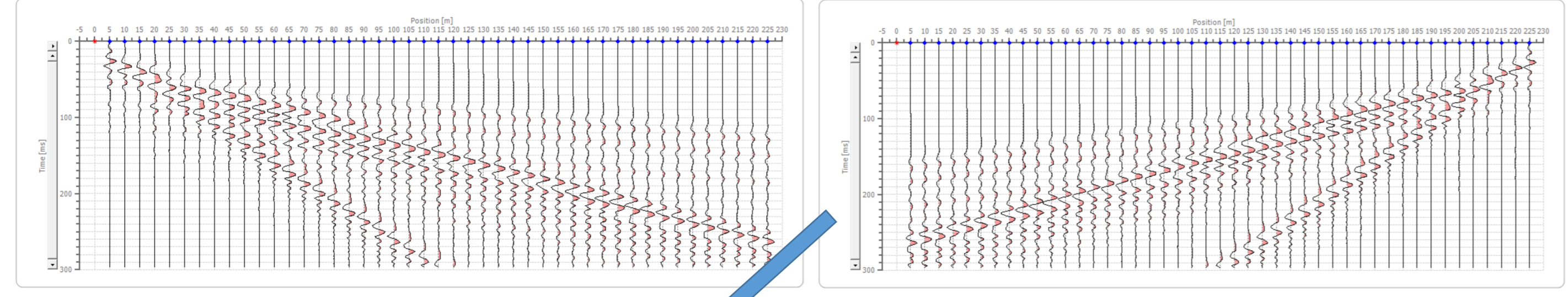
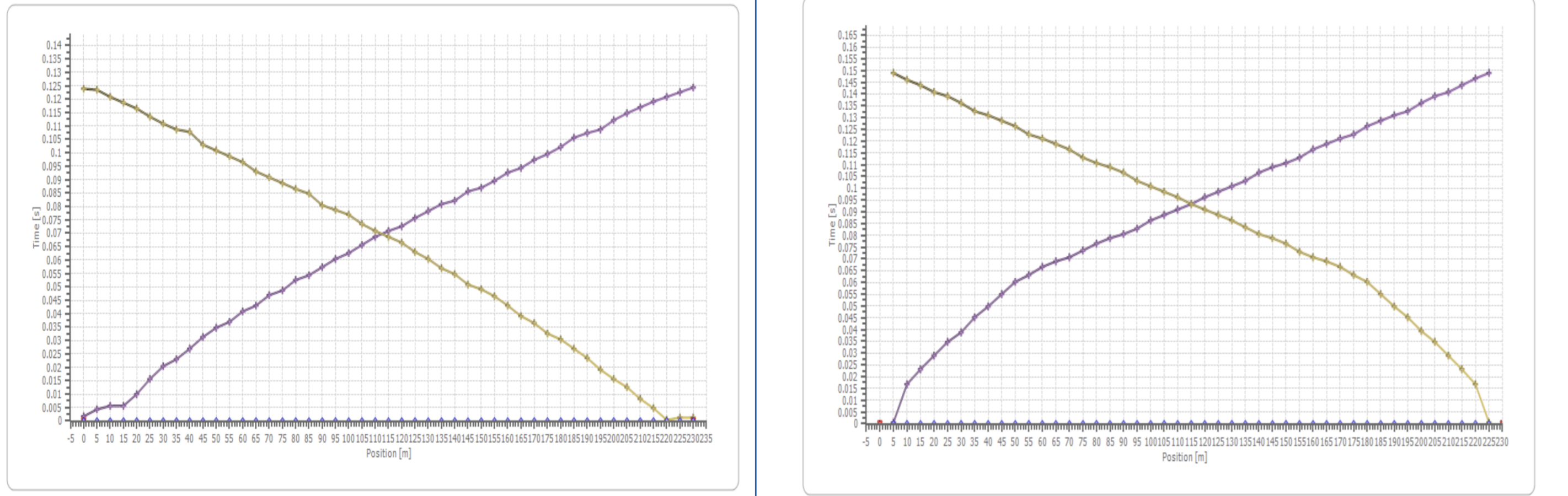


