## ABSTRACT

## BIPOLE SOURCE MODELING

Disclosed are methods and systems for producing bipole source modeling with reduced computational loads. A method may comprise receiving first electromagnetic data and second electromagnetic data from a first shotpoint and a second of a marine electromagnetic survey, modelling a first electromagnetic field and second electromagnetic field for one or more dipole sources of a bipole source and combining a plurality of data points to provide an approximation of an electromagnetic field for the bipole source. A system may comprise electromagnetic sensors, a bipole source, wherein the bipole source comprise a pair of electrodes that are separated by a distance, wherein the bipole source is configured to generate an electromagnetic field, and a data processing system configured to receive electromagnetic data from a plurality of shotpoints of the bipole source and model electromagnetic fields for one or more dipole sources of the bipole source from the electromagnetic data.

FIG. 2A – 2D