

Geosciences

Supporting Information for

Morphotectonic Kinematic Indicators Along the Vigan-Aggao Fault: The Western Deformation Front of the Philippine Fault Zone in Northern Luzon, the Philippines

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Introduction

This supporting information provides a table figures that show the basis for determining the kinematics of the Vigan-Aggao Fault and additional photos and Google Earth perspective view of morphotectonic features.

Table S1. Piercing point types, locations, V/H measurements, and sense of displacement

Piercing Point		Reference	Location		Elev. (M)	Displ. (M)		Sense	Eye Alt. (M)
			Lat	Long		HD	VD		
Vigan-Santa									
1	VGN1a	Offset stream	17°27'28.72"N	120°26'7.41" E	89	58	37	LL	140
	VGN1b		17°27'28.80"N	120°26'04.96"E	52				
2	VGN2a	Offset spur	17°27'29.69"N	120°26'08.44"E	106	75	42	LL	225
	VGN2b		17°27'29.88"N	120°26'05.48"E	64				
3	VGN3a	Offset spur	17°27'32.35"N	120°26'12.10"E	140	110	53	LL	285
	VGN3b		17°27'31.20"N	120°26'06.96"E	87				
4	VGN4a	Offset stream	17°27'34.28"N	120°26'13.15"E	145	112	45	LL	305
	VGN4b		17°27'32.17"N	120°26'07.70"E	100				
5	VGN5a	Offset spur	17°27'35.17"N	120°26'16.88"E	167	107	33	LL	258
	VGN5b		17°27'34.73"N	120°26'12.78"E	134				

6	VGN6a	Offset stream	17°27'36.96"N	120°26'16.59"E	155	103	22	LL	276
	VGN6b		17°27'36.46"N	120°26'14.09"E	133				
7	VGN7a	Offset spur	17°27'40.37"N	120°26'18.52"E	173	108	23	LL	276
	VGN7b		17°27'39.67"N	120°26'15.56"E	150				
8	VGN8a	Offset spur	17°27'43.93"N	120°26'20.96"E	198	80	53	LL	276
	VGN8b		17°27'44.89"N	120°26'15.52"E	145				
9	VGN9a	Offset spur	17°27'48.82"N	120°26'17.79"E	144	85	31	LL	249
	VGN9b		17°27'48.69"N	120°26'15.00"E	113				
10	VGN10a	Offset spur	17°27'52.18"N	120°26'18.59"E	134	118	32	LL	264
	VGN10b		17°27'51.74"N	120°26'15.67"E	102				
11	VGN11a	Offset spur	17°27'54.75"N	120°26'19.76"E	132	110	28	LL	278
	VGN11b		17°27'54.28"N	120°26'16.47"E	104				
12	VGN12a	Offset spur	17°28'07.31"N	120°26'25.56"E	181	82	46	LL	422
	VGN12b		17°28'07.68"N	120°26'18.96"E	135				
13	VGN13a	Offset stream	17°28'10.45"N	120°26'20.53"E	149	96.5	16	LL	346
	VGN13b		17°28'09.61"N	120°26'18.06"E	133				
14	VGN14a	Offset spur	17°28'14.05"N	120°26'19.26"E	141	99.5	12	LL	268
	VGN14b		17°28'11.69"N	120°26'16.49"E	129				
15	VGN15a	Offset stream	17°28'16.90"N	120°26'18.60"E	121	56	39	LL	245
	VGN15b		17°28'17.74"N	120°26'15.43"E	82				
16	VGN16a	Offset spur	17°28'23.11"N	120°26'21.58"E	160	80	48	LL	392
	VGN16b		17°28'22.64"N	120°26'17.68"E	112				
17	VGN17a	Offset spur	17°28'29.08"N	120°26'24.92"E	172	55	32	LL	294
	VGN17b		17°28'29.38"N	120°26'21.40"E	140				
18	VGN18a	Offset spur	17°28'32.94"N	120°26'27.55"E	187	68.5	22	LL	380
	VGN18b		17°28'32.92"N	120°26'24.62"E	165				
19	VGN19a	Offset spur	17°28'47.98"N	120°26'28.48"E	158	60.5	26	LL	254
	VGN19b		17°28'46.73"N	120°26'25.68"E	132				
20	VGN20a	Offset stream	17°28'51.06"N	120°26'33.56"E	168	158.5	50	LL	300
	VGN20b		17°28'49.21"N	120°26'25.44"E	118				
21	VGN21a	Offset spur	17°28'52.73"N	120°26'31.89"E	149	39	23	LL	281
	VGN21b		17°28'51.14"N	120°26'27.80"E	126				
22	VGN22a	Offset stream	17°28'55.48"N	120°26'33.25"E	145	81	27	LL	370
	VGN22b		17°28'55.49"N	120°26'29.30"E	118				
23	VGN23a	Offset spur	17°28'58.45"N	120°26'33.51"E	142	85	28	LL	289
	VGN23b		17°28'59.00"N	120°26'29.89"E	114				
24	VGN24a	Offset spur	17°29'4.39"N	120°26'37.19"E	185	90.5	43	LL	295
	VGN24b		17°29'4.10"N	120°26'33.47"E	142				
25	VGN25a	Offset spur	17°29'17.56"N	120°26'37.48"E	119	80	14	LL	336
	VGN25b		17°29'16.43"N	120°26'34.60"E	105				
26	VGN26a	Offset spur	17°29'27.58"N	120°26'41.57"E	134	84	22	LL	280
	VGN26b		17°29'26.44"N	120°26'39.44"E	112				
27	VGN27a	Offset spur	17°29'42.12"N	120°26'47.76"E	134	63	32	LL	294
	VGN27b		17°29'43.50"N	120°26'44.52"E	102				
28	VGN28a	Offset spur	17°29'53.32"N	120°26'56.68"E	182	98	40	LL	335

	VGN28b		17°29'53.31"N	120°26'52.97"E	142				
29	VGN29a	Offset spur	17°30'01.03"N	120°26'56.54"E	165	163.5	63	LL	324
	VGN29b		17°30'02.43"N	120°26'52.13"E	102				
30	VGN30a	Offset spur	17°30'17.93"N	120°26'56.90"E	153	87	29	LL	309
	VGN30b		17°30'17.23"N	120°26'54.29"E	124				
31	VGN31a	Offset spur	17°30'26.00"N	120°27'00.14"E	157	107	18	LL	341
	VGN31b		17°30'24.73"N	120°26'58.86"E	139				
32	VGN32a	Offset spur	17°30'37.21"N	120°27'05.92"E	217	89	39	LL	313
	VGN32n		17°30'36.01"N	120°27'02.09"E	178				
33	VGN33a	Offset spur	17°30'50.54"N	120°27'14.63"E	256	107	78	LL	362
	VGN33b		17°30'48.97"N	120°27'07.34"E	178	Bend?			
34	VGN34a	Offset stream	17°30'54.17"N	120°27'09.03"E	160	65	23	LL	257
	VGN34b		17°30'53.34"N	120°27'06.76"E	137	Bend?			
35	VGN35a	Offset spur	17°30'57.58"N	120°27'13.50"E	229	101	18	LL	367
	VGN35b		17°30'58.59"N	120°27'11.19"E	211				
36	VGN36a	Offset spur	17°31'13.80"N	120°27'15.28"E	211	82	31	LL	340
	VGN36b		17°31'14.08"N	120°27'12.53"E	180				
37	VGN37a	Offset spur	17°31'25.96"N	120°27'28.15"E	288	157.5	45	LL	756
	VGN37b		17°31'24.00"N	120°27'21.91"E	243				
38	VGN38a	Offset spur	17°31'33.29"N	120°27'31.01"E	285	146	33	LL	449
	VGN38b		17°31'32.89"N	120°27'24.19"E	252				
39	VGN39a	Offset spur	17°32'00.77"N	120°27'27.74"E	254	209	56	LL	822
	VGN39b		17°31'58.92"N	120°27'22.70"E	198				
40	VGN40a	Offset stream	17°32'07.58"N	120°27'31.37"E	223	203	70	LL	425
	VGN40b		17°32'06.09"N	120°27'23.91"E	153				
41	VGN41a	Offset spur	17°32'13.22"N	120°27'28.75"E	249	50	34	LL	463
	VGN41b		17°32'12.88"N	120°27'24.81"E	215				
42	VGN42a	Offset spur	17°32'21.43"N	120°27'27.30"E	212	52	35	LL	287
	VGN42b		17°32'21.57"N	120°27'25.56"E	177				
43	VGN43a	Offset stream	17°32'35.82"N	120°27'32.79"E	190	124	62	LL	543
	VGN43b		17°32'33.10"N	120°27'26.75"E	128				
44	VGN44a	Offset stream	17°32'44.76"N	120°27'37.56"E	243	129	88	LL	634
	VGN44b		17°32'44.39"N	120°27'28.60"E	155				
45	VGN45a	Offset spur	17°32'47.05"N	120°27'38.34"E	247	135	51	LL	523
	VGN45b		17°32'48.43"N	120°27'34.00"E	196				
Badoc-Vigan1									
1	Bdc-Vgn1a	Offset spur	17°33'53.91"N	120°27'55.15"E	167	98.5	57	LL	206
	Bdc-Vgn1b		17°33'52.23"N	120°27'52.42"E	110				
2	Bdc-Vgn2a	Offset spur	17°34'03.35"N	120°27'57.73"E	193	129	29	LL	718
	Bdc-Vgn2b		17°34'02.42"N	120°27'55.72"E	164				
3	Bdc-Vgn3a	Offset spur	17°34'03.97"N	120°28'02.70"E	292	28	21	LL	265

	Bdc-Vgn3b		17°34'03.86"N	120°28'03.14"E	271	Beside PR			
4	Bdc-Vgn4a	Offset spur	17°34'12.05"N	120°27'58.67"E	216	57.5	36	LL	296
	Bdc-Vgn4b		17°34'11.83"N	120°27'56.08"E	180				
5	Bdc-Vgn5a	Offset spur	17°34'11.30"N	120°28'04.41"E	289	88.5	37	LL	380
	Bdc-Vgn5b		17°34'11.68"N	120°28'01.48"E	252				
6	Bdc-Vgn6a	Offset spur	17°34'22.03"N	120°28'02.37"E	203	71	30	LL	243
	Bdc-Vgn6b		17°34'22.57"N	120°27'59.48"E	173				
7	Bdc-Vgn7a	Offset spur	17°34'20.56"N	120°28'09.49"E	341	107	62	LL	335
	Bdc-Vgn7b		17°34'21.33"N	120°28'06.50"E	279				
8	Bdc-Vgn8a	Offset spur	17°34'27.53"N	120°27'59.20"E	168	29	10	LL	193
	Bdc-Vgn8b		17°34'27.35"N	120°27'58.36"E	158				
9	Bdc-Vgn9a	Offset spur	17°34'27.58"N	120°28'04.13"E	229	50	21	LL	234
	Bdc-Vgn9b		17°34'27.56"N	120°28'02.52"E	208				
10	Bdc-Vgn10a	Offset spur	17°34'31.16"N	120°28'05.46"E	242	108	18	LL	293
	Bdc-Vgn10b		17°34'30.95"N	120°28'03.59"E	224				
11	Bdc-Vgn11a	Offset spur	17°34'36.14"N	120°27'58.28"E	183	60	19	LL	256
	Bdc-Vgn11b		17°34'35.90"N	120°27'56.53"E	164				
12	Bdc-Vgn12a	Offset spur	17°34'39.78"N	120°28'05.99"E	271	117	25	LL	262
	Bdc-Vgn12b		17°34'38.36"N	120°28'04.02"E	246				
13	Bdc-Vgn13a	Offset spur	17°34'42.34"N	120°27'58.36"E	199	200	33	LL	476
	Bdc-Vgn13b		17°34'39.63"N	120°27'54.70"E	166				
14	Bdc-Vgn14a	Offset spur	17°34'51.87"N	120°27'58.39"E	184	215	29	LL	680
	Bdc-Vgn14b		17°34'50.12"N	120°27'53.69"E	155				
15	Bdc-Vgn15a	Offset spur	17°35'08.49"N	120°28'10.86"E	254	205	68	LL	483
	Bdc-Vgn15b		17°35'09.36"N	120°28'04.44"E	186				
16	Bdc-Vgn16a	Offset spur	17°35'21.52"N	120°28'18.50"E	276	117	52	LL	442
	Bdc-Vgn16b		17°35'23.51"N	120°28'11.94"E	224				
17	Bdc-Vgn17b	Offset spur	17°35'43.55"N	120°28'26.41"E	384	52.5	34	LL	422

	Bdc-Vgn17b		17°35'43.75"N	120°28'24.52"E	350				
18	Bdc-Vgn18a	Offset spur	17°36'00.11"N	120°28'43.63"E	340	123	50	LL	566
	Bdc-Vgn18b		17°36'02.81"N	120°28'40.94"E	290				
19	Bdc-Vgn19a	Offset spur	17°36'10.16"N	120°28'46.00"E	345	97	44	LL	479
	Bdc-Vgn19b		17°36'10.45"N	120°28'42.64"E	301				
20	Bdc-Vgn20a	Offset spur	17°36'24.65"N	120°28'56.74"E	417	92	13	LL	447
	Bdc-Vgn20b		17°36'24.03"N	120°28'54.57"E	404				
21	Bdc-Vgn21a	Offset spur	17°36'40.47"N	120°29'00.15"E	382	113	42	LL	559
	Bdc-Vgn21b		17°36'40.29"N	120°28'57.47"E	240				
22	Bdc-Vgn22a	Offset spur	17°37'14.32"N	120°29'30.39"E	668	218	41	LL	830
	Bdc-Vgn22b		17°37'16.65"N	120°29'18.32"E	627				
23	Bdc-Vgn23a	Offset stream	17°37'45.29"N	120°29'21.62"E	266	145	36	LL	658
	Bdc-Vgn23b		17°37'42.47"N	120°29'13.63"E	230				
24	Bdc-Vgn24a	Offset spur	17°38'04.24"N	120°29'29.91"E	450	73	17	LL	503
	Bdc-Vgn24b		17°38'05.85"N	120°29'28.60"E	433				
25	Bdc-Vgn25a	Offset spur	17°38'24.39"N	120°29'39.46"E	585	180	47	LL	670
	Bdc-Vgn25b		17°38'22.67"N	120°29'34.49"E	538				
26	Bdc-Vgn26a	Offset spur	17°36'57.77"N	120°28'19.64"E	105	29	5	LL	209
	Bdc-Vgn26b		17°36'57.48"N	120°28'18.85"E	100				
27	Bdc-Vgn27a	Offset spur	17°37'02.50"N	120°28'22.93"E	123	27	9	LL	247
	Bdc-Vgn27b		17°37'02.10"N	120°28'21.91"E	114				
28	Bdc-Vgn28a	Offset spur	17°37'25.55"N	120°28'40.28"E	295	135	56	LL	681
	Bdc-Vgn28b		17°37'26.39"N	120°28'35.23"E	239				

29	Bdc-Vgn29a	Offset stream	17°38'31.23"N	120°29'17.87"E	261	68	13	LL	354
	Bdc-Vgn29b		17°38'30.56"N	120°29'14.93"E	248				
30	Bdc-Vgn30a	Offset spur	17°38'38.25"N	120°29'25.04"E	338	70	15	LL	578
	Bdc-Vgn30b		17°38'38.98"N	120°29'20.26"E	323				
31	Bdc-Vgn31a	Offset spur	17°39'04.51"N	120°29'31.11"E	400	123.5	53	LL	541
	Bdc-Vgn31b		17°39'04.37"N	120°29'26.85"E	347				
32	Bdc-Vgn32a	Offset stream	17°39'20.28"N	120°29'38.01"E	353	151	36	LL	571
	Bdc-Vgn32b		17°39'19.66"N	120°29'32.47"E	317				
33	Bdc-Vgn33a	Offset spur	17°39'44.15"N	120°29'56.62"E	480	43.5	32	LL	424
	Bdc-Vgn33b		17°39'44.35"N	120°29'54.20"E	448	Bend			
34	Bdc-Vgn34a	Offset spur	17°39'46.94"N	120°29'59.03"E	518	35	26	LL	432
	Bdc-Vgn34b		17°39'47.21"N	120°29'57.78"E	492	Bend			
35	Bdc-Vgn35a	Offset spur	17°39'57.11"N	120°29'59.77"E	392	44	17	LL	346
	Bdc-Vgn35b		17°39'57.21"N	120°29'58.98"E	375	Bend			
36	Bdc-Vgn36a	Offset stream	17°39'58.62"N	120°29'59.90"E	385	31	27	LL	364
	Bdc-Vgn36b		17°39'59.05"N	120°29'58.25"E	358	Bend			
37	Bdc-Vgn37a	Offset spur	17°39'59.17"N	120°30'05.10"E	464	89	75	LL	596
	Bdc-Vgn37b		17°40'02.70"N	120°30'01.10"E	389	Bend			
38	Bdc-Vgn38a	Offset spur	17°40'24.63"N	120°30'26.55"E	416	75	60	LL	649
	Bdc-Vgn38b		17°40'26.24"N	120°30'22.76"E	356	Bend			
39	Bdc-Vgn39a	Offset spur	17°40'40.08"N	120°30'27.16"E	354	121.5	28	LL	520
	Bdc-Vgn39b		17°40'38.71"N	120°30'22.97"E	326	Bend			
40	Bdc-Vgn40a	Offset spur	17°41'03.29"N	120°30'28.97"E	336	162	35	LL	598

	Bdc-Vgn40b		17°41'02.05"N	120°30'24.22"E	301				
41	Bdc-Vgn41a	Offset stream	17°41'27.97"N	120°30'29.81"E	325	150	23	LL	481
	Bdc-Vgn41b		17°41'26.04"N	120°30'26.48"E	302				
42	Bdc-Vgn42a	Offset spur	17°42'17.59"N	120°30'52.47"E	339	39	24	LL	380
	Bdc-Vgn42b		17°42'18.27"N	120°30'49.07"E	315				
43	Bdc-Vgn43a	Offset spur	17°42'54.29"N	120°31'13.46"E	258	114	25	LL	528
	Bdc-Vgn43b		17°42'52.59"N	120°31'08.13"E	233				
44	Bdc-Vgn44a	Offset spur	17°43'02.03"N	120°31'17.44"E	311	142	46	LL	726
	Bdc-Vgn44b		17°43'01.76"N	120°31'10.59"E	265				
45	Bdc-Vgn45a	Offset spur	17°43'46.56"N	120°31'39.37"E	436	108.5	77	LL	1080
	Bdc-Vgn45b		17°43'48.33"N	120°31'34.20"E	359				
46	Bdc-Vgn46a	Offset spur	17°44'05.60"N	120°31'56.39"E	681	115	89	LL	1060
	Bdc-Vgn46b		17°44'06.27"N	120°31'51.96"E	592				
47	Bdc-Vgn47a	Offset spur	17°44'13.37"N	120°31'59.73"E	693	171	123	LL	1040
	Bdc-Vgn47b		17°44'18.80"N	120°31'52.65"E	570				
48	Bdc-Vgn48a	Offset spur	17°44'23.60"N	120°31'59.64"E	674	161.5	89	LL	1360
	Bdc-Vgn48b		17°44'26.02"N	120°31'55.51"E	585				
49	Bdc-Vgn49a	Offset spur	17°44'38.01"N	120°32'02.98"E	695	233	108	LL	1350
	Bdc-Vgn49b		17°44'35.68"N	120°31'56.58"E	587				
50	Bdc-Vgn50a	Offset spur	17°44'44.88"N	120°32'00.57"E	617	159	37	LL	973
	Bdc-Vgn50b		17°44'45.30"N	120°31'56.57"E	580				
51	Bdc-Vgn51a	Offset spur	17°44'58.41"N	120°32'05.07"E	585	104	42	LL	588
	Bdc-Vgn51b		17°44'58.21"N	120°32'01.71"E	543				

