



A Free, Cloud-based Tool for Creating and Publishing CAP Alerts

presented

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Risk Reduction and Management for the Arab Region"



Presentation Outline

- 1 Overview of Tool for Creating CAP Alerts
- 2 The Role of Composer and the Role of Approver
- 3 Using the CAP Feed to Reach More People
- 4 Exercise: Saving a Draft and Publishing an Alert



Tool for Creating CAP Alerts

CAP Alert Editor, Session Setup

NOTE: If an alert must be issued in less than one minute, please use your simplified warning method instead of this editor tool.

This tool is for composing alerts in CAP (X.1303) format. You must login to be authenticated in your role as authorized composer or approver of CAP alerts. (An approver is an authorized composer also authorized to publish the CAP alert.) Authentication requires your e-mail address and password.

Language - [2-letter \(lowercase\) ISO 639-1 code](#) for text in this CAP alert and its Internet news feed.

Status - Is the alert to be published as an **actual** alert or as a test or exercise?

 ▼

Scope - Is the alert to be published as a **public** alert or published as a private or restricted alert?

 ▼

MsgType - Is this a new alert, or an update or cancel of an already issued alert?

 ▼



Tool for Creating CAP Alerts (selector)

Initialize this CAP alert (status: Test, scope: Restricted, msgType: Alert)

This application confirmed or created two file directories, within the designated server directory for the application, now set to null. The directory at `c:/cap/en/drafts` is for draft CAP alerts and `c:/cap/en/alerts` is for published CAP alerts.

Select initial values using one of the most recent posted alerts: (`c:/cap/en/alerts`)

As Posted 2014/03/30 16:34:58	2012-10-28-08-47-32.xml	The tsunami Advisory continues in effect for the coastal areas of California and Oregon from Gualala Point, California (80 miles NW of San Francisco) to Douglas/Lane County Line, Oregon (10 miles SW of Florence).
As Posted 2014/03/24 09:51:03	2011-02-02-08-37-09.xml	Geomagnetic Storm Alert
As Posted 2013/11/21 20:42:18	2013-11-22-01-42-03.xml	Flood warning for Musanze Northern Province, Rwanda
As Posted 2012/08/16 15:04:16	2011-02-02-10-08-30.xml	Flash flood Warning for South Central San Bernardino, Western Riverside, and North Central San Diego Counties in Southwest California

Select initial values using one of the most recent draft alerts: (`c:/cap/en/drafts`)

Draft as of 2013/11/21 20:42:06	2013-11-22-01-42-03.xml	Flood warning for Musanze Northern Province, Rwanda
Draft as of 2011/02/05 04:07:26	2007-08-15-18-53-48.xml	Flash flood Warning for South Central San Bernardino, Western Riverside, and North Central San Diego Counties in Southwest California
Draft as of 2011/02/05 04:07:26	2011-01-25-04-53-33.xml	Geomagnetic Storm Alert
Draft as of 2011/02/05 04:07:26	2011-01-25-05-06-47.xml	Mount St Helens Volcano Advisory (aviation color code ORANGE)



Tool for Creating CAP Alerts (draft)

Show/Hide XML Validate (Google) Save edited alert End this session

identifier

sender **sent**

status **msgType** **scope**

restriction:

language **category** **responseType**

event:

urgency **severity** **certainty**

onset **expires**

senderName:

[Text templates for headline, description, instruction.](#)

