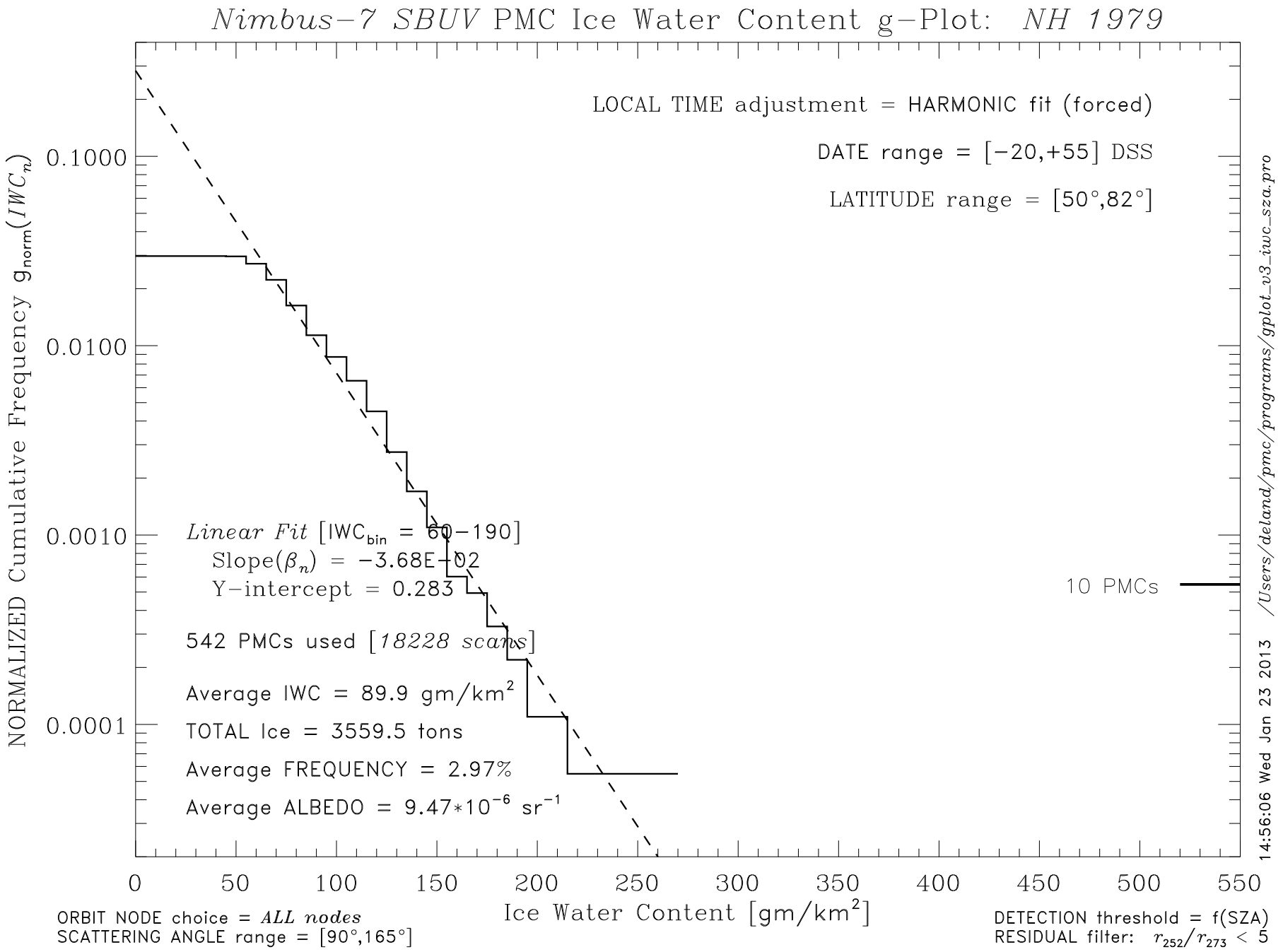
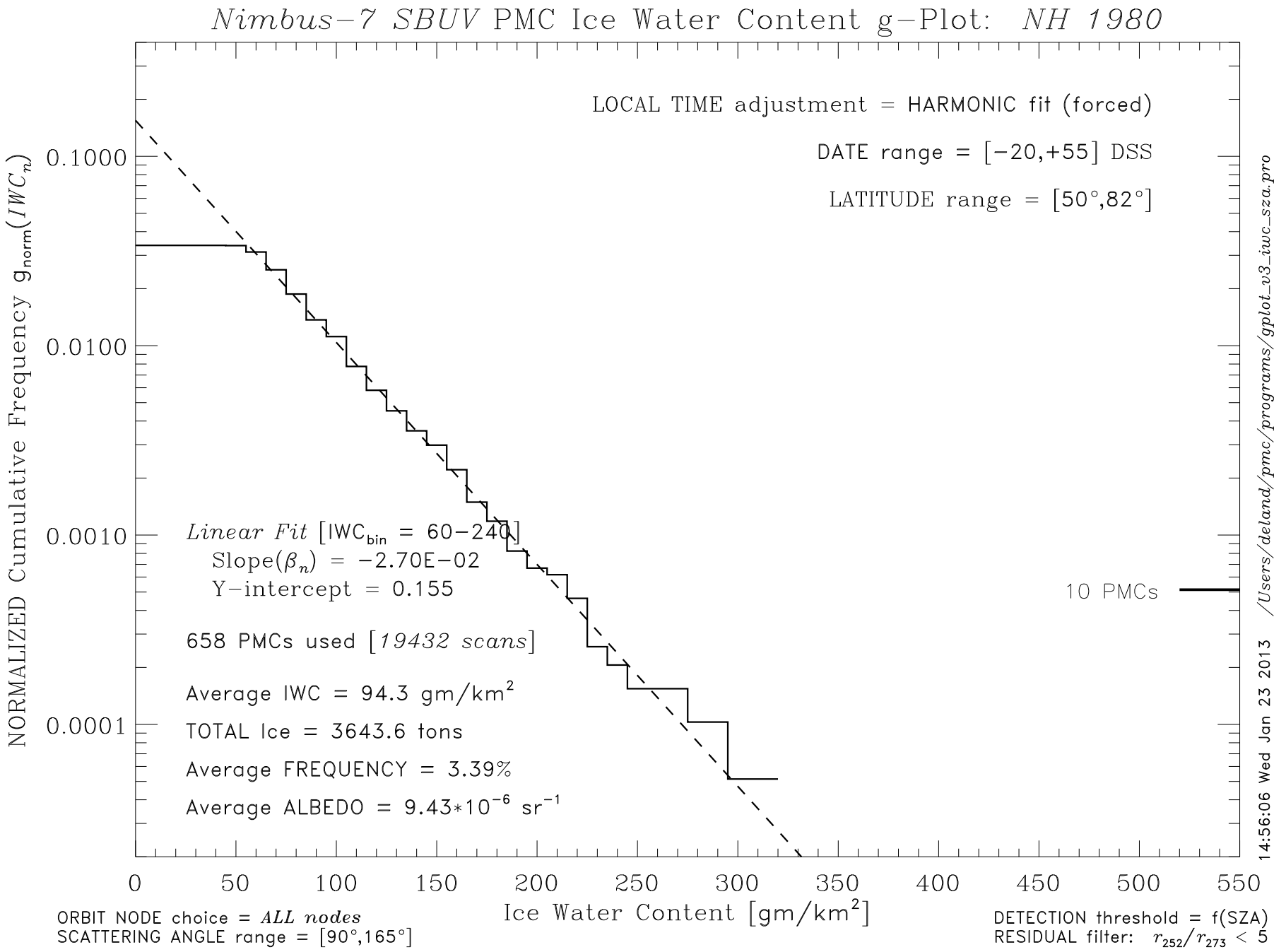
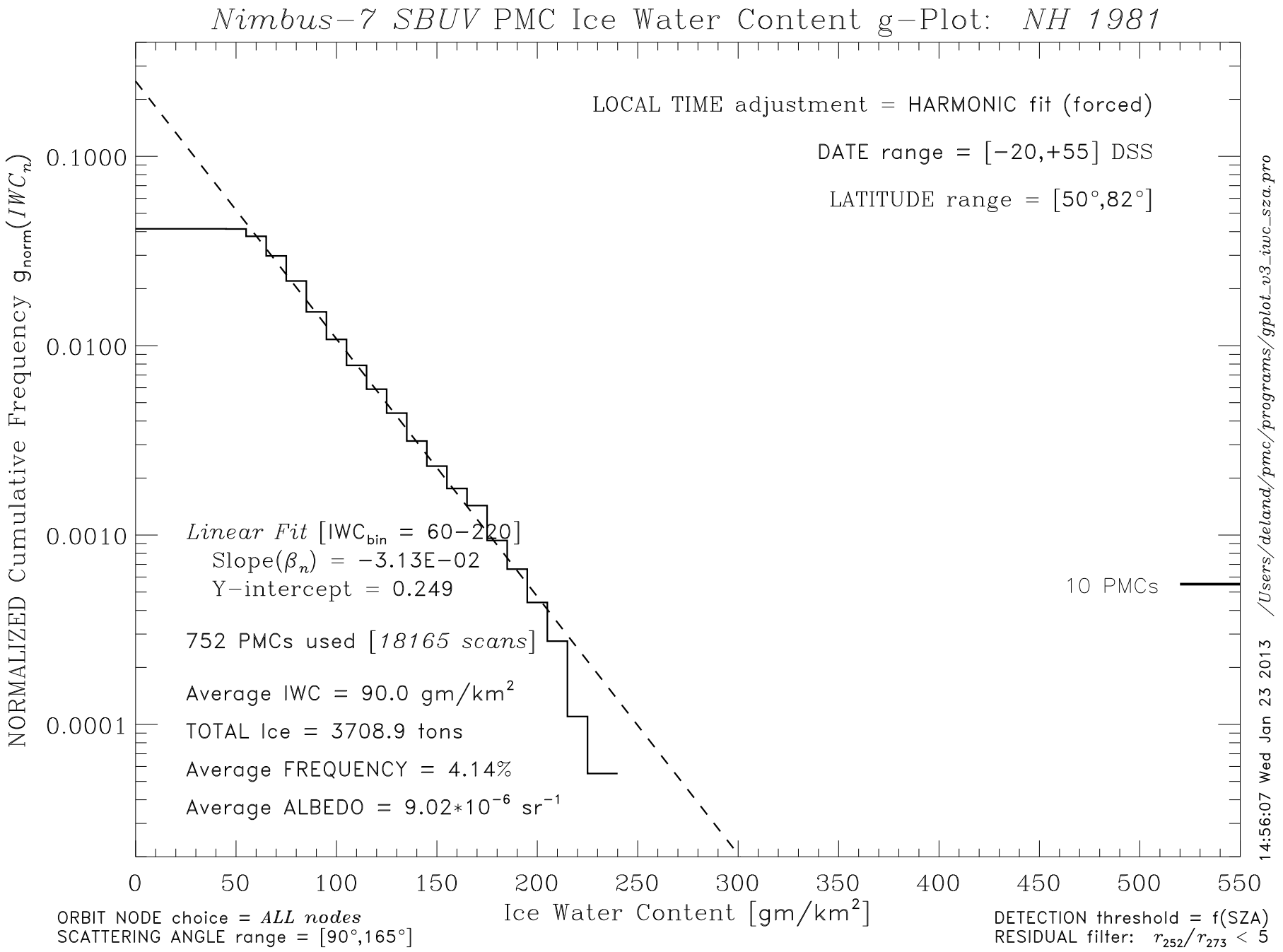
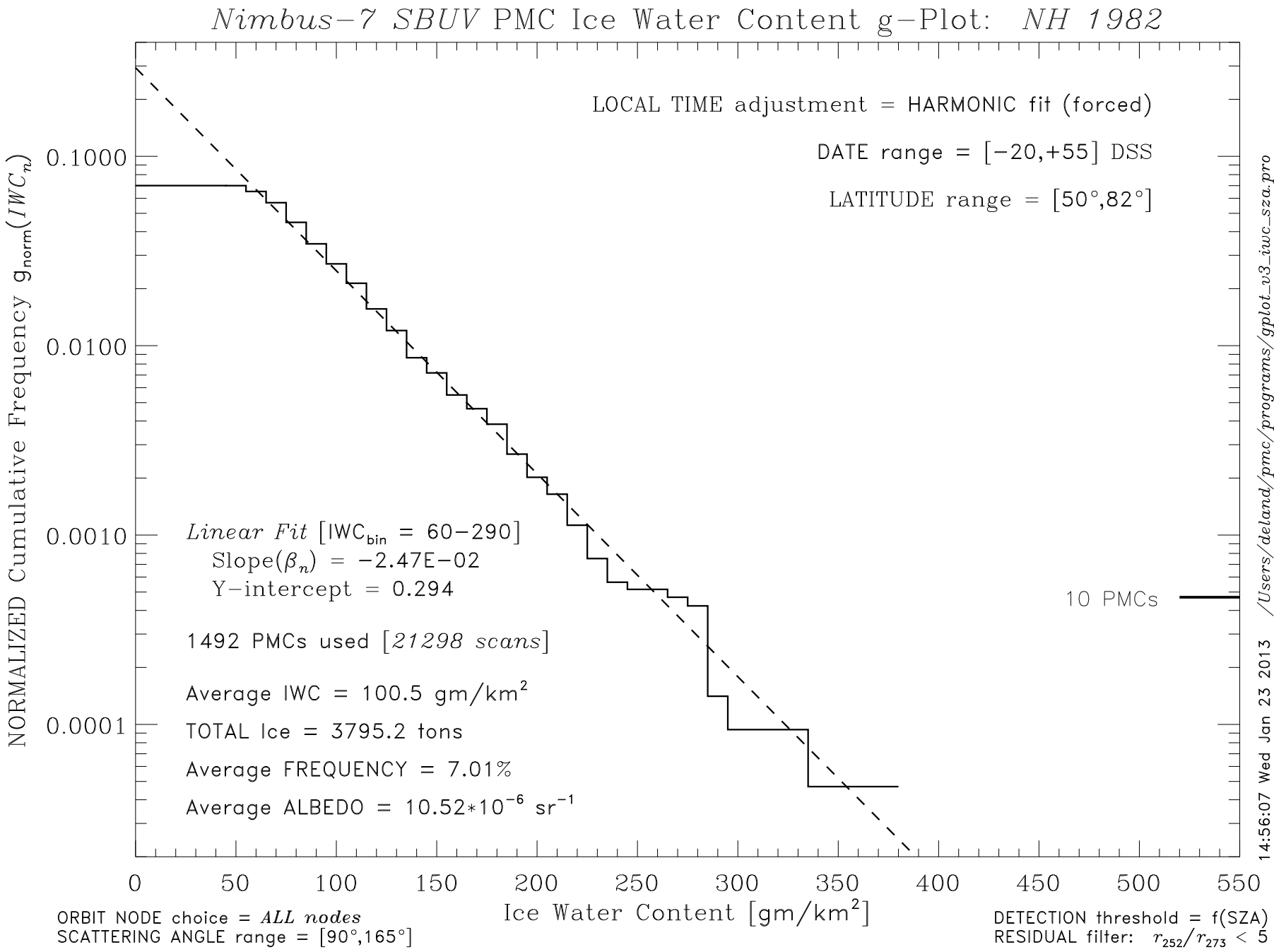
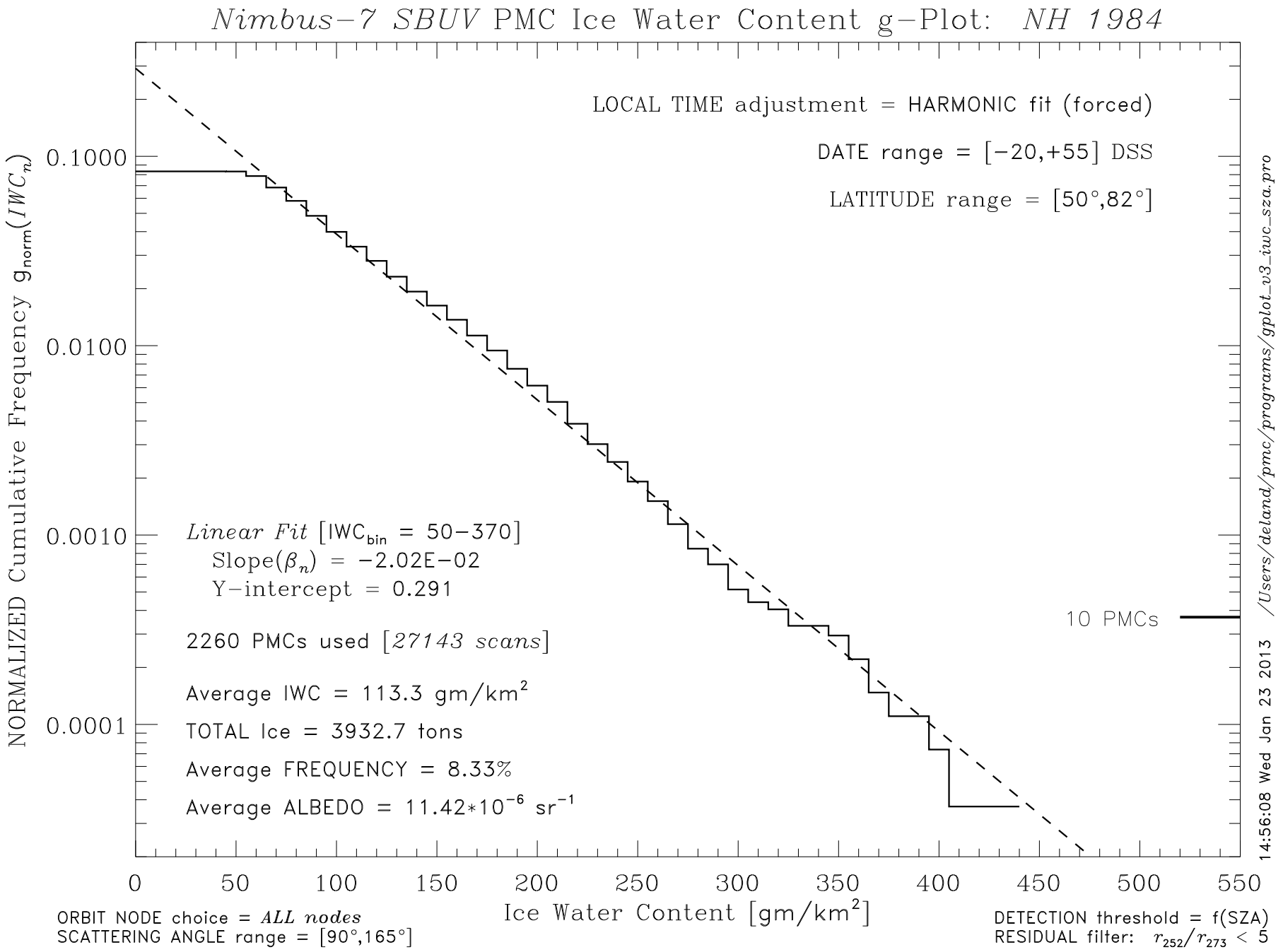

