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IMK/IAA MIPAS temperature retrieval version 8: nominal measurements

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This document serves as reference for the definitions of the representative atmospheres used for the calculation of tem-perature error budgets, as listed in Tab. 1, and as collection of the respective error budgets for FR data (2002-2004), which are listed in tables 2–35 and depicted in figures 1–34, and the respective error budgets for RR data (2005-2012), which are listed in tables 36–69 and depicted in figures 35–68.

Table 1. Labels and definitions of the representative atmospheric conditions which were used to calculate the error budget for FR and RR data.

representative atmosphere label	month(s) used	latitude range	solar zenith angle range
Northern polar winter day	Jan, Feb	65°N – 90°N	< 90°
Northern polar winter night	Jan, Feb	65°N – 90°N	> 95°
Northern polar spring day	Apr	65°N – 90°N	< 90°
Northern polar spring night	Apr	65°N – 90°N	> 95°
Northern polar summer day	Jul, Aug	65°N – 90°N	< 90°
Northern polar summer night	Jul, Aug	65°N – 90°N	> 95°
Northern polar autumn day	Oct	65°N – 90°N	< 90°
Northern polar autumn night	Oct	65°N – 90°N	> 95°
Northern midlatitude winter day	Jan, Feb	40°N – 60°N	< 90°
Northern midlatitude winter night	Jan, Feb	40°N – 60°N	> 95°
Northern midlatitude spring day	Apr	40°N – 60°N	< 90°
Northern midlatitude spring night	Apr	40°N – 60°N	> 95°
Northern midlatitude summer day	Jul, Aug	40°N – 60°N	< 90°
Northern midlatitude summer night	Jul, Aug	40°N – 60°N	> 95°
Northern midlatitude autumn day	Oct	40°N – 60°N	< 90°
Northern midlatitude autumn night	Oct	40°N – 60°N	> 95°
Tropics day	Apr	20°S – 20°N	< 90°
Tropics night	Apr	20°S – 20°N	> 95°
Southern midlatitude winter day	Jul, Aug	40°S – 60°S	< 90°
Southern midlatitude winter night	Jul, Aug	40°S – 60°S	> 95°
Southern midlatitude spring day	Oct	40°S – 60°S	< 90°
Southern midlatitude spring night	Oct	40°S – 60°S	> 95°
Southern midlatitude summer day	Jan, Feb	40°S – 60°S	< 90°
Southern midlatitude summer night	Jan, Feb	40°S – 60°S	> 95°
Southern midlatitude autumn day	Apr	40°S – 60°S	< 90°
Southern midlatitude autumn night	Apr	40°S – 60°S	> 95°
Southern polar winter day	Jul, Aug	65°S – 90°S	< 90°
Southern polar winter night	Jul, Aug	65°S – 90°S	> 95°
Southern polar spring day	Oct	65°S – 90°S	< 90°
Southern polar spring night	Oct	65°S – 90°S	> 95°
Southern polar summer day	Jan, Feb	65°S – 90°S	< 90°
Southern polar summer night	Jan, Feb	65°S – 90°S	> 95°
Southern polar autumn day	Apr	65°S – 90°S	< 90°
Southern polar autumn night	Apr	65°S – 90°S	> 95°

Table 2. Temperature error budget for Northern polar winter day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	217.0	0.7	0.6	0.4	0.4	0.4	<0.1	<0.1	0.4	0.1
12	217.5	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.4	0.2
15	214.1	1.0	0.5	0.9	0.4	0.3	<0.1	<0.1	0.6	0.6
18	212.1	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.3	0.4
21	212.5	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
24	214.9	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.2
27	220.1	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.4	0.2
30	225.4	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
33	229.5	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.3	0.2
36	235.1	0.7	0.5	0.3	0.3	0.5	<0.1	<0.1	0.3	0.1
39	239.0	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.2	0.1
42	240.6	0.8	0.6	0.4	0.3	0.5	<0.1	<0.1	0.2	0.3
45	241.2	0.9	0.7	0.6	0.4	0.6	<0.1	<0.1	0.1	0.5
48	240.4	0.9	0.7	0.6	0.4	0.5	0.1	<0.1	0.2	0.5
52	243.3	0.8	0.6	0.5	0.5	0.3	<0.1	<0.1	0.3	0.4
56	239.5	1.0	0.8	0.5	0.7	0.5	<0.1	<0.1	0.4	0.2
60	231.2	1.2	0.9	0.7	0.7	0.5	<0.1	<0.1	0.5	0.5
64	224.9	1.6	1.0	1.3	0.9	0.5	0.2	<0.1	0.3	1.2
68	221.3	1.5	1.2	1.0	1.1	0.3	0.1	<0.1	0.4	0.9

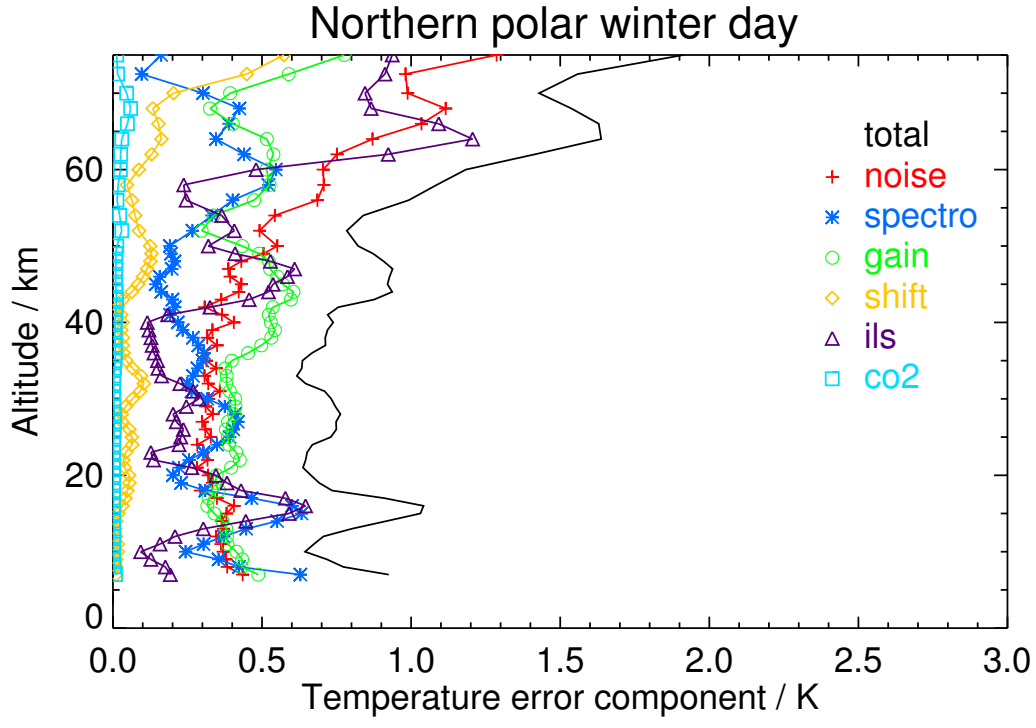

Figure 1. V8H_T_61 Northern polar winter day

Table 3. Temperature error budget for Northern polar winter night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	224.7	1.4	0.9	1.0	0.5	0.7	<0.1	<0.1	1.0	0.1
9	213.9	0.8	0.6	0.5	0.4	0.4	<0.1	<0.1	0.4	0.1
12	213.7	0.8	0.5	0.6	0.4	0.4	<0.1	<0.1	0.5	0.3
15	209.3	1.2	0.5	1.0	0.4	0.3	<0.1	<0.1	0.8	0.6
18	206.1	0.8	0.5	0.6	0.3	0.3	<0.1	<0.1	0.4	0.4
21	206.8	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
24	211.1	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.5	0.2
27	218.9	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.6	0.2
30	226.7	0.8	0.5	0.5	0.3	0.4	<0.1	<0.1	0.5	0.2
33	233.4	0.7	0.5	0.4	0.3	0.4	0.1	<0.1	0.3	0.1
36	239.6	0.7	0.5	0.3	0.3	0.4	<0.1	<0.1	0.3	0.2
39	243.4	0.8	0.7	0.3	0.3	0.6	<0.1	<0.1	0.3	0.1
42	245.7	0.8	0.6	0.4	0.3	0.5	<0.1	<0.1	0.2	0.3
45	247.3	1.0	0.7	0.7	0.4	0.5	0.1	<0.1	0.2	0.6
48	247.3	1.0	0.6	0.7	0.4	0.5	0.1	<0.1	0.3	0.6
52	245.3	0.9	0.6	0.6	0.5	0.3	<0.1	<0.1	0.4	0.4
56	241.0	1.0	0.9	0.5	0.7	0.5	0.1	<0.1	0.5	0.2
60	234.5	1.1	0.9	0.7	0.7	0.5	<0.1	<0.1	0.5	0.5
64	228.4	1.8	1.0	1.4	0.8	0.6	0.1	<0.1	0.3	1.4
68	224.9	1.6	1.1	1.1	1.0	0.4	0.2	<0.1	0.4	1.0

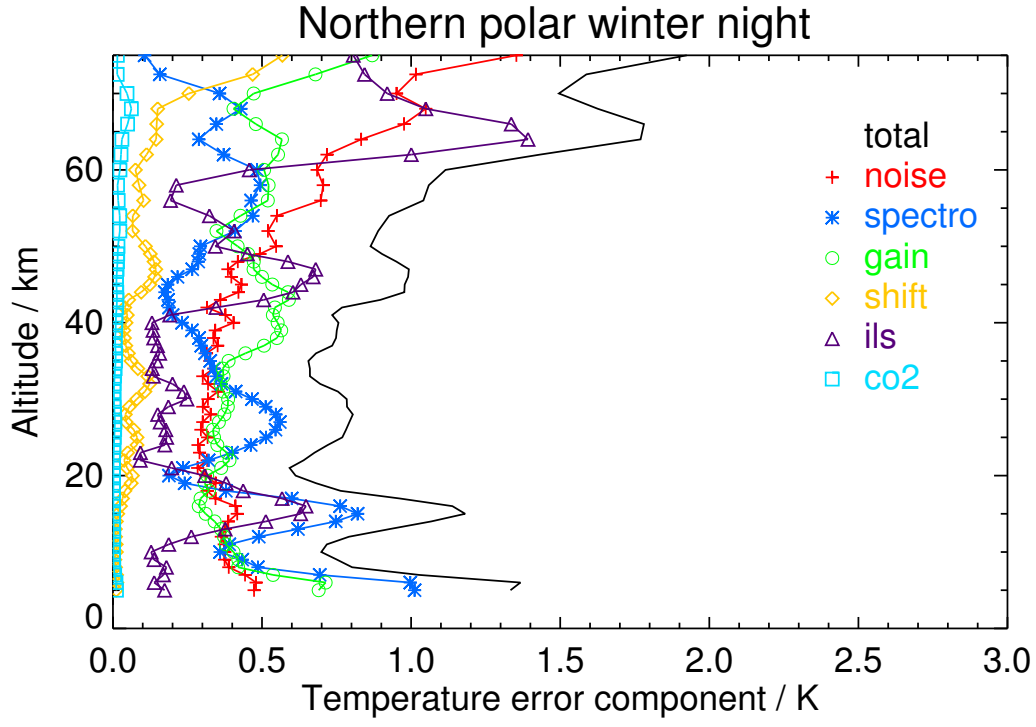

Figure 2. V8H_T_61 Northern polar winter night

Table 4. Temperature error budget for Northern polar spring day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	228.7	0.9	0.7	0.6	0.4	0.6	<0.1	<0.1	0.6	<0.1
9	220.4	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.1	<0.1
12	222.7	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.2	0.1
15	221.0	0.8	0.5	0.5	0.3	0.4	<0.1	<0.1	0.3	0.4
18	222.4	0.8	0.5	0.6	0.3	0.3	<0.1	<0.1	0.1	0.6
21	224.4	0.6	0.5	0.4	0.3	0.4	<0.1	<0.1	0.2	0.3
24	227.0	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.2	0.2
27	230.0	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.2	0.3
30	233.8	0.7	0.6	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
33	238.7	0.7	0.5	0.4	0.4	0.4	0.1	<0.1	0.2	0.3
36	243.4	0.7	0.6	0.3	0.3	0.4	0.1	<0.1	0.3	0.1
39	249.6	0.8	0.7	0.4	0.4	0.6	<0.1	<0.1	0.4	<0.1
42	255.7	0.8	0.7	0.3	0.3	0.6	<0.1	<0.1	0.3	0.2
45	260.2	0.9	0.7	0.5	0.4	0.5	<0.1	<0.1	0.1	0.5
48	263.2	1.0	0.8	0.6	0.4	0.7	<0.1	<0.1	<0.1	0.6
52	263.5	1.2	0.7	1.0	0.5	0.4	0.3	<0.1	0.3	0.9
56	261.8	0.8	0.7	0.4	0.7	0.3	<0.1	<0.1	0.4	0.1
60	250.7	1.2	0.9	0.8	0.6	0.6	0.1	<0.1	0.7	0.4
64	237.4	1.8	1.2	1.2	0.9	0.9	0.1	<0.1	0.7	1.0
68	226.0	1.6	1.0	1.2	0.8	0.6	0.3	<0.1	0.6	1.0

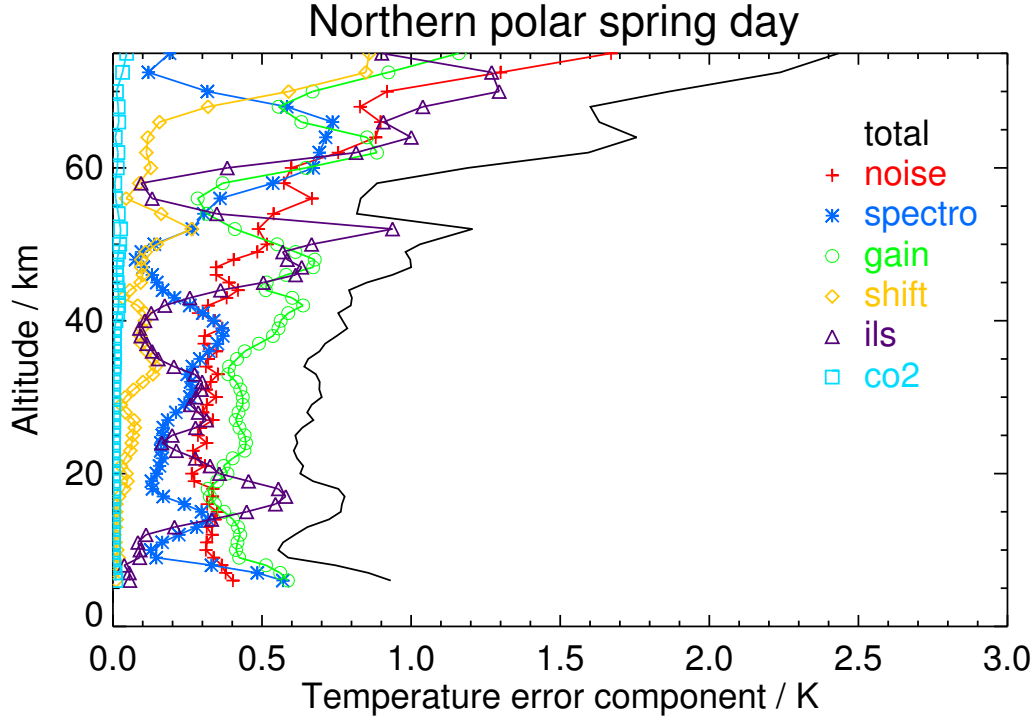

Figure 3. V8H_T_61 Northern polar spring day

Table 5. Temperature error budget for Northern polar spring night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	219.5	0.7	0.6	0.3	0.4	0.4	<0.1	<0.1	0.3	<0.1
12	220.1	0.6	0.5	0.3	0.4	0.4	<0.1	<0.1	0.2	0.2
15	219.5	0.8	0.5	0.5	0.4	0.4	<0.1	<0.1	0.3	0.5
18	220.3	0.8	0.5	0.6	0.3	0.3	<0.1	<0.1	0.2	0.5
21	221.2	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
24	222.0	0.7	0.6	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
27	224.1	0.7	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
30	228.0	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.2
33	233.5	0.7	0.5	0.4	0.3	0.4	0.1	<0.1	0.3	0.2
36	240.3	0.7	0.5	0.4	0.3	0.4	0.1	<0.1	0.4	<0.1
39	248.2	0.8	0.7	0.4	0.4	0.5	0.1	<0.1	0.4	<0.1
42	254.6	0.8	0.7	0.4	0.3	0.6	0.1	<0.1	0.4	0.1
45	261.7	0.9	0.6	0.5	0.4	0.5	<0.1	<0.1	0.2	0.5
48	265.6	1.0	0.8	0.6	0.4	0.7	0.1	<0.1	<0.1	0.6
52	264.7	1.2	0.7	1.0	0.5	0.4	0.3	<0.1	0.3	0.9
56	261.8	0.9	0.8	0.4	0.7	0.4	<0.1	<0.1	0.4	0.1
60	249.2	1.2	0.9	0.8	0.6	0.7	0.1	<0.1	0.7	0.4
64	235.7	1.7	1.2	1.1	0.9	0.8	0.1	<0.1	0.7	0.9
68	227.5	1.5	1.0	1.1	0.8	0.5	0.2	<0.1	0.5	1.0

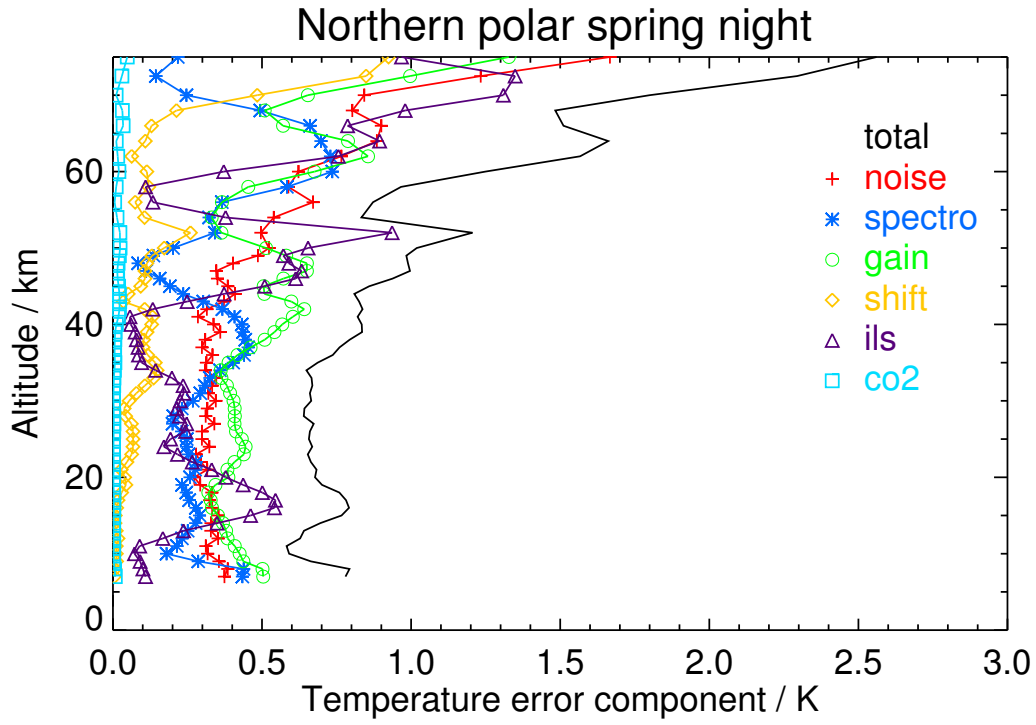

Figure 4. V8H_T_61 Northern polar spring night

Table 6. Temperature error budget for Northern polar summer day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	226.0	0.7	0.6	0.3	0.4	0.5	<0.1	<0.1	0.3	<0.1
12	227.4	0.6	0.5	0.1	0.3	0.4	<0.1	<0.1	<0.1	0.1
15	226.8	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.2	0.5
18	227.3	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.2	0.4
21	227.4	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.1	0.3
24	227.4	0.6	0.6	0.2	0.3	0.5	<0.1	<0.1	<0.1	0.2
27	229.2	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.1	0.2
30	233.0	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
33	239.0	0.6	0.5	0.4	0.3	0.4	0.1	<0.1	0.3	0.1
36	246.0	0.7	0.6	0.4	0.3	0.5	0.1	<0.1	0.4	<0.1
39	253.6	0.8	0.7	0.4	0.3	0.6	0.1	<0.1	0.4	<0.1
42	261.7	0.8	0.7	0.4	0.3	0.6	0.2	<0.1	0.4	0.1
45	268.5	0.8	0.7	0.4	0.4	0.6	<0.1	<0.1	0.2	0.3
48	273.5	1.0	0.8	0.7	0.3	0.7	<0.1	<0.1	<0.1	0.7
52	273.9	1.3	0.8	1.0	0.6	0.4	0.3	<0.1	0.3	1.0
56	271.0	0.9	0.7	0.4	0.6	0.4	<0.1	<0.1	0.4	0.1
60	259.5	1.0	0.8	0.7	0.6	0.5	0.2	<0.1	0.6	0.1
64	244.2	2.0	1.3	1.4	0.8	1.0	0.2	<0.1	0.9	1.2
68	226.8	1.9	1.3	1.4	0.9	0.7	0.5	<0.1	0.9	1.1

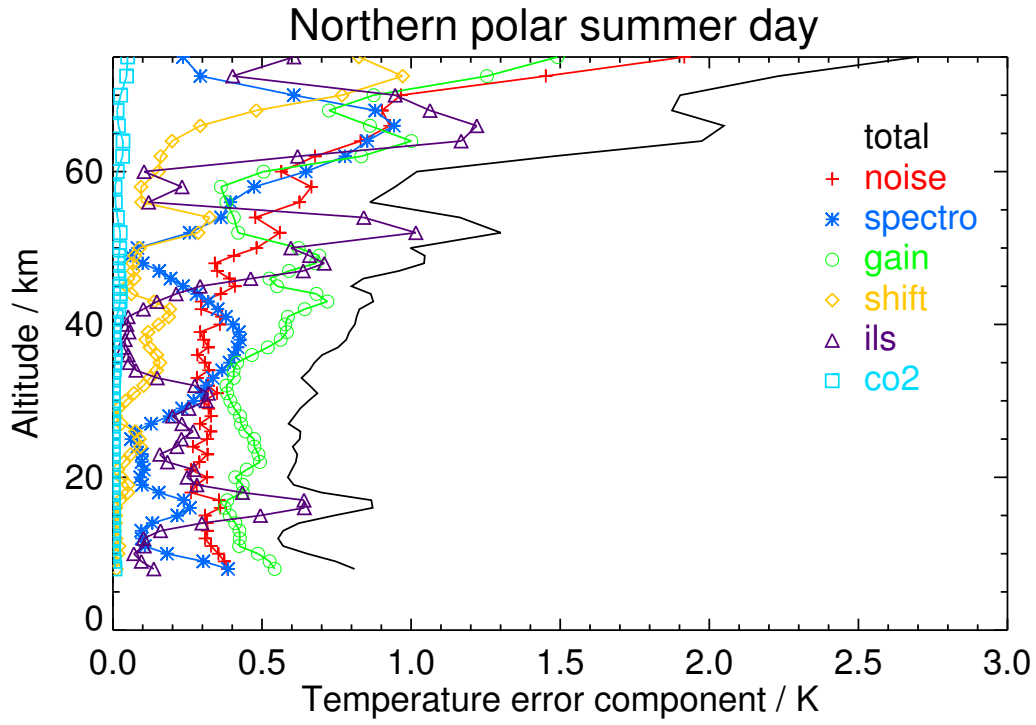

Figure 5. V8H_T_61 Northern polar summer day

Table 7. Temperature error budget for Northern polar summer night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	225.3	0.9	0.7	0.5	0.4	0.5	<0.1	<0.1	0.5	0.1
12	225.7	0.5	0.5	0.1	0.3	0.4	<0.1	<0.1	<0.1	<0.1
15	224.9	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.3	0.4
18	224.6	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.3	0.5
21	224.1	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.1	0.3
24	224.4	0.6	0.5	0.2	0.3	0.5	<0.1	<0.1	<0.1	0.2
27	226.8	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
30	231.0	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
33	237.1	0.6	0.5	0.4	0.3	0.4	0.1	<0.1	0.3	0.2
36	243.9	0.7	0.6	0.4	0.3	0.5	0.2	<0.1	0.4	<0.1
39	251.8	0.8	0.7	0.5	0.3	0.6	0.1	<0.1	0.5	<0.1
42	259.5	0.8	0.7	0.3	0.3	0.6	0.2	<0.1	0.3	<0.1
45	265.3	0.8	0.7	0.4	0.4	0.6	<0.1	<0.1	0.2	0.4
48	268.7	1.0	0.7	0.7	0.4	0.6	0.1	<0.1	<0.1	0.7
52	266.9	1.2	0.8	0.9	0.6	0.4	0.3	<0.1	0.3	0.9
56	264.4	0.8	0.7	0.4	0.6	0.3	<0.1	<0.1	0.4	0.1
60	252.0	1.1	0.8	0.8	0.6	0.5	0.1	<0.1	0.8	<0.1
64	236.5	2.0	1.3	1.5	0.8	0.9	0.2	<0.1	0.8	1.2
68	220.9	1.9	1.2	1.4	1.0	0.7	0.4	<0.1	0.8	1.1

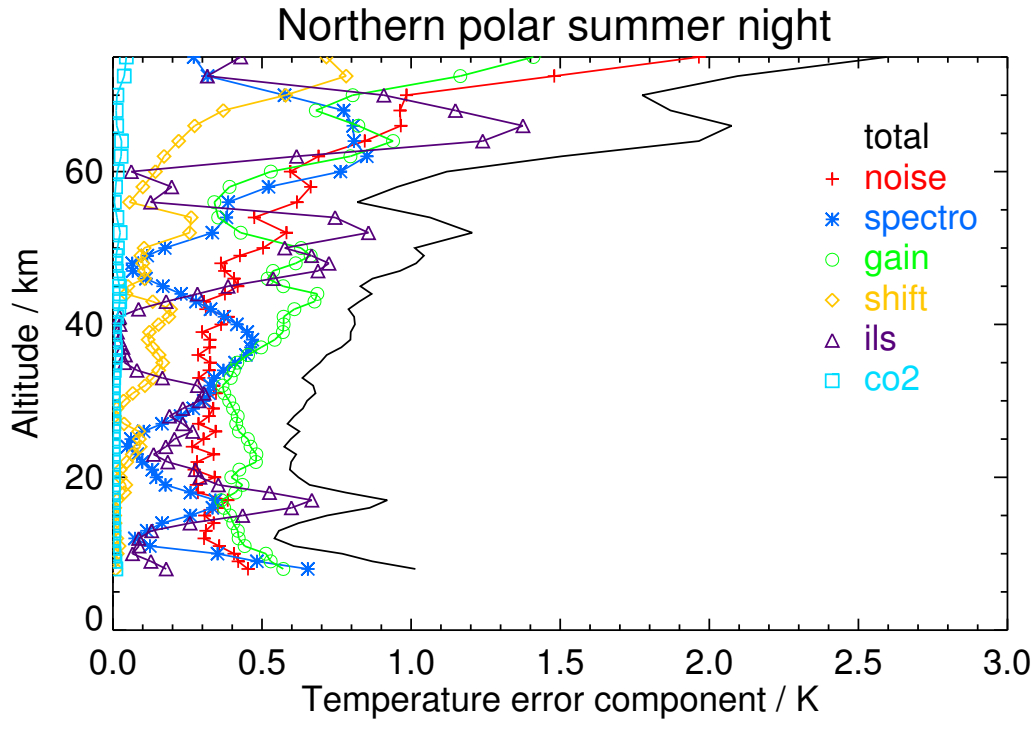

Figure 6. V8H_T_61 Northern polar summer night

Table 8. Temperature error budget for Northern polar autumn day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	235.1	1.0	0.8	0.6	0.4	0.7	<0.1	<0.1	0.6	0.1
9	219.9	0.6	0.6	0.3	0.3	0.5	<0.1	<0.1	0.2	0.1
12	221.5	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.2	0.1
15	220.2	0.8	0.5	0.5	0.3	0.4	<0.1	<0.1	0.4	0.4
18	217.8	1.0	0.5	0.8	0.4	0.4	<0.1	<0.1	0.5	0.6
21	214.5	0.8	0.5	0.5	0.3	0.4	<0.1	<0.1	0.3	0.4
24	212.6	0.6	0.6	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
27	211.9	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
30	212.8	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
33	216.8	0.6	0.5	0.3	0.3	0.3	0.1	<0.1	0.3	<0.1
36	222.4	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.3	<0.1
39	228.2	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.3	0.1
42	234.6	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.3	0.2
45	241.0	0.9	0.6	0.6	0.4	0.5	<0.1	<0.1	0.2	0.6
48	245.5	0.9	0.6	0.7	0.4	0.4	0.1	<0.1	0.1	0.6
52	247.0	0.8	0.6	0.4	0.5	0.3	<0.1	<0.1	0.3	0.3
56	243.9	0.9	0.8	0.5	0.6	0.5	<0.1	<0.1	0.4	0.2
60	239.9	1.0	0.8	0.5	0.6	0.5	<0.1	<0.1	0.4	0.3
64	235.3	1.5	0.9	1.2	0.7	0.5	<0.1	<0.1	0.2	1.2
68	230.7	1.6	1.1	1.2	1.0	0.4	<0.1	<0.1	0.4	1.1

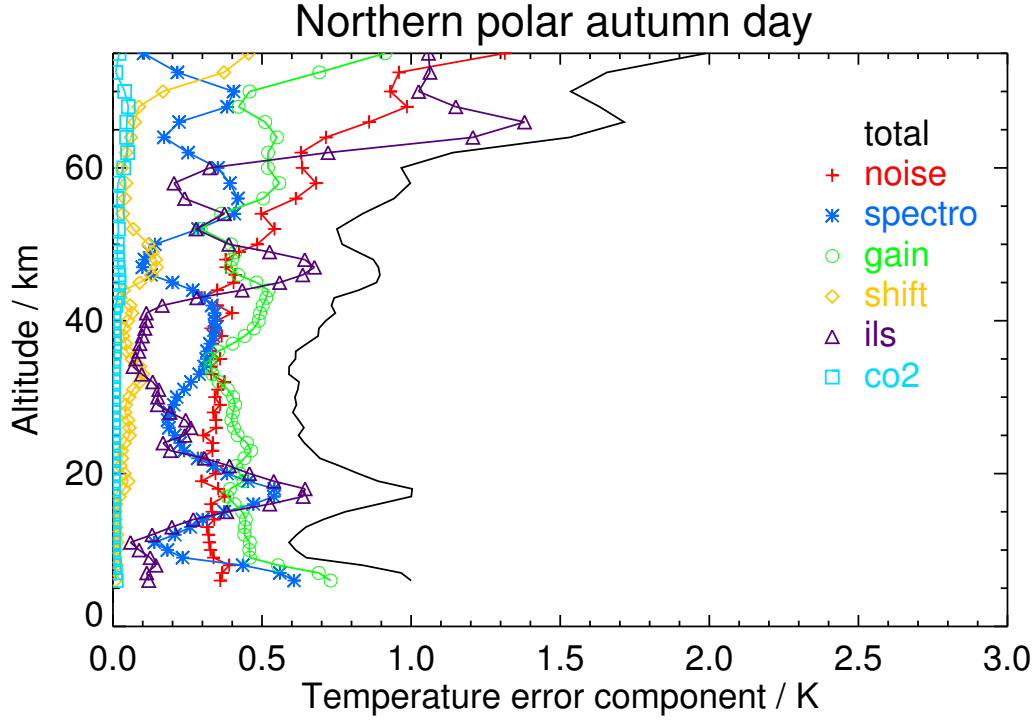

Figure 7. V8H_T_61 Northern polar autumn day

Table 9. Temperature error budget for Northern polar autumn night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	219.2	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.1	<0.1
12	222.5	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.1	0.1
15	221.5	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.4	0.4
18	218.4	1.1	0.6	0.9	0.4	0.4	<0.1	<0.1	0.6	0.7
21	214.7	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.4	0.4
24	212.0	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.3	0.2
27	210.5	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
30	211.0	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.2	0.2
33	214.2	0.6	0.5	0.3	0.3	0.3	<0.1	<0.1	0.2	<0.1
36	219.0	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.3	<0.1
39	224.6	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.4	<0.1
42	231.0	0.8	0.6	0.4	0.3	0.5	<0.1	<0.1	0.4	0.1
45	237.7	0.9	0.6	0.6	0.4	0.5	<0.1	<0.1	0.3	0.5
48	243.2	0.8	0.6	0.6	0.4	0.4	0.1	<0.1	0.1	0.6
52	246.7	0.7	0.6	0.4	0.5	0.3	<0.1	<0.1	0.2	0.3
56	245.9	0.9	0.7	0.4	0.6	0.4	<0.1	<0.1	0.4	0.2
60	243.2	0.9	0.8	0.5	0.6	0.4	<0.1	<0.1	0.4	0.3
64	238.5	1.5	0.9	1.2	0.7	0.5	<0.1	<0.1	0.2	1.2
68	235.1	1.6	1.0	1.3	1.0	0.4	<0.1	<0.1	0.4	1.2

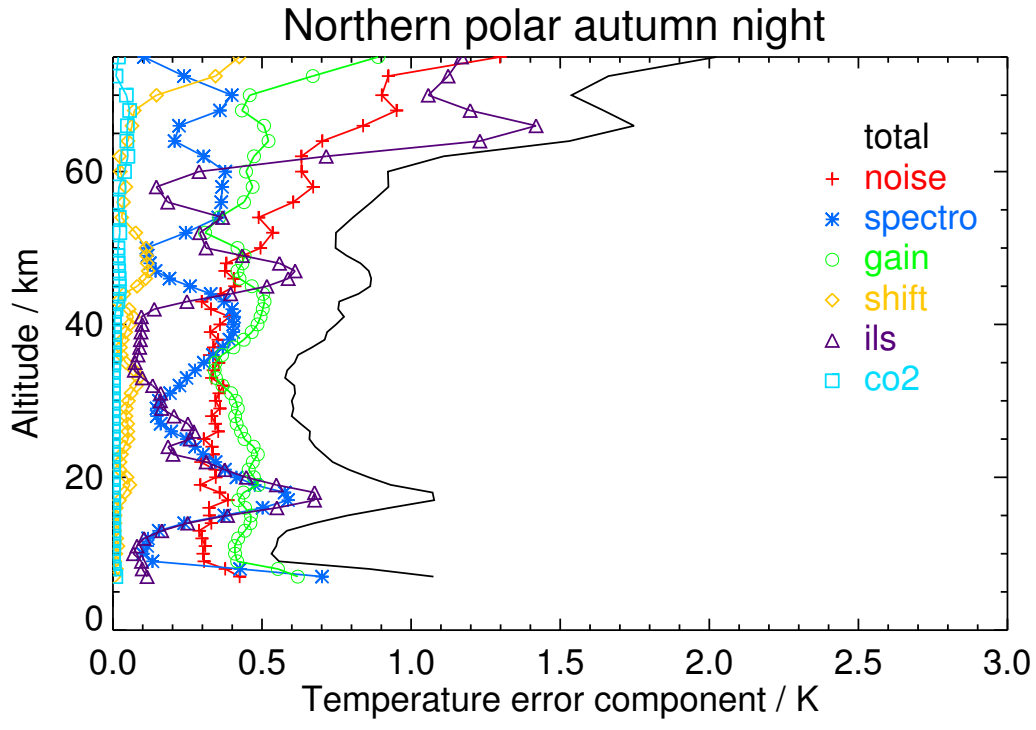

Figure 8. V8H_T_61 Northern polar autumn night

Table 10. Temperature error budget for Northern midlatitude winter day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	220.7	0.9	0.7	0.5	0.4	0.5	<0.1	<0.1	0.4	0.2
12	218.3	0.6	0.5	0.3	0.4	0.4	<0.1	<0.1	0.2	0.2
15	216.0	0.9	0.5	0.7	0.4	0.3	<0.1	<0.1	0.4	0.6
18	215.1	0.8	0.5	0.5	0.3	0.4	<0.1	<0.1	0.4	0.4
21	217.2	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
24	217.1	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
27	220.4	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
30	224.4	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
33	231.1	0.7	0.5	0.5	0.3	0.4	0.1	<0.1	0.4	0.1
36	237.3	0.6	0.6	0.3	0.3	0.5	<0.1	<0.1	0.3	0.1
39	239.8	0.8	0.7	0.3	0.3	0.6	<0.1	<0.1	0.3	<0.1
42	246.7	0.7	0.6	0.3	0.3	0.6	<0.1	<0.1	0.3	0.2
45	250.3	0.9	0.6	0.5	0.4	0.5	0.1	<0.1	0.1	0.5
48	249.8	1.0	0.7	0.7	0.4	0.5	0.2	<0.1	0.3	0.7
52	248.2	1.0	0.6	0.7	0.5	0.3	<0.1	<0.1	0.5	0.6
56	237.8	1.2	1.0	0.7	0.7	0.6	0.1	<0.1	0.7	0.2
60	226.2	1.2	0.9	0.7	0.7	0.5	<0.1	<0.1	0.7	0.3
64	219.9	1.7	1.1	1.3	0.9	0.5	0.2	<0.1	0.4	1.2
68	215.5	1.7	1.2	1.1	1.1	0.4	0.2	<0.1	0.4	1.0

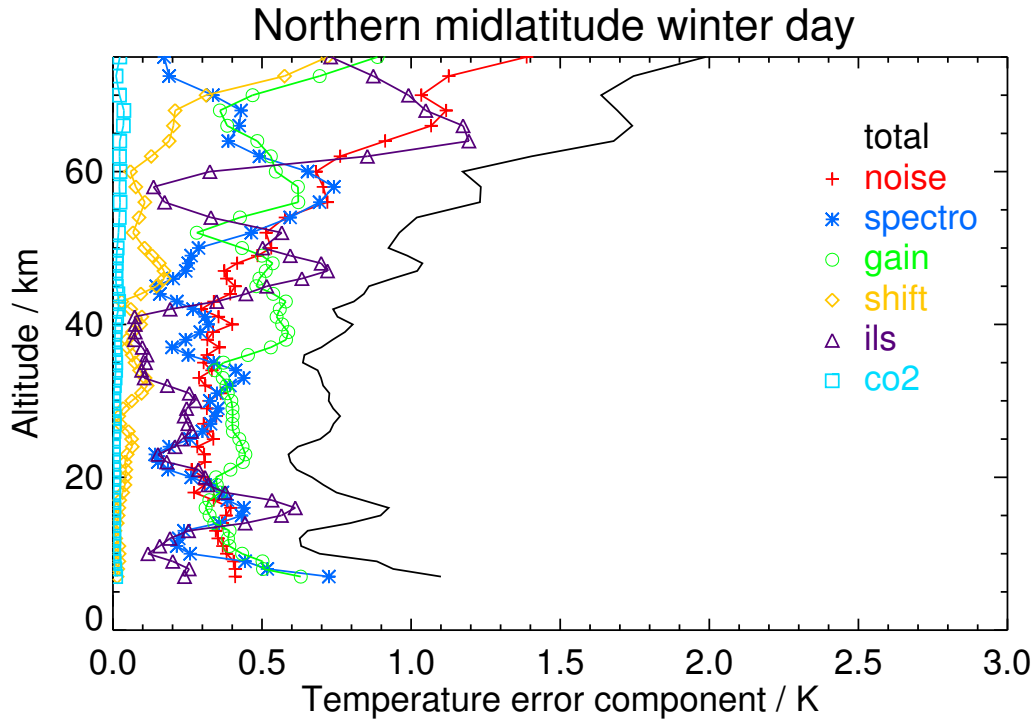

Figure 9. V8H_T_61 Northern midlatitude winter day

Table 11. Temperature error budget for Northern midlatitude winter night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	221.1	0.8	0.6	0.5	0.4	0.5	<0.1	<0.1	0.5	0.1
12	219.1	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.1
15	216.2	0.8	0.5	0.7	0.4	0.3	<0.1	<0.1	0.4	0.5
18	215.9	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.3	0.4
21	216.4	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
24	217.8	0.7	0.5	0.3	0.3	0.4	<0.1	<0.1	0.3	0.2
27	220.4	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
30	223.9	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
33	229.3	0.7	0.5	0.4	0.3	0.4	0.1	<0.1	0.4	0.1
36	236.4	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.4	0.1
39	242.0	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.3	<0.1
42	246.7	0.9	0.7	0.5	0.3	0.6	<0.1	<0.1	0.4	0.2
45	251.4	0.8	0.7	0.5	0.4	0.5	0.1	<0.1	0.2	0.4
48	253.4	1.0	0.7	0.7	0.4	0.5	0.2	<0.1	0.2	0.7
52	249.0	1.1	0.6	0.8	0.5	0.3	<0.1	<0.1	0.6	0.6
56	238.1	1.3	1.0	0.8	0.7	0.7	0.1	<0.1	0.8	0.2
60	225.4	1.1	0.9	0.6	0.7	0.5	<0.1	<0.1	0.6	0.2
64	222.5	1.6	1.0	1.3	0.9	0.4	0.1	<0.1	0.3	1.2
68	219.1	1.6	1.1	1.1	1.1	0.3	0.2	<0.1	0.4	1.0

