

**IIP InsightCloud**

**Datasource Documentation**

**Version 0.4 Beta**

**June 09, 2015**





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**Revision Table**

<i>Version Number</i>	<i>Date</i>	<i>Description</i>	<i>Authors</i>
0.3 Beta	05/27/2015	First Draft for initial source list	DigitalGlobe
0.4 Beta	06/09/2015	Second Draft updated to include new and updated sources	DigitalGlobe

## 1 Scope

### 1.1 Identification

This document applies to InsightCloud Version 0.4 Beta Dated 06/09/2015.

### 1.2 Document Overview

The purpose of this document is to:

- Identify the terrain sources and restrictions.
- Identify the social media and vector types used in the software.
- Identify the sources for each social media and vector type, and any restrictions.
- Define Anthrometer attributes.

## 2 Terrain

Terrain applications run analytics using Digital Elevation Models (DEMs) and various user inputs through algorithms to return different analytic results.

### 2.1 Terrain Source List

Source	Source Name	Coverage
SRTM3	SRTM 90M	Global
ASTER1	ASTER 30M	Global
VRICON2M	VRICON 2M	Sporadic

### 2.2 VRICON 2M Coverage List

Port Lincoln - Australia  
Camiri - Bolivia  
Rio de Janeiro - Brazil  
Dorchester – England  
Dorset - England  
Portsmouth – England  
Southampton - England

Euskirchen - Germany  
 Megara - Greece  
 Nea Peramos – Greece  
 Al Asad Airbase (alt. Al Anbar) - Iraq  
 Nairobi – Kenya  
 Monrovia - Liberia  
 Tripoli – Libya  
 Lagos – Nigeria  
 Yongbyon (alt. Nyongbyon) - North Korea  
 Boden - Sweden  
 Aleppo - Syria  
 Ar Raqqa - Syria  
 Salamiya – Syria  
 Gombe National Park (alt. Kigoma) - Tanzania  
 Mwandiga – Tanzania  
 Entebbe Airport - Uganda  
 Juneau - Alaska, USA  
 Al Mukalla – Yemen  
 Ghayl Ba Wazir – Yemen  
 Sompe - Southern Zambia

### 2.3 Restrictions

Source	Terrain Analytic Name	Terrain Analytic API Call Name	Restrictions
SRTM3	Comms RFP	Comms	Outer Radius <= 30000
	Cumulative Viewshed	massvs	7000 x 7000
	HLZ Touchdown	hlz	SRTM3 not used in hlz
	Sightline	sightline	Outer Radius <= 30000
	Sitescan	sitescan	N/A
ASTER1	Comms RFP	Comms	Outer Radius <= 10000
	Cumulative Viewshed	massvs	7000 x 7000
	HLZ Touchdown	hlz	ASTER1 not used in hlz
	Sightline	sightline	Outer Radius <= 10000
	Sitescan	sitescan	N/A
VRICON2M	Comms RFP	Comms	Outer Radius <= 3500 <i>Note: 3500 takes 3+ minutes to return results</i>

Source	Terrain Analytic Name	Terrain Analytic API Call Name	Restrictions
			<i>Note: Small radii around 721 return results quickly</i>
	Cumulative Viewshed	massvs	VRICON2M not used in massvs
	HLZ Touchdown	hlz	Aoi bounding box should not exceed 20000 x 20000, or the footprint of the data, whichever is smaller <i>Note: Large aois will take 3-4 + minutes to return</i>
	Sightline	sightline	Outer Radius <= 7500 <i>Note: 7500 takes 1+ minutes to return results</i> <i>Note: Small radii around 721 return results quickly</i>
	Sitescan	sitescan	VRICON2M not used in sitescan

### 3 Social Media

The InsightCloud Social Media widget provides the analyst with a visual output of up-to-the-second geolocated social media from Twitter and RSS feeds, based on user-defined queries.

