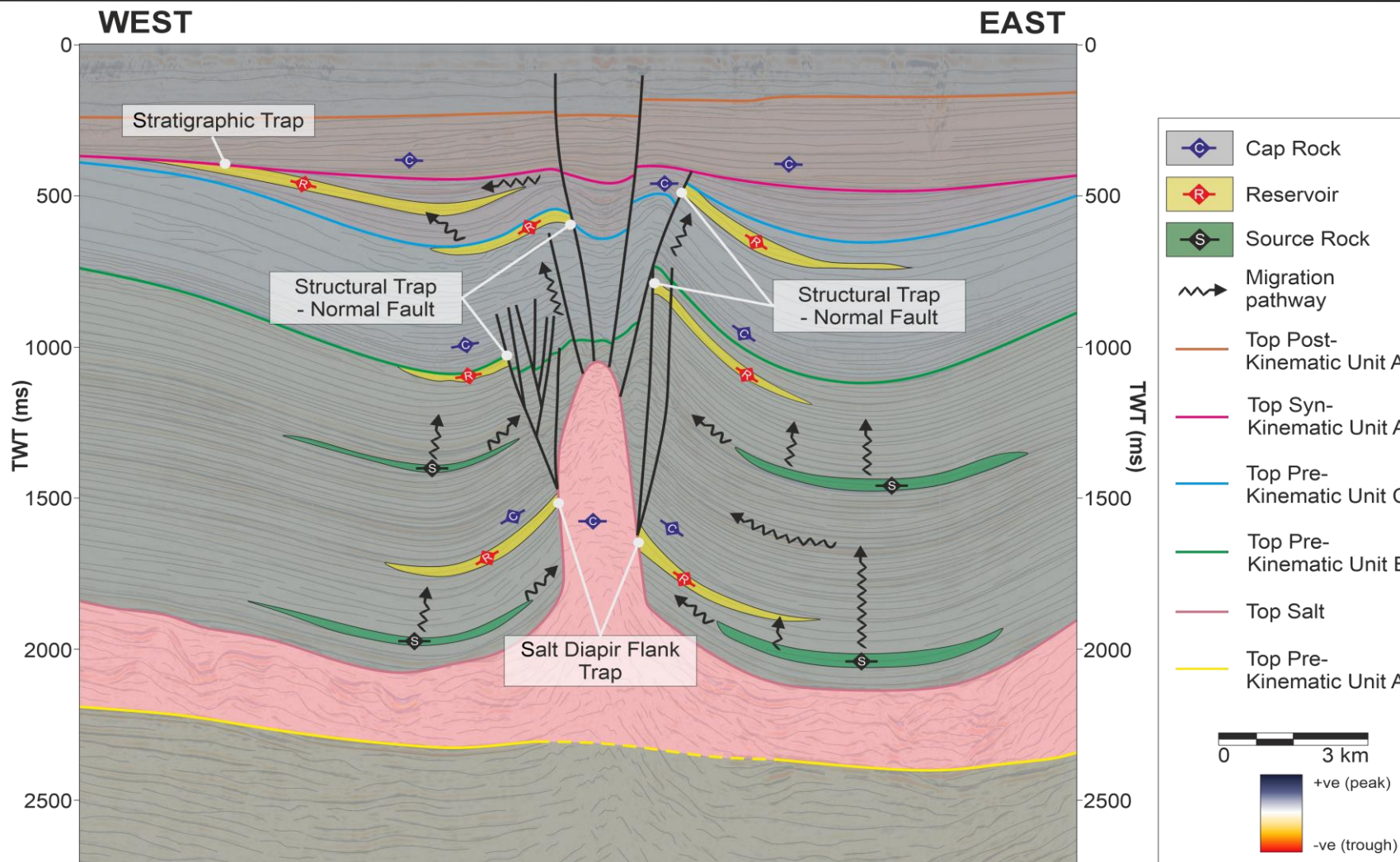




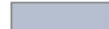




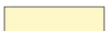

Legend

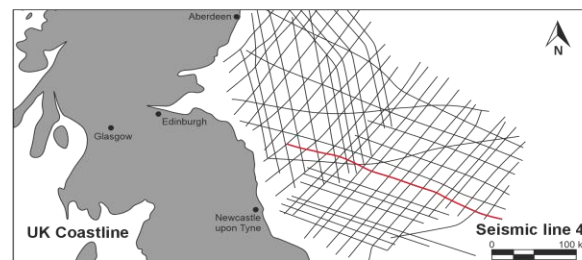
 Post-Kinematic Unit B	 Pre-Kinematic Unit B
 Post-Kinematic Unit A	 Salt
 Syn-Kinematic Unit A	 Pre-Kinematic Unit A
 Pre-Kinematic Unit C	





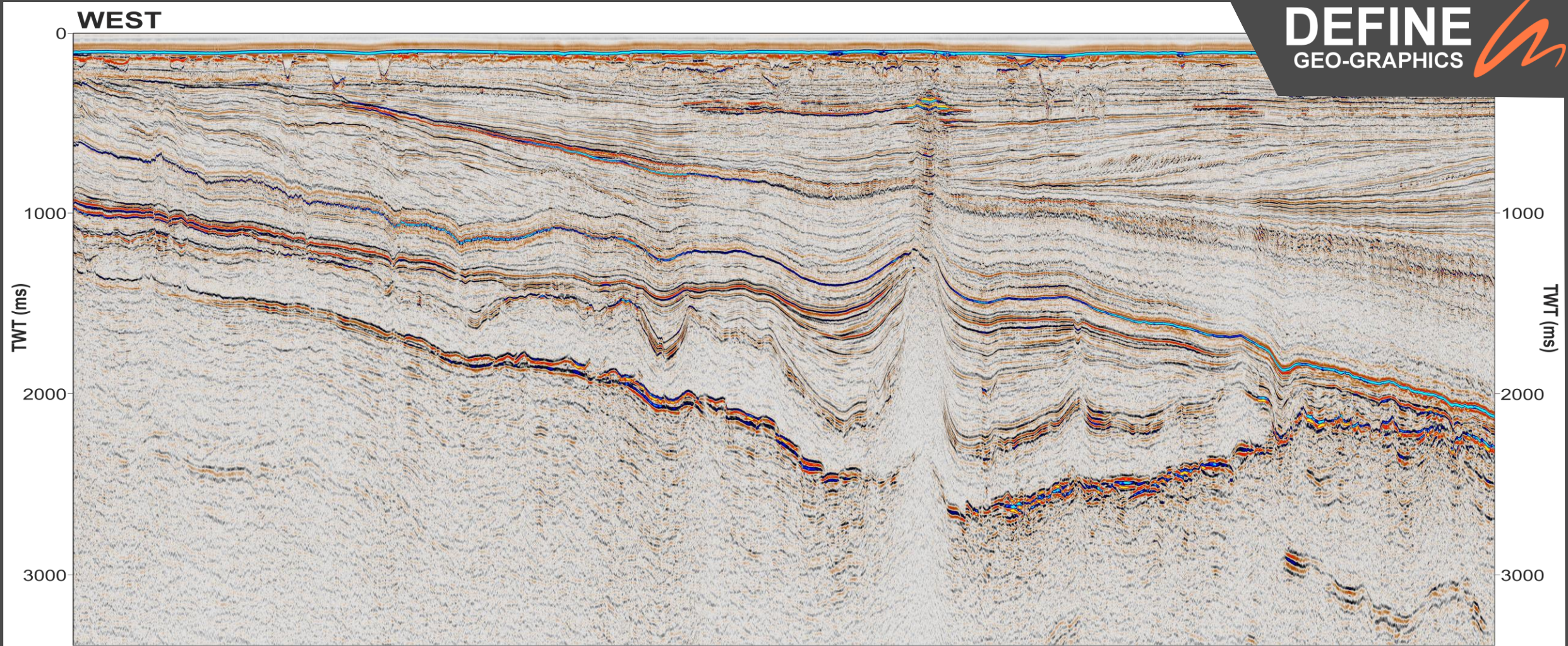
Legend

 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	












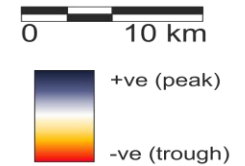
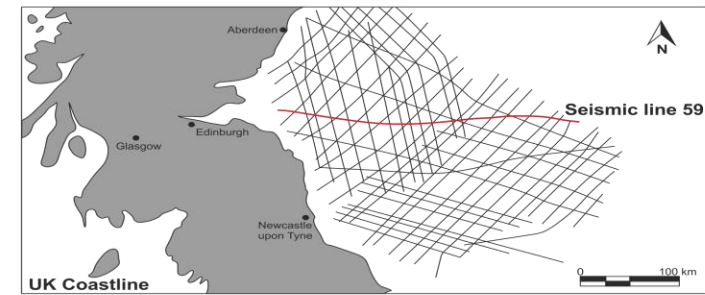
PLAY CROSS-SECTION

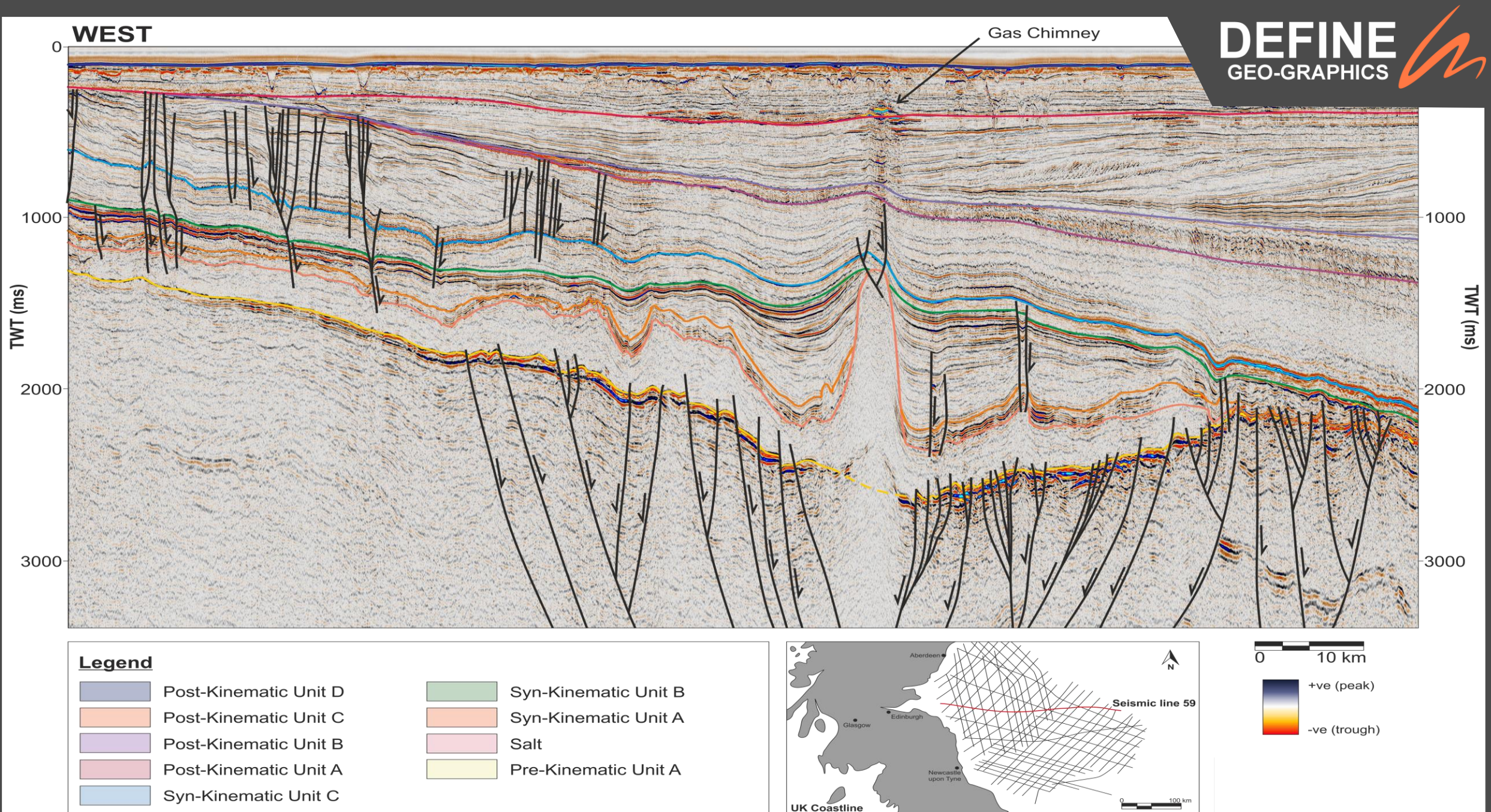
- Realistic play cross sections
- Based upon **YOUR** seismic data
- Perfect for farm-out flyers or technical peer review presentations

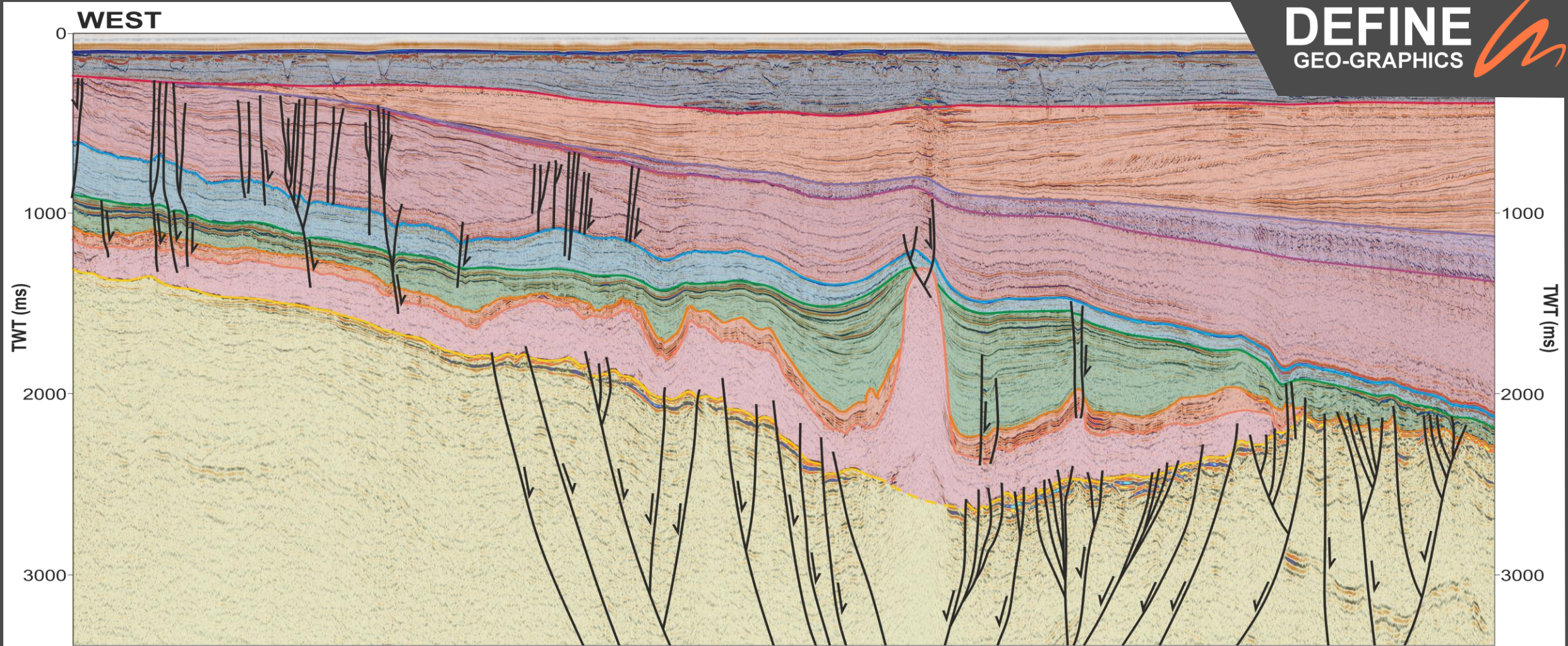


Legend










	Post-Kinematic Unit D		Syn-Kinematic Unit B
	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		

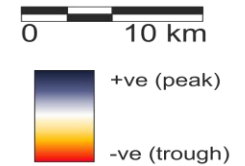
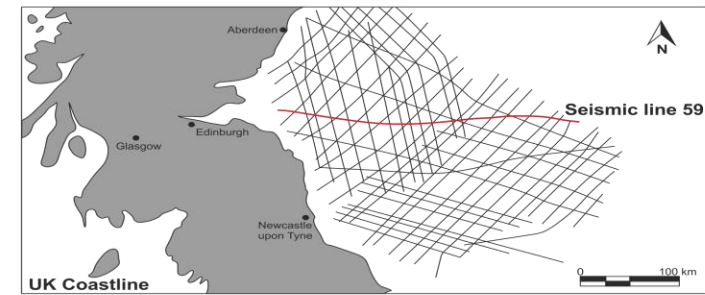


