

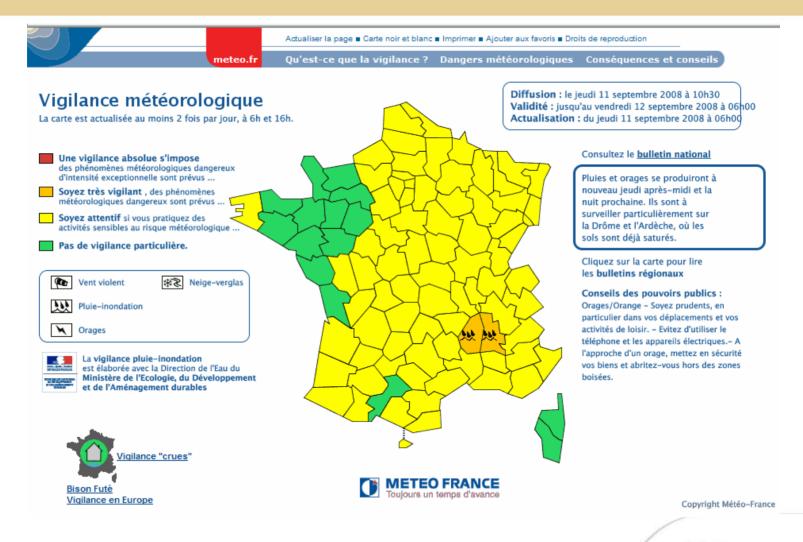
Météo-France contribution to the French Awareness system: Vigilance

Cyrille Honoré, Forecasting Deputy Director





key Vigilance operational features





Criteria for color decision making

Weather phenomenon

Criteria for issue yellow Criteria for issue orange

Criteria for issue red

STRONG WINDS (gust, storms)

Widespread Gust in plain areas > 80 to 100 km/h

Widespread Gust > 100 to 130 km/h inland,

Widespread Gust > 130 km/h inland

Heavy rains

Depends on the regional climatology (30 à 60 m/24h)

Depends on the regional climatology (60 à 100mm/24h, South East : >80mm in less 6 hours

Depends on the regional climatology

Thunderstorms

Whatever Thunderstorm

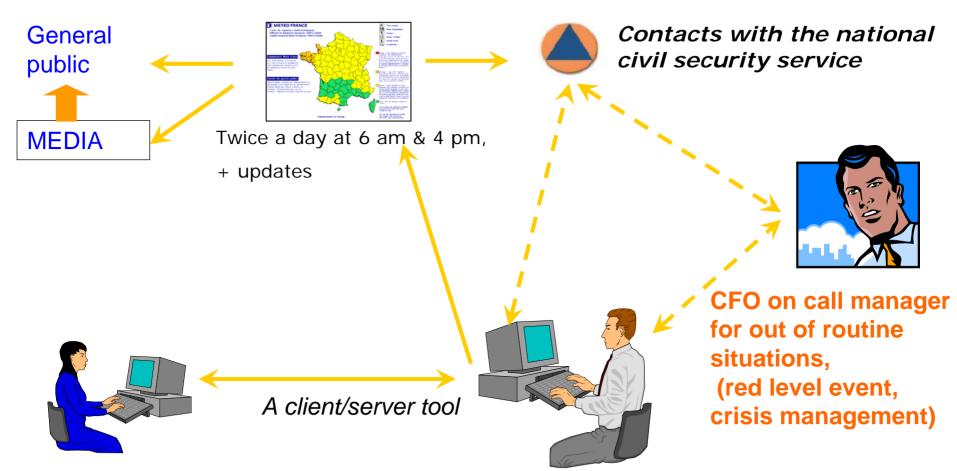
100mm/24h, South E >80mm in less 6 hou or [120,300] in 24h Widespread organized thunderstorms

No standart criteria

Not a automated process, expertise is mandatory!



