Geospace Model Evaluation to Support Model Transition to Operations. Phase I Report (V.20130831) Supplementary Material

Community Coordinated Modeling Center

Appendix A&B: Skill Scores for Individual Events

Figures A1-A6 show probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the *dB/dt* thresholds a) 0.3 nT/s, b) 0.7 nT/s, c) 1.1 nT/s and d) 1.5 nT/s for six individual events 1-6. In all figures the top panel shows POD and POFD obtained by integrating over the three mid-latitude stations and the bottom panel shows POD and POFD obtained by integrating over the three high-latitude stations. The models are ordered according to their POD. The model with the largest POD is the leftmost in all panels

Figures B1-B6 show Heidke Skill Score (HSS) for the *dB/dt* thresholds a) 0.3 nT/s, b) 0.7 nT/s, c) 1.1 nT/s and d) 1.5 nT/s for six individual events 1-6. In all panels the top panel shows HSS obtained by integrating over the three mid-latitude stations and the bottom panel shows HSS obtained by integrating over the three high-latitude stations. The models are ordered according to their HSS. The model with the largest HSS is the leftmost in all panels.

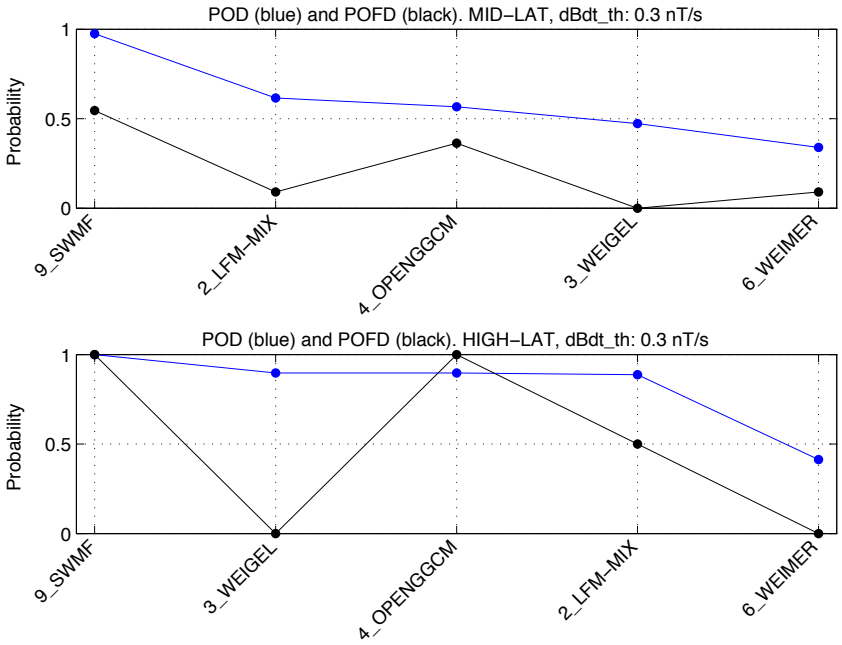

Figure A1a: Event 1: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 0.3 nT/s.

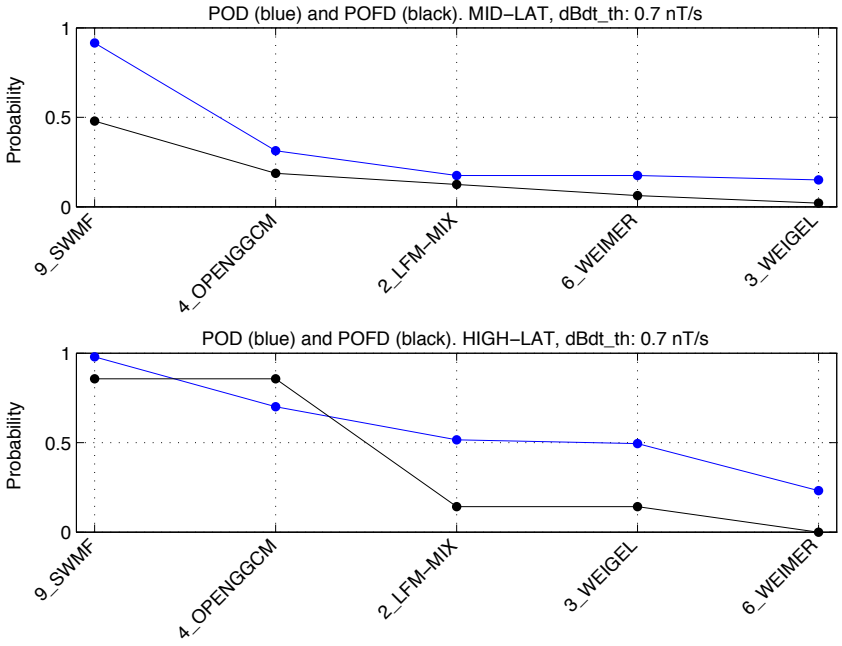

Figure A1b: Event 1: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 0.7 nT/s.

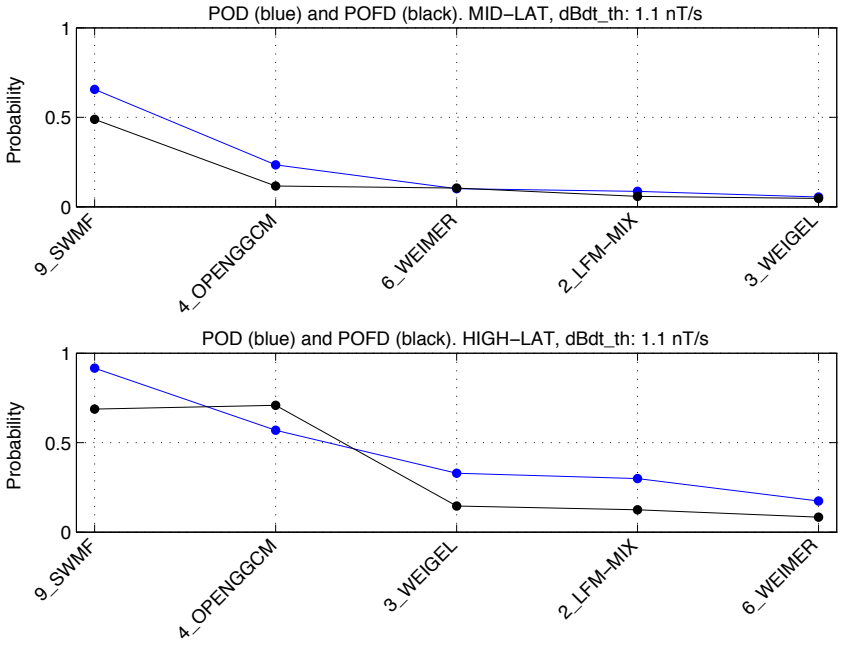

Figure A1c: Event 1: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 1.1 nT/s.

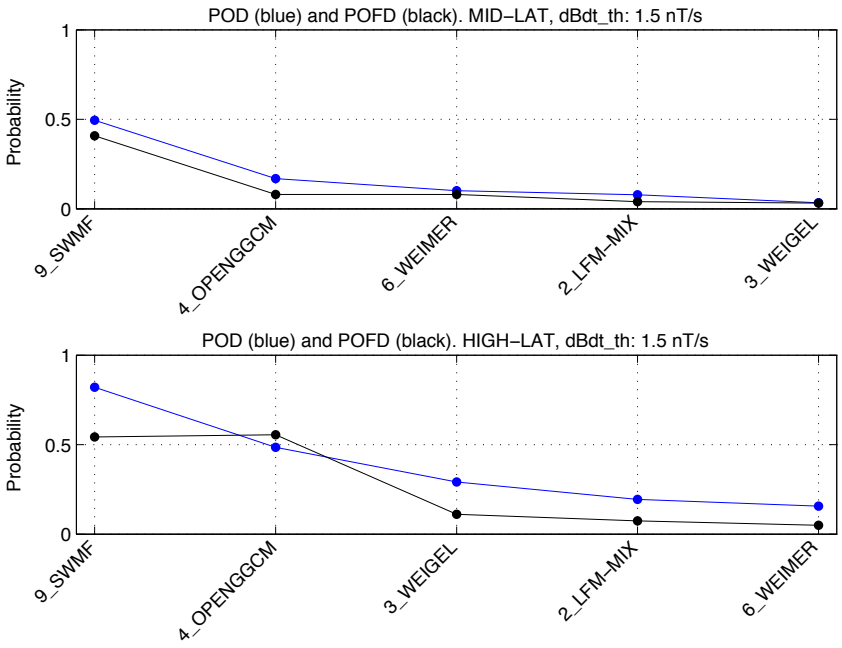

Figure A1d: Event 1: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 1.5 nT/s.

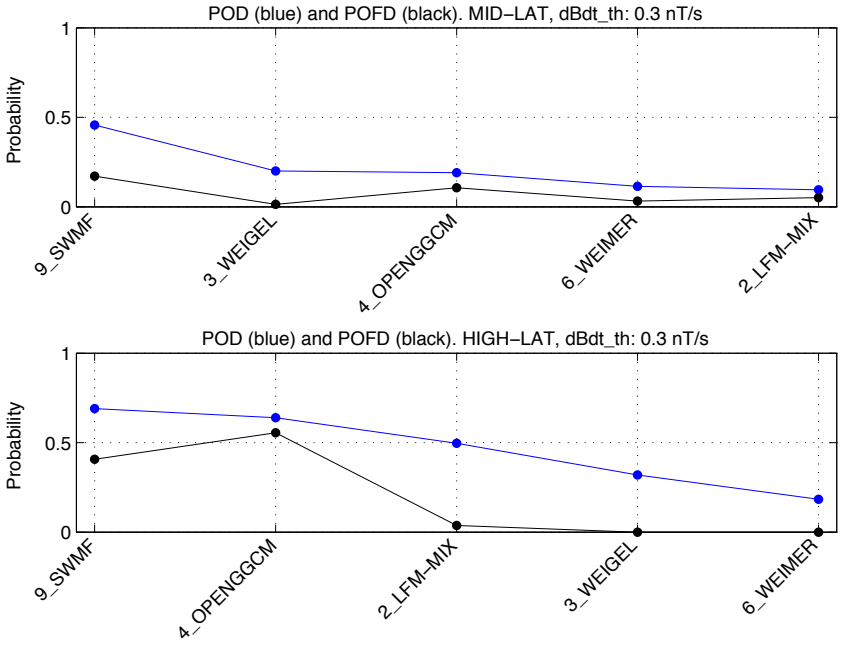

Figure A2a: Event 2: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 0.3 nT/s.

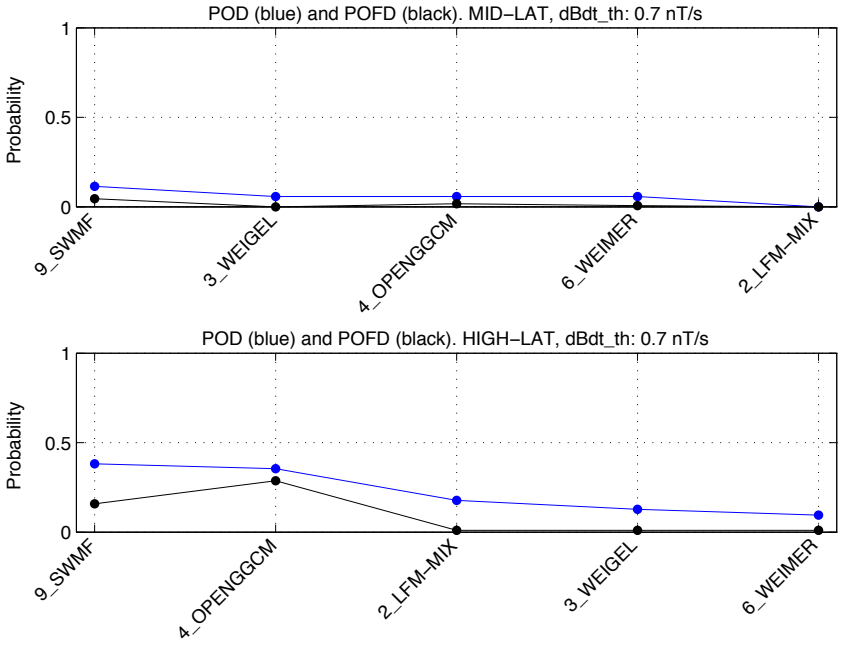

Figure A2b: Event 2: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 0.7 nT/s.