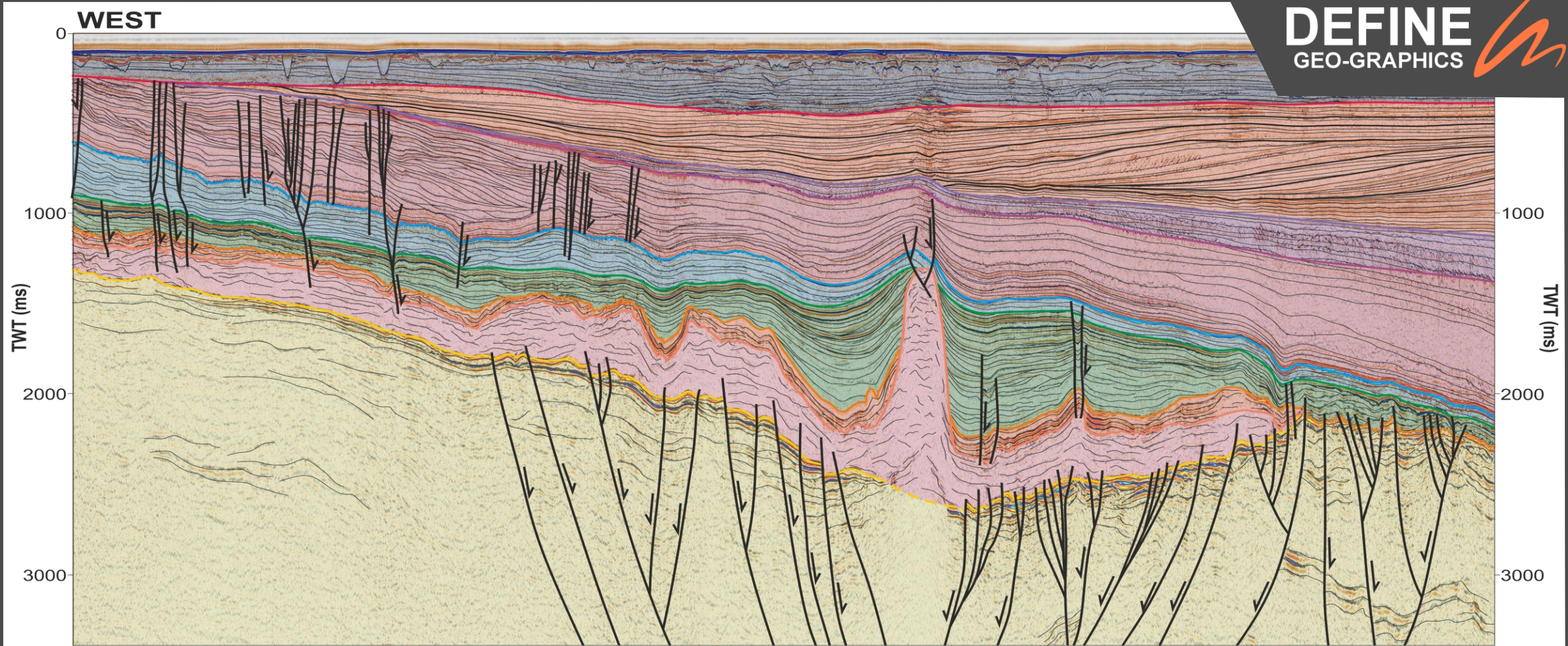






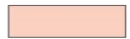
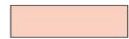




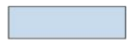
Legend

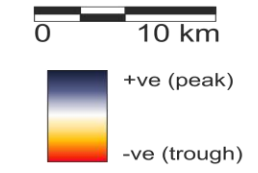
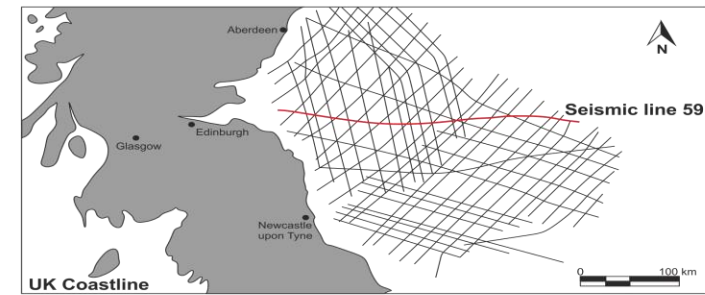
 Post-Kinematic Unit D	 Syn-Kinematic Unit B
 Post-Kinematic Unit C	 Syn-Kinematic Unit A
 Post-Kinematic Unit B	 Salt
 Post-Kinematic Unit A	 Pre-Kinematic Unit A
 Syn-Kinematic Unit C	

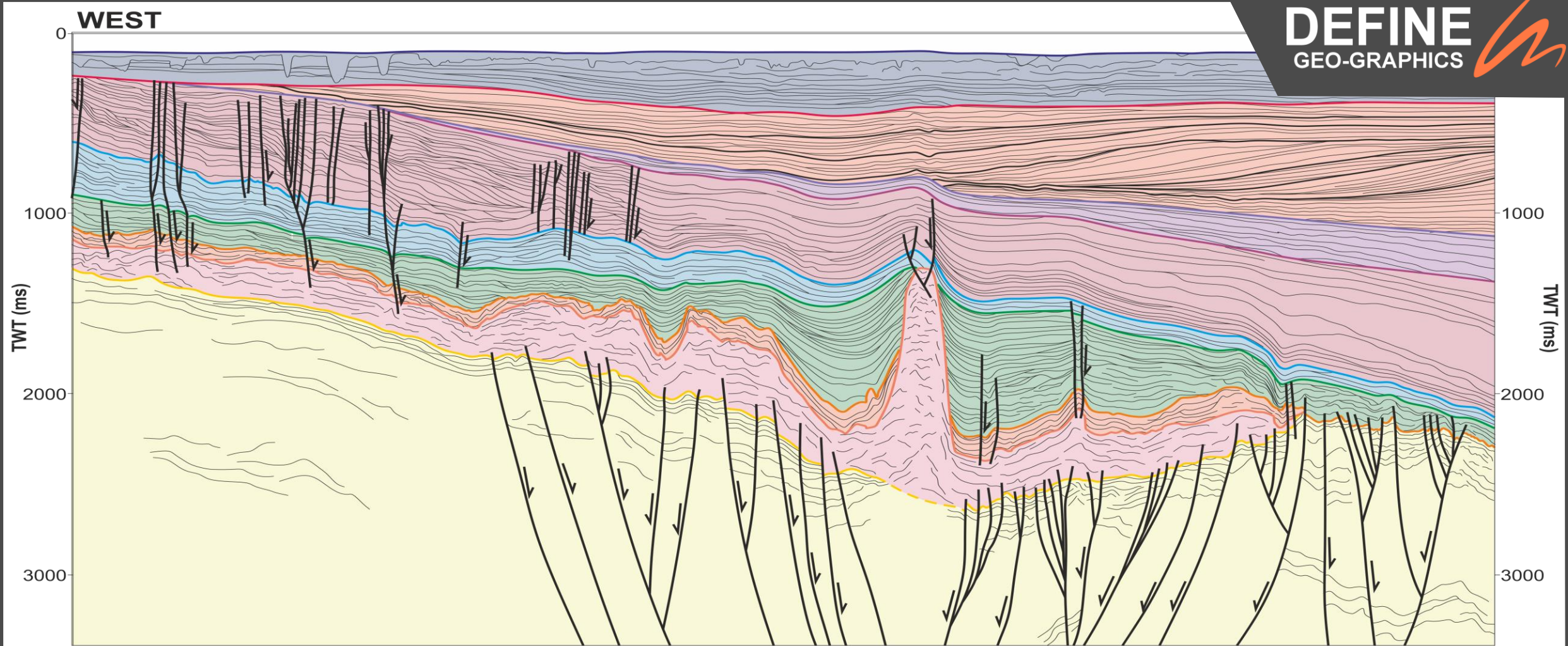













Legend

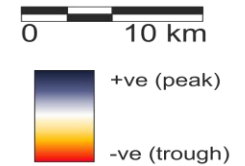
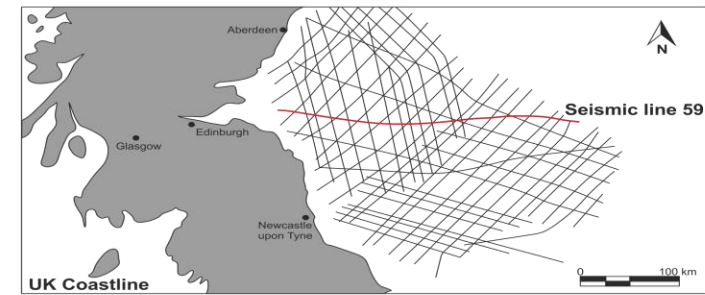
- | | |
|---|--|
|  Post-Kinematic Unit D |  Syn-Kinematic Unit B |
|  Post-Kinematic Unit C |  Syn-Kinematic Unit A |
|  Post-Kinematic Unit B |  Salt |
|  Post-Kinematic Unit A |  Pre-Kinematic Unit A |
|  Syn-Kinematic Unit C | |

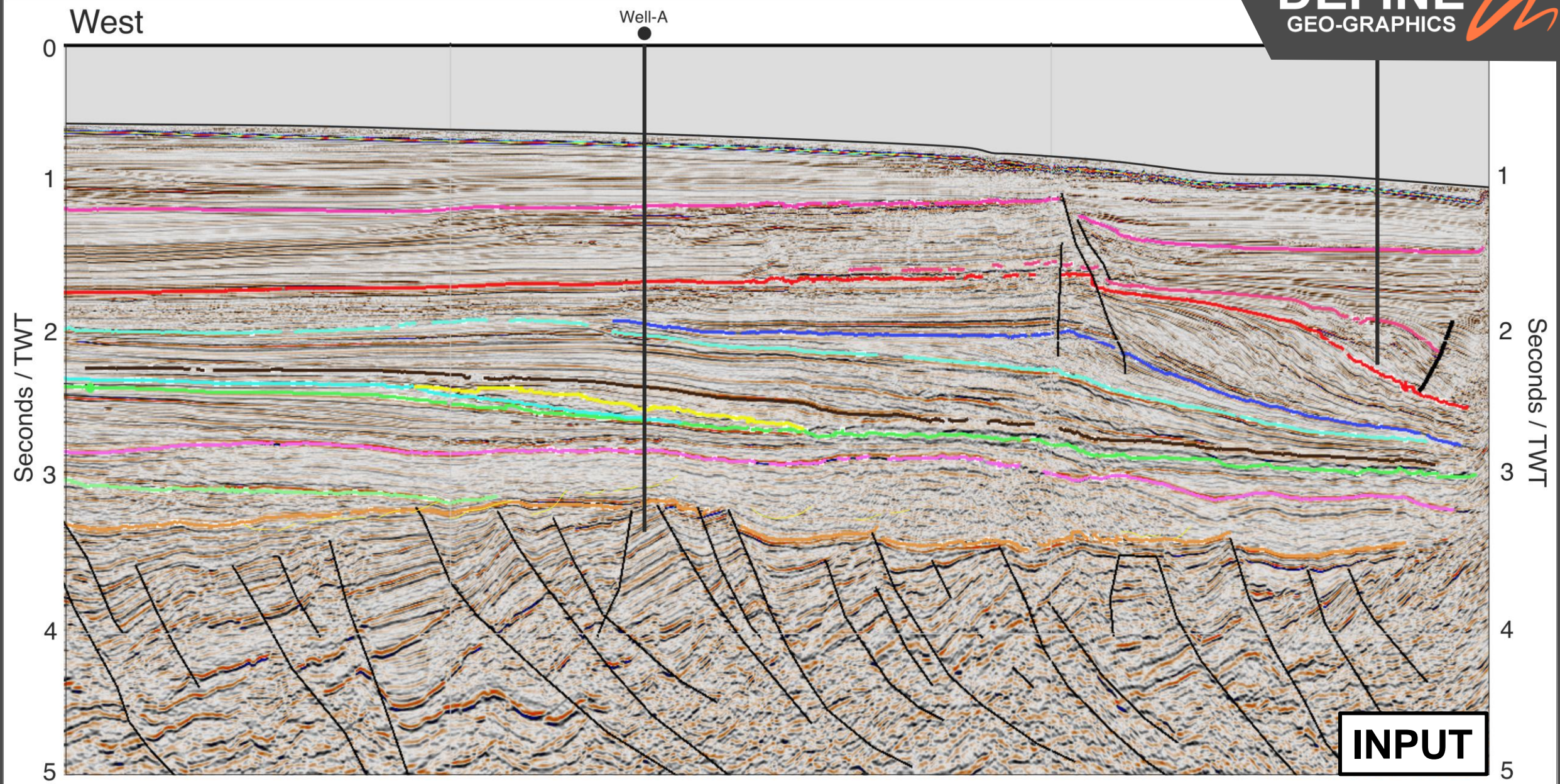


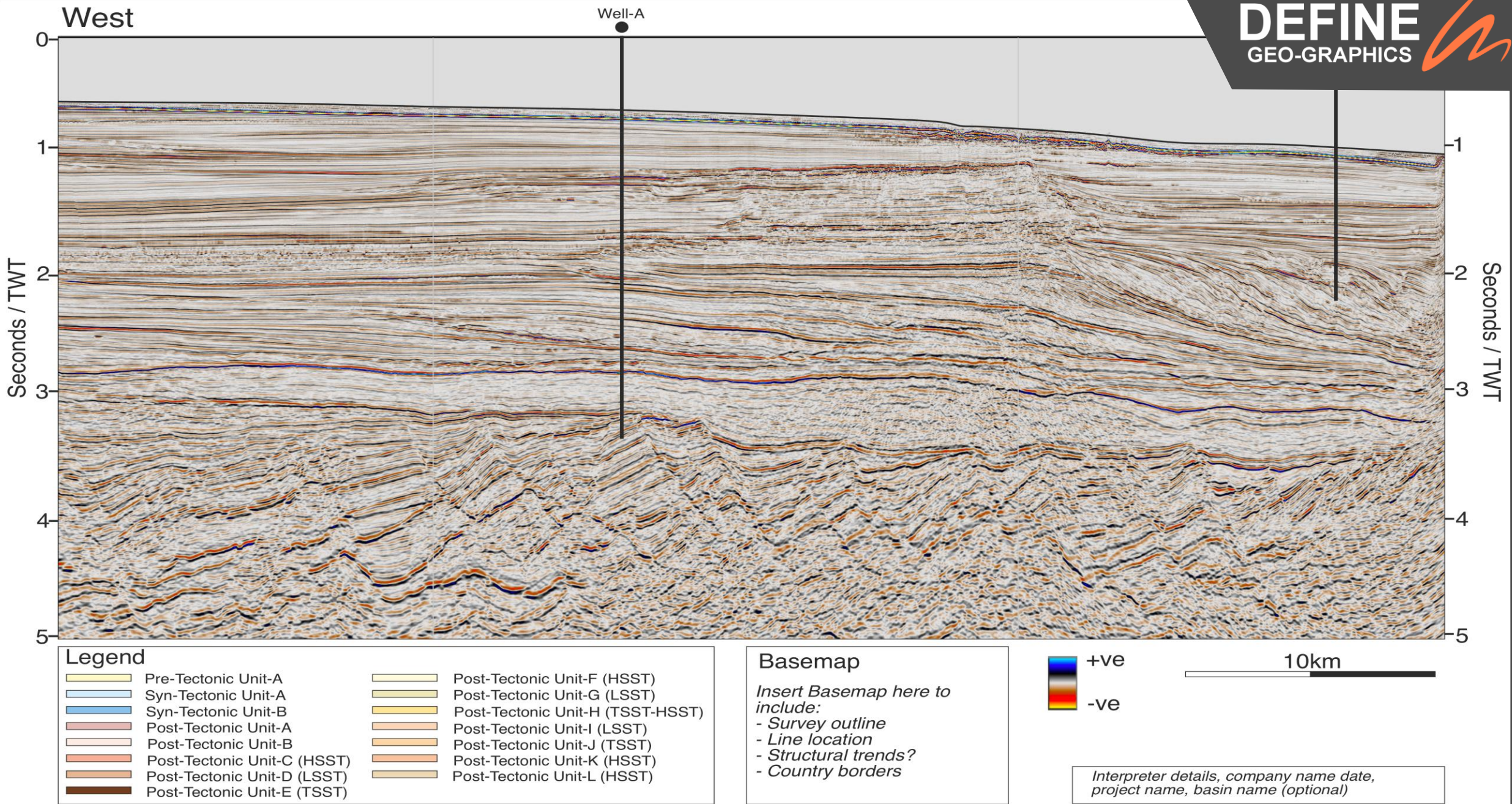


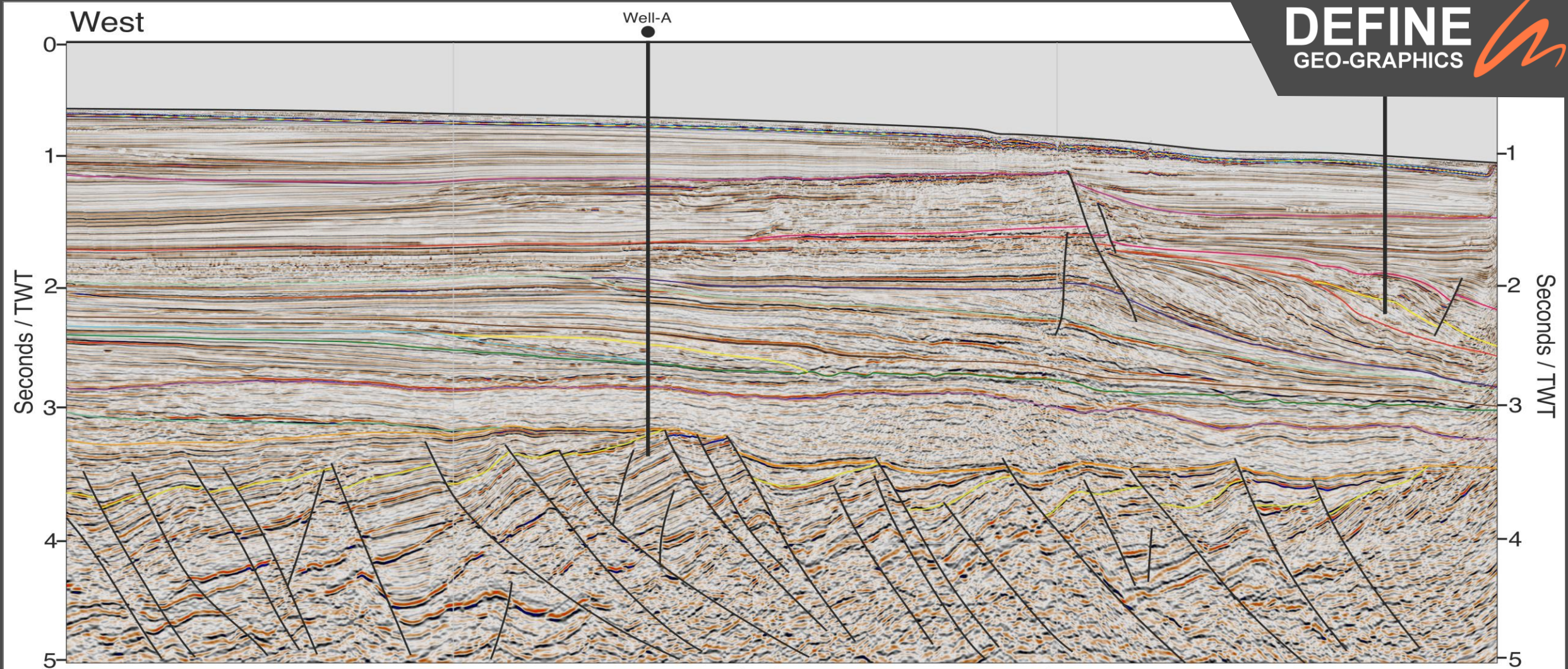
Legend

	Post-Kinematic Unit D		Syn-Kinematic Unit B
	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		

