## !!! Question !!!

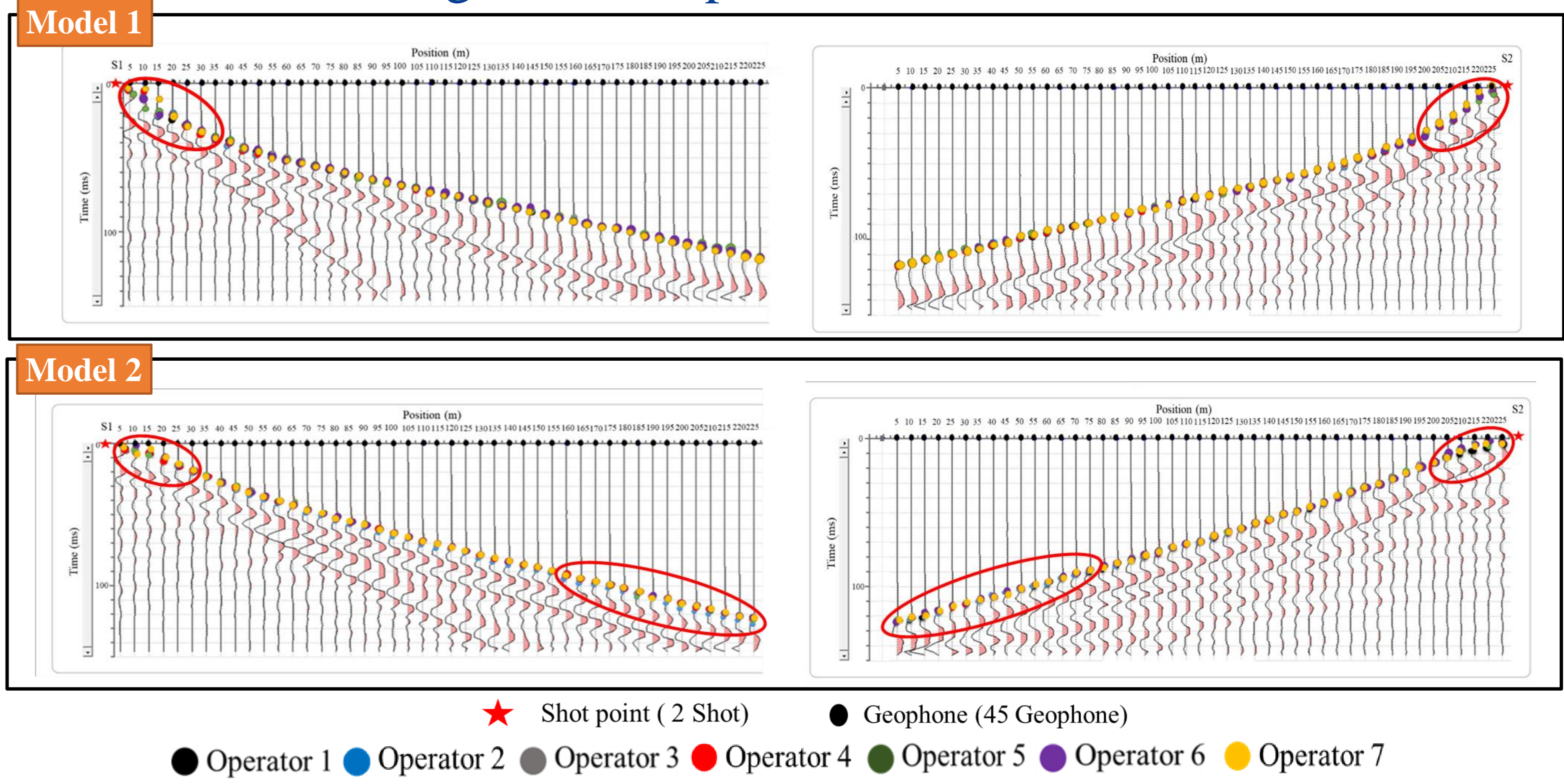
There are seismic trace, can you guess how many layers in this profile ?



