

The image features a dark grey background with a central graphic of a green globe. The globe is surrounded by a circular pattern of white dots that fades outwards. Several white, wavy lines swirl around the globe, creating a sense of motion and connectivity. In the top right corner, the Aurecon logo is displayed in white, with a small green dot above the 'a'. Below the logo, the tagline 'Leading. Vibrant. Global.' is written in green, followed by the website address 'www.aurecongroup.com' in white.

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**Leading. Vibrant. Global.**  
[www.aurecongroup.com](http://www.aurecongroup.com)

# The Scales of Disaster

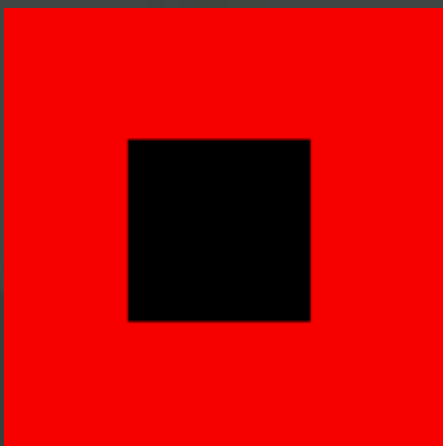
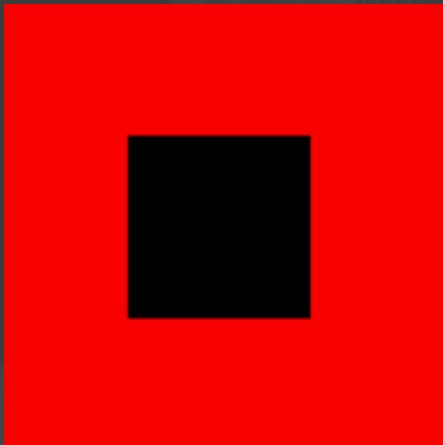
Johan Minnie

The word "INTRODUCTION" is centered on the page in a large, white, uppercase, sans-serif font. The background consists of a dark grey gradient with a faint, circular wireframe pattern on the left side and a grid of four squares (two light grey, two light green) on the right side.

# **INTRODUCTION**

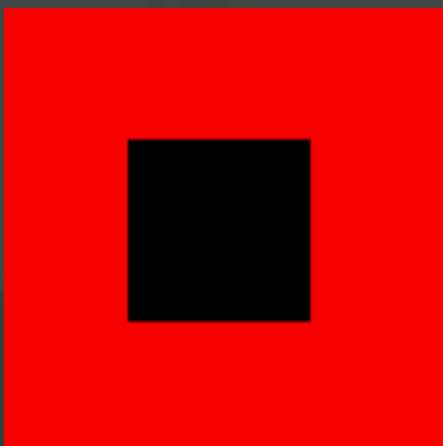
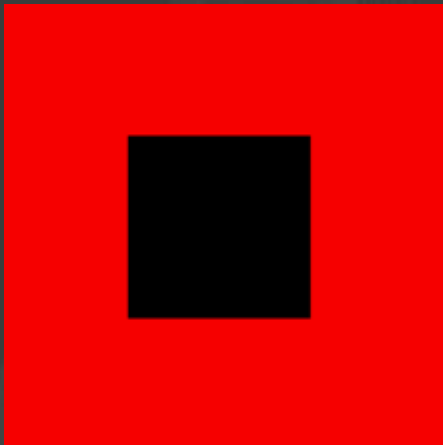


Do you know this signal?



# Do you know this signal?

- Hurricane warning flags used in the US



# Names to remember

UNUSUAL EVENT	PHASE 1	CODE GREEN
ALERT	PHASE 2	CODE YELLOW
SITE EMERGENCY	PHASE 3	CODE ORANGE
GENERAL EMERGENCY	NO ALERT	CODE RED
BOMB THREAT CODE	ADVISORY	PHASE 1: ALERT
PUBLIC SAFETY ADVISORY	WATCH	PHASE 2: EMERGENCY
EMERGENCY NOTIFICATION	WARNING	
SITUATION REPORT		

The text "INTERNATIONAL EXAMPLES" is centered on the page in a large, white, uppercase, sans-serif font. The background features a faint, stylized globe with a grid pattern, and a decorative graphic of overlapping squares in shades of grey and green on the right side.