Legend

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

Basemap


Insert Basemap here to include:

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



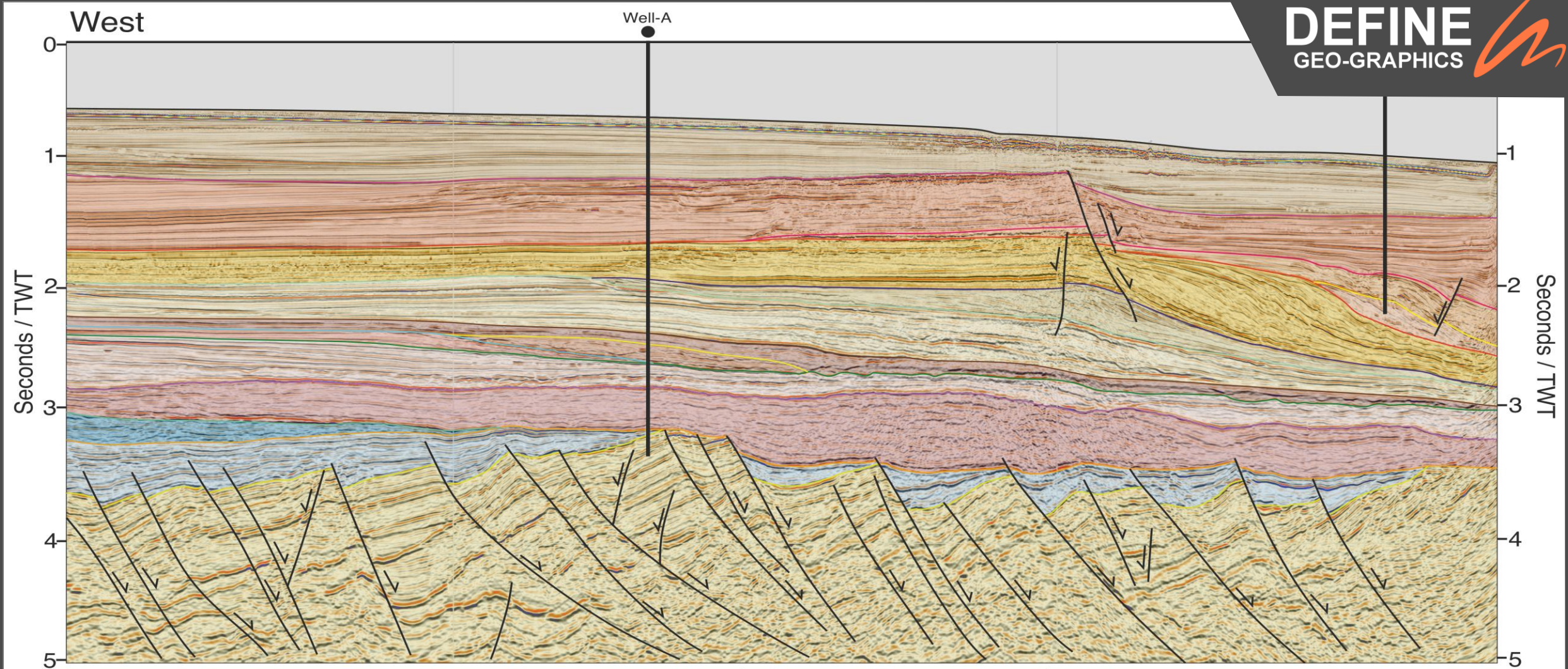
+ve

-ve



10km

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



Legend

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

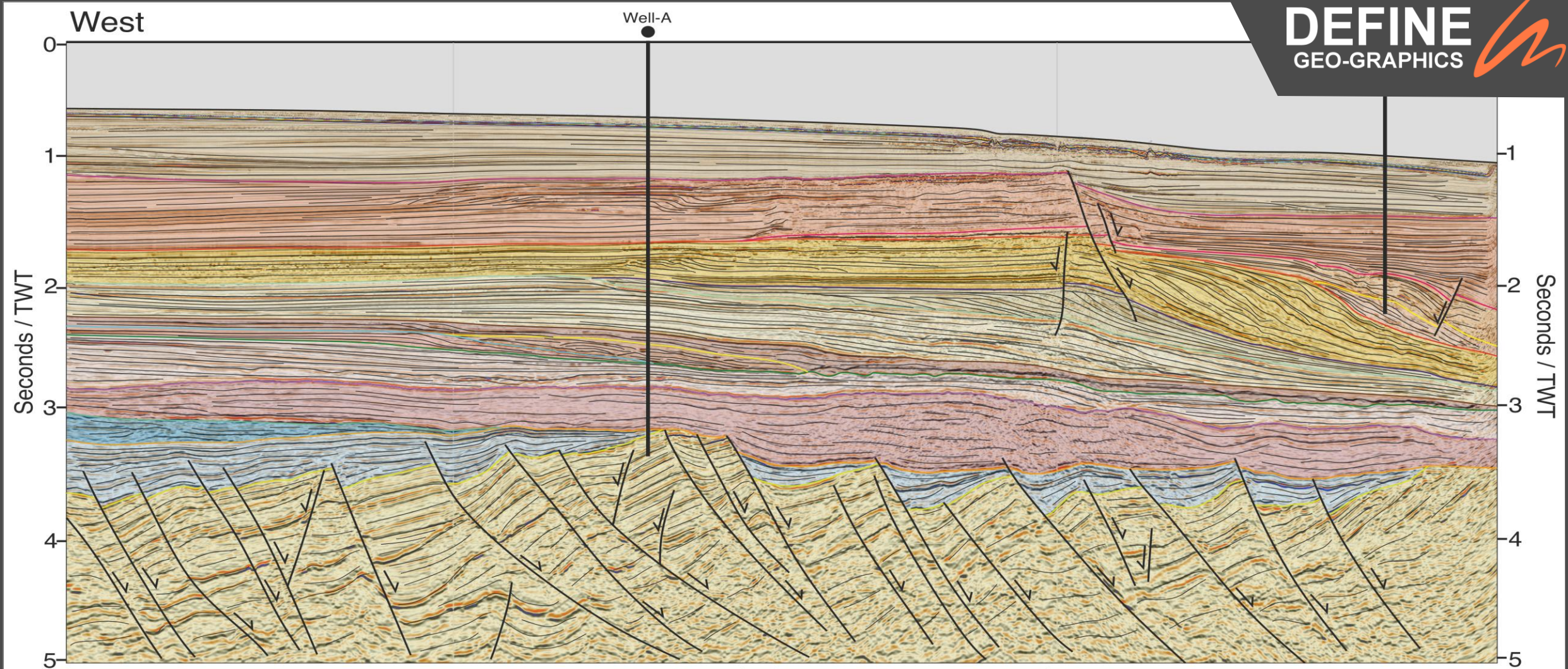
Basemap

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

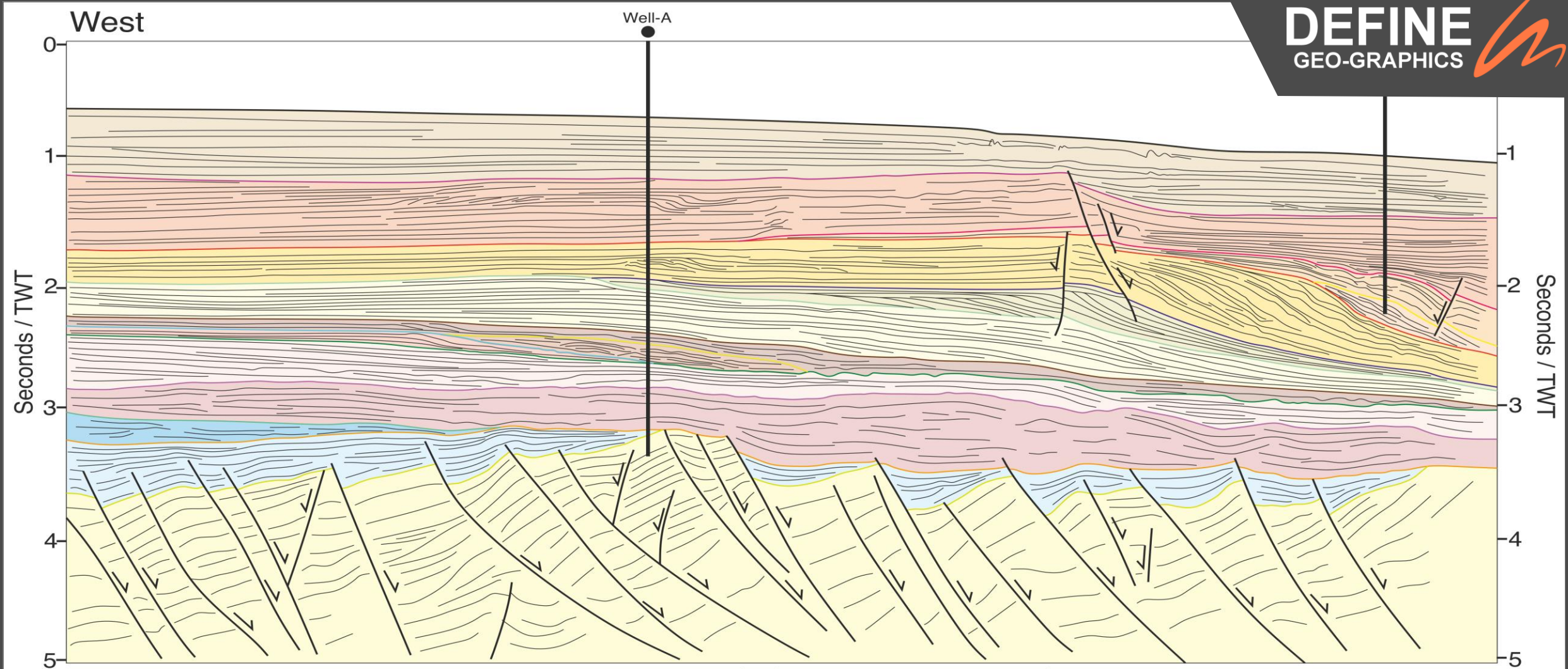
Basemap

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

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 he customer and our drafts-people.

You will provide:

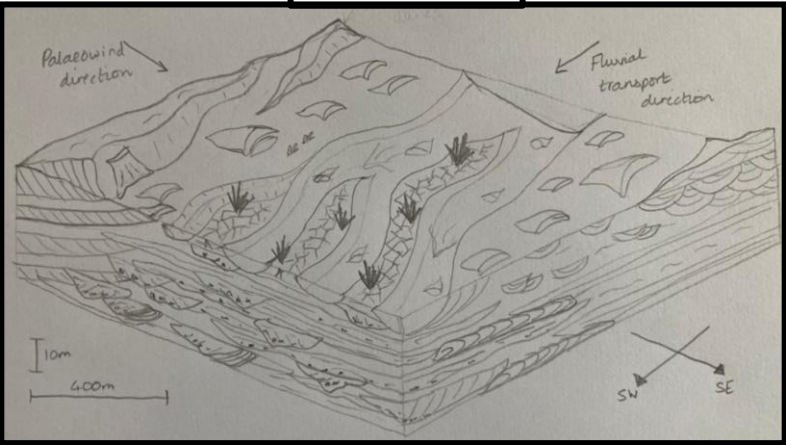
1. A rough sketch for the vision you have for your model
2. An introduction to the depositional setting