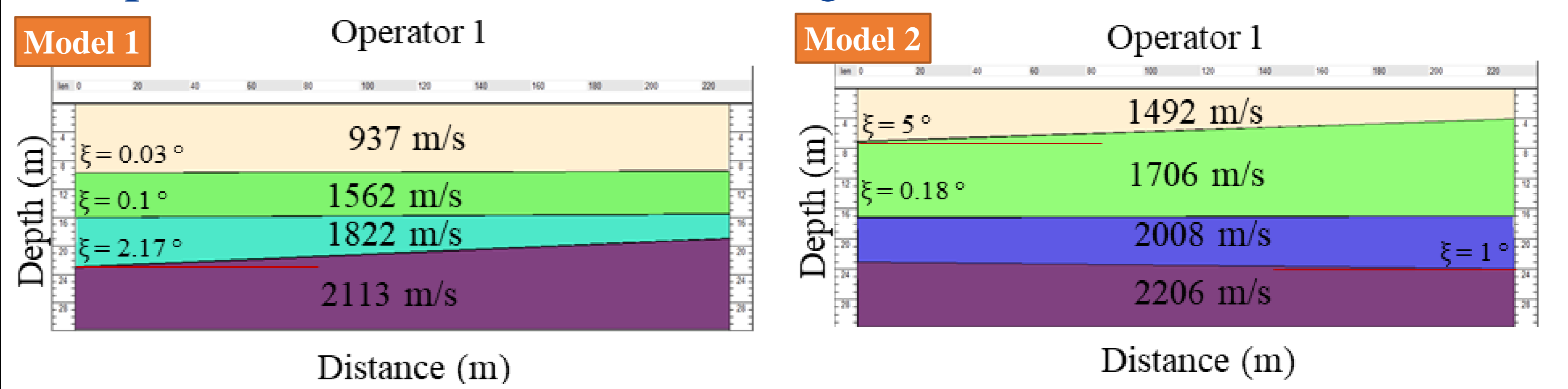
How About This Curve ??



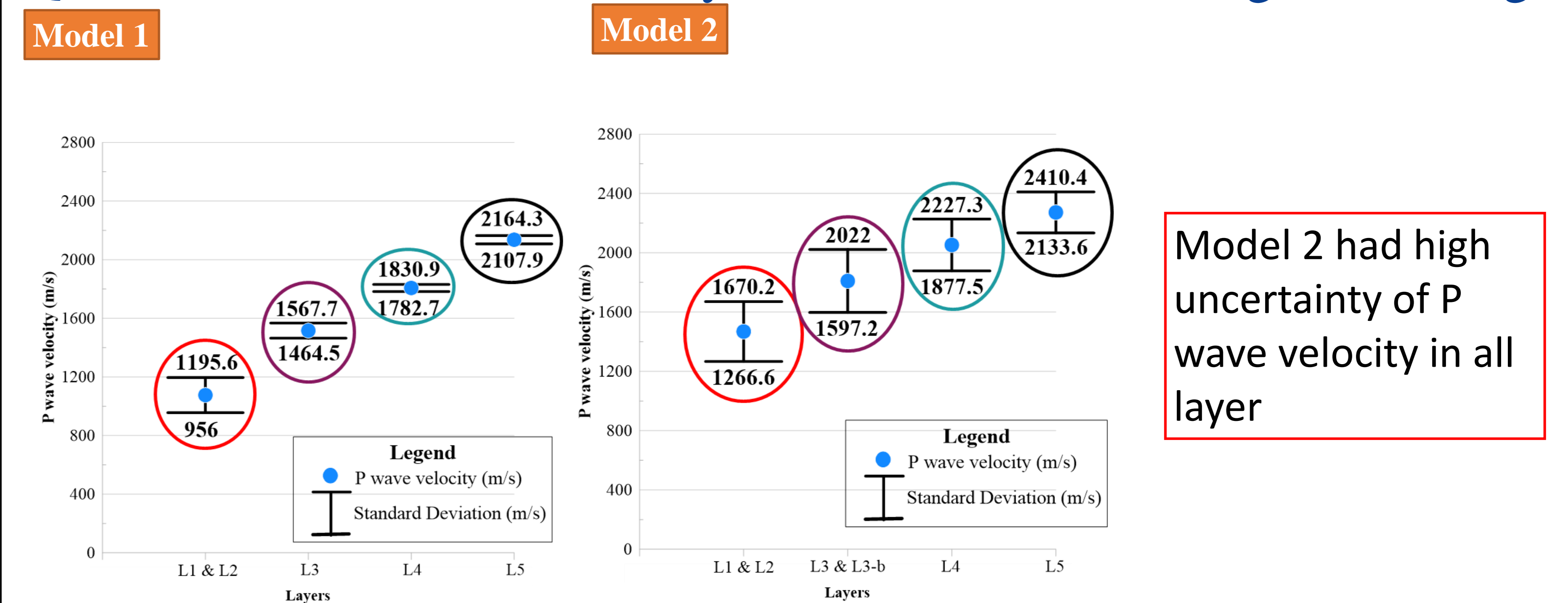
## First Arrival Picking From 7 Operators



