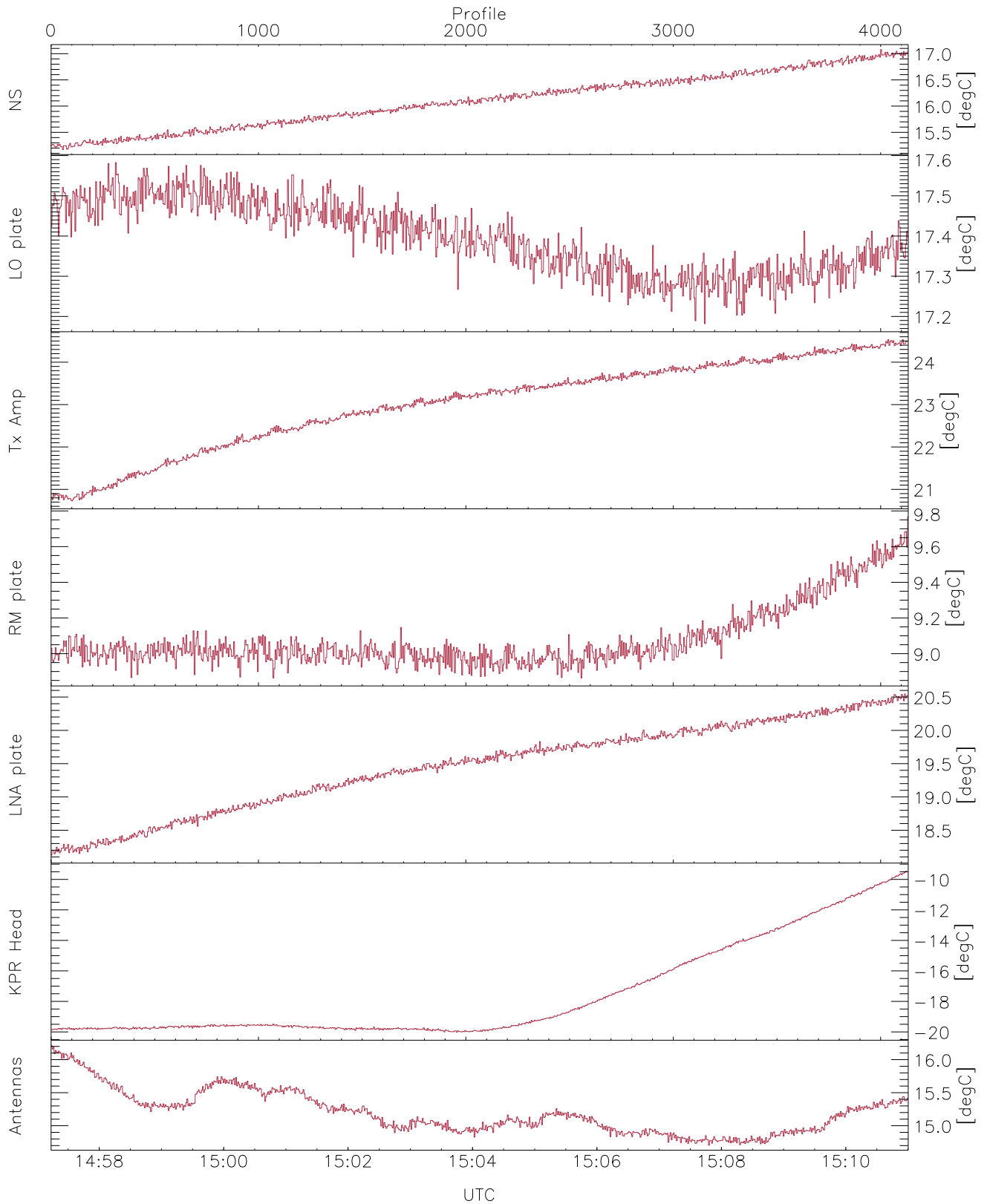


KPR SPP; Ant(s): UP, DOWN; Radiometer: OFF
 UTC: 14:57:14-15:11:00, TimeCor: 0.00s, Dur: 826.67s
 TimeInt(min,max,mn,std): 195.7,204.4,200.0,0.1 ms; PPS: 5.0
 NumRec(r/t): 4134/4134, 0-4133/14:57:14-15:11:00
 AcqTime(req,actual): 200.0,200.0 ms, Data Rate: 79.8 KB/s
 Pulse: 618 ns, Chirp: 6.18 us, DRxIF: 2.0 MHz
 PRF: 18.5 KHz, avgPulses: 1852, avgPP: 926
 NyquistVel: 38.9 m/s, RangeRes:75.0 m
 Pulse Range(min,max): 159, 6529 m, Gates: 171
 Chirp Range(min,max): 1210, 6494 m, Gates: 142
 RangeGateSampling: 37.5 m, Aspect: 2.1

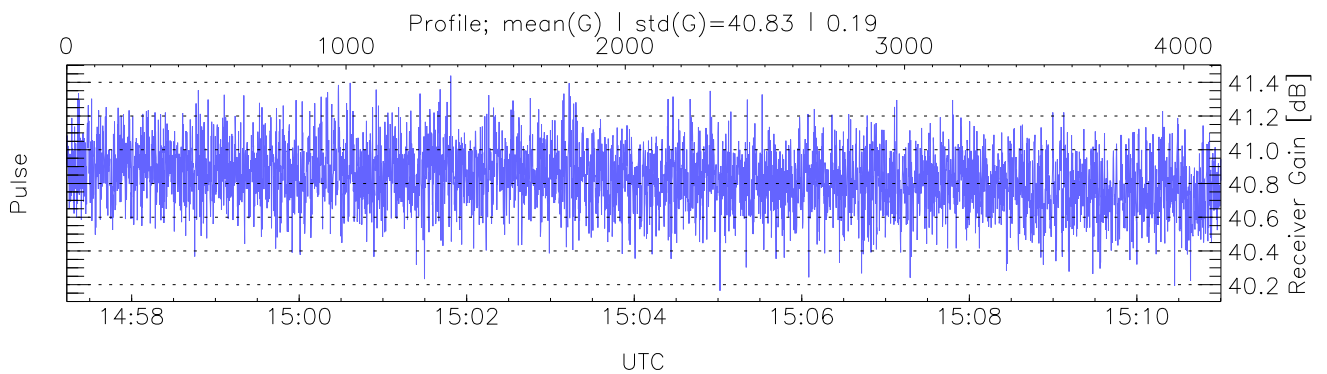
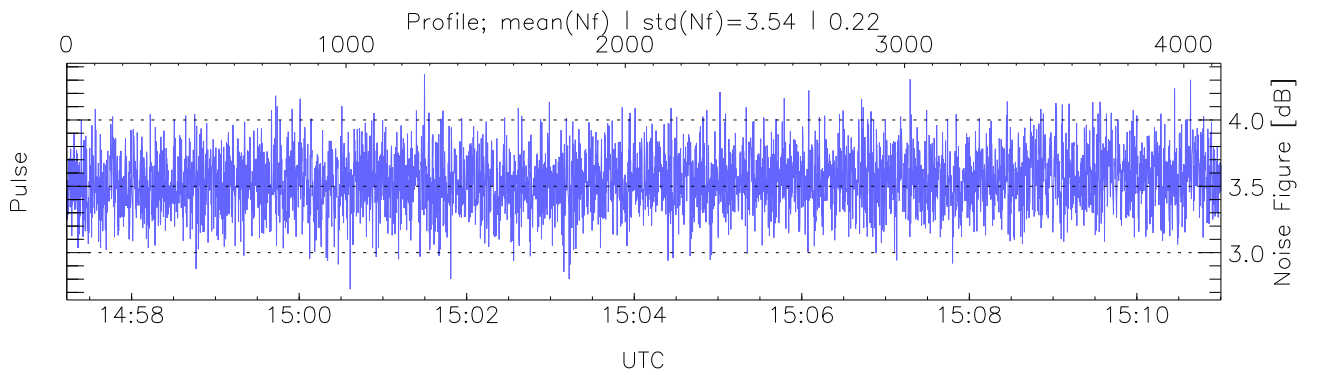
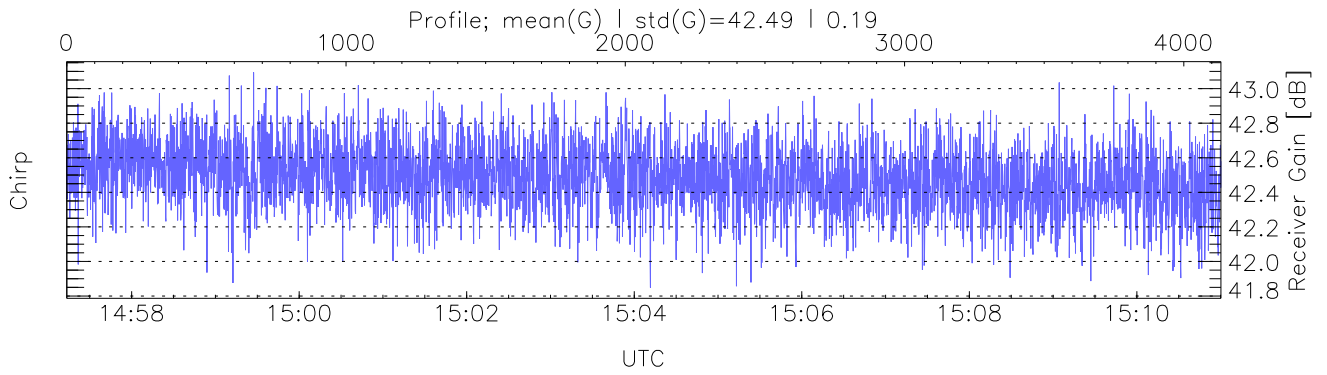
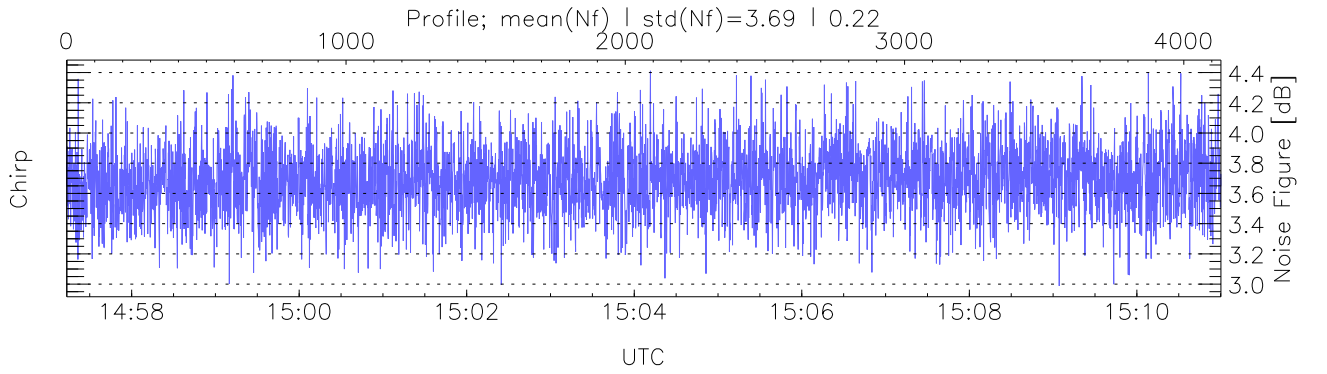


KPR SPP Temperatures, Power Supplies, PLO lock:

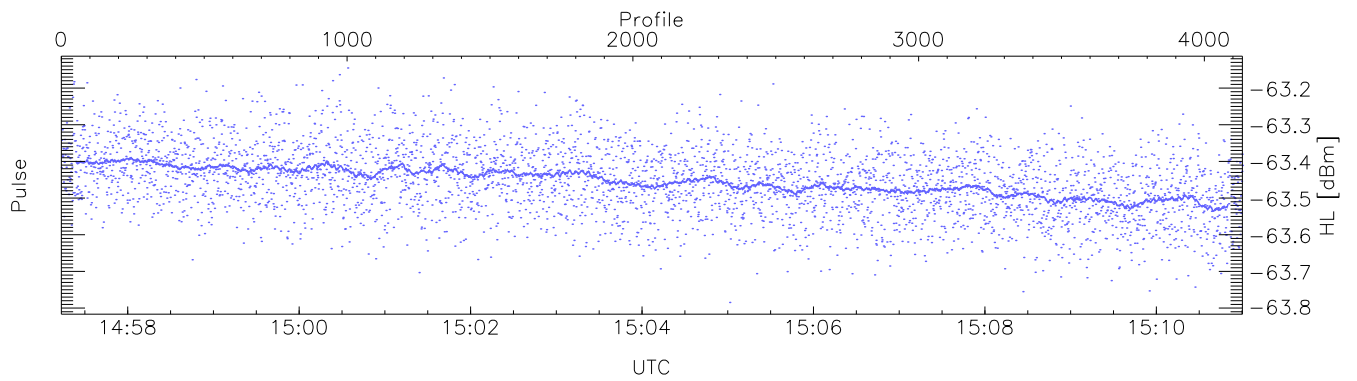
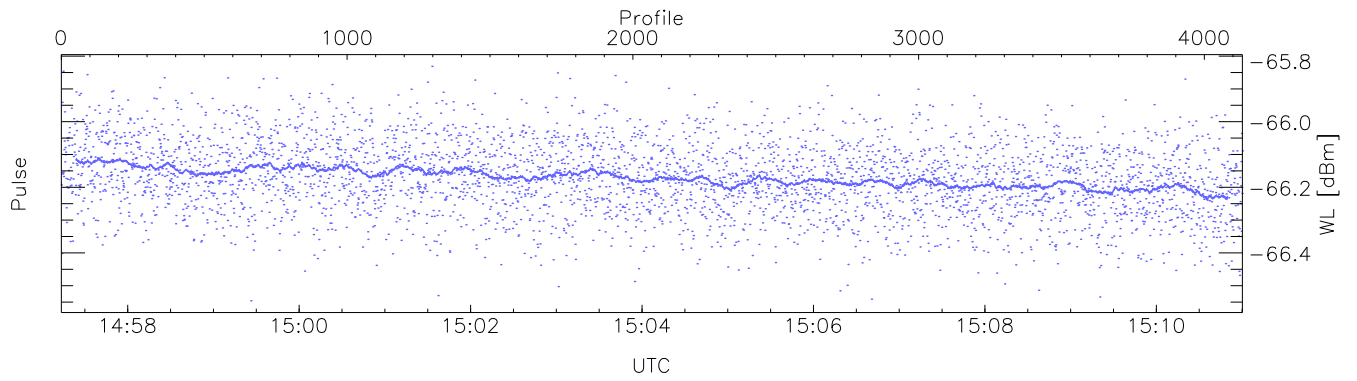
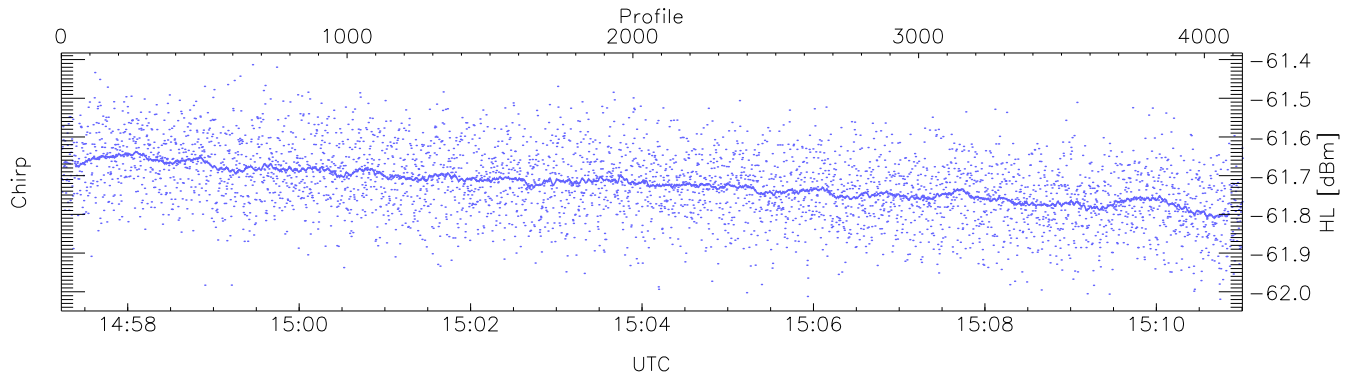
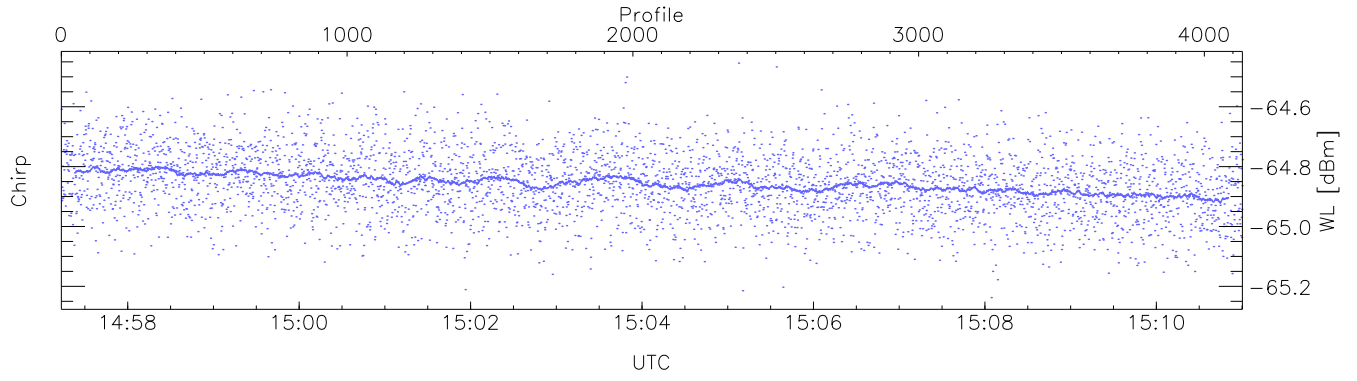
| | | | | | | | |
|--------------|-------|-------|-------|------|-------|--------|------|
| temperature: | NS, | LO, | Tx, | RM, | LNA, | Head, | Ant |
| mintempC: | 15.2, | 17.2, | 20.7, | 8.9, | 18.1, | -20.0, | 14.7 |
| maxtempC: | 17.1, | 17.6, | 24.5, | 9.8, | 20.5, | -9.5, | 16.2 |
| meantempC: | 16.1, | 17.4, | 23.0, | 9.1, | 19.5, | -17.5, | 15.2 |

| | | | | |
|----------|--------|--------|-------|-------|
| PwrSply: | 28, | 12, | 8, | 5 VDC |
| minVDC: | 25.05, | 11.65, | 7.87, | 5.21 |
| maxVDC: | 27.72, | 11.73, | 7.90, | 5.23 |
| meanVDC: | 26.66, | 11.69, | 7.88, | 5.22 |

PLO(3.84,15.84 GHz) unlocked: None

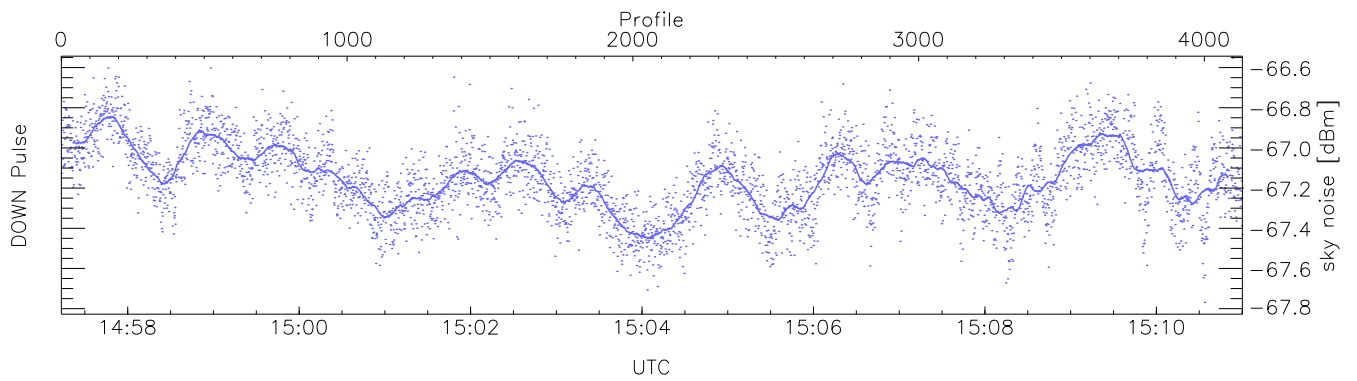
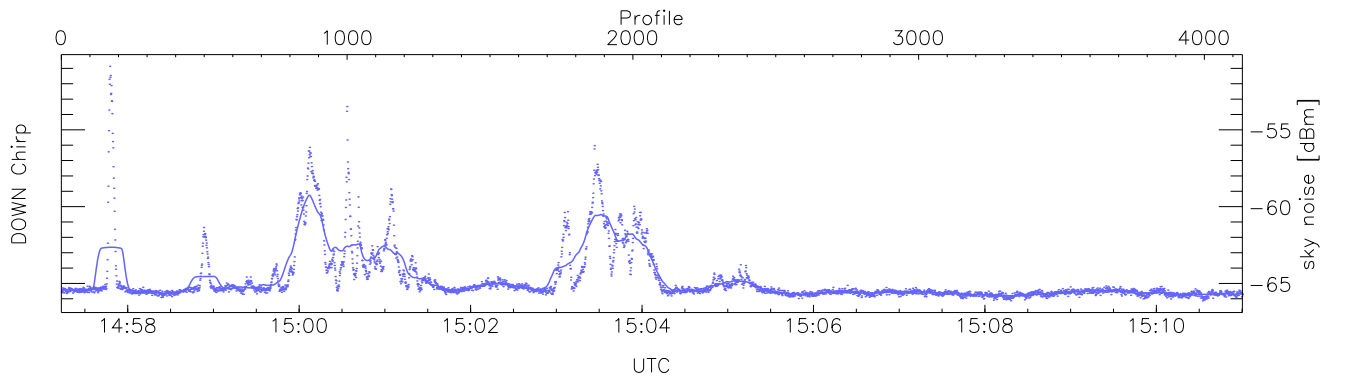
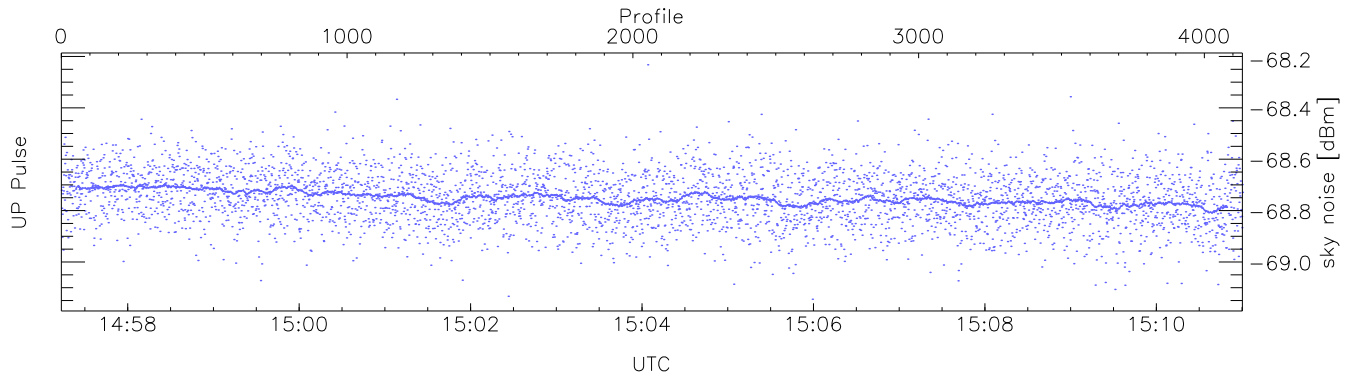
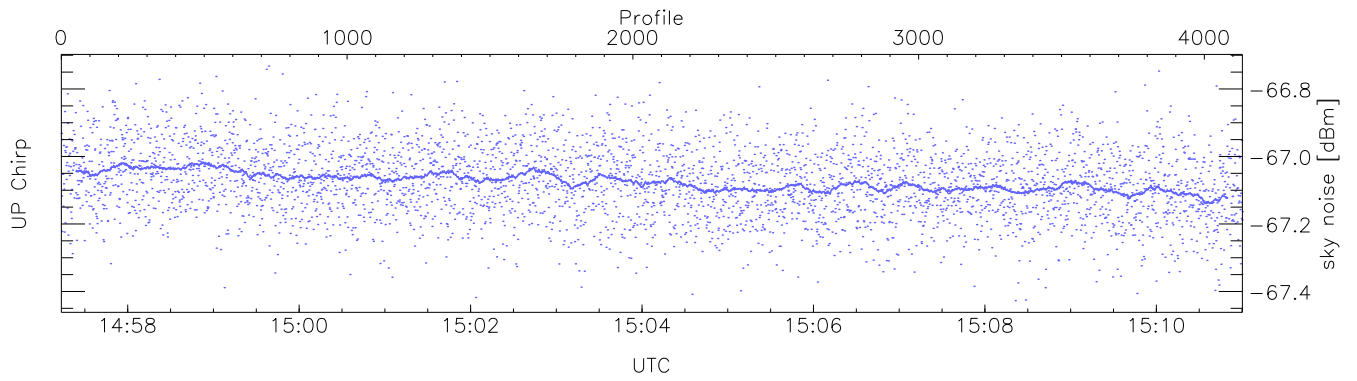