headline

description

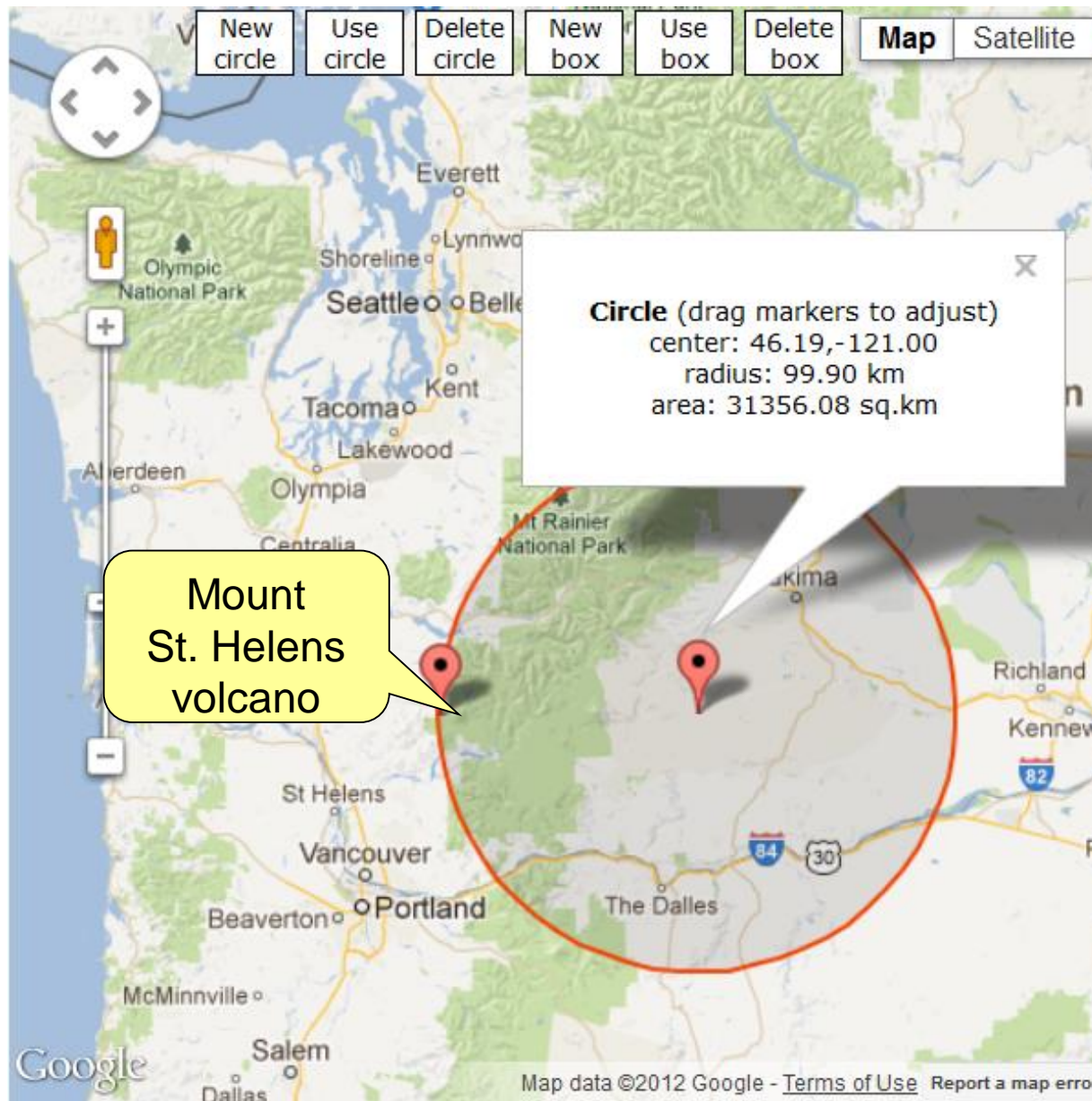
identifier
 sender sent
 status msgType scope
 language category responseType
 event:
 urgency severity certainty
 onset expires
 senderName:
[Text templates for headline, description, instruction.](#)
 headline
 description
 instruction
 web
 image
 contact
 areaDesc
 circle geocode
 Circle format: lat,long<space>radius
[Make circle using map](#) Geocode format: 'type' = 'value'

```

<?xml version="1.0" encoding="UTF-8" ?>
<cap:alert xmlns:cap="urn:oasis:names:tc:emergency:cap:1.1" >
  <cap:identifier>urn:oid:2.49.0.0.388.0.2014.10.18.13.31.33</cap:identifier>
  <cap:sender>echristian@usgs.gov</cap:sender>
  <cap:sent>2014-10-18T13:31:33-00:00</cap:sent>
  <cap:status>Test</cap:status>
  <cap:msgType>Alert</cap:msgType>
  <cap:scope>Public</cap:scope>
  <cap:info>
    <cap:language>en</cap:language>
    <cap:category>Met</cap:category>
    <cap:event>Message from USGS Volcanoes Program</cap:event>
    <cap:responseType>Monitor</cap:responseType>
    <cap:urgency>Expected</cap:urgency>
    <cap:severity>Minor</cap:severity>
    <cap:certainty>Possible</cap:certainty>
    <cap:senderName>USGS Volcanoes Program, Craig Weaver</cap:senderName>
    <cap:headline>Mount St Helens Volcano Advisory (aviation color code ORANGE)
  </cap:headline>
    <cap:description>Current status is Volcano Advisory (Alert Level 2); aviation
    color code ORANGE: Growth of the new lava dome inside the crater of Mount St.
    Helens continues, accompanied by low rates of seismicity, low emissions of steam
    and volcanic gases, and minor production of ash. During such eruptions, changes
    in the level of activity can occur over days to months. The eruption could
    intensify suddenly or with little warning and produce explosions that cause
    hazardous conditions within several miles of the crater and farther downwind.
    Small lahars could suddenly descend the Toutle River if triggered by heavy rain
    or by interaction of hot rocks with snow and ice. These lahars pose a negligible
    hazard below the Sediment Retention Structure (SRS) but could pose a hazard along
    the river channel upstream.</cap:description>
    <cap:instruction>Wind forecasts from the National Oceanic and Atmospheric
    Administration (NOAA), coupled with eruption models, show that any ash clouds
    that rise above the crater rim today would drift principally eastward. Under
    current eruptive conditions, small, short-lived explosions may produce ash clouds
    that exceed 30,000 feet in altitude. Ash from such events can travel 100 miles or
    more downwind.</cap:instruction>
    <cap:web>http://vulcan.wr.usgs.gov/Volcanoes/MSH/Eruption04/</cap:web>
    <cap:contact>Craig Weaver 1-206-553-0627</cap:contact>
    <cap:resource>
      <cap:resourceDesc>Image file</cap:resourceDesc>
      <cap:uri>http://www.fs.fed.us/gprnf/volcanocams/msh/</cap:uri>
    </cap:resource>
    <cap:area>
      <cap:areaDesc>Skamania County, Washington, in the Pacific Northwest region
      of the United States (96 miles south of Seattle, Washington and 53 miles
      northeast of Portland, Oregon</cap:areaDesc>
      <cap:circle>46.2,-122.2 0</cap:circle>
    </cap:area>
  </cap:info>
</cap:alert>
  