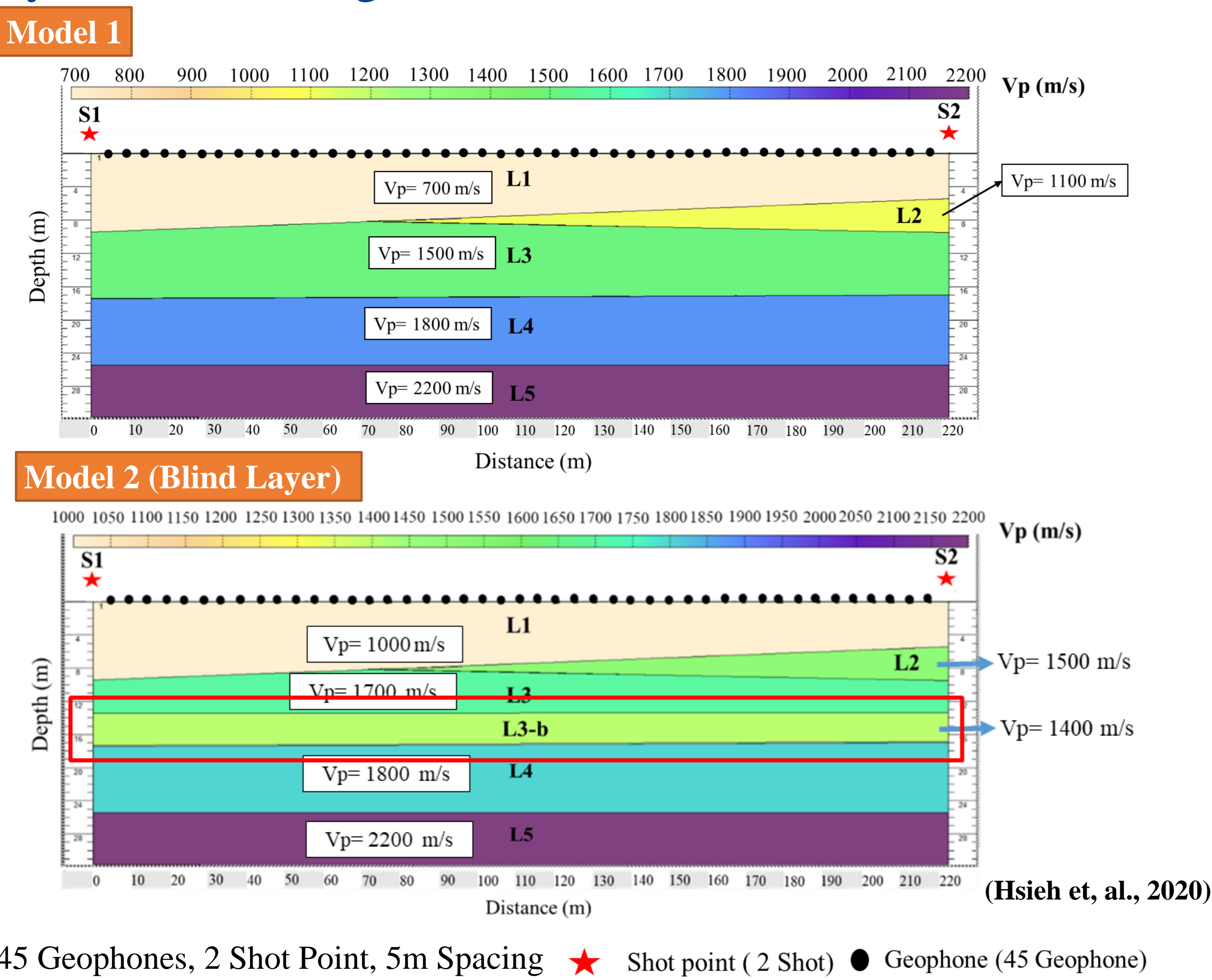
## Comparison of First Arrival Picking Result



