

Processing England's Live Traffic Information with Python

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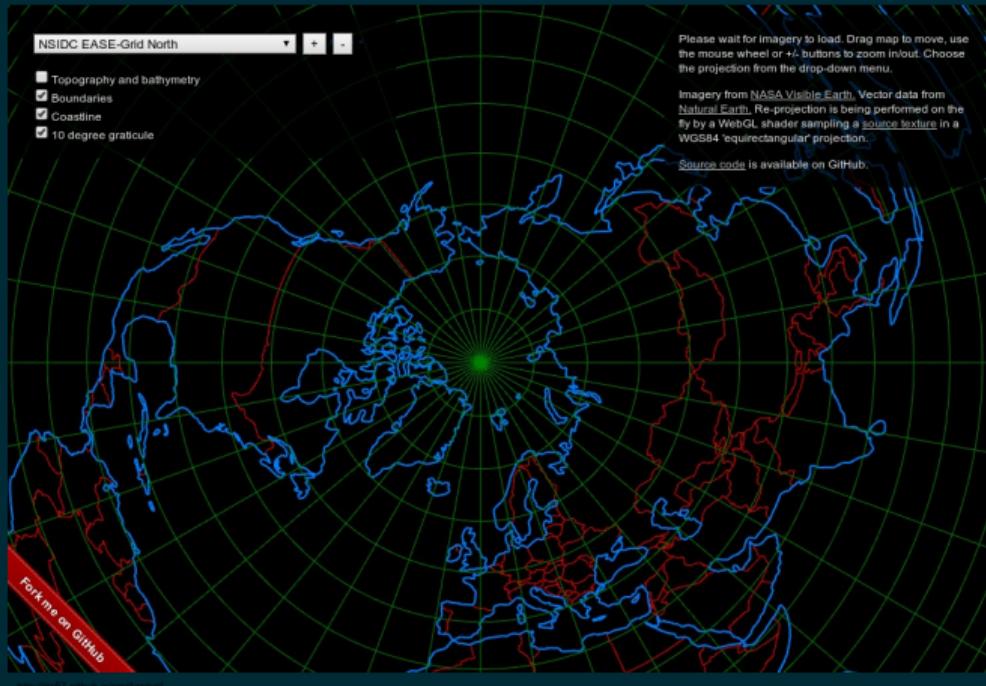
29 April 2013







