



ERAD 2012  
Toulouse France  
25-29 June 2012

Welcome by Olivier Gupta  
Deputy Head, Météo France

# Météo-France, a weather and climate service

- Provide the State and other customers with meteorological forecasts which are constantly improving, for
  - people and goods' safety,
  - weather assistance to air traffic management,
  - assistance to decision-making
- Produce and make available the most reliable data and scientific analysis on climate evolutions and their consequences
- Contribute to define and implement the public policies in those two areas

# Our ambition

- Be a weather and climate service which is
  - recognized for being at the top level in scientific, technical and operational issues,
  - recognized for its efficiency and effectiveness,
- and regarded internationally as a benchmark for good practices

# Our values

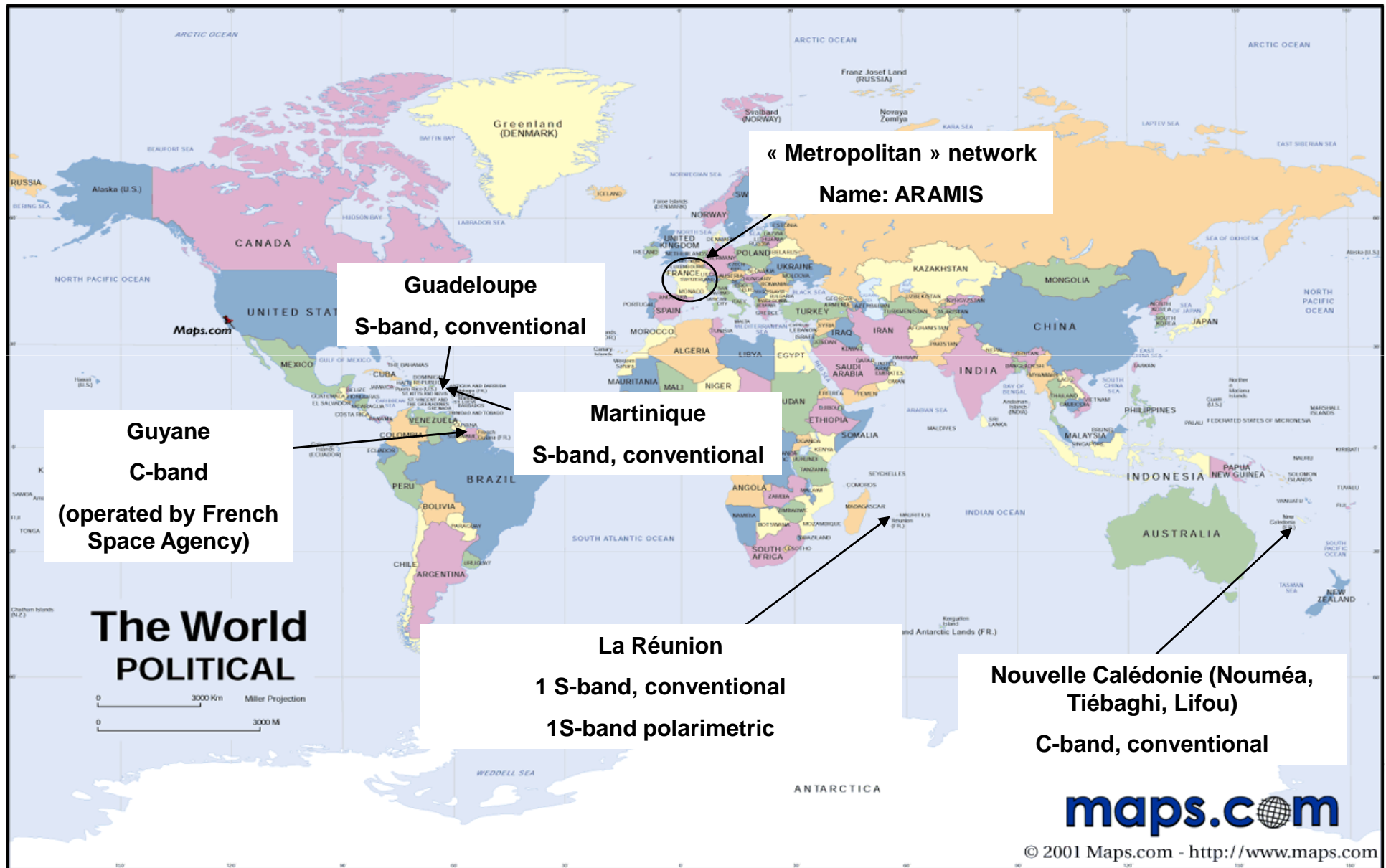
- Commitment to duty
- Scientific and technical excellence
- Innovative spirit
- Rigour
- Openness