```

Make circle using map

Mapping Tool





Tool for Creating CAP Alerts (validate)

Show/Hide XML Validate (Google) Save edited alert End this session

identifier

sender sent

status msgType scope

restriction:

language category responseType

event:

urgency severity certainty

onset expires

senderName:

[Text templates for headline, description, instruction.](#)

headline

description

instruction

web

image

contact

areaDesc

circle geocode

Circle format: lat,long<space>radius
Geocode format: 'type' = 'value'

[Make circle using map](#)

google.org Common Alerting Protocol Validator

The [Common Alerting Protocol](#) validator is a free service that checks the syntax of CAP messages and Atom and RSS feeds of CAP messages. It supports CAP v1.0, v1.1 and

Input feed

```
<?xml version="1.0" encoding="UTF-8" ?>
<cap:alert xmlns:cap="urn:oasis:names:tc:emergency:cap:1.1" >
  <cap:identifier>urn:oid:2.49.0.0.388.0.2014.10.18.9.52.55</cap:identifier>
  <cap:sender>echristian@usgs.gov</cap:sender>
  <cap:sent>2014-10-18T09:52:55-00:00</cap:sent>
  <cap:status>Test</cap:status>
  <cap:msgType>Alert</cap:msgType>
  <cap:scope>Restricted</cap:scope>
  <cap:info>
    <cap:language>en</cap:language>
    <cap:category>Met</cap:category>
    <cap:event>Message from USGS Volcanoes Program</cap:event>
    <cap:urgency>Expected</cap:urgency>
    <cap:severity>Minor</cap:severity>
    <cap:certainty>Possible</cap:certainty>
    <cap:senderName>USGS Volcanoes Program, Craig Weaver</cap:senderName>
    <cap:headline>Mount St Helens Volcano Advisory (aviation color code ORANGE)
  </cap:headline>
    <cap:description>Current status is Volcano Advisory (Alert Level 2);
    aviation color code ORANGE: Growth of the new lava dome inside the crater of
    Mount St. Helens continues, accompanied by low rates of seismicity, low
    emissions of steam and volcanic gases, and minor production of ash. During such
    eruptions, changes in the level of activity can occur over days to months. The
    eruption could intensify suddenly or with little warning and produce explosions
    that cause hazardous conditions within several miles of the crater and farther
    downwind. Small lahars could suddenly descend the Toutle River if triggered by
    heavy rain or by interaction of hot rocks with snow and ice. These lahars pose
    a negligible hazard below the Sediment Retention Structure (SRS) but could pose
    a hazard along the river channel upstream.</cap:description>
  </cap:info>
</cap:alert>
```

Type an alert or [upload a file](#).