Nimbus-7 SBUV PMC Ice Water Content g-Plot: NH 1979
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [-20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC$_{bin}$ = 60-190]
Slope(β_n) = -3.68E-02
Y-intercept = 0.283
542 PMCs used [18228 scans]
Average IWC = 89.9 gm/km^2
TOTAL Ice = 3559.5 tons
Average FREQUENCY = 2.97%
Average ALBEDO = 9.47*10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
14:56:06 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$

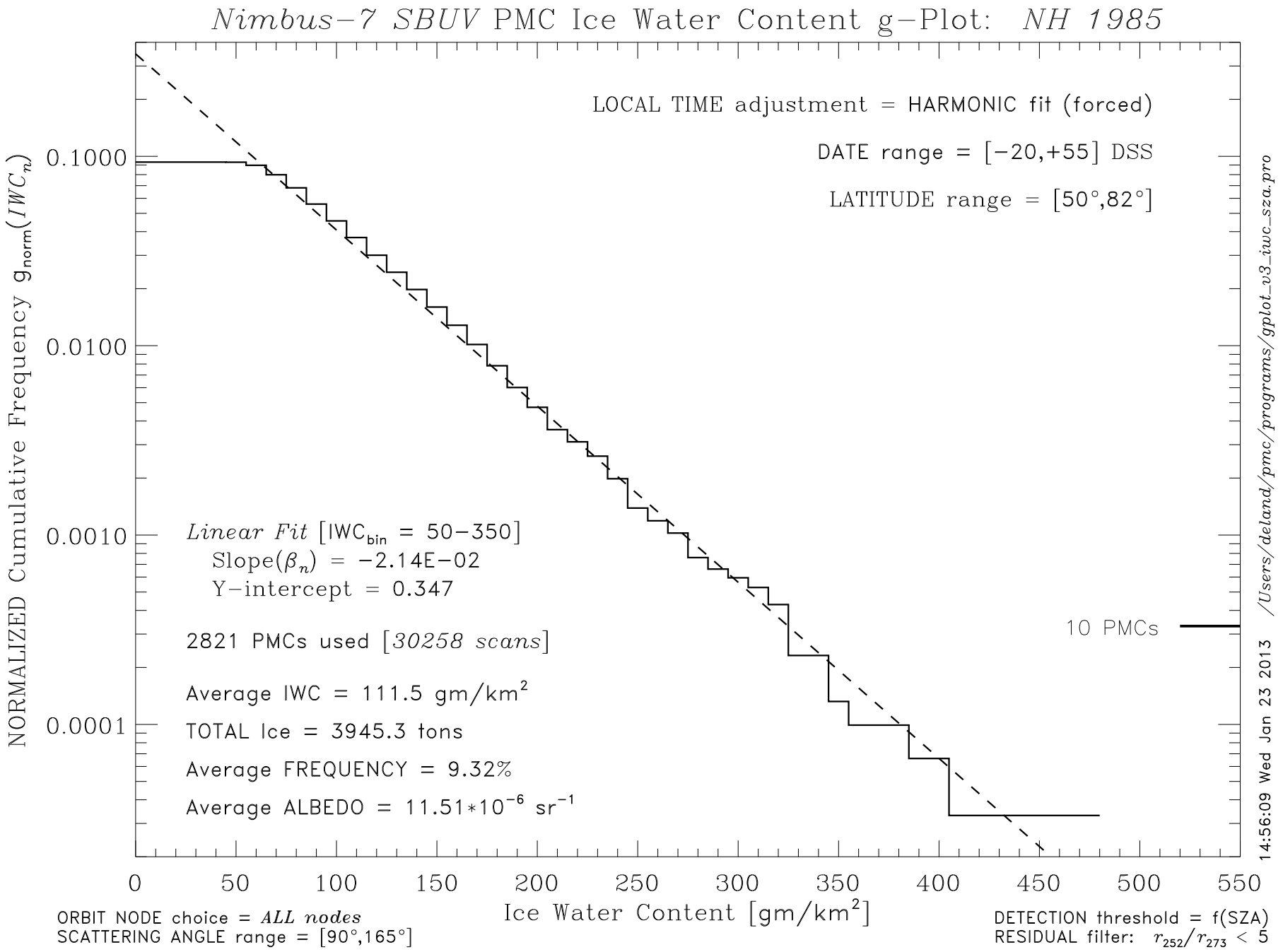

Nimbus−7 SBUV PMC Ice Water Content g−Plot: NH 1980
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC_{bin} = 60−240]
Slope(β_n) = −2.70E−02
Y−intercept = 0.155
658 PMCs used [19432 scans]
Average IWC = 94.3 gm/km^2
TOTAL Ice = 3643.6 tons
Average FREQUENCY = 3.39%
Average ALBEDO = 9.43∗10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
14:56:06 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$


Nimbus-7 SBUV PMC Ice Water Content g-Plot: NH 1981
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [-20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC_bin = 60-220]
Slope(β_n) = -3.13E-02
Y-intercept = 0.249
752 PMCs used [18165 scans]
Average IWC = 90.0 gm/km^2
TOTAL Ice = 3708.9 tons
Average FREQUENCY = 4.14%
Average ALBEDO = 9.02*10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:56:07 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro


Nimbus−7 SBUV PMC Ice Water Content g−Plot: NH 1982
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC_bin = 60−290]
Slope(β_n) = −2.47E−02
Y−intercept = 0.294
1492 PMCs used [21298 scans]
Average IWC = 100.5 gm/km^2
TOTAL Ice = 3795.2 tons
Average FREQUENCY = 7.01%
Average ALBEDO = 10.52∗10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
14:56:07 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$

Nimbus−7 SBUV PMC Ice Water Content g−Plot: NH 1983
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWC$_{bin}$ = 50−300]
Slope(β_n) = −2.27E−02
Y−intercept = 0.225
1244 PMCs used [21588 scans]
Average IWC = 106.0 gm/km^2
TOTAL Ice = 3751.1 tons
Average FREQUENCY = 5.76%
Average ALBEDO = 10.92*10^{-6} sr^{-1}
10 PMCs
NORMALIZED Cumulative Frequency g$_{norm}$(IWC$_n$)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:56:07 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

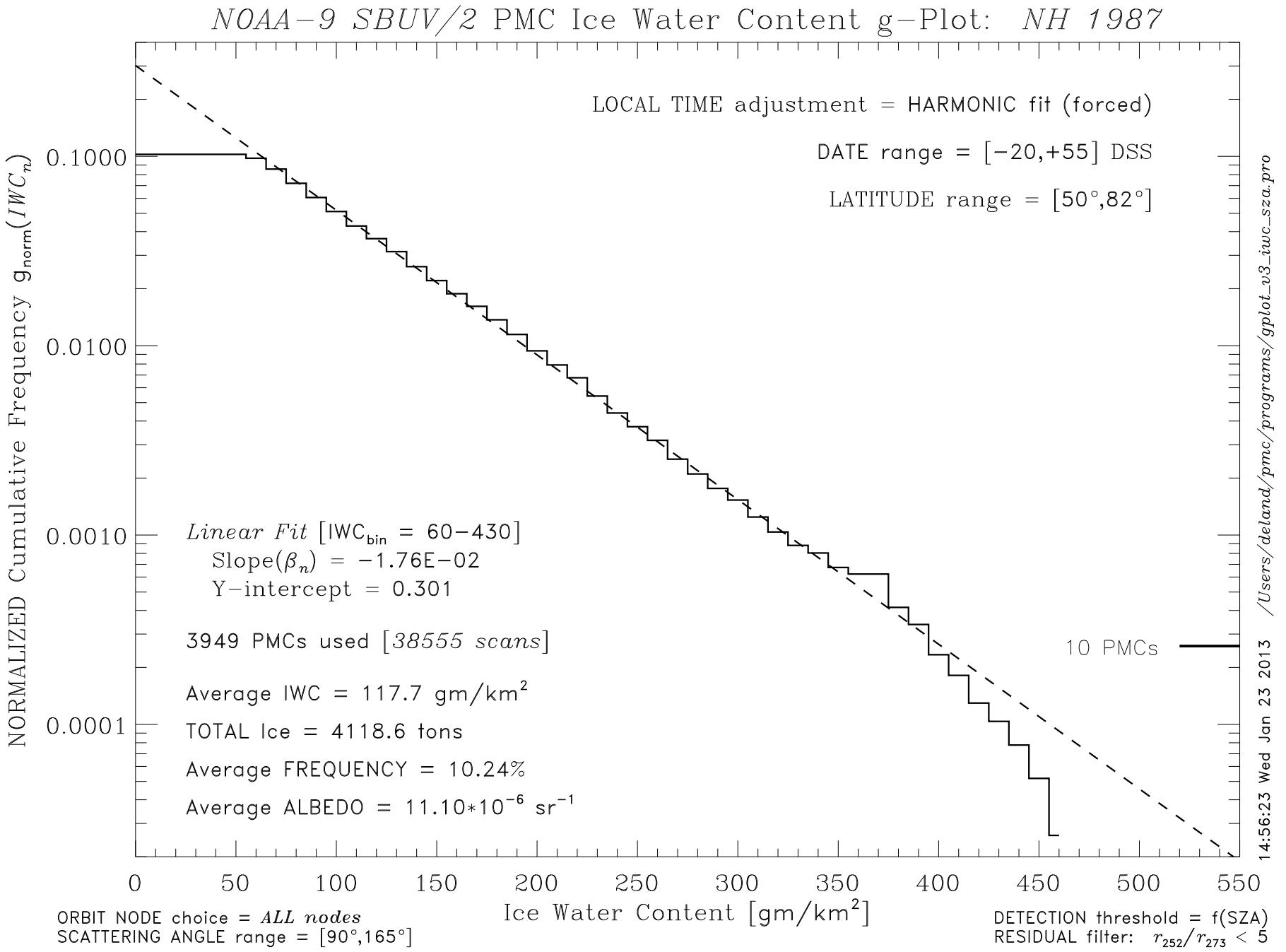

Nimbus−7 SBUV PMC Ice Water Content g−Plot: NH 1984
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC_{bin} = 50−370]
Slope(β_n) = −2.02E−02
Y−intercept = 0.291
2260 PMCs used [27143 scans]
Average IWC = 113.3 gm/km^2
TOTAL Ice = 3932.7 tons
Average FREQUENCY = 8.33%
Average ALBEDO = 11.42∗10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
14:56:08 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$

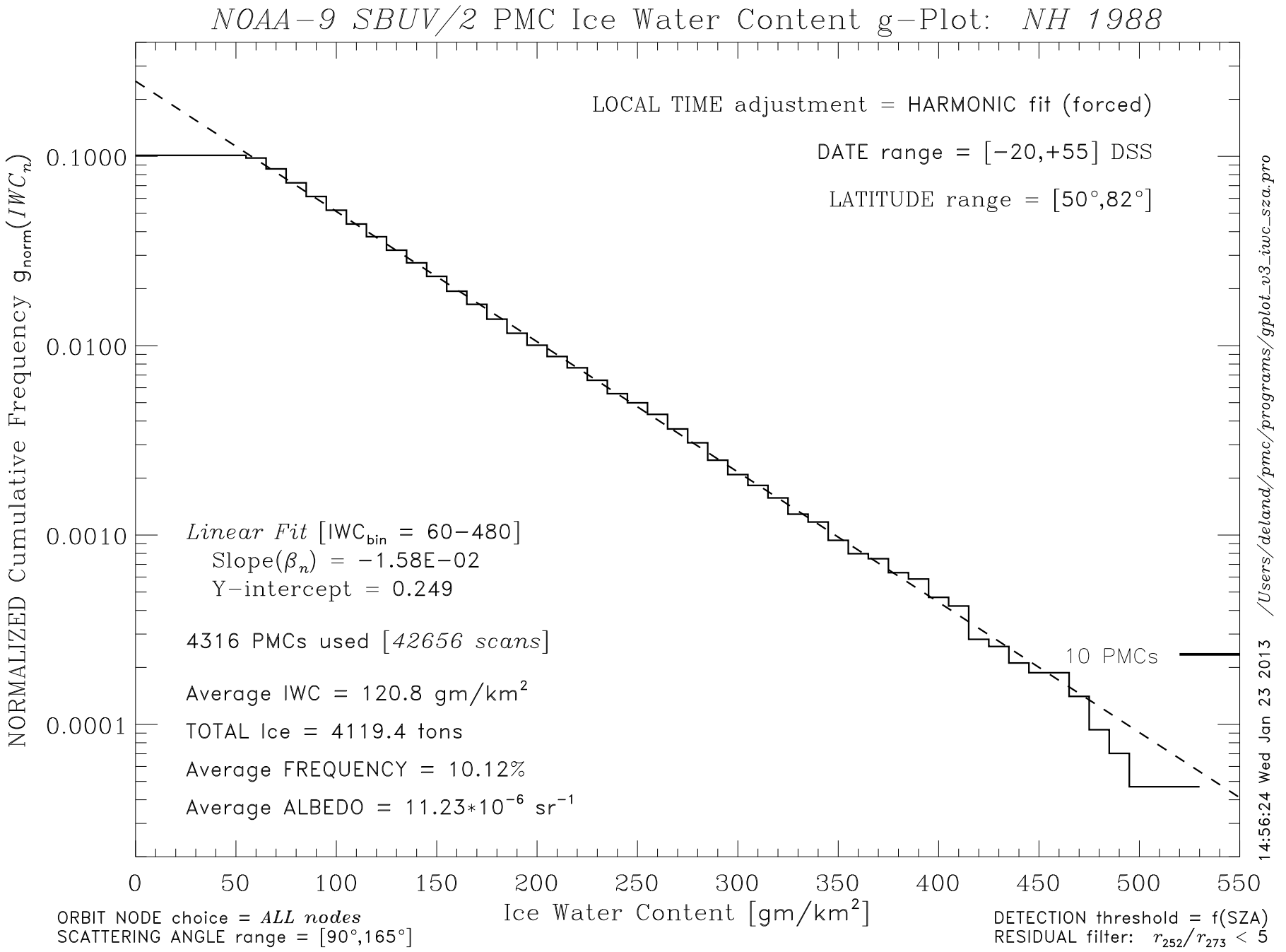

Nimbus−7 SBUV PMC Ice Water Content g−Plot: NH 1985
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC_{bin} = 50−350]
Slope(β_n) = −2.14E−02
Y−intercept = 0.347
2821 PMCs used [30258 scans]
Average IWC = 111.5 gm/km^2
TOTAL Ice = 3945.3 tons
Average FREQUENCY = 9.32%
Average ALBEDO = 11.51∗10^{-6} sr^{-1}
10 PMCs
0 50 100 150 200 250 300 350 400 450 500 550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:56:09 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