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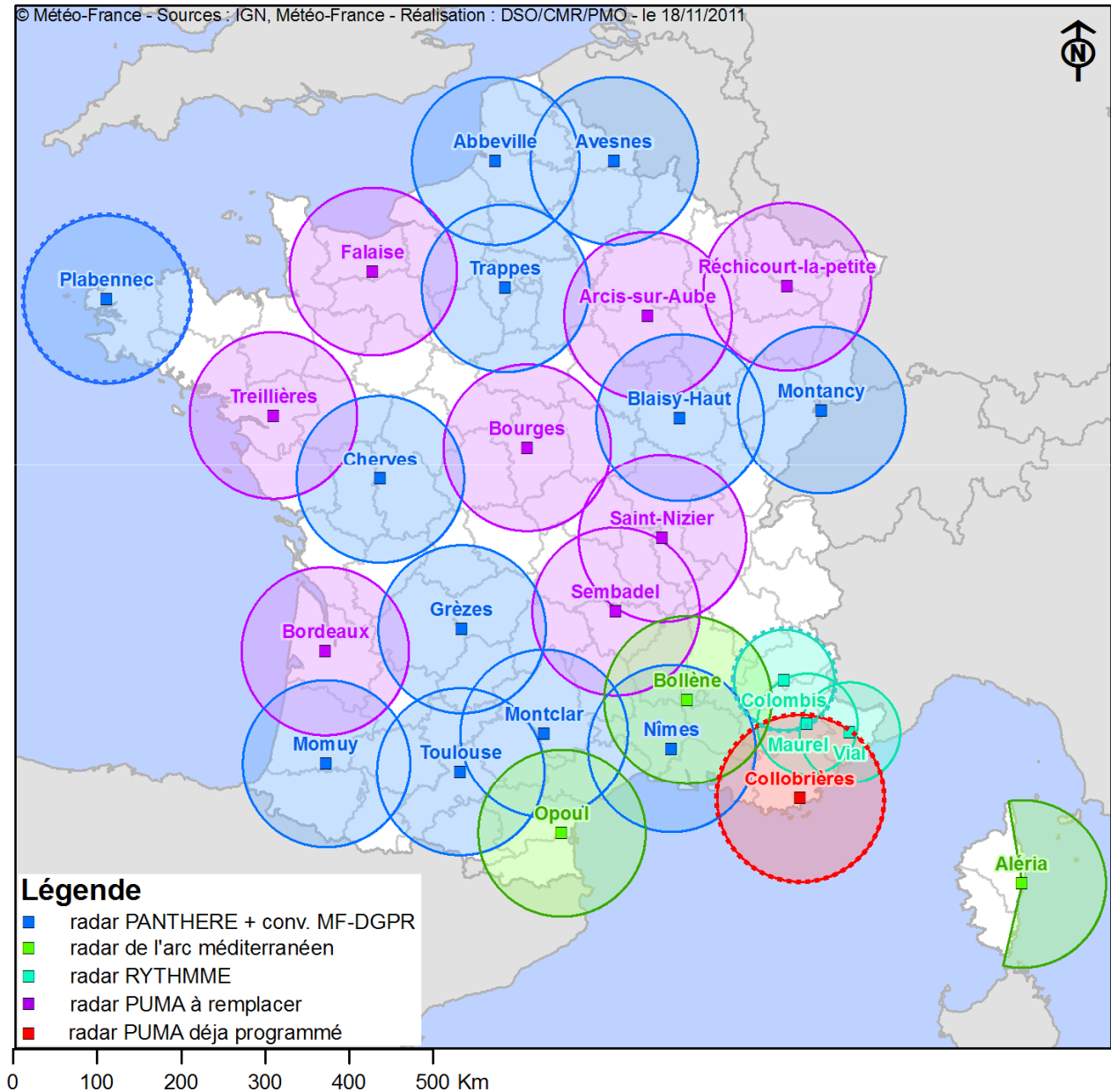
## Météo France and weather radars

# French weather radar waves in the world ...



# ARAMIS at the end of 2012

- All Doppler
- 26 overall
- 6 S (2 DPOL)
- 2 X (2 DPOL)
- 18 C (11 DPOL)