KPR SPP Receiver Gain and Noise Figure



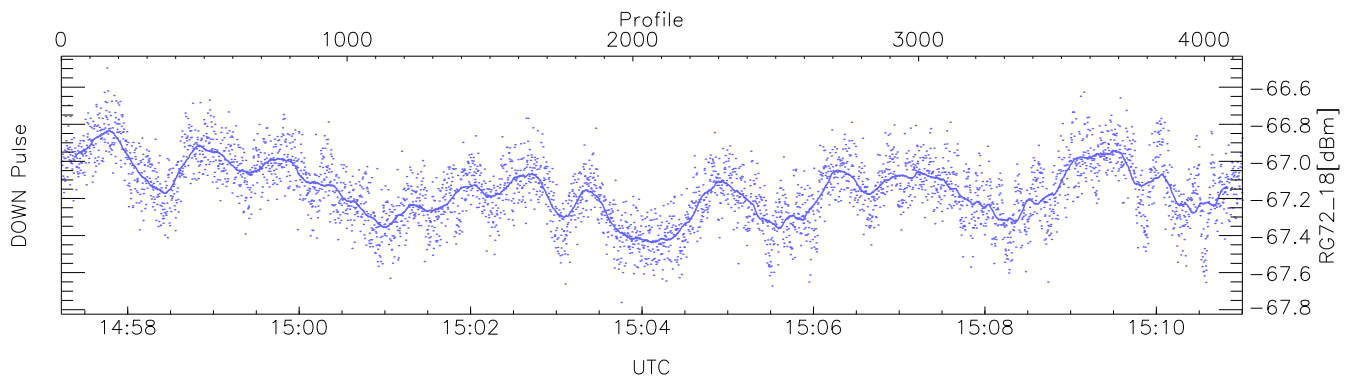
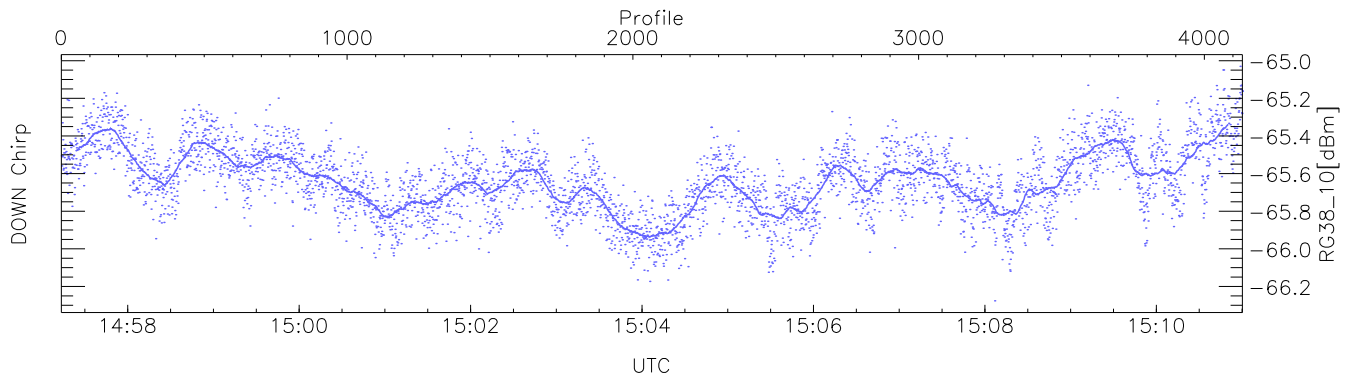
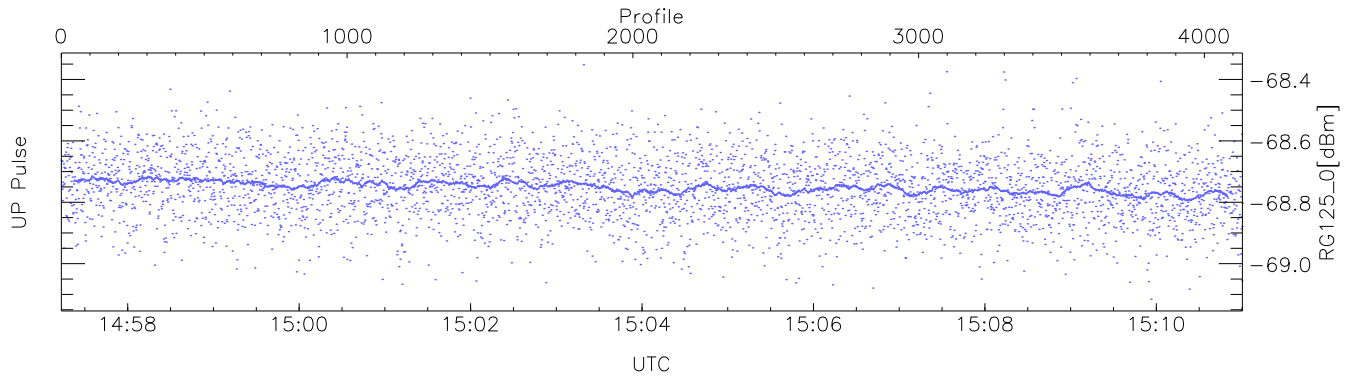
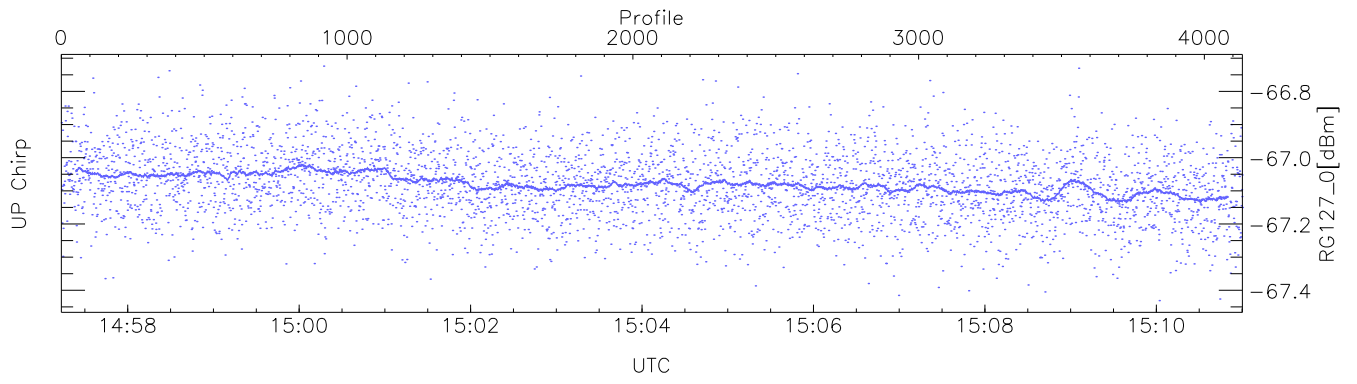
KPR SPP Receiver Noise Source Warm and Hot Measurements

| | Min | Max | Mean | Median | StDev |
|-----------------|--------|--------|--------|--------|--------|
| Chirp(WL [dBm]) | -65.24 | -64.45 | -64.86 | -64.86 | -80.95 |
| Chirp(HL [dBm]) | -62.02 | -61.41 | -61.72 | -61.72 | -78.37 |
| Pulse(WL [dBm]) | -66.55 | -65.83 | -66.17 | -66.17 | -82.25 |
| Pulse(HL [dBm]) | -63.78 | -63.15 | -63.45 | -63.45 | -80.18 |



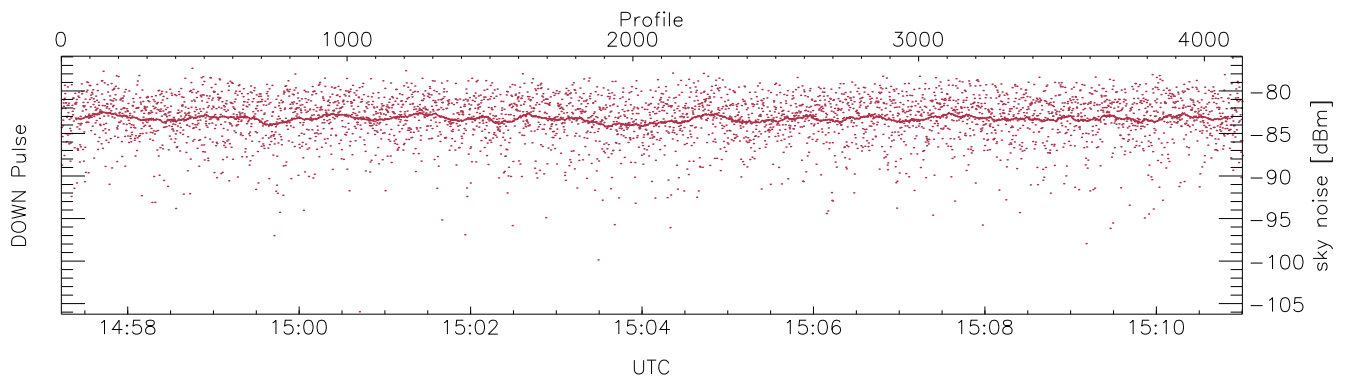
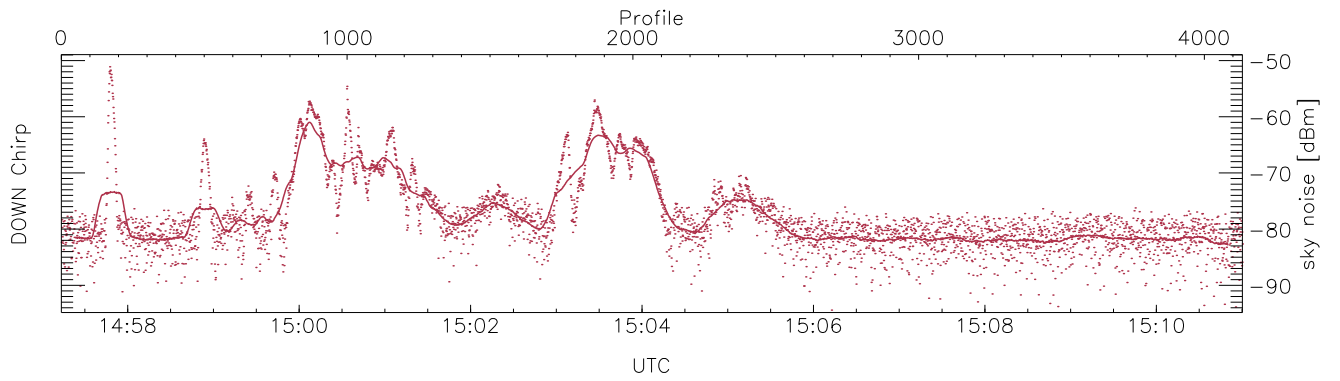
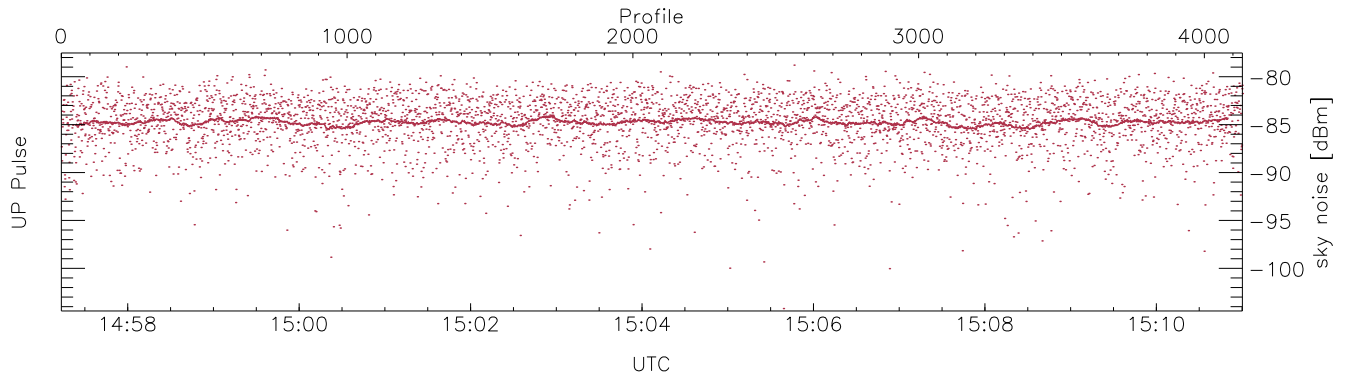
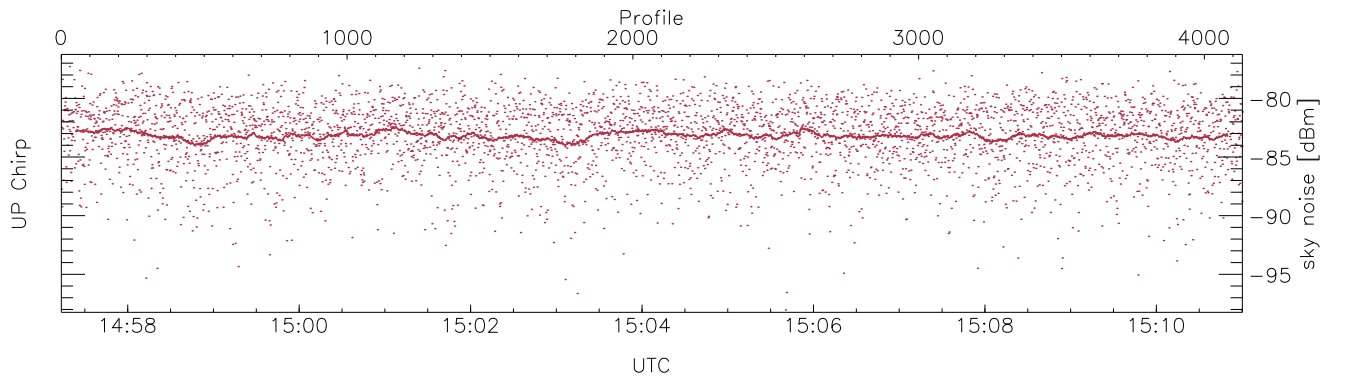
KPR SPP Last range gate power measurements: assumed RM(sky) noise

| | Min | Max | Mean | Median | StDev |
|-----------------|--------|--------|--------|--------|--------|
| UP Chirp(dBm) | -67.43 | -66.73 | -67.07 | -67.08 | -83.24 |
| UP Pulse(dBm) | -69.14 | -68.23 | -68.75 | -68.75 | -84.94 |
| DOWN Chirp(dBm) | -66.13 | -50.87 | -64.13 | -65.44 | -63.93 |
| DOWN Pulse(dBm) | -67.77 | -66.60 | -67.15 | -67.15 | -80.95 |



