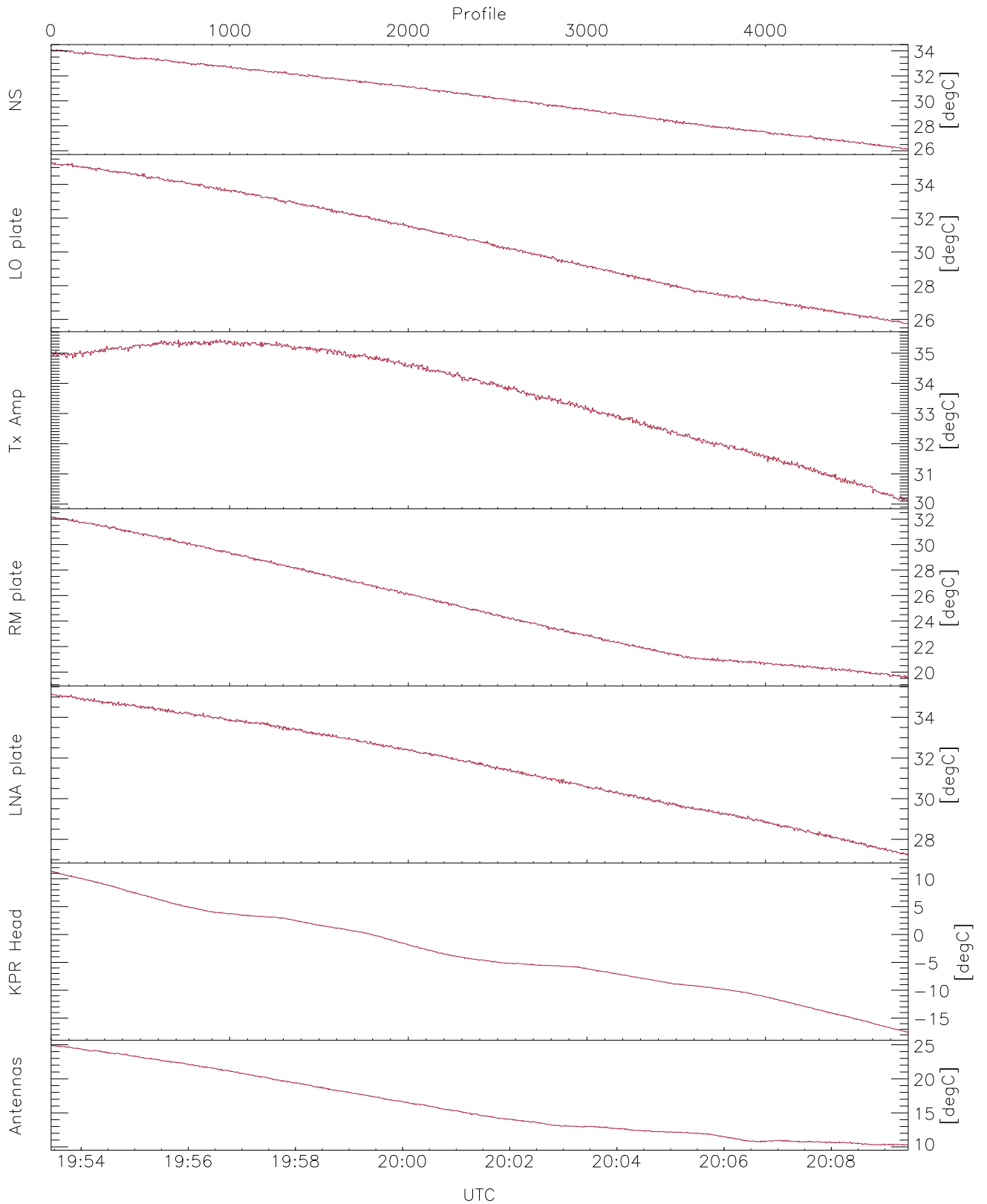


KPR SPP; Ant(s): UP, DOWN; Radiometer: OFF
 UTC: 19:53:26-20:33:30, TimeCor: 0.00s, Dur: 959.80s
 TimeInt(min,max,mn,std): 190.3,209.7,200.0,0.4 ms; PPS: 5.0
 NumRec(r/t): 4800/12021, 0-4799/19:53:26-20:09:26
 AcqTime(req,actual): 200.0,200.0 ms, Data Rate: 187.6 KB/s
 Pulse: 247 ns, Chirp: 2.47 us, 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, 6487 m, Gates: 398
 RangeGateSampling: 15.0 m, Aspect: 0.8

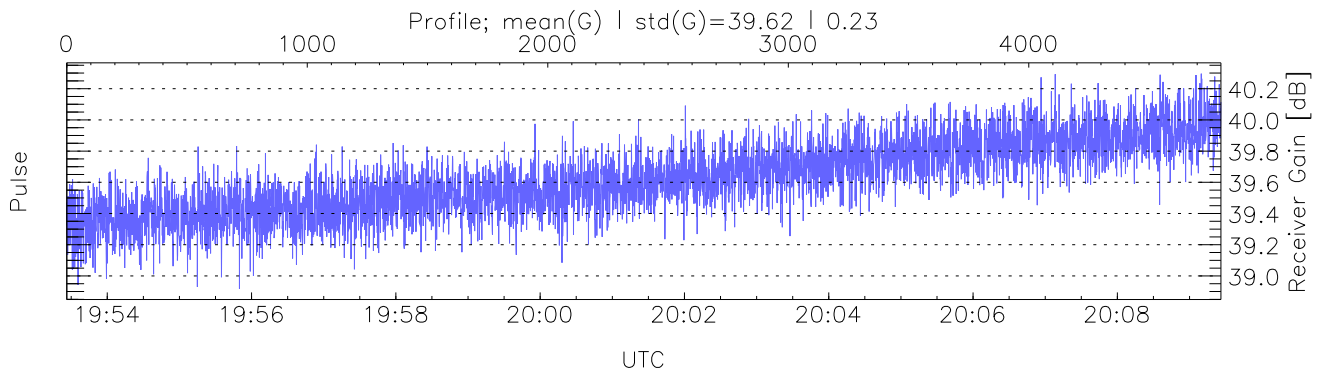
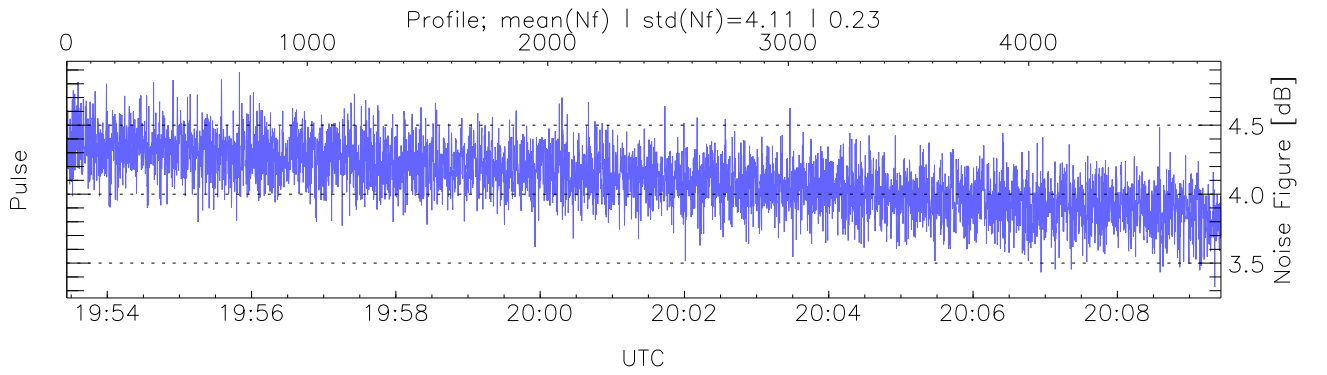
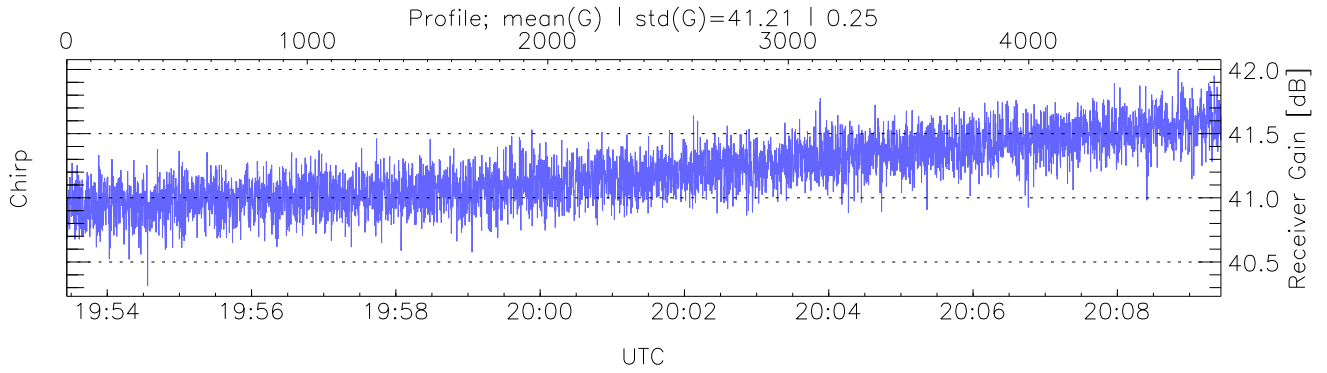
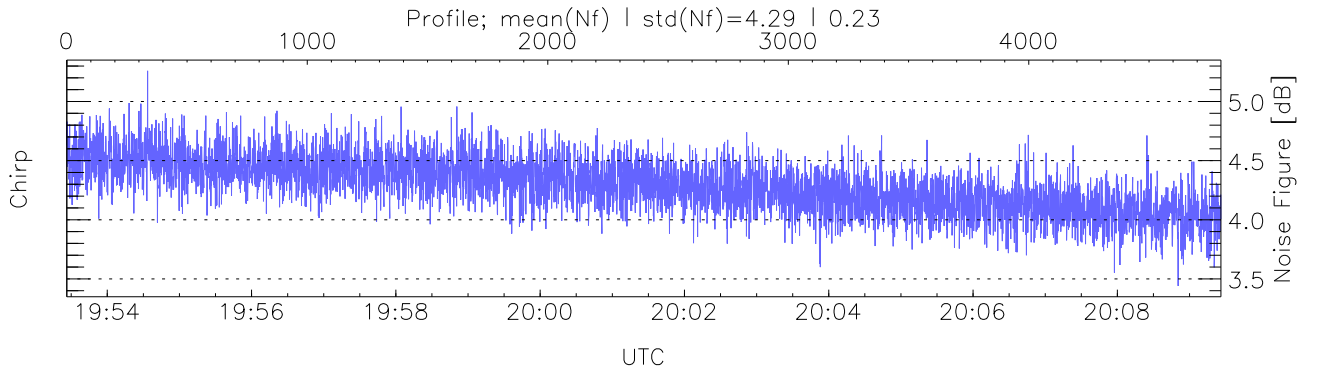


KPR SPP Temperatures, Power Supplies, PLO lock:

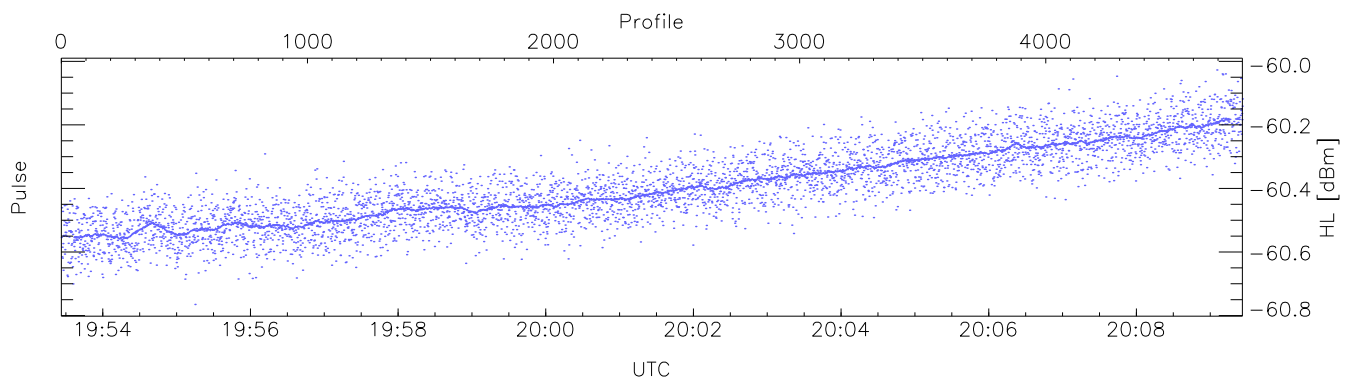
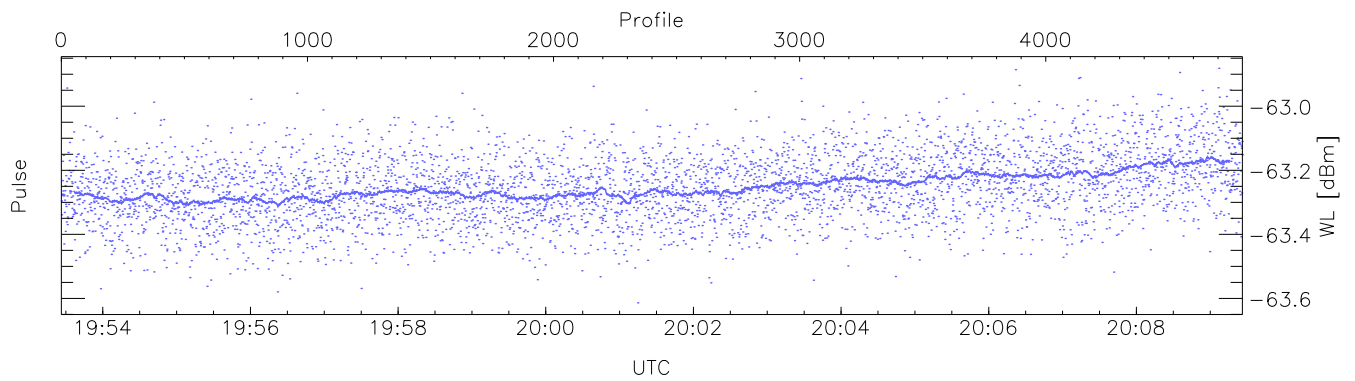
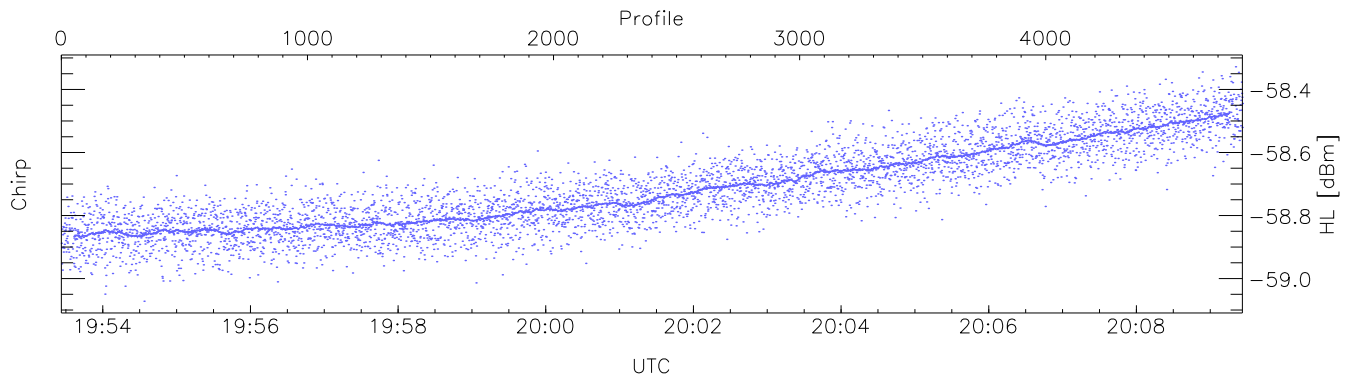
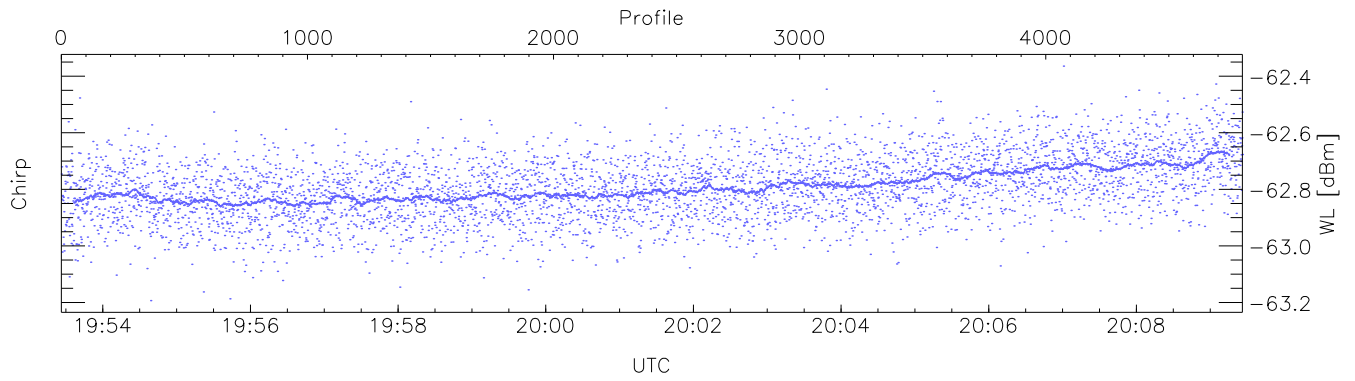
temperature: NS, LO, Tx, RM, LNA, Head, Ant
 mintempC: 26.1, 25.8, 30.1, 19.5, 27.2, -17.5, 10.2
 maxtempC: 34.1, 35.3, 35.4, 32.2, 35.1, 11.4, 24.9
 meantempC: 30.3, 30.5, 33.6, 25.1, 31.5, -3.3, 16.0

PwrSply: 28, 12, 8, 5 VDC
 minVDC: 25.96, 11.69, 7.87, 5.22
 maxVDC: 27.85, 11.74, 7.90, 5.24
 meanVDC: 27.06, 11.71, 7.88, 5.23

PLO(3.84,15.84 GHz) unlocked: None

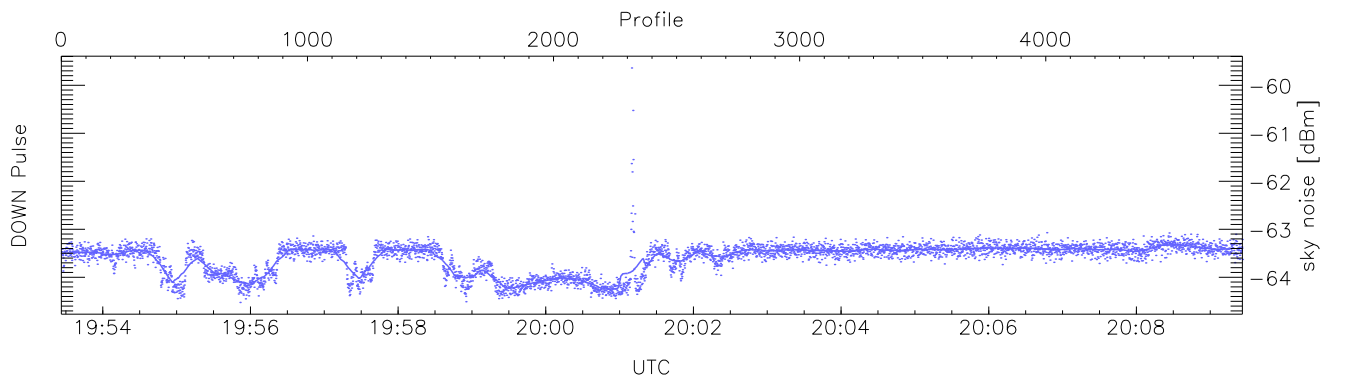
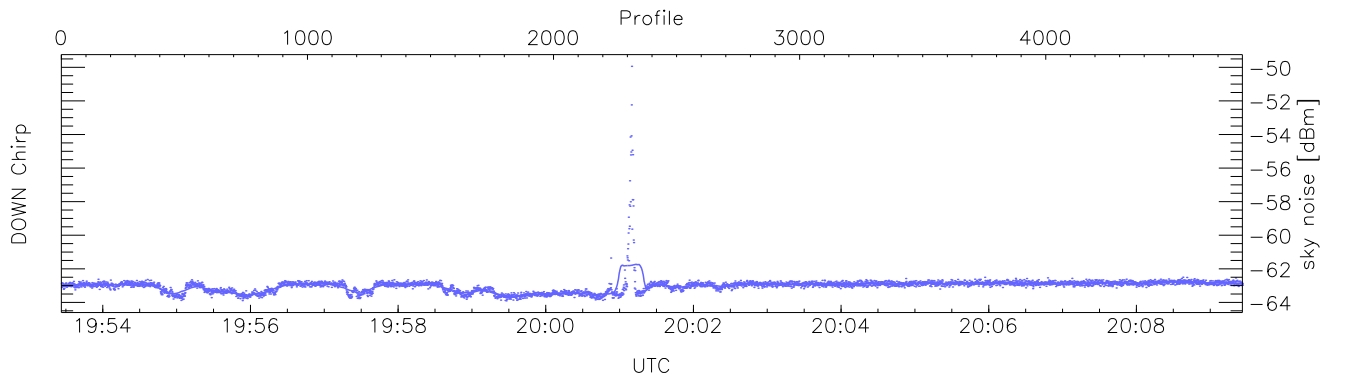
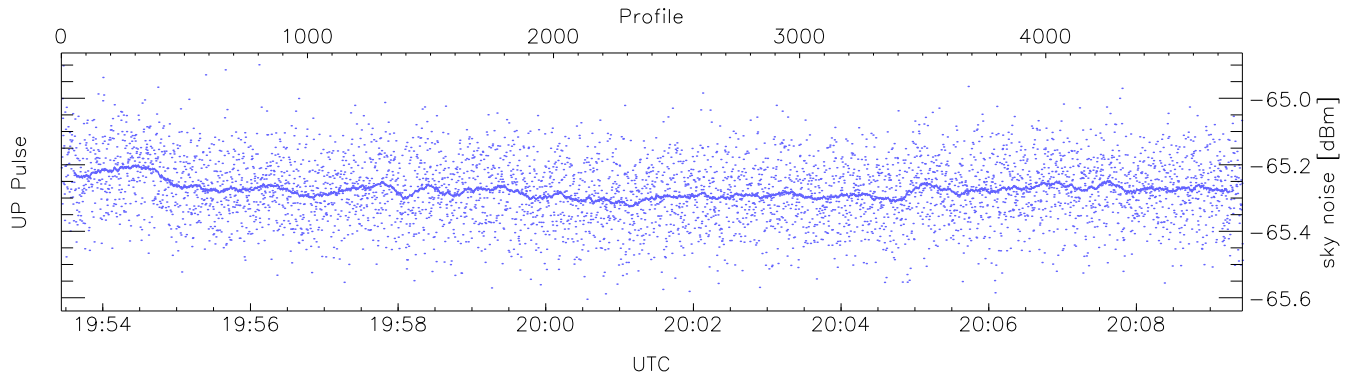
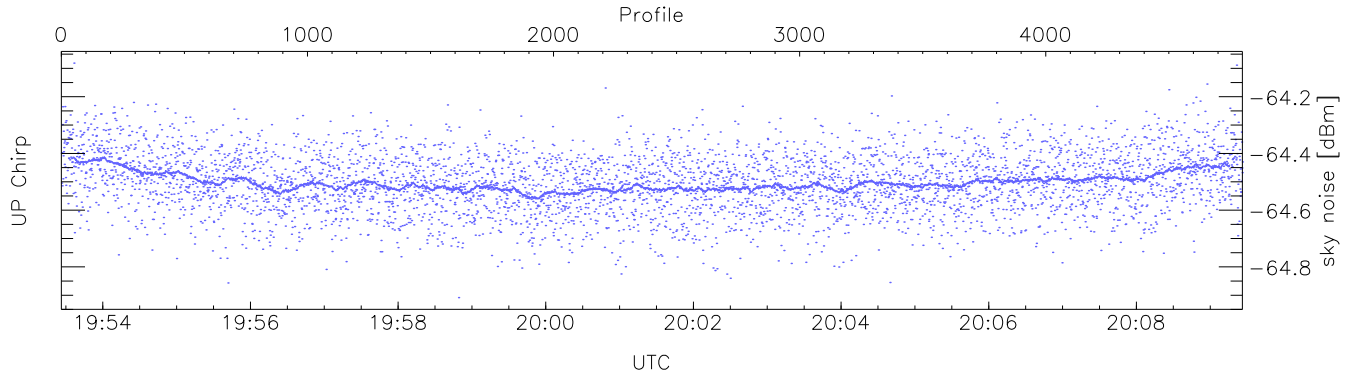


KPR SPP Receiver Gain and Noise Figure



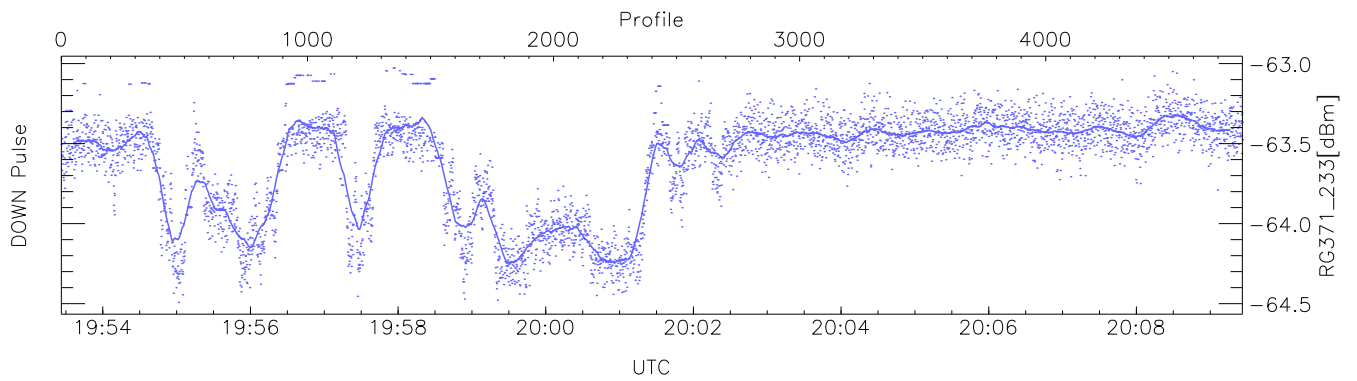
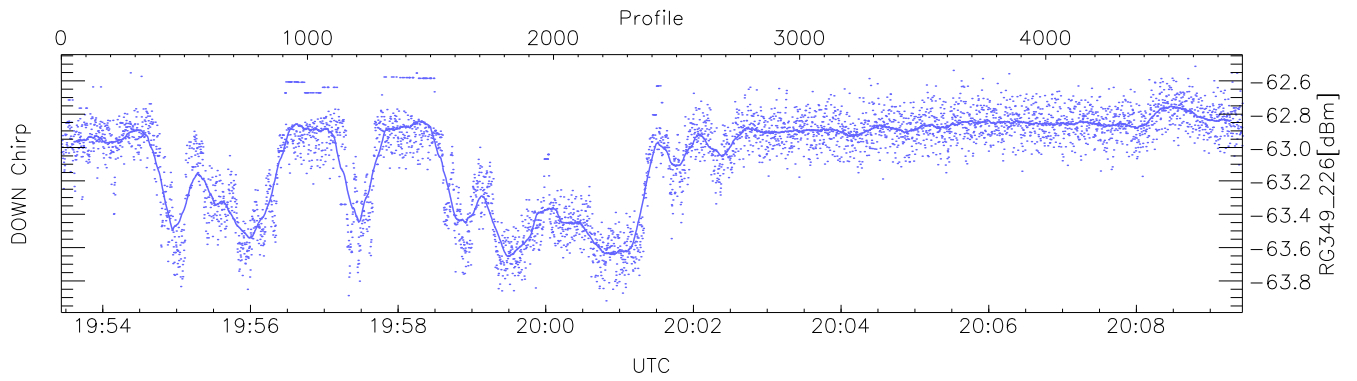
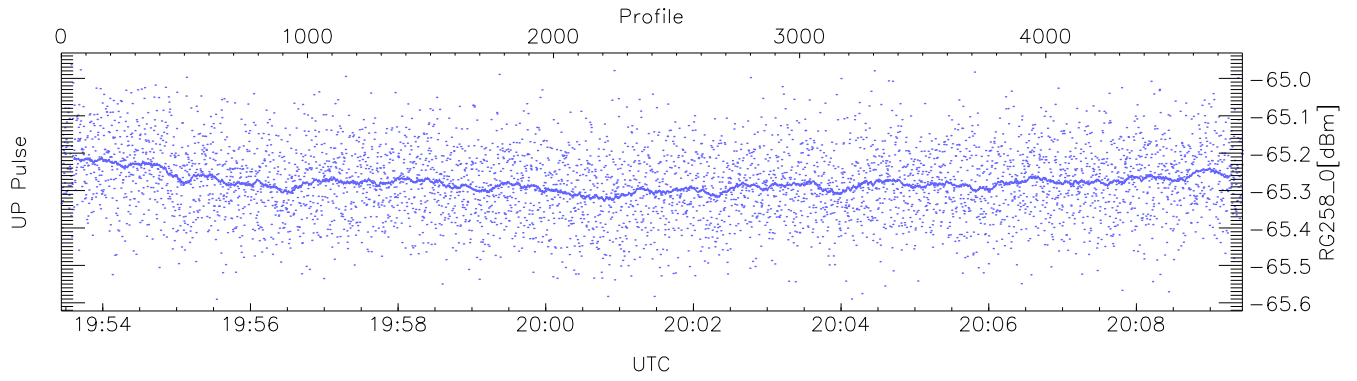
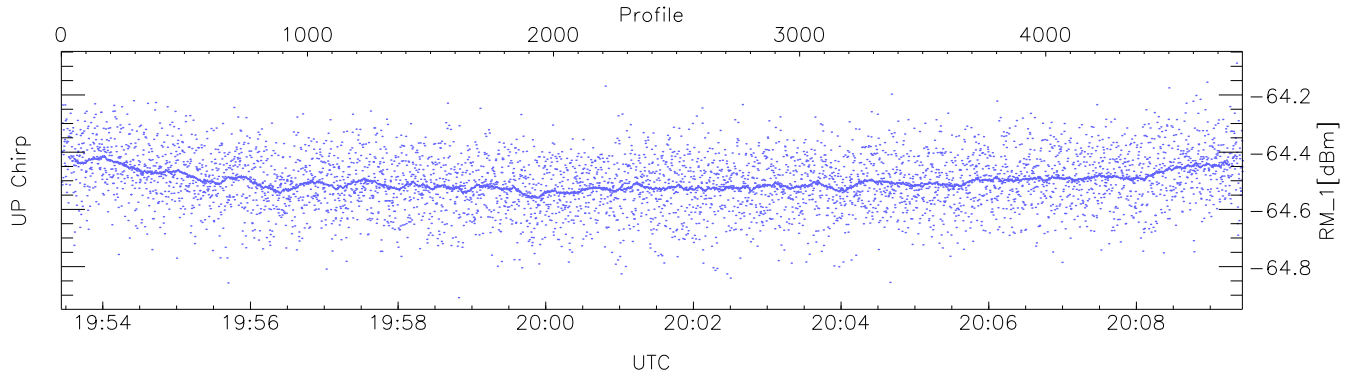
KPR SPP Receiver Noise Source Warm and Hot Measurements

| | Min | Max | Mean | Median | StDev |
|-----------------|--------|--------|--------|--------|--------|
| Chirp(WL [dBm]) | -63.19 | -62.36 | -62.79 | -62.79 | -78.78 |
| Chirp(HL [dBm]) | -59.07 | -58.33 | -58.72 | -58.74 | -73.78 |
| Pulse(WL [dBm]) | -63.61 | -62.88 | -63.25 | -63.25 | -79.49 |
| Pulse(HL [dBm]) | -60.77 | -60.03 | -60.39 | -60.41 | -75.83 |



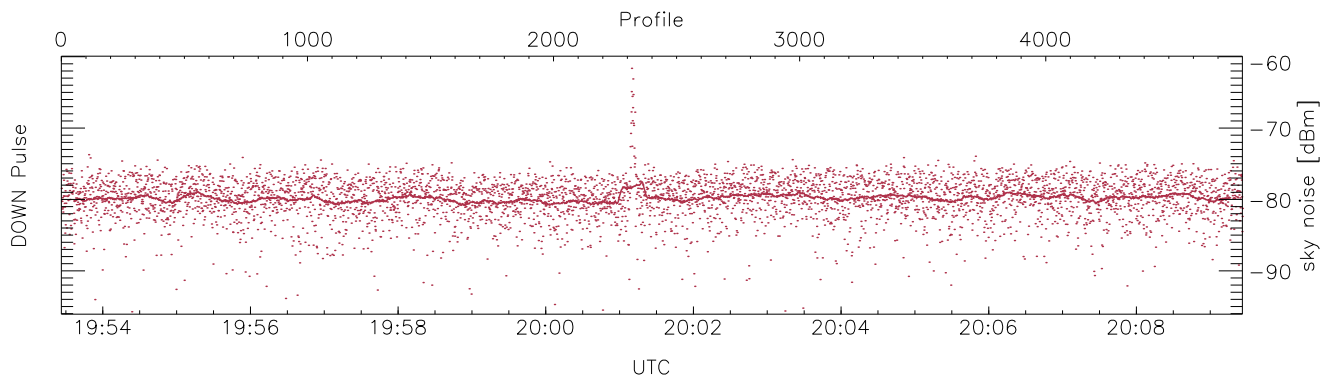
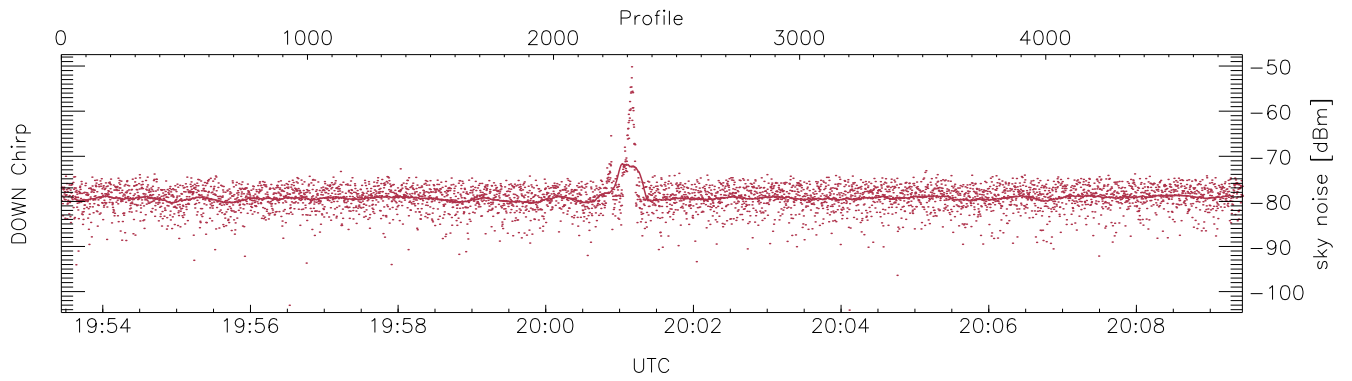
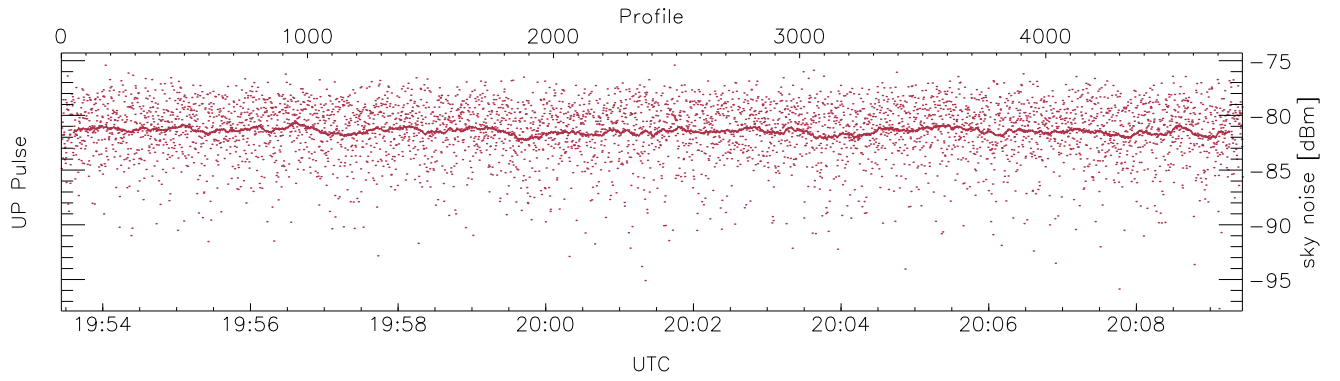
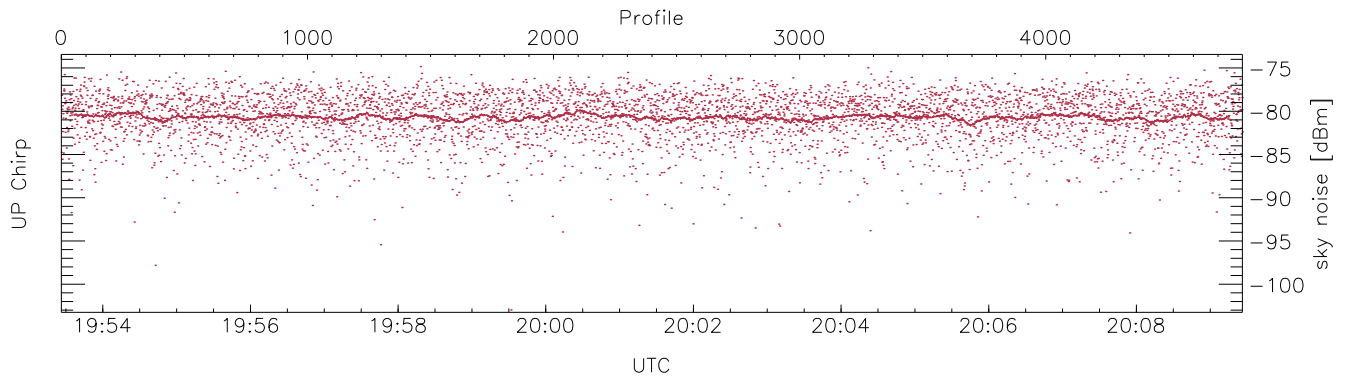
KPR SPP Last range gate power measurements: assumed RM(sky) noise

| | Min | Max | Mean | Median | StDev |
|-----------------|--------|--------|--------|--------|--------|
| UP Chirp(dBm) | -64.91 | -64.08 | -64.50 | -64.50 | -80.76 |
| UP Pulse(dBm) | -65.60 | -64.90 | -65.28 | -65.28 | -81.63 |
| DOWN Chirp(dBm) | -63.91 | -49.94 | -62.96 | -62.95 | -67.02 |
| DOWN Pulse(dBm) | -64.52 | -59.64 | -63.60 | -63.49 | -74.84 |



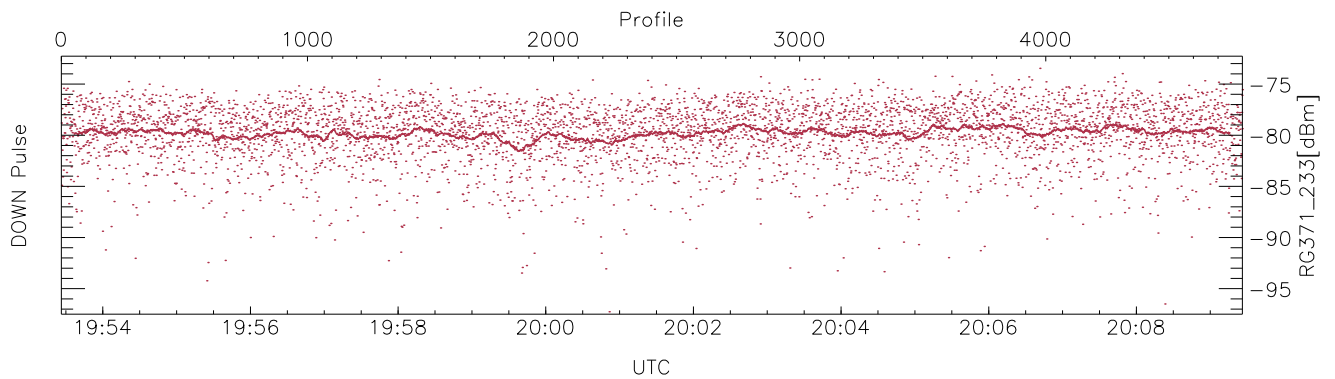
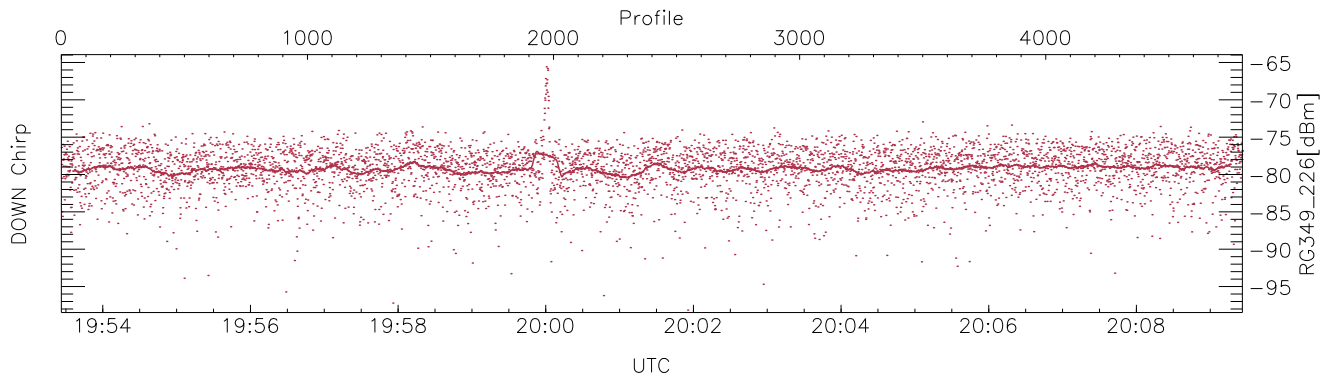
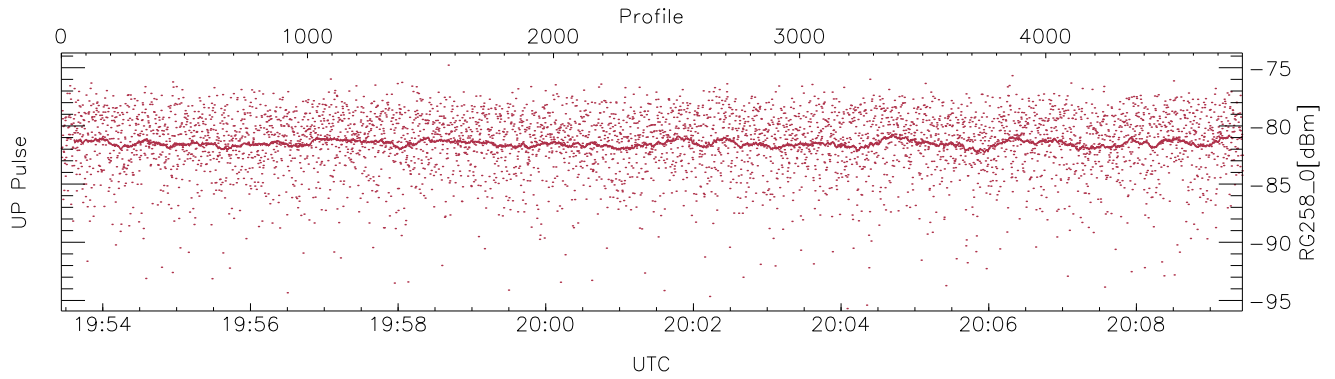
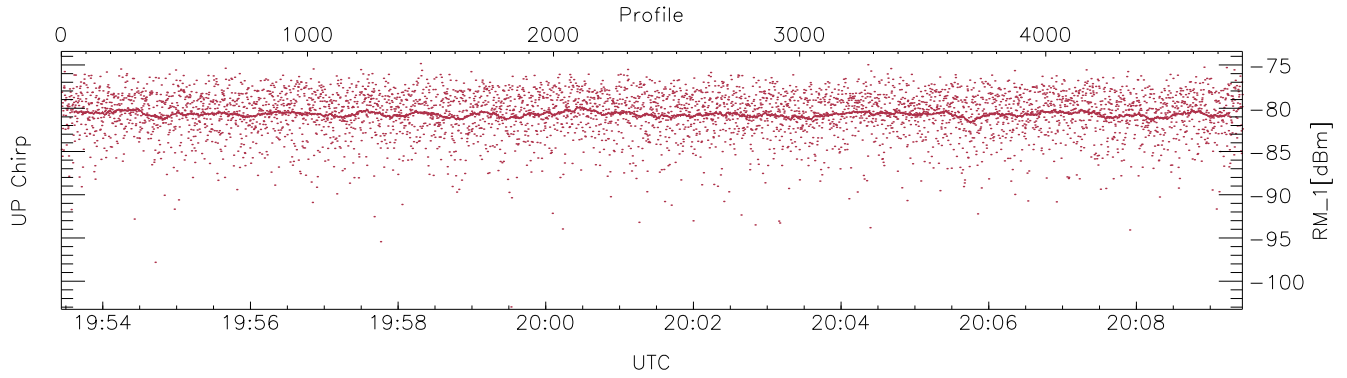
KPR SPP "Best" noise power measurements (dBm):

| | Min | Max | Mean | Median | StDev |
|------------------|--------|--------|--------|--------|--------|
| UP_C_RM_1 | -64.91 | -64.09 | -64.50 | -64.50 | -80.76 |
| UP_P_RG258_0 | -65.59 | -64.96 | -65.28 | -65.28 | -81.71 |
| DOWN_C_RG349_226 | -63.92 | -62.51 | -63.05 | -62.95 | -74.87 |
| DOWN_P_RG371_233 | -64.49 | -63.03 | -63.61 | -63.51 | -75.13 |



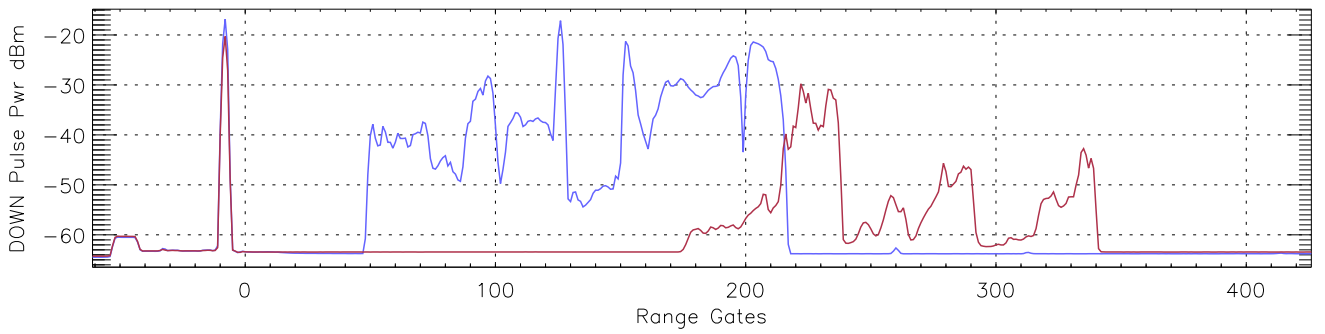
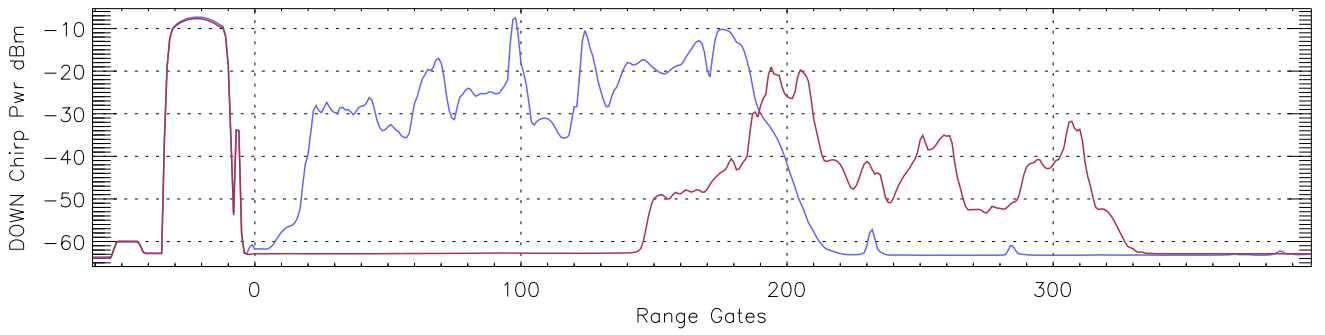
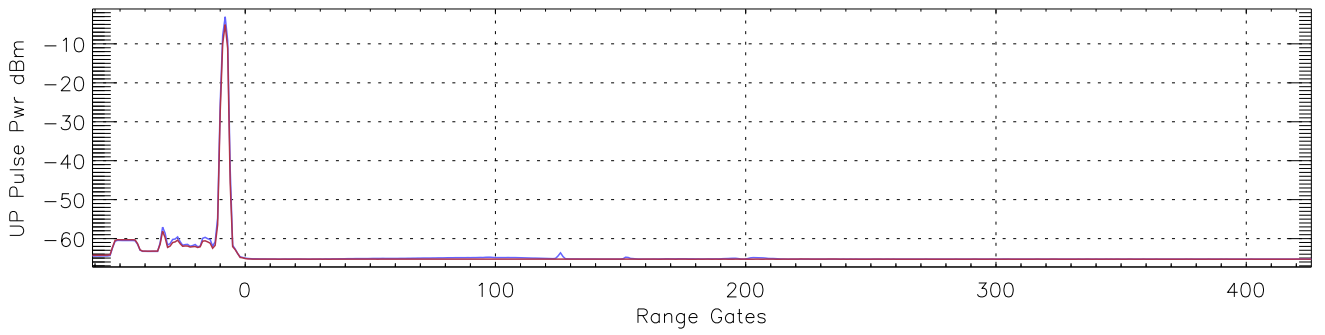
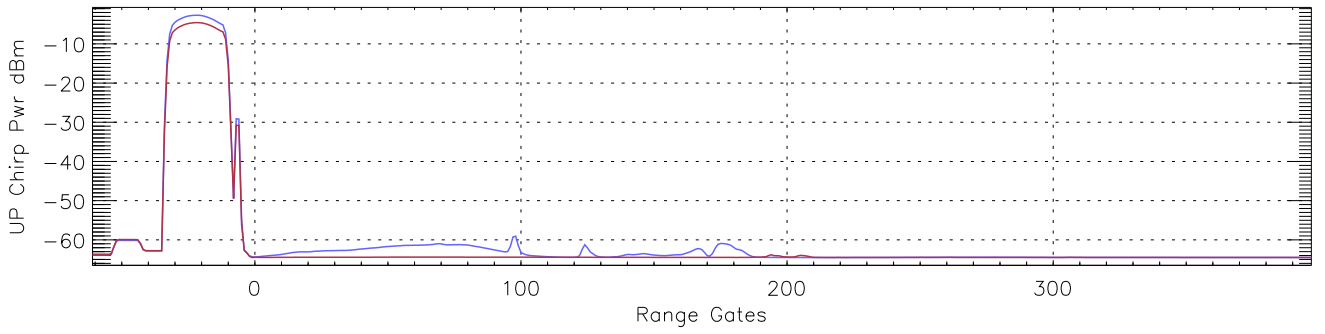
KPR SPP Last range gate PPMAG: assumed RM(sky) noise

