

# Vaisala De-icing Support Solutions



*De-icing conference 3.-4.10.2007*

*Moscow, Russia*

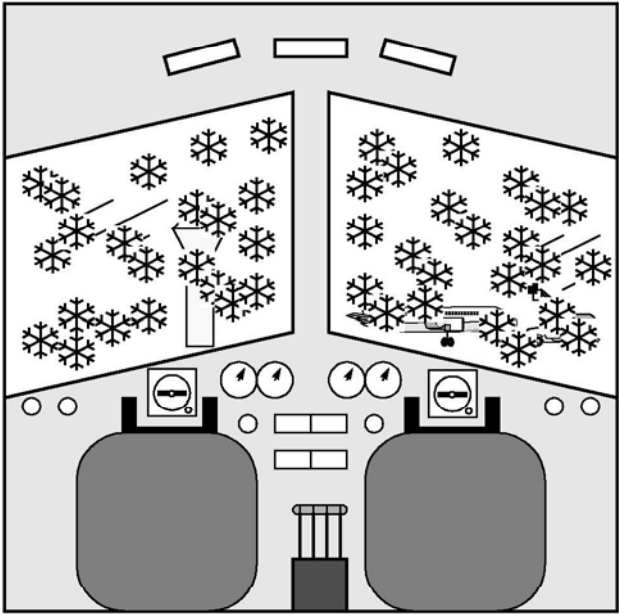
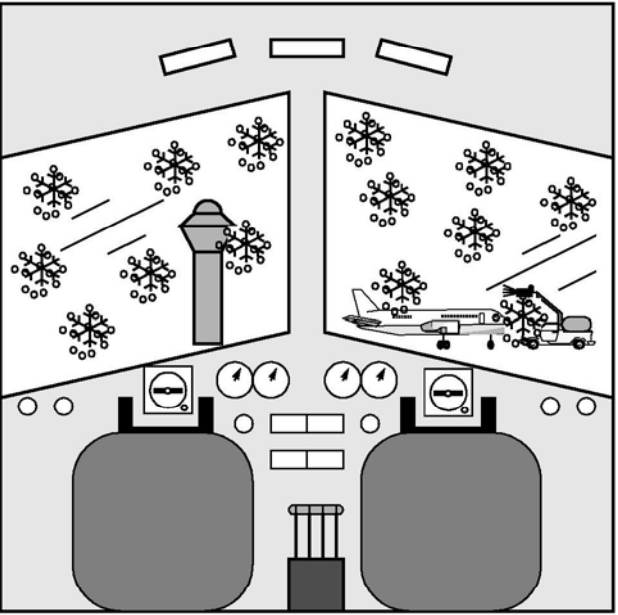


# Holdover Time exceeded...!



# Visibility vs. Snowfall Rate

Which Case Causes the Greatest Aircraft Ground-Icing Threat?

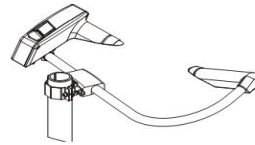
Case #1	Case #2
	
<p><b>Visibility = 1/4 mile (0.4 km)</b></p> <p><b>NWS Snowfall Rate = Heavy (S+)</b> Note: based on visibility</p> <p><b>Liquid Precip Rate = 0.10 in/hr (2.5 mm/hr)</b></p> <p><b>Snow Crystals:</b> 3-5 mm Dendrites</p> <p><b>Crystal Riming:</b> None - Light</p> <p><b>Aggregates:</b> 5-25 mm</p>	<p><b>Visibility = 3/4 mile (1.2 km)</b></p> <p><b>NWS Snowfall Rate = Light (S-)</b> Note: based on visibility</p> <p><b>Liquid Precip Rate = 0.10 in/hr (2.5 mm/hr)</b></p> <p><b>Snow Crystals:</b> 1-3 mm Dendrites &amp; Plates</p> <p><b>Crystal Riming:</b> Heavy</p> <p><b>Aggregates:</b> None</p>
<p><b>Answer: Both</b></p>	<p>Rasmussen ja Cole, 2000</p>

