



Drupal and Outer Space



A Game Changer for the Geospatial Data Market

**Dauria Aerospace
develops new ways in
building low cost
satellites, thus reducing
costs for earth
observation data
drastically.**



The Game Changer for the Geospatial Data Market

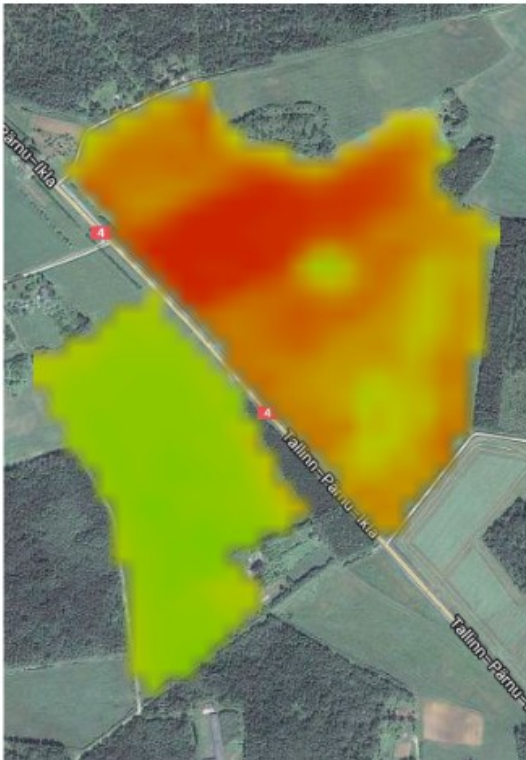
geo | cledian
spatial architects



NDVI - 12.03.2014

Large parcel: winter crop, not homogenous.

Small parcel: no emergence



Affordable Geo data allow small businesses to pioneer new business models.

**Example:
Low cost parcel monitoring service for local farmers**

Building Satellites with Smartphone Technology

Venture Capital Dispatch

An inside look from VentureWire at high-tech startups and their investors.



BIG DATA
Cloudera Investor: Intel's Huge Bet is Another Microsoft Windows Moment



COMPANY FUNDING
Goldman Sachs Joins Venture Firms to Invest in Chinese App Store Wandoujia

VENTURE FUNDS

M&A

DEALS

IPOS

PEOPLE

2:04 pm ET
Oct 21, 2013

INTERNATIONAL

Private Space Co. Dauria Aerospace Will Use Smartphone Tech To Launch Russian Satellites

ARTICLE COMMENTS

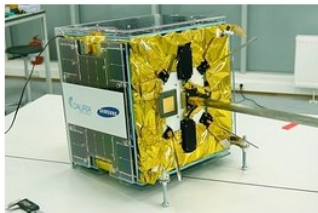
DAURIA AEROSPACE | I2BF GLOBAL VENTURES | ILYA GOLUBOVICH | MICROSATELLITES



By LIZETTE CHAPMAN [CONNECT](#)

Leveraging the same technology found in your smartphone, **Dauria Aerospace** will launch the first Russian private space satellite for about \$3 million early next year.

Launching DX-1, which is being accomplished through a partnership with consumer electronics giant **Samsung Electronics Co. Ltd.** and Russian federal space agency **Roscosmos**, is the latest milestone for the private space industry and is a first step for the two-year-old startup. The company aims to gather data about earth collected by microsatellites it and others have manufactured, aggregate the data onto a cloud-based platform and then charge application developers and others to access it.



—Dauria Aerospace Dauria's DX-1 satellite.

"In 2015 we are anticipating a certain percentage of revenue coming from the cloud platform," said **Ilya Golubovich**, founding partner of **I2BF Global Ventures**, a venture firm that invested \$20 million in Dauria earlier this month.

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Life Sciences IPO Boom Leaves Out Medical Devices

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The Daily Startup: SMS Assist to Modernize Facilities Maintenance

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Malaysia Flight 370: The 'Ghost Plane' Scenario



Why Hardware Is the New Venture-Capital Darling



NYC Teen Uses Google to Predict Mortgage Trends

About Venture Capital Dispatch



Produced by the editors of **Dow Jones VentureWire**, Venture Capital Dispatch tracks the fast-moving developments at the intersection of high-tech startups and venture capital.

Featuring the VentureWire Daily Startup, Venture Capital Dispatch provides trends in venture capital and startup news. For more information, contact VCdispatch@dowjones.com. For more information on Dow Jones products and services, go to <http://www.dowjones.com>.

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Dauria's push follows the high-profile successes earlier this year by private space companies **Space Exploration Technologies Corp.** and **Orbital Sciences Corp.**

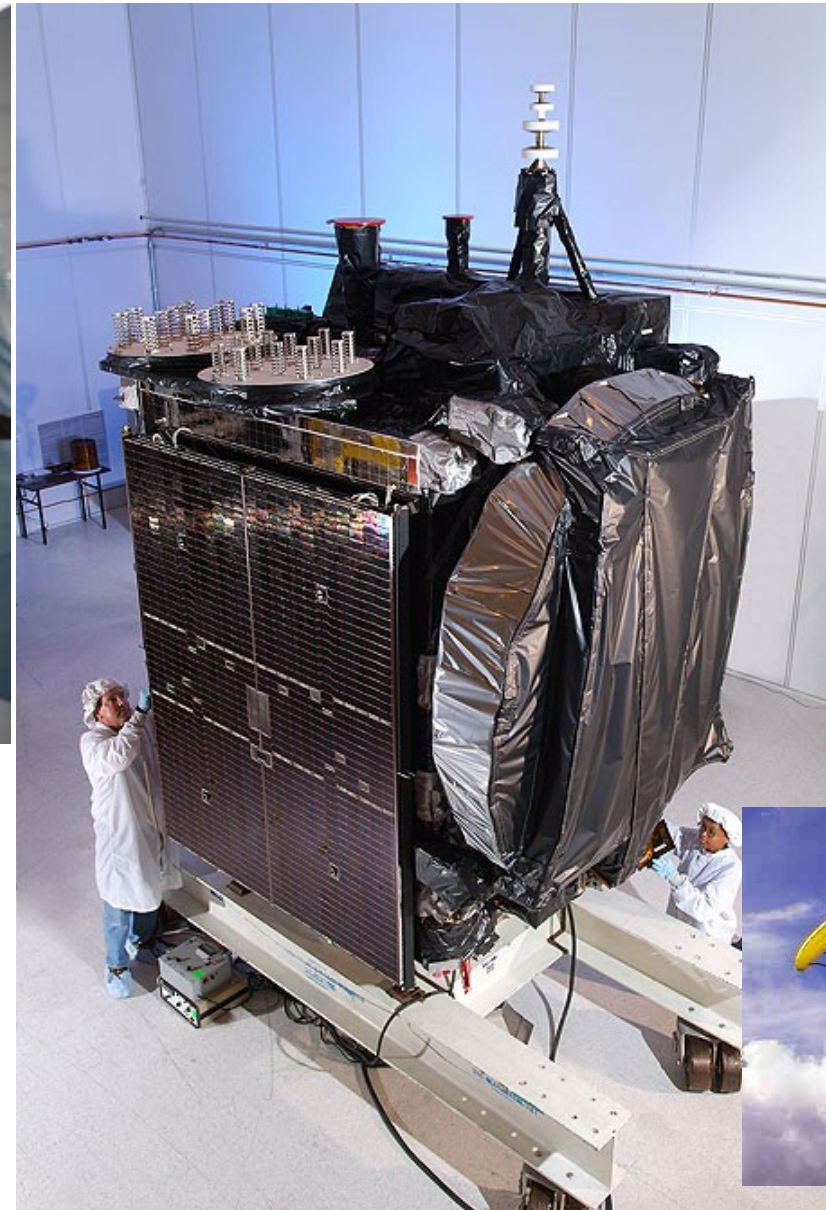
Founded in 2011, Dauria is a resident of **NASA Ames Research Park** in California and has contracts with NASA. It's also a partner of **Boeing Co.** and **Airbus SAS** and is part of the Skolkovo space cluster, located on the outskirts of Moscow.