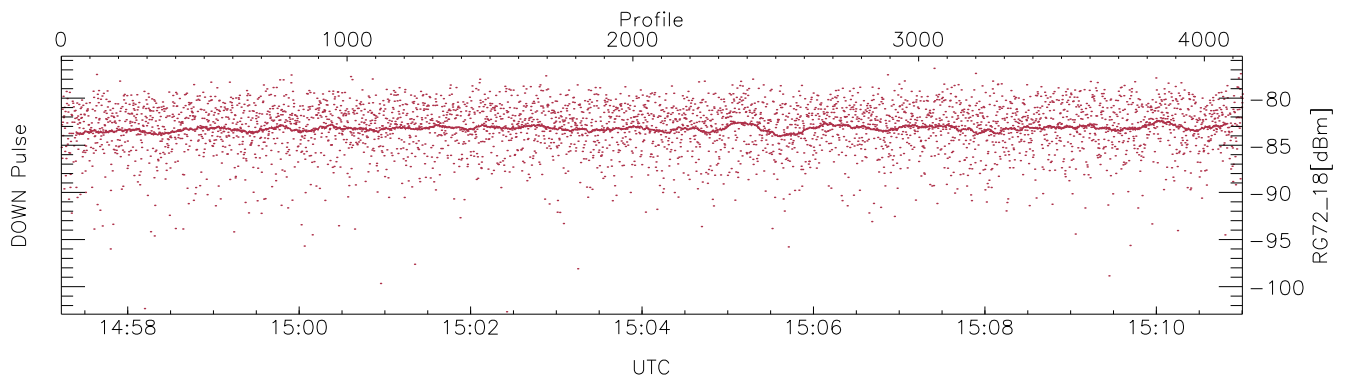
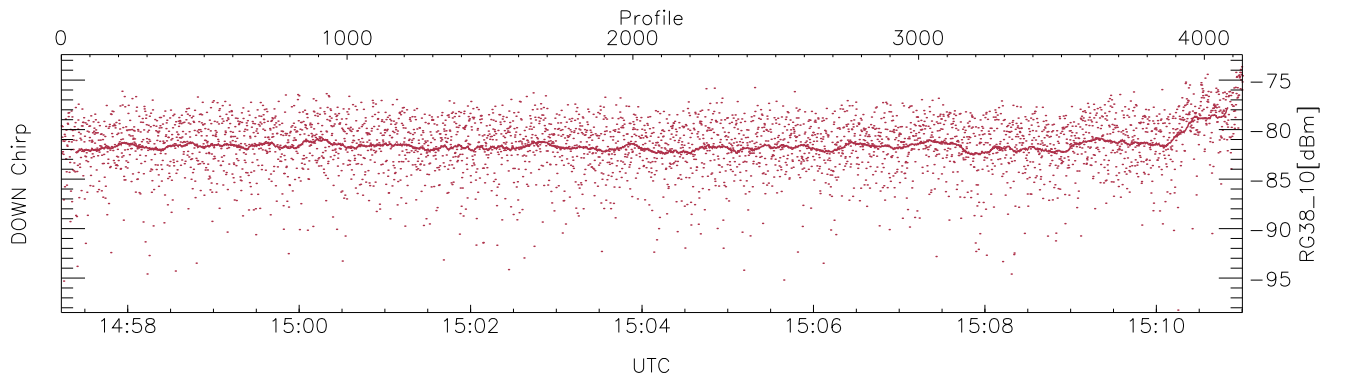
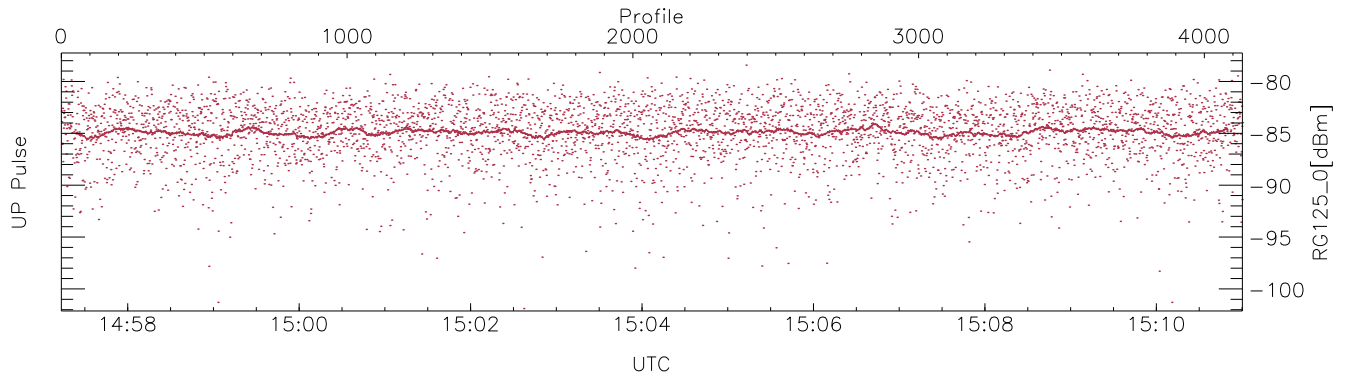
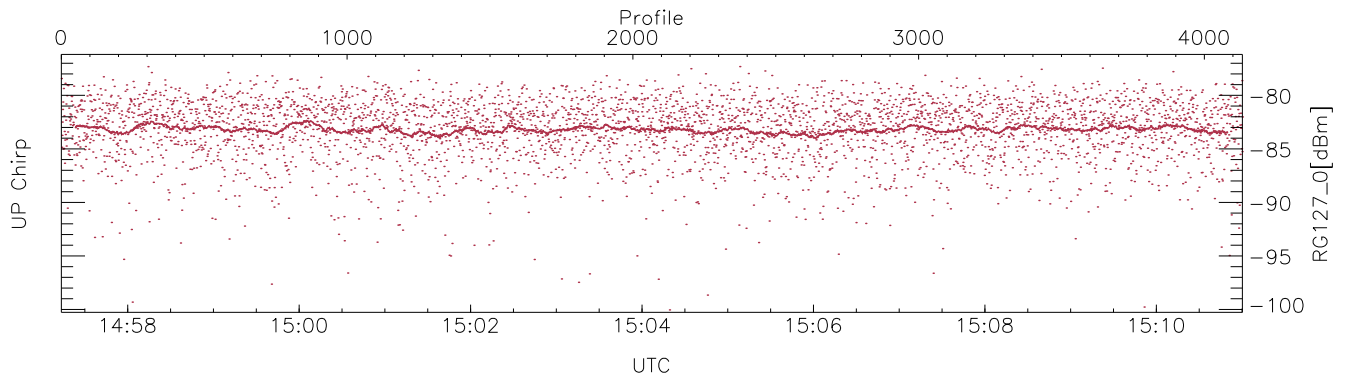
KPR SPP "Best" noise power measurements (dBm):

| | Min | Max | Mean | Median | StDev |
|----------------|--------|--------|--------|--------|--------|
| UP_C_RG127_0 | -67.43 | -66.72 | -67.08 | -67.08 | -83.30 |
| UP_P_RG125_0 | -69.12 | -68.35 | -68.75 | -68.75 | -84.98 |
| DOWN_C_RG38_10 | -66.28 | -65.03 | -65.63 | -65.64 | -79.43 |
| DOWN_P_RG72_18 | -67.76 | -66.50 | -67.15 | -67.15 | -80.92 |



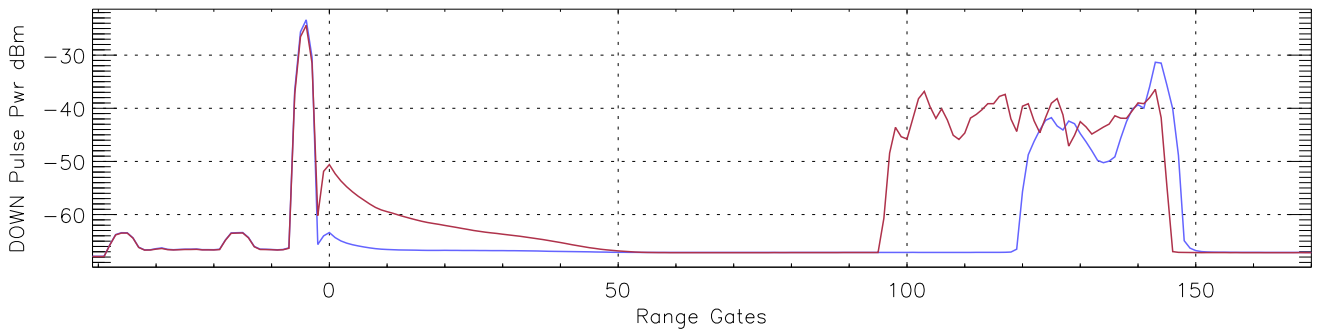
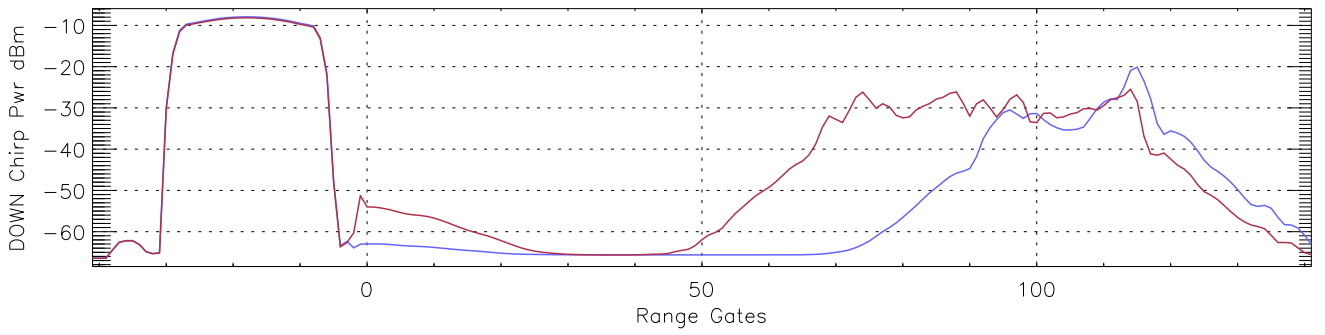
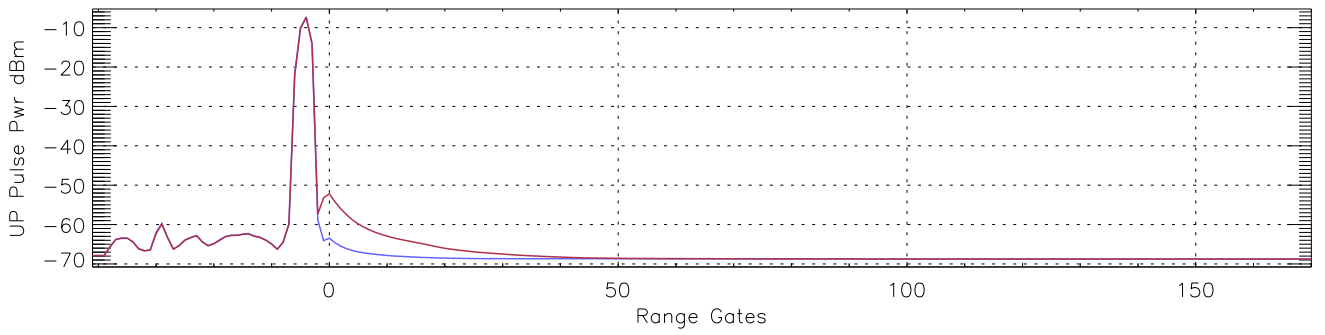
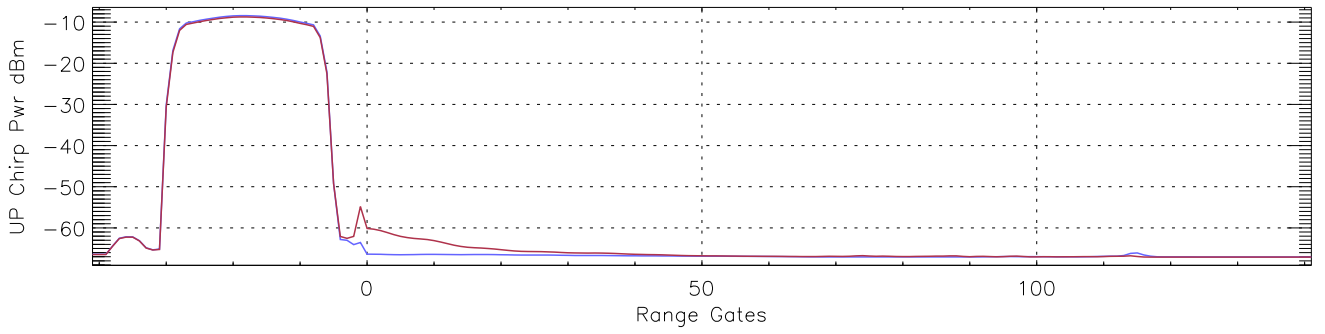
KPR SPP Last range gate PPMAG: assumed RM(sky) noise

