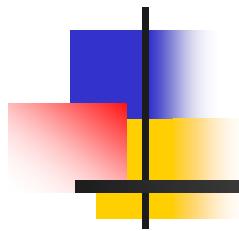


# Severe Weather Warnings

at The Central Weather Bureau



Weather Forecast Center  
Central Weather Bureau, Taiwan



Torrential Rainfall  
豪雨 8%

颱風 88%  
Typhoon

寒害

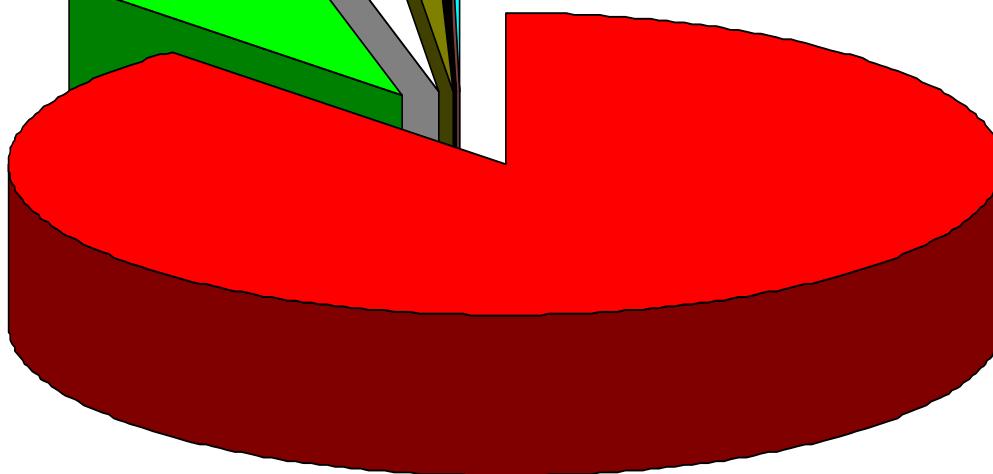
2%

1%

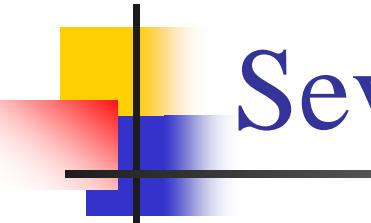
0.5%

0.02%

0.15%



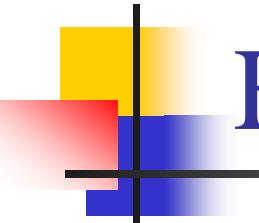
■ 颱風 ■ 豪雨 □ 寒害 ■ 旱災 ■ 冰雹 ■ 焚風 ■ 其它



# Severe Weather

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- Dense fog <200m
- Severe thunderstorms
- Heavy (or Torrential) rains > 50 or 130 (> 200 )mm/24hour
- Cold outbreaks
- Gales
- Hail, Tornado

