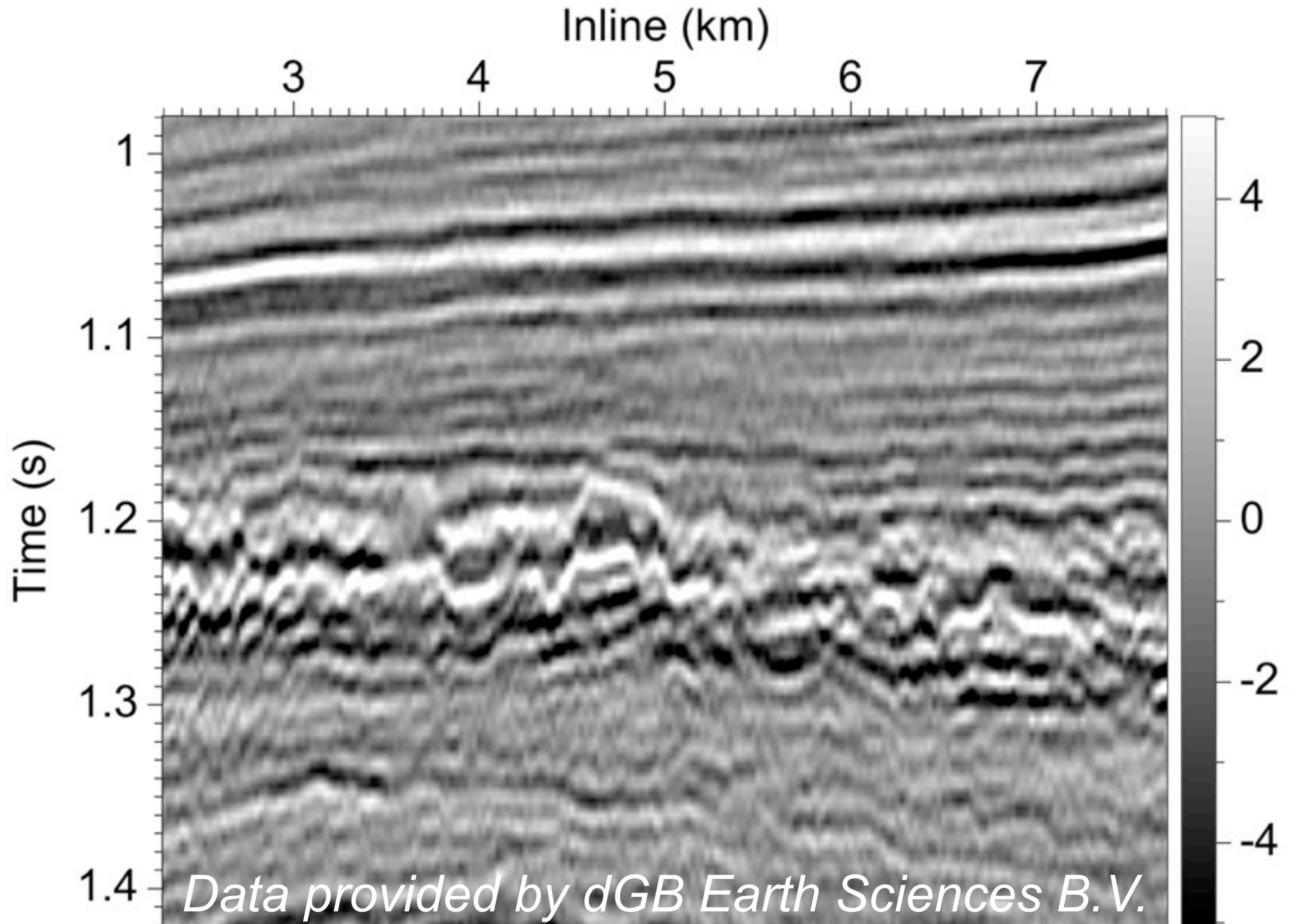


# Simple readable slides (Ken's rule of 1/20)

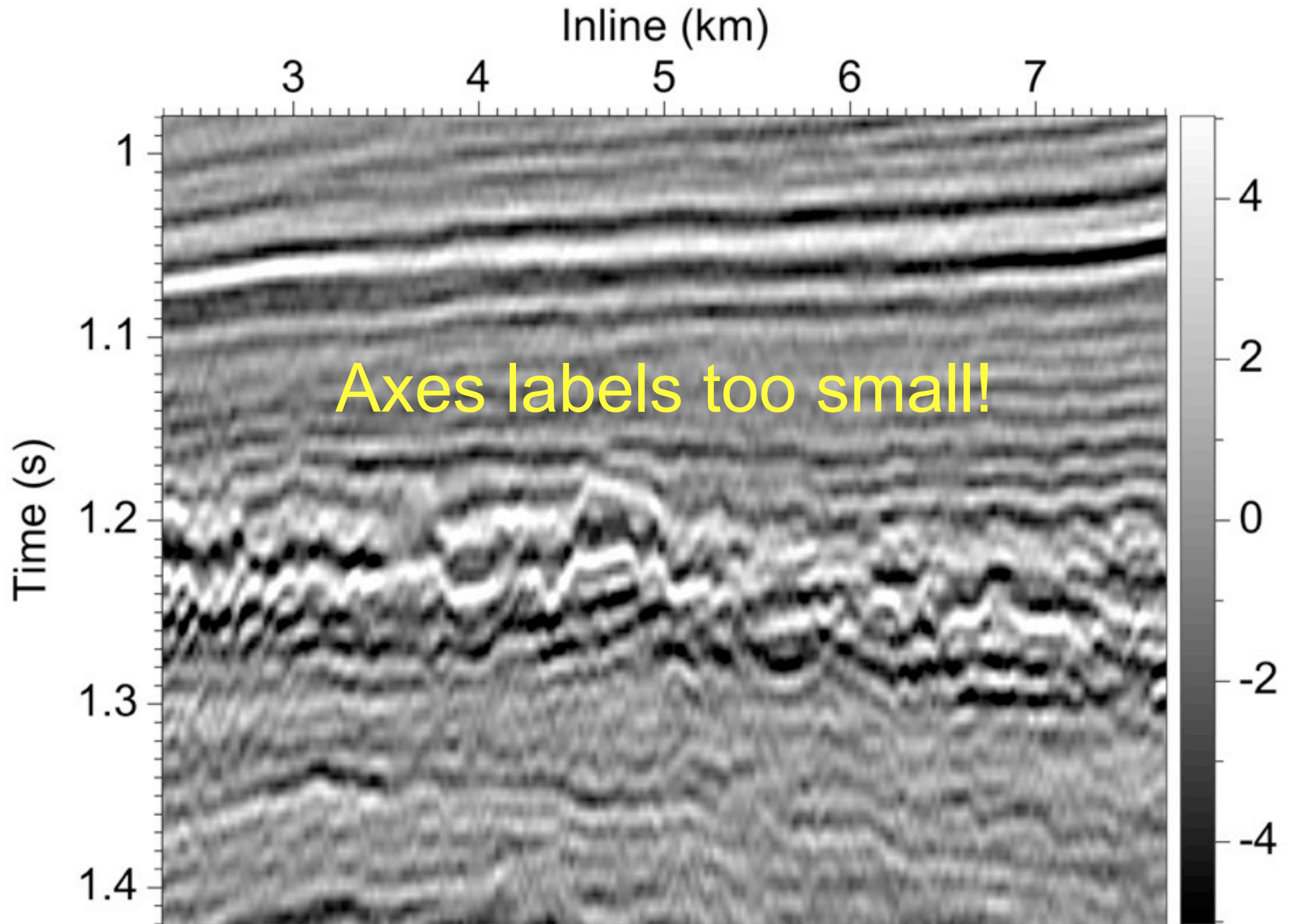


Dave Hale  
Center for Wave Phenomena  
Colorado School of Mines

# Seismic image



# Seismic image





This font is Ariel 40 pt  $\approx 1/20$  slide height

I 1/20

Inline (km)

3

4

5

6

7

1

1.1

1.2

1.3

1.4

Time (s)

