



## EUMETNET / SWS site

Säntis 2490 m.a.s.l 47°15′

9°20′

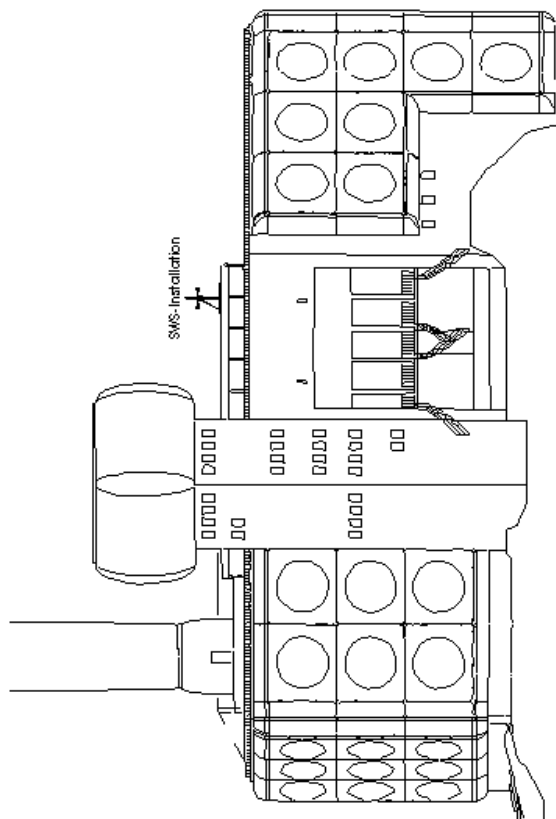
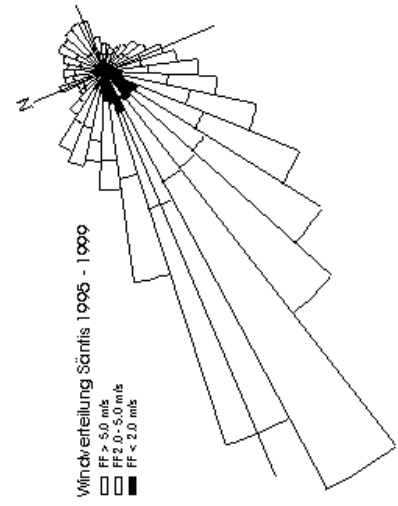
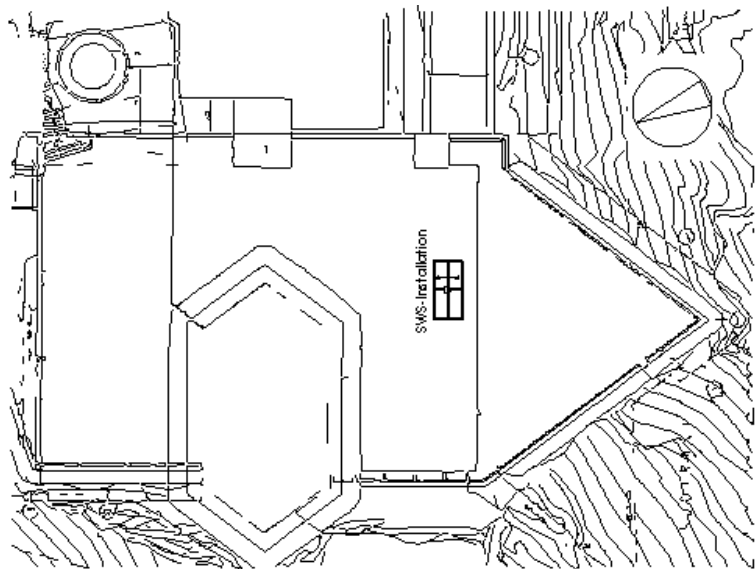
Main objectives of the Säntis-tests are:

- 1) better understanding phenomena around icing of instruments
- 2) quantify icing-conditions
- 3) test the ability of instruments to estimate temperature, wind, global radiation and precipitation