# Vaisala AviMet® De-icing Support Display

Vaisala VRG101 All  
Precipitation Gauge



Vaisala PWD22 Present  
Weather Detector



Vaisala WXT510  
Weather Transmitter



Vaisala AviMet  
Central Data Unit (CDU)



Vaisala Multi-Sensor Present Weather Service

Vaisala Holdover Time Service

Vaisala AviMet  
WeatherView workstation



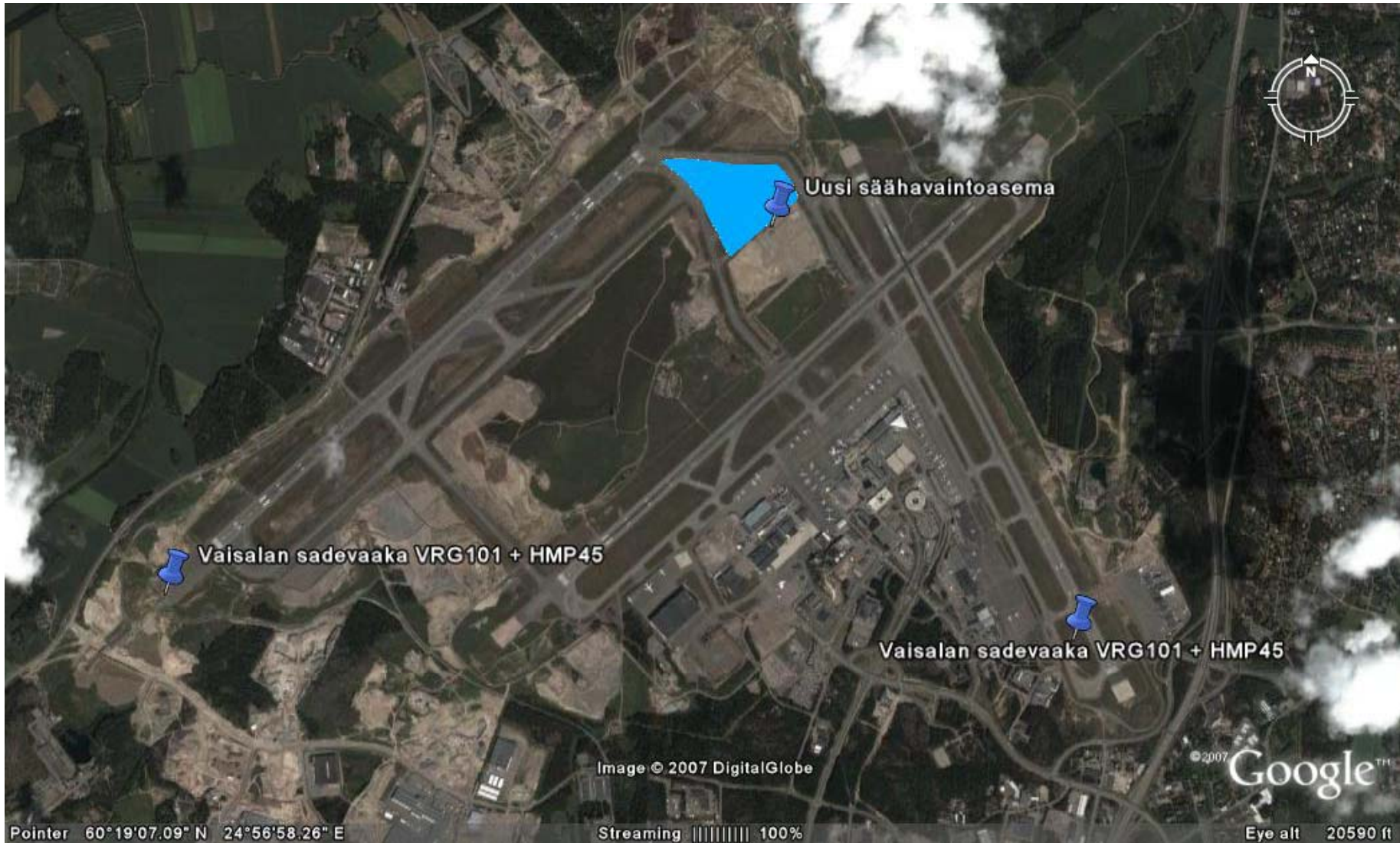
Vaisala AviMet  
WeatherView workstation



