

Appendix 1. Parcels sampled in 2014. Column headings indicate: baseline management type (*A,B,C,D,E*), *plant community* type based on Holland (1986), and *location* based on proximity to production wells.

Appendix 2. Figures 1-169 show mean perennial vegetation cover plotted over time for the 169 vegetation parcels sampled since 1991 using the Green Book Line Point monitoring program, and SMA average cover data (through 2011), and depth to water (through 2010). Asterisks depict years that perennial cover is significantly different from the baseline period (sampled between 1984 and 1987) using Welch's t-test for unequal variances. Thirteen parcels do not have raw transect data and thus could not be analyzed with statistics based on the variance. In these cases, the baseline cover value is shown without error bars.

Appendix 3. Grass, shrub, and herb proportion regressed against time in parcels with baseline transect data and at least 10 years of line point data. Columns indicate: wellfield or control parcel status, *W/C*; sample size, *n*; coefficient of determination, *R*²; p-value, *p*; slope parameter estimate, *slope*; upper and lower 95% confidence interval for the slope parameter, *95% Confidence Interval*; direction (positive or negative) of the relationship, *Slope direction*. Bold text in p-value column, indicates significant regressions at $\alpha = 0.05$. Rows were sorted by grass slope direction to highlight changes in grass proportion.

Appendix 4. Evaluation of sampling error of LADWP permanent line point locations using Landsat remote sensing data and SMA estimates of vegetation cover for each sampled vegetation parcel.

Appendix 1. Parcels sampled in 2014. Column headings indicate: baseline management type (A,B,C,D,E), plant community type based on Holland (1986), and location based on proximity to production wells.

Parcel	TYPE	Plant Community	Location	Parcel	TYPE	Plant Community	Location
BIS055	C	Alkali Meadow	wellfield	UNW031	E	Rush/Sedge Meadow	non-wellfield
BLK009	C	Alkali Meadow	wellfield	BGP031	C	Alkali Meadow	non-wellfield
BLK016	C	Alkali Meadow	wellfield	BGP047	C	Alkali Meadow	non-wellfield
BLK033	C	Alkali Meadow	wellfield	BLK099	C	Alkali Meadow	non-wellfield
BLK039	C	Alkali Meadow	wellfield	BLK142	C	Alkali Meadow	non-wellfield
BLK075	C	Alkali Meadow	wellfield	BLK143	C	Alkali Meadow	non-wellfield
BLK093	C	Alkali Meadow	wellfield	IND064	C	Alkali Meadow	non-wellfield
BLK094	C	Alkali Meadow	wellfield	IND119	C	Alkali Meadow	non-wellfield
FSL116	C	Alkali Meadow	wellfield	IND151	C	Alkali Meadow	non-wellfield
FSL123	C	Alkali Meadow	wellfield	IND163	C	Alkali Meadow	non-wellfield
IND011	C	Alkali Meadow	wellfield	LNP018	C	Alkali Meadow	non-wellfield
IND019	C	Alkali Meadow	wellfield	LNP050	C	Alkali Meadow	non-wellfield
IND024	C	Alkali Meadow	wellfield	LNP095	C	Alkali Meadow	non-wellfield
IND026	C	Alkali Meadow	wellfield	MAN060	C	Alkali Meadow	non-wellfield
IND029	C	Alkali Meadow	wellfield	PLC024	C	Alkali Meadow	non-wellfield
IND035	C	Alkali Meadow	wellfield	PLC097	C	Alkali Meadow	non-wellfield
IND205	C	Alkali Meadow	wellfield	PLC121	C	Alkali Meadow	non-wellfield
LAW030	C	Alkali Meadow	wellfield	PLC144	C	Alkali Meadow	non-wellfield
LAW052	C	Alkali Meadow	wellfield	PLC223	C	Alkali Meadow	non-wellfield
LAW078	C	Alkali Meadow	wellfield	TIN050	C	Alkali Meadow	non-wellfield
LAW085	C	Alkali Meadow	wellfield	UNW029	C	Alkali Meadow	non-wellfield
LAW107	C	Alkali Meadow	wellfield	UNW074	C	Alkali Meadow	non-wellfield
LAW120	C	Alkali Meadow	wellfield	UNW074	C	Alkali Meadow	non-wellfield
LAW122	C	Alkali Meadow	wellfield	IND067	C	Nevada Saltbush Meadow	non-wellfield
MAN006	C	Alkali Meadow	wellfield	LNP045	C	Nevada Saltbush Meadow	non-wellfield
PLC028	C	Alkali Meadow	wellfield	MAN014	C	Nevada Saltbush Meadow	non-wellfield
TIN053	C	Alkali Meadow	wellfield	UNW079	C	Nevada Saltbush Meadow	non-wellfield
TIN064	C	Alkali Meadow	wellfield	LAW137	C	Rabbitbrush Meadow	non-wellfield
BGP154	C	Nevada Saltbush Meadow	wellfield	PLC106	C	Rabbitbrush Meadow	non-wellfield
BLK024	C	Nevada Saltbush Meadow	wellfield	PLC137	C	Rabbitbrush Meadow	non-wellfield
IND111	C	Nevada Saltbush Meadow	wellfield	IND096	B	Nevada Saltbush Scrub	non-wellfield
IND139	C	Nevada Saltbush Meadow	wellfield	LNP019	B	Nevada Saltbush Scrub	non-wellfield
LAW112	C	Nevada Saltbush Meadow	wellfield	UNW039	B	Nevada Saltbush Scrub	non-wellfield
BIS085	C	Rabbitbrush Meadow	wellfield	PLC072	B	Rabbitbrush Scrub	non-wellfield
BIS085	C	Rabbitbrush Meadow	wellfield	PLC092	B	Rabbitbrush Scrub	non-wellfield
BLK044	C	Rabbitbrush Meadow	wellfield	BLK115	A	Alkali Meadow	non-wellfield
FSP004	C	Rabbitbrush Meadow	wellfield	FSL187	A	Alkali Meadow	non-wellfield
IND021	C	Rabbitbrush Meadow	wellfield	PLC136	A	Alkali Meadow	non-wellfield
LAW062	C	Rabbitbrush Meadow	wellfield				
LAW082	C	Rabbitbrush Meadow	wellfield				
BGP162	B	Nevada Saltbush Scrub	wellfield				
BLK021	B	Nevada Saltbush Scrub	wellfield				
BLK074	B	Nevada Saltbush Scrub	wellfield				
IND122	B	Nevada Saltbush Scrub	wellfield				
IND132	B	Nevada Saltbush Scrub	wellfield				
MAN007	B	Nevada Saltbush Scrub	wellfield				
MAN037	B	Nevada Saltbush Scrub	wellfield				
BLK002	B	Rabbitbrush Scrub	wellfield				
FSP006	A/C	Alkali Meadow	wellfield				
BLK095	A	Alkali Meadow	wellfield				
FSL065	A	Alkali Meadow	wellfield				
LAW065	A	Alkali Meadow	wellfield				
TIN068	A	Alkali Meadow	wellfield				
LAW063	A	Desert Greasewood Scrub	wellfield				
TIN028	A	Desert Greasewood Scrub	wellfield				
BLK069	A	Desert Sink Scrub	wellfield				
BLK077	A	Desert Sink Scrub	wellfield				
BLK096	A	Desert Sink Scrub	wellfield				
IND106	A	Nevada Saltbush Scrub	wellfield				
IND133	A	Nevada Saltbush Scrub	wellfield				
IND231	A	Nevada Saltbush Scrub	wellfield				

Appendix 2. Figures 1-169 show mean perennial vegetation cover plotted over time for the 169 vegetation parcels sampled since 1991 using the Green Book Line Point monitoring program, and SMA average cover data (through 2011), and depth to water (through 2010). Asterisks depict years that perennial cover is significantly different from the baseline period (sampled between 1984 and 1987) using Welch's t-test for unequal variances. Thirteen parcels do not have raw transect data and thus could not be analyzed with statistics based on the variance. In these cases, the baseline cover value is shown without error bars.

BGP013
Alkali Meadow (Type A)

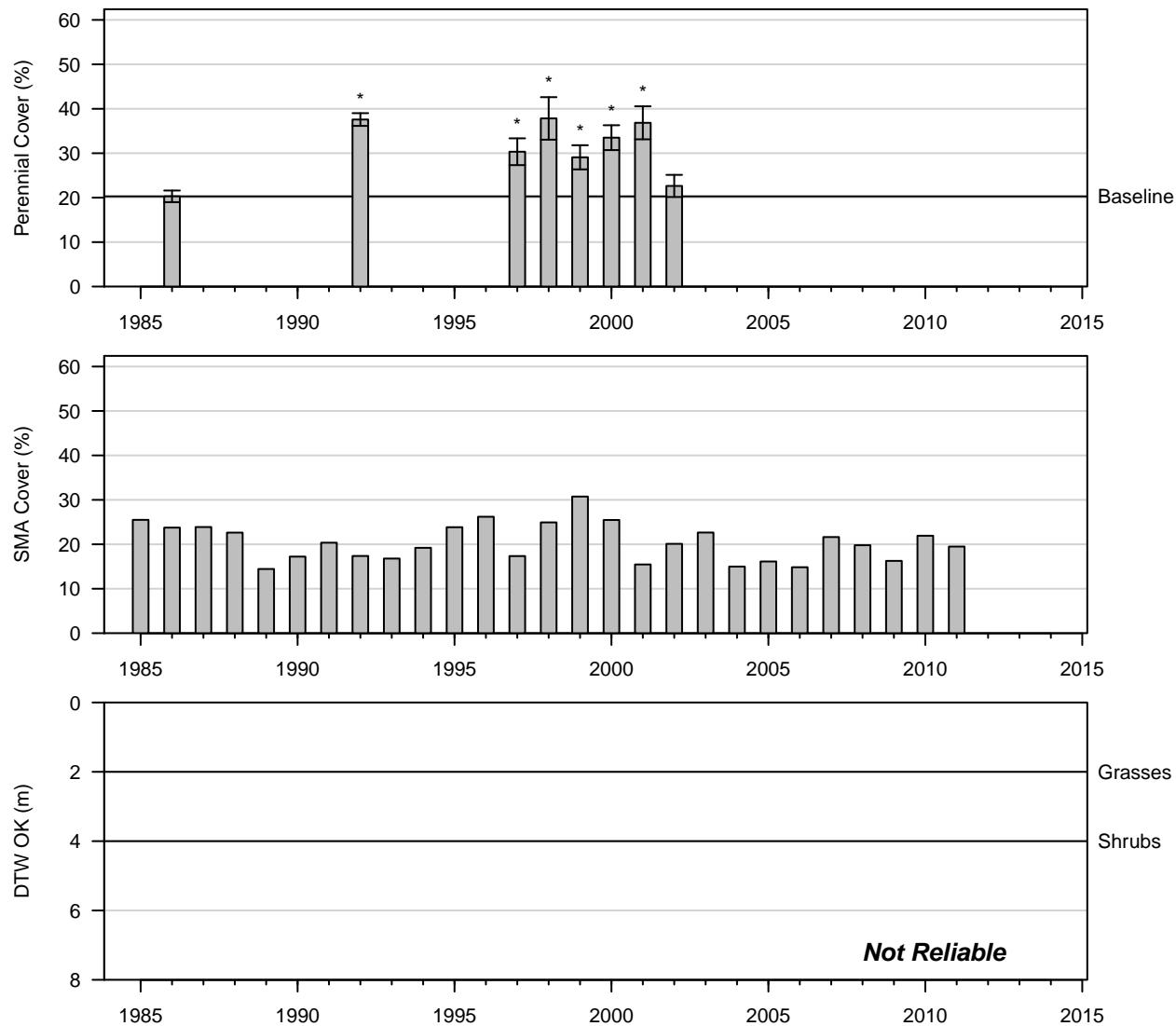


Figure 1: 2002 Control

BGP019
Rush/Sedge Meadow (Type E)

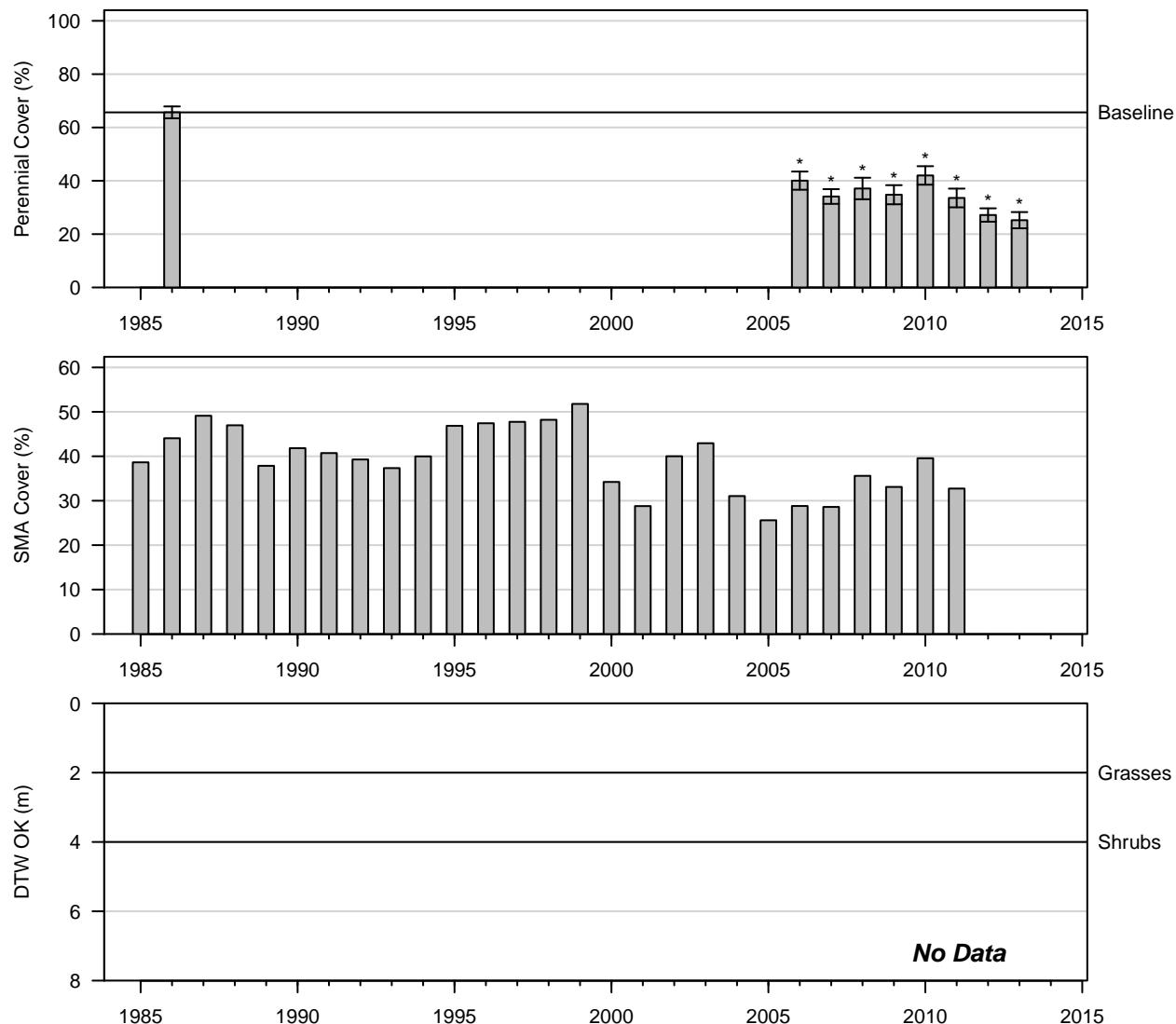


Figure 2: 2013 Control

BGP031
Alkali Meadow (Type C)

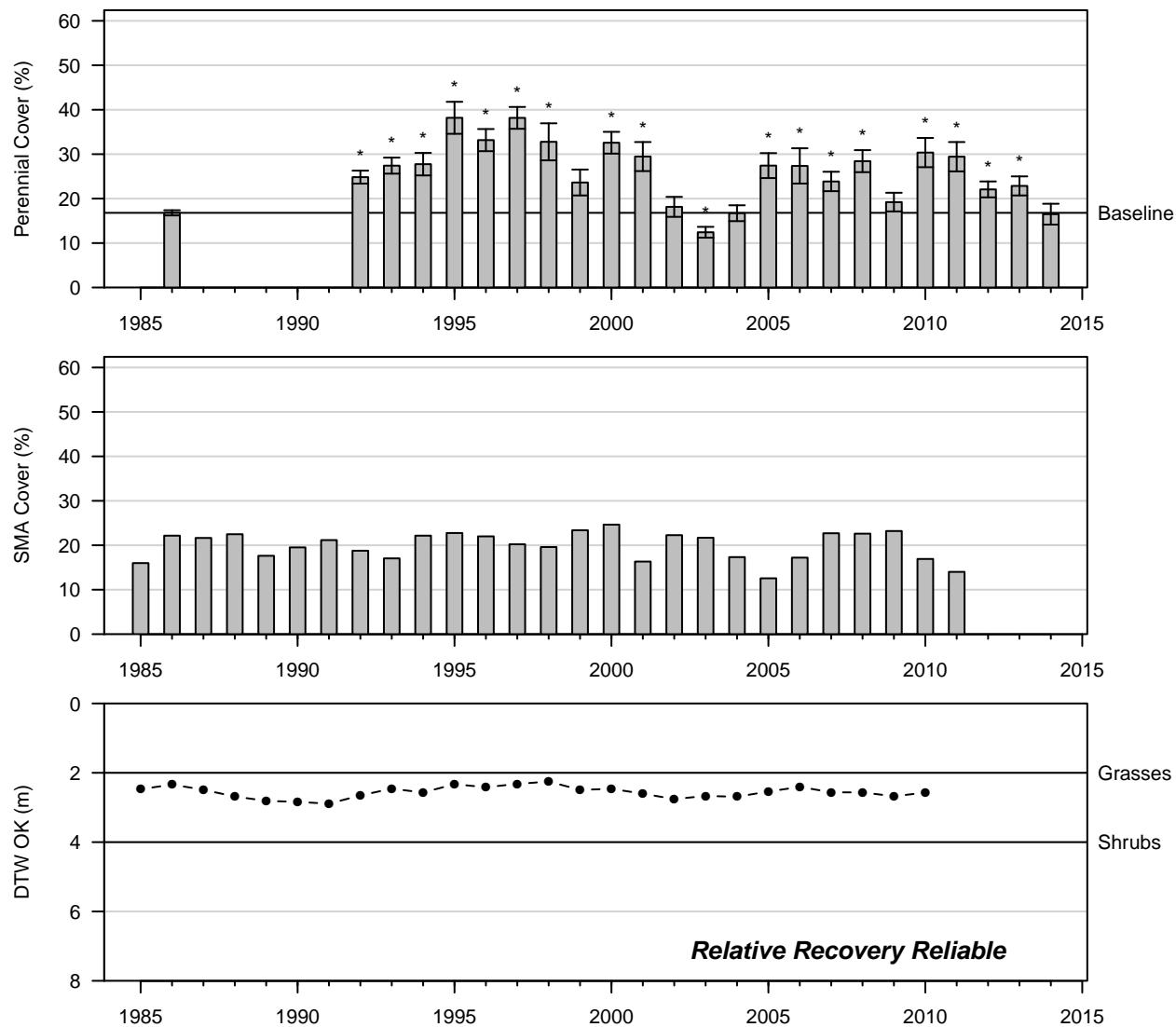


Figure 3: 2014 Control

BGP047
Alkali Meadow (Type C)

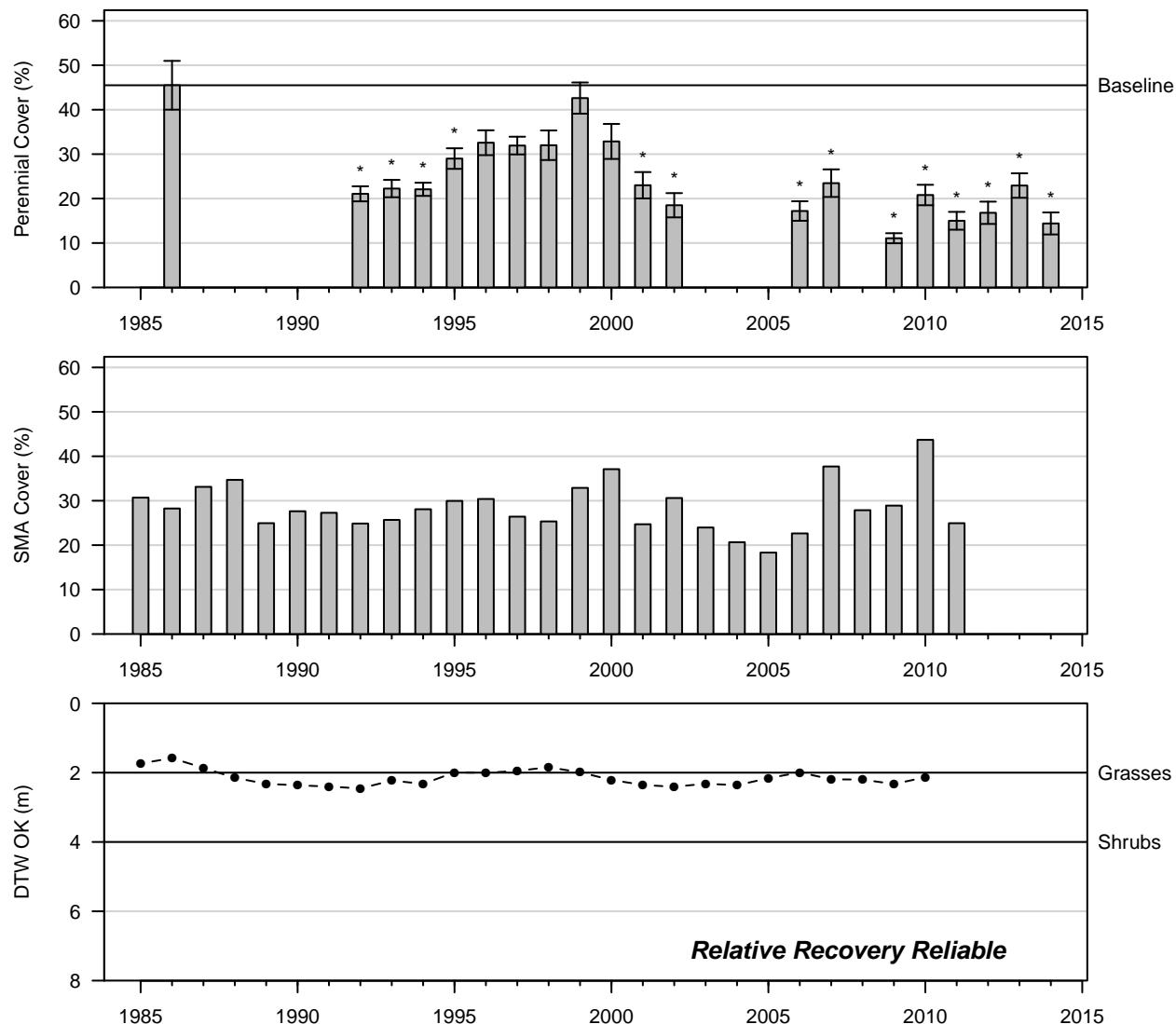


Figure 4: 2014 Control

BGP086
Alkali Meadow (Type C)

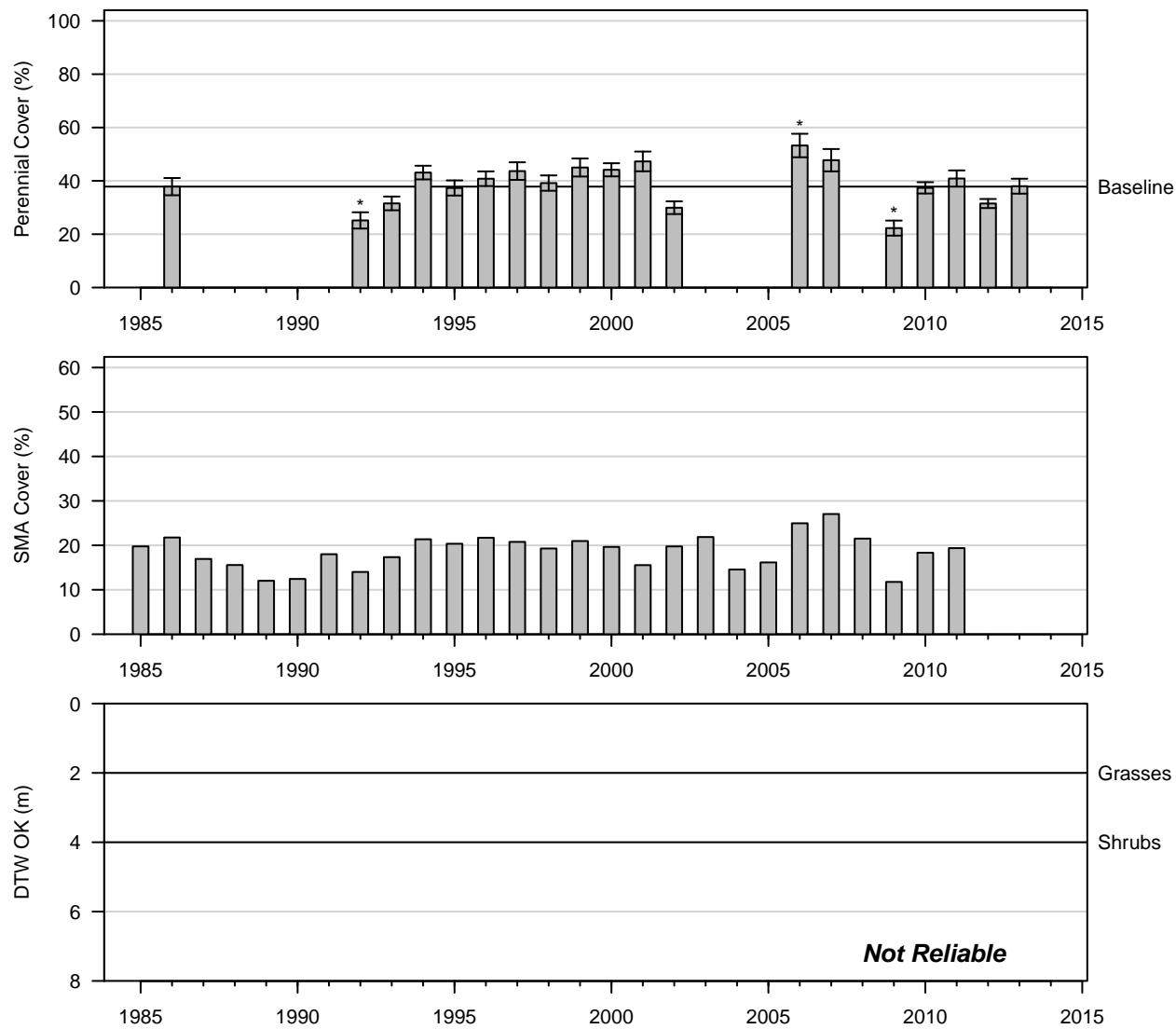


Figure 5: 2013 Wellfield

BGP088
Nevada Saltbush Scrub (Type B)

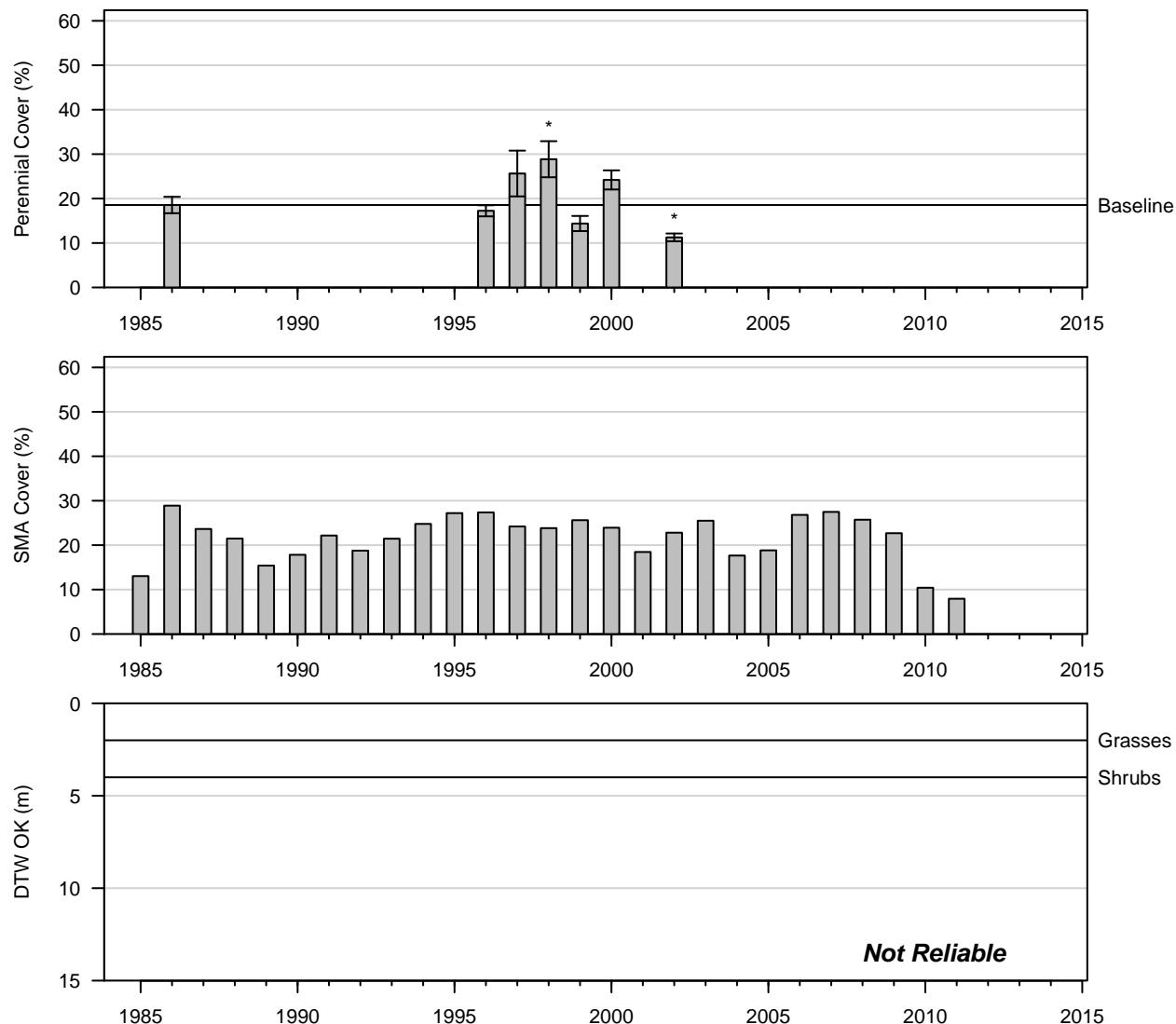


Figure 6: 2002 Wellfield

BGP091
Irrigated Agriculture (Type E)

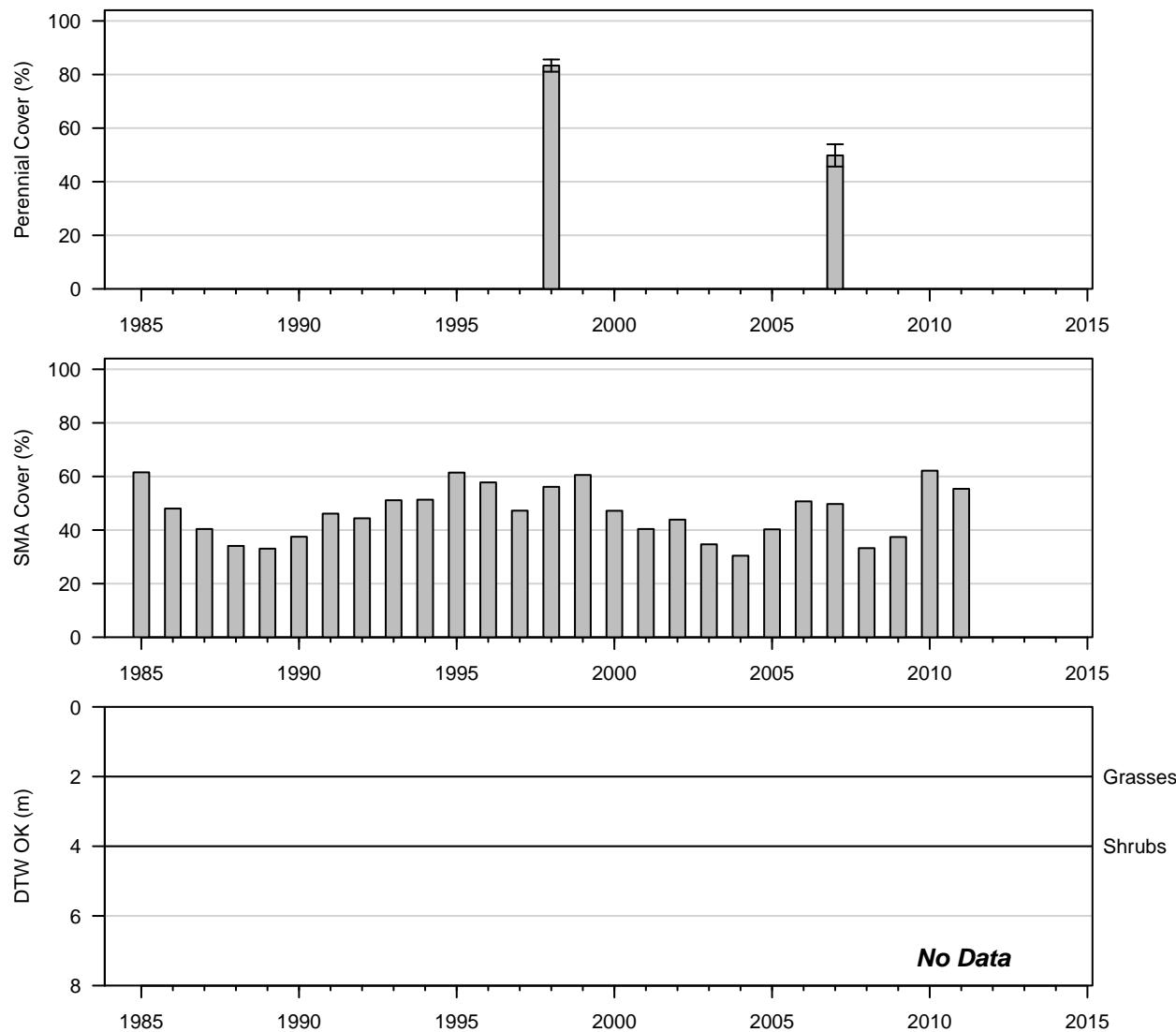


Figure 7: 2007 Wellfield

BGP093
Irrigated Agriculture (Type E)

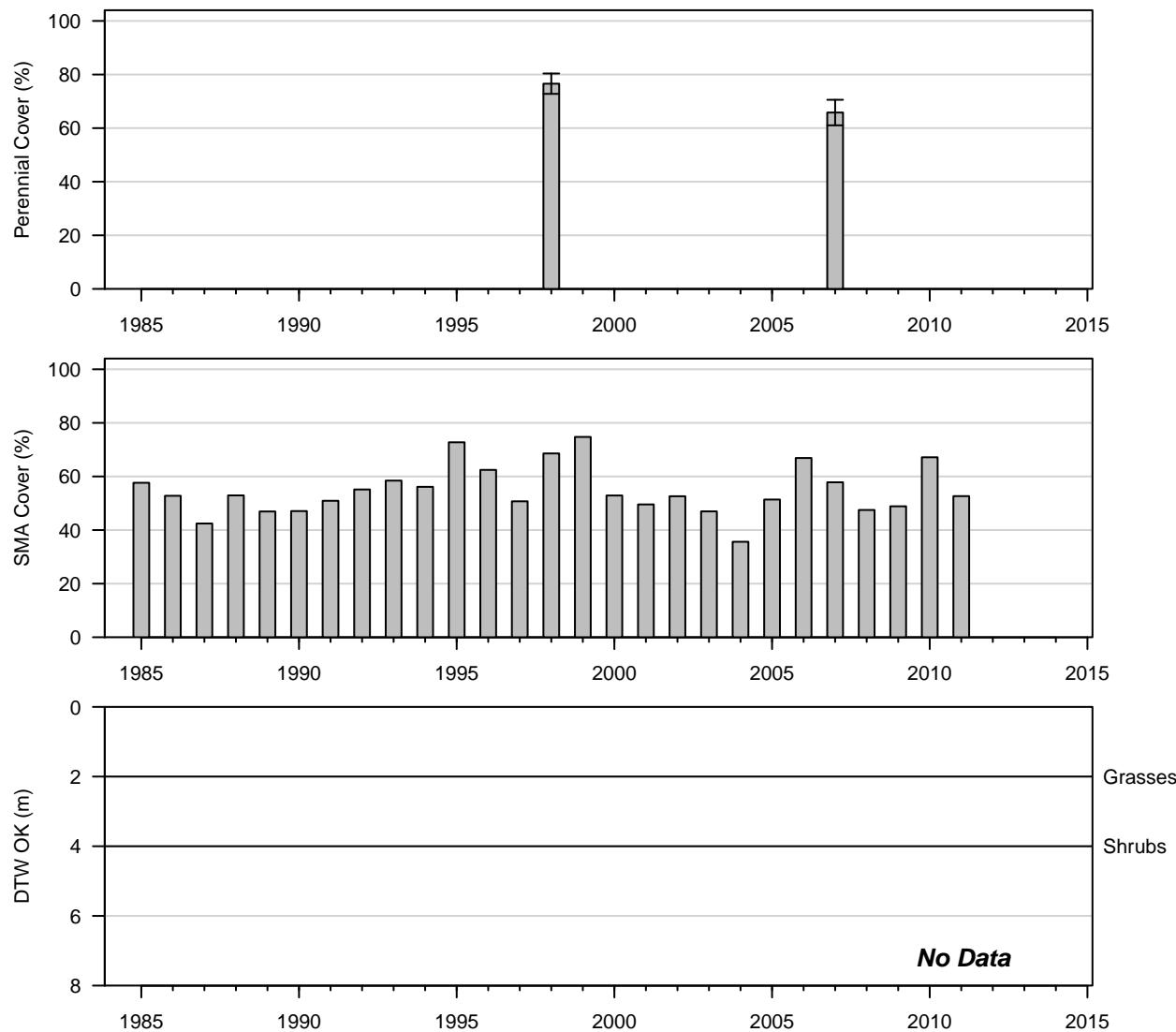


Figure 8: 2007 Wellfield

BGP154
Nevada Saltbush Meadow (Type C)

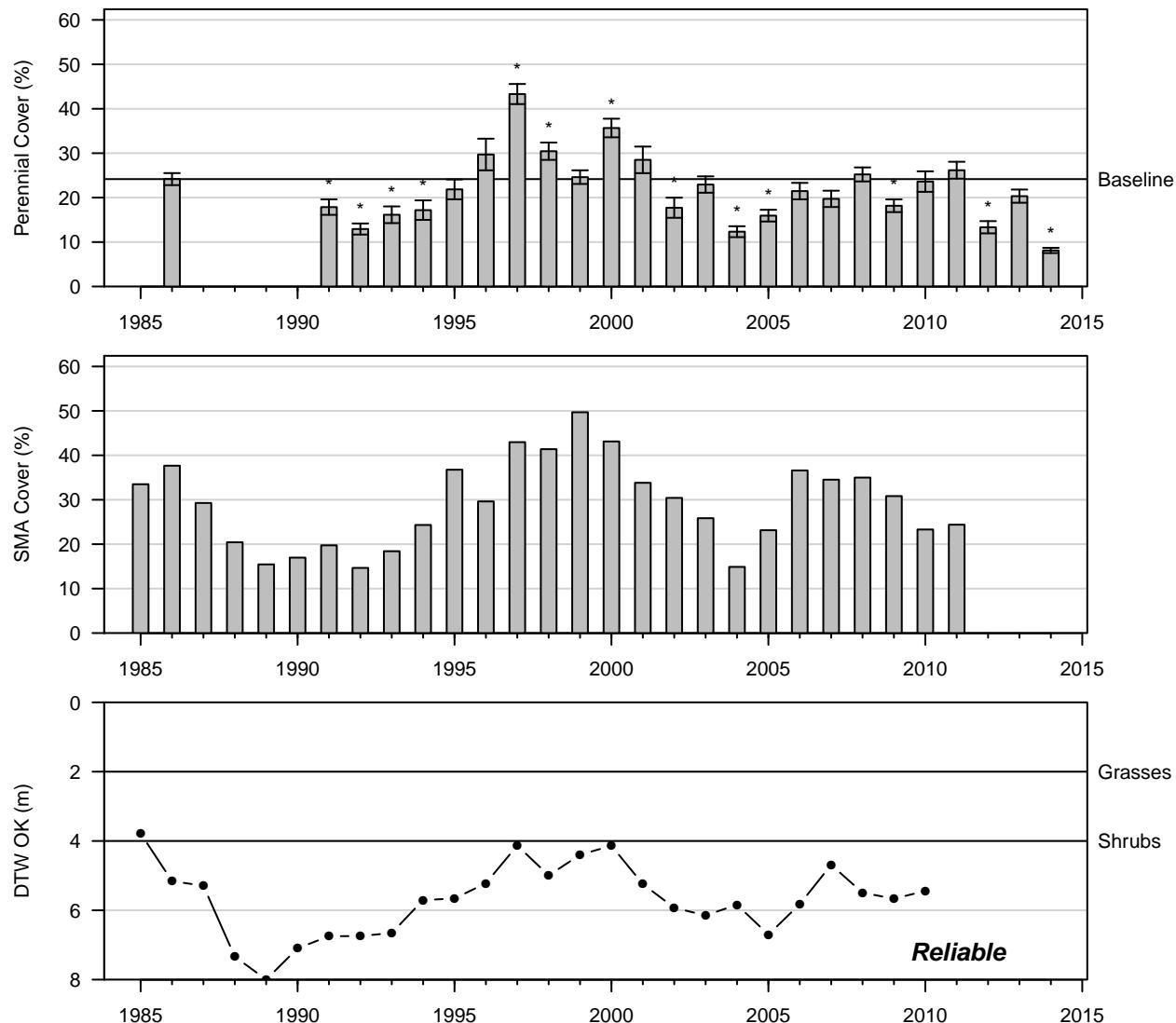


Figure 9: 2014 Wellfield

BGP157
Rabbitbrush Scrub (Type B)

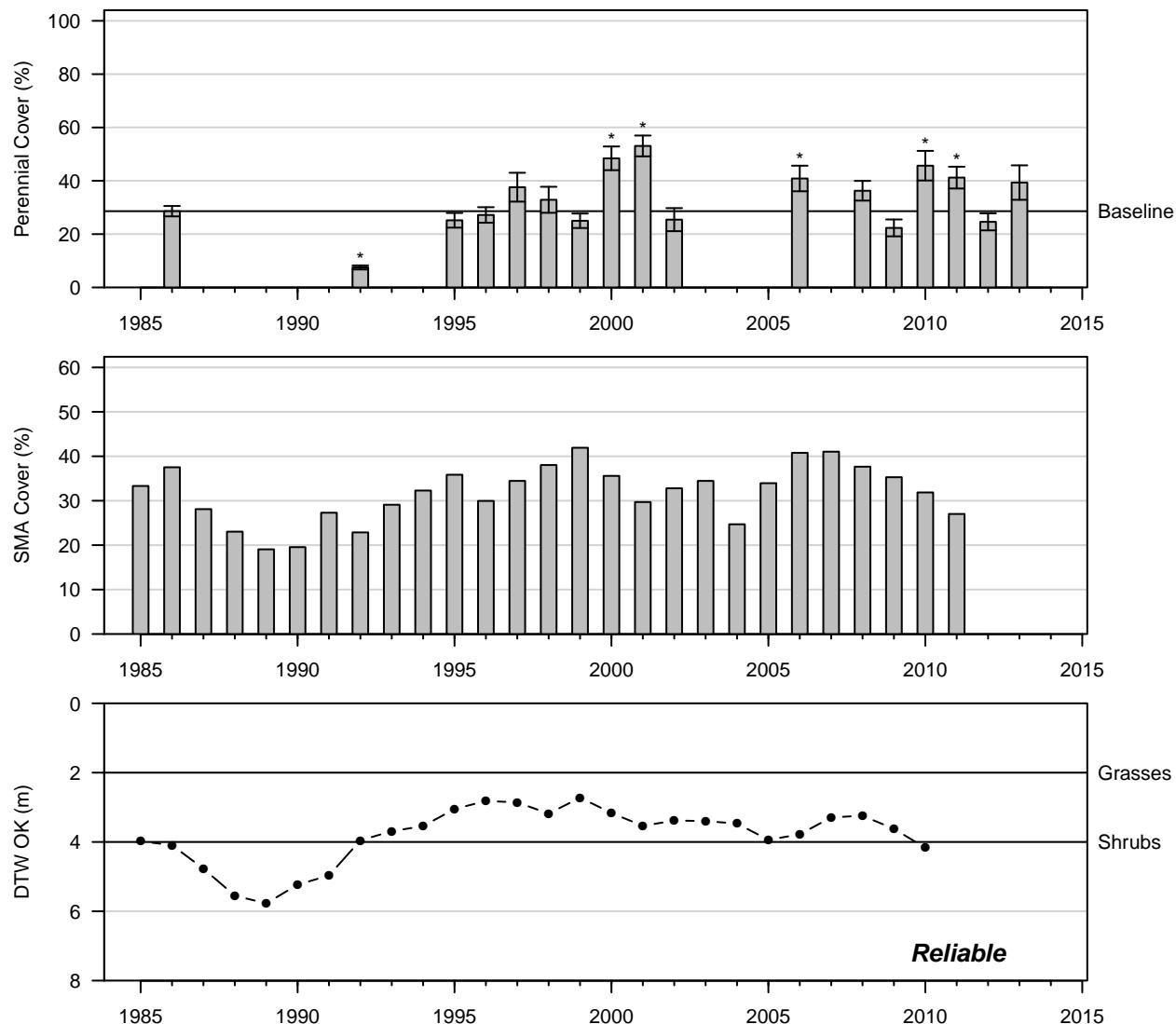


Figure 10: 2013 Wellfield

BGP162
Nevada Saltbush Scrub (Type B)

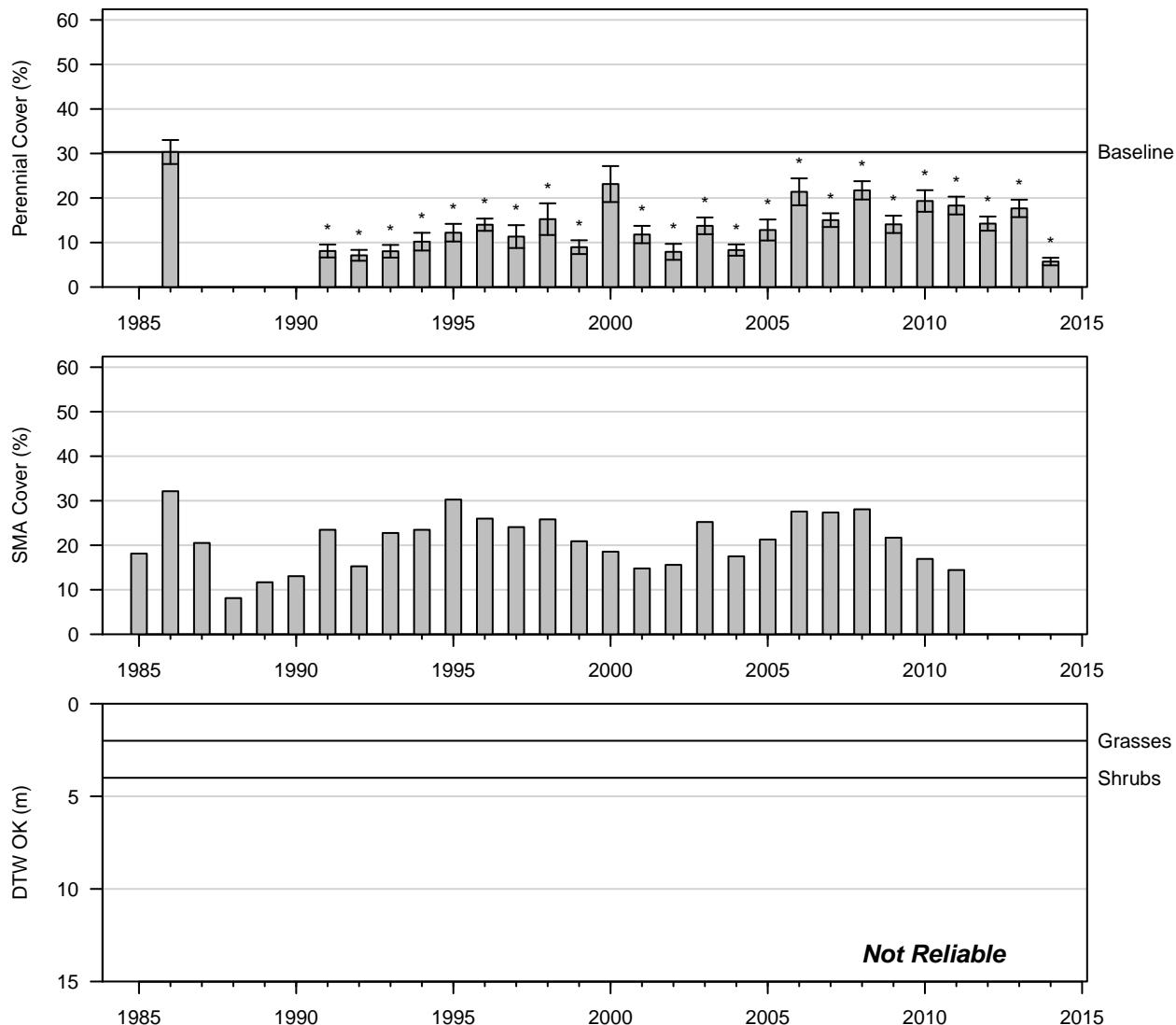


Figure 11: 2014 Wellfield

BGP204
Nevada Saltbush Meadow (Type C)

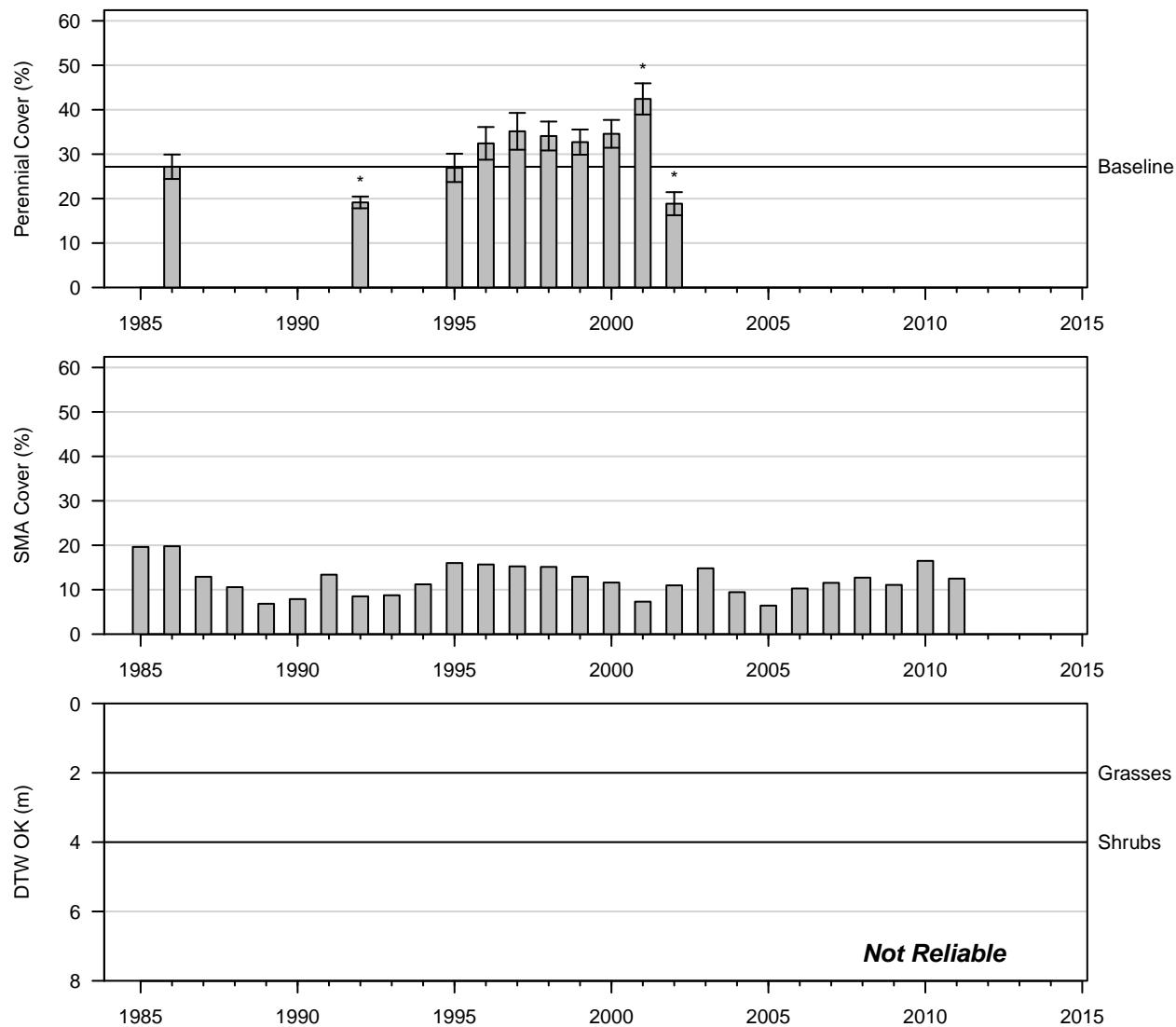


Figure 12: 2002 Control

BGP205
Alkali Meadow (Type C)

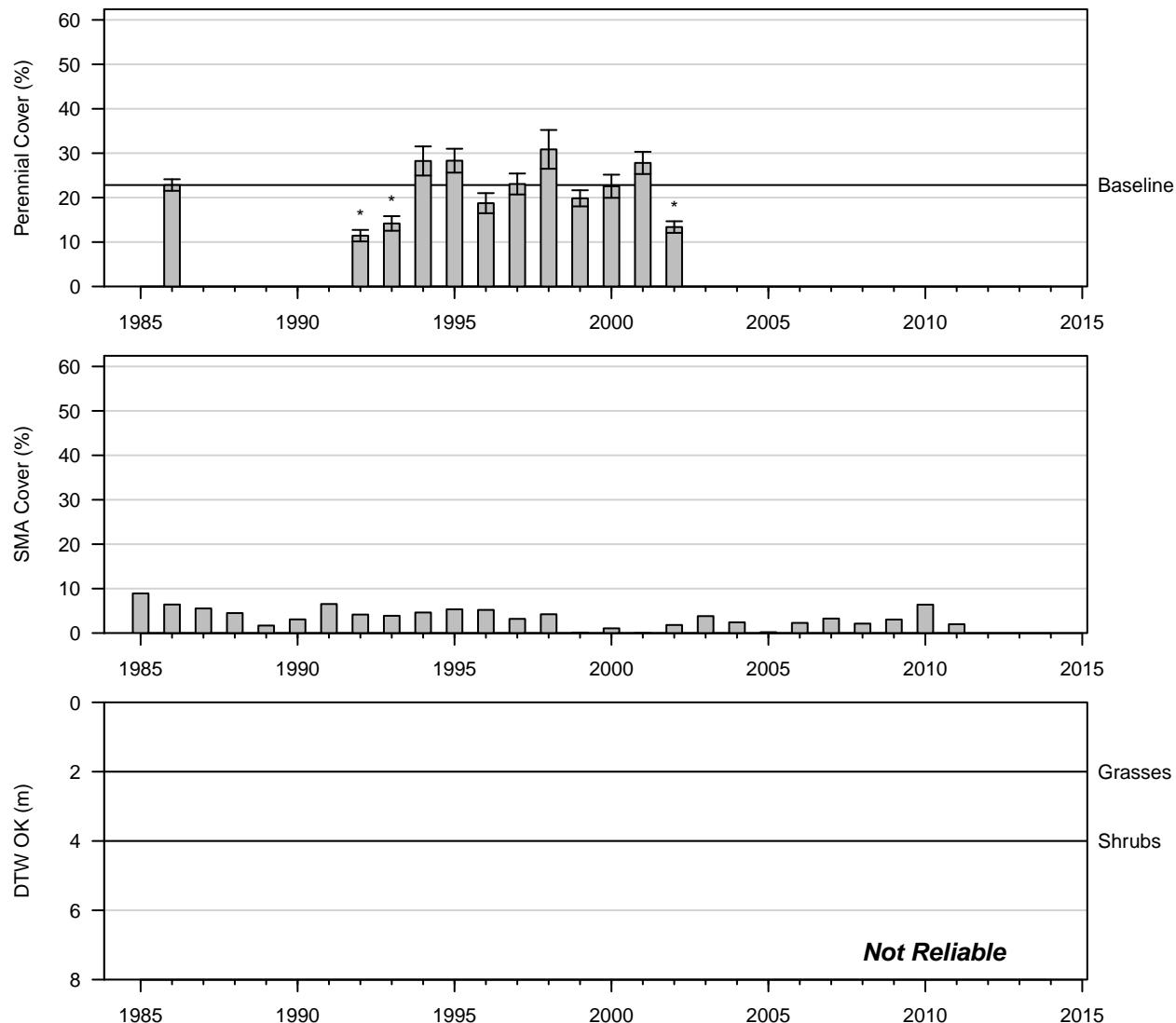


Figure 13: 2002 Control

BIS019
Rabbitbrush Scrub (Type A)

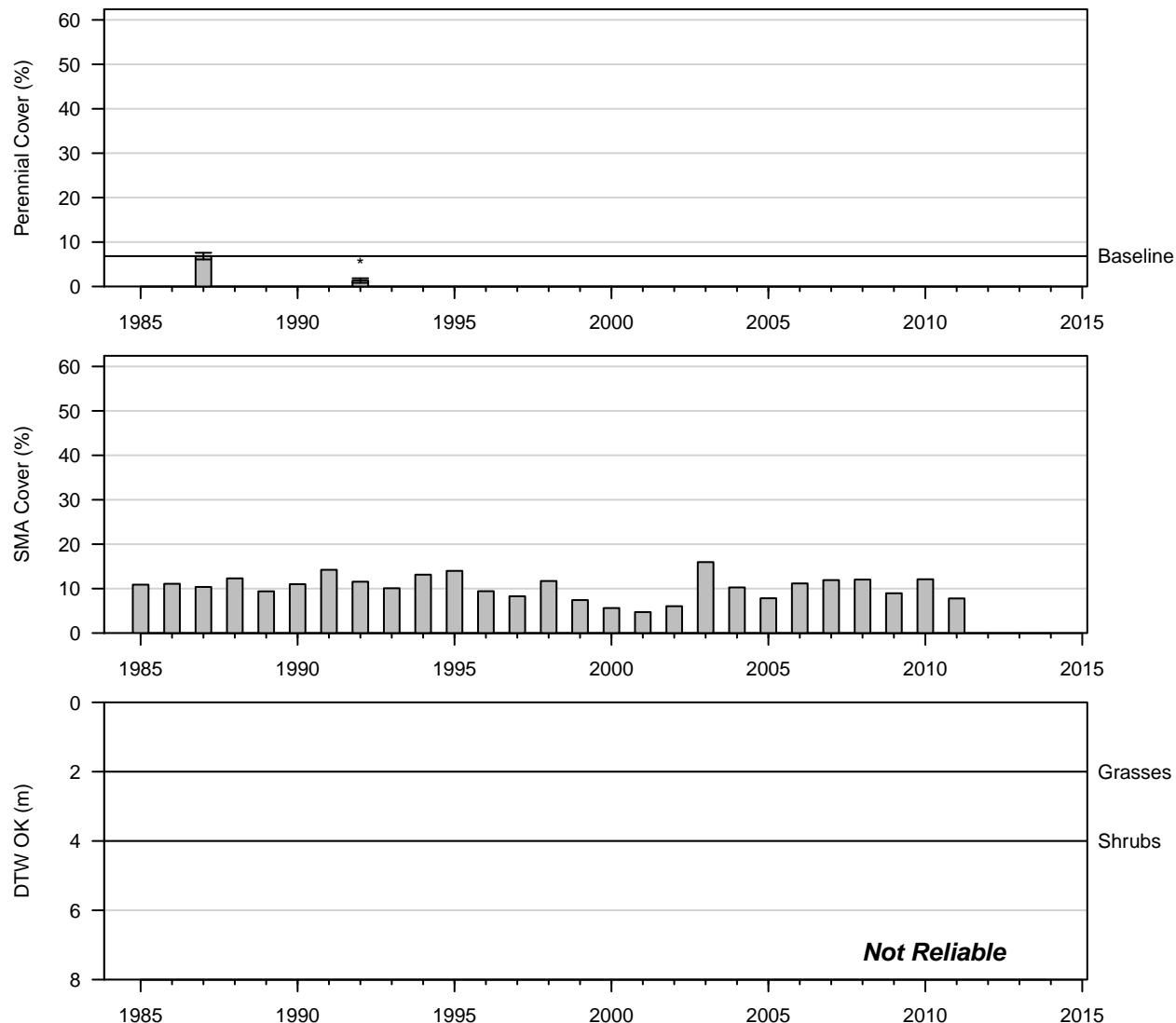


Figure 14: 1992 Control

BIS055
Alkali Meadow (Type C)

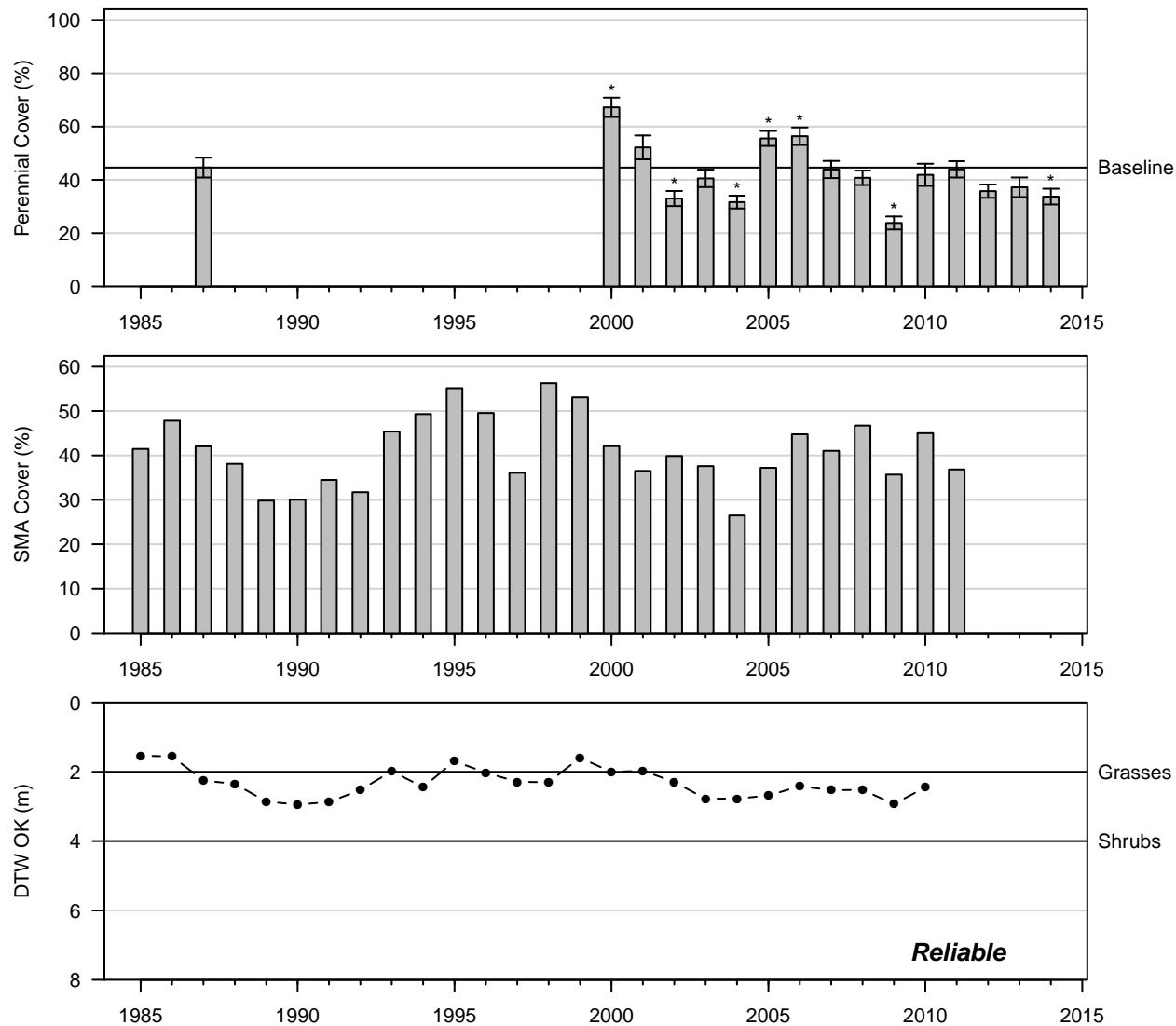


Figure 15: 2014 Control

BIS068
Rabbitbrush Scrub (Type B)

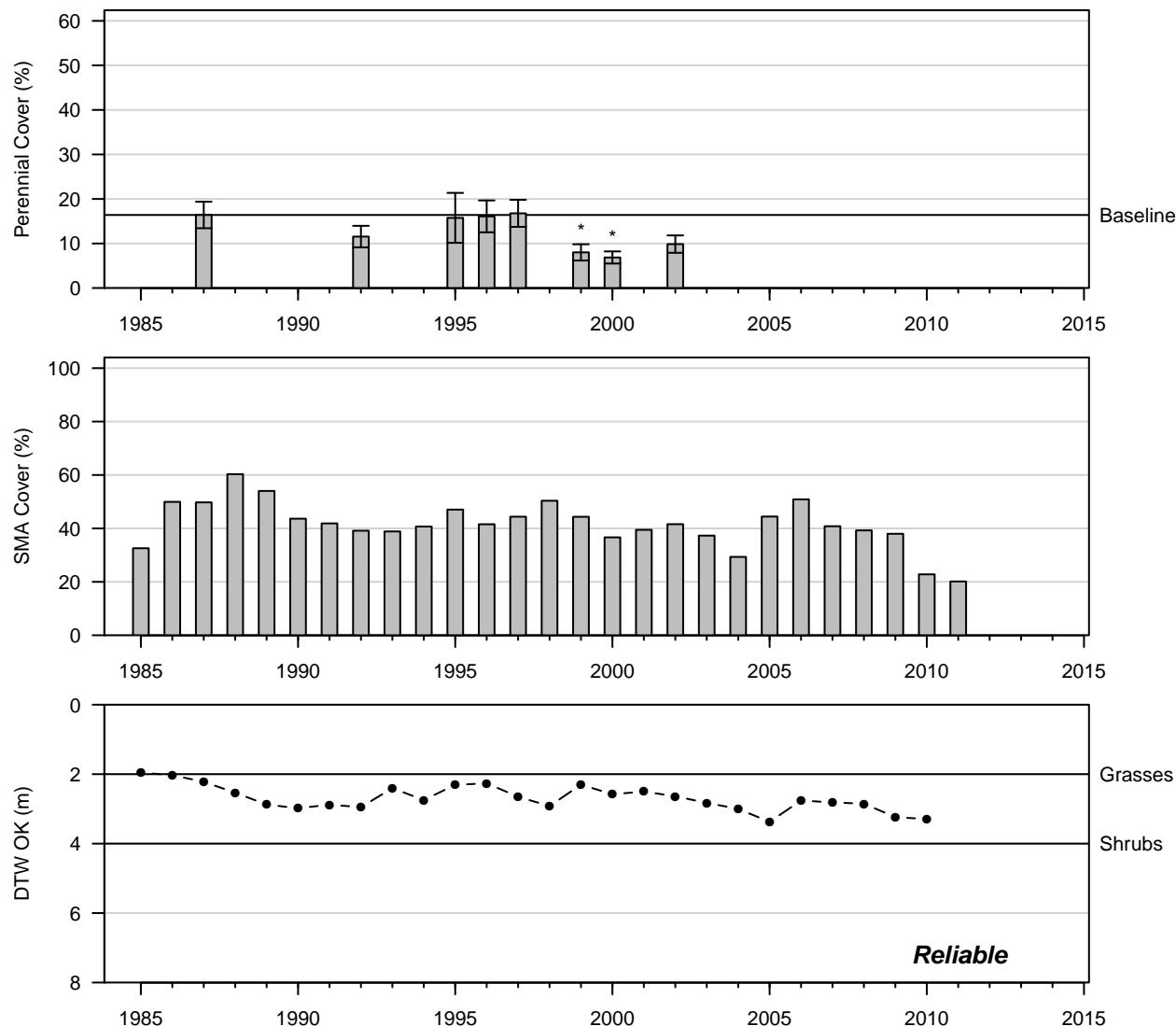


Figure 16: 2002 Control

BIS085
Rabbitbrush Meadow (Type C)

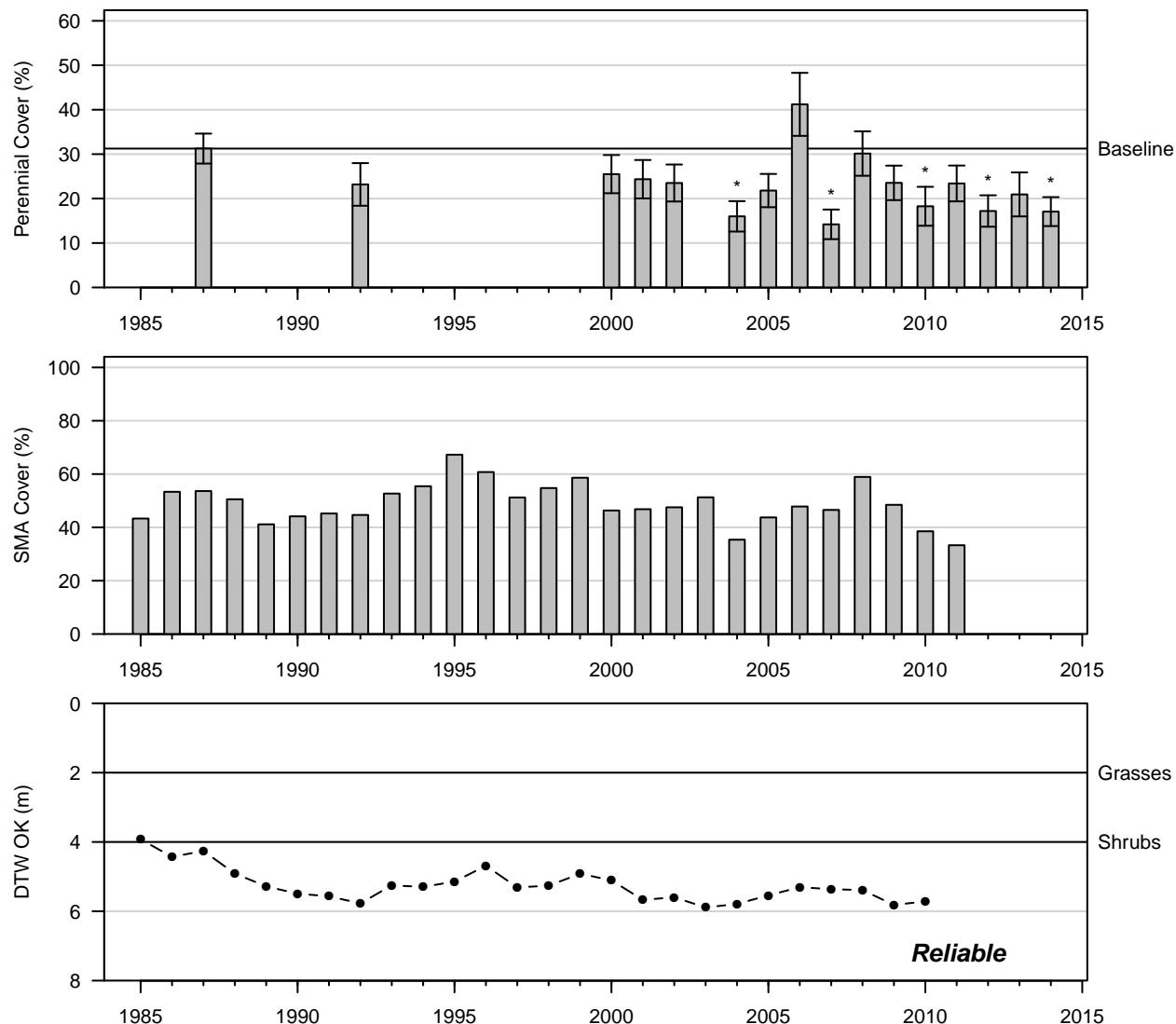


Figure 17: 2014 Wellfield

BLK002
Rabbitbrush Scrub (Type B)

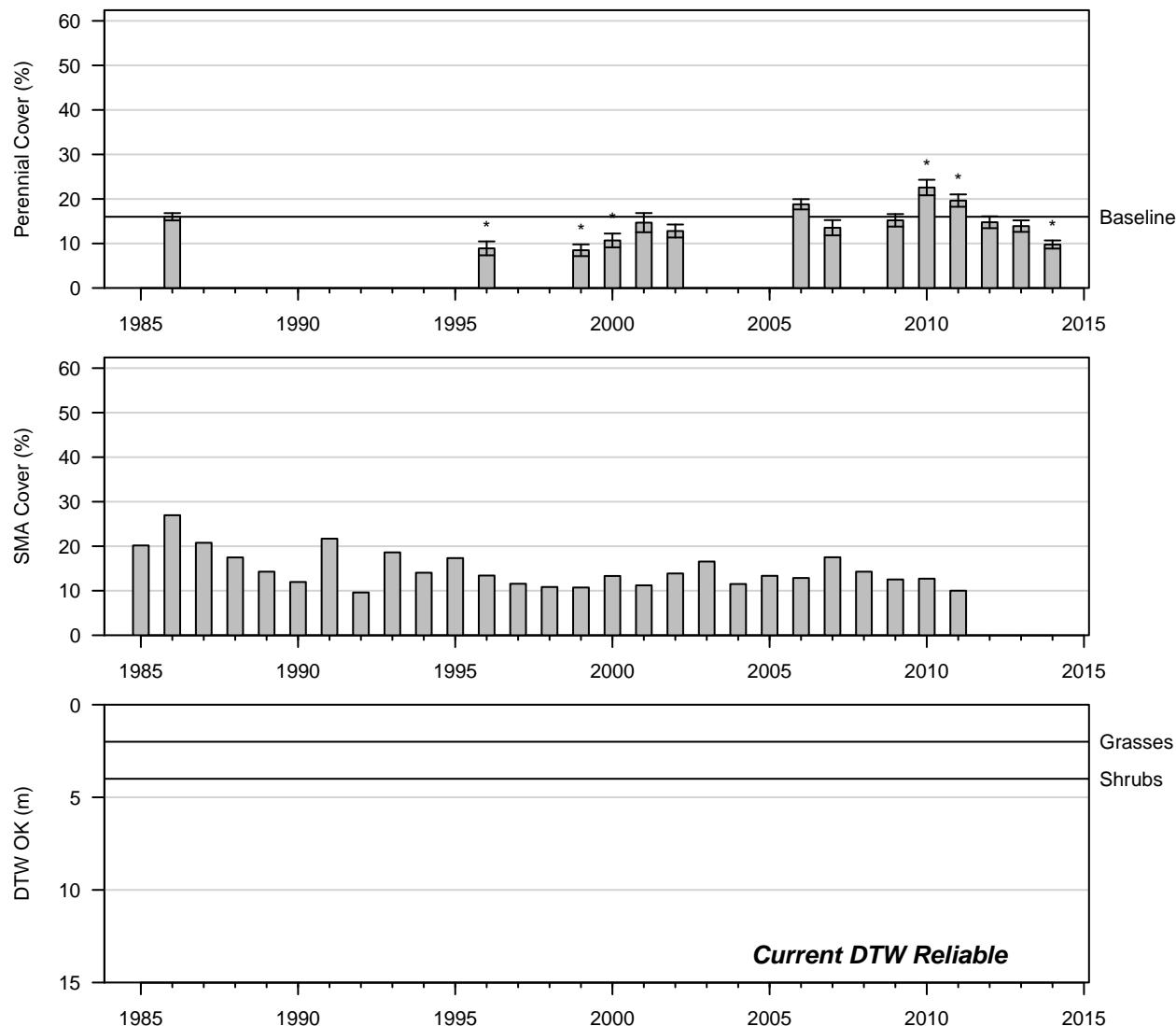


Figure 18: 2014 Wellfield

BLK006
Desert Sink Scrub (Type A)

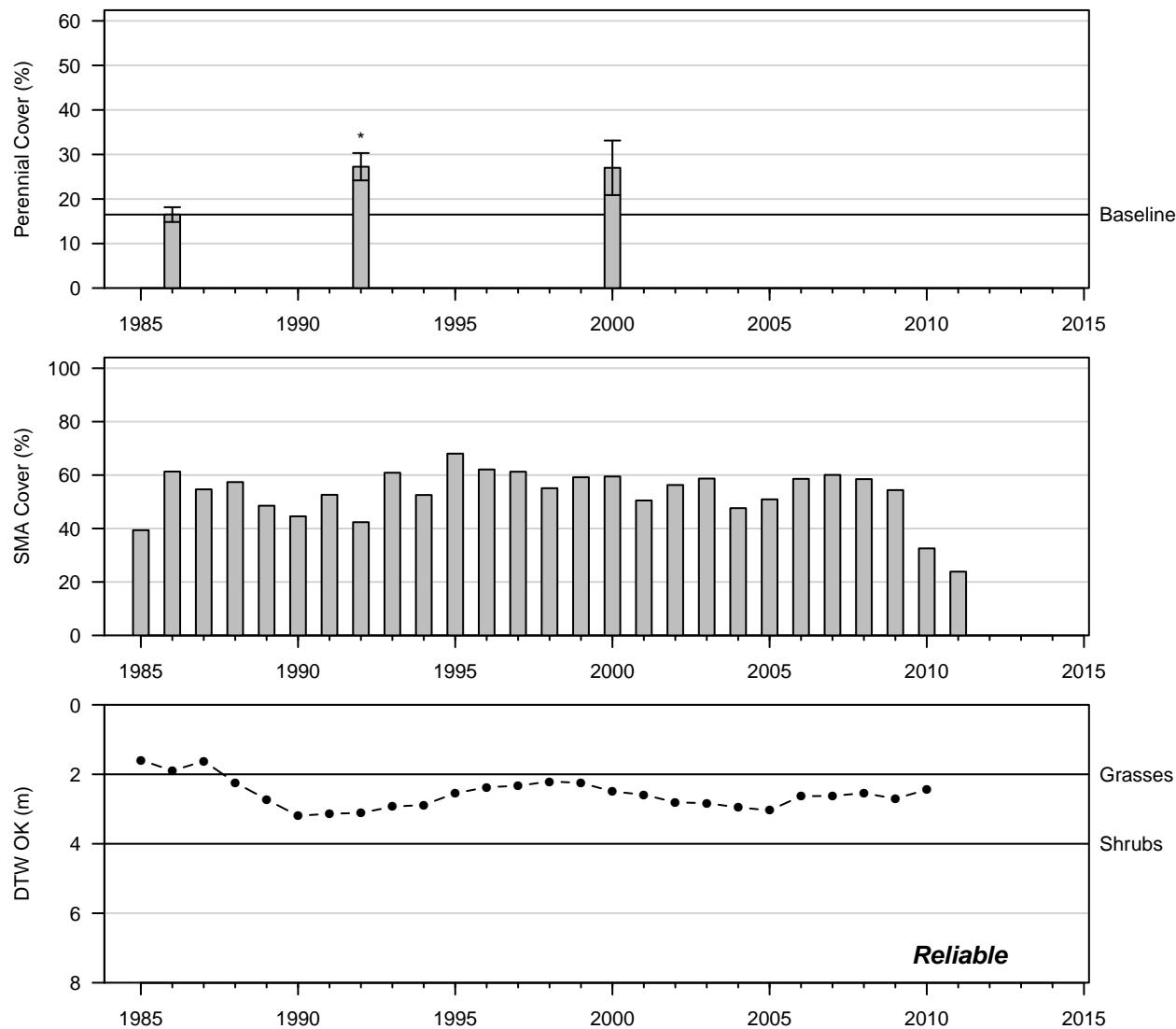


Figure 19: 2000 Wellfield

BLK008
Alkali Meadow (Type C)

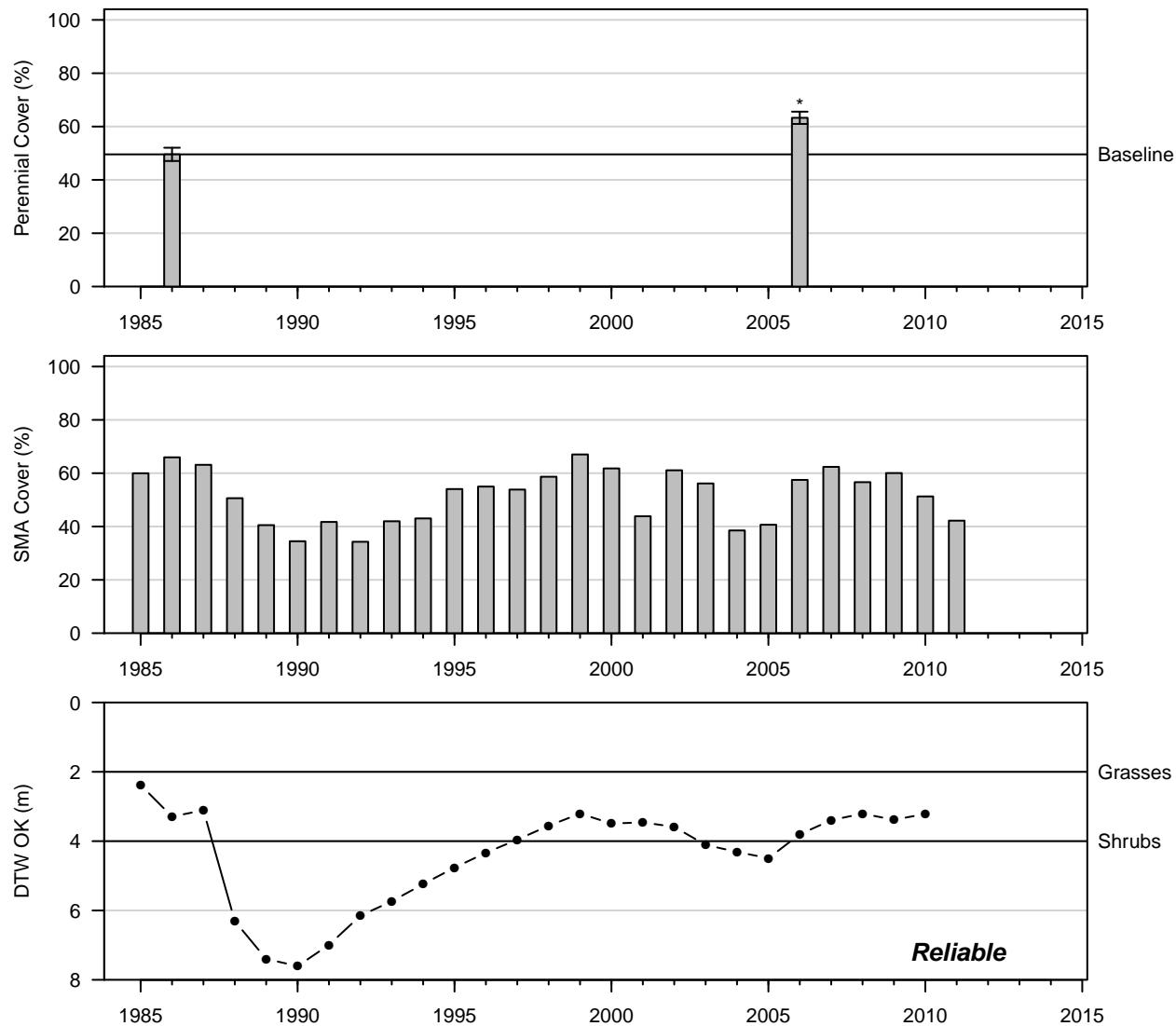


Figure 20: 2006 Wellfield

BLK009
Alkali Meadow (Type C)

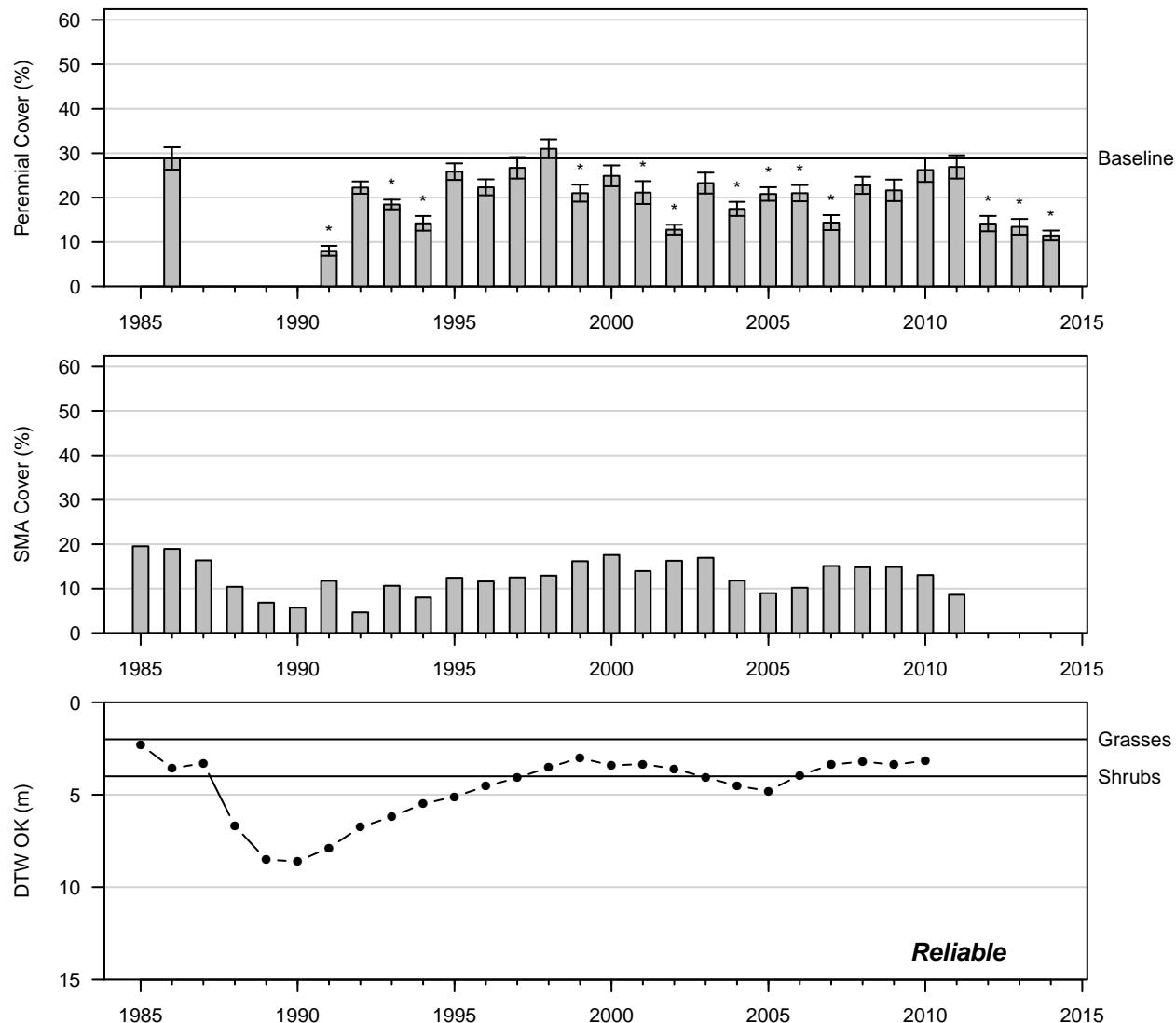


Figure 21: 2014 Wellfield

BLK011
Alkali Meadow (Type C)

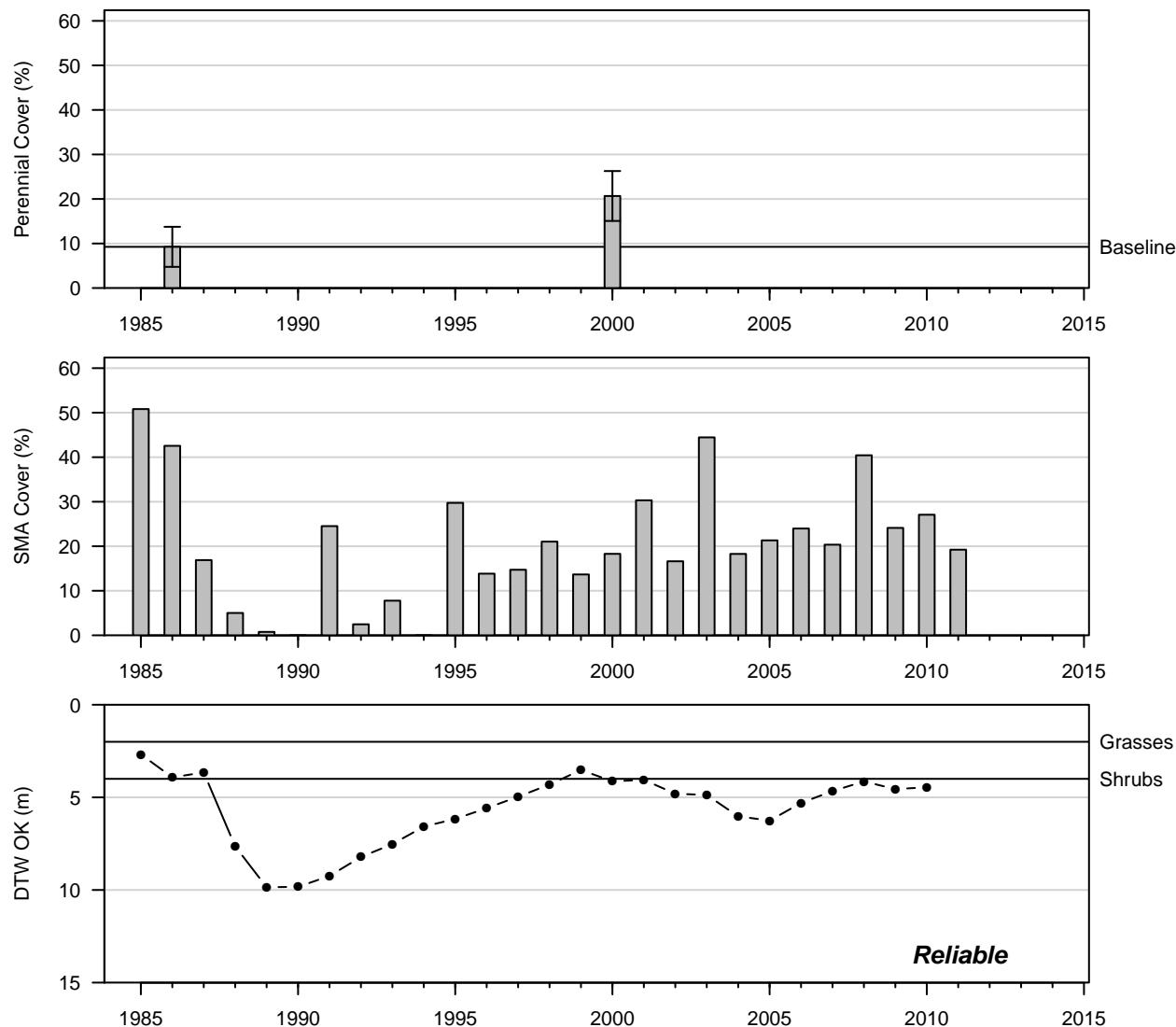


Figure 22: 2000 Wellfield

BLK016
Alkali Meadow (Type C)

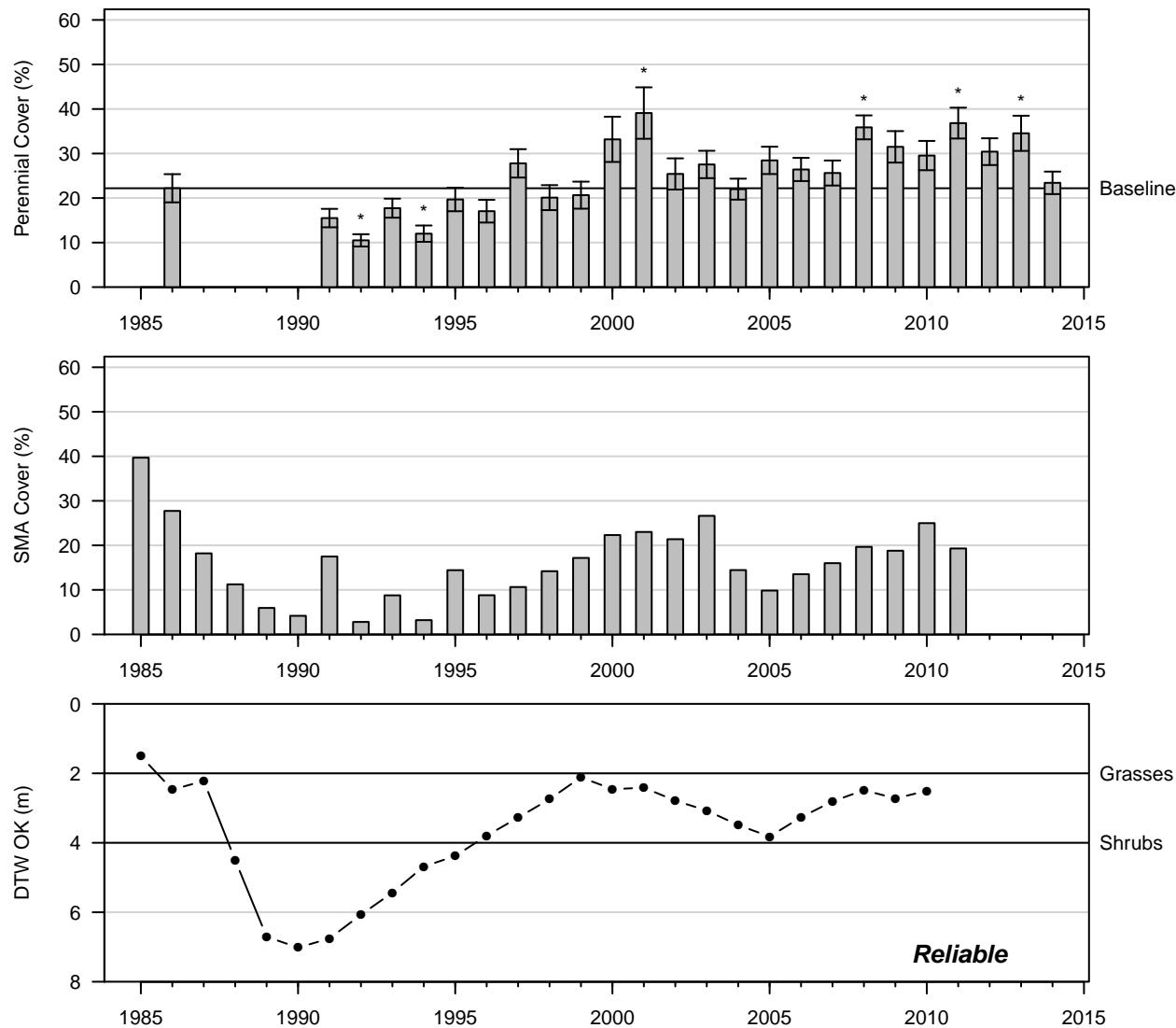


Figure 23: 2014 Wellfield

BLK021
Nevada Saltbush Scrub (Type B)

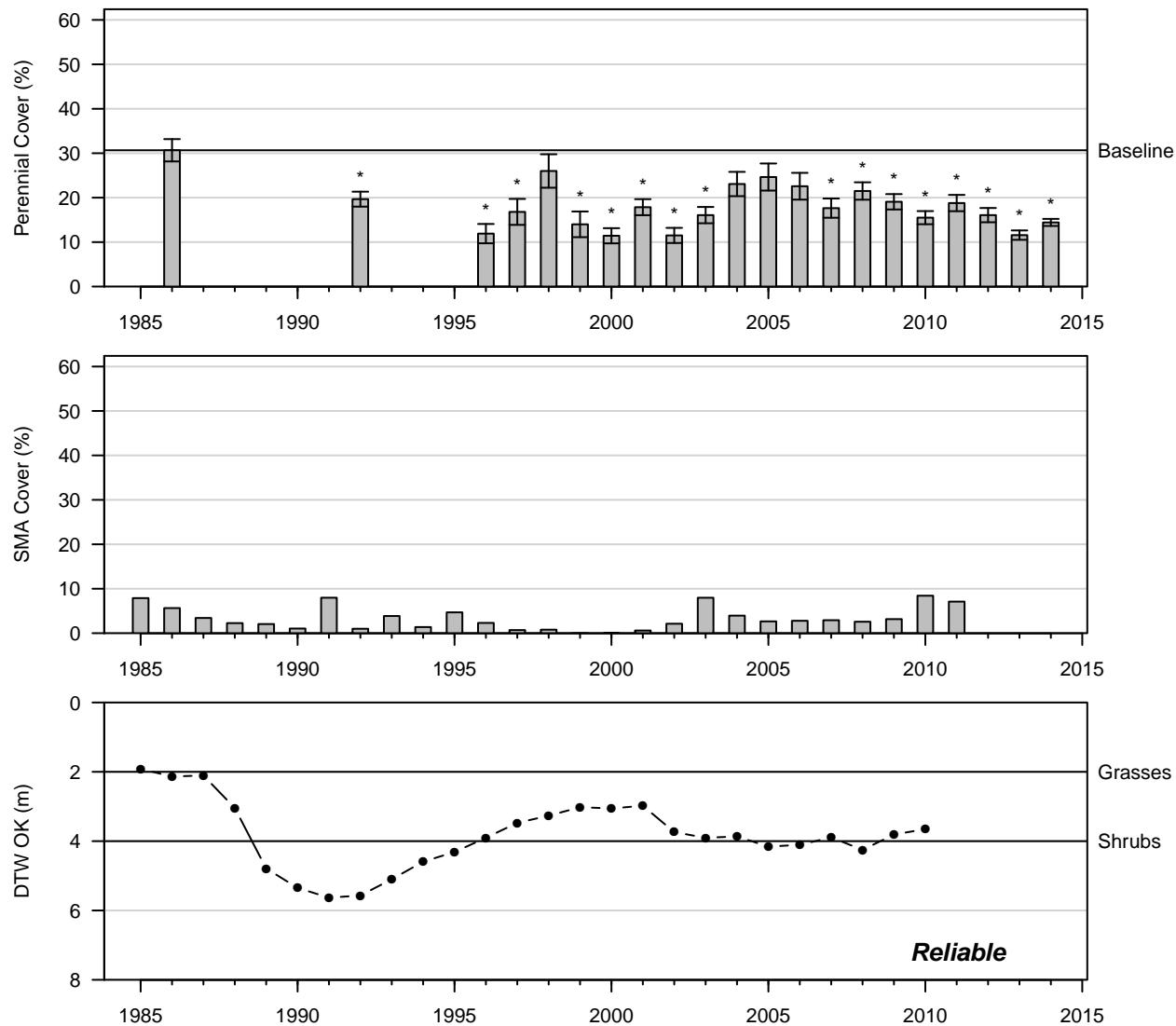


Figure 24: 2014 Wellfield

BLK024
Nevada Saltbush Meadow (Type C)

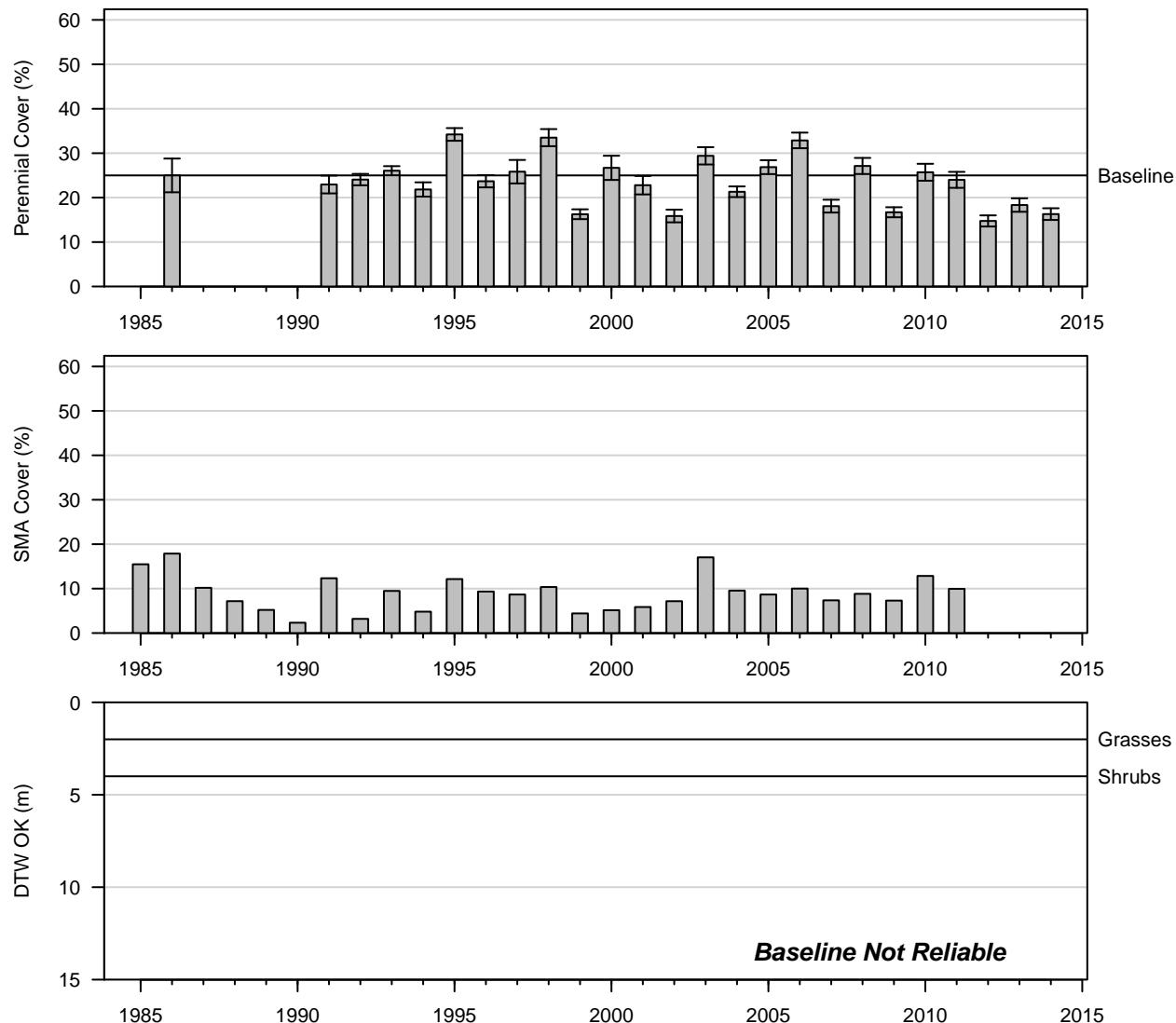


Figure 25: 2014 Wellfield

BLK029
Rabbitbrush Scrub (Type B)

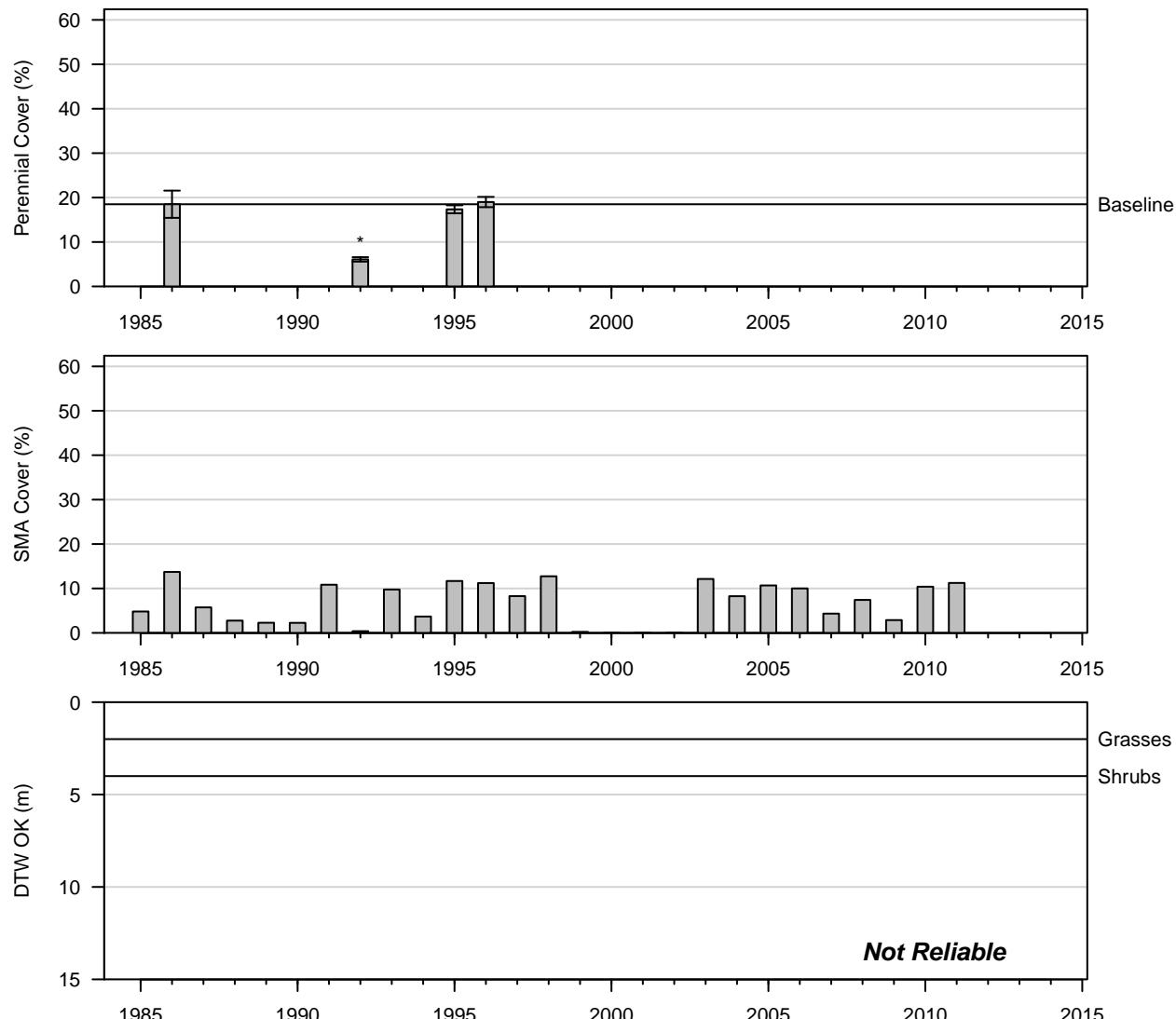


Figure 26: 1996 Control

BLK033
Alkali Meadow (Type C)

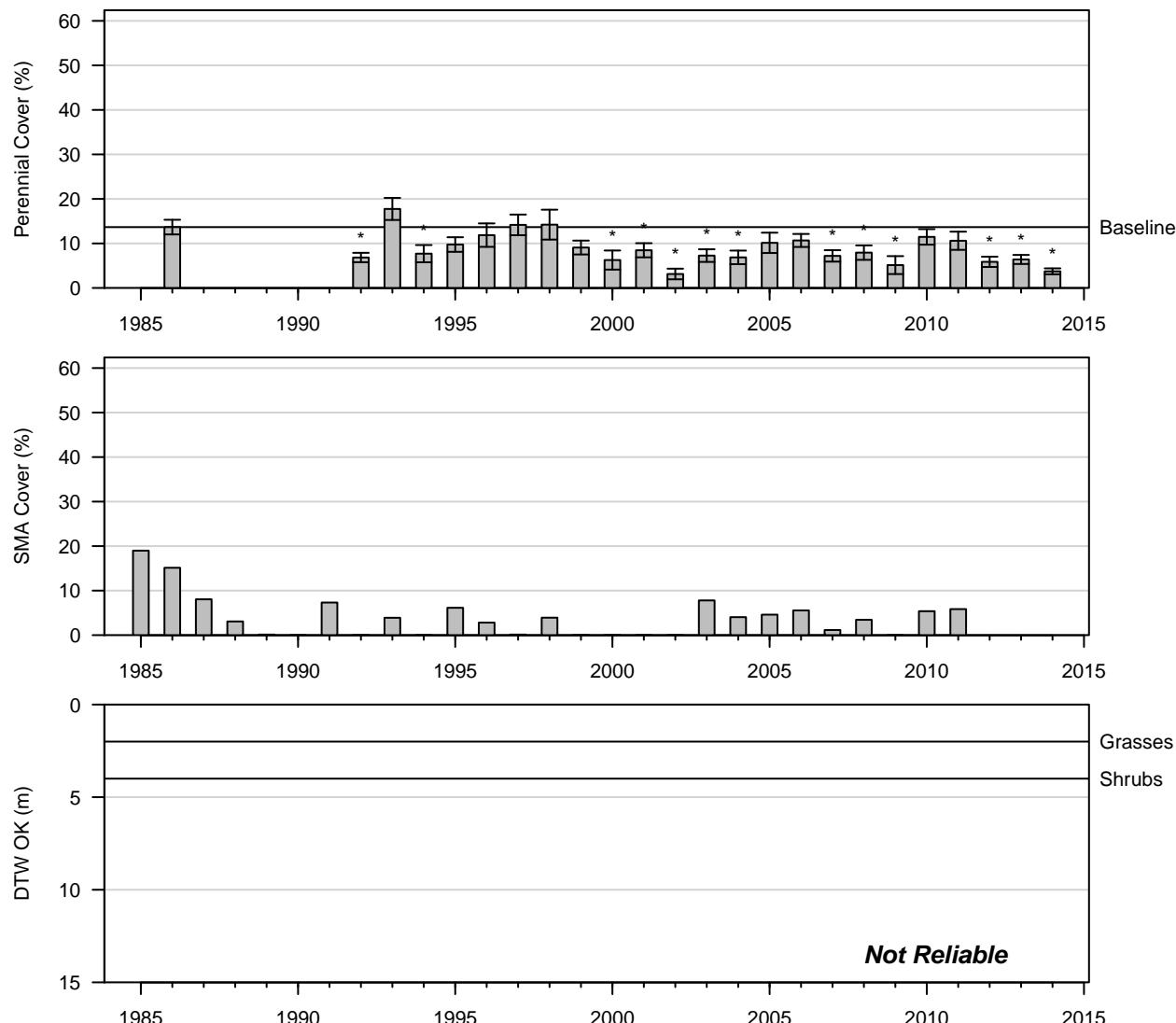


Figure 27: 2014 Wellfield

BLK039
Alkali Meadow (Type C)

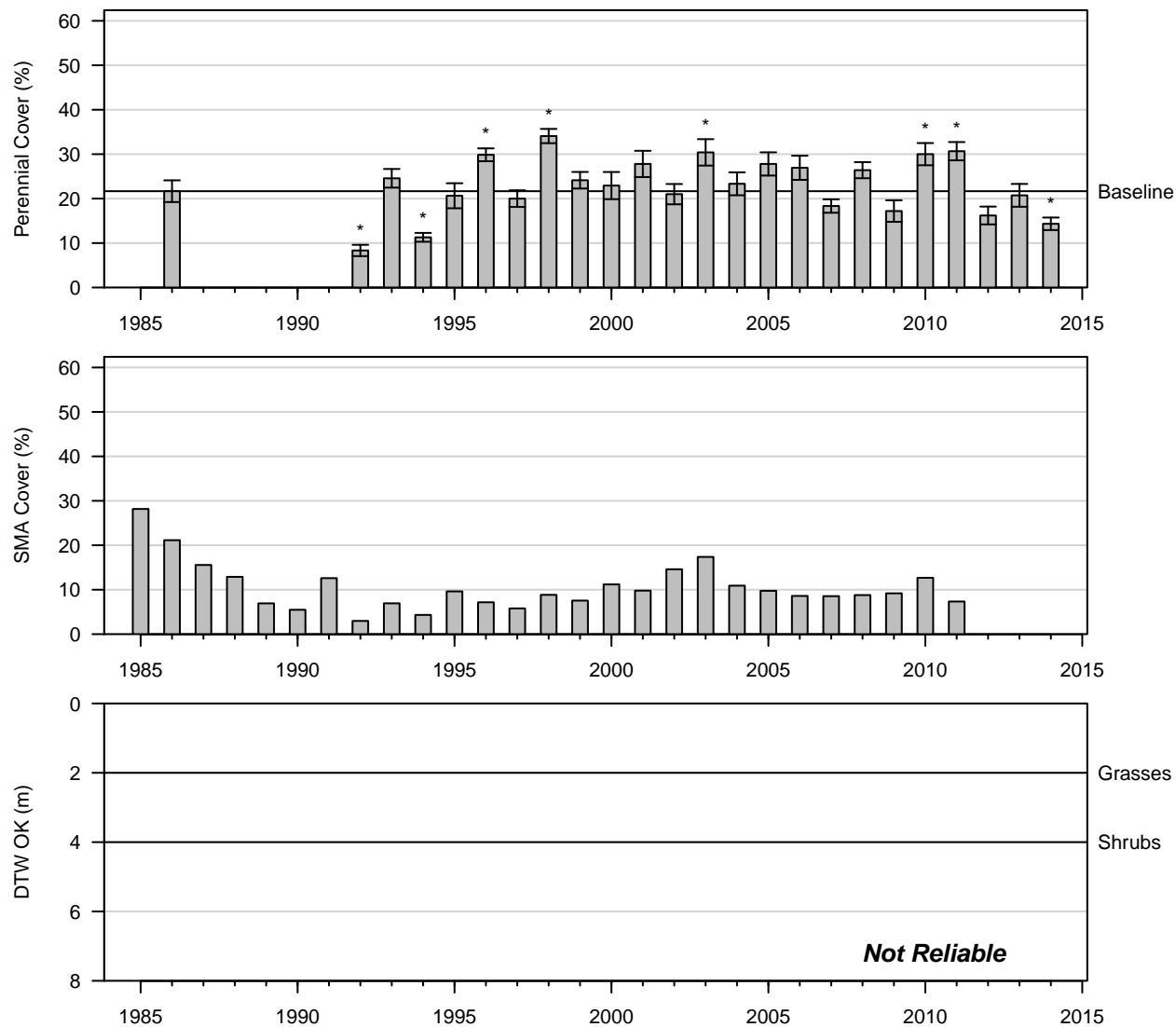


Figure 28: 2014 Wellfield

BLK040
Desert Sink Scrub (Type A)

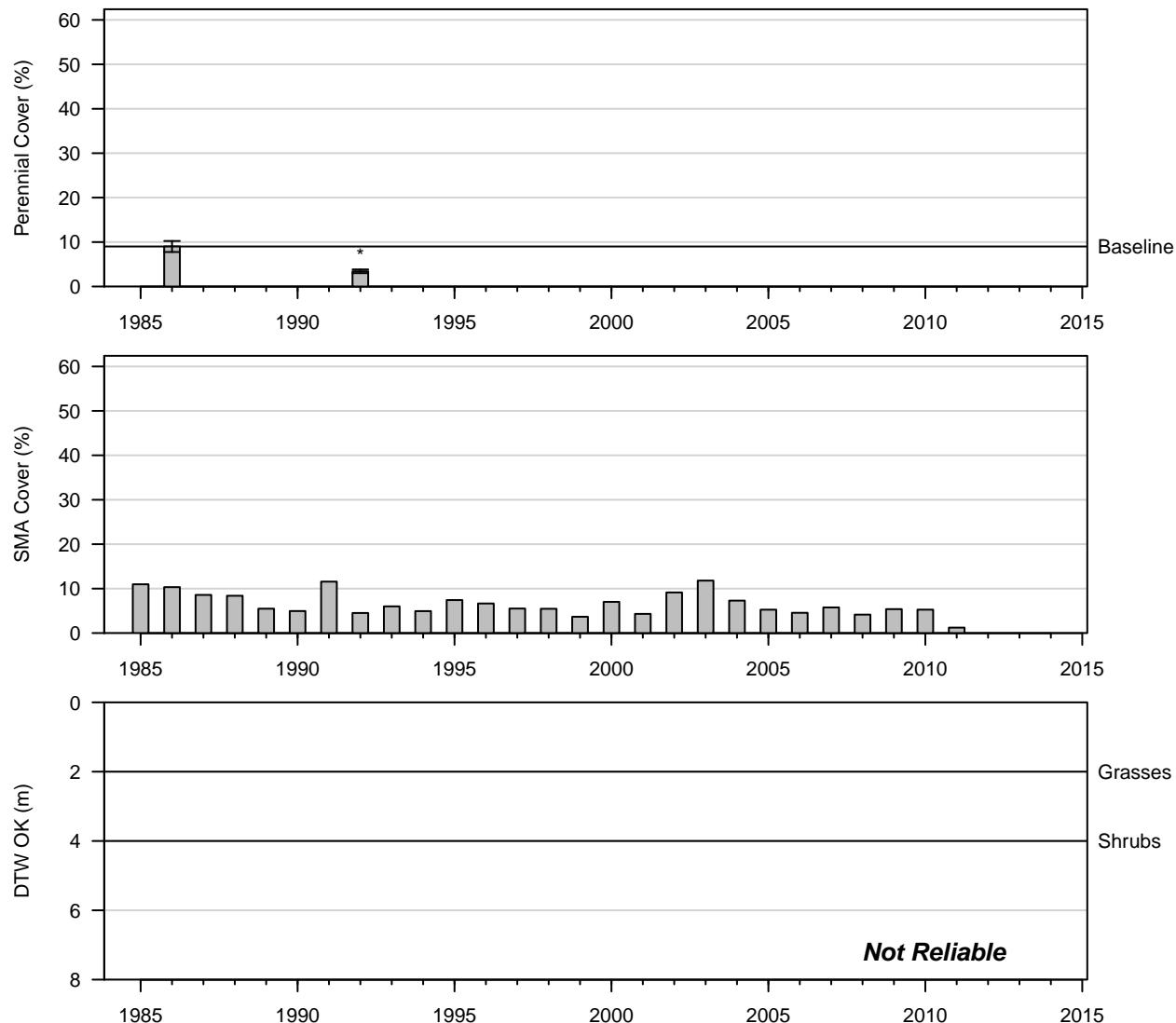


Figure 29: 1992 Wellfield

BLK044
Rabbitbrush Meadow (Type C)

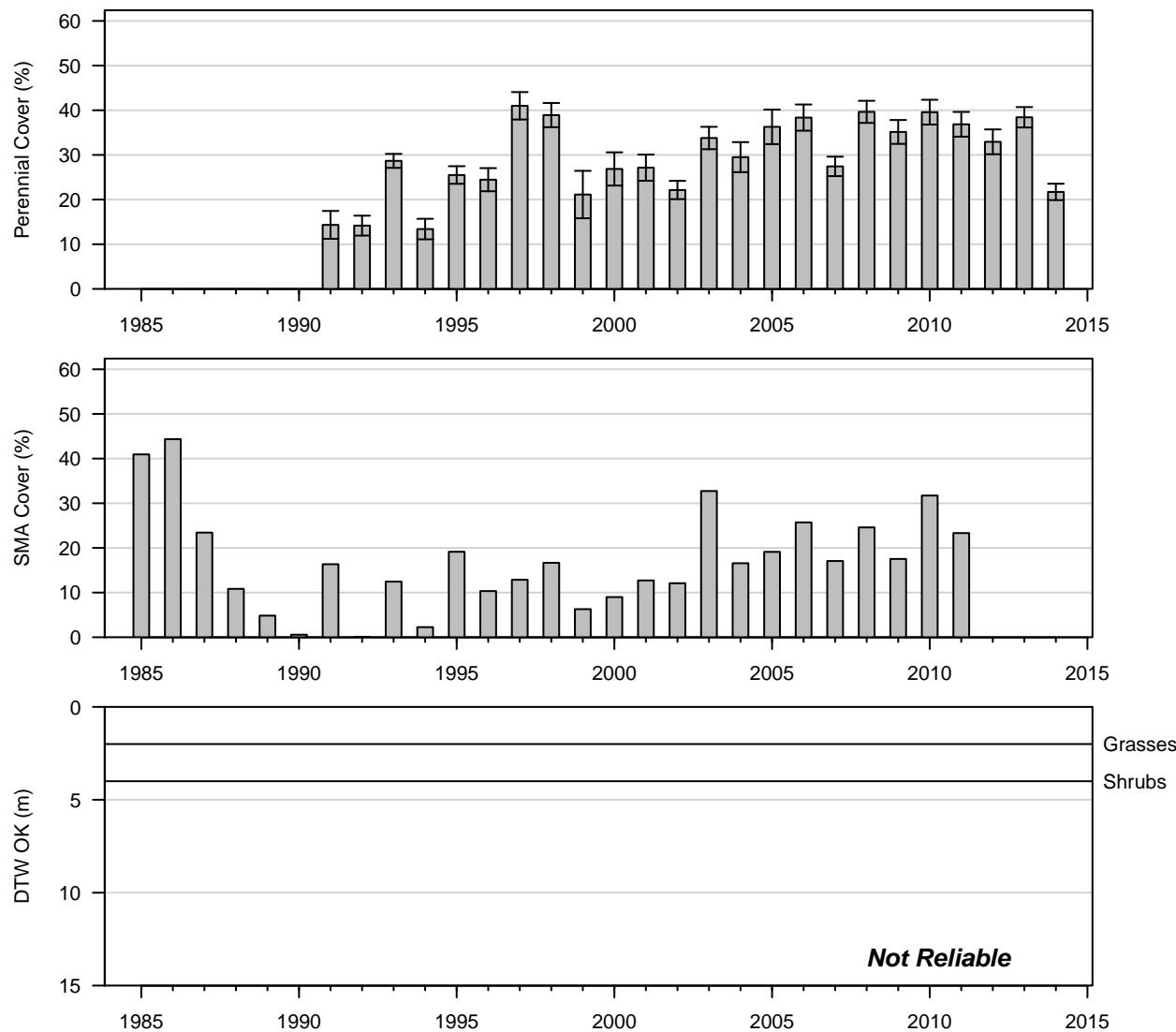


Figure 30: 2014 Wellfield

BLK069
Desert Sink Scrub (Type A)

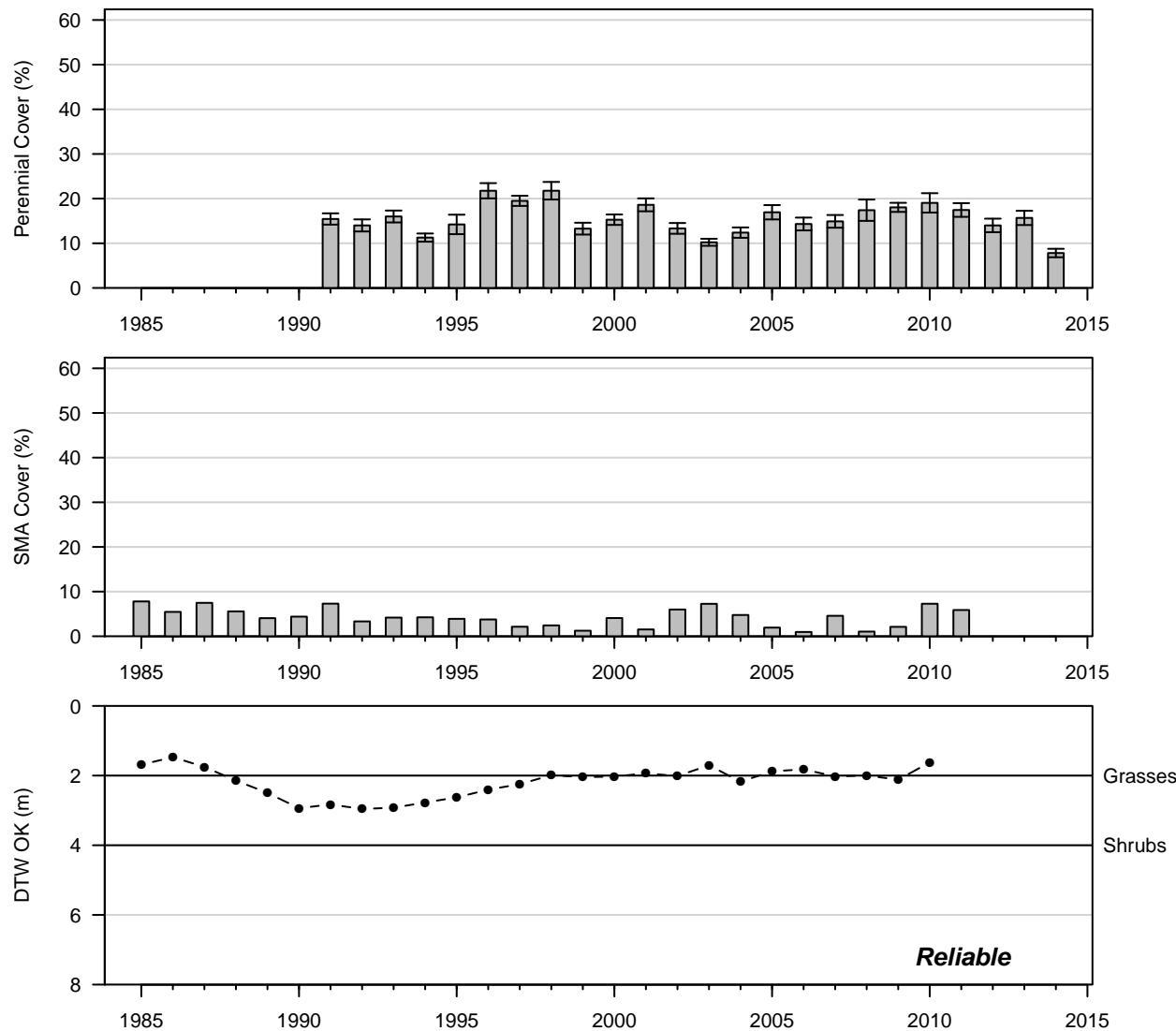


Figure 31: 2014 Wellfield

BLK074
Nevada Saltbush Scrub (Type B)

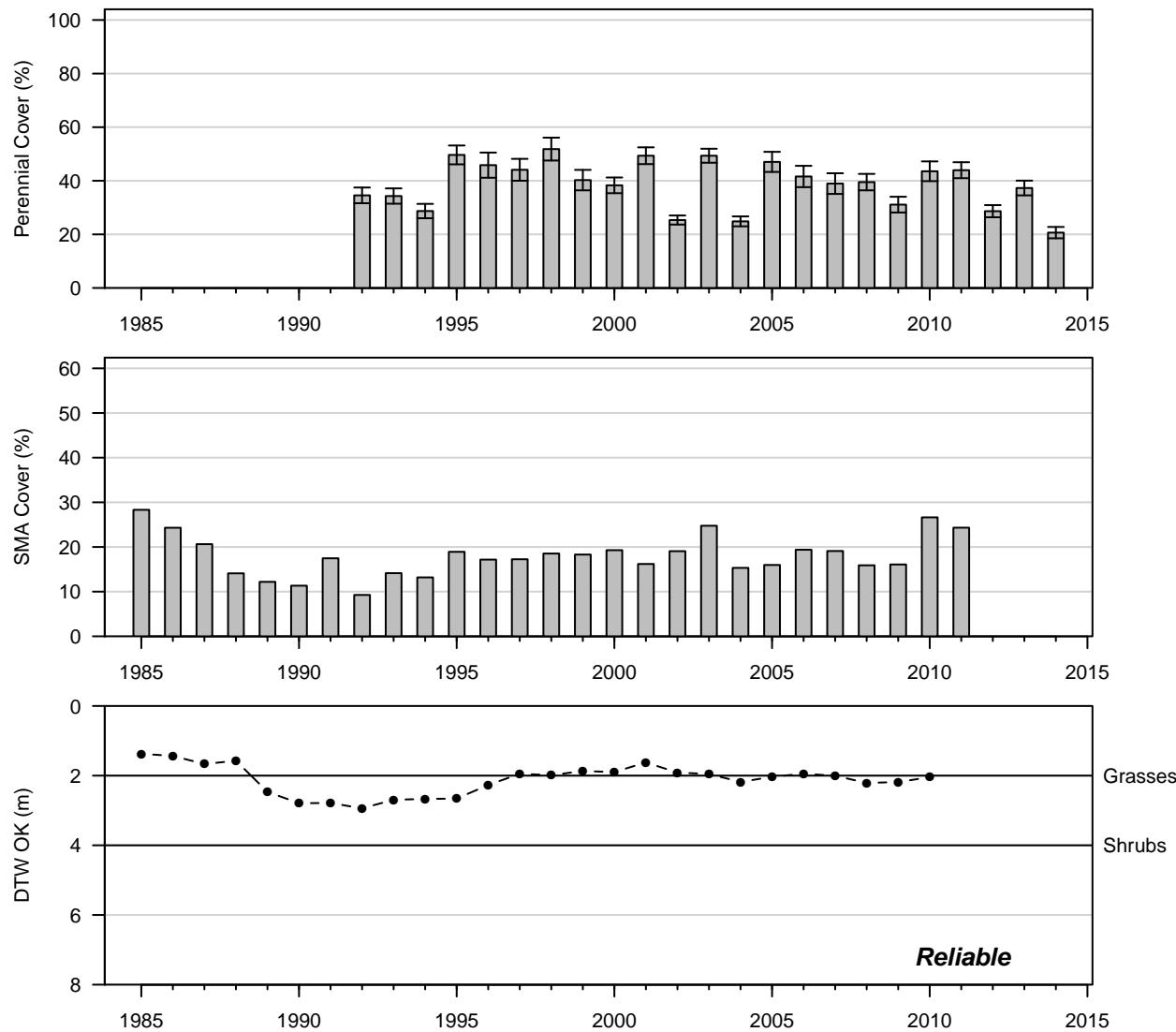


Figure 32: 2014 Wellfield

BLK075
Alkali Meadow (Type C)

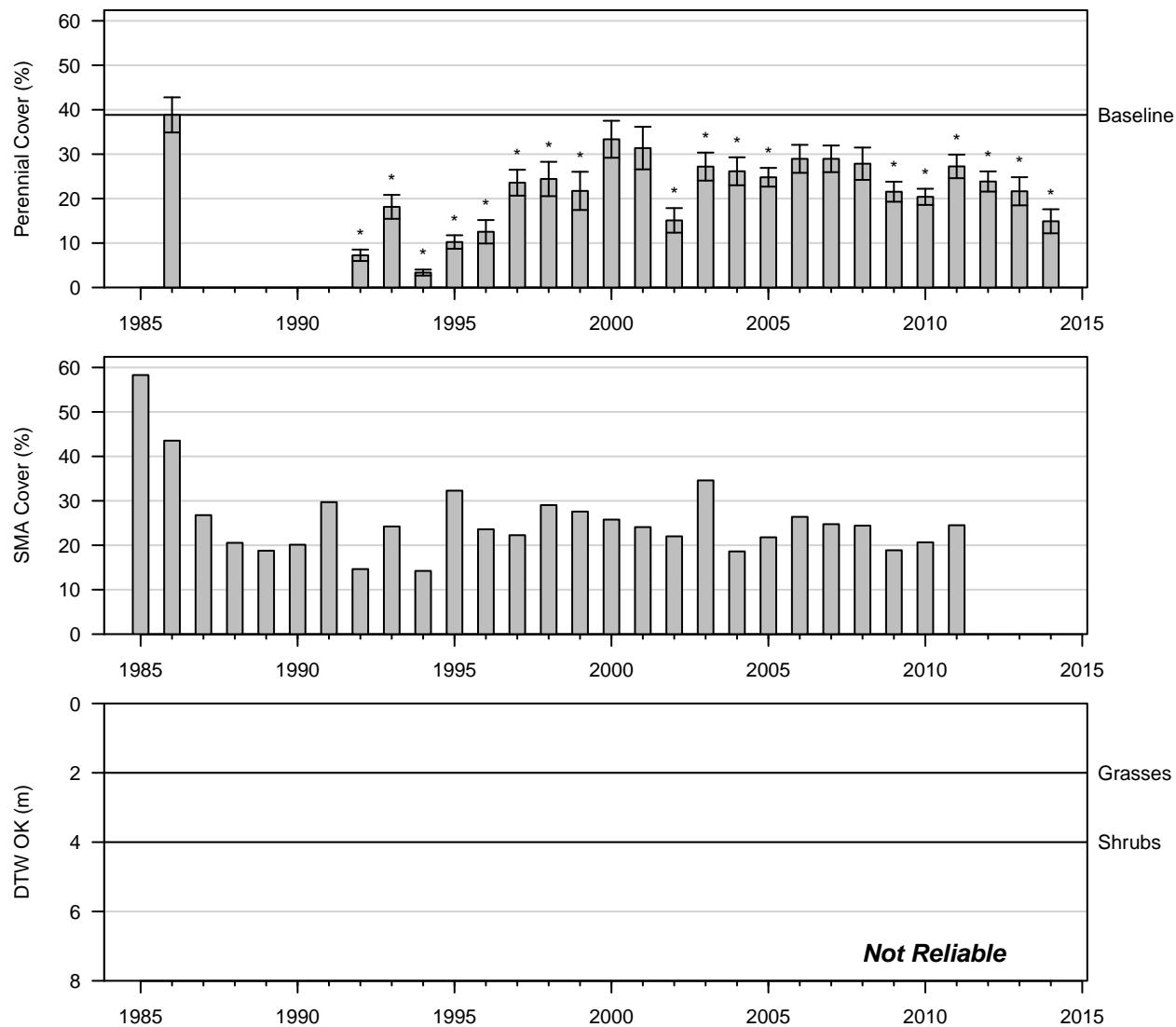


Figure 33: 2014 Wellfield

BLK077
Desert Sink Scrub (Type A)

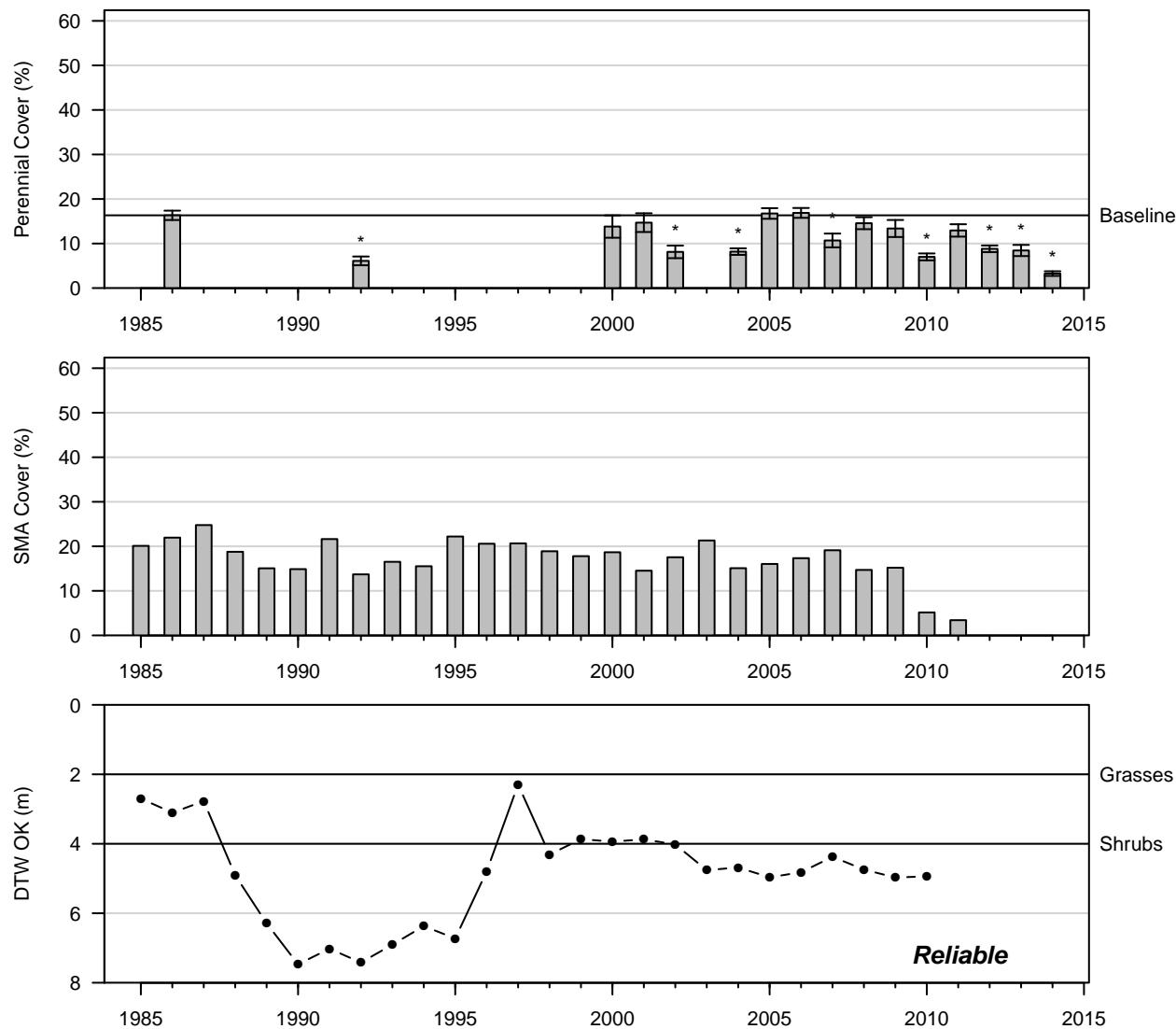


Figure 34: 2014 Wellfield

BLK093
Alkali Meadow (Type C)

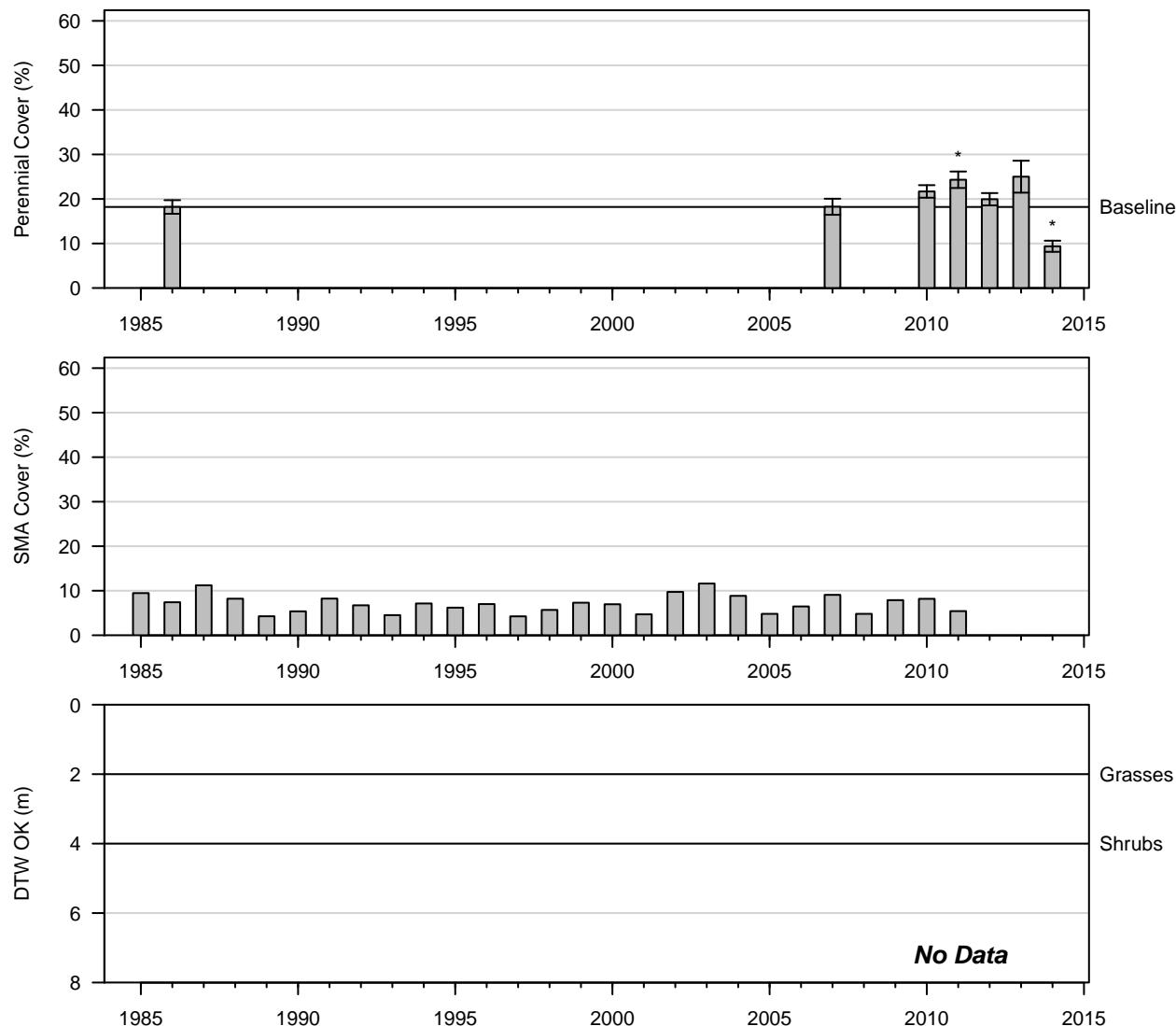


Figure 35: 2014 Wellfield

BLK094
Alkali Meadow (Type C)

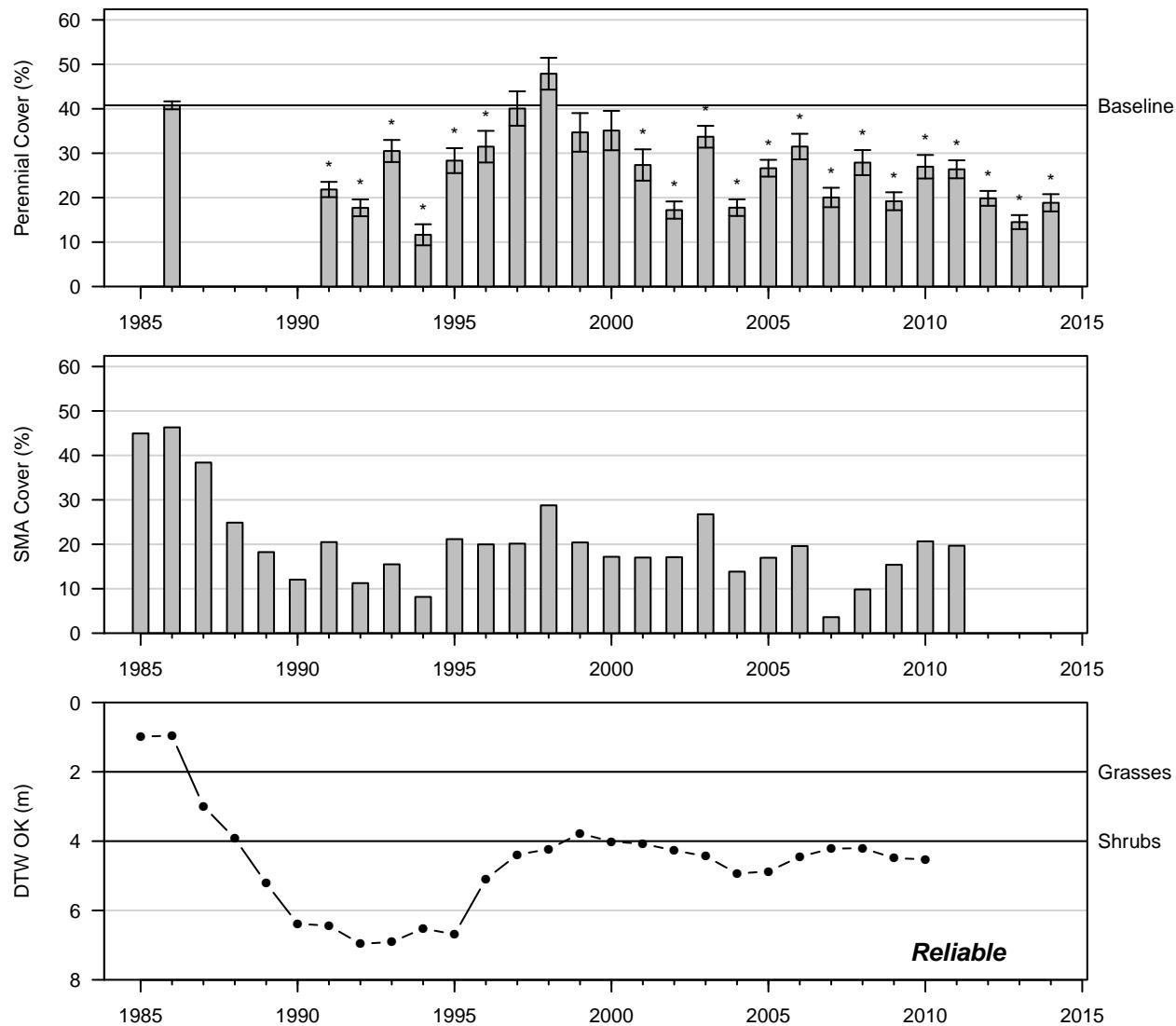


Figure 36: 2014 Wellfield

BLK095
Alkali Meadow (Type A)

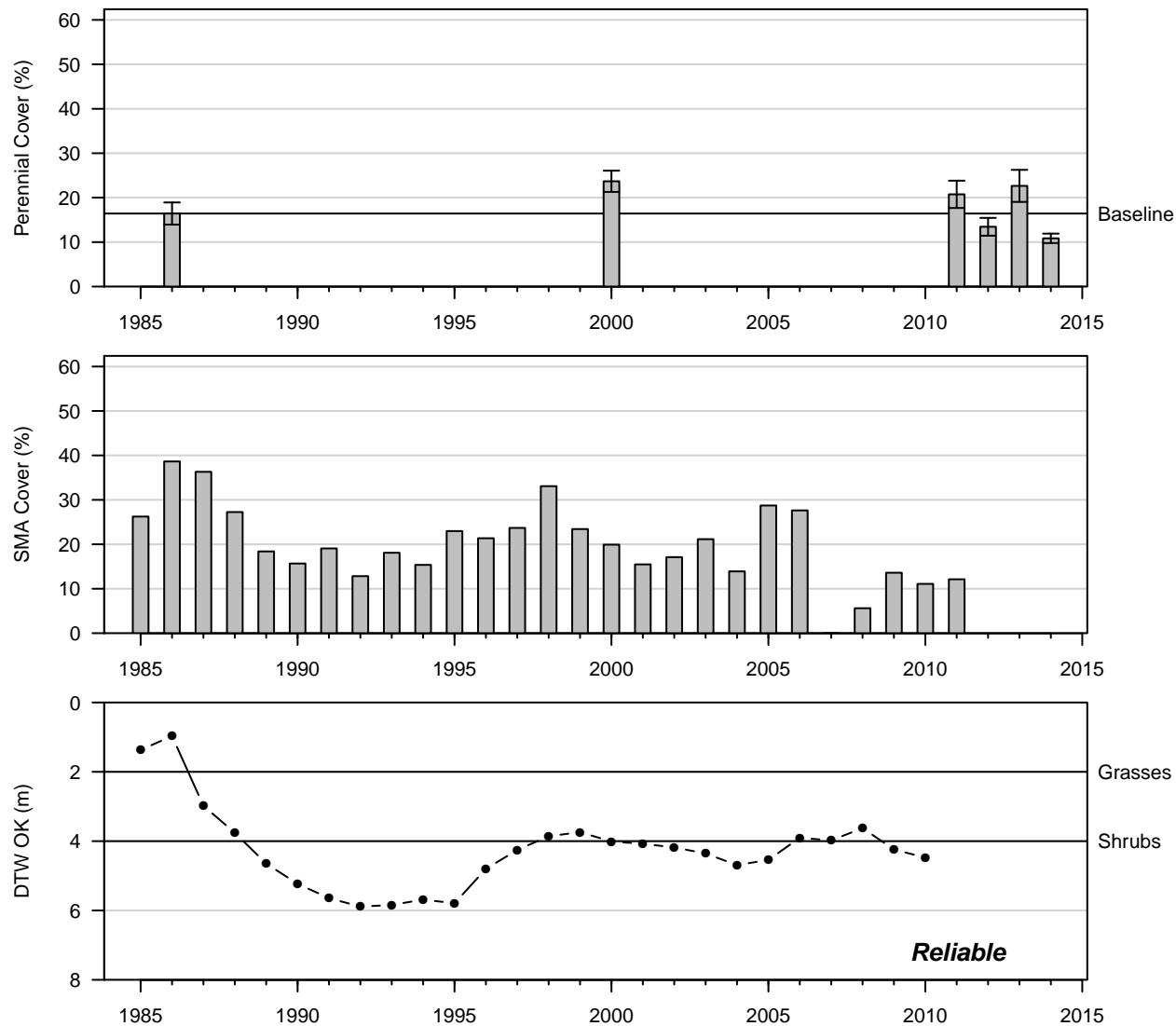


Figure 37: 2014 Wellfield

BLK096
Desert Sink Scrub (Type A)

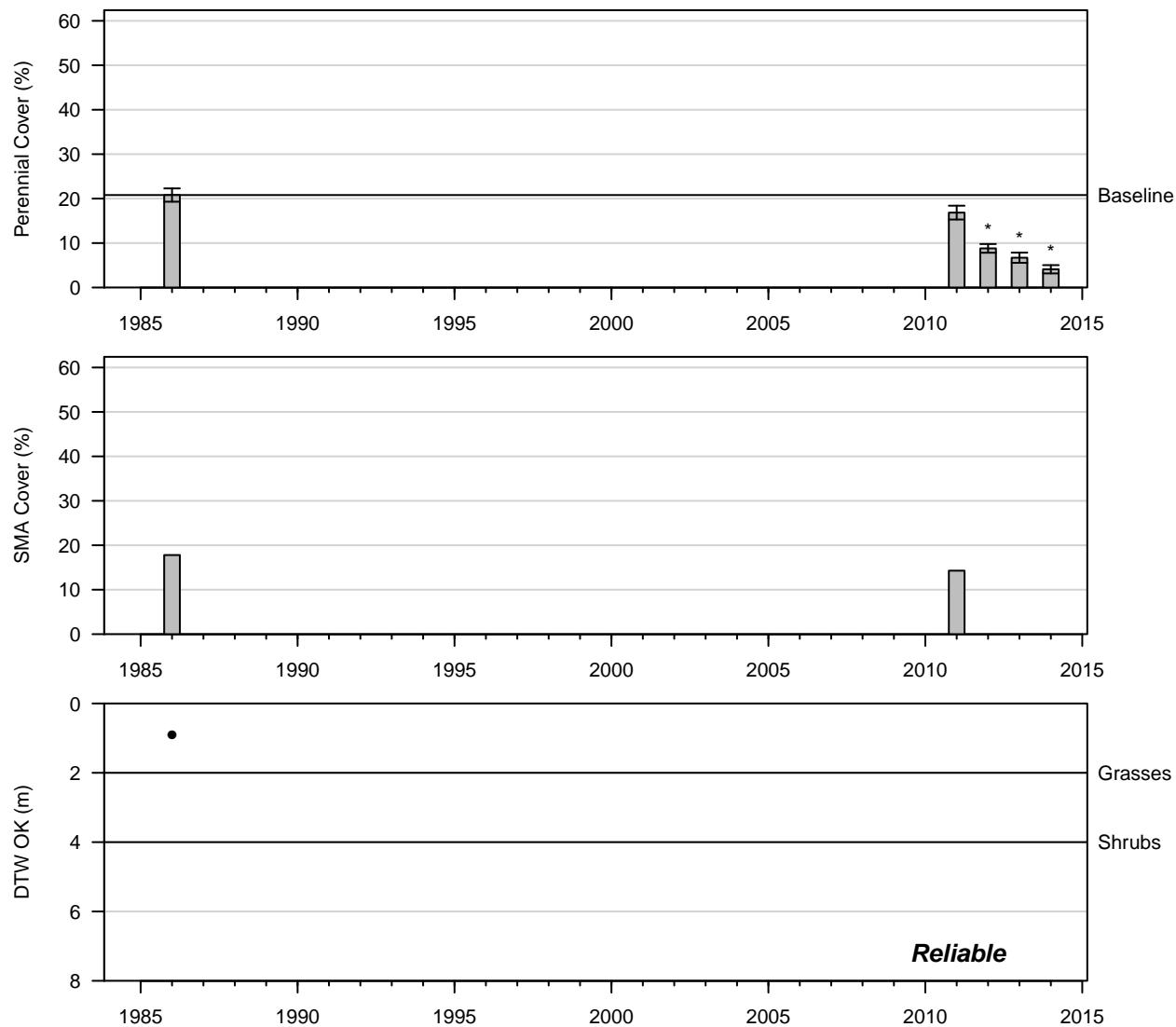


Figure 38: 2014 Wellfield

BLK099
Alkali Meadow (Type C)

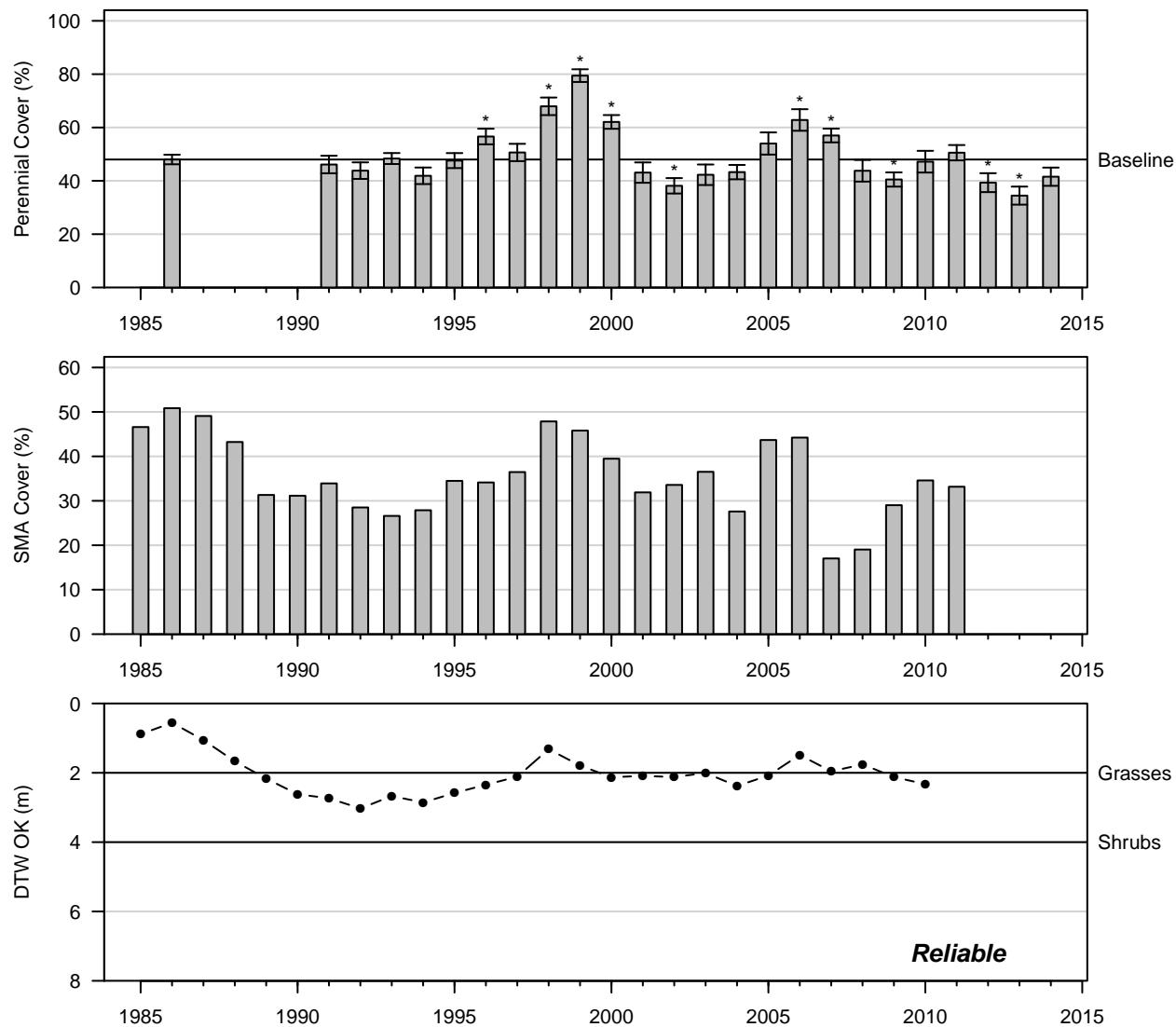


Figure 39: 2014 Wellfield

BLK115
Alkali Meadow (Type A)

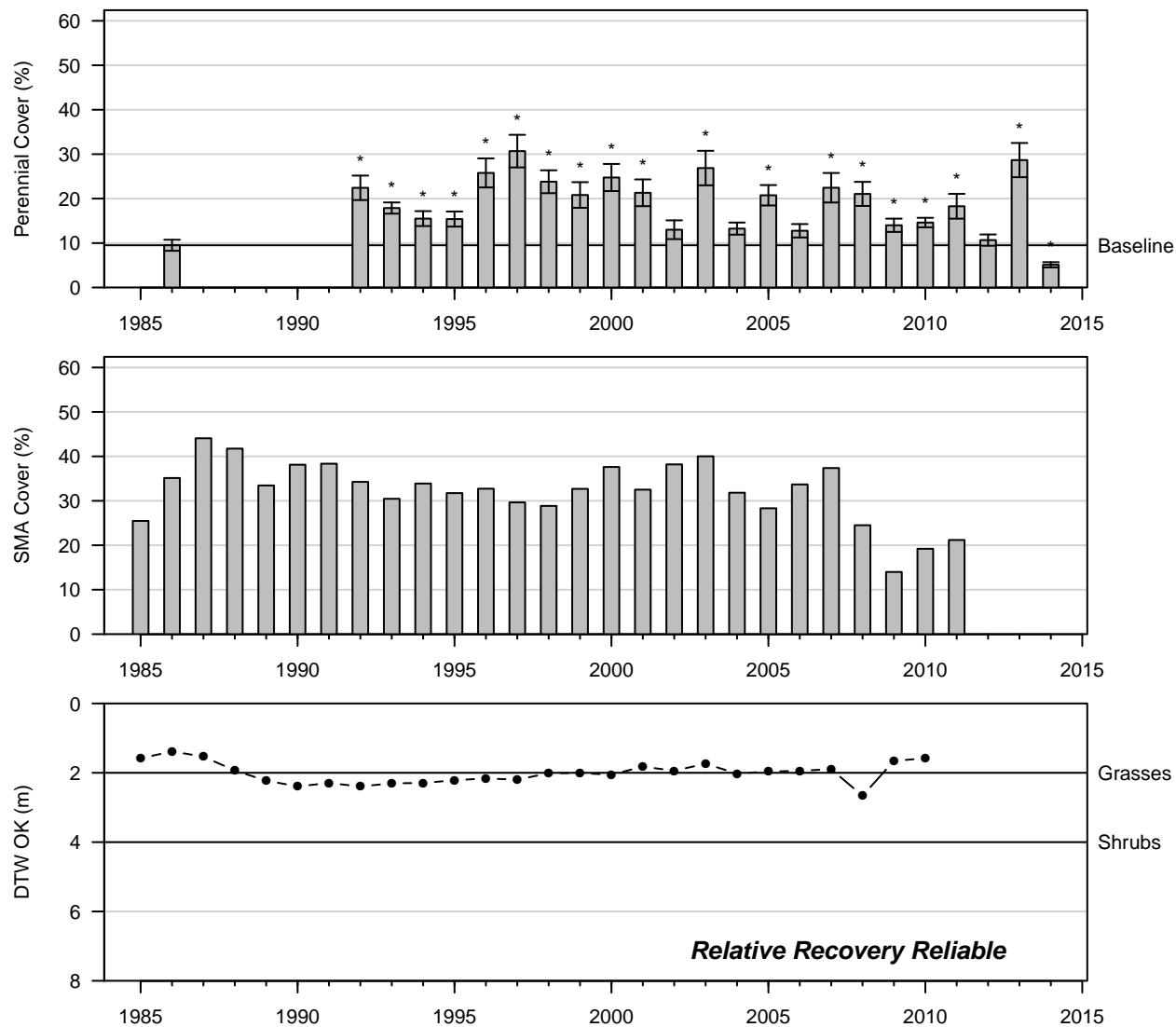


Figure 40: 2014 Control

BLK142
Alkali Meadow (Type C)

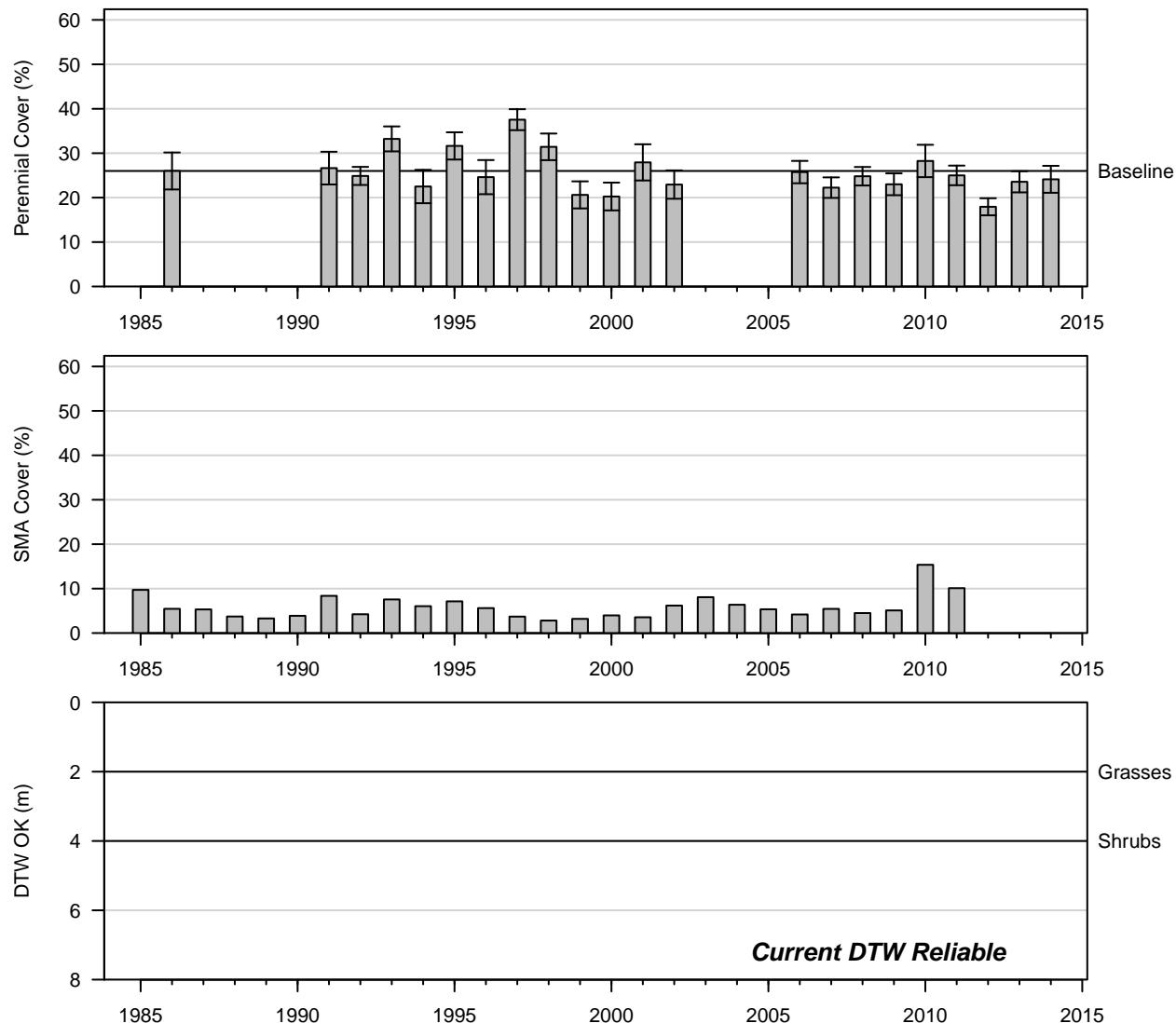


Figure 41: 2014 Wellfield

BLK143
Alkali Meadow (Type C)