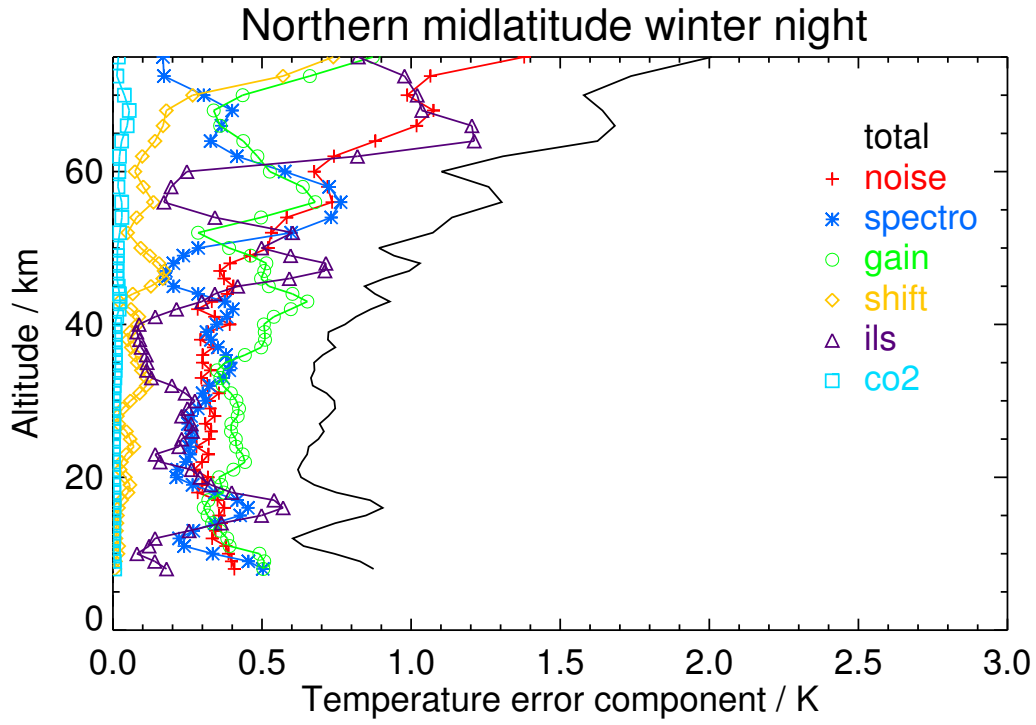

Figure 10. V8H_T_61 Northern midlatitude winter night

Table 12. Temperature error budget for Northern midlatitude spring day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	225.6	1.1	0.8	0.7	0.4	0.6	<0.1	<0.1	0.7	0.2
12	218.2	0.7	0.6	0.4	0.4	0.4	<0.1	<0.1	0.3	0.2
15	216.5	0.8	0.5	0.6	0.4	0.3	<0.1	<0.1	0.4	0.5
18	216.1	0.8	0.5	0.6	0.3	0.3	<0.1	<0.1	0.2	0.5
21	217.4	0.6	0.5	0.4	0.3	0.3	<0.1	<0.1	0.2	0.3
24	220.2	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.1
27	223.8	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
30	227.6	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.2
33	233.2	0.7	0.5	0.4	0.4	0.4	0.1	<0.1	0.3	0.2
36	238.8	0.7	0.5	0.4	0.3	0.4	0.1	<0.1	0.4	0.1
39	247.1	0.8	0.7	0.5	0.4	0.5	0.1	<0.1	0.5	<0.1
42	254.8	0.8	0.7	0.4	0.3	0.6	<0.1	<0.1	0.3	0.2
45	261.0	0.9	0.6	0.6	0.4	0.5	0.1	<0.1	0.1	0.6
48	263.3	1.0	0.8	0.6	0.4	0.7	<0.1	<0.1	<0.1	0.6
52	261.7	1.2	0.7	0.9	0.5	0.4	0.2	<0.1	0.3	0.9
56	258.4	0.9	0.7	0.5	0.7	0.3	<0.1	<0.1	0.4	0.1
60	245.7	1.3	1.0	0.9	0.6	0.7	0.1	<0.1	0.7	0.5
64	233.4	1.7	1.2	1.2	0.9	0.8	0.1	<0.1	0.8	0.9
68	220.4	1.6	1.1	1.2	0.9	0.6	0.3	<0.1	0.5	1.1

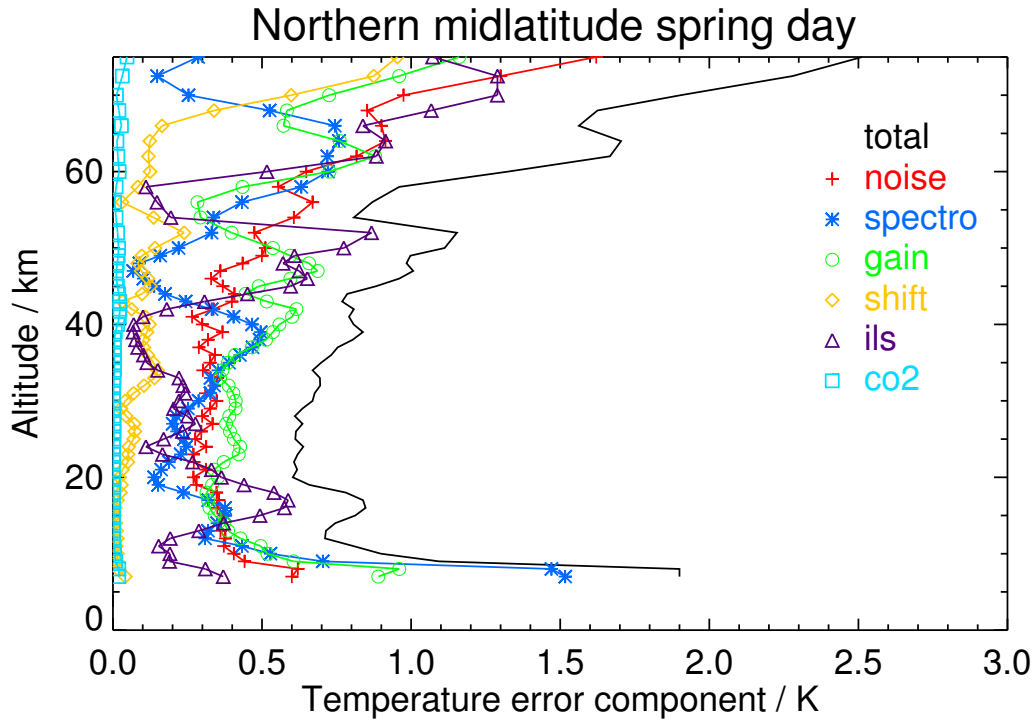

Figure 11. V8H_T_61 Northern midlatitude spring day

Table 13. Temperature error budget for Northern midlatitude spring night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	225.8	0.8	0.6	0.4	0.4	0.5	<0.1	<0.1	0.3	<0.1
12	219.7	0.7	0.5	0.3	0.4	0.4	<0.1	<0.1	0.3	0.2
15	217.7	0.9	0.5	0.7	0.4	0.3	<0.1	<0.1	0.5	0.5
18	216.0	0.7	0.5	0.6	0.3	0.3	<0.1	<0.1	0.3	0.5
21	216.9	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.1	0.3
24	219.9	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
27	222.8	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.3	0.2
30	228.4	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.2
33	234.2	0.7	0.5	0.4	0.3	0.4	0.1	<0.1	0.4	0.2
36	240.5	0.8	0.6	0.5	0.3	0.4	0.1	<0.1	0.5	<0.1
39	248.9	0.9	0.7	0.5	0.4	0.6	0.1	<0.1	0.5	<0.1
42	257.4	0.8	0.7	0.4	0.3	0.6	<0.1	<0.1	0.3	0.2
45	262.4	0.9	0.6	0.6	0.4	0.5	0.1	<0.1	<0.1	0.6
48	263.6	1.0	0.8	0.6	0.4	0.7	<0.1	<0.1	0.1	0.6
52	262.2	1.2	0.7	1.0	0.5	0.4	0.2	<0.1	0.3	0.9
56	259.2	0.9	0.8	0.4	0.7	0.3	<0.1	<0.1	0.4	0.2
60	245.9	1.3	0.9	0.9	0.6	0.7	0.1	<0.1	0.8	0.4
64	233.6	1.7	1.2	1.2	0.9	0.8	<0.1	<0.1	0.7	1.0
68	222.9	1.6	1.0	1.2	0.8	0.5	0.3	<0.1	0.6	1.1

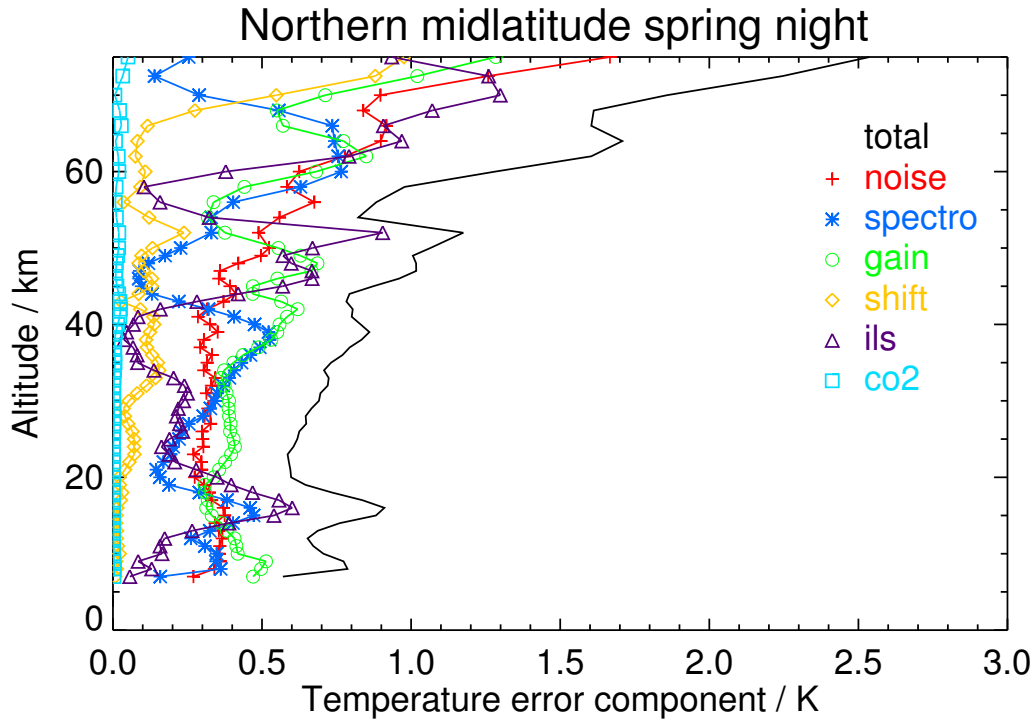

Figure 12. V8H_T_61 Northern midlatitude spring night

Table 14. Temperature error budget for Northern midlatitude summer day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	238.8	1.6	1.0	1.2	0.5	0.8	<0.1	<0.1	1.2	0.4
12	222.0	1.2	0.7	0.8	0.5	0.6	<0.1	<0.1	0.8	0.4
15	216.2	1.1	0.5	0.9	0.4	0.4	<0.1	<0.1	0.7	0.7
18	215.5	0.6	0.4	0.4	0.3	0.3	<0.1	<0.1	0.2	0.4
21	218.8	0.6	0.4	0.3	0.2	0.4	<0.1	<0.1	0.2	0.2
24	222.4	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
27	227.3	0.6	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.2
30	232.0	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
33	237.6	0.7	0.5	0.4	0.3	0.4	0.1	<0.1	0.3	0.2
36	244.3	0.7	0.6	0.4	0.3	0.5	0.1	<0.1	0.4	<0.1
39	252.2	0.8	0.7	0.5	0.3	0.6	0.1	<0.1	0.5	<0.1
42	260.1	0.8	0.7	0.4	0.3	0.6	0.1	<0.1	0.3	0.2
45	265.0	0.8	0.7	0.4	0.4	0.5	<0.1	<0.1	0.1	0.3
48	267.6	1.1	0.8	0.7	0.4	0.7	<0.1	<0.1	<0.1	0.7
52	264.0	1.3	0.7	1.0	0.5	0.4	0.2	<0.1	0.4	1.0
56	258.7	1.0	0.8	0.5	0.7	0.4	<0.1	<0.1	0.5	0.1
60	244.8	1.3	0.9	0.9	0.6	0.6	0.1	<0.1	0.9	0.3
64	227.9	2.0	1.3	1.5	0.9	0.8	0.2	<0.1	0.9	1.2
68	212.2	1.8	1.3	1.2	1.0	0.6	0.5	<0.1	0.7	1.0

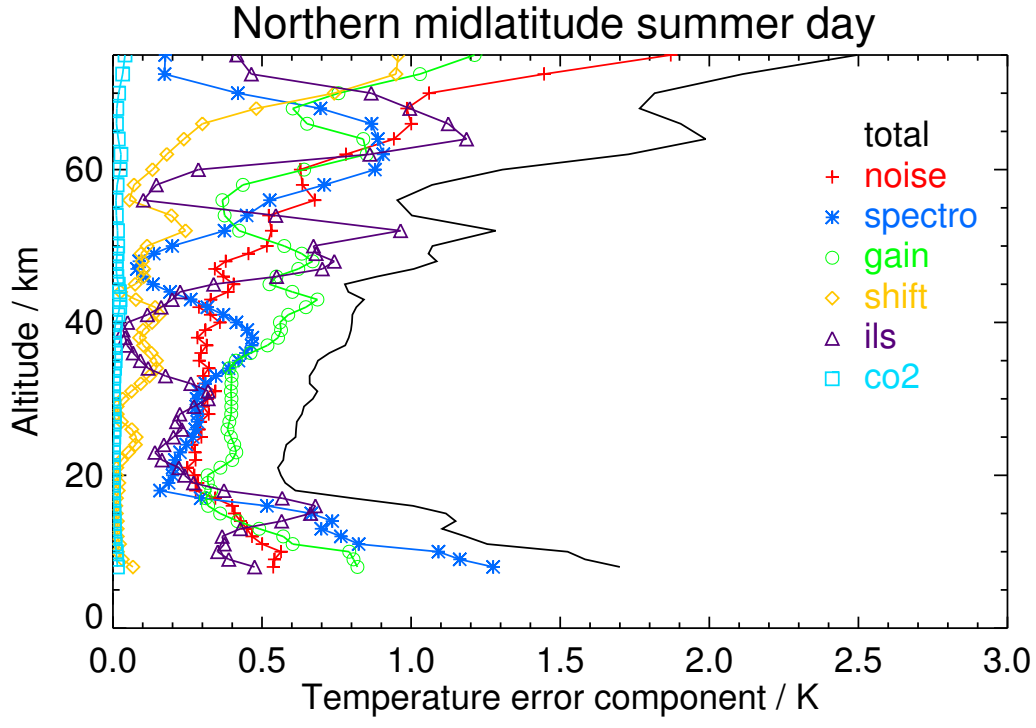

Figure 13. V8H_T_61 Northern midlatitude summer day

Table 15. Temperature error budget for Northern midlatitude summer night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	238.5	1.7	1.0	1.3	0.6	0.8	<0.1	<0.1	1.3	0.3
12	222.3	1.1	0.7	0.7	0.4	0.5	<0.1	<0.1	0.7	0.3
15	217.3	1.0	0.5	0.8	0.4	0.3	<0.1	<0.1	0.6	0.6
18	216.3	0.6	0.4	0.4	0.3	0.3	<0.1	<0.1	0.2	0.4
21	219.0	0.5	0.4	0.3	0.2	0.4	<0.1	<0.1	0.1	0.2
24	222.3	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
27	227.1	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.3	0.2
30	232.2	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.3	0.3
33	238.5	0.6	0.5	0.4	0.3	0.4	0.1	<0.1	0.3	0.1
36	245.6	0.7	0.6	0.4	0.3	0.5	0.1	<0.1	0.4	<0.1
39	253.1	0.8	0.7	0.5	0.3	0.6	0.1	<0.1	0.5	<0.1
42	261.9	0.8	0.7	0.3	0.3	0.6	0.2	<0.1	0.3	0.2
45	266.4	0.8	0.7	0.3	0.4	0.5	<0.1	<0.1	<0.1	0.3
48	267.4	1.1	0.8	0.8	0.4	0.7	<0.1	<0.1	0.1	0.8
52	264.8	1.2	0.7	1.0	0.5	0.4	0.2	<0.1	0.4	0.9
56	260.9	0.9	0.7	0.5	0.7	0.3	<0.1	<0.1	0.5	0.1
60	245.6	1.3	0.9	1.0	0.6	0.6	0.1	<0.1	0.9	0.2
64	228.3	2.0	1.3	1.5	0.9	0.9	0.2	<0.1	0.9	1.2
68	212.5	1.9	1.3	1.3	1.0	0.6	0.4	<0.1	0.7	1.1

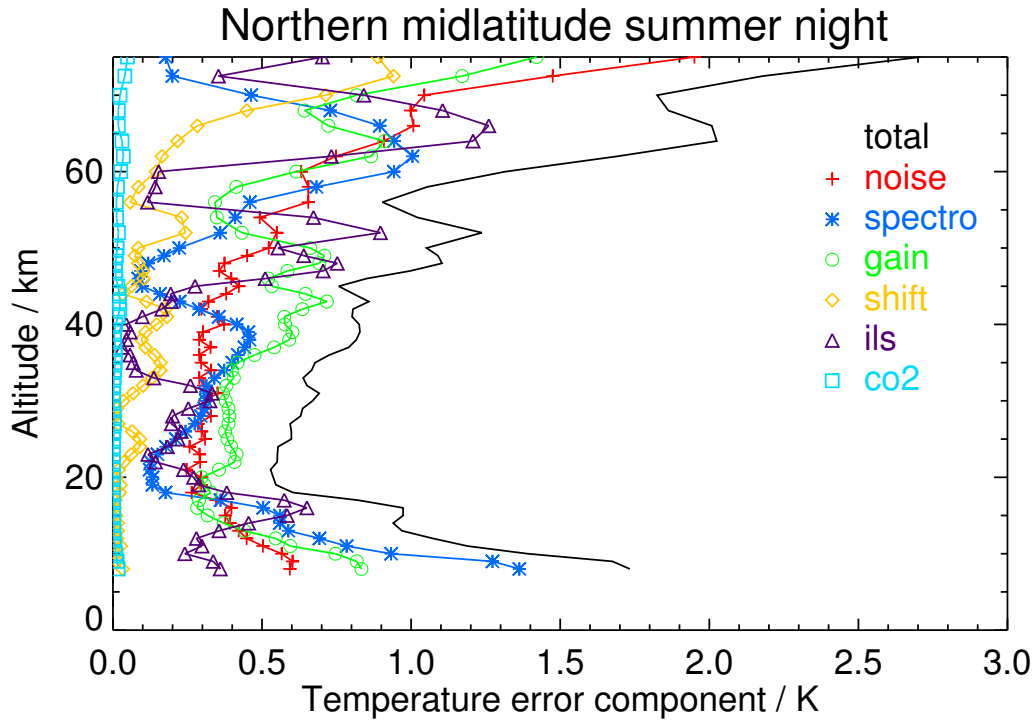

Figure 14. V8H_T_61 Northern midlatitude summer night

Table 16. Temperature error budget for Northern midlatitude autumn day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	250.5	1.8	1.1	1.4	0.5	1.0	<0.1	<0.1	1.4	0.3
9	228.1	1.3	0.8	0.9	0.4	0.6	<0.1	<0.1	0.9	0.3
12	219.6	1.0	0.7	0.7	0.4	0.5	<0.1	<0.1	0.7	0.3
15	214.9	1.0	0.5	0.8	0.4	0.4	<0.1	<0.1	0.6	0.5
18	214.3	0.8	0.5	0.6	0.3	0.3	<0.1	<0.1	0.3	0.5
21	213.9	0.6	0.5	0.4	0.3	0.4	<0.1	<0.1	0.2	0.3
24	215.5	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.2	0.1
27	218.0	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
30	221.6	0.6	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.2
33	226.9	0.6	0.5	0.4	0.3	0.3	0.1	<0.1	0.3	0.2
36	232.6	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.3	<0.1
39	238.2	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.4	<0.1
42	244.9	0.7	0.6	0.3	0.3	0.5	0.1	<0.1	0.3	0.1
45	250.3	0.9	0.7	0.5	0.4	0.5	0.1	<0.1	0.1	0.5
48	253.8	1.0	0.6	0.7	0.4	0.5	0.2	<0.1	<0.1	0.7
52	252.9	0.9	0.6	0.7	0.5	0.2	<0.1	<0.1	0.4	0.6
56	246.6	1.1	0.9	0.6	0.7	0.6	<0.1	<0.1	0.6	0.1
60	236.5	1.2	0.9	0.7	0.7	0.6	<0.1	<0.1	0.7	0.3
64	225.7	1.8	1.1	1.5	0.8	0.7	0.2	<0.1	0.4	1.4
68	219.1	1.8	1.2	1.3	1.1	0.4	0.2	<0.1	0.5	1.2

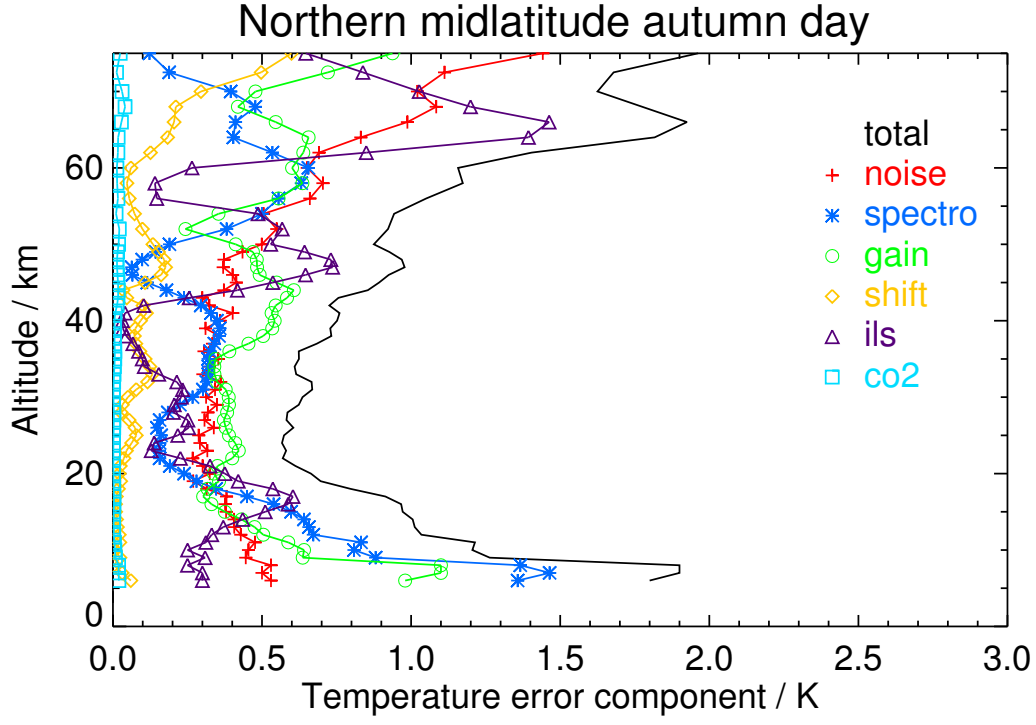

Figure 15. V8H_T_61 Northern midlatitude autumn day

Table 17. Temperature error budget for Northern midlatitude autumn night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	229.4	1.1	0.7	0.8	0.4	0.6	<0.1	<0.1	0.7	0.2
12	219.7	0.9	0.6	0.5	0.4	0.5	<0.1	<0.1	0.5	0.2
15	214.8	0.8	0.5	0.6	0.4	0.4	<0.1	<0.1	0.5	0.4
18	214.3	0.9	0.5	0.8	0.3	0.3	<0.1	<0.1	0.4	0.6
21	213.4	0.6	0.5	0.4	0.3	0.4	<0.1	<0.1	0.2	0.4
24	215.7	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.2	0.1
27	218.2	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
30	221.3	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.2
33	226.5	0.6	0.5	0.4	0.3	0.4	0.1	<0.1	0.3	0.2
36	232.6	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.4	<0.1
39	239.3	0.8	0.6	0.4	0.3	0.5	<0.1	<0.1	0.4	<0.1
42	246.0	0.8	0.6	0.4	0.3	0.5	<0.1	<0.1	0.4	<0.1
45	252.0	0.9	0.7	0.5	0.4	0.5	<0.1	<0.1	0.2	0.5
48	255.1	1.0	0.6	0.7	0.4	0.5	0.2	<0.1	0.1	0.7
52	253.4	0.9	0.6	0.7	0.6	0.3	<0.1	<0.1	0.4	0.6
56	247.0	1.1	0.9	0.6	0.7	0.5	<0.1	<0.1	0.6	0.2
60	237.6	1.2	0.9	0.7	0.7	0.6	<0.1	<0.1	0.7	0.3
64	224.6	1.8	1.1	1.5	0.8	0.7	0.1	<0.1	0.4	1.4
68	218.5	1.8	1.2	1.4	1.1	0.4	0.2	<0.1	0.5	1.3

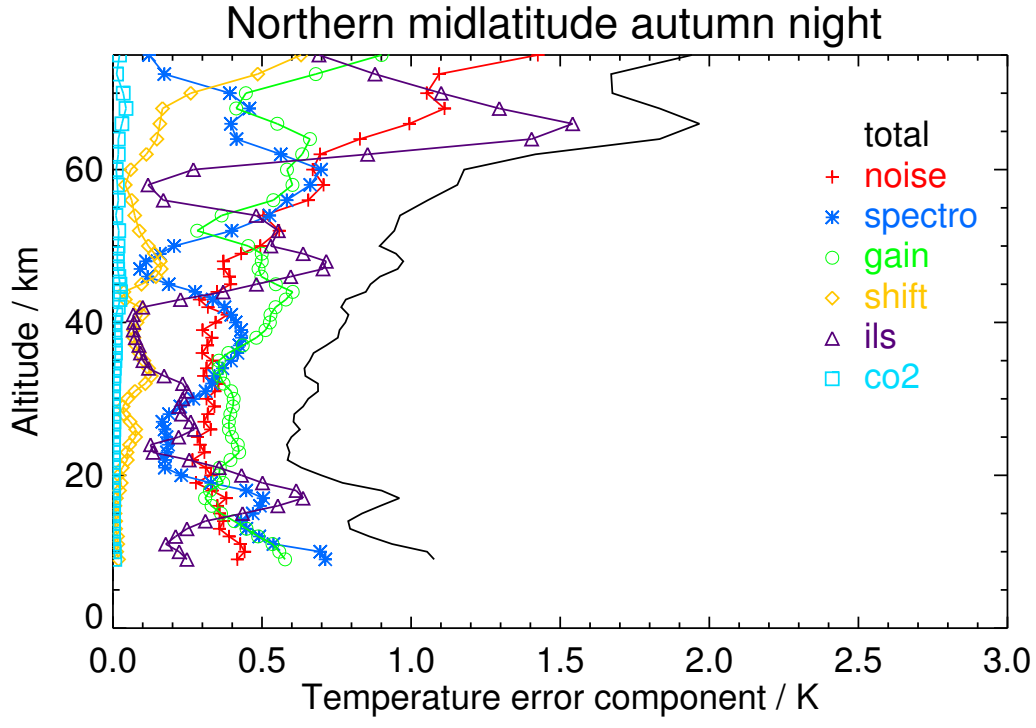

Figure 16. V8H_T_61 Northern midlatitude autumn night

Table 18. Temperature error budget for Tropics day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	245.9	1.8	1.3	1.3	0.5	1.1	<0.1	<0.1	1.2	0.3
12	223.8	2.3	1.0	2.0	0.7	0.7	<0.1	<0.1	1.8	0.8
15	200.5	2.1	0.7	2.0	0.6	0.2	<0.1	<0.1	1.7	1.0
18	193.1	0.7	0.4	0.5	0.4	0.2	<0.1	<0.1	0.4	0.2
21	207.1	0.9	0.3	0.8	0.2	0.2	<0.1	<0.1	0.8	<0.1
24	215.3	0.7	0.4	0.5	0.3	0.3	<0.1	<0.1	0.5	0.1
27	223.4	0.7	0.4	0.5	0.3	0.3	<0.1	<0.1	0.5	0.2
30	230.0	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.4	0.2
33	237.1	0.7	0.5	0.5	0.3	0.4	0.1	<0.1	0.4	0.2
36	244.3	0.7	0.6	0.4	0.3	0.4	0.1	<0.1	0.4	0.1
39	251.3	0.9	0.7	0.5	0.4	0.6	0.1	<0.1	0.5	<0.1
42	260.3	0.8	0.7	0.4	0.4	0.6	<0.1	<0.1	0.3	0.2
45	264.2	0.9	0.6	0.6	0.4	0.5	0.1	<0.1	<0.1	0.6
48	264.3	1.0	0.8	0.6	0.5	0.7	<0.1	<0.1	0.2	0.6
52	261.6	1.2	0.7	1.0	0.5	0.4	0.3	<0.1	0.4	0.9
56	255.1	0.9	0.7	0.5	0.7	0.3	<0.1	<0.1	0.5	0.1
60	240.7	1.4	1.0	1.0	0.7	0.8	0.1	<0.1	0.9	0.5
64	227.4	1.6	1.1	1.1	0.9	0.7	<0.1	<0.1	0.9	0.7
68	215.9	1.7	1.2	1.2	0.9	0.6	0.5	<0.1	0.4	1.1

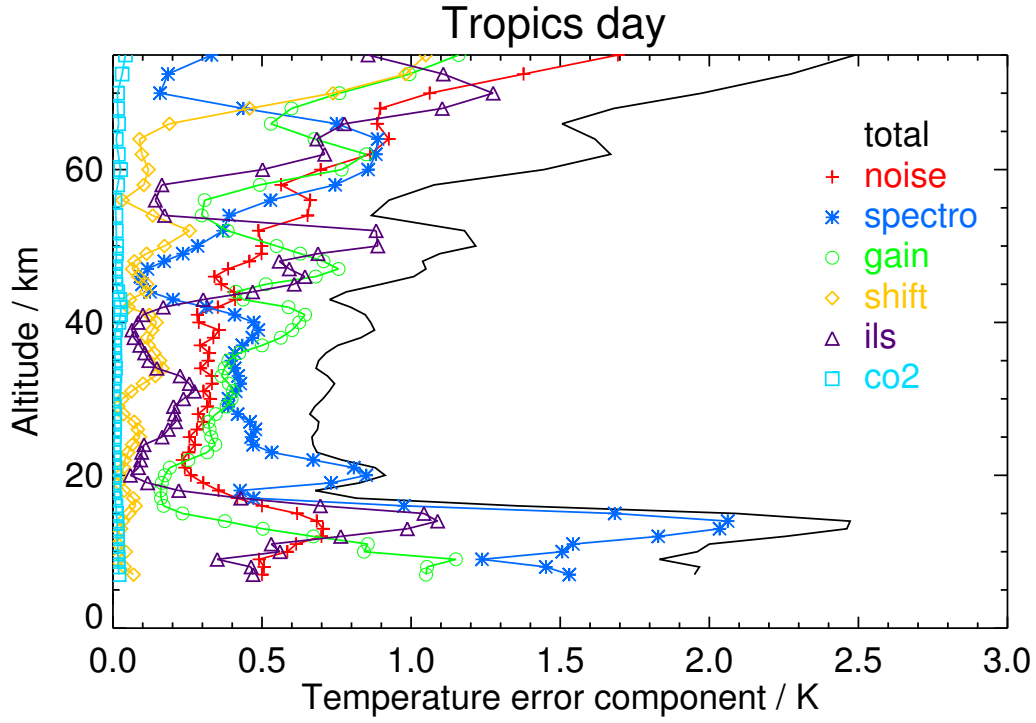

Figure 17. V8H_T_61 Tropics day

Table 19. Temperature error budget for Tropics night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
12	224.4	2.1	1.0	1.9	0.7	0.7	<0.1	<0.1	1.8	0.7
15	199.7	2.1	0.7	1.9	0.6	0.2	<0.1	<0.1	1.7	1.0
18	192.7	0.5	0.4	0.3	0.3	0.1	<0.1	<0.1	0.2	0.2
21	206.2	1.0	0.4	0.9	0.2	0.3	<0.1	<0.1	0.9	<0.1
24	215.3	0.7	0.4	0.5	0.3	0.3	<0.1	<0.1	0.5	0.1
27	224.0	0.7	0.5	0.5	0.3	0.3	<0.1	<0.1	0.5	0.2
30	230.5	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
33	236.7	0.7	0.5	0.4	0.3	0.4	0.1	<0.1	0.4	0.1
36	244.4	0.7	0.6	0.4	0.3	0.5	0.1	<0.1	0.4	<0.1
39	251.0	0.9	0.7	0.4	0.4	0.6	0.1	<0.1	0.4	<0.1
42	259.5	0.9	0.7	0.4	0.3	0.7	0.1	<0.1	0.4	0.1
45	265.1	0.9	0.6	0.6	0.4	0.5	0.1	<0.1	0.1	0.6
48	266.1	1.1	0.8	0.7	0.4	0.7	<0.1	<0.1	0.2	0.7
52	262.5	1.2	0.7	1.0	0.5	0.4	0.2	<0.1	0.4	0.9
56	256.4	1.0	0.8	0.6	0.7	0.4	<0.1	<0.1	0.5	0.2
60	242.0	1.4	1.0	1.0	0.7	0.7	0.1	<0.1	0.9	0.5
64	225.4	1.9	1.3	1.4	1.0	0.8	0.2	<0.1	0.9	1.1
68	212.8	1.7	1.2	1.2	1.0	0.6	0.4	<0.1	0.6	1.0

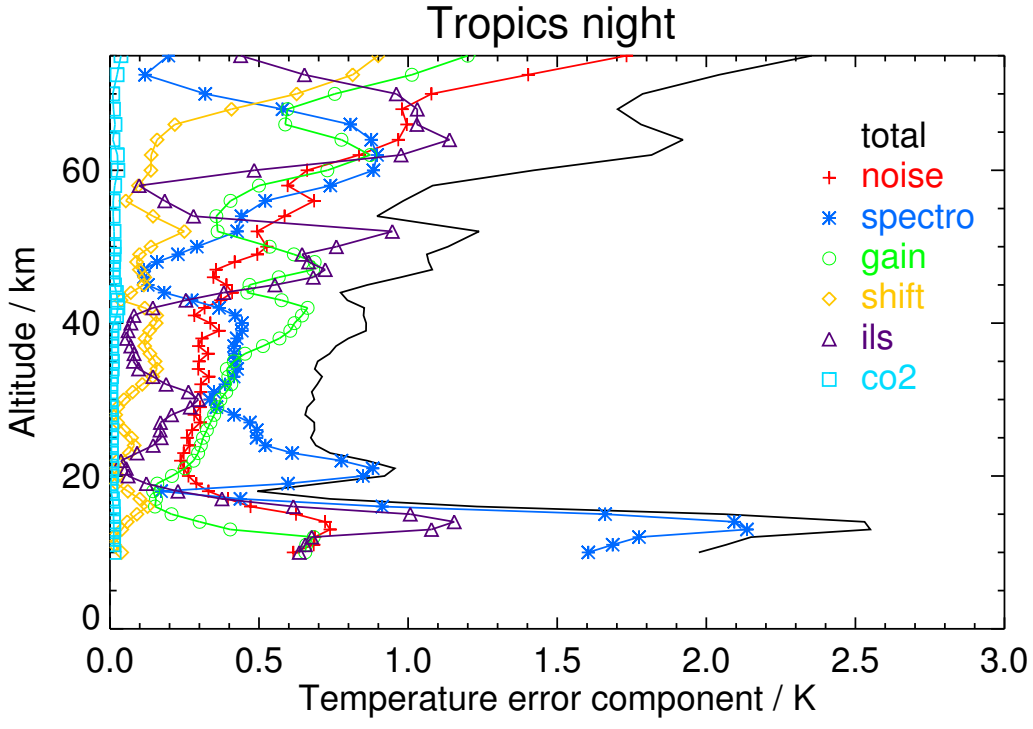

Figure 18. V8H_T_61 Tropics night

Table 20. Temperature error budget for Southern midlatitude winter day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	241.2	2.0	1.3	1.5	0.6	1.1	<0.1	<0.1	1.5	0.2
9	220.7	1.1	0.8	0.7	0.4	0.7	<0.1	<0.1	0.7	0.2
12	215.8	0.7	0.6	0.4	0.4	0.4	<0.1	<0.1	0.3	0.2
15	213.4	1.0	0.5	0.8	0.4	0.4	<0.1	<0.1	0.6	0.5
18	210.6	0.9	0.5	0.7	0.3	0.4	<0.1	<0.1	0.5	0.5
21	208.2	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
24	206.2	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.3	0.2
27	205.0	0.7	0.5	0.4	0.4	0.4	<0.1	<0.1	0.3	0.1
30	208.1	0.8	0.5	0.5	0.4	0.4	<0.1	<0.1	0.5	0.1
33	214.1	0.9	0.5	0.7	0.3	0.3	<0.1	<0.1	0.7	0.1
36	223.0	1.0	0.5	0.8	0.3	0.4	<0.1	<0.1	0.7	0.1
39	232.8	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.5	<0.1
42	240.3	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.4	0.3
45	246.7	1.0	0.6	0.7	0.4	0.5	0.1	<0.1	0.3	0.6
48	251.3	1.0	0.7	0.7	0.4	0.5	0.2	<0.1	0.4	0.6
52	252.4	0.9	0.7	0.5	0.5	0.4	<0.1	<0.1	0.4	0.4
56	251.9	1.0	0.8	0.5	0.7	0.5	<0.1	<0.1	0.5	0.2
60	243.6	1.2	0.9	0.7	0.7	0.5	<0.1	<0.1	0.5	0.5
64	233.9	1.9	1.0	1.5	0.8	0.6	<0.1	<0.1	0.3	1.5
68	227.3	1.7	1.1	1.3	1.0	0.5	0.1	<0.1	0.4	1.2

