

Deep Crustal Seismic Reflection Profiling: Australia 2012-

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Geoscience Australia

Introduction

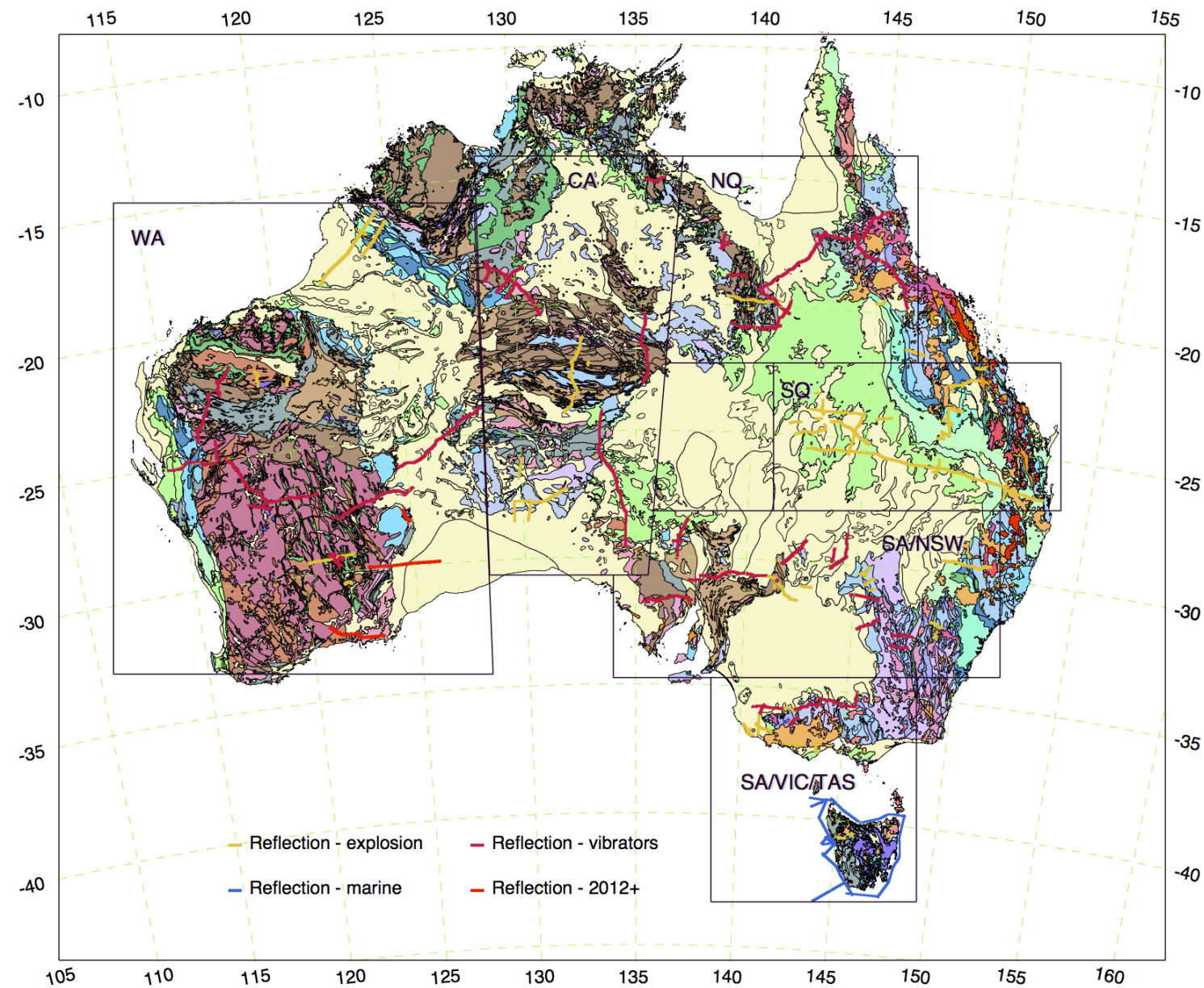
This collection represents an extension of the atlas of reflection profiles presented by Kennett et al. (2013).

The same format for the plates of the reflection profiles with up to 200km per page is used. The profiles are also grouped using the same geographic divisions.

Reference

Kennett B.L.N., Saygin E. & Fomin T. & Blewett R. 2013 Deep Crustal Reflection profiling Australia 1978-2011, ANU E-Press & Geoscience Australia
<http://press.anu.edu.au/titles/deep-crustal-seismic-reflection-profiling/>

