

# NZ Survey Report

<b>Job name</b>	Ashgrove LT 23-03-22
<b>Version</b>	7.3.1 (build 2207192000)
<b>Distance Units</b>	Meters
<b>Angle Units</b>	Degrees
<b>Pressure Units</b>	mbar
<b>Temperature Units</b>	Celsius

## Coordinate system (Job)

<b>System</b>	Circuit2000
<b>Zone</b>	Mount_Eden
<b>Datum</b>	NZGD2000

## Projection

<b>Projection</b>	TMERC
<b>Origin lat</b>	-36°52'47.0"
<b>Origin long</b>	174°45'51.0"
<b>False northing</b>	800000.000000000
<b>False easting</b>	400000.000000000
<b>Scale</b>	0.999900000
<b>Grid coords</b>	Increase North-East

## GPS Receiver

	<b>Base</b>	<b>Rover</b>
<b>Receiver type</b>	GRX3	GRX3
<b>Serial number</b>	1467-10516	1467-10517
<b>Firmware version</b>	5.3.3 VR May,08,2020	5.3.3 VR May,08,2020
<b>Antenna type</b>	SOKGRX3 NONE	SOKGRX3 NONE

## Instrument

<b>Instrument</b>	iX-505_UR000851
<b>Model</b>	iX-505
<b>Serial #</b>	
<b>Hz precision</b>	0°00'01.0"
<b>Vt precision</b>	0°00'01.0"
<b>EDM precision</b>	3
<b>EDM ppm</b>	3

# Survey Controller Reduced Observations

## GPS Base Reference

Name	NZ122	North	925042.160	East	320568.983	Elevation	65.820	Code	IT III				
Name	NZ122	Antenna height	1.941	Type	Corrected								
Name	Grid Azimuth	Ellipsoid Dist	ΔElevation	Code	Ant Ht	Epochs	Hz Prec	Vt Prec	PDOP	Sats	Date	Time	Images
NZ121_stk	292°48'07.0"	831.067	-5.560		1.946	300	0.000	0.001	1.123	31	2021-03-16	11:40	
NZ208_stk	343°40'11.6"	582.080	27.518		1.813	300	0.000	0.000	1.189	31	2021-03-16	12:20	
600	299°17'09.8"	518.351	10.723	IS I	1.912	300	0.000	0.000	1.099	31	2021-03-16	12:48	
NZ203_stk	307°55'44.0"	530.064	10.639		1.910	300	0.000	0.000	1.007	30	2021-03-16	13:13	
601	1°50'49.3"	389.485	-5.485	POST1	1.330	120	0.000	0.001	1.009	30	2021-03-16	13:46	
602	3°30'04.1"	373.539	-5.961	F	1.330	5	0.007	0.010	1.014	29	2021-03-16	13:46	
603	3°50'29.0"	370.397	-5.900	F	1.330	5	0.004	0.007	1.035	29	2021-03-16	13:47	
604	14°47'56.4"	296.683	-5.705	POST2	1.330	120	0.001	0.001	1.079	28	2021-03-16	13:53	
605	19°09'50.5"	279.054	-10.444	F	1.330	5	0.003	0.004	1.182	26	2021-03-16	13:54	
606	23°13'25.2"	267.679	-9.991	POST3	1.330	120	0.000	0.001	1.258	26	2021-03-16	14:08	
607	14°36'53.5"	216.751	-6.600	POST4	1.330	120	0.001	0.001	1.118	26	2021-03-16	14:14	
608	345°09'41.3"	209.332	-8.138	POST5	1.330	120	0.001	0.001	1.846	22	2021-03-16	14:29	
609	352°48'55.7"	205.804	-5.699	F	1.330	5	0.004	0.006	1.540	22	2021-03-16	14:30	
610	312°24'58.8"	202.255	-4.099	POST9	1.330	120	0.001	0.002	1.566	23	2021-03-16	14:47	
611	323°44'50.7"	142.208	-5.262	POST8	1.330	120	0.001	0.001	2.261	16	2021-03-16	14:54	
612	333°28'07.3"	158.176	-5.219	POST7	1.330	120	0.001	0.002	2.501	15	2021-03-16	14:59	
613	305°39'11.2"	95.893	-6.727	PEG	1.330	60	0.001	0.001	1.026	29	2021-03-16	15:19	



