HLP RT-130 Station Installation (v4) (revised 6/27/2007 DEJ)

STATION: W013  Month: 05  Day: 29  Year: 2008
ARRIVAL TIME: 10:30  OPERATOR: James Vaine West Stream
Handheld GPS Site Loc: Lat: 41.61861  Lon: 118.52314  Elev: 1272
POWER: BATT-1: 12.44  BATT-2: 12.44  solar panel output (-18V): 70.8  20.4
12.44 - both  Increasing.

Connect cables:
1) Build power system
2) RT-130 (GPS) to GPS
3) Check power with voltmeter
4) Sensor to RT-130 (CH1-3)
5) power to RT-130
6) Cline to RT-130 (comm.)

Clie -> PFC_130 -> Control -> RAM -> Clear
Control -> Reset DAS
Control -> Format Disk -> 1 Format Disk -> 2

> Check that GPS has locked: Control -> Status -> GPS
(Warning: Load parameters from Clie to DAS ONLY AFTER GPS LOCK)

> Exit Control (click Done on successive screens until return to Control)
> PFC_130 -> Work with Configuration (Refer to Configuration Sheet for RT-130 in back of service binder)
> Work with Configuration -> Load -> HLP (or) Work with Configuration -> New -> Name: HLP
> Edit configuration file...
> Send to DAS...
> Confirm (optional): Upload from DAS and confirm that parameters have been correctly set in RT-130...

SENSOR MASS POSITION: (Measure initial voltage at breakout box, vault open)
Voltage CH 1: 000  CH 2: unlocked
Push mass center button from breakout box if any CH > +/-1.5 V (Guralp) or +/-2.5 V (STS-2) and, if necessary, repeat at 2-3 minute intervals until centered. Seal up vault and continue centering if necessary through the Clie.

> Control -> Aux Cntrl -> Aux Ch.
If any CH > +/-1.5 V (Guralp) or +/-2.5 V (STS-2), touch center 1-3 (and update) until all CH < +/- 1.5 V or 2.5 V.
Final mass position voltages: CH 1: +0.1  CH 2: -0.1  CH 3: +0.1

WAVEFORM MONITOR: Control -> Monitor -> View: Record Midpoint and Range
CH 1: 36917  3311  CH 2: 21855  5471  CH 3: 81244  1799 (microseconds)

START ACQUISITION: Control -> Status -> Start Acq.
DAS Status: (use Update to Refresh)
Time: 2008.08.19 19:54:33
Acq: Start on
Events: 3
RAM: 44 of 43022 Increasing?
Disk1: 0 of 1971 (Current?)
Disk2: 0 of 1971 (Current?)
Temperature: 73.8 C
Power: 184 + 0.33 Vpp 0.0 c/s
Clie: 123  DS: cc

GPS Status: GPS
Time: 2008 19:54:12
Sec since LL: 00000000
Phase Diff (us): 0
Mode: Cycle
Status: Locked SV's: 11
Lat: 41.37 1230
Lon: 34.99 11
Elev(m): 1272

DEPARTURE TIME: 11:10

*****PLEASE NOTE ANY SPECIAL PROBLEMS BELOW ON THIS SHEET*****
HLP RT-130 SERVICE SHEET (v4) (last revised 20080716 MJF)

STATION: 1W08  Month: 09  Day: 09  Year: 2008  ARRIVAL TIME (local): 5:40
Voltage CH 1: -0.12  CH 2: -0.1  CH 3: -0.1
Use Center 1-3 to center if any CH > +/- 1.5 volts Guralp; > +/- 2.5 volts STS-2. Check here
Continue with centering command (and update) until all channels are < +/- 1.5 V (Guralp); 2.5 V (STS2)
Enter final mass position voltages: CH 1:  CH 2:  CH 3:  

DAS Status: Control -> Status: (use Update to Refresh)
Time: 2008.254:00:00:43.40  Accurate? Y / N
Acq: Start on
Events: 300 A
RAM: PB12 of 4352  Increasing?
Disk1: 1576 of 1979  (Current)
Disk2: 0 of 1979  (Current)
Temperature: 37.5
Power: 0.9 in 3.3 W
Ch: 1/2/3  DS: CC

GPS Status: GPS
Time: 2008.254:00:00:45.15
Sec since LL: 00:00:50
Phase Diff.(us): 1.45
Mode: Cycle
Status: Locked  SVs: 9
Lat: N 41.37.1234
Lon: W 118.34.59.30
Alt(m): 1271

CALIBRATION: Control -> Aux. Ctrlr -> Test 1-3: Wait quietly for 18 min.

