



Providers of Weather, Climate and Water Information

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WMO
OMM



South African
Weather Service

Introductory remark

Southern Africa view

- The application of weather forecast information to the benefit of society and economy at large is quite diverse and complicated in the case of Southern Africa,
 - for example, due to its mixture of mostly developing and few developed areas.
- Most rural regions in Southern Africa are particularly vulnerable to high impact weather due to their limited coping and adaptive capacity as a result of widespread poverty, HIV/AIDS, population growth and the general vulnerability of rural subsistence communities to particularly natural disasters.
- The significant impact that tropical cyclone Eline had on the rural communities in Mozambique is a telling example.
- In many areas application of weather forecasts to meet the needs of society is non-existent.

Introductory remark

Southern Africa view continue,

- On the other hand, in some well developed regions industries and communities benefit significantly through the use of weather forecast products.
- Important in this context is also the fact that the technical capabilities of weather services in the region (14 countries in the region) are quite diverse.
- South Africa is fortunate enough to have a small but technically well developed weather service,
- however, the majority of the other weather services lack financial resources to establish sophisticated systems like weather radars, numerical models, or even proper data communication links in a few cases.

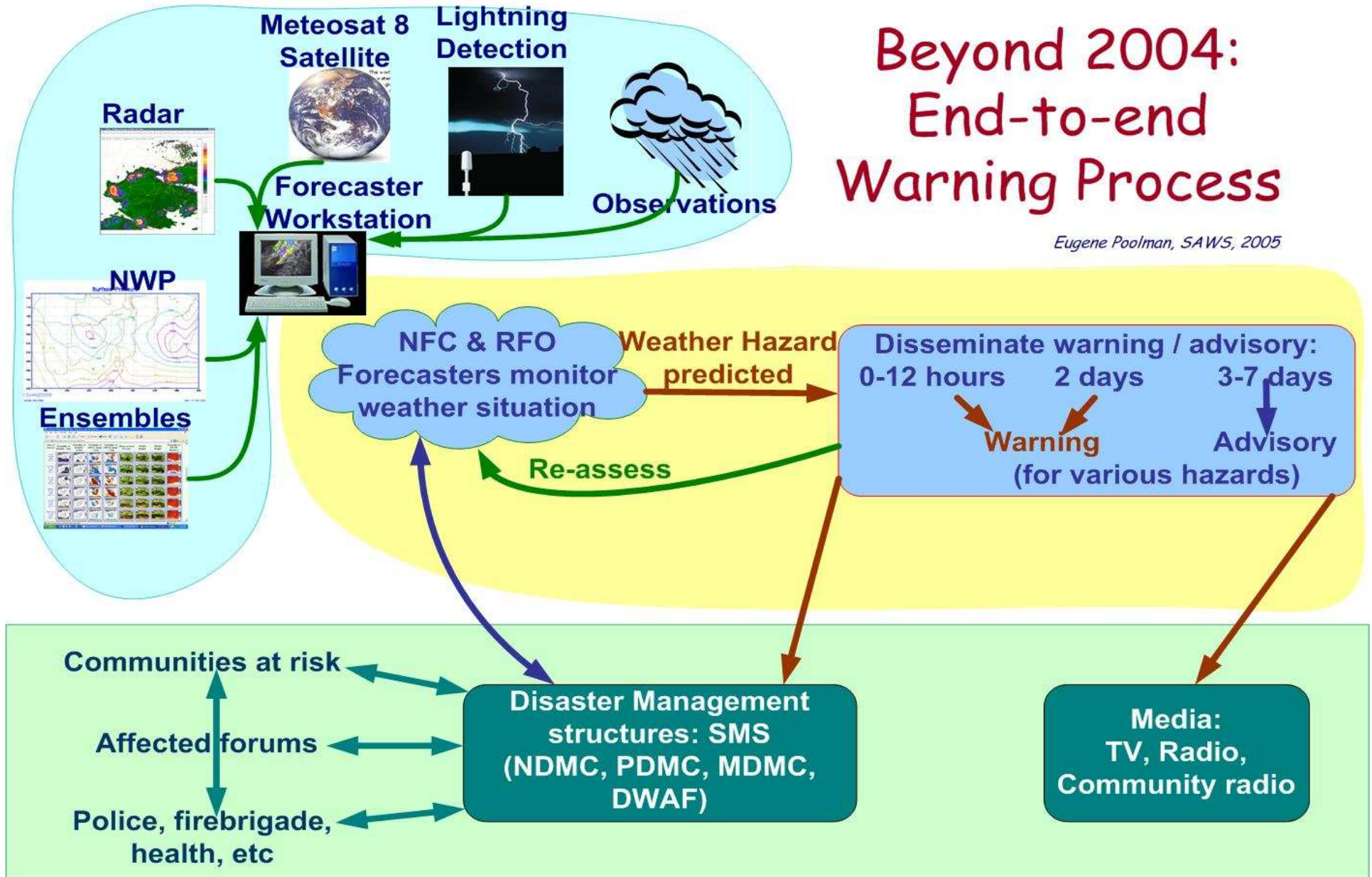
Various providers

- Data sources (of->Obs, NWP, Historic data...mainly NMHSs)
- Data analysis and processing (compilers of products..NMHSs)
- Package processed data (Non field expert at times)
- Provision of processed data to users (e.g. media) for further dissemination to other users (e.g. public). Who is the provider? At times a medium is confused with a provider...
- Sometimes weather products are re-produced by non experts due to compatibility challenges, distorted product is sometimes disseminated to the public (two providers, chain reaction).
- Partnership approach in providing information (Disaster, media..)
- Providers of information for specialised services (NMHSs)
- Avail products by providing links to other organisation (e.g Tourism sites..etc)