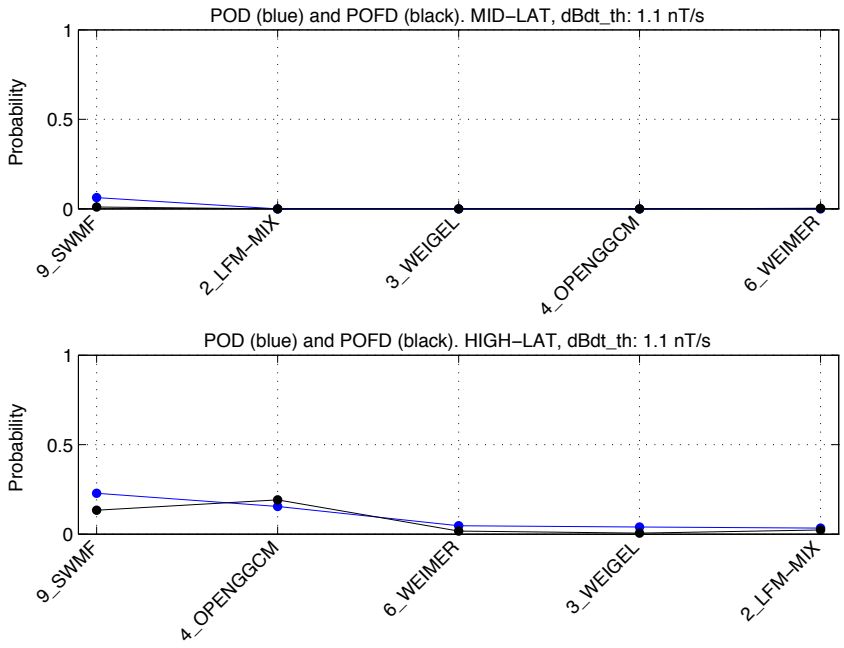

Figure A2c: Event 2: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 1.1 nT/s

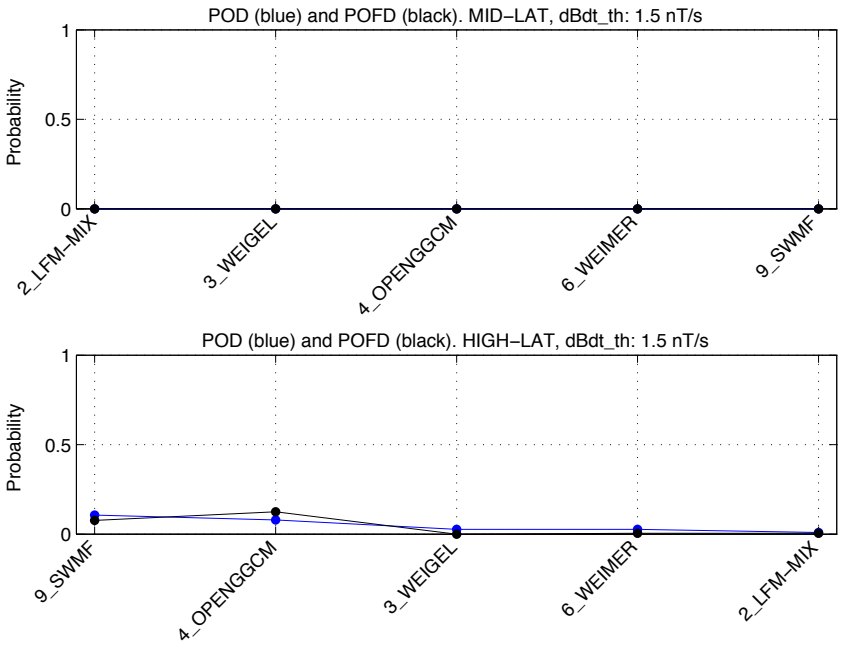

Figure A2d: Event 2: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 1.5 nT/s

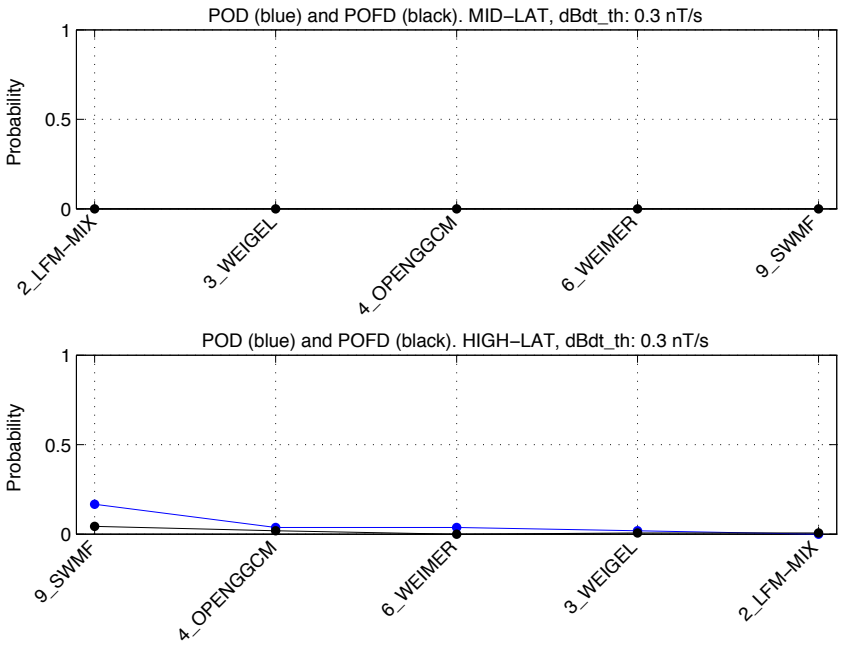

Figure A3a: Event 3: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 0.3 nT/s

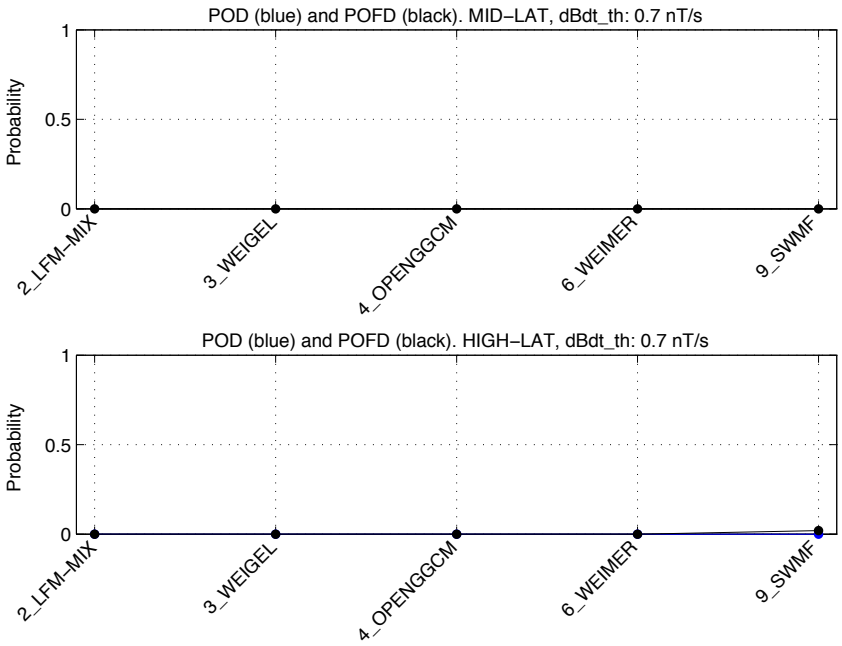

Figure A3b: Event 3: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 0.7 nT/s

Figure A3c: Event 3: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 1.1 nT/s

Figure A3d: Event 3: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 1.5 nT/s

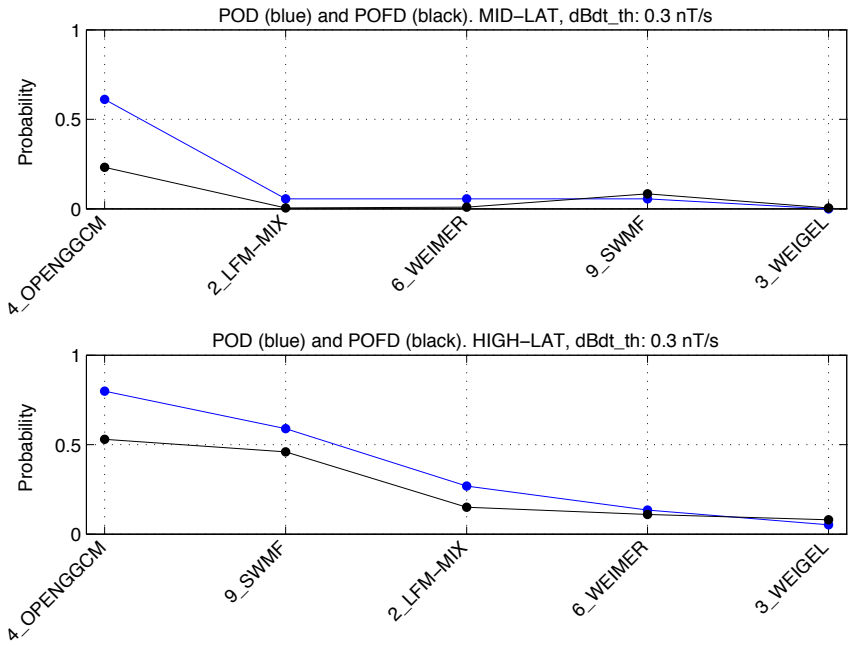

Figure A4a: Event 4: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 0.3 nT/s

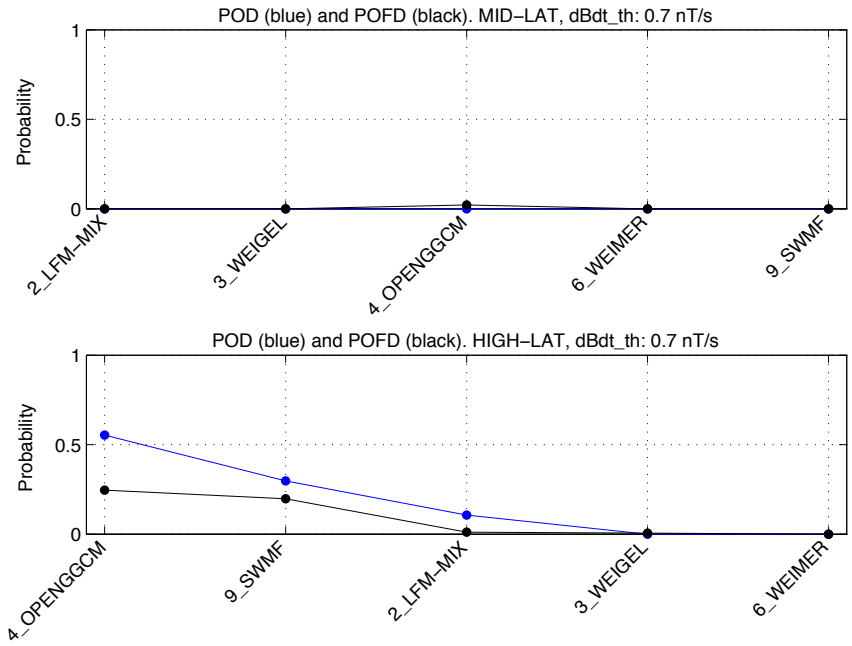

Figure A4b: Event 4: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 0.7 nT/s

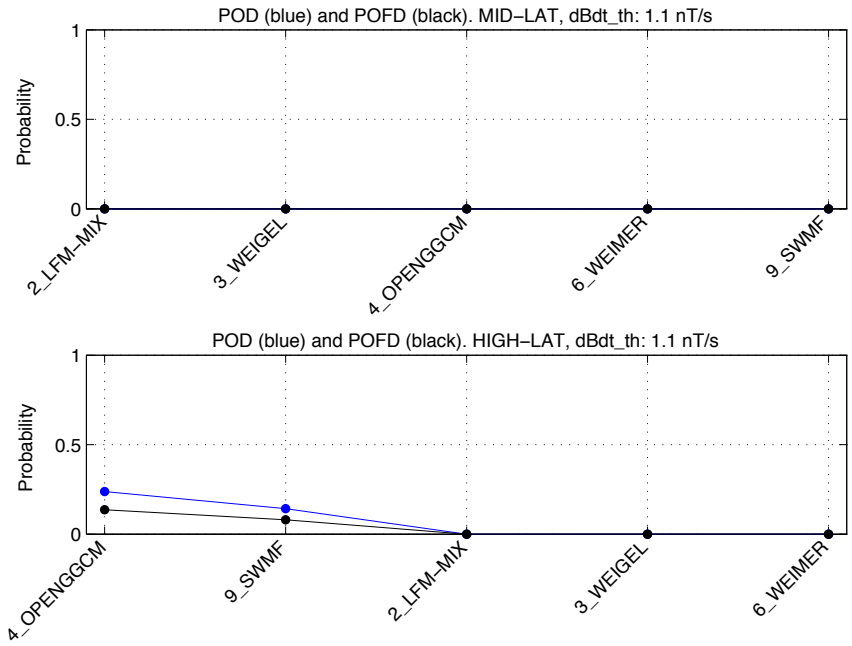

Figure A4c: Event 4: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 1.1 nT/s

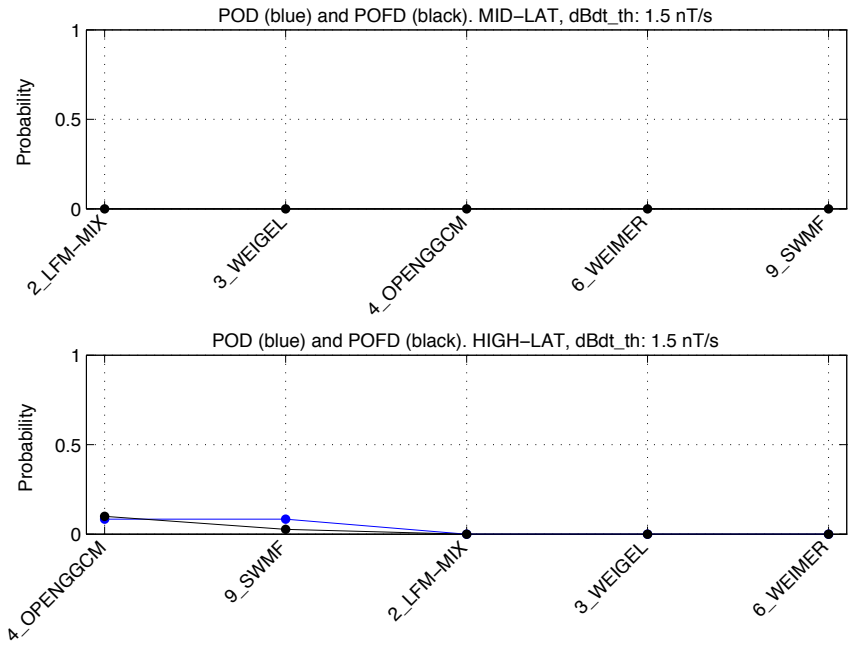

Figure A4d: Event 4: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 1.5 nT/s