4

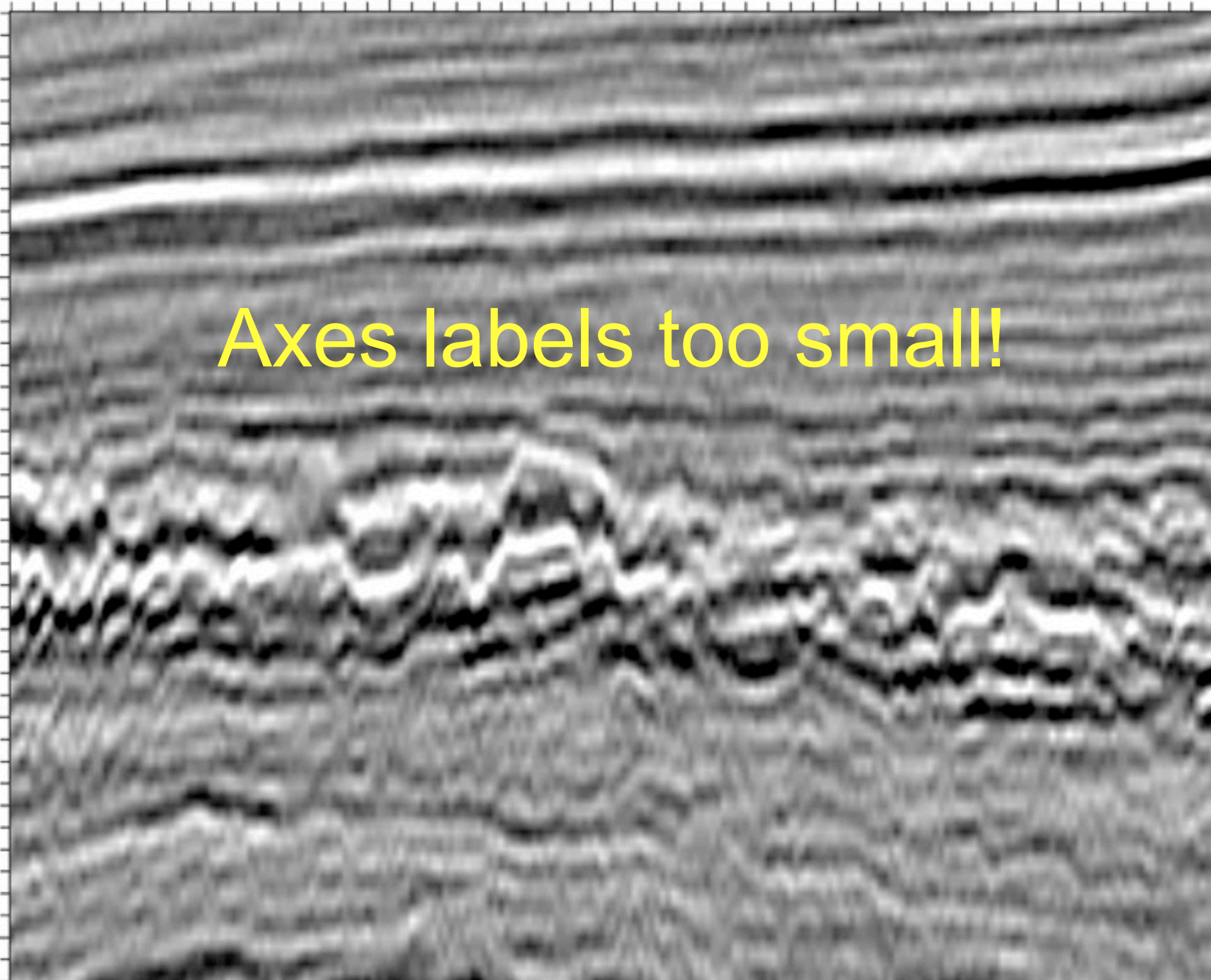
2

0

-2

