

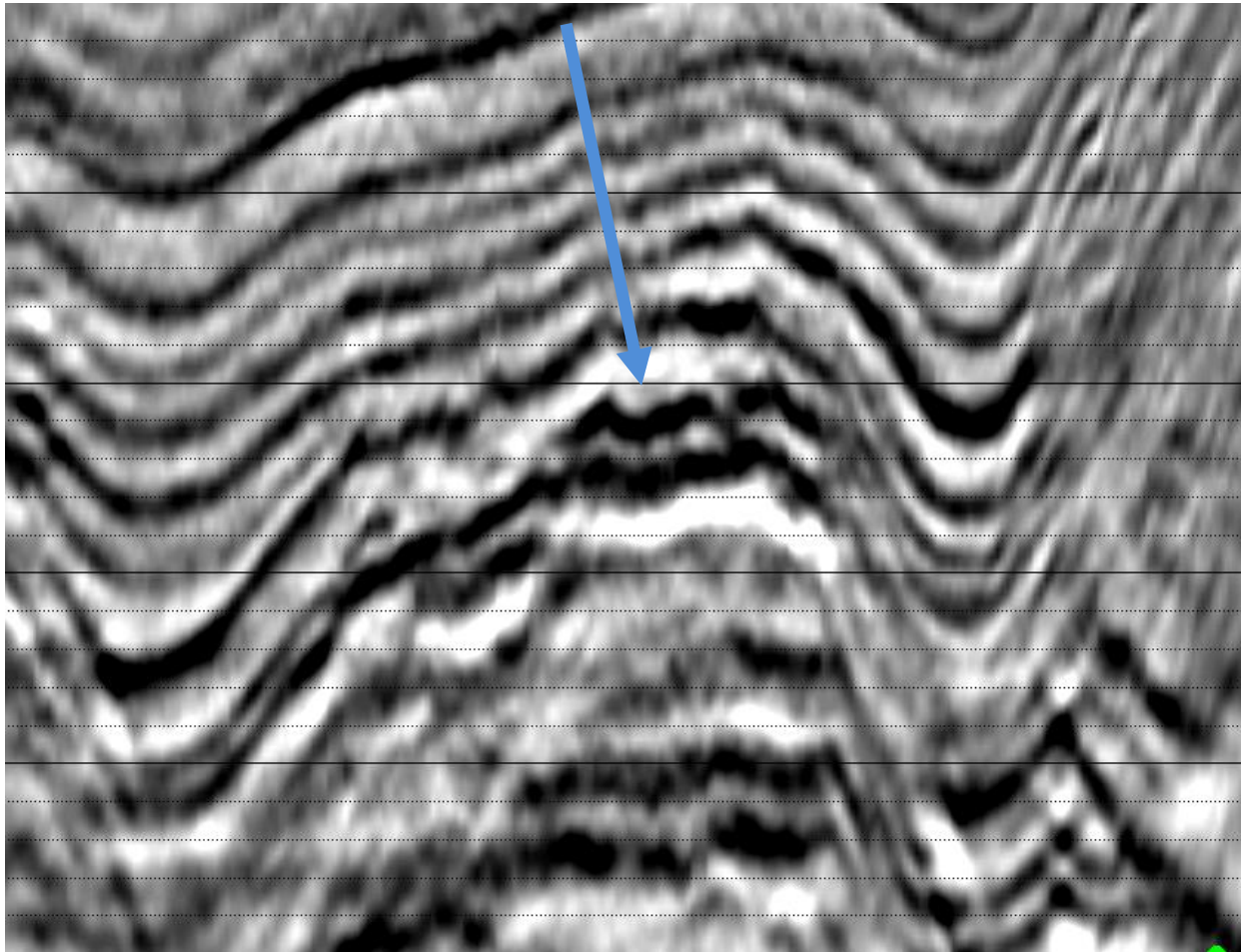
**NEW!!!**

# Decomposing the phase

for tuning effect elimination and HC contour highlight

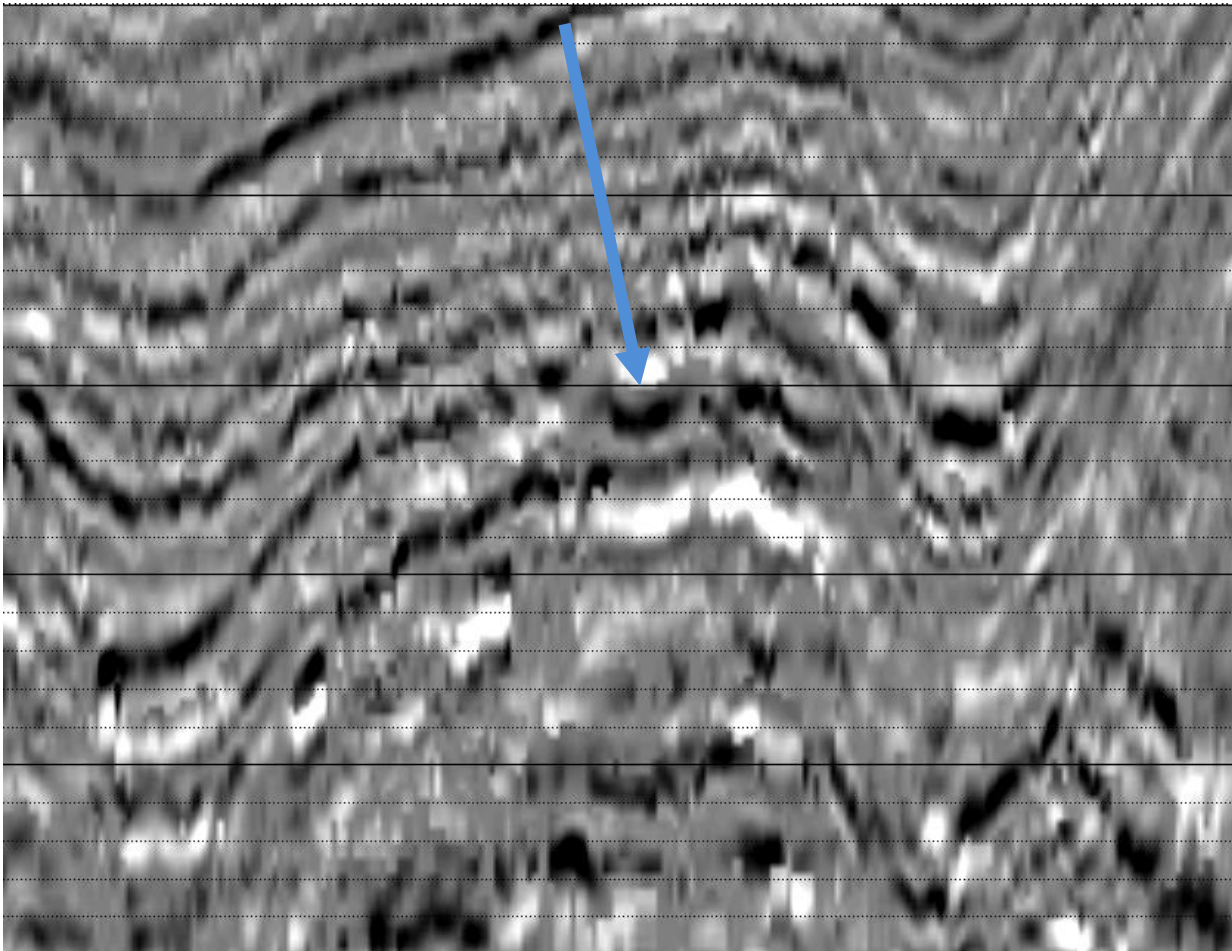
# Middle East Gas reservoir

Original seismic



# Middle East Gas reservoir

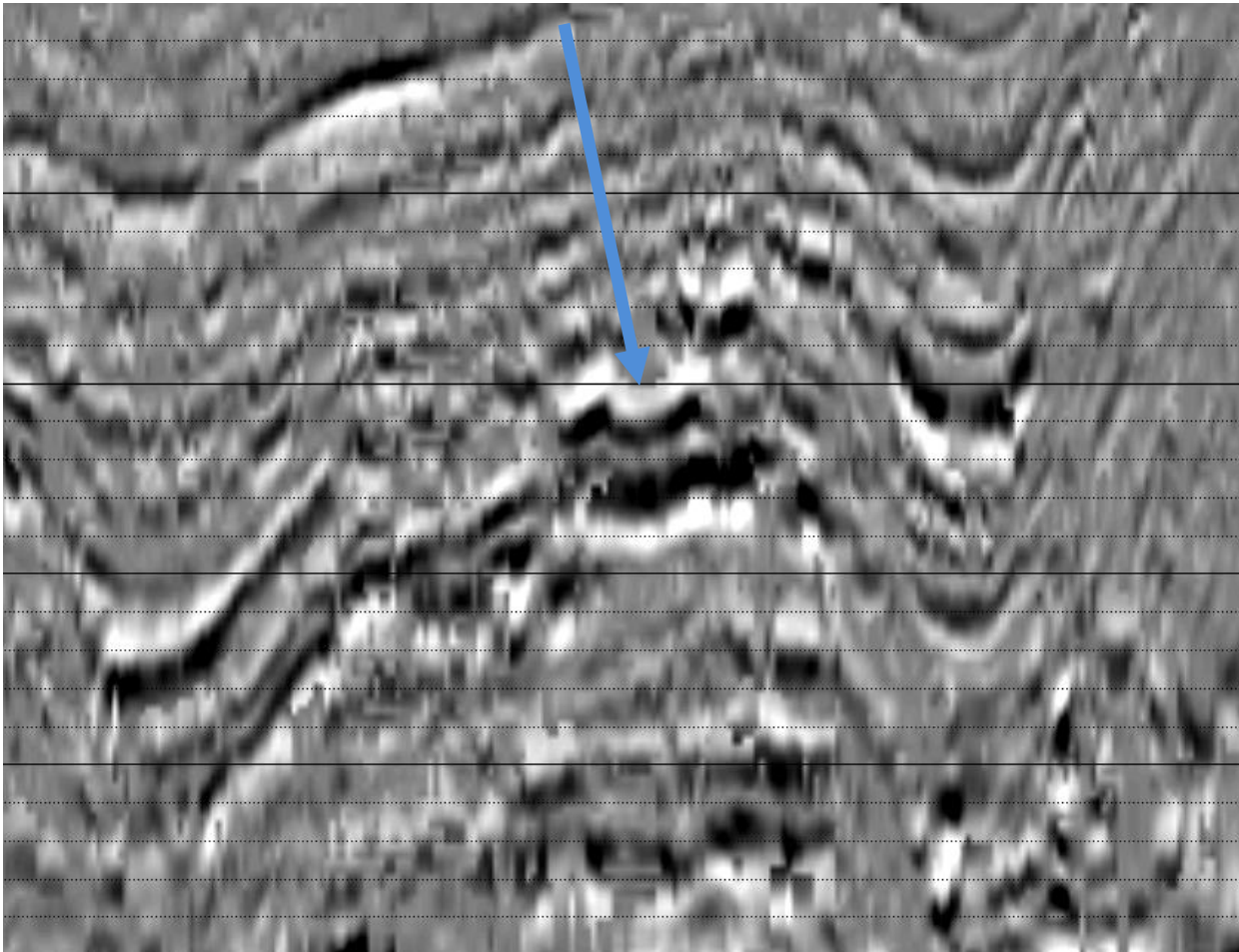
Seismic phase decomposed to 0



# Middle East Gas reservoir

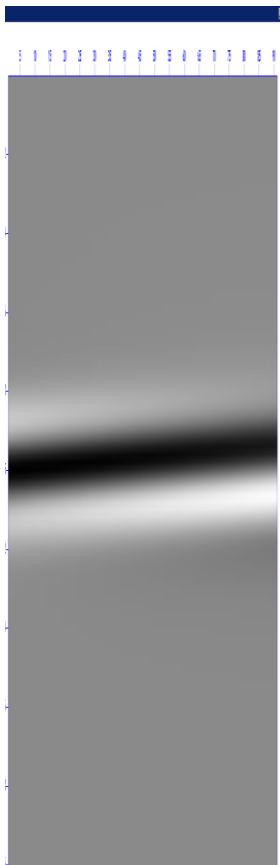
Seismic phase decomposed to 90

HC highlights

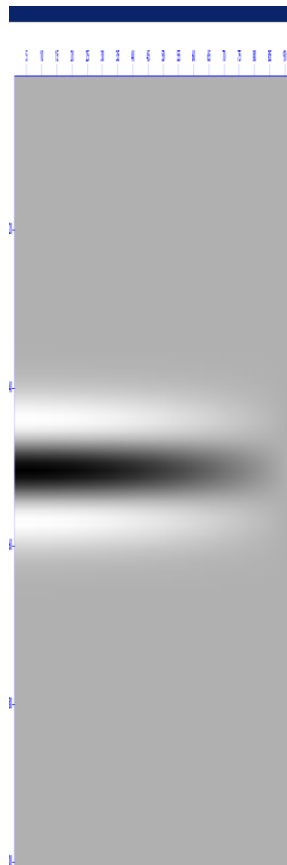