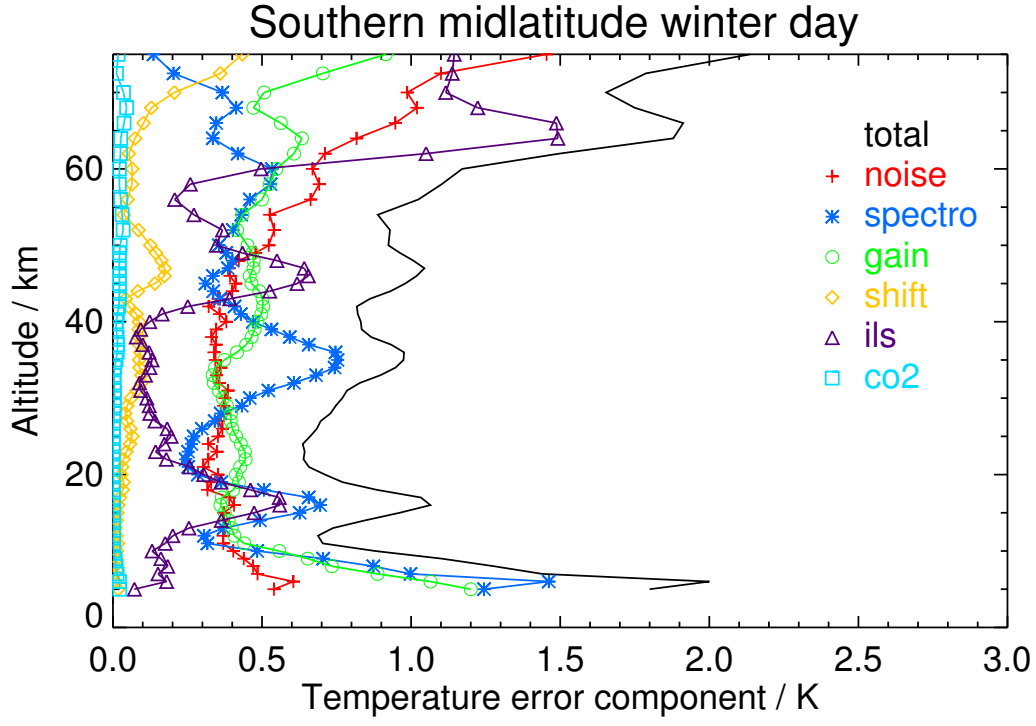

Figure 19. V8H_T_61 Southern midlatitude winter day

Table 21. Temperature error budget for Southern midlatitude winter night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	231.8	1.3	0.9	1.0	0.4	0.7	<0.1	<0.1	1.0	0.2
9	219.9	1.0	0.8	0.7	0.4	0.6	<0.1	<0.1	0.7	0.2
12	216.5	0.7	0.5	0.4	0.4	0.4	<0.1	<0.1	0.3	0.2
15	212.4	0.9	0.5	0.8	0.4	0.3	<0.1	<0.1	0.6	0.5
18	210.5	0.8	0.5	0.6	0.3	0.3	<0.1	<0.1	0.4	0.5
21	208.9	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
24	207.8	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
27	207.7	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.4	0.2
30	211.4	0.8	0.5	0.5	0.4	0.4	<0.1	<0.1	0.5	0.1
33	217.6	0.8	0.5	0.6	0.3	0.3	<0.1	<0.1	0.6	0.1
36	225.5	0.9	0.5	0.7	0.3	0.4	<0.1	<0.1	0.7	0.1
39	234.7	0.9	0.6	0.5	0.3	0.5	<0.1	<0.1	0.5	0.1
42	241.9	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.4	0.2
45	248.8	1.0	0.6	0.7	0.4	0.5	0.1	<0.1	0.3	0.6
48	253.6	0.9	0.6	0.7	0.4	0.4	0.2	<0.1	0.2	0.6
52	253.7	0.9	0.6	0.5	0.5	0.3	<0.1	<0.1	0.4	0.3
56	248.2	1.1	0.9	0.5	0.7	0.6	<0.1	<0.1	0.5	0.3
60	238.8	1.1	0.9	0.6	0.7	0.6	<0.1	<0.1	0.5	0.4
64	234.3	1.7	1.0	1.4	0.8	0.6	<0.1	<0.1	0.3	1.4
68	228.9	1.8	1.1	1.4	1.0	0.5	0.2	<0.1	0.4	1.3

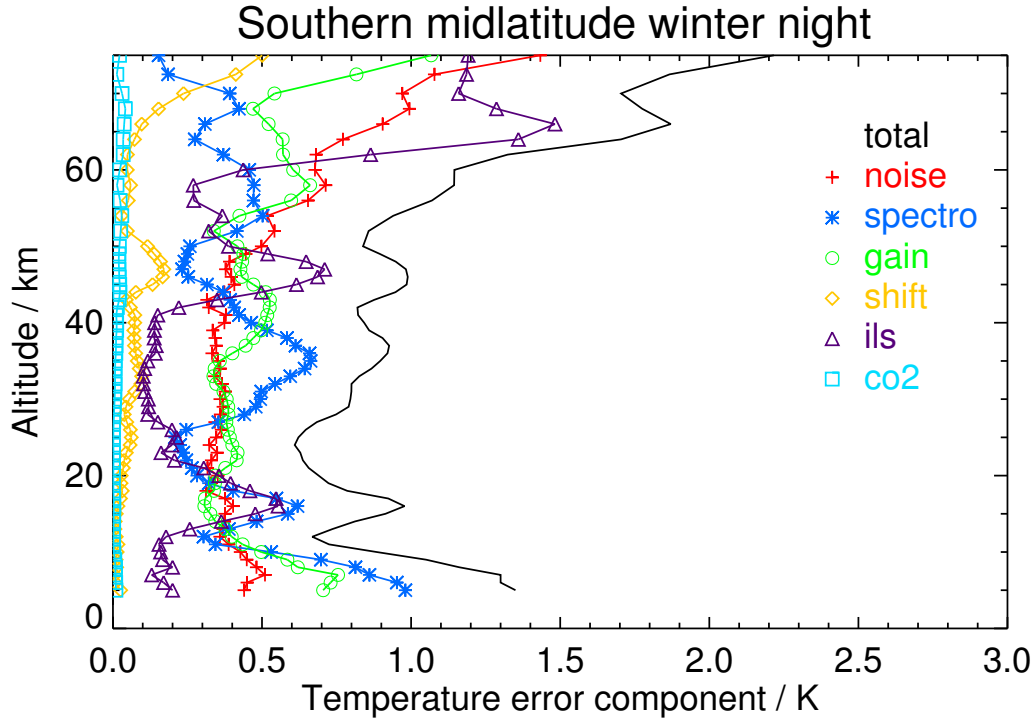

Figure 20. V8H_T_61 Southern midlatitude winter night

Table 22. Temperature error budget for Southern midlatitude spring day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	238.8	1.3	0.9	0.9	0.5	0.8	<0.1	<0.1	0.9	<0.1
9	221.7	1.0	0.7	0.7	0.5	0.5	<0.1	<0.1	0.6	0.2
12	217.8	0.7	0.5	0.4	0.4	0.3	<0.1	<0.1	0.4	0.2
15	218.8	0.7	0.5	0.5	0.3	0.3	<0.1	<0.1	0.3	0.4
18	220.3	0.8	0.5	0.6	0.4	0.3	<0.1	<0.1	0.3	0.6
21	222.0	0.7	0.5	0.4	0.3	0.3	<0.1	<0.1	0.2	0.3
24	224.9	0.7	0.5	0.3	0.3	0.4	<0.1	<0.1	0.3	0.1
27	229.2	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
30	233.8	0.7	0.6	0.4	0.3	0.4	<0.1	<0.1	0.2	0.3
33	237.4	0.7	0.5	0.4	0.4	0.4	0.1	<0.1	0.3	0.3
36	242.5	0.6	0.5	0.3	0.4	0.4	0.1	<0.1	0.3	0.1
39	247.4	0.8	0.7	0.3	0.3	0.6	<0.1	<0.1	0.3	<0.1
42	253.4	0.7	0.7	0.3	0.4	0.5	0.1	<0.1	0.3	0.1
45	257.4	0.9	0.7	0.5	0.4	0.6	<0.1	<0.1	0.2	0.5
48	259.3	1.1	0.7	0.8	0.4	0.5	0.2	<0.1	0.1	0.8
52	258.7	0.9	0.7	0.6	0.6	0.3	0.1	<0.1	0.3	0.5
56	255.1	0.9	0.7	0.6	0.6	0.4	<0.1	<0.1	0.5	0.3
60	242.5	1.2	0.9	0.7	0.6	0.6	<0.1	<0.1	0.7	0.1
64	231.1	1.6	1.1	1.2	0.7	0.7	0.2	<0.1	0.5	1.1
68	221.5	1.9	1.2	1.5	1.0	0.5	0.3	<0.1	0.5	1.4

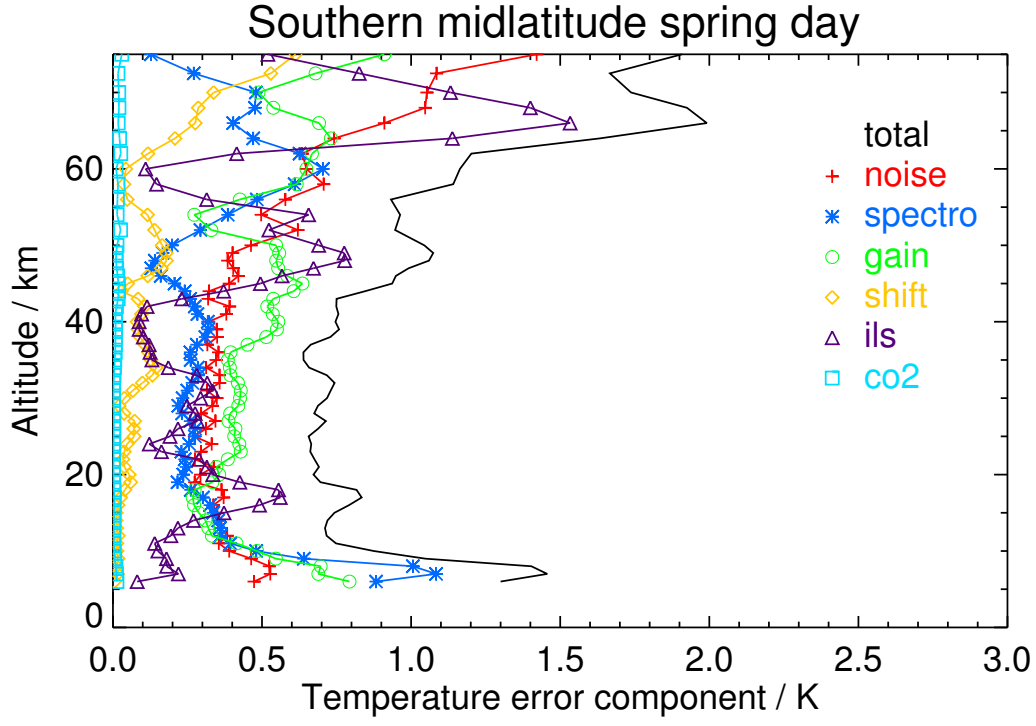

Figure 21. V8H_T_61 Southern midlatitude spring day

Table 23. Temperature error budget for Southern midlatitude spring night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	234.8	1.2	0.9	0.9	0.4	0.7	<0.1	<0.1	0.9	0.1
9	222.1	0.9	0.7	0.5	0.4	0.5	<0.1	<0.1	0.5	0.2
12	219.6	0.7	0.5	0.3	0.4	0.4	<0.1	<0.1	0.2	0.2
15	219.0	0.7	0.5	0.5	0.3	0.3	<0.1	<0.1	0.3	0.4
18	221.5	0.8	0.5	0.6	0.3	0.3	<0.1	<0.1	0.2	0.6
21	222.9	0.6	0.5	0.4	0.3	0.4	<0.1	<0.1	0.2	0.3
24	225.2	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.3	0.1
27	229.9	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
30	233.6	0.7	0.6	0.4	0.3	0.4	<0.1	<0.1	0.2	0.3
33	237.1	0.7	0.6	0.4	0.3	0.4	0.1	<0.1	0.3	0.3
36	242.8	0.7	0.5	0.4	0.3	0.4	0.1	<0.1	0.3	<0.1
39	247.8	0.8	0.7	0.4	0.3	0.6	<0.1	<0.1	0.3	<0.1
42	254.3	0.8	0.7	0.4	0.4	0.6	0.1	<0.1	0.3	<0.1
45	260.6	0.9	0.7	0.5	0.4	0.6	<0.1	<0.1	0.2	0.5
48	261.4	1.1	0.7	0.8	0.4	0.5	0.2	<0.1	0.2	0.8
52	259.4	1.0	0.7	0.6	0.6	0.3	0.1	<0.1	0.3	0.5
56	255.2	1.0	0.7	0.6	0.6	0.4	<0.1	<0.1	0.5	0.3
60	243.3	1.1	0.9	0.7	0.6	0.7	<0.1	<0.1	0.6	0.1
64	233.7	1.6	1.0	1.2	0.7	0.7	0.2	<0.1	0.4	1.1
68	223.9	1.9	1.2	1.5	1.0	0.5	0.3	<0.1	0.5	1.4

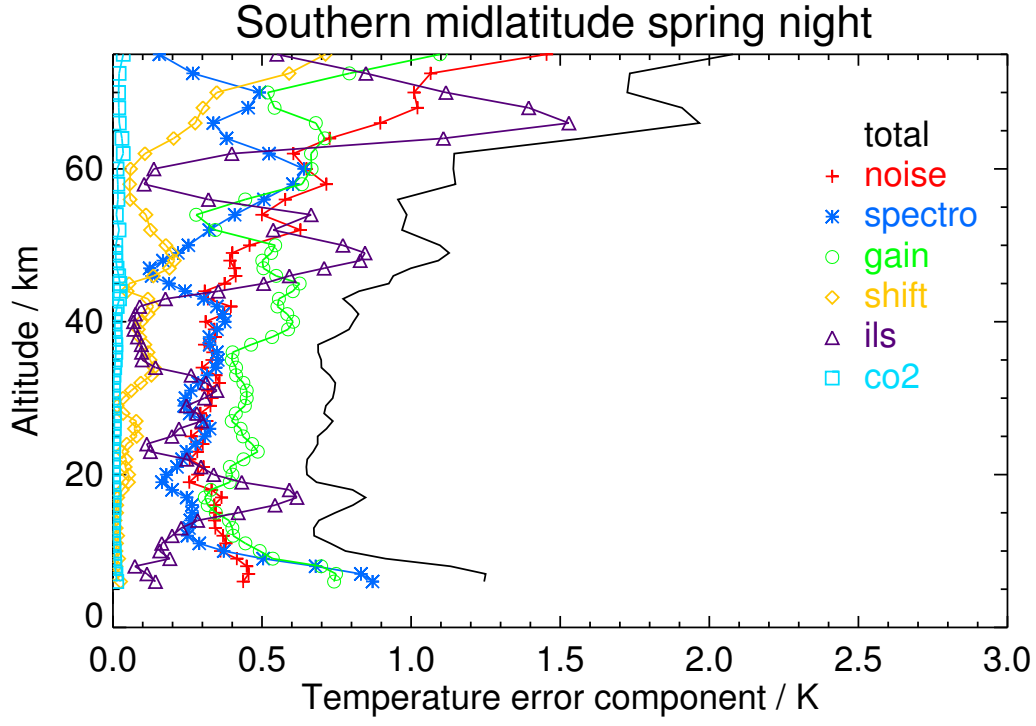

Figure 22. V8H_T_61 Southern midlatitude spring night

Table 24. Temperature error budget for Southern midlatitude summer day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	228.5	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.3	0.2
12	222.8	0.7	0.6	0.4	0.4	0.4	<0.1	<0.1	0.3	0.2
15	219.3	0.9	0.5	0.7	0.4	0.3	<0.1	<0.1	0.5	0.6
18	219.1	0.7	0.4	0.5	0.3	0.3	<0.1	<0.1	0.2	0.5
21	222.1	0.5	0.4	0.3	0.3	0.3	<0.1	<0.1	0.1	0.3
24	225.9	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
27	230.7	0.6	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.2
30	236.0	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.3	0.3
33	242.6	0.6	0.5	0.4	0.3	0.4	0.1	<0.1	0.3	0.2
36	249.7	0.7	0.6	0.4	0.3	0.5	0.1	<0.1	0.4	<0.1
39	257.9	0.8	0.7	0.4	0.3	0.6	0.1	<0.1	0.4	<0.1
42	265.6	0.8	0.7	0.3	0.3	0.6	0.2	<0.1	0.3	0.1
45	270.5	0.8	0.7	0.2	0.4	0.6	<0.1	<0.1	0.1	0.2
48	272.2	1.1	0.7	0.8	0.4	0.6	0.1	<0.1	0.1	0.8
52	269.6	1.2	0.8	0.9	0.6	0.4	0.2	<0.1	0.4	0.8
56	264.2	0.9	0.7	0.5	0.6	0.4	0.1	<0.1	0.5	0.3
60	250.9	1.2	0.8	0.8	0.6	0.6	0.1	<0.1	0.8	0.2
64	234.4	2.0	1.3	1.6	0.8	0.9	0.3	<0.1	0.9	1.3
68	218.2	2.0	1.3	1.6	1.0	0.6	0.5	<0.1	0.8	1.3

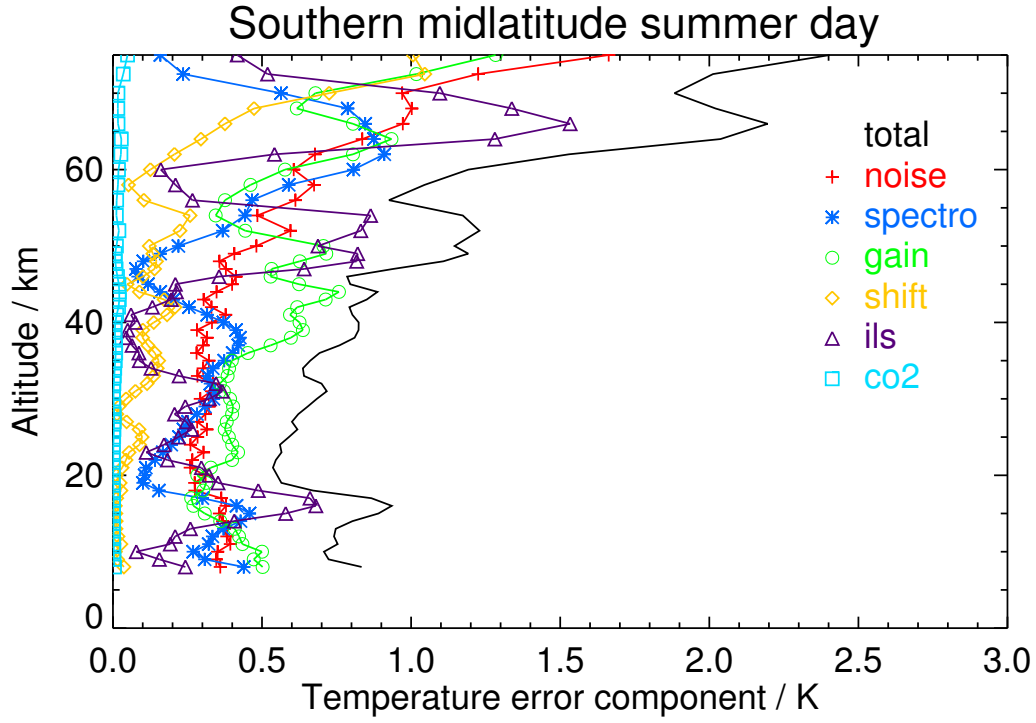

Figure 23. V8H_T_61 Southern midlatitude summer day

Table 25. Temperature error budget for Southern midlatitude summer night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	229.3	1.1	0.8	0.8	0.4	0.6	<0.1	<0.1	0.7	0.3
12	224.1	0.9	0.6	0.5	0.4	0.5	<0.1	<0.1	0.5	0.3
15	219.2	1.0	0.5	0.8	0.4	0.3	<0.1	<0.1	0.5	0.7
18	219.4	0.6	0.4	0.4	0.3	0.4	<0.1	<0.1	0.1	0.4
21	222.3	0.6	0.4	0.3	0.2	0.4	<0.1	<0.1	0.2	0.2
24	226.2	0.6	0.5	0.3	0.2	0.4	<0.1	<0.1	0.3	0.2
27	231.0	0.6	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.2
30	236.2	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.4	0.3
33	242.8	0.7	0.5	0.4	0.3	0.4	0.1	<0.1	0.4	0.2
36	250.8	0.7	0.5	0.5	0.3	0.5	0.1	<0.1	0.5	<0.1
39	260.0	0.8	0.7	0.5	0.3	0.6	<0.1	<0.1	0.4	<0.1
42	267.7	0.8	0.7	0.3	0.3	0.6	0.2	<0.1	0.3	0.1
45	272.5	0.8	0.7	0.3	0.4	0.6	<0.1	<0.1	0.1	0.3
48	274.3	1.1	0.7	0.9	0.4	0.6	0.2	<0.1	0.1	0.9
52	270.6	1.2	0.8	0.8	0.6	0.5	0.2	<0.1	0.3	0.8
56	264.5	0.9	0.7	0.6	0.6	0.4	0.1	<0.1	0.5	0.3
60	251.5	1.2	0.9	0.8	0.6	0.6	0.1	<0.1	0.8	0.1
64	235.3	2.0	1.3	1.5	0.8	0.9	0.3	<0.1	0.8	1.3
68	219.5	1.9	1.2	1.5	1.0	0.6	0.4	<0.1	0.8	1.2

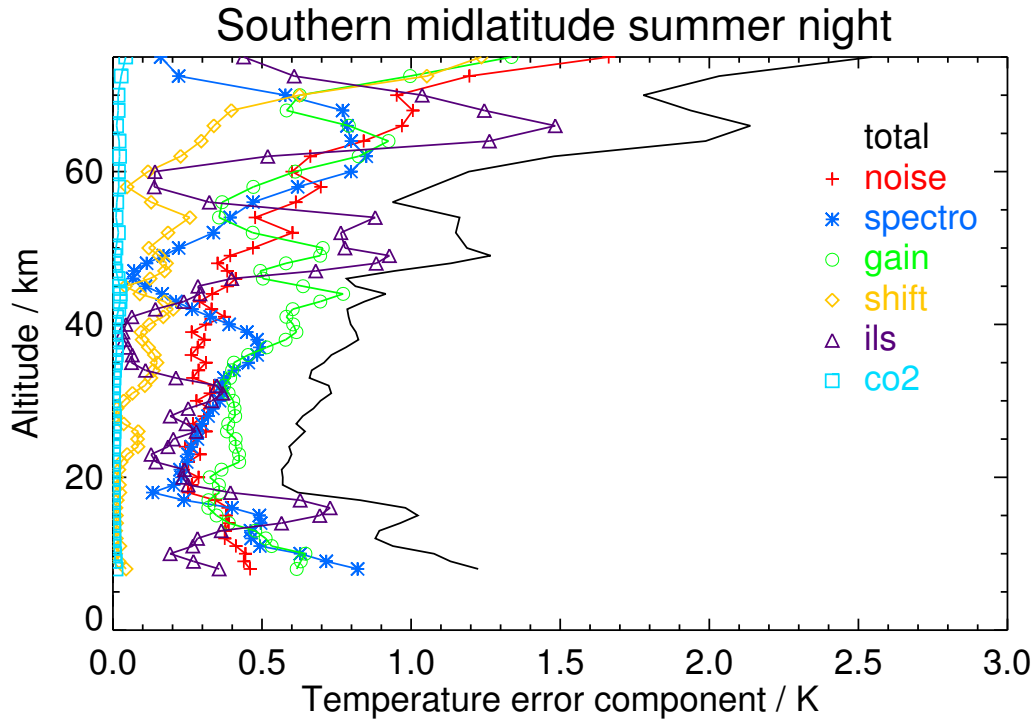

Figure 24. V8H_T_61 Southern midlatitude summer night

Table 26. Temperature error budget for Southern midlatitude autumn day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	226.1	0.8	0.7	0.4	0.4	0.6	<0.1	<0.1	0.4	<0.1
12	223.0	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.3	0.2
15	219.1	1.0	0.5	0.8	0.4	0.4	<0.1	<0.1	0.5	0.6
18	217.5	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.2	0.3
21	216.8	0.6	0.6	0.2	0.3	0.5	<0.1	<0.1	0.1	0.2
24	216.7	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.1	0.2
27	218.3	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.1	0.2
30	220.5	0.6	0.5	0.3	0.4	0.4	<0.1	<0.1	0.2	0.3
33	225.1	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.4	0.1
36	231.6	0.7	0.6	0.4	0.3	0.4	<0.1	<0.1	0.4	<0.1
39	236.4	0.8	0.6	0.4	0.4	0.5	<0.1	<0.1	0.4	<0.1
42	243.0	0.8	0.7	0.4	0.3	0.6	<0.1	<0.1	0.4	0.2
45	248.1	0.8	0.7	0.5	0.4	0.5	0.1	<0.1	0.1	0.4
48	251.1	0.9	0.7	0.6	0.4	0.5	0.1	<0.1	0.1	0.6
52	248.5	1.1	0.6	0.9	0.5	0.3	<0.1	<0.1	0.5	0.7
56	240.1	1.2	1.0	0.6	0.7	0.6	<0.1	<0.1	0.6	0.2
60	234.1	1.0	0.8	0.5	0.6	0.5	<0.1	<0.1	0.4	0.3
64	229.4	1.6	0.9	1.2	0.8	0.4	<0.1	<0.1	0.3	1.2
68	226.3	1.5	1.0	1.1	0.9	0.4	0.1	<0.1	0.4	1.1

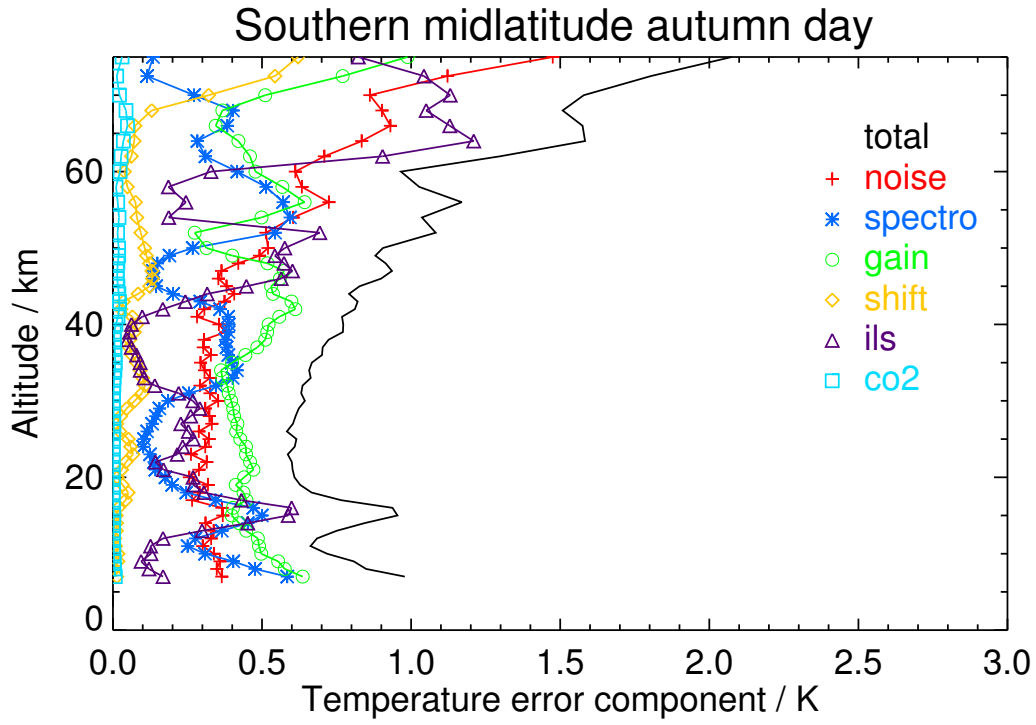

Figure 25. V8H_T_61 Southern midlatitude autumn day

Table 27. Temperature error budget for Southern midlatitude autumn night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	235.5	1.5	0.9	1.1	0.5	0.8	<0.1	<0.1	1.0	0.2
9	226.1	1.0	0.8	0.6	0.4	0.6	<0.1	<0.1	0.5	0.1
12	223.8	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.3	0.2
15	219.0	1.0	0.5	0.8	0.4	0.4	<0.1	<0.1	0.5	0.6
18	217.3	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
21	216.7	0.6	0.5	0.2	0.3	0.5	<0.1	<0.1	0.2	0.2
24	216.8	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.1	0.2
27	218.3	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.1	0.2
30	220.5	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.1	0.2
33	224.6	0.6	0.5	0.3	0.3	0.3	0.1	<0.1	0.3	<0.1
36	231.6	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.4	<0.1
39	237.9	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.3	<0.1
42	244.5	0.8	0.7	0.4	0.3	0.6	<0.1	<0.1	0.3	0.2
45	250.0	0.8	0.7	0.5	0.4	0.5	0.1	<0.1	0.1	0.5
48	253.3	0.9	0.7	0.6	0.4	0.5	0.1	<0.1	0.1	0.6
52	251.7	1.0	0.6	0.8	0.5	0.3	<0.1	<0.1	0.5	0.7
56	245.3	1.0	0.9	0.5	0.7	0.6	<0.1	<0.1	0.5	0.1
60	236.4	1.1	0.8	0.6	0.6	0.6	<0.1	<0.1	0.5	0.3
64	230.2	1.7	1.0	1.4	0.8	0.6	0.1	<0.1	0.4	1.3
68	226.4	1.6	1.1	1.2	0.9	0.5	0.2	<0.1	0.5	1.1

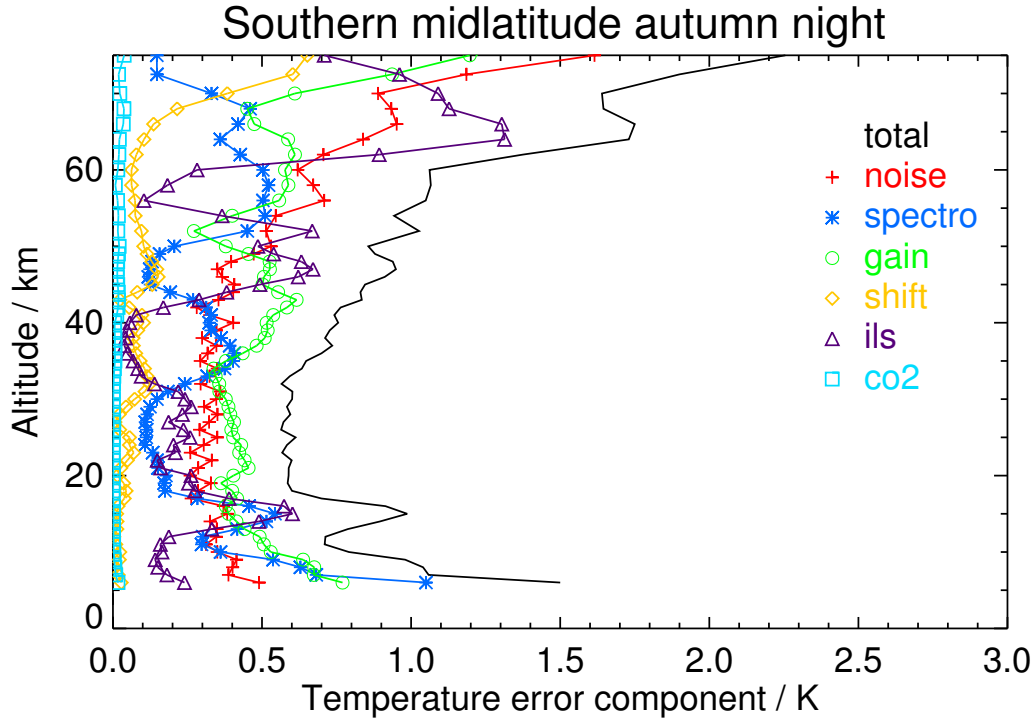

Figure 26. V8H_T_61 Southern midlatitude autumn night

Table 28. Temperature error budget for Southern polar winter day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	206.9	1.8	0.8	1.6	0.7	0.3	<0.1	<0.1	1.6	0.4
12	198.6	1.3	0.6	1.2	0.6	0.3	<0.1	<0.1	1.1	0.3
15	192.4	1.3	0.7	1.1	0.7	0.2	<0.1	<0.1	0.9	0.5
18	188.4	0.8	0.5	0.6	0.4	0.2	<0.1	<0.1	0.5	0.3
21	187.0	0.6	0.5	0.3	0.4	0.3	0.1	<0.1	0.2	0.1
24	190.6	0.8	0.5	0.6	0.4	0.3	0.1	<0.1	0.6	<0.1
27	199.6	1.1	0.5	0.9	0.4	0.3	0.1	<0.1	0.9	0.1
30	212.4	1.2	0.5	1.1	0.4	0.3	<0.1	<0.1	1.1	0.1
33	227.7	1.1	0.5	0.9	0.3	0.3	0.1	<0.1	0.9	0.1
36	240.0	1.0	0.6	0.8	0.3	0.4	0.1	<0.1	0.8	0.2
39	253.6	1.0	0.7	0.7	0.3	0.5	<0.1	<0.1	0.6	0.2
42	264.0	0.9	0.6	0.5	0.3	0.5	<0.1	<0.1	0.3	0.5
45	269.0	1.2	0.6	1.0	0.4	0.4	0.2	<0.1	0.2	0.9
48	270.8	1.0	0.6	0.8	0.4	0.4	0.2	<0.1	0.2	0.8
52	268.4	0.8	0.7	0.4	0.6	0.3	0.1	<0.1	0.4	<0.1
56	261.6	1.3	1.0	0.8	0.7	0.8	0.1	<0.1	0.5	0.6
60	249.5	1.7	1.1	1.3	0.8	0.8	0.2	<0.1	0.6	1.2
64	234.4	2.3	1.1	2.0	0.8	0.7	<0.1	<0.1	0.4	1.9
68	224.0	2.0	1.2	1.5	1.1	0.5	0.1	<0.1	0.4	1.5

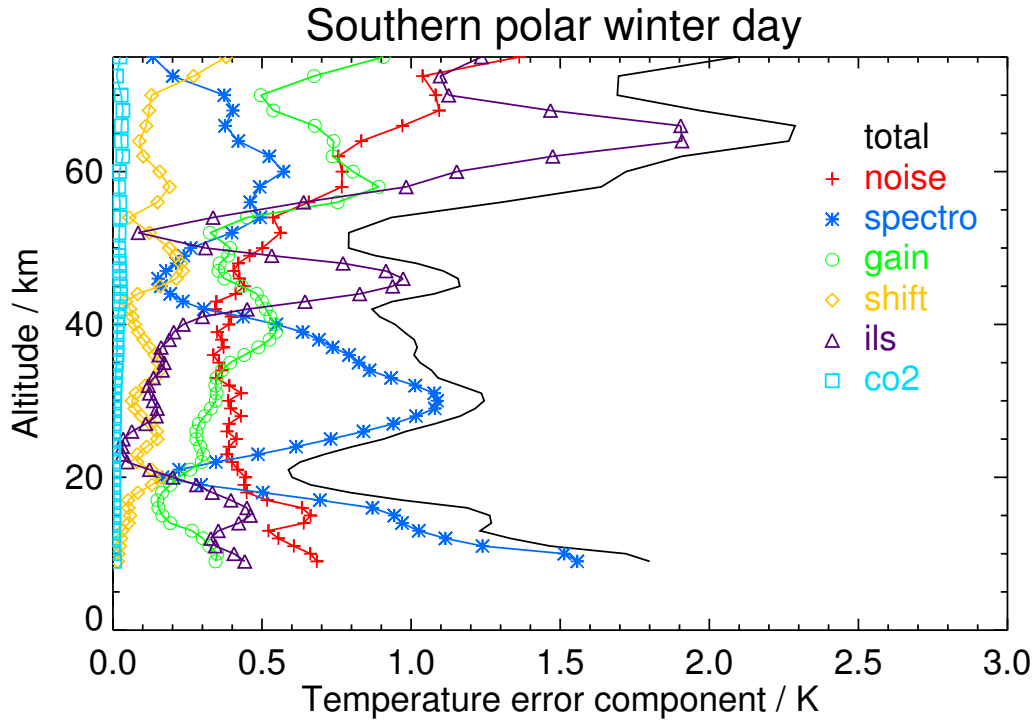

Figure 27. V8H_T_61 Southern polar winter day

Table 29. Temperature error budget for Southern polar winter night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	226.7	1.9	1.0	1.6	0.7	0.7	<0.1	<0.1	1.6	0.3
9	207.4	1.6	0.8	1.3	0.6	0.5	<0.1	<0.1	1.3	0.3
12	199.1	1.3	0.6	1.1	0.6	0.3	<0.1	<0.1	1.0	0.4
15	193.5	1.3	0.6	1.1	0.6	0.2	<0.1	<0.1	1.0	0.5
18	183.9	0.9	0.6	0.7	0.6	0.1	0.1	<0.1	0.6	0.4
21	182.9	0.6	0.5	0.2	0.5	0.2	0.2	<0.1	0.2	0.2
24	186.8	0.8	0.5	0.6	0.4	0.3	0.1	<0.1	0.6	<0.1
27	194.3	1.1	0.5	0.9	0.4	0.3	0.1	<0.1	0.9	0.1
30	207.1	1.1	0.5	1.0	0.4	0.3	<0.1	<0.1	1.0	<0.1
33	220.1	1.0	0.5	0.9	0.4	0.3	0.1	<0.1	0.9	0.1
36	232.8	1.0	0.5	0.8	0.4	0.4	0.1	<0.1	0.8	0.1
39	245.5	1.0	0.6	0.7	0.4	0.5	<0.1	<0.1	0.7	0.2
42	257.2	0.9	0.6	0.6	0.4	0.5	<0.1	<0.1	0.4	0.4
45	265.6	1.0	0.6	0.8	0.4	0.4	0.1	<0.1	0.3	0.7
48	271.4	0.9	0.6	0.7	0.4	0.4	0.2	<0.1	0.2	0.7
52	274.1	0.7	0.7	0.3	0.5	0.4	0.1	<0.1	0.3	0.1
56	268.1	1.3	1.0	0.8	0.6	0.8	0.1	<0.1	0.4	0.7
60	257.4	1.7	1.1	1.3	0.7	0.8	<0.1	<0.1	0.4	1.2
64	244.4	2.3	1.0	2.1	0.8	0.7	<0.1	<0.1	0.3	2.0
68	233.6	2.2	1.2	1.8	1.0	0.6	0.2	<0.1	0.4	1.8