52	Bdc-Vgn52a	Offset stream	17°45'05.81"N	120°32'05.09"E	524	63.5	40	LL	606
	Bdc-Vgn52b		17°45'07.34"N	120°32'02.77"E	484				
53	Bdc-Vgn53a	Offset spur	17°45'06.79"N	120°32'13.69"E	637	154	49	LL	663
	Bdc-Vgn53b		17°45'08.75"N	120°32'10.17"E	588				
54	Bdc-Vgn54a	Offset spur	17°45'15.47"N	120°32'17.83"E	482	145	51	LL	750
	Bdc-Vgn54b		17°45'18.50"N	120°32'15.68"E	431				
55	Bdc-Vgn55a	Offset spur	17°45'35.99"N	120°32'20.12"E	336	29.5	13	LL	558
	Bdc-Vgn55b		17°45'36.37"N	120°32'18.85"E	323				
56	Bdc-Vgn56a	Offset spur	17°45'48.84"N	120°32'27.61"E	466	183	26	LL	1480
	Bdc-Vgn56b		17°45'47.73"N	120°32'21.34"E	440				
57	Bdc-Vgn57a	Offset spur	17°45'58.27"N	120°32'35.66"E	553	145	26	LL	1250
	Bdc-Vgn57b		17°45'58.78"N	120°32'32.21"E	527				
58	Bdc-Vgn58a	Offset spur	17°46'07.56"N	120°32'39.90"E	621	105.5	37	LL	1240
	Bdc-Vgn58b		17°46'05.47"N	120°32'36.41"E	584				
59	Bdc-Vgn59a	Offset spur	17°46'14.59"N	120°32'38.30"E	601	183	31	LL	633
	Bdc-Vgn59b		17°46'13.67"N	120°32'35.65"E	570				
60	Bdc-Vgn60a	Offset spur	17°46'17.96"N	120°32'43.41"E	629	133	49	LL	1030
	Bdc-Vgn60b		17°46'18.85"N	120°32'38.73"E	580				
61	Bdc-Vgn61a	Offset spur	17°46'22.30"N	120°32'46.51"E	613	74	59	LL	687
	Bdc-Vgn61b		17°46'24.45"N	120°32'42.36"E	554				
62	Bdc-Vgn62a	Offset spur	17°46'29.11"N	120°32'49.89"E	620	142	61	LL	1100
	Bdc-Vgn62b		17°46'30.12"N	120°32'45.93"E	559				
63	Bdc-Vgn63a	Offset spur	17°46'46.12"N	120°33'03.32"E	772	45.5	45	LL	982

	Bdc-Vgn63b		17°46'47.69"N	120°33'01.12"E	727				
64	Bdc-Vgn64a	Offset spur	17°46'50.31"N	120°33'07.32"E	796	103.5	46	LL	1140
	Bdc-Vgn64b		17°46'50.66"N	120°33'04.66"E	750				
65	Bdc-Vgn65a	Offset spur	17°46'58.79"N	120°33'05.05"E	674	54.5	38	LL	925
	Bdc-Vgn65b		17°46'59.43"N	120°33'03.03"E	636				
66	Bdc-Vgn66a	Offset spur	17°47'00.24"N	120°33'07.28"E	708	101	65	LL	1350
	Bdc-Vgn66b		17°47'01.33"N	120°33'04.35"E	643				
67	Bdc-Vgn67a	Offset spur	17°47'09.07"N	120°33'18.10"E	741	88.5	53	LL	1220
	Bdc-Vgn67b		17°47'09.53"N	120°33'14.21"E	688				
68	Bdc-Vgn68a	Offset spur	17°47'13.78"N	120°33'13.63"E	658	47.5	24	LL	972
	Bdc-Vgn68b		17°47'14.64"N	120°33'12.43"E	634				
69	Bdc-Vgn69a	Offset spur	17°47'18.24"N	120°33'14.39"E	623	63	34	LL	733
	Bdc-Vgn69b		17°47'20.54"N	120°33'13.15"E	589				
70	Bdc-Vgn70a	Offset spur	17°47'21.63"N	120°33'18.05"E	659	89	55	LL	849
	Bdc-Vgn70b		17°47'22.93"N	120°33'15.10"E	604				
71	Bdc-Vgn71a	Offset spur	17°47'27.18"N	120°33'20.21"E	637	112	30	LL	1020
	Bdc-Vgn71b		17°47'26.72"N	120°33'17.19"E	607				
72	Bdc-Vgn72a	Offset spur	17°47'32.35"N	120°33'20.51"E	618	96.5	26	LL	906
	Bdc-Vgn72b		17°47'32.48"N	120°33'18.58"E	592				
73	Bdc-Vgn73a	Offset spur	17°47'36.71"N	120°33'22.15"E	605	94	50	LL	853
	Bdc-Vgn73b		17°47'38.08"N	120°33'18.36"E	555				
74	Bdc-Vgn74a	Offset spur	17°47'44.59"N	120°33'24.50"E	586	144	25	LL	842
	Bdc-Vgn74b		17°47'44.73"N	120°33'22.54"E	561				

75	Bdc-Vgn75a	Offset spur	17°47'47.68"N	120°33'25.51"E	610	53	38	LL	883
	Bdc-Vgn75b		17°47'48.84"N	120°33'23.23"E	572				
76	Bdc-Vgn76a	Offset spur	17°47'50.91"N	120°33'24.05"E	568	50	29	LL	557
	Bdc-Vgn76b		17°47'52.24"N	120°33'22.48"E	539				
77	Bdc-Vgn77a	Offset spur	17°48'00.09"N	120°33'28.93"E	584	129	38	LL	1150
	Bdc-Vgn77b		17°47'59.02"N	120°33'26.23"E	546				
78	Bdc-Vgn78a	Offset spur	17°48'07.66"N	120°33'26.61"E	485	17	20	LL	499
	Bdc-Vgn78b		17°48'08.30"N	120°33'25.07"E	465				
79	Bdc-Vgn79a	Offset spur	17°48'11.52"N	120°33'29.12"E	516	61	18	LL	669
	Bdc-Vgn79b		17°48'12.17"N	120°33'27.60"E	498				
80	Bdc-Vgn80a	Offset spur	17°48'18.74"N	120°33'28.15"E	473	56	22	LL	632
	Bdc-Vgn80b		17°48'19.46"N	120°33'26.56"E	451				
81	Bdc-Vgn81a	Offset spur	17°48'27.79"N	120°33'31.60"E	482	57.5	20	LL	620
	Bdc-Vgn81b		17°48'27.63"N	120°33'30.18"E	462				
82	Bdc-Vgn82a	Offset spur	17°48'31.85"N	120°33'32.41"E	495	36.5	23	LL	525
	Bdc-Vgn82b		17°48'32.18"N	120°33'31.05"E	472				
83	Bdc-Vgn83a	Offset spur	17°48'34.54"N	120°33'33.98"E	505	43	41	LL	688
	Bdc-Vgn83b		17°48'34.80"N	120°33'31.36"E	464				
84	Bdc-Vgn84a	Offset spur	17°48'37.88"N	120°33'33.64"E	488	37.5	21	LL	596
	Bdc-Vgn84b		17°48'37.94"N	120°33'32.15"E	467				
Sinait									
1	Sinait1a	Offset spur	17°48'57.59"N	120°33'26.41"E	373	27	25	LL	703
	Sinait1b		17°48'56.52"N	120°33'22.91"E	347				
2	Sinait2a	Offset spur	17°49'06.32"N	120°33'24.49"E	403	35.5	38	LL	546

	Sinait2b		17°49'05.11"N	120°33'21.55"E	365				
3	Sinait3a	Offset spur	17°49'17.35"N	120°33'19.48"E	442	39	96	LL	919
	Sinait3b		17°49'14.28"N	120°33'13.93"E	346				
4	Sinait4a	Offset spur	17°49'22.78"N	120°33'16.84"E	411	34	47	LL	633
	Sinait4b		17°49'22.19"N	120°33'14.36"E	364				
5	Sinait5a	Offset spur	17°49'27.36"N	120°33'16.92"E	411	27	37	LL	810
	Sinait5b		17°49'27.67"N	120°33'14.31"E	374				
6	Sinait6a	Offset spur	17°49'30.33"N	120°33'17.33"E	416	10	19	LL	569
	Sinait6b		17°49'30.61"N	120°33'15.51"E	397				
Cabugao-Badoc									
1	Cbg-Bdc1a	Offset spur	17°48'6.83"N	120°32'31.57"E	577	35.5	13	LL	598
	Cbg-Bdc1b		17°48'7.26"N	120°32'30.86"E	564				
2	Cbg-Bdc2a	Offset spur	17°48'9.02"N	120°32'33.59"E	569	22	20	LL	545
	Cbg-Bdc2b		17°48'9.90"N	120°32'32.63"E	549				
3	Cbg-Bdc3a	Offset spur	17°48'11.75"N	120°32'35.70"E	564	29.5	21	LL	531
	Cbg-Bdc3b		17°48'12.29"N	120°32'34.15"E	543				
4	Cbg-Bdc4a	Offset spur	17°48'15.06"N	120°32'36.24"E	545	36.5	23	LL	619
	Cbg-Bdc4b		17°48'15.75"N	120°32'34.69"E	522				
5	Cbg-Bdc5a	Offset spur	17°48'19.24"N	120°32'38.98"E	528	68.5	17	LL	767
	Cbg-Bdc5b		17°48'19.91"N	120°32'37.68"E	511				
6	Cbg-Bdc6a	Offset spur	17°48'20.80"N	120°32'39.23"E	518	18	17	LL	513
	Cbg-Bdc6b		17°48'21.65"N	120°32'38.10"E	501				
7	Cbg-Bdc7a	Offset spur	17°48'22.33"N	120°32'40.11"E	515	30	13	LL	690
	Cbg-Bdc7b		17°48'22.79"N	120°32'39.19"E	502				
8	Cbg-Bdc8a	Offset spur	17°48'24.46"N	120°32'42.43"E	515	33.5	14	LL	690
	Cbg-Bdc8b		17°48'25.40"N	120°32'41.44"E	501				
9	Cbg-Bdc9a	Offset spur	17°48'33.02"N	120°32'47.31"E	497	87	17	LL	884
	Cbg-Bdc9b		17°48'33.27"N	120°32'45.52"E	480				
10	Cbg-Bdc10a	Offset spur	17°48'40.60"N	120°32'52.65"E	498	24.5	16	LL	675
	Cbg-Bdc10b		17°48'40.72"N	120°32'51.18"E	482				
11	Cbg-Bdc11a	Offset spur	17°48'46.06"N	120°32'55.09"E	482	56.5	33	LL	871
	Cbg-Bdc11b		17°48'46.64"N	120°32'52.60"E	449				
12	Cbg-Bdc12a	Offset spur	17°48'49.04"N	120°32'53.84"E	453	17	10	LL	511
	Cbg-Bdc12b		17°48'49.33"N	120°32'53.07"E	443				
13	Cbg-Bdc13a	Offset spur	17°48'51.38"N	120°32'55.62"E	456	38.5	18	LL	790

	Cbg-Bdc13b		17°48'52.00"N	120°32'54.42"E	438				
14	Cbg-Bdc14a	Offset spur	17°49'34.54"N	120°33'19.45"E	426	48	15	LL	642
	Cbg-Bdc14b		17°49'34.12"N	120°33'18.18"E	411				
15	Cbg-Bdc15a	Offset spur	17°49'47.85"N	120°33'28.30"E	462	61	53	LL	574
	Cbg-Bdc15b		17°49'49.71"N	120°33'25.29"E	409				
16	Cbg-Bdc16a	Offset spur	17°50'07.68"N	120°33'41.32"E	443	54	17	LL	641
	Cbg-Bdc16b		17°50'08.34"N	120°33'39.11"E	426				
17	Cbg-Bdc17a	Offset stream	17°50'13.50"N	120°33'43.07"E	376	61.5	36	LL	773
	Cbg-Bdc17b		17°50'13.98"N	120°33'39.89"E	340				
18	Cbg-Bdc18a	Offset spur	17°50'15.00"N	120°33'43.76"E	369	75	30	LL	1150
	Cbg-Bdc18b		17°50'15.39"N	120°33'41.55"E	339				
19	Cbg-Bdc19a	Offset spur	17°50'19.60"N	120°33'51.14"E	333	112.5	57	LL	705
	Cbg-Bdc19b		17°50'22.04"N	120°33'48.89"E	276				
20	Cbg-Bdc20a	Offset spur	17°51'11.28"N	120°34'17.32"E	207	35.5	15	LL	564
	Cbg-Bdc20b		17°51'11.92"N	120°34'15.93"E	192				
21	Cbg-Bdc21a	Offset spur	17°51'15.08"N	120°34'18.75"E	203	32.5	18	LL	405
	Cbg-Bdc21b		17°51'15.50"N	120°34'17.65"E	185				
22	Cbg-Bdc22a	Offset spur	17°51'18.49"N	120°34'21.69"E	193	26	19	LL	361
	Cbg-Bdc22b		17°51'19.00"N	120°34'20.28"E	174				
22 b	Cbg-Bdc22c	Offset spur	17°51'20.87"N	120°34'28.40"E	215	20.5	16	LL	237
	Cbg-Bdc22d		17°51'21.05"N	120°34'26.85"E	199				
23	Cbg-Bdc23a	Offset spur	17°51'31.09"N	120°34'41.45"E	243	45.5	42	LL	418
23 b	Cbg-Bdc23b		17°51'32.46"N	120°34'39.29"E	201				

24	Cbg-Bdc24a	Offset spur	17°51'41.73"N	120°34'45.21"E	225	81	31	LL	666
24	Cbg-b Bdc24b		17°51'40.40"N	120°34'43.41"E	194				
25	Cbg-Bdc25a	Offset spur	17°51'46.83"N	120°34'50.39"E	269	38	22	LL	419
25	Cbg-b Bdc25b		17°51'47.28"N	120°34'48.93"E	247				
Badoc-Vigan2									
1	Bdc-VgnII1a	Offset spur	17°45'11.05"N	120°31'52.29"E	393	37	10	LL	557
	Bdc-VgnII1b		17°45'11.14"N	120°31'51.09"E	383				
2	Bdc-VgnII2a	Offset spur	17°45'17.37"N	120°31'50.47"E	331	18	03	LL	494
	Bdc-VgnII2b		17°45'17.42"N	120°31'49.94"E	328				
3	Bdc-VgnII3a	Offset spur	17°45'35.12"N	120°32'00.80"E	253	31.5	05	LL	651
	Bdc-VgnII3b		17°45'35.03"N	120°31'58.99"E	248				
4	Bdc-VgnII4a	Offset spur	17°45'47.11"N	120°32'10.19"E	339	124.5	69	LL	1230
	Bdc-VgnII4b		17°45'46.43"N	120°32'06.11"E	270				
5	Bdc-VgnII5a	Offset spur	17°46'00.27"N	120°32'11.81"E	352	122.5	35	LL	920
	Bdc-VgnII5b		17°45'57.44"N	120°32'09.74"E	317				
6	Bdc-VgnII6a	Offset spur	17°46'08.41"N	120°32'09.73"E	336	34	14	LL	687
	Bdc-VgnII6b		17°46'08.12"N	120°32'08.30"E	322				
7	Bdc-VgnII7a	Offset stream	17°46'17.07"N	120°32'10.53"E	347	77.5	13	LL	836
	Bdc-VgnII7b		17°46'16.68"N	120°32'08.84"E	334				
San Juan-Cabugao									
1	SJ-Cbg1a	Offset spur	17°43'25.93"N	120°31'19.67"E	235	58	25	LL	650
	SJ-Cbg1b		17°43'26.01"N	120°31'15.57"E	210				

2	SJ-Cbg2a	Offset spur	17°44'02.40"N	120°31'21.10"E	302	63.5	12	LL	957
	SJ-Cbg2b		17°44'02.38"N	120°31'17.91"E	290				
3	SJ-Cbg3a	Offset spur	17°44'21.82"N	120°31'24.60"E	317	114	17	LL	907
	SJ-Cbg3b		17°44'21.96"N	120°31'16.86"E	300				
4	SJ-Cbg4a	Offset spur	17°44'38.24"N	120°31'28.62"E	262	102	18	LL	717
	SJ-Cbg4b		17°44'39.26"N	120°31'25.79"E	244				
5	SJ-Cbg5a	Offset spur	17°45'05.28"N	120°31'34.80"E	289	165.5	61	LL	654
	SJ-Cbg5b		17°45'01.88"N	120°31'27.94"E	228				
6	SJ-Cbg6a	Offset spur	17°45'11.95"N	120°31'36.59"E	256	167	22	LL	1200
	SJ-Cbg6b		17°45'09.50"N	120°31'29.74"E	234				
7	SJ-Cbg7a	Offset spur	17°45'24.77"N	120°31'39.07"E	172	34.5	02	LL	450
	SJ-Cbg7b		17°45'24.14"N	120°31'38.20"E	170				
8	SJ-Cbg8a	Offset spur	17°45'46.29"N	120°31'42.10"E	226	37.5	18	LL	358
	SJ-Cbg8b		17°45'45.54"N	120°31'40.65"E	208				
9	SJ-Cbg9a	Offset spur	17°45'47.93"N	120°31'42.12"E	232	32	13	LL	88
	SJ-Cbg9b		17°45'47.62"N	120°31'41.04"E	219				
10	SJ-Cbg10a	Offset spur	17°45'51.17"N	120°31'43.03"E	258	62.5	32	LL	818
	SJ-Cbg10b		17°45'49.60"N	120°31'41.28"E	226				
11	SJ-Cbg11a	Offset spur	17°45'56.18"N	120°31'41.81"E	266	68	16	LL	464
	SJ-Cbg11b		17°45'55.29"N	120°31'40.81"E	250				
12	SJ-Cbg12a	Offset spur	17°45'59.55"N	120°31'41.00"E	271	151.5	30	LL	1040
	SJ-Cbg12b		17°45'57.89"N	120°31'39.45"E	241				
13	SJ-Cbg13a	Offset spur	17°46'04.78"N	120°31'39.31"E	267	130	15	LL	1060
	SJ-Cbg13b		17°46'03.38"N	120°31'38.25"E	252				
14	SJ-Cbg14a	Offset spur	17°46'11.25"N	120°31'36.19"E	291	101	12	LL	863
	SJ-Cbg14b		17°46'09.70"N	120°31'34.72"E	283				
15	SJ-Cbg15a	Offset spur	17°46'15.27"N	120°31'36.28"E	298	149	17	LL	863
	SJ-Cbg15b		17°46'13.21"N	120°31'33.85"E	281				
16	SJ-Cbg16a	Offset spur	17°46'30.43"N	120°31'39.71"E	300	48.5	11	LL	539
	SJ-Cbg16b		17°46'29.99"N	120°31'38.50"E	289				
17	SJ-Cbg17a	Offset spur	17°46'54.33"N	120°31'38.93"E	350	153	05	LL	664
	SJ-Cbg17b		17°46'53.05"N	120°31'37.25"E	345				
18	SJ-Cbg18a	Offset spur	17°47'22.60"N	120°31'36.25"E	340	168.5	27	LL	1080
	SJ-Cbg18b		17°47'21.01"N	120°31'33.87"E	313				
19	SJ-Cbg19a	Offset spur	17°47'34.73"N	120°31'36.98"E	312	72.5	47	LL	824
	SJ-Cbg19b		17°47'33.99"N	120°31'34.07"E	265				
20	SJ-Cbg20a	Offset spur	17°47'36.74"N	120°31'33.53"E	257	40	10	LL	410
	SJ-Cbg20b		17°47'36.20"N	120°31'32.62"E	247				
21	SJ-Cbg21a	Offset spur	17°47'40.38"N	120°31'35.05"E	264	139.5	26	LL	574
	SJ-Cbg21b		17°47'39.43"N	120°31'32.14"E	238				
22	SJ-Cbg22a	Offset spur	17°47'54.33"N	120°31'33.50"E	207	22	11	LL	475
	SJ-Cbg22b		17°47'53.72"N	120°31'32.73"E	196				
23	SJ-Cbg23a	Offset spur	17°47'58.74"N	120°31'35.27"E	237	128	39	LL	475
	SJ-Cbg23b		17°47'56.92"N	120°31'31.91"E	198				
24	SJ-Cbg24a	Offset spur	17°48'04.38"N	120°31'34.21"E	229	65	36	LL	919