(Optional) Validate against common CAP profiles:

- [US IPAWS Profile v1.0](#)
- [CAP Canadian Profile v1.0](#)
- [CAP Australian Profile v3.0, Comm](#)
- [Google Public Alerts CAP v1.0](#)

Validate

Result

Valid

CAP alert is valid



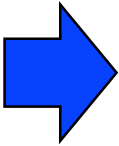
This draft alert was saved to drafts directory as c:/cap/en/drafts/2014-10-18-09-52-55.xml and is available private
[E-mail the alert to me](#)

Tool for Creating CAP Alerts
(published)

identifier urn:oid:2.49.0.0.388.0.2014.10.18.9.52.55
sender echristian@usgs.gov
sent 2014-10-18T09:52:55-00:00
status Test msgType Alert scope Restricted
restriction civic-authorities
addresses
note
references
language en category Met responseType
event Message from USGS Volcanoes Program
urgency Expected severity Minor certainty Possible
onset expires
senderName: USGS Volcanoes Program, Craig Weaver
headline Mount St Helens Volcano Advisory (aviation color code ORANGE)
description Current status is Volcano Advisory (Alert Level 2); aviation color code ORANGE: Growth of the new lava volcanic gases, and minor production of ash. During such eruptions, changes in the level of activity can occur over conditions within several miles of the crater and farther downwind. Small lahars could suddenly descend the Toutle the Sediment Retention Structure (SRS) but could pose a hazard along the river channel upstream.
instruction Wind forecasts from the National Oceanic and Atmospheric Administration (NOAA), coupled with eruptive eruptive conditions, small, short-lived explosions may produce ash clouds that exceed 30,000 feet in altitude. Ash
web http://vulcan.wr.usgs.gov/Volcanoes/MSH/Eruption04/
image http://www.fs.fed.us/gpnf/volcanocams/msh/
contact Craig Weaver 1-206-553-0627
areaDesc Skamania County, Washington, in the Pacific Northwest
circle 46.2,-122.2 0 geocode polygon
Validate (Google) Publish this approved alert Continue editing this draft alert End this editing session


Publish CAP alert

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Tanzania at <https://cap.alert-hub.org>

	Editor tool	Language	Authority feed
Afghanistan	af-andma-en	English	National Disaster Management Authority
Algeria	dz-meteo-ar	Arabic	مكتب الجزائر الوطني للأرصاد الجوية
Suriname	sr-ncrr-en	English	National Coordination Center For Disaster Relief (NCCR)
	sr-ncrr-nl	Dutch	Nationaal CoördinatieCentrum voor Rampenbestrijding (NCCR)
	sr-meteo-en	English	Suriname Meteorological
	sr-meteo-nl	Dutch	Meteorologische Dienst
Tanzania	tz-tma-en	English	Meteorological Agency
Timor-Leste	tl-dnmg-en	English	National Directorate of Meteorology and Geophysics
	tl-dnmg-fr	French	Dirrecção Nacional Meteorologia e Geofisica
Togo	tg-dgmn-en	English	Directorate General of National Meteorology
	tg-dgmn-fr	French	Direction Générale de la Météorologie Nationale
Trinidad and Tobago	tt-ttms-en	English	Meteorological Service

Editor Tool for TMA in English

CAP news feed for TMA in English



<https://cap.alert-hub.org/login.php?sourceld=tz-tma-en>

CAP Alert Editor, Initial Setup

This tool is for composing alerts in CAP format. If you are in the role 'approver-cap' you are authorized to publish CAP alerts. If your role is 'composer-cap' you can create draft CAP alerts but you cannot approve and publish a CAP alert. If you are not in either of the two roles, you cannot use the CAP Editor tool.

Compose CAP alert

Guest

Click here to preview the CAP Editor Tool in the role of "Guest"

Composers and Approvers

- The head of the alerting authority head must designate "composers" and "approvers"
- Composers can save a draft alert
- Approvers can also publish an alert
- The username must be an e-mail address
- Each composer and approver is registered to the user group, not specific to a language