| | Min | Max | Mean | Median | StDev |
|-----------------|---------|--------|--------|--------|--------|
| UP Chirp(dBm) | -98.04 | -77.29 | -82.46 | -82.74 | -85.27 |
| UP Pulse(dBm) | -104.19 | -78.80 | -84.07 | -84.33 | -86.98 |
| DOWN Chirp(dBm) | -94.42 | -51.11 | -70.05 | -79.18 | -64.23 |
| DOWN Pulse(dBm) | -105.95 | -77.35 | -82.53 | -82.83 | -85.32 |

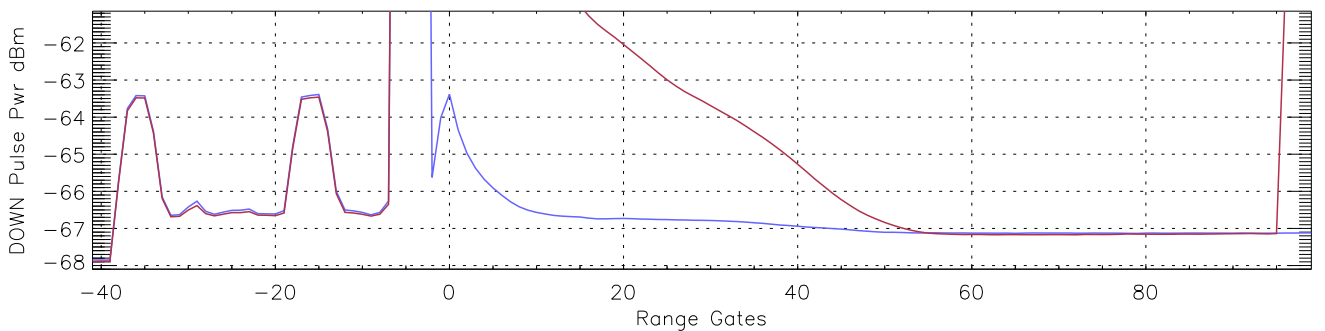
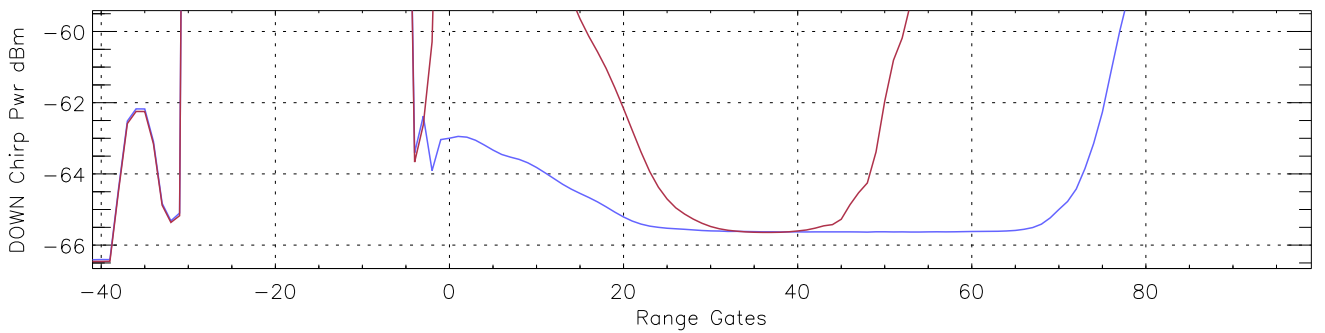
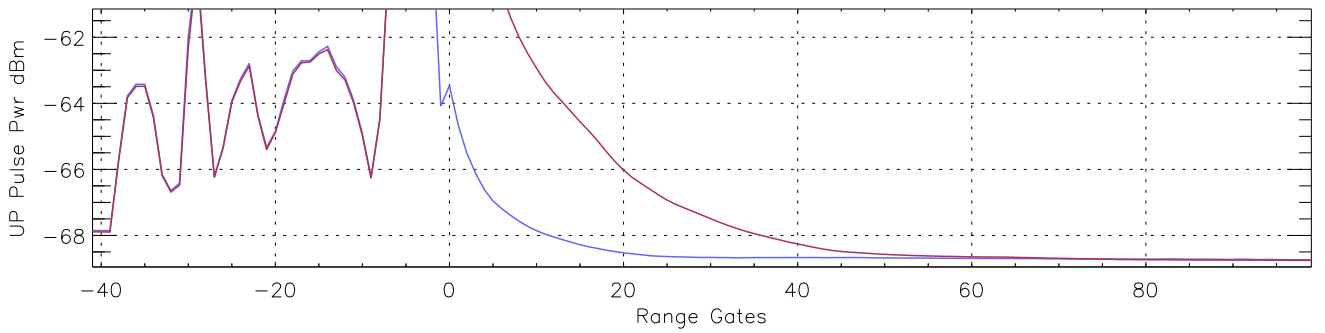
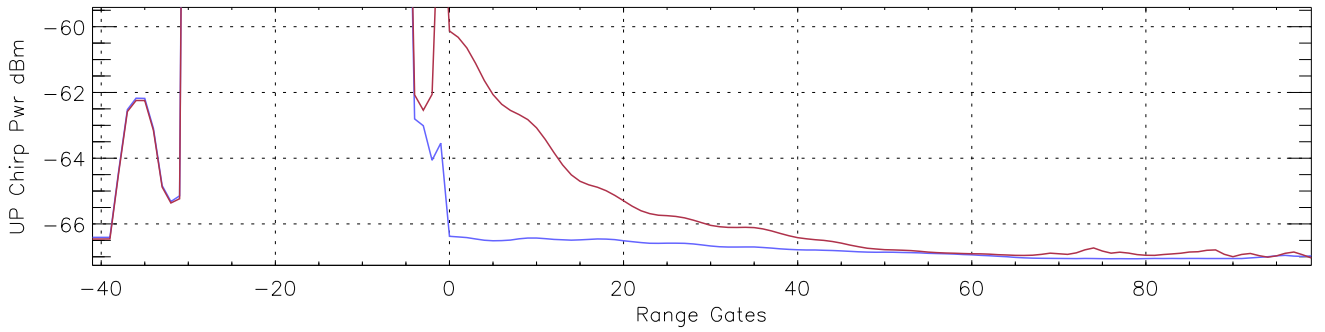


KPR SPP "Best" PPMAG noise (dBm):

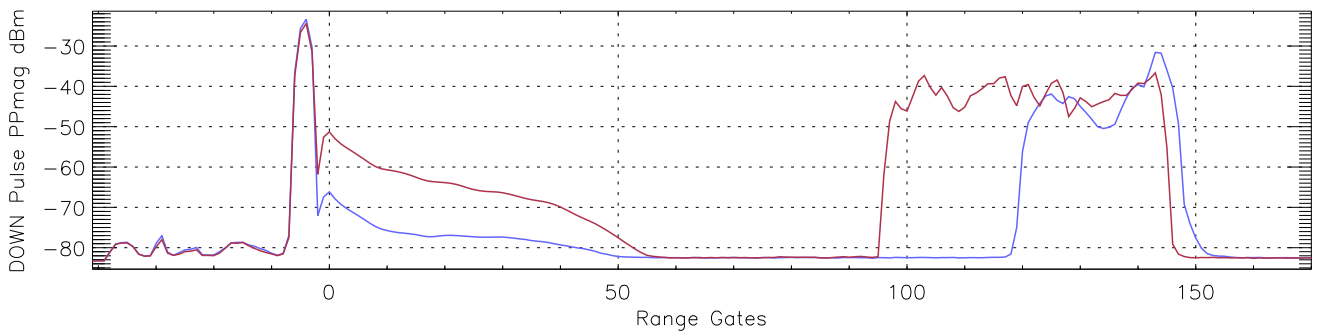
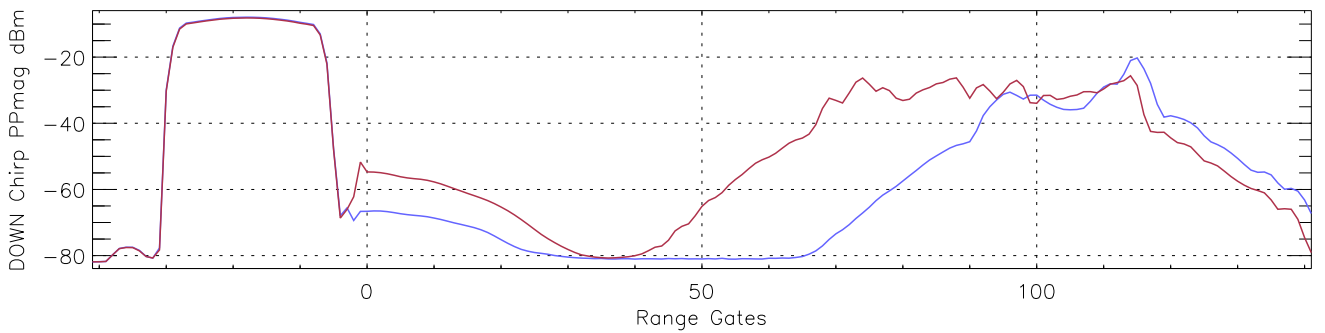
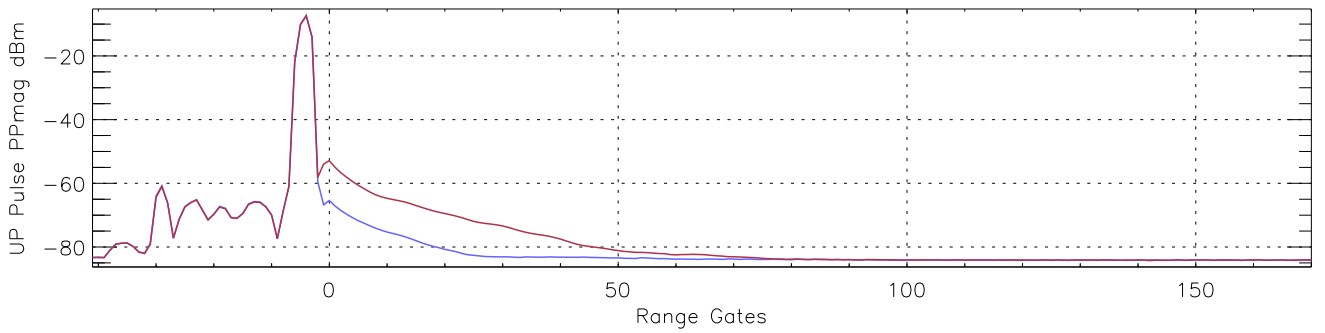
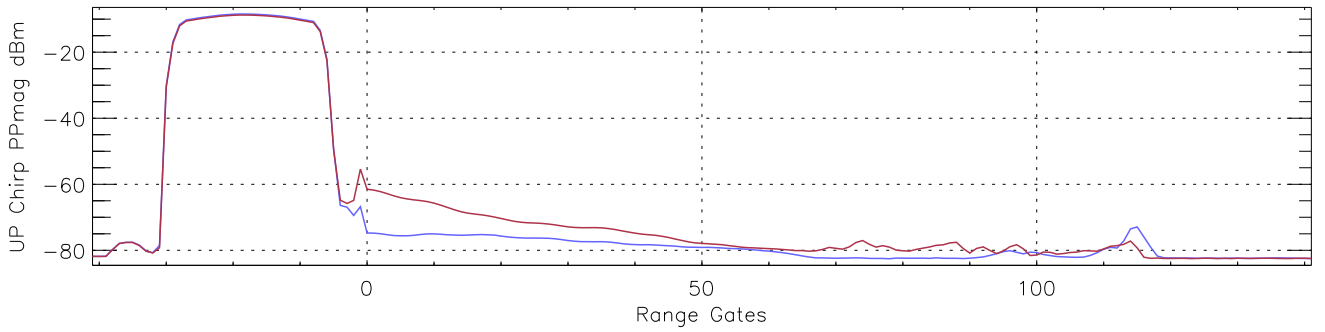
| | Min | Max | Mean | Median | StDev |
|----------------|---------|--------|--------|--------|--------|
| UP_C_RG127_0 | -100.04 | -77.31 | -82.46 | -82.68 | -85.28 |
| UP_P_RG125_0 | -101.89 | -78.43 | -84.15 | -84.47 | -86.83 |
| DOWN_C_RG38_10 | -98.24 | -73.66 | -80.74 | -81.17 | -83.04 |
| DOWN_P_RG72_18 | -102.66 | -76.84 | -82.48 | -82.73 | -85.23 |



