

GeoRZA

Seemingly concerned neighbors team:

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Mobile app details

- **User input**

- peak frequency
- depth to top of layer and thickness
- max offset

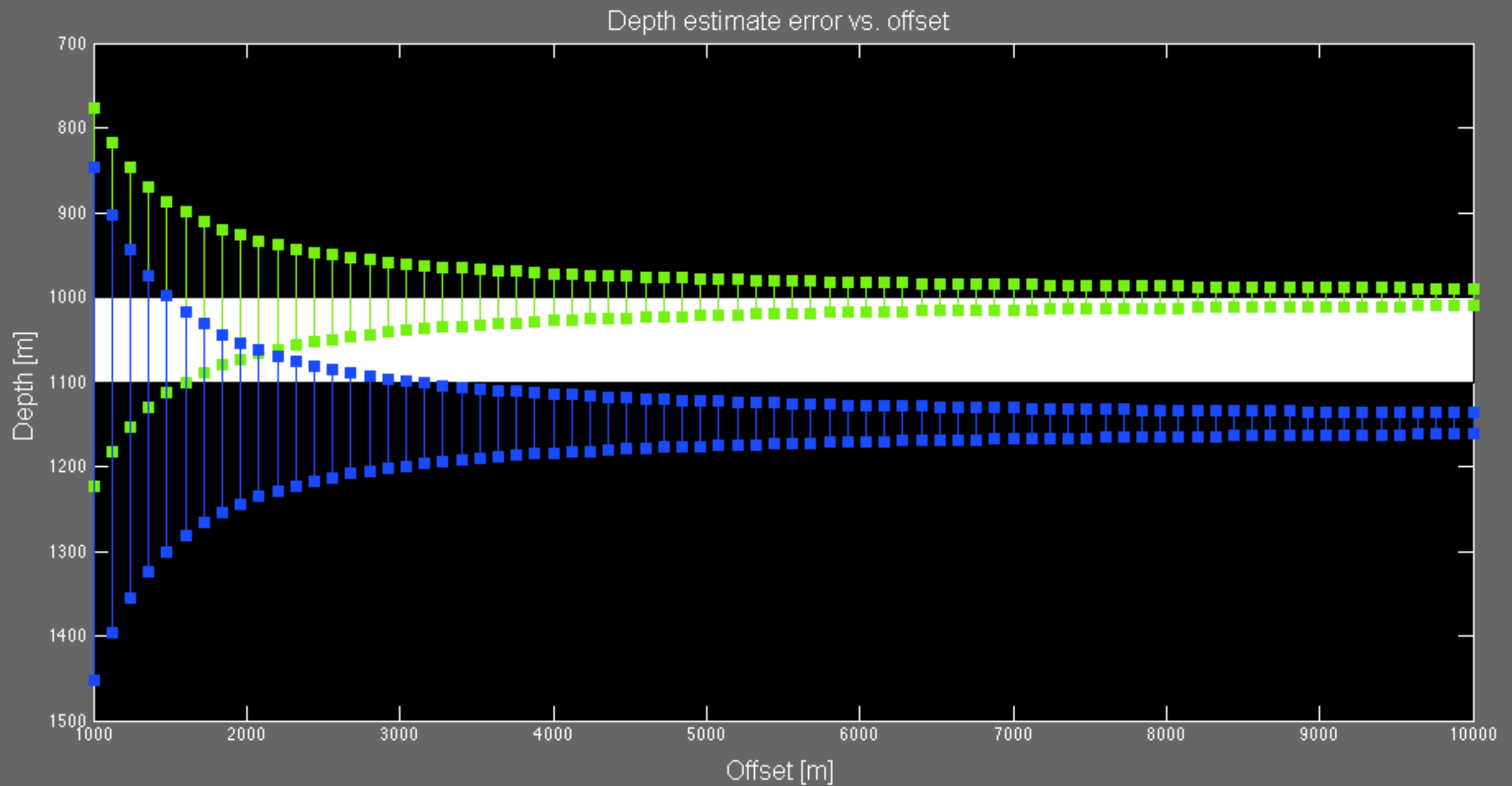
- **Output**