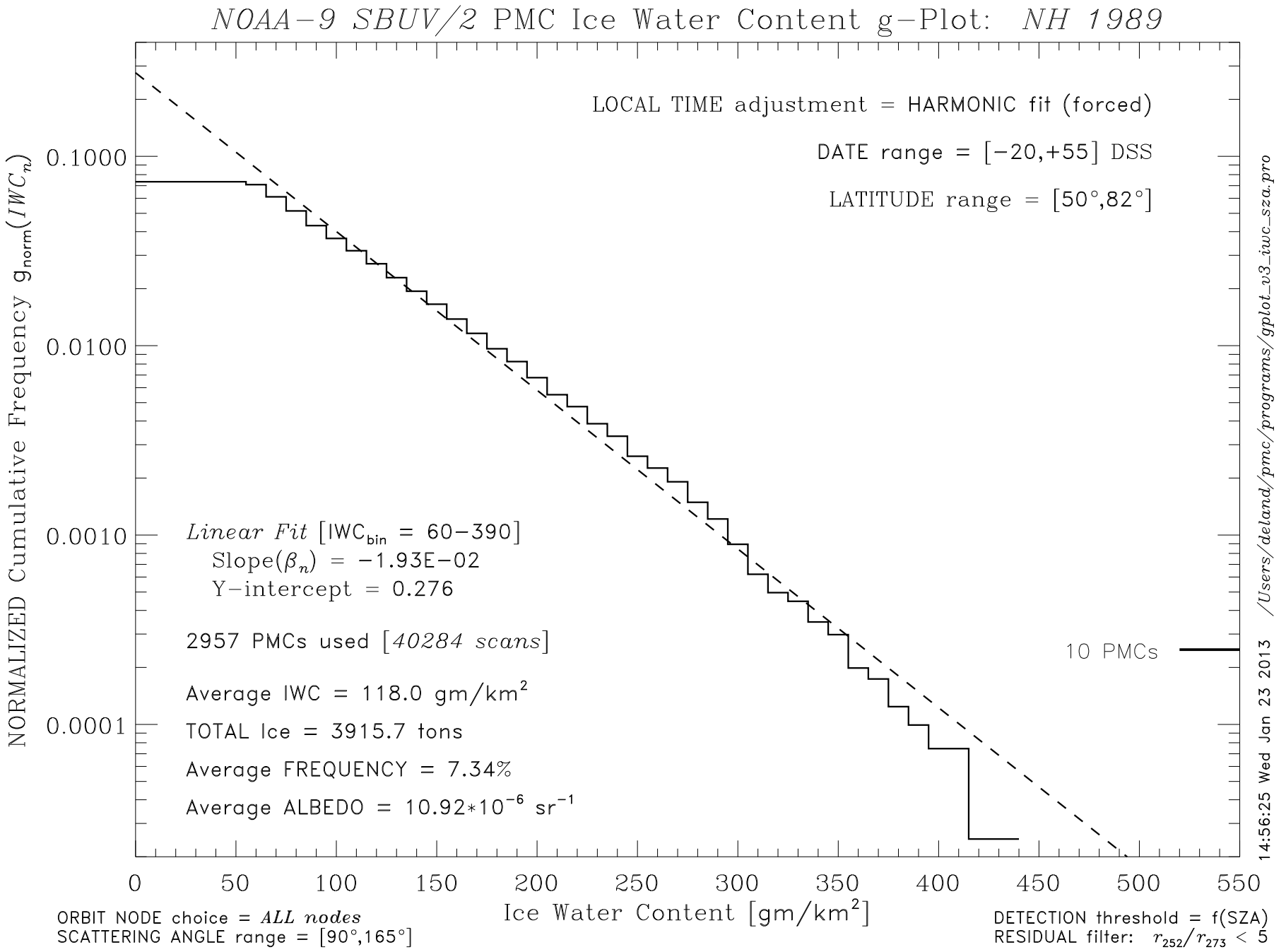
Nimbus−7 SBUV PMC Ice Water Content g−Plot: NH 1986
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWCbin = 50−400]
Slope(βn) = −1.74E−02
Y−intercept = 0.334
2705 PMCs used [25760 scans]
Average IWC = 123.4 gm/km2
TOTAL Ice = 4141.7 tons
Average FREQUENCY = 10.50%
Average ALBEDO = 11.93*10−6 sr−1
10 PMCs
NORMALIZED Cumulative Frequency gnorm(IWCn)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r252/r273 < 5
14:56:09 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

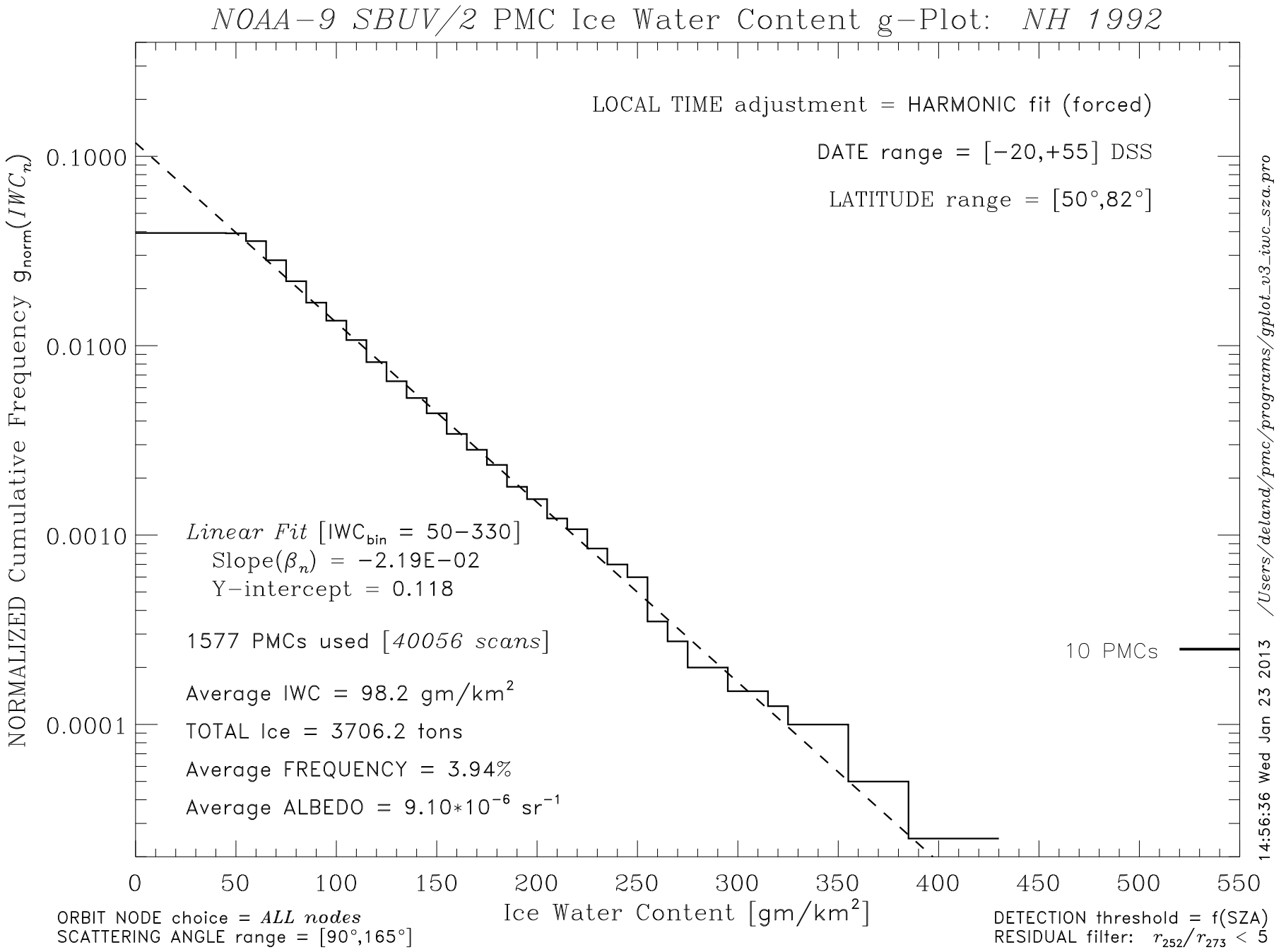
NOAA−9 SBUV/2 PMC Ice Water Content g−Plot: NH 1985
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWC_bin = 60−330]
Slope(β_n) = −1.94E−02
Y−intercept = 0.205
1959 PMCs used [3088 scans]
Average IWC = 111.1 gm/km²
TOTAL Ice = 3869.8 tons
Average FREQUENCY = 6.34%
Average ALBEDO = 10.77*10⁻⁶ sr⁻¹
10 PMCs
NORMALIZED Cumulative Frequency g_norm(IWC_n)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km²]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r252/r273 < 5
14:56:21 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

NOAA−9 SBUV/2 PMC Ice Water Content g−Plot: NH 1986
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWC$_{bin}$ = 60−450]
Slope(β_n) = −1.74E−02
Y−intercept = 0.390
3870 PMCs used [3554 scans]
Average IWC = 126.5 gm/km^2
TOTAL Ice = 4180.1 tons
Average FREQUENCY = 10.89%
Average ALBEDO = 12.05*10^{-6} sr^{-1}
10 PMCs
NORMALIZED Cumulative Frequency g$_{norm}$(IWC$_n$)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r$_{252}$/r$_{273}$ < 5
14:56:22 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro


NOAA-9 SBUV/2 PMC Ice Water Content g-Plot: NH 1987
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [-20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC$_{bin}$ = 60-430]
Slope(β_n) = -1.76E-02
Y-intercept = 0.301
3949 PMCs used [38555 scans]
Average IWC = 117.7 gm/km^2
TOTAL Ice = 4118.6 tons
Average FREQUENCY = 10.24%
Average ALBEDO = 11.10*10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:56:23 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

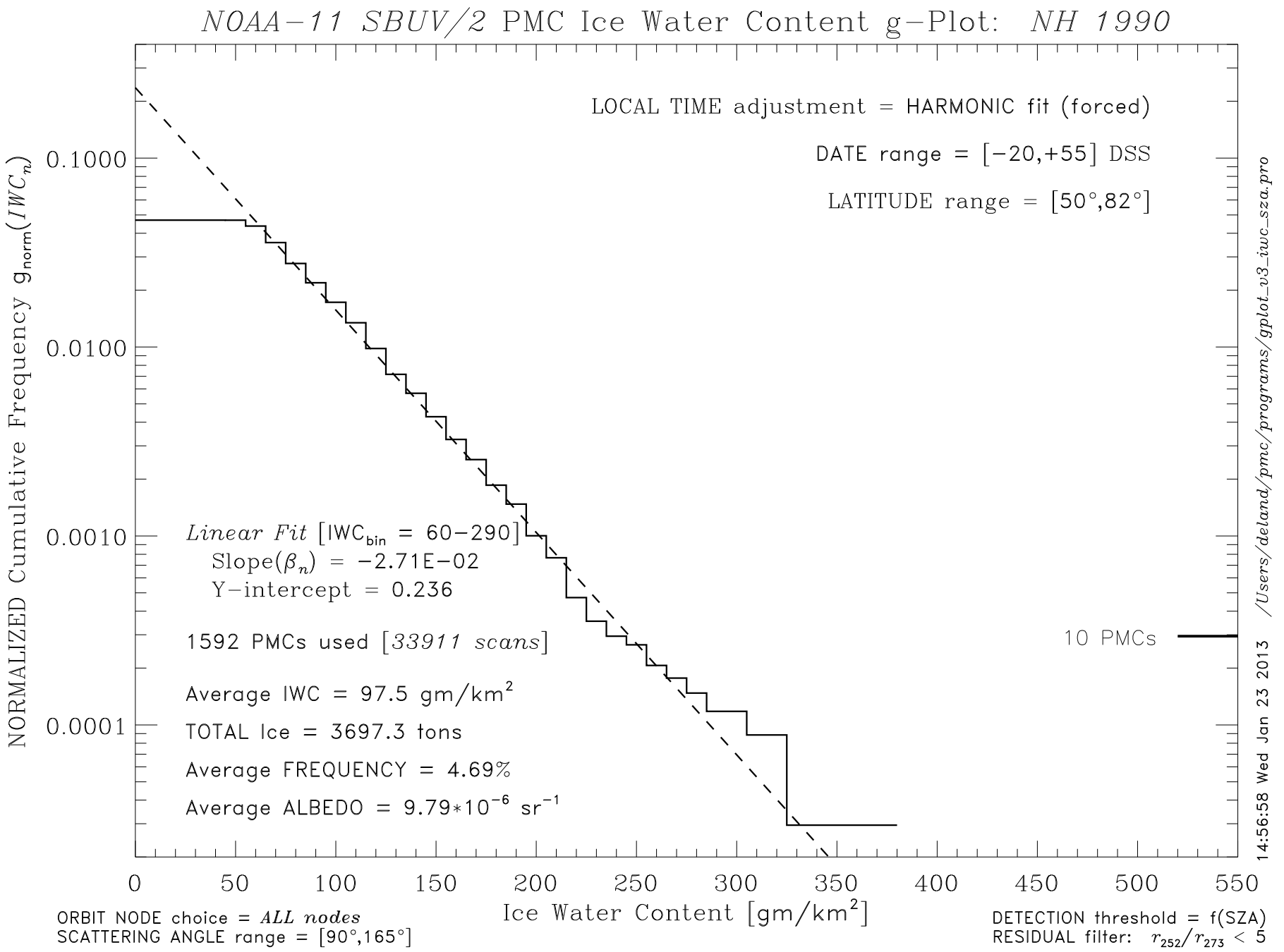

NOAA-9 SBUV/2 PMC Ice Water Content g-Plot: NH 1988
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [-20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC_{bin} = 60-480]
Slope(β_n) = -1.58E-02
Y-intercept = 0.249
4316 PMCs used [42656 scans]
Average IWC = 120.8 gm/km^2
TOTAL Ice = 4119.4 tons
Average FREQUENCY = 10.12%
Average ALBEDO = 11.23*10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:56:24 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro


NOAA-9 SBUV/2 PMC Ice Water Content g-Plot: NH 1989
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [-20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC$_{bin}$ = 60-390]
Slope(β_n) = -1.93E-02
Y-intercept = 0.276
2957 PMCs used [40284 scans]
Average IWC = 118.0 gm/km^2
TOTAL Ice = 3915.7 tons
Average FREQUENCY = 7.34%
Average ALBEDO = 10.92*10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:56:25 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro


NOAA−9 SBUV/2 PMC Ice Water Content g−Plot: NH 1992
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC$_{bin}$ = 50−330]
Slope(β_n) = −2.19E−02
Y−intercept = 0.118
1577 PMCs used [40056 scans]
Average IWC = 98.2 gm/km^2
TOTAL Ice = 3706.2 tons
Average FREQUENCY = 3.94%
Average ALBEDO = 9.10∗10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
14:56:36 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$

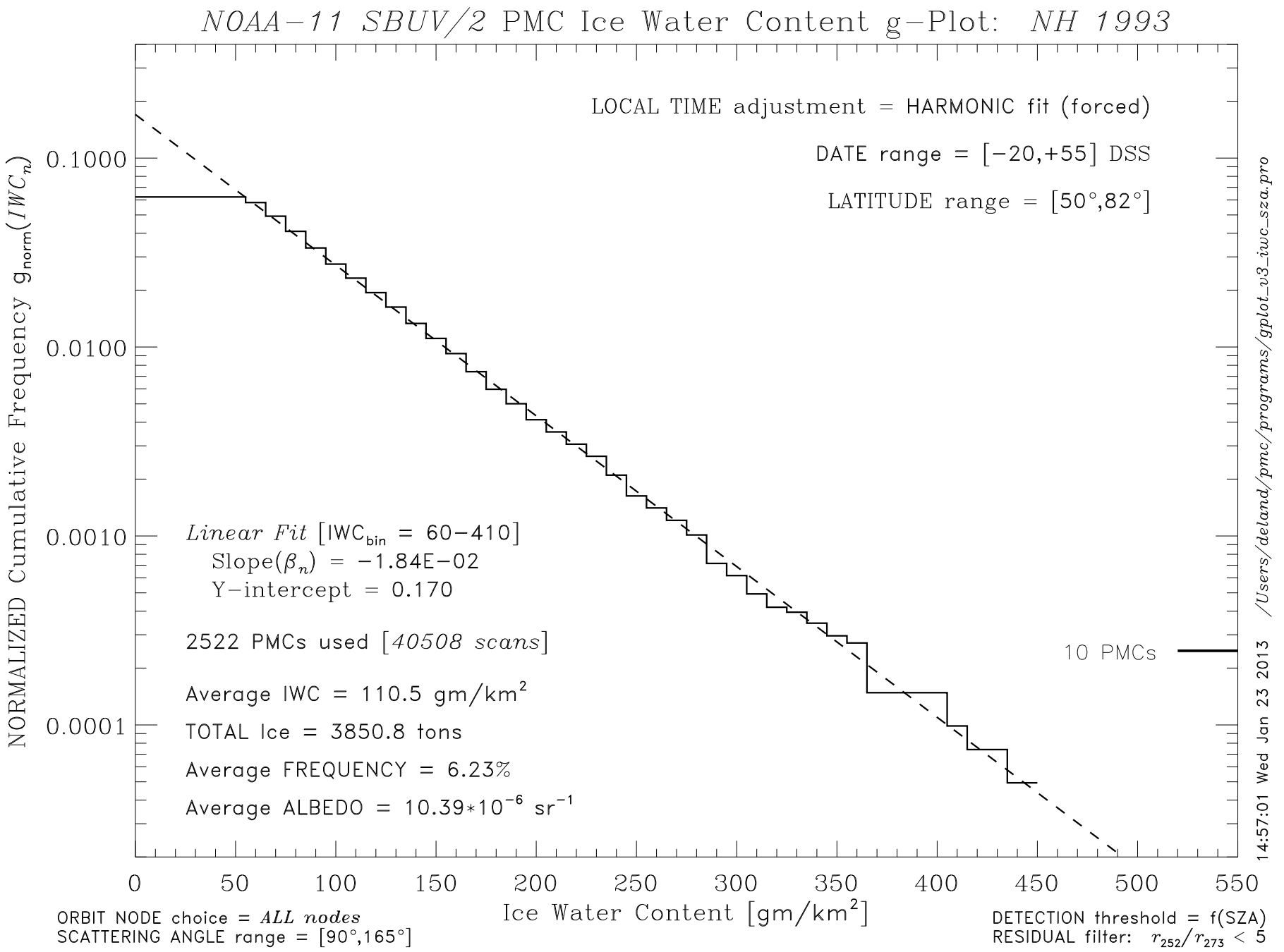
NOAA−9 SBUV/2 PMC Ice Water Content g−Plot: NH 1994
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWC$_{bin}$ = 50−430]
Slope(β_n) = −1.75E−02
Y−intercept = 0.387
4217 PMCs used [38324 scans]
Average IWC = 127.1 gm/km^2
TOTAL Ice = 4205.5 tons
Average FREQUENCY = 11.00%
Average ALBEDO = 11.53*10^{-6} sr^{-1}
10 PMCs
NORMALIZED Cumulative Frequency g$_{norm}$(IWC$_n$)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:56:48 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