# ARAMIS at the end of 2014

- All Doppler
- 30 overall
- 5 S (2 DPOL)
- 4 X (4 DPOL) hors Vial
- 19 C (13 DPOL)
- + 2 X-band Airport radars (at CDG & Nice) coupled with lidars

Changes / 2012:

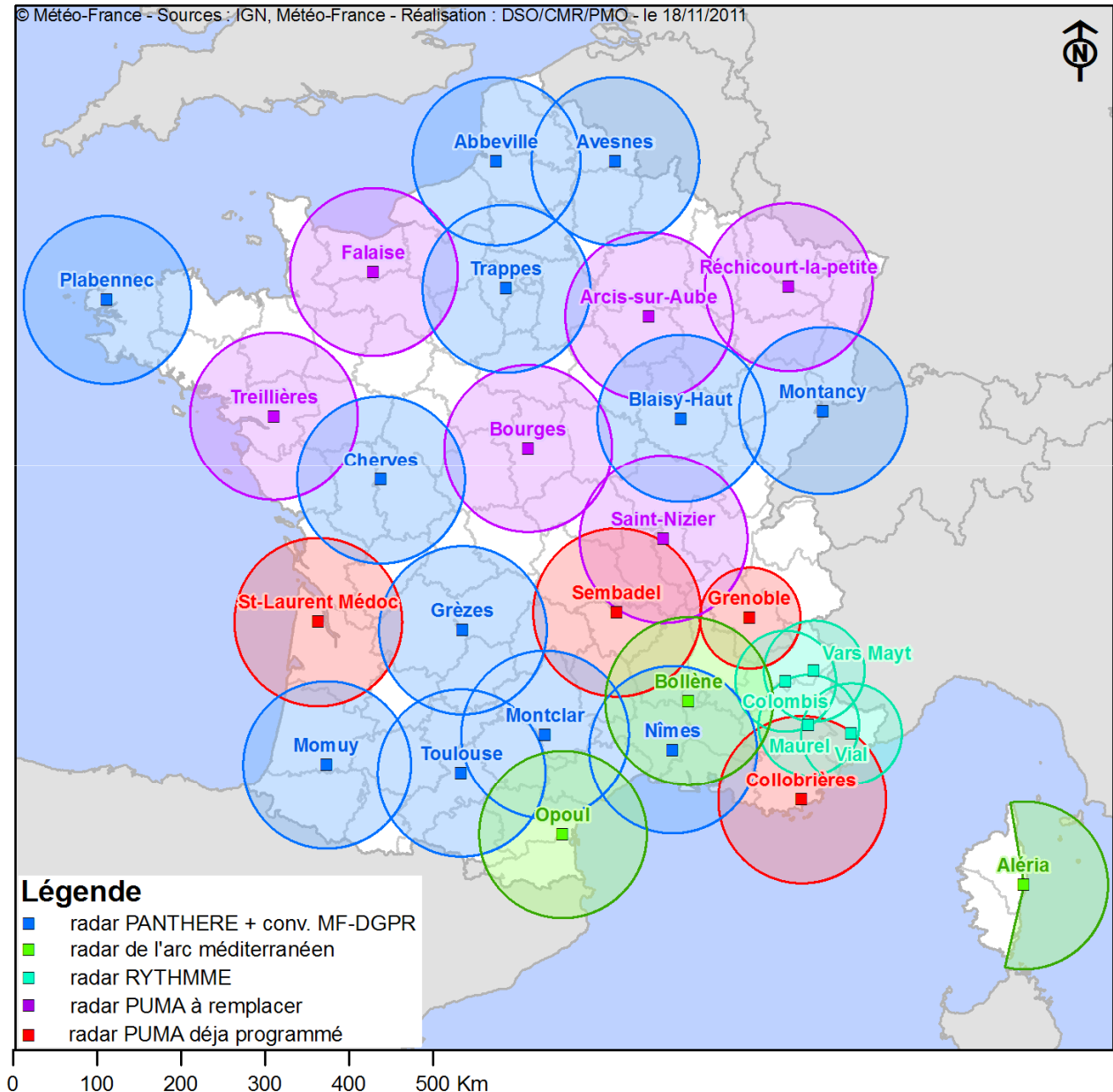
[New X-band: Vars Mayt]

[New X-band: Grenoble]

[Replacement of Bordeaux]

[Remplacement of Sembadel]