Geographic Groups for Full-crustal Reflection Profiles



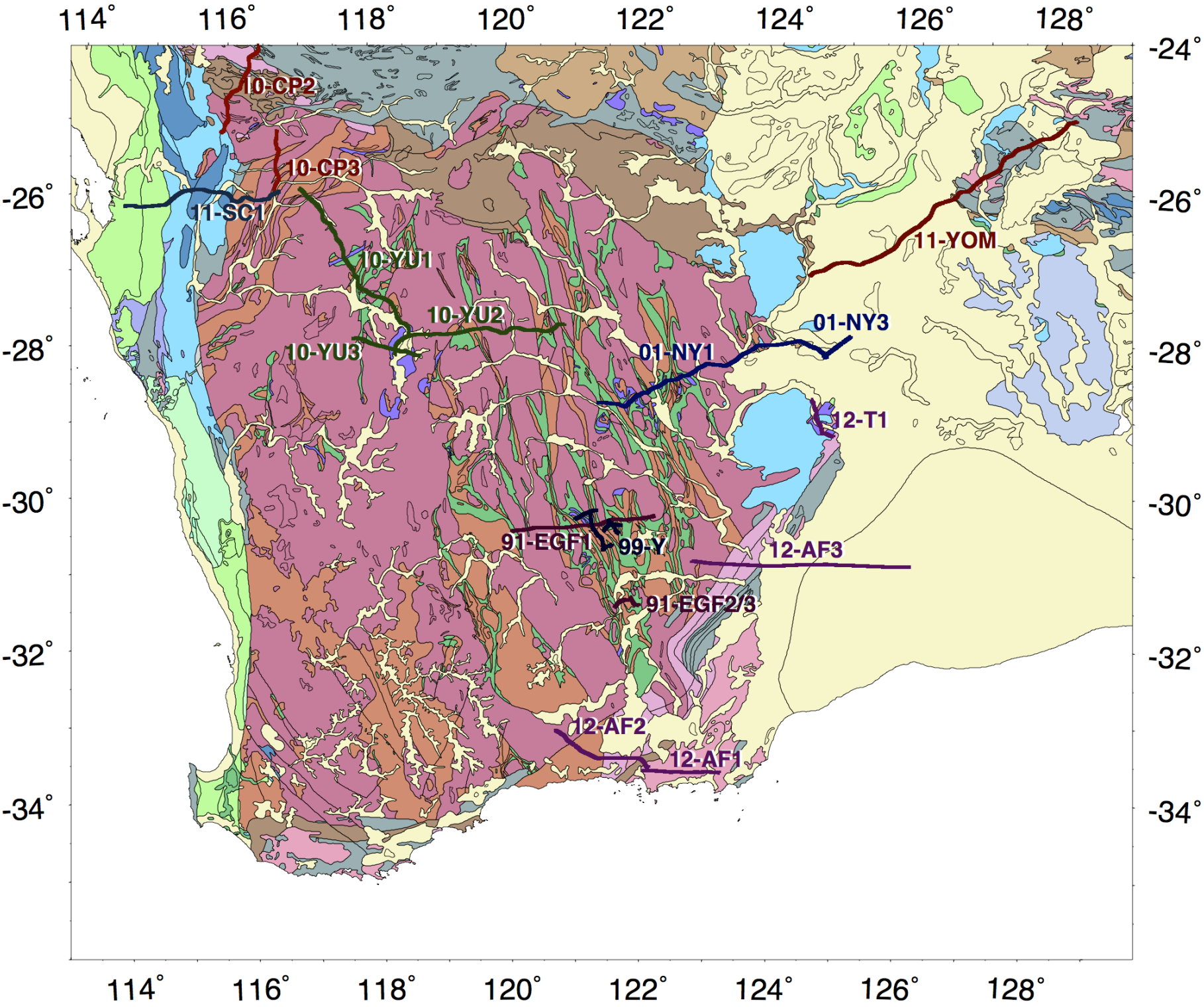
Legend for 1:1 000 000 and 1:2 500 000 Surface Geology

CENOZOIC UNITS (mainly unconsolidated deposits)											
Quaternary				Cenozoic				Cenozoic			
Q	Quaternary sediments, undivided	Qk	Calcrete	Czu	Cenozoic sediments, undivided	Czk	Calcrete	Czu	Cenozoic sediments, undivided	Czk	Calcrete
Qa	Channel and flood plain alluvium; gravel, sand, silt, clay	Qrc	Colluvium and/or residual deposits; boulder, gravel, sand	Cza	Alluvial deposits; typically incised by current drainage	Czl	Laterite, ferruginous duricrust	Cza	Alluvial deposits; typically incised by current drainage	Czl	Laterite, ferruginous duricrust
Qb	Volcanic rocks, predominantly mafic	Qrlb	Black soil plains	Czb	Volcanic rocks, predominantly mafic	Czq	Spring deposits	Czb	Volcanic rocks, predominantly mafic	Czq	Spring deposits
Qd	Dunes, sand plain with dunes	Qsg	Glacial sediments, moraine	Czc	Consolidated siliclastic rocks	Czs	Sand plain	Czc	Consolidated siliclastic rocks	Czs	Sand plain
Qdc	Coastal dunes, beach ridge, barrier beach, foredune and shoreface sands	Qsm	Anthropogenic deposits; mining waste, salt pans	Cze	Estuarine and delta deposits	Czt	Lake and swamp deposits	Cze	Estuarine and delta deposits	Czt	Lake and swamp deposits
Qe	Estuarine, tidal delta deposits; coastal mud flats	Qt	Lake and swamp deposits; mud, silt, evaporites, limestone, minor sand	Czf	Felsic to intermediate volcanic rocks	Czu	Ultramafic intrusive rocks	Czf	Felsic to intermediate volcanic rocks	Czu	Ultramafic intrusive rocks
Qi	Carbonate sediments	Qv	Volcanics, undivided	Czg	Felsic intrusive rocks	Czz	Silcrete	Czg	Felsic intrusive rocks	Czz	Silcrete
				Czi	Carbonate sediments			Czi	Carbonate sediments		