South African Weather Service

Beyond 2004: End-to-end Warning Process

Eugene Poolman, SAWS, 2005



Regional offices and Disaster Management Centres

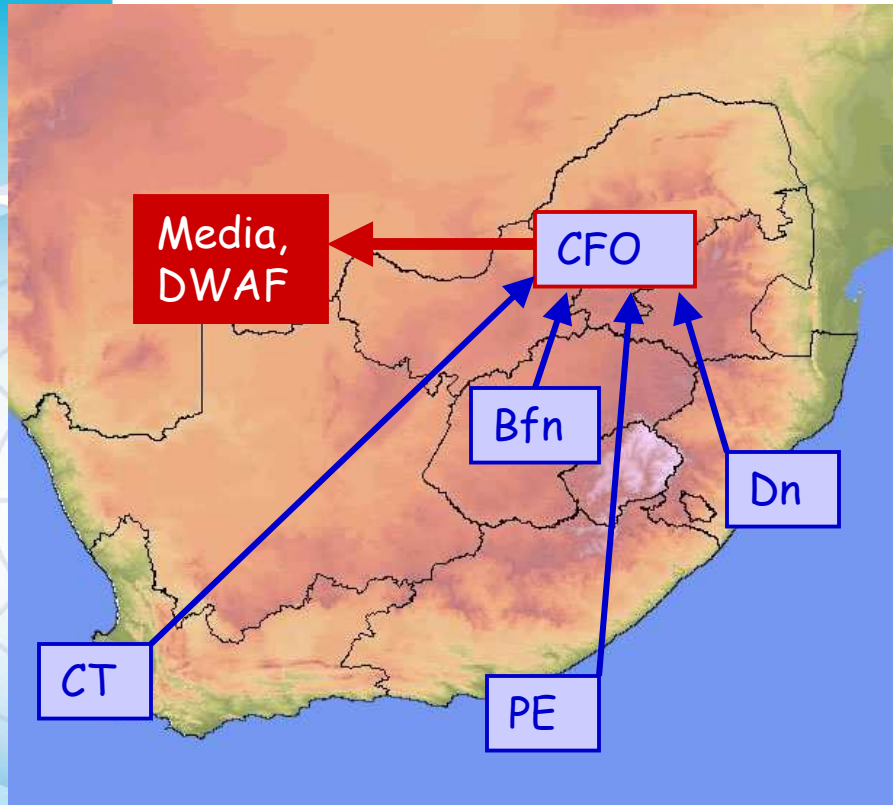


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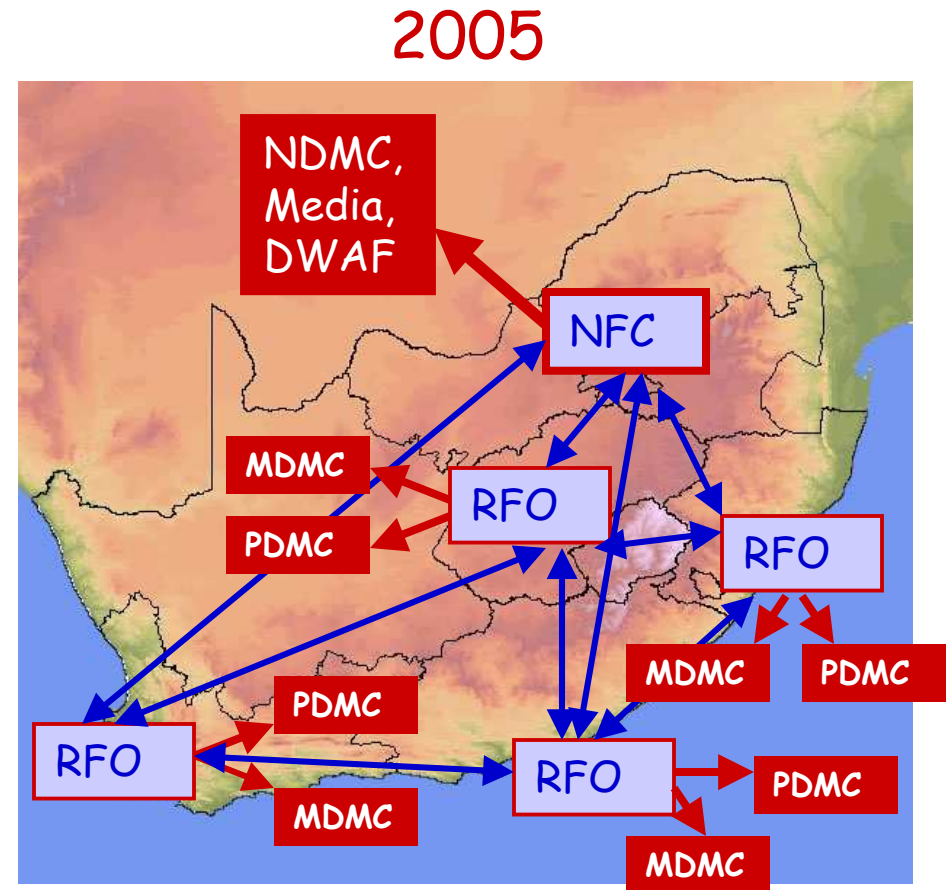


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Development in Forecasting Coordination and Dissemination: 1987 to 2005



1987



2006-attempt to link further,
Introduction of DMC at
Municipality levels

NMHSs Contribution to early warnings

- Warnings are helpful if they are received, interpreted appropriately and acted upon (Big challenge to the providers).
- Dissemination of warnings to remote areas for safety of life and property.
- Understanding of historic exposure to weather hazards.
- Striving to bring media closer enforcing emphasis on disseminating forecast other than impact after the event.
- Ensuring single authoritative source of the warnings.
- Challenged due to separate NMS and Hydrological Centres in some countries.
- Timely dissemination of the warning (arrives timely to some users but late or never to some due to poor integration or links).
- Need for integration of warnings to broader socio-economic system that takes into account diversity (cultural, isolation, political)

NMHSs contribution to data availability

- Availability and use of meteorological and climate data would assist implementation of appropriate strategies in
 - Agriculture and food security
 - water resources management
 - health
 - Media
 - disaster mitigation and prevention
 - environmental protection and in
 - establishing vulnerability to climate change.

NB: Environmental factors (Macro and Micro) causing turbulence from all directions have to be identified all the time.

