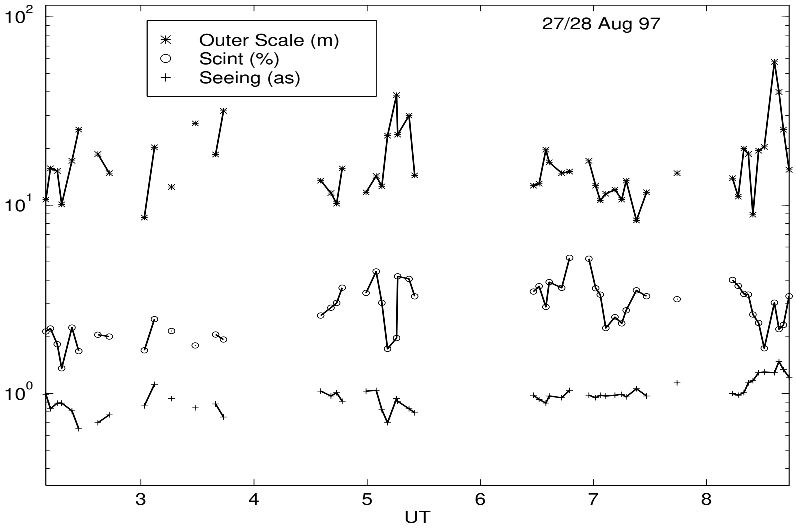
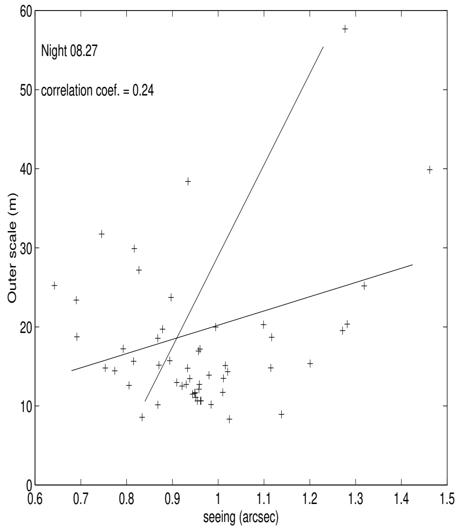
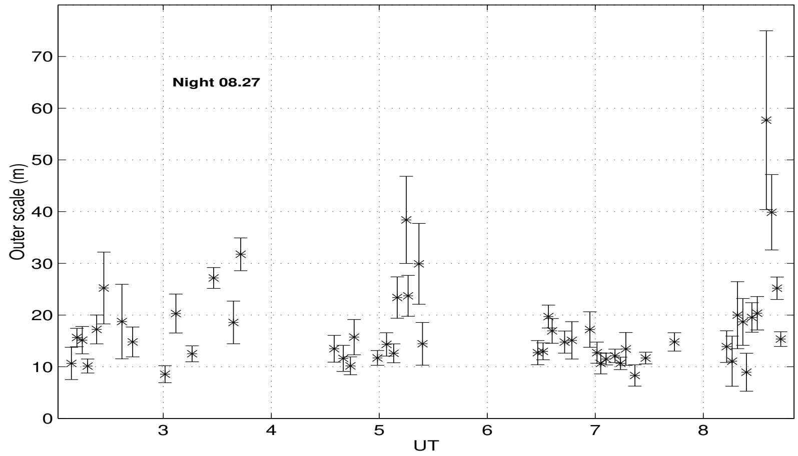
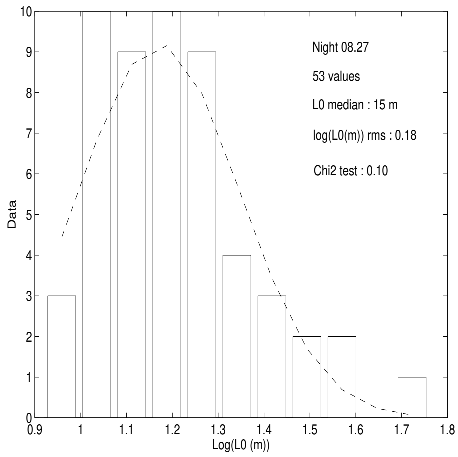
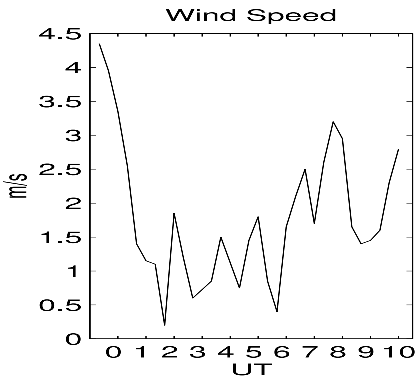
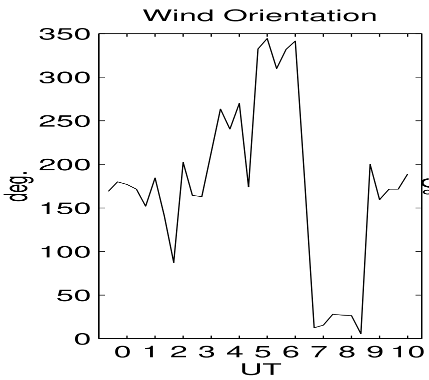


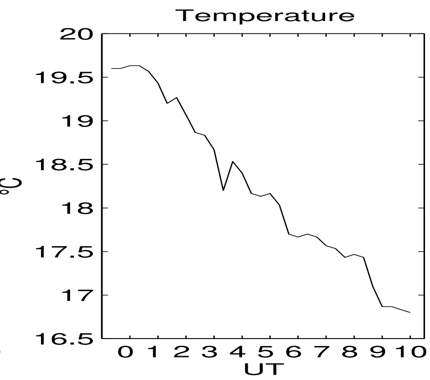








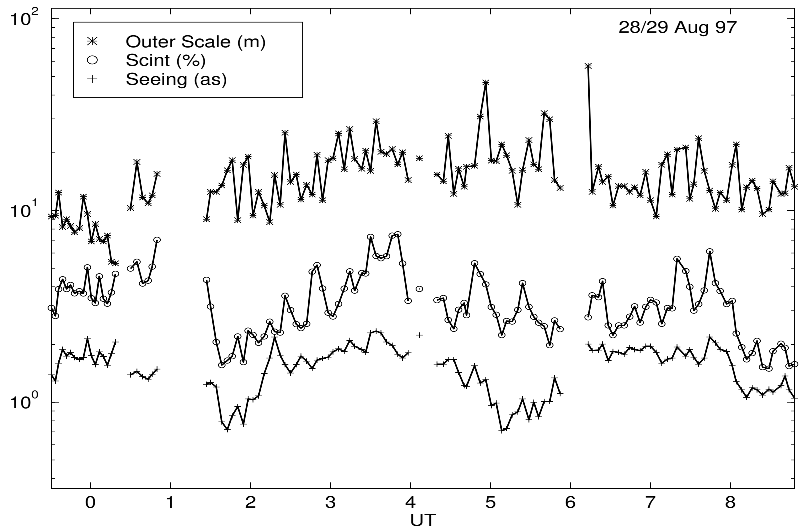


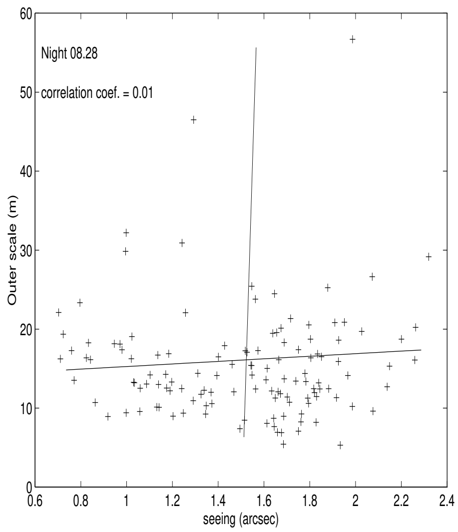


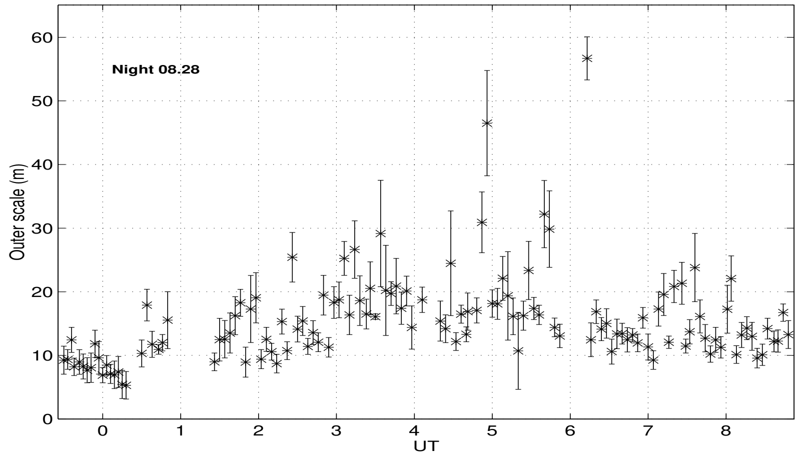
1. August 27/28

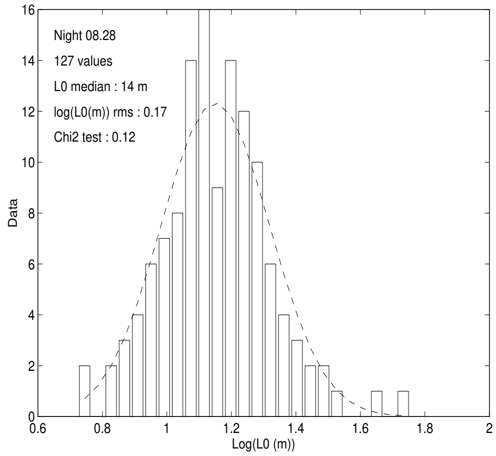
There was no wind-protective net. With a slow southern wind the ground turbulence effects were evidenced by comparison with DIMM. The best seeing of this mission!

