



METEO CONSULT

WWW.METEO.NL



Meteo Consult Group

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PRIMET

- Association of Private Meteorological Services
- 36 members in 16 European countries
- Established 1999
- Promotes an open data policy for Europe



Agenda

- How does the weather business use PSI?
- What value do we add?
- Barriers to development
- Conclusion



How we forecast the weather

Observations are made in space, air, on the earth and sea

Weather balloons (probes)

Satellite images



Ground observations

Buoys

Observations are transmitted to super computing sites. The data is analyzed to form a complete picture of the atmosphere.



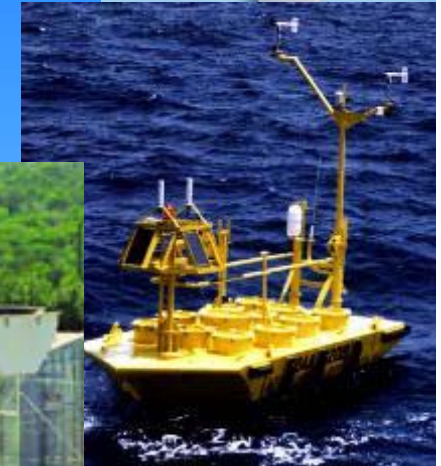
Based on super computer analysis a global forecast is computed for up to 15 days ahead.



PSI - observations

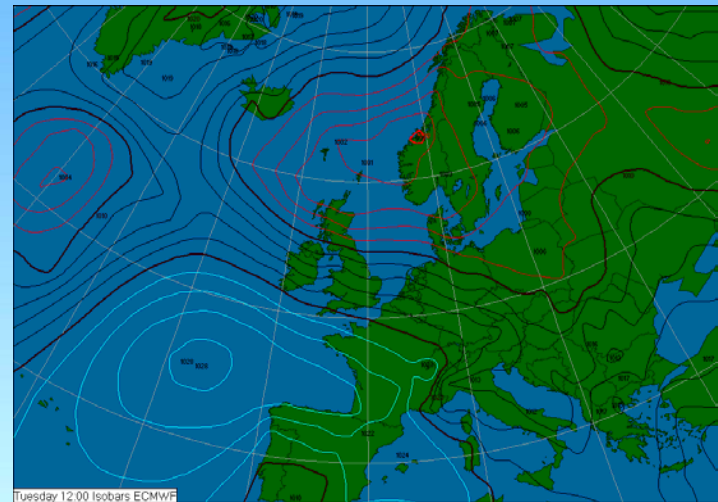
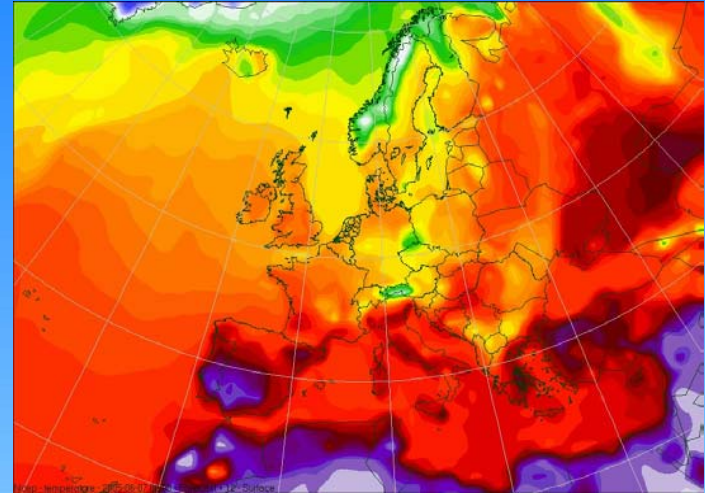
Observations collected for the whole world

- Synoptic stations
- Ocean buoys
- Remote sensing via satellite
- Radiosonde balloons – upper air
- Rainfall radar
- Aircraft reports



PSI - Atmospheric models

- General Circulation Models (GCMs) use complex maths and physics to calculate forecasts
- GCMs are run on government-funded supercomputers
- Main GCMs
 - UKMO
 - GFS
 - ECMWF



What value do we add?

- Improved forecasting technology
- Innovative new products
- Tailored to industry needs
- Market driven

Benefits to Industry

TABLE 5. Incremental benefits of 1°C weather forecast improvement.

	Operating cost (million dollars)	Cost reduction (percent)	Benefits (million dollars per year)
North	19,478	0.0284	5.54
South	27,341	0.1883	51.48
West	4,127	0.0582	2.40
Total			59.43

Source: The Economic Value of Temperature Forecasts in Electricity Generation, American Meteorological Society 22nd July 2005

Products

- Roads
- Rail
- Maritime
- Agriculture
- Energy
- Aviation

**RailCast**

**RoadCast**

**AviaCast**

www.mc-energy.com

www.agrarwetter24.de

**PowerCast**

**TraderCast**



SPOS

onboard weather advisory system

So what's the problem?