<http://rjw57.github.io/proj4webgl/>









HIGHWAYS
AGENCY

Network Map

Core National Route
Star Roads

National
Regional
Local





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+ NHS Choices 0/5

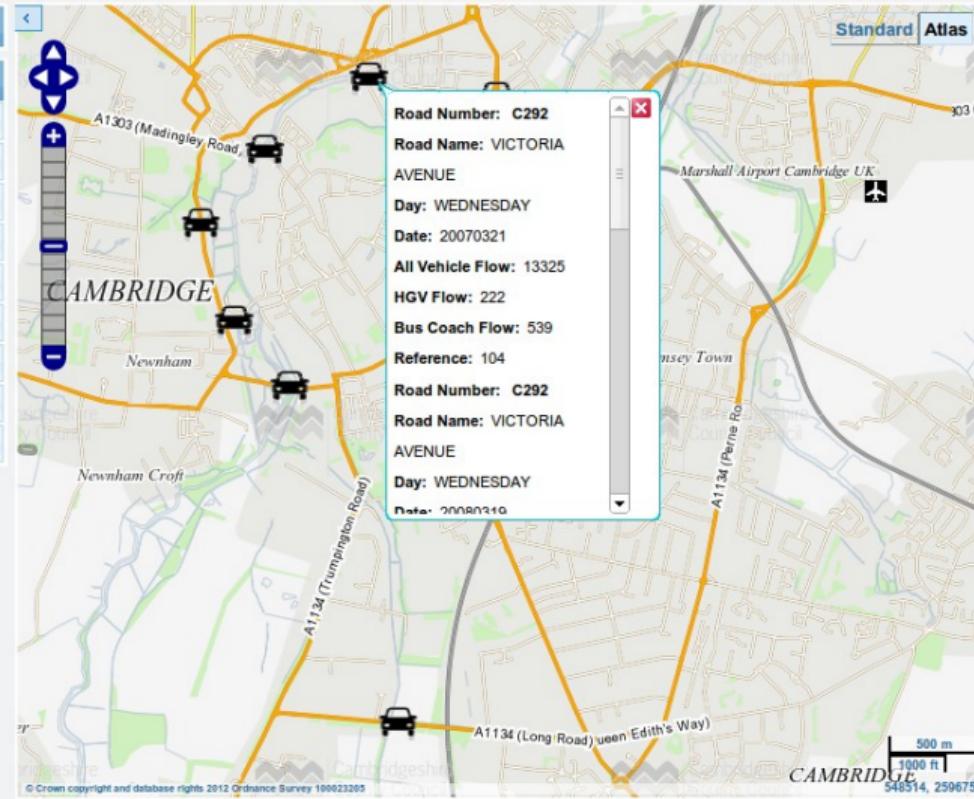
+ Schools and Learning 0/7

+ Transport and Streets 1/14

+ Highways Faults 0/8

+ Public Sector Assets 0/9

+ Flood Risk Assets 0/13



<http://data.gov.uk/>



Beta



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SEARCH AND PREVIEW

New map widgets

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CONSULTATION
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BATHING QUALITY DATA AS LINKED DATA

A BLOG BY Dr IAN DICKINSON



data.gov.uk technologies

New features to get at the data!

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9361

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Live traffic information from the Highways Agency

View Resources (9) History

Description

Live traffic information data showing traffic information on the strategic road network in England.

The separate datasets are referred to as "Information products" and presented as XML, conforming to a Data 2 data specification. A supporting document is provided to support understanding of the Data 2 schema.

Information products consist of Current Roadworks (Updated every 30 mins (1 M bytes)), Future Planned Events (Updated every 30 mins (1 M bytes)), Current Journey Time Data (Updated every 10 mins (10 K bytes)), Future Journey Time Data (Updated every 10 mins (10 K bytes)), Future Planned Events (Updated every 10 mins (10 K bytes)), Journey Time Data (Updated every 10 mins (10 K bytes)), Journey Message Signs (Updated every 10 mins (3 M bytes)) and Matrix Signals (Updated every 10 mins (3 M bytes)). The Variable Message Signs (VMS) information product will contain the status of all currently set or ready VMS on the UK network. If the next publication no longer contains a particular VMS, it will be removed or it's fault has been cleared. The payload will contain VMSnumber&signid=string elements.

Matrix Signals updated every 10 mins (3 M bytes). The Matrix Signal information product will contain the status of all currently set or ready Matrix Signals on the HI network. If the next publication no longer contains a particular Matrix Signal, then enter the setting or fault has been cleared. The payload will contain Matrix signid=string elements.

Data Resources (9)

Name	Preview	Download
Current roadworks	XML	Preview Download
Future roadworks	XML	Preview Download
Current planned events	XML	Preview Download
Future planned events	XML	Preview Download
Upgraded events	XML	Preview Download
Journey time data	XML	Preview Download
Traffic data	XML	Preview Download
Variable Message Signs (VMS)	XML	Preview Download
Matrix signals	XML	Preview Download

Additional Information

Openness score: ★ ★ ★

Theme: Transport

Temporal coverage: 21/12/2011

Geographic coverage: England

Date added to data.gov.uk: 21/12/2011

Date updated on data.gov.uk: 15/04/2013

Date update future: 2012-01-06

Provider: Highways Agency

Update frequency: live data updated automatically

Temporal granularity: day

Taxonomy URL: http://www.datacite.eu/vocab/www.dcced2.eu/vocab/M10_DATEXII_v2_0_0.pdf

Mandate: No value

Developer Tools

The information on this page (the dataset metadata) is also available in JSON format:
<https://data.gov.uk/api/2.0/resource/12079/atom>

Read more about this site's CKAN API: [About the API](http://about.ckan.org/).

This dataset has a permanent URL:
<https://data.gov.uk/resource/12079>

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Navigation icons: back, forward, search, etc.

