Greens's Fucntion Report: N3Dmean_buffer10km_Q_ER_50m

January 25, 2022

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Artefact Report: N3Dmean_buffer10km_Q_ER_50m

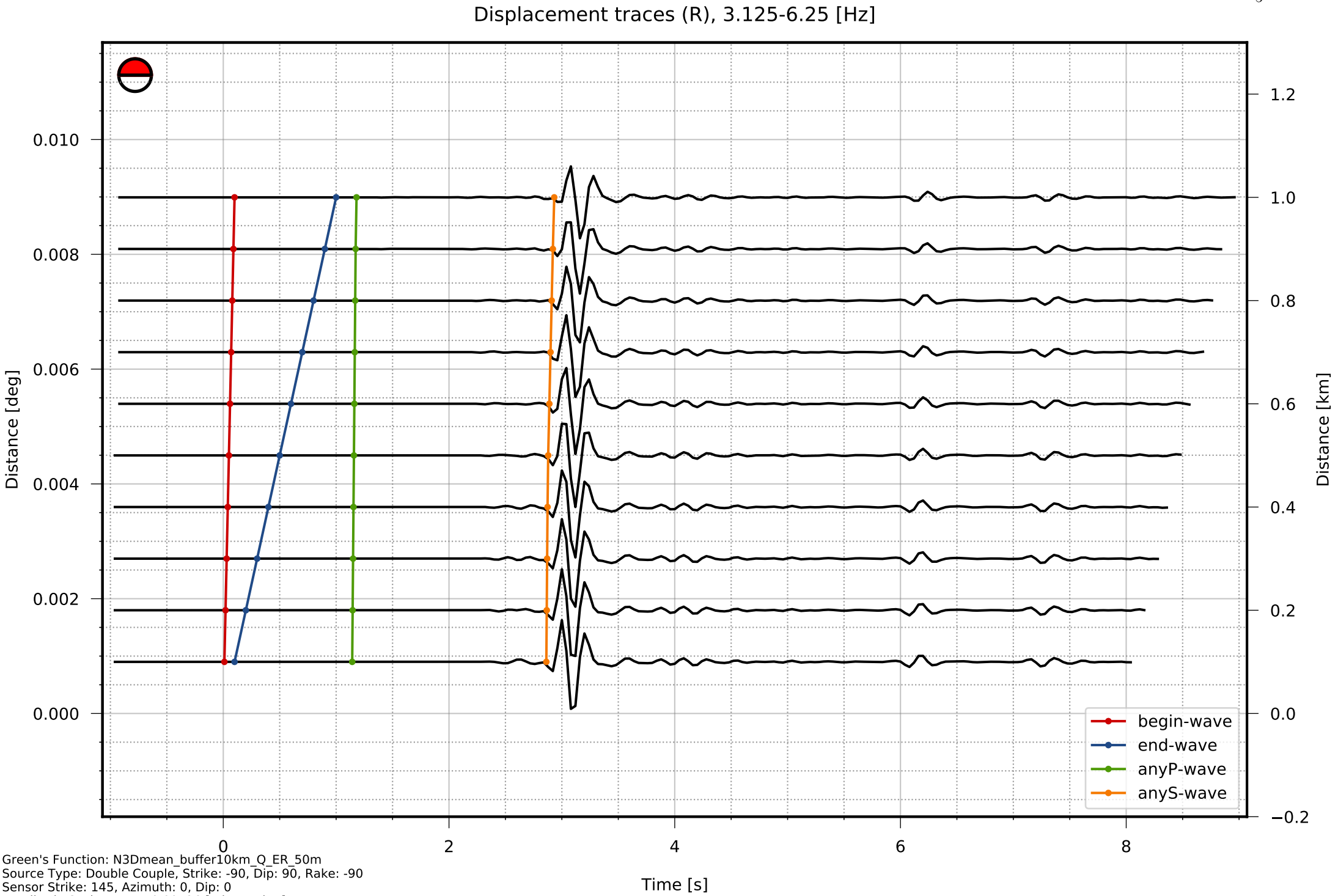
The artefact report is created by finding the maximum amplitude before and after a certain tabulated phase (after filtering without demeaning) for each trace, and then reports only the maximum value per source/senors array. The phase search string for this store was: **begin**.

