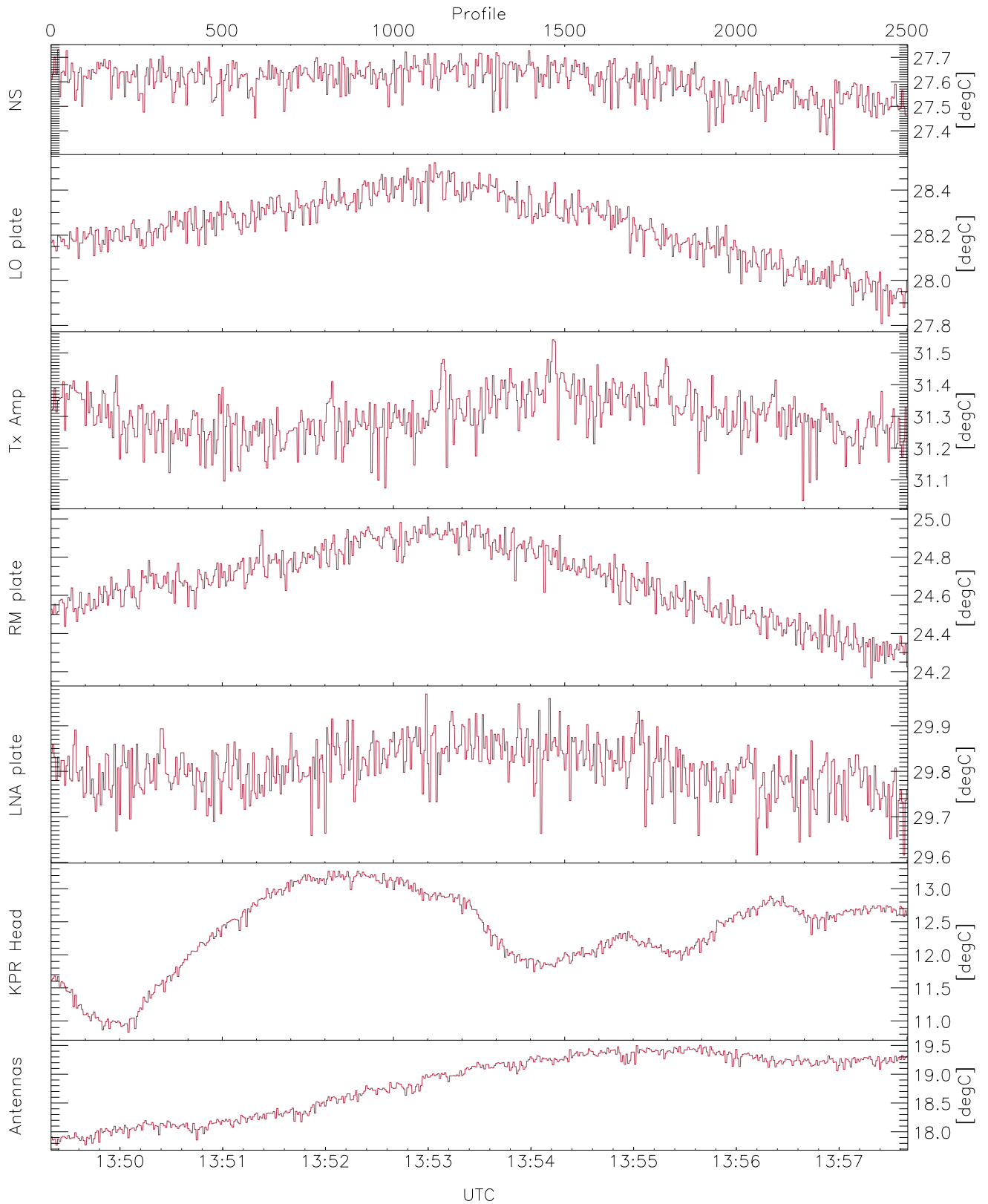


KPR SPP; Ant(s): UP, DOWN; Radiometer: OFF
 UTC: 13:49:20-13:57:40, TimeCor: 0.00s, Dur: 500.40s
 TimeInt(min,max,mn,std): 188.9,211.2,200.0,1.0 ms; PPS: 5.0
 NumRec(r/t): 2503/2503, 0-2502/13:49:20-13:57:40
 AcqTime(req,actual): 200.0,200.0 ms, Data Rate: 187.8 KB/s
 Pulse: 247 ns, Chirp: 2.47 us, DRxIF: 5.0 MHz
 PRF: 20.0 KHz, avgPulses: 2000, avgPP: 1000
 NyquistVel: 42.1 m/s, RangeRes:30.0 m
 Pulse Range(min,max): 120, 6506 m, Gates: 427
 Chirp Range(min,max): 536, 6502 m, Gates: 399
 RangeGateSampling: 15.0 m, Aspect: 0.8

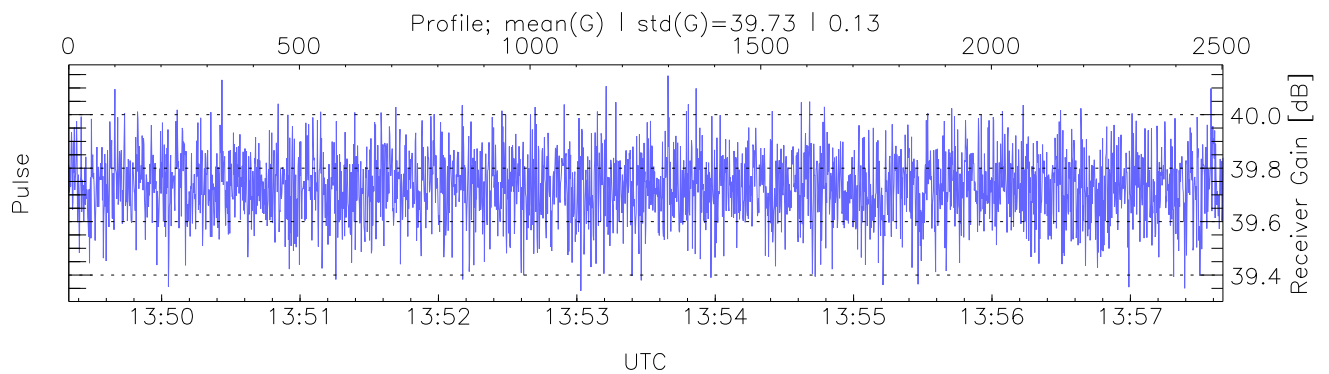
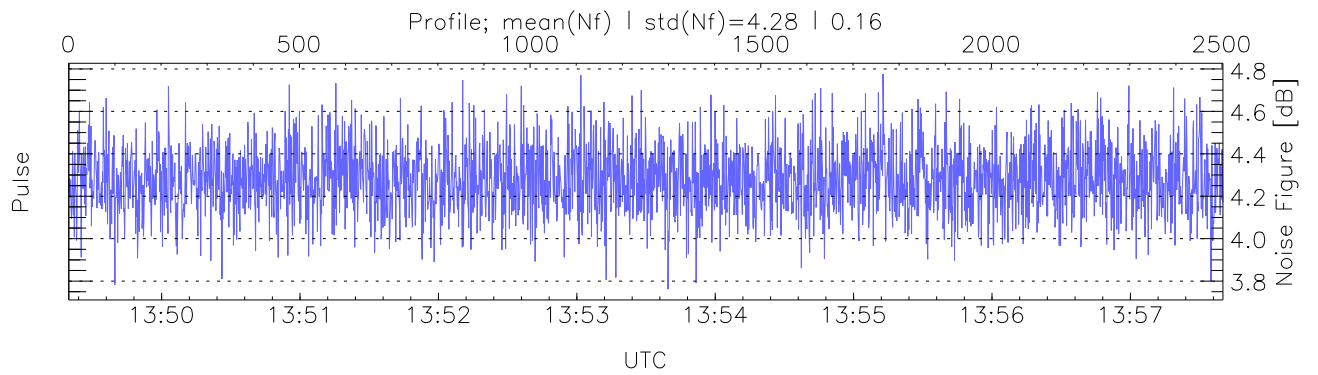
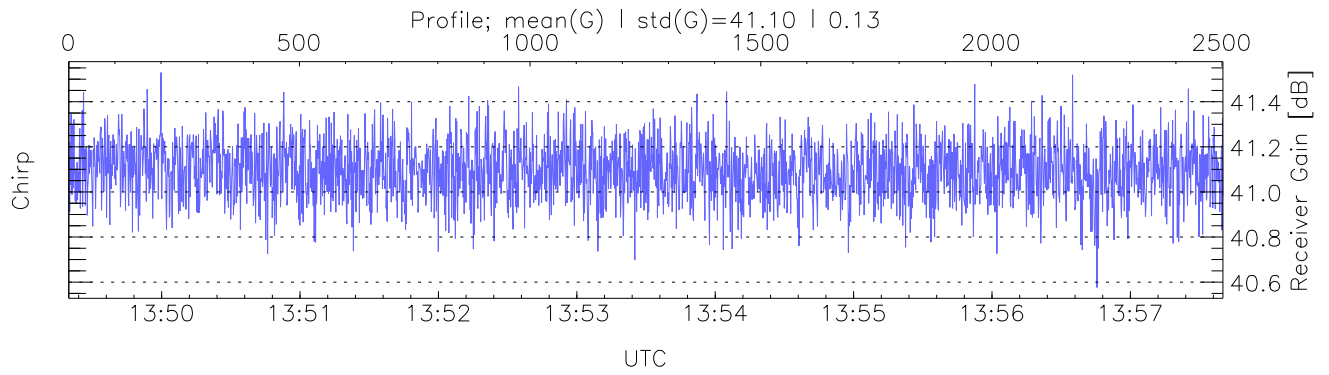
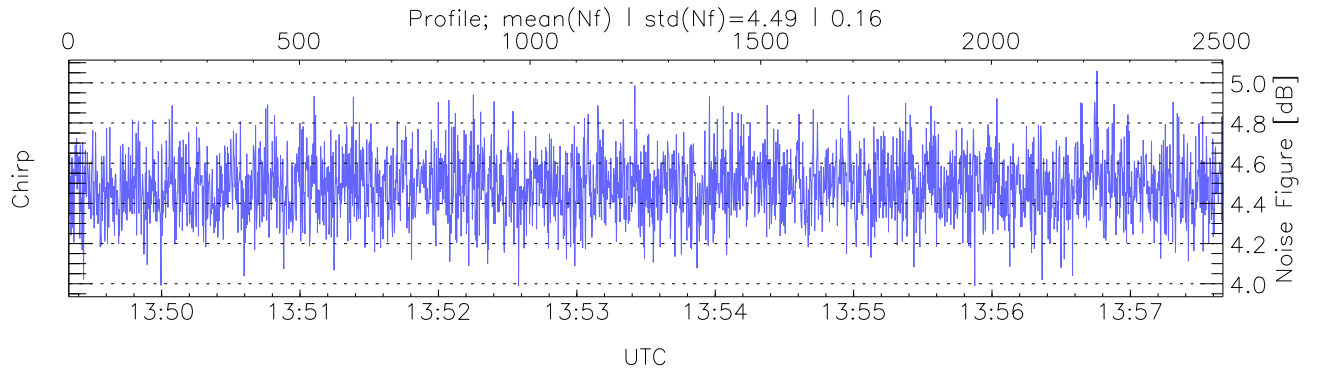


KPR SPP Temperatures, Power Supplies, PLO lock:

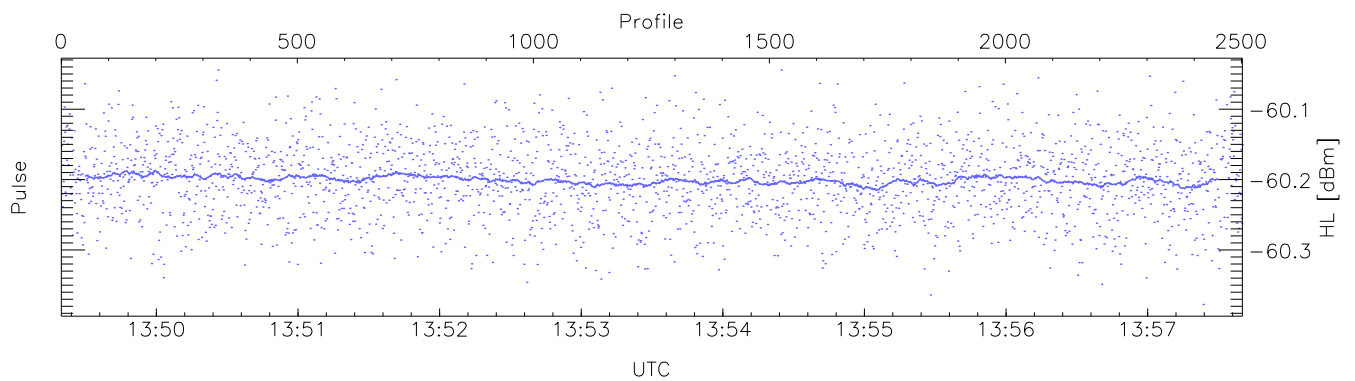
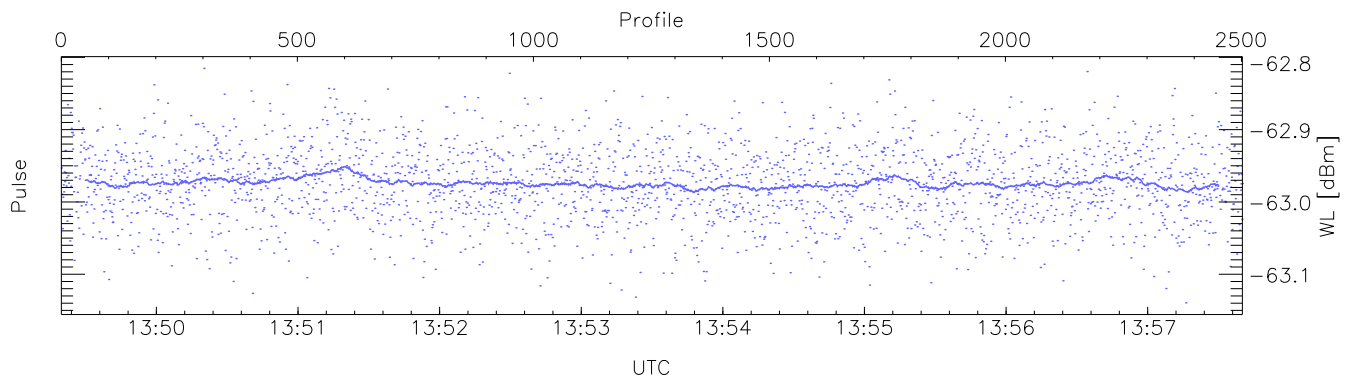
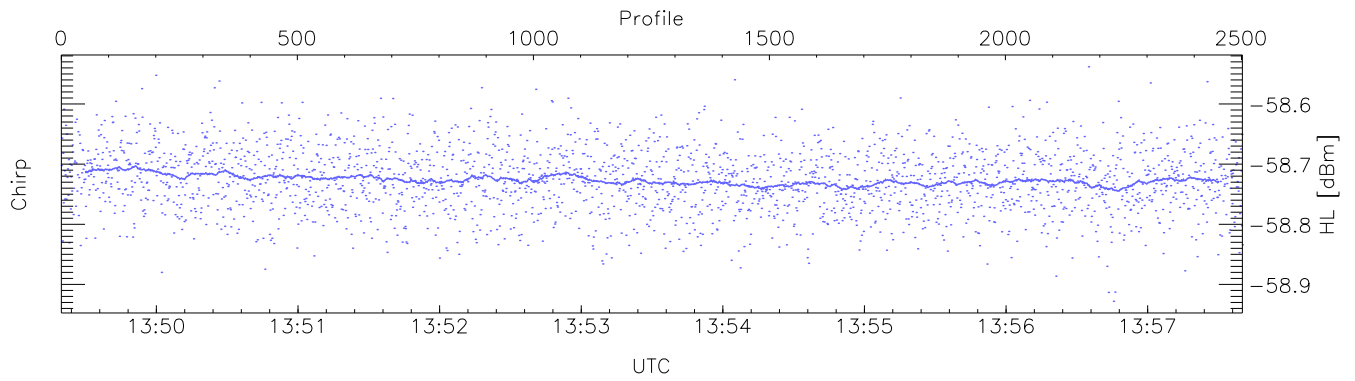
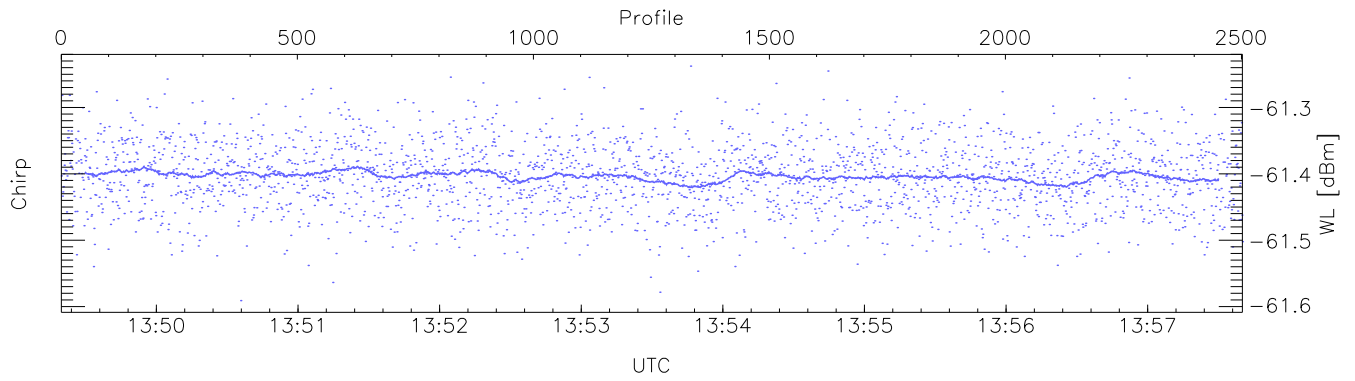
mintempC: 27.3, 27.8, 31.0, 24.2, 29.6, 10.8, 17.8
 maxtempC: 27.7, 28.5, 31.5, 25.0, 30.0, 13.3, 19.5

minVDC: 26.28, 11.71, 7.84, 5.21
 maxVDC: 27.74, 11.77, 7.87, 5.23

PLO(3.84,15.84 GHz) unlocked: None

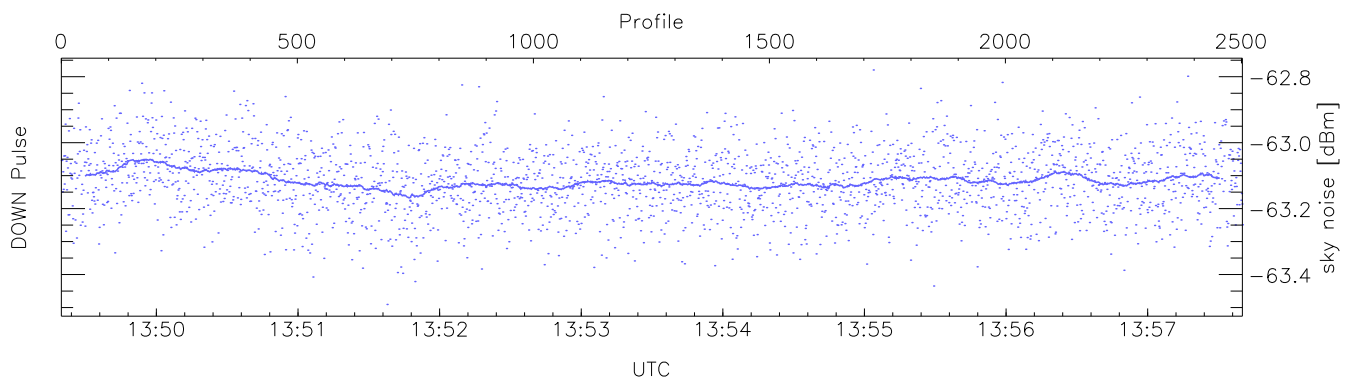
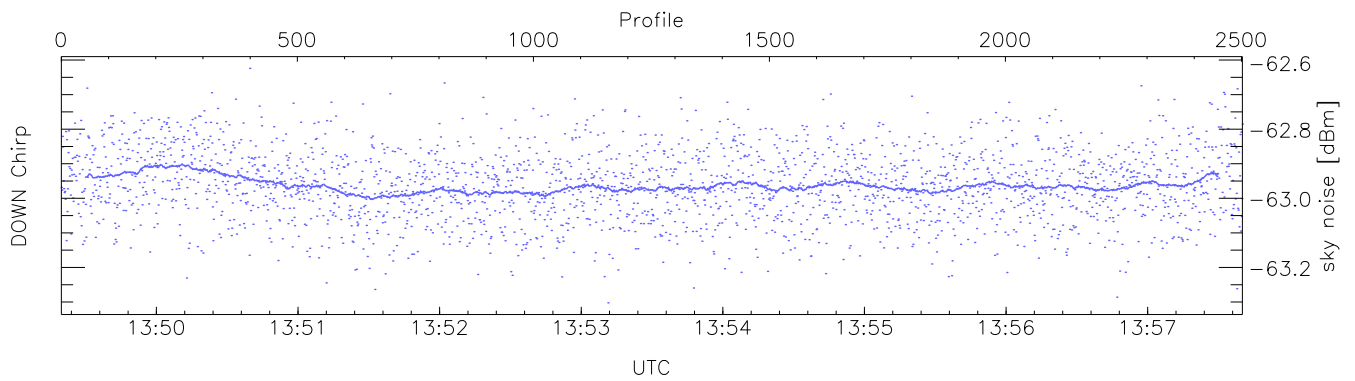
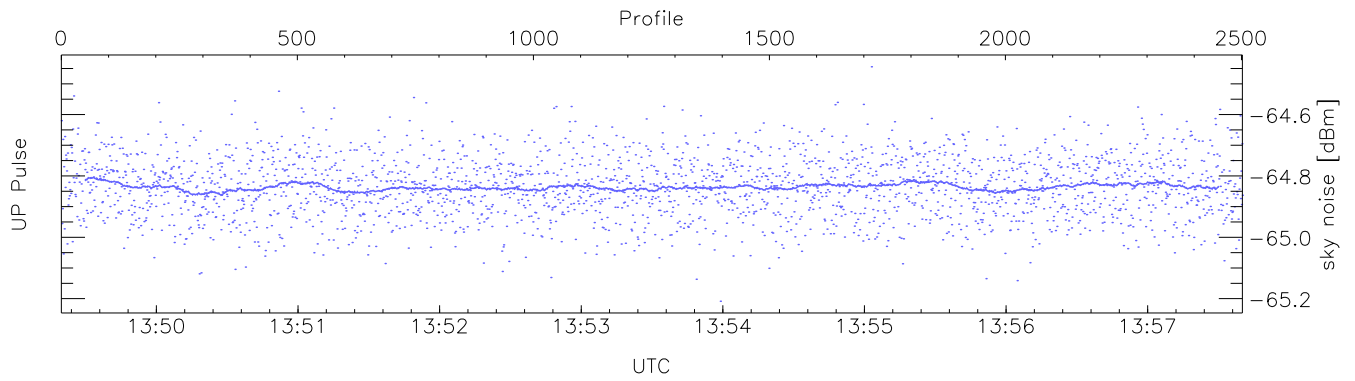
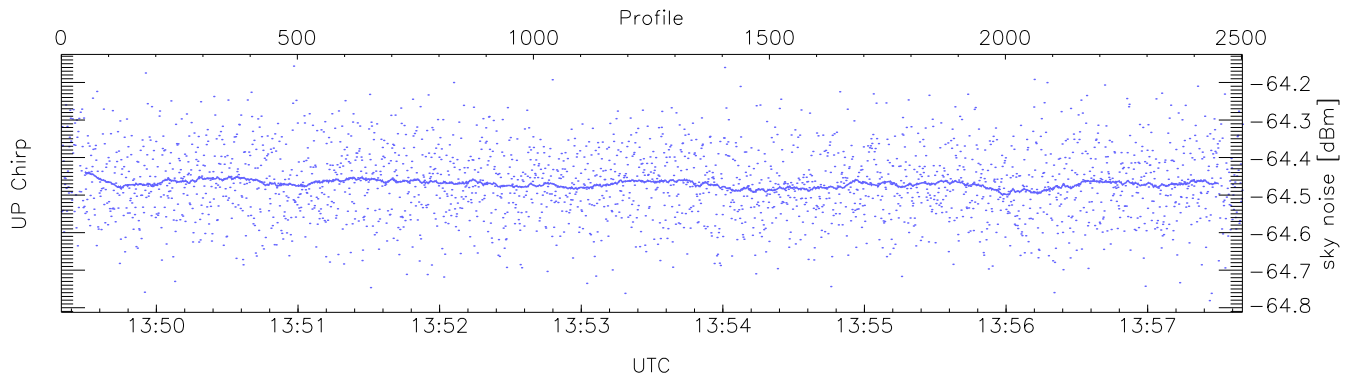