Data Resources (9)

 Current roadworks	XML	Preview	Download	
 Future roadworks	XML	Preview	Download	
 Current planned events	XML	Preview	Download	
 Future planned events	XML	Preview	Download	
 Unplanned events	XML	Preview	Download	
 Journey time data	XML	Preview	Download	
 Traffic data	XML	Preview	Download	
 Variable Message Signs (VMS)	XML	Preview	Download	
 Matrix signals	XML	Preview	Download	



EASYWAY ★★☆

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DATEX User Forum 2012 - Stockholm

The 2012 edition of the DATEX User Forum have been held in Stockholm on 20th-21st March



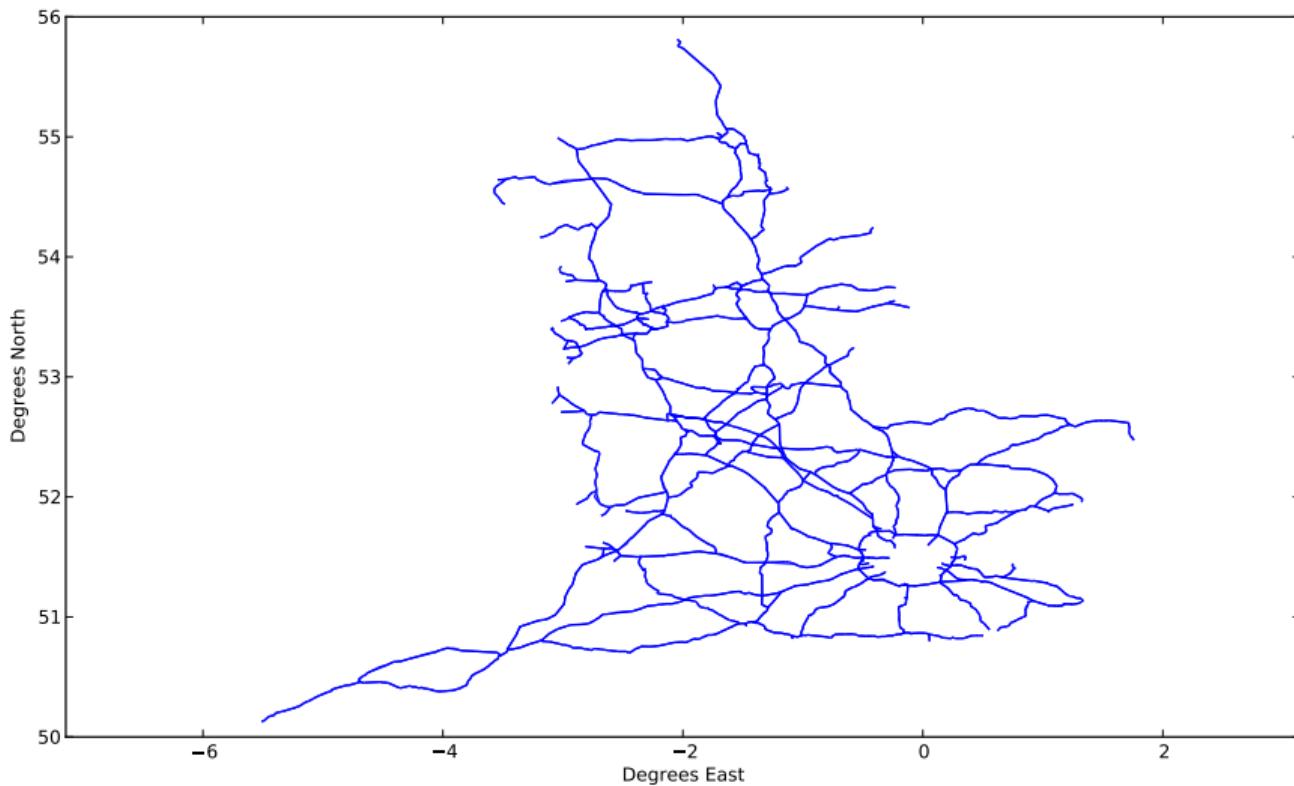
Session Presentations are now [available from this link](#).

