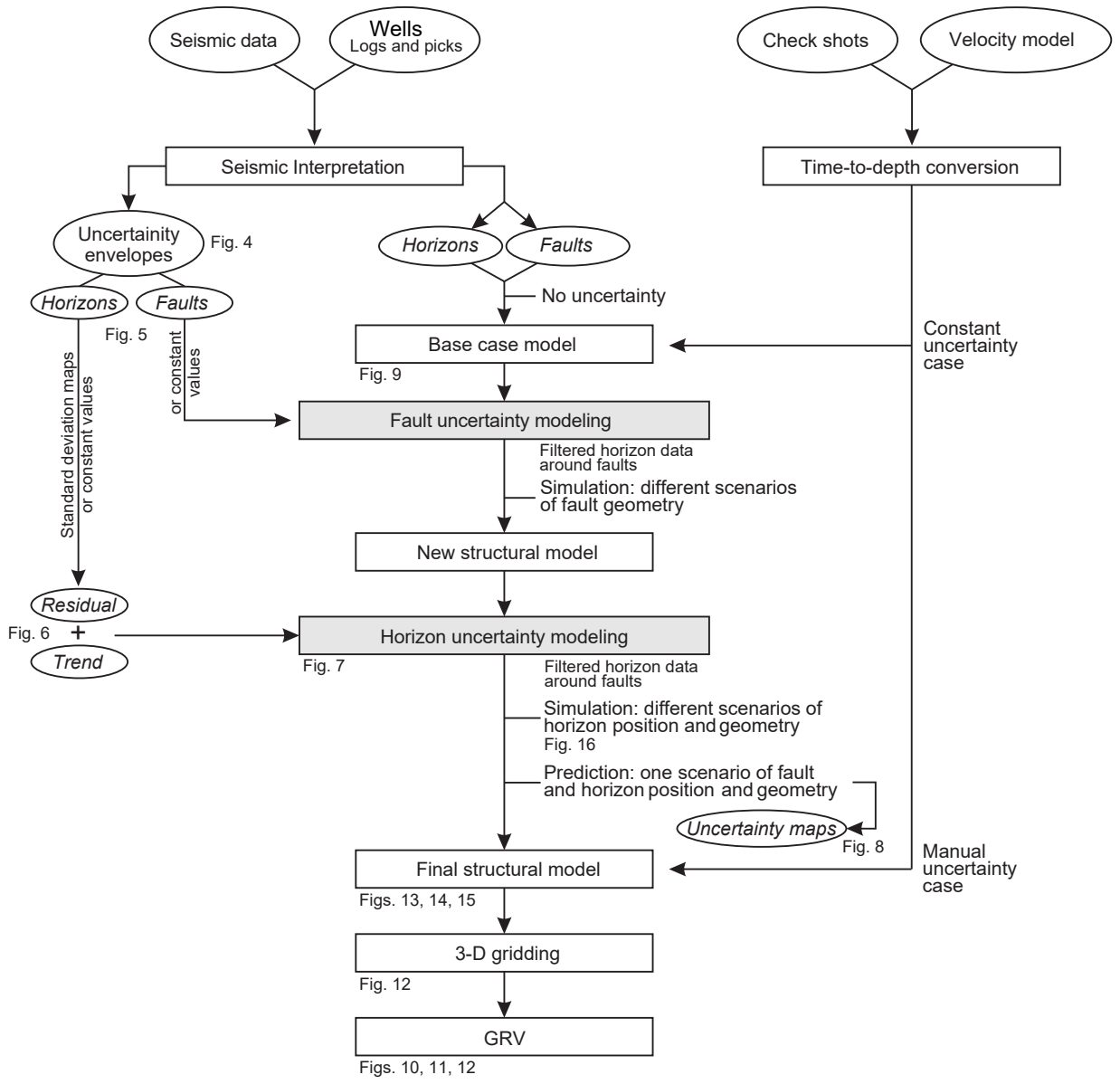
Seismic data
Wells
Logs and picks
Check shots
Velocity model
Seismic Interpretation
Time-to-depth conversion
Uncertainty envelopes
Fig. 4
Horizons
Faults
No uncertainty
Horizons
Faults
Fig. 5
Standard deviation maps or constant values
or constant values
Base case model
Fig. 9
Constant uncertainty case
Fault uncertainty modeling
Filtered horizon data around faults
Simulation: different scenarios of fault geometry
New structural model
Residual
Fig. 6
+
Trend
Horizon uncertainty modeling
Fig. 7
Filtered horizon data around faults
Simulation: different scenarios of horizon position and geometry
Fig. 16
Prediction: one scenario of fault and horizon position and geometry
Uncertainty maps
Fig. 8
Final structural model
Figs. 13, 14, 15
Manual uncertainty case
3-D gridding
Fig. 12
GRV
Figs. 10, 11, 12