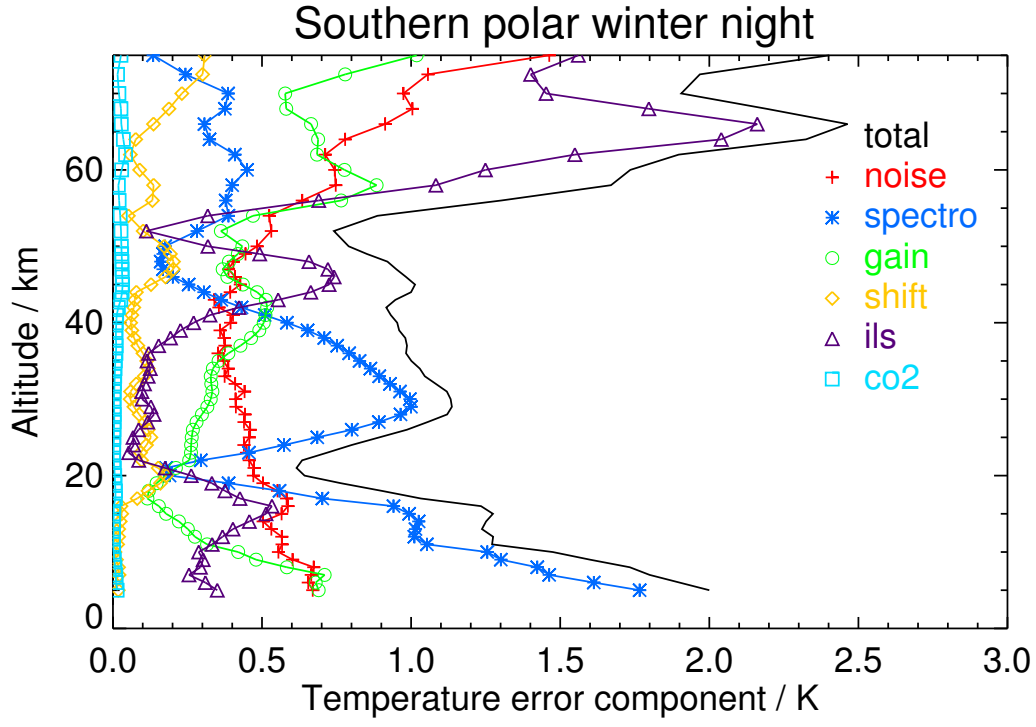

Figure 28. V8H_T_61 Southern polar winter night

Table 30. Temperature error budget for Southern polar spring day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	223.0	1.6	0.8	1.4	0.6	0.4	<0.1	<0.1	1.2	0.7
9	207.0	1.5	0.7	1.3	0.6	0.2	<0.1	<0.1	1.0	0.9
12	198.4	1.3	0.7	1.1	0.6	<0.1	<0.1	<0.1	0.6	1.0
15	196.7	1.2	0.6	1.0	0.5	<0.1	<0.1	<0.1	0.3	0.9
18	203.0	1.0	0.5	0.9	0.5	<0.1	<0.1	<0.1	0.8	0.3
21	220.5	1.4	0.4	1.4	0.3	0.2	<0.1	<0.1	1.3	0.5
24	240.8	1.2	0.5	1.0	0.3	0.4	<0.1	<0.1	1.0	<0.1
27	258.1	1.0	0.5	0.7	0.3	0.4	<0.1	<0.1	0.7	0.2
30	269.8	0.9	0.6	0.6	0.3	0.5	<0.1	<0.1	0.4	0.4
33	273.2	0.9	0.6	0.6	0.4	0.5	0.1	<0.1	0.2	0.6
36	273.9	0.8	0.7	0.2	0.4	0.6	0.2	<0.1	0.1	0.2
39	273.9	0.9	0.8	0.2	0.4	0.7	0.1	<0.1	0.1	0.2
42	275.0	0.8	0.8	0.2	0.4	0.6	0.2	<0.1	0.1	0.2
45	276.0	1.1	0.8	0.7	0.4	0.7	<0.1	<0.1	0.1	0.7
48	274.8	1.2	0.8	0.9	0.4	0.6	0.2	<0.1	0.2	0.8
52	271.0	1.1	0.8	0.7	0.7	0.4	0.2	<0.1	0.3	0.6
56	264.6	1.0	0.7	0.8	0.5	0.4	<0.1	<0.1	0.5	0.6
60	251.0	1.3	1.0	0.8	0.7	0.7	0.1	<0.1	0.8	0.1
64	234.5	1.6	1.1	1.1	0.7	0.8	0.4	<0.1	0.7	0.9
68	221.4	2.1	1.4	1.6	1.0	0.6	0.6	<0.1	0.6	1.5

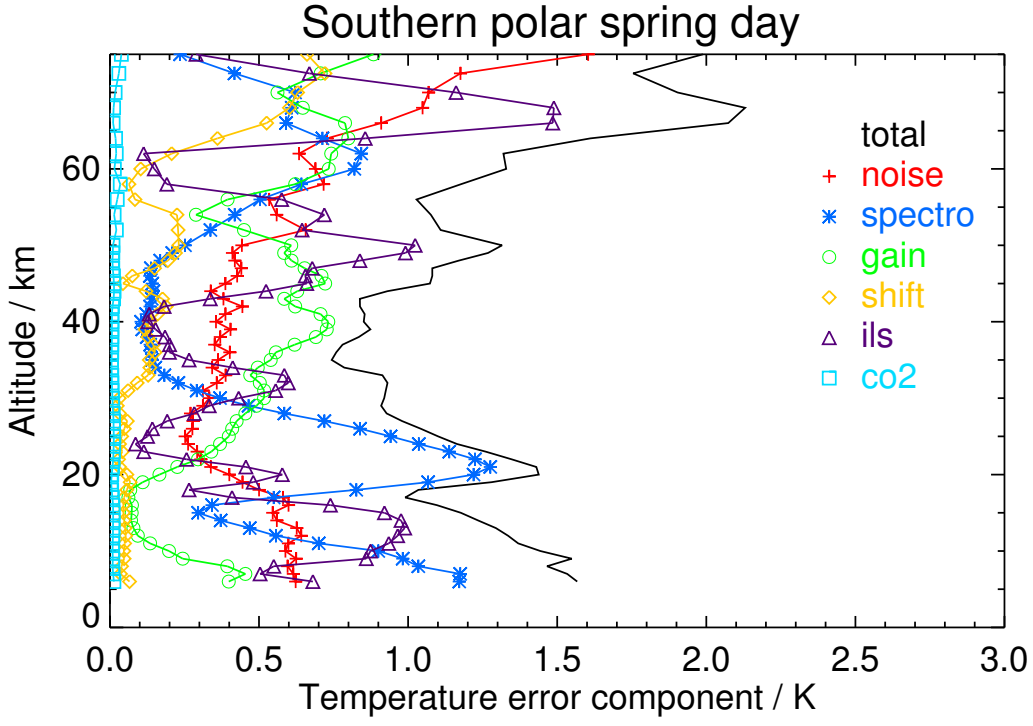

Figure 29. V8H_T_61 Southern polar spring day

Table 31. Temperature error budget for Southern polar spring night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	225.1	1.7	0.8	1.4	0.6	0.6	<0.1	<0.1	1.3	0.7
9	211.0	1.3	0.7	1.0	0.5	0.4	<0.1	<0.1	0.9	0.6
12	206.7	1.1	0.6	0.9	0.5	0.3	<0.1	<0.1	0.7	0.6
15	206.3	1.0	0.5	0.8	0.4	0.2	<0.1	<0.1	0.4	0.7
18	213.8	0.8	0.4	0.6	0.4	0.2	<0.1	<0.1	0.5	0.3
21	227.2	1.0	0.4	0.8	0.3	0.3	<0.1	<0.1	0.8	0.3
24	239.9	0.9	0.5	0.6	0.3	0.4	<0.1	<0.1	0.6	0.1
27	247.9	0.9	0.6	0.5	0.3	0.5	<0.1	<0.1	0.4	0.3
30	255.1	0.9	0.6	0.5	0.3	0.5	<0.1	<0.1	0.4	0.3
33	262.7	0.9	0.6	0.6	0.3	0.4	0.1	<0.1	0.3	0.5
36	267.0	0.7	0.7	0.3	0.4	0.5	0.1	<0.1	0.2	0.2
39	268.7	0.8	0.8	0.2	0.4	0.7	<0.1	<0.1	0.2	0.2
42	269.6	0.8	0.8	0.2	0.4	0.6	0.2	<0.1	0.1	0.1
45	270.5	1.1	0.9	0.6	0.4	0.8	<0.1	<0.1	0.2	0.5
48	273.1	1.1	0.7	0.8	0.4	0.6	0.2	<0.1	0.2	0.8
52	271.5	1.1	0.8	0.7	0.6	0.4	0.2	<0.1	0.3	0.7
56	262.3	1.1	0.7	0.8	0.5	0.5	<0.1	<0.1	0.6	0.5
60	250.1	1.3	1.0	0.8	0.7	0.7	<0.1	<0.1	0.8	0.2
64	234.7	1.6	1.1	1.1	0.7	0.8	0.4	<0.1	0.6	1.0
68	221.2	2.1	1.3	1.6	1.0	0.6	0.5	<0.1	0.5	1.5

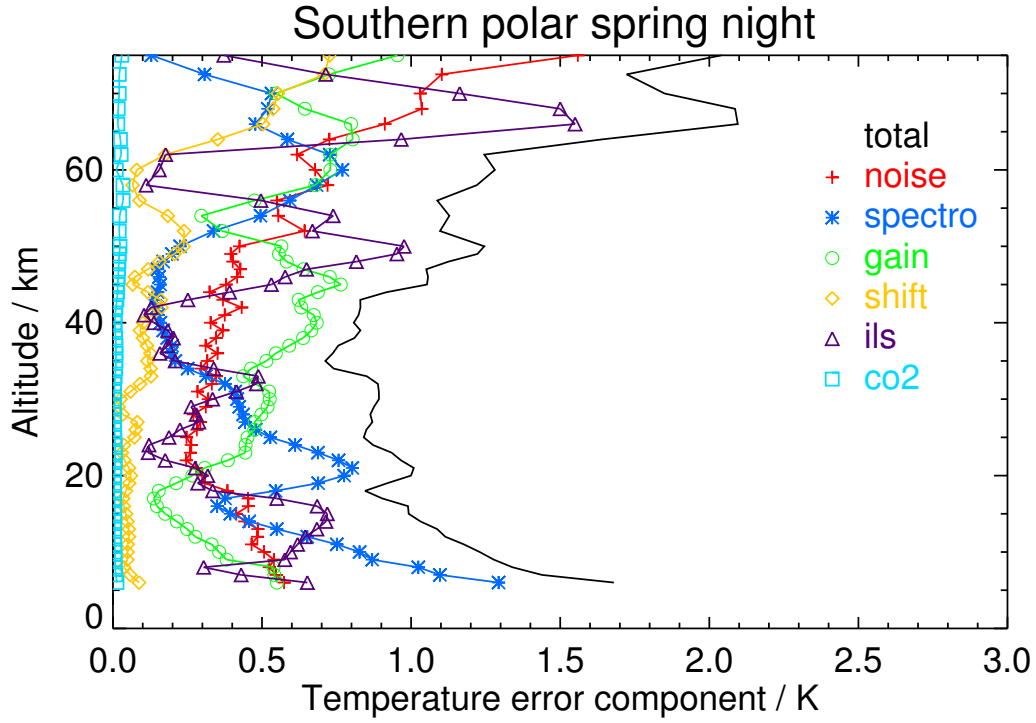

Figure 30. V8H_T_61 Southern polar spring night

Table 32. Temperature error budget for Southern polar summer day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	232.2	1.3	0.9	1.0	0.5	0.8	<0.1	<0.1	1.0	<0.1
9	223.0	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.2	<0.1
12	228.5	0.5	0.5	0.1	0.3	0.4	<0.1	<0.1	<0.1	0.1
15	228.0	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.2	0.5
18	229.3	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.1	0.5
21	230.0	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.1	0.3
24	229.8	0.6	0.6	0.2	0.3	0.5	<0.1	<0.1	<0.1	0.2
27	232.3	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
30	236.9	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
33	243.0	0.6	0.5	0.4	0.3	0.4	0.1	<0.1	0.3	0.2
36	249.8	0.7	0.6	0.4	0.3	0.5	0.1	<0.1	0.4	<0.1
39	257.2	0.8	0.7	0.4	0.3	0.6	0.1	<0.1	0.4	<0.1
42	265.1	0.8	0.8	0.3	0.3	0.6	0.2	<0.1	0.3	<0.1
45	272.0	0.8	0.8	0.3	0.4	0.7	<0.1	<0.1	0.2	0.2
48	276.5	1.1	0.7	0.8	0.4	0.6	0.1	<0.1	<0.1	0.8
52	276.3	1.2	0.8	0.9	0.6	0.5	0.2	<0.1	0.3	0.8
56	272.8	0.9	0.7	0.5	0.6	0.4	0.2	<0.1	0.4	0.4
60	262.1	1.0	0.8	0.6	0.6	0.5	0.1	<0.1	0.6	0.2
64	246.7	1.9	1.3	1.4	0.8	1.0	0.2	<0.1	0.8	1.2
68	230.3	2.1	1.3	1.6	0.9	0.8	0.5	<0.1	0.9	1.4

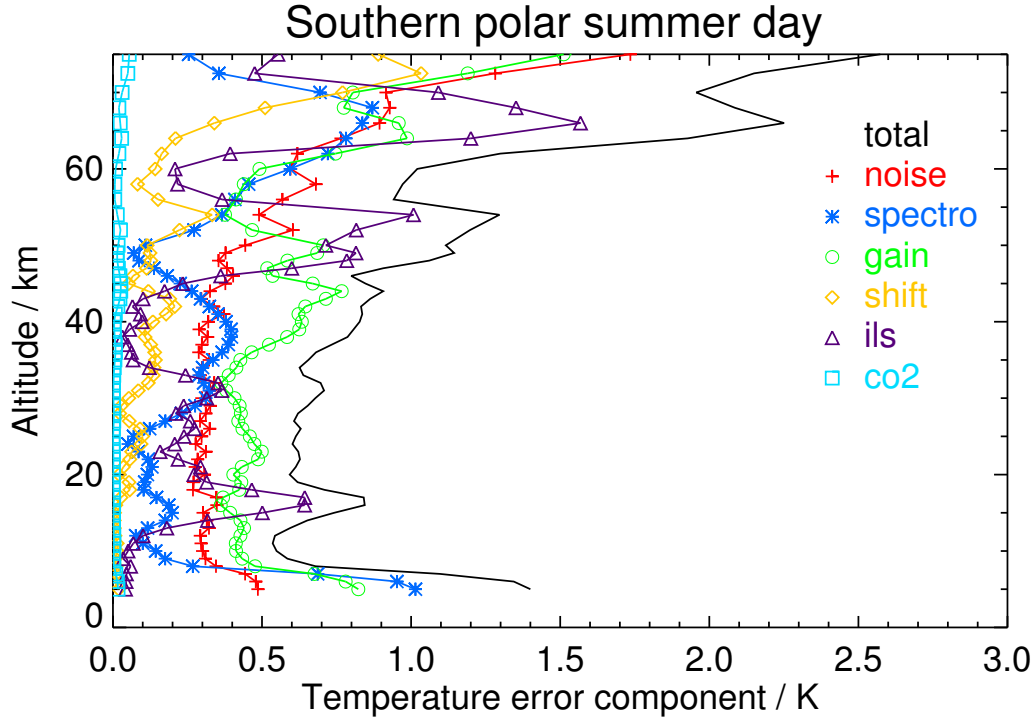

Figure 31. V8H_T_61 Southern polar summer day

Table 33. Temperature error budget for Southern polar summer night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	242.1	1.5	1.0	1.1	0.5	0.9	<0.1	<0.1	1.0	0.1
9	221.8	0.6	0.6	0.2	0.3	0.5	<0.1	<0.1	0.2	<0.1
12	227.7	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	<0.1	0.1
15	226.4	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.3	0.5
18	226.7	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.1	0.4
21	227.2	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	<0.1	0.3
24	227.0	0.6	0.6	0.2	0.3	0.5	<0.1	<0.1	<0.1	0.2
27	228.9	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.1	0.3
30	232.8	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
33	239.2	0.6	0.5	0.4	0.3	0.4	0.1	<0.1	0.3	0.2
36	246.4	0.7	0.5	0.4	0.3	0.4	0.1	<0.1	0.4	<0.1
39	253.6	0.8	0.7	0.4	0.3	0.6	0.1	<0.1	0.4	<0.1
42	261.3	0.8	0.7	0.3	0.3	0.6	0.2	<0.1	0.3	<0.1
45	267.2	0.8	0.7	0.4	0.4	0.6	<0.1	<0.1	0.2	0.4
48	270.6	1.1	0.7	0.8	0.3	0.6	0.2	<0.1	<0.1	0.8
52	269.3	1.1	0.8	0.8	0.6	0.4	0.2	<0.1	0.3	0.8
56	265.9	0.9	0.7	0.5	0.6	0.4	<0.1	<0.1	0.4	0.2
60	254.4	1.1	0.8	0.7	0.6	0.6	<0.1	<0.1	0.7	0.1
64	240.6	2.0	1.3	1.6	0.8	0.9	0.3	<0.1	0.7	1.4
68	225.8	2.0	1.3	1.6	0.9	0.7	0.6	<0.1	0.7	1.4

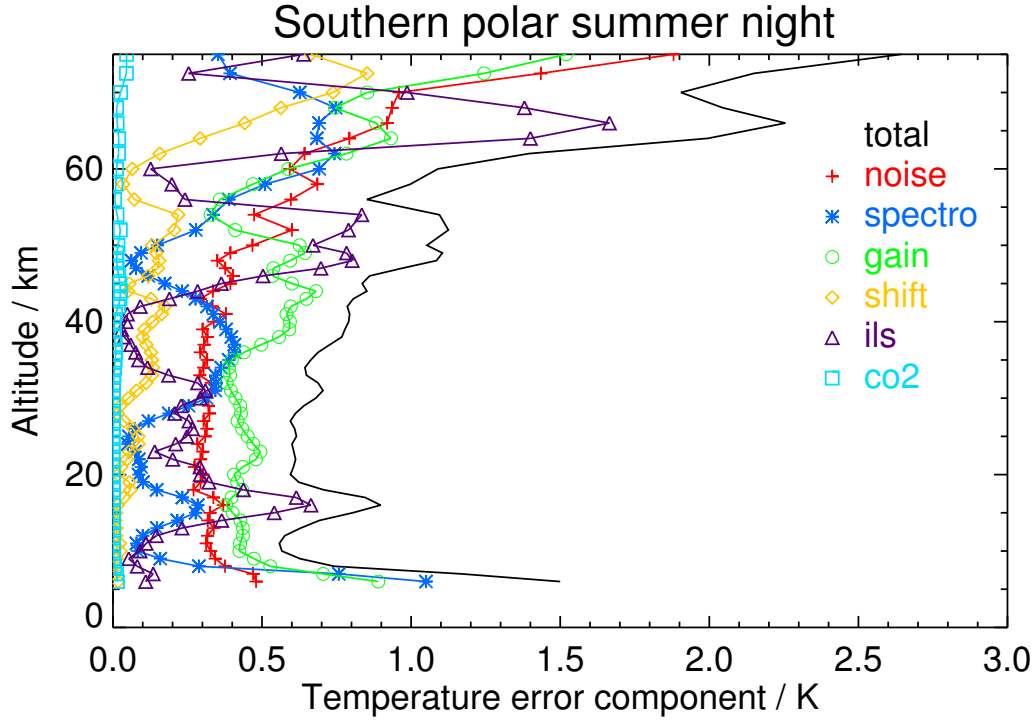

Figure 32. V8H_T_61 Southern polar summer night

Table 34. Temperature error budget for Southern polar autumn day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	219.5	0.6	0.6	0.2	0.3	0.5	<0.1	<0.1	0.2	<0.1
12	221.0	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
15	217.0	1.1	0.6	0.9	0.4	0.4	<0.1	<0.1	0.7	0.6
18	213.3	0.8	0.6	0.6	0.3	0.5	<0.1	<0.1	0.5	0.4
21	210.3	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.3	0.2
24	208.2	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
27	208.8	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.1	0.2
30	210.7	0.6	0.5	0.3	0.4	0.4	<0.1	<0.1	0.2	0.2
33	215.5	0.6	0.5	0.3	0.3	0.3	<0.1	<0.1	0.3	<0.1
36	220.4	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.4	<0.1
39	227.3	0.9	0.6	0.6	0.4	0.5	<0.1	<0.1	0.6	<0.1
42	236.3	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.5	0.2
45	243.9	0.9	0.6	0.6	0.4	0.5	0.1	<0.1	0.3	0.6
48	250.3	0.8	0.7	0.5	0.4	0.5	0.1	<0.1	0.2	0.4
52	253.4	0.8	0.6	0.5	0.5	0.3	0.1	<0.1	0.3	0.5
56	255.6	0.9	0.8	0.3	0.7	0.4	<0.1	<0.1	0.3	0.1
60	246.5	1.1	0.8	0.7	0.6	0.5	<0.1	<0.1	0.5	0.5
64	240.4	1.9	1.0	1.6	0.8	0.6	<0.1	<0.1	0.3	1.6
68	232.1	1.7	1.1	1.3	1.0	0.5	0.1	<0.1	0.5	1.2

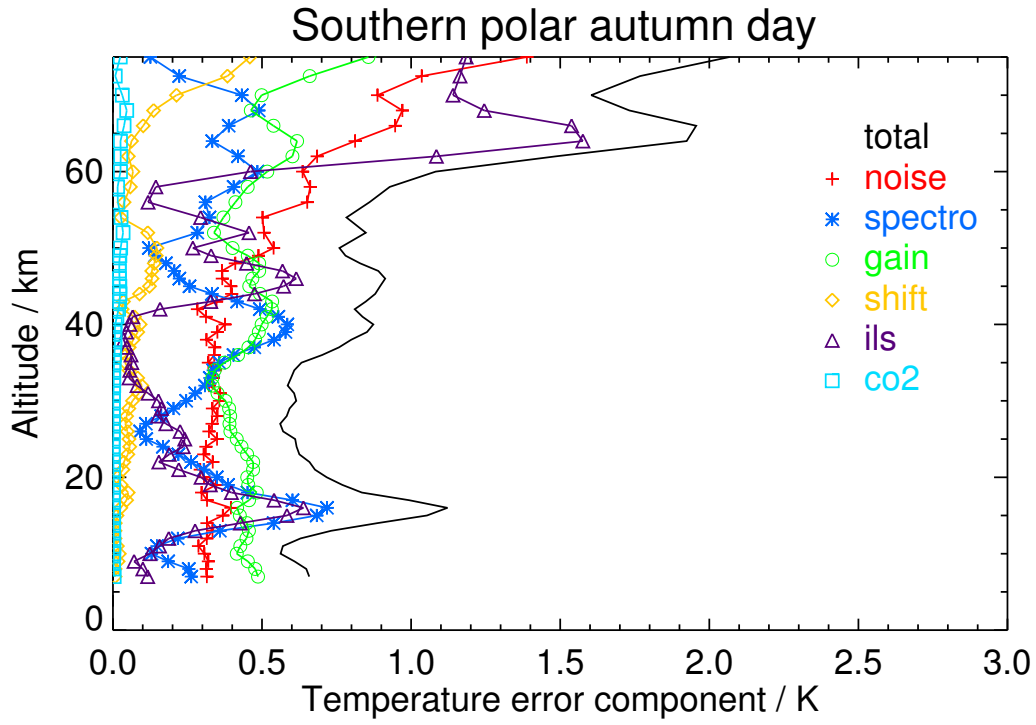

Figure 33. V8H_T_61 Southern polar autumn day

Table 35. Temperature error budget for Southern polar autumn night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	226.7	1.0	0.8	0.7	0.4	0.6	<0.1	<0.1	0.7	0.1
9	220.5	0.6	0.6	0.2	0.3	0.4	<0.1	<0.1	0.2	<0.1
12	221.8	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.3	0.2
15	217.2	1.0	0.6	0.9	0.4	0.4	<0.1	<0.1	0.7	0.6
18	213.8	0.8	0.6	0.6	0.3	0.5	<0.1	<0.1	0.5	0.4
21	210.2	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.4	0.2
24	207.8	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
27	207.5	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.1	0.2
30	209.0	0.6	0.5	0.2	0.4	0.4	<0.1	<0.1	0.2	0.1
33	213.1	0.6	0.5	0.3	0.3	0.3	<0.1	<0.1	0.3	<0.1
36	218.4	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.4	<0.1
39	225.1	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.4	<0.1
42	232.3	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.5	0.2
45	240.5	0.9	0.6	0.7	0.4	0.5	<0.1	<0.1	0.4	0.6
48	249.5	0.8	0.6	0.5	0.4	0.5	0.1	<0.1	0.3	0.4
52	256.0	0.8	0.6	0.4	0.5	0.3	0.1	<0.1	0.2	0.4
56	257.4	0.9	0.8	0.3	0.6	0.5	<0.1	<0.1	0.3	0.2
60	251.1	1.1	0.9	0.7	0.6	0.6	<0.1	<0.1	0.5	0.6
64	241.0	2.0	1.0	1.7	0.8	0.7	<0.1	<0.1	0.3	1.7
68	232.7	1.7	1.1	1.3	1.0	0.5	<0.1	<0.1	0.5	1.2

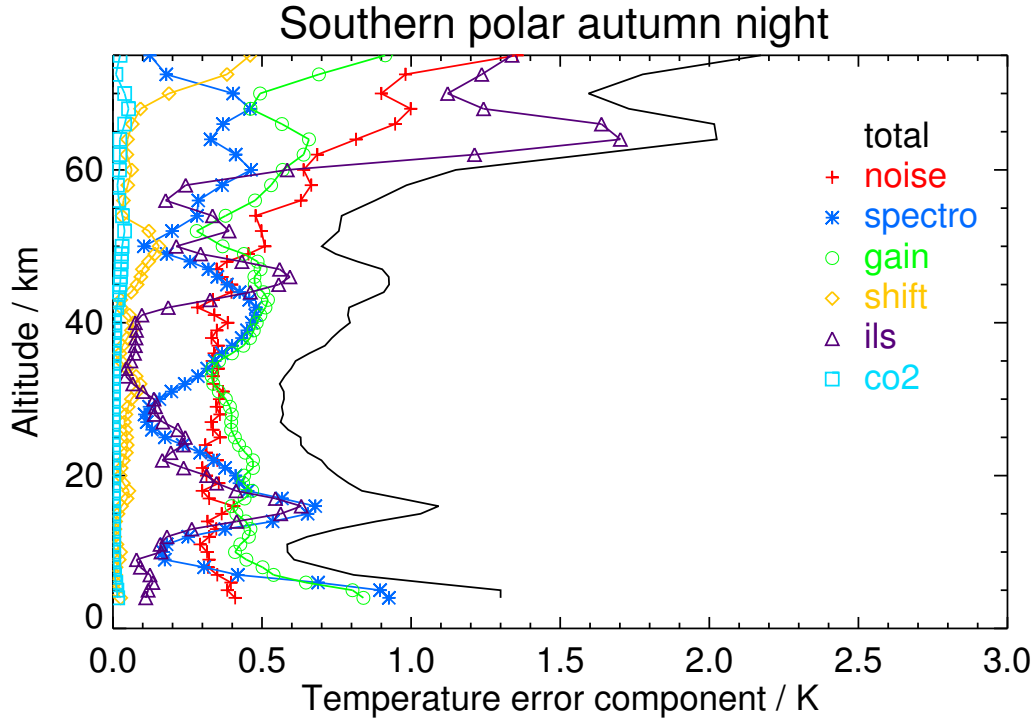

Figure 34. V8H_T_61 Southern polar autumn night

Table 36. Temperature error budget for Northern polar winter day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	216.4	0.8	0.6	0.5	0.4	0.4	<0.1	<0.1	0.3	0.4
12	217.9	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.2	0.4
15	219.8	0.9	0.5	0.8	0.3	0.3	<0.1	<0.1	0.2	0.7
18	224.0	0.7	0.4	0.5	0.3	0.4	<0.1	<0.1	0.3	0.4
21	228.2	0.7	0.5	0.5	0.2	0.4	<0.1	<0.1	0.4	0.3
24	231.8	0.7	0.5	0.3	0.2	0.5	<0.1	<0.1	0.3	0.1
27	235.9	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.2	0.3
30	237.2	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.1	0.4
33	236.2	0.9	0.6	0.6	0.3	0.5	<0.1	<0.1	0.2	0.6
36	236.3	0.8	0.5	0.5	0.3	0.5	0.1	<0.1	0.1	0.5
39	235.2	0.7	0.6	0.3	0.3	0.6	<0.1	<0.1	0.2	0.2
42	232.4	0.7	0.6	0.2	0.3	0.6	<0.1	<0.1	0.2	<0.1
45	232.1	0.7	0.6	0.3	0.3	0.6	<0.1	<0.1	0.2	0.2
48	234.1	0.7	0.6	0.4	0.4	0.5	<0.1	<0.1	0.2	0.3
52	237.3	0.9	0.6	0.6	0.5	0.4	<0.1	<0.1	0.2	0.6
56	233.9	1.1	0.7	0.9	0.6	0.5	<0.1	<0.1	0.5	0.7
60	228.2	1.3	0.9	0.9	0.7	0.5	<0.1	<0.1	0.6	0.7
64	218.8	1.4	1.0	0.9	0.9	0.4	<0.1	<0.1	0.7	0.6
68	212.4	1.5	1.3	0.7	1.3	0.3	0.1	0.1	0.5	0.5

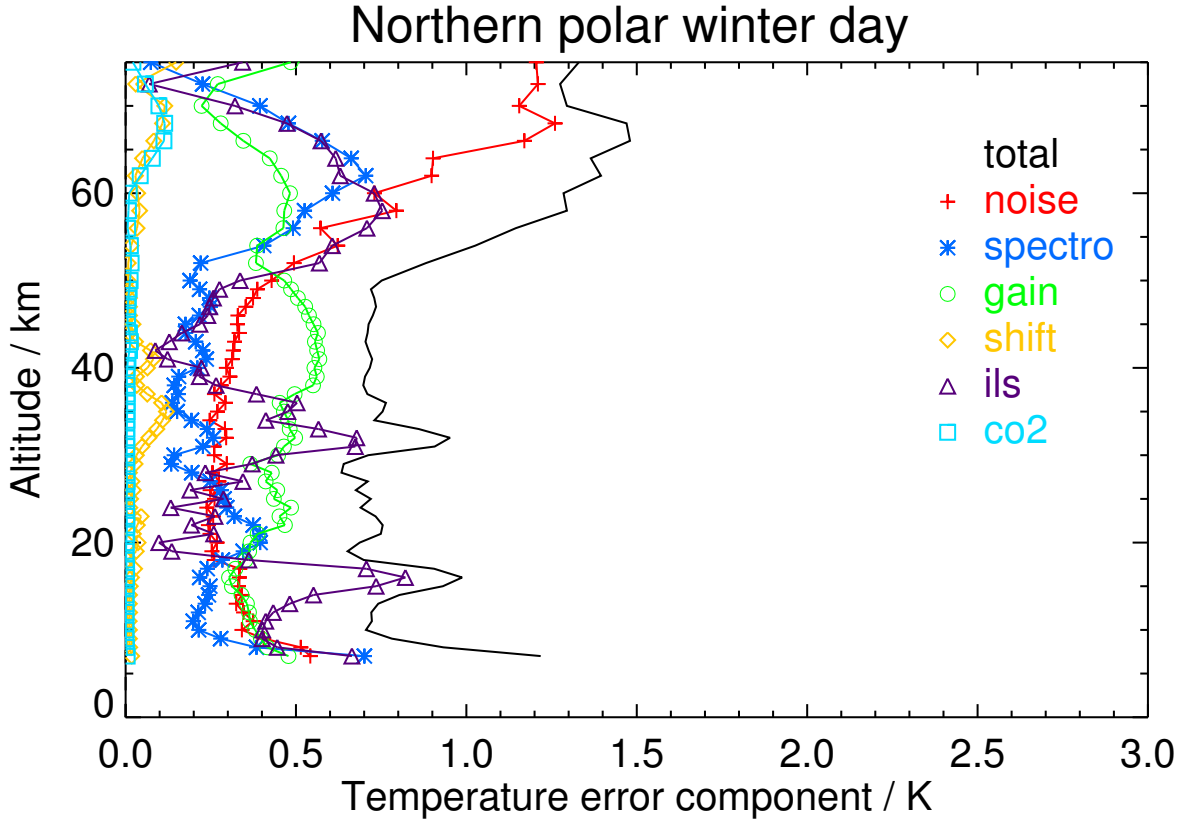

Figure 35. V8R_T_261 Northern polar winter day

Table 37. Temperature error budget for Northern polar winter night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	229.5	1.7	0.9	1.5	0.6	0.7	<0.1	<0.1	1.2	0.8
9	217.4	0.7	0.6	0.4	0.4	0.4	<0.1	<0.1	0.3	0.3
12	219.7	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.3	0.3
15	221.0	1.0	0.5	0.8	0.3	0.3	<0.1	<0.1	0.3	0.8
18	221.5	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.3	0.4
21	220.7	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.2	0.3
24	220.5	0.6	0.5	0.2	0.3	0.5	<0.1	<0.1	0.1	0.2
27	221.8	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
30	224.4	0.8	0.5	0.5	0.3	0.4	<0.1	<0.1	0.3	0.4
33	227.9	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.3	0.5
36	231.8	0.8	0.5	0.5	0.3	0.4	<0.1	<0.1	0.3	0.4
39	234.4	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.3	0.2
42	235.6	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.3	0.2
45	235.2	0.8	0.6	0.4	0.3	0.5	<0.1	<0.1	0.3	0.3
48	234.0	0.8	0.6	0.4	0.4	0.5	<0.1	<0.1	0.3	0.3
52	234.2	0.9	0.7	0.6	0.5	0.4	<0.1	<0.1	0.2	0.5
56	232.6	1.1	0.7	0.8	0.6	0.4	<0.1	<0.1	0.4	0.7
60	228.4	1.2	0.9	0.8	0.8	0.4	<0.1	<0.1	0.5	0.7
64	221.7	1.3	1.0	0.8	0.9	0.4	<0.1	<0.1	0.6	0.6
68	213.9	1.5	1.3	0.7	1.2	0.4	<0.1	0.1	0.5	0.4

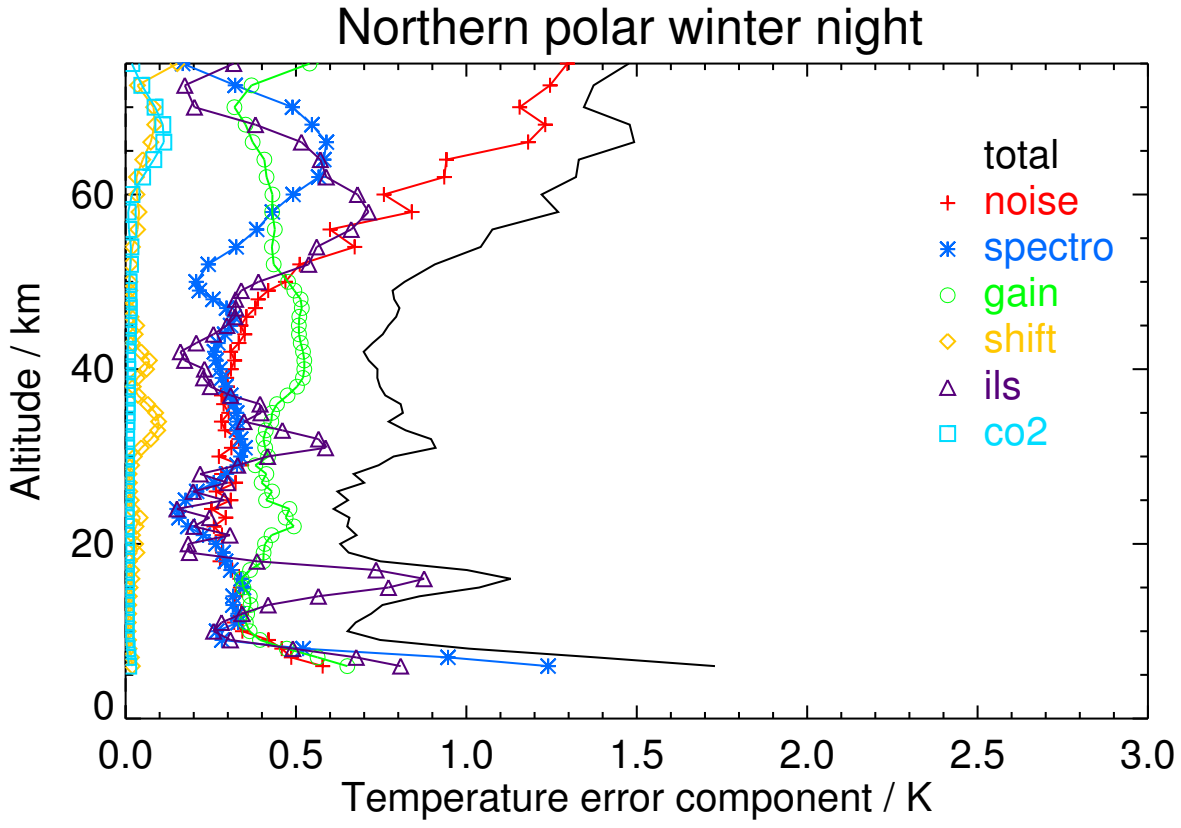

Figure 36. V8R_T_261 Northern polar winter night

Table 38. Temperature error budget for Northern polar spring day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	219.2	0.7	0.6	0.3	0.4	0.4	<0.1	<0.1	0.1	0.2
12	220.6	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.3	0.5
15	218.8	1.1	0.5	0.9	0.4	0.4	<0.1	<0.1	0.4	0.8
18	217.4	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
21	216.4	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.1	0.2
24	215.4	0.5	0.5	0.2	0.3	0.4	<0.1	<0.1	0.1	0.1
27	215.0	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.1	0.3
30	217.0	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.4	0.5
33	224.6	0.9	0.5	0.8	0.3	0.3	<0.1	<0.1	0.7	0.4
36	235.4	0.9	0.5	0.7	0.3	0.4	<0.1	<0.1	0.7	0.2
39	247.1	0.9	0.6	0.6	0.3	0.5	<0.1	<0.1	0.6	0.1
42	257.1	0.8	0.6	0.4	0.3	0.6	<0.1	<0.1	0.4	<0.1
45	265.0	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.2	0.3
48	269.1	0.7	0.6	0.4	0.4	0.5	<0.1	<0.1	0.1	0.3
52	268.9	1.0	0.6	0.7	0.5	0.4	<0.1	<0.1	0.3	0.7
56	263.7	1.2	0.7	0.9	0.5	0.5	<0.1	<0.1	0.4	0.8
60	253.7	1.2	0.8	0.9	0.6	0.6	<0.1	<0.1	0.6	0.7
64	241.9	1.3	0.9	0.9	0.7	0.6	<0.1	<0.1	0.6	0.7
68	228.7	1.4	1.0	1.0	0.9	0.4	<0.1	0.1	0.6	0.8

