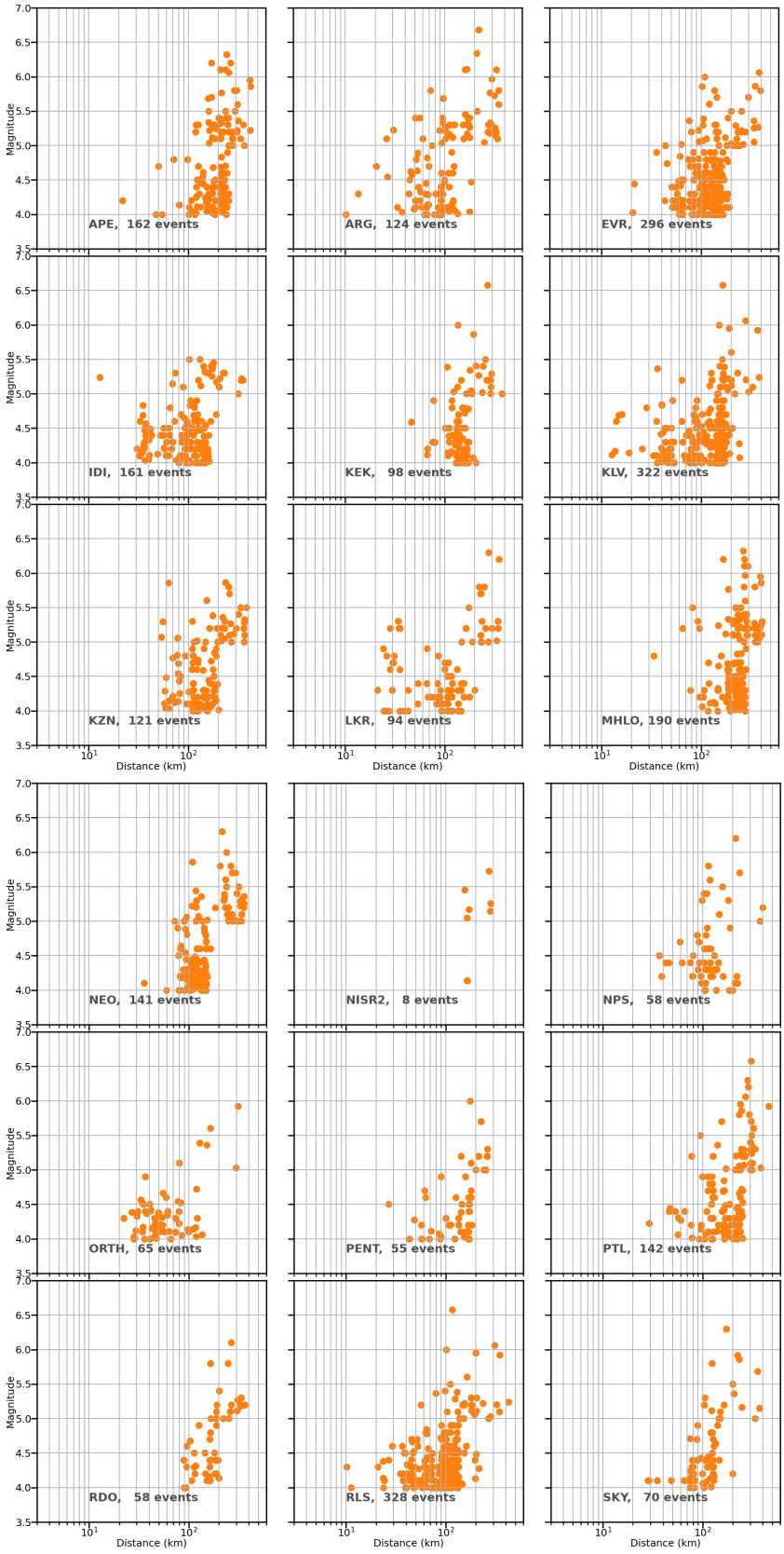

APE, 162 events
ARG, 124 events
EVR, 296 events
IDI, 161 events
KEK, 98 events
KLV, 322 events
KZN, 121 events
LKR, 94 events
MHLO, 190 events
NEO, 141 events
NISR2, 8 events
NPS, 58 events
ORTH, 65 events
PENT, 55 events
PTL, 142 events
RDO, 58 events
RLS, 328 events
SKY, 70 events
Magnitude
Distance (km)

