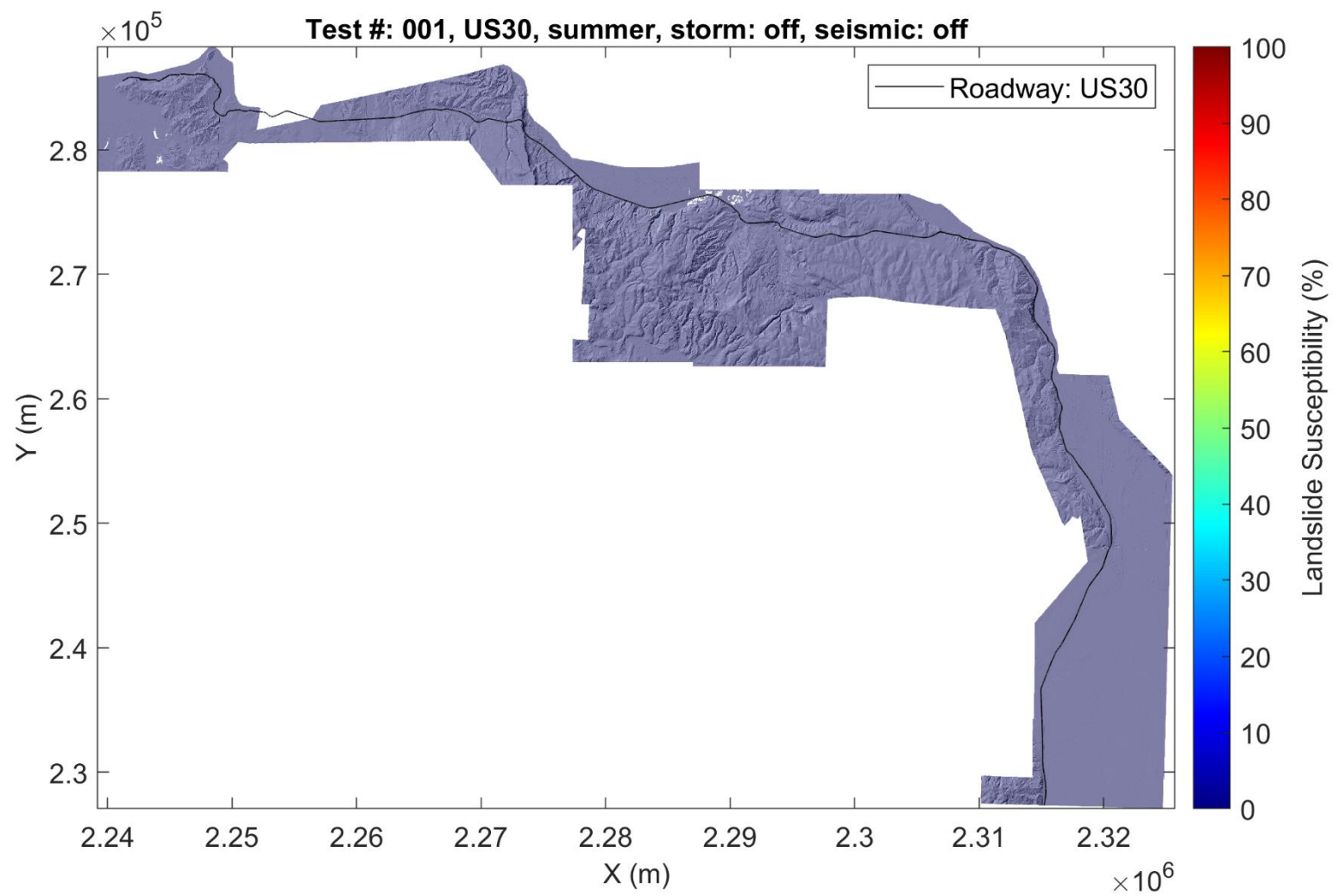
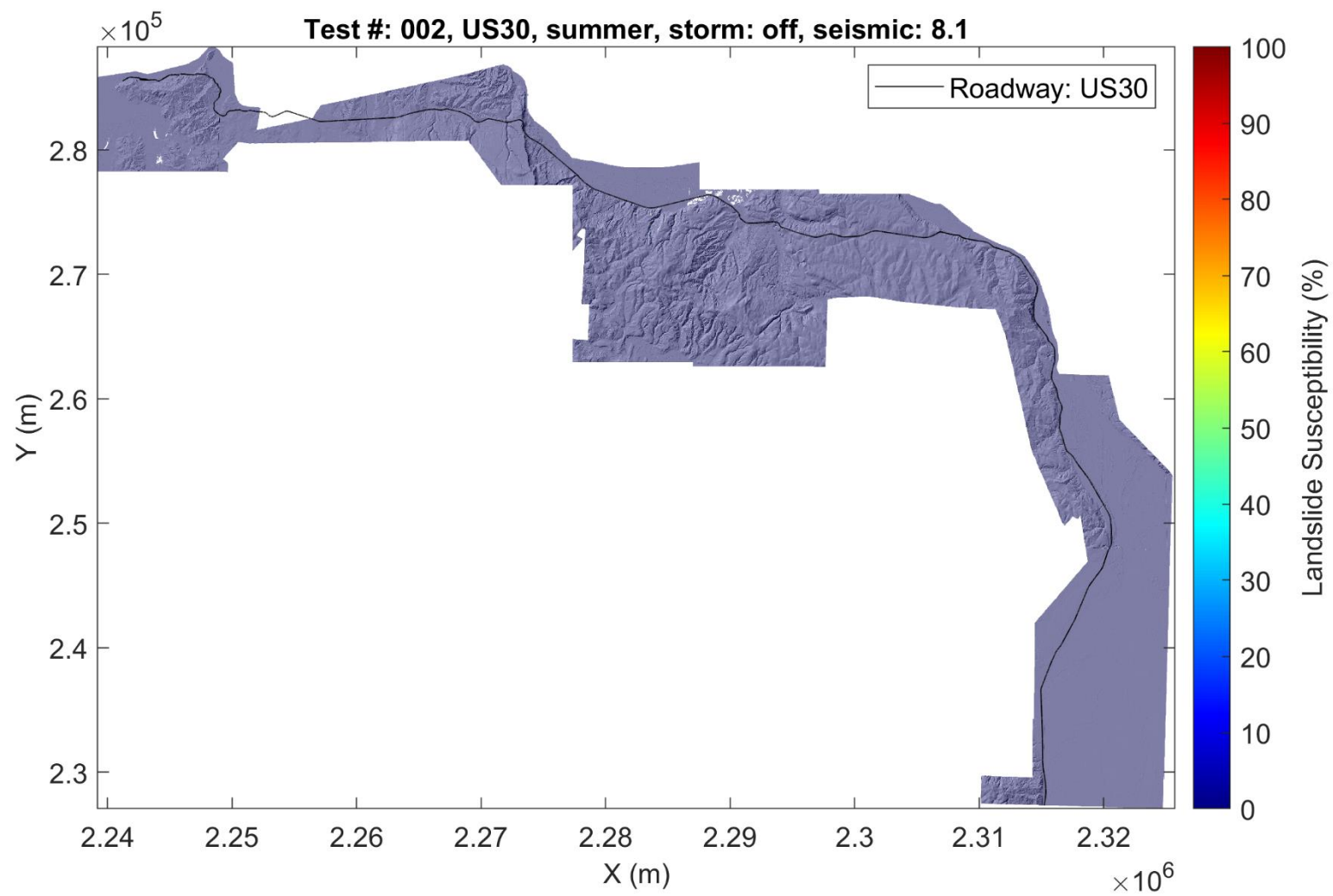
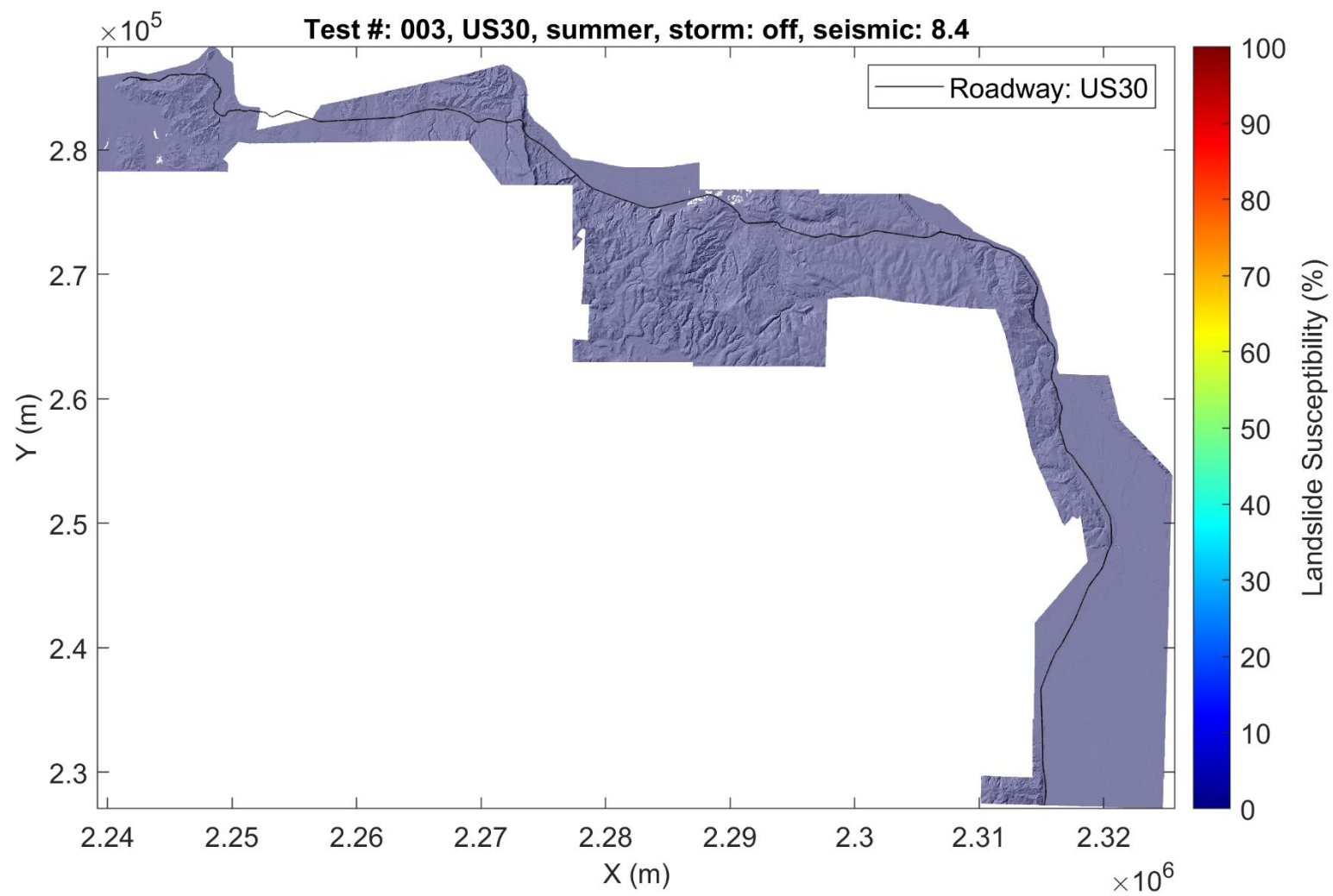


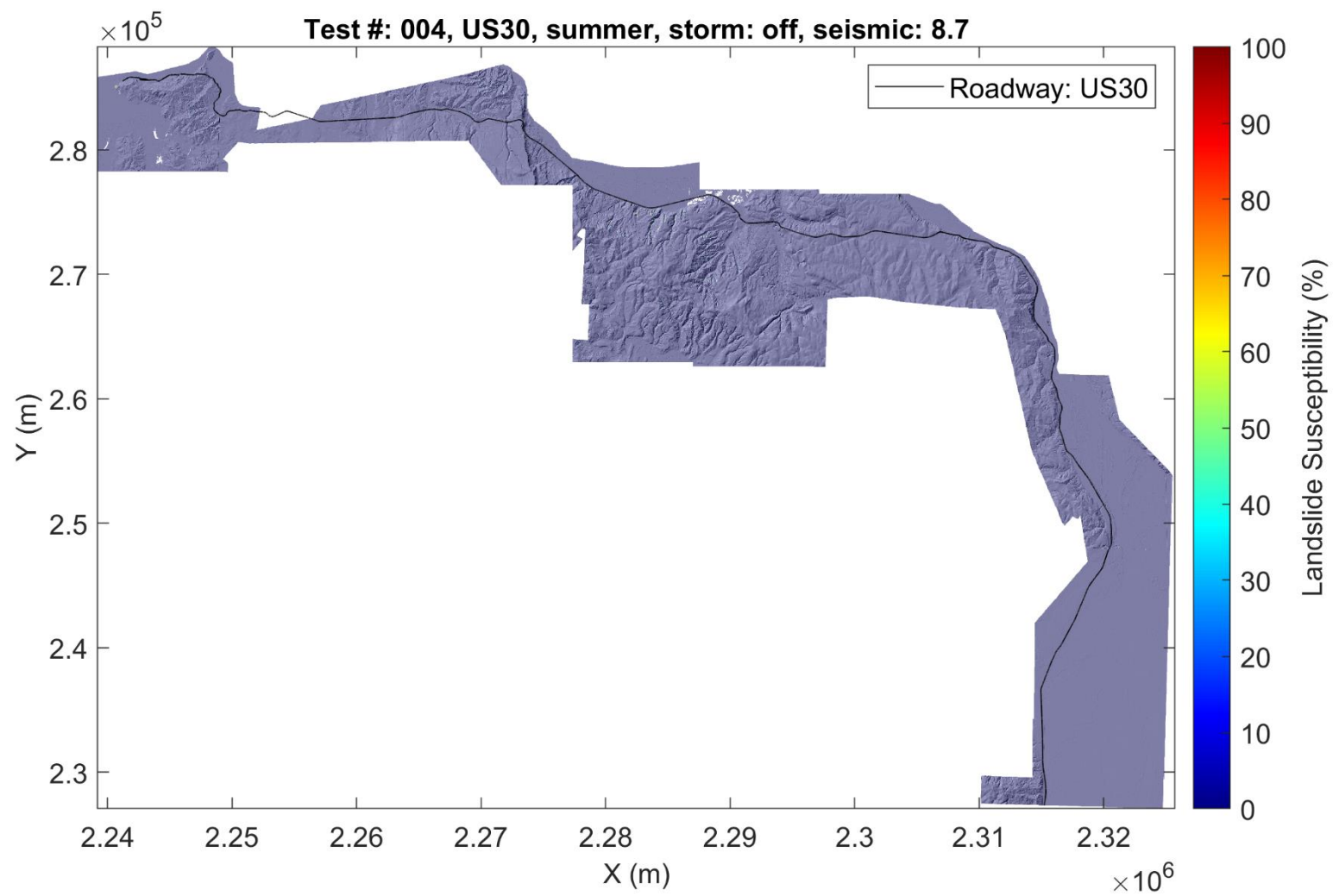
APPENDIX A: SUSCEPTIBILITY MAPS

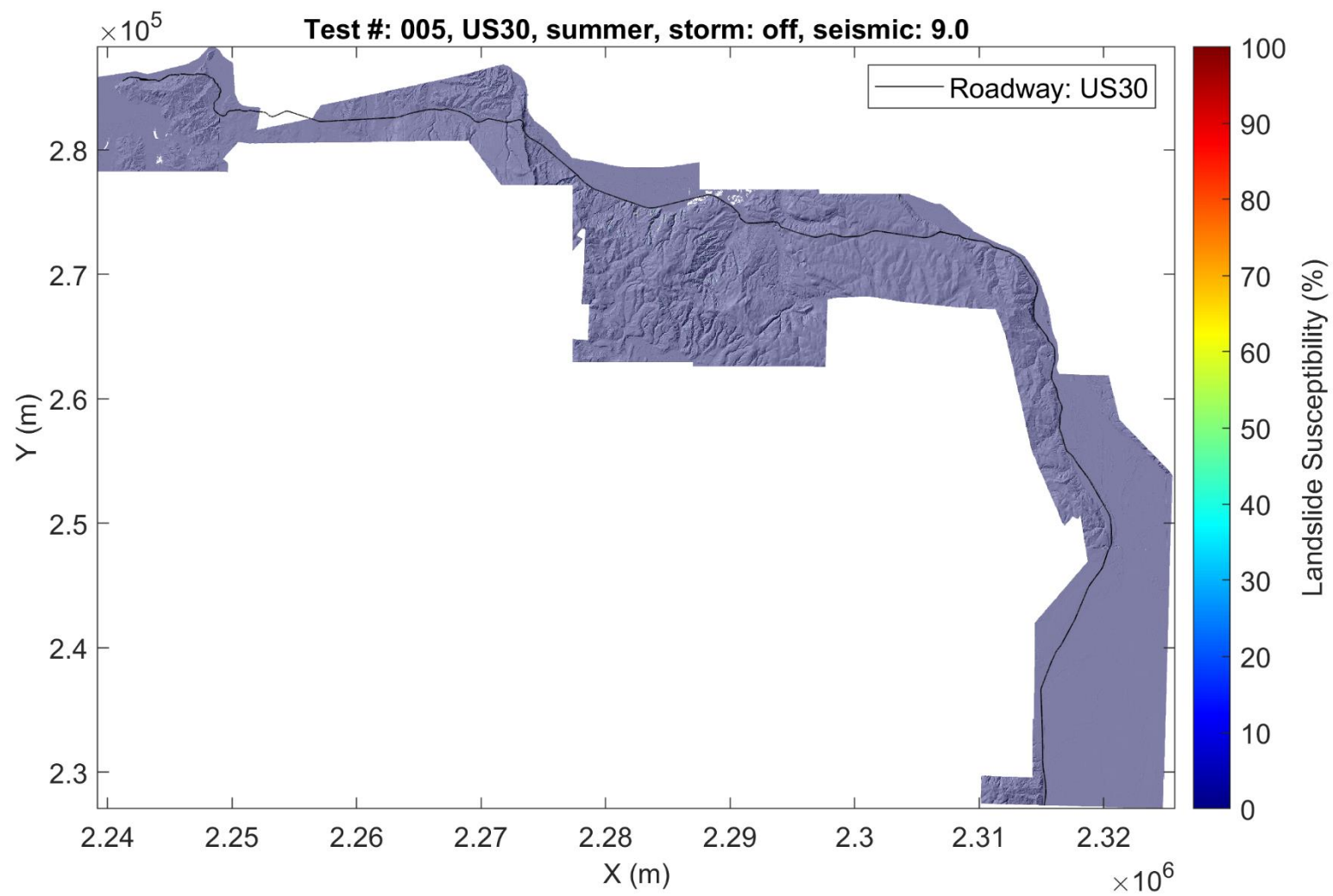
This appendix contains a full suite of susceptibility maps for all scenarios considered for SPR808. These scenarios consider a combination of physical drivers, including seasonal variations in antecedent moisture, rainfall inputs, seismicity, and climate-change induced precipitation anomaly. A directory describing all tests not considering future climate may be found in Table 4.4. A directory describing all tests considering future climate may be found in Table 4.7.