Composing a TMA alert

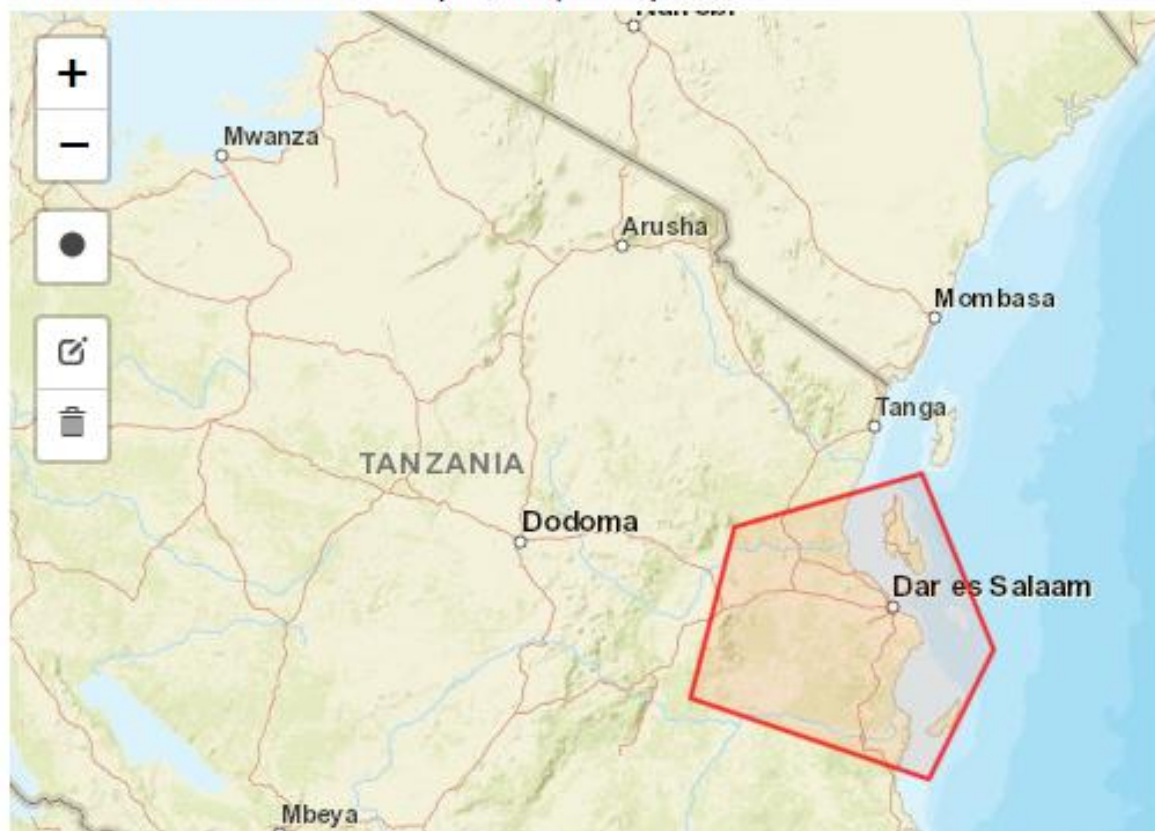
contact met@meteo.go.tz

areaDesc
Dar es Salaam and vicinity

circle
format: lat,long<space>radius

geocode
format: 'type' = 'value'

polygon
-6.0311,37.7710 -7.6454,37.3535 -8.4070,39.6167 -7.1879,40.2319 -5.528
format: SW SE NE NW SW (lat,lon points)





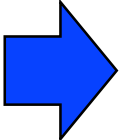
Latest alerts from Tanzania Meteorological Agency

[Flood warning for Musanze Northern Province, Rwanda](#) (Fri, 03 Apr 2015 13:07:14 +0000)

Heavy rains in Musanze Northern Province of Rwanda will lead to flooding, with likely extensive damage to houses and property in an area of 1,000 square kilometers. Rwanda Red Cross estimates that 1,000 households may be affected.