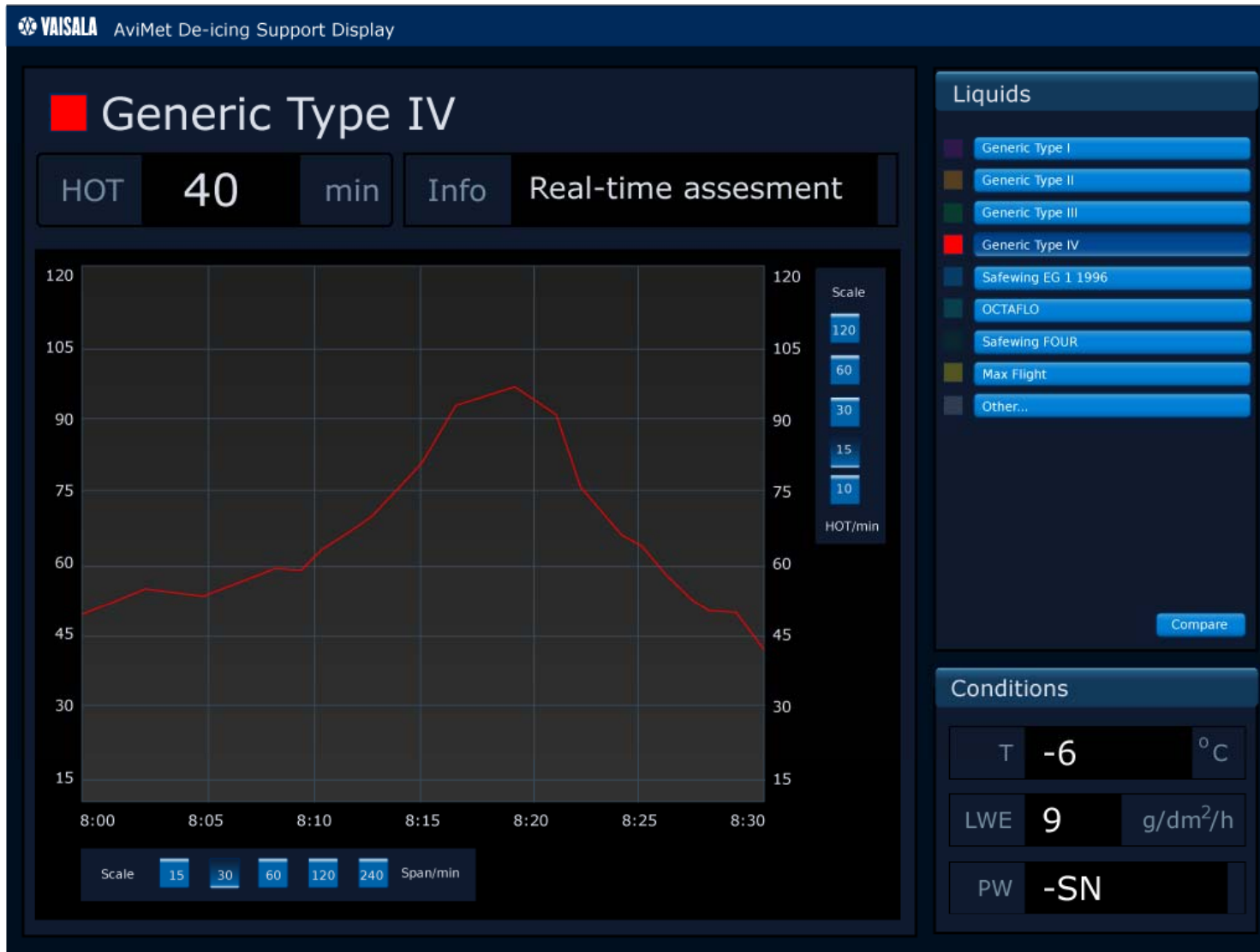
# Vaisala AviMet® De-icing Support Display