629	287°26'33.8"	456.862	-3.022	POST16	1.330	120	0.001	0.001	1.542	27	2021-03-19	11:30
630	285°16'35.0"	565.867	-2.746	POST17	1.330	120	0.001	0.001	1.361	28	2021-03-19	11:36
631	286°18'04.9"	596.336	-3.124	POST18	1.330	120	0.000	0.001	1.156	29	2021-03-19	11:41
632	288°41'03.2"	619.927	-2.465	POST19	1.330	120	0.000	0.001	1.233	28	2021-03-19	11:47
633	290°57'33.7"	623.588	-3.952	POST20	1.330	120	0.000	0.001	1.556	24	2021-03-19	11:53
634	292°47'28.9"	615.396	-6.228	F	1.330	5	0.003	0.009	2.720	12	2021-03-19	11:54
635	292°47'35.2"	632.375	-3.714	F	1.330	5	0.004	0.008	2.528	20	2021-03-19	11:55
636	293°23'55.0"	643.498	-3.991	F	1.330	5	0.005	0.009	2.535	17	2021-03-19	11:55
637	293°50'22.6"	650.997	-6.863	F	1.330	5	0.004	0.008	2.065	17	2021-03-19	11:56
638	293°47'03.4"	666.244	-6.510	F	1.330	30	0.119	0.234	1.967	20	2021-03-19	11:58
639	293°27'48.6"	676.936	-6.165	F	1.330	5	0.003	0.006	2.580	19	2021-03-19	11:58
640	292°33'00.9"	693.179	-5.599	F	1.330	5	0.053	0.079	2.771	16	2021-03-19	11:59
641	292°15'19.8"	716.719	-4.455	F	1.330	5	0.005	0.009	2.788	18	2021-03-19	11:59
642	293°00'23.4"	746.453	-6.587	F	1.330	5	0.778	1.823	3.386	17	2021-03-19	12:03
643	292°28'53.2"	769.993	-6.690	F	1.330	5	0.005	0.006	1.960	16	2021-03-19	12:04
644	291°32'40.2"	780.270	-2.374	F	1.330	5	0.004	0.007	3.187	16	2021-03-19	12:05
645	291°19'23.3"	761.397	-1.640	PEG21	2.632	300	0.000	0.001	1.545	21	2021-03-19	12:28
645_stk	291°19'23.3"	761.398	-1.652		2.632	120	0.001	0.001	1.348	24	2021-03-19	13:03
633_stk	290°57'34.3"	623.589	-3.952		1.330	120	0.000	0.001	1.070	29	2021-03-19	13:13
632_stk	288°41'04.9"	619.925	-2.476		1.330	120	0.000	0.001	1.192	28	2021-03-19	13:16
631_stk	286°18'08.2"	596.337	-3.115		1.330	120	0.000	0.001	1.253	25	2021-03-19	13:19
630_stk	285°16'35.8"	565.852	-2.759		1.330	120	0.001	0.001	1.143	28	2021-03-19	13:23
629_stk	287°26'35.1"	456.866	-3.013		1.330	120	0.000	0.001	1.390	25	2021-03-	13:28