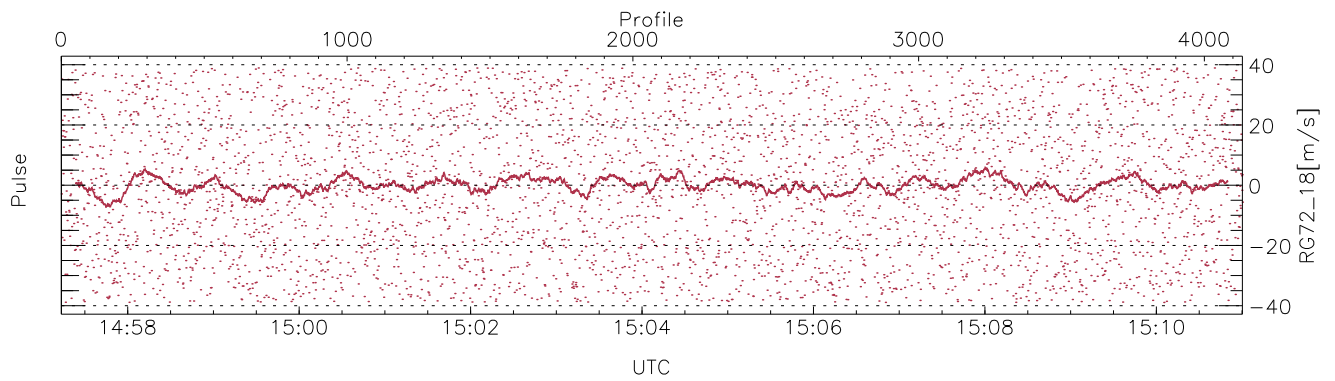
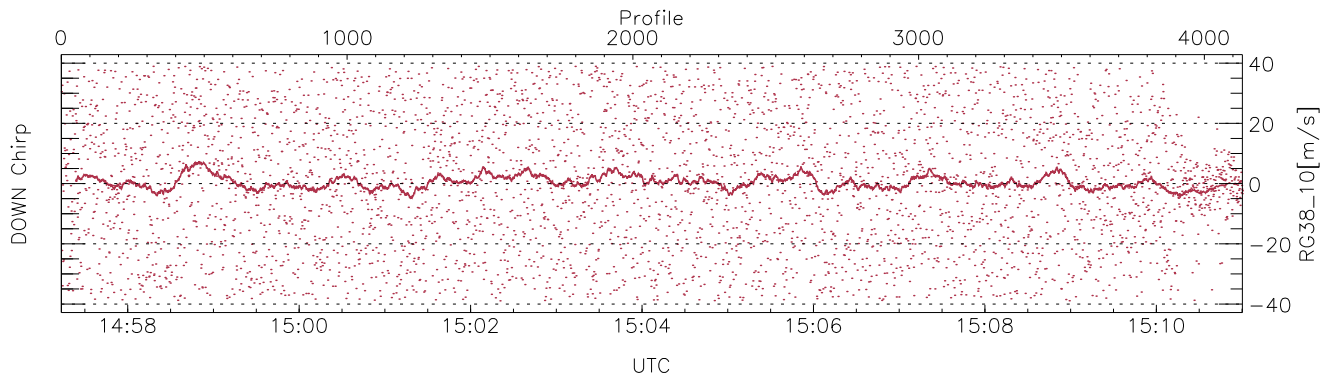
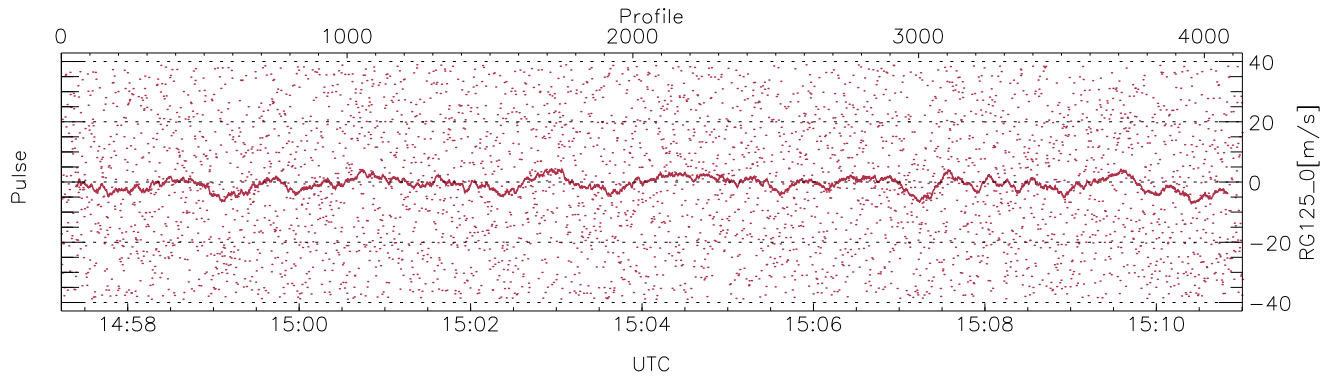
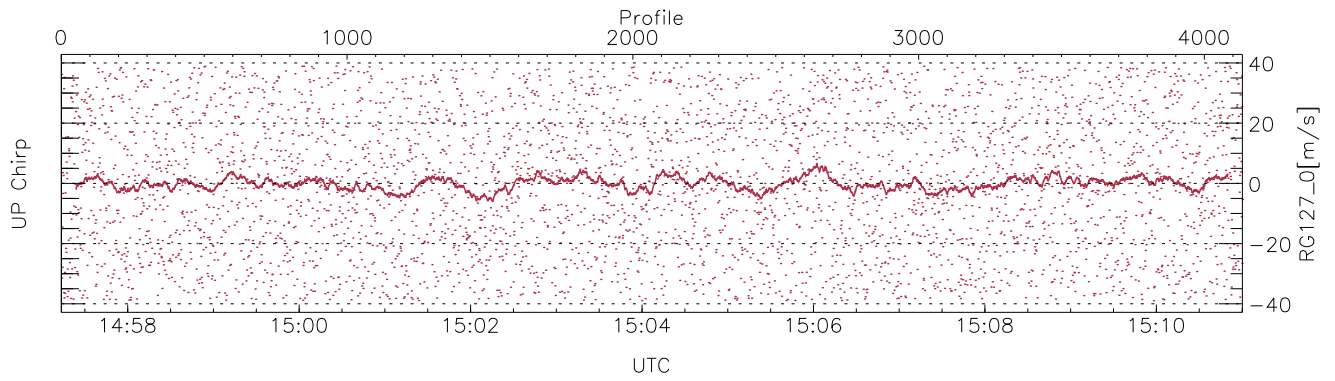
KPR SPP Averaged Received power for all recorded gates
blue: 145714-150406, 2068 profiles averaged
red: 150406-151100, 2067 profiles averaged



KPR SPP Averaged Power for neg. gates & up to 100 gates
blue: 145714-150406, 2068 profiles averaged
red: 150406-151100, 2067 profiles averaged

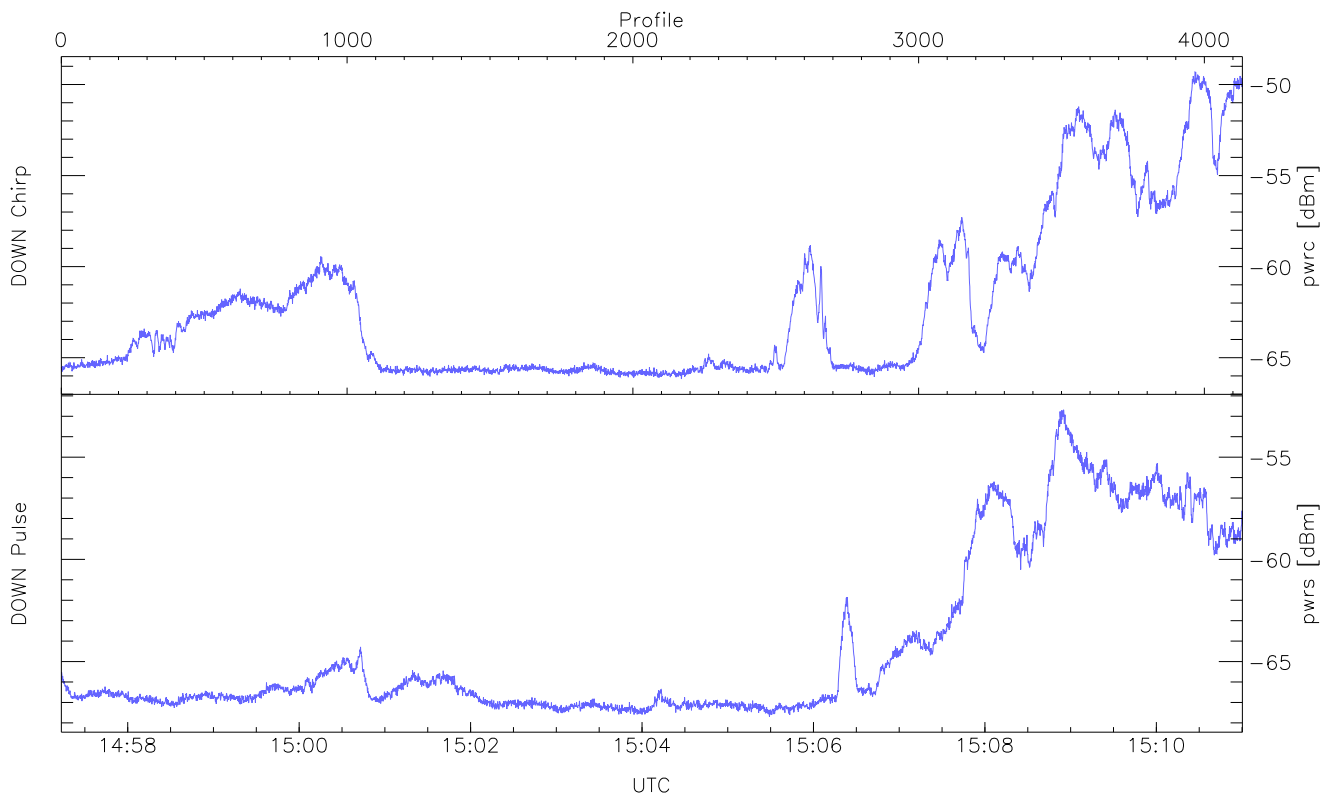
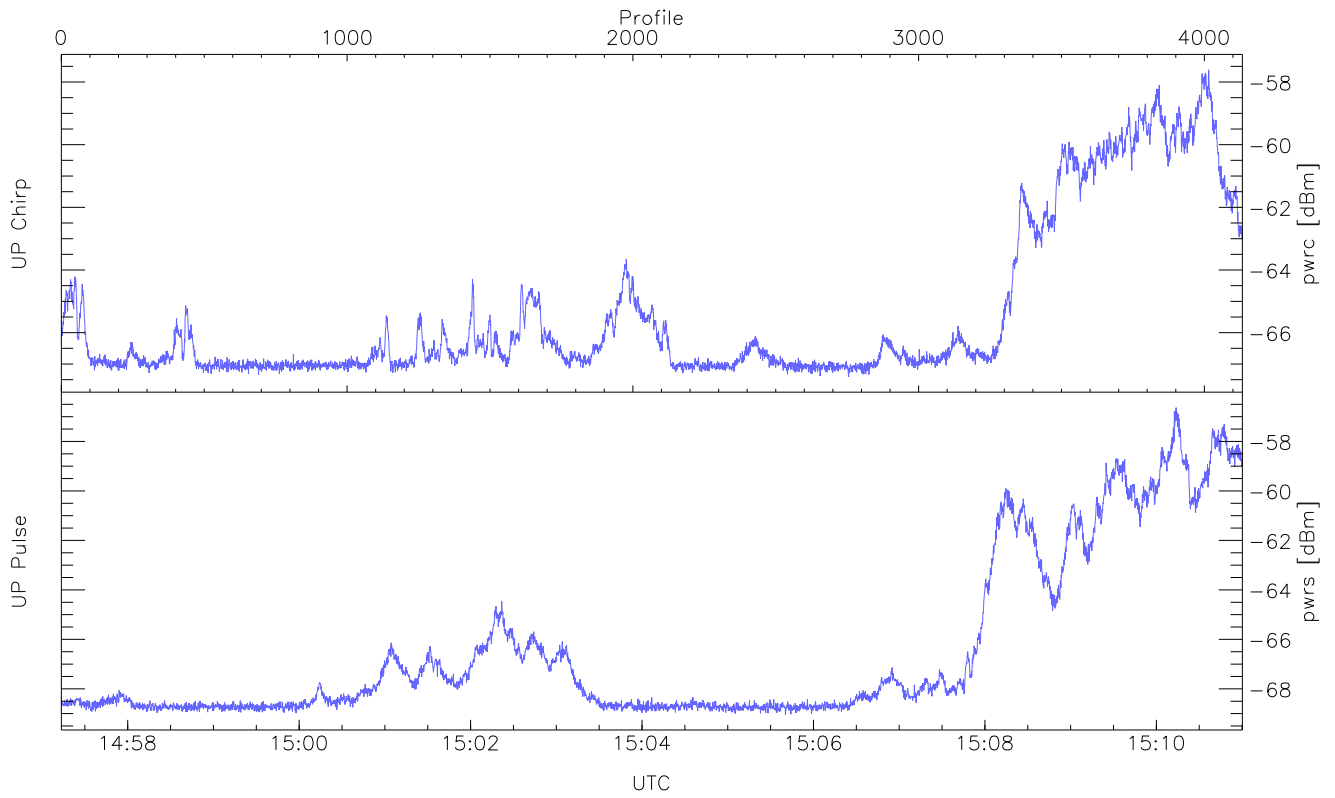