# Theoretical examples

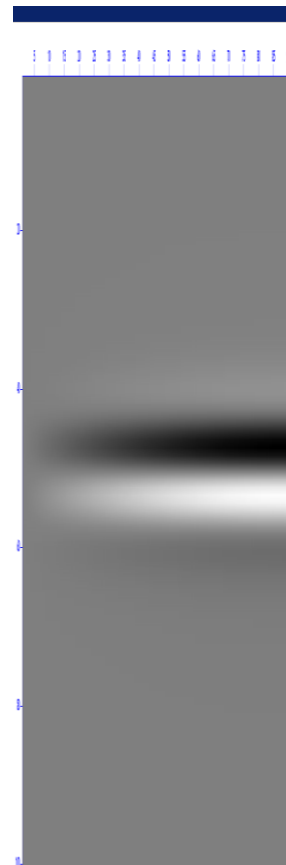
Synthetic gather with  
linear phase shift from  
0 to 90 degrees



Phase  
decomposition 0



Phase  
decomposition 90



Thin layers and HC effects are often accompanied by phase anomalies. It can be detected by decomposing the phase.

On this slide we show Synthetic gather with linear phase shift from 0 to 90 degrees, which is normally would be corrected by higher velocity or trim static correction.

Such effect could happen due to fluid effect and seismic velocity should be picked on the 0 phase decomposed gather.

Phase decomposition 90 gather emphasizes the fluid effect on the far offsets.

# Theoretical examples

## Wedge modeling



The Wedge model here illustrate tuning effect – bright amplitude in the moment of tuning.

The Wedge phase decomposition 0 and 90 allowe easily to separate thin ant thick layers.

## Wedge phase decomposition 0



## Wedge phase decomposition 90



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