628_stk	283°55'02.1"	369.688	-3.502		1.330	120	0.000	0.001	1.553	24	2021-03-19	13:32
626_stk	281°44'51.6"	324.335	-0.684		1.330	60	0.001	0.001	1.350	25	2021-03-19	13:35
625_stk	282°01'23.1"	295.064	-1.325		1.330	60	0.001	0.001	1.256	25	2021-03-19	13:40
646	6°37'56.9"	873.769	12.792	IT II	1.873	300	0.000	0.000	1.103	29	2021-03-19	14:23
NZ209_stk	351°38'13.6"	650.538	30.368		1.960	120	0.000	0.001	0.995	30	2021-03-19	14:46
NZ205_stk	318°33'28.1"	592.223	25.085		1.900	180	0.000	0.001	1.068	30	2021-03-19	15:08
NZ69_stk	318°01'50.8"	592.973	24.988		1.330	180	0.000	0.001	1.128	27	2021-03-19	15:20
647	25°35'56.1"	287.607	-10.865	F	1.330	10	0.002	0.003	1.397	23	2021-03-19	15:44
648	27°07'47.1"	292.675	-11.634	F	1.330	10	0.002	0.003	1.564	22	2021-03-19	15:45

### Instrument Station

Name	613	North	925098.055	East	320491.069	Elevation	59.087	Code	PEG	
Name	Grid Azimuth	Ellipsoid Dist	ΔElevation	Code	Tgt Ht	Face	Prism Const	Date	Time	Images
NZ122	125°39'19.2"	95.891	6.733		1.240	Face Right	-34.400	2021-03-19	09:59	
620_stk	244°00'14.2"	114.925	5.030		1.380	Face Right	-7.000	2021-03-19	10:00	
620_stk1	244°00'12.2"	114.925	5.031		1.380	Face Right	-7.000	2021-03-19	10:01	
621	8°00'10.2"	103.522	1.282	POST 6	1.380	Face Right	-7.000	2021-03-19	10:08	
621	8°00'10.2"	103.522	1.282	POST 6	1.380	Face Left	-7.000	2021-03-19	10:08	
622	4°50'17.7"	85.947	1.511	POST7	1.380	Face Right	-7.000	2021-03-19	10:11	
622	4°50'17.7"	85.947	1.511	POST7	1.380	Face Left	-7.000	2021-03-19	10:12	
623	354°00'13.7"	59.180	2.534	POST8	1.380	Face Right	-7.000	2021-03-19	10:19	
623	354°00'13.7"	59.180	2.534	POST8	1.380	Face Left	-7.000	2021-03-19	10:19	

### Instrument Station

Name	619	North	925156.850	East	320410.973	Elevation	62.002	Code	PEG B	
Name	Grid Azimuth	Ellipsoid Dist	ΔElevation	Code	Tgt Ht	Face	Prism Const	Date	Time	Images
NZ122	125°58'25.0"	195.250	3.818		1.240	Face Right	-34.400	2021-03-19	10:33	
620_stk2	191°59'46.0"	111.610	2.129		1.380	Face Right	-7.000	2021-03-19	10:34	
620_stk3	191°59'44.0"	111.610	2.128		1.380	Face Right	-7.000	2021-03-19	10:35	
624	21°48'22.5"	23.427	-0.239	POST9	1.380	Face Right	-7.000	2021-03-19	10:39	

624	21°48'22.5"	23.427	-0.239	POST9	1.380	Face Left	-7.000	2021-03-19	10:39
614_stk	274°00'33.0"	9.992	0.098		1.380	Face Right	-7.000	2021-03-19	10:41
615_stk	238°14'37.0"	52.801	-0.264		1.380	Face Right	-7.000	2021-03-19	10:42