KPR SPP Averaged PP magnitude for all recorded gates
blue: 145714-150406, 2068 profiles averaged
red: 150406-151100, 2067 profiles averaged



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

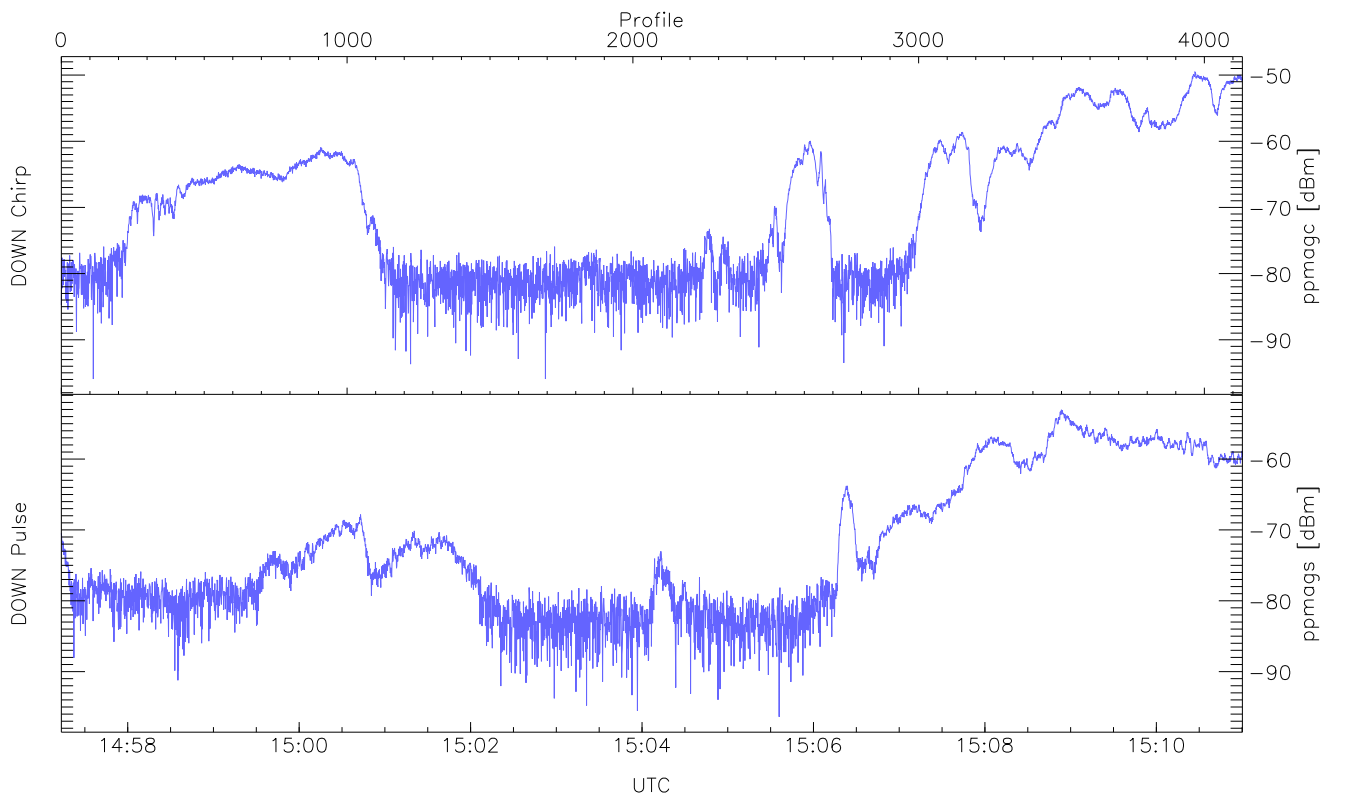
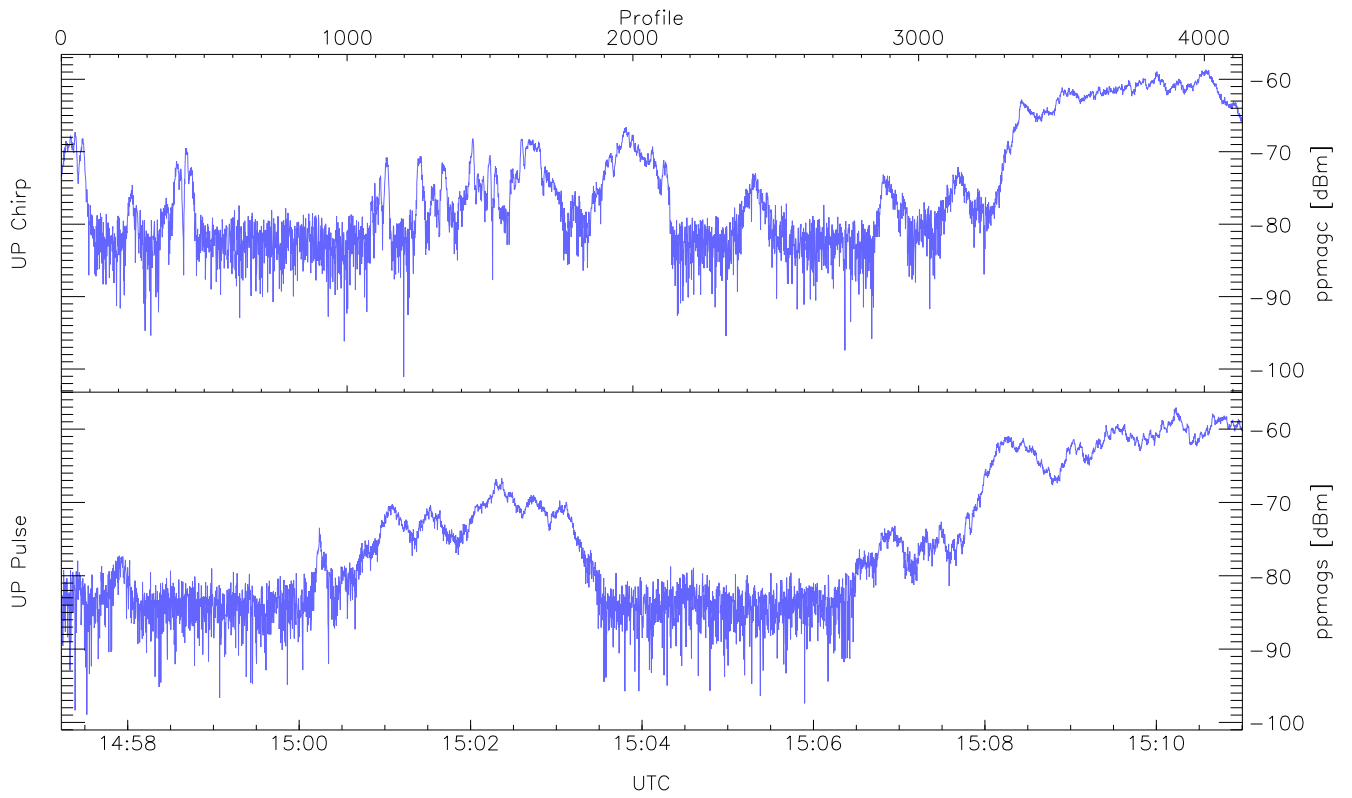
| | Min | Max | Mean | Median | StDev |
|----------------|--------|-------|-------|--------|-------|
| UP_C_RG127_0 | -38.94 | 38.94 | -0.19 | -0.01 | 22.29 |
| UP_P_RG125_0 | -38.93 | 38.94 | -0.87 | -1.47 | 22.05 |
| DOWN_C_RG38_10 | -38.94 | 38.94 | 0.36 | 0.29 | 21.62 |
| DOWN_P_RG72_18 | -38.92 | 38.93 | -0.05 | -0.04 | 22.35 |



KPR SPP Received Power for Chirp Range gate 10 (1585.2 m)

KPR SPP Received Power for Pulse Range gate 10 (533.8 m)