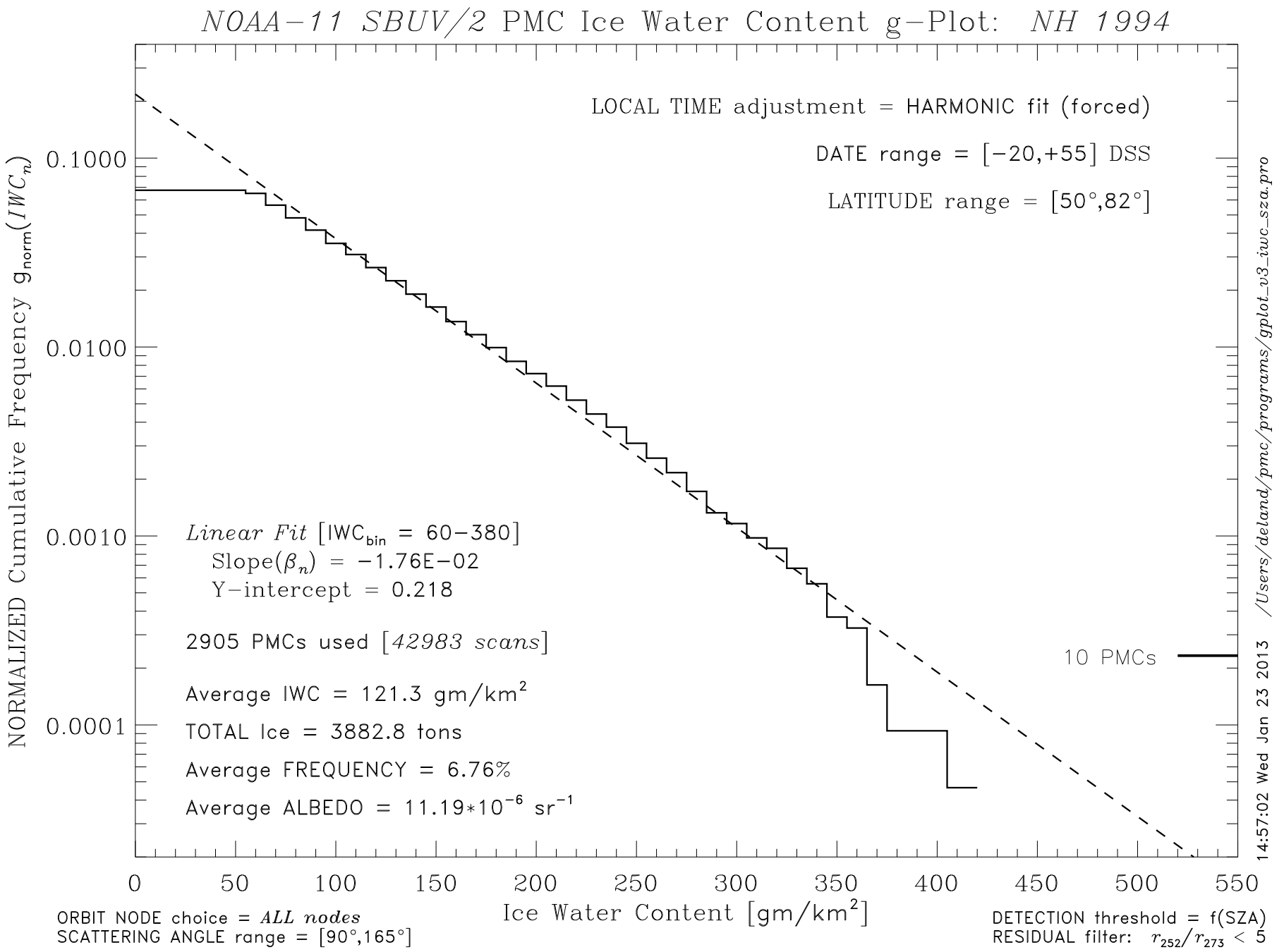
NOAA−11 SBUV/2 PMC Ice Water Content g−Plot: NH 1989
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWCbin = 60−410]
Slope(βn) = −1.94E−02
Y−intercept = 0.315
3012 PMCs used [33999 scans]
Average IWC = 117.1 gm/km2
TOTAL Ice = 3977.4 tons
Average FREQUENCY = 8.86%
Average ALBEDO = 11.62*10−6 sr−1
10 PMCs
NORMALIZED Cumulative Frequency gnorm(IWCn)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r252/r273 < 5
14:56:58 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

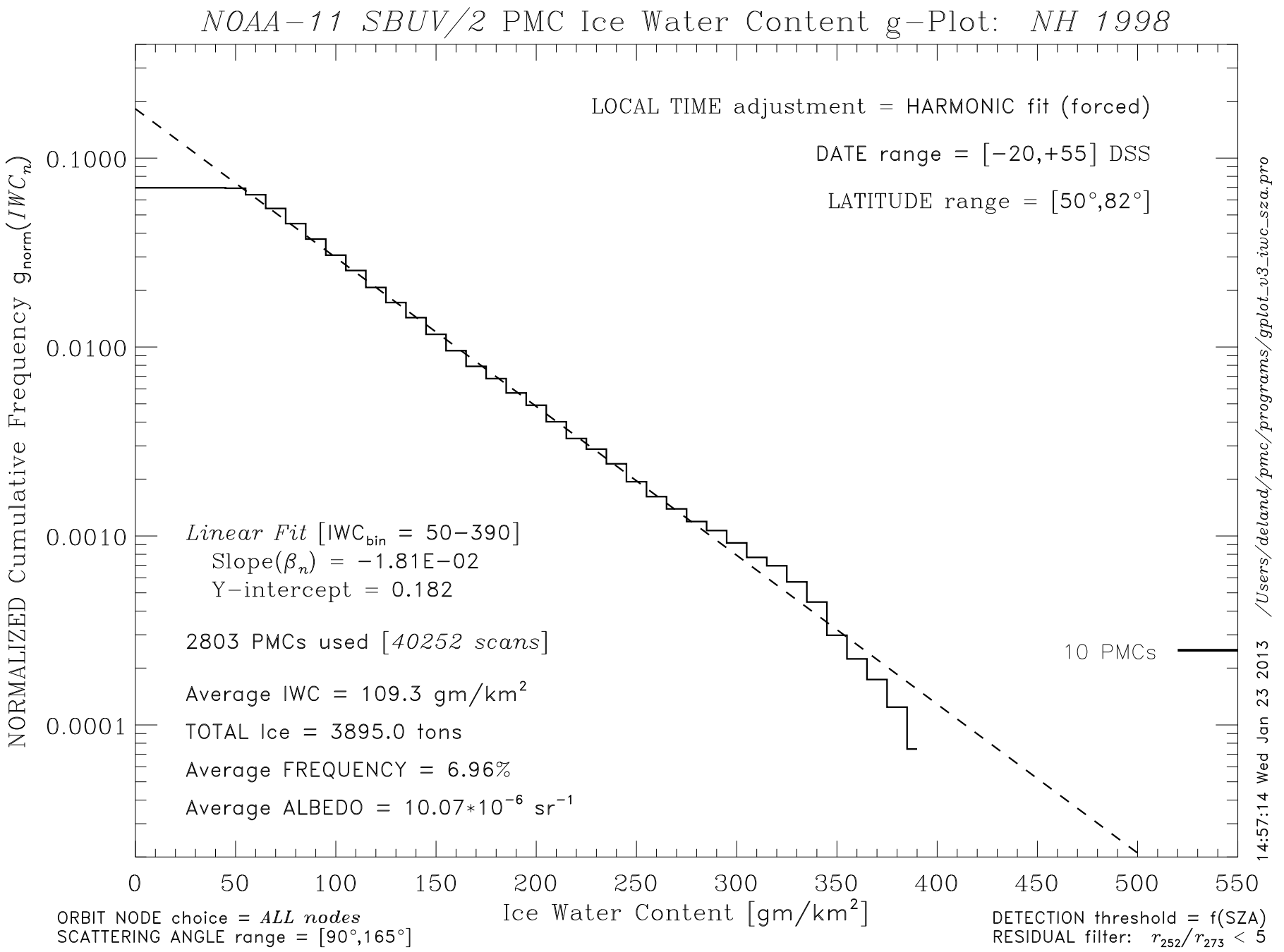

NOAA−11 SBUV/2 PMC Ice Water Content g−Plot: NH 1990
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC$_{bin}$ = 60−290]
Slope(β_n) = −2.71E−02
Y−intercept = 0.236
1592 PMCs used [33911 scans]
Average IWC = 97.5 gm/km^2
TOTAL Ice = 3697.3 tons
Average FREQUENCY = 4.69%
Average ALBEDO = 9.79∗10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
14:56:58 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$

NOAA−11 SBUV/2 PMC Ice Water Content g−Plot: NH 1991
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWC_bin = 60−280]
Slope(β_n) = −2.51E−02
Y−intercept = 0.149
915 PMCs used [3069 scans]
Average IWC = 103.0 gm/km²
TOTAL Ice = 3652.1 tons
Average FREQUENCY = 3.03%
Average ALBEDO = 10.05*10⁻⁶ sr⁻¹
10 PMCs
NORMALIZED Cumulative Frequency g_norm(IWC_n)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km²]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r252/r273 < 5
14:56:59 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

NOAA−11 SBUV/2 PMC Ice Water Content g−Plot: NH 1992
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWC$_{bin}$ = 60−280]
Slope(β_n) = −2.58E−02
Y−intercept = 0.223
1815 PMCs used [37728 scans]
Average IWC = 98.0 gm/km^2
TOTAL Ice = 3751.8 tons
Average FREQUENCY = 4.81%
Average ALBEDO = 9.47*10^{-6} sr^{-1}
10 PMCs
NORMALIZED Cumulative Frequency g$_{norm}$(IWC$_n$)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:57:00 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro


NOAA−11 SBUV/2 PMC Ice Water Content g−Plot: NH 1993
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC$_{bin}$ = 60−410]
Slope(β_n) = −1.84E−02
Y−intercept = 0.170
2522 PMCs used [40508 scans]
Average IWC = 110.5 gm/km^2
TOTAL Ice = 3850.8 tons
Average FREQUENCY = 6.23%
Average ALBEDO = 10.39∗10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:57:01 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

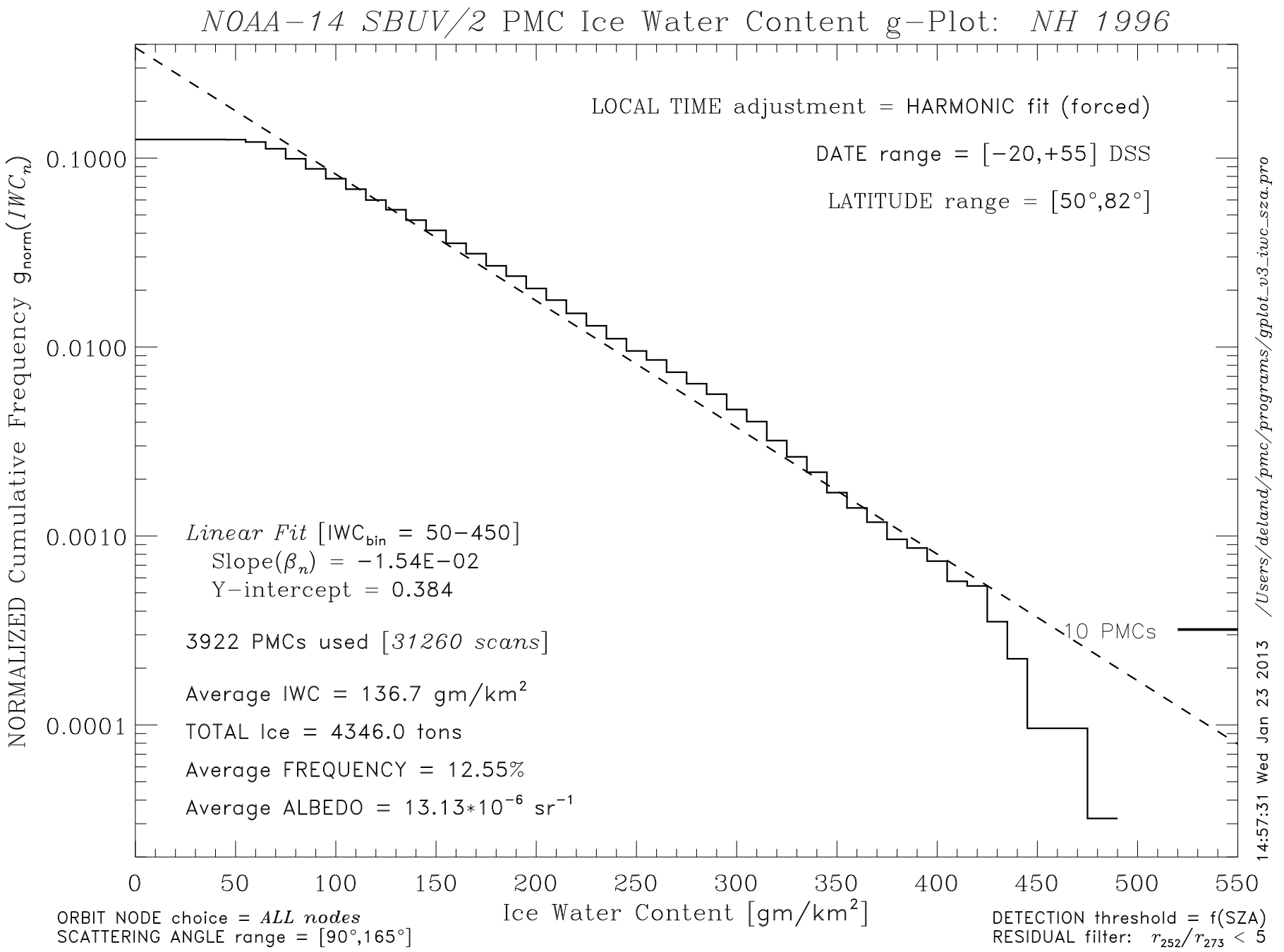

NOAA-11 SBUV/2 PMC Ice Water Content g-Plot: NH 1994
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [-20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC_bin = 60-380]
Slope(β_n) = -1.76E-02
Y-intercept = 0.218
2905 PMCs used [42983 scans]
Average IWC = 121.3 gm/km^2
TOTAL Ice = 3882.8 tons
Average FREQUENCY = 6.76%
Average ALBEDO = 11.19*10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
14:57:02 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$

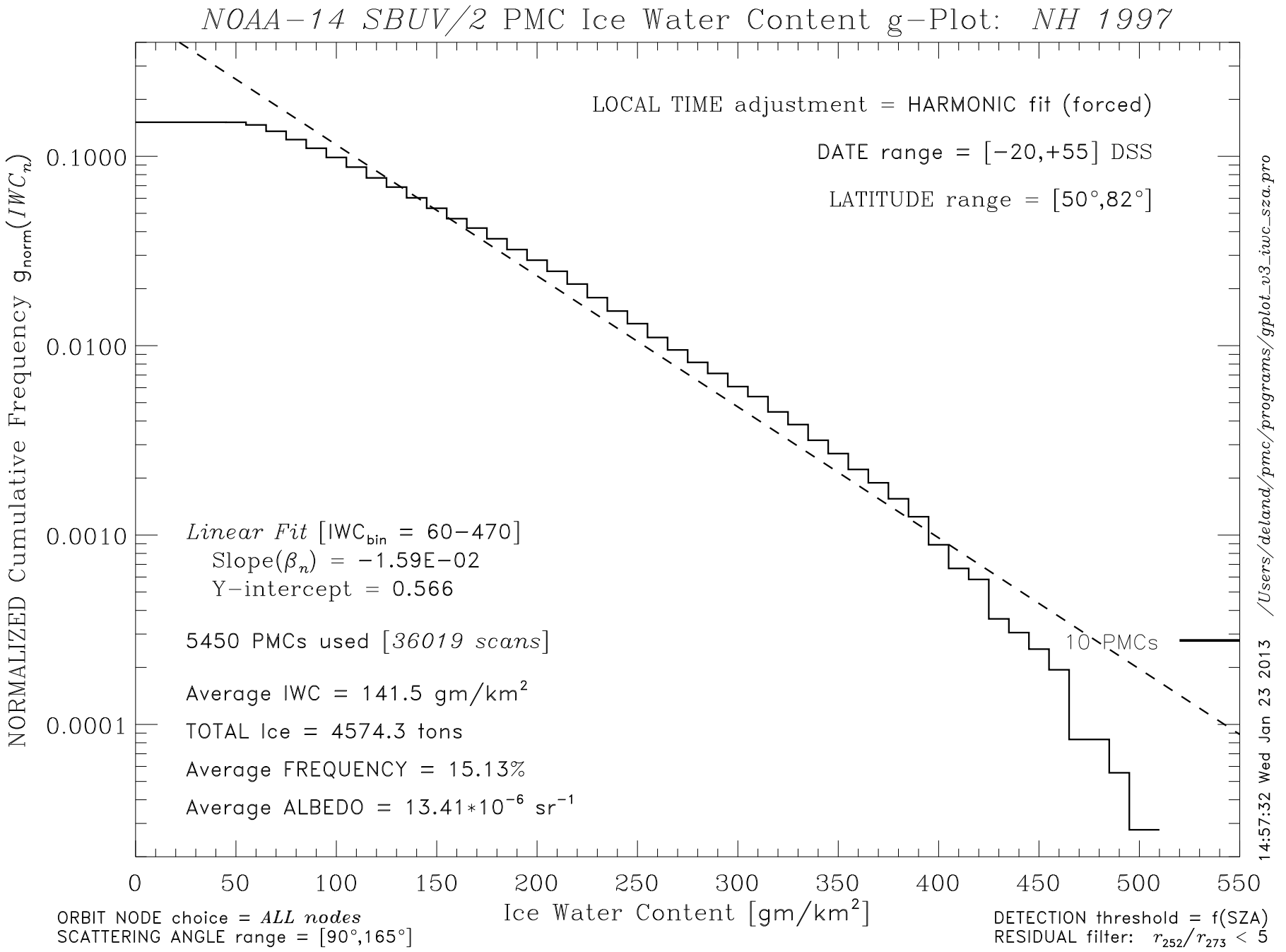

NOAA−11 SBUV/2 PMC Ice Water Content g−Plot: NH 1998
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC_bin = 50−390]
Slope(β_n) = −1.81E−02
Y−intercept = 0.182
2803 PMCs used [40252 scans]
Average IWC = 109.3 gm/km^2
TOTAL Ice = 3895.0 tons
Average FREQUENCY = 6.96%
Average ALBEDO = 10.07*10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:57:14 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