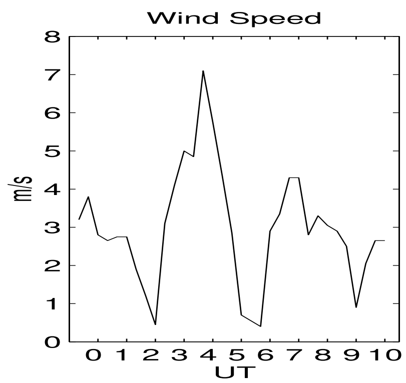
August 27/28	Median	Range
Seeing, $''$	0.97	0.76–1.22
$\mathcal{L}_0$, m	14.4	2.9 –27.1
Scintillation, %	3.4	2.1 –5.1
Ground wind, m/s	1.6, S	0.2–4.4
Temperature, ^{o}C	18.2	
Rel. humidity, %	16	
Clouds	Clear	

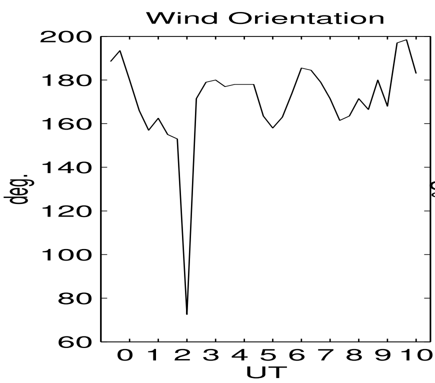


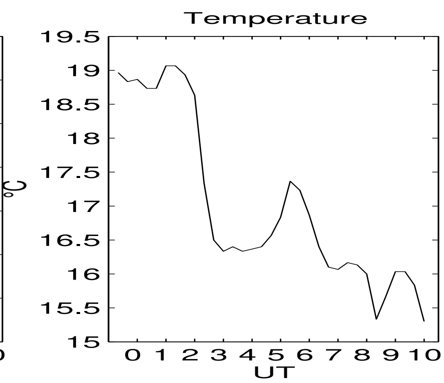








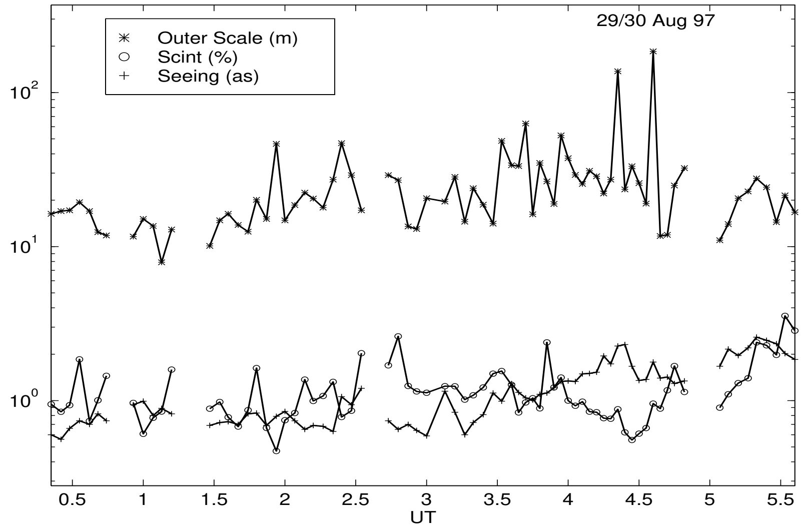


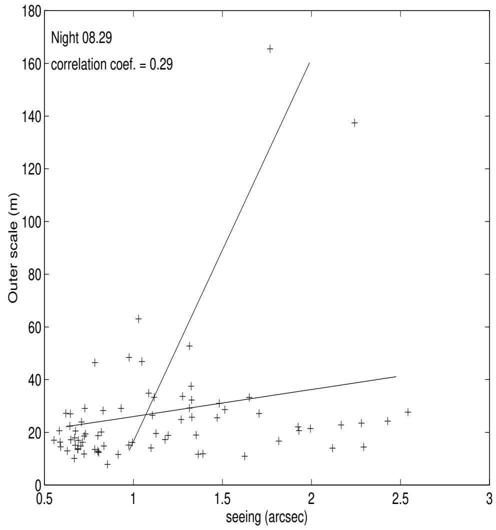


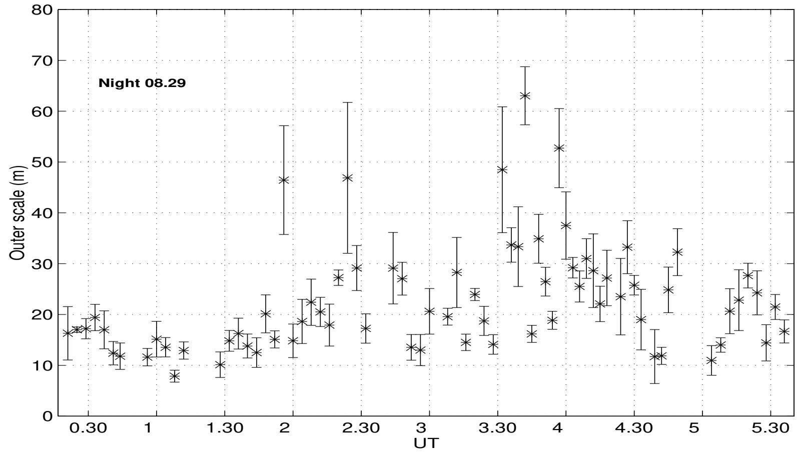
2. August 28/29

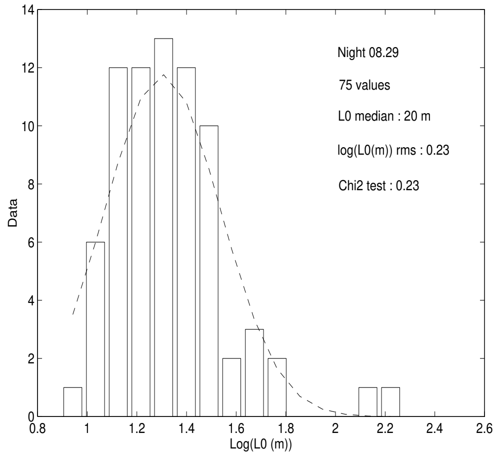
There was no wind-protective net. With a slow southern wind the ground turbulence effects were evidenced by comparison with DIMM; large variations of seeing, the moments of best seeing correspond to the lowest wind. First attempt to do simultaneous measurements with ADONIS. The smallest $\mathcal{L}_0$ of the campaign.

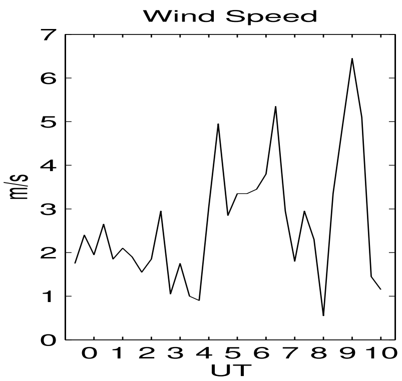
August 28/29	Median	Range
Seeing, $''$	1.62	0.96 – 2.01
$\mathcal{L}_0$, m	14.1	7.9 – 22.3
Scintillation, %	3.6	2.2 – 6.9
Ground wind, m/s	2.9, S	0.4 – 7.1
Temperature, ^{o}C	16.4	
Rel. humidity, %	26	
Clouds	Clear	

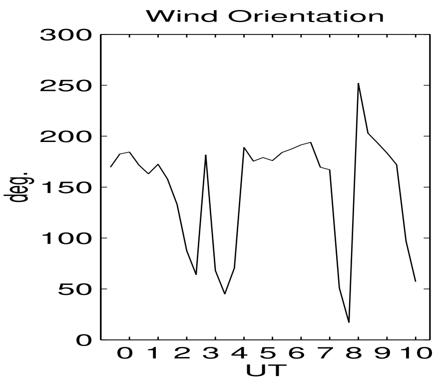


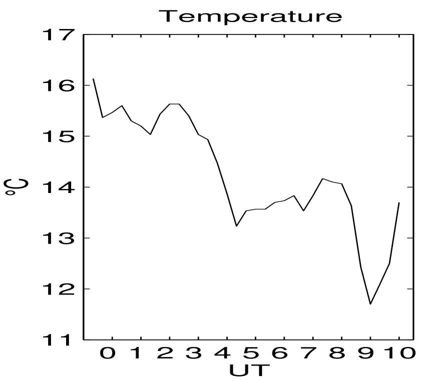








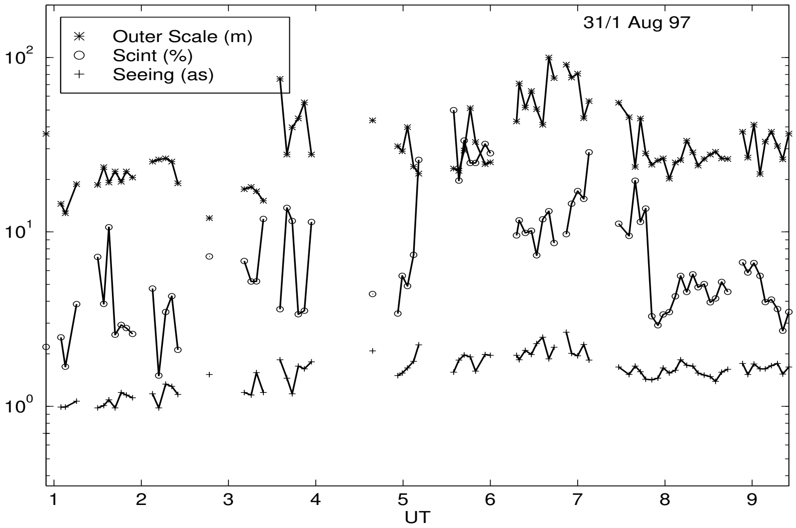


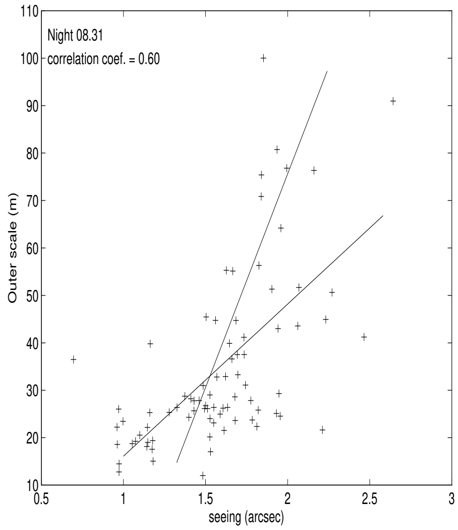


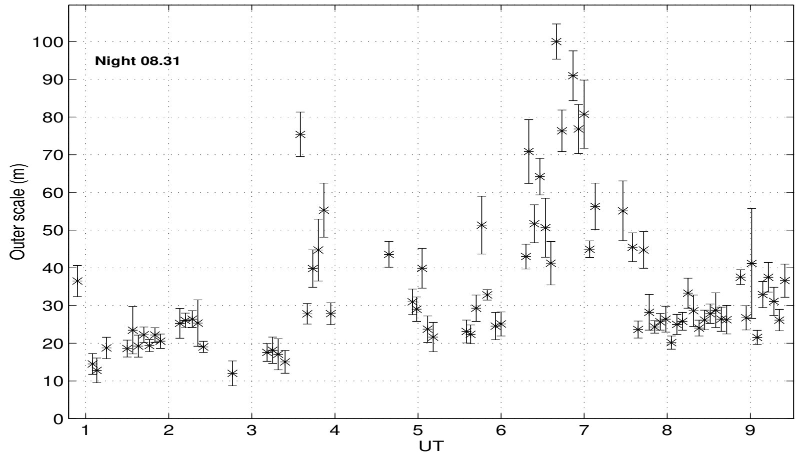
3. August 29/30

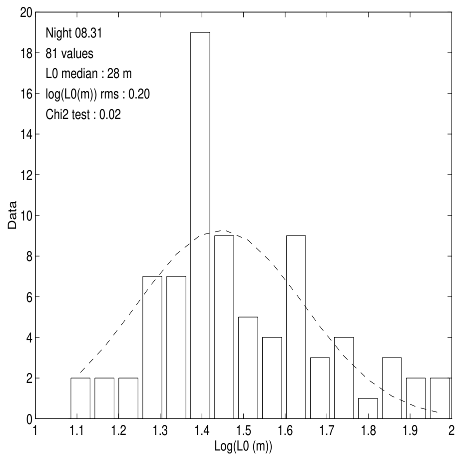
A good agreement between GSM and ESO DIMM indicates that ground turbulence was less troublesome, although the wind was similar to the last night. Simultaneous measurements with ADONIS (3h45m - 4h45m UT). Clouds after 5h40m UT. The periods of the best seeing (0.6 ″) were noted this night, and seeing was highly variable.