SEDIMENTARY ROCKS AND LOW-GRADE METAMORPHIC ROCKS			IGNEOUS ROCKS							METAMORPHIC ROCKS		
			Volcanic rocks			Intrusive rocks						
mudstone, siltstone, sandstone, conglomerate (s), limestone (l), coal measures (o), volcanogenic sediments (j), mixed sediments and volcanic rocks (w), chemical sediments (c)			Felsic (f), metamorphosed (r)	Intermediate (a)	Mafic to ultramafic metamorphosed (t), mixed intrusives (i)	Felsic to mafic (v)	Felsic (g), quartz vein (q)	Mafic (d), metamorphosed (t)	Mafic to ultramafic (u), metamorphosed (e), alkaline ultrabasic (k)	Low-medium grade metacarbonate (m), siliciclastic (y), hornfels (h)	High-grade metamorphics (n), complexes (x)	Fault/shear rocks (z)
Cretaceous	MESOZOIC	Ks	Kf	Ka	Kb	Kv	Kg	Kd				
		Js	Jf	Ja	Jb		Jg	Jd				
		Mzs		Mza	Mzb		Mzg	Mzd				
		-Rs	-Rf	-Ra	-Rb	-Rv	-Rg	-Rd				
Permian	PALEOZOIC	Ps	Pf	Pa	Pb	Pv	Pg	Pd	Pu			
Carboniferous		Cs	Cf	Ca	Cb	Cv	Cg	Cd			Cn	Cz
Devonian		Ds	Df	Da	Db	Dv	Dg	Dd			Dn	
Silurian		Ss	Sf		Sb		Sg	Sd	Su	Sy		
Ordovician		Os	Of	Oa	Ob		Og	Od	Ou	Oy		
Cambrian		-Cs	-Cf		-Cb		-Cg	-Cd	-Cu	-Cy	-Cn	-Cz
Neoproterozoic		Ns	Nf	Na	Nb	Nv	Ng	Nd	Nu	Ny	Nn	Nz
Mesoproterozoic	PROTEROZOIC	Ms	Mf	Ma	Mb	Mv	Mg	-Pd	Mu	-Py	Mn	-Pn
Paleoproterozoic		Ls	Lf	La	Lb		Lg	Ld	Lu	Ly	Ln	Lz
ARCHEAN		As	Af	Aa	Ab	Av	Ag	Ad	Au	Ay	An	Az

Note: Geological units which span multiple time periods have symbols showing the oldest and youngest time periods. e.g. Cambrian to Ordovician sedimentary rocks = -COs; Paleoproterozoic to Mesoproterozoic high grade metamorphics = LMn

WESTERN AUSTRALIA - SOUTH

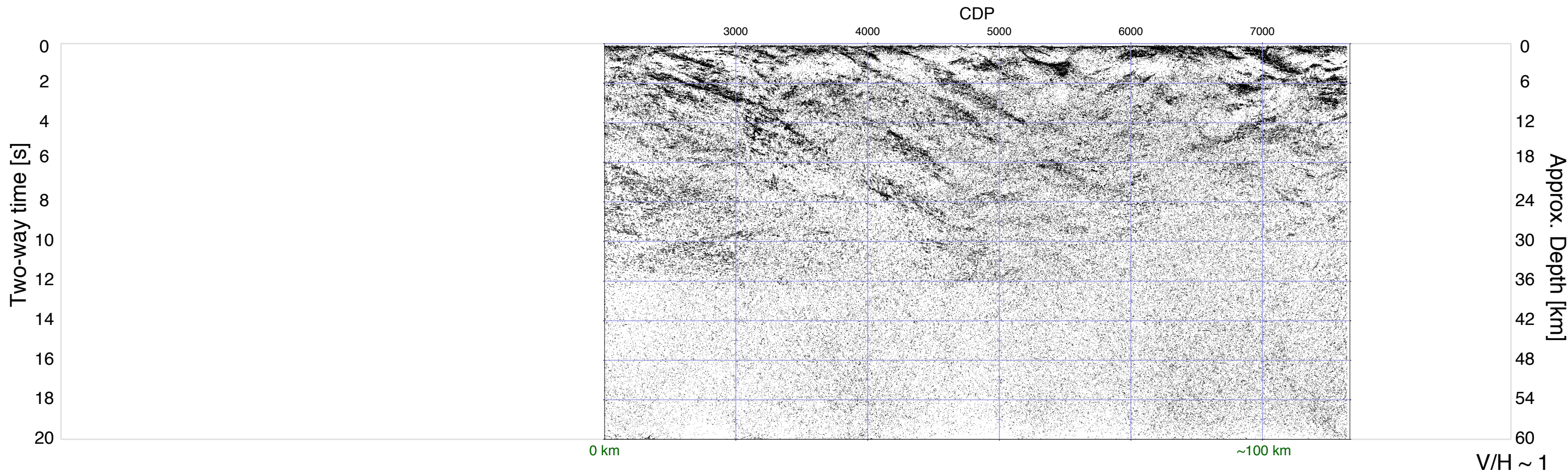
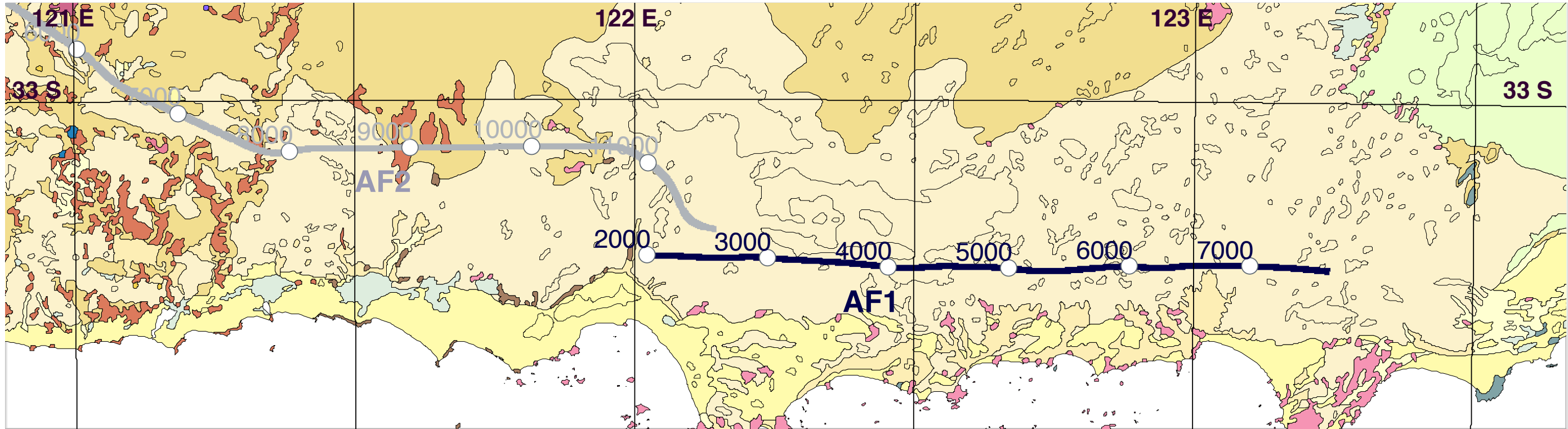