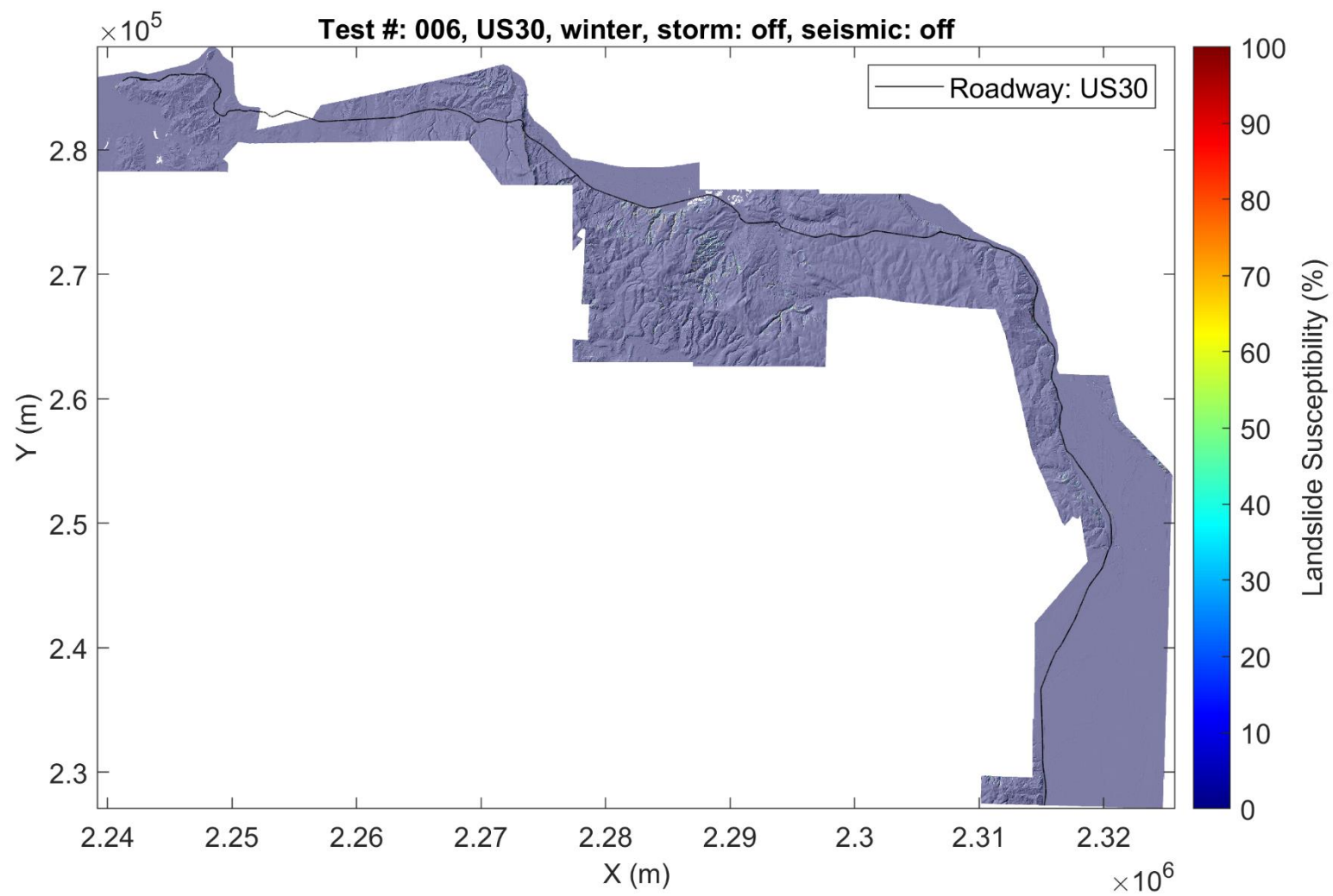


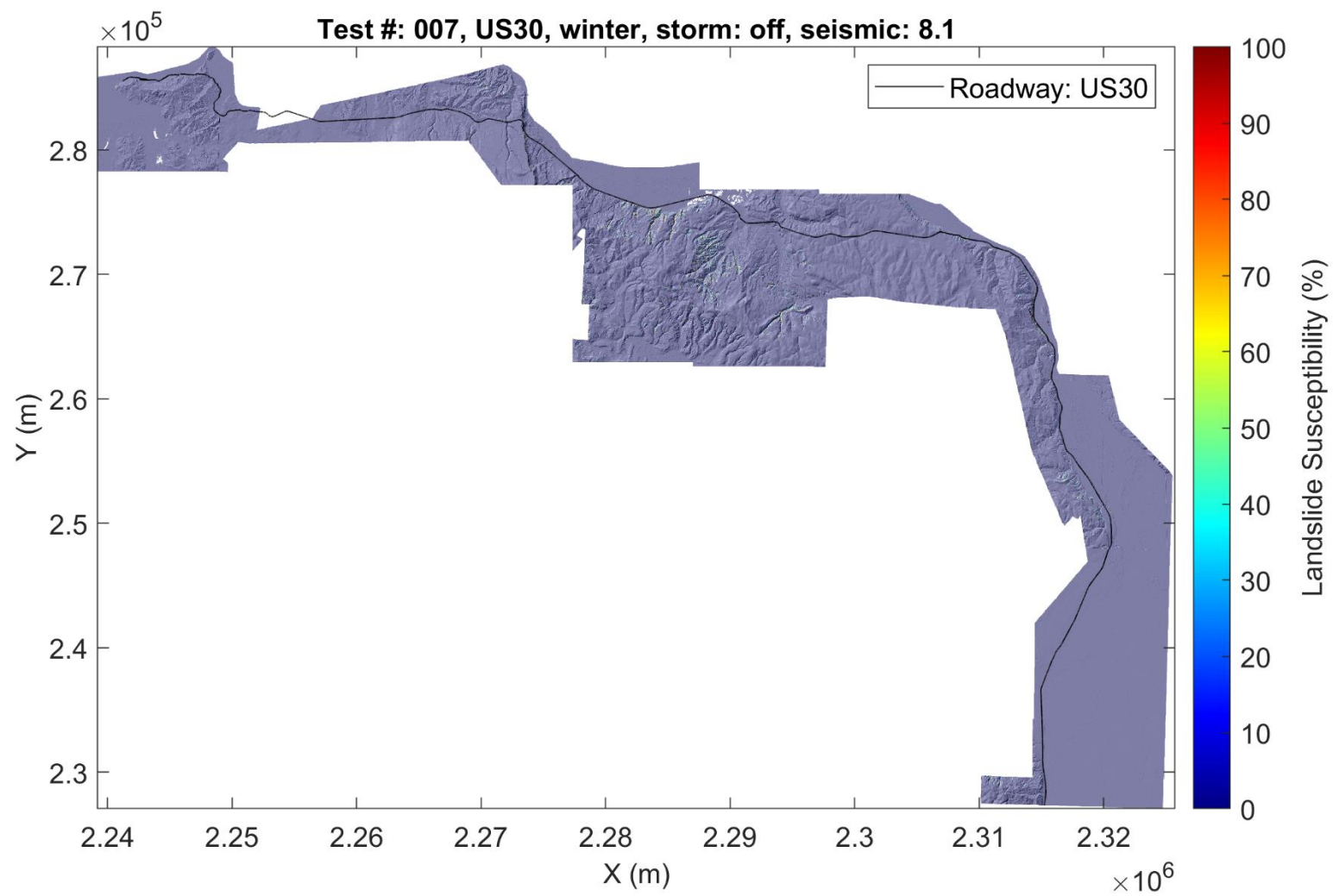


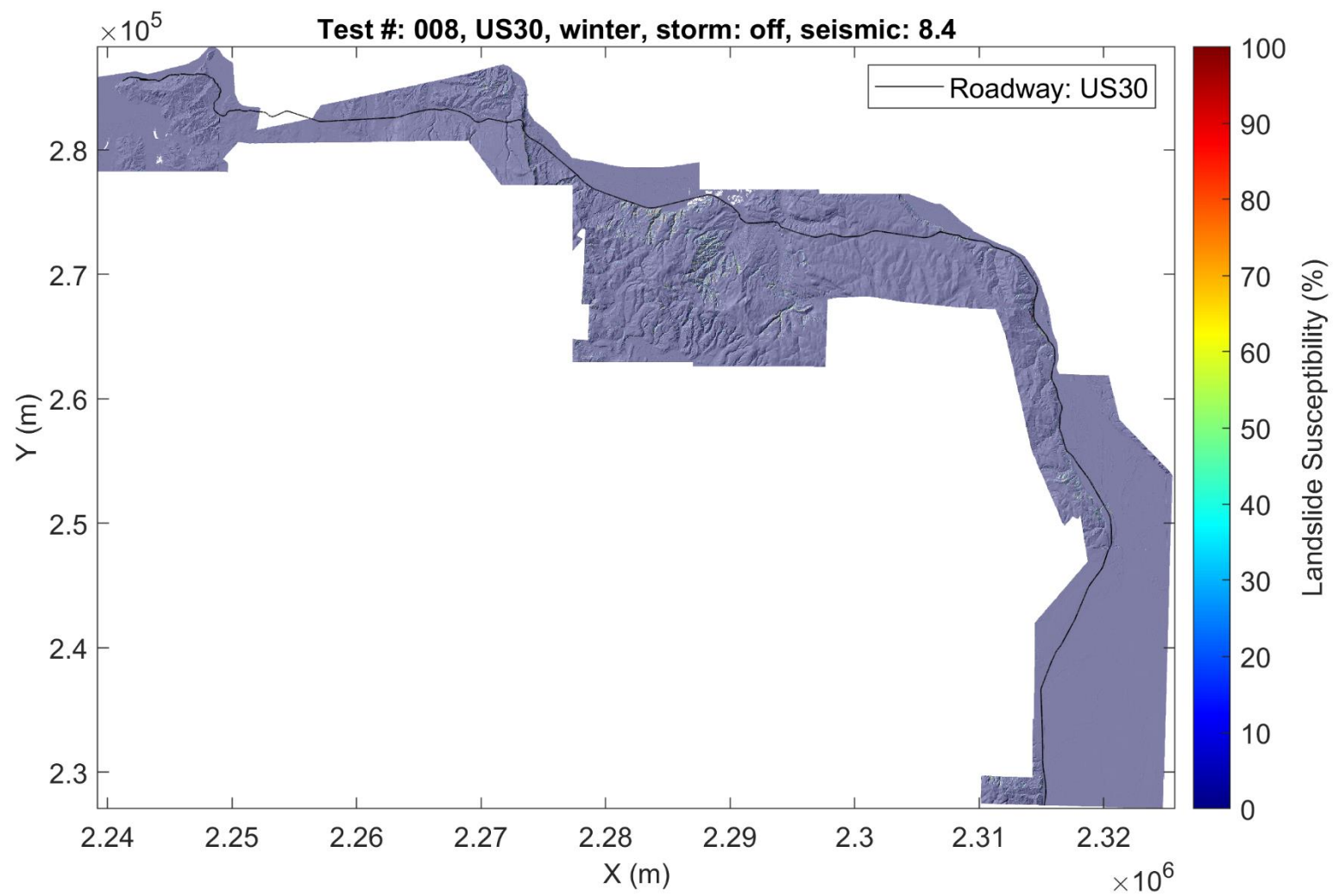


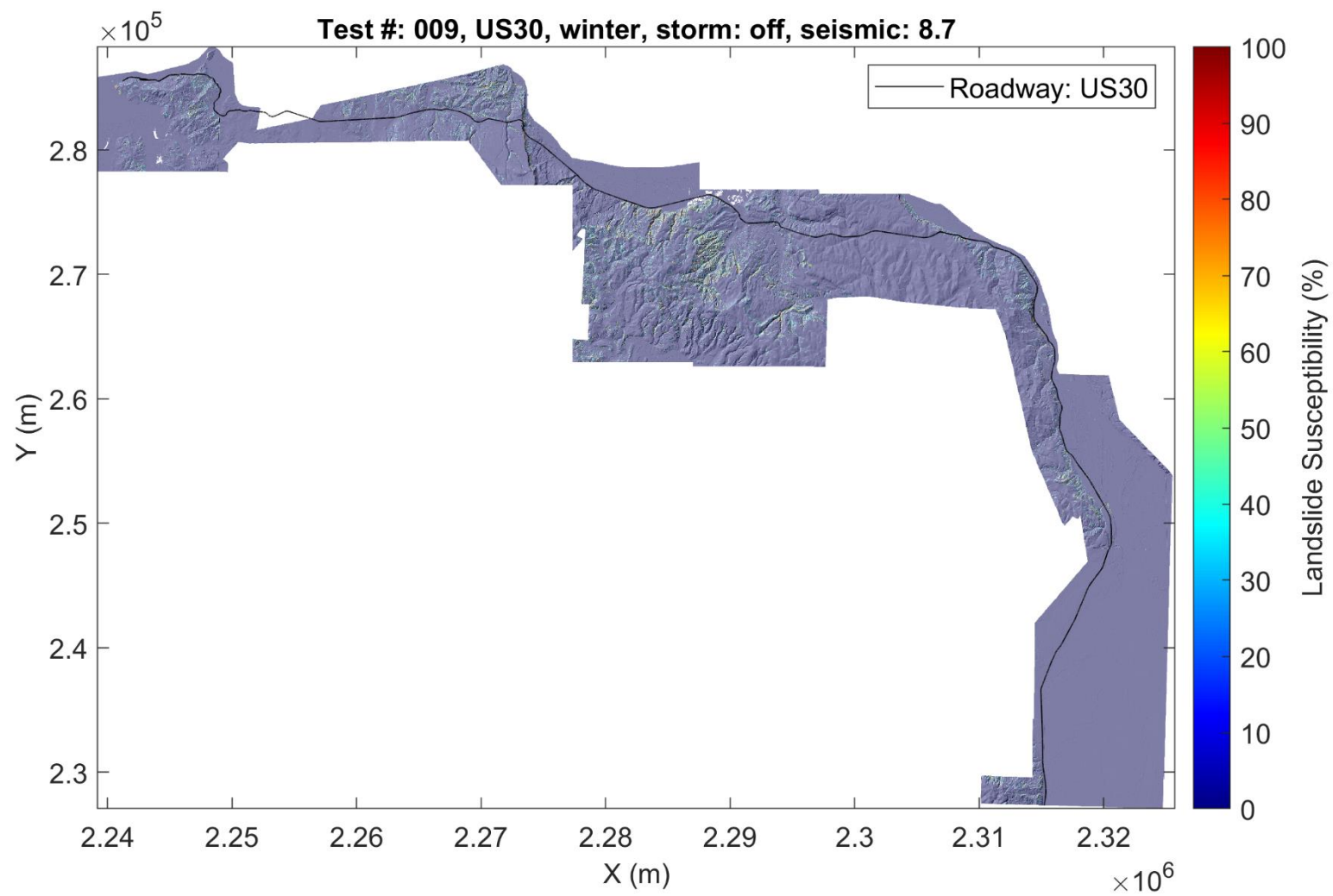


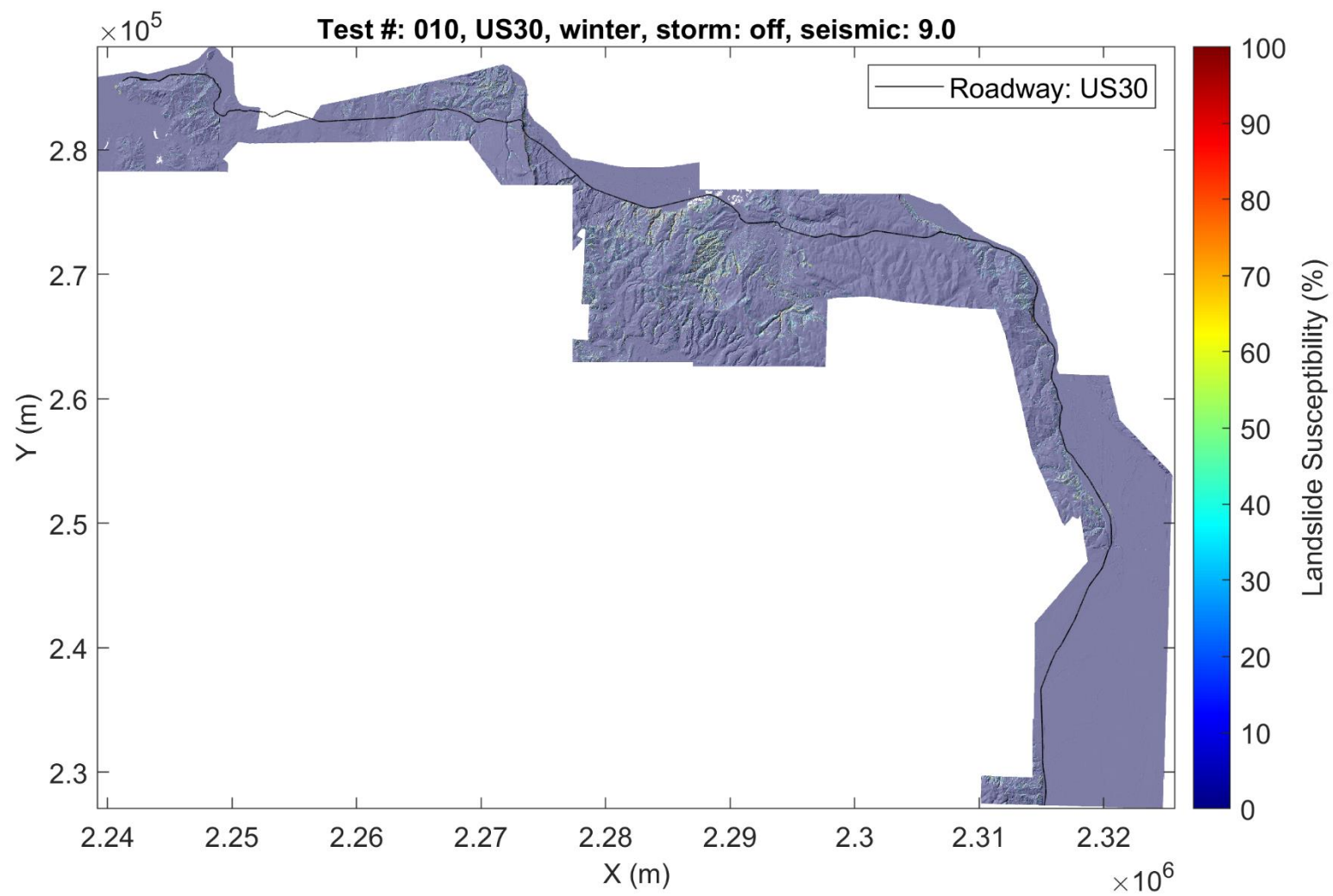