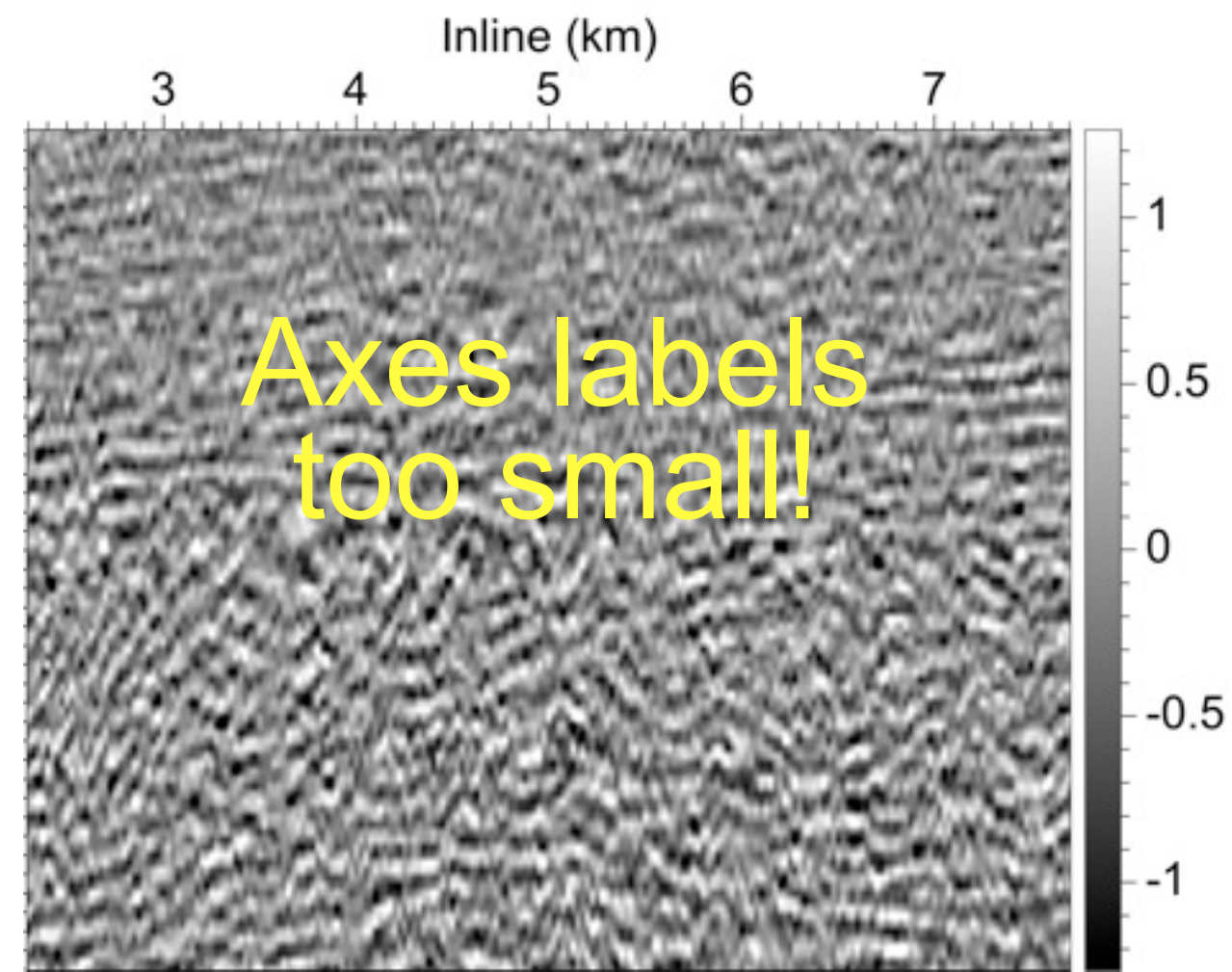
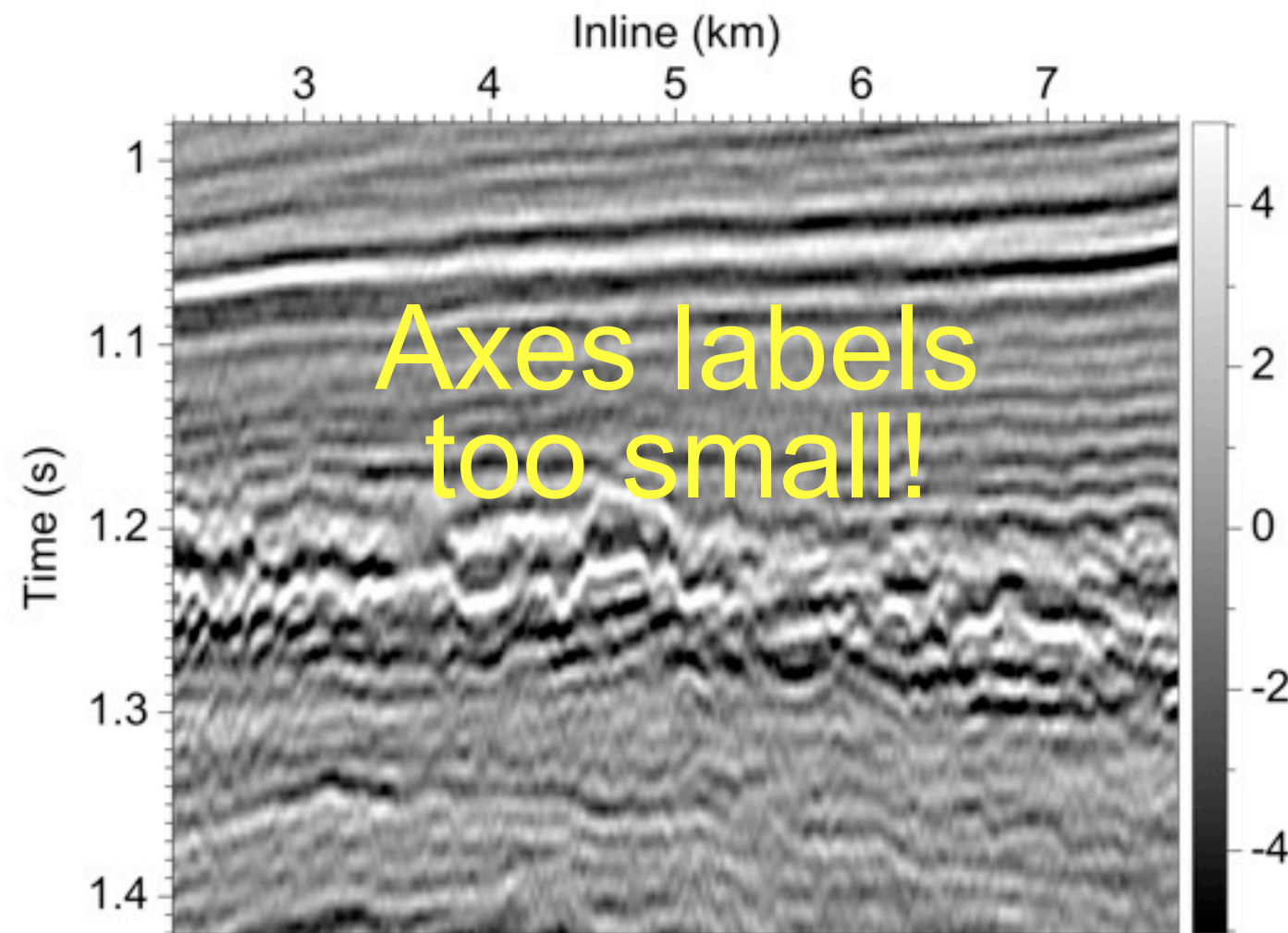
-4