| | Min | Max | Mean | Median | StDev |
|-----------------|---------|--------|--------|--------|--------|
| UP Chirp(dBm) | -102.97 | -74.84 | -79.99 | -80.26 | -82.85 |
| UP Pulse(dBm) | -97.65 | -75.41 | -80.74 | -80.98 | -83.59 |
| DOWN Chirp(dBm) | -104.11 | -50.16 | -76.18 | -78.84 | -67.06 |
| DOWN Pulse(dBm) | -95.73 | -61.64 | -78.90 | -79.41 | -77.90 |

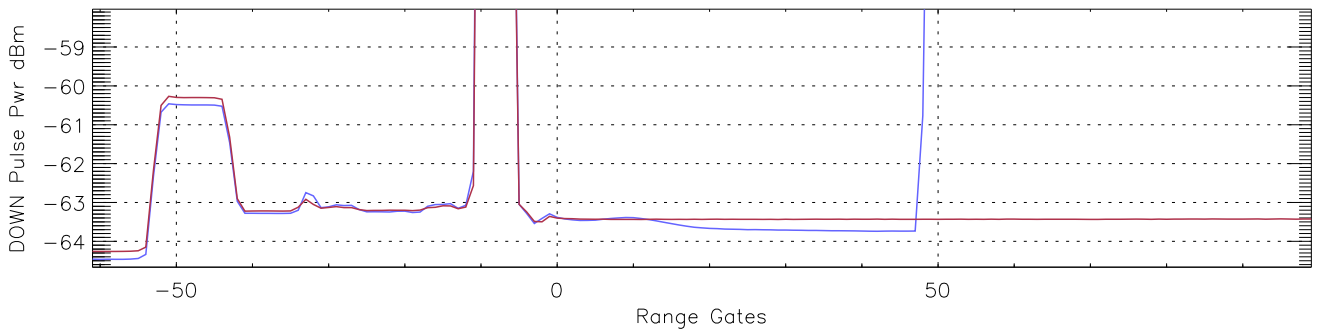
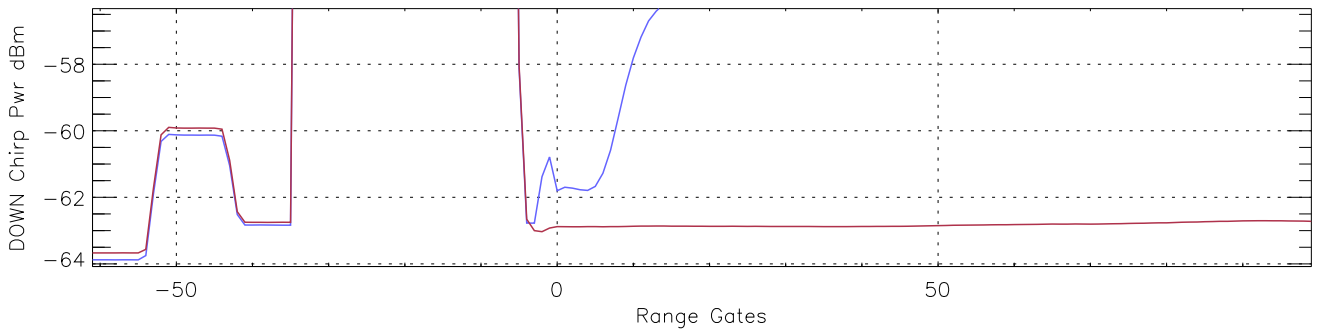
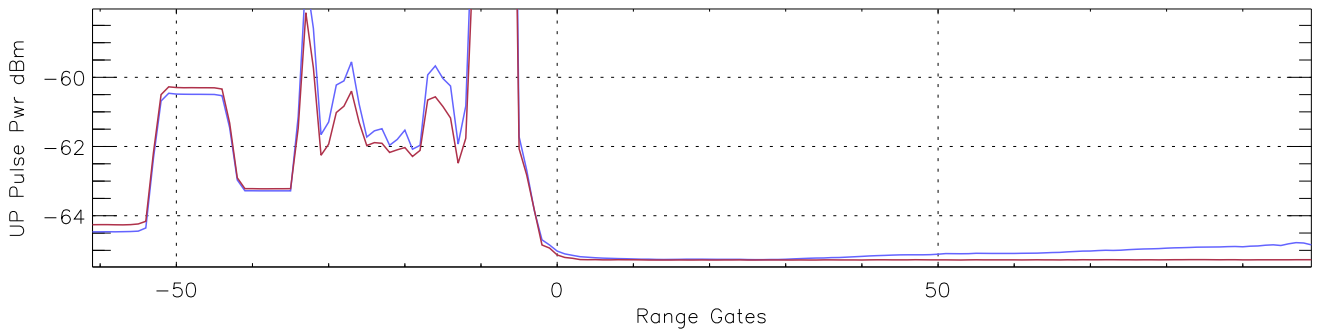
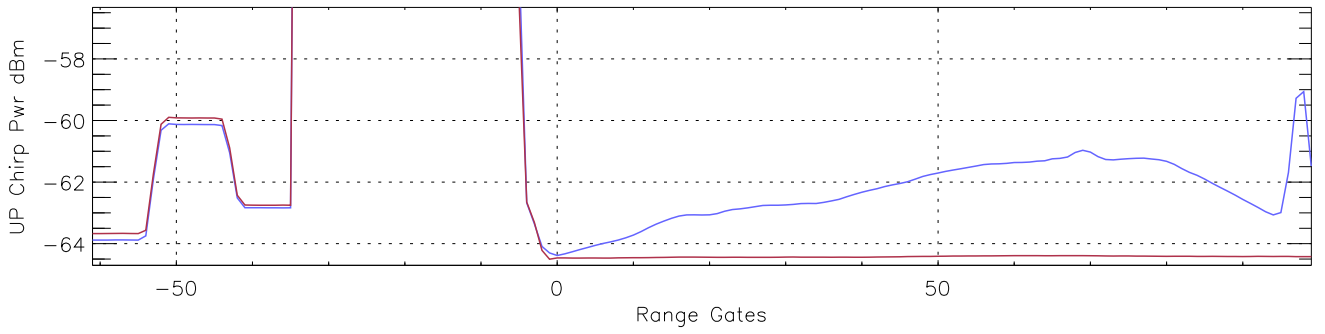


KPR SPP "Best" PPMAG noise (dBm):

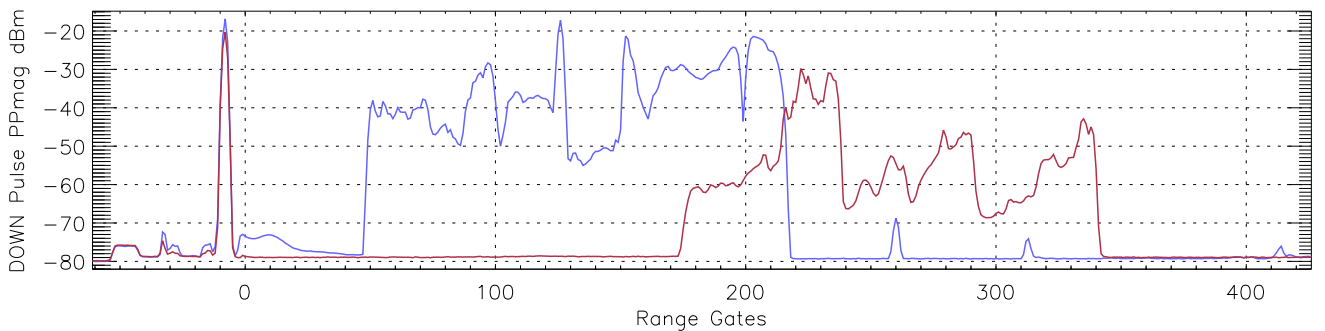
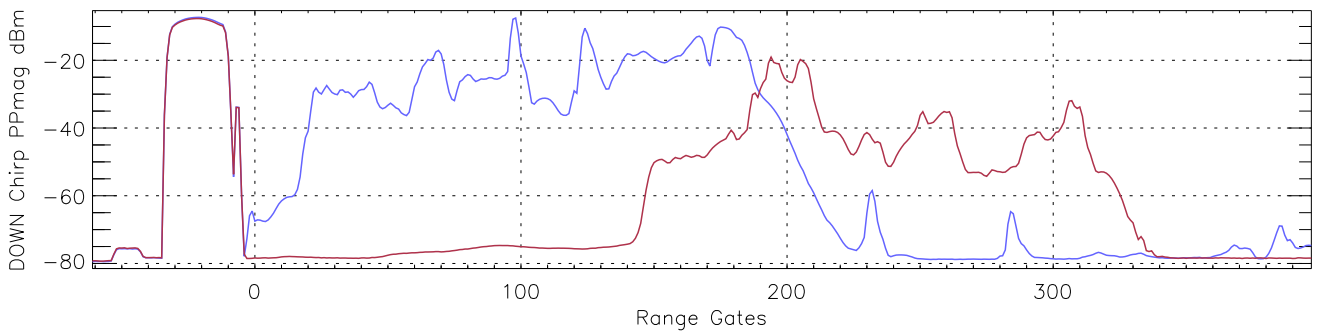
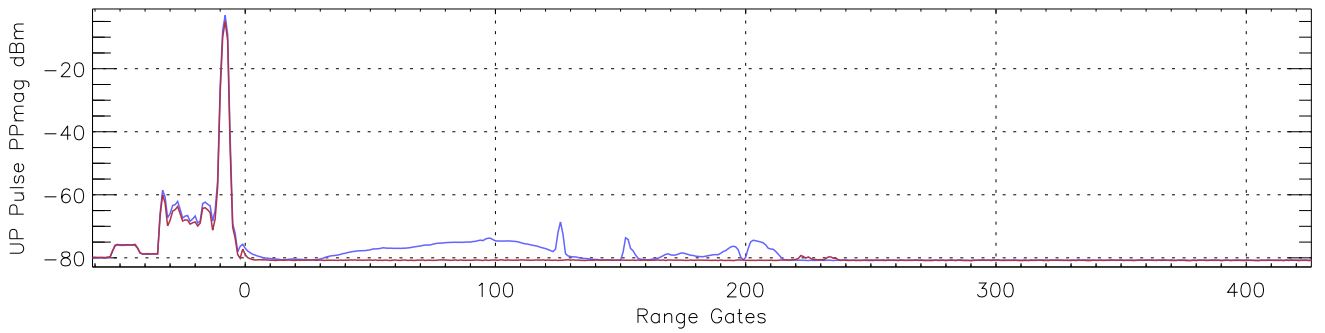
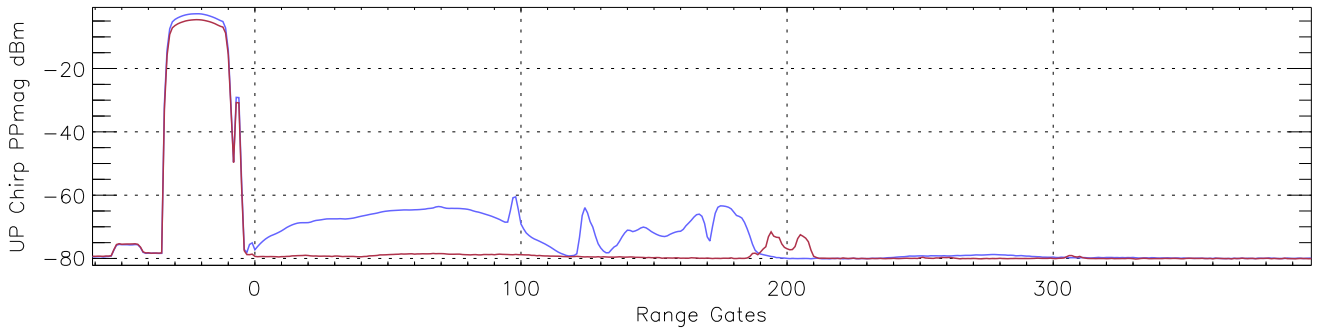
| | Min | Max | Mean | Median | StDev |
|------------------|---------|--------|--------|--------|--------|
| UP_C_RM_1 | -102.97 | -74.84 | -79.99 | -80.26 | -82.85 |
| UP_P_RG258_0 | -95.69 | -74.78 | -80.78 | -81.03 | -83.57 |
| DOWN_C_RG349_226 | -98.16 | -65.57 | -78.35 | -78.78 | -79.28 |
| DOWN_P_RG371_233 | -97.26 | -73.47 | -79.07 | -79.34 | -81.85 |