- Real-time Holdover Time assessment
  - Based on reliable, accurate real-time weather data
  - Takes into account all approved de-icing fluids
- Vaisala AviMet® service
- Designed to meet Transport Canada's regulations for Holdover Time Determination System (HOTDS)
  - Currently Transport Canada is the only regulator in the world who have defined regulations for HOTDS
- State-of-the-art system
- For Airlines, De-icing operators, De-icing coordinators, ground traffic controllers and runway maintenance staff

# Sensor installation sites in Helsinki-Vantaa airport



# Vaisala AviMet® De-icing Support Display

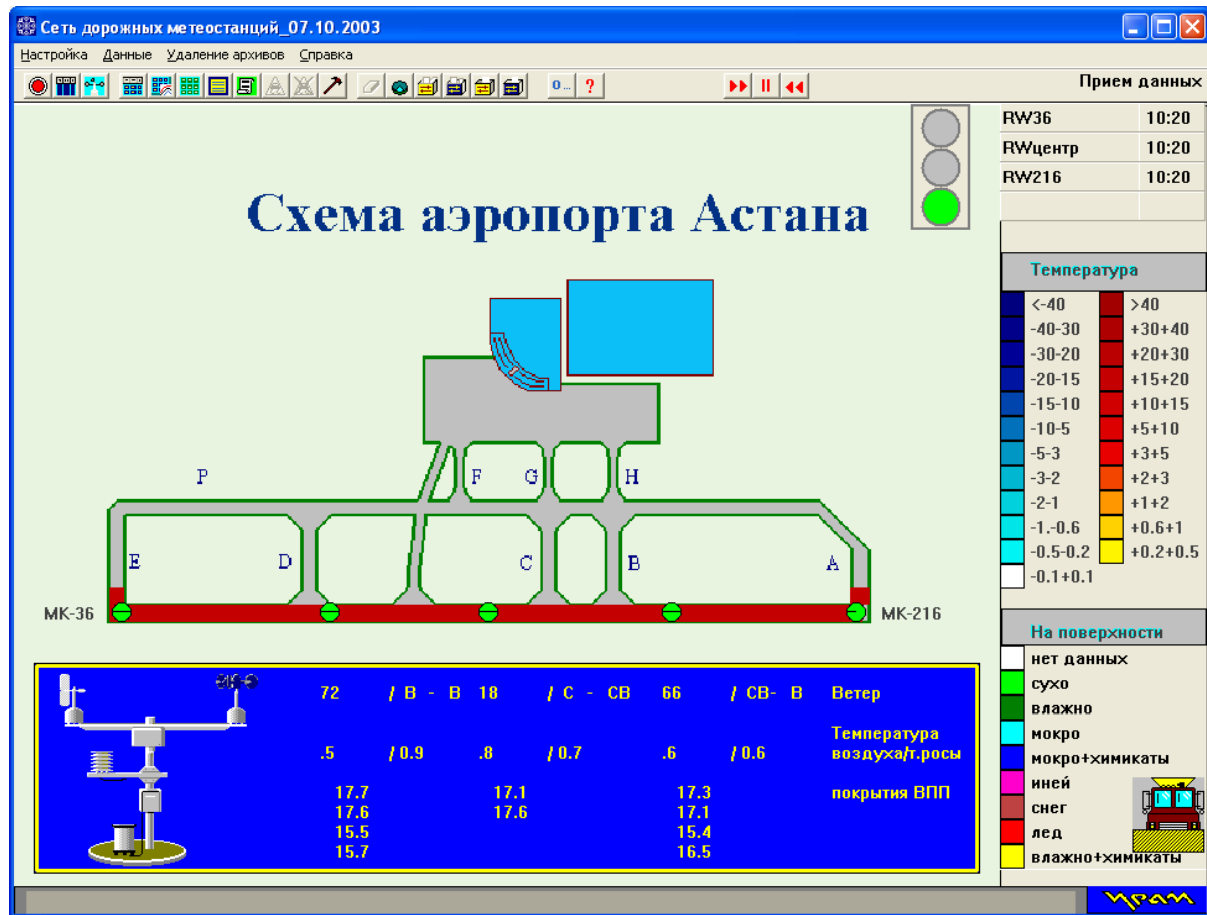


# Advantages

- Save time and money making better decisions
  - When anti-icing treatment is needed
    - Choosing the best fluid for conditions
  - Optimizing dispatching locations and procedures
    - Increased flight capacity
- Better safety
- Bridge the gap between weather and aviation