INDEX OF PROFILES: WESTERN AUSTRALIA

On the display panels the reflection lines are identified by year, project identifier and line designator. The table below presents the full list of the lines and the codes used in Geoscience Australia reports, together with the nature of the display and the bias and clip parameters used to display the sections using the *pssegy* facility.

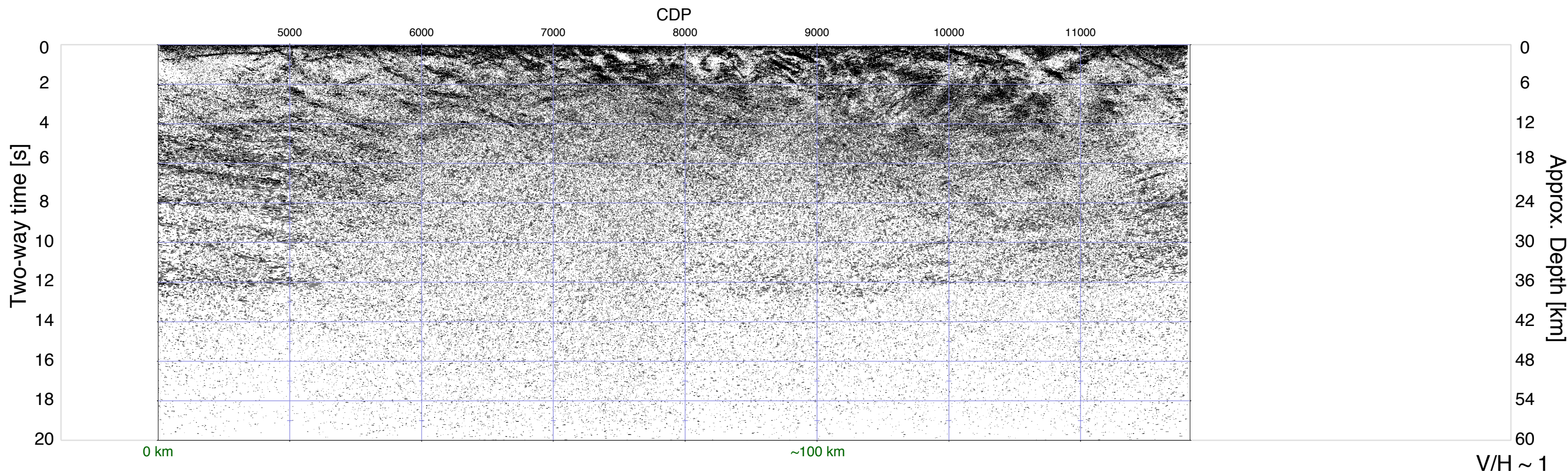
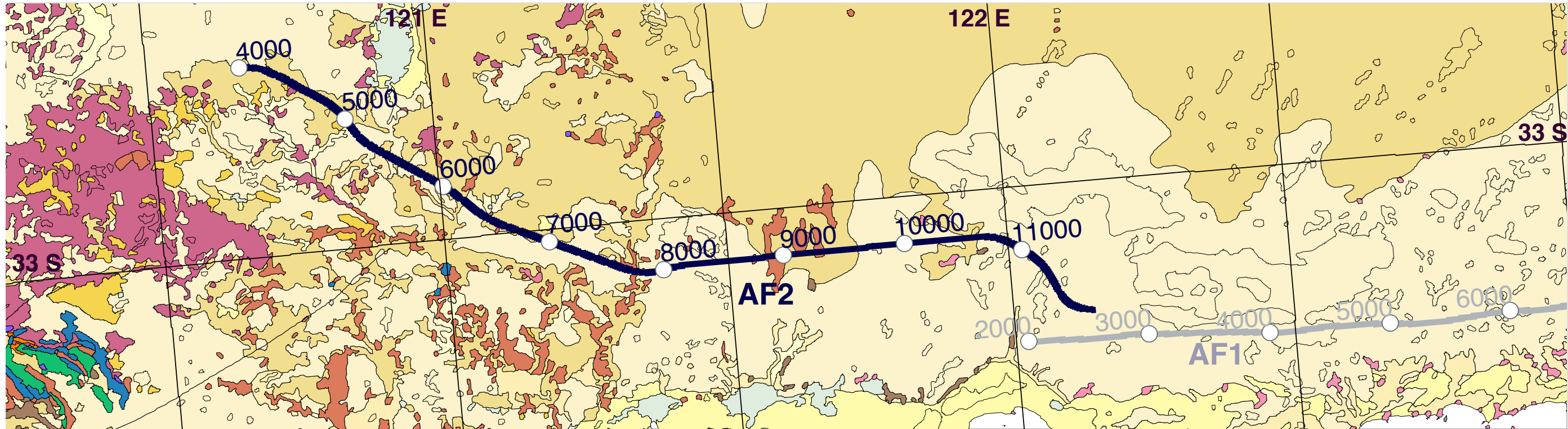
Year	Project	GA Line Code	Line Designator	Display:	Bias	Clip	Page
2012	L201	12GA-AF1	AF1	Migrated	1.47	85	
		12GA-AF2	AF2	Stack	1.40	85	
		12GA-AF3	AF3	Stack	1.40	85	
		12GA-T1	T1	Stack	1.40	85	