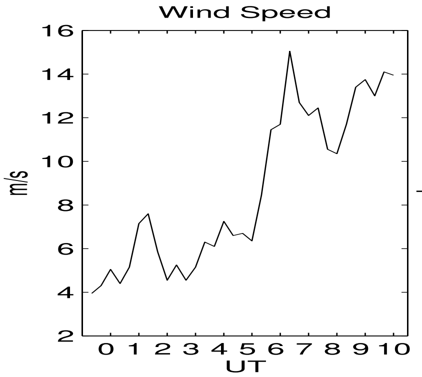
August 29/30	Median	Range
Seeing, ″	1.03	0.62 – 2.03
$\mathcal{L}_0$, m	19.5	9.8 – 38.7
Scintillation, %	1.4	0.8 – 2.3
Ground wind, m/s	2.4, S	0.6 – 6.4
Temperature, ^{o}C	14.1	
Rel. humidity, %	42	
Clouds	Partial	

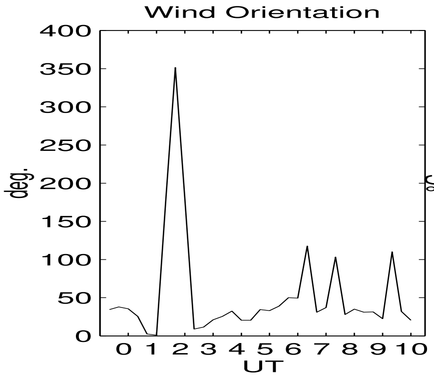


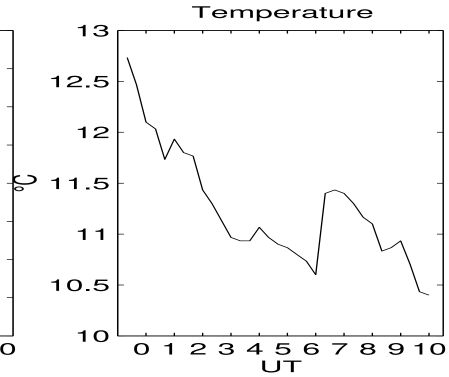








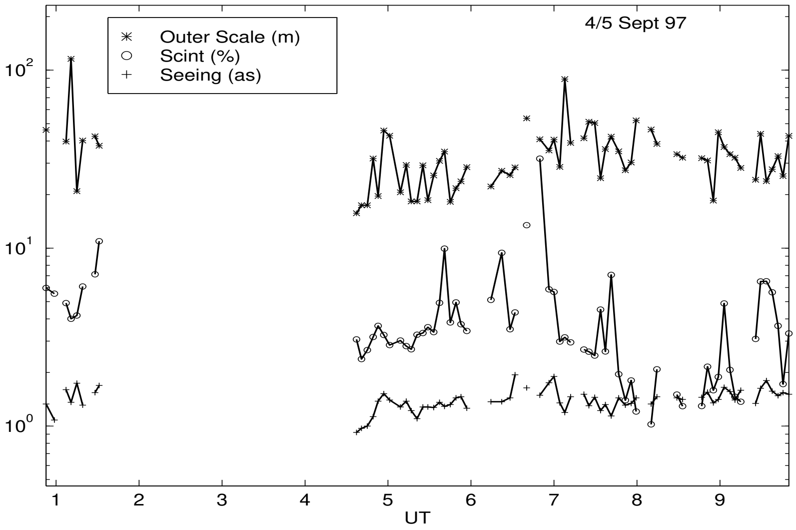


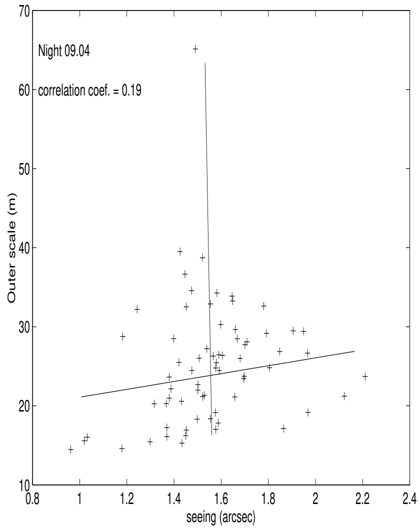


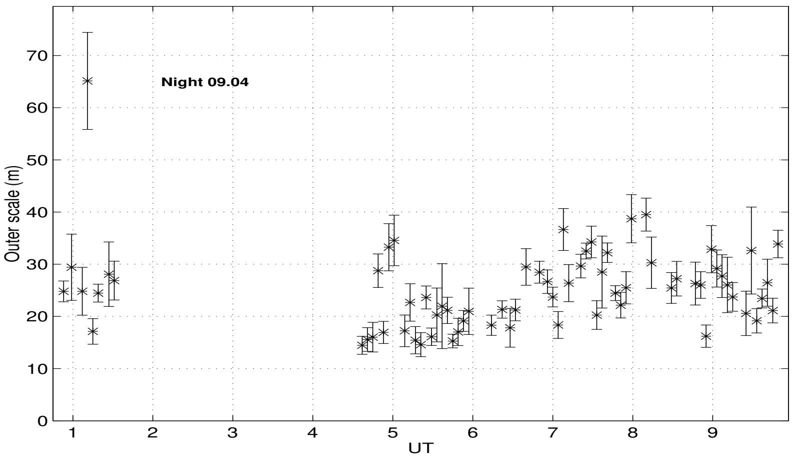
5. August 31/September 1

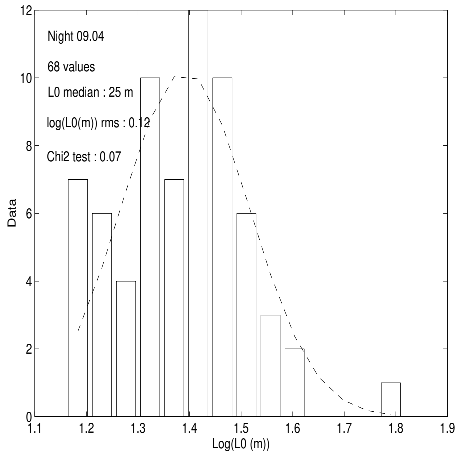
Cirrus clouds, observations interrupted because of cloud passages. Large $\mathcal{L}_0$ values were found during half an hour when wind was strongest, but at the same time r_0 was stable.

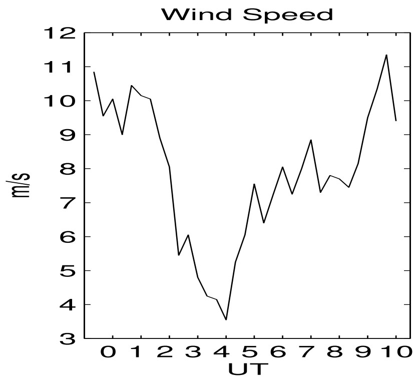
August 31/01	Median	Range
Seeing, ″	1.62	1.04–2.10
$\mathcal{L}_0$, m	27.3	16.5–71.8
Scintillation, %	7.7	2.2 –23.1:
Ground wind, m/s	7.2, NE	4.0–15.0
Temperature, ^{o}C	11.1	
Rel. humidity, %	42	
Clouds	Partial	

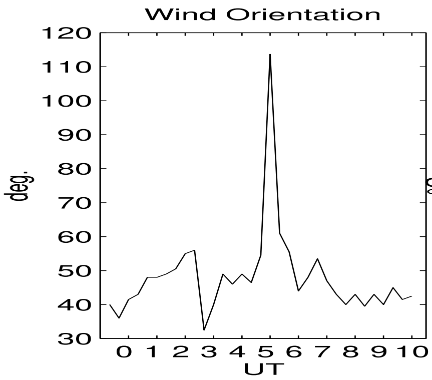


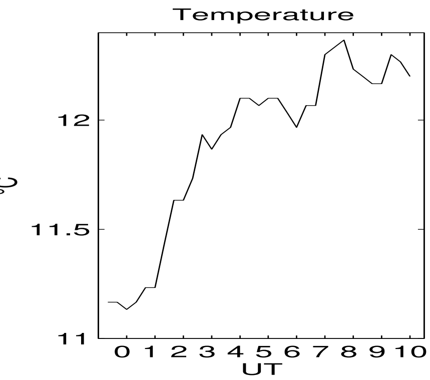








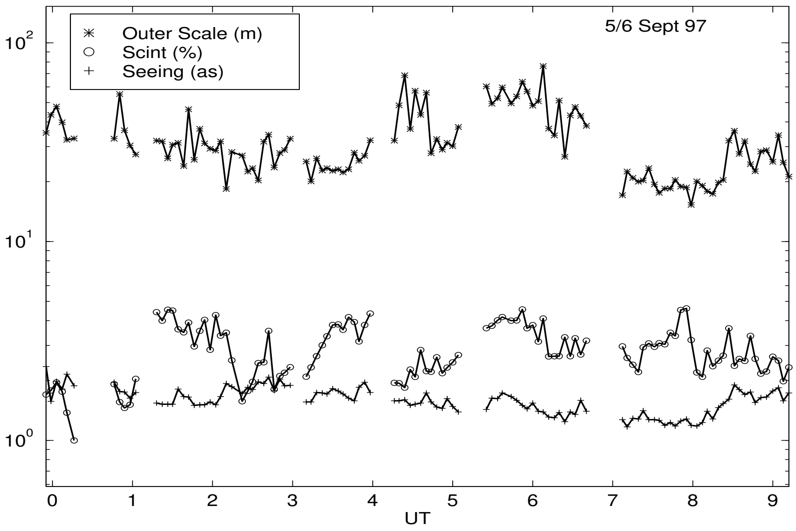


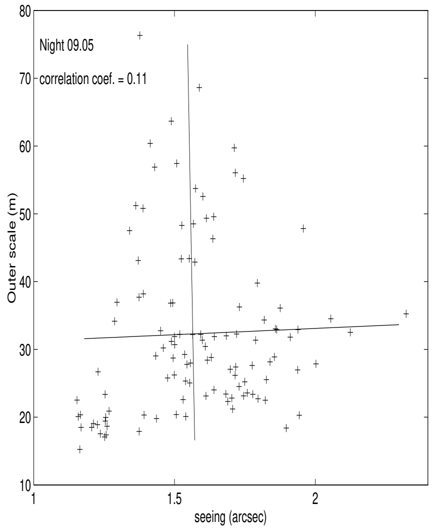


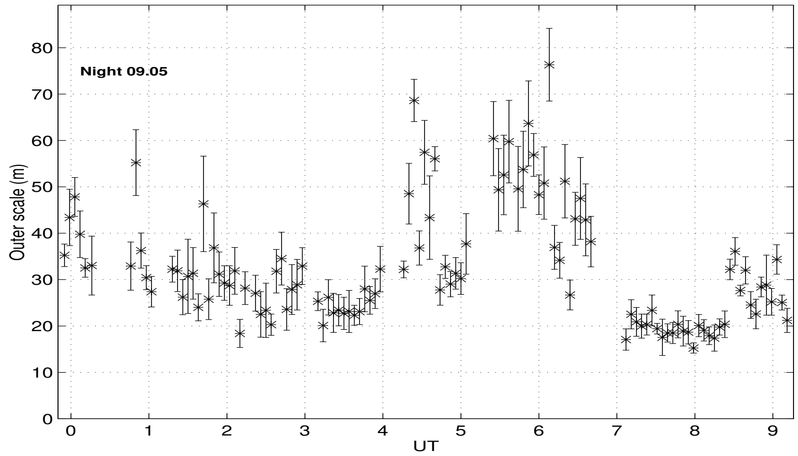
9. September 04/05

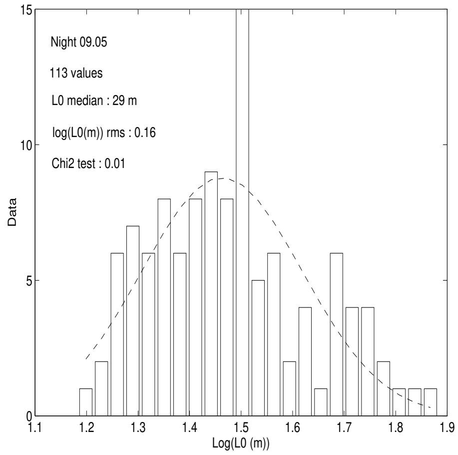
Partial clouds in the first half of the night. Stable atmospheric parameters during this and subsequent nights. Wind-protective net was removed from 6h14m to 9h25m UT, and no effect on the measurements was seen.