The company, which employs 100, is headquartered in Munich, where its CloudEO platform is being developed. Mr. Kokorich said the company expects to receive a grant from German space agency DLR shortly.

Building Lightweight Satellites



New Satellite



Conventional Satellite

Less Expensive Launches



ASTRO WATCH

WATCHING THE SKY ABOVE

NEWS IMAGES VIDEOS DONATE ADVERTISING LINKS CONTACT US

WEDNESDAY, OCTOBER 16, 2013

Russia to Launch First Private Satellite in February 2014



Russia will launch its first-ever spacecraft to be 100 percent funded by domestic private capital on board a Soyuz-2-1B carrier rocket in February 2014, the Skolkovo high-tech hub said Tuesday. The DX-1 mini-satellite, designed and built by the Dauria Aerospace group, will test the equipment, technology and software to create a unified platform of small spacecraft. It will also carry an Automatic Identification System (AIS) receiver to monitor global shipping routes.

Dauria Aerospace is planning to set up a compact mission control center in Skolkovo to operate its own satellites in the future, the Skolkovo hub cited the aerospace company's general director Sergei Ivanov as saying. According to Ivanov, Dauria has signed a contract with South Korea's Samsung electronics manufacturer to supply equipment for the mission control center.

Dauria Aerospace is the first private space company in Russia. It was established by businessman Mikhail Kokorich in 2011 "to create low-cost solutions for space-based services," according to the company's

ASTRO WATCH FACEBOOK EVENTS



Soyuz TMA-12M Launch

TOTAL PAGEVIEWS

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+1 590

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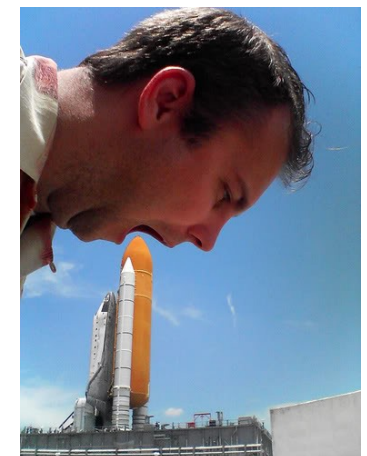
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8,583 osoby lubią obiekt Astro Watch.



We need a Configurable Product with a Map

CLOUDEO STORE USERS ORDERS DRUPACHIN LOG OUT HOME PAGE

WATER QUALITY SUBSCRIPTION 500M

View Edit Products Node export Log

- Daily measures at medium resolution
- Coastal and inland water evaluation
- Archive and Subscription availability

Rating: Too few votes yet

Order Options Description Details Licensing & Pricing Downloads

Water Quality Type *

- Organic Absorption
- Turbidity
- Chlorophyll a

Subscription Type *

- 3 month
- 6 month
- 12 month

Subscription Starting Date
Date:
E.g., 18.04.2014
Earliest starting date is in 7 days.

Subscription Renewal

- Automatic renewal

Eomap Eula agreement

- I agree to Eomap's EULA

Remarks

CALCULATE PRICE

Area: **0 sqkm**

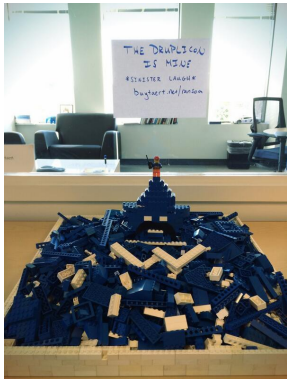
Price: **0.00 €**

ADD TO CART

How to define an AOI?

2000 km
1000 m
Portions Courtesy NASA/JPL-Caltech and U.S. Depart. of Agriculture, Farm Service Agency, Tiles Courtesy of MapQ

Add new comment



Commerce's Standard Handling of Product Variations

The screenshot shows a product page for a purple t-shirt. The page layout includes a top navigation bar with 'Log in', 'Create account', a shopping cart icon showing 'Empty \$0.00', and a 'Checkout' button. Below this is a secondary navigation bar with categories like 'To Carry', 'To Drink With', 'To Geek Out', 'To Wear', and 'All Products', along with 'Blog', 'Contact', and 'About' links. The breadcrumb trail reads 'Home » To wear » "The guy" Short Sleeve Tee'. The main content area features a large image of a man wearing the purple t-shirt with a dark silhouette of a man in a suit. To the left are three smaller thumbnail images showing different views of the t-shirt. To the right of the main image, the product title is '"The guy" Short Sleeve Tee', followed by the SKU 'TSH2-PRL-SM' and the brand 'Simple Threads'. The price is '\$16.00'. Below the price is a product description: 'Product Description for Tshirt 2 - Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed eu dui. Phasellus eget orci volutpat sem accumsan condimentum. Etiam lobortis facilisis sem. Aliquam...'. There is a '+ Read More' link. Below the description are three color selection swatches (blue, green, purple), a size selection dropdown set to 'Small', and a quantity input field set to '1'. At the bottom of the product information is an 'Add to cart' button with a shopping cart icon.

<http://demo.commerceguys.com/ck/tops/guy-short-sleeve-tee>



The Customizable Products Module

As the ancient
Drupal Proverb goes:
There's a module
for that



Get Started Community Documentation Support Download & Extend Marketplace About

Drupal™

Search Drupal.org Search

Drupal Homepage Your Dashboard Logged in as Martin Mayer Log out Refine your search ▾

Download & Extend

Add Issues for Commerce Customizable Products to dashboard +

Download & Extend Home Drupal Core Distributions Modules Themes

Commerce Customizable Products

[View](#) [Version control](#) [Revisions](#) [Automated Testing](#)

Posted by [rszrama](#) on December 13, 2011 at 4:40am

[Drupal Commerce](#) allows you to sell customizable products that require customer input when added to the cart. Use cases for this functionality include:

- Business cards that require contact information and a logo upload.
- Event registrations that require attendee information.
- Donations the allow the customer to specify a donation amount.

The core Line Item module accommodates these scenarios by letting you add any number of fields to the Product line item type and expose them to the Add to Cart form. However, sites that sell multiple types of customizable products or a mixture of customizable and non-customizable products need to define multiple line item types to handle the different configurations of fields. That's where this Customizable Products module comes in!

It gives you the ability to define new line item types on the fly at **Administration > Store > Configuration > Line item types**. This is functionally equivalent to defining the new line item type in code, which is still recommended if you are able (see below).

The module will be developed further to add features that support the creation and management of your customizable products. If you have any ideas to do so, please post them as feature requests in the [issue queue](#).

Installation and configuration

This module only requires the core Line Item and Line Item UI modules to work. Browse to the line item types configuration page and create your new product line item type to begin adding fields to it. Be sure to click the checkbox to include your custom fields on the Add to Cart form or they will not show up.

Once your customizable product line item type has been created, you need to either update an existing product display node type or create a new one to use the custom product line item type. Do this through the settings form for the *Add to Cart form* display formatter of your node type's *Product reference* field. If the Add to Cart form is visible on multiple view modes, make sure you have updated them all to use the same line item type.

This module was featured in the [Commerce Module Tuesday](#) video series if you'd like to see a video walkthrough.

Maintainers for Commerce Customizable Products

[rszrama](#) - 5 commits
last: 1 year ago, first: 2 years ago

[View all committers](#)
[View commits](#)

Issues for Commerce Customizable Products

To avoid duplicates, please search before submitting a new issue.