KPR SPP Receiver Gain and Noise Figure



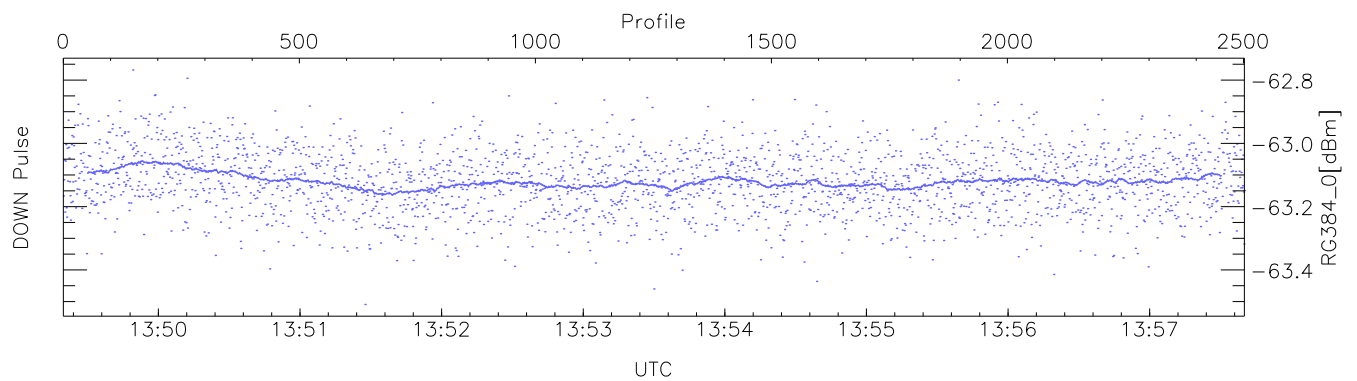
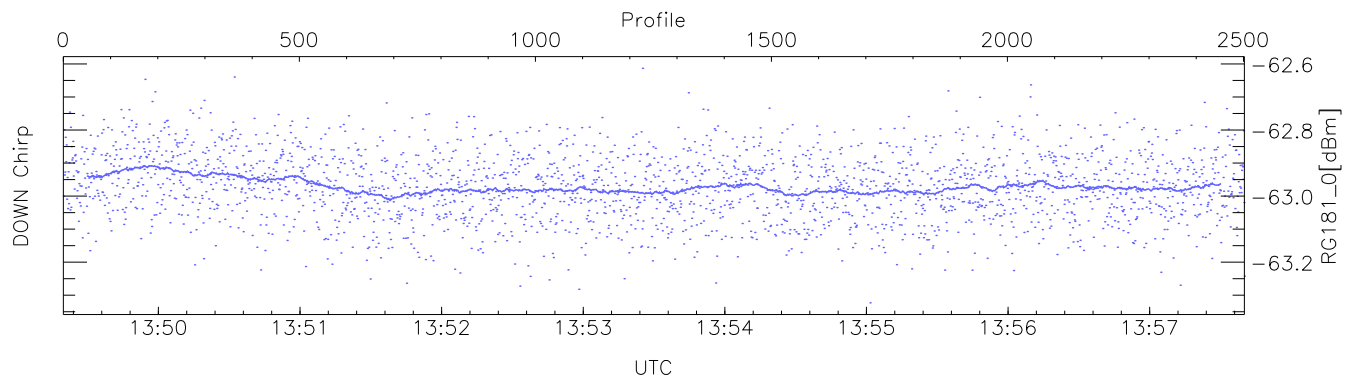
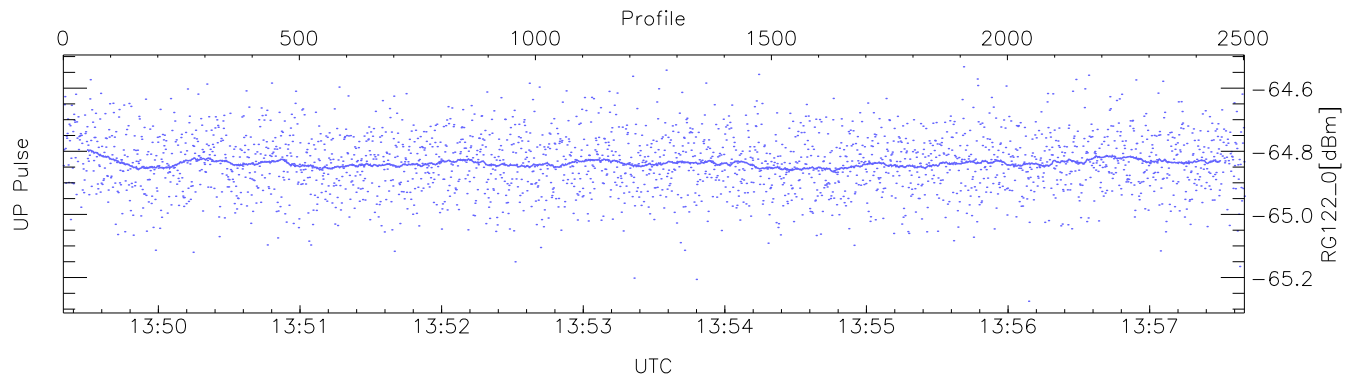
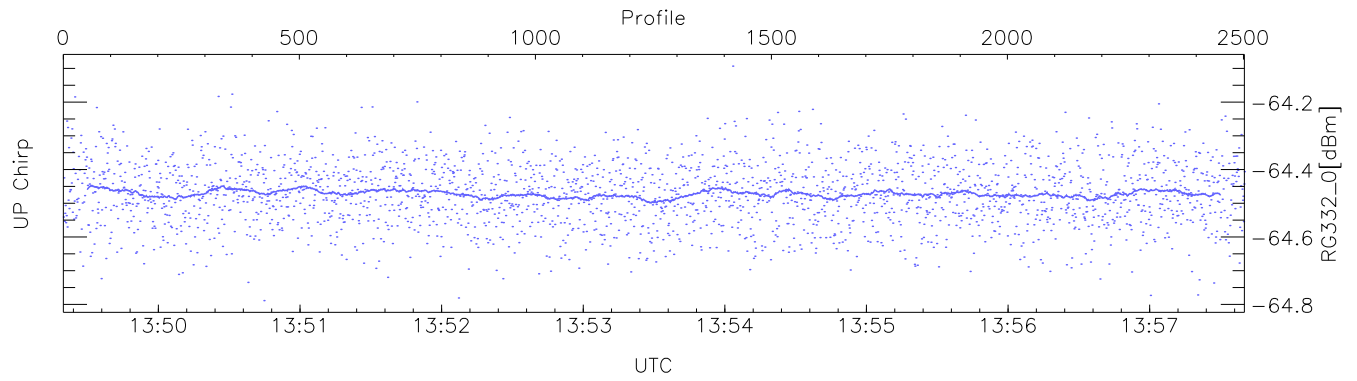
KPR SPP Receiver Noise Source Warm and Hot Measurements

| | Min | Max | Mean | Median | StDev |
|-----------------|--------|--------|--------|--------|--------|
| Chirp(WL [dBm]) | -61.59 | -61.24 | -61.40 | -61.40 | -80.79 |
| Chirp(HL [dBm]) | -58.93 | -58.54 | -58.73 | -58.73 | -77.87 |
| Pulse(WL [dBm]) | -63.14 | -62.82 | -62.97 | -62.97 | -82.33 |
| Pulse(HL [dBm]) | -60.38 | -60.04 | -60.20 | -60.20 | -79.38 |



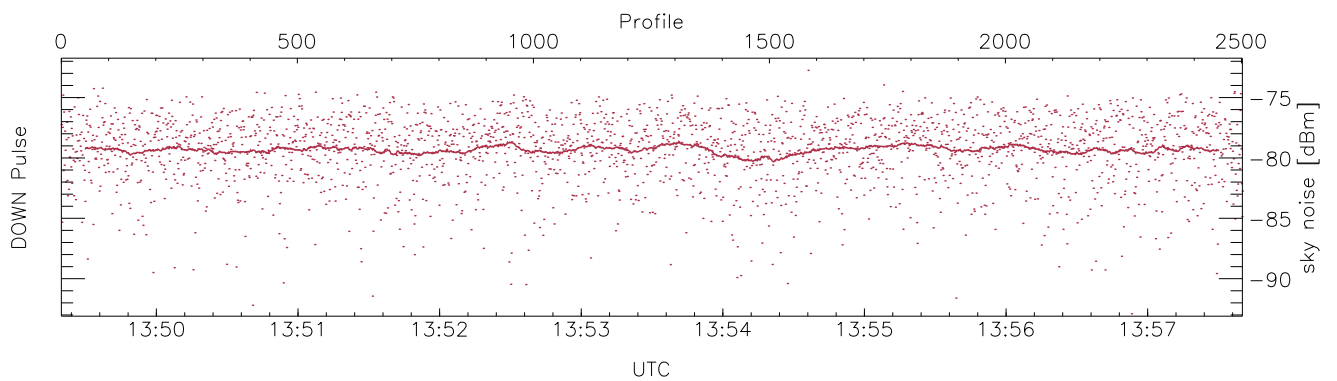
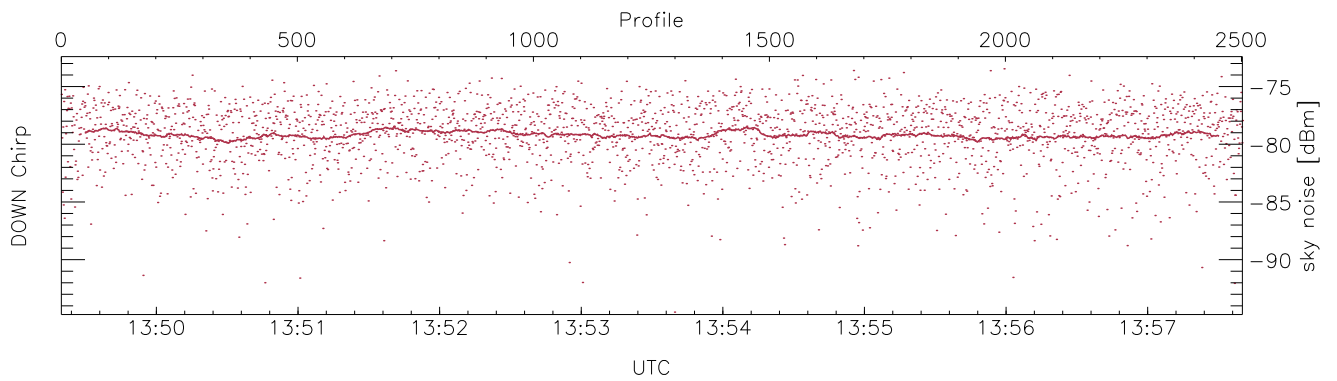
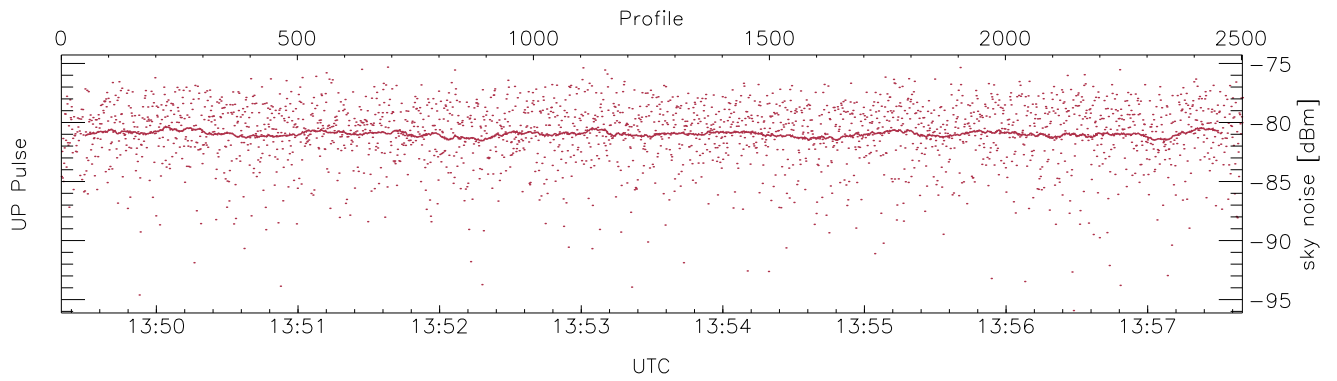
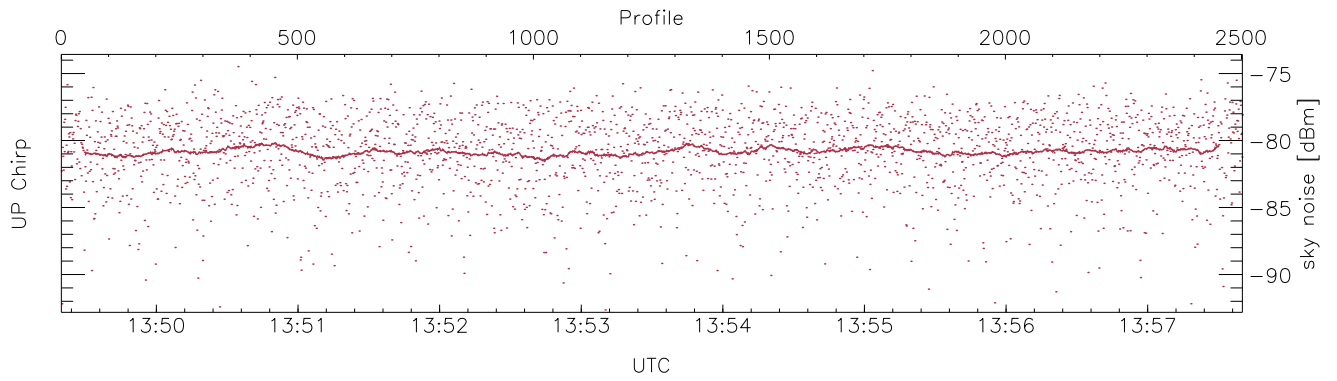
KPR SPP Last range gate power measurements: assumed RM(sky) noise

| | Min | Max | Mean | Median | StDev |
|-----------------|--------|--------|--------|--------|--------|
| UP Chirp(dBm) | -64.78 | -64.16 | -64.47 | -64.47 | -80.93 |
| UP Pulse(dBm) | -65.21 | -64.44 | -64.84 | -64.83 | -81.30 |
| DOWN Chirp(dBm) | -63.30 | -62.62 | -62.96 | -62.96 | -79.32 |
| DOWN Pulse(dBm) | -63.49 | -62.78 | -63.11 | -63.11 | -79.55 |