Provision of products and services

- Quality of the products and services provided by NMHSs should result in adequate use of meteorological, climatological and hydrological products and services for socio-economic benefit.
- Sharing of expertise between NMHSs of neighbouring countries through exchange of information between NMHSs and NMHSs and Regional Centres (facilitated by WMO). Now we need to bring other users' expertise to ensure socio-economic benefit.
- Increasing capabilities of Regional Centres in NWP, data processing and product generation help to feed NMHSs with data and products for application.
- WMO facilitate and encourage establishment of awareness raising programme (Positive results are beginning to show.



South African Weather Service Products

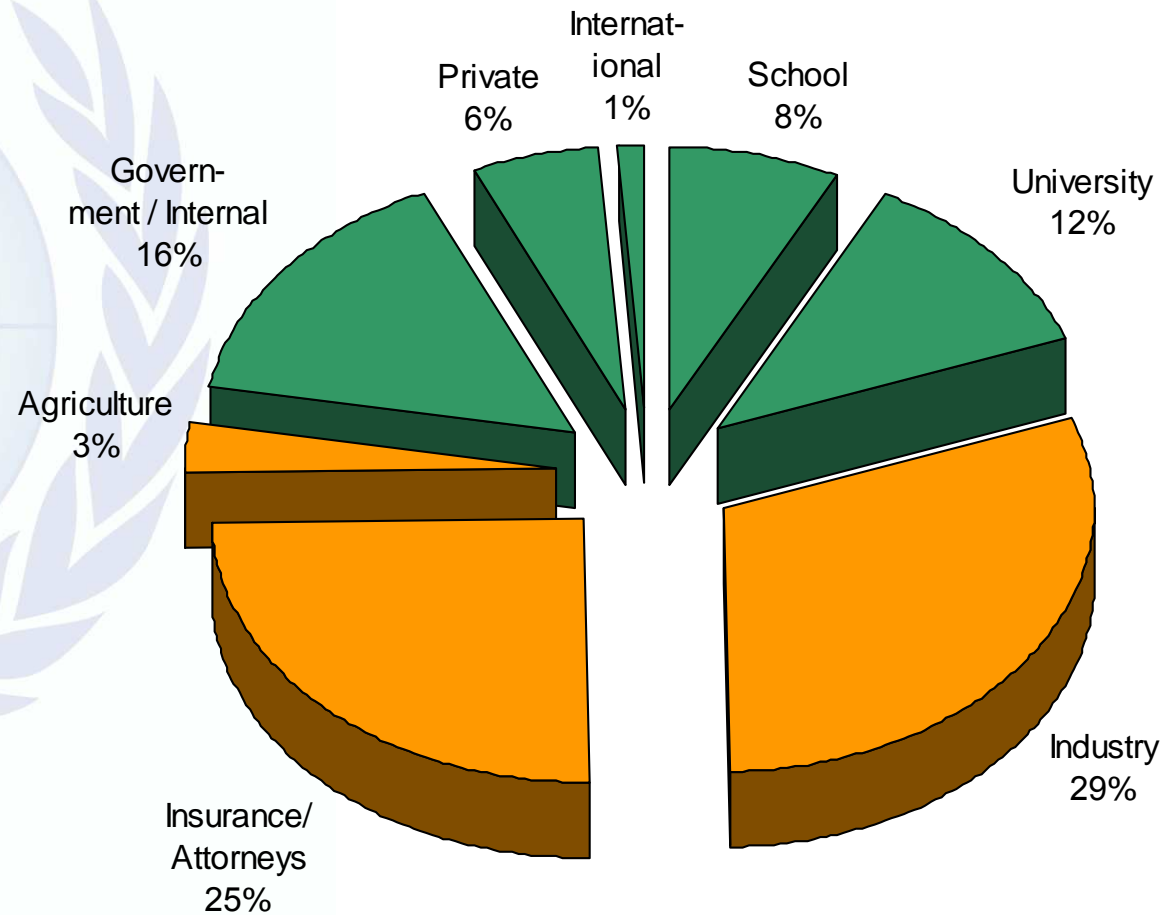
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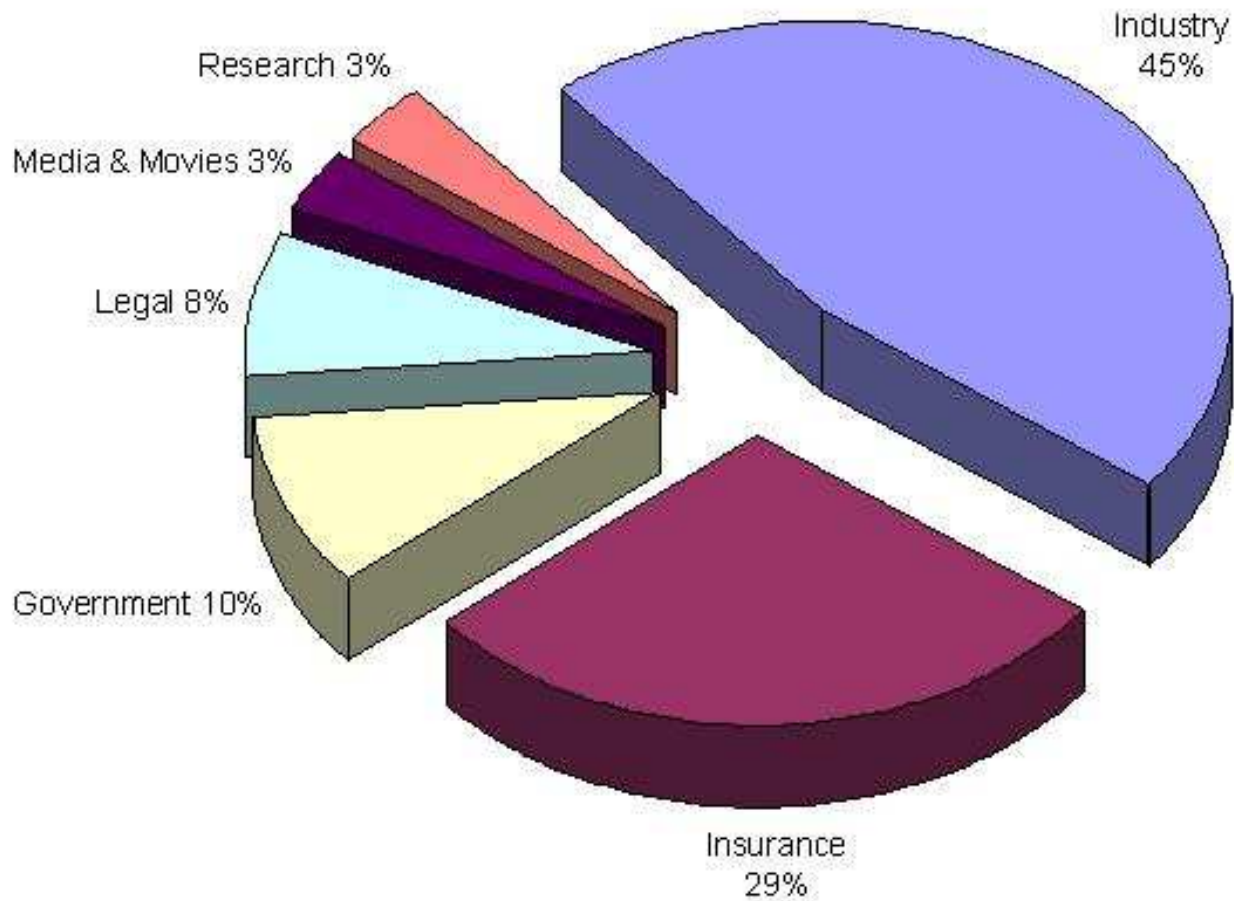
Head Office Clients

Breakdown of Clients: April 2004 to March 2005
Public Good - Green and Commercial - Orange