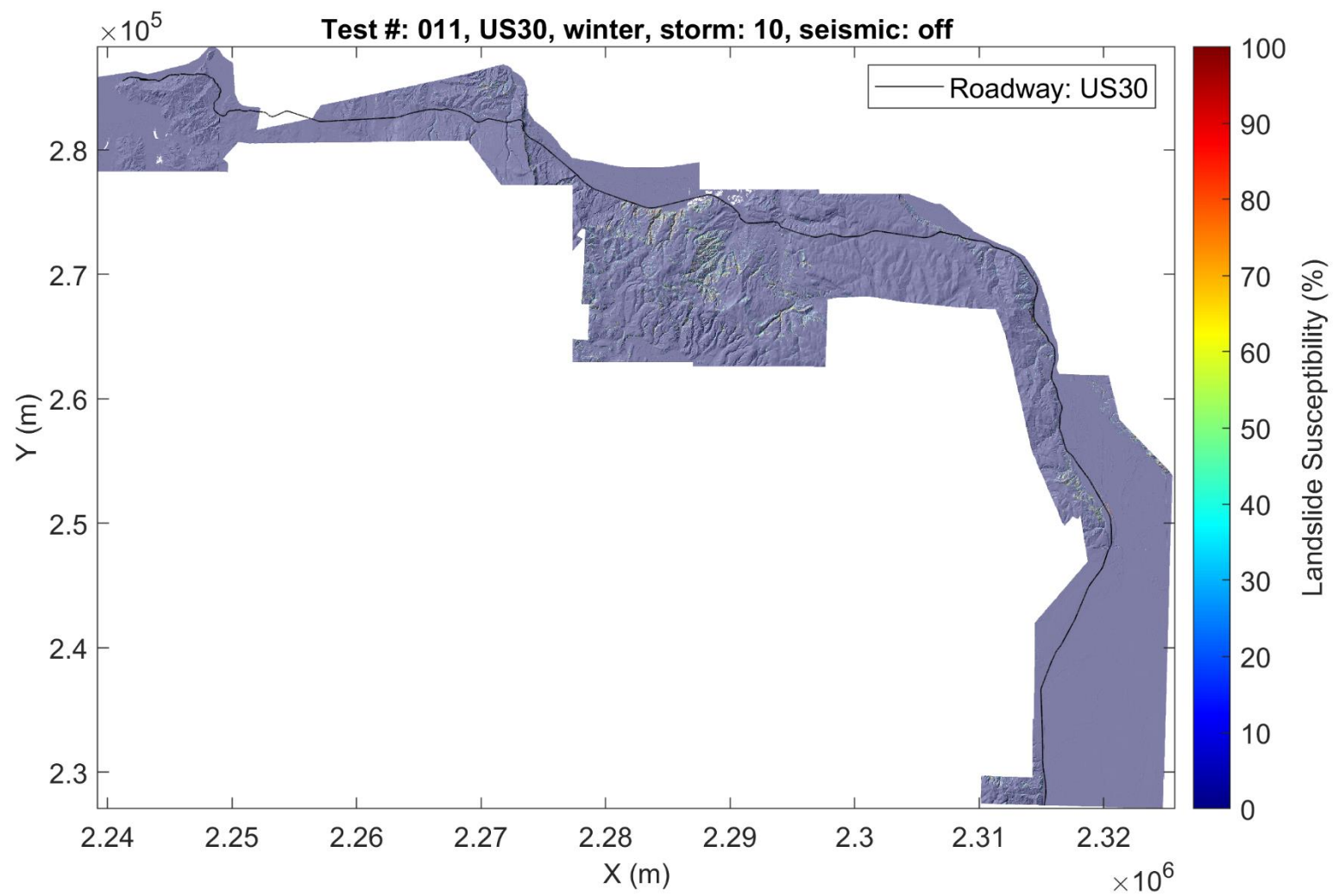


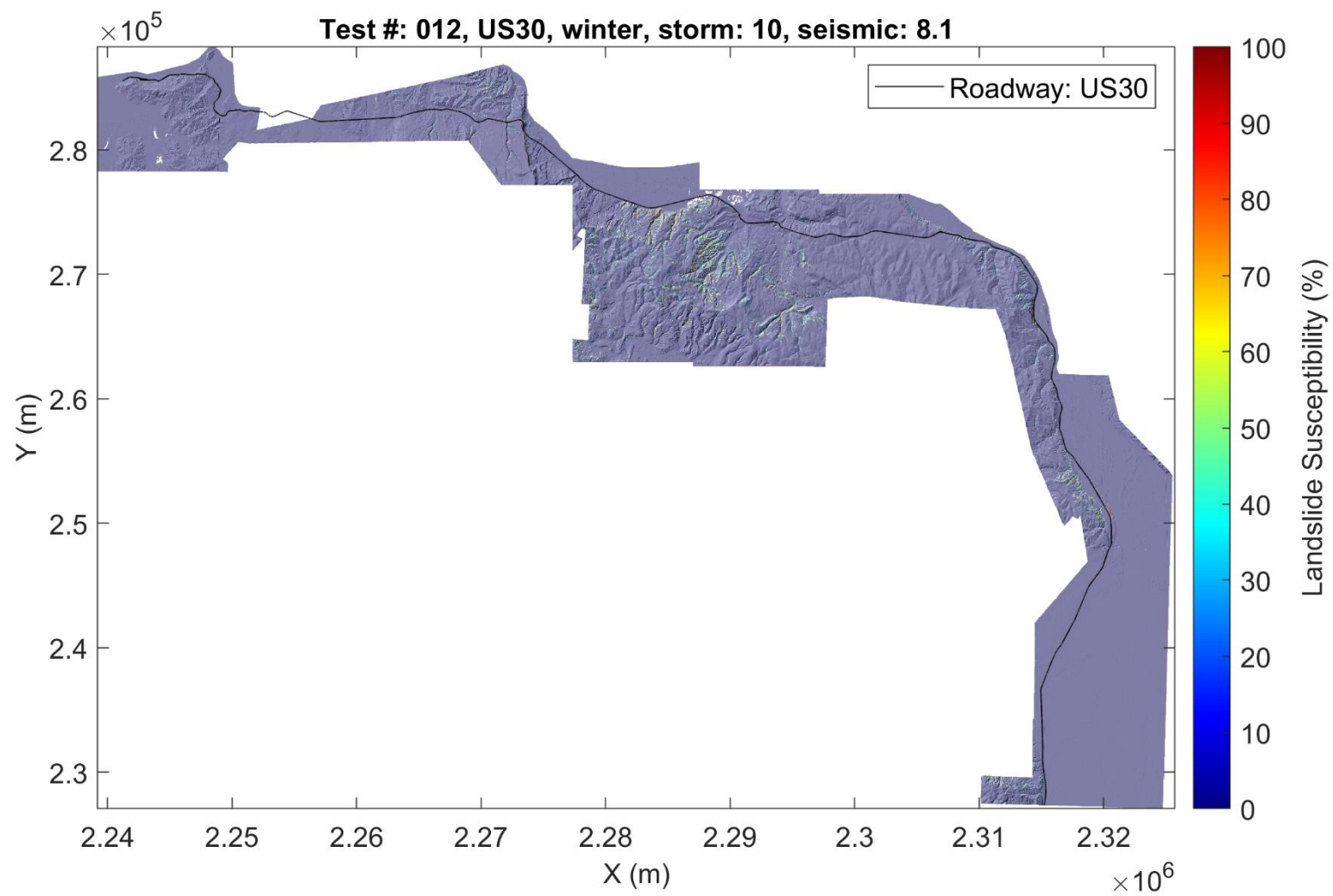


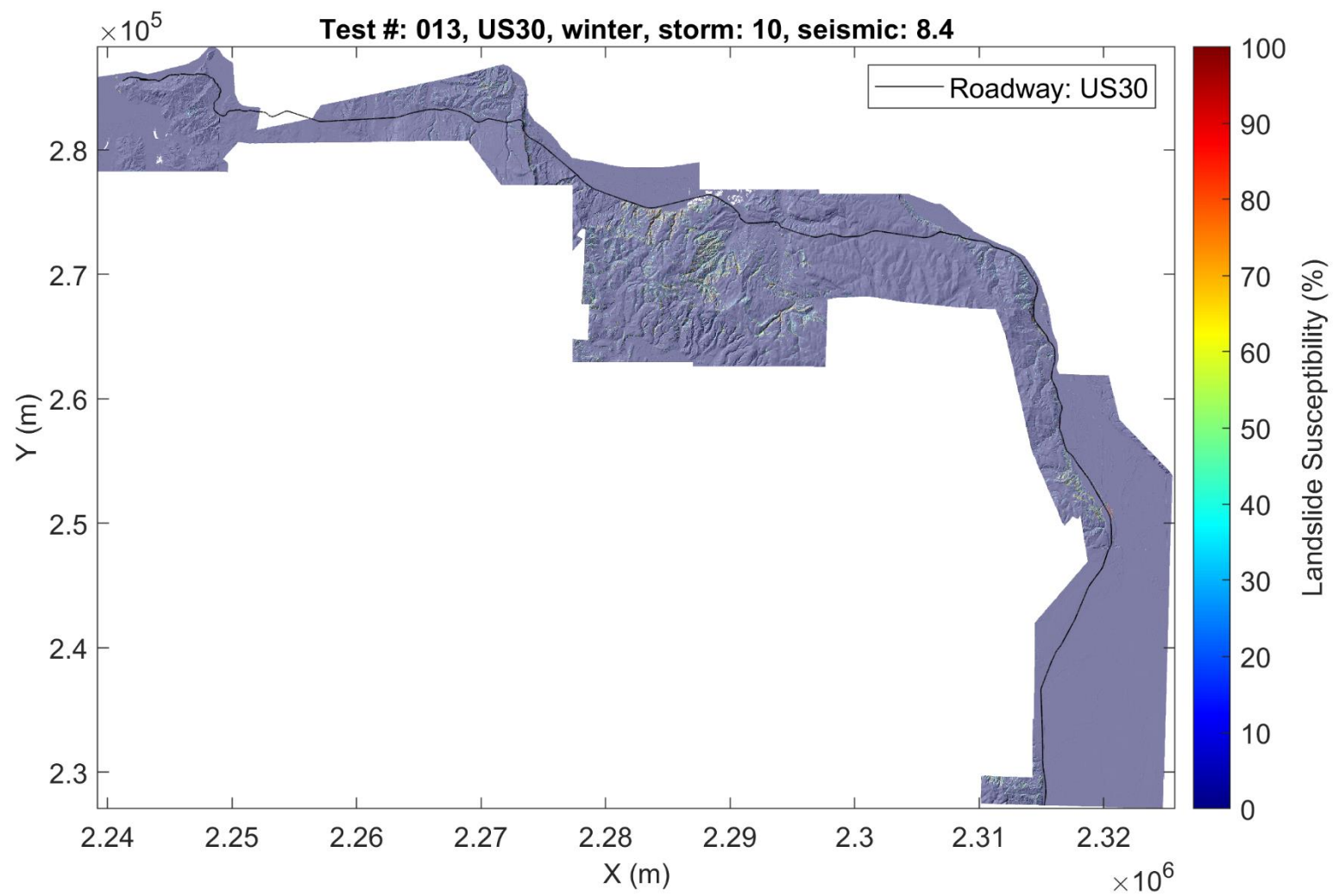


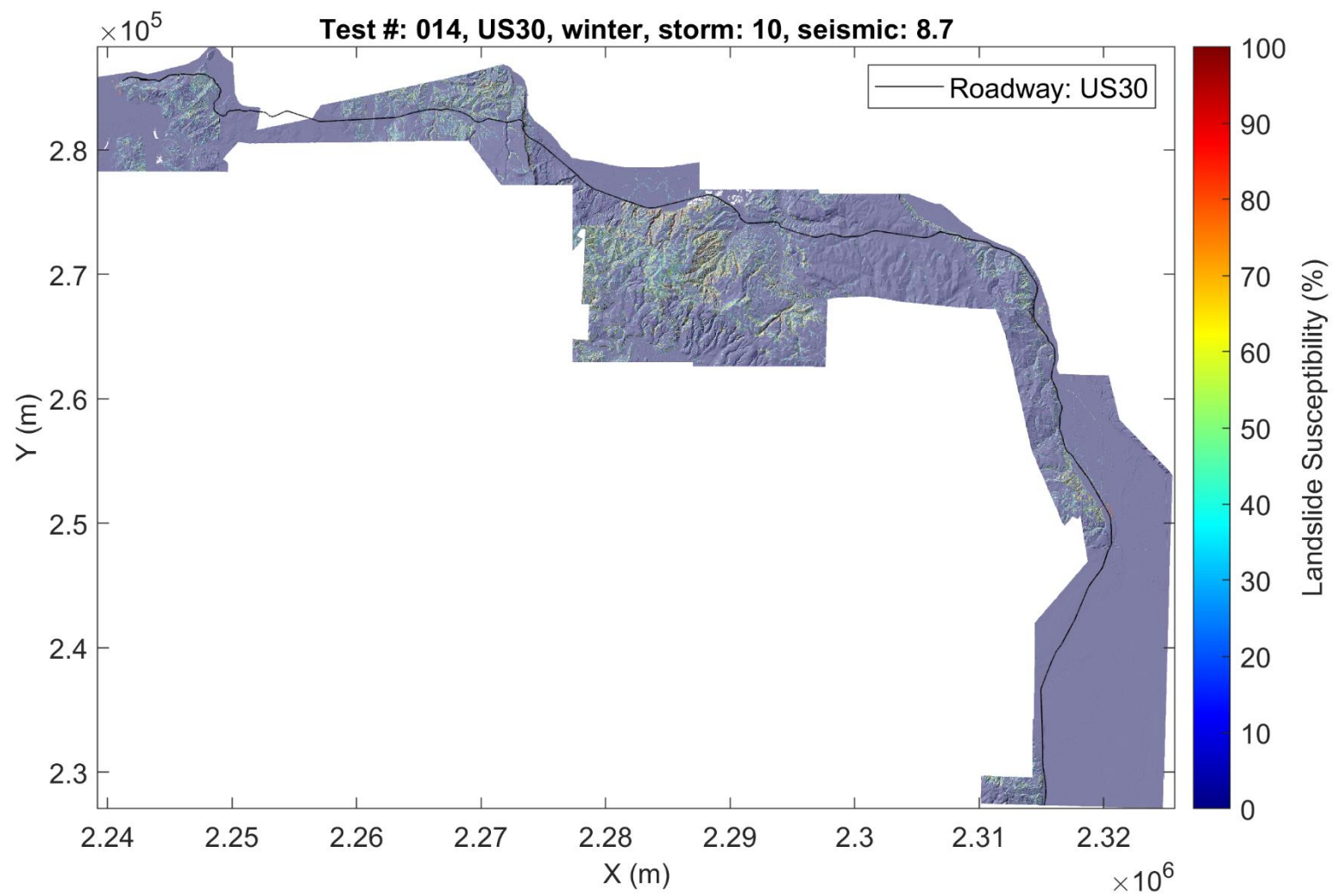