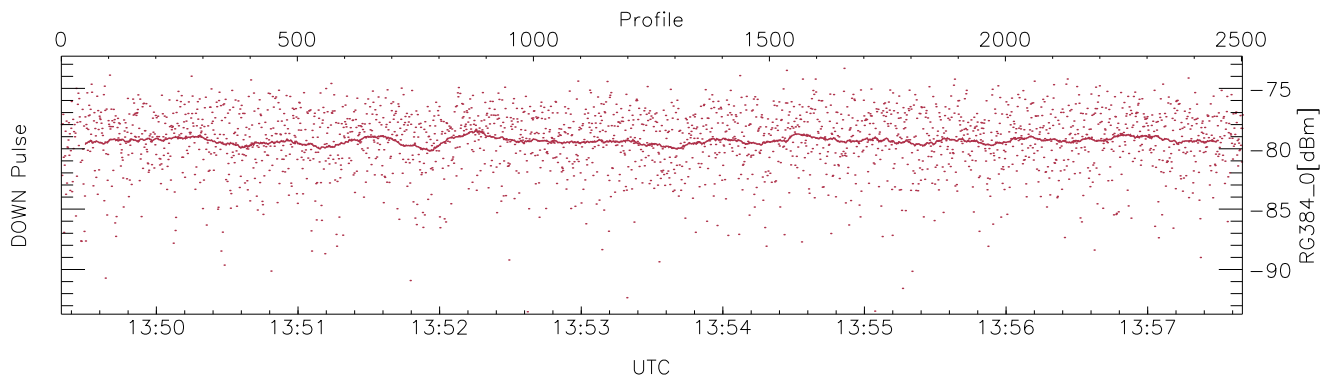
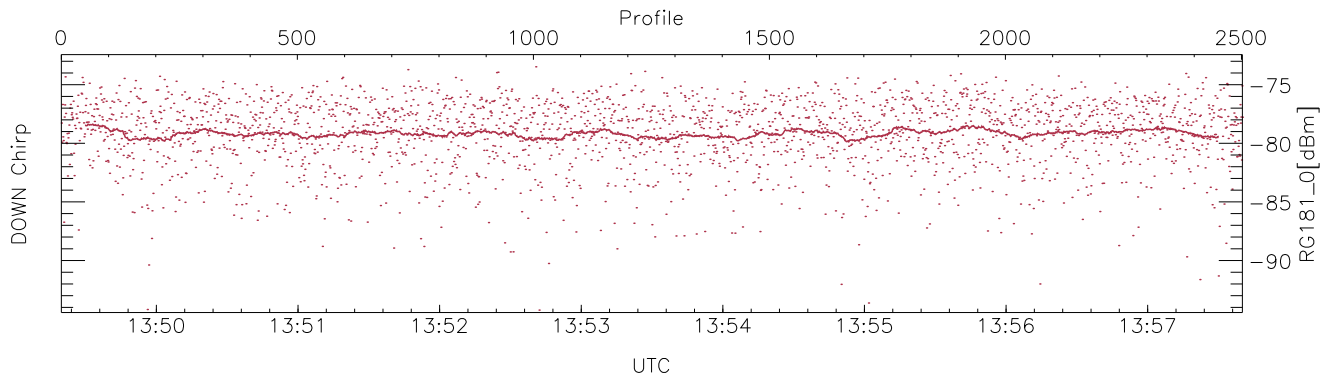
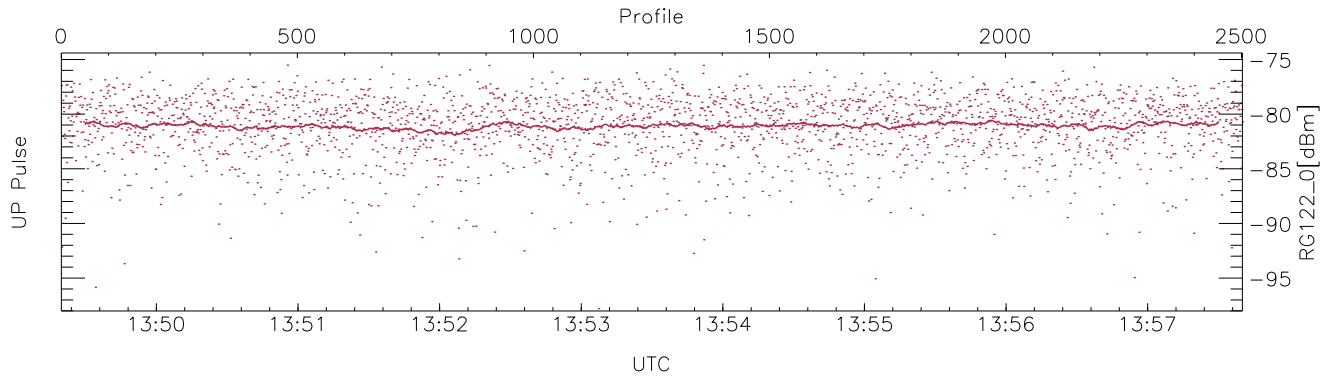
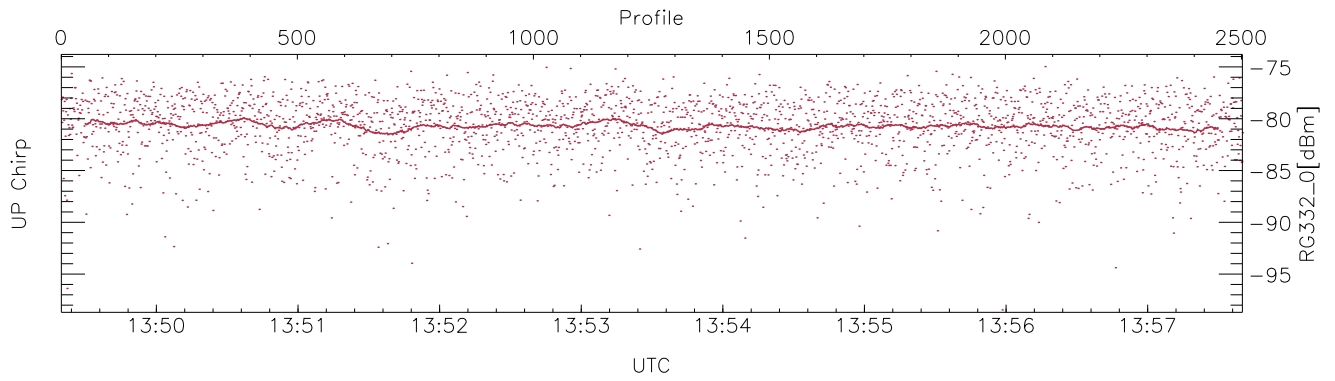
KPR SPP "Best" noise power measurements (dBm):

| | Min | Max | Mean | Median | StDev |
|----------------|--------|--------|--------|--------|--------|
| UP_C_RG332_0 | -64.79 | -64.09 | -64.47 | -64.47 | -81.08 |
| UP_P_RG122_0 | -65.28 | -64.53 | -64.84 | -64.84 | -81.31 |
| DOWN_C_RG181_0 | -63.32 | -62.61 | -62.97 | -62.97 | -79.38 |
| DOWN_P_RG384_0 | -63.51 | -62.77 | -63.12 | -63.12 | -79.59 |



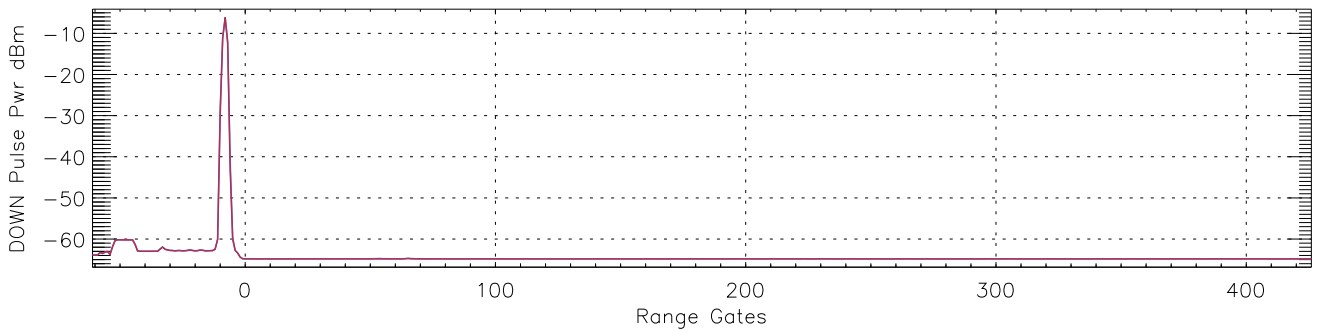
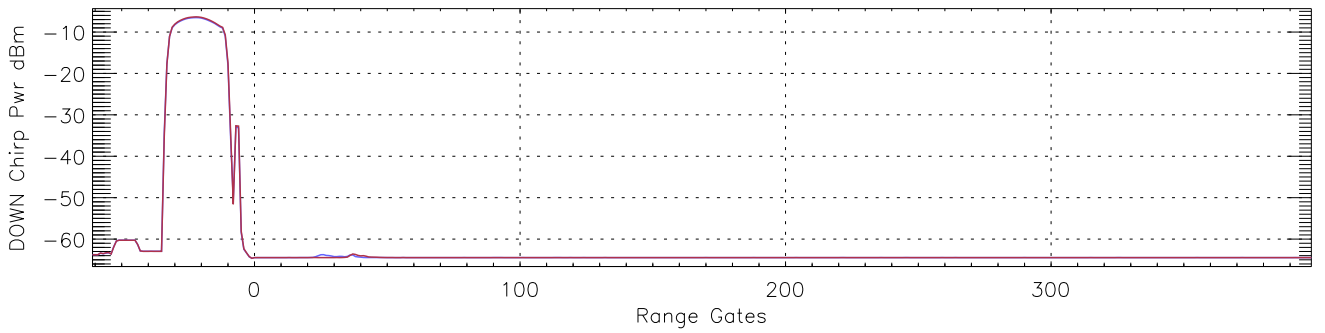
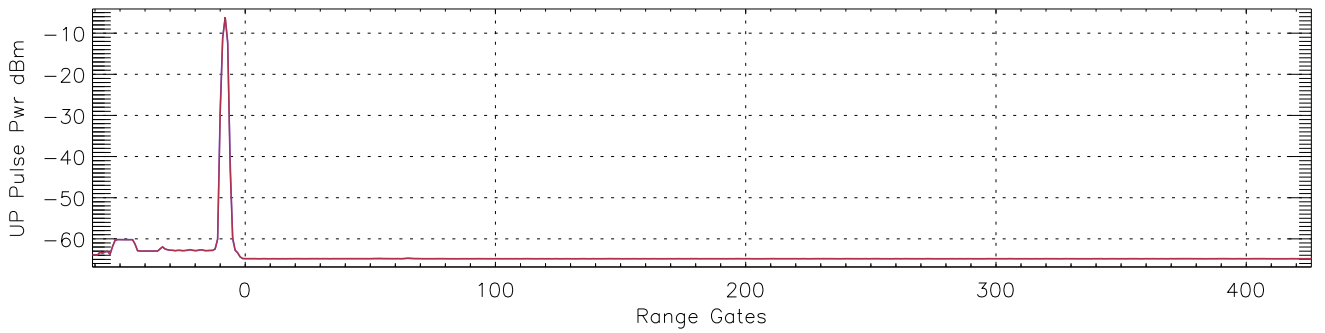
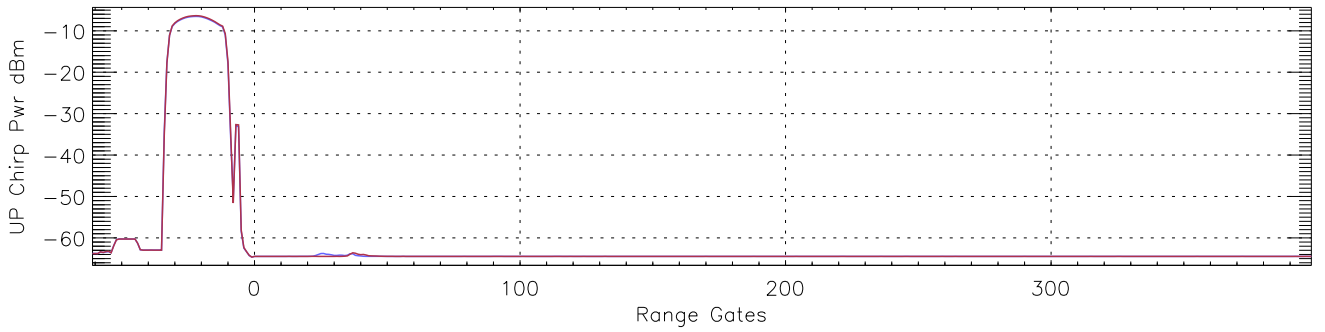
KPR SPP Last range gate PPMAG: assumed RM(sky) noise