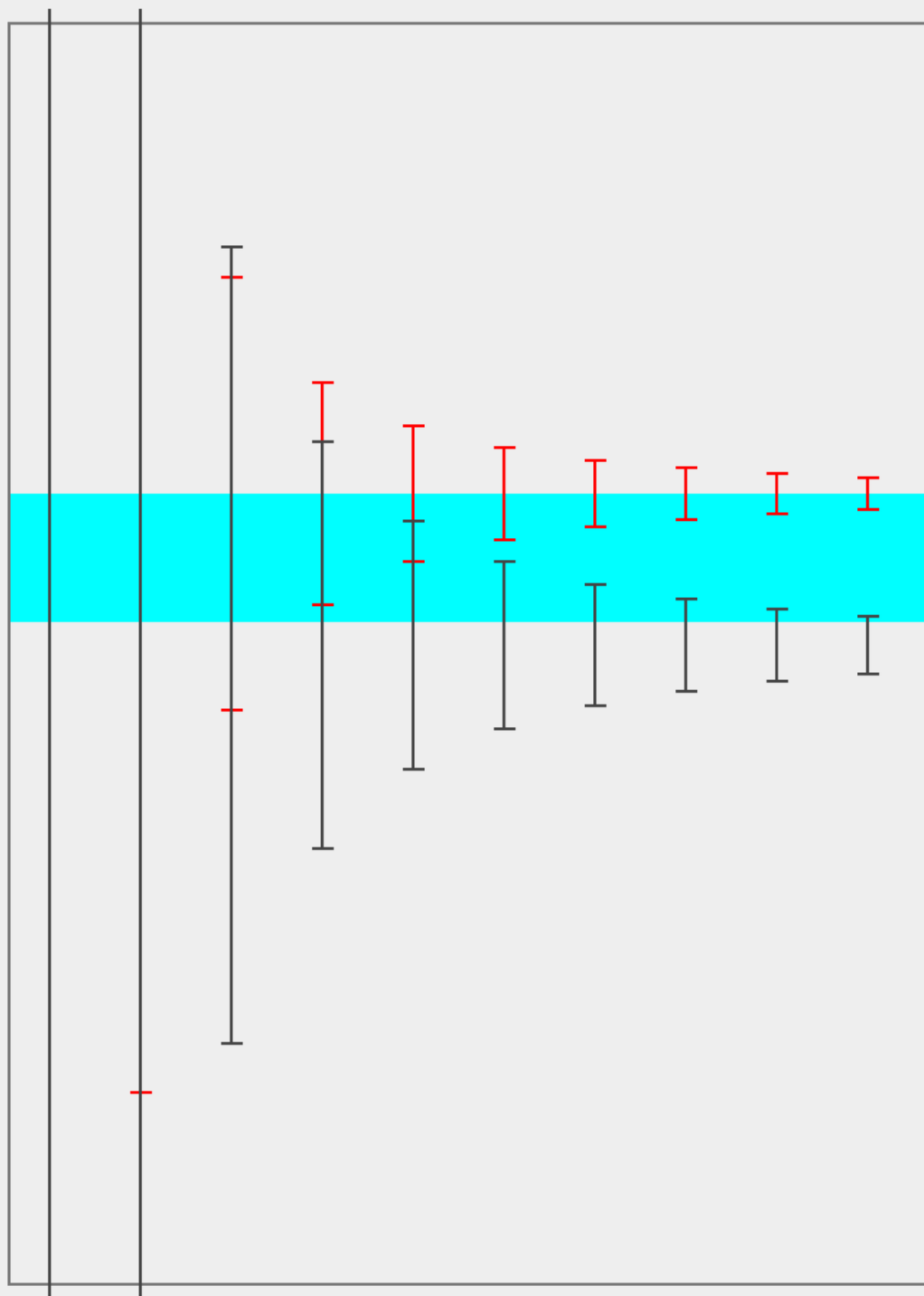
- bounds on top and bottom of layer displayed on schematic image

- **Assumptions**

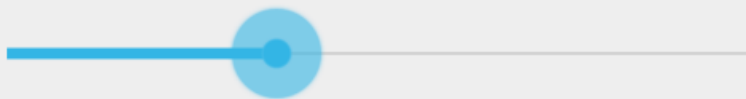
- no ray bending, attenuation, multiples
- 1D boxcar wavelet
- constant velocity
- Android OS

