

## L-DEO Portable High Resolution MCS acquisition system Sequence

Logging software timetags and logs GPS NMEA strings

Fire control software monitors GPS or time, decides when to fire.

Trigger is sent to Airgun controller – see "*guntiming*" diagram

Source is fired, time break is issued.

Time break triggers OYO-DAS and is also timetagged and logged in software

OYO-DAS listens for specified interval

OYO-DAS issues its ascii string and starts to record on tape

Software logs OYO-DAS string with timebreak time and location

Software triggers DIGICOURSE computer

DIGICOURSE computer scans birds, transmits their data

Software timetags and logs DIGICOURSE data

... repeat ....

## L-DEO Portable High Resolution Acquisition system log file formats

### GPS log file gp01.d123

CPU time	GPS NMEA strings
2002+215:07:15:00.830	\$GPGGA,071540,6409.0504,N,02156.1587,W,2,07,1.2,15.5,M,60.9,M,,*6F
2002+215:07:15:02.810	\$GPGGA,071542,6409.0505,N,02156.1583,W,2,07,1.3,15.3,M,60.9,M,,*6F
2002+215:07:15:03.810	\$GPGGA,071543,6409.0505,N,02156.1582,W,2,07,1.3,15.2,M,60.9,M,,*6E
2002+215:07:15:03.910	\$PGRMT,GPS 16-HVS Ver. 2.05,P,P,R,R,P,,33,R*07
2002+215:07:15:04.810	\$GPGGA,071544,6409.0504,N,02156.1583,W,2,07,1.2,15.0,M,60.9,M,,*6A

### Fire control log file nb01.d123

CPU time	GPS clock time	Shot#	GPS lat	GPS lon	Heading
2002+215:07:14:59.070	2002+215:07:15:38.503	000020	64.150840	-21.935984	270.0
2002+215:07:15:04.070	2002+215:07:15:43.504	000021	64.150842	-21.935969	090.0
2002+215:07:15:09.080	2002+215:07:15:48.505	000022	64.150830	-21.935980	203.4
2002+215:07:15:14.070	2002+215:07:15:53.503	000023	64.150828	-21.935973	090.0
2002+215:07:15:19.070	2002+215:07:15:58.505	000024	64.150821	-21.935980	000.0

### OYO tape log file oy01.d123

GPS clock Time	OYO system time	Shot#	Tape#	File#	GPS lon & Lat
2002+215:07:14:58.501	1982+215:03:42:13.000	000012	000012	3425	64.150840 -21.935974
2002+215:07:15:03.502	1982+215:03:42:18.000	000013	000012	3426	64.150840 -21.935975
2002+215:07:15:08.503	1982+215:03:42:23.000	000014	000012	3427	64.150834 -21.935977
2002+215:07:15:13.504	1982+215:03:42:28.000	000015	000012	3428	64.150837 -21.935961
2002+215:07:15:18.502	1982+215:03:42:33.000	000016	000012	3429	64.150841 -21.935958

### Bird Data log file cb01.d123

CPU time	Bird Controller data
2002+215:07:14:56.970	64.150842 -21.935973 270.0 0 0 5 bT01 0.00 0.0 0.0 bT02 0.00 0.0 0.0 bT03 0.00 0.0 0.0 bT04 0.00 0.0 0.0 bT05 0.00 0.0 0.0
2002+215:07:15:01.970	64.150840 -21.935978 NaN 0 0 5 bT01 0.00 0.0 0.0 bT02 0.00 0.0 0.0 bT03 0.00 0.0 0.0 bT04 0.00 0.0 0.0 bT05 0.00 0.0 0.0
2002+215:07:15:06.970	64.150838 -21.935972 0.0 0 0 5 bT01 0.00 0.0 0.0 bT02 0.00 0.0 0.0 bT03 0.00 0.0 0.0 bT04 0.00 0.0 0.0 bT05 0.00 0.0 0.0
2002+215:07:15:11.980	64.150828 -21.935982 203.8 0 0 5 bT01 0.00 0.0 0.0 bT02 0.00 0.0 0.0 bT03 0.00 0.0 0.0 bT04 0.00 0.0 0.0 bT05 0.00 0.0 0.0
2002+215:07:15:16.970	64.150825 -21.935980 NaN 0 0 5 bT01 0.00 0.0 0.0 bT02 0.00 0.0 0.0 bT03 0.00 0.0 0.0 bT04 0.00 0.0 0.0 bT05 0.00 0.0 0.0