Axes labels too small!



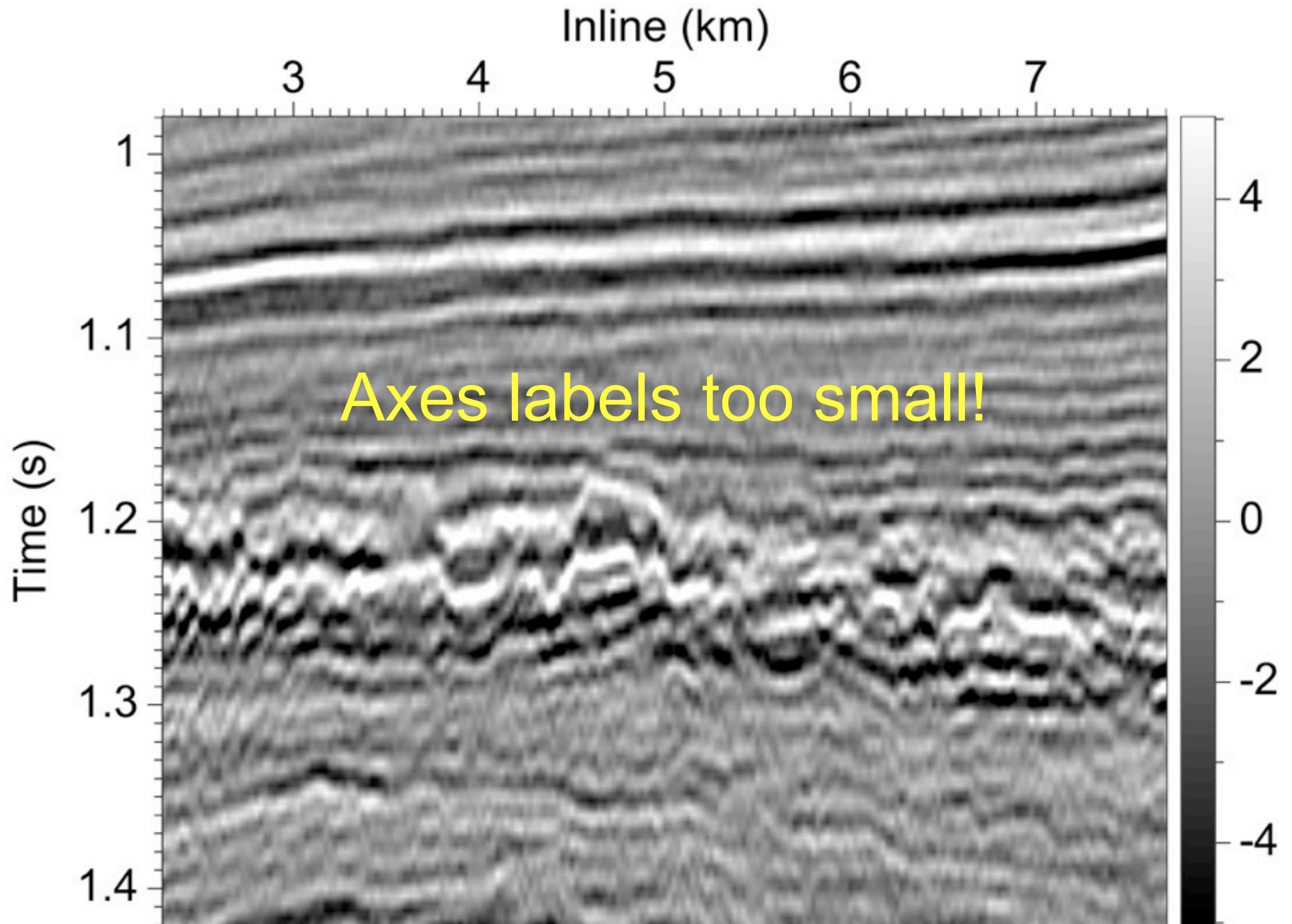
This font is Ariel 40 pt  $\approx 1/20$  slide height