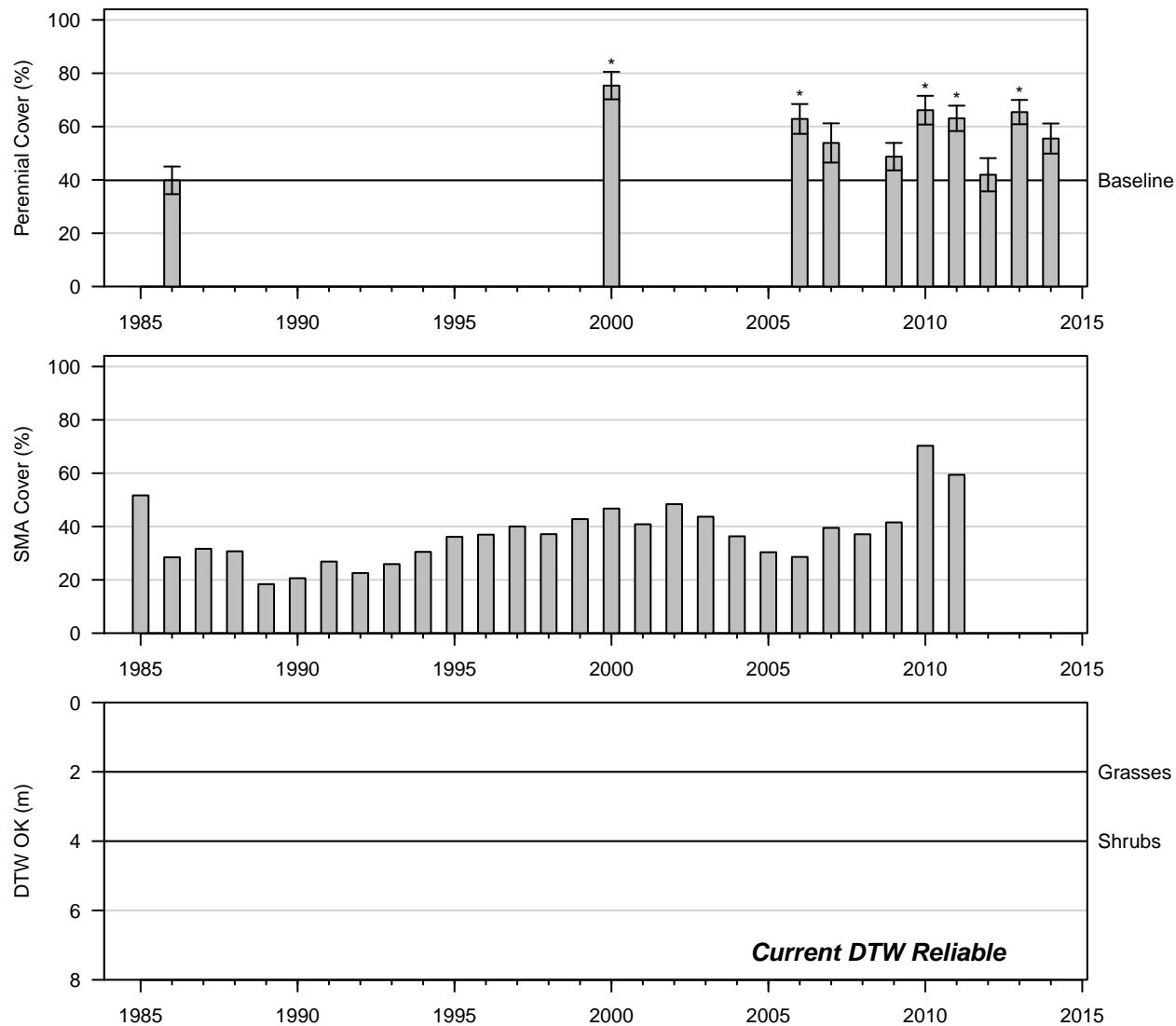


Figure 42: 2014 Wellfield

FSL051
Alkali Meadow (Type C)

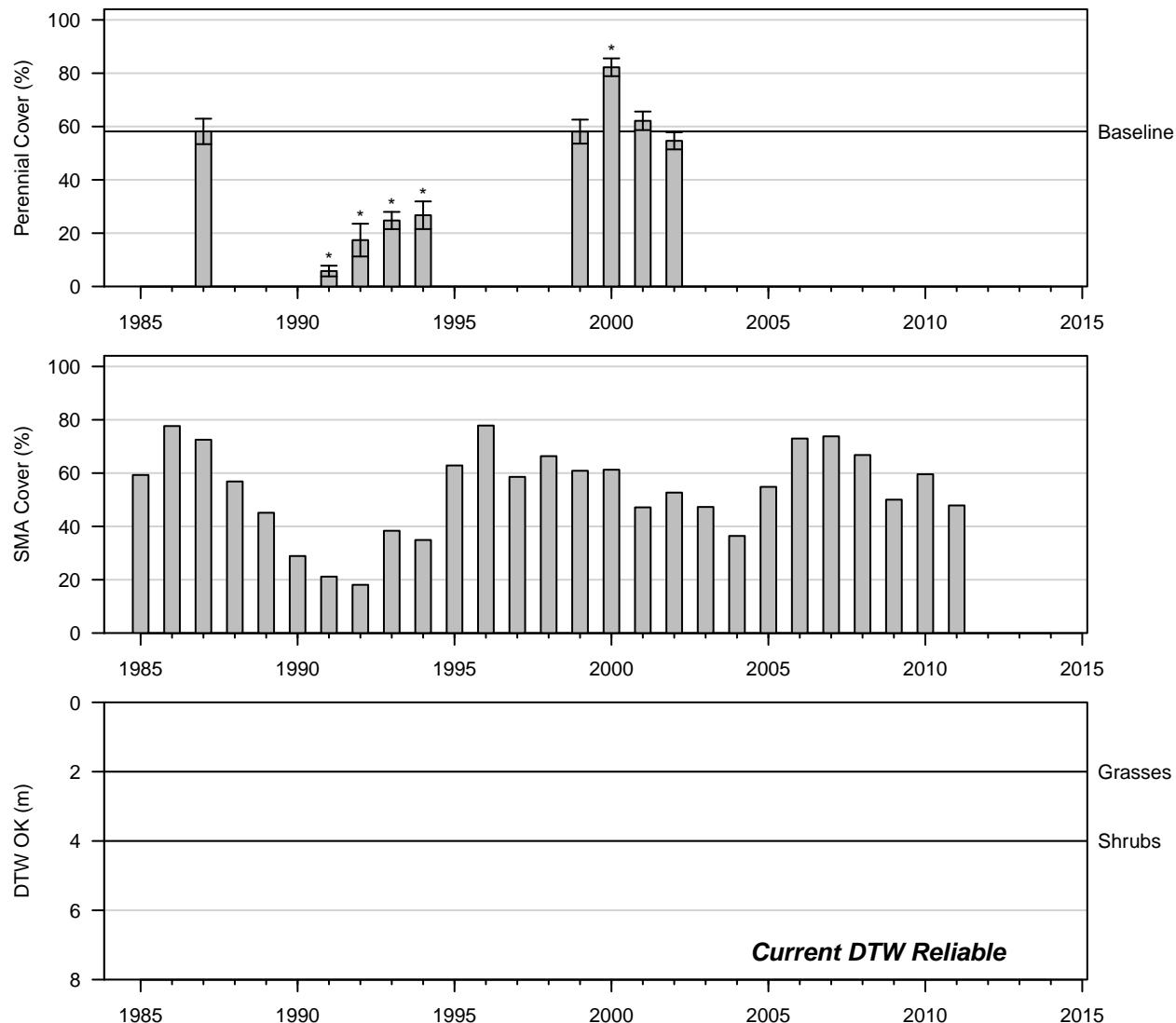


Figure 43: 2002 Wellfield

FSL053
Alkali Meadow (Type C)

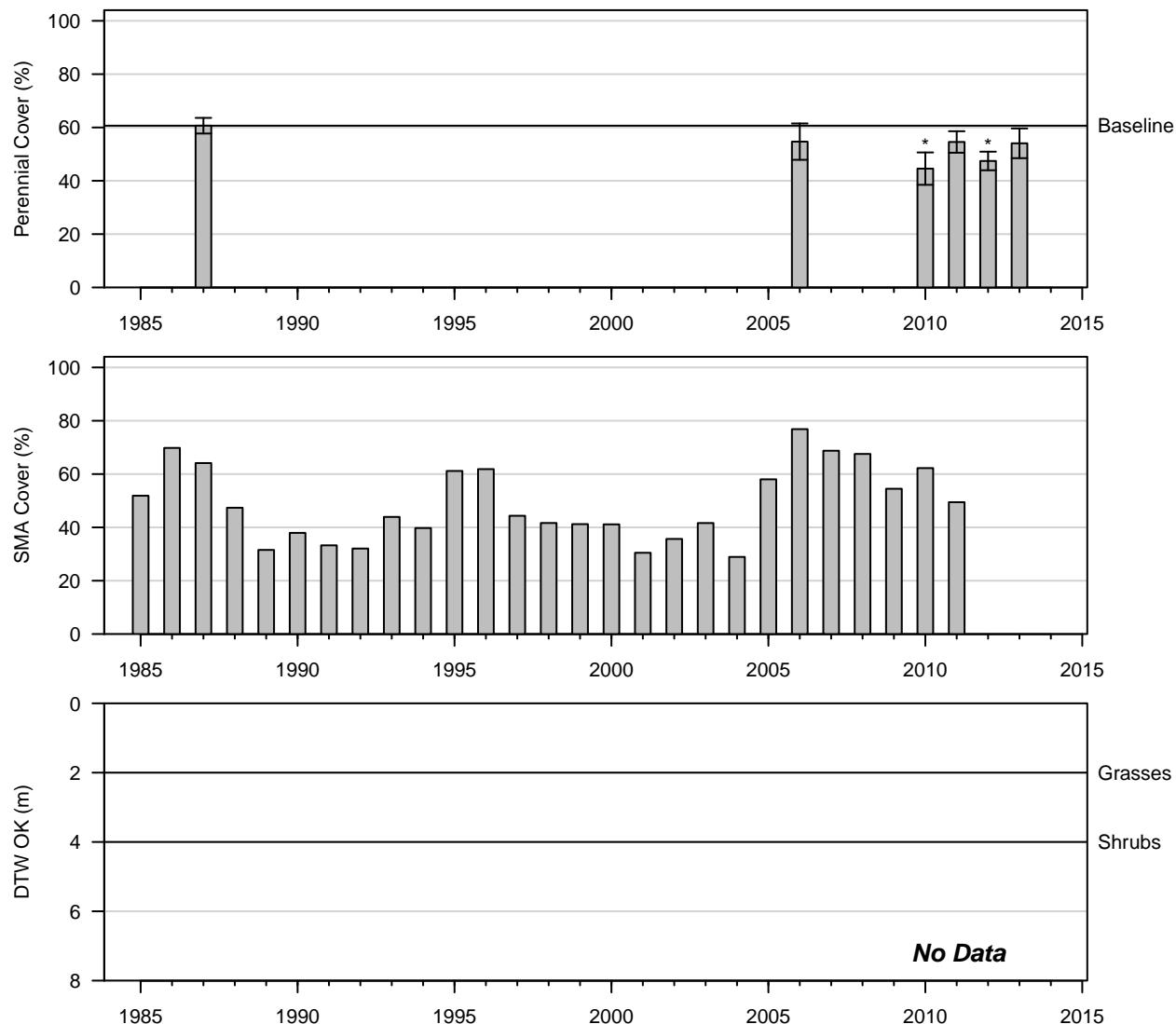


Figure 44: 2013 Wellfield

FSL064
Alkali Meadow (Type C)

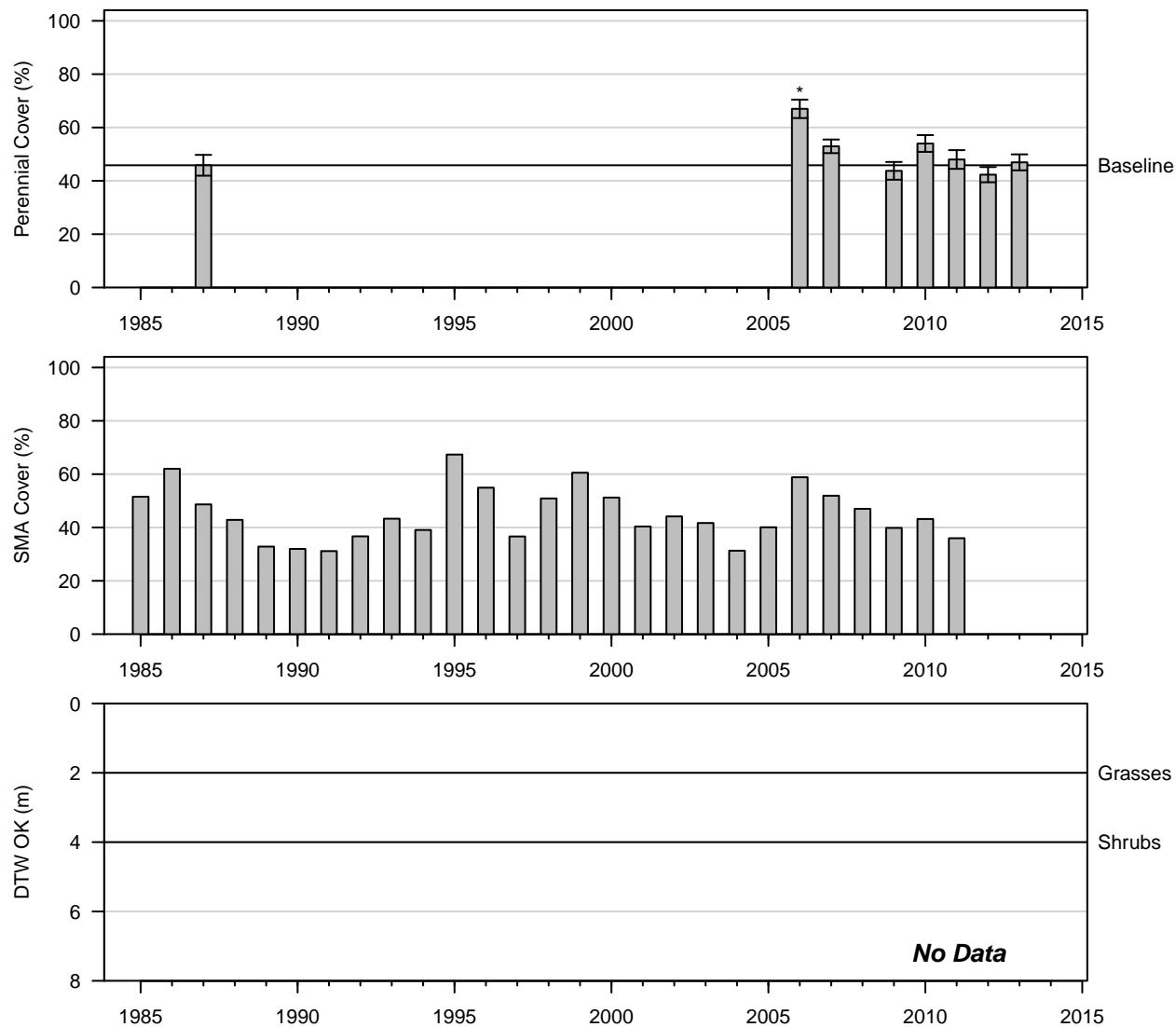


Figure 45: 2013 Wellfield

FSL065
Alkali Meadow (Type A)

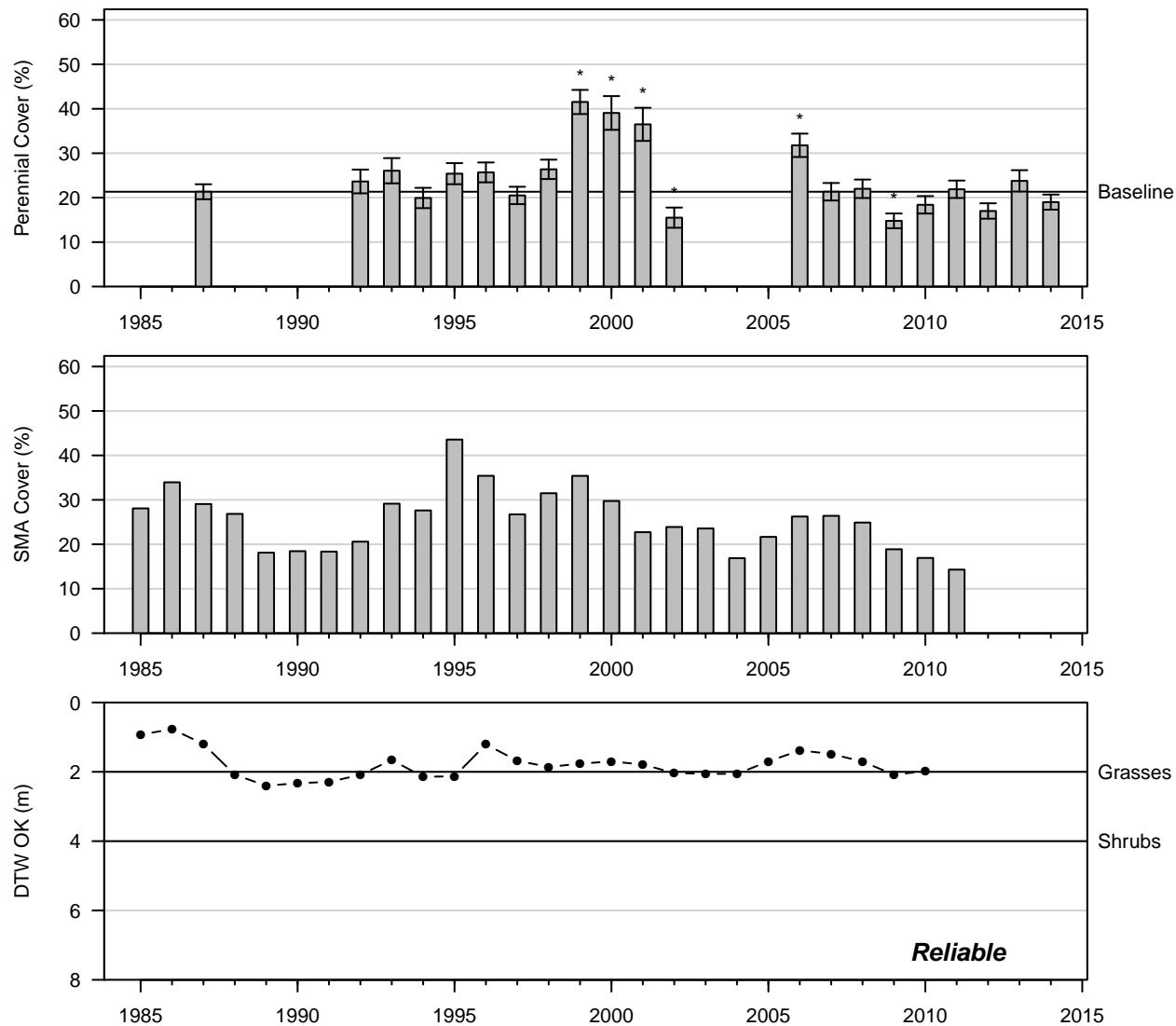


Figure 46: 2014 Wellfield

FSL109
Rush/Sedge Meadow (Type E)

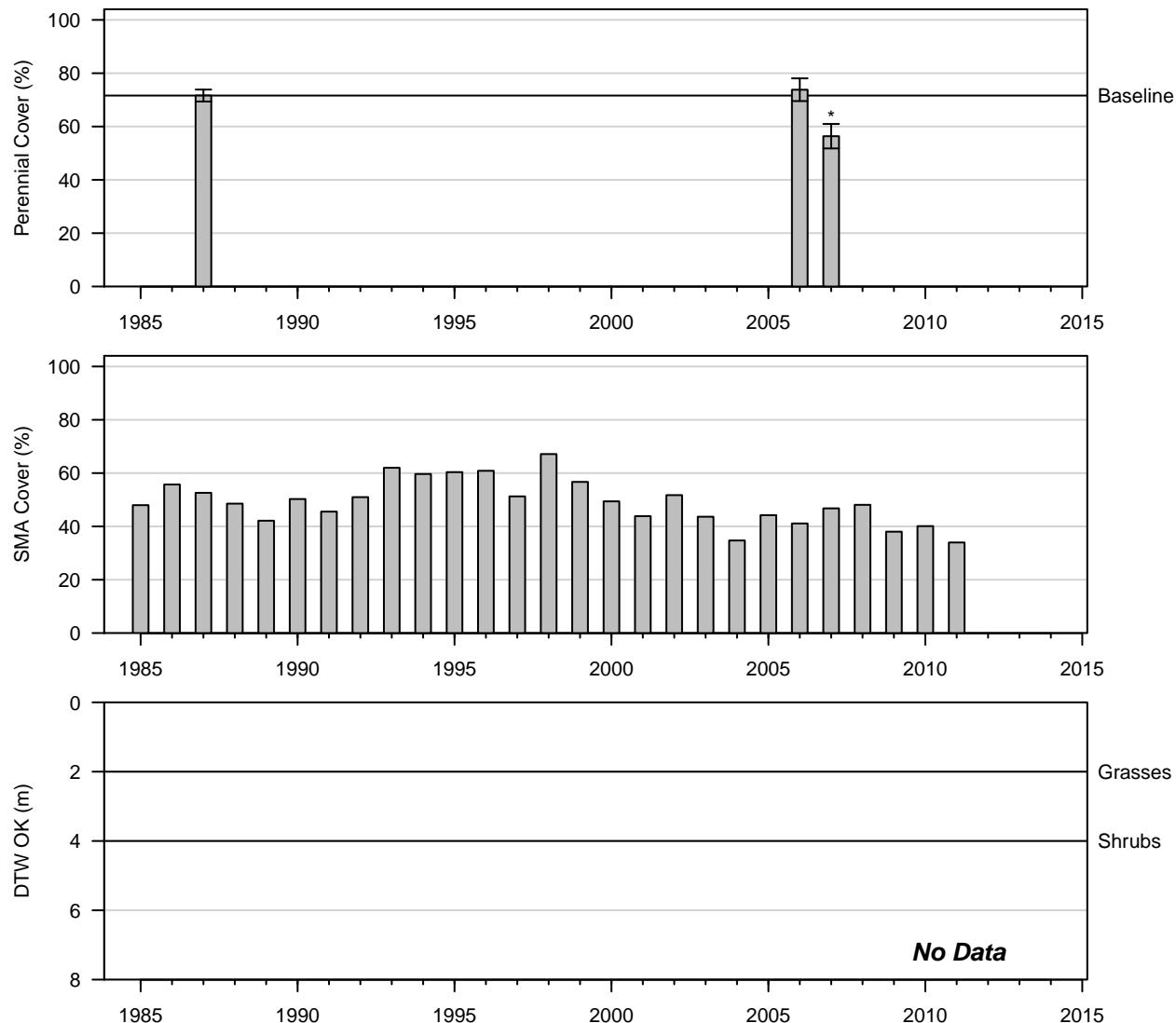


Figure 47: 2007 Control

FSL116
Alkali Meadow (Type C)

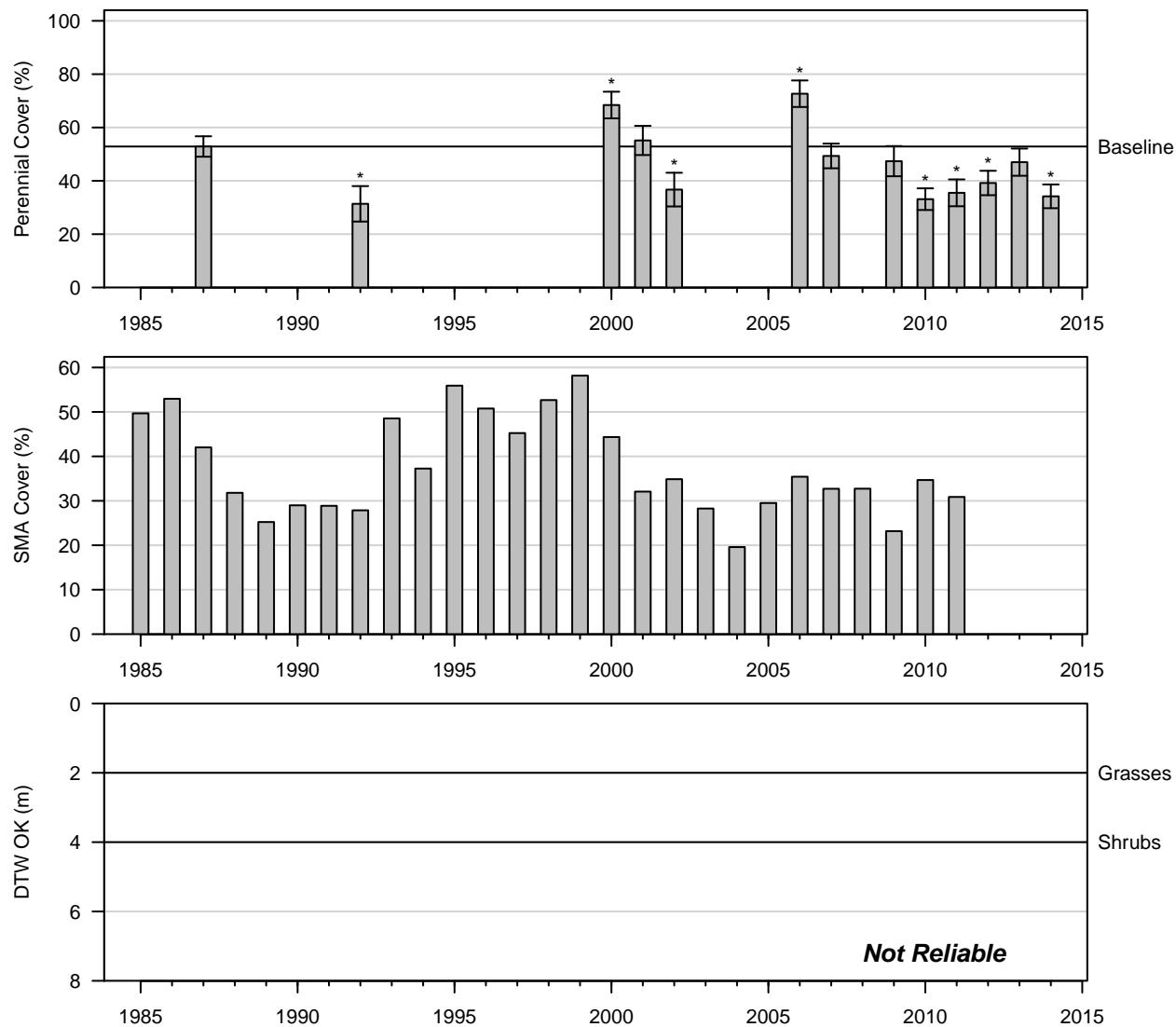


Figure 48: 2014 Wellfield

FSL118
Rabbitbrush Scrub (Type A)

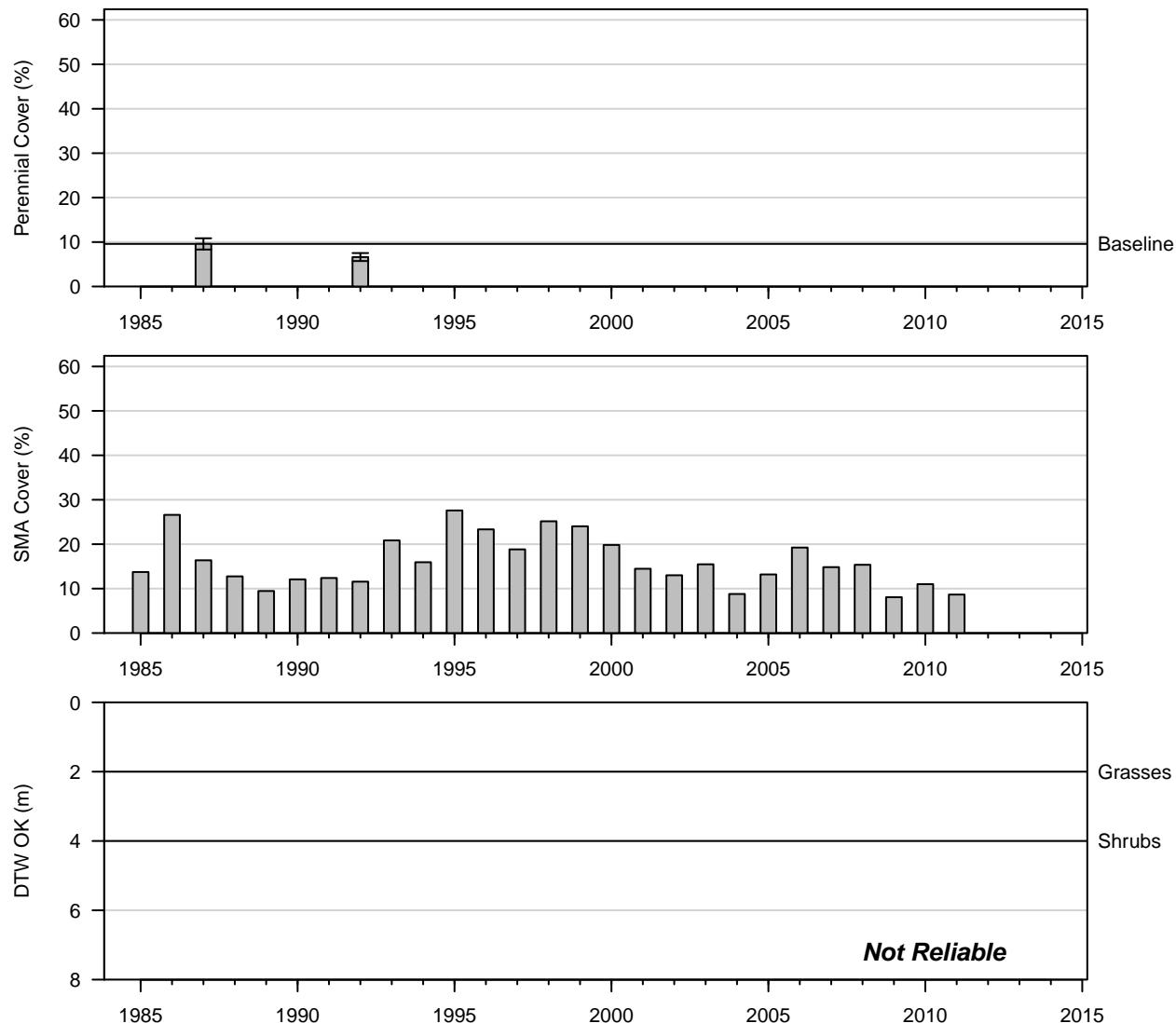


Figure 49: 1992 Wellfield

FSL120
Alkali Meadow (Type C)

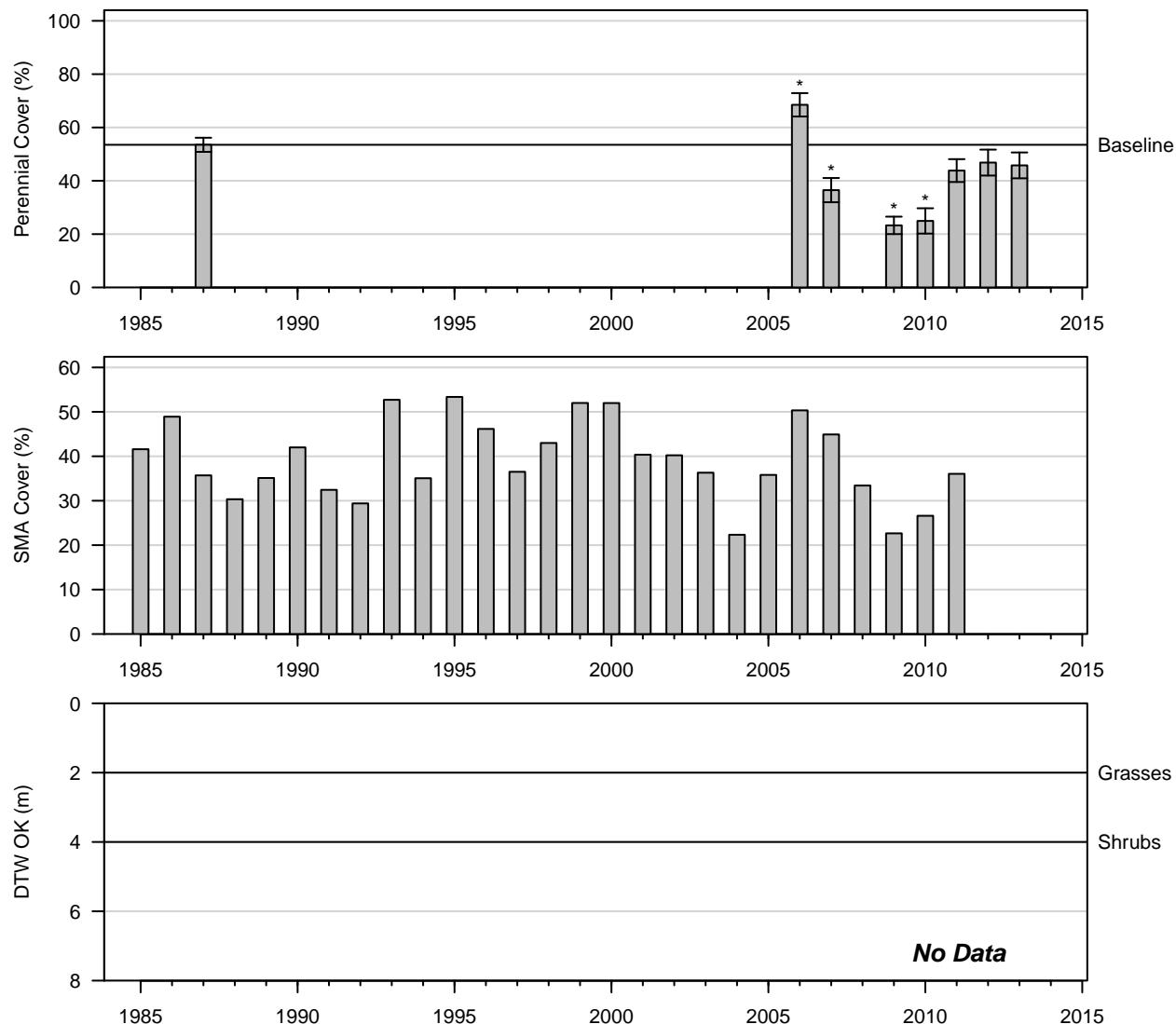


Figure 50: 2013 Wellfield

FSL122
Rabbitbrush Scrub (Type A)

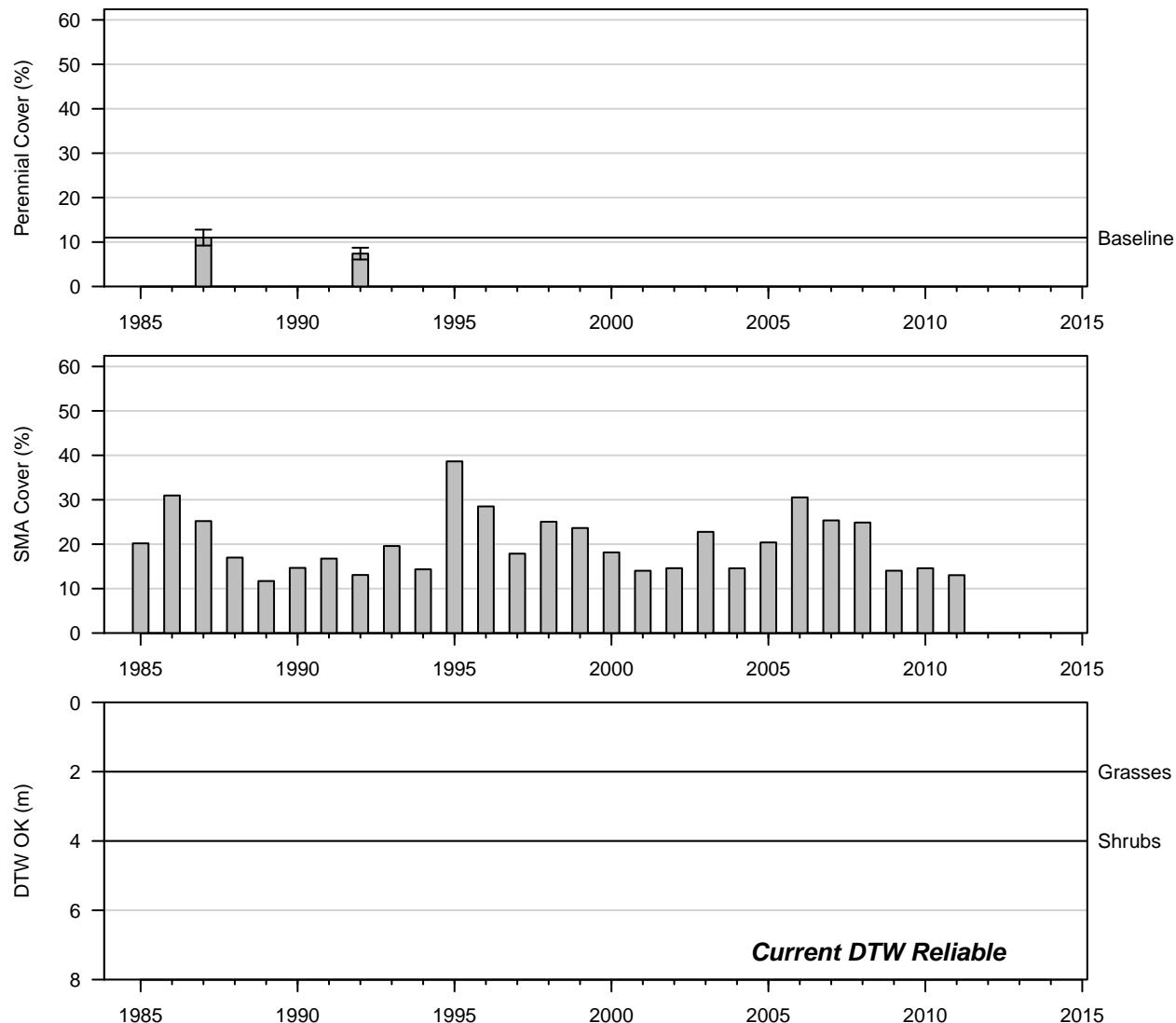


Figure 51: 1992 Wellfield

FSL123
Alkali Meadow (Type C)

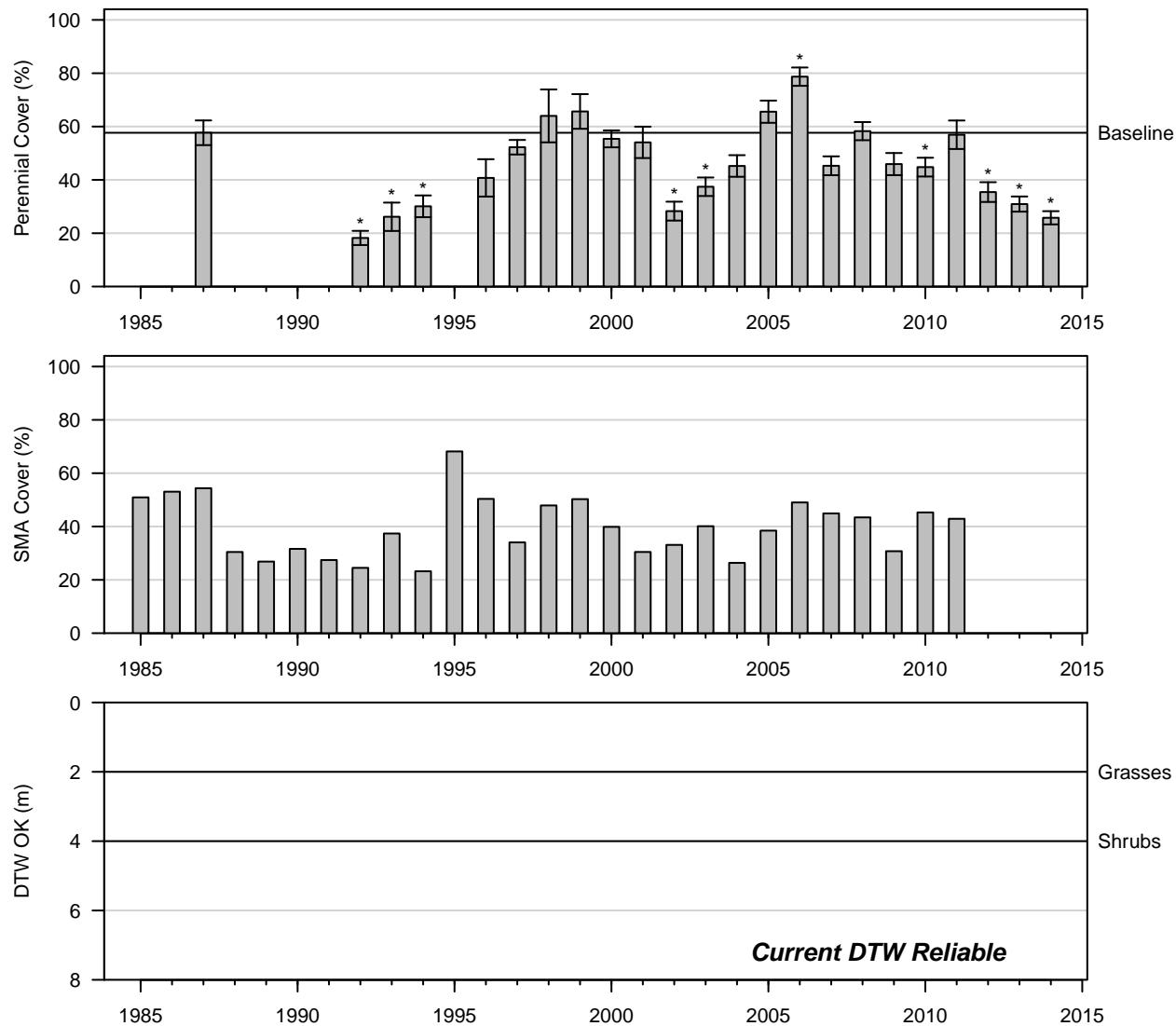


Figure 52: 2014 Wellfield

FSL133
Rabbitbrush Scrub (Type A)

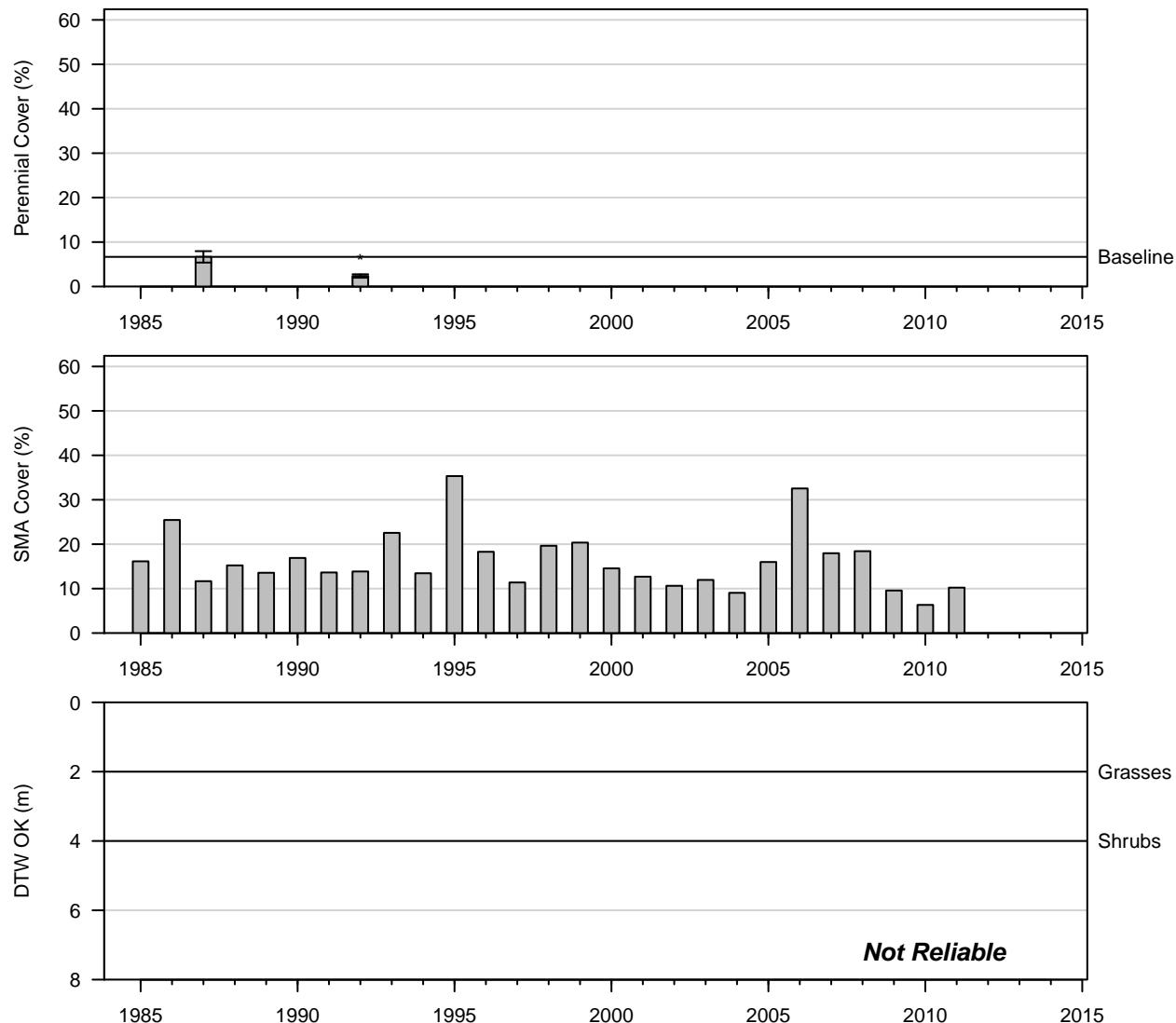


Figure 53: 1992 Wellfield

FSL179
Rabbitbrush Meadow (Type C)

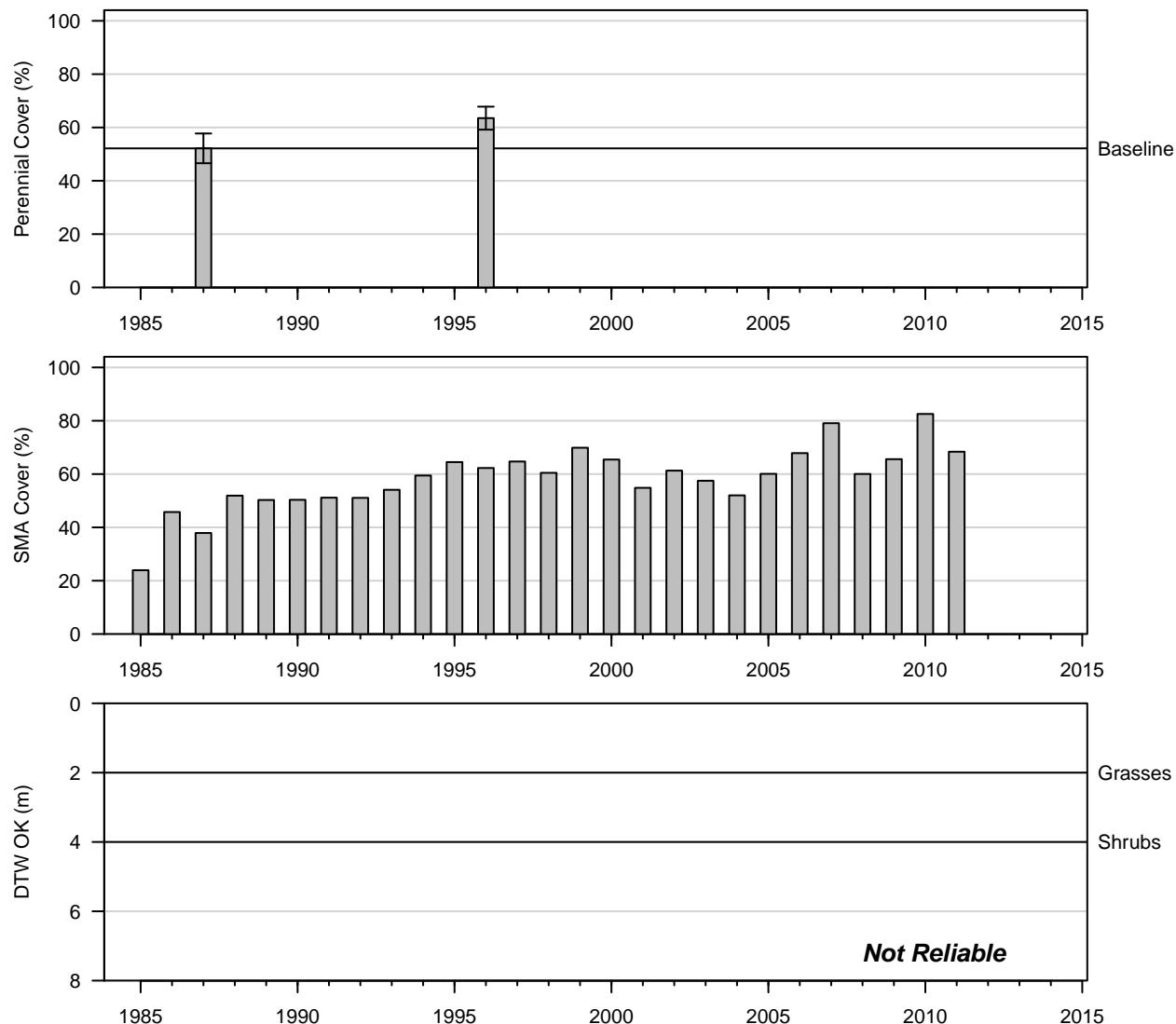


Figure 54: 1996 Control

FSL187
Alkali Meadow (Type A)

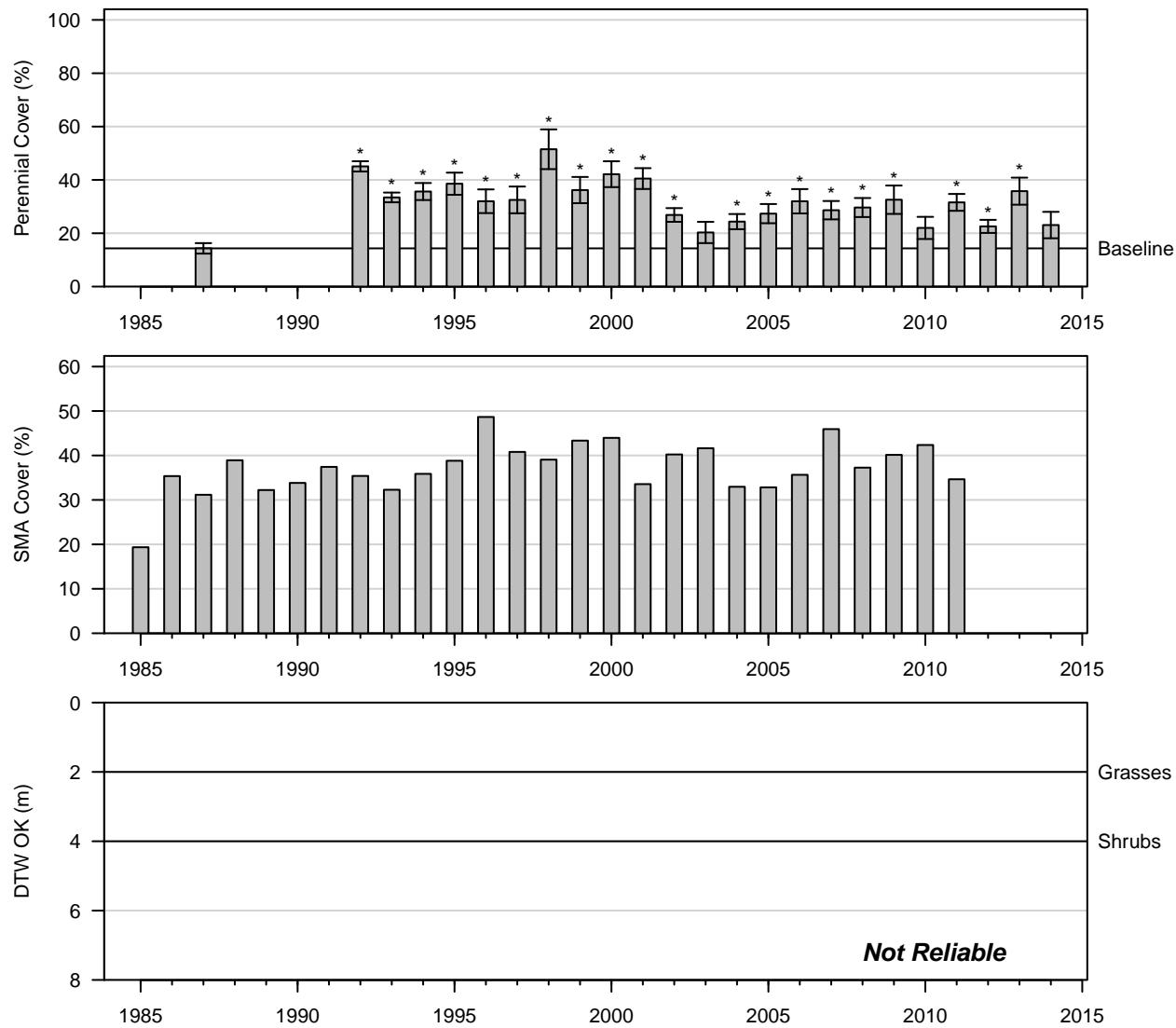


Figure 55: 2014 Control

FSP004
Rabbitbrush Meadow (Type C)

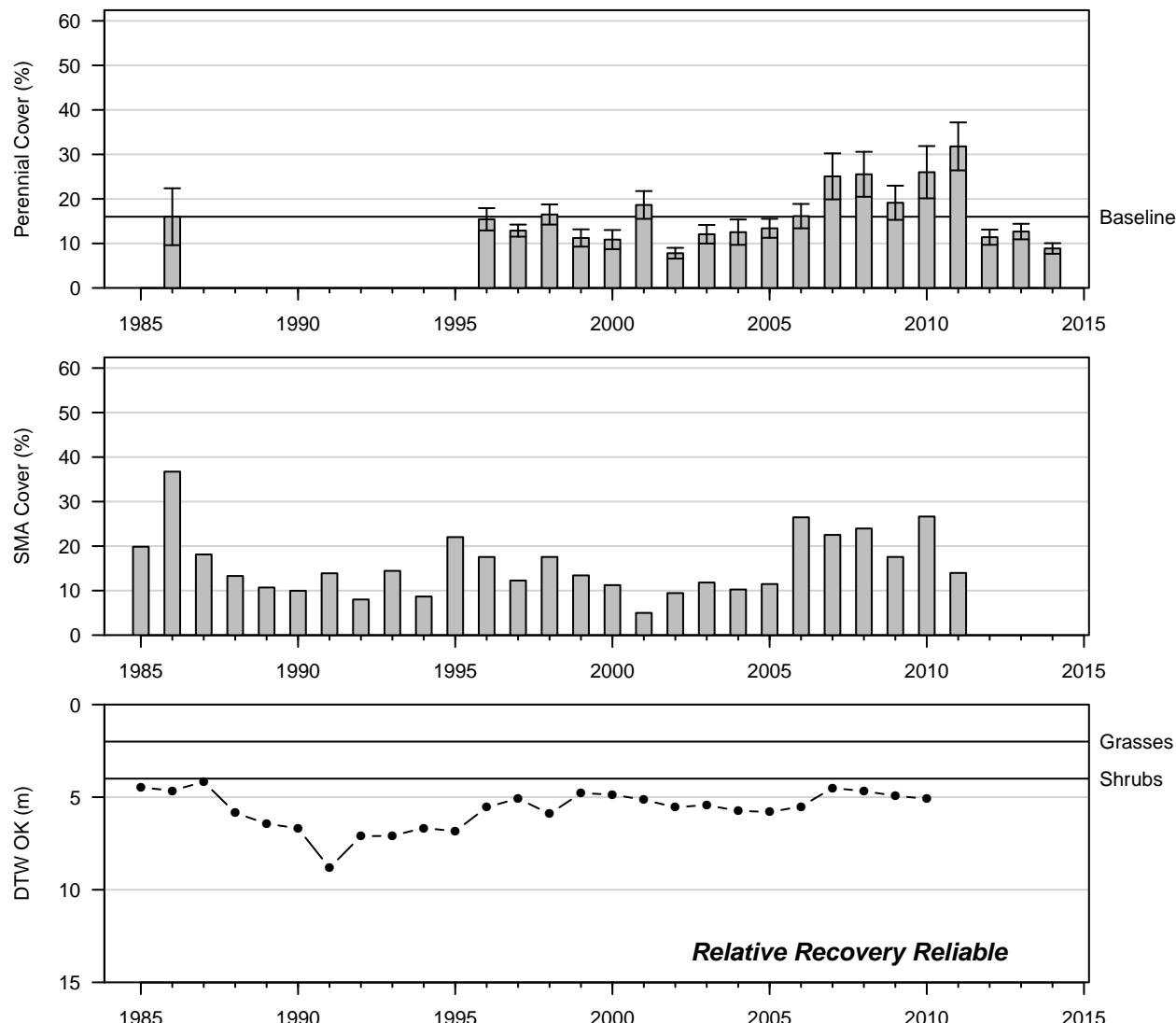


Figure 56: 2014 Wellfield

FSP006
Alkali Meadow (Type AC)

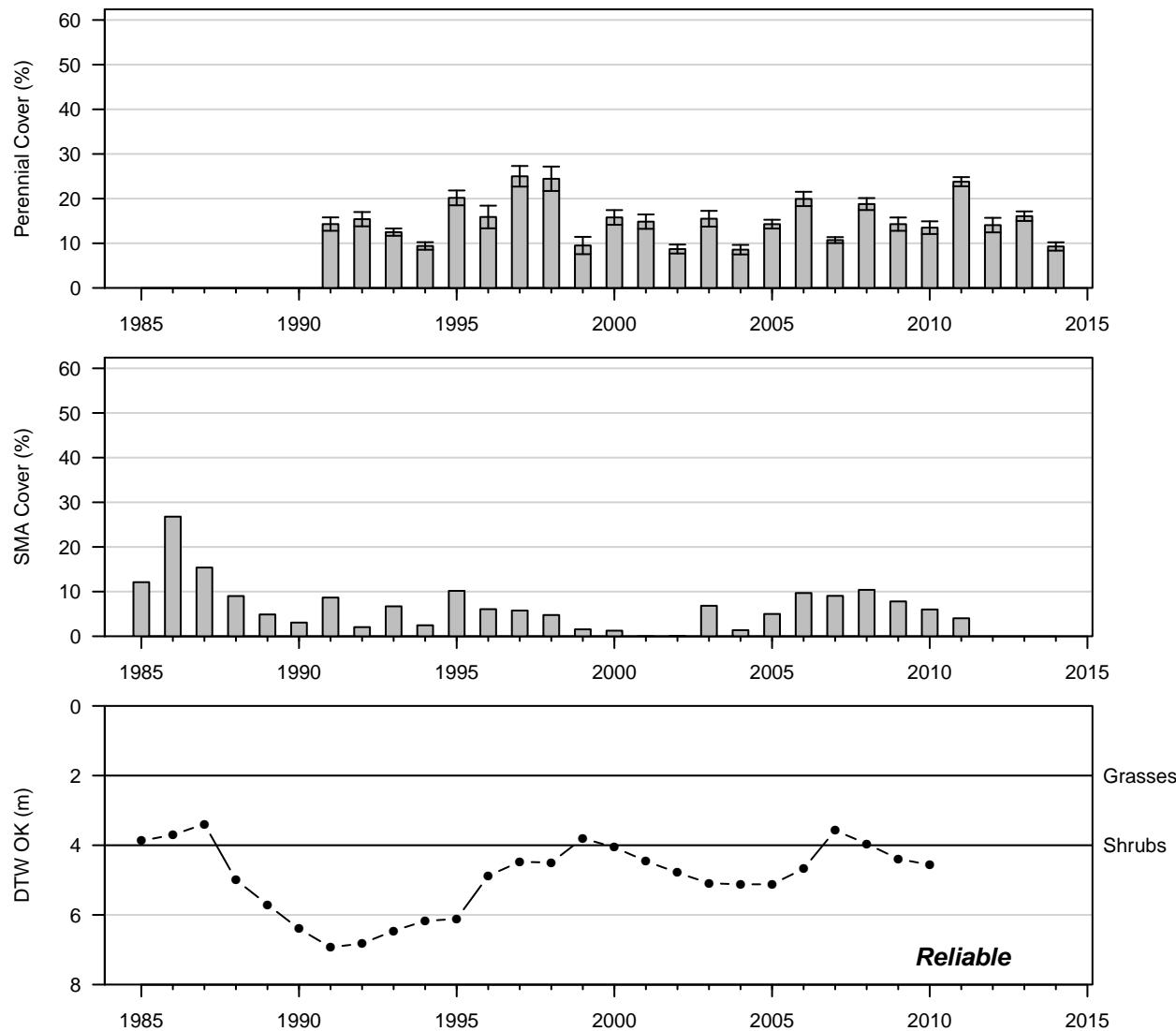


Figure 57: 2014 Wellfield

IND011
Alkali Meadow (Type C)

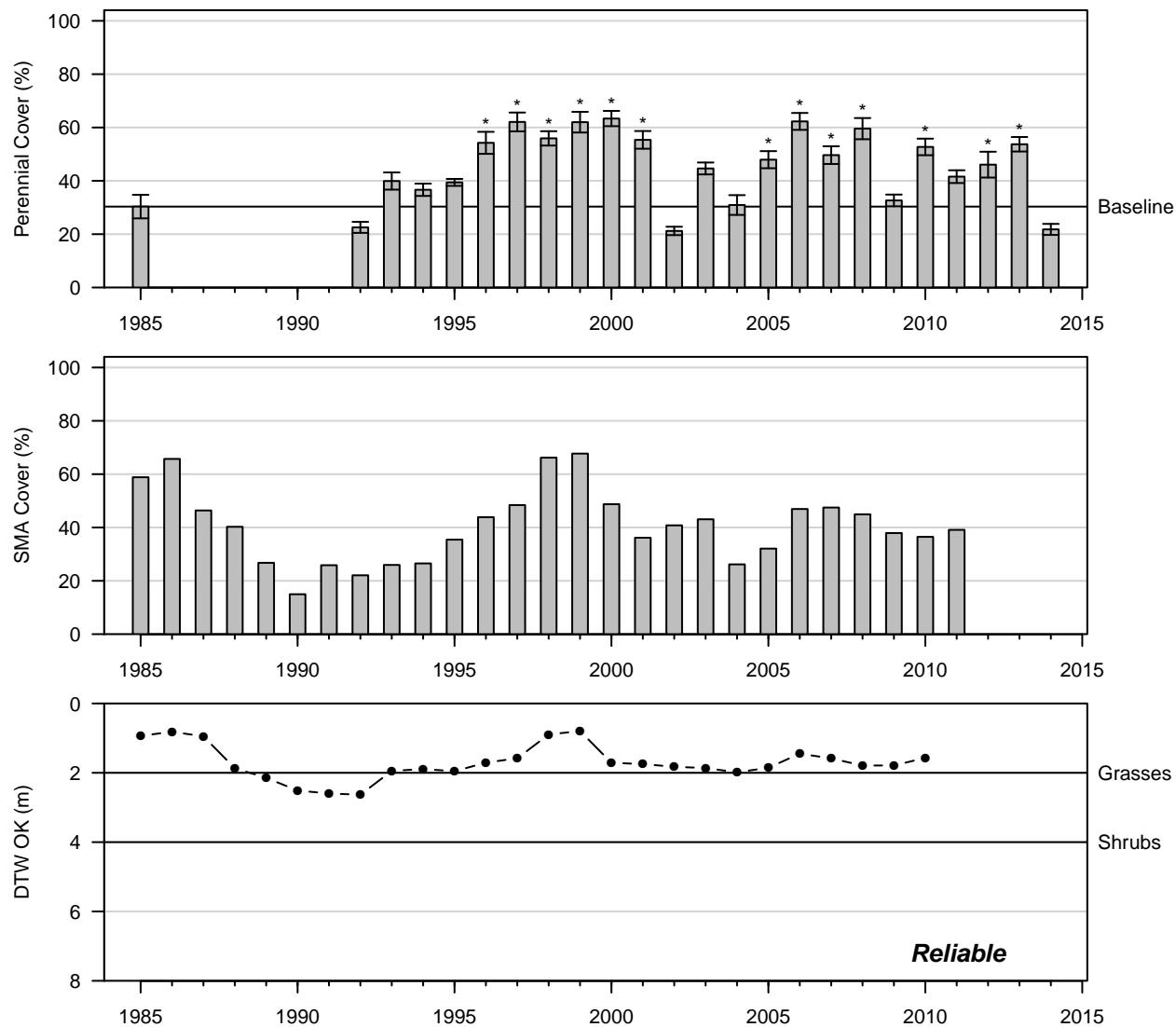


Figure 58: 2014 Wellfield

IND019
Alkali Meadow (Type C)

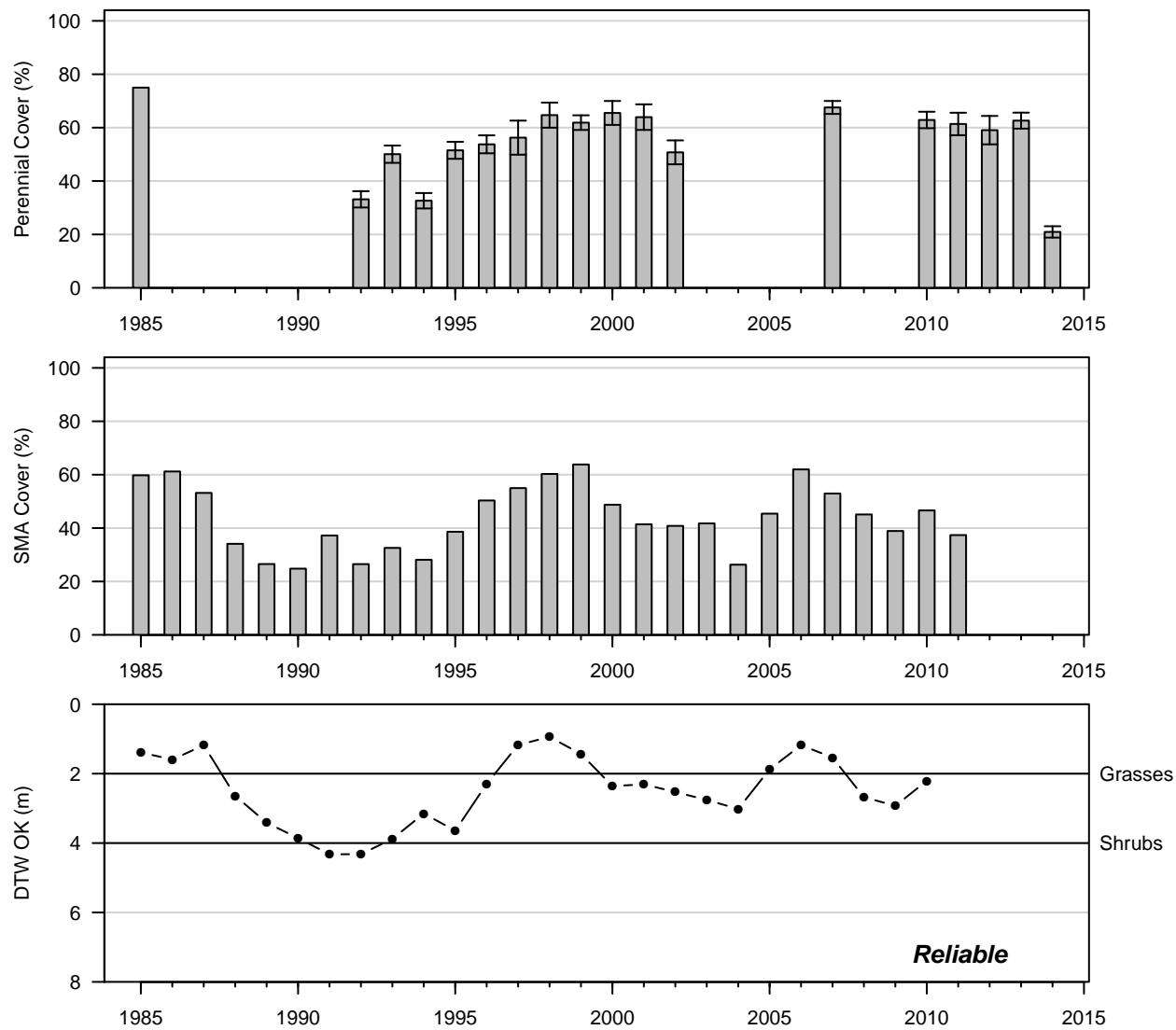


Figure 59: 2014 Wellfield

IND021
Rabbitbrush Meadow (Type C)

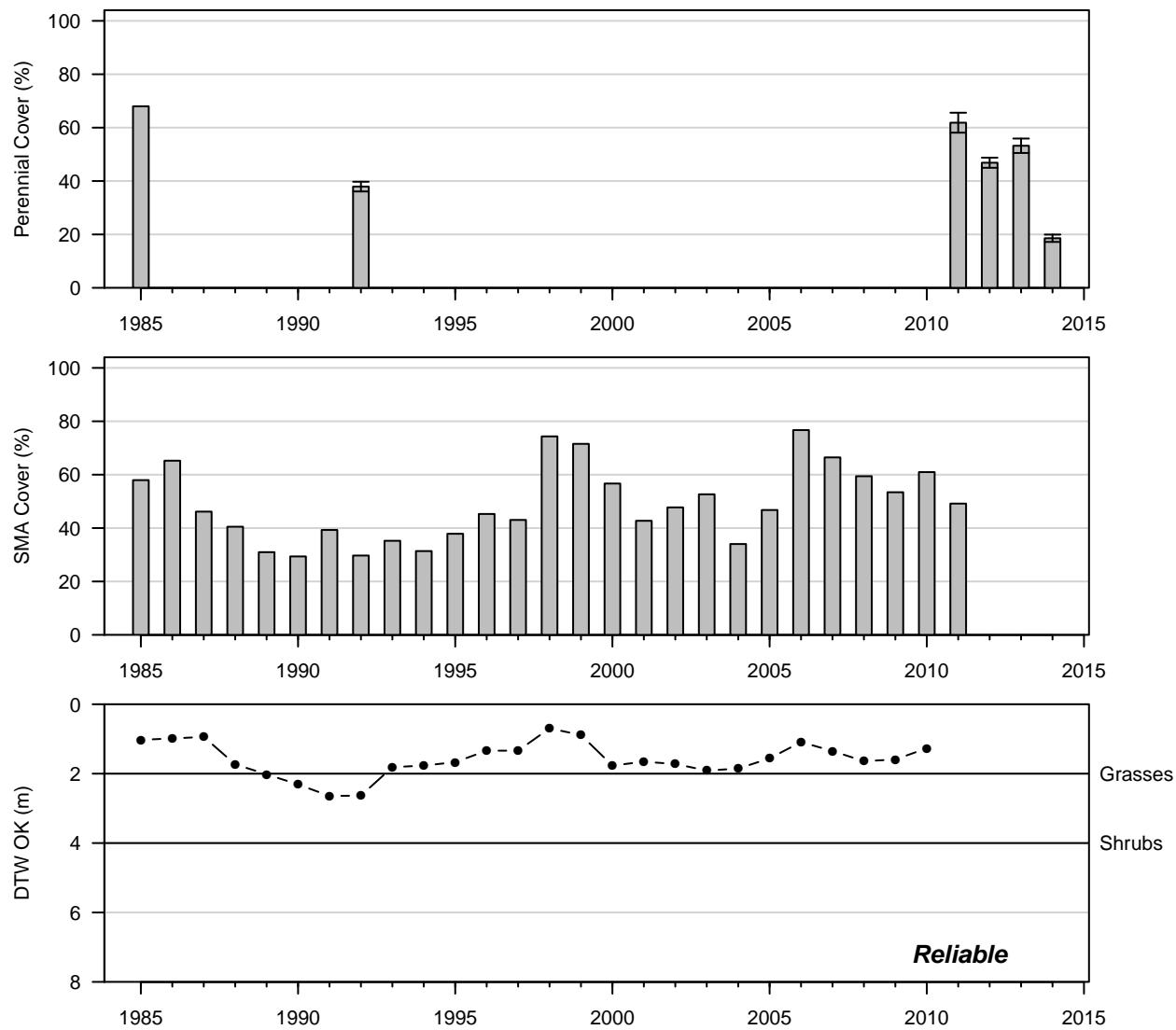


Figure 60: 2014 Wellfield

IND024
Alkali Meadow (Type C)

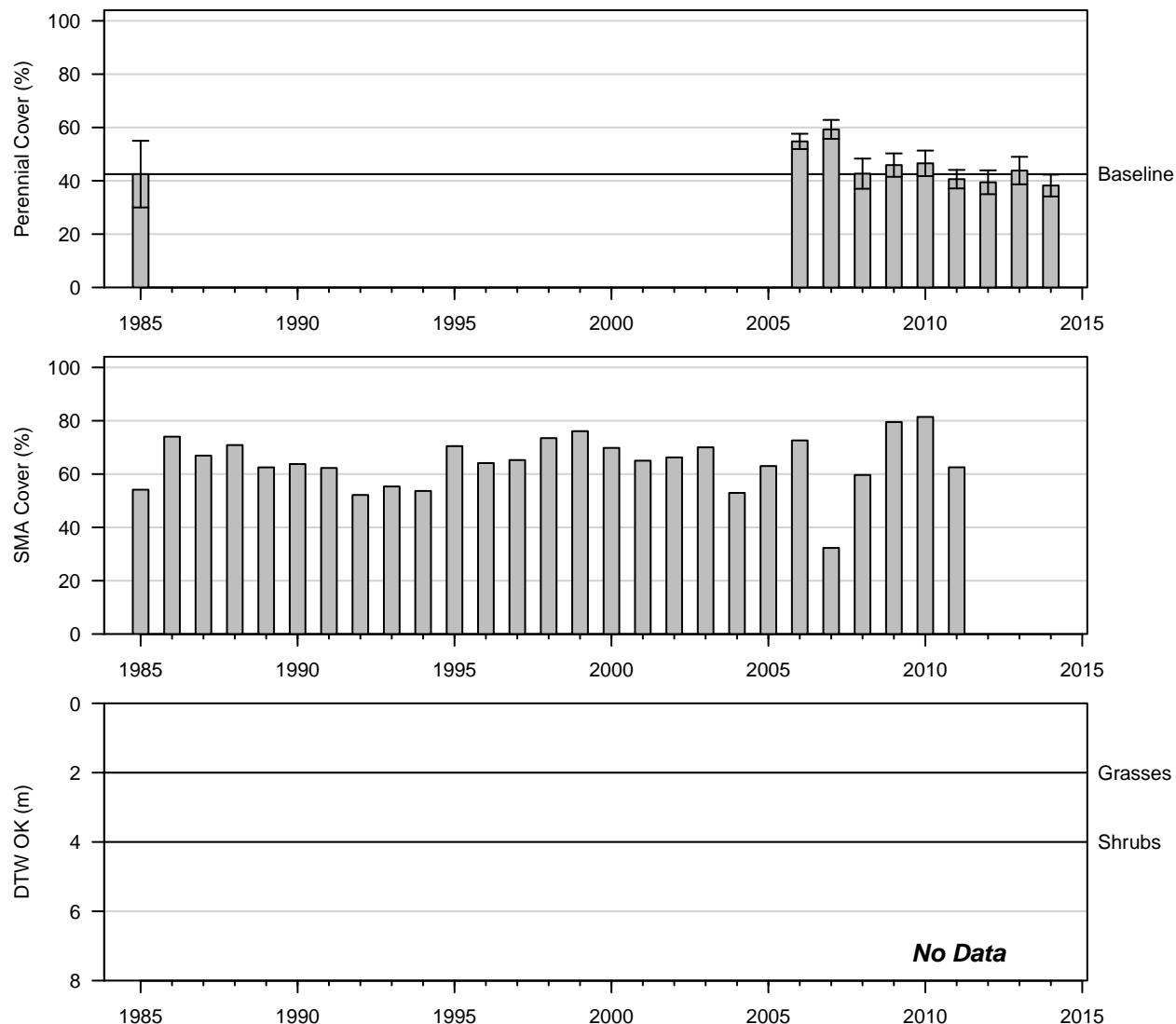


Figure 61: 2014 Wellfield

IND026
Alkali Meadow (Type C)

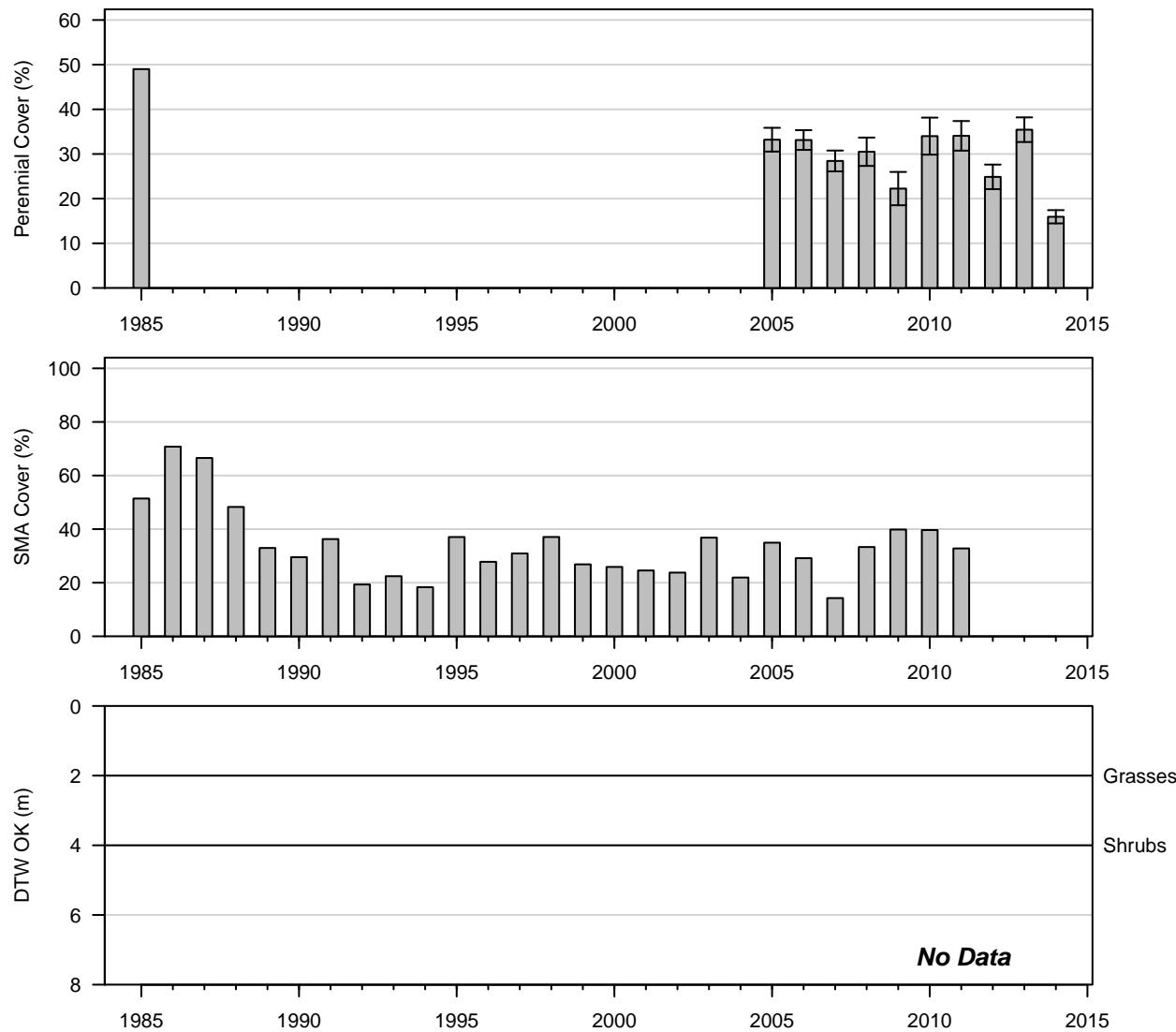


Figure 62: 2014 Wellfield

IND029
Alkali Meadow (Type C)

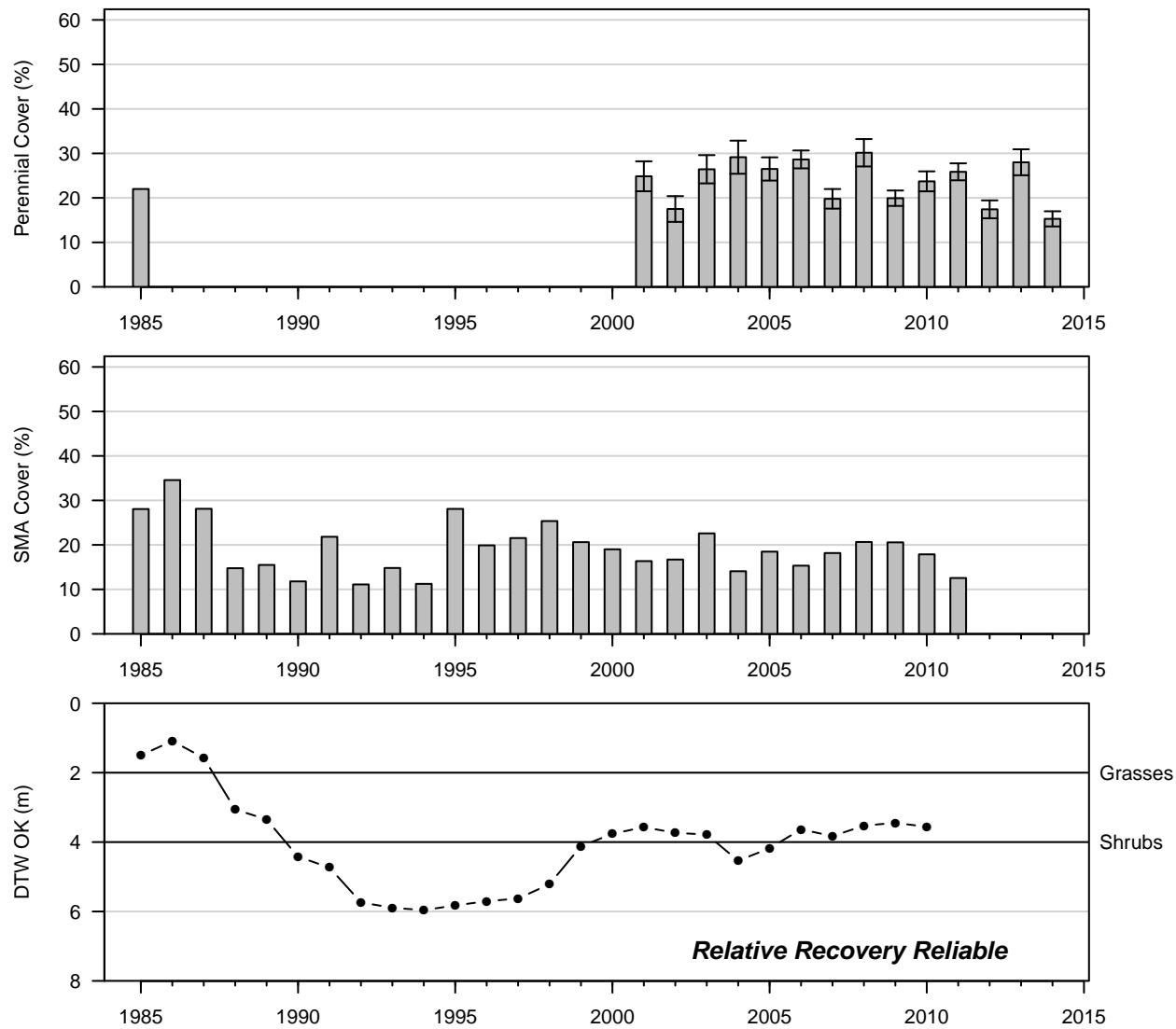


Figure 63: 2014 Wellfield

IND035
Alkali Meadow (Type C)

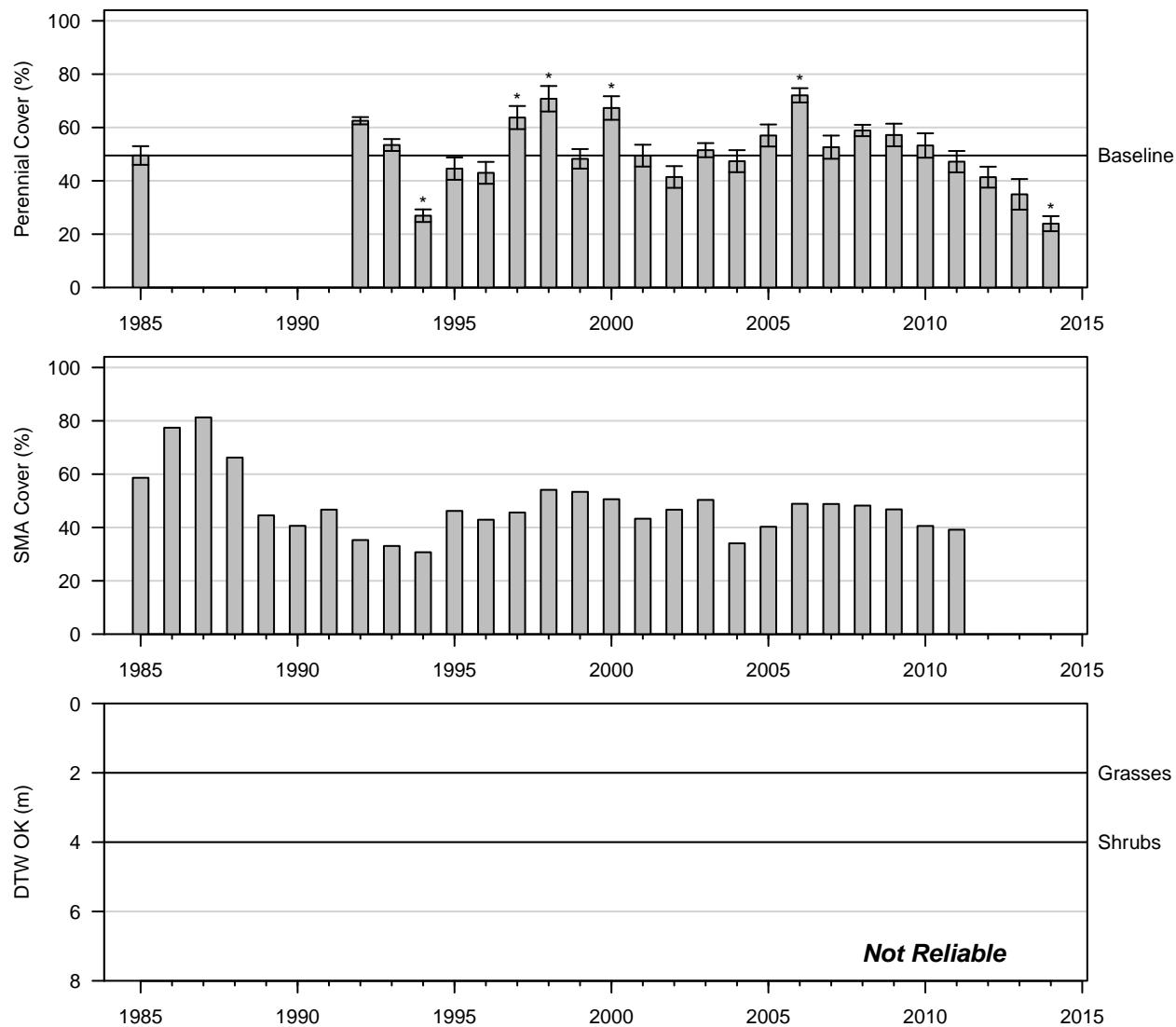


Figure 64: 2014 Wellfield

IND064
Alkali Meadow (Type C)

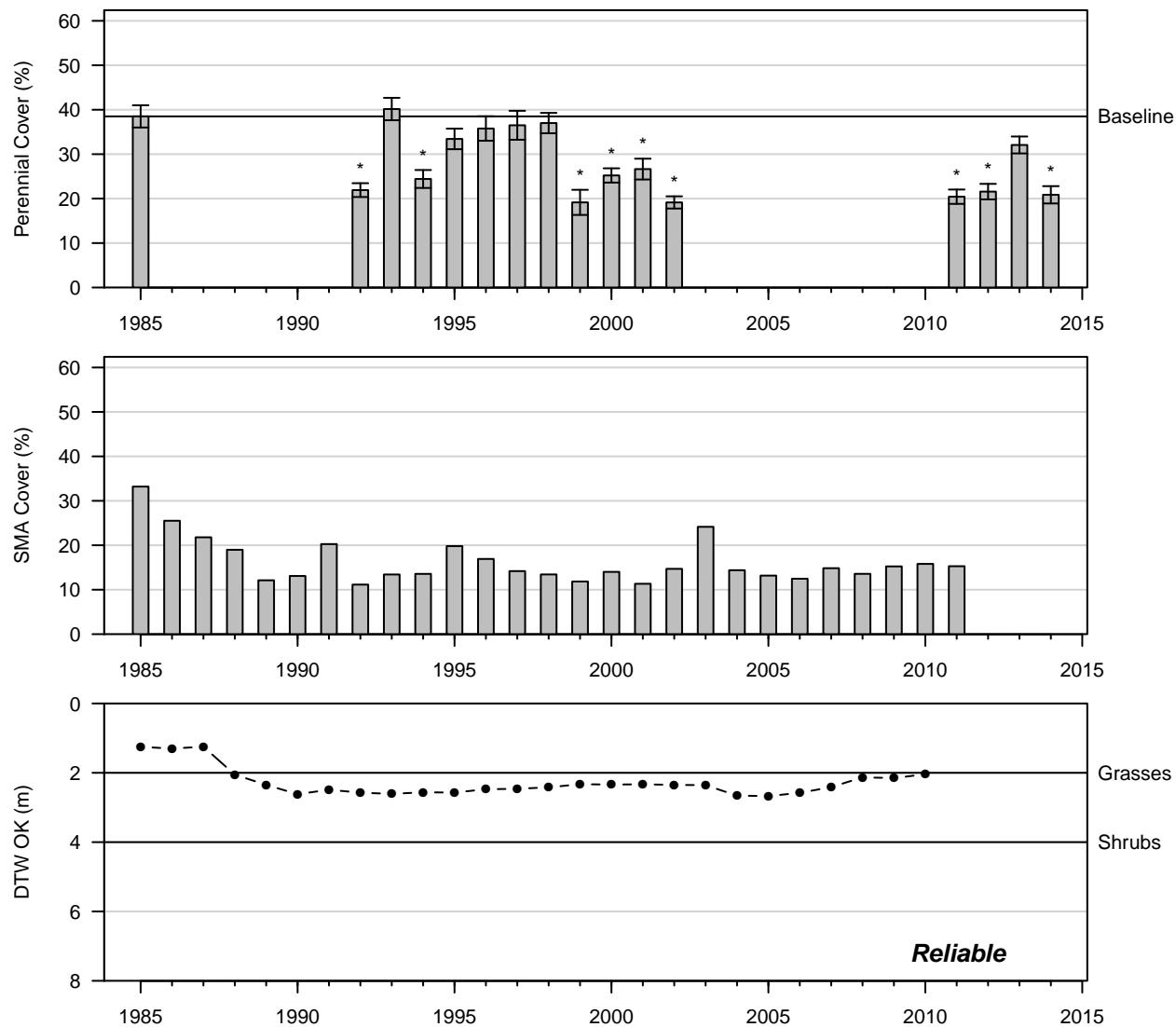


Figure 65: 2014 Control

IND066
Desert Sink Scrub (Type A)

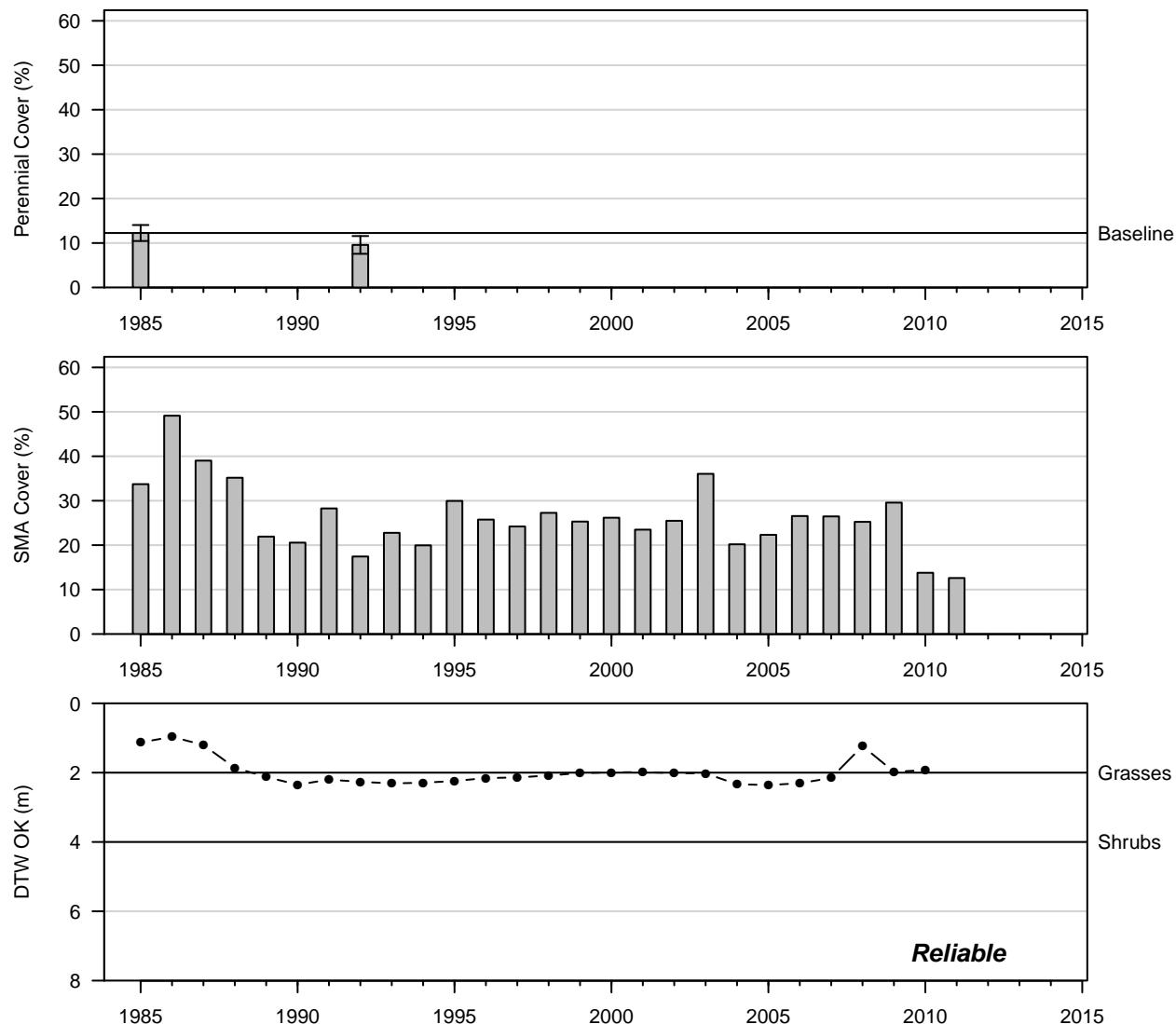


Figure 66: 1992 Control

IND067
Nevada Saltbush Meadow (Type C)

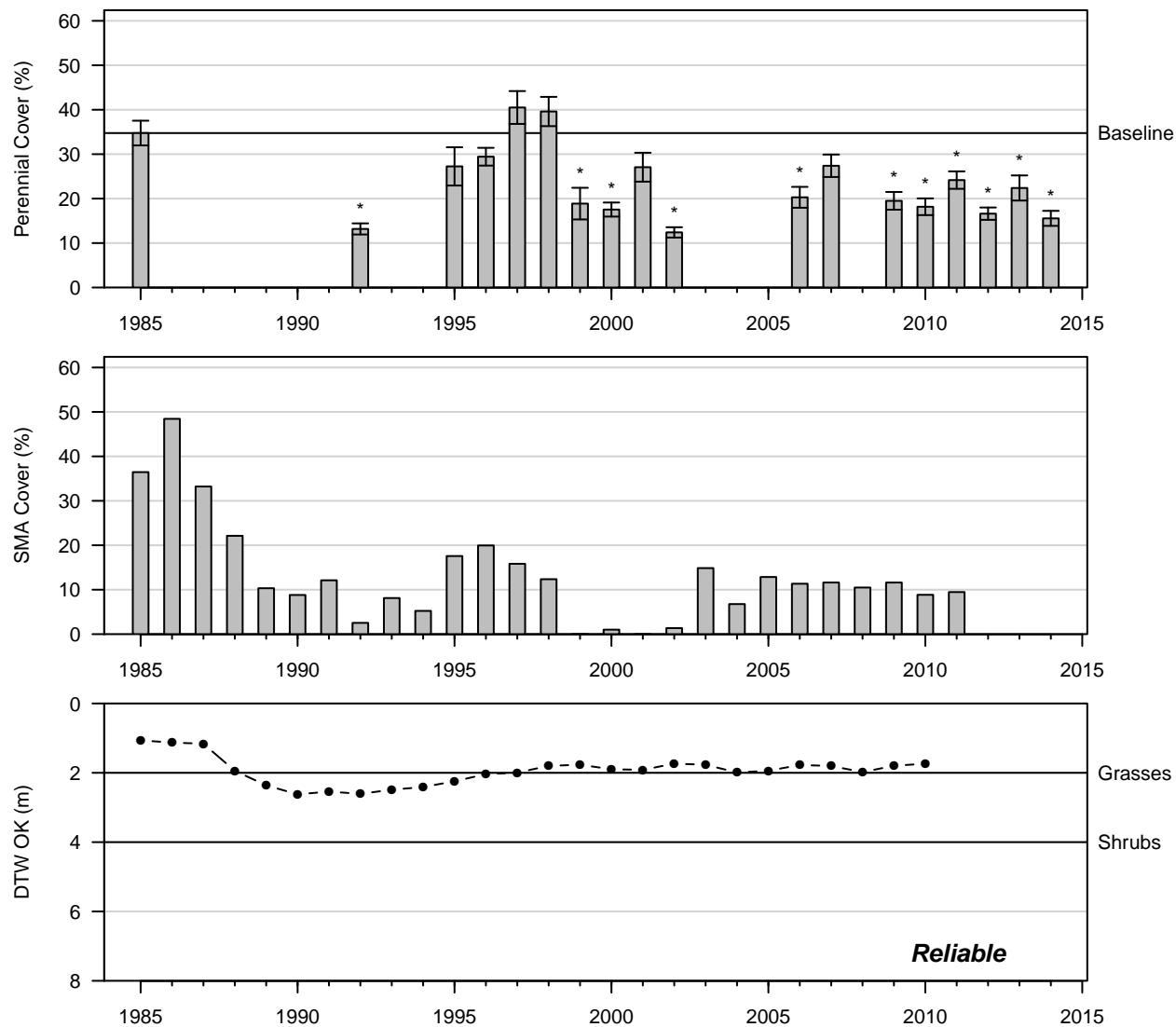


Figure 67: 2014 Control

IND086
Alkali Meadow (Type C)

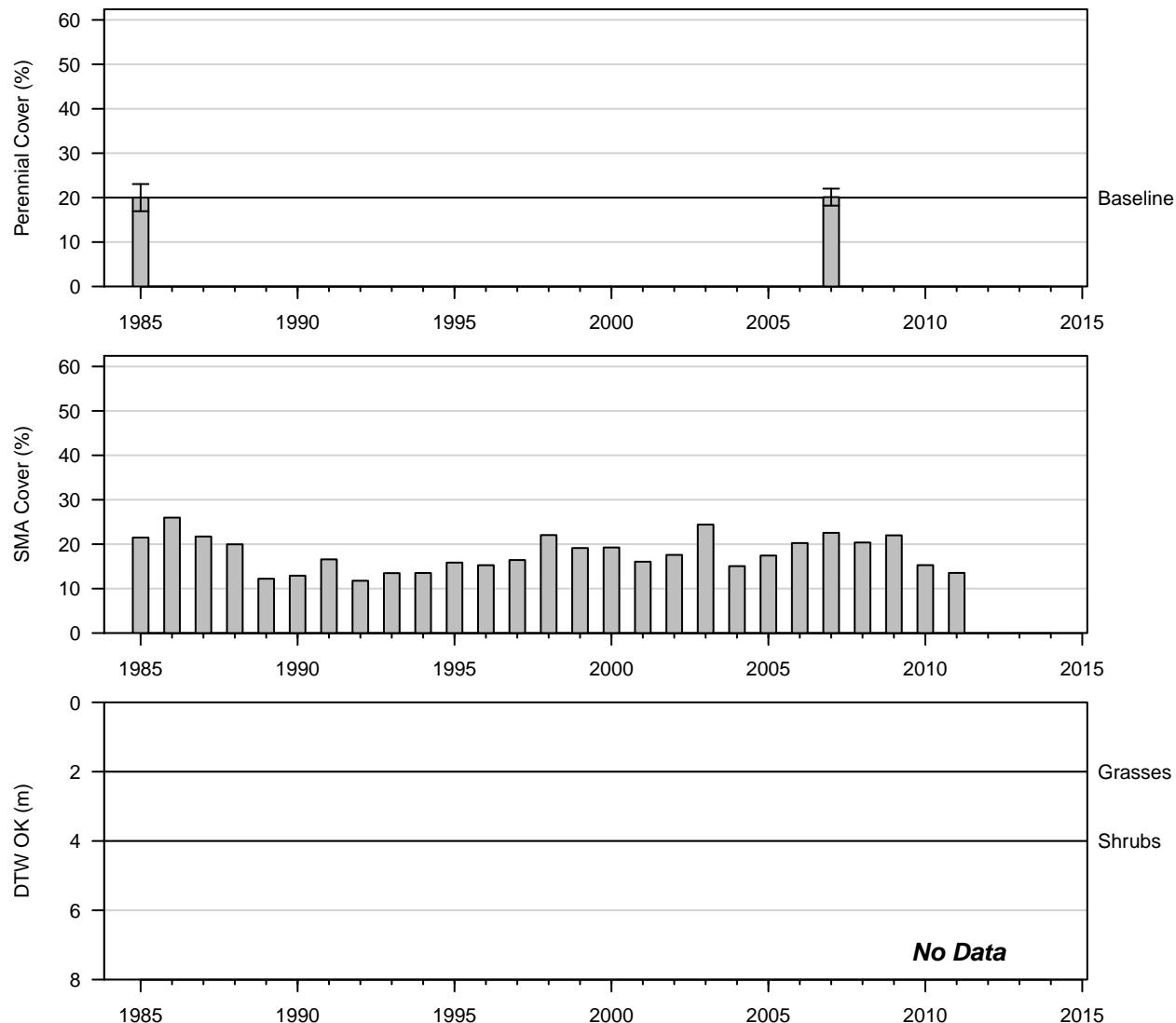


Figure 68: 2007 Control

IND087
Alkali Meadow (Type C)

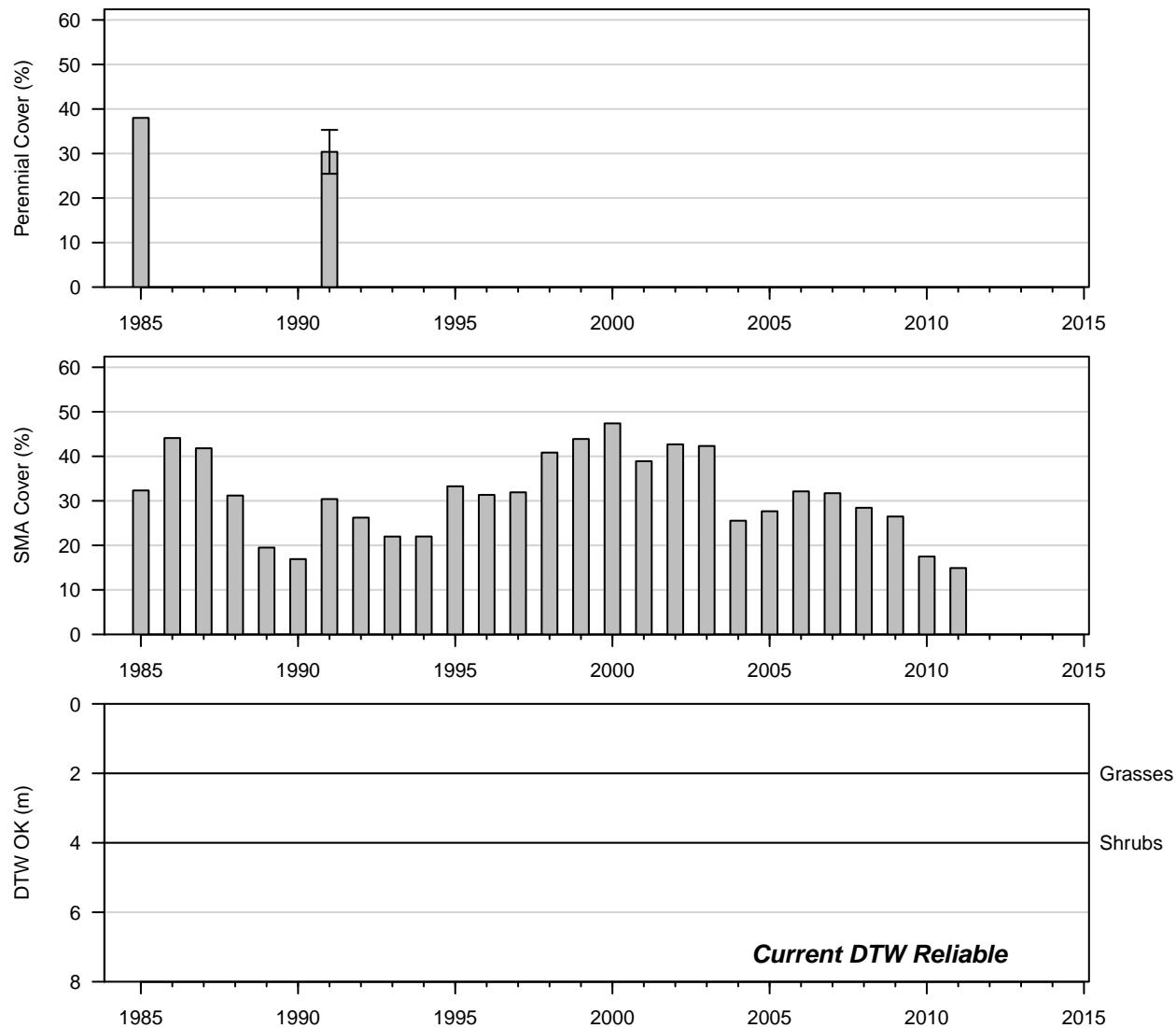


Figure 69: 1991 Control

IND096
Nevada Saltbush Scrub (Type B)

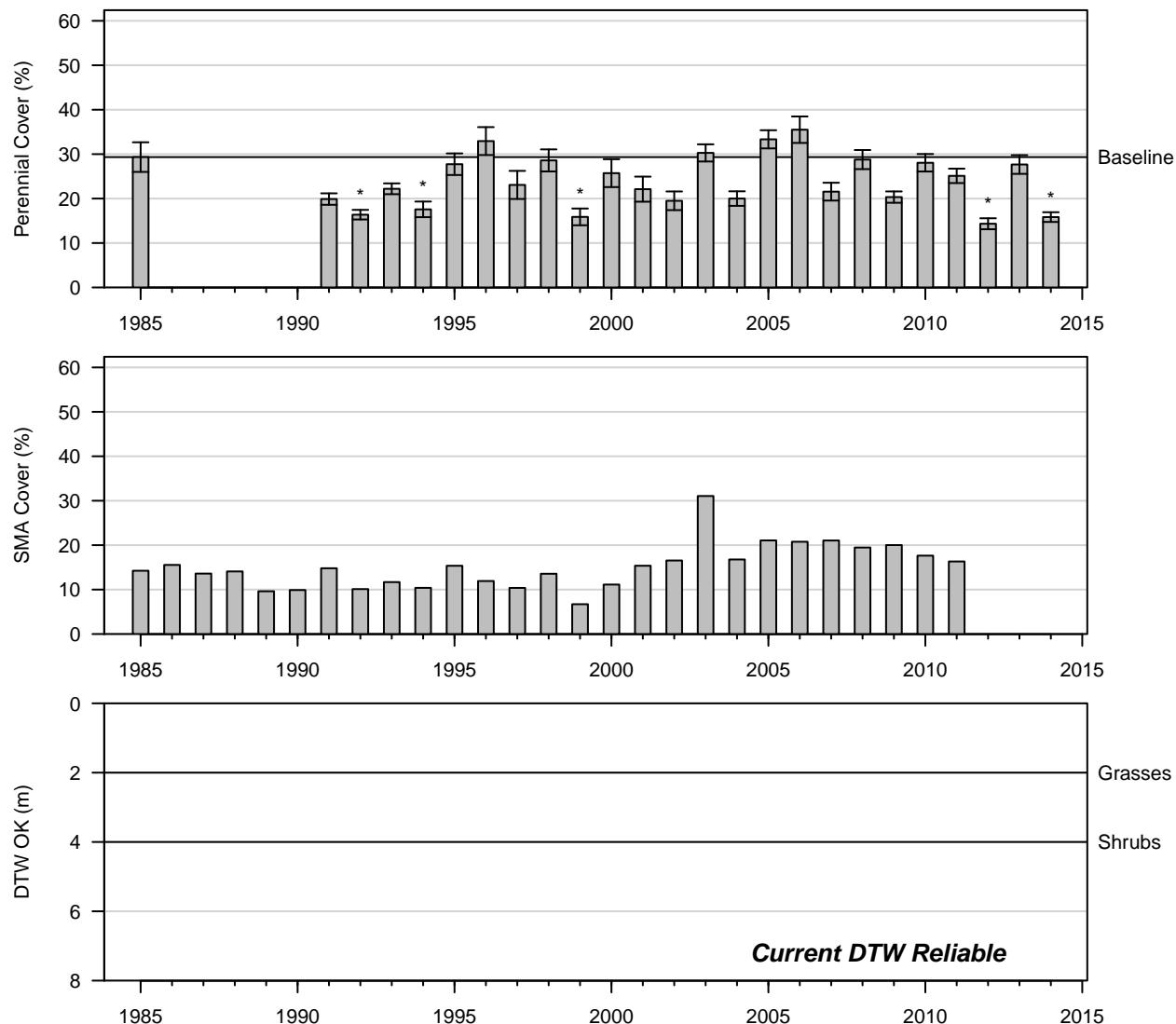


Figure 70: 2014 Control

IND099
Nevada Saltbush Scrub (Type B)

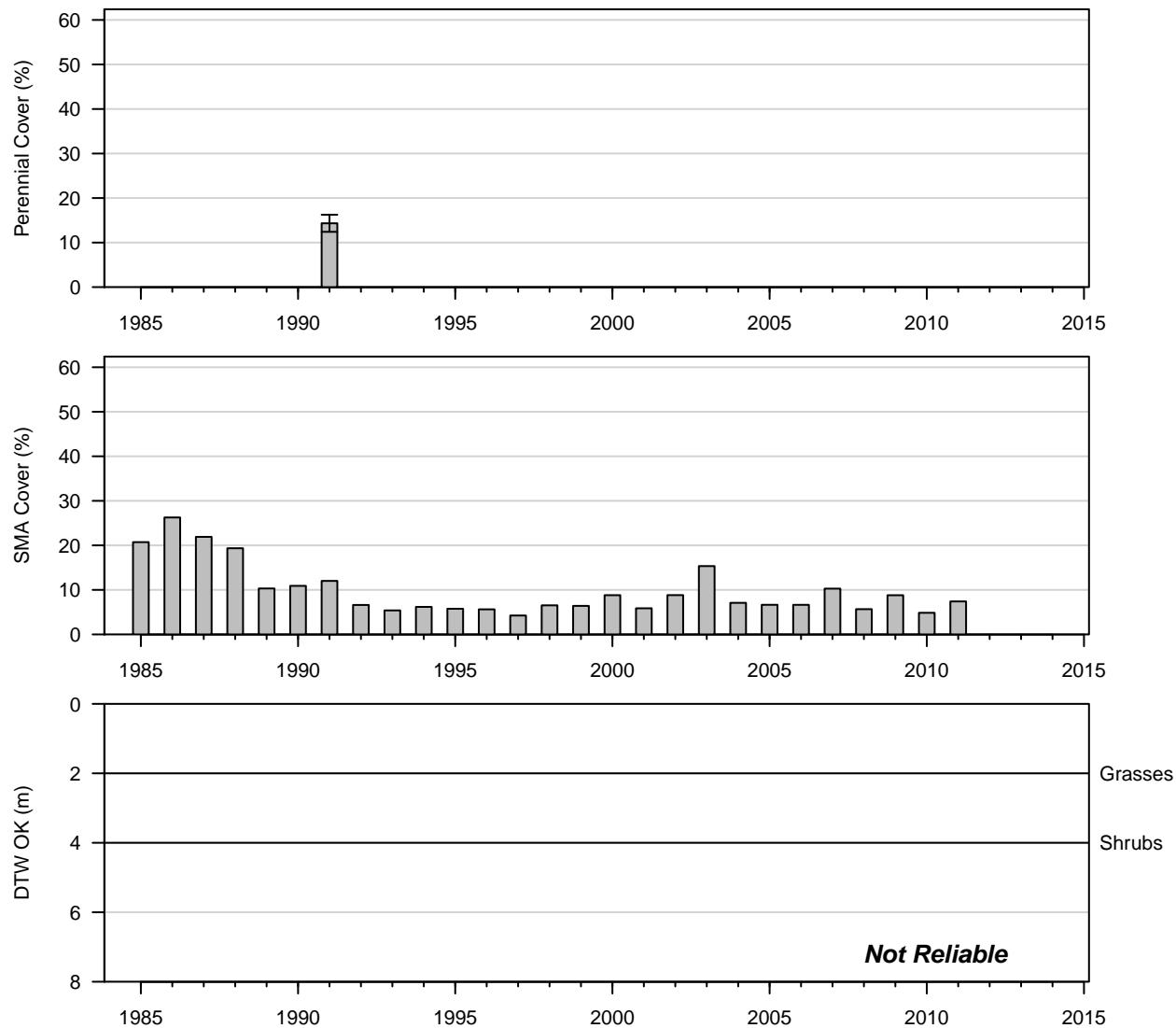


Figure 71: 1991 Control

IND106
Nevada Saltbush Scrub (Type A)

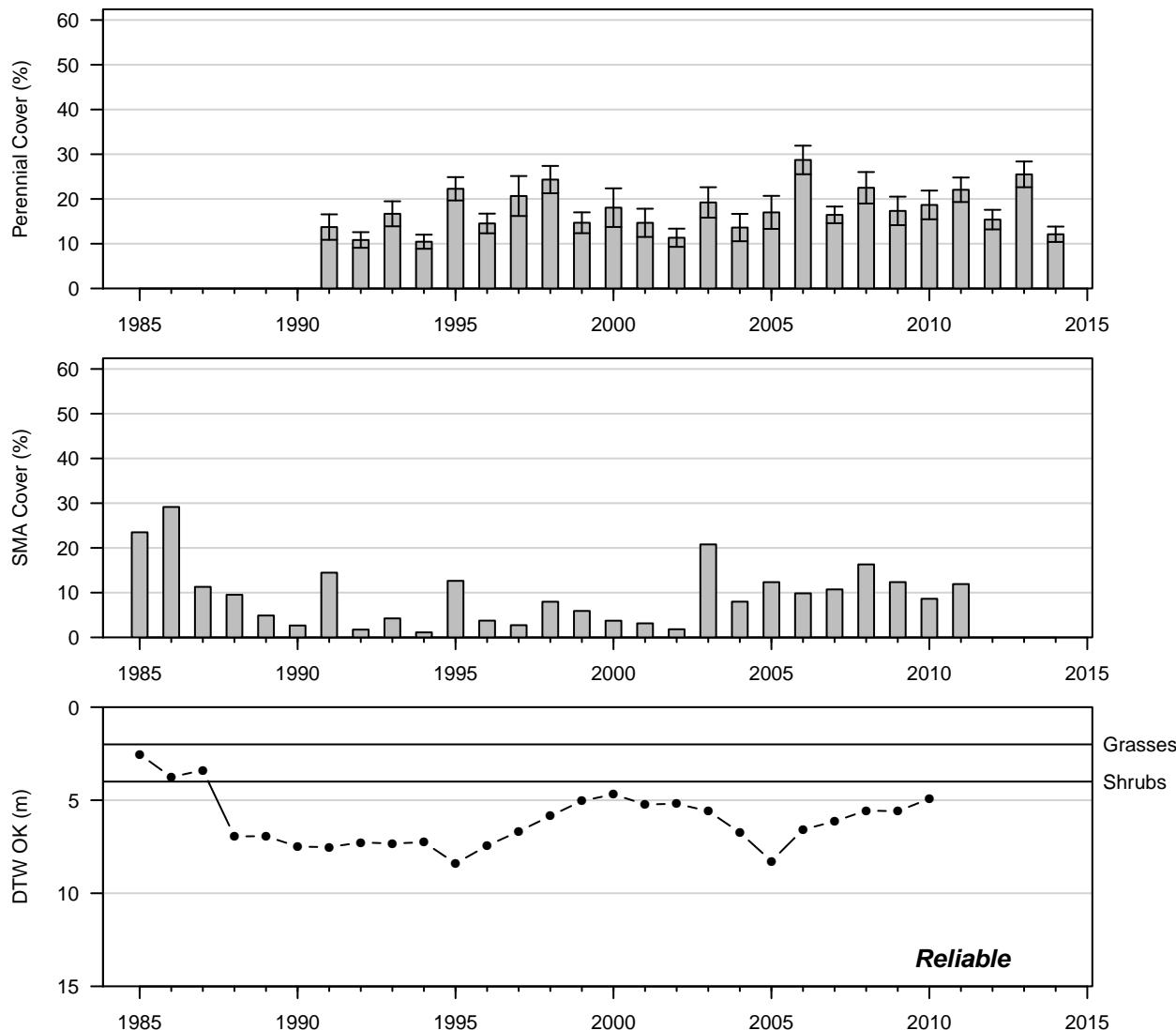


Figure 72: 2014 Wellfield

IND111
Nevada Saltbush Meadow (Type C)

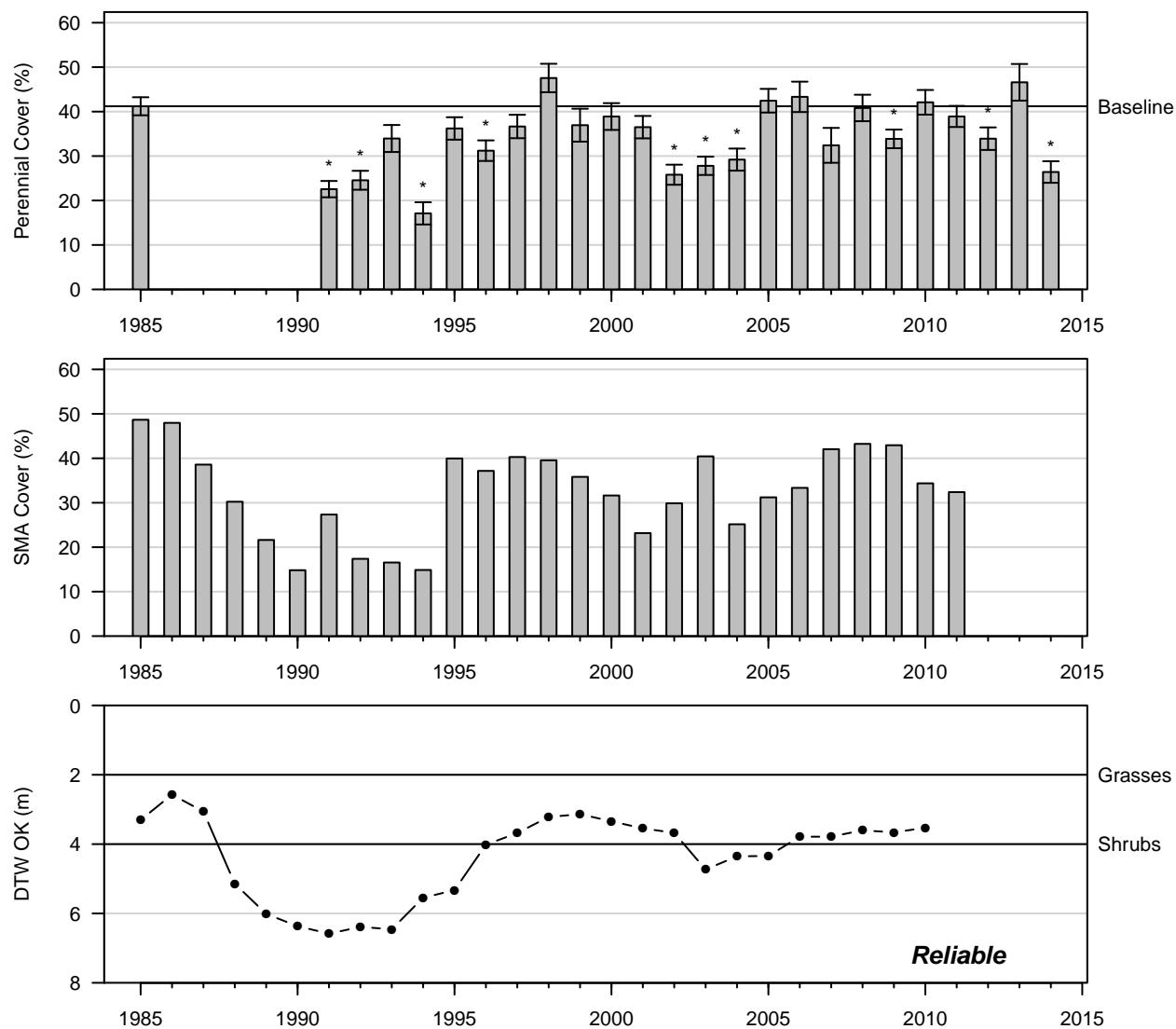


Figure 73: 2014 Wellfield

IND119
Alkali Meadow (Type C)

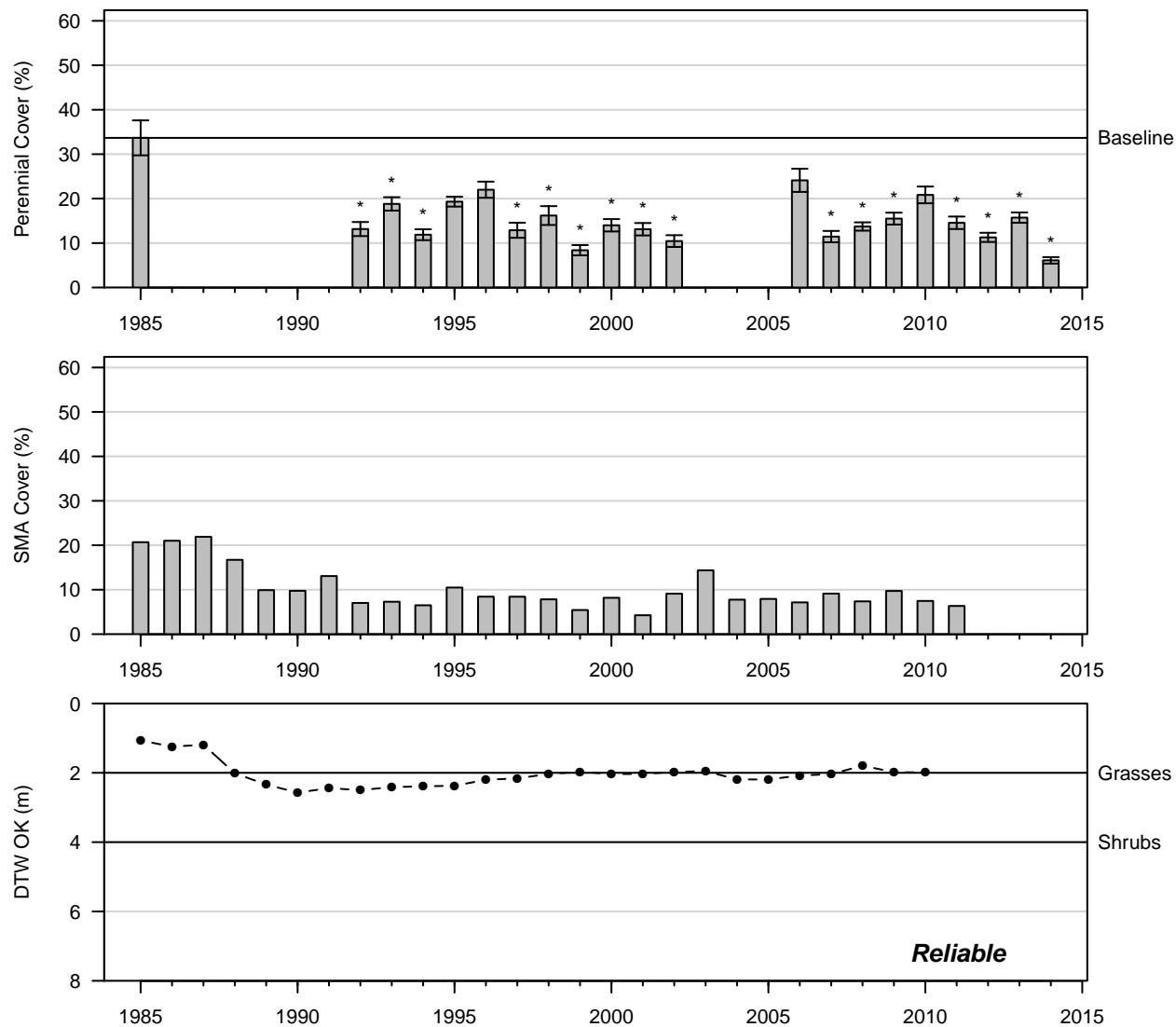


Figure 74: 2014 Control

IND122
Nevada Saltbush Scrub (Type B)

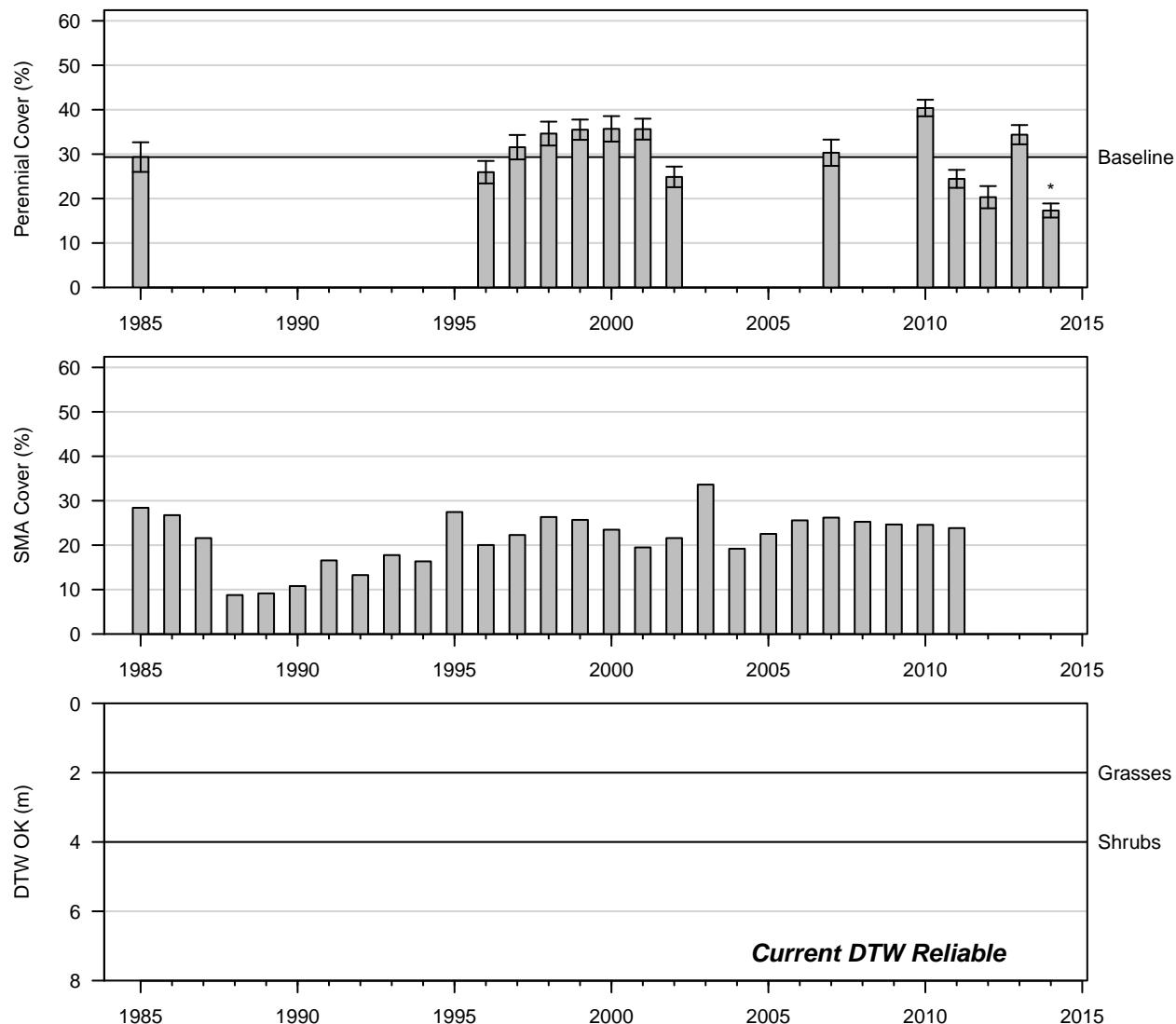


Figure 75: 2014 Control

IND132
Nevada Saltbush Scrub (Type B)

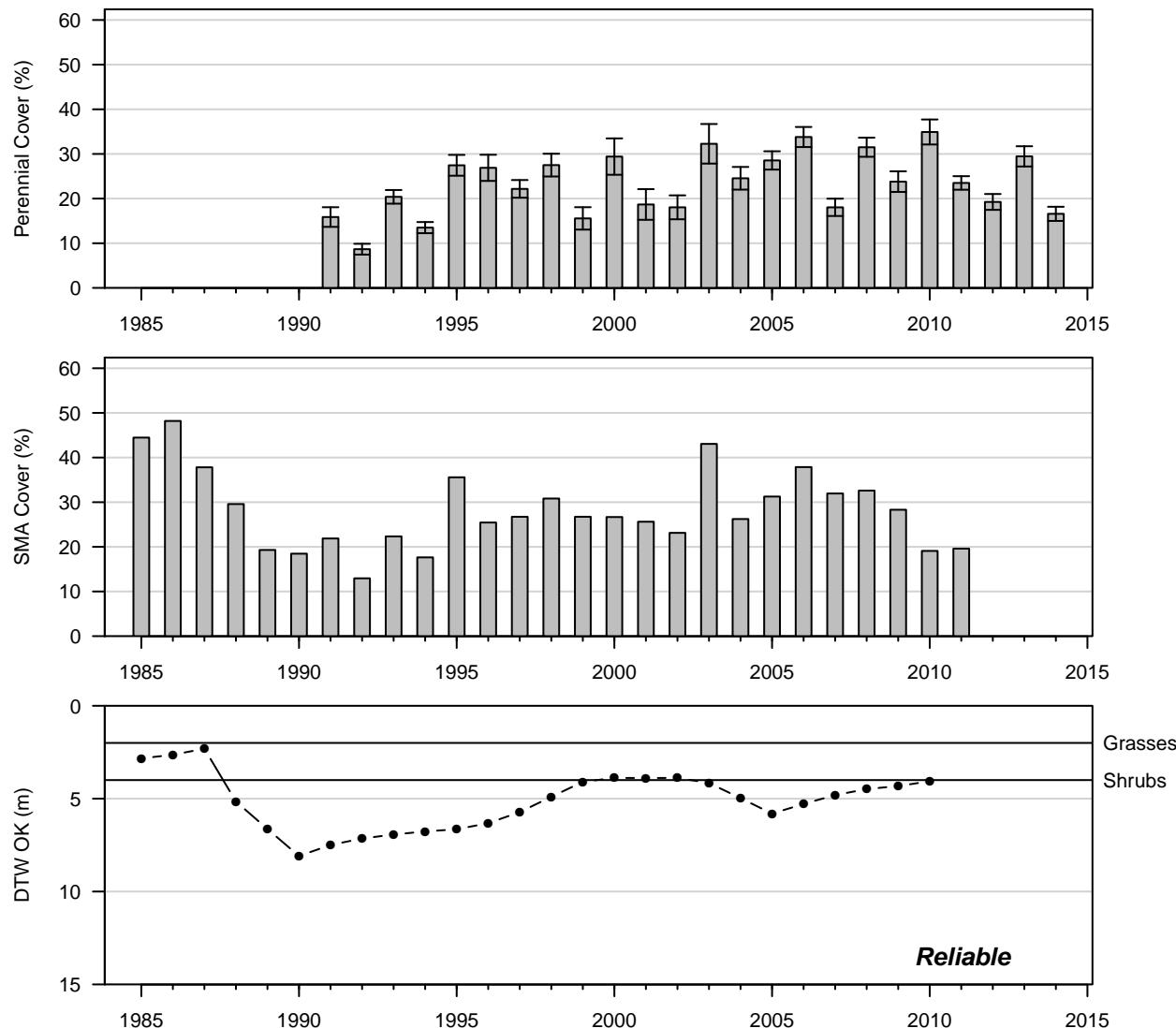


Figure 76: 2014 Wellfield

IND133
Nevada Saltbush Scrub (Type A)

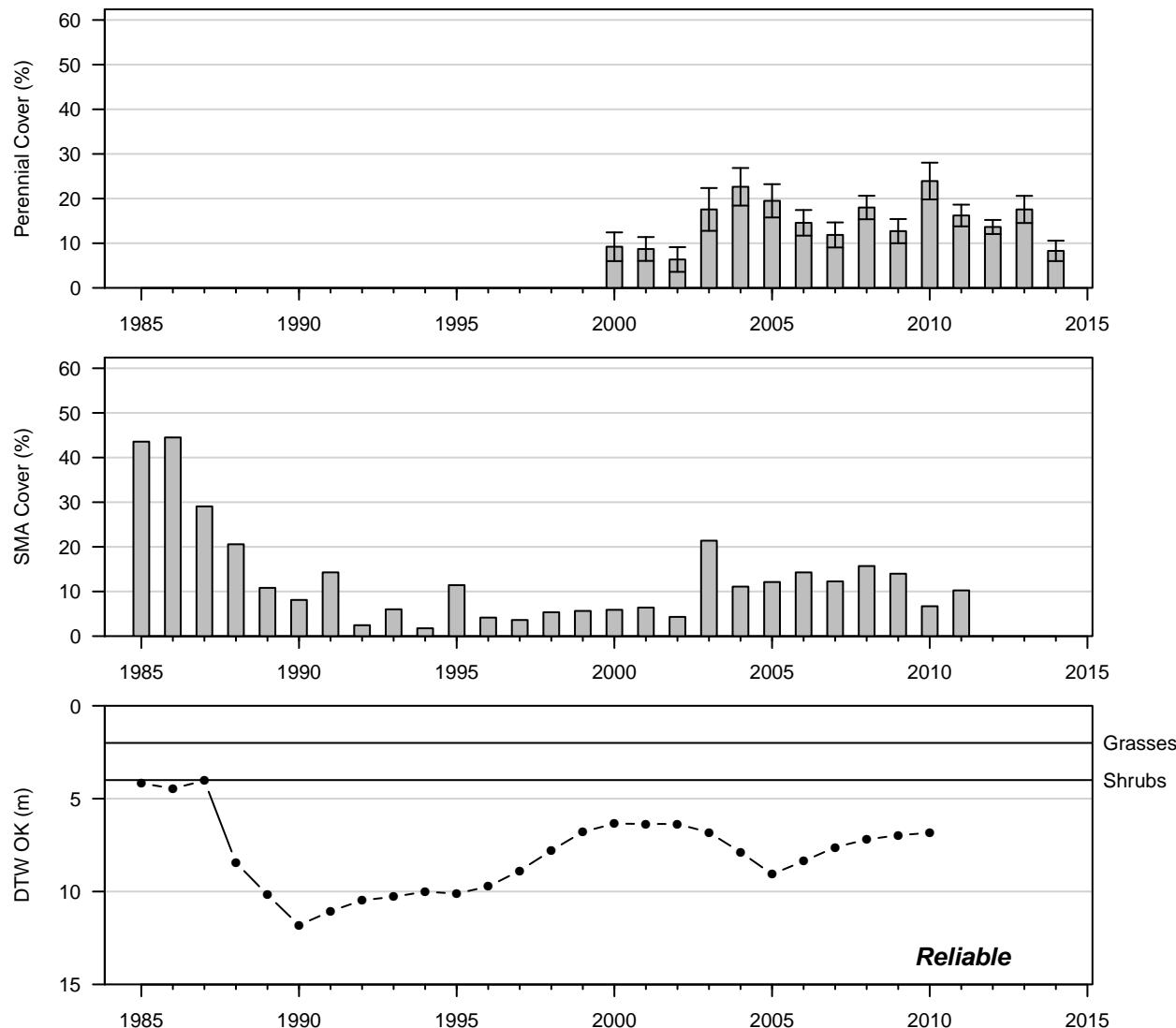


Figure 77: 2014 Wellfield

IND139
Nevada Saltbush Meadow (Type C)

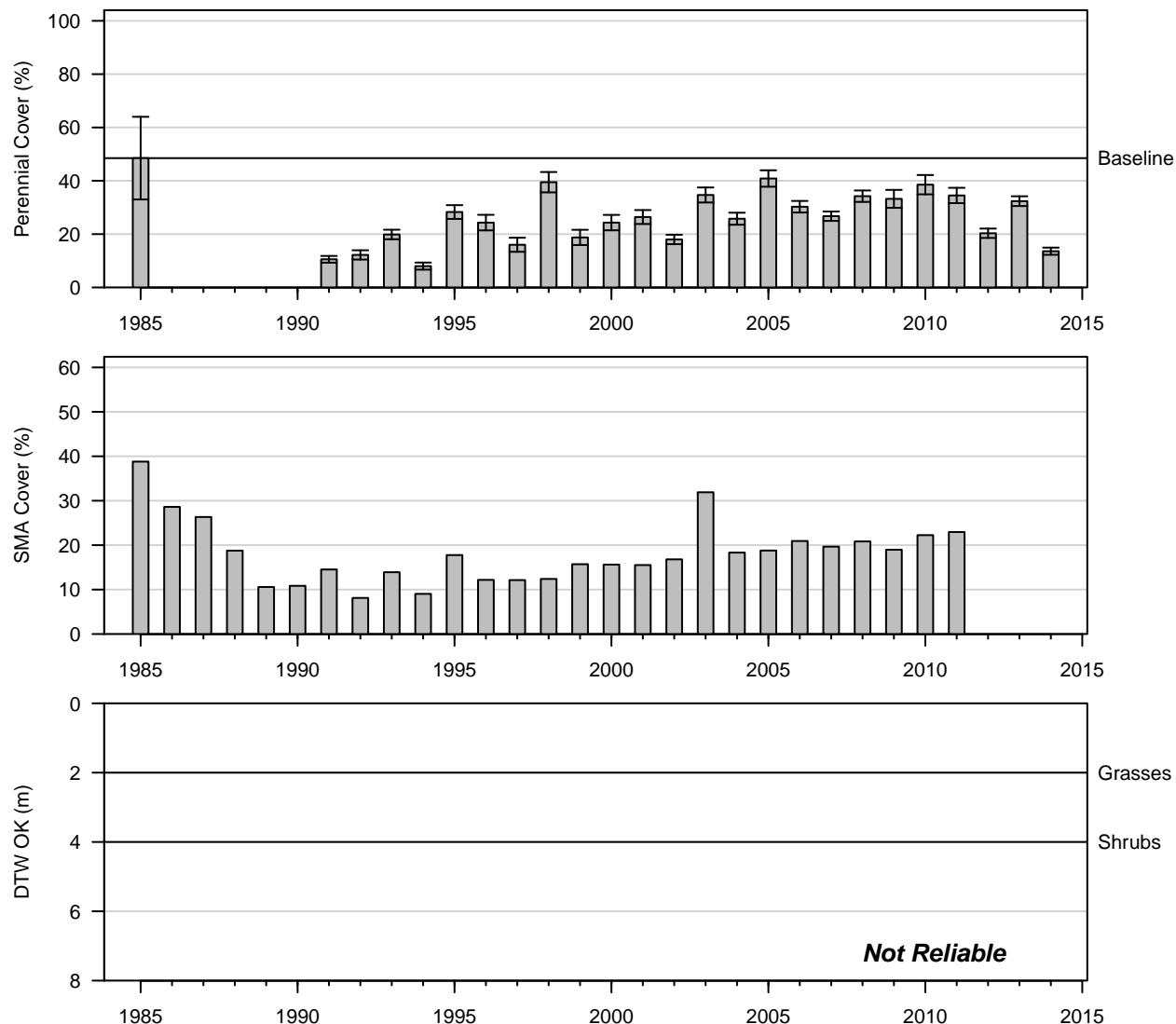


Figure 78: 2014 Wellfield

IND151
Alkali Meadow (Type C)

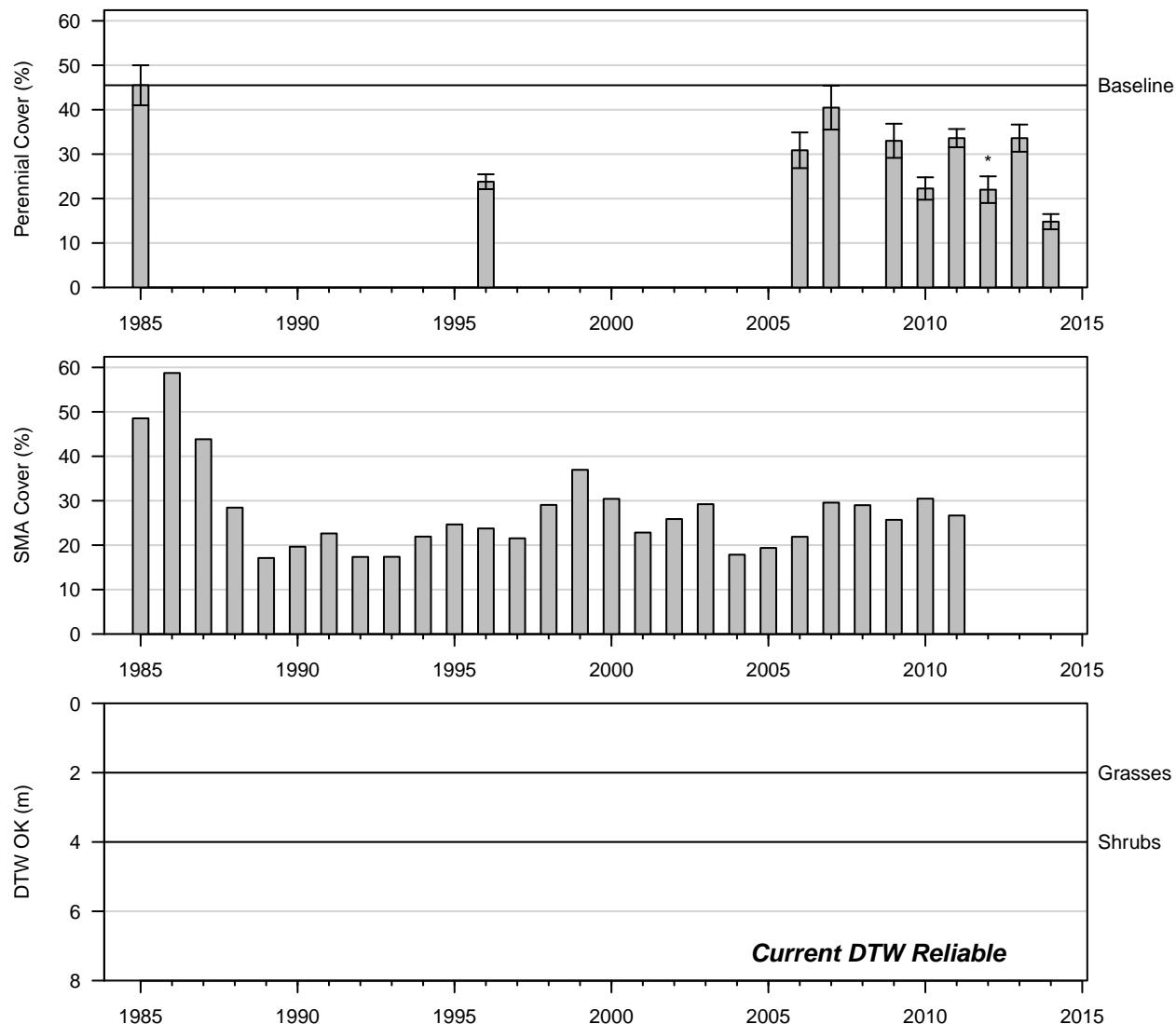


Figure 79: 2014 Control

IND156
Alkali Meadow (Type C)

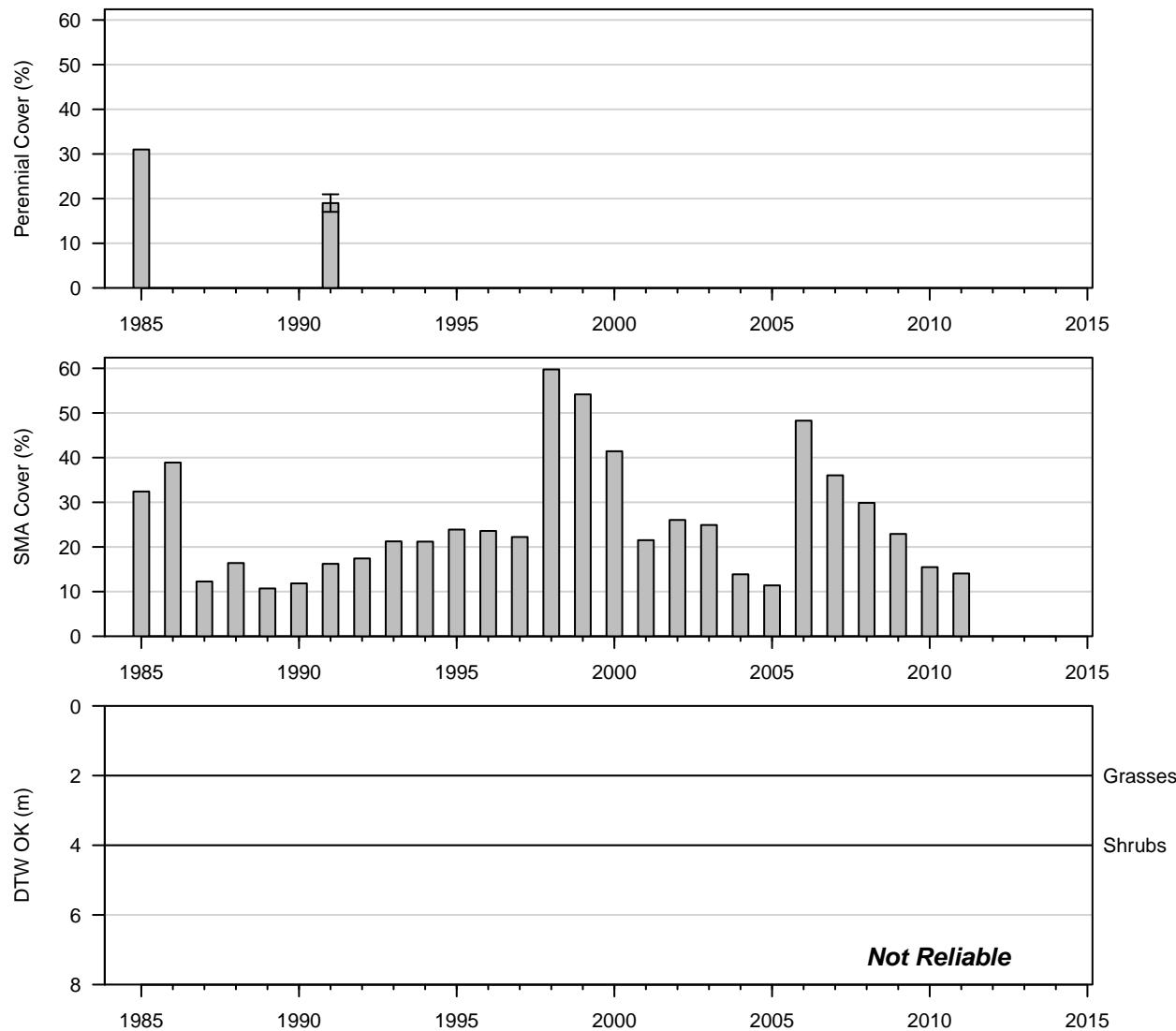


Figure 80: 1991 Control

IND163
Alkali Meadow (Type C)

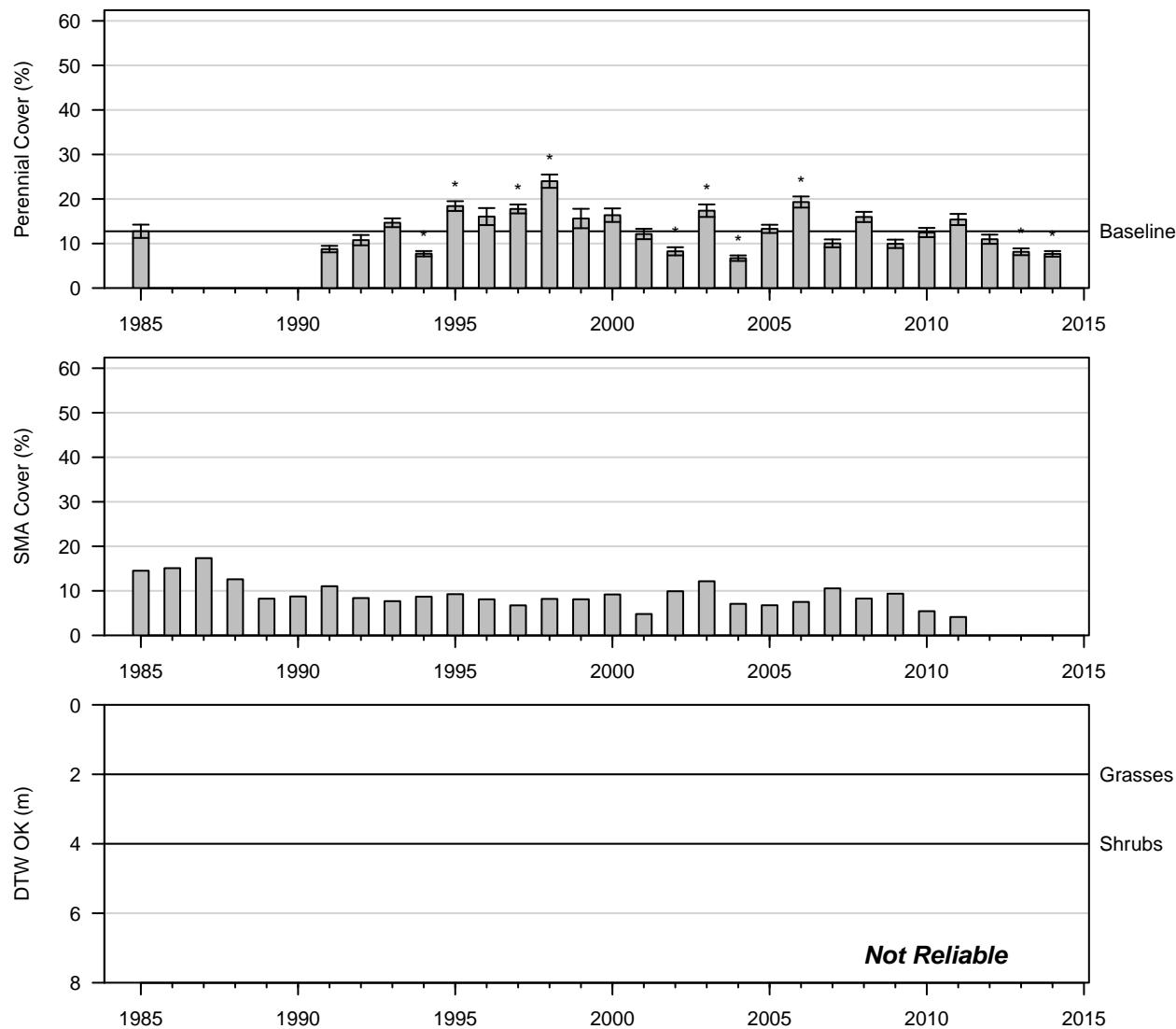


Figure 81: 2014 Control

IND205
Alkali Meadow (Type C)

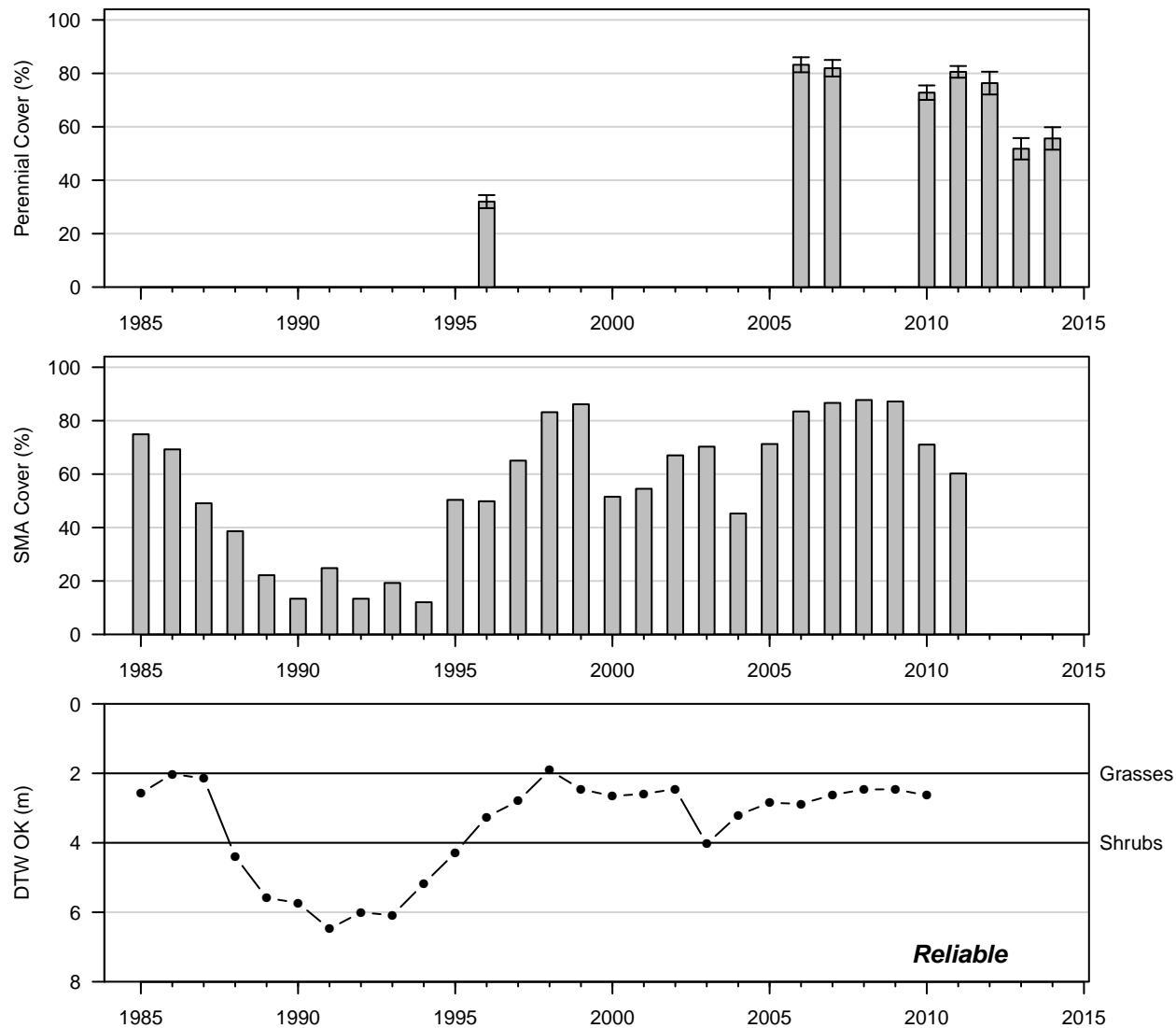


Figure 82: 2014 Wellfield

IND231
Nevada Saltbush Scrub (Type A)

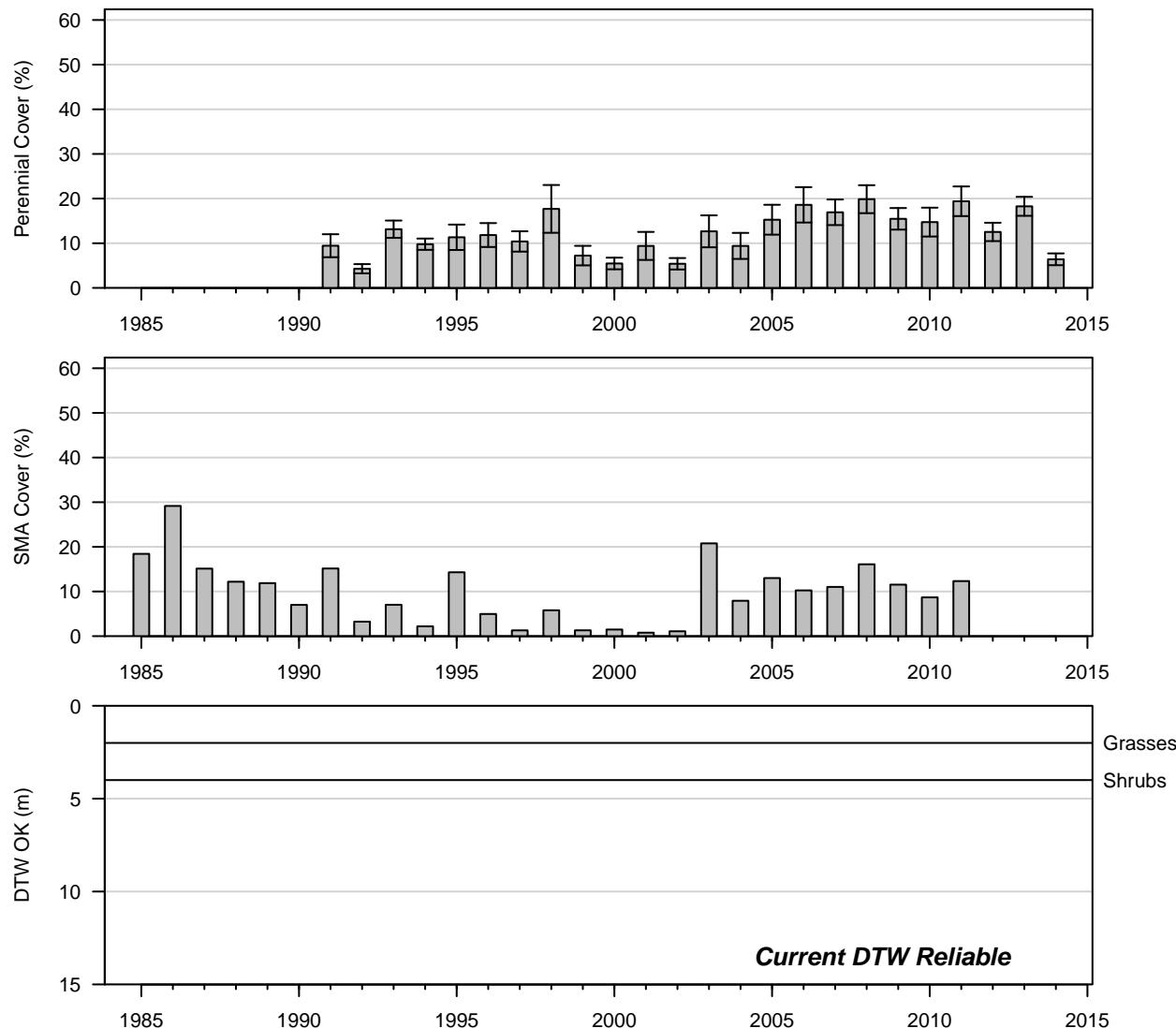


Figure 83: 2014 Wellfield

LAW030
Alkali Meadow (Type C)

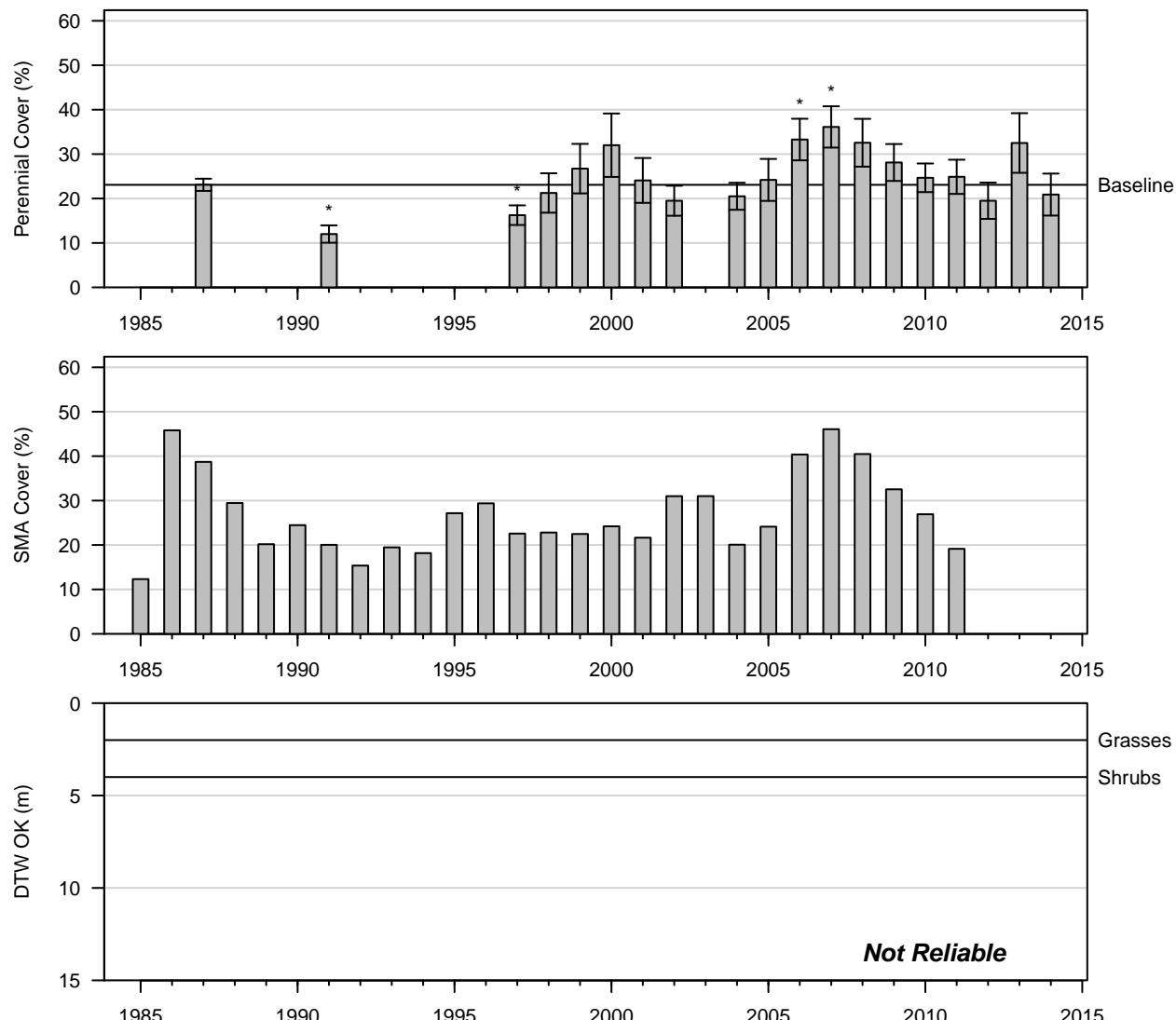


Figure 84: 2014 Wellfield

LAW035
Alkali Meadow (Type C)

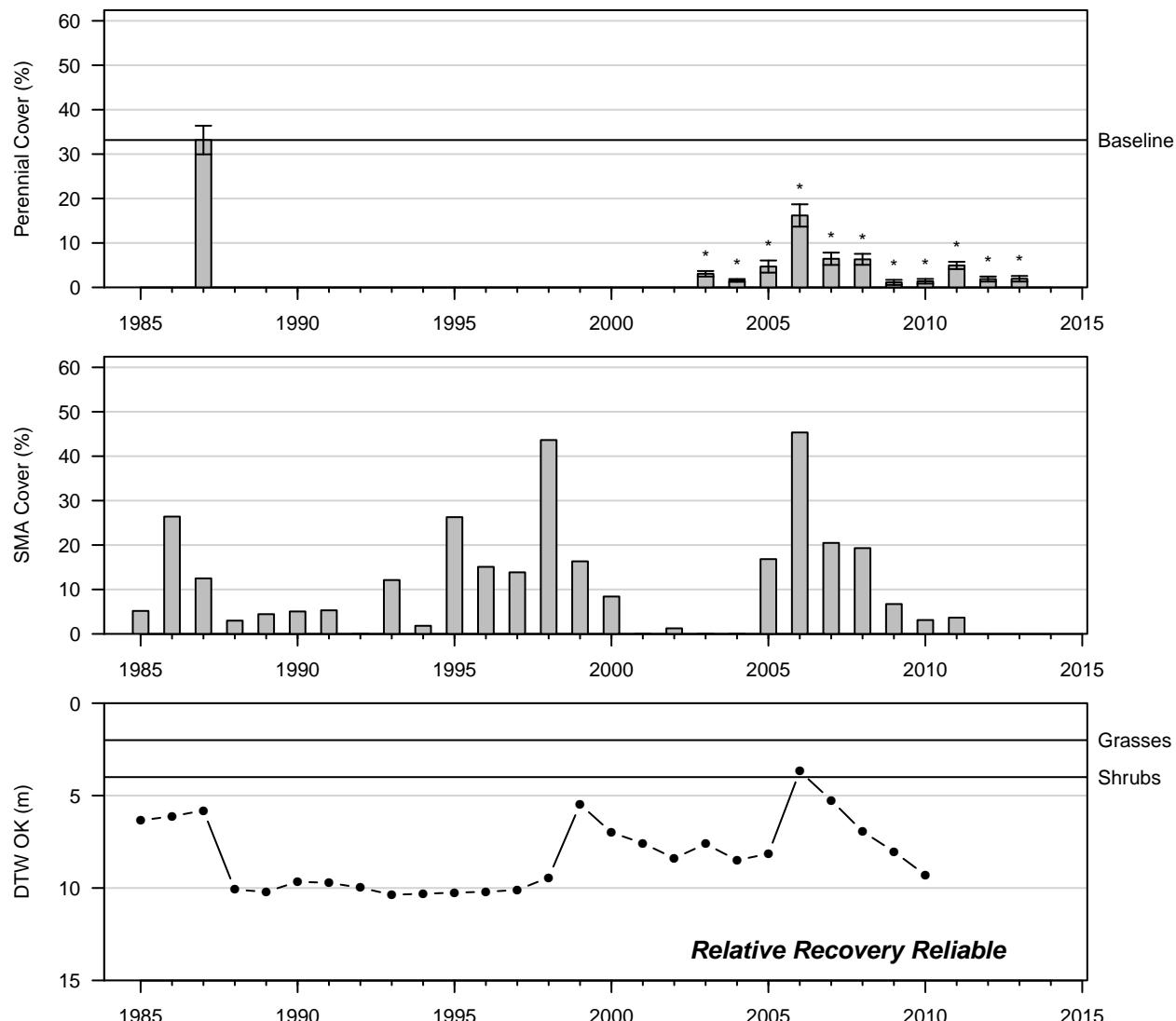


Figure 85: 2013 Wellfield

LAW040
Nevada Saltbush Scrub (Type B)