STOP ACQUISITION: Control -> Status -> Stop Acq: Wait until disk is no longer in use, update status screen then remove and record time here: 2008.02.01 00:50:24

Remove disk(s) and label with station ID, date, disk #, & final data amount (in Mb)

Once disks are removed (2 circle one or both). Install new disk(s): Confirm that correct disk has been removed by checking disk content: Control -> Status: disk1/disk2.

IMPORTANT NOTE: Disk 1 must be current once acquisition starts. If changing both disks, then insert disk1 first, and leaving disk2 slot empty, dump RAM to disk1 (Control -> RAM -> Dump RAM), then insert disk2 and proceed.

ROUTINE SERVICE
Control -> RAM -> Clear:
Control -> Reset DAS:
Control -> Format Disk 1:
Control -> Format Disk 2:

REPLACEMENT (record details and new S/N below!)
Control -> Status -> GPS Status: (confirm lock?)
Configuration: Load new parameters only after GPS lock
Control -> RAM -> Clear:
Control -> Reset DAS:
Control -> Format Disk 1 & 2:

WAVEFORM MONITOR: Control -> Monitor -> View: Record Midpoint(M) and Range(R)
CH 1: M = 744. R = 39.5  CH 2: M = 572. R = 39
Microseism?:  Microseism?:  Microseism?:

START ACQUISITION: Control -> Status -> Start Acq.
DAS Status: use Update to Refresh
Time: 2008.254:00:53:38
Acq: Start on
Events: 3
RAM: 4 of 4352  Increasing?
Disk1: 0 PB 1971  (Current)
Disk2: 0 PB 1971  (Current)
Temperature: 37.5
Power: 0.9 in 3.3 W
Ch: 1/2/3  DS: CC

GPS Status: GPS
Time: 2008.254:00:53:43
Sec since LL: 0
Phase Diff.(us): 0
Mode: Cycle
Status: Locked  SVs: 9
Lat: N 41.37.1234
Lon: W 118.34.59.30
Alt(m): 1271

DEPARTURE TIME (local): 6:34

"PLEASE NOTE GENERAL STATE OF THE STATION AND ANY SPECIAL PROBLEMS IN SPACE BELOW"
HLP RT-130 DEMOBILIZATION SHEET (v4) (last revised 20090904 MJF)

STATION: NV015 Month: 9 Day: 16 Year: 2009 ARRIVAL TIME (local): 9:30 AM
Voltage CH 1: 0.8 CH 2: -1.3 CH 3: 0.5
Use Center 1-3 to recenter if any CH > +/-1.5 V (Guralp); > +/-2.5 V (STS-2). Check here.
Continue with recenter command (and update) until all channels are < +/- 1.5 V (Guralp); 2.5 V (STS2)
Enter final mass position voltages: CH 1: _______ CH 2: _______ CH 3: _______

DAS Status: Control -> Status: (use Update to Refresh)
Time: 2009-09-16T16:45:24 Accurate? Y/N
Acq: 0
Events: 3 965
RAM: 157744 4352 √ Increasing?
Disk1: 17832 3911 √ (Current)
Disk2: 206 3911 (Current)
Temperature: 27.9
Power: 12.3 12.1 V
Ch: 123 DS: CC

GPS Status: GPS
Time: 2009-09-16T16:46:24
Sec since LL: 0
Phase Diff. (us): 1.1
Mode: Cycled
Status: Locked SVs: 11
Lat: N 41° 37.1205
Lon: W 118° 34.7888
Alt (m): 1273

CALIBRATION: Control -> Aux. Ctrlr -> Test 1-3: Wait quietly for 18 min.

STOP ACQUISITION: Control -> Status -> Stop Acq: Wait until disk is no longer in use, update status screen then remove and record time here: 10:12 AM

√ Remove disk(s) and label with station ID, date, disk #, & final data amount (in Mb)

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DEMOBILIZE STATION

SENSOR
√ If sensor is a 3T: lock masses twice with power on using breakout box; confirm masses pegged; disconnect breakout box (NB: May need to connect AUX power cable to breakout box first, or use HCU with power cable)
□ If sensor is an STS2: disconnect breakout box; lock masses with power off
□ Confirm alignment of sensor with vault alignment line. If not aligned, enter misorientation value: __________
√ Remove sensor; enter sensor information: Type: Guralp STT Serial #: T378
□ Enter assumed declination from installation (as written on sensor pad): 15° 40° E
□ Confirm Brunton compass declination is set to same value as that written on pad: 1° W
□ Measure orientation of vault alignment line (N-S for Guralp; E-W for Streckheisen). Enter orientation: N-S

If measured orientation does not appear to be correct, double check measurement and confirm with at least one other team member!

GPS S/N 3816

DATALOGGER
√ Disconnect power box
√ Disconnect datalogger (all cables); enter serial #: 9530