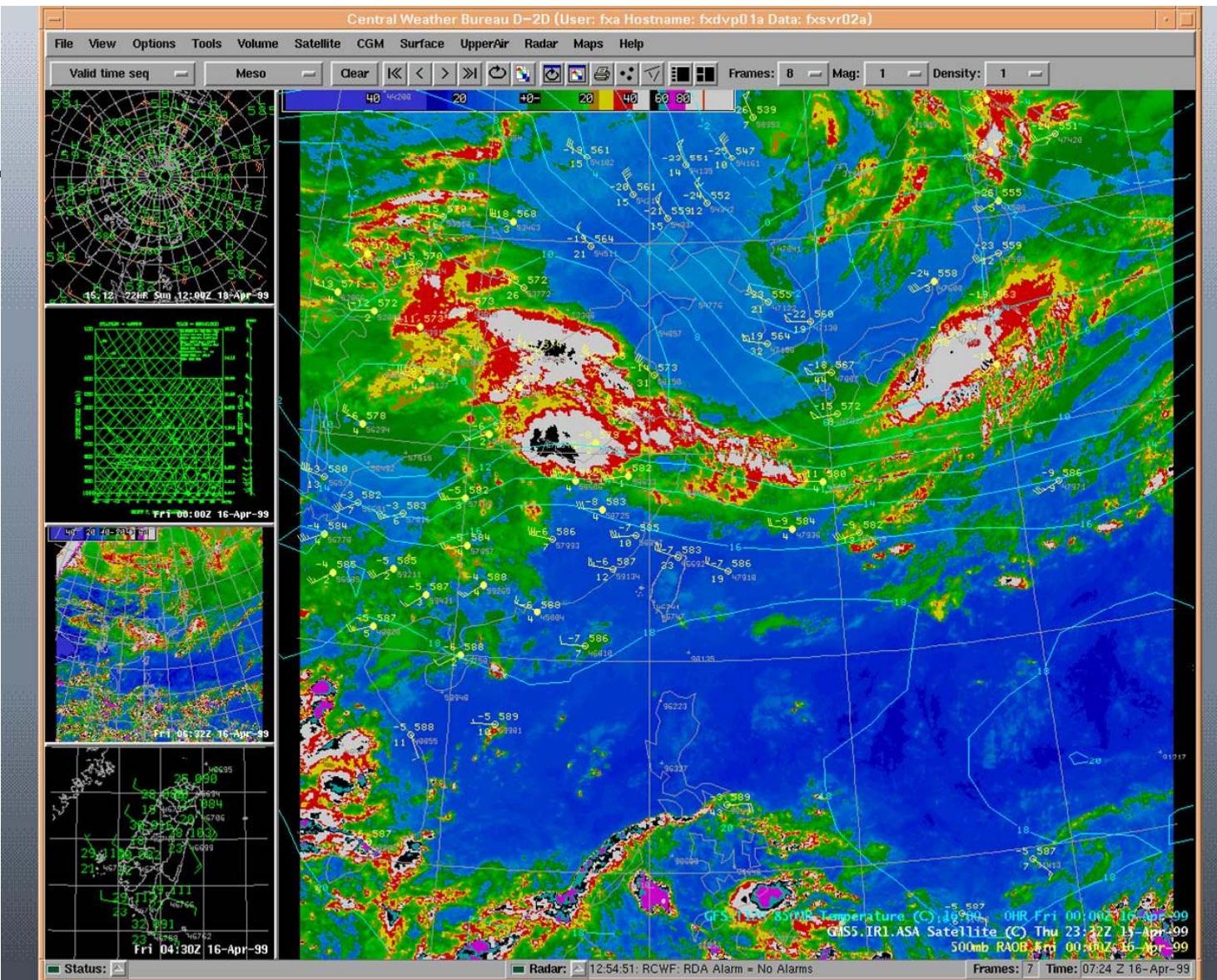


# Forecast Tools

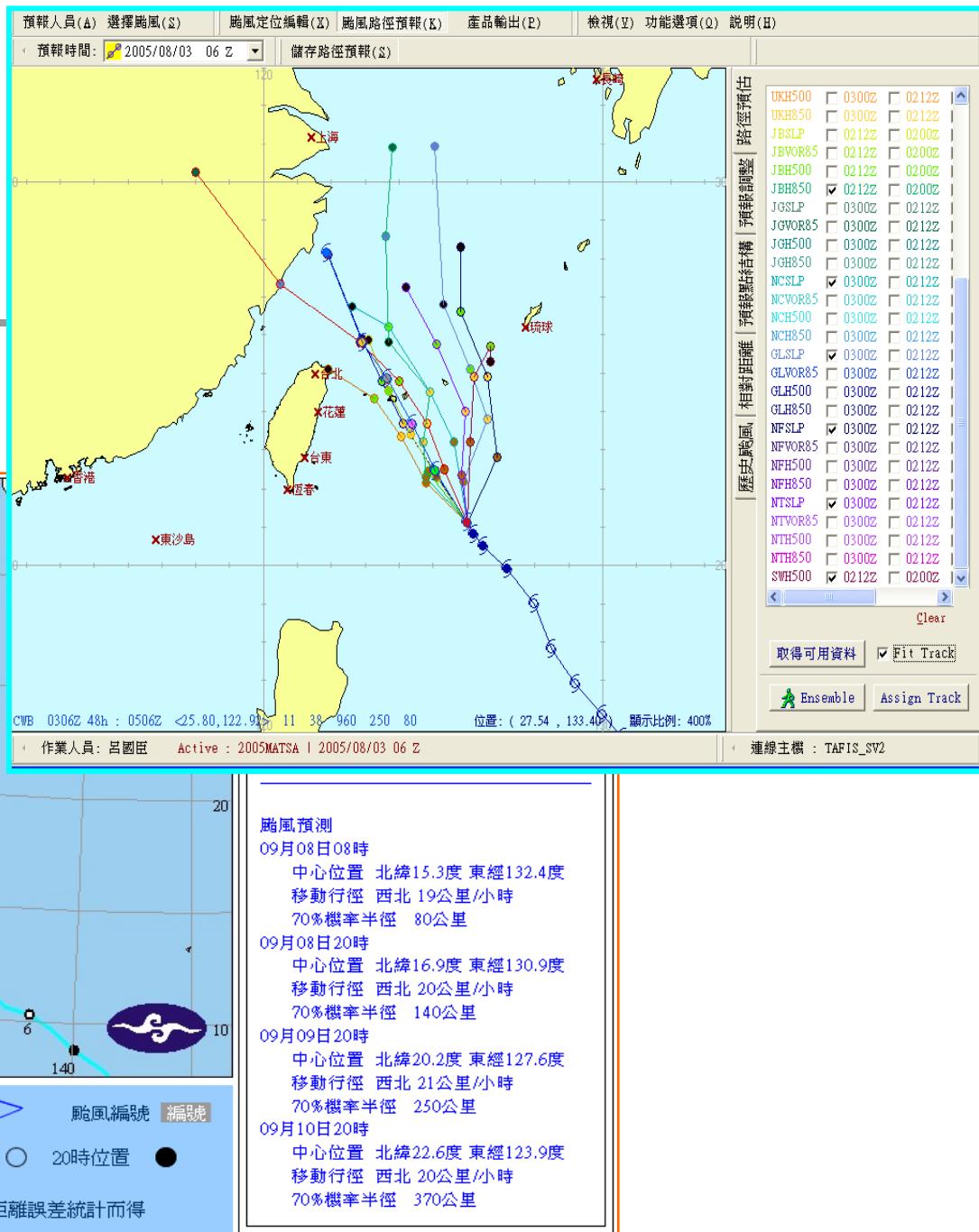
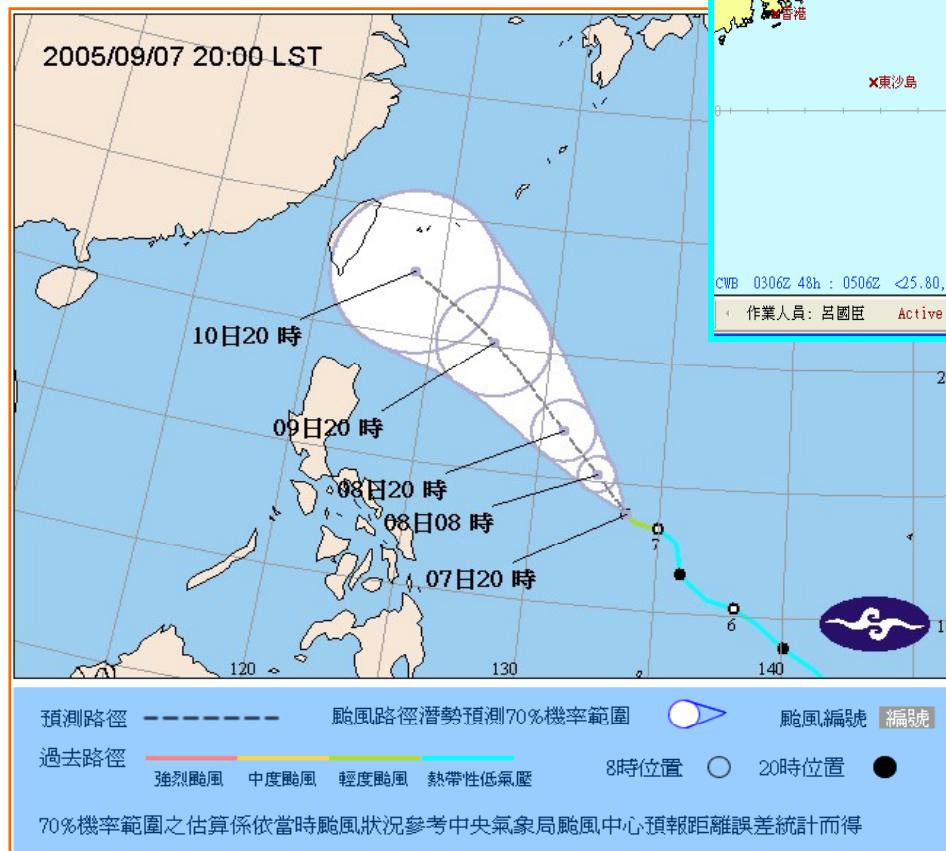
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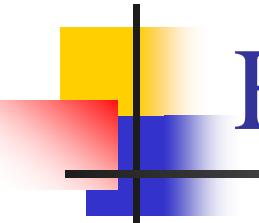
- WINS
  - Weather Integration and Nowcasting System
- FTES
  - Forecast Text Editing System
- TAFIS
  - Typhoon Analysis Forecast Integrated System
- TWES-II
  - Second Generation Typhoon Warning Editing System