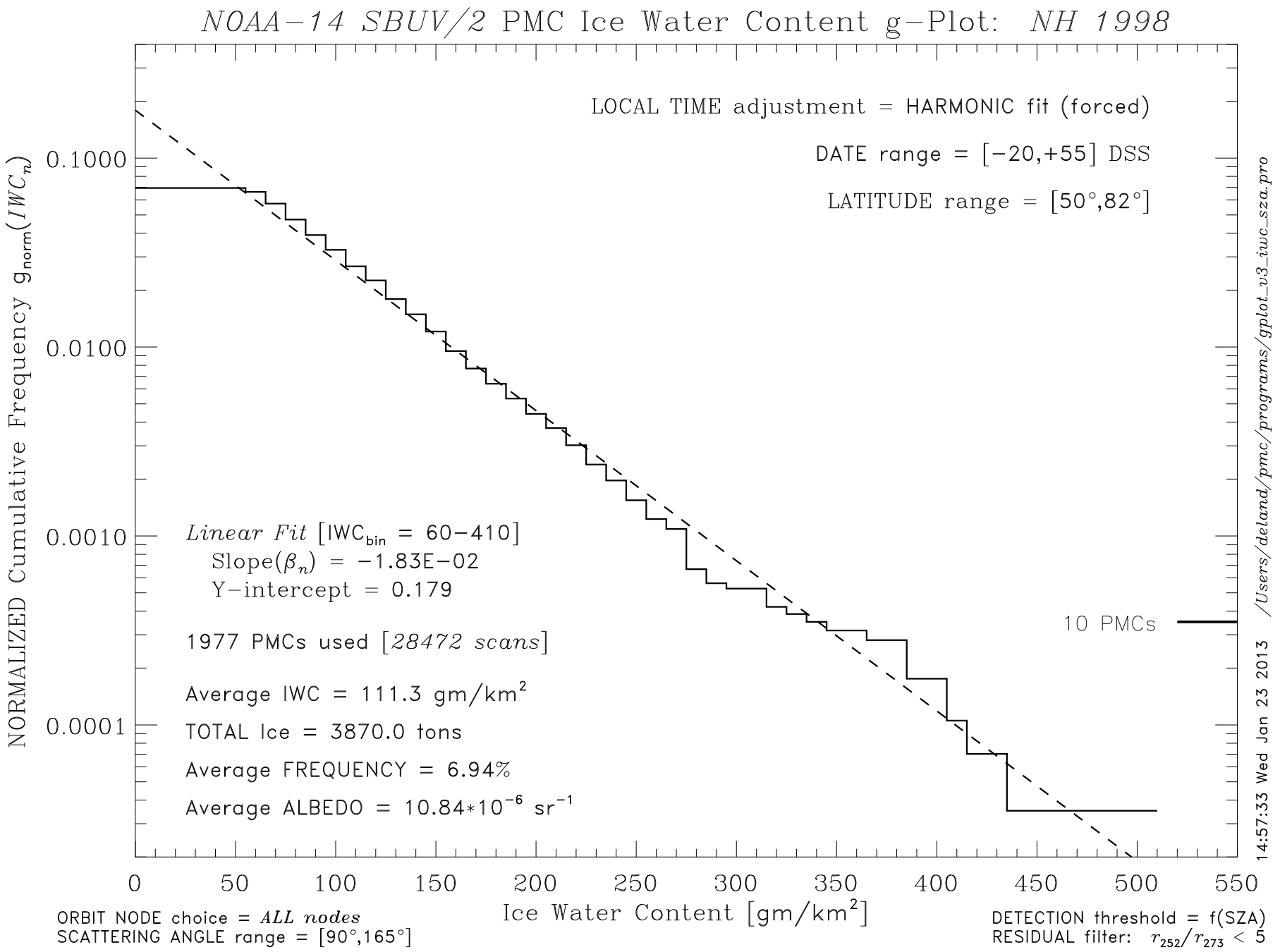
NOAA−11 SBUV/2 PMC Ice Water Content g−Plot: NH 1999
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWC_bin = 50−400]
Slope(β_n) = −1.90E−02
Y−intercept = 0.239
2957 PMCs used [38675 scans]
Average IWC = 114.0 gm/km²
TOTAL Ice = 3947.2 tons
Average FREQUENCY = 7.65%
Average ALBEDO = 10.60*10⁻⁶ sr⁻¹
10 PMCs
NORMALIZED Cumulative Frequency g_norm(IWC_n)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km²]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r252/r273 < 5
14:57:15 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

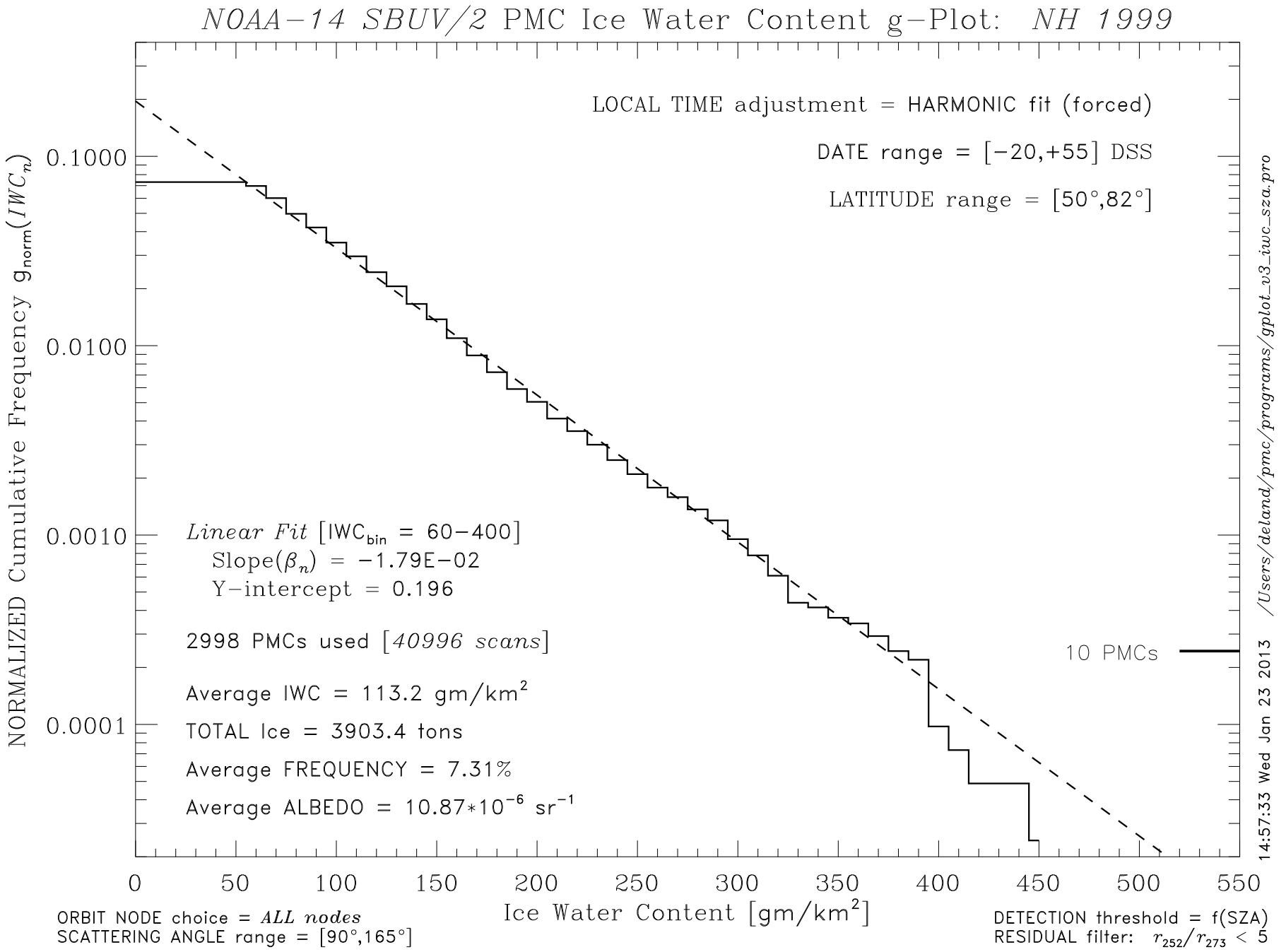
NOAA−11 SBUV/2 PMC Ice Water Content g−Plot: NH 2000
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWC$_{bin}$ = 50−420]
Slope(β_n) = −1.84E−02
Y−intercept = 0.175
2368 PMCs used [34813 scans]
Average IWC = 111.0 gm/km^2
TOTAL Ice = 3861.8 tons
Average FREQUENCY = 6.80%
Average ALBEDO = 10.49*10^{-6} sr^{-1}
10 PMCs
NORMALIZED Cumulative Frequency g$_{norm}$(IWC$_n$)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r$_{252}$/r$_{273}$ < 5
14:57:16 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

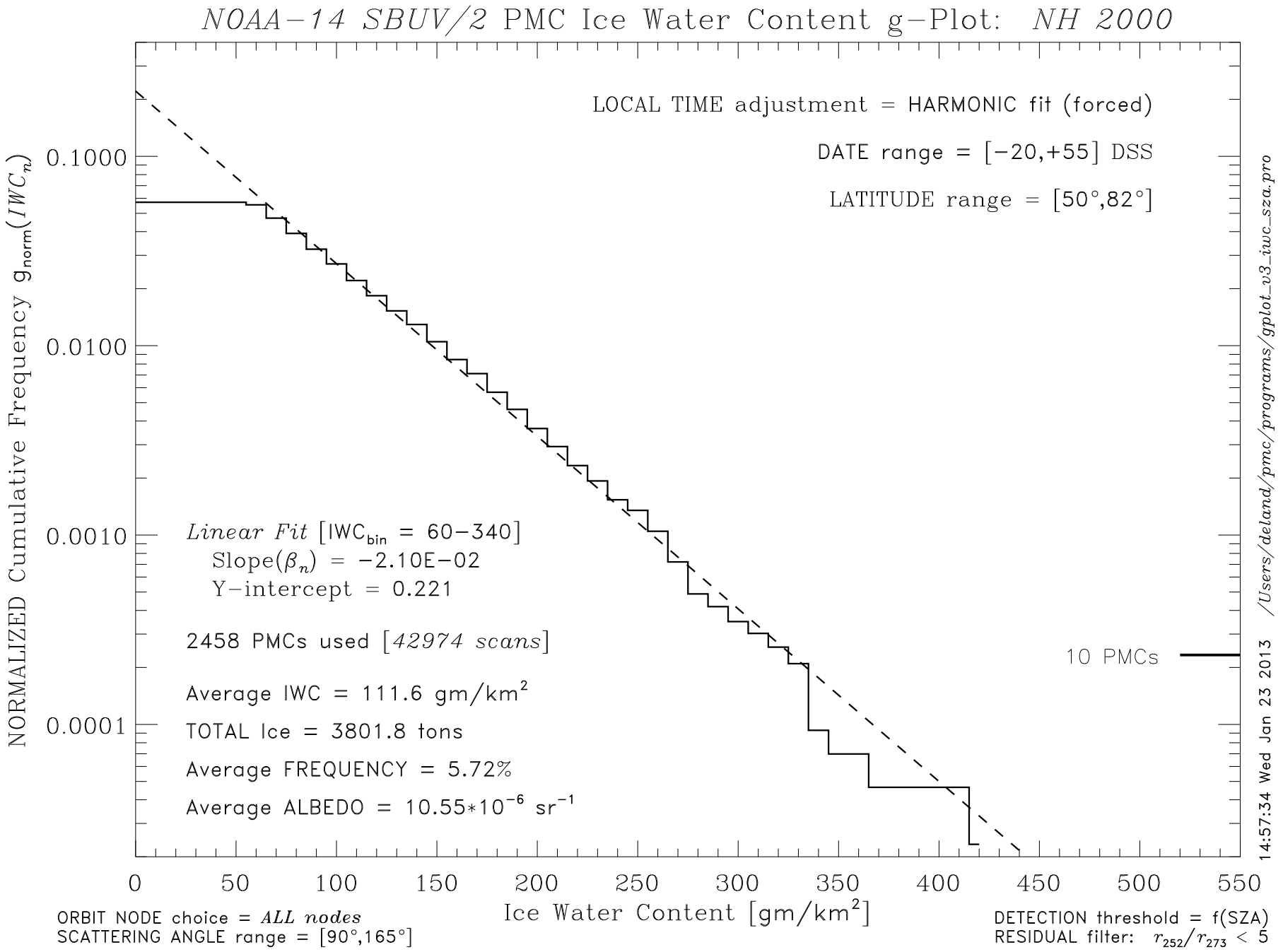
NOAA−14 SBUV/2 PMC Ice Water Content g−Plot: NH 1995
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWC$_{bin}$ = 60−400]
Slope(β_n) = −1.84E−02
Y−intercept = 0.402
2882 PMCs used [25945 scans]
Average IWC = 122.5 gm/km^2
TOTAL Ice = 4201.8 tons
Average FREQUENCY = 11.11%
Average ALBEDO = 11.87*10^{-6} sr^{-1}
10 PMCs
NORMALIZED Cumulative Frequency g$_{norm}$(IWC$_n$)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r$_{252}$/r$_{273}$ < 5
14:57:31 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

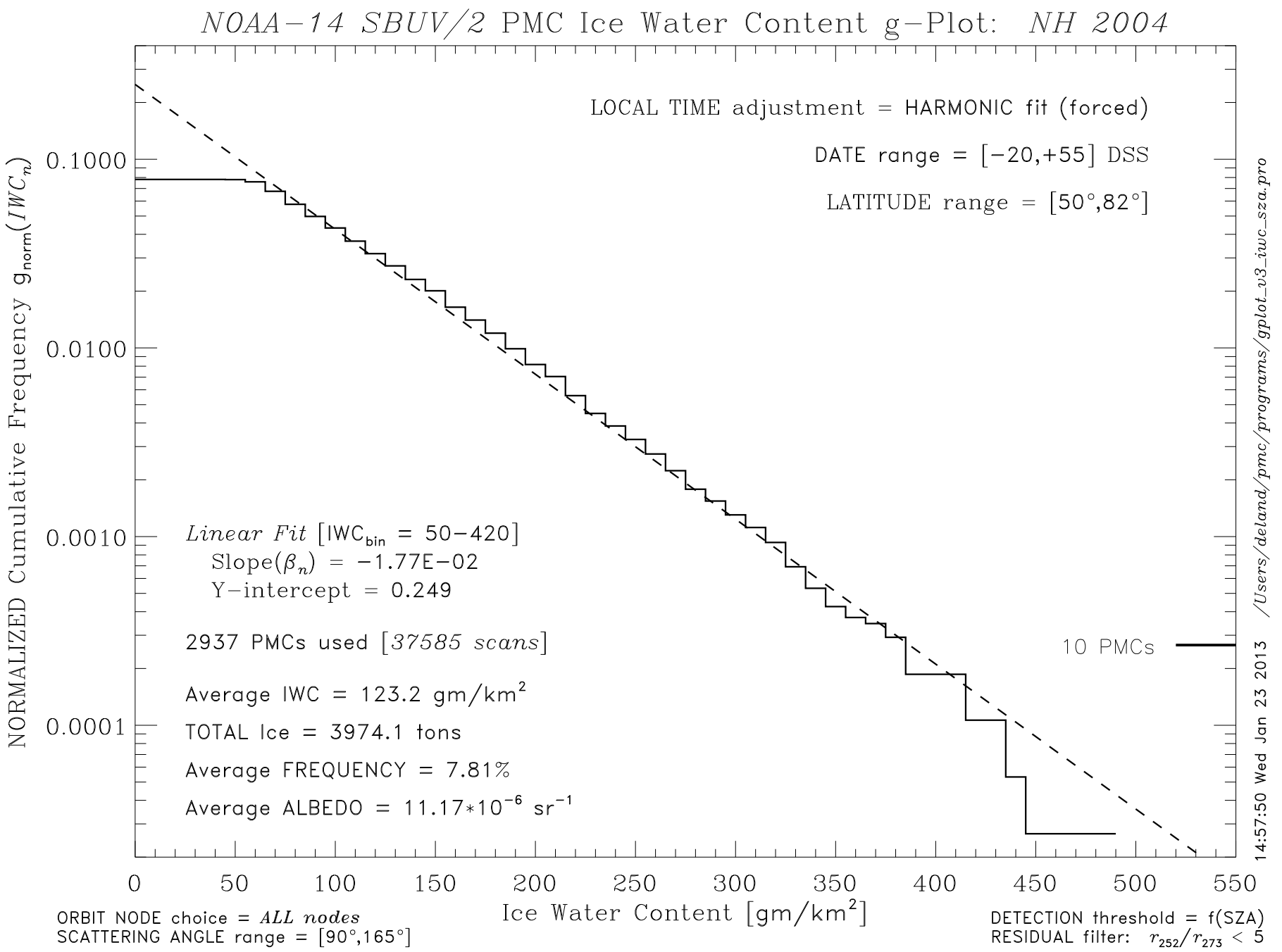

NOAA−14 SBUV/2 PMC Ice Water Content g−Plot: NH 1996
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC_bin = 50−450]
Slope(β_n) = −1.54E−02
Y−intercept = 0.384
3922 PMCs used [31260 scans]
Average IWC = 136.7 gm/km^2
TOTAL Ice = 4346.0 tons
Average FREQUENCY = 12.55%
Average ALBEDO = 13.13∗10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
14:57:31 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$