| | Min | Max | Mean | Median | StDev |
|-----------------|--------|--------|--------|--------|--------|
| UP Chirp(dBm) | -92.64 | -74.48 | -80.09 | -80.40 | -82.83 |
| UP Pulse(dBm) | -95.93 | -75.32 | -80.25 | -80.51 | -83.09 |
| DOWN Chirp(dBm) | -94.55 | -73.46 | -78.49 | -78.73 | -81.36 |
| DOWN Pulse(dBm) | -92.90 | -72.75 | -78.61 | -78.85 | -81.44 |

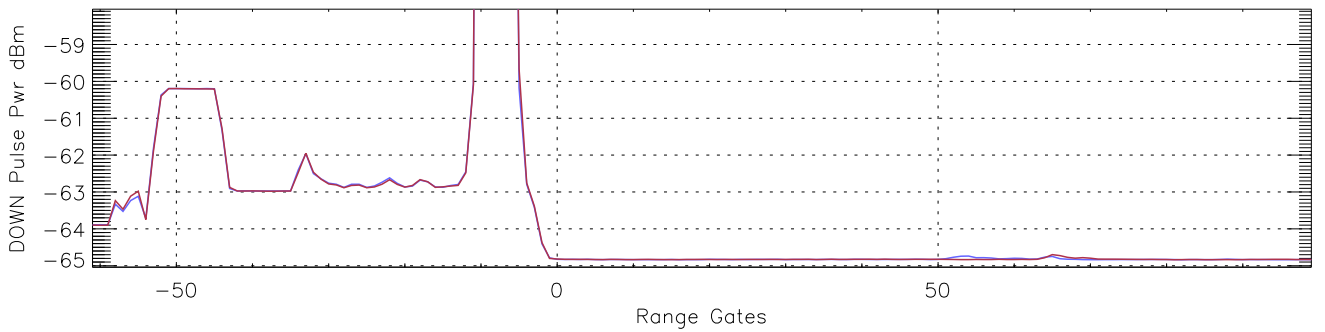
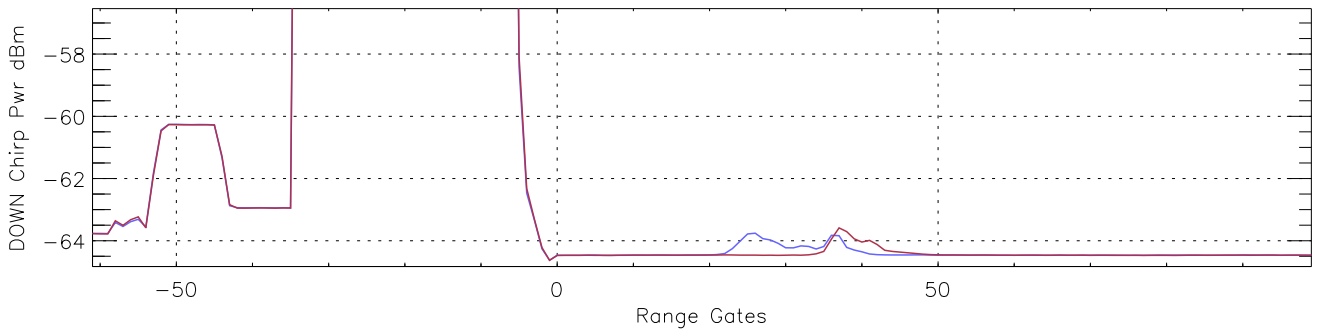
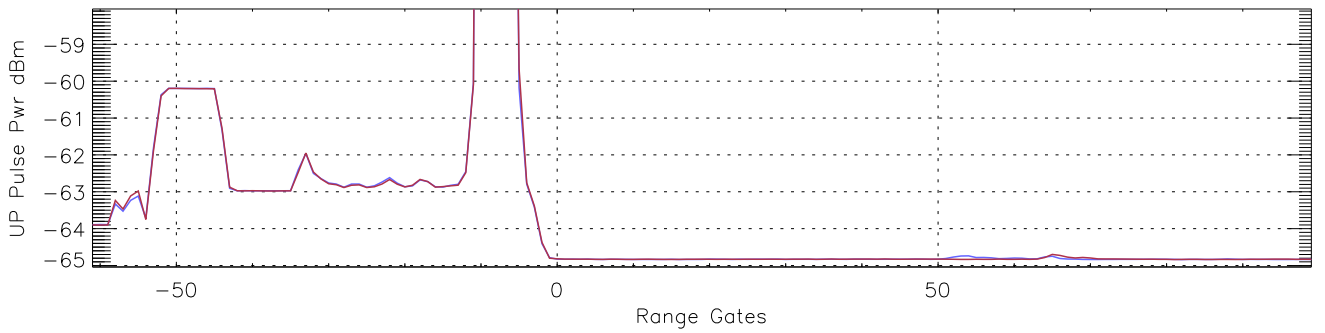
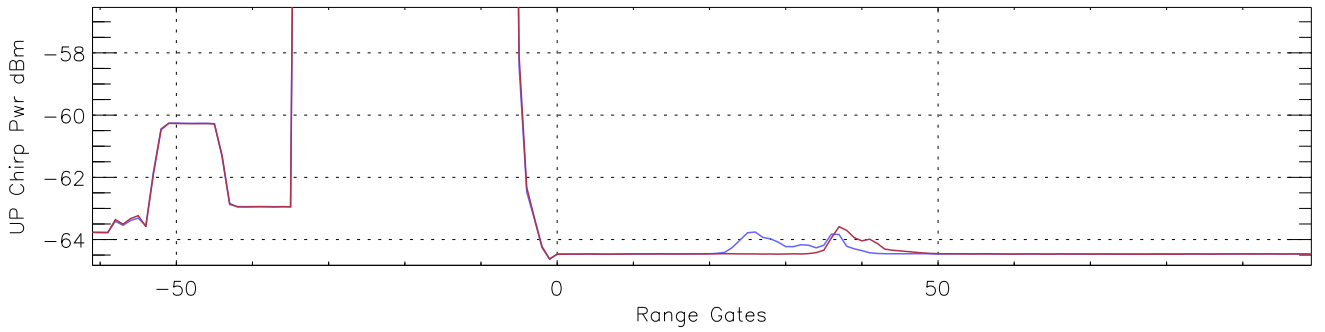


KPR SPP "Best" PPMAG noise (dBm):

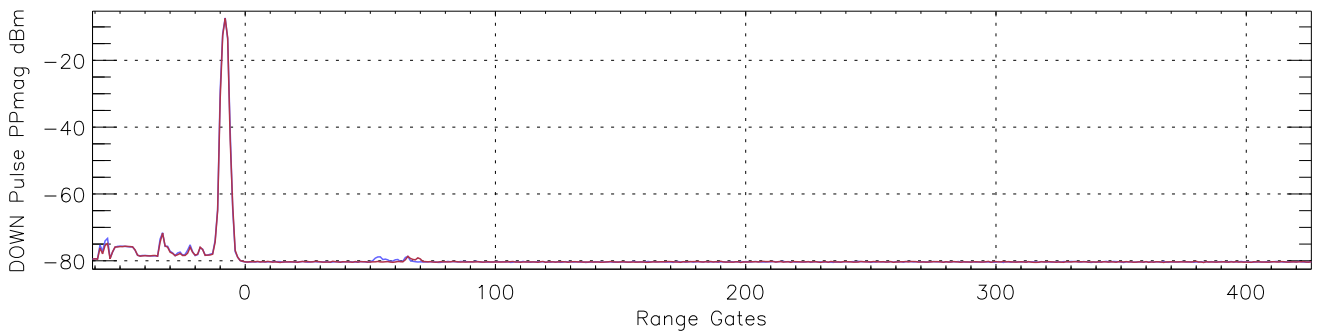
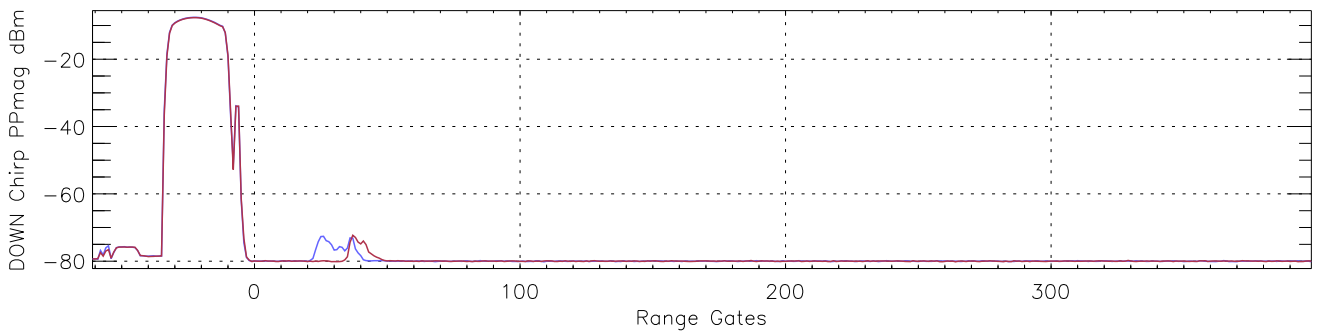
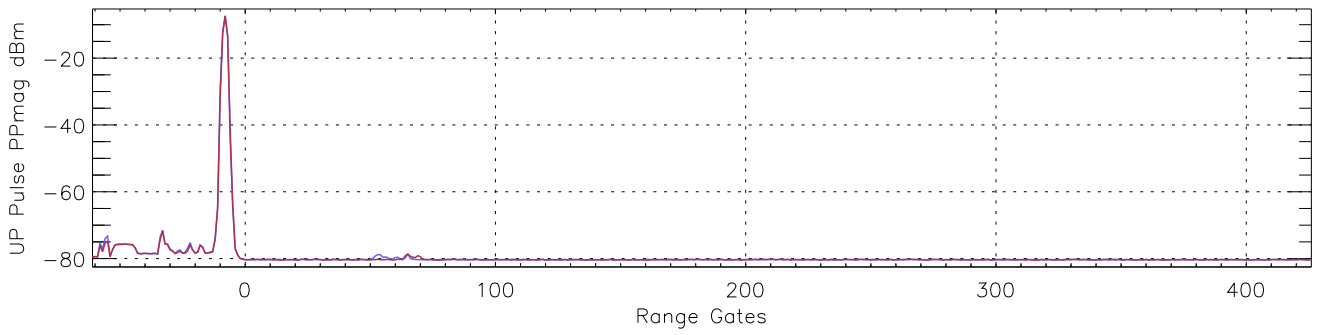
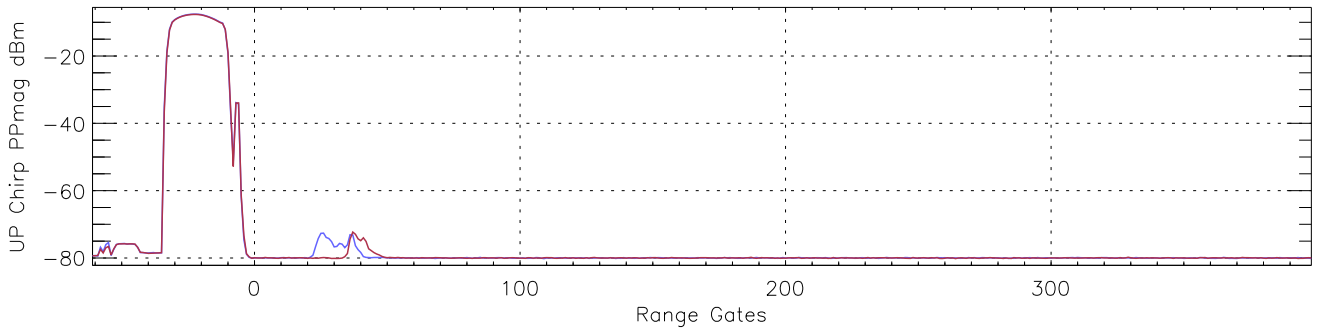
| | Min | Max | Mean | Median | StDev |
|----------------|--------|--------|--------|--------|--------|
| UP_C_RG332_0 | -98.46 | -74.97 | -79.98 | -80.25 | -82.78 |
| UP_P_RG122_0 | -97.79 | -75.52 | -80.36 | -80.60 | -83.20 |
| DOWN_C_RG181_0 | -94.23 | -73.47 | -78.41 | -78.70 | -81.16 |
| DOWN_P_RG384_0 | -93.50 | -73.34 | -78.66 | -78.87 | -81.53 |