**INTERNATIONAL EXAMPLES**

Fire Danger Rating		Flame Ht/ Rate of Spread	Time to Impact			
Category	Fire Danger Index		<2 hrs	2-6 hrs	6-24 hrs	24 plus hrs
Catastrophic (Code Red)	100+	VARIABLE	Emergency Warning		Watch and Act	
Extreme	75-99					
Severe	50-74					
Very High	25-49					
High	12-24					
Low - Moderate	0-11			Advice		

Advice

Watch  
and Act

Emergency  
Warnings



## WATCHES & WARNINGS



Level	Possible Scenario
IV Active volcano and stable	The volcano could be on a state basis that characterized the period of rest or stillness, or record seismic activity, fumarole or other manifestations of activity in that area are predominantly the most immediate or near the center of the issue, so it does not represent a risk for the populations and economic activities in its area of influence.
III Changes in the behavior of volcanic activity	Variations in the levels of the parameters derived from the monitoring indicating that the volcano is above the threshold base and that the process is unstable and may evolve by increasing or decreasing these levels. Phenomena can be registered as swarms of earthquakes, some of them senses; emissions of ash, lahars; morphological changes, noise, smells of volcanic gases among others, which can alter the quality of life of the populations in the zone of volcanic influence.
II Likely eruption in days or weeks	Significant changes in the development process of volcanic derived from the analysis of the indicators of the parameters of surveillance, which can evolve in the event (s) Eruptive (s) of an explosive or effusive.
I Eruption imminent or in progress	The eruptive phase is explosive or effusive can be composed of several episodes. The time for preparation and response is very short.