[Search](#)


[Advanced search](#)

All issues
[37 open, 73 total](#)

Bug report
[10 open, 24 total](#)
[Subscribe via e-mail](#)

Statistics (2 years)

Participants  1

 1

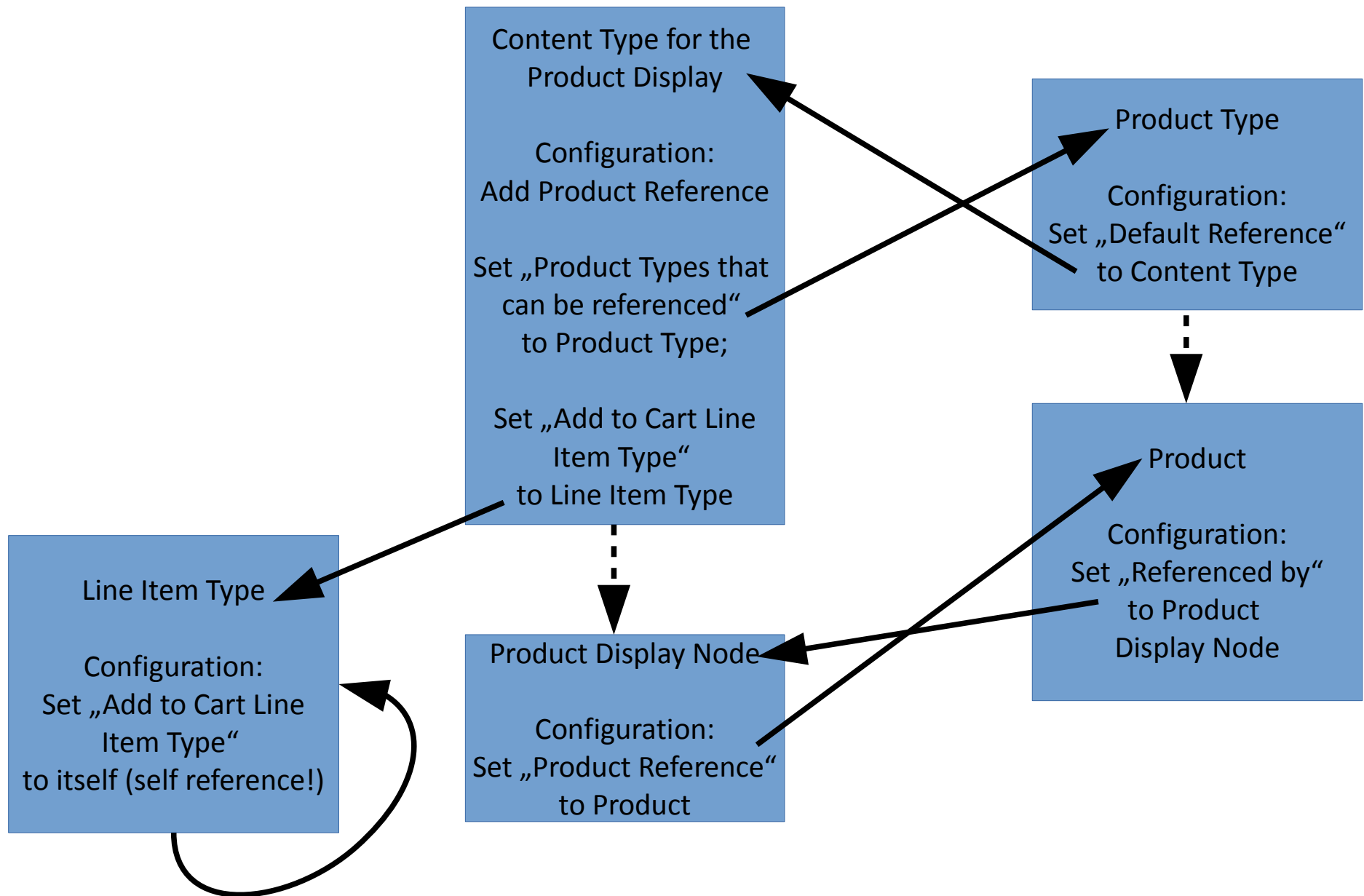
Resources

[Read license](#)
[View project translations](#)

Development

[View pending patches](#)

Configuration of References



Validating User Inputs

- Order Options
- Description
- Details
- Licensing & Pricing
- Downloads

How to define an AOI?

Water Quality Type *

- Organic Absorption
- Turbidity
- Chlorophyll a

Subscription Type *

- 3 month
- 6 month
- 12 month

Subscription Starting Date

Date

28.04.2014

E.g., 21.04.2014

Earliest starting date is in 7 days.

Subscription Renewal

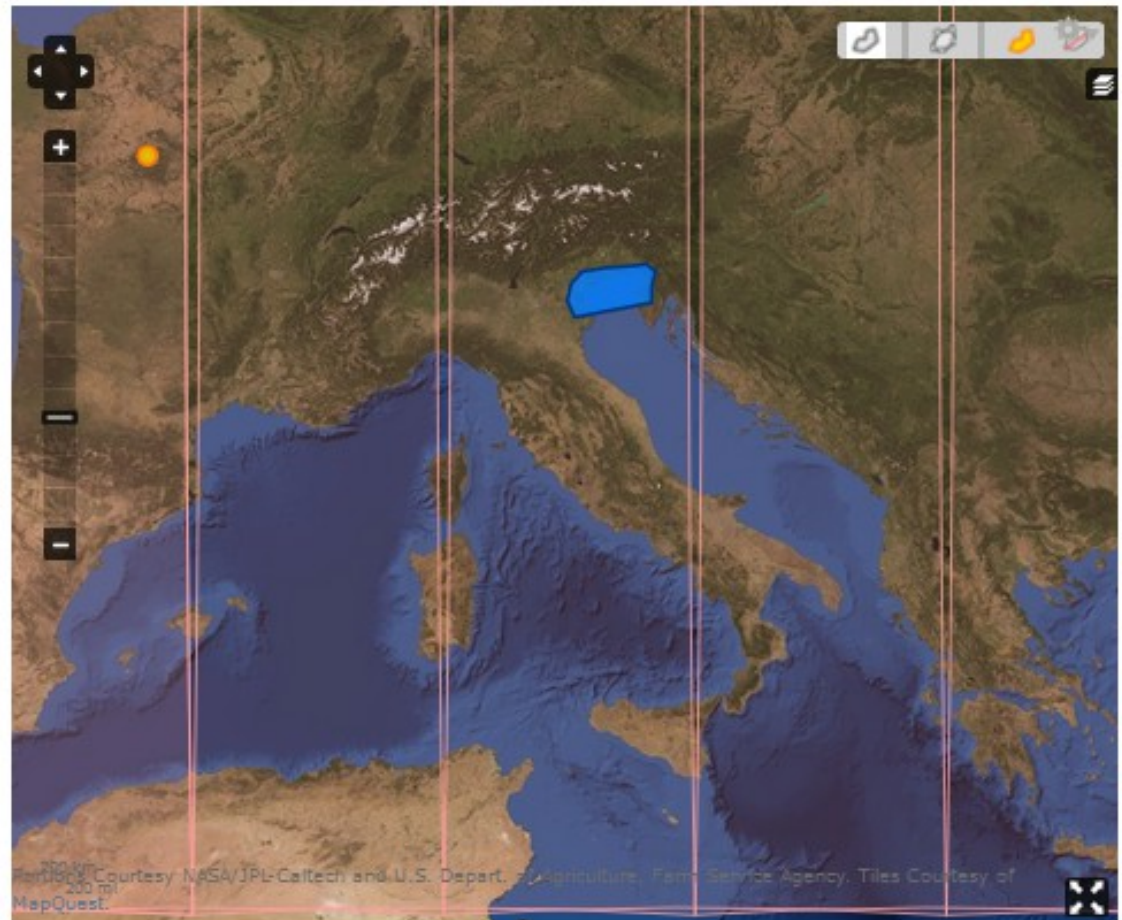
- Automatic renewal

Eomap Eula agreement

- I agree to Eomap's EULA

Remarks

CALCULATE PRICE



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- 6 month
- 12 month

Subscription Starting Date

Date

27.04.2014

E.g., 20.04.2014

Earliest starting date is in 7 days.