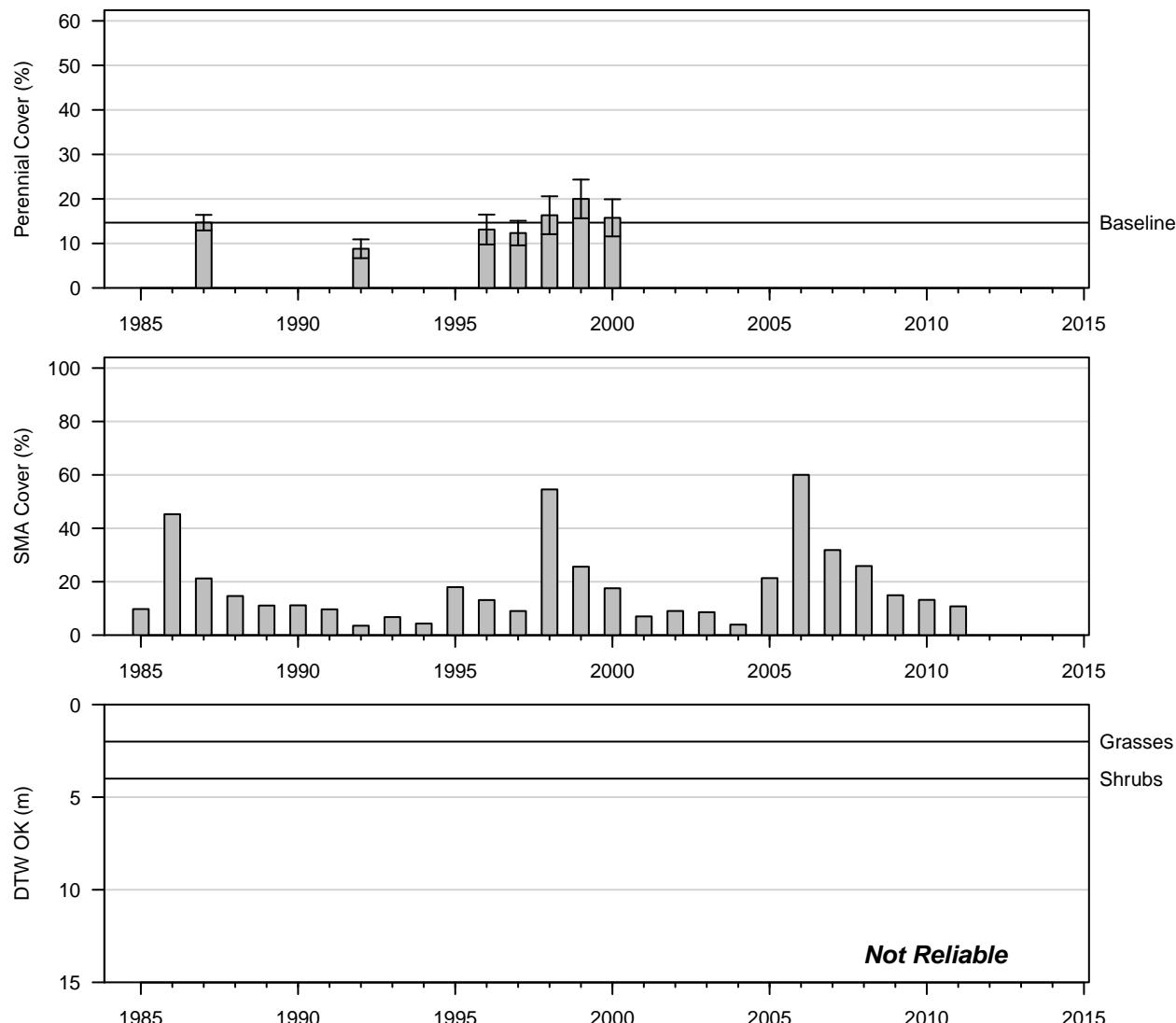


Figure 86: 2000 Wellfield

LAW043
Rush/Sedge Meadow (Type E)

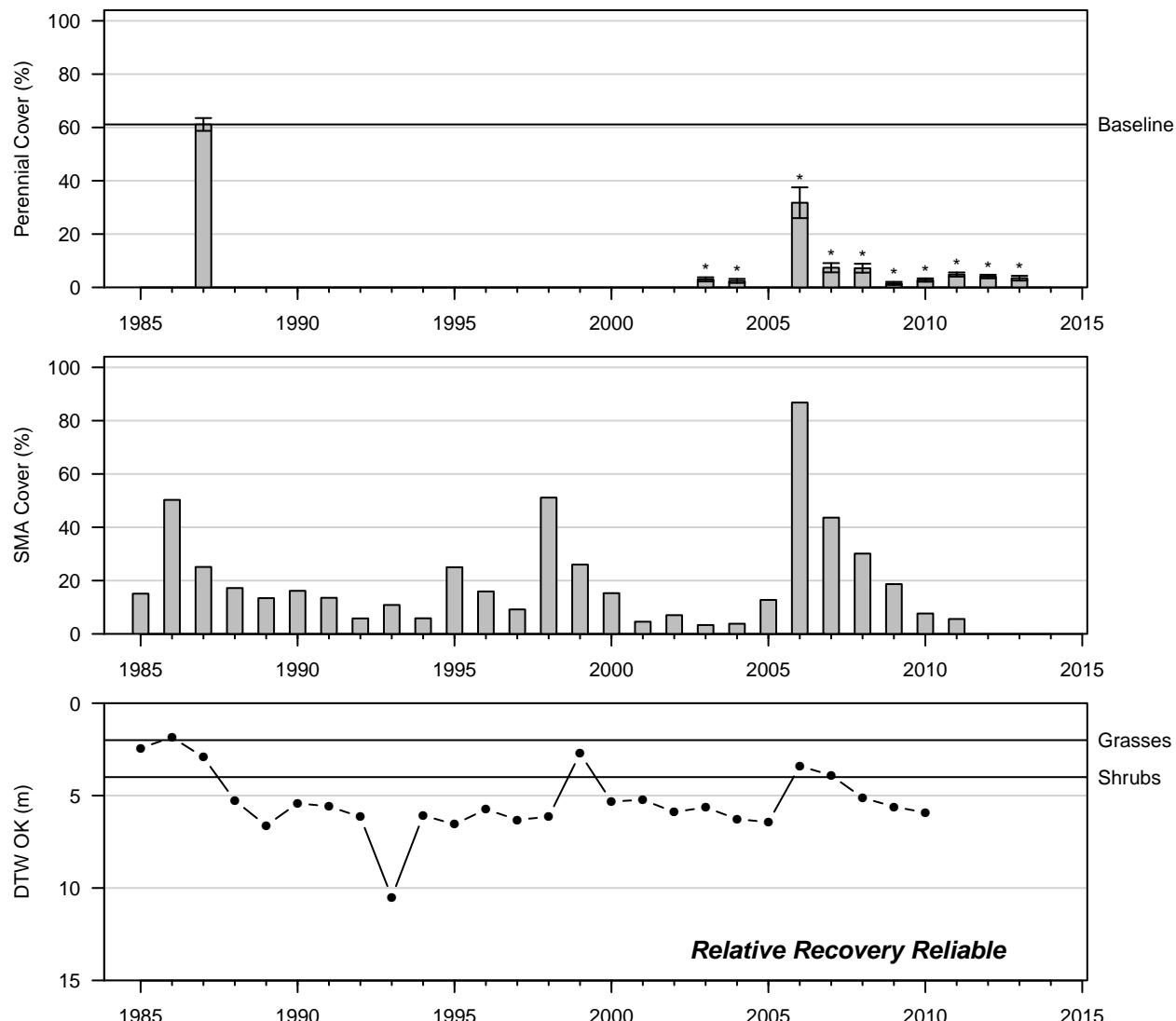


Figure 87: 2013 Wellfield

LAW052
Alkali Meadow (Type C)

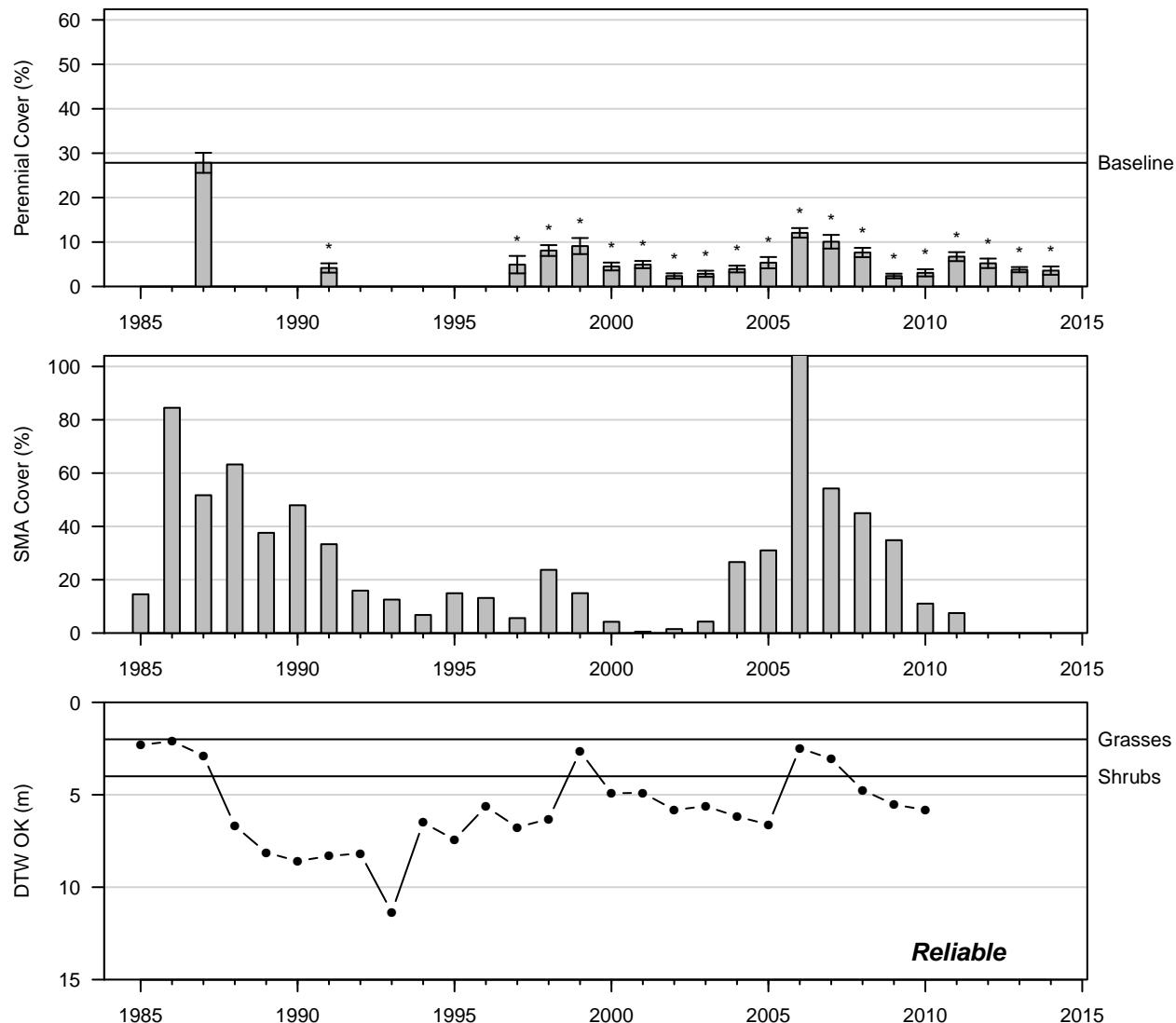


Figure 88: 2014 Wellfield

LAW062
Rabbitbrush Meadow (Type C)

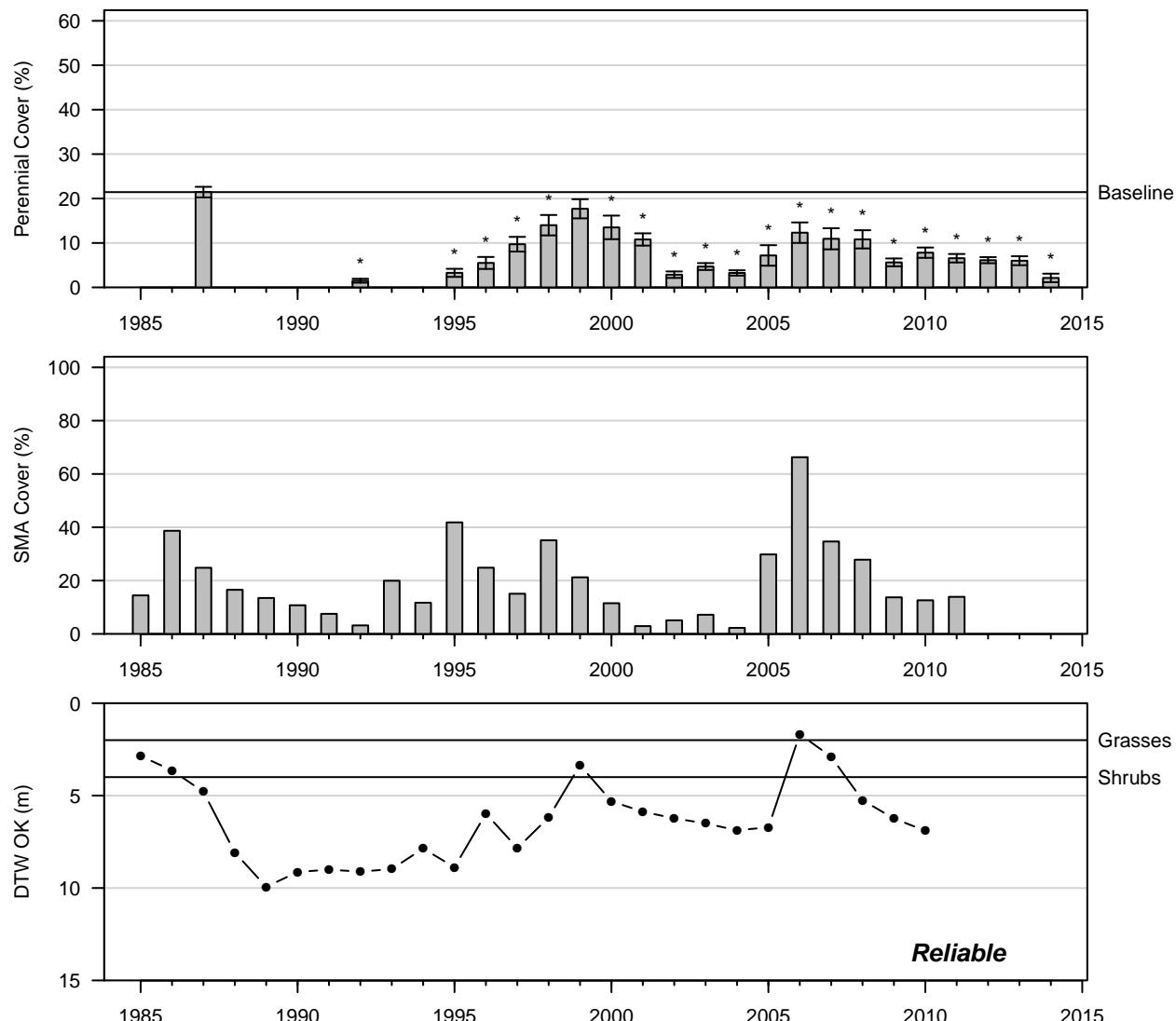


Figure 89: 2014 Wellfield

LAW063
Desert Greasewood Scrub (Type A)

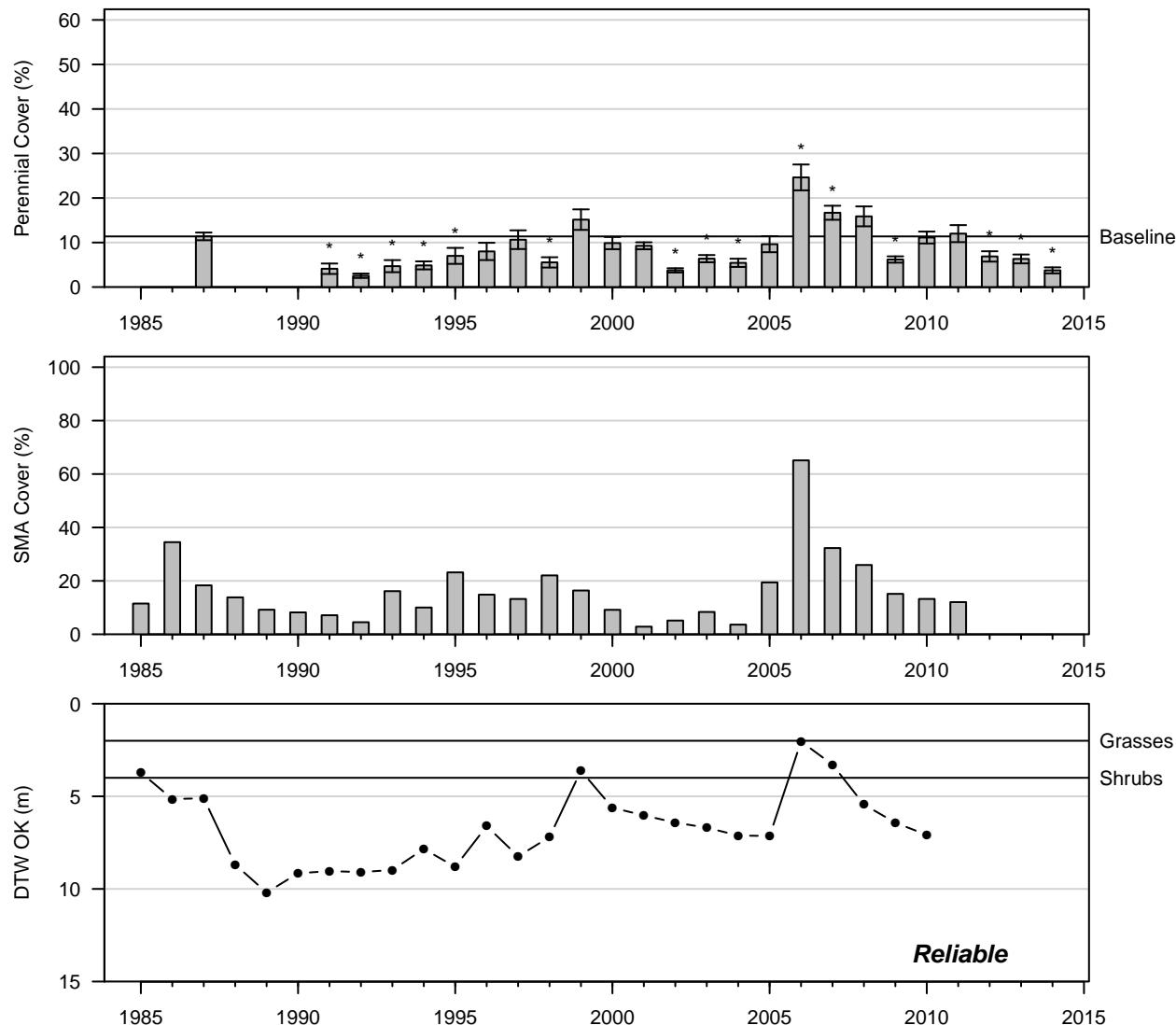


Figure 90: 2014 Wellfield

LAW065
Alkali Meadow (Type A)

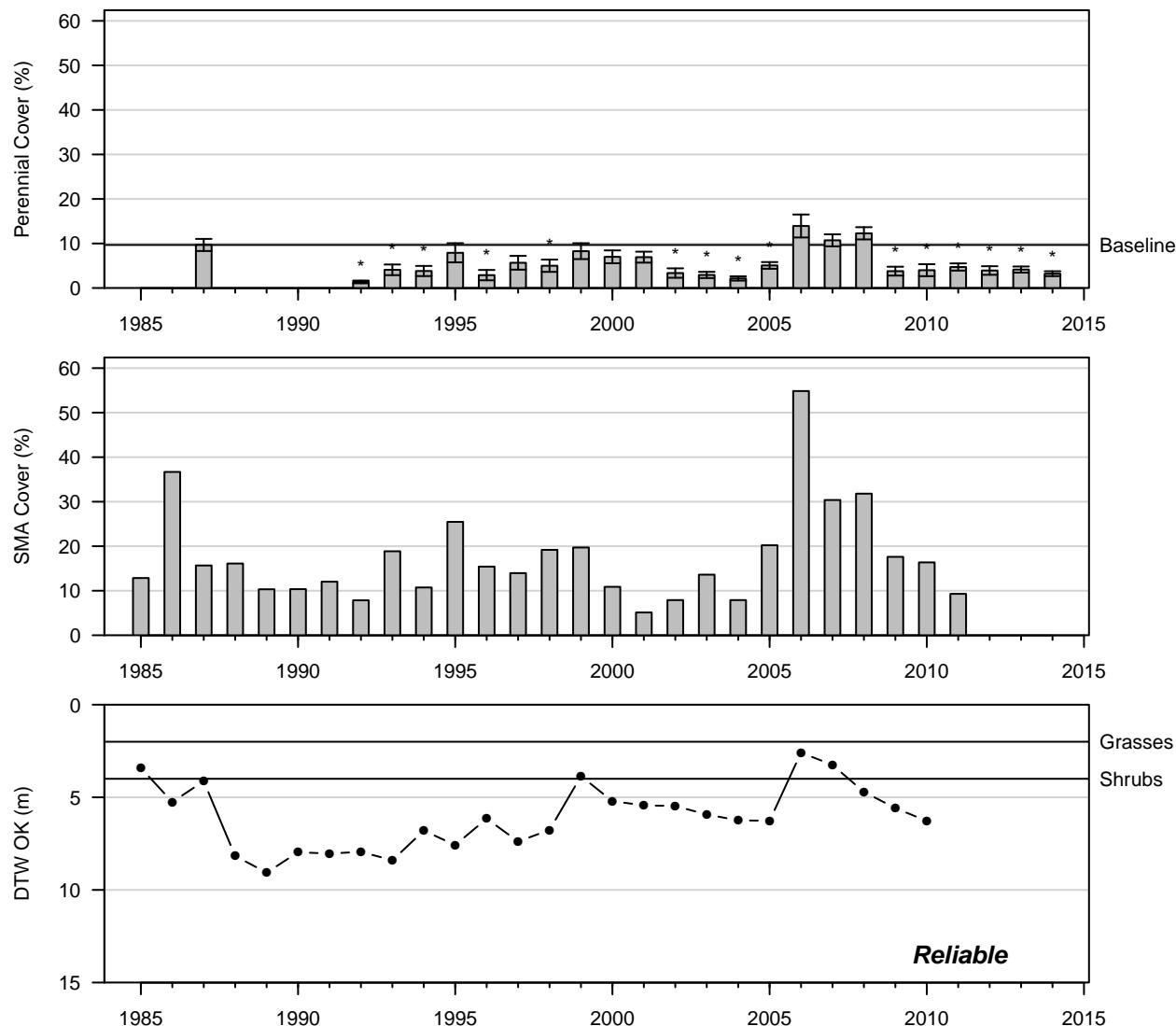


Figure 91: 2014 Wellfield

LAW070
Rush/Sedge Meadow (Type E)

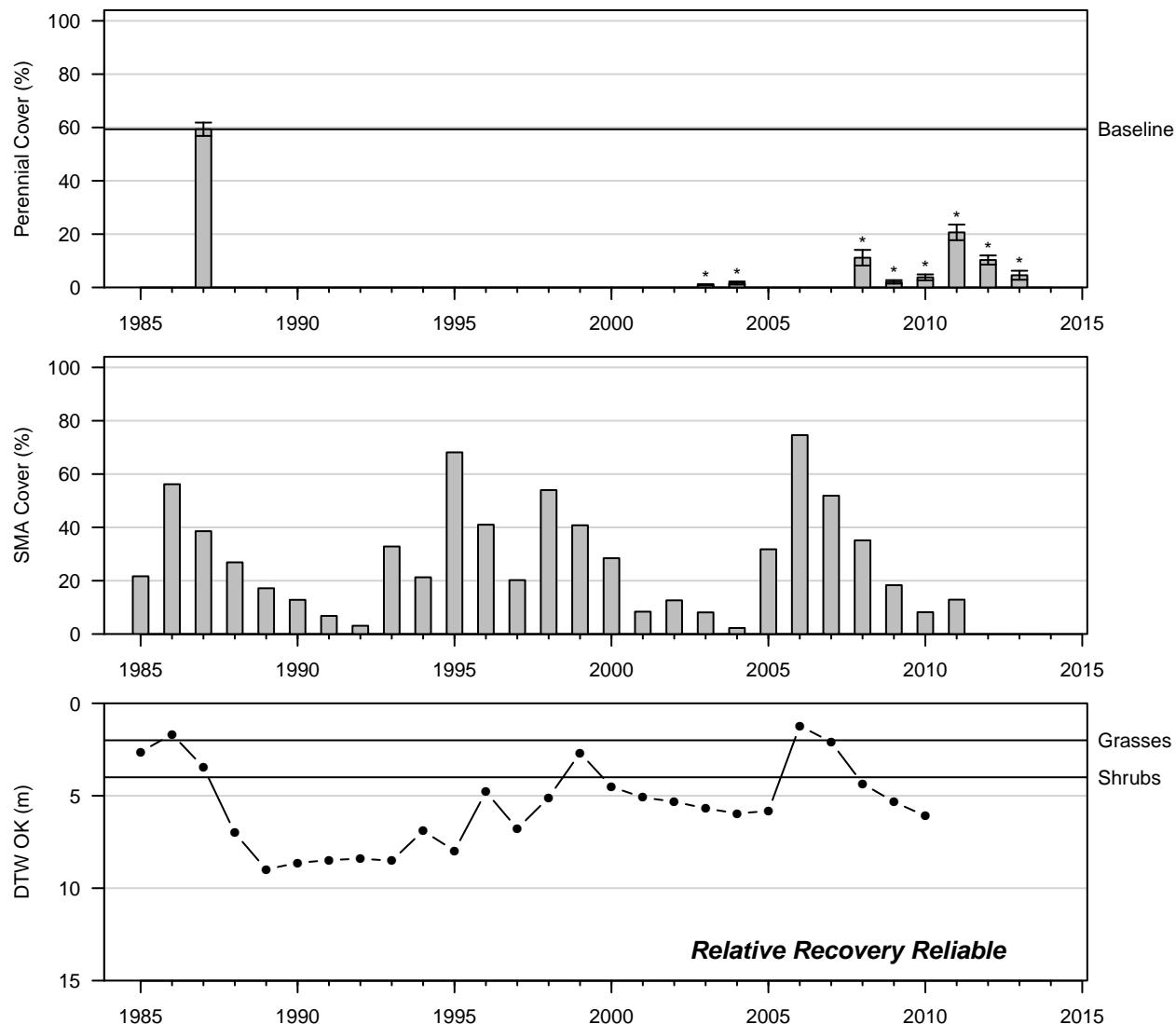


Figure 92: 2013 Wellfield

LAW072
Alkali Meadow (Type C)

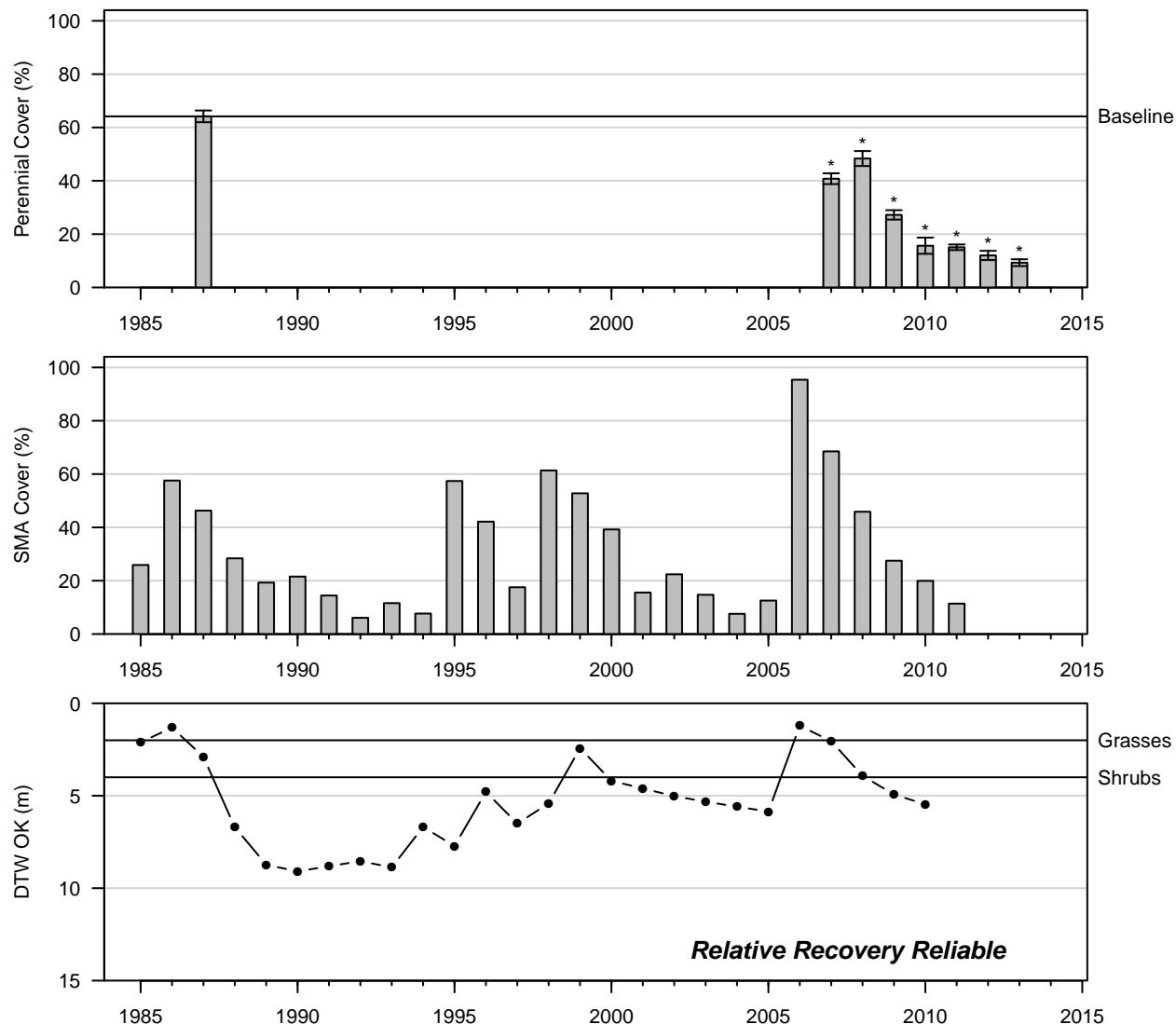


Figure 93: 2013 Wellfield

LAW076
Desert Greasewood Scrub (Type A)

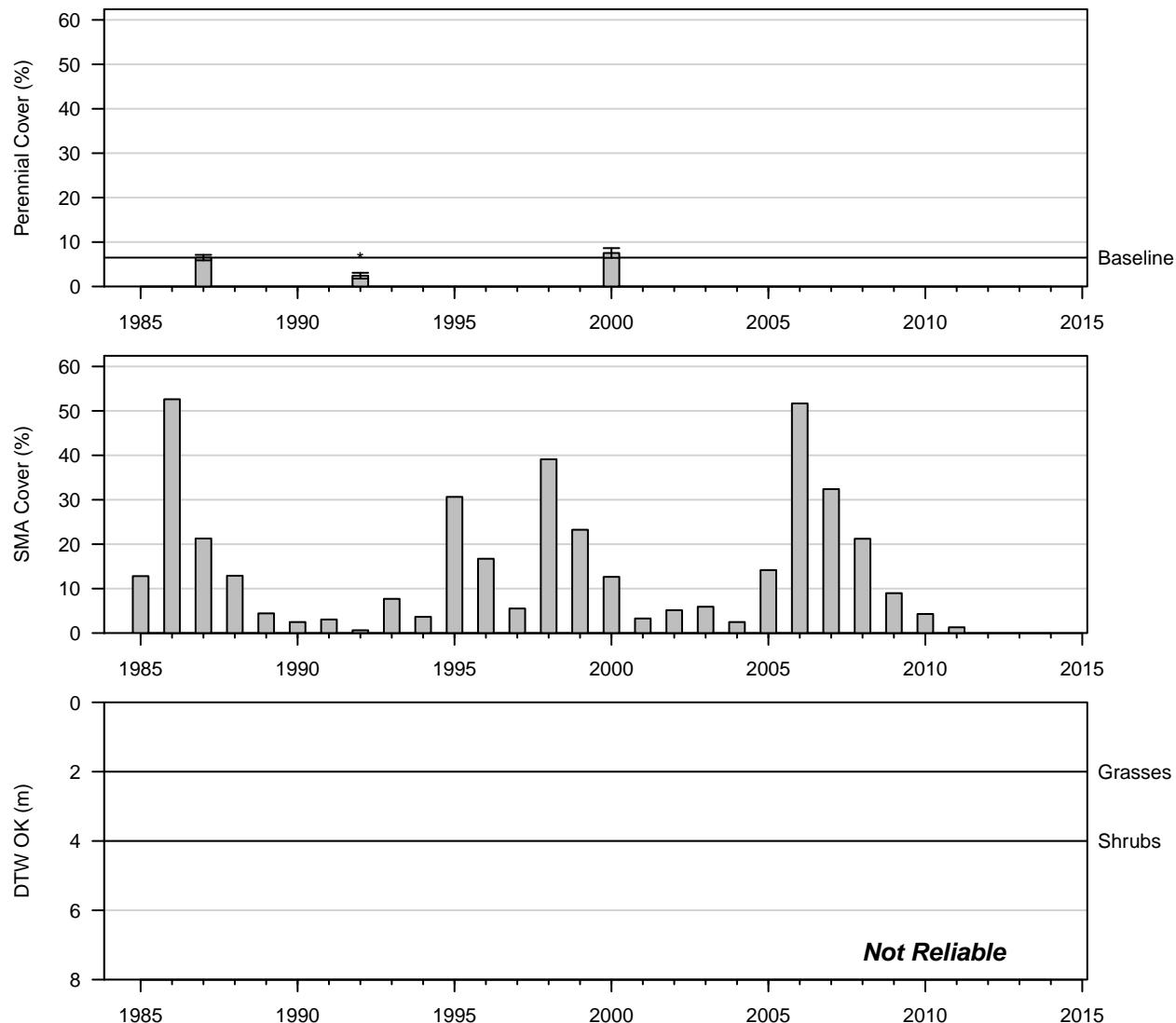


Figure 94: 2000 Wellfield

LAW078
Alkali Meadow (Type C)

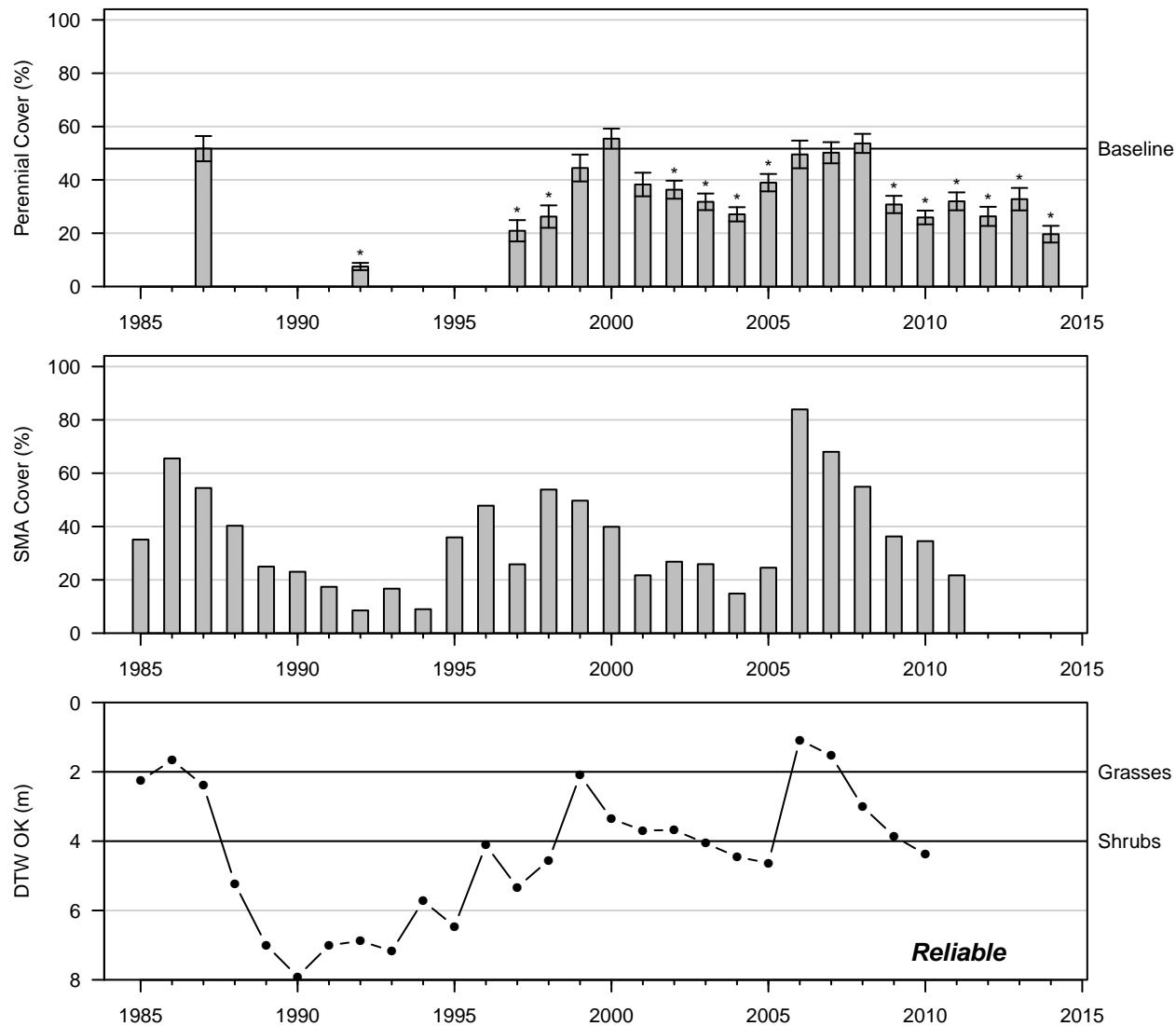


Figure 95: 2014 Wellfield

LAW082
Rabbitbrush Meadow (Type C)

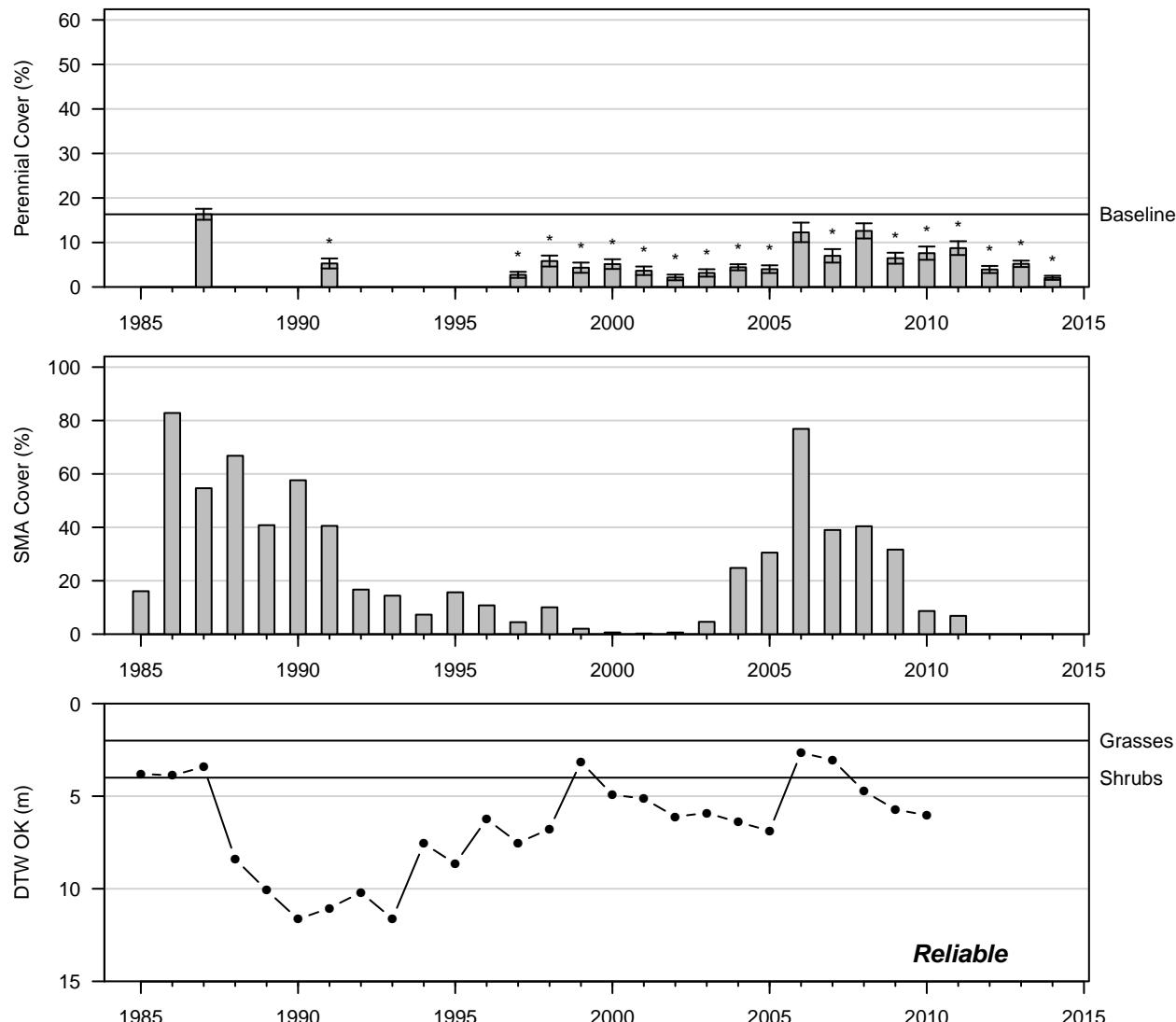


Figure 96: 2014 Wellfield

LAW085
Alkali Meadow (Type C)

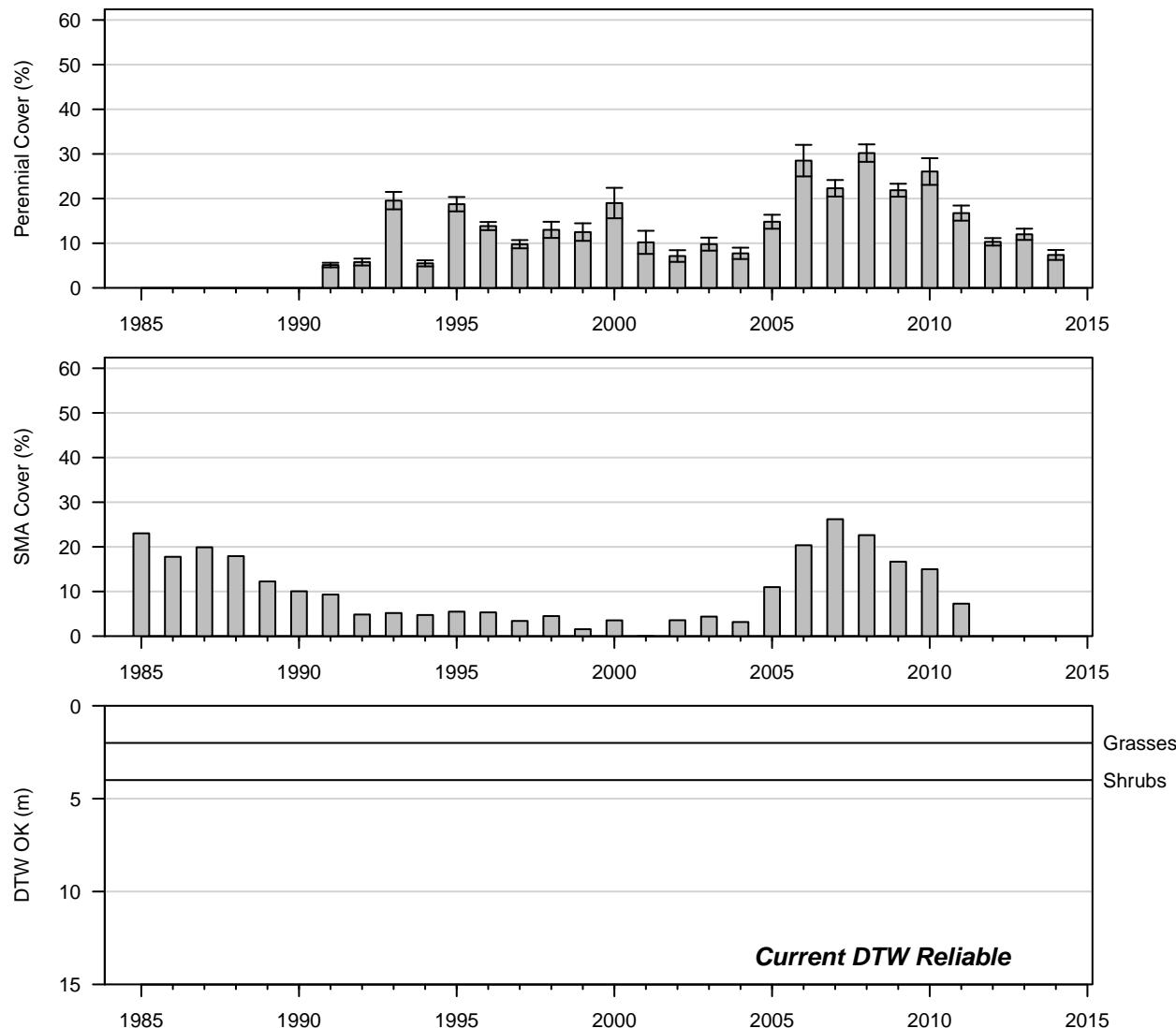


Figure 97: 2014 Wellfield

LAW104
Desert Greasewood Scrub (Type A)

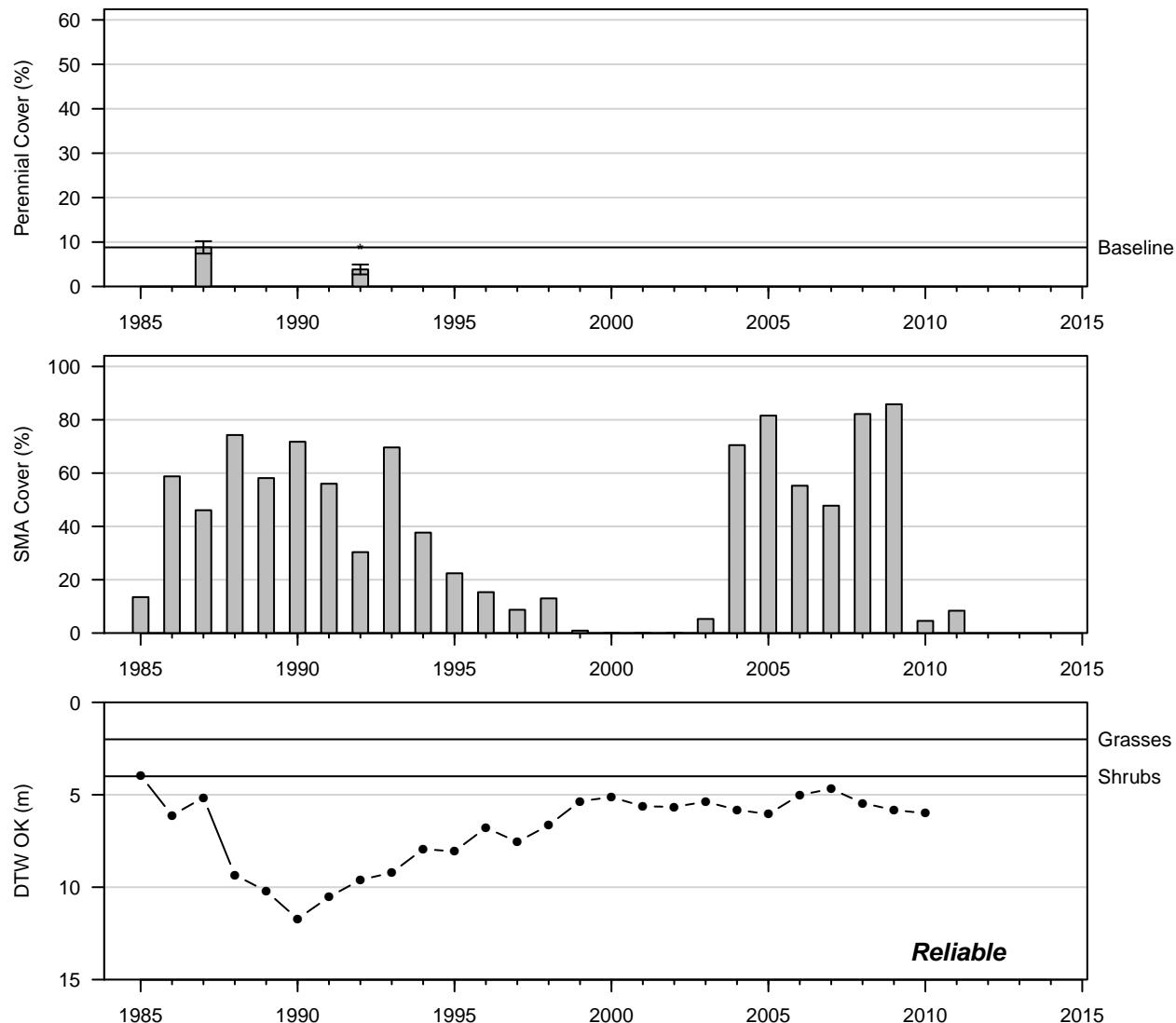


Figure 98: 1992 Wellfield

LAW107
Alkali Meadow (Type C)

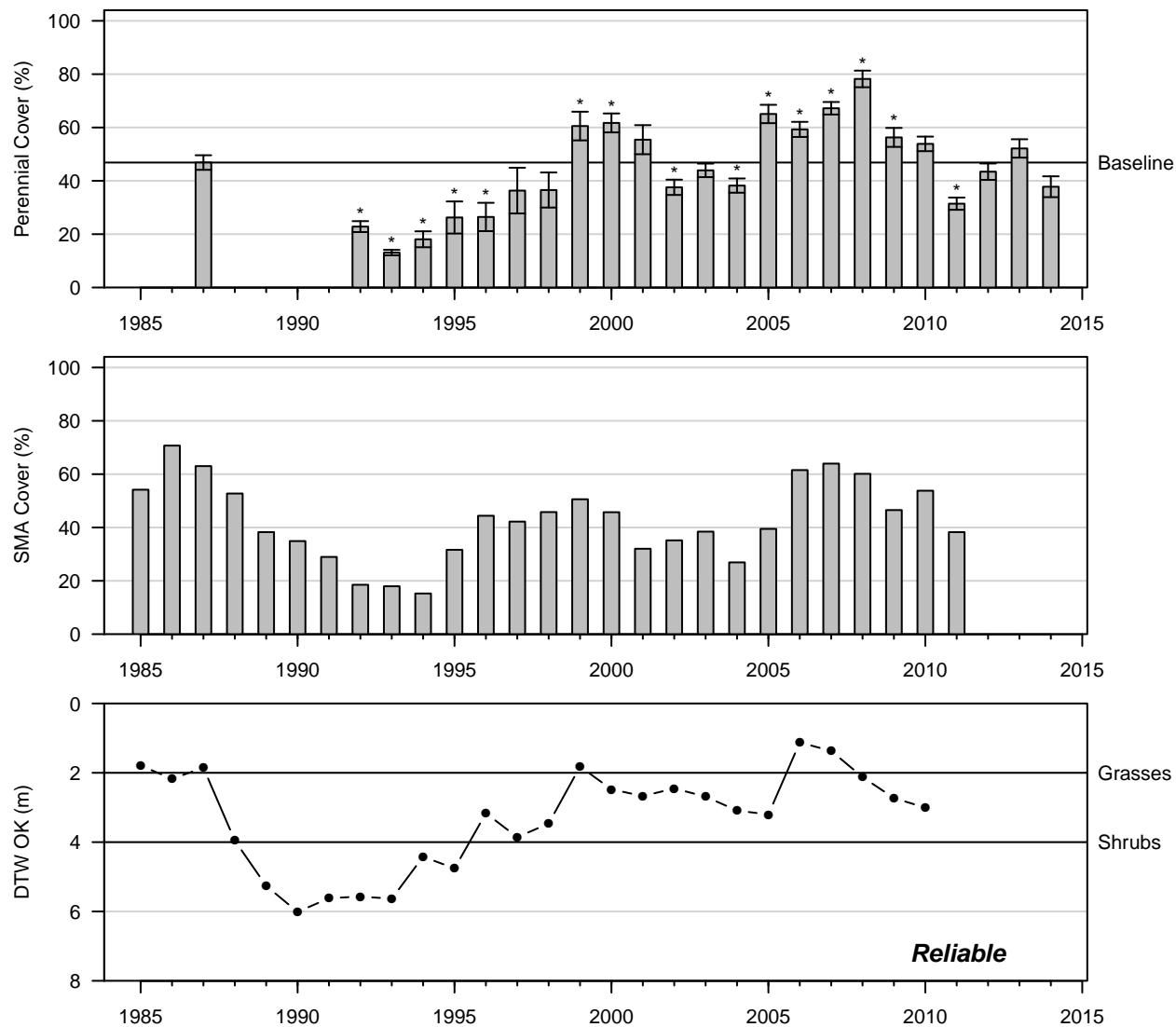


Figure 99: 2014 Wellfield

LAW109
Alkali Meadow (Type C)

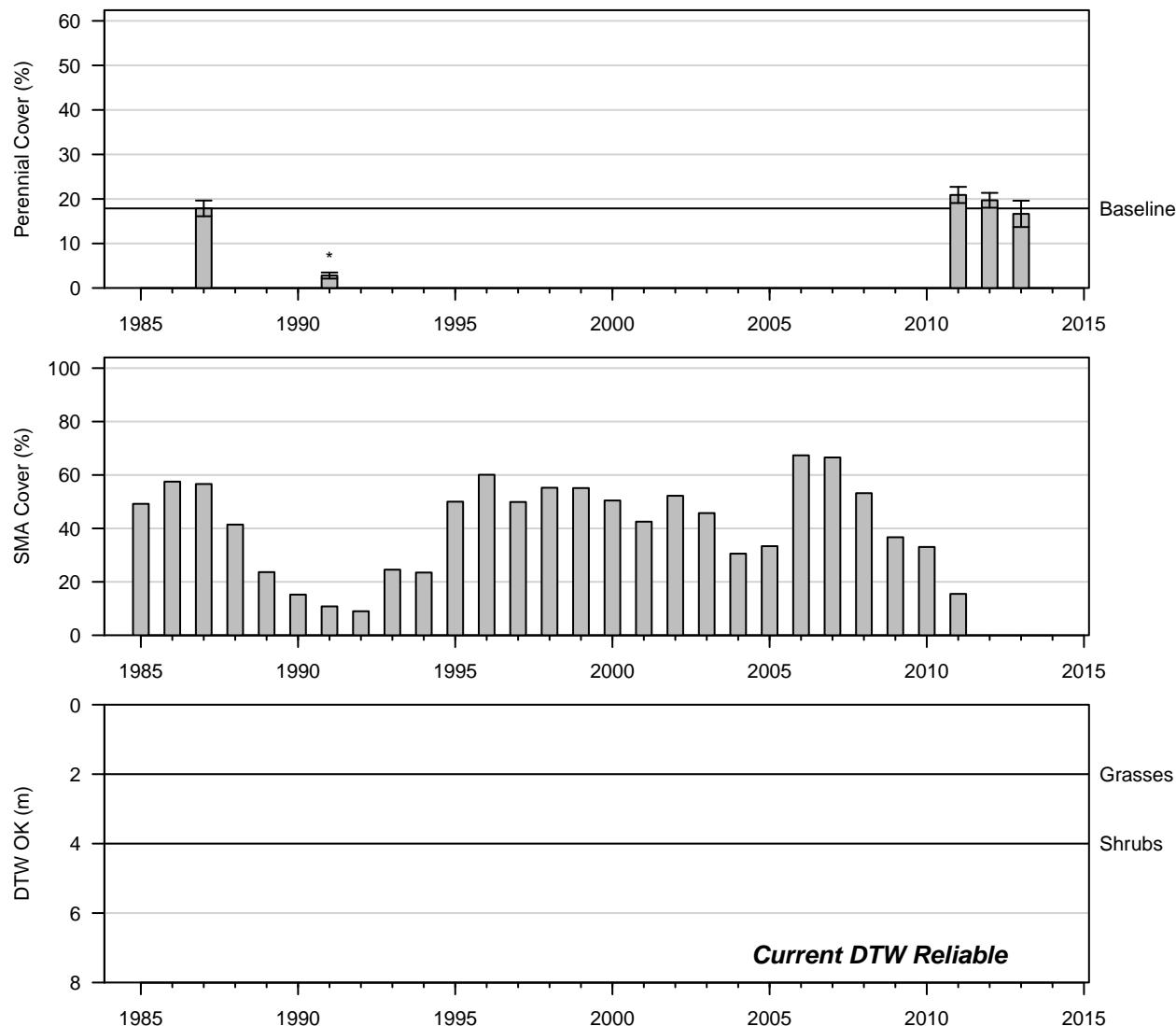


Figure 100: 2013 Wellfield

LAW110
Alkali Meadow (Type C)

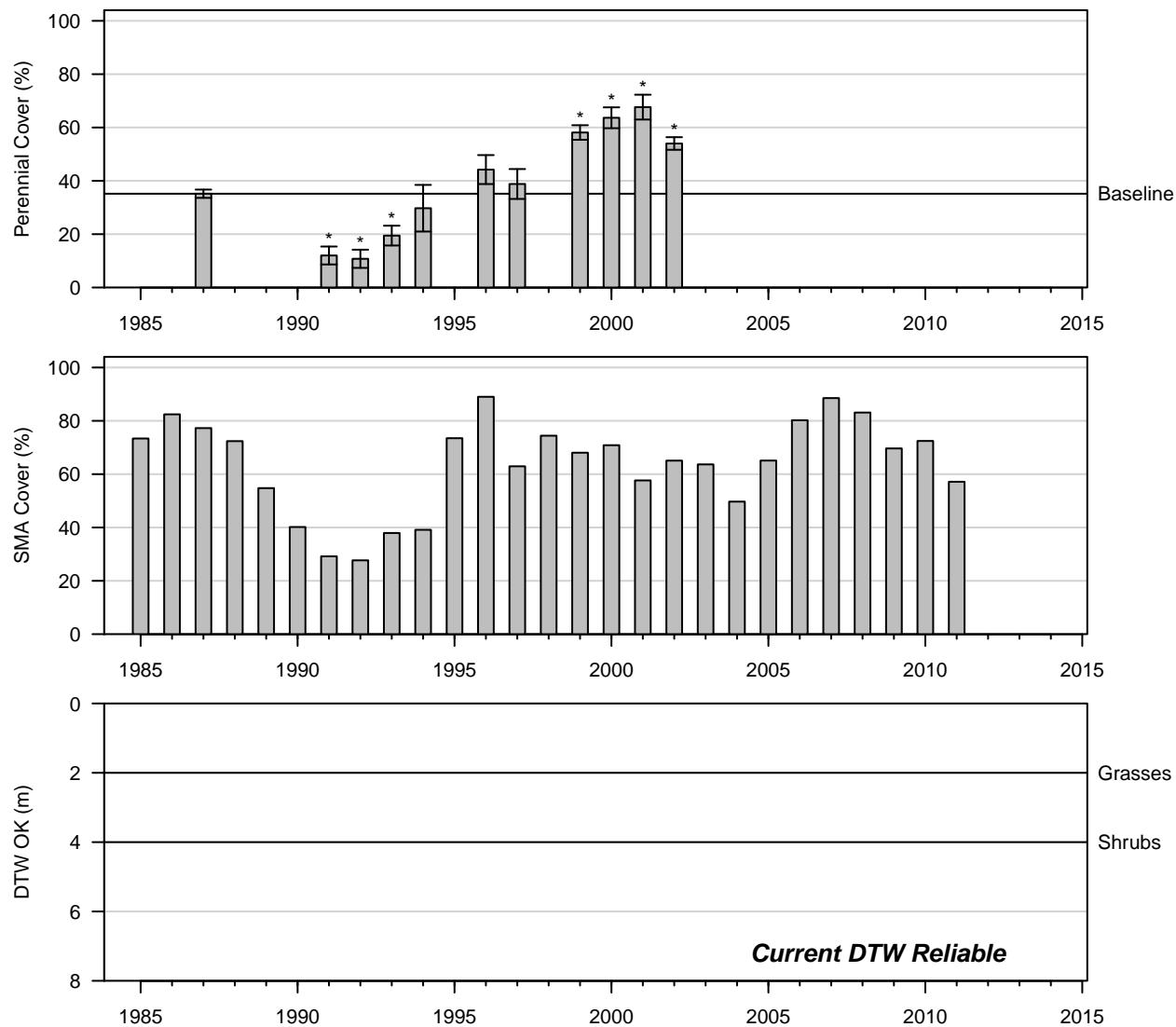


Figure 101: 2002 Wellfield

LAW112
Nevada Saltbush Meadow (Type C)

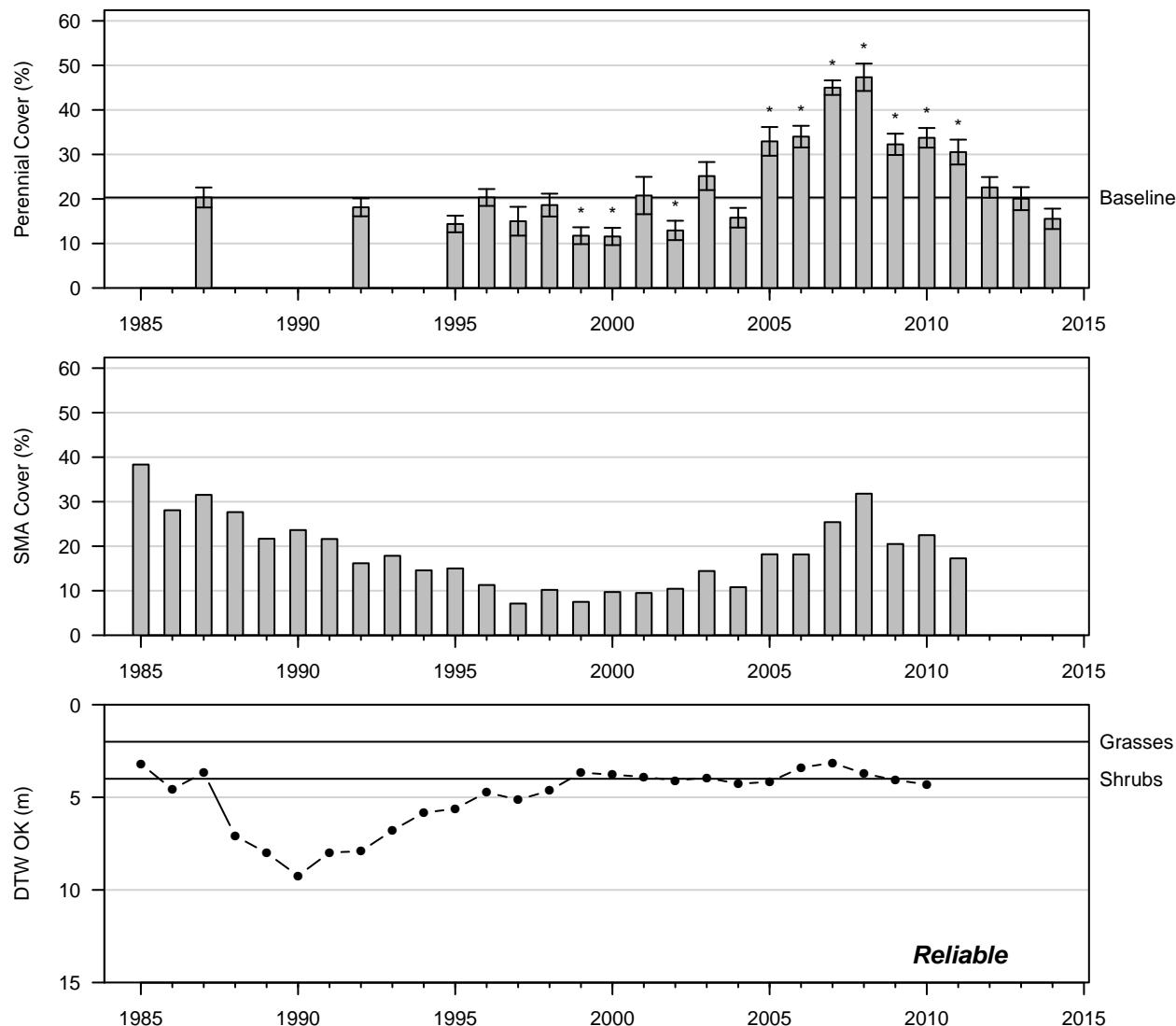


Figure 102: 2014 Wellfield

LAW120
Alkali Meadow (Type C)

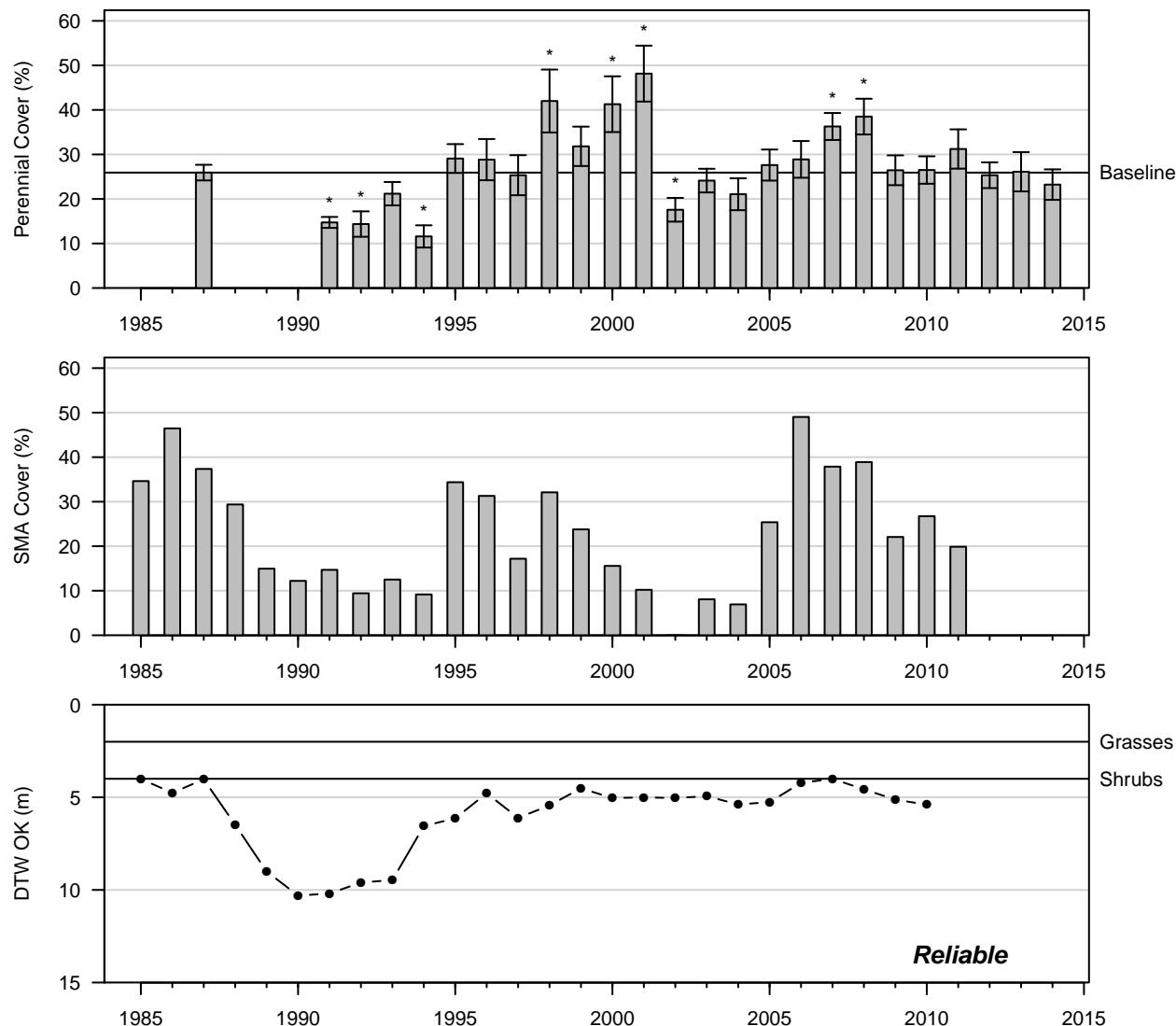


Figure 103: 2014 Wellfield

LAW122
Alkali Meadow (Type C)

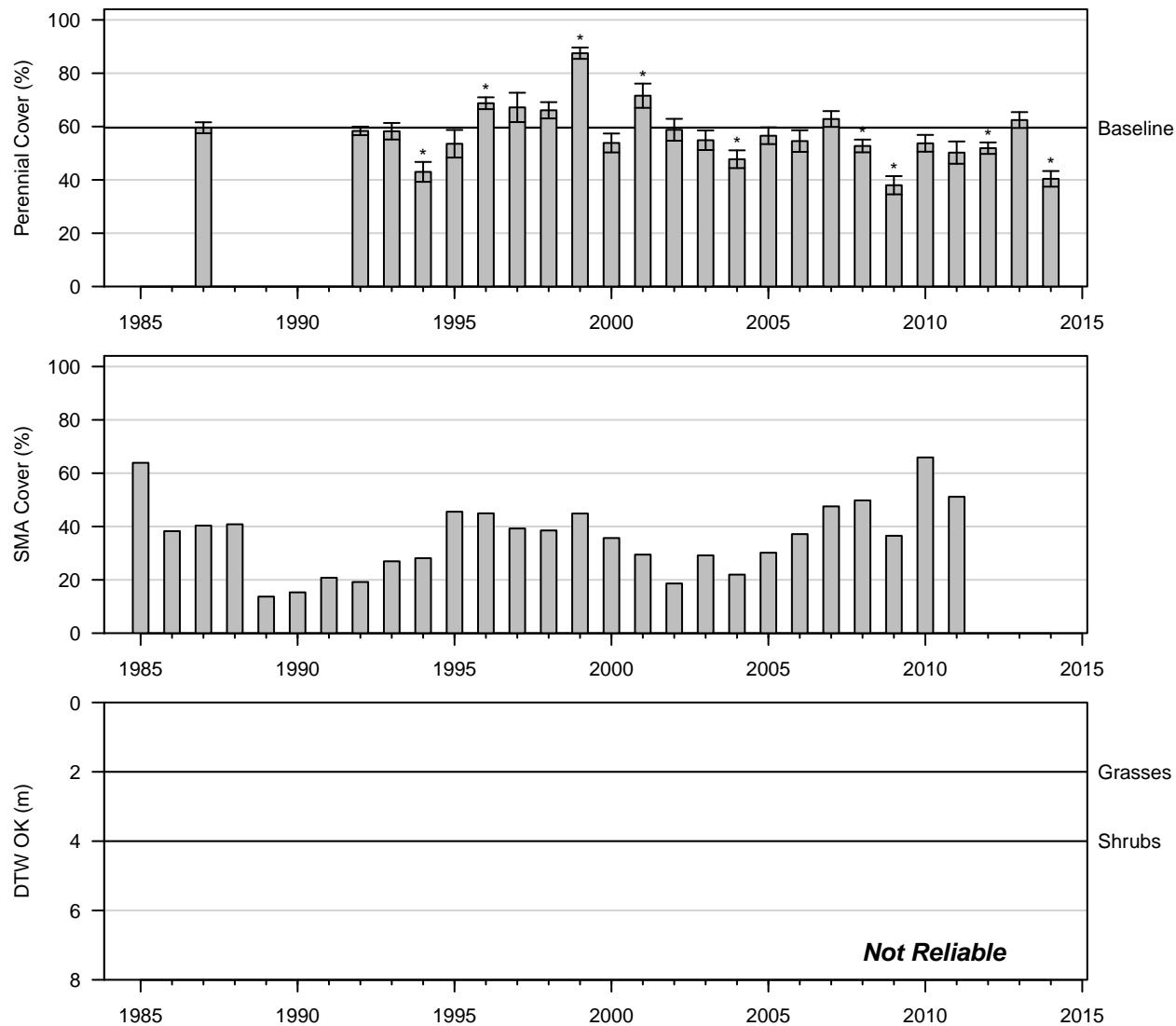


Figure 104: 2014 Wellfield

LAW137
Rabbitbrush Meadow (Type C)

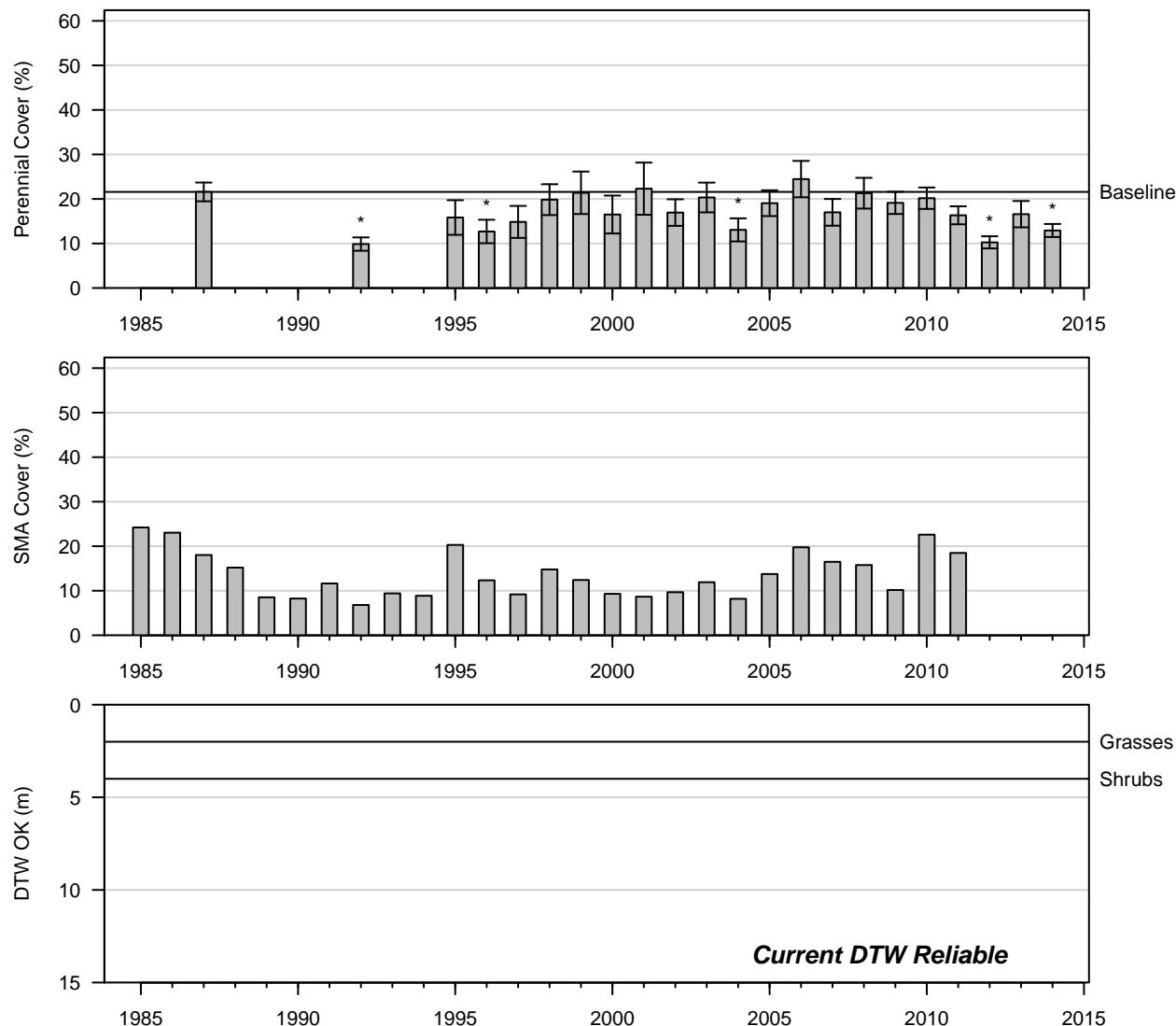


Figure 105: 2014 Wellfield

LAW154
Nevada Saltbush Scrub (Type A)

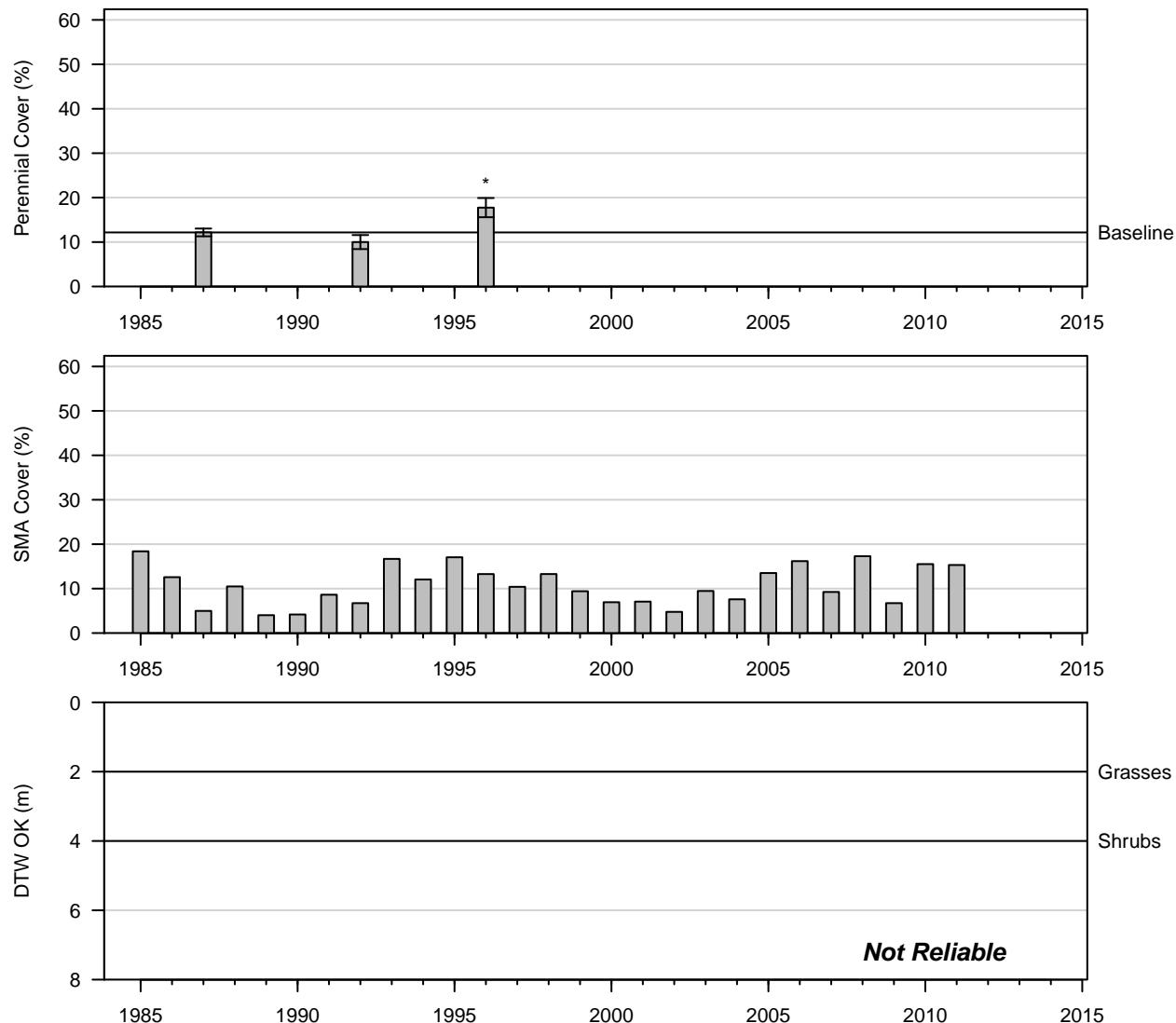


Figure 106: 1996 Control

LAW167
Rabbitbrush Scrub (Type A)

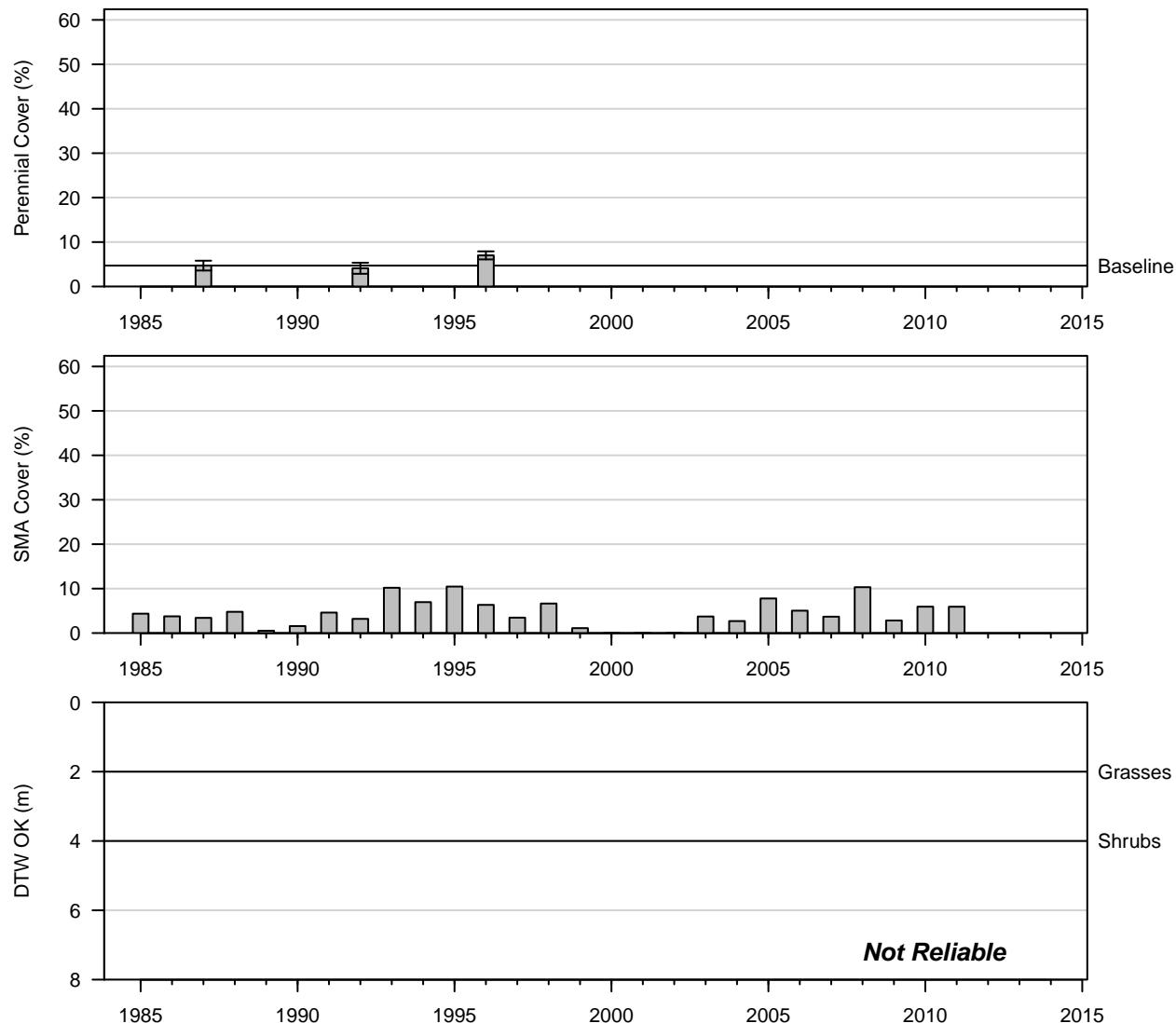


Figure 107: 1996 Control

LAW187
Alkali Meadow (Type C)

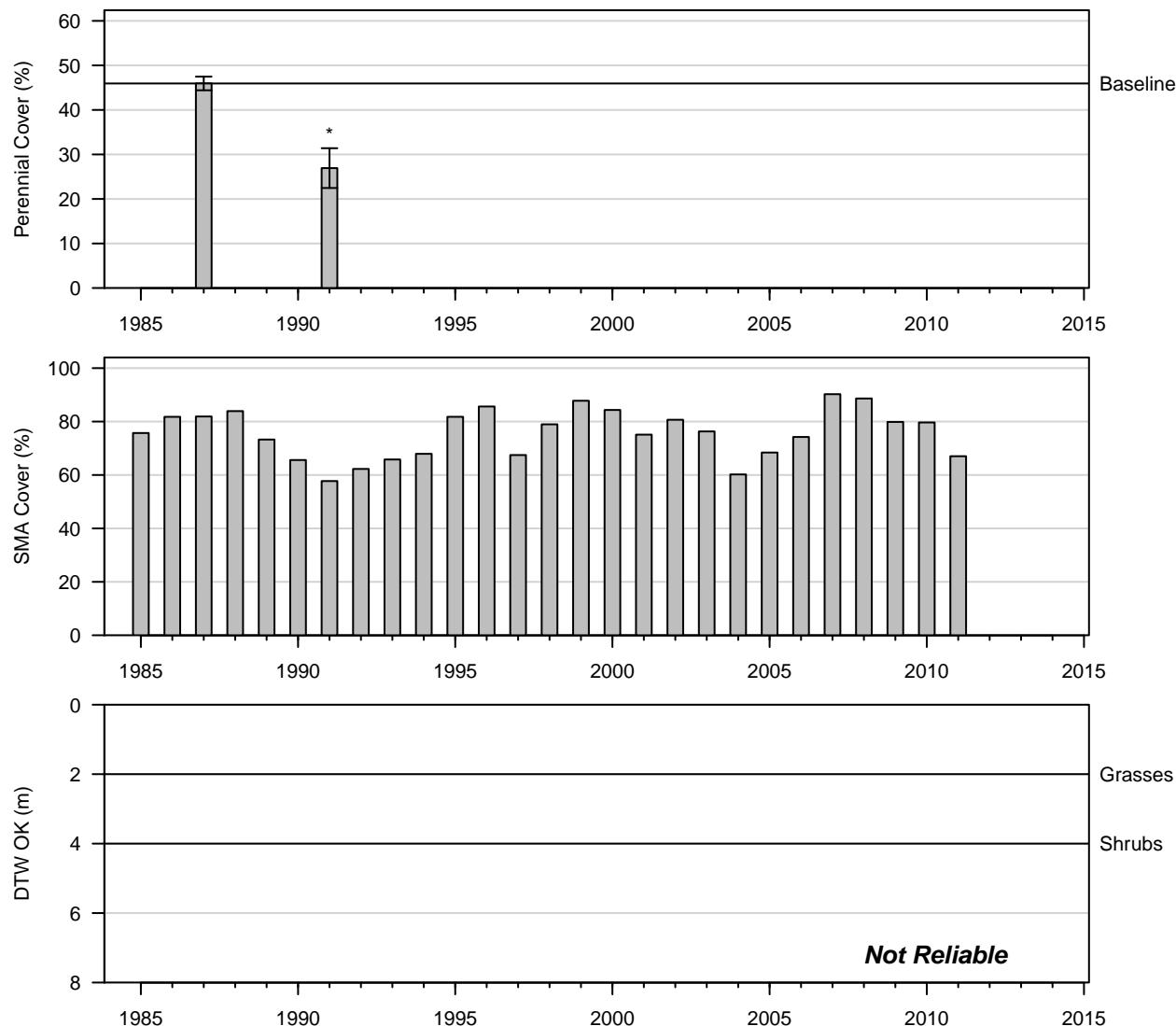


Figure 108: 1991 Control

LNP018
Alkali Meadow (Type C)

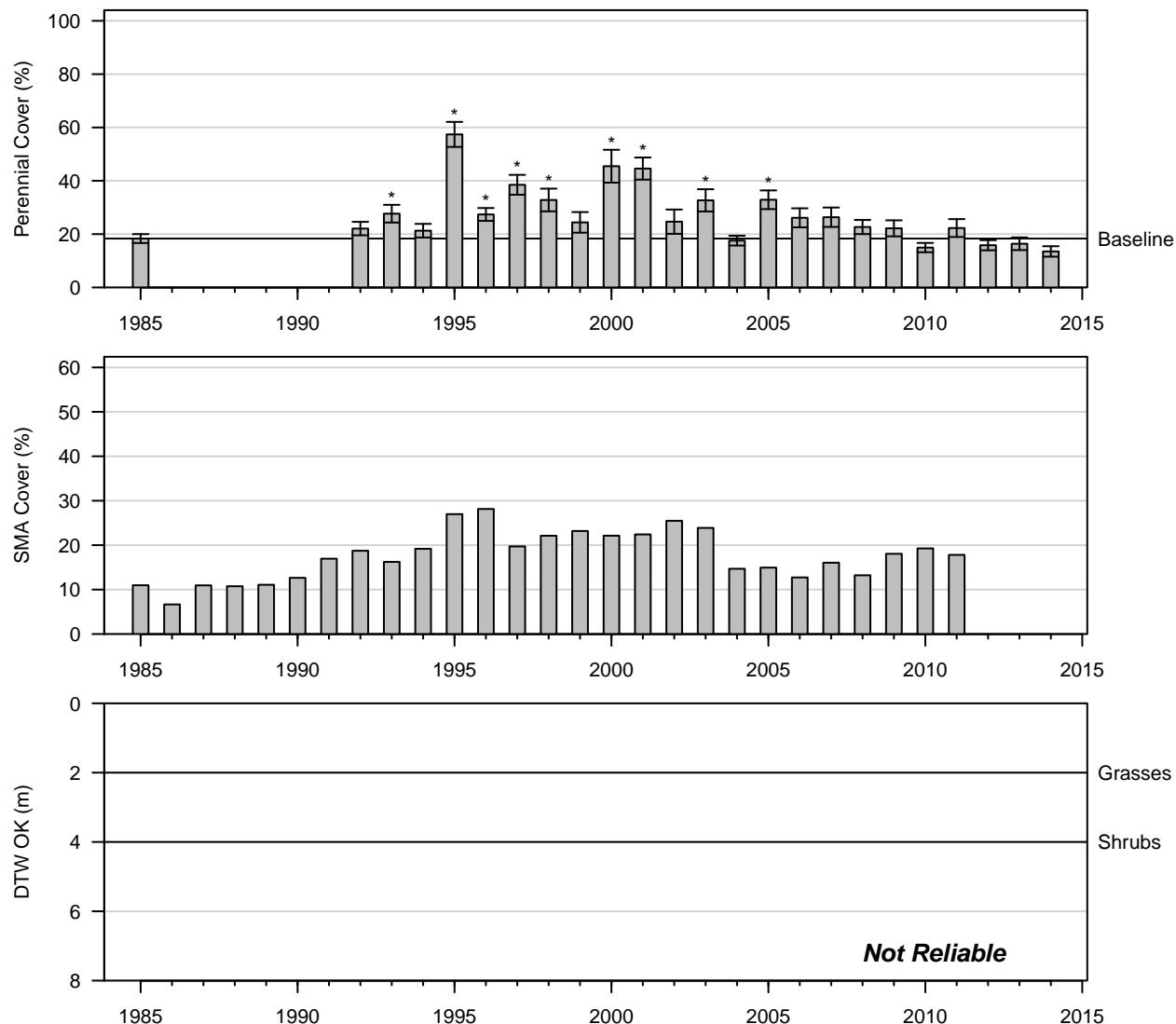


Figure 109: 2014 Control

LNP019
Nevada Saltbush Scrub (Type B)

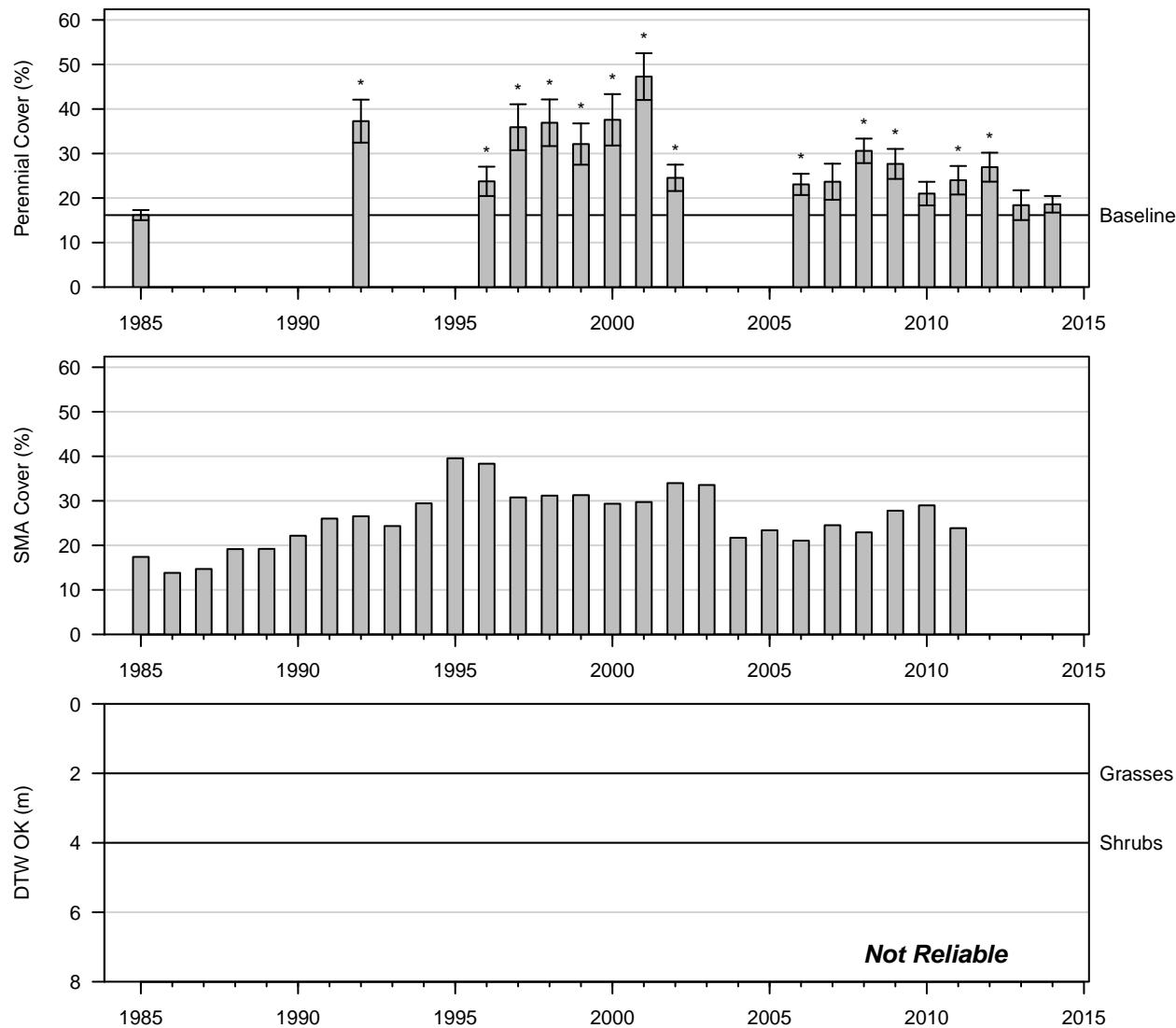


Figure 110: 2014 Control

LNP045
Nevada Saltbush Meadow (Type C)

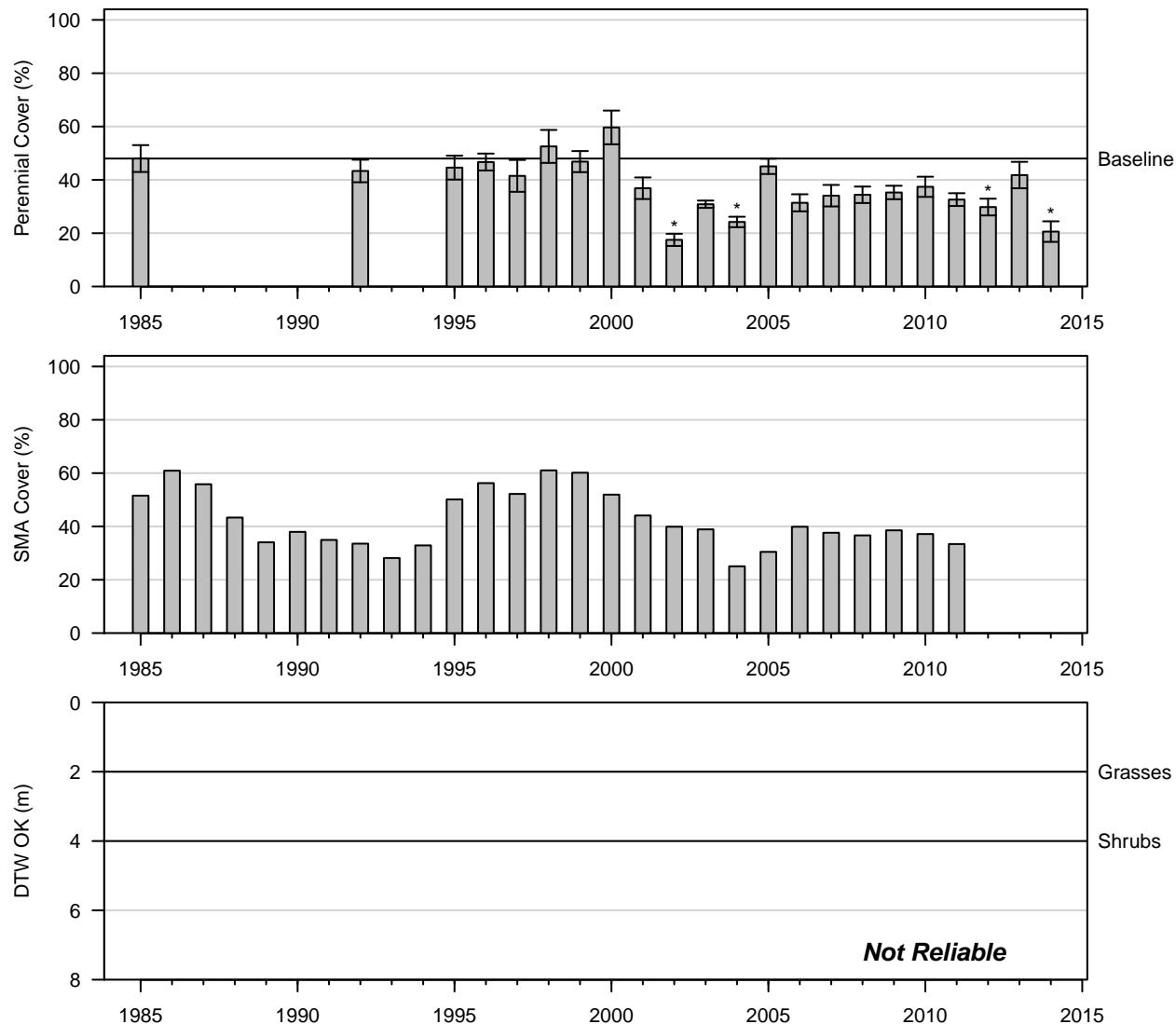


Figure 111: 2014 Wellfield

LNP050
Alkali Meadow (Type C)

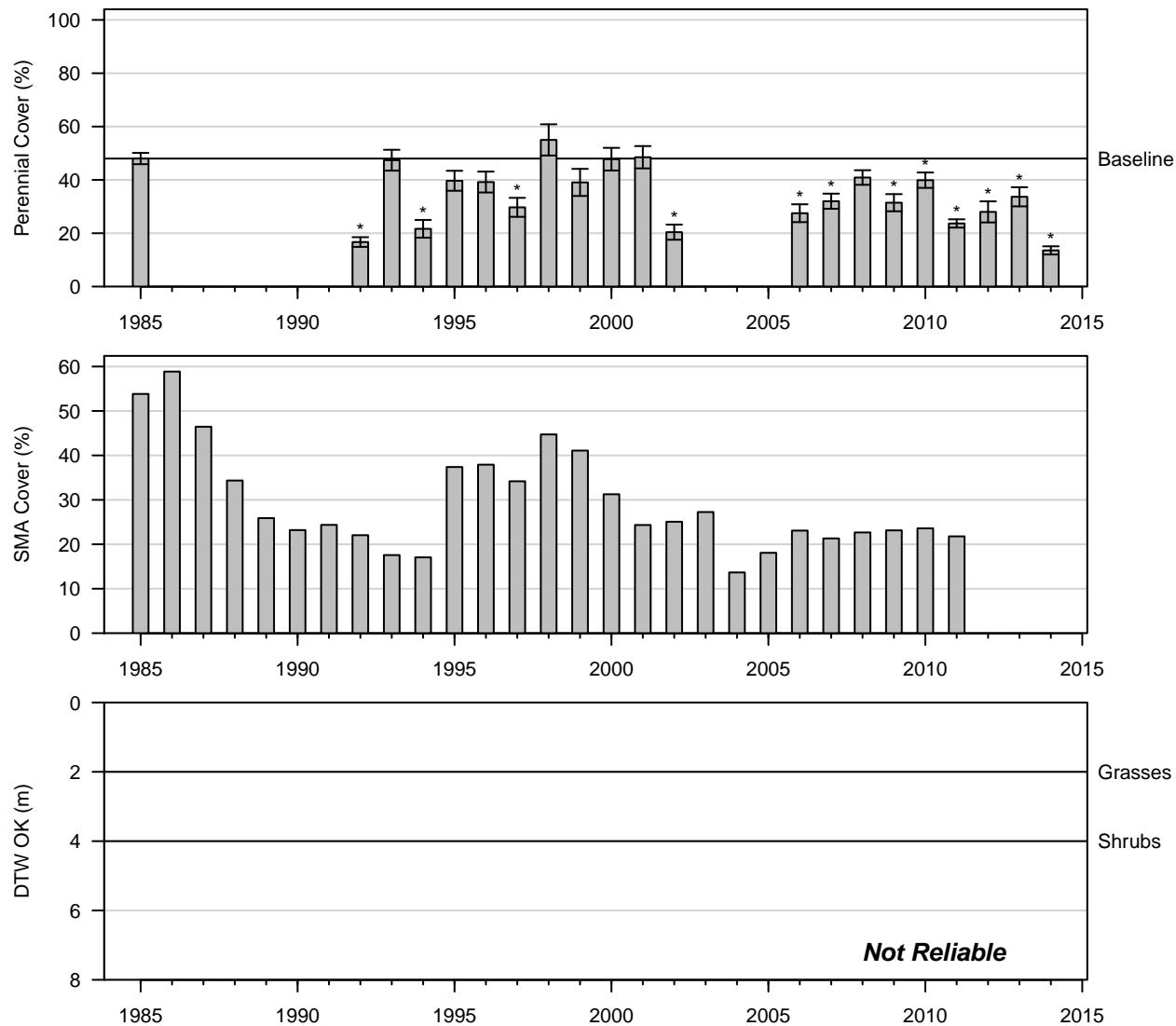


Figure 112: 2014 Control

LNP095
Alkali Meadow (Type C)

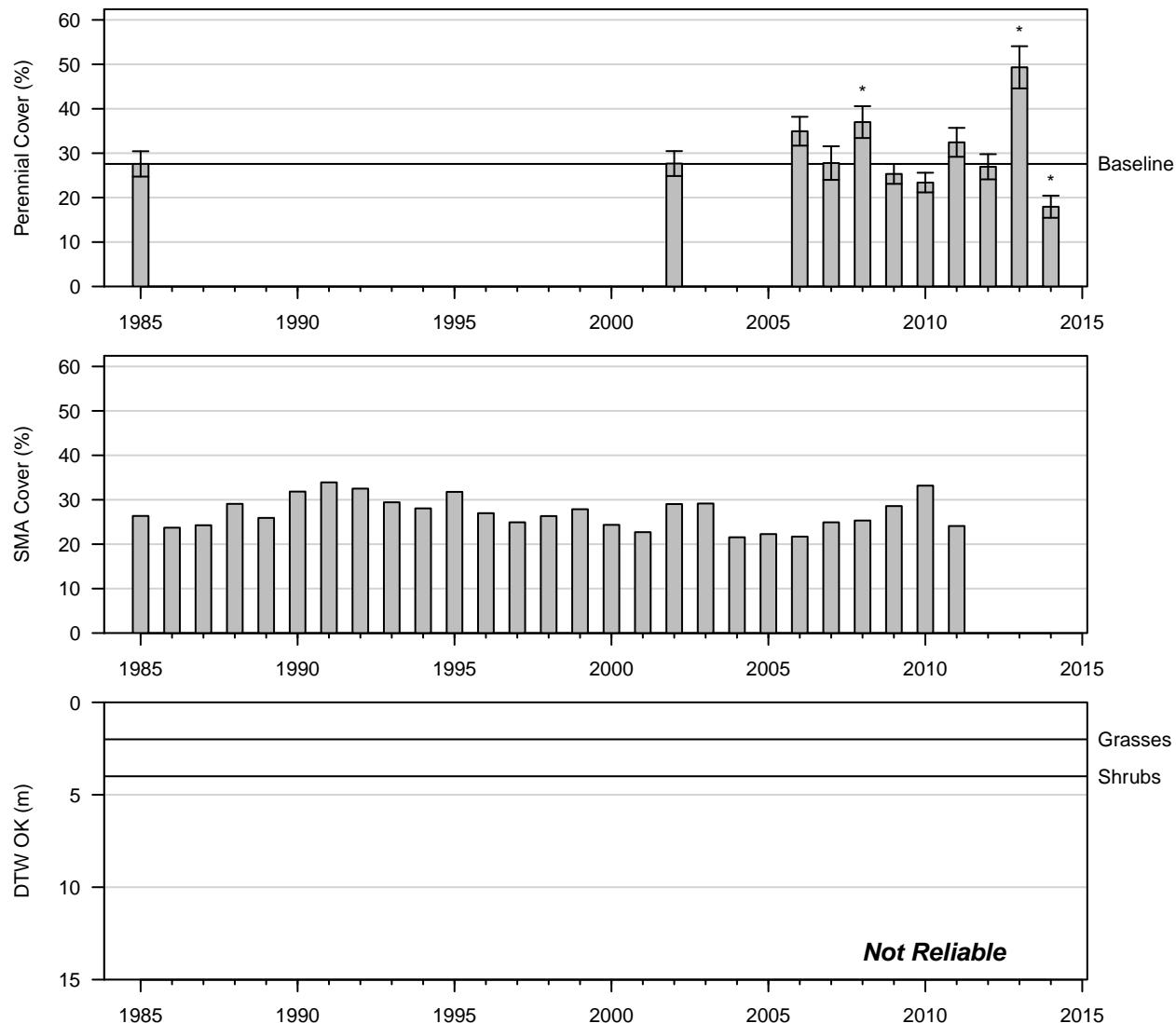


Figure 113: 2014 Control

MAN006
Alkali Meadow (Type C)

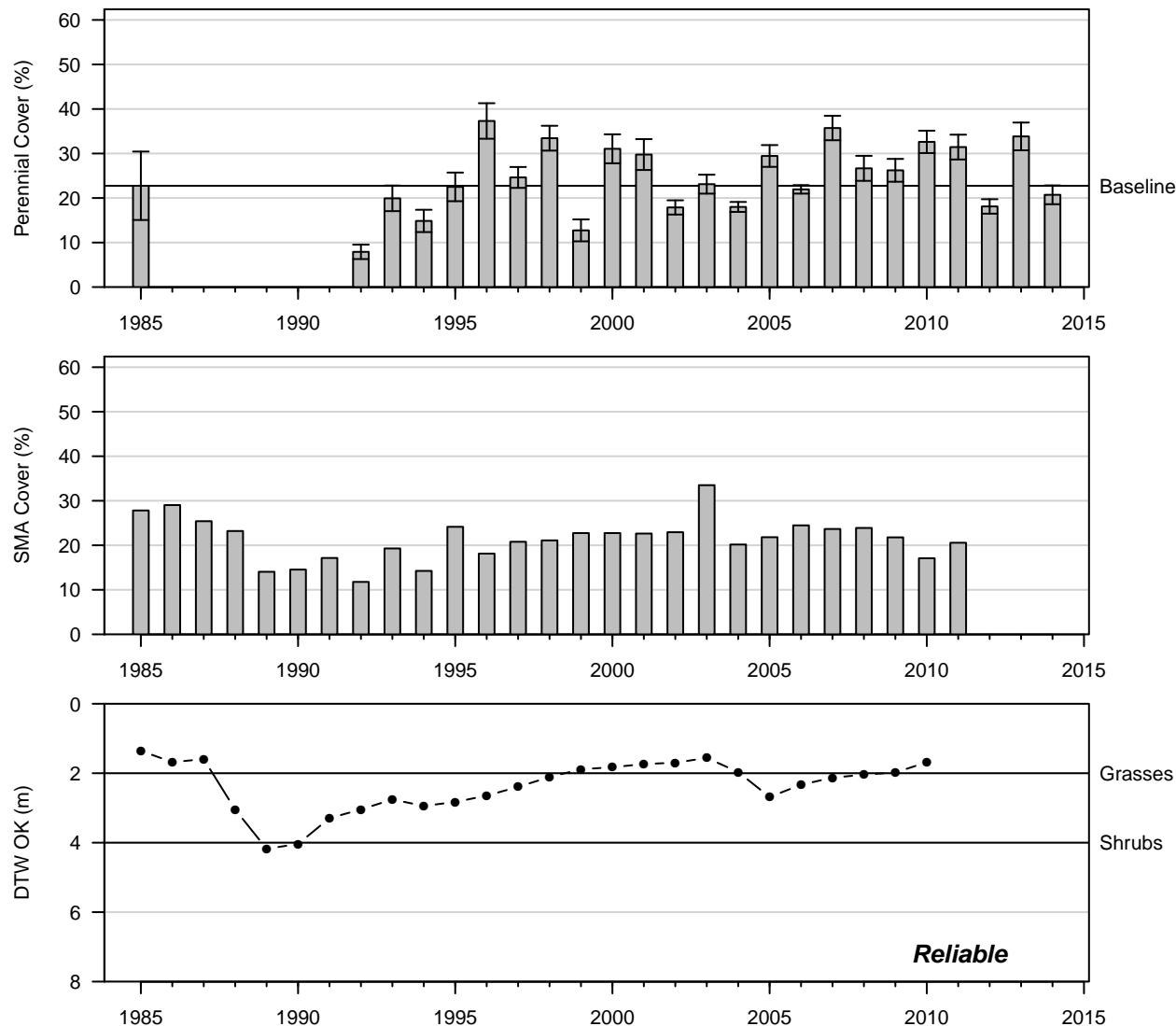


Figure 114: 2014 Wellfield

MAN007
Nevada Saltbush Scrub (Type B)

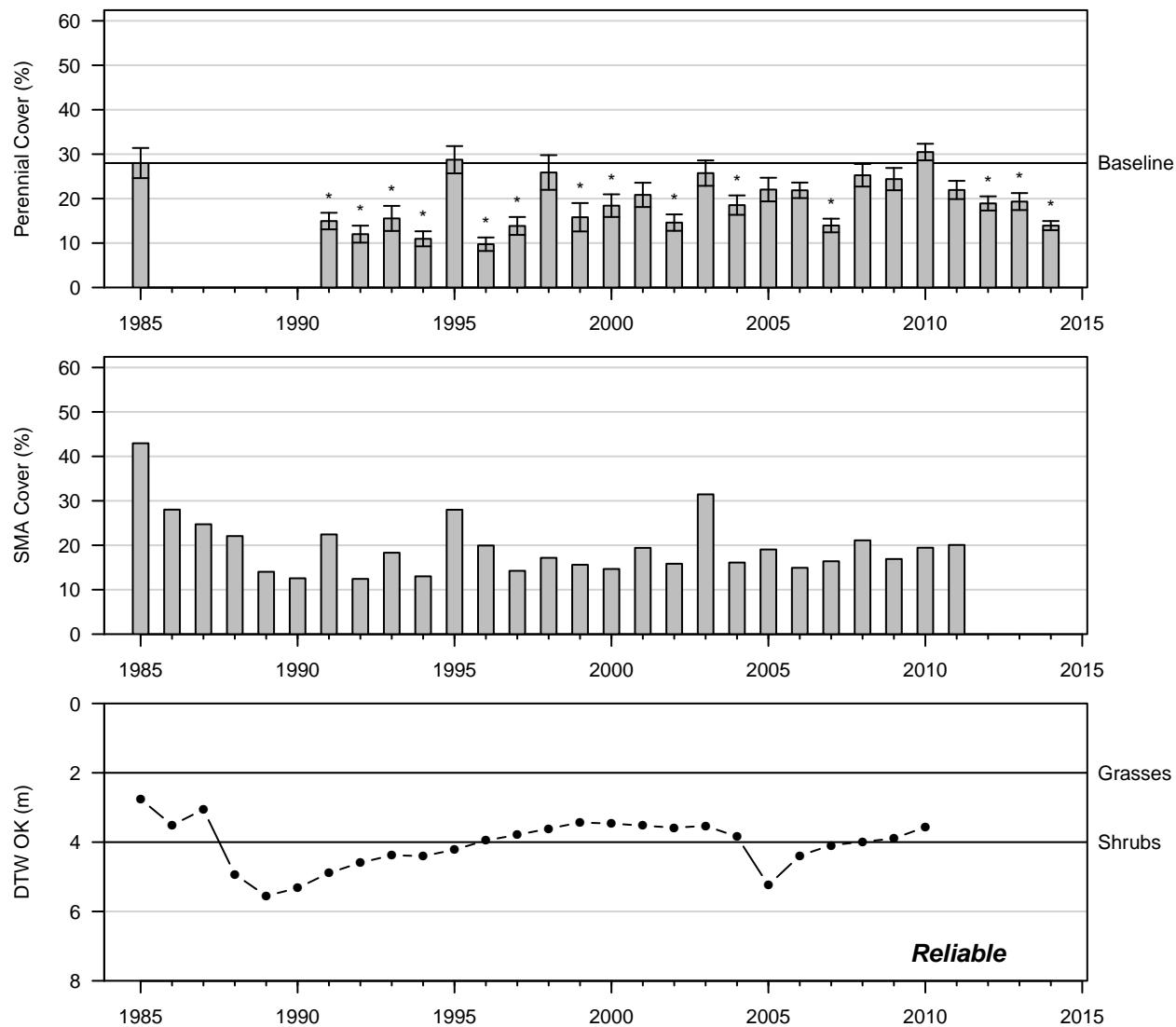


Figure 115: 2014 Wellfield

MAN014
Nevada Saltbush Meadow (Type C)

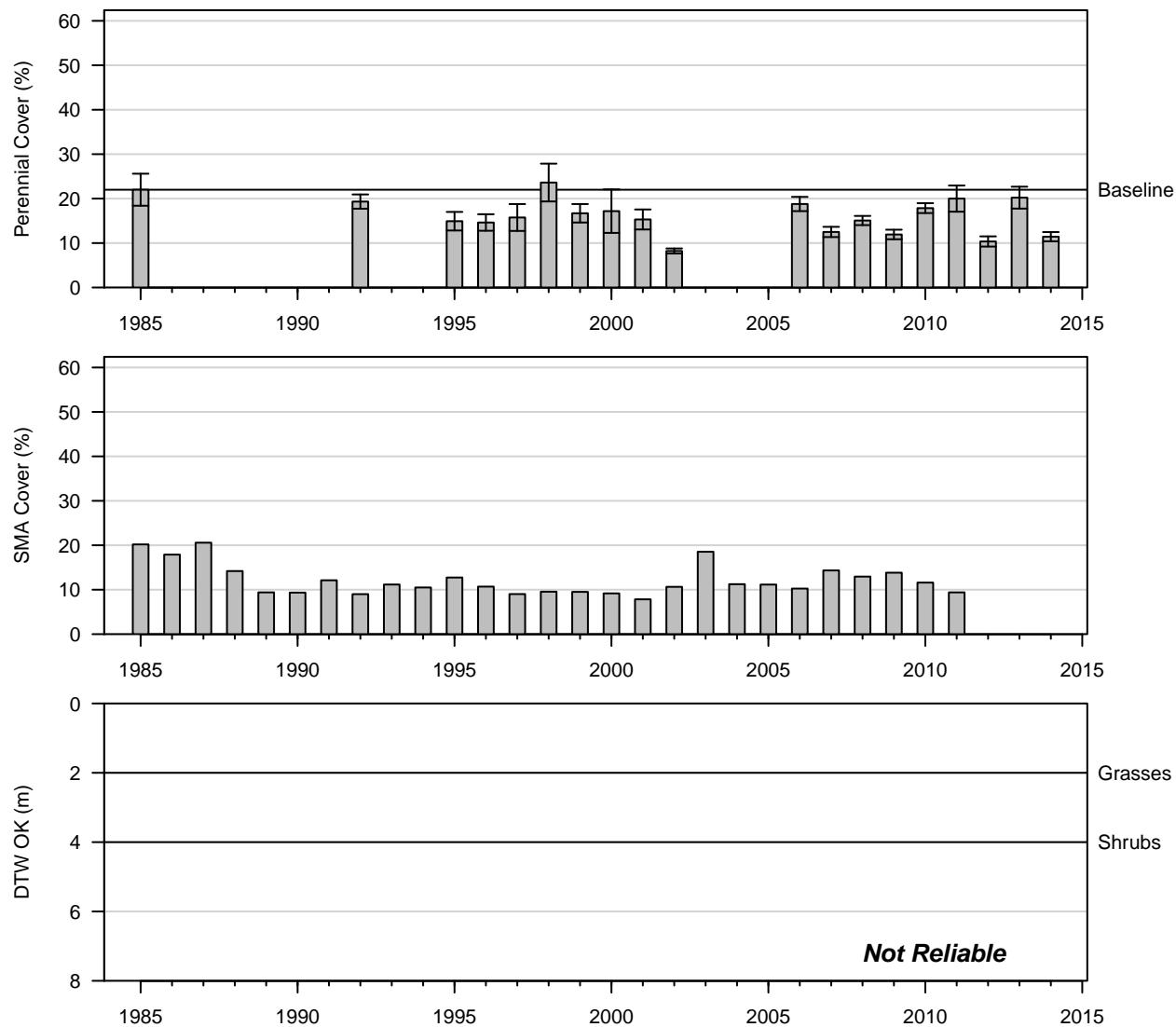


Figure 116: 2014 Control

MAN017
Rabbitbrush Scrub (Type B)

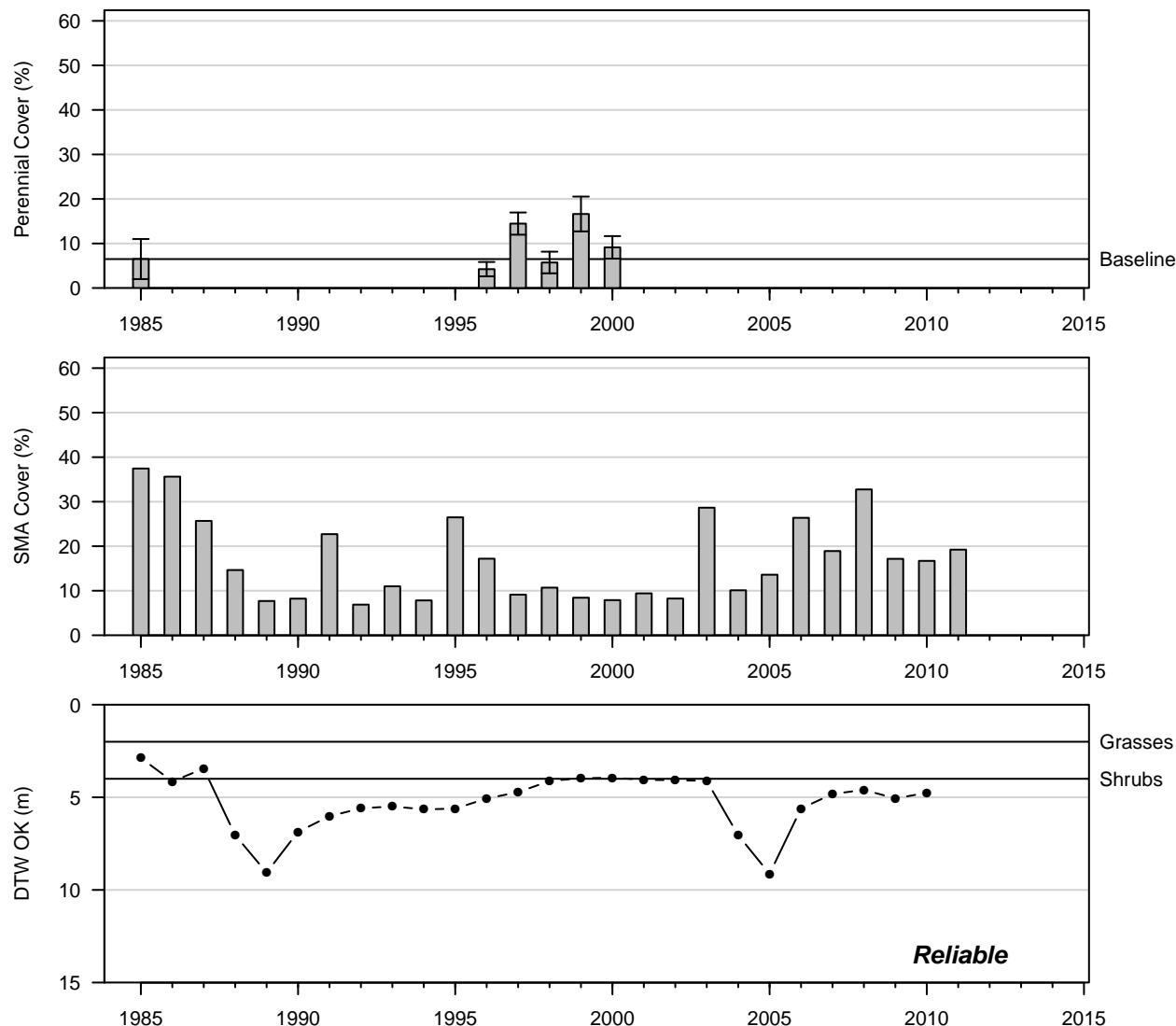


Figure 117: 2000 Wellfield

MAN034
Desert Sink Scrub (Type A)

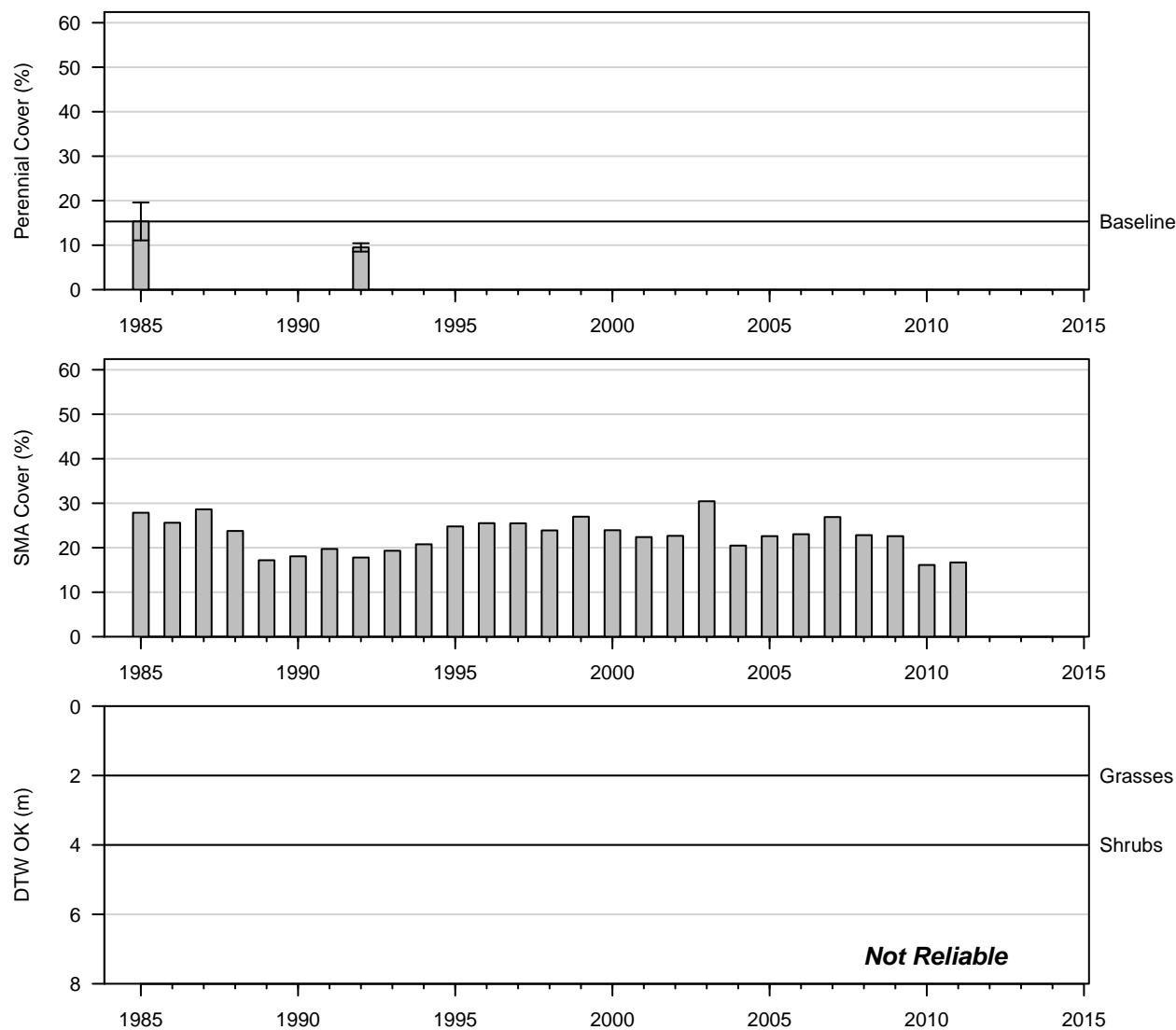


Figure 118: 1992 Wellfield

MAN037
Nevada Saltbush Scrub (Type B)

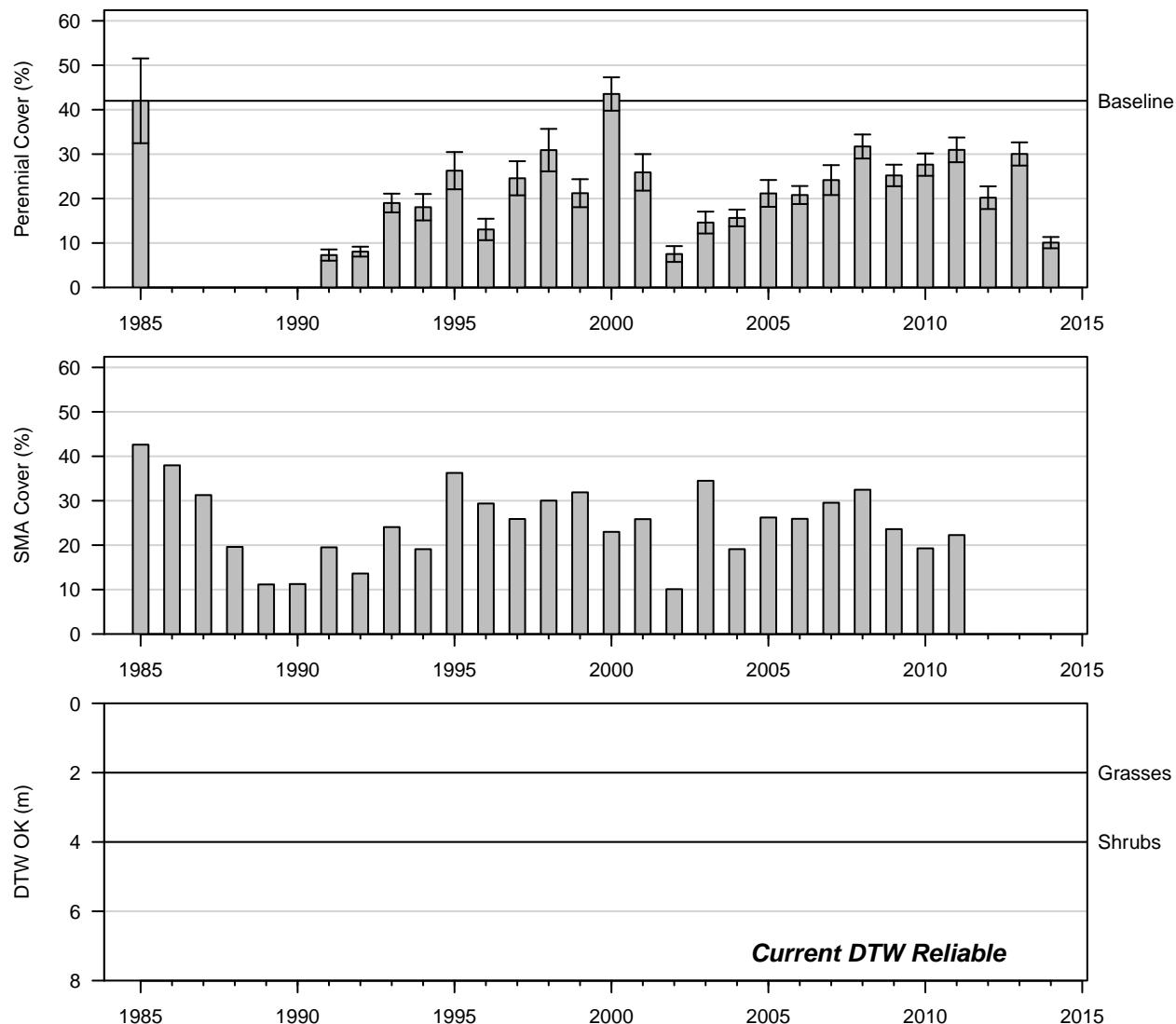


Figure 119: 2014 Wellfield

MAN038
Nevada Saltbush Meadow (Type C)

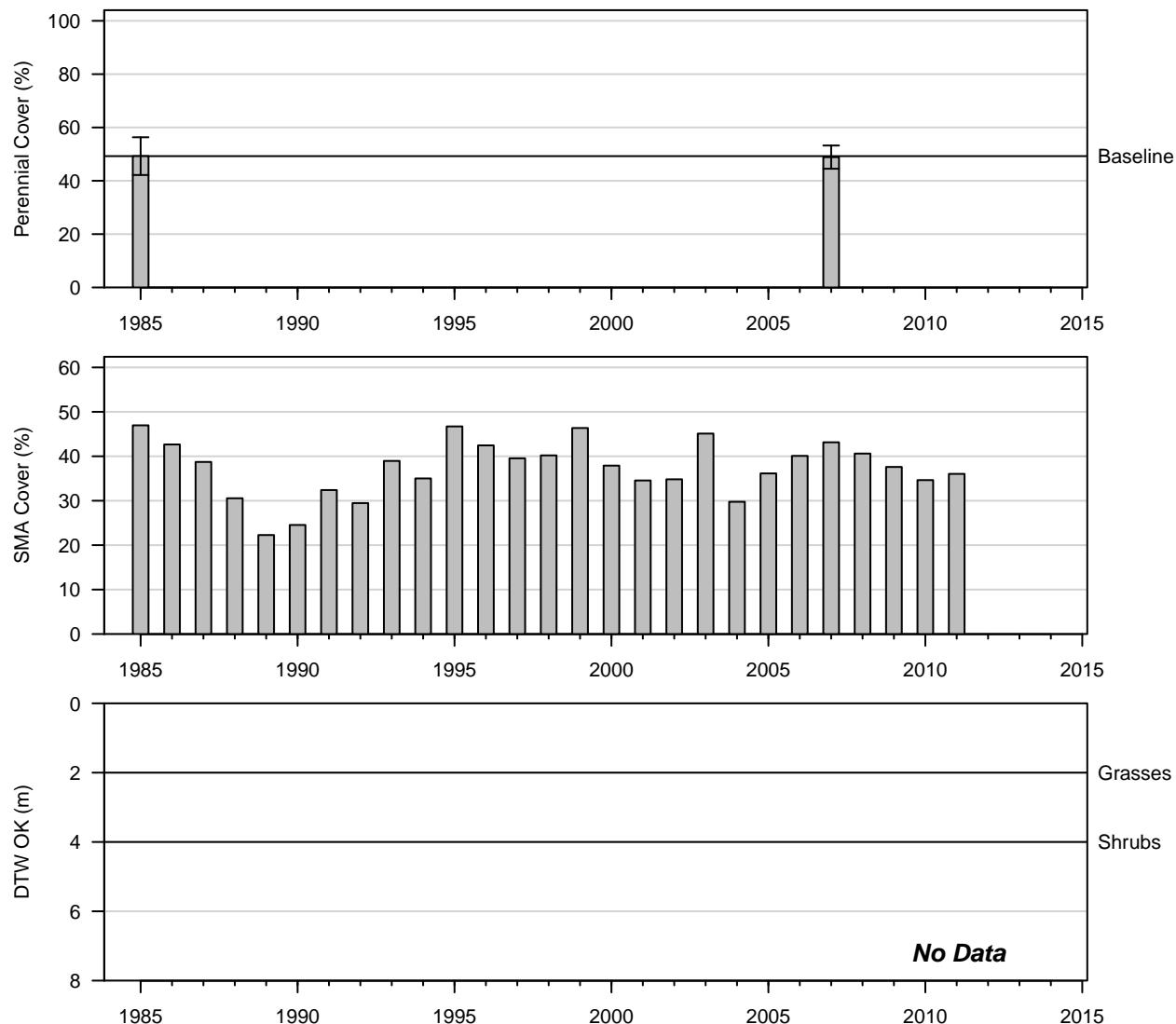


Figure 120: 2007 Wellfield

MAN042
Rabbitbrush Scrub (Type C)

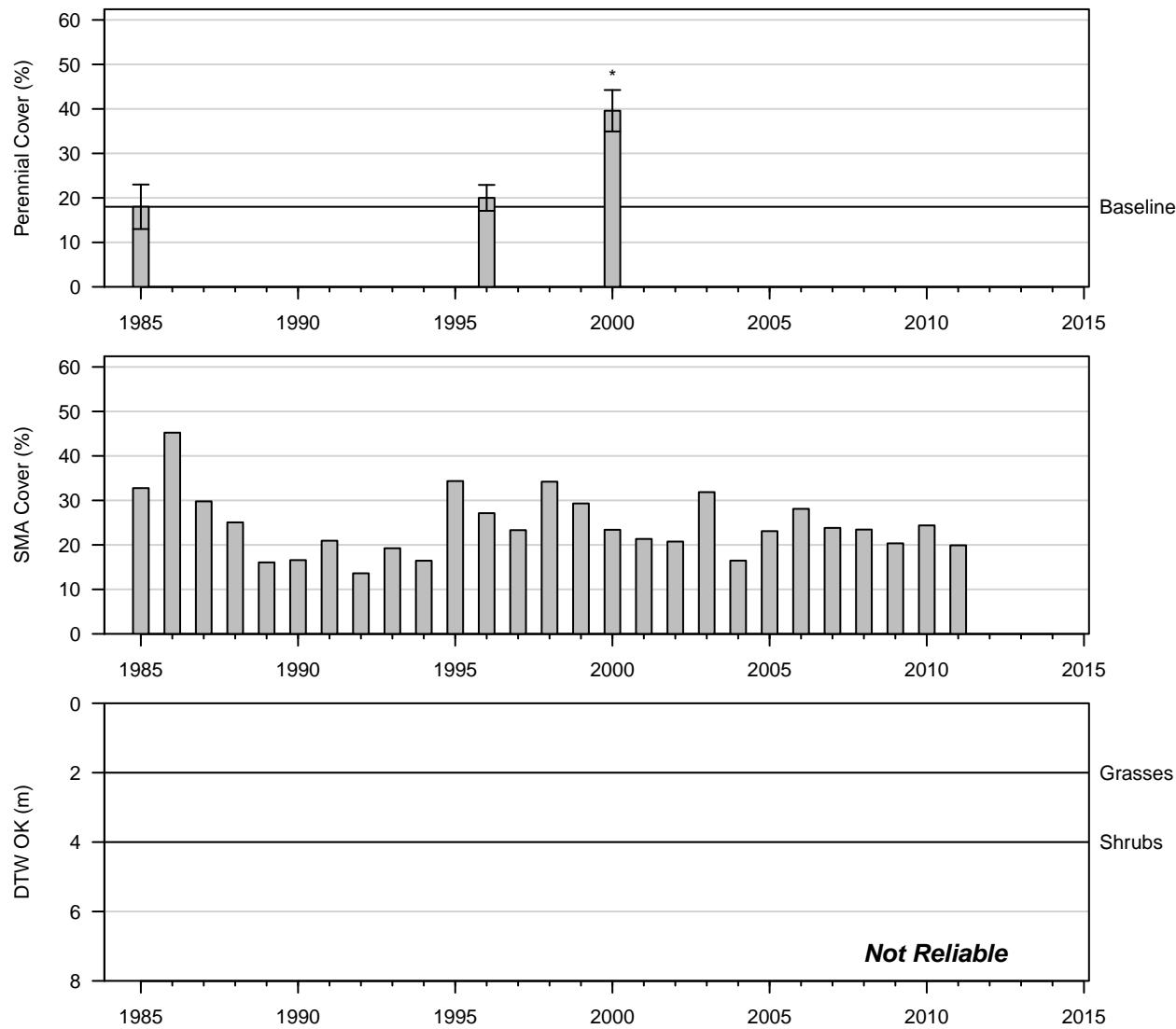


Figure 121: 2000 Wellfield

MAN060
Alkali Meadow (Type C)

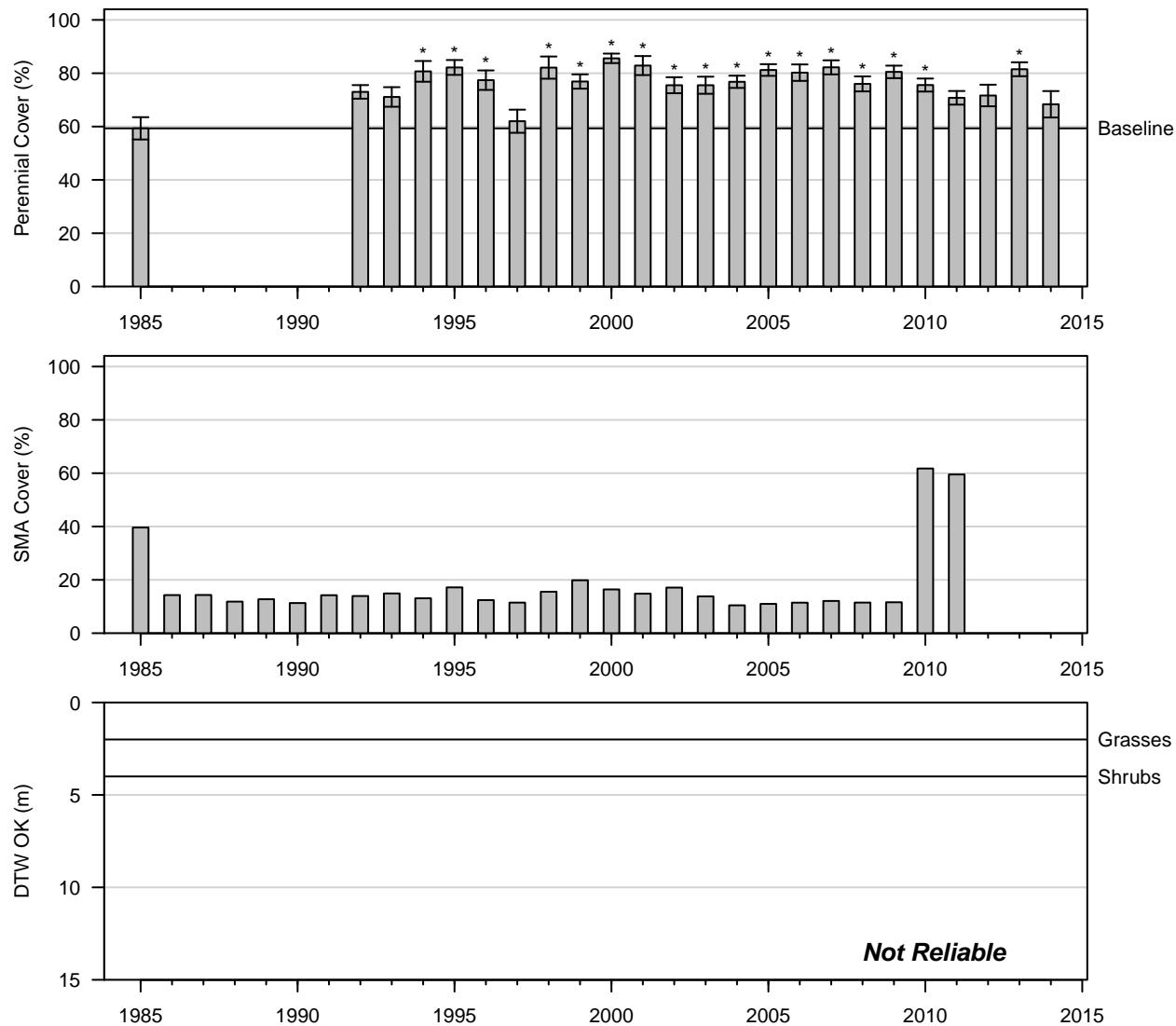


Figure 122: 2014 Control

PLC007
Nevada Saltbush Scrub (Type B)

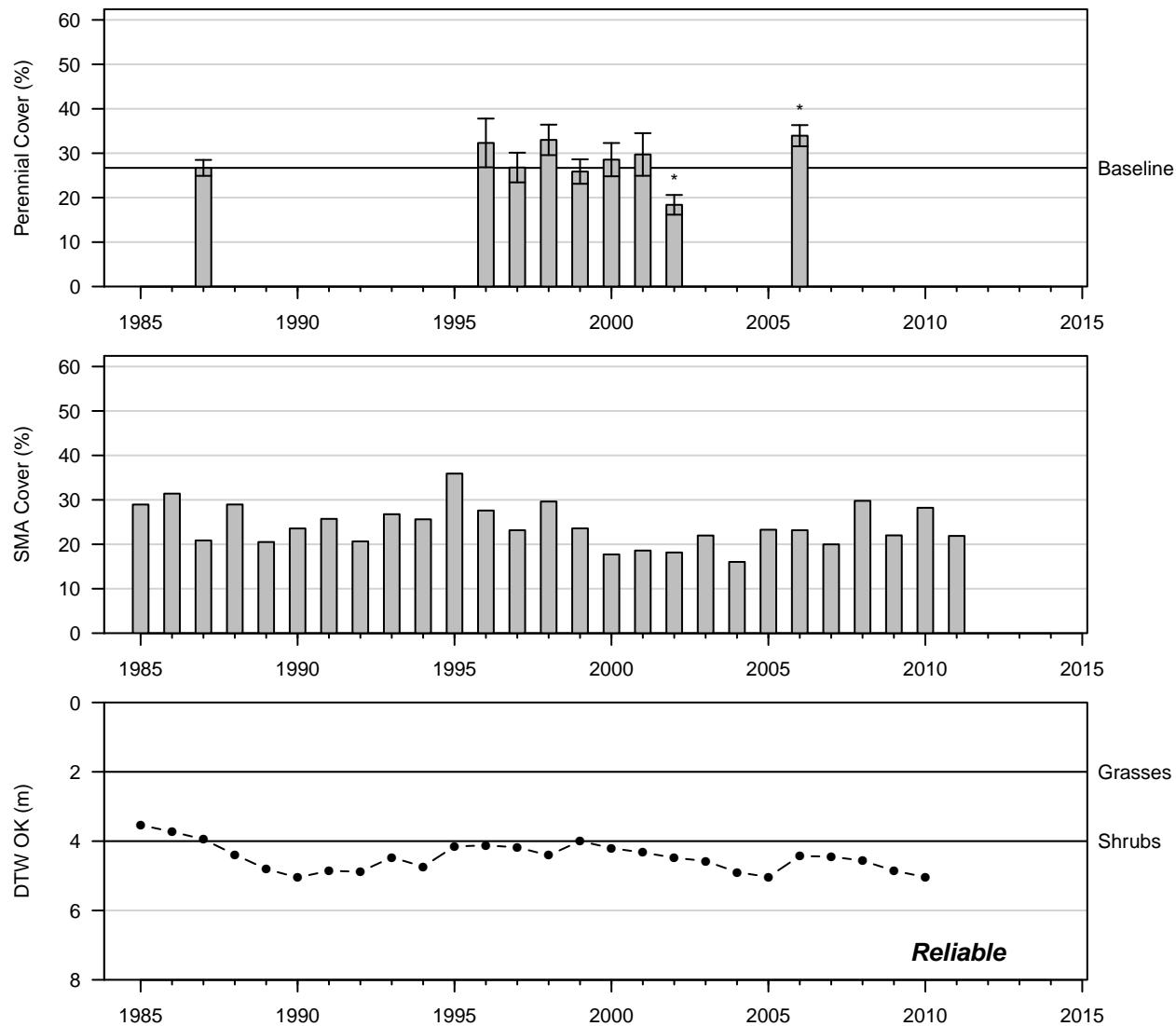


Figure 123: 2006 Wellfield

PLC024
Alkali Meadow (Type C)

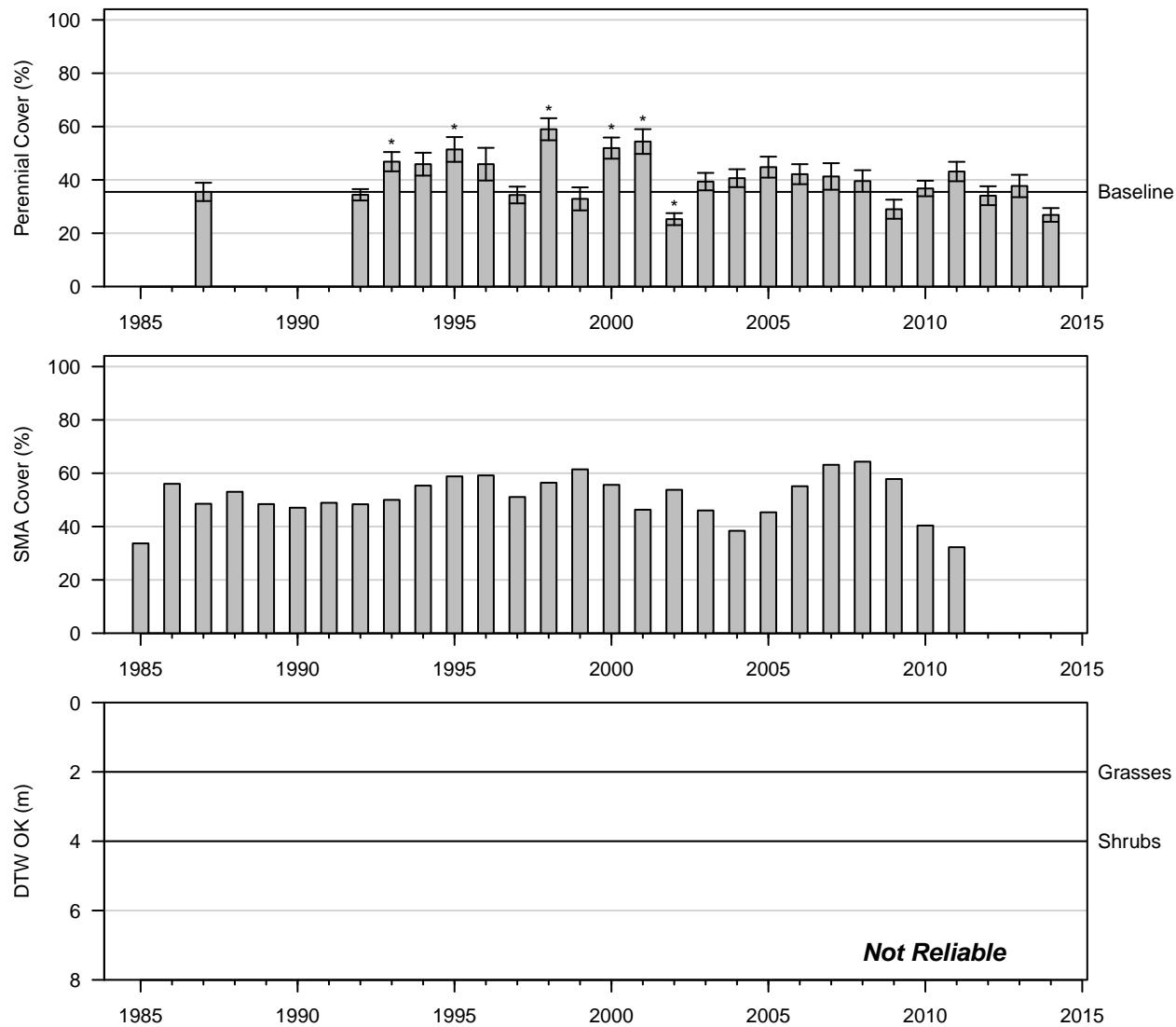


Figure 124: 2014 Control

PLC028
Alkali Meadow (Type C)

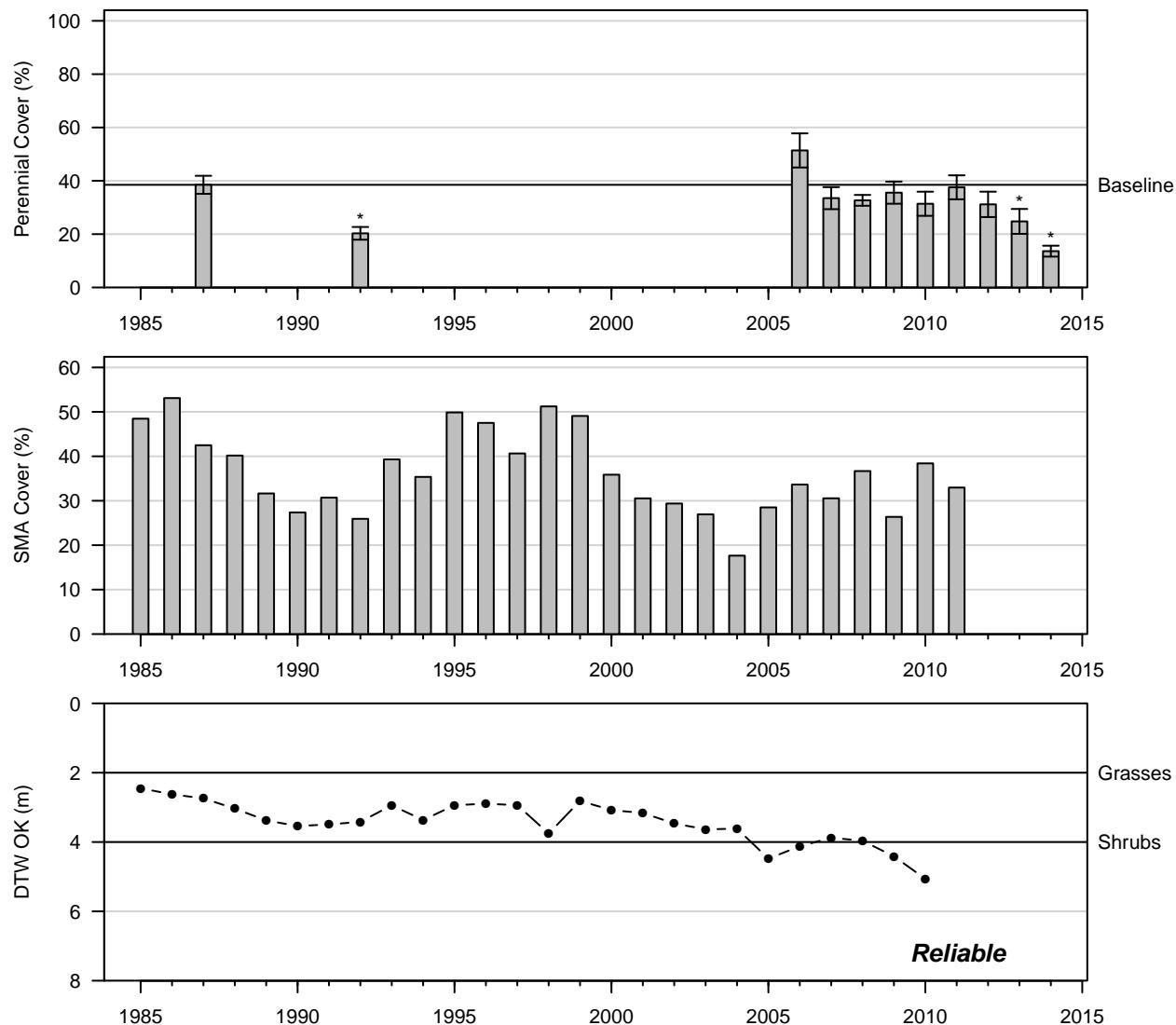


Figure 125: 2014 Control

PLC055
Nevada Saltbush Scrub (Type A)

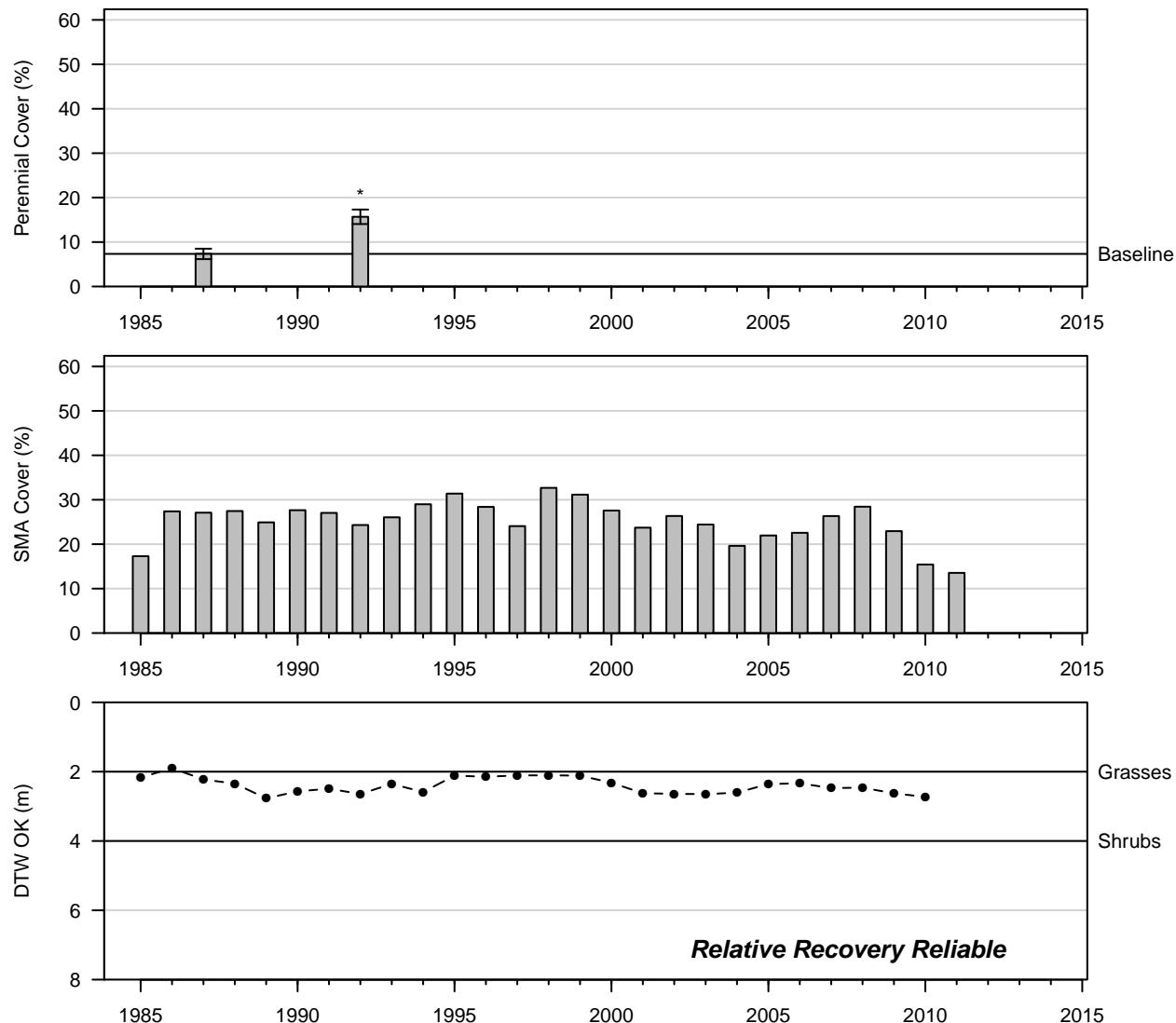


Figure 126: 1992 Control

PLC056
Rabbitbrush Meadow (Type C)

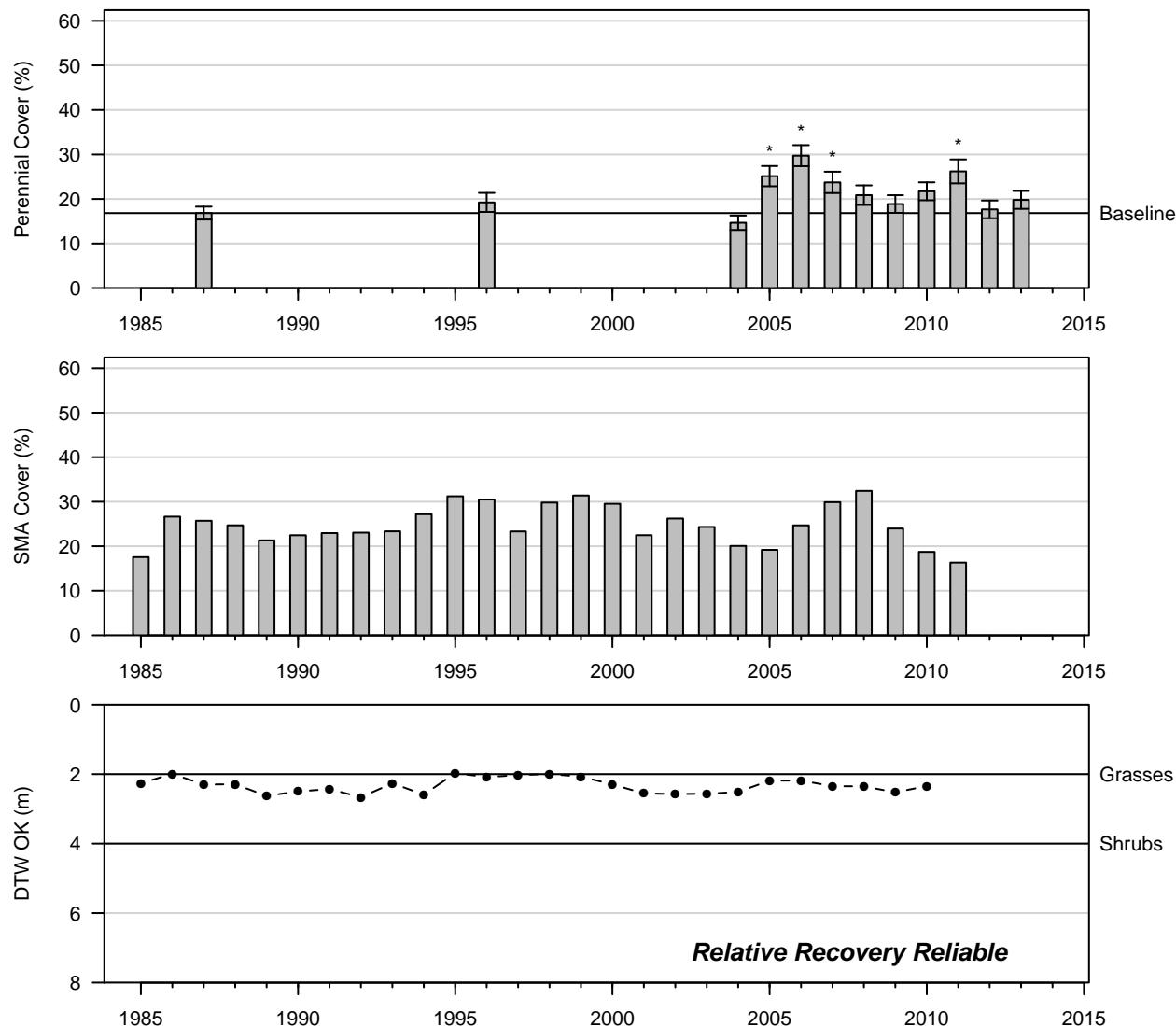


Figure 127: 2013 Control

PLC059
Nevada Saltbush Scrub (Type B)

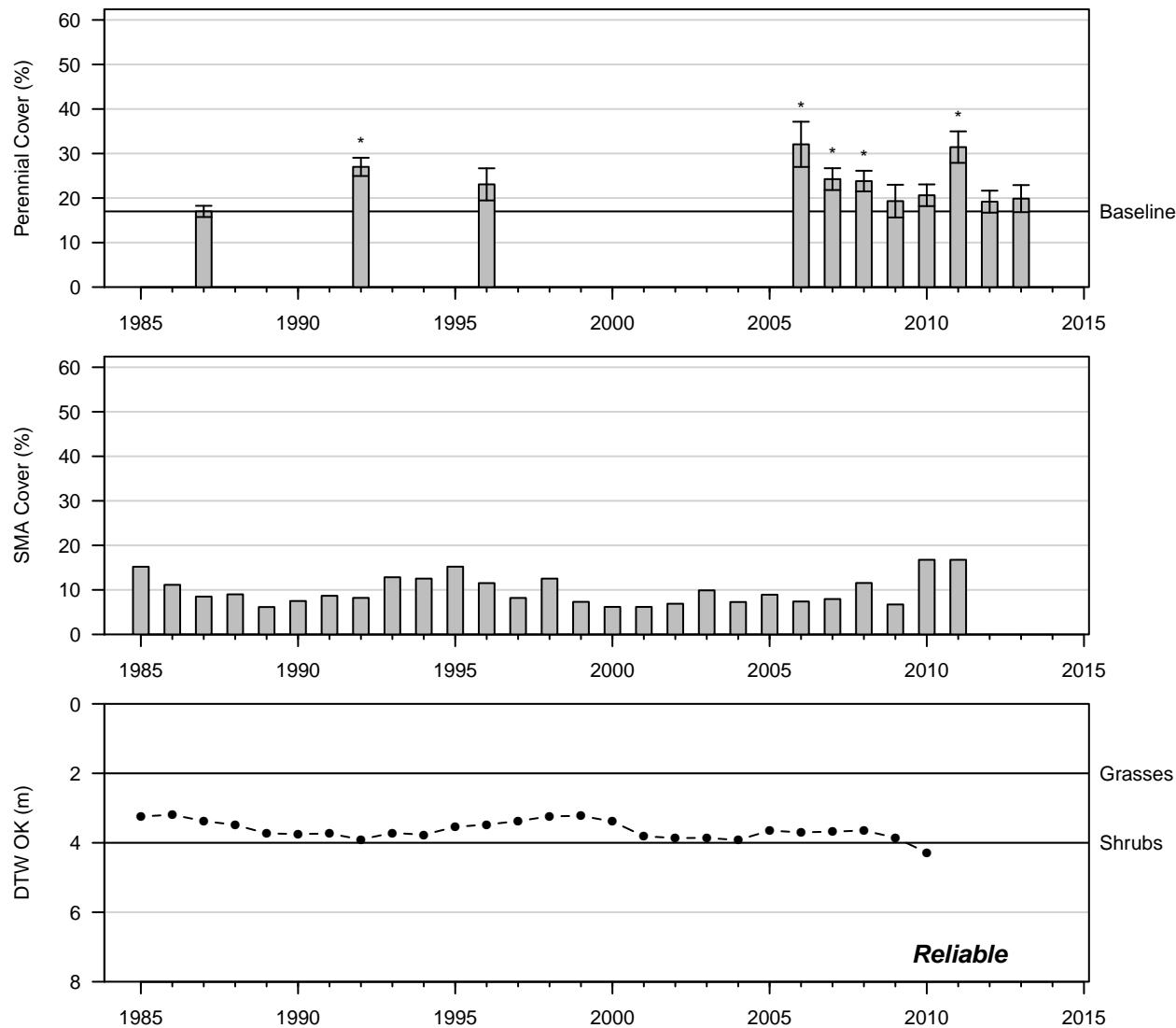


Figure 128: 2013 Control

PLC064
Rabbitbrush Scrub (Type A)