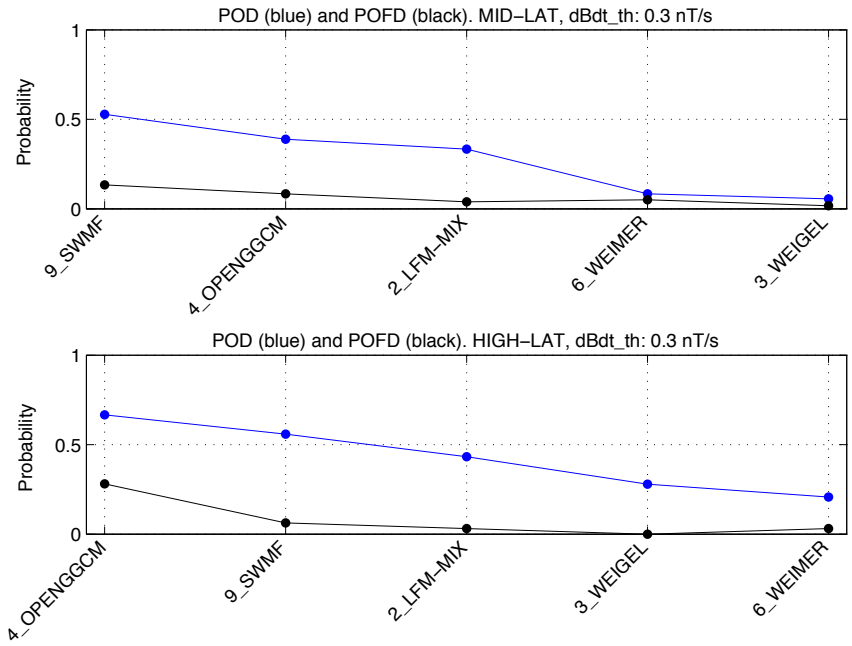

Figure A5a: Event 5: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 0.3 nT/s

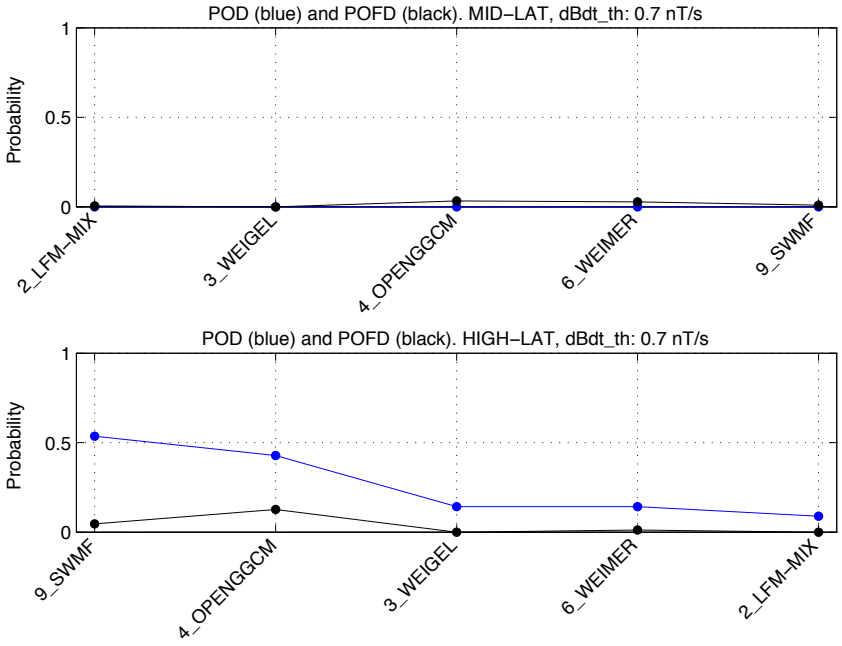

Figure A5b: Event 5: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 0.7 nT/s

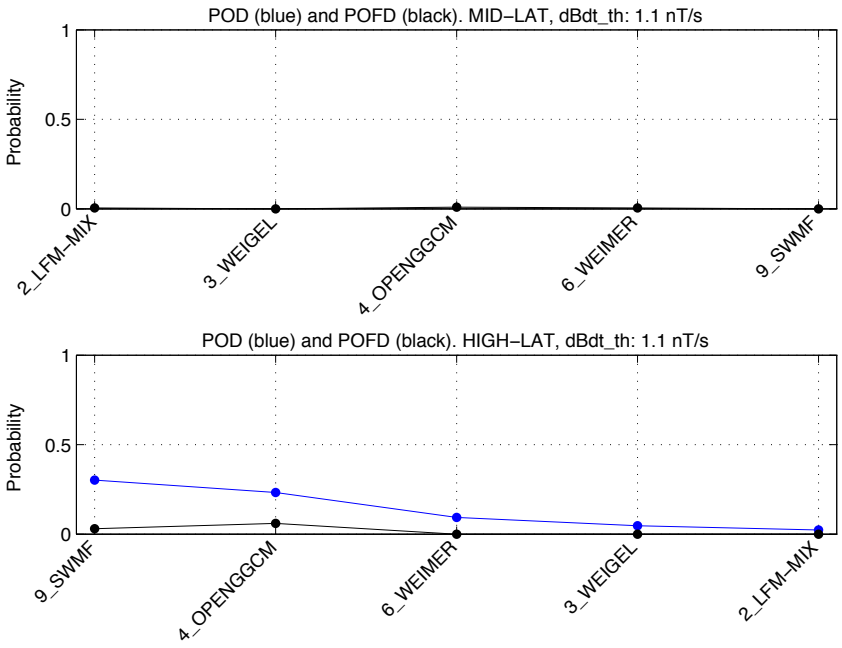

Figure A5c: Event 5: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 1.1 nT/s

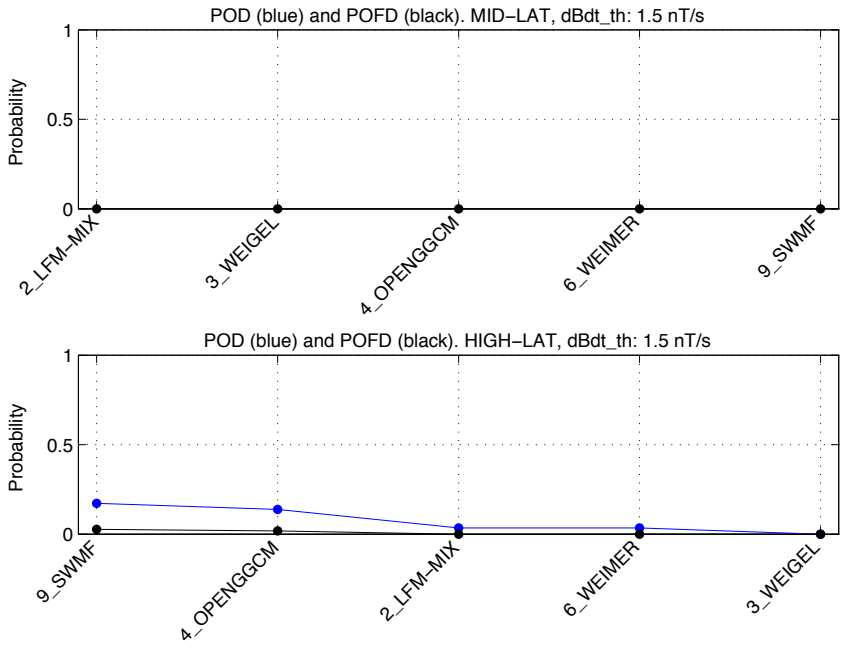

Figure A5d: Event 5: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 1.5 nT/s

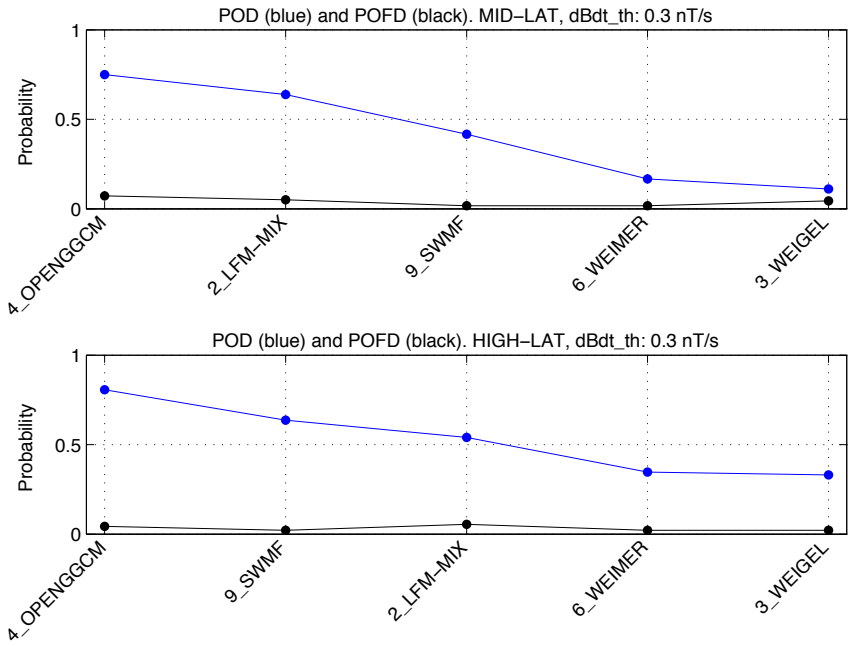

Figure A6a: Event 6: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 0.3 nT/s

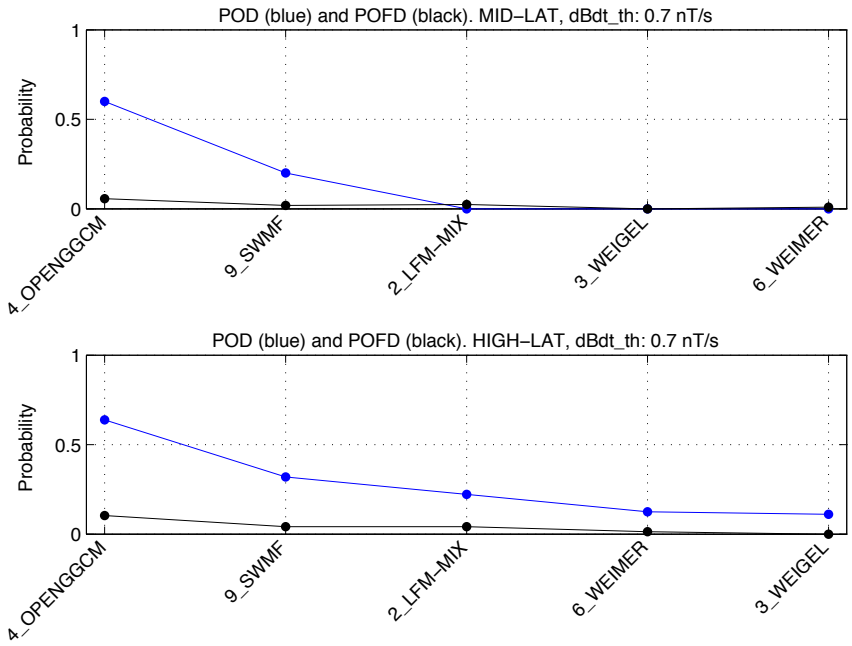

Figure A6b: Event 6: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 0.7 nT/s

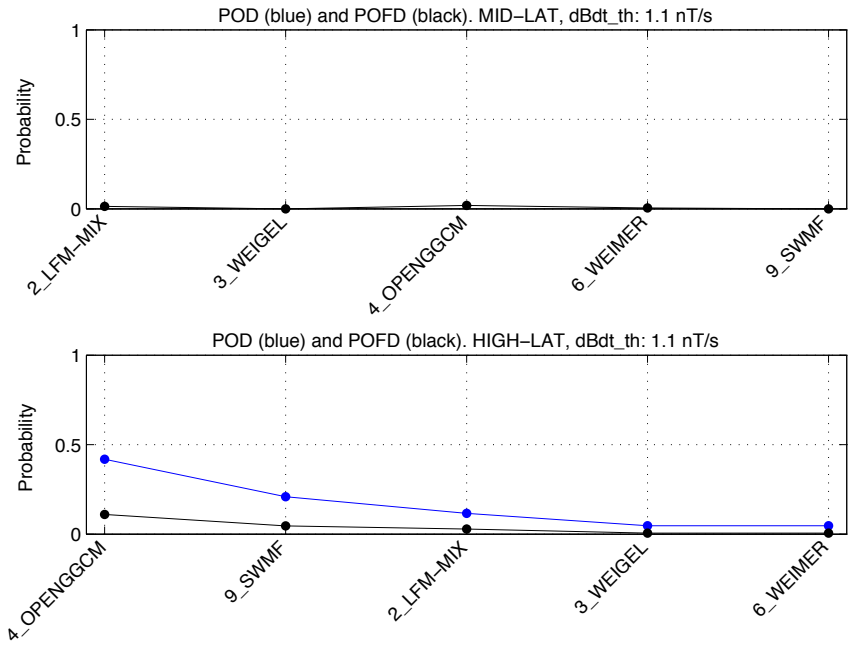

Figure A6c: Event 6: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 1.1 nT/s

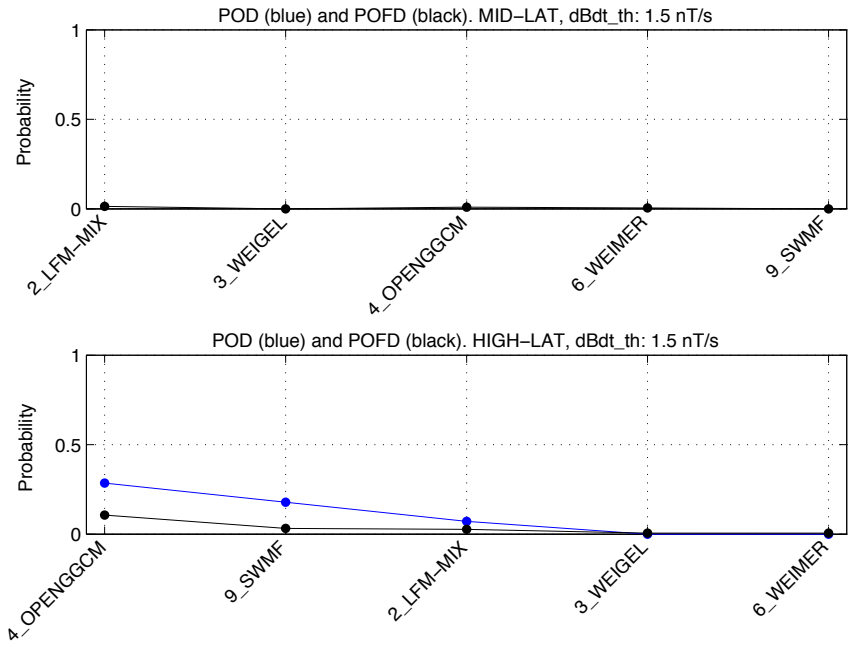

Figure A6d: Event 6: Probability of Detection (POD) (blue curve) and Probability of False Detection (POFD) (black curve) for the dB/dt threshold 1.5 nT/s