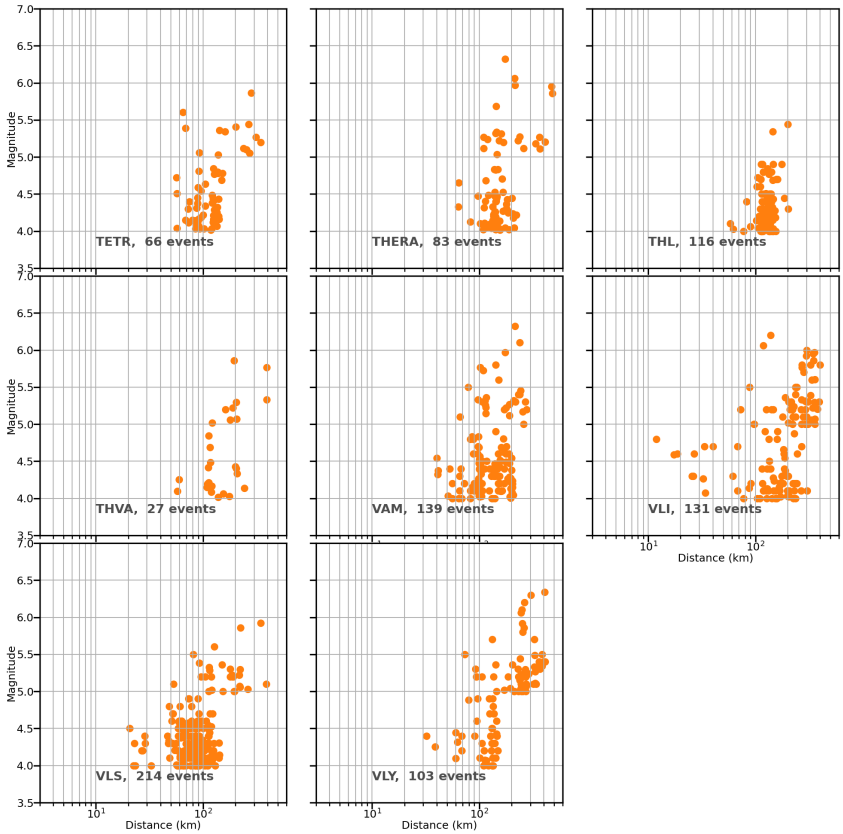
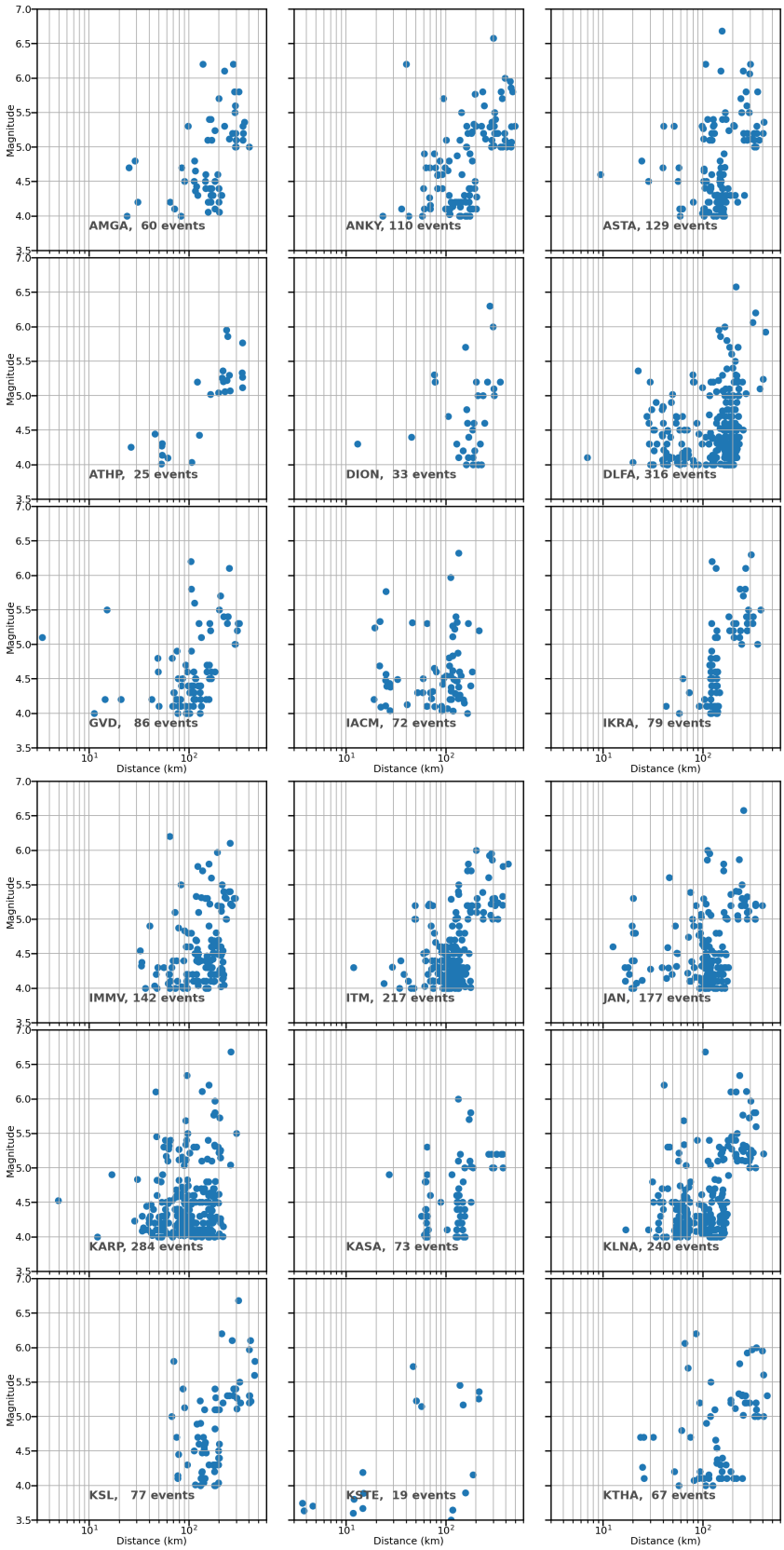


Figure S1: Distribution of magnitude (local) and distance (epicentral) for all data analysed per HH station.


AMGA, 60 events
ANKY, 110 events
ASTA, 129 events
ATHP, 25 events
DION, 33 events
DLFA, 316 events
GVD, 86 events
IACM, 72 events
IKRA, 79 events
IMMV, 142 events
ITM, 217 events
JAN, 177 events
KARP, 284 events
KASA, 73 events
KLNA, 240 events
KSL, 77 events
KSTE, 19 events
KTHA, 67 events
Magnitude
Distance (km)