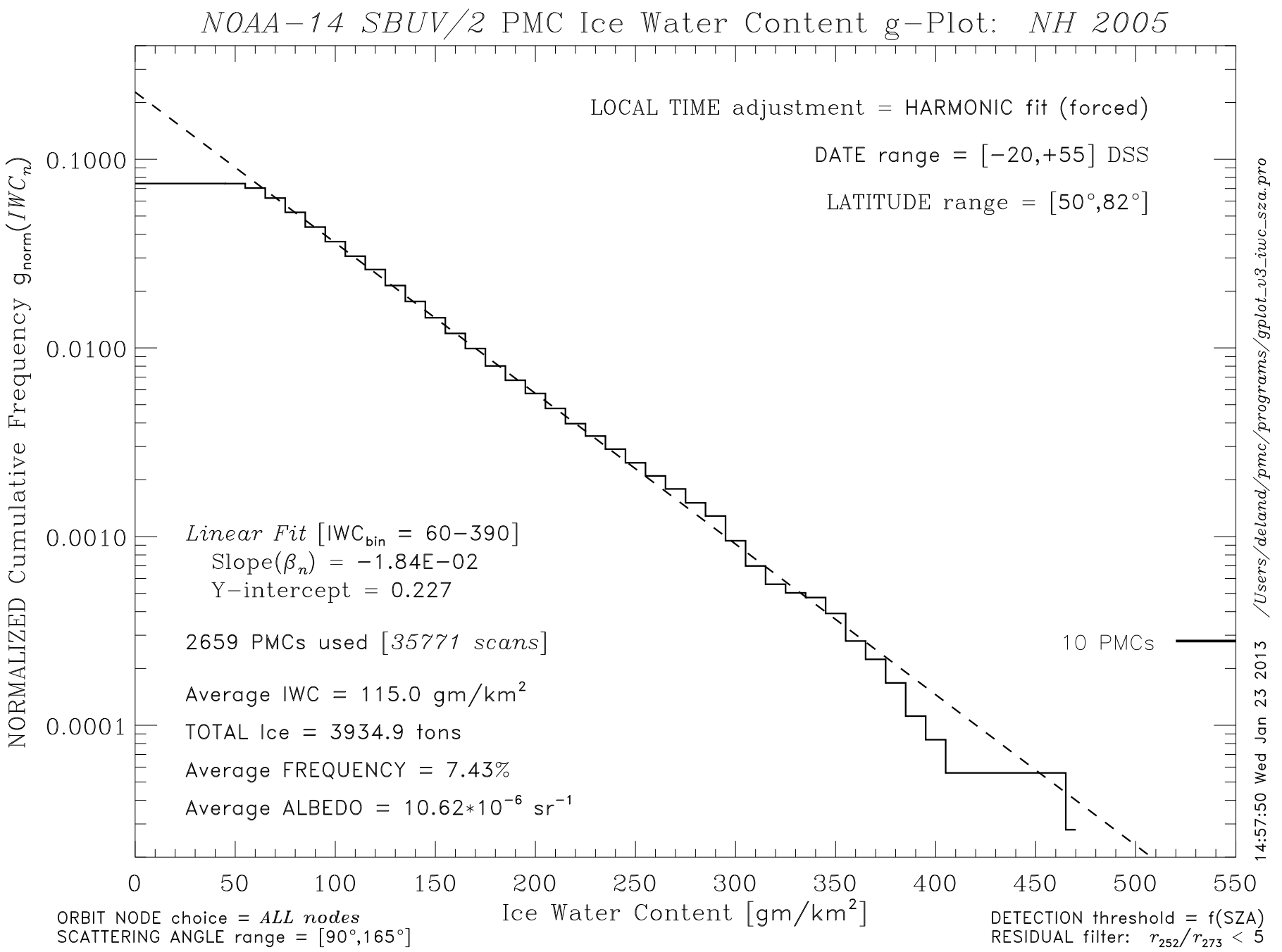

NOAA−14 SBUV/2 PMC Ice Water Content g−Plot: NH 1997
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC$_{bin}$ = 60−470]
Slope(β_n) = −1.59E−02
Y−intercept = 0.566
5450 PMCs used [36019 scans]
Average IWC = 141.5 gm/km^2
TOTAL Ice = 4574.3 tons
Average FREQUENCY = 15.13%
Average ALBEDO = 13.41∗10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
14:57:32 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$


NOAA−14 SBUV/2 PMC Ice Water Content g−Plot: NH 1998
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC_{bin} = 60−410]
Slope(β_n) = −1.83E−02
Y−intercept = 0.179
1977 PMCs used [28472 scans]
Average IWC = 111.3 gm/km^2
TOTAL Ice = 3870.0 tons
Average FREQUENCY = 6.94%
Average ALBEDO = 10.84∗10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
14:57:33 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$

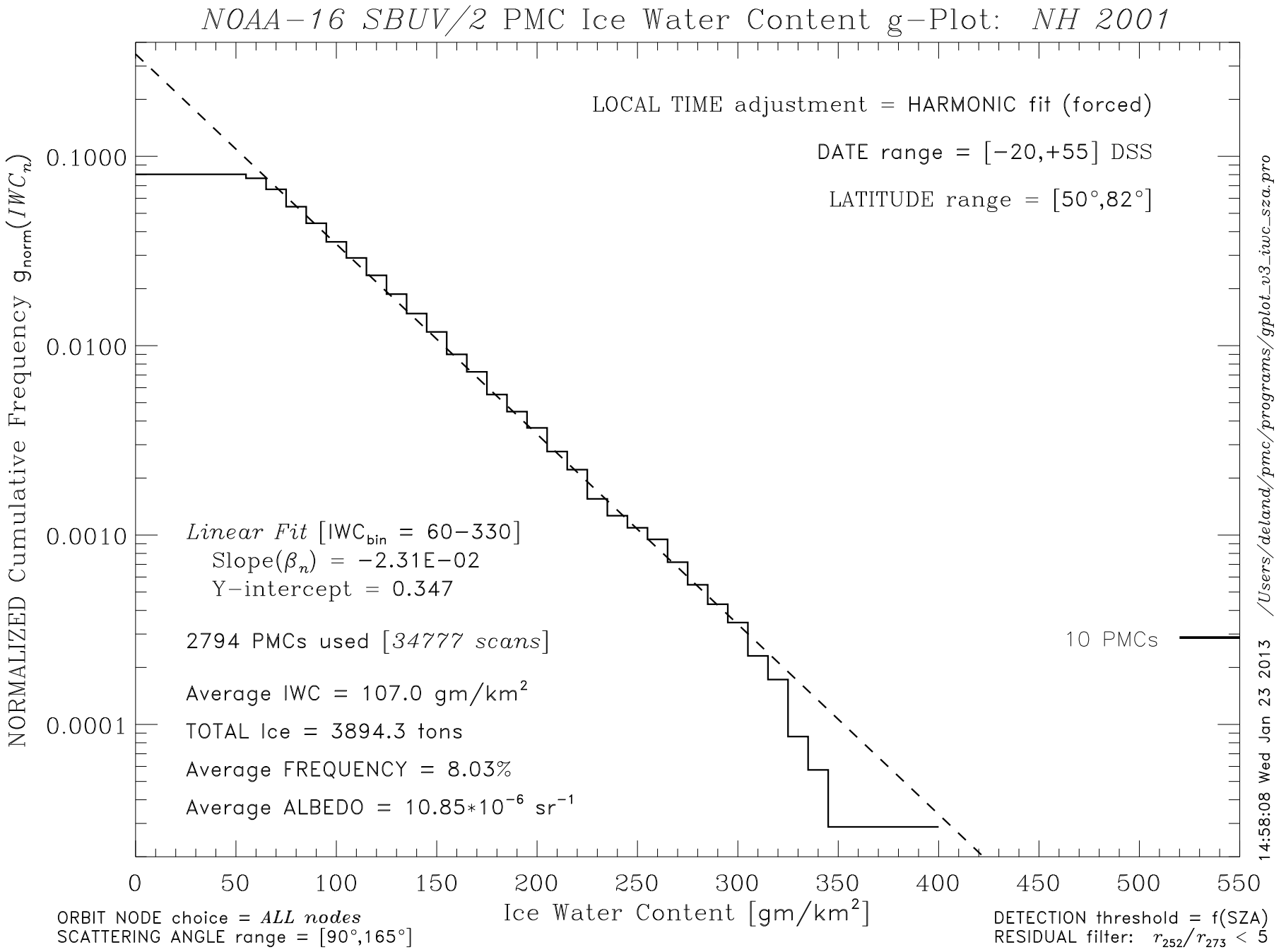

NOAA−14 SBUV/2 PMC Ice Water Content g−Plot: NH 1999
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC$_{bin}$ = 60−400]
Slope(β_n) = −1.79E−02
Y−intercept = 0.196
2998 PMCs used [40996 scans]
Average IWC = 113.2 gm/km^2
TOTAL Ice = 3903.4 tons
Average FREQUENCY = 7.31%
Average ALBEDO = 10.87∗10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:57:33 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

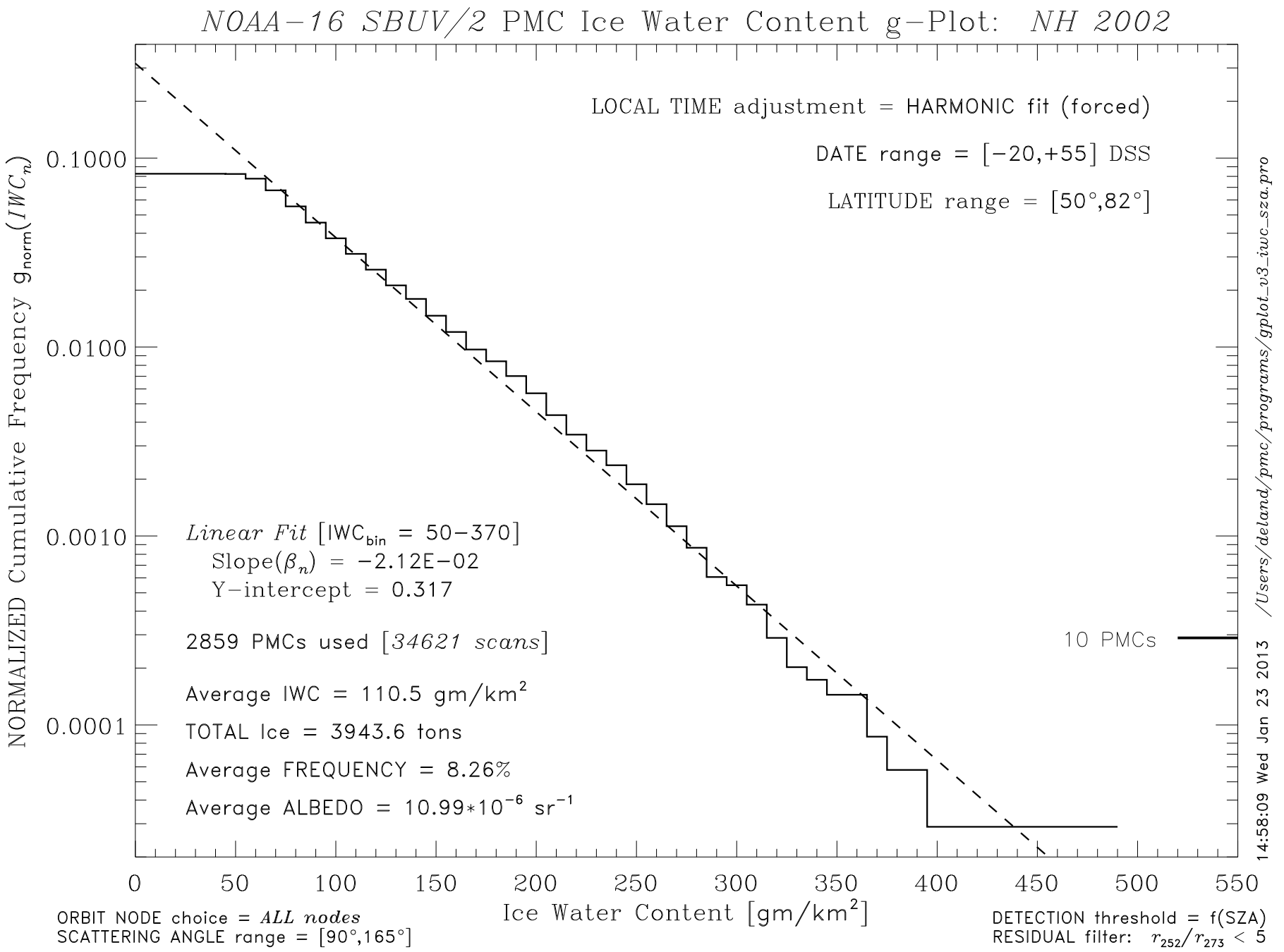

NOAA−14 SBUV/2 PMC Ice Water Content g−Plot: NH 2000
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC_{bin} = 60−340]
Slope(β_n) = −2.10E−02
Y−intercept = 0.221
2458 PMCs used [42974 scans]
Average IWC = 111.6 gm/km^2
TOTAL Ice = 3801.8 tons
Average FREQUENCY = 5.72%
Average ALBEDO = 10.55∗10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:57:34 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro


NOAA−14 SBUV/2 PMC Ice Water Content g−Plot: NH 2004
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC$_{bin}$ = 50−420]
Slope(β_n) = −1.77E−02
Y−intercept = 0.249
2937 PMCs used [37585 scans]
Average IWC = 123.2 gm/km^2
TOTAL Ice = 3974.1 tons
Average FREQUENCY = 7.81%
Average ALBEDO = 11.17∗10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:57:50 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro


NOAA−14 SBUV/2 PMC Ice Water Content g−Plot: NH 2005
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC$_{bin}$ = 60−390]
Slope(β_n) = −1.84E−02
Y−intercept = 0.227
2659 PMCs used [35771 scans]
Average IWC = 115.0 gm/km^2
TOTAL Ice = 3934.9 tons
Average FREQUENCY = 7.43%
Average ALBEDO = 10.62∗10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
14:57:50 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$

NOAA−14 SBUV/2 PMC Ice Water Content g−Plot: NH 2006
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWCbin = 50−410]
Slope(βn) = −1.82E−02
Y−intercept = 0.242
2200 PMCs used [29609 scans]
Average IWC = 121.1 gm/km2
TOTAL Ice = 3946.7 tons
Average FREQUENCY = 7.43%
Average ALBEDO = 11.23*10−6 sr−1
10 PMCs
NORMALIZED Cumulative Frequency gnorm(IWCn)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r252/r273 < 5
14:57:51 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro


NOAA−16 SBUV/2 PMC Ice Water Content g−Plot: NH 2001
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC_{bin} = 60−330]
Slope(β_n) = −2.31E−02
Y−intercept = 0.347
2794 PMCs used [34777 scans]
Average IWC = 107.0 gm/km^2
TOTAL Ice = 3894.3 tons
Average FREQUENCY = 8.03%
Average ALBEDO = 10.85∗10^{-6} sr^{-1}
10 PMCs
0 50 100 150 200 250 300 350 400 450 500 550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:58:08 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