Subscription Renewal

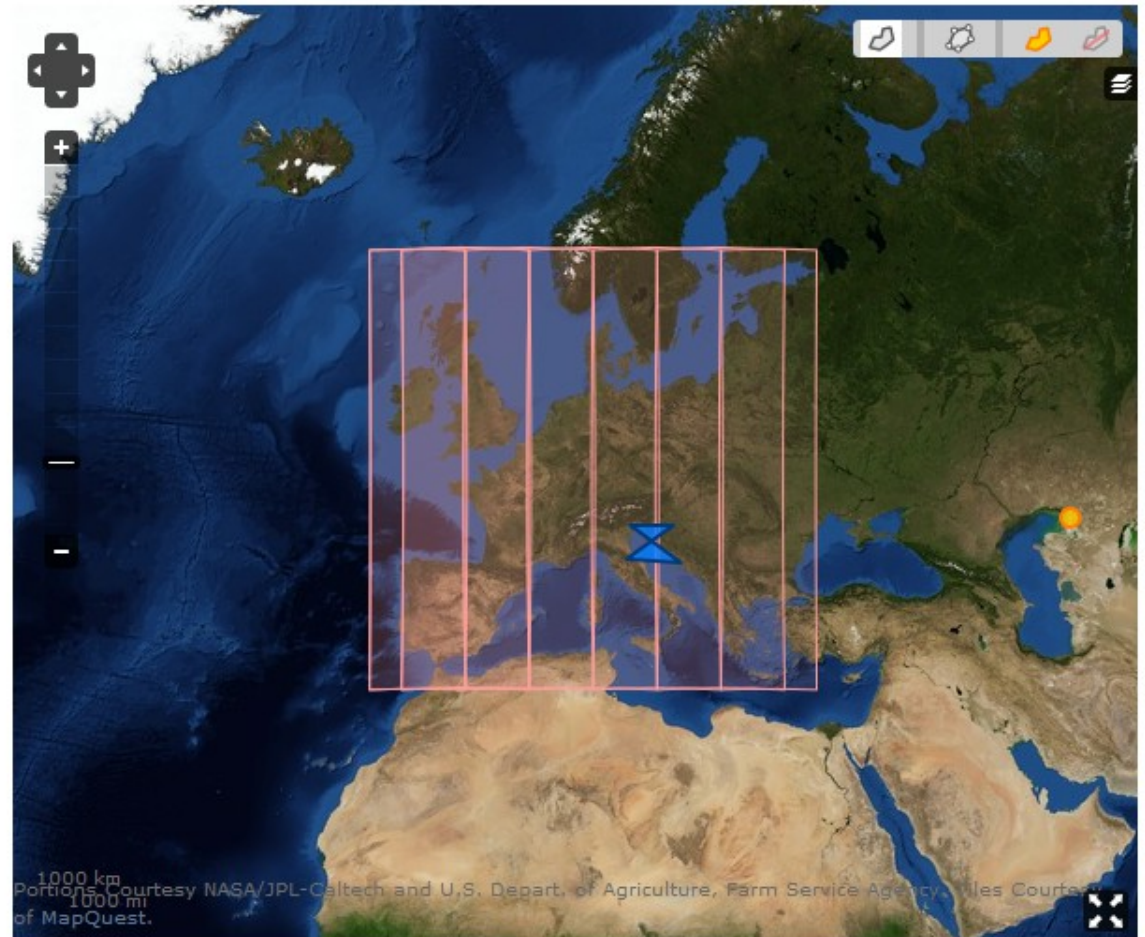
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CALCULATE PRICE



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Date

E.g., 20.04.2014
Earliest starting date is in 7 days.

Subscription Renewal

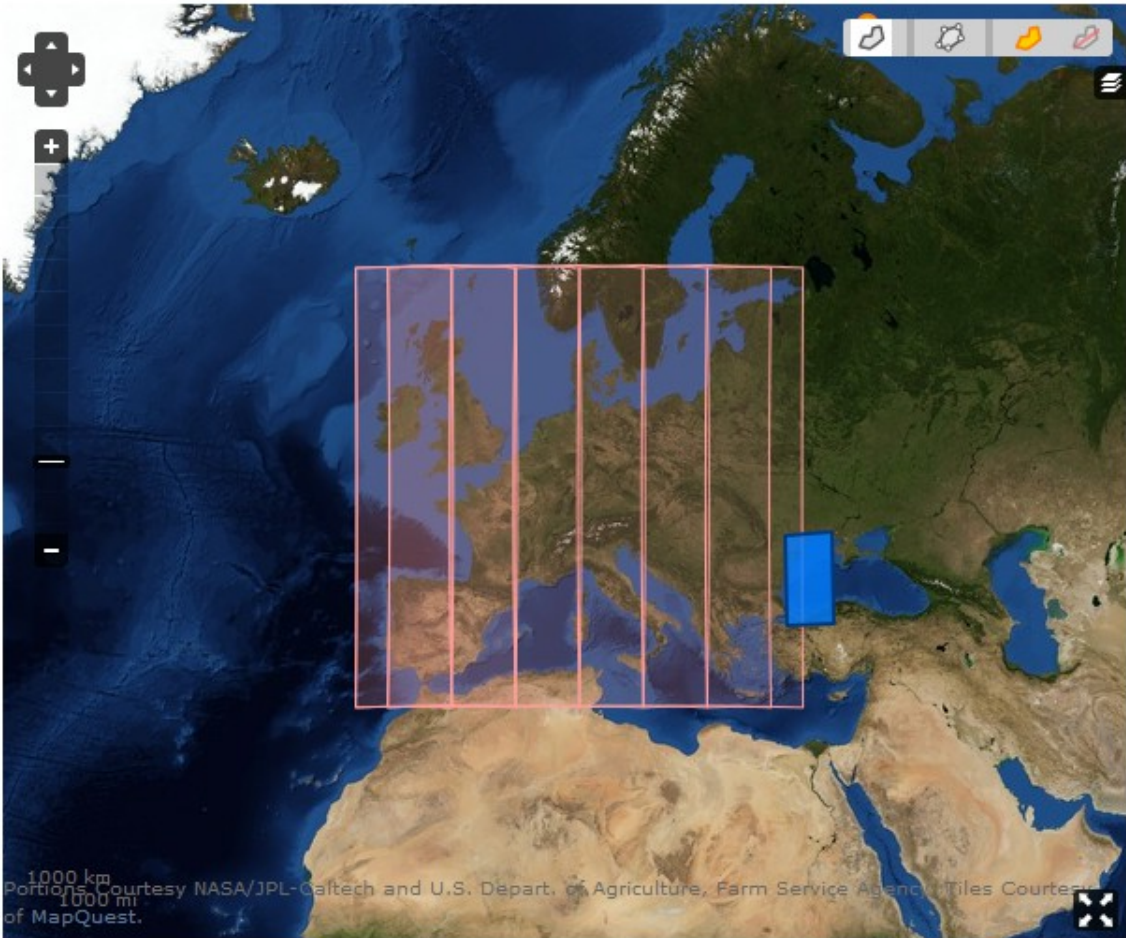
- Automatic renewal

Eomap Eula agreement

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Remarks

CALCULATE PRICE



1000 km
1000 mi
Portions Courtesy NASA/JPL-Caltech and U.S. Depart. of Agriculture, Farm Service Agency. Tiles Courtesy of MapQuest.



Validating User Inputs

Order Options | Description | Details | Licensing & Pricing | Downloads

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- Organic Absorption
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E.g., 20.04.2014
Earliest starting date is in 7 days.