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

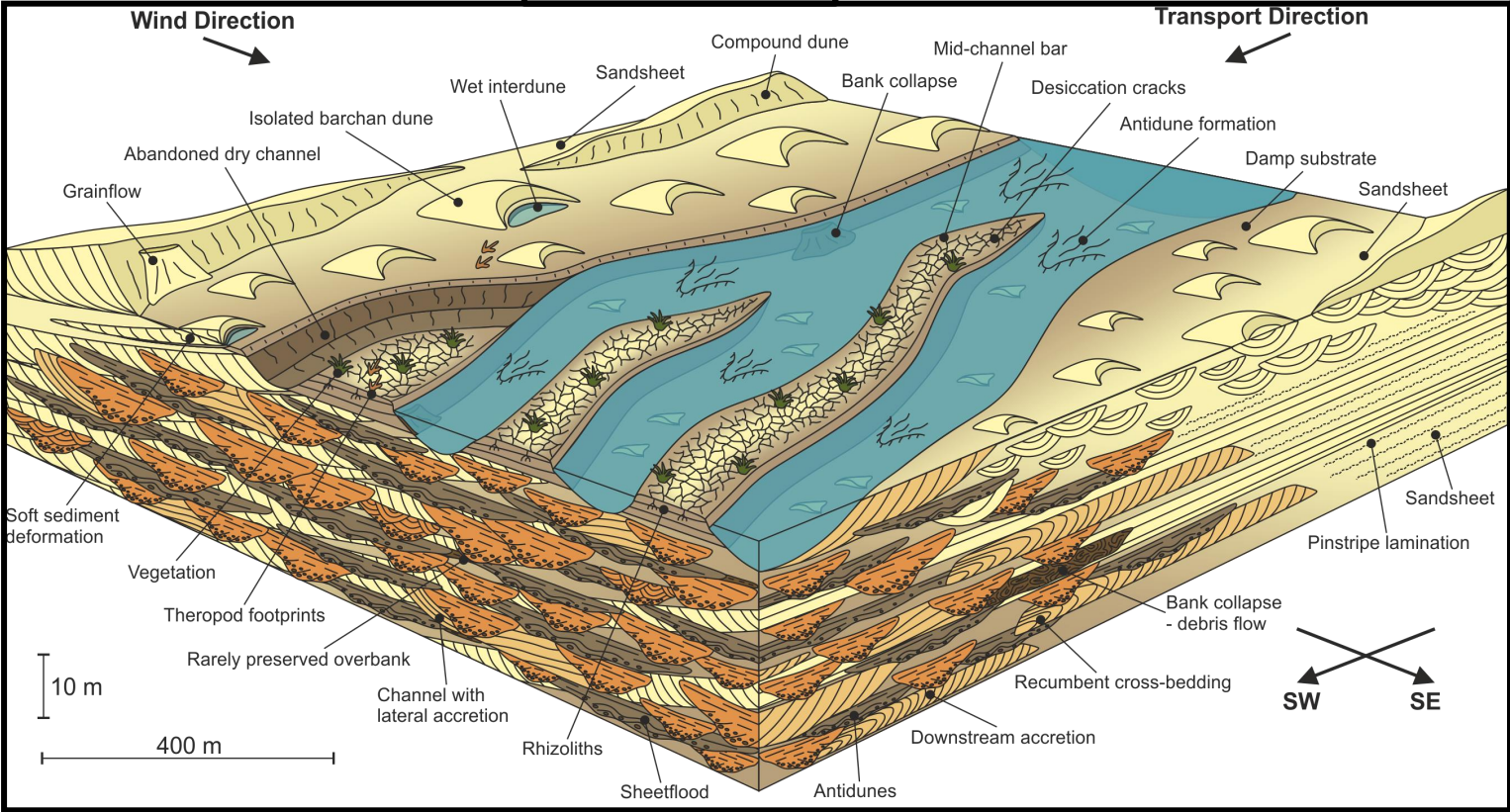


Ephemeral 3D Facies Model

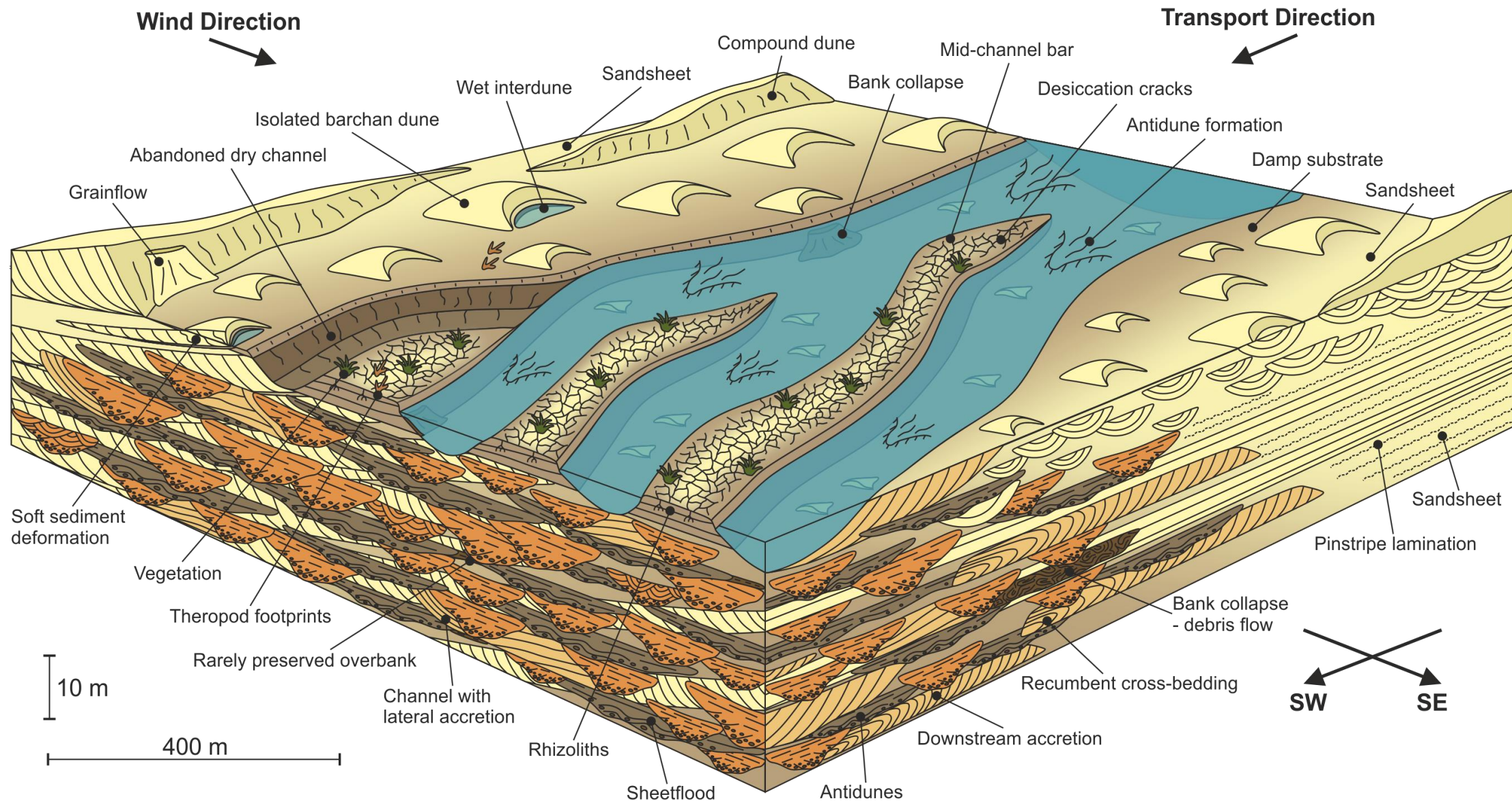
INPUT



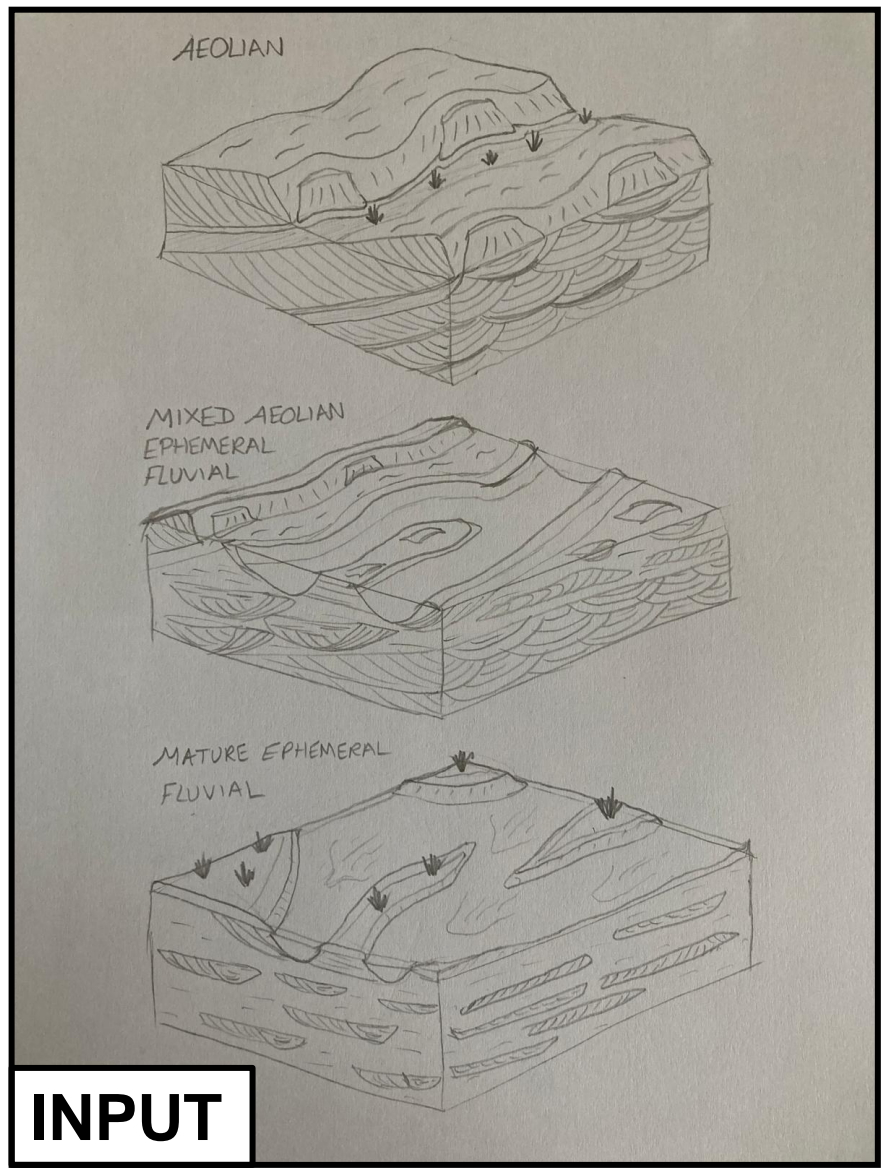
OUTPUT



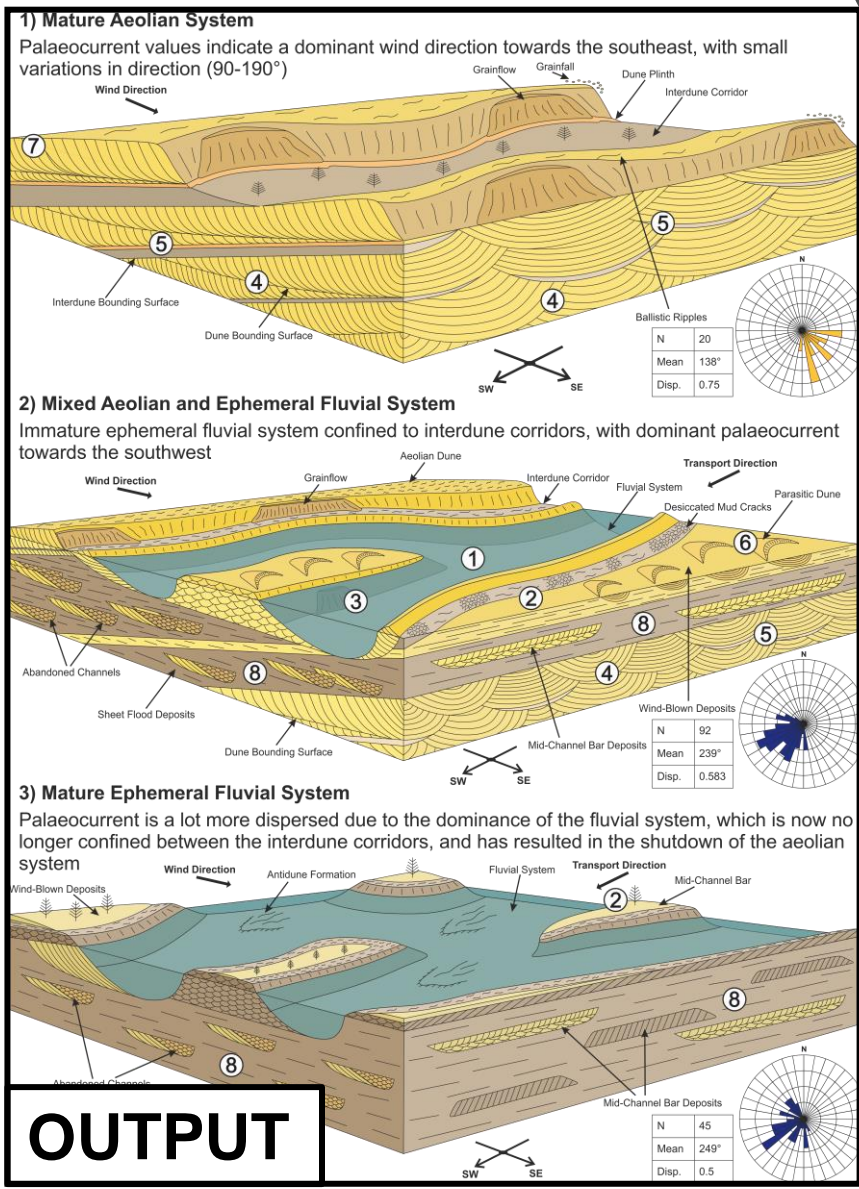
Ephemeral 3D Facies Model



Aeolian 3D Facies Model

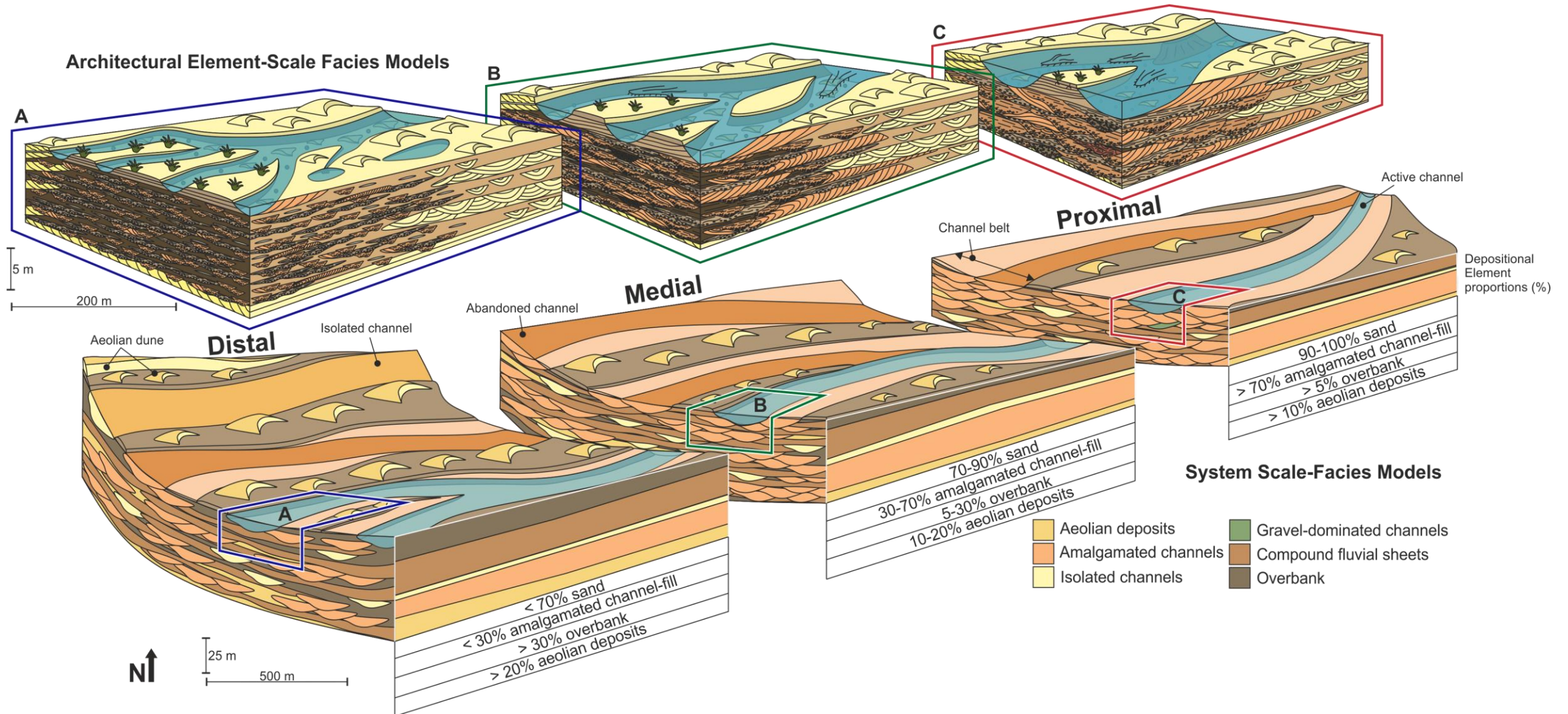


INPUT

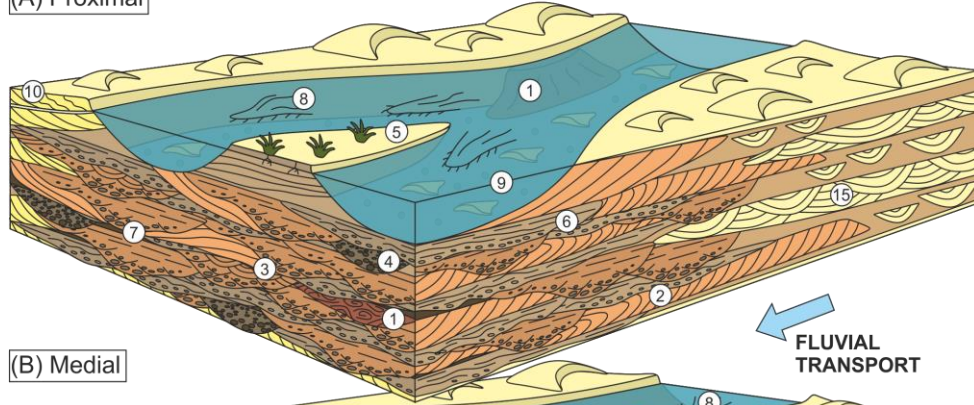


OUTPUT

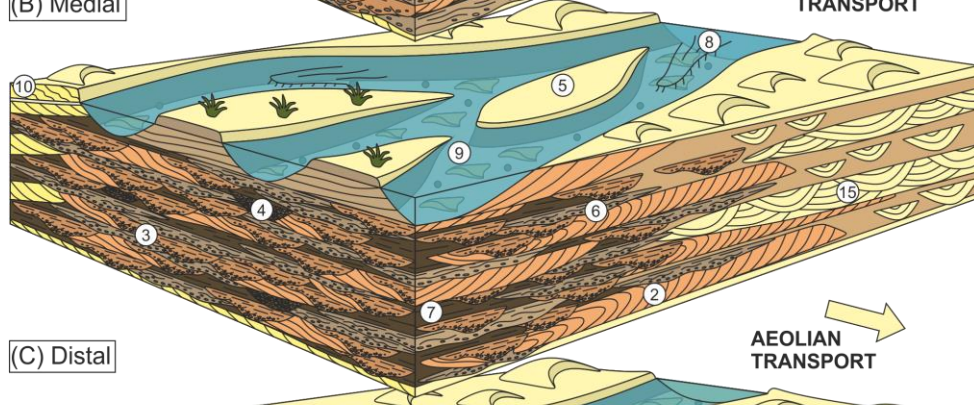
Element Scale Facies Models



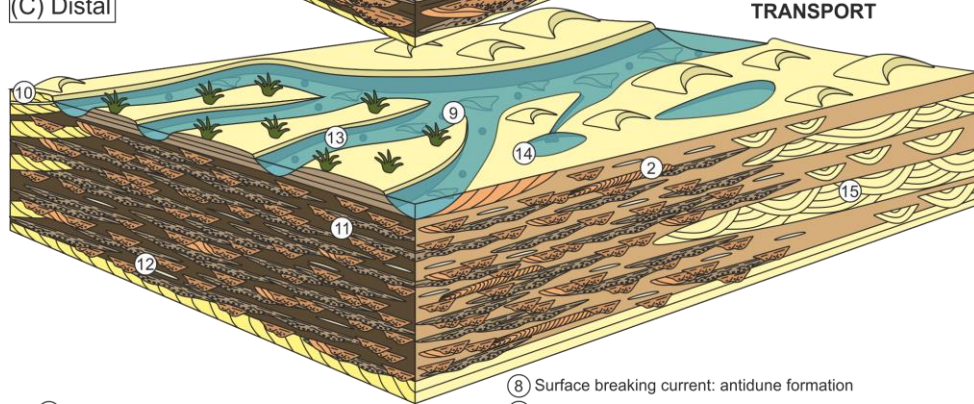
(A) Proximal



(B) Medial



(C) Distal



Element Scale Facies Models

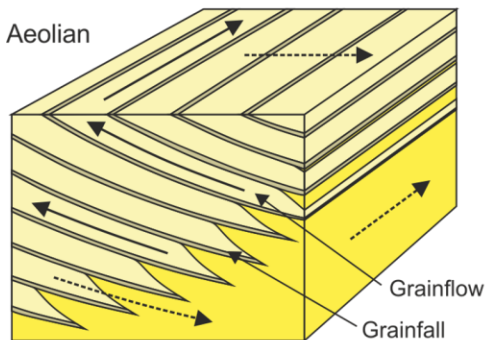
- Sample 3D depositional models

- 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

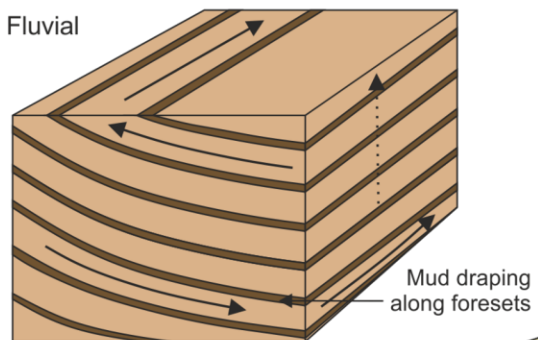
- ⑧ Surface breaking current: antidune formation
- ⑨ High sediment load flow with isolated bedforms
- ⑩ Aeolian dune deposits with soft sediment deformation
- ⑪ Channel and sheetflood deposits within extensive overbank
- ⑫ Isolated lenses of siliciclastic-rich limestone
- ⑬ Isolated small channels dying out within overbank deposits
- ⑭ Isolated ponds with sediment input from the fluvial system
- ⑮ Interfingering of the aeolian system