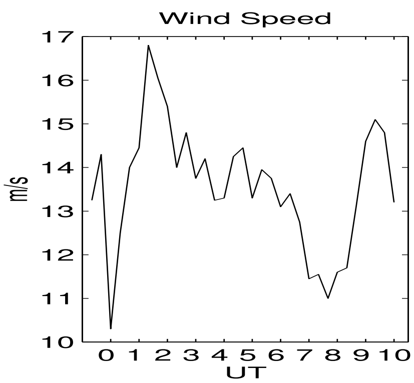
September 04/05	Median	Range
Seeing, $''$	1.58	1.24–1.91
$\mathcal{L}_0$, m	24.5	15.3–33.6
Scintillation, %	4.4	2.1 –11.9:
Ground wind, m/s	8.0, NE	3.6–11.4
Temperature, ^{o}C	12.1	
Rel. humidity, %	28	
Clouds	Partial	

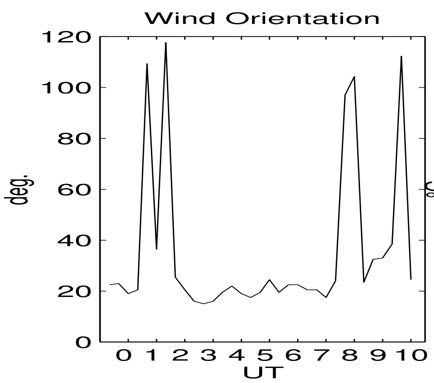


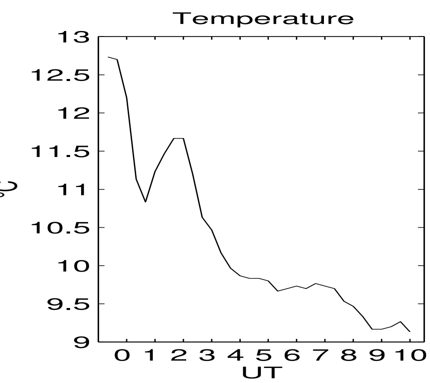








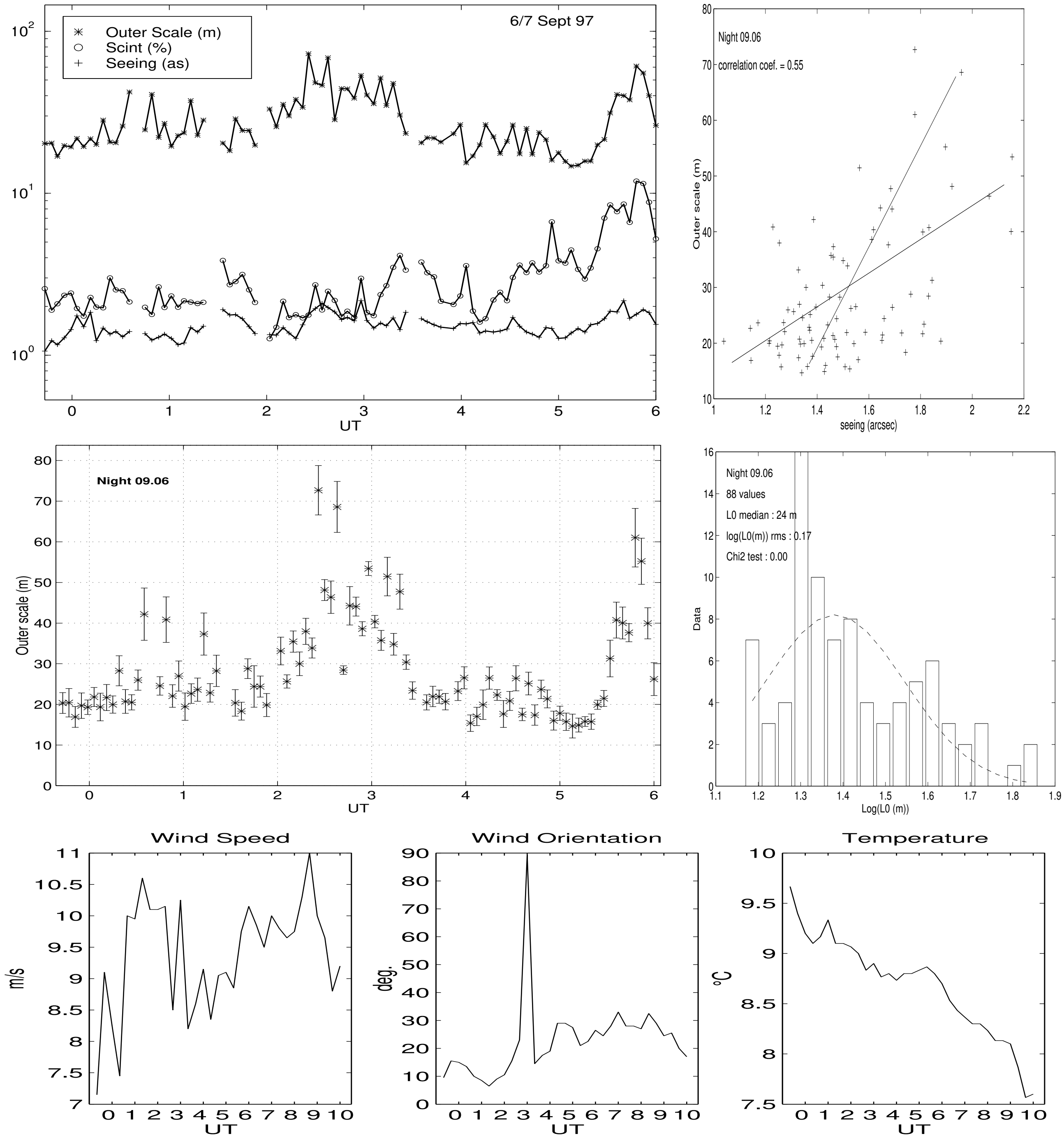




10. September 05/06

Stable conditions of bad seeing, typical $\mathcal{L}_0$ values and moderate wind. Measurements with longitudinal configuration from 5h25m to 6h47m UT.

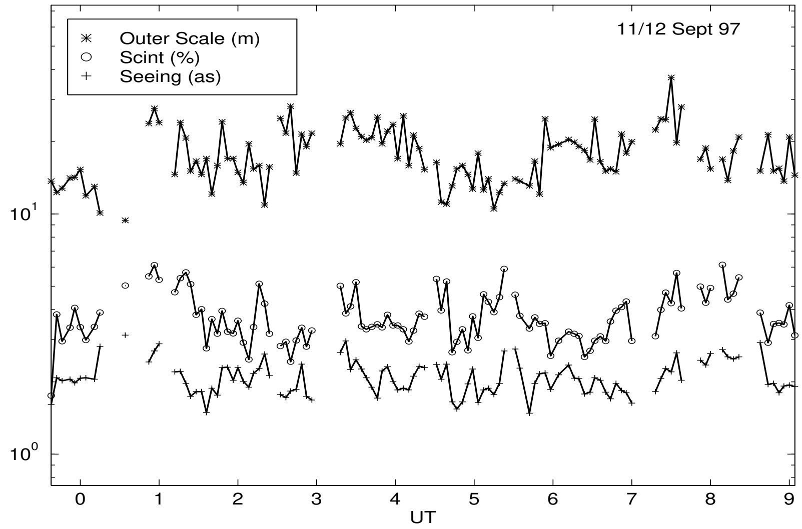
September 05/06	Median	Range
Seeing, ″	1.59	1.24–1.95
$\mathcal{L}_0$, m	29.7	35.2–54.8
Scintillation, %	4.0	2.0 – 6.1
Ground wind, m/s	13.8, NNE	10.0–16.8
Temperature, °C	9.8	
Rel. humidity, %	44	
Clouds	Clear	

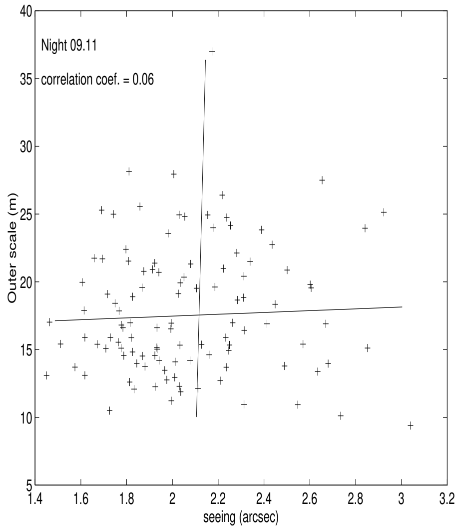


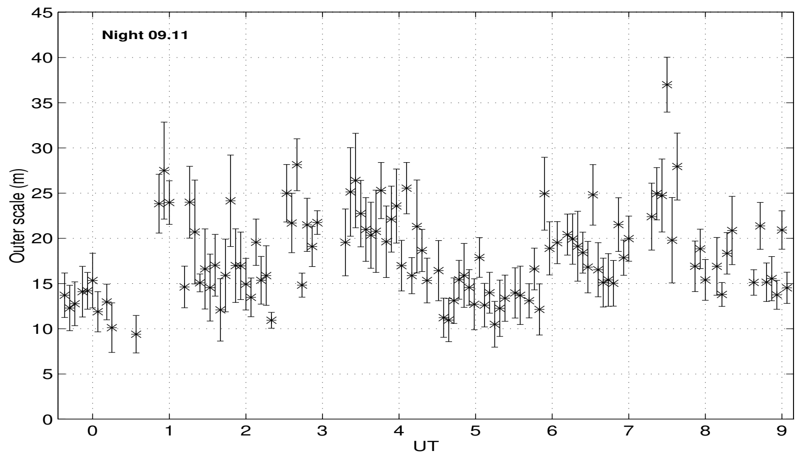
11. September 06/07

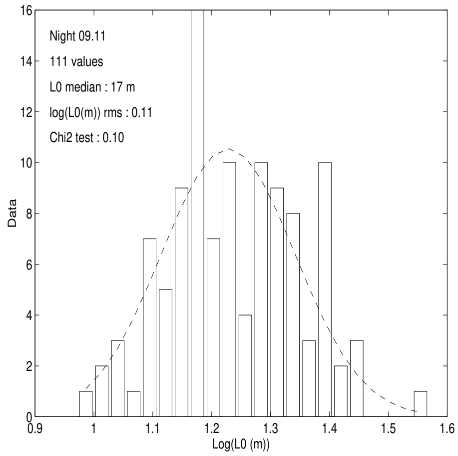
Clear night with stable conditions of bad seeing.