Trace information	Aretefact maximum-ratio
Source Type: Double Couple, Strike: -90, Dip: 90, Rake: -90, Sensor Strike: 145, Azimuth: 0, Dip: 0	
Displacement traces (R)	0.000

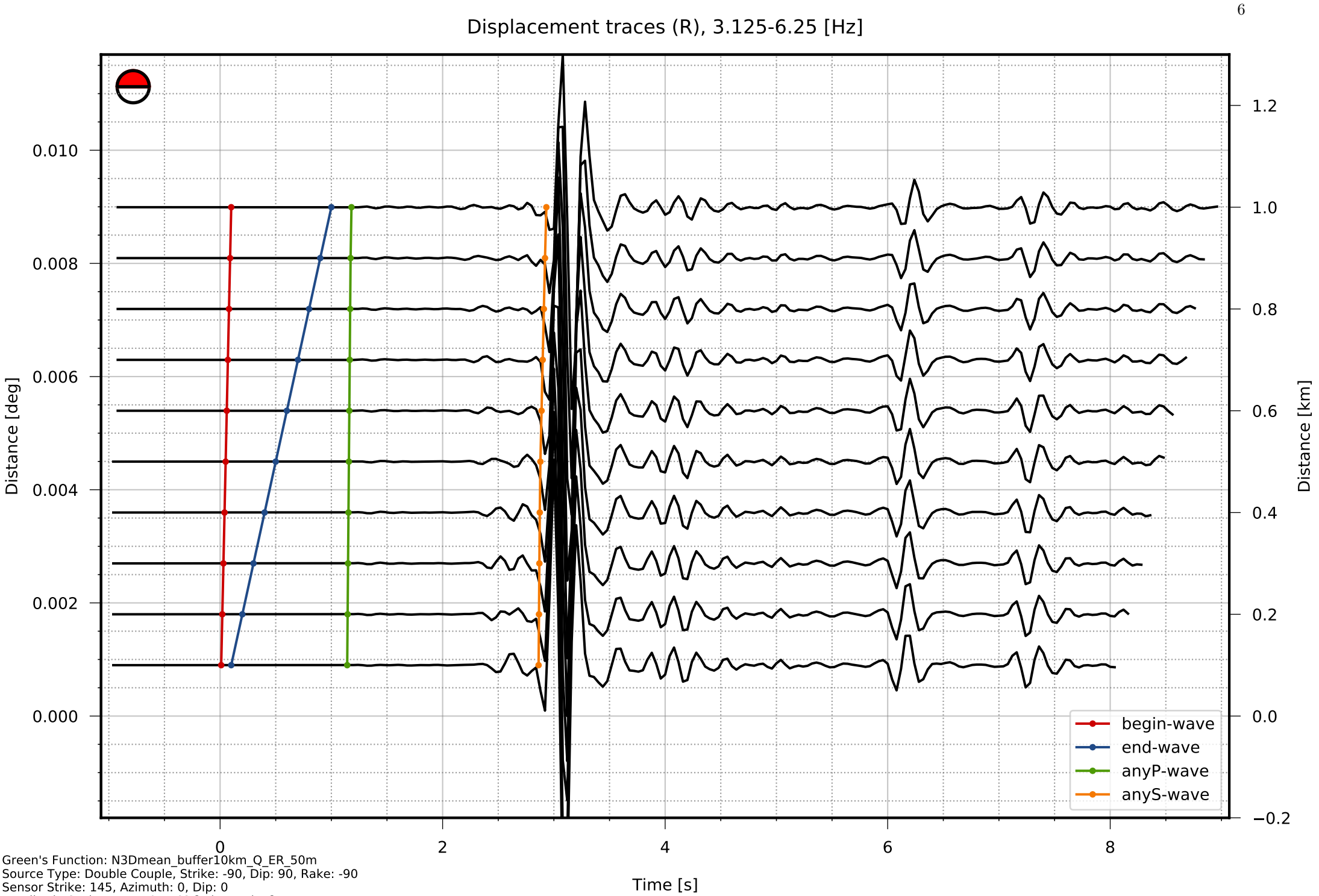
Source Type: Double Couple, Strike: -90, Dip: 90, Rake: -90, Sensor Strike: 145, Azimuth: 0, Dip: 0

— !pf.DCSource
depth: 3600.0
time: '1970-01-01 00:00:00'
stf_mode: post
magnitude: 0.2
strike: -90.0
dip: 90.0
rake: -90.0