#### 3.1 Twitter

##### 3.1.1 Twitter Country Coverage

Country Name	ISO Code
Afghanistan	AF
Algeria	DZ
Armenia	AM
Benin	BJ
Botswana	BW
Brazil	BR
Burkina Faso	BF
Cameroon	CM

Country Name	ISO Code
Central African Republic	CF
Chad	TD
Colombia	CO
Djibouti	DJ
Georgia	GE
Ghana	GH
Guinea	GN
Honduras	HN
Indonesia	ID
Iran	IR
Iraq	IQ
Ivory Coast	CI
Jordon	JO
Kenya	KE
Lebanon	LB
Liberia	LR
Libya	LY
Malaysia	MY
Maldives	MV
Mali	ML
Mauritania	MR
Mexico	MX
Morocco	MA
Niger	NE



Country Name	ISO Code
Nigeria	NG
North Korea	KP
Pakistan	PK
Peru	PE
Philippines	PH
Sierra Leone	SL
Somalia	SO
Sudan	SD
Swaziland	SZ
Syria	SY
Thailand	TH
Togo	TG
Trinidad and Tobago	TT
Tunisia	TN
Turkey	TR
United States of America	US
Venezuela	VE
Yemen	YE

### 3.1.2 Twitter Available Timeframe

Twitter Ingest from: Nov 2013 – current date and time

## 3.2 RSS

### 3.2.1 RSS Source List

Source	Category	URL
All Africa	AFRICA	<a href="http://allafrica.com/tools/headlines/rdf/latest/headlines.rdf">http://allafrica.com/tools/headlines/rdf/latest/headlines.rdf</a>

Source	Category	URL
BBC	AFRICA	<a href="http://feeds.bbc.co.uk/news/world/africa/rss.xml">http://feeds.bbc.co.uk/news/world/africa/rss.xml</a>
The Hindu	ASIA	<a href="http://www.thehindu.com/news/national/?service=rss">http://www.thehindu.com/news/national/?service=rss</a>
The Hindu	ASIA	<a href="http://www.thehindu.com/news/international/south-asia/?service=rss">http://www.thehindu.com/news/international/south-asia/?service=rss</a>
Straits Times	ASIA	<a href="http://straitstimes.com.feedsportal.com/c/32792/f/640960/index.rss">http://straitstimes.com.feedsportal.com/c/32792/f/640960/index.rss</a>
Yonhap News	ASIA	<a href="http://yonhapnews.feedsportal.com/c/35025/f/647120/index.rss">http://yonhapnews.feedsportal.com/c/35025/f/647120/index.rss</a>
Oil and Gas Journal	BUSINESS	<a href="http://feeds.feedburner.com/latest-news-ogj">http://feeds.feedburner.com/latest-news-ogj</a>
CNN	CRIME	<a href="http://rss.cnn.com/rss/cnn_crime.rss">http://rss.cnn.com/rss/cnn_crime.rss</a>
Copernicus EMS	DISASTER	<a href="http://feeds.feedburner.com/CopernicusEMSMappingRushModeActivations">http://feeds.feedburner.com/CopernicusEMSMappingRushModeActivations</a>
Disaster Charter	DISASTER	<a href="http://www.disasterscharter.org/DisasterCharter/RssFeed?articleType=activation&amp;locale=en_US&amp;companyId=1&amp;communityId=10729">http://www.disasterscharter.org/DisasterCharter/RssFeed?articleType=activation&amp;locale=en_US&amp;companyId=1&amp;communityId=10729</a>
Disaster Report	DISASTER	<a href="http://www.disaster-report.com/feeds/posts/default">http://www.disaster-report.com/feeds/posts/default</a>
EMERCOM of Russia	DISASTER	<a href="http://en.mchs.ru/news/rss/">http://en.mchs.ru/news/rss/</a>
GDACS	DISASTER	<a href="http://www.gdacs.org/xml/rss.xml">http://www.gdacs.org/xml/rss.xml</a>
Guardian	DISASTER	<a href="http://www.theguardian.com/world/natural-disasters/rss">http://www.theguardian.com/world/natural-disasters/rss</a>
PDC	DISASTER	<a href="http://d2mxabrykbl1km.cloudfront.net/feed.xml">http://d2mxabrykbl1km.cloudfront.net/feed.xml</a>
RSOE-EDIS	DISASTER	<a href="http://feeds.feedburner.com/RsoeEdis-EmergencyAndDisasterInformation">http://feeds.feedburner.com/RsoeEdis-EmergencyAndDisasterInformation</a>
RSOE-EDIS	DISASTER	<a href="http://feeds.feedburner.com/rsoeEdis-FaaAirplaneAccidentAndIncidentInformation">http://feeds.feedburner.com/rsoeEdis-FaaAirplaneAccidentAndIncidentInformation</a>
RSOE-EDIS	DISASTER	<a href="http://feeds.feedburner.com/RsoeEdis-TropicalStormInformations">http://feeds.feedburner.com/RsoeEdis-TropicalStormInformations</a>
RSOE-EDIS	DISASTER	<a href="http://feeds2.feedburner.com/RsoeEdis-TsunamiInformation">http://feeds2.feedburner.com/RsoeEdis-TsunamiInformation</a>
RSOE-EDIS	DISASTER	<a href="http://feeds.feedburner.com/RsoeEdis-VolcanoMonitoring">http://feeds.feedburner.com/RsoeEdis-VolcanoMonitoring</a>
Topix	DISASTER	<a href="http://www.topix.com/rss/news/natural-disasters">http://www.topix.com/rss/news/natural-disasters</a>
FEMA	GOVERNMENT	<a href="http://www.fema.gov/news/recentnews_rss.fema">http://www.fema.gov/news/recentnews_rss.fema</a>

