

CLAIMS

What is claimed is:

1. A computer program product embodied on a non-transitory computer readable
5 medium, said computer readable medium having instructions stored thereon that, when
executed by a computer, which implements or operates in conjunction with at least one
classification and/or segmentation processor, causes the computer to perform:
receiving modelled seismic data that is to be recognized by the at least one
processor, wherein the modelled seismic data is represented within a transform domain;
10 generating an output via the at least one processor based on the received modelled
seismic data;
comparing the output of the at least one processor with a desired output; and
modifying the at least one processor so that the output of the processor
corresponds to the desired output.
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2. The computer program product of claim 1, wherein the receiving modelled seismic data
comprises receiving modelled seismic data that is represented within the Fourier domain.
3. The computer program product of claim 1, wherein the at least one processor is
20 implemented by a multi-layer perceptron and/or a neural network.
4. The computer program product of claim 1, wherein the generated output comprises an
identification of aliased data.

5. The computer program product of claim 1, wherein the received modelled seismic data is labelled as including aliasing.

6. The computer program product of claim 5, wherein the received modelled data is
5 decimated modelled data, and aliasing is introduced into the modelled data after the decimating.

7. A method comprising:
receiving, by at least one classification and/or segmentation processor, modelled
seismic data that is to be recognized by the at least one processor, wherein the modelled
10 seismic data is represented within a transform domain;
generating an output via the at least one processor based on the received modelled
seismic data;
comparing the output of the at least one processor with a desired output; and
modifying the at least one processor so that the output of the processor
15 corresponds to the desired output.

8. The method of claim 7, wherein the receiving modelled seismic data comprises receiving
modelled seismic data that is represented within the Fourier domain.

20 9. The method of claim 7, wherein the at least one processor is implemented by a multi-
layer perceptron and/or a neural network.

10. The method of claim 7, wherein the generated output comprises an identification of
aliased data.

11. The method of claim 7, wherein the received modelled seismic data is labelled as including aliasing.

12. The method of claim 11, wherein the received modelled data is decimated modelled data, and aliasing is introduced into the modelled data after the decimating.

13. A computer program product embodied on a non-transitory computer readable medium, said computer readable medium having instructions stored thereon that, when executed by a computer, which implements or operates in conjunction with at least one trained classification and/or segmentation processor, causes the computer to perform:

10 receiving actual seismic data, wherein the received actual seismic data includes aliasing that is to be identified by the at least one trained processor, and the received actual seismic data comprises data represented within a transform domain;

generating an output via the at least one trained processor based on the received

15 actual seismic data;

generating a mask based on the output; and

removing aliasing from the received actual seismic data using the generated mask.

14. The computer program product of claim 13, wherein the receiving actual seismic data comprises receiving actual seismic data that is represented within the Fourier domain.

15. The computer program product of claim 13, wherein the at least one trained processor comprises a multi-layer perceptron and/or a neural network.

16. The computer program product of claim 13, wherein the generated output comprises an identification of aliased data.

17. A method comprising:

5 receiving actual seismic data, wherein the received actual seismic data includes aliasing that is to be identified by at least one trained classification and/or segmentation processor, and the received actual seismic data comprises data represented within a transform domain;

generating an output via the at least one trained processor based on the received
10 actual seismic data; and

correcting the actual seismic data for the aliasing based on the output.

18. The method of claim 17, wherein the receiving actual seismic data comprises receiving actual seismic data that is represented within the Fourier domain.

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19. The method of claim 17, wherein the at least one trained processor comprises a multi-layer perceptron and/or a neural network.

20. The method of claim 17, wherein the generated output comprises an identification of
20 aliased data.

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