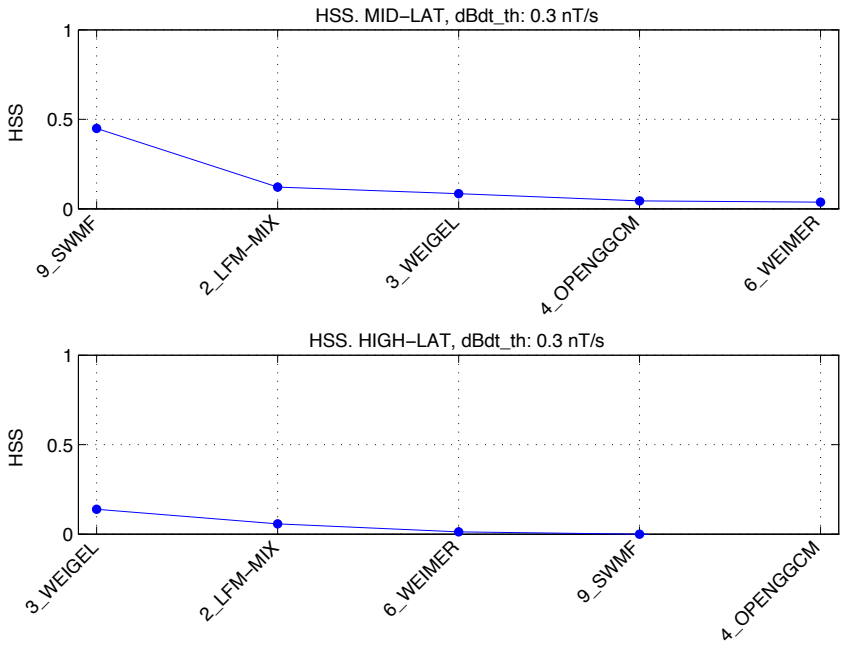

Figure B1a: Event 1: Heidke Skill Score (HSS) for the dB/dt threshold 0.3 nT/s

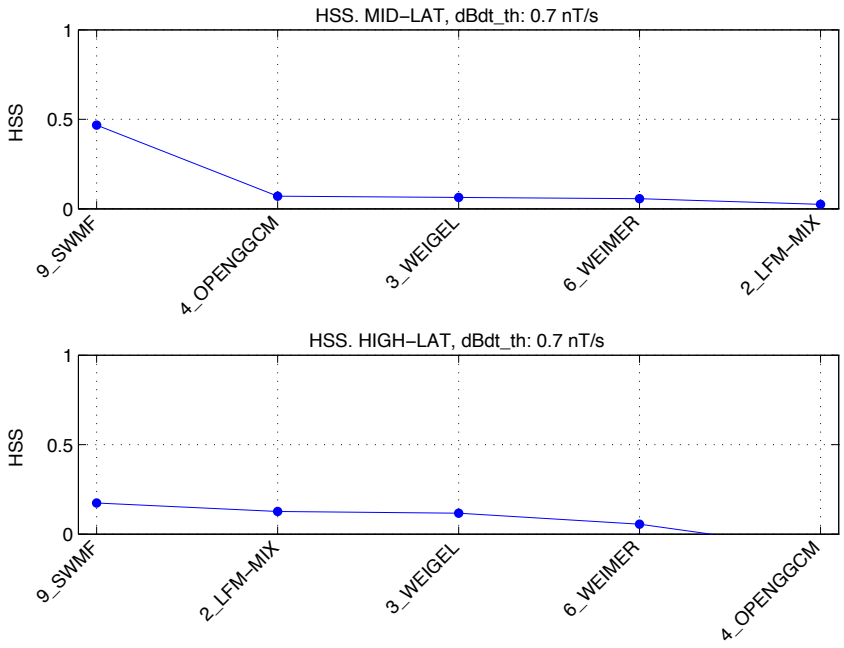

Figure B1b: Event 1: Heidke Skill Score (HSS) for the dB/dt threshold 0.7 nT/s

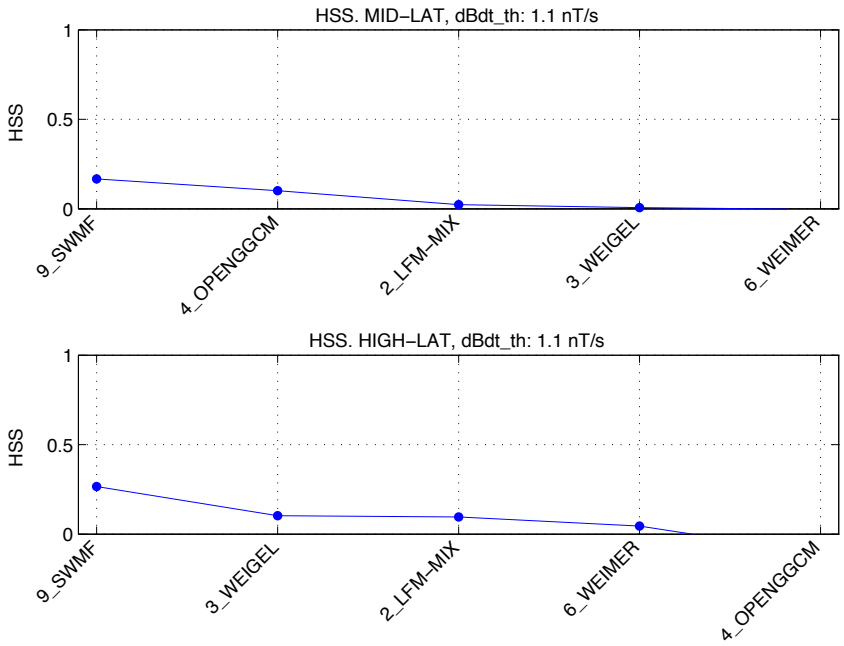

Figure B1c: Event 1: Heidke Skill Score (HSS) for the dB/dt threshold 1.1 nT/s

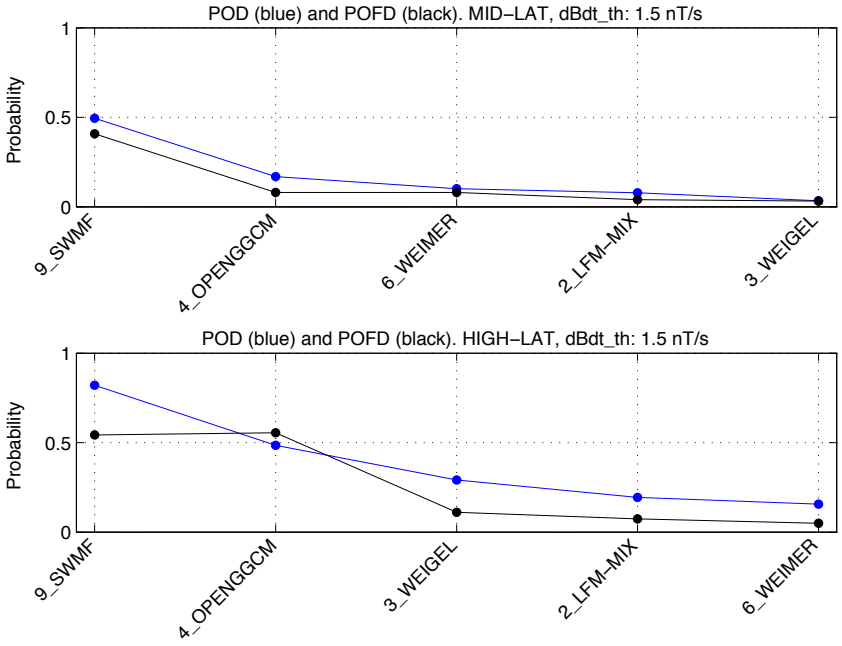

Figure B1d: Event 1: Heidke Skill Score (HSS) for the dB/dt threshold 1.5 nT/s

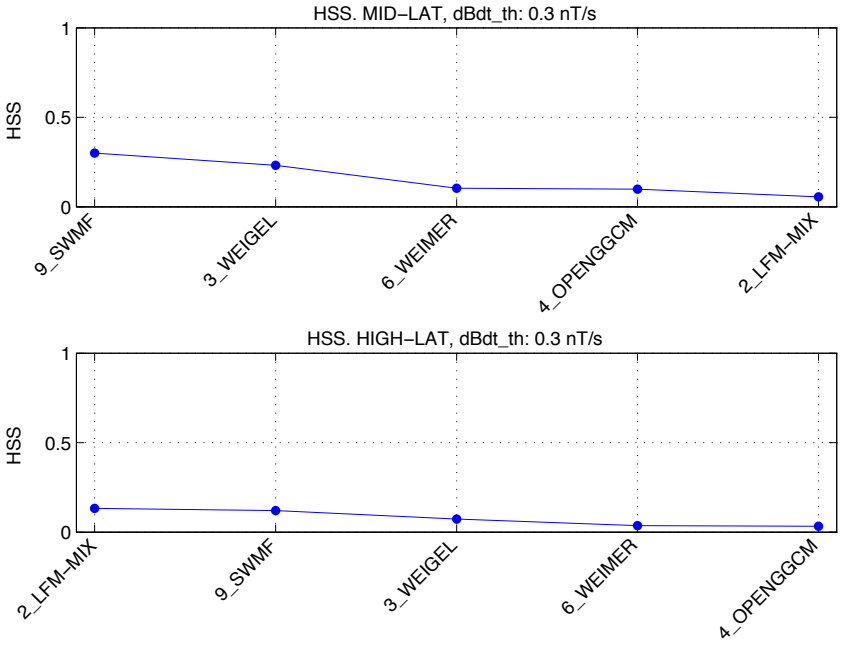

Figure B2a: Event 2: Heidke Skill Score (HSS) for the dB/dt threshold 0.3 nT/s

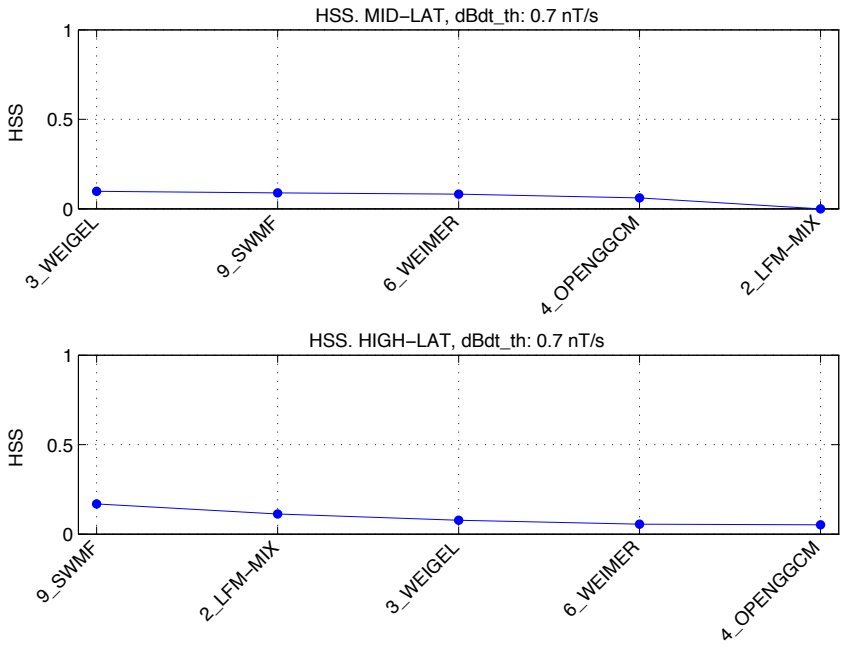

Figure B2b: Event 2: Heidke Skill Score (HSS) for the dB/dt threshold 0.7 nT/s

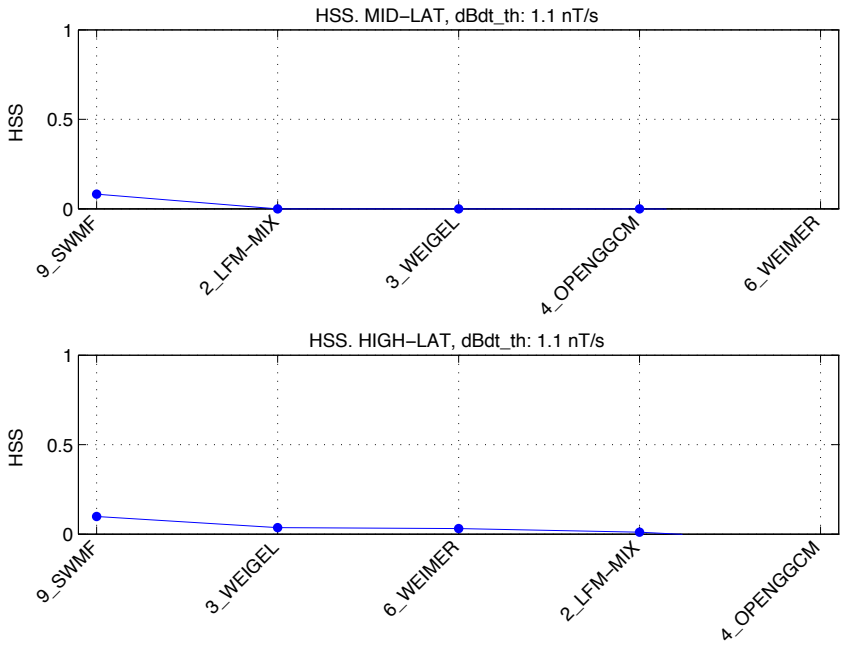

Figure B2c: Event 2: Heidke Skill Score (HSS) for the dB/dt threshold 1.1 nT/s

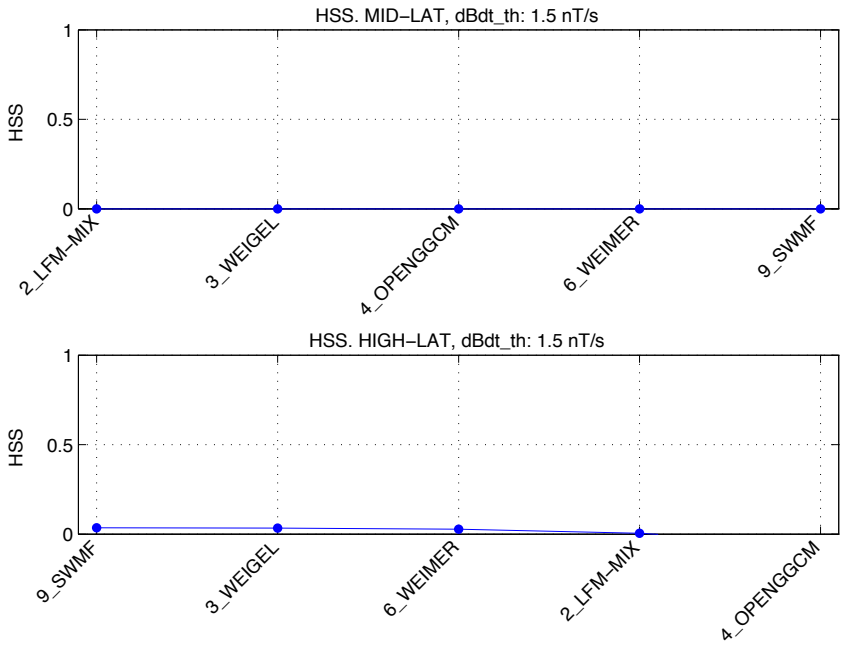

Figure B2d: Event 2: Heidke Skill Score (HSS) for the dB/dt threshold 1.5 nT/s

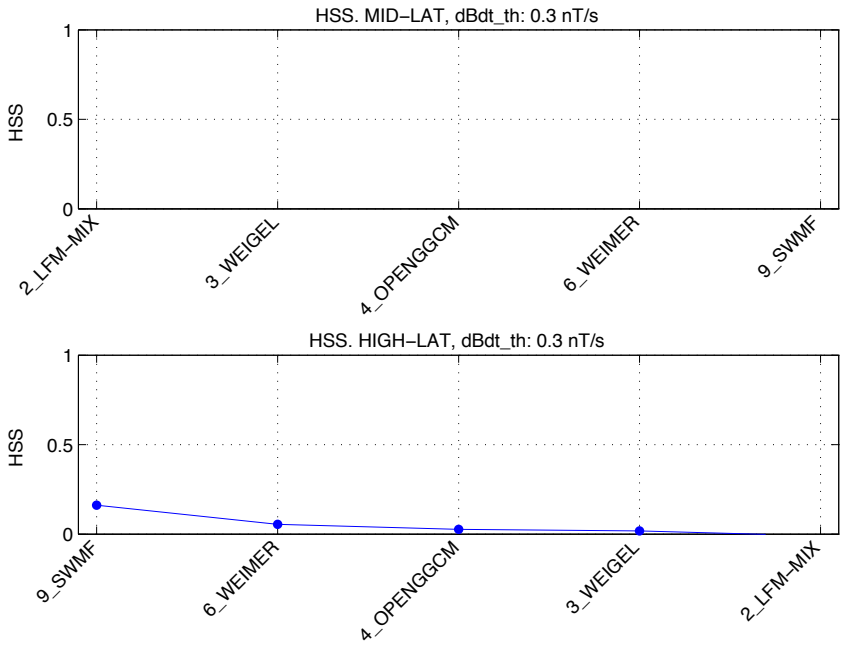

Figure B3a Event 3: Heidke Skill Score (HSS) for the dB/dt threshold 0.3 nT/s

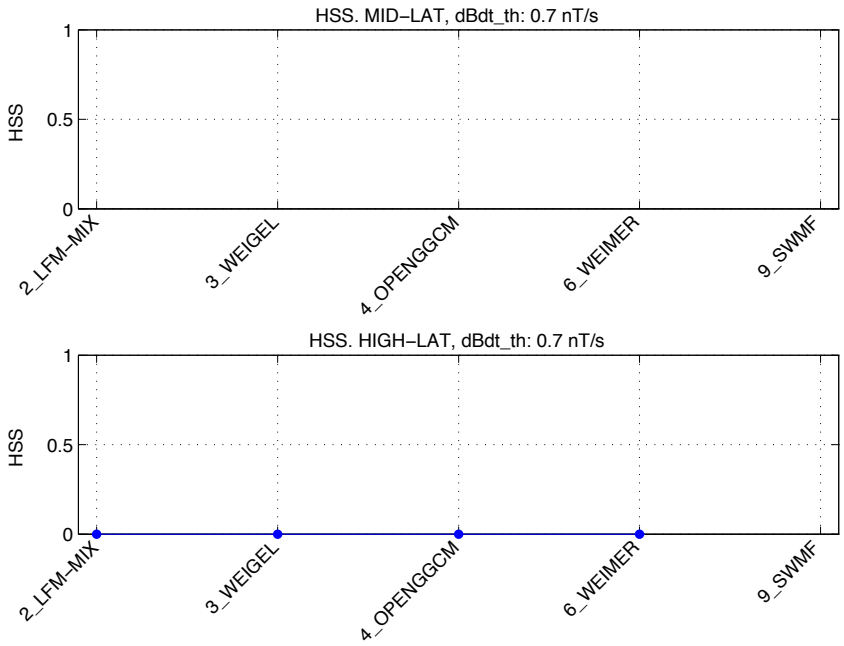

Figure B3b Event 3: Heidke Skill Score (HSS) for the dB/dt threshold 0.7 nT/s

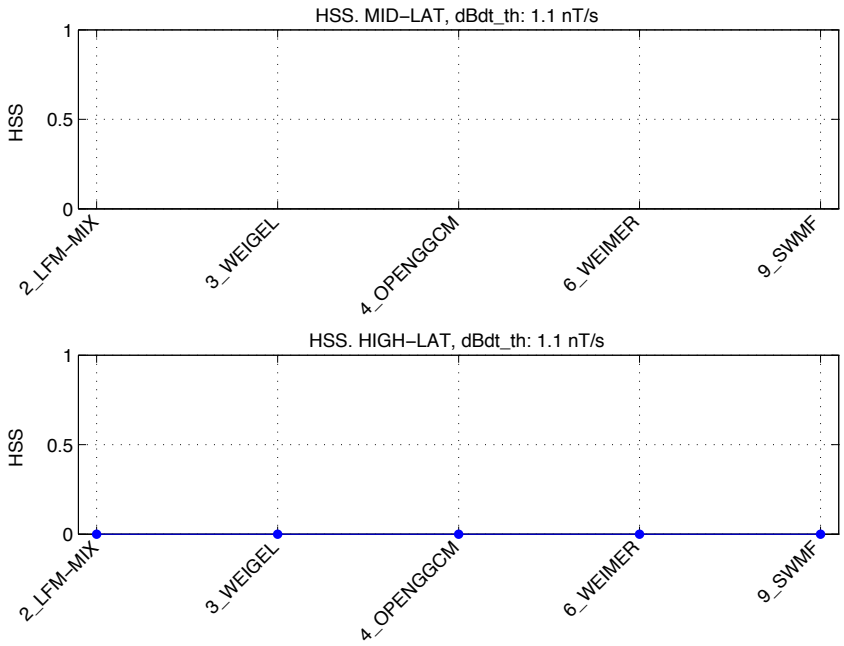

Figure B3c Event 3: Heidke Skill Score (HSS) for the dB/dt threshold 1.1 nT/s

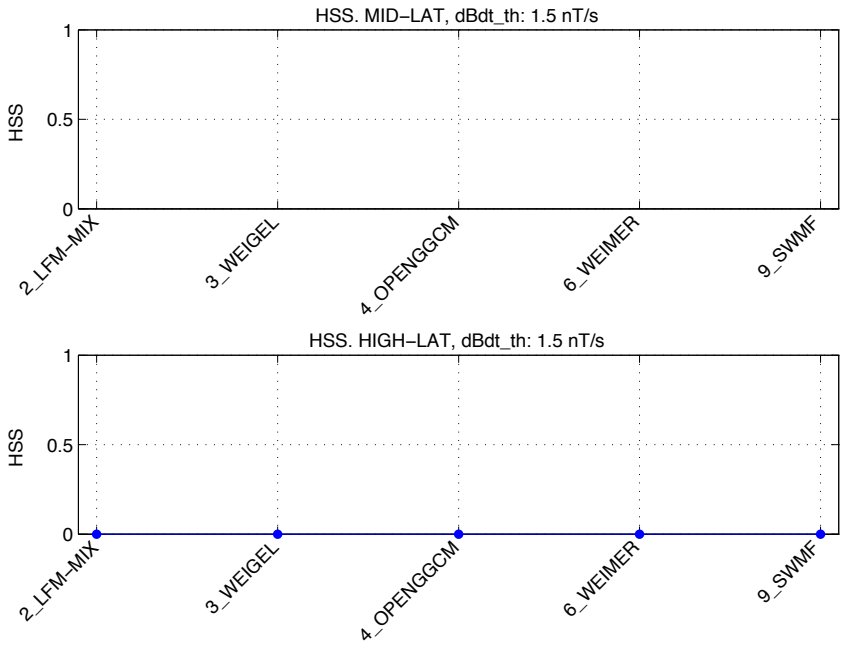

Figure B3d Event 3: Heidke Skill Score (HSS) for the dB/dt threshold 1.5 nT/s

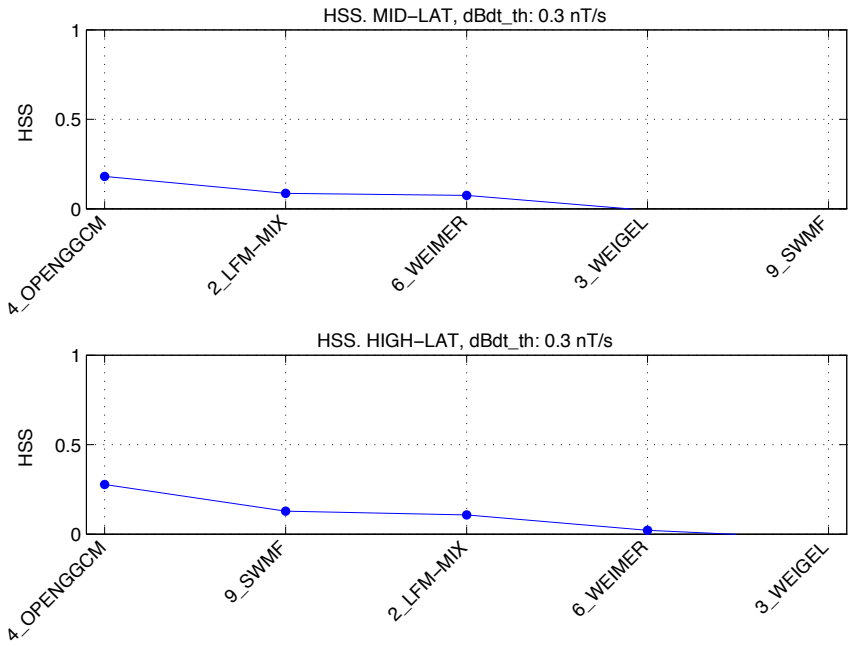

Figure B4a Event 4: Heidke Skill Score (HSS) for the dB/dt threshold 0.3 nT/s

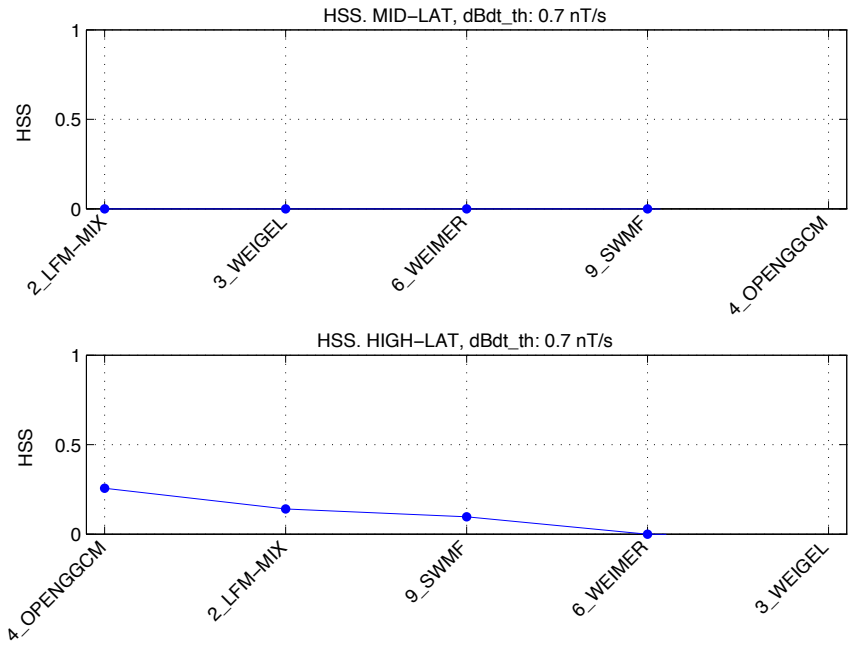

Figure B4b Event 4: Heidke Skill Score (HSS) for the dB/dt threshold 0.7 nT/s

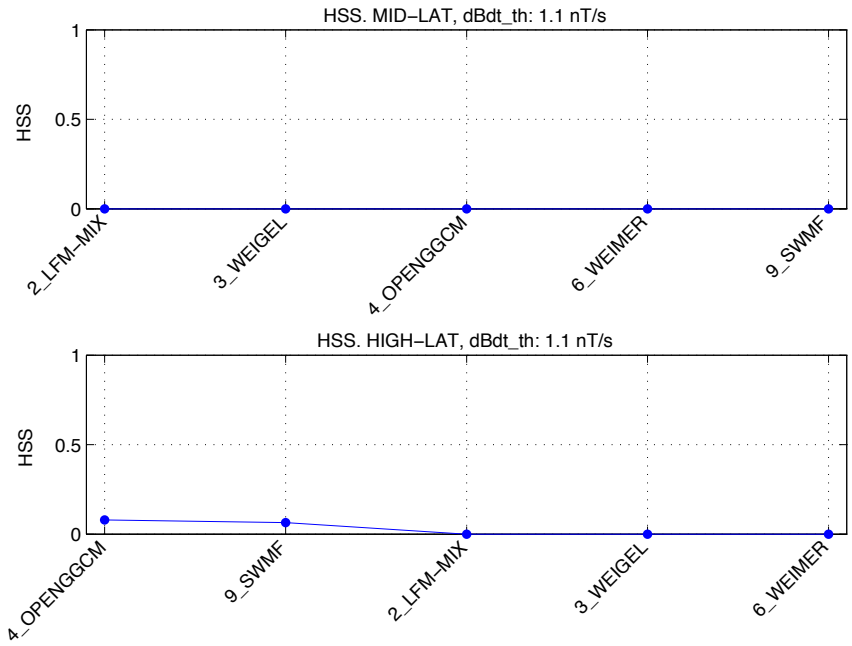

Figure B4c Event 4: Heidke Skill Score (HSS) for the dB/dt threshold 1.1 nT/s

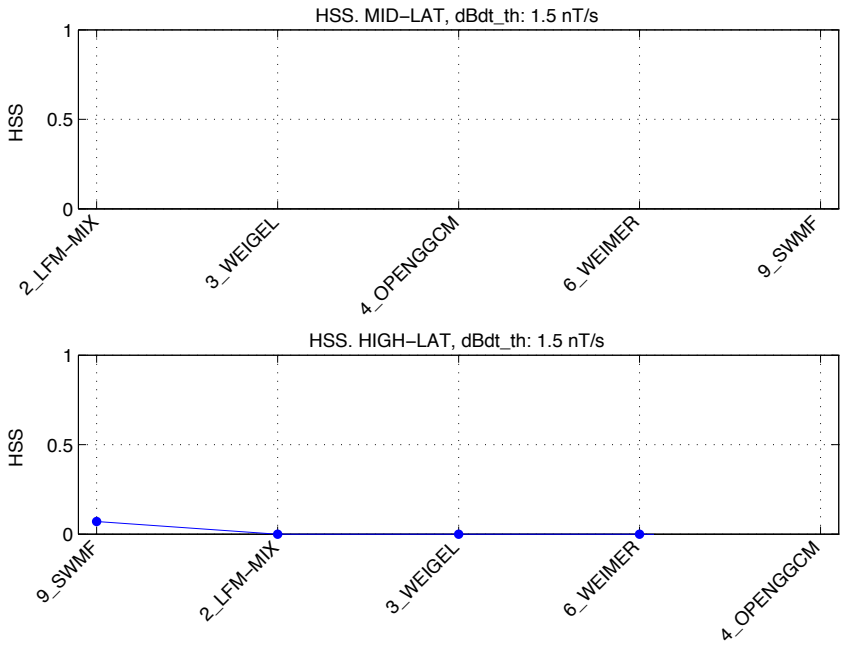

Figure B4d Event 4: Heidke Skill Score (HSS) for the dB/dt threshold 1.5 nT/s

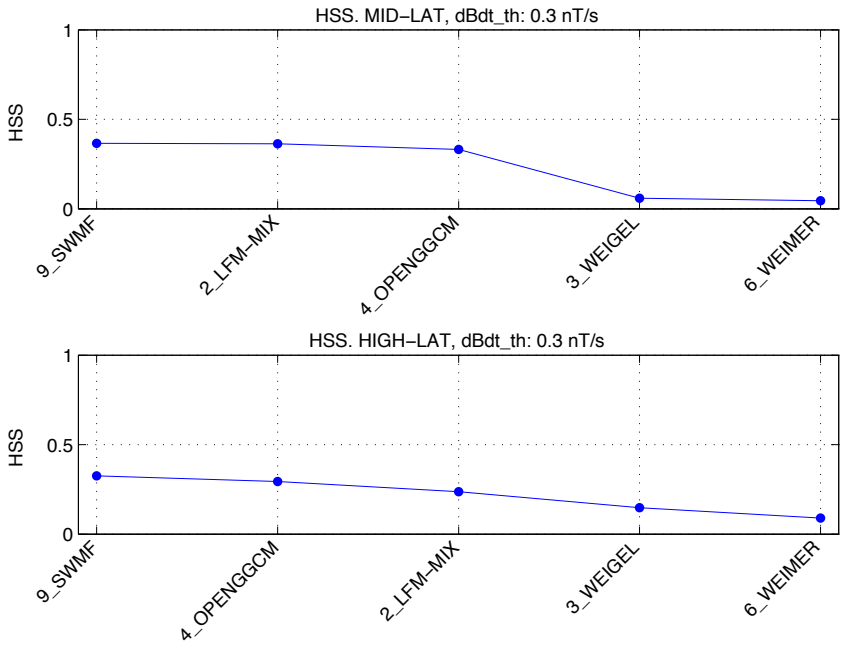

Figure B5a Event 5: Heidke Skill Score (HSS) for the dB/dt threshold 0.3 nT/s

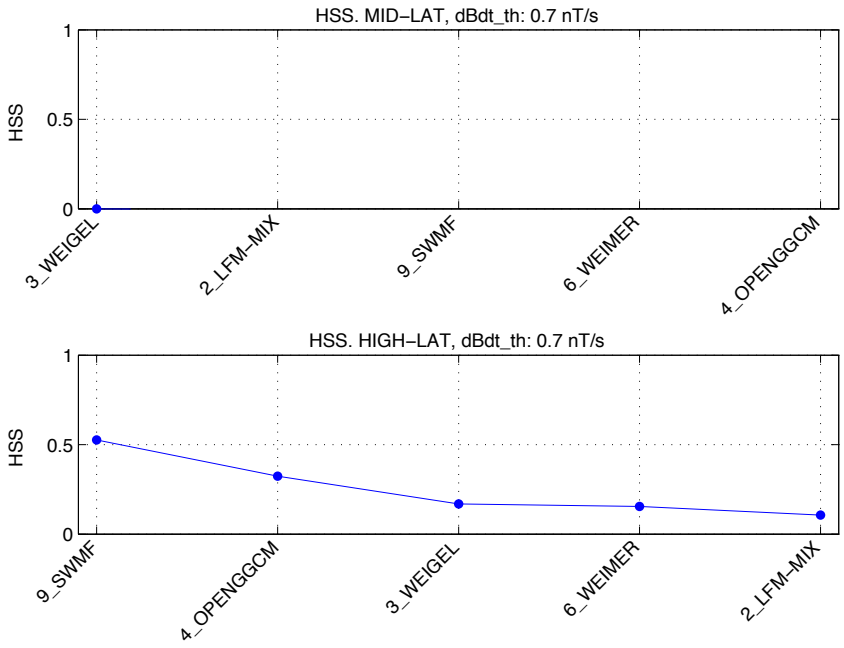

Figure B5b Event 5: Heidke Skill Score (HSS) for the dB/dt threshold 0.7 nT/s

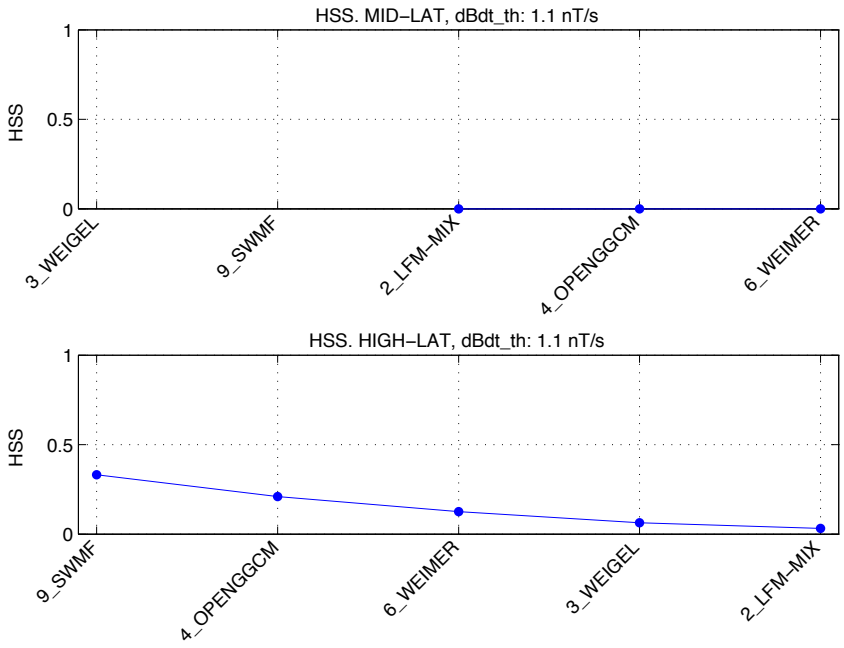

Figure B5c Event 5: Heidke Skill Score (HSS) for the dB/dt threshold 1.1 nT/s

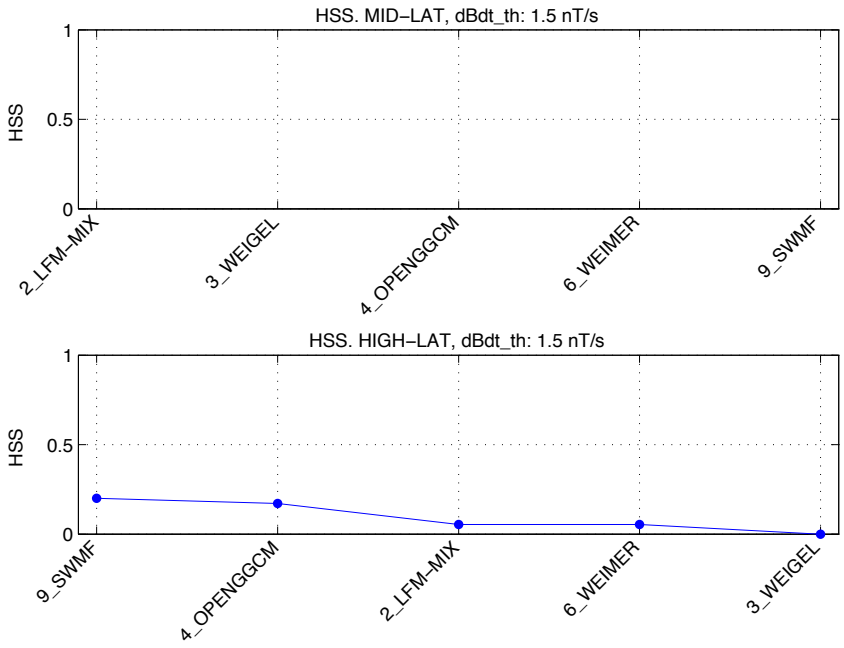

Figure B5d Event 5: Heidke Skill Score (HSS) for the dB/dt threshold 1.5 nT/s

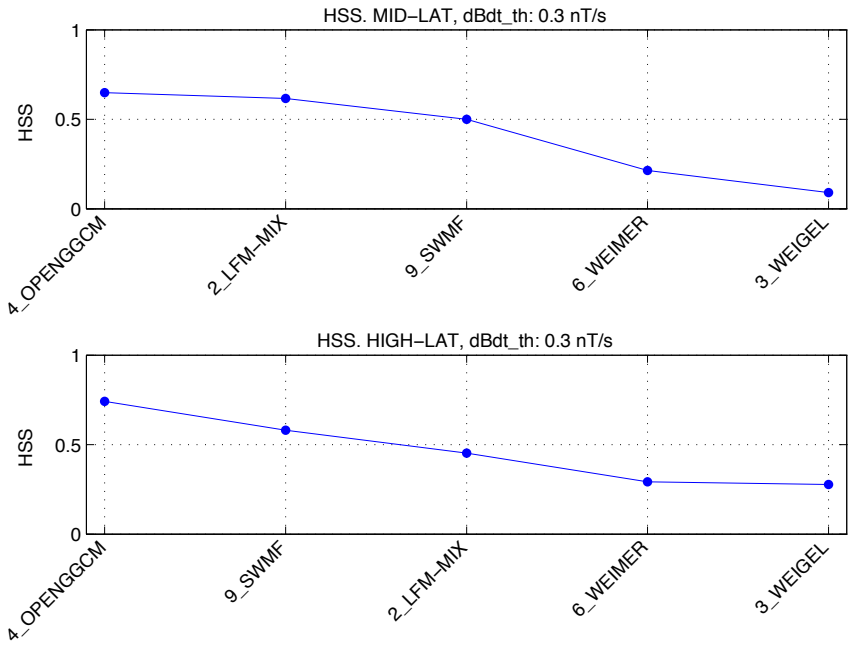

Figure B6a Event 6: Heidke Skill Score (HSS) for the dB/dt threshold 0.3 nT/s

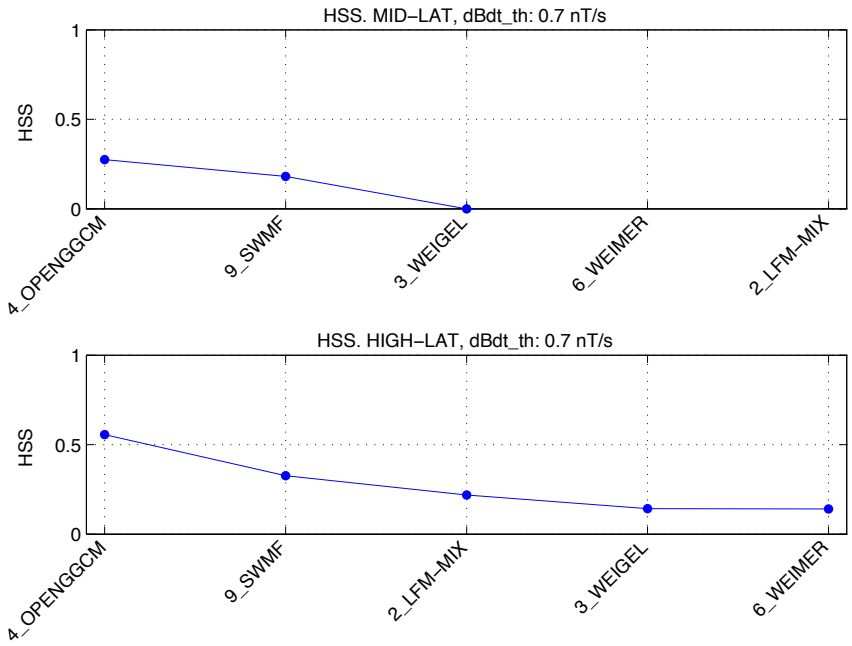

Figure B6b Event 6: Heidke Skill Score (HSS) for the dB/dt threshold 0.7 nT/s

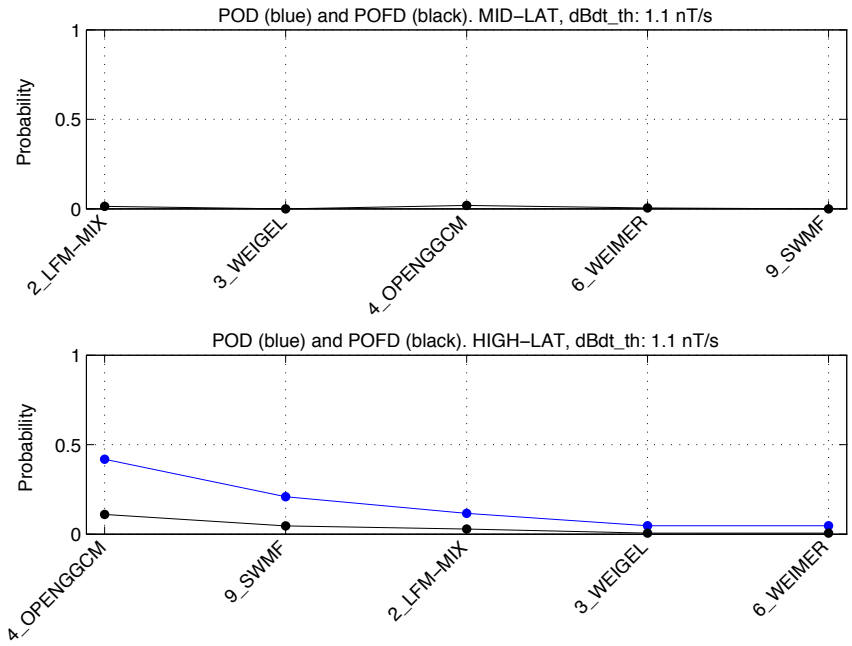

Figure B6c Event 6: Heidke Skill Score (HSS) for the dB/dt threshold 1.1 nT/s

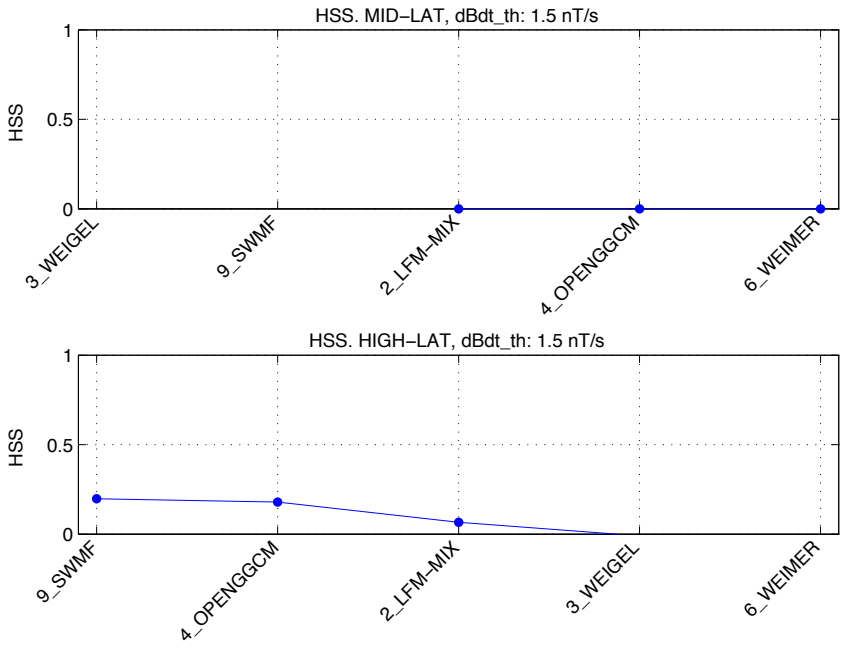

Figure B6d Event 6: Heidke Skill Score (HSS) for the dB/dt threshold 1.5 nT/s

Appendix C: Contingency Tables for Individual Events

Table C1: Event 1

MID-LAT stations: NEW OTT WNG
HIGH-LAT stations: YKC PBQ ABK

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 0.3 nT/s, model: 2_LFM-MIX]
|---
| YES 125 001 126
| NO 078 010 088