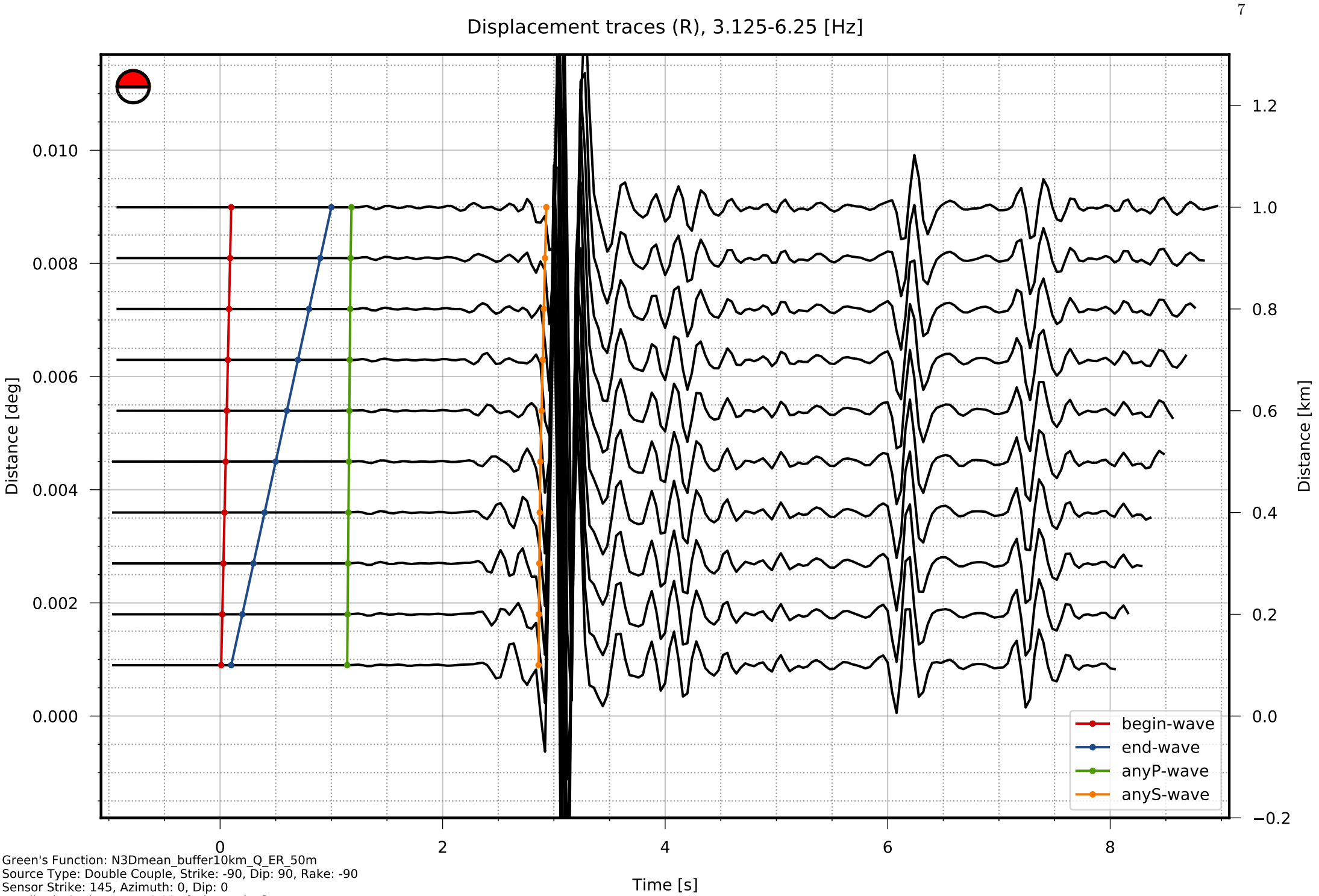
— !gft.SensorArray
depth: 0.0
codes:
- ''
- KWI
- ''
- R
elevation: 0.0
interpolation: nearest_neighbor
azimuth: 0.0
dip: 0.0
distance_min: 100.0
distance_max: 1000.0
strike: 145.0
sensor_count: 10