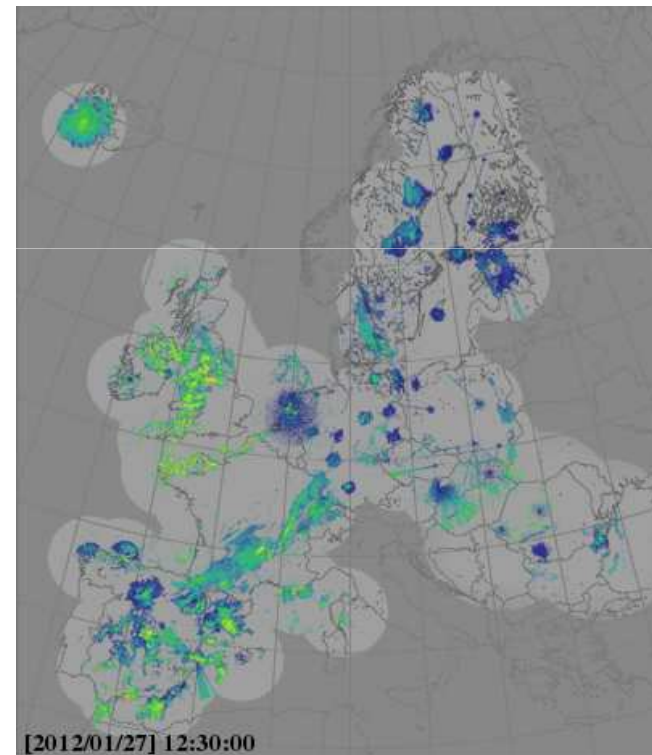
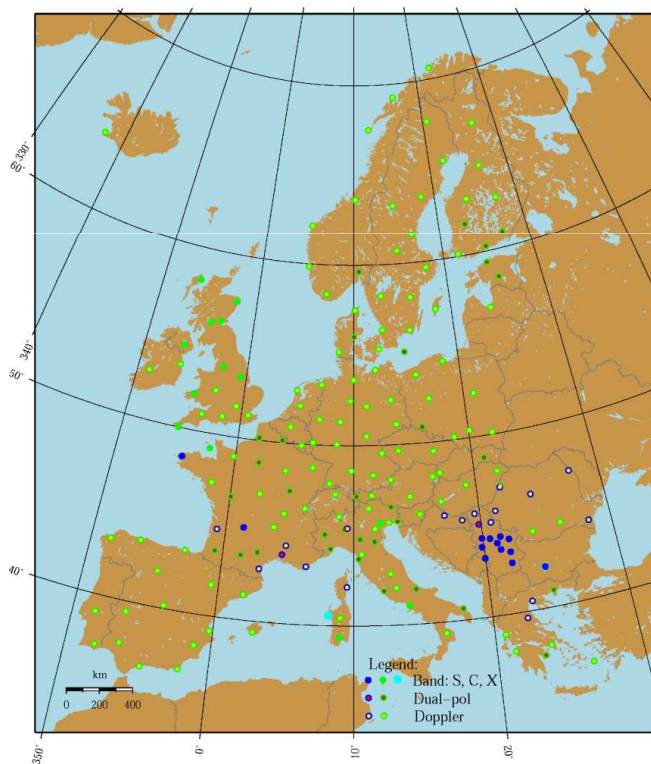
**Target** : network fully polarimetric by 2020





# Weather radars in Europe

Odyssey – The first European radar data center, developed by Météo France & the UK Met Office in the frame of EUMETNET/OPERA





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## Applications of weather radar data in France

- Surveillance / Nowcasting
- Hydrology – Strong Partnership with DGPR
- Numerical Weather Prediction (Data Assimilation)
- Aviation Meteorology (Airport / TMA / En-Route)
- Climate Studies – Reanalysis
- Research – Case studies - Climatological studies



**METEO FRANCE**  
Toujours un temps d'avance



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## Some questions / issues from an operator point of view

- How to protect - in the long run – the meteorological radar network observing capabilities against wind farms, RLAN, ... ?
- How mature / affordable is the phased-array technology ?
- Radars & Rain Gauges : how to combine them optimally ? Do we still need gauges in the context of polarimetric radars ?
- Radar frequency: how to choose optimally the wavelength of a new radar ? What is the minimum guaranteed range of X-band radars ?
- What are the main obstacles to automated quantitative use of weather radars ? How to overcome them ?



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