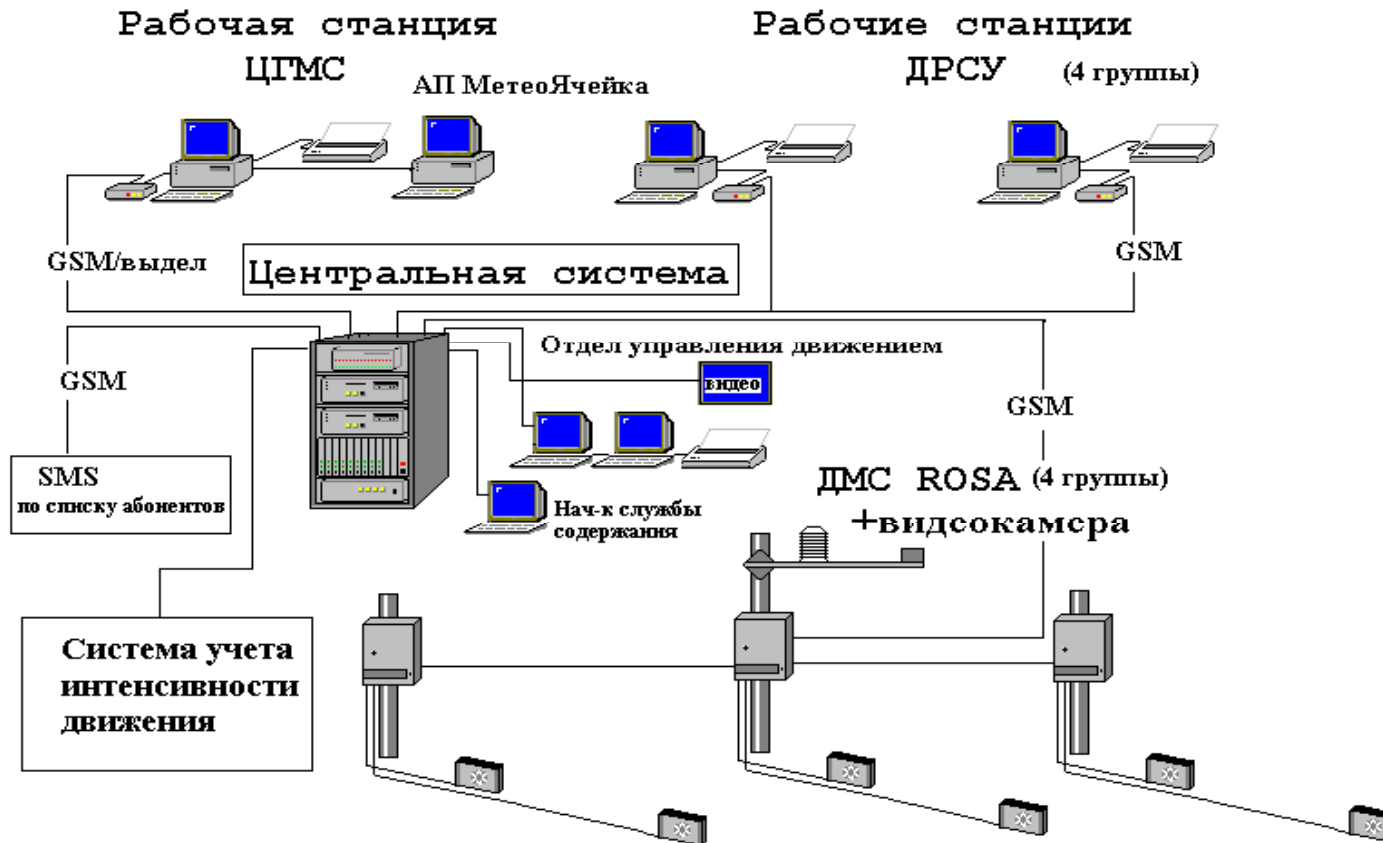
## In Future

- Ongoing research and development work to improve Vaisala's De-icing solutions
  - Integrating radar information to our solutions
    - Forecasted values for Holdover Time
- New decision making tools for aviation use