# Survey Controller Reduced Points

Point	North	East	Elevation	Code
NZ122	925042.160	320568.983	65.820	IT III
NZ121_stk	925364.231	319802.880	60.260	
NZ208_stk	925600.746	320405.322	93.338	
600	925295.716	320116.893	76.543	IS I
NZ203_stk	925367.974	320150.891	76.459	
601	925431.434	320581.536	60.335	POST1
602	925414.993	320591.794	59.859	F
603	925411.717	320593.797	59.920	F
604	925328.995	320644.763	60.115	POST2
605	925305.743	320660.587	55.376	F
606	925288.144	320674.532	55.829	POST3
607	925251.893	320623.672	59.220	POST4
608	925244.507	320515.375	57.682	POST5
609	925246.344	320543.245	60.121	F
610	925178.581	320419.669	61.721	POST9
611	925156.836	320484.891	60.558	POST8
612	925183.675	320498.330	60.601	POST7
613	925098.055	320491.069	59.087	PEG
613	925098.055	320491.069	59.087	PEG
614	925157.556	320401.012	62.090	POST10
615	925129.067	320366.080	61.727	POST11
616	925102.941	320315.068	64.515	POST12
617	925103.095	320304.540	64.545	PP
618	925080.513	320312.639	65.073	PP
NZ122	925042.160	320568.983	65.820	IT III
606_stk	925288.153	320674.535	55.839	
607_stk	925251.912	320623.677	59.236	
608_stk	925244.506	320515.372	57.667	
610_stk	925178.556	320419.664	61.767	
619	925156.850	320410.973	62.002	PEG B
619	925156.850	320410.973	62.002	PEG B
620	925047.680	320387.773	64.127	PEG C
620	925047.680	320387.773	64.127	PEG C
616_stk	925102.939	320315.063	64.517	
625	925103.624	320280.408	64.496	POST13
626	925108.193	320251.451	65.126	POST14

627	925109.548	320248.583	64.931	F
628	925131.065	320210.149	62.322	POST15
629	925179.103	320133.138	62.798	POST16
630	925191.249	320023.122	63.074	POST17
631	925209.542	319996.633	62.696	POST18
632	925240.750	319981.740	63.355	POST19
633	925265.216	319986.668	61.868	POST20
634	925280.545	320001.648	59.592	F
635	925287.140	319986.003	62.106	F
636	925297.704	319978.417	61.829	F
637	925305.273	319973.541	58.957	F
638	925310.847	319959.336	59.310	F
639	925311.686	319948.034	59.655	F
640	925307.984	319928.816	60.221	F
641	925313.602	319905.671	61.365	F
642	925333.894	319881.917	59.233	F
643	925336.587	319857.522	59.130	F
644	925328.688	319843.244	63.446	F
645	925319.019	319859.723	64.180	PEG21
645_stk	925319.019	319859.722	64.168	
633_stk	925265.218	319986.667	61.868	
632_stk	925240.755	319981.744	63.344	
631_stk	925209.551	319996.635	62.705	
630_stk	925191.247	320023.137	63.061	
629_stk	925179.106	320133.135	62.807	
628_stk	925131.076	320210.155	62.318	
626_stk	925108.194	320251.449	65.136	
625_stk	925103.622	320280.398	64.495	
646	925910.062	320669.901	78.612	IT II
NZ209_stk	925685.766	320474.369	96.188	
NZ205_stk	925486.095	320177.020	90.905	
NZ69_stk	925483.028	320172.452	90.808	
647	925301.530	320693.246	54.955	F
648	925302.628	320702.442	54.186	F
613	925098.055	320491.069	59.087	PEG
NZ122	925042.160	320568.983	65.820	IT III
620_stk	925047.683	320387.774	64.117	
620_stk1	925047.682	320387.775	64.118	
621	925200.567	320505.482	60.369	POST 6



621	925200.567	320505.482	60.369	POST 6
622	925183.693	320498.318	60.598	POST7
622	925183.693	320498.318	60.598	POST7
623	925156.909	320484.887	61.621	POST8
623	925156.909	320484.887	61.621	POST8
619	925156.850	320410.973	62.002	PEG B
NZ122	925042.160	320568.983	65.820	IT III
620_stk2	925047.680	320387.776	64.131	
620_stk3	925047.679	320387.777	64.130	
624	925178.600	320419.675	61.763	POST9
624	925178.600	320419.675	61.763	POST9
614_stk	925157.548	320401.006	62.100	
615_stk	925129.061	320366.078	61.737	