### Ground-based Volcano Alert Levels

Normal    Advisory    Watch    Warning



### Aviation Color Codes

Green

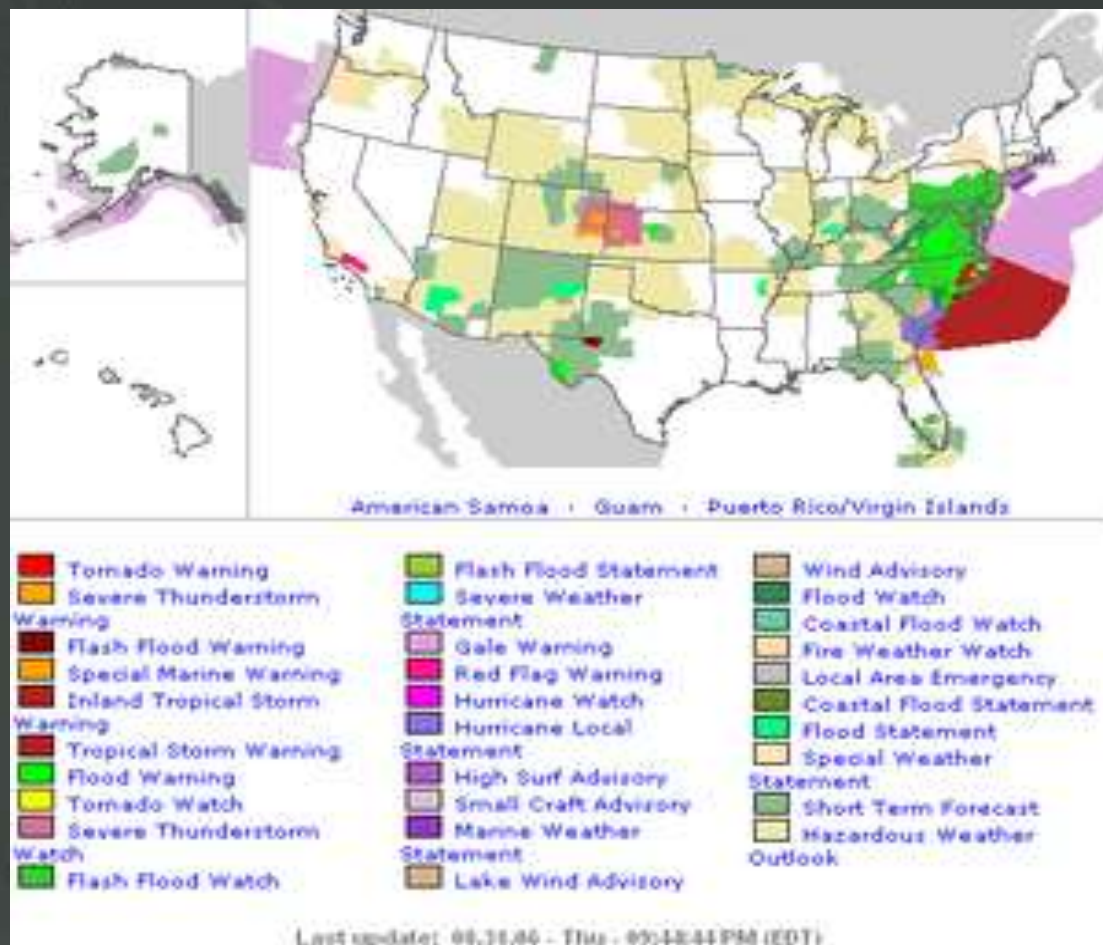
Yellow

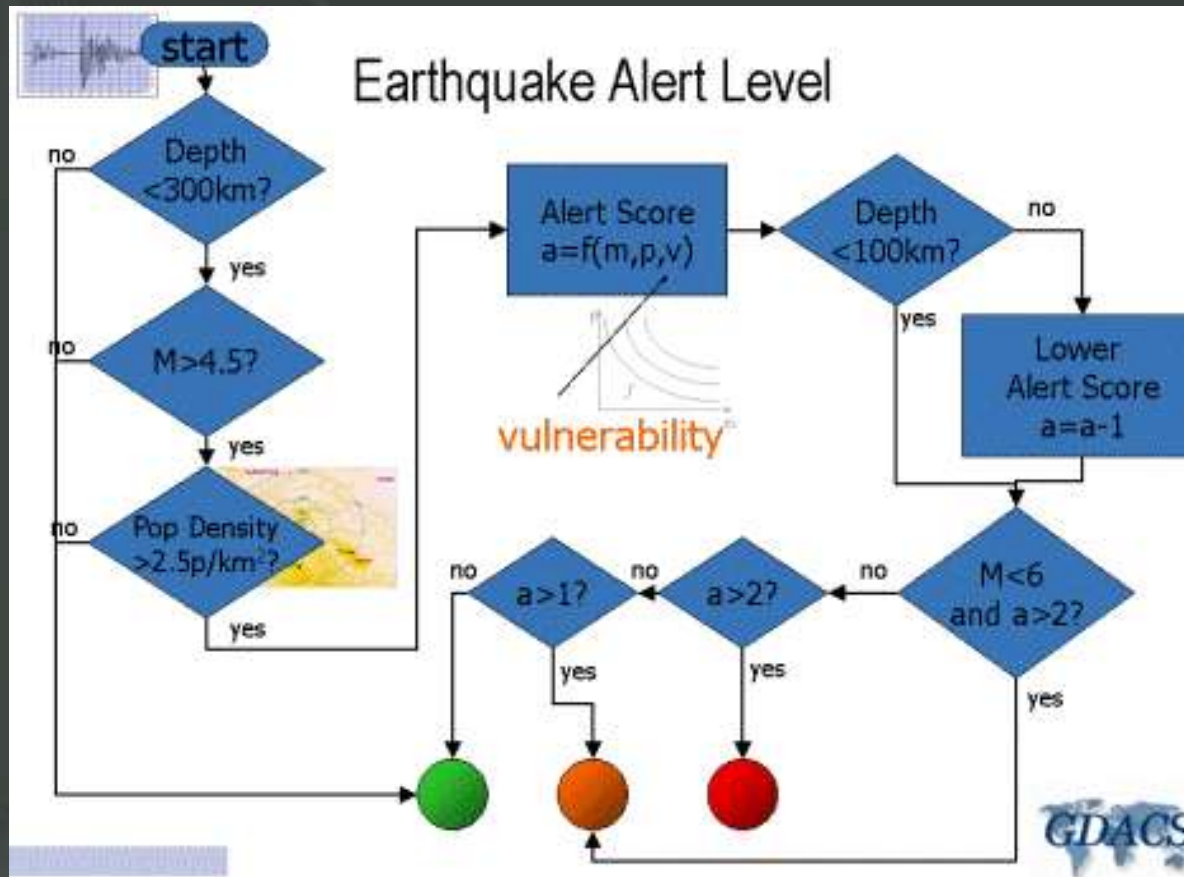
Orange

Red

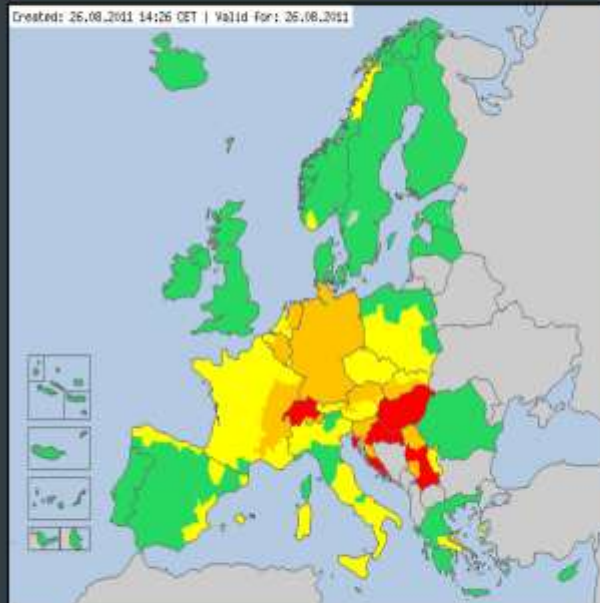
————— Increasing level of activity —————>

△ Unassigned (Insufficient monitoring to make assessment)





Created: 26.08.2011 14:26 CET | Valid for: 26.08.2011



## Weather warnings: Europe

**Awareness Reports** - You can find detailed information about the warnings in the awareness reports issued for each country. Select the relevant country.

AT					
BE					
CH					
CY					
CZ					
DE					
DK					
EE					
ES					
FI					
FR					
GR					
HR					
HU					
IE					
IS					
IT					
LU					
LV					
MT					
NL					
NO					
PL					
PT					
RO					
RS					
SE					
SI					
SK					
UK					

awareness types:

Display:

Caption:

 **White**

Missing, insufficient, outdated or suspicious data.

 **Green**

No particular awareness of the weather is required.

 **Yellow**

The weather is potentially dangerous. The weather phenomena that have been forecast are not unusual, but be attentive if you intend to practice activities exposed to meteorological risks. Keep informed about the expected meteorological conditions and do not take any avoidable risk.