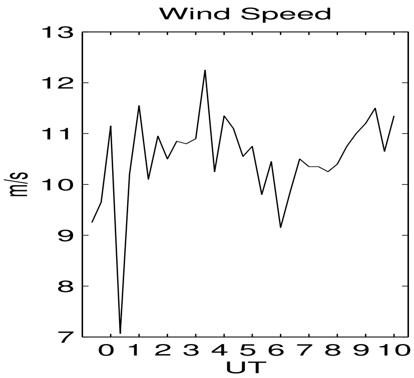
September 06/07	Median	Range
Seeing, $''$	1.48	1.25–1.85
$\mathcal{L}_0$, m	23.7	15.3–44.3
Scintillation, %	3.0	1.9 – 8.1
Ground wind, m/s	9.6, NNE	7.2–11.0
Temperature, ^{o}C	8.8	
Rel. humidity, %	39	
Clouds	Clear	

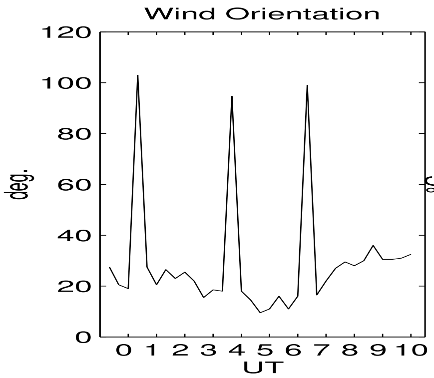


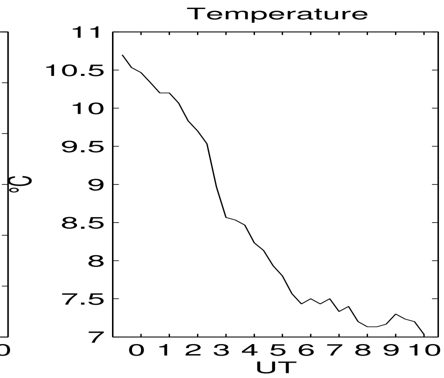








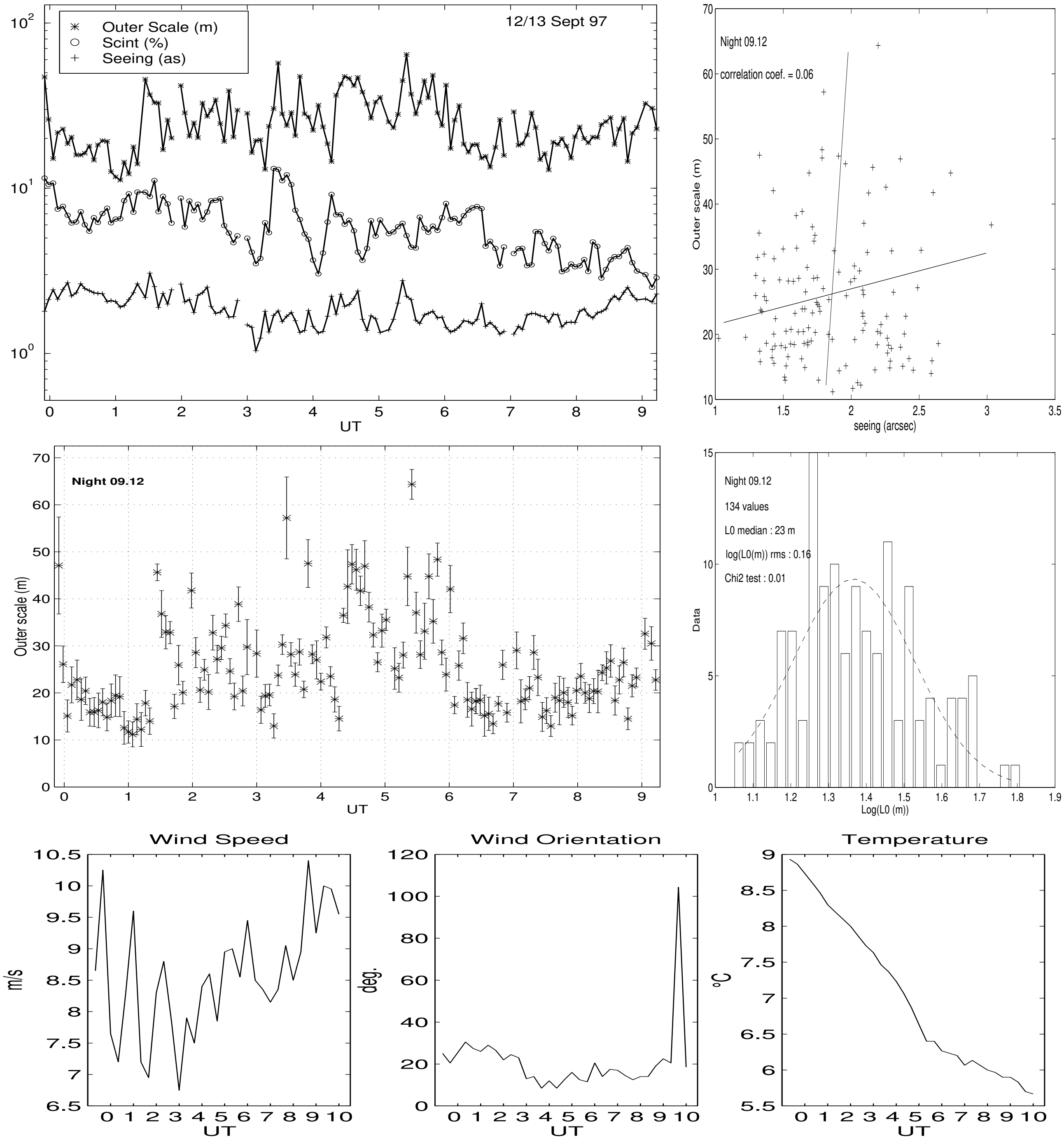




13. September 11/12

First partially clear night after a 3-day break. Jet stream is above La Silla, with wind of 60 m/s at 200 mb. Seeing is worse and scintillation is stronger than on previous few nights. At some moments observations were interrupted because seeing was too bad ($r_0 < 3$ cm).

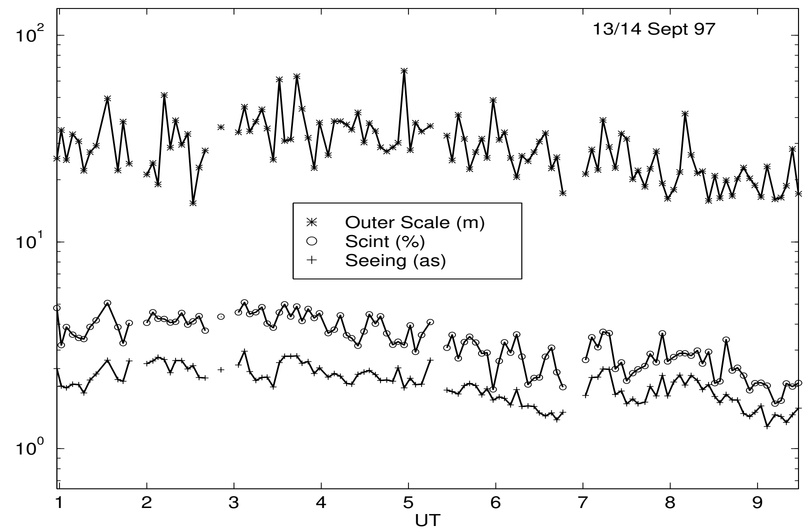
September 11/12	Median	Range
Seeing, $''$	2.06	1.67–2.72
$\mathcal{L}_0$, m	16.6	11.2–24.6
Scintillation, %	4.6	3.2 – 7.1
Ground wind, m/s	10.6, NNE	7.1–12.2
Temperature, ^{o}C	7.9	
Rel. humidity, %	20	
Clouds	Partial	

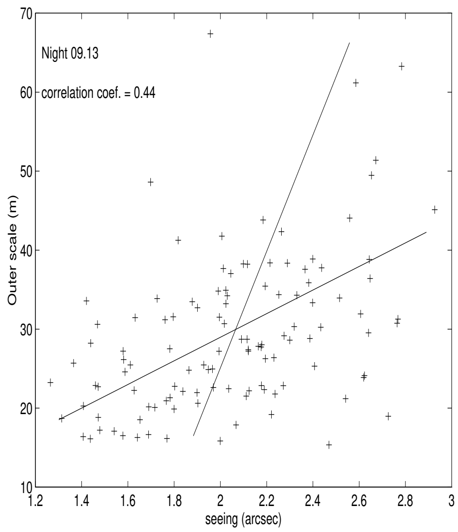


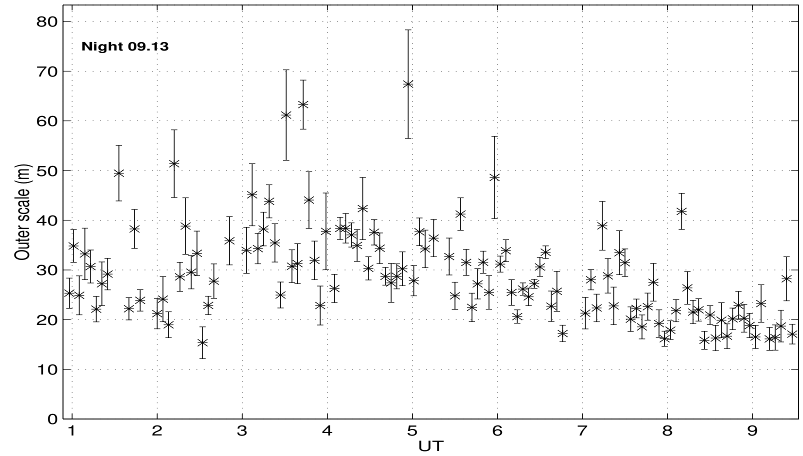
14. September 12/13

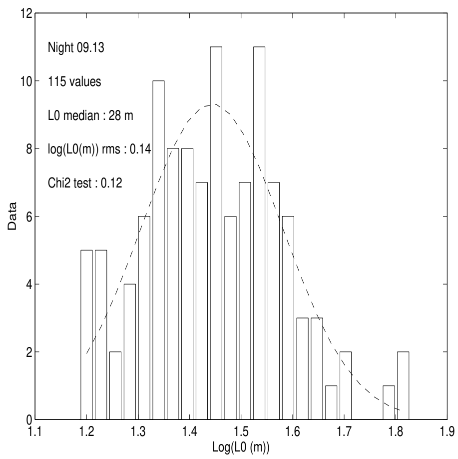
Clear night with bad and stable seeing. The strongest scintillation of our campaign was registered; jet stream was blowing at 75 m/s!