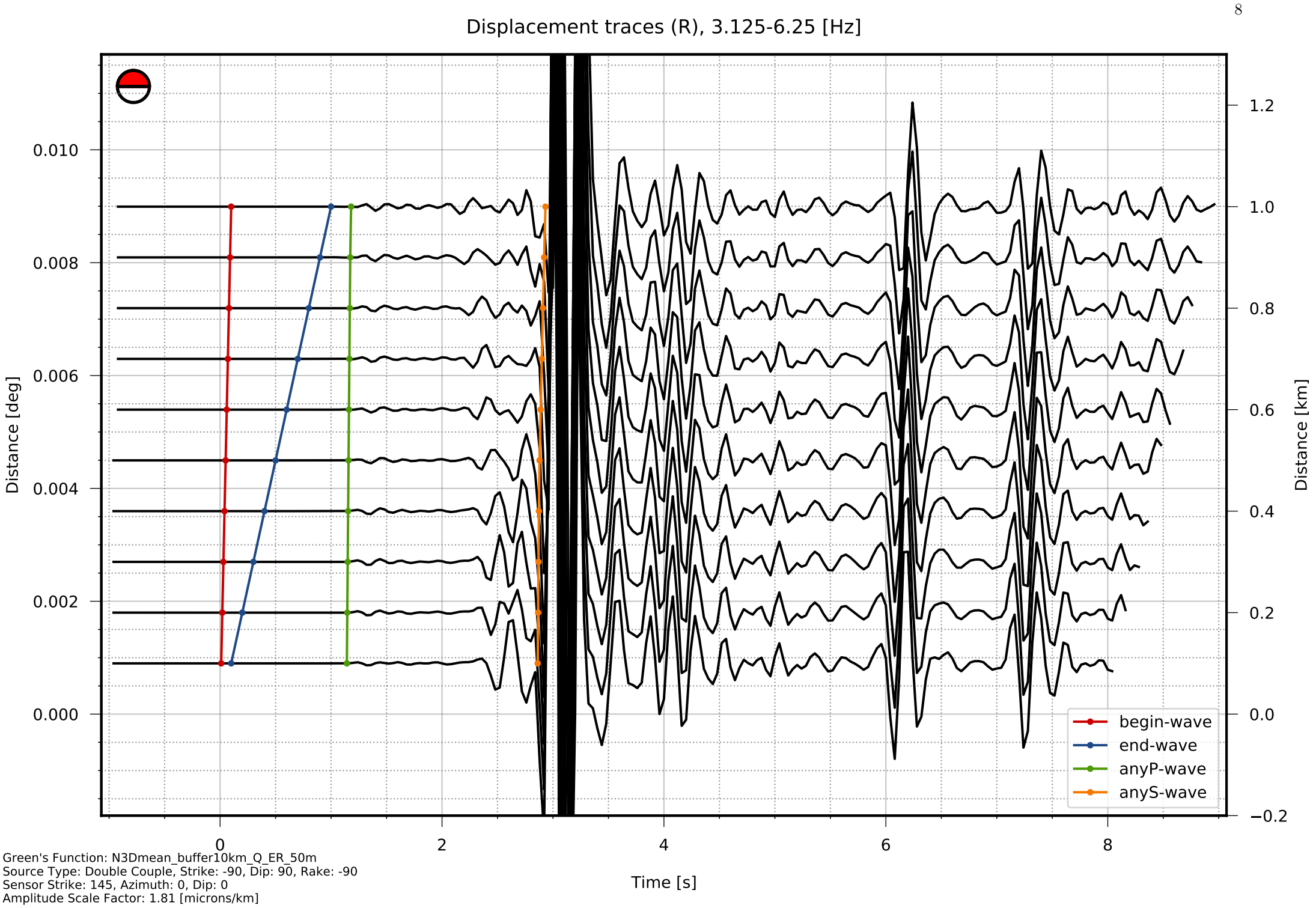
Green's Function: N3Dmean_buffer10km_Q_ER_50m
Source Type: Double Couple, Strike: -90, Dip: 90, Rake: -90
Sensor Strike: 145, Azimuth: 0, Dip: 0
Amplitude Scale Factor: 0.09526 [microns/km]