A multi-expert process



7 Forecasters in the Regional Meteorological Centers

The senior forecaster in the Central Forecasting Office



Dissemination

On « push » mode (email + some fax + sms)

- All authorities responsible for safety
- French media agency AFP
- In case of red, radio and TV channels

On « pull » mode

Internet: <u>www.meteo.fr</u>

(+ security back-up for authorities in case of problems)

Health and flood information

is additionally disseminated to authorities by INVS and SCHAPI



Information exchanges with Civil Security



Event notification by phone,
Access to Civil Security
event reporting system
(Synergi website)



Meteo-France





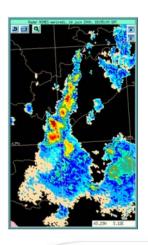


Daily briefings,

Regular bulletins,

Special bulletins, (i.e. for yellow level events)

Dedicated websites and workstations

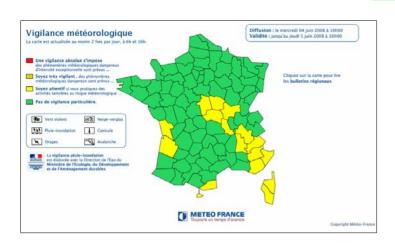




Similar exchanges with INVS and SCHAPI

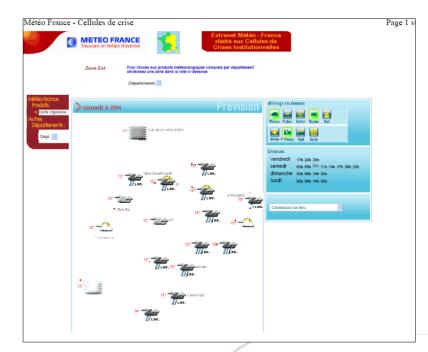
yellow color on the vigilance chart

to improve anticipation



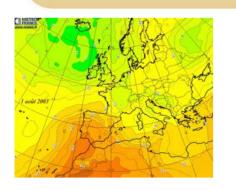
 COGIC knows why there is yellow due to its close contact with CFO

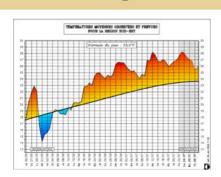
• In case of yellow with higher risk (ex. scattered but potentially violent thunderstorms), Meteo-France has to take contacts with the regional Civil Security service and the 'Prefectures' (State representative at the local French "département")



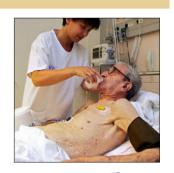


Heat wave specific cooperation









Specific data, indexes and expertise

Conference calls if needed

Meteo-France

Health reports, worsening factors

INVS



Local authorities (Préfets)

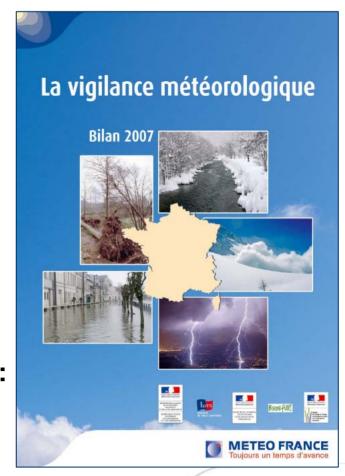
Warning status and proposals for action





Assessment

- A continuous assessment and a continuous improvement trend
 - Quarterly meetings with the main partners of the Ministeries of Interior, Ecology, Transportation and Health
 - Assess operational capability at local / regional / institutional level
 - Assess effectiveness of coordination and management of warnings from end to end
 - An annual assessment document:
 Feedback about procedure and presentation of statistical data about quality of warnings and related damages





Orange or Red vigilance cases

Three red vigilance level events since October, 2001 for heavy rain:

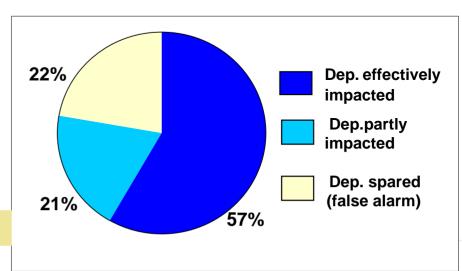
- September, 9th, 2002, in Gard
- December, 3rd, 2003, in Hérault
- September, 6th and 7th, 2005, in Gard and Hérault

A single windstorm red level event on January, 24th, 2009, 9 counties in southwestern France

Nearly 300 cases assessed since 2002:

- •0% to 2% annual non detection
- •22% of false alarm at county scale,

Anticipation >= 3h at county scale ~ 81 %





Conclusion

Lessons learned :

- The chart is now very well known by the general public (>80%)
- Main access to information is achieved through the TV (> 95%)
- Technical coordination is critical within NMS
- Higher pressure on the authorities responsible for safety and for Météo-France, bringing communication issues
- A strong driver to improve our technical infrastructure, methods and skills

Next probable step :

 Inclusion of coastal risks in the Vigilance system is expected, with new partnerships to be settled in that respect.

France's « Vigilance » is a success, thanks to the cooperation quality of all partner institutions





