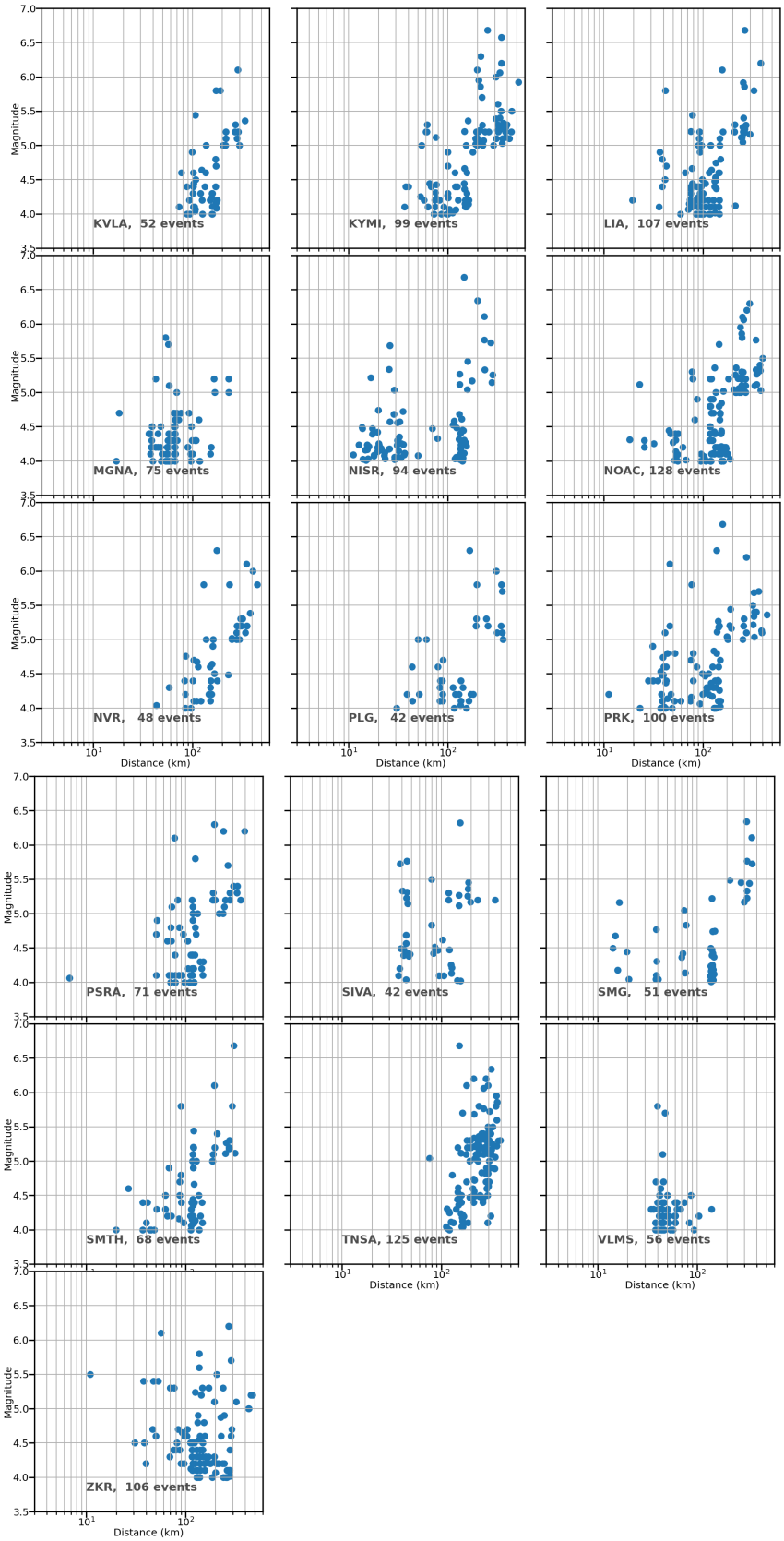


Figure S2: Distribution of magnitude (local) and distance (epicentral) for all data analysed per HN station.

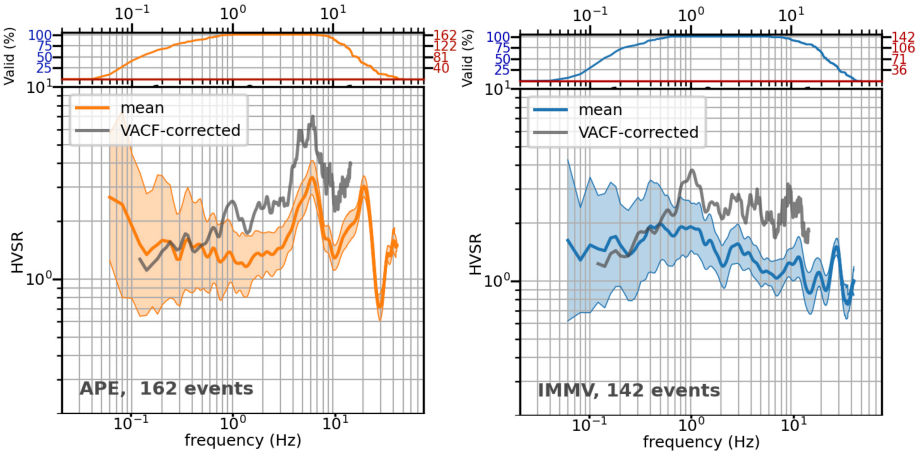
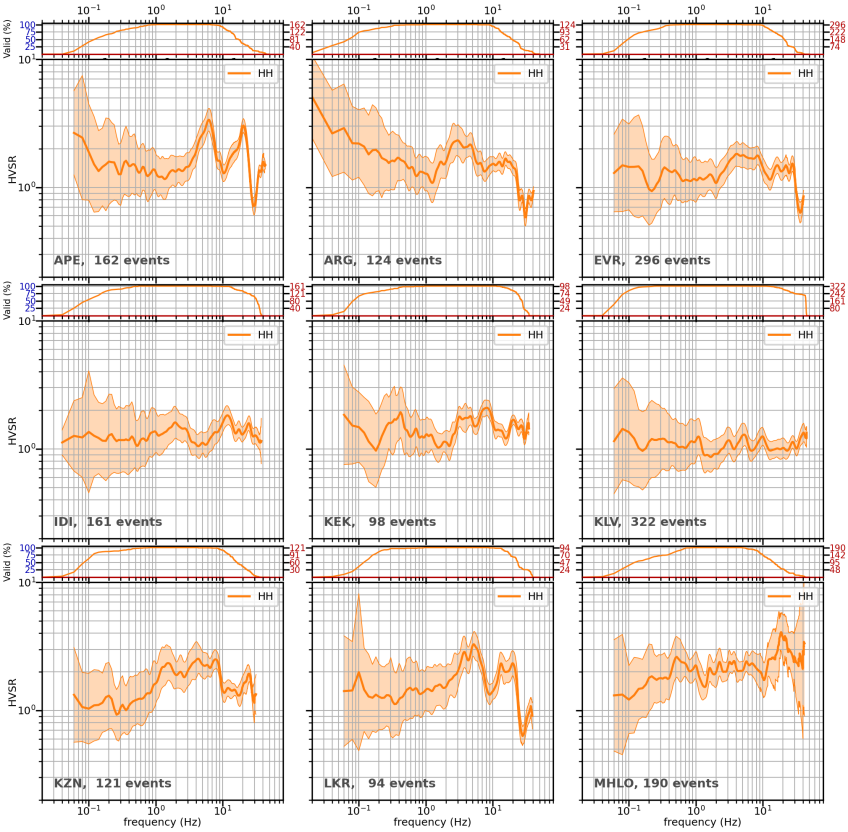


Figure S3: Indicative correction of HVSR using Ito et al. (2020) correction function for the vertical component (VACF) at two stations.



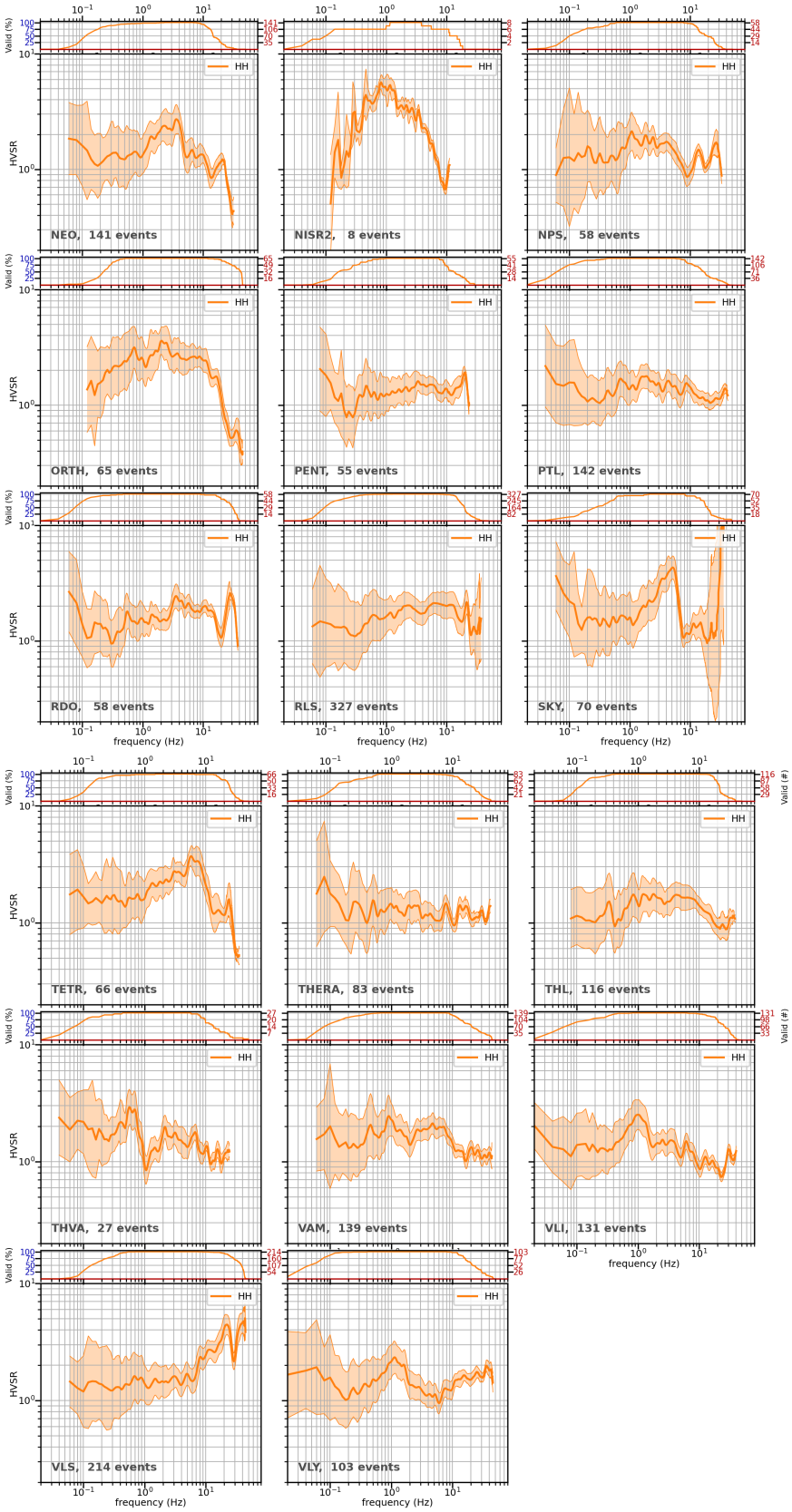
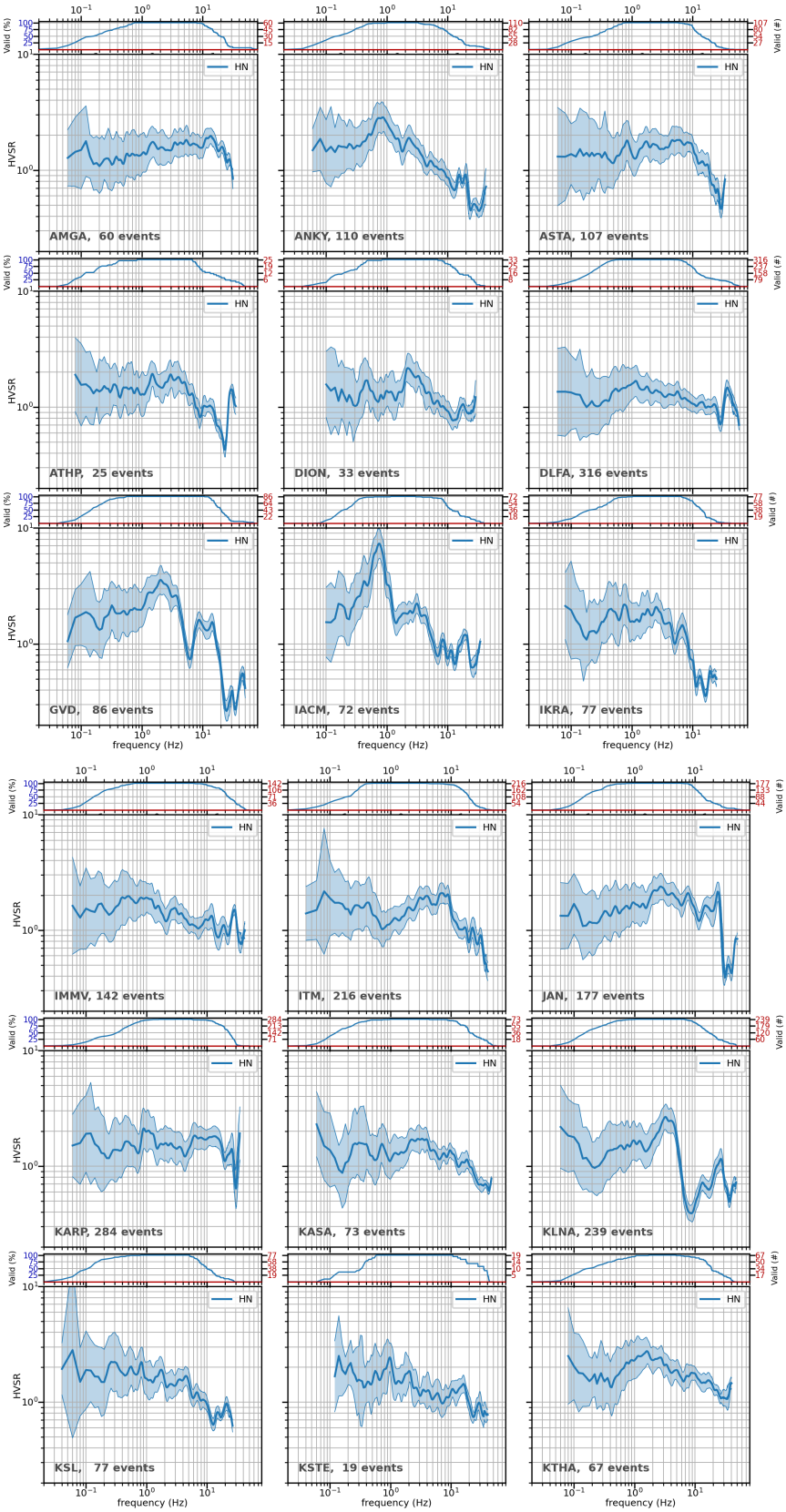


Figure S4: Mean orientation-invariant (SRSS) HVSR±1 standard deviation for all HH stations.


AMGA, 60 events
ANKY, 110 events
ASTA, 107 events
ATHP, 25 events
DION, 33 events
DLFA, 316 events
GVD, 86 events
IACM, 72 events
IKRA, 77 events
IMMV, 142 events
ITM, 216 events
JAN, 177 events
KARP, 284 events
KASA, 73 events
KLNA, 239 events
KSL, 77 events
KSTE, 19 events
KTHA, 67 events
HN
HVSR
Valid (%)
Valid (#)
frequency (Hz)

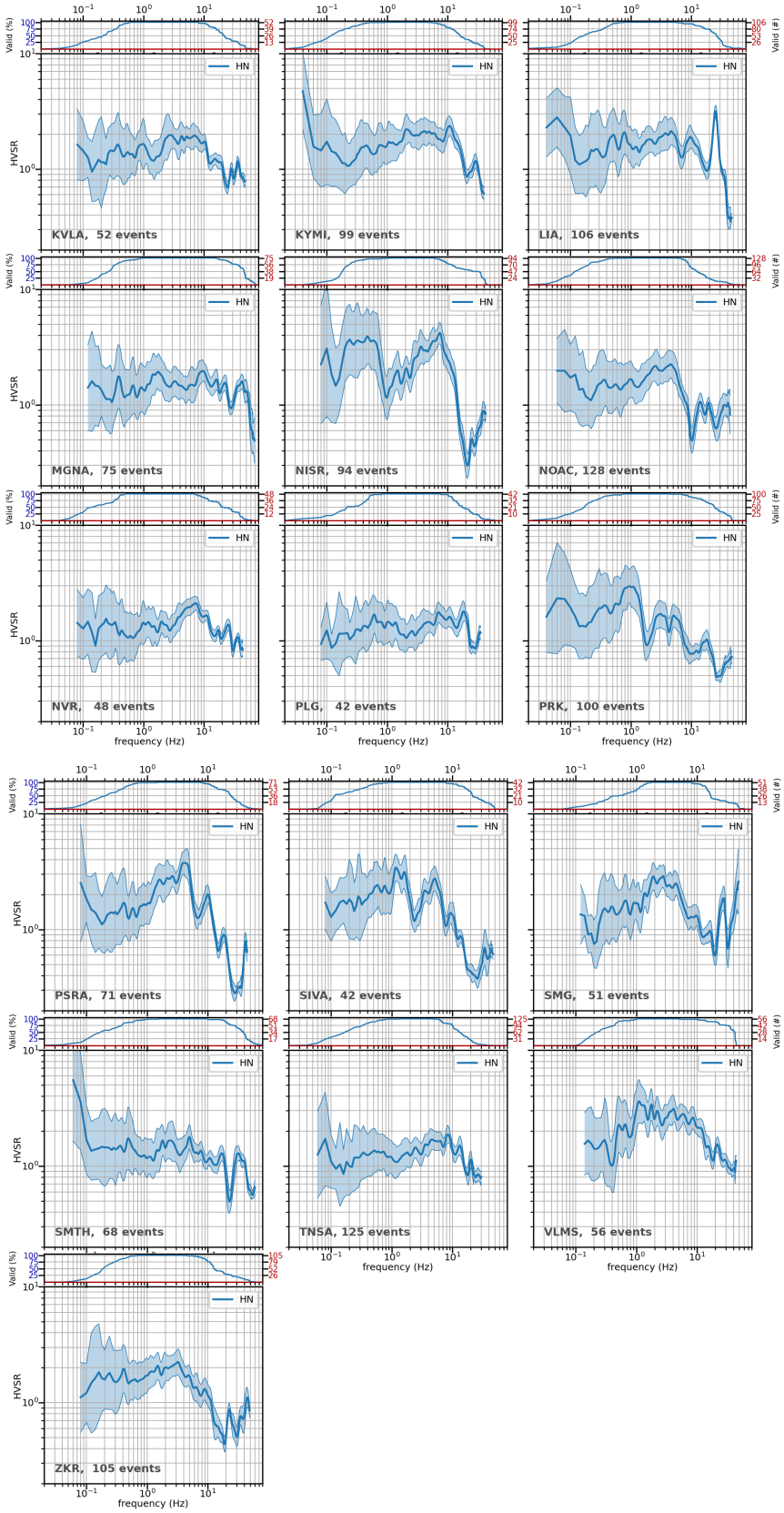
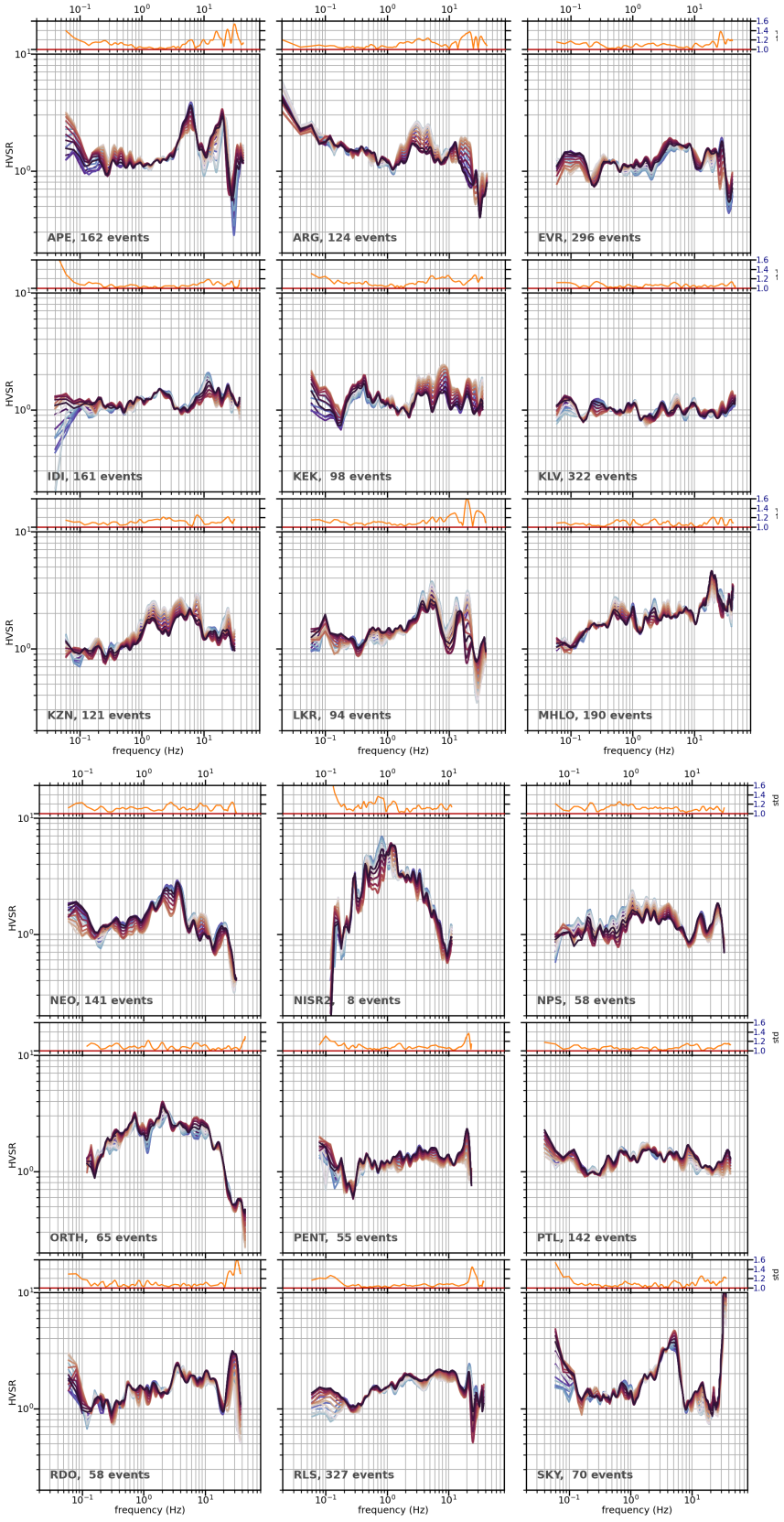


Figure S5: Mean orientation-invariant (SRSS) HVSR±1 standard deviation for all HN stations.


APE, 162 events
ARG, 124 events
EVR, 296 events
IDI, 161 events
KEK, 98 events
KLV, 322 events
KZN, 121 events
LKR, 94 events
MHLO, 190 events
NEO, 141 events
NISR2, 8 events
NPS, 58 events
ORTH, 65 events
PENT, 55 events
PTL, 142 events
RDO, 58 events
RLS, 327 events
SKY, 70 events
HVSR
std
frequency (Hz)

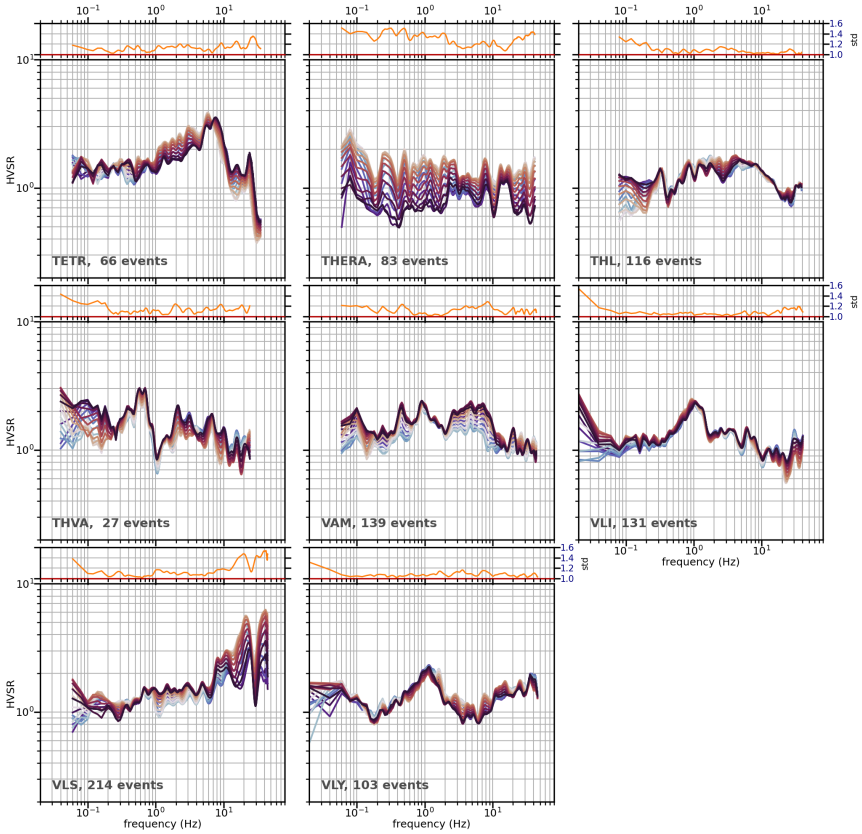
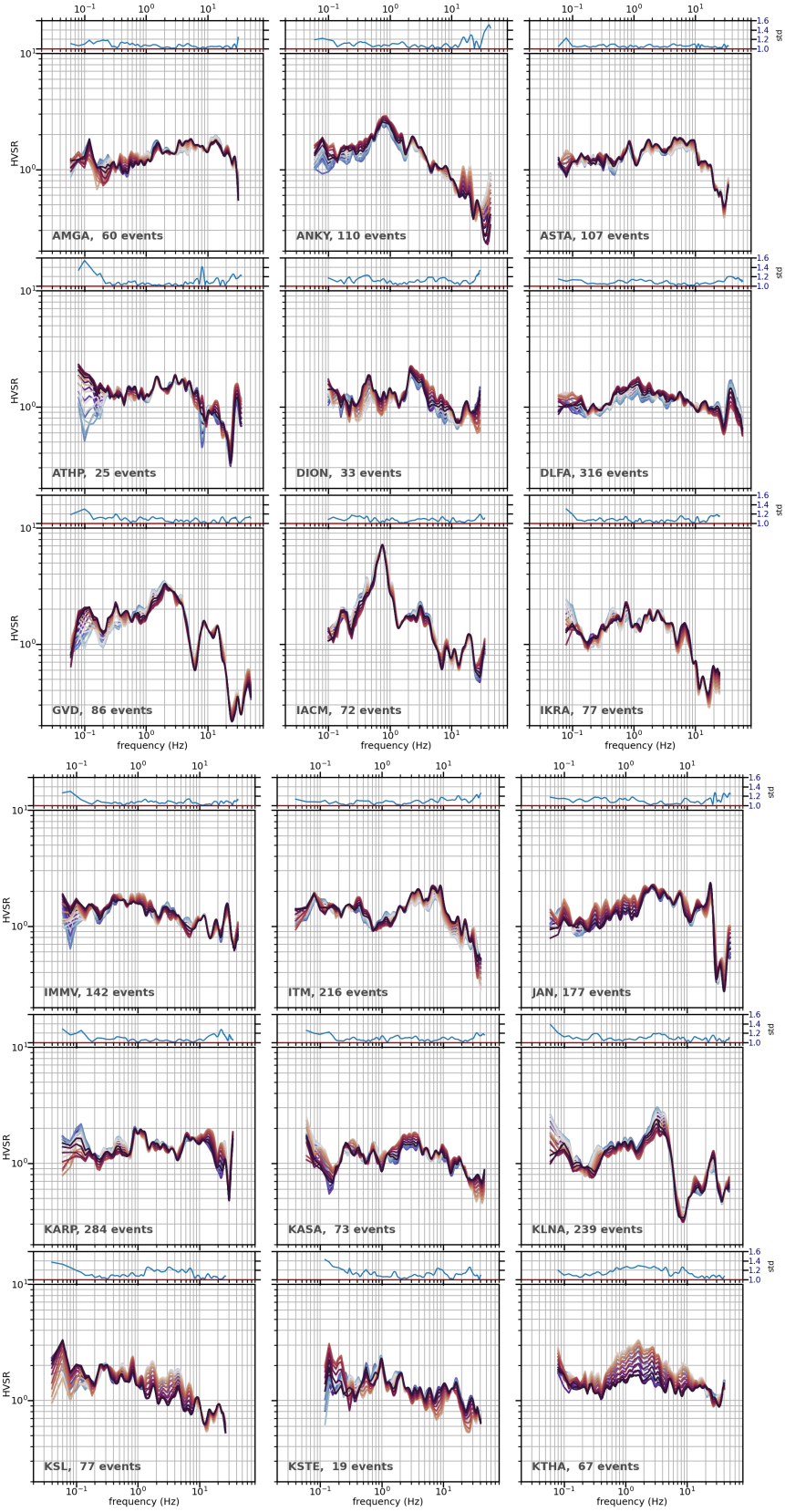