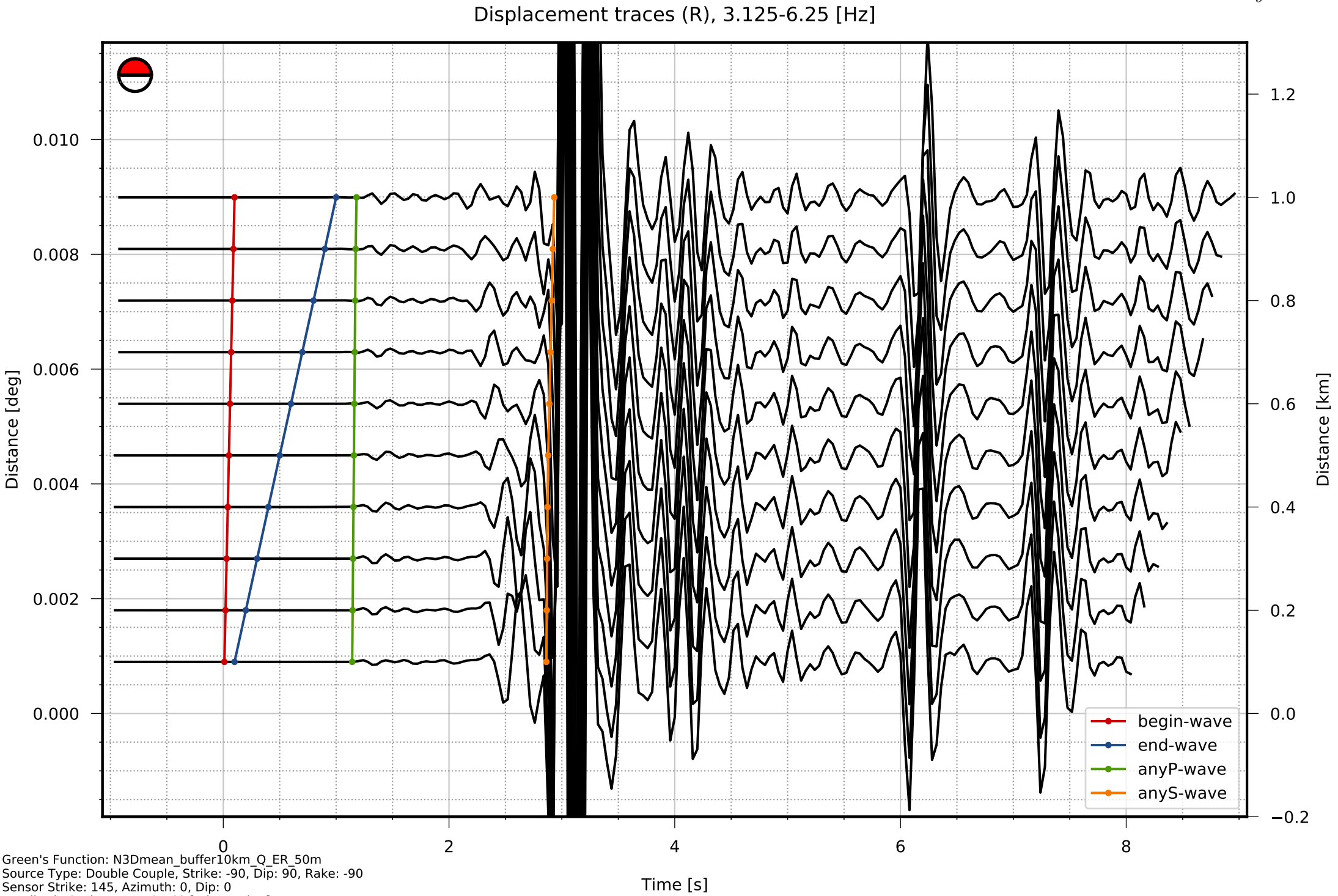


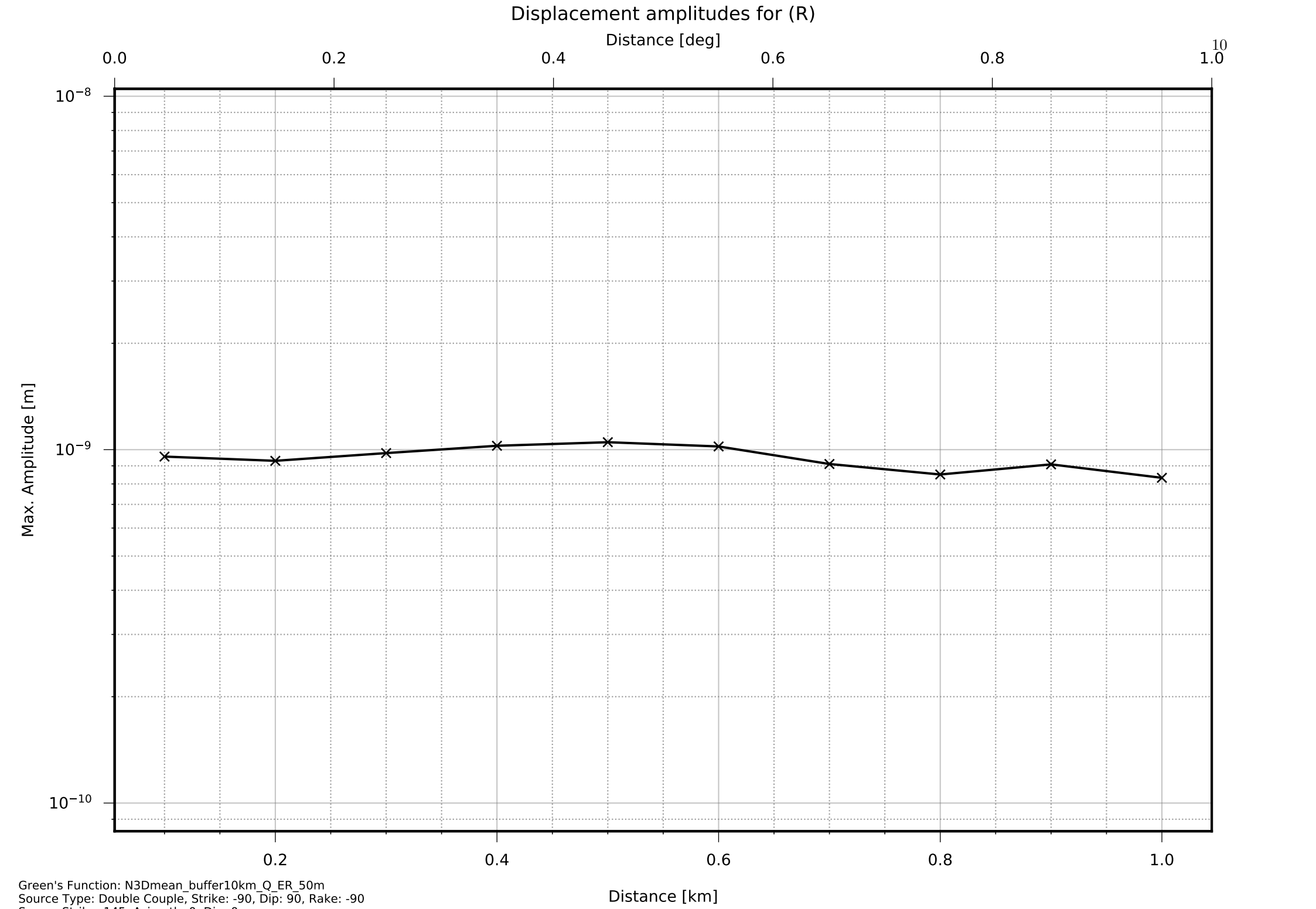
Green's Function: N3Dmean_buffer10km_Q_ER_50m
Source Type: Double Couple, Strike: -90, Dip: 90, Rake: -90
Sensor Strike: 145, Azimuth: 0, Dip: 0
Amplitude Scale Factor: 0.4763 [microns/km]