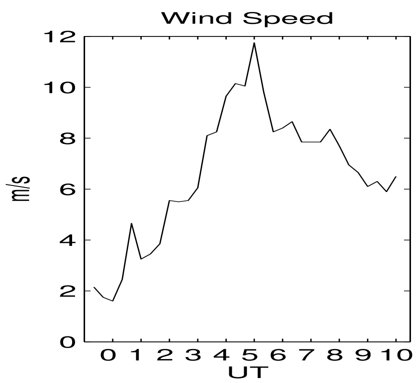
September 12/13	Median	Range
Seeing, ″	1.79	1.35–2.44
$\mathcal{L}_0$, m	23.3	13.8–41.5
Scintillation, %	7.3	4.7 –11.2
Ground wind, m/s	8.5, NNE	6.8–10.4
Temperature, °C	6.9	
Rel. humidity, %	35	
Clouds	Clear	

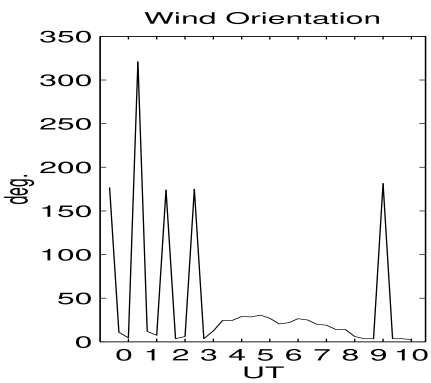


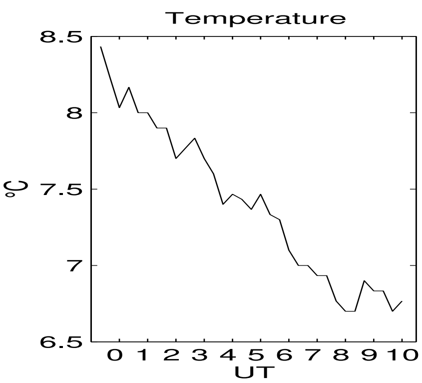








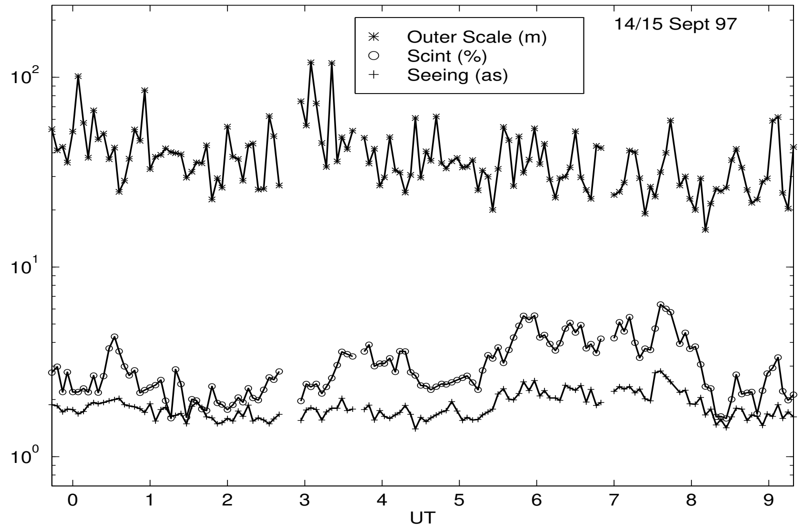


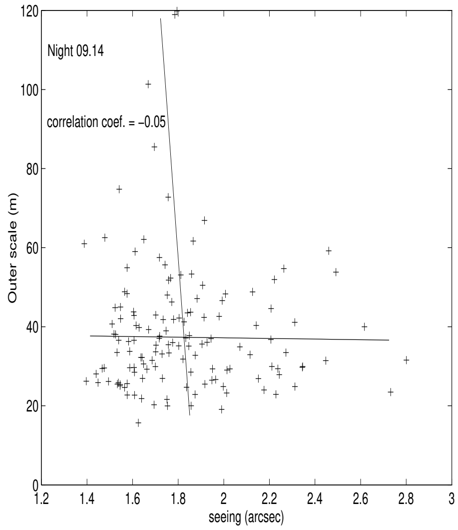


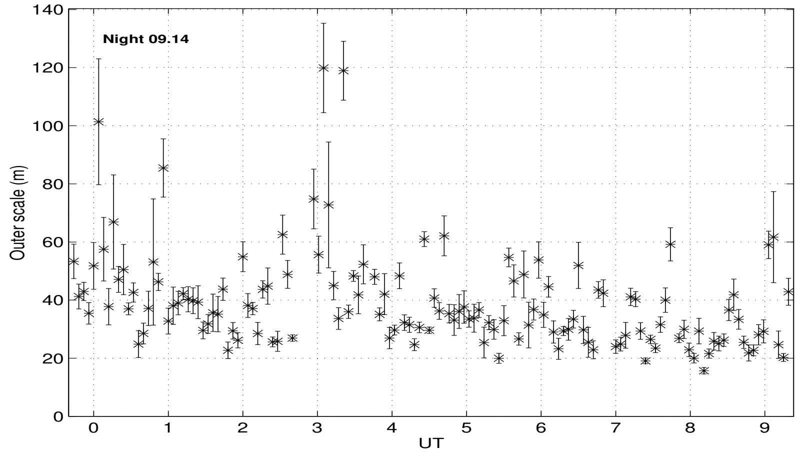
15. September 13/14

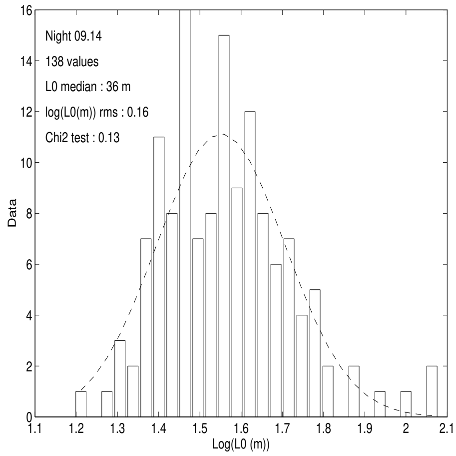
Not very different from the previous two nights. Cirrus clouds in the northern part of the sky were noted. From 0h to 1h UT the turbulence was so strong that GSM could not work. A remarkable correlation between seeing and scintillation indicates that a high turbulent layer was dominating this night.

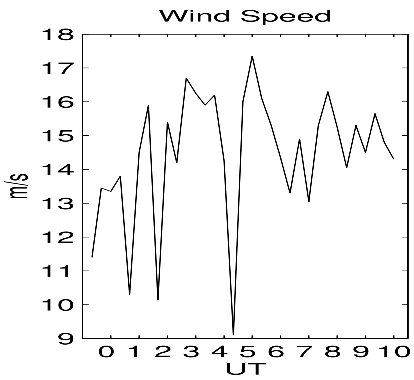
September 13/14	Median	Range
Seeing, $''$	2.07	1.46–2.69
$\mathcal{L}_0$, m	27.9	17.1–41.3
Scintillation, %	4.6	3.4 – 5.9
Ground wind, m/s	6.6, NNE	1.6–11.8
Temperature, ^{o}C	7.4	
Rel. humidity, %	40	
Clouds	Clear	

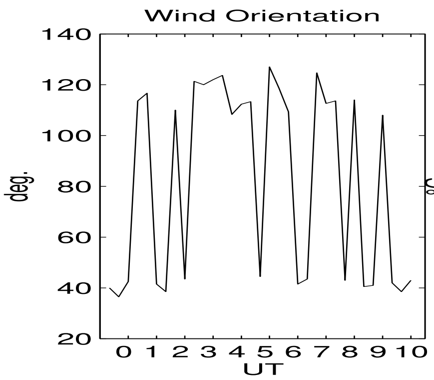


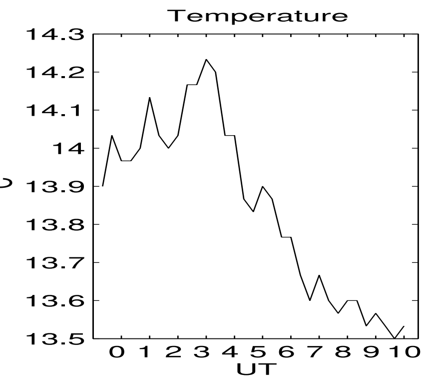








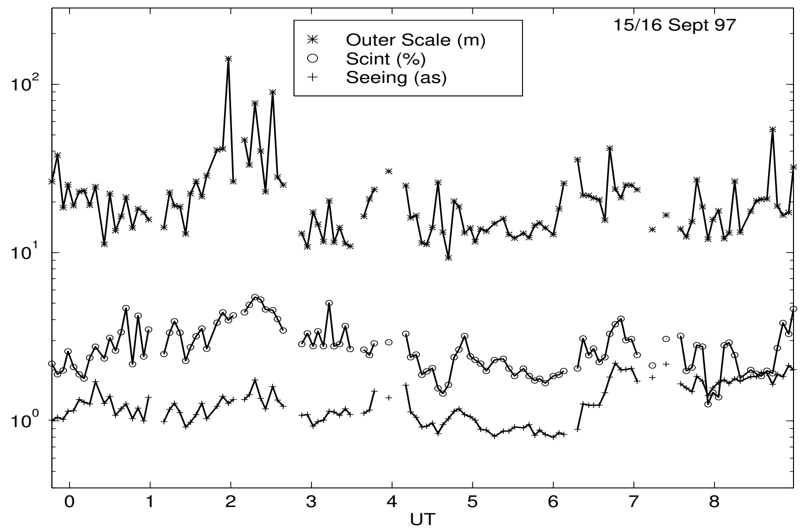


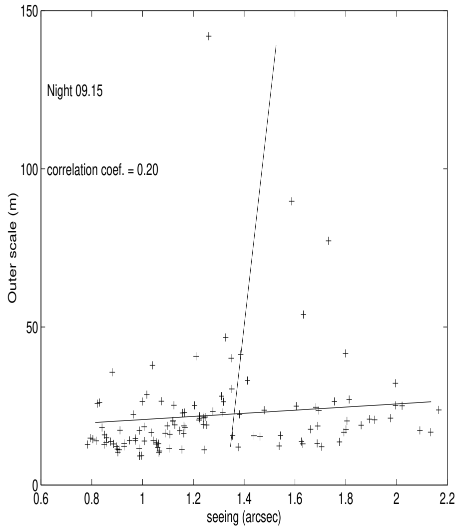


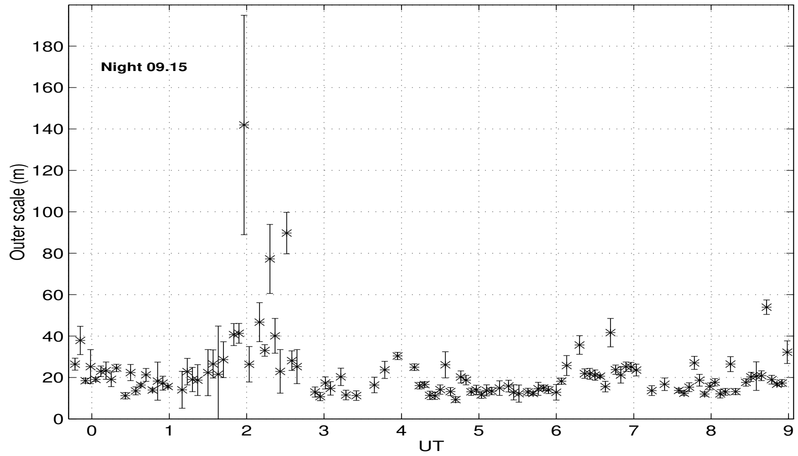
16. September 14/15

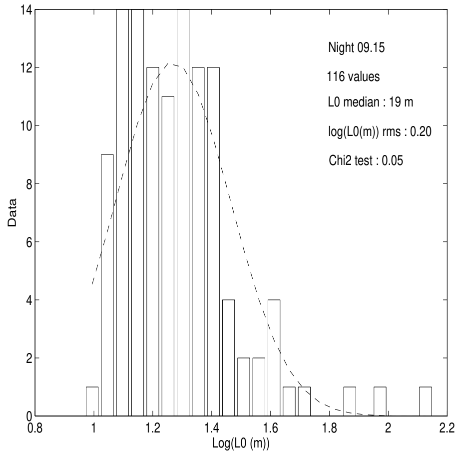
The weather conditions have changed! Strong eastern wind, the temperature have increased, air was very dry. A correlation between seeing and scintillation possibly exists for this night. Cirrus clouds were noted.