1/20

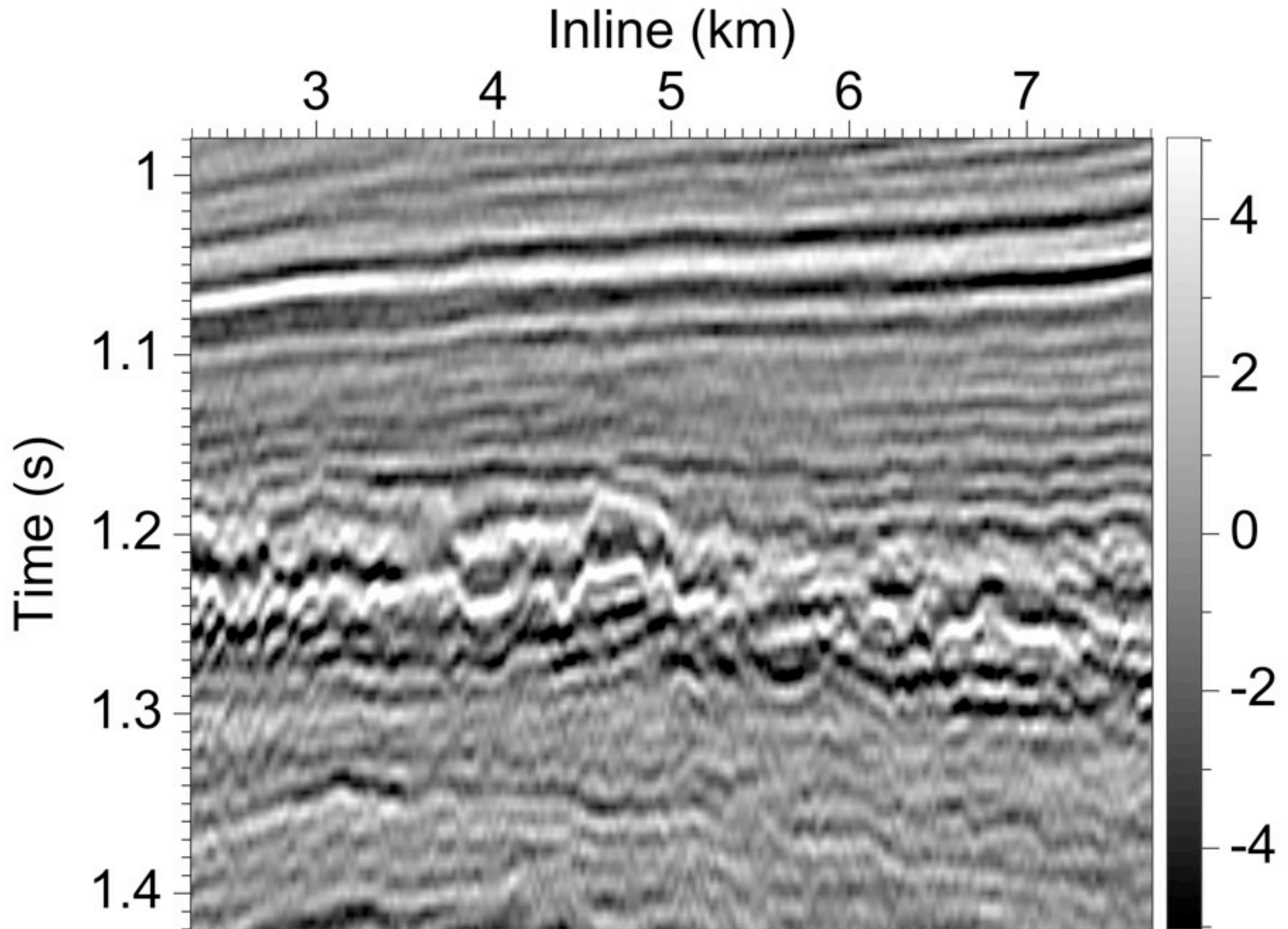




# Font size for print



# Font size for slide



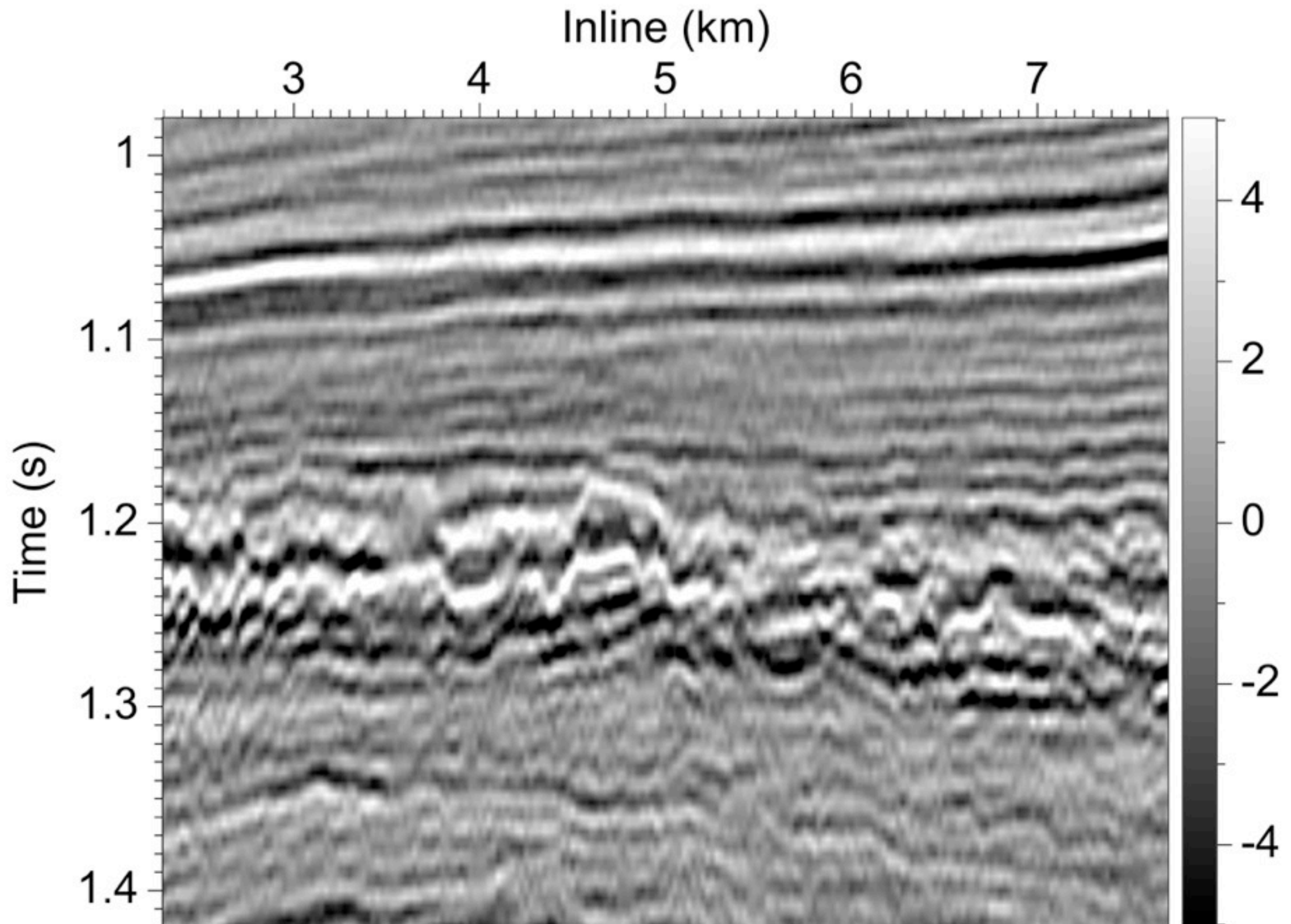
# Font size for slide

$w_g \equiv$  width of graphic (points)

$h_g \equiv$  height of graphic (points)



$$w_g = 240 \text{ pt}, \quad h_g = 171 \text{ pt}$$



# Font size for slide

$w_g \equiv$  width of graphic (points)

$h_g \equiv$  height of graphic (points)

$w_f \equiv$  fraction of slide width available

$h_f \equiv$  fraction of slide height available

$$w_f = 1.0, \quad h_f = 0.9$$



# Font size for slide

$w_g \equiv$  width of graphic (points)

$h_g \equiv$  height of graphic (points)

$w_f \equiv$  fraction of slide width available

$h_f \equiv$  fraction of slide height available

$w_a = 4 \times w_f$  (= width available)

$h_a = 3 \times h_f$  (= height available)

# Font size for slide

$w_g \equiv$  width of graphic (points)

$h_g \equiv$  height of graphic (points)

$w_f \equiv$  fraction of slide width available

$h_f \equiv$  fraction of slide height available

$w_a = 4 \times w_f$  (= width available)

$h_a = 3 \times h_f$  (= height available)

$h_s = \min[(h_g/w_g)/(h_a/w_a), 1]$

# Font size for slide

$w_g \equiv$  width of graphic (points)

$h_g \equiv$  height of graphic (points)

$w_f \equiv$  fraction of slide width available

$h_f \equiv$  fraction of slide height available

$w_a = 4 \times w_f$  (= width available)

$h_a = 3 \times h_f$  (= height available)

$h_s = \min[(h_g/w_g)/(h_a/w_a), 1]$

**font size** =  $((h_g/h_f)/h_s)/20$



# Mines JTK PlotFrame

**setFontSize**(float size)

Sets the font size (in points) for all panels in this frame.

**setFontSizeForPrint**(double fontSize, double plotWidth)

Sets font size to automatically adjust for a printed manuscript.

**setFontSizeForSlide**(double fracWidth, double fracHeight)

Sets font size automatically for a slide in presentations.