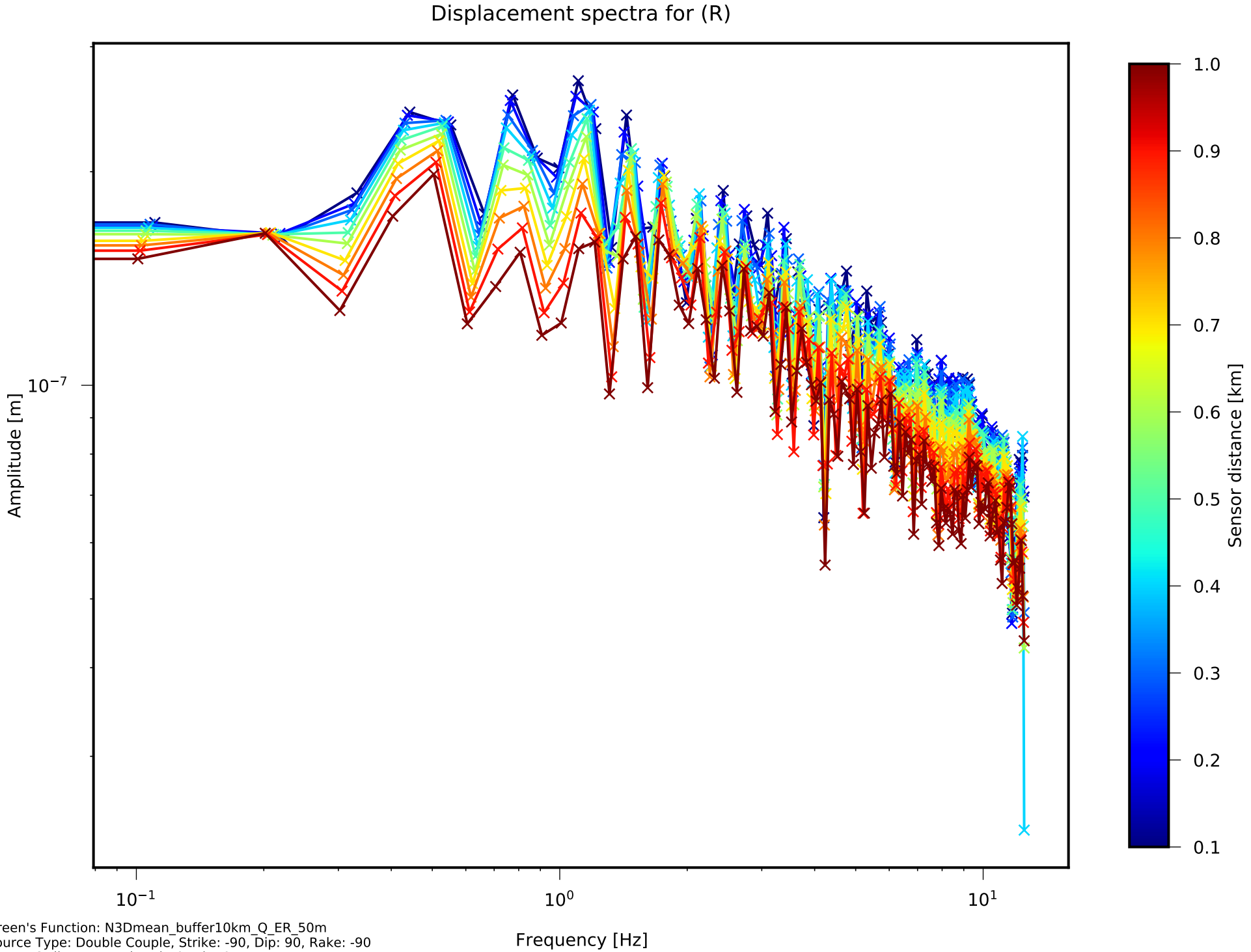
Green's Function: N3Dmean_buffer10km_Q_ER_50m
Source Type: Double Couple, Strike: -90, Dip: 90, Rake: -90
Sensor Strike: 145, Azimuth: 0, Dip: 0
Amplitude Scale Factor: 0.905 [microns/km]