2012 L201 AF1	WESTERN AUSTRALIA Albany Fraser	GSWA <i>Geoscience Australia</i>
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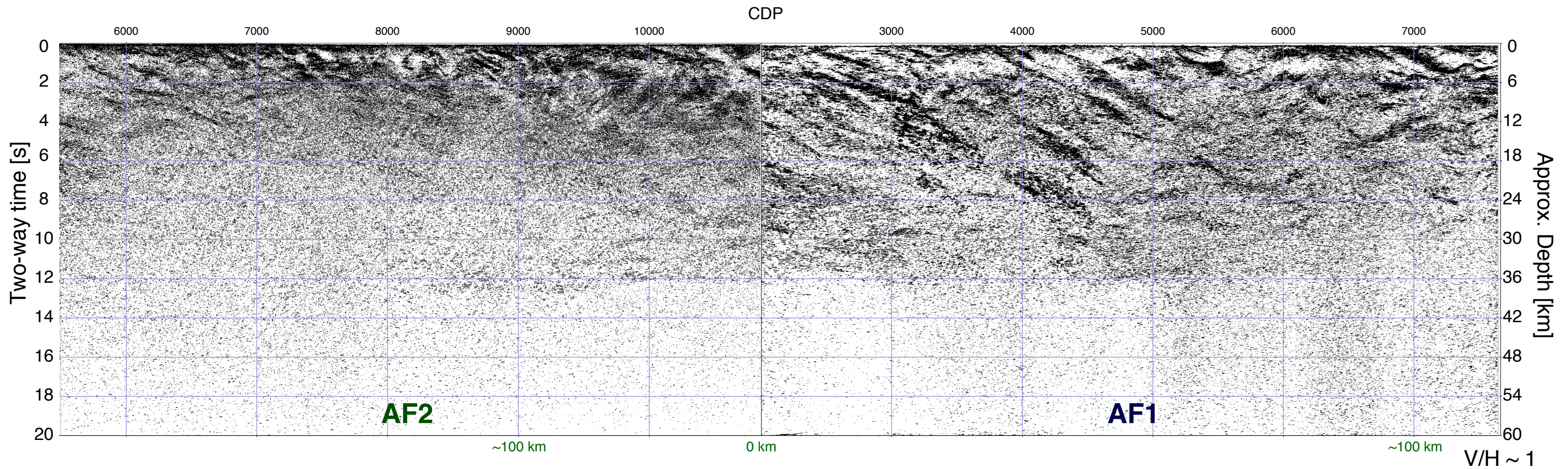
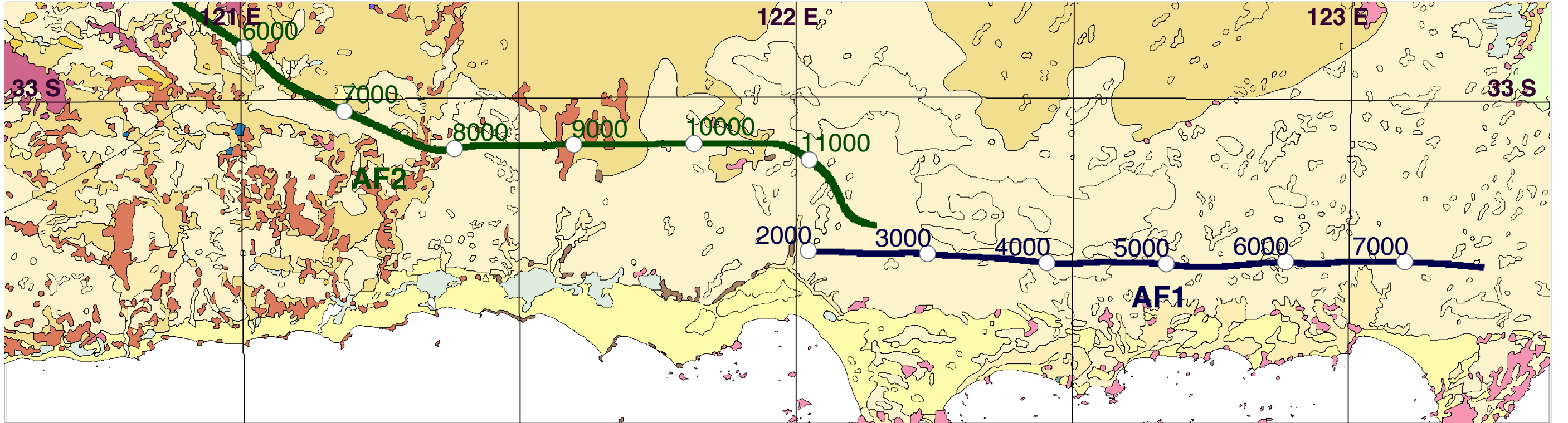
Migrated Section	Source: 3 Hemi-50 vibrator, 80 m interval	Survey Details: GA-L201
	Spread: 300 Channels, 40 m group interval	
	Fold: 75 nominal	

