

Early Winds History at SSEC

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IWW 13

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The Early Days

Prof. Vern Suomi was striving to exploit the geostationary satellites for time domain information

- Cinematic technique by Fritz Hasler (1968)
- Pasting printouts together
 - Covered 1000 ft²
 - Staff would walk around in stocking feet to find a landmark or cloud.

The Early Days

Mechanical vs. Computer

Internal competition at SSEC circa 1970:

- Optical correlator (light table)
- Computerized cross correlation
- WINDCO was born, which evolved to the McIDAS (Man computer Interactive Data Access System)

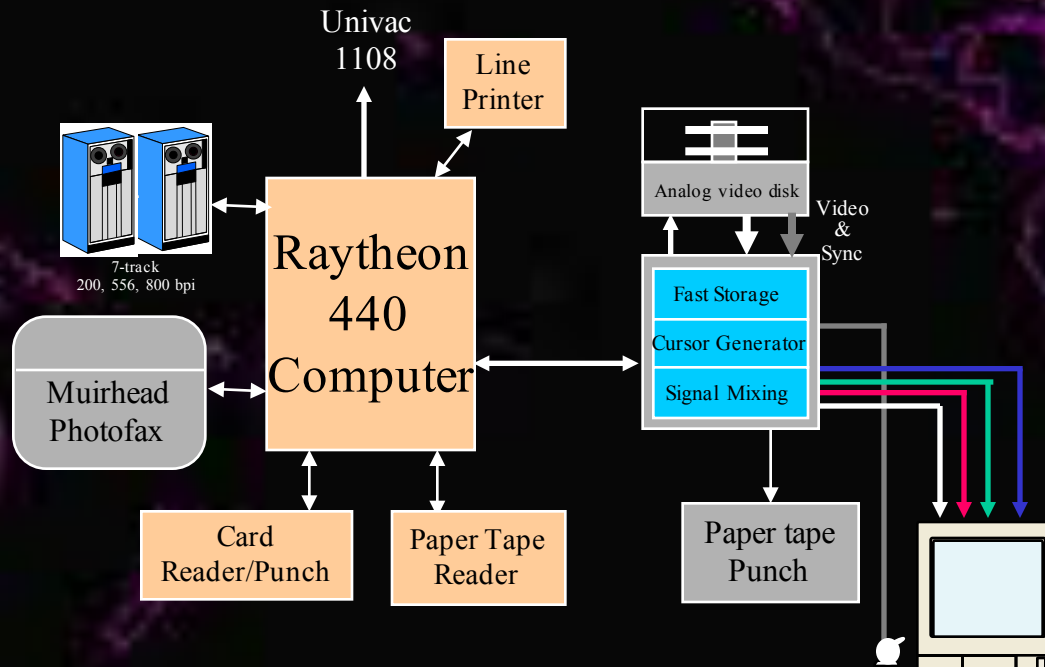
WINDCO

- Based on TV instant replay analog disk:
 - Image animations of 520 frames
 - Frame size: 500x640
 - Animation rate: up to 15 frames per second

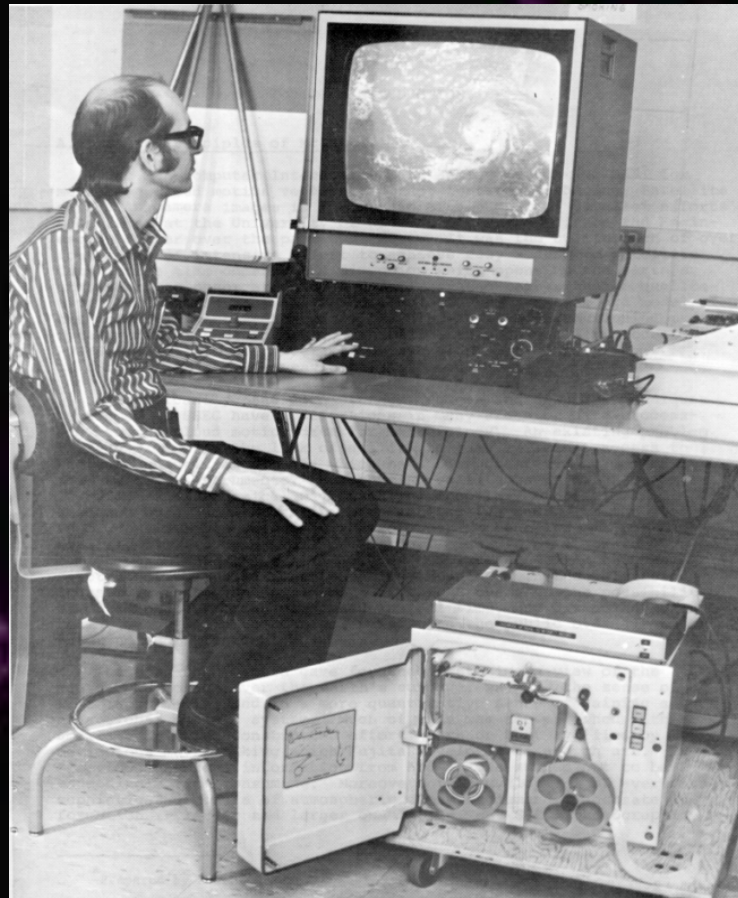
WINDCO process

- A joystick used to control cursor location
- User pressed button to record frame number and cursor location of target clouds
- Location punched into paper tape
- Paper tape data were transferred to punch cards using a Raytheon 440
- Cards were walked across the street to the university's Univac 1108 mainframe

WINDCO - McIDAS Prototype (1971-1973)