Facies-scale

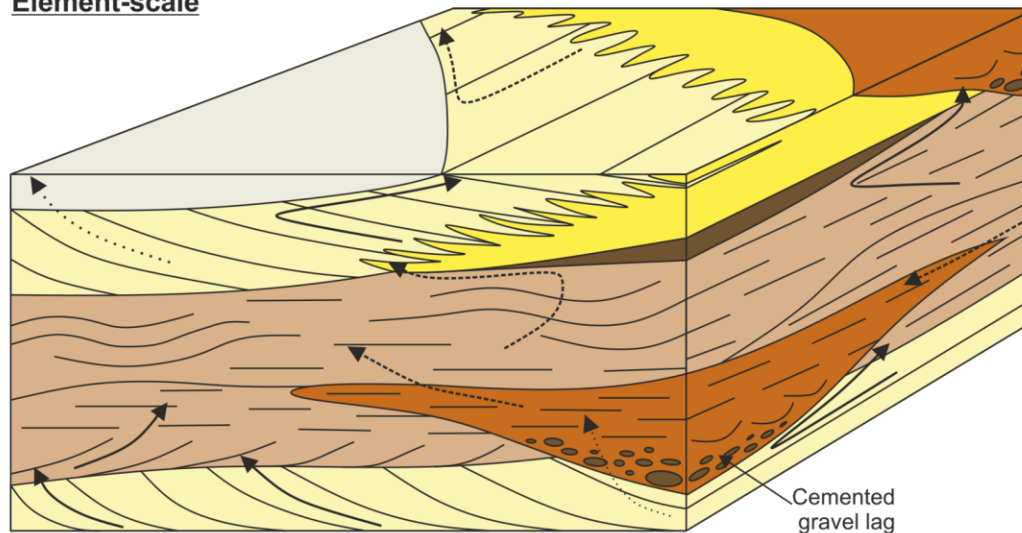
Aeolian



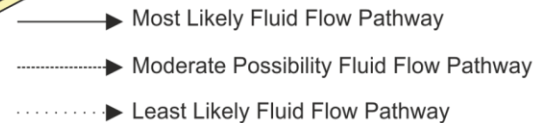
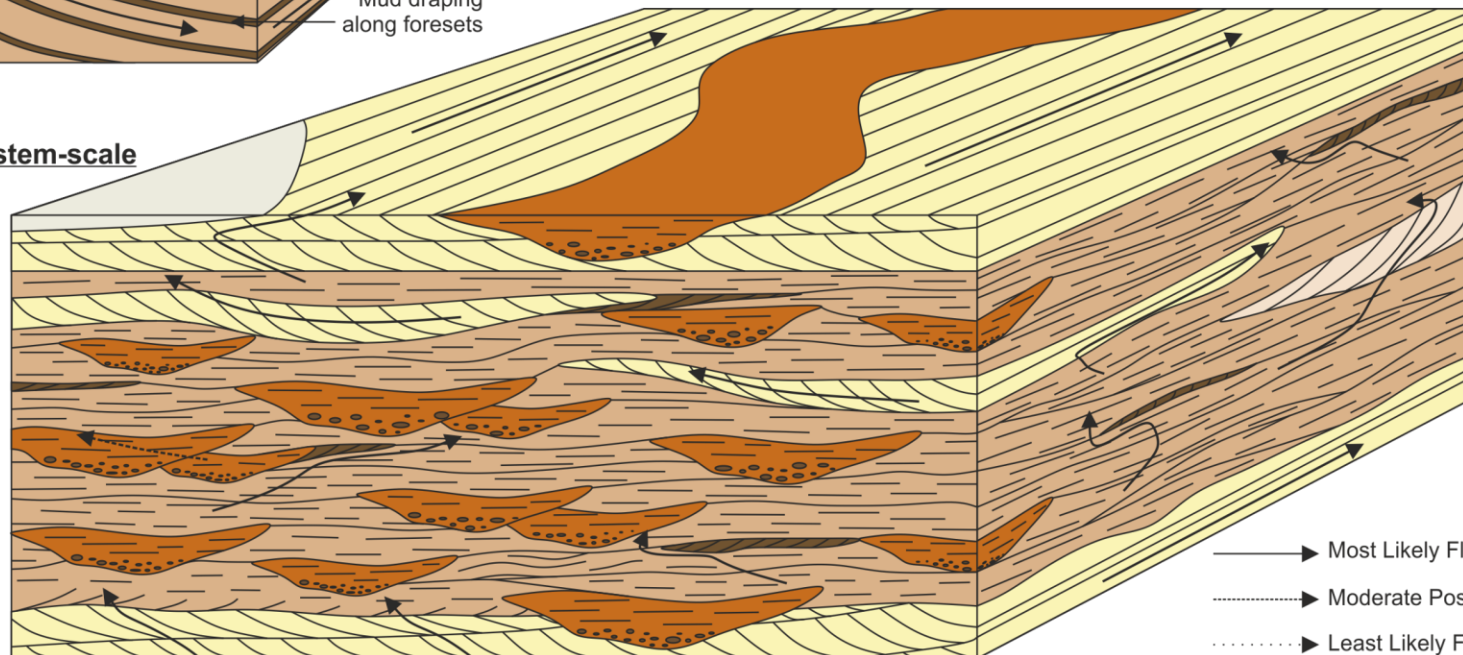
Fluvial



Element-scale

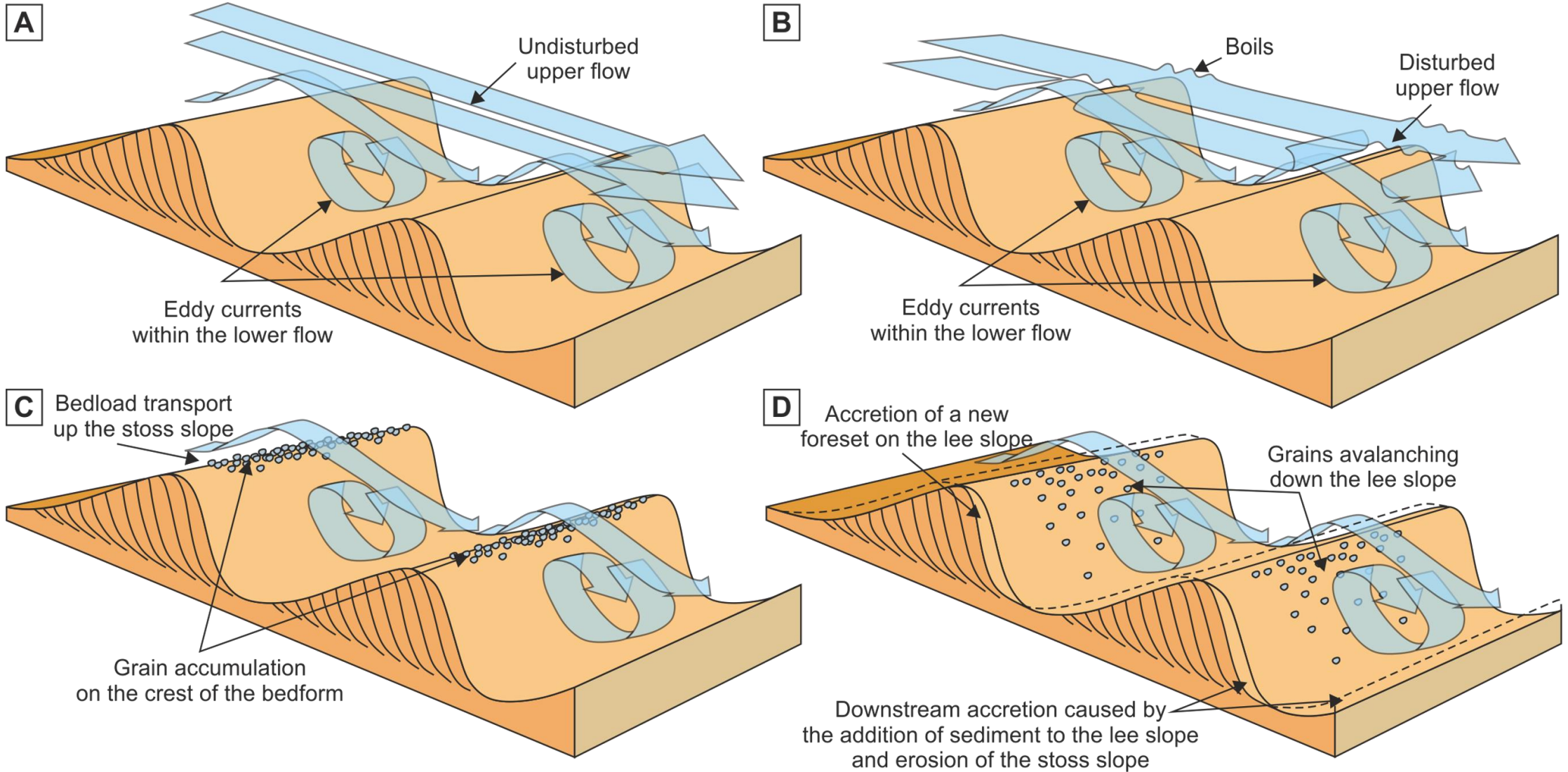


System-scale



Fluid Flow Models

Geological Process Description - Bedform Migration



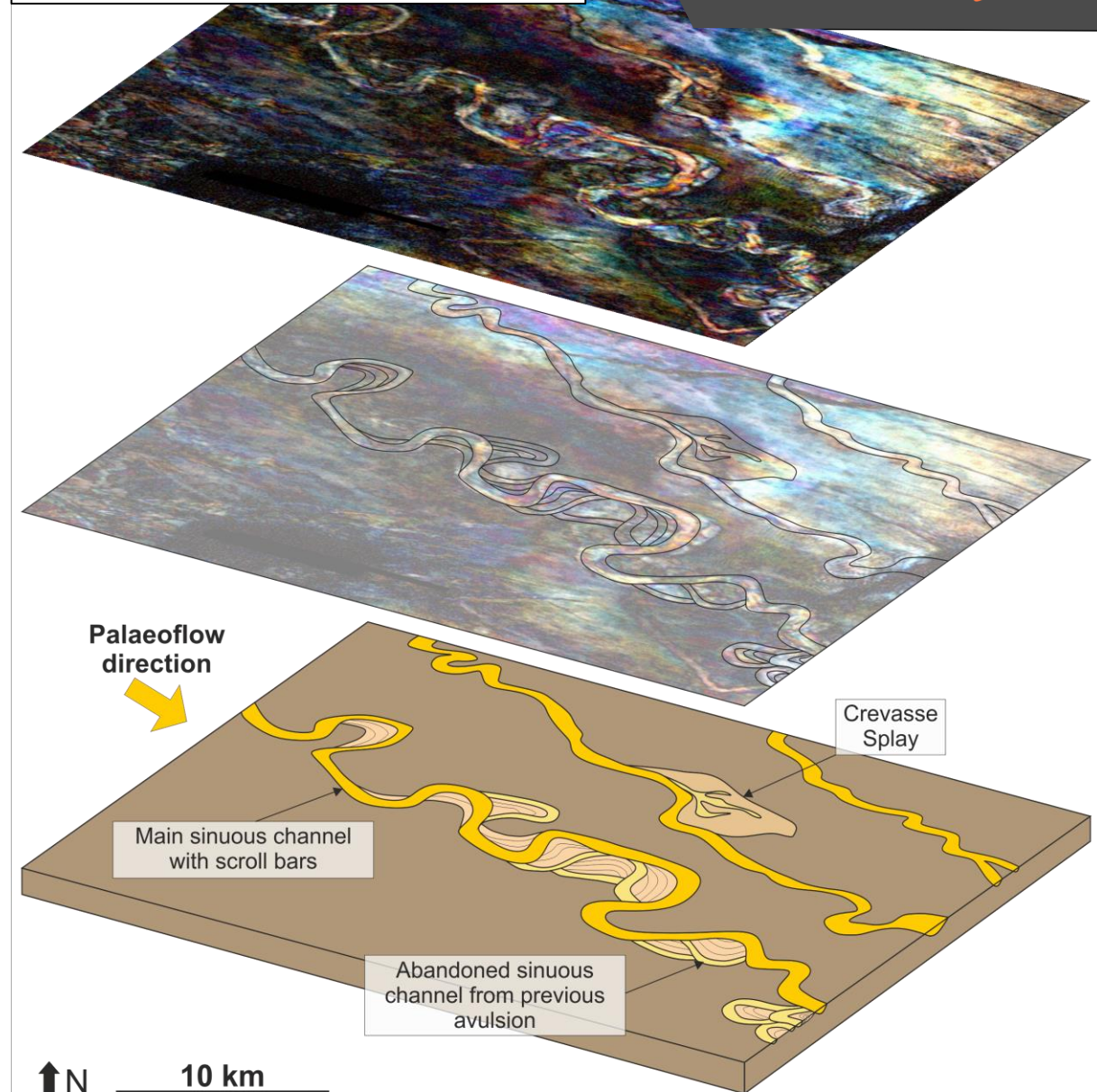
Seismic Attributes

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.

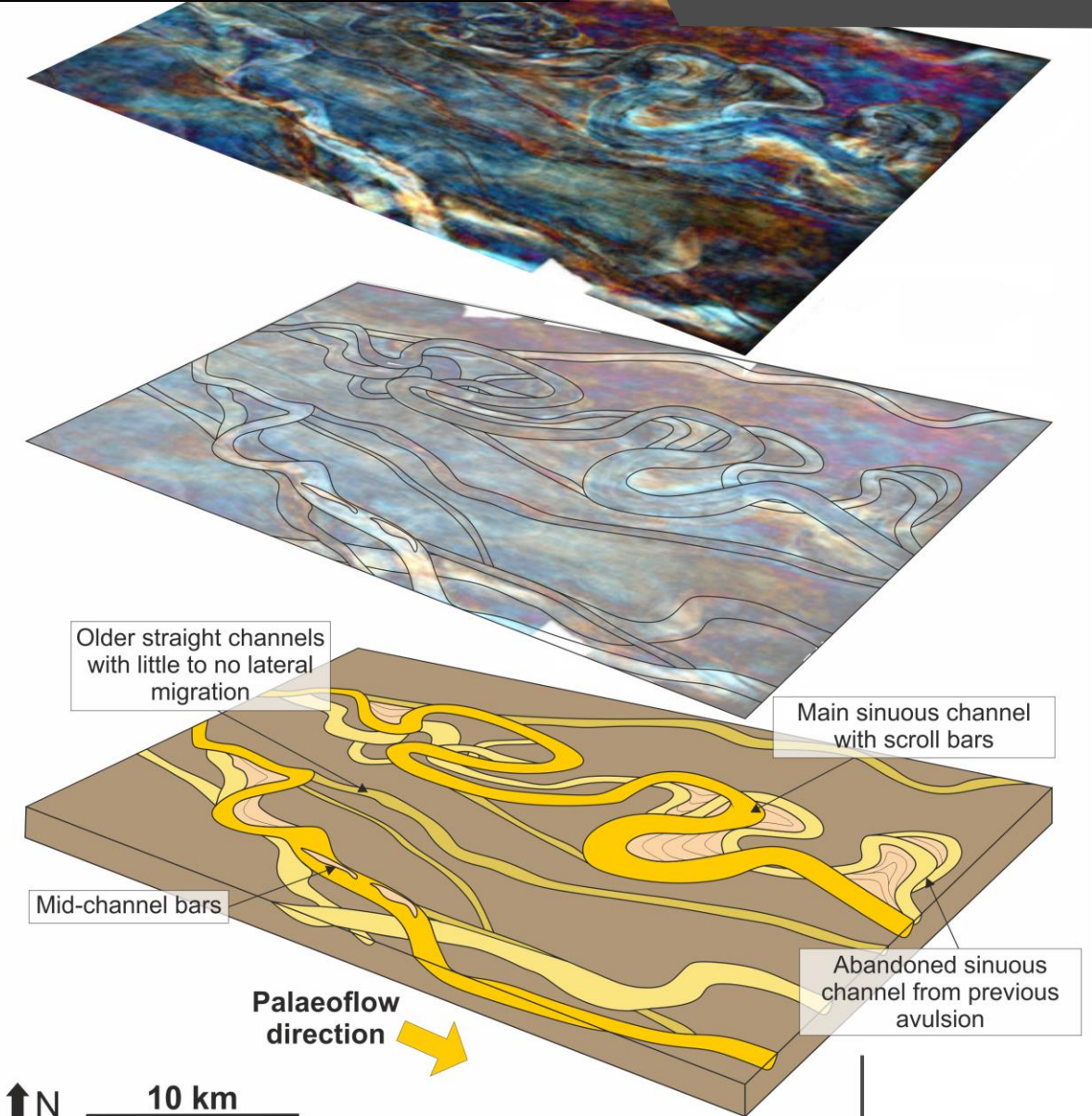
Spectral Decomposition attribute
Showing river channels



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.



