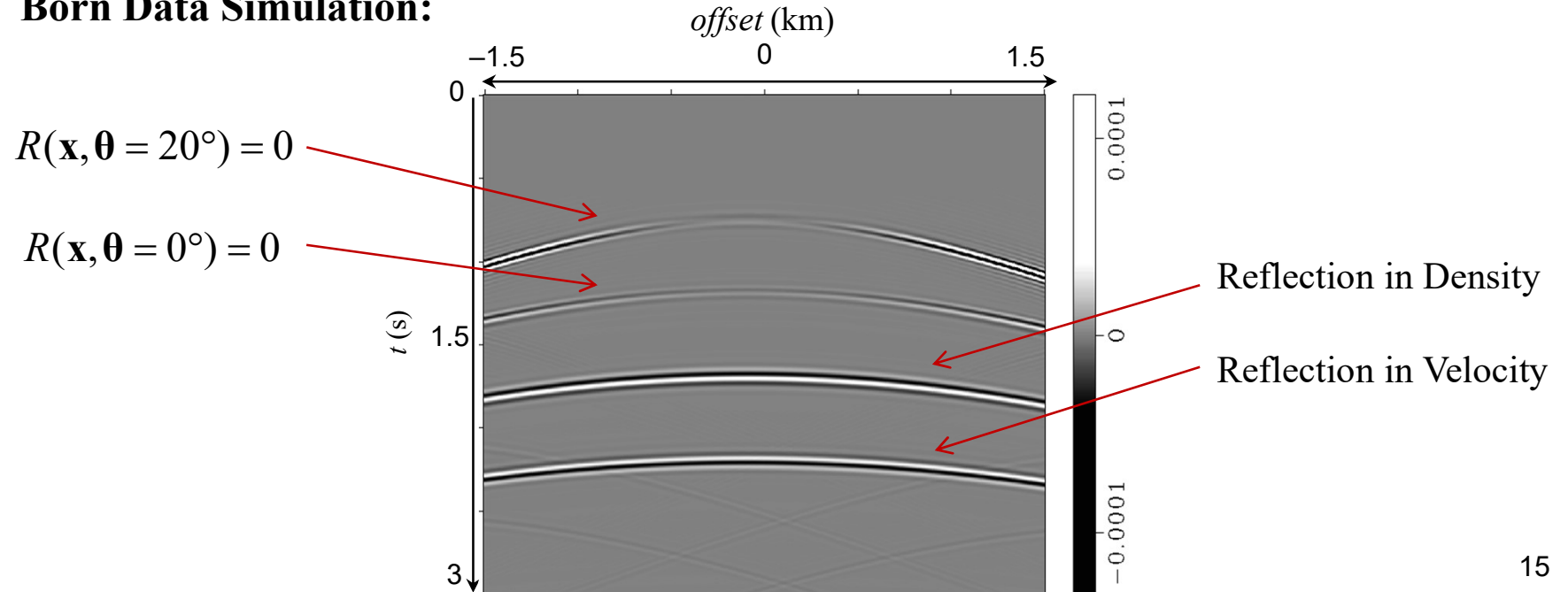


Example #1

- Layered Variable Density Media:

Layer #	Depth (km)	Velocity (km/s)	Density (gr/cm ³)
1	0.750	2.000	2.300
2	1.250	2.300	1.963
3	1.750	1.963	2.300
4	2.250	1.963	2.000
5	3.000	2.200	2.000

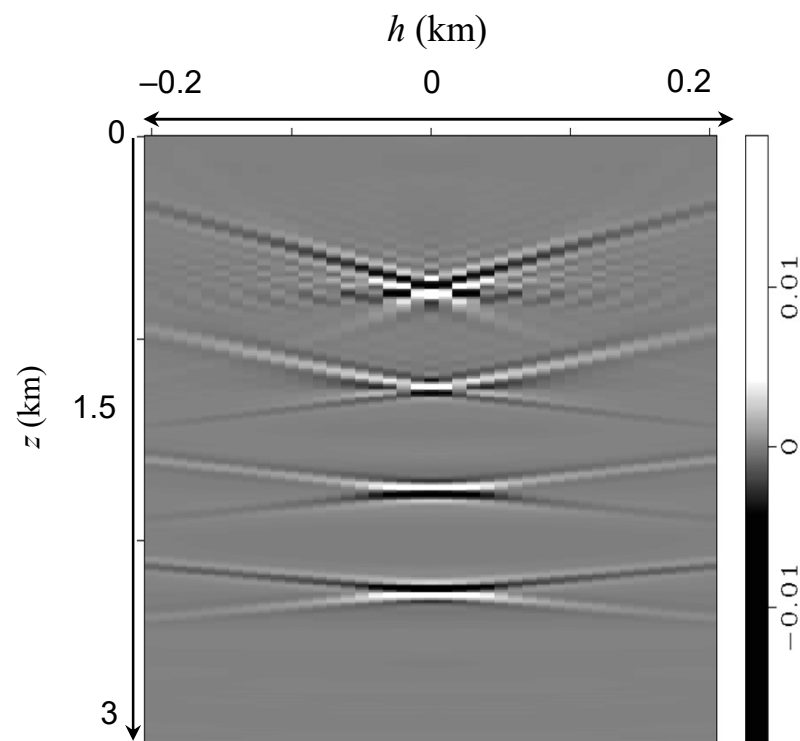
- Born Data Simulation:



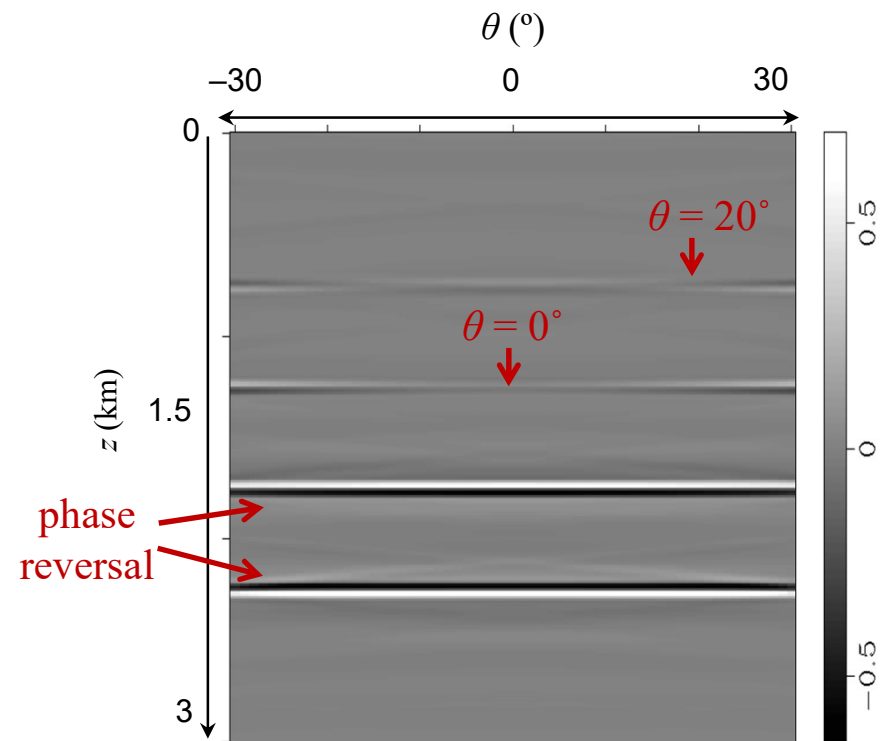
Example #1

- Approximate Inverse:

subsurface offset gather



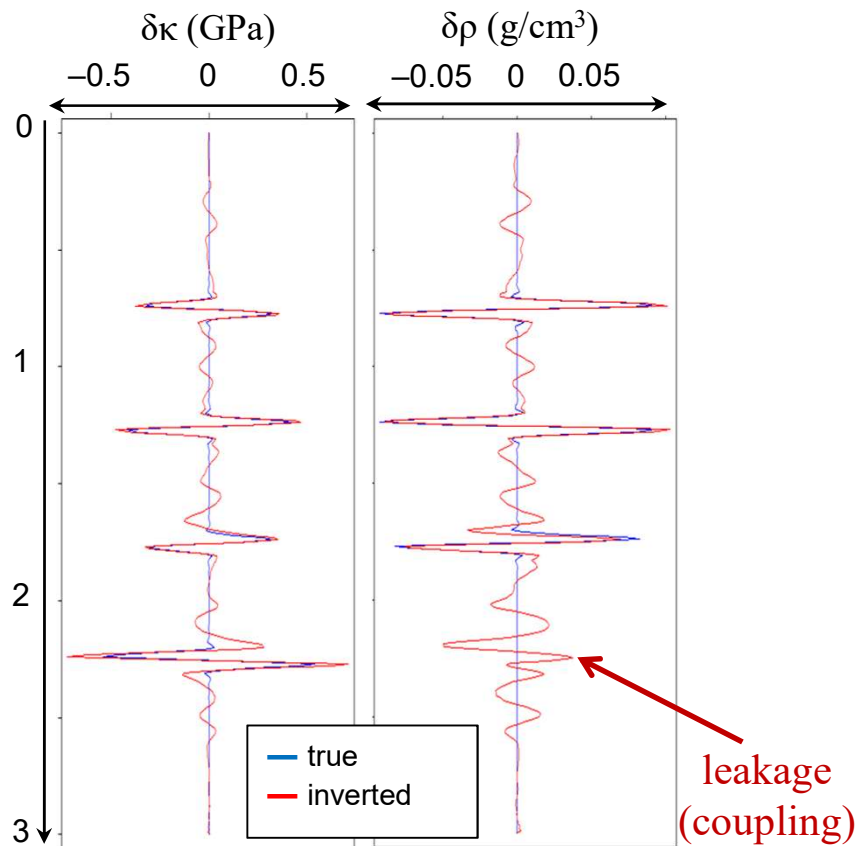
scattering-angle gather



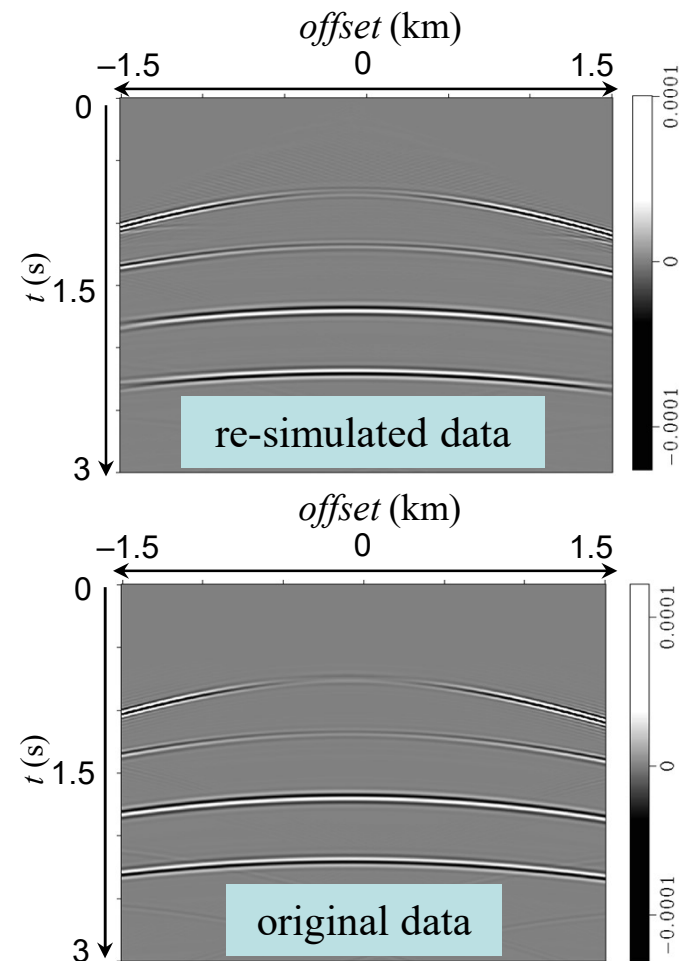
Example #1

- AVA Inversion:

model perturbations

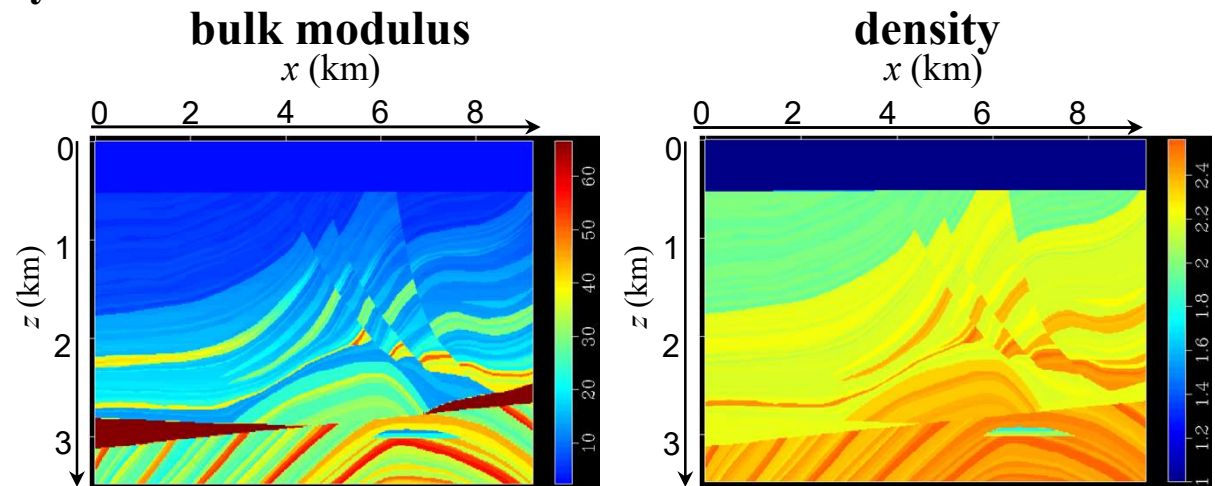


Born data re-simulation



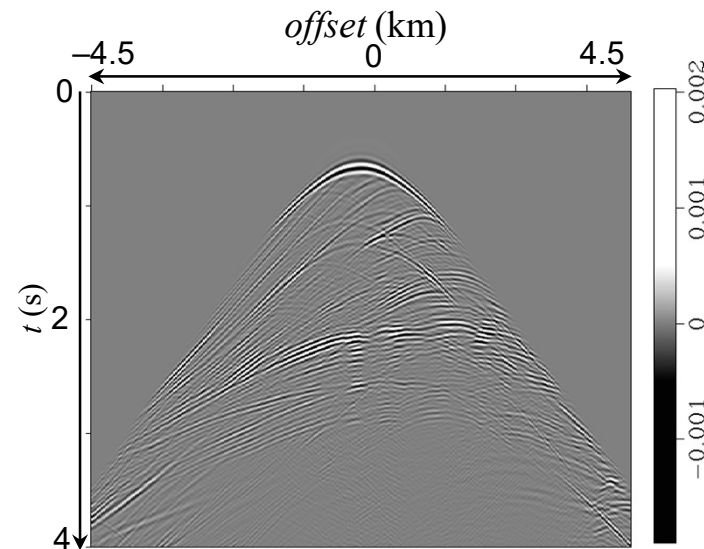
Example #2

- Marmousi Variable Density Model:**



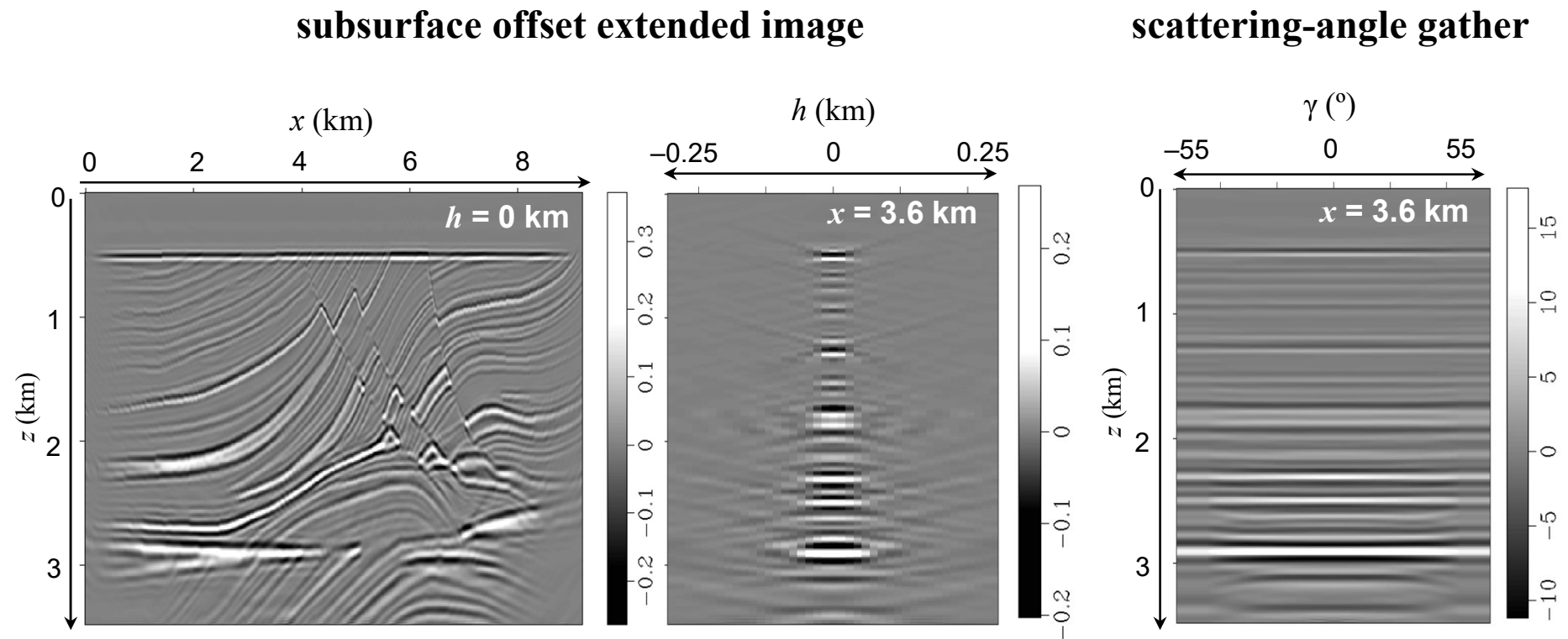
- Born data simulation:**

Shot gather at $x = 4.56\text{km}$:



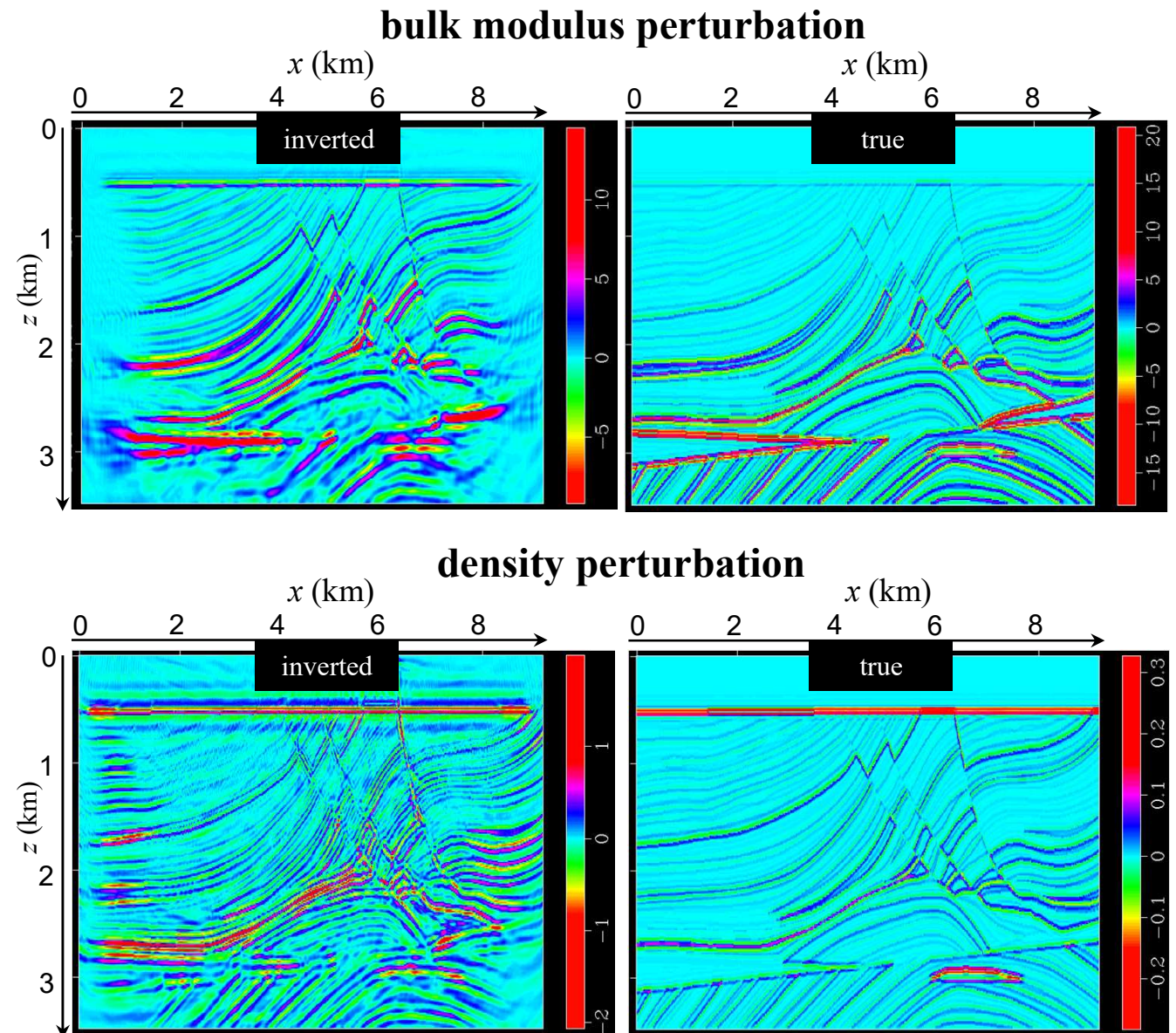
Example #2

- Approximate Inverse:



Example #2

- AVA Inversion:



Example #2

- AVA Inversion:

Born data re-simulation

Shot gather at $x = 4.56\text{km}$:

