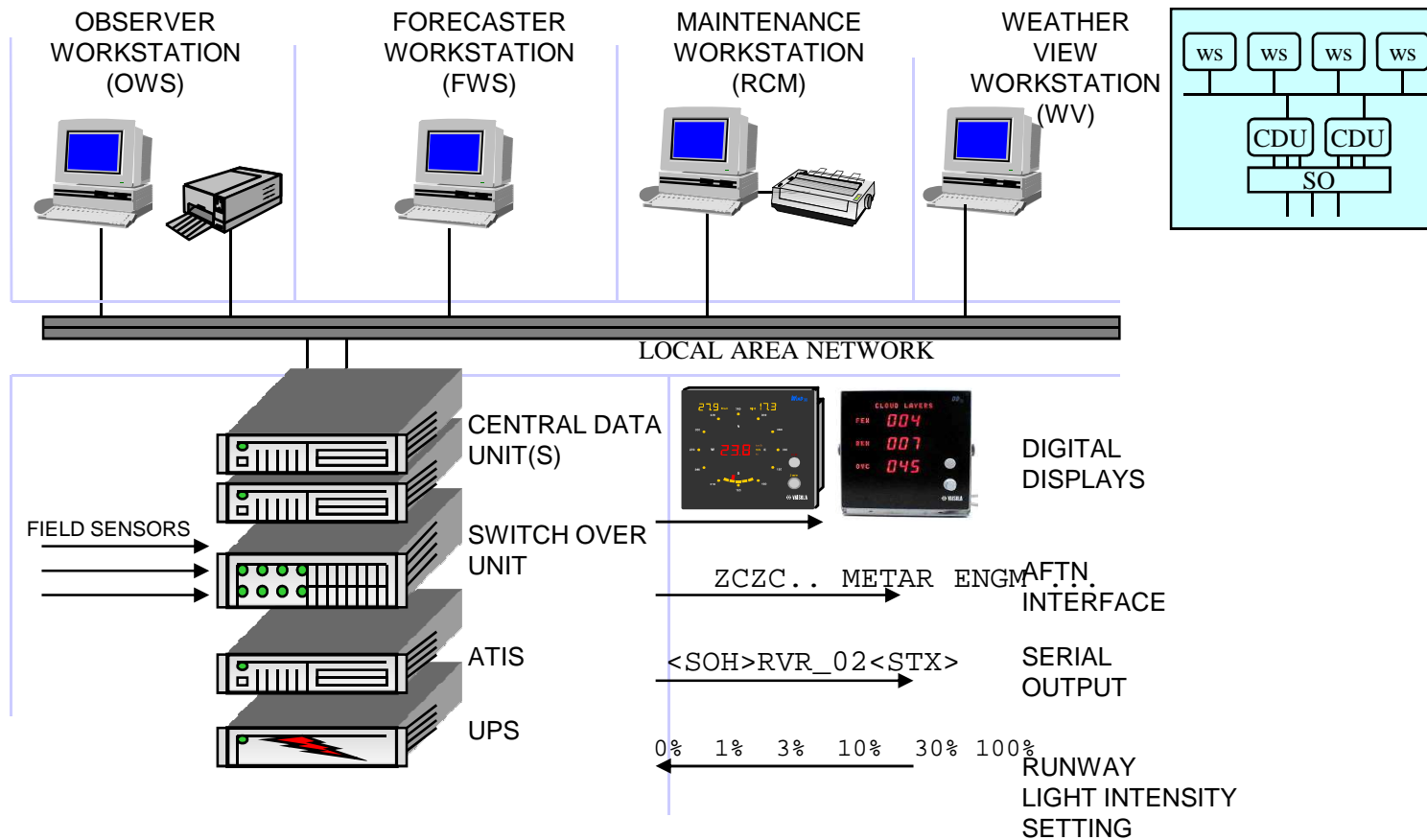
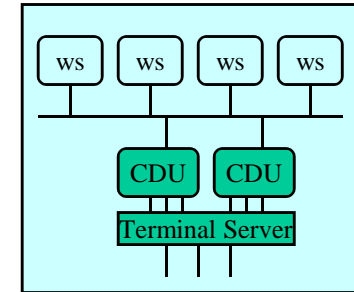


AviMet: System architecture

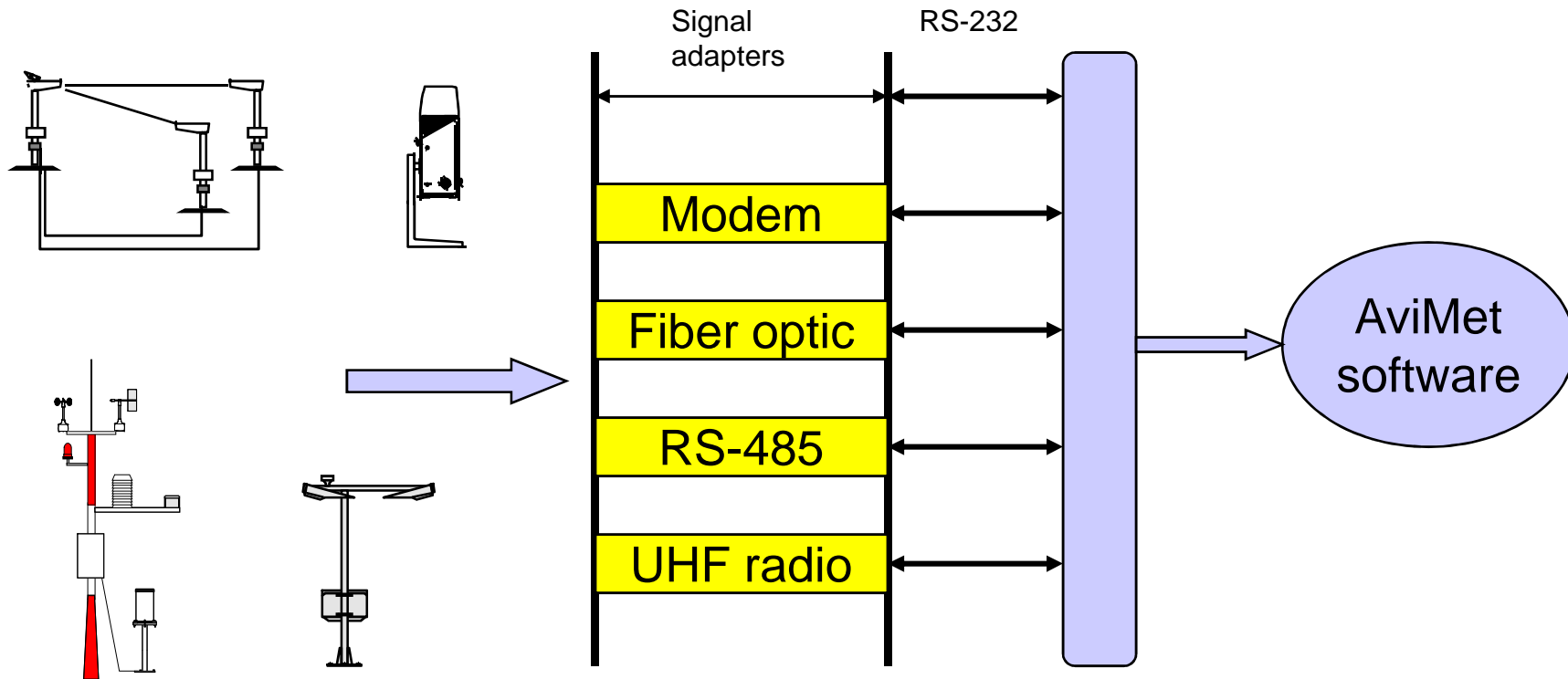


Central Data Unit (CDU)

- CDU tasks
 - Sensor data acquisition and validation
 - Meteorological calculations
 - Sensor service interface
 - Alarm services
 - Single or dual configuration
 - dual hot-standby configuration with Switchover Unit provides increased reliability and uptime

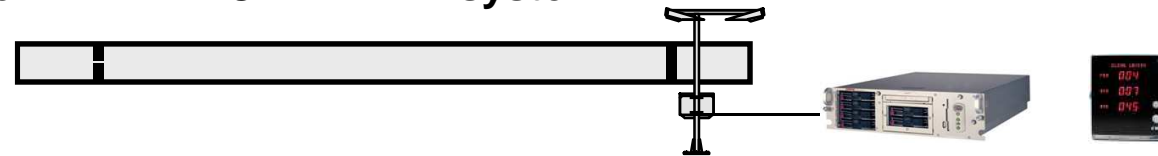


Data acquisition: Field sensor connections

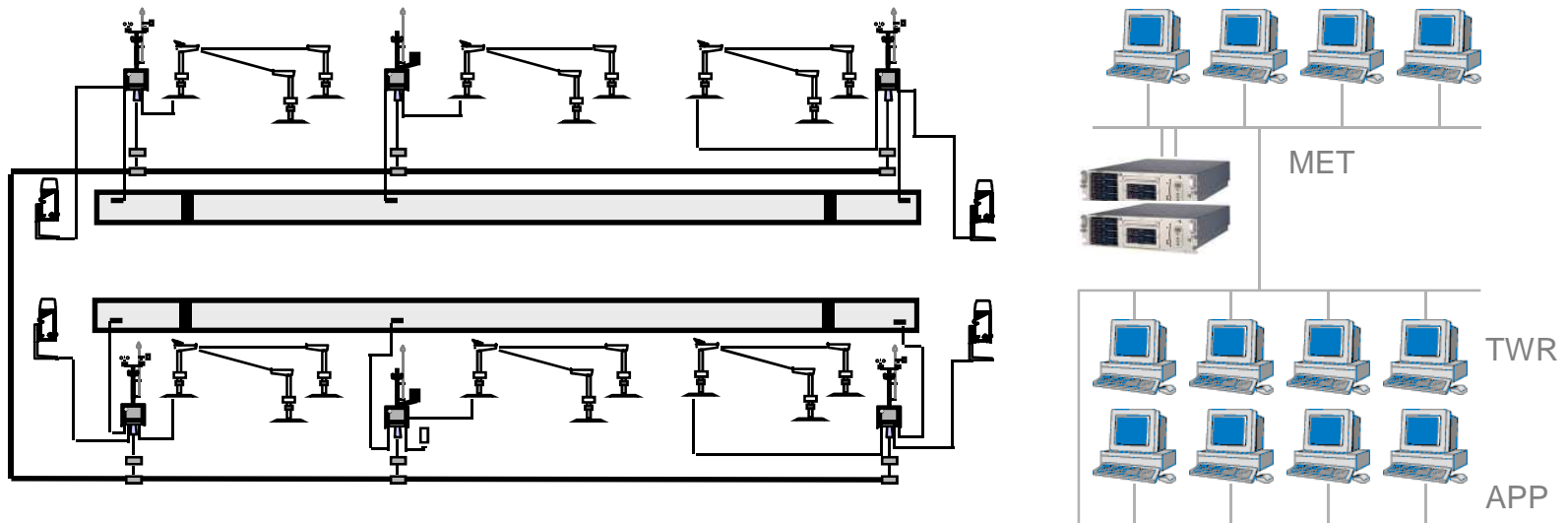


AviMet: Scalability

Small system: 1 RWY CAT I RVR system

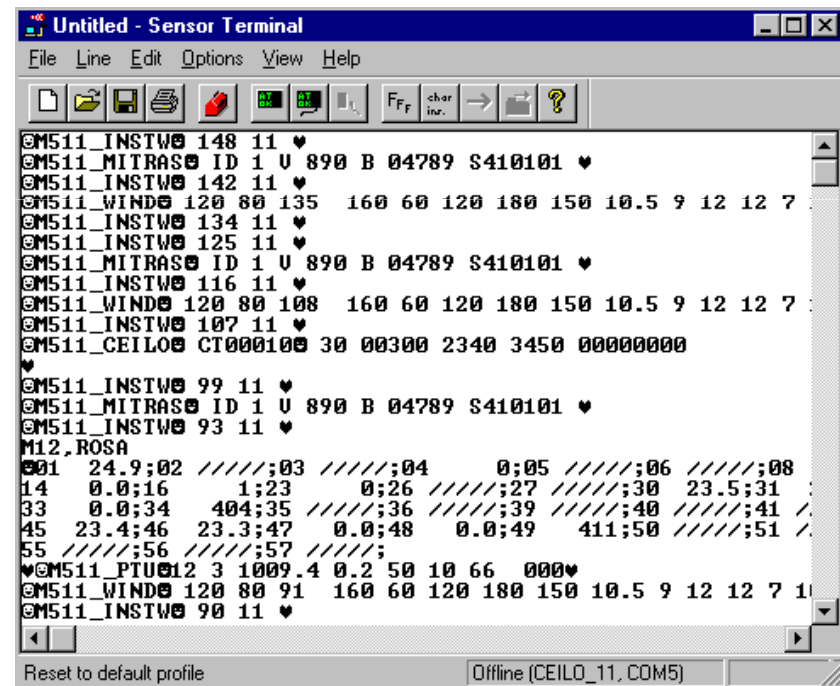


Large system: 2 RWY CAT IIIB AWOS



Sensor service interface

- Direct access to sensors and weather stations for configuration and diagnostics
- Available over a dial-up connection for remote maintenance



```
Untitled - Sensor Terminal
File Line Edit Options View Help
[F] [C] [D] [P] [R] [G] [B] [Ff] char ins. [A] [?]
@M511_INSTW@ 148 11 ♥
@M511_MITRAS@ ID 1 U 890 B 04789 S410101 ♥
@M511_INSTW@ 142 11 ♥
@M511_WIND@ 120 80 135 160 60 120 180 150 10.5 9 12 12 7
@M511_INSTW@ 134 11 ♥
@M511_INSTW@ 125 11 ♥
@M511_MITRAS@ ID 1 U 890 B 04789 S410101 ♥
@M511_INSTW@ 116 11 ♥
@M511_WIND@ 120 80 108 160 60 120 180 150 10.5 9 12 12 7
@M511_INSTW@ 107 11 ♥
@M511_CEILO@ CT000100 30 00300 2340 3450 00000000
♥
@M511_INSTW@ 99 11 ♥
@M511_MITRAS@ ID 1 U 890 B 04789 S410101 ♥
@M511_INSTW@ 93 11 ♥
M12.ROSA
01 24.9;02 //;/;03 //;/;04 0;05 //;/;06 //;/;08
14 0.0;16 1;23 0;26 //;/;27 //;/;30 23.5;31
33 0.0;34 404;35 //;/;36 //;/;39 //;/;40 //;/;41
45 23.4;46 23.3;47 0.0;48 0.0;49 411;50 //;/;51
55 //;/;56 //;/;57 //;/;
♥@M511_PTU@12 3 1009.4 0.2 50 10 66 000♥
@M511_WIND@ 120 80 91 160 60 120 180 150 10.5 9 12 12 7 1
@M511_INSTW@ 90 11 ♥
Reset to default profile Offline (CEILO_11, COM5)
```

Meteorological messages and AFTN

- METAR/SPECI
- SYNOP
- TAF
- SIGMET
- AFTN interface:
 - message formats: IA-5, ITA-2
 - viewing of outgoing messages
 - message transmission via serial port, TCP/IP socket or FTP

- Data storage for...

Data storage

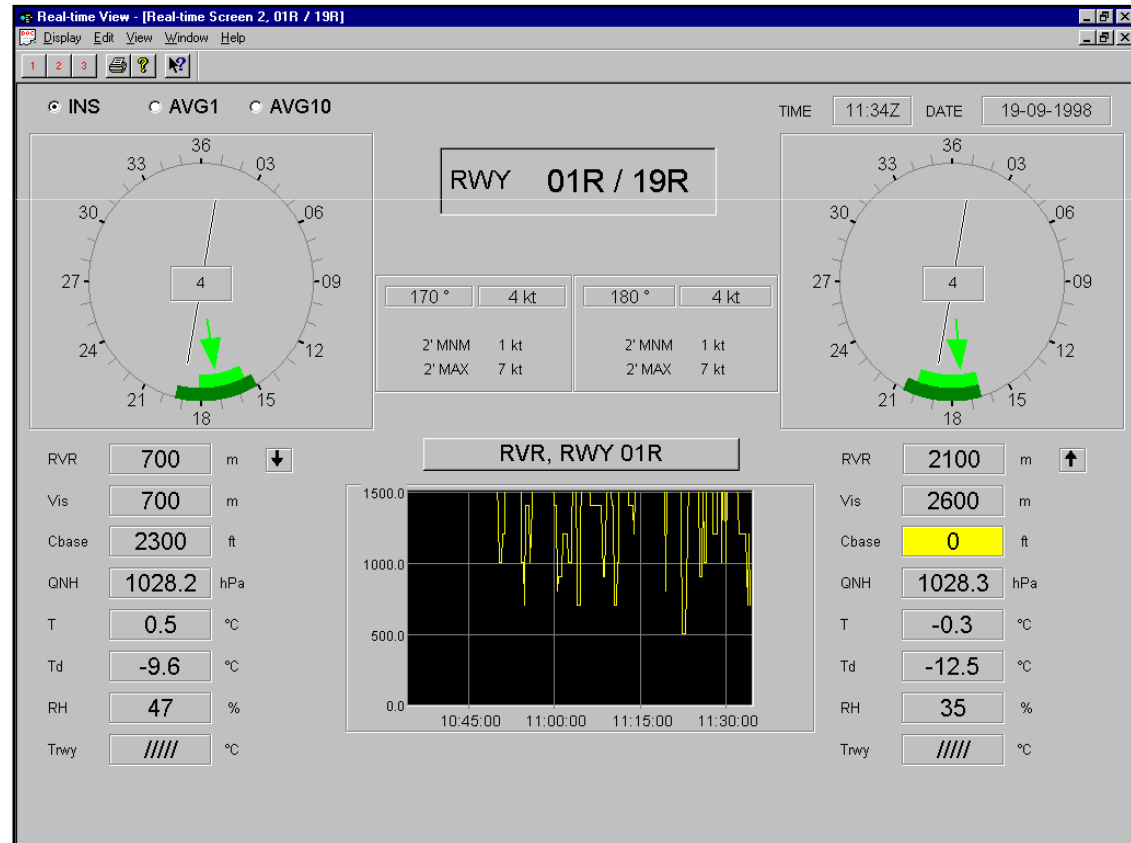
- measured and calculated variables
- meteorological messages
- alarms
- Up to one year storage time
- Human-readable file format
- Viewer application for easy access to data

The screenshot shows a window titled "ASCII Log View - [RVR01_15.his]". The window contains a table with the following columns: CREATEDATE, SITE, RVR_1A, RVR_10M, RVR_10A, RVR_10X, RVR_TEND, MDR_1A, and MDR_10M. The data is organized into a table with 10 columns and 20 rows of data. The status bar at the bottom indicates "Records: 393" and "MIDAS IV".

CREATEDATE	SITE	RVR_1A	RVR_10M	RVR_10A	RVR_10X	RVR_TEND	MDR_1A	MDR_10M
2000-03-15 01:27:00	12	800	650	750	1100	0	250	100
2000-03-15 01:28:00	12	600	500	700	1100	0	150	100
2000-03-15 01:29:00	12	450	400	550	700	0	100	100
2000-03-15 01:30:00	12	500	400	500	550	-1	150	100
2000-03-15 01:31:00	12	550	400	500	550	-1	150	100
2000-03-15 01:32:00	12	750	400	550	900	-1	200	100
2000-03-15 01:33:00	12	1100	400	550	1100	-1	350	100
2000-03-15 01:34:00	12	1000	750	1000	1100	0	300	100
2000-03-15 01:35:00	12	1300	900	1100	1300	1	450	100
2000-03-15 01:36:00	12	1300	900	1200	1300	1	400	100
2000-03-15 01:37:00	12	1300	900	1200	1300	1	450	100
2000-03-15 01:38:00	12	1300	900	1200	1400	1	450	100
2000-03-15 01:39:00	12	1100	900	1200	1400	1	350	100
2000-03-15 01:40:00	12	1000	800	1100	1400	1	300	150
2000-03-15 01:41:00	12	800	650	1100	1400	0	250	150
2000-03-15 01:42:00	12	550	500	1100	1400	-1	150	150
2000-03-15 01:43:00	12	650	500	600	650	-1	150	150
2000-03-15 01:44:00	12	700	600	650	750	-1	200	150
2000-03-15 01:45:00	12	650	600	650	750	-1	200	150

Applications: Weather View

- Any measured or calculated data can be displayed
- Up to 6 pages for different configurations
- Read-only access



Applications: METAR Template

- edit, validate and send METAR and SPECI
- opens automatically on schedule with data from sensors
- adjustable editing time
- parameter cross-checking
- automated METAR optional
- corrected and delayed messages

The screenshot shows the 'Metar/Speci Template' application window. The title bar includes 'Metar/Speci Template' and standard window controls. The menu bar contains 'Report', 'Edit', 'View', and 'Help'. The toolbar has icons for file operations and a 'METAR' button. The main interface is divided into several sections:

- Header:** METAR CCA UTC 12:05Z 21-08-2000 TYPE CORRECTED
- Wind:** WIND 120 DEG 6 KT MAX 12 KT; VRBWIND 130 TD 160 DEG
- Visibility:** VIS 5000 / ; VIS 2 / ; RVR 2 /
- Weather:** WEATHER RA
- Clouds:** FEW 12 100 ft; OVC 25; 0; 0; 0
- Temperature/Pressure:** I 16.0 °C DP 13.0 °C; QNH 1012.0 hPa REWX; WS
- TREND:** [] [Old]
- REMARKS:** []
- Buttons:** Build, SEND
- CODE:** METAR ZGNN 211132Z 12003MPS 5000 RA FEW012 OVC025 16/13 Q1012
- Options:** No error messages, Auto send

Digital Displays

- Vaisala DD50 Universal Digital Display for RVR, visibility, cloud data, temperature and dewpoint, QNH, QFE.
- Vaisala WIND30 or WIND50 for wind data