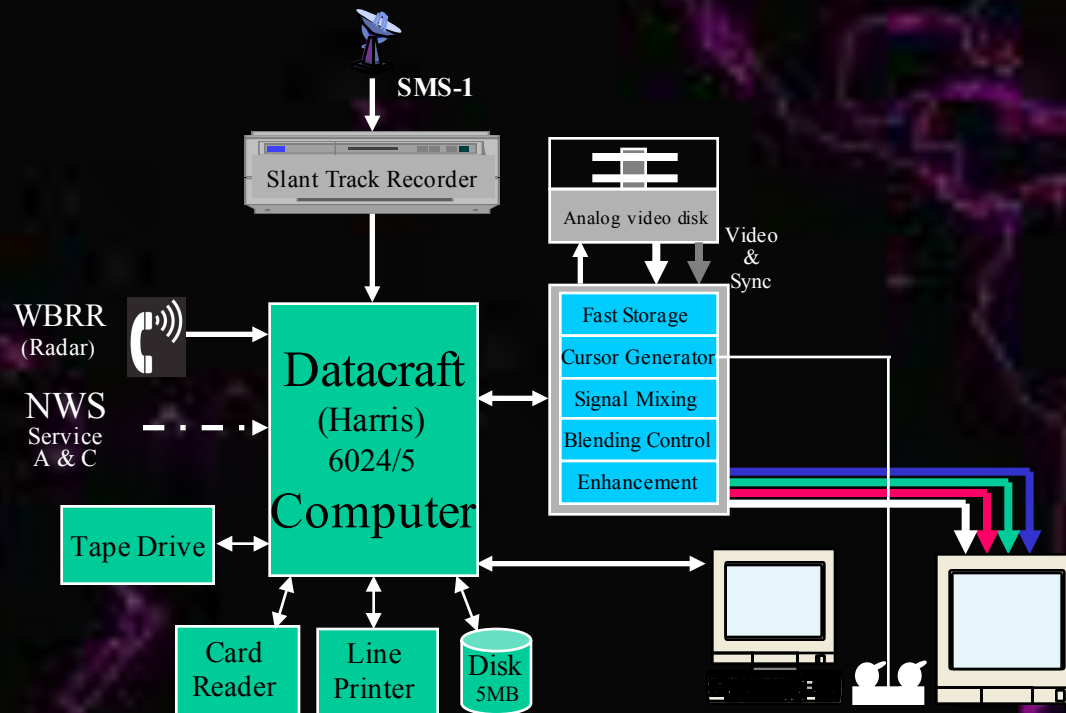
WINDCO - McIDAS Prototype Workstation



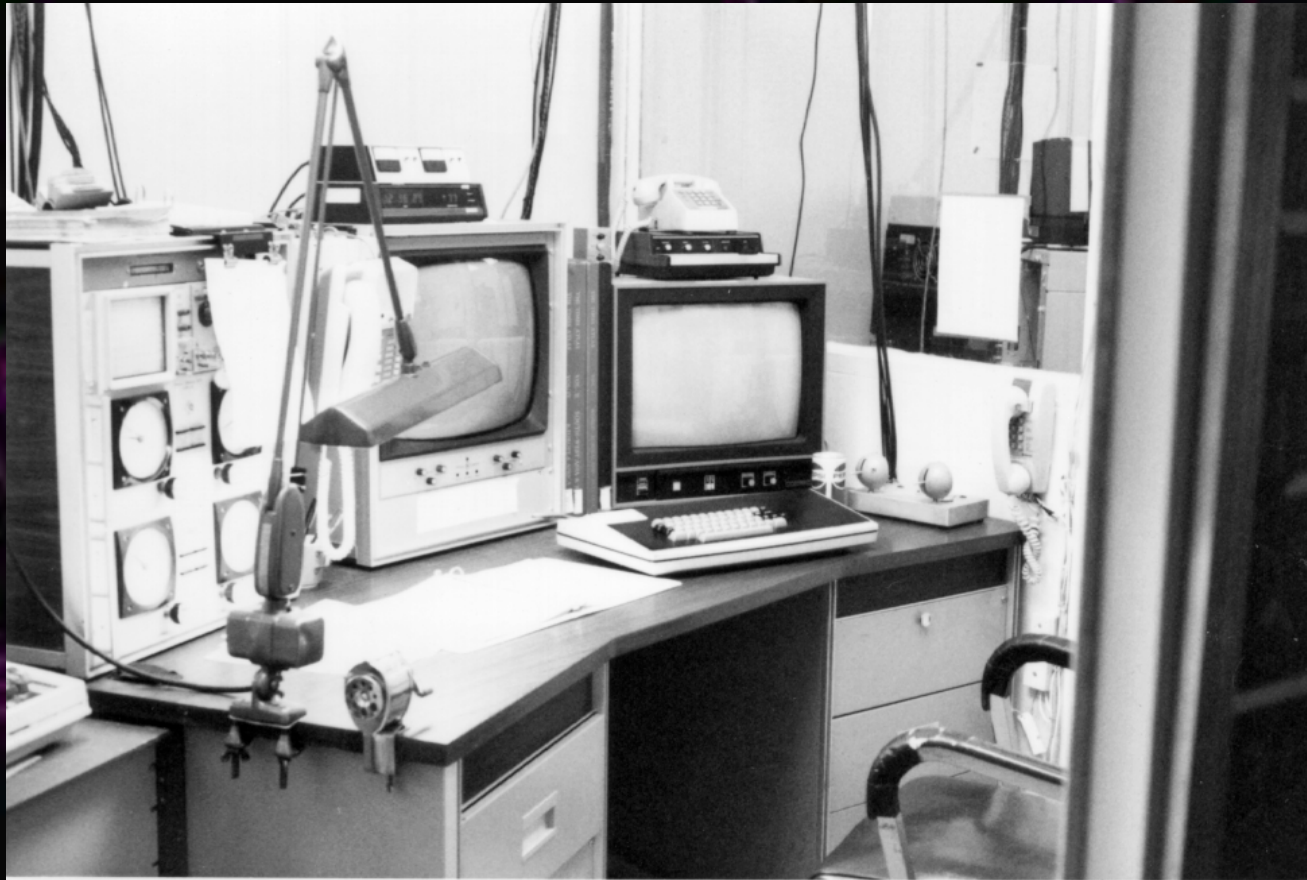
WINDCO - McIDAS Prototype Satellite Image with Radar 'overlay'