 **Orange**

The weather is dangerous. Unusual meteorological phenomena have been forecast. Damage and casualties are likely to happen. Be very vigilant and keep regularly informed about the detailed expected meteorological conditions. Be aware of the risks that might be unavoidable. Follow any advice given by your authorities.

 **Red**

The weather is very dangerous. Exceptionally intense meteorological phenomena have been forecast. Major damage and accidents are likely, in many cases with threat to life and limb, over a wide area. Keep frequently informed about detailed expected meteorological conditions and risks. Follow orders and any advice given by your authorities under all circumstances, be prepared for extraordinary measures.



Wind



Snow/Ice



Thunderstorms



Fog



Extreme high temperature



Extreme low temperature



Coastal Event



Forestfire



Avalanches



Rain



**awareness typ not available**

If the icon on country level has a dark background: The country doesn't issue warnings for this awareness-level!



Home » Weather

## Weather & Hazards/Disaster Tweets

[Logout](#) | [Auto-refresh in 11:12](#)

**Message Codes [x]**

DA: PDC, AI-Hazard Warnings, Analysts, and Risk Evaluation System  
 KNHC: National Hurricane Center Miami  
 PGTW: Joint Typhoon Warning Center  
 PHFO: NWS Forecast Office in Honolulu  
 PTWC/PHEB: Pacific Tsunami Warning Center  
 \* Atlantic Ocean messages

