What is claimed is:

1. A geologic survey system comprising:

a plurality of acoustic sources spaced at intervals over a target area of a terranean surface, each of the plurality of acoustic sources configured to generate a seismic energy wave;

a plurality of acoustic sensors positioned in a plurality of boreholes formed in a geologic formation, the boreholes having a depth sufficient to reach a geologic datum; and

a control system communicably coupled to the plurality of acoustic sensors and configured to perform operations comprising:

receiving, from the plurality of acoustic sensors, data associated with reflected acoustic signals generated by the plurality of acoustic sources and received by the plurality of acoustic sensors;

determining, based on the received data, a subsurface topology of the geologic formation, the determining comprising:

processing, with the control system, the data associated with reflected acoustic signals in a time imaging model by:

estimating static corrections of the data associated with reflected acoustic signals,

partitioning the estimated static corrections into a short-wavelength and a long-wavelength,

attenuating noise from the estimated static corrections of the data associated with reflected acoustic signals,

shifting the estimated static corrections of the data associated with reflected acoustic signals to a plurality of pre-defined intermediate depth levels based on vertical timeshifts measured from the plurality of boreholes,

stacking common gathers from each of the plurality of acoustic sensors to generate a plurality of supergathers, each of the supergathers having an improved signal-to-noise ratio, at each of the plurality of pre-defined intermediate depth levels:

sorting the plurality of supergathers to a common depth point,

applying the short-wavelength static corrections,

estimating normal moveout velocity and applying a normal moveout correction and stack,

applying the long-wavelength static shifts to the geologic datum,

stacking the plurality of stacks generated from the plurality of pre-defined intermediate depth levels into a final stack, and

performing a post-stack time migration, and

processing, with the control system, the data associated with reflected acoustic signals in a depth imaging model; and

generating a subsurface model of the geologic formation based on the determined subsurface topology.

2. The system of claim 1, wherein the plurality of boreholes are formed at a regular interval corresponding to a desired sample wavelength of the seismic energy wave.

3. The system of claim 1, wherein each acoustic sensor comprises a fiber optic acoustic sensor.

4. The system of claim 3, wherein each fiber optic acoustic sensor comprises a fiber optic turnaround assembly.

5. The system of claim 4, wherein the plurality of fiber optic turnaround assemblies are coupled together with a single fiber optic cable.

6. The system of claim 1, wherein processing the data associated with reflected acoustic signals in the depth imaging model comprises:

performing an up-down separation of the noise attenuated estimated static corrections of the data associated with reflected acoustic signals;

generating a near-surface velocity model between the terranean surface and the geologic datum by interpolating measured velocities of the reflected acoustic signals;

generating a deep velocity model at a depth below the geologic datum; and

pre-stacking depth migration from the terranean surface based on a global velocity model that comprises the near-surface velocity model.

7. The system of claim 1, wherein the plurality of acoustic sources are spaced at regular and repeating intervals over the target area of a terranean surface, the plurality of acoustic sources comprising a source carpet positioned on the terranean surface.

8. The system of claim 1, wherein the regular and repeating intervals are between 100 meters and 1000 meters.

9. The system of claim 1, wherein the geologic formation comprises a complex geologic structure and a low-relief geologic structure.

10. A method comprising:

positioning a plurality of acoustic sensors into a plurality of boreholes;

positioning a plurality of acoustic sources on or near a terranean surface;

emitting, by the plurality of acoustic sources, an acoustic signal directed into a subsurface geologic formation;

receiving, by the plurality of acoustic sensors, a reflected acoustic signal from the subsurface geologic formation;

determining a subsurface topology of the geologic formation based on receiving the reflected acoustic signal by the plurality of acoustic sensors, the determining comprising:

processing, with a control system communicably coupled to the acoustic sensors, the reflected acoustic signal in a time imaging model by:

estimating static corrections of the reflected acoustic signal,

partitioning the estimated static corrections into a short-wavelength and a long-wavelength,

attenuating noise from the estimated static corrections of the reflected acoustic signal,

shifting the estimated static corrections of the reflected acoustic signal to a plurality of pre-defined intermediate depth levels based on vertical timeshifts measured from the plurality of boreholes,

stacking common gathers from each of the plurality of acoustic sensors to generate a plurality of supergathers, each of the supergathers having an improved signal-to-noise ratio, at each of the plurality of pre-defined intermediate depth levels:

sorting the plurality of supergathers to a common depth point,

applying the short-wavelength of the estimated static corrections, and

estimating normal moveout velocity and

applying a normal moveout correction and stack,

applying the long-wavelength static shifts to the geologic datum,

stacking the plurality of stacks generated from the plurality of pre-defined intermediate depth levels into a final stack, and

performing a post-stack time migration, and

processing, with the control system, the reflected acoustic signal in a depth imaging model; and

creating a subsurface model of the geologic formation based on the determined subsurface topology.