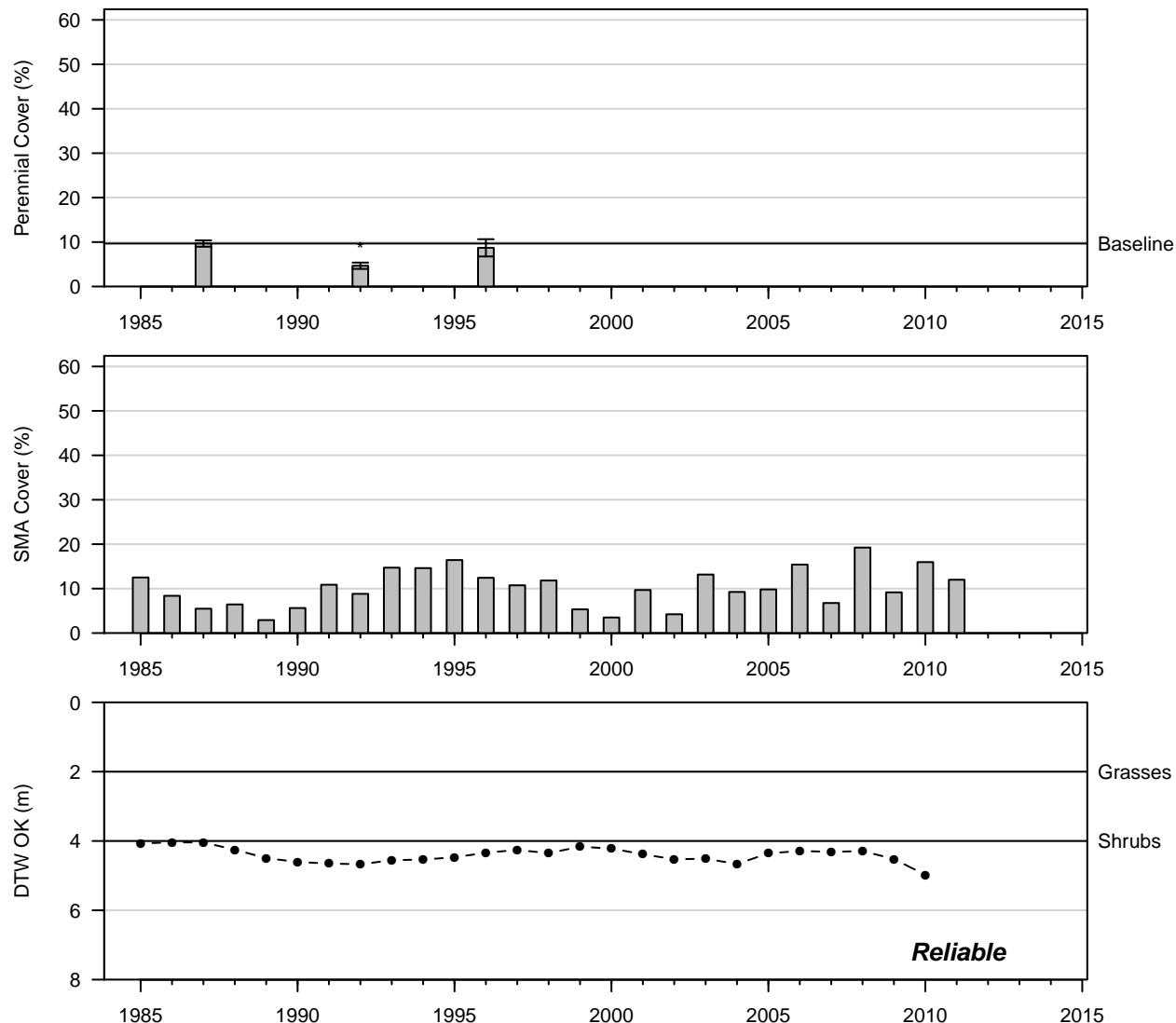


Figure 129: 1996 Control

PLC065
Rabbitbrush Scrub (Type A)

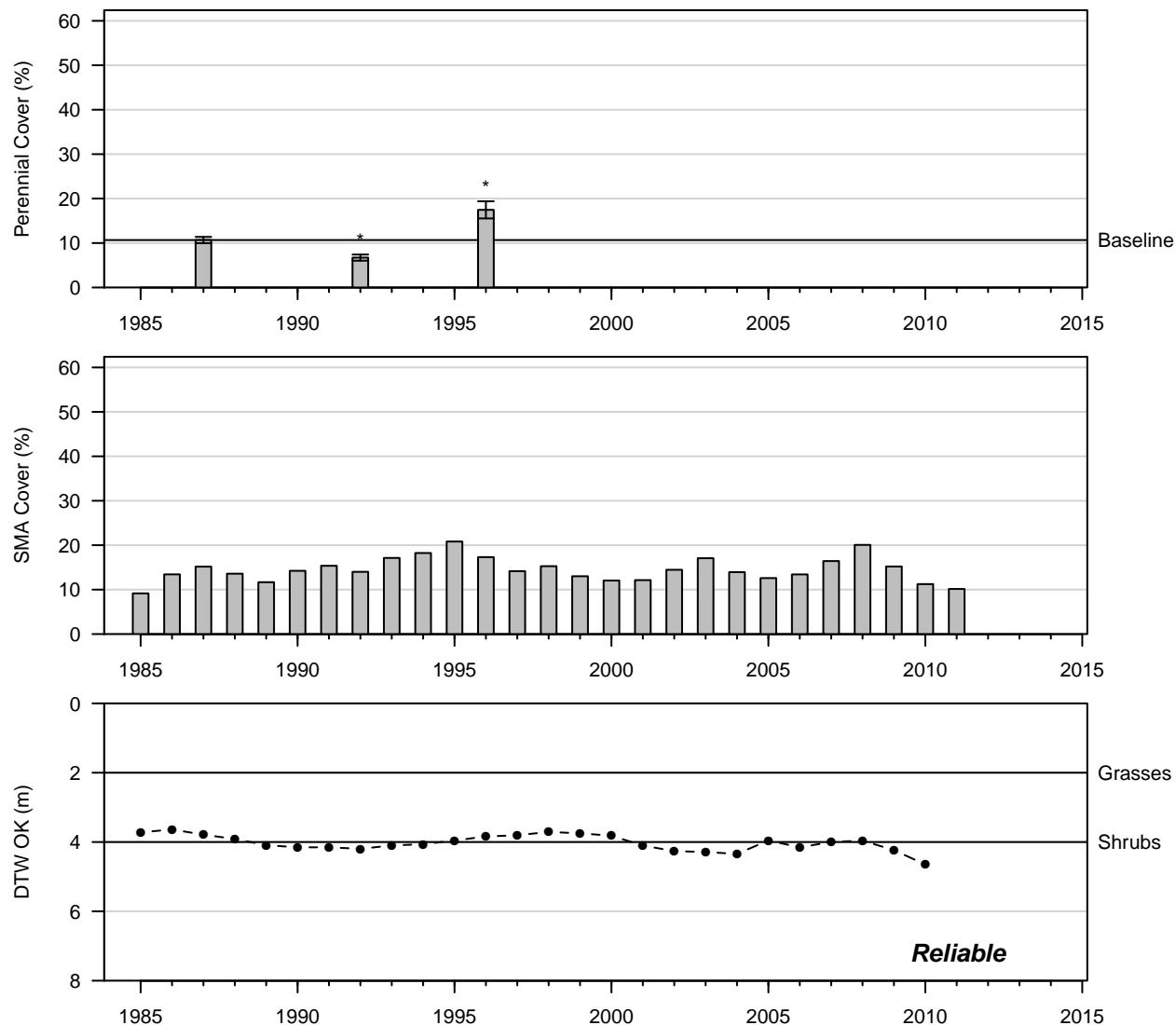


Figure 130: 1996 Control

PLC069
Desert Greasewood Scrub (Type A)

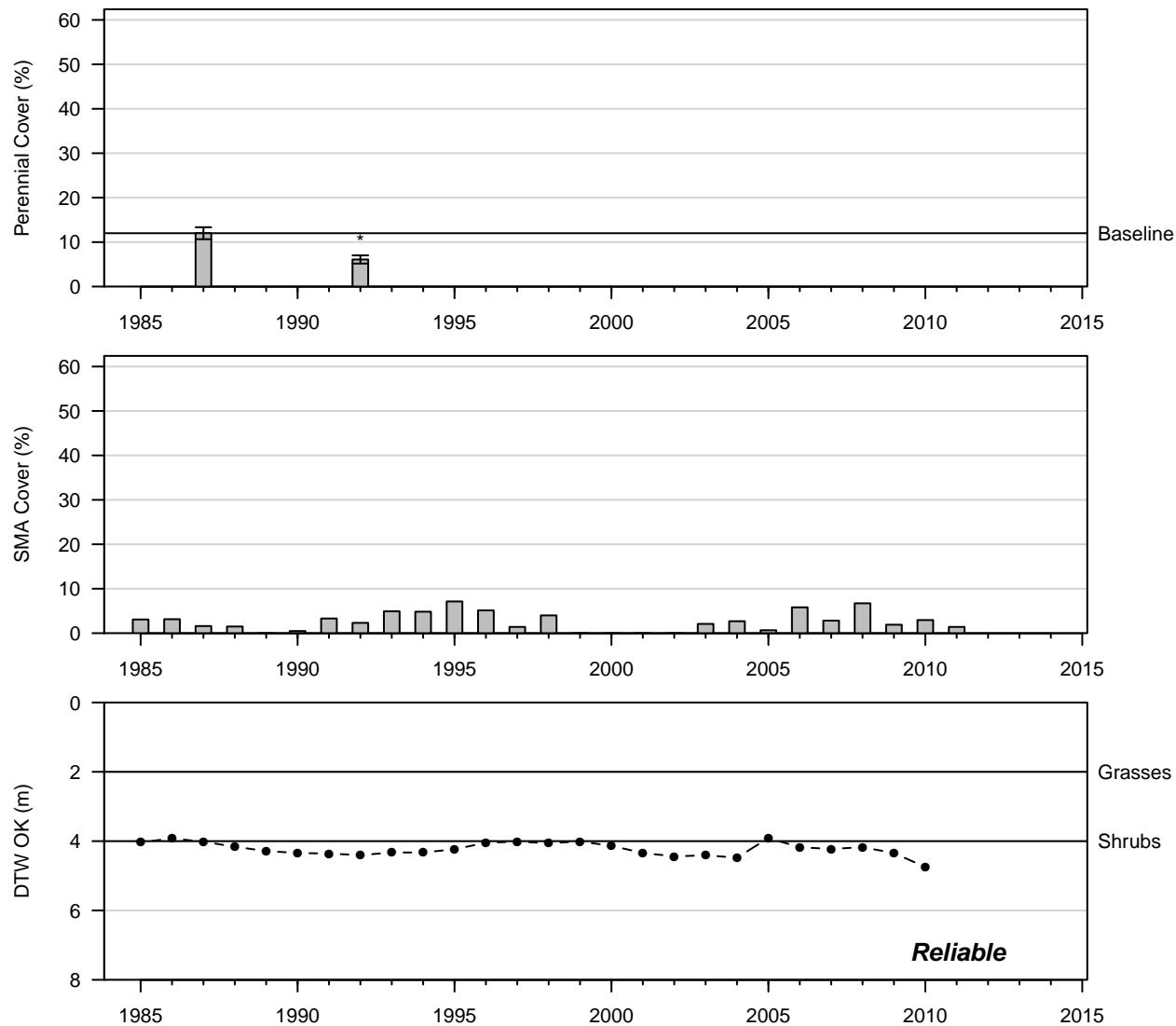


Figure 131: 1992 Control

PLC072
Rabbitbrush Scrub (Type B)

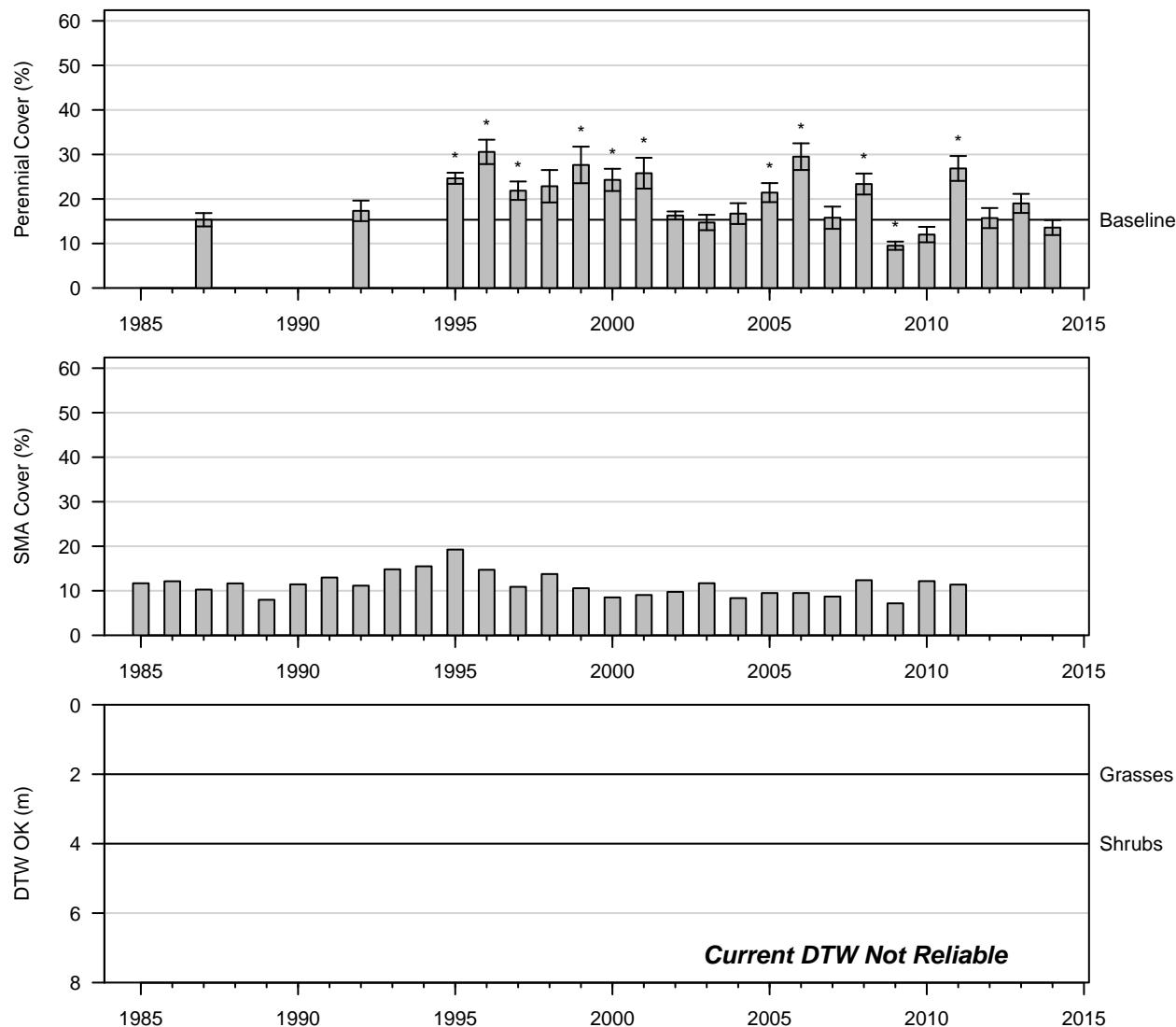


Figure 132: 2014 Control

PLC088
Alkali Meadow (Type C)

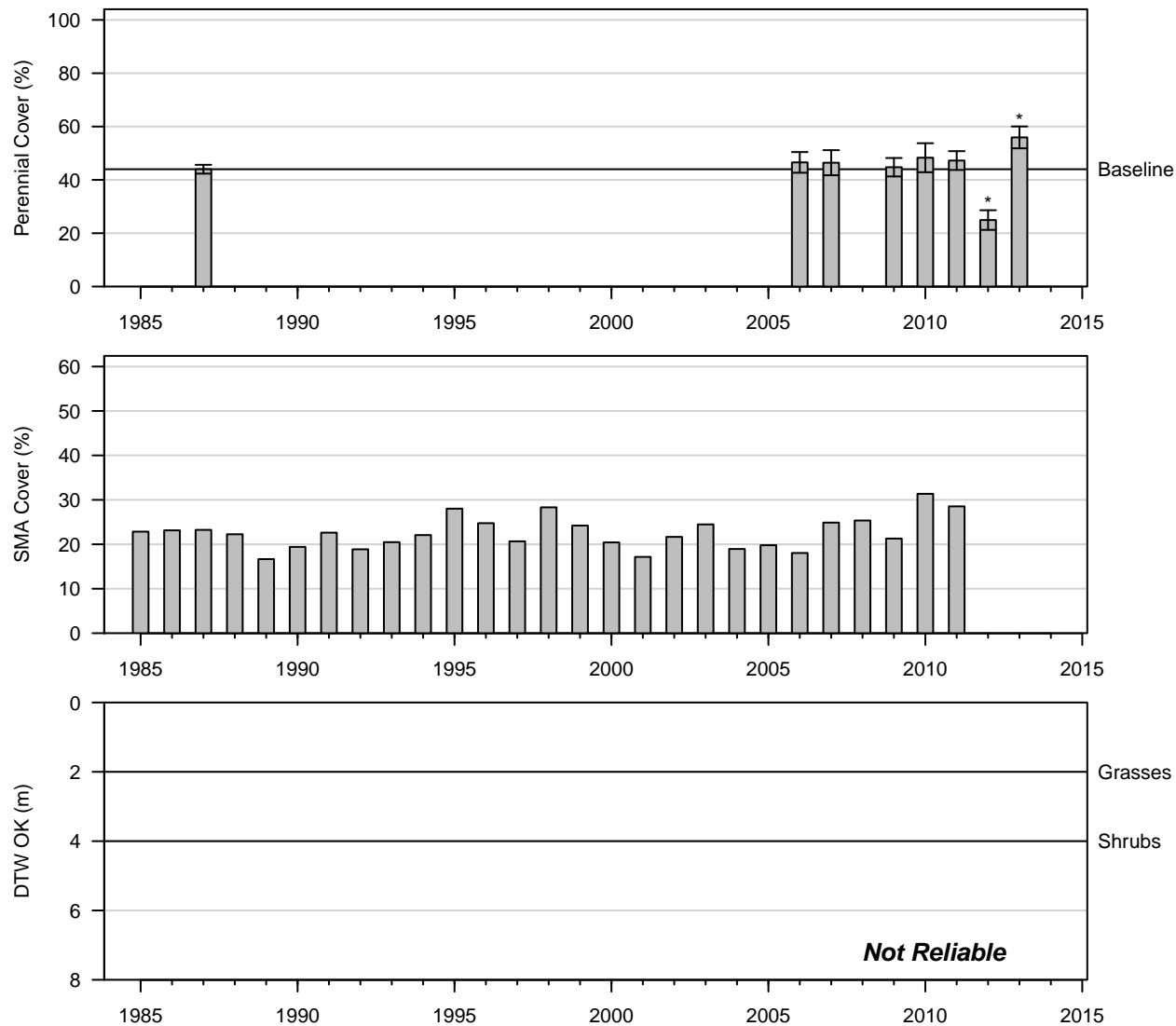


Figure 133: 2013 Control

PLC092
Rabbitbrush Scrub (Type B)

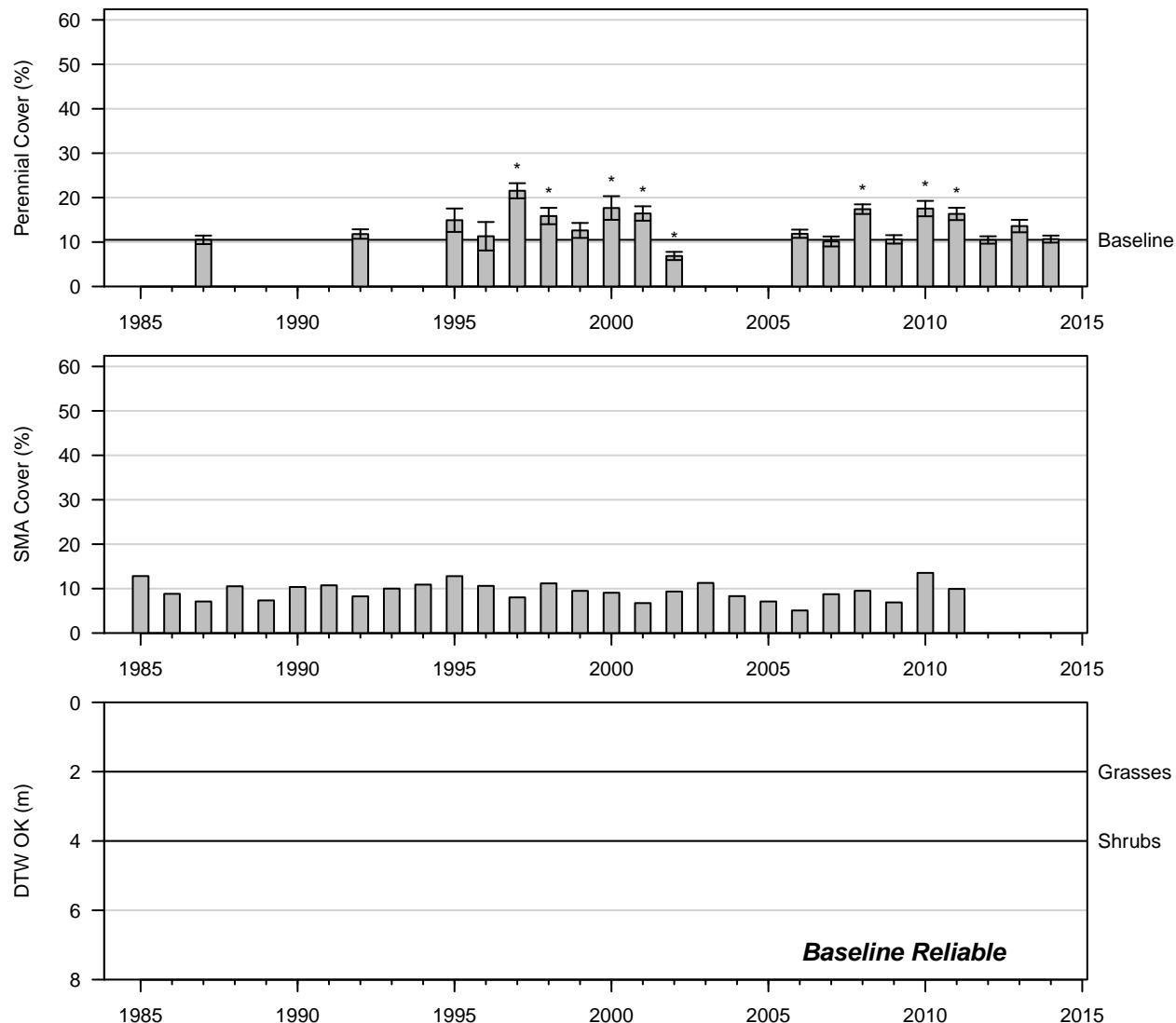


Figure 134: 2014 Control

PLC097
Alkali Meadow (Type C)

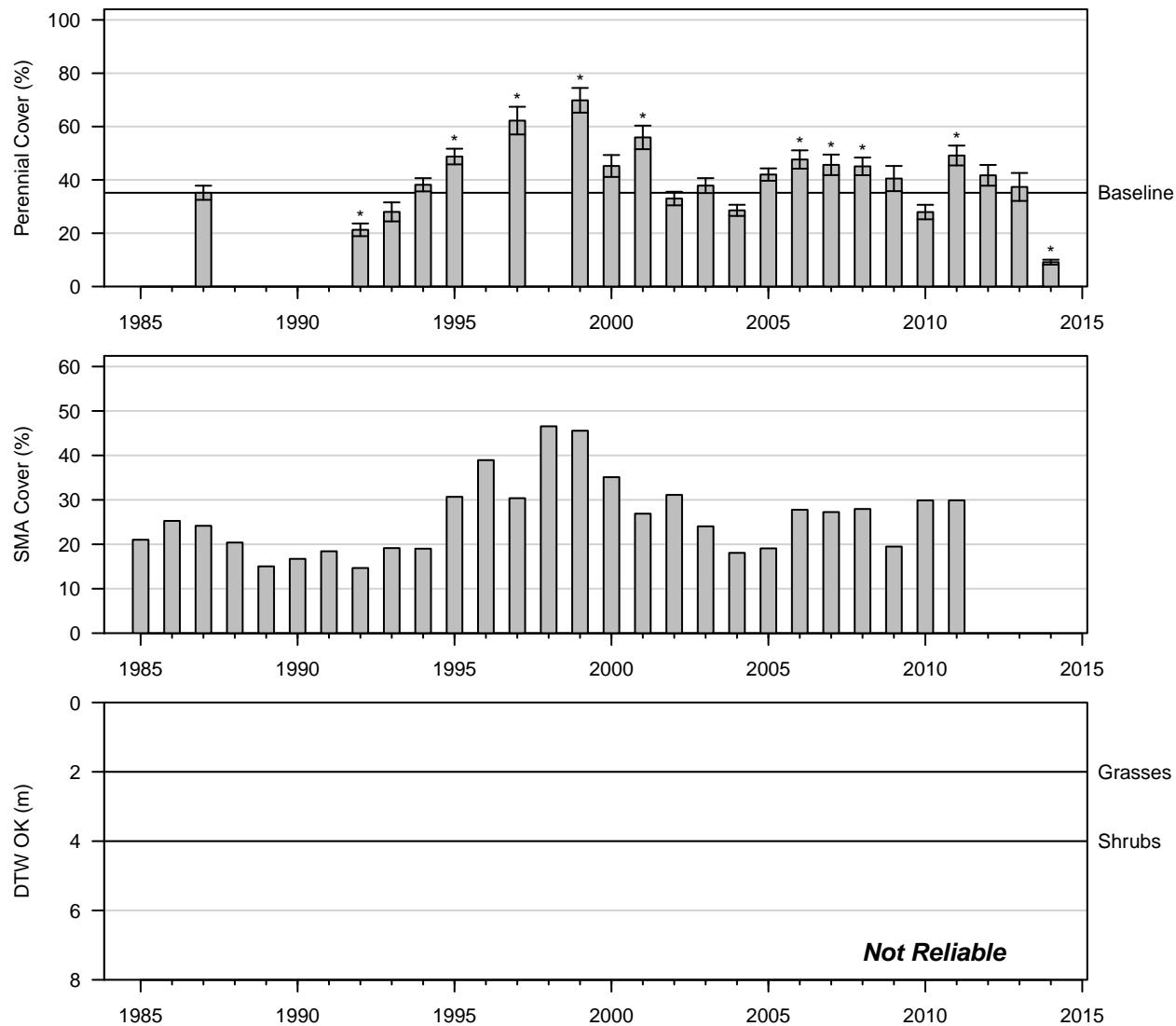


Figure 135: 2014 Control

PLC106
Rabbitbrush Meadow (Type C)

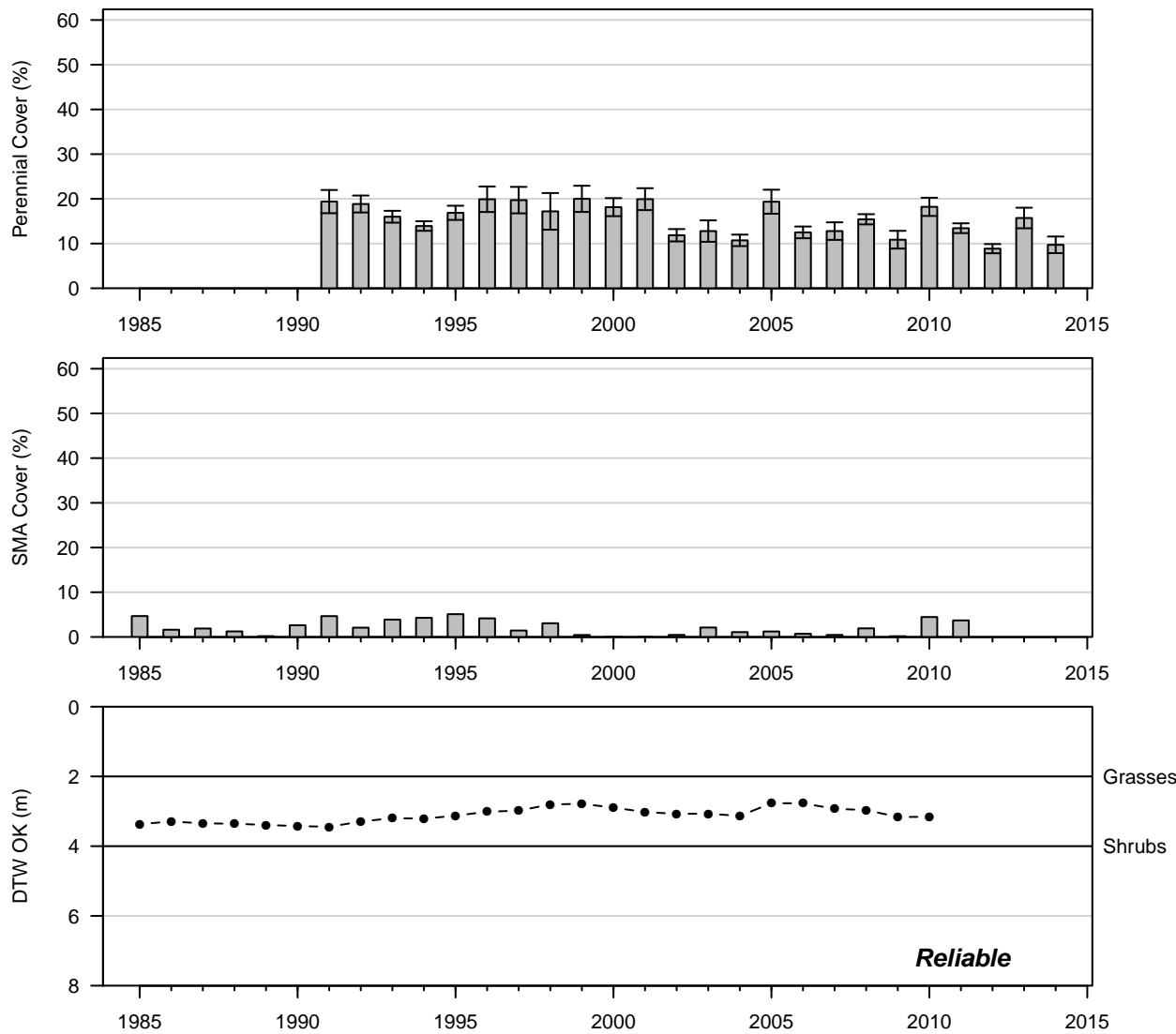


Figure 136: 2014 Control

PLC110
Rabbitbrush Scrub (Type B)

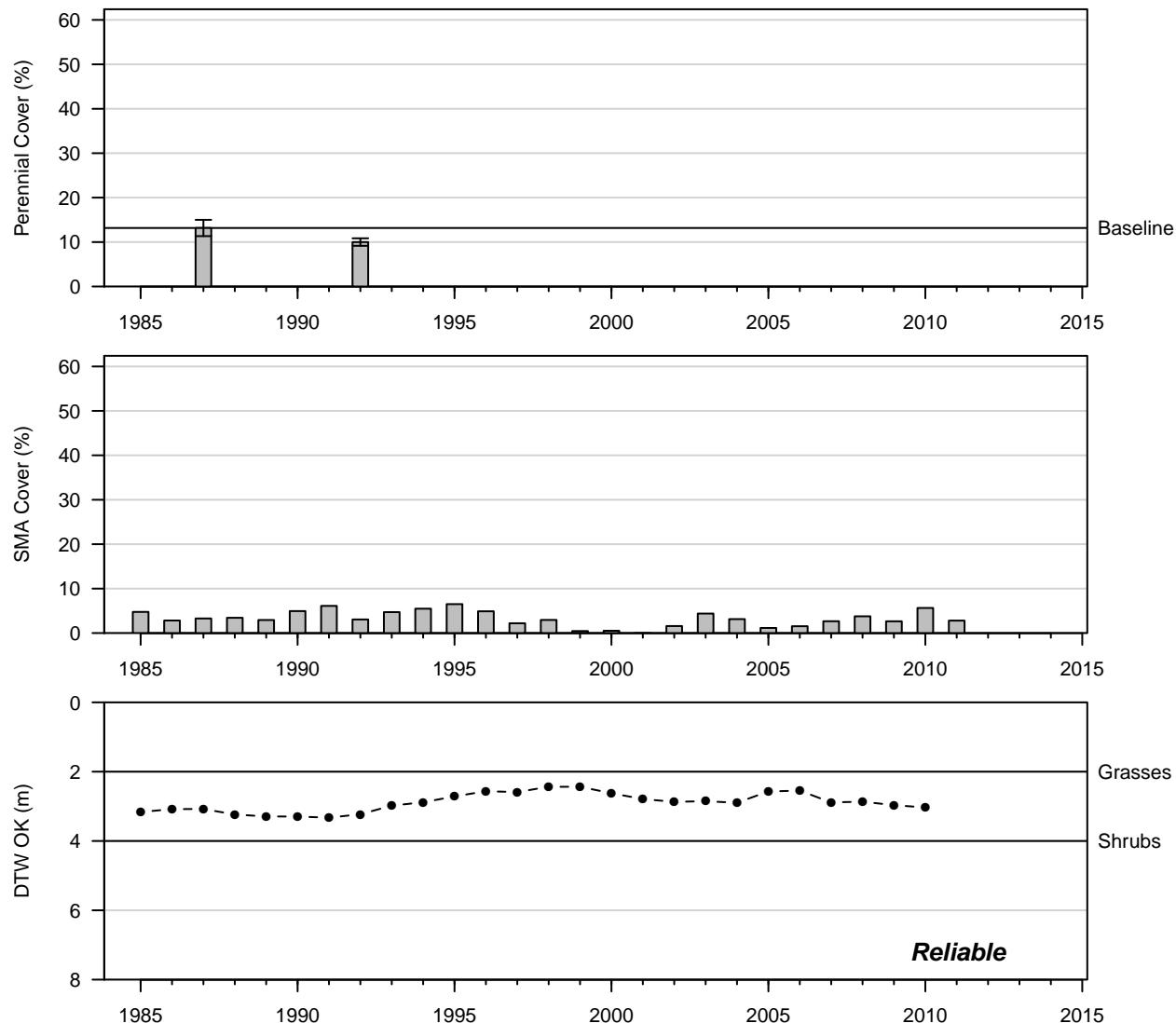


Figure 137: 1992 Control

PLC111
Rabbitbrush Scrub (Type A)

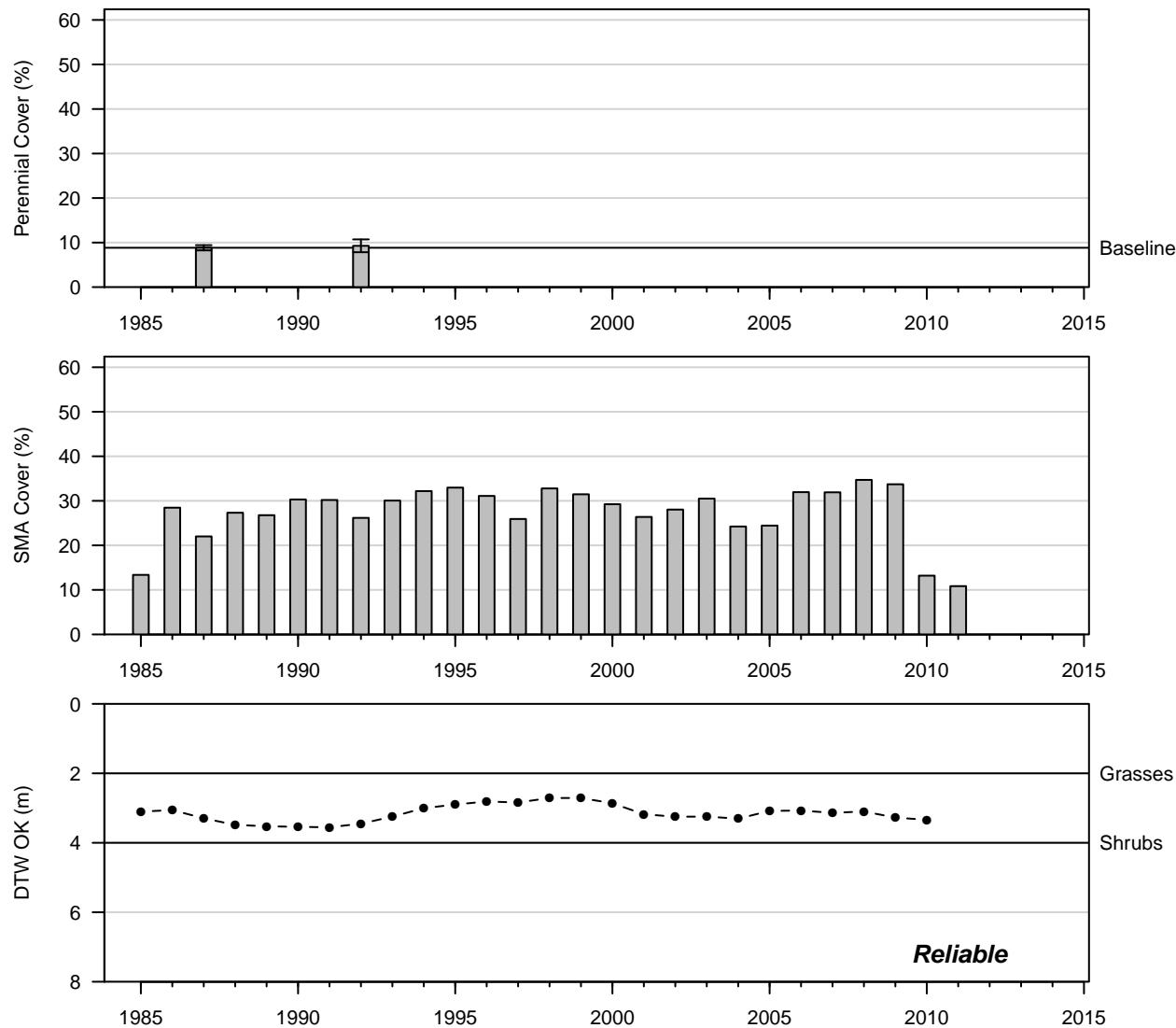


Figure 138: 1992 Control

PLC113
Rabbitbrush Scrub (Type B)

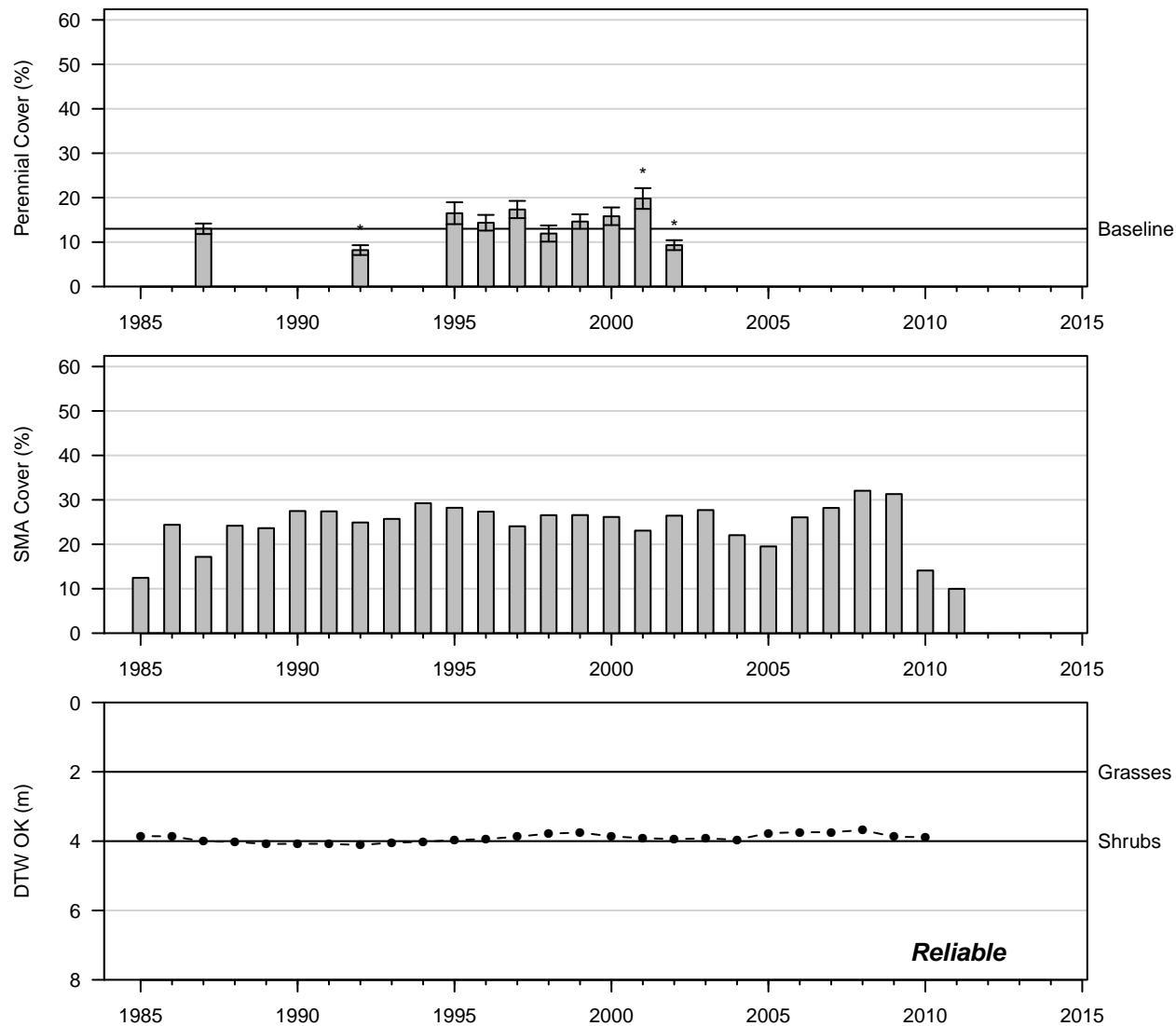


Figure 139: 2002 Control

PLC121
Alkali Meadow (Type C)

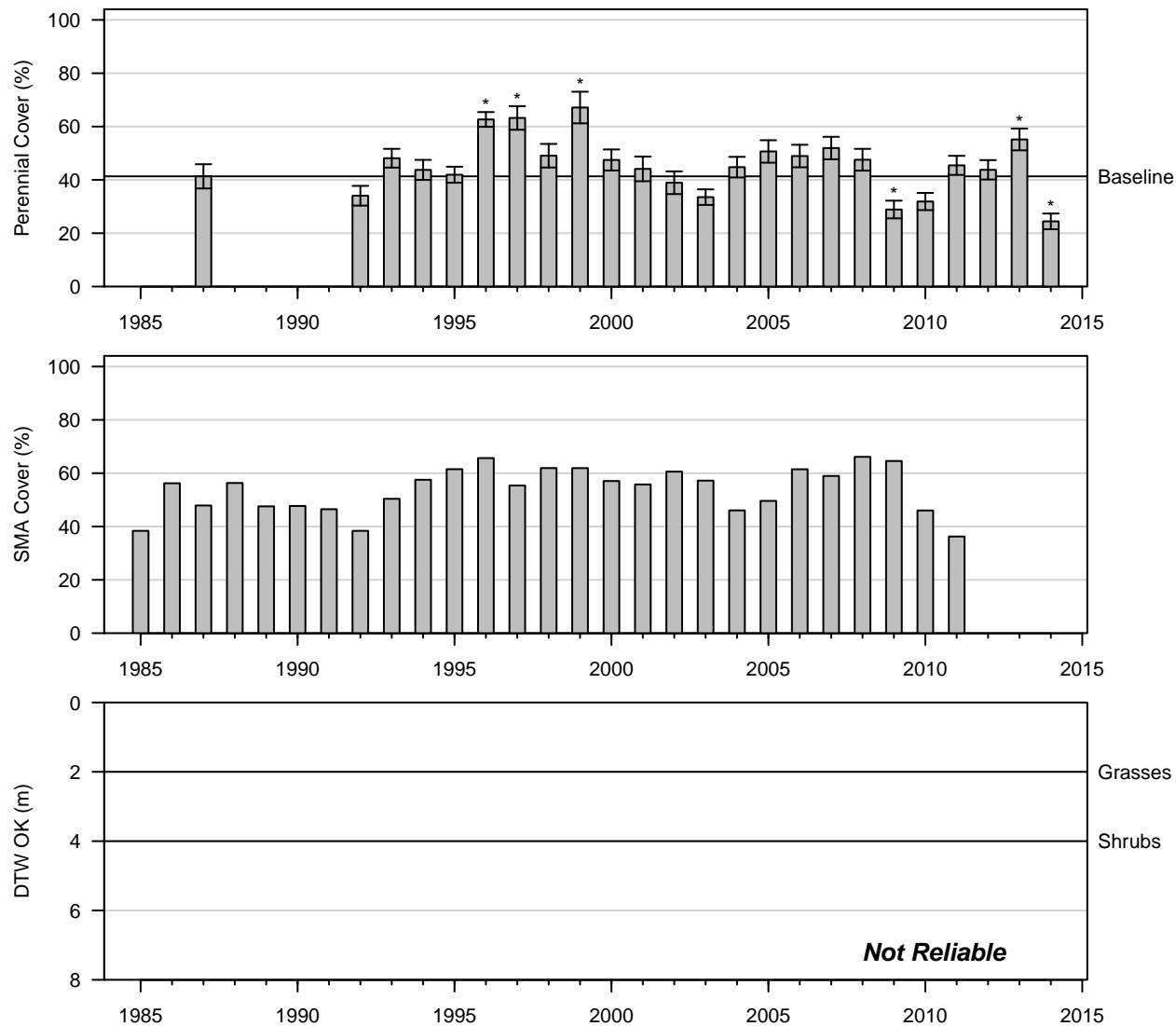


Figure 140: 2014 Control

PLC125
Rabbitbrush Meadow (Type A)

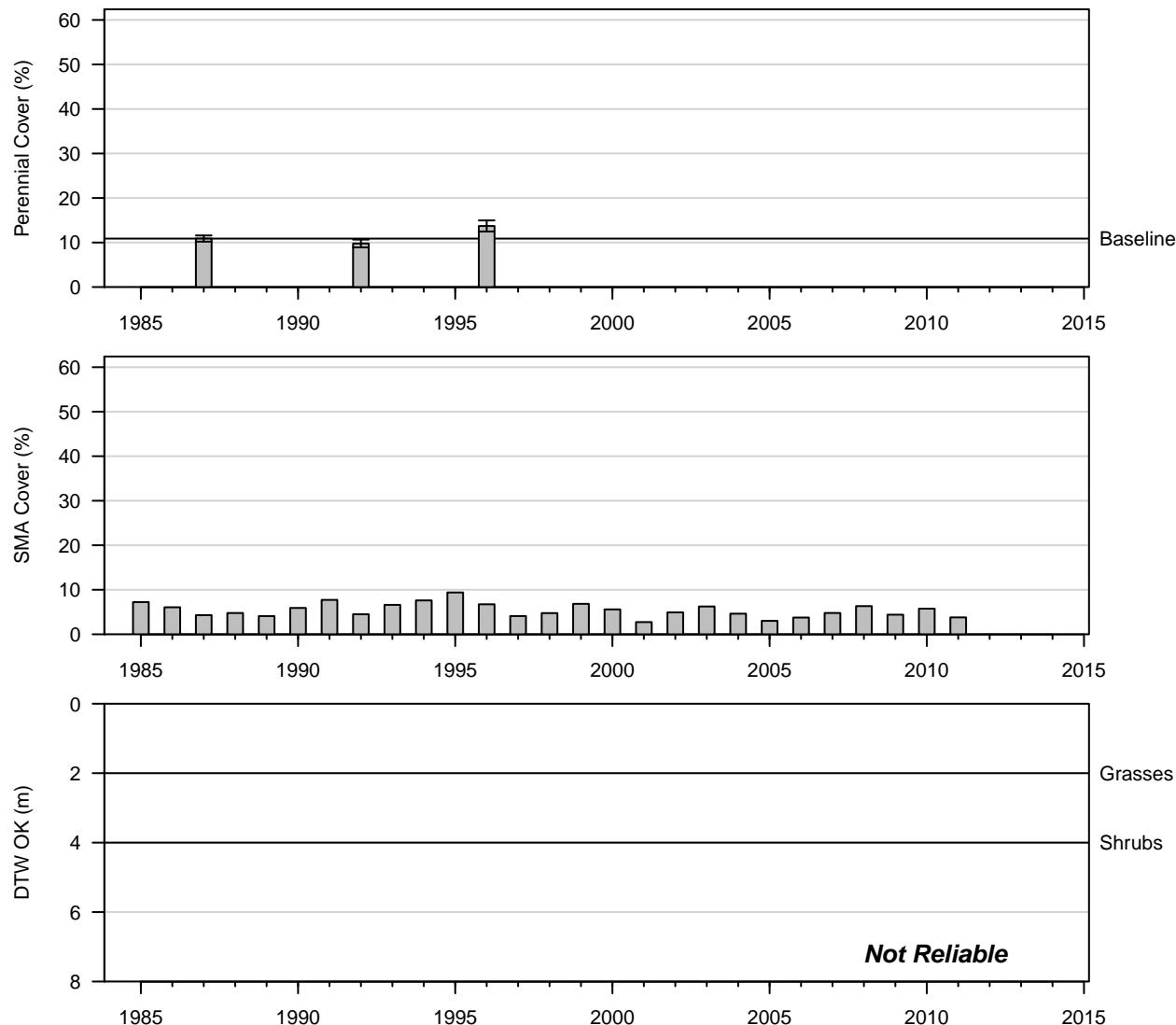


Figure 141: 1996 Control

PLC136
Alkali Meadow (Type A)

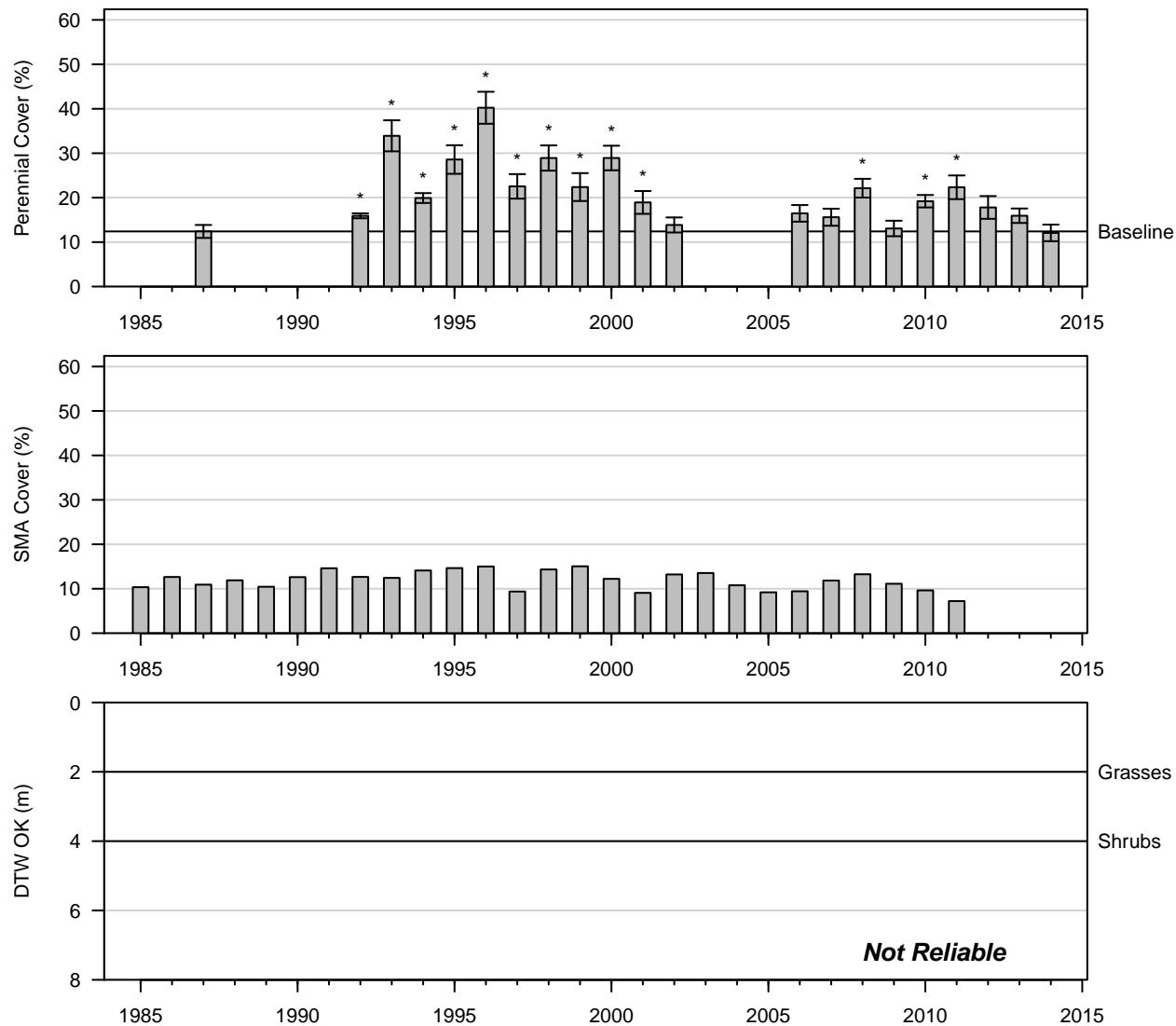


Figure 142: 2014 Control

PLC137
Rabbitbrush Meadow (Type C)

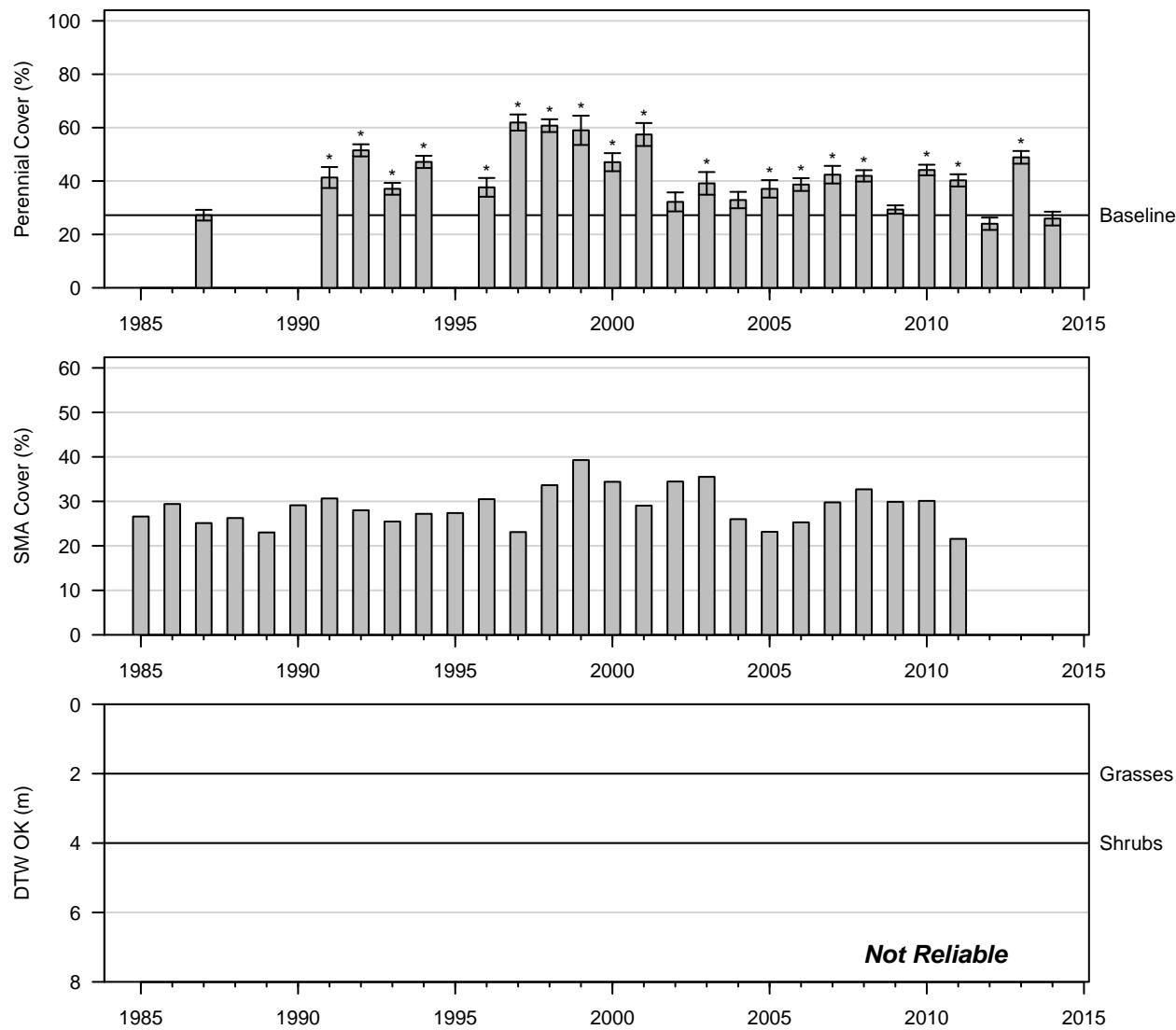


Figure 143: 2014 Control

PLC144
Alkali Meadow (Type C)

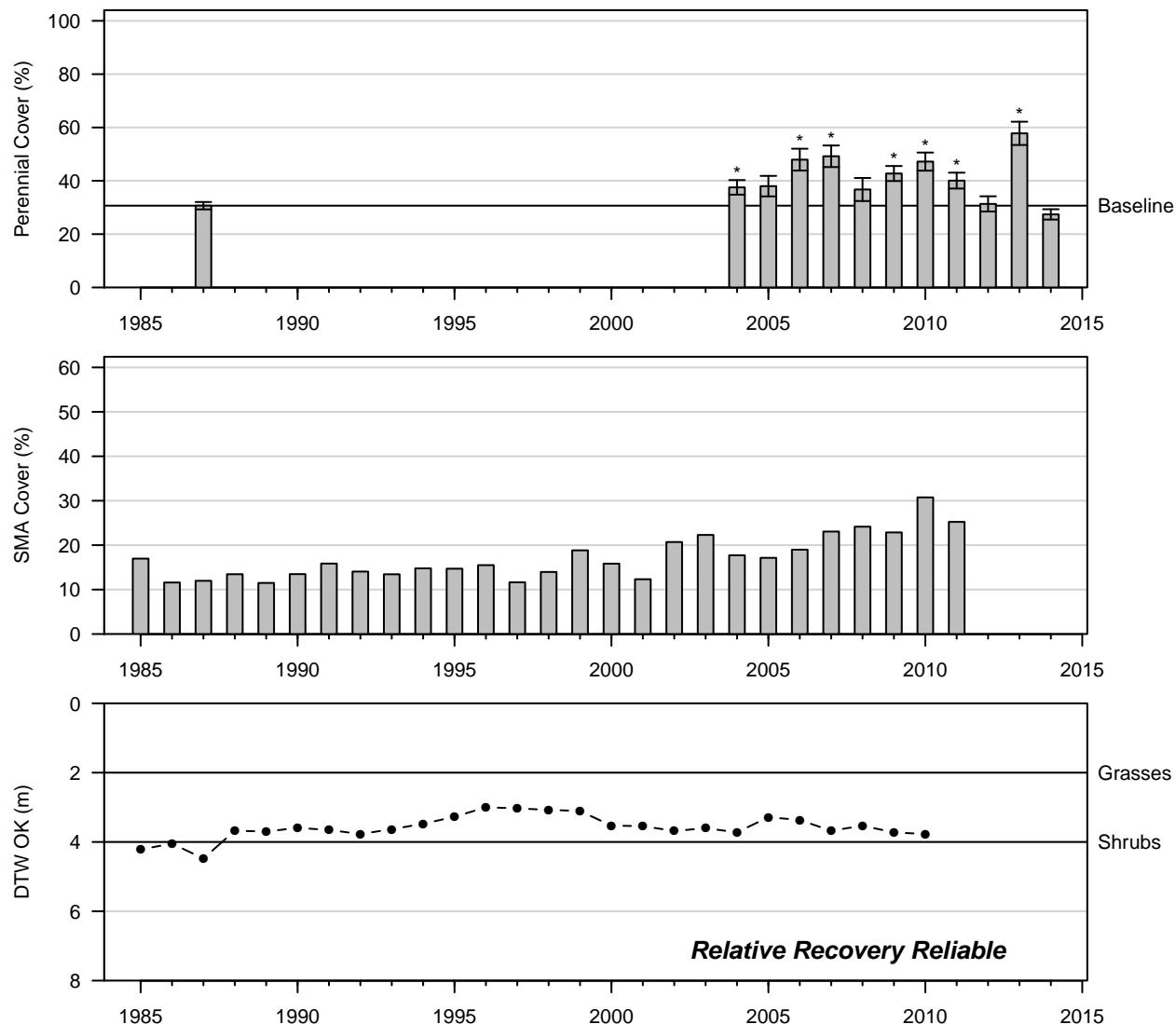


Figure 144: 2014 Control

PLC187
Rabbitbrush Scrub (Type B)

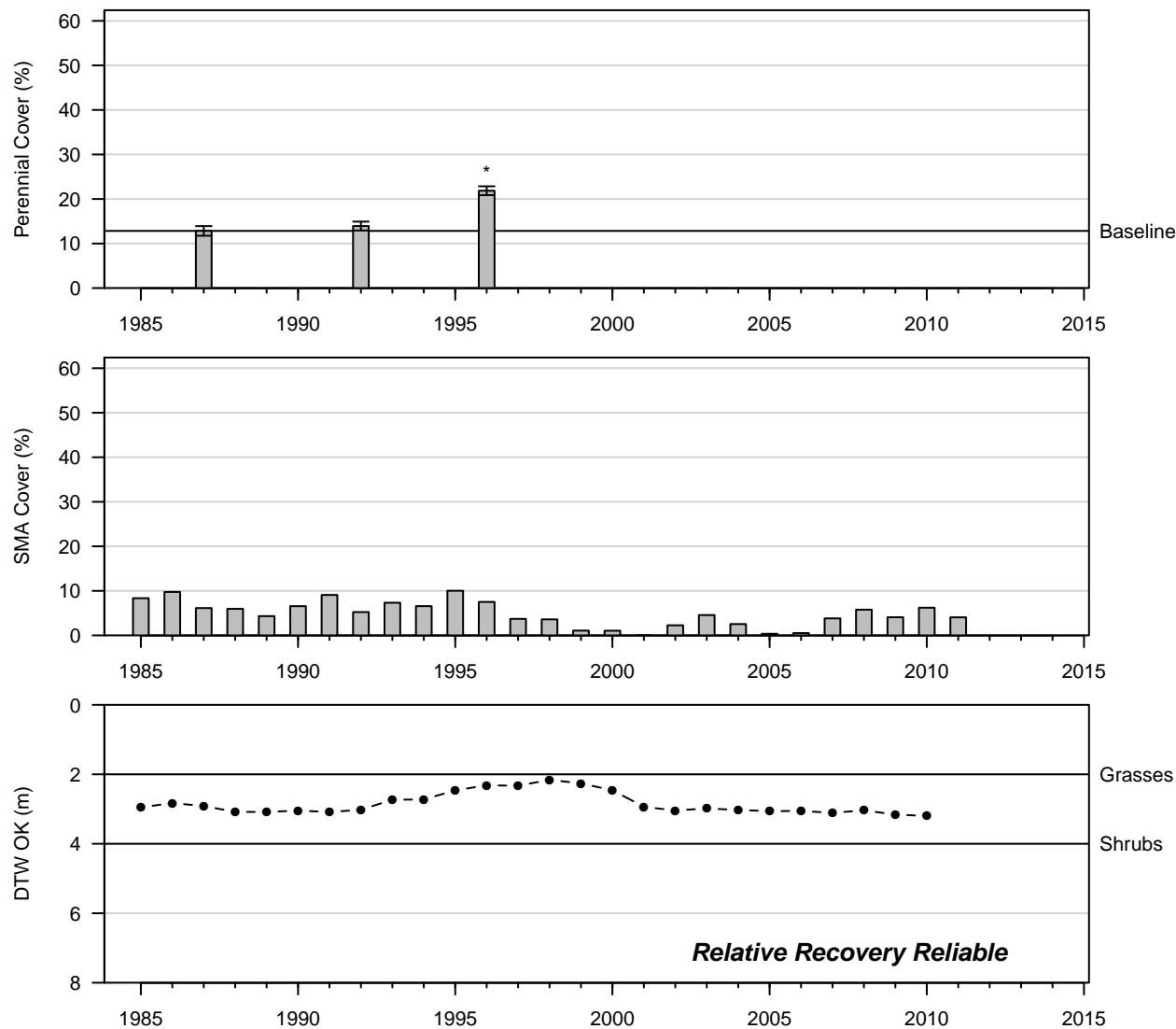


Figure 145: 1996 Control

PLC193
Rabbitbrush Scrub (Type B)

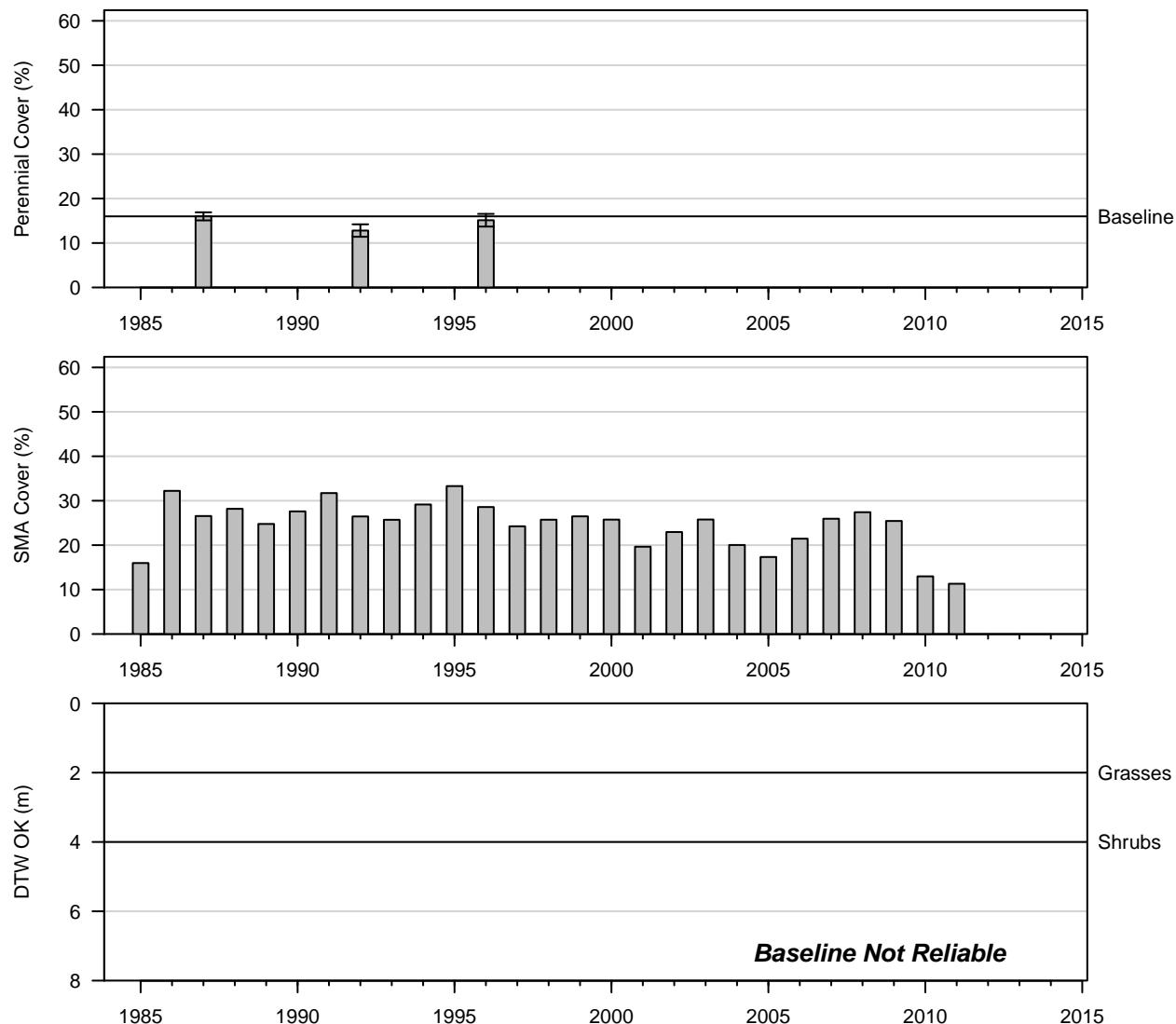


Figure 146: 1996 Control

PLC220
Alkali Meadow (Type C)

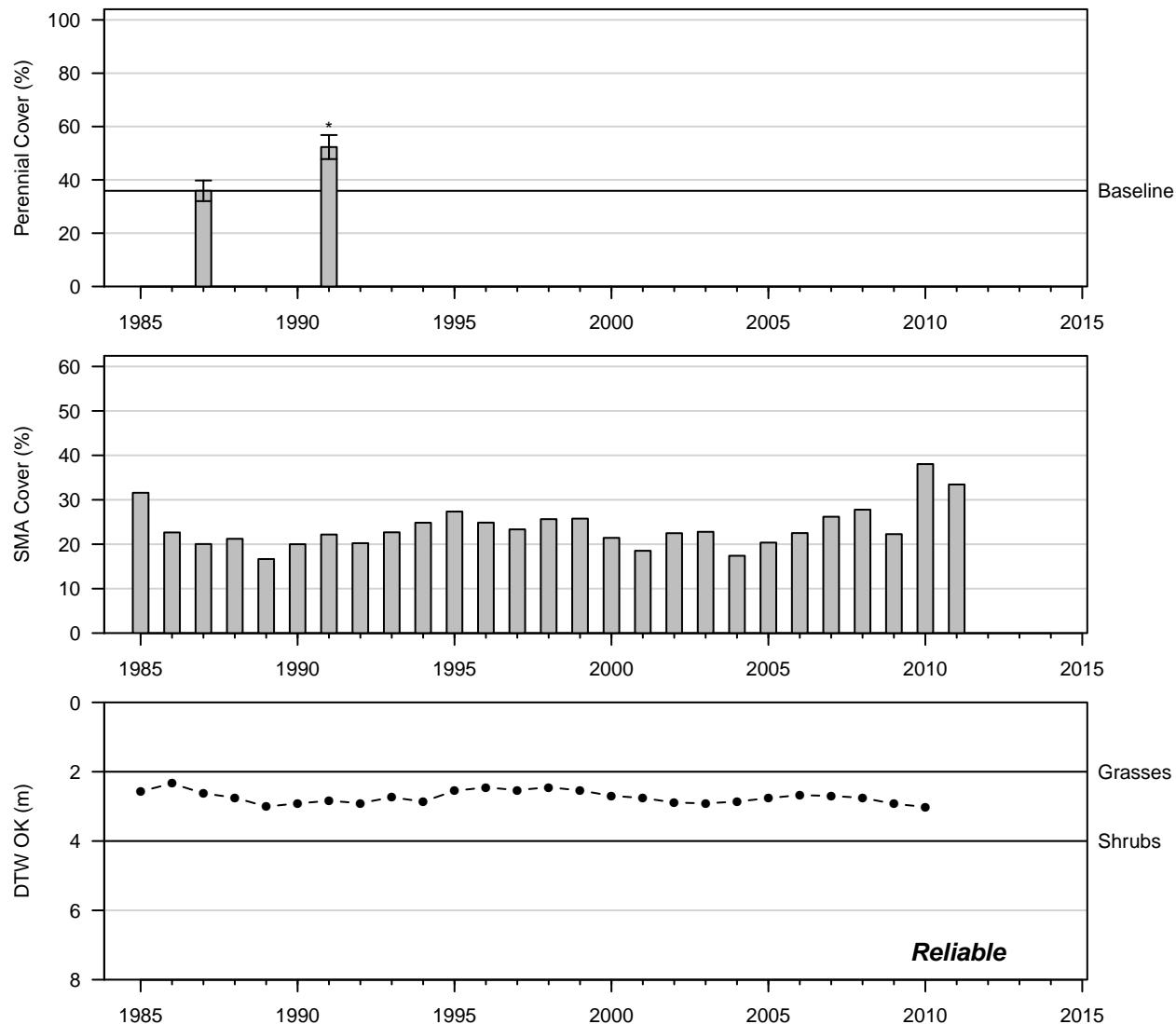


Figure 147: 1991 Control

PLC223
Alkali Meadow (Type C)

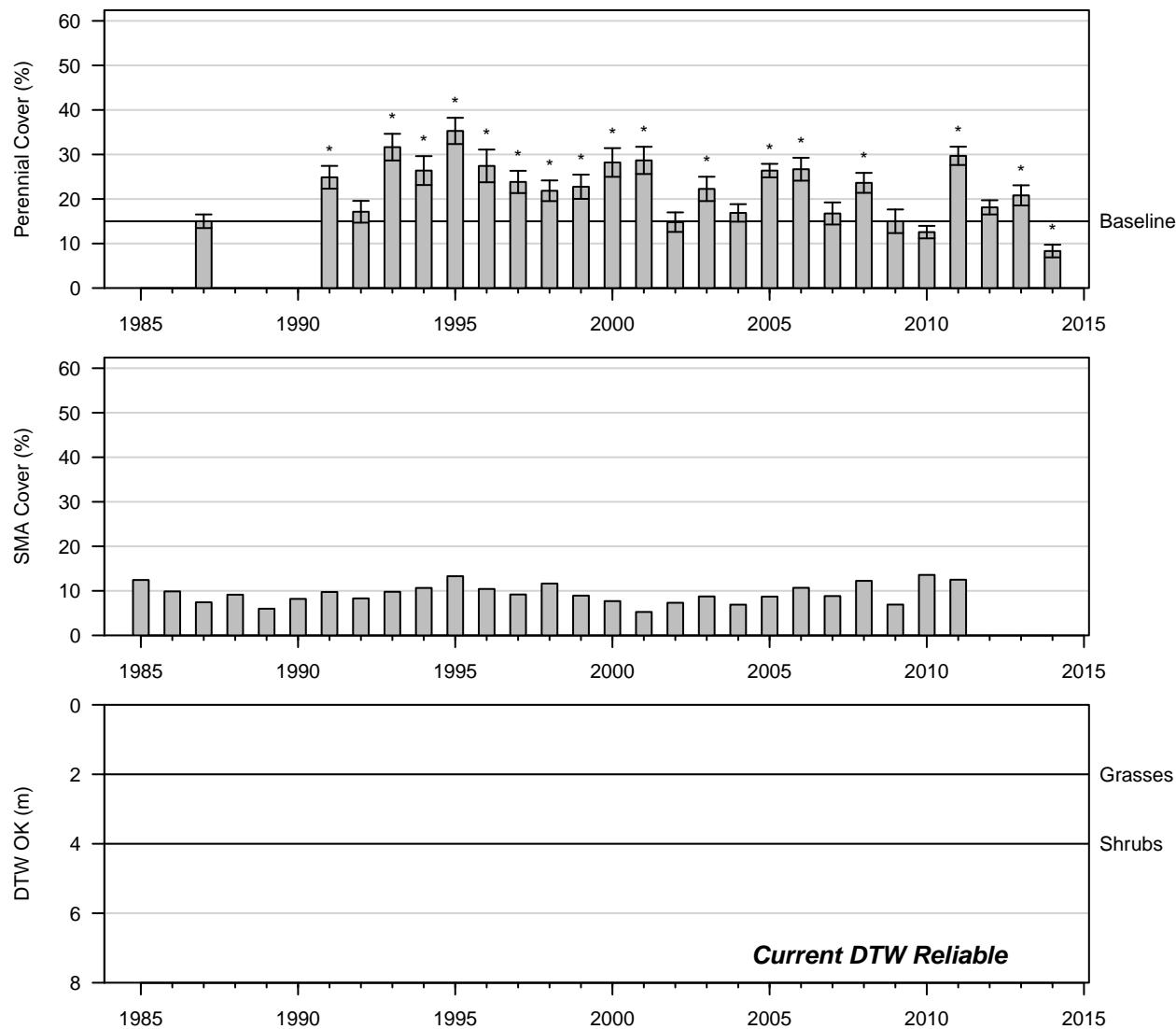


Figure 148: 2014 Control

PLC239
Rabbitbrush Scrub (Type A)

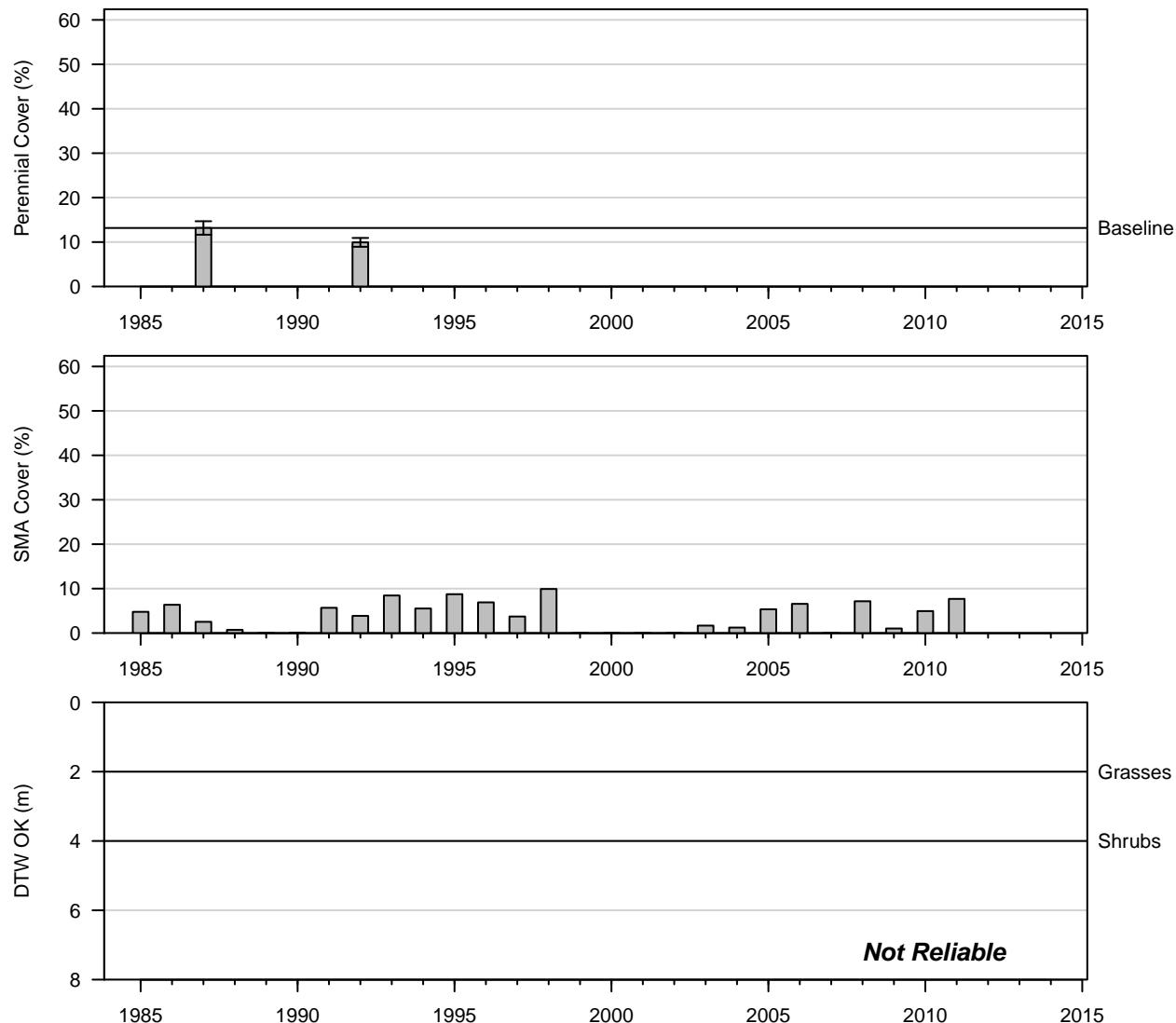


Figure 149: 1992 Control

PLC240
Nevada Saltbush Scrub (Type A)

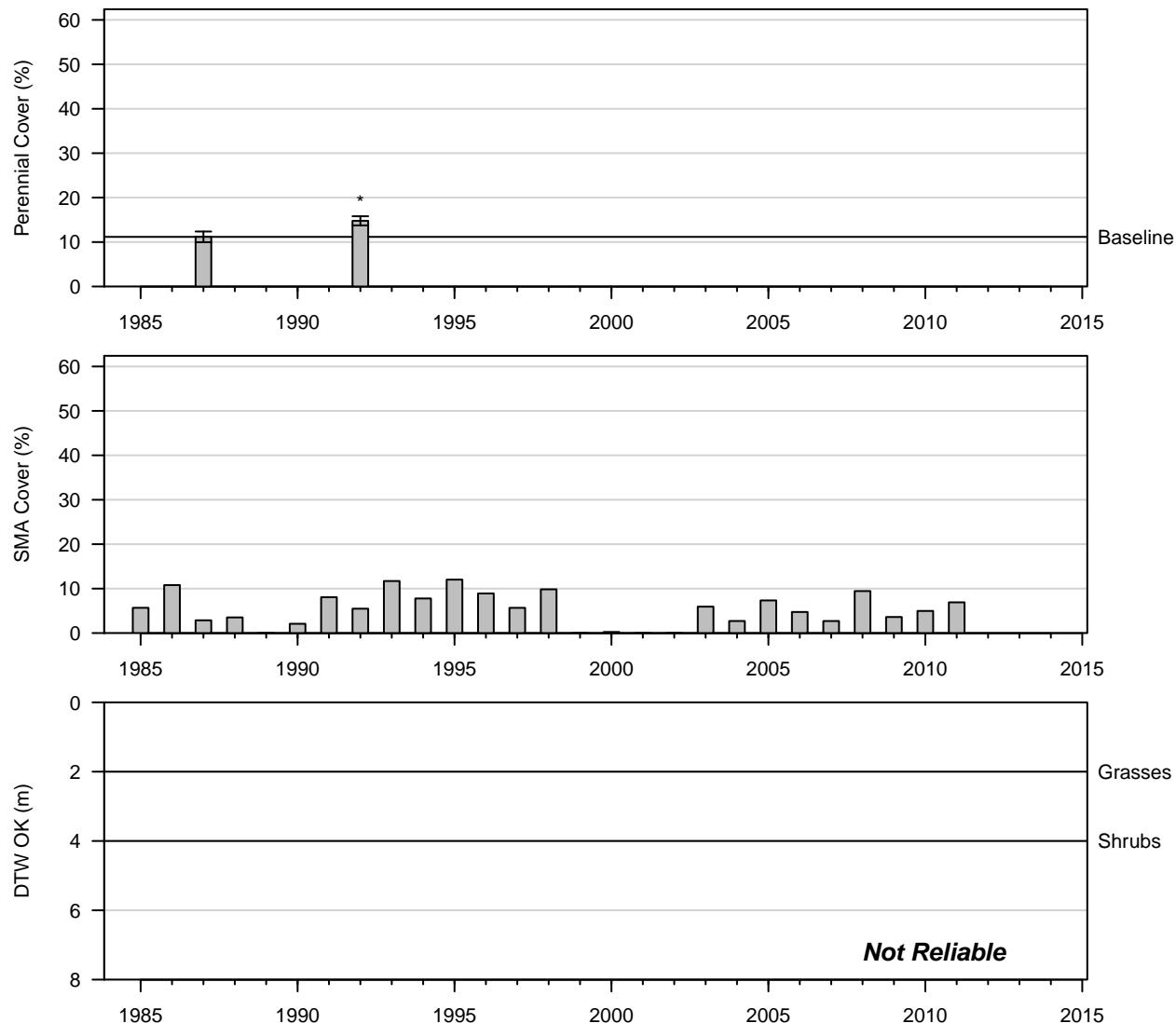


Figure 150: 1992 Control

PLC241
Nevada Saltbush Scrub (Type A)

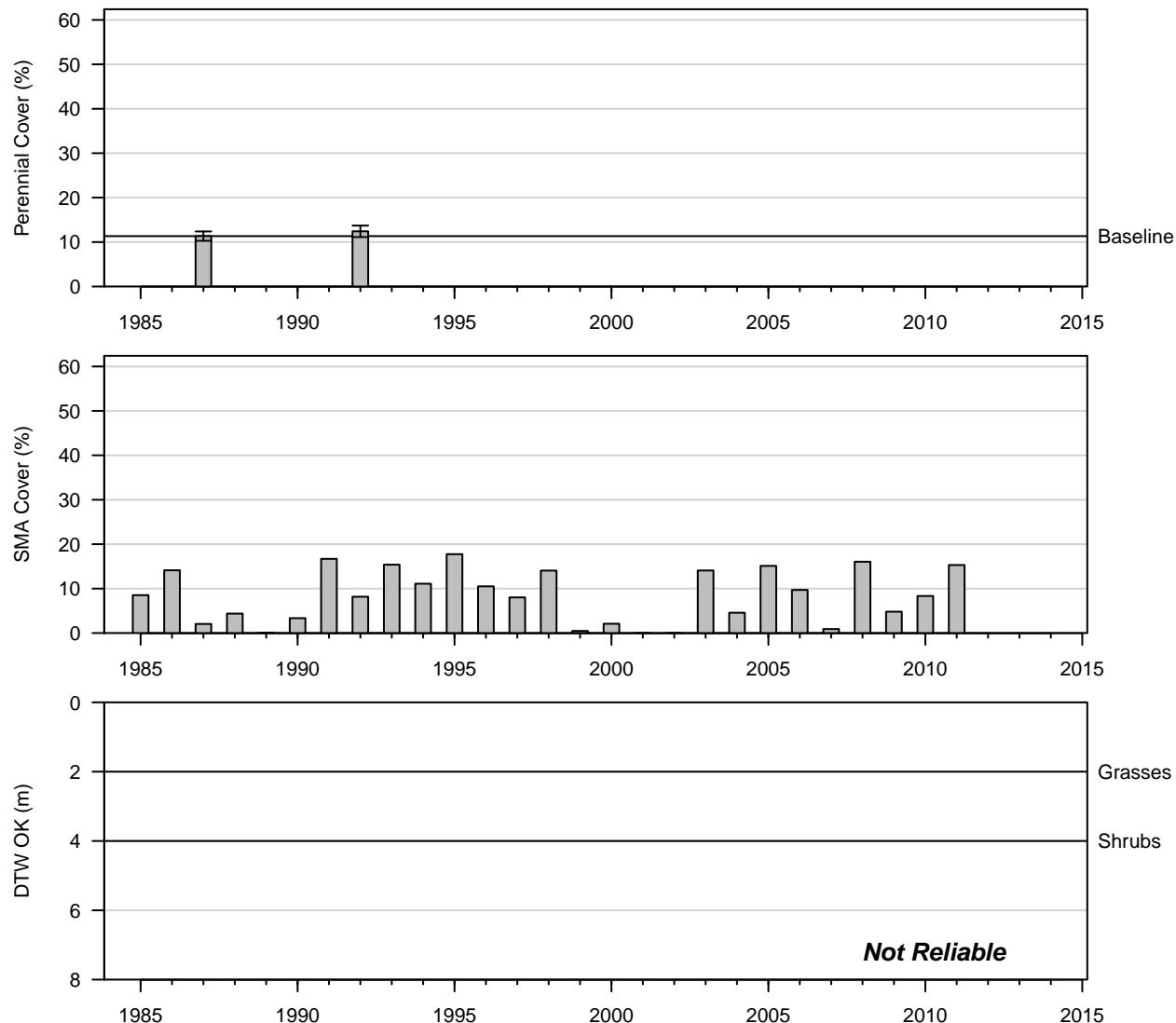


Figure 151: 1992 Control

PLC246
Desert Greasewood Scrub (Type A)

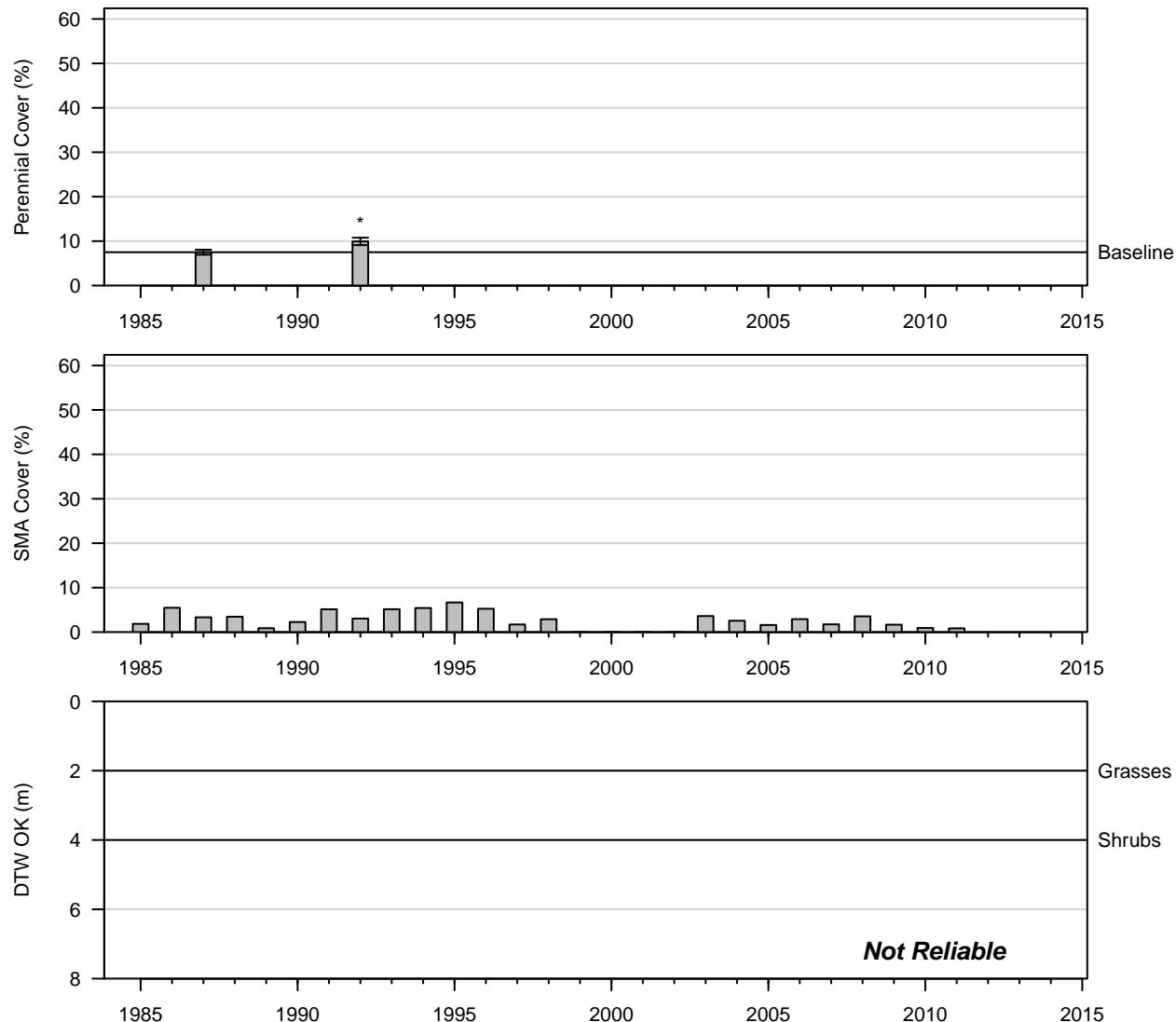


Figure 152: 1992 Control

PLC251
Nevada Saltbush Scrub (Type A)

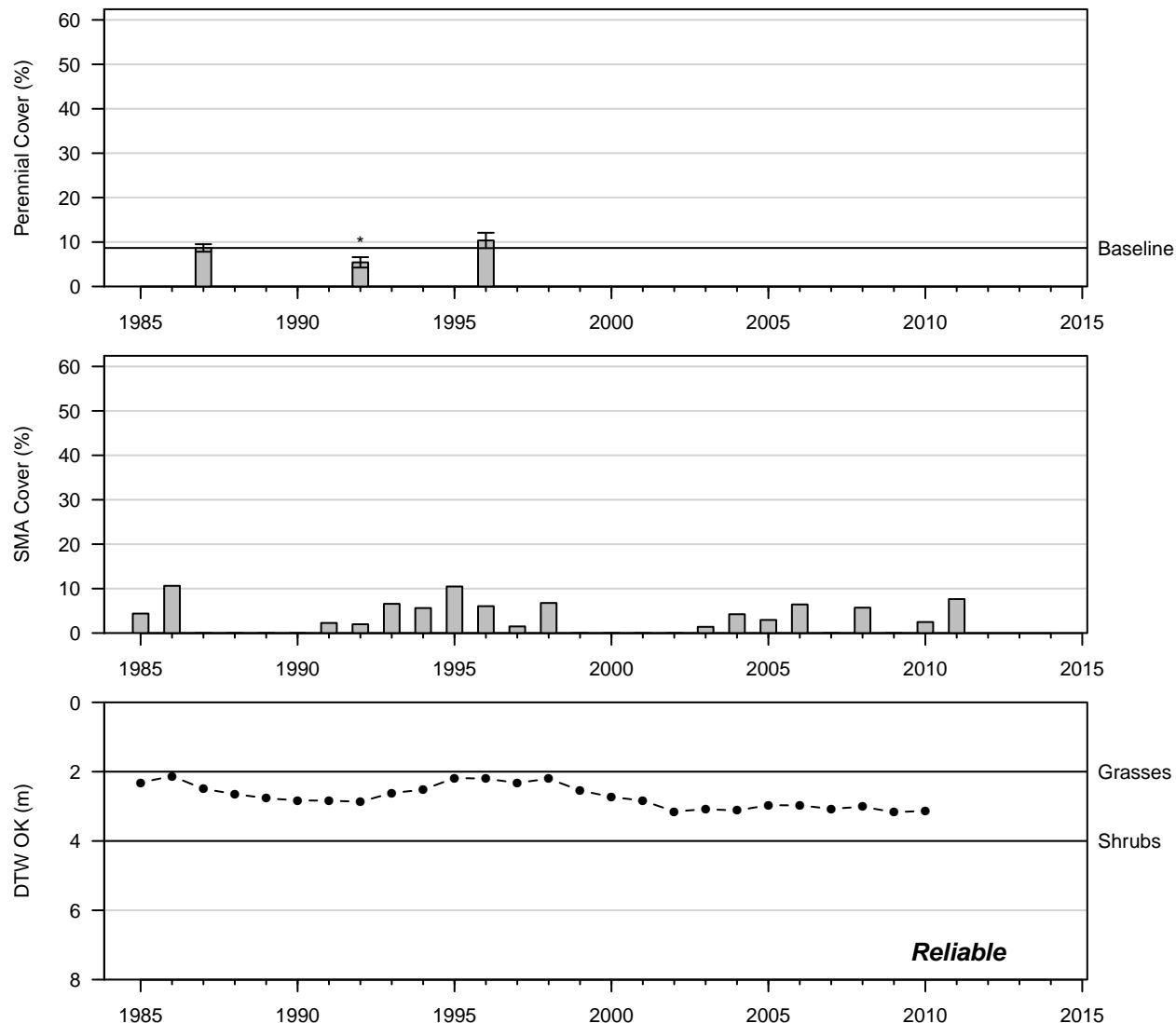


Figure 153: 1996 Control

PLC263
Rabbitbrush Meadow (Type A)

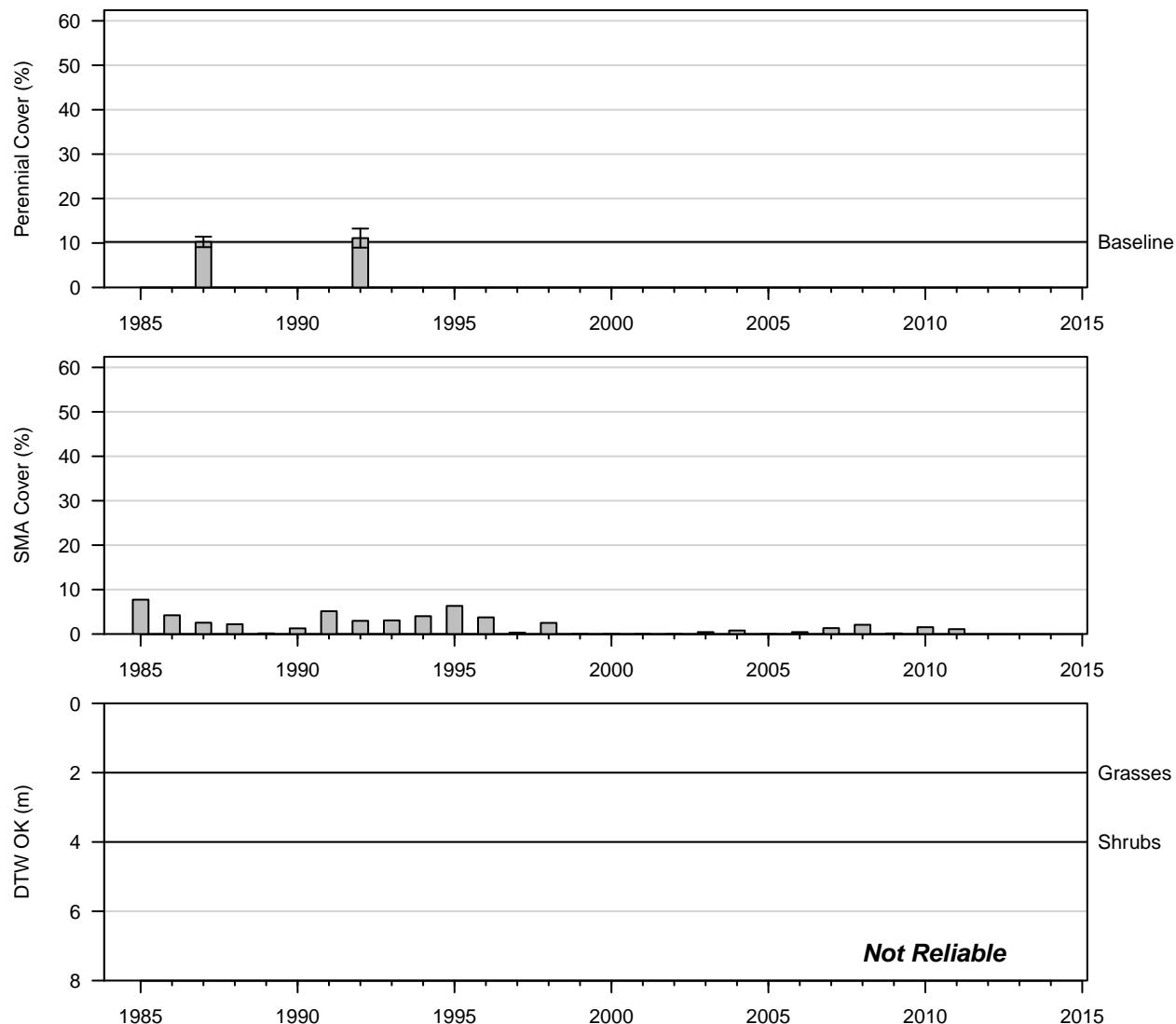


Figure 154: 1992 Control

TIN006
Desert Sink Scrub (Type A)

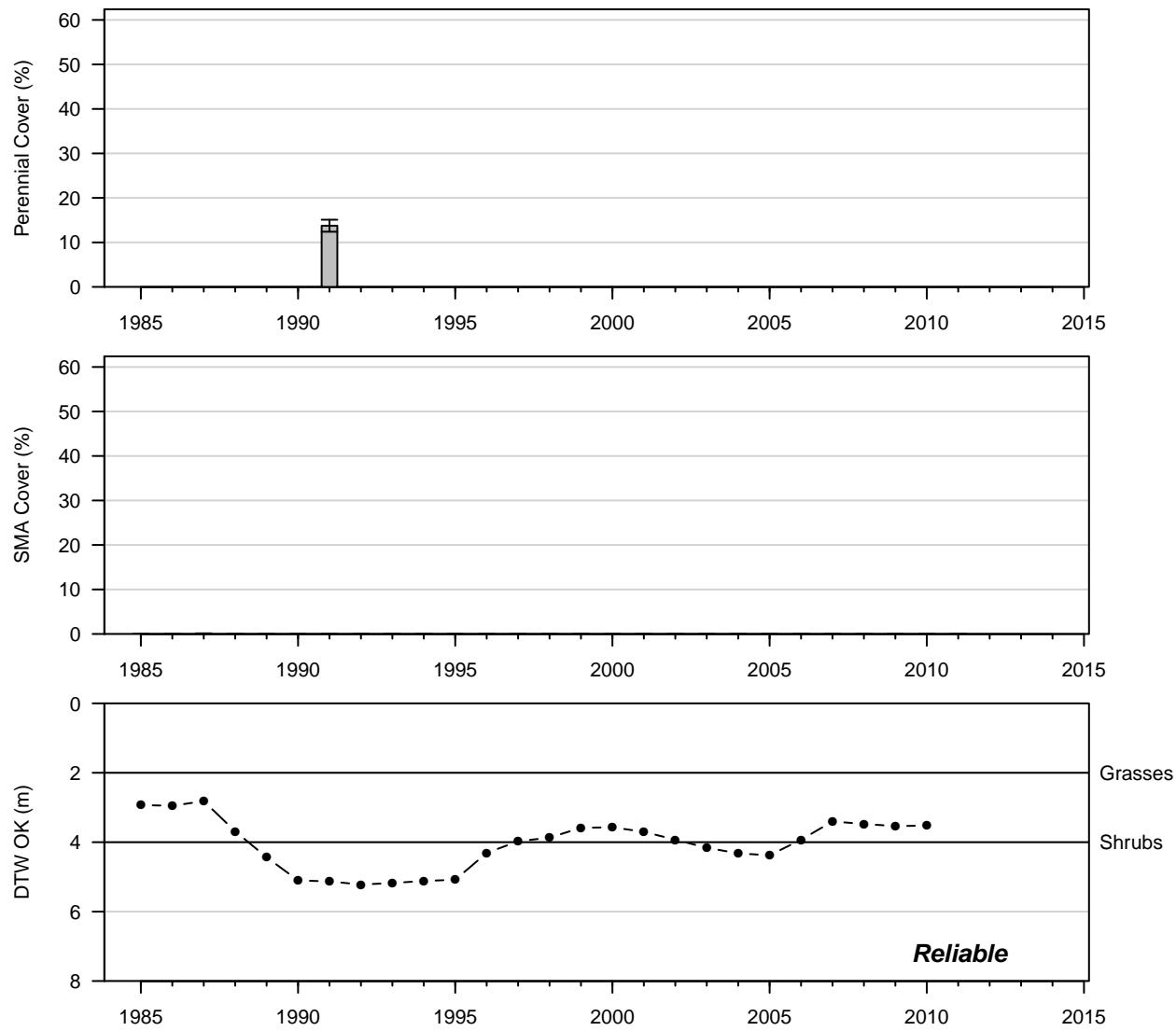


Figure 155: 1991 Wellfield

TIN028
Desert Greasewood Scrub (Type A)

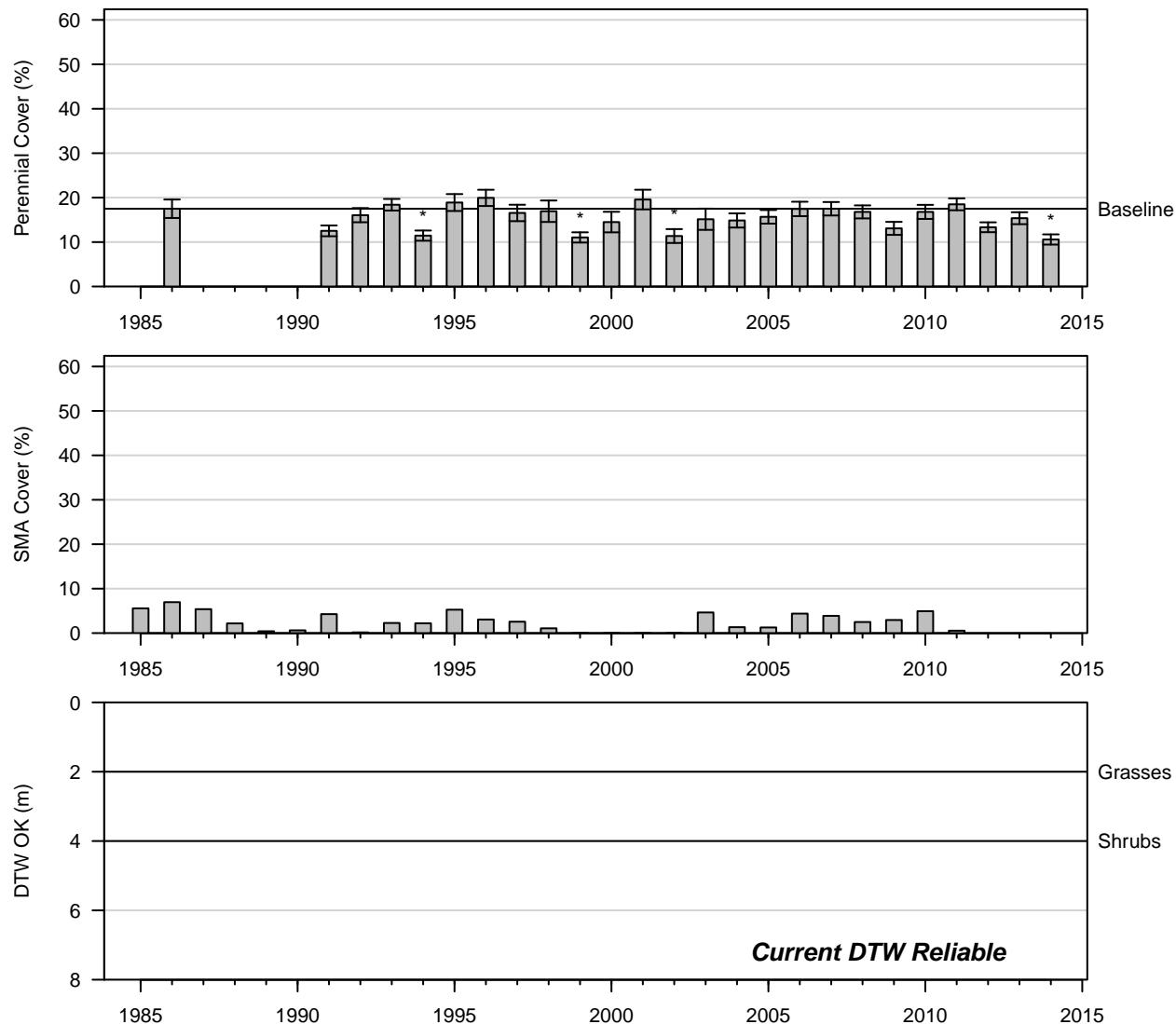


Figure 156: 2014 Wellfield

TIN030
Alkali Meadow (Type C)

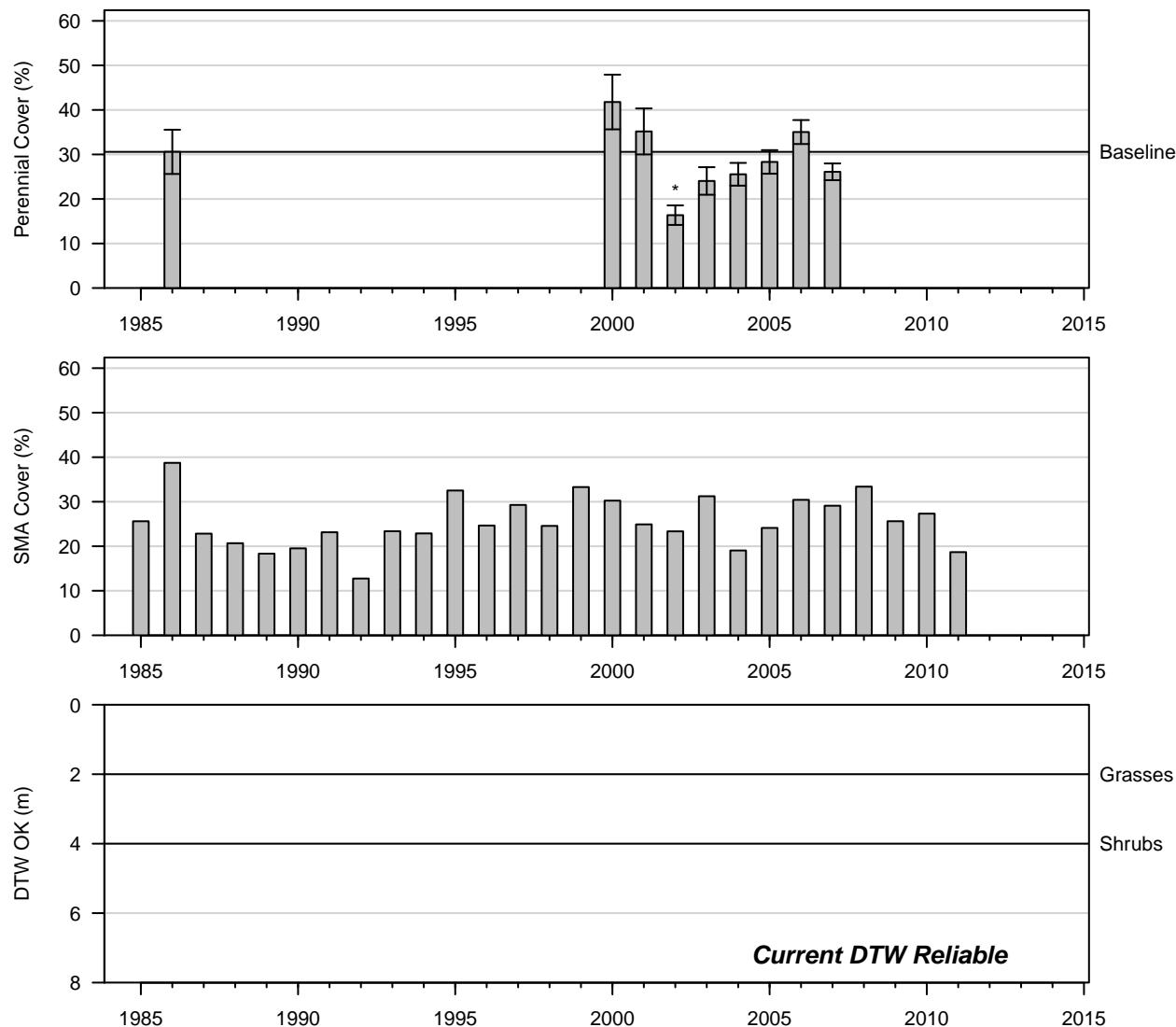


Figure 157: 2007 Wellfield

TIN050
Alkali Meadow (Type C)

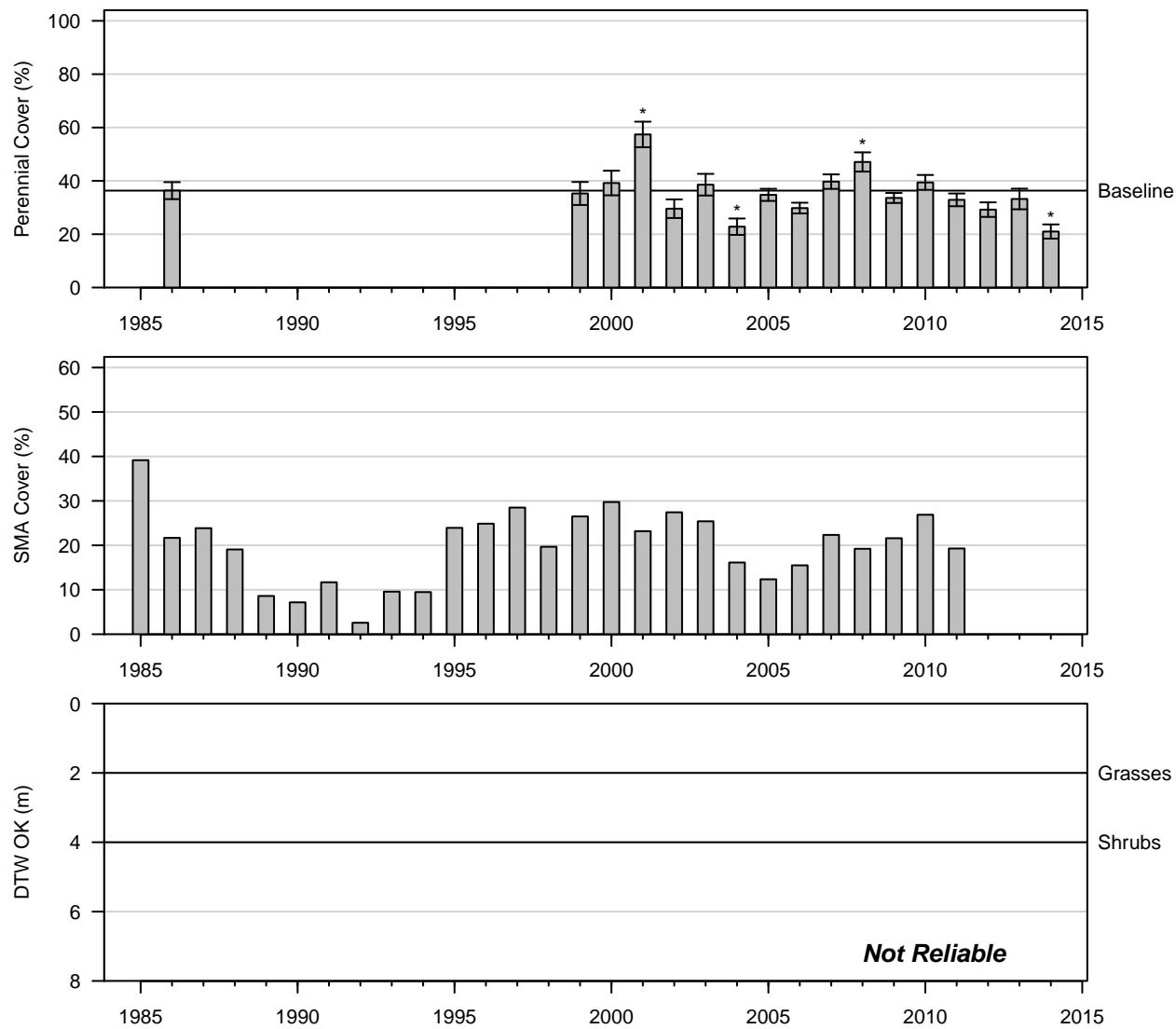


Figure 158: 2014 Wellfield

TIN053
Alkali Meadow (Type C)

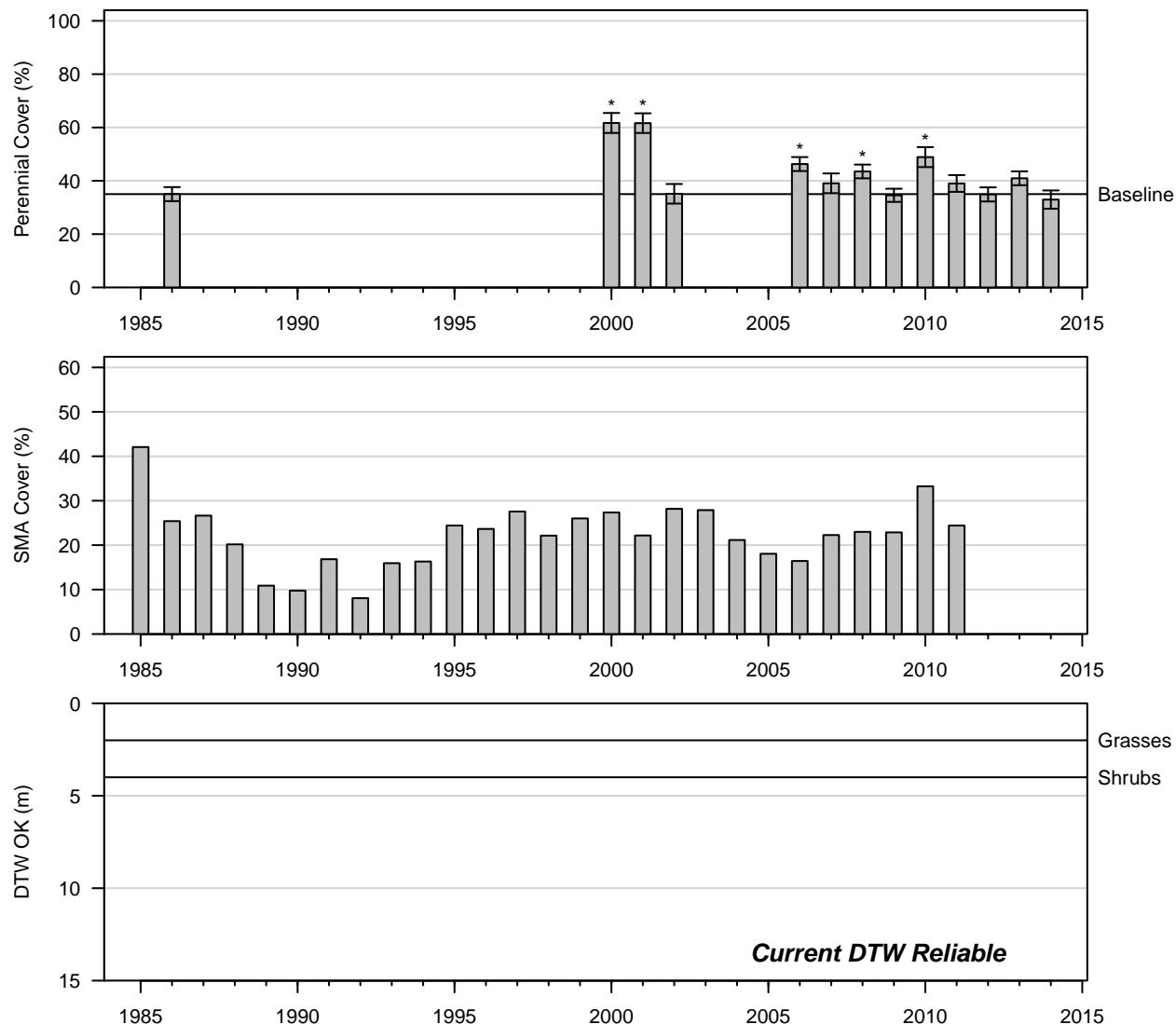


Figure 159: 2014 Wellfield

TIN064
Alkali Meadow (Type C)

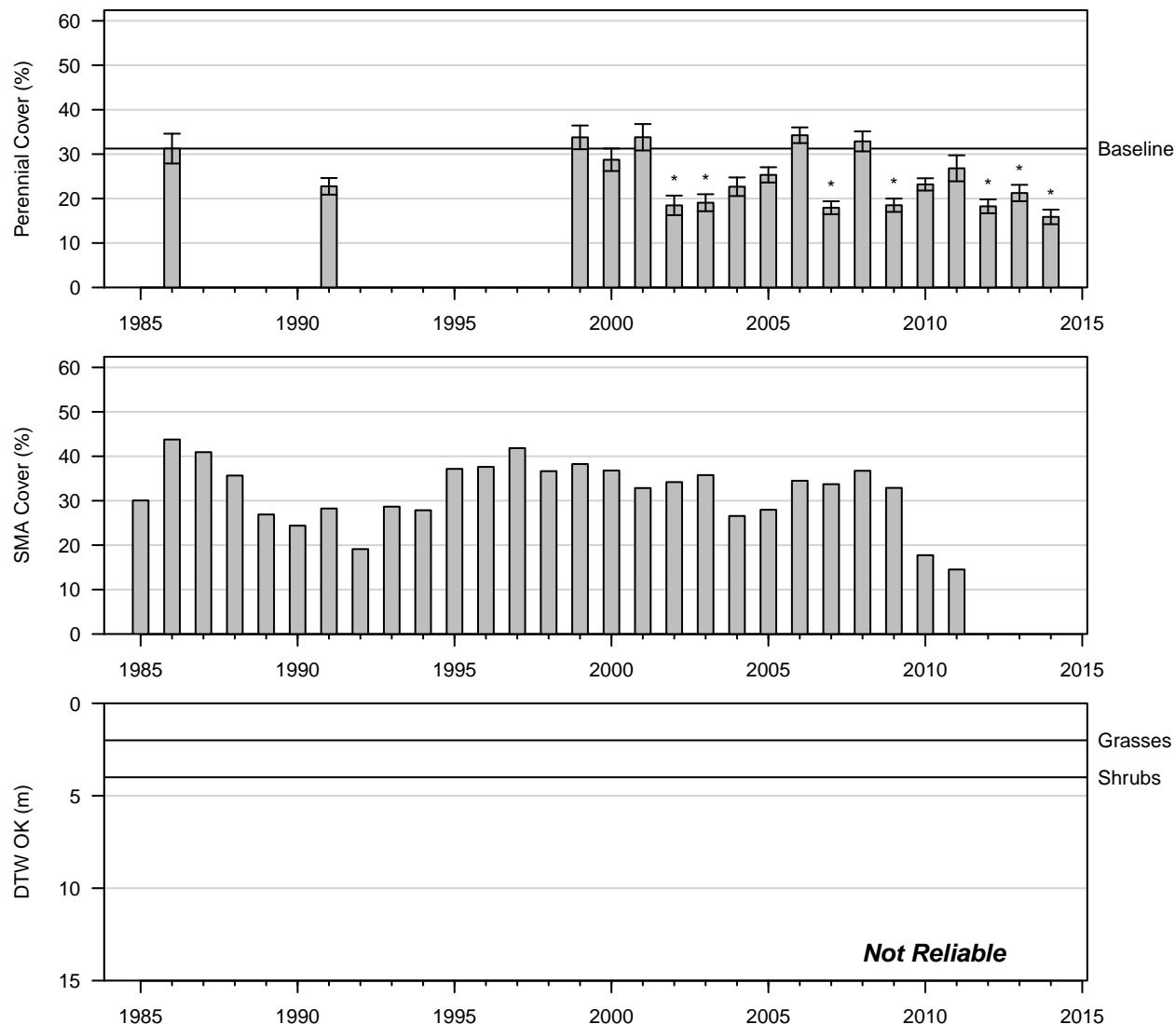


Figure 160: 2014 Wellfield

TIN068
Alkali Meadow (Type A)

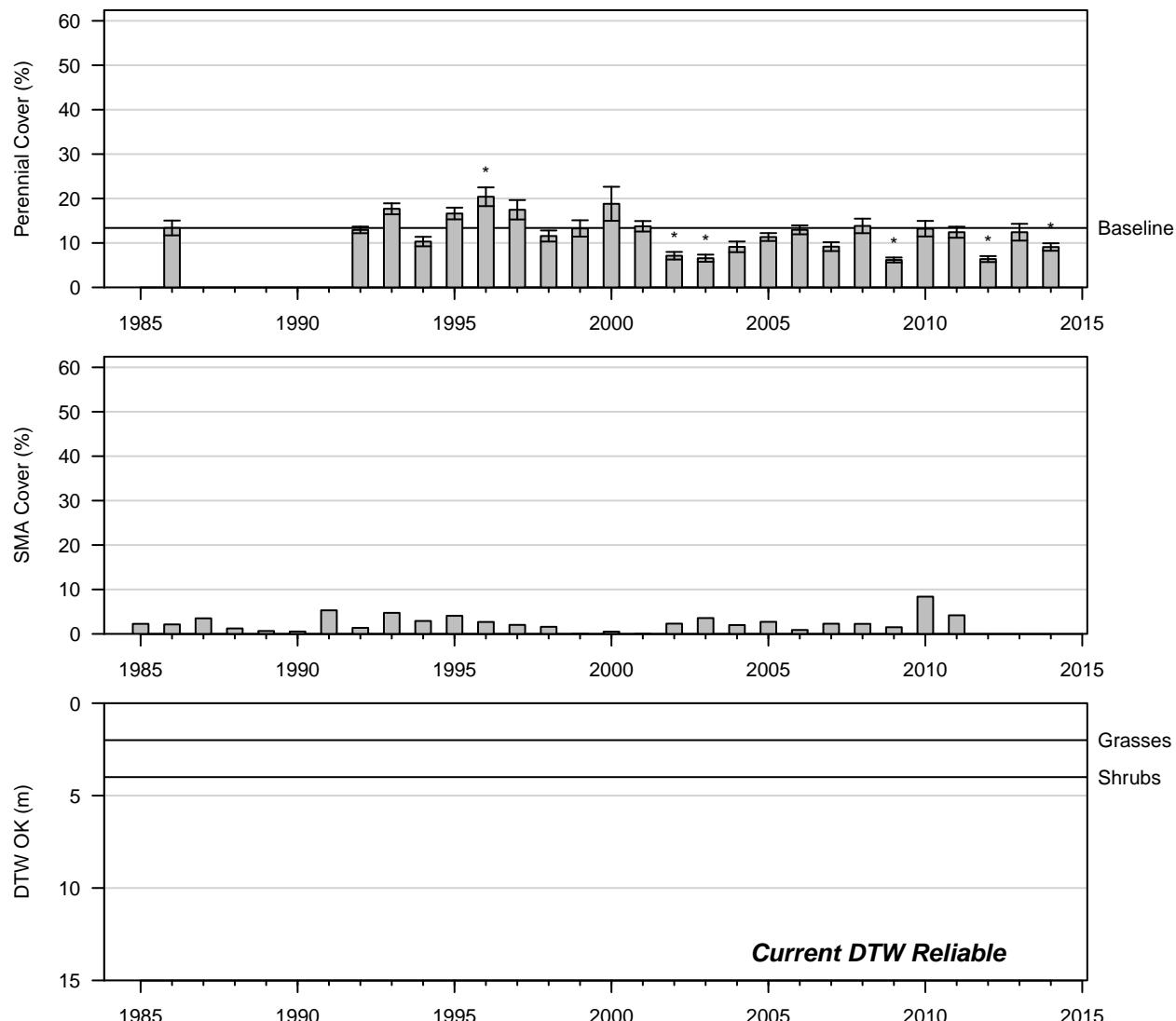


Figure 161: 2014 Wellfield

UHL052
Desert Greasewood Scrub (Type A)

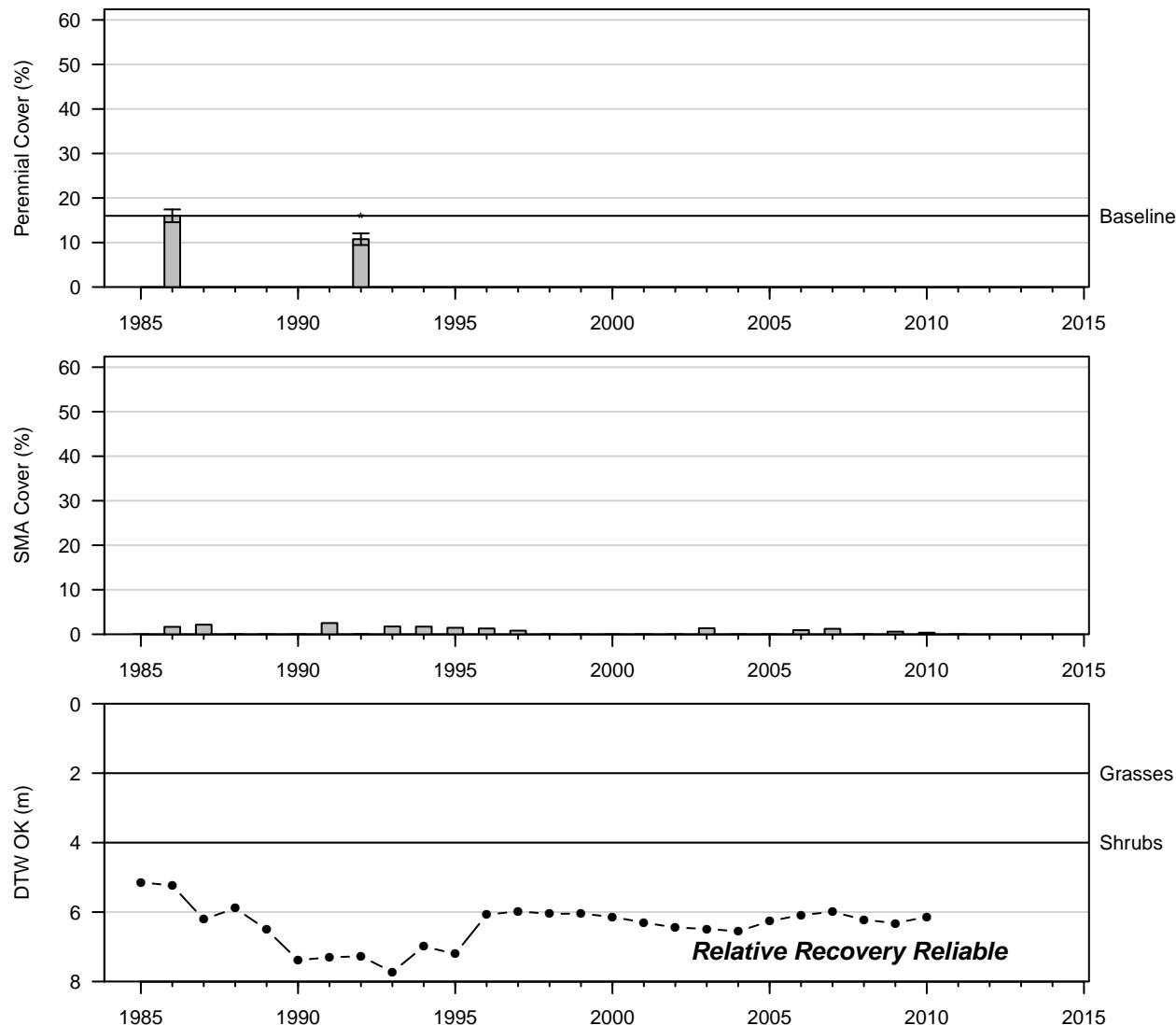


Figure 162: 1992 Wellfield

UNW029
Alkali Meadow (Type C)

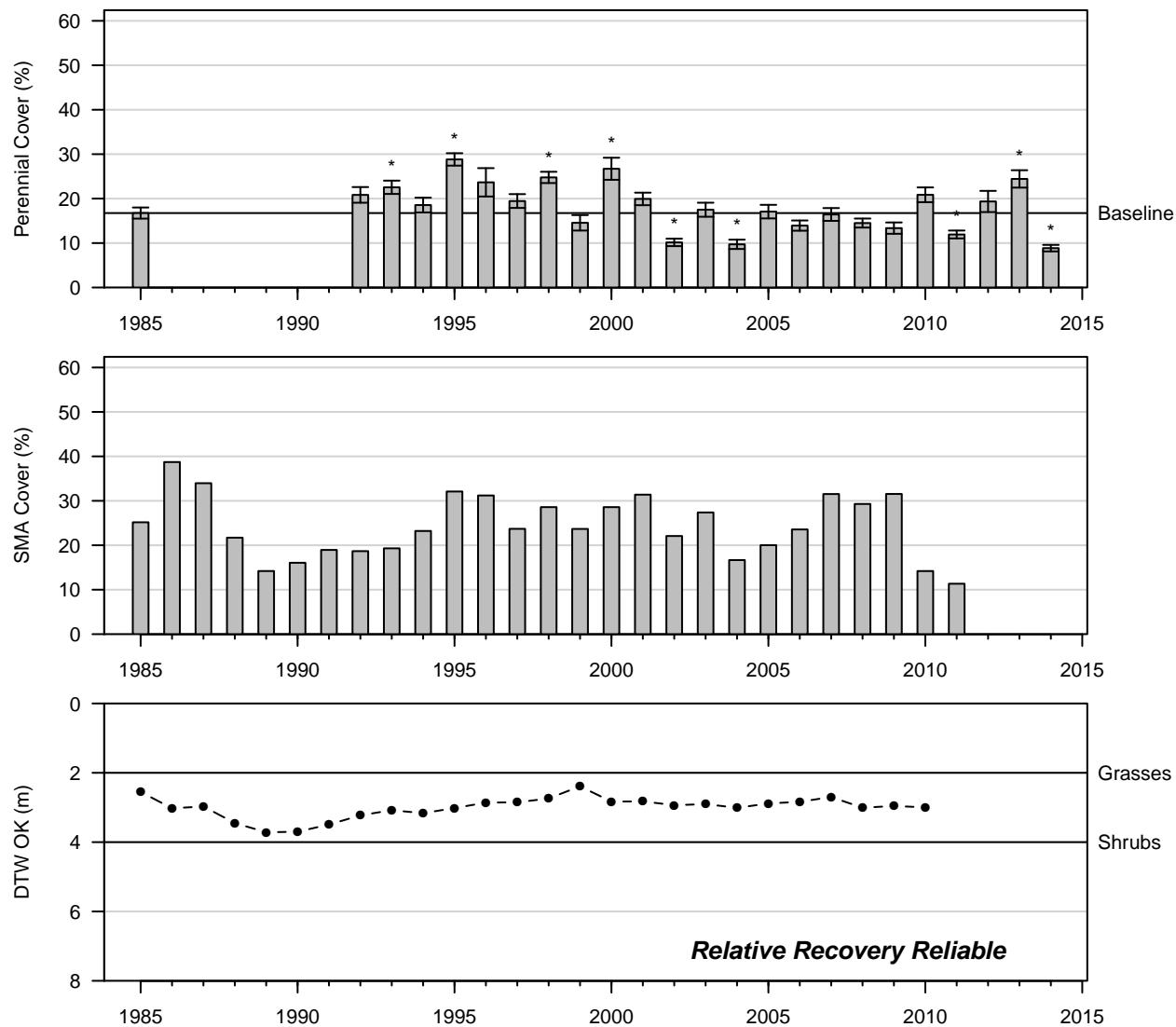


Figure 163: 2014 Control

UNW031
Rush/Sedge Meadow (Type E)

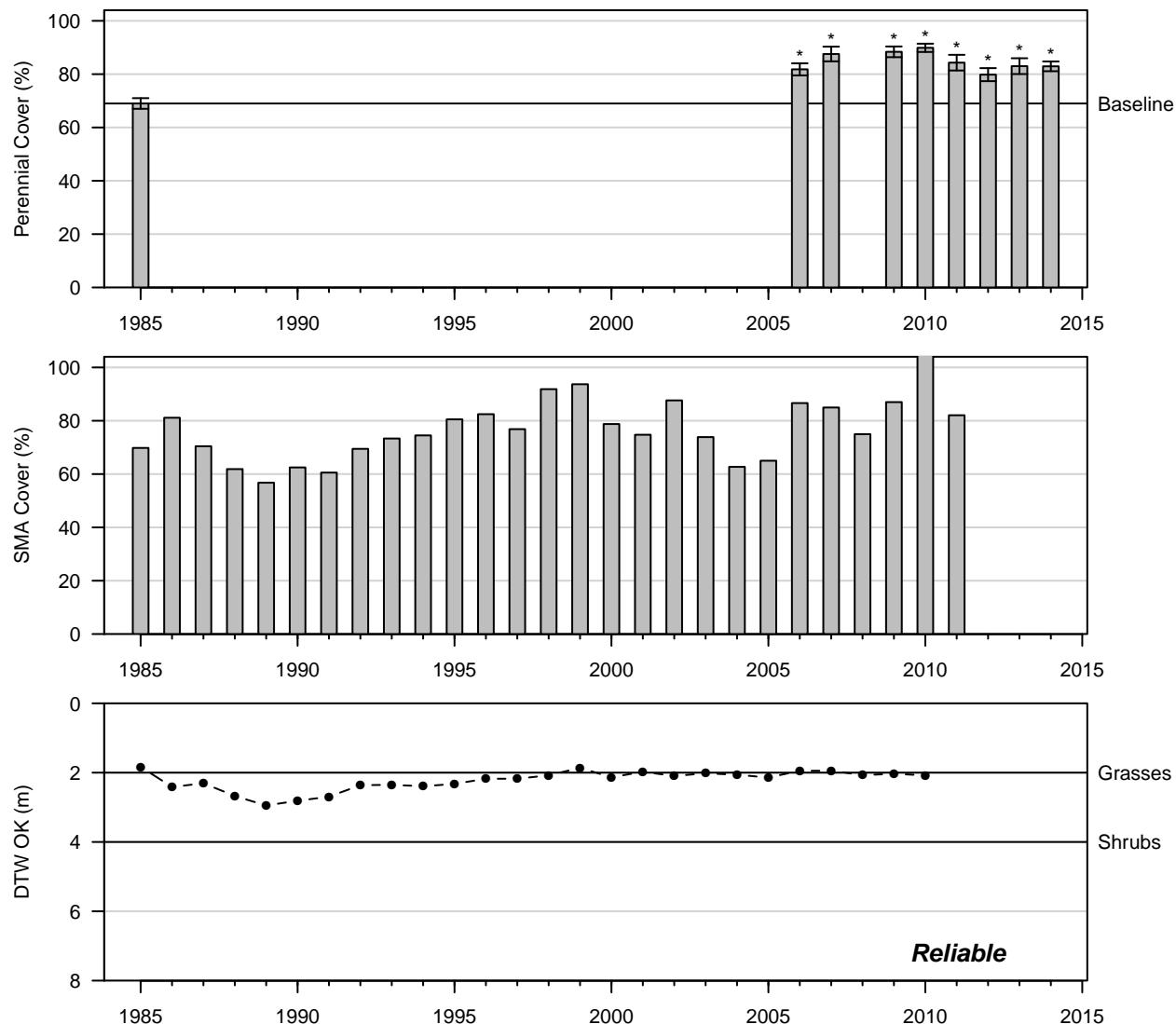


Figure 164: 2014 Control

UNW039
Nevada Saltbush Scrub (Type B)

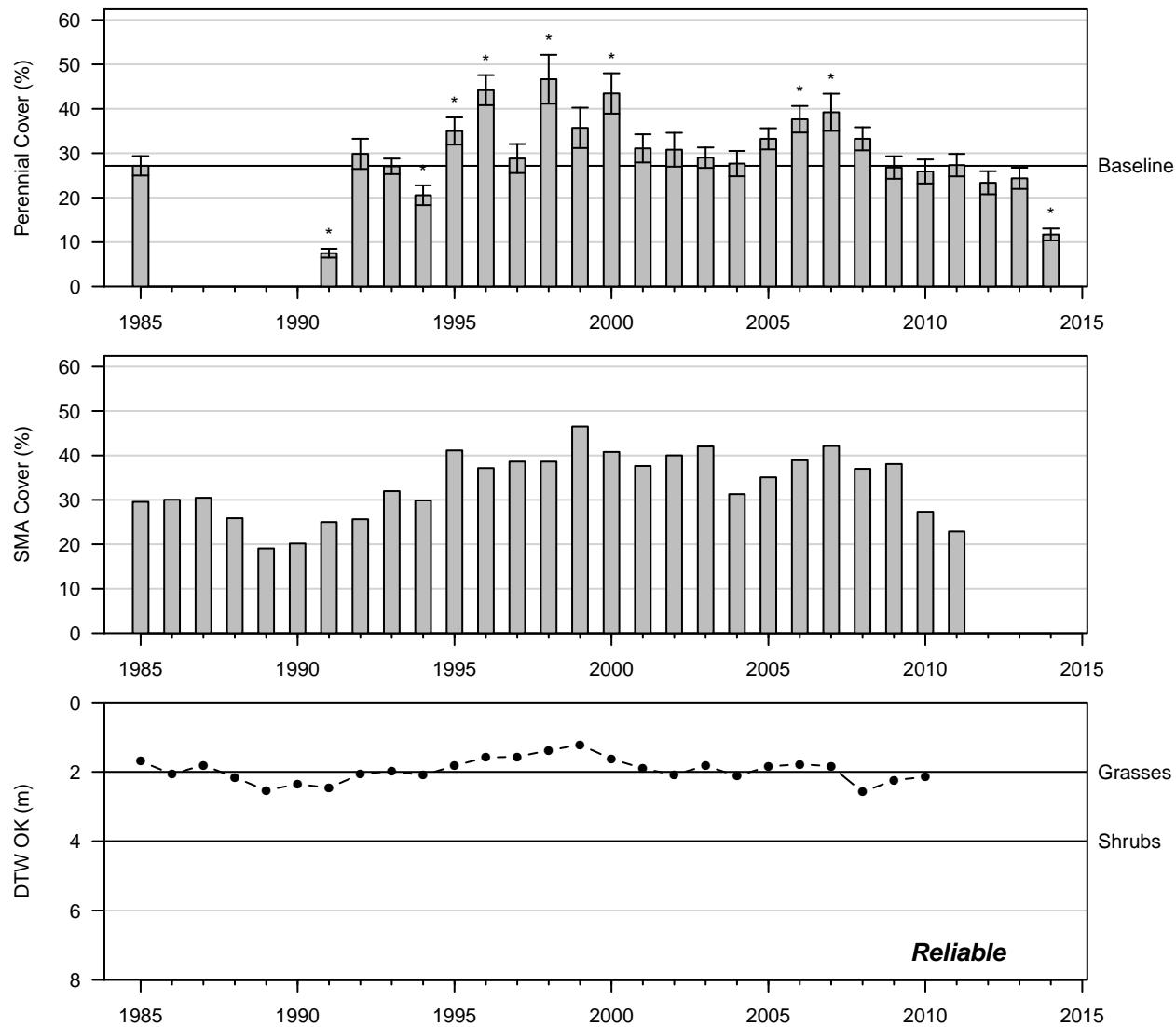


Figure 165: 2014 Control

UNW072
Nevada Saltbush Scrub (Type B)

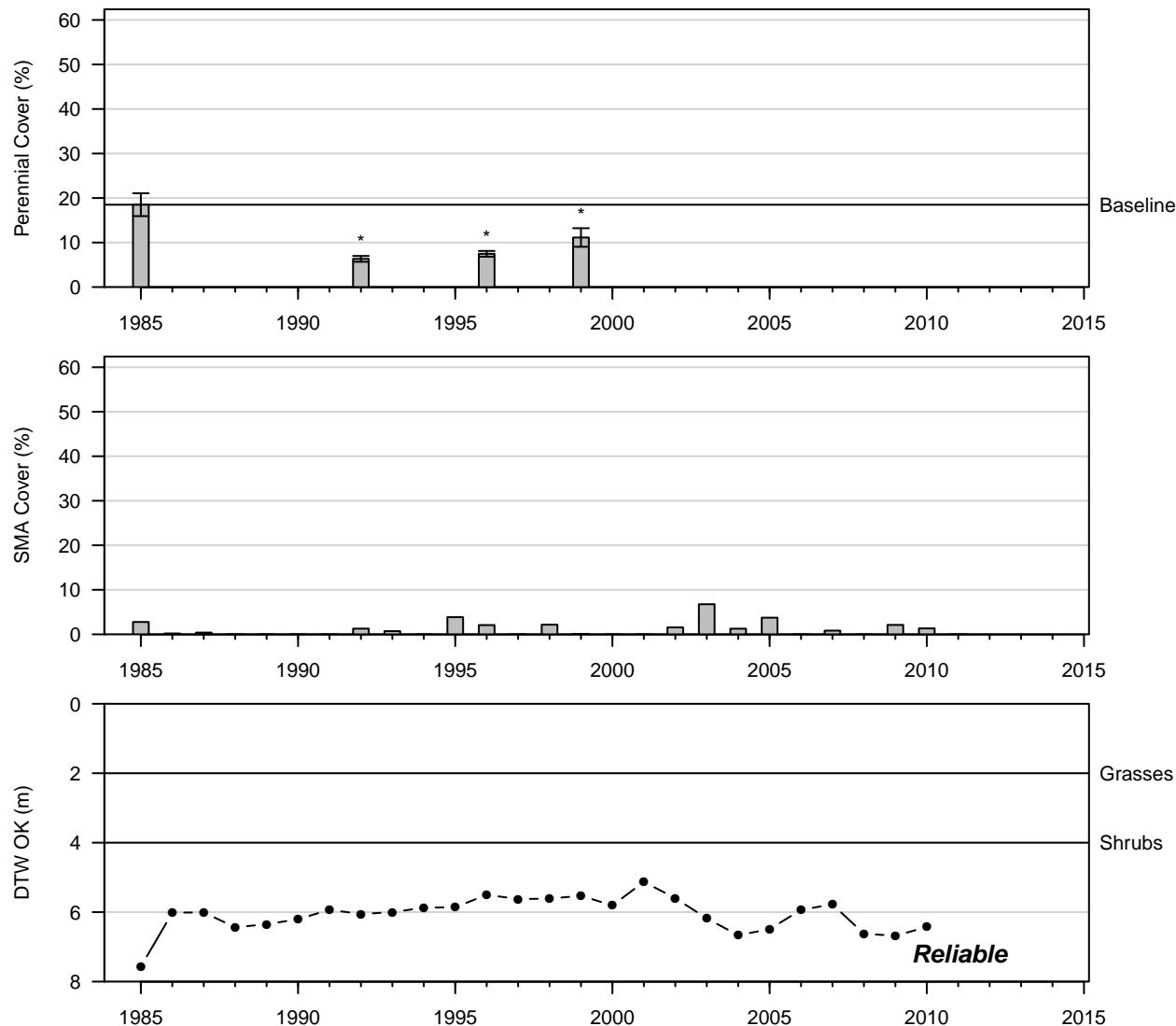


Figure 166: 1999 Control

UNW073
Nevada Saltbush Scrub (Type B)

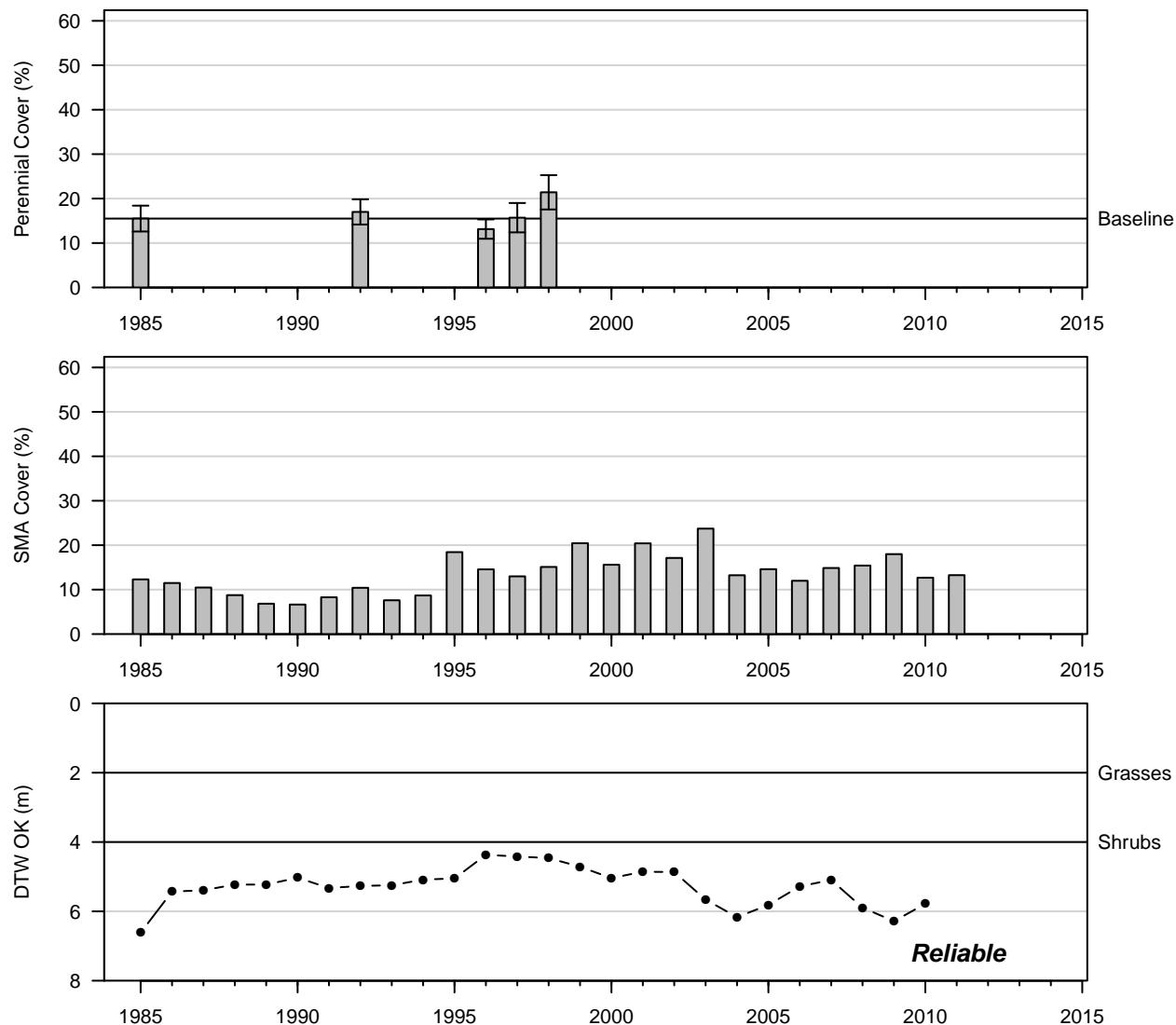


Figure 167: 1998 Control

UNW074
Alkali Meadow (Type C)

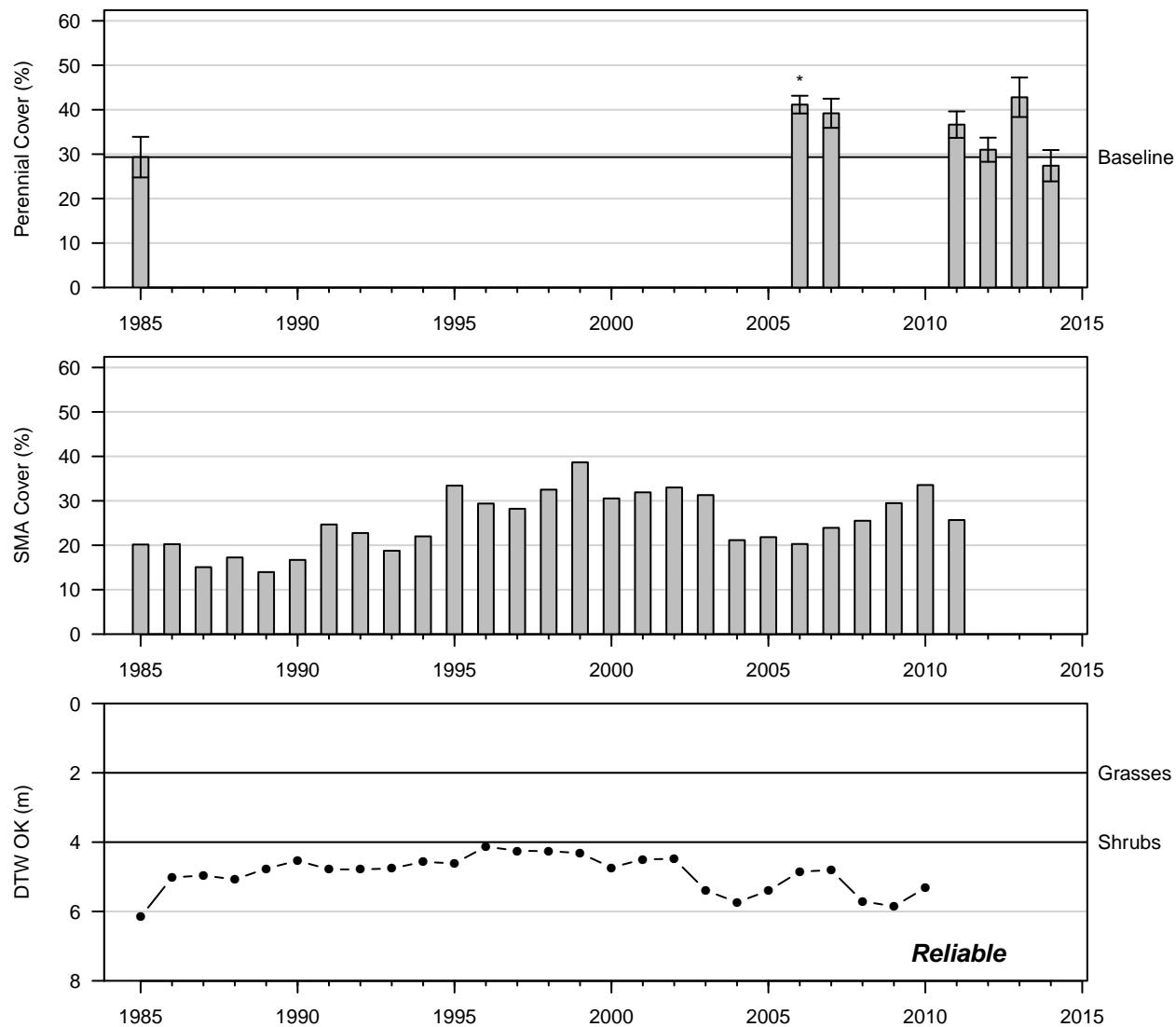


Figure 168: 2014 Control

UNW079
Nevada Saltbush Meadow (Type C)

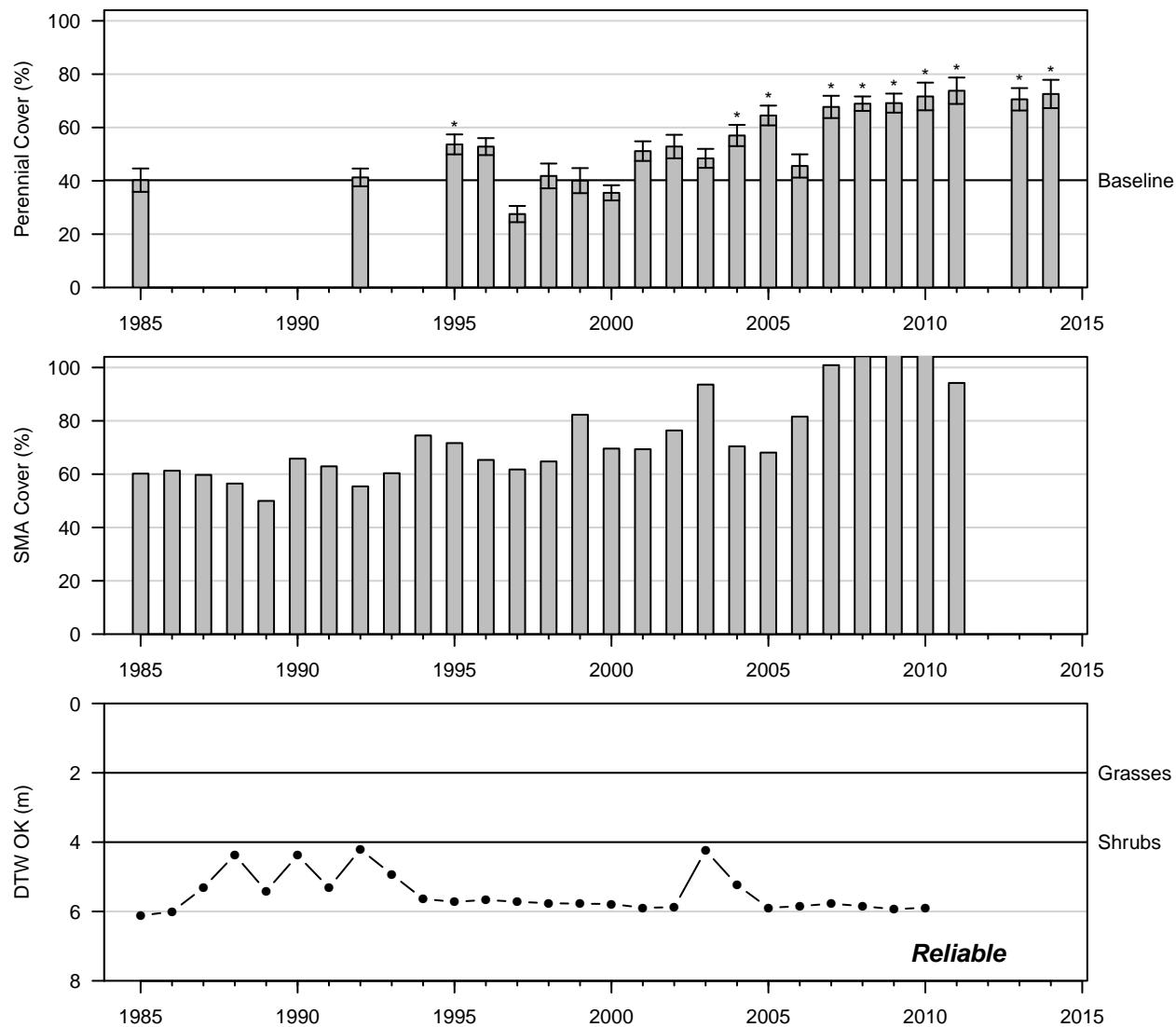
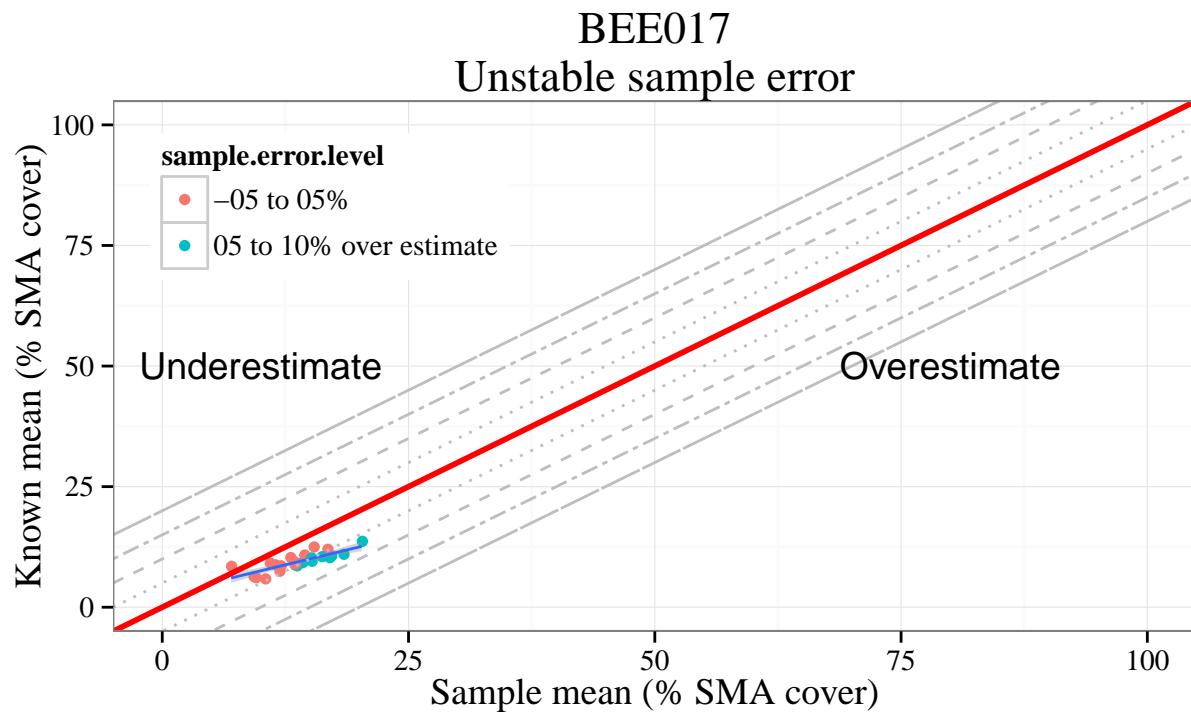
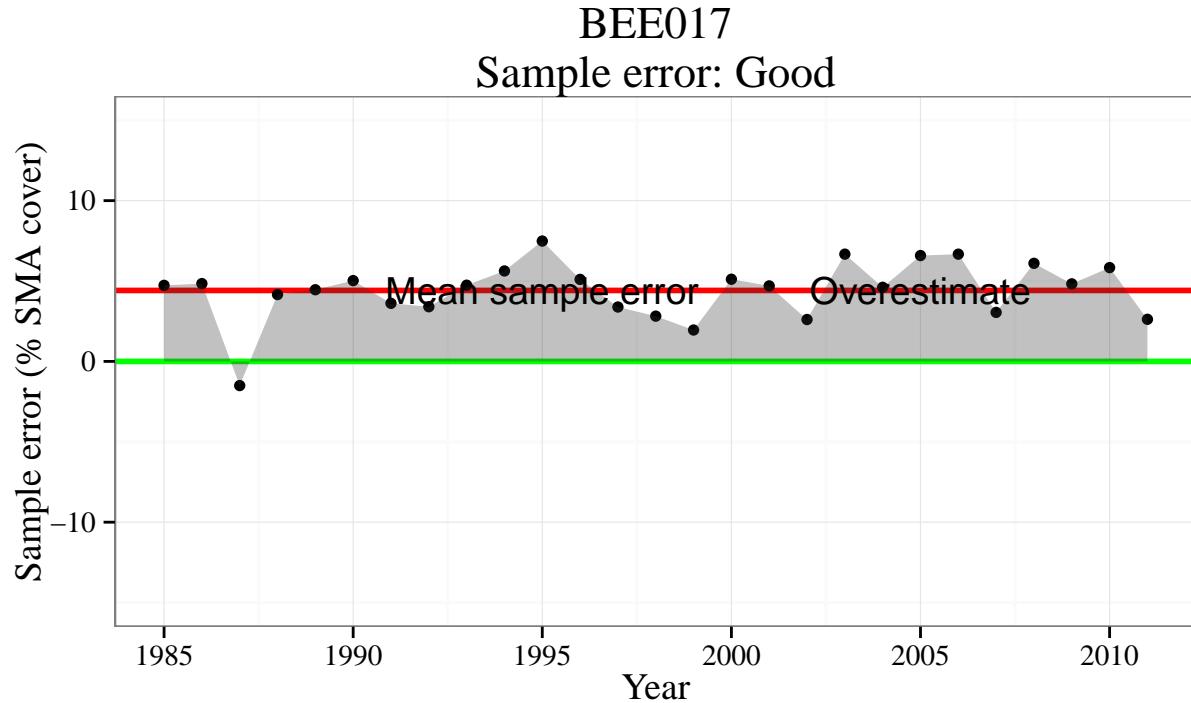


Figure 169: 2014 Control

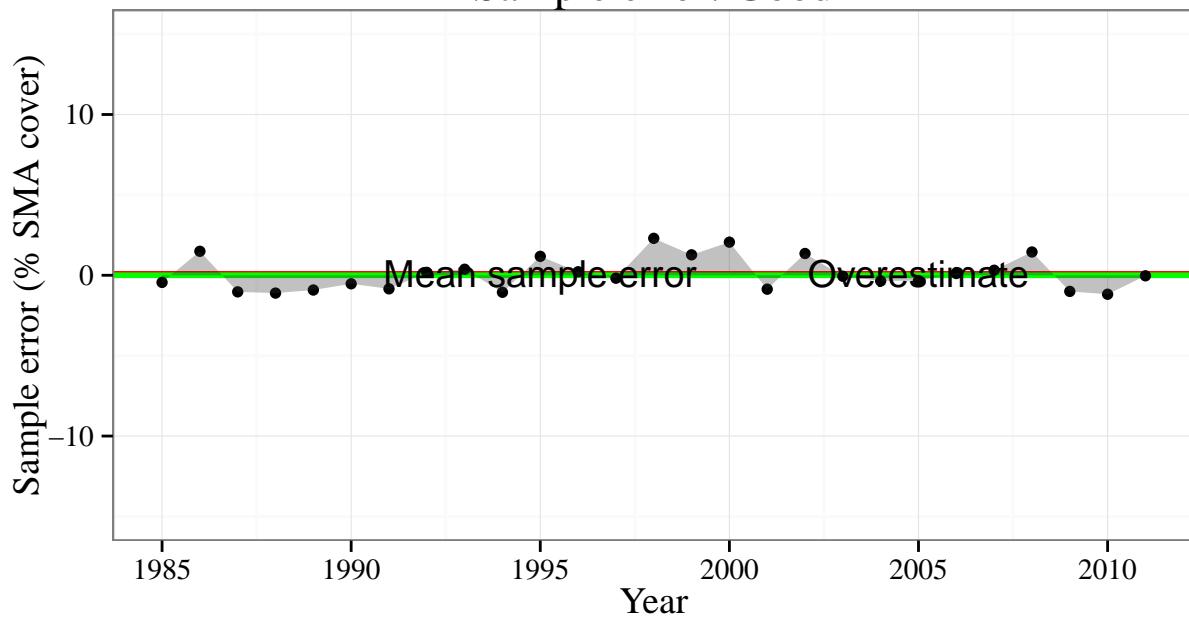
Appendix 3. Grass, shrub, and herb proportion regressed against time in parcels with baseline transect data and at least 10 years of line point data. Columns indicate: wellfield or control parcel status, W/C; sample size, n; coefficient of determination, R²; p-value, p; slope parameter estimate, slope; upper and lower 95% confidence interval for the slope parameter, 95% Confidence Interval; direction (positive or negative) of the relationship, Slope direction. Bold text in p-value column, indicates significant regressions at $\alpha = 0.05$. Rows were sorted by grass slope direction to highlight changes in grass proportion.