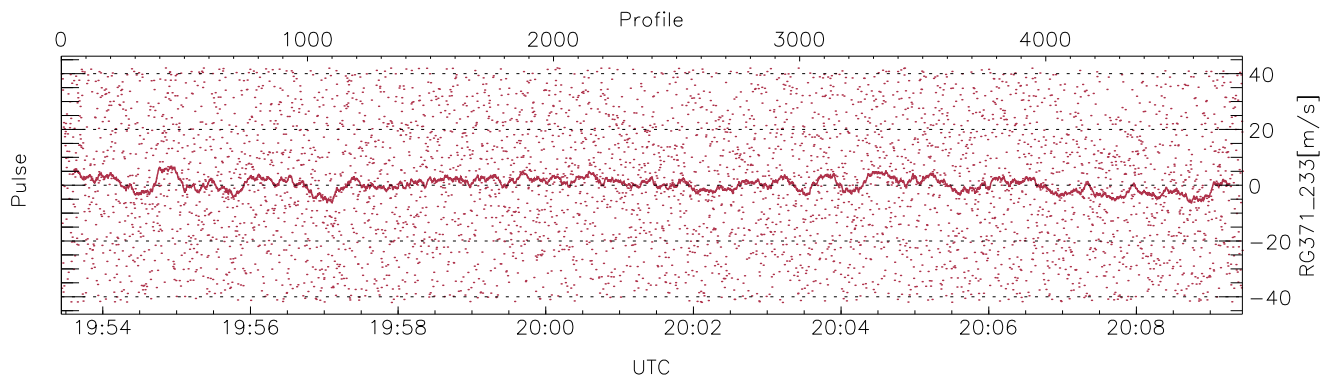
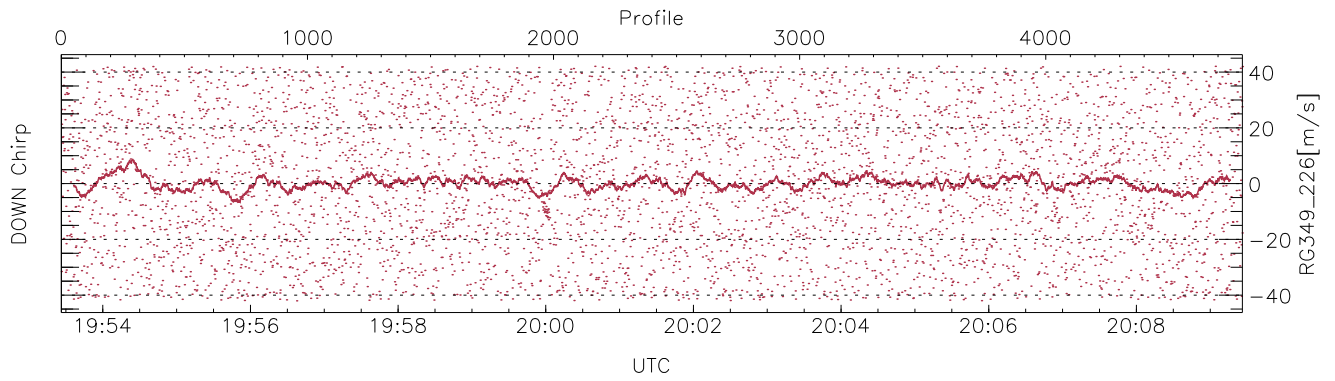
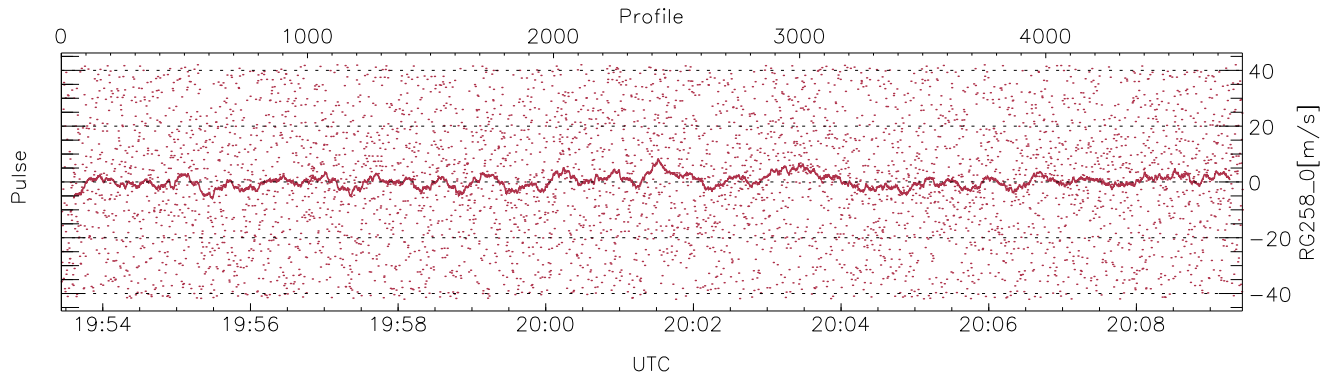
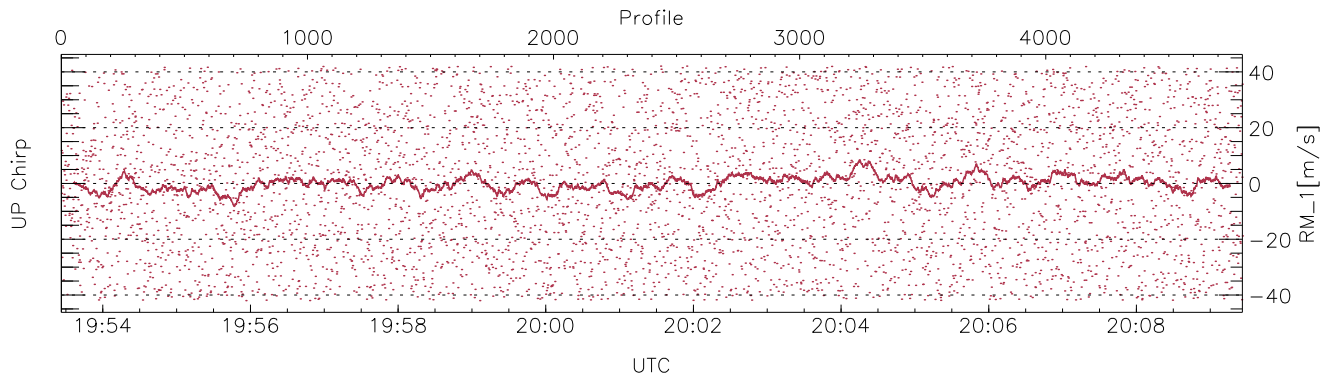
KPR SPP Averaged Received power for all recorded gates
blue: 195326-200126, 2401 profiles averaged
red: 200126-200926, 2400 profiles averaged



KPR SPP Averaged Power for neg. gates & up to 100 gates
blue: 195326-200126, 2401 profiles averaged
red: 200126-200926, 2400 profiles averaged

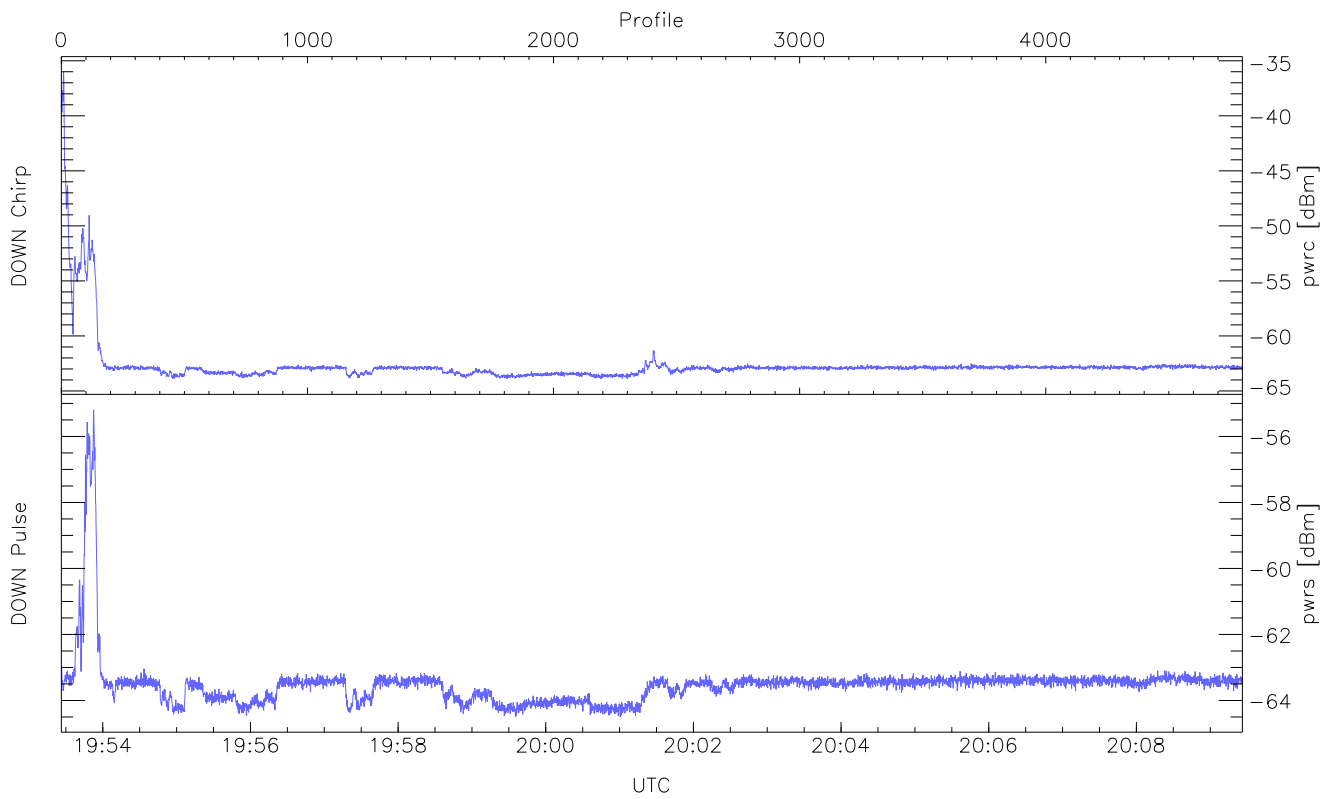
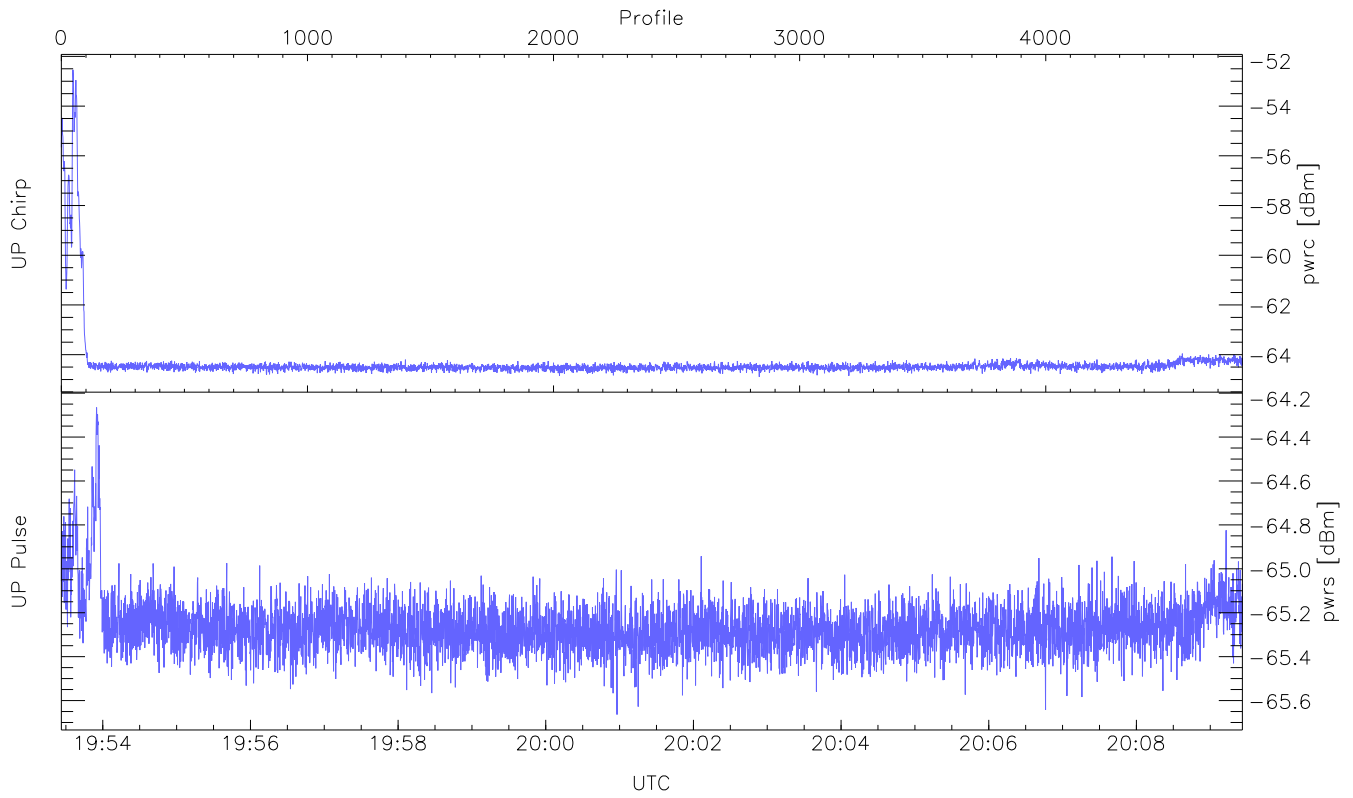