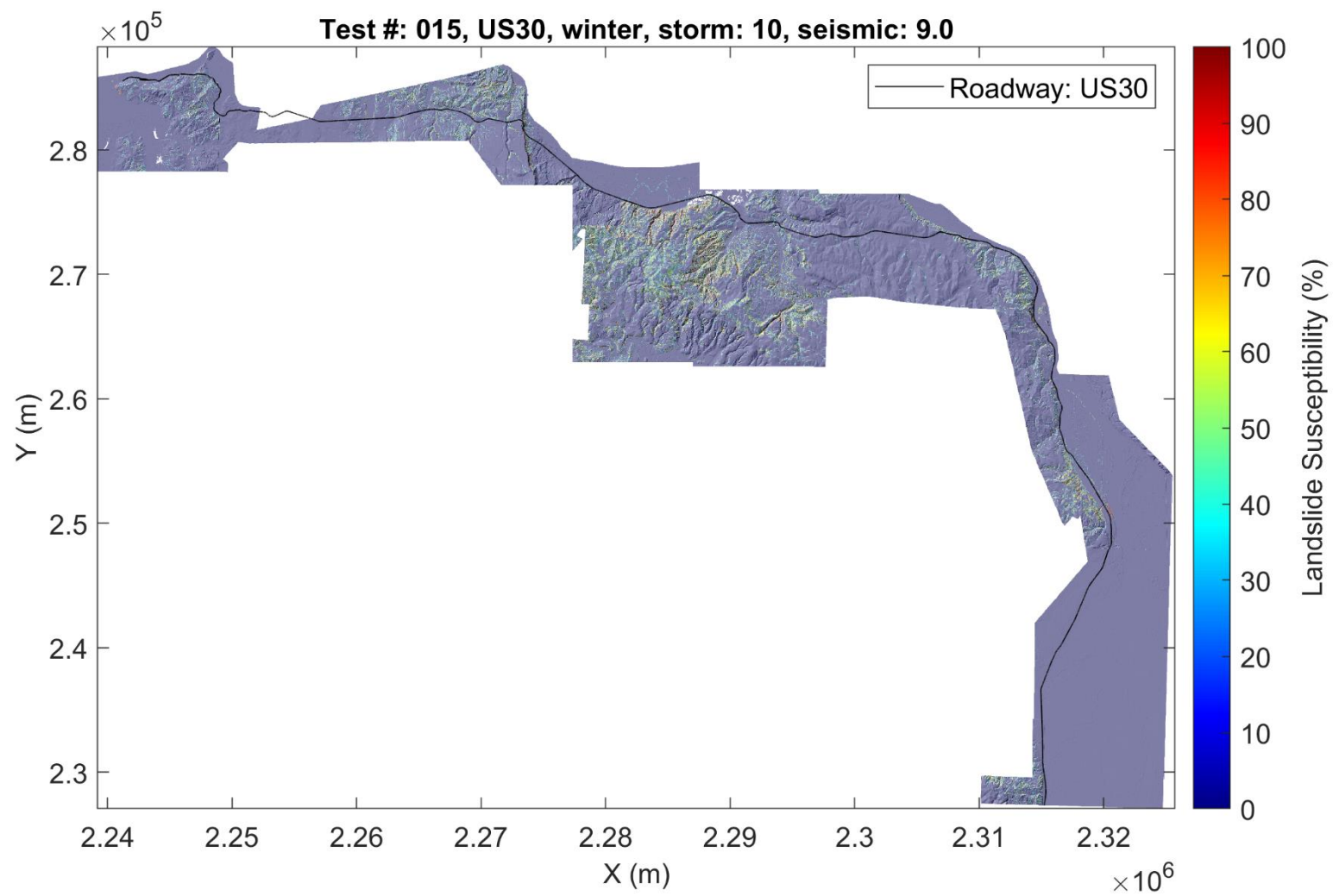


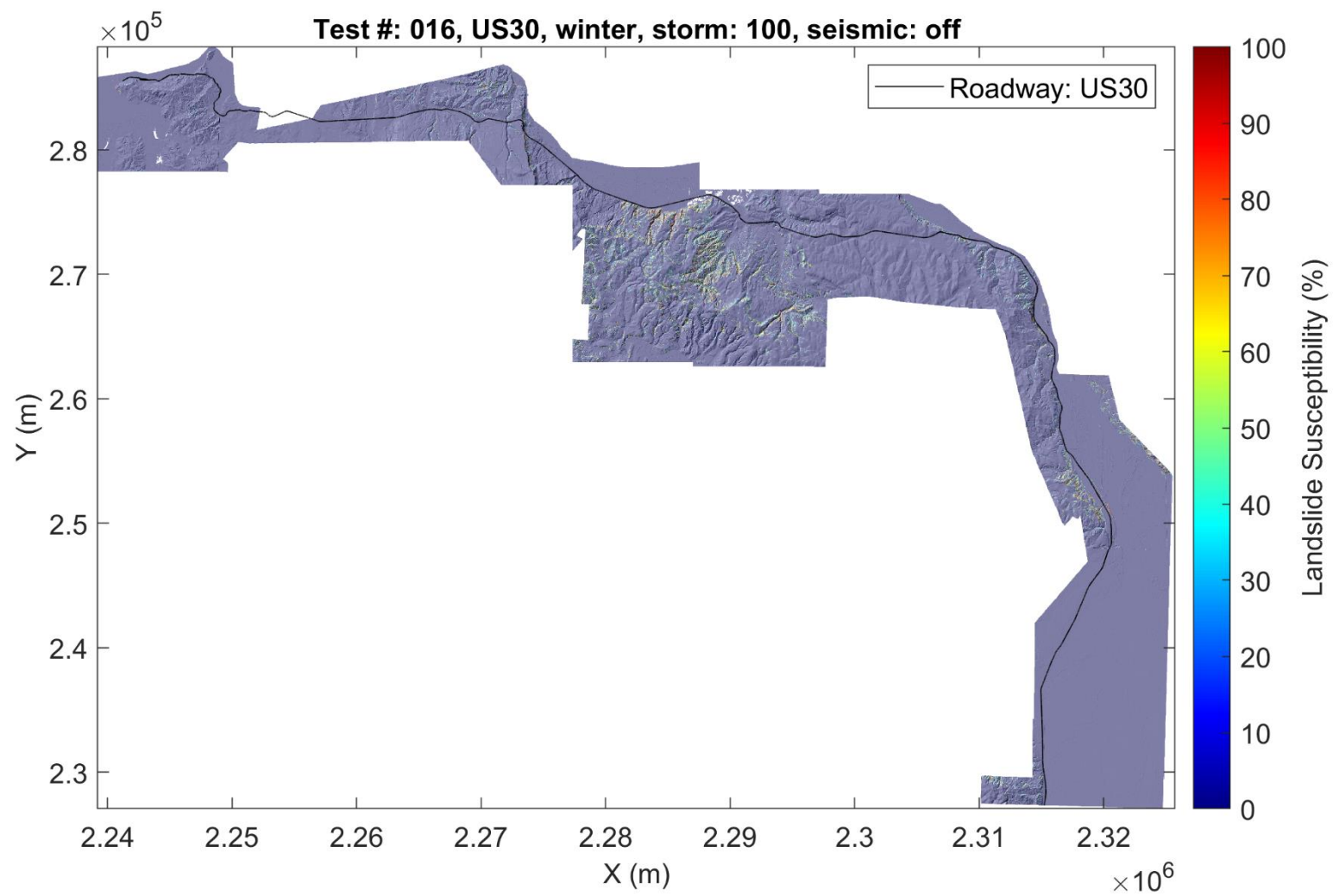


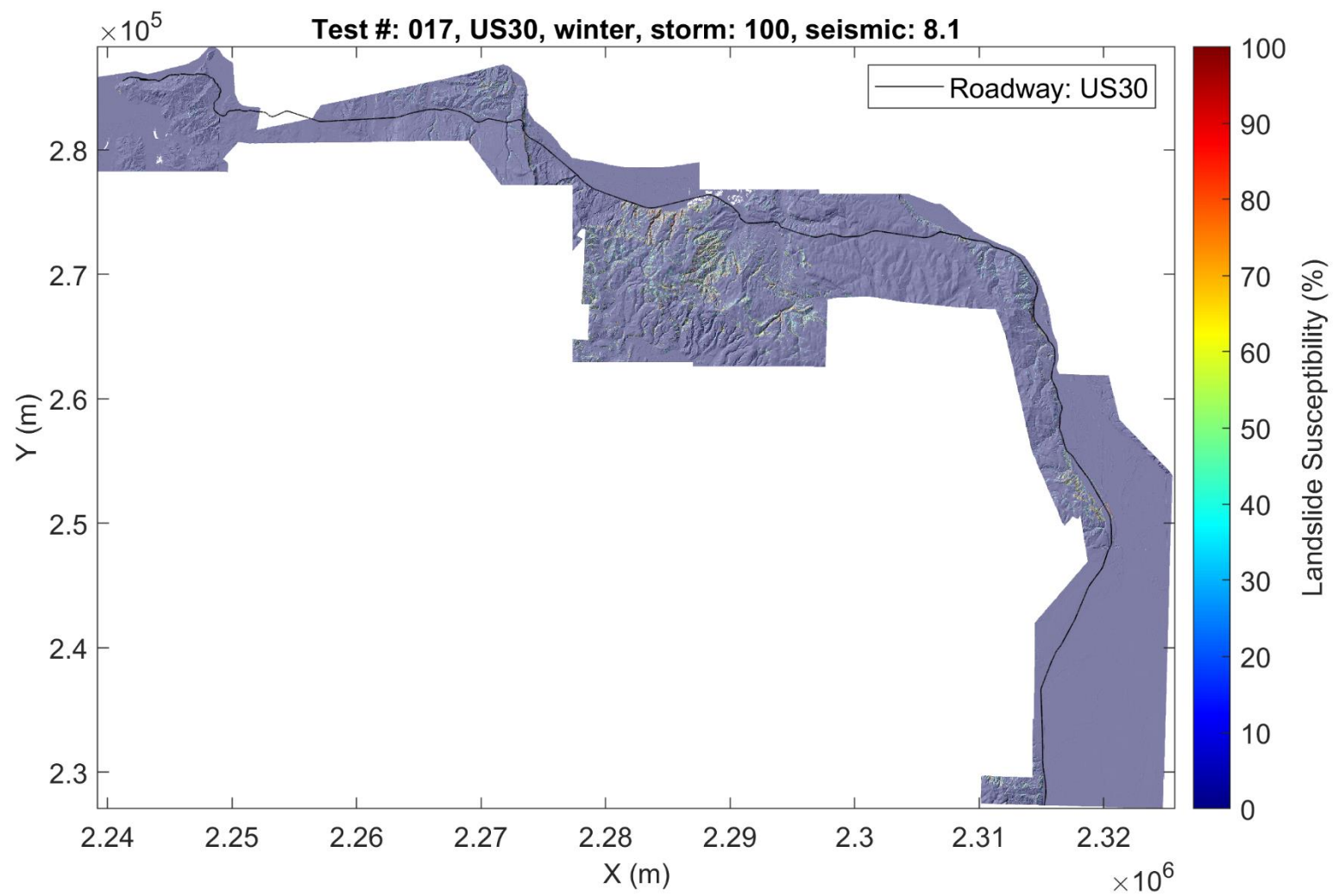


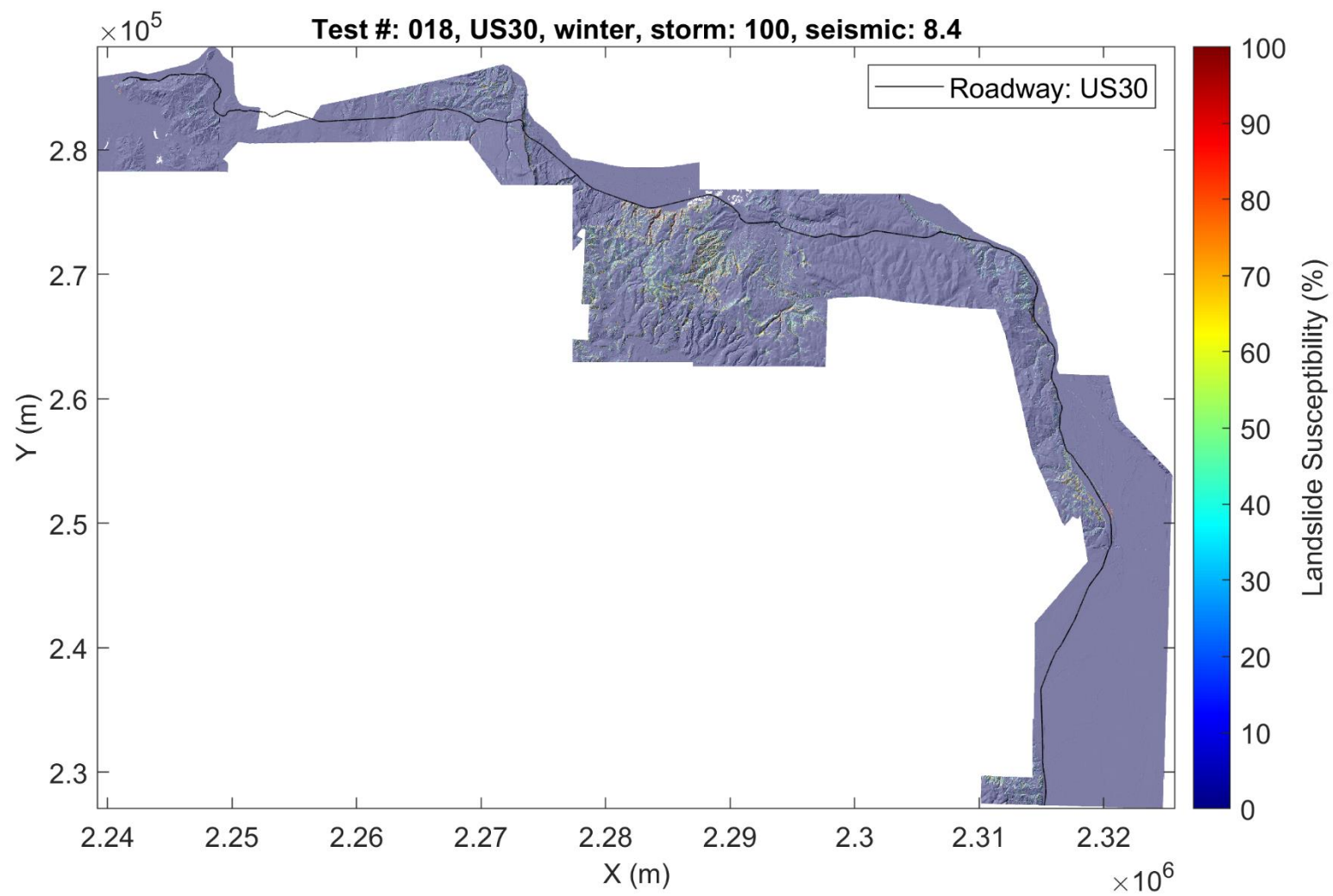


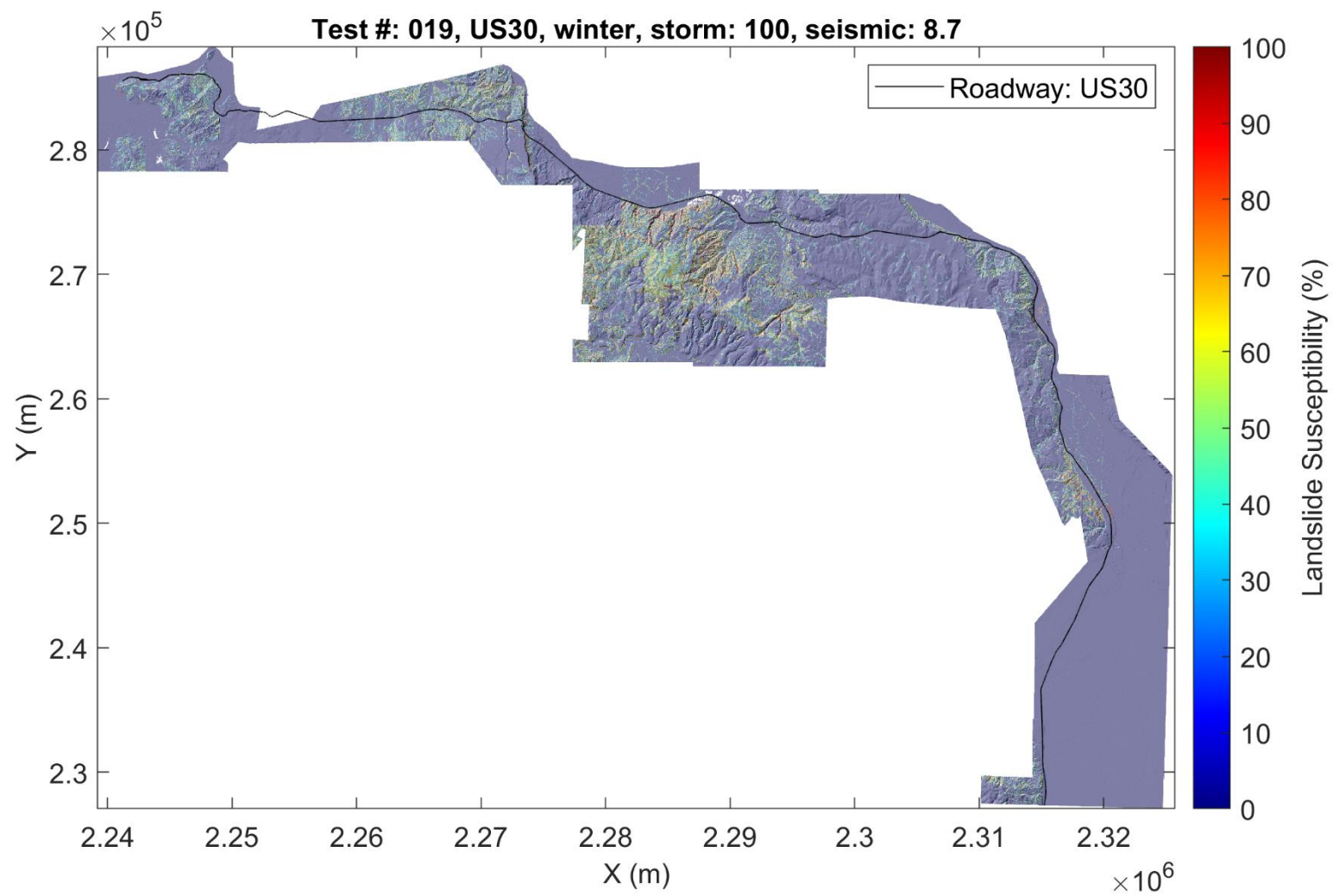