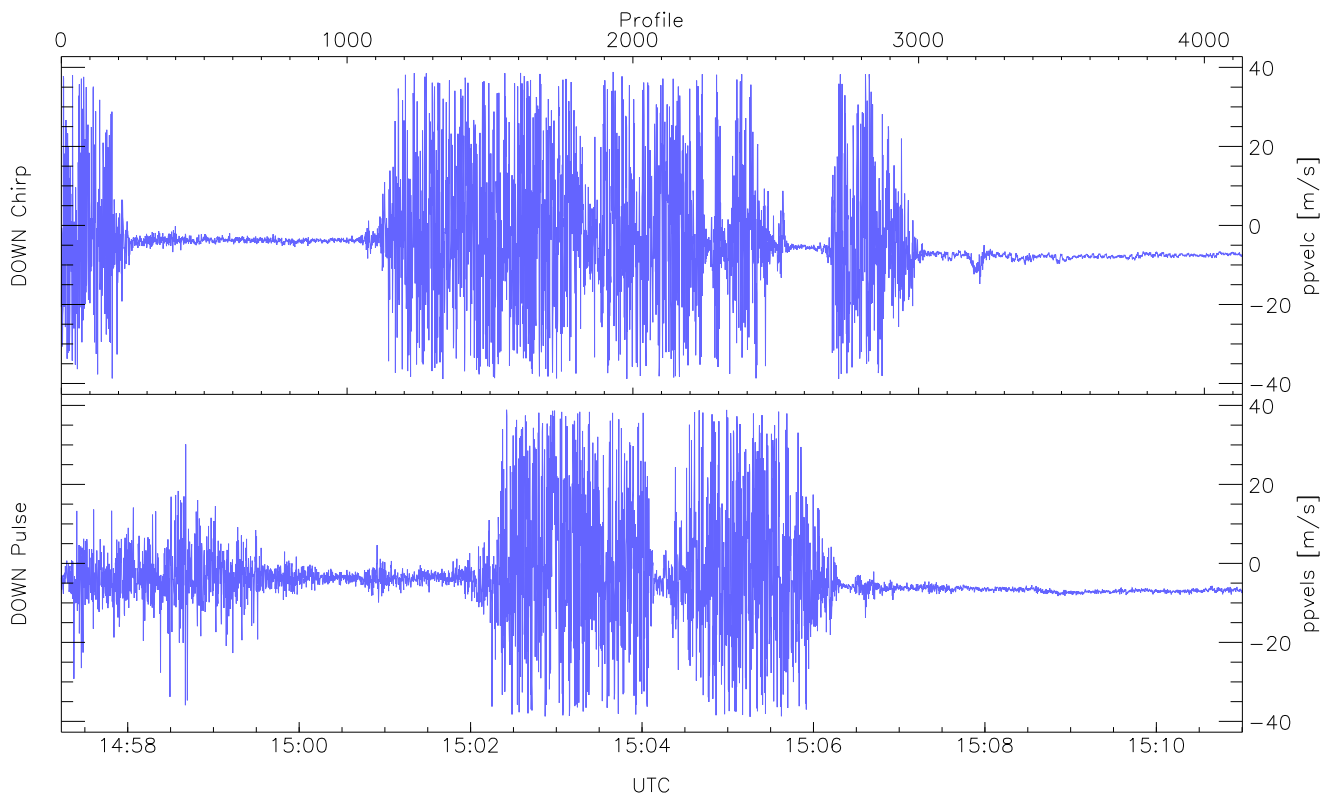
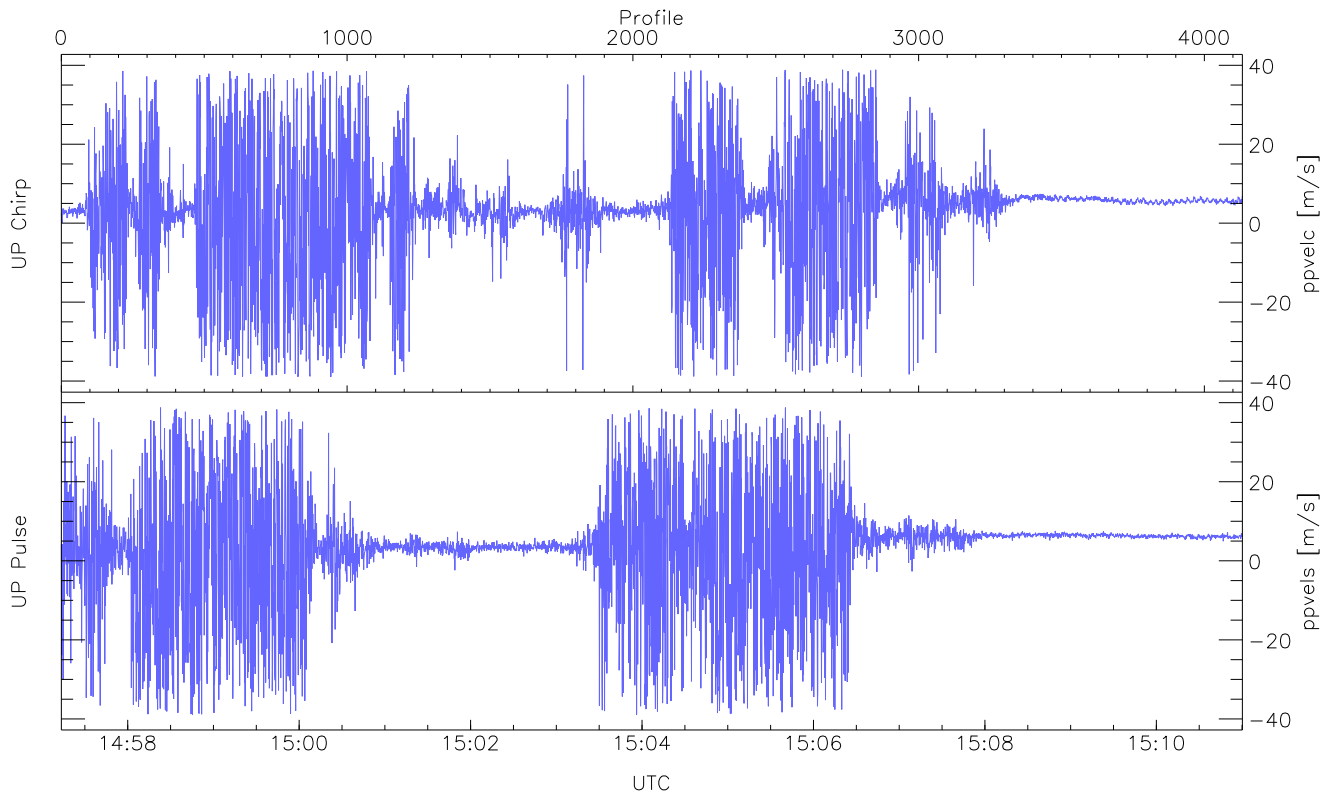
| | Min | Max | Mean |
|-----------------|--------|--------|--------|
| UP Chirp(dBm) | -67.41 | -57.61 | -64.44 |
| UP Pulse(dBm) | -69.04 | -56.63 | -64.73 |
| DOWN Chirp(dBm) | -66.17 | -49.31 | -58.95 |
| DOWN Pulse(dBm) | -67.70 | -52.68 | -61.70 |



KPR SPP PPMAG for Chirp Range gate 10 (1585.2 m)

KPR SPP PPMAG for Pulse Range gate 10 (533.8 m)

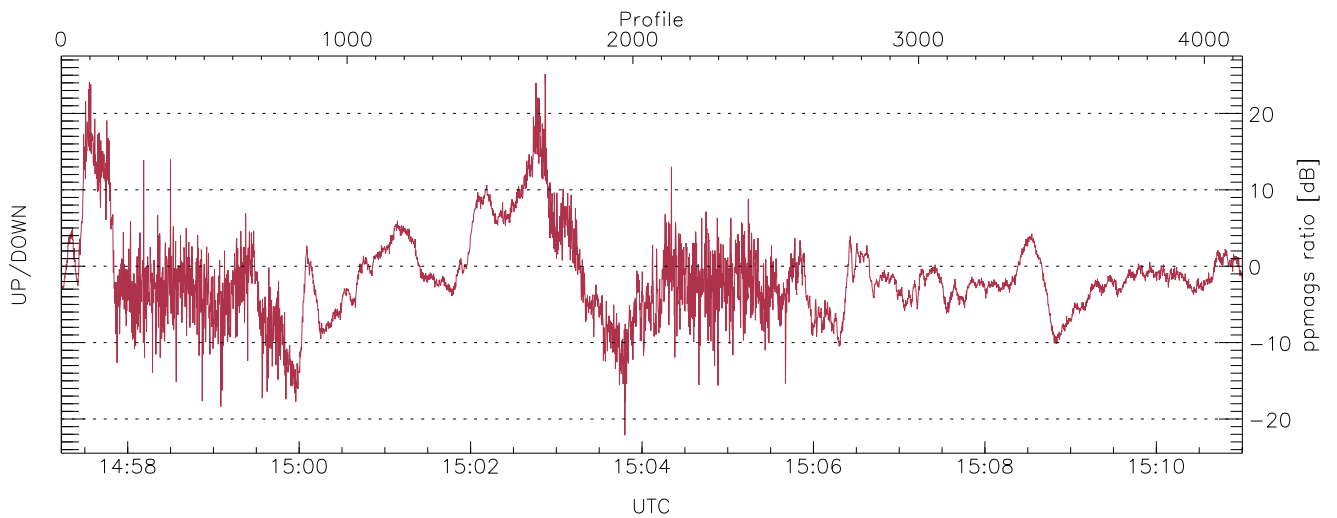
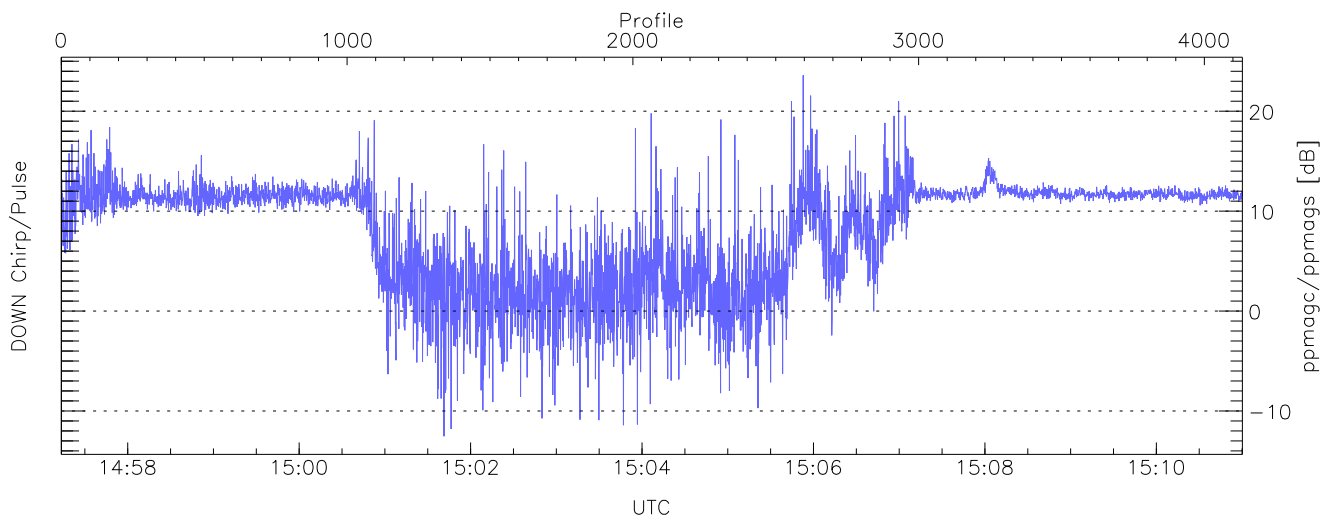
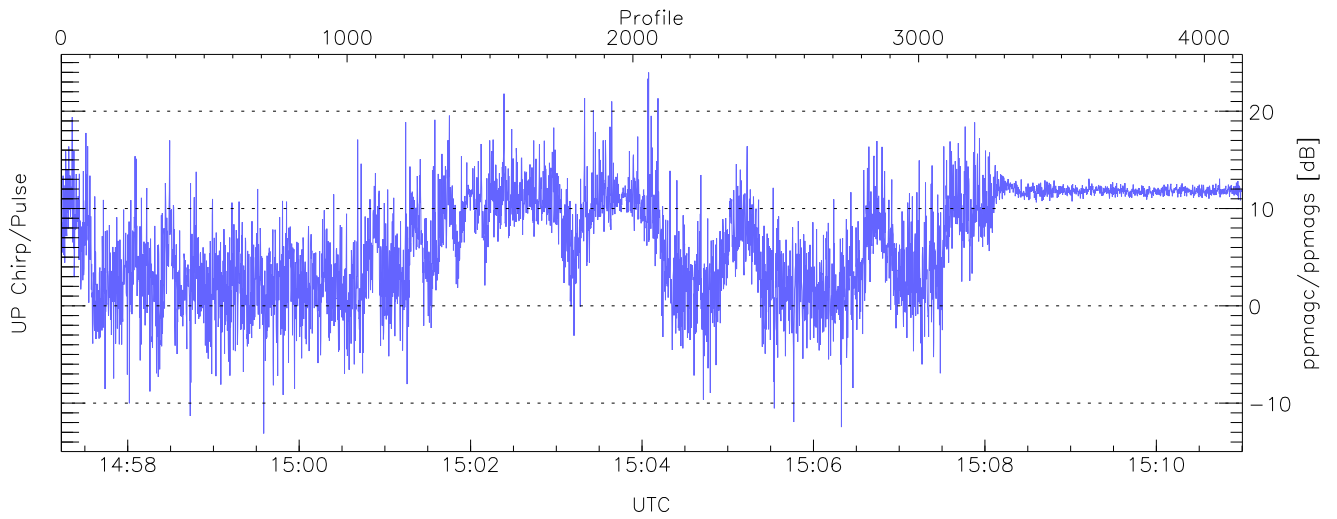
| | Min | Max | Mean |
|-----------------|---------|--------|--------|
| UP Chirp(dBm) | -101.07 | -58.68 | -68.23 |
| UP Pulse(dBm) | -98.94 | -57.06 | -67.36 |
| DOWN Chirp(dBm) | -95.94 | -49.53 | -60.40 |
| DOWN Pulse(dBm) | -96.38 | -53.03 | -63.58 |



KPR SPP PPVEL for Chirp Range gate 10 (1585.2 m)

KPR SPP PPVEL for Pulse Range gate 10 (533.8 m)

| | Min | Max | Mean |
|-----------------|--------|-------|-------|
| UP Chirp(m/s) | -38.93 | 38.87 | 2.96 |
| UP Pulse(m/s) | -38.90 | 38.76 | 3.30 |
| DOWN Chirp(m/s) | -38.88 | 38.84 | -4.30 |
| DOWN Pulse(m/s) | -38.84 | 38.90 | -3.92 |



KPR SPP PPMAG Chirp/Pulse; Range gate: 1247.9m /1283.3m

| | Min | Max | Mean |
|--------------------------------|--------|-------|-------|
| UP Chirp/Pulse(dBm) | -13.12 | 23.98 | 9.37 |
| DOWN Chirp/Pulse(dBm) | -12.54 | 23.60 | 10.22 |
| UP/DOWN Ratio at Range 196.5 m | | | |
| | Min | Max | Mean |
| UP/DOWN(dB) | -22.11 | 25.15 | 4.52 |