W/C	Parcel ID	n (years)	Perennial Grass Cover					Perennial Shrub Cover					Perennial Herb Cover							
			<i>R</i> ²	p	Slope	95% Confidence Interval		Slope direction	<i>R</i> ²	p	Slope	95% Confidence Interval		Slope direction	<i>R</i> ²	p	Slope	95% Confidence Interval		Slope direction
						Lower	Upper					Lower	Upper					Lower	Upper	
W	BGP086	19	0.53	0.00	0.02	0.01	0.02	+	0.57	0.00	-0.02	-0.02	-0.01	-	0.15	0.10	0.00	0.00	0.00	0.00
W	BGP157	17	0.54	0.00	0.01	0.01	0.02	+	0.58	0.00	-0.01	-0.02	-0.01	-	0.29	0.03	0.00	0.00	0.00	+
W	LAW030	19	0.76	0.00	0.02	0.01	0.02	+	0.72	0.00	-0.02	-0.02	-0.01	-	0.01	0.64	0.00	0.00	0.00	0.00
W	BGP154	25	0.35	0.00	-0.01	-0.01	0.00	-	0.32	0.00	0.01	0.00	0.01	+	0.04	0.33	0.00	0.00	0.00	0.00
W	BLK021	21	0.37	0.00	-0.01	-0.01	0.00	-	0.35	0.01	0.01	0.00	0.01	+	0.02	0.51	0.00	0.00	0.00	0.00
W	BLK024	25	0.29	0.01	-0.01	-0.01	0.00	-	0.23	0.02	0.00	0.00	0.01	+	0.09	0.15	0.00	0.00	0.00	0.00
W	BLK033	24	0.42	0.00	-0.01	-0.02	-0.01	-	0.42	0.00	0.01	0.01	0.02	+	0.03	0.41	0.00	0.00	0.00	0.00
W	BLK039	24	0.36	0.00	-0.01	-0.02	0.00	-	0.18	0.04	0.01	0.00	0.01	+	0.61	0.00	0.00	0.00	0.01	+
W	BLK044	24	0.70	0.00	-0.02	-0.02	-0.01	-	0.63	0.00	0.01	0.01	0.02	+	0.07	0.21	0.00	0.00	0.00	0.01
W	BLK075	24	0.55	0.00	-0.02	-0.03	-0.01	-	0.36	0.00	0.01	0.01	0.02	+	0.23	0.02	0.00	0.00	0.01	+
W	BLK094	25	0.68	0.00	-0.01	-0.02	-0.01	-	0.69	0.00	0.01	0.01	0.02	+	0.00	0.74	0.00	0.00	0.00	0.00
W	BLK099	25	0.17	0.04	0.00	-0.01	0.00	-	0.04	0.31	0.00	0.00	0.00	+	0.49	0.00	0.00	0.00	0.01	+
W	FSL065	21	0.78	0.00	-0.01	-0.02	-0.01	-	0.80	0.00	0.01	0.01	0.02	+	0.00	0.81	0.00	0.00	0.00	0.00
W	FSL116	13	0.57	0.00	-0.01	-0.02	-0.01	-	0.62	0.00	0.01	0.00	0.01	+	0.27	0.07	0.00	0.00	0.01	0.01
W	FSL123	23	0.25	0.02	-0.01	-0.01	0.00	-	0.24	0.02	0.00	0.00	0.01	+	0.11	0.13	0.00	0.00	0.01	0.01
W	FSP006	24	0.44	0.00	-0.01	-0.02	-0.01	-	0.44	0.00	0.01	0.01	0.02	+	0.01	0.68	0.00	0.00	0.00	0.00
W	IND011	24	0.22	0.02	-0.01	-0.01	0.00	-	0.54	0.00	0.01	0.01	0.01	+	0.05	0.32	0.00	-0.01	0.00	0.00
W	IND026	11	0.79	0.00	-0.03	-0.04	-0.02	-	0.77	0.00	0.03	0.02	0.04	+	0.44	0.03	0.00	0.00	0.00	+
W	IND029	15	0.63	0.00	-0.02	-0.02	-0.01	-	0.77	0.00	0.02	0.01	0.02	+	0.03	0.56	0.00	0.00	0.00	0.00
W	IND035	24	0.61	0.00	-0.01	-0.01	-0.01	-	0.51	0.00	0.01	0.00	0.01	+	0.11	0.11	0.00	0.00	0.00	0.00
W	IND132	24	0.27	0.01	0.00	-0.01	0.00	-	0.31	0.00	0.01	0.00	0.01	+	0.14	0.07	0.00	0.00	0.00	0.00
W	LAW043	11	0.75	0.00	-0.03	-0.05	-0.02	-	0.47	0.02	0.03	0.01	0.06	+	0.01	0.74	0.00	-0.01	0.02	0.00
W	LAW052	20	0.39	0.00	-0.02	-0.02	-0.01	-	0.45	0.00	0.02	0.01	0.03	+	0.03	0.46	0.00	-0.01	0.00	0.00
W	LAW065	24	0.17	0.05	-0.01	-0.02	0.00	-	0.18	0.04	0.01	0.00	0.02	+	0.13	0.08	0.00	0.00	0.00	0.00
W	LAW082	20	0.31	0.01	-0.01	-0.01	0.00	-	0.30	0.01	0.01	0.00	0.01	+	0.05	0.34	0.00	0.00	0.00	0.00
W	TIN053	13	0.39	0.02	-0.01	-0.02	0.00	-	0.41	0.02	0.01	0.00	0.02	+	0.04	0.50	0.00	0.00	0.00	0.00
W	TIN064	18	0.28	0.02	-0.01	-0.02	0.00	-	0.30	0.02	0.01	0.00	0.02	+	0.20	0.06	0.00	0.00	0.00	0.00
W	BGP162	25	0.10	0.12	0.00	-0.01	0.00	-	0.10	0.12	0.00	0.00	0.01	-	0.00	0.93	0.00	0.00	0.00	0.00
W	BIS085	16	0.20	0.08	-0.01	-0.01	0.00	-	0.14	0.15	0.01	0.00	0.01	-	0.09	0.25	0.00	0.00	0.00	0.00
W	BLK002	14	0.00	0.89	0.00	0.00	0.00	-	0.00	0.89	0.00	0.00	0.00	-	NA	NA	0.00	0.00	0.00	0.00
W	BLK009	25	0.05	0.28	0.00	-0.01	0.00	-	0.02	0.52	0.00	0.00	0.01	-	0.41	0.00	0.00	0.00	0.00	+
W	BLK016	25	0.07	0.22	0.00	-0.01	0.00	-	0.03	0.38	0.00	0.00	0.01	-	0.10	0.13	0.00	0.00	0.00	0.00
W	BLK069	24	0.04	0.35	0.00	-0.01	0.00	-	0.03	0.39	0.00	0.00	0.01	-	0.03	0.40	0.00	0.00	0.00	0.00
W	BLK074	23	0.00	0.87	0.00	-0.00	0.01	-	0.02	0.47	0.00	-0.01	0.00	-	0.17	0.05	0.00	0.00	0.00	0.00
W	BLK077	16	0.05	0.39	0.00	-0.01	0.01	-	0.05	0.39	0.00	-0.01	0.01	-	0.02	0.60	0.00	0.00	0.00	0.00
W	BLK142	22	0.13	0.10	0.00	-0.01	0.00	-	0.11	0.13	0.00	0.00	0.01	-	0.03	0.42	0.00	0.00	0.00	0.00
W	BLK143	10	0.10	0.37	0.00	-0.01	0.00	-	0.06	0.49	0.00	0.00	0.01	-	0.09	0.39	0.00	0.00	0.00	0.00
W	FSP004	20	0.02	0.60	0.00	-0.01	0.01	-	0.02	0.59	0.00	-0.01	0.01	-	0.06	0.30	0.00	0.00	0.00	0.00
W	IND019	18	0.09	0.23	0.01	0.00	0.01	-	0.01	0.68	0.00	-0.01	0.01	-	0.13	0.14	0.00	-0.01	0.00	0.00
W	IND024	10	0.09	0.40	0.00	0.00	0.01	-	0.27	0.12	0.00	-0.01	0.00	-	0.27	0.12	0.00	0.00	0.01	0.01
W	IND106	24	0.00	0.93	0.00	0.00	0.00	-	0.00	0.92	0.00	0.00	0.00	-	0.01	0.64	0.00	0.00	0.00	0.00
W	IND111	25	0.00	0.99	0.00	0.00	0.00	-	0.02	0.51	0.00	-0.01	0.00	-	0.07	0.19	0.00	0.00	0.00	0.00
W	IND133	15	NA	NA	0.00	0.00	0.00	-	0.53	0.11	0.00	0.00	0.00	-	NA	NA	0.00	0.00	0.00	0.00
W	IND139	25	0.10	0.12	0.00	-0.01	0.00	-	0.10	0.13	0.00	0.00	0.01	-	0.00	0.93	0.00	0.00	0.00	0.00
W	IND231	24	0.04	0.37	0.00	0.00	0.00	-	0.01	0.73	0.00	0.00	0.00	-	0.02	0.50	0.00	0.00	0.00	0.00
W	LAW035	12	0.31	0.06	-0.02	-0.04	0.00	-	0.40	0.03	0.02	0.00	0.04	+	0.05	0.50	0.00	-0.01	0.01	0.01
W	LAW062	22	0.15	0.08	-0.01	-0.01	0.00	-	0.02	0.51	0.00	-0.01	0.01	-	0.02	0.57	0.00	0.00	0.01	0.01
W	LAW063	25	0.11	0.11	0.00	-0.01	0.00	-	0.04	0.36	0.00	0.00	0.01	-	0.08	0.16	0.00	0.00	0.00	0.00
W	LAW078	20	0.02	0.60	0.00	-0.01	0.01	-	0.00	0.83	0.00	-0.01	0.01	-	0.04	0.39	0.00	0.00	0.00	0.00
W	LAW085	24	0.00	0.93	0.00	-0.01	0.01	-	0.01	0.70	0.00	-0.02	0.00	-	0.08	0.19	0.00	0.00	0.00	0.00
W	LAW107	24	0.00	0.86	0.00	-0.01	0.01	-	0.02	0.49	0.00	-0.01	0.01	-	0.03	0.38	0.00	0.00	0.00	0.00
W	LAW110	11	0.01	0.78	0.00	-0.01	0.02	-	0.06	0.49	0.00	-0.01	0.02	-	0.43	0.03	-0.01	-0.01	0.00	-
W	LAW112	22	0.14	0.08	0.01	0.00	0.01	-	0.13	0.11	-0.01	-0.01	0.00	-	0.09	0.18	0.00	0.00	0.00	0.00
W	LAW120	25	0.04	0.33	0.00	0.00	0.01	-	0.16	0.05	-0.01	-0.01	0.00	-	0.22	0.02	0.00	0.00	0.01	+
W	LAW122	24	0.13</td																	

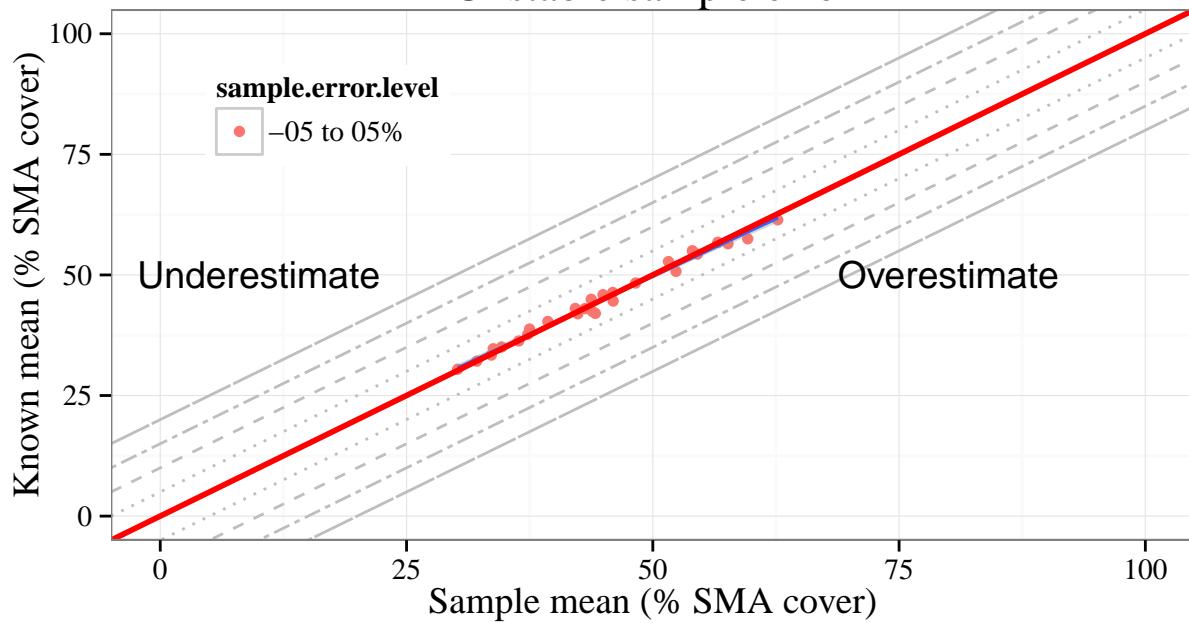
Appendix 4a. Two plots are shown for each parcel. The top plot shows the magnitude of sample error over time (mean sample error shown in red). The bottom plot shows known mean parcel cover against the sample mean with the stability of the sample error classified as stable or unstable (confidence band is 1 SE).