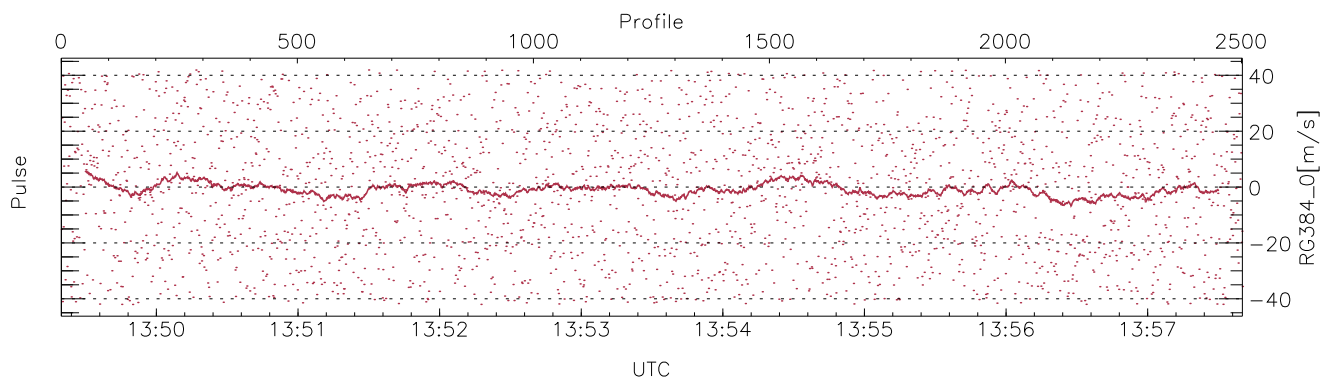
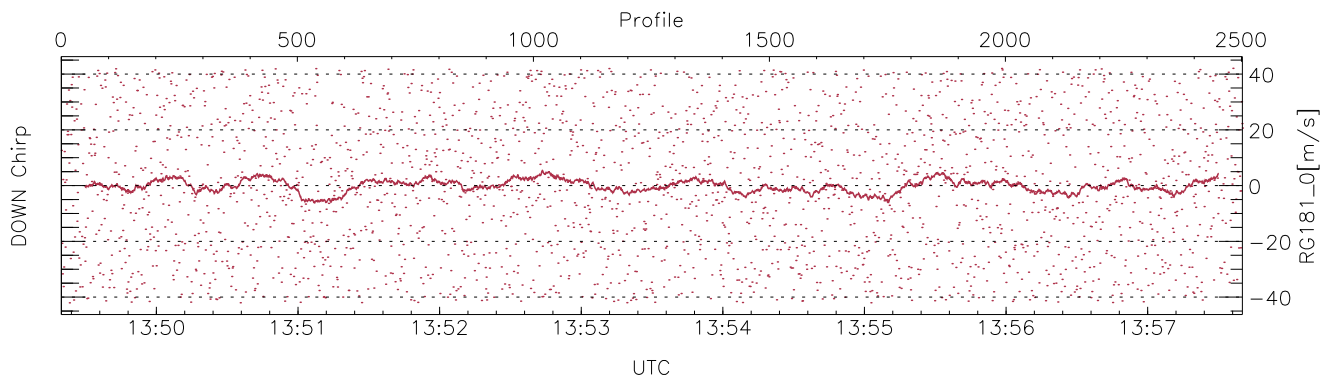
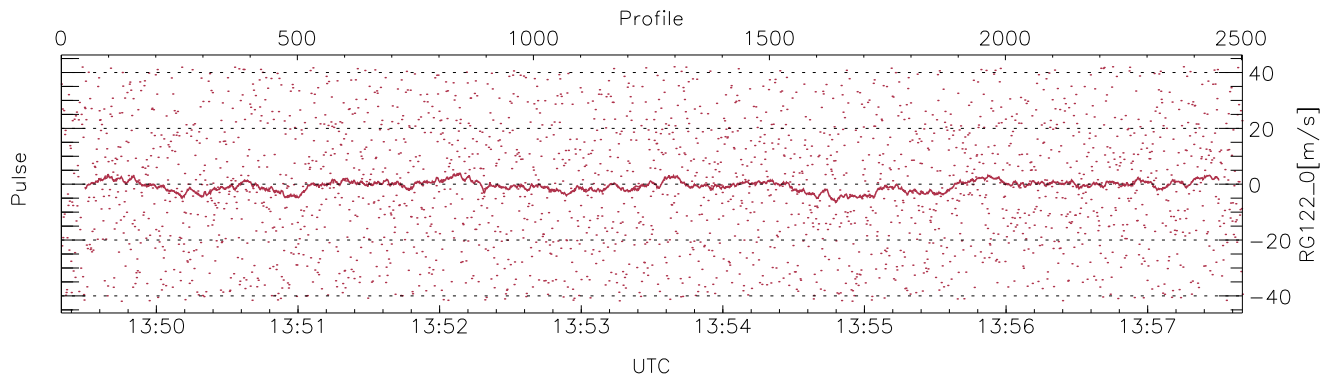
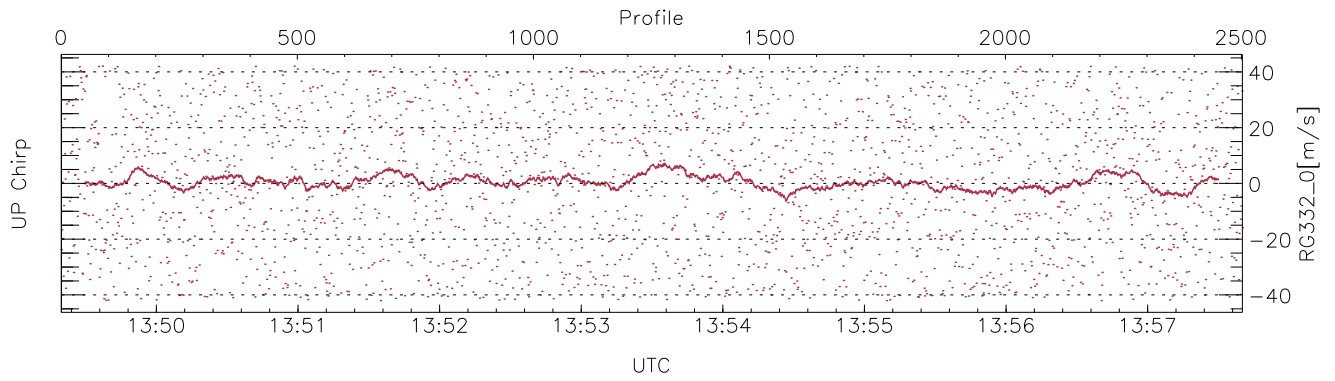
KPR SPP Averaged Received power for all recorded gates
blue: 134920-135329, 1252 profiles averaged
red: 135329-135740, 1252 profiles averaged



KPR SPP Averaged Power for neg. gates & up to 100 gates
blue: 134920-135329, 1252 profiles averaged
red: 135329-135740, 1252 profiles averaged

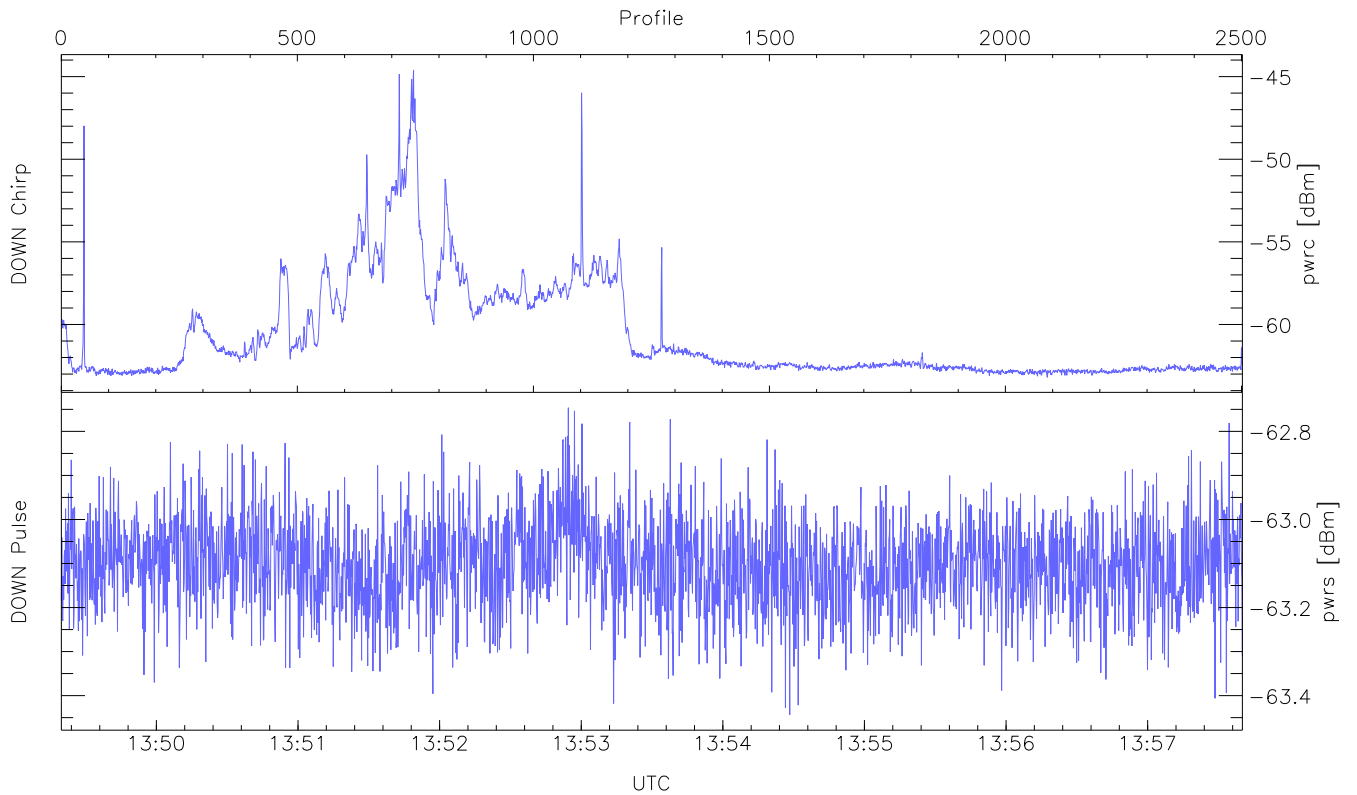
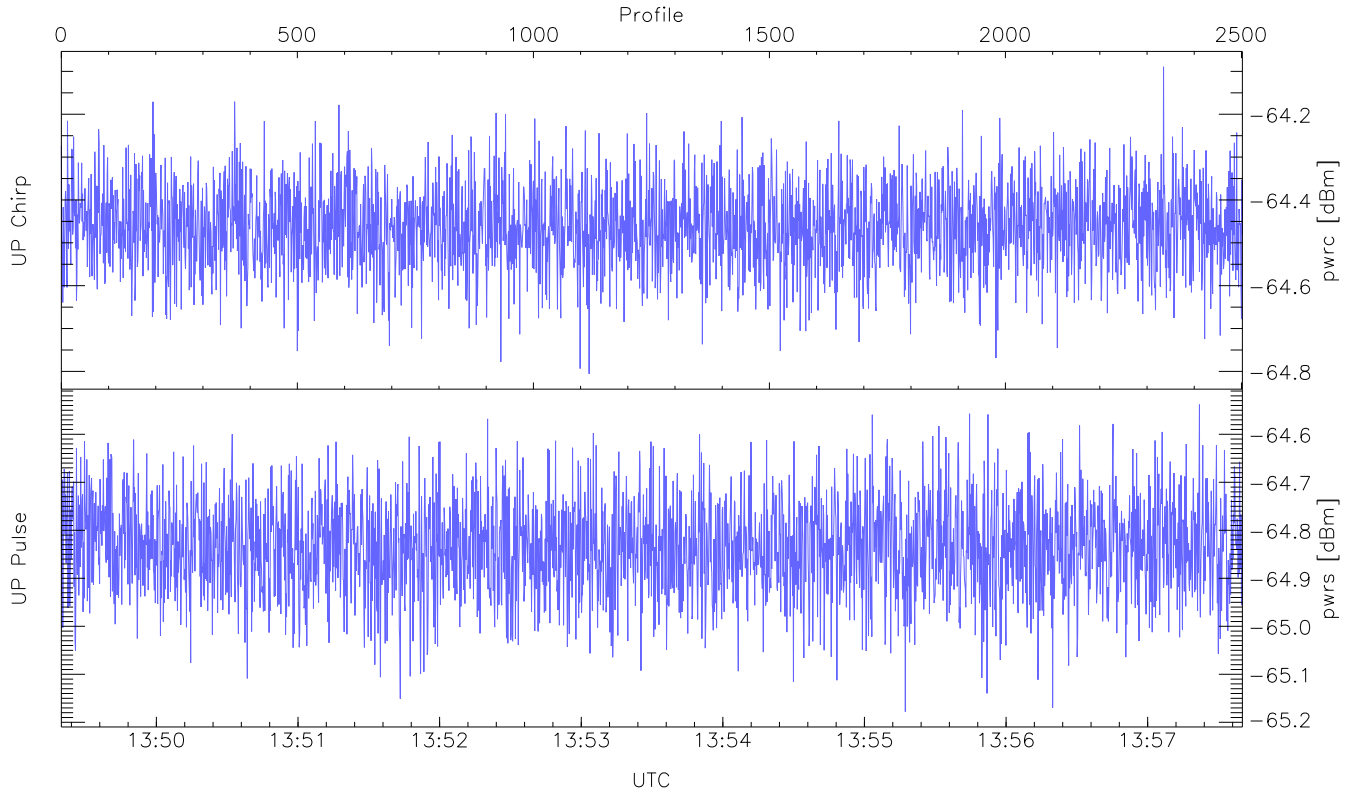