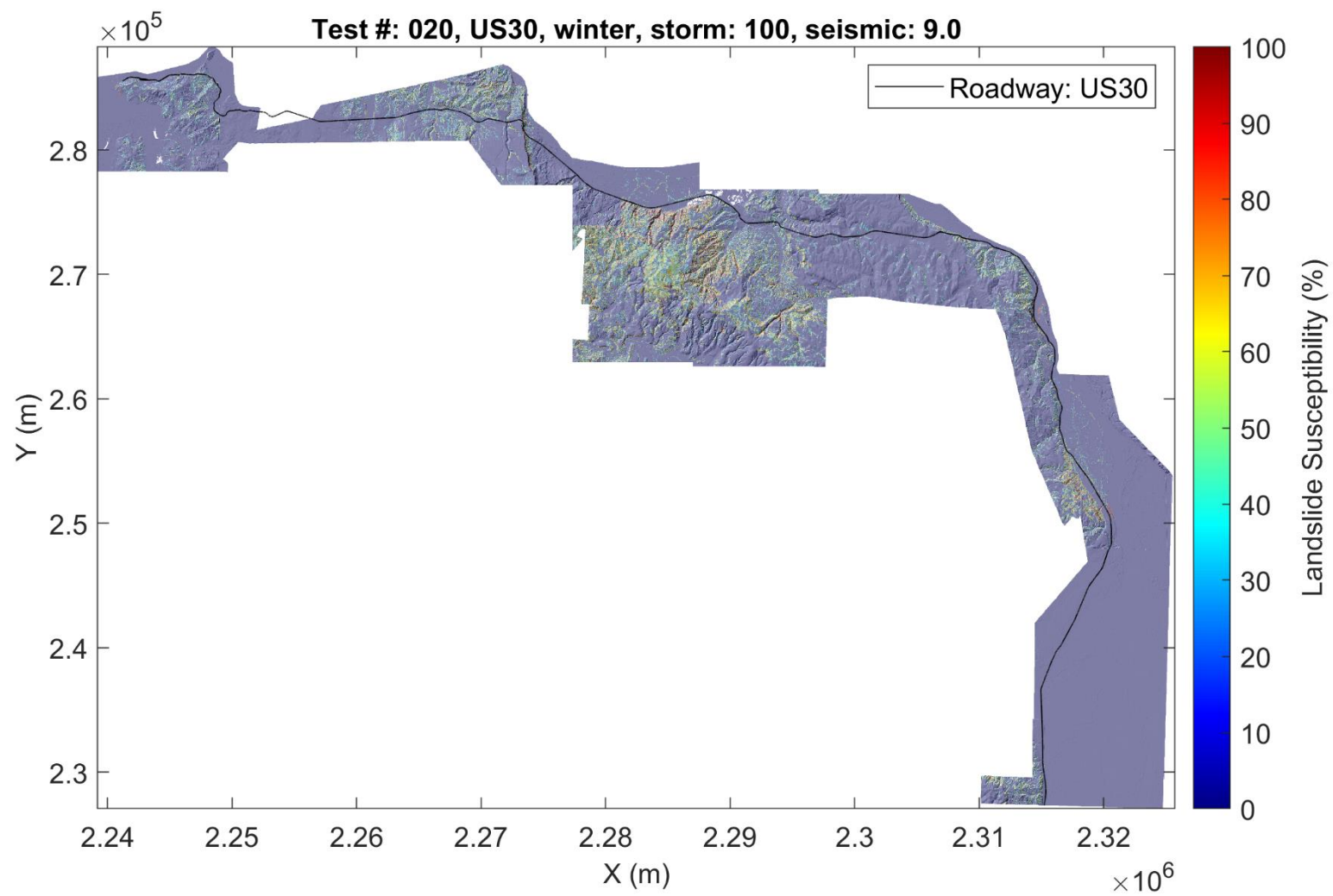


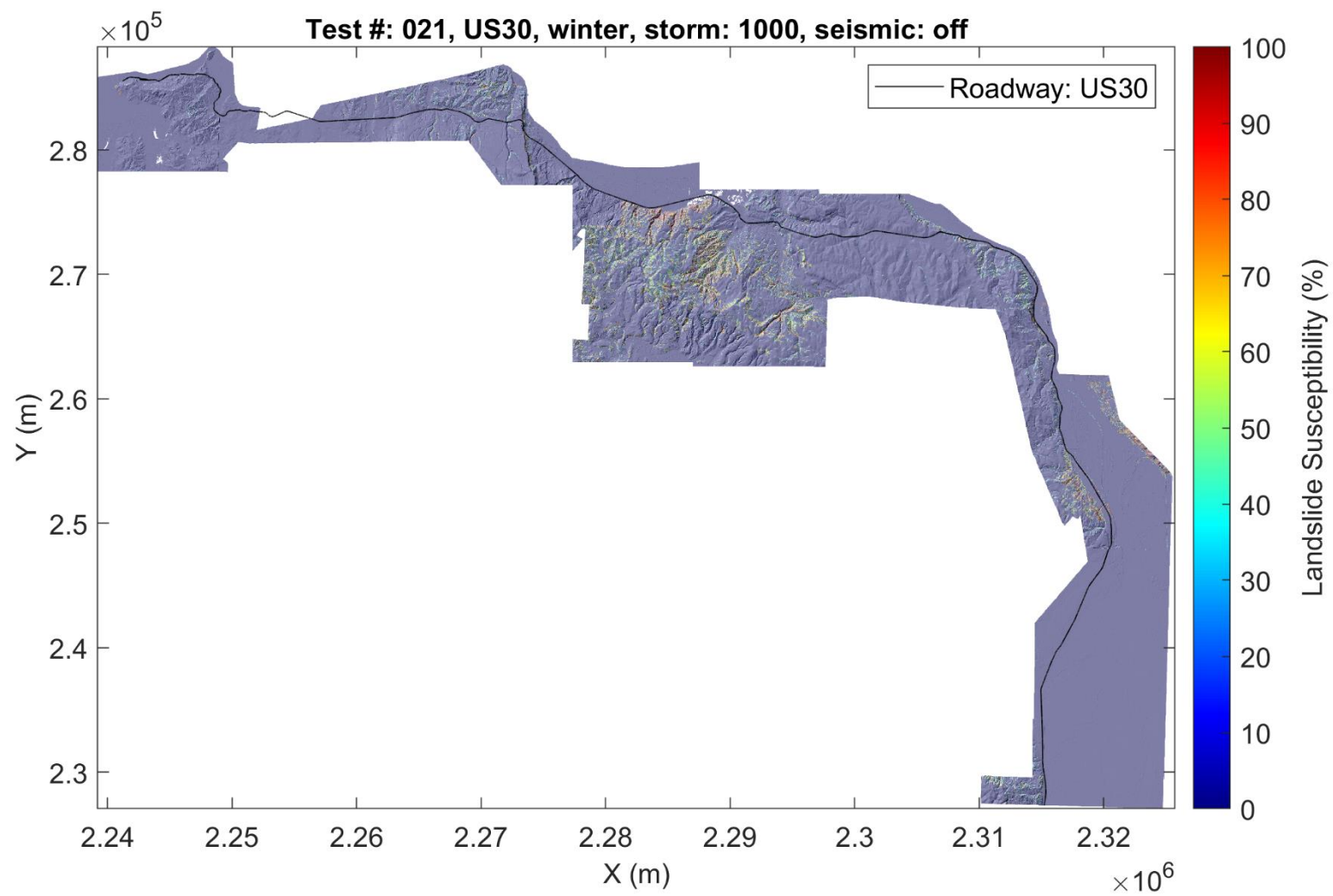


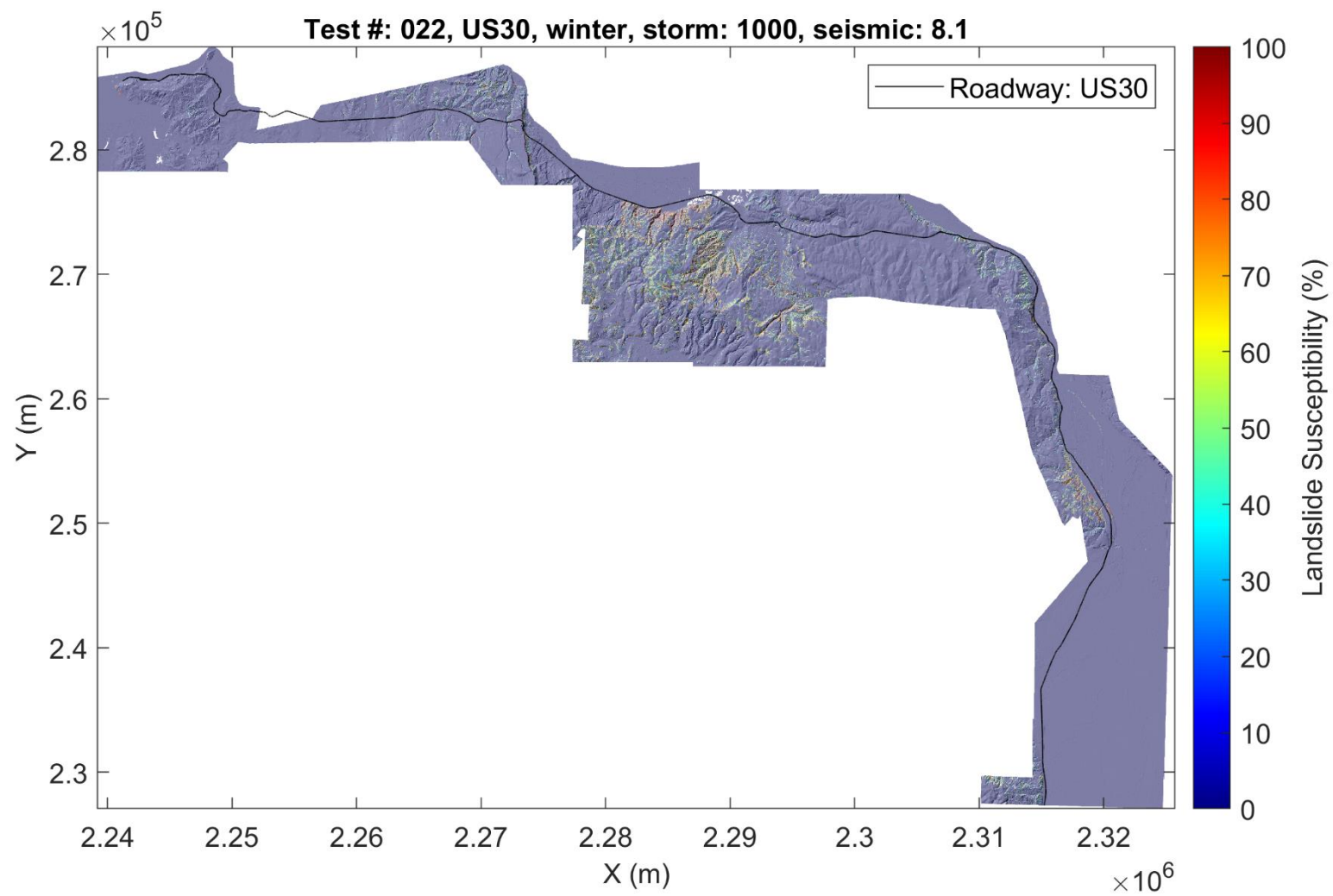


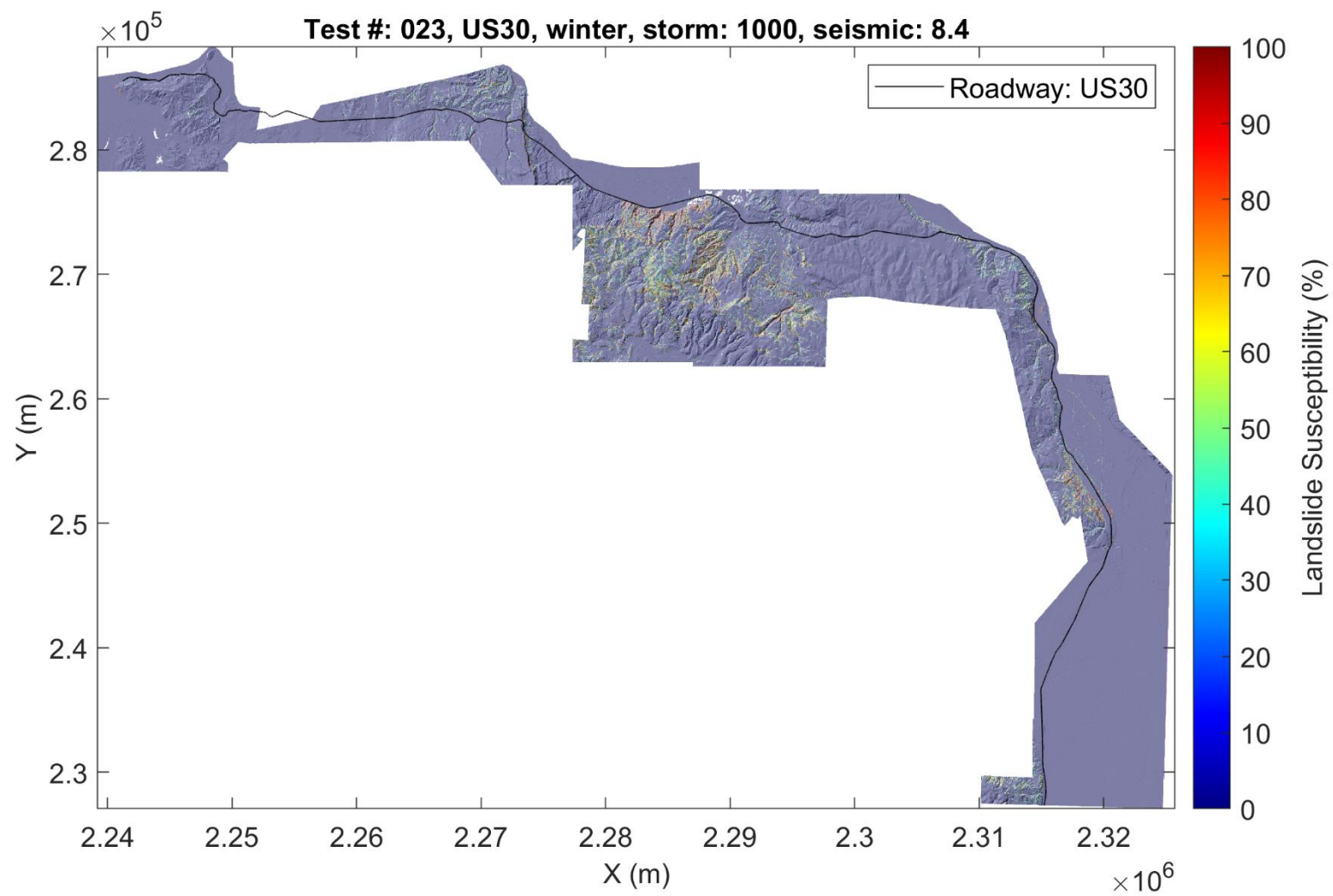


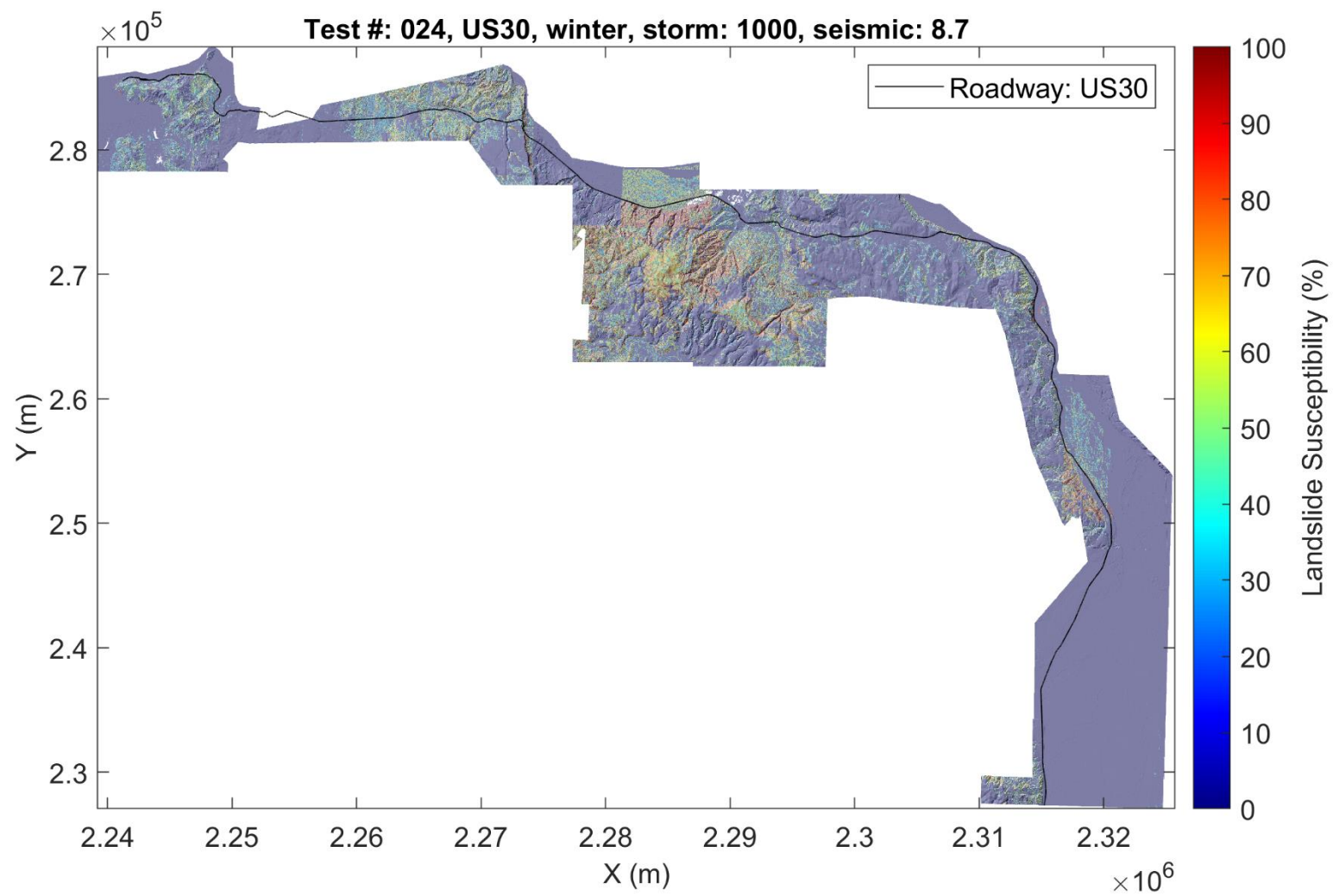