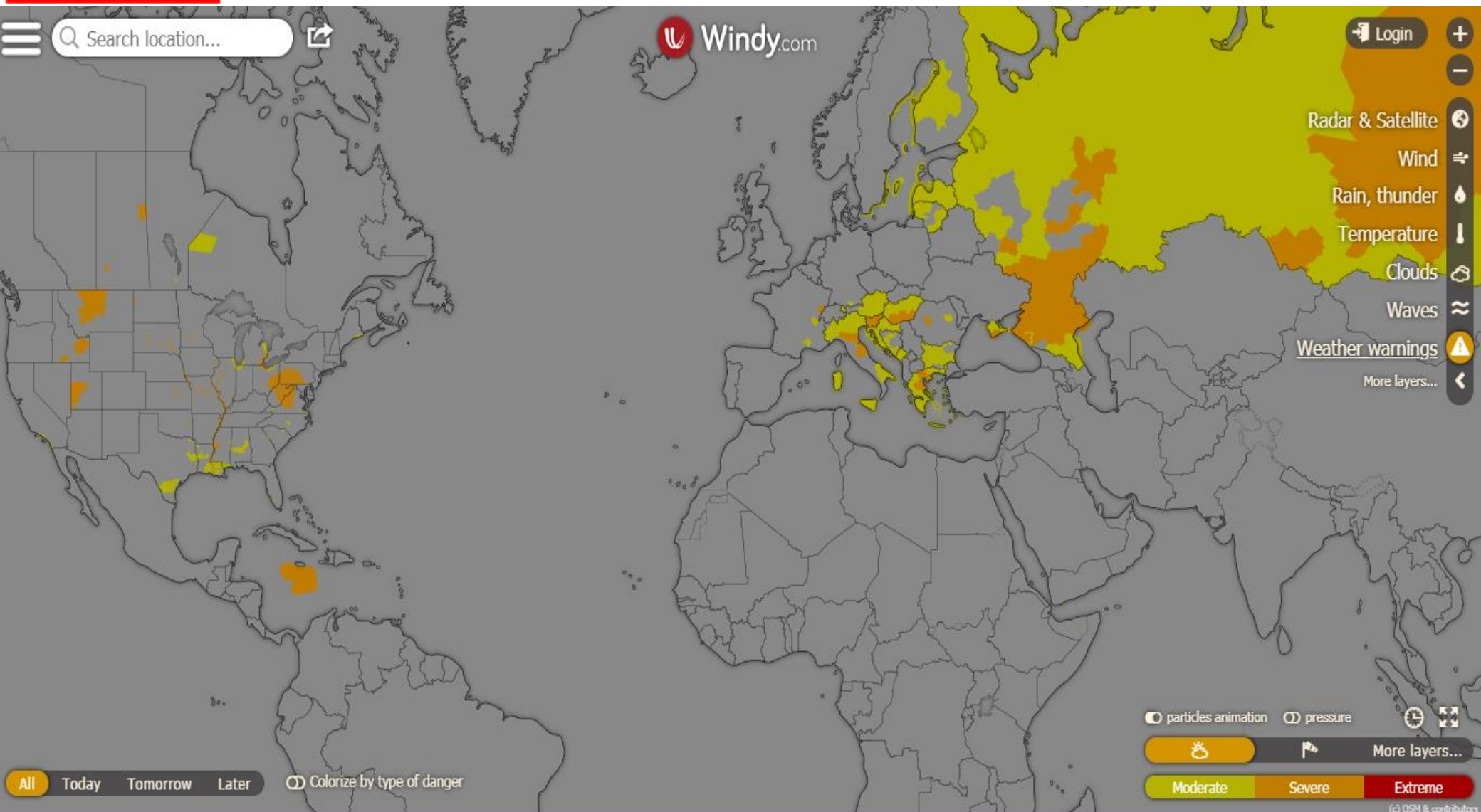
<https://cap-sources.s3.amazonaws.com/tz-tma-en/rss.xml>

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Aggregators of CAP Alert News Feeds



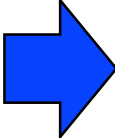
Cloud-based Tool for Creating and Publishing CAP



Reaching People via the News Feed

- "Look for alerts here": link to the CAP news feed from agency Web site in order to leverage
 - sister agencies (e.g., civil protection authorities at national and city levels)
 - non-government organizations,
 - in-country and international news media (print, radio, television, etc.)
- Cell phone services send SMS or cell broadcast
- Amateur radio operators help disseminate alerts
- High-priority alerts automatically sent by satellite

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Imagine a Scenario, Make an Alert

Imagine an emergency is happening now and TMA needs to issue a CAP Alert

Key facts for this specific emergency:

- What is it (think in terms of "impact")?
- Where is it?
- How soon do people need to act ("urgency")?
- How bad is it ("severity")?
- How sure are the experts ("certainty")?
- What actions should people take?



Your choice at <https://cap.alert-hub.org>

	Editor tool	Language	Authority feed
Algeria	dz-craag-ar	Arabic	مركز البحوث في علم الفلك والفيزياء الفلكية والجيوفيزياء
	dz-craag-en	English	Research Center in Astronomy Astrophysics and Geophysics
	dz-craag-fr	French	Centre de Recherche en Astronomie Astrophysique et Géophysique
	ao-inamet-pt	Portuguese	Instituto Nacional de Hidrometeorologia e Geofísica
Bahrain	bh-meteo-ar	Arabic	مديرية الأرصاد الجوية
	bh-meteo-en	English	Meteorological Directorate

click here for Editor Tool

click here for CAP news feed