KPR SPP Averaged PP magnitude for all recorded gates
blue: 134920-135329, 1252 profiles averaged
red: 135329-135740, 1252 profiles averaged



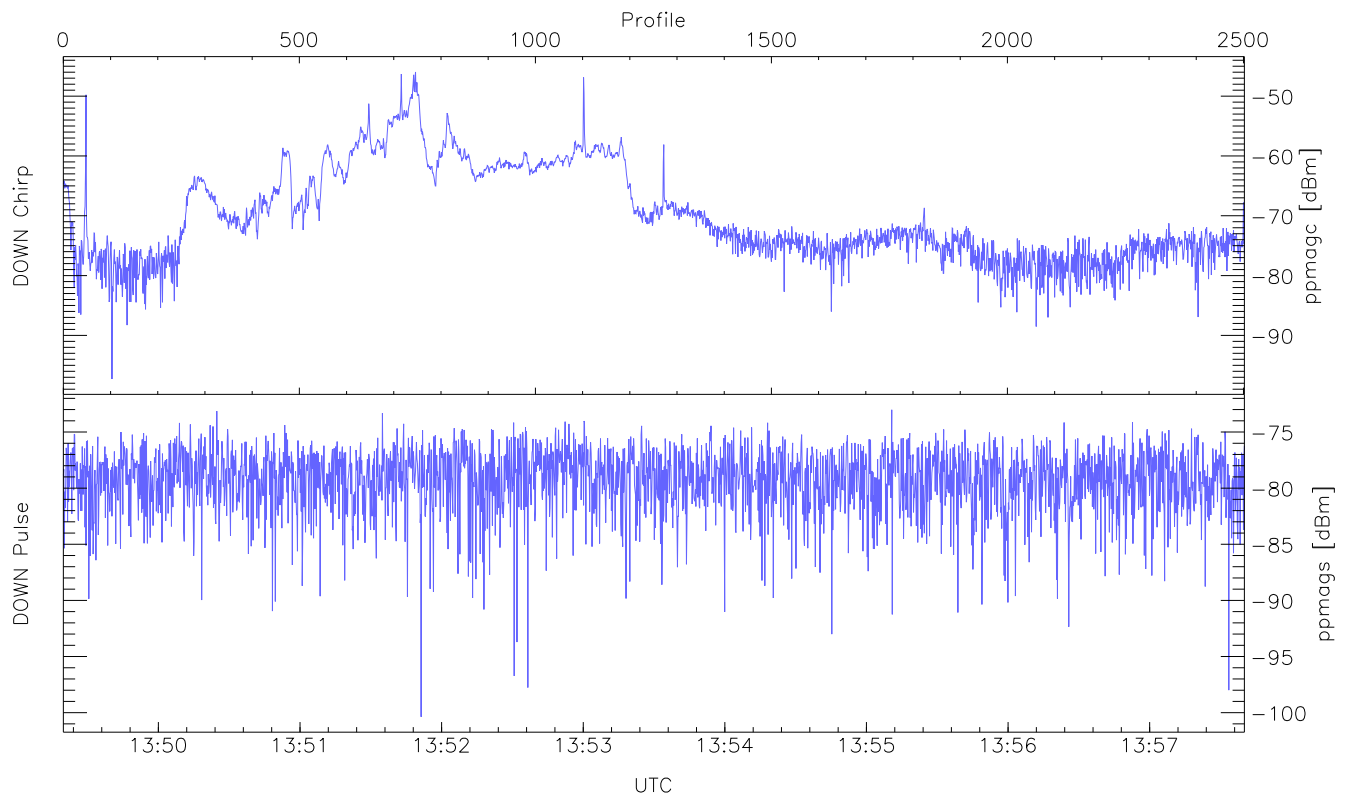
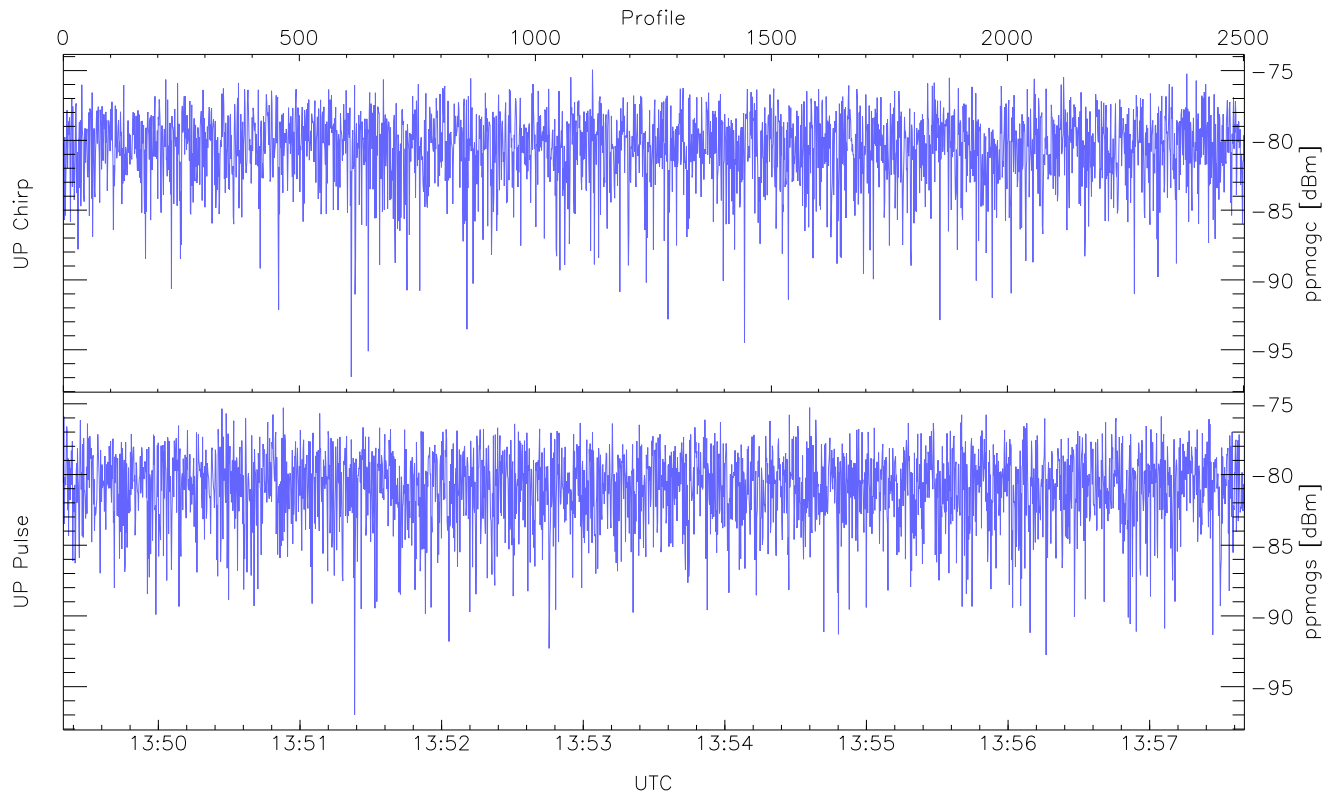
KPR SPP "Best" PPVEL noise (m/s):

| | Min | Max | Mean | Median | StDev |
|----------------|--------|-------|-------|--------|-------|
| UP_C_RG332_0 | -42.06 | 42.06 | 0.41 | 0.96 | 24.08 |
| UP_P_RG122_0 | -41.91 | 42.06 | -0.63 | -0.82 | 22.74 |
| DOWN_C_RG181_0 | -42.06 | 42.06 | -0.09 | -0.27 | 24.43 |
| DOWN_P_RG384_0 | -42.03 | 41.92 | -0.81 | -0.22 | 23.02 |