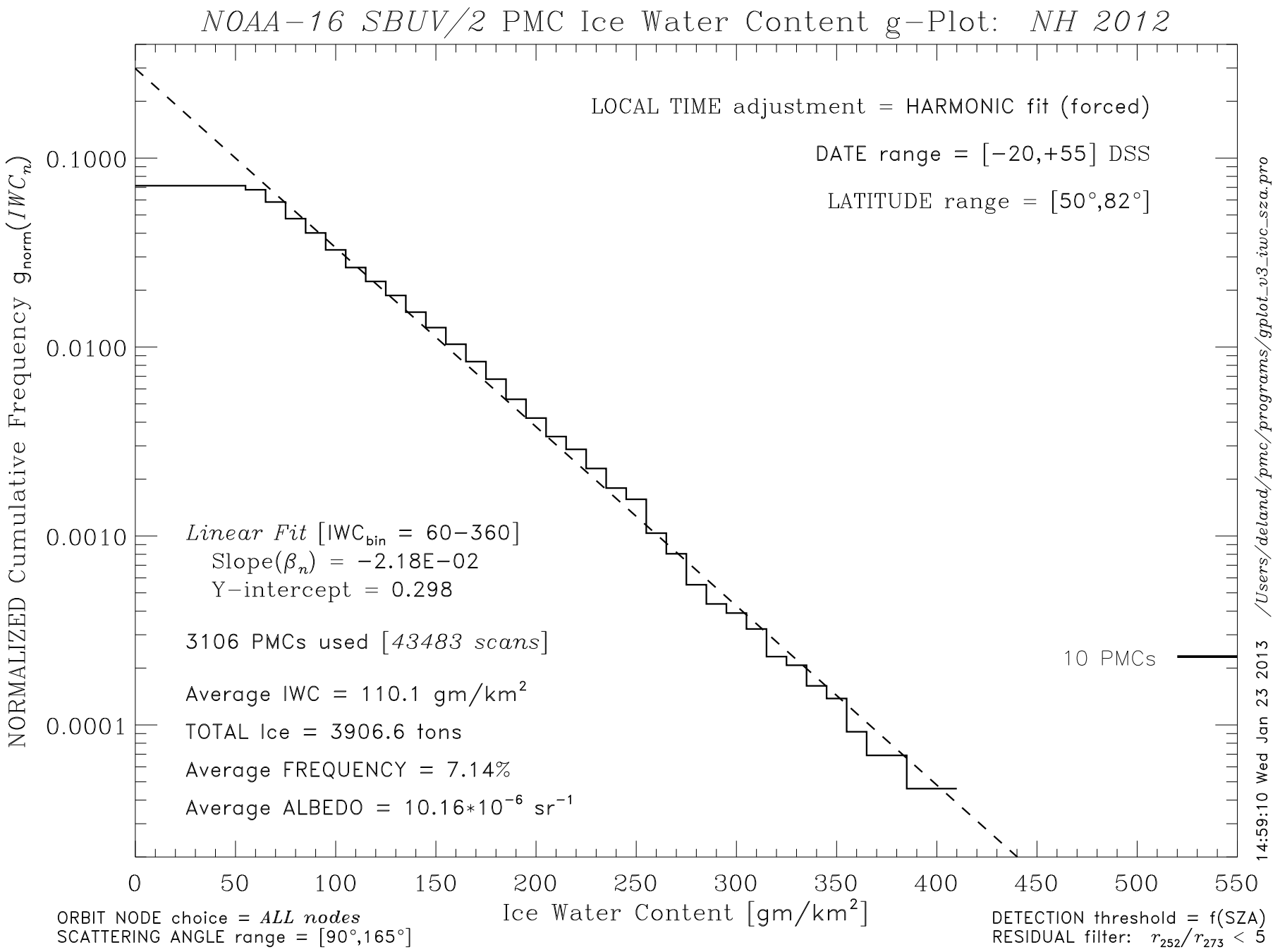

NOAA−16 SBUV/2 PMC Ice Water Content g−Plot: NH 2002
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC$_{bin}$ = 50−370]
Slope(β_n) = −2.12E−02
Y−intercept = 0.317
2859 PMCs used [34621 scans]
Average IWC = 110.5 gm/km^2
TOTAL Ice = 3943.6 tons
Average FREQUENCY = 8.26%
Average ALBEDO = 10.99∗10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
14:58:09 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$

NOAA−16 SBUV/2 PMC Ice Water Content g−Plot: NH 2003
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWC$_{bin}$ = 50−470]
Slope(β_n) = −1.54E−02
Y−intercept = 0.263
3751 PMCs used [35732 scans]
Average IWC = 125.7 gm/km^2
TOTAL Ice = 4149.0 tons
Average FREQUENCY = 10.50%
Average ALBEDO = 12.24*10^{-6} sr^{-1}
10 PMCs
NORMALIZED Cumulative Frequency g$_{norm}$(IWC$_n$)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:58:10 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

NOAA−16 SBUV/2 PMC Ice Water Content g−Plot: NH 2005
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWC$_{bin}$ = 60−430]
Slope(β_n) = −1.77E−02
Y−intercept = 0.231
3461 PMCs used [39036 scans]
Average IWC = 114.2 gm/km^2
TOTAL Ice = 4001.0 tons
Average FREQUENCY = 8.87%
Average ALBEDO = 11.09*10^{-6} sr^{-1}
10 PMCs
NORMALIZED Cumulative Frequency g$_{norm}$(IWC$_n$)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r$_{252}$/r$_{273}$ < 5
14:58:22 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

NOAA−16 SBUV/2 PMC Ice Water Content g−Plot: NH 2006
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWCbin = 60−430]
Slope(βn) = −1.81E−02
Y−intercept = 0.292
3996 PMCs used [41695 scans]
Average IWC = 116.9 gm/km2
TOTAL Ice = 4068.8 tons
Average FREQUENCY = 9.58%
Average ALBEDO = 11.10*10−6 sr−1
10 PMCs
NORMALIZED Cumulative Frequency gnorm(IWCn)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r252/r273 < 5
14:58:23 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

NOAA−16 SBUV/2 PMC Ice Water Content g−Plot: NH 2007
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWC$_{bin}$ = 60−460]
Slope(β_n) = −1.56E−02
Y−intercept = 0.286
4375 PMCs used [43518 scans]
Average IWC = 128.0 gm/km^2
TOTAL Ice = 4135.2 tons
Average FREQUENCY = 10.05%
Average ALBEDO = 11.81*10^{-6} sr^{-1}
10 PMCs
NORMALIZED Cumulative Frequency g$_{norm}$(IWC$_n$)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:58:24 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro


NOAA−16 SBUV/2 PMC Ice Water Content g−Plot: NH 2012
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC_{bin} = 60−360]
Slope(β_n) = −2.18E−02
Y−intercept = 0.298
3106 PMCs used [43483 scans]
Average IWC = 110.1 gm/km^2
TOTAL Ice = 3906.6 tons
Average FREQUENCY = 7.14%
Average ALBEDO = 10.16∗10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
14:59:10 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$

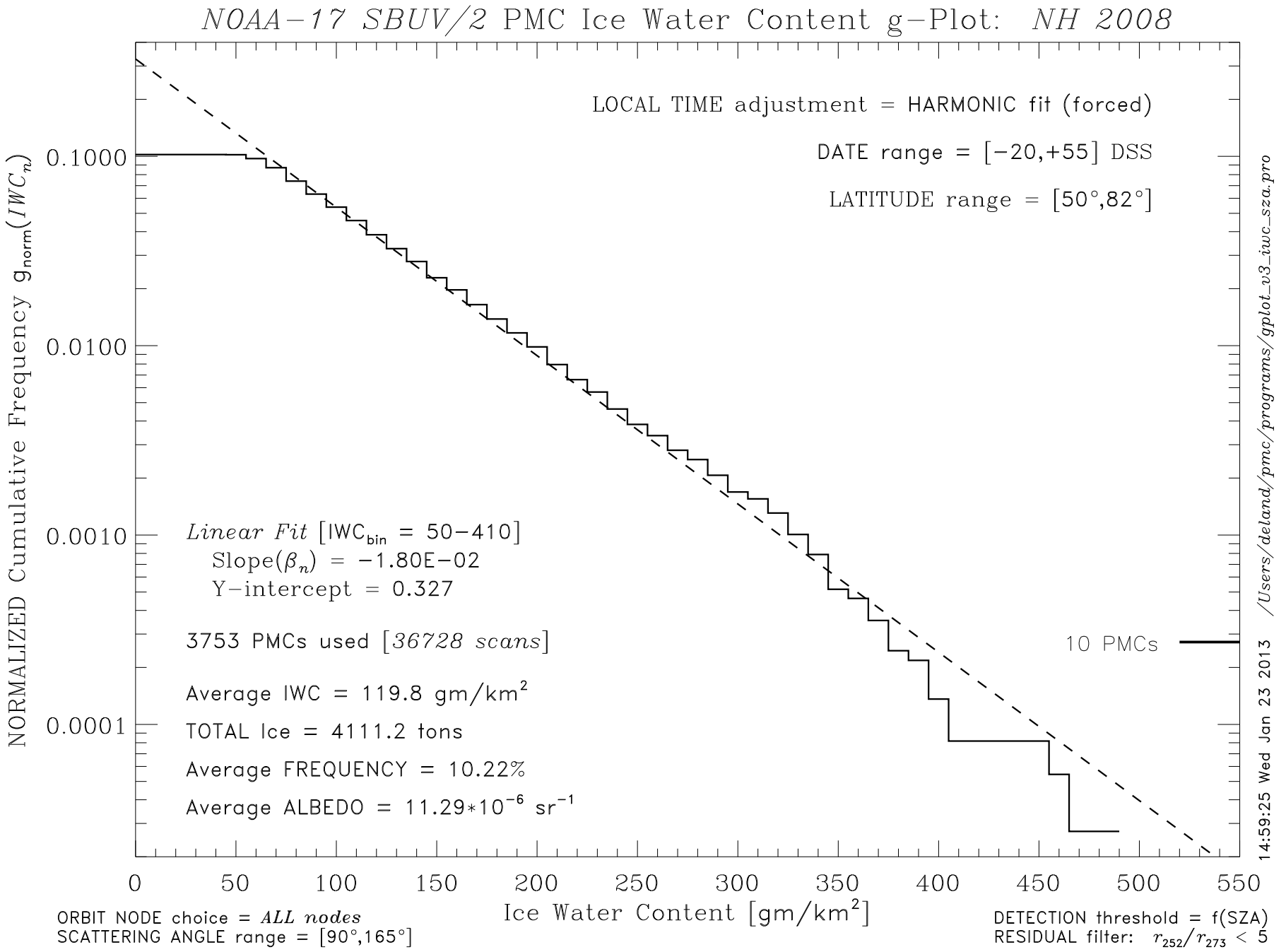
NOAA−17 SBUV/2 PMC Ice Water Content g−Plot: NH 2003
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWC$_{bin}$ = 50−450]
Slope(β_n) = −1.62E−02
Y−intercept = 0.281
3122 PMCs used [30894 scans]
Average IWC = 124.8 gm/km^2
TOTAL Ice = 4110.3 tons
Average FREQUENCY = 10.11%
Average ALBEDO = 11.60*10^{-6} sr^{-1}
10 PMCs
NORMALIZED Cumulative Frequency g$_{norm}$(IWC$_n$)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:59:21 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

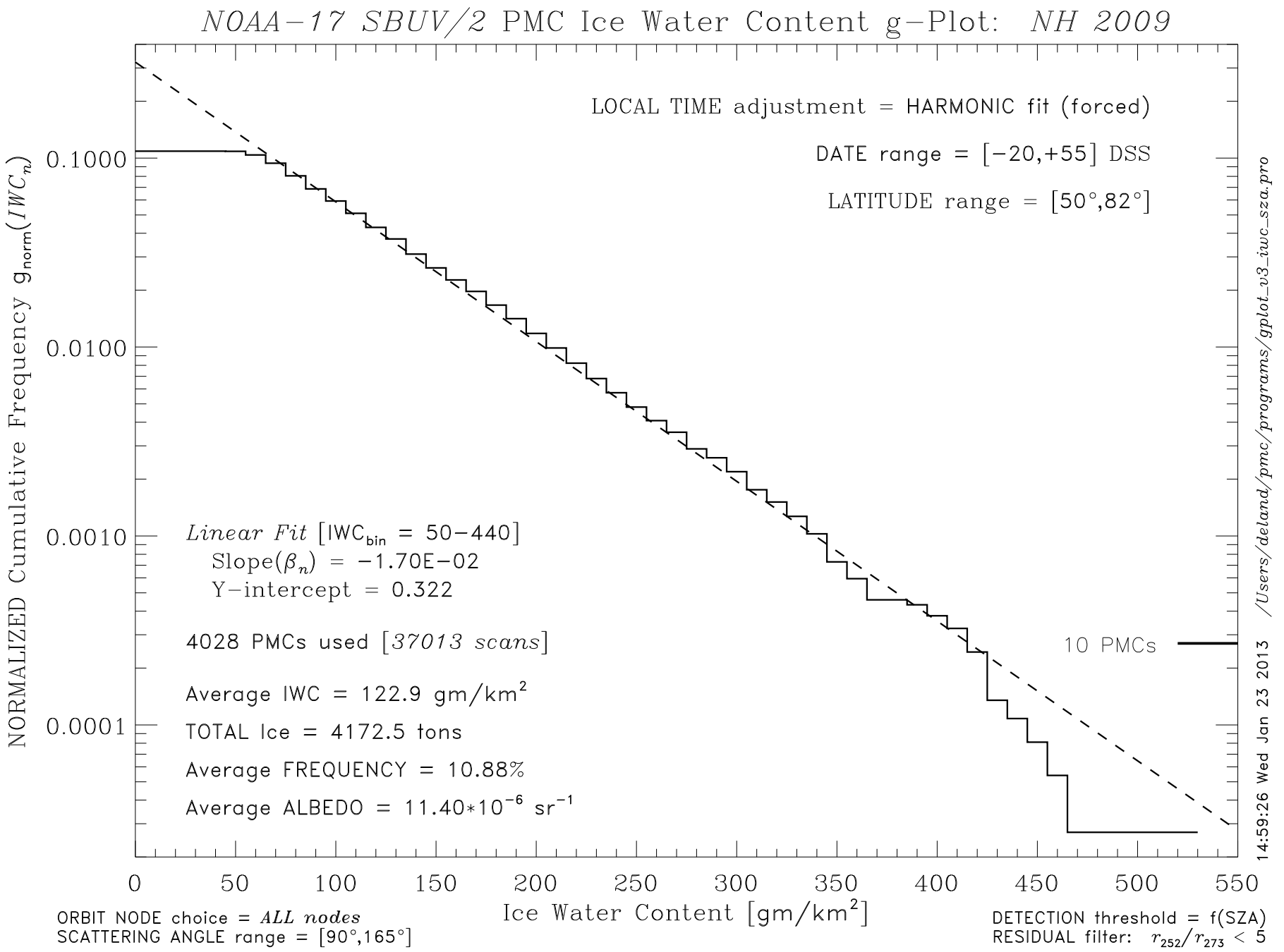
NOAA−17 SBUV/2 PMC Ice Water Content g−Plot: NH 2004
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWC$_{bin}$ = 50−450]
Slope(β_n) = −1.68E−02
Y−intercept = 0.314
3333 PMCs used [30503 scans]
Average IWC = 123.9 gm/km^2
TOTAL Ice = 4152.1 tons
Average FREQUENCY = 10.93%
Average ALBEDO = 11.65*10^{-6} sr^{-1}
10 PMCs
NORMALIZED Cumulative Frequency g$_{norm}$(IWC$_n$)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:59:22 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

NOAA−17 SBUV/2 PMC Ice Water Content g−Plot: NH 2005
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWCbin = 50−380]
Slope(βn) = −1.93E−02
Y−intercept = 0.308
3121 PMCs used [33066 scans]
Average IWC = 115.1 gm/km2
TOTAL Ice = 4027.3 tons
Average FREQUENCY = 9.44%
Average ALBEDO = 10.99*10−6 sr−1
10 PMCs
NORMALIZED Cumulative Frequency gnorm(IWCn)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r252/r273 < 5
14:59:23 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

NOAA−17 SBUV/2 PMC Ice Water Content g−Plot: NH 2006
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWC$_{bin}$ = 50−420]
Slope(β_n) = −1.67E−02
Y−intercept = 0.296
3686 PMCs used [34442 scans]
Average IWC = 122.5 gm/km^2
TOTAL Ice = 4152.4 tons
Average FREQUENCY = 10.70%
Average ALBEDO = 11.53*10^{-6} sr^{-1}
10 PMCs
NORMALIZED Cumulative Frequency g$_{norm}$(IWC$_n$)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:59:24 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

NOAA−17 SBUV/2 PMC Ice Water Content g−Plot: NH 2007
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWC$_{bin}$ = 50−450]
Slope(β_n) = −1.64E−02
Y−intercept = 0.355
3933 PMCs used [3469O scans]
Average IWC = 130.8 gm/km^2
TOTAL Ice = 4226.0 tons
Average FREQUENCY = 11.34%
Average ALBEDO = 12.17*10^{-6} sr^{-1}
10 PMCs
NORMALIZED Cumulative Frequency g$_{norm}$(IWC$_n$)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r$_{252}$/r$_{273}$ < 5
14:59:24 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro


NOAA−17 SBUV/2 PMC Ice Water Content g−Plot: NH 2008
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC$_{bin}$ = 50−410]
Slope(β_n) = −1.80E−02
Y−intercept = 0.327
3753 PMCs used [36728 scans]
Average IWC = 119.8 gm/km^2
TOTAL Ice = 4111.2 tons
Average FREQUENCY = 10.22%
Average ALBEDO = 11.29∗10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:59:25 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro


NOAA−17 SBUV/2 PMC Ice Water Content g−Plot: NH 2009
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC$_{bin}$ = 50−440]
Slope(β_n) = −1.70E−02
Y−intercept = 0.322
4028 PMCs used [37013 scans]
Average IWC = 122.9 gm/km^2
TOTAL Ice = 4172.5 tons
Average FREQUENCY = 10.88%
Average ALBEDO = 11.40∗10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:59:26 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