2012 L201 AF2	WESTERN AUSTRALIA Albany Fraser	GSWA Geoscience Australia
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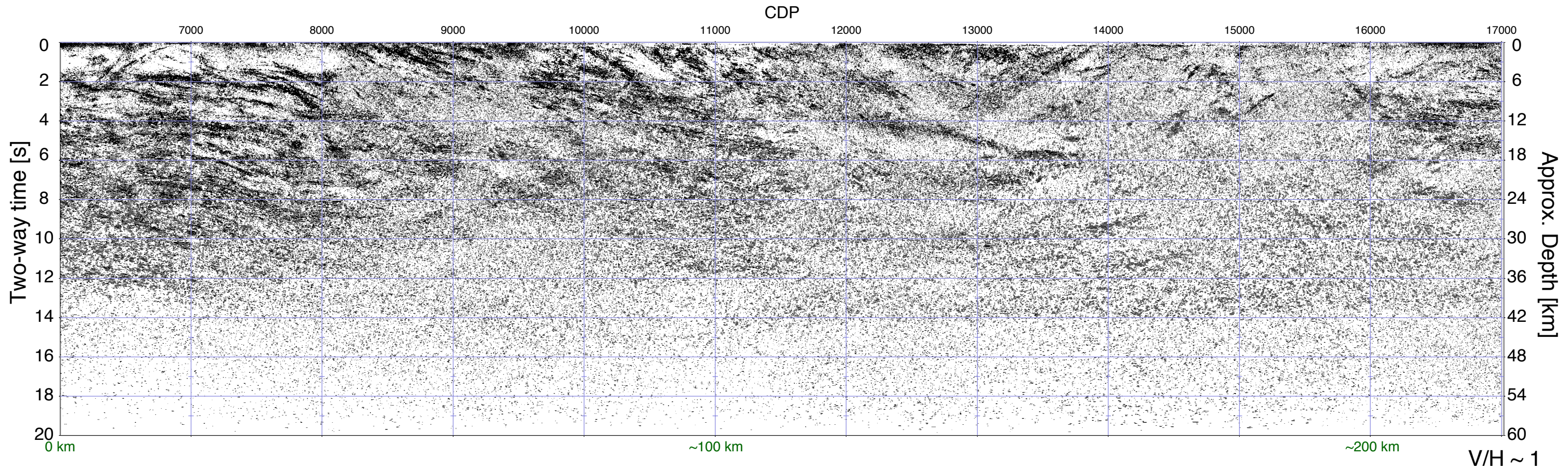
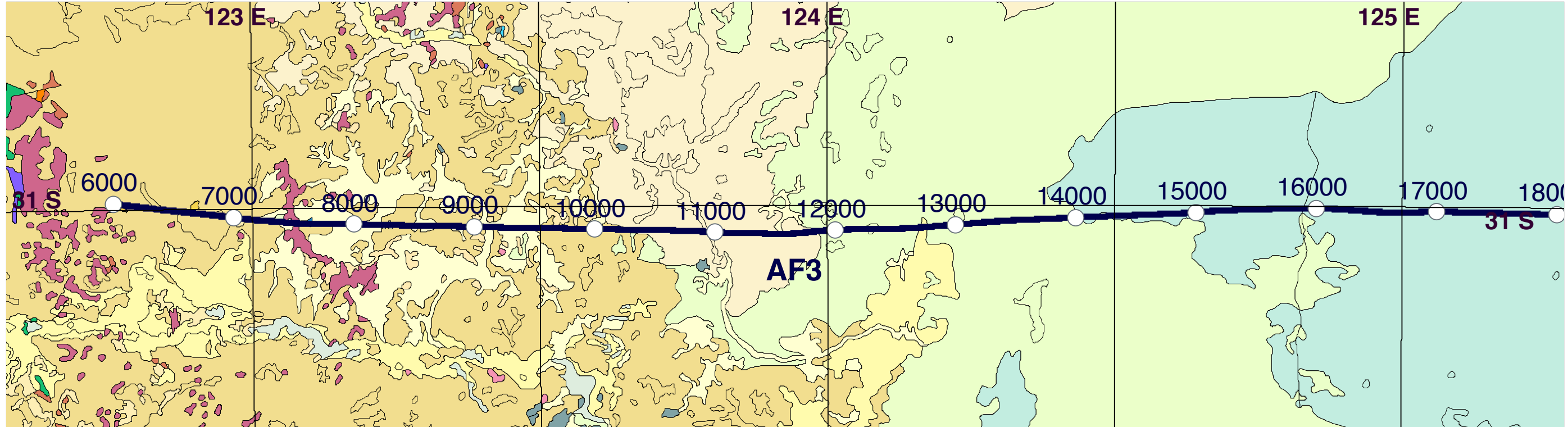