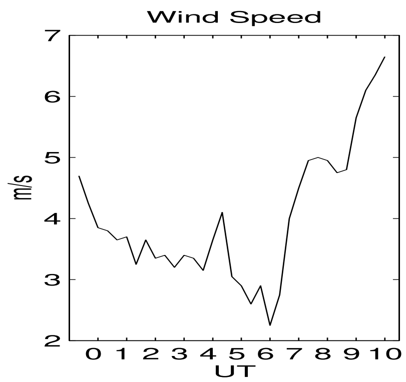
September 14/15	Median	Range
Seeing, ″	1.78	1.53–2.28
$\mathcal{L}_0$, m	35.6	18.5–57.8
Scintillation, %	3.5	2.1 –6.9
Ground wind, m/s	14.8, E	9.1–17.4
Temperature, ^{o}C	13.9	
Rel. humidity, %	15	
Clouds	Clear	

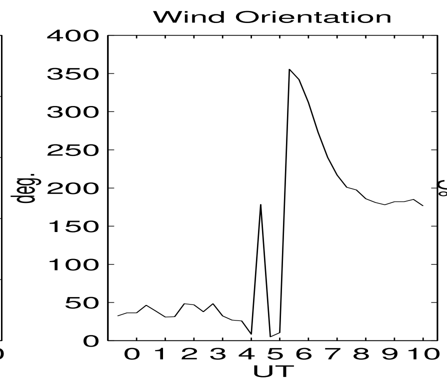


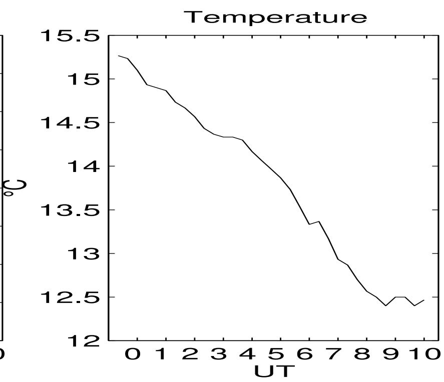








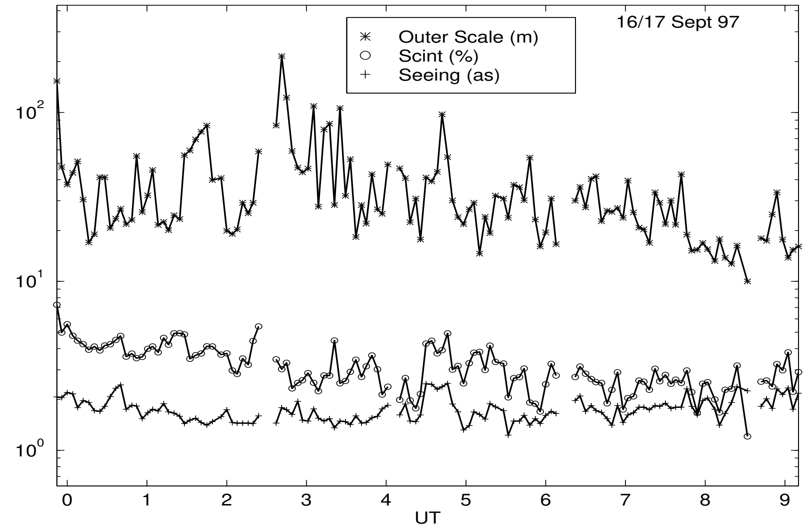


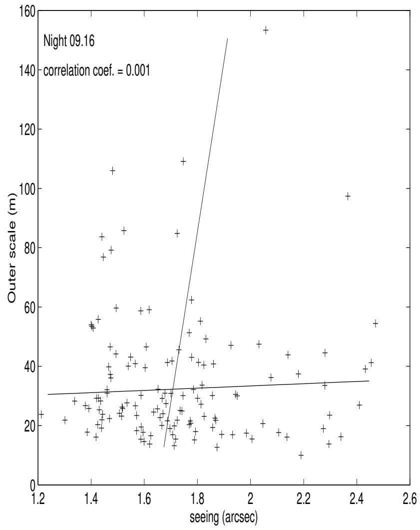


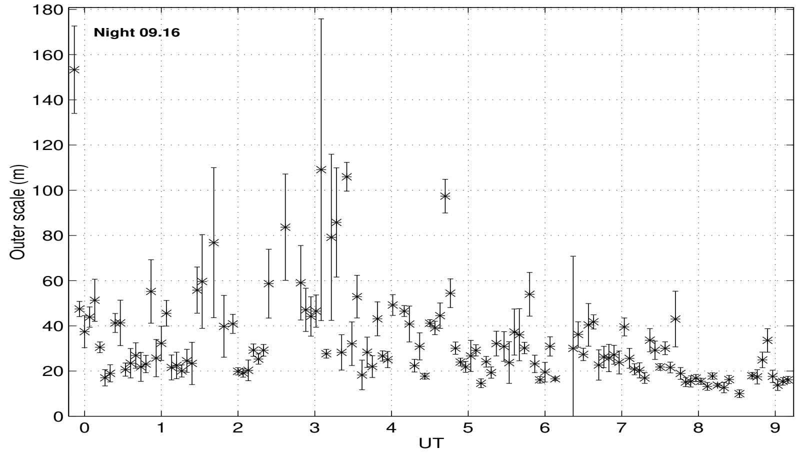
17. September 15/16

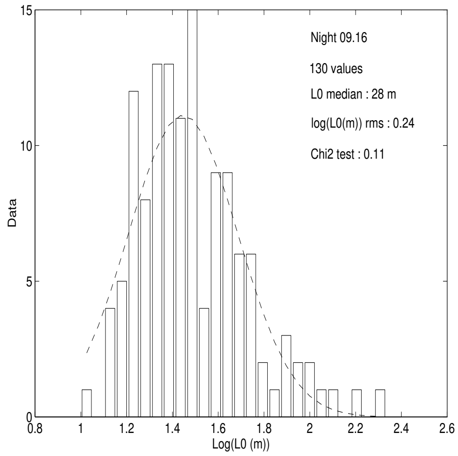
Wind was slow, and seeing was better. Longitudinal configuration from 1h10m to 2h39m UT. Low values of $\mathcal{L}_0$ were noted, with longitudinal covariances sometimes negative. The wind-protective nets were removed from 3h39m UT till the end of night.

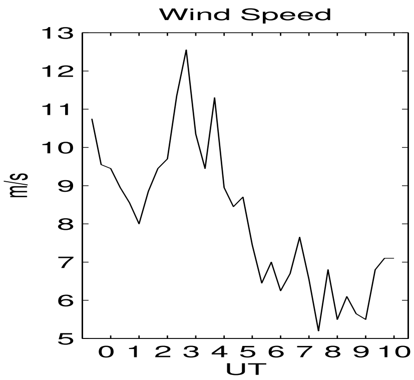
September 15/16	Median	Range
Seeing, $''$	1.22	0.87–1.82
$\mathcal{L}_0$, m	18.7	10.6–34.5
Scintillation, %	3.1	2.0 – 5.8
Ground wind, m/s	3.7, NE	2.2– 6.6
Temperature, ^{o}C	14.0	
Rel. humidity, %	19	
Clouds	Clear	

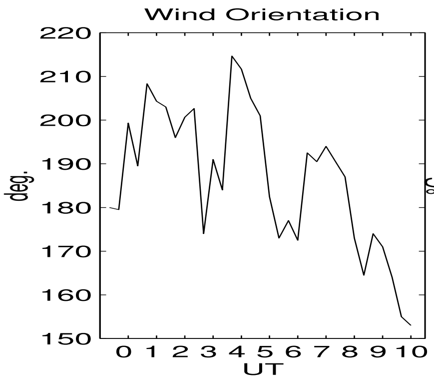


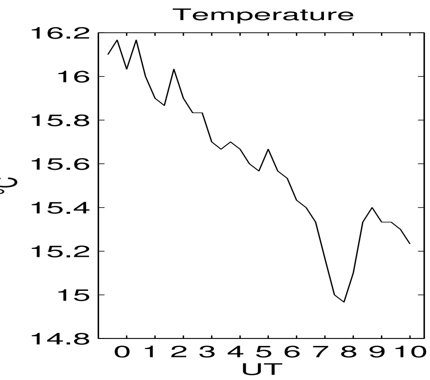








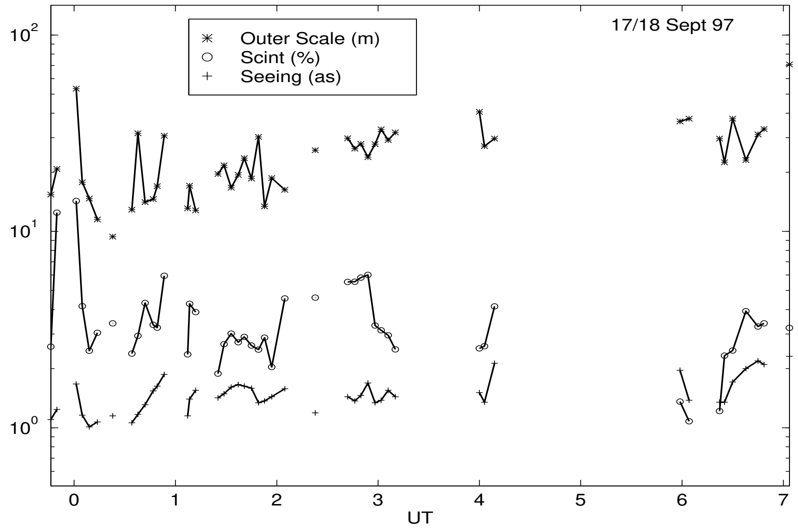


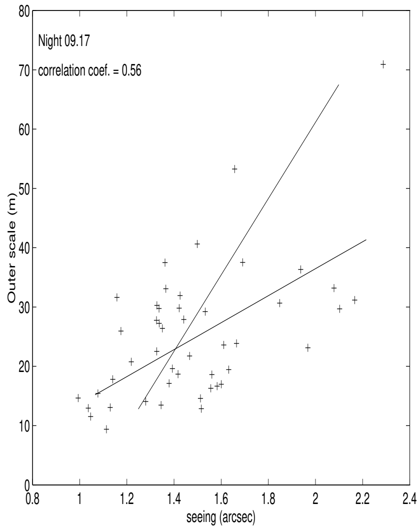


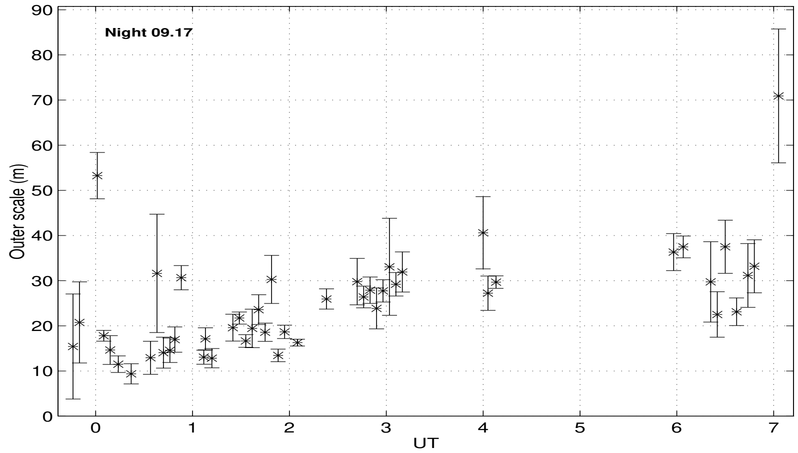
18. September 16/17

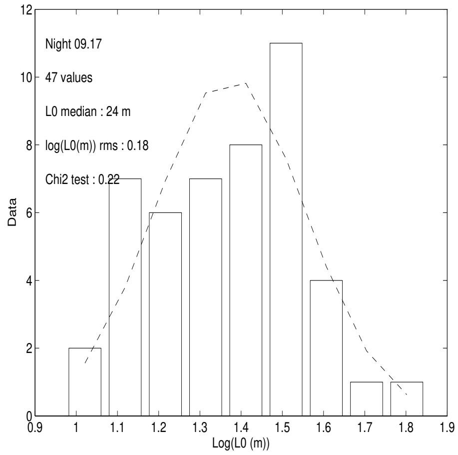
Southern wind: local turbulence was possible. The wind direction at the GSM was variable. Measurements without wind-protective net for the whole night. Thin clouds appeared after 8h30m UT.