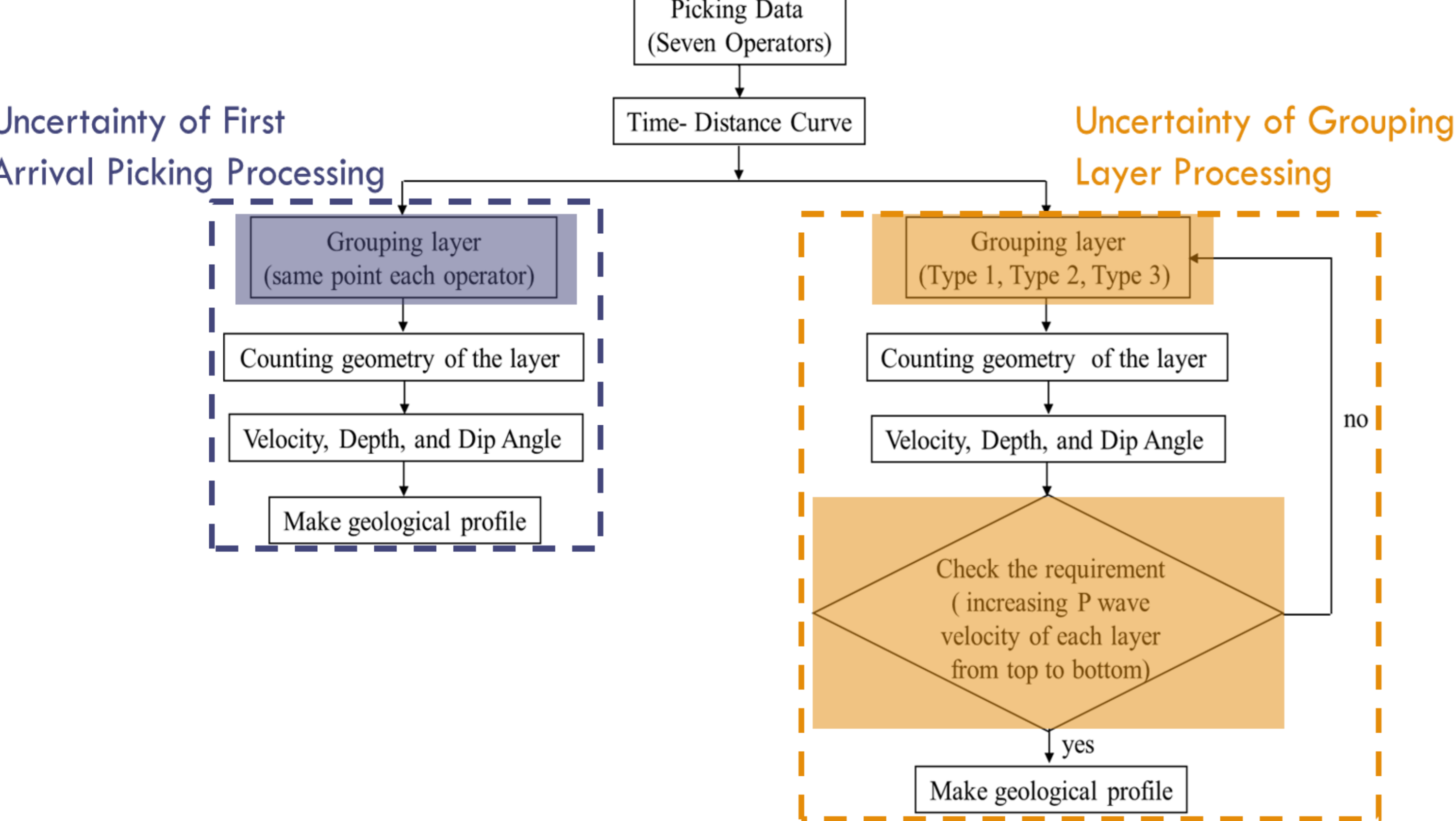
## Quantitative of P wave velocity on First Arrival Picking Processing