Migrated Section	Source: 3 Hemi-50 vibrators, 80 m interval	Survey Details: GA-L201
	Spread: 300 Channels, 40 m group interval	
	Fold: 75 nominal	

2012 L201 AF1 AF2	WESTERN AUSTRALIA Albany Fraser	GSWA <i>Geoscience Australia</i>
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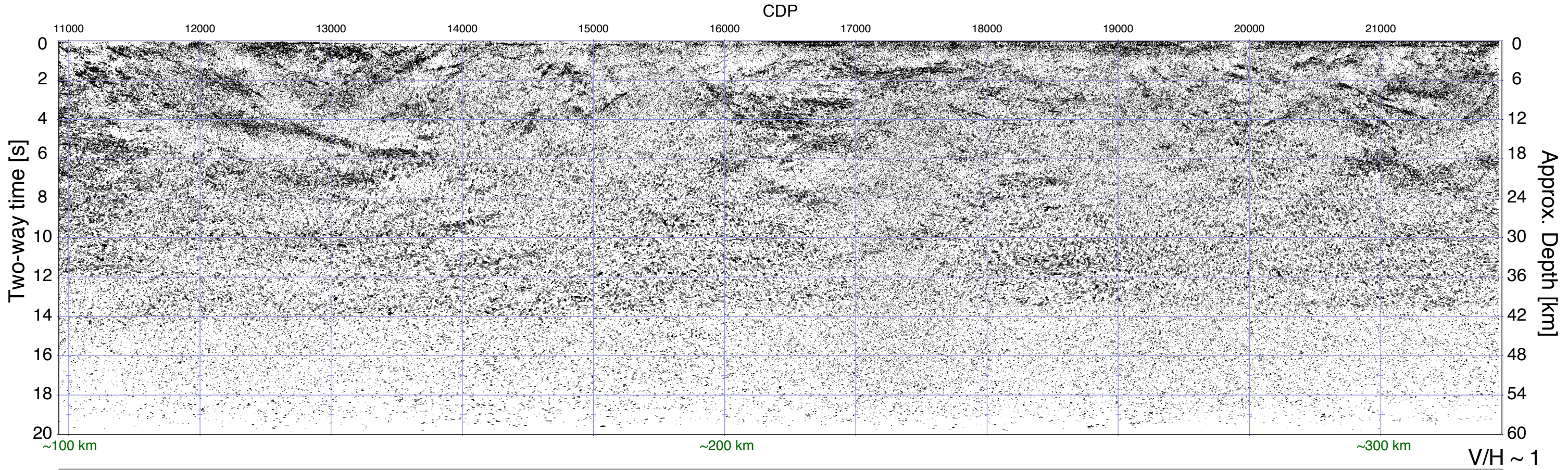
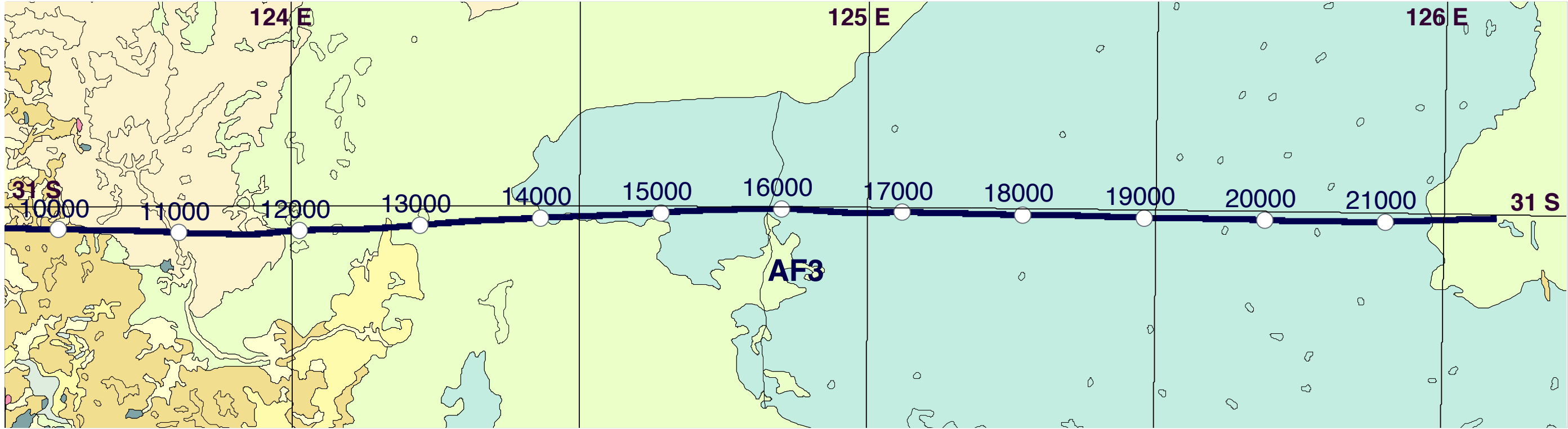
Migrated Section	Source: 3 Hemi-50 vibrator, 80 m interval	Survey Details: GA-L201
	Spread: 300 Channels, 40 m group interval	
	Fold: 75 nominal	