Displacement traces (R), 3.125-6.25 [Hz]
Distance [deg]
0.010
0.008
0.006
0.004
0.002
0.000
Distance [km]
1.2
1.0
0.8
0.6
0.4
0.2
0.0
−0.2
0
2
4
6
8
Time [s]
begin-wave
end-wave
anyP-wave
anyS-wave
Green's Function: N3Dmean_buffer10km_Q_ER_50m
Source Type: Double Couple, Strike: -90, Dip: 90, Rake: -90
Sensor Strike: 145, Azimuth: 0, Dip: 0
Amplitude Scale Factor: 1.81 [microns/km]


Displacement traces (R), 3.125-6.25 [Hz]
Distance [deg]
0.010
0.008
0.006
0.004
0.002
0.000
Distance [km]
1.2
1.0
0.8
0.6
0.4
0.2
0.0
−0.2
0
2
4
6
8
Time [s]
begin-wave
end-wave
anyP-wave
anyS-wave
Green's Function: N3Dmean_buffer10km_Q_ER_50m
Source Type: Double Couple, Strike: -90, Dip: 90, Rake: -90
Sensor Strike: 145, Azimuth: 0, Dip: 0
Amplitude Scale Factor: 2.763 [microns/km]



Green's Function: N3Dmean_buffer10km_Q_ER_50m
Source Type: Double Couple, Strike: -90, Dip: 90, Rake: -90
Sensor Strike: 145, Azimuth: 0, Dip: 0



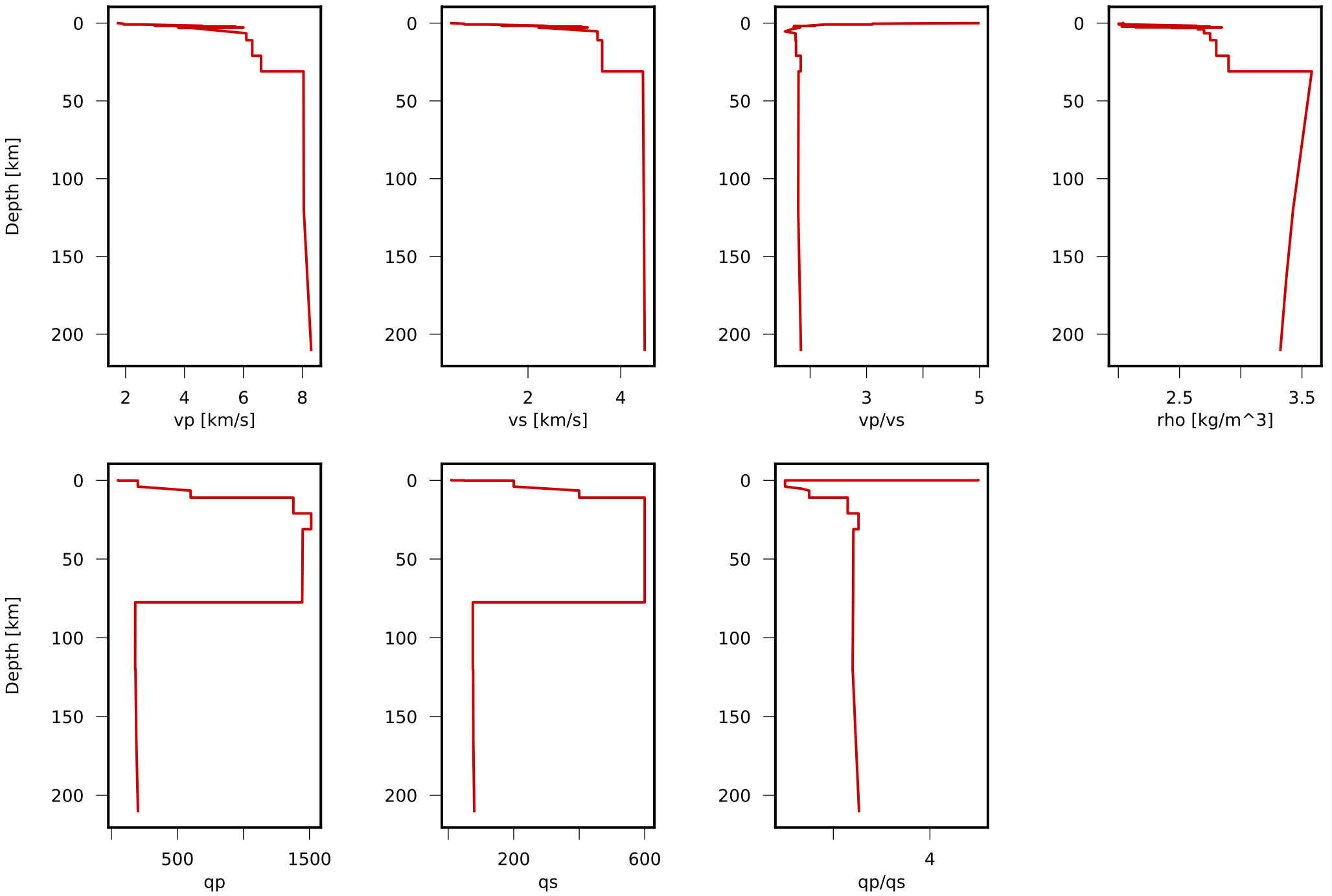
Green's Function: N3Dmean_buffer10km_Q_ER_50m
Source Type: Double Couple, Strike: -90, Dip: 90, Rake: -90
Sensor Strike: 145, Azimuth: 0, Dip: 0