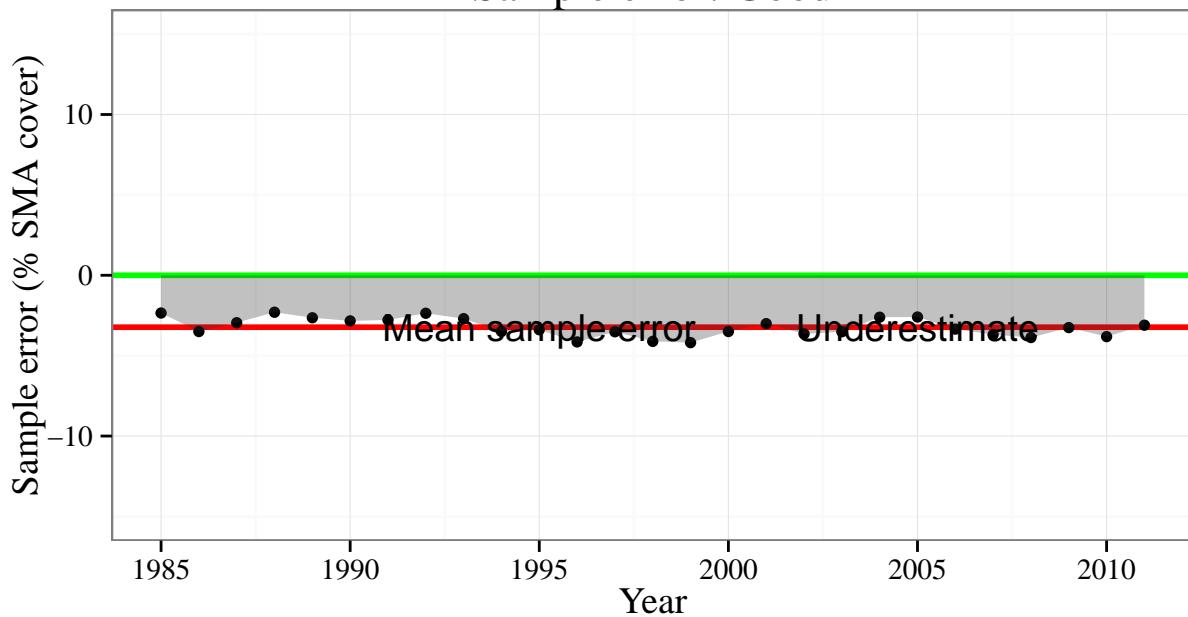
BGP019 Sample error: Good



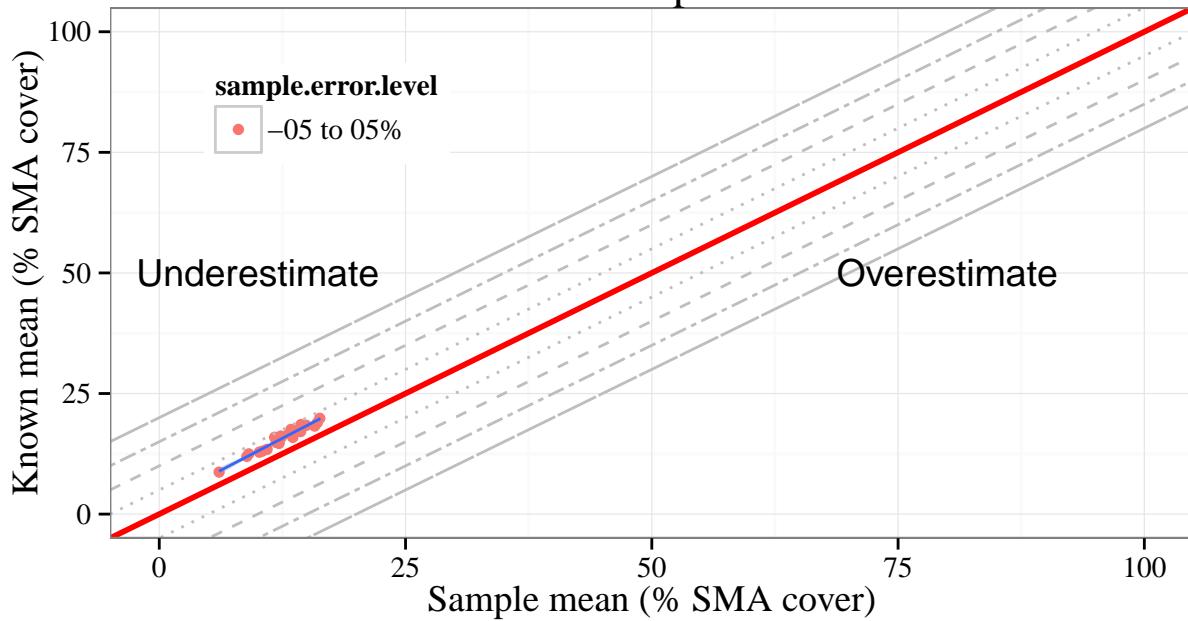
BGP019 Unstable sample error



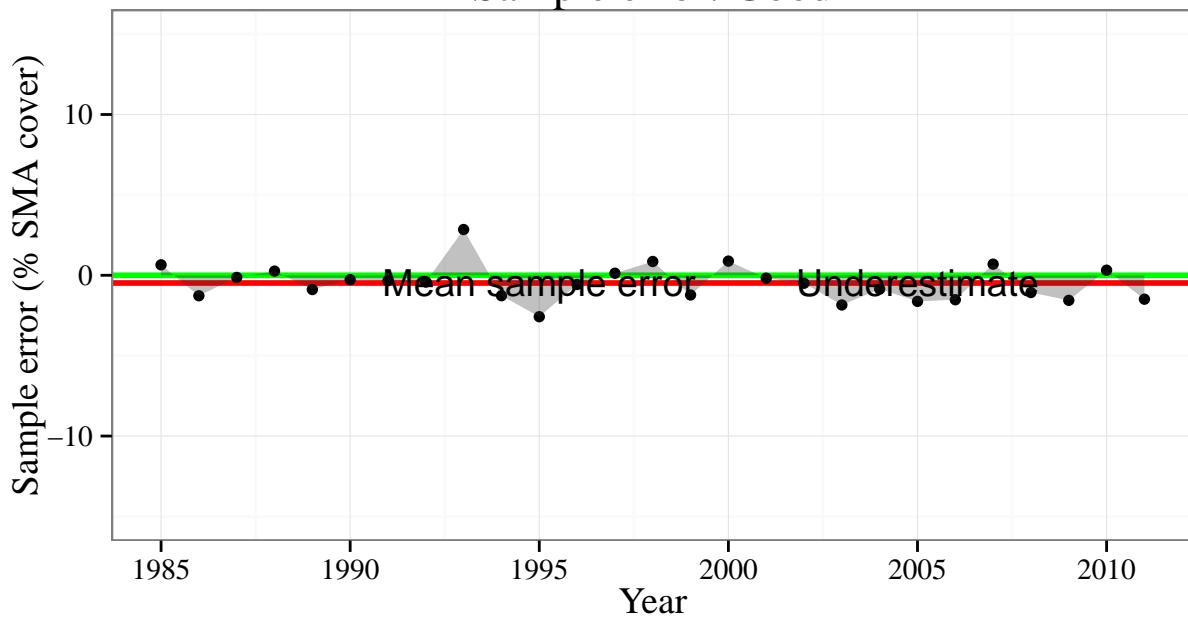
BGP031 Sample error: Good



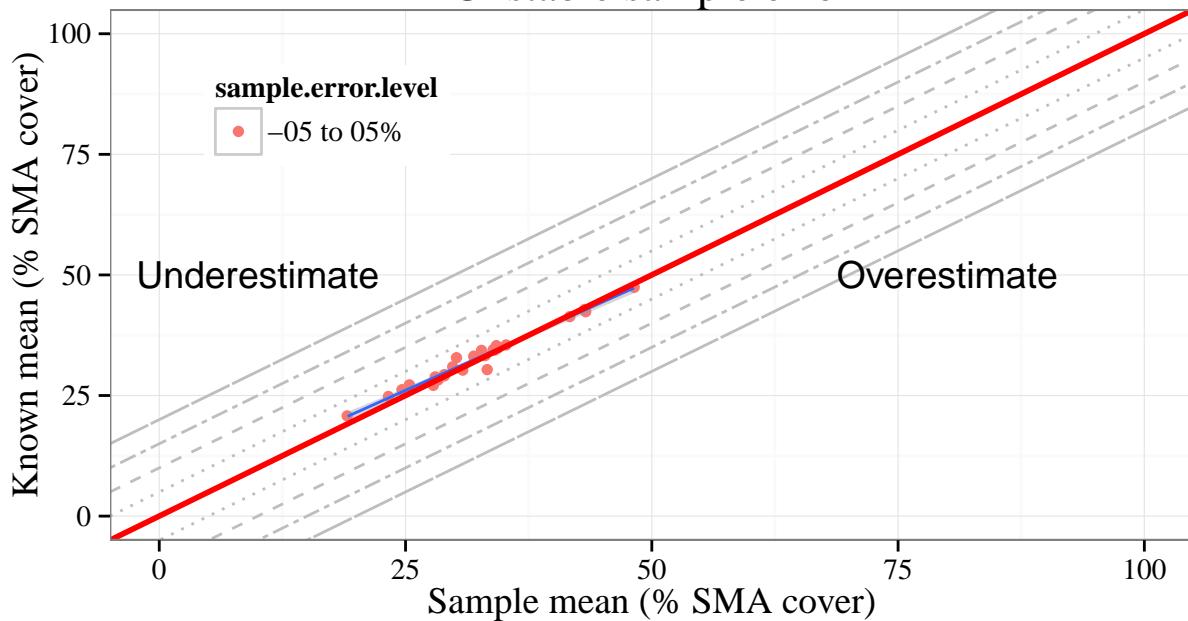
BGP031 Stable sample error



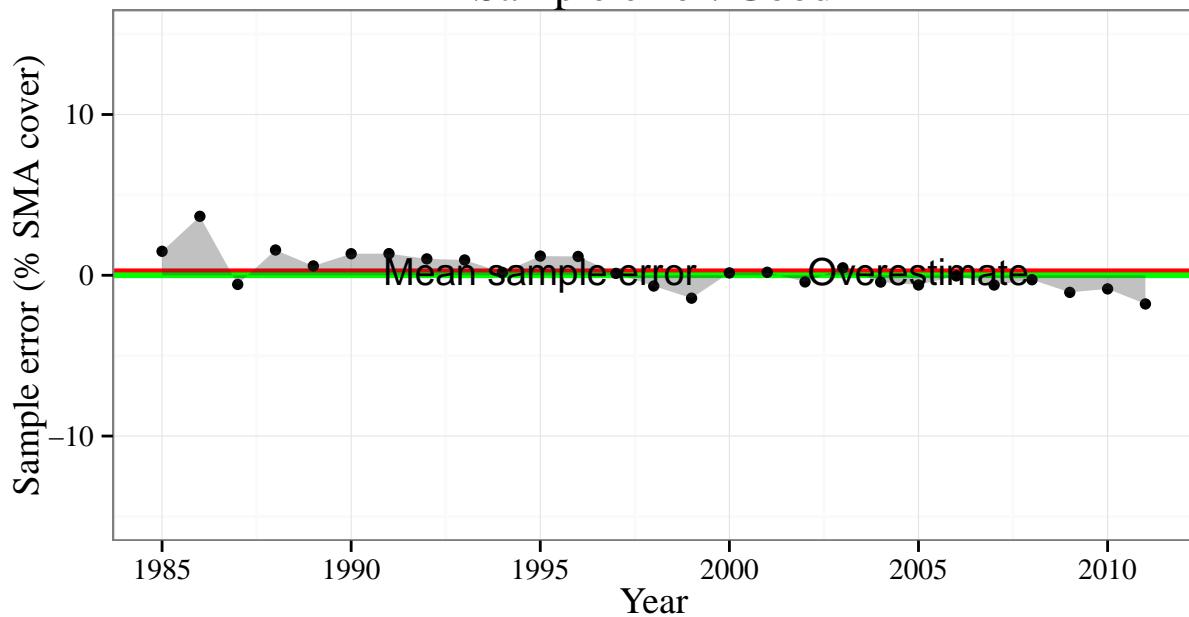
BGP047 Sample error: Good



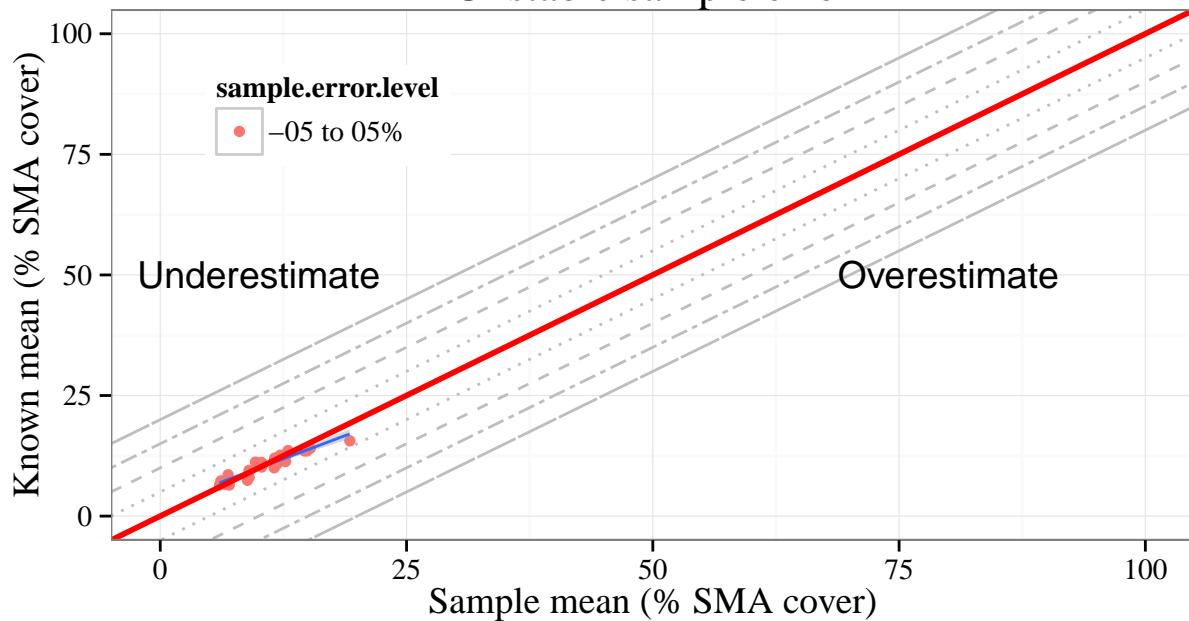
BGP047 Unstable sample error



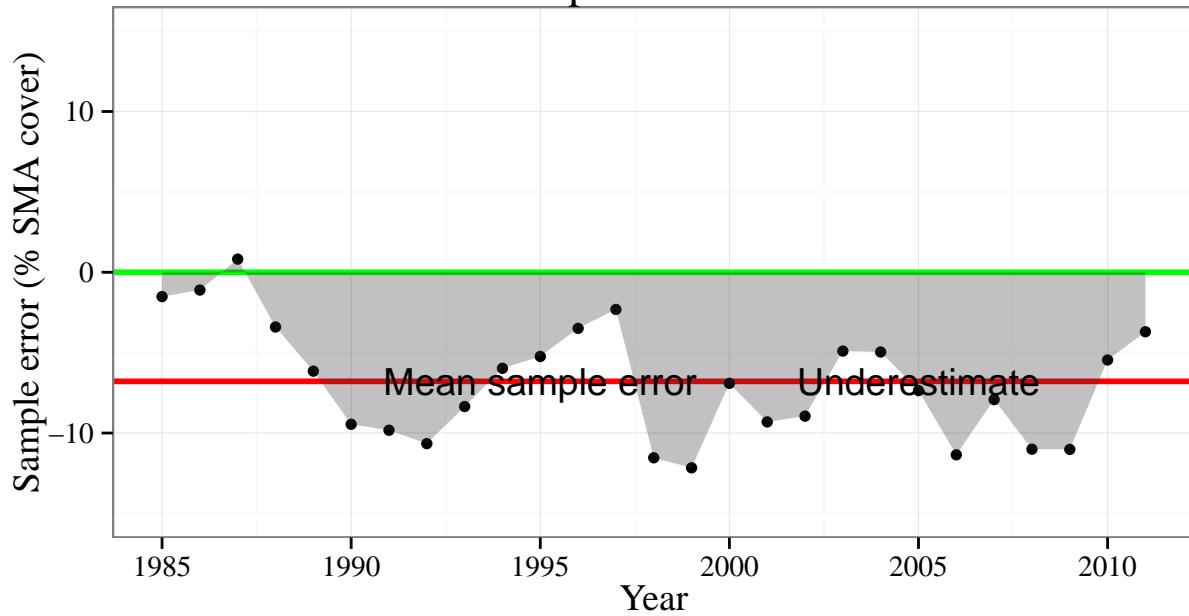
BGP088 Sample error: Good



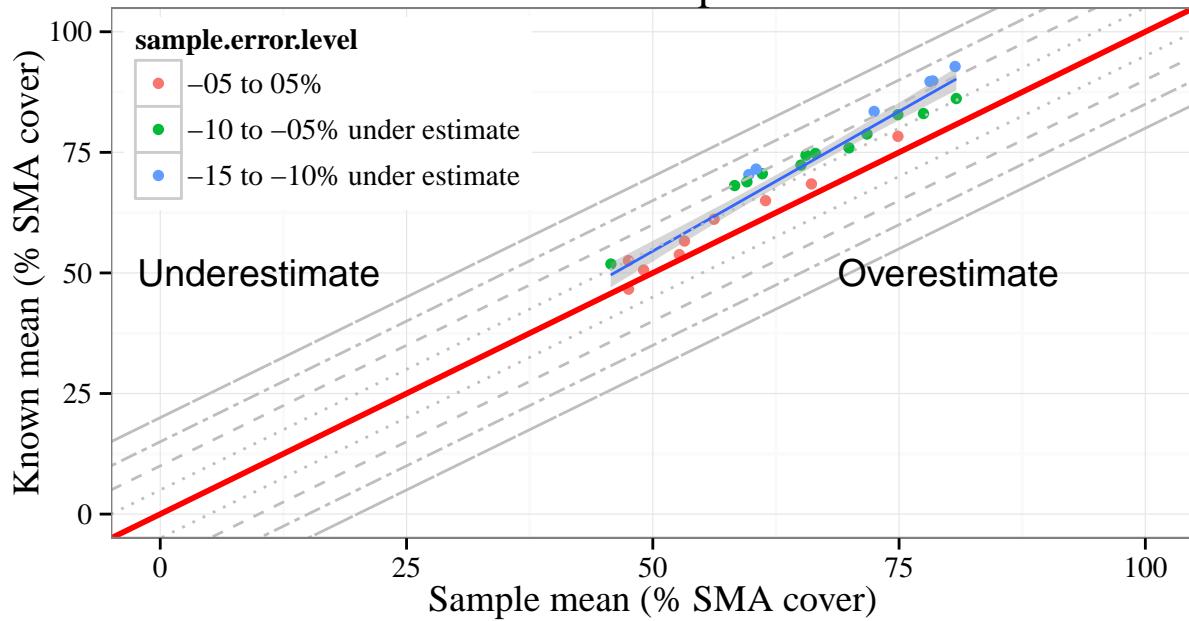
BGP088 Unstable sample error



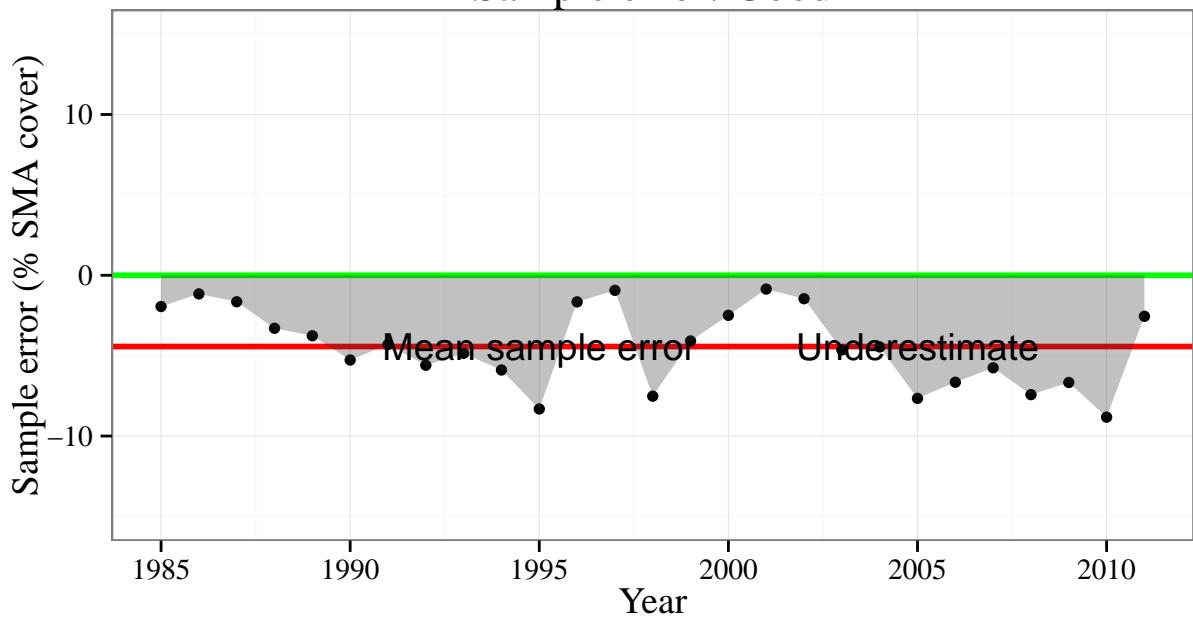
BGP094 Sample error: Fair



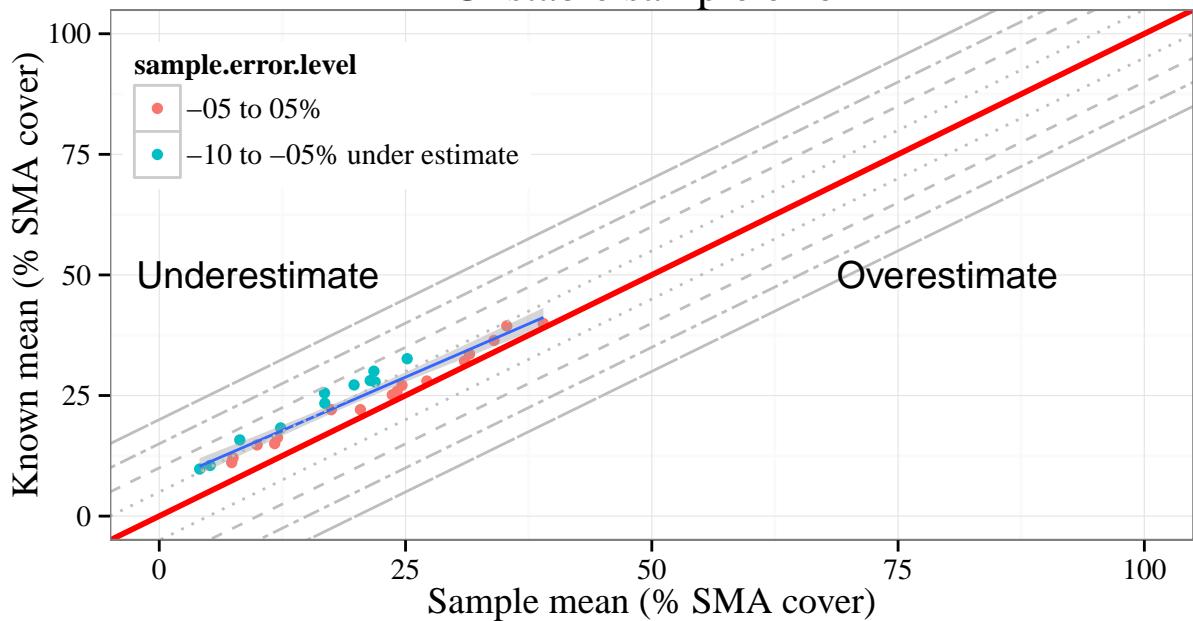
BGP094 Unstable sample error



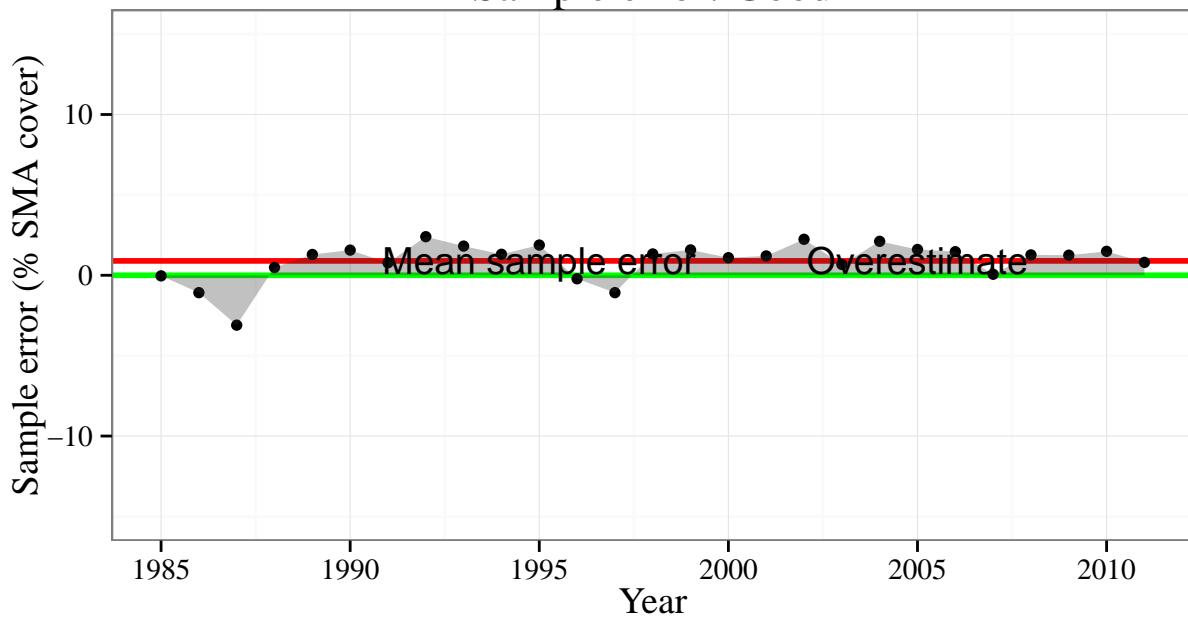
BGP154 Sample error: Good



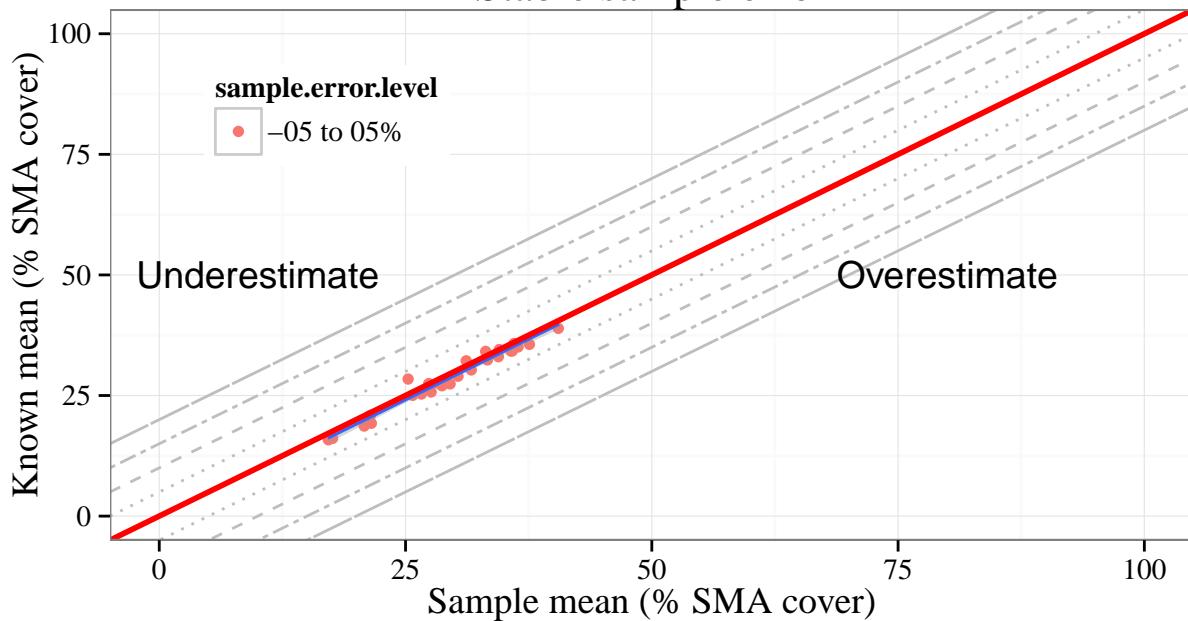
BGP154 Unstable sample error



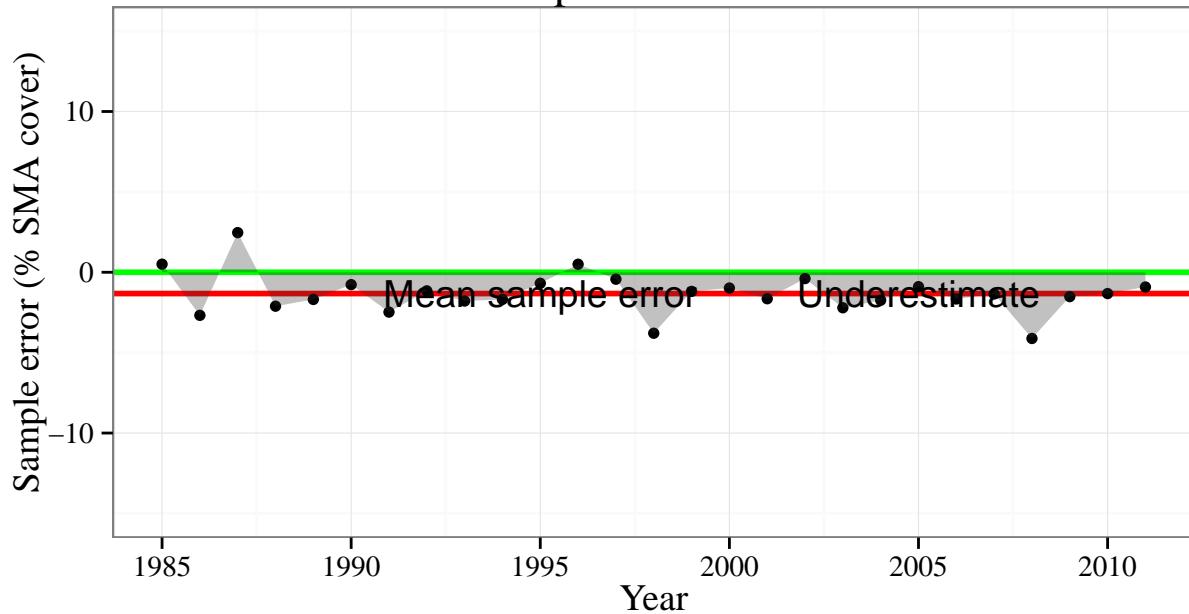
BGP157 Sample error: Good



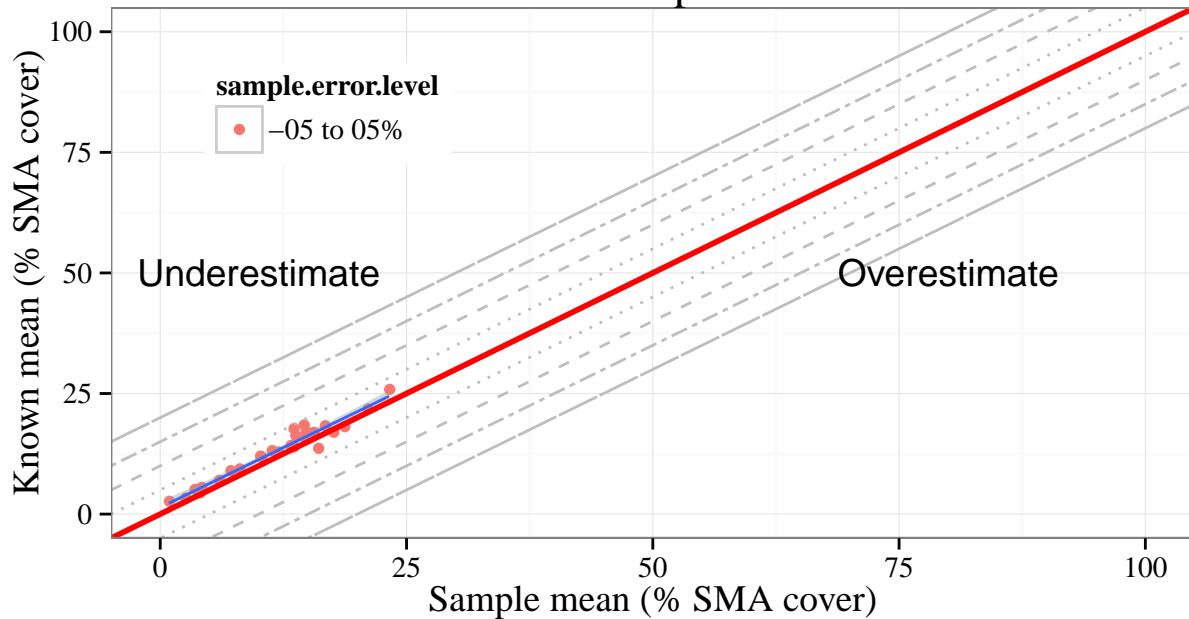
BGP157 Stable sample error



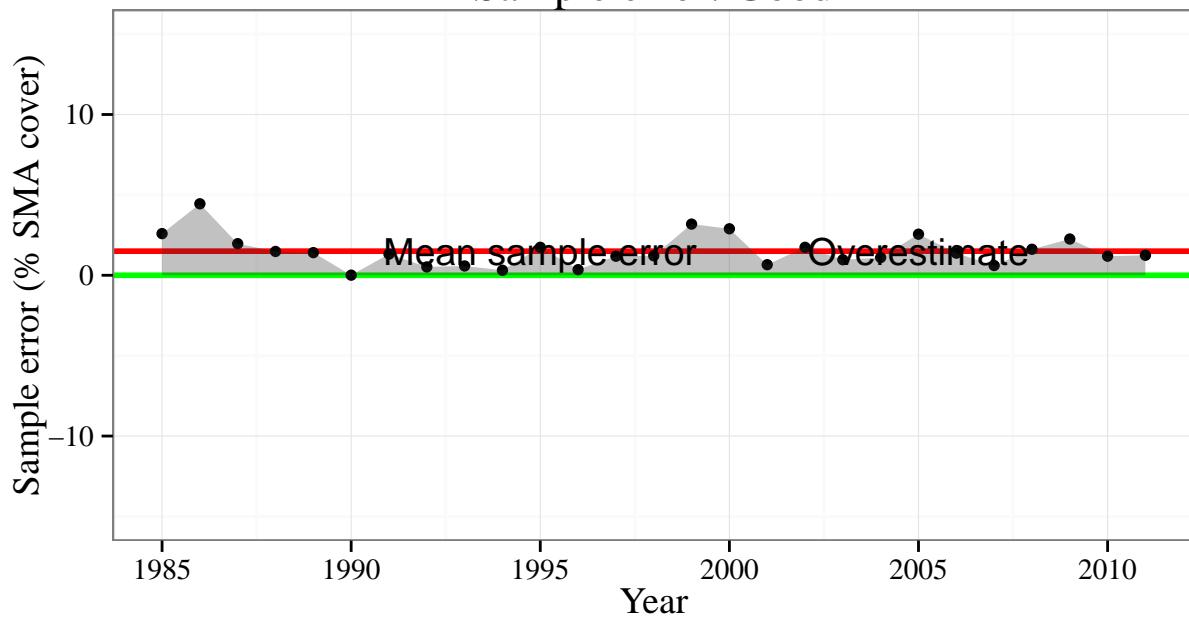
BGP162 Sample error: Good



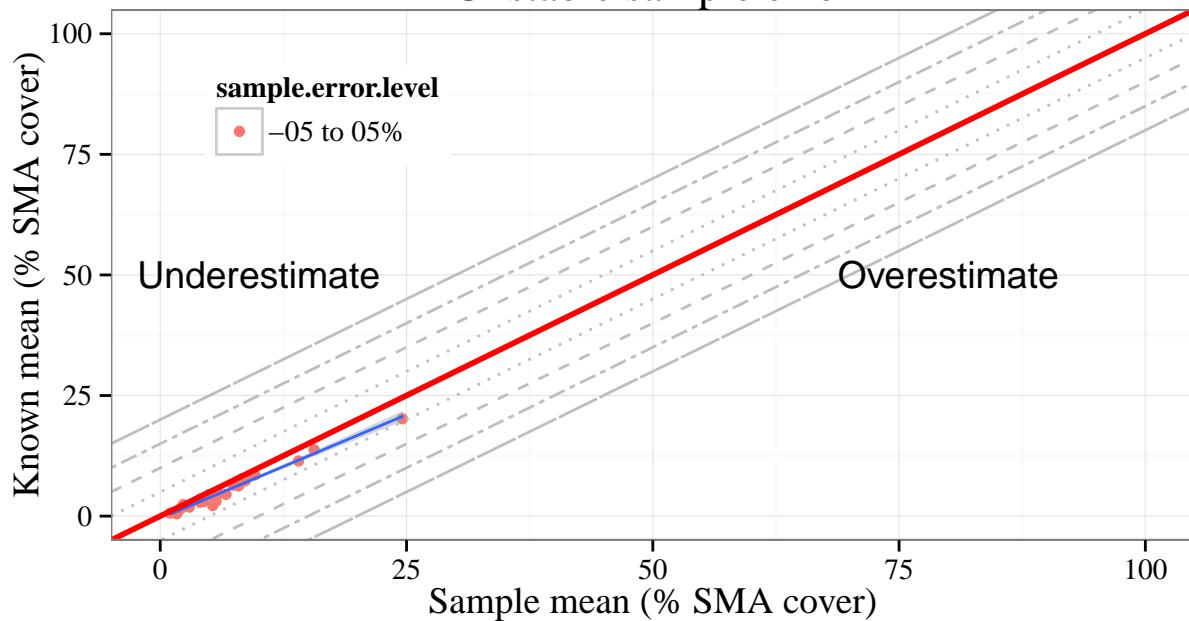
BGP162 Stable sample error



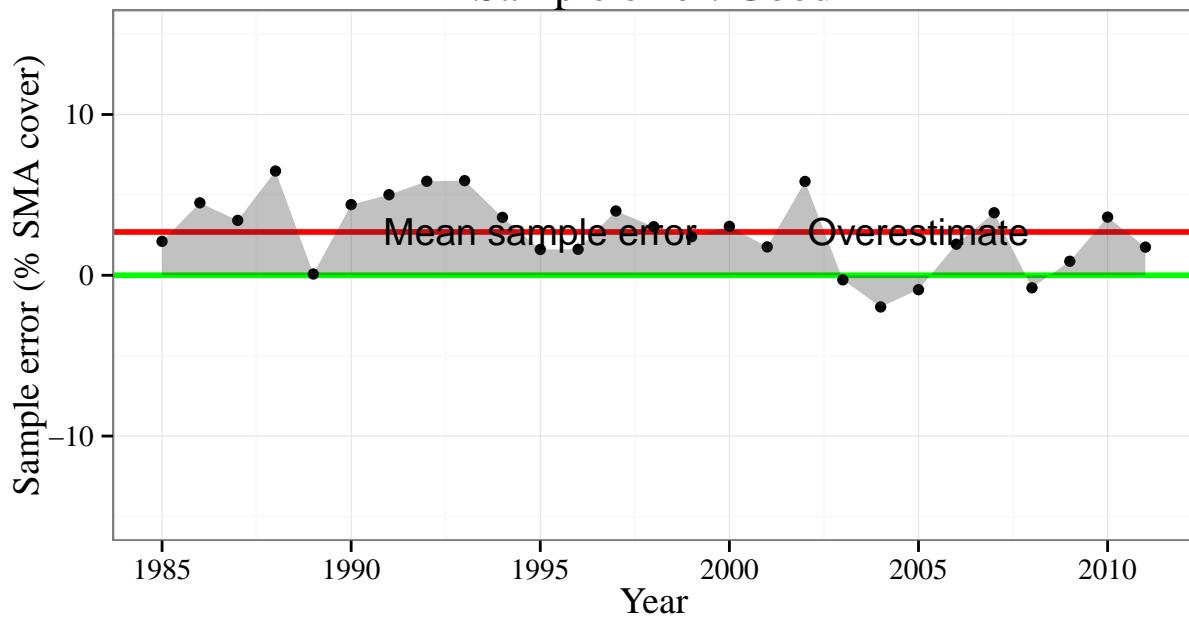
BGP182 Sample error: Good



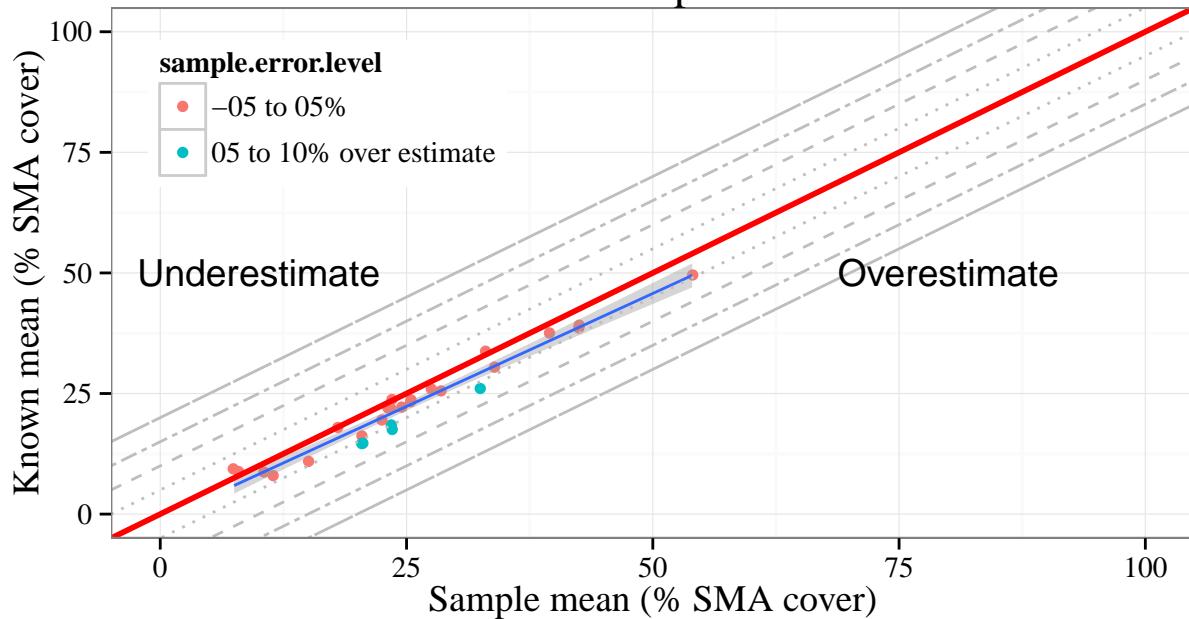
BGP182 Unstable sample error



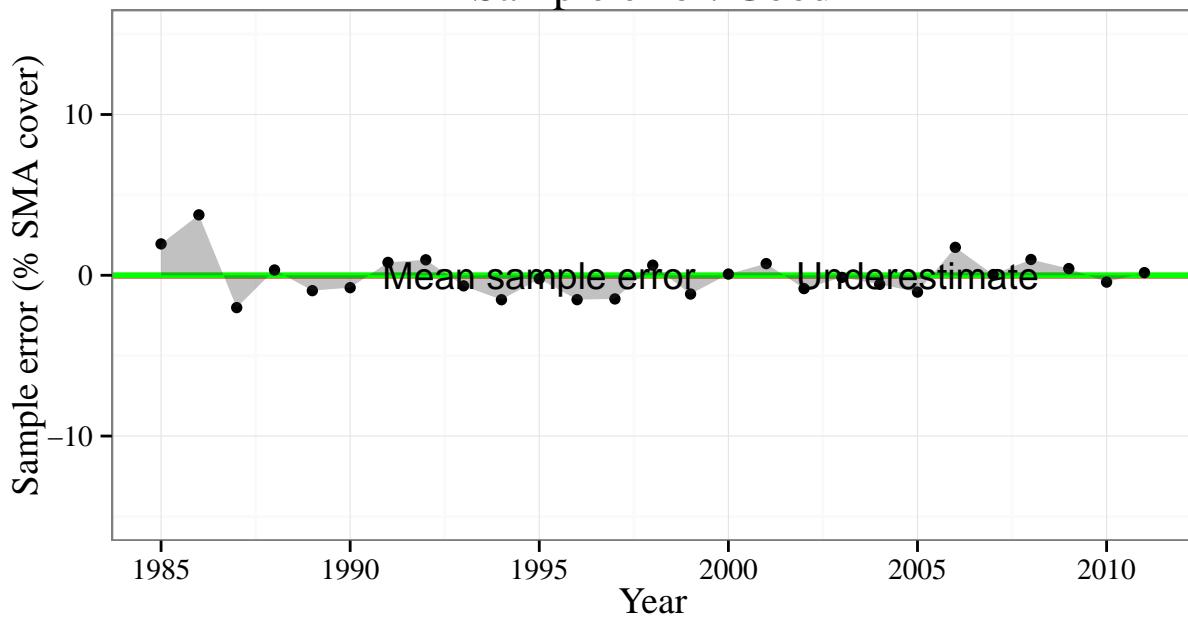
BGP188 Sample error: Good



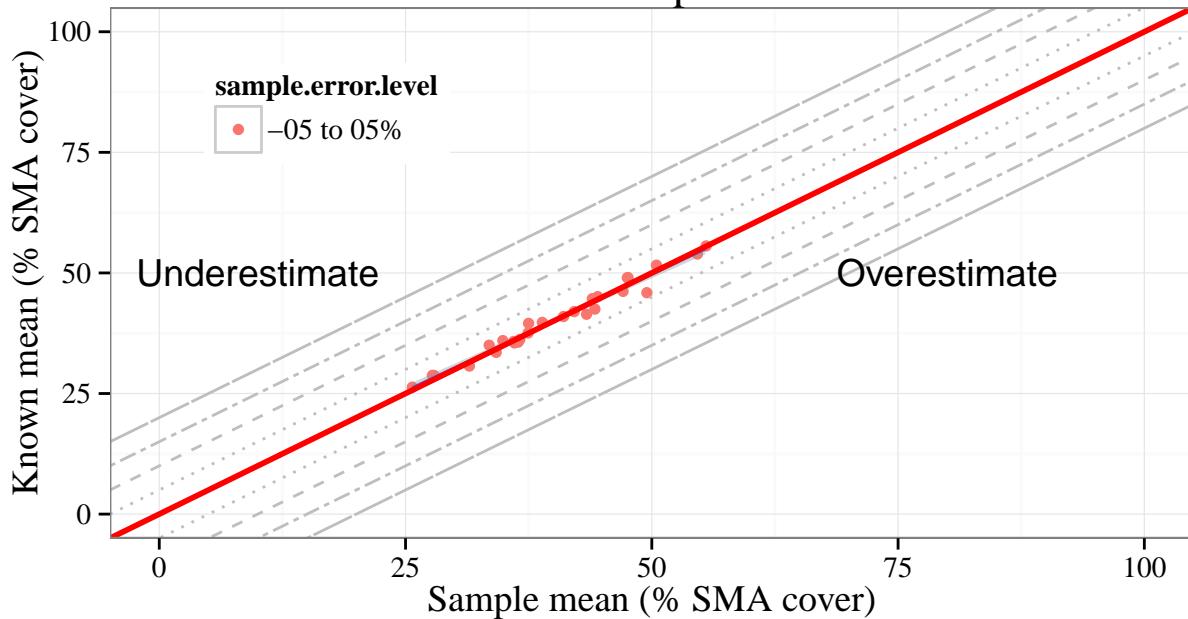
BGP188 Stable sample error



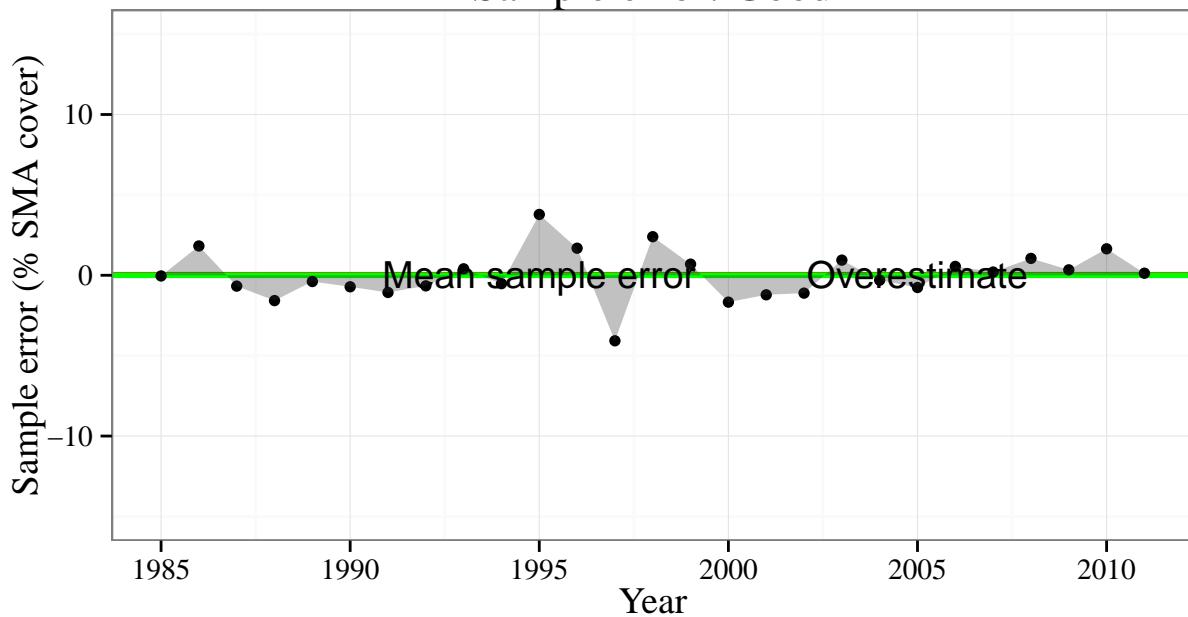
BIS055 Sample error: Good



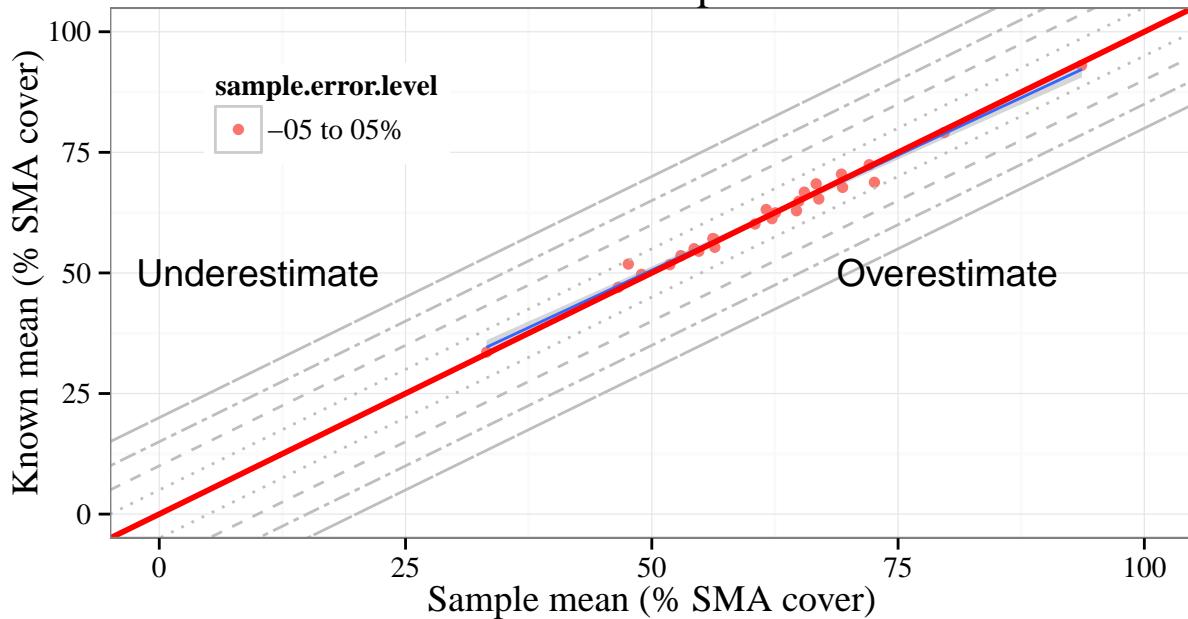
BIS055 Stable sample error



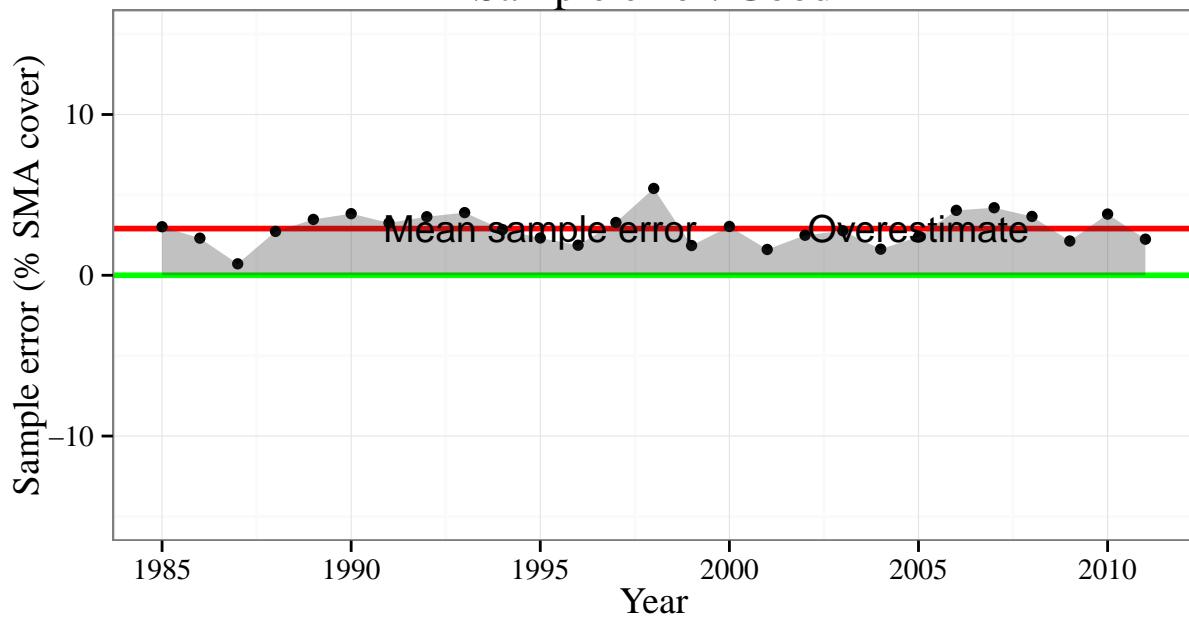
BIS060 Sample error: Good



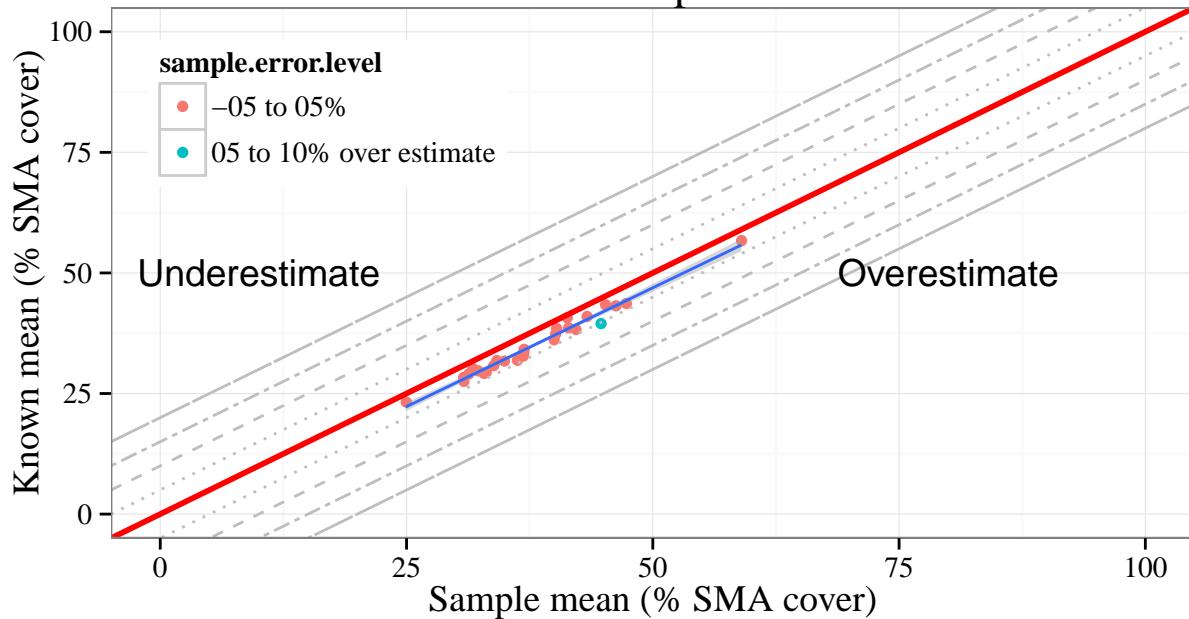
BIS060 Unstable sample error



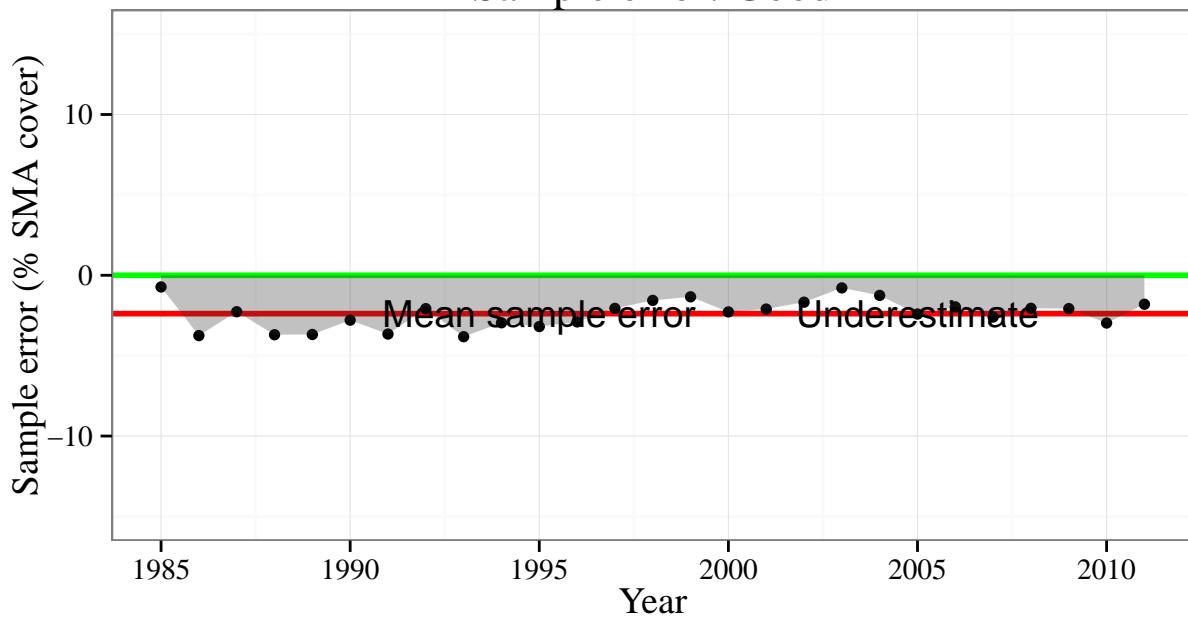
BIS085 Sample error: Good



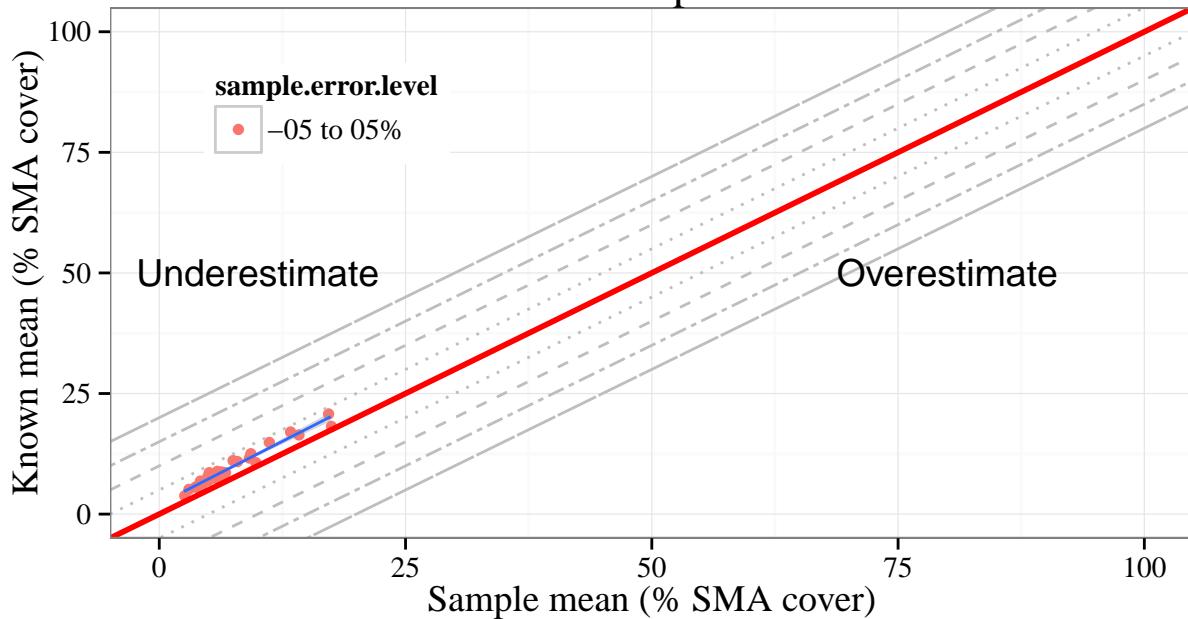
BIS085 Stable sample error



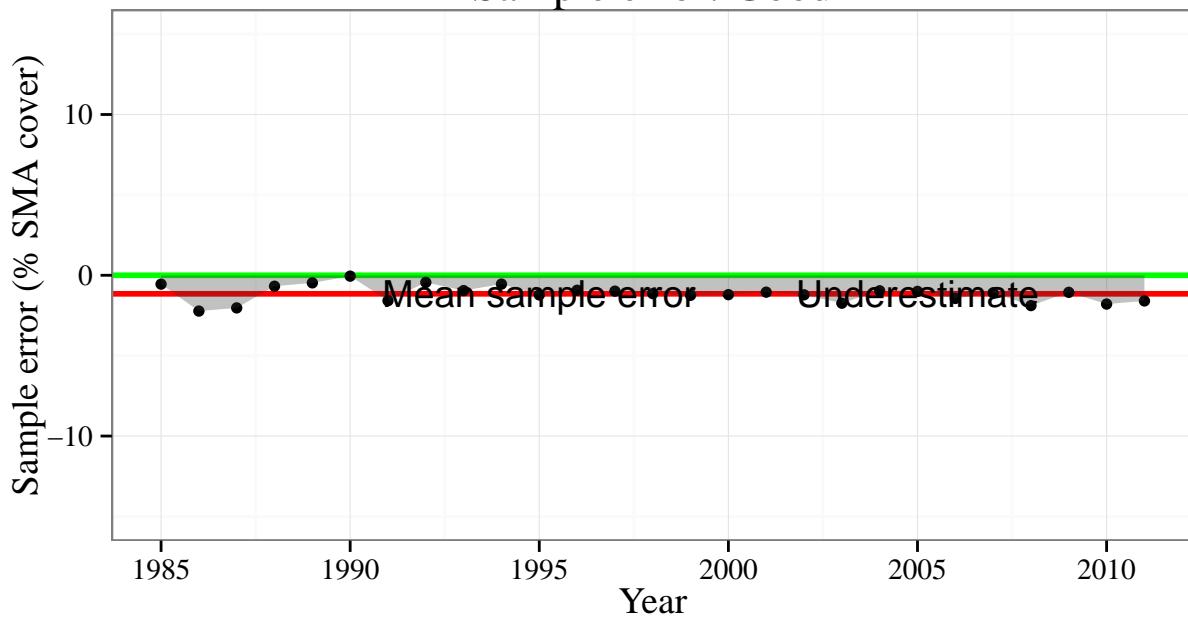
BLK002
Sample error: Good



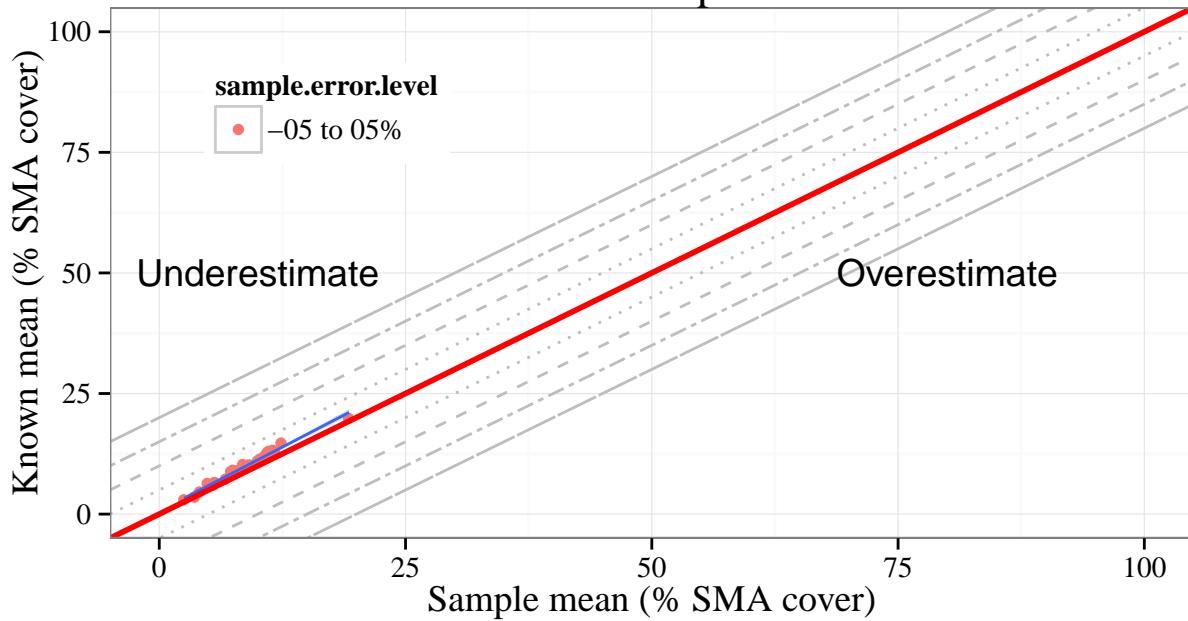
BLK002
Stable sample error



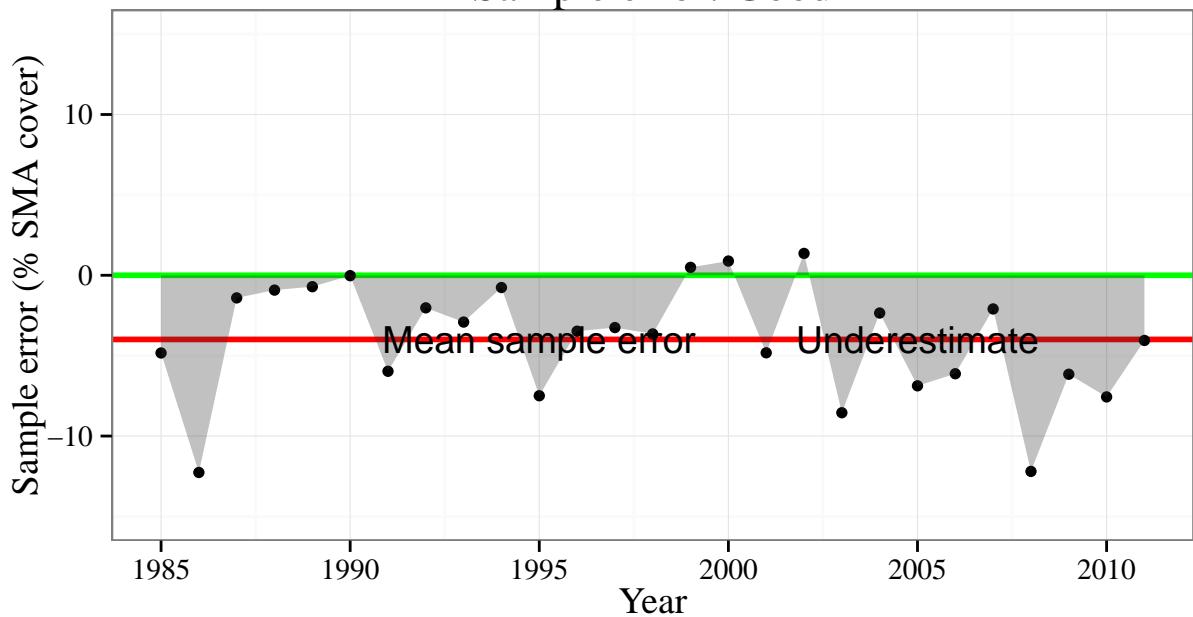
BLK009
Sample error: Good



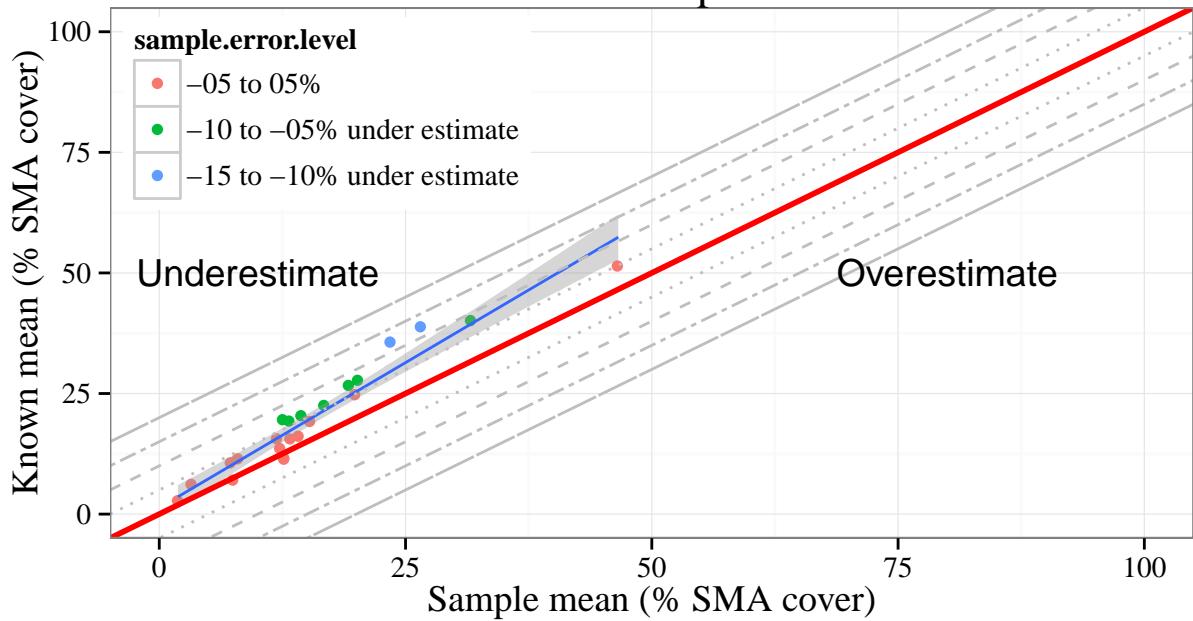
BLK009
Unstable sample error



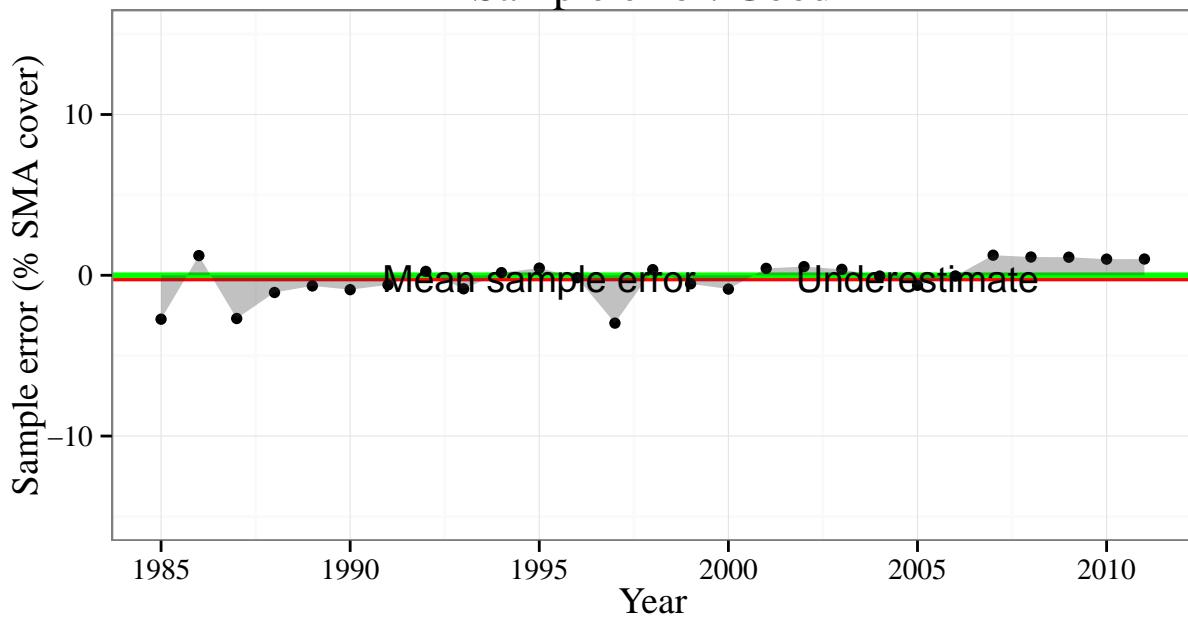
BLK011 Sample error: Good



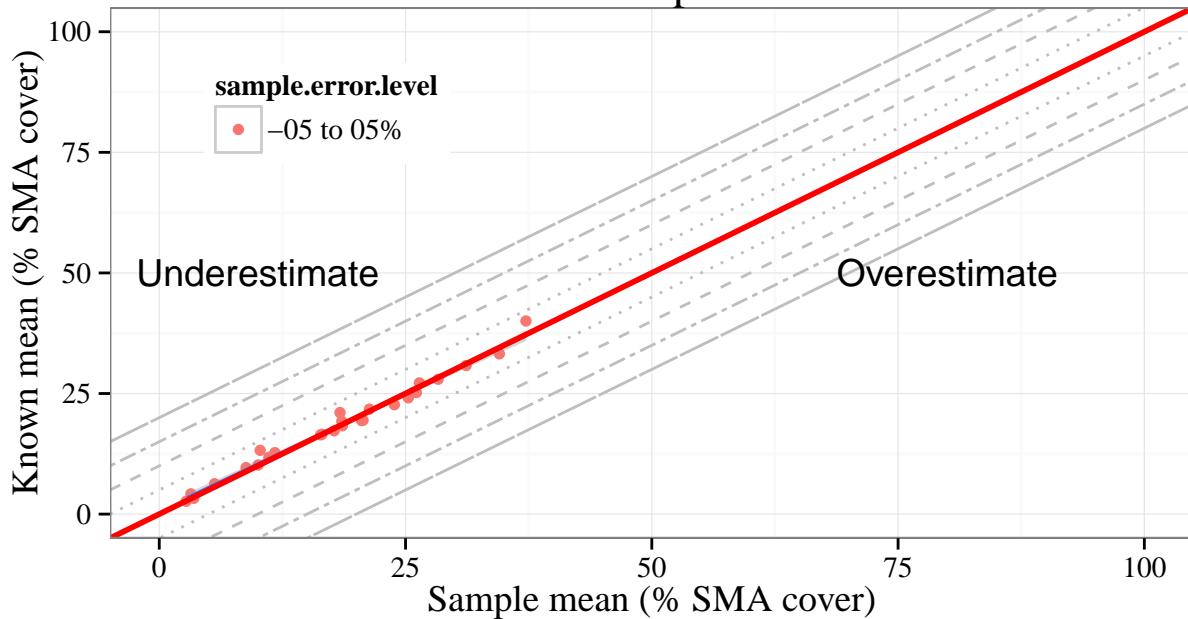
BLK011 Unstable sample error



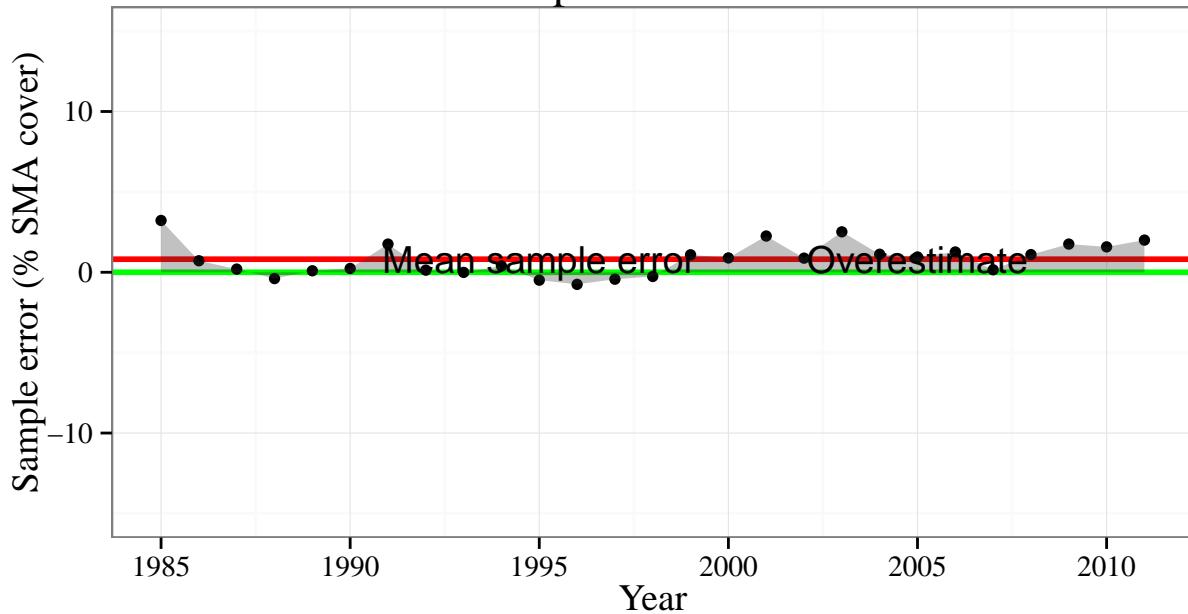
BLK016 Sample error: Good



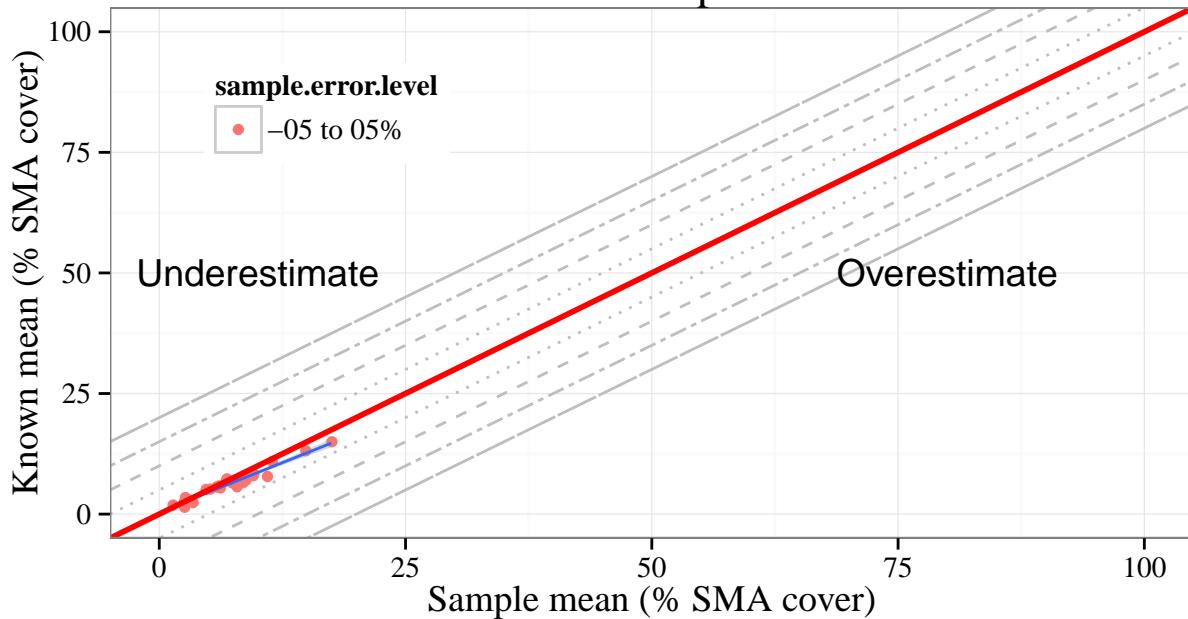
BLK016 Stable sample error



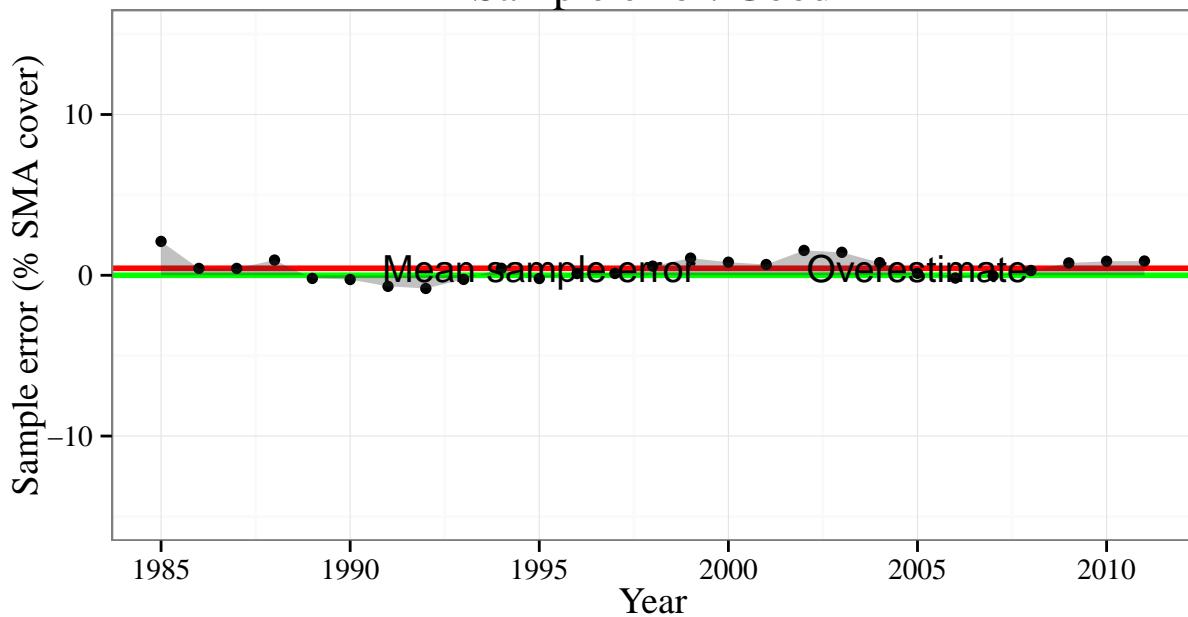
BLK021 Sample error: Good



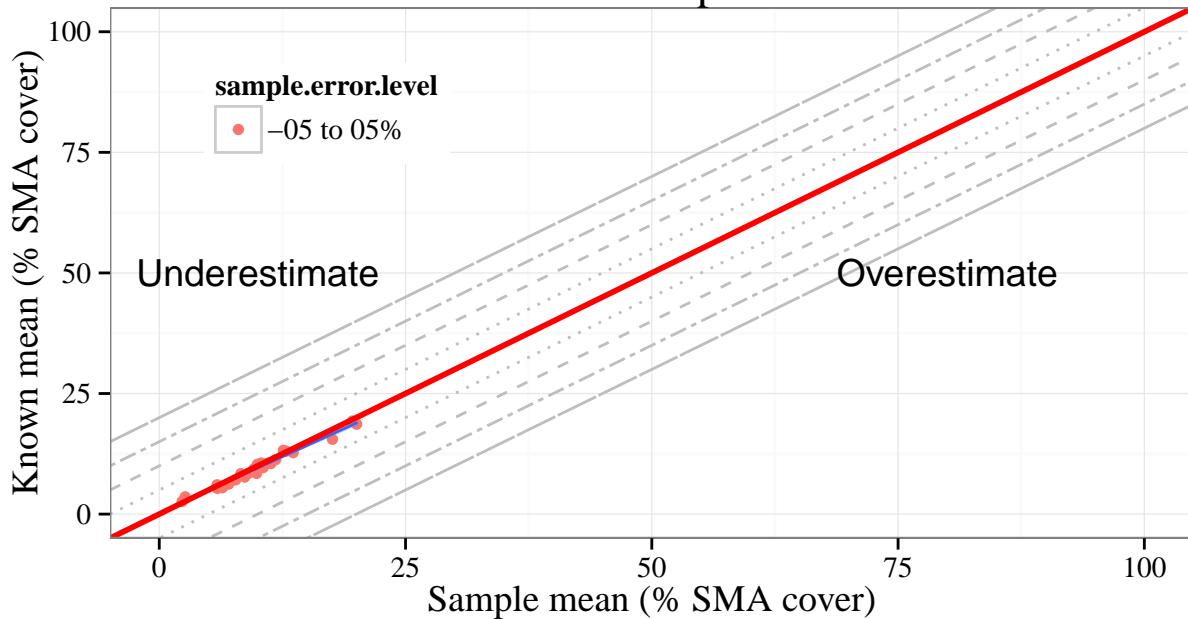
BLK021 Unstable sample error



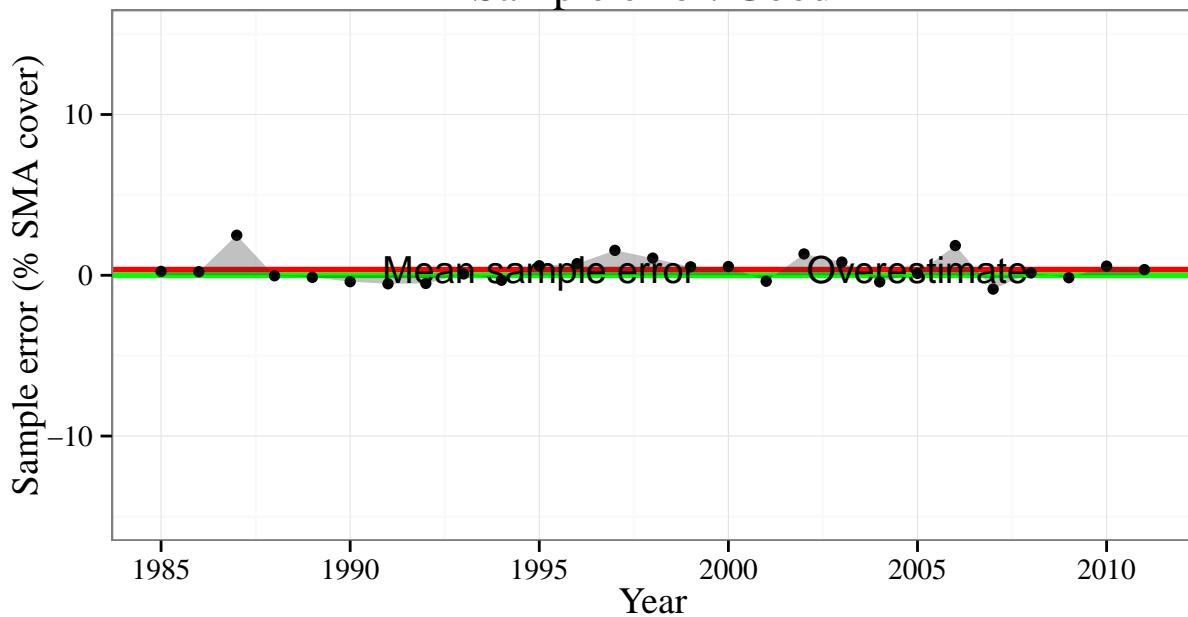
BLK024
Sample error: Good



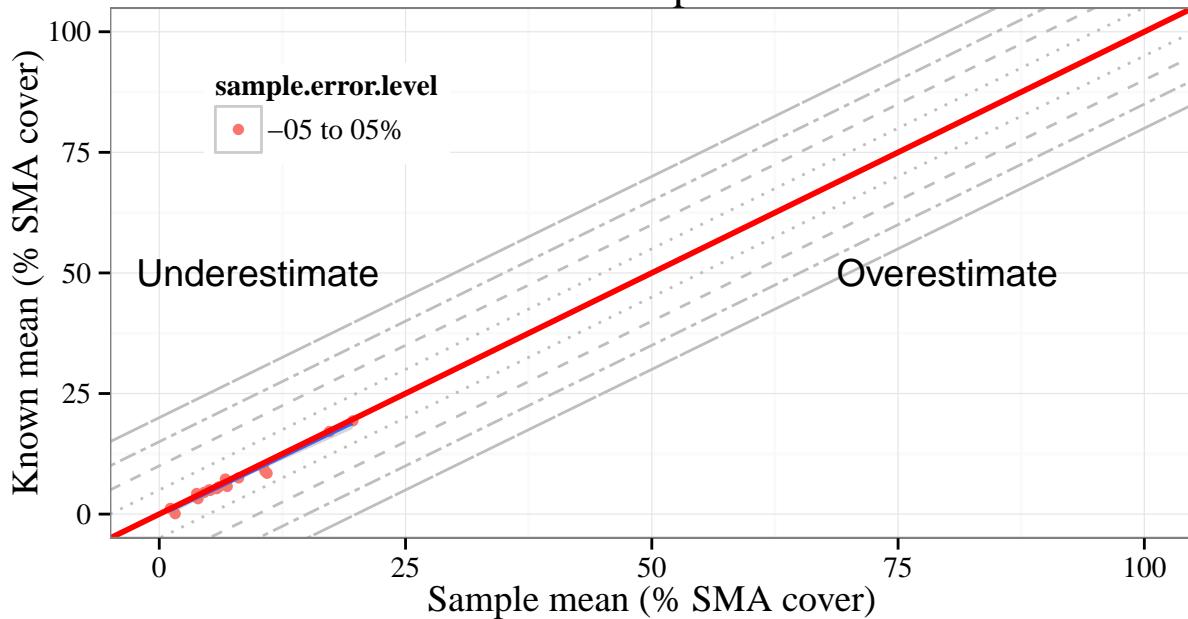
BLK024
Unstable sample error



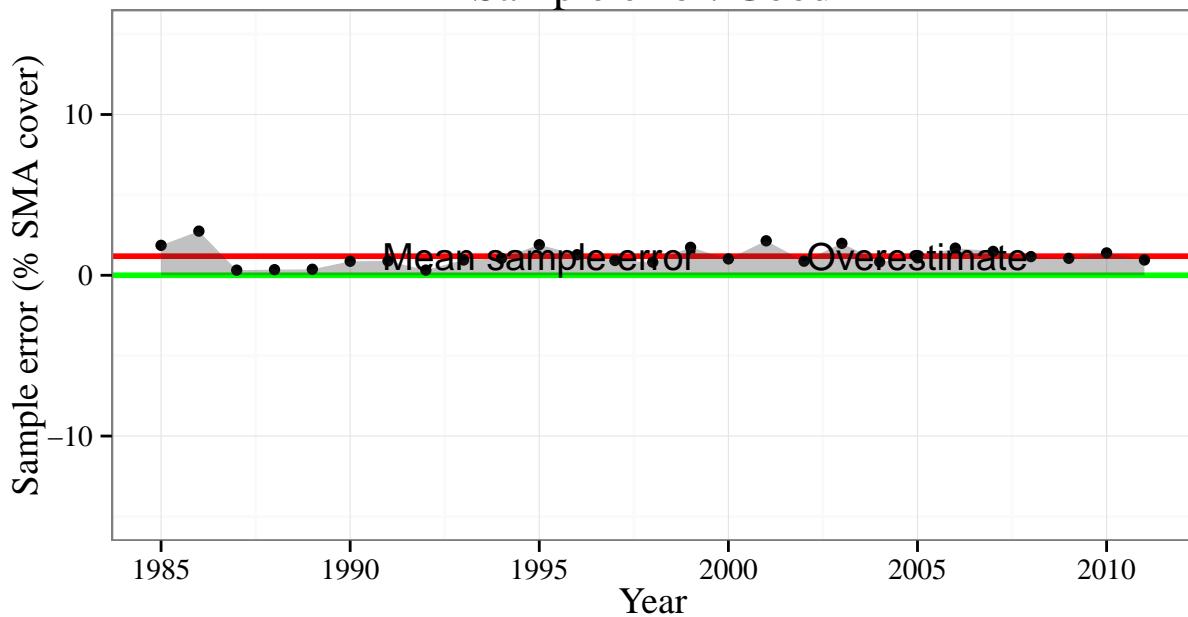
BLK033
Sample error: Good



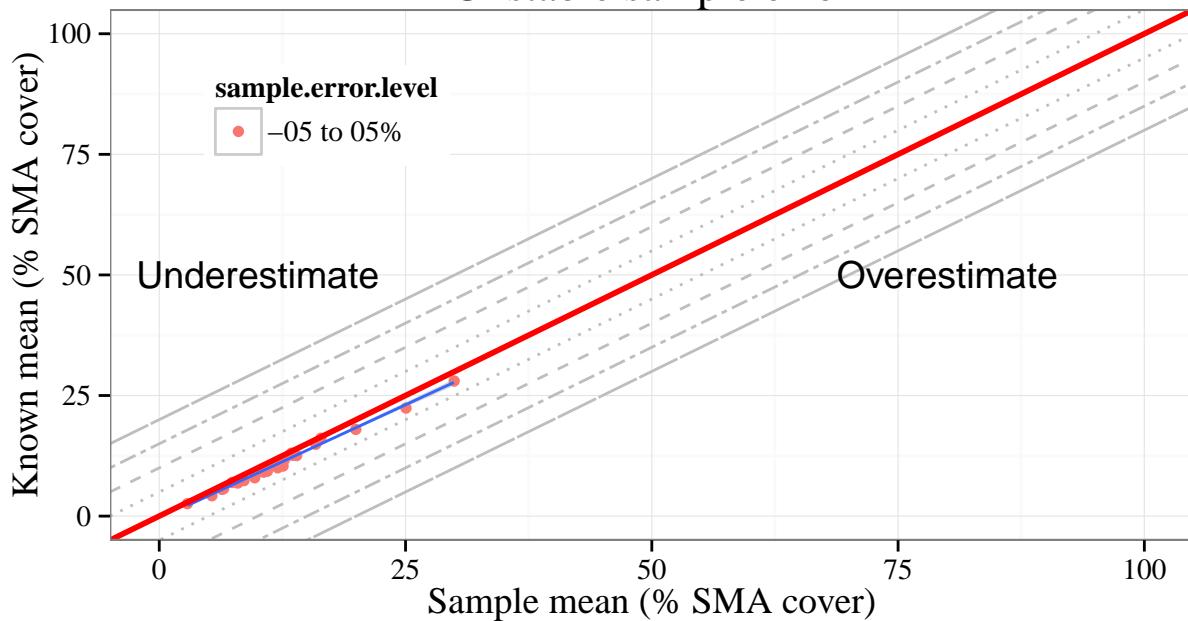
BLK033
Stable sample error



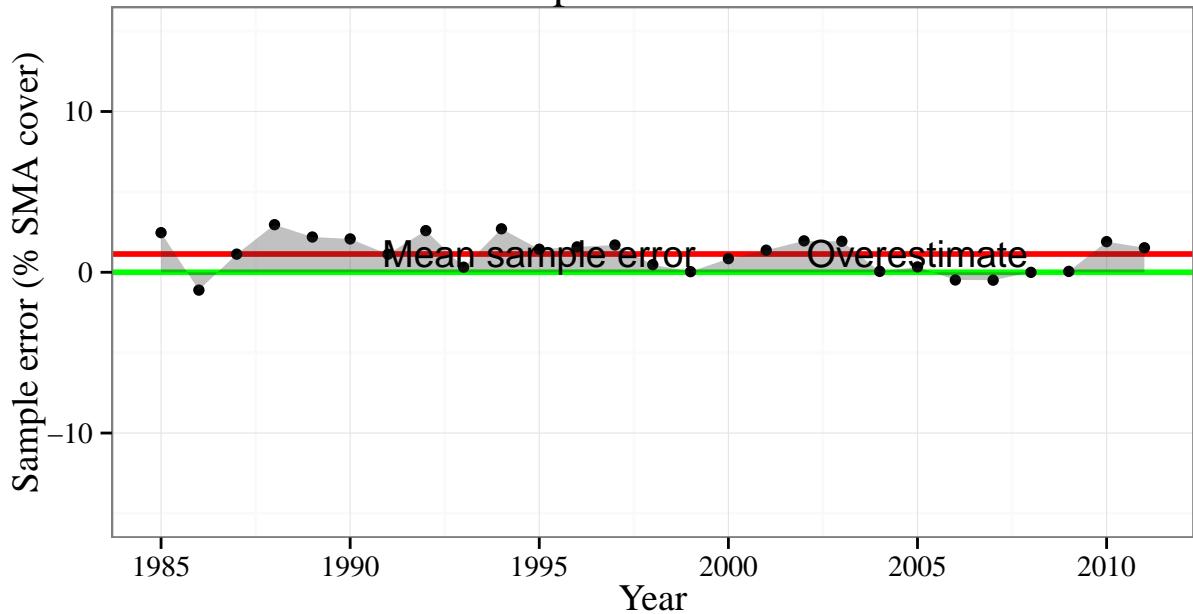
BLK039
Sample error: Good



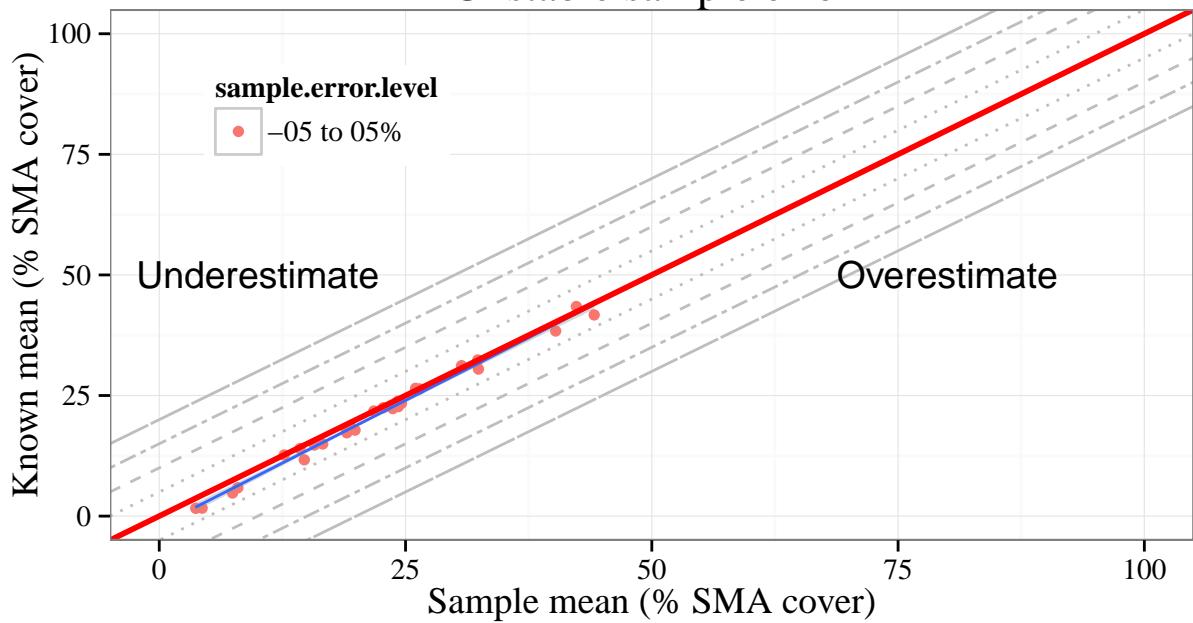
BLK039
Unstable sample error



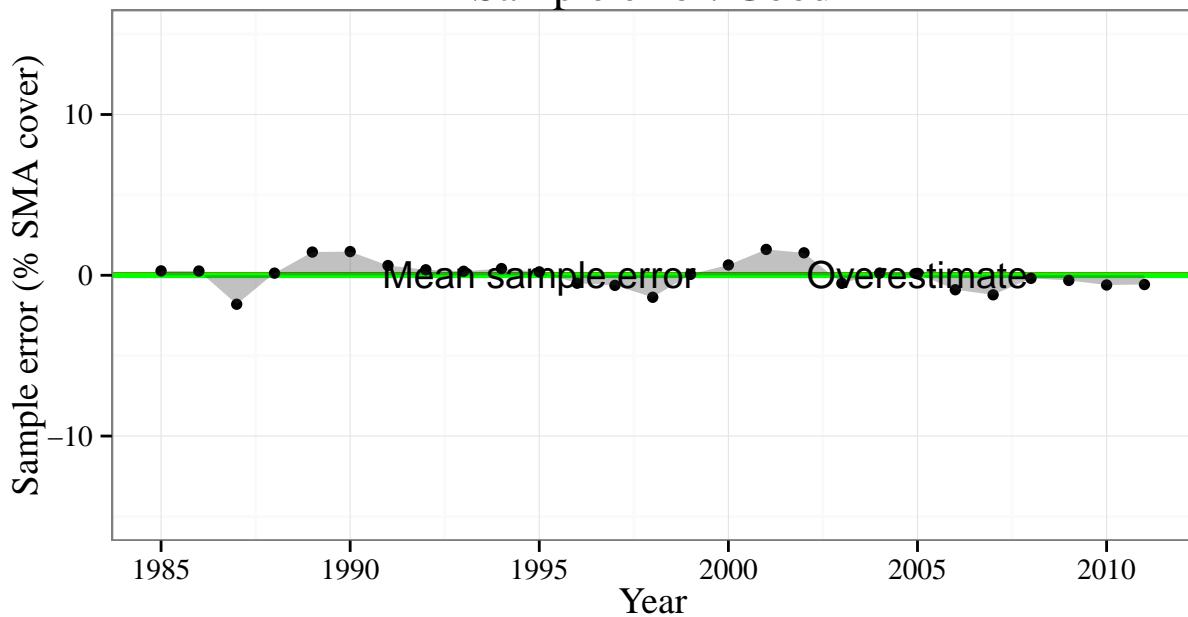
BLK044
Sample error: Good



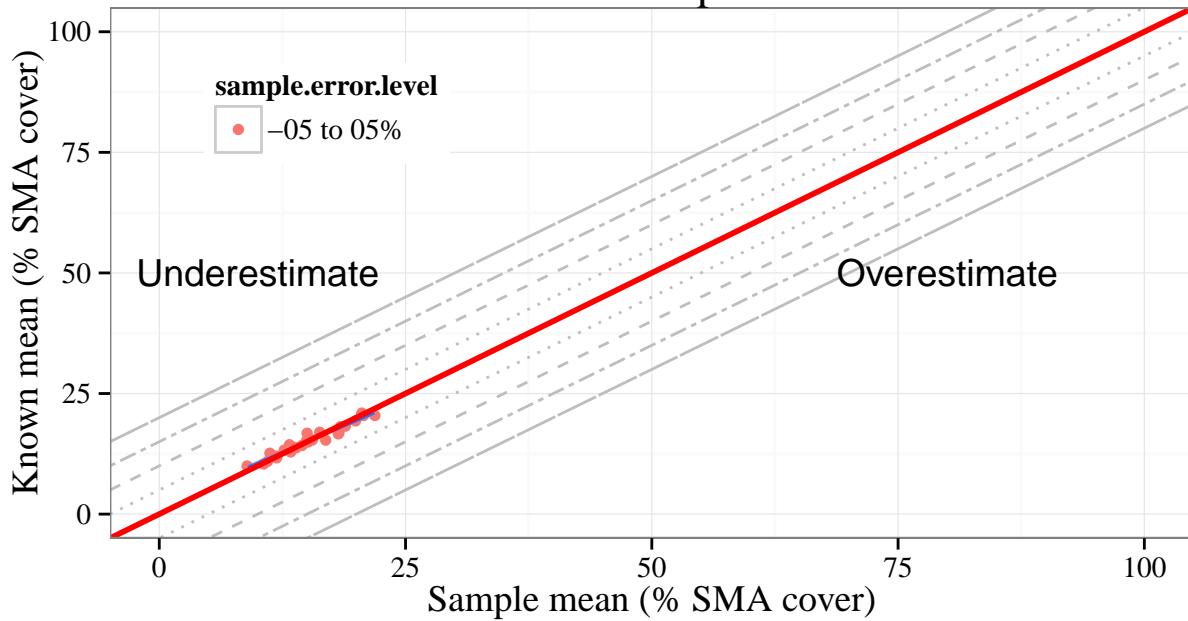
BLK044
Unstable sample error



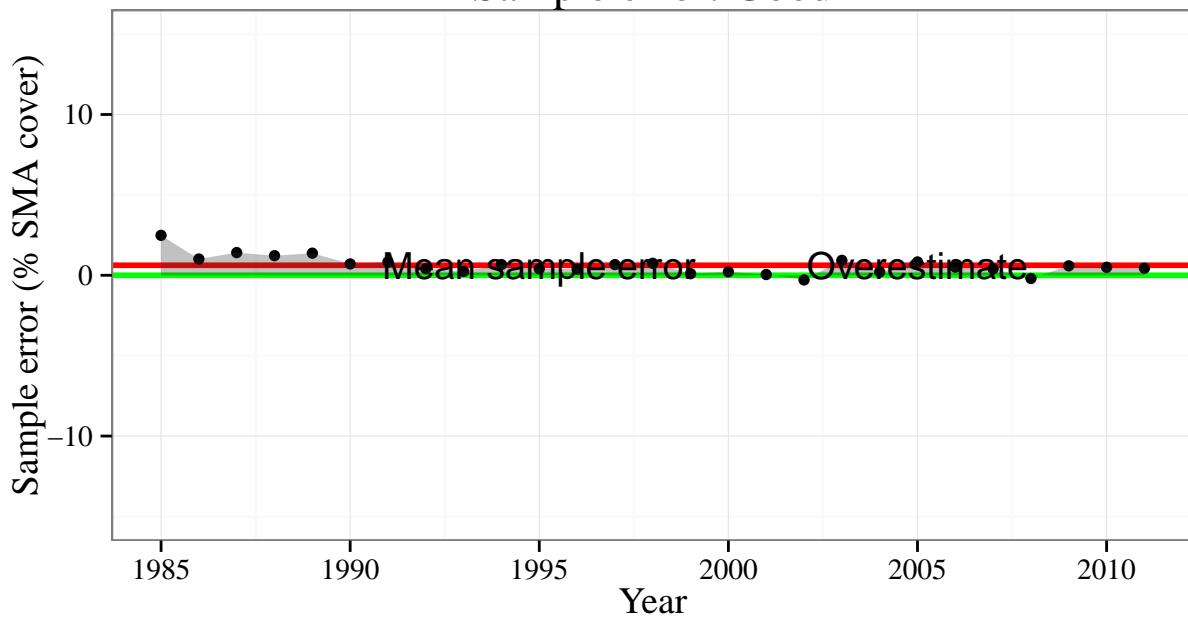
BLK059
Sample error: Good



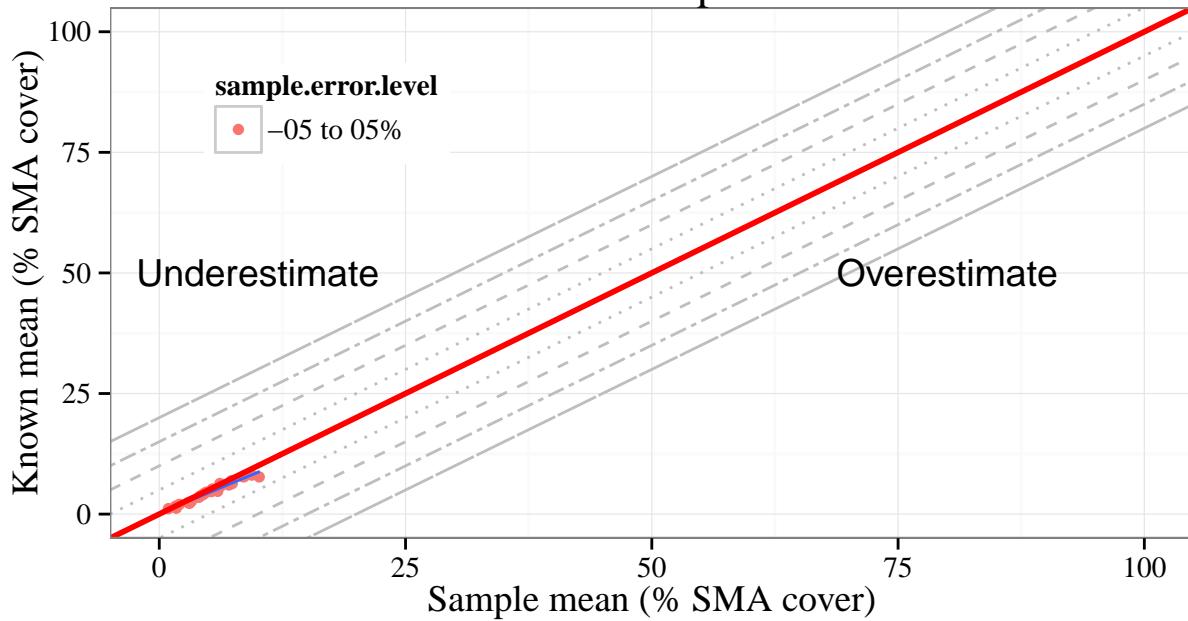
BLK059
Unstable sample error



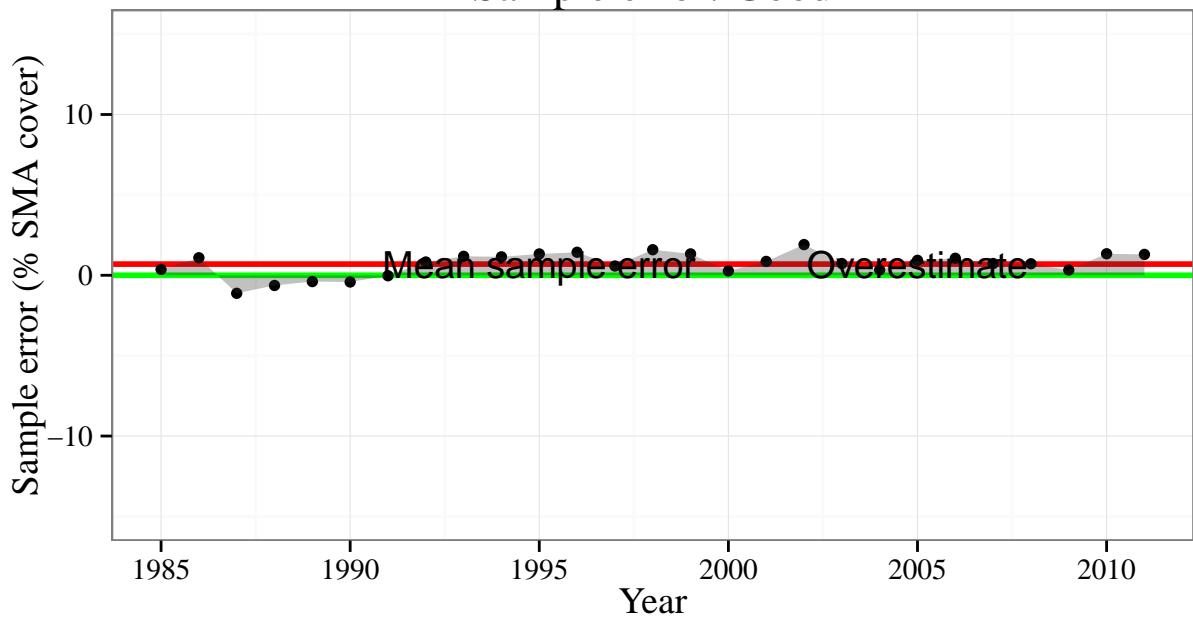
BLK069
Sample error: Good



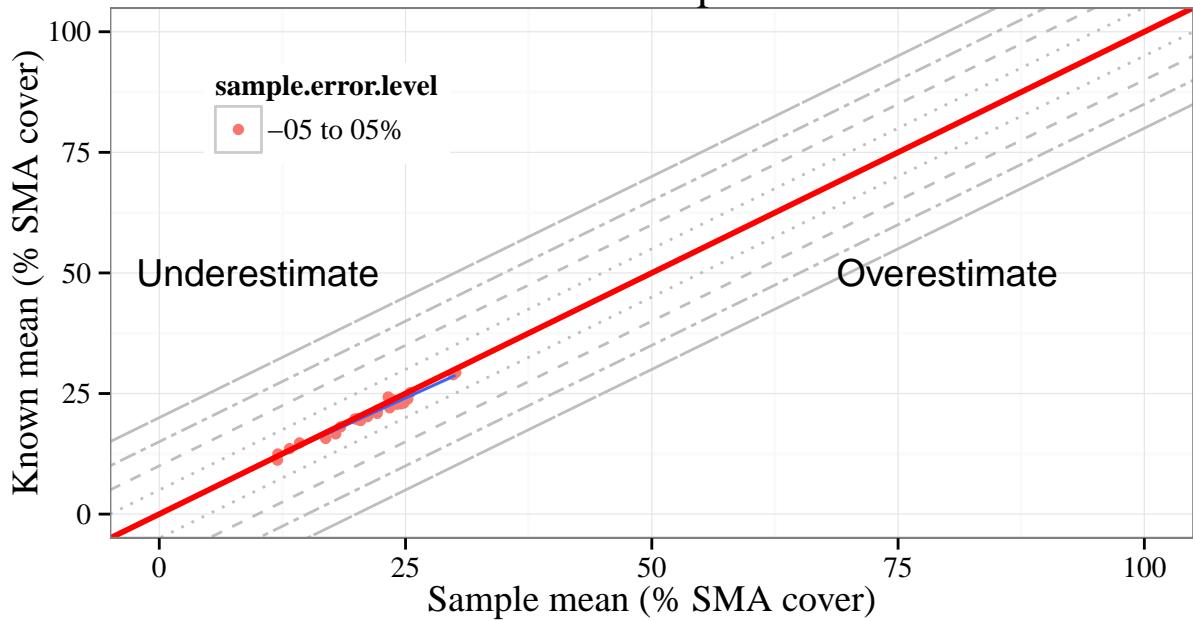
BLK069
Unstable sample error



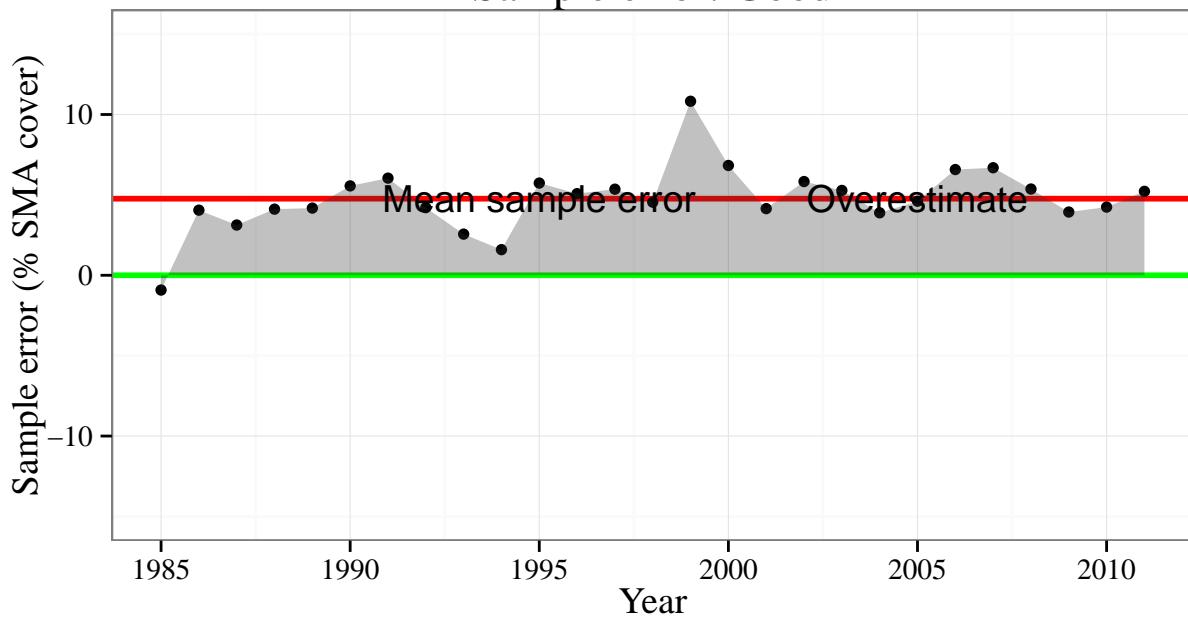
BLK074
Sample error: Good



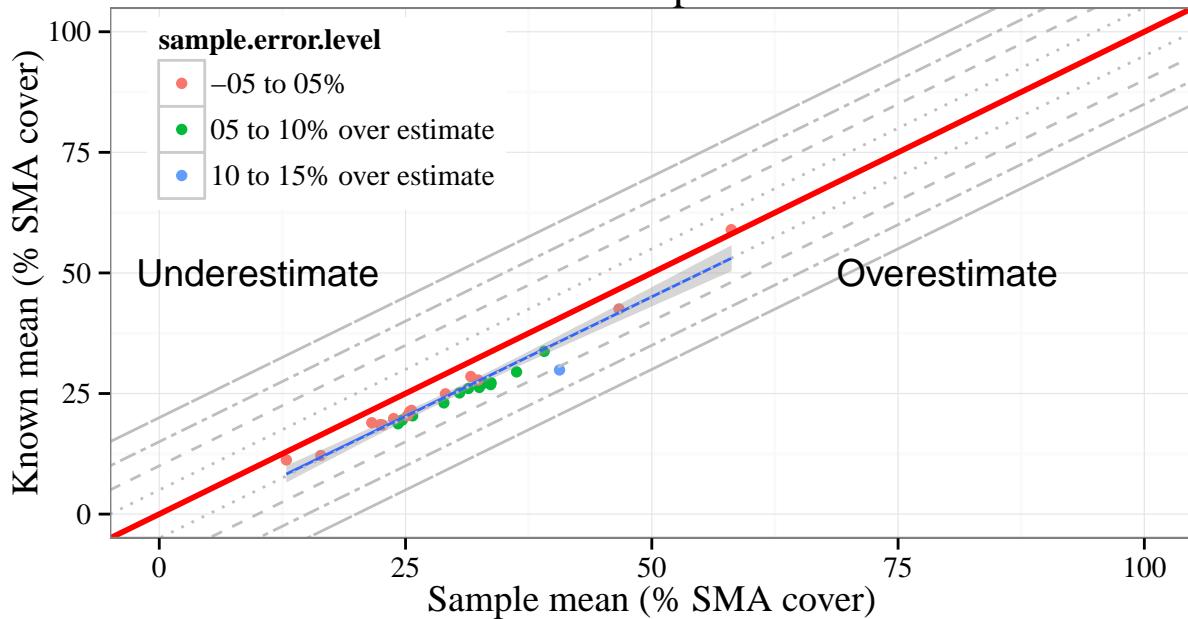
BLK074
Unstable sample error



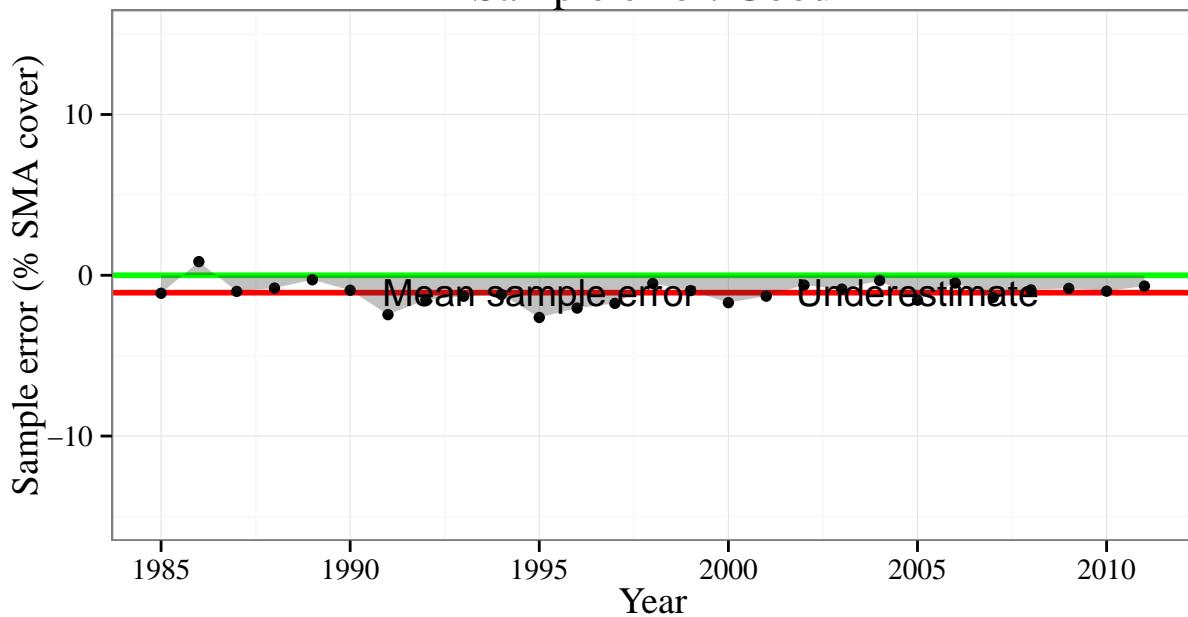
BLK075 Sample error: Good



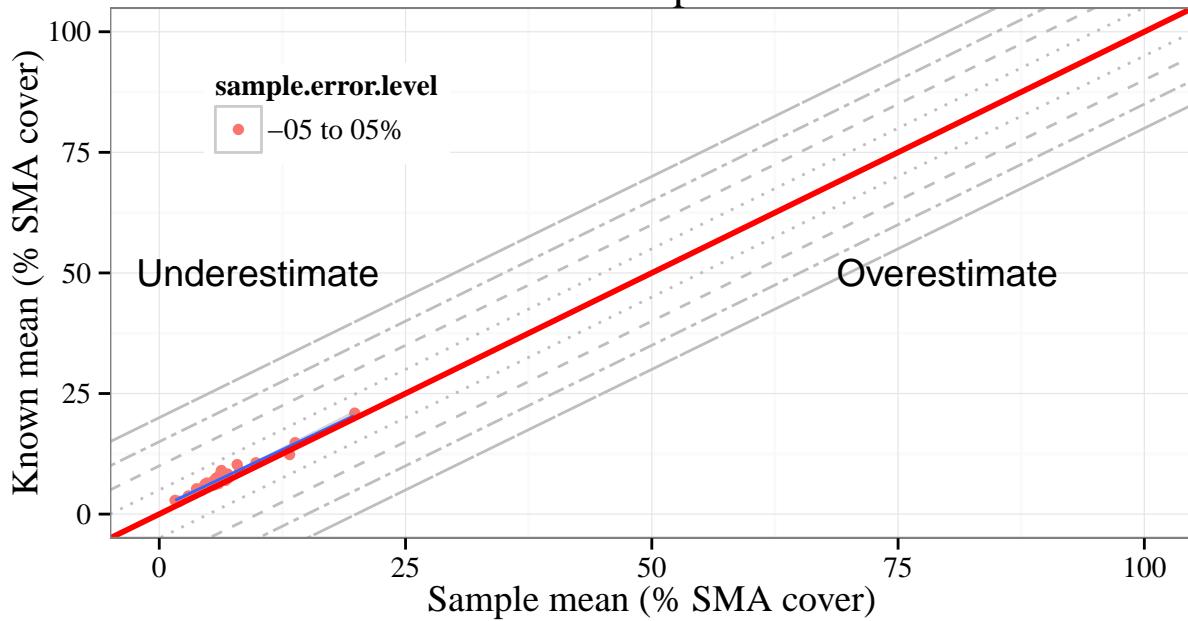
BLK075 Stable sample error



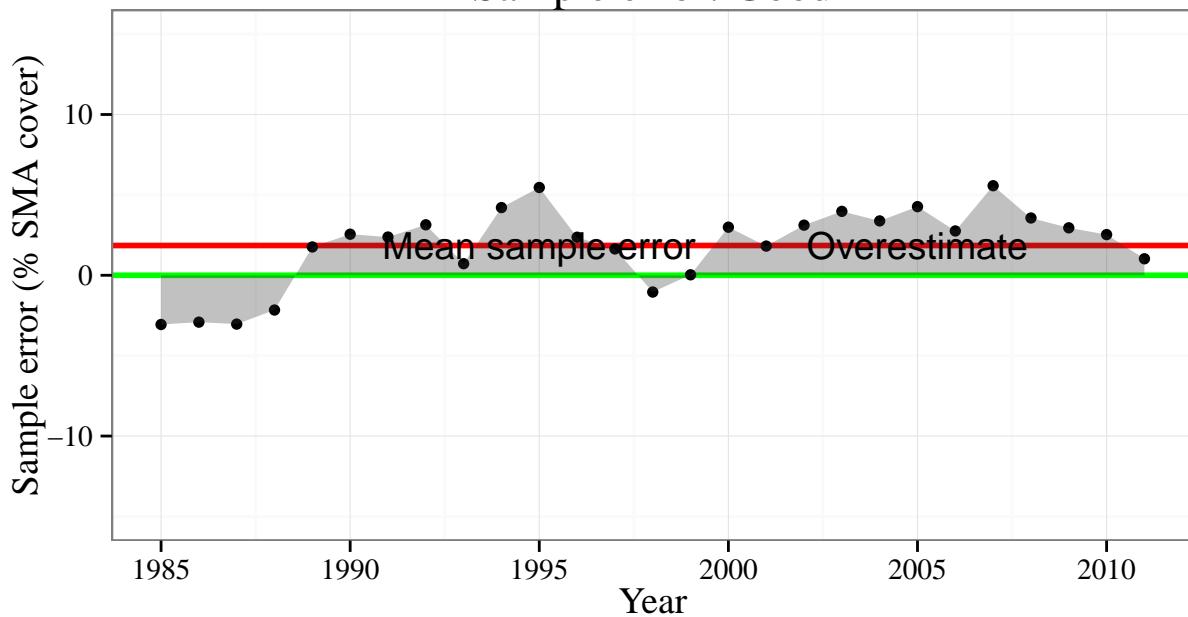
BLK077
Sample error: Good



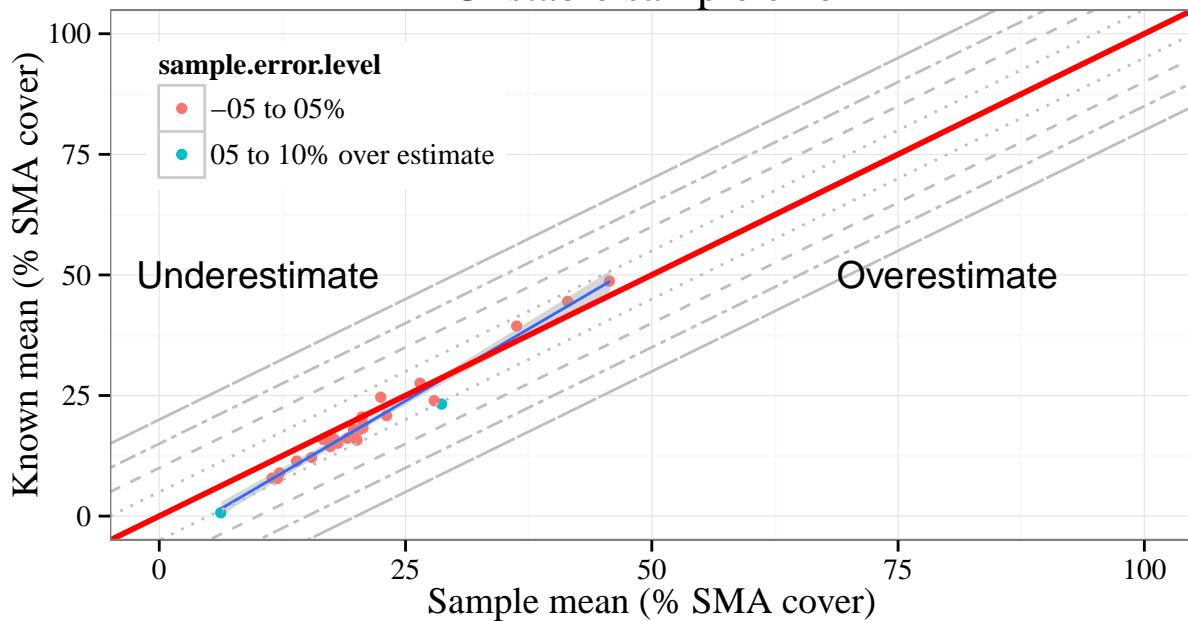
BLK077
Stable sample error



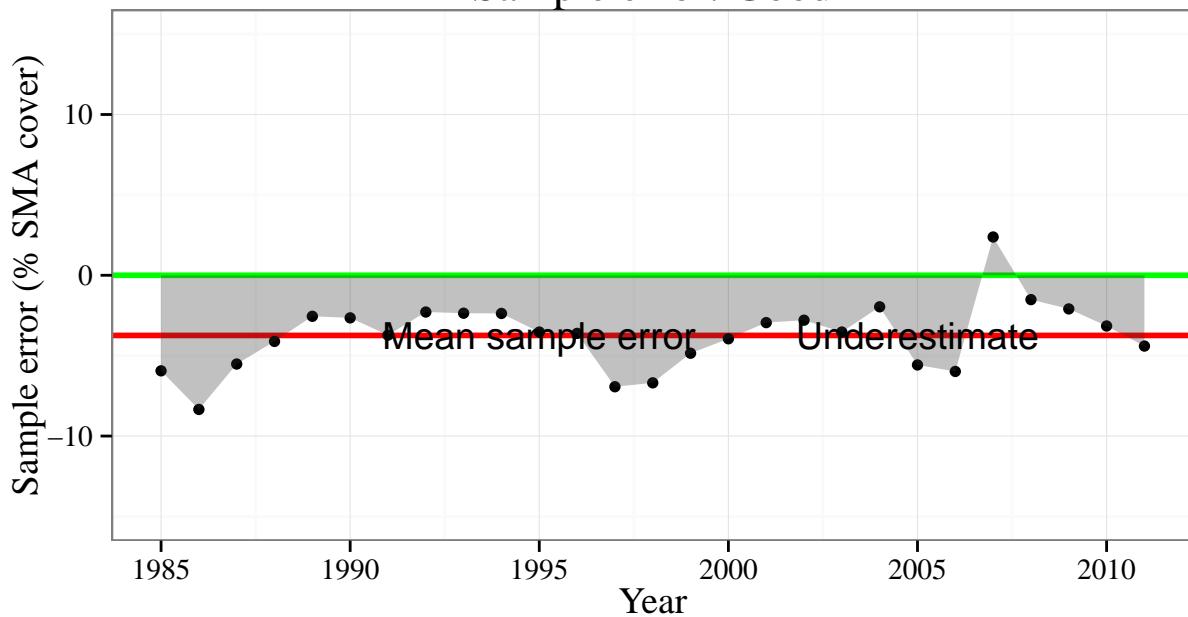
BLK094 Sample error: Good



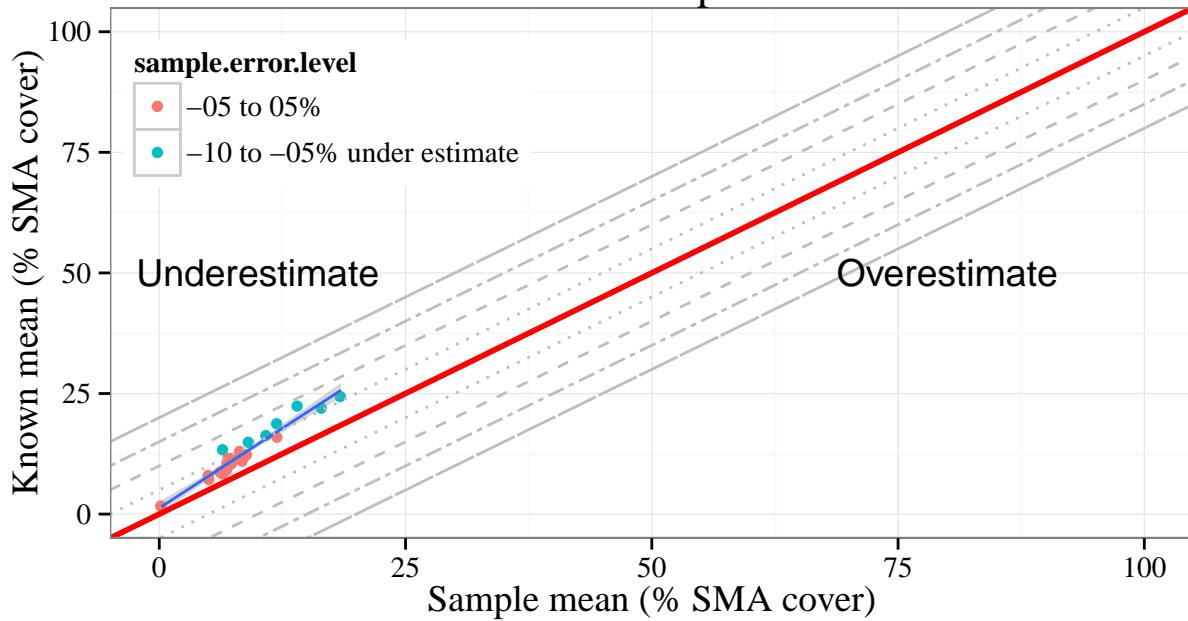
BLK094 Unstable sample error



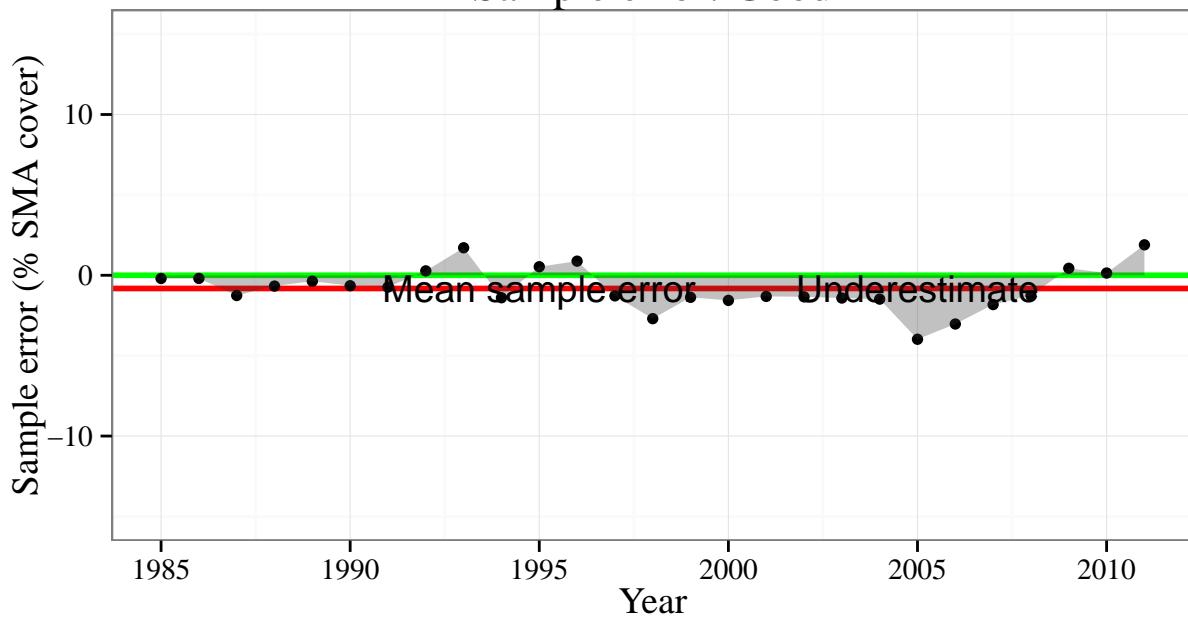
BLK095 Sample error: Good



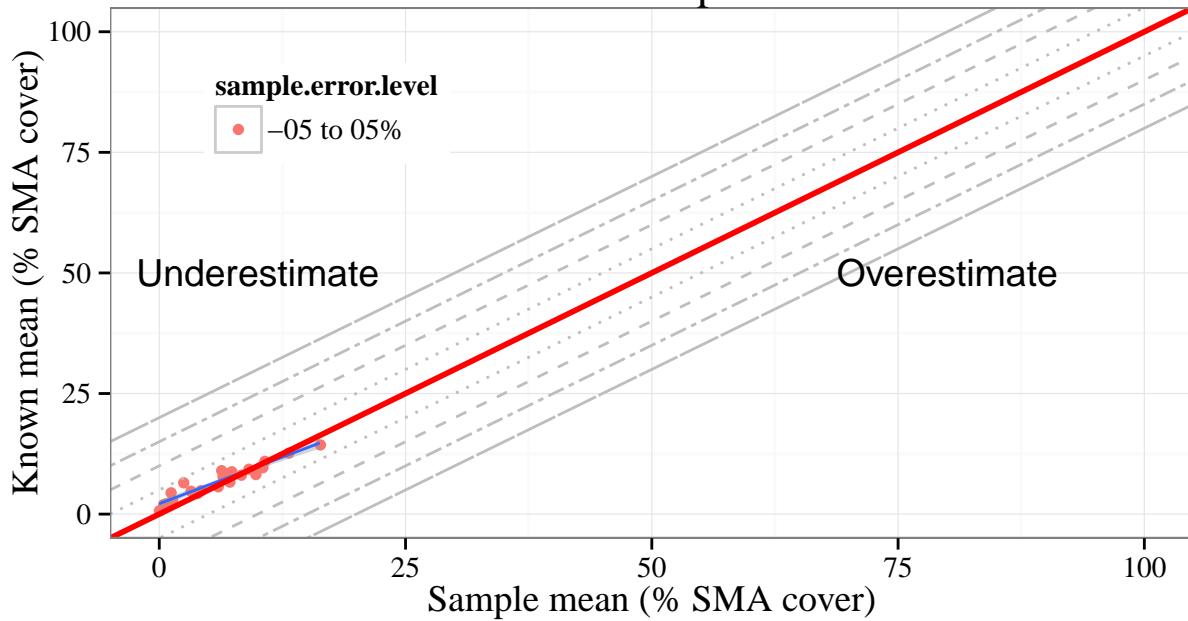
BLK095 Unstable sample error



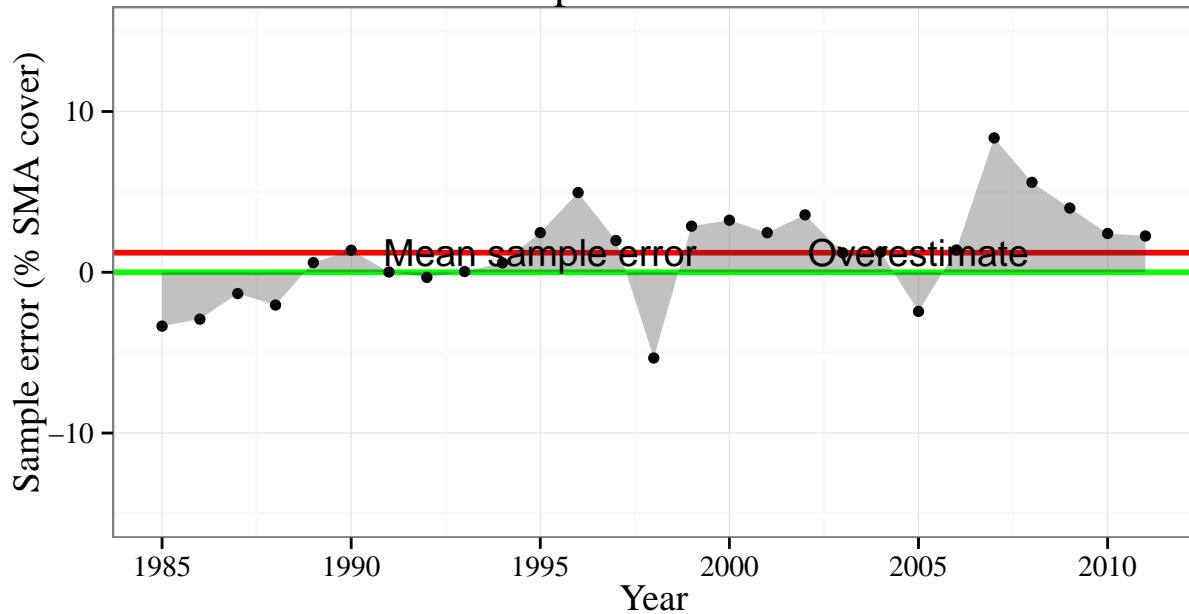
BLK096
Sample error: Good



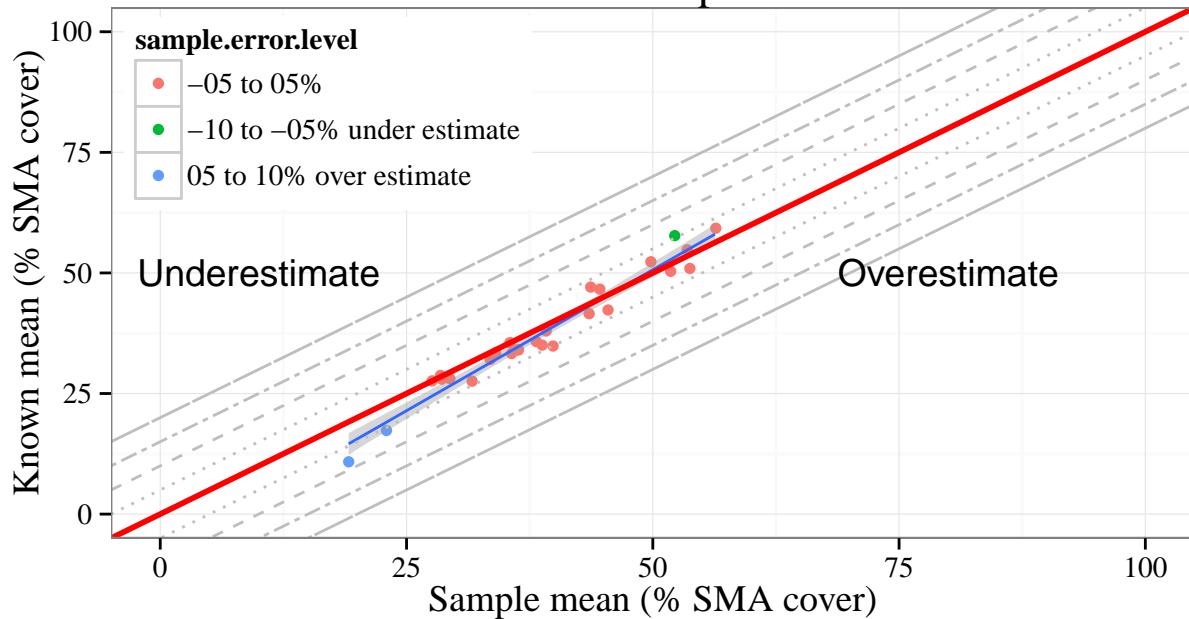
BLK096
Unstable sample error



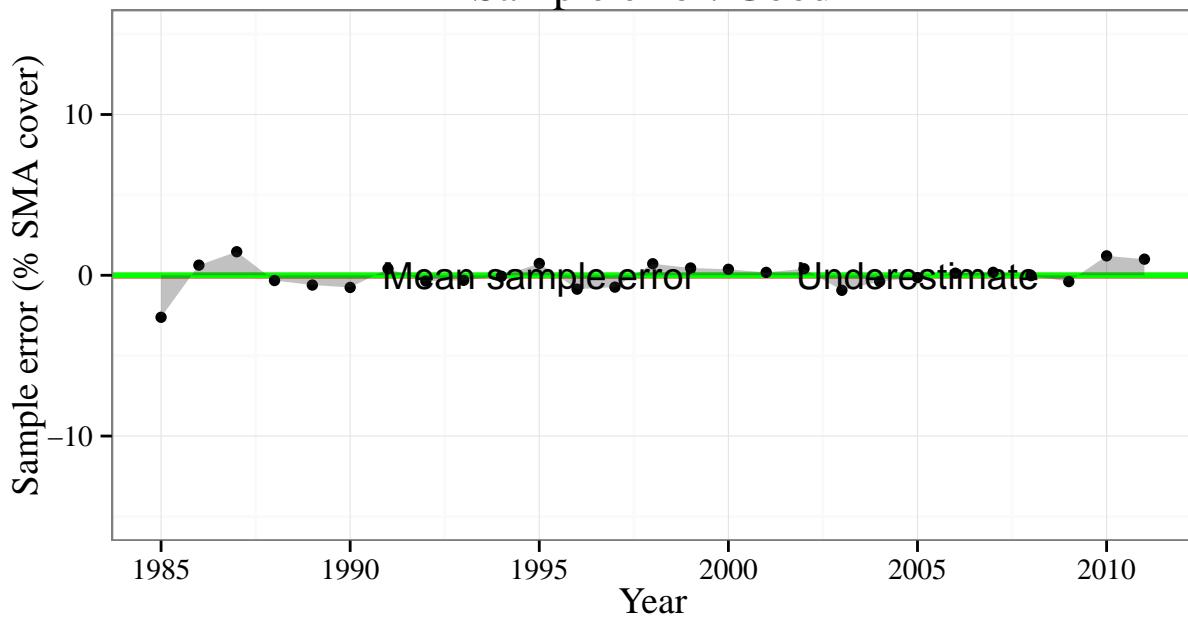
BLK099 Sample error: Good



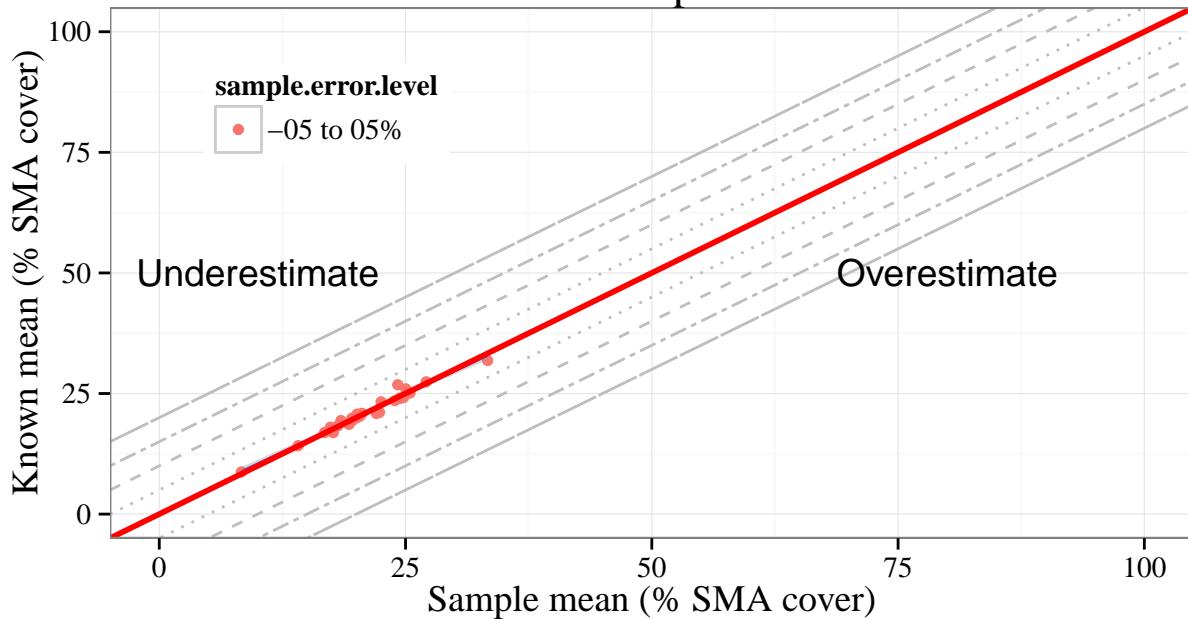
BLK099 Unstable sample error



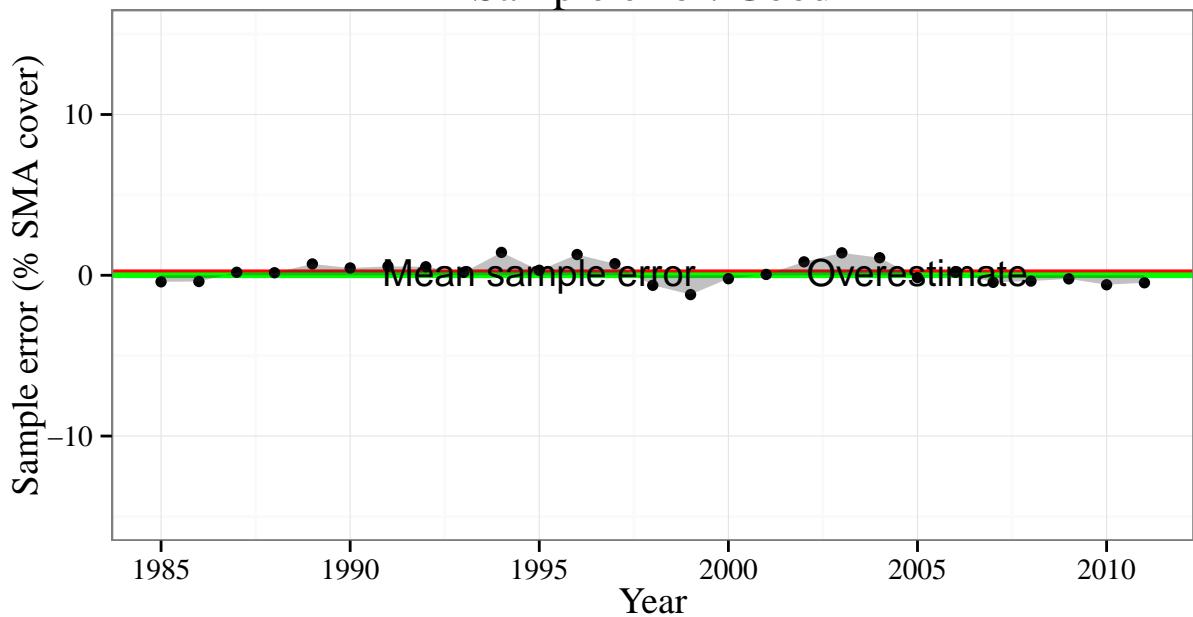
BLK115
Sample error: Good



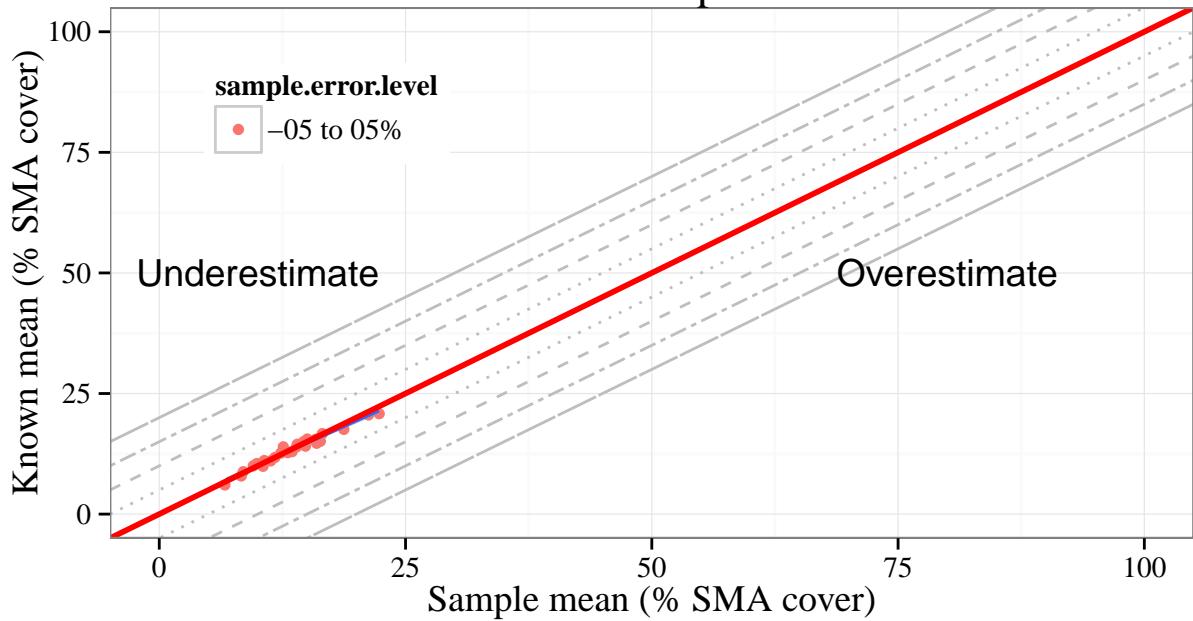
BLK115
Stable sample error



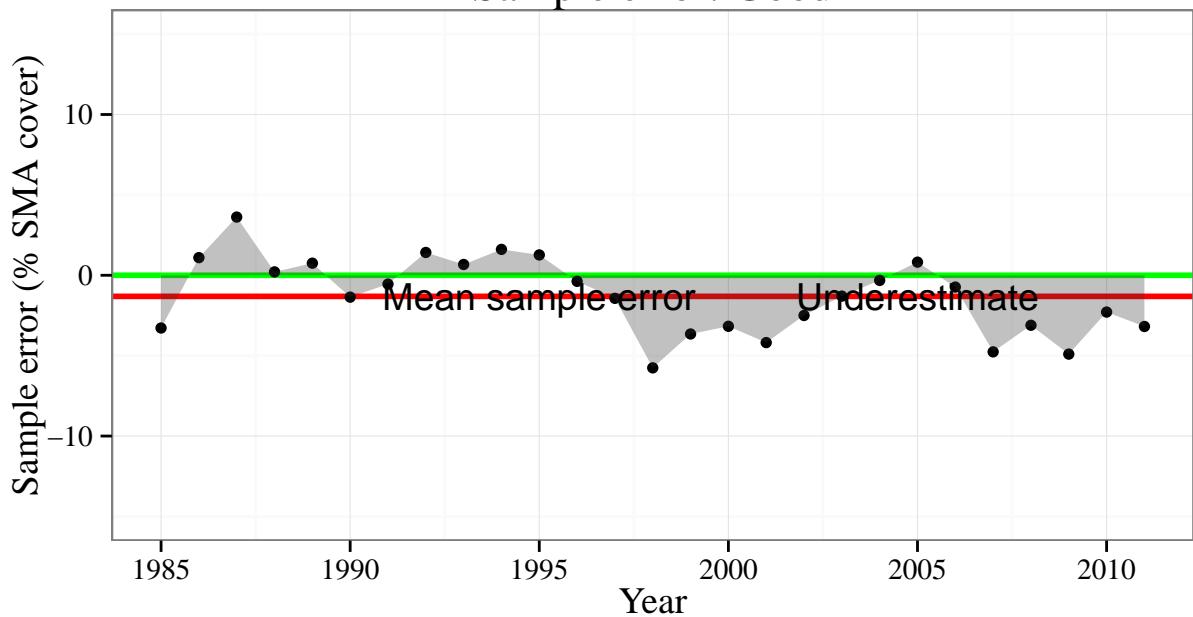
BLK142
Sample error: Good



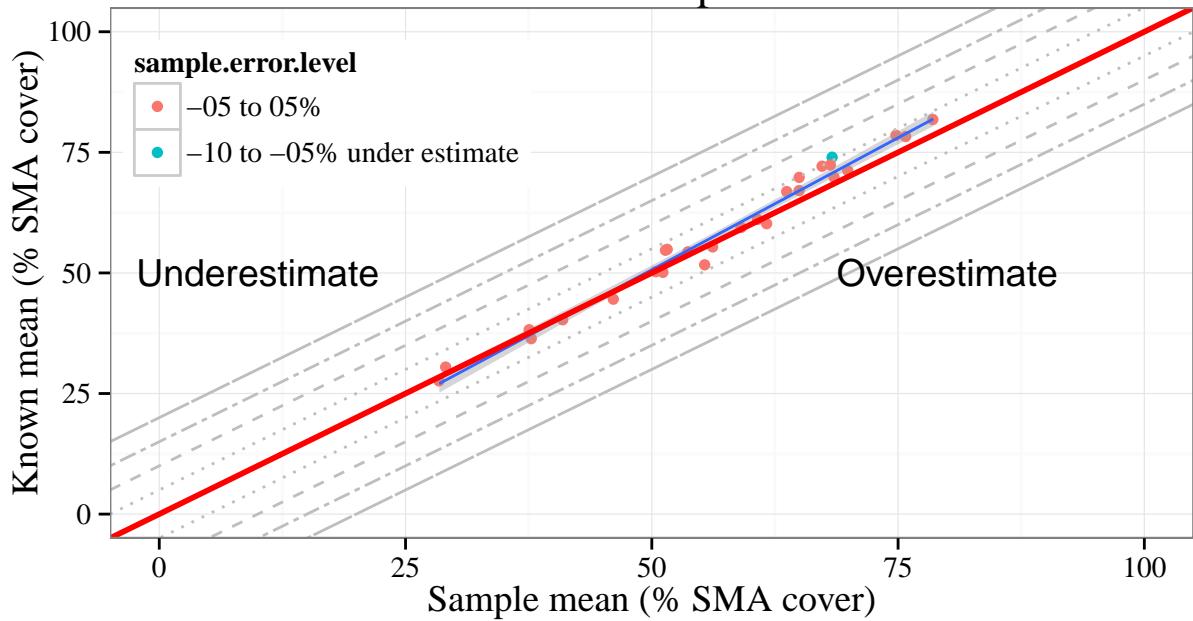
BLK142
Unstable sample error



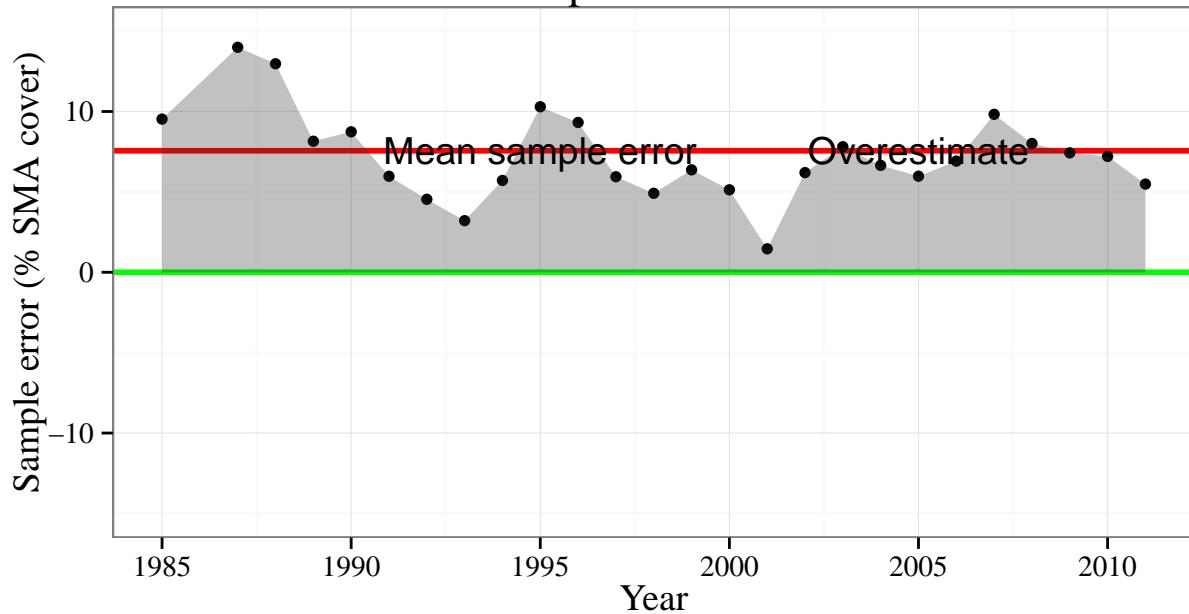
BLK143 Sample error: Good



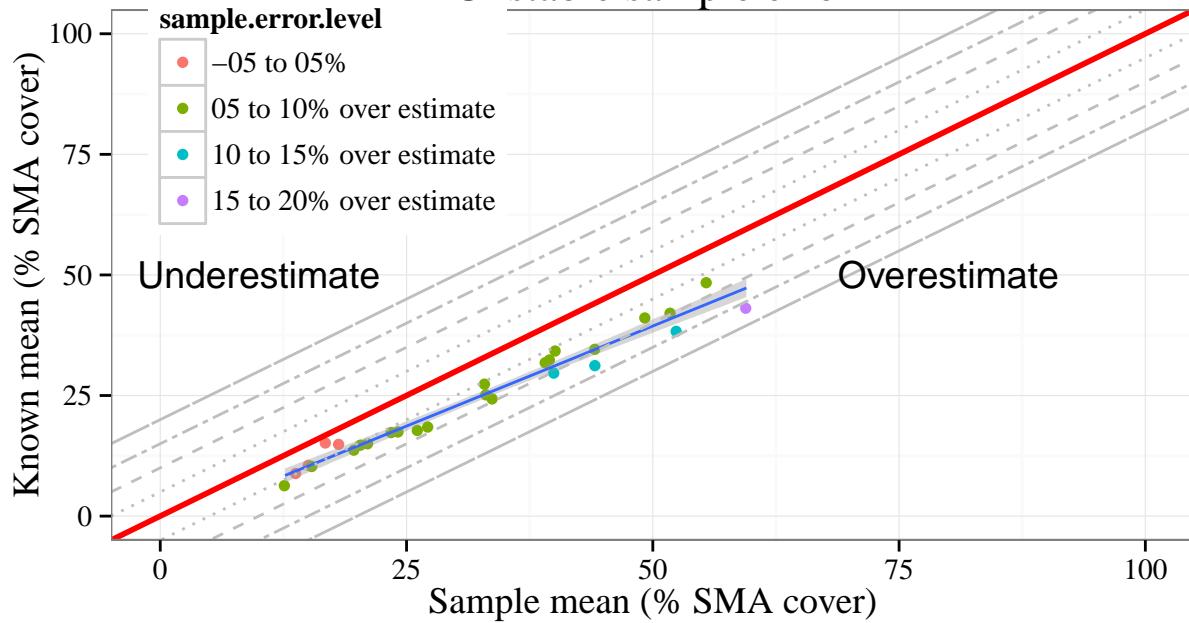
BLK143 Unstable sample error



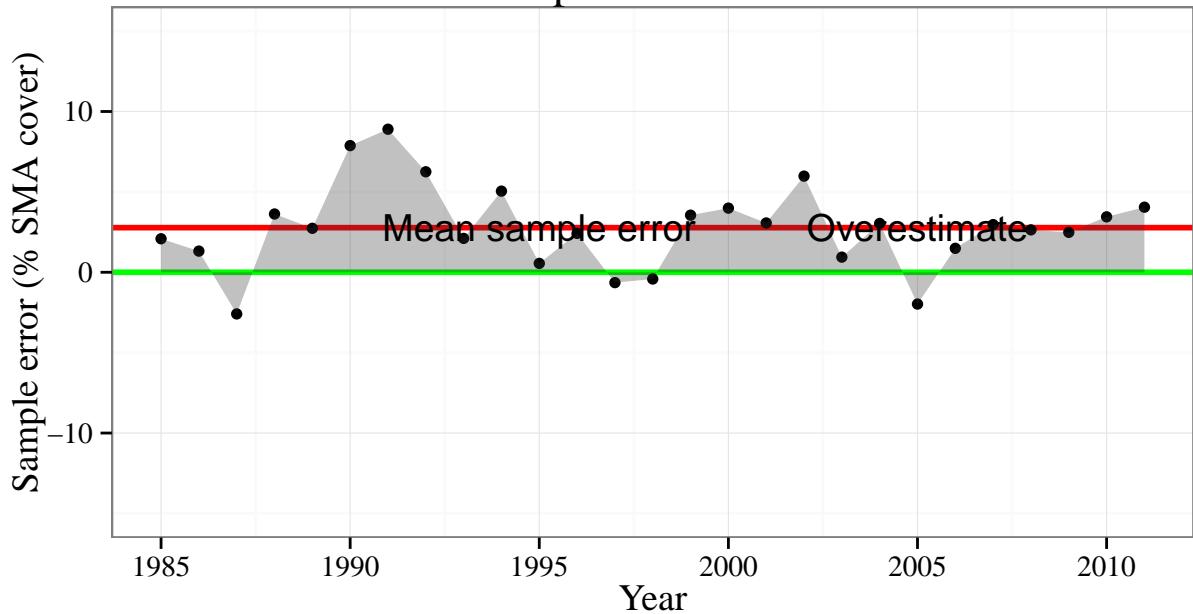
FSL044 Sample error: Fair



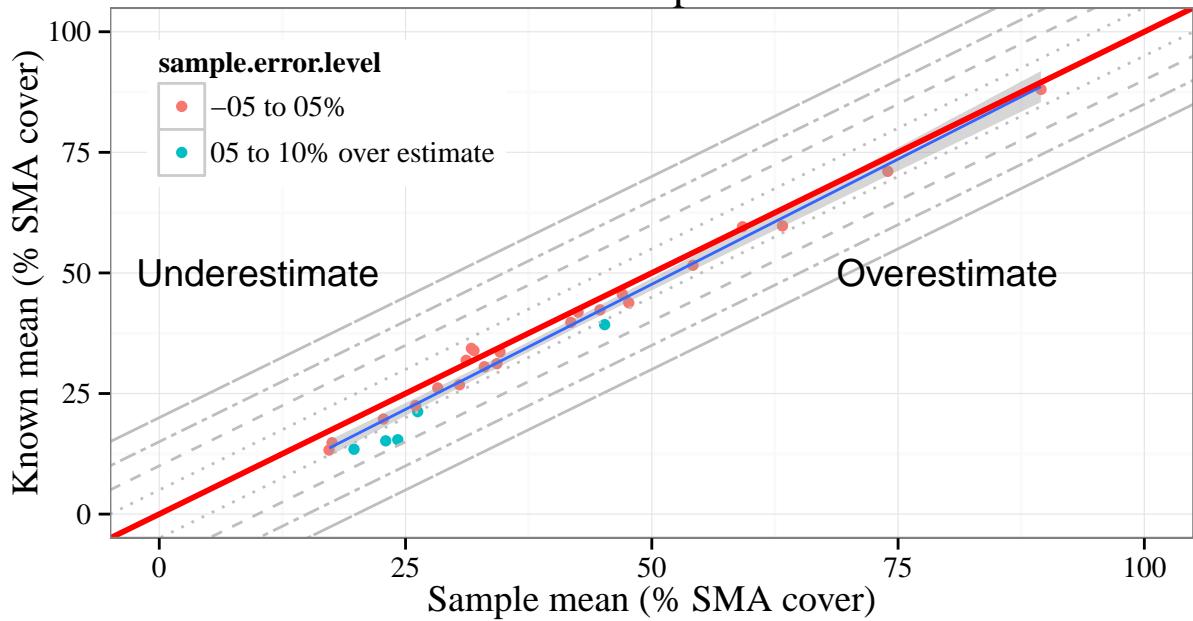
FSL044 Unstable sample error



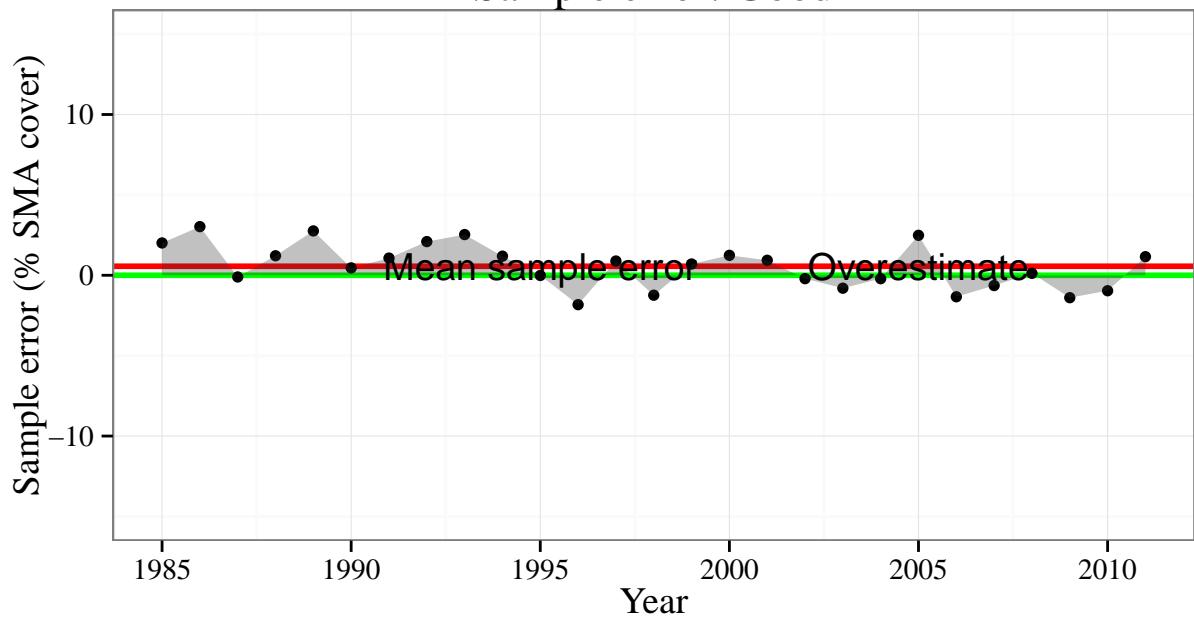
FSL047 Sample error: Good



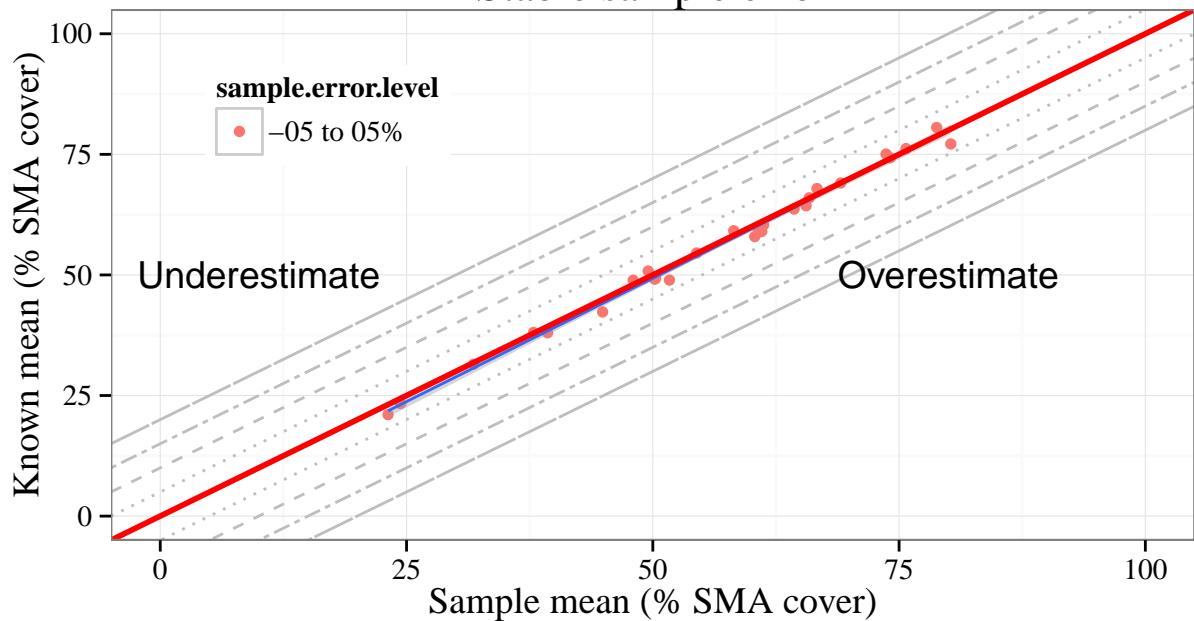
FSL047 Stable sample error



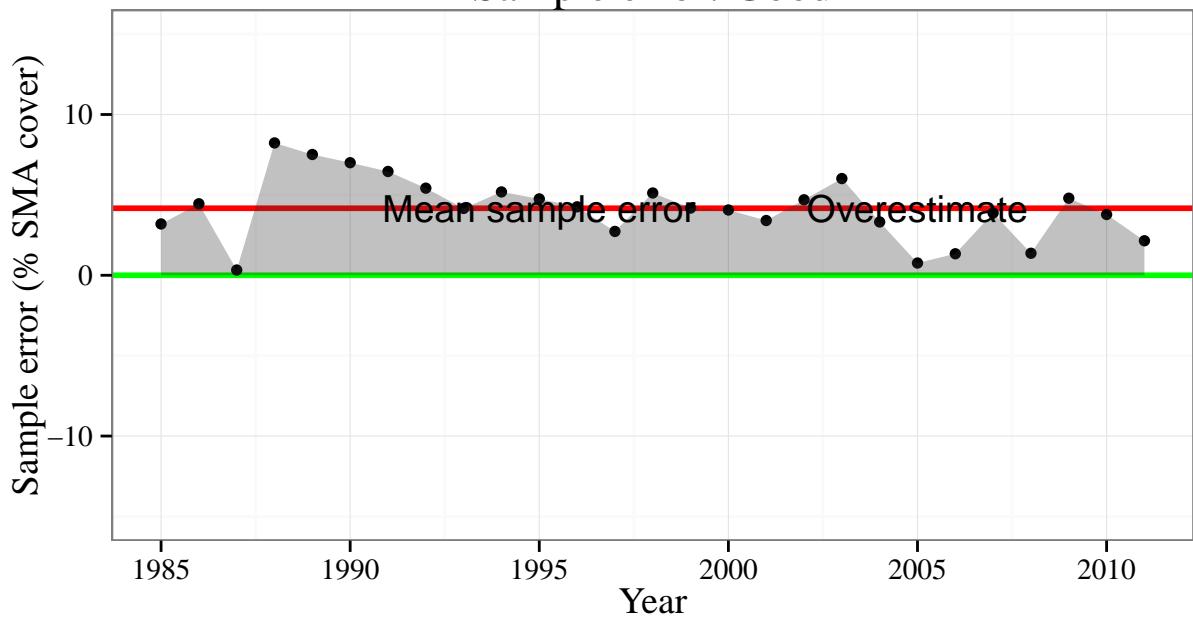
FSL051
Sample error: Good



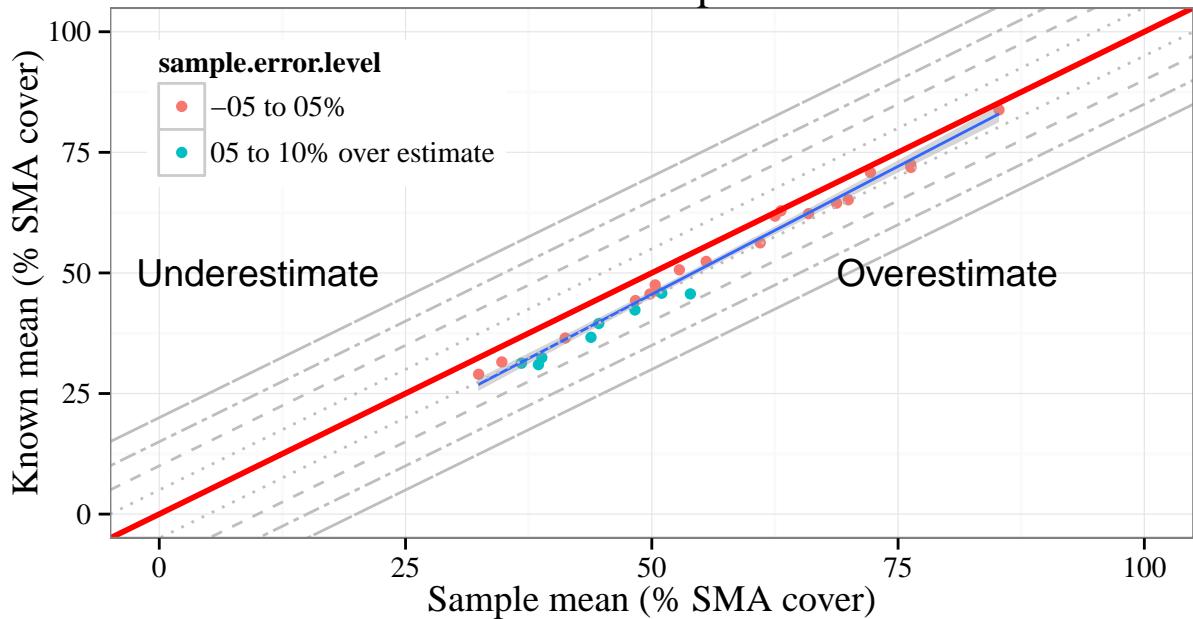
FSL051
Stable sample error



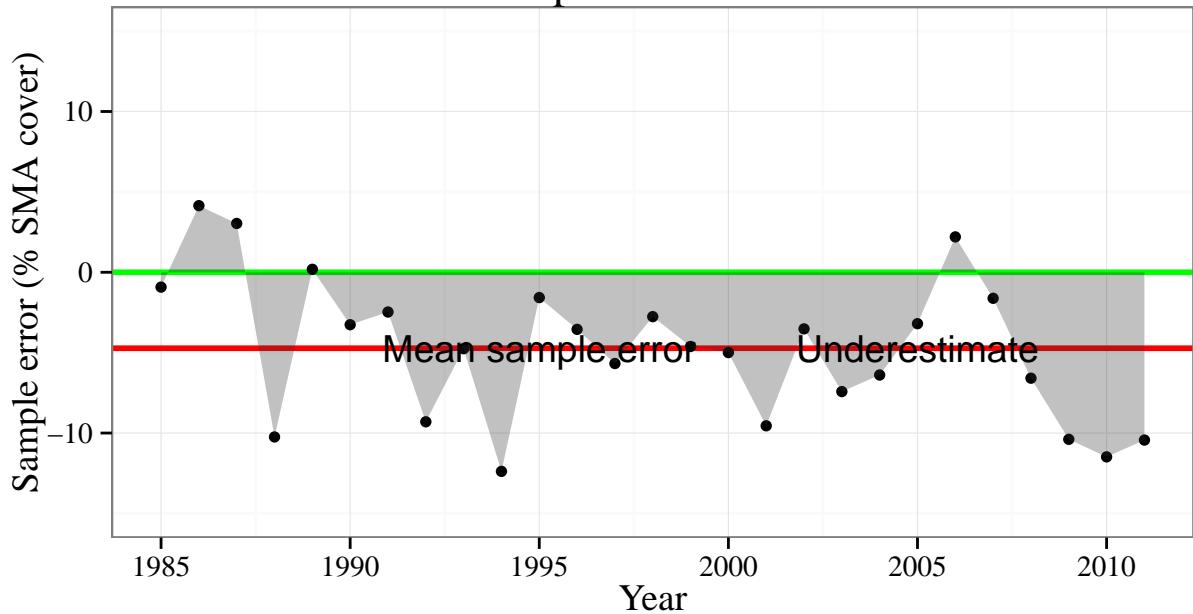
FSL053 Sample error: Good



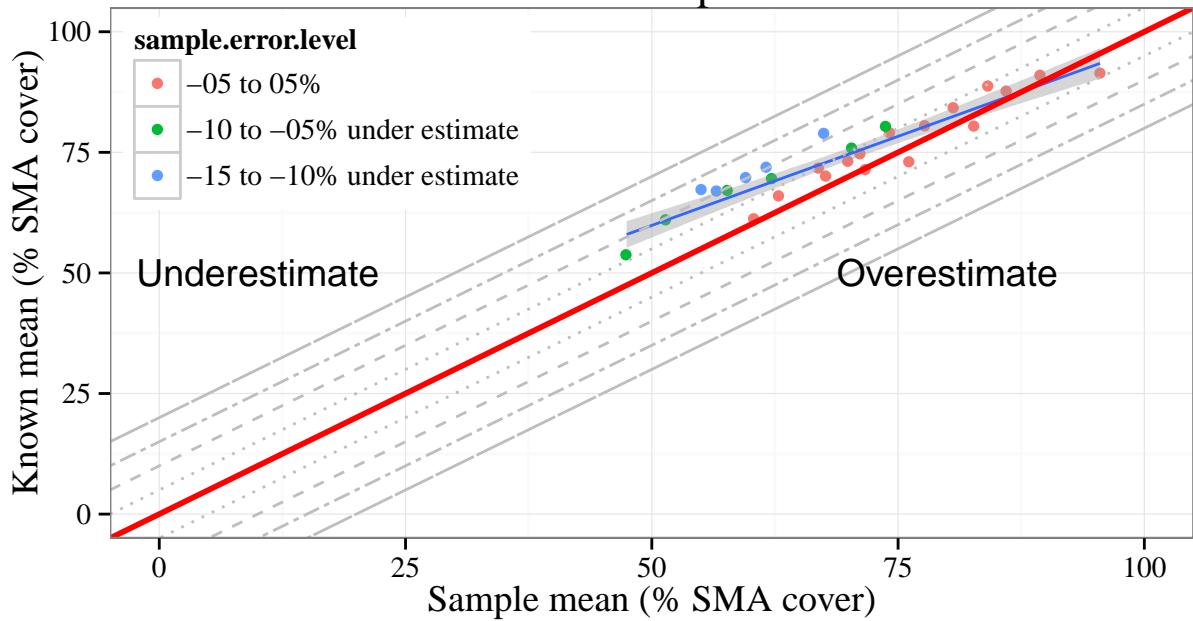
FSL053 Unstable sample error



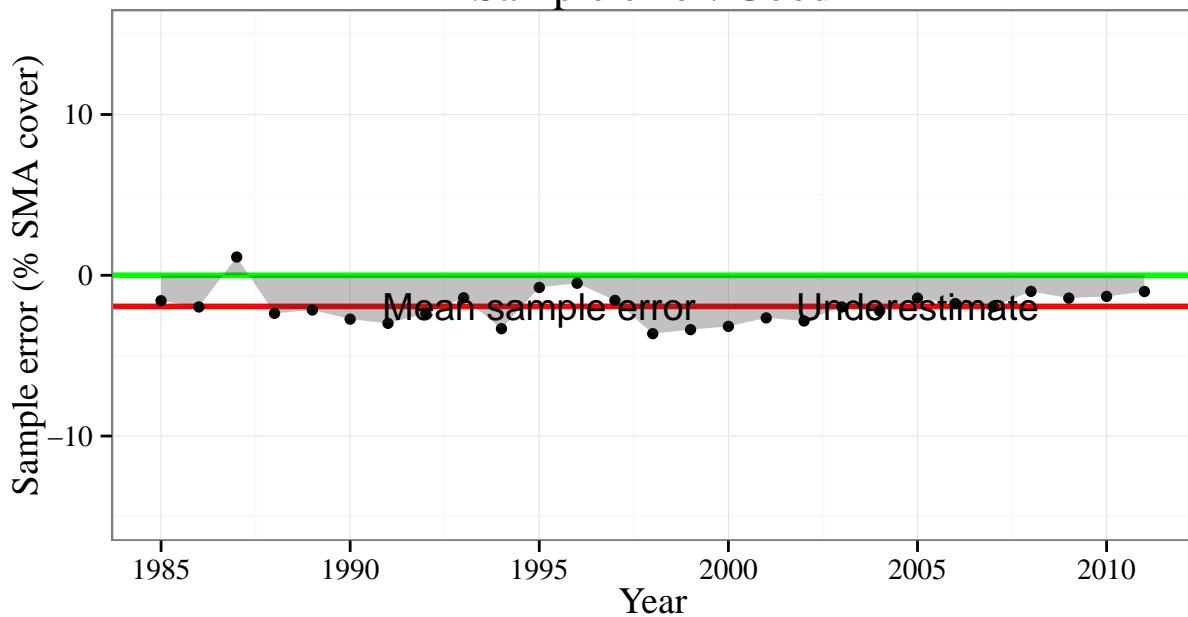
FSL054 Sample error: Good



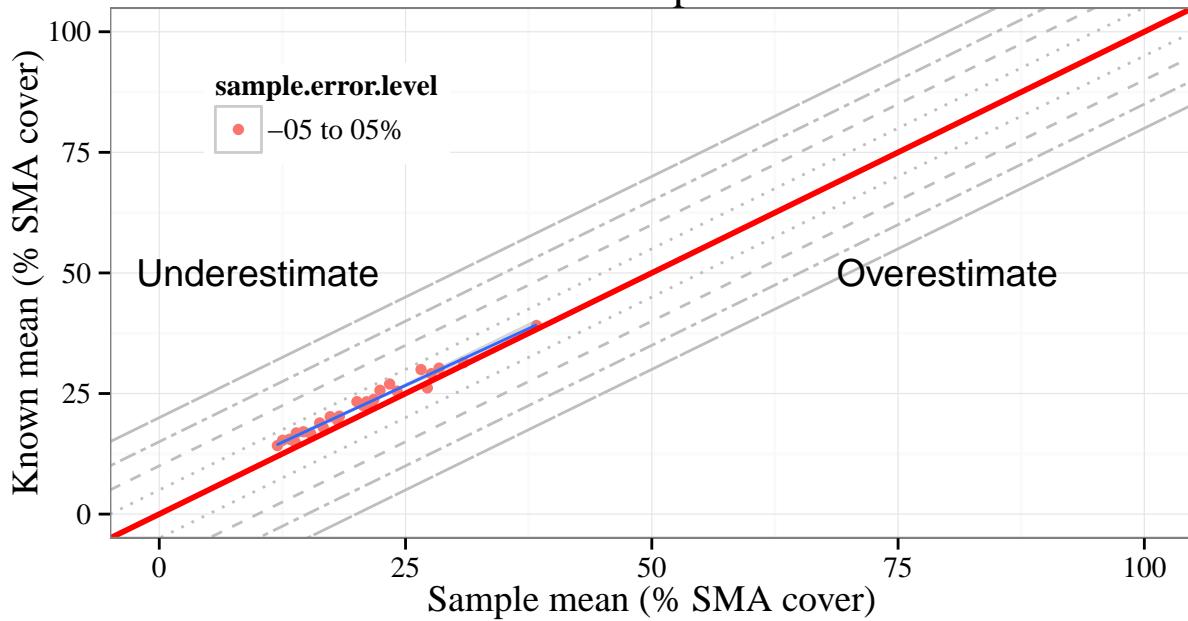
FSL054 Unstable sample error



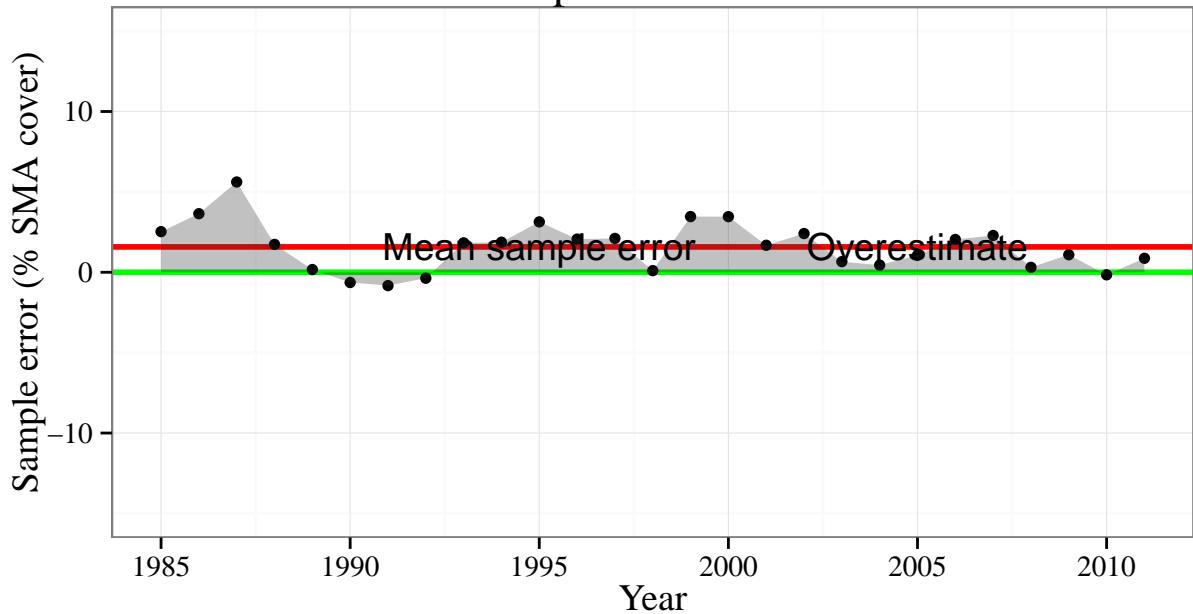
FSL065 Sample error: Good



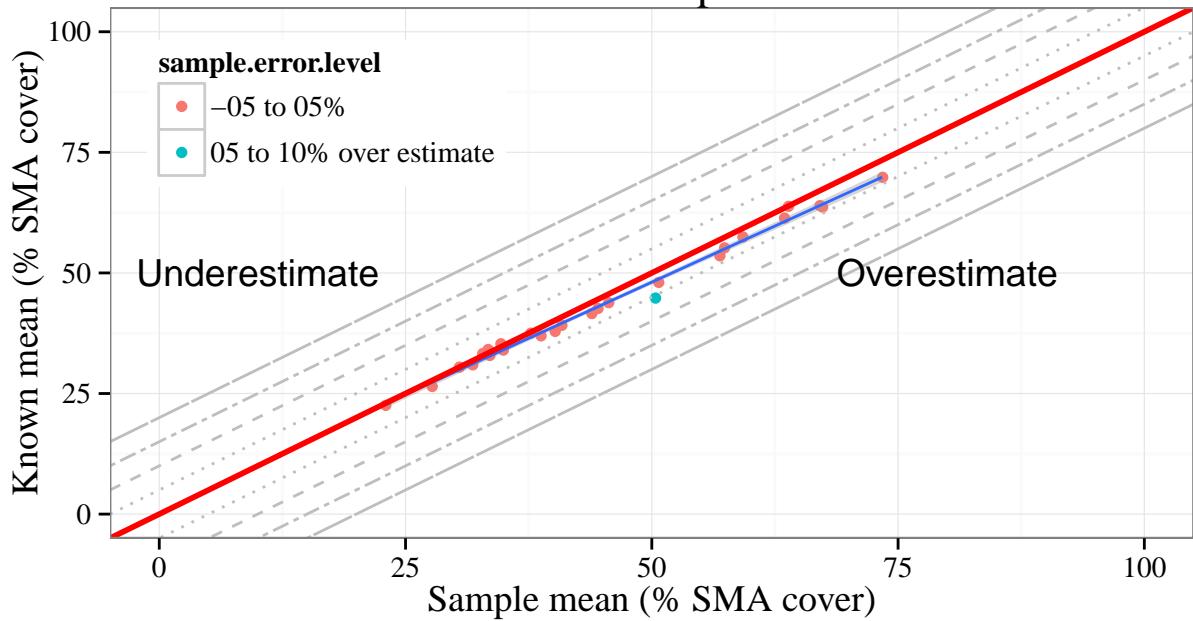
FSL065 Stable sample error



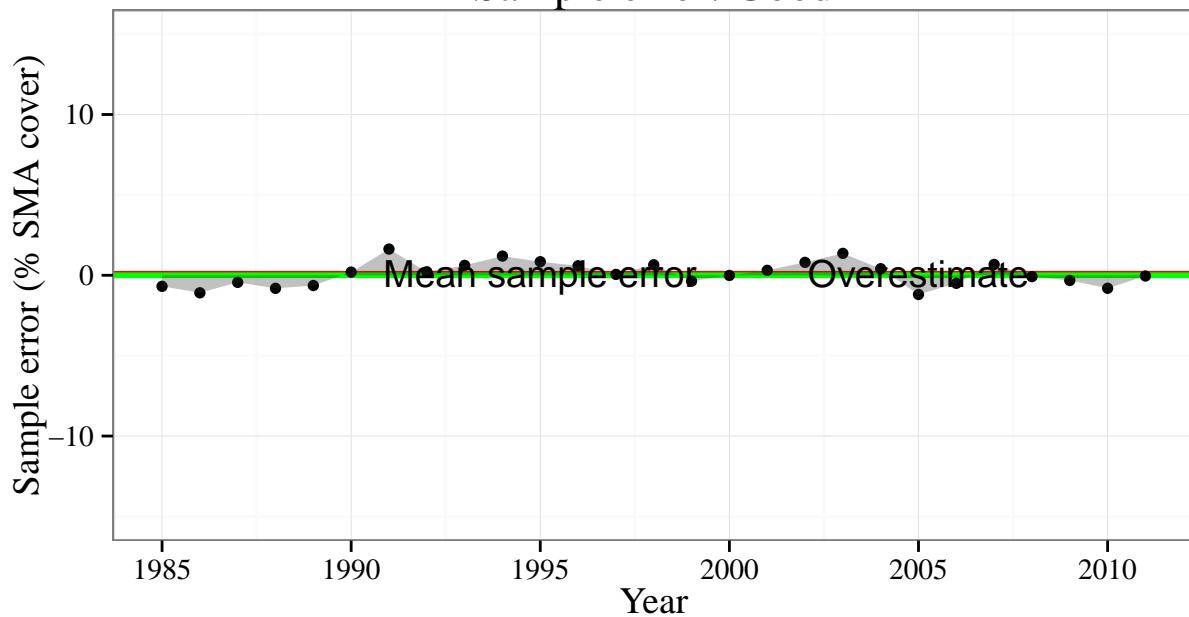
FSL116 Sample error: Good



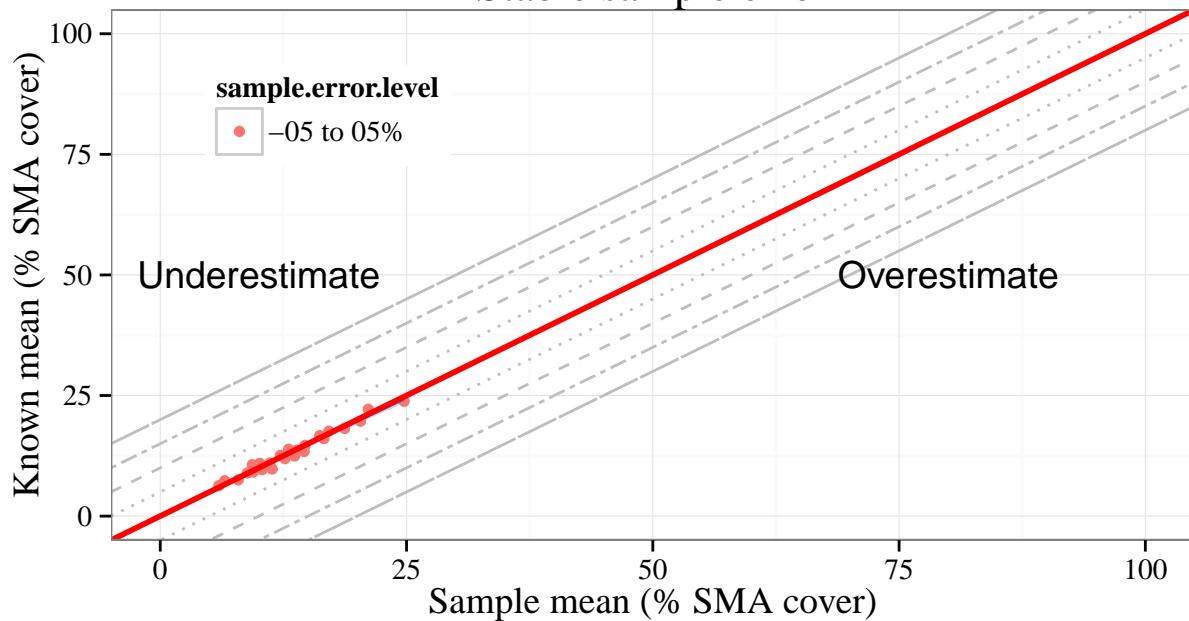
FSL116 Unstable sample error



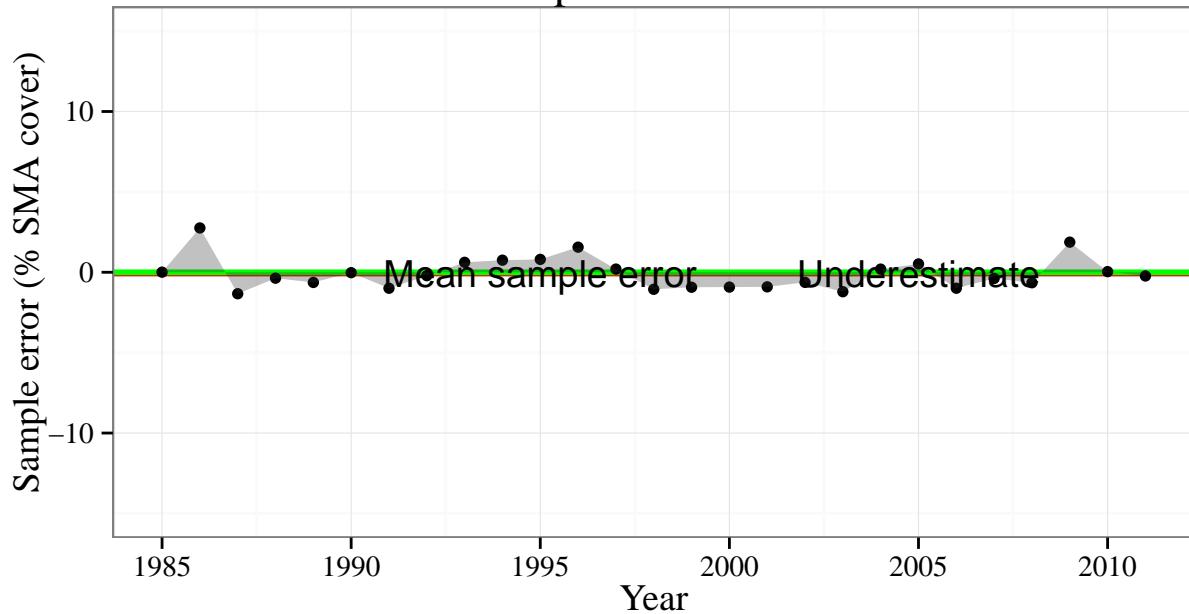
FSL118
Sample error: Good



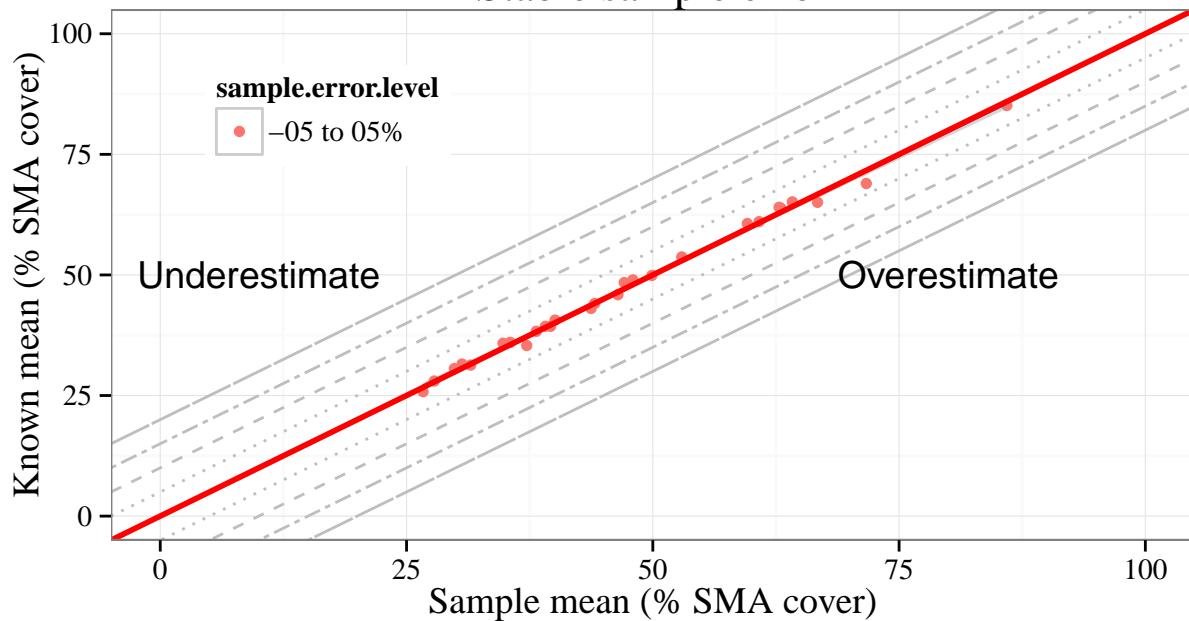
FSL118
Stable sample error



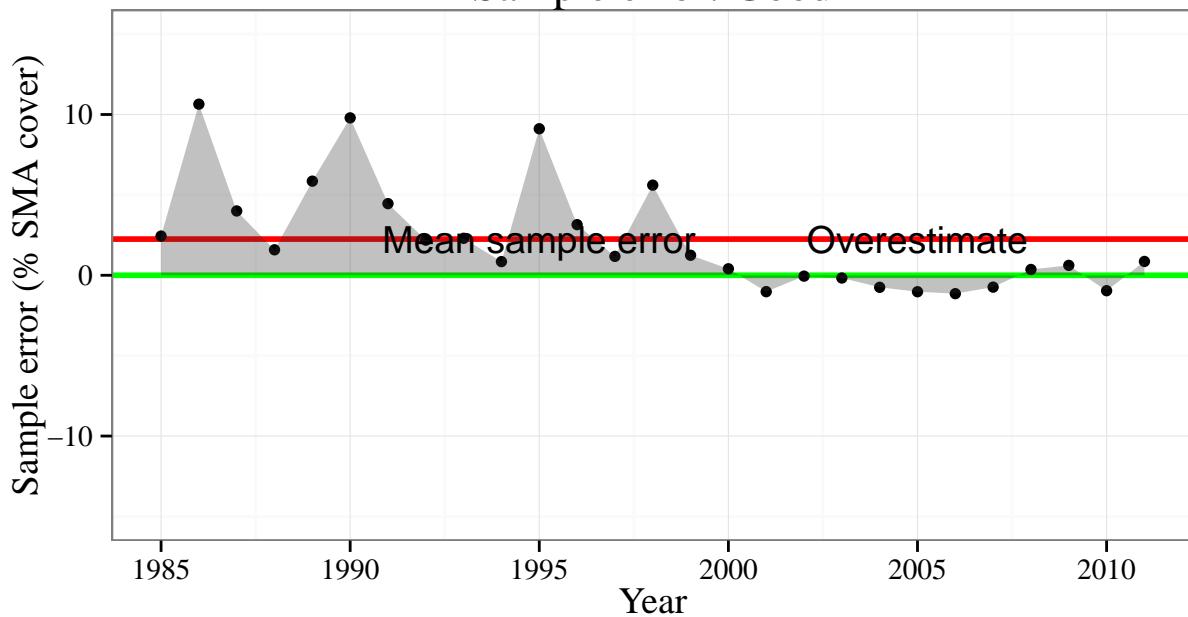
FSL123 Sample error: Good



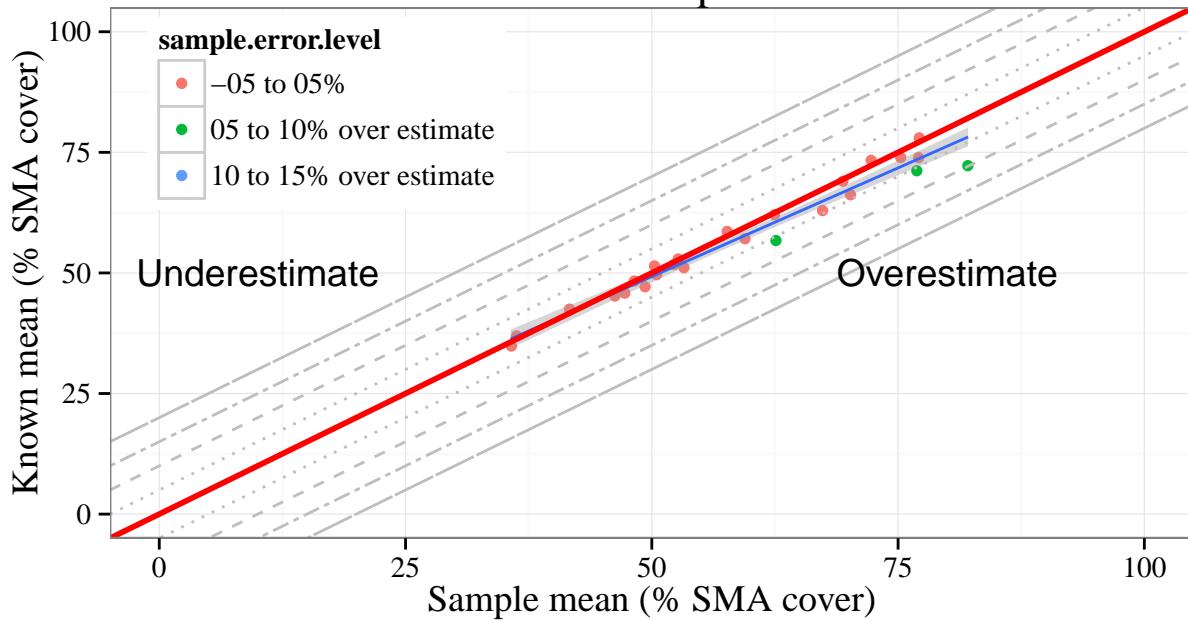
FSL123 Stable sample error



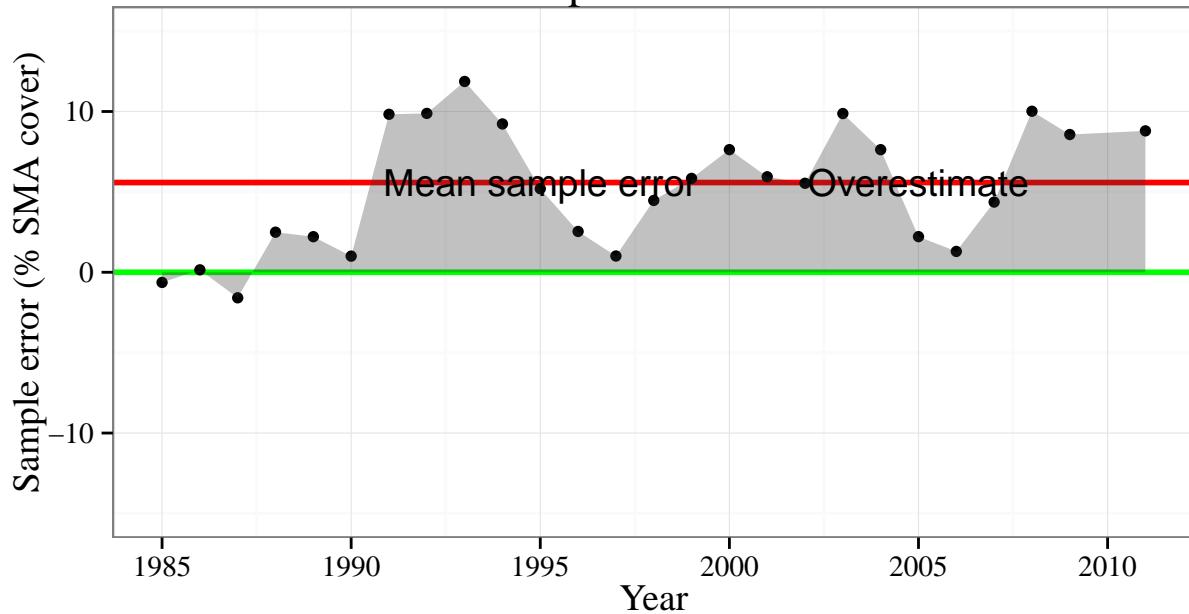
FSL124 Sample error: Good



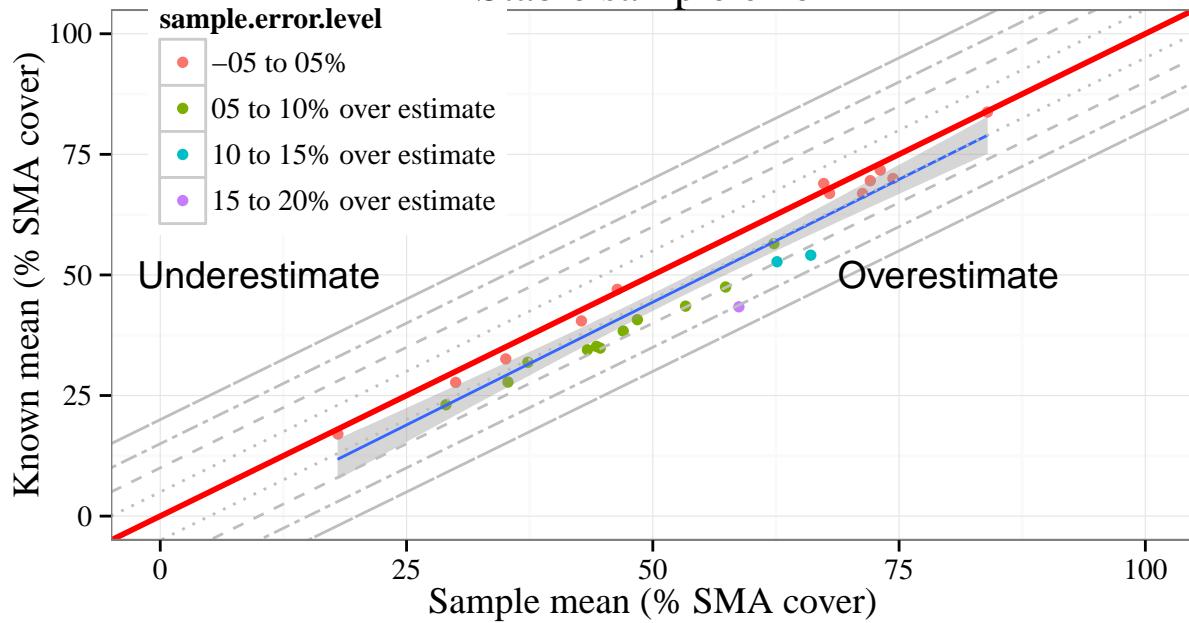
FSL124 Unstable sample error



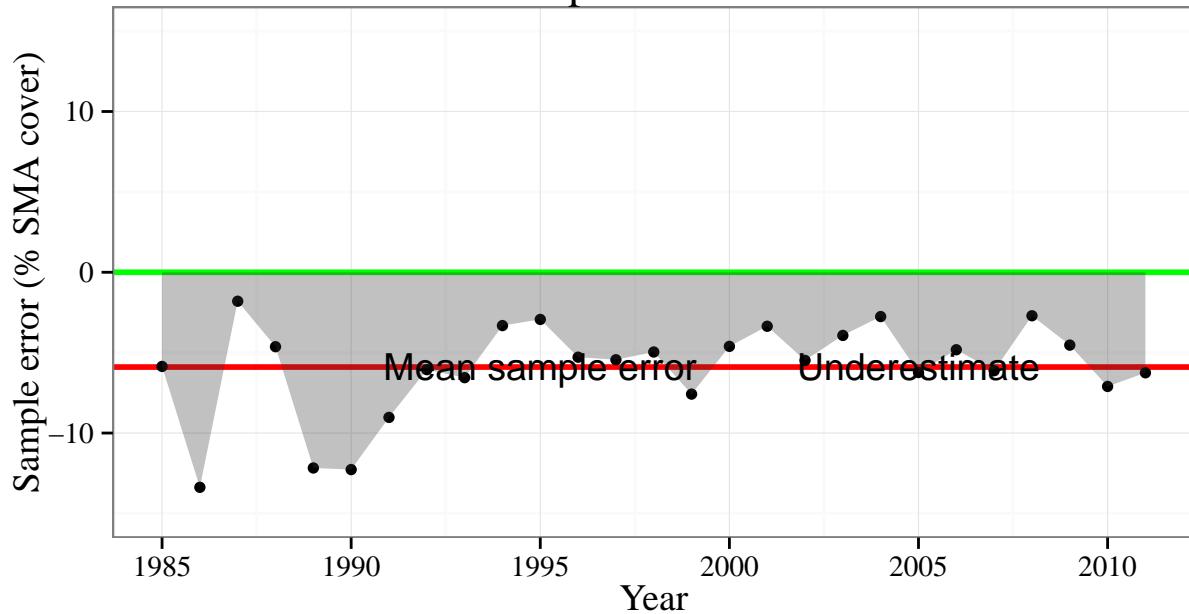
FSL125 Sample error: Fair



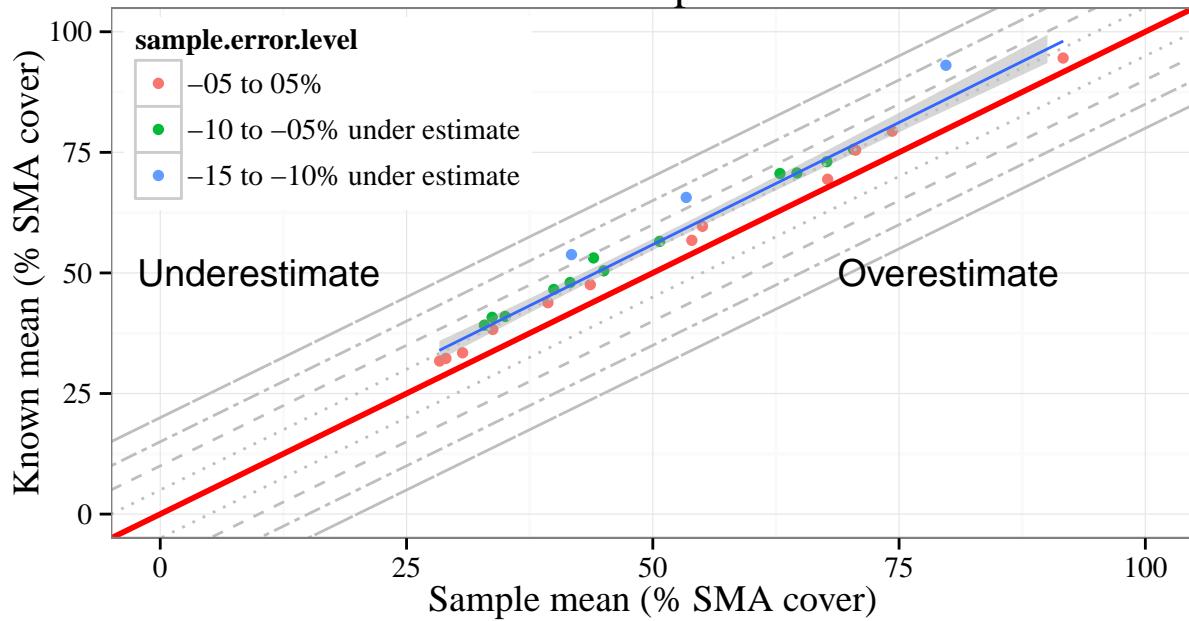
FSL125 Stable sample error



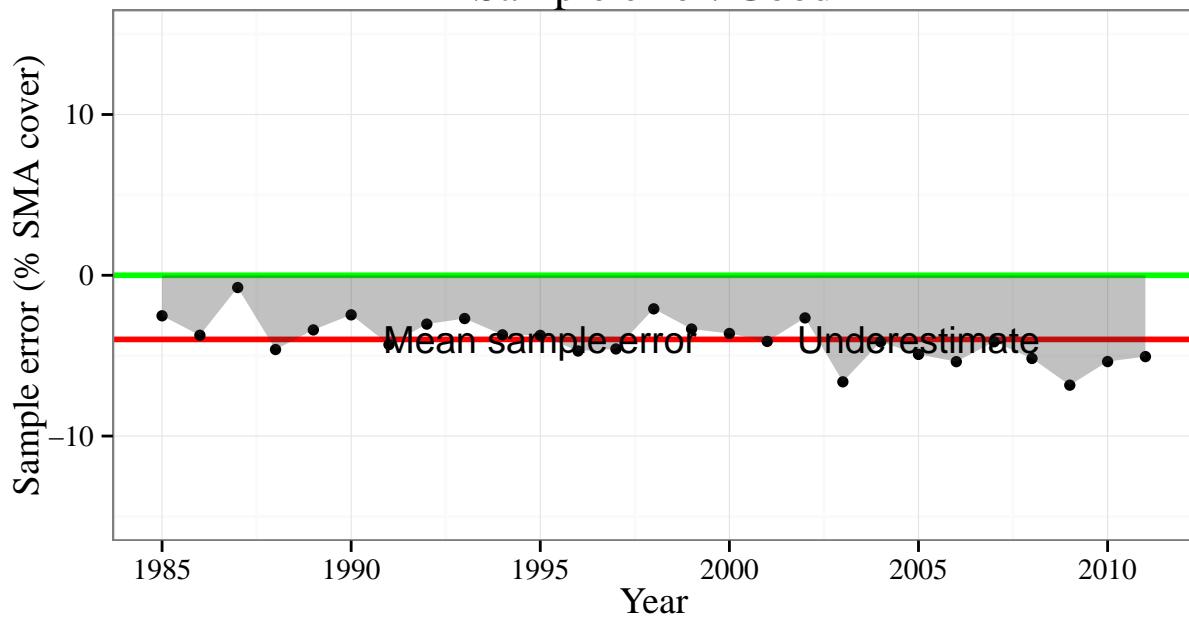
FSL126 Sample error: Fair



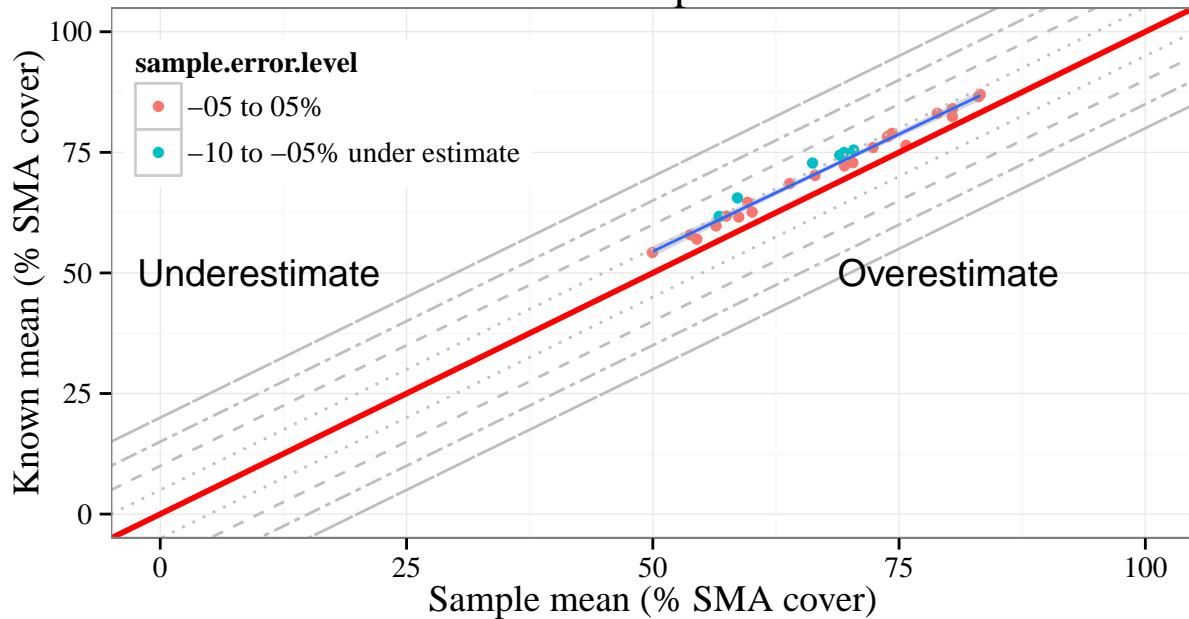
FSL126 Stable sample error



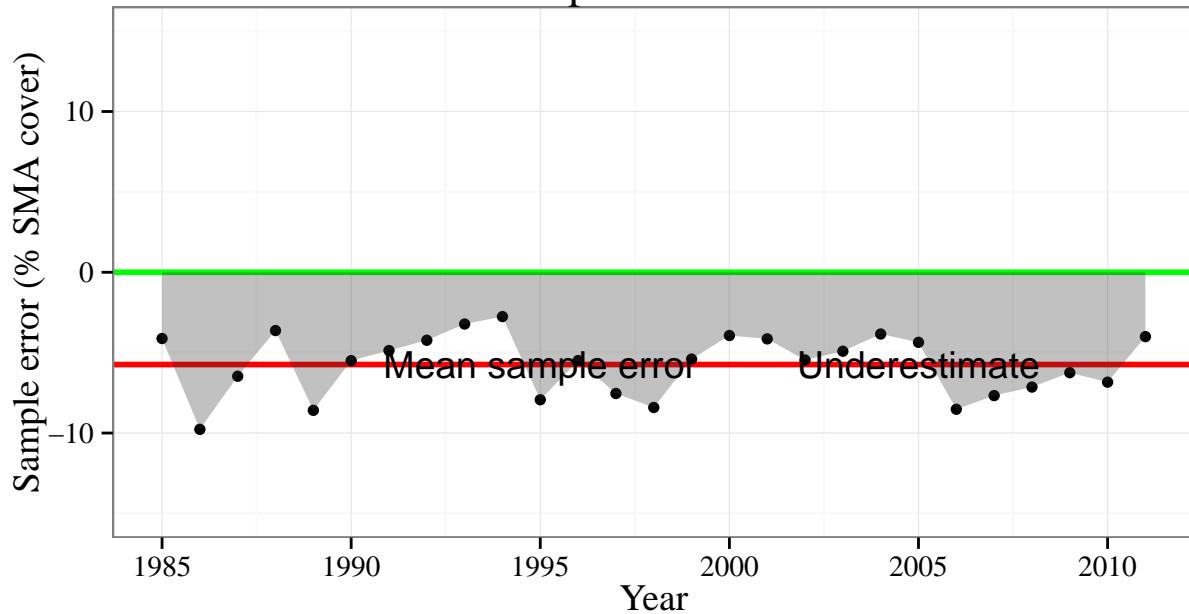
FSL128 Sample error: Good



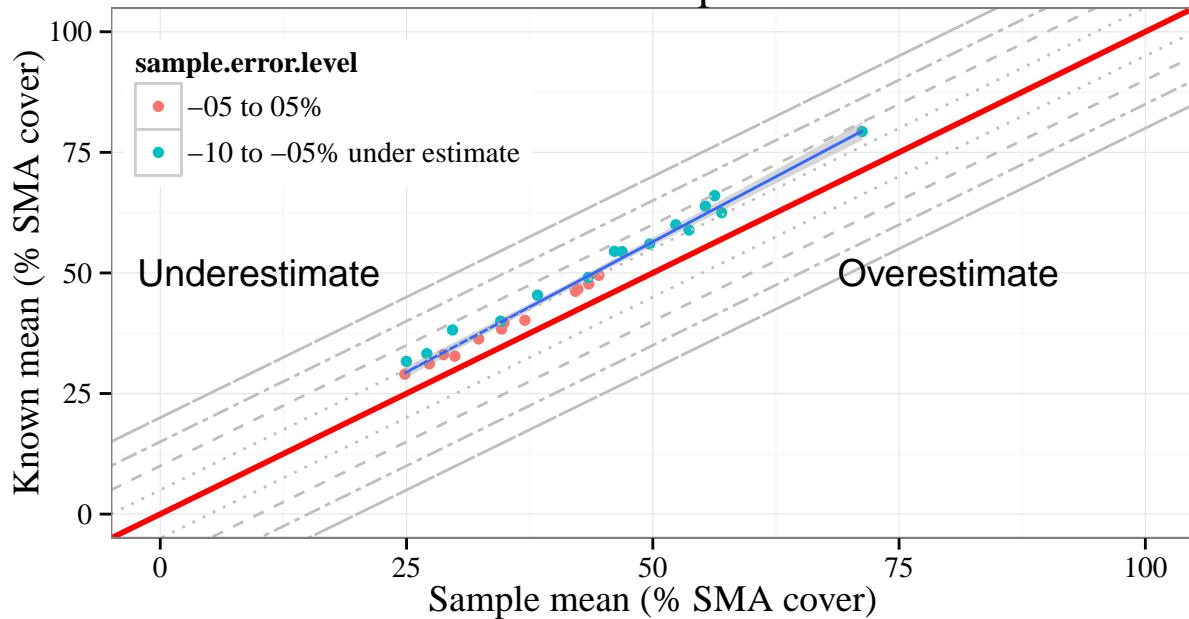
FSL128 Stable sample error



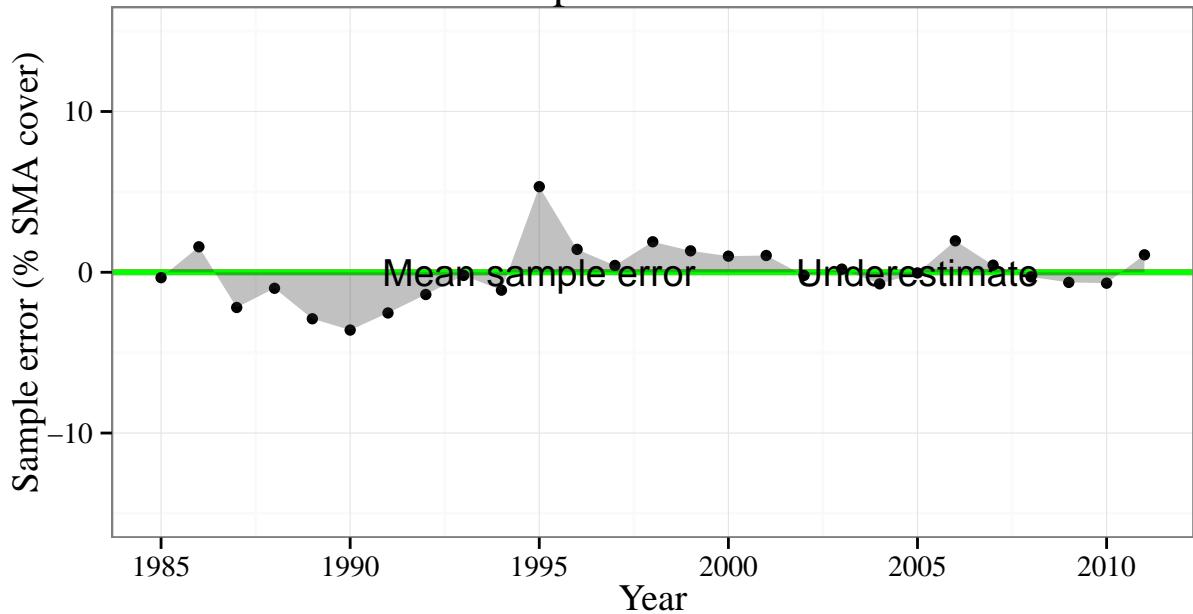
FSL129
Sample error: Fair



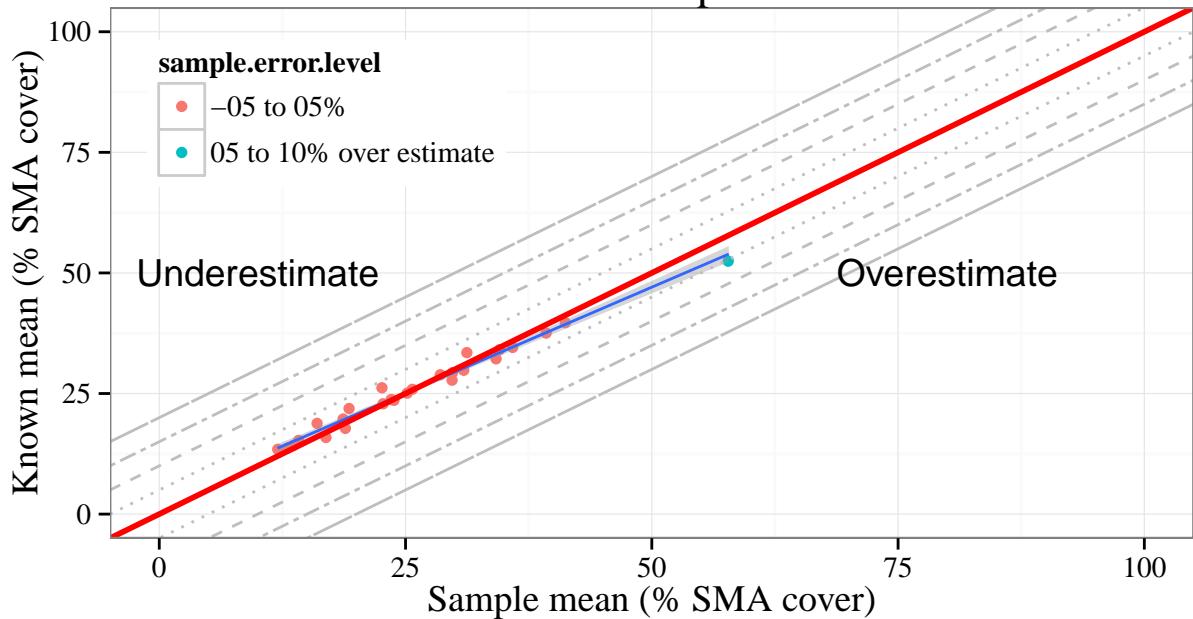
FSL129
Unstable sample error



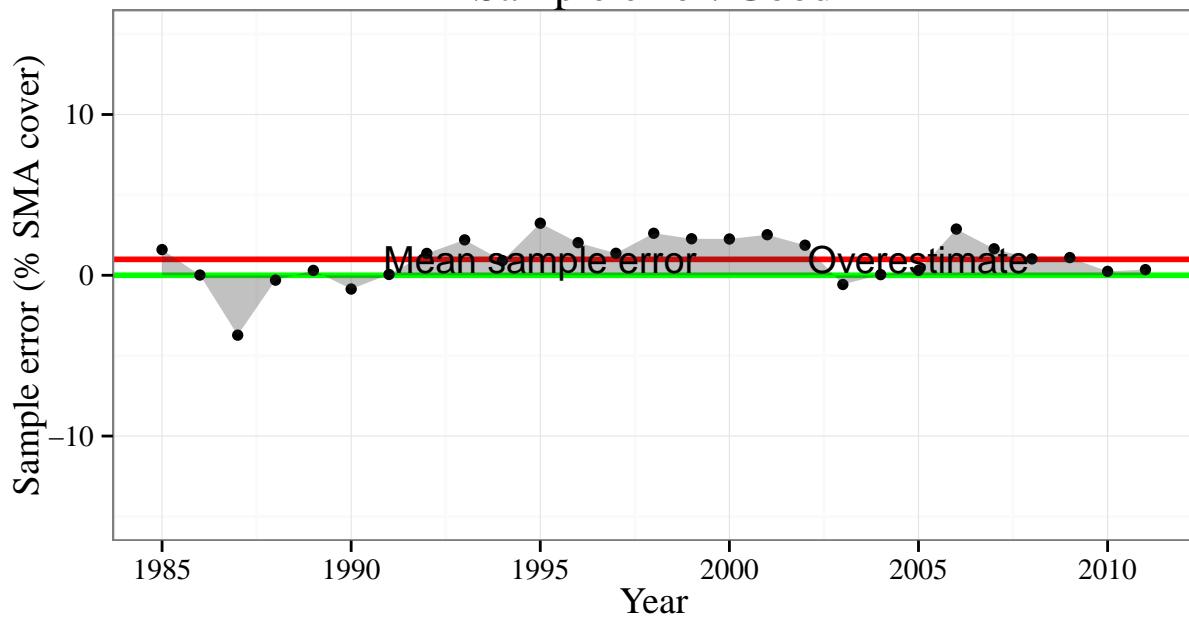
FSL130 Sample error: Good



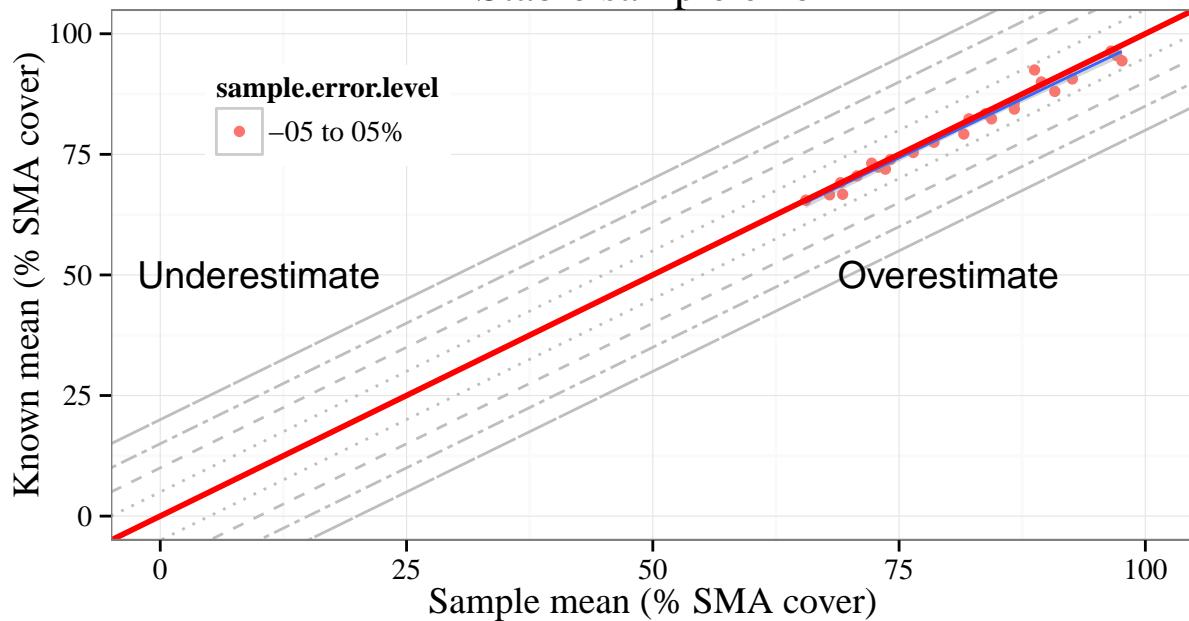
FSL130 Unstable sample error



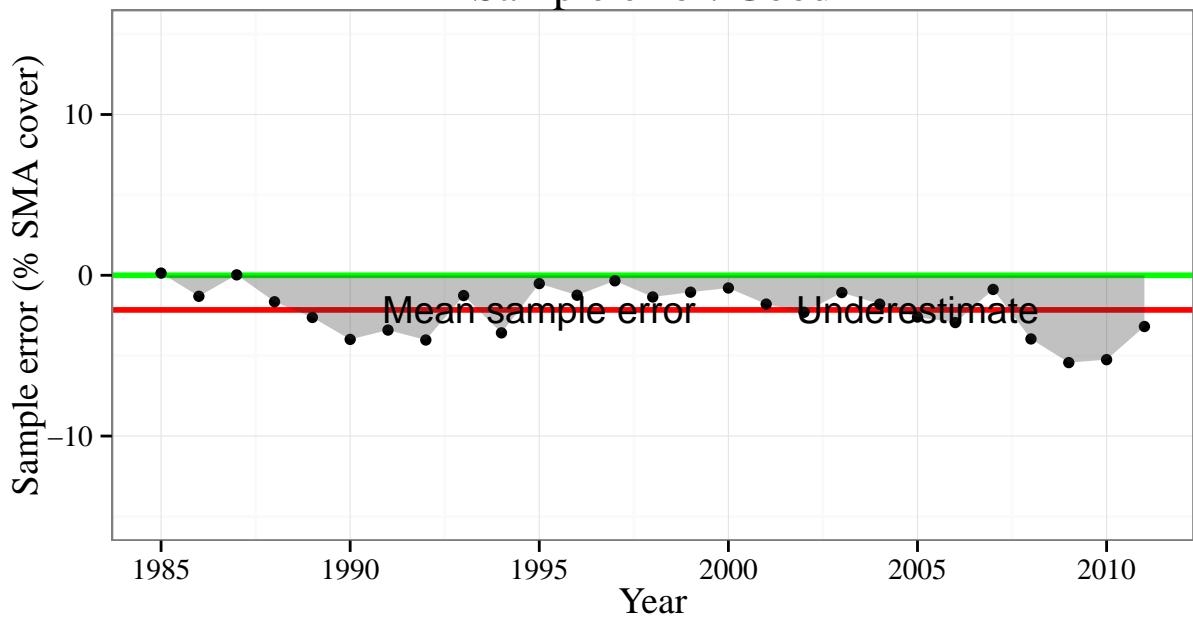
FSL138 Sample error: Good



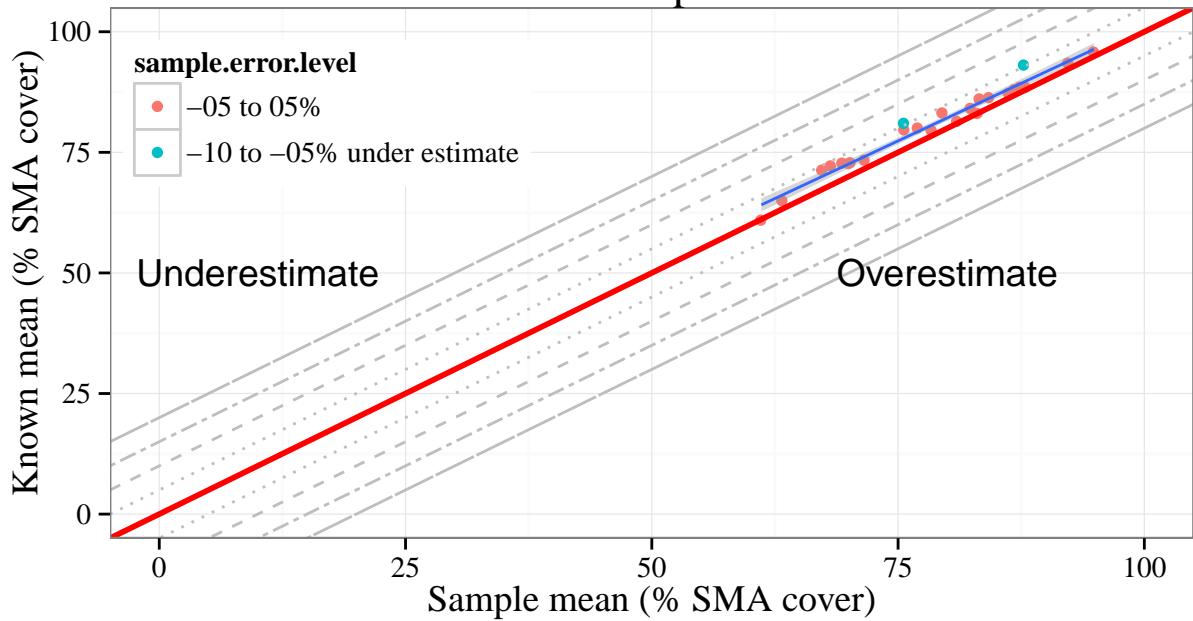
FSL138 Stable sample error



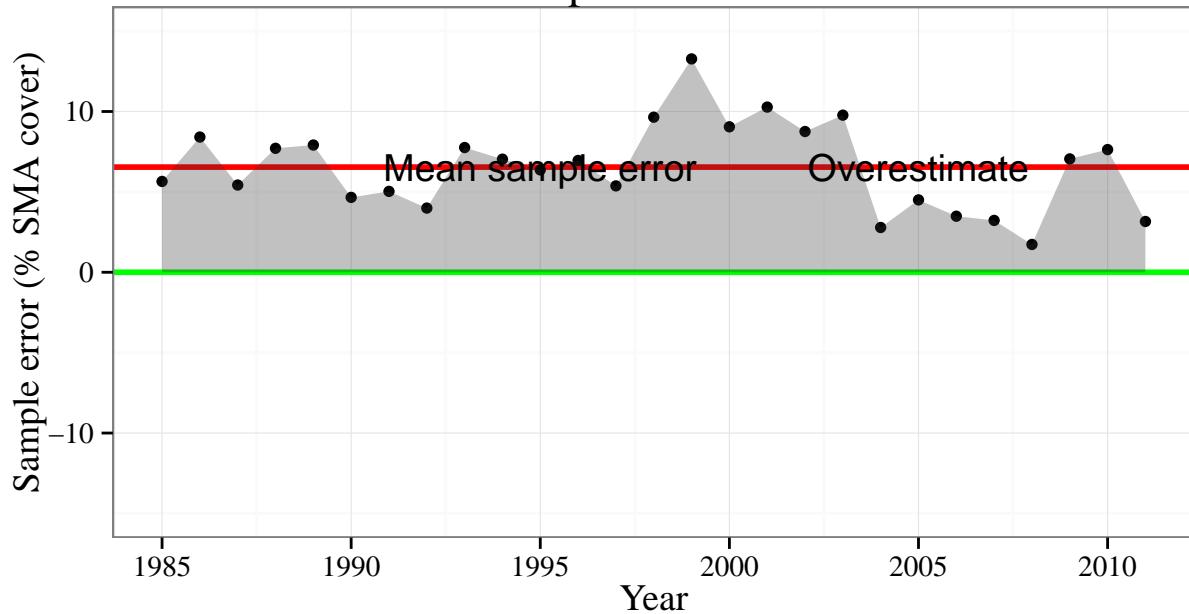
FSL166 Sample error: Good



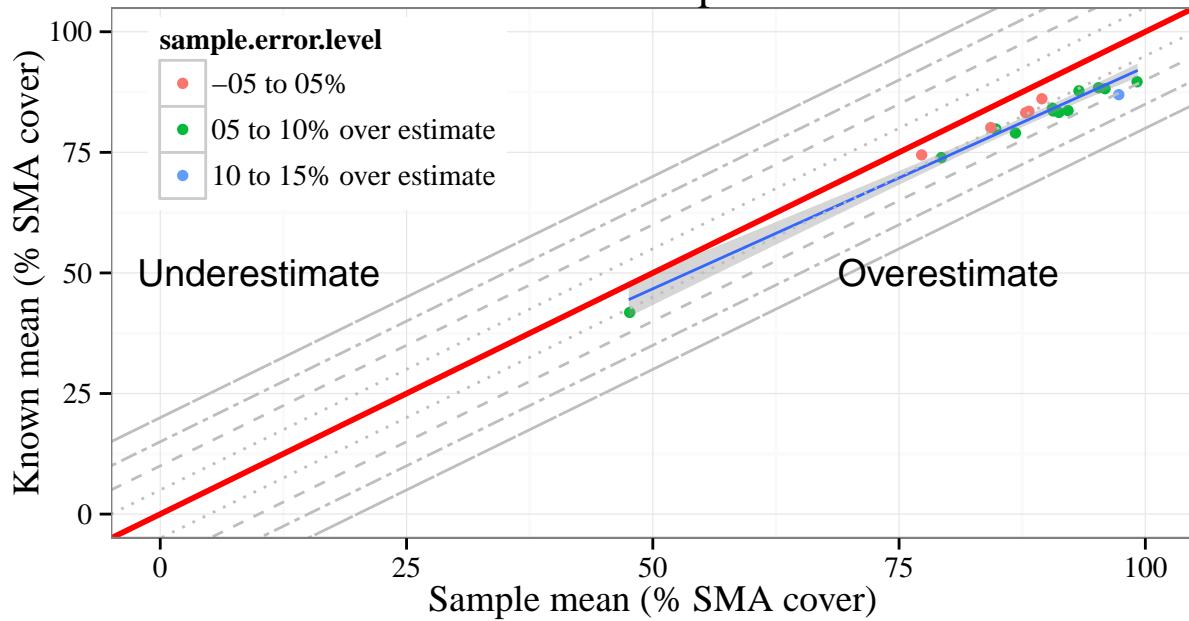
FSL166 Stable sample error



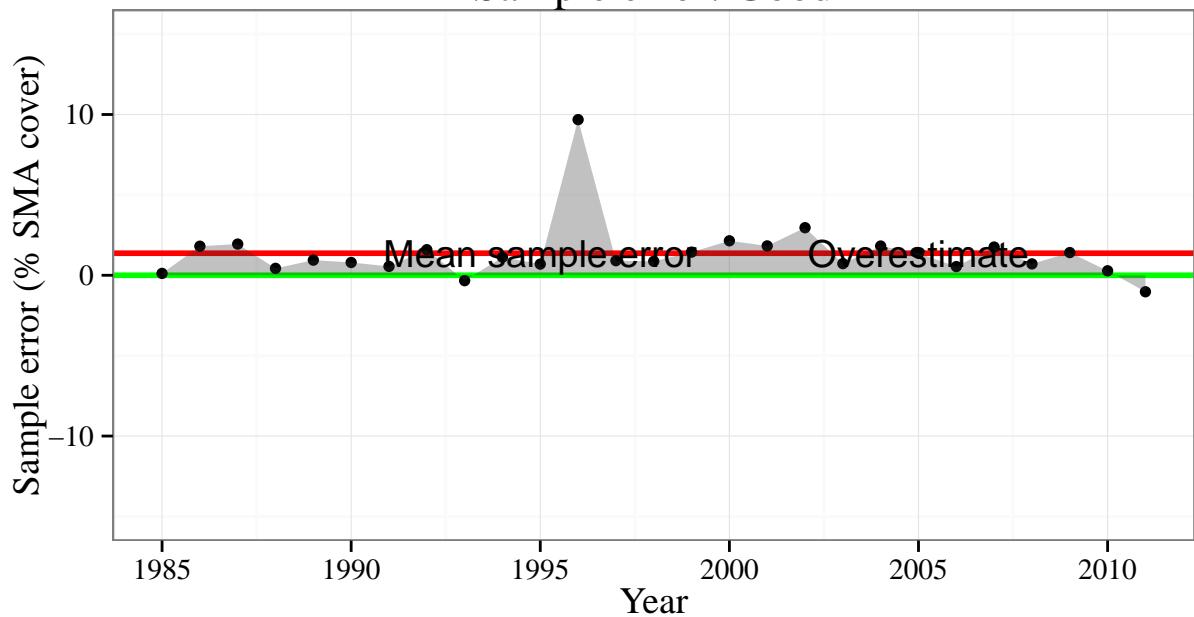
FSL172
Sample error: Fair



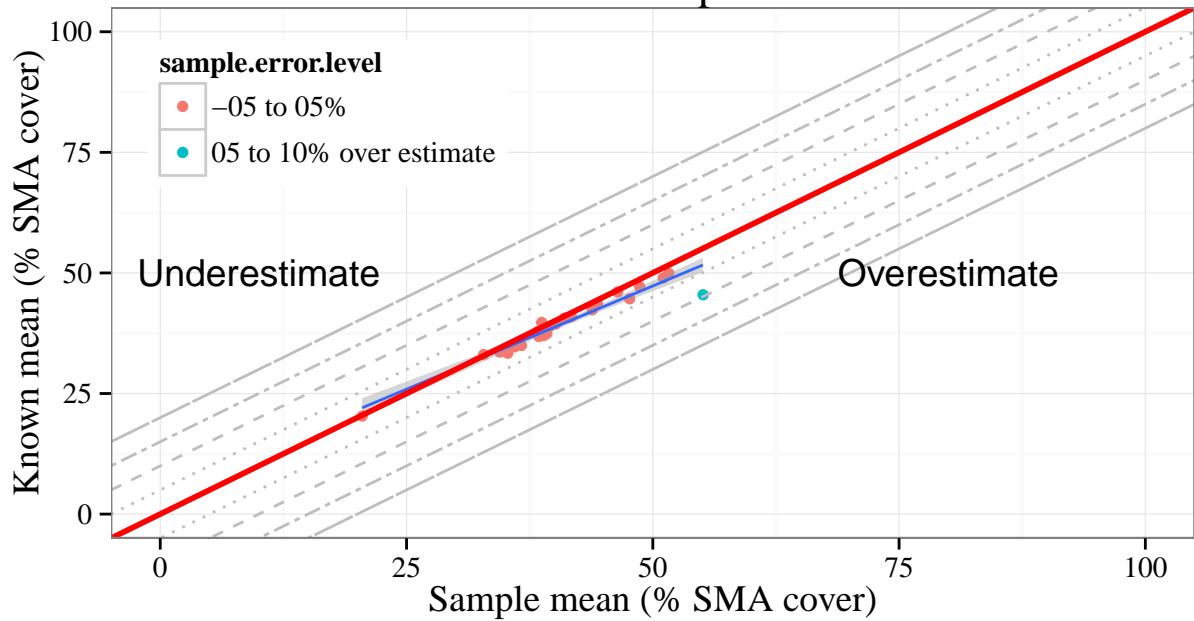
FSL172
Unstable sample error



FSL187 Sample error: Good

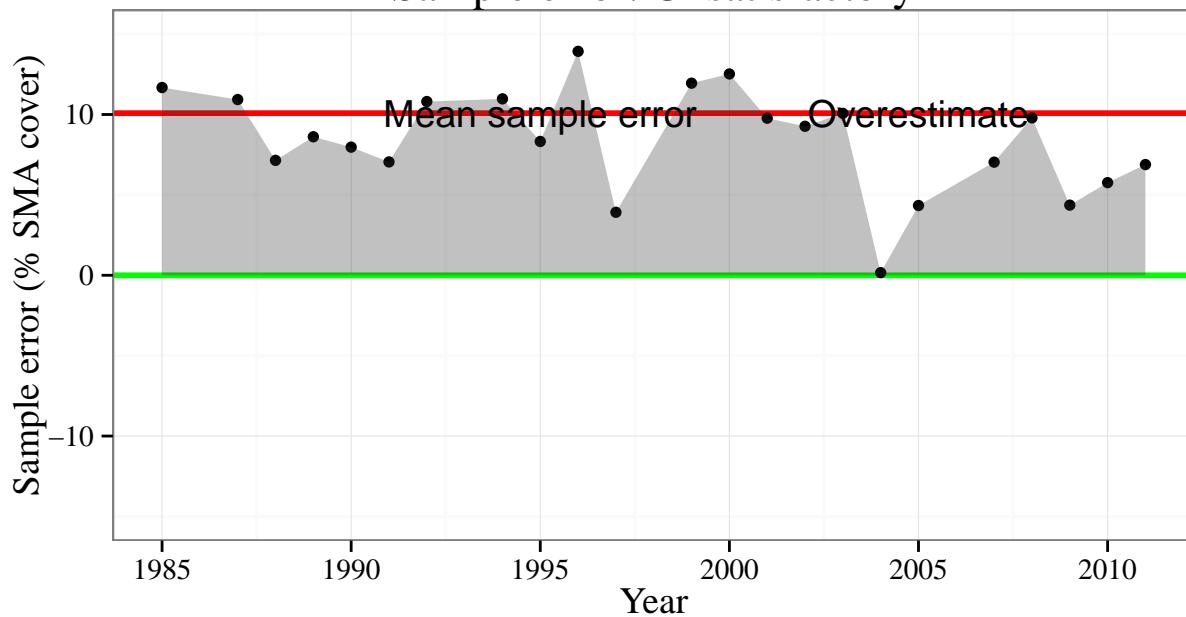


FSL187 Unstable sample error



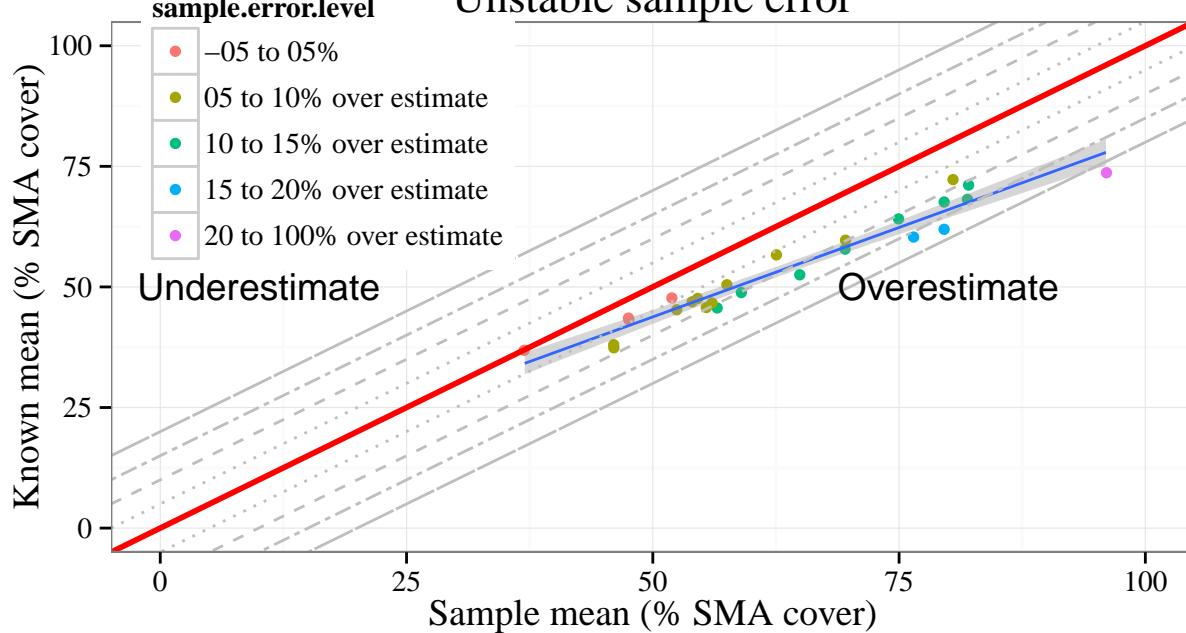
FSL214

Sample error: Unsatisfactory

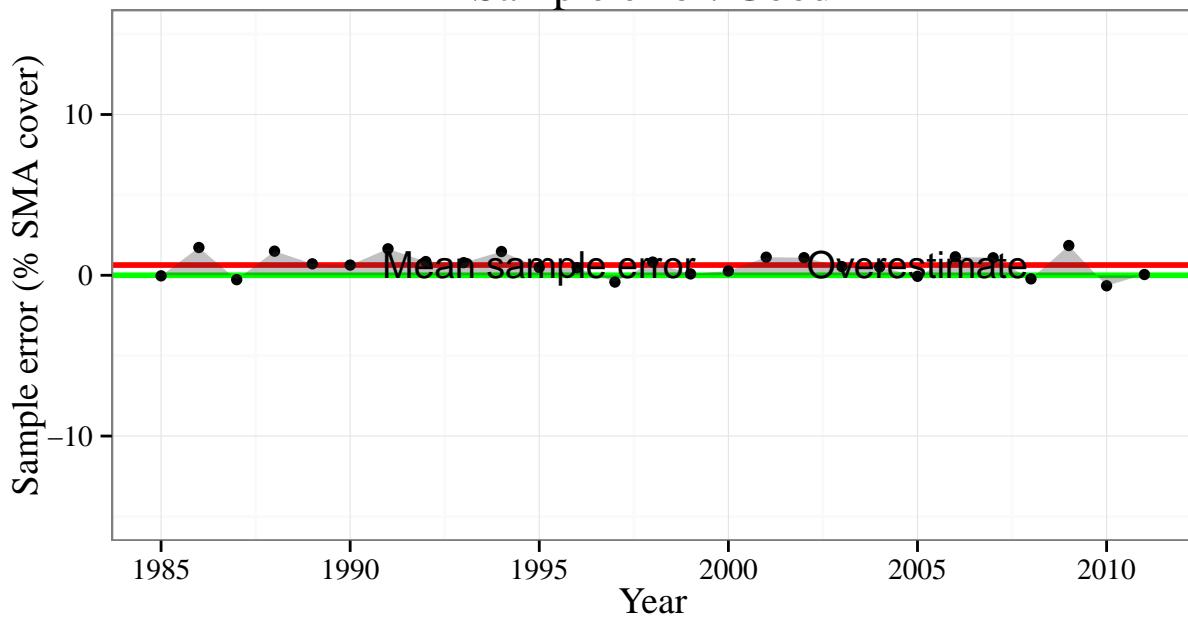


FSL214

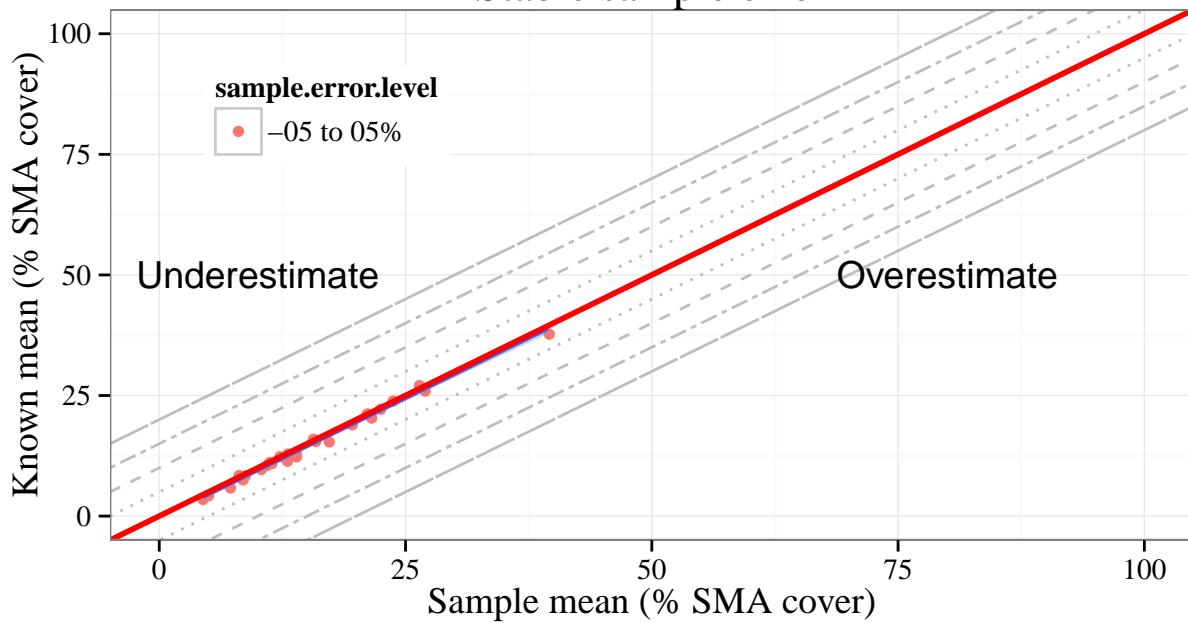
Unstable sample error



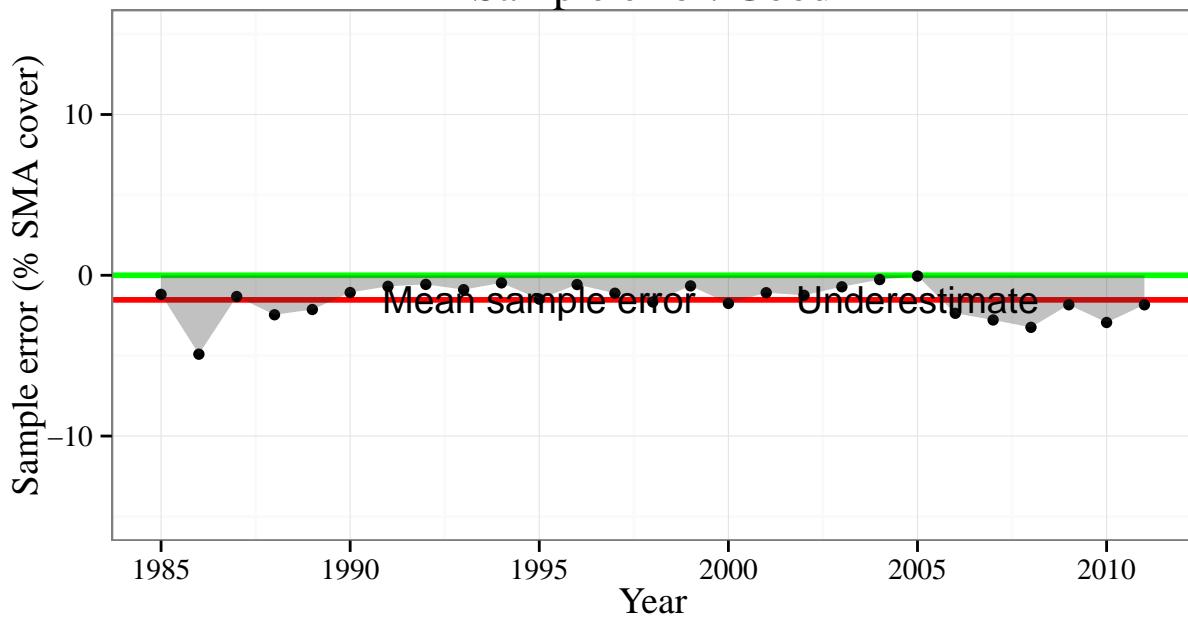
FSP004
Sample error: Good



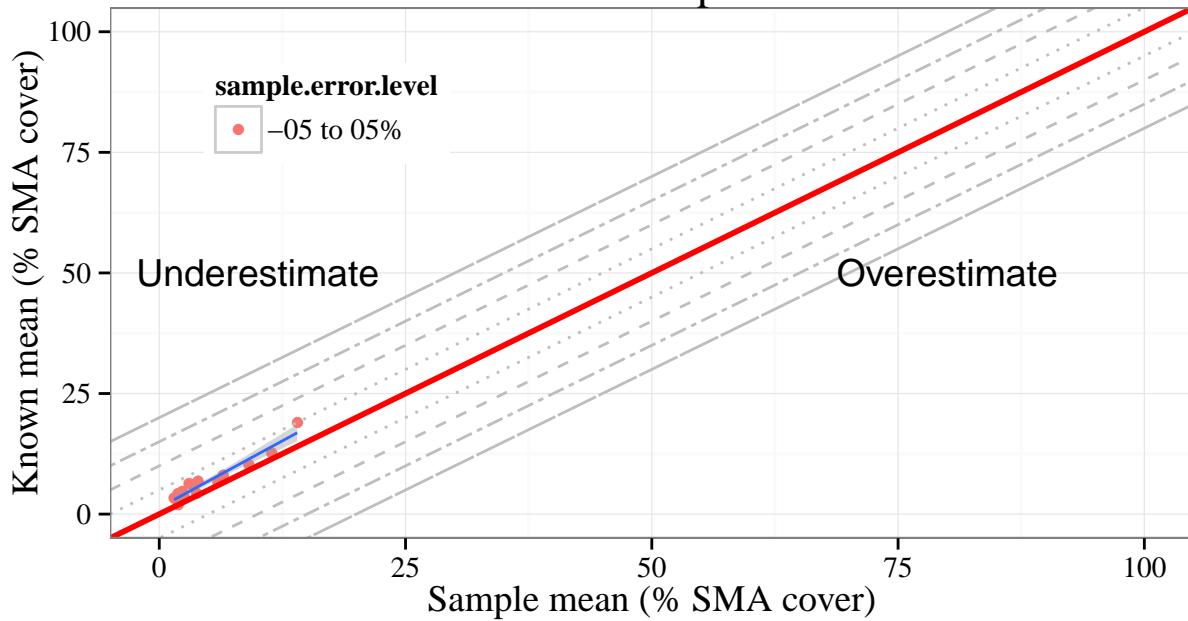
FSP004
Stable sample error



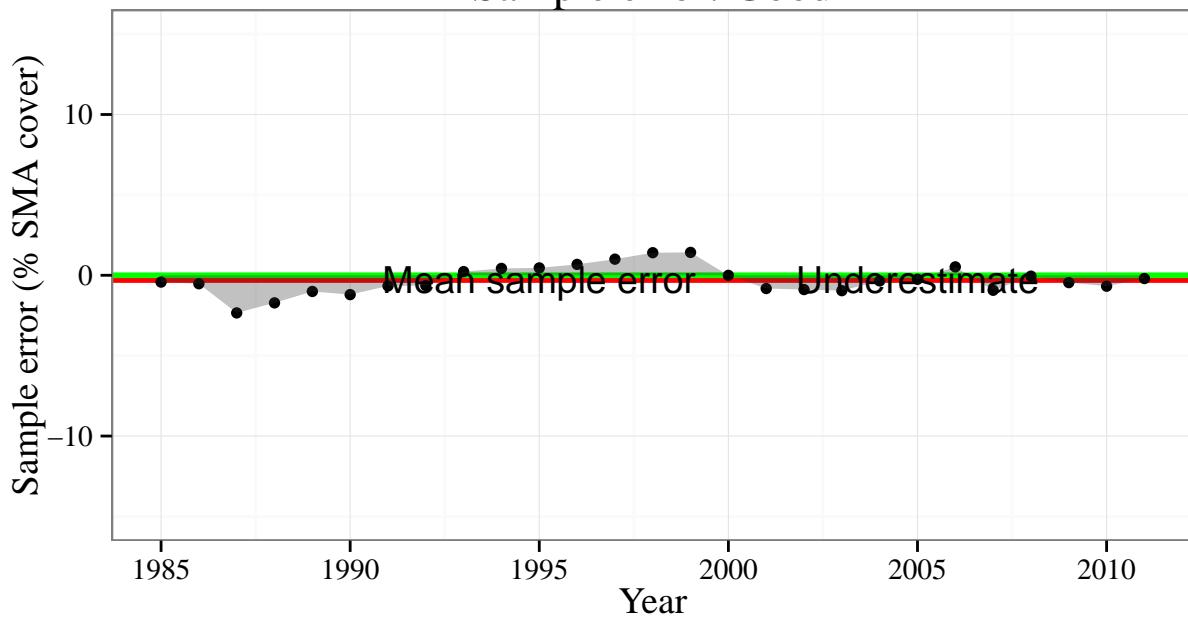
FSP006 Sample error: Good



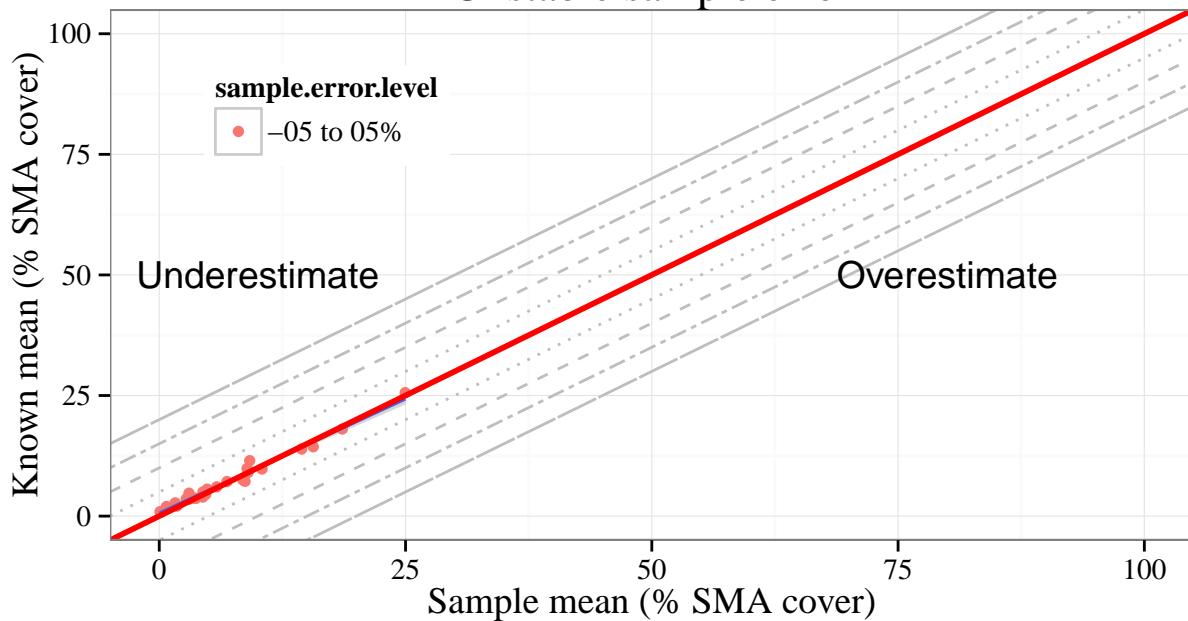
FSP006 Unstable sample error



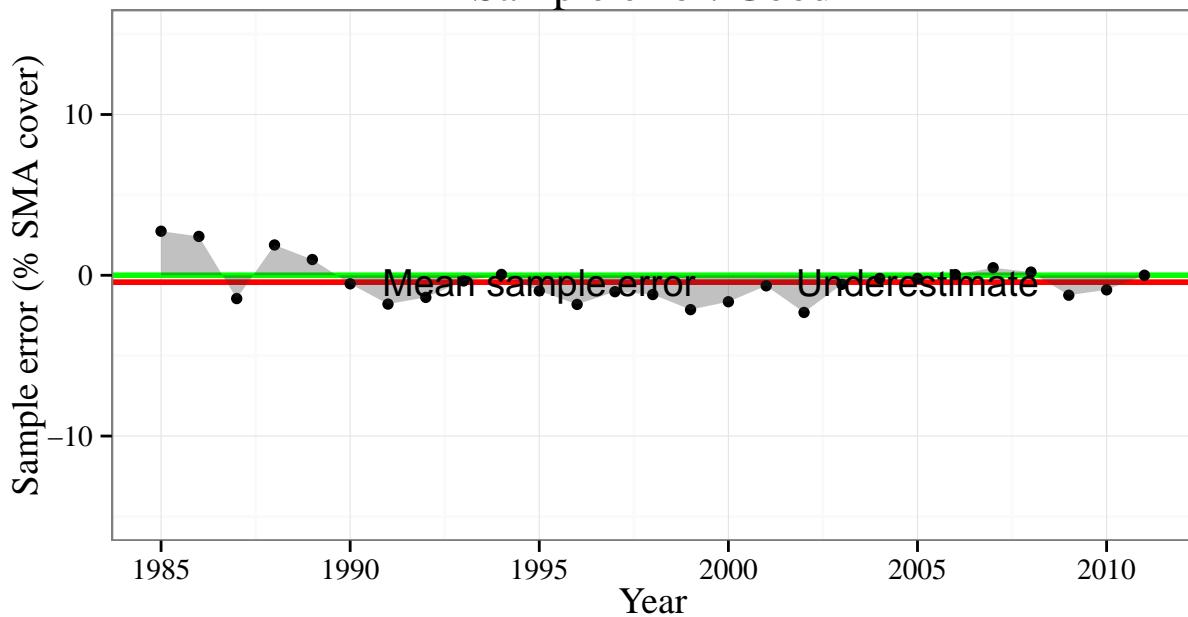
FSP015 Sample error: Good