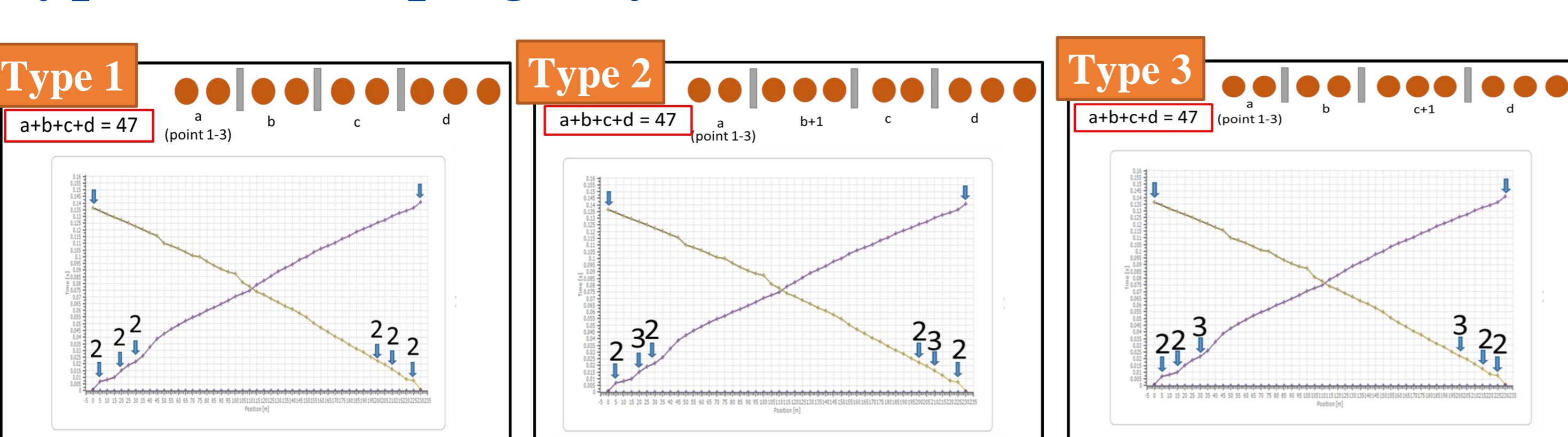
## Synthetic Geological model



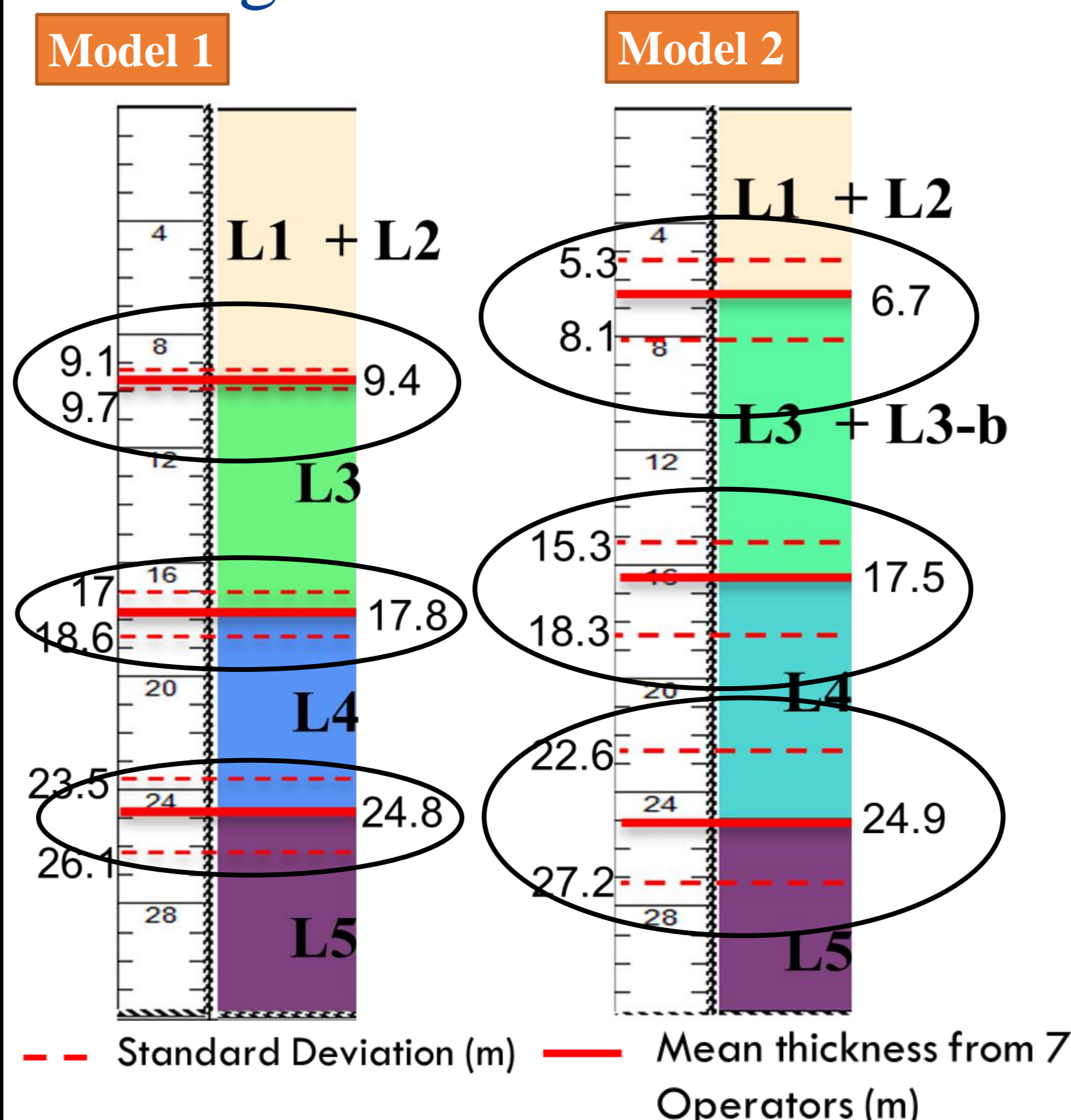
## Research Flow Chart



## Types of Grouping