	SJ-Cbg24b		17°48'03.12"N	120°31'31.08"E	193				
25	SJ-Cbg25a	Offset spur	17°48'18.98"N	120°31'35.33"E	249	155.5	45	LL	1010
	SJ-Cbg25b		17°48'15.91"N	120°31'29.93"E	204				
26	SJ-Cbg26a	Offset spur	17°48'26.00"N	120°31'35.73"E	254	146	56	LL	675
	SJ-Cbg26b		17°48'25.42"N	120°31'30.77"E	198				
27	SJ-Cbg27a	Offset spur	17°48'30.07"N	120°31'33.42"E	222	66	21	LL	669
	SJ-Cbg27b		17°48'29.21"N	120°31'31.94"E	201				
28	SJ-Cbg28a	Offset spur	17°48'32.61"N	120°31'32.06"E	196	53	12	LL	669
	SJ-Cbg28b		17°48'32.07"N	120°31'30.99"E	184				
Cabugao-Sinait-Badoc									
1	CSB1a	Offset spur	17°50'07.42"N	120°30'40.06"E	136	217	12	LL	632
	CSB1b		17°50'06.14"N	120°30'36.56"E	124				
2	CSB2a	Offset spur	17°50'10.43"N	120°30'42.77"E	144	85	21	LL	893
	CSB2b		17°50'10.40"N	120°30'37.99"E	123				
3	CSB3a	Offset spur	17°50'17.41"N	120°30'43.02"E	150	38	07	LL	517
	CSB3b		17°50'17.17"N	120°30'42.04"E	143				
4	CSB4a	Offset spur	17°50'25.74"N	120°30'48.08"E	160	39	18	LL	517
	CSB4b		17°50'25.94"N	120°30'45.15"E	142				
5	CSB5a	Offset spur	17°50'35.41"N	120°30'48.92"E	189	194	28	LL	1,030
	CSB5b		17°50'33.41"N	120°30'44.42"E	161				
6	CSB6a	Offset spur	17°50'55.07"N	120°30'49.99"E	142	49.5	10	LL	1,030
	CSB6b		17°50'54.87"N	120°30'48.93"E	132				
7	CSB7a	Offset spur	17°51'43.49"N	120°30'55.95"E	213	30.5	28	LL	511
	CSB7b		17°51'42.44"N	120°30'53.72"E	185				
8	CSB8a	Offset stream	17°51'48.49"N	120°30'54.59"E	195	108.5	22	LL	511
	CSB8b		17°51'44.74"N	120°30'52.31"E	173				
9	CSB9a	Offset spur	17°51'53.16"N	120°30'56.05"E	208	54	36	LL	511
	CSB9b		17°51'51.71"N	120°30'54.26"E	172				
10	CSB10a	Offset spur	17°51'55.46"N	120°30'55.15"E	202	78.5	46	LL	511
	CSB10b		17°51'53.47"N	120°30'52.98"E	156				
11	CSB11a	Offset spur	17°52'13.17"N	120°30'49.00"E	151	54	11	LL	330
	CSB11b		17°52'11.51"N	120°30'47.76"E	140				
12	CSB12a	Offset spur	17°52'15.46"N	120°30'49.50"E	146	54	10	LL	267
	CSB12b		17°52'14.05"N	120°30'48.50"E	136				
13	CSB13a	Offset stream	17°52'15.89"N	120°30'48.78"E	135	55.5	13	LL	515
	CSB13b		17°52'15.07"N	120°30'48.03"E	122				
14	CSB14a	Offset spur	17°52'18.13"N	120°30'49.62"E	161	76	37	LL	632
	CSB14b		17°52'15.87"N	120°30'47.89"E	124				
15	CSB15a	Offset spur	17°52'24.11"N	120°30'51.21"E	153	62.5	14	LL	390
	CSB15b		17°52'23.47"N	120°30'49.68"E	139				
16	CSB16a	Offset spur	17°52'28.38"N	120°30'49.52"E	142	23	17	LL	381
	CSB16b		17°52'28.09"N	120°30'48.41"E	125				
17	CSB17a	Offset spur	17°52'46.36"N	120°30'55.22"E	126	15	04	LL	189

	CSB17b		17°52'46.26"N	120°30'55.04"E	122				
18	CSB18a	Offset spur	17°52'48.94"N	120°30'56.39"E	146	27.5	16	LL	280
	CSB18b		17°52'48.58"N	120°30'55.33"E	130				
19	CSB19a	Offset spur	17°52'51.53"N	120°30'56.58"E	140	30.5	11	LL	280
	CSB19b		17°52'51.15"N	120°30'55.60"E	129				
20	CSB20a	Offset spur	17°52'32.32"N	120°31'03.55"E	191	30.5	09	LL	365
	CSB20b		17°52'31.91"N	120°31'02.98"E	182				
21	CSB21a	Offset spur	17°52'36.96"N	120°31'07.64"E	219	11.5	06	LL	358
	CSB21b		17°52'37.17"N	120°31'06.80"E	213				
22	CSB22a	Offset spur	17°52'41.66"N	120°31'10.37"E	250	40.5	22	LL	425
	CSB22b		17°52'40.76"N	120°31'08.55"E	228				
23	CSB23a	Offset spur	17°52'43.97"N	120°31'11.28"E	271	42.5	19	LL	425
	CSB23b		17°52'43.35"N	120°31'09.83"E	252				
24	CSB24a	Offset spur	17°52'47.03"N	120°31'09.64"E	260	36.5	20	LL	425
	CSB24b		17°52'46.57"N	120°31'06.13"E	240				
25	CSB25a	Offset spur	17°52'51.62"N	120°31'12.50"E	292	79.5	58	LL	761
	CSB25b		17°52'52.82"N	120°31'09.38"E	234				
26	CSB26a	Offset stream	17°52'55.94"N	120°31'11.48"E	219	59.5	48	LL	761
	CSB26b		17°52'55.88"N	120°31'09.62"E	171				
27	CSB27a	Offset spur	17°52'59.52"N	120°31'13.15"E	242	48	19	LL	761
	CSB27b		17°53'00.22"N	120°31'11.08"E	223				
28	CSB28a	Offset stream	17°53'02.86"N	120°31'14.92"E	223	83.2	48	LL	497
	CSB28b		17°53'02.38"N	120°31'11.48"E	175				
29	CSB29a	Offset spur	17°53'04.44"N	120°31'15.02"E	236	109	30	LL	497
	CSB29b		17°53'04.49"N	120°31'11.92"E	206				
30	CSB30a	Offset spur	17°53'09.29"N	120°31'15.70"E	216	39.5	23	LL	497
	CSB30b		17°53'09.08"N	120°31'14.47"E	193				
31	CSB31a	Offset spur	17°53'12.63"N	120°31'16.77"E	219	54.5	33	LL	497
	CSB31b		17°53'12.08"N	120°31'14.56"E	186				
32	CSB32a	Offset stream	17°53'16.18"N	120°31'14.73"E	156	116.5	22	LL	497
	CSB32b		17°53'14.37"N	120°31'12.93"E	134				
33	CSB33a	Offset spur	17°53'19.09"N	120°31'14.49"E	196	91.5	17	LL	665
	CSB33b		17°53'18.02"N	120°31'11.73"E	179				
34	CSB34a	Offset spur	17°53'22.58"N	120°31'15.78"E	218	122	77	LL	665
	CSB34b		17°53'22.48"N	120°31'12.24"E	141				
35	CSB35a	Offset spur	17°53'25.51"N	120°31'16.22"E	218	139.5	75	LL	665
	CSB35b		17°53'23.61"N	120°31'12.57"E	143				
36	CSB36a	Offset spur	17°53'41.44"N	120°31'14.70"E	142	125.5	14	LL	554
	CSB36b		17°53'38.19"N	120°31'14.01"E	128				
37	CSB37a	Offset spur	17°54'07.50"N	120°31'11.19"E	82	64	05	LL	554
	CSB37b		17°54'06.44"N	120°31'10.15"E	77				
38	CSB38a	Offset spur	17°54'18.31"N	120°31'12.16"E	86	27	03	LL	554
	CSB38b		17°54'17.94"N	120°31'11.20"E	83				
39	CSB39a	Offset spur	17°54'25.12"N	120°31'12.53"E	75	26	04	LL	554
	CSB39b		17°54'24.72"N	120°31'12.07"E	71				

40	CSB40a	Offset spur	17°54'26.73"N	120°31'13.56"E	89	23	09	LL	554
	CSB40b		17°54'26.57"N	120°31'12.68"E	80				
Pinili-Batac									
1	PB1a	Offset spur	17°55'05.23"N	120°32'10.67"E	87	49.5	15	LL	403
	PB1b		17°55'05.90"N	120°32'08.96"E	73				
2	PB2a	Offset spur	17°55'06.52"N	120°32'16.64"E	131	111.5	40	LL	430
	PB2b		17°55'07.41"N	120°32'13.30"E	91				
3	PB3a	Offset spur	17°55'15.53"N	120°32'23.22"E	128	78.5	20	LL	516
	PB3b		17°55'16.46"N	120°32'20.99"E	108				
4	PB4a	Offset spur	17°55'22.42"N	120°32'31.54"E	160	126.5	53	LL	575
	PB4b		17°55'21.51"N	120°32'26.69"E	107				
5	PB5a	Offset spur	17°55'25.33"N	120°32'36.68"E	150	64.5	38	LL	324
	PB5b		17°55'27.48"N	120°32'31.96"E	112				
6	PB6a	Offset spur	17°55'29.66"N	120°32'40.17"E	161	102	34	LL	304
	PB6b		17°55'31.53"N	120°32'36.75"E	127				
7	PB7a	Offset spur	17°55'32.24"N	120°32'41.74"E	129	25	04	LL	235
	PB7b		17°55'33.28"N	120°32'41.52"E	125				
8	PB8a	Offset spur	17°55'31.71"N	120°32'46.60"E	151	20.5	18	LL	300
	PB8b		17°55'32.50"N	120°32'46.03"E	133				
9	PB9a	Offset spur	17°55'33.49"N	120°32'49.12"E	130	39	10	LL	253
	PB9b		17°55'34.25"N	120°32'48.89"E	120				
10	PB10a	Offset spur	17°55'33.14"N	120°32'52.93"E	125	41.5	06	LL	328
	PB10b		17°55'34.22"N	120°32'51.90"E	119				
11	PB11a	Offset spur	17°55'36.16"N	120°33'08.84"E	158	16	29	LL-N	354
	PB11b		17°55'37.68"N	120°33'06.96"E	129				
12	PB12a	Offset spur	17°55'49.24"N	120°33'19.74"E	205	21	31	LL	345
	PB12b		17°55'50.04"N	120°33'18.07"E	174				
13	PB13a	Offset spur	17°56'19.84"N	120°33'29.79"E	201	34	39	RL-N	802
	PB13b		17°56'22.20"N	120°33'27.14"E	162				
14	PB14a	Offset spur	17°56'27.70"N	120°33'36.63"E	202	70	26	RL	571
	PB14b		17°56'29.14"N	120°33'31.53"E	176				
15	PB15a	Offset spur	17°56'49.80"N	120°33'27.44"E	91	57.5	02	LL	166
	PB15b		17°56'48.71"N	120°33'26.07"E	89				
16	PB16a	Offset stream	17°56'50.62"N	120°33'27.79"E	84	60.5	06	LL	315
	PB16b		17°56'50.30"N	120°33'26.82"E	78				
17	PB17a	Offset spur	17°57'01.95"N	120°33'31.94"E	96	39.5	05	LL	471
	PB17b		17°57'01.86"N	120°33'30.30"E	91				
18	PB18a	Offset stream	17°57'07.29"N	120°33'38.20"E	121	27.5	17	LL	315
	PB18b		17°57'07.69"N	120°33'37.00"E	104				
19	PB19a	Offset spur	17°57'08.46"N	120°33'43.39"E	162	110	29	LL	434
	PB19b		17°57'10.18"N	120°33'40.16"E	133				
20	PB20a	Offset spur	17°57'13.43"N	120°33'40.81"E	126	36.5	10	LL	599
	PB20b		17°57'13.65"N	120°33'39.42"E	116				

21	PB21a	Offset spur	17°57'23.06"N	120°33'53.10"E	170	37	20	LL	403
	PB21b		17°57'25.56"N	120°33'51.64"E	150				
22	PB22a	Offset spur	17°57'26.66"N	120°33'58.93"E	168	75.5	24	LL	420
	PB22b		17°57'28.91"N	120°33'57.25"E	144				
23	PB23a	Offset spur	17°57'30.76"N	120°33'59.88"E	146	29	10	LL	372
	PB23b		17°57'31.72"N	120°33'59.33"E	136				
24	PB24a	Offset spur	17°57'56.25"N	120°34'39.74"E	158	23.5	11	LL	295
	PB24b		17°57'56.28"N	120°34'38.40"E	147				
25	PB25a	Offset spur	17°57'57.84"N	120°34'40.00"E	159	9	11	LL-T	282
	PB25b		17°57'57.91"N	120°34'38.90"E	148				
26	PB26a	Offset spur	17°57'59.89"N	120°34'40.21"E	163	24.5	14	LL	297
	PB26b		17°57'59.83"N	120°34'39.09"E	149				
27	PB27a	Offset spur	17°58'01.90"N	120°34'39.83"E	155	12	04	LL	269
	PB27b		17°58'01.92"N	120°34'39.09"E	151				
28	PB28a	Offset spur	17°58'04.54"N	120°34'41.94"E	169	09	05	LL	339
	PB28b		17°58'04.78"N	120°34'41.21"E	164				
29	PB29a	Offset spur	17°58'07.13"N	120°34'43.66"E	173	37	08	LL	507
	PB29b		17°58'07.65"N	120°34'42.51"E	165				
30	PB30a	Offset spur	17°58'09.63"N	120°34'50.47"E	195	70	30	LL	422
	PB30b		17°58'10.76"N	120°34'47.41"E	165				
31	PB31a	Offset spur	17°58'11.63"N	120°34'50.58"E	173	9.5	05	LL	423
	PB31b		17°58'12.10"N	120°34'49.89"E	168				
32	PB32a	Offset spur	17°58'11.56"N	120°34'56.21"E	209	33.5	41	LL-T	760
	PB32b		17°58'14.70"N	120°34'52.51"E	168				
33	PB33a	Offset spur	17°58'22.92"N	120°35'01.33"E	177	38	11	LL	378
	PB33b		17°58'23.09"N	120°35'00.02"E	166				
34	PB34a	Offset spur	17°58'24.37"N	120°35'02.69"E	176	30.5	07	LL	515
	PB34b		17°58'25.07"N	120°35'10.54"E	169				
35	PB35a	Offset spur	17°58'26.52"N	120°35'06.52"E	177	25	23	RL	545
	PB35b		17°58'29.82"N	120°35'06.00"E	154				
36	PB36a	Offset spur	17°58'29.63"N	120°35'12.24"E	186	30	28	LL	705
	PB36b		17°58'32.22"N	120°35'10.79"E	158				
37	PB37a	Offset spur	17°58'54.15"N	120°35'49.98"E	195	27.5	07	LL	297
	PB37b		17°58'53.65"N	120°35'49.42"E	188				
38	PB38a	Offset spur	17°58'55.35"N	120°35'51.82"E	197	11	13	LL-T	240
	PB38b		17°58'55.64"N	120°35'50.76"E	184				
39	PB39a	Offset spur	17°58'57.07"N	120°35'51.98"E	201	22.5	16	LL	262
	PB39b		17°58'56.97"N	120°35'51.03"E	185				
40	PB40a	Offset spur	17°58'58.34"N	120°35'52.72"E	208	22.5	14	LL	284
	PB40b		17°58'58.54"N	120°35'51.81"E	194				
41	PB41a	Offset spur	17°58'59.30"N	120°35'52.68"E	207	7.5	13	LL-T	209
	PB41b		17°58'59.58"N	120°35'51.93"E	194				
42	PB42a	Offset spur	17°59'01.48"N	120°35'55.67"E	233	15	19	LL-T	358