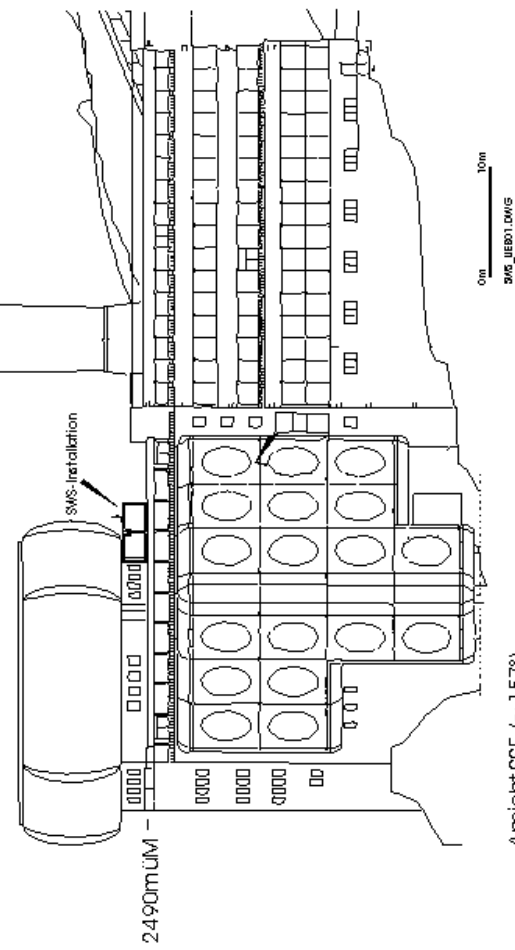
As a secondary goal we will make a step towards defining the power needed to keep the instruments free of ice. Where this is impossible, we will determine the percentage of time during which the operation of the instruments is disturbed (this percentage will depend on the heating power available and the exposition of the instrument).