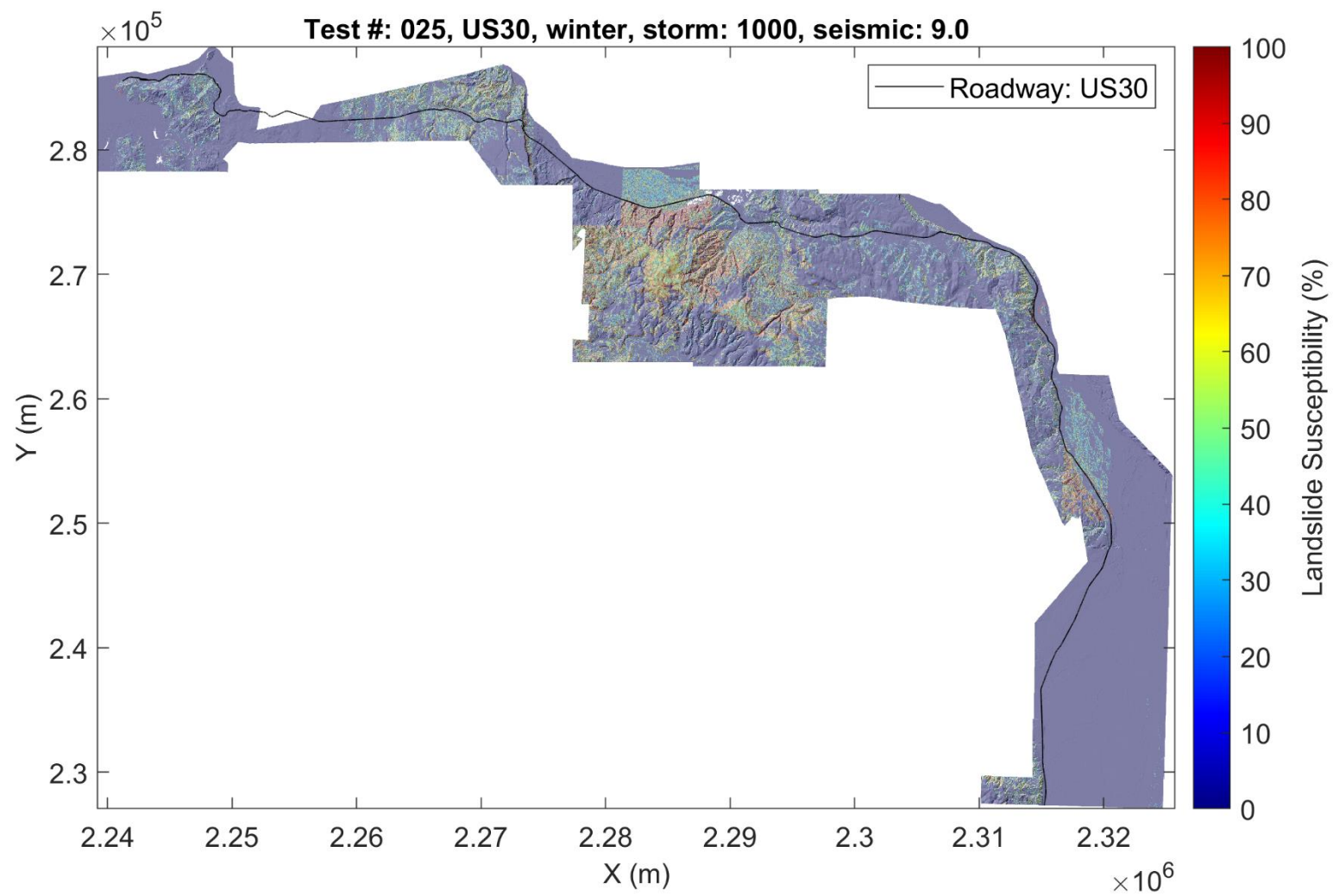


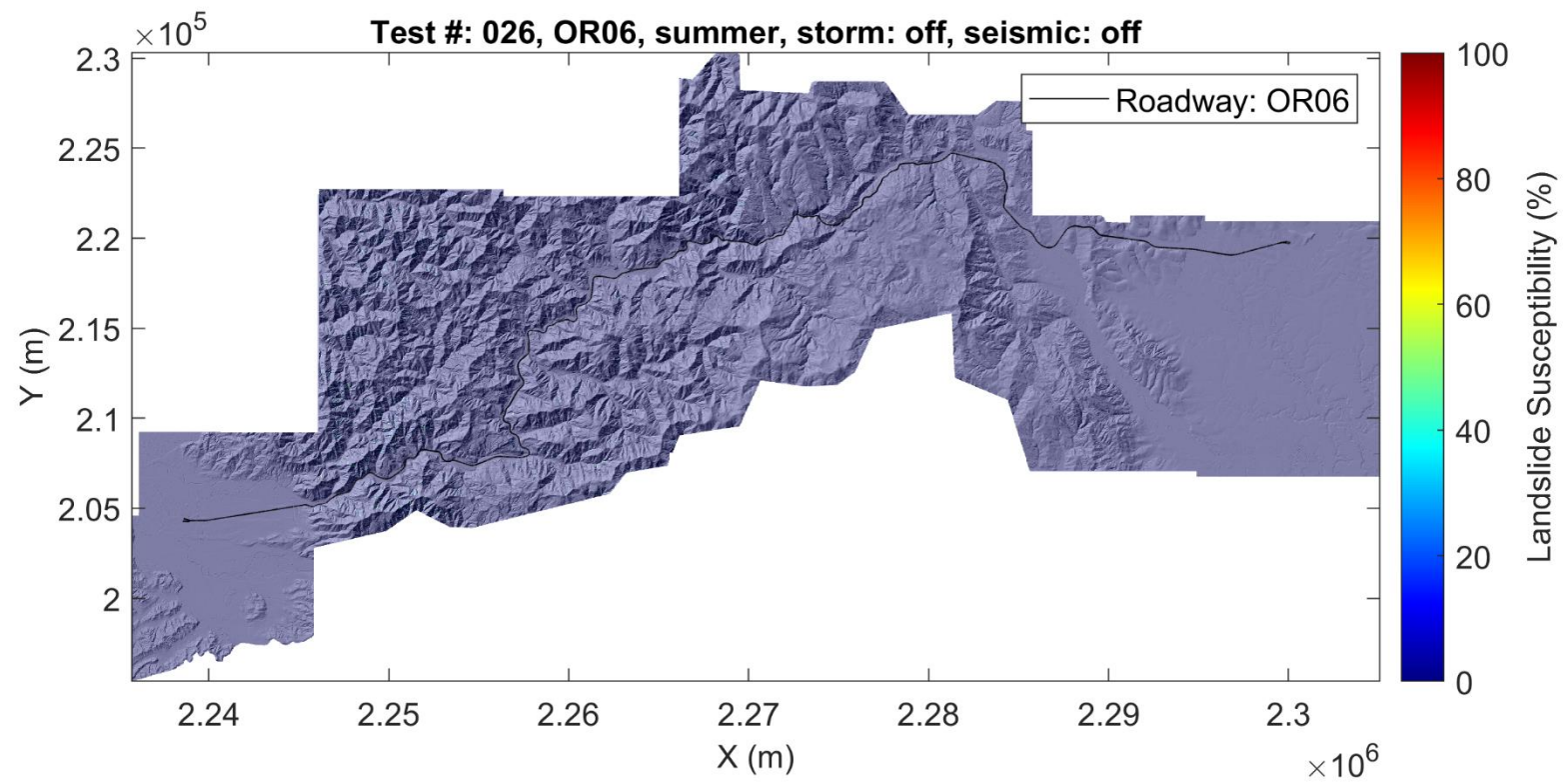


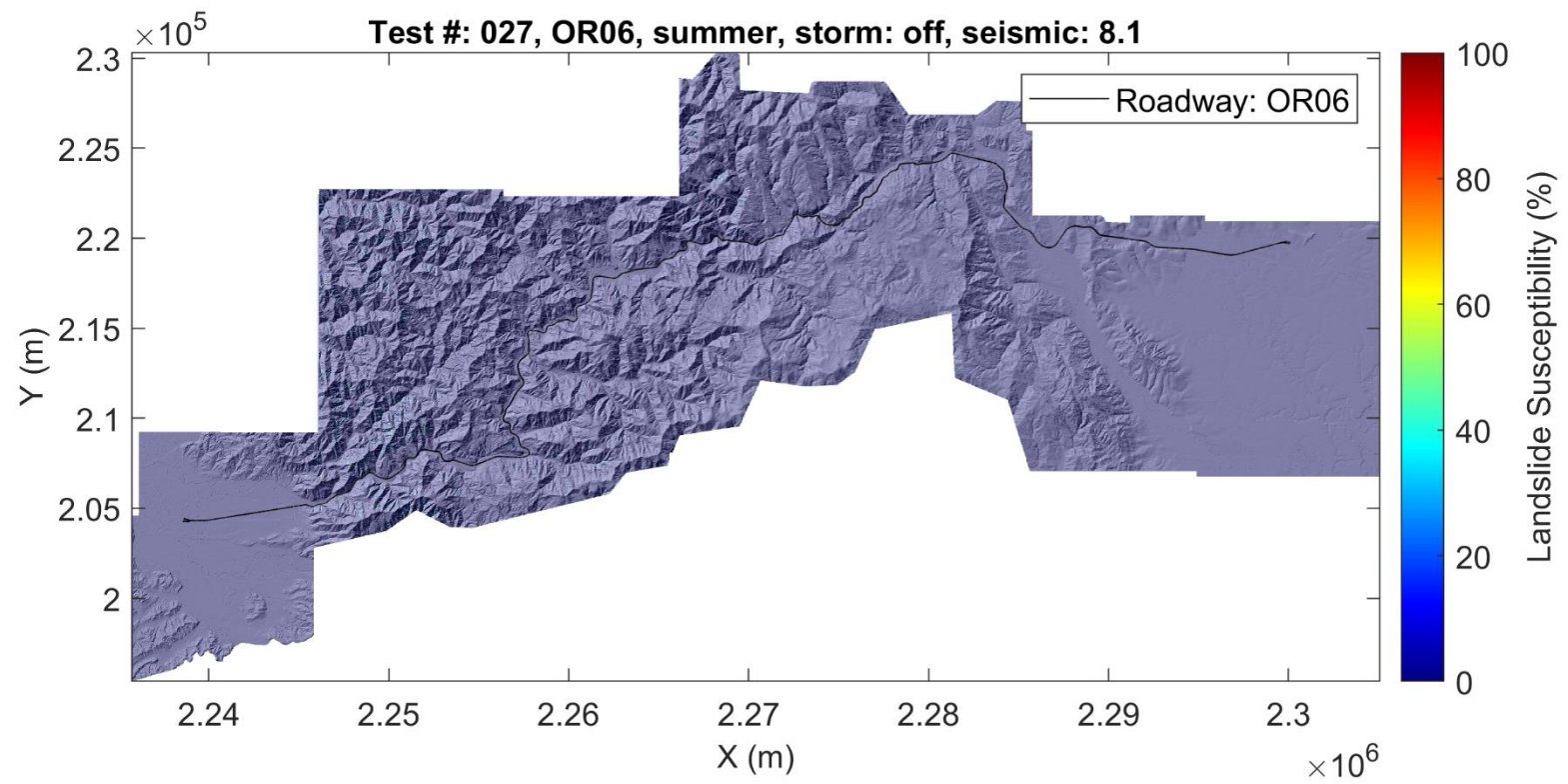


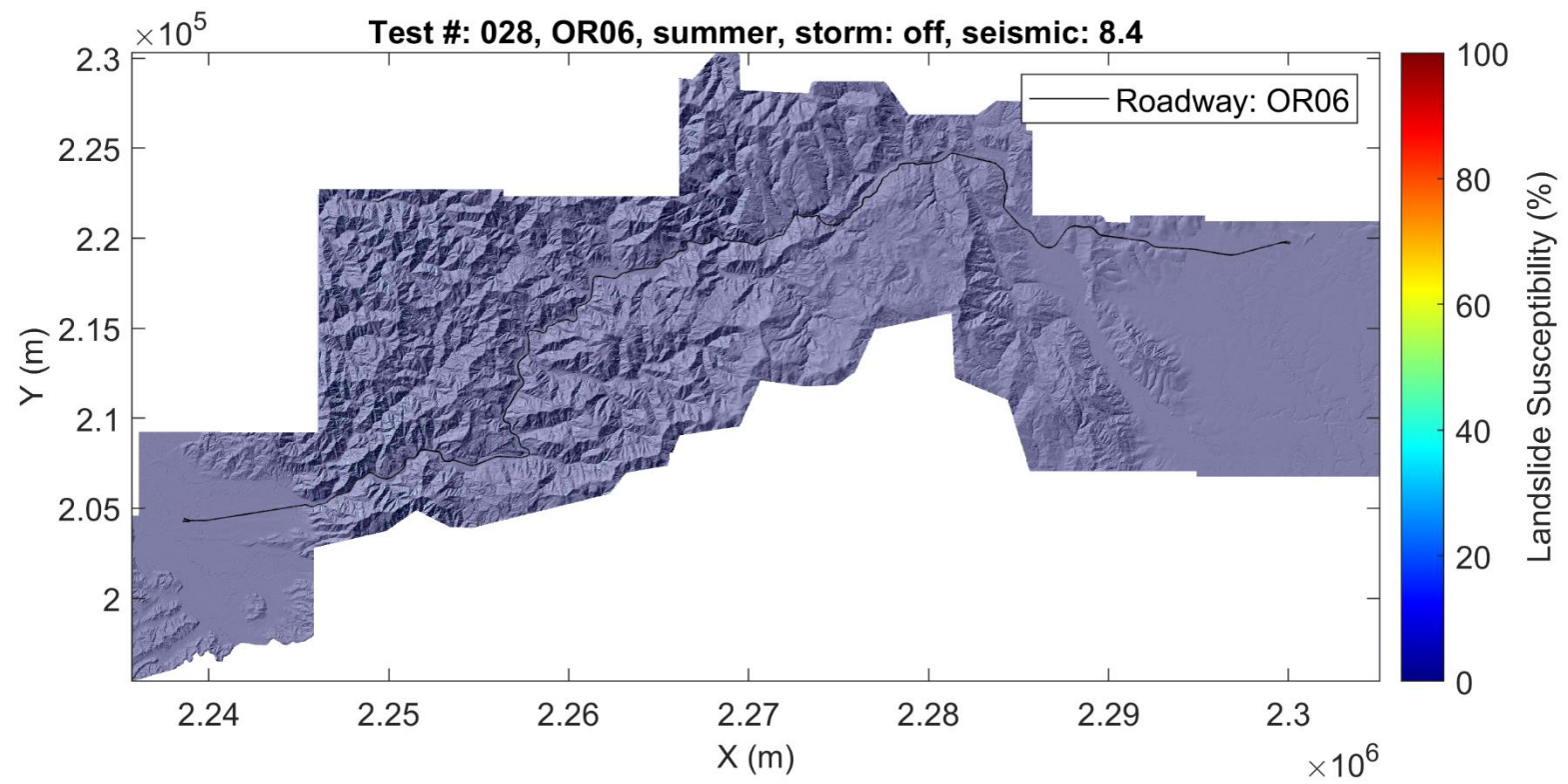


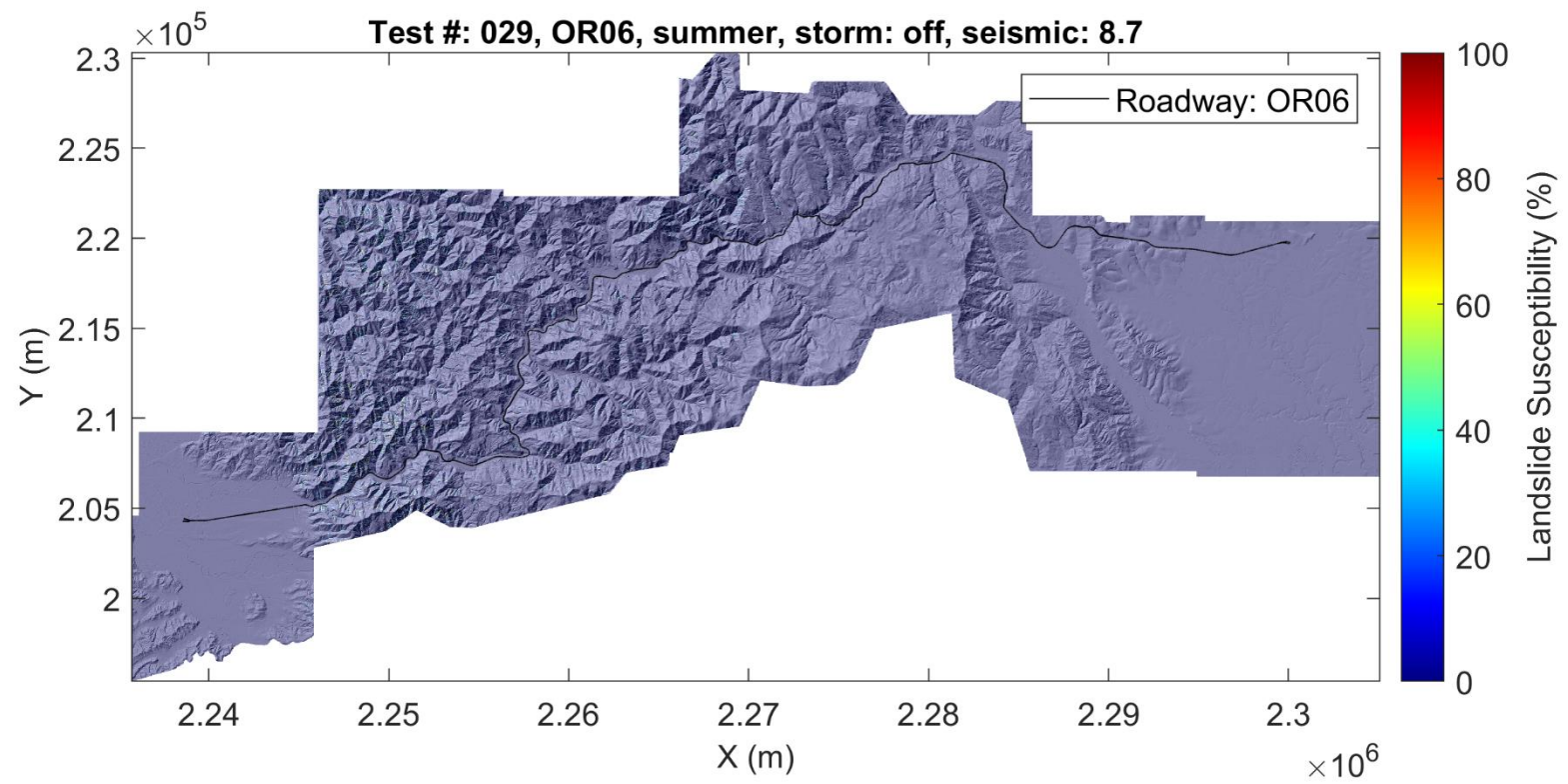