	PB42b		17°59'01.70"N	120°35'54.56"E	214				
43	PB43a	Offset spur	17°59'12.19"N	120°35'59.20"E	287	28	23	LL	407
	PB43b		17°59'11.94"N	120°35'57.17"E	264				
44	PB44a	Offset spur	17°59'23.17"N	120°36'05.19"E	333	13.5	23	RL-T	450
	PB44b		17°59'24.28"N	120°36'03.91"E	310				
45	PB45a	Offset stream	17°59'25.87"N	120°36'06.98"E	321	36	36	LL-T	485
	PB45b		17°59'26.21"N	120°36'04.70"E	285				
46	PB46a	Offset spur	17°59'29.41"N	120°36'07.53"E	345	30	07	LL	413
	PB46b		17°59'29.48"N	120°36'07.53"E	338				
47	PB47a	Offset spur	17°59'30.65"N	120°36'9.72"E	354	15	17	LL-T	482
	PB47b		17°59'32.10"N	120°36'07.78"E	337				
48	PB48a	Offset spur	17°59'35.21"N	120°36'11.78"E	318	11	26	LL-T	386
	PB48b		17°59'35.90"N	120°36'10.73"E	292				
49	PB49a	Offset spur	17°59'37.07"N	120°36'14.98"E	335	50.5	38	LL	528
	PB49b		17°59'37.99"N	120°36'11.85"E	297				
50	PB50a	Offset stream	17°59'42.00"N	120°36'17.84"E	256	15.5	07	RL	499
	PB50b		17°59'43.03"N	120°36'17.07"E	249				
51	PB51a	Offset spur	17°59'42.56"N	120°36'21.08"E	320	29	36	RL	460
	PB51b		17°59'44.93"N	120°36'18.80"E	284				
52	PB52a	Offset spur	17°59'45.46"N	120°36'25.07"E	310	17.5	51	LL-T	454
	PB52b		17°59'46.72"N	120°36'22.51"E	259				
53	PB53a	Offset spur	17°59'50.27"N	120°36'32.93"E	322	82.5	22	LL	656
	PB53b		17°59'51.64"N	120°36'27.82"E	300				
54	PB54a	Offset spur	17°59'53.48"N	120°36'38.42"E	317	39.5	56	RL	868
	PB54b		17°59'56.58"N	120°36'36.97"E	261				
55	PB55a	Offset spur	17°59'56.48"N	120°36'43.99"E	316	44.5	34	LL	689
	PB55b		17°59'59.56"N	120°36'42.00"E	282				
56	PB56a	Offset spur	18° 00'01.04"N	120°36'47.16"E	254	29	15	RL	369
	PB56b		18° 00'02.60"N	120°36'46.02"E	239				
57	PB57a	Offset spur	18° 00'02.24"N	120°36'50.38"E	291	21	41	LL-T	477
	PB57b		18° 00'04.79"N	120°36'49.22"E	250				
58	PB58a	Offset spur	18° 00'02.86"N	120°36'54.77"E	305	31	38	RL-T	370
	PB58b		18° 00'04.70"N	120°36'54.61"E	267				
59	PB59a	Offset spur	18° 00'02.68"N	120°37'03.86"E	357	25.5	57	RL-T	498
	PB59b		18° 00'06.61"N	120°37'03.74"E	300				
60	PB60a	Offset spur	18° 00'09.11"N	120°37'11.46"E	320	12.5	31	RL-T	415
	PB60b		18° 00'11.16"N	120°37'11.27"E	289				
61	PB61a	Offset spur	18° 00'10.20"N	120°37'16.87"E	325	39	65	RL-T	557
	PB61b		18° 00'13.50"N	120°37'17.21"E	260				
62	PB62a	Offset spur	18° 00'09.94"N	120°37'24.42"E	339	29.5	86	RL-T	573
	PB62b		18° 00'15.13"N	120°37'23.33"E	253				
63	PB63a	Offset spur	18° 00'10.39"N	120°37'30.01"E	347	47.5	45	LL-T	485
	PB63b		18° 00'13.47"N	120°37'29.73"E	302				
64	PB64a	Offset spur	17°59'45.34"N	120°35'47.41"E	195	20.5	16	LL	296

	PB64b		17°59'45.66"N	120°35'45.66"E	179				
65	PB65a	Offset stream	17°59'46.68"N	120°35'46.21"E	163	18	11	LL	241
	PB65b		17°59'46.87"N	120°35'45.35"E	152				
66	PB66a	Offset spur	17°59'47.42"N	120°35'48.30"E	192	17	13	LL	374
	PB66b		17°59'47.57"N	120°35'47.39"E	179				
67	PB67a	Offset spur	17°59'49.03"N	120°35'52.50"E	229	30.5	22	RL	623
	PB67b		17°59'52.02"N	120°35'51.15"E	207				
68	PB68a	Offset spur	17°59'57.48"N	120°36'03.54"E	268	41.5	32	LL	572
	PB68b		18°00'00.07"N	120°36'00.24"E	236				
69	PB69a	Offset spur	18°00'03.98"N	120°36'18.32"E	303	83	32	LL	835
	PB69b		18°00'06.74"N	120°36'13.31"E	271				
70	PB70a	Offset spur	18°00'15.58"N	120°36'33.19"E	271	64	10	LL	834
	PB70b		18°00'17.25"N	120°36'30.31"E	261				
71	PB71a	Offset spur	18°00'47.28"N	120°37'05.74"E	277	71.5	47	LL	643
	PB71b		18°00'50.84"N	120°37'01.70"E	230				
72	PB72a	Offset stream	18°00'54.29"N	120°37'02.25"E	192	10.5	13	LL-T	339
	PB72b		18°00'54.99"N	120°37'01.54"E	179				
73	PB73a	Offset spur	18°00'54.76"N	120°37'08.49"E	249	31.5	26	LL	733
	PB73b		18°00'57.76"N	120°37'06.23"E	223				
74	PB74a	Offset spur	18°00'54.42"N	120°37'11.96"E	271	63	49	LL	697
	PB74b		18°00'58.74"N	120°37'08.18"E	222				
75	PB75a	Offset stream	18°01'03.33"N	120°37'17.80"E	217	14.5	09	LL	283
	PB75b		18°01'04.12"N	120°37'16.98"E	208				
76	PB76a	Offset spur	18°01'03.08"N	120°37'20.19"E	261	25.19	31	LL-T	451
	PB76b		18°01'04.97"N	120°37'18.71"E	230				
77	PB77a	Offset spur	18°01'05.43"N	120°37'24.74"E	270	57.5	27	LL	404
	PB77b		18°01'06.93"N	120°37'22.55"E	243				
78	PB78a	Offset spur	18°01'14.89"N	120°37'36.40"E	251	28.5	16	LL	380
	PB78b		18°01'16.08"N	120°37'35.62"E	235				
79	PB79a	Offset spur	18°01'14.37"N	120°37'42.32"E	270	12.5	13	LL-T	428
	PB79b		18°01'17.24"N	120°37'39.72"E	257				
80	PB80a	Offset stream	18°01'18.10"N	120°37'42.29"E	226	28.5	15	LL	444
	PB80b		18°01'18.99"N	120°37'41.08"E	211				
81	PB81a	Offset spur	18°01'18.06"N	120°37'45.13"E	251	30.5	25	LL	338
	PB81b		18°01'20.03"N	120°37'42.83"E	226				
82	PB82a	Offset spur	18°01'22.07"N	120°37'46.14"E	255	14	19	LL-T	631
	PB82b		18°01'22.83"N	120°37'44.97"E	236				
83	PB83a	Offset spur	17°58'49.72"N	120°33'17.05"E	200	10	11	RL-T	259
	PB83b		17°58'50.50"N	120°33'16.85"E	189				
84	PB84a	Offset spur	17°59'00.22"N	120°33'29.50"E	209	33.5	19	LL	361
	PB84b		17°59'01.66"N	120°33'27.89"E	190				
85	PB85a	Offset spur	17°59'02.23"N	120°33'36.32"E	208	30	33	RL-T	383
	PB85b		17°59'05.03"N	120°33'33.94"E	175				
86	PB86a	Offset spur	17°59'05.26"N	120°33'40.12"E	188	27.5	36	RL-T	440

1	PLS1a	Offset spur	18°01'54.51"N	120°37'35.93"E	157	16	17	LL-T	226
	PLS1b		18°01'54.58"N	120°37'34.74"E	140				
2	PLS2a	Offset stream	18°01'56.21"N	120°37'34.72"E	120	13.5	06	LL	158
	PLS2b		18°01'56.03"N	120°37'34.05"E	114				
3	PLS3a	Offset spur	18°01'56.85"N	120°37'35.05"E	130	17.5	11	LL	196
	PLS3b		18°01'56.58"N	120°37'34.51"E	119				
4	PLS4a	Offset spur	18°01'57.74"N	120°37'35.50"E	129	07	07	LL-T	161
	PLS4b		18°01'57.72"N	120°37'35.04"E	122				
5	PLS5a	Offset spur	18°02'03.42"N	120°37'38.15"E	143	20	23	LL-T	287
	PLS5b		18°02'03.21"N	120°37'35.72"E	120				
6	PLS6a	Offset spur	18°02'07.73"N	120°37'37.04"E	128	49	13	LL	318
	PLS6b		18°02'06.49"N	120°37'35.44"E	115				
7	PLS7a	Offset spur	18°02'15.98"N	120°37'39.88"E	123	39.5	11	LL	251
	PLS7b		18°02'15.61"N	120°37'38.37"E	112				
8	PLS8a	Offset spur	18°02'35.22"N	120°38'05.52"E	152	59.5	01	LL	336
	PLS8b		18°02'34.09"N	120°38'04.37"E	151				
9	PLS9a	Offset spur	18°02'45.66"N	120°38'06.07"E	139	16.5	03	LL	237
	PLS9b		18°02'45.14"N	120°38'04.92"E	136				
10	PLS10a	Offset spur	18°02'50.60"N	120°38'06.18"E	142	11	07	LL	281
	PLS10b		18°02'50.03"N	120°38'05.02"E	135				
11	PLS11a	Offset spur	18°02'51.51"N	120°38'05.32"E	133	10.5	04	LL	277
	PLS11b		18°02'50.89"N	120°38'04.61"E	129				
12	PLS12a	Offset spur	18°02'53.13"N	120°38'07.10"E	144	26	05	LL	358
	PLS12b		18°02'52.63"N	120°38'05.95"E	139				
13	PLS13a	Offset spur	18°02'58.19"N	120°38'07.90"E	164	27	09	LL	459
	PLS13b		18°02'56.81"N	120°38'06.37"E	155				
14	PLS14a	Offset spur	18°03'01.70"N	120°38'08.35"E	162	36	02	LL	323
	PLS14b		18°03'01.29"N	120°38'07.19"E	160				
15	PLS15a	Offset spur	18°03'07.71"N	120°38'06.67"E	184	29	06	LL	515
	PLS15b		18°03'07.23"N	120°38'05.47"E	178				
16	PLS16a	Offset spur	18°03'10.43"N	120°38'06.27"E	151	32.5	06	LL	435
	PLS16b		18°03'10.07"N	120°38'05.22"E	145				
17	PLS17a	Offset spur	18°03'17.96"N	120°38'02.68"E	181	12	22	RL	460
	PLS17b		18°03'17.83"N	120°38'00.34"E	159				
18	PLS18a	Offset spur	18°03'21.42"N	120°38'01.49"E	160	25	07	LL	456
	PLS18b		18°03'20.93"N	120°37'59.55"E	153				
19	PLS19a	Offset spur	18°03'24.65"N	120°37'58.97"E	151	36	09	LL	244
	PLS19b		18°03'23.98"N	120°37'57.94"E	142				
20	PLS20a	Offset spur	18°03'26.50"N	120°37'59.37"E	158	40	07	LL	418
	PLS20b		18°03'25.86"N	120°37'58.40"E	151				
21	PLS21a	Offset spur	18°03'27.58"N	120°38'02.20"E	186	23	28	LL-T	580

	PLS21b		18°03'28.07"N	120°37'58.94"E	158				
22	PLS22a	Offset spur	18°03'28.13"N	120°37'57.52"E	155	111	13	LL	580
	PLS22b		18°03'26.61"N	120°37'55.31"E	142				
23	PLS23a	Offset spur	18°03'49.78"N	120°38'01.94"E	143	107.5	26	LL	343
	PLS23b		18°03'49.65"N	120°37'57.17"E	117				
24	PLS24a	Offset spur	18°03'55.04"N	120°38'06.95"E	179	37.5	22	LL	350
	PLS24b		18°03'54.03"N	120°38'05.90"E	167				
25	PLS25a	Offset stream	18°03'56.80"N	120°38'06.60"E	153	41.5	23	LL	268
	PLS25b		18°03'56.03"N	120°38'04.82"E	130				
26	PLS26a	Offset spur	18°03'57.50"N	120°38'08.19"E	174	77	23	LL	310
	PLS26b		18°03'57.67"N	120°38'05.50"E	151				
27	PLS27a	Offset stream	18°04'00.26"N	120°38'07.82"E	139	44.5	09	LL	243
	PLS27b		18°04'00.58"N	120°38'07.12"E	130				
28	PLS28a	Offset spur	18°04'01.38"N	120°38'11.45"E	186	23	17	LL	406
	PLS28b		18°04'02.08"N	120°38'09.69"E	169				
29	PLS29a	Offset stream	18°04'03.07"N	120°38'12.36"E	154	52	14	LL	307
	PLS29b		18°04'03.54"N	120°38'10.17"E	140				
30	PLS30a	Offset spur	18°03'48.02"N	120°38'12.30"E	201	16.5	09	LL	329
	PLS30b		18°03'48.12"N	120°38'11.72"E	192				
31	PLS31a	Offset spur	18°03'51.66"N	120°38'14.65"E	204	16.5	03	LL	318
	PLS31b		18°03'51.69"N	120°38'13.96"E	201				
32	PLS32a	Offset spur	18°03'53.93"N	120°38'15.94"E	230	18.5	18	LL	383
	PLS32b		18°03'53.81"N	120°38'14.72"E	212				
33	PLS33a	Offset stream	18°03'54.93"N	120°38'15.35"E	210	14	08	LL	268
	PLS33b		18°03'54.90"N	120°38'14.80"E	202				
34	PLS34a	Offset spur	18°03'56.29"N	120°38'15.52"E	218	21.5	05	LL	577
	PLS34b		18°03'56.11"N	120°38'14.86"E	213				
35	PLS35a	Offset spur	18°03'57.98"N	120°38'16.76"E	198	29	12	LL	356
	PLS35b		18°03'58.06"N	120°38'15.90"E	186				
36	PLS36a	Offset spur	18°03'59.50"N	120°38'17.39"E	198	24.5	04	LL	294
	PLS36b		18°03'59.44"N	120°38'16.91"E	194				
37	PLS37a	Offset spur	18°04'01.62"N	120°38'17.38"E	194	16.5	09	LL	559
	PLS37b		18°04'01.30"N	120°38'16.75"E	185				
38	PLS38a	Offset spur	18°04'04.04"N	120°38'17.49"E	202	19.5	03	LL	458
	PLS38b		18°04'04.14"N	120°38'16.53"E	199				
39	PLS39a	Offset spur	18°04'08.11"N	120°38'18.34"E	189	56.5	10	LL	567
	PLS39b		18°04'07.95"N	120°38'16.81"E	179				
40	PLS40a	Offset spur	18°04'28.92"N	120°38'21.65"E	156	24.5	15	LL	593
	PLS40b		18°04'28.82"N	120°38'19.94"E	141				
41	PLS41a	Offset spur	18°04'32.51"N	120°38'21.01"E	132	19.5	08	LL	328
	PLS41b		18°04'32.05"N	120°38'20.32"E	124				
42	PLS42a	Offset spur	18°04'39.86"N	120°38'22.66"E	127	19.5	09	LL	283

	PLS42b		18°04'40.01"N	120°38'22.03"E	118				
43	PB43a	Offset spur	18°04'41.97"N	120°38'23.96"E	131	31	12	LL	665
	PLS43b		18°04'41.62"N	120°38'22.44"E	119				
44	PLS44a	Offset spur	18°04'46.15"N	120°38'25.32"E	153	28.5	15	LL	350
	PLS44b		18°04'45.94"N	120°38'23.87"E	138				
45	PLS45a	Offset spur	18°04'56.55"N	120°38'28.55"E	147	21	08	LL	285
	PLS45b		18°04'56.39"N	120°38'26.37"E	139				
46	PLS46a	Offset spur	18°05'01.15"N	120°38'28.34"E	125	08	05	LL	198
	PLS46b		18°05'01.19"N	120°38'27.73"E	120				
47	PLS47a	Offset spur	18°05'02.85"N	120°38'29.84"E	122	33.5	13	LL	277
	PLS47b		18°05'02.95"N	120°38'28.27"E	109				
48	PLS48a	Offset spur	18°05'05.46"N	120°38'29.03"E	129	18	06	LL	204
	PLS48b		18°05'05.31"N	120°38'28.66"E	123				
49	PLS49a	Offset spur	18°05'06.73"N	120°38'31.78"E	166	36.5	28	LL	284
	PLS49b		18°05'06.85"N	120°38'29.62"E	138				
50	PLS50a	Offset spur	18°05'11.39"N	120°38'32.32"E	161	74	34	LL	363
	PLS50b		18°05'10.14"N	120°38'30.45"E	127				
51	PLS51a	Offset spur	18°05'23.98"N	120°38'34.20"E	166	37	29	LL	352
	PLS51b		18°05'25.09"N	120°38'31.98"E	137				
52	PLS52a	Offset spur	18°05'28.29"N	120°38'34.33"E	120	36	05	LL	547
	PLS52b		18°05'28.37"N	120°38'32.85"E	115				
53	PLS53a	Offset spur	18°05'35.06"N	120°38'35.71"E	154	61	06	LL	672
	PLS53b		18°05'34.30"N	120°38'34.08"E	148				
54	PLS54a	Offset spur	18°05'37.18"N	120°38'35.16"E	128	19	04	LL	259
	PLS54b		18°05'37.54"N	120°38'34.09"E	124				
55	PLS55a	Offset spur	18°05'41.94"N	120°38'35.78"E	139	25	20	LL	246
	PLS55b		18°05'41.51"N	120°38'34.17"E	119				
56	PLS56a	Offset spur	18°05'45.55"N	120°38'36.38"E	146	34	10	LL	279
	PLS56b		18°05'45.65"N	120°38'34.29"E	136				
57	PLS57a	Offset stream	18°05'47.39"N	120°38'36.73"E	118	20.5	04	LL	254
	PLS57b		18°05'47.70"N	120°38'35.46"E	114				
58	PLS58a	Offset spur	18°05'47.94"N	120°38'39.59"E	137	36	15	LL	631
	PLS58b		18°05'49.41"N	120°38'36.63"E	122				
59	PLS59a	Offset spur	18°05'55.28"N	120°38'38.58"E	143	24.5	27	LL-T	260
	PLS59b		18°05'55.93"N	120°38'35.65"E	116				
60	PLS60a	Offset spur	18°06'00.39"N	120°38'42.50"E	139	21	22	LL-T	244
	PLS60b		18°06'00.59"N	120°38'40.45"E	117				
61	PLS61a	Offset spur	18°06'02.90"N	120°38'42.68"E	146	38	16	LL	250
	PLS61b		18°06'03.51"N	120°38'41.28"E	130				
62	PLS62a	Offset spur	18°06'08.24"N	120°38'48.36"E	156	48.6	26	LL	350
	PLS62b		18°06'08.71"N	120°38'44.82"E	130				
63	PLS63a	Offset spur	18°06'12.31"N	120°38'48.87"E	116	35	09	LL	643
	PLS63b		18°06'13.44"N	120°38'46.93"E	107				
64	PLS64a	Offset spur	18°06'17.40"N	120°38'49.18"E	130	24	20	RL-T	512