- Unfair competition
- Cross subsidisation
- Abuse of dominant market position
- Price dumping
- Prohibitive data pricing
- Restricted access to data

ECOMET – the theory

ECOMET OBJECTIVES:

*“To ensure the **widest availability of basic meteorological data** and products for commercial applications”*

*“To **guarantee access** to meteorological data and products, be it for public or private sectors”*

*“The NMS’s have developed in ECOMET a legal framework to establish **equal competition conditions** for the public as well as for the private sector”*

Ecomet website 30/05/2006

ECOMET – the facts

- NMS's use data commercially that is not listed in ECOMET catalogue
- Prohibitively high pricing and huge variations between countries
- Unwillingness to supply the data even when listed in ECOMET catalogue
- Licensing terms prohibitive
- Not all EU countries members

Basic price for 1 SYNOP (EUR)

Country	For End User	For Broadcaster	For Service Provider (excluding redistribution licence)	For Service Provider (including redistribution licence) (type B VAS)	Prices valid from
Austria	0.07	N/A	0.14	0.21	
Belgium	0.06	N/A	0.18	0.18	
Croatia	0.10	0.20	0.40	0.40	
Denmark All Danish synops (Greenland not included)	0.10 13500	0.40 N/A	0.40 54000	0.40 54000	
Finland	0.08	N/A	0.32	0.32	
France	0.043	N/A	0.17	0.17	
Germany (see Catalogue for flat rates)	0.04	0.04	0.20	0.20 ¹⁾	1/1/2006
1) The licence may include the right to redistribute type A data. For a licence to redistribute type A data or type B VAS on the open Internet an additional fee of 0.04 € per SYNOP shall apply. The additional fee shall not be subject to the small Service Providers discount.					
Greece	0.10	N/A	0.40	0.40	
Hungary	0.10	0.40	0.40	0.40	
Iceland	0.07	0.14	0.28	0.28	
Ireland	0.08	0.16	0.32	0.32	
Italy	0.05	0.05	0.20	0.20	
Luxembourg	0.04	0.12	0.12	0.16	
Netherlands	0.045	N/A	0.18	0.18	
Norway	0.00	0.00	0.00	0.00	1/1/2006
Portugal	0.10	0.20	0.40	0.50	16/3/2006

Prohibitive Pricing

- At 40c per report, hourly reports from 100 sites would cost €186,200 per annum (inc volume discount)
- €1,862 per site – more than 50% of the infrastructure cost recovered from a single client
- Whilst in UK and Norway much synoptic data is available free

B2. Radar images

Information price (in EURO)

* click on the product to see the technical specifications

	End users	Broadcaster	Service Providers, <i>internal use</i>	Service Providers <i>incl. red. licence</i>	Open internet redistribution	Prices effective from
Norway						
- single site radars and national composite radars	0 + obligation to give met.no as source	0 + obligation to give met.no as source	0	0 + obligation to give met.no as source	0 + obligation to give met.no as source	1/4/2006
- international composite radar (Skagerrak composite)	Originators conditions apply	Originators conditions apply	Originators conditions apply	Originators conditions apply	Originators conditions apply	1/4/2006
- international composite radar (Nordic composite)	Originators conditions apply	Originators conditions apply	Originators conditions apply	Originators conditions apply	Originators conditions apply	1/4/2006
Switzerland						
- single site radar	0.17	0.34	0.50	0.50 plus 75% of the end user or broadcast price for every onward sale	N/A	1/1/2004
- national composite radar	0.27	0.54	0.80	0.80 plus 75% of the end user or broadcast price for every onward sale	N/A	1/1/2004

Prohibitive Pricing

“Anyone engaging in the sale of meteorological [data] as well as providing sovereign activities, is acting as an independent party in the commercial process and, as a public undertaking, is subject to the provisions of the Antitrust Act...In the Swiss market, [the Swiss Meteorological Institute] has a market-dominating position. **It must make available to interested third parties on a non-discriminatory manner all the data and products which it uses for its own services.**”

Swiss Competition Commission (16/11/98)

Barriers to development

- ECOMET has no control over NMS's pricing
- No harmonisation across Europe
- No action on anti-competitive pricing or restrictive data practices

These are the bottlenecks to the development of our industry

Some progress...more problems

- More data being made WMO essential
- Some change in thinking
- Some prices have been reduced

BUT

- Whilst selected NMSs make progress others remain intransigent
- The newer EU countries not part of ECOMET

Commercial Meteorology in the US and Europe

	United States (1)	Europe (2)
Gross Receipts	\$ 400-700 million	\$ 30-50 million
Number of Firms	400	30
Number of Employees	4000	300

Sources: Commercial Weather Services Association (1) and Meteoconsult (2)

Since the size of the US and EU economies are approximately the same, there is no reason for the European market not to grow to US size with accompanying revenue generation and job growth. Restrictive government information policies stand in the way.

Conclusion

- EU weather market is weak, we don't compete globally
- European weather market is lagging behind
- The gap will only widen!
- Urgently need a single European market for weather data
- All data readily accessible, from a single source, at fair prices

Any Questions?