Migrated Section

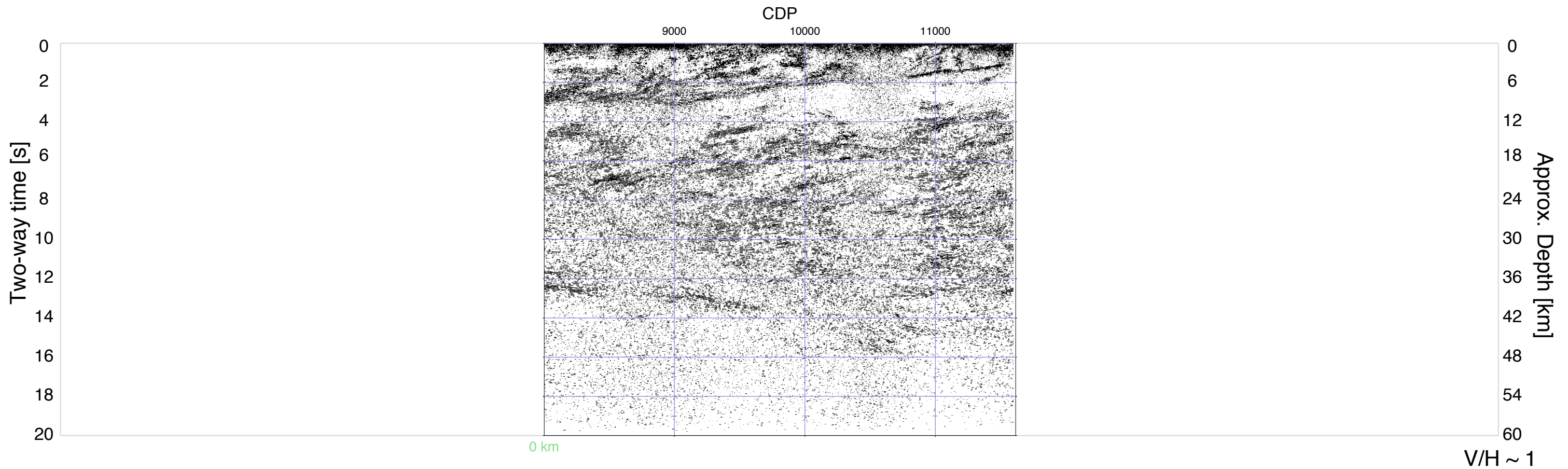
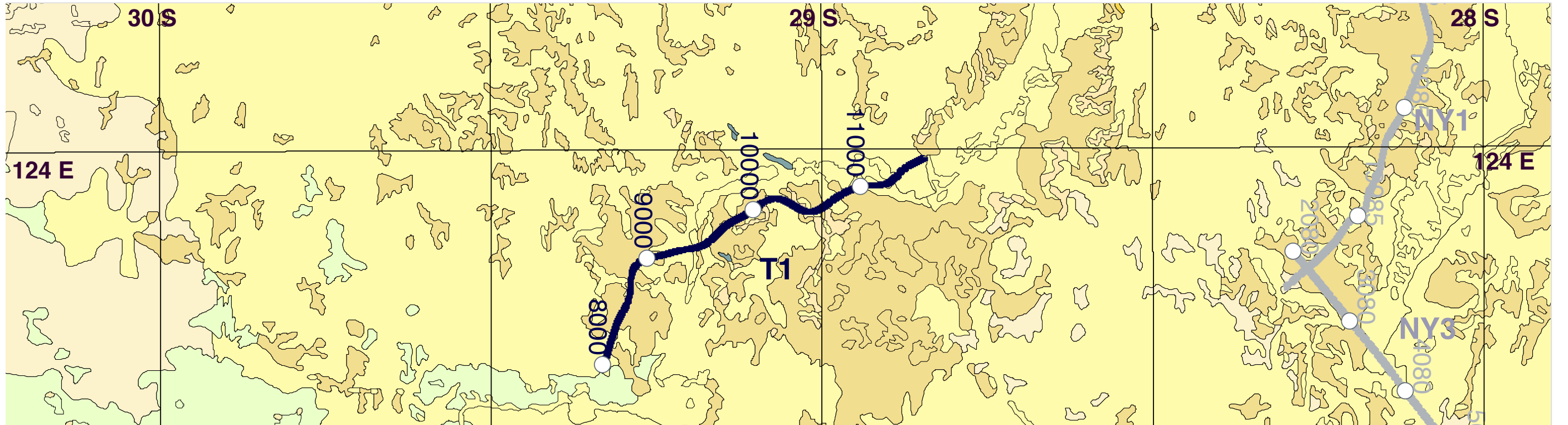
Source: 3 Hemi-50 vibrator, 80 m interval
Spread: 300 Channels, 40 m group interval
Fold: 75 nominal

Survey Details: [GA-L201](#)



Migrated Section	Source:	3 Hemi-50 vibrator, 80 m interval	Survey Details: GA-L201
	Spread:	300 Channels, 40 m group interval	
	Fold:	75 nominal	

2012 L201 T1	WESTERN AUSTRALIA Albany Fraser - Tropicana	Anglo-Gold GSWA Geoscience Australia
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Migrated Section	Source: 3 Hemi-50 vibrator, 80 m interval Spread: 300 Channels, 40 m group interval Fold: 75 nominal	Survey Details: GA-L201
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