	PLS64b		18°06'18.96"N	120°38'47.61"E	110				
65	PLS65a	Offset spur	18°06'20.06"N	120°38'53.23"E	134	12	09	LL	344
	PLS65b		18°06'21.13"N	120°38'51.27"E	125				
66	PLS66a	Offset spur	18°06'25.58"N	120°39'00.82"E	153	10	36	RL-T	286
	PLS66b		18°06'28.29"N	120°38'57.52"E	117				
67	PLS67a	Offset spur	18°06'43.16"N	120°39'13.34"E	131	28	27	LL	441
	PLS67b		18°06'45.87"N	120°39'12.28"E	104				
68	PLS68a	Offset spur	18°06'45.47"N	120°39'21.49"E	149	40	25	RL	313
	PLS68b		18°06'47.15"N	120°39'19.97"E	124				
69	PLS69a	Offset spur	18°06'49.17"N	120°39'27.58"E	149	06	17	RL-T	469
	PLS69b		18°06'50.87"N	120°39'27.16"E	132				
70	PLS70a	Offset spur	18°06'50.15"N	120°39'34.62"E	196	13	43	RL-T	334
	PLS70b		18°06'51.81"N	120°39'32.98"E	153				
71	PLS71a	Offset spur	18°06'53.89"N	120°39'36.73"E	173	24	29	LL-T	306
	PLS71b		18°06'54.88"N	120°39'35.23"E	144				
72	PLS72a	Offset spur	18°06'58.07"N	120°39'40.32"E	168	33.5	22	LL	289
	PLS72b		18°06'57.87"N	120°39'38.44"E	146				
73	PLS73a	Offset spur	18°06'06.03"N	120°38'51.47"E	177	16.5	24	LL-T	382
	PLS73b		18°06'07.69"N	120°38'49.38"E	153				
74	PLS74a	Offset spur	18°06'12.51"N	120°39'03.07"E	222	12	26	RL-T	359
	PLS74b		18°06'13.77"N	120°39'01.08"E	196				
75	PLS75a	Offset spur	18°06'17.03"N	120°39'07.07"E	212	27.6	28	RL-T	377
	PLS75b		18°06'17.90"N	120°39'05.21"E	184				
76	PLS76a	Offset spur	18°06'21.49"N	120°39'09.88"E	227	46	34	LL	280
	PLS76b		18°06'23.09"N	120°39'07.56"E	193				
77	PLS77a	Offset spur	18°06'26.21"N	120°39'13.13"E	218	43	21	LL	312
	PLS77b		18°06'26.47"N	120°39'11.24"E	197				
78	PLS78a	Offset spur	18°06'30.65"N	120°39'17.37"E	226	58	38	LL	464
	PLS78b		18°06'31.16"N	120°39'14.63"E	188				
79	PLS79a	Offset spur	18°06'34.51"N	120°39'21.25"E	209	34.5	31	LL	418
	PLS79b		18°06'36.20"N	120°39'17.74"E	178				
80	PLS80a	Offset spur	18°07'01.82"N	120°39'44.89"E	156	36	32	LL	356
	PLS80b		18°07'02.54"N	120°39'42.34"E	124				
81	PLS81a	Offset spur	18°07'09.17"N	120°39'47.06"E	128	17.5	20	LL-T	222
	PLS81b		18°07'10.11"N	120°39'45.87"E	108				
82	PLS82a	Offset spur	18°07'15.66"N	120°39'46.71"E	81	21.5	19	LL	143
	PLS82b		18°07'15.95"N	120°39'45.44"E	62				
83	PLS83a	Offset spur	18°07'18.18"N	120°39'47.51"E	76	8.5	11	LL-T	111
	PLS83b		18°07'18.29"N	120°39'47.00"E	65				
84	PLS84a	Offset spur	18°07'22.13"N	120°39'50.25"E	93	36.5	16	LL	188
	PLS84b		18°07'22.05"N	120°39'48.97"E	77				
85	PLS85a	Offset spur	18°07'28.17"N	120°39'50.77"E	107	48	17	LL	264
	PLS85b		18°07'27.41"N	120°39'48.97"E	90				
86	PLS86a	Offset spur	18°07'32.66"N	120°39'52.71"E	103	37.5	22	LL	229

	PLS86b		18°07'32.57"N	120°39'50.76"E	81				
87	PLS87a	Offset spur	18°07'36.36"N	120°39'54.13"E	113	39	35	LL	165
	PLS87b		18°07'35.57"N	120°39'52.20"E	78				
88	PLS88a	Offset spur	18°07'38.62"N	120°39'54.72"E	109	17	15	LL	217
	PLS88b		18°07'38.47"N	120°39'53.33"E	94				
89	PLS89a	Offset spur	18°07'40.87"N	120°39'55.16"E	97	28	19	LL	330
	PLS89b		18°07'41.14"N	120°39'54.15"E	78				
90	PLS90a	Offset spur	18°07'44.02"N	120°39'57.68"E	84	32	13	LL	162
	PLS90b		18°07'44.00"N	120°39'56.69"E	71				
91	PLS91a	Offset spur	18°07'47.70"N	120°39'59.33"E	83	64	21	LL	172
	PLS91b		18°07'47.42"N	120°39'57.26"E	62				
92	PLS92a	Offset spur	18°07'54.64"N	120°40'01.51"E	77	41.5	11	LL	153
	PLS92b		18°07'54.62"N	120°40'00.09"E	66				

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01	SV-A01a	Offset spur	18° 9'11.12"N	120°40'02.07"E	79	22.05	09	LL	
	SV-A01b		18° 9'11.25"N	120°40'01.63"E	70				
02	SV-A02a	Offset spur	18° 9'14.68"N	120°40'03.02"E	114	49.77	19	LL	
	SV-A02b		18° 9'13.59"N	120°40'02.62"E	95				
03	SV-A03a	Offset spur	18° 9'17.77"N	120°40'03.48"E	115	21.22	18	LL	
	SV-A03b		18° 9'17.69"N	120°40'03.04"E	107				
04	SV-A04a	Offset spur	18° 9'19.78"N	120°40'03.03"E	103	18.44	14	LL	
	SV-A04b		18° 9'19.43"N	120°40'02.25"E	89				
05	SV-A05a	Offset spur	18° 9'20.66"N	120°40'03.18"E	103	18.88	10	LL	
	SV-A05b		18° 9'20.37"N	120°40'02.40"E	93				
06	SV-A06a	Offset spur	18° 9'21.94"N	120°40'02.11"E	97	9.93	06	LL	
	SV-A06b		18° 9'21.84"N	120°40'01.72"E	91				
07	SV-A07a	Offset spur	18°10'33.52"N	120°40'12.45"E	202	56.13	12	LL	
	SV-A07b		18°10'31.97"N	120°40'10.54"E	190				
08	SV-A08a	Offset spur	18°10'42.84"N	120°40'10.79"E	166	47.69	12	LL	
	SV-A08b		18°10'42.86"N	120°40'09.17"E	154				
09	SV-A09a	Offset spur	18°10'46.77"N	120°40'15.84"E	184	69.79	27	LL	
	SV-A09b		18°10'48.18"N	120°40'12.00"E	157				
10	SV-A10a	Offset spur	18°11'21.17"N	120°40'22.57"E	161	36.20	06	LL	
	SV-A10b		18°11'20.71"N	120°40'21.36"E	155				
11	SV-A11a	Offset spur	18°11'27.40"N	120°40'21.11"E	135	82.07	23	LL	
	SV-A11b		18°11'28.17"N	120°40'18.00"E	112				
12	SV-A12a	Offset spur	18°11'31.72"N	120°40'21.89"E	130	84.61	12	LL	
	SV-A12b		18°11'32.75"N	120°40'19.53"E	118				
13	SV-A13a	Offset spur	18°11'35.81"N	120°40'23.44"E	131	32.56	06	LL	

	SV-A13b		18°11'35.78"N	120°40'22.51"E	125				
14	SV-A14a	Offset spur	18°11'43.54"N	120°40'30.58"E	181	62.46	24	LL	
	SV-A14b		18°11'42.66"N	120°40'28.76"E	157				
15	SV-A15a	Offset spur	18°11'51.47"N	120°40'26.19"E	146	33.81	07	LL	
	SV-A15b		18°11'50.89"N	120°40'25.17"E	139				
16	SV-A16a	Offset spur	18°12'11.44"N	120°40'22.44"E	154	32.78	11	LL	
	SV-A16b		18°12'11.48"N	120°40'20.88"E	143				
17	SV-A17a	Offset spur	18°12'37.61"N	120°40'30.76"E	138	30.92	20	LL	
	SV-A17b		18°12'37.71"N	120°40'28.97"E	118				
18	SV-A18a	Offset spur	18°12'41.54"N	120°40'32.79"E	134	26.36	14	LL	
	SV-A18b		18°12'41.80"N	120°40'31.78"E	120				
19	SV-A19a	Offset spur	18°13'03.83"N	120°40'44.06"E	192	53.76	16	LL	
	SV-A19b		18°13'04.14"N	120°40'41.60"E	176				
20	SV-A20a	Offset spur	18°13'10.89"N	120°40'46.93"E	151	44.41	22	LL	
	SV-A20b		18°13'12.09"N	120°40'44.36"E	129				
21	SV-A21a	Offset spur	18°13'34.53"N	120°40'53.72"E	115	251.93	26	LL	
	SV-A21b		18°13'28.38"N	120°40'50.42"E	89				
								LL	
01	SV-B01a	Offset spur	18°12'29.83"N	120°40'33.74"E	203	33.46	20	LL	
	SV-B01b		18°12'30.02"N	120°40'32.19"E	183				
02	SV-B02a	Offset spur	18°12'39.85"N	120°40'37.69"E	165	54.67	08	LL	
	SV-B02b		18°12'39.55"N	120°40'36.16"E	157				
03	SV-B03a	Offset spur	18°12'58.44"N	120°40'54.04"E	224	159.20	65	LL	
	SV-B03b		18°12'54.84"N	120°40'49.39"E	159				
04	SV-B04a	Offset spur	18°13'04.50"N	120°40'53.29"E	216	101.62	04	LL	
	SV-B04b		18°13'03.05"N	120°40'52.47"E	212				
05	SV-B05a	Offset spur	18°13'09.40"N	120°40'55.31"E	192	30.80	20	LL	
	SV-B05b		18°13'09.19"N	120°40'53.75"E	172				
06	SV-B06a	Offset spur	18°13'13.79"N	120°40'55.84"E	189	37.83	22	LL	
	SV-B06b		18°13'13.38"N	120°40'54.26"E	167				
07	SV-B07a	Offset spur	18°13'23.94"N	120°40'56.22"E	176	55.81	09	LL	
	SV-B07b		18°13'23.30"N	120°40'55.54"E	167				
08	SV-B08a	Offset spur	18°13'26.83"N	120°40'54.95"E	145	24.02	07	LL	
	SV-B08b		18°13'26.53"N	120°40'54.43"E	138				
09	SV-B09a	Offset spur	18°13'28.59"N	120°40'56.36"E	142	36.57	07	LL	
	SV-B09b		18°13'28.06"N	120°40'54.58"E	135				
10	SV-B10a	Offset spur	18°13'32.67"N	120°41'00.27"E	148	32.43	04	LL	
	SV-B10b		18°13'33.11"N	120°40'57.56"E	144				
11	SV-B11a	Offset spur	18°13'39.00"N	120°41'00.98"E	101	91.50	10	LL	
	SV-B11b		18°13'37.79"N	120°40'59.89"E	91				
12	SV-B12a	Offset spur	18°13'40.95"N	120°41'05.96"E	121	102.95	32	LL	
	SV-B12b		18°13'41.72"N	120°41'01.41"E	89				
01	SV-C01a	Offset spur	18°13'06.36"N	120°40'33.55"E	81	28.87	13	LL	

	SV-C01b		18°13'06.51"N	120°40'32.67"E	68				
02	SV-C02a	Offset spur	18°13'16.02"N	120°40'37.08"E	77	20.45	09	LL	
	SV-C02b		18°13'16.25"N	120°40'36.20"E	68				
03	SV-C03a	Offset spur	18°13'21.86"N	120°40'38.63"E	90	56.30	10	LL	
	SV-C03b		18°13'20.81"N	120°40'37.36"E	80				
01	SV-D01a	Offset spur	18°14'37.40"N	120°40'22.81"E	93	15.36	16	N-LL	
	SV-D01b		18°14'36.49"N	120°40'22.40"E	77				
02	SV-D02a	Offset spur	18°14'40.79"N	120°40'19.26"E	106	2.94	10	N-RL	
	SV-D02b		18°14'40.08"N	120°40'18.66"E	96				
03	SV-D03a	Offset spur	18°14'40.98"N	120°40'19.87"E	108	12.20	09	LL	
	SV-D03b		18°14'40.31"N	120°40'19.30"E	99				
04	SV-D02a	Offset spur	18°14'44.85"N	120°40'15.33"E	145	5.41	11	N-RL	
	SV-D02b		18°14'44.95"N	120°40'14.41"E	134				
05	SV-D05a	Offset spur	18°14'54.59"N	120°40'12.75"E	202	28.69	51	N-LL	
	SV-D05b		18°14'52.46"N	120°40'11.48"E	151				
06	SV-D06a	Offset spur	18°15'00.71"N	120°40'08.90"E	205	16.13	28	N-LL	
	SV-D06b		18°15'00.01"N	120°40'06.05"E	177				
07	SV-D07a	Offset spur	18°15'04.20"N	120°40'05.68"E	170	5.66	31	N-LL	
	SV-D07b		18°15'03.86"N	120°40'03.74"E	139				
08	SV-D08a	Offset spur	18°15'11.52"N	120°40'04.82"E	194	27.12	35	N-RL	
	SV-D08b		18°15'10.94"N	120°40'01.35"E	159				
09	SV-D09a	Offset spur	18°15'25.40"N	120°40'00.76"E	137	22.4	13	LL	
	SV-D09b		18°15'24.44"N	120°40'00.14"E	124				
01	SV-E01a	Offset spur	18°13'54.71"N	120°40'51.99"E	82	7.30	06	LL	
	SV-E01b		18°13'54.34"N	120°40'51.67"E	76				
02	SV-E02a	Offset spur	18°13'57.60"N	120°40'50.77"E	97	17.59	16	LL	
	SV-E02b		18°13'56.61"N	120°40'50.47"E	81				
03	SV-E03a	Offset spur	18°13'59.12"N	120°40'48.13"E	101	41.41	12	LL	
	SV-E03b		18°13'58.28"N	120°40'48.32"E	89				
04	SV-E04a	Offset spur	18°13'59.30"N	120°40'44.39"E	91	5.99	11	N-LL	
	SV-E04b		18°13'58.71"N	120°40'43.94"E	80				
05	SV-E05a	Offset spur	18°14'00.92"N	120°40'41.42"E	94	19.17	12	RL	
	SV-E05b		18°14'00.70"N	120°40'39.95"E	82				
06	SV-E06a	Offset spur	18°14'04.02"N	120°40'38.51"E	87	18.95	22	N-LL	
	SV-E06b		18°14'03.31"N	120°40'37.52"E	65				
01	SV-F01a	Offset spur	18°14'00.24"N	120°41'02.84"E	185		34	LL	
	SV-F01b		18°13'59.84"N	120°41'00.27"E	151				
02	SV-F02a	Offset spur	18°14'04.20"N	120°41'02.97"E	175		29	LL	
	SV-F02b		18°14'02.86"N	120°40'59.37"E	146				
03	SV-F03a	Offset spur	18°14'04.82"N	120°40'55.24"E	119		10	LL	
	SV-F03b		18°14'04.50"N	120°40'54.79"E	109				

04	SV-F04a	Offset spur	18°14'06.98"N	120°40'54.72"E	134		07	LL	
	SV-F04b		18°14'06.68"N	120°40'53.83"E	127				
05	SV-F05a	Offset spur	18°14'14.77"N	120°40'48.78"E	74		07	LL	
	SV-F05b		18°14'14.61"N	120°40'48.40"E	67				
06	SV-F06a	Offset spur	18°14'17.89"N	120°40'49.09"E	82		21	LL	
	SV-F06b		18°14'18.13"N	120°40'47.05"E	61				
01	SV-G01a	Offset spur	18°14'54.85"N	120°39'39.74"E	79	100.93	07	LL	
	SV-G01b		18°14'51.83"N	120°39'38.67"E	72				
02	SV-G02a	Offset spur	18°15'04.16"N	120°39'41.59"E	123	12.47	03	LL	
	SV-G02b		18°15'04.36"N	120°39'40.68"E	120				
03	SV-G03a	Offset spur	18°15'11.40"N	120°39'48.00"E	102	17.17	14	LL	
	SV-G03b		18°15'11.84"N	120°39'46.93"E	88				
04	SV-G04a	Offset spur	18°15'17.08"N	120°39'53.42"E	105	41.32	07	LL	
	SV-G04b		18°15'16.87"N	120°39'51.98"E	98				
05	SV-G05a	Offset spur	18°15'27.58"N	120°39'59.60"E	132	35.75	15	LL	
	SV-G05b		18°15'27.22"N	120°39'57.52"E	117				
06	SV-G06a	Offset spur	18°15'33.74"N	120°40'03.58"E	130	24.78	32	N-LL	
	SV-G06b		18°15'34.02"N	120°40'00.41"E	98				
07	SV-G07a	Offset spur	18°15'39.75"N	120°40'04.73"E	120	53.48	16	LL	
	SV-G07b		18°15'39.89"N	120°40'02.72"E	104				
08	SV-G08a	Offset spur	18°15'43.26"N	120°40'03.78"E	104	12.03	24	N-LL	
	SV-G08b		18°15'43.19"N	120°40'02.84"E	95				
09	SV-G09a	Offset spur	18°15'47.85"N	120°40'05.19"E	116	15.25	18	N-LL	
	SV-G09b		18°15'47.35"N	120°40'03.15"E	98				
10	SV-G10a	Offset spur	18°15'53.94"N	120°40'10.70"E	156	41.63	30	LL	
	SV-G10b		18°15'54.49"N	120°40'07.38"E	126				
11	SV-G11a	Offset spur	18°15'59.45"N	120°40'11.89"E	144	51.53	18	LL	
	SV-G11b		18°15'59.88"N	120°40'08.85"E	126				
12	SV-G12a	Offset spur	18°16'09.08"N	120°40'14.92"E	106	18.52	15	RL	
	SV-G12b		18°16'09.69"N	120°40'13.10"E	91				
13	SV-G13a	Offset spur	18°16'12.02"N	120°40'16.55"E	99	35.11	06	LL	
	SV-G13b		18°16'12.18"N	120°40'15.15"E	93				
14	SV-G14a	Offset spur	18°16'14.49"N	120°40'18.82"E	99	42.39	04	LL	
	SV-G14b		18°16'15.22"N	120°40'16.99"E	95				
15	SV-G15a	Offset spur	18°16'17.72"N	120°40'22.70"E	109	24.74	01	LL	
	SV-G15b		18°16'19.13"N	120°40'21.72"E	108				
16	SV-G16a	Offset spur	18°16'22.40"N	120°40'26.85"E	98	12.56	02	LL	
	SV-G16b		18°16'22.31"N	120°40'26.42"E	96				
17	SV-G17a	Offset spur	18°16'24.07"N	120°40'28.27"E	110	10.39	03	LL	
	SV-G17b		18°16'23.99"N	120°40'27.84"E	107				
18	SV-G18a	Offset spur	18°16'25.56"N	120°40'29.72"E	120	29.57	05	LL	
	SV-G18b		18°16'25.56"N	120°40'29.10"E	115				
19	SV-G19a	Offset spur	18°16'26.92"N	120°40'31.21"E	119	18.53	09	LL	
	SV-G19b		18°16'27.07"N	120°40'30.32"E	110				