Concept





Depth



Thickness

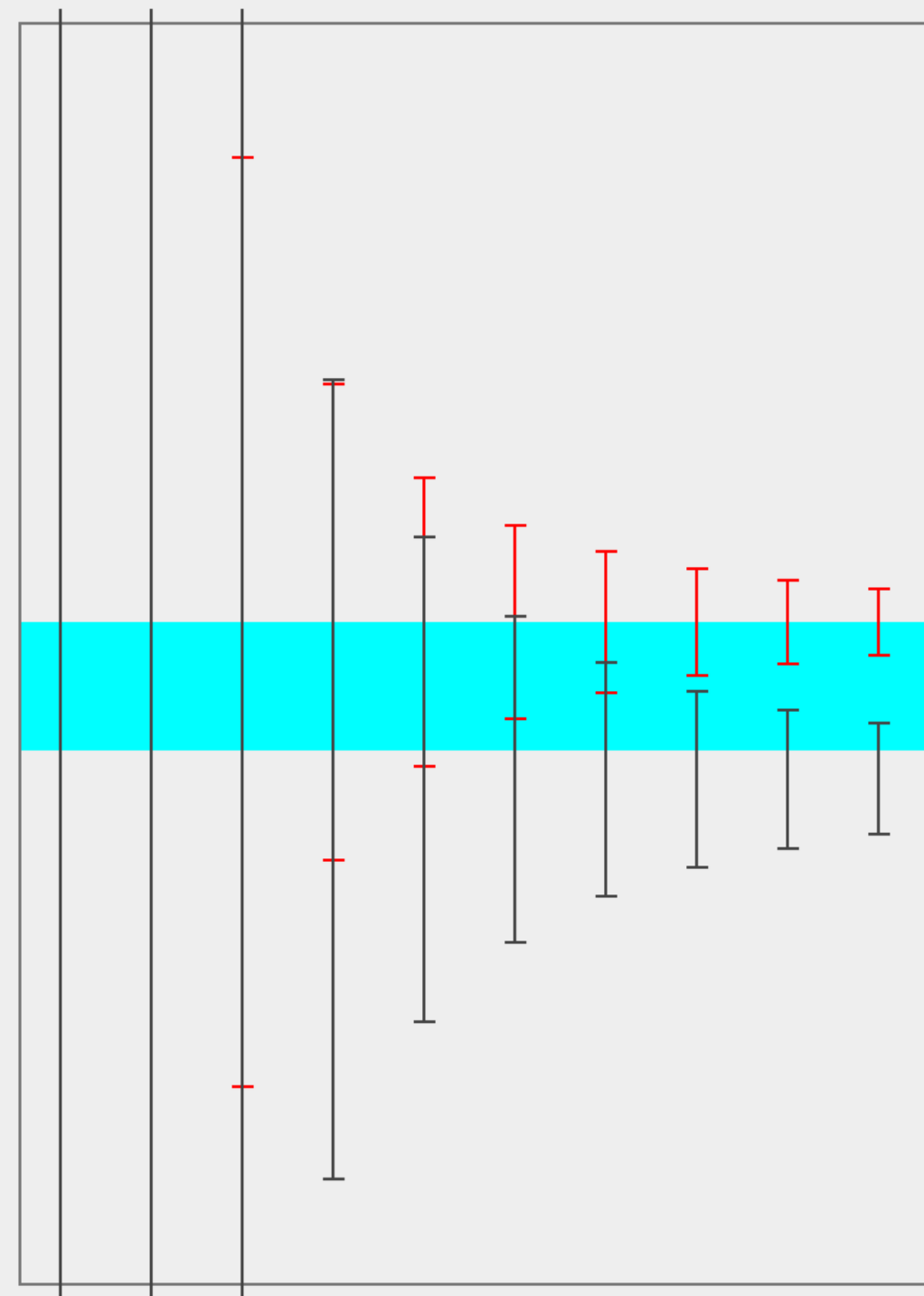
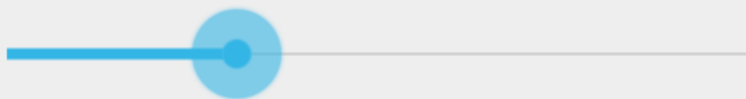