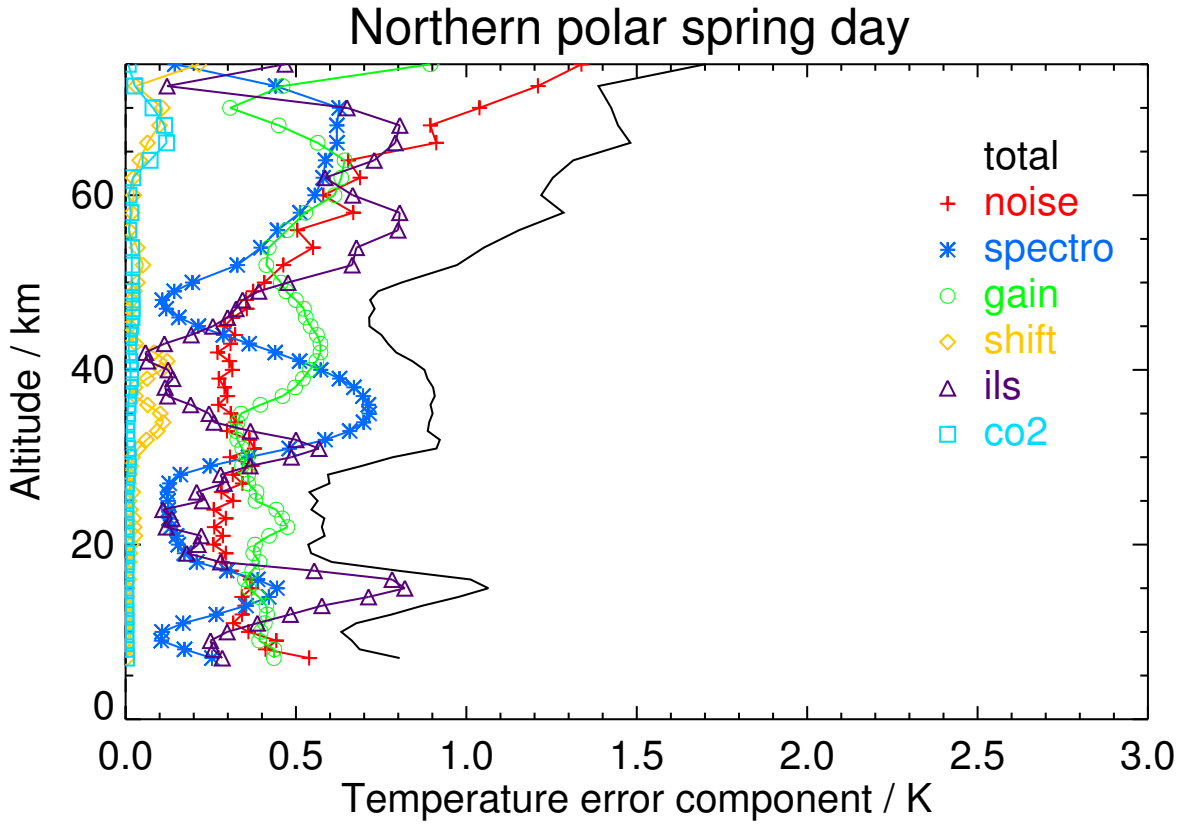

Figure 37. V8R_T_261 Northern polar spring day

Table 39. Temperature error budget for Northern polar spring night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	219.6	0.7	0.6	0.3	0.5	0.4	<0.1	<0.1	0.1	0.2
12	223.3	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.2	0.4
15	221.7	1.1	0.5	1.0	0.4	0.4	<0.1	<0.1	0.4	0.8
18	219.4	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.3	0.4
21	216.7	0.6	0.5	0.4	0.3	0.4	<0.1	<0.1	0.2	0.3
24	214.7	0.6	0.5	0.2	0.3	0.5	<0.1	<0.1	0.2	<0.1
27	213.7	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.1	0.3
30	215.1	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.4	0.4
33	221.5	0.8	0.5	0.7	0.3	0.3	<0.1	<0.1	0.6	0.4
36	230.3	0.9	0.5	0.7	0.3	0.4	<0.1	<0.1	0.7	0.2
39	241.6	0.9	0.6	0.7	0.3	0.5	<0.1	<0.1	0.7	<0.1
42	251.2	0.8	0.6	0.5	0.3	0.6	<0.1	<0.1	0.5	<0.1
45	259.1	0.7	0.6	0.3	0.3	0.6	<0.1	<0.1	0.3	0.2
48	264.9	0.7	0.6	0.3	0.4	0.5	<0.1	<0.1	<0.1	0.3
52	267.5	0.9	0.6	0.7	0.5	0.4	<0.1	<0.1	0.3	0.6
56	262.6	1.1	0.7	0.9	0.5	0.5	<0.1	<0.1	0.5	0.7
60	254.3	1.2	0.8	0.9	0.6	0.6	<0.1	<0.1	0.6	0.7
64	241.1	1.3	0.9	1.0	0.7	0.6	<0.1	<0.1	0.6	0.7
68	230.7	1.4	1.0	0.9	0.9	0.4	<0.1	0.1	0.6	0.8

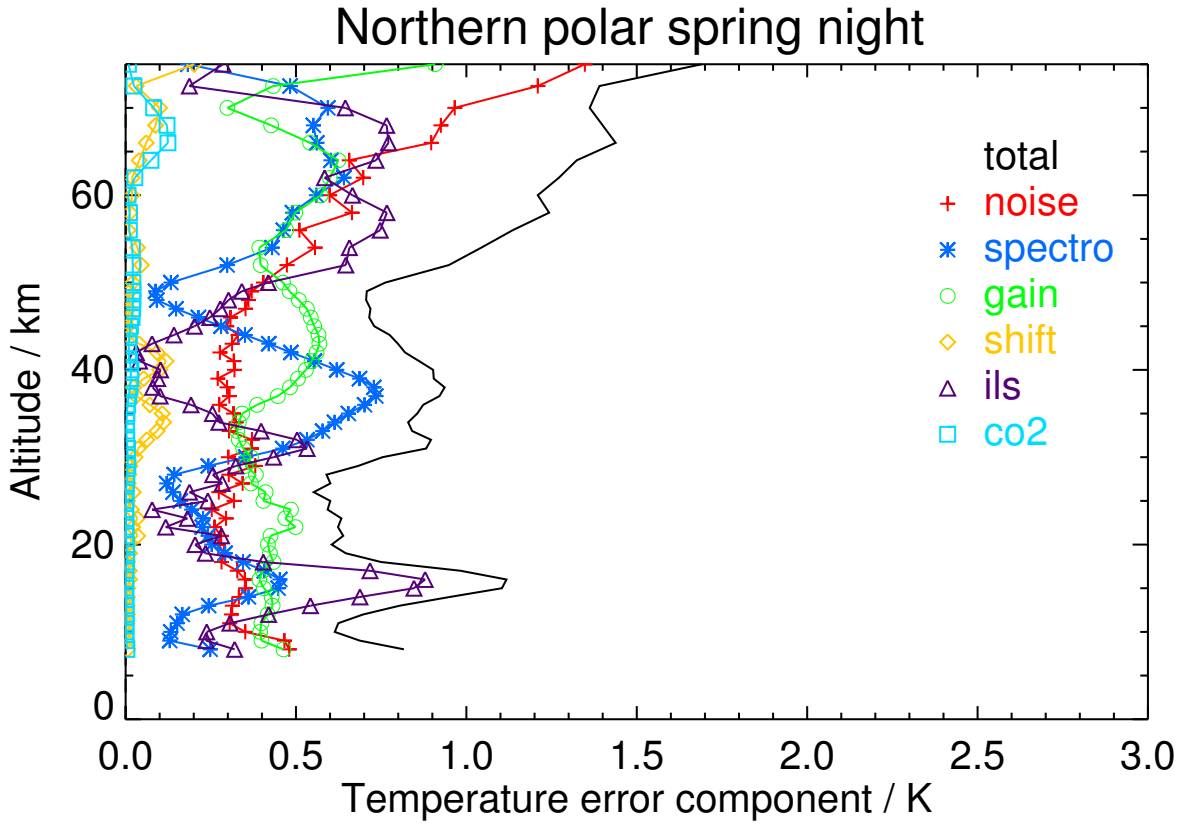

Figure 38. V8R_T_261 Northern polar spring night

Table 40. Temperature error budget for Northern polar summer day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
12	229.0	0.8	0.7	0.3	0.5	0.4	<0.1	<0.1	0.1	0.3
15	227.9	0.9	0.5	0.8	0.3	0.4	<0.1	<0.1	0.2	0.7
18	227.9	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.1	0.3
21	227.6	0.6	0.5	0.3	0.3	0.5	<0.1	<0.1	<0.1	0.3
24	228.1	0.6	0.5	<0.1	0.2	0.5	<0.1	<0.1	<0.1	<0.1
27	230.1	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
30	233.8	0.8	0.4	0.6	0.3	0.4	<0.1	<0.1	0.3	0.5
33	239.4	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.4	0.5
36	246.2	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.4	0.3
39	254.3	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.4	0.2
42	262.1	0.7	0.7	0.4	0.3	0.6	0.1	<0.1	0.4	<0.1
45	268.9	0.7	0.7	0.3	0.3	0.6	<0.1	<0.1	0.2	0.2
48	273.6	0.7	0.6	0.2	0.4	0.5	<0.1	<0.1	<0.1	0.2
52	274.5	0.9	0.6	0.6	0.5	0.4	<0.1	<0.1	0.3	0.5
56	270.1	1.1	0.6	0.9	0.5	0.4	<0.1	<0.1	0.4	0.8
60	260.1	1.2	0.8	0.8	0.5	0.6	<0.1	<0.1	0.6	0.6
64	245.3	1.4	1.0	1.0	0.6	0.8	<0.1	<0.1	0.8	0.6
68	228.4	1.5	1.0	1.1	0.8	0.6	<0.1	<0.1	0.8	0.8

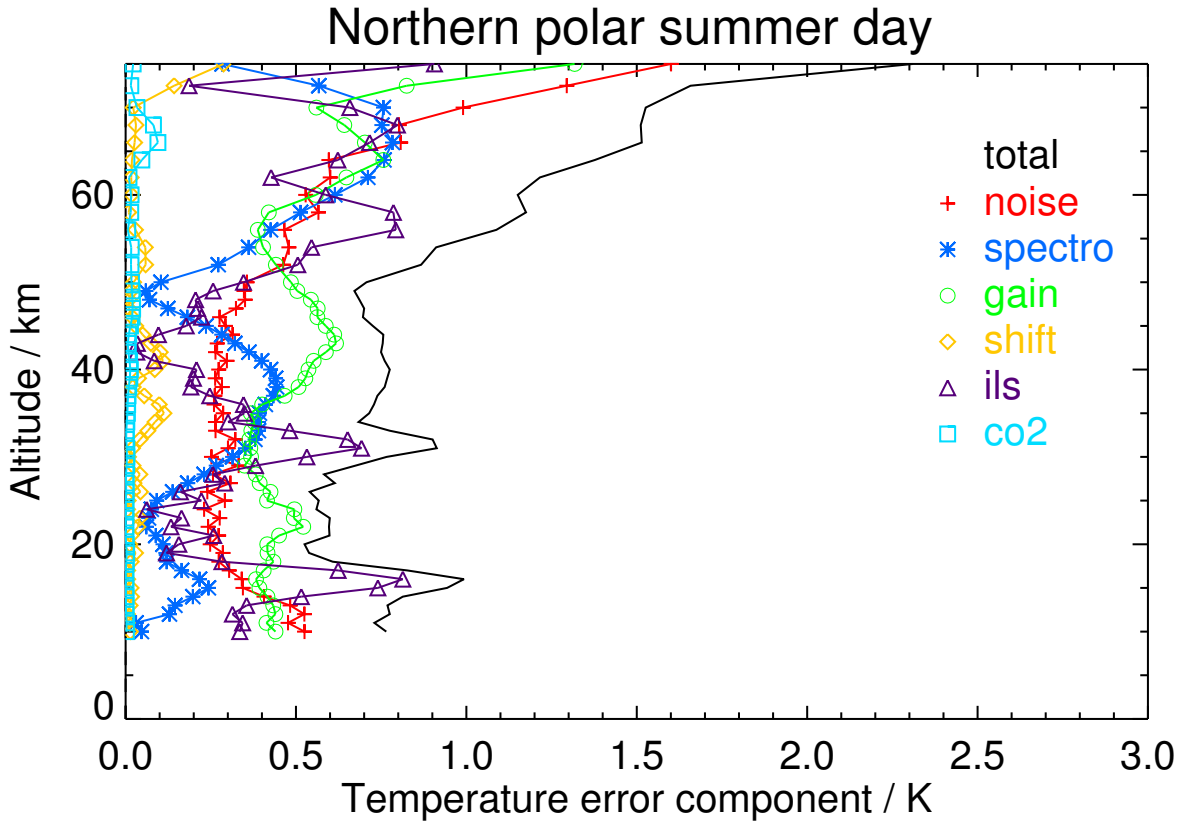

Figure 39. V8R_T_261 Northern polar summer day

Table 41. Temperature error budget for Northern polar summer night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
12	228.0	0.8	0.7	0.3	0.6	0.4	<0.1	<0.1	0.1	0.3
15	224.9	0.8	0.5	0.6	0.4	0.4	<0.1	<0.1	0.2	0.6
18	225.1	0.6	0.5	0.4	0.3	0.4	<0.1	<0.1	0.2	0.4
21	224.7	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	<0.1	0.3
24	226.2	0.6	0.5	0.1	0.2	0.5	<0.1	<0.1	0.1	<0.1
27	228.1	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
30	231.7	0.7	0.5	0.6	0.3	0.4	<0.1	<0.1	0.3	0.5
33	236.9	0.8	0.5	0.7	0.3	0.4	<0.1	<0.1	0.4	0.5
36	243.9	0.7	0.5	0.5	0.3	0.4	0.1	<0.1	0.4	0.4
39	251.2	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.4	0.2
42	258.9	0.8	0.7	0.4	0.3	0.6	0.1	<0.1	0.4	<0.1
45	265.1	0.7	0.7	0.3	0.3	0.6	<0.1	<0.1	0.2	0.2
48	268.9	0.7	0.6	0.2	0.4	0.5	<0.1	<0.1	<0.1	0.2
52	268.3	0.9	0.6	0.6	0.5	0.4	<0.1	<0.1	0.3	0.5
56	263.6	1.1	0.6	0.9	0.5	0.4	<0.1	<0.1	0.5	0.8
60	253.1	1.2	0.8	0.9	0.6	0.6	<0.1	<0.1	0.7	0.7
64	238.3	1.4	0.9	1.1	0.6	0.7	<0.1	<0.1	0.8	0.7
68	222.0	1.5	1.1	1.0	0.9	0.6	<0.1	<0.1	0.7	0.7

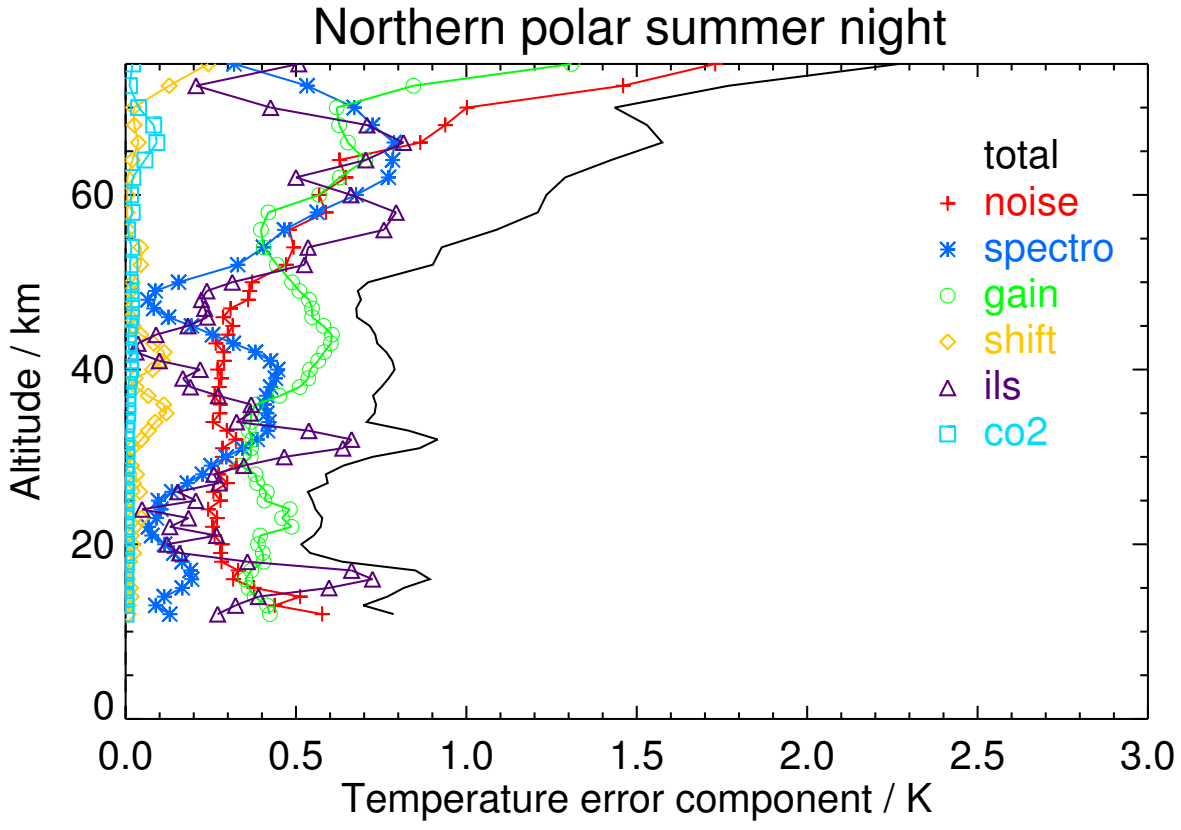

Figure 40. V8R_T_261 Northern polar summer night

Table 42. Temperature error budget for Northern polar autumn day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
12	223.2	0.8	0.7	0.4	0.5	0.4	<0.1	<0.1	0.2	0.4
15	220.9	1.0	0.5	0.9	0.4	0.4	<0.1	<0.1	0.5	0.8
18	217.8	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.4	0.4
21	214.2	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.3	0.3
24	211.5	0.6	0.5	0.2	0.3	0.5	<0.1	<0.1	0.2	0.1
27	209.9	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
30	209.9	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.1	0.4
33	212.7	0.7	0.5	0.6	0.3	0.4	<0.1	<0.1	0.3	0.4
36	218.7	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.4	0.3
39	224.9	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.4	0.2
42	231.4	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.4	0.1
45	238.8	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.3	0.2
48	244.8	0.8	0.6	0.4	0.4	0.5	<0.1	<0.1	0.2	0.4
52	250.3	0.9	0.7	0.6	0.5	0.4	<0.1	<0.1	0.2	0.6
56	249.7	1.1	0.7	0.8	0.6	0.4	<0.1	<0.1	0.4	0.7
60	244.7	1.2	0.8	0.9	0.7	0.5	<0.1	<0.1	0.5	0.7
64	237.0	1.2	0.9	0.8	0.7	0.4	<0.1	<0.1	0.5	0.7
68	232.9	1.3	1.1	0.8	1.0	0.4	<0.1	0.1	0.5	0.5

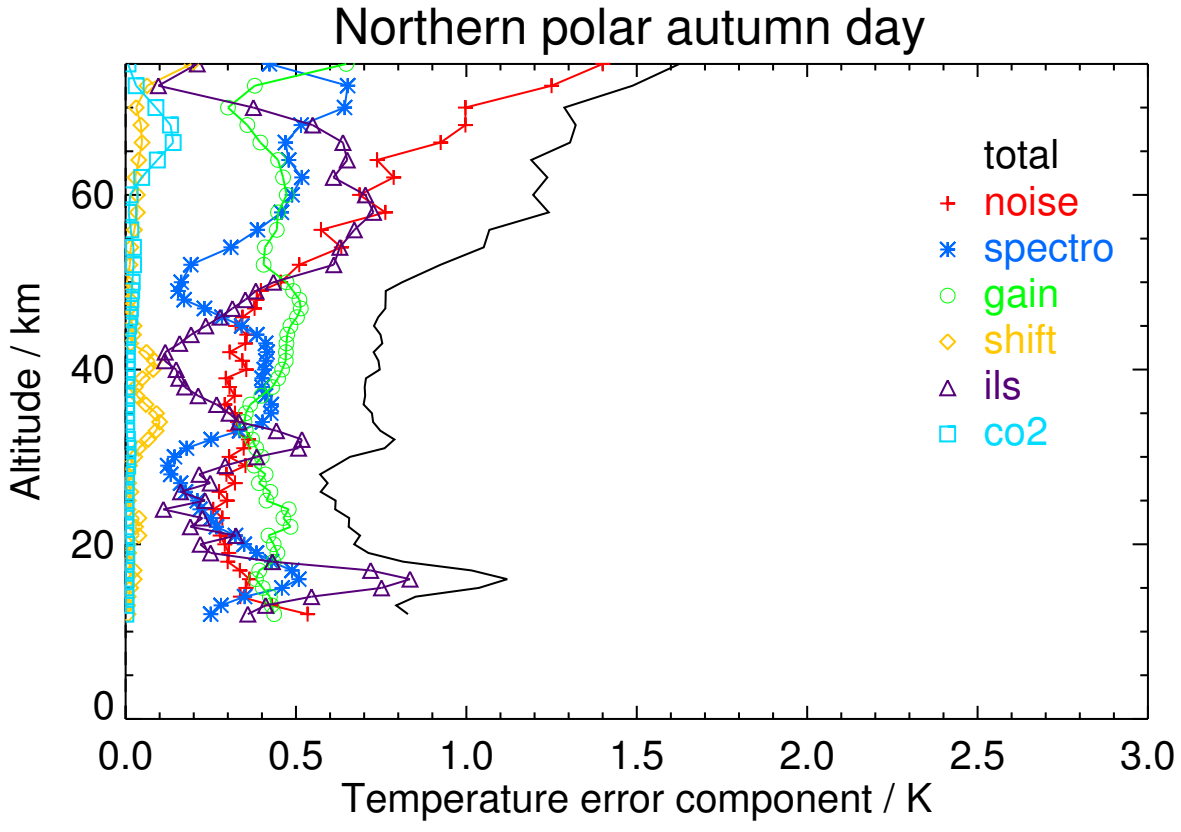

Figure 41. V8R_T_261 Northern polar autumn day

Table 43. Temperature error budget for Northern polar autumn night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
12	222.2	0.8	0.7	0.4	0.5	0.4	<0.1	<0.1	0.2	0.3
15	220.9	1.0	0.5	0.9	0.4	0.4	<0.1	<0.1	0.5	0.8
18	217.3	0.8	0.6	0.6	0.3	0.5	<0.1	<0.1	0.5	0.4
21	213.5	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
24	210.9	0.6	0.6	0.3	0.3	0.5	<0.1	<0.1	0.2	0.1
27	208.8	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
30	208.5	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.1	0.4
33	210.9	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.3	0.4
36	216.1	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.5	0.2
39	222.9	0.8	0.5	0.5	0.3	0.4	<0.1	<0.1	0.5	0.1
42	230.1	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.5	<0.1
45	238.2	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.4	0.2
48	245.3	0.8	0.6	0.4	0.4	0.5	<0.1	<0.1	0.3	0.3
52	251.0	0.9	0.7	0.6	0.5	0.4	<0.1	<0.1	0.2	0.6
56	251.6	1.0	0.7	0.8	0.6	0.4	<0.1	<0.1	0.4	0.6
60	246.9	1.1	0.8	0.8	0.7	0.4	<0.1	<0.1	0.5	0.6
64	240.9	1.2	0.8	0.8	0.7	0.4	<0.1	<0.1	0.5	0.6
68	233.7	1.4	1.1	0.8	1.0	0.4	<0.1	0.1	0.6	0.6

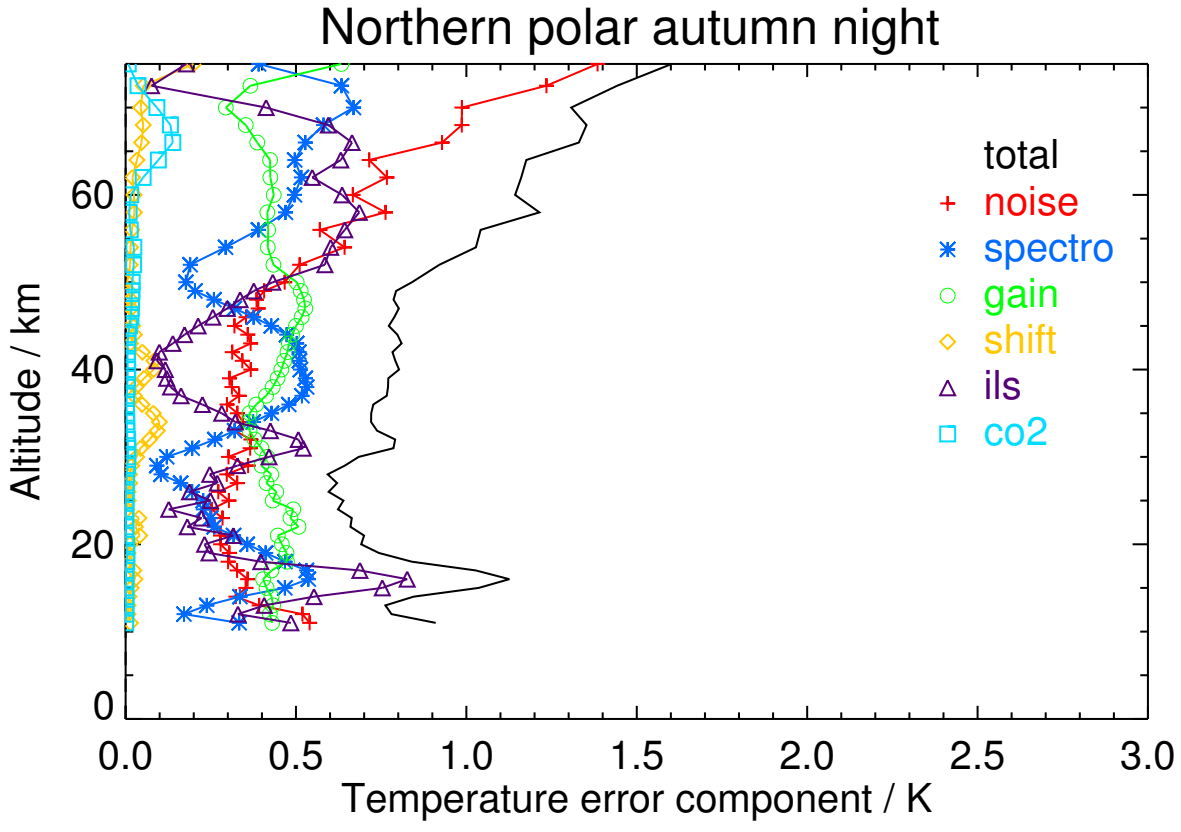

Figure 42. V8R_T_261 Northern polar autumn night

Table 44. Temperature error budget for Northern midlatitude winter day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	219.0	1.2	0.7	1.0	0.5	0.5	<0.1	<0.1	0.8	0.6
12	219.8	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.2	0.4
15	217.5	1.2	0.5	1.0	0.3	0.4	<0.1	<0.1	0.5	0.9
18	215.1	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.2	0.4
21	215.4	0.6	0.4	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
24	216.8	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
27	218.9	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.4	0.2
30	224.8	0.9	0.5	0.7	0.3	0.4	<0.1	<0.1	0.5	0.4
33	227.0	0.9	0.5	0.6	0.3	0.4	<0.1	<0.1	0.3	0.6
36	229.7	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.3	0.3
39	234.6	0.8	0.6	0.4	0.3	0.5	<0.1	<0.1	0.4	0.2
42	240.1	0.8	0.6	0.4	0.3	0.5	<0.1	<0.1	0.3	0.1
45	245.1	0.8	0.6	0.4	0.3	0.5	<0.1	<0.1	0.3	0.2
48	250.6	0.8	0.6	0.5	0.4	0.5	<0.1	<0.1	0.3	0.3
52	252.5	1.1	0.7	0.8	0.5	0.5	<0.1	<0.1	0.5	0.6
56	252.5	1.1	0.7	0.7	0.6	0.5	<0.1	<0.1	0.4	0.6
60	246.6	1.4	0.9	1.1	0.7	0.5	<0.1	<0.1	0.7	0.8
64	227.5	1.6	1.0	1.1	0.8	0.6	<0.1	<0.1	0.9	0.7
68	219.2	1.5	1.3	0.7	1.2	0.5	<0.1	0.1	0.6	0.5

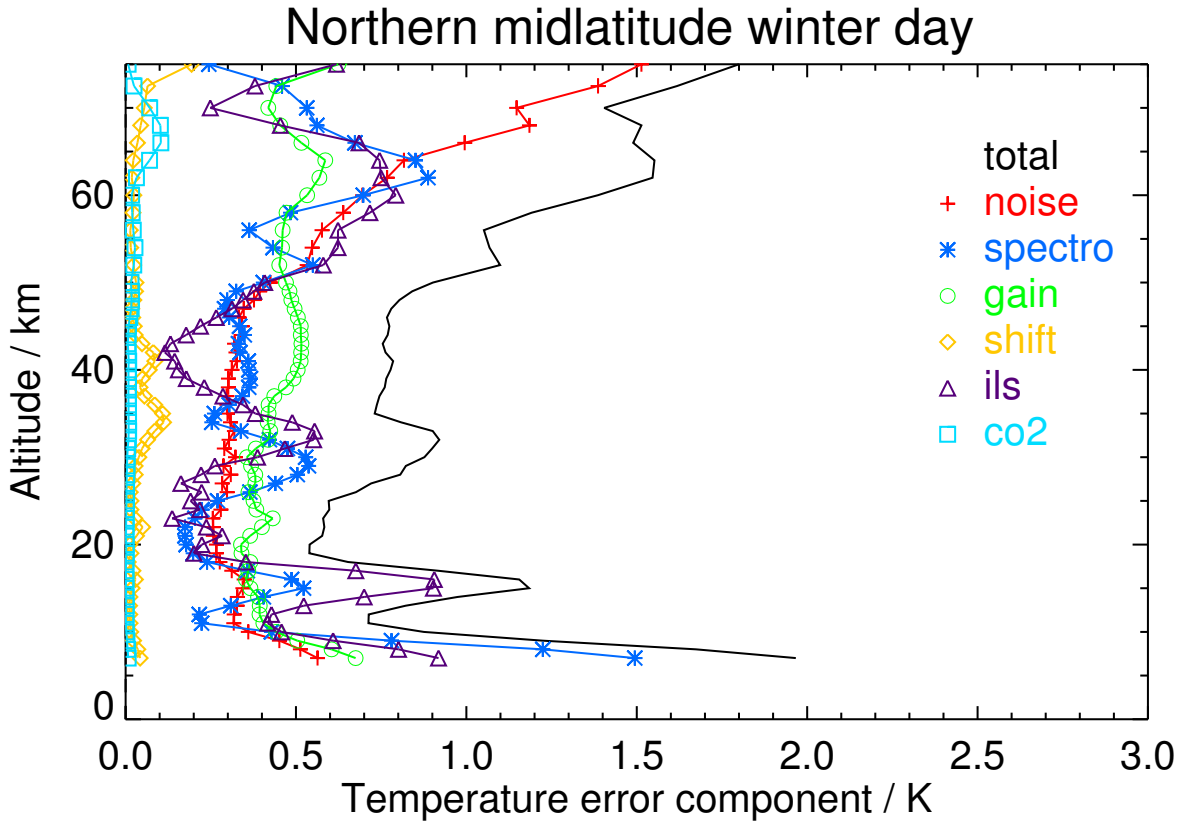

Figure 43. V8R_T_261 Northern midlatitude winter day

Table 45. Temperature error budget for Northern midlatitude winter night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	220.5	0.8	0.6	0.5	0.4	0.5	<0.1	<0.1	0.4	0.4
12	221.9	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.2	0.4
15	220.1	1.2	0.5	1.0	0.3	0.4	<0.1	<0.1	0.5	0.9
18	216.7	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.4	0.4
21	214.8	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
24	214.6	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
27	216.1	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.2
30	219.2	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.4	0.4
33	220.4	0.9	0.5	0.7	0.3	0.4	<0.1	<0.1	0.4	0.5
36	225.4	0.9	0.5	0.7	0.3	0.4	<0.1	<0.1	0.6	0.2
39	235.0	0.9	0.6	0.7	0.3	0.5	<0.1	<0.1	0.7	0.1
42	243.4	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.5	0.1
45	249.4	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.4	0.2
48	254.7	0.8	0.6	0.5	0.4	0.5	<0.1	<0.1	0.4	0.4
52	253.5	1.1	0.7	0.8	0.5	0.4	<0.1	<0.1	0.5	0.6
56	245.5	1.2	0.8	0.9	0.6	0.5	<0.1	<0.1	0.6	0.7
60	240.9	1.2	0.9	0.8	0.7	0.5	<0.1	<0.1	0.4	0.7
64	234.1	1.3	0.9	0.9	0.8	0.5	<0.1	<0.1	0.6	0.6
68	224.7	1.5	1.2	0.8	1.1	0.4	<0.1	0.1	0.6	0.5

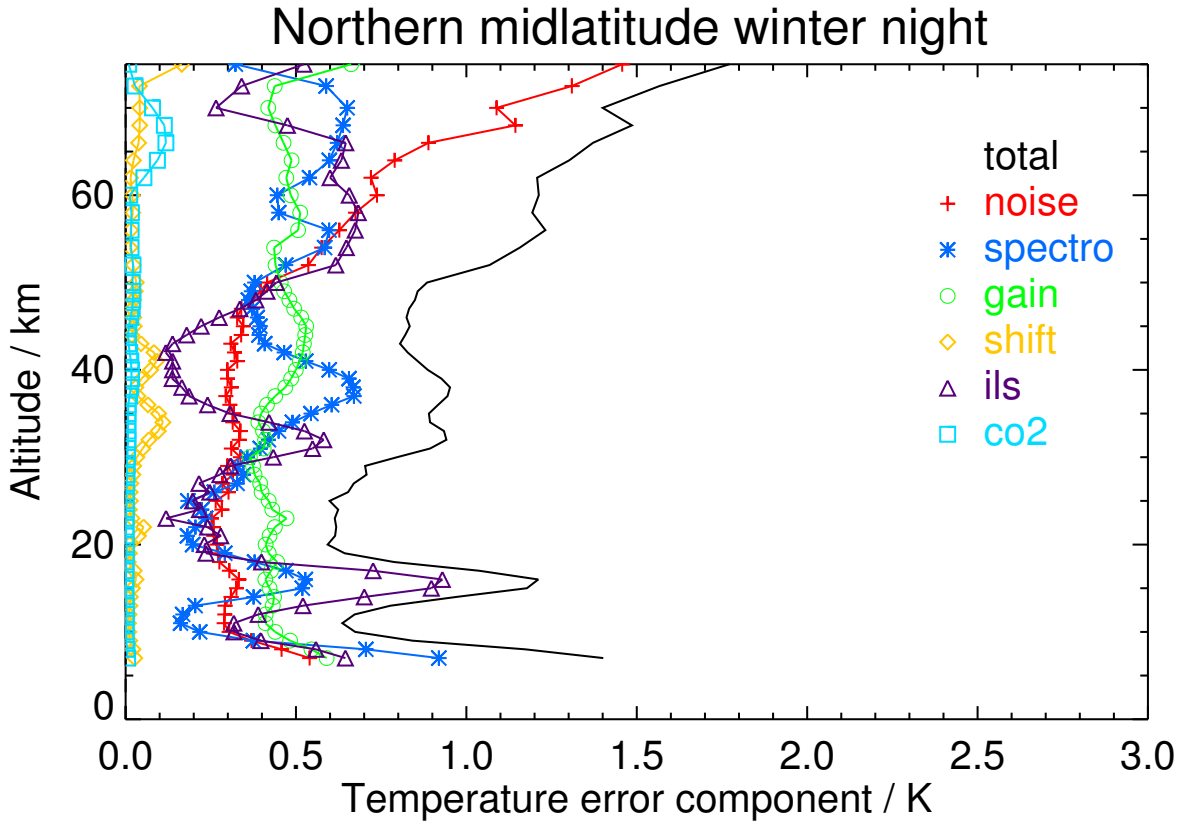

Figure 44. V8R_T_261 Northern midlatitude winter night

Table 46. Temperature error budget for Northern midlatitude spring day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	218.4	1.1	0.7	0.8	0.5	0.4	<0.1	<0.1	0.5	0.5
12	219.4	0.7	0.5	0.4	0.4	0.4	<0.1	<0.1	0.1	0.4
15	218.7	1.1	0.5	0.9	0.4	0.4	<0.1	<0.1	0.4	0.8
18	216.8	0.6	0.5	0.4	0.3	0.4	<0.1	<0.1	0.2	0.3
21	217.7	0.5	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
24	219.7	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.2	0.1
27	222.6	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
30	225.7	0.8	0.5	0.5	0.4	0.4	<0.1	<0.1	0.4	0.4
33	232.5	0.9	0.5	0.7	0.3	0.4	<0.1	<0.1	0.5	0.5
36	241.3	0.8	0.5	0.6	0.3	0.4	0.1	<0.1	0.5	0.3
39	249.8	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.4	0.2
42	256.2	0.7	0.7	0.3	0.3	0.6	0.1	<0.1	0.3	<0.1
45	260.3	0.7	0.6	0.3	0.3	0.6	<0.1	<0.1	<0.1	0.3
48	261.9	0.7	0.6	0.4	0.4	0.5	<0.1	<0.1	0.1	0.3
52	260.9	1.0	0.6	0.8	0.5	0.4	<0.1	<0.1	0.4	0.7
56	253.6	1.2	0.7	1.0	0.5	0.5	<0.1	<0.1	0.5	0.8
60	244.6	1.3	0.9	0.9	0.6	0.6	<0.1	<0.1	0.6	0.8
64	231.0	1.4	1.0	1.0	0.7	0.6	<0.1	<0.1	0.7	0.7
68	220.7	1.5	1.2	0.9	1.1	0.4	<0.1	0.1	0.6	0.6