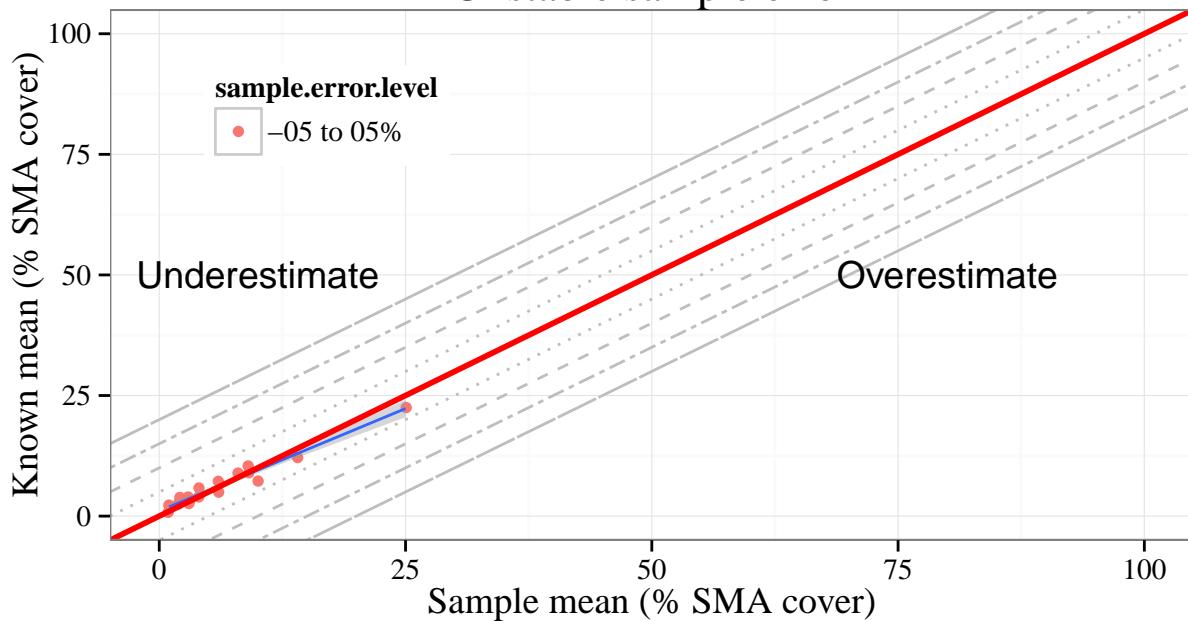
FSP015 Unstable sample error



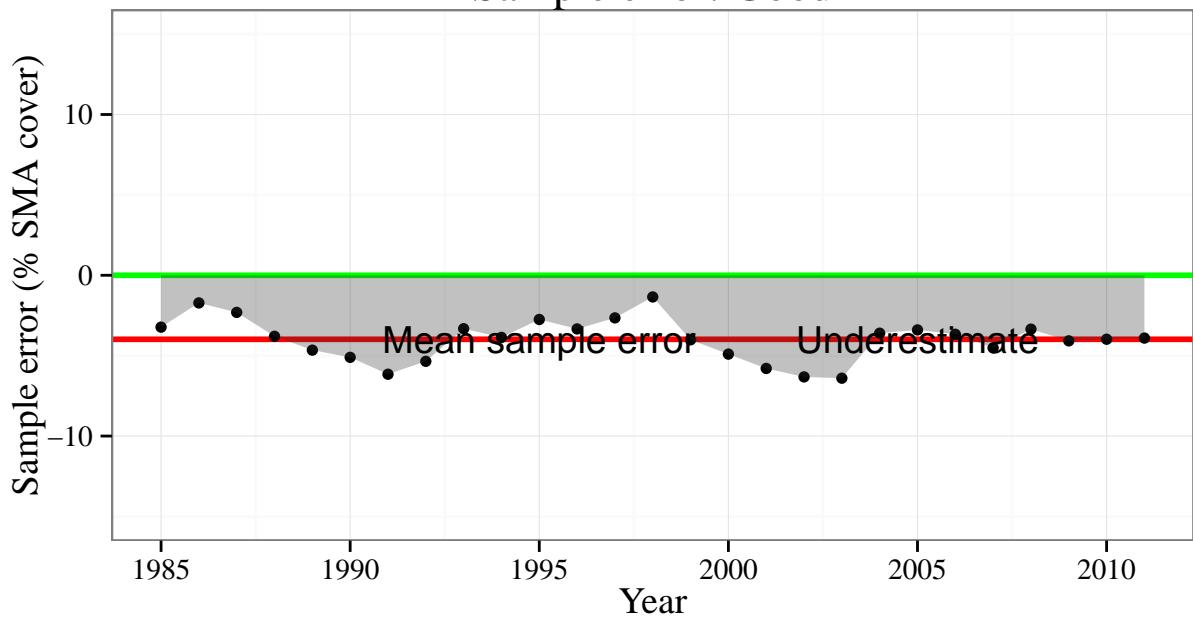
FSP019 Sample error: Good



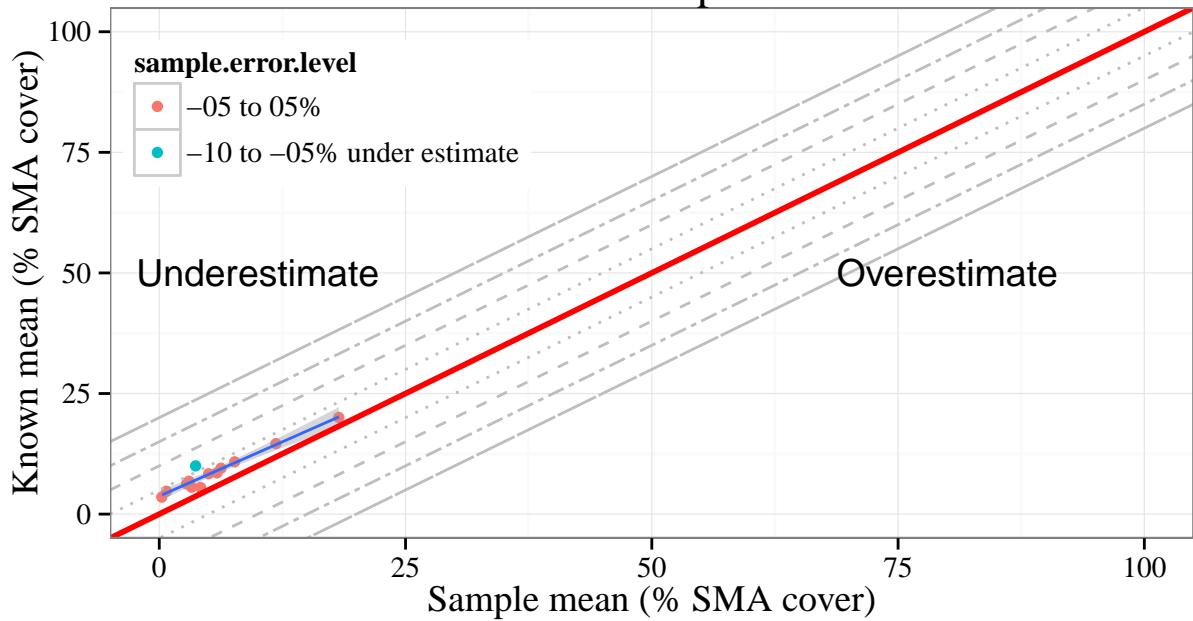
FSP019 Unstable sample error



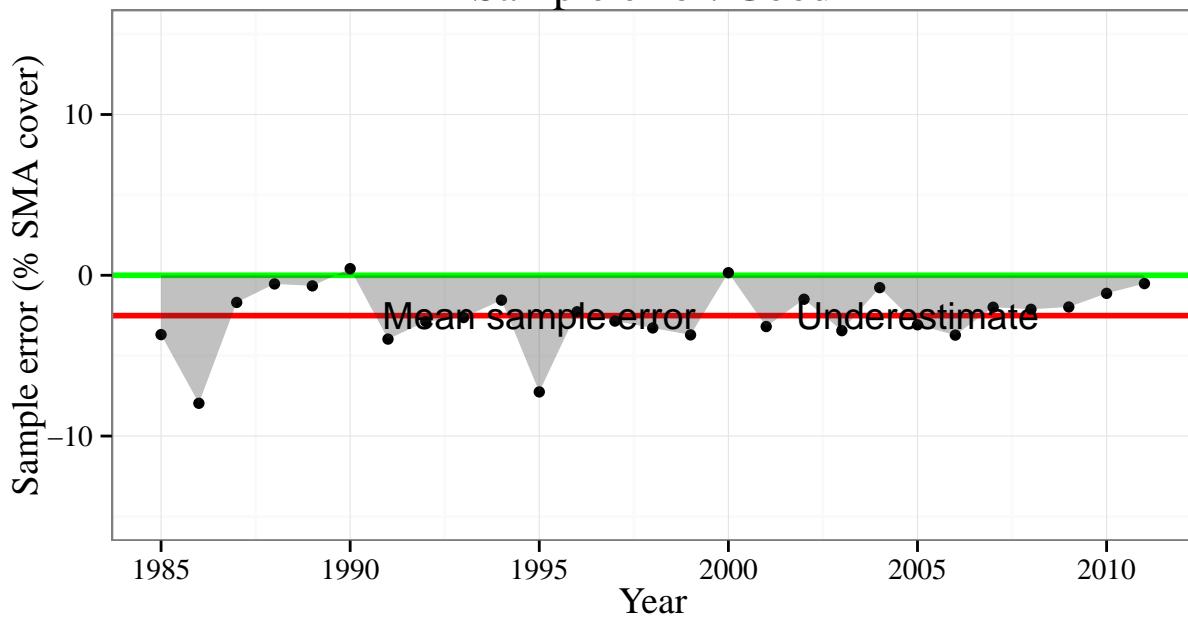
FSP020 Sample error: Good



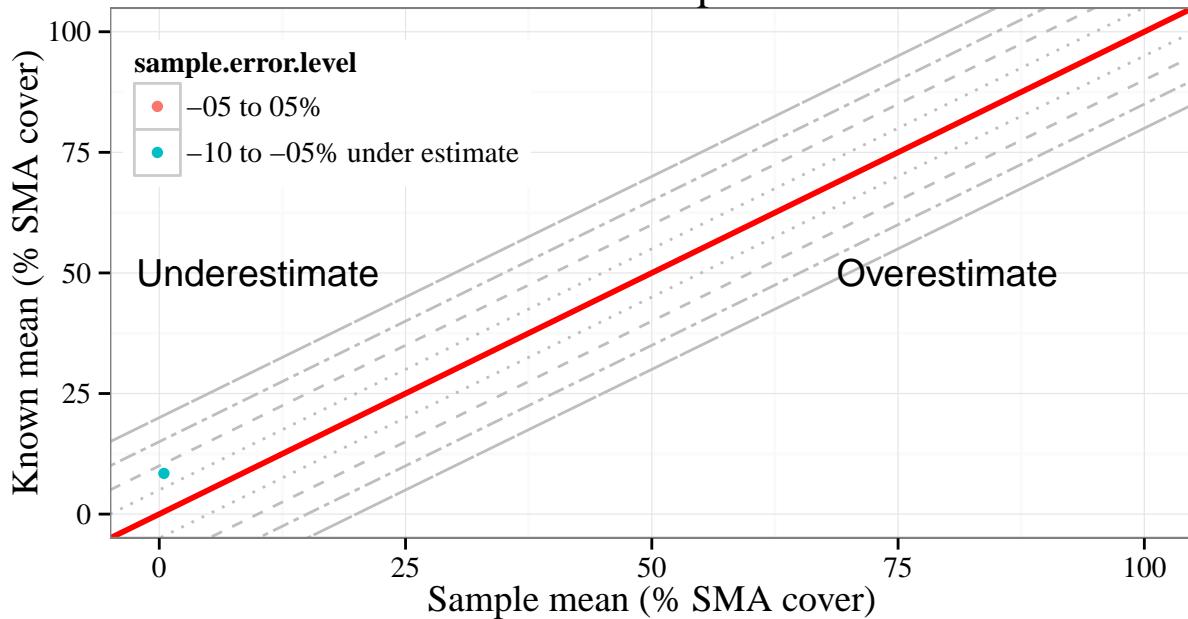
FSP020 Unstable sample error



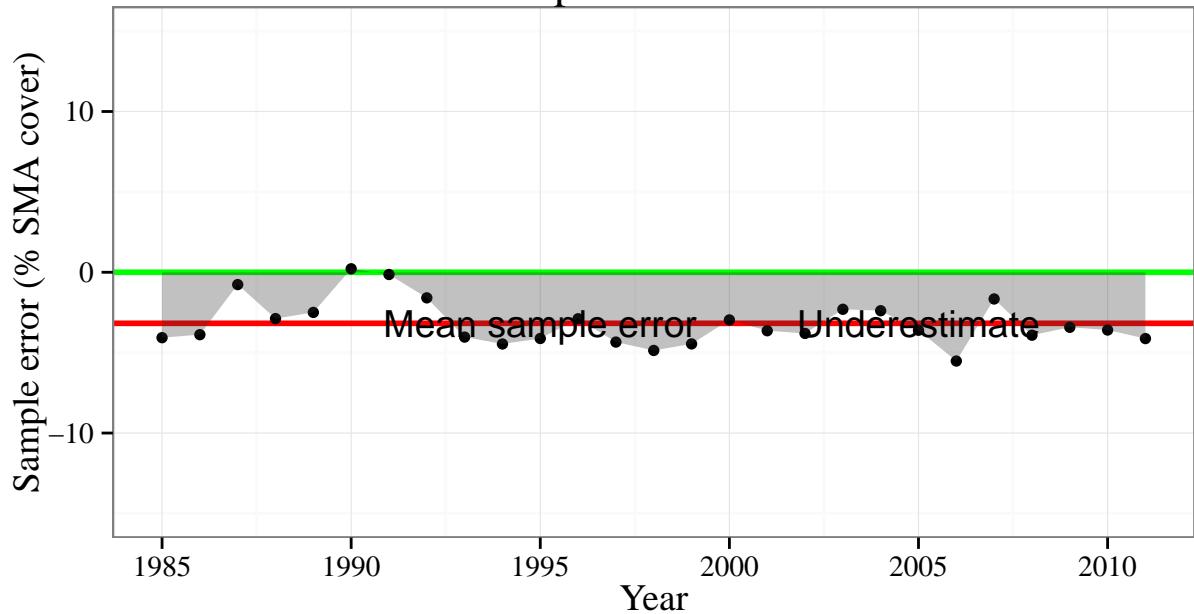
FSP022 Sample error: Good



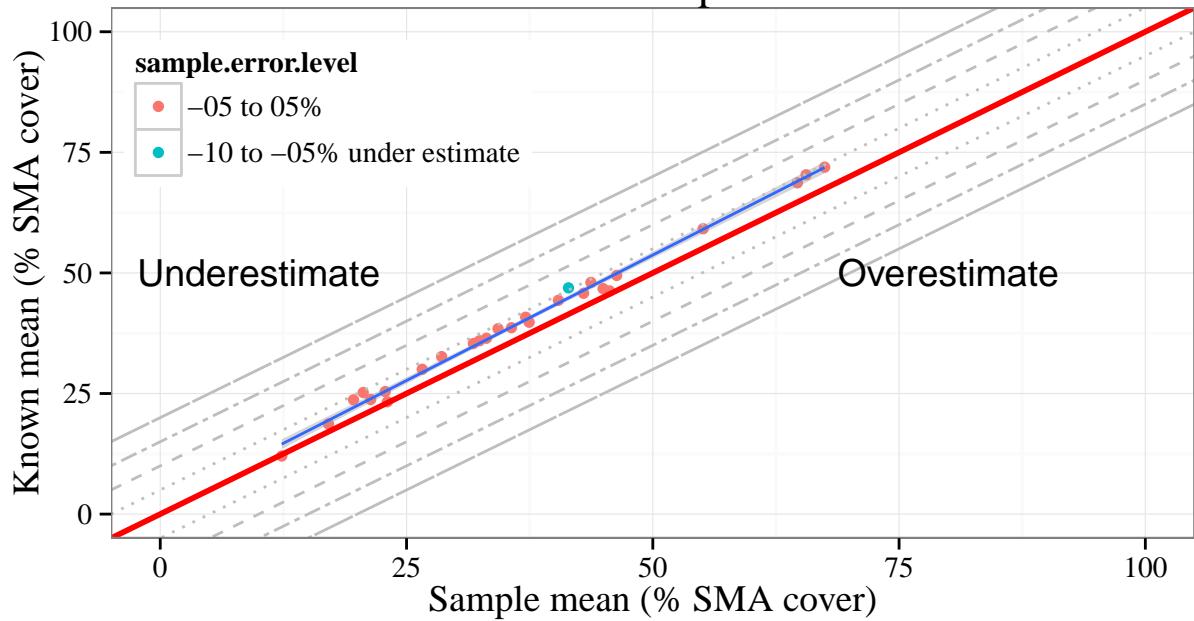
FSP022 Unstable sample error



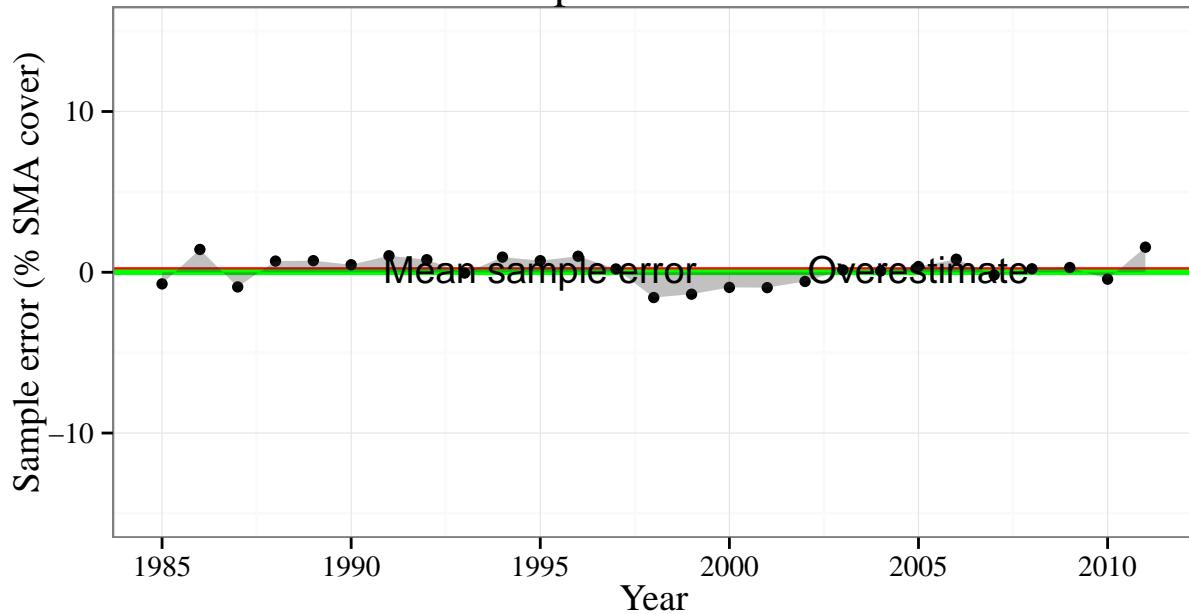
IND011 Sample error: Good



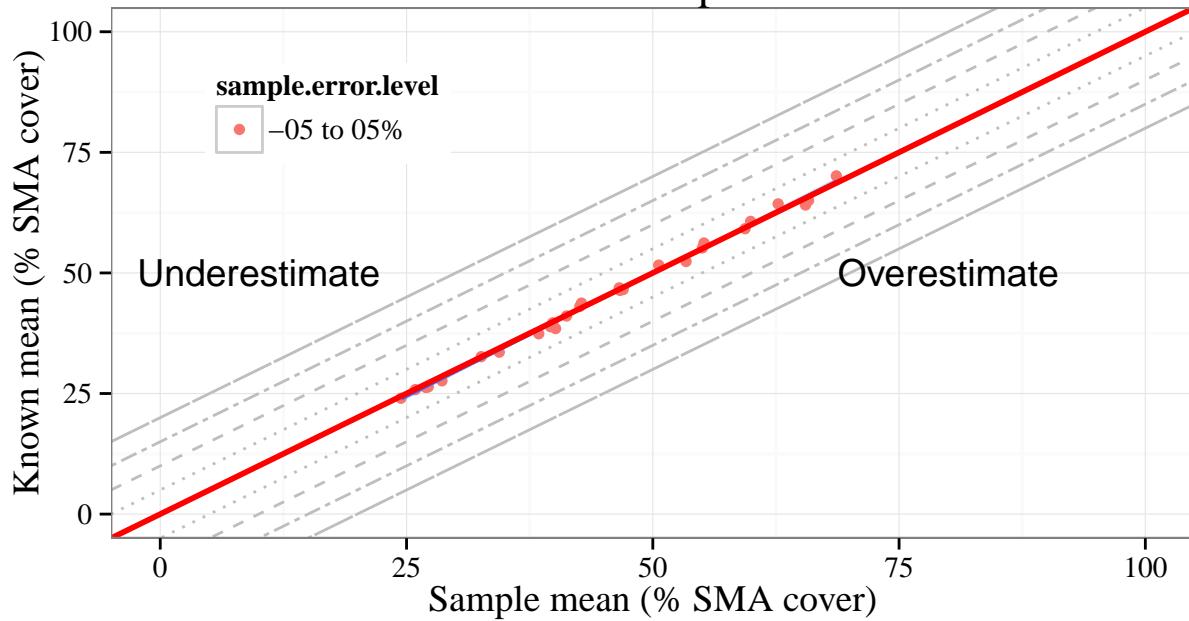
IND011 Unstable sample error



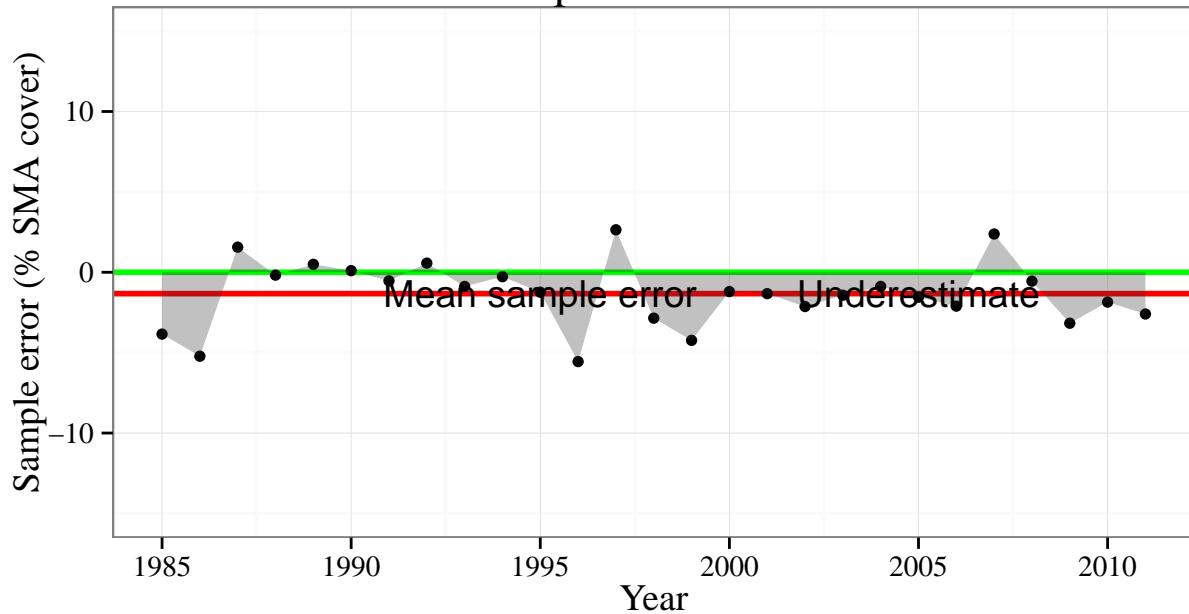
IND019
Sample error: Good



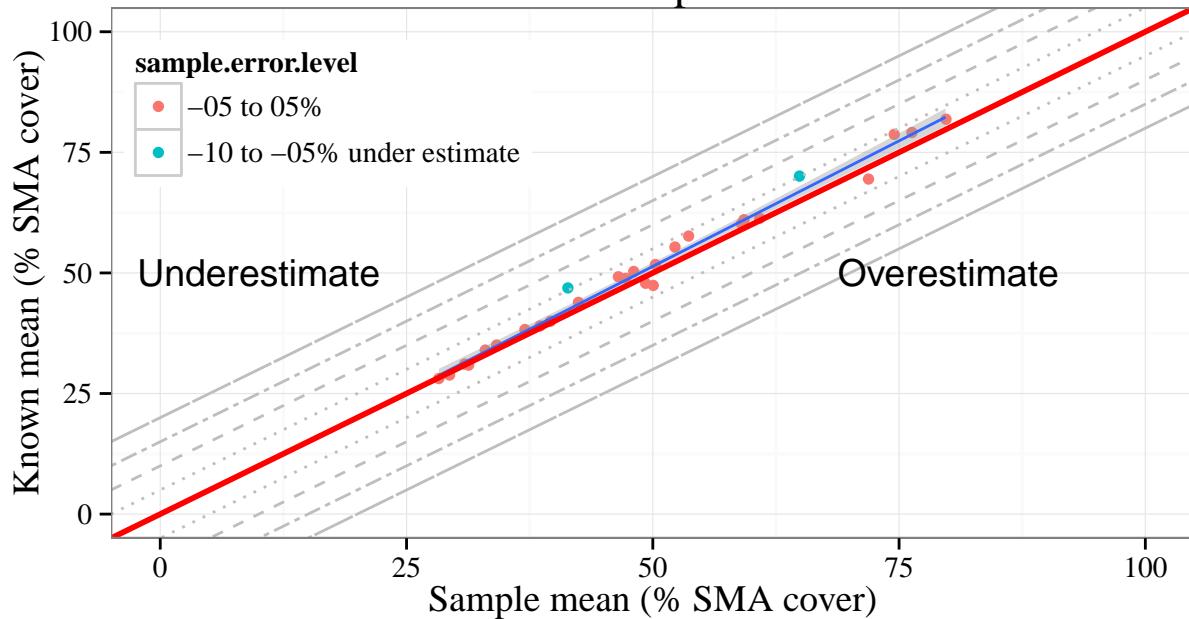
IND019
Unstable sample error



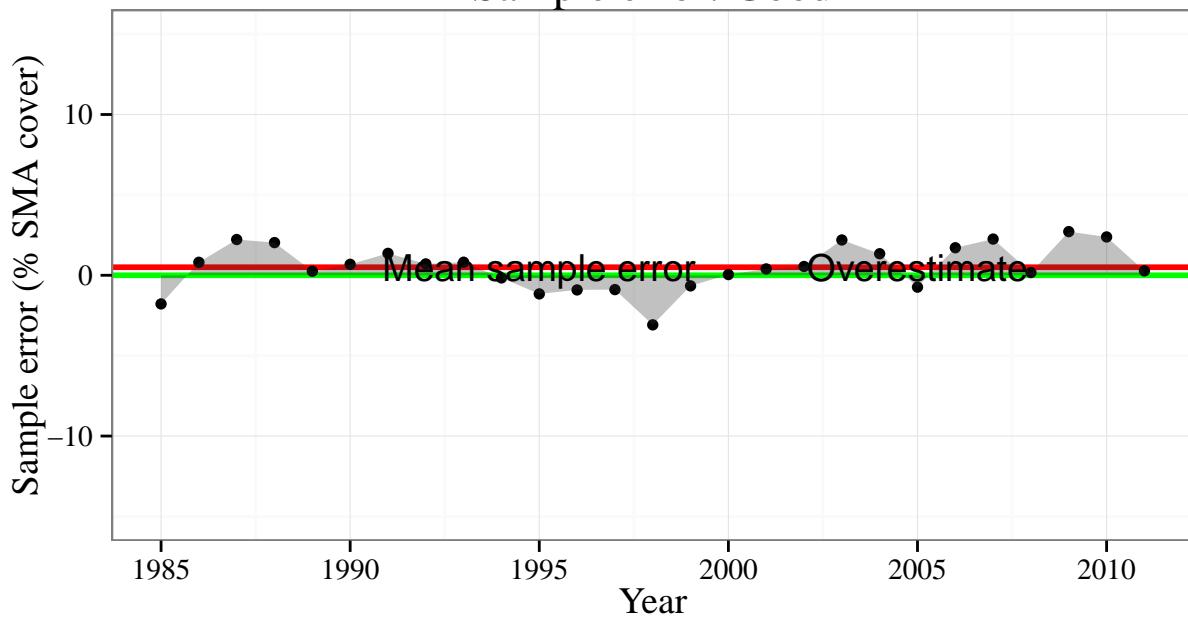
IND021 Sample error: Good



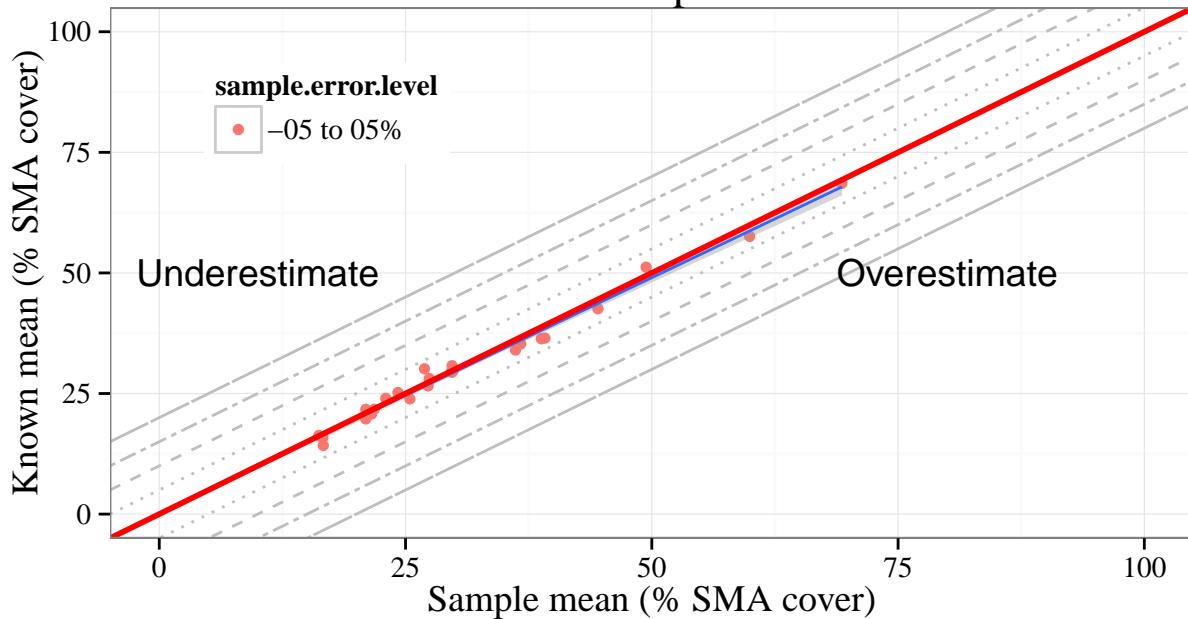
IND021 Stable sample error



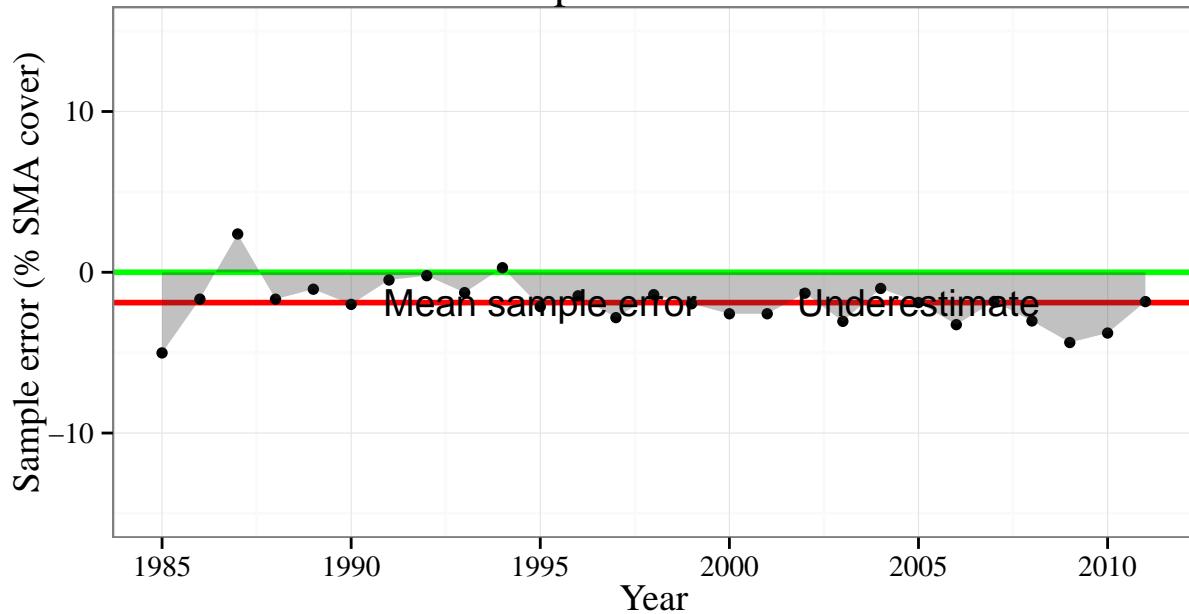
IND026
Sample error: Good



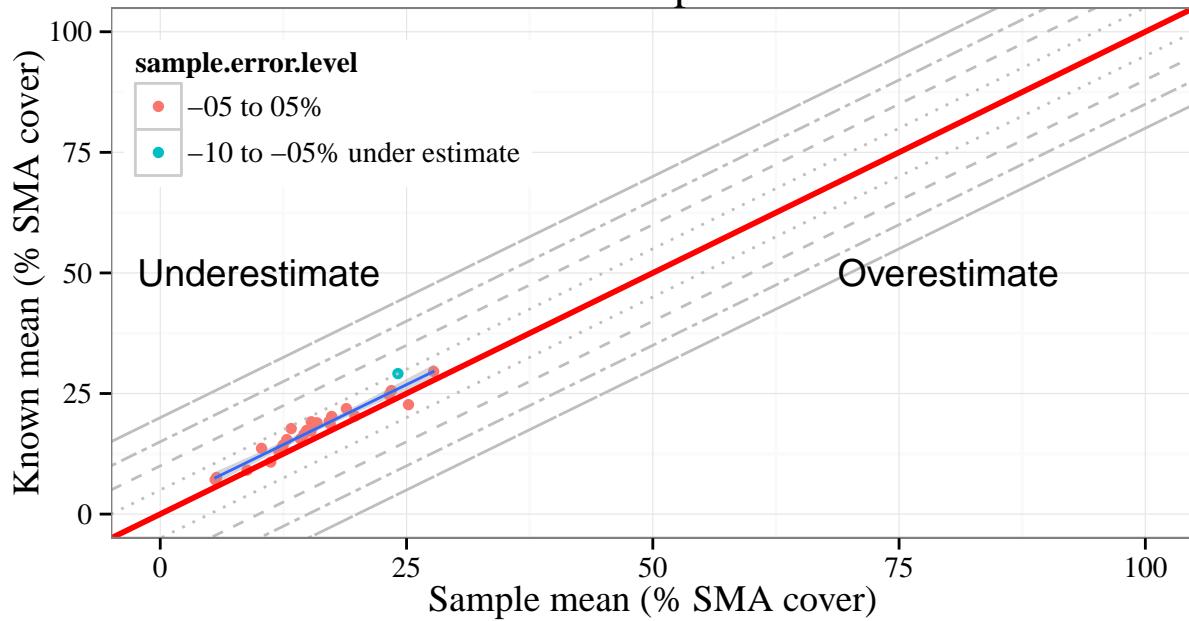
IND026
Stable sample error



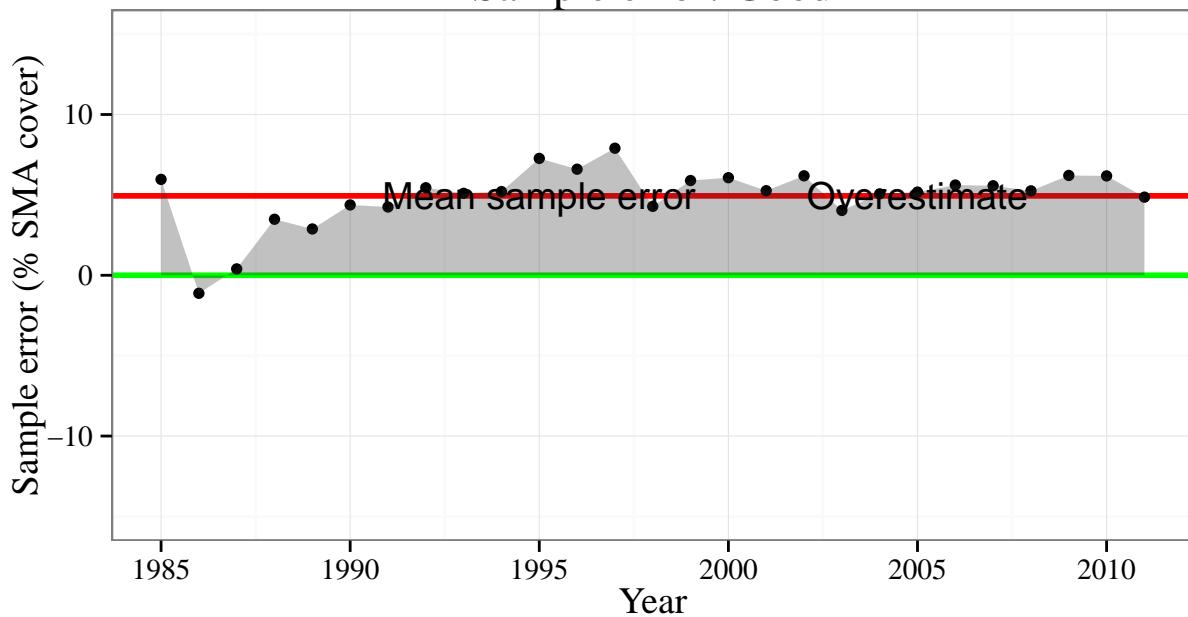
IND029
Sample error: Good



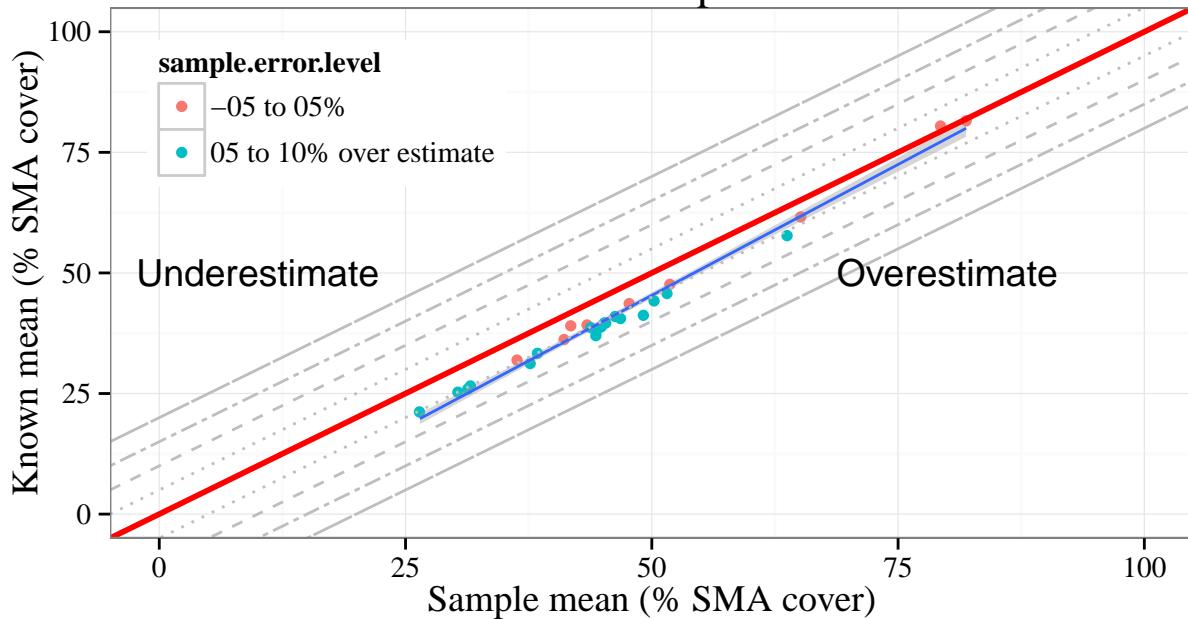
IND029
Stable sample error



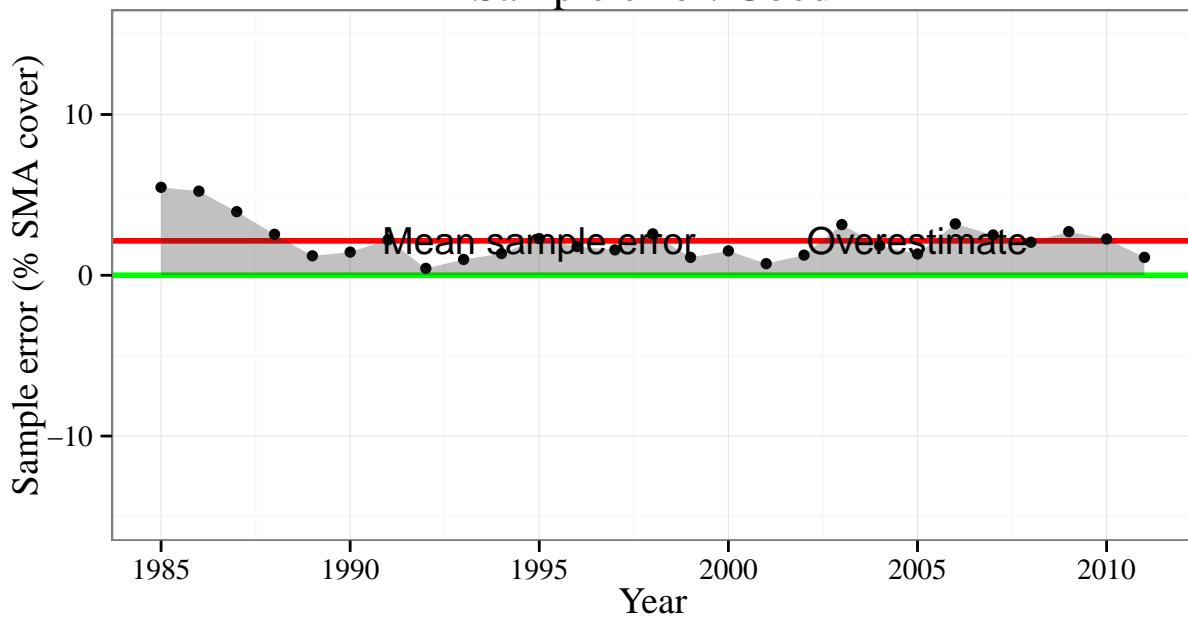
IND035 Sample error: Good



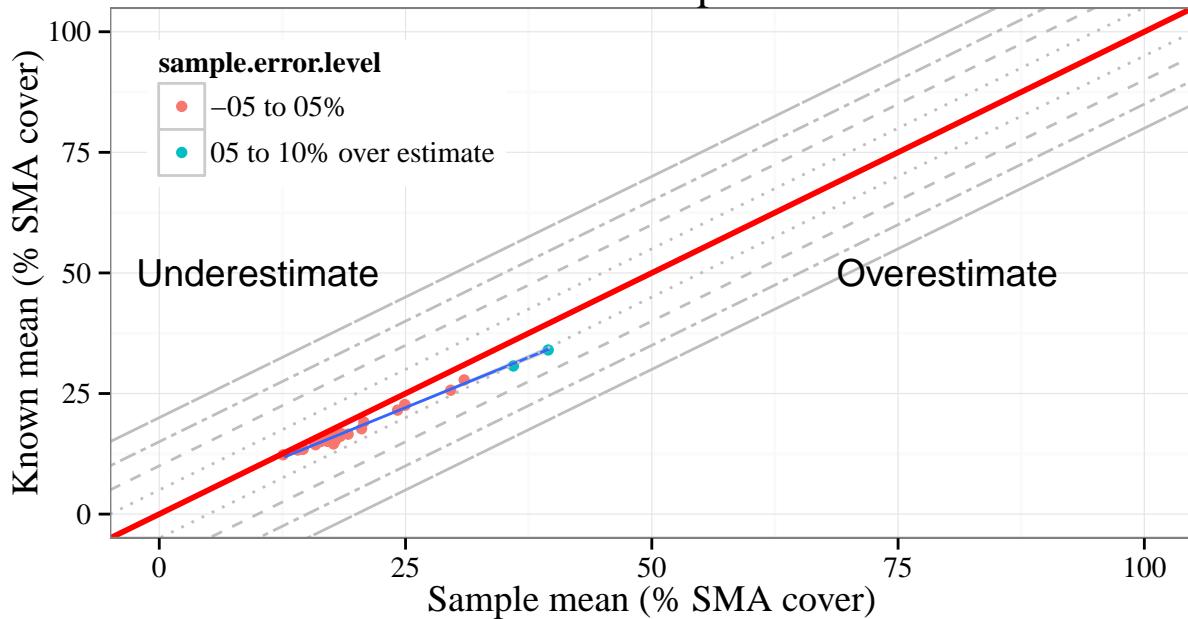
IND035 Unstable sample error



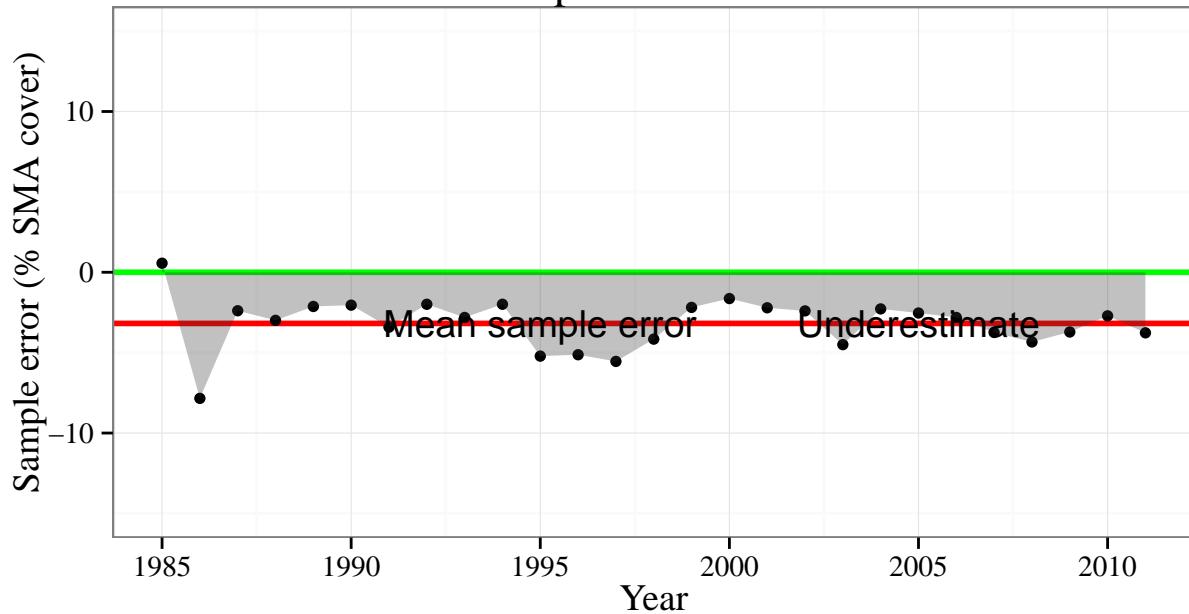
IND064 Sample error: Good



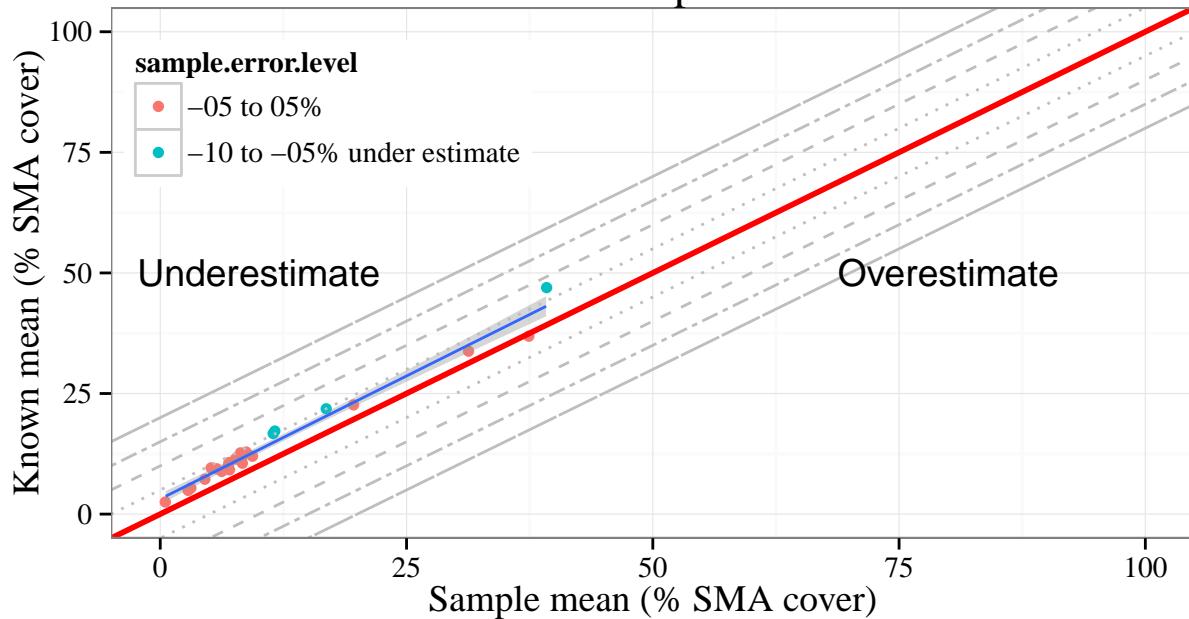
IND064 Unstable sample error



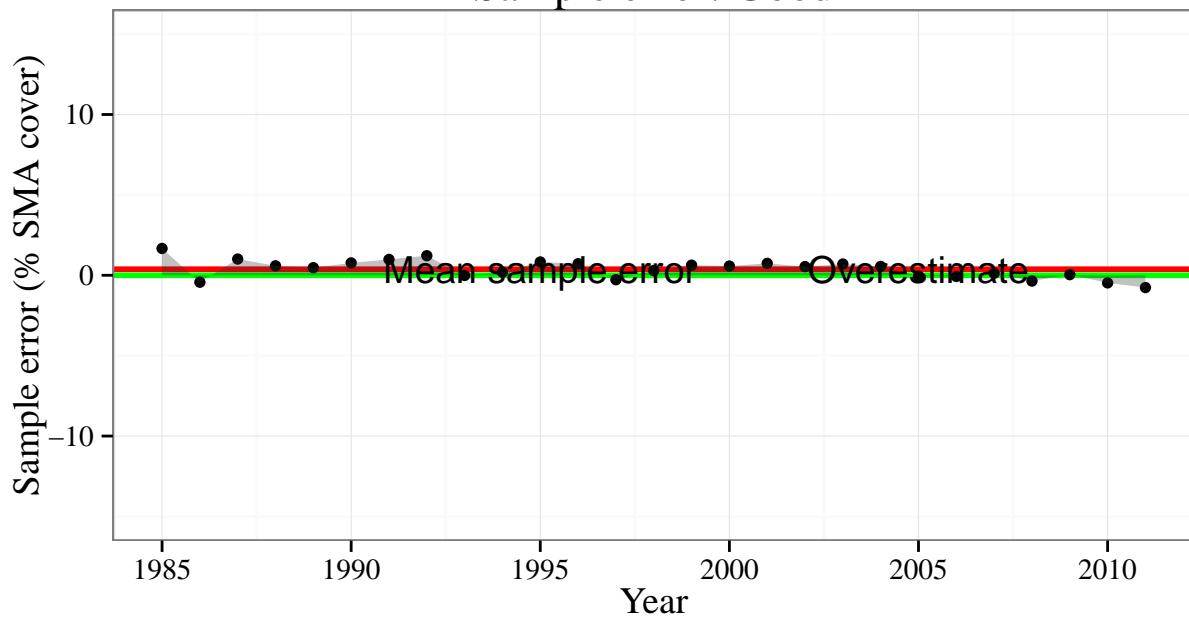
IND067 Sample error: Good



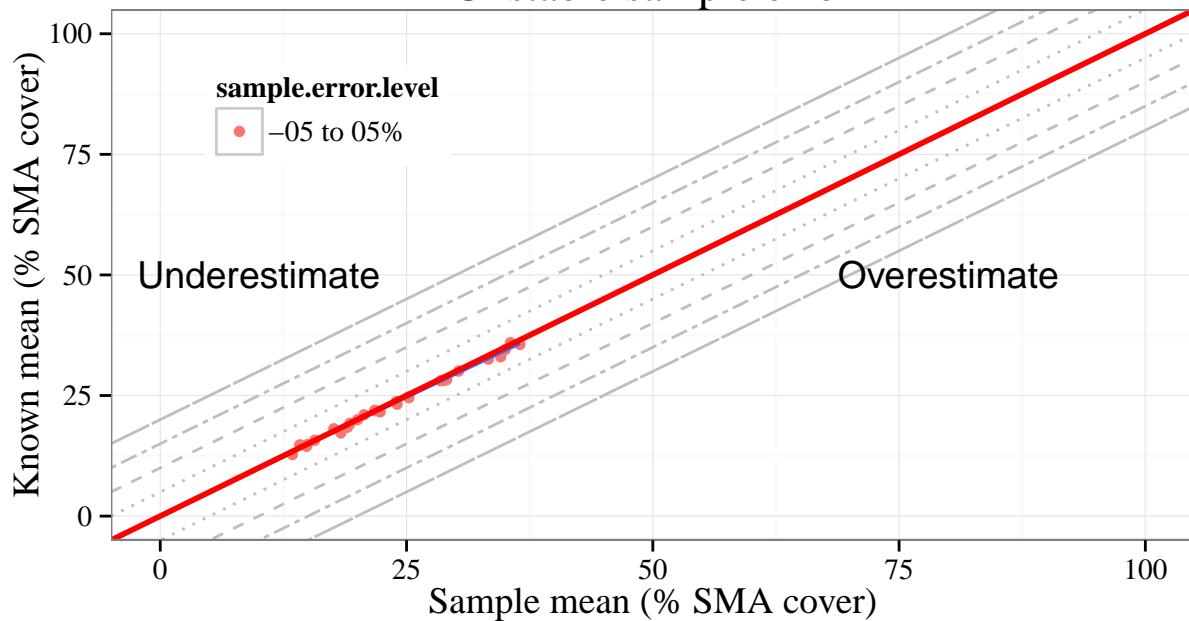
IND067 Stable sample error



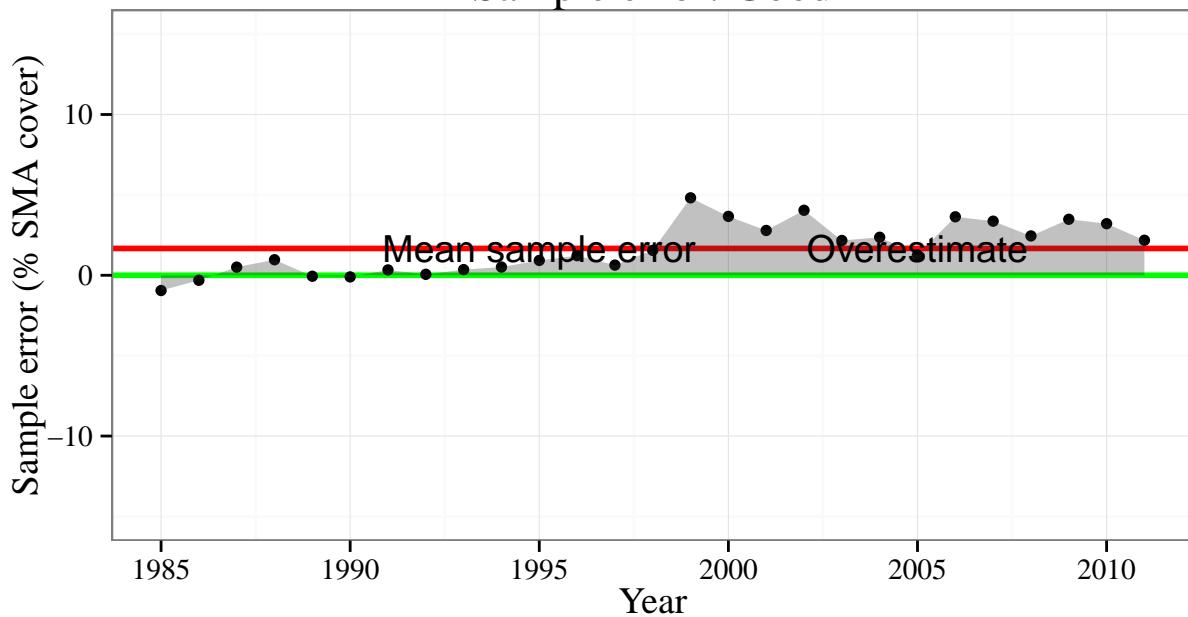
IND087
Sample error: Good



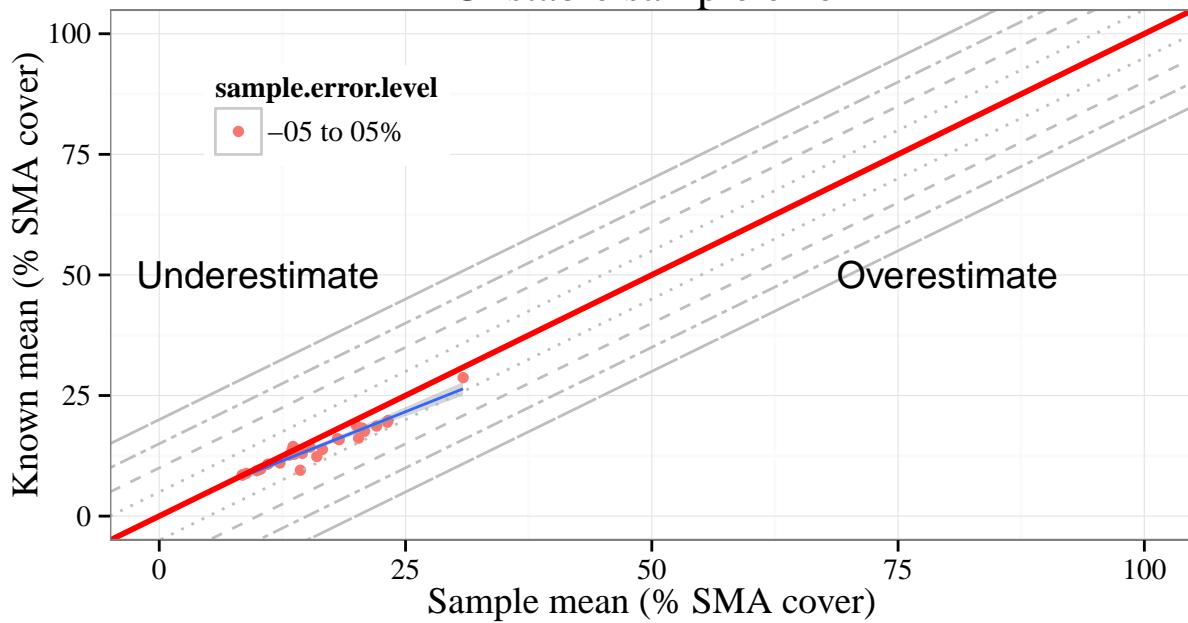
IND087
Unstable sample error



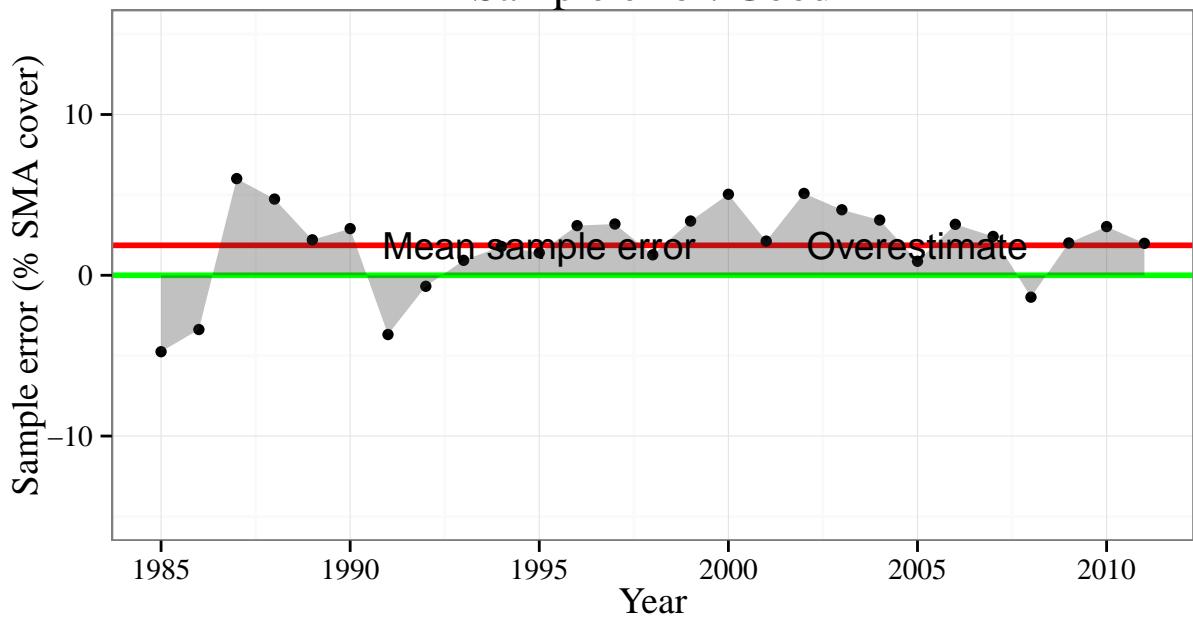
IND096 Sample error: Good



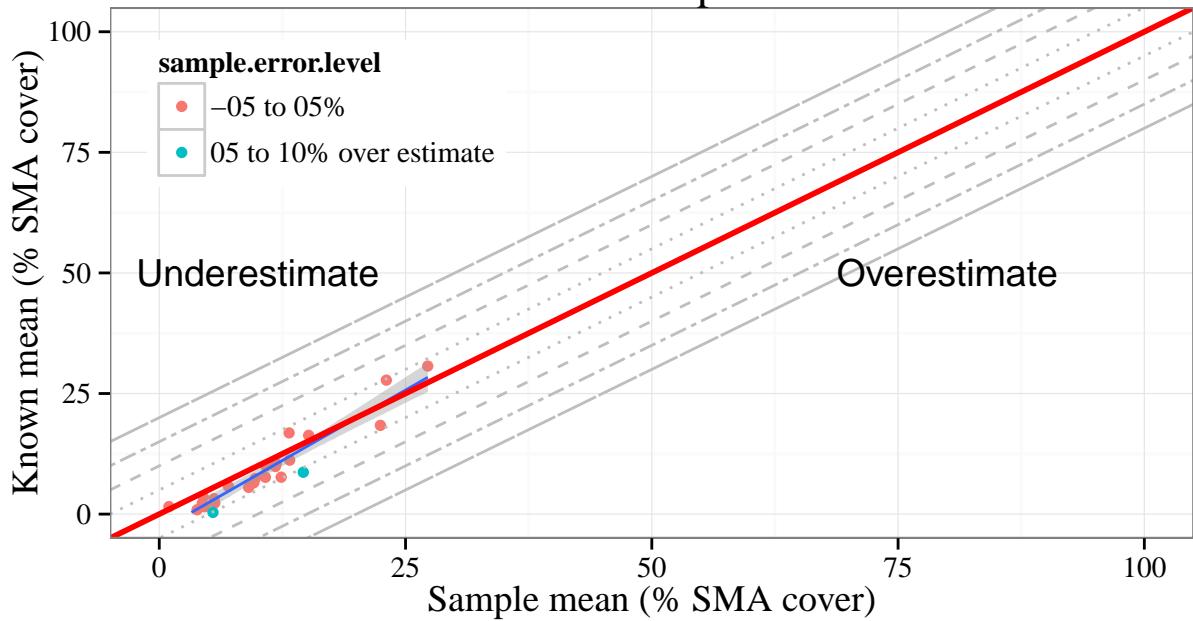
IND096 Unstable sample error



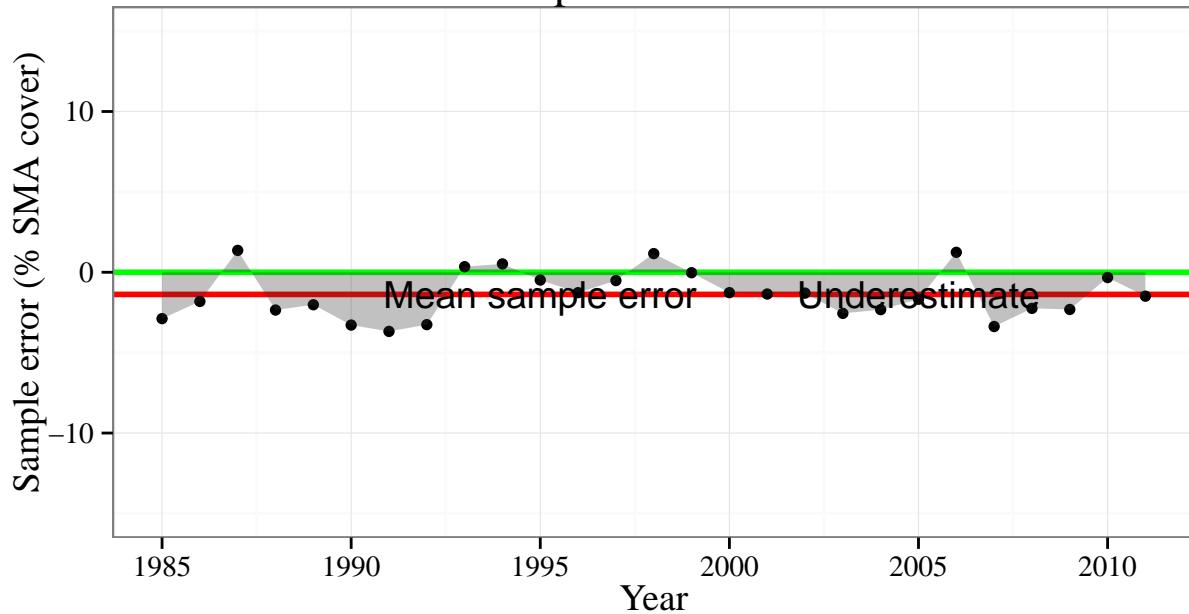
IND106 Sample error: Good



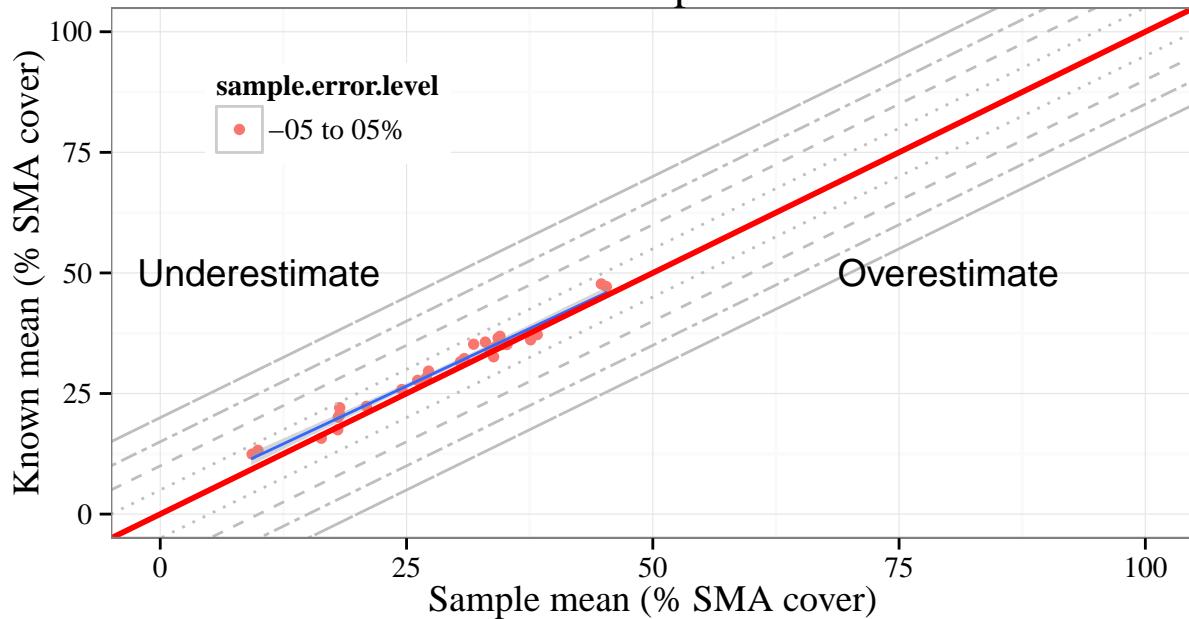
IND106 Unstable sample error



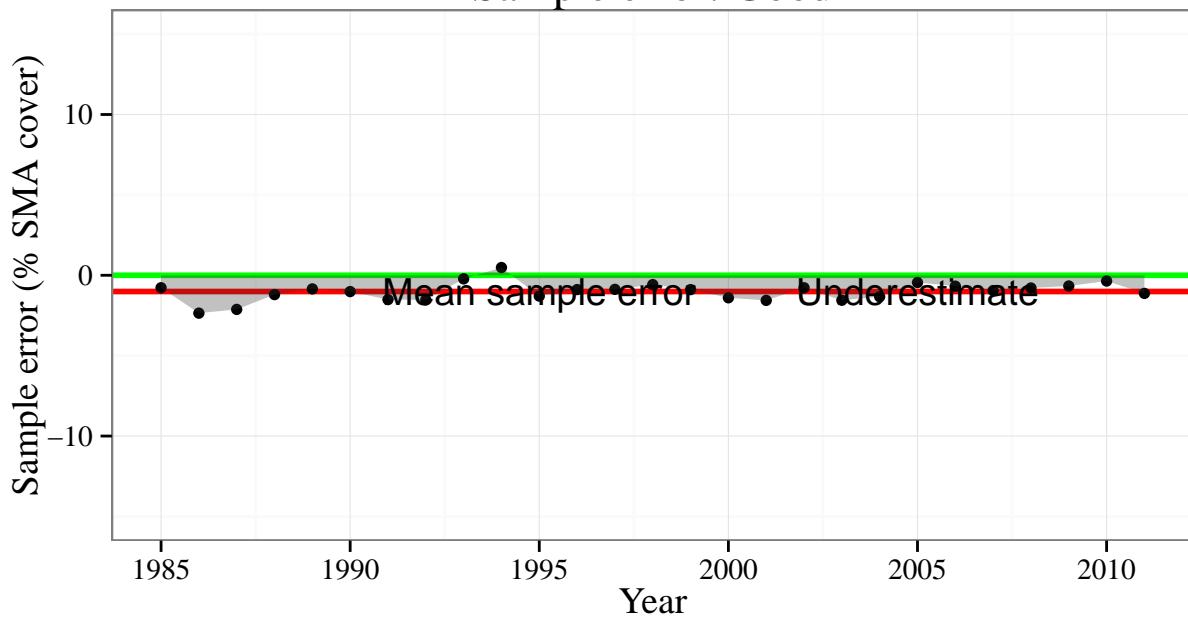
IND111 Sample error: Good



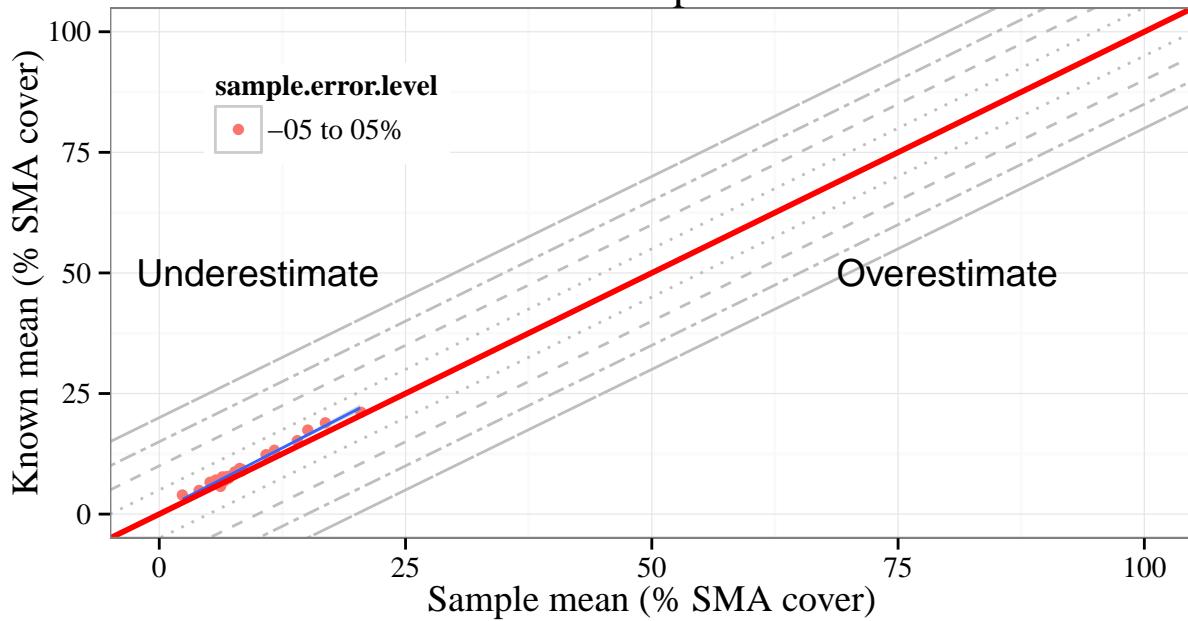
IND111 Stable sample error



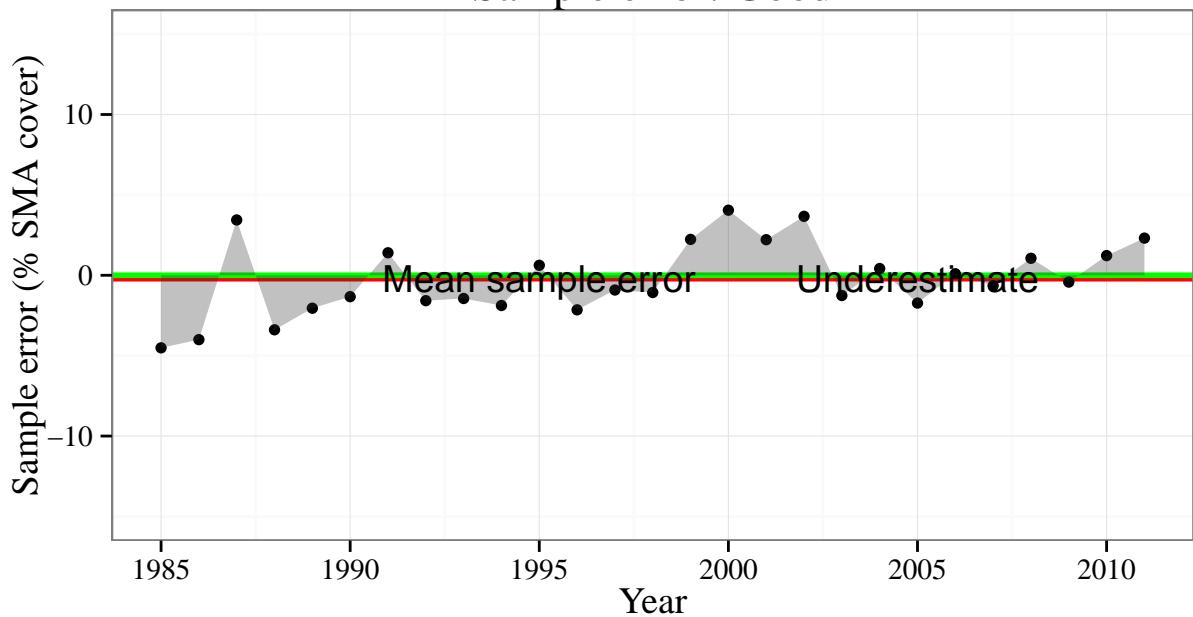
IND119
Sample error: Good



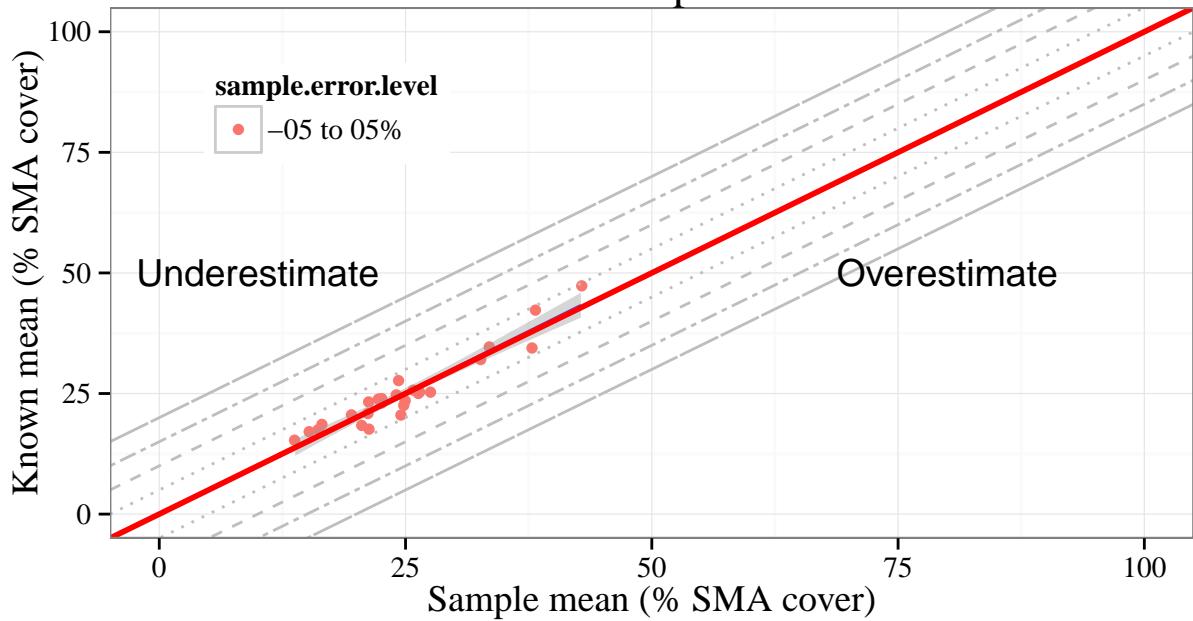
IND119
Stable sample error



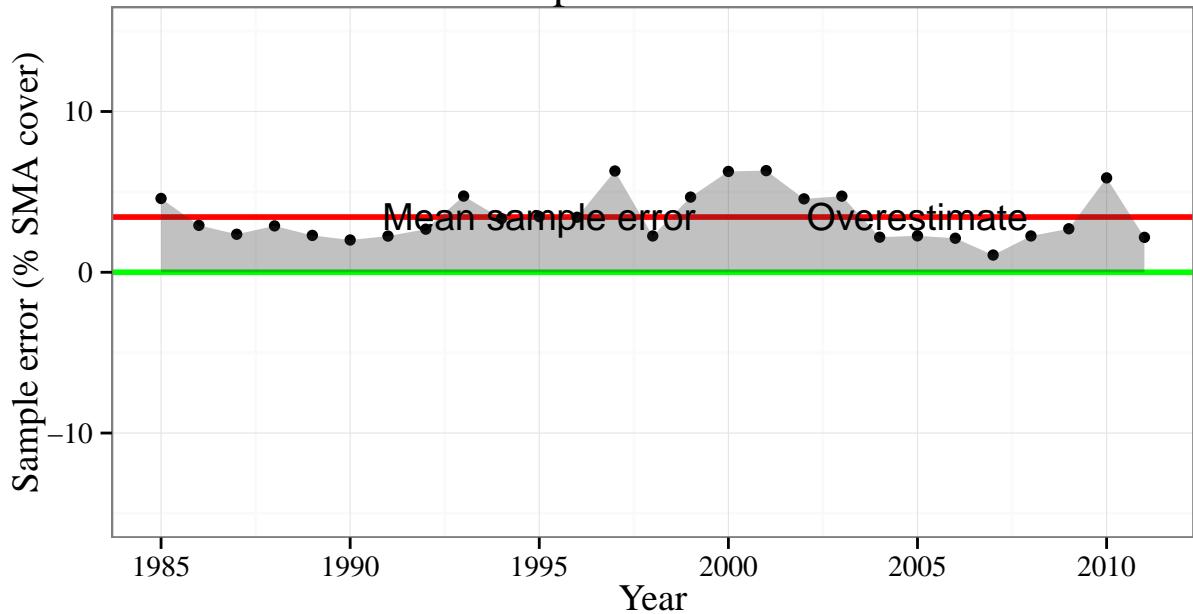
IND124
Sample error: Good



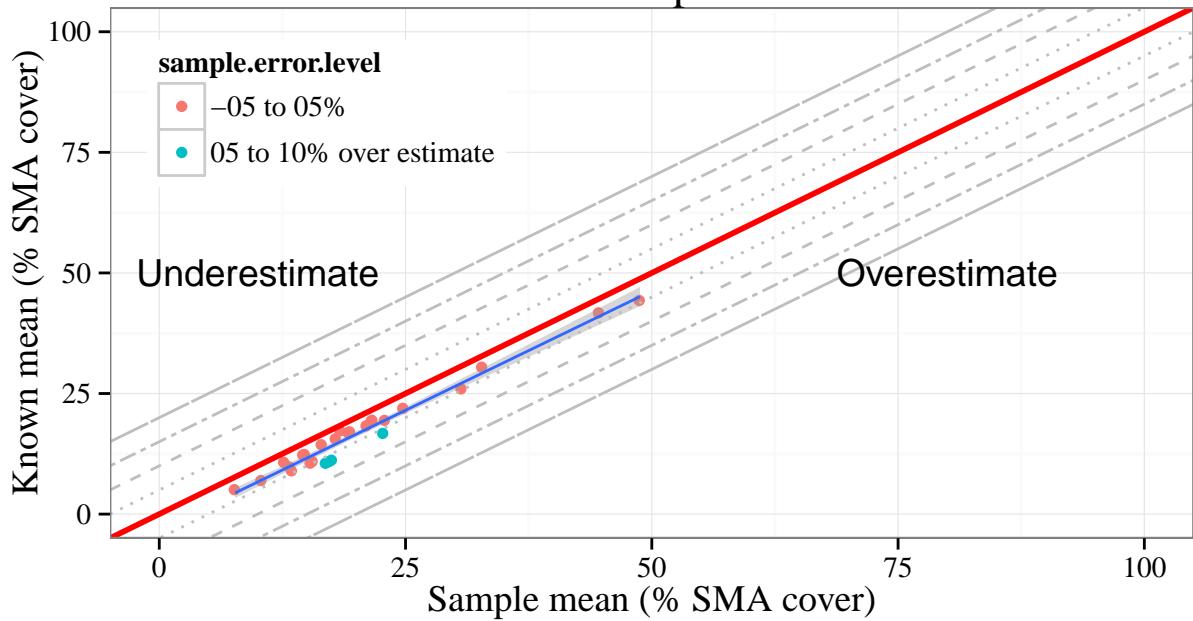
IND124
Stable sample error



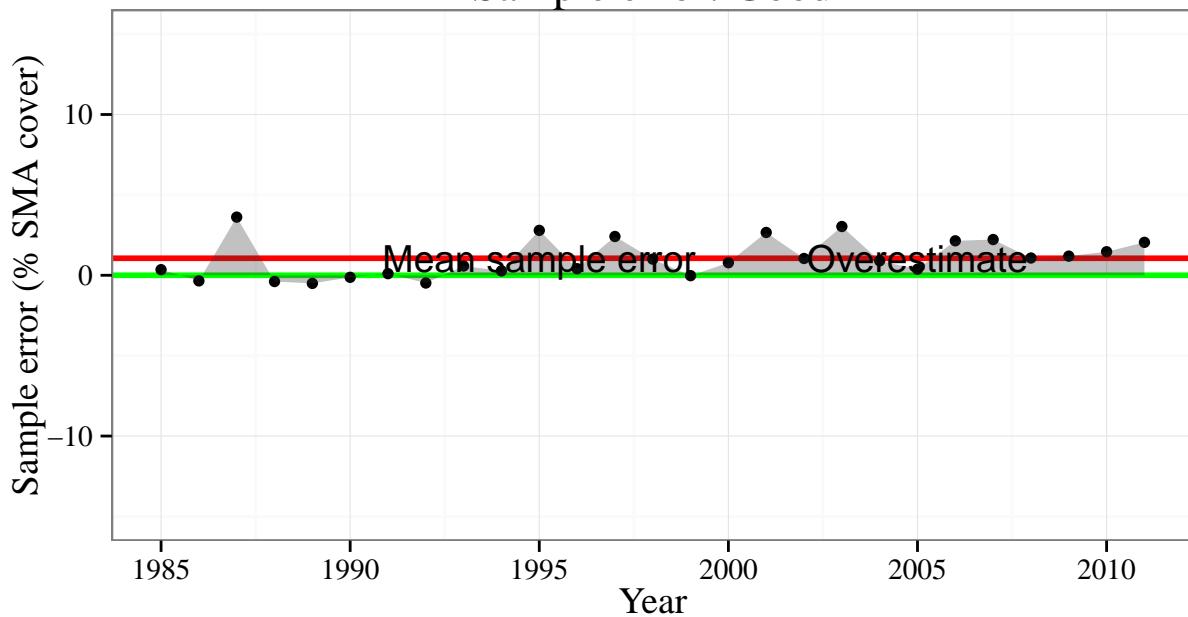
IND132 Sample error: Good



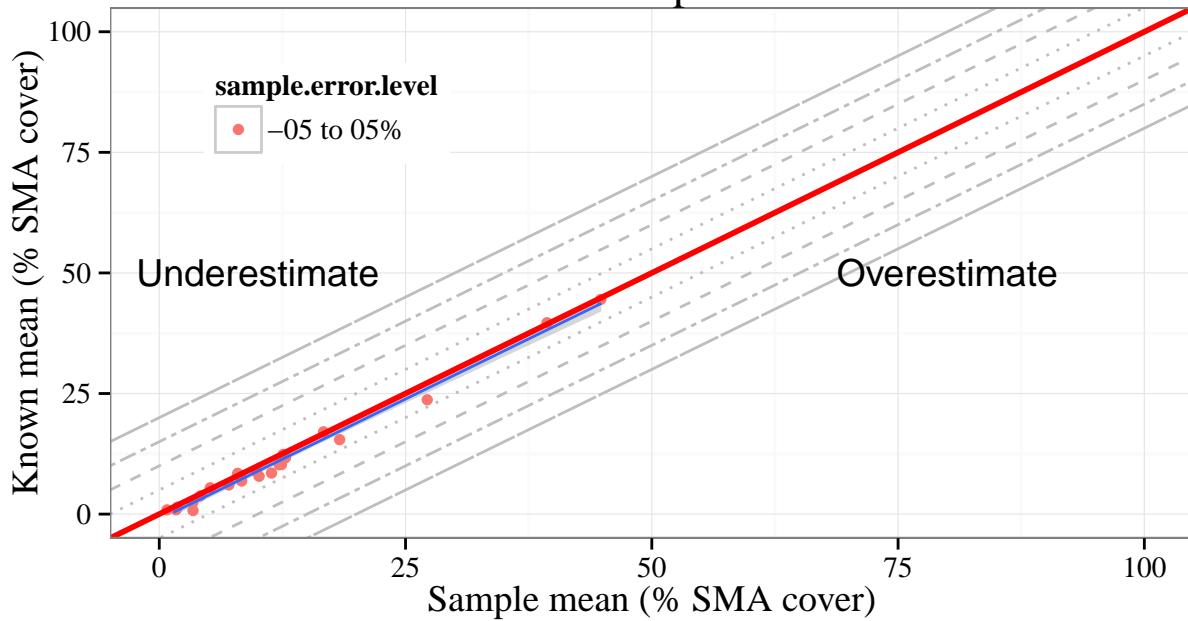
IND132 Stable sample error



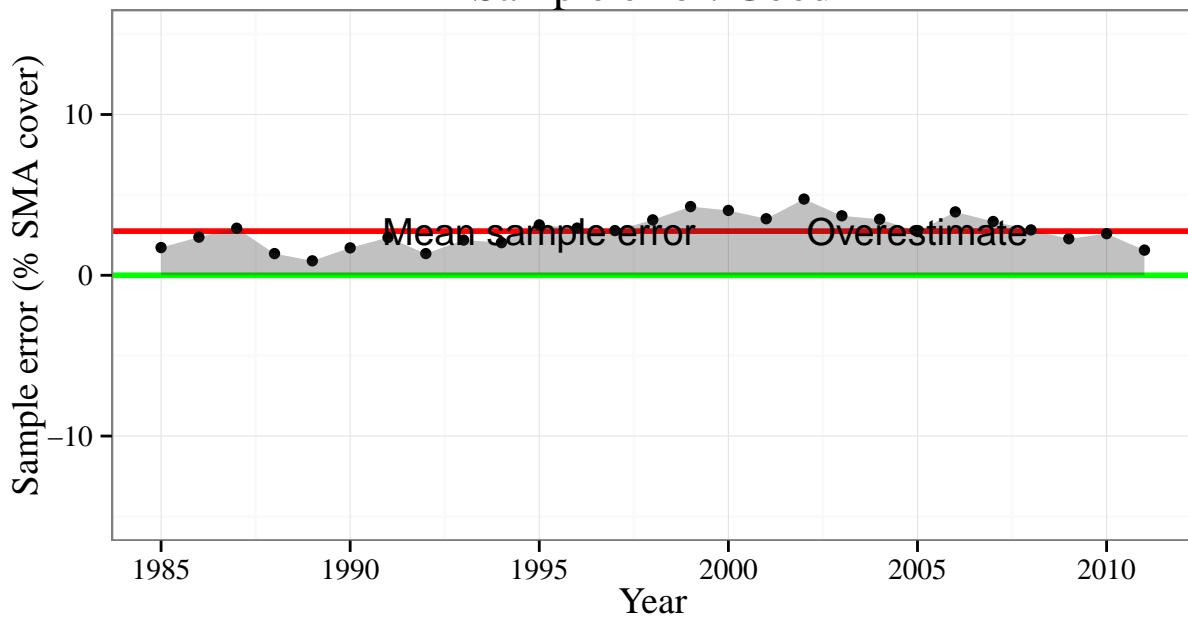
IND133 Sample error: Good



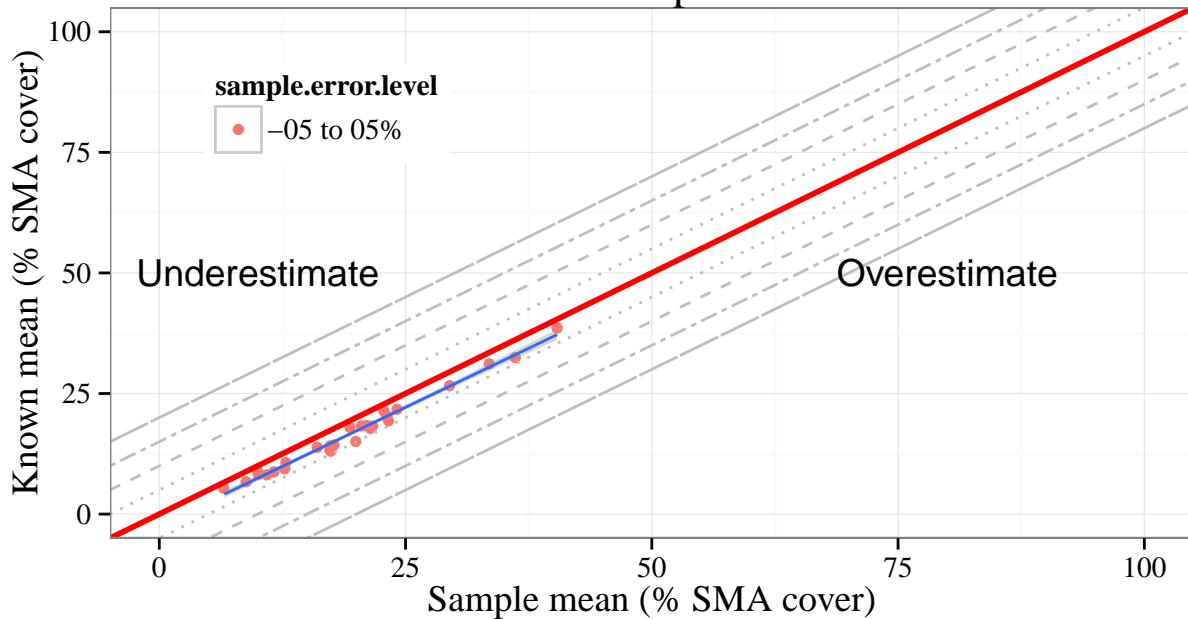
IND133 Stable sample error



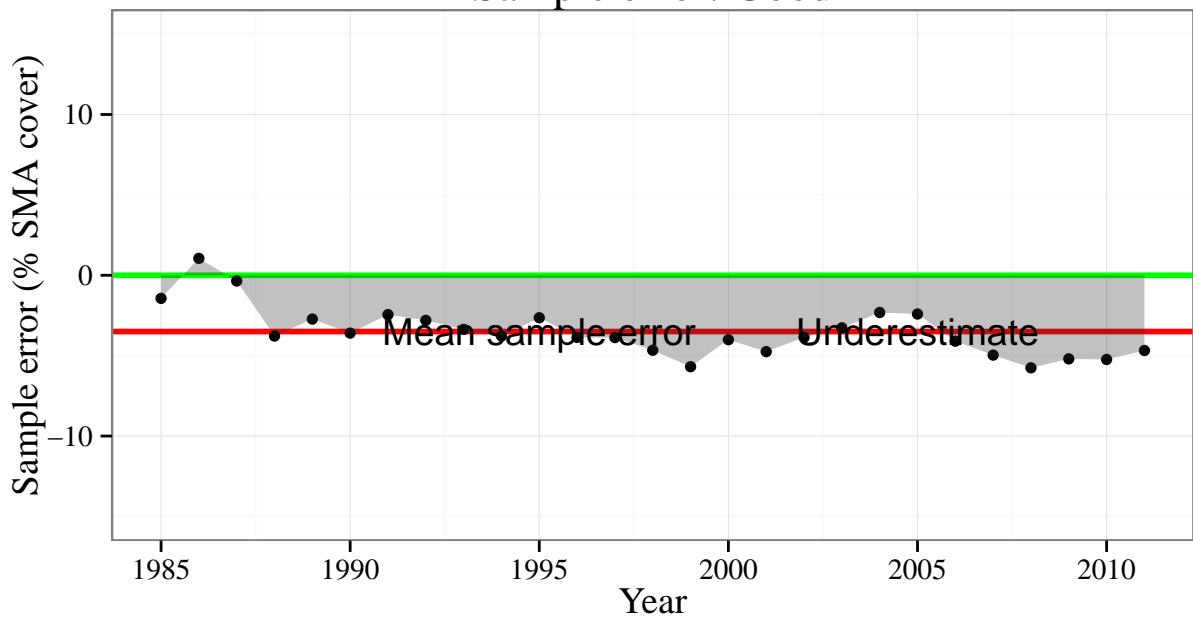
IND139
Sample error: Good



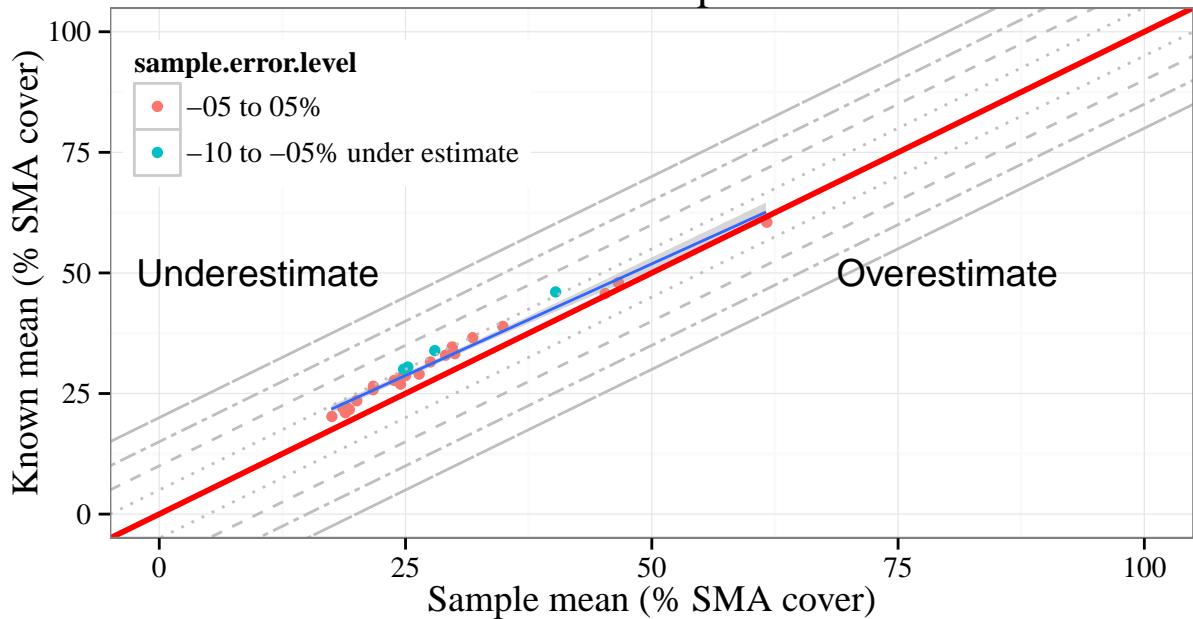
IND139
Stable sample error



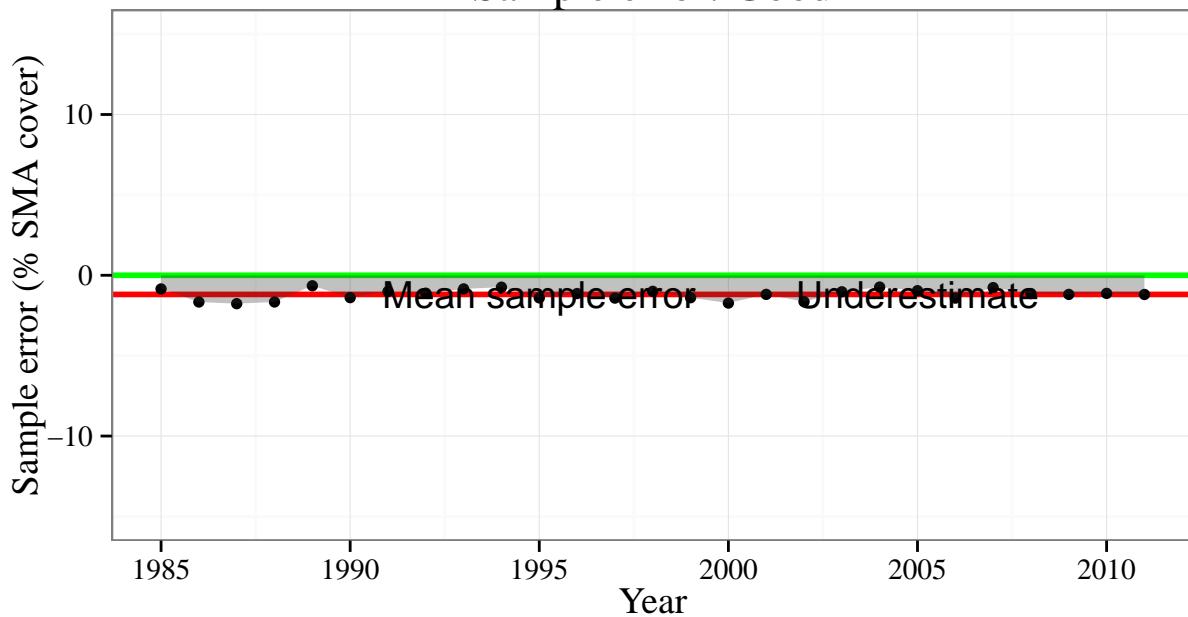
IND151 Sample error: Good



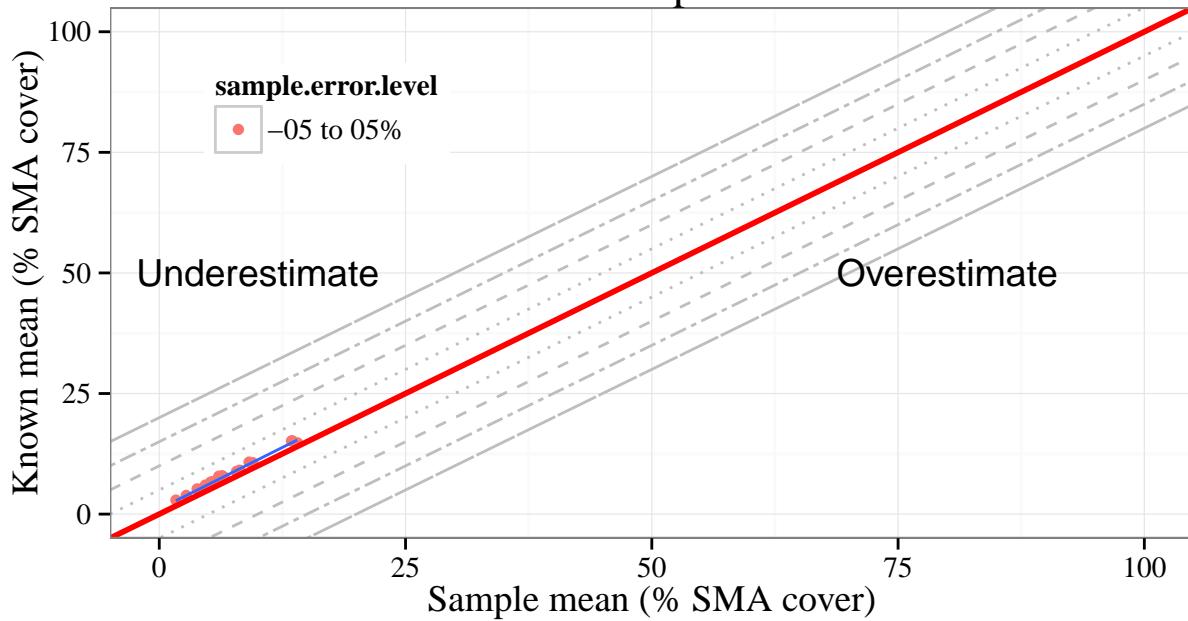
IND151 Unstable sample error



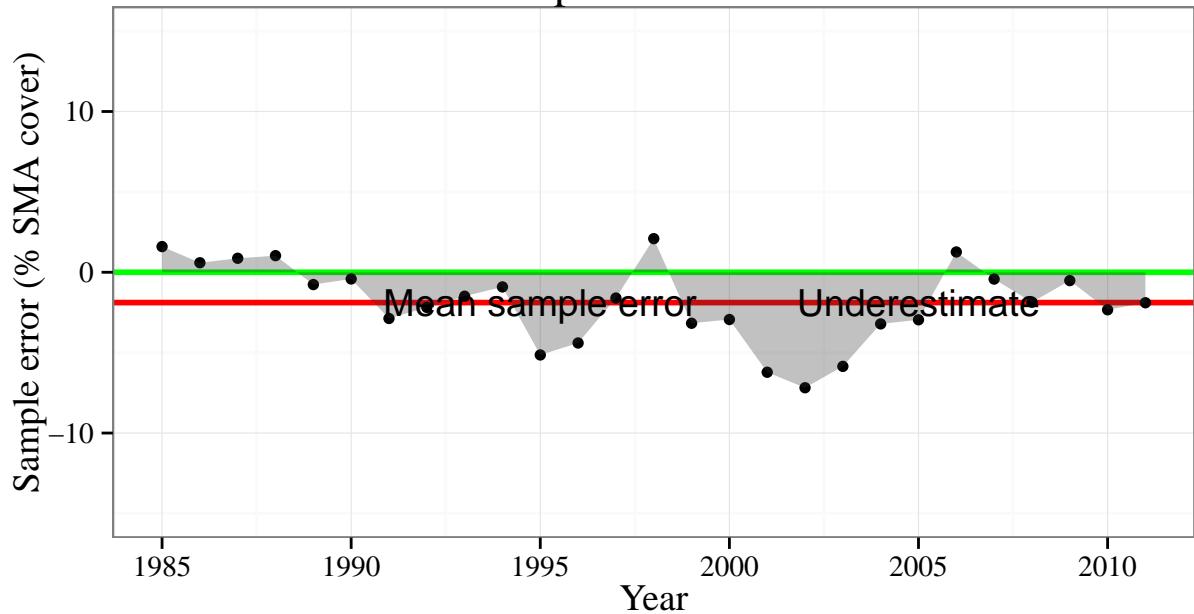
IND163
Sample error: Good



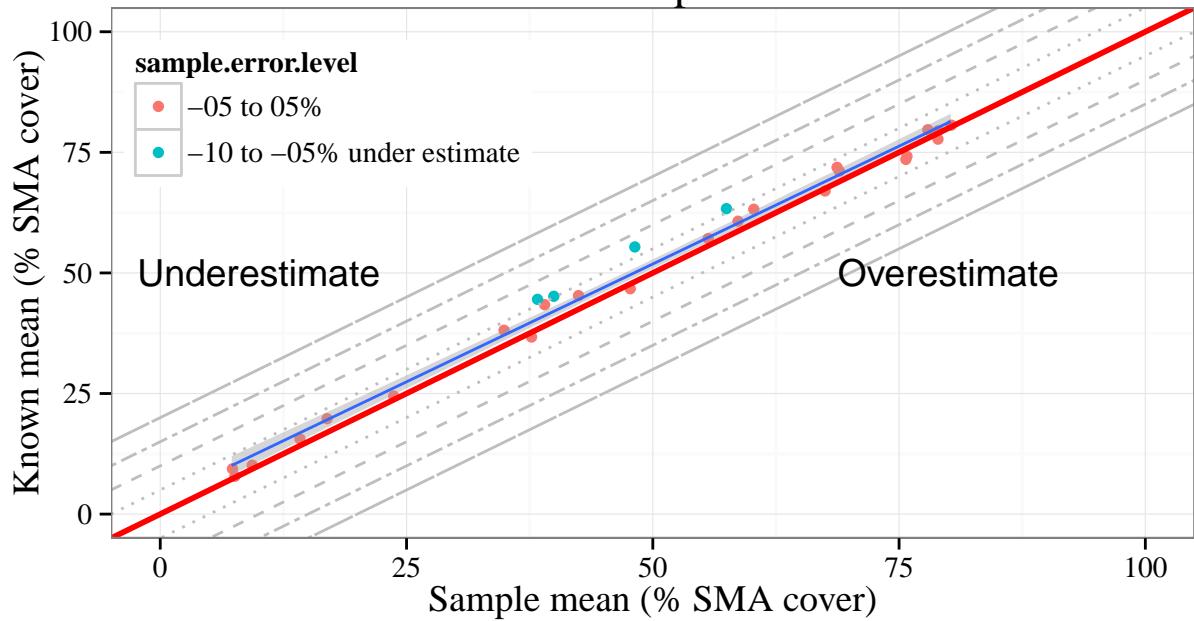
IND163
Stable sample error



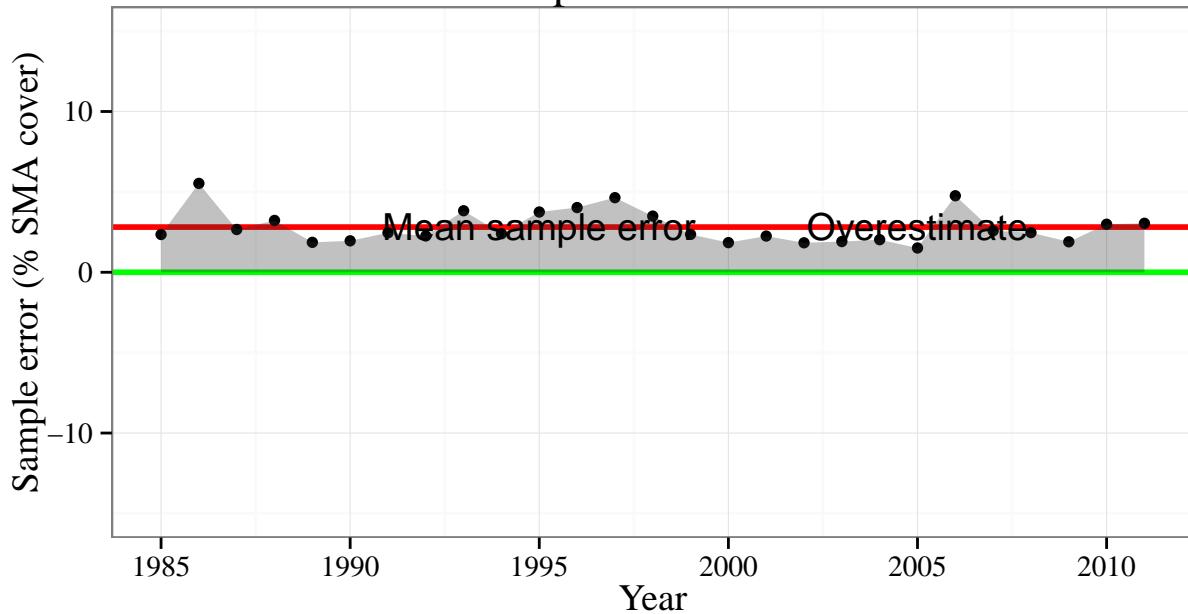
IND205 Sample error: Good



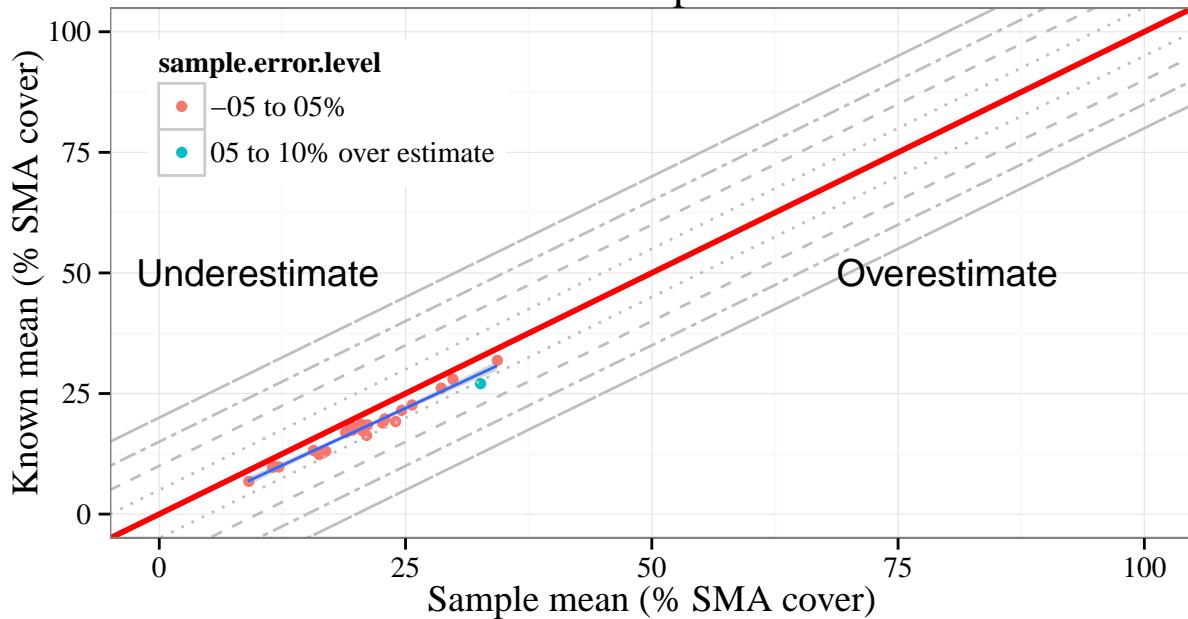
IND205 Stable sample error



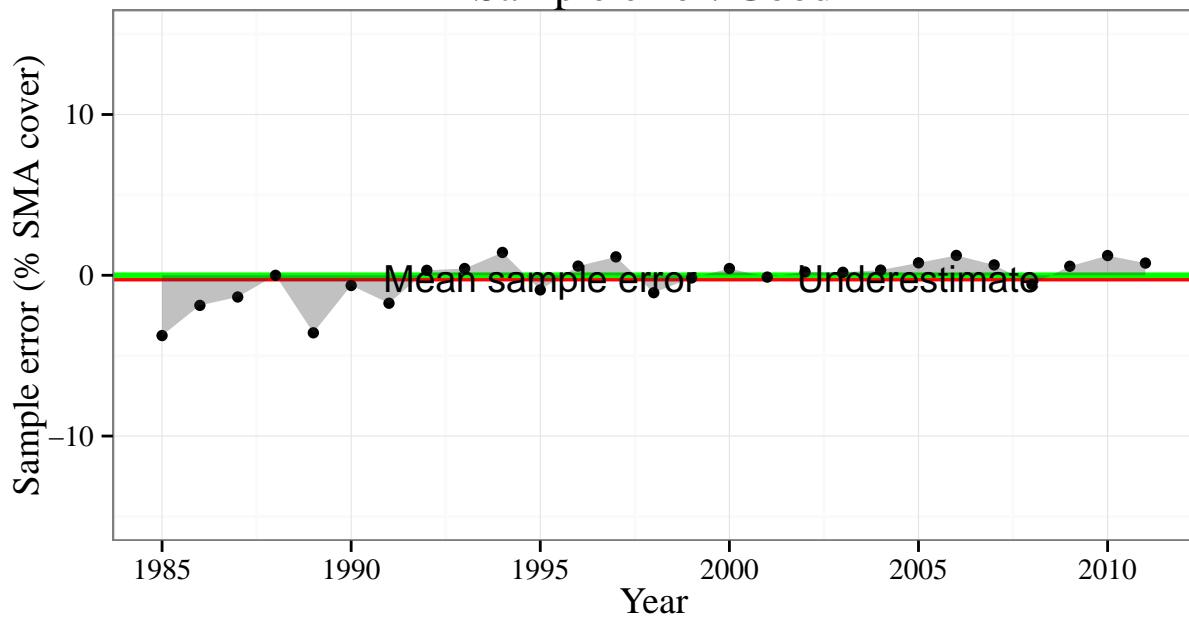
IND229 Sample error: Good



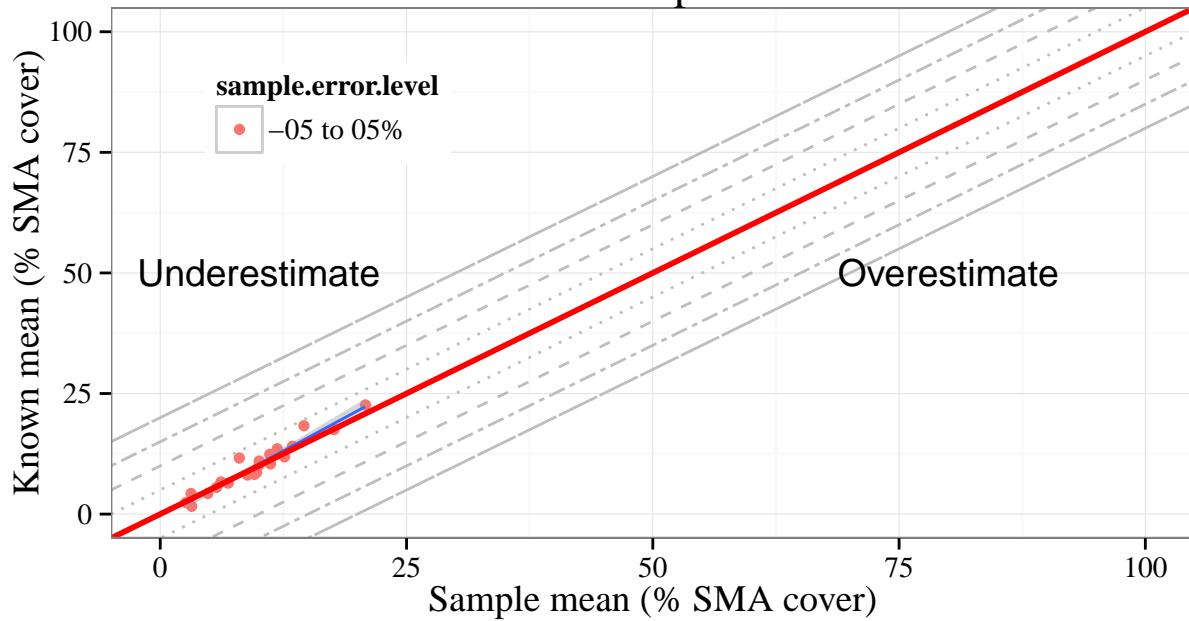
IND229 Stable sample error



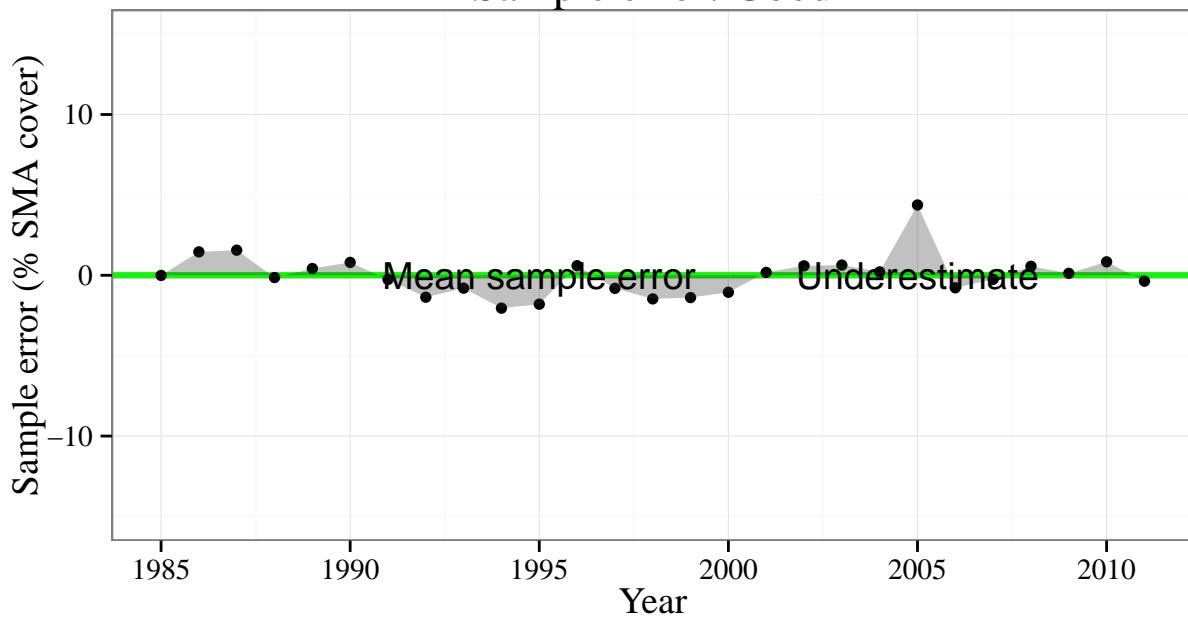
IND231
Sample error: Good



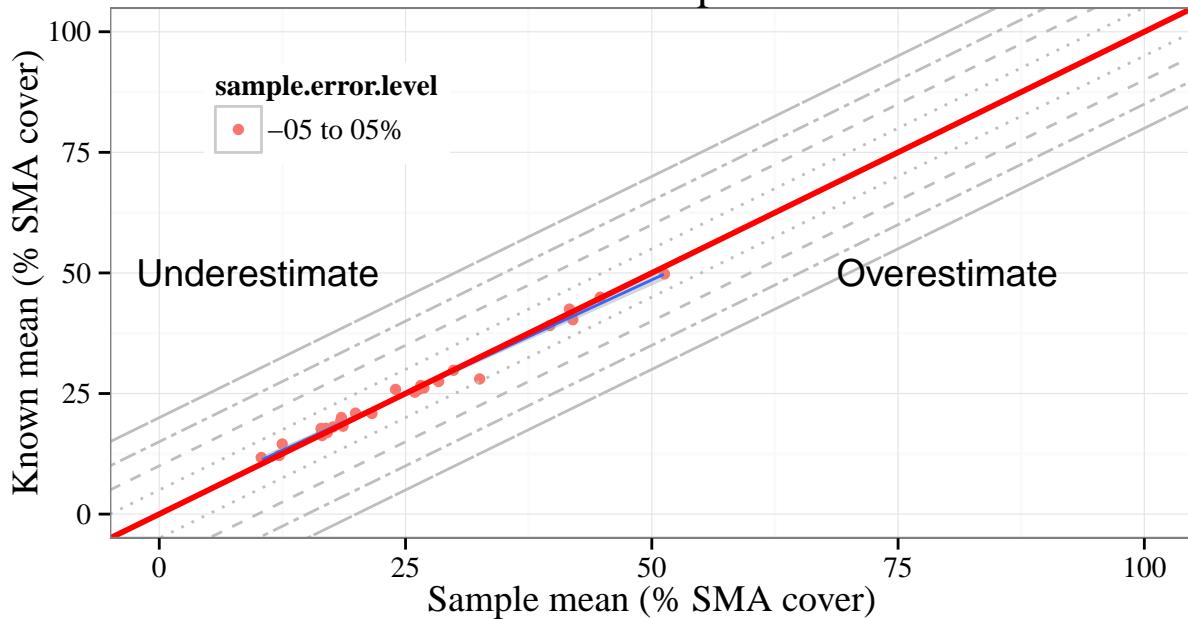
IND231
Stable sample error



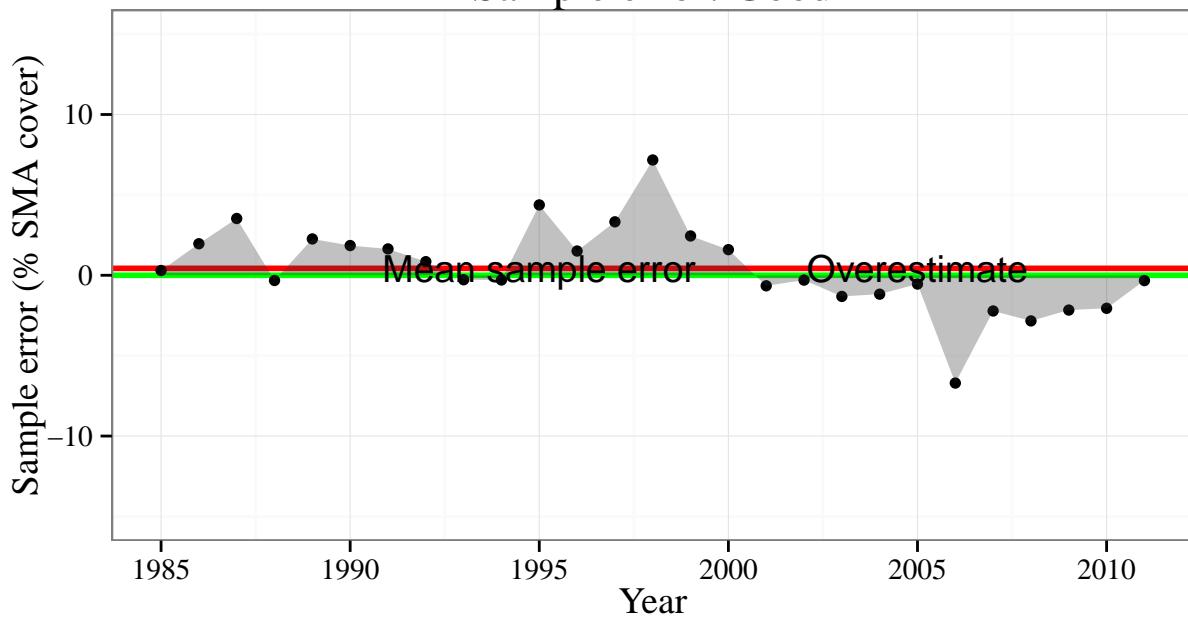
LAW030 Sample error: Good



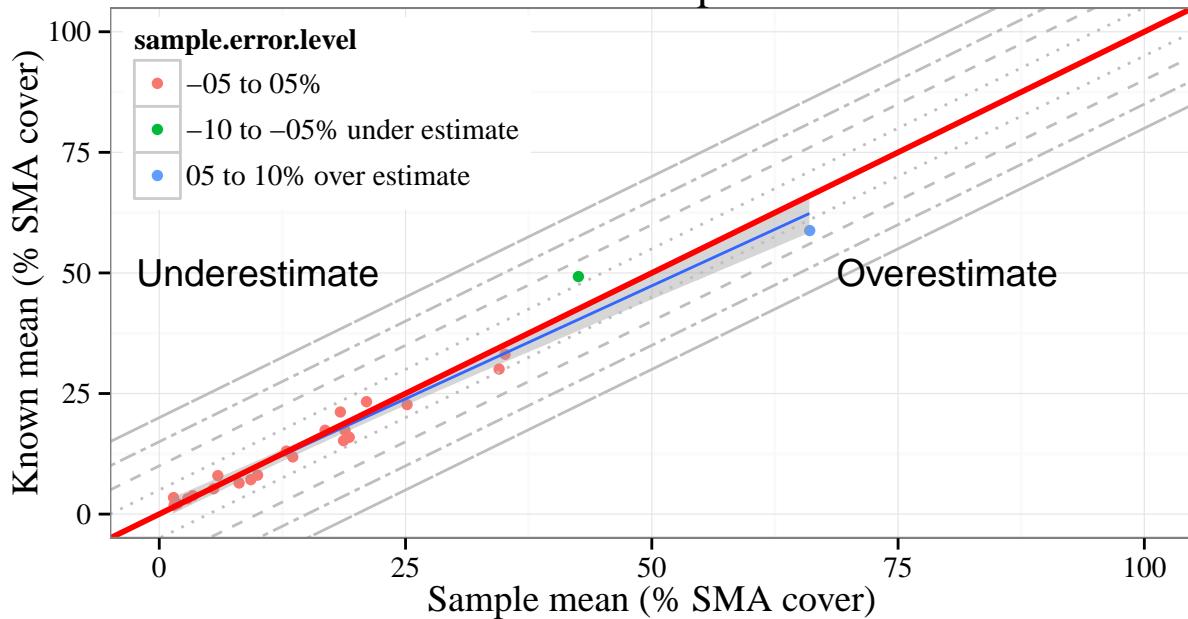
LAW030 Unstable sample error



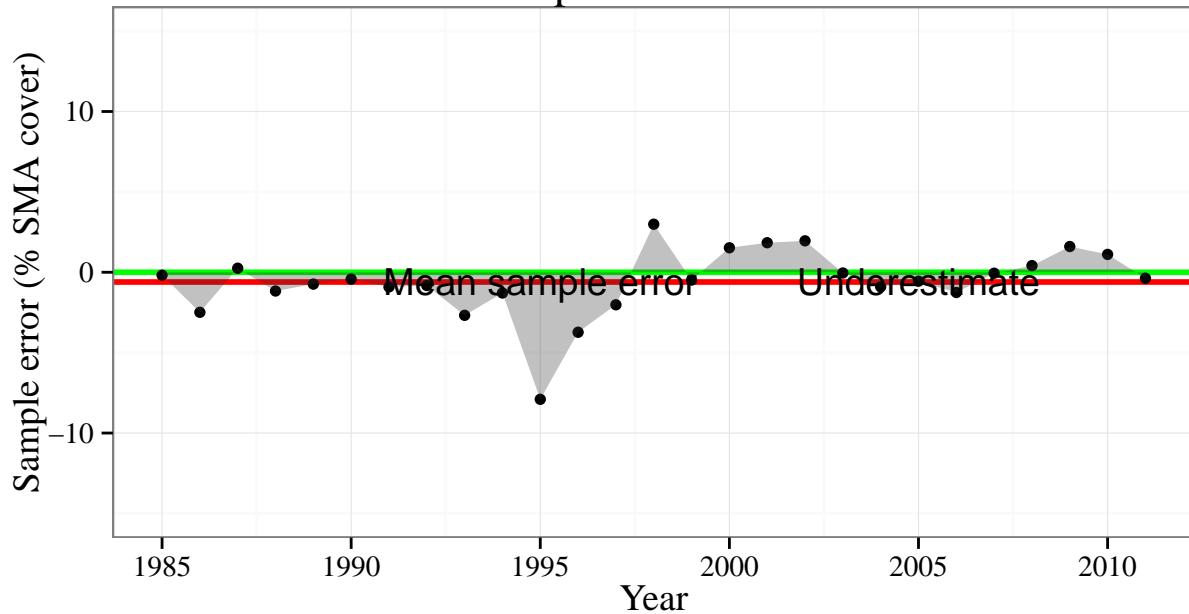
LAW035 Sample error: Good



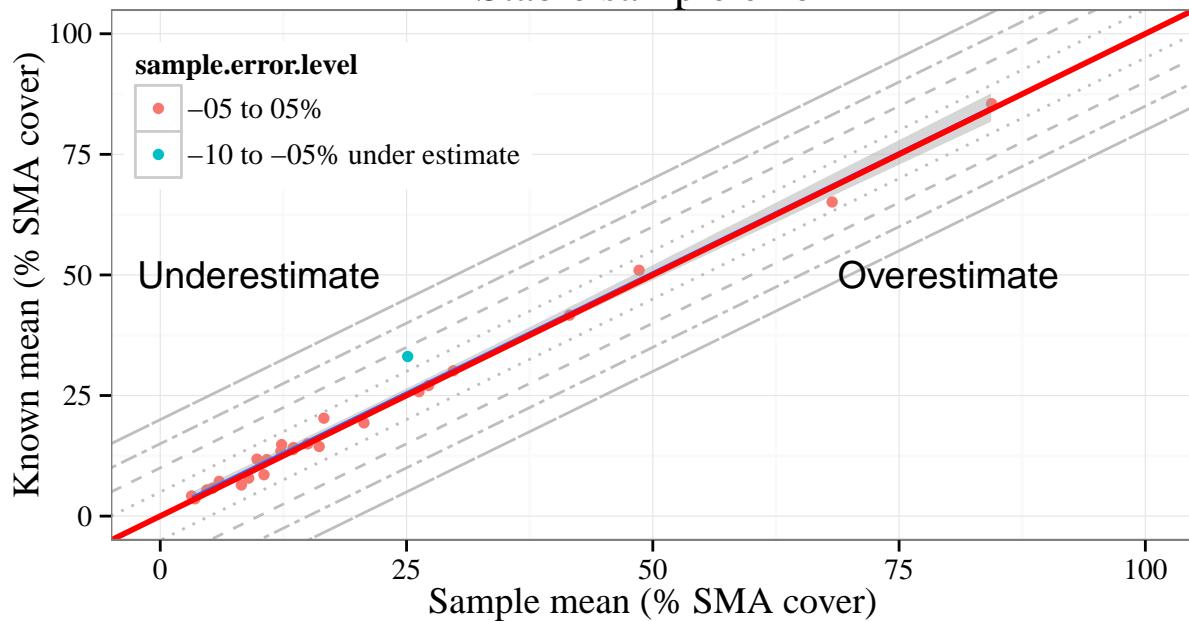
LAW035 Unstable sample error



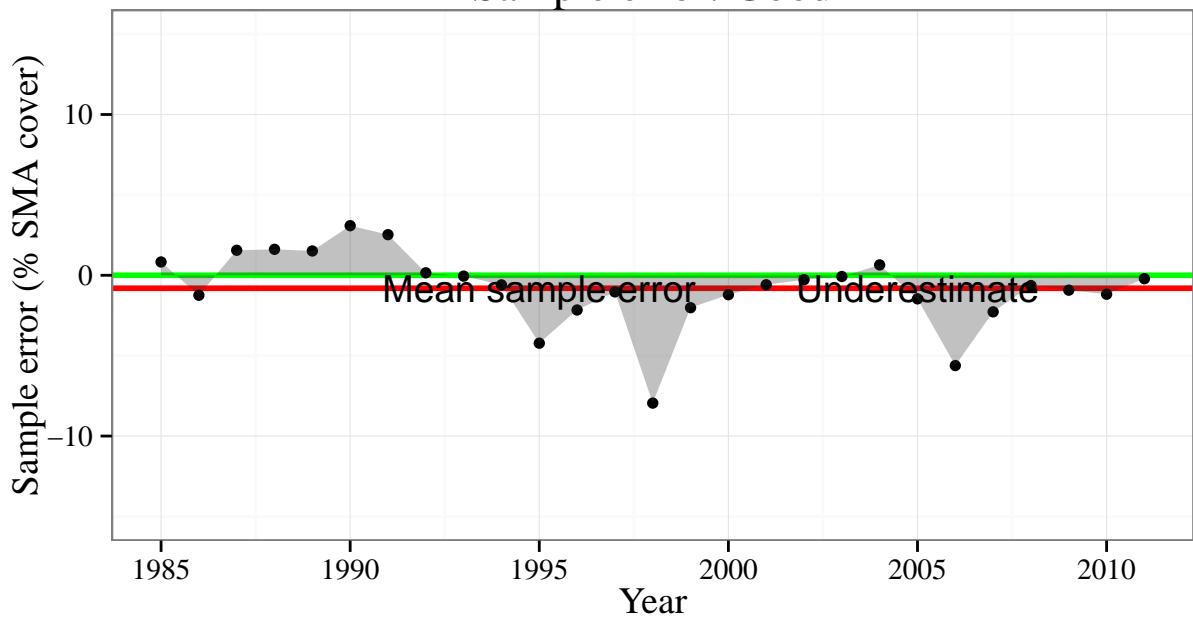
LAW043 Sample error: Good



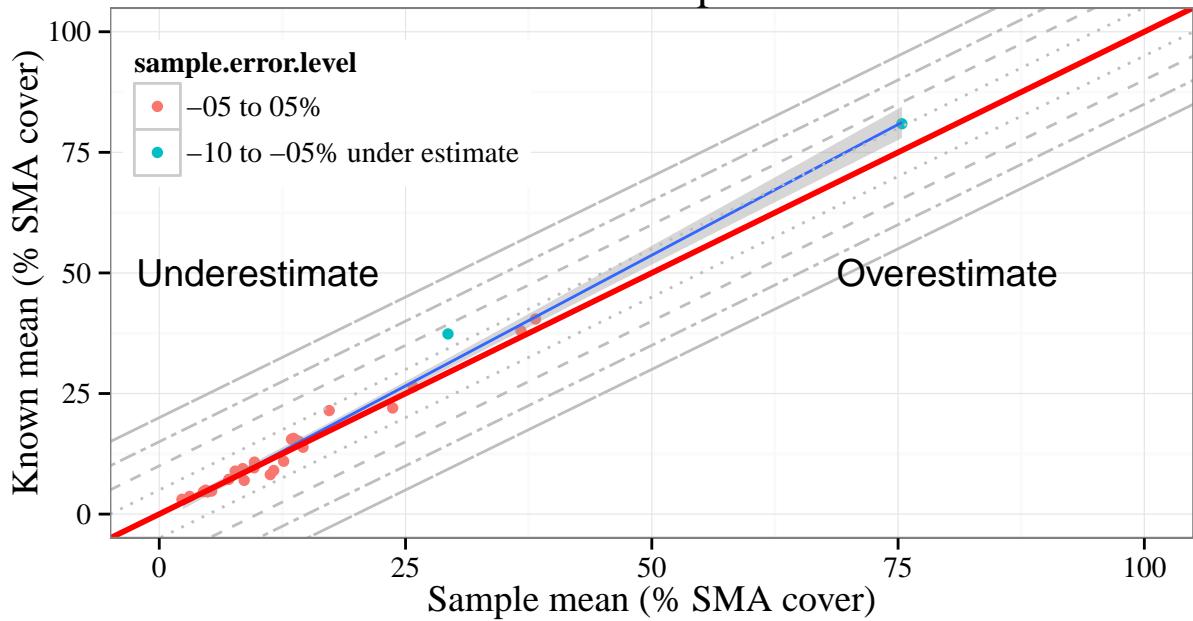
LAW043 Stable sample error



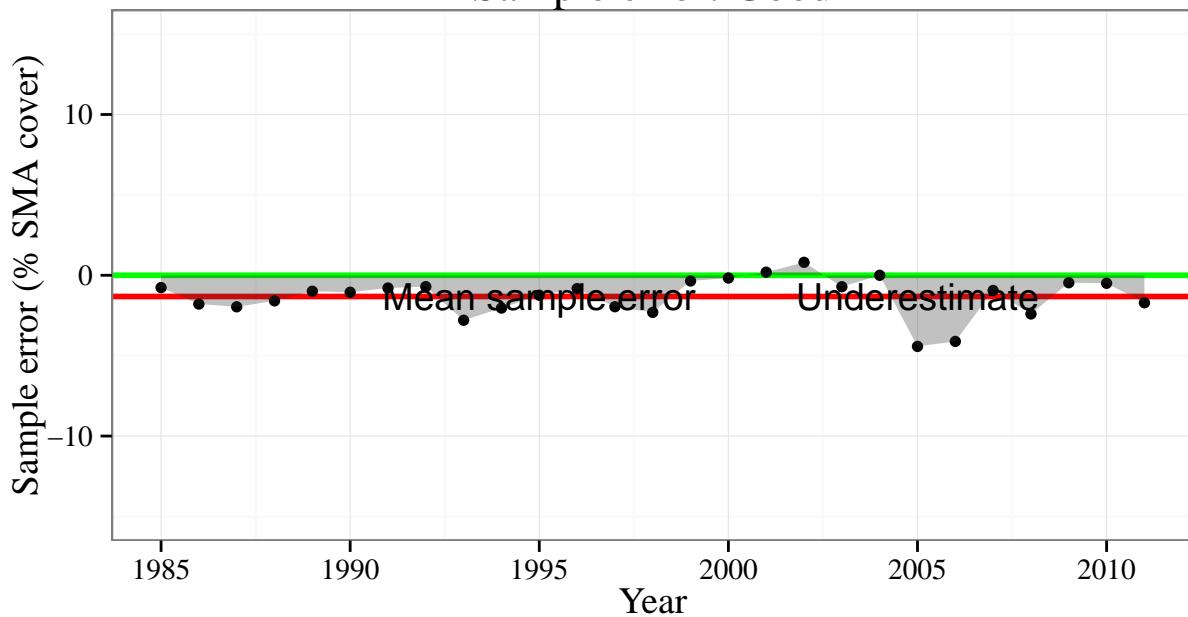
LAW052 Sample error: Good



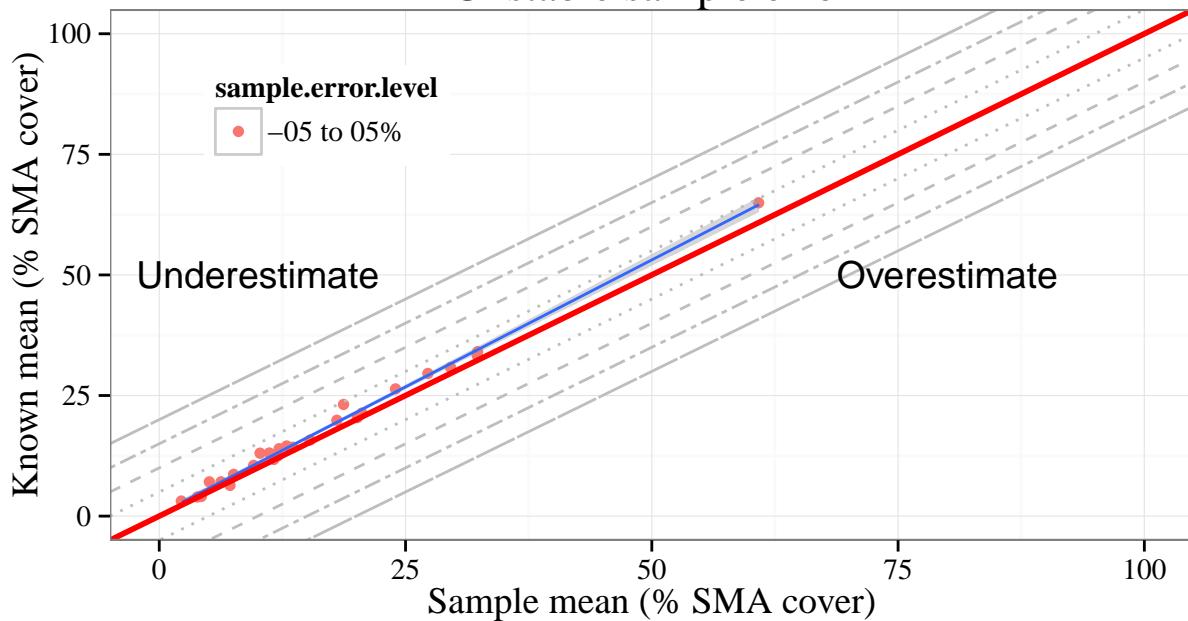
LAW052 Unstable sample error



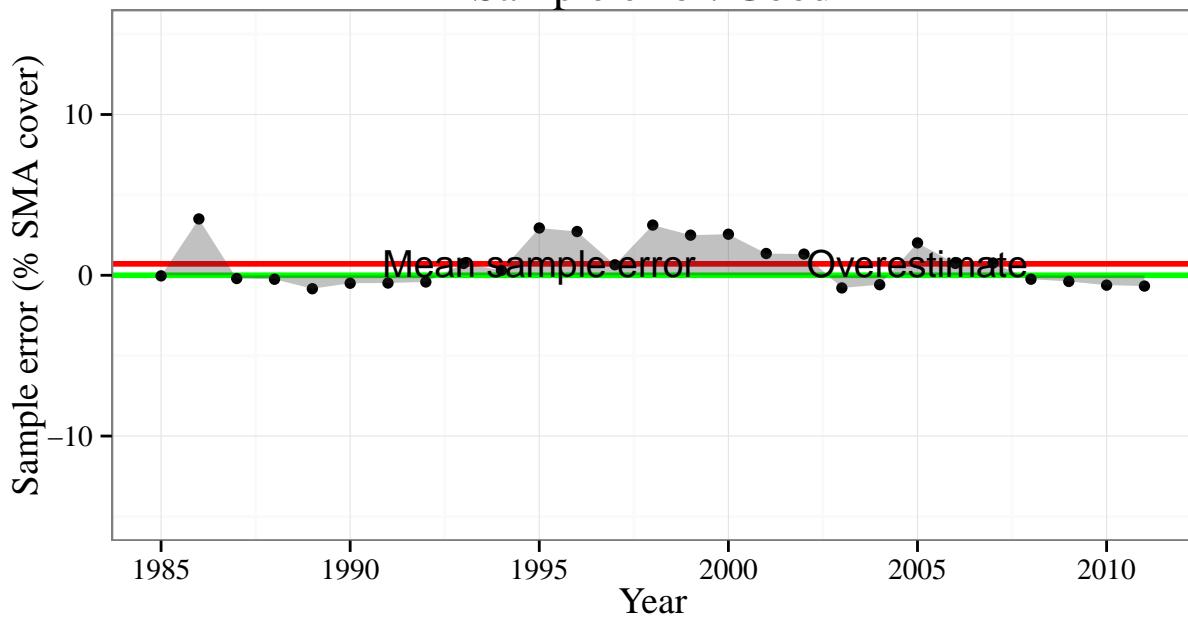
LAW062 Sample error: Good



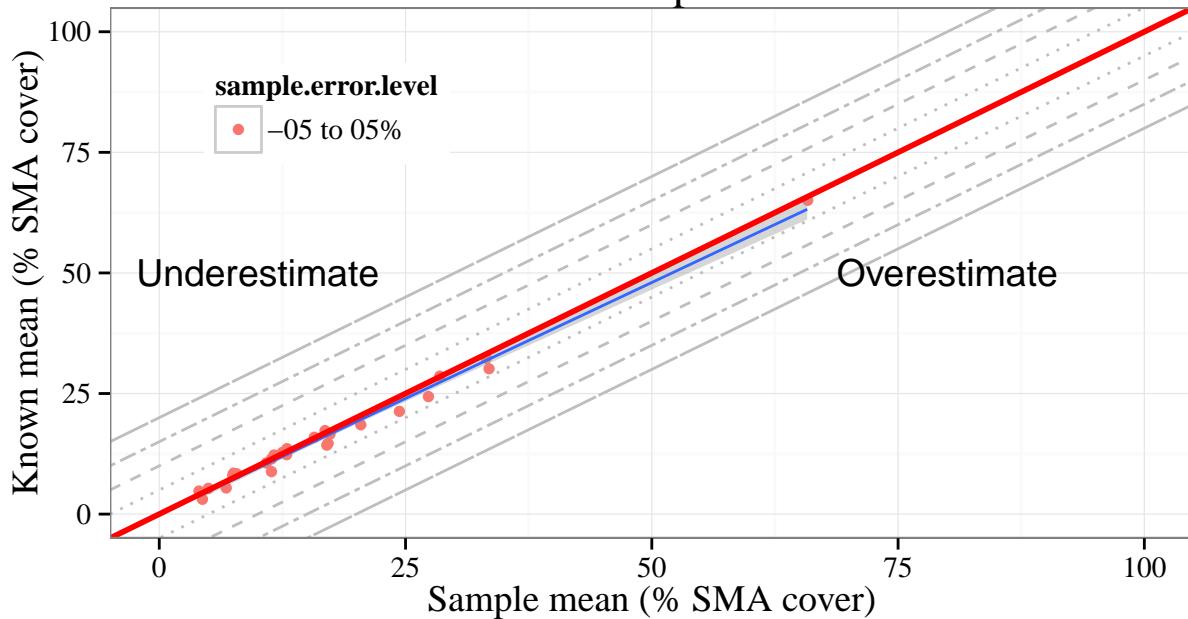
LAW062 Unstable sample error



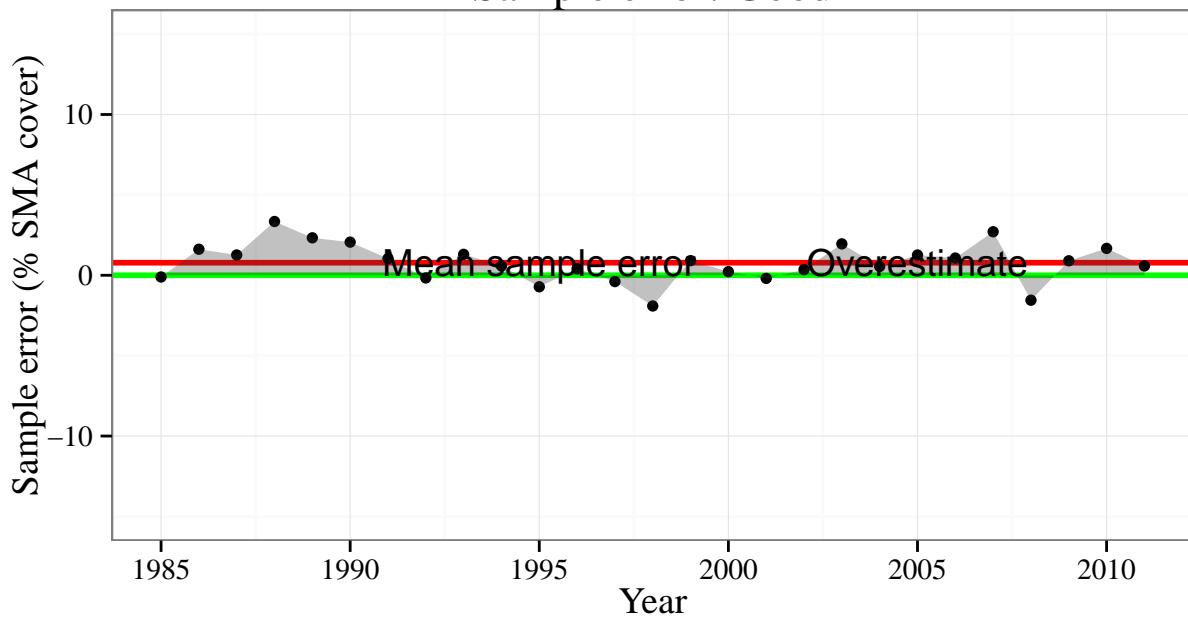
LAW063
Sample error: Good



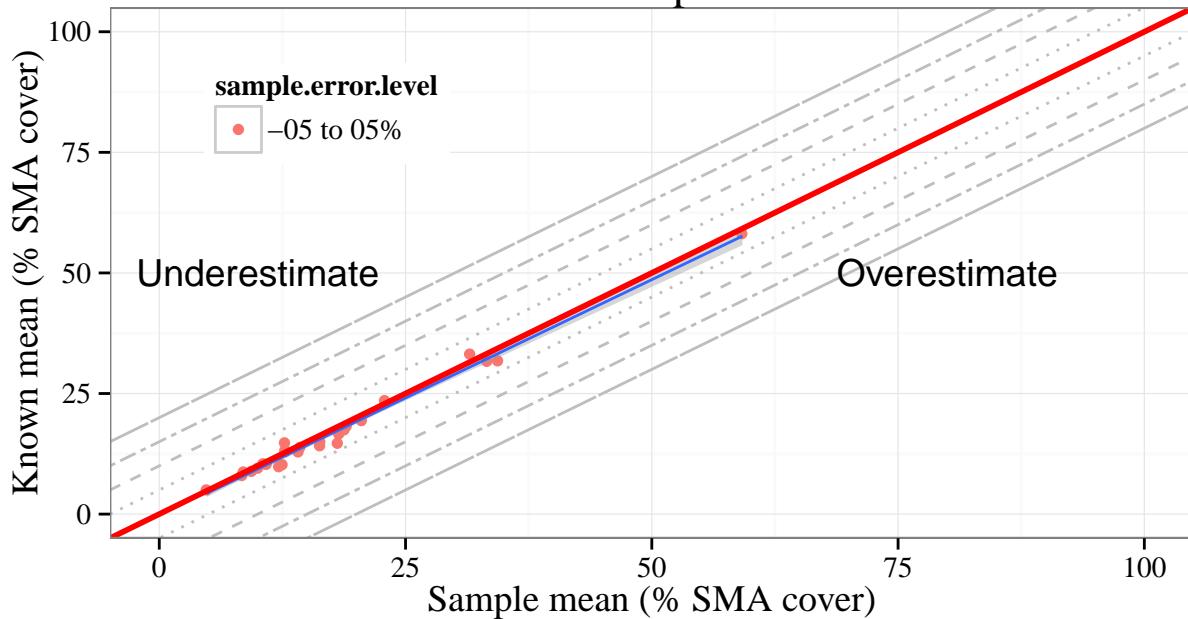
LAW063
Stable sample error



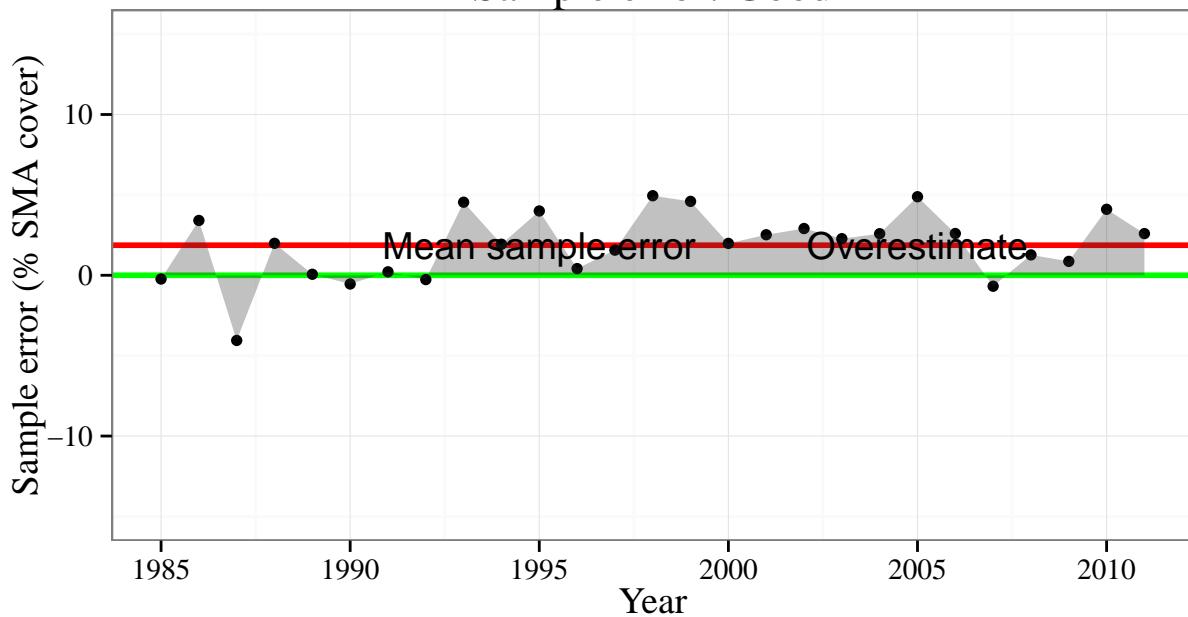
LAW065 Sample error: Good



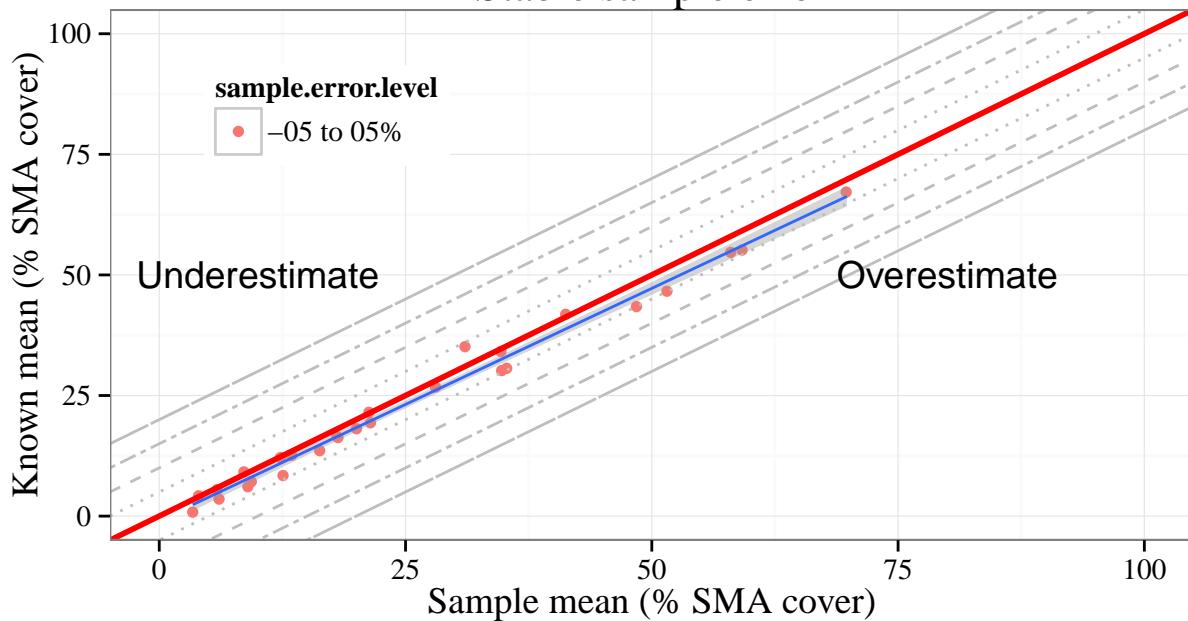
LAW065 Stable sample error



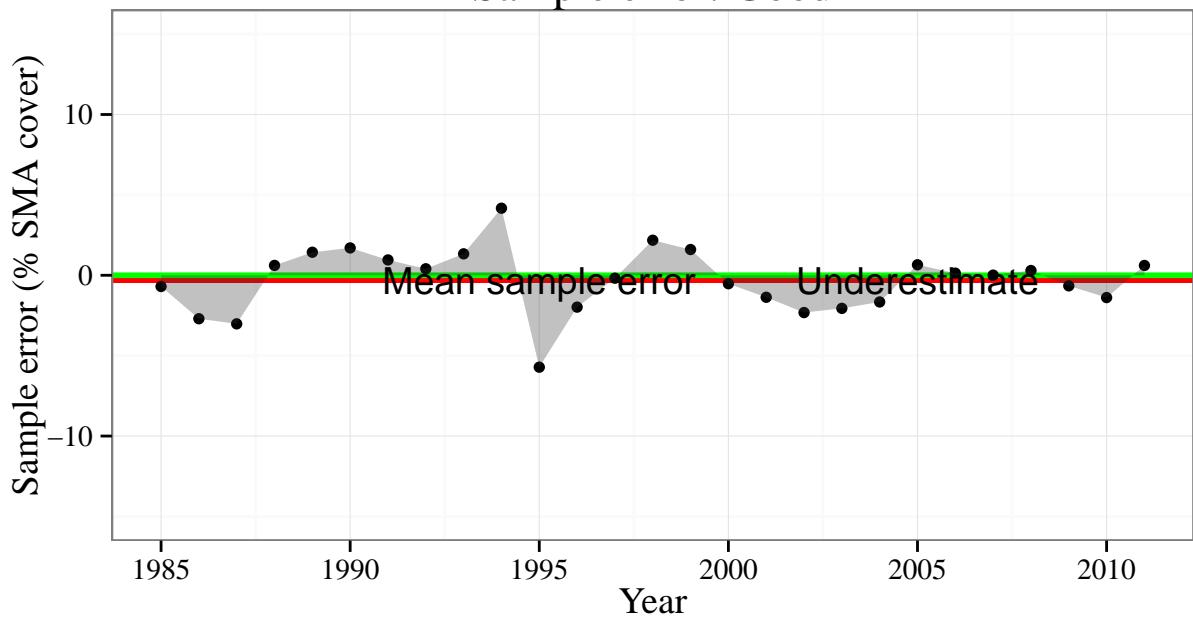
LAW070 Sample error: Good



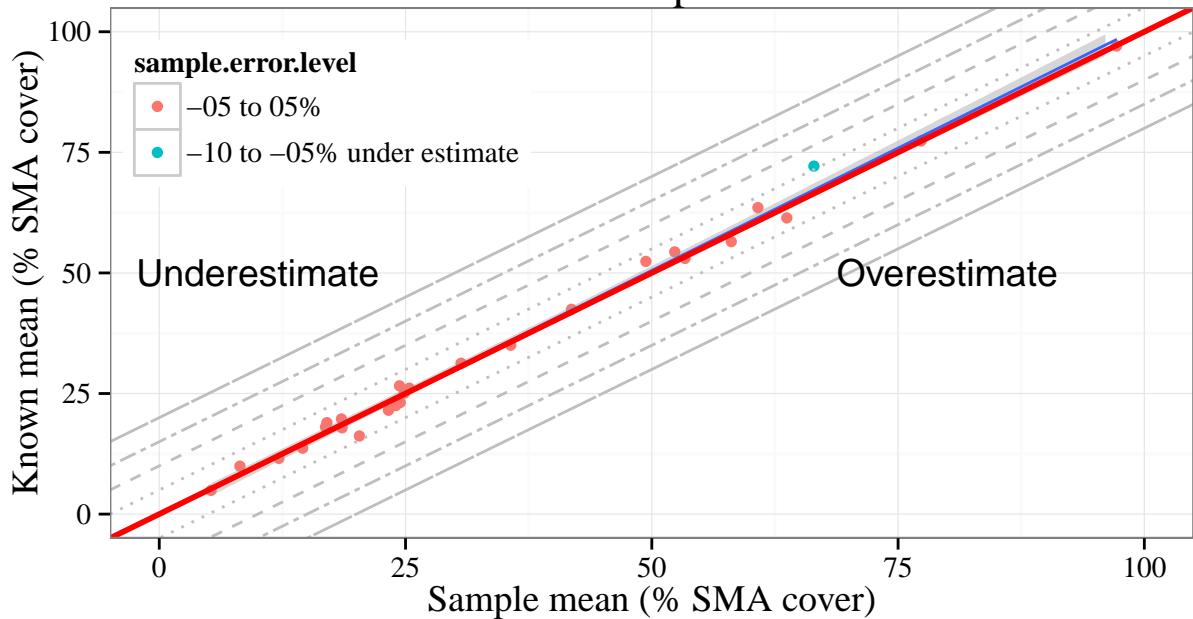
LAW070 Stable sample error



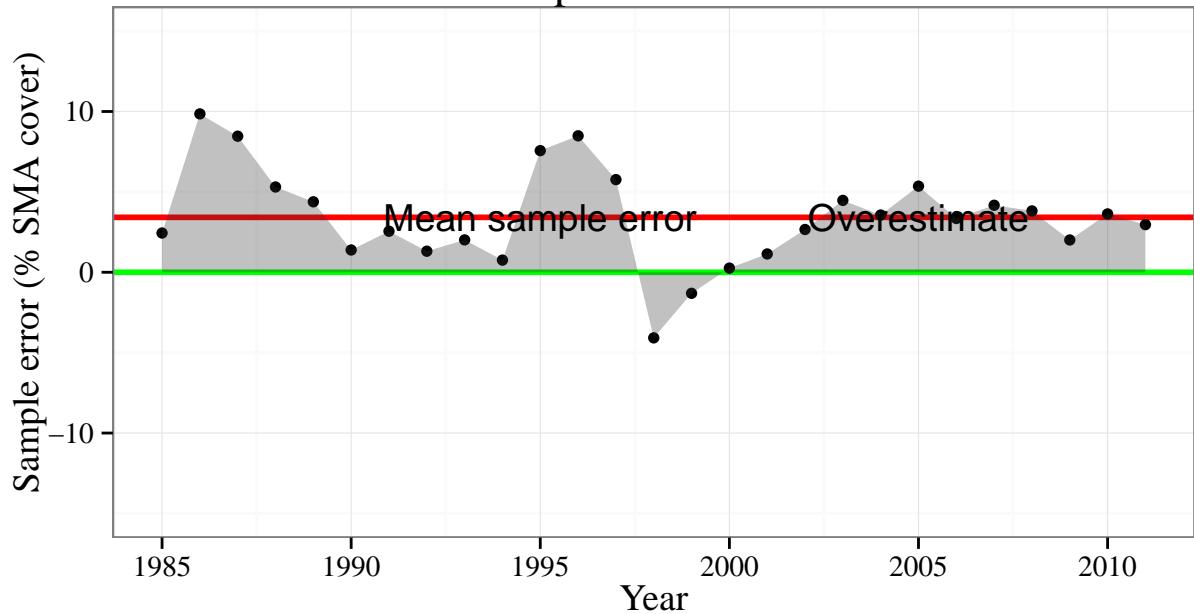
LAW072 Sample error: Good



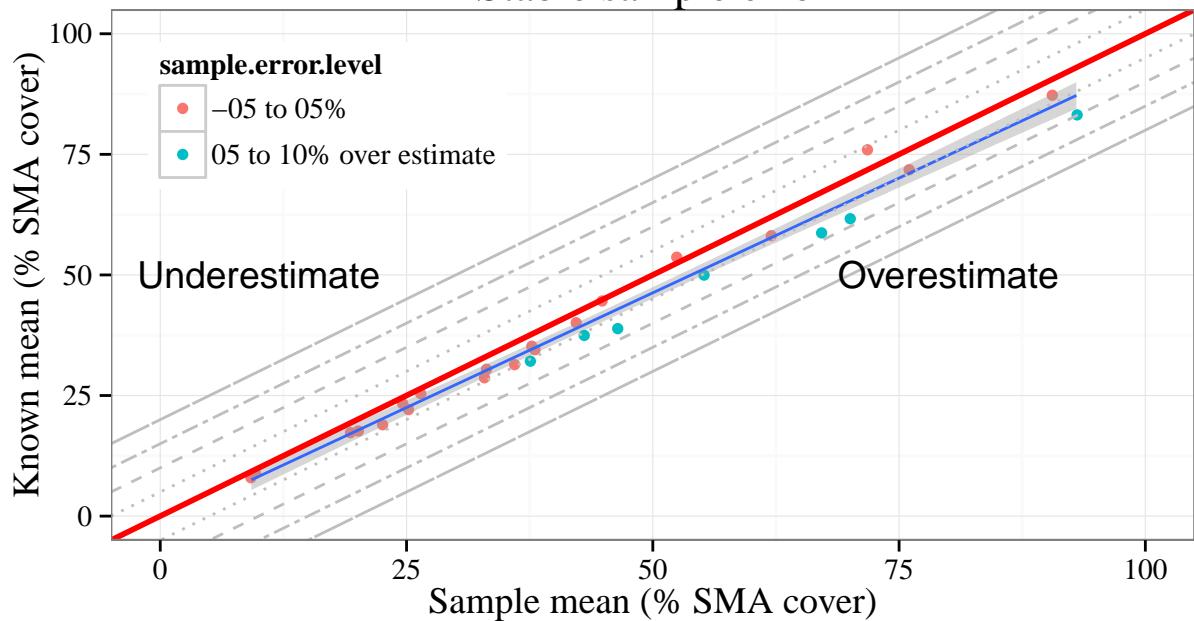
LAW072 Stable sample error



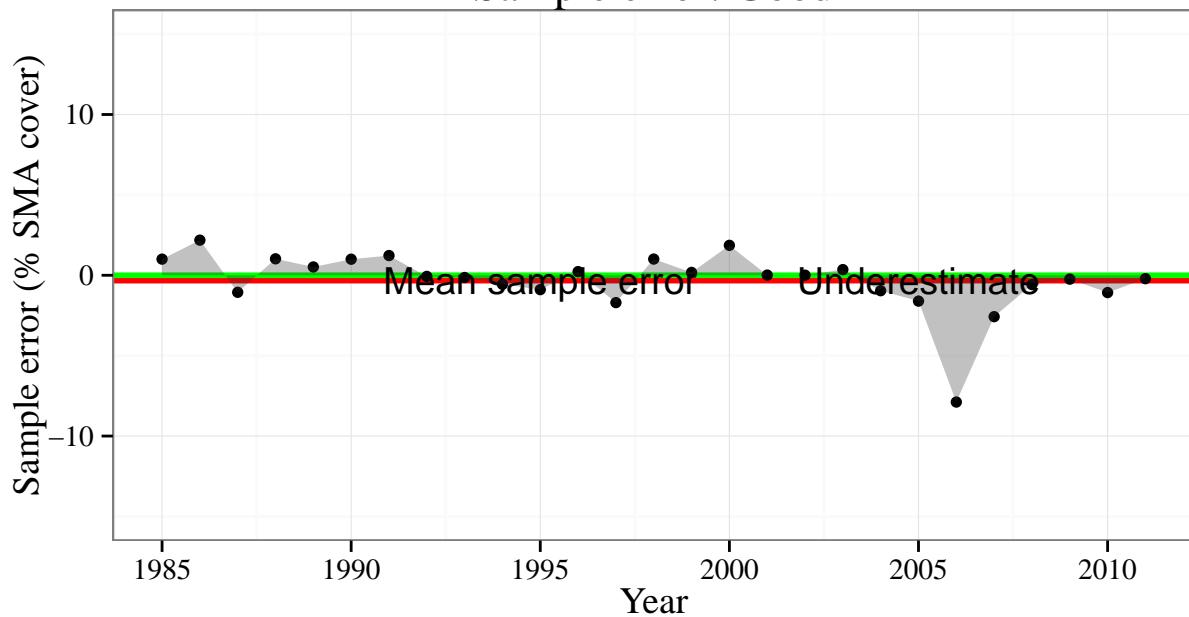
LAW078 Sample error: Good



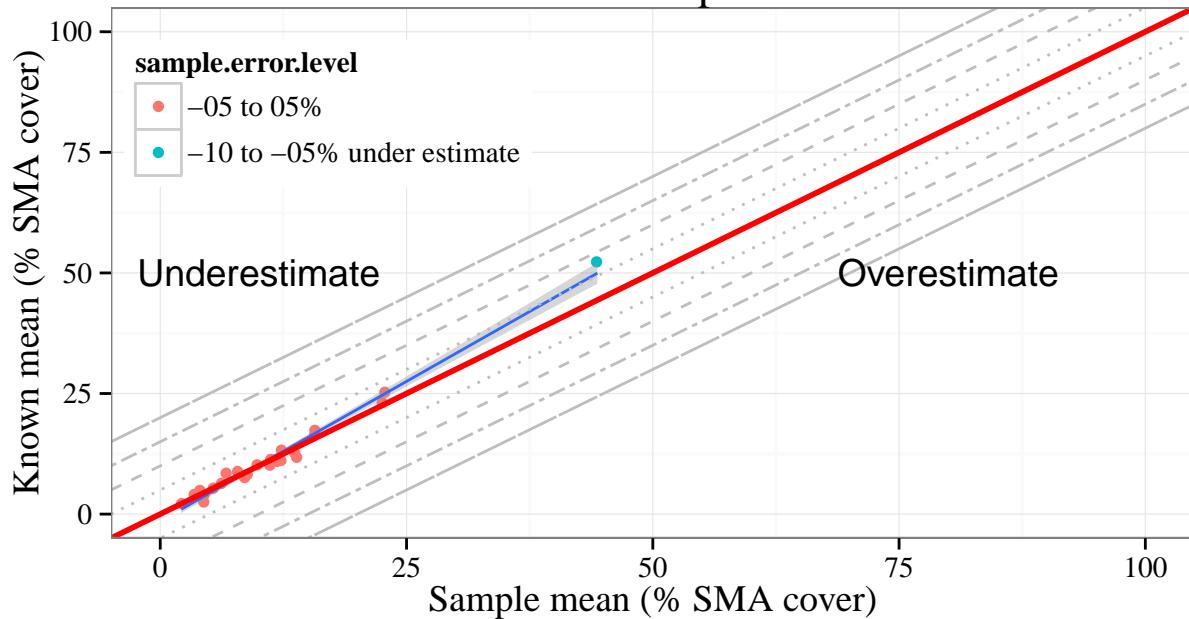
LAW078 Stable sample error



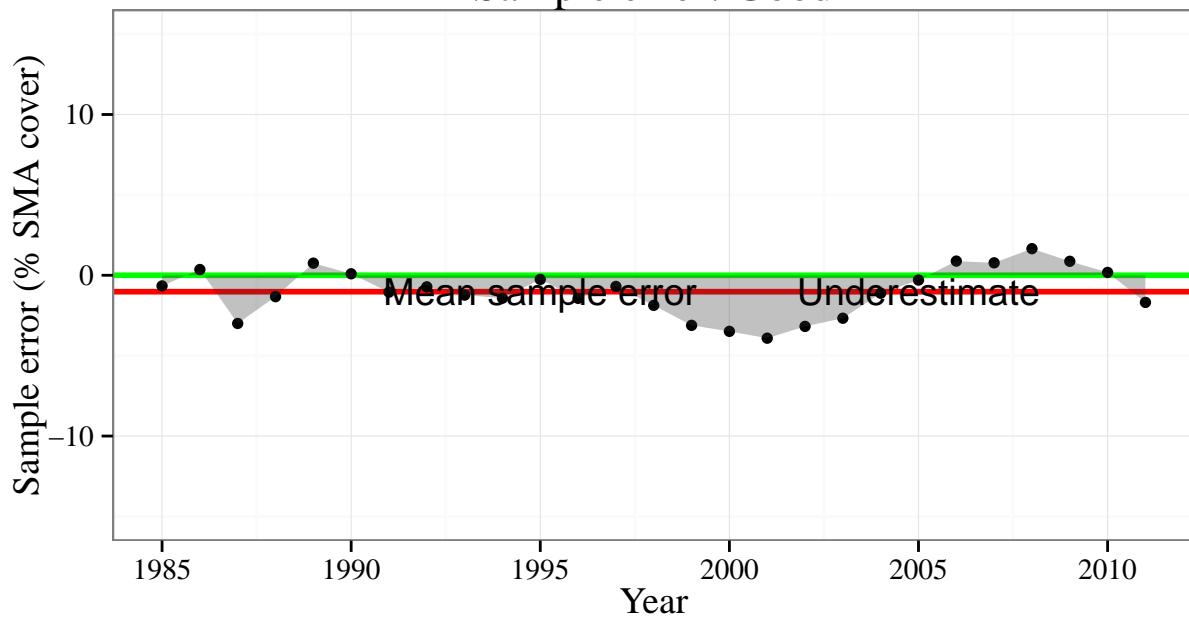
LAW082 Sample error: Good



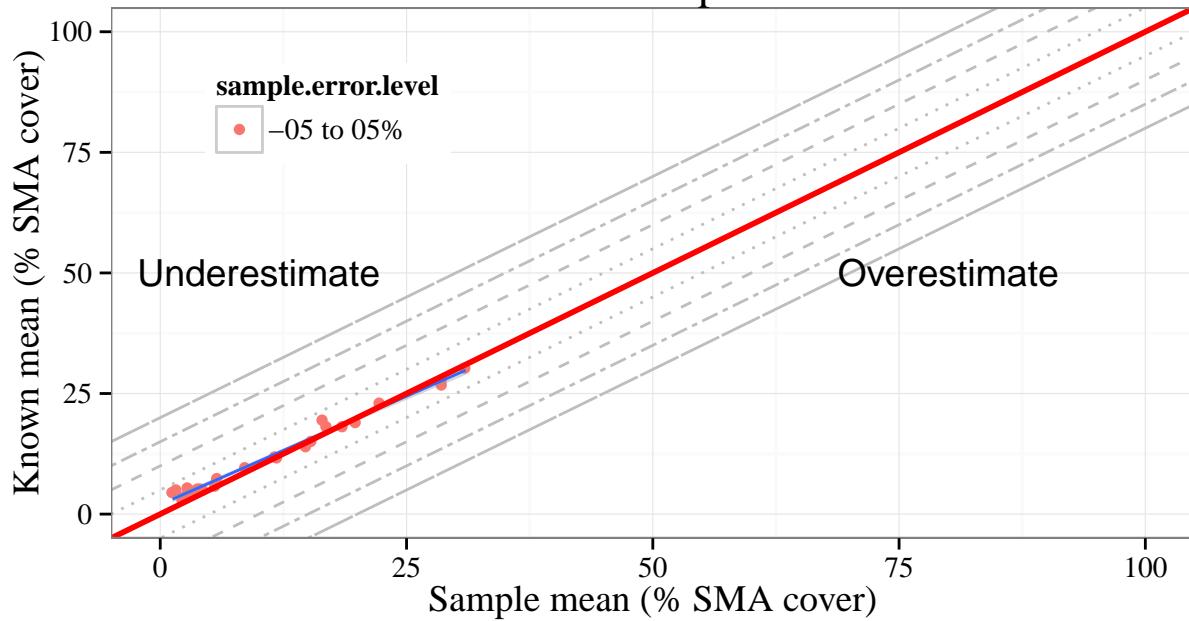
LAW082 Unstable sample error



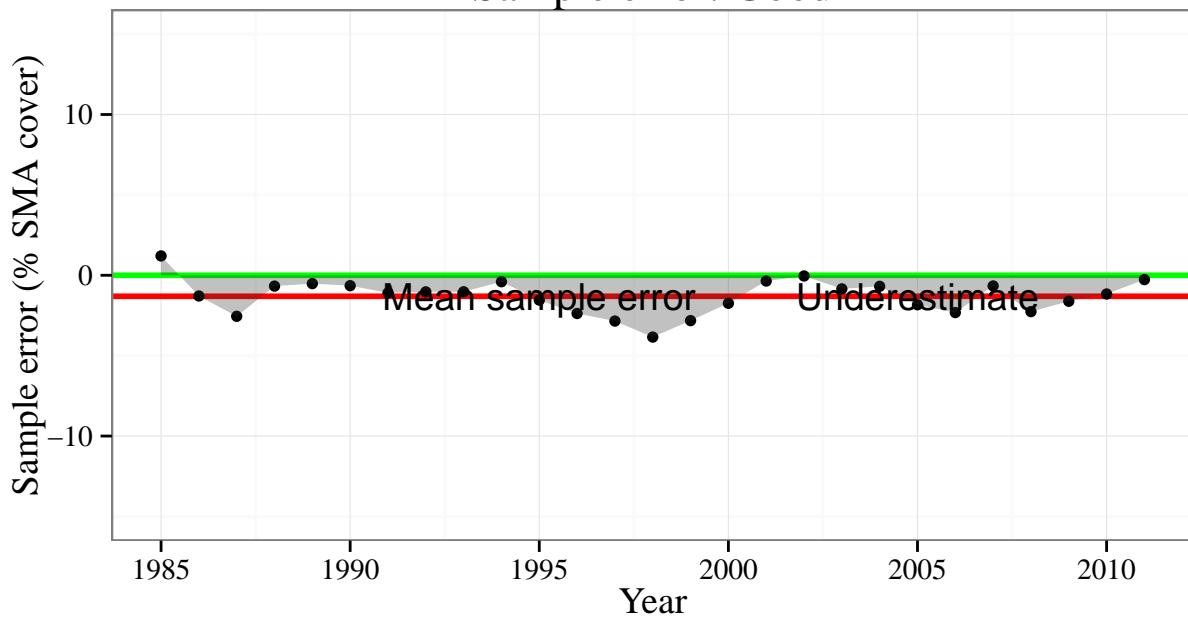
LAW085 Sample error: Good



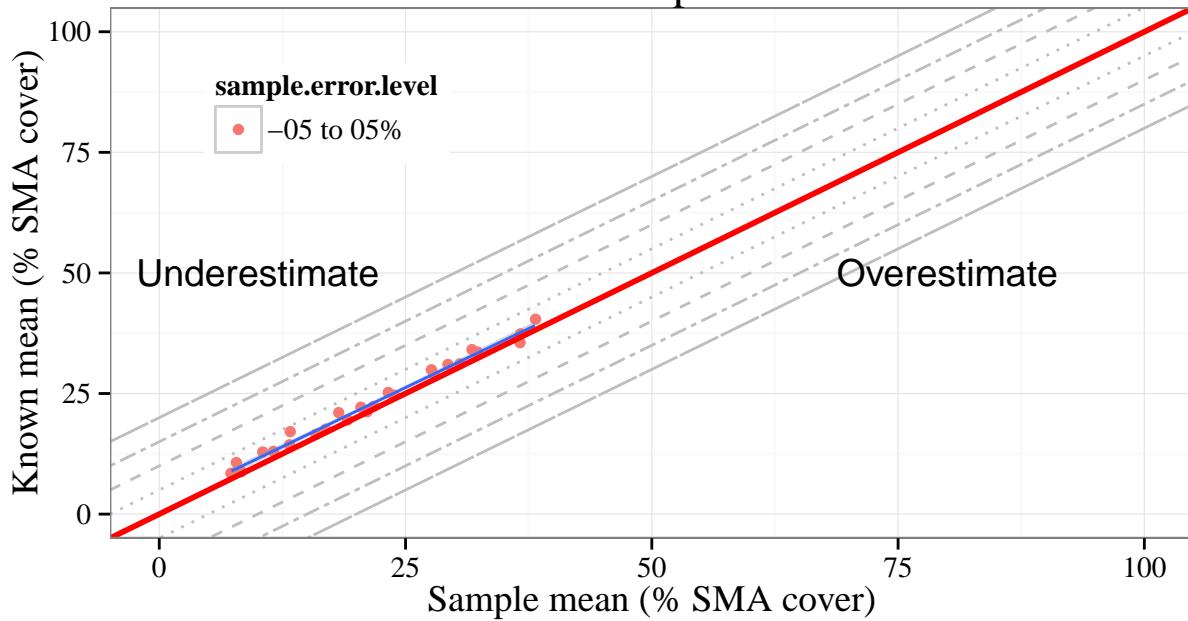
LAW085 Unstable sample error



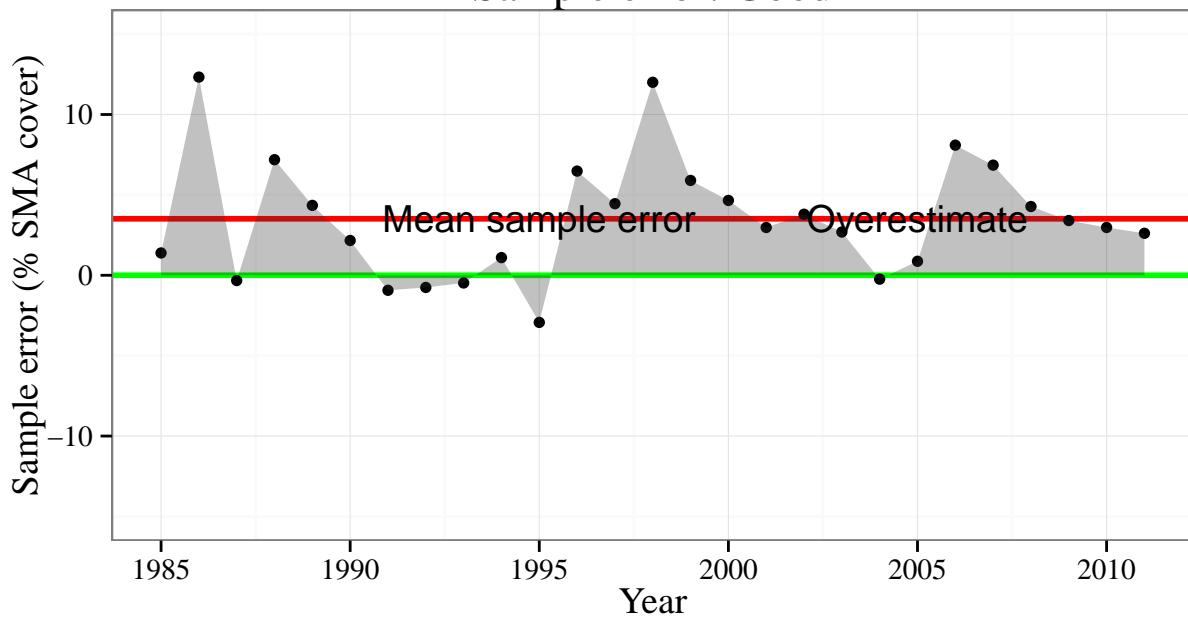
LAW105 Sample error: Good



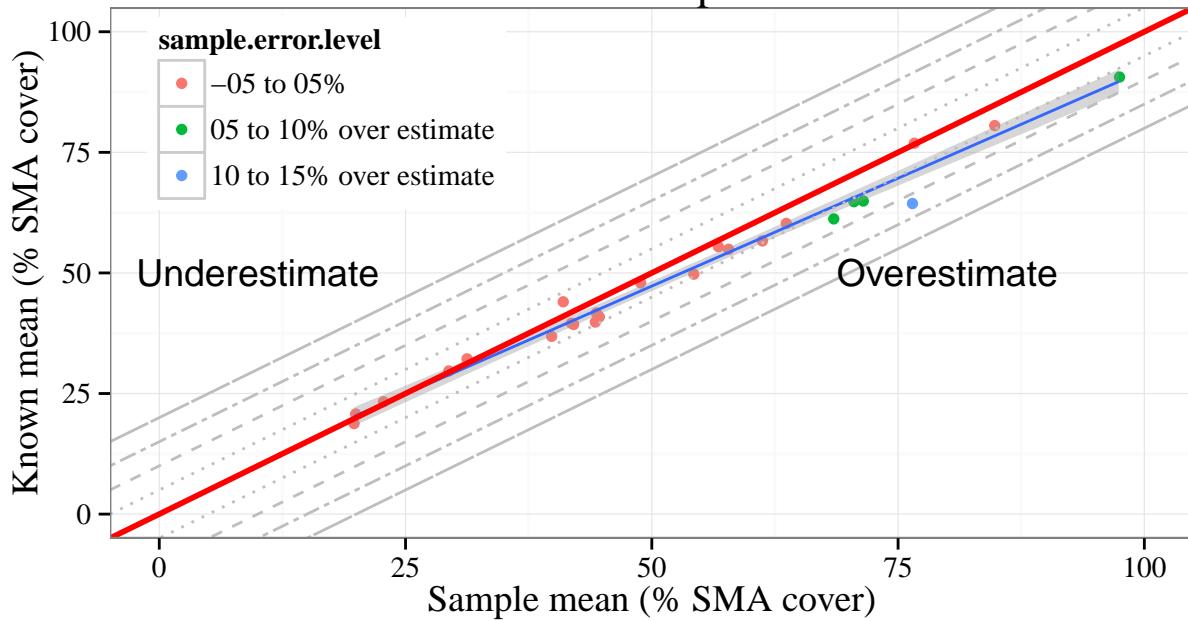
LAW105 Stable sample error



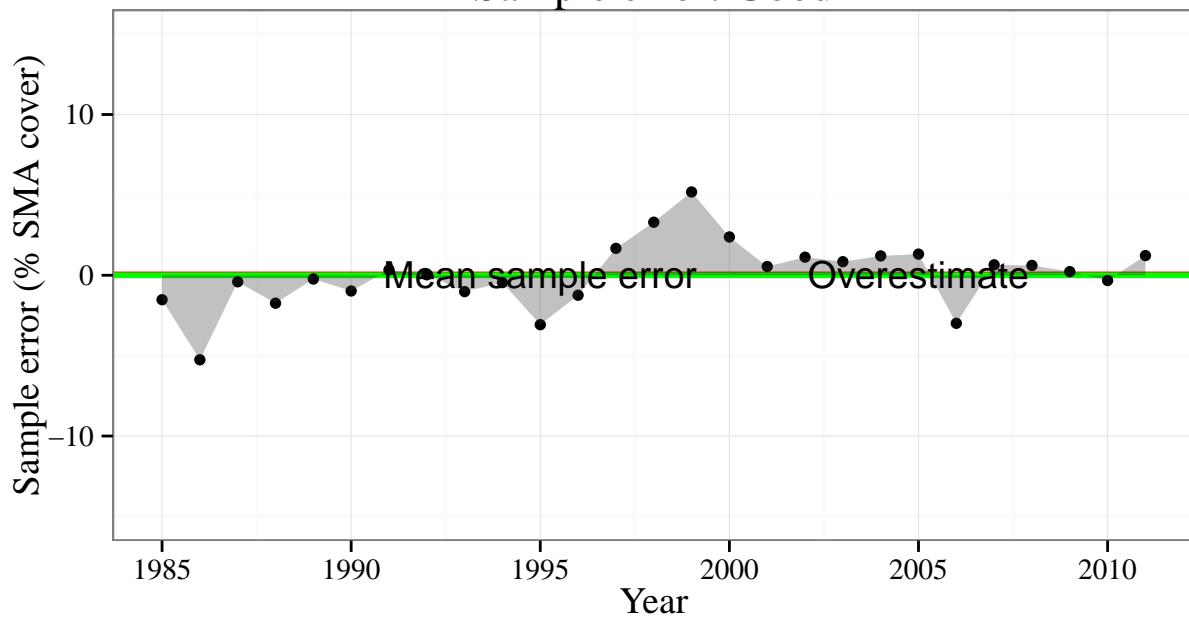
LAW107 Sample error: Good



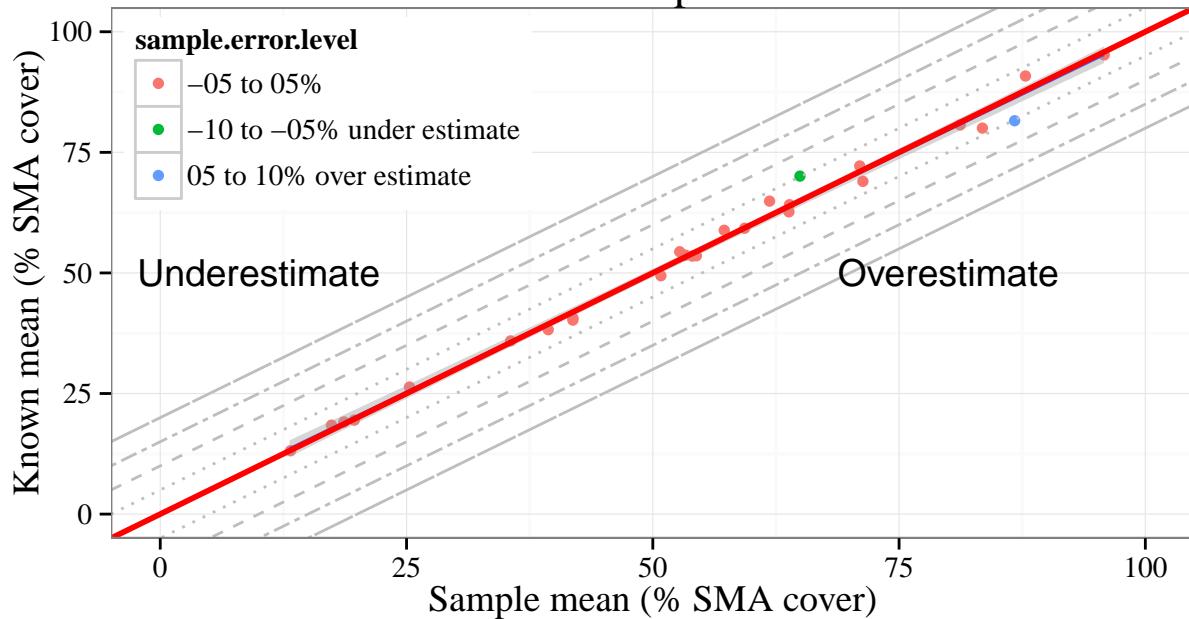
LAW107 Unstable sample error



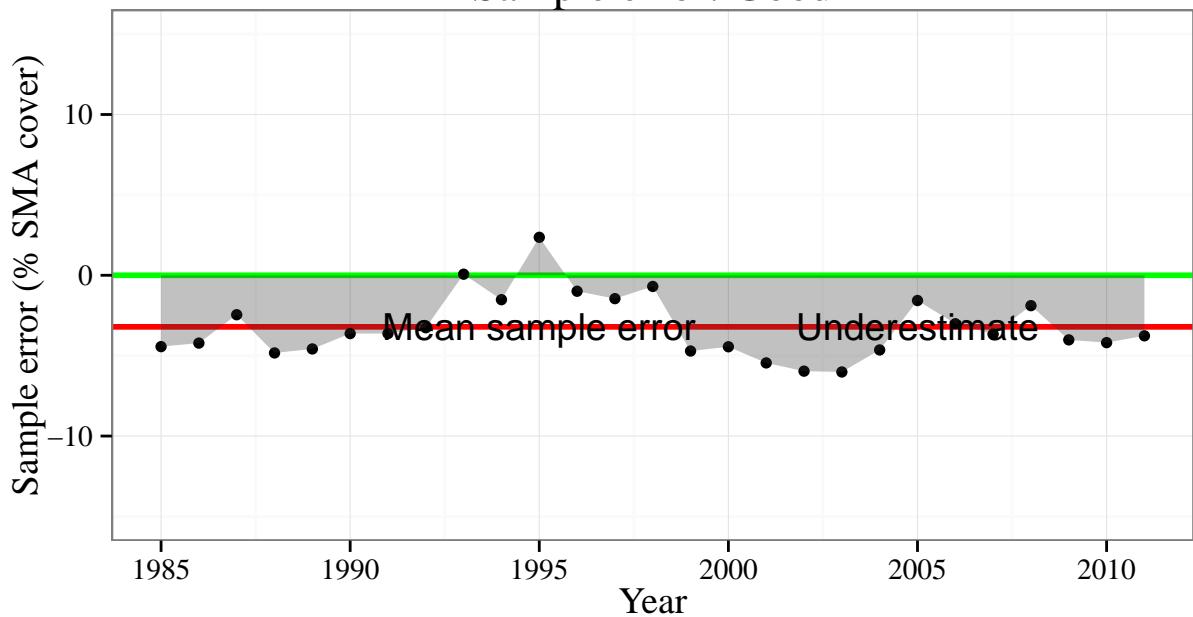
LAW108 Sample error: Good



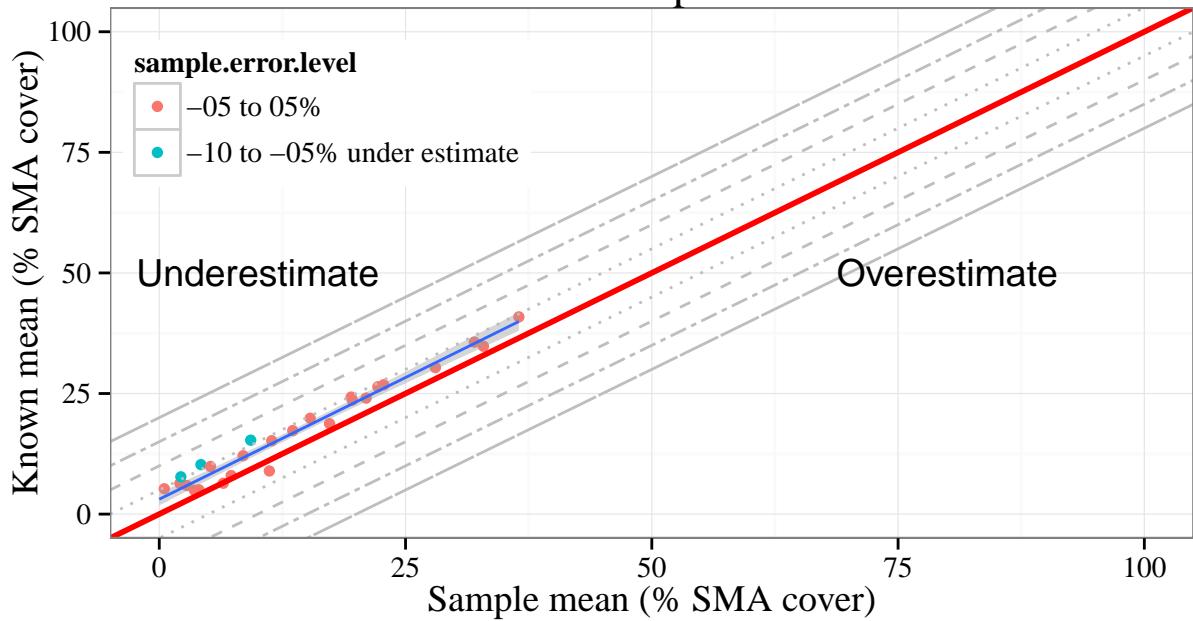
LAW108 Stable sample error



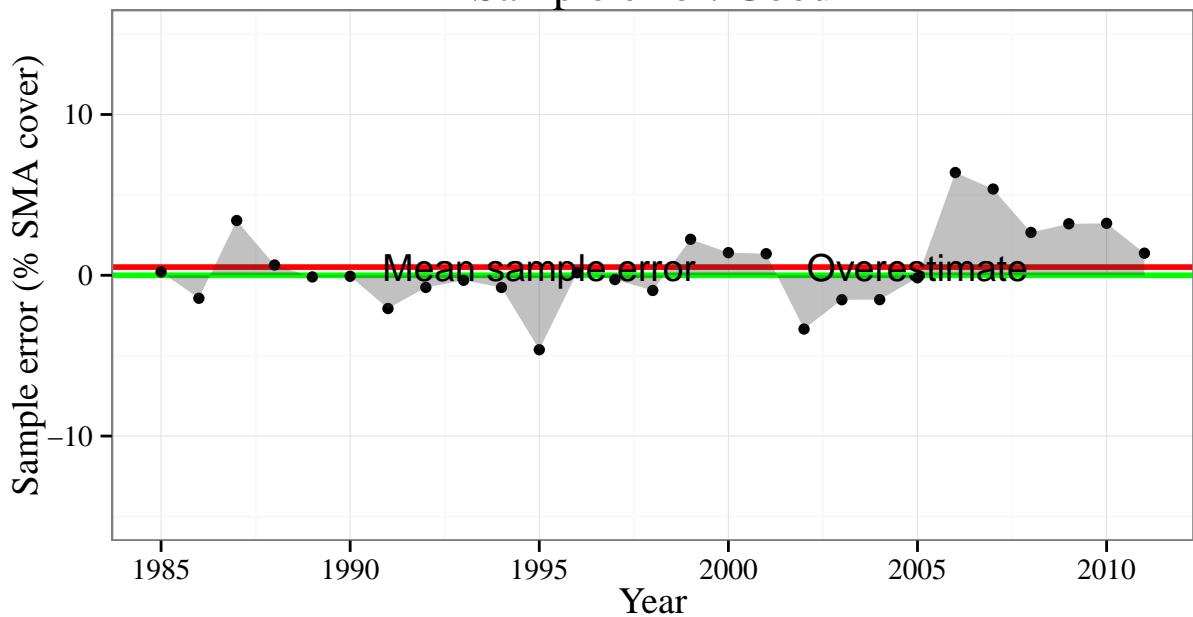
LAW112 Sample error: Good



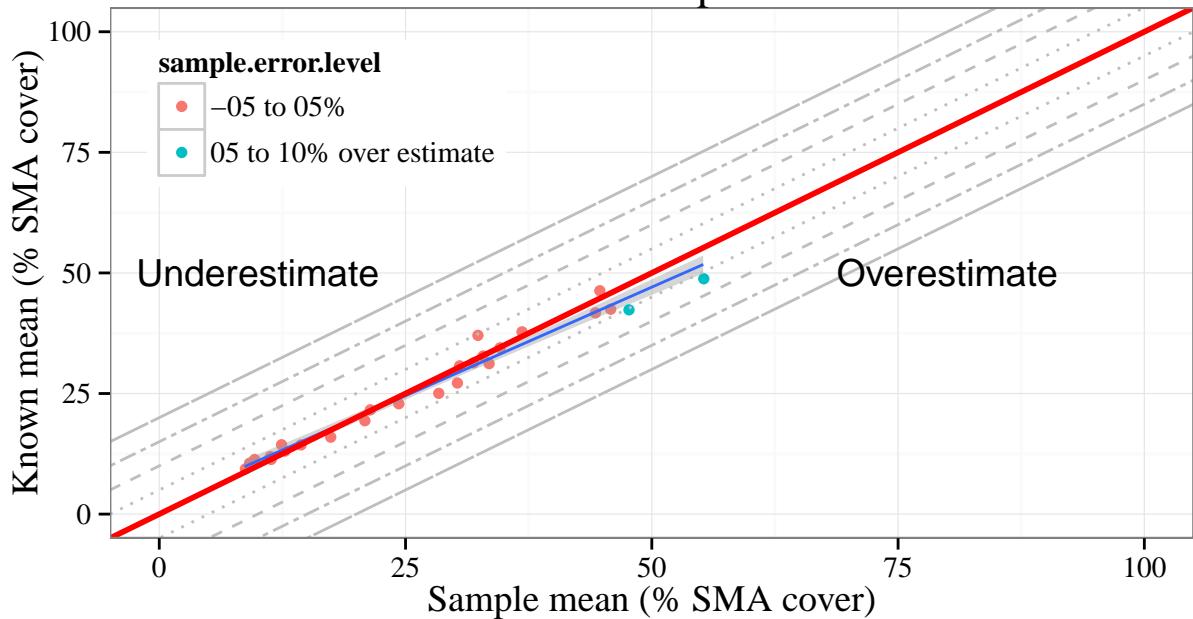
LAW112 Stable sample error



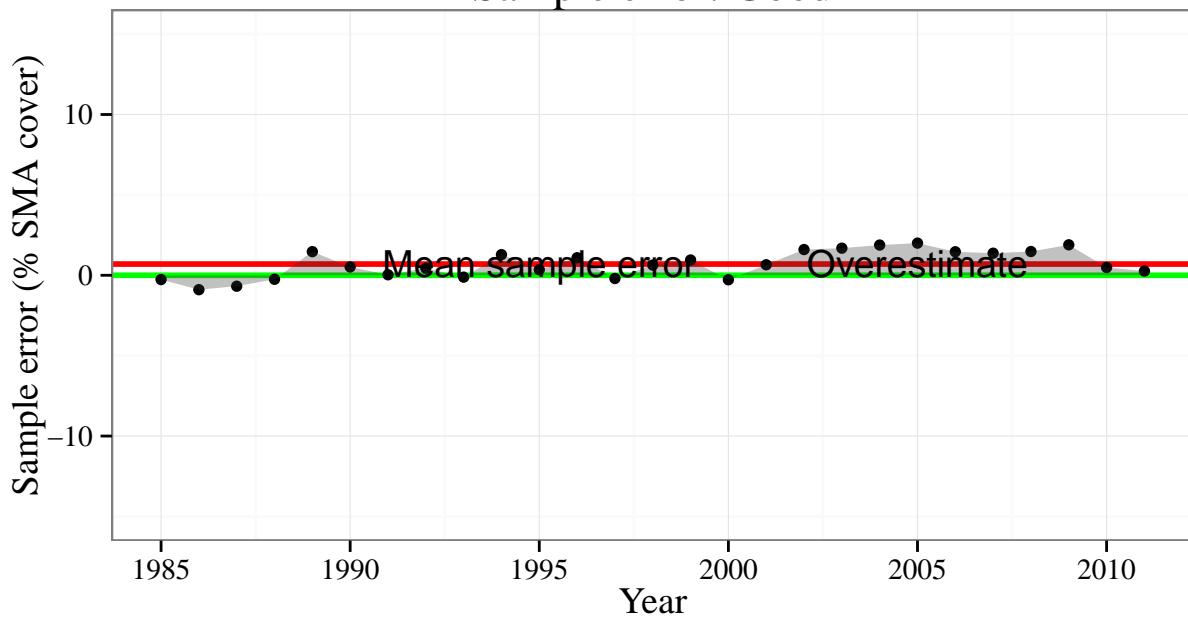
LAW120 Sample error: Good



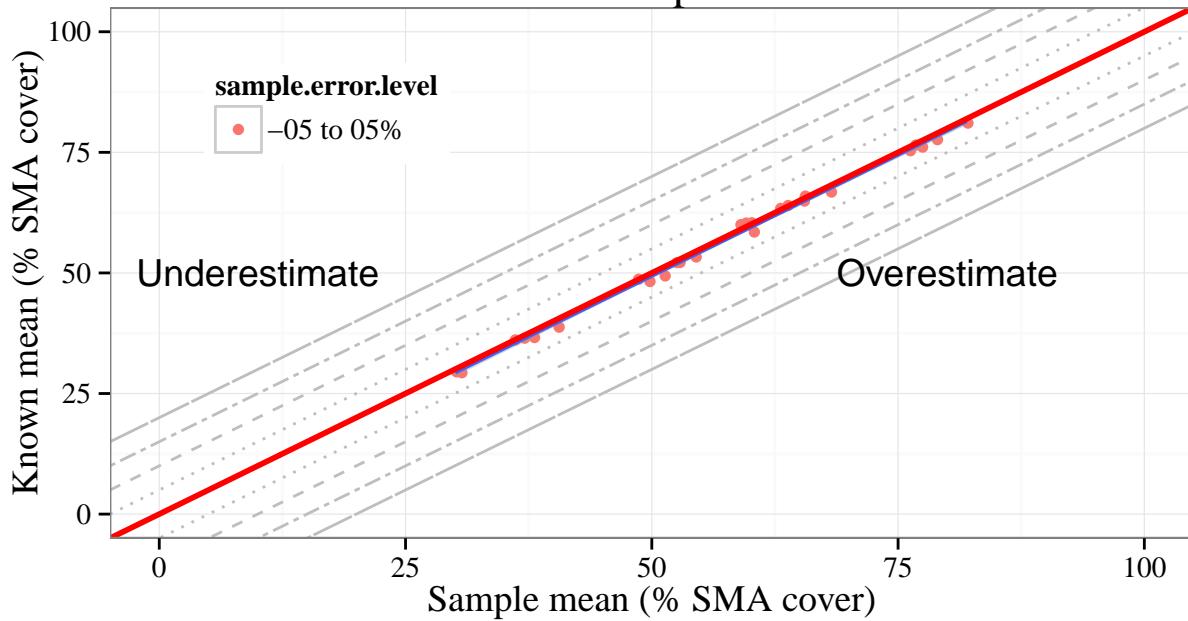
LAW120 Unstable sample error



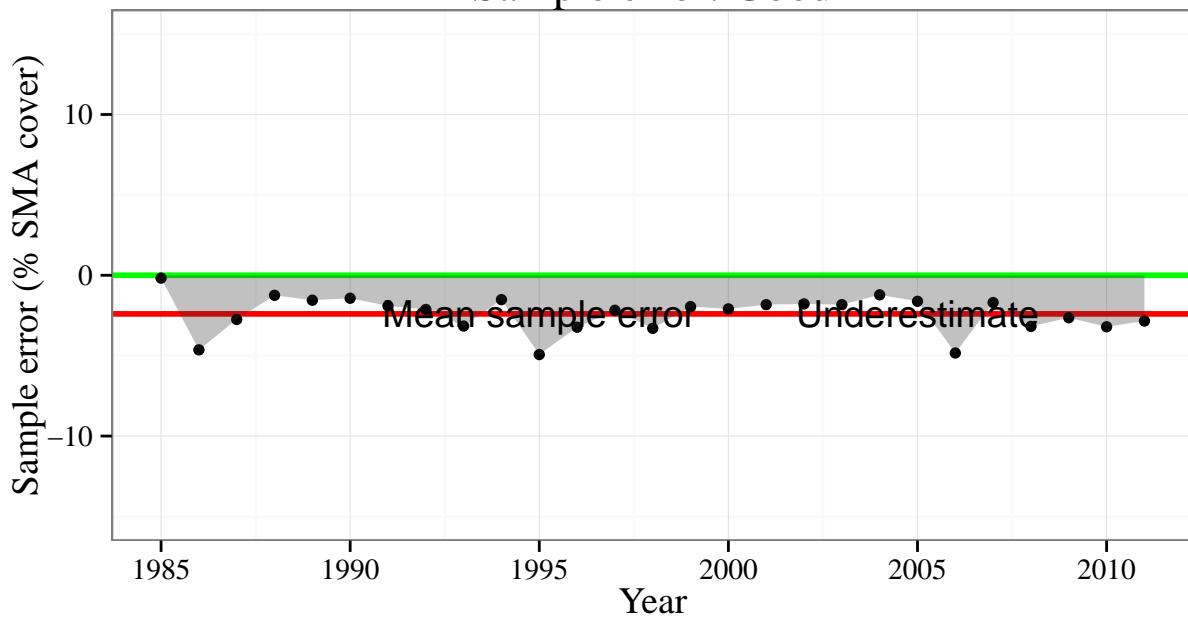
LAW122 Sample error: Good



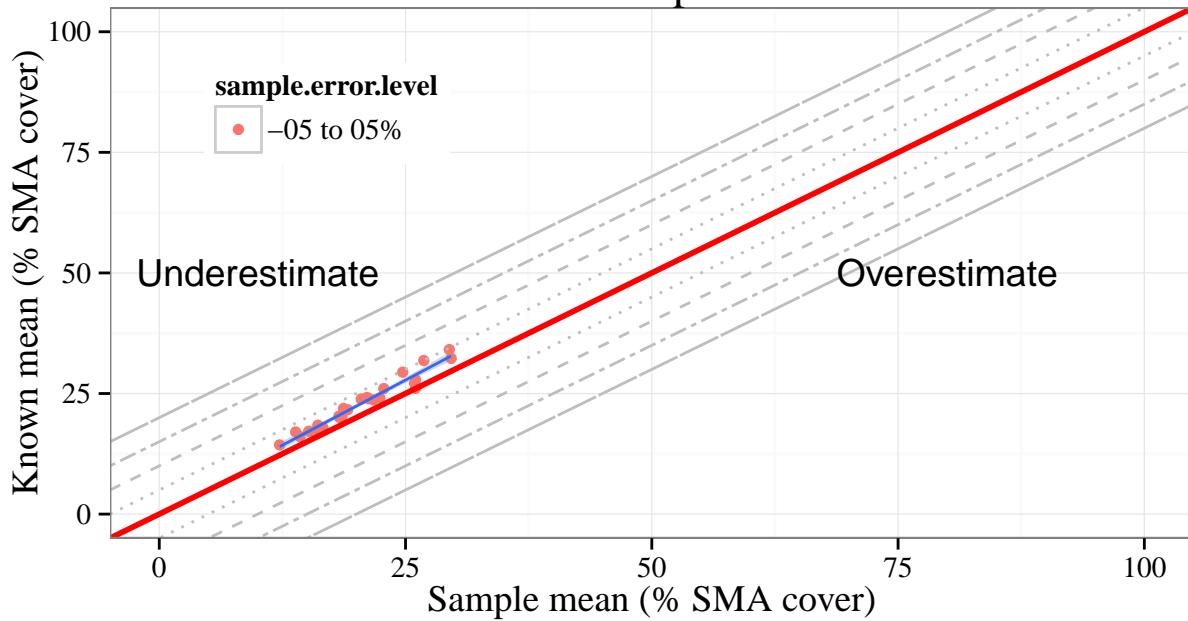
LAW122 Stable sample error



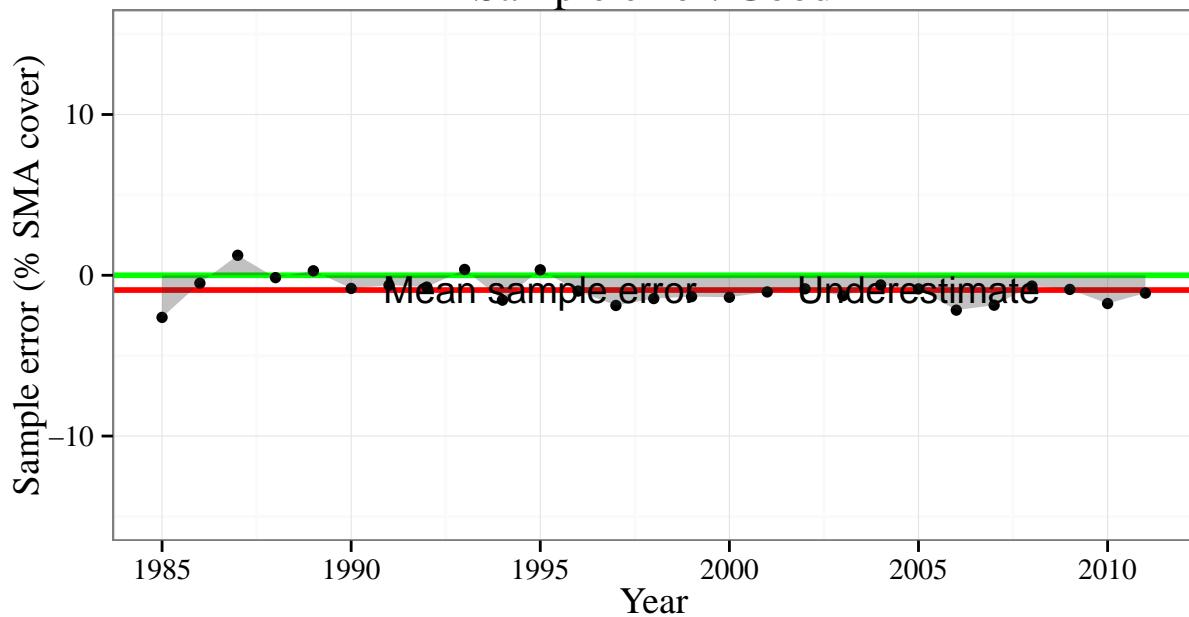
LAW137
Sample error: Good



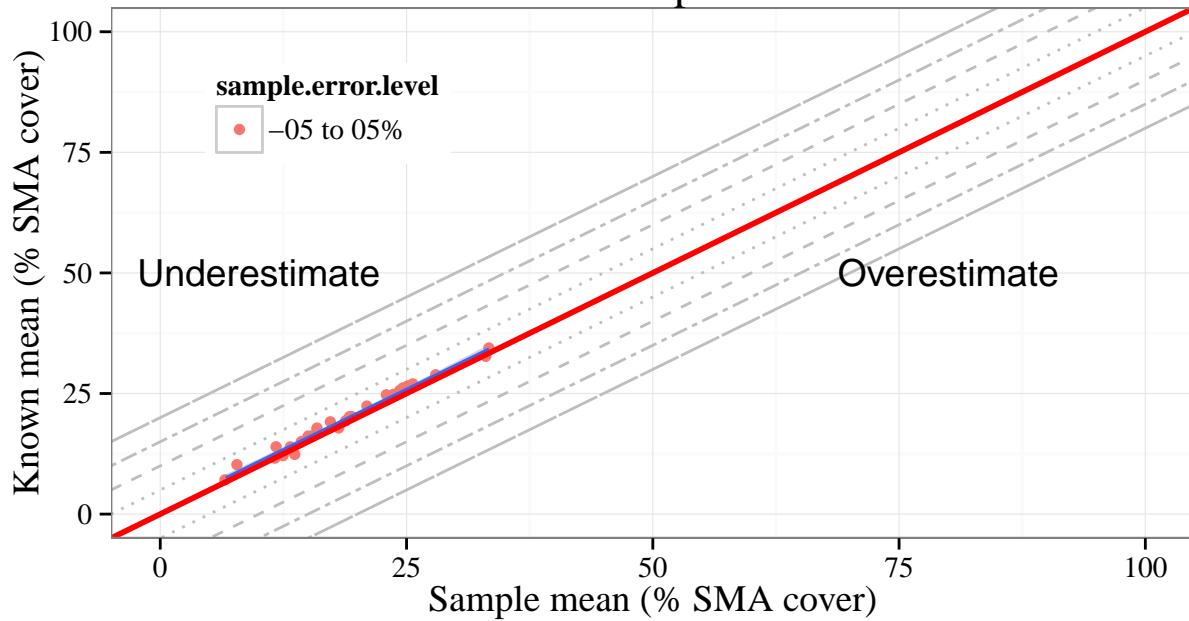
LAW137
Stable sample error



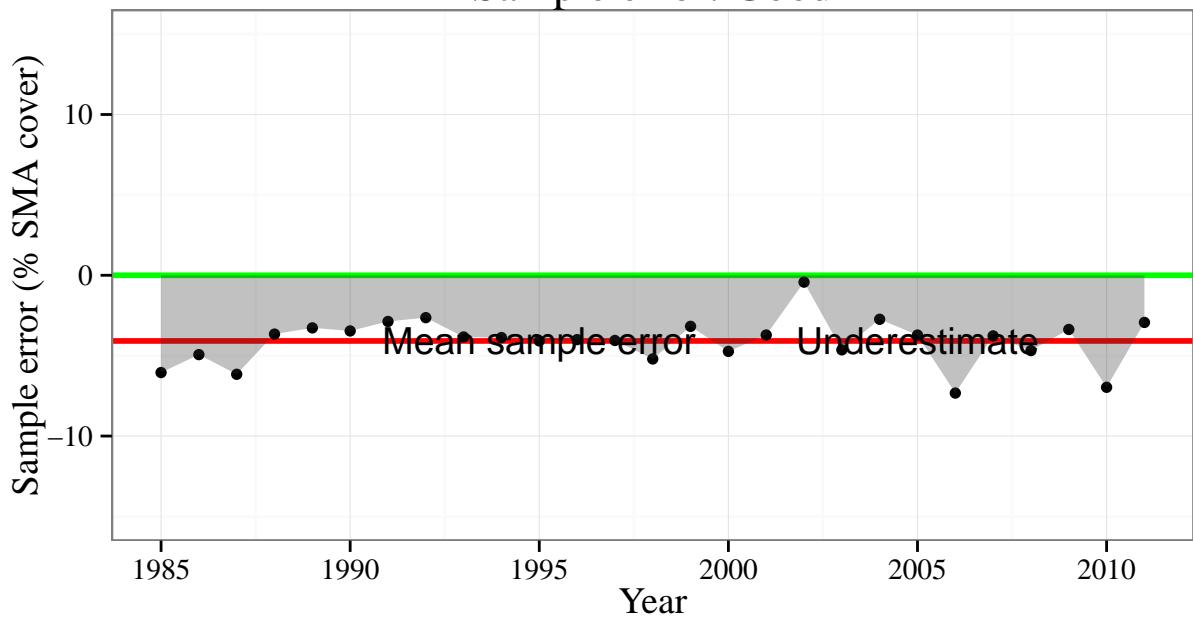
LNP018
Sample error: Good



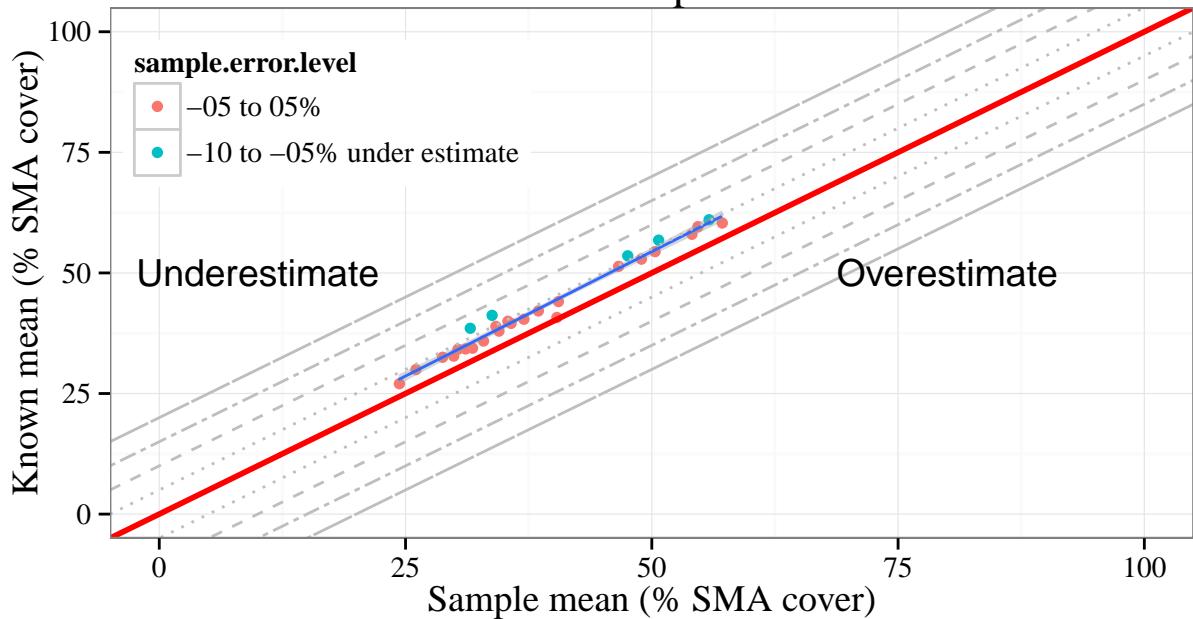
LNP018
Stable sample error



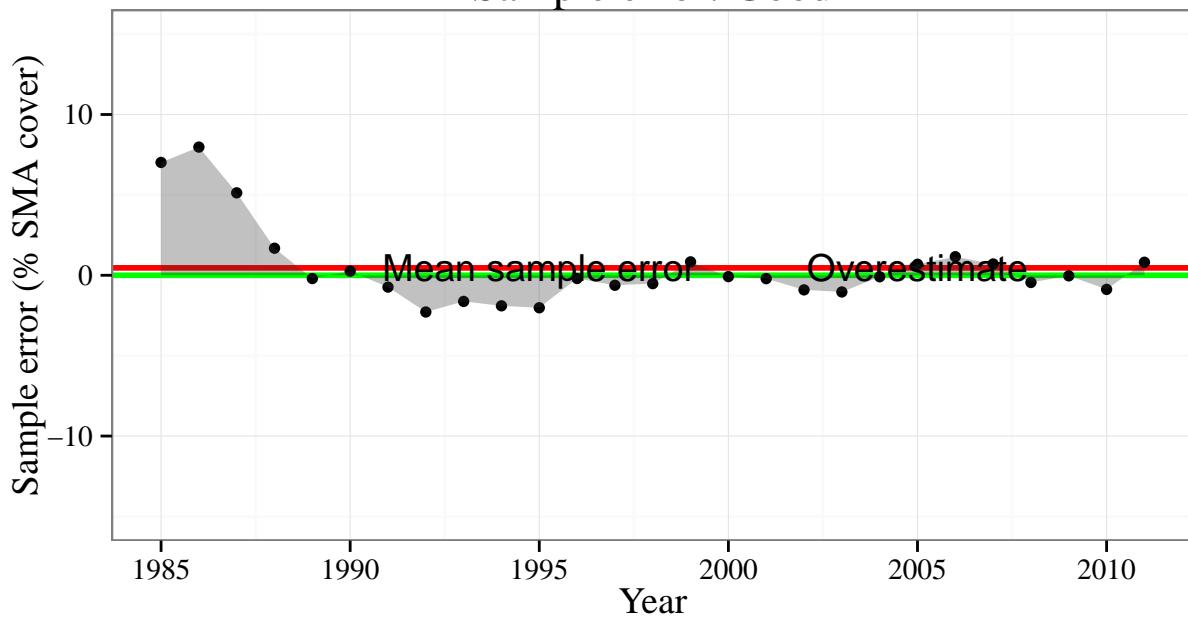
LNP045 Sample error: Good



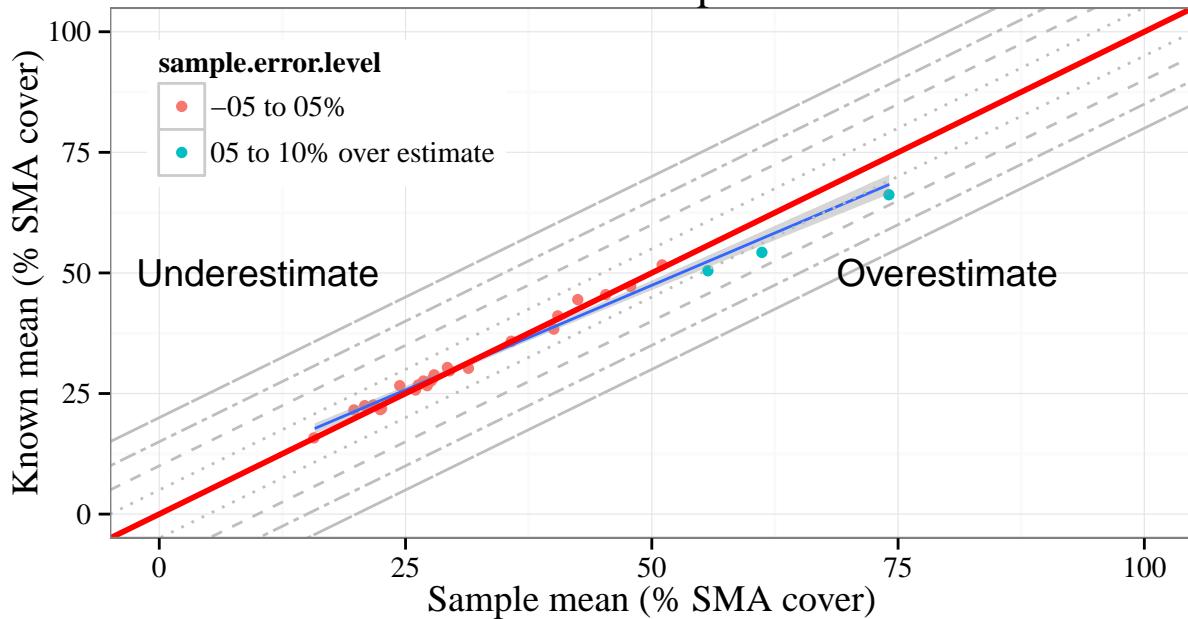
LNP045 Stable sample error



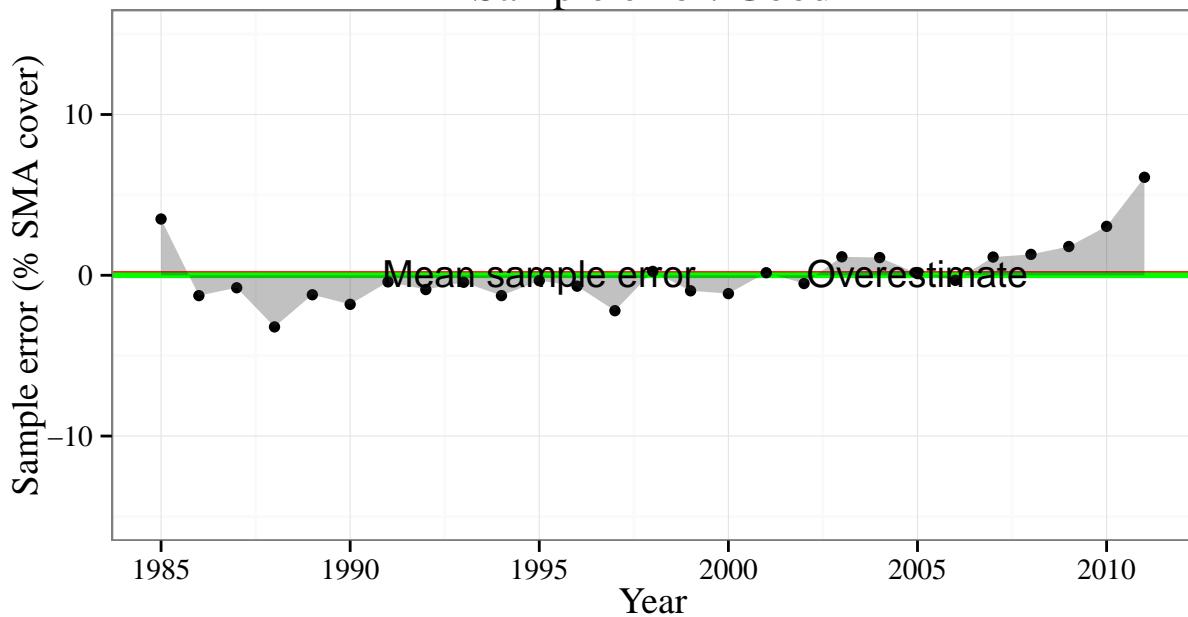
LNP050 Sample error: Good



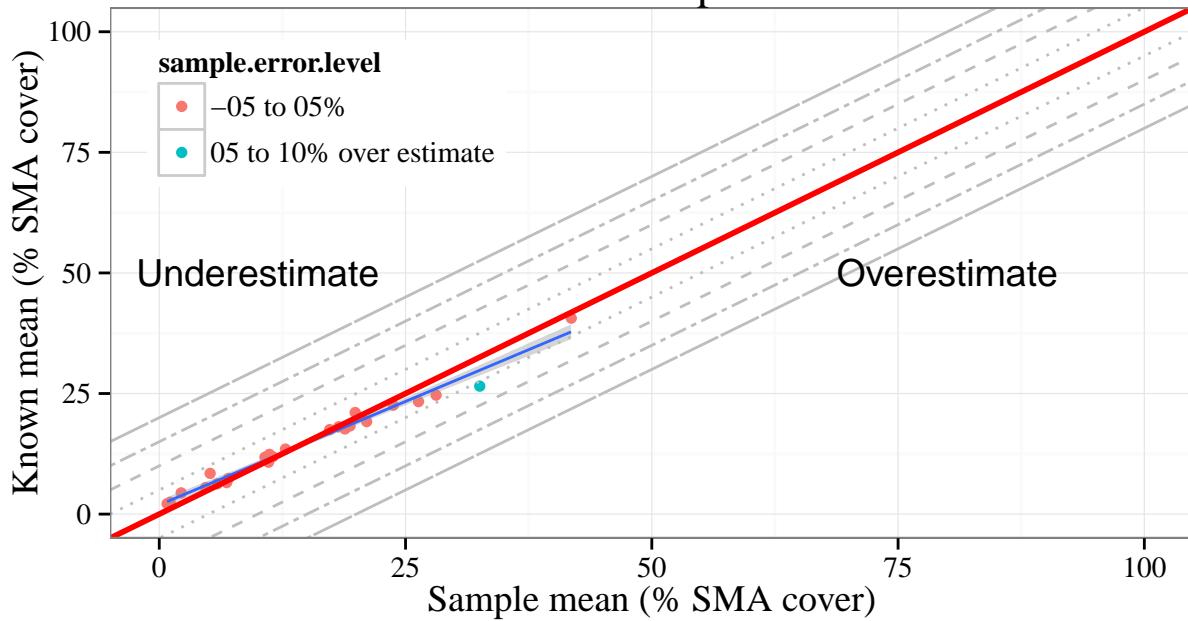
LNP050 Unstable sample error



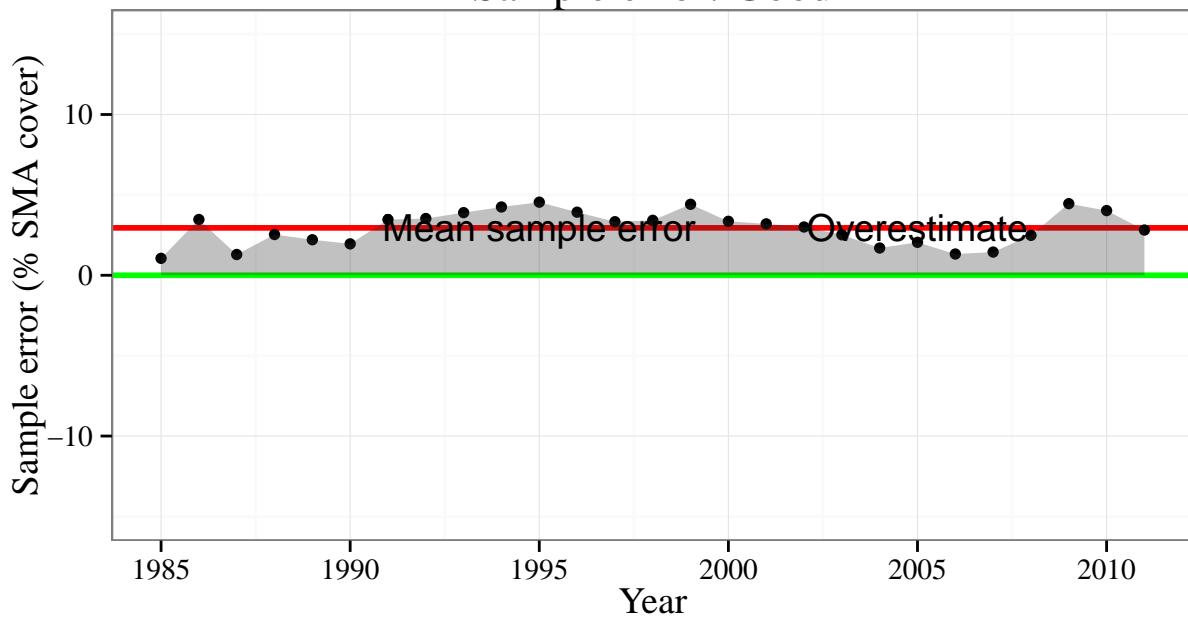
MAN005 Sample error: Good



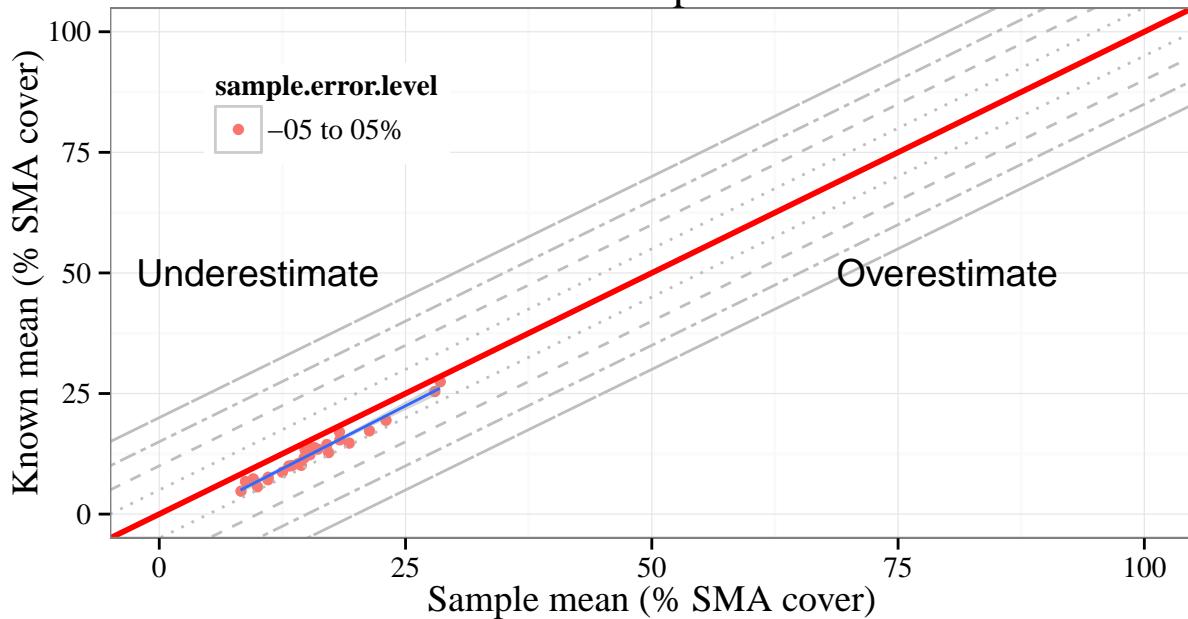
MAN005 Unstable sample error



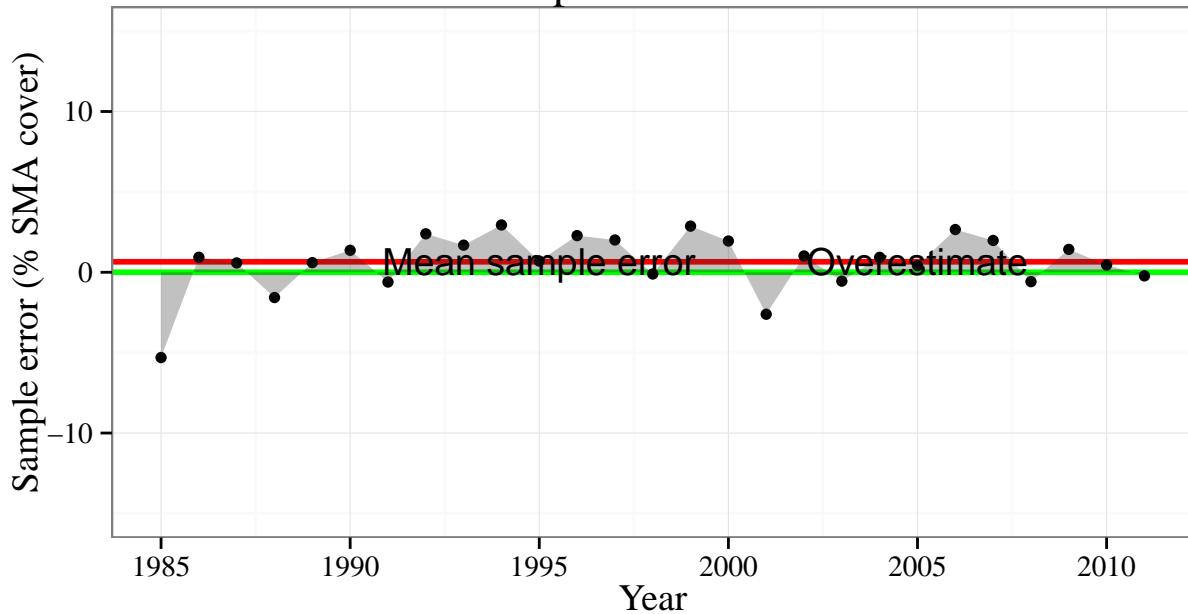
MAN006
Sample error: Good



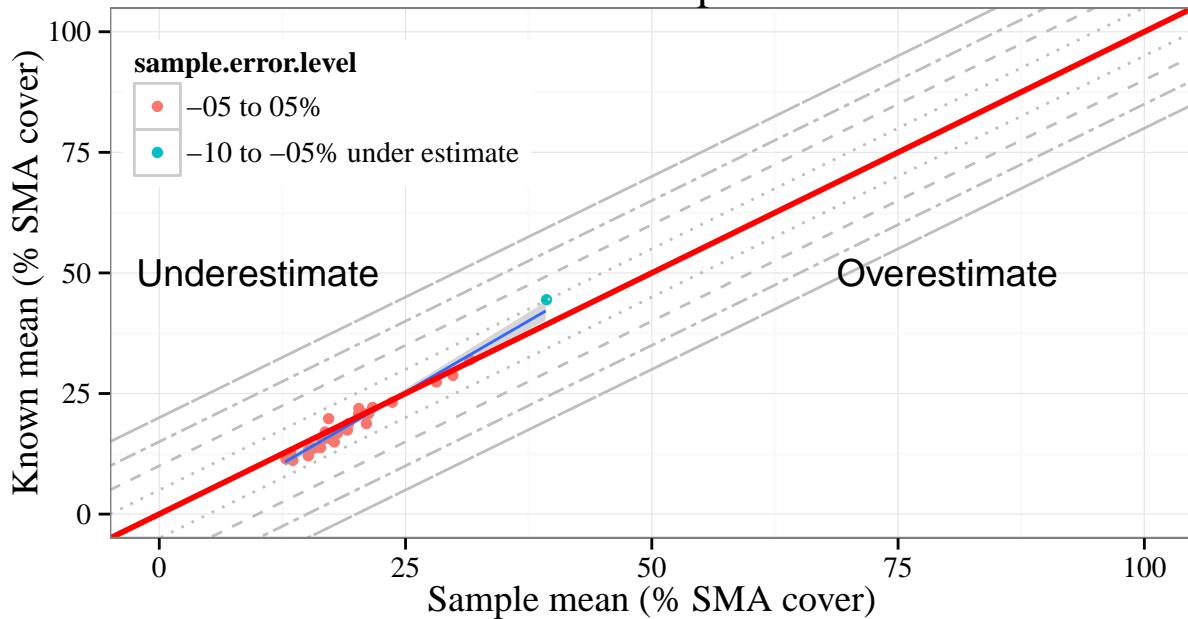
MAN006
Stable sample error



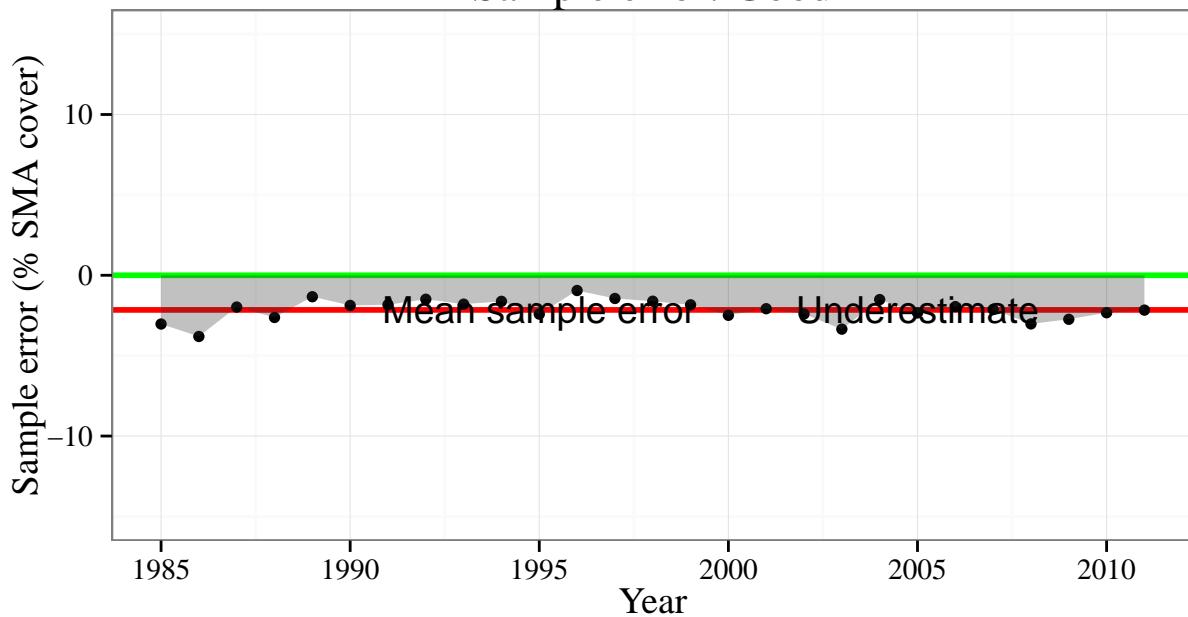
MAN007 Sample error: Good



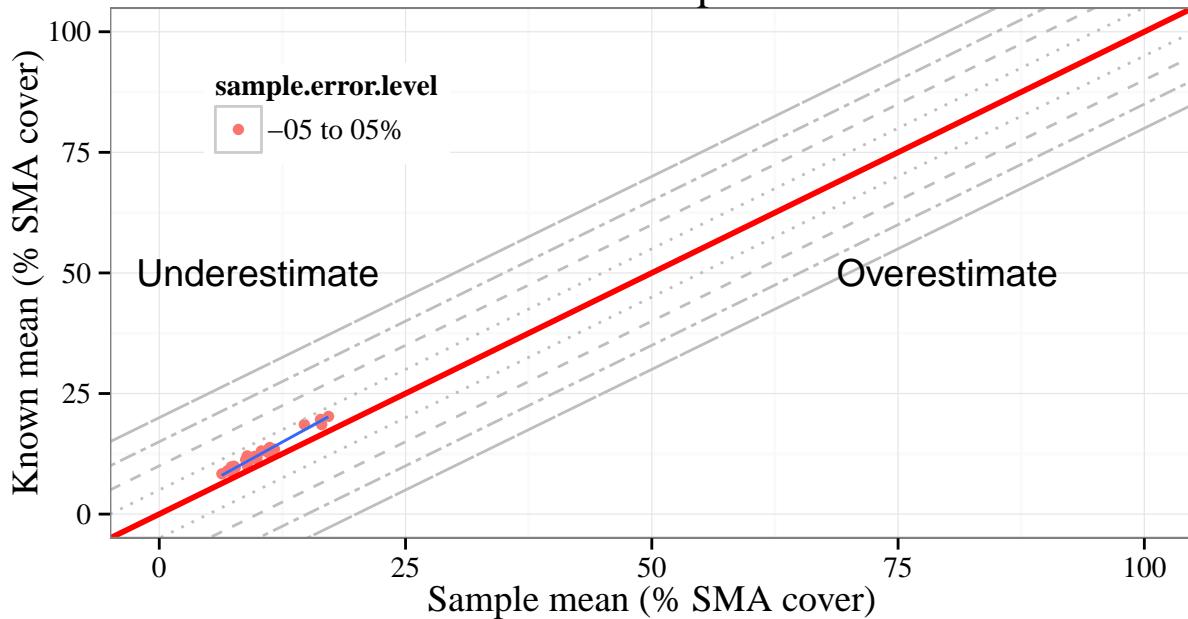
MAN007 Unstable sample error



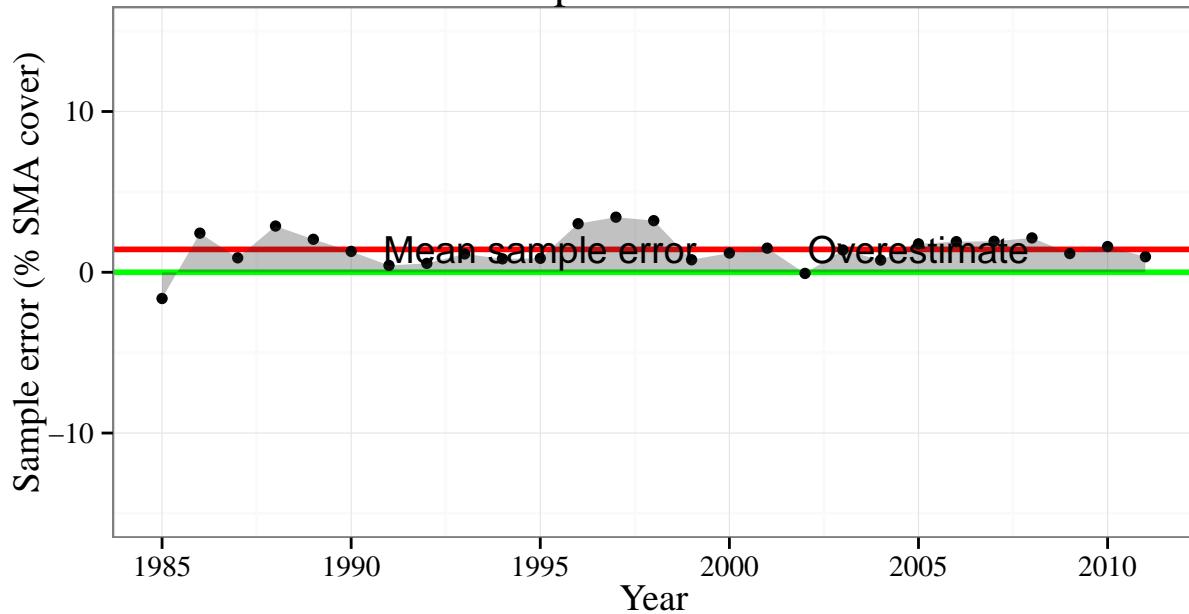
MAN014
Sample error: Good



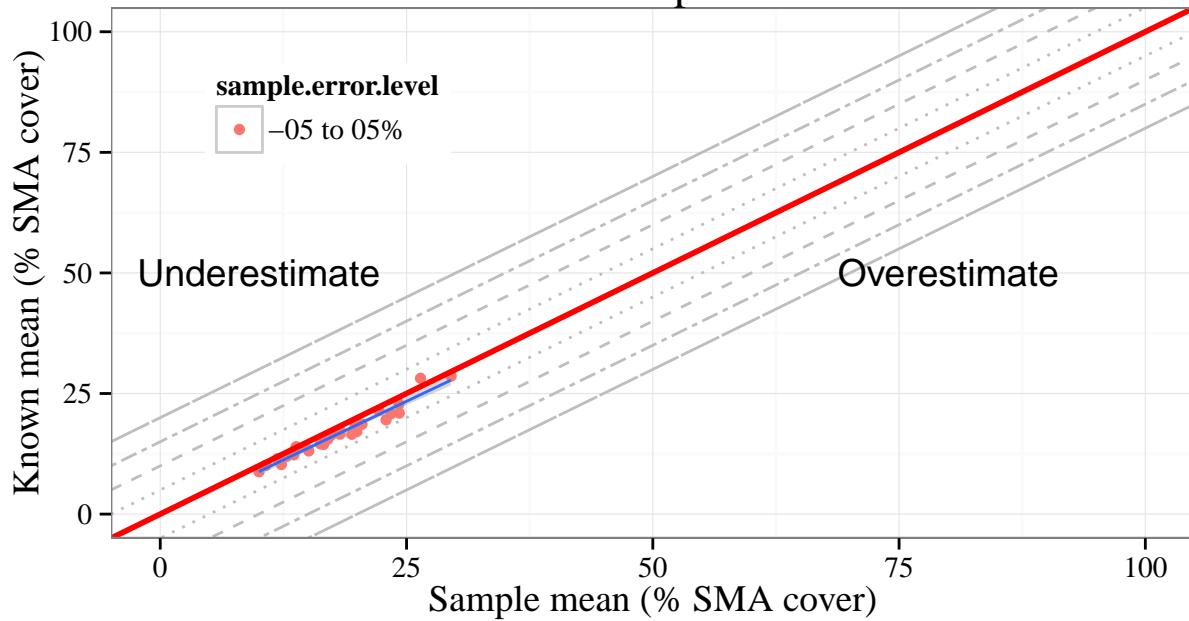
MAN014
Unstable sample error



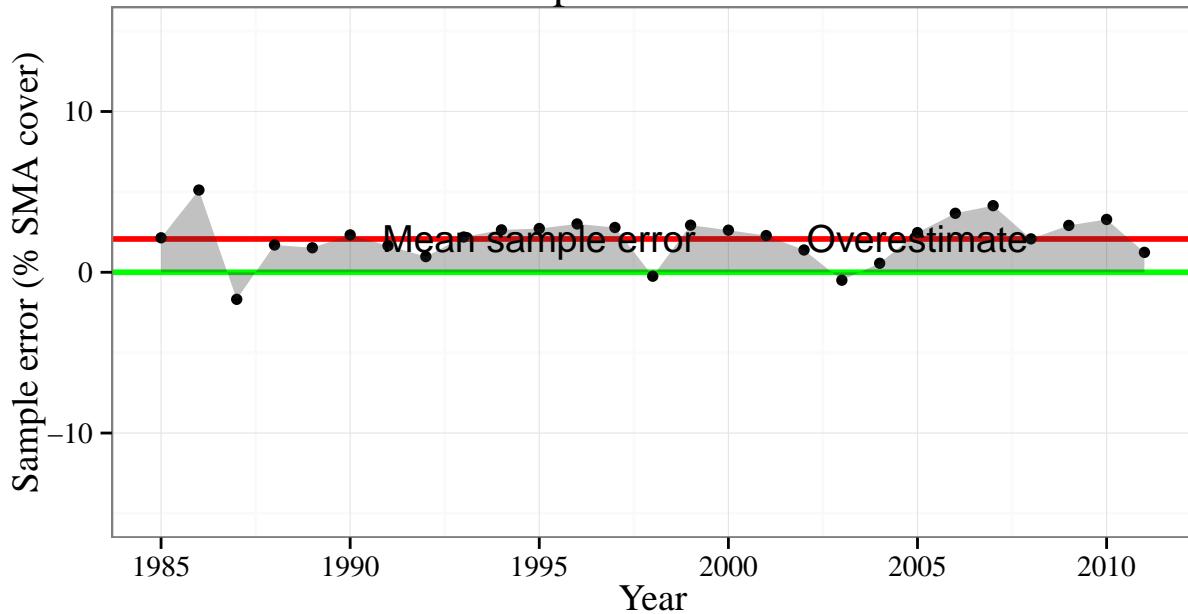
MAN034
Sample error: Good



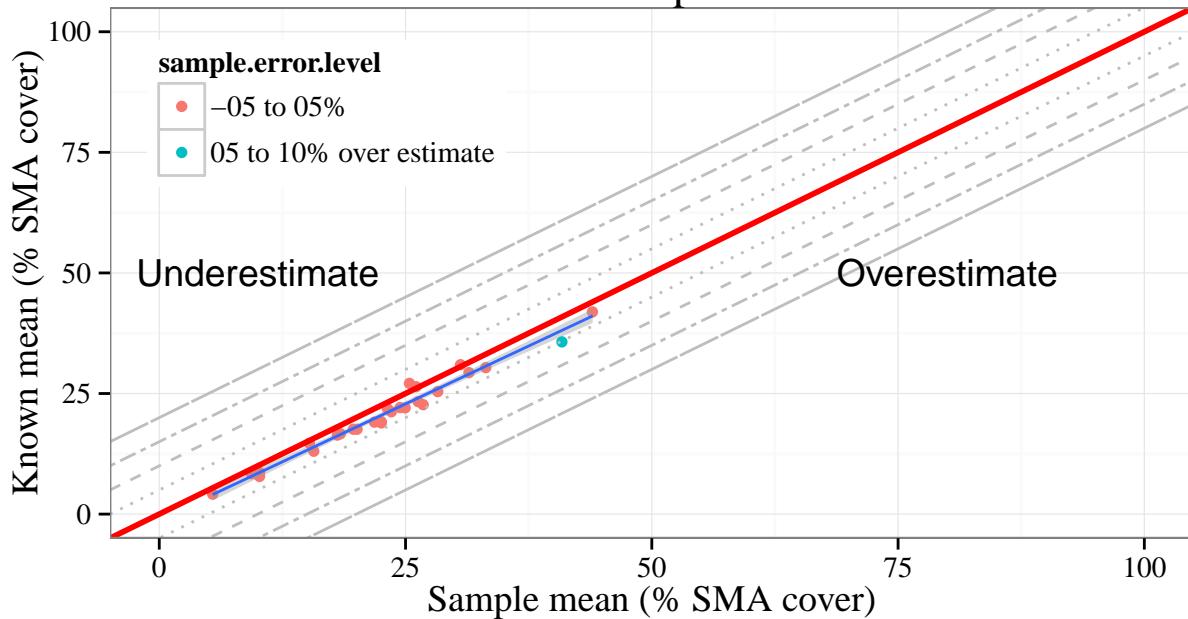
MAN034
Stable sample error



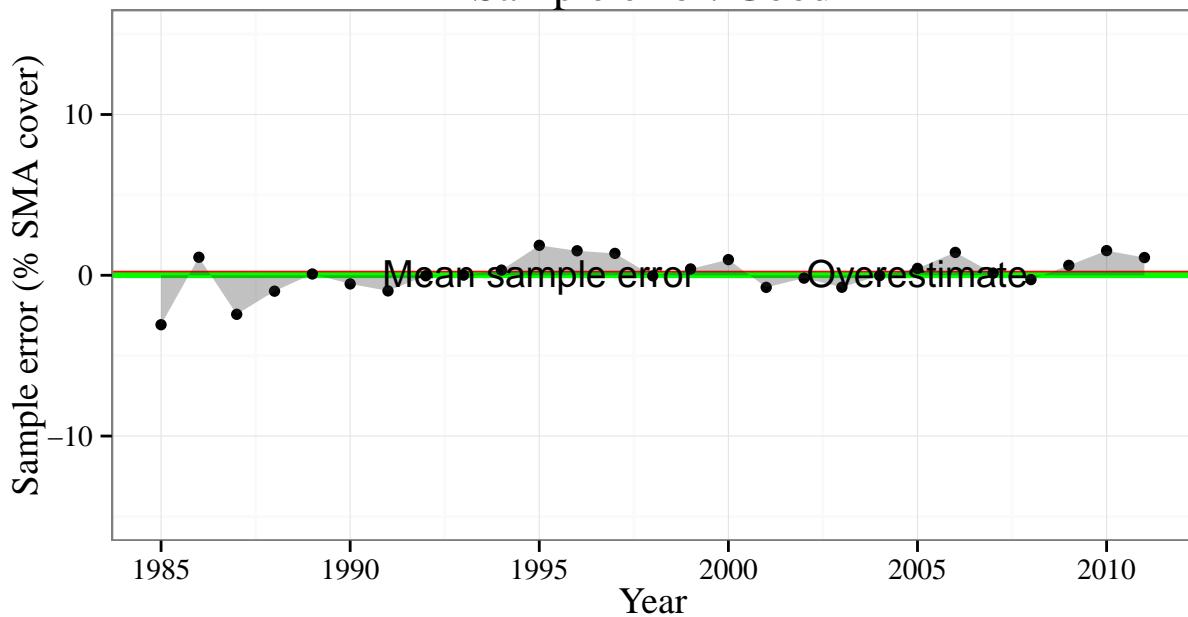
MAN037
Sample error: Good



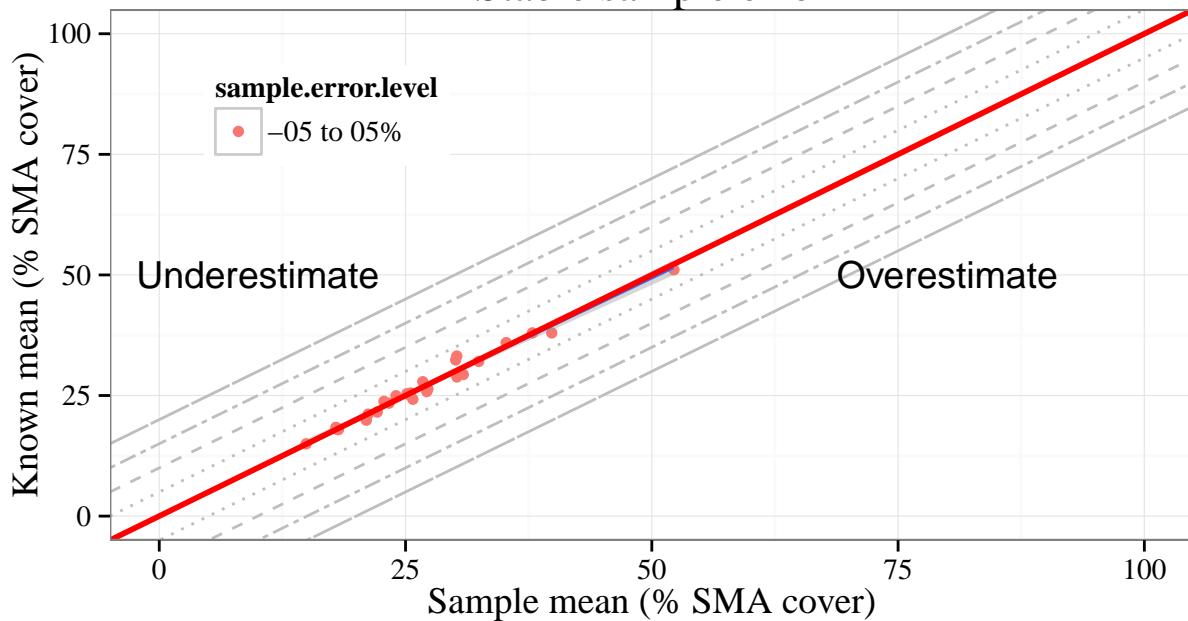
MAN037
Stable sample error



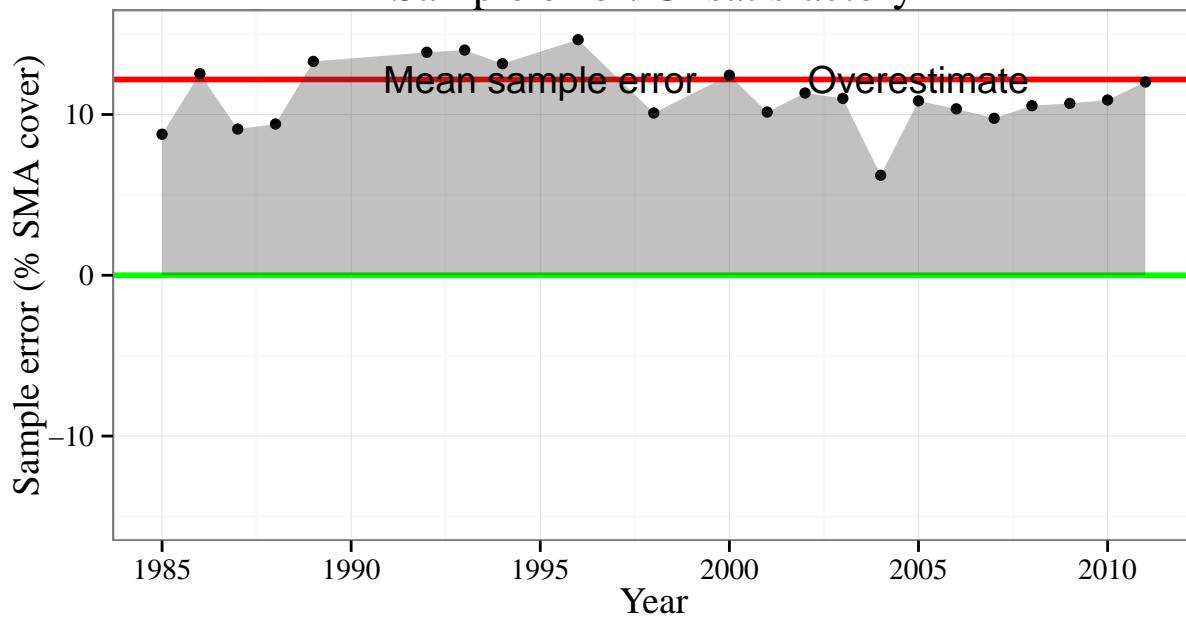
MAN042
Sample error: Good



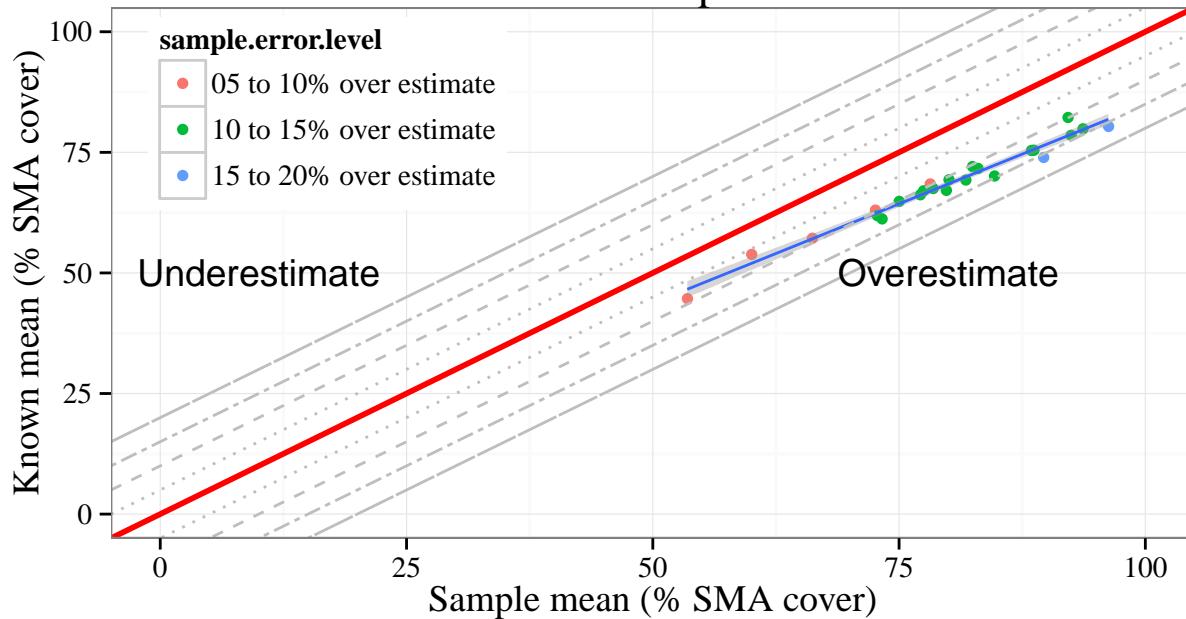
MAN042
Stable sample error



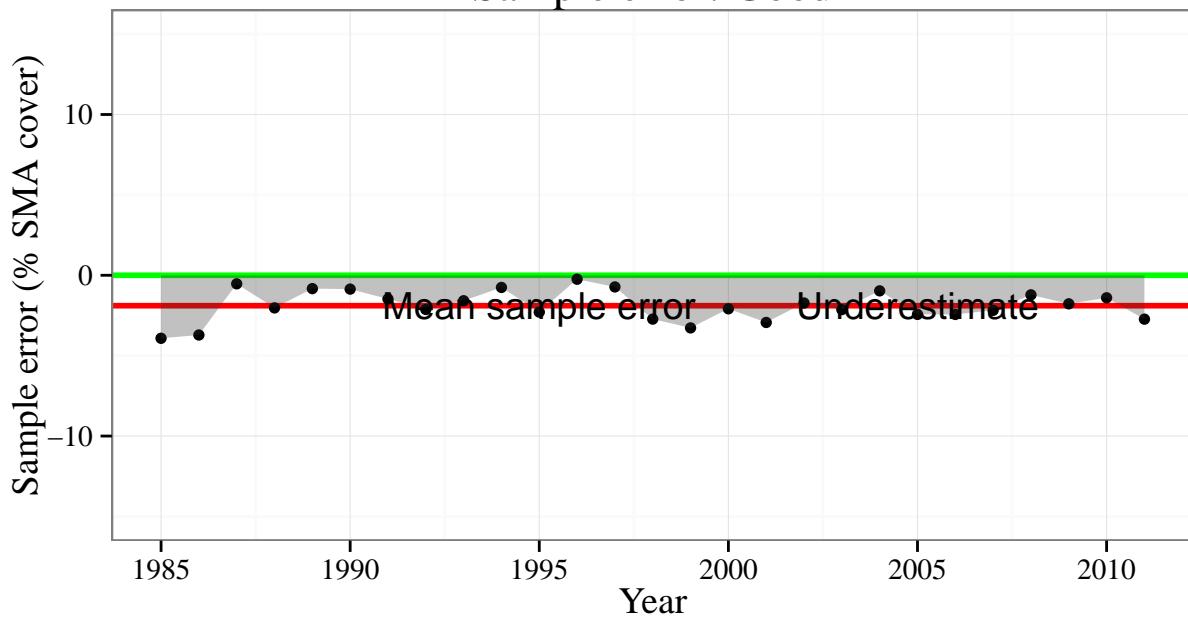
MAN060 Sample error: Unsatisfactory



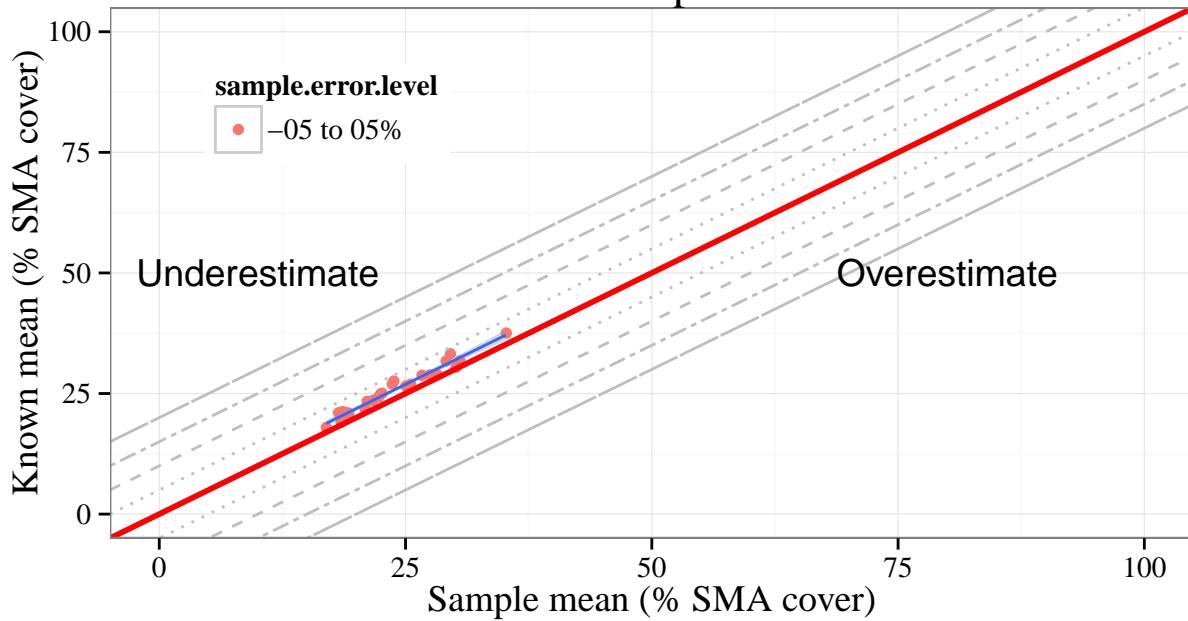
MAN060 Unstable sample error



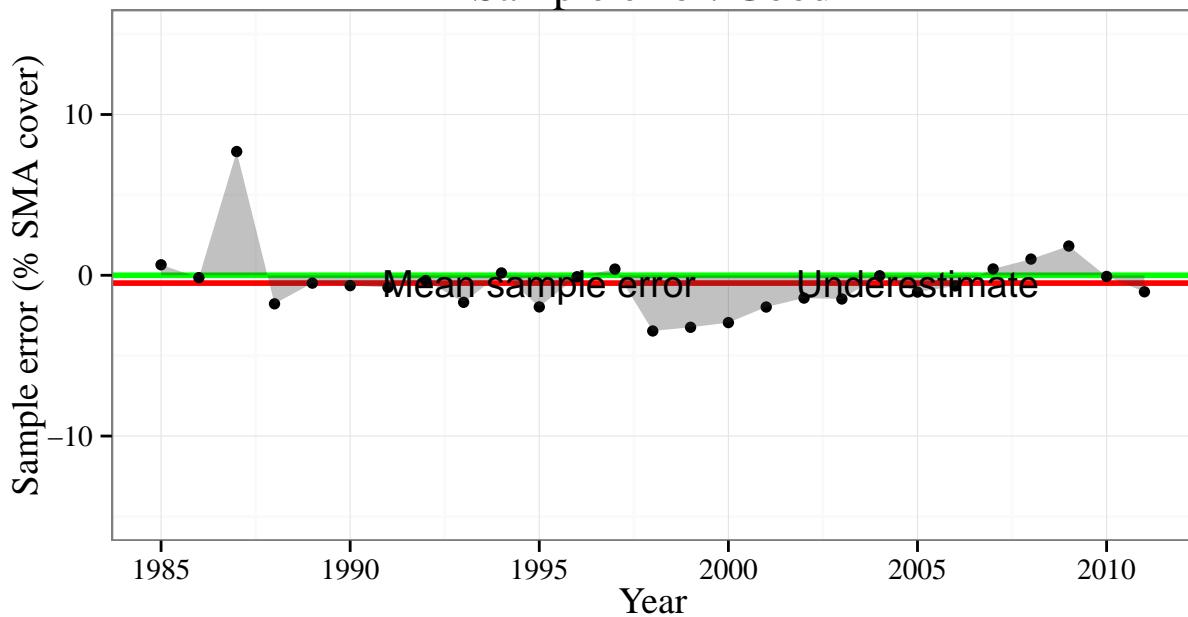
PLC007
Sample error: Good



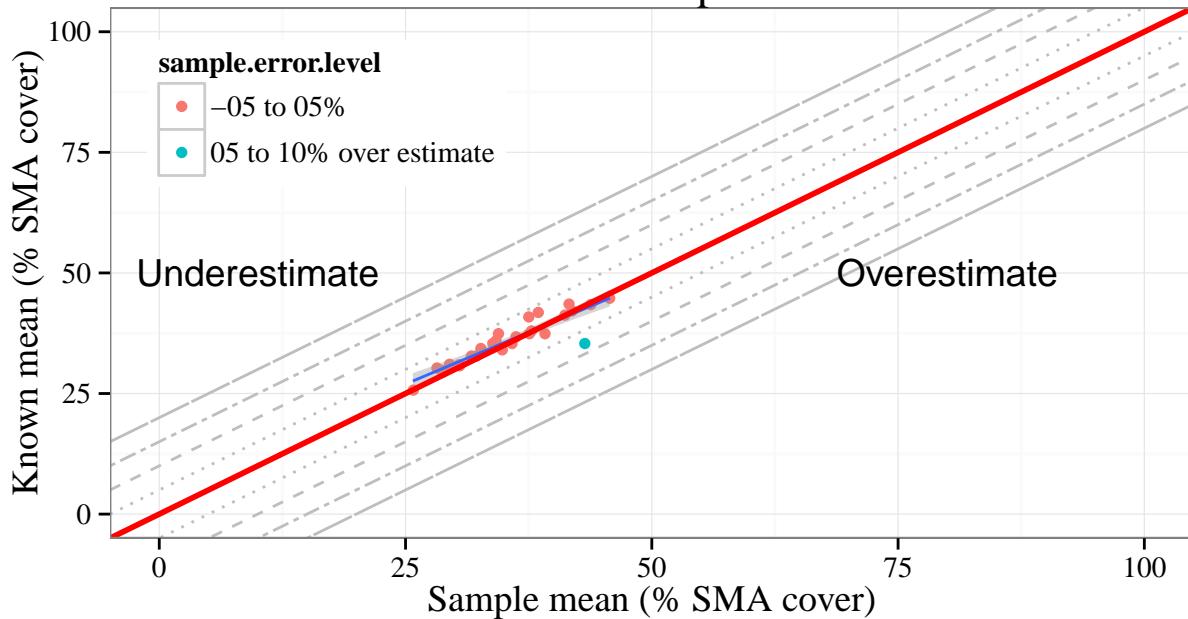
PLC007
Stable sample error



