

# GIS day

Jeudi 16 novembre 2017

## Journée du Club Géomatique de la Nouvelle-Calédonie

Amphithéâtre de la province Sud



# Atelier 1

## Introduction à GéoEvent – Traitement de flux de données en temps réel



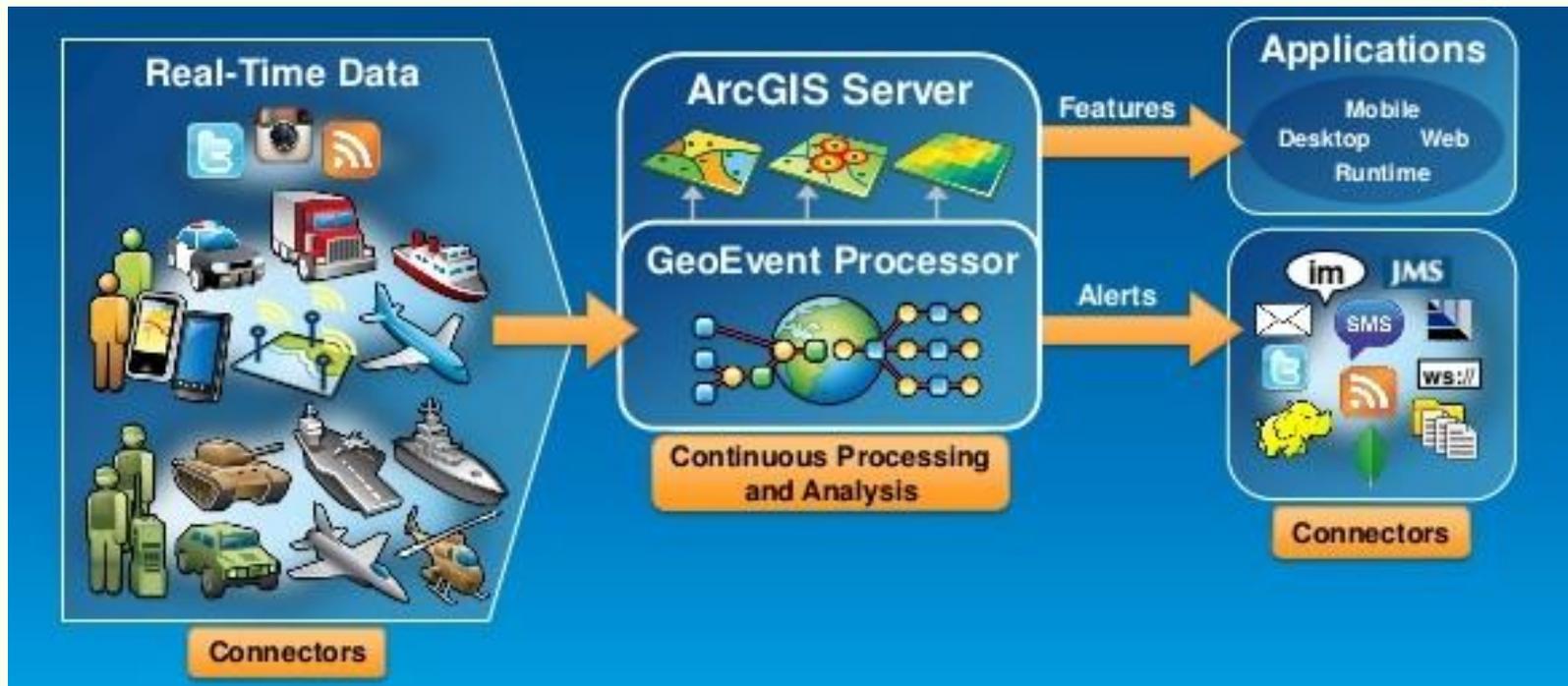
**GIS**day



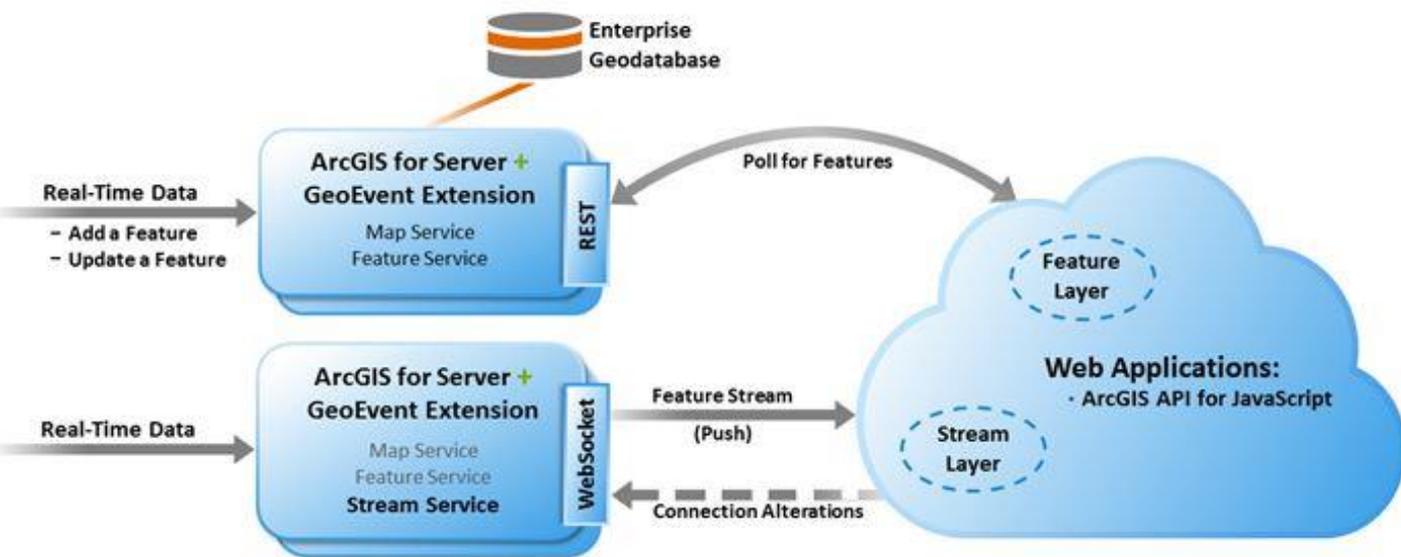
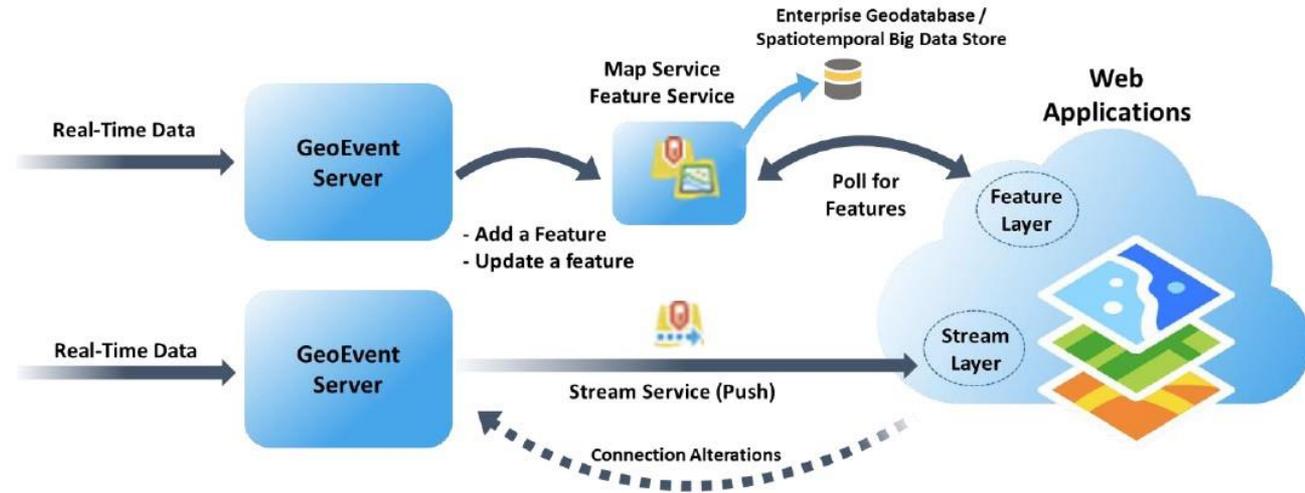
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  - Source de données et Workflow
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  - Résultat sur une application cartographique
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# Schéma des étapes de l'information



# Schéma du fonctionnement des services



# Positionnement de la Station spatiale Internationale

- ❖ Récupérer un service JSON avec des informations de l'ISS
- ❖ Traiter les données reçues et les croiser avec d'autres données géographiques
- ❖ Publier un stream service pour afficher l'information en temps réel
- ❖ Envoyer des mails d'alertes ou de suivi de la données