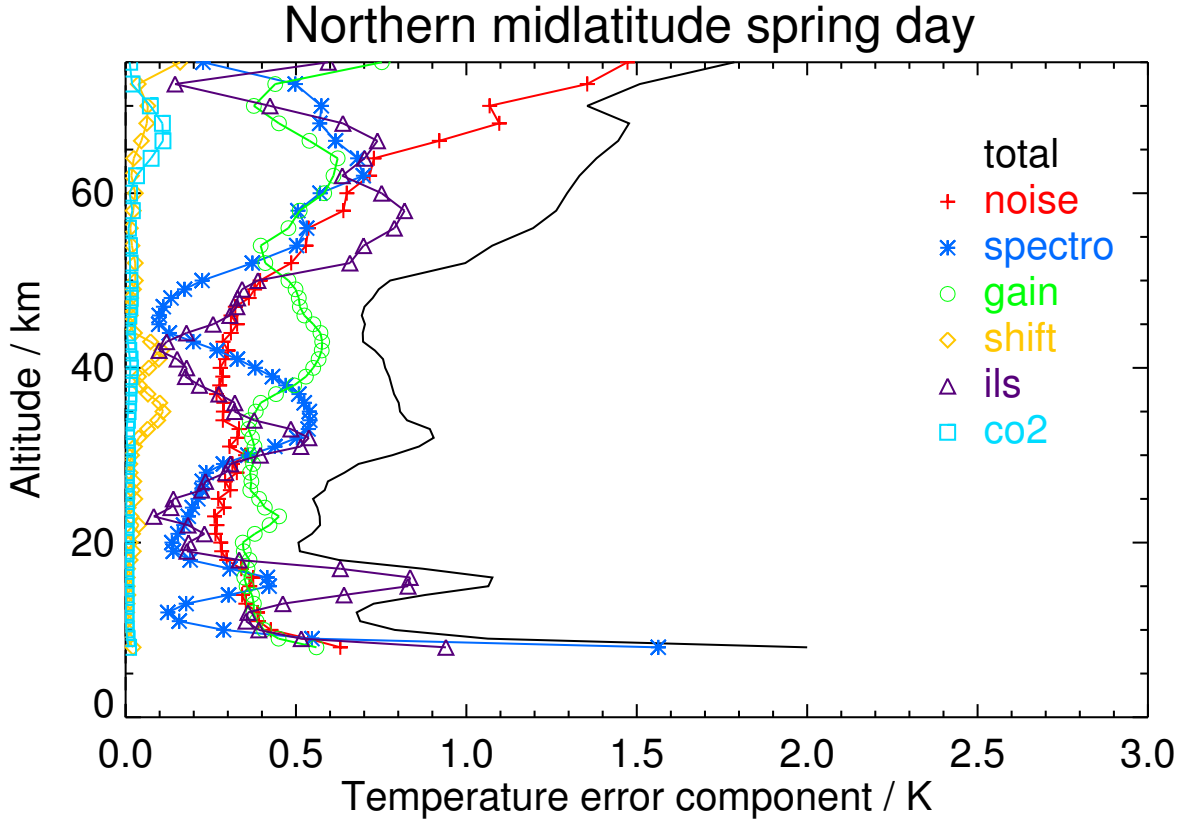

Figure 45. V8R_T_261 Northern midlatitude spring day

Table 47. Temperature error budget for Northern midlatitude spring night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	219.1	0.9	0.7	0.6	0.5	0.4	<0.1	<0.1	0.4	0.4
12	218.8	0.6	0.5	0.4	0.3	0.4	<0.1	<0.1	0.1	0.4
15	218.4	1.0	0.5	0.9	0.4	0.3	<0.1	<0.1	0.4	0.8
18	217.2	0.6	0.5	0.4	0.3	0.4	<0.1	<0.1	0.2	0.3
21	217.6	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.1	0.2
24	218.6	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.2	0.1
27	219.9	0.6	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.2
30	224.5	0.8	0.5	0.6	0.4	0.3	<0.1	<0.1	0.5	0.4
33	232.4	0.9	0.5	0.7	0.3	0.3	<0.1	<0.1	0.5	0.5
36	240.6	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.6	0.3
39	250.1	0.8	0.6	0.6	0.3	0.5	<0.1	<0.1	0.5	0.1
42	258.1	0.8	0.7	0.3	0.3	0.6	0.1	<0.1	0.3	<0.1
45	262.5	0.7	0.6	0.3	0.3	0.6	<0.1	<0.1	0.1	0.2
48	264.5	0.7	0.6	0.4	0.4	0.5	<0.1	<0.1	0.1	0.3
52	262.6	1.0	0.6	0.8	0.5	0.4	<0.1	<0.1	0.4	0.7
56	256.6	1.2	0.7	0.9	0.5	0.5	<0.1	<0.1	0.5	0.7
60	246.3	1.3	0.9	1.0	0.7	0.6	<0.1	<0.1	0.6	0.7
64	233.0	1.3	0.9	0.9	0.7	0.6	<0.1	<0.1	0.6	0.6
68	224.0	1.4	1.1	0.9	1.1	0.4	<0.1	0.1	0.5	0.7

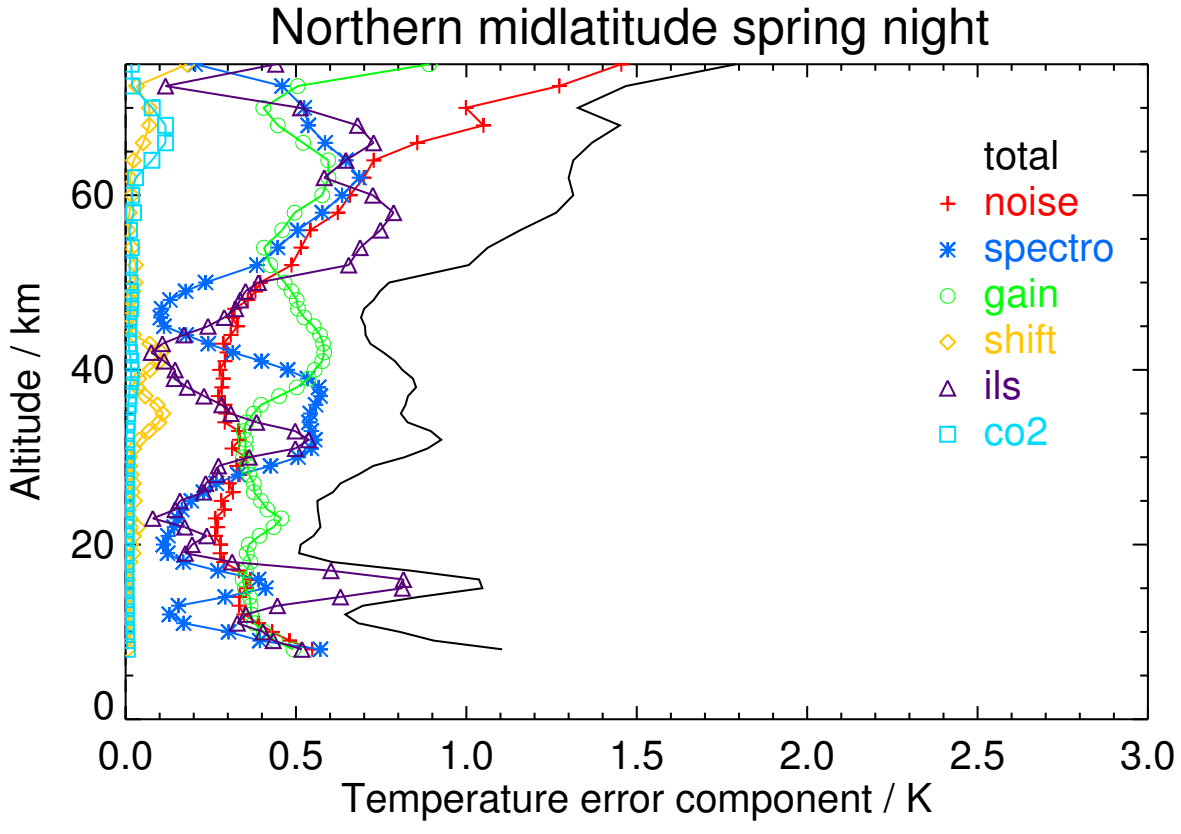

Figure 46. V8R_T_261 Northern midlatitude spring night

Table 48. Temperature error budget for Northern midlatitude summer day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
12	225.1	1.4	0.8	1.1	0.6	0.5	<0.1	<0.1	0.8	0.8
15	218.1	1.2	0.6	1.0	0.4	0.4	<0.1	<0.1	0.6	0.8
18	216.0	0.6	0.4	0.3	0.3	0.3	<0.1	<0.1	0.2	0.3
21	219.0	0.6	0.4	0.3	0.3	0.4	<0.1	<0.1	0.3	0.2
24	223.2	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.3	0.1
27	228.0	0.6	0.5	0.4	0.3	0.4	<0.1	<0.1	0.4	0.2
30	233.4	0.7	0.5	0.6	0.3	0.3	<0.1	<0.1	0.4	0.4
33	239.0	0.9	0.5	0.7	0.3	0.4	<0.1	<0.1	0.5	0.6
36	246.3	0.8	0.5	0.6	0.3	0.4	0.1	<0.1	0.4	0.4
39	253.9	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.5	0.2
42	261.7	0.8	0.7	0.4	0.3	0.6	0.1	<0.1	0.4	0.1
45	266.9	0.7	0.7	0.3	0.3	0.6	<0.1	<0.1	0.1	0.2
48	268.4	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.1	0.3
52	265.7	1.0	0.6	0.7	0.5	0.4	<0.1	<0.1	0.4	0.6
56	258.9	1.1	0.7	0.9	0.5	0.4	<0.1	<0.1	0.5	0.8
60	247.2	1.4	0.9	1.0	0.6	0.6	<0.1	<0.1	0.7	0.8
64	231.6	1.4	1.0	1.0	0.7	0.7	<0.1	<0.1	0.8	0.7
68	215.2	1.5	1.2	0.9	1.0	0.6	<0.1	<0.1	0.7	0.6

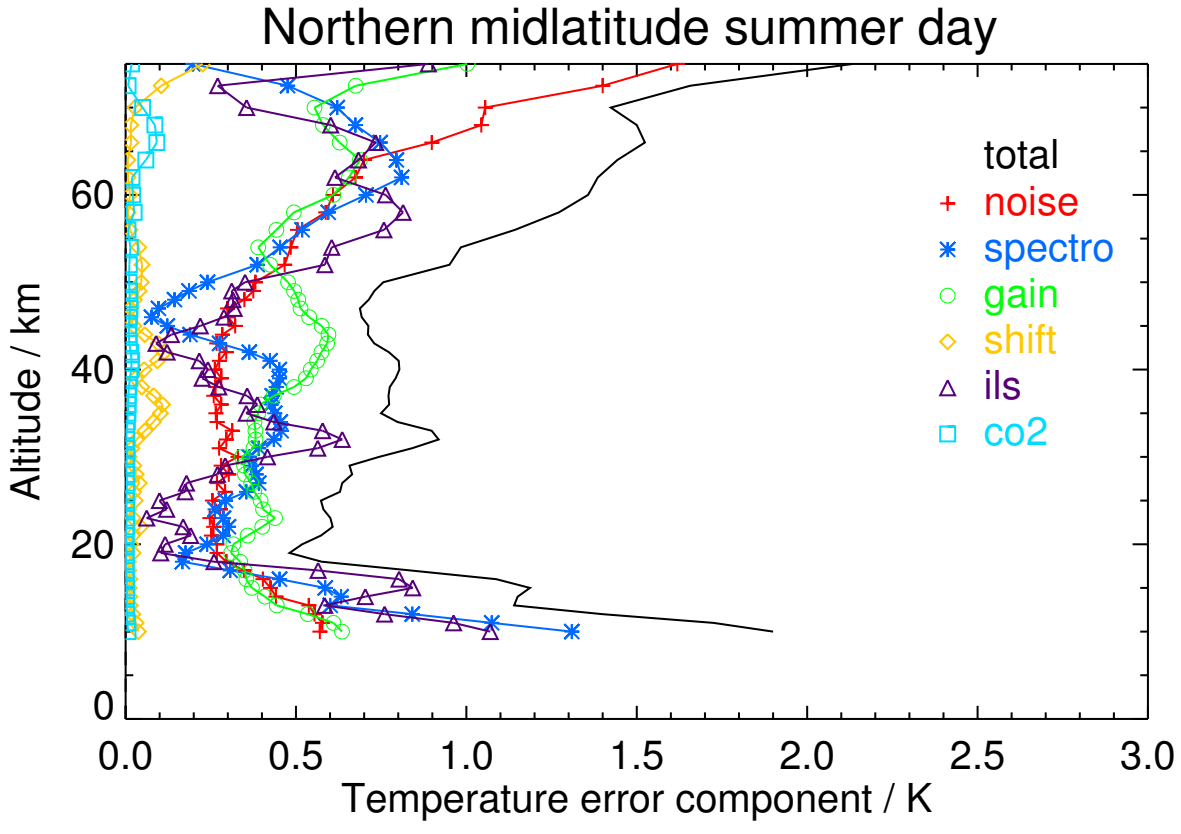

Figure 47. V8R_T_261 Northern midlatitude summer day

Table 49. Temperature error budget for Northern midlatitude summer night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	241.4	2.0	0.9	1.8	0.6	0.6	<0.1	<0.1	1.4	1.1
12	223.9	1.4	0.7	1.2	0.5	0.5	<0.1	<0.1	0.9	0.8
15	218.8	1.0	0.5	0.9	0.4	0.3	<0.1	<0.1	0.4	0.8
18	218.8	0.6	0.4	0.4	0.3	0.3	<0.1	<0.1	0.2	0.3
21	220.8	0.5	0.4	0.3	0.3	0.3	<0.1	<0.1	0.1	0.2
24	223.9	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.2	<0.1
27	228.7	0.6	0.4	0.4	0.3	0.4	<0.1	<0.1	0.3	0.2
30	233.2	0.7	0.5	0.5	0.3	0.3	<0.1	<0.1	0.3	0.4
33	239.0	0.9	0.5	0.7	0.3	0.4	<0.1	<0.1	0.5	0.5
36	247.5	0.8	0.5	0.6	0.3	0.4	0.1	<0.1	0.4	0.4
39	254.9	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.4	0.2
42	262.1	0.8	0.7	0.4	0.3	0.6	0.1	<0.1	0.3	<0.1
45	268.3	0.7	0.7	0.2	0.3	0.6	<0.1	<0.1	0.2	0.2
48	270.8	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.1	0.3
52	266.9	0.9	0.6	0.7	0.5	0.4	<0.1	<0.1	0.4	0.6
56	260.2	1.1	0.7	0.9	0.5	0.4	<0.1	<0.1	0.5	0.7
60	248.2	1.3	0.9	1.0	0.6	0.6	<0.1	<0.1	0.7	0.7
64	232.3	1.5	1.0	1.1	0.7	0.7	<0.1	<0.1	0.9	0.7
68	214.5	1.6	1.3	1.0	1.1	0.7	<0.1	<0.1	0.8	0.6

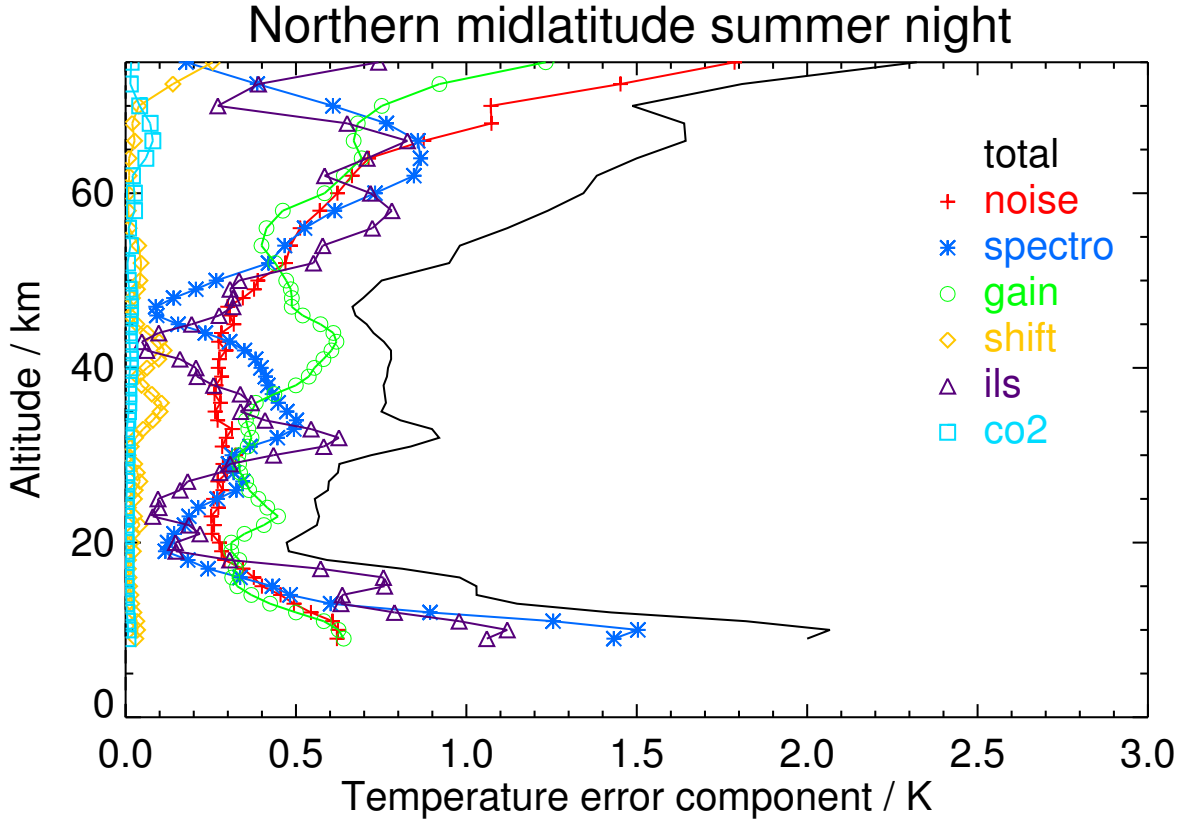

Figure 48. V8R_T_261 Northern midlatitude summer night

Table 50. Temperature error budget for Northern midlatitude autumn day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	236.9	2.2	0.9	2.0	0.6	0.7	<0.1	<0.1	1.6	1.1
12	217.3	1.2	0.7	1.0	0.5	0.5	<0.1	<0.1	0.7	0.6
15	214.3	1.0	0.5	0.8	0.4	0.3	<0.1	<0.1	0.4	0.7
18	213.7	0.6	0.5	0.4	0.3	0.4	<0.1	<0.1	0.2	0.3
21	213.6	0.5	0.4	0.3	0.3	0.4	<0.1	<0.1	0.1	0.3
24	215.9	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
27	219.0	0.6	0.4	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
30	222.5	0.7	0.5	0.5	0.3	0.3	<0.1	<0.1	0.3	0.4
33	226.9	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.3	0.5
36	231.6	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.3	0.4
39	237.3	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.4	0.2
42	243.0	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.3	0.1
45	249.1	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.2	0.2
48	252.2	0.7	0.6	0.4	0.4	0.5	<0.1	<0.1	0.2	0.4
52	251.2	1.0	0.7	0.7	0.5	0.4	<0.1	<0.1	0.4	0.6
56	245.9	1.2	0.8	0.9	0.6	0.5	<0.1	<0.1	0.5	0.7
60	236.0	1.4	0.9	1.0	0.7	0.6	<0.1	<0.1	0.6	0.8
64	226.3	1.3	1.0	0.9	0.9	0.5	<0.1	<0.1	0.5	0.7
68	220.7	1.4	1.2	0.8	1.2	0.4	<0.1	0.1	0.5	0.6

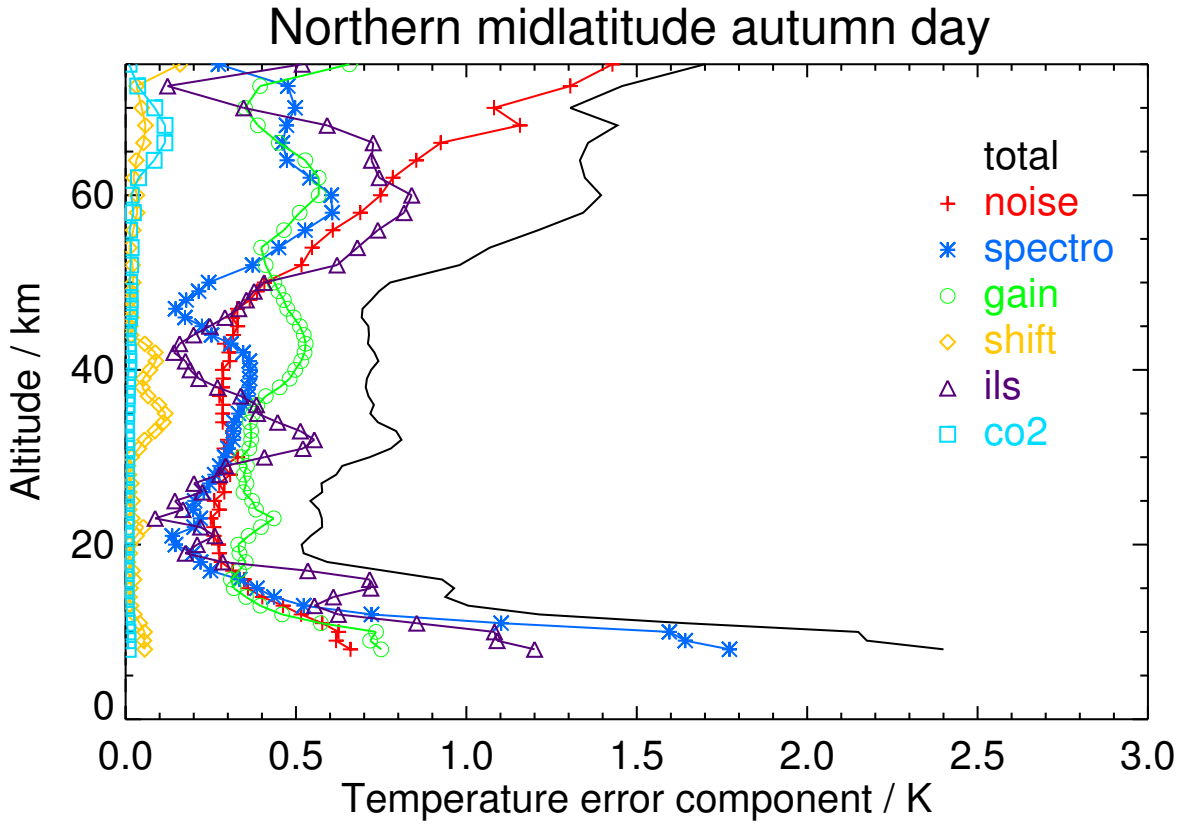

Figure 49. V8R_T_261 Northern midlatitude autumn day

Table 51. Temperature error budget for Northern midlatitude autumn night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	231.4	2.3	0.9	2.0	0.7	0.6	<0.1	<0.1	1.7	1.1
12	216.6	1.0	0.7	0.7	0.5	0.4	<0.1	<0.1	0.5	0.5
15	215.1	0.9	0.5	0.8	0.4	0.3	<0.1	<0.1	0.4	0.7
18	214.1	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
21	214.3	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
24	215.8	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
27	217.9	0.6	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.2
30	222.4	0.8	0.5	0.5	0.3	0.3	<0.1	<0.1	0.4	0.4
33	226.8	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.3	0.5
36	231.5	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.4	0.3
39	237.7	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.4	0.2
42	243.9	0.8	0.6	0.4	0.3	0.5	<0.1	<0.1	0.4	0.1
45	250.0	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.2	0.2
48	252.5	0.7	0.6	0.4	0.4	0.5	<0.1	<0.1	0.1	0.3
52	252.4	1.0	0.7	0.7	0.5	0.4	<0.1	<0.1	0.4	0.6
56	245.3	1.2	0.8	0.9	0.6	0.5	<0.1	<0.1	0.6	0.7
60	237.8	1.3	0.9	0.9	0.8	0.5	<0.1	<0.1	0.5	0.8
64	228.9	1.3	1.0	0.9	0.8	0.5	<0.1	<0.1	0.5	0.7
68	221.8	1.4	1.2	0.8	1.1	0.4	<0.1	0.1	0.5	0.6

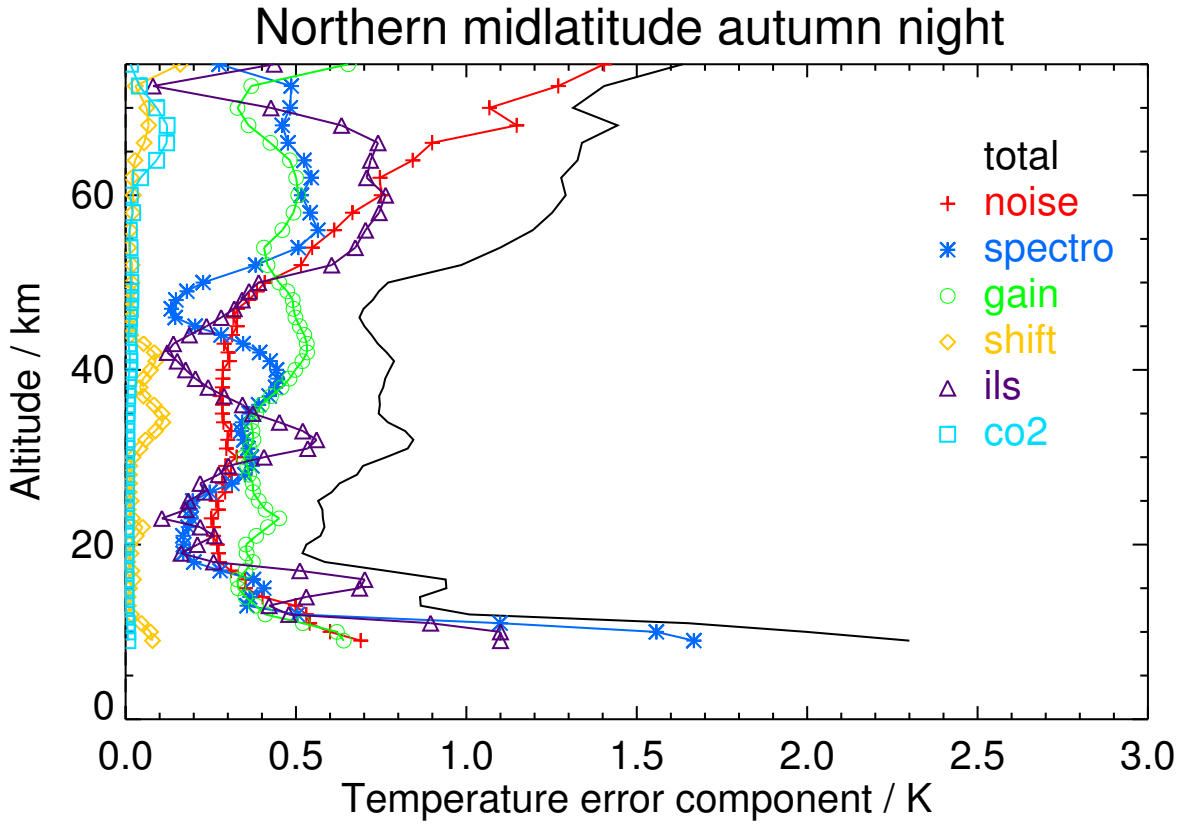

Figure 50. V8R_T_261 Northern midlatitude autumn night

Table 52. Temperature error budget for Tropics day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	244.9	2.1	0.9	2.0	0.6	0.7	<0.1	<0.1	1.6	1.2
12	225.0	2.2	0.9	2.0	0.7	0.6	<0.1	<0.1	1.6	1.2
15	200.2	1.8	0.7	1.6	0.6	0.2	<0.1	<0.1	1.3	1.0
18	194.1	0.8	0.5	0.6	0.5	<0.1	<0.1	<0.1	0.6	<0.1
21	207.8	0.8	0.4	0.7	0.3	0.3	<0.1	<0.1	0.7	<0.1
24	215.7	0.7	0.4	0.6	0.3	0.3	<0.1	<0.1	0.6	<0.1
27	223.8	0.7	0.4	0.5	0.3	0.3	<0.1	<0.1	0.5	0.2
30	230.3	0.8	0.5	0.7	0.3	0.3	<0.1	<0.1	0.4	0.5
33	236.4	0.8	0.5	0.6	0.3	0.3	<0.1	<0.1	0.4	0.4
36	243.3	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.5	0.3
39	252.7	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.5	0.2
42	260.1	0.7	0.7	0.3	0.3	0.6	<0.1	<0.1	0.3	<0.1
45	263.9	0.7	0.6	0.3	0.3	0.6	<0.1	<0.1	0.1	0.2
48	265.6	0.7	0.6	0.4	0.4	0.4	<0.1	<0.1	0.2	0.4
52	260.9	1.0	0.6	0.8	0.5	0.4	<0.1	<0.1	0.5	0.6
56	253.0	1.2	0.7	1.0	0.5	0.5	<0.1	<0.1	0.6	0.8
60	241.4	1.3	0.9	1.0	0.6	0.6	<0.1	<0.1	0.7	0.7
64	227.3	1.4	1.0	1.0	0.7	0.6	<0.1	<0.1	0.8	0.7
68	211.8	1.5	1.2	0.8	1.1	0.6	<0.1	<0.1	0.7	0.5

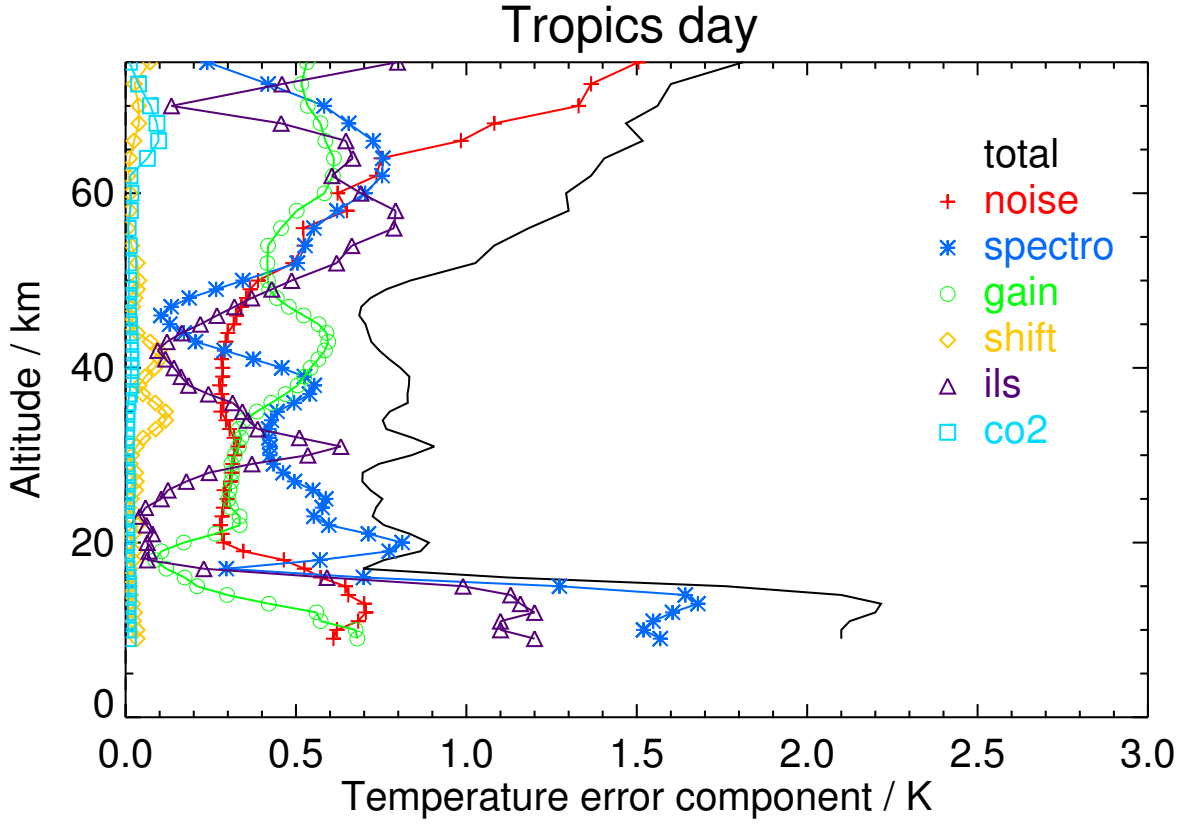

Figure 51. V8R_T_261 Tropics day

Table 53. Temperature error budget for Tropics night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	245.9	2.2	0.9	1.9	0.7	0.6	<0.1	<0.1	1.6	1.1
12	224.6	2.2	0.9	2.0	0.7	0.5	<0.1	<0.1	1.6	1.2
15	201.8	2.0	0.7	1.8	0.6	0.2	<0.1	<0.1	1.4	1.1
18	193.6	0.7	0.5	0.4	0.4	<0.1	<0.1	<0.1	0.4	0.1
21	207.0	1.0	0.4	0.9	0.3	0.3	<0.1	<0.1	0.9	<0.1
24	217.0	0.7	0.4	0.6	0.3	0.3	<0.1	<0.1	0.6	<0.1
27	223.8	0.7	0.4	0.5	0.3	0.3	<0.1	<0.1	0.5	0.2
30	230.2	0.8	0.5	0.7	0.3	0.3	<0.1	<0.1	0.4	0.5
33	236.8	0.8	0.5	0.6	0.3	0.3	<0.1	<0.1	0.4	0.4
36	244.4	0.8	0.5	0.5	0.3	0.4	<0.1	<0.1	0.5	0.3
39	251.4	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.4	0.2
42	259.4	0.7	0.7	0.3	0.3	0.6	<0.1	<0.1	0.3	<0.1
45	263.5	0.7	0.6	0.2	0.3	0.5	<0.1	<0.1	0.1	0.2
48	264.9	0.7	0.6	0.4	0.4	0.5	<0.1	<0.1	0.2	0.3
52	261.9	1.0	0.7	0.7	0.5	0.4	<0.1	<0.1	0.4	0.6
56	255.1	1.2	0.7	0.9	0.5	0.4	<0.1	<0.1	0.5	0.8
60	243.8	1.3	0.9	1.0	0.6	0.6	<0.1	<0.1	0.7	0.7
64	228.8	1.4	1.0	1.0	0.7	0.6	<0.1	<0.1	0.8	0.7
68	212.4	1.5	1.3	0.8	1.1	0.6	<0.1	<0.1	0.8	0.4

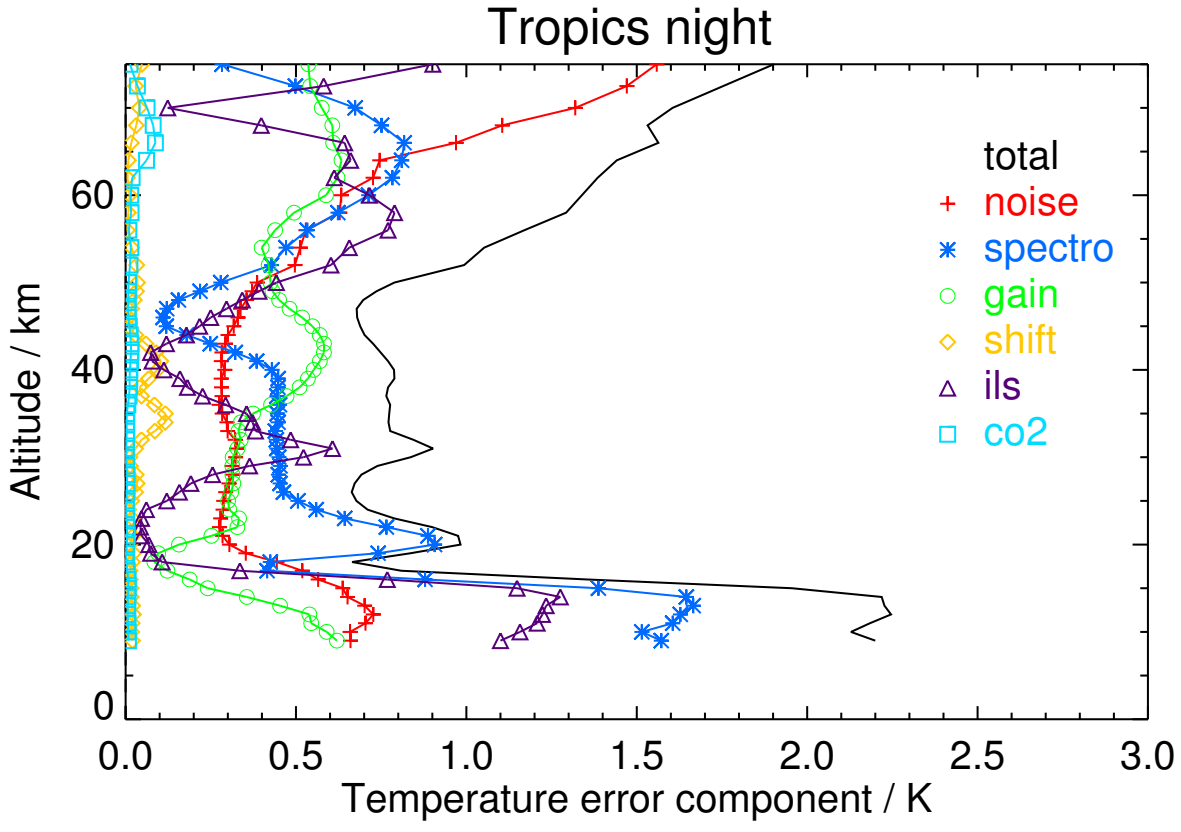

Figure 52. V8R_T_261 Tropics night

Table 54. Temperature error budget for Southern midlatitude winter day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	237.4	2.1	1.0	1.8	0.6	0.8	<0.1	<0.1	1.6	0.9
9	217.6	1.4	0.8	1.2	0.4	0.7	<0.1	<0.1	1.0	0.6
12	216.3	0.7	0.5	0.4	0.4	0.4	<0.1	<0.1	0.2	0.4
15	215.1	1.1	0.5	0.9	0.3	0.4	<0.1	<0.1	0.5	0.7
18	211.7	0.8	0.5	0.5	0.3	0.4	<0.1	<0.1	0.4	0.3
21	208.9	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
24	206.9	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
27	205.8	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
30	207.7	0.8	0.5	0.6	0.4	0.4	<0.1	<0.1	0.4	0.5
33	212.2	0.8	0.5	0.6	0.3	0.3	<0.1	<0.1	0.5	0.3
36	219.2	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.6	0.1
39	226.7	0.8	0.6	0.6	0.3	0.5	<0.1	<0.1	0.6	<0.1
42	234.3	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.5	0.1
45	241.7	0.8	0.7	0.4	0.4	0.5	<0.1	<0.1	0.4	0.2
48	248.1	0.9	0.7	0.5	0.4	0.5	<0.1	<0.1	0.3	0.4
52	254.4	1.0	0.8	0.6	0.6	0.5	<0.1	<0.1	0.3	0.6
56	254.6	1.2	0.9	0.7	0.7	0.5	<0.1	<0.1	0.4	0.6
60	255.0	1.1	0.9	0.7	0.8	0.4	<0.1	<0.1	0.4	0.5
64	247.4	1.5	0.9	1.1	0.8	0.4	<0.1	0.1	0.8	0.7
68	227.0	1.6	1.2	1.0	1.2	0.4	<0.1	0.1	0.8	0.6