# Схема АИИС МЕТЕОТРАССА

ККГУ "Дорожный комитет" ККГУ "Дорожный комитет"



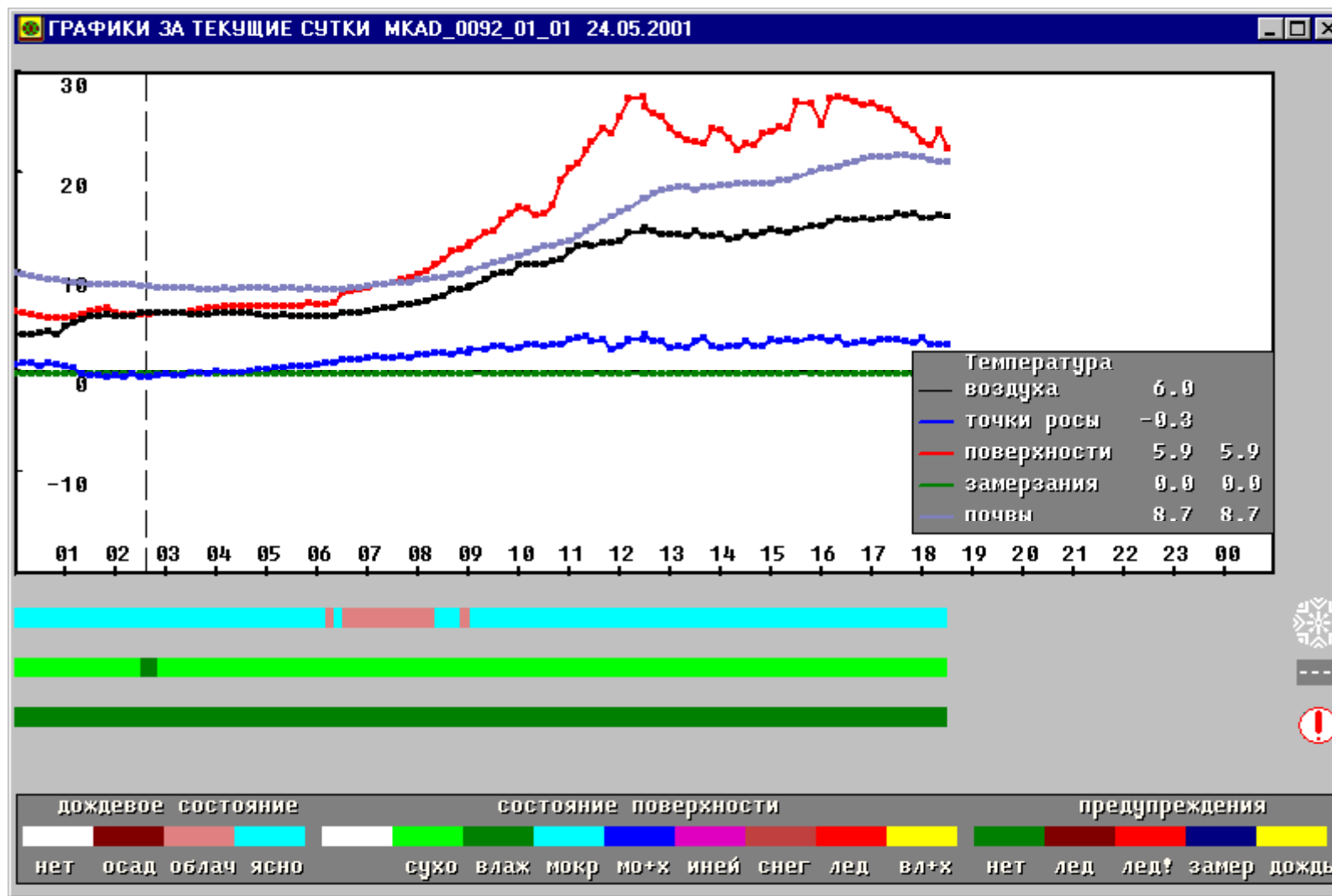
Число рабочих станций: 44

Число ДМС: 22

Число видеокамер: 32

Число систем учета инт-сти дв-я: >10

Число абонентов SMS: >30



**Thank you**