Layer

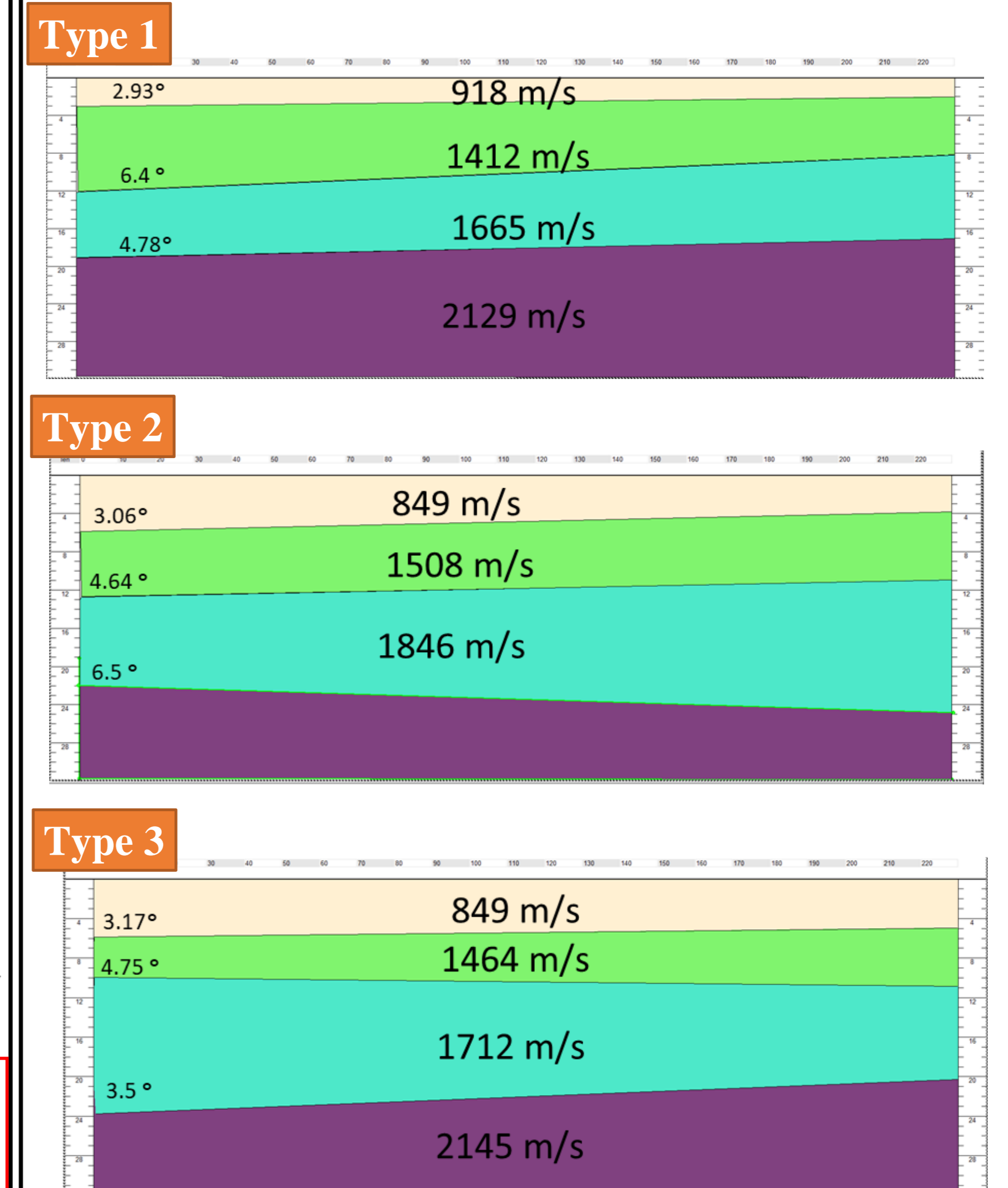


## Quantitation of thickness boundary from First Arrival Picking



Model 2 had high uncertainty compared with Model 1

## Comparison of Grouping Layer Result



## Conclusions

Blind Layer ( Low P wave velocity ) amplifies uncertainty on Seismic refraction Method