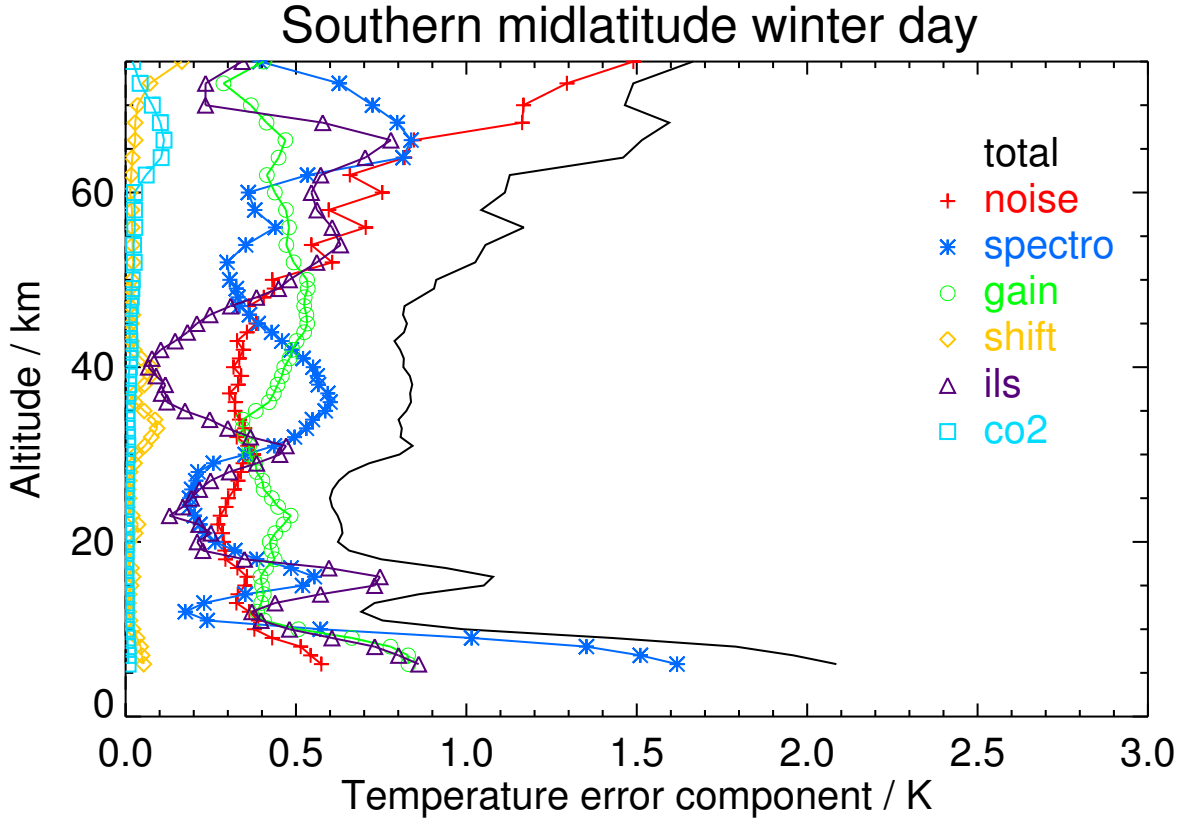

Figure 53. V8R_T_261 Southern midlatitude winter day

Table 55. Temperature error budget for Southern midlatitude winter night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	241.0	2.1	1.0	1.9	0.6	0.8	<0.1	<0.1	1.7	0.9
9	216.8	1.3	0.7	1.1	0.5	0.5	<0.1	<0.1	0.9	0.6
12	211.6	0.8	0.5	0.5	0.4	0.3	<0.1	<0.1	0.3	0.4
15	211.6	0.9	0.5	0.8	0.4	0.3	<0.1	<0.1	0.4	0.6
18	208.8	0.7	0.5	0.5	0.3	0.3	<0.1	<0.1	0.4	0.3
21	206.7	0.6	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
24	205.0	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.2	0.1
27	204.9	0.6	0.5	0.3	0.3	0.3	<0.1	<0.1	0.2	0.2
30	207.7	0.7	0.5	0.5	0.4	0.3	<0.1	<0.1	0.3	0.4
33	211.6	0.8	0.5	0.5	0.3	0.3	<0.1	<0.1	0.4	0.4
36	218.6	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.6	0.1
39	226.6	0.8	0.6	0.6	0.4	0.5	<0.1	<0.1	0.5	0.1
42	235.3	0.9	0.6	0.6	0.4	0.5	<0.1	<0.1	0.6	0.1
45	244.8	0.9	0.6	0.5	0.4	0.5	<0.1	<0.1	0.5	0.2
48	252.2	0.8	0.6	0.5	0.4	0.5	<0.1	<0.1	0.3	0.4
52	254.6	1.1	0.8	0.8	0.6	0.5	<0.1	<0.1	0.5	0.6
56	256.2	1.2	0.8	0.8	0.7	0.5	<0.1	<0.1	0.4	0.6
60	253.9	1.2	0.9	0.8	0.7	0.5	<0.1	<0.1	0.5	0.7
64	245.1	1.4	1.0	1.0	0.8	0.5	<0.1	0.1	0.7	0.7
68	229.7	1.5	1.2	1.0	1.1	0.5	<0.1	0.1	0.7	0.7

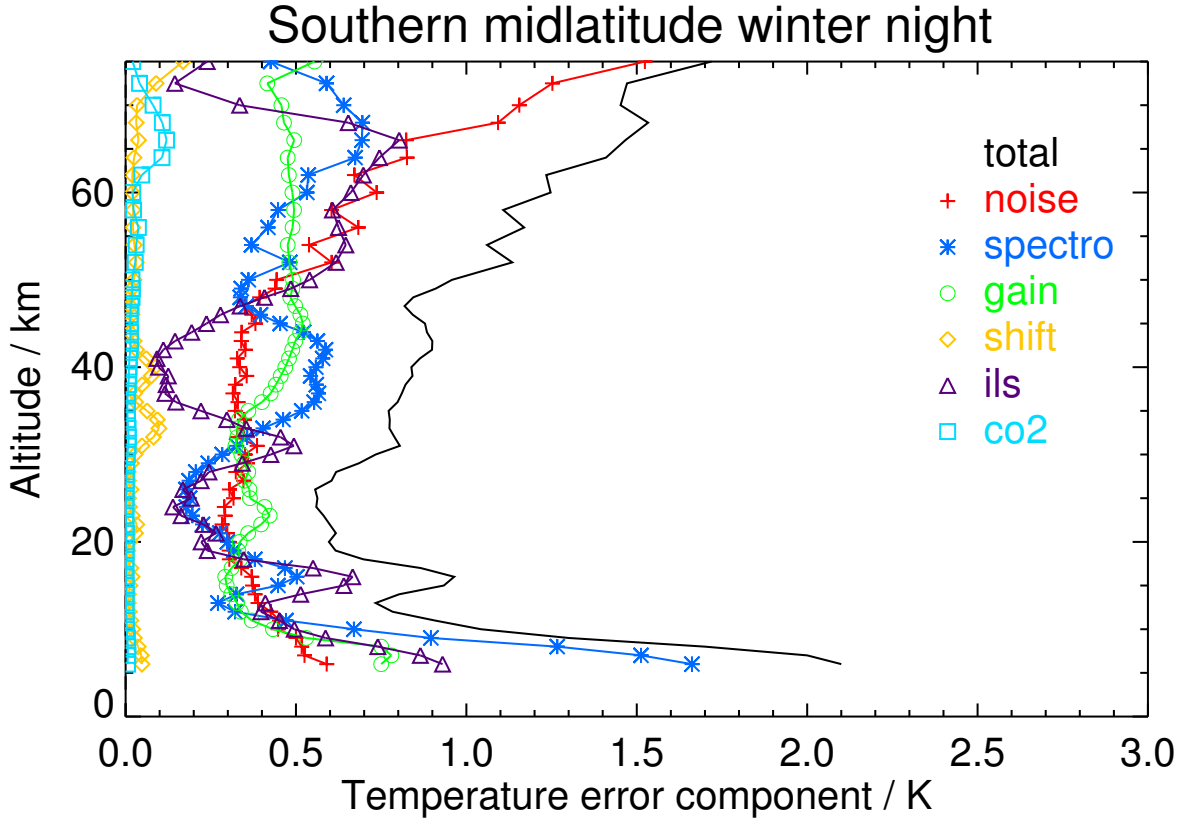

Figure 54. V8R_T_261 Southern midlatitude winter night

Table 56. Temperature error budget for Southern midlatitude spring day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	236.4	2.2	0.9	1.9	0.6	0.7	<0.1	<0.1	1.6	1.1
9	221.0	1.4	0.7	1.2	0.5	0.5	<0.1	<0.1	0.9	0.7
12	217.3	0.8	0.5	0.5	0.4	0.3	<0.1	<0.1	0.3	0.4
15	216.5	1.1	0.5	1.0	0.4	0.3	<0.1	<0.1	0.5	0.9
18	215.7	0.6	0.4	0.3	0.3	0.3	<0.1	<0.1	0.1	0.3
21	217.5	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
24	221.3	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.4	0.2
27	227.2	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.4	0.2
30	233.1	0.9	0.4	0.7	0.3	0.3	<0.1	<0.1	0.3	0.6
33	237.4	0.7	0.5	0.5	0.3	0.4	0.1	<0.1	0.2	0.4
36	240.3	0.7	0.5	0.4	0.3	0.5	<0.1	<0.1	0.3	0.3
39	244.5	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.4	0.2
42	251.9	0.8	0.6	0.4	0.3	0.5	<0.1	<0.1	0.4	<0.1
45	257.6	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.2	0.2
48	260.7	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.2	0.3
52	258.7	0.9	0.7	0.6	0.5	0.4	<0.1	<0.1	0.3	0.5
56	255.7	1.1	0.7	0.8	0.6	0.4	<0.1	<0.1	0.5	0.7
60	244.6	1.3	0.9	0.9	0.7	0.6	<0.1	<0.1	0.6	0.7
64	233.1	1.4	1.0	1.0	0.8	0.6	<0.1	<0.1	0.7	0.7
68	220.5	1.6	1.2	1.0	1.1	0.5	<0.1	0.1	0.6	0.7

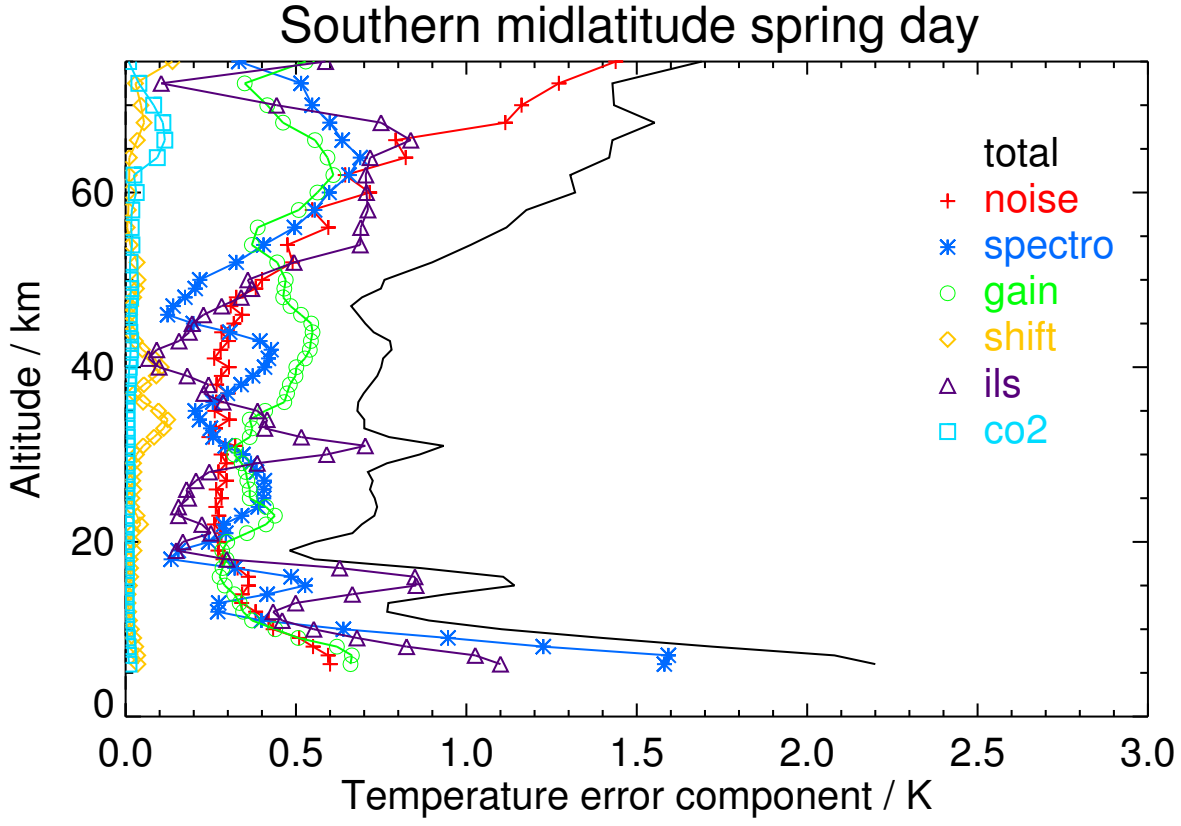

Figure 55. V8R_T_261 Southern midlatitude spring day

Table 57. Temperature error budget for Southern midlatitude spring night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	239.7	2.0	0.9	1.8	0.5	0.7	<0.1	<0.1	1.5	1.0
9	221.5	1.4	0.8	1.2	0.5	0.6	<0.1	<0.1	1.0	0.7
12	216.8	0.9	0.5	0.6	0.4	0.4	<0.1	<0.1	0.4	0.5
15	216.6	1.1	0.5	1.0	0.3	0.3	<0.1	<0.1	0.4	0.9
18	217.2	0.6	0.4	0.3	0.3	0.3	<0.1	<0.1	0.2	0.3
21	219.1	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.2
24	223.0	0.7	0.5	0.3	0.3	0.4	<0.1	<0.1	0.3	0.1
27	227.4	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.4	0.2
30	232.6	0.9	0.4	0.7	0.3	0.3	<0.1	<0.1	0.3	0.6
33	236.8	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.3	0.4
36	242.0	0.7	0.5	0.5	0.3	0.5	<0.1	<0.1	0.4	0.3
39	247.2	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.3	0.2
42	252.3	0.8	0.6	0.4	0.3	0.6	<0.1	<0.1	0.4	<0.1
45	258.4	0.7	0.6	0.3	0.3	0.6	<0.1	<0.1	0.2	0.2
48	261.9	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.1	0.3
52	261.8	0.9	0.6	0.6	0.5	0.4	<0.1	<0.1	0.3	0.5
56	255.7	1.2	0.7	0.9	0.6	0.4	<0.1	<0.1	0.5	0.7
60	245.9	1.3	0.9	0.9	0.7	0.6	<0.1	<0.1	0.6	0.7
64	233.5	1.4	1.0	1.0	0.8	0.6	<0.1	<0.1	0.7	0.8
68	220.9	1.5	1.2	0.9	1.1	0.5	<0.1	0.1	0.6	0.7

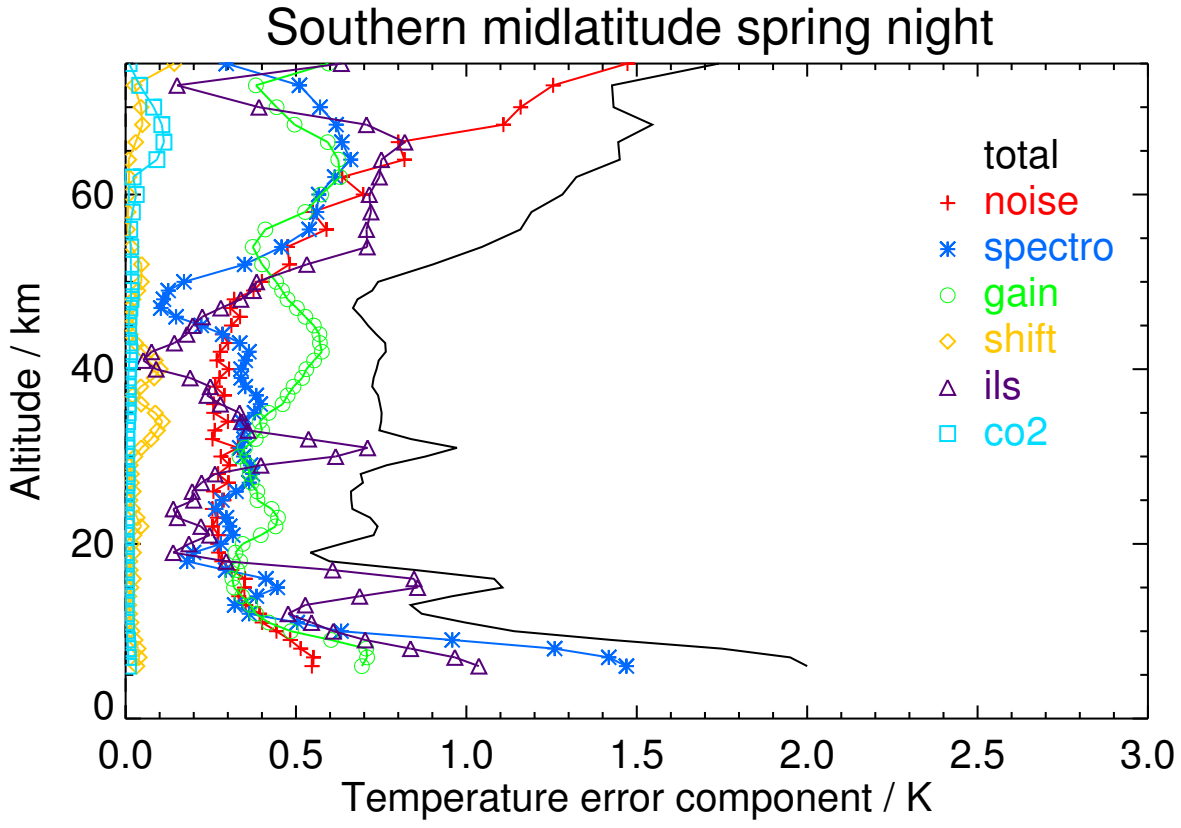

Figure 56. V8R_T_261 Southern midlatitude spring night

Table 58. Temperature error budget for Southern midlatitude summer day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	230.2	1.3	0.8	1.0	0.5	0.6	<0.1	<0.1	0.8	0.6
12	223.0	0.9	0.5	0.7	0.4	0.4	<0.1	<0.1	0.4	0.6
15	219.6	1.2	0.5	1.1	0.3	0.3	<0.1	<0.1	0.5	1.0
18	217.8	0.6	0.4	0.5	0.3	0.3	<0.1	<0.1	0.3	0.4
21	221.2	0.6	0.4	0.3	0.3	0.3	<0.1	<0.1	0.2	0.3
24	225.0	0.6	0.5	0.3	0.2	0.4	<0.1	<0.1	0.2	<0.1
27	229.7	0.6	0.4	0.4	0.3	0.3	<0.1	<0.1	0.3	0.2
30	235.0	0.9	0.4	0.8	0.3	0.3	<0.1	<0.1	0.4	0.6
33	242.2	0.7	0.4	0.5	0.2	0.4	<0.1	<0.1	0.4	0.3
36	249.3	0.8	0.5	0.6	0.2	0.4	<0.1	<0.1	0.5	0.3
39	258.1	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.5	0.2
42	265.6	0.7	0.6	0.3	0.3	0.6	<0.1	<0.1	0.3	<0.1
45	269.3	0.7	0.6	0.2	0.3	0.6	<0.1	<0.1	0.1	0.2
48	272.2	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.1	0.4
52	269.3	0.9	0.6	0.6	0.5	0.4	<0.1	<0.1	0.4	0.5
56	262.8	1.1	0.6	0.8	0.5	0.4	<0.1	<0.1	0.5	0.7
60	251.3	1.3	0.8	1.0	0.6	0.6	<0.1	<0.1	0.7	0.7
64	235.7	1.5	1.0	1.1	0.7	0.7	<0.1	<0.1	0.8	0.6
68	219.5	1.6	1.2	1.1	1.0	0.6	<0.1	<0.1	0.7	0.8

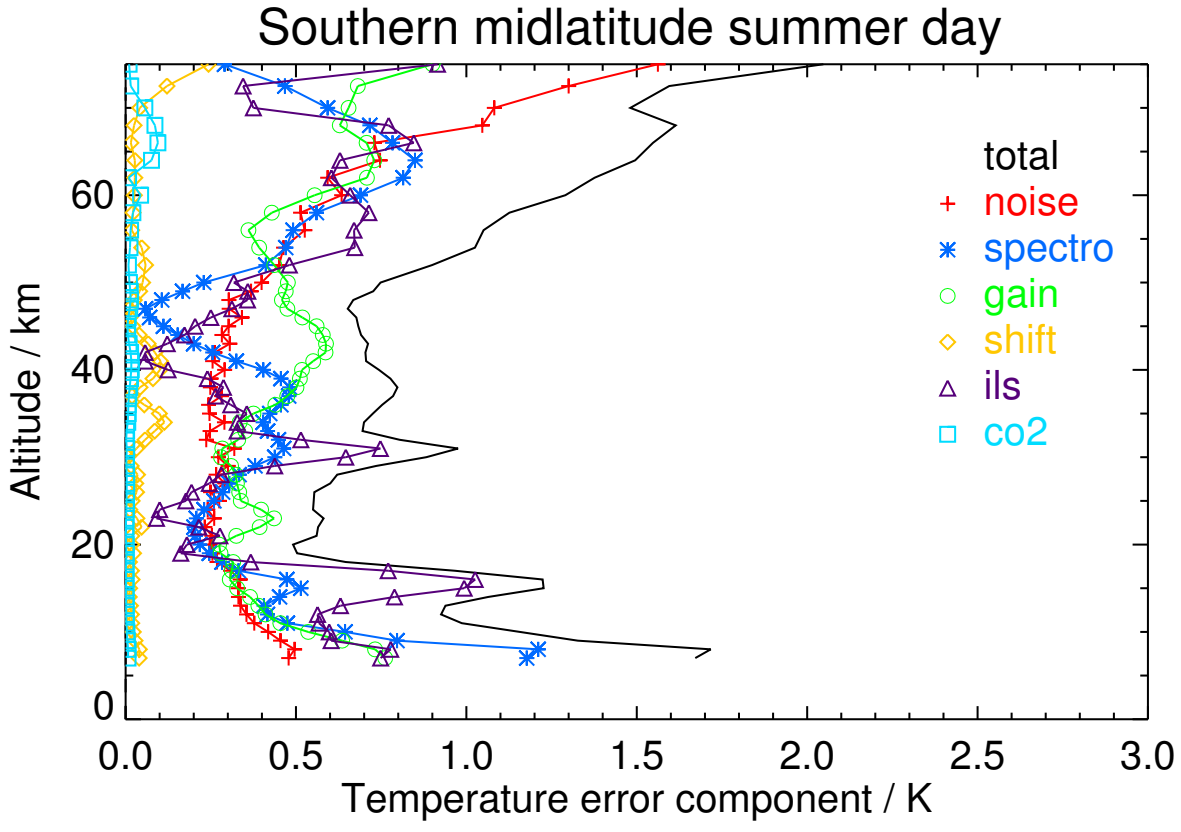

Figure 57. V8R_T_261 Southern midlatitude summer day

Table 59. Temperature error budget for Southern midlatitude summer night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	245.2	1.9	1.0	1.6	0.5	0.9	<0.1	<0.1	1.4	0.9
9	231.5	1.5	0.9	1.1	0.5	0.7	<0.1	<0.1	0.9	0.7
12	223.0	1.1	0.6	0.8	0.4	0.5	<0.1	<0.1	0.5	0.7
15	218.0	1.3	0.5	1.2	0.4	0.4	<0.1	<0.1	0.6	1.0
18	215.9	0.5	0.4	0.3	0.3	0.3	<0.1	<0.1	0.1	0.2
21	218.7	0.6	0.4	0.4	0.3	0.4	<0.1	<0.1	0.3	0.2
24	223.6	0.6	0.5	0.4	0.2	0.4	<0.1	<0.1	0.4	<0.1
27	228.9	0.6	0.5	0.4	0.3	0.3	<0.1	<0.1	0.4	0.2
30	235.0	0.9	0.4	0.8	0.3	0.3	<0.1	<0.1	0.5	0.7
33	242.5	0.7	0.4	0.6	0.2	0.4	<0.1	<0.1	0.5	0.3
36	251.1	0.8	0.5	0.6	0.2	0.4	<0.1	<0.1	0.5	0.3
39	260.1	0.8	0.6	0.5	0.2	0.5	<0.1	<0.1	0.5	0.3
42	267.9	0.7	0.7	0.3	0.3	0.6	<0.1	<0.1	0.3	<0.1
45	272.2	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.1	0.3
48	273.7	0.7	0.5	0.4	0.3	0.5	<0.1	<0.1	0.1	0.4
52	270.4	0.9	0.6	0.6	0.4	0.4	<0.1	<0.1	0.4	0.5
56	264.0	1.1	0.6	0.9	0.5	0.4	<0.1	<0.1	0.5	0.7
60	252.2	1.3	0.9	1.0	0.6	0.6	<0.1	<0.1	0.7	0.7
64	237.1	1.5	1.0	1.0	0.7	0.7	<0.1	<0.1	0.8	0.6
68	222.8	1.6	1.2	1.0	1.0	0.6	<0.1	<0.1	0.7	0.7

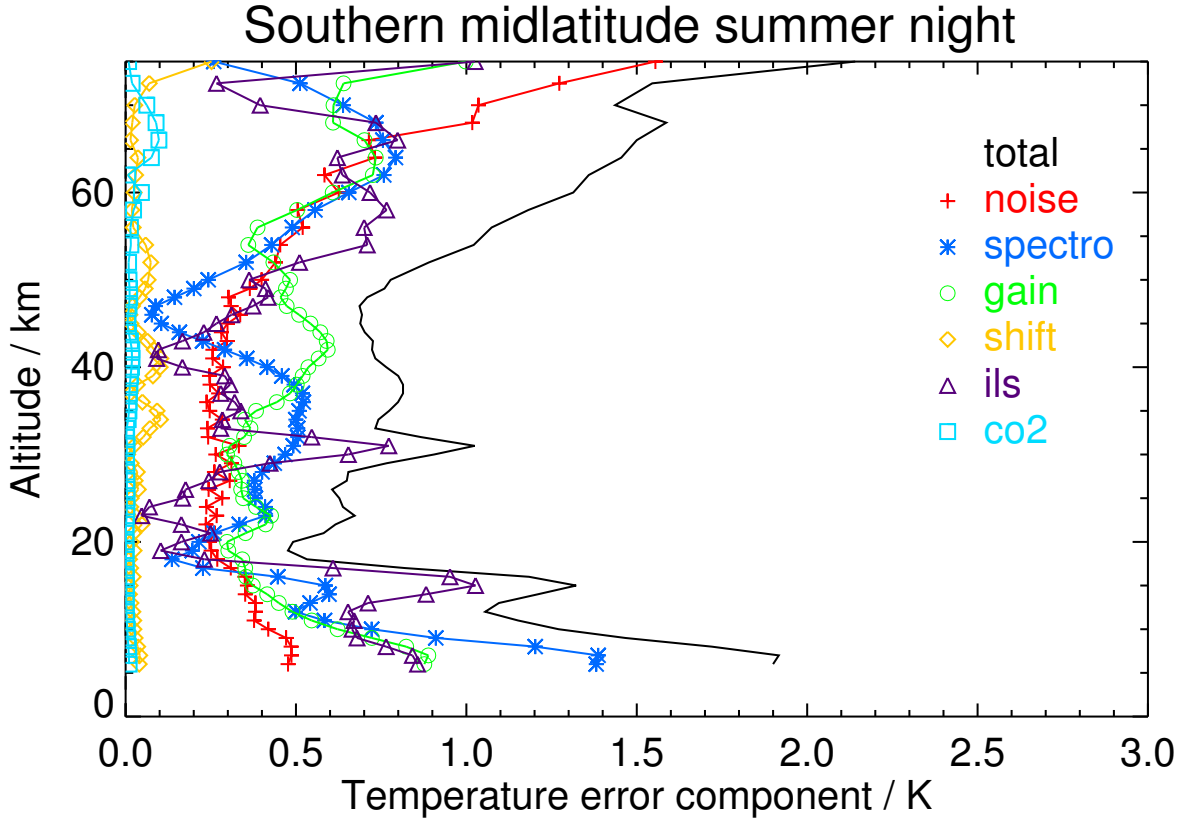

Figure 58. V8R_T_261 Southern midlatitude summer night

Table 60. Temperature error budget for Southern midlatitude autumn day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
9	231.3	1.8	0.9	1.5	0.6	0.7	<0.1	<0.1	1.2	0.8
12	218.7	0.9	0.6	0.7	0.4	0.4	<0.1	<0.1	0.4	0.5
15	214.3	1.0	0.5	0.9	0.4	0.3	<0.1	<0.1	0.4	0.8
18	213.2	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
21	213.3	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.1	0.3
24	214.3	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.2	0.2
27	215.8	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
30	218.9	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.4	0.5
33	224.3	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.4	0.3
36	230.5	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.4	0.2
39	237.2	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.4	0.1
42	242.2	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.3	0.1
45	246.4	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.2	0.2
48	249.8	0.7	0.6	0.4	0.4	0.5	<0.1	<0.1	0.1	0.4
52	248.2	1.0	0.7	0.8	0.6	0.4	<0.1	<0.1	0.5	0.6
56	241.3	1.2	0.8	0.9	0.7	0.5	<0.1	<0.1	0.5	0.7
60	234.7	1.3	1.0	0.8	0.8	0.5	<0.1	<0.1	0.5	0.7
64	227.0	1.3	1.0	0.7	0.9	0.4	<0.1	0.1	0.4	0.6
68	223.6	1.4	1.2	0.7	1.1	0.3	<0.1	0.1	0.4	0.6

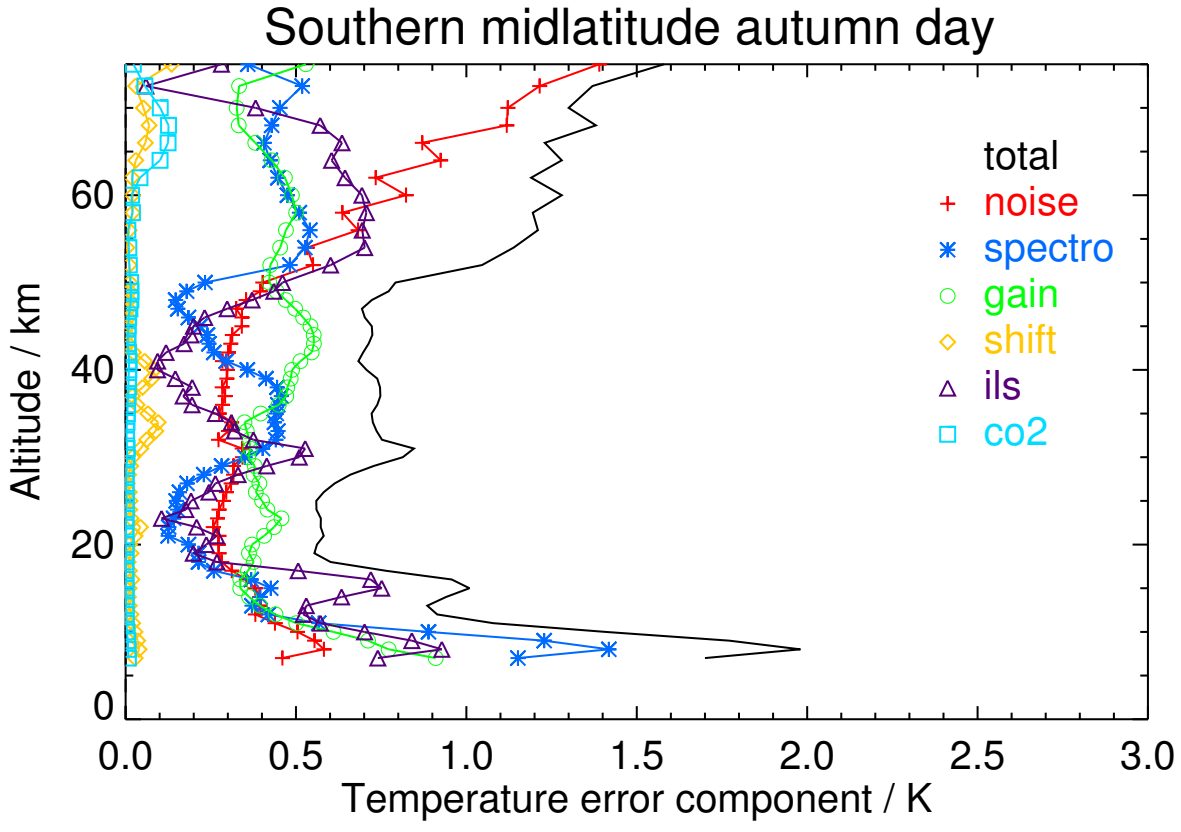

Figure 59. V8R_T_261 Southern midlatitude autumn day

Table 61. Temperature error budget for Southern midlatitude autumn night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	237.5	2.0	1.0	1.7	0.5	0.9	<0.1	<0.1	1.5	0.8
9	225.7	1.5	0.8	1.2	0.5	0.7	<0.1	<0.1	1.0	0.7
12	217.8	0.9	0.6	0.6	0.4	0.4	<0.1	<0.1	0.3	0.5
15	215.7	0.9	0.5	0.8	0.4	0.3	<0.1	<0.1	0.3	0.7
18	215.2	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.3
21	215.4	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.1	0.3
24	216.0	0.5	0.5	0.2	0.3	0.4	<0.1	<0.1	0.1	0.1
27	217.6	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.1	0.3
30	219.2	0.7	0.5	0.5	0.3	0.4	<0.1	<0.1	0.2	0.5
33	223.9	0.7	0.5	0.5	0.3	0.3	<0.1	<0.1	0.4	0.3
36	229.8	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.4	0.2
39	235.9	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.4	0.2
42	242.8	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.3	0.1
45	248.7	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.2	0.2
48	251.6	0.7	0.6	0.4	0.4	0.4	<0.1	<0.1	0.2	0.4
52	248.8	1.0	0.7	0.7	0.5	0.4	<0.1	<0.1	0.5	0.6
56	243.8	1.2	0.8	0.9	0.7	0.5	<0.1	<0.1	0.5	0.7
60	236.2	1.3	0.9	0.8	0.8	0.5	<0.1	<0.1	0.5	0.7
64	229.4	1.3	1.0	0.8	0.9	0.5	<0.1	0.1	0.4	0.6
68	223.9	1.3	1.2	0.7	1.1	0.4	<0.1	0.1	0.4	0.5

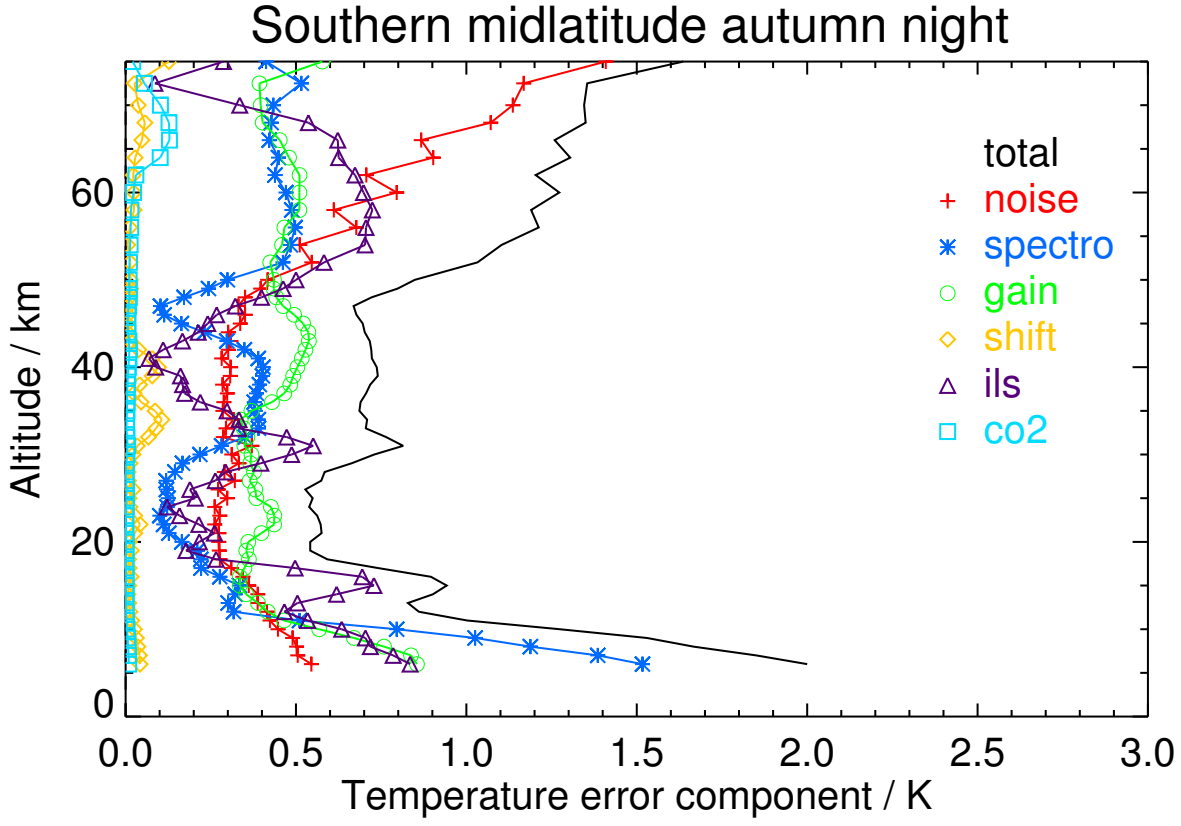

Figure 60. V8R_T_261 Southern midlatitude autumn night

Table 62. Temperature error budget for Southern polar winter day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	237.0	2.3	1.0	2.2	0.6	0.8	<0.1	<0.1	2.0	0.9
9	208.9	1.5	0.7	1.4	0.5	0.5	<0.1	<0.1	1.2	0.6
12	204.4	0.9	0.5	0.7	0.4	0.3	<0.1	<0.1	0.5	0.4
15	201.3	1.1	0.5	1.0	0.4	0.3	<0.1	<0.1	0.8	0.6
18	194.0	0.7	0.5	0.5	0.3	0.3	<0.1	<0.1	0.4	0.2
21	190.9	0.6	0.5	0.3	0.3	0.3	<0.1	<0.1	0.2	0.1
24	189.2	0.7	0.5	0.4	0.4	0.3	<0.1	<0.1	0.3	0.2
27	193.8	0.9	0.5	0.7	0.4	0.3	<0.1	<0.1	0.7	0.1
30	203.6	1.1	0.5	0.9	0.4	0.3	<0.1	<0.1	0.9	0.2
33	215.0	1.2	0.5	1.1	0.4	0.3	0.1	<0.1	1.0	0.5
36	229.6	1.2	0.6	1.0	0.4	0.5	<0.1	<0.1	1.0	<0.1
39	243.9	1.0	0.6	0.8	0.3	0.5	<0.1	<0.1	0.8	0.2
42	256.0	1.0	0.7	0.7	0.4	0.5	<0.1	<0.1	0.6	0.2
45	268.9	0.8	0.6	0.5	0.4	0.5	<0.1	<0.1	0.4	0.3
48	274.1	0.9	0.6	0.6	0.4	0.4	<0.1	<0.1	0.3	0.6
52	267.6	1.3	0.8	1.0	0.6	0.5	<0.1	<0.1	0.6	0.8
56	259.1	1.3	0.9	0.9	0.7	0.5	<0.1	<0.1	0.5	0.8
60	248.5	1.5	1.0	1.1	0.8	0.5	<0.1	<0.1	0.5	1.0
64	236.2	1.5	1.0	1.0	0.9	0.4	<0.1	0.1	0.5	0.9
68	225.6	1.5	1.3	0.8	1.2	0.4	<0.1	0.1	0.5	0.6