Subscription Renewal

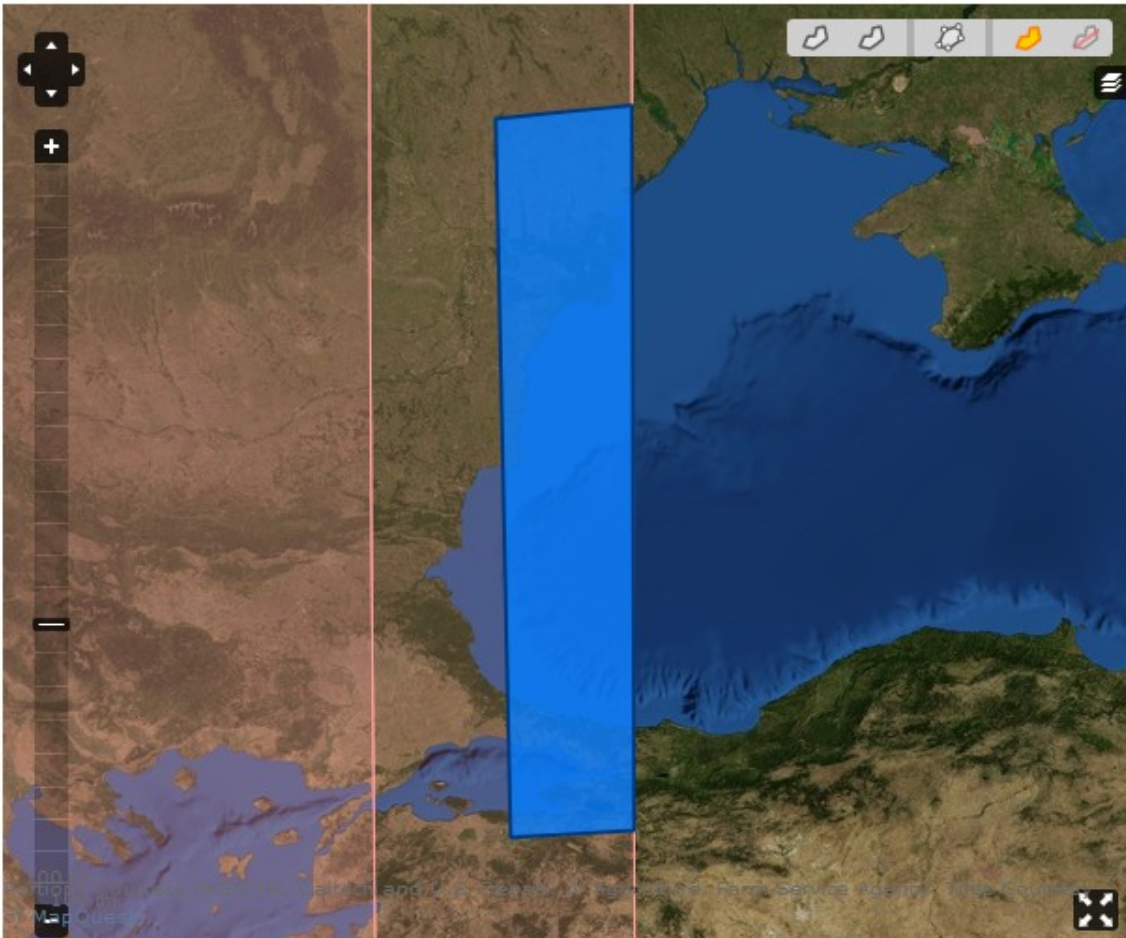
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Eomap Eula agreement

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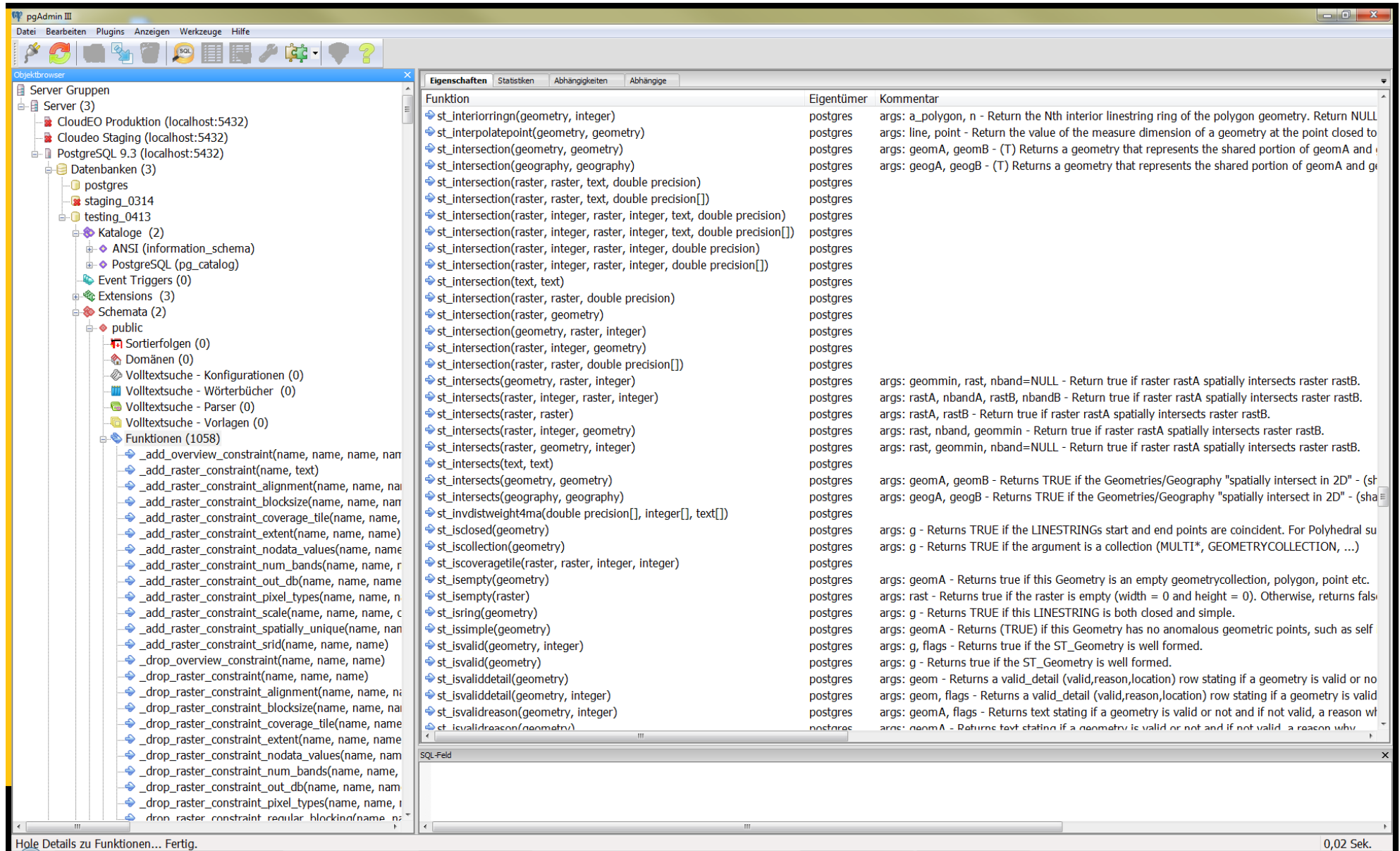
Remarks

CALCULATE PRICE



Utilizing PostGIS

PostGIS extends PostgreSQL Databases with geodetic functions



The screenshot displays the pgAdmin III interface. On the left, the 'Objektbrowser' (Object Browser) shows a tree view of the database structure, including 'Server Gruppen', 'Server (3)', 'Datenbanken (3)', 'Kataloge (2)', 'Event Triggers (0)', 'Extensions (3)', 'Schemata (2)', and 'public'. The 'public' schema is expanded, showing various functions. The main window displays the 'Eigenschaften' (Properties) tab for a selected function, showing a list of functions with their signatures, owners, and comments. The functions listed include various PostGIS functions such as `st_interiorring`, `st_interpolatepoint`, `st_intersection`, `st_intersects`, `st_isclosed`, `st_iscollection`, `st_iscoveragetable`, `st_isempty`, `st_ismultipolygon`, `st_isring`, `st_issimple`, `st_isvalid`, `st_isvaliddetail`, and `st_isvaliddetail`.