**[ - ] Disaster Tweets (18)**

- ◊ DA: HST Aug 26 03:46 | GMT Aug 26 13:46  
 [WARN] UPDATE #18, Super Typhoon - Nanmadol, NW Pacific Ocean, Winds 135 kt, Gusts 165 kt, reported by JTWC
- ◊ DA: HST Aug 26 03:46 | GMT Aug 26 13:46  
 [WATCH] UPDATE #6, Tropical Storm - Talas, NW Pacific Ocean, Winds 45 kt, Gusts 55 kt, reported by JTWC
- ◊ DA: HST Aug 25 23:46 | GMT Aug 26 09:46  
 [WATCH] UPDATE #5, Tropical Storm - Talas, NW Pacific Ocean, Winds 40 kt, Gusts 50 kt, reported by JTWC
- ◊ DA: HST Aug 25 23:46 | GMT Aug 26 09:46  
 [WARN] UPDATE #24, Hurricane - Irene, Atlantic Ocean, Winds 95 kt, Gusts 115 kt, reported by NWS
- ◊ DA: HST Aug 25 23:17 | GMT Aug 26 09:17  
 [WARN] UPDATE #15, Super Typhoon - Nanmadol, NW Pacific Ocean, Winds 135 kt, Gusts 165 kt, reported by JTWC
- ◊ DA: HST Aug 25 23:16 | GMT Aug 26 09:16  
 [ADV] UPDATE #5, Tropical Depression - Ten, Atlantic Ocean, Winds 20 kt, Gusts 40 kt, reported by NWS
- ◊ DA: HST Aug 25 21:45 | GMT Aug 26 07:45  
 [WARN] UPDATE #14, Super Typhoon - Nanmadol, NW Pacific Ocean, Winds 130 kt, Gusts 160 kt, reported by JTWC
- ◊ DA: HST Aug 25 19:15 | GMT Aug 26 05:15  
 [WARN] UPDATE #14, Typhoon - Nanmadol, NW Pacific Ocean, Winds 130 kt, Gusts 160 kt, reported by JTWC
- ◊ DA: HST Aug 25 17:47 | GMT Aug 26 03:47  
 [WATCH] UPDATE #4, Tropical Storm - Talas, NW Pacific Ocean, Winds 45 kt, Gusts 55 kt, reported by JTWC
- ◊ DA: HST Aug 25 17:46 | GMT Aug 26 03:46  
 [WARN] UPDATE #14, Super Typhoon - Nanmadol, NW Pacific Ocean, Winds 130 kt, Gusts 160 kt, reported by JTWC
- ◊ DA: HST Aug 25 17:16 | GMT Aug 26 03:16  
 [WARN] UPDATE #14, Typhoon - Nanmadol, NW Pacific Ocean, Winds 130 kt, Gusts 160 kt, reported by JTWC
- ◊ DA: HST Aug 25 17:16 | GMT Aug 26 03:16

# **CAP – COMMON ALERTING PROTOCOL**

# Urgency code values

- “Immediate” - Responsive action SHOULD be taken immediately
- “Expected” - Responsive action SHOULD be taken soon (within next hour)
- “Future” - Responsive action SHOULD be taken in the near future
- “Past” - Responsive action is no longer required
- “Unknown” - Urgency not known

# Severity Code Values

- “Extreme” - Extraordinary threat to life or property
- “Severe” - Significant threat to life or property
- “Moderate” - Possible threat to life or property
- “Minor” – Minimal to no known threat to life or property
- “Unknown” - Severity unknown

# Certainty code values

- “Observed” – Determined to have occurred or to be ongoing
- “Likely” - Likely ( $p > \sim 50\%$ )
- “Possible” - Possible but not likely ( $p \leq \sim 50\%$ )
- “Unlikely” - Not expected to occur ( $p \sim 0$ )
- “Unknown” - Certainty unknown

# YYYY-MM-DDThh:mm:ssXzh:z

All [**dateTime**] elements (<sent>, <effective>, <onset>, and <expires>) SHALL be specified in the form 241 "YYYY-MM-DDThh:mm:ssXzh:zm" where:

- YYYY indicates the year
- MM indicates the month
- DD indicates the day
- T indicates the symbol "T" marking the start of the required time section
- hh indicates the hour
- mm indicates the minute
- ss indicates the second
- X indicates either the symbol "+" if the preceding date and time are in a time zone ahead of UTC, or the symbol "-", if the preceding date and time are in a time zone behind UTC. If the time is in UTC, the symbol "-" will be used.
- zh indicates the hours of offset from the preceding date and time to UTC, or "00" if the preceding time is in UTC
- zm indicates the minutes of offset from the preceding date and time to UTC, or "00" if the preceding time is in UTC

The word "CONCLUSION" is centered on the page in a large, white, uppercase, sans-serif font. The background features a faint, circular wireframe pattern on the left side and a grid of four squares (two light green, two light grey) on the right side.

**CONCLUSION**

# Conclusion

- We need to develop a framework for scaled advice and warnings in Southern Africa
- Advisory – Watch – Warning seems to be the *de facto* standard
- The Australian warning system, as well as that of GDACS and the elements of CAP, which includes references to expected impact, shows us the way to an alert system that should factor in severity, certainty and urgency.
- We need to beware of over-warning people (early warning body of knowledge)
- We need to invest in mass-communication systems for distributing alerts.



Thank you

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