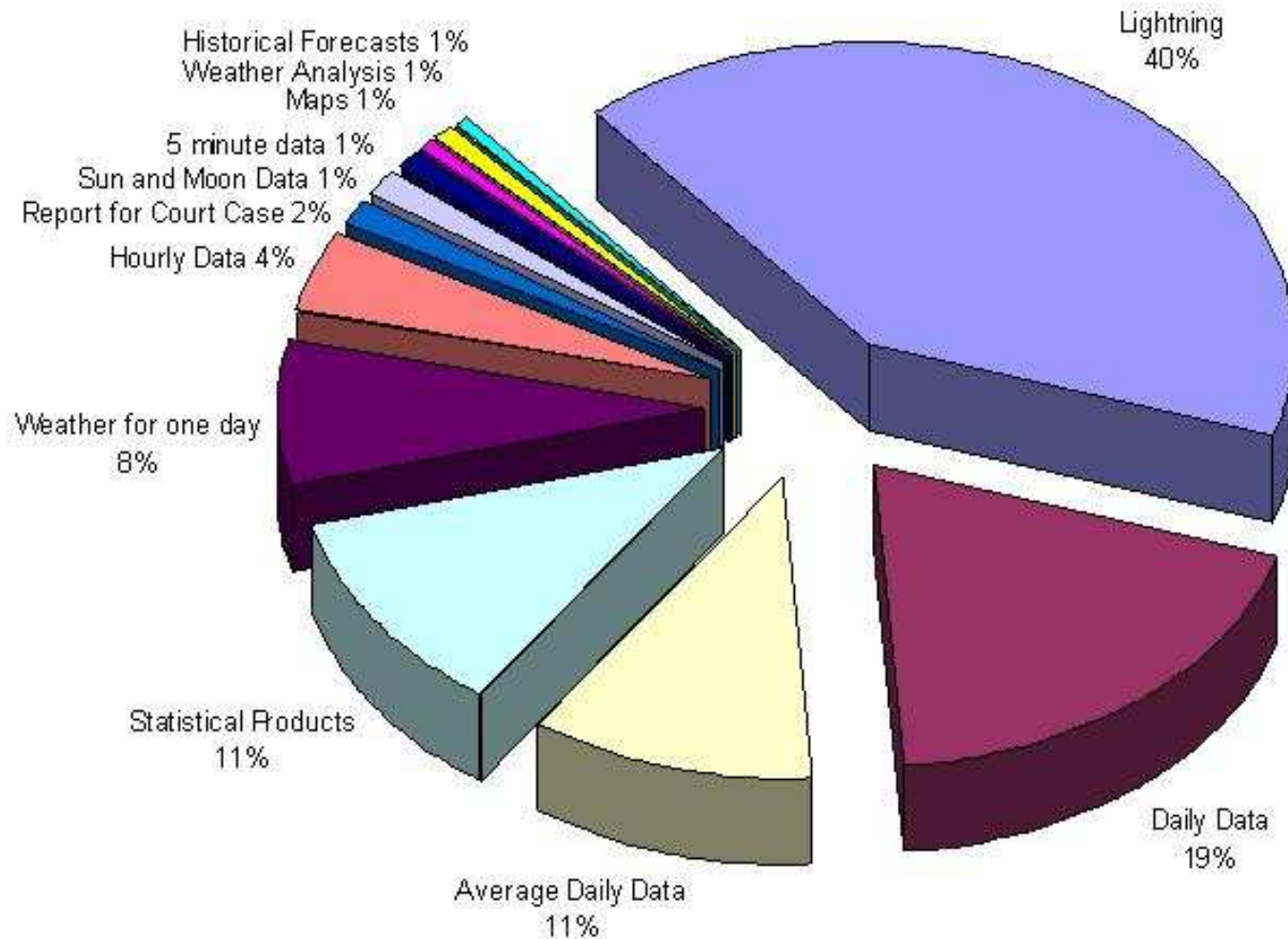
Regional Office Clients

Breakdown of Clients in the Regional Offices



SAWS Product Breakdown

Overall Product Breakdown



Some of +- 23 TV Wx Presenters



WMO PWS members visualizing atmospheric behaviour over Hong Kong.



THANK YOU!!!