Source	Category	URL
Naval Open Source Intelligence	GOVERNMENT	<a href="http://nosint.blogspot.com/feeds/posts/default">http://nosint.blogspot.com/feeds/posts/default</a>
BBS	MIDDLE EAST	<a href="http://feeds.bbc.co.uk/news/world/middle_east/rss.xml">http://feeds.bbc.co.uk/news/world/middle_east/rss.xml</a>
Space Daily	SPACE	<a href="http://www.spacedaily.com/spacedaily.xml">http://www.spacedaily.com/spacedaily.xml</a>
Space Flight Now	SPACE	<a href="http://www.spaceflightnow.com/sfnnews.xml">http://www.spaceflightnow.com/sfnnews.xml</a>
Space War	SPACE	<a href="http://www.spacewar.com/spacewar.xml">http://www.spacewar.com/spacewar.xml</a>
Terra Daily	SPACE	<a href="http://www.terradaily.com/terradaily.xml">http://www.terradaily.com/terradaily.xml</a>
Al Jazeera	TOP STORIES	<a href="http://www.aljazeera.com/Services/Rss/?PostingId=2007731105943979989">http://www.aljazeera.com/Services/Rss/?PostingId=2007731105943979989</a>
AP	TOP STORIES	<a href="http://hosted.ap.org/lineups/TOPHEADS.rss?SITE=AP&amp;SECTION=HOME">http://hosted.ap.org/lineups/TOPHEADS.rss?SITE=AP&amp;SECTION=HOME</a>
BBC	TOP STORIES	<a href="http://feeds.bbc.co.uk/news/rss.xml">http://feeds.bbc.co.uk/news/rss.xml</a>
CNN	TOP STORIES	<a href="http://rss.cnn.com/rss/cnn_topstories.rss">http://rss.cnn.com/rss/cnn_topstories.rss</a>
CNTV	TOP STORIES	<a href="http://english.cntv.cn/service/rss/0/index.xml">http://english.cntv.cn/service/rss/0/index.xml</a>
Google	TOP STORIES	<a href="https://news.google.com/news/feeds?pz=1&amp;cf=all&amp;ned=us&amp;hl=en&amp;output=rss">https://news.google.com/news/feeds?pz=1&amp;cf=all&amp;ned=us&amp;hl=en&amp;output=rss</a>
REUTERS	TOP STORIES	<a href="http://feeds.reuters.com/reuters/topNews">http://feeds.reuters.com/reuters/topNews</a>
Sydney Morning Herald	TOP STORIES	<a href="http://feeds.smh.com.au/rssheadlines/national.xml">http://feeds.smh.com.au/rssheadlines/national.xml</a>
Yonhap News	TOP STORIES	<a href="http://yonhapnews.feedsportal.com/c/35025/f/647119/index.rss">http://yonhapnews.feedsportal.com/c/35025/f/647119/index.rss</a>
CNN	US	<a href="http://rss.cnn.com/rss/cnn_us.rss">http://rss.cnn.com/rss/cnn_us.rss</a>
AP	WORLD	<a href="http://hosted.ap.org/lineups/WORLDHEADS.rss?SITE=AP&amp;SECTION=HOME">http://hosted.ap.org/lineups/WORLDHEADS.rss?SITE=AP&amp;SECTION=HOME</a>
CNN	WORLD	<a href="http://rss.cnn.com/rss/cnn_world.rss">http://rss.cnn.com/rss/cnn_world.rss</a>
BBC	WORLD	<a href="http://feeds.bbc.co.uk/news/world/rss.xml">http://feeds.bbc.co.uk/news/world/rss.xml</a>