Funktion	Eigentümer	Kommentar
<code>st_interiorring(geometry, integer)</code>	postgres	args: a_polygon, n - Return the Nth interior linestring ring of the polygon geometry. Return NULL
<code>st_interpolatepoint(geometry, geometry)</code>	postgres	args: line, point - Return the value of the measure dimension of a geometry at the point closed to
<code>st_intersection(geometry, geometry)</code>	postgres	args: geomA, geomB - (T) Returns a geometry that represents the shared portion of geomA and g
<code>st_intersection(geography, geography)</code>	postgres	args: geomA, geomB - (T) Returns a geometry that represents the shared portion of geomA and g
<code>st_intersection(raster, raster, text, double precision)</code>	postgres	
<code>st_intersection(raster, raster, text, double precision[])</code>	postgres	
<code>st_intersection(raster, integer, raster, integer, text, double precision)</code>	postgres	
<code>st_intersection(raster, integer, raster, integer, double precision)</code>	postgres	
<code>st_intersection(raster, integer, raster, integer, double precision[])</code>	postgres	
<code>st_intersection(raster, integer, raster, integer, double precision[])</code>	postgres	
<code>st_intersection(text, text)</code>	postgres	
<code>st_intersection(raster, raster, double precision)</code>	postgres	
<code>st_intersection(raster, geometry)</code>	postgres	
<code>st_intersection(geometry, raster, integer)</code>	postgres	
<code>st_intersection(raster, integer, geometry)</code>	postgres	
<code>st_intersection(raster, raster, double precision[])</code>	postgres	
<code>st_intersects(geometry, raster, integer)</code>	postgres	args: geommin, rast, nband=NULL - Return true if raster rastA spatially intersects raster rastB.
<code>st_intersects(raster, integer, raster, integer)</code>	postgres	args: rastA, nbandA, rastB, nbandB - Return true if raster rastA spatially intersects raster rastB.
<code>st_intersects(raster, raster)</code>	postgres	args: rastA, rastB - Return true if raster rastA spatially intersects raster rastB.
<code>st_intersects(raster, integer, geometry)</code>	postgres	args: rast, nband, geommin - Return true if raster rastA spatially intersects raster rastB.
<code>st_intersects(raster, geometry, integer)</code>	postgres	args: rast, geommin, nband=NULL - Return true if raster rastA spatially intersects raster rastB.
<code>st_intersects(text, text)</code>	postgres	
<code>st_intersects(geometry, geometry)</code>	postgres	args: geomA, geomB - Returns TRUE if the Geometries/Geography "spatially intersect in 2D" - (st
<code>st_intersects(geography, geography)</code>	postgres	args: geomA, geomB - Returns TRUE if the Geometries/Geography "spatially intersect in 2D" - (sha
<code>st_invdistweight4ma(double precision[], integer[], text[])</code>	postgres	
<code>st_isclosed(geometry)</code>	postgres	args: g - Returns TRUE if the LINESTRINGs start and end points are coincident. For Polyhedral su
<code>st_iscollection(geometry)</code>	postgres	args: g - Returns TRUE if the argument is a collection (MULTI*, GEOMETRYCOLLECTION, ...)
<code>st_iscoveragetable(raster, raster, integer, integer)</code>	postgres	
<code>st_isempty(geometry)</code>	postgres	args: geomA - Returns true if this Geometry is an empty geometrycollection, polygon, point etc.
<code>st_isempty(raster)</code>	postgres	args: rast - Returns true if the raster is empty (width = 0 and height = 0). Otherwise, returns fals
<code>st_issring(geometry)</code>	postgres	args: g - Returns TRUE if this LINESTRING is both closed and simple.
<code>st_issimple(geometry)</code>	postgres	args: geomA - Returns (TRUE) if this Geometry has no anomalous geometric points, such as self
<code>st_isvalid(geometry, integer)</code>	postgres	args: g, flags - Returns true if the ST_Geometry is well formed.
<code>st_isvalid(geometry)</code>	postgres	args: g - Returns true if the ST_Geometry is well formed.
<code>st_isvaliddetail(geometry)</code>	postgres	args: geom - Returns a valid_detail (valid,reason,location) row stating if a geometry is valid or no
<code>st_isvaliddetail(geometry, integer)</code>	postgres	args: geom, flags - Returns a valid_detail (valid,reason,location) row stating if a geometry is valid
<code>st_isvalidreason(geometry, integer)</code>	postgres	args: geomA, flags - Returns text stating if a geometry is valid or not and if not valid, a reason wh
<code>st_isvalidreason(geometry)</code>	postgres	args: geomA - Returns text stating if a geometry is valid or not and if not valid, a reason why

The PostGIS Module integrates this Functions into Drupal

```
class PostgisGeometry {
...
function validate() {
    $geo = is_null($this->wkt) ? $this->geometry : $this->wkt;
    try {
        $result = db_query("SELECT ST_GeometryType(:geo), ST_IsValid(:geo), ST_IsValidReason(:geo) as reason",
            array(':geo' => $geo))->fetchAssoc();

        // Return reason if geometry is not valid.
        if (!$result['st_isvalid']) {
            return array(
                'error' => 'postgis_unparsable',
                'message' => t('Not a valid geometry: @reason.', array('@reason' => $result['reason'])),
            );
        }
    }
...
}
catch (PDOException $e) {
    // TODO: catch only WKT parse errors.
    return array(
        'error' => 'postgis_unparsable',
        'message' => t('Unable to parse WKT: ' . $geo),
    );
}
}
```

But the PostGIS Module has some Weaknesses

```
/**
 * Calculates difference to a given geometry.
 *
 * @param PostgisGeometry $geometry
 *   Geometry which this instance will be compared to.
 *
 * @return PostgisGeometry
 *   Geometry of difference.
 */
function diff($geometry) {
    ...
    $geo_diff = db_query("SELECT ST_Union(ST_Difference(:geo_a, :geo_b), ST_Difference(:geo_b, :geo_a))",
        array(':geo_a' => $geo_a, ':geo_b' => $geo_b))->fetchField();
    $geo_type = db_query("SELECT GeometryType(:geo_diff)",
        array(':geo_diff' => $geo_diff))->fetchField();

    $diff = new PostgisGeometry($geo_type, $this->srid);
    $diff->fromGeometry($geo_diff);

    return $diff;
}
```



- Some important geodetic functions are not implemented
- Error handling is inconsistent

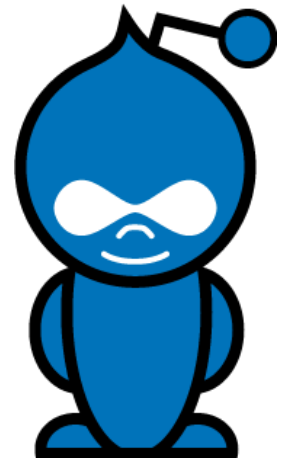
Extending and Overwriting the PostGIS Module

```
class PostgisGeometries extends PostgisGeometry {
...
function intersects($geometry) {
    if ((get_class($geometry) !== 'postgis_geometry') && (get_class($geometry) !== 'PostgisGeometries')) {
        throw new PostgisGeometryException('not postgis_geometry');
    }
    try {
        $geo_a = $this->getText();
        if(strpos($geo_a, 'GEOMETRYCOLLECTION(') === 0) {
            $geo_a = substr(strstr($geo_a, '('), 1, -1);
        }

        $geo_b = $geometry->getText();
        if(strpos($geo_b, 'GEOMETRYCOLLECTION(') === 0) {
            $geo_b = substr(strstr($geo_b, '('), 1, -1);
        }

        $intersects = db_query("SELECT ST_Intersects(text :geo_a, text :geo_b)",
            array(':geo_a' => $geo_a, ':geo_b' => $geo_b))->fetchField();

        return $intersects;
    }
    catch (PDOException $e) {
        throw new PostgisGeometryException( $e->getMessage( ) , (int)$e->getCode( ) );
    }
}
```



Writing a module to validate the AOI and calculate the price

```
function water_quality_form_alter(&$form, &$form_state, $form_id) {
...
  $form['line_item_fields']['field_line_item_map'][LANGUAGE_NONE][0]['wkt']['#element_validate'][] =
  'water_quality_aoi_validate';
...
}

function water_quality_aoi_validate($element, &$form_state) {
...
  $coverage_region_comparison->transform($aoi->getSrid());
  $coverage_region_comparison->dump();
  $intersects_google_projection = $coverage_region_comparison->intersects($aoi_comparison);

  if ($intersects_google_projection){

    // Convert aoi to srid of the region.
    $aoi_comparison->transform($coverage_region['region']->getSrid());
    $aoi_comparison->dump();

    // check if the aoi intersects with the region. This needs to be
    // done in the SRID of the coverage region for accuracy.
    $within = $aoi_comparison->within($coverage_region['region']);
    if ($within){
...
...

