An overview of the eSurge system
11 December 2012
About these slides

These slides give a brief overview of how to use the eSurge database to find, view and download the available data sets for a given storm surge event.

• The eSurge website is at [www.storm-surge.info](http://www.storm-surge.info).

• Access to the database is via [www.storm-surge.info/data-access](http://www.storm-surge.info/data-access).

• Online help is provided at [www.storm-surge.info/how-to](http://www.storm-surge.info/how-to).

• Contact us at [www.storm-surge.info/contact](http://www.storm-surge.info/contact).
The eSurge Website

Links to data access

Links to more information about storm surges

Also has or will have
- list of events,
- project docs,
- training material,
- user profiles
- and more.

... but these are not discussed in this presentation

www.storm-surge.info
About storm surges (“wikiSurge”)

This section contains:
- General background on storm surges
- Descriptions of the surge events in the database
- Links to known storm surge resources

To be added in near future:
- Pages for discussing main topics, e.g. coastal altimetry, data assimilation.

These pages are in the form of a wiki – any authorised user can edit them.
(Facility for registering at top of each page)
The “data access” section gives access to the actual data stored in the eSurge database, categorised per surge event (SEV).

It also contains links to online help, FAQ, product handbooks, etc.

The database is currently available as a beta version – not everything may be present. Please look at the “known issues” page (link at top)
Finding a surge event

To find a data for a surge event, first select an area of interest from the map to obtain a list of events in that area.

NB, please let us know if there is an event not in the database that you would like to see data for.
Data available for a surge event

Selecting an event will bring up a page for that event

Information on the event

Link to viewer

Link to help page

List of data types available

<table>
<thead>
<tr>
<th>Available data</th>
<th>Product Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bathymetry</td>
<td></td>
</tr>
<tr>
<td>Coastal altimetry - Envisat</td>
<td></td>
</tr>
<tr>
<td>Flood maps</td>
<td></td>
</tr>
<tr>
<td>SAR wave spectra</td>
<td></td>
</tr>
<tr>
<td>Scatterometer Winds ASCAT L2 12.5 km coastal (KNMI)</td>
<td>Product Info</td>
</tr>
<tr>
<td>Scatterometer Winds ASCAT L3 12.5 km coastal (KNMI)</td>
<td>Product Info</td>
</tr>
<tr>
<td>Scatterometer Winds ASCAT Level 2 25 km (KNMI)</td>
<td>Product Info</td>
</tr>
<tr>
<td>Scatterometer Winds QuikSCAT 100 km (KNMI)</td>
<td>Product Info</td>
</tr>
</tbody>
</table>
Listing available data sets

Each data type appears as a bar like this:

Clicking on \( \downarrow \) lists the individual data sets for this type:

- Displays a preview (like the one above)
- Opens an opendap window (next slide)
Downloading data

For each data set it is possible to download data via opendap as shown on the right.

This also supports subsetting before downloading.

Batch downloads are possible using an automatically generated script.

ftp not yet available but will be added soon.
Viewing data

The preview facility is mainly intended to let users assess how useful a data set is before downloading it.

To view the data, we provide an additional geographical data viewer available from the SEV page.

This opens up in a new window…
Viewing data

The preview facility is mainly intended to let users assess how useful a data set is before downloading it.

To view and compare the available data, we provide a geographical data viewer available from the SEV page.

This opens up in a new window...
The eSurge data viewer: selecting data

Lists the data types/sets available and allows them to be selected individually.
The “selected layers” tab allows altering the order and transparency in which data sets are displayed.

These don’t have to be of the same type – can overlay different data types.

(NB, in a future upgrade we will modify the strings shown to indicate the data sets.)
The “base” tab gives different options for what map is used as the backdrop.

This can be useful for e.g. displaying flood maps against physical or street maps.
What can you do with the viewer?

See how an event unfolds over time...
What can you do with the viewer?

Overlay different data sets; useful for a visual comparison but also to see what data are available at a given place/time.
What can you do with the viewer?

View inundation maps against a physical map. (for selected events only.)
The eSurge data viewer: future work

There are still a few things we still want to do with the data viewer:

• Allowing selection of all data sets within a data type
• Adding the facility to scroll through the timeline of an event.
• Updating the strings shown so as to be more useful.
• Allowing reading of values at a point

But we would also like user feedback.
There are still several things we want to do with the eSurge database:

- Adding more data sets and events to the database
- FTP download facility
- Updates to the viewer
- Single sign on

However, we would also like your feedback as to what is important.

- Surge events that you are interested in
- Data sets that you would like to have
- Different ways to access data

To give feedback, please either contact us directly or use the online feedback form at www.storm-surge.info/data-access.