# Source de données et Workflow

https://api.wheretheiss.at/v1/satellites/25544

Rechercher

Les plus visités Courrier en arrivée Profil utilisateur: Gaeta... Gouvernement de la N... Géorep, Portail de l'inf... outils DTSI SIG Perso AGS

```
{ "name": "iss", "id": 25544, "latitude": -50.109418757573, "longitude": -115.41643065961, "altitude": 424.97601747469, "velocity": 27555.027645953, "visibility": "daylight", "footprint": 4532.6930578847, "timestamp": 1509598484, "daynum": 2458059.7046759, "solar_lat": -14.800847126593, "solar_lon": 102.21302817582, "units": "kilometers" }
```

suivi\_ISS \*

Status	In/Out	Count	Rate (over last 5 mins)	Edit Rate	Max Rate	Time Since Last	View Graph	Action
STARTED	In	4 014	0 /sec		1 /sec	00:00:01		
	Out	4 014	0 /sec		1 /sec	00:00:01		

```
graph LR; A[Localisation ISS] --> B[modification de la valeur timestamp (Field Calculator)]; B --> C[Correspondance des champs (Field Mapper)]; C --> D[Stream Localisation_ISS]; C --> E{Entree et sortie de la zee NC}; C --> F{ISS survolant la zee}; E --> G[email_ISS_entrant_et_sortant_la_zee]; F --> H[email_ISS_dans_la_zee];
```



# Résultat sur une application cartographique

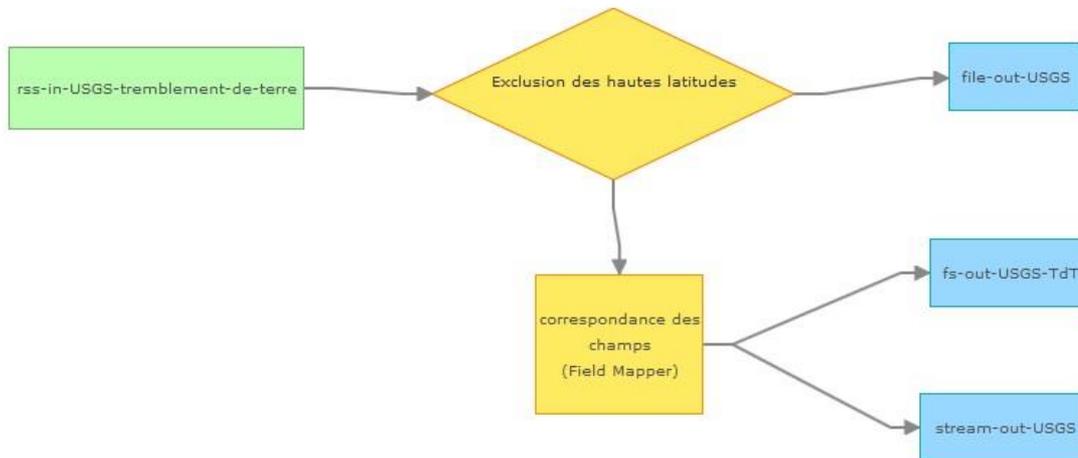
# Les tremblements de terre référencés par l'USGS

- ❖ Récupérer un flux RSS
- ❖ Requêtes attributaires de la donnée source
- ❖ L'information en sortie:
  - ❖ un fichier .csv sous forme de tableur
  - ❖ un stream service pour le suivi en temps réel
  - ❖ un feature service pour l'archivage et une visualisation de l'information choisie

# Source de données et Workflow

## USGS-RSS-tremblement-de-terre \*

Status	In/Out	Count	Rate (over last 5 mins)
STARTED	In	8 517	0 /sec
	Out	25 551	0 /sec



https://earthquake.usgs.gov/earthquakes/feed/v1.0/summary/all\_hour.atom

Les plus visités Courrier en arrivée Profil utilisateur: Gaeta... Gouvernement de la N...

S'abonner à ce flux en utilisant Marque-pages dynamiques

Toujours utiliser Marque-pages dynamiques pour s'abonner aux flux.

S'abonner maintenant

### USGS All Earthquakes, Past Hour

[M 1.6 - 0km SSE of Los Altos Hills, California](#)  
jeudi 2 novembre 2017 15:52

Time  
2017-11-02 04:50:31 UTC  
2017-11-01 20:50:31 -08:00 at epicenter

Location  
37.373°N 122.133°W

Depth  
3.54 km (2.20 mi)

[M 0.8 - 20km ESE of Anza, CA](#)  
jeudi 2 novembre 2017 15:52

Time  
2017-11-02 04:48:58 UTC  
2017-11-01 20:48:58 -08:00 at epicenter

Location  
33.491°N 116.477°W

Depth  
12.63 km (7.85 mi)