| TOTAL 203 011 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 189 001 190
| NO 024 001 025
| TOTAL 213 002 215

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 0.3 nT/s, model: 3_WEIGEL]
|---
| YES 096 000 096
| NO 107 011 118
| TOTAL 203 011 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 191 000 191
| NO 022 002 024
| TOTAL 213 002 215

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 0.3 nT/s, model: 4_OPENGGCM]
|---
| YES 115 004 119
| NO 088 007 095
| TOTAL 203 011 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 191 002 193
| NO 022 000 022
| TOTAL 213 002 215
| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 0.3 nT/s, model: 6_WEIMER]
|---
| YES 069 001 070
| NO 134 010 144
| TOTAL 203 011 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 088 000 088
| NO 125 002 127
| TOTAL 213 002 215

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 0.3 nT/s, model: 9_SWMF]
|---
| YES 198 006 204
| NO 005 005 010
| TOTAL 203 011 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 213 002 215
| NO 000 000 000
| TOTAL 213 002 215

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 0.7 nT/s, model: 2_LFM-MIX]
|---
| YES 029 006 035
| NO 137 042 179
| TOTAL 166 048 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 100 003 103
| NO 094 018 112
| TOTAL 194 021 215

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 0.7 nT/s, model: 3_WEIGEL]
|---
| YES 025 001 026
| NO 141 047 188
| TOTAL 166 048 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 096 003 099
| NO 098 018 116
| TOTAL 194 021 215

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 0.7 nT/s, model: 4_OPENGGCM]
|---
| YES 052 009 061
| NO 114 039 153
| TOTAL 166 048 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 136 018 154
| NO 058 003 061
| TOTAL 194 021 215

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 0.7 nT/s, model: 6_WEIMER]
|---
| YES 029 003 032
| NO 137 045 182
| TOTAL 166 048 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 045 000 045
| NO 149 021 170
| TOTAL 194 021 215

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 0.7 nT/s, model: 9_SWMF]
|---
| YES 152 023 175
| NO 014 025 039
| TOTAL 166 048 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 190 018 208
| NO 004 003 007
| TOTAL 194 021 215

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 1.1 nT/s, model: 2_LFM-MIX]
|---
| YES 011 005 016
| NO 117 081 198
| TOTAL 128 086 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 050 006 056
| NO 117 042 159
| TOTAL 167 048 215

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 1.1 nT/s, model: 3_WEIGEL]
|---
| YES 007 004 011
| NO 121 082 203
| TOTAL 128 086 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 055 007 062
| NO 112 041 153
| TOTAL 167 048 215

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 1.1 nT/s, model: 4_OPENGGCM]
|---
| YES 030 010 040
| NO 098 076 174
| TOTAL 128 086 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 095 034 129
| NO 072 014 086
| TOTAL 167 048 215

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 1.1 nT/s, model: 6_WEIMER]
|---
| YES 013 009 022
| NO 115 077 192
| TOTAL 128 086 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 029 004 033
| NO 138 044 182
| TOTAL 167 048 215

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 1.1 nT/s, model: 9_SWMF]
|---
| YES 084 042 126
| NO 044 044 088
| TOTAL 128 086 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 153 033 186
| NO 014 015 029
| TOTAL 167 048 215

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 1.5 nT/s, model: 2_LFM-MIX]
|---
| YES 007 005 012
| NO 082 120 202
| TOTAL 089 125 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 026 006 032
| NO 108 075 183
| TOTAL 134 081 215

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 1.5 nT/s, model: 3_WEIGEL]
|---
| YES 003 004 007
| NO 086 121 207
| TOTAL 089 125 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 039 009 048
| NO 095 072 167
| TOTAL 134 081 215

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 1.5 nT/s, model: 4_OPENGGCM]
|---
| YES 015 010 025
| NO 074 115 189
| TOTAL 089 125 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 065 045 110
| NO 069 036 105
| TOTAL 134 081 215

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 1.5 nT/s, model: 6_WEIMER]
|---
| YES 009 010 019
| NO 080 115 195
| TOTAL 089 125 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 021 004 025
| NO 113 077 190
| TOTAL 134 081 215

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 1, dBdt_th: 1.5 nT/s, model: 9_SWMF]
|---
| YES 044 051 095
| NO 045 074 119
| TOTAL 089 125 214
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 110 044 154
| NO 024 037 061
| TOTAL 134 081 215

Table C2: Event 2

MID-LAT stations: NEW OTT WNG
HIGH-LAT stations: YKC PBQ ABK

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 0.3 nT/s, model: 2_LFM-MIX]
|---
| YES 010 011 021
| NO 095 205 300
| TOTAL 105 216 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 146 001 147
| NO 148 026 174
| TOTAL 294 027 321

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 0.3 nT/s, model: 3_WEIGEL]
|---
| YES 021 003 024
| NO 084 213 297
| TOTAL 105 216 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 094 000 094
| NO 200 027 227
| TOTAL 294 027 321

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 0.3 nT/s, model: 4_OPENGGCM]
|---
| YES 020 023 043
| NO 085 193 278
| TOTAL 105 216 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 188 015 203
| NO 106 012 118
| TOTAL 294 027 321

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 0.3 nT/s, model: 6_WEIMER]
|---
| YES 012 007 019
| NO 093 209 302
| TOTAL 105 216 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 054 000 054
| NO 240 027 267
| TOTAL 294 027 321

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 0.3 nT/s, model: 9_SWMF]
|---
| YES 048 037 085
| NO 057 179 236
| TOTAL 105 216 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 203 011 214
| NO 091 016 107
| TOTAL 294 027 321

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 0.7 nT/s, model: 2_LFM-MIX]
|---
| YES 000 000 000
| NO 035 286 321
| TOTAL 035 286 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 039 001 040
| NO 181 100 281
| TOTAL 220 101 321

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 0.7 nT/s, model: 3_WEIGEL]
|---
| YES 002 000 002
| NO 033 286 319
| TOTAL 035 286 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 028 001 029