### 3.2.2 RSS Available Timeframe

RSS Ingest from: Nov 2013 – current date and time

*Note: Not all datasources were added at the same time.*

### 3.3 Restrictions

Kernel Density restricts pageSize to 100000.

## 4 UVI

The Unified Vector Index (UVI) provides the analyst with a tool for visually mapping all available vectors within a given aoi. Analysts may then refine the resulting vectors into a desired selection. These quickly polled and returned arrays of points, polylines, and polygons may then be used in further analytical studies of the area.

### 4.1 Restrictions

Querying the index without the use of paging is restricted to 1000 vector items.  
Querying the index through paging is unrestricted for the number of items returned.

### 4.2 Source List

Source Name	Coverage
ACLED	Africa
Anthrometer	Global
Gazetteer	Global
GDB	US
HGIS	Benin; Burkina Faso; Gabon; Ivory Coast; Liberia; Mali; Niger; Nigeria
OSM	Global
SETD	Syria
Tomnod	Nepal; Lucknow, India; Tibet (north of Nepal, south of Bogkamba)

### 4.3 Anthrometer Attribute Definitions

Level	Attr. Name	Description
Top Level	Geometry	The GeoJSON polygon representing this bin's geohash
properties	itemType	The date at the start of this bin's time period
	itemDate	The start of the time period for this geotemporal bin (all bins are currently 15 minutes long)
properties.attributes (general attributes)	TimeBucket	Same as properties.itemDate

Level	Attr. Name	Description
properties.attributes (volume analysis attributes)	VolumeActualValue	The actual volume of tweets in this geotemporal bin
	VolumeExpectedMin / VolumeExpectedMax	The range of expected values based on the model; the model is currently trained on the three immediately prior weeks of historic data
	GeohashType	The name of the model variation that was used to analyze this bin (currently always “low-volume”)
	AlertLevel	A value indicating how significant the deviation of the actual tweet volume is from the expected range; a value twice as high is approximately twice as unusual; a value of at least 1.0 is a “significant” deviation
	AlertType	A simple categorization of the values in AlertLevel; an AlertLevel of 0.0 yields an AlertType of “none,” an AlertLevel less than 1.0 yields an AlertType of “watch,” and an AlertLevel at least 1.0 yields an AlertType of “warning”
properties.attributes (sentiment analysis attributes)	MedianSentimentMedian	An “average” level of sentiment in this bin (to be precise, it is the median of the median of the non-0.5 positive sentiment values from each training time bucket in this geohash)
	SentimentMAD	An “average” difference between MedianSentimentMedian and the individual sentiment medians from the training time buckets
	SentimentMedian	The median of the non-0.5 positive sentiment values from the tweets in this bin
	SentimentDeviation	The level of deviation of this bin’s SentimentMedian from the MedianSentimentMedian; this value uses SentimentMAD for limited “normalization,” but the resultant value should not be used as a ratio value (i.e. it’s only useful to say that a higher value is more unusual); a value of at least 10.0 is a “significant” deviation

*Note: There will only be entries for geotemporal bins if the AlertLevel is at least 1.0 or the SentimentDeviation is at least 10.0.*