# Données sortantes

A

1	USGS_All_Earthquakes_Past_Hour,"M 1.5 - 22km ESE of Anza, CA",https://earthquake.usgs.gov/earthquakes/eventpage/ci38038048,<dl><dt>Time</dt><dd>2017-11-06 12:55:50 UTC</dd><dd>2017-11-06
2	USGS_All_Earthquakes_Past_Hour,"M 0.2 - 12km SE of Anza, CA",https://earthquake.usgs.gov/earthquakes/eventpage/ci38038040,<dl><dt>Time</dt><dd>2017-11-06 12:30:45 UTC</dd><dd>2017-11-06
3	USGS_All_Earthquakes_Past_Hour,"M 2.4 - 46km S of Tanana, Alaska",https://earthquake.usgs.gov/earthquakes/eventpage/ak17168492,<dl><dt>Time</dt><dd>2017-11-06 12:28:14 UTC</dd><dd>2017-11-06
4	USGS_All_Earthquakes_Past_Hour,"M 0.2 - 9km NE of Aguanga, CA",https://earthquake.usgs.gov/earthquakes/eventpage/ci38038032,<dl><dt>Time</dt><dd>2017-11-06 12:24:21 UTC</dd><dd>2017-11-06
5	USGS_All_Earthquakes_Past_Hour,"M 1.3 - 53km W of Big Lake, Alaska",https://earthquake.usgs.gov/earthquakes/eventpage/ak17168498,<dl><dt>Time</dt><dd>2017-11-06 12:48:45 UTC</dd><dd>2017-11-06
6	USGS_All_Earthquakes_Past_Hour,"M 1.9 - 18km S of Malibu Beach, CA",https://earthquake.usgs.gov/earthquakes/eventpage/ci38038024,<dl><dt>Time</dt><dd>2017-11-06 12:07:42 UTC</dd><dd>2017-11-06
7	USGS_All_Earthquakes_Past_Hour,"M 4.8 - South of the Fiji Islands",https://earthquake.usgs.gov/earthquakes/eventpage/us2000bj6m,<dl><dt>Time</dt><dd>2017-11-06 12:03:12 UTC</dd><dd>2017-11-06
8	USGS_All_Earthquakes_Past_Hour,"M 1.6 - 33km E of Sutton-Alpine, Alaska",https://earthquake.usgs.gov/earthquakes/eventpage/ak17168185,<dl><dt>Time</dt><dd>2017-11-06 12:11:02 UTC</dd><dd>2017-11-06
9	USGS_All_Earthquakes_Past_Hour,"M 1.5 - 22km ESE of Anza, CA",https://earthquake.usgs.gov/earthquakes/eventpage/ci38038048,<dl><dt>Time</dt><dd>2017-11-06 12:55:50 UTC</dd><dd>2017-11-06
10	USGS_All_Earthquakes_Past_Hour,"M 2.4 - 46km S of Tanana, Alaska",https://earthquake.usgs.gov/earthquakes/eventpage/ak17168492,<dl><dt>Time</dt><dd>2017-11-06 12:28:14 UTC</dd><dd>2017-11-06
11	USGS_All_Earthquakes_Past_Hour,"M 0.2 - 12km SE of Anza, CA",https://earthquake.usgs.gov/earthquakes/eventpage/ci38038040,<dl><dt>Time</dt><dd>2017-11-06 12:30:45 UTC</dd><dd>2017-11-06

objectid: [2](#)

title: M 1.4 - 5km NW of Phelan, CA

link: https://earthquake.usgs.gov/earthquakes/eventpage/ci38035264

guid: urn:earthquake-usgs-gov:ci:38035264

geo\_long: -117.6038

geo\_lat: 34.4585

Point:

X: -117.60383330000002

Y: 34.458500000000015

objectid: [3](#)

title: M 0.9 - 10km N of Campo, CA

link: https://earthquake.usgs.gov/earthquakes/eventpage/ci38035256

guid: urn:earthquake-usgs-gov:ci:38035256

geo\_long: -116.4637

geo\_lat: 32.692

Point:

X: -116.46366669999998

Y: 32.69200000000001

objectid: [4](#)

title: M 5.6 - 98km ESE of Tadine, New Caledonia

link: https://earthquake.usgs.gov/earthquakes/eventpage/us2000bfdc

guid: urn:earthquake-usgs-gov:us:2000bfdc

geo\_long: 168.7884

geo\_lat: -21.8189

Point:

X: 168.78840000000002

Y: -21.818899999999985

## geoevent\_TdT (StreamServer)

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Cape Yakataga, Alaska", "link": "https://earthquake.usgs.gov/earthquakes/eventpage/ak17169371", "guid": "urn:earthquake-usgs-gov:ak:17169371", "geo_lat": 59.8991, "geo_long": -142.2253}}
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```

You have subscribed

# Résultat sur une application cartographique

# Futurs cas d'usages

- Application VMS (DAM)
- Application SITAC (DSCGR)

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