Structural/GIS Basemaps

Prospect Scale Displays

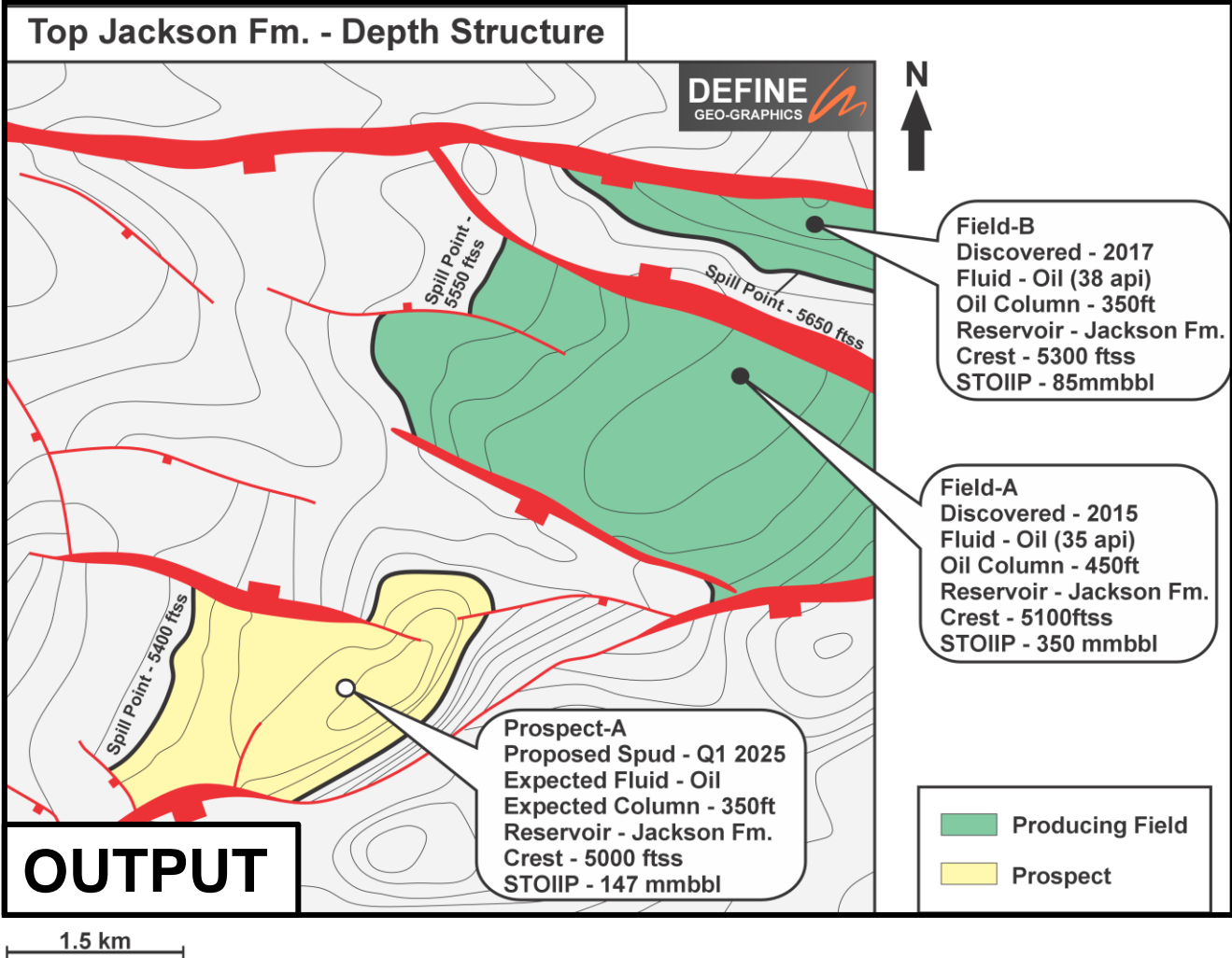
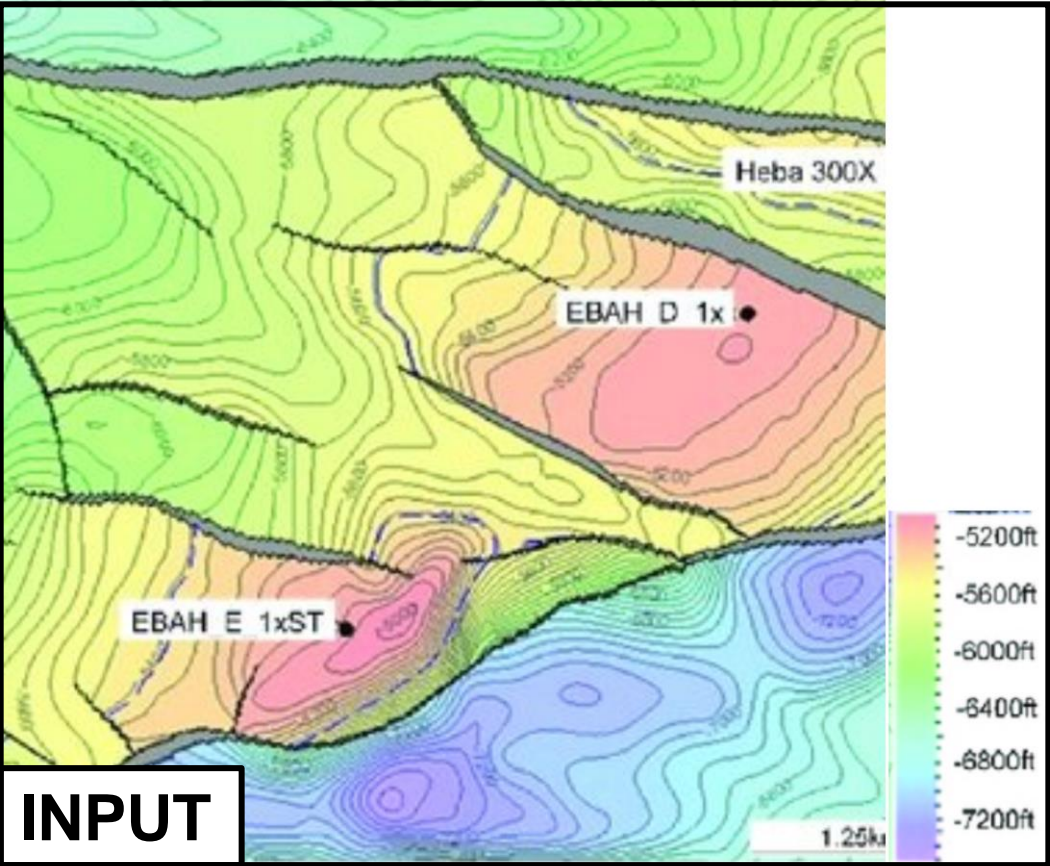
Basemaps and Prospect Displays

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



29°N, 53°E

53.5

29°N, 54°E

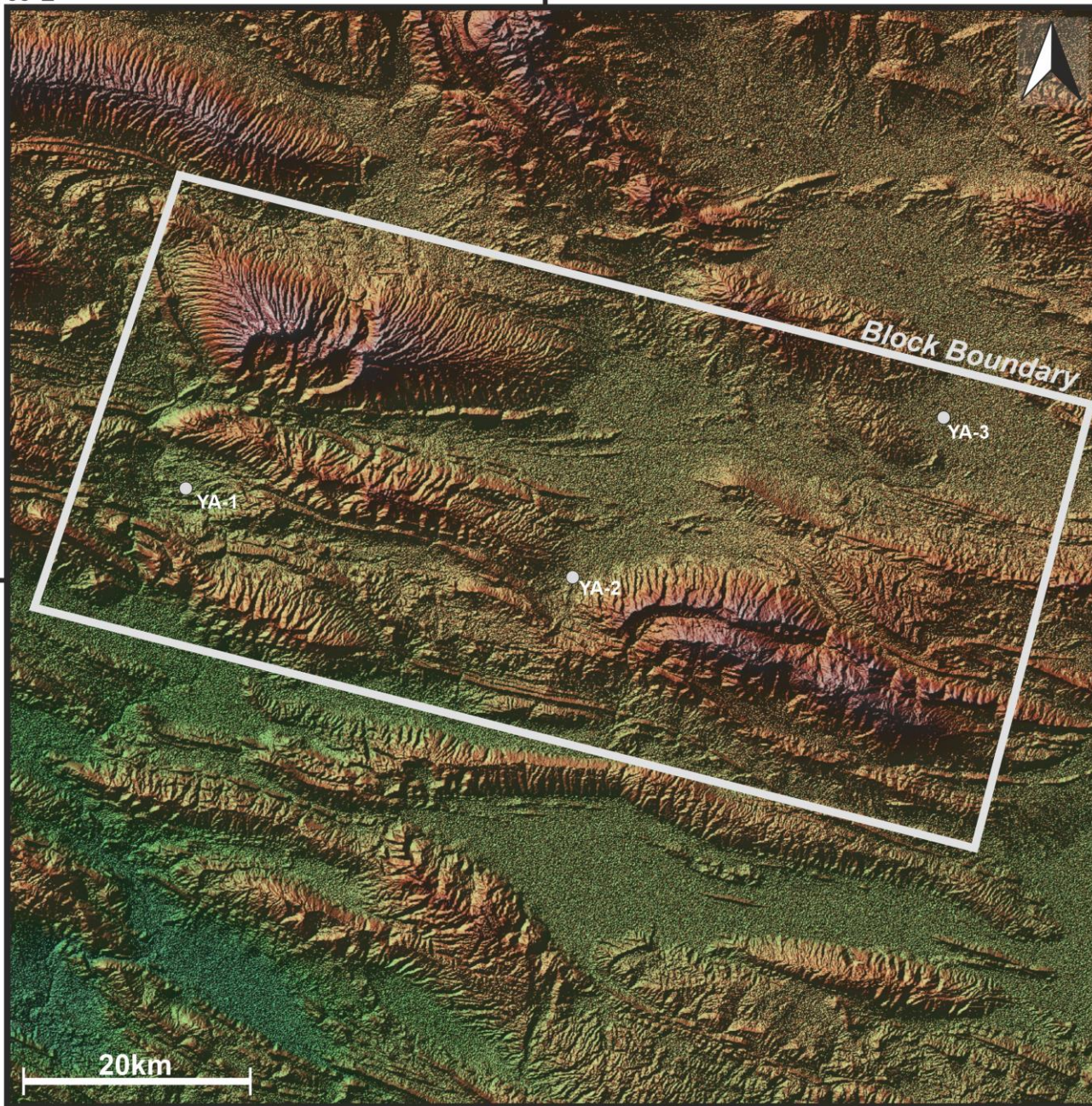
Basemap Iran, Block

28.5°

28°N, 53°E

53.5

28°N, 54°E



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%)

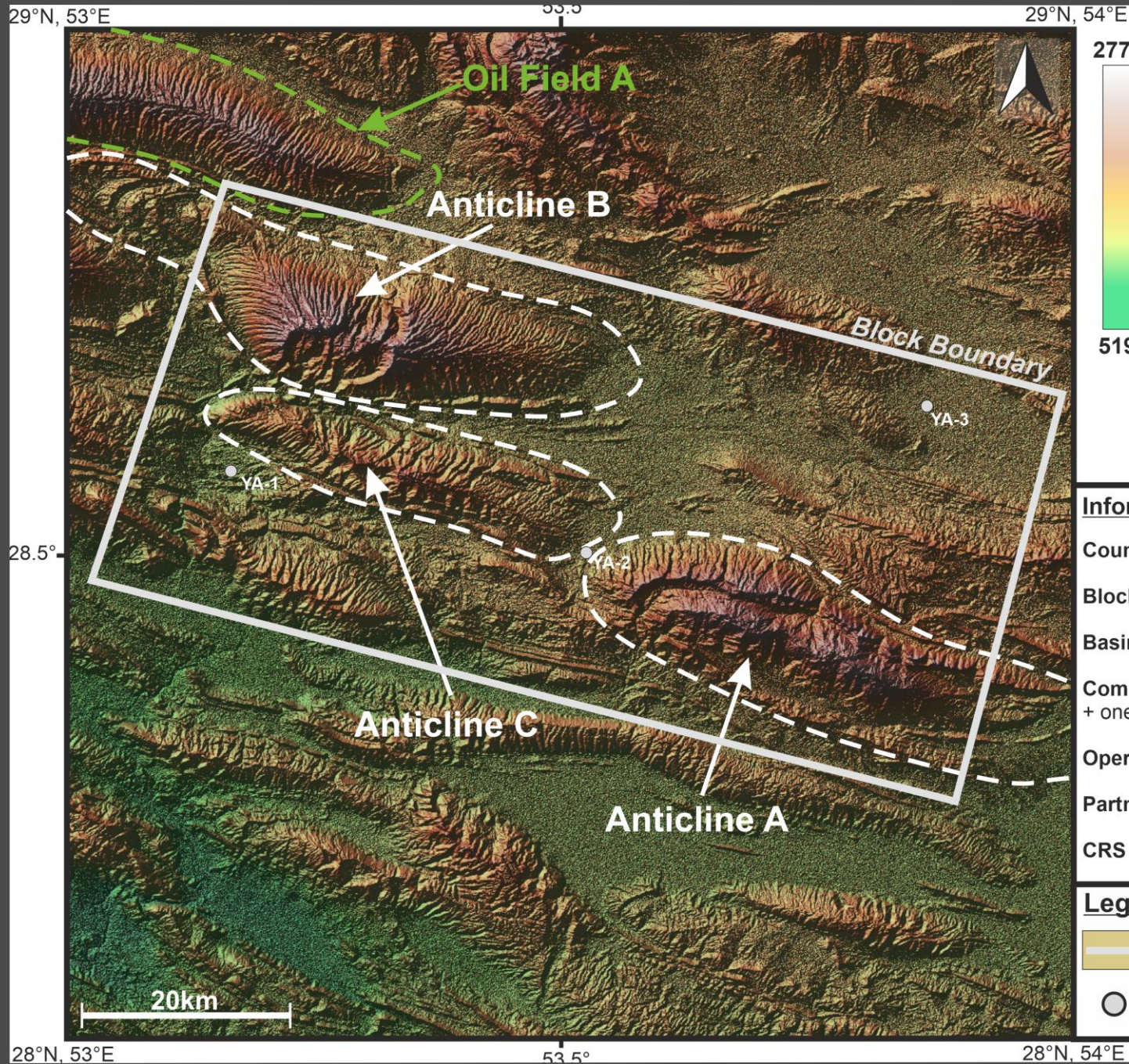
Partner - Company B (40%)