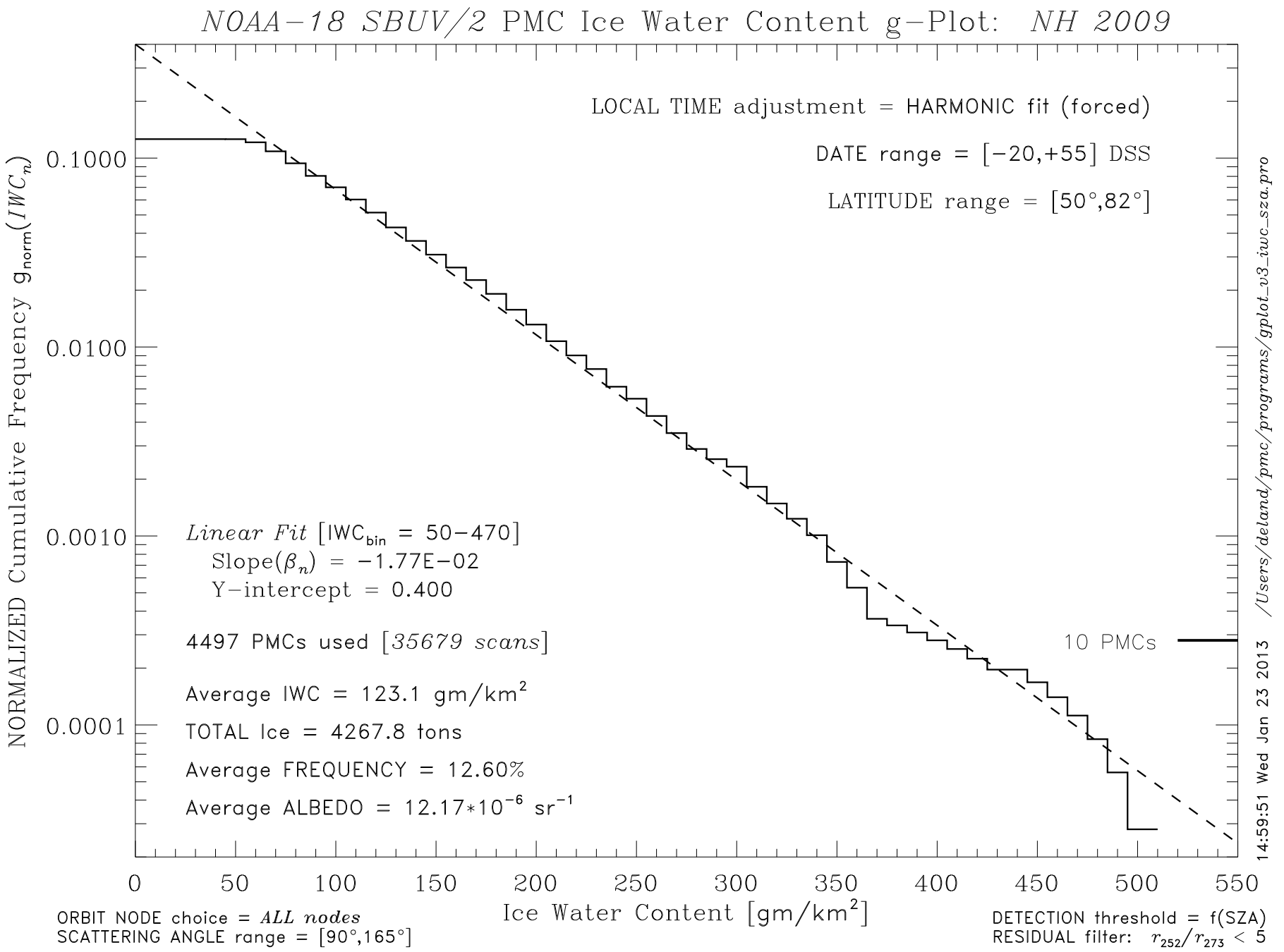
NOAA−17 SBUV/2 PMC Ice Water Content g−Plot: NH 2010
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWC_bin = 50−430]
Slope(β_n) = −1.80E−02
Y−intercept = 0.248
3419 PMCs used [38976 scans]
Average IWC = 114.8 gm/km²
TOTAL Ice = 4016.2 tons
Average FREQUENCY = 8.77%
Average ALBEDO = 10.62*10⁻⁶ sr⁻¹
10 PMCs
NORMALIZED Cumulative Frequency g_norm(IWC_n)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km²]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r252/r273 < 5
14:59:26 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

NOAA−17 SBUV/2 PMC Ice Water Content g−Plot: NH 2011
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWCbin = 60−450]
Slope(βn) = −1.65E−02
Y−intercept = 0.264
3848 PMCs used [4609 scans]
Average IWC = 123.4 gm/km2
TOTAL Ice = 4070.5 tons
Average FREQUENCY = 9.25%
Average ALBEDO = 11.21*10−6 sr−1
10 PMCs
NORMALIZED Cumulative Frequency gnorm(IWCn)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r252/r273 < 5
14:59:27 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

NOAA−18 SBUV/2 PMC Ice Water Content g−Plot: NH 2005
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWCbin = 50−380]
Slope(βn) = −2.0.4E−02
Y−intercept = 0.407
3473 PMCs used [32545 scans]
Average IWC = 115.8 gm/km2
TOTAL Ice = 4089.6 tons
Average FREQUENCY = 10.67%
Average ALBEDO = 11.48*10−6 sr−1
10 PMCs
NORMALIZED Cumulative Frequency gnorm(IWCn)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r252/r273 < 5
14:59:38 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

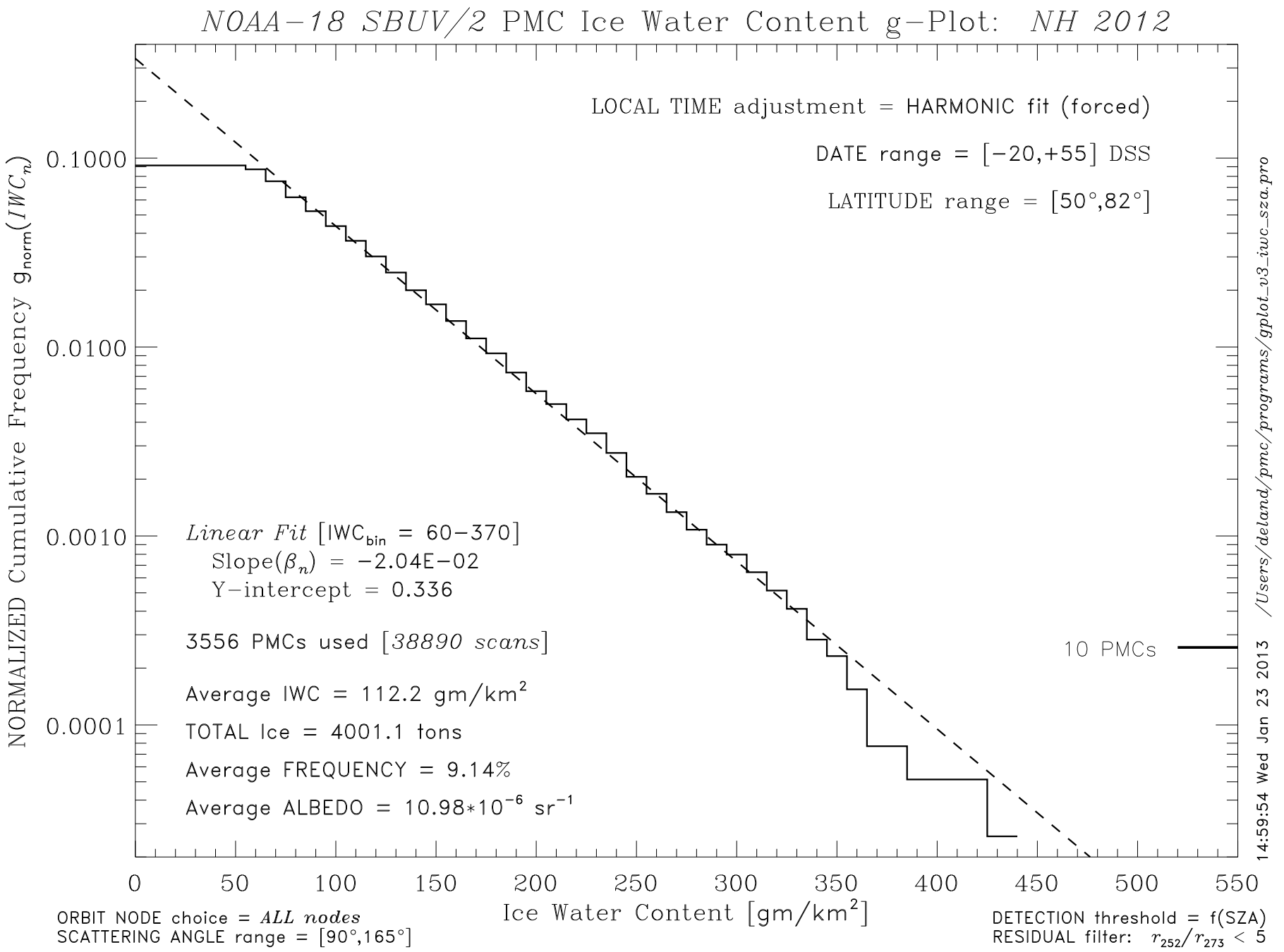
NOAA-18 SBUV/2 PMC Ice Water Content g-Plot: NH 2006
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [-20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWCbin = 60-420]
Slope(βn) = -1.91E-02
Y-intercept = 0.478
4237 PMCs used [35563 scans]
Average IWC = 121.8 gm/km2
TOTAL Ice = 4204.9 tons
Average FREQUENCY = 11.91%
Average ALBEDO = 12.03*10-6 sr-1
10 PMCs
NORMALIZED Cumulative Frequency gnorm(IWCn)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r252/r273 < 5
14:59:38 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

NOAA−18 SBUV/2 PMC Ice Water Content g−Plot: NH 2007
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWC$_{bin}$ = 50−460]
Slope(β_n) = −1.60E−02
Y−intercept = 0.390
4537 PMCs used [35245 scans]
Average IWC = 130.7 gm/km^2
TOTAL Ice = 4311.8 tons
Average FREQUENCY = 12.87%
Average ALBEDO = 12.84*10^{-6} sr^{-1}
10 PMCs
NORMALIZED Cumulative Frequency g$_{norm}$(IWC$_n$)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:59:39 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

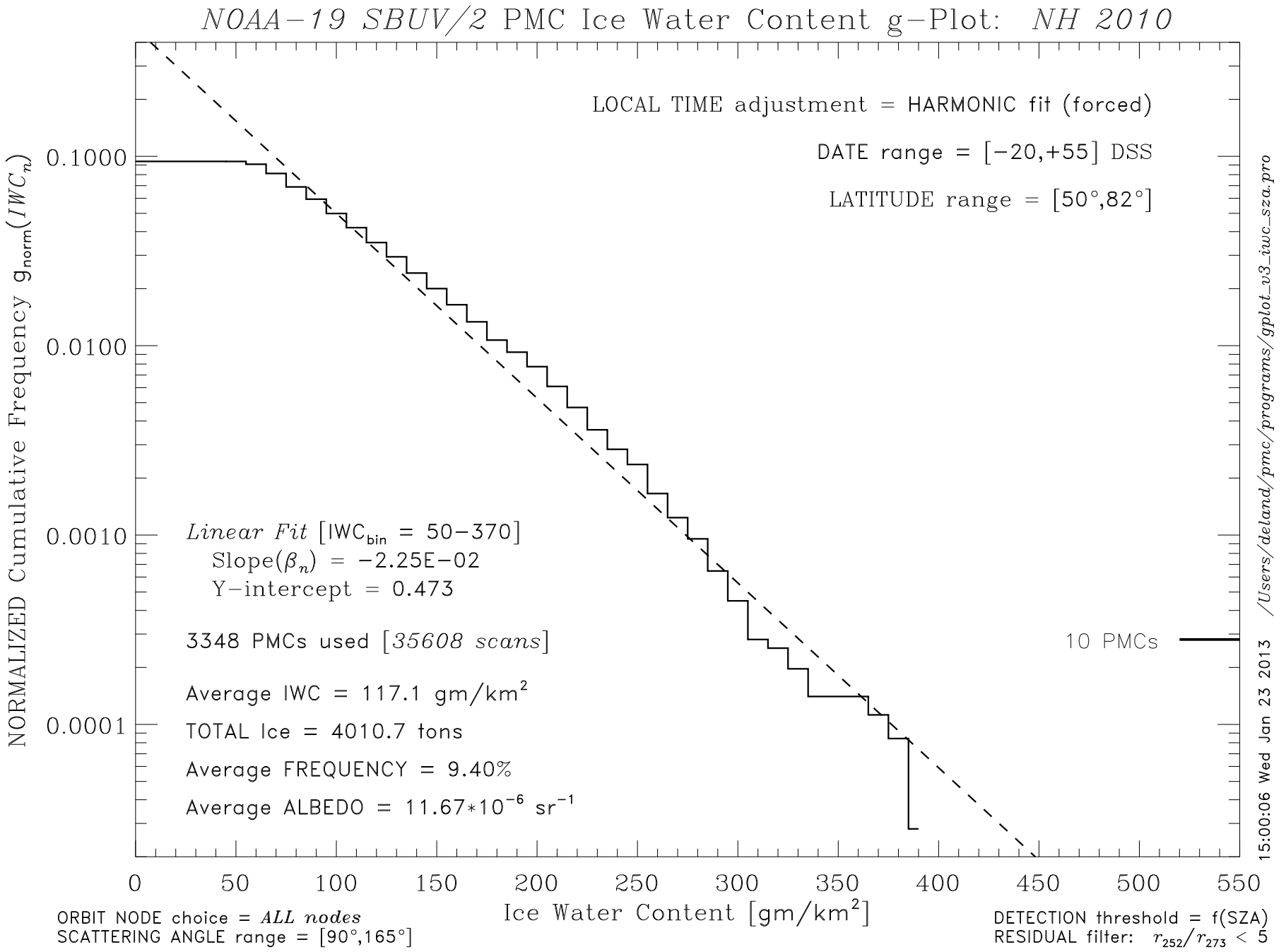

NOAA−18 SBUV/2 PMC Ice Water Content g−Plot: NH 2009
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC$_{bin}$ = 50−470]
Slope(β_n) = −1.77E−02
Y−intercept = 0.400
4497 PMCs used [35679 scans]
Average IWC = 123.1 gm/km^2
TOTAL Ice = 4267.8 tons
Average FREQUENCY = 12.60%
Average ALBEDO = 12.17∗10^{-6} sr^{-1}
10 PMCs
0 50 100 150 200 250 300 350 400 450 500 550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:59:51 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

NOAA−18 SBUV/2 PMC Ice Water Content g−Plot: NH 2010
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWCbin = 60−380]
Slope(βn) = −2.13E−02
Y−intercept = 0.470
3726 PMCs used [35389 scans]
Average IWC = 116.9 gm/km2
TOTAL Ice = 4086.7 tons
Average FREQUENCY = 10.53%
Average ALBEDO = 11.58*10−6 sr−1
10 PMCs
NORMALIZED Cumulative Frequency gnorm(IWCn)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r252/r273 < 5
14:59:52 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

NOAA-18 SBUV/2 PMC Ice Water Content g-Plot: NH 2011
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [-20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWCbin = 50-440]
Slope(βn) = -1.78E-02
Y-intercept = 0.334
4072 PMCs used [37148 scans]
Average IWC = 120.7 gm/km2
TOTAL Ice = 4139.9 tons
Average FREQUENCY = 10.96%
Average ALBEDO = 11.78*10-6 sr-1
10 PMCs
NORMALIZED Cumulative Frequency gnorm(IWCn)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r252/r273 < 5
14:59:53 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro


NOAA−18 SBUV/2 PMC Ice Water Content g−Plot: NH 2012
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC$_{bin}$ = 60−370]
Slope(β_n) = −2.04E−02
Y−intercept = 0.336
3556 PMCs used [38890 scans]
Average IWC = 112.2 gm/km^2
TOTAL Ice = 4001.1 tons
Average FREQUENCY = 9.14%
Average ALBEDO = 10.98∗10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$
14:59:54 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

NOAA-19 SBUV/2 PMC Ice Water Content g-Plot: NH 2009
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [-20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWCbin = 50-450]
Slope(βn) = -1.79E-02
Y-intercept = 0.454
4504 PMCs used [35962 scans]
Average IWC = 127.1 gm/km2
TOTAL Ice = 4283.7 tons
Average FREQUENCY = 12.52%
Average ALBEDO = 12.47*10-6 sr-1
10 PMCs
NORMALIZED Cumulative Frequency gnorm(IWCn)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r252/r273 < 5
15:00:06 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro


NOAA−19 SBUV/2 PMC Ice Water Content g−Plot: NH 2010
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
NORMALIZED Cumulative Frequency $g_{norm}(IWC_n)$
0.1000
0.0100
0.0010
0.0001
Linear Fit [IWC$_{bin}$ = 50−370]
Slope(β_n) = −2.25E−02
Y−intercept = 0.473
3348 PMCs used [35608 scans]
Average IWC = 117.1 gm/km^2
TOTAL Ice = 4010.7 tons
Average FREQUENCY = 9.40%
Average ALBEDO = 11.67∗10^{-6} sr^{-1}
10 PMCs
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km^2]
15:00:06 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: $r_{252}/r_{273} < 5$

NOAA−19 SBUV/2 PMC Ice Water Content g−Plot: NH 2011
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWCbin = 60−400]
Slope(βn) = −1.97E−02
Y−intercept = 0.447
3882 PMCs used [35362 scans]
Average IWC = 120.0 gm/km2
TOTAL Ice = 4130.1 tons
Average FREQUENCY = 10.98%
Average ALBEDO = 11.87*10−6 sr−1
10 PMCs
NORMALIZED Cumulative Frequency gnorm(IWCn)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r252/r273 < 5
15:00:07 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro

NOAA−19 SBUV/2 PMC Ice Water Content g−Plot: NH 2012
LOCAL TIME adjustment = HARMONIC fit (forced)
DATE range = [−20,+55] DSS
LATITUDE range = [50°,82°]
Linear Fit [IWCbin = 50−400]
Slope(βn) = −1.88E−02
Y−intercept = 0.297
3272 PMCs used [34736 scans]
Average IWC = 115.7 gm/km2
TOTAL Ice = 4008.2 tons
Average FREQUENCY = 9.42%
Average ALBEDO = 11.55*10−6 sr−1
10 PMCs
NORMALIZED Cumulative Frequency gnorm(IWCn)
0.1000
0.0100
0.0010
0.0001
0
50
100
150
200
250
300
350
400
450
500
550
Ice Water Content [gm/km2]
ORBIT NODE choice = ALL nodes
SCATTERING ANGLE range = [90°,165°]
DETECTION threshold = f(SZA)
RESIDUAL filter: r252/r273 < 5
15:00:08 Wed Jan 23 2013 /Users/deland/pmc/programs/gplot_v3_iwc_sza.pro