CLAIMS:

1. A method of measuring properties downhole, the method comprising:

activating (1710), at different positions downhole, a first transmitter (212-1) in an arrangement (105) of transmitters (212-1, 212-2) and receivers (214-1, 214-2) along a longitudinal axis (207-1);

collecting (1720) a signal at a receiver (214-2) in the arrangement of transmitters and receivers in response to activating the first transmitter;

collecting (1730) a signal at a second transmitter (212-2) in the arrangement of transmitters and receivers in response to activating the first transmitter, when the arrangement of transmitters and receivers has been moved to a different position at which the second transmitter is located at substantially the same position at which the receiver collects the signal in response to activating the first transmitter, wherein in the arrangement of transmitters and receivers, the first transmitter, the second transmitter, and the receiver are tilted with respect to the longitudinal axis of the tool; and

processing together (1740) the signals that were collected at substantially the same position by both the receiver and the second transmitter, thereby to provide measurements that simulate operation of an arrangement of receivers co-located at a single downhole position and that simulate measurements from a triaxial tool.

2. The method of claim 1, wherein the method comprising:

activating, at different positions downhole, the second transmitter in the arrangement of transmitters and receivers;

collecting a signal at the or another receiver (214-1) in the arrangement of transmitters and receivers in response to activating the second transmitter;

collecting a signal at the first transmitter in response to activating the second transmitter, when the first transmitter is located at substantially the same position at which the or the other receiver collects the signal in response to activating the second transmitter; and

processing the collected signals from activating the second transmitter with the collected signals from activating the first transmitter to provide measurements that

simulate operation of an arrangement of transmitters and receivers that differs from the actual arrangement of transmitters and receivers.

3. The method of claims 1 or 2 wherein the arrangement of transmitters and receivers includes the first transmitter and the second transmitter separated by two receivers and arranged along the longitudinal axis of a tool with the first transmitter, the second transmitter, and the two receivers tilted with respect to the longitudinal axis of the tool, the first transmitter and the second transmitter being oriented such that they lie in directions perpendicular to each other.

4. The method of claim 3, wherein the first transmitter and the second transmitter are arranged equidistant on either side of a reference location (Z) which is at the midpoint between the two receivers.

5. The method of claim 4, wherein the method includes shifting the tool relative to the reference location between the two receivers such that the first transmitter or the second transmitter is shifted to a position of one of the two receivers relative to the reference location before the shift.

6. The method of any preceding claim 1 or 2, wherein the method includes selectively activating the transmitters and selectively collecting signals at the receivers and at one or more of the transmitters at different angles of rotation (Ø) of the arrangement of transmitters and receivers about the longitudinal axis, the signals at different angles being collected in a number of different bins corresponding to partitions of a complete rotation about the axis.

7. The method of any preceding claim, wherein the method further includes identifying anisotropic downhole formations from the processed collected signals.

8. The method of any preceding claim, wherein the method includes computation of a voltage matrix from the collected signals such that the arrangement of transmitters and receivers operates as a triaxial tool.

9. The method of claim 8, wherein the method includes determining one or more of horizontal resistivity, vertical resistivity, or dip angle using the voltage matrix.

10. The method of any preceding claim, wherein the method is a logging-while-drilling method.

11. A machine-readable storage medium having instructions stored thereon, which, when performed by a machine, cause the machine to perform the method of any of claims 1 to 9.

12. An apparatus to measure properties downhole, the apparatus comprising:

a tool having an arrangement of transmitters and receivers (214-1, 214-2) along a longitudinal axis of the tool, wherein a first transmitter, a second transmitter, and a receiver are tilted with respect to the longitudinal axis of the tool; and

a processing unit to control activation of the transmitters of the tool and to process signals received from receivers and transmitters in the tool in accordance with the method of any of claims 1 to 10.

13. The method of claim 1, wherein the second transmitter is a transceiver or a transmitter operated as a receiver.