# Font size for slide

$w_g \equiv$  width of graphic (points)

$h_g \equiv$  height of graphic (points)

$w_f \equiv$  fraction of slide width available

$h_f \equiv$  fraction of slide height available

$w_a = 4 \times w_f$  (= width available)

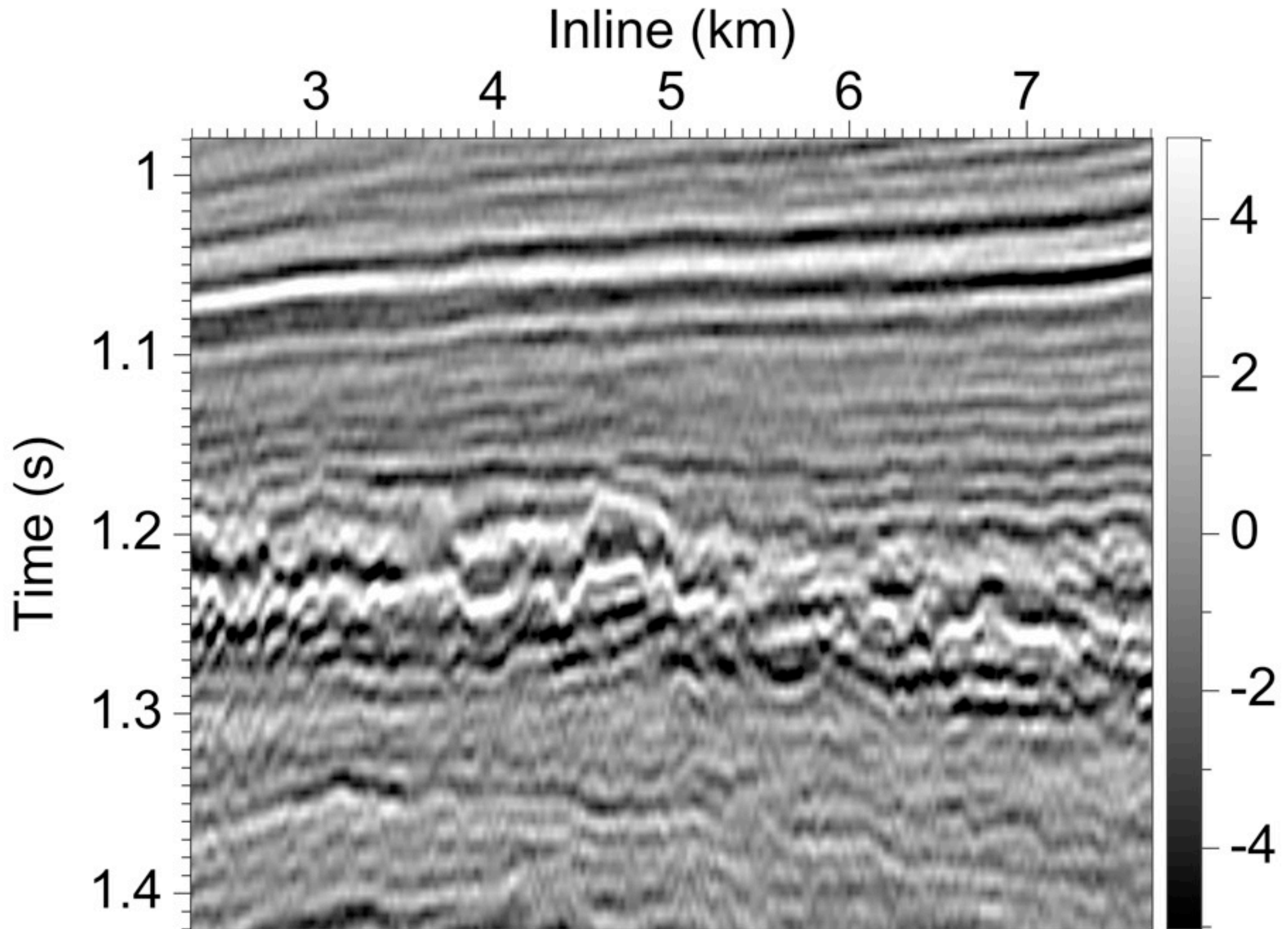
$h_a = 3 \times h_f$  (= height available)