80

Peak Freq



Max Offset



Depth



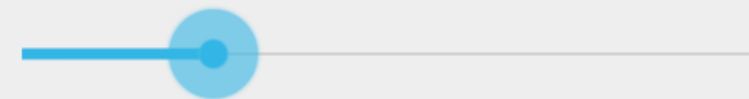
Thickness

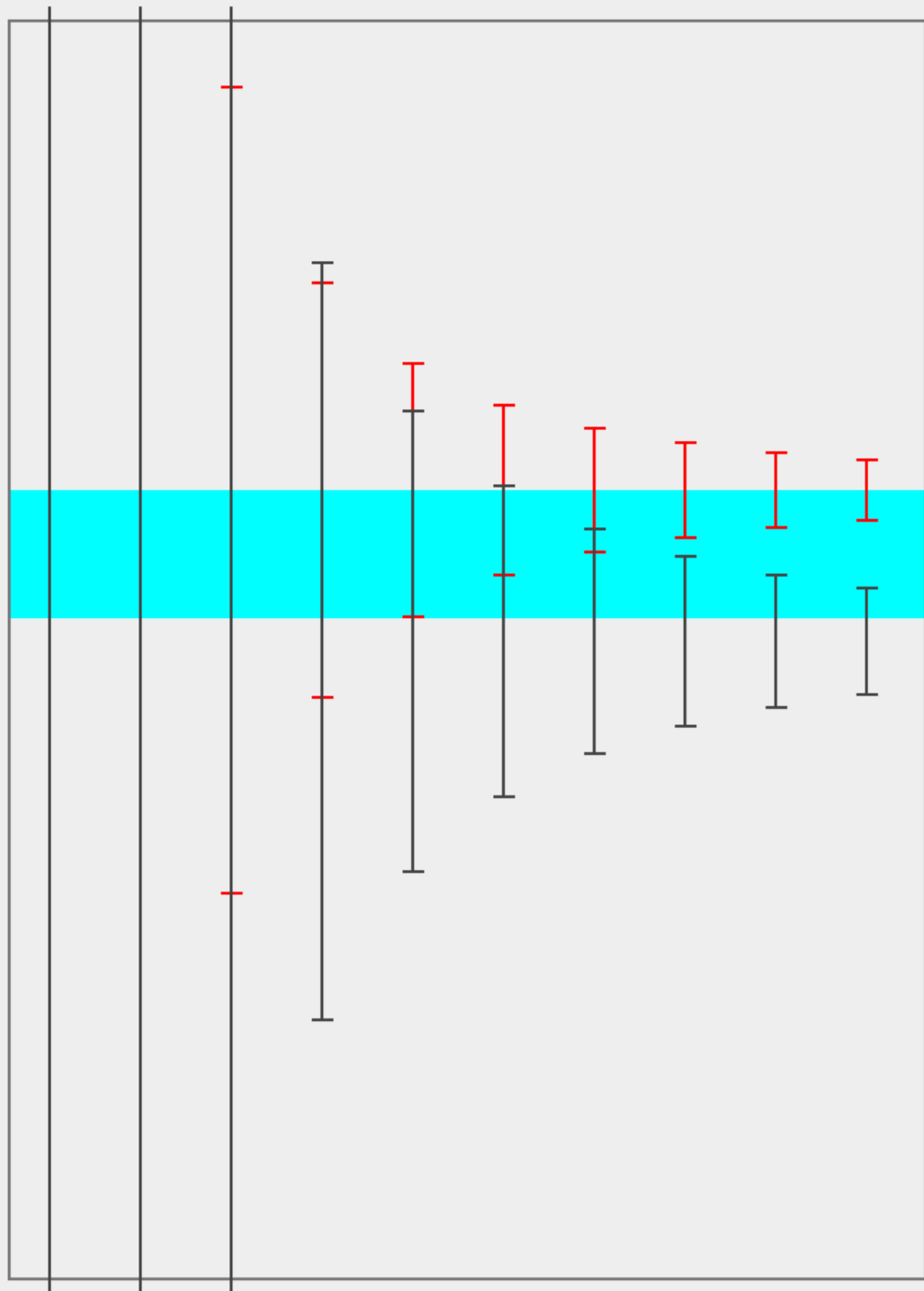


Peak Freq

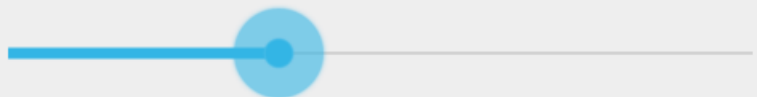


Max Offset





Depth



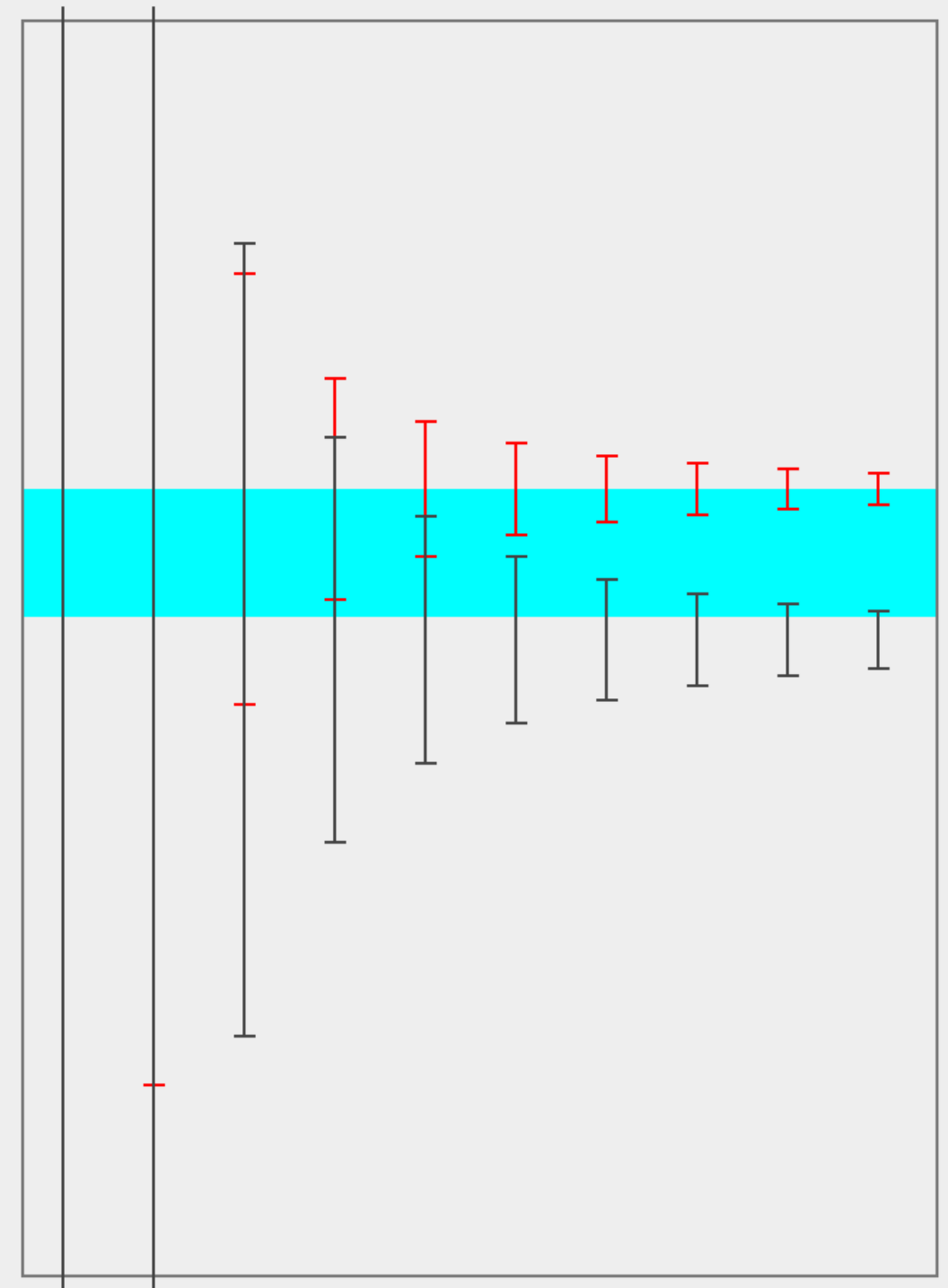
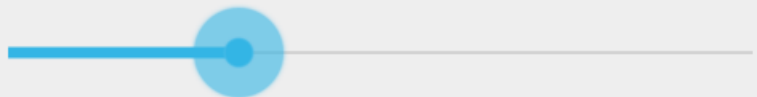
Thickness



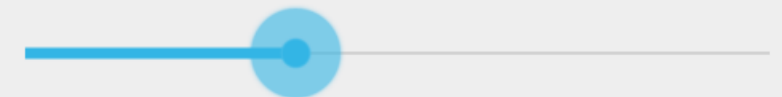
Peak Freq



Max Offset



Depth



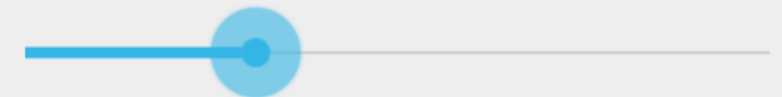
Thickness



Peak Freq



Max Offset



Future work

- **Pretty stuff**

- Scale bars
- User supplied velocity
- Highlights areas where assumptions are violated

- **Fancy stuff**

- Snell's law
- Multiple (dipping?) layers
- 2D wavelet
- Spatially varying velocity