# Support-position and wind direction at the Swiss Säntis site

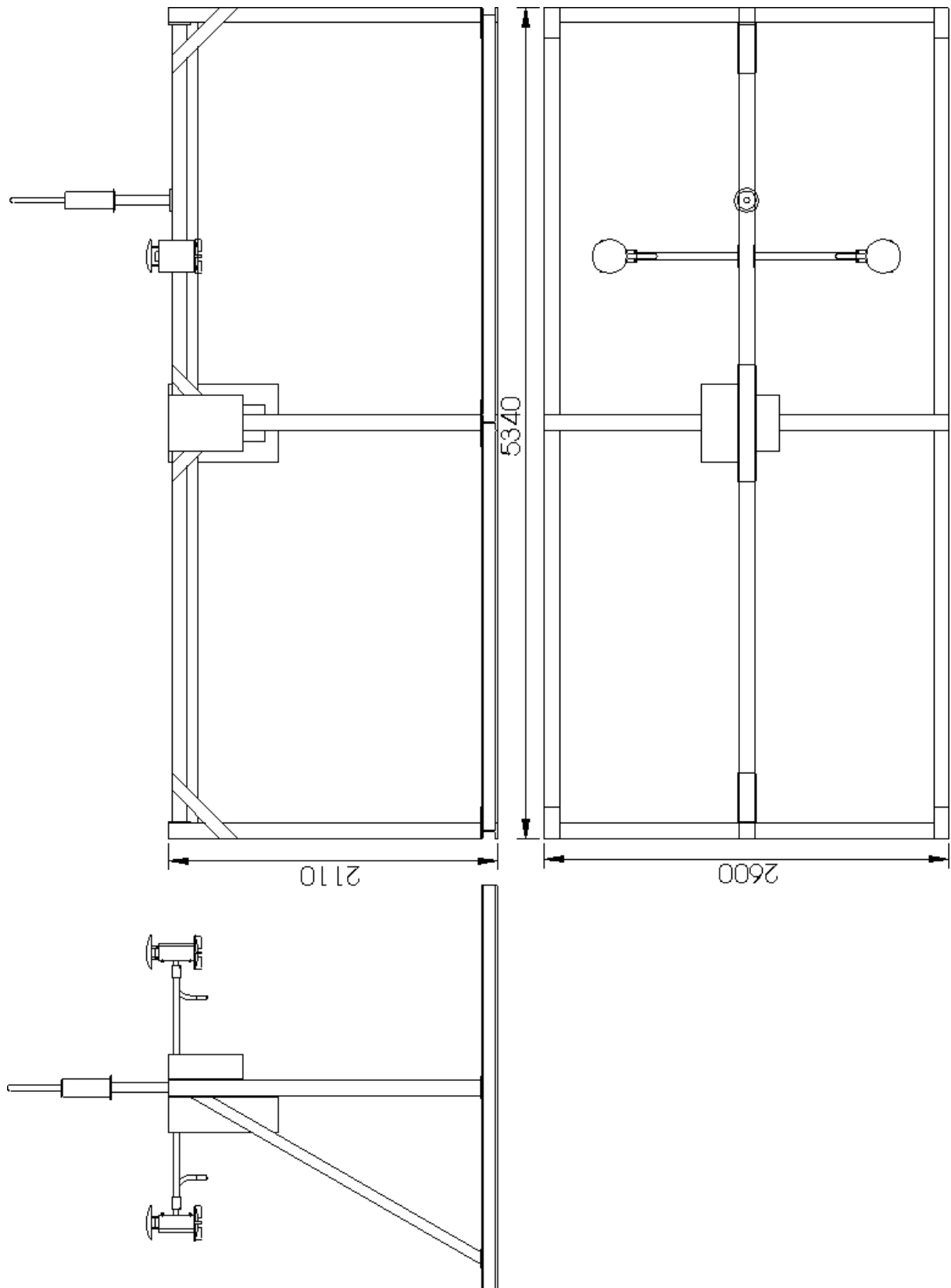


Ansicht WSW (~ 247°)



Ansicht SSE (~ 157°)

Support with sample-instruments to be tested on the Swiss Sántis site



## Climatological monthly averages of the weather on the Swiss Säntis site (1961 – 1990)

VALUE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
T (deg. C)	-7.6	-8.0	-7.0	-4.6	-0.5	2.4	4.9	4.9	3.4	1.0	-4.2	-6.4
T min. mean	-10.3	-10.5	-9.5	-6.9	-2.6	0.2	2.5	2.6	1.0	-1.4	-6.7	-9.0
T max. mean	-4.7	-5.1	-4.2	-2.1	2.0	4.9	7.5	7.5	6.1	3.7	-1.3	-3.4
Humidity (%)	72	71	76	81	82	83	81	80	74	66	70	68
Precipitation. (mm)	229	201	209	249	235	294	315	333	211	171	211	246
Sun (h/month)	115	134	148	142	154	148	169	166	176	188	133	121

## List of instruments to be tested during the winter 2000/2001 on the Swiss Säntis site

Sensor / Loggerpart	Factory	Parameters	Remark
Milos 520	Vaisala	Main Logger	
IS	Meteolabor	Sub Logger	For various sensors
TMUX	Meteolabor	Sub Logger	for control-temperature-measurements ( max. 30)
Thygan	Meteolabor	TT, HH, DP, Status	Swiss standard, with Controlunit
Thygan	Meteolabor	dito.	dito, for modifications
HPM 243	Vaisala	TT, HH, DP	
NOWA	Meteolabor	DD, FF, FFX, TT, Icing, Control-Values	include Precipitation
Rosemount 1447W	Rosemount	DD, FF, FFX, Status	as reference
WAA251 + WAV 252	Vaisala	DD, FF, FFX	
WAS 425 AH	Vaisala	DD, FF, FFX, Status	Ultrasonic
FT 702	FT Technologies LTD	DD, FF, FFX, Status	Ultrasonic
Solar 111	Haenni	SS	cleaned
Solar 111	Haenni	SS	not cleaned
FMI-Standard	FMI	GG	not received yet
CM 21	Kipp + Zonen	GG	with CV 21 ventilation
CM21	dito + MCH	GG	with ventilation "Vernez", cleaned
CM 21	dito + MCH	GG	with ventilation "Vernez", not cleaned
French Rain Gauge	French Meteo ?	Precipitation	Eventual
PTB220	Vaisala	Pressure	included in Milos 520
FMI - Tube	FMI	Icing	manual reading
Pictures		Observation	not defined yet
Observations		Various Observations	
various sensors	Various	Various	from the standard weatherstation