```



The Open Layers Editor has some Bugs

What it should deliver

```
POLYGON((1066993.16984217 4873953.49407963,  
1340943.47921804 5392502.29411237,  
1810572.58092165 5382718.35450175,  
1979345.539345157 5106322.0602720035,  
1849708.33939679 4776114.09813913,  
1066993.16984217 4873953.49407963))
```

```
GEOMETRYCOLLECTION(  
POLYGON((1066993.16984217 4873953.49407963,  
1340943.47921804 5392502.29411237,  
1810572.58092165 5382718.35450175,  
1979345.539345157 5106322.0602720035,  
1849708.33939679 4776114.09813913,  
1066993.16984217 4873953.49407963)),  
POINT(1203968.324530105 5133227.894096),  
POINT(1575758.0300698448 5387610.32430706),  
POINT(1894959.0601334036 5244520.207386877),  
POINT(1914526.9393709735 4941218.079205567),  
POINT(1458350.75461948 4825033.79610938),  
POINT(1066993.16984217 4873953.49407963),  
POINT(1340943.47921804 5392502.29411237),  
POINT(1810572.58092165 5382718.35450175),  
POINT(1979345.539345157 5106322.0602720035),  
POINT(1849708.33939679 4776114.09813913))
```

What it sometimes delivers



```
GEOMETRYCOLLECTION()
```

The Open Layers Editor has some Bugs

Caching and the Open Layers Editor have an awkward relationship

CLOUDEO STORE

Water Quality Type field is required.

View Edit Products Node export Log Devel WATER QUALITY SUBSCRIPTION 500M

CATEGORY

- ALL PRODUCTS
- CONTENT
- SOFTWARE / APPS
- CLOUDEO WORKBENCH

THEMATIC

- AGRICULTURE
- AQUATICS
- TELECOMMUNICATION

PROVIDER

- ALL PROVIDERS

HELP

- HELP DESK

SHOPPING CART

100 x CLOUDEO TERRAINPROFILES

TOTAL: 1 500,00 €

VIEW CART

DEVELOPMENT

- CLEAR CACHE
- ENTITY INFO
- EXECUTE PHP CODE
- FIELD INFO
- FUNCTION REFERENCE
- HOOK_ELEMENTS()
- MENU ITEM
- PHPINFO()
- REBUILD MENUS
- REINSTALL MODULES
- RUN CRON
- SESSION VIEWER
- THEME REGISTRY
- VARIABLE EDITOR

Order Options Description Details Licensing & Pricing Downloads

Water Quality Type *

- Organic Absorption
- Turbidity
- Chlorophyll a

Subscription Type *

- 3 month
- 6 month
- 12 month

Subscription Starting Date

Date

25.04.2014

E.g., 18.04.2014

Earliest starting date is in 7 days.

Subscription Renewal

- Automatic renewal

Eomap Eula agreement

- I agree to Eomap's EULA

Remarks

CALCULATE PRICE

Area

0 sqkm

Price

0.00 €

ADD TO CART

How to define an AOI?

Add new comment



The Open Layers Editor has some Bugs

```
function water_quality_form_alter(&$form, &$form_state, $form_id) {  
  ...  
  ...  
  $form['line_item_fields']['field_subscription_type'][LANGUAGE_NONE]['#element_validate'][] =  
    'water_quality_subscription_type_validate';  
  
  $form['line_item_fields']['field_eomap_eula_agreement'][LANGUAGE_NONE]['#element_validate'][] =  
    'eomap_eula_validate';  
  ...  
  ...  
}
```

```
function water_quality_subscription_type_validate($element, &$form_state) {  
  if(!isset($element['#value']) || empty($element['#value'])) {  
    drupal_rebuild_form($form_state['build_info']['form_id'], $form_state);  
  }  
}
```

```
function eomap_eula_validate($element, &$form_state) {  
  if(!isset($element['#value']) || empty($element['#value'])) {  
    drupal_rebuild_form($form_state['build_info']['form_id'], $form_state);  
    form_set_error('field_line_item_map', t('Agreement to Product EULA must be checked'));  
  }  
}
```

The Open Layers Editor has some Bugs

CLOUDEO STORE

USERS ORDERS DRUPADMIN LOG OUT HOMEPAGE

CATEGORY

- ALL PRODUCTS
- CONTENT
- SOFTWARE / APPS
- CLOUDEO WORKBENCH

THEMATIC

- AGRICULTURE
- AQUATICS
- TELECOMMUNICATION

PROVIDER

- ALL PROVIDERS

HELP

- HELP DESK

SHOPPING CART

100 x CLOUDEO TERRAINPROFILES

TOTAL: 1 500,00 €

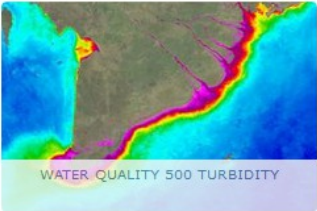
VIEW CART

DEVELOPMENT


- CLEAR CACHE
- ENTITY INFO
- EXECUTE PHP CODE
- FIELD INFO
- FUNCTION REFERENCE
- HOOK_ELEMENTS()
- MENU ITEM
- PHPINFO()
- REBUILD MENUS
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- THEME REGISTRY
- VARIABLE EDITOR

View Edit Products Node export Log Devel

WATER QUALITY SUBSCRIPTION 500M



• Daily measures at medium resolution
• Coastal and inland water evaluation
• Archive and Subscription availability

Rating:  Too few votes yet

Order Options Description Details Licensing & Pricing Downloads

How to define an AOI?

Water Quality Type *

- Organic Absorption
- Turbidity
- Chlorophyll a

Subscription Type *

- 3 month
- 6 month
- 12 month

Subscription Starting Date

Date:

E.g., 21.04.2014
Earliest starting date is in 7 days.

Subscription Renewal

- Automatic renewal

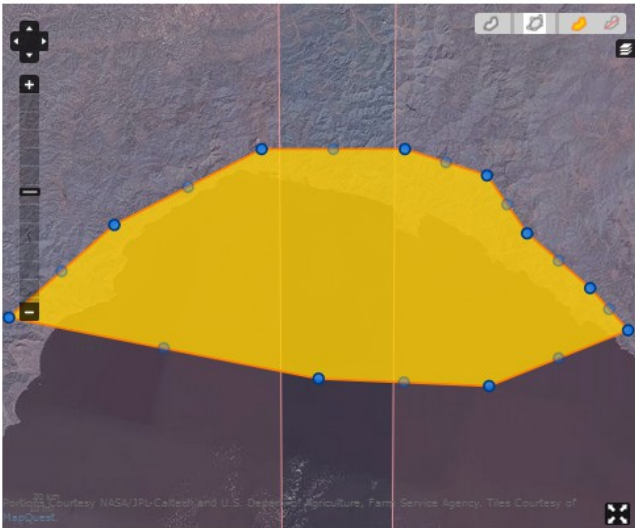
Eomap Eula agreement

- I agree to Eomap's EULA

Remarks

CALCULATE PRICE

Area
4047 sqkm



The Open Layers Editor has some Bugs

CLOUDEO STORE

USERS ORDERS DRUPADMIN LOG OUT HOMEPAGE

- Water Quality Type field is required.
- Warning: Illegal string offset 'value' in list_field_is_empty() (line 408 of D:\xampp183\htdocs\cloudeo\htdocs\modules\field\modules\list\list.module).