KPR SPP Averaged PP magnitude for all recorded gates
blue: 195326-200126, 2401 profiles averaged
red: 200126-200926, 2400 profiles averaged



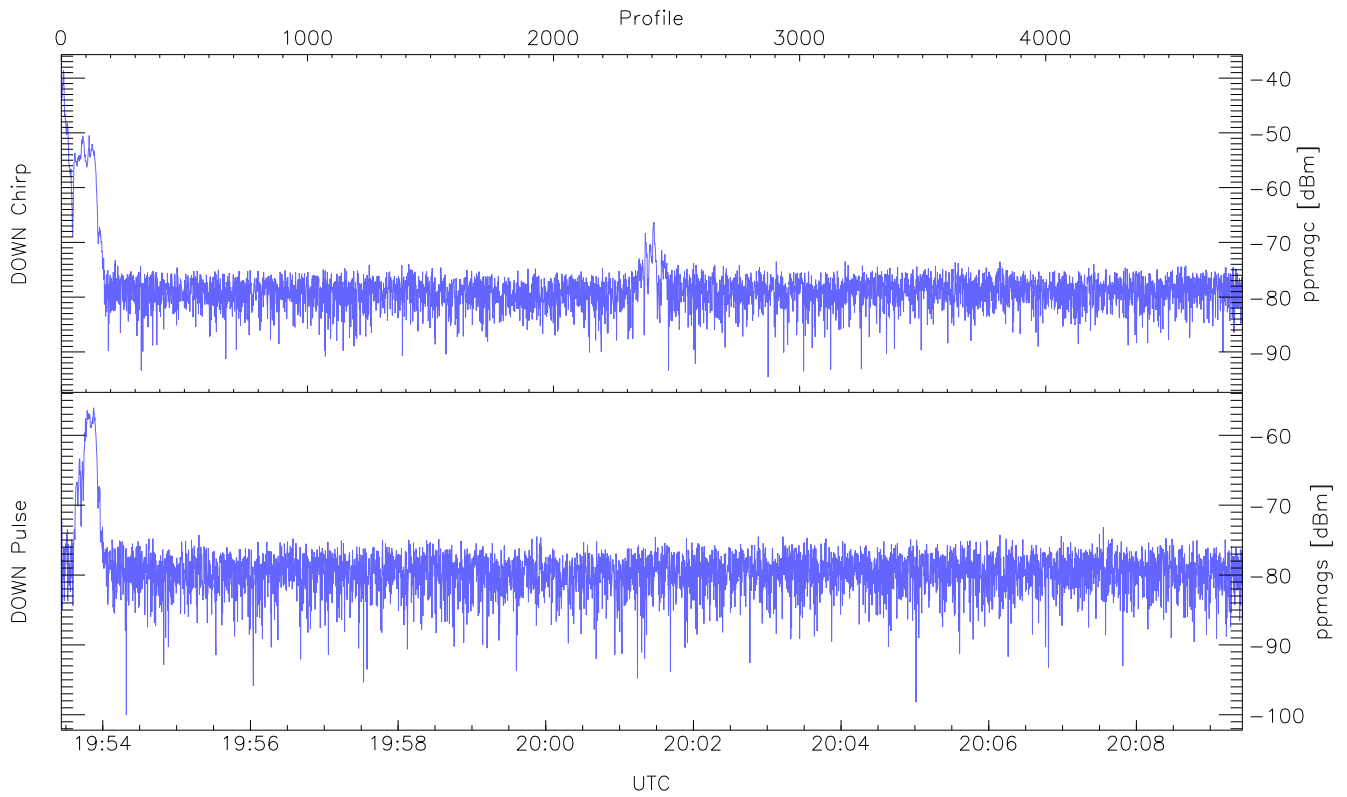
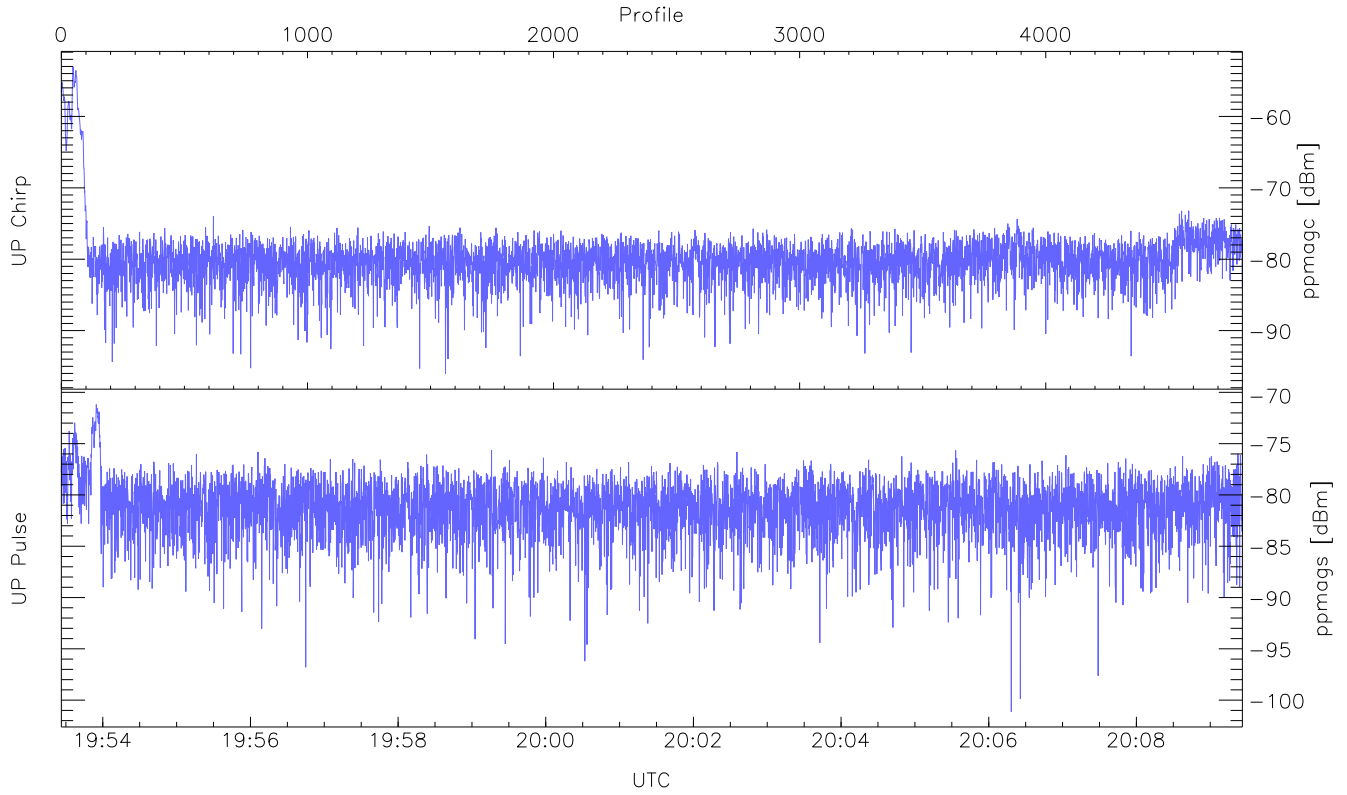
KPR SPP "Best" PPVEL noise (m/s):

| | Min | Max | Mean | Median | StDev |
|------------------|--------|-------|-------|--------|-------|
| UP_C_RM_1 | -42.03 | 42.05 | -0.09 | 0.46 | 23.93 |
| UP_P_RG258_0 | -42.04 | 42.02 | 0.08 | 0.41 | 22.77 |
| DOWN_C_RG349_226 | -42.05 | 42.06 | 0.03 | -0.13 | 23.99 |
| DOWN_P_RG371_233 | -42.03 | 42.06 | 0.27 | 0.61 | 23.08 |