11. The method of claim 10, further comprising drilling the plurality of boreholes in a geologic formation, at least a portion of the boreholes having a depth sufficient to reach a geologic datum.

12. The method of claim 10, wherein processing the reflected acoustic signal in the depth imaging model comprises:

performing an up-down separation of the noise attenuated estimated static corrections of the reflected acoustic signal;

generating a near-surface velocity model between the terranean surface and the geologic datum by interpolating measured velocities of the reflected acoustic signals;

generating a deep velocity model at a depth below the geologic datum; and

pre-stacking depth migration from the terranean surface based on a global velocity model that comprises the near-surface velocity model.

13. The method of claim 10, wherein positioning the plurality of acoustic sources on or near the terranean surface comprises positioning the plurality of acoustic sources at regular and repeating intervals over a target area of the terranean surface, the plurality of acoustic sources comprising a source carpet positioned on the terranean surface.

14. The method of claim 13, wherein the regular and repeating intervals are between 100

meters and 1000 meters.

15. The method of claim 10, wherein the plurality of boreholes are formed at a regular interval corresponding to a desired sample wavelength of the seismic energy wave.

16. The method of claim 10, wherein each acoustic sensor comprises a fiber optic turnaround assembly.

17. The method of claim 16, wherein the plurality of fiber optic turnaround assemblies are coupled together with a single fiber optic cable.

18. A computer-implemented method for generating a subsurface model, comprising:

identifying, with a hardware processor, data associated with reflected acoustic signals generated by a plurality of acoustic sources and received by a plurality of acoustic sensors;

determining, with the hardware processor, a subsurface topology of the geologic formation based on the identified data, the determining comprising:

processing, with the hardware processor, the data associated with the reflected acoustic signals in a time imaging model by:

estimating static corrections of the data associated with reflected acoustic signals,

partitioning the estimated static corrections into a short-wavelength and a long-wavelength,

attenuating noise from the estimated static corrections of the data associated with the reflected acoustic signals,

shifting the estimated static corrections of the data associated with the reflected acoustic signals to a plurality of pre-defined intermediate depth levels based on vertical timeshifts measured from a plurality of boreholes,

stacking common gathers from each of the plurality of acoustic sensors to generate a plurality of supergathers, each of the supergathers having an improved signal-to-noise ratio, at each of the plurality of pre-defined intermediate depth levels:

sorting the plurality of supergathers to a common depth point,

applying the short-wavelength static corrections, and

estimating normal moveout velocity and

applying a normal moveout correction and stack,

applying the long-wavelength static shifts to the geologic datum,

stacking the plurality of stacks generated from the plurality of pre-defined intermediate depth levels into a final stack, and

performing a post-stack time migration, and

processing, with the hardware processor, the data associated with the reflected acoustic signals in a depth imaging model; and

generating, with the hardware processors, the subsurface model of the geologic formation based on the determined subsurface topology.

19. The computer-implemented method of claim 18, wherein processing the data associated with reflected acoustic signals in the depth imaging model comprises:

performing an up-down separation of the noise attenuated estimated static corrections of the data associated with reflected acoustic signals;

generating a near-surface velocity model between the terranean surface and the geologic datum by interpolating measured velocities of the reflected acoustic signals;

generating a deep velocity model at a depth below the geologic datum; and

pre-stacking depth migration from the terranean surface based on a global velocity model that comprises the near-surface velocity model.

20. The computer-implemented method of claim 18, wherein the plurality of boreholes are formed at a regular interval corresponding to a desired sample wavelength of the seismic energy wave.

21. The computer-implemented method of claim 18, wherein each acoustic sensor comprises a fiber optic turnaround assembly.

22. The computer-implemented method of claim 21, wherein the plurality of fiber optic turnaround assemblies are coupled together with a single fiber optic cable.