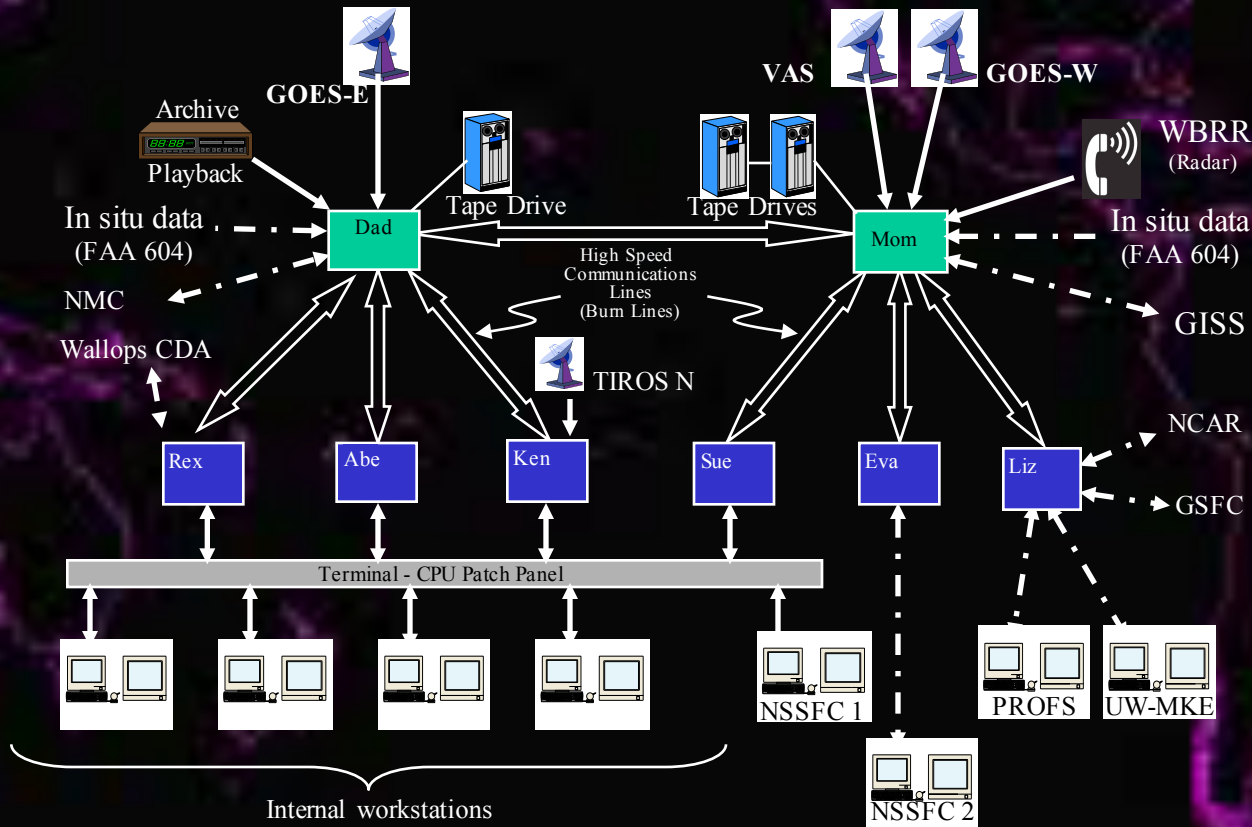
McIDAS I (1973 - 1978)



McIDAS I Terminal



McIDAS II (1978 - 1983)



Global Winds in 1978

Cloud-drift winds were manually generated from five geostationary satellites for a year as part of the First GARP Global Experiment (FGGE)