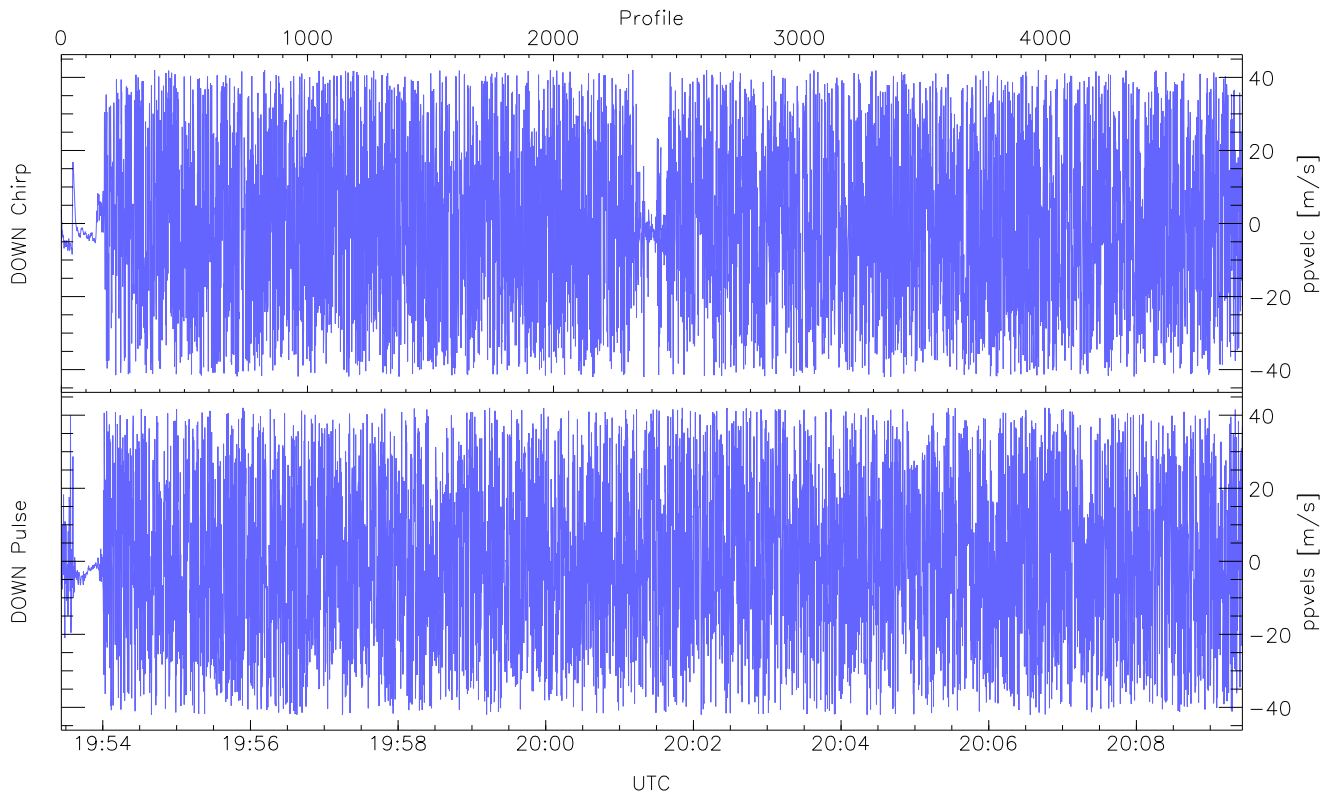
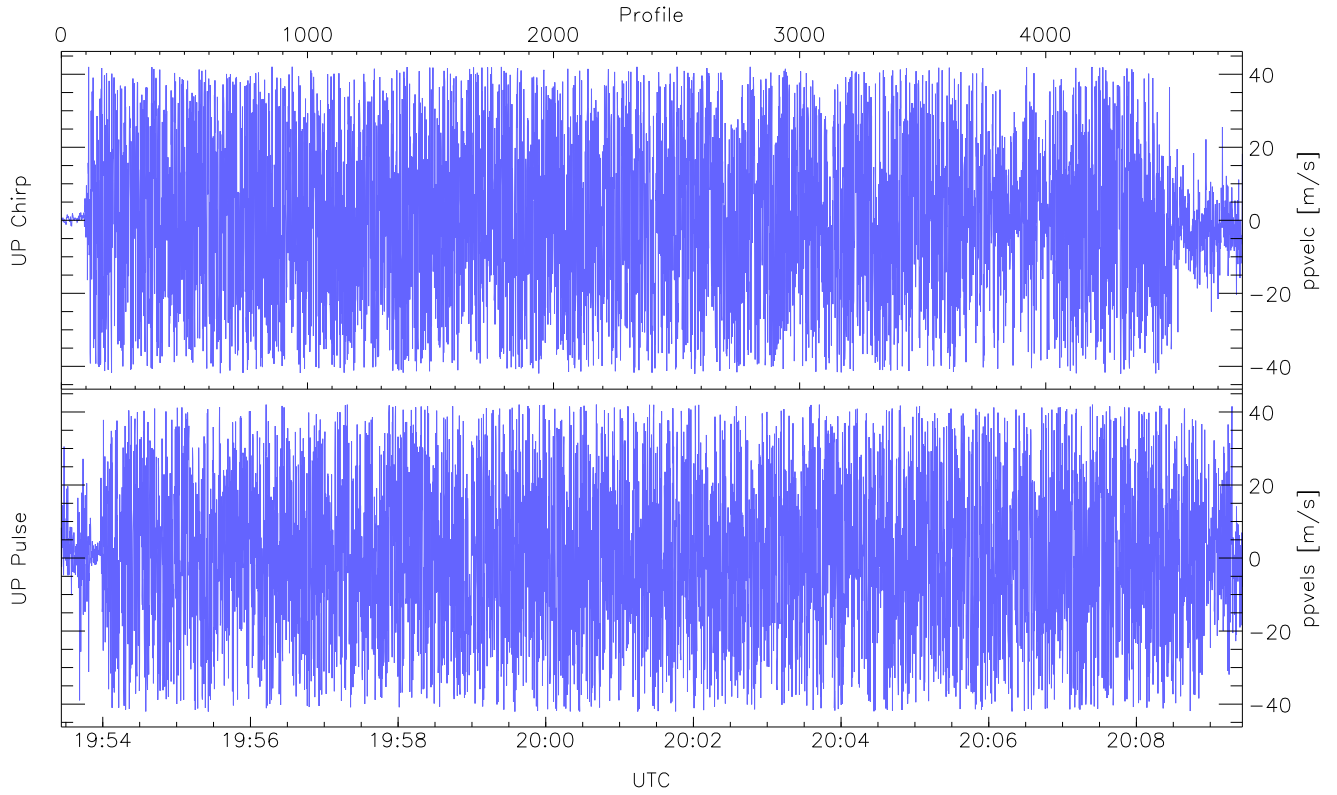
KPR SPP Received Power for Chirp Range gate 10 (686.2 m)
 KPR SPP Received Power for Pulse Range gate 10 (270.7 m)

| | Min | Max | Mean |
|-----------------|--------|--------|--------|
| UP Chirp(dBm) | -64.89 | -52.54 | -64.07 |
| UP Pulse(dBm) | -65.66 | -64.27 | -65.26 |
| DOWN Chirp(dBm) | -63.92 | -36.02 | -59.64 |
| DOWN Pulse(dBm) | -64.50 | -55.19 | -63.41 |



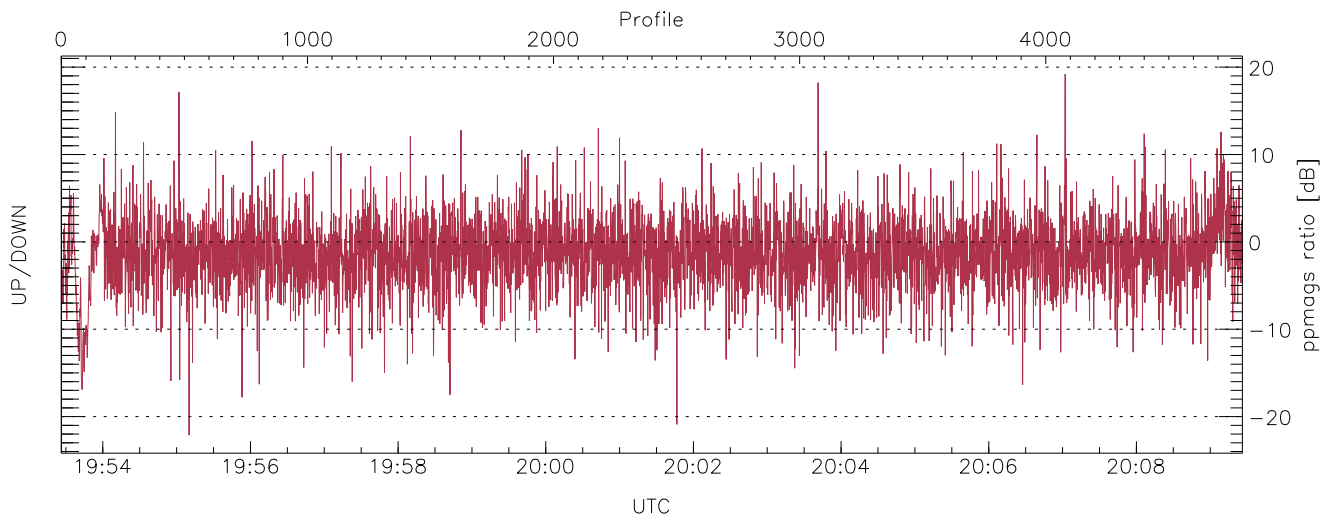
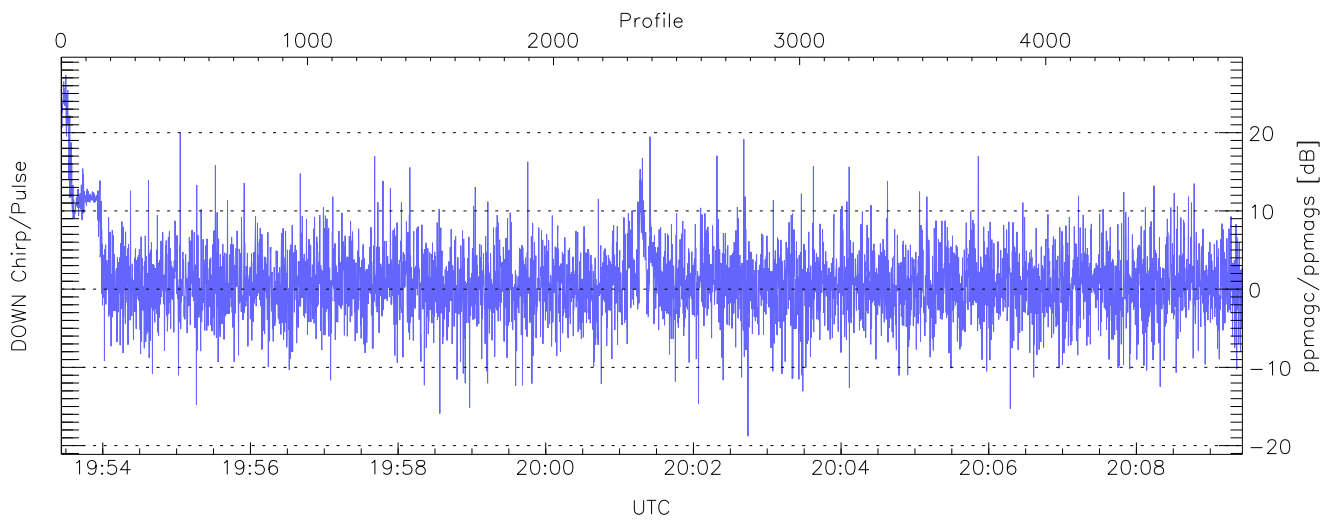
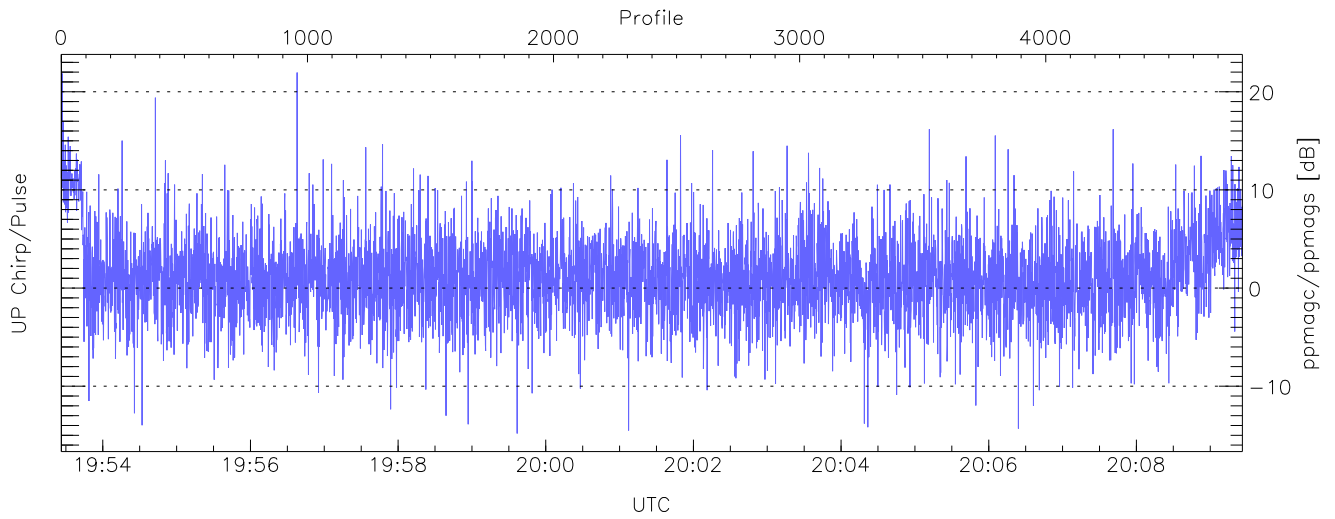
KPR SPP PPMAG for Chirp Range gate 10 (686.2 m)
 KPR SPP PPMAG for Pulse Range gate 10 (270.7 m)

| | Min | Max | Mean |
|-----------------|---------|--------|--------|
| UP Chirp(dBm) | -96.05 | -53.04 | -73.67 |
| UP Pulse(dBm) | -101.12 | -71.19 | -80.48 |
| DOWN Chirp(dBm) | -94.59 | -38.52 | -64.43 |
| DOWN Pulse(dBm) | -100.00 | -56.06 | -75.11 |



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) | -42.05 | 42.05 | 0.10 |
| UP Pulse(m/s) | -42.05 | 42.05 | 0.31 |
| DOWN Chirp(m/s) | -42.03 | 42.03 | -0.34 |
| DOWN Pulse(m/s) | -42.04 | 42.04 | -0.53 |



KPR SPP PPMAG Chirp/Pulse; Range gate: 551.3m /570.5m

| | Min | Max | Mean |
|--------------------------------|--------|-------|------|
| UP Chirp/Pulse(dBm) | -14.82 | 21.97 | 3.39 |
| DOWN Chirp/Pulse(dBm) | -18.81 | 27.33 | 5.75 |
| UP/DOWN Ratio at Range 135.8 m | | | |
| | Min | Max | Mean |
| UP/DOWN(dB) | -22.12 | 19.21 | 0.61 |