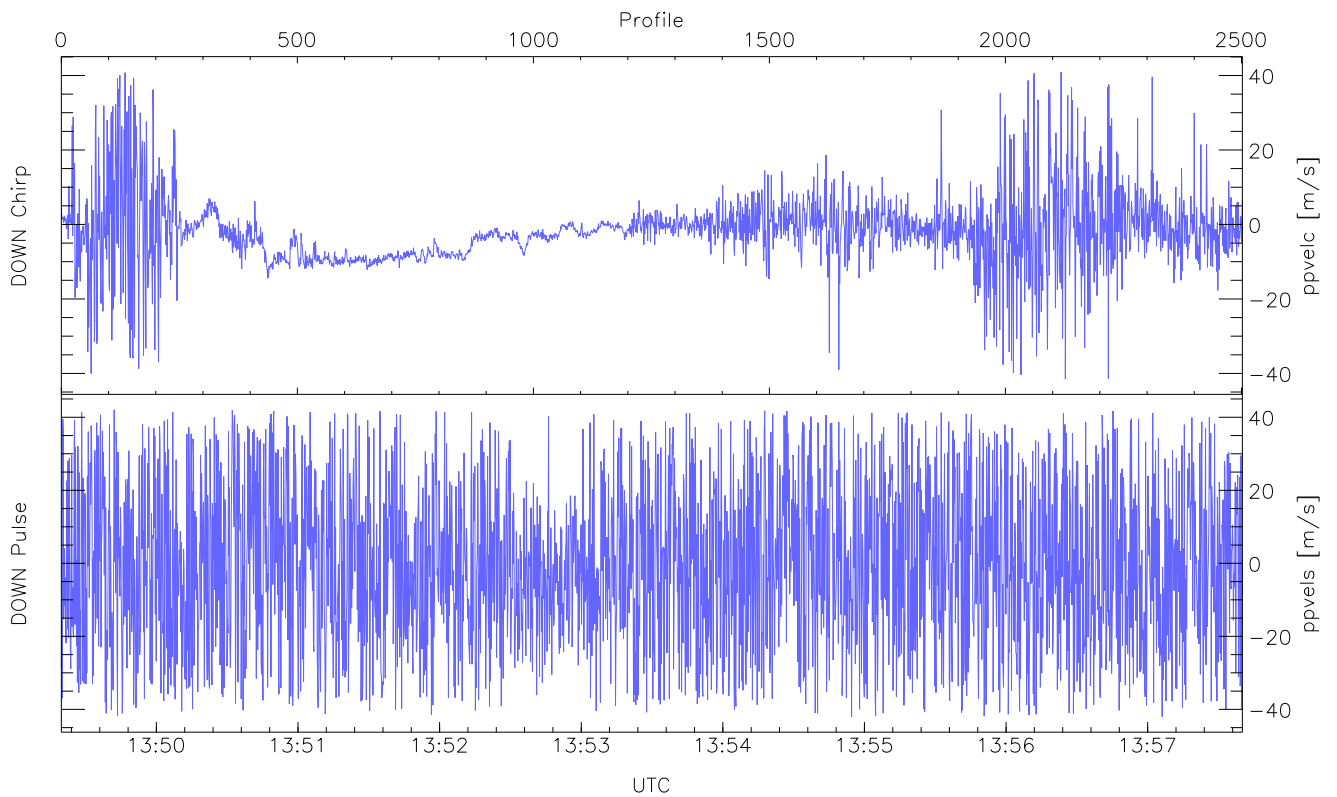
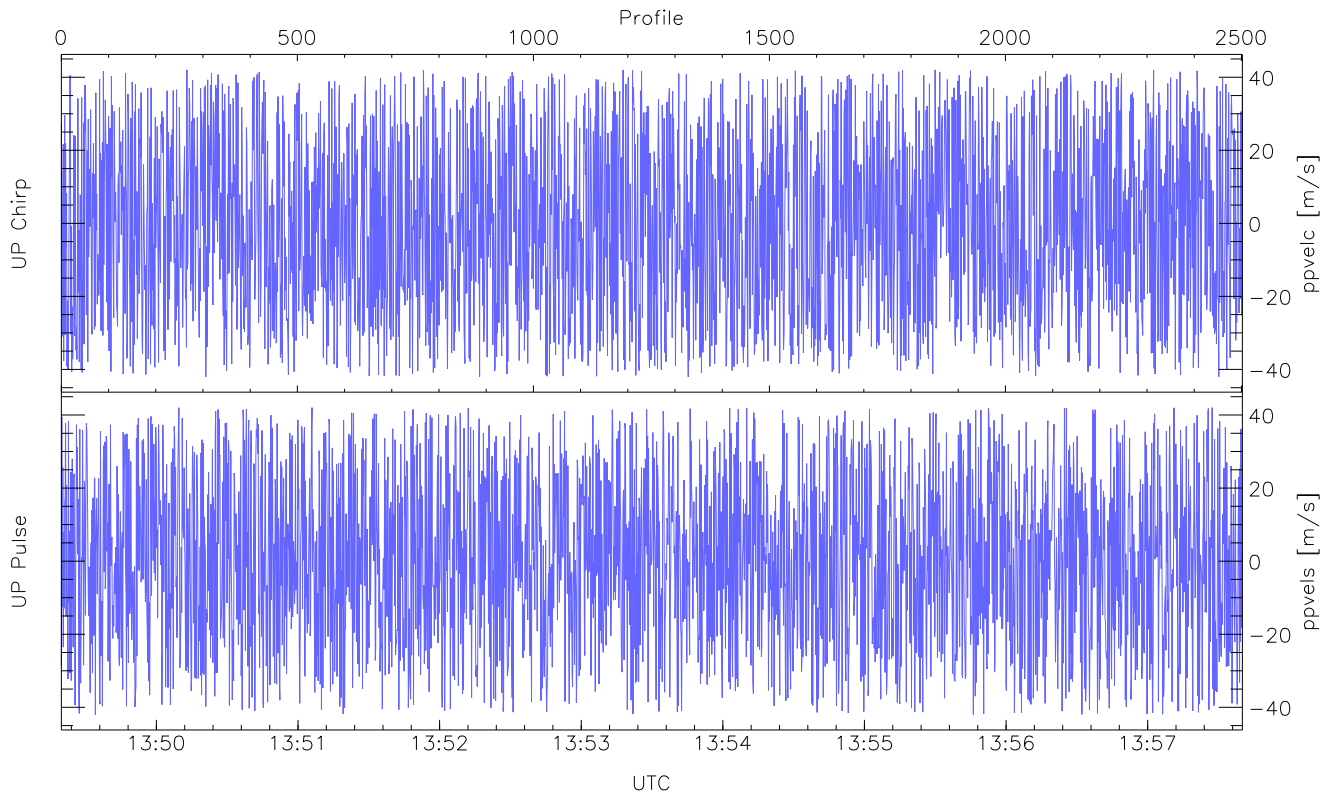
KPR SPP Received Power for Chirp Range gate 10 (686.2 m)
 KPR SPP Received Power for Pulse Range gate 10 (270.7 m)

| | Min | Max | Mean |
|-----------------|--------|--------|--------|
| UP Chirp(dBm) | -64.81 | -64.09 | -64.46 |
| UP Pulse(dBm) | -65.18 | -64.54 | -64.83 |
| DOWN Chirp(dBm) | -63.18 | -44.60 | -59.06 |
| DOWN Pulse(dBm) | -63.44 | -62.75 | -63.10 |



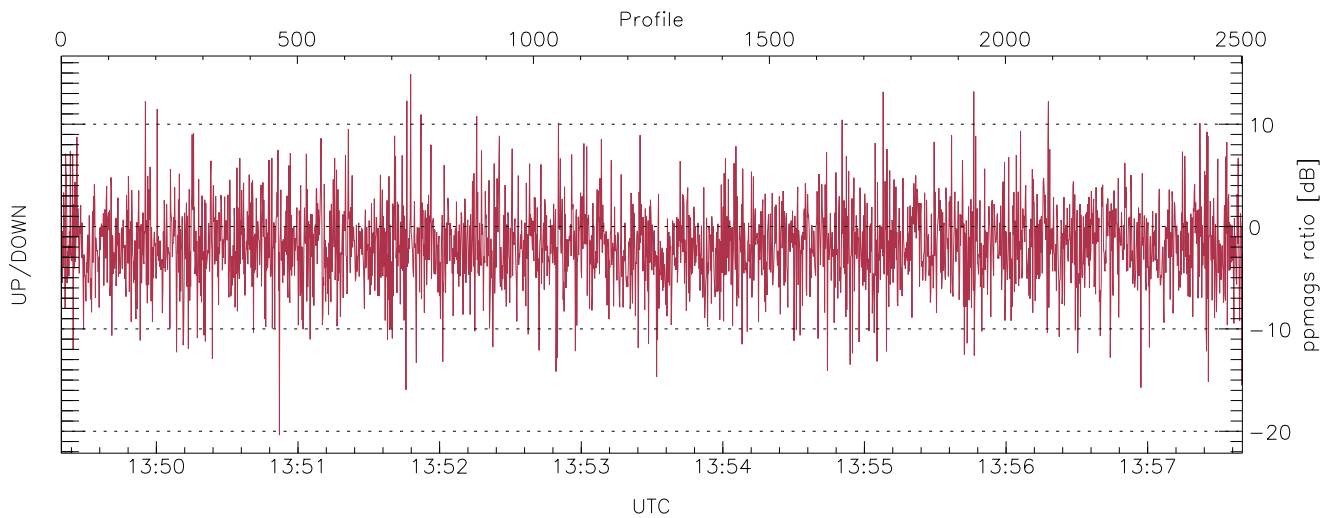
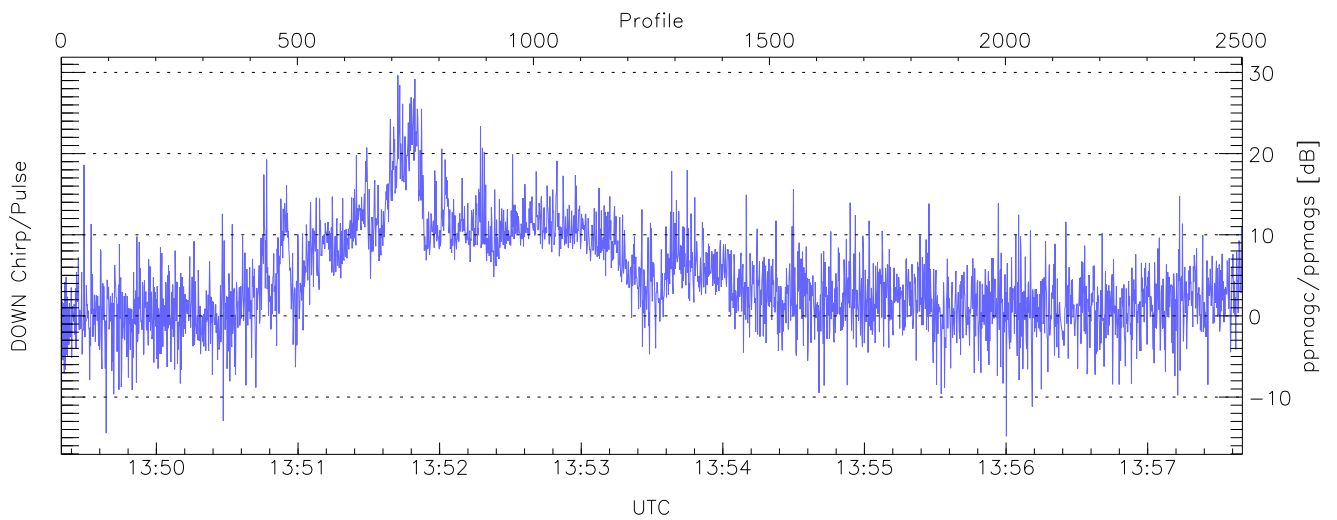
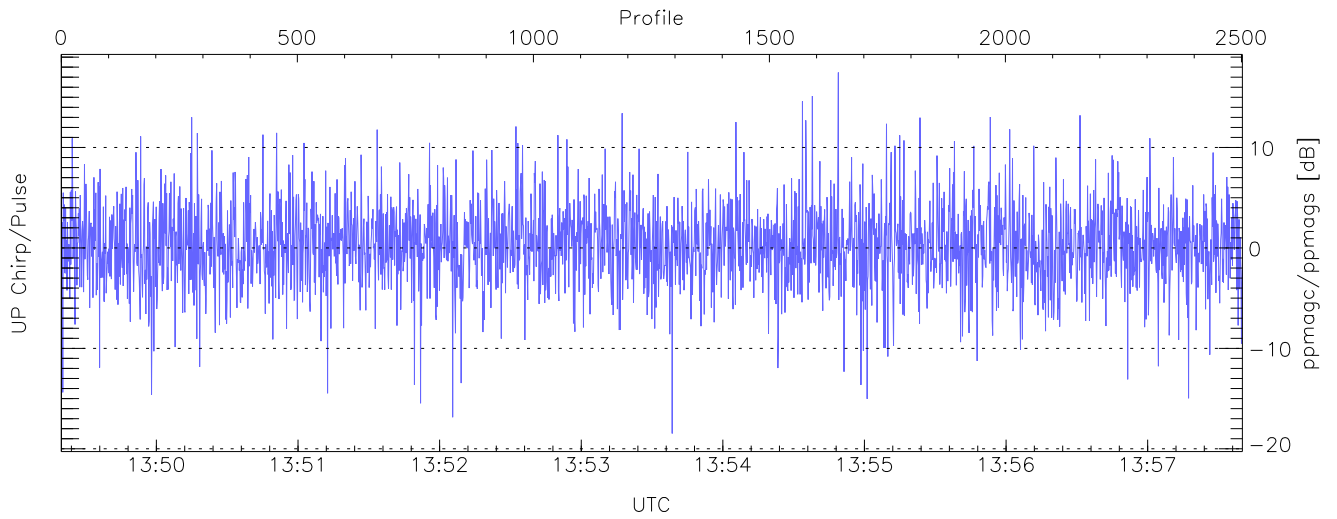
KPR SPP PPMAG for Chirp Range gate 10 (686.2 m)
 KPR SPP PPMAG for Pulse Range gate 10 (270.7 m)

| | Min | Max | Mean |
|-----------------|---------|--------|--------|
| UP Chirp(dBm) | -96.94 | -74.94 | -79.95 |
| UP Pulse(dBm) | -96.98 | -75.26 | -80.30 |
| DOWN Chirp(dBm) | -97.30 | -45.96 | -62.74 |
| DOWN Pulse(dBm) | -100.37 | -73.02 | -78.58 |



KPR SPP PPVEL for Chirp Range gate 10 (686.2 m)
 KPR SPP PPVEL for Pulse Range gate 10 (270.7 m)

| | Min | Max | Mean |
|-----------------|--------|-------|-------|
| UP Chirp(m/s) | -42.03 | 42.05 | -0.42 |
| UP Pulse(m/s) | -41.99 | 42.03 | 0.39 |
| DOWN Chirp(m/s) | -41.51 | 40.95 | -1.96 |
| DOWN Pulse(m/s) | -42.04 | 42.06 | -0.42 |



KPR SPP PPMAG Chirp/Pulse; Range gate: 551.3m /555.5m

| | Min | Max | Mean |
|--------------------------------|--------|-------|-------|
| UP Chirp/Pulse(dBm) | -18.48 | 17.47 | 2.20 |
| DOWN Chirp/Pulse(dBm) | -14.83 | 29.65 | 10.06 |
| UP/DOWN Ratio at Range 135.8 m | | | |
| | Min | Max | Mean |
| UP/DOWN(dB) | -20.38 | 14.90 | 0.05 |