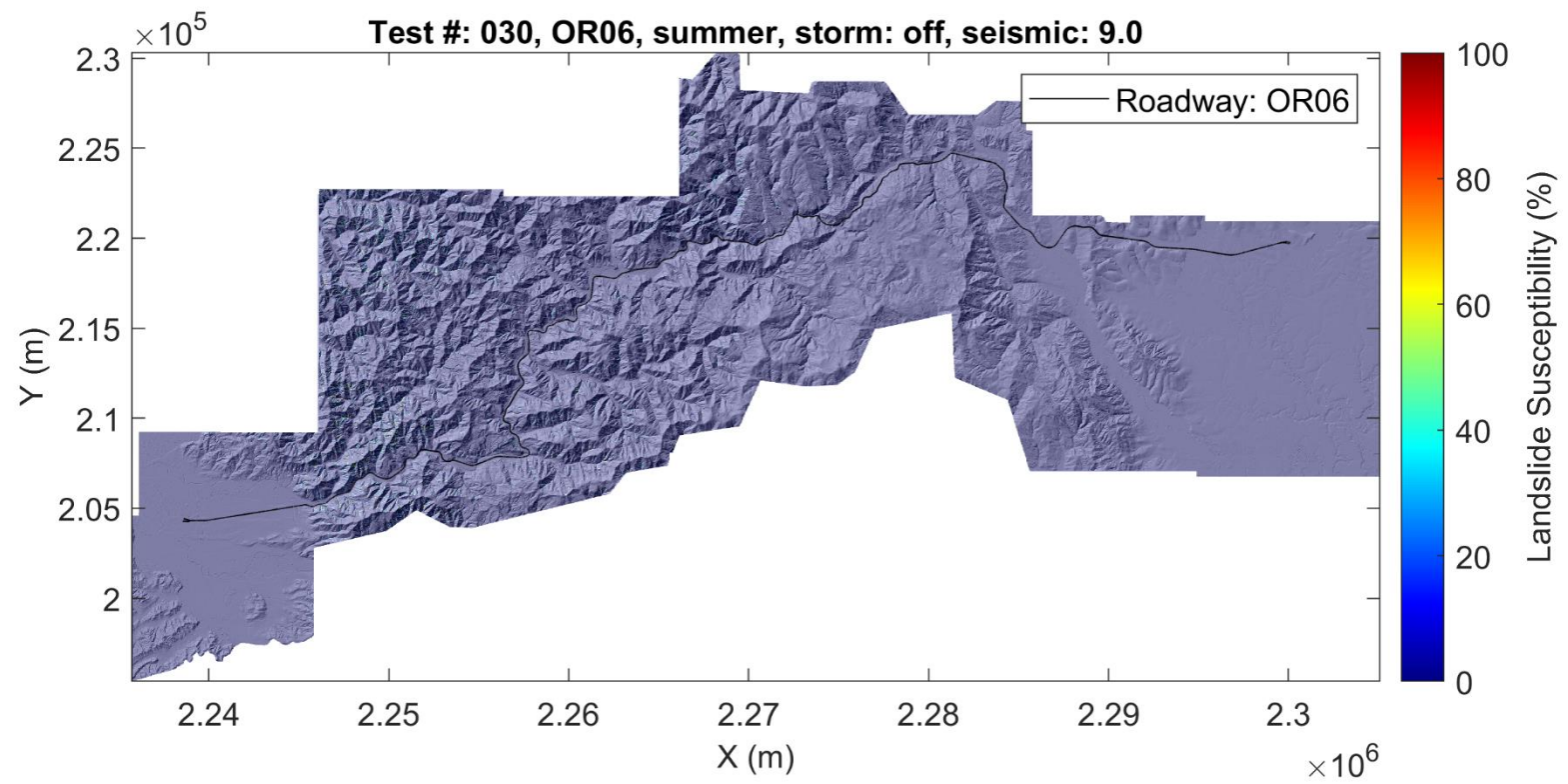


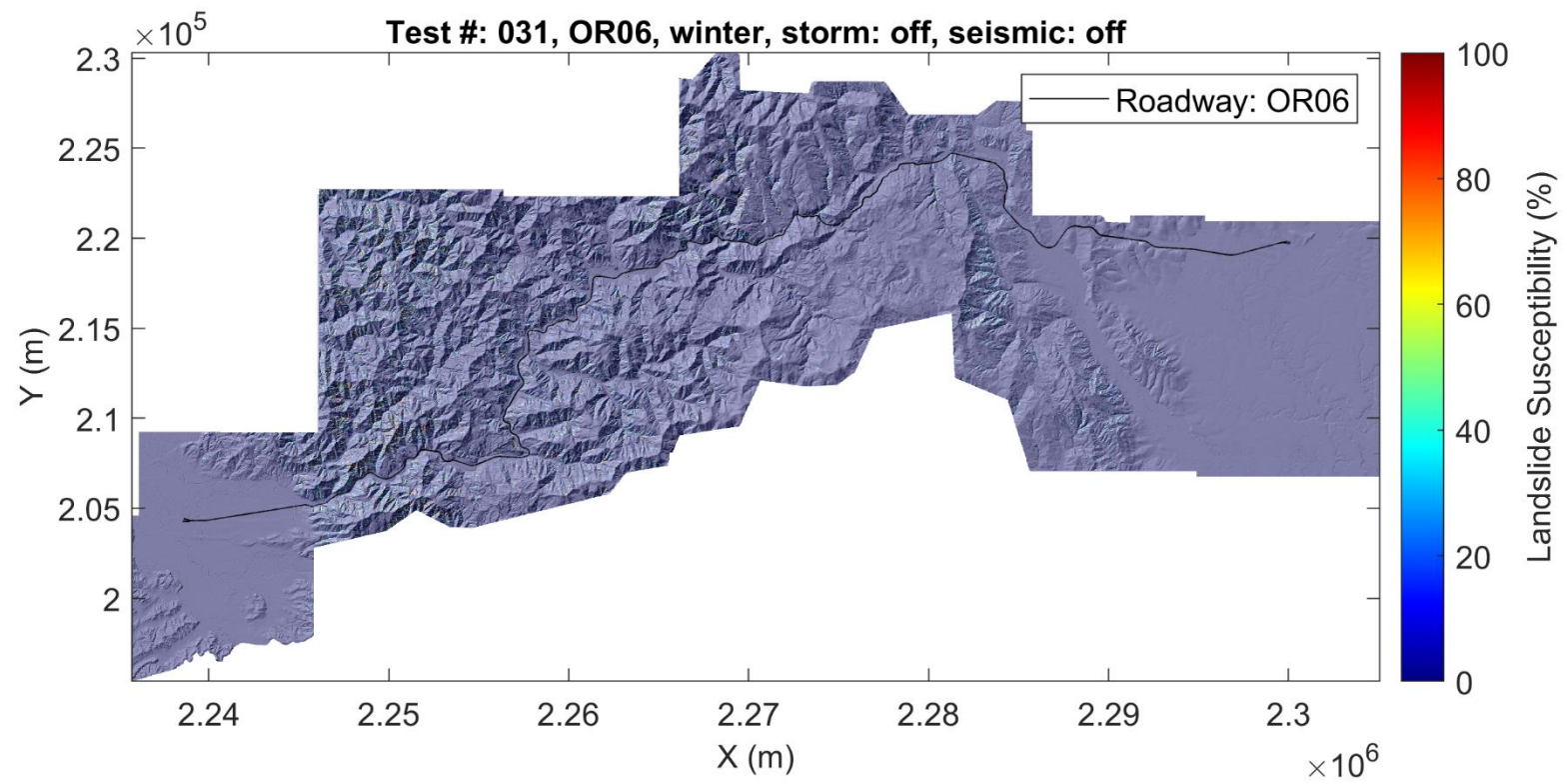


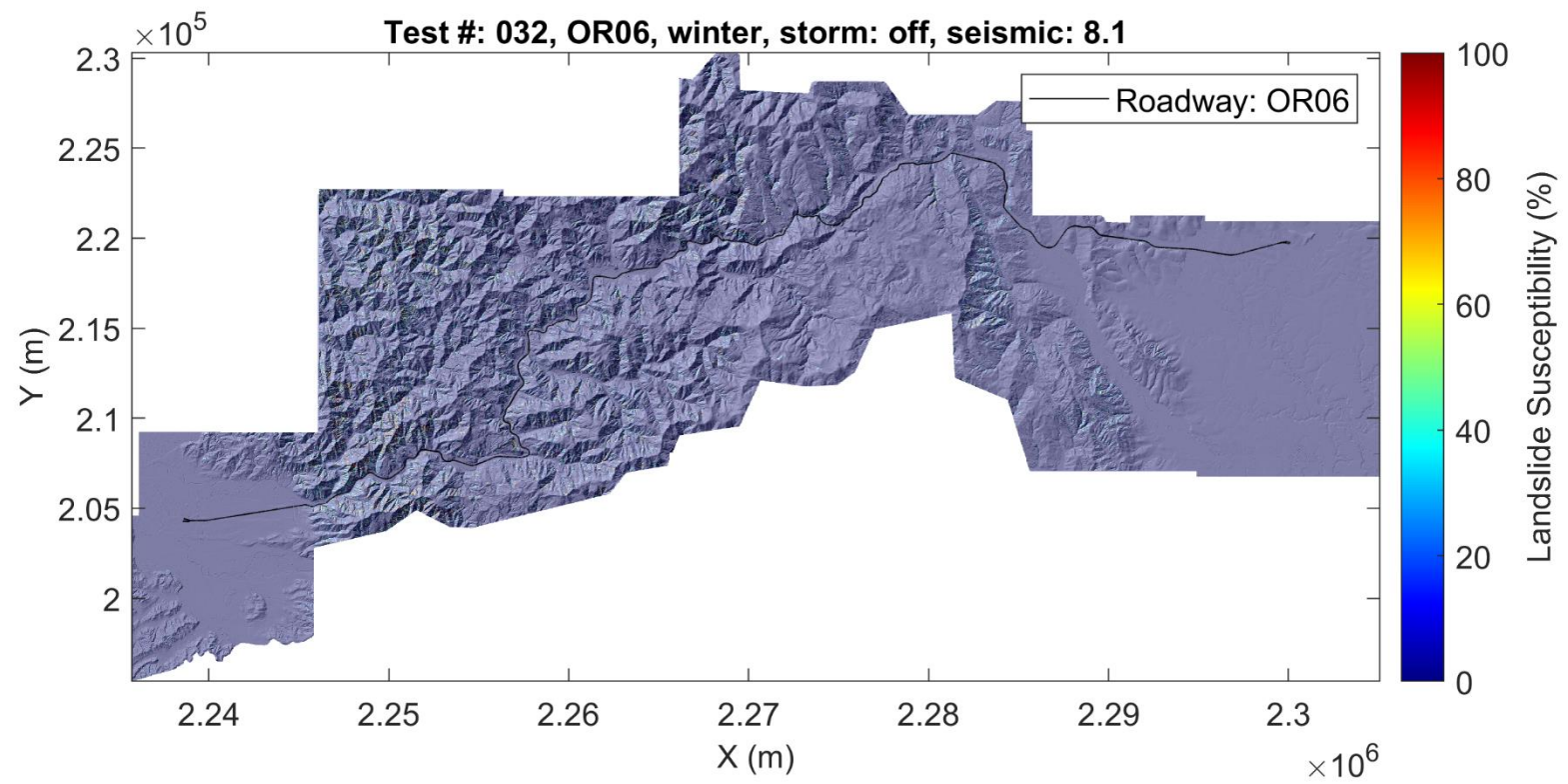


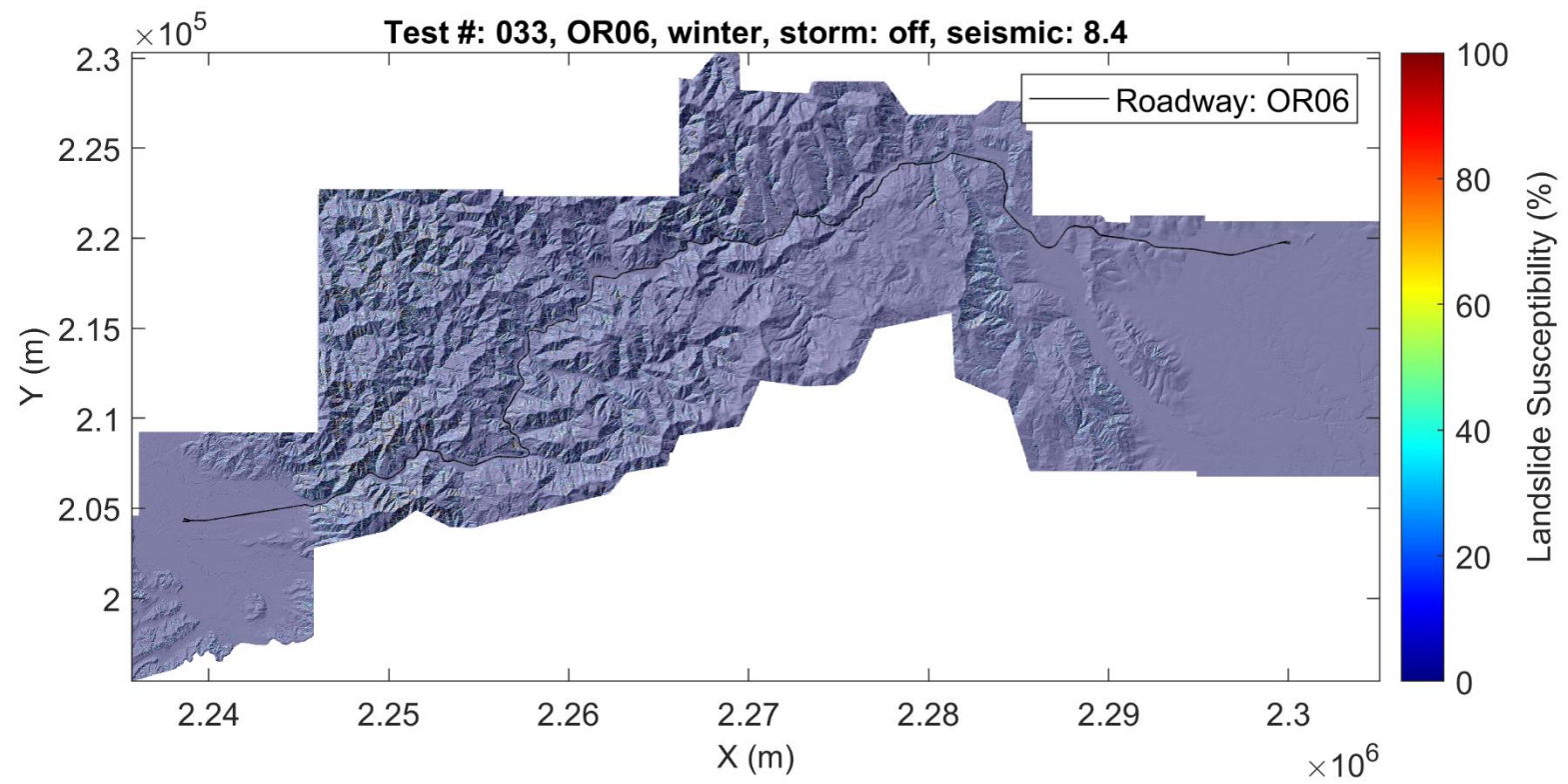