20	SV-G20a	Offset spur	18°16'28.34"N	120°40'32.68"E	135	14.13	12	LL	
	SV-G20b		18°16'28.43"N	120°40'31.60"E	123				
21	SV-G21a	Offset spur	18°16'30.72"N	120°40'33.59"E	142	23.18	14	LL	
	SV-G21b		18°16'30.77"N	120°40'32.73"E	128				
22	SV-G22a	Offset spur	18°16'41.30"N	120°40'37.37"E	184	37.25	08	LL	
	SV-G22b		18°16'40.91"N	120°40'37.04"E	176				
23	SV-G23a	Offset spur	18°16'54.25"N	120°40'40.45"E	273	48.82	11	LL	
	SV-G23b		18°16'54.50"N	120°40'38.62"E	262				
24	SV-G24a	Offset spur	18°16'58.27"N	120°40'43.38"E	270	39.94	14	LL	
	SV-G24b		18°16'58.00"N	120°40'42.04"E	256				
25	SV-G25a	Offset spur	18°17'00.77"N	120°40'44.01"E	259	32.74	11	LL	
	SV-G25b		18°17'00.64"N	120°40'43.09"E	248				
01	BP01a	Offset spur	18°16'45.18"N	120°41'09.85"E	345	18.17	10	LL	
	BP01b		18°16'44.67"N	120°41'09.25"E	335				
02	BP02a	Offset spur	18°16'47.17"N	120°41'09.12"E	330	10.92	07	LL	
	BP02b		18°16'47.28"N	120°41'08.84"E	323				
03	BP03a	Offset spur	18°16'52.48"N	120°41'10.31"E	337	14.23	06	LL	
	BP03b		18°16'52.14"N	120°41'09.45"E	331				
04	BP04a	Offset spur	18°16'54.03"N	120°41'10.26"E	314	14.59	13	LL	
	BP04b		18°16'54.07"N	120°41'09.64"E	301				
05	BP05a	Offset spur	18°16'55.56"N	120°41'10.94"E	303	23.55	16	LL	
	BP05b		18°16'55.67"N	120°41'10.32"E	287				
06	BP06a	Offset spur	18°17'08.79"N	120°41'17.37"E	251	18.50	17	LL	
	BP06b		18°17'09.26"N	120°41'16.82"E	234				
07	BP07a	Offset spur	18°17'13.31"N	120°41'19.00"E	244	31.37	15	LL	
	BP07b		18°17'12.69"N	120°41'17.97"E	229				
08	BP08a	Offset spur	18°17'18.79"N	120°41'19.78"E	238	8.88	05	LL	
	BP08b		18°17'18.73"N	120°41'19.44"E	233				
09	BP09a	Offset spur	18°17'24.75"N	120°41'21.78"E	218	19.62	13	LL	
	BP09b		18°17'24.85"N	120°41'20.51"E	205				
10	BP10a	Offset spur	18°17'27.84"N	120°41'21.22"E	177	14.91	05	LL	
	BP10b		18°17'27.95"N	120°41'20.75"E	173				
11	BP11a	Offset spur	18°17'29.85"N	120°41'22.55"E	188	22.65	05	LL	
	BP11b		18°17'30.98"N	120°41'21.72"E	183				
12	BP12a	Offset spur	18°17'36.59"N	120°41'27.40"E	159	13.39	03	LL	
	BP12b		18°17'36.83"N	120°41'26.71"E	156				
13	BP13a	Offset spur	18°17'41.76"N	120°41'31.31"E	192	45.96	06	LL	
	BP13b		18°17'42.44"N	120°41'28.94"E	186				
14	BP14a	Offset spur	18°17'48.91"N	120°41'32.80"E	168	33.36	07	LL	
	BP14b		18°17'48.92"N	120°41'31.64"E	161				
15	BP15a	Offset spur	18°17'52.72"N	120°41'31.62"E	177	16.47	04	LL	
	BP15b		18°17'52.48"N	120°41'31.46"E	173				
16	BP16a	Offset spur	18°17'54.83"N	120°41'31.86"E	193	6.59	01	LL	

	BP16b		18°17'54.92"N	120°41'31.56"E	192				
17	BP17a	Offset spur	18°18'03.06"N	120°41'34.45"E	194	80.85	12	LL	
	BP17b		18°18'02.90"N	120°41'32.88"E	182				
18	BP18a	Offset spur	18°18'06.69"N	120°41'35.31"E	176	25.28	04	LL	
	BP18b		18°18'06.53"N	120°41'34.30"E	172				
19	BP19a	Offset spur	18°18'19.19"N	120°41'32.42"E	165	5.55	03	LL	
	BP19b		18°18'19.09"N	120°41'32.16"E	162				
20	BP20a	Offset spur	18°18'29.61"N	120°41'35.01"E	219	33.87	06	LL	
	BP20b		18°18'29.39"N	120°41'34.18"E	213				
21	BP21a	Offset spur	18°18'36.00"N	120°41'37.26"E	218	11.93	10	LL	
	BP21b		18°18'36.05"N	120°41'35.95"E	208				
22	BP22a	Offset spur	18°18'37.57"N	120°41'37.51"E	204	7.04	06	LL	
	BP22b		18°18'37.72"N	120°41'37.14"E	198				
23	BP23a	Offset spur	18°18'38.90"N	120°41'38.35"E	208	10.17	10	LL	
	BP23b		18°18'39.02"N	120°41'37.74"E	198				
24	BP24a	Offset spur	18°18'40.15"N	120°41'40.62"E	228	27.40	10	LL	
	BP24b		18°18'40.45"N	120°41'39.16"E	218				
25	BP25a	Offset spur	18°19'58.82"N	120°41'38.00"E	327	50.10	20	LL	
	BP25b		18°19'57.43"N	120°41'36.42"E	307				
26	BP26a	Offset spur	18°20'02.82"N	120°41'36.63"E	330	47.60	17	LL	
	BP26b		18°20'01.61"N	120°41'36.06"E	313				
27	BP27a	Offset spur	18°20'05.17"N	120°41'36.08"E	318	28.87	06	LL	
	BP27b		18°20'04.94"N	120°41'35.57"E	312				
28	BP28a	Offset spur	18°20'24.50"N	120°41'36.83"E	405	68.76	11	LL	
	BP28b		18°20'24.33"N	120°41'33.58"E	394				
								LL	
01	PBR01a	Offset spur	18°20'15.53"N	120°41'20.09"E	307	10.04	04		
	PBR01b		18°20'15.53"N	120°41'19.84"E	303			LL	
02	PBR02a	Offset spur	18°20'18.73"N	120°41'23.38"E	334	47.84	14		
	PBR02b		18°20'18.39"N	120°41'22.26"E	320			LL	
03	PBR03a	Offset spur	18°20'22.81"N	120°41'24.50"E	335	71.94	11		
	PBR03b		18°20'21.34"N	120°41'23.43"E	324			LL	
04	PBR04a	Offset spur	18°20'25.84"N	120°41'27.38"E	343	51.81	15		
	PBR04b		18°20'25.34"N	120°41'24.98"E	328			LL	
05	PBR05a	Offset spur	18°20'45.83"N	120°41'35.89"E	312	40.03	11		
	PBR05b		18°20'46.35"N	120°41'35.07"E	301			LL	
06	PBR06a	Offset spur	18°20'49.69"N	120°41'39.89"E	319	44.36	04		
	PBR06b		18°20'49.69"N	120°41'38.13"E	315			LL	
07	PBR07a	Offset spur	18°21'07.90"N	120°41'45.72"E	327	42.85	03		
	PBR07b		18°21'07.66"N	120°41'45.03"E	324			LL	
08	PBR08a	Offset spur	18°21'16.00"N	120°41'49.29"E	349	15.72	08		
	PBR08b		18°21'15.86"N	120°41'48.78"E	341			LL	
09	PBR09a	Offset spur	18°21'20.01"N	120°41'51.02"E	353	32.48	05		
	PBR09b		18°21'19.62"N	120°41'50.23"E	348			LL	
10	PBR10a	Offset spur	18°21'25.07"N	120°41'53.58"E	366	10.32	05		

	PBR10b		18°21'25.16"N	120°41'52.63"E	361			LL	
11	PBR11a	Offset spur	18°21'29.36"N	120°41'53.95"E	356	26.42	03		
	PBR11b		18°21'29.13"N	120°41'53.63"E	353			LL	
12	PBR12a	Offset spur	18°21'33.11"N	120°41'54.52"E	367	83.01	03		
	PBR12b		18°21'33.44"N	120°41'53.65"E	364			LL	
13	PBR13a	Offset spur	18°21'38.13"N	120°42'00.89"E	376	36.75	08		
	PBR13b		18°21'38.48"N	120°41'59.11"E	369			LL	
14	PBR14a	Offset spur	18°21'42.83"N	120°41'59.67"E	373	27.77	03		
	PBR14b		18°21'42.67"N	120°41'59.03"E	370			LL	
15	PBR15a	Offset spur	18°21'46.72"N	120°42'03.18"E	367	60.05	03		
	PBR15b		18°21'46.53"N	120°42'01.85"E	364			LL	
16	PBR16a	Offset spur	18°21'50.58"N	120°42'06.06"E	350	40.30	05		
	PBR16b		18°21'50.90"N	120°42'05.20"E	345			LL	
17	PBR17a	Offset spur	18°21'53.49"N	120°42'07.56"E	343	29.87	05		
	PBR17b		18°21'53.94"N	120°42'06.82"E	338			LL	
18	PBR18a	Offset spur	18°21'55.66"N	120°42'10.15"E	349	16.05	10		
	PBR18b		18°21'56.31"N	120°42'08.90"E	339			LL	
19	PBR19a	Offset spur	18°21'59.26"N	120°42'13.60"E	344	26.92	04		
	PBR19b		18°21'58.99"N	120°42'12.56"E	340			LL	
20	PBR20a	Offset spur	18°22'04.64"N	120°42'04.11"E	337	33.29	02		
	PBR20b		18°22'04.66"N	120°42'03.62"E	335			LL	
21	PBR21a	Offset spur	18°22'07.71"N	120°42'06.95"E	339	22.17	01		
	PBR21b		18°22'07.67"N	120°42'05.86"E	338			LL	
22	PBR22a	Offset spur	18°22'17.59"N	120°42'11.75"E	349	40.77	05		
	PBR22b		18°22'17.41"N	120°42'09.94"E	344			LL	
23	PBR23a	Offset spur	18°22'27.63"N	120°42'15.18"E	350	70.09	04		
	PBR23b		18°22'26.48"N	120°42'14.09"E	346			LL	
24	PBR24a	Offset spur	18°22'34.93"N	120°42'16.63"E	332	65.23	03		
	PBR24b		18°22'36.23"N	120°42'14.81"E	329			LL	
01	PSQ01a	Offset spur	18°21'06.46"N	120°42'33.55"E	391	11.34	08	LL	
	PSQ01b		18°21'06.15"N	120°42'33.11"E	383				
02	PSQ02a	Offset spur	18°21'08.60"N	120°42'33.57"E	397	11.5	06	LL	
	PSQ02b		18°21'08.53"N	120°42'33.18"E	391				
03	PSQ03a	Offset spur	18°21'13.42"N	120°42'34.09"E	396	21.41	07	LL	
	PSQ03b		18°21'13.29"N	120°42'33.16"E	389				
04	PSQ04a	Offset spur	18°21'13.89"N	120°42'36.26"E	405	27.27	13	LL	
	PSQ04b		18°21'14.74"N	120°42'34.99"E	392				
05	PSQ05a	Offset spur	18°21'17.98"N	120°42'37.92"E	420	19.66	06	LL	
	PSQ05b		18°21'18.09"N	120°42'37.21"E	414				
06	PSQ06a	Offset stream	18°21'19.56"N	120°42'40.24"E	430	39.82	14	LL	
	PSQ06b		18°21'19.56"N	120°42'39.25"E	416				
07	PSQ07a	Offset spur	18°21'20.71"N	120°42'41.36"E	402	54.51	28	LL	
	PSQ07b		18°21'21.81"N	120°42'39.79"E	374				
08	PSQ08a	Offset spur	18°21'25.47"N	120°42'43.28"E	404	23.90	20	LL	

	PSQ08b		18°21'26.14"N	120°42'42.28"E	384				
09	PSQ09a	Offset spur	18°21'42.90"N	120°42'51.31"E	313	47.42	09	LL	
	PSQ09b		18°21'41.97"N	120°42'50.20"E	304				
10	PSQ10a	Offset spur	18°21'50.07"N	120°42'51.56"E	281	54.8	17	LL	
	PSQ10b		18°21'49.58"N	120°42'49.69"E	264				
11	PSQ11a	Offset spur	18°21'56.95"N	120°42'54.59"E	292	44.81	22	LL	
	PSQ11b		18°21'56.64"N	120°42'53.09"E	270				
12	PSQ12a	Offset spur	18°21'59.17"N	120°42'54.43"E	284	49.24	21	LL	
	PSQ12b		18°21'58.97"N	120°42'52.85"E	263				
13	PSQ13a	Offset spur	18°22'02.94"N	120°42'54.62"E	256	72.06	15	LL	
	PSQ13b		18°22'01.88"N	120°42'53.79"E	241				
14	PSQ14a	Offset spur	18°22'05.74"N	120°42'55.04"E	243	42.01	16	LL	
	PSQ14b		18°22'05.60"N	120°42'54.05"E	227				
15	PSQ15a	Offset spur	18°22'11.50"N	120°42'54.33"E	192	36.71	08	LL	
	PSQ15b		18°22'11.70"N	120°42'53.31"E	184				
16	PSQ16a	Offset spur	18°22'14.08"N	120°42'53.88"E	182	13.25	06	LL	
	PSQ16b		18°22'14.17"N	120°42'53.37"E	176				
17	PSQ17a	Offset spur	18°22'15.33"N	120°42'54.97"E	188	10.46	06	LL	
	PSQ17b		18°22'15.34"N	120°42'54.34"E	182				
18	PSQ18a	Offset spur	18°22'17.12"N	120°42'56.29"E	186	16.66	03	LL	
	PSQ18b		18°22'16.96"N	120°42'55.42"E	183				
19	PSQ19a	Offset stream	18°22'17.80"N	120°42'56.19"E	184	30.80	13	LL	
	PSQ19b		18°22'17.69"N	120°42'55.54"E	171				
20	PSQ20a	Offset spur	18°22'23.05"N	120°42'55.28"E	159	19.80	06	LL	
	PSQ20b		18°22'22.58"N	120°42'54.70"E	153				
21	PSQ21a	Offset spur	18°22'38.97"N	120°42'53.39"E	246	43.07	15	LL	
	PSQ21b		18°22'38.28"N	120°42'53.07"E	231				
22	PSQ22a	Offset spur	18°22'43.04"N	120°42'50.16"E	174	27.28	11	LL	
	PSQ22b		18°22'42.50"N	120°42'50.02"E	163				
23	PSQ23a	Offset spur	18°22'44.14"N	120°42'49.53"E	176	19.4	07	LL	
	PSQ23b		18°22'43.92"N	120°42'49.25"E	169				
24	PSQ24a	Offset spur	18°22'47.01"N	120°42'49.88"E	189	42.5	23	LL	
	PSQ24b		18°22'45.59"N	120°42'48.44"E	166				
25	PSQ25a	Offset spur	18°22'57.53"N	120°42'49.84"E	189	9.24	03	LL	
	PSQ25b		18°22'57.33"N	120°42'49.55"E	186				
26	PSQ26a	Offset spur	18°23'01.35"N	120°42'51.63"E	239	80.33	29	LL	
	PSQ26b		18°22'59.68"N	120°42'50.17"E	210				
27	PSQ27a	Offset spur	18°23'05.27"N	120°42'51.39"E	222	18.23	14	LL	
	PSQ27b		18°23'04.91"N	120°42'50.85"E	208				
28	PSQ28a	Offset spur	18°23'17.37"N	120°42'56.42"E	265	16.82	10	LL	
	PSQ28b		18°23'17.43"N	120°42'55.72"E	255				
29	PSQ29a	Offset spur	18°23'19.71"N	120°42'57.52"E	269	35.76	32	LL	
	PSQ29b		18°23'19.40"N	120°42'56.31"E	237				
30	PSQ30a	Offset spur	18°23'24.98"N	120°42'59.15"E	251	15.98	09	LL	
	PSQ30b		18°23'24.83"N	120°42'58.57"E	242				

31	PSQ31a	Offset spur	18°23'30.19"N	120°43'02.03"E	273	26.10	06	LL	
	PSQ31b		18°23'30.07"N	120°43'01.58"E	267				
32	PSQ32a	Offset spur	18°23'50.13"N	120°43'14.15"E	319	26.67	17	T-LL	
	PSQ32b		18°23'49.65"N	120°43'12.70"E	302				
33	PSQ33a	Offset spur	18°23'59.44"N	120°43'16.87"E	377	28	13	LL	
	PSQ33b		18°23'58.80"N	120°43'16.53"E	364				
34	PSQ34a	Offset spur	18°24'01.57"N	120°43'17.67"E	376	42.88	17	LL	
	PSQ34b		18°24'00.33"N	120°43'16.59"E	359				
35	PSQ35a	Offset spur	18°24'06.52"N	120°43'20.81"E	406	39.17	16	LL	
	PSQ35b		18°24'06.06"N	120°43'19.87"E	390				
36	PSQ36a	Offset spur	18°24'12.48"N	120°43'22.75"E	431	16.32	10	LL	
	PSQ36b		18°24'13.36"N	120°43'22.30"E	421				
37	PSQ37a	Offset spur	18°24'15.30"N	120°43'27.63"E	428	10.56	19	T-LL	
	PSQ37b		18°24'16.05"N	120°43'26.97"E	409				
38	PSQ38a	Offset spur	18°24'23.65"N	120°43'31.96"E	416	10.28	12	T-RL	
	PSQ38b		18°24'23.95"N	120°43'30.56"E	404				
39	PSQ39a	Offset spur	18°24'26.41"N	120°43'32.72"E	403	13.09	12	RL	
	PSQ39b		18°24'27.31"N	120°43'31.97"E	391				
40	PSQ40a	Offset spur	18°24'28.49"N	120°43'37.25"E	417	46.34	19	LL	
	PSQ40b		18°24'29.51"N	120°43'36.17"E	398				
41	PSQ41a	Offset spur	18°24'32.06"N	120°43'40.32"E	400	14.75	13	RL	
	PSQ41b		18°24'33.02"N	120°43'40.05"E	387				
42	PSQ42a	Offset spur	18°24'36.39"N	120°43'43.96"E	431	67.88	20	LL	
	PSQ42b		18°24'35.93"N	120°43'42.51"E	411				
43	PSQ43a	Offset spur	18°24'41.84"N	120°43'47.80"E	435	27.58	35	T-LL	
	PSQ43b		18°24'41.68"N	120°43'45.62"E	400				
44	PSQ44a	Offset stream	18°24'44.44"N	120°43'47.02"E	394	50.64	29	LL	
	PSQ44b		18°24'44.43"N	120°43'45.73"E	365				
45	PSQ45a	Offset spur	18°24'45.41"N	120°43'47.76"E	400	42.8	15	LL	
	PSQ45b		18°24'45.68"N	120°43'46.55"E	385				
46	PSQ46a	Offset spur	18°24'51.18"N	120°43'52.54"E	413	43.2	20	LL	
	PSQ46b		18°24'51.26"N	120°43'51.41"E	393				
47	PSQ47a	Offset spur	18°24'55.94"N	120°43'53.91"E	454	41.79	28	LL	
	PSQ47b		18°24'54.93"N	120°43'52.00"E	426				
48	PSQ48a	Offset spur	18°25'01.23"N	120°43'52.49"E	443	53.55	29	LL	
	PSQ48b		18°25'00.22"N	120°43'51.21"E	414				
49	PSQ49a	Offset spur	18°25'05.62"N	120°43'53.92"E	447	16.04	15	LL	
	PSQ49b		18°25'05.53"N	120°43'53.17"E	432				
50	PSQ50a	Offset spur	18°25'10.14"N	120°43'54.10"E	433	71.11	06	LL	
	PSQ50b		18°25'09.90"N	120°43'53.48"E	427				
51	PSQ51a	Offset spur	18°25'13.48"N	120°43'54.32"E	414	34.58	13	LL	
	PSQ51b		18°25'13.17"N	120°43'53.32"E	401				
52	PSQ52a	Offset spur	18°25'20.29"N	120°43'55.62"E	427	49.69	26	LL	
	PSQ52b		18°25'19.76"N	120°43'54.54"E	401				
53	PSQ53a	Offset spur	18°25'29.59"N	120°44'00.77"E	479	49.84	39	LL	