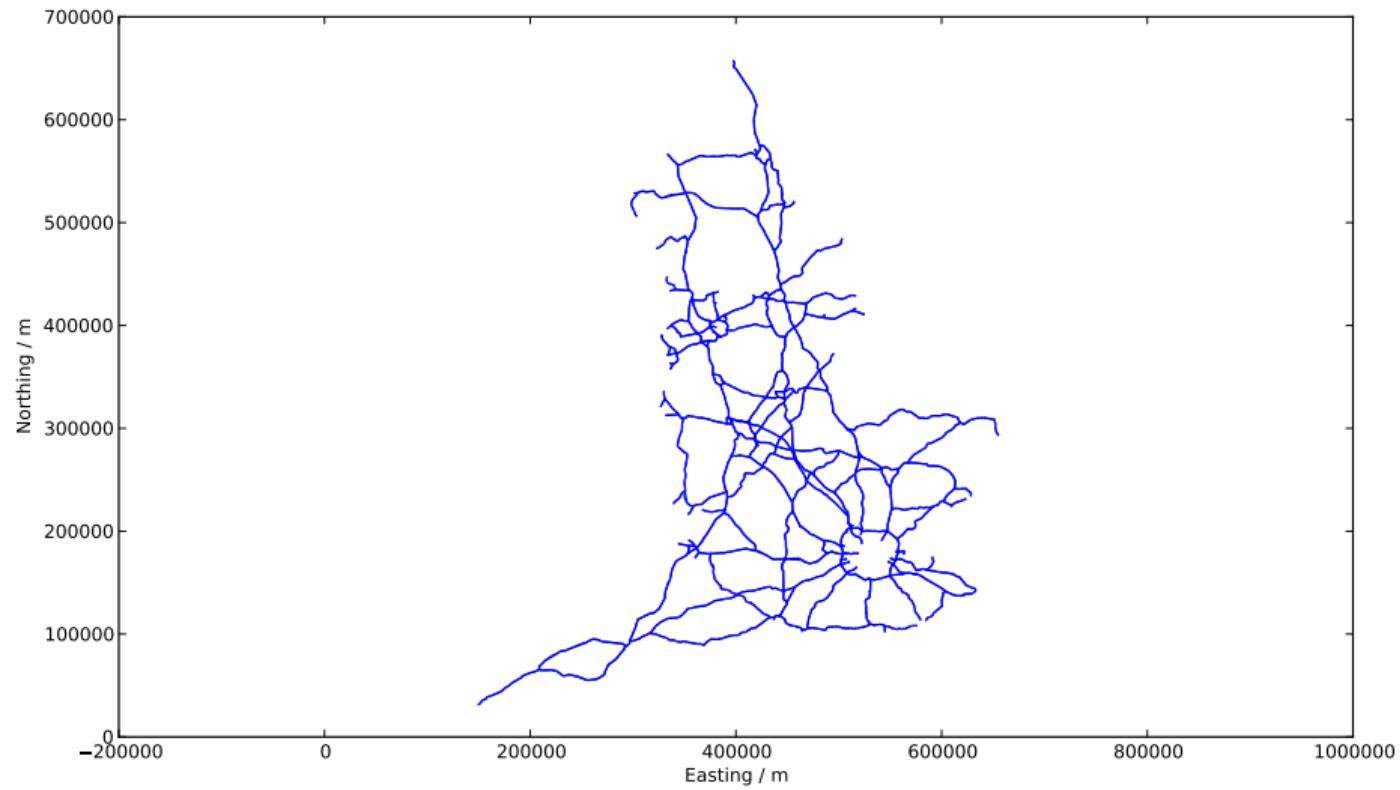
News

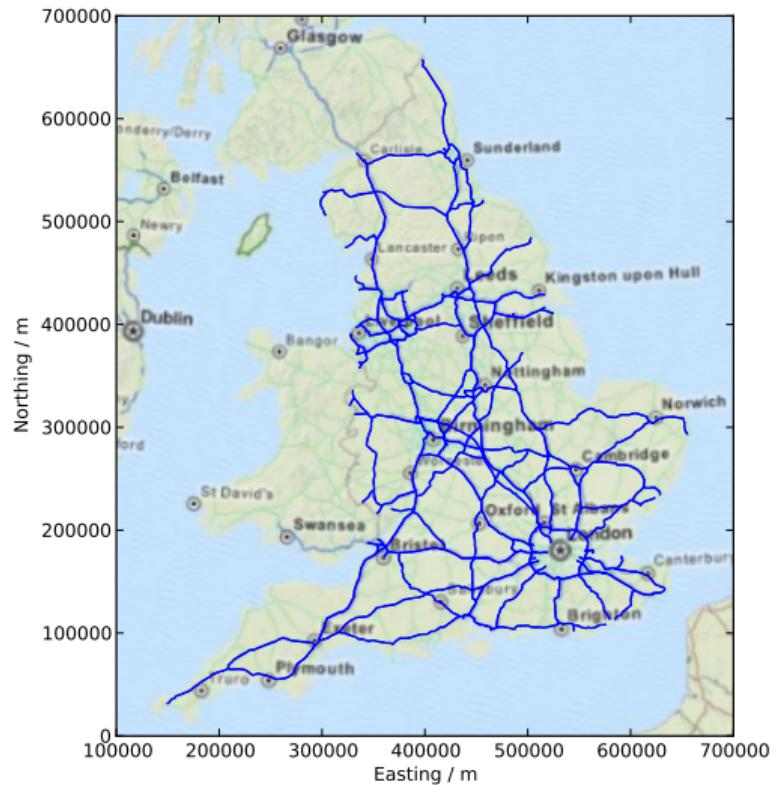
► DATEX II v2.1 has been released on DATEX II website

DATEX II v2.1 is finalised and available for download on datex website www.datex2.eu. Please visit

PredefinedLocationLinks







TrafficData

Movie

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PUBLIC rjw57 / highways-agency-live-traffic Pull Request Unwatch Star 0 Fork 0

Code Network Pull Requests 0 Issues 0 Wiki Graphs Settings

An automatically updated historical record of data from <http://www.data.gov.uk/dataset/live-traffic-information-from-the-highways-agency-road-network> — [Read more](#)

ZIP HTTP SSH Git Read-Only git@github.com:rjw57/highways-agency-live-traffic.git Read+Write access

branch: master Files Commits Branches 1 Tags

highways-agency-live-traffic / + 514 commits

Automatic commit for Tue Apr 23 16:09:21 BST 2013

rjw57 authored 39 minutes ago	latest commit 3f2bdec16b	
CurrentPlanned	39 minutes ago	Automatic commit for Tue Apr 23 16:09:21 BST 2013 [rjw57]