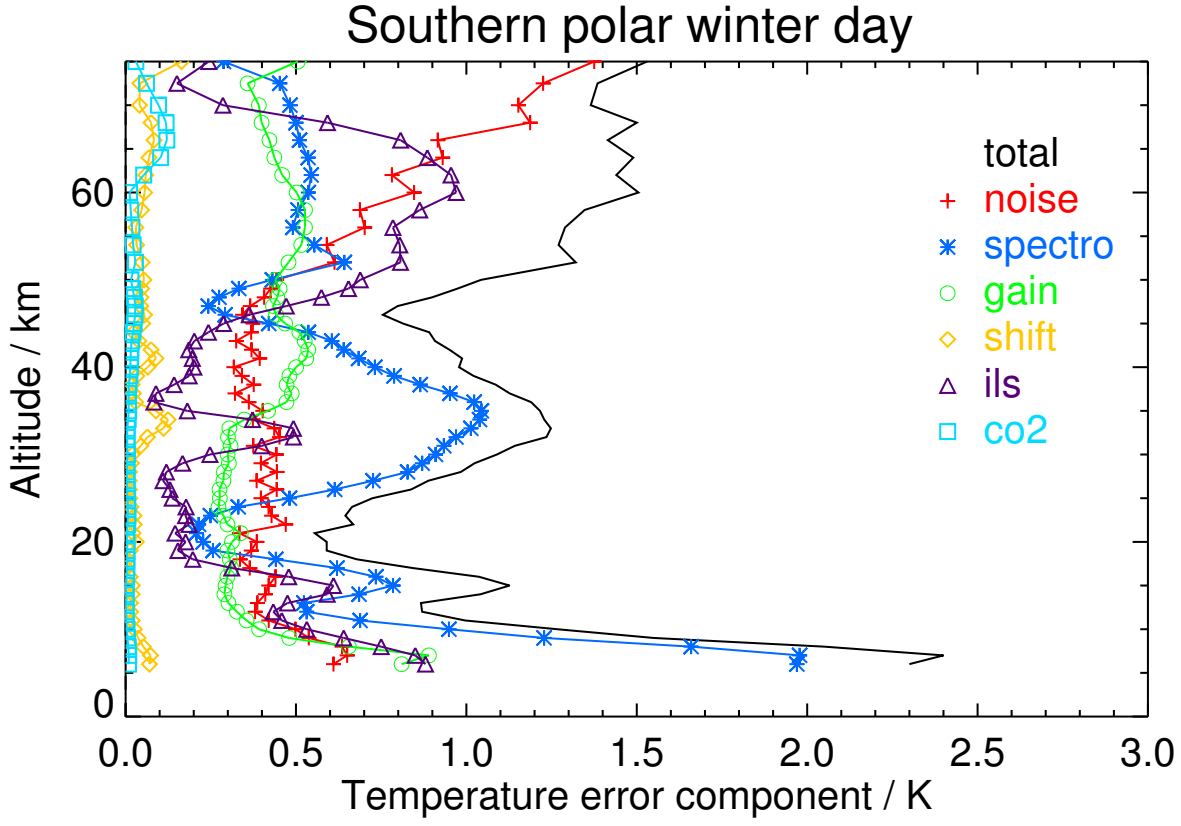

Figure 61. V8R_T_261 Southern polar winter day

Table 63. Temperature error budget for Southern polar winter night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	235.1	2.0	1.0	1.8	0.6	0.7	<0.1	<0.1	1.6	0.8
9	208.9	1.5	0.7	1.3	0.5	0.5	<0.1	<0.1	1.2	0.6
12	203.9	0.9	0.5	0.7	0.4	0.3	<0.1	<0.1	0.5	0.4
15	200.1	1.1	0.5	1.0	0.5	0.2	<0.1	<0.1	0.8	0.6
18	194.0	0.8	0.4	0.6	0.4	0.2	<0.1	<0.1	0.5	0.3
21	188.3	0.6	0.5	0.3	0.4	0.3	<0.1	<0.1	0.2	0.2
24	185.6	0.8	0.6	0.5	0.5	0.2	<0.1	<0.1	0.5	0.1
27	191.3	1.0	0.5	0.8	0.4	0.3	<0.1	<0.1	0.8	<0.1
30	202.1	1.1	0.5	1.0	0.4	0.3	<0.1	<0.1	1.0	0.3
33	214.2	1.2	0.5	1.1	0.4	0.3	0.1	<0.1	1.0	0.5
36	227.8	1.1	0.6	0.9	0.4	0.5	<0.1	<0.1	0.9	0.1
39	240.5	0.9	0.6	0.7	0.4	0.4	<0.1	<0.1	0.7	0.2
42	250.7	0.8	0.6	0.5	0.4	0.5	<0.1	<0.1	0.5	0.2
45	260.2	0.8	0.6	0.4	0.4	0.4	<0.1	<0.1	0.3	0.3
48	265.6	0.9	0.6	0.6	0.4	0.5	<0.1	<0.1	0.2	0.5
52	269.6	1.1	0.8	0.7	0.6	0.4	<0.1	<0.1	0.3	0.6
56	265.4	1.2	0.9	0.8	0.7	0.5	<0.1	<0.1	0.5	0.7
60	257.0	1.4	1.0	1.0	0.8	0.5	<0.1	<0.1	0.5	0.8
64	247.1	1.4	1.0	0.9	0.9	0.4	<0.1	0.1	0.5	0.8
68	238.0	1.4	1.2	0.8	1.1	0.4	<0.1	0.1	0.5	0.6

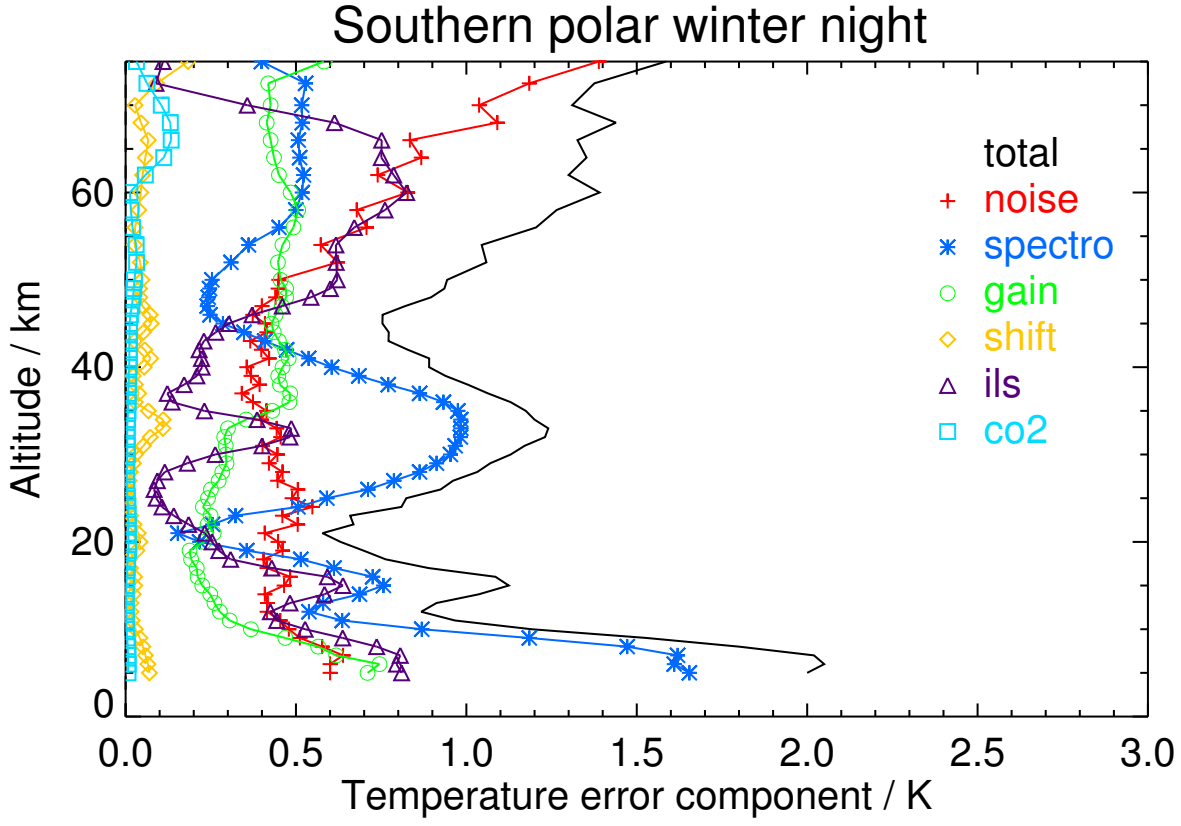

Figure 62. V8R_T_261 Southern polar winter night

Table 64. Temperature error budget for Southern polar spring day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	227.6	1.9	0.8	1.8	0.6	0.6	<0.1	<0.1	1.4	1.0
9	209.6	1.4	0.6	1.2	0.5	0.3	<0.1	<0.1	0.9	0.8
12	202.9	1.0	0.5	0.9	0.5	0.1	<0.1	<0.1	0.5	0.7
15	201.0	1.2	0.5	1.0	0.5	0.1	<0.1	<0.1	0.4	1.0
18	204.6	0.8	0.4	0.6	0.4	0.1	<0.1	<0.1	0.5	0.2
21	217.5	1.2	0.4	1.1	0.3	0.3	<0.1	<0.1	1.0	0.3
24	233.0	1.0	0.5	0.8	0.3	0.4	<0.1	<0.1	0.7	0.2
27	244.4	0.8	0.4	0.6	0.3	0.4	<0.1	<0.1	0.6	0.2
30	254.1	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.4	0.4
33	260.2	1.1	0.5	1.0	0.3	0.4	<0.1	<0.1	0.3	0.9
36	265.9	0.8	0.6	0.6	0.3	0.5	0.2	<0.1	0.2	0.5
39	271.0	0.8	0.7	0.4	0.3	0.6	<0.1	<0.1	0.2	0.4
42	272.0	0.8	0.7	0.2	0.3	0.6	0.1	<0.1	0.2	0.2
45	273.0	0.8	0.7	0.3	0.3	0.6	<0.1	<0.1	0.2	0.3
48	272.1	0.8	0.6	0.4	0.4	0.5	<0.1	<0.1	0.2	0.4
52	268.7	1.0	0.6	0.8	0.5	0.4	<0.1	<0.1	0.4	0.7
56	259.9	1.2	0.7	0.9	0.6	0.5	<0.1	<0.1	0.6	0.7
60	247.0	1.4	0.9	1.1	0.7	0.6	<0.1	<0.1	0.7	0.8
64	232.9	1.5	1.0	1.0	0.8	0.7	<0.1	<0.1	0.7	0.8
68	220.9	1.6	1.3	1.0	1.1	0.6	<0.1	<0.1	0.6	0.8

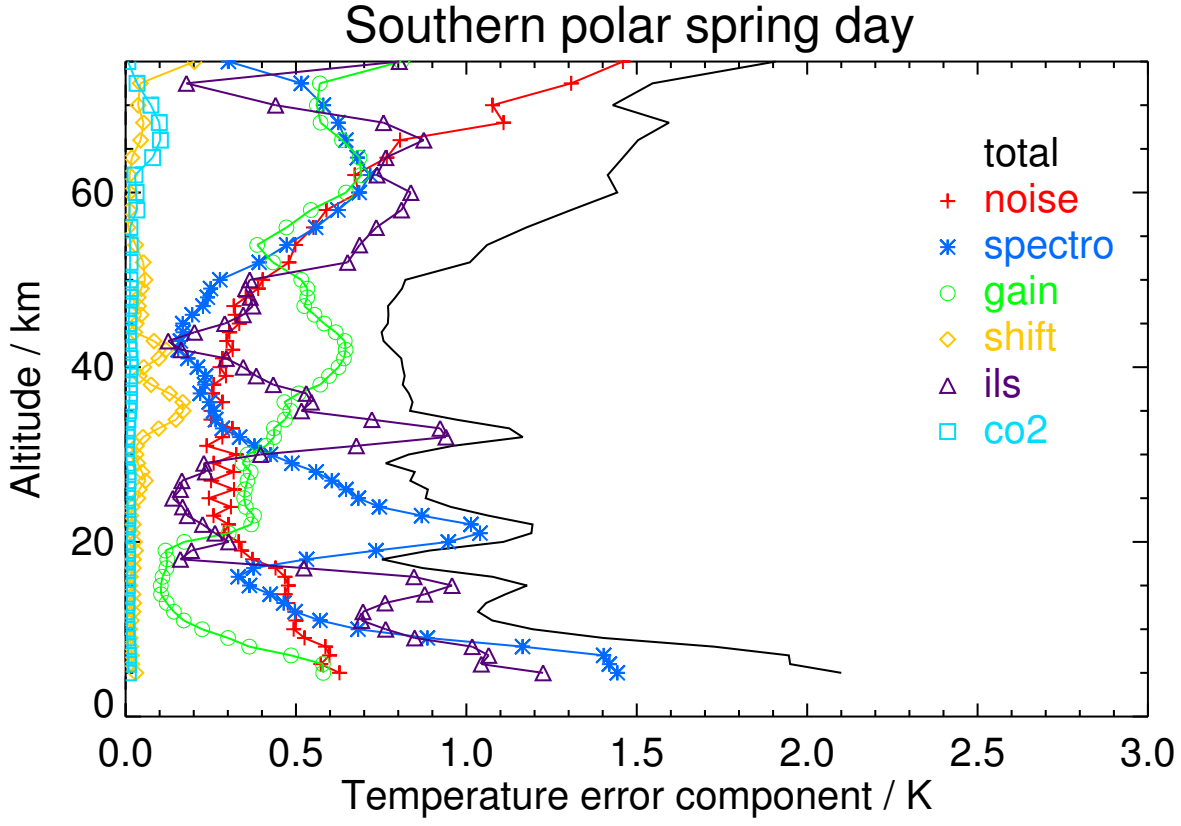

Figure 63. V8R_T_261 Southern polar spring day

Table 65. Temperature error budget for Southern polar spring night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	229.1	1.7	0.8	1.5	0.5	0.7	<0.1	<0.1	1.3	0.8
9	217.3	0.9	0.6	0.7	0.4	0.4	<0.1	<0.1	0.5	0.5
12	214.3	0.8	0.5	0.6	0.4	0.3	<0.1	<0.1	0.4	0.5
15	216.8	1.1	0.4	0.9	0.4	0.2	<0.1	<0.1	0.4	0.8
18	222.6	0.8	0.4	0.5	0.3	0.3	<0.1	<0.1	0.4	0.3
21	228.3	0.8	0.5	0.5	0.2	0.4	<0.1	<0.1	0.5	0.2
24	234.8	0.8	0.5	0.5	0.3	0.4	<0.1	<0.1	0.4	0.2
27	240.0	0.8	0.5	0.4	0.2	0.4	<0.1	<0.1	0.4	0.2
30	244.8	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.3	0.4
33	249.7	1.0	0.5	0.8	0.3	0.4	<0.1	<0.1	0.3	0.8
36	253.0	0.8	0.6	0.6	0.3	0.5	0.1	<0.1	0.2	0.5
39	256.8	0.7	0.6	0.4	0.3	0.6	<0.1	<0.1	0.3	0.2
42	260.0	0.7	0.7	0.3	0.3	0.6	<0.1	<0.1	0.2	0.1
45	262.2	0.7	0.7	0.3	0.3	0.6	<0.1	<0.1	0.1	0.2
48	264.4	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	0.2	0.3
52	263.9	0.9	0.6	0.7	0.5	0.4	<0.1	<0.1	0.3	0.6
56	257.7	1.1	0.7	0.9	0.6	0.4	<0.1	<0.1	0.5	0.7
60	247.0	1.4	0.9	1.0	0.7	0.6	<0.1	<0.1	0.6	0.8
64	234.2	1.4	1.0	1.0	0.8	0.7	<0.1	<0.1	0.7	0.7
68	220.7	1.6	1.3	1.0	1.1	0.6	<0.1	<0.1	0.7	0.7

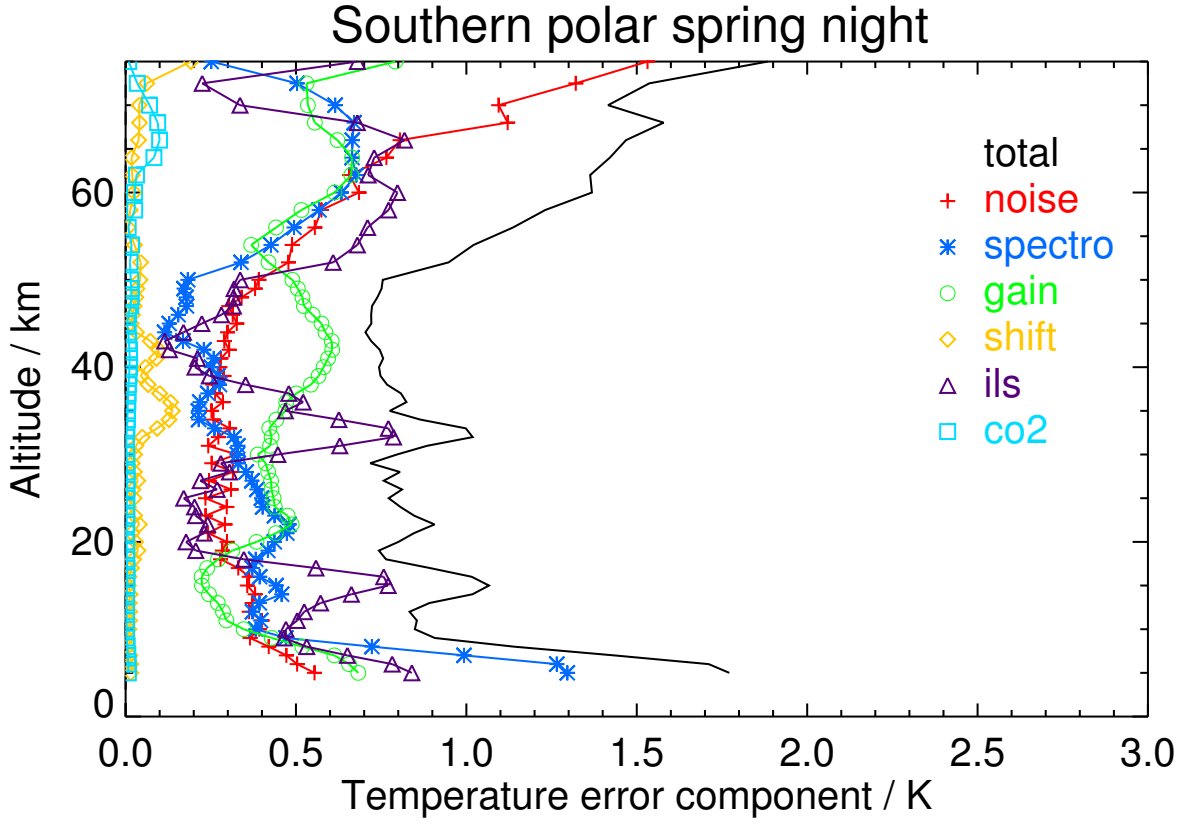

Figure 64. V8R_T_261 Southern polar spring night

Table 66. Temperature error budget for Southern polar summer day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	233.3	1.6	0.8	1.3	0.4	0.7	<0.1	<0.1	1.1	0.7
9	222.3	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.3	0.3
12	226.8	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.1	0.4
15	228.3	1.1	0.4	1.0	0.3	0.3	<0.1	<0.1	0.3	1.0
18	230.7	0.6	0.5	0.3	0.2	0.4	<0.1	<0.1	0.1	0.3
21	232.5	0.6	0.5	0.3	0.2	0.5	<0.1	<0.1	<0.1	0.3
24	233.9	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	<0.1	0.2
27	235.4	0.6	0.5	0.3	0.2	0.4	<0.1	<0.1	0.2	0.2
30	238.9	0.7	0.5	0.5	0.3	0.3	<0.1	<0.1	0.3	0.5
33	244.1	1.0	0.5	0.8	0.3	0.4	<0.1	<0.1	0.4	0.7
36	251.2	0.8	0.5	0.6	0.3	0.4	0.1	<0.1	0.4	0.4
39	258.9	0.8	0.6	0.4	0.3	0.5	<0.1	<0.1	0.4	0.2
42	266.5	0.8	0.7	0.4	0.3	0.6	0.1	<0.1	0.4	<0.1
45	273.5	0.7	0.7	0.3	0.3	0.6	<0.1	<0.1	0.2	0.1
48	277.2	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	<0.1	0.3
52	278.0	0.9	0.6	0.6	0.4	0.5	<0.1	<0.1	0.3	0.6
56	272.9	1.0	0.6	0.8	0.5	0.4	<0.1	<0.1	0.4	0.7
60	262.4	1.2	0.8	0.9	0.6	0.6	<0.1	<0.1	0.6	0.7
64	247.0	1.4	1.0	1.0	0.6	0.8	<0.1	<0.1	0.8	0.6
68	230.1	1.6	1.2	1.1	0.9	0.7	<0.1	<0.1	0.8	0.8

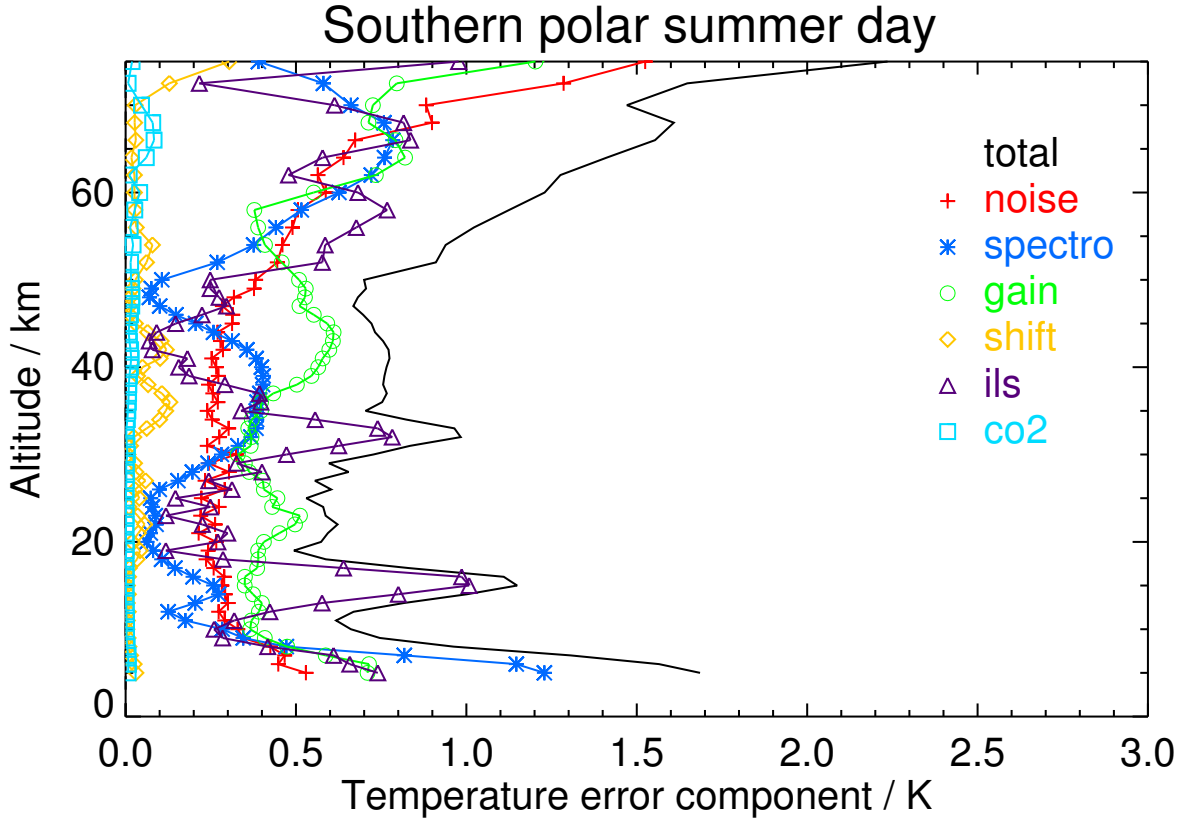

Figure 65. V8R_T_261 Southern polar summer day

Table 67. Temperature error budget for Southern polar summer night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	237.8	1.8	0.9	1.6	0.5	0.8	<0.1	<0.1	1.4	0.8
9	220.5	0.7	0.6	0.4	0.4	0.4	<0.1	<0.1	0.2	0.3
12	226.2	0.7	0.5	0.4	0.3	0.4	<0.1	<0.1	0.2	0.4
15	227.1	1.2	0.5	1.1	0.3	0.4	<0.1	<0.1	0.3	1.1
18	227.0	0.6	0.5	0.2	0.2	0.4	<0.1	<0.1	<0.1	0.2
21	228.5	0.6	0.5	0.3	0.2	0.4	<0.1	<0.1	<0.1	0.3
24	230.0	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	<0.1	0.3
27	232.2	0.6	0.5	0.3	0.2	0.4	<0.1	<0.1	0.2	0.2
30	236.0	0.9	0.4	0.8	0.3	0.3	<0.1	<0.1	0.3	0.8
33	242.1	0.7	0.4	0.6	0.3	0.4	<0.1	<0.1	0.4	0.4
36	249.2	0.7	0.5	0.5	0.2	0.5	<0.1	<0.1	0.4	0.3
39	256.4	0.7	0.6	0.5	0.3	0.5	<0.1	<0.1	0.4	0.2
42	264.6	0.7	0.6	0.4	0.3	0.6	<0.1	<0.1	0.3	<0.1
45	269.9	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.1	0.2
48	271.7	0.7	0.6	0.4	0.3	0.5	<0.1	<0.1	<0.1	0.3
52	271.6	0.9	0.6	0.6	0.4	0.4	<0.1	<0.1	0.3	0.6
56	265.8	1.1	0.6	0.8	0.5	0.4	<0.1	<0.1	0.5	0.7
60	254.3	1.3	0.9	1.0	0.6	0.6	<0.1	<0.1	0.7	0.7
64	240.4	1.5	1.0	1.0	0.7	0.8	<0.1	<0.1	0.8	0.7
68	224.0	1.6	1.2	1.1	1.0	0.7	<0.1	<0.1	0.7	0.8

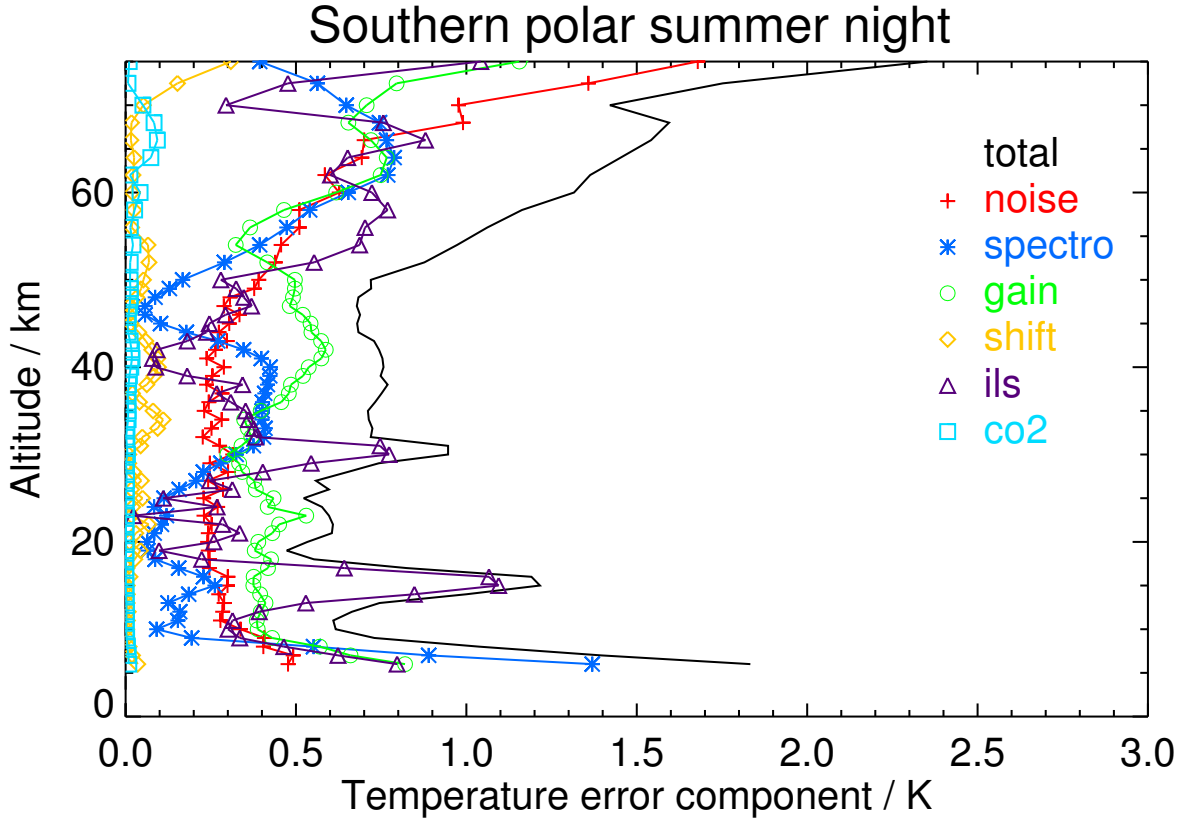

Figure 66. V8R_T_261 Southern polar summer night

Table 68. Temperature error budget for Southern polar autumn day . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	232.1	1.5	0.9	1.1	0.4	0.8	<0.1	<0.1	1.0	0.5
9	220.8	0.7	0.6	0.3	0.3	0.5	<0.1	<0.1	0.2	0.3
12	221.7	0.8	0.5	0.5	0.3	0.4	<0.1	<0.1	0.2	0.5
15	218.1	1.2	0.6	1.1	0.3	0.4	<0.1	<0.1	0.6	0.9
18	214.1	0.7	0.5	0.5	0.3	0.5	<0.1	<0.1	0.4	0.3
21	210.7	0.7	0.5	0.4	0.3	0.5	<0.1	<0.1	0.3	0.2
24	208.1	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
27	207.4	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	<0.1	0.2
30	208.6	0.7	0.5	0.4	0.4	0.4	<0.1	<0.1	0.2	0.4
33	212.2	0.8	0.5	0.6	0.4	0.4	<0.1	<0.1	0.4	0.5
36	218.2	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.5	0.2
39	224.8	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.5	0.1
42	232.1	0.9	0.6	0.6	0.4	0.5	<0.1	<0.1	0.6	0.1
45	242.6	0.8	0.6	0.5	0.4	0.5	<0.1	<0.1	0.5	0.2
48	250.6	0.8	0.6	0.5	0.4	0.5	<0.1	<0.1	0.3	0.4
52	257.3	1.0	0.7	0.7	0.6	0.4	<0.1	<0.1	0.4	0.6
56	250.2	1.3	0.8	1.0	0.7	0.5	<0.1	<0.1	0.6	0.8
60	242.2	1.4	1.0	0.9	0.8	0.5	<0.1	<0.1	0.5	0.8
64	234.9	1.3	1.0	0.8	0.9	0.4	<0.1	0.1	0.5	0.7
68	228.8	1.4	1.2	0.7	1.1	0.3	<0.1	0.1	0.5	0.5

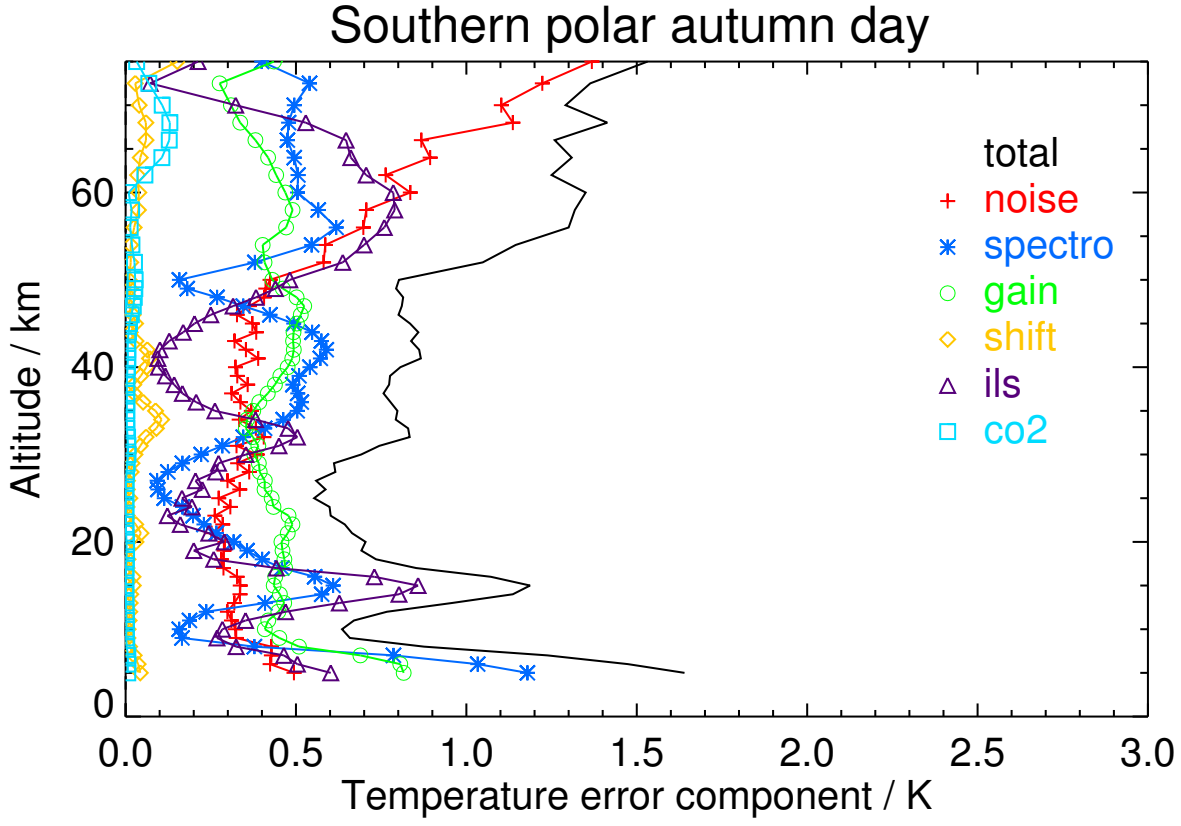

Figure 67. V8R_T_261 Southern polar autumn day

Table 69. Temperature error budget for Southern polar autumn night . All uncertainties are 1σ.

Altitude (km)	Temp. (K)	Total Error (K)	Random Error (K)	Syst. Error (K)	Meas. Noise (K)	Gain Calibr. (K)	Spectral Shift (K)	CO_2-VMR (K)	Spectrosc. Data (K)	Instrument Line Shape (K)
6	225.5	1.4	0.8	1.2	0.5	0.7	<0.1	<0.1	1.0	0.5
9	217.2	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
12	219.9	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.3	0.5
15	215.7	1.2	0.5	1.1	0.4	0.4	<0.1	<0.1	0.7	0.8
18	211.4	0.8	0.5	0.6	0.3	0.4	<0.1	<0.1	0.4	0.3
21	208.7	0.6	0.5	0.3	0.3	0.4	<0.1	<0.1	0.2	0.2
24	207.5	0.6	0.5	0.2	0.3	0.4	<0.1	<0.1	0.1	0.2
27	207.9	0.5	0.5	0.2	0.3	0.4	<0.1	<0.1	0.1	0.2
30	210.2	0.7	0.5	0.4	0.4	0.4	<0.1	<0.1	0.2	0.4
33	213.9	0.8	0.5	0.6	0.4	0.3	<0.1	<0.1	0.4	0.5
36	219.7	0.8	0.5	0.5	0.3	0.4	<0.1	<0.1	0.5	0.2
39	226.8	0.8	0.6	0.5	0.3	0.5	<0.1	<0.1	0.5	0.1
42	234.7	0.8	0.6	0.5	0.4	0.5	<0.1	<0.1	0.5	0.1
45	243.0	0.8	0.6	0.5	0.4	0.5	<0.1	<0.1	0.4	0.2
48	250.6	0.8	0.6	0.5	0.4	0.5	<0.1	<0.1	0.3	0.4
52	257.6	1.0	0.7	0.7	0.6	0.4	<0.1	<0.1	0.3	0.6
56	253.3	1.2	0.8	0.8	0.7	0.5	<0.1	<0.1	0.5	0.7
60	248.9	1.2	0.9	0.8	0.8	0.5	<0.1	<0.1	0.4	0.7
64	243.0	1.3	0.9	0.8	0.8	0.4	<0.1	0.1	0.5	0.7
68	233.9	1.5	1.2	0.9	1.1	0.4	<0.1	0.1	0.6	0.6

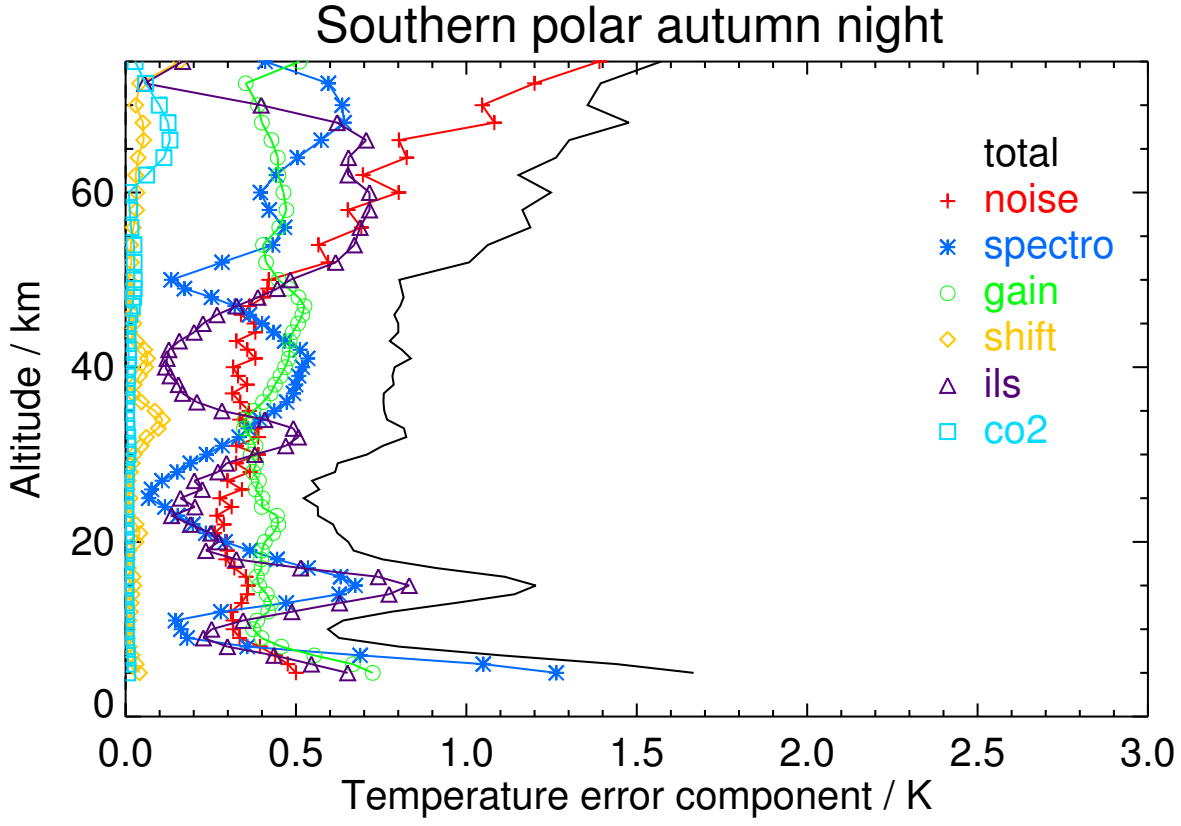

Figure 68. V8R_T_261 Southern polar autumn night