

Canada





### Meteorological Service of Canada's **Data Management Initiative**



WORKING TOGETHER TO STRENGTHEN THE FOUNDATION FOR SCIENCE. PRODUCTS AND SERVICES

**WOUDC Workshop** May, 2010 **Tony Colavecchia** 

## Why data management is important

- Data is the foundation of EC science, products and services
- Data management problems are limiting achievement of results.
- Fixing problems will significantly contribute to more results, achievements of priorities and benefits for Canadians





### What we are working towards

#### **Data Management Vision**

WES's data assets are effectively and efficiently managed to inform decision making.

#### **DMI** Mission

 To provide leadership in the management of WES's data assets to meet the principal needs of priority internal and external clients.

#### Goal

 WES's data assets are effectively processed in real-time, are of known quality and effectively stored to facilitate easy discovery, access, use, expand and exchange.

#### **Priorities**

- Support priority WES initiatives: Prediction renewal (NinJo), Warning/Alerts reengineering (CAP), and dissemination/access enhancement (WeatherOffice and Climate on line)
- Renew management of and access to data assets





### How we are going to get there

- 1. Continue the development of a data management framework
- Accelerate renewal of Data Management Systems and business processes: real time, near real time, archive, data acquisition, monitoring asset management and software retirement of legacy systems.





### Data Sharing – systems perspective

### **Short Term**

- Create a data discovery portal: GeoConnections, Data.gov (U.S., U.K., Australia), ICONO
- Ingest key third party data (network strategies): NavCan, RWIN, MoF, Satellite, Lightning, Hydrometric, WMO

### Long Term

- Explore options for linking data bases: ontology's, data models, semantic web
- Explore use of native quality assessment checks





# **Data Sharing Standards**

- Data Exchange Formats: BUFR, METAR, XML, Flat files, KML, ShapeFiles
- Dataset Metadata (discovery, access, identification, quality and constraints): ISO 19115
- WMO Classification Framework (instruments): Network classification