CATEGORY

ALL PRODUCTS

CONTENT

SOFTWARE / APPS

CLOUDEO WORKBENCH

THEMATIC

AGRICULTURE

AQUATICS

TELECOMMUNICATION

PROVIDER

ALL PROVIDERS

HELP

HELP DESK

SHOPPING CART

100 x CLOUDEO TERRAINPROFILES

TOTAL: 1 500,00 €

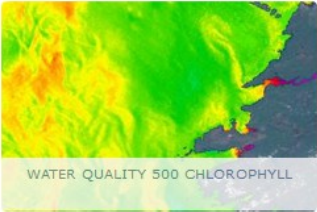
VIEW CART

DEVELOPMENT

- CLEAR CACHE
- ENTITY INFO
- EXECUTE PHP CODE
- FIELD INFO
- FUNCTION REFERENCE
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View Edit Products Node export Log Devel

WATER QUALITY SUBSCRIPTION 500M



WATER QUALITY 500 CHLOROPHYLL

- Daily measures at medium resolution
- Coastal and inland water evaluation
- Archive and Subscription availability

Rating:  Too few votes yet

Order Options Description Details Licensing & Pricing Downloads

How to define an AOI?

Water Quality Type *

- Organic Absorption
- Turbidity
- Chlorophyll a

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- 3 month
- 6 month
- 12 month

Subscription Starting Date

Date:

E.g., 21.04.2014
Earliest starting date is in 7 days.

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- Automatic renewal

Eomap Eula agreement

- I agree to Eomap's EULA

Remarks

CALCULATE PRICE

Area
4047 sqkm



The Open Layers Editor has some Bugs

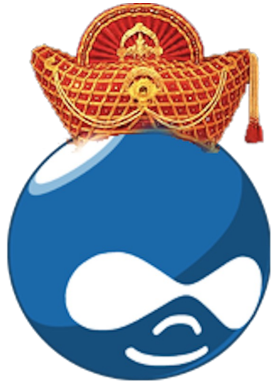


```
$form_state['no_cache'] = TRUE;
```

```
if (isset($form_state['values']['line_item_fields']['field_line_item_map'][LANGUAGE_NONE][0]['wkt'])) {
    $form_state['input']['line_item_fields']['field_line_item_map'][LANGUAGE_NONE][0]['wkt'] =
        $form_state['values']['line_item_fields']['field_line_item_map'][LANGUAGE_NONE][0]['wkt'];
} else {
    if (isset($form_state['input']['line_item_fields']['field_line_item_map'][LANGUAGE_NONE][0]['wkt'])) {
        $wkt = $form_state['input']['line_item_fields']['field_line_item_map'][LANGUAGE_NONE][0]['wkt'];
        if (strpos($wkt, 'POINT') !== false) {
            $wkt = substr(strstr($wkt, '('), 1, (strpos($wkt, ',POINT') - strpos($wkt, '(') - 1));
        }
        $form['line_item_fields']['field_line_item_map'][LANGUAGE_NONE][0]['wkt']['#value'] = $wkt;
    }
}
```

**Some form fields mysteriously lose
their value and need to be refilled**

Wrapping it up: Placing the Geo Data Product in the Shopping Cart



**A Rule
overwrites
the line item
price with
the calculated
price**

Dashboard Content Structure Store Appearance People Modules Affiliated content Configuration Reports Help

Add content Find content Products Dashboard Edit shortcuts

Home » Administration » Configuration » Workflow » Rules

Editing reaction rule "Water Quality"

Events

EVENT	OPERATIONS
Calculating the sell price of a product	delete
+ Add event	

Conditions

[Show row weights](#)

ELEMENTS	OPERATIONS
+ Entity has field Parameter: <i>Entity</i> : [commerce-line-item], <i>Field</i> : field_price_of_chosen_area	edit delete
+ Add condition + Add or + Add and	

Actions

[Show row weights](#)


ELEMENTS	OPERATIONS
+ Set the unit price to a specific amount Parameter: <i>Line item</i> : [commerce_line_item], <i>Amount</i> : [commerce-line-item:field...]	edit delete
+ Add action + Add loop	

▶ SETTINGS

Save changes

Wrapping it up: Placing the Geo Data Product in the Shopping Cart

CLUDEO STORE

USERS ORDERS  DRUPADMIN LOG OUT HOMEPAGE

CATEGORY

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- TELECOMMUNICATION

PROVIDER

- ALL PROVIDERS

HELP

- HELP DESK

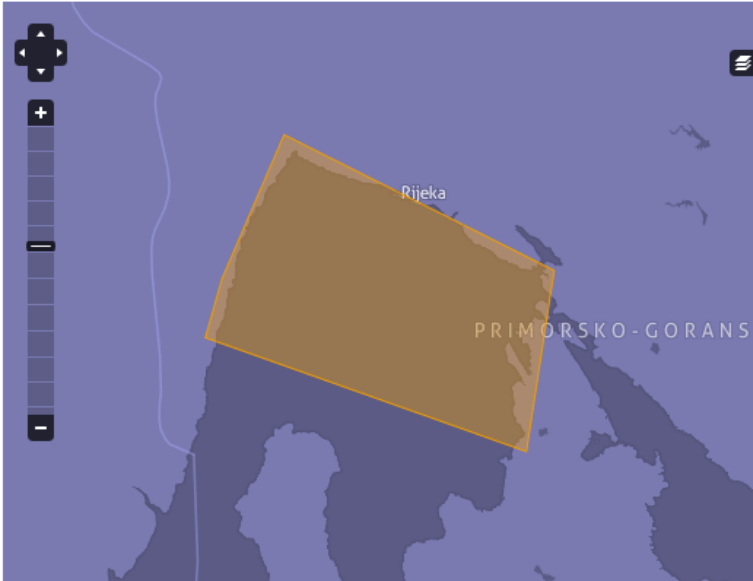
SHOPPING CART

1 x WATER QUALITY SUBSCRIPTION 500M

TOTAL: 3 730,61 €

VIEW CART

SHOPPING CART

Product	Remove	Total	Remarks
 <p>Water Quality Subscription 500m</p> <ul style="list-style-type: none">Organic Absorption <p>3 month</p>	REMOVE	3 730,61 €	

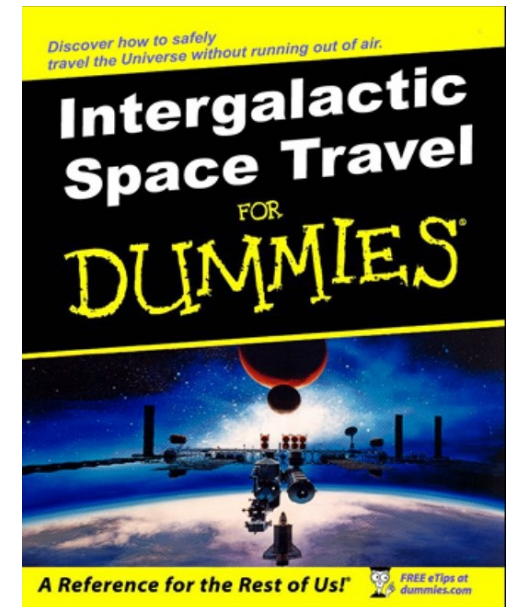
Total: 3 730,61 €

[UPDATE CART](#) [CHECKOUT](#)



What it's all about...

**You can build some such thing
and even more sophisticated
sites with Drupal modules
and a little coding!**



Any Questions?



The End

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**Translated to a select
choice of languages
of planet Earth:**

**Спасибо за внимание
Спасибі за увагу
Danke für Ihre Aufmerksamkeit
Thank you for your attention**