CRS - WGS84 UTM39 N

Legend

 - Block Boundary

 - Drilled Wells



Basemap Iran, Block & Structures

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

29°N, 53°E

53.5

29°N, 54°E

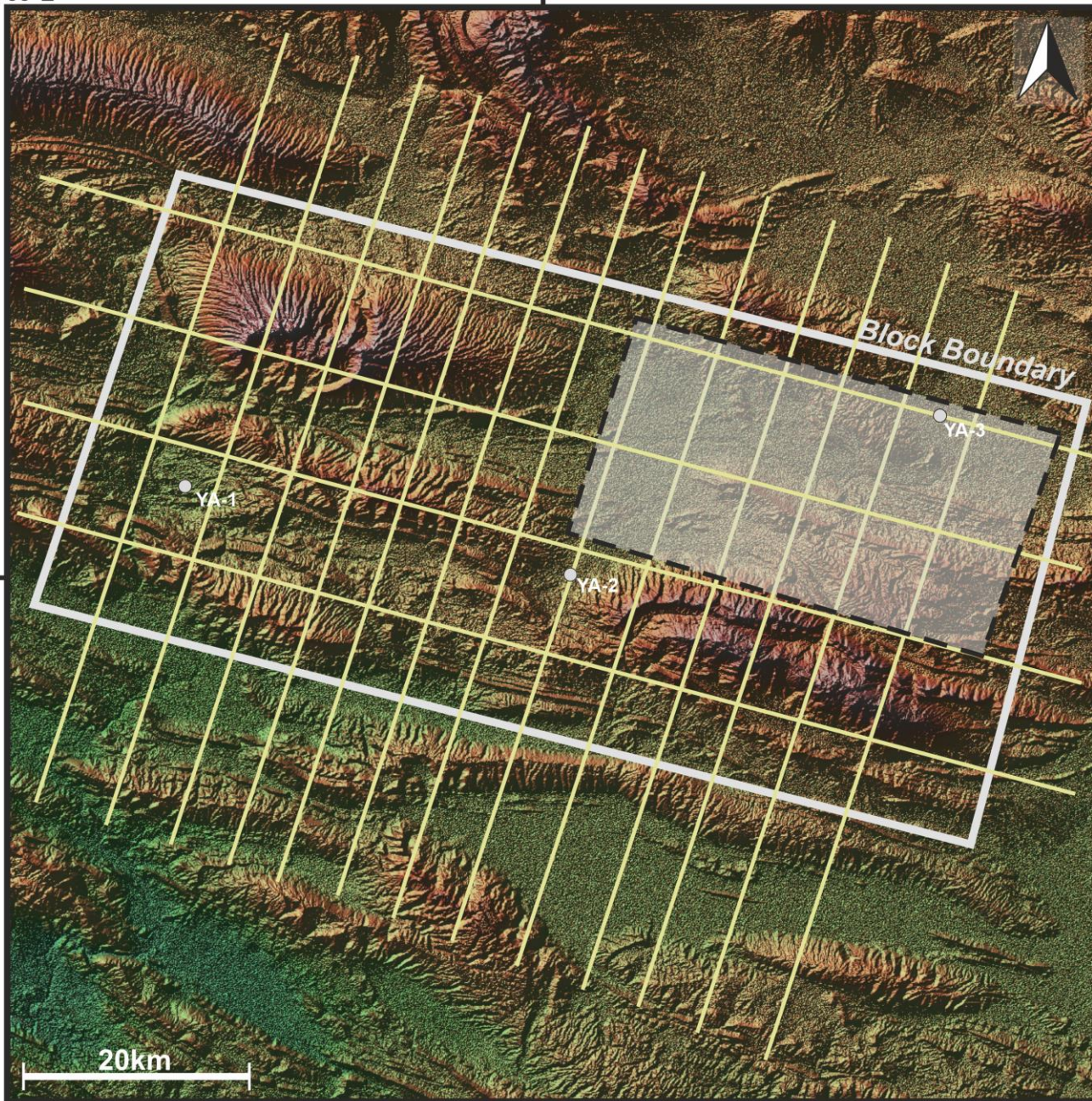
Basemap Iran, Block & Dataset

28.5°

28°N, 53°E

53.5

28°N, 54°E



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

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!

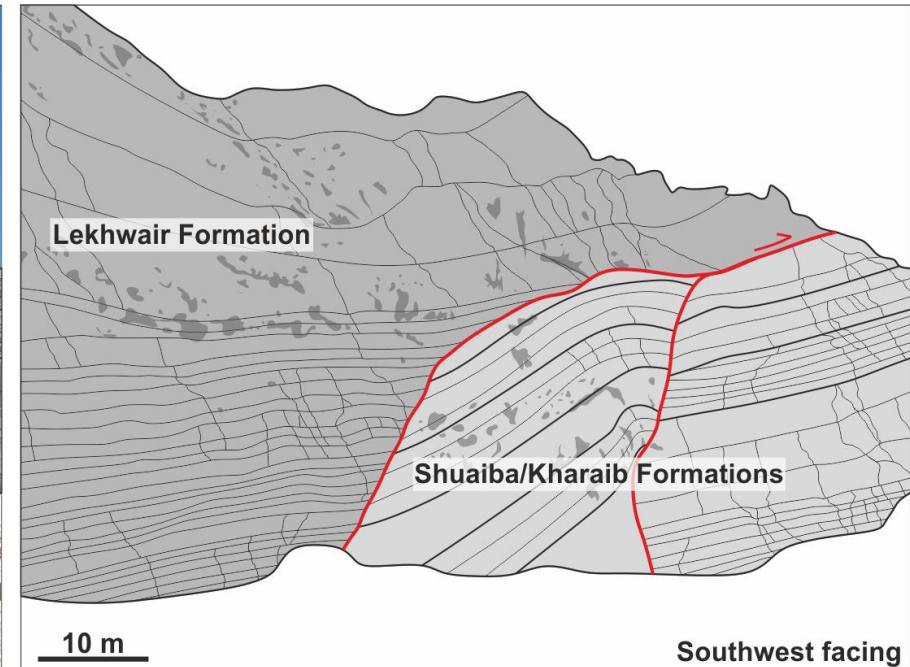
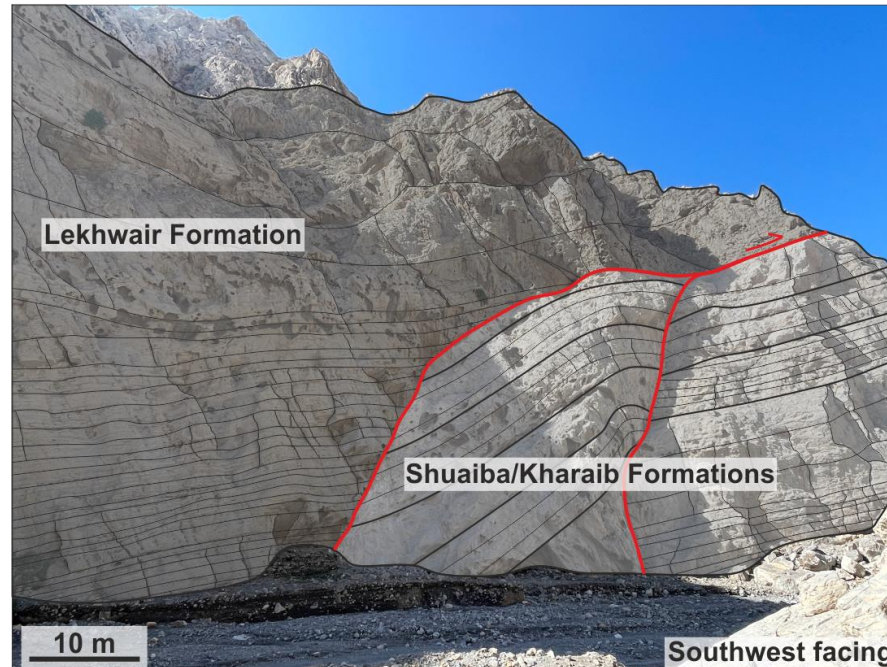
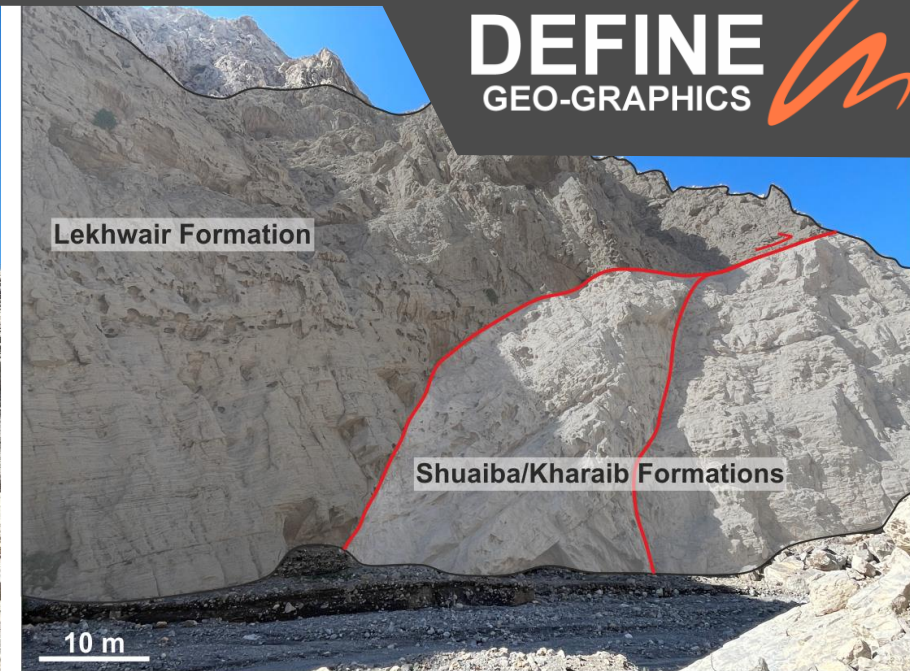
Our outcrop interpretations have been used for countless purposes by our customers but to name a few, they have aided the understanding of:

- 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.

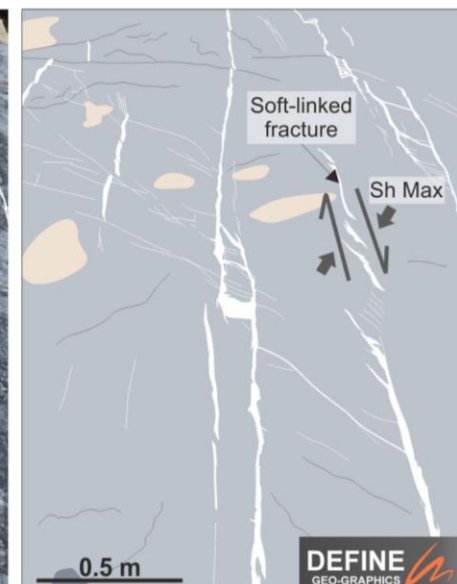
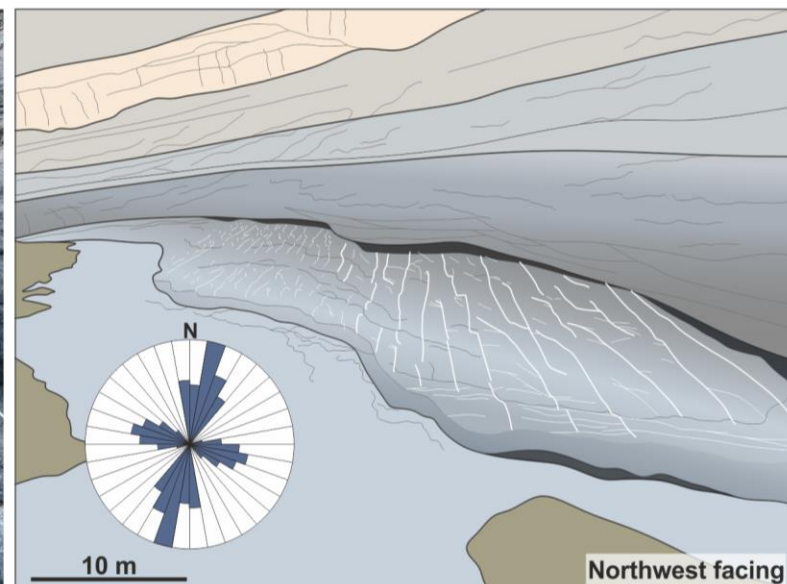
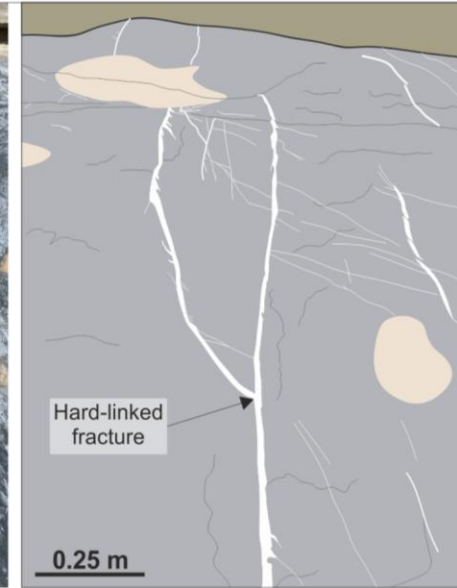
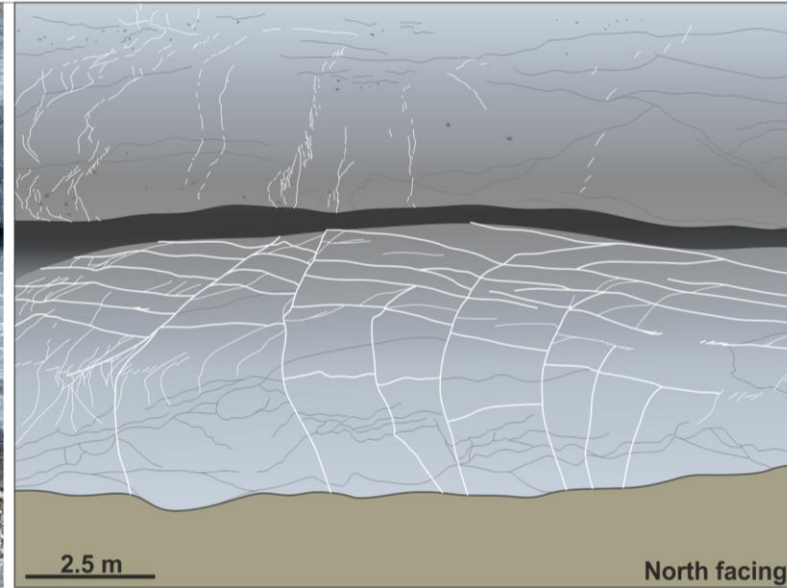


Structural deformation in a carbonate thrust belt.

Ras al Khaimah,
United Arab
Emirates



Fractures Carbonates – Wadi Damm, Oman

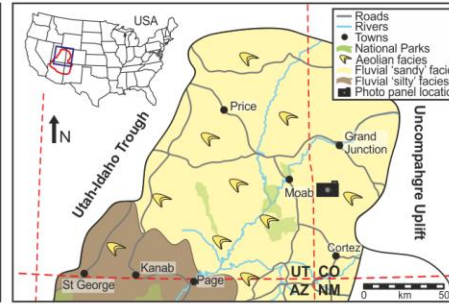


Architectural Elements

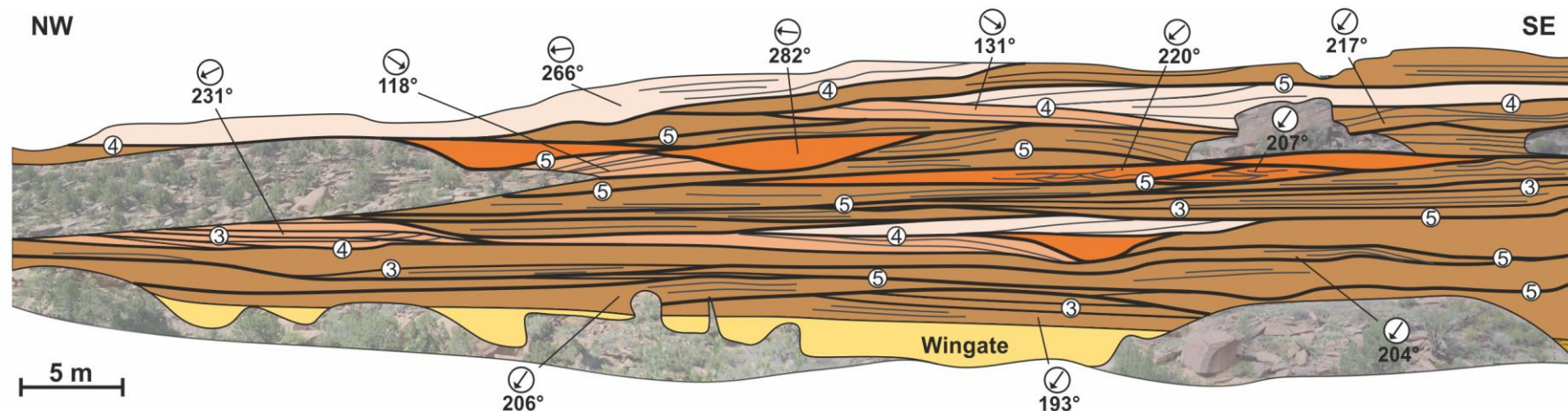
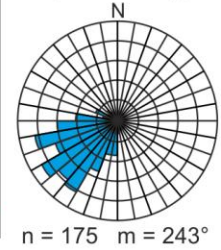
- Aeolian Dune; includes facies Smxb, Smtxb, Smpb, Smwb
- Fluvial Channel; includes facies Cms, Ccs, Sxb, Stxb, Spb, Smf
- Sheetflood; includes facies Cru, Spb, Sma, Smf, Sfrl
- Lateral Accretion; includes facies Stxb, Slxb, Srb, Sfrl
- Downstream Accretion; includes facies Sxb, Slxb, Srpl, Sfrl