| NO 192 100 292
| TOTAL 220 101 321

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 0.7 nT/s, model: 4_OPENGGCM]
|---
| YES 002 005 007
| NO 033 281 314
| TOTAL 035 286 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 078 029 107
| NO 142 072 214
| TOTAL 220 101 321

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 0.7 nT/s, model: 6_WEIMER]
|---
| YES 002 002 004
| NO 033 284 317
| TOTAL 035 286 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 021 001 022
| NO 199 100 299
| TOTAL 220 101 321

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 0.7 nT/s, model: 9_SWMF]
|---
| YES 004 013 017
| NO 031 273 304
| TOTAL 035 286 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 084 016 100
| NO 136 085 221
| TOTAL 220 101 321

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 1.1 nT/s, model: 2_LFM-MIX]
|---
| YES 000 000 000
| NO 016 305 321
| TOTAL 016 305 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 005 004 009
| NO 144 168 312
| TOTAL 149 172 321

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 1.1 nT/s, model: 3_WEIGEL]
|---
| YES 000 000 000
| NO 016 305 321
| TOTAL 016 305 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 006 001 007
| NO 143 171 314
| TOTAL 149 172 321

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 1.1 nT/s, model: 4_OPENGGCM]
|---
| YES 000 000 000
| NO 016 305 321
| TOTAL 016 305 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 023 033 056
| NO 126 139 265
| TOTAL 149 172 321

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 1.1 nT/s, model: 6_WEIMER]
|---
| YES 000 001 001
| NO 016 304 320
| TOTAL 016 305 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 007 003 010
| NO 142 169 311
| TOTAL 149 172 321

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 1.1 nT/s, model: 9_SWMF]
|---
| YES 001 003 004
| NO 015 302 317
| TOTAL 016 305 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 034 023 057
| NO 115 149 264
| TOTAL 149 172 321

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 1.5 nT/s, model: 2_LFM-MIX]
|---
| YES 000 000 000
| NO 007 314 321
| TOTAL 007 314 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 001 001 002
| NO 112 207 319
| TOTAL 113 208 321

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 1.5 nT/s, model: 3_WEIGEL]
|---
| YES 000 000 000
| NO 007 314 321
| TOTAL 007 314 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 003 000 003
| NO 110 208 318
| TOTAL 113 208 321

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 1.5 nT/s, model: 4_OPENGGCM]
|---
| YES 000 000 000
| NO 007 314 321
| TOTAL 007 314 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 009 026 035
| NO 104 182 286
| TOTAL 113 208 321

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 1.5 nT/s, model: 6_WEIMER]
|---
| YES 000 000 000
| NO 007 314 321
| TOTAL 007 314 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 003 001 004
| NO 110 207 317
| TOTAL 113 208 321

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 2, dBdt_th: 1.5 nT/s, model: 9_SWMF]
|---
| YES 000 000 000
| NO 007 314 321
| TOTAL 007 314 321
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 012 016 028
| NO 101 192 293
| TOTAL 113 208 321

Table C3: Event 3

MID-LAT stations: NEW OTT WNG
HIGH-LAT stations: YKC PBQ ABK

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 3, dBdt_th: 0.3 nT/s, model: 2_LFM-MIX]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 001 001
| NO 054 161 215
| TOTAL 054 162 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 3, dBdt_th: 0.3 nT/s, model: 3_WEIGEL]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 001 001 002
| NO 053 161 214
| TOTAL 054 162 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 3, dBdt_th: 0.3 nT/s, model: 4_OPENGGCM]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 002 003 005
| NO 052 159 211
| TOTAL 054 162 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 3, dBdt_th: 0.3 nT/s, model: 6_WEIMER]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|

| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 002 000 002
| NO 052 162 214
| TOTAL 054 162 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 3, dBdt_th: 0.3 nT/s, model: 9_SWMF]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 009 007 016
| NO 045 155 200
| TOTAL 054 162 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 3, dBdt_th: 0.7 nT/s, model: 2_LFM-MIX]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 013 203 216
| TOTAL 013 203 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 3, dBdt_th: 0.7 nT/s, model: 3_WEIGEL]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 013 203 216
| TOTAL 013 203 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 3, dBdt_th: 0.7 nT/s, model: 4_OPENGGCM]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 013 203 216
| TOTAL 013 203 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 3, dBdt_th: 0.7 nT/s, model: 6_WEIMER]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216 |
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 013 203 216
| TOTAL 013 203 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 3, dBdt_th: 0.7 nT/s, model: 9_SWMF]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 004 004
| NO 013 199 212
| TOTAL 013 203 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 3, dBdt_th: 1.1 nT/s, model: 2_LFM-MIX]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 005 211 216
| TOTAL 005 211 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 3, dBdt_th: 1.1 nT/s, model: 3_WEIGEL]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 005 211 216
| TOTAL 005 211 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 3, dBdt_th: 1.1 nT/s, model: 4_OPENGGCM]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 005 211 216
| TOTAL 005 211 216

6_WEIMER]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 005 211 216
| TOTAL 005 211 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 3, dBdt_th: 1.1 nT/s, model: 9_SWMF]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 005 211 216
| TOTAL 005 211 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 3, dBdt_th: 1.5 nT/s, model: 2_LFM-MIX]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 002 214 216
| TOTAL 002 214 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 3, dBdt_th: 1.5 nT/s, model: 3_WEIGEL]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 002 214 216
| TOTAL 002 214 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 3, dBdt_th: 1.5 nT/s, model: 4_OPENGGCM]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 002 214 216
| TOTAL 002 214 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 3, dBdt_th: 1.5 nT/s, model: 6_WEIMER]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 002 214 216
| TOTAL 002 214 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 3, dBdt_th: 1.5 nT/s, model: 9_SWMF]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 002 214 216
| TOTAL 002 214 216

Table C4: Event 4

MID-LAT stations: NEW OTT WNG
HIGH-LAT stations: YKC PBQ ABK

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 0.3 nT/s, model: 2_LFM-MIX]
|---
| YES 001 001 002
| NO 017 215 232
| TOTAL 018 216 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 036 015 051
| NO 098 085 183
| TOTAL 134 100 234

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 0.3 nT/s, model: 3_WEIGEL]
|---
| YES 000 001 001
| NO 018 215 233
| TOTAL 018 216 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 007 008 015
| NO 127 092 219
| TOTAL 134 100 234

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 0.3 nT/s, model: 4_OPENGGCM]
|---
| YES 011 050 061
| NO 007 166 173
| TOTAL 018 216 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 107 053 160
| NO 027 047 074
| TOTAL 134 100 234

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 0.3 nT/s, model: 6_WEIMER]
|---
| YES 001 002 003
| NO 017 214 231
| TOTAL 018 216 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 018 011 029
| NO 116 089 205
| TOTAL 134 100 234

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 0.3 nT/s, model: 9_SWMF]
|---
| YES 001 018 019
| NO 017 198 215
| TOTAL 018 216 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 079 046 125
| NO 055 054 109
| TOTAL 134 100 234

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 0.7 nT/s, model: 2_LFM-MIX]
|---
| YES 000 000 000
| NO 002 232 234
| TOTAL 002 232 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 005 002 007
| NO 042 185 227
| TOTAL 047 187 234

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 0.7 nT/s, model: 3_WEIGEL]
|---
| YES 000 000 000
| NO 002 232 234
| TOTAL 002 232 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 001 001
| NO 047 186 233
| TOTAL 047 187 234

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 0.7 nT/s, model: 4_OPENGGCM]
|---
| YES 000 005 005
| NO 002 227 229
| TOTAL 002 232 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 026 046 072
| NO 021 141 162
| TOTAL 047 187 234

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 0.7 nT/s, model: 6_WEIMER]
|---
| YES 000 000 000
| NO 002 232 234
| TOTAL 002 232 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 047 187 234
| TOTAL 047 187 234

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 0.7 nT/s, model: 9_SWMF]
|---
| YES 000 000 000
| NO 002 232 234
| TOTAL 002 232 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 014 037 051
| NO 033 150 183
| TOTAL 047 187 234

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 1.1 nT/s, model: 2_LFM-MIX]
|---
| YES 000 000 000
| NO 001 233 234
| TOTAL 001 233 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 021 213 234
| TOTAL 021 213 234

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 1.1 nT/s, model: 3_WEIGEL]
|---
| YES 000 000 000
| NO 001 233 234
| TOTAL 001 233 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 021 213 234
| TOTAL 021 213 234

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 1.1 nT/s, model: 4_OPENGGCM]
|---
| YES 000 000 000
| NO 001 233 234
| TOTAL 001 233 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 005 029 034
| NO 016 184 200
| TOTAL 021 213 234

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 1.1 nT/s, model: 6_WEIMER]
|---
| YES 000 000 000
| NO 001 233 234
| TOTAL 001 233 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 021 213 234
| TOTAL 021 213 234

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 1.1 nT/s, model: 9_SWMF]
|---
| YES 000 000 000
| NO 001 233 234
| TOTAL 001 233 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 003 017 020
| NO 018 196 214
| TOTAL 021 213 234

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 1.5 nT/s, model: 2_LFM-MIX]
|---
| YES 000 000 000
| NO 000 234 234
| TOTAL 000 234 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 012 222 234
| TOTAL 012 222 234

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 1.5 nT/s, model: 3_WEIGEL]
|---
| YES 000 000 000
| NO 000 234 234
| TOTAL 000 234 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 012 222 234
| TOTAL 012 222 234

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 1.5 nT/s, model: 4_OPENGGCM]
|---
| YES 000 000 000
| NO 000 234 234
| TOTAL 000 234 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 001 022 023
| NO 011 200 211
| TOTAL 012 222 234

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 1.5 nT/s, model: 6_WEIMER]
|---
| YES 000 000 000
| NO 000 234 234
| TOTAL 000 234 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 012 222 234
| TOTAL 012 222 234

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 4, dBdt_th: 1.5 nT/s, model: 9_SWMF]
|---
| YES 000 000 000
| NO 000 234 234
| TOTAL 000 234 234
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 001 006 007
| NO 011 216 227
| TOTAL 012 222 234

Table C5: Event 5

MID-LAT stations: NEW OTT WNG
HIGH-LAT stations: YKC SNK ABK

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 0.3 nT/s, model: 2_LFM-MIX]
|---
| YES 012 007 019
| NO 024 173 197
| TOTAL 036 180 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 048 001 049
| NO 063 031 094
| TOTAL 111 032 143

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 0.3 nT/s, model: 3_WEIGEL]
|---
| YES 002 003 005
| NO 034 177 211
| TOTAL 036 180 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 031 000 031
| NO 080 032 112
| TOTAL 111 032 143

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 0.3 nT/s, model: 4_OPENGGCM]
|---
| YES 014 015 029
| NO 022 165 187
| TOTAL 036 180 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 074 009 083
| NO 037 023 060
| TOTAL 111 032 143

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 0.3 nT/s, model: 6_WEIMER]
|---
| YES 003 009 012
| NO 033 171 204
| TOTAL 036 180 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 023 001 024
| NO 088 031 119
| TOTAL 111 032 143

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 0.3 nT/s, model: 9_SWMF]
|---
| YES 019 024 043
| NO 017 156 173
| TOTAL 036 180 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 062 002 064
| NO 049 030 079
| TOTAL 111 032 143

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 0.7 nT/s, model: 2_LFM-MIX]
|---
| YES 000 001 001
| NO 001 214 215
| TOTAL 001 215 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 005 000 005
| NO 051 087 138
| TOTAL 056 087 143

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 0.7 nT/s, model: 3_WEIGEL]
|---
| YES 000 000 000
| NO 001 215 216
| TOTAL 001 215 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 008 000 008
| NO 048 087 135
| TOTAL 056 087 143

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 0.7 nT/s, model: 4_OPENGGCM]
|---
| YES 000 007 007
| NO 001 208 209
| TOTAL 001 215 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 024 011 035
| NO 032 076 108
| TOTAL 056 087 143

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 0.7 nT/s, model: 6_WEIMER]
|---
| YES 000 006 006
| NO 001 209 210
| TOTAL 001 215 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 008 001 009
| NO 048 086 134
| TOTAL 056 087 143

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 0.7 nT/s, model: 9_SWMF]
|---
| YES 000 002 002
| NO 001 213 214
| TOTAL 001 215 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 030 004 034
| NO 026 083 109
| TOTAL 056 087 143

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 1.1 nT/s, model: 2_LFM-MIX]
|---
| YES 000 001 001
| NO 000 215 215
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 001 000 001
| NO 042 100 142
| TOTAL 043 100 143

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 1.1 nT/s, model: 3_WEIGEL]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 002 000 002
| NO 041 100 141
| TOTAL 043 100 143

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 1.1 nT/s, model: 4_OPENGGCM]
|---
| YES 000 002 002
| NO 000 214 214
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 010 006 016
| NO 033 094 127
| TOTAL 043 100 143

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 1.1 nT/s, model: 6_WEIMER]
|---
| YES 000 001 001
| NO 000 215 215
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 004 000 004
| NO 039 100 139
| TOTAL 043 100 143

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 1.1 nT/s, model: 9_SWMF]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 013 003 016
| NO 030 097 127
| TOTAL 043 100 143

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 1.5 nT/s, model: 2_LFM-MIX]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 001 000 001
| NO 028 114 142
| TOTAL 029 114 143

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 1.5 nT/s, model: 3_WEIGEL]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 000 000
| NO 029 114 143
| TOTAL 029 114 143

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 1.5 nT/s, model: 4_OPENGGCM]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 004 002 006
| NO 025 112 137
| TOTAL 029 114 143

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 1.5 nT/s, model: 6_WEIMER]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 001 000 001
| NO 028 114 142
| TOTAL 029 114 143

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 7, dBdt_th: 1.5 nT/s, model: 9_SWMF]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 005 003 008
| NO 024 111 135
| TOTAL 029 114 143

Table C6: Event 6

MID-LAT stations: NEW OTT WNG
HIGH-LAT stations: YKC SNK ABK

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 0.3 nT/s, model: 2_LFM-MIX]
|---
| YES 023 009 032
| NO 013 171 184
| TOTAL 036 180 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 067 005 072
| NO 057 087 144
| TOTAL 124 092 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 0.3 nT/s, model: 3_WEIGEL]
|---
| YES 004 008 012
| NO 032 172 204
| TOTAL 036 180 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 041 002 043
| NO 083 090 173
| TOTAL 124 092 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 0.3 nT/s, model: 4_OPENGGCM]
|---
| YES 027 013 040
| NO 009 167 176
| TOTAL 036 180 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 100 004 104
| NO 024 088 112
| TOTAL 124 092 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 0.3 nT/s, model: 6_WEIMER]
|---
| YES 006 003 009
| NO 030 177 207
| TOTAL 036 180 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 043 002 045
| NO 081 090 171
| TOTAL 124 092 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 0.3 nT/s, model: 9_SWMF]
|---
| YES 015 003 018
| NO 021 177 198
| TOTAL 036 180 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 079 002 081
| NO 045 090 135
| TOTAL 124 092 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 0.7 nT/s, model: 2_LFM-MIX]
|---
| YES 000 005 005
| NO 005 206 211
| TOTAL 005 211 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 016 006 022
| NO 056 138 194
| TOTAL 072 144 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 0.7 nT/s, model: 3_WEIGEL]
|---
| YES 000 000 000
| NO 005 211 216
| TOTAL 005 211 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 008 000 008
| NO 064 144 208
| TOTAL 072 144 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 0.7 nT/s, model: 4_OPENGGCM]
|---
| YES 003 012 015
| NO 002 199 201
| TOTAL 005 211 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 046 015 061
| NO 026 129 155
| TOTAL 072 144 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 0.7 nT/s, model: 6_WEIMER]
|---
| YES 000 002 002
| NO 005 209 214
| TOTAL 005 211 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 009 002 011
| NO 063 142 205
| TOTAL 072 144 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 0.7 nT/s, model: 9_SWMF]
|---
| YES 001 004 005
| NO 004 207 211
| TOTAL 005 211 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 023 006 029
| NO 049 138 187
| TOTAL 072 144 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 1.1 nT/s, model: 2_LFM-MIX]
|---
| YES 000 003 003
| NO 000 213 213
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 005 005 010
| NO 038 168 206
| TOTAL 043 173 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 1.1 nT/s, model: 3_WEIGEL]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 002 001 003
| NO 041 172 213
| TOTAL 043 173 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 1.1 nT/s, model: 4_OPENGGCM]
|---
| YES 000 004 004
| NO 000 212 212
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 018 019 037
| NO 025 154 179
| TOTAL 043 173 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 1.1 nT/s, model: 6_WEIMER]
|---
| YES 000 001 001
| NO 000 215 215
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 002 001 003
| NO 041 172 213
| TOTAL 043 173 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 1.1 nT/s, model: 9_SWMF]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 009 008 017
| NO 034 165 199
| TOTAL 043 173 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 1.5 nT/s, model: 2_LFM-MIX]
|---
| YES 000 003 003
| NO 000 213 213
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 002 005 007
| NO 026 183 209
| TOTAL 028 188 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 1.5 nT/s, model: 3_WEIGEL]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 001 001
| NO 028 187 215
| TOTAL 028 188 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 1.5 nT/s, model: 4_OPENGGCM]
|---
| YES 000 002 002
| NO 000 214 214
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 008 020 028
| NO 020 168 188
| TOTAL 028 188 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 1.5 nT/s, model: 6_WEIMER]
|---
| YES 000 001 001
| NO 000 215 215
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 000 001 001
| NO 028 187 215
| TOTAL 028 188 216

| Forecasts Observations | YES | NO | TOTAL [MID-LAT][Event no. 8, dBdt_th: 1.5 nT/s, model: 9_SWMF]
|---
| YES 000 000 000
| NO 000 216 216
| TOTAL 000 216 216
|
| Forecasts Observations | YES | NO | TOTAL [HIGH-LAT]
|---
| YES 005 006 011
| NO 023 182 205
| TOTAL 028 188 216