	PSQ53b		18°25'29.05"N	120°43'59.18"E	440				
54	PSQ54a	Offset spur	18°25'37.13"N	120°44'00.27"E	437	14.26	11	LL	
	PSQ54b		18°25'36.97"N	120°43'59.72"E	426				
55	PSQ55a	Offset spur	18°25'42.39"N	120°44'00.09"E	442	47.74	11	LL	
	PSQ55b		18°25'42.02"N	120°43'59.62"E	431				
56	PSQ56a	Offset spur	18°25'54.48"N	120°44'01.72"E	428	28.58	13	LL	
	PSQ56b		18°25'54.42"N	120°44'00.57"E	415				
57	PSQ57a	Offset spur	18°25'59.37"N	120°44'02.73"E	416	99.2	13	LL	
	PSQ57b		18°25'58.55"N	120°44'01.40"E	403				
58	PSQ58a	Offset spur	18°26'11.44"N	120°44'00.97"E	356	50.97	05	LL	
	PSQ58b		18°26'10.58"N	120°44'00.47"E	351				
59	PSQ59a	Offset spur	18°26'32.20"N	120°44'01.56"E	349	33.12	04	LL	
	PSQ59b		18°26'32.37"N	120°44'00.48"E	345				
60	PSQ60a	Offset spur	18°26'36.77"N	120°44'02.22"E	337	24.93	03	LL	
	PSQ60b		18°26'36.27"N	120°44'01.66"E	334				
61	PSQ61a	Offset spur	18°26'50.72"N	120°44'08.76"E	327	98.17	14	LL	
	PSQ61b		18°26'49.79"N	120°44'04.85"E	313				
62	PSQ62a	Offset spur	18°26'59.60"N	120°44'10.98"E	324	91.12	08	LL	
	PSQ62b		18°26'58.95"N	120°44'09.47"E	316				
63	PSQ63a	Offset spur	18°27'04.02"N	120°44'09.90"E	317	88.07	04	LL	
	PSQ63b		18°27'03.54"N	120°44'08.82"E	313				
64	PSQ64a	Offset spur	18°27'23.03"N	120°44'14.90"E	368	48.46	10	LL	
	PSQ64b		18°27'21.53"N	120°44'13.31"E	358				
65	PSQ65a	Offset spur	18°27'36.29"N	120°44'12.90"E	331	28.79	08	LL	
	PSQ65b		18°27'35.43"N	120°44'12.29"E	323				
66	PSQ66a	Offset spur	18°27'39.86"N	120°44'08.55"E	303	36.13	06	LL	
	PSQ66b		18°27'39.04"N	120°44'08.03"E	297				
67	PSQ67a	Offset spur	18°27'44.61"N	120°44'10.03"E	313	66.47	16	LL	
	PSQ67b		18°27'43.15"N	120°44'07.99"E	297				
68	PSQ68a	Offset spur	18°27'52.31"N	120°44'07.21"E	325	39.32	14	LL	
	PSQ68b		18°27'51.06"N	120°44'06.12"E	311				
69	PSQ69a	Saddle	18°27'59.77"N	120°44'04.92"E	321	37.01	01	LL	
	PSQ69b		18°27'59.79"N	120°44'5.46"E	320				
70	PSQ70a	Offset spur	18°28'16.51"N	120°44'00.48"E	272	33.06	10	LL	
	PSQ70b		18°28'17.13"N	120°44'00.40"E	262				
71	PSQ71a	Offset spur	18°28'28.52"N	120°43'55.29"E	282	47.84	15	LL	
	PSQ71b		18°28'29.78"N	120°43'56.29"E	267				
72	PSQ72a	Offset spur	18°28'43.43"N	120°43'55.66"E	211	28.3	11	LL	
	PSQ72b		18°28'43.72"N	120°43'56.77"E	200				
73	PSQ73a	Offset spur	18°28'47.10"N	120°43'56.97"E	212	56.14	14	LL	
	PSQ73b		18°28'47.50"N	120°43'57.84"E	198				
74	PSQ74a	Offset spur	18°28'53.00"N	120°43'55.75"E	195	108.1	30	LL	
	PSQ74b		18°28'54.63"N	120°43'56.98"E	165				
75	PSQ75a	Offset spur	18°29'00.91"N	120°43'56.44"E	131	24.78	13	LL	
	PSQ75b		18°29'01.21"N	120°43'57.42"E	118				

76	PSQ76a	Offset spur	18°29'17.80"N	120°44'00.62"E	113	28.09	16	LL	
	PSQ76b		18°29'17.34"N	120°43'58.75"E	97				
77	PSQ77a	Offset spur	18°29'23.13"N	120°43'59.68"E	87	88.19	08	LL	
	PSQ77b		18°29'22.00"N	120°43'58.11"E	79				
77	PSQ78a	Offset spur	18°29'28.89"N	120°44'01.02"E	105	29.17	11	LL	
	PSQ78b		18°29'28.18"N	120°43'59.65"E	94				
77	PSQ79a	Offset spur	18°29'37.42"N	120°43'59.10"E	114	74.84	30	LL	
	PSQ79b		18°29'35.12"N	120°43'57.14"E	84				
Bangui									
01	BNG-A01a	Offset spur	18°29'09.16"N	120°44'05.78"E	194	48.54	25	LL	
	BNG-A01b		18°29'08.30"N	120°44'04.55"E	169				
02	BNG-A02a	Offset spur	18°29'20.32"N	120°44'08.18"E	164	17.88	15	LL	
	BNG-A02b		18°29'20.42"N	120°44'06.96"E	149				
03	BNG-A03a	Offset spur	18°29'25.44"N	120°44'10.01"E	164	26.89	21	LL	
	BNG-A03b		18°29'25.31"N	120°44'08.98"E	143				
04	BNG-A04a	Offset stream	18°29'28.24"N	120°44'09.95"E	113	45.65	05	LL	
	BNG-A04b		18°29'27.55"N	120°44'08.30"E	108				
05	BNG-A05a	Offset spur	120°44'8.30"E	120°44'11.69"E	188	82.15	26	LL	
	BNG-A05b		18°29'35.66"N	120°44'09.59"E	162				
06	BNG-A06a	Offset stream	18°29'40.41"N	120°44'12.10"E	143	86.13	05	LL	
	BNG-A06b		18°29'40.32"N	120°44'10.15"E	138				
07	BNG-A07a	Offset spur	18°29'50.17"N	120°44'20.86"E	300	67.61	43	LL	
	BNG-A07b		18°29'49.95"N	120°44'17.52"E	257				
08	BNG-A08a	Offset spur	18°29'54.89"N	120°44'24.41"E	301	24.73	48	T-LL	
	BNG-A08b		18°29'55.18"N	120°44'21.87"E	253				
09	BNG-A09a	Offset spur	18°29'56.68"N	120°44'27.51"E	330	38.56	28	LL	
	BNG-A09b		18°29'57.32"N	120°44'25.28"E	302				
10	BNG-A10a	Offset spur	18°30'00.96"N	120°44'28.04"E	319	35.81	53	T-LL	
	BNG-A10b		18°30'01.91"N	120°44'25.47"E	266				
11	BNG-A11a	Offset spur	18°30'10.62"N	120°44'36.10"E	302	66.98	42	LL	
	BNG-A11b		18°30'10.21"N	120°44'32.76"E	260				
12	BNG-A12a	Offset spur	18°30'14.28"N	120°44'35.36"E	267	9.93	16	T-LL	
	BNG-A12b		18°30'14.50"N	120°44'34.13"E	251				
01	BNG-B01a	Offset spur	18°29'34.30"N	120°43'16.81"E	181	50.07	19	LL	
	BNG-B01b		18°29'34.36"N	120°43'15.68"E	162				
02	BNG-B02a	Offset spur	18°29'36.29"N	120°43'19.14"E	180	52.44	41	LL	
	BNG-B02b		18°29'36.91"N	120°43'17.16"E	139				
03	BNG-B03a	Offset spur	18°29'39.24"N	120°43'21.00"E	172	10.19	27	T-RL	
	BNG-B03b		18°29'40.20"N	120°43'19.99"E	145				
04	BNG-B04a	Offset spur	18°29'42.46"N	120°43'23.26"E	172	8.67	21	T-LL	

	BNG-B04b		18°29'43.06"N	120°43'22.17"E	151				
05	BNG-B05a	Offset spur	18°29'46.12"N	120°43'24.63"E	155	31.22	15	LL	
	BNG-B05b		18°29'46.56"N	120°43'23.57"E	140				
06	BNG-B06a	Offset spur	18°29'52.54"N	120°43'25.55"E	169	61.12	19	LL	
	BNG-B06b		18°29'51.56"N	120°43'24.02"E	140				
07	BNG-B07a	Offset spur	18°29'57.90"N	120°43'26.75"E	124	10.32	16	T-RL	
	BNG-B07b		18°29'58.02"N	120°43'25.87"E	108				
08	BNG-B08a	Offset spur	18°30'00.97"N	120°43'31.44"E	155	105.59	22	LL	
	BNG-B08b		18°30'01.86"N	120°43'29.05"E	133				
09	BNG-B09a	Offset spur	18°30'06.52"N	120°43'34.36"E	159	8.63	40	T-RL	
	BNG-B09b		18°30'09.03"N	120°43'32.36"E	119				
10	BNG-B10a	Offset spur	18°30'11.52"N	120°43'37.81"E	126	10.44	23	T-RL	
	BNG-B10b		18°30'13.74"N	120°43'35.74"E	103				
11	BNG-B11a	Offset spur	18°30'14.06"N	120°43'41.25"E	134	6.55	29	T-RL	
	BNG-B11b		18°30'16.41"N	120°43'40.21"E	105				
12	BNG-B12a	Offset spur	18°30'13.43"N	120°43'47.34"E	193	49.85	44	LL	
	BNG-B12b		18°30'16.16"N	120°43'46.47"E	149				
13	BNG-B13a	Offset spur	18°30'15.05"N	120°43'52.74"E	198	20.55	58	T-RL	
	BNG-B13b		18°30'18.35"N	120°43'50.83"E	140				
14	BNG-B14a	Offset spur	18°30'15.33"N	120°43'59.45"E	266	18.32	46	T-RL	
	BNG-B14b		18°30'18.26"N	120°43'58.29"E	220				
15	BNG-B15a	Offset spur	18°30'20.45"N	120°44'05.44"E	223	34.61	40	T-LL	
	BNG-B15b		18°30'22.54"N	120°44'04.27"E	183				
16	BNG-B16a	Offset spur	18°30'21.01"N	120°44'09.02"E	242	36.58	33	LL	
	BNG-B16b		18°30'22.52"N	120°44'07.87"E	209				
17	BNG-B17a	Offset spur	18°30'21.97"N	120°44'14.90"E	247	49.10	73	T-LL	
	BNG-B17b		18°30'26.08"N	120°44'12.60"E	174				
18	BNG-B18a	Offset spur	18°30'26.57"N	120°44'16.03"E	172	31.16	51	T-RL	
	BNG-B18b		18°30'28.83"N	120°44'16.53"E	121				
19	BNG-B19a	Offset spur	18°30'27.92"N	120°44'21.57"E	173	28.29	24	LL	
	BNG-B19b		18°30'30.16"N	120°44'21.11"E	149				
20	BNG-B20a	Offset spur	18°30'27.87"N	120°44'27.73"E	190	28.25	54	T-RL	
	BNG-B20b		18°30'30.98"N	120°44'26.52"E	136				
21	BNG-B21a	Offset spur	18°30'31.67"N	120°44'34.59"E	176	33.05	48	T-RL	
	BNG-B21b		18°30'33.86"N	120°44'34.35"E	128				
22	BNG-B22a	Offset spur	18°30'36.94"N	120°44'47.63"E	243	45.73	64	T-LL	
	BNG-B22b		18°30'39.40"N	120°44'45.34"E	179				
23	BNG-B23a	Offset spur	18°30'40.70"N	120°44'55.42"E	234	71.4	35	RL	
	BNG-B23b		18°30'44.45"N	120°44'55.32"E	199				
24	BNG-B24a	Offset spur	18°30'54.70"N	120°45'06.46"E	147	10.99	09	RL	
	BNG-B24b		18°30'55.81"N	120°45'05.51"E	138				
25	BNG-B25a	Offset spur	18°30'59.02"N	120°45'02.69"E	138	35.82	04	LL	
	BNG-B25b		18°31'00.28"N	120°45'01.25"E	134				
26	BNG-B26a	Offset spur	18°31'04.26"N	120°45'09.40"E	159	104.97	42	LL	
	BNG-B26b		18°31'04.43"N	120°45'05.83"E	117				

01	BNG-C01a	Offset spur	18°30'41.52"N	120°45'47.01"E	186	83.31	29	RL	
	BNG-C01b		18°30'44.59"N	120°45'49.89"E	157				
02	BNG-C02a	Offset spur	18°30'38.96"N	120°46'02.04"E	188	58.37	30	LL	
	BNG-C02b		18°30'42.62"N	120°46'01.63"E	158				
03	BNG-C03a	Offset spur	18°30'51.80"N	120°46'28.32"E	281	48.58	10	RL	
	BNG-C03b		18°30'53.61"N	120°46'27.76"E	271				
04	BNG-C04a	Offset spur	18°30'55.60"N	120°46'37.07"E	265	20.71	16	LL	
	BNG-C04b		18°30'57.55"N	120°46'37.54"E	249				
05	BNG-C05a	Offset spur	18°30'46.00"N	120°47'07.84"E	198	14.31	49	T-LL	
	BNG-C05b		18°30'48.34"N	120°47'07.69"E	149				
06	BNG-C06a	Offset spur	18°30'42.43"N	120°47'18.18"E	208	17.37	18	T-LL	
	BNG-C06b		18°30'43.40"N	120°47'19.08"E	190				
07	BNG-C07a	Offset spur	18°30'37.02"N	120°47'28.20"E	178	42.22	30	LL	
	BNG-C07b		18°30'39.50"N	120°47'29.50"E	148				
08	BNG-C08a	Offset spur	18°30'33.81"N	120°47'50.79"E	193	32.97	49	T-LL	
	BNG-C08b		18°30'35.82"N	120°47'52.22"E	144				
01	BNG-D01a	Offset spur	18°30'15.30"N	120°45'35.57"E	176	29.37	18	LL	
	BNG-D01b		18°30'18.56"N	120°45'35.17"E	158				
02	BNG-D02a	Offset spur	18°30'15.74"N	120°45'44.27"E	215	7.8	08	T-RL	
	BNG-D02b		18°30'16.84"N	120°45'44.72"E	207				
03	BNG-D03a	Offset spur	18°30'10.91"N	120°45'50.95"E	219	26.5	08	LL	
	BNG-D03b		18°30'12.45"N	120°45'50.66"E	211				
04	BNG-D04a	Offset spur	18°30'11.76"N	120°45'55.66"E	226	13.52	09	LL	
	BNG-D04b		18°30'12.24"N	120°45'55.04"E	217				
05	BNG-D05a	Offset spur	18°30'12.51"N	120°45'59.46"E	277	39.65	27	LL	
	BNG-D05b		18°30'13.71"N	120°45'57.70"E	250				
06	BNG-D06a	Offset spur	18°30'11.42"N	120°46'07.70"E	352	47.46	30	LL	
	BNG-D06b		18°30'15.46"N	120°46'06.24"E	322				
07	BNG-D07a	Offset spur	18°30'13.91"N	120°46'42.78"E	390	32.78	18	LL	
	BNG-D07b		18°30'16.12"N	120°46'42.96"E	372				
01	BNG-E01a	Offset spur	18°29'59.19"N	120°46'04.40"E	421	39.17	30	RL	
	BNG-E01b		18°30'00.76"N	120°46'04.87"E	391				
02	BNG-E02a	Offset spur	18°29'56.27"N	120°46'09.83"E	433	17.80	35	T-RL	
	BNG-E02b		18°29'58.13"N	120°46'10.26"E	398				
03	BNG-E03a	Offset spur	18°29'57.49"N	120°46'20.39"E	372	56.17	24	RL	
	BNG-E03b		18°29'59.48"N	120°46'21.67"E	348				
04	BNG-E04a	Offset spur	18°29'59.59"N	120°46'28.24"E	376	18.24	30	T-LL	
	BNG-E04b		18°30'00.36"N	120°46'26.97"E	346				
05	BNG-E05a	Offset spur	18°30'02.29"N	120°46'31.75"E	384	29.78	53	T-LL	
	BNG-E05b		18°30'03.42"N	120°46'29.57"E	331				
06	BNG-E06a	Offset spur	18°30'10.81"N	120°46'44.43"E	430	28.67	28	LL	
	BNG-E06b		18°30'12.34"N	120°46'43.70"E	402				