$h_s = \min[(h_g/w_g)/(h_a/w_a), 1]$

font size =  $((h_g/h_f)/h_s)/20$

**9.5 points**

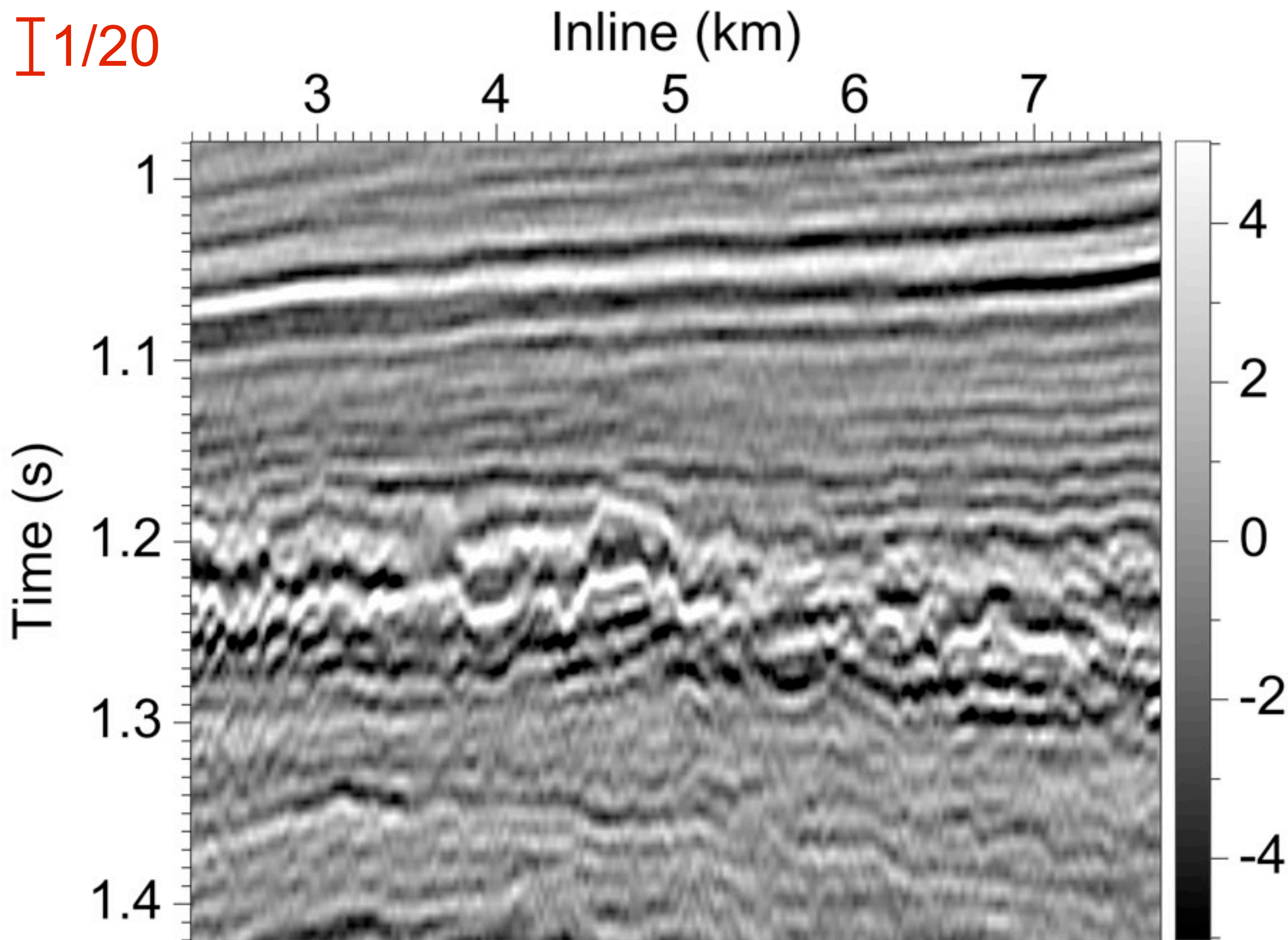
# Font size for slide





This font is Ariel 40 pt  $\approx 1/20$  slide height

I 1/20



# Font size for slide

$w_g \equiv$  width of graphic (points)

$h_g \equiv$  height of graphic (points)

$w_f \equiv$  fraction of slide width available

$h_f \equiv$  fraction of slide height available

$w_a = 4 \times w_f$  (= width available)

$h_a = 3 \times h_f$  (= height available)

$h_s = \min[(h_g/w_g)/(h_a/w_a), 1]$

**font size** =  $((h_g/h_f)/h_s)/20$

# Font size for slide

$w_g \equiv$  width of graphic (points)

$h_g \equiv$  height of graphic (points)

$w_f \equiv$  fraction of slide width available

$h_f \equiv$  fraction of slide height available

$w_a = 4 \times w_f$  (= width available)

$h_a = 3 \times h_f$  (= height available)

$h_s = \min[(h_g/w_g)/(h_a/w_a), 1]$

**font size** =  $((h_g/h_f)/h_s)/20$



# LaTeXiT (48 pt)

$w_g \equiv$  width of graphic (points)

$h_g \equiv$  height of graphic (points)

$w_f \equiv$  fraction of slide width available

$h_f \equiv$  fraction of slide height available

$w_a = 4 \times w_f$  (= width available)

$h_a = 3 \times h_f$  (= height available)

$h_s = \min[(h_g/w_g)/(h_a/w_a), 1]$

**font size** =  $((h_g/h_f)/h_s)/20$

# A short equation (48 pt)

$$q[\mathbf{i}] = \frac{\sum_j p[\mathbf{j}] s(\mathbf{i} - \mathbf{j})}{\sum_j s(\mathbf{i} - \mathbf{j})}$$

# A long equation (48 pt)

$$q[\mathbf{i}] = \frac{\sum_k \Lambda(p[\mathbf{i}] - p_k) \sum_j p[\mathbf{j}] r(p_k, p[\mathbf{j}]) s(\mathbf{i}, \mathbf{j})}{\sum_k \Lambda(p[\mathbf{i}] - p_k) \sum_j r(p_k, p[\mathbf{j}]) s(\mathbf{i}, \mathbf{j})}$$

A short equation (96 pt)

$$q[\mathbf{i}] = \frac{\sum_j p[\mathbf{j}] s(\mathbf{i} - \mathbf{j})}{\sum_j s(\mathbf{i} - \mathbf{j})}$$



# A long equation (48 pt)

$$q[\mathbf{i}] = \frac{\sum_k \Lambda(p[\mathbf{i}] - p_k) \sum_j p[\mathbf{j}] r(p_k, p[\mathbf{j}]) s(\mathbf{i}, \mathbf{j})}{\sum_k \Lambda(p[\mathbf{i}] - p_k) \sum_j r(p_k, p[\mathbf{j}]) s(\mathbf{i}, \mathbf{j})}$$

# Summary

★ be consistent

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- ★ be consistent
- ★ follow Ken's rule of  $1/20$

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- ★ be consistent
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- ★ do not use print font size

# Summary

- ★ be consistent
- ★ follow Ken's rule of  $1/20$
- ★ do not use print font size
- ★ do compute slide font size



# Summary

- ★ be consistent
- ★ follow Ken's rule of 1/20
- ★ do not use print font size
- ★ do compute slide font size
- ★ change one thing per slide

# Summary

- ★ be consistent
- ★ follow Ken's rule of 1/20
- ★ do not use print font size
- ★ do compute slide font size
- ★ change one thing per slide
- ★ avoid lots of slides like this one