Legend

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



Palaeocurrent Summary



Aeolian System Proximal Setting

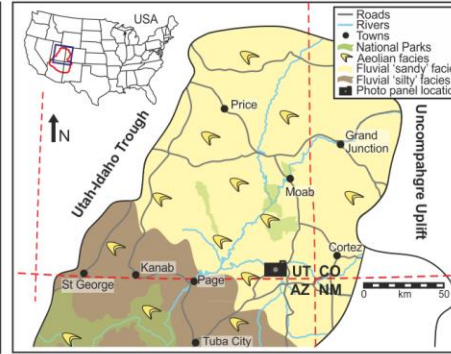
Utah, USA

Architectural Elements

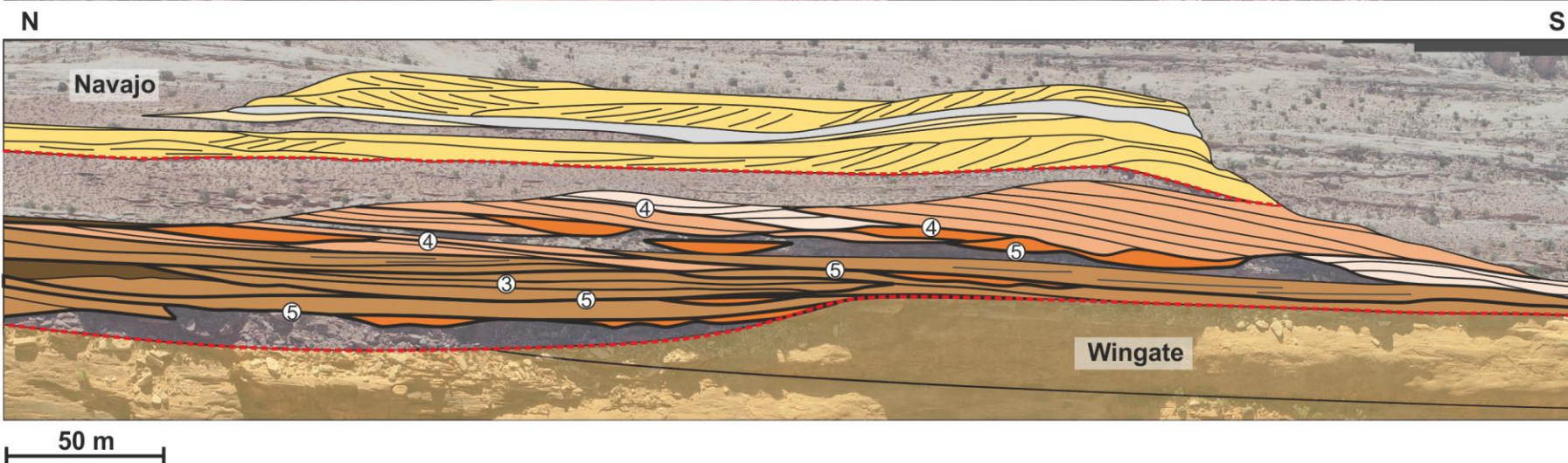
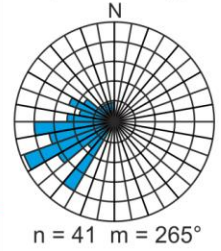
- Aeolian Dune; includes facies Smxb, Smtxb, Smpb, Smwb
- Sandsheet; includes facies Smpb, Smwb, Sm
- Interdune; includes facies Sm, Spl
- Fluvial Channel; includes facies Cms, Ccs, Sxb, Stxb, Spb, Smf
- Sheetflood; includes facies Cru, Spb, Sma, Smf, Sfrl
- Lateral Accretion; includes facies Stxb, Slxb,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

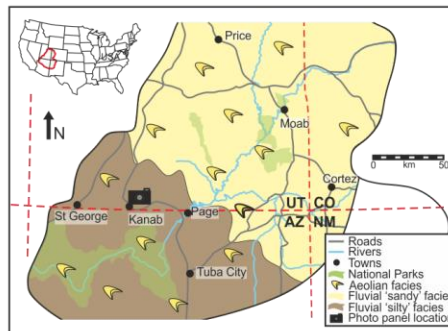
Utah, USA

Architectural Elements

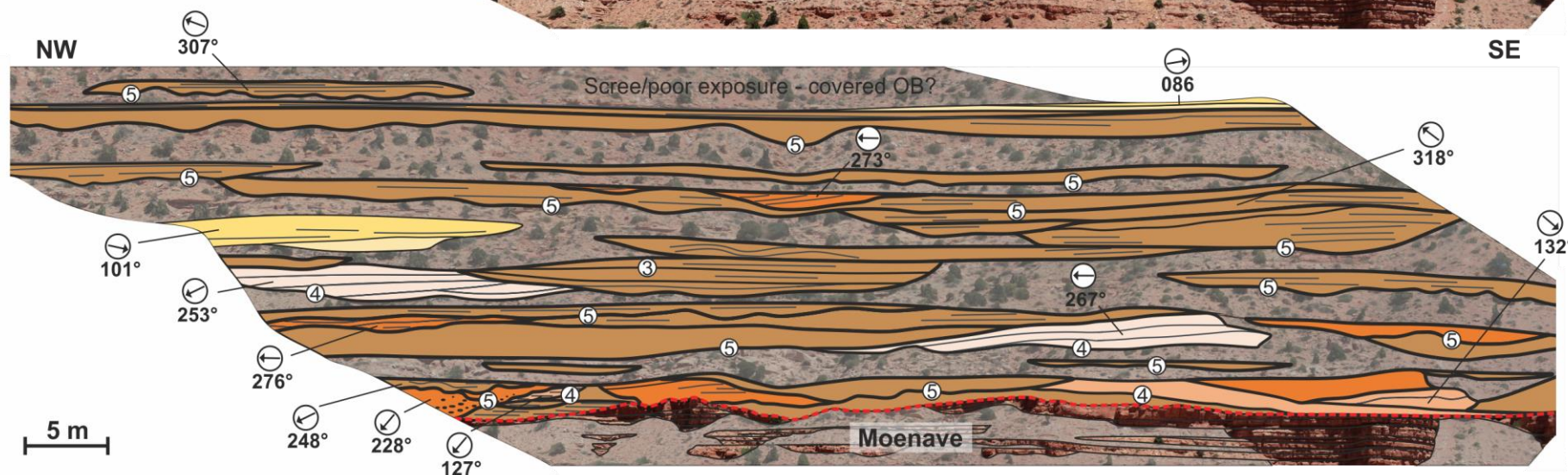
- Aeolian Dune; includes facies Smxb, Smtxb, Smpb, Smwb
- Sandsheet; includes facies Smpb, Smwb, Sm
- Fluvial Channel; includes facies Cms, Ccs, Sxb, Stxb, Spb, Smf
- Sheetflood; includes facies Cru, Spb, Sma, Smf, Sfrl
- Lateral Accretion; includes facies Stxb, Slxb, Srb, Sfrl
- Downstream Accretion;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

Seismic Trace

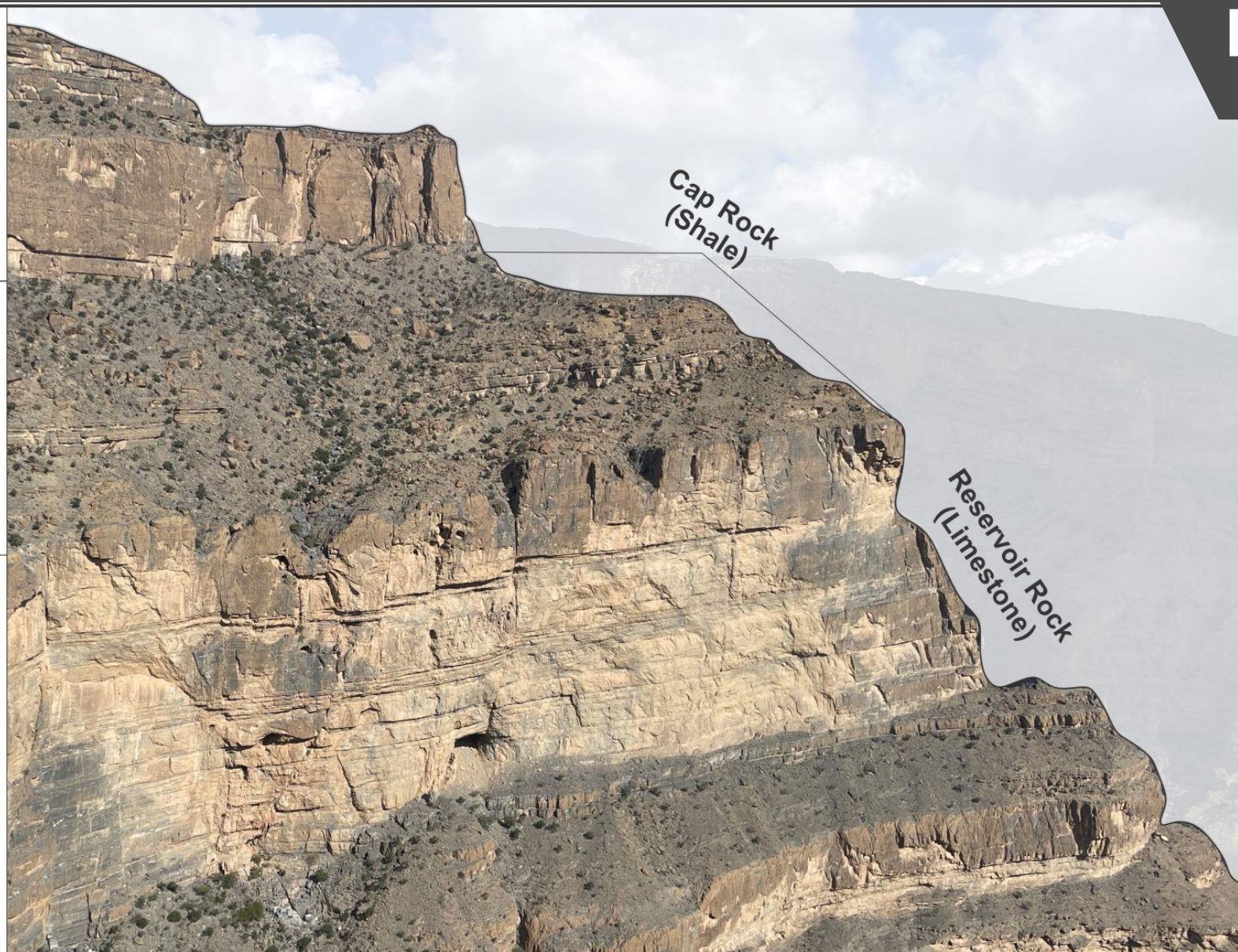
Synthetic
Seismogram

+ve -ve +ve

Seismic Layer 3

Seismic Layer 2

Seismic Layer 1



50m

Fractured Carbonates – Jebel Shams, Oman

North Facing

Seismic Trace

Synthetic
Seismogram

+ve -ve +ve

Seismic Layer 3

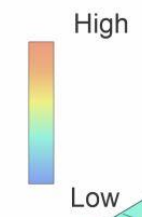
Seismic Layer 2

Seismic Layer 1

Cap Rock
(Shale)

Reservoir Rock
(Limestone)

Fracture
Corridors



Variations in Hydrocarbon
Saturation along strike

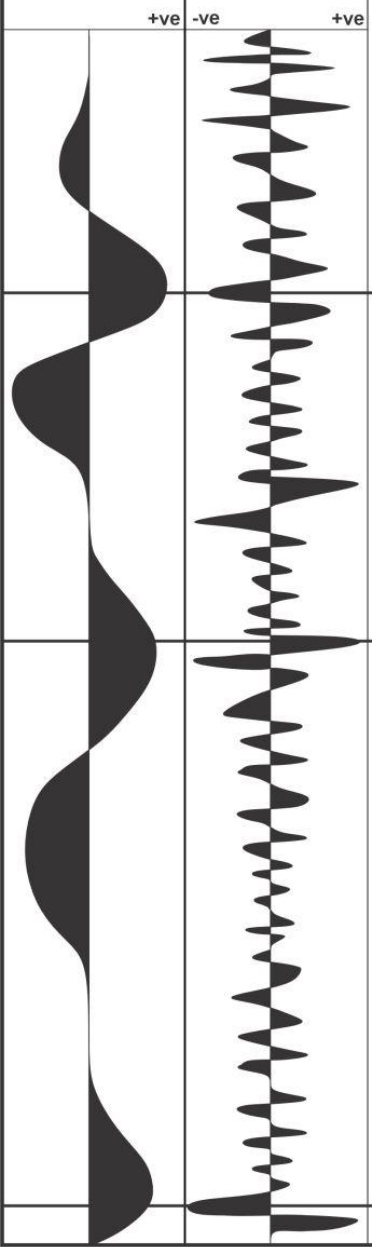
50m

Fractured Carbonates – Jebel Shams, Oman

North Facing

Seismic Trace

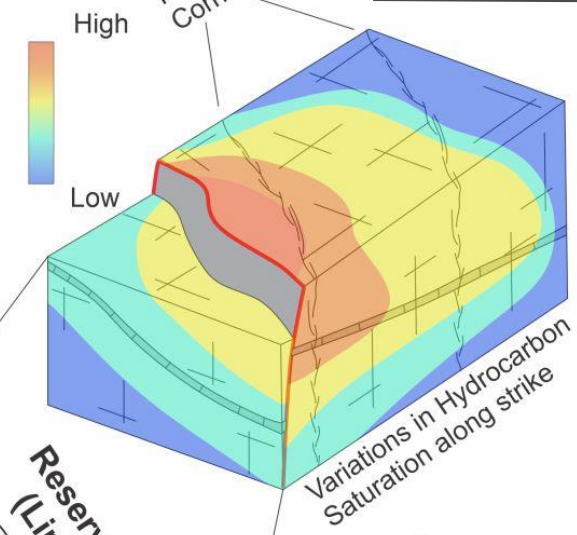
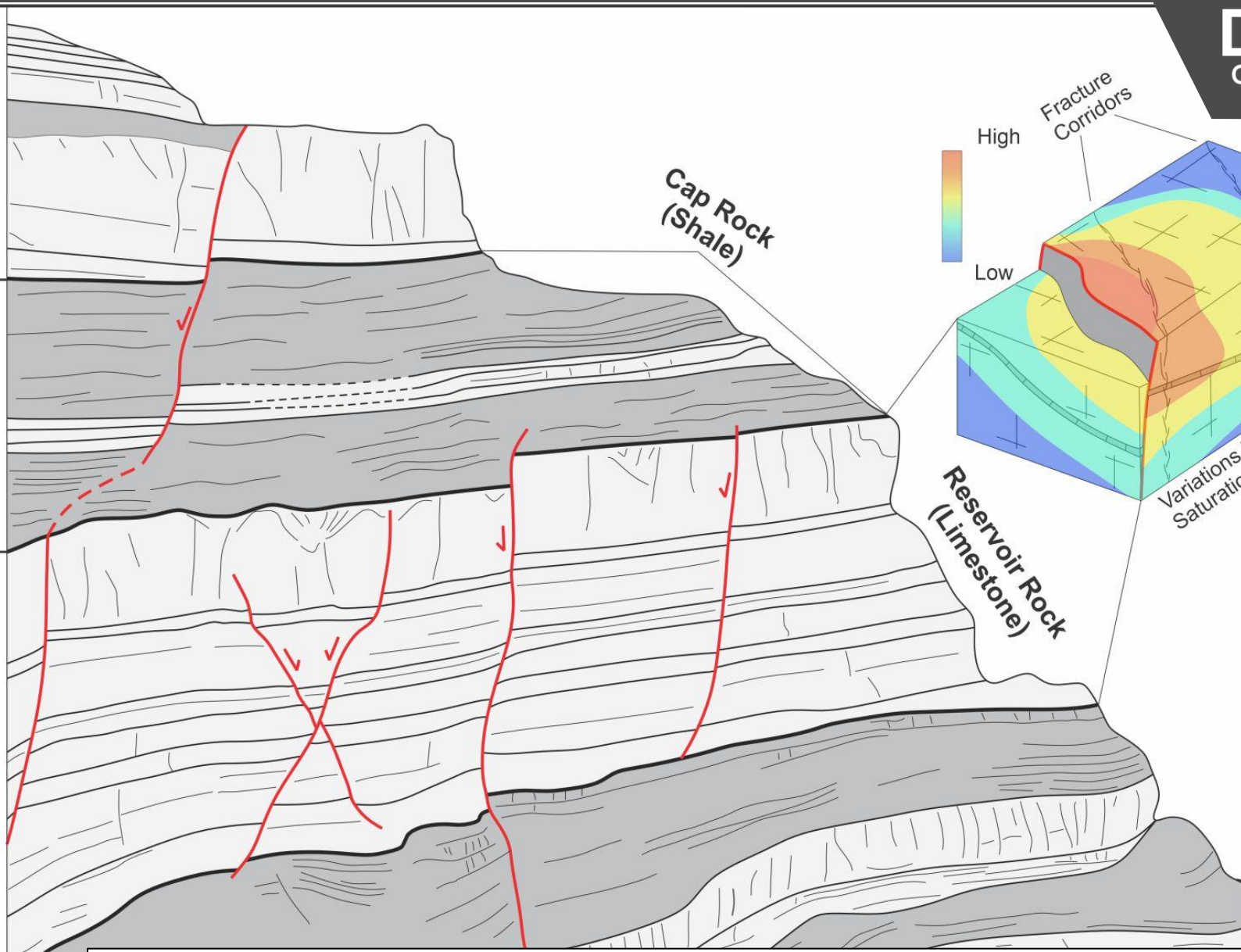
Synthetic
Seismogram



Seismic Layer 3

Seismic Layer 2

Seismic Layer 1



Fractured Carbonates – Jebel Shams, Oman

North Facing

Precambrian Stromatolites – Duqm, Oman