07	BNG-E07a	Offset spur	18°30'14.14"N	120°46'57.80"E	371	62.4	26	LL	
	BNG-E07b		18°30'16.02"N	120°46'55.89"E	345				
08	BNG-E08a	Offset spur	18°30'07.27"N	120°47'15.87"E	611	47.64	61	T-LL	
	BNG-E08b		18°30'10.91"N	120°47'15.17"E	550				
09	BNG-E09a	Offset spur	18°30'12.97"N	120°47'16.93"E	519	27.01	64	T-LL	
	BNG-E09b		18°30'16.00"N	120°47'18.51"E	455				
10	BNG-E10a	Offset spur	18°30'15.28"N	120°47'22.62"E	437	70.99	16	LL	
	BNG-E10b		18°30'16.85"N	120°47'22.35"E	421				
11	BNG-E11a	Offset spur	18°30'12.90"N	120°47'28.70"E	442	153.00	49	LL	
	BNG-E11b		18°30'15.91"N	120°47'28.50"E	393				
12	BNG-E12a	Offset spur	18°30'09.97"N	120°47'50.29"E	540	141.80	109	LL	
	BNG-E12b		18°30'16.32"N	120°47'51.21"E	431				
13	BNG-E13a	Offset spur	18°30'04.89"N	120°48'00.55"E	463	242.96	116	LL	
	BNG-E13b		18°30'13.64"N	120°48'02.77"E	347				
Pagudpud									
01	PAG-A01a	Offset spur	18°28'26.81"N	120°47'26.68"E	583	16.6	06	LL	
	PAG-A01b		18°28'26.48"N	120°47'26.26"E	577				
02	PAG-A02a	Offset spur	18°28'29.02"N	120°47'26.50"E	592	13.29	08	LL	
	PAG-A02b		18°28'28.78"N	120°47'25.83"E	584				
03	PAG-A03a	Offset spur	18°28'33.50"N	120°47'26.66"E	613	32.17	19	LL	
	PAG-A03b		18°28'33.03"N	120°47'25.81"E	594				
04	PAG-A04a	Offset spur	18°28'38.02"N	120°47'27.25"E	626	45.77	17	LL	
	PAG-A04b		18°28'37.57"N	120°47'25.08"E	609				
05	PAG-A05a	Offset spur	18°28'45.85"N	120°47'32.59"E	621	54.33	11	LL	
	PAG-A05b		18°28'45.84"N	120°47'30.51"E	610				
06	PAG-A06a	Offset spur	18°28'56.83"N	120°47'46.54"E	708	66.78	76	LL	
	PAG-A06b		18°28'57.73"N	120°47'39.81"E	632				
07	PAG-A07a	Offset spur	18°30'05.78"N	120°48'14.44"E	454	57.87	37	LL	
	PAG-A07b		18°30'07.37"N	120°48'12.93"E	417				
08	PAG-A08a	Offset spur	18°30'09.62"N	120°48'20.38"E	474	82.13	36	LL	
	PAG-A08b		18°30'12.68"N	120°48'18.79"E	338				
09	PAG-A09a	Offset spur	18°30'10.23"N	120°48'30.59"E	437	126.71	33	LL	
	PAG-A09b		18°30'14.53"N	120°48'28.94"E	404				
10	PAG-A10a	Offset spur	18°30'21.45"N	120°48'38.72"E	249	40.27	25	LL	
	PAG-A10b		18°30'22.72"N	120°48'38.35"E	224				
11	PAG-A11a	Offset spur	18°30'51.46"N	120°49'39.68"E	628	80.93	24	LL	
	PAG-A11b		18°30'53.35"N	120°49'38.62"E	604				
12	PAG-A12a	Offset spur	18°31'43.65"N	120°50'50.94"E	207	48.95	35	LL	
	PAG-A12b		18°31'44.07"N	120°50'48.74"E	172				
13	PAG-A13a	Offset spur	18°31'51.36"N	120°51'05.08"E	316	104.19	36	LL	
	PAG-A13b		18°31'51.37"N	120°51'03.28"E	280				
14	PAG-A14a	Offset spur	18°32'27.14"N	120°51'44.98"E	556	90.80	27	LL	
	PAG-A14b		18°32'26.95"N	120°51'42.23"E	529				

15	PAG-A15a	Offset spur	18°32'34.78"N	120°52'00.14"E	599	71.44	27	LL	
	PAG-A15b		18°32'34.49"N	120°51'57.97"E	572				
16	PAG-A16a	Offset spur	18°32'37.07"N	120°52'02.05"E	604	75.61	19	LL	
	PAG-A16b		18°32'36.72"N	120°52'00.18"E	585				
17	PAG-A17a	Offset spur	18°32'40.89"N	120°52'02.40"E	569	31.64	13	LL	
	PAG-A17b		18°32'40.90"N	120°52'01.11"E	556				
18	PAG-A18a	Offset spur	18°32'45.09"N	120°52'08.89"E	607	65.92	36	LL	
	PAG-A18b		18°32'45.91"N	120°52'06.27"E	571				
19	PAG-A19a	Offset spur	18°33'05.70"N	120°53'16.42"E	888	598	89	LL	
	PAG-A19b		18°33'01.81"N	120°52'52.58"E	799				
20	PAG-A20a	Offset spur	18°33'09.14"N	120°53'05.36"E	771	174.88	46	LL	
	PAG-A20b		18°33'10.28"N	120°53'01.48"E	725				
21	PAG-A21a	Offset spur	18°33'12.23"N	120°53'14.83"E	772	95.52	55	LL	
	PAG-A21b		18°33'14.49"N	120°53'11.88"E	717				
22	PAG-A22a	Offset spur	18°33'28.16"N	120°53'30.51"E	577	111.86	14	LL	
	PAG-A22b		18°33'31.65"N	120°53'24.99"E	463				
01	PAG-B01a	Offset spur	18°31'45.13"N	120°50'45.72"E	136	63.86	14	LL	
	PAG-B01b		18°31'44.89"N	120°50'43.87"E	122				
02	PAG-B02a	Offset spur	18°32'03.20"N	120°51'00.04"E	190	53.80	29	LL	
	PAG-B02b		18°32'03.26"N	120°50'58.27"E	161				
03	PAG-B03a	Offset spur	18°32'17.97"N	120°51'17.04"E	319	45.34	17	LL	
	PAG-B03b		18°32'17.77"N	120°51'16.50"E	302				
04	PAG-B04a	Offset spur	18°32'24.22"N	120°51'26.25"E	450	97.35	47	LL	
	PAG-B04b		18°32'26.16"N	120°51'23.45"E	403				
05	PAG-B05a	Offset spur	18°32'28.74"N	120°51'34.97"E	466	74.96	16	LL	
	PAG-B05b		18°32'30.48"N	120°51'34.20"E	450				

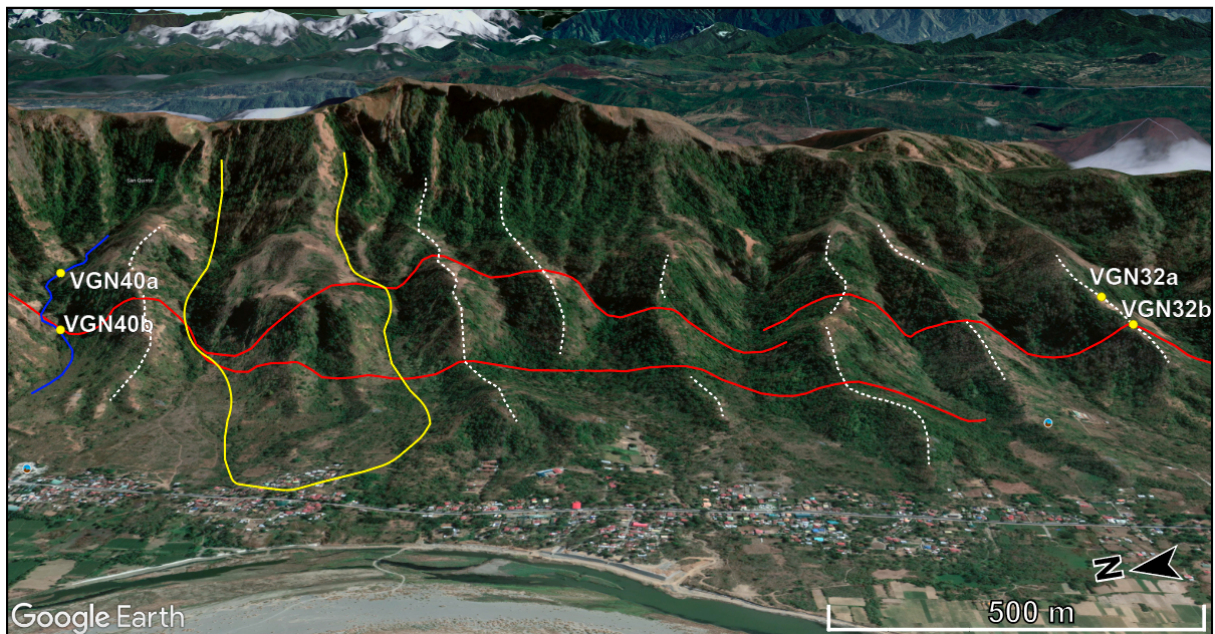


Figure S1. Google Earth perspective view of offset features along a stretch of the Santa-Vigan area. The blue line indicates an example of an offset stream, white lines indicate selected offset spur crests, while the yellow line outlines an example of an offset spur.



Figure S2. A left-laterally offset spur and a pressure ridge mark the location of the Vigan-Aggao fault's active trace along the mountain front in San Nicolas, Ilocos Norte.

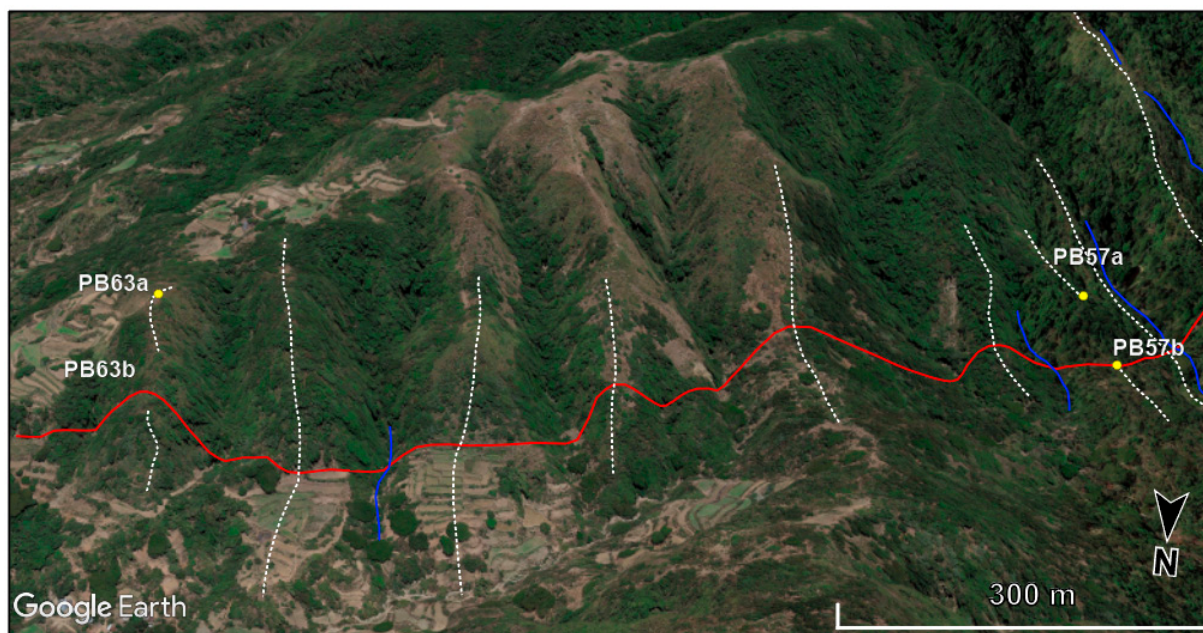


Figure S3. Google Earth perspective view of offset features along a stretch of the Vigan-Aggao fault in the Batac-Paoay area. This part of the fault marks where it bends within a broad right-step gap. Offsets are marked by elevated vertical offset values and involving both left-lateral and right lateral slip.



Figure S4. Google Earth perspective view of a series of left-laterally offset spurs along the highly linear portion of the fault in the Batac-Sarrat area.

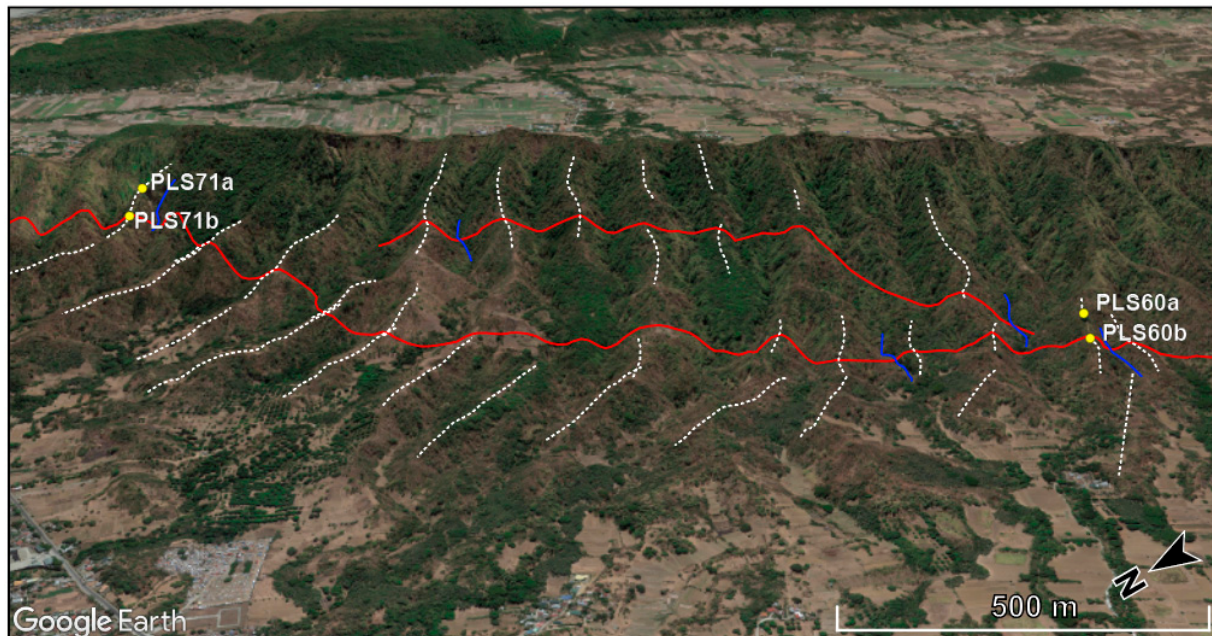


Figure S5. Google Earth perspective view of offset features along a stretch of the Vigan-Aggao fault in the Batac-Sarrat area. This part of the fault marks where it bends within a right-step gap. Offsets are marked by elevated vertical offset values and involving both left-lateral and right lateral slip.



Figure S6. Google Earth perspective view of a series of left-laterally offset spurs along the highly linear portion of the San Juan-Vintar segment in the Sarrat-Vintar-Bacarra area.



Figure S7. Google Earth perspective view of offset features along a stretch of the Vigan-Aggao fault in the Sarrat-Vintar-Bacarra area. This part of the fault is within a left-step gap. Offsets are marked by elevated vertical offset values and involving both left-lateral and right lateral slip.



Figure S8. A series of left-laterally offset spurs with large vertical components of displacement along the trace between the Bacarra-Burgos and Pagudpud segments in Bangui, Ilocos Norte.



Figure S9. Offset spurs with relatively large vertical component of displacement. Both left-lateral and right-lateral senses of slip are involved within this localized zone of transpression between the Bacarra-Burgos and Pagudpud segments in Bangui, Ilocos Norte.

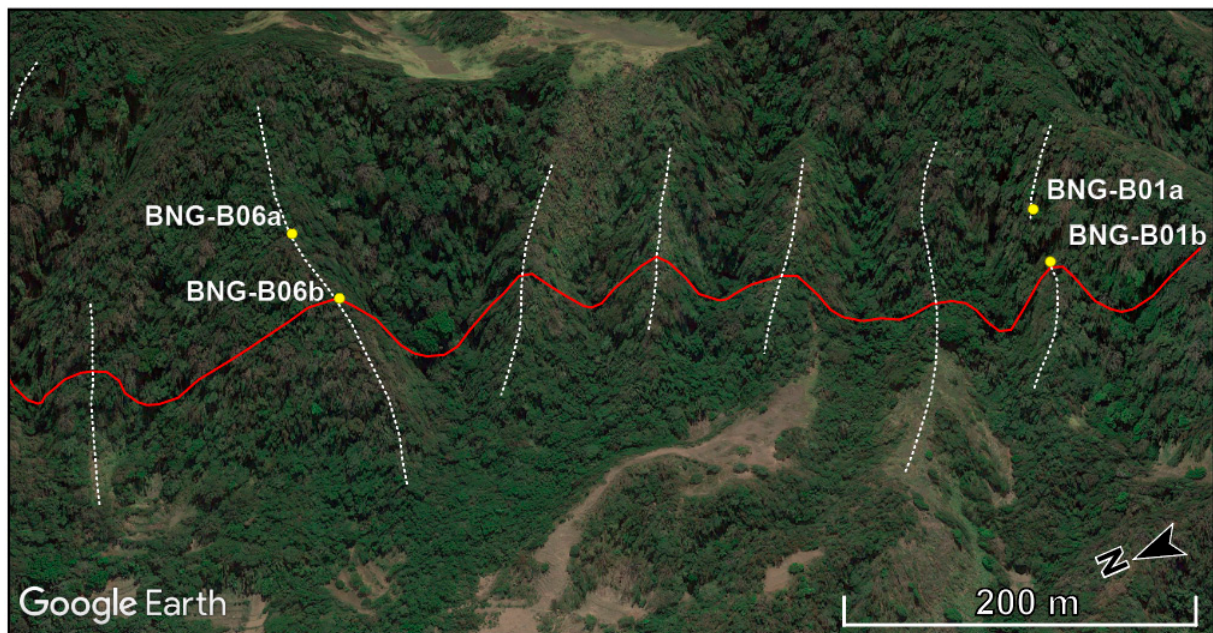


Figure S10. Google Earth perspective view of offset features along a stretch of the Vigan-Aggao fault in the Bangui area. This part of the fault is within a major bend. Offsets are marked by elevated vertical offset values and involving both left-lateral and right lateral slip.

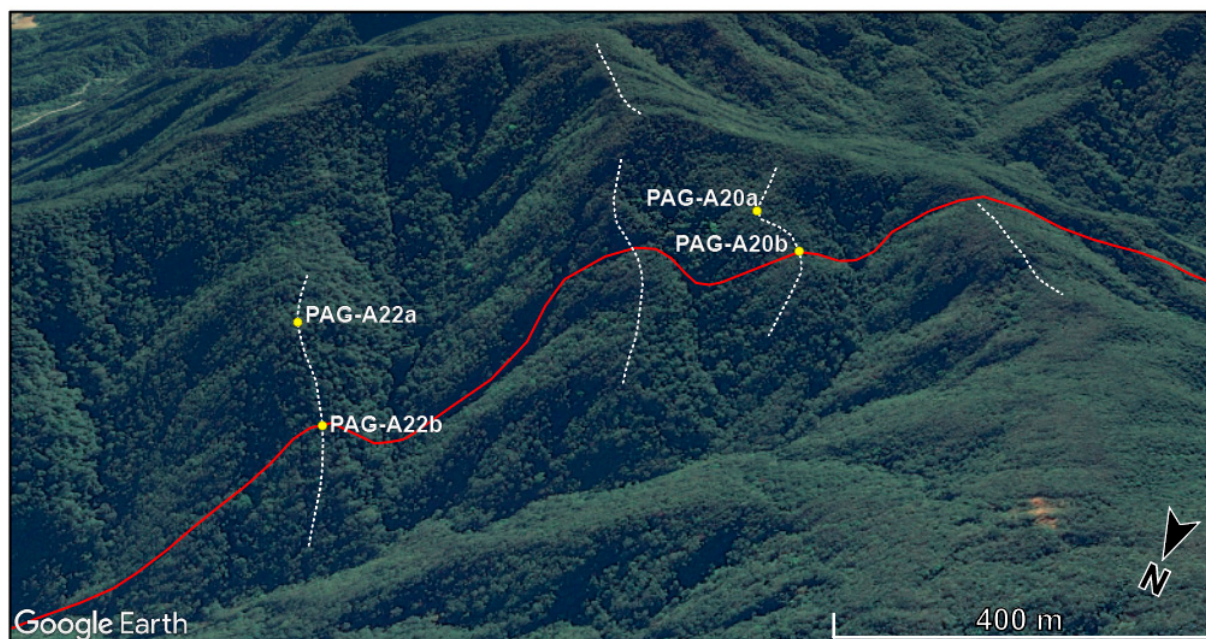


Figure S11. Google Earth perspective view of offset features along the northernmost segment of the Vigan-Aggao fault in Pagudpud. This part of the fault is highly linear and is characterized by offset features involving left-lateral strike slip.