Federal Prototype MDSS

Michael Chapman

NCAR - Research Applications Laboratory

U.S. Department of Transportation
Federal Highway Administration

NCAR

Background

Maintenance Decision Support System (MDSS)

✧ First version was developed in 2001

✧Version 6.1 recently released

✧ Deployed over Denver, E470 Toll road, Denver International Airport, A1 Highway – Madrid

✧ Plans for deployment in complex terrain

NCAR

MDSS - Issues

- **Tactical Forecasting**
- **Forecasting in Complex Terrain**
- **Pavement model issues (non-winter, high latitudes)**
- **Usefulness in Airport ground environment**
  - Complex Decisions
  - Treatment recommendations

NCAR

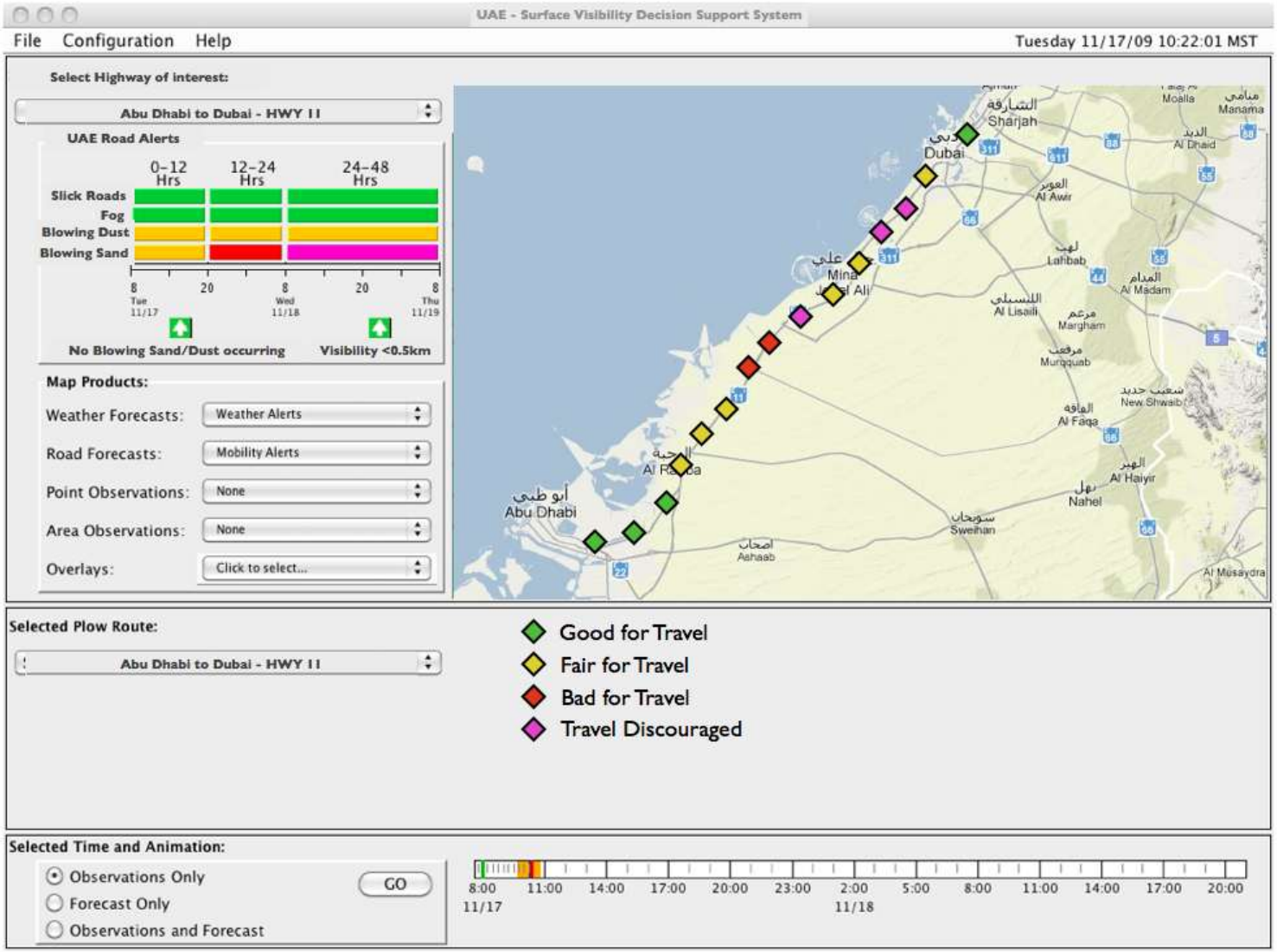
Future MDSS-type Systems

- Non-winter maintenance – pavement, precip, lightning, etc.
- Fleet routing
- Emergency Services
- Complex Airport DSS
- Rail
- Visibility

* Some of this still needs to be researched out

NCAR

Future MDSS-type Systems



NCAR

MDSS Information

http://www.rap.ucar.edu/projects/rdwx_mdss

Mike Chapman - mchapman@ucar.edu

Sheldon Drobot - drobot@ucar.edu

NCAR