



"sharing the geological interpretation of seismic data".

www.seismicatlas.org

THE VIRTUAL SEISMIC ATLAS – PHASE 2 CALL FOR CONTRIBUTIONS

About the VSA

The Virtual Seismic Atlas (VSA) Project is an independent, free-to-use, community-based internet resource that captures and shares the geological interpretation of seismic reflection data. It is strictly not-for-profit. In its simplest form it is a picture and workbook - in effect a digital development from existing hard-copy publications such as the classic AAPG "Bally" Atlas. However, the digital format allows for a variety of visualization types, together with links to supporting material. Content is growing organically with community involvement. We are aiming for comprehensive coverage of different structural, stratigraphic and geomorphological styles, illustrated using a range of different types of seismic image, and with increasingly global coverage. The VSA provides an environment for the community to find and compare seismic examples, interpretations and analogues that can be located on the basis of the geology they image. The VSA is housed on a bespoke internet application, powered by Endeca. This platform allows rapid, efficient and surprising searches for data with returns displayed as image galleries. Each step in a search reveals different juxtapositions of images providing rapid analogue comparisons.

In effect the VSA is an on-line publication environment for subsurface geology.

The Director of the VSA is Rob Butler (University of Aberdeen). The project is guided by an Advisory Group drawn from the community and by patrons Richard Hardman and David Roberts. The VSA was set up thanks to support from the UK's Natural Environment Research Council, the Geological Society of London, the Petroleum Exploration Society of Great Britain and an array of energy companies. In common with existing learned journals, all materials available on the site are credited to the contributors; further information can be added at the authors' discretion. There is a Code of Practice for use of materials. However, the guiding principle is that the VSA is free-at-the-point of access and that, subject to honouring the IP of materials, there is no restriction on the use of images downloaded from the site. Contributors will be able to submit alternative interpretations of existing images and datasets where appropriate.

Why submit material to the VSA?

Individuals and organizations may see specific advantages of contributing material to the VSA, as a means:

- To promote spec data-sets;
- To showcase acquisition and processing technology;
- To showcase interpretation capabilities;
- To promote existing complementary or related studies, such as publications;
- To promote materials held in existing public seismic data libraries.
- To publish conference proceedings or supplement conventional publications.

The VSA is used equally by academia and industry to find training materials and examples of subsurface geological features. Recent audits of web traffic and server use indicate c. 50,000 searches and thousands of different users per month. Adding content to the VSA exposes it to more people than attend the largest geoscience conferences or ever read scientific literature!

Content

As the VSA grows, we are seeking submissions that can include:

- 1 World class images of classic structural styles (thrusts, normal faults, strike-slip faults, detachment folds, inversion structures, salt tectonics etc.). These contributions can be in profiles and enhanced where appropriate with 3D visualizations from block diagrams, time-slices, short fly-through animations;
- 2 World class images of stratigraphic features and depositional forms;
- 3 Regional profiles through basins that show the arrangement of structural and stratigraphic styles (megasequences etc);
- 4 Representative sections across continental margins, through basins, exploration blocks, classic oilfields etc.;
- 5 Modern seabed and shallow section horizon maps – seismic geomorphology;
- 6 Studies of advances in seismic technology and improvements in image quality.

The VSA aspires to have truly global coverage, and to include material from the very near surface to deeper Earth imagery and from across the spectrum of industry, research institutions and academic groups. The levels of interpretation can vary – especially depending on the image quality and scope. For example, a crisply imaged thrust structure through a well-differentiated reflector stratigraphy need not have substantial annotation. In other situations, reflectors may be picked, labelled and fault strands fully shown. Images may be accompanied by extended captions and links to further documentation (e.g. published papers and websites).

How to submit content

In submitting material to the VSA you are expected to adhere to our Code of Practice. The VSA has a structured authoring environment that is intuitive and easy to use. New content could simply be in the form of a new interpretation of some existing image. It could consist of the seismic images you've published with one of our partner organizations. Or it could consist of new images. Whatever you chose to publish on the VSA – you must establish that you have the permission of the data owner (or copyright holder) as for any other publishing medium. We can then set up your personal VSA user and authoring ID. By being a registered user and logging in, you gain further functionality, including access to an authoring environment. All content you add can be edited by you prior to final submission. Once submitted, content awaits approval (generally routine and completed within hours). Once approved (we check that the material is not inappropriate, and that the metadata and links work) the content goes live, being returned in searches within 10 minutes of this process completing. We do not challenge interpretations made in good faith. We welcome diversity!

Format:

Images are accepted high resolution jpegs (RGB format, up to 5Mb or so) – from which you should also create a thumbnail (c. 50 kb). Where possible, please ensure images have both a vertical and horizontal scale. You may include multiple versions with different scales. Precise geographic locations, while desirable, are not essential, especially if data are sensitive commercially. For new projects you should prepare both clean and interpreted images. Or you can just add clean data for the benefit of others (or to elicit interpretations). You find it useful to create an abstract and paste this into the text box as requested. You can add web links as needed (to on-line journal articles, data portals, research pages) together with non-seismic data (maps, well-logs, reports) as pdfs in the “docs and links” area. Further guidance and advice is freely available as requested.

To obtain a user authoring ID, please email

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