Figure S6: Sensitivity of mean HVSR of components rotated by 10 degree increments, for all HH stations.


AMGA, 60 events
ANKY, 110 events
ASTA, 107 events
ATHP, 25 events
DION, 33 events
DLFA, 316 events
GVD, 86 events
IACM, 72 events
IKRA, 77 events
IMMV, 142 events
ITM, 216 events
JAN, 177 events
KARP, 284 events
KASA, 73 events
KLNA, 239 events
KSL, 77 events
KSTE, 19 events
KTHA, 67 events
HVSR
std
frequency (Hz)

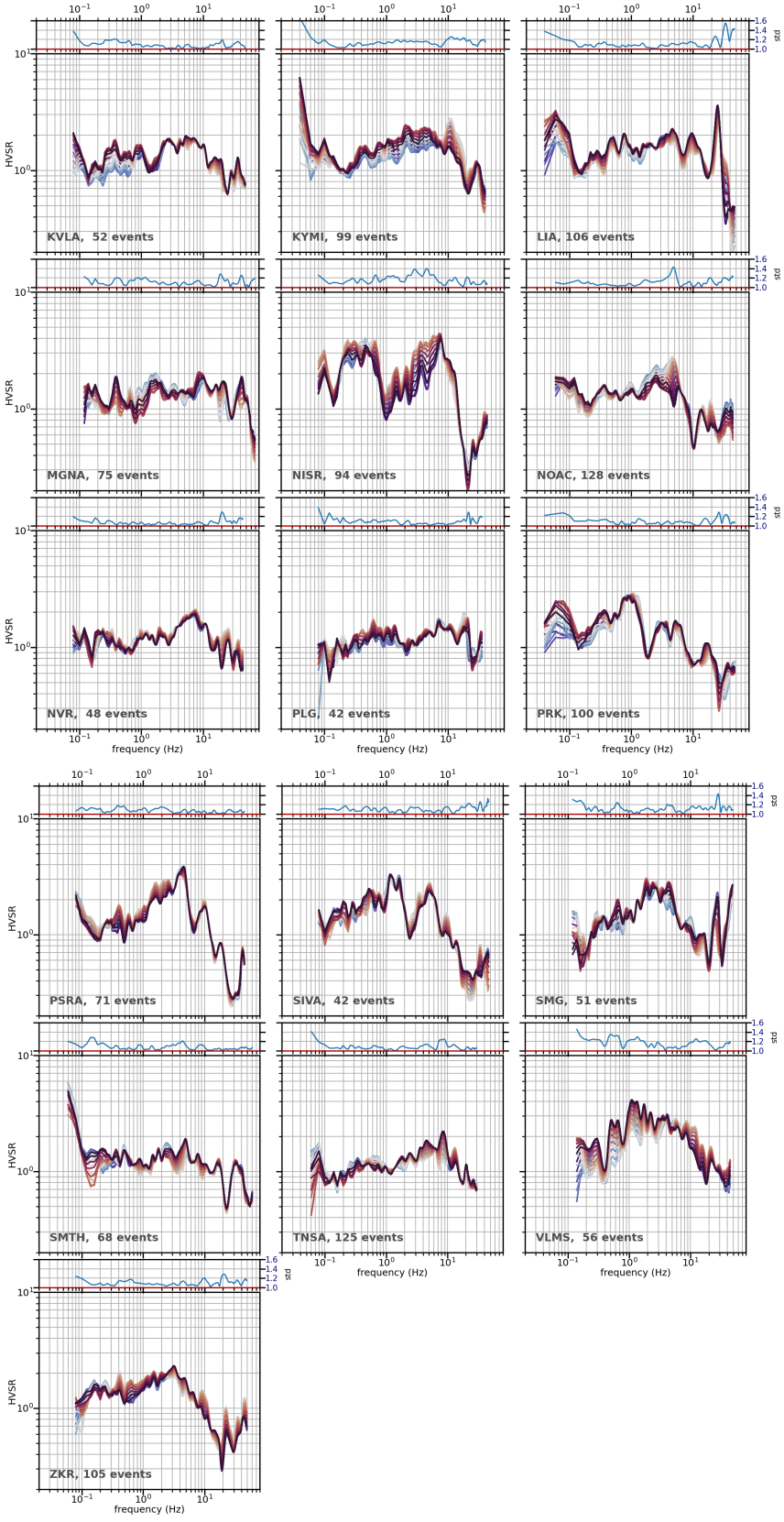


Figure S7: Sensitivity of mean HVSR of components rotated by 10 degree increments, for all HN stations.