CurrentRoadworks	39 minutes ago	Automatic commit for Tue Apr 23 16:09:21 BST 2013 [rjw57]
FuturePlanned	an hour ago	Automatic commit for Tue Apr 23 16:00:24 BST 2013 [rjw57]
FutureRoadworks	an hour ago	Automatic commit for Tue Apr 23 16:00:24 BST 2013 [rjw57]
JourneyTimeData	39 minutes ago	Automatic commit for Tue Apr 23 16:09:21 BST 2013 [rjw57]
PredefinedLocationJourneyTimeSections	39 minutes ago	Automatic commit for Tue Apr 23 16:09:21 BST 2013 [rjw57]
PredefinedLocationLinks	39 minutes ago	Automatic commit for Tue Apr 23 16:09:21 BST 2013 [rjw57]
TrafficData	39 minutes ago	Automatic commit for Tue Apr 23 16:09:21 BST 2013 [rjw57]
UnplannedEvent	39 minutes ago	Automatic commit for Tue Apr 23 16:09:21 BST 2013 [rjw57]

chrome://newtab/

Movie

Conclusions

- ▶ Python is a universal ‘glue’ language.
- ▶ The IPython web notebook is amazing.
- ▶ Plotting and numerical processing on a par with MATLAB.
- ▶ GPU acceleration is easily exposed as needed by PyOpenCL.
- ▶ Playing with data is fun.
- ▶ You too can make ‘mission control’.

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