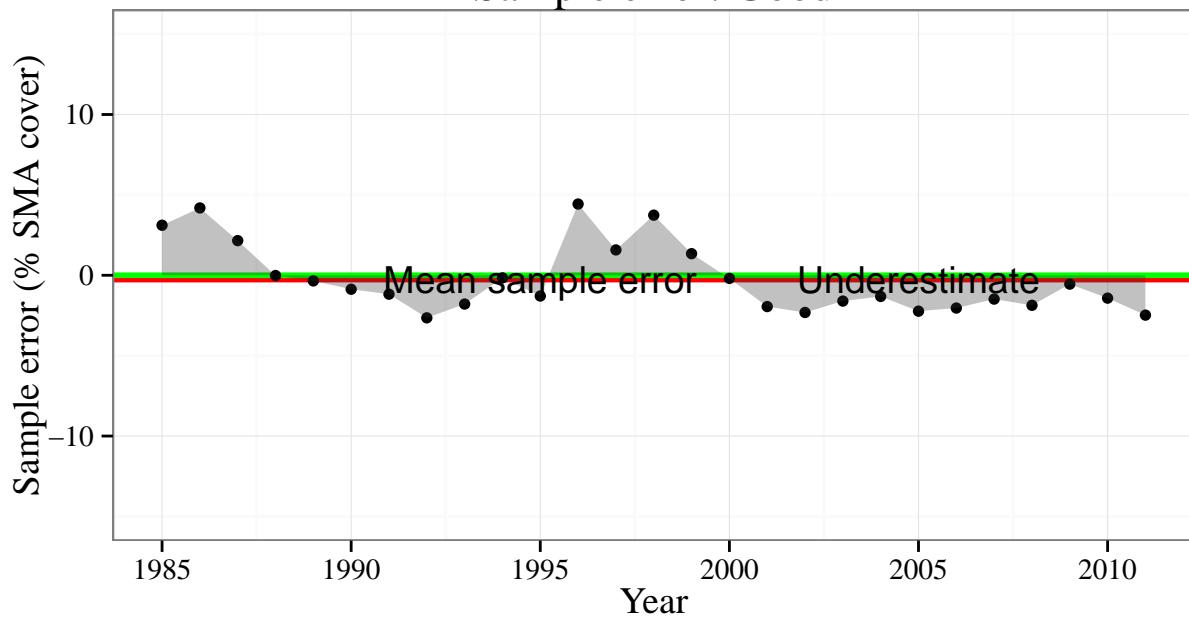
PLC024
Sample error: Good



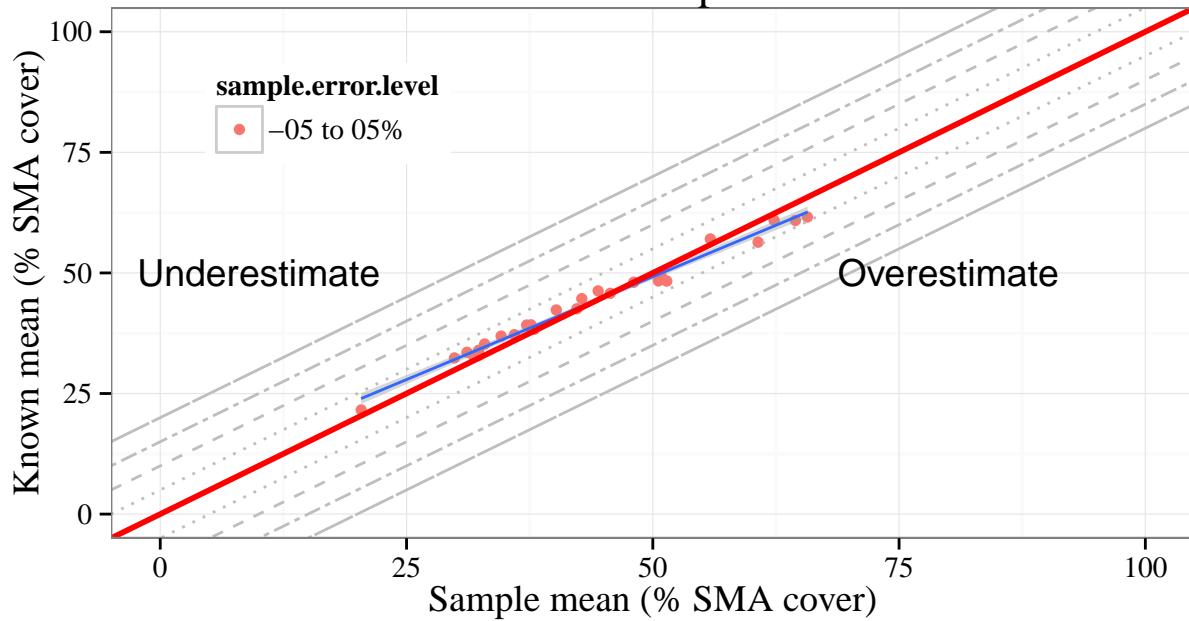
PLC024
Unstable sample error



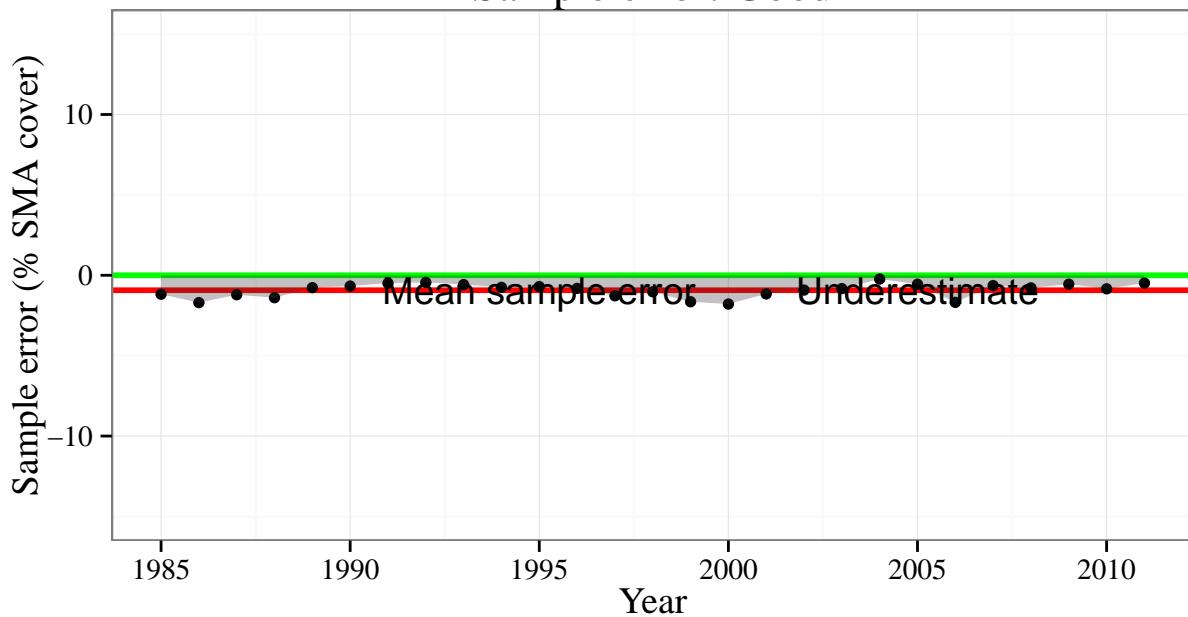
PLC028
Sample error: Good



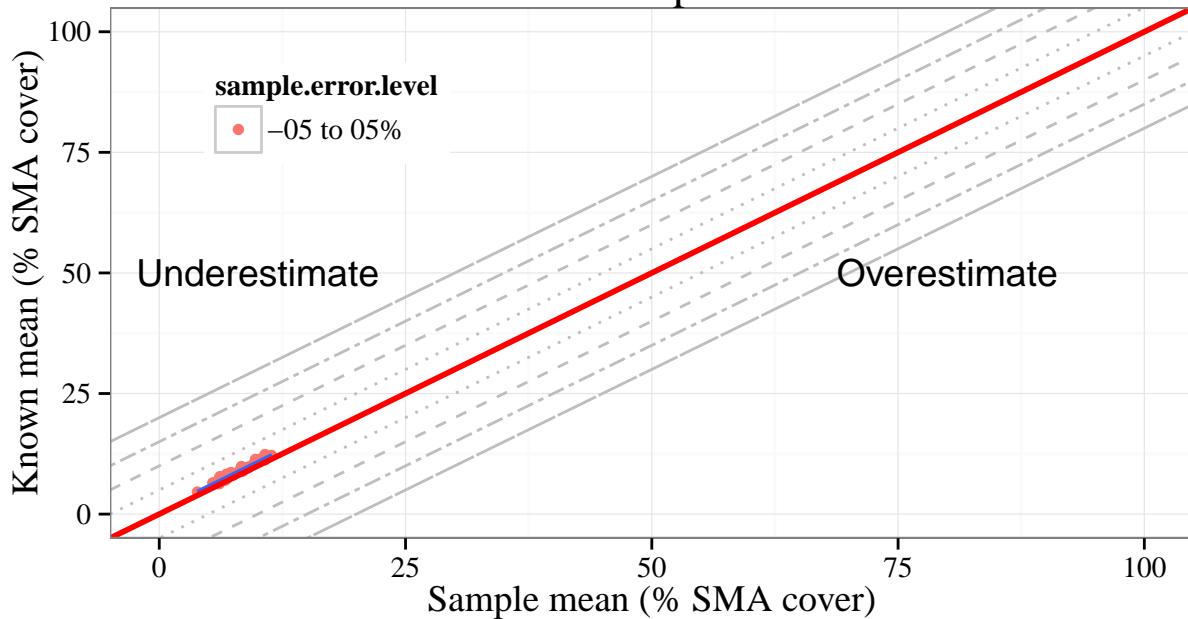
PLC028
Unstable sample error



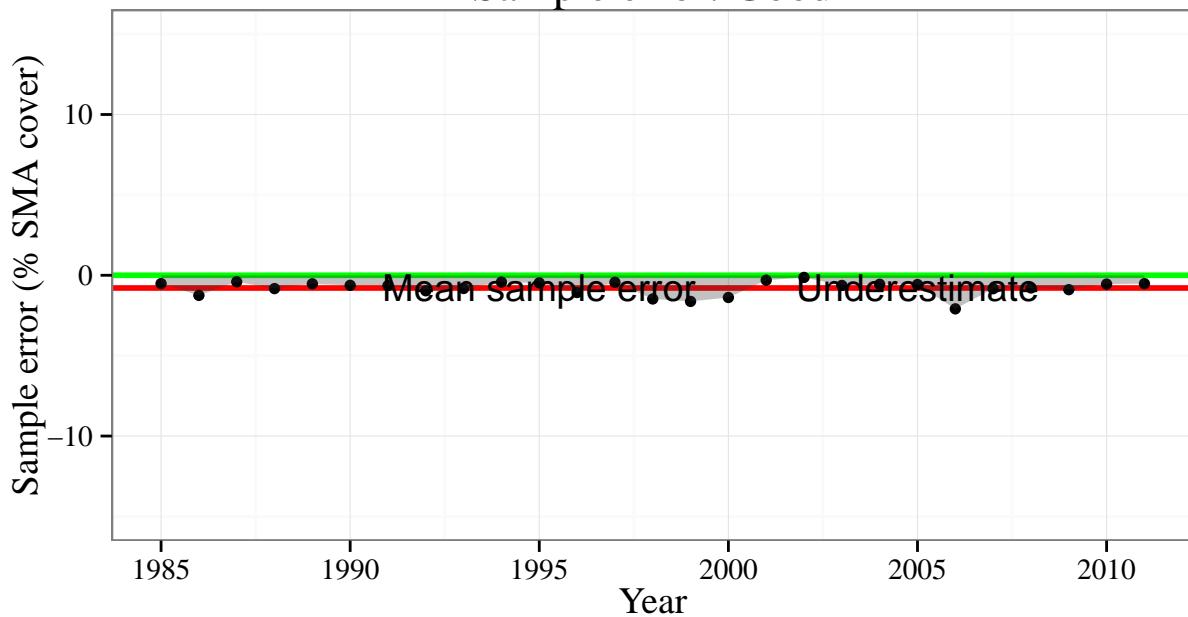
PLC070
Sample error: Good



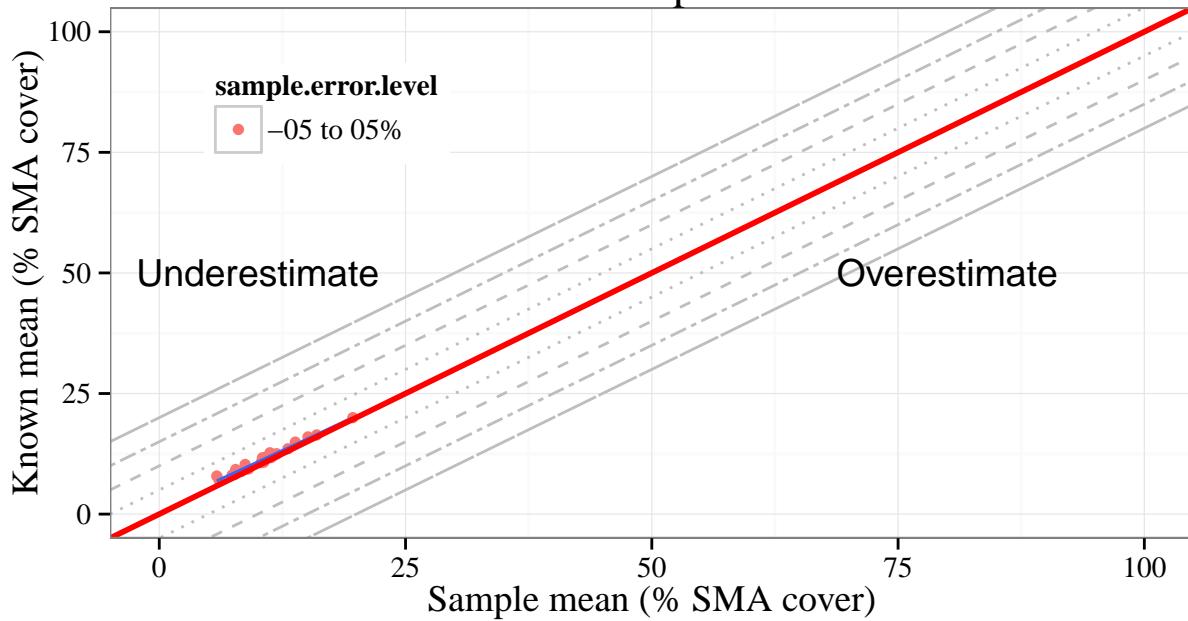
PLC070
Stable sample error



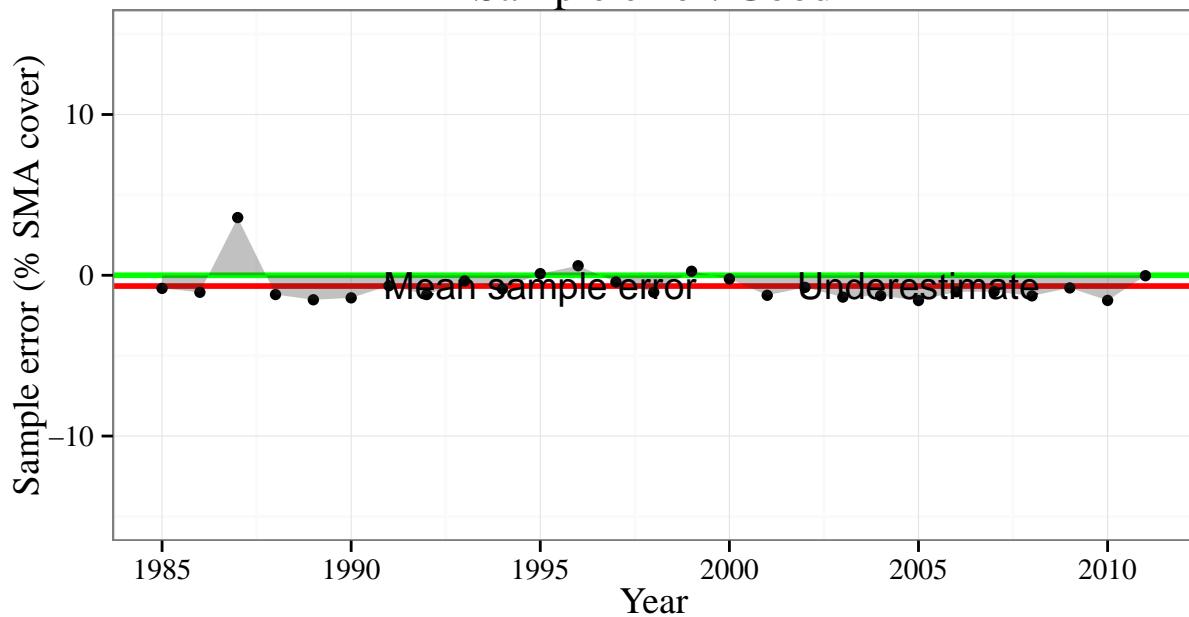
PLC072
Sample error: Good



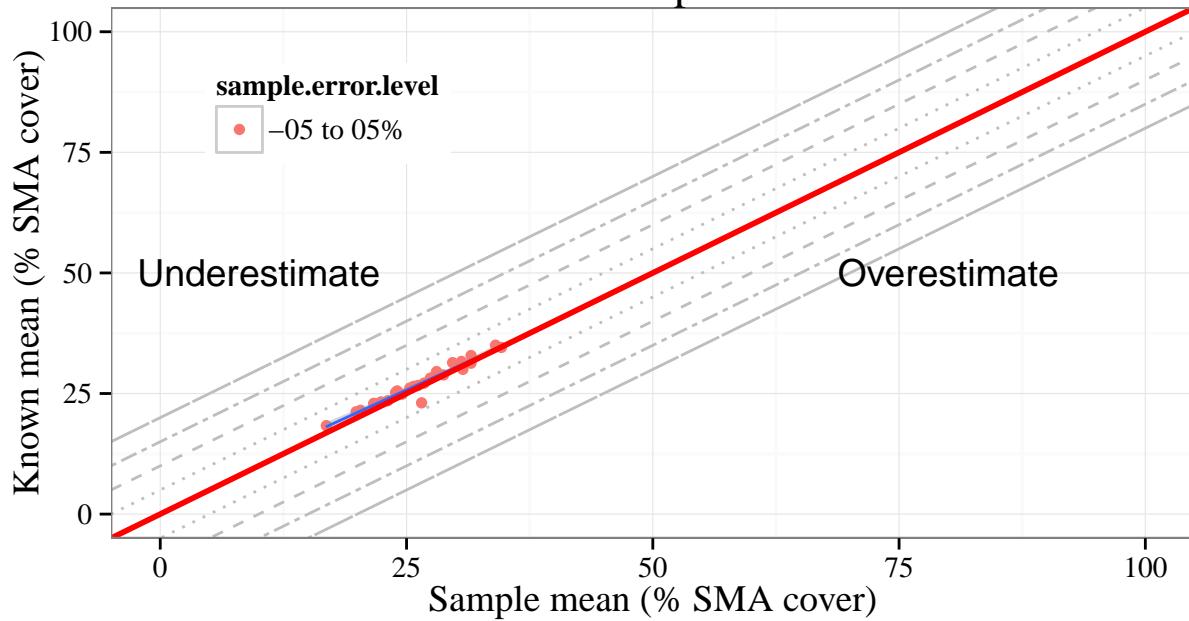
PLC072
Stable sample error



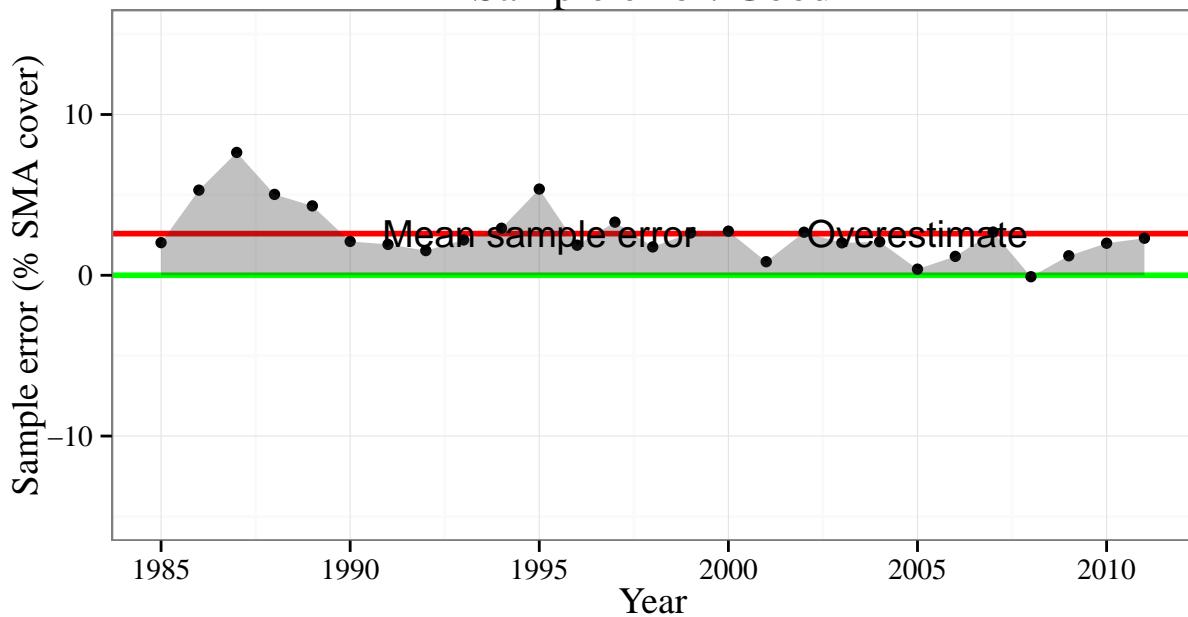
PLC088
Sample error: Good



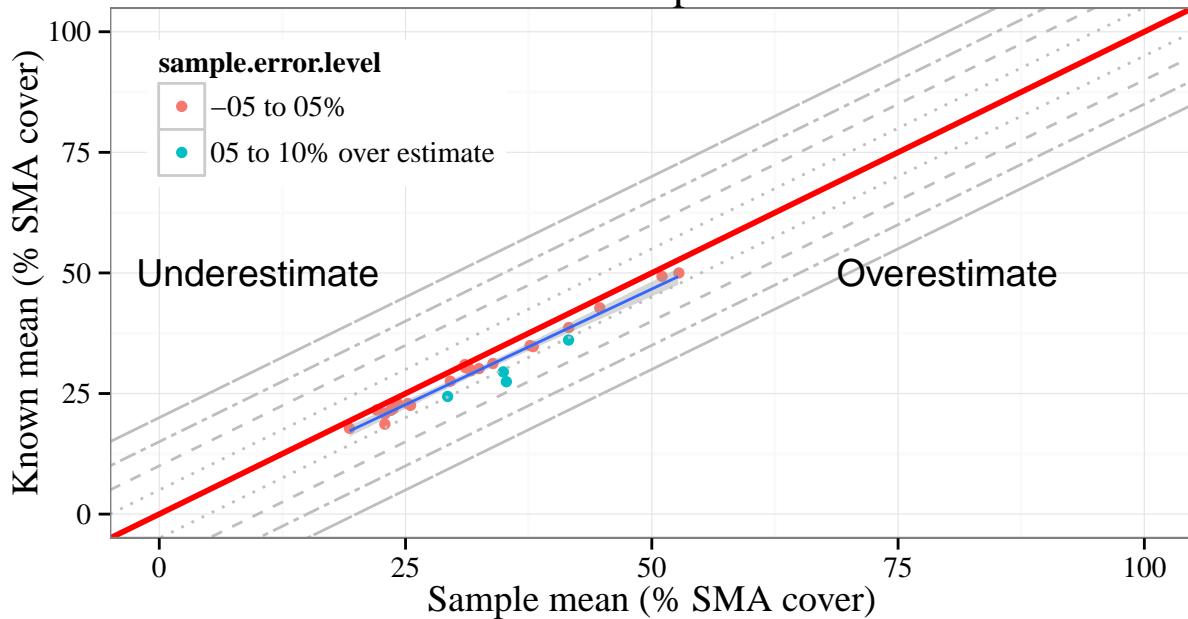
PLC088
Stable sample error



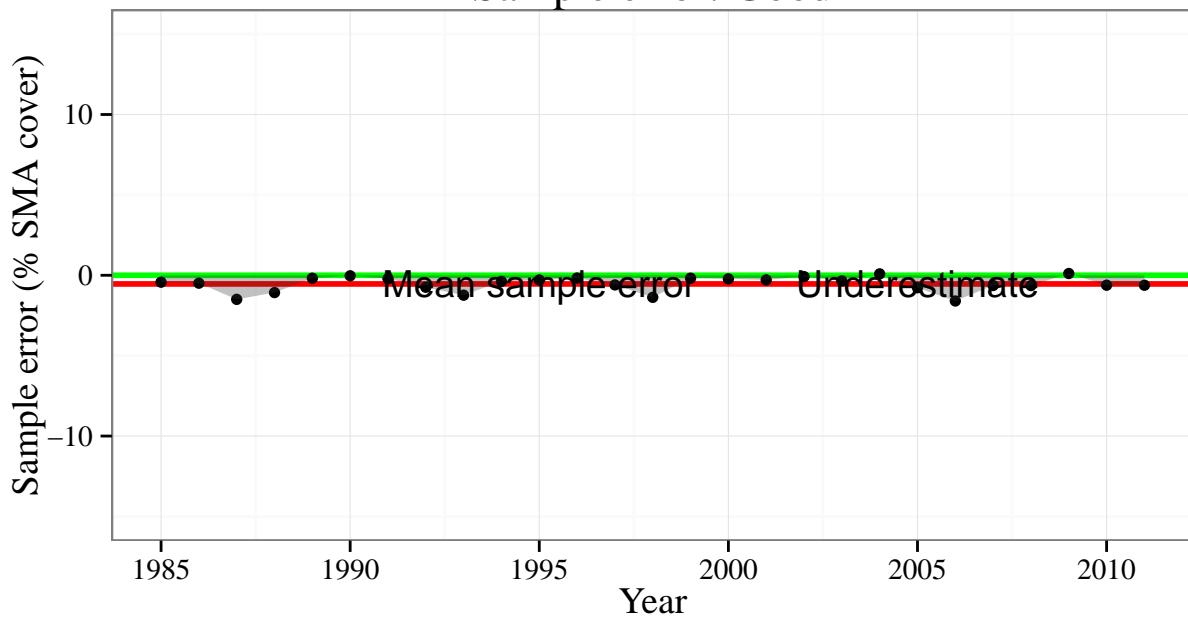
PLC097
Sample error: Good



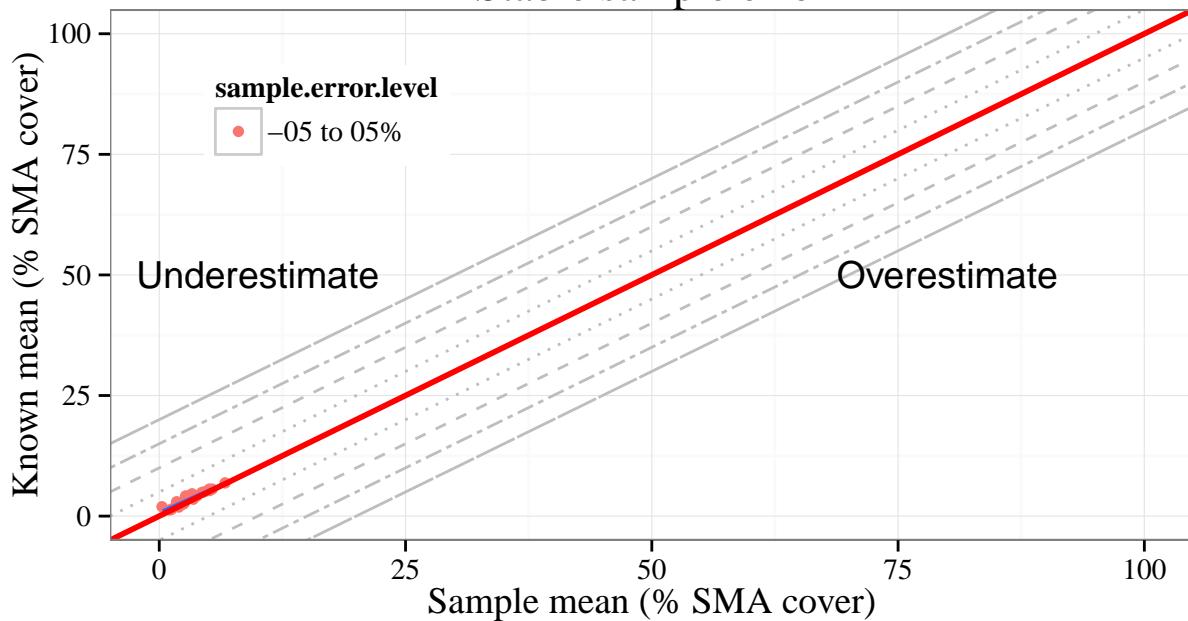
PLC097
Stable sample error



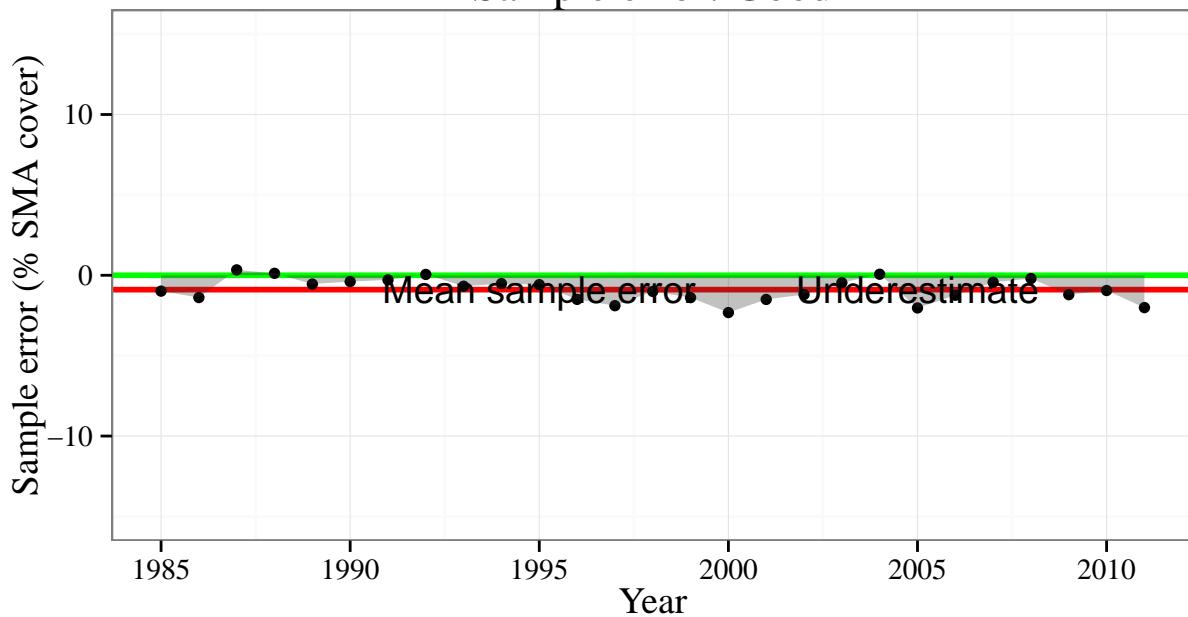
PLC106
Sample error: Good



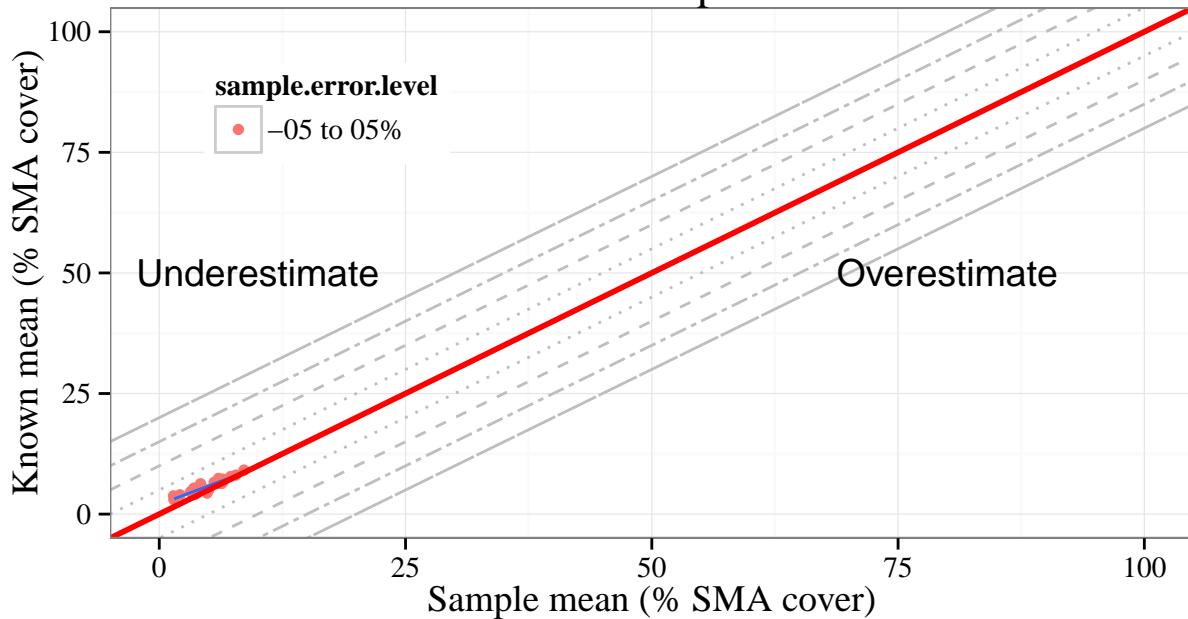
PLC106
Stable sample error



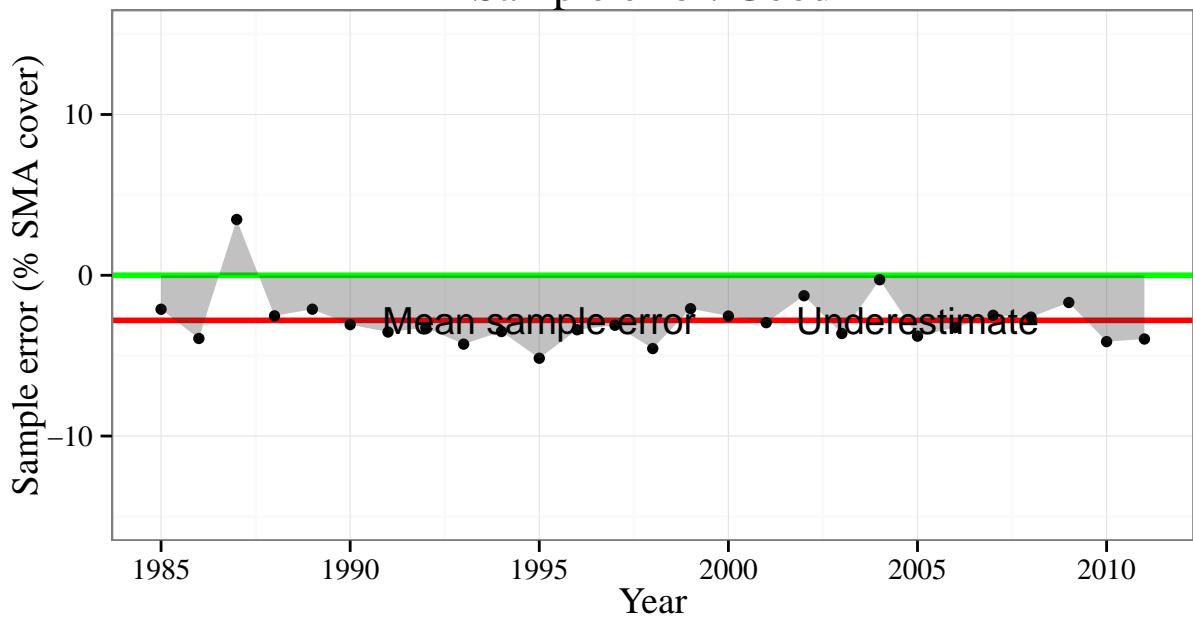
PLC107
Sample error: Good



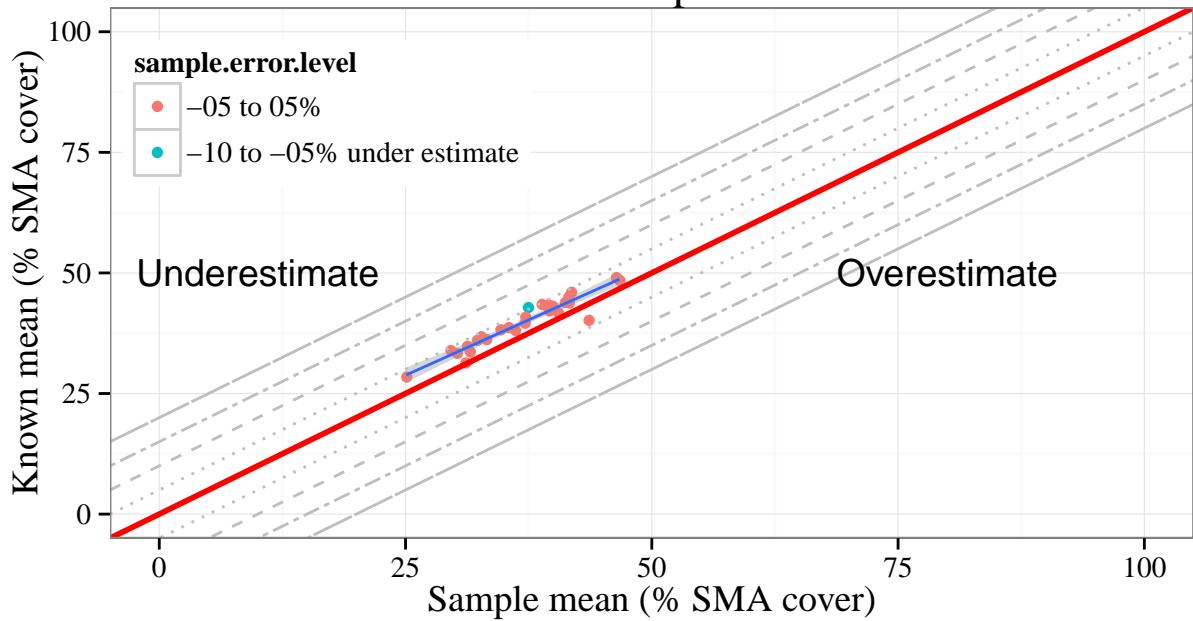
PLC107
Unstable sample error



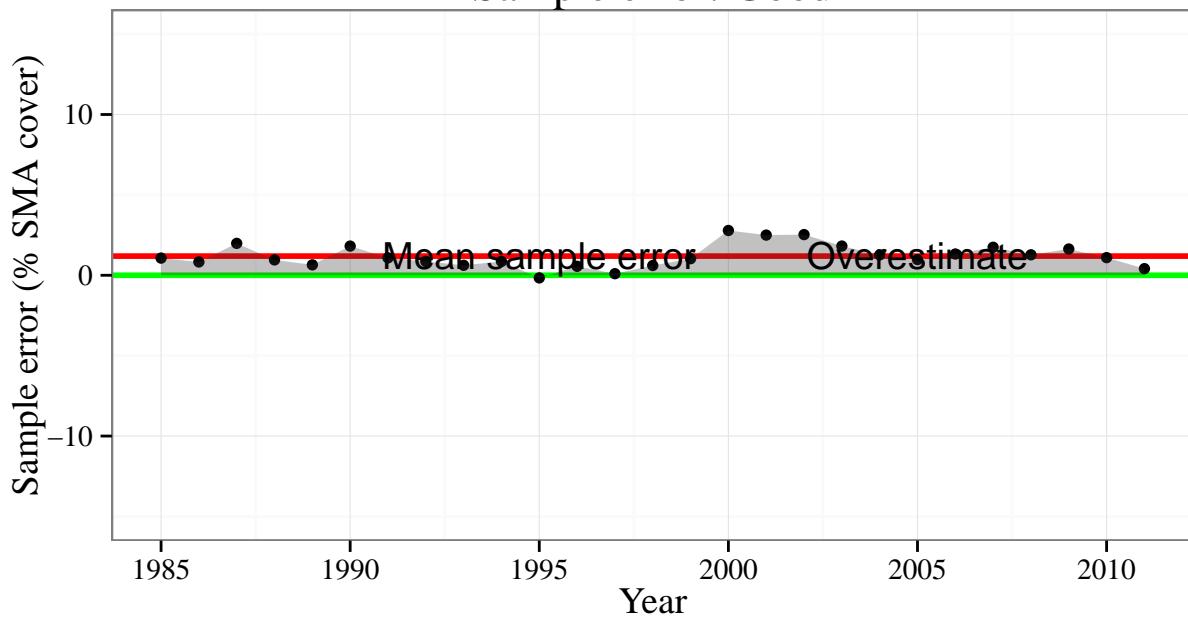
PLC121
Sample error: Good



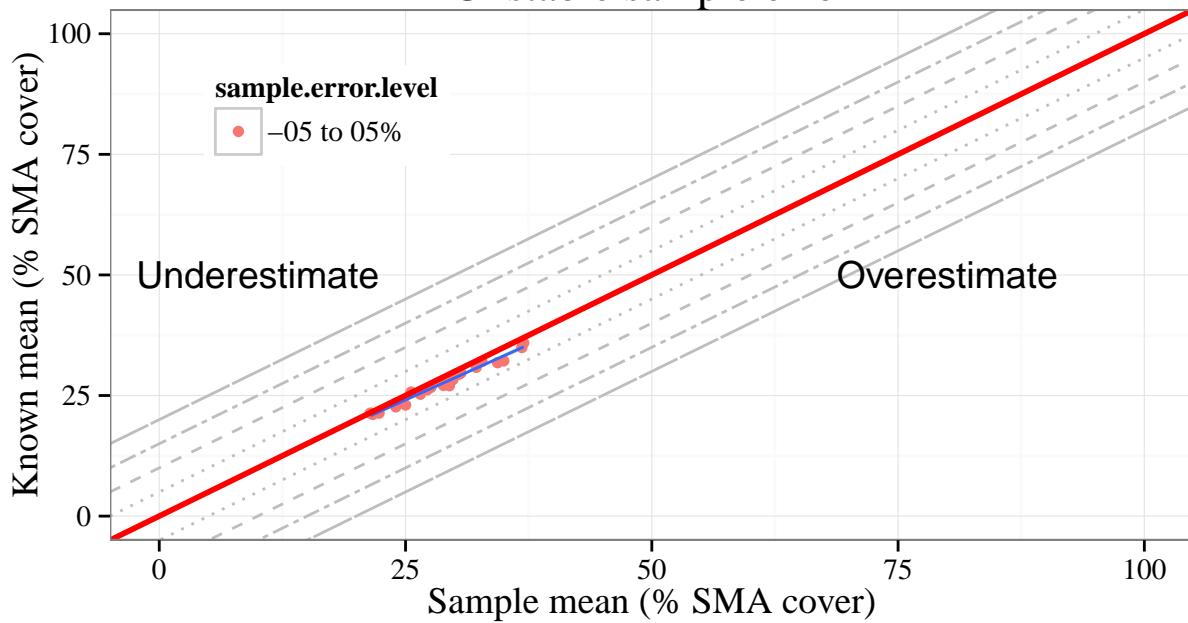
PLC121
Stable sample error



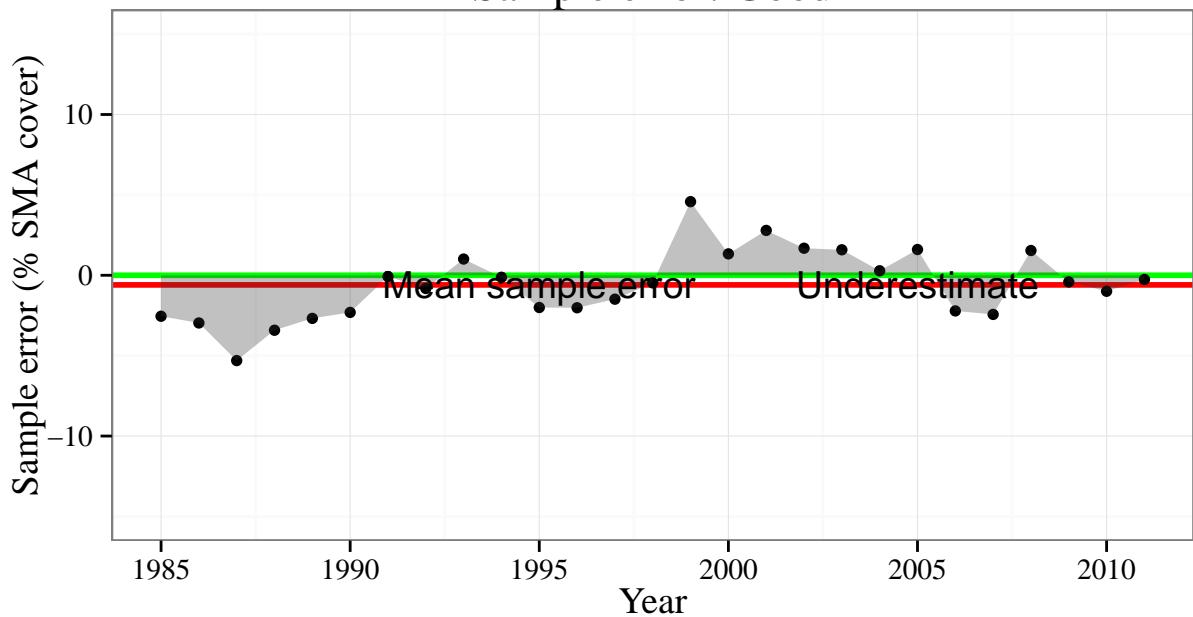
PLC137
Sample error: Good



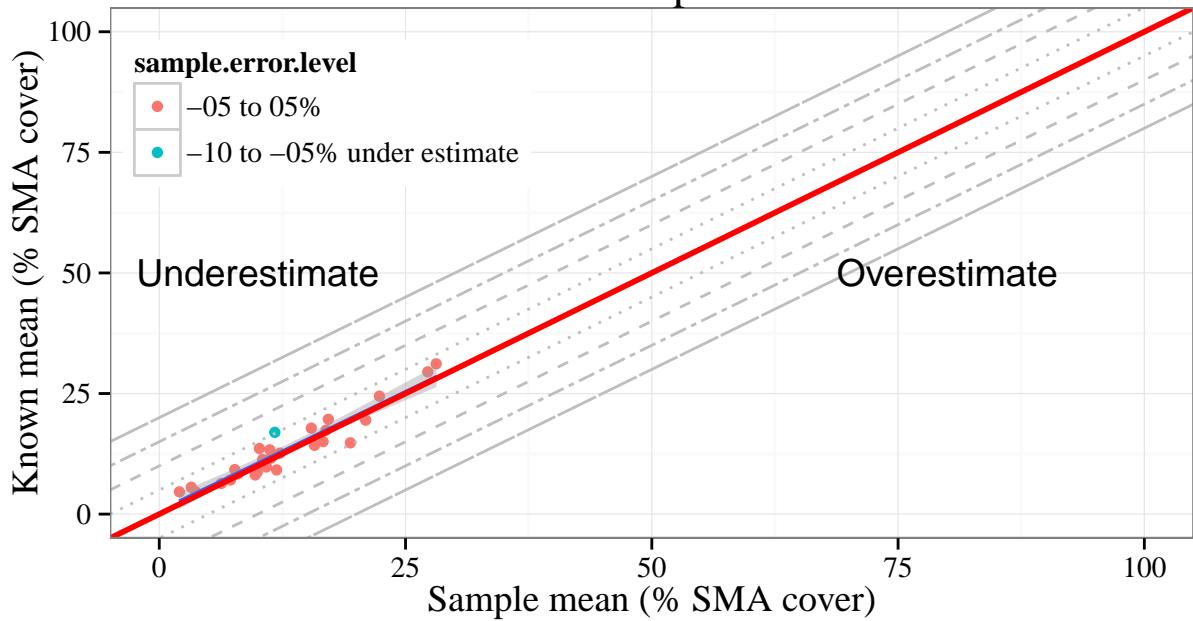
PLC137
Unstable sample error



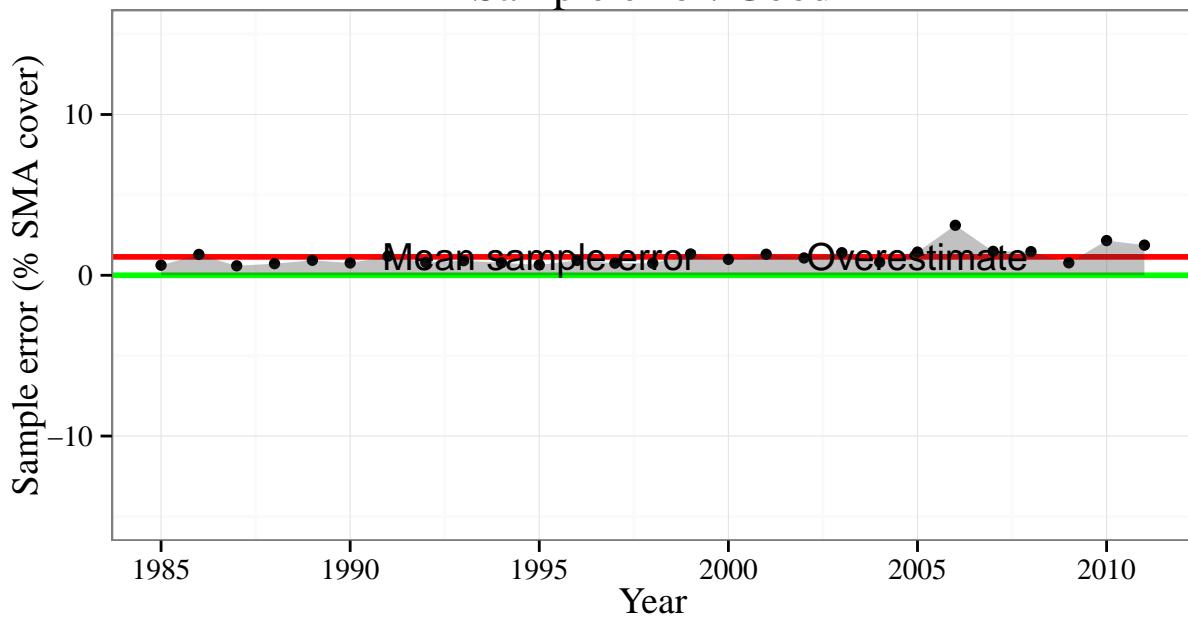
PLC210 Sample error: Good



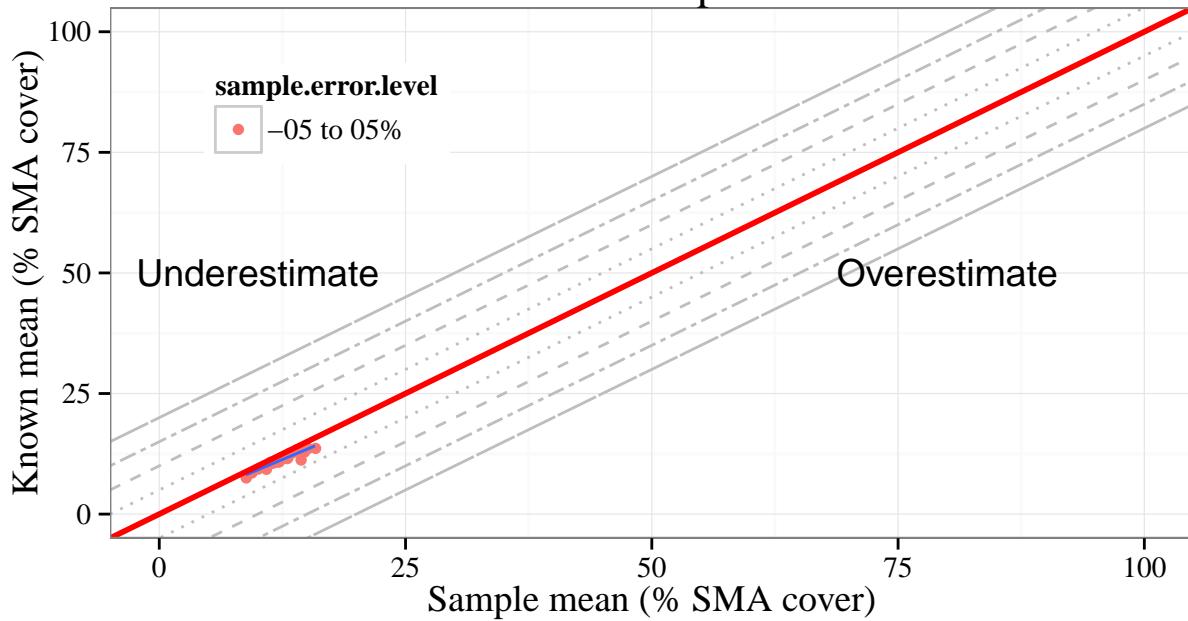
PLC210 Stable sample error



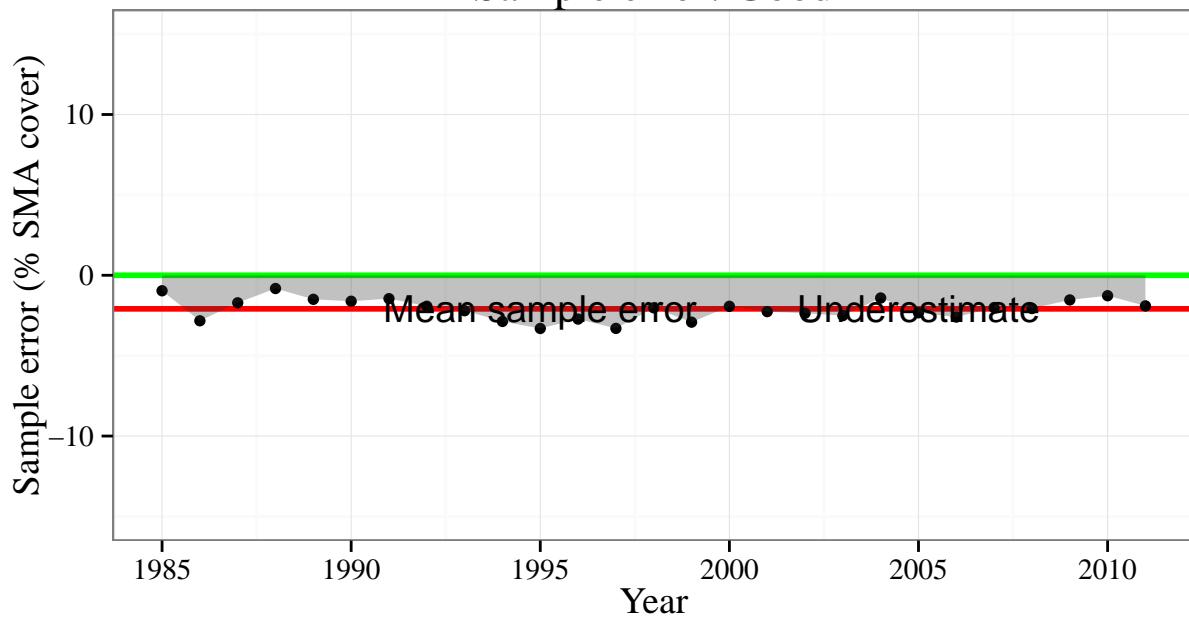
PLC223
Sample error: Good



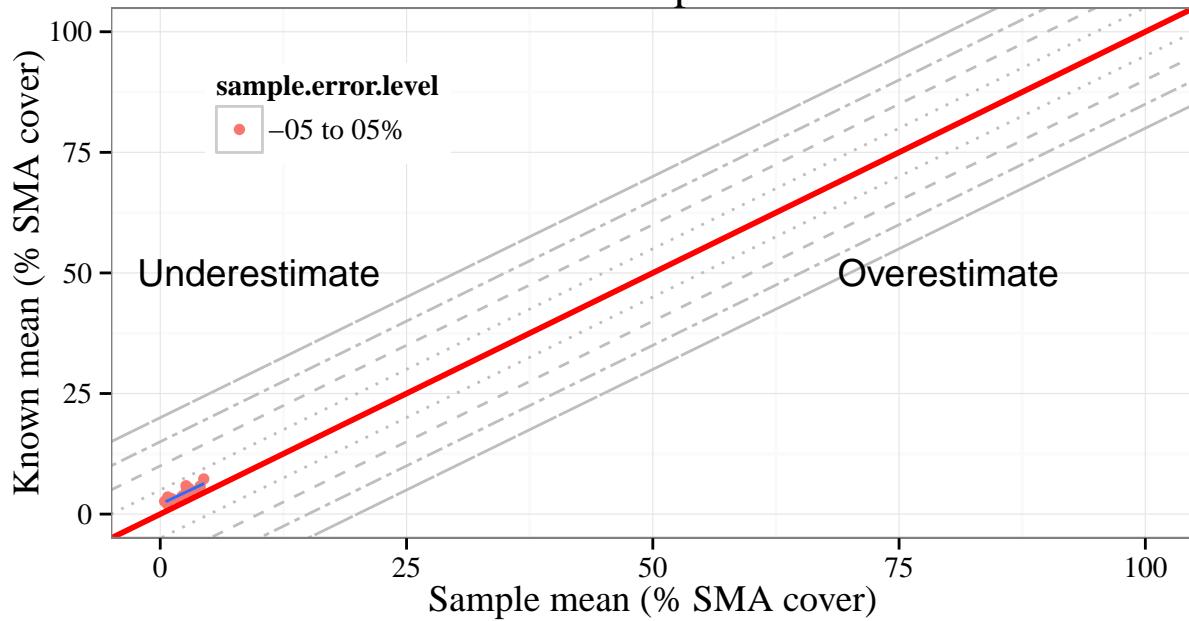
PLC223
Unstable sample error



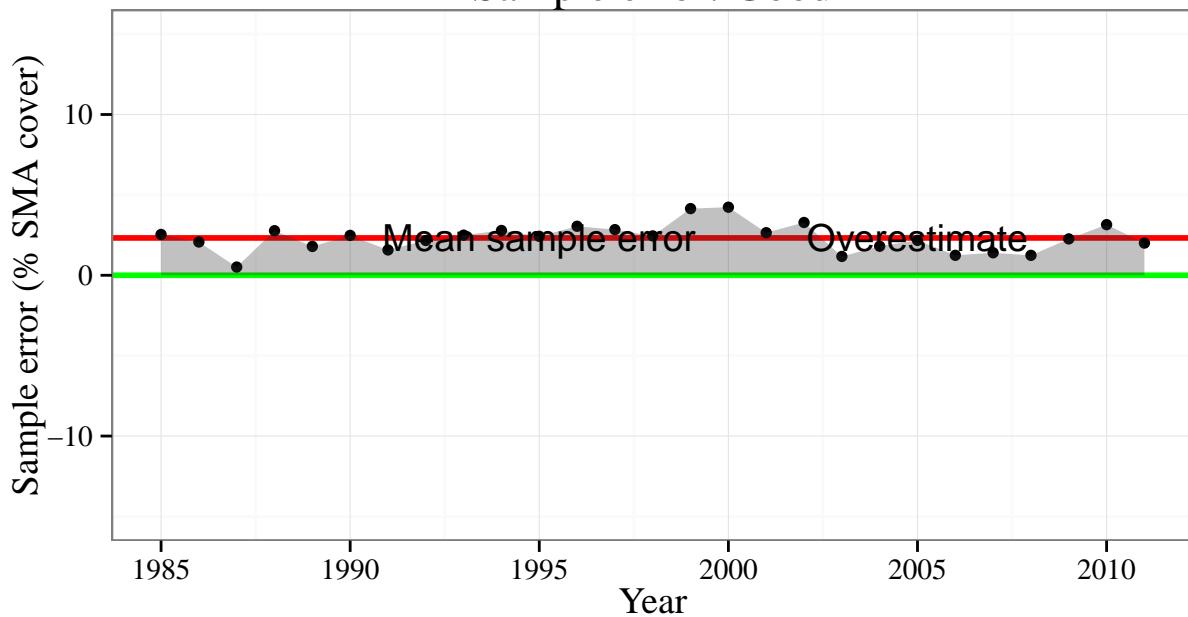
TIN028
Sample error: Good



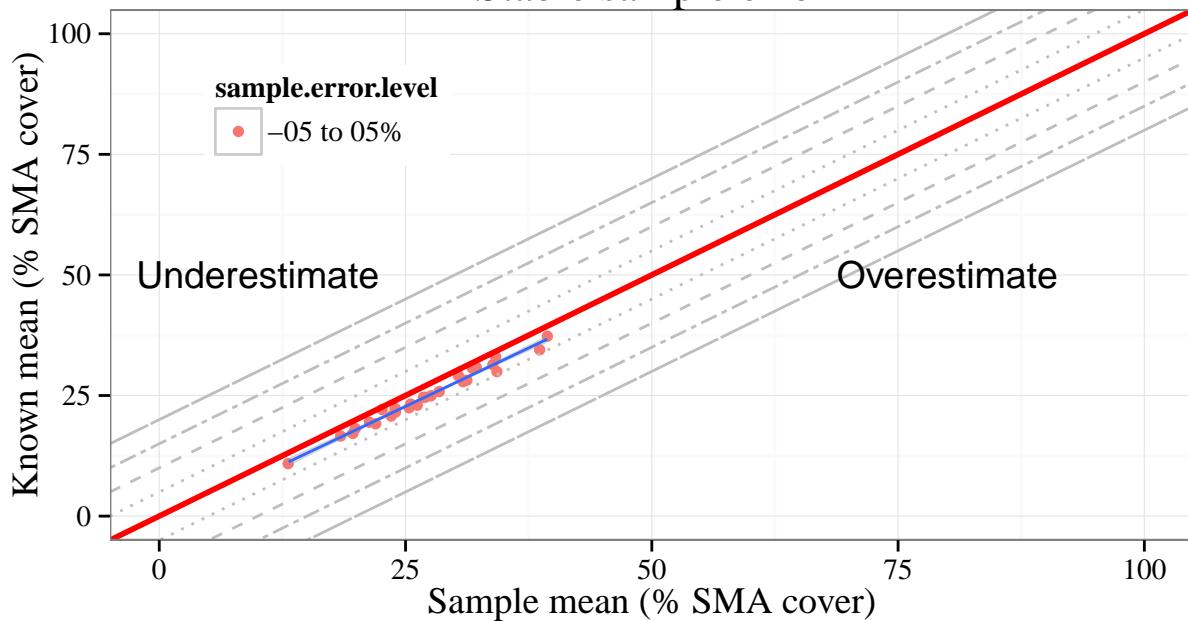
TIN028
Stable sample error



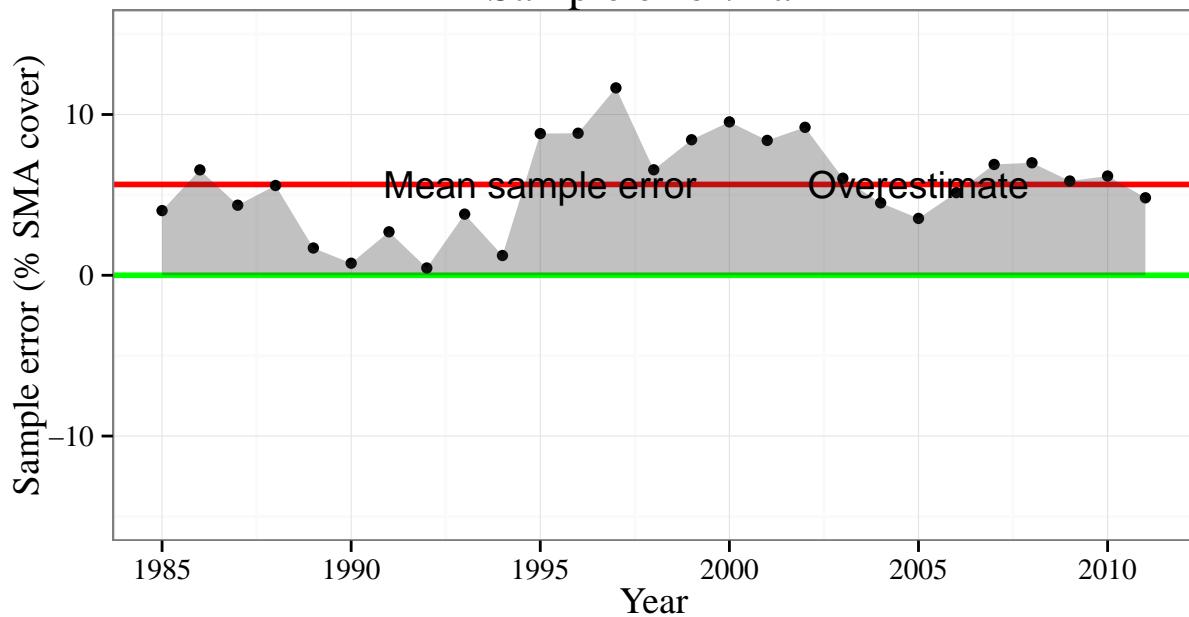
TIN030
Sample error: Good



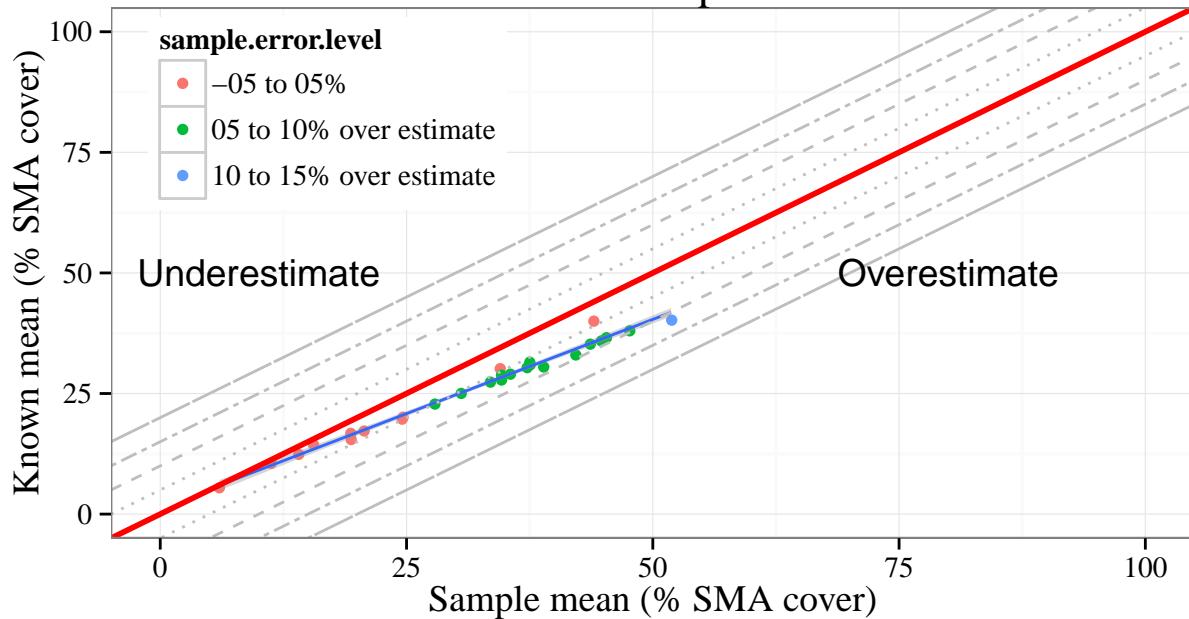
TIN030
Stable sample error



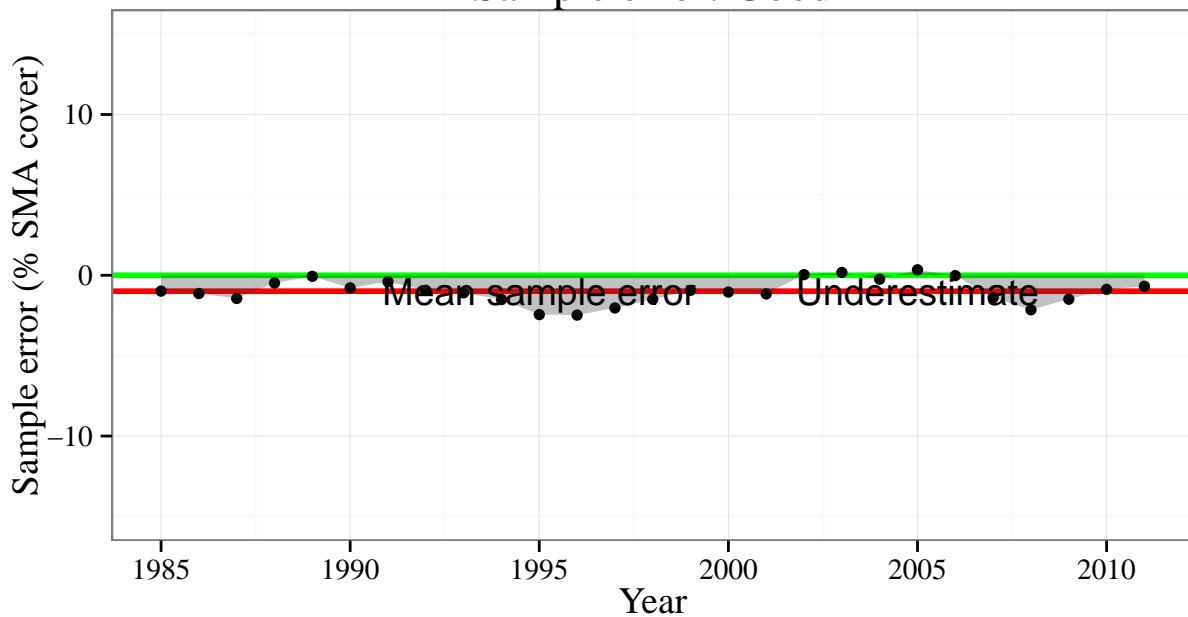
TIN050
Sample error: Fair



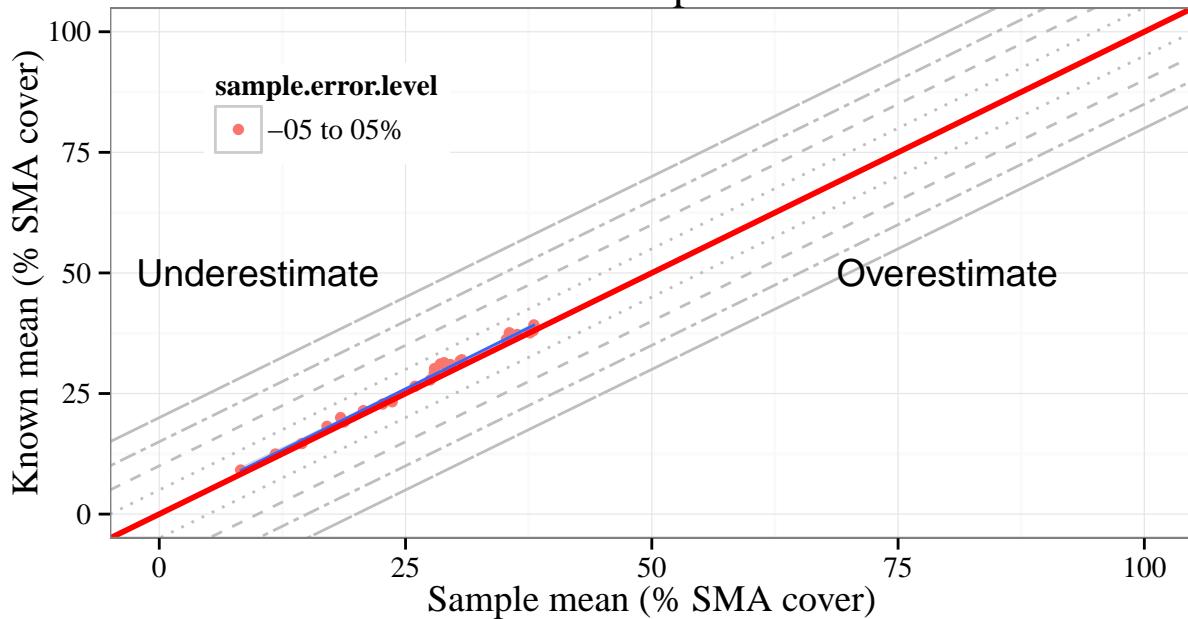
TIN050
Unstable sample error



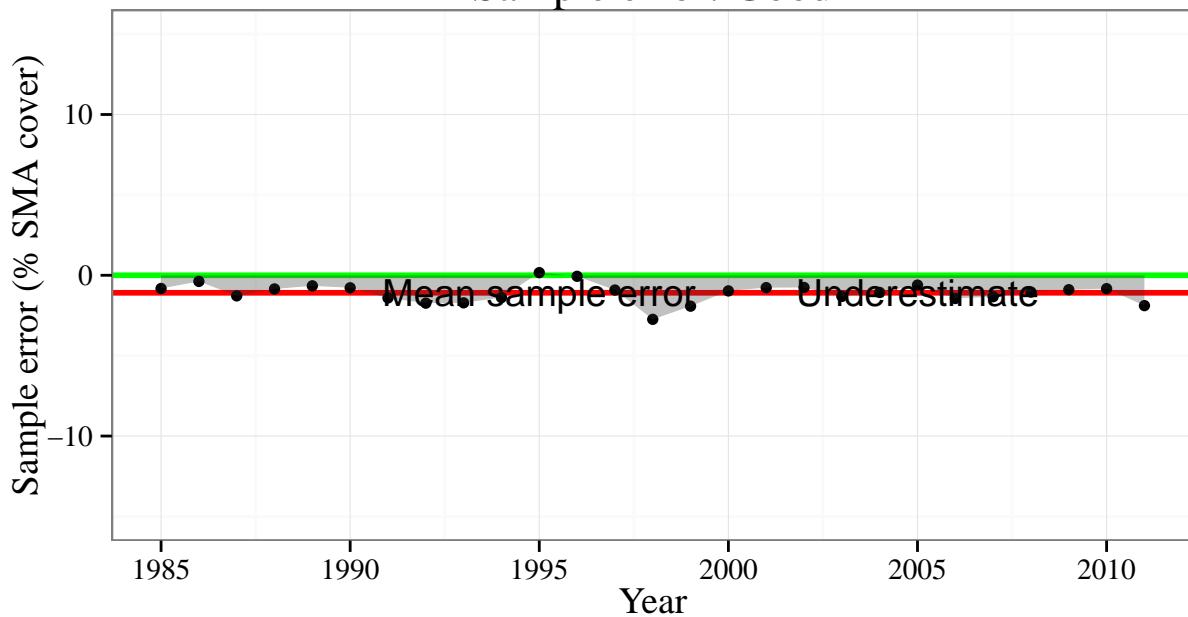
TIN053
Sample error: Good



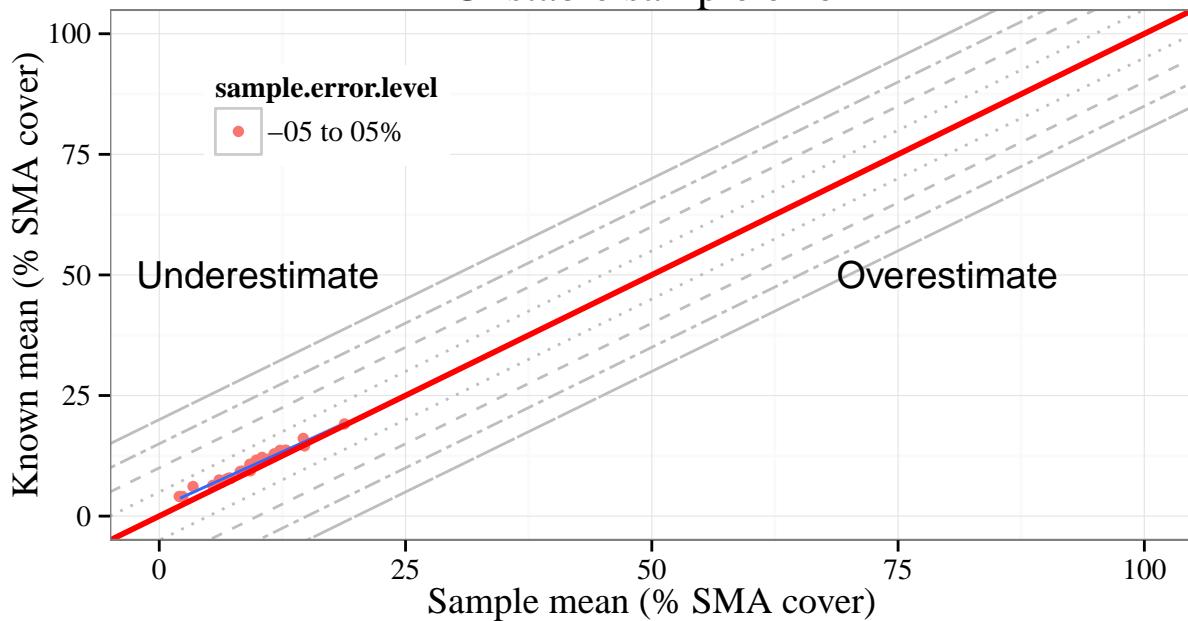
TIN053
Stable sample error



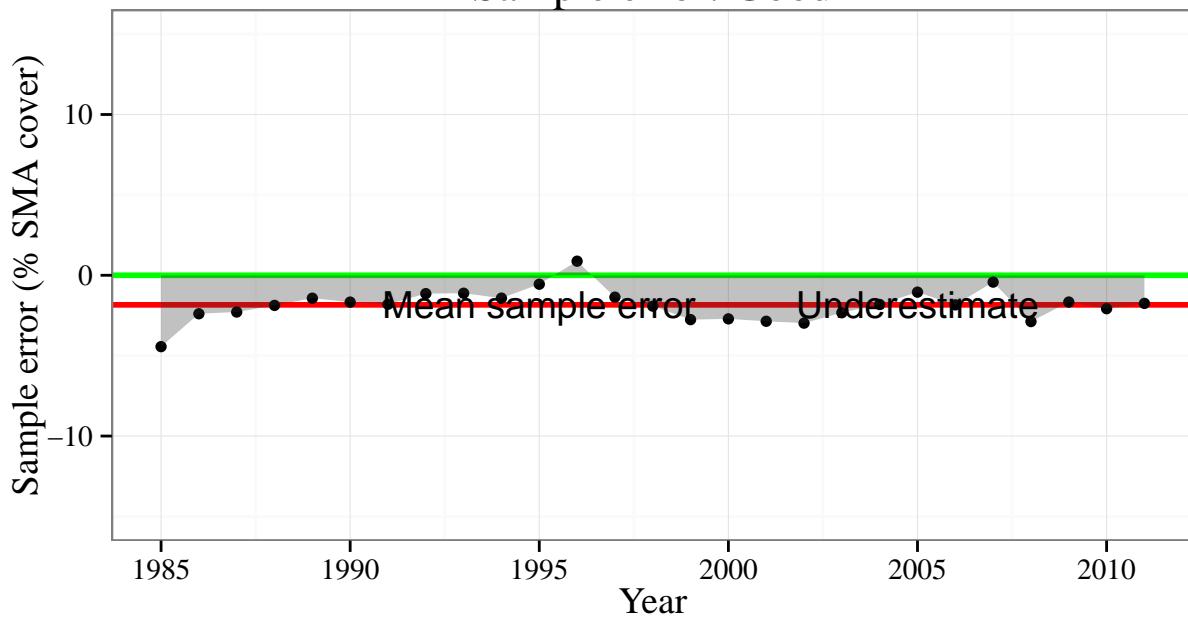
TIN061
Sample error: Good



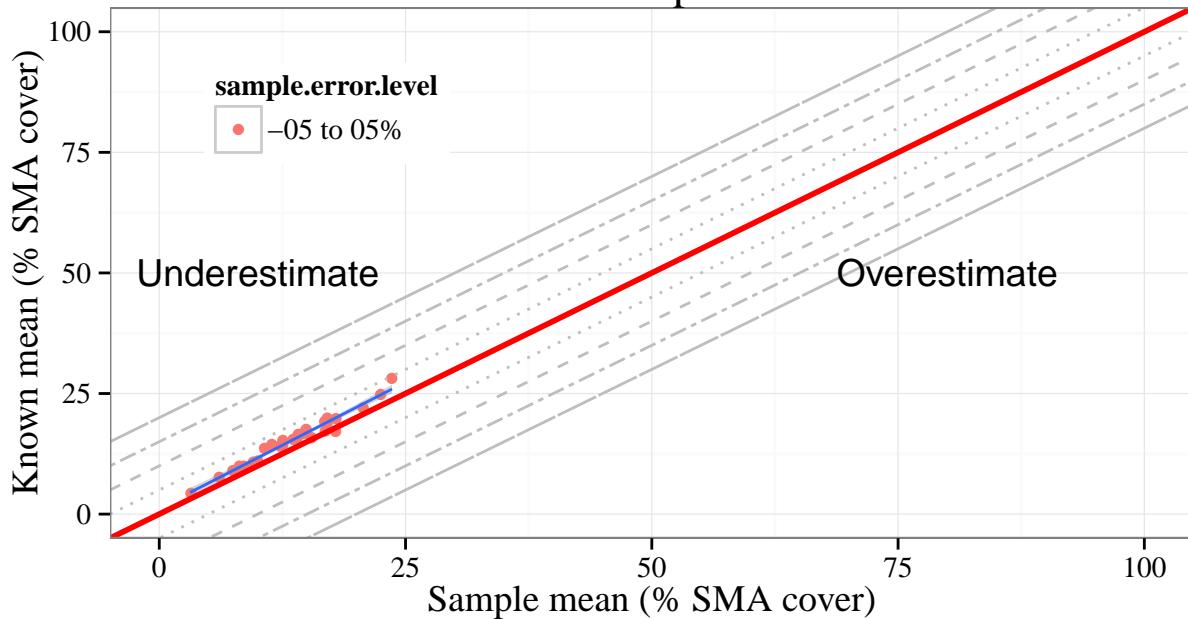
TIN061
Unstable sample error



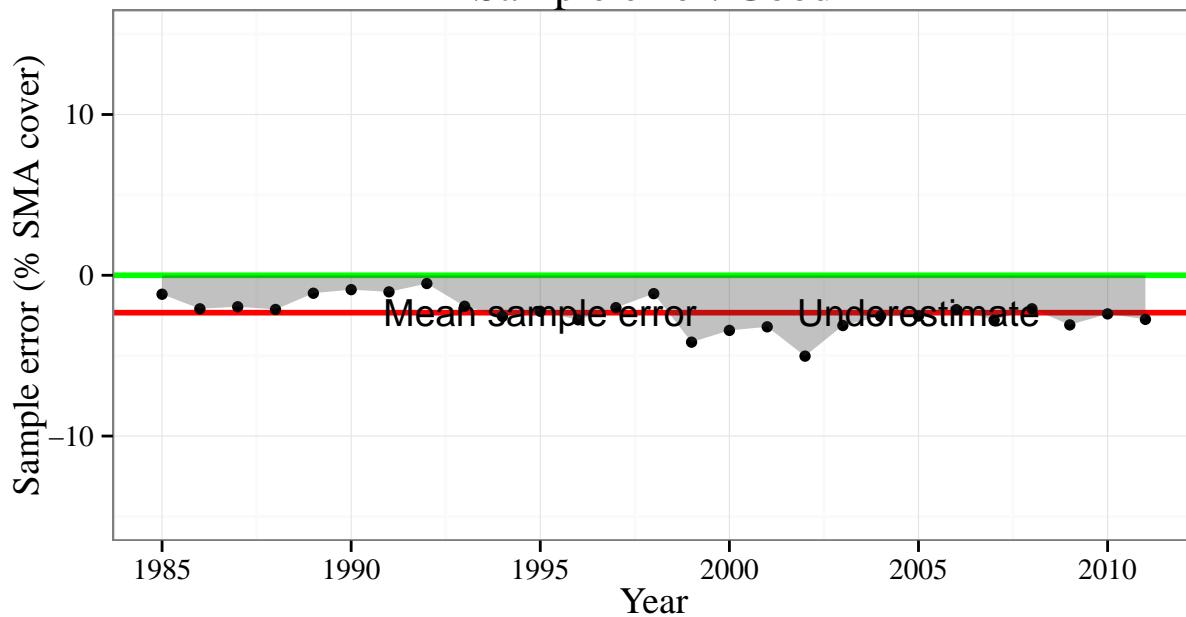
TIN064
Sample error: Good



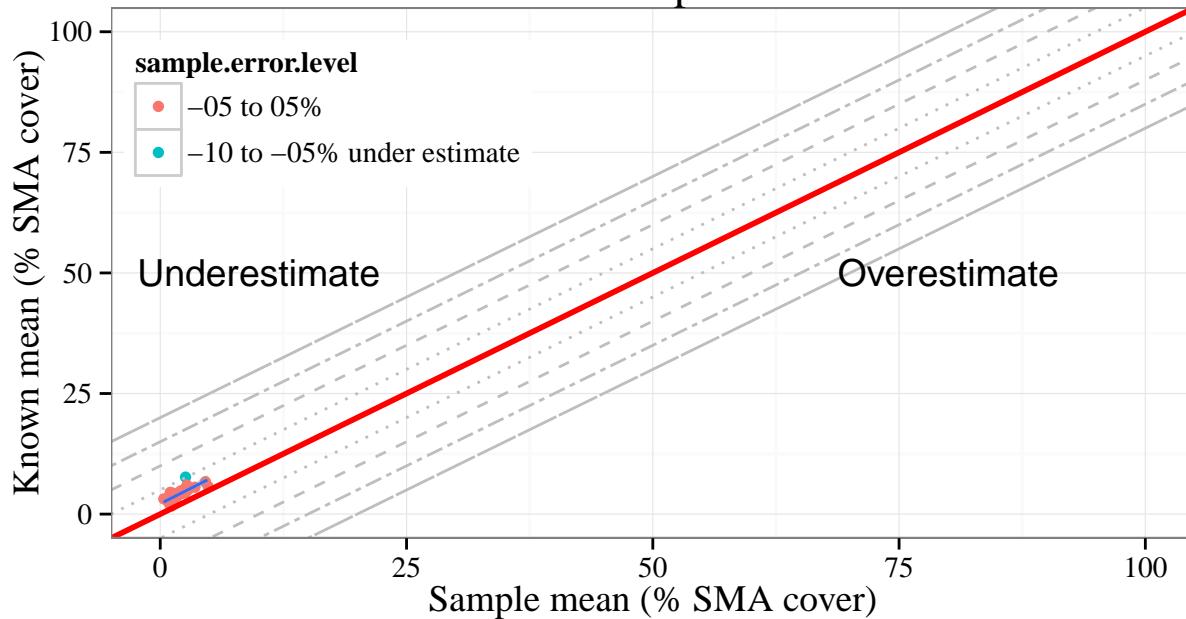
TIN064
Stable sample error



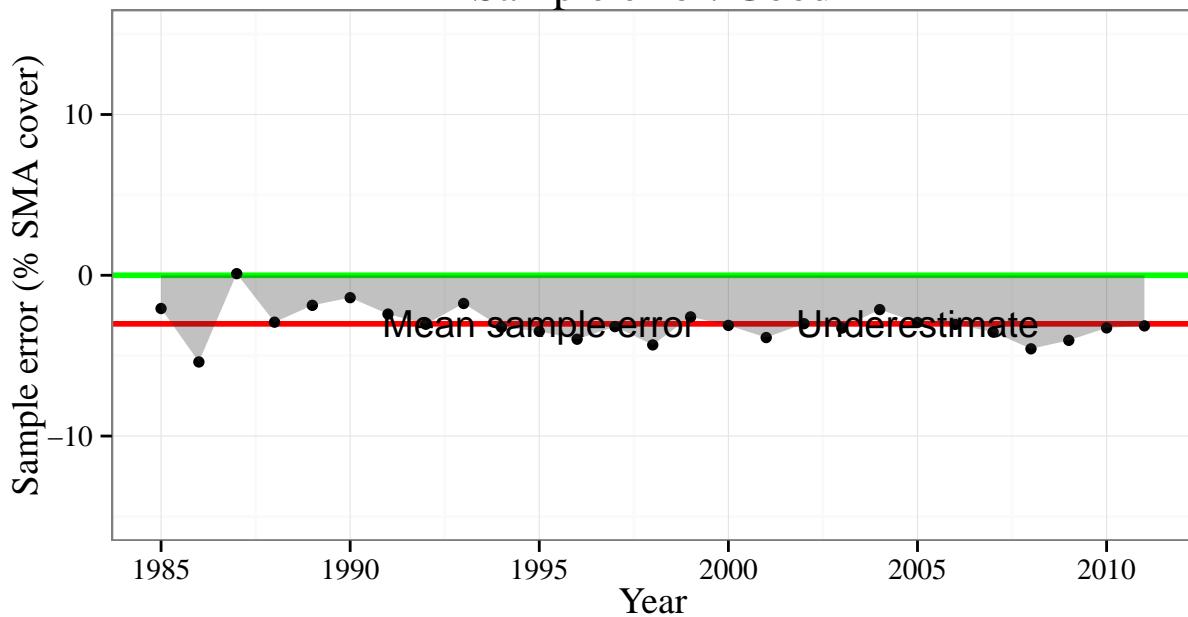
TIN068
Sample error: Good



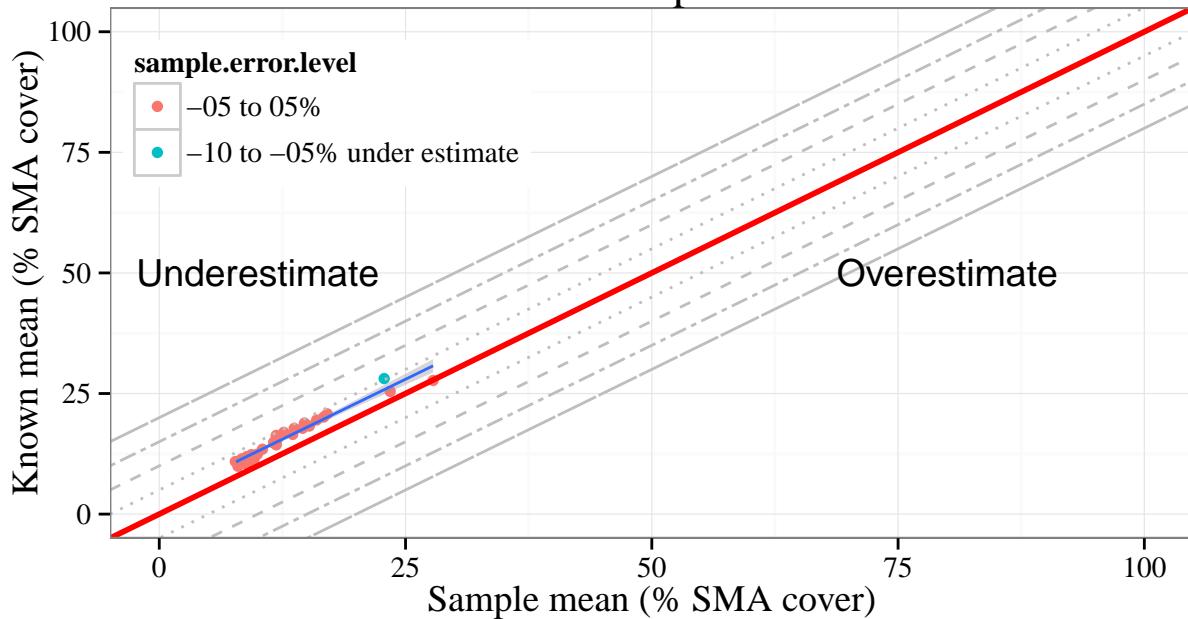
TIN068
Stable sample error



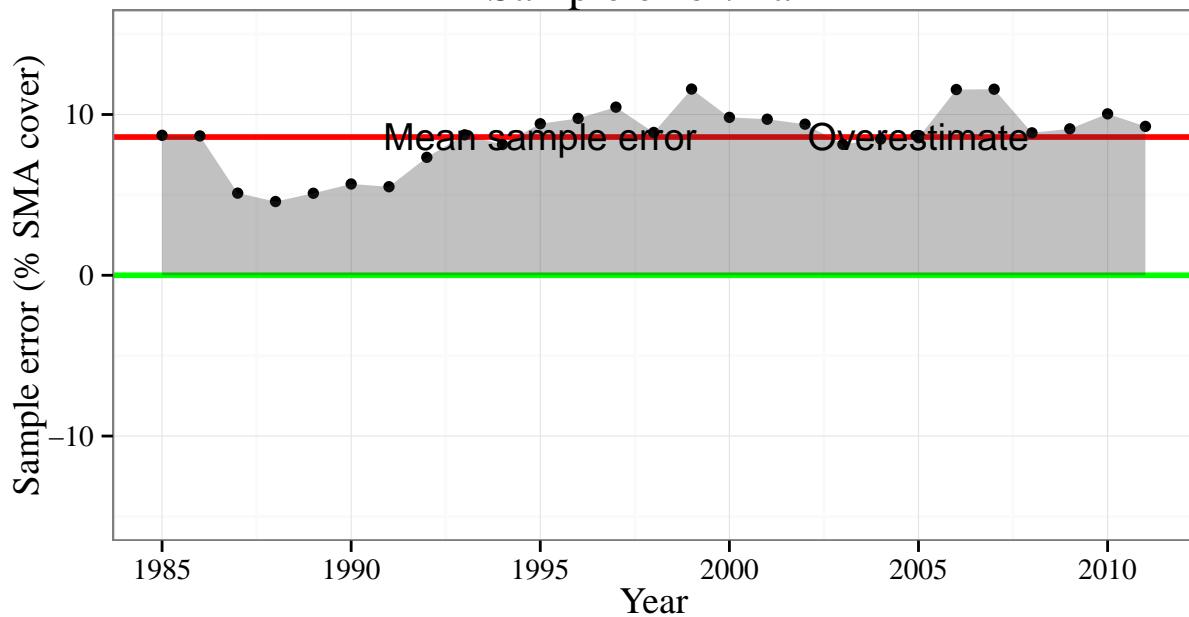
UNW029
Sample error: Good



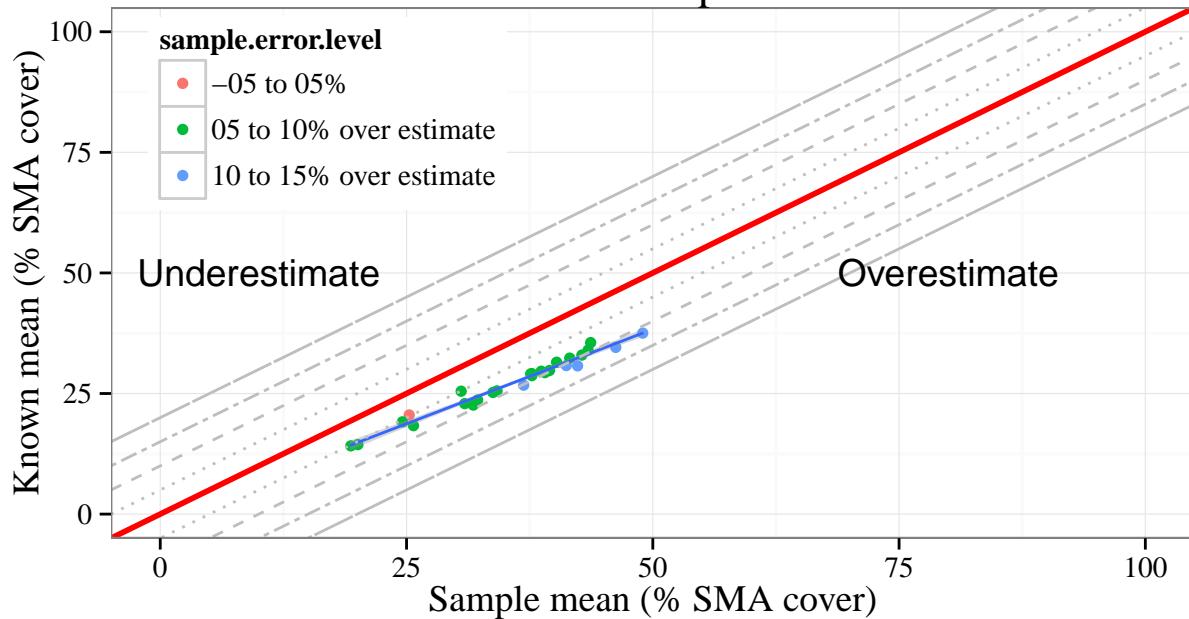
UNW029
Stable sample error



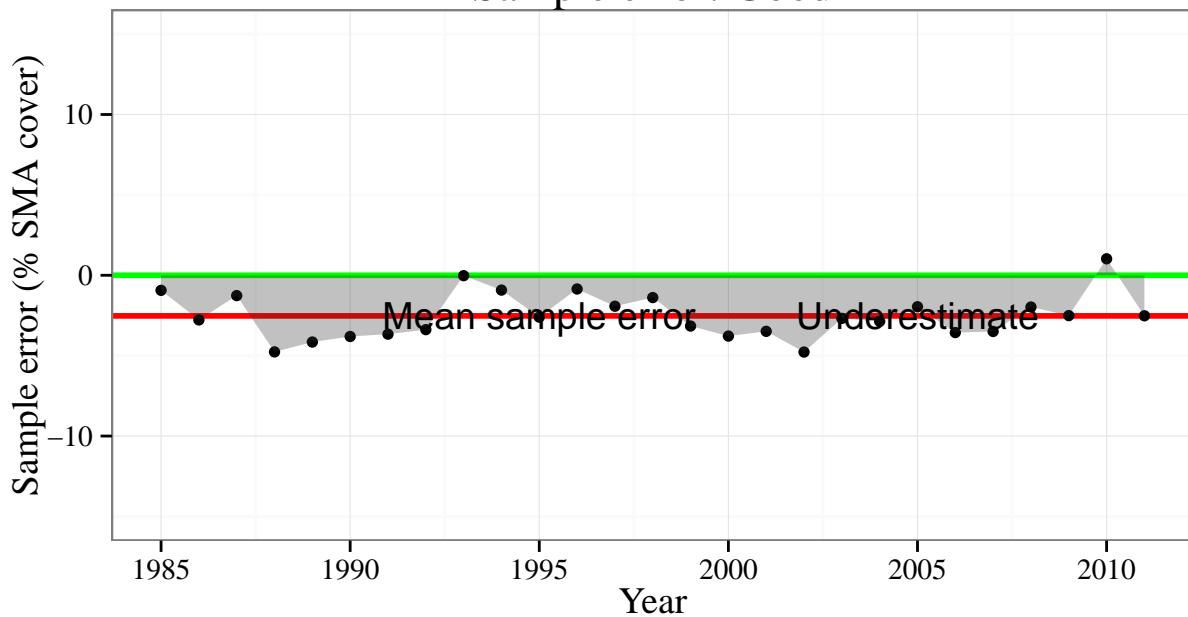
UNW039
Sample error: Fair



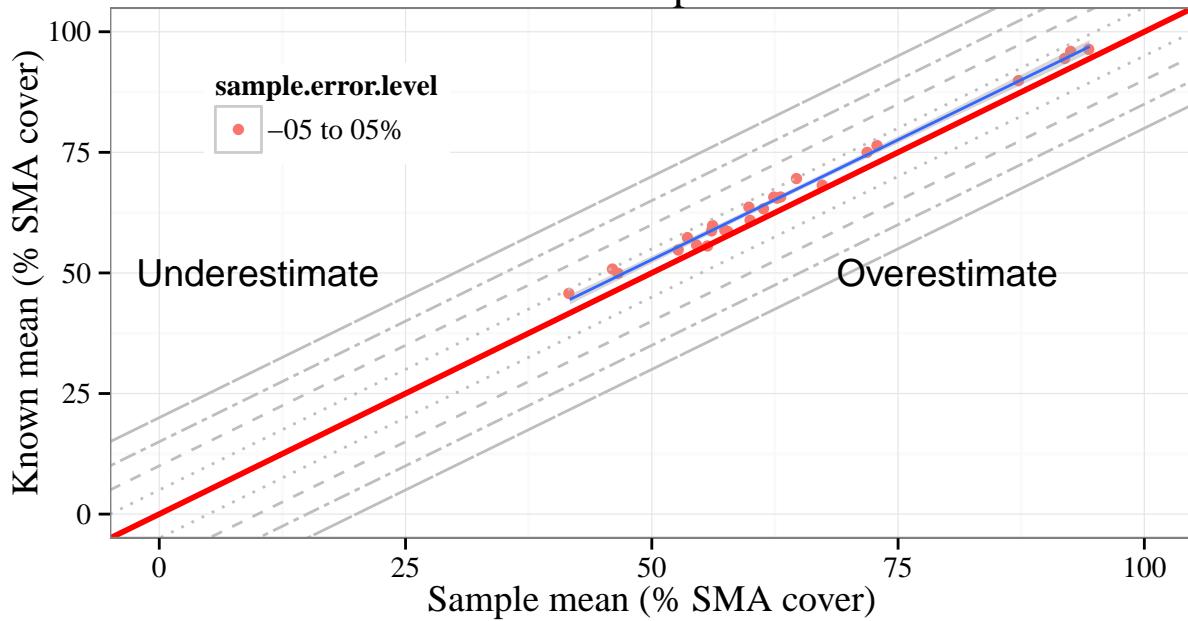
UNW039
Unstable sample error



UNW079
Sample error: Good



UNW079
Stable sample error



Appendix 4b. Tabular form of mean sample error computed for each of 136 parcels, grouped by efficacy of sample and the direction of sample bias.

X	Parcel	Mean Sample Error	Efficacy of Sample	Direction of bias
6	BGP094	-6.78	Fair	Underestimate
7	FSL126	-5.89	Fair	Underestimate
8	FSL129	-5.74	Fair	Underestimate
83	FSL054	-4.72	Good	Underestimate
71	BGP154	-4.43	Good	Underestimate
116	LNP045	-4.08	Good	Underestimate
76	BLK011	-3.99	Good	Underestimate
86	FSL128	-3.99	Good	Underestimate
92	FSP020	-3.98	Good	Underestimate
79	BLK095	-3.74	Good	Underestimate
101	IND151	-3.50	Good	Underestimate
69	BGP031	-3.23	Good	Underestimate
113	LAW112	-3.21	Good	Underestimate
97	IND067	-3.18	Good	Underestimate
94	IND011	-3.17	Good	Underestimate
133	UNW029	-3.02	Good	Underestimate
126	PLC121	-2.80	Good	Underestimate
134	UNW079	-2.53	Good	Underestimate
93	FSP022	-2.51	Good	Underestimate
114	LAW137	-2.40	Good	Underestimate
74	BLK002	-2.39	Good	Underestimate
132	TIN068	-2.33	Good	Underestimate
88	FSL166	-2.15	Good	Underestimate
117	MAN014	-2.15	Good	Underestimate
128	TIN028	-2.09	Good	Underestimate
84	FSL065	-1.94	Good	Underestimate
118	PLC007	-1.89	Good	Underestimate
96	IND029	-1.89	Good	Underestimate
103	IND205	-1.88	Good	Underestimate
131	TIN064	-1.84	Good	Underestimate
89	FSP006	-1.53	Good	Underestimate
98	IND111	-1.38	Good	Underestimate
95	IND021	-1.33	Good	Underestimate
72	BGP162	-1.32	Good	Underestimate
108	LAW062	-1.32	Good	Underestimate
82	BLK143	-1.31	Good	Underestimate
112	LAW105	-1.31	Good	Underestimate
102	IND163	-1.19	Good	Underestimate
75	BLK009	-1.15	Good	Underestimate
130	TIN061	-1.09	Good	Underestimate
78	BLK077	-1.08	Good	Underestimate
111	LAW085	-1.02	Good	Underestimate
99	IND119	-1.01	Good	Underestimate
129	TIN053	-0.99	Good	Underestimate
121	PLC070	-0.93	Good	Underestimate
115	LNP018	-0.92	Good	Underestimate
125	PLC107	-0.89	Good	Underestimate
80	BLK096	-0.82	Good	Underestimate
107	LAW052	-0.81	Good	Underestimate
122	PLC072	-0.79	Good	Underestimate

X	Parcel	Mean Sample Error	Efficacy of Sample	Direction of bias
123	PLC088	-0.67	Good	Underestimate
106	LAW043	-0.61	Good	Underestimate
127	PLC210	-0.60	Good	Underestimate
124	PLC106	-0.54	Good	Underestimate
119	PLC024	-0.49	Good	Underestimate
70	BGP047	-0.48	Good	Underestimate
91	FSP019	-0.43	Good	Underestimate
110	LAW082	-0.33	Good	Underestimate
109	LAW072	-0.30	Good	Underestimate
90	FSP015	-0.30	Good	Underestimate
120	PLC028	-0.27	Good	Underestimate
100	IND124	-0.21	Good	Underestimate
104	IND231	-0.21	Good	Underestimate
77	BLK016	-0.20	Good	Underestimate
85	FSL123	-0.08	Good	Underestimate
73	BIS055	-0.03	Good	Underestimate
81	BLK115	-0.02	Good	Underestimate
105	LAW030	-0.01	Good	Underestimate
87	FSL130	0.00	Good	Underestimate
22	BLK059	0.03	Good	Overestimate
15	BIS060	0.03	Good	Overestimate
55	LAW108	0.05	Good	Overestimate
59	MAN005	0.08	Good	Overestimate
10	BGP019	0.09	Good	Overestimate
33	FSL118	0.09	Good	Overestimate
64	MAN042	0.11	Good	Overestimate
38	IND019	0.14	Good	Overestimate
28	BLK142	0.19	Good	Overestimate
11	BGP088	0.25	Good	Overestimate
19	BLK033	0.35	Good	Overestimate
42	IND087	0.38	Good	Overestimate
49	LAW035	0.43	Good	Overestimate
18	BLK024	0.43	Good	Overestimate
58	LNP050	0.46	Good	Overestimate
39	IND026	0.50	Good	Overestimate
56	LAW120	0.51	Good	Overestimate
30	FSL051	0.56	Good	Overestimate
23	BLK069	0.62	Good	Overestimate
37	FSP004	0.64	Good	Overestimate
61	MAN007	0.65	Good	Overestimate
24	BLK074	0.69	Good	Overestimate
57	LAW122	0.70	Good	Overestimate
50	LAW063	0.71	Good	Overestimate
51	LAW065	0.78	Good	Overestimate
17	BLK021	0.81	Good	Overestimate
12	BGP157	0.89	Good	Overestimate
35	FSL138	0.99	Good	Overestimate
46	IND133	1.06	Good	Overestimate
21	BLK044	1.14	Good	Overestimate
67	PLC223	1.15	Good	Overestimate
20	BLK039	1.19	Good	Overestimate
66	PLC137	1.19	Good	Overestimate

X	Parcel	Mean Sample Error	Efficacy of Sample	Direction of bias
27	BLK099	1.22	Good	Overestimate
36	FSL187	1.37	Good	Overestimate
62	MAN034	1.42	Good	Overestimate
13	BGP182	1.50	Good	Overestimate
32	FSL116	1.58	Good	Overestimate
43	IND096	1.67	Good	Overestimate
26	BLK094	1.85	Good	Overestimate
44	IND106	1.86	Good	Overestimate
52	LAW070	1.87	Good	Overestimate
63	MAN037	2.07	Good	Overestimate
41	IND064	2.14	Good	Overestimate
34	FSL124	2.25	Good	Overestimate
68	TIN030	2.32	Good	Overestimate
65	PLC097	2.59	Good	Overestimate
14	BGP188	2.69	Good	Overestimate
47	IND139	2.75	Good	Overestimate
29	FSL047	2.77	Good	Overestimate
48	IND229	2.81	Good	Overestimate
16	BIS085	2.90	Good	Overestimate
60	MAN006	2.95	Good	Overestimate
53	LAW078	3.42	Good	Overestimate
45	IND132	3.43	Good	Overestimate
54	LAW107	3.51	Good	Overestimate
31	FSL053	4.17	Good	Overestimate
9	BEE017	4.41	Good	Overestimate
25	BLK075	4.76	Good	Overestimate
40	IND035	4.94	Good	Overestimate
2	FSL125	5.58	Fair	Overestimate
4	TIN050	5.65	Fair	Overestimate
3	FSL172	6.54	Fair	Overestimate
1	FSL044	7.56	Fair	Overestimate
5	UNW039	8.60	Fair	Overestimate
135	FSL214	10.08	Unsatisfactory	Overestimate
136	MAN060	12.18	Unsatisfactory	Overestimate