# WINS



# TAFIS

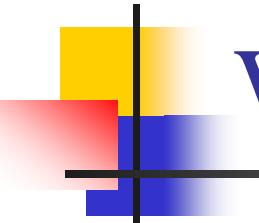




# Forecast Guidance

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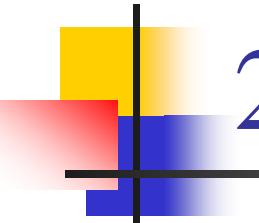
- Numerical Weather Prediction outputs
  - NWP
- Statistical models outputs
- Pattern recognition (Analog)



# Warning Dissemination

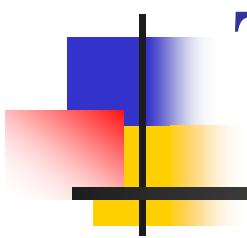
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- SMS and Facsimile Broadcasting
- News Agencies (TV, Radio Station, Newspaper)
- Point to point Disaster Prevention Weather Service System
- Fax-On-Demand (FOD)
- “166” & “167” Dial-in Tape-recording Services
- World-Wide-Web (WWW)
  - <http://www.cwb.gov.tw>
- Dial-in Consultation Service 02-23491234
- BMF and SSB Broadcasting
- Multi-Media system
- E-mail



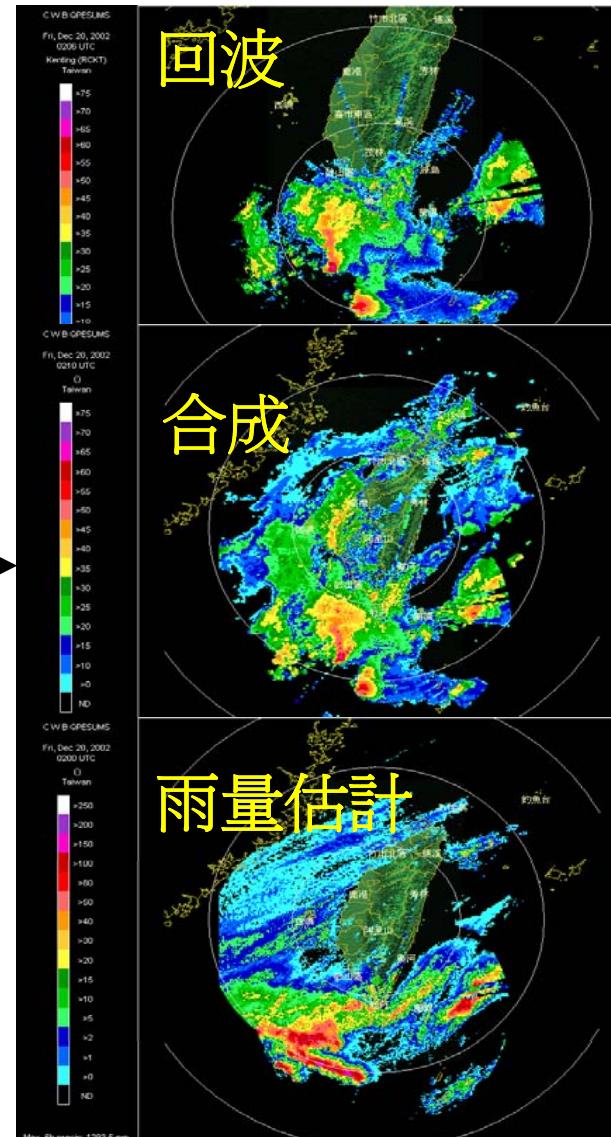
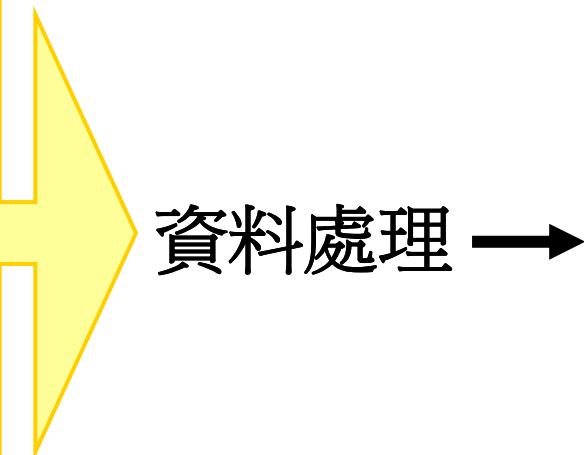
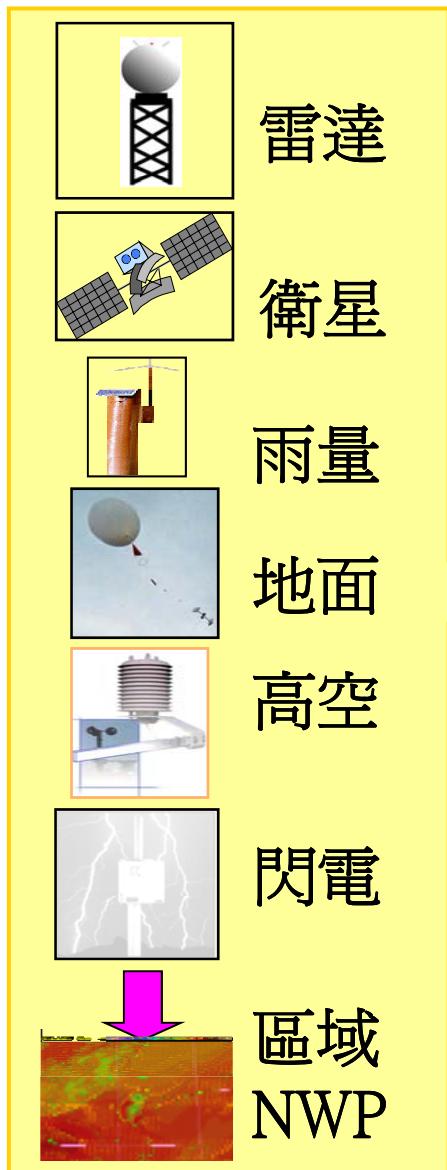
## 24-hour Forecast Errors

	2001	2002	2003	2004	2005	2006	2007	2008	2009
台灣 CWB	149	142	132	120	95	101	99	103	110
日本 JMA	155	134	120	125	104	105	111	112	120
美國 JTWC	134	122	135	130	104	104	100	103	107



The End

# QPESUMS (Quantitative Precipitation Estimation) 系統



# 氣象防災資訊服務系統架構

結合本局氣象資訊服務系統與QPESUMS系統，  
並利用中央災害防救委員會所建立之通信備援。