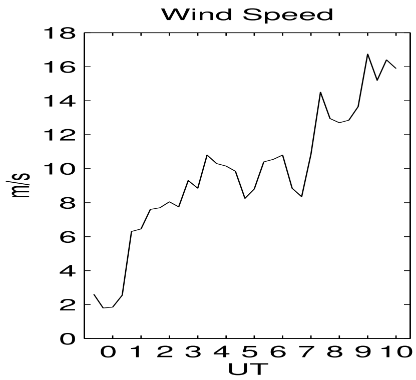
September 16/17	Median	Range
Seeing, $''$	1.71	1.41–2.21
$\mathcal{L}_0$, m	27.7	12.1–57.2
Scintillation, %	3.9	2.4 – 5.7
Ground wind, m/s	8.0, S	5.2–12.6
Temperature, ^{o}C	15.6	
Rel. humidity, %	23	
Clouds	Clear	

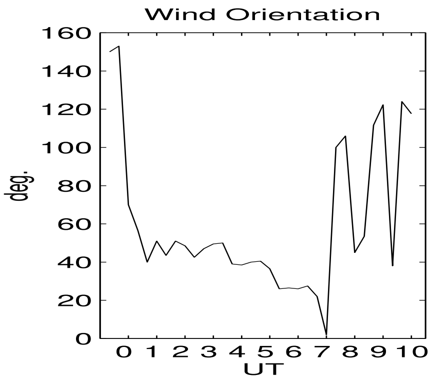


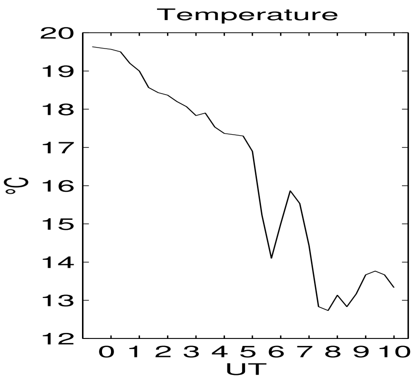








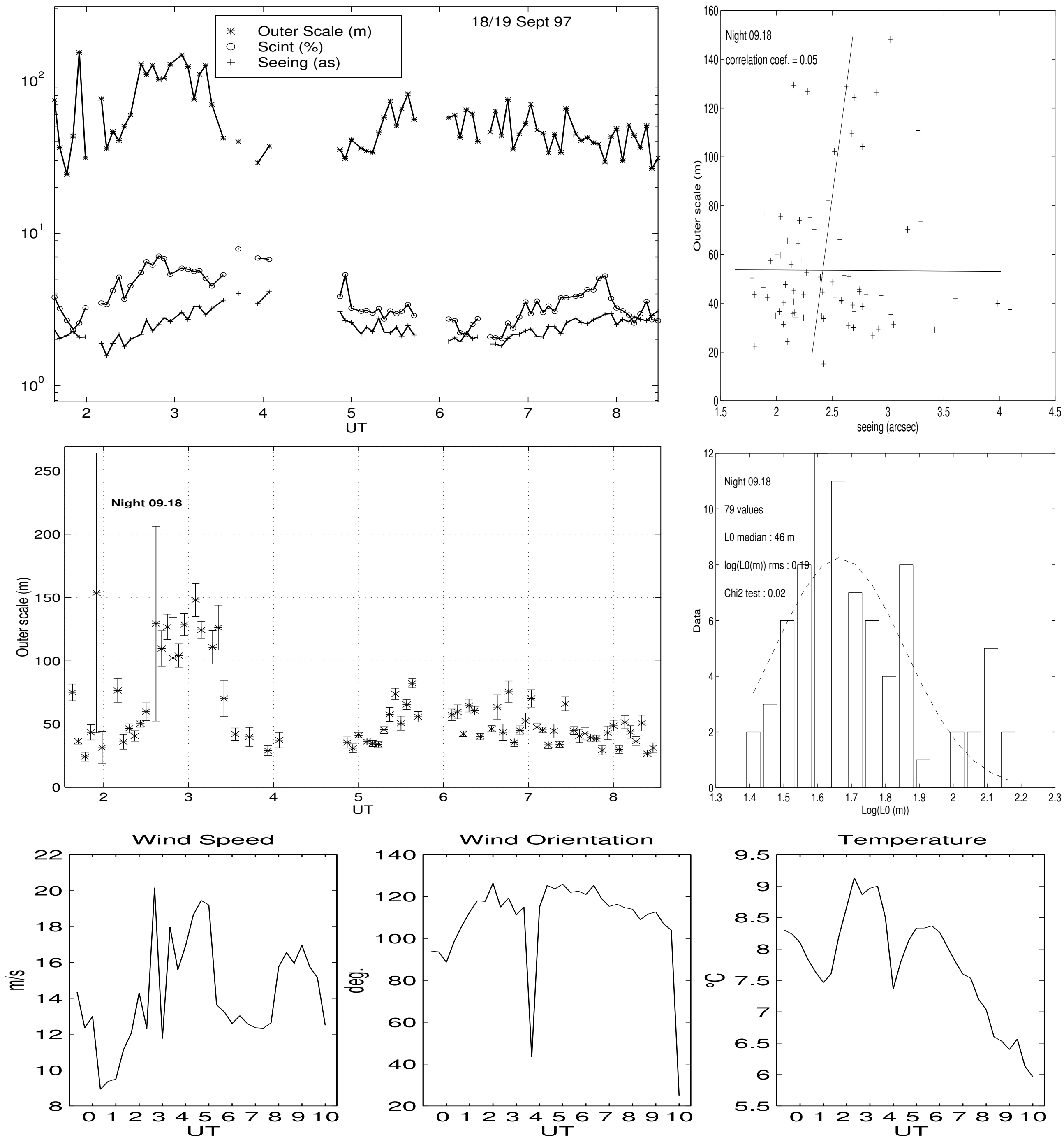




19. September 17/18

Measurements were taken between the clouds and stopped at 5h00m UT because the sky got covered completely. Moderate and variable wind from north. Wind-protective net was re-installed at 2h05m UT.

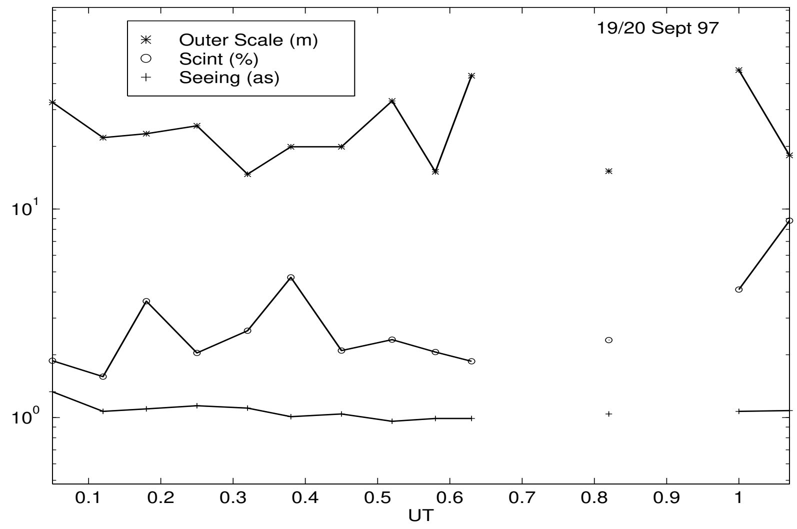
September 17/18	Median	Range
Seeing, $''$	1.44	1.10–2.09
$\mathcal{L}_0$, m	23.1	11.6–36.9
Scintillation, %	3.5	2.2 – 6.6
Ground wind, m/s	9.8, NE	1.8–16.8
Temperature, ^{o}C	17.3	
Rel. humidity, %	30	
Clouds	Partial	

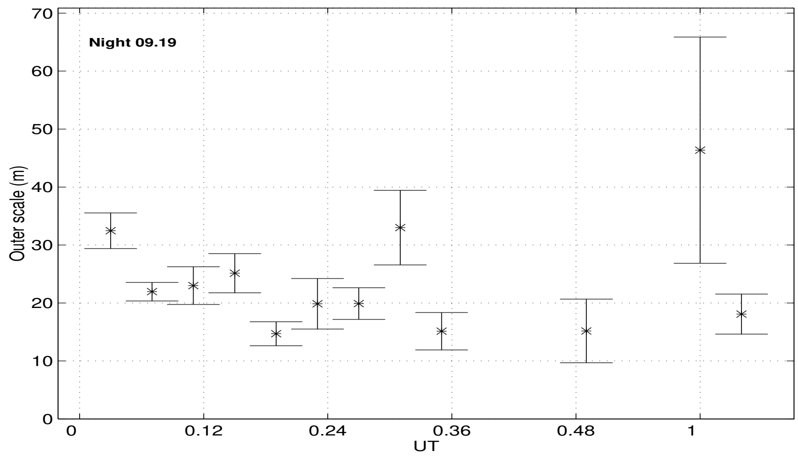


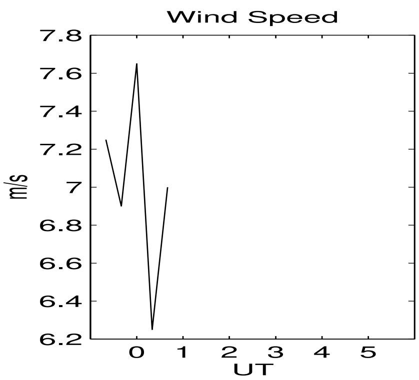
20. September 18/19

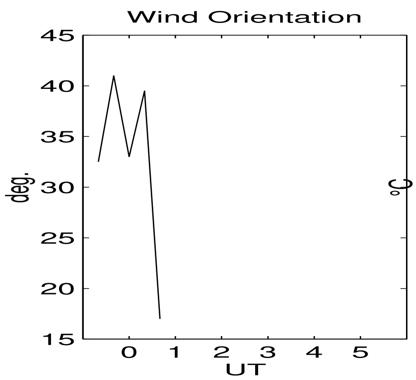
The sky cleared up unexpectedly shortly after sunset, and clouds remained whole night just below La Silla (humidity 80 %). A strong eastern wind, up to 20 m/s. Largest $\mathcal{L}_0$ for this mission, very bad seeing. All telescopes at La Silla were closed this night.

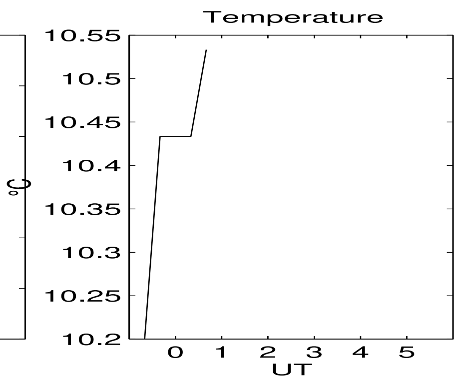
September 18/19	Median	Range
Seeing, ″	2.43	1.88–3.08
$\mathcal{L}_0$, m	45.9	28.0–111.8
Scintillation, %	5.0	2.9 – 7.3
Ground wind, m/s	13.2, SE	8.9–20.2
Temperature, ^{o}C	7.8	
Rel. humidity, %	82	
Clouds	Clear	











21. September 19/20

This last night was practically lost because of clouds which came after 1h UT, so the 13 measurements taken before that are not very representative.

September 19/20	Median	Range
Seeing, $''$	1.07	0.98–1.14
$\mathcal{L}_0$, m	20.9	13.5–43.4
Scintillation, %	2.5	1.7 – 4.8
Ground wind, m/s	7.0, NE	6.2– 7.6
Temperature, ^{o}C	10.4	
Rel. humidity, %	64	
Clouds	Partial	