Appendix

Model configuration: N3Dmean_buffer10km_Q_ER_50m

```
--- !pf.ConfigTypeB
id: N3Dmean_buffer10km_Q_ER_50m
modelling_code_id: qseis.2006a
regions: []
references: []
earthmodel_1d: |2
        0.              1.742           0.3499          2.039           50.             10.
        5.000E-02       1.767           0.3845          2.038           50.             10.
    I0A
        5.000E-02       1.767           0.3845          2.038           50.             50.
        0.2             1.843           0.4884          2.037           50.             50.
    I0B
        0.2             1.843           0.4884          2.037           200.            200.
        0.3383          1.913           0.5841          2.035           200.            200.
    I01
        0.3383          1.931           0.622           2.002           200.            200.
        0.8358          1.931           0.622           2.002           200.            200.
    I02
        0.8358          2.551           1.126           2.083           200.            200.
        1.73            4.606           2.368           2.639           200.            200.
    I03
        1.73            2.991           1.434           2.421           200.            200.
        1.809           3.029           1.466           2.433           200.            200.
    I04
        1.809           3.613           2.106           2.352           200.            200.
        1.952           3.708           2.157           2.374           200.            200.
```

```
  I05
      1.952          4.3          2.436          2.028          200.           200.
      2.139          4.3          2.436          2.028          200.           200.
  I06
      2.139          5.729        3.152          2.748          200.           200.
      2.177          5.729        3.152          2.748          200.           200.
  I07
      2.177          4.475        2.524          2.141          200.           200.
      2.772          4.475        2.524          2.141          200.           200.
  I08
      2.772          6.           3.288          2.845          200.           200.
      2.823          6.           3.288          2.845          200.           200.
  I09
      2.823          3.8          2.232          2.435          200.           200.
      3.084          3.8          2.232          2.435          200.           200.
  I10
      3.084          4.241        2.384          2.65           200.           200.
      4.             4.736        2.843          2.65           200.           200.
      4.             4.736        2.843          2.7            200.           200.
      5.31           5.445        3.5            2.7            408.           304.
      5.31           5.445        3.5            2.7            408.           304.
      6.521          6.1          3.5            2.7            600.           400.
  baselocal
      6.521          6.1          3.5            2.75           600.           400.
     11.             6.1          3.5            2.75           600.           400.
     11.             6.3          3.6            2.8           1378.           600.
     21.             6.3          3.6            2.8           1378.           600.
     21.             6.6          3.6            2.9           1513.           600.
     31.             6.6          3.6            2.9           1513.           600.
  mantle
     31.             8.04         4.48           3.58          1449.           600.
     77.5            8.045        4.49           3.5           1445.           600.
     77.5            8.045        4.49           3.5            180.6           75.
    120.             8.05         4.5            3.427          180.           75.
    120.             8.05         4.5            3.427          182.6          76.06
    165.             8.175        4.509          3.371          188.7          76.55
    210.             8.301        4.518          3.324          201.           79.4
sample_rate: 25.0
component_scheme: elastic10
tabulated_phases:
```

```
- !pf.TPDef
  id: begin
  definition: '10.0'
- !pf.TPDef
  id: end
  definition: '1.0'
- !pf.TPDef
  id: anyP
  definition: P,p
- !pf.TPDef
  id: anyS
  definition: S,s
- !pf.TPDef
  id: P
  definition: P
- !pf.TPDef
  id: S
  definition: S
- !pf.TPDef
  id: p
  definition: p
- !pf.TPDef
  id: s
  definition: s
ncomponents: 10
receiver_depth_min: 0.0
receiver_depth_max: 200.0
receiver_depth_delta: 50.0
source_depth_min: 1000.0
source_depth_max: 4000.0
source_depth_delta: 50.0
distance_min: 0.0
distance_max: 15000.0
distance_delta: 50.0
```

Earth model plots: N3Dmean_buffer10km_Q_ER_50m