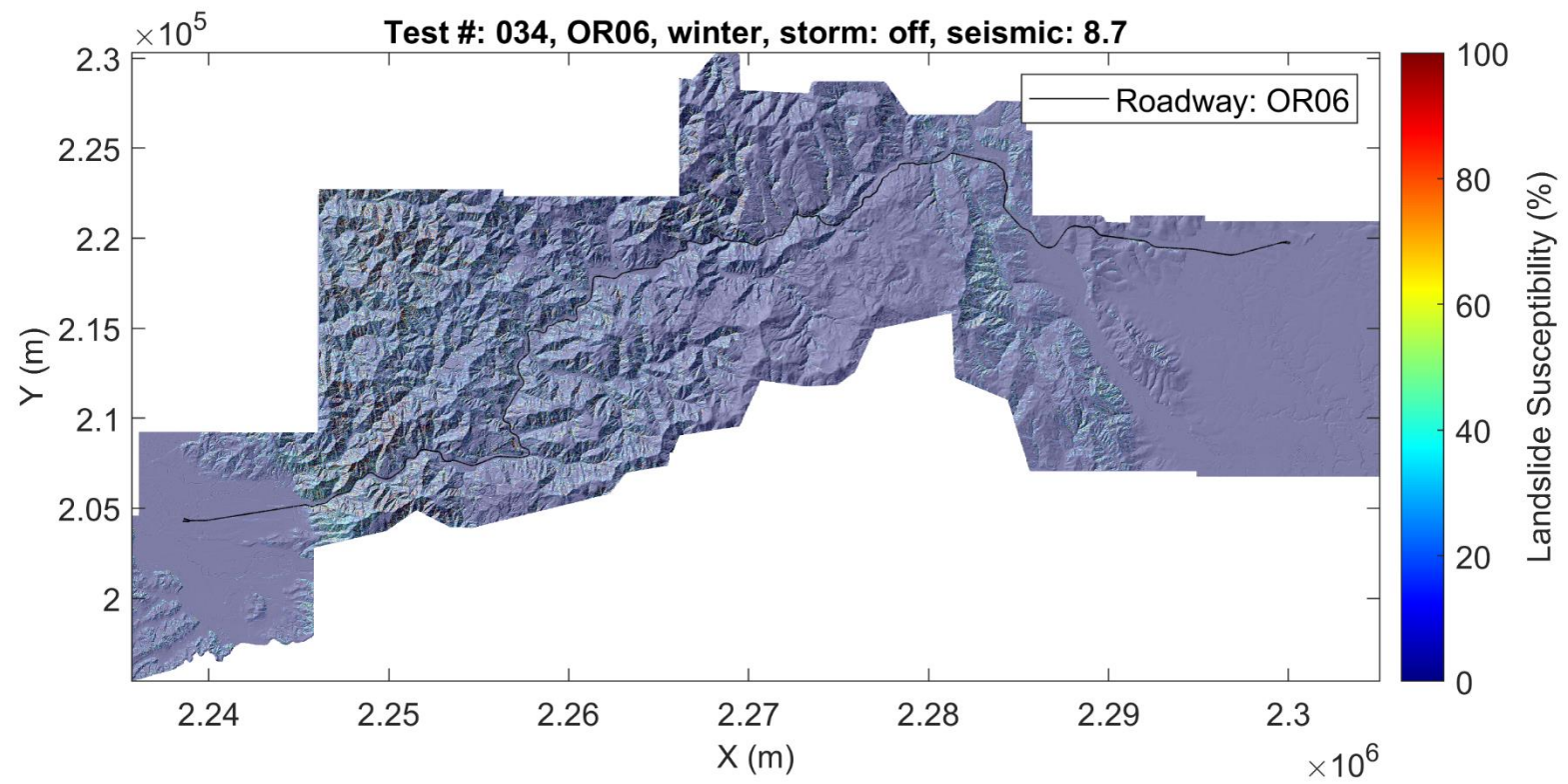


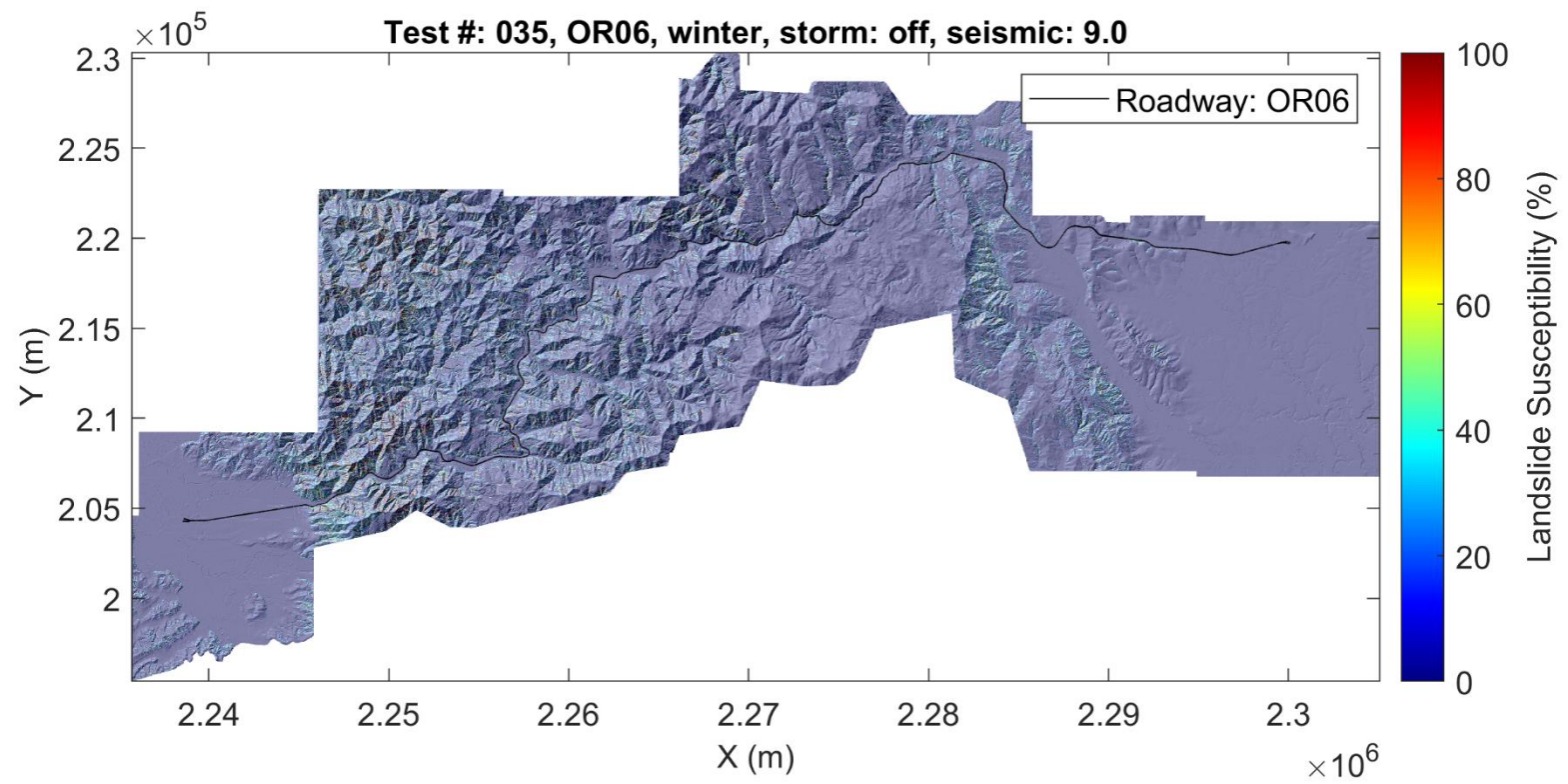


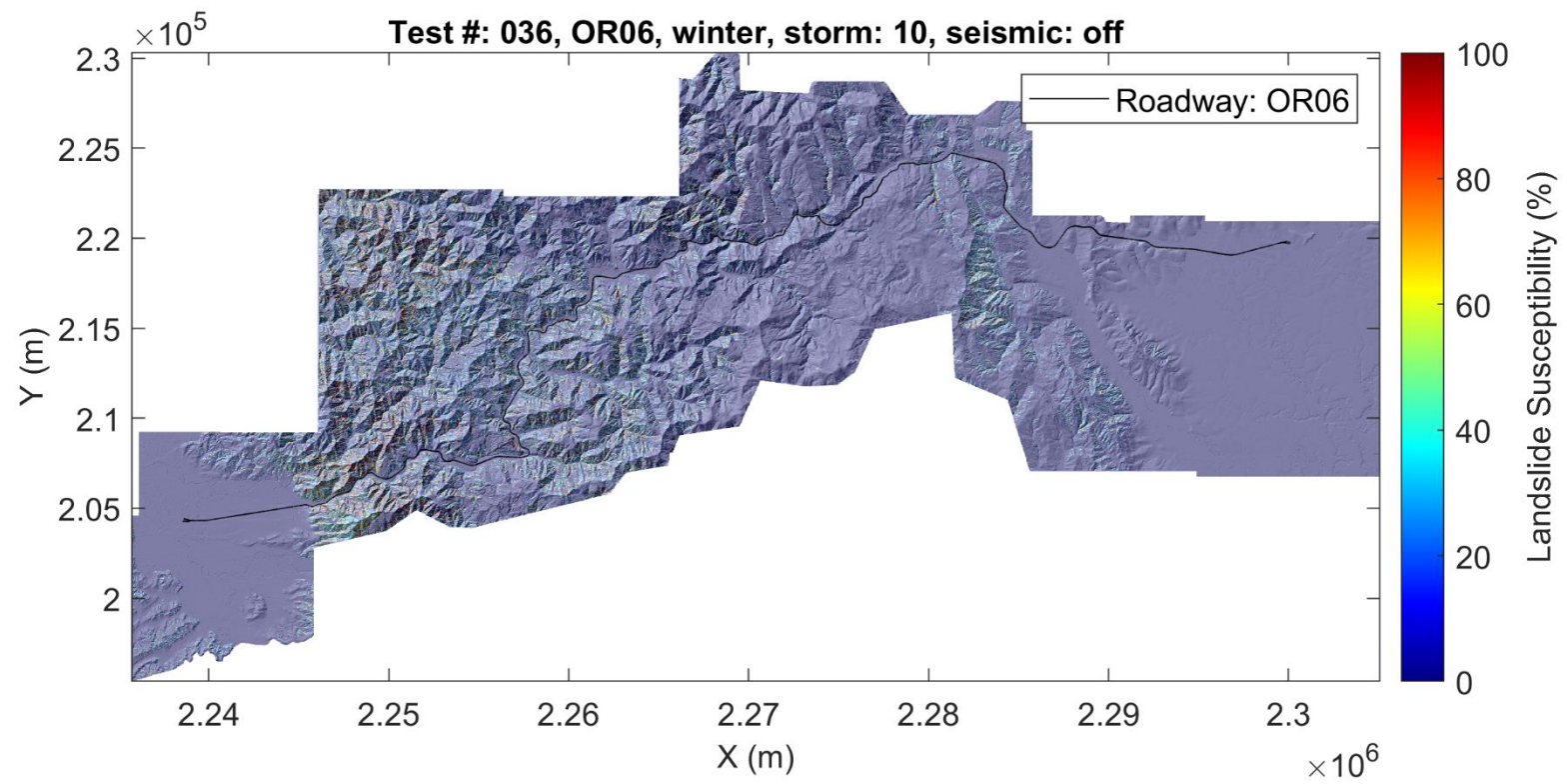


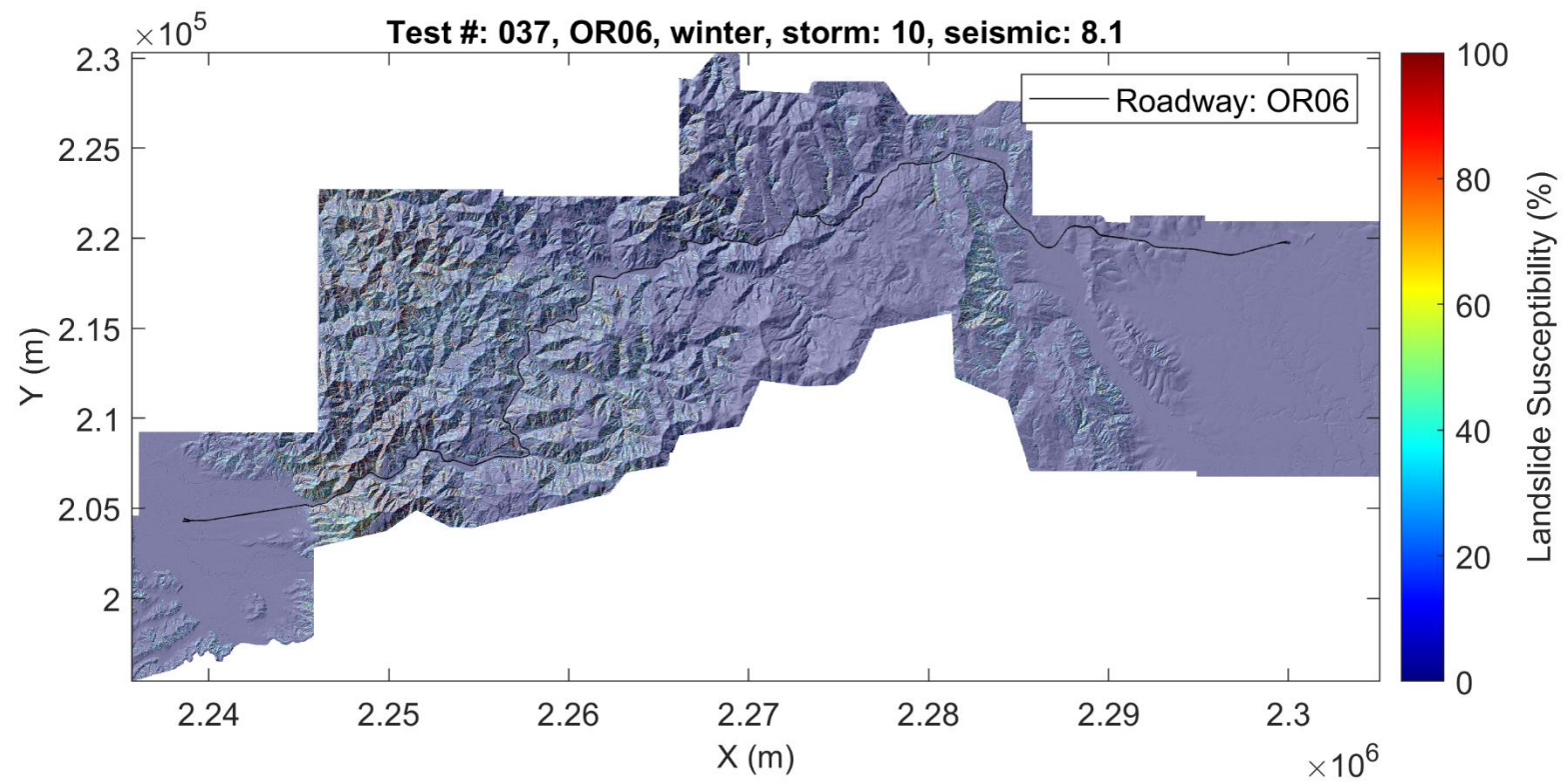


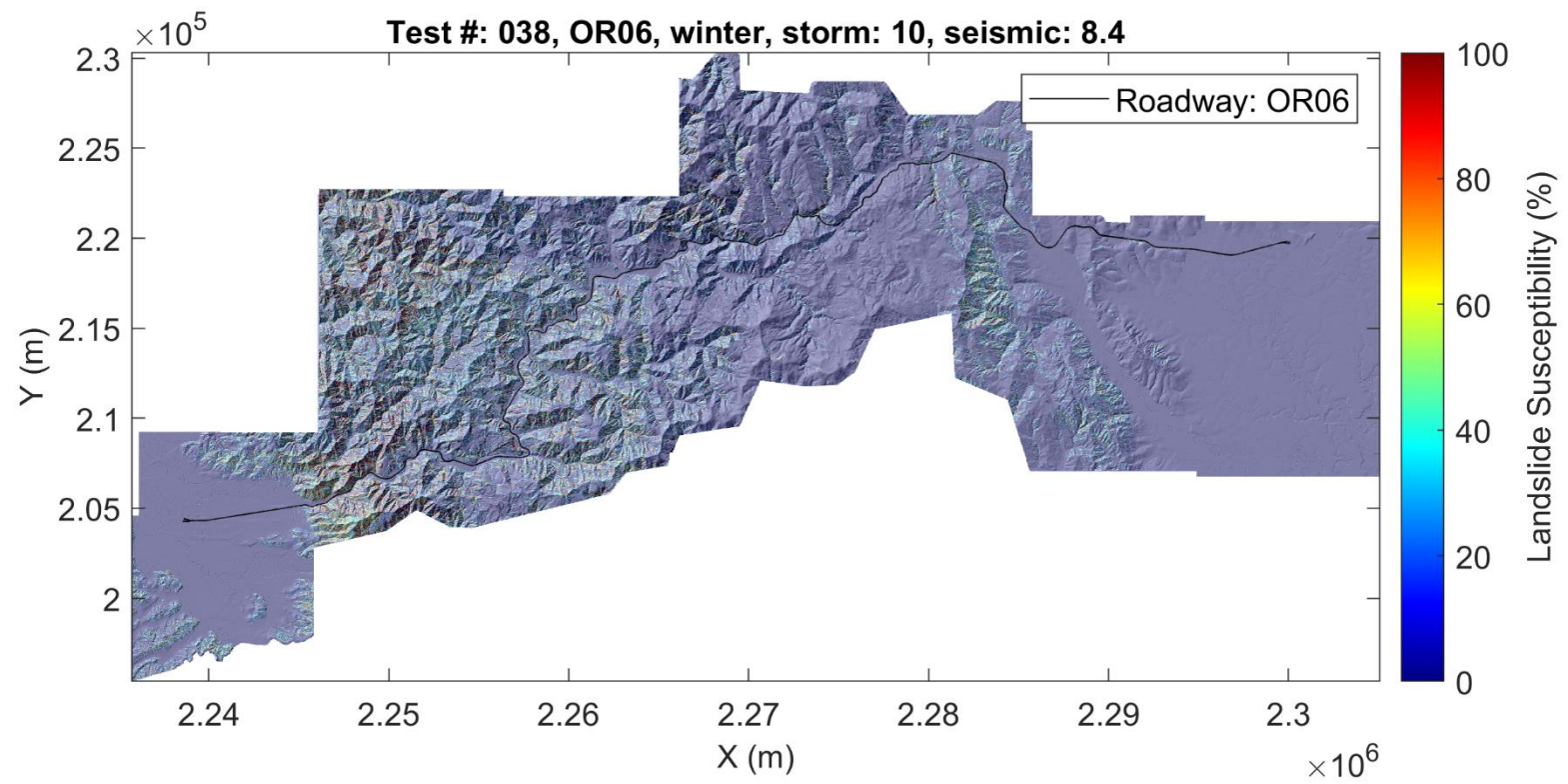


