

Inversion for the given model

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Inversion parameters I

- Inversion Code: Siripunvaraporn (2005)
 - Finite difference method
 - Input data: Complex value of 4-components Impedance
- Data for Inversion
 - No. of Rx: 59 sites
 - No. of periods: 6 (0.56 s ~ 10,000 s)
 - No. of data: 59 sites × 6 periods × 8 components = 2,832
- Initial model: 100 ohm-m half-space

Modeling and Inversion meshes

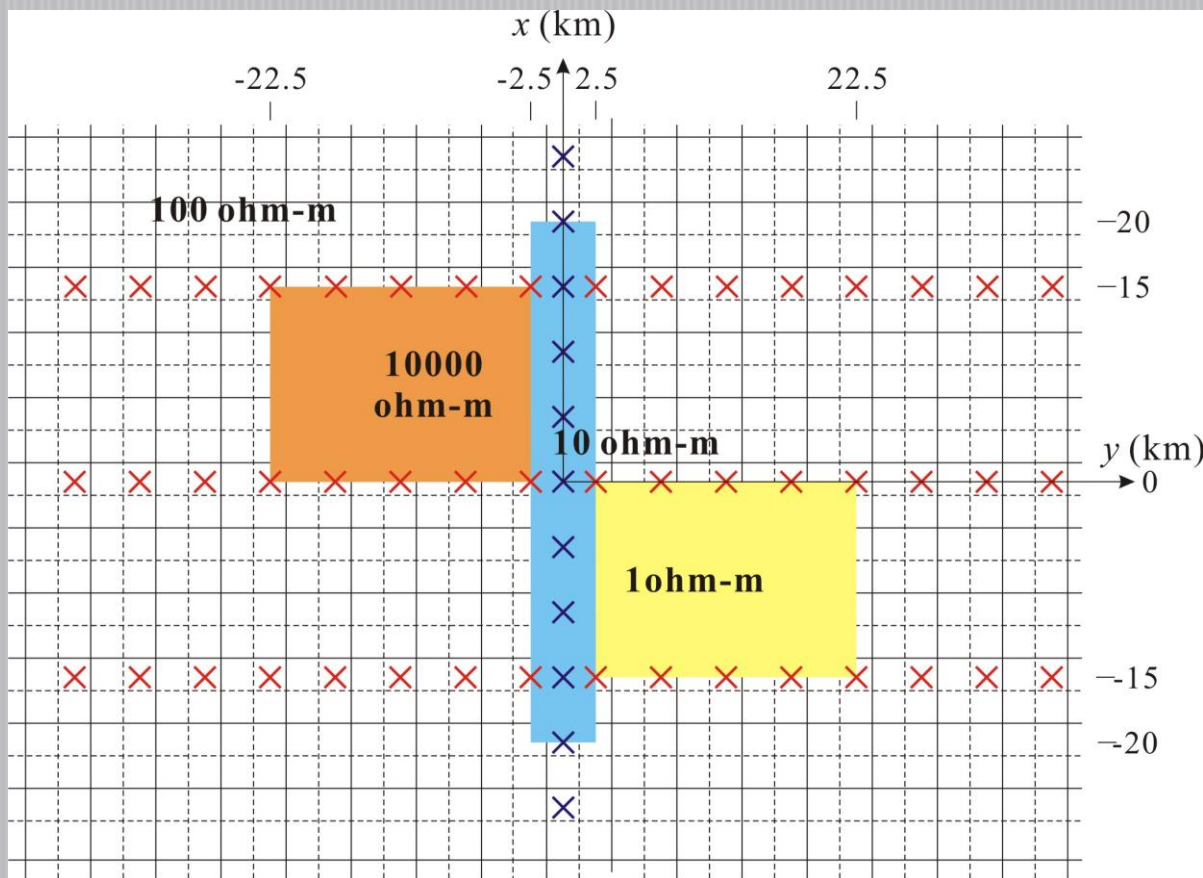
- Modeling = Inversion

- 35×47×20

- The smallest mesh size

- horizontal: 2.5 km

- vertical: 0.5 km

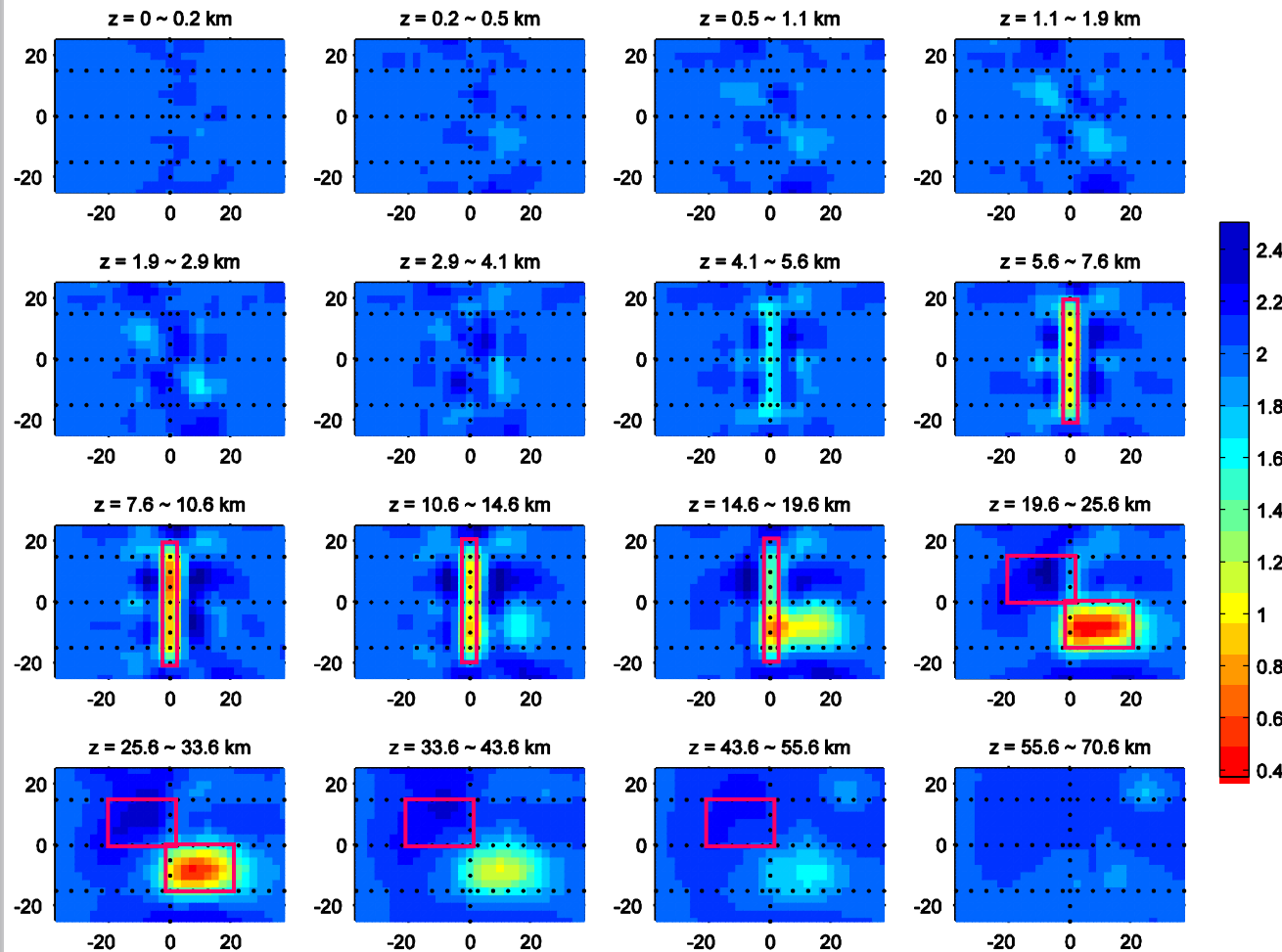


Inversion parameters II

- Number of iterations: 5
- Computation time
 - 8 Hours
 - PC with Intel CoreDuo2 processor (2.66 GHz)
- RMS & Lagrangian Multiplier

iter	0	1	2	3	4	5
RMS	2.1396	0.35	0.225	0.178	0.146	0.173
LM		3.16e-1	3.16e-2	3.16e-2	1.e-2	3.16e-3

Reconstructed images

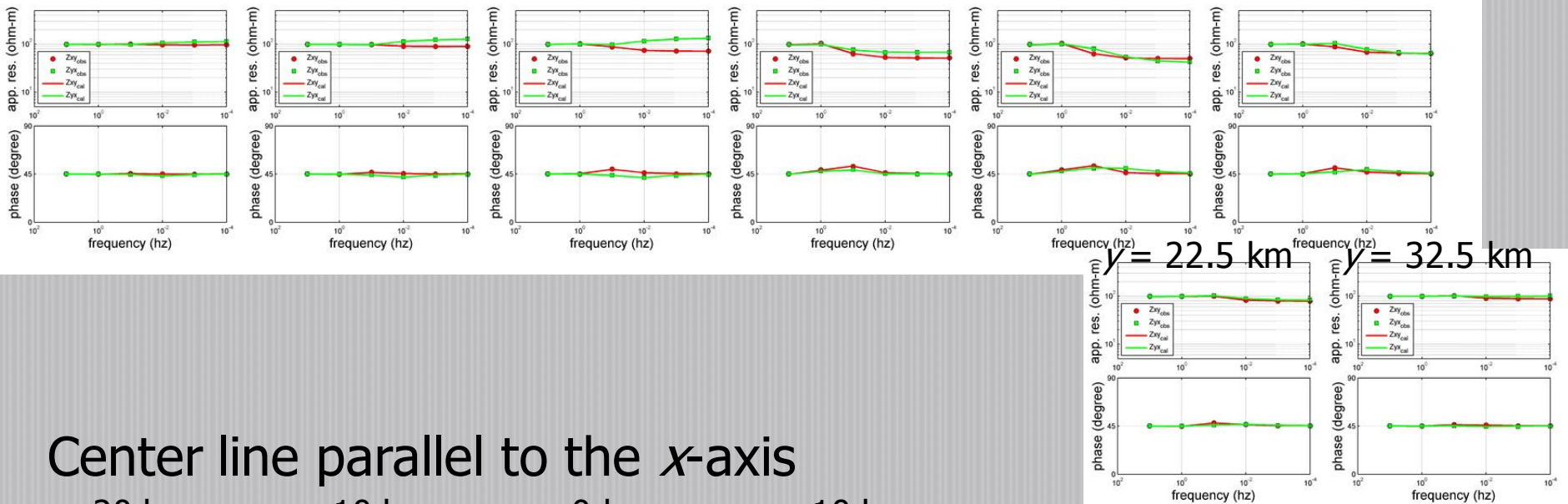


- *rms* misfit
- Initial: 2.1396
- Final: 0.173

Data fits

Center line parallel to the y -axis

$y = -32.5$ km $y = -22.5$ km $y = -12.5$ km $y = -2.5$ km $y = 2.5$ km $y = 12.5$ km



Center line parallel to the x -axis

$x = -20$ km $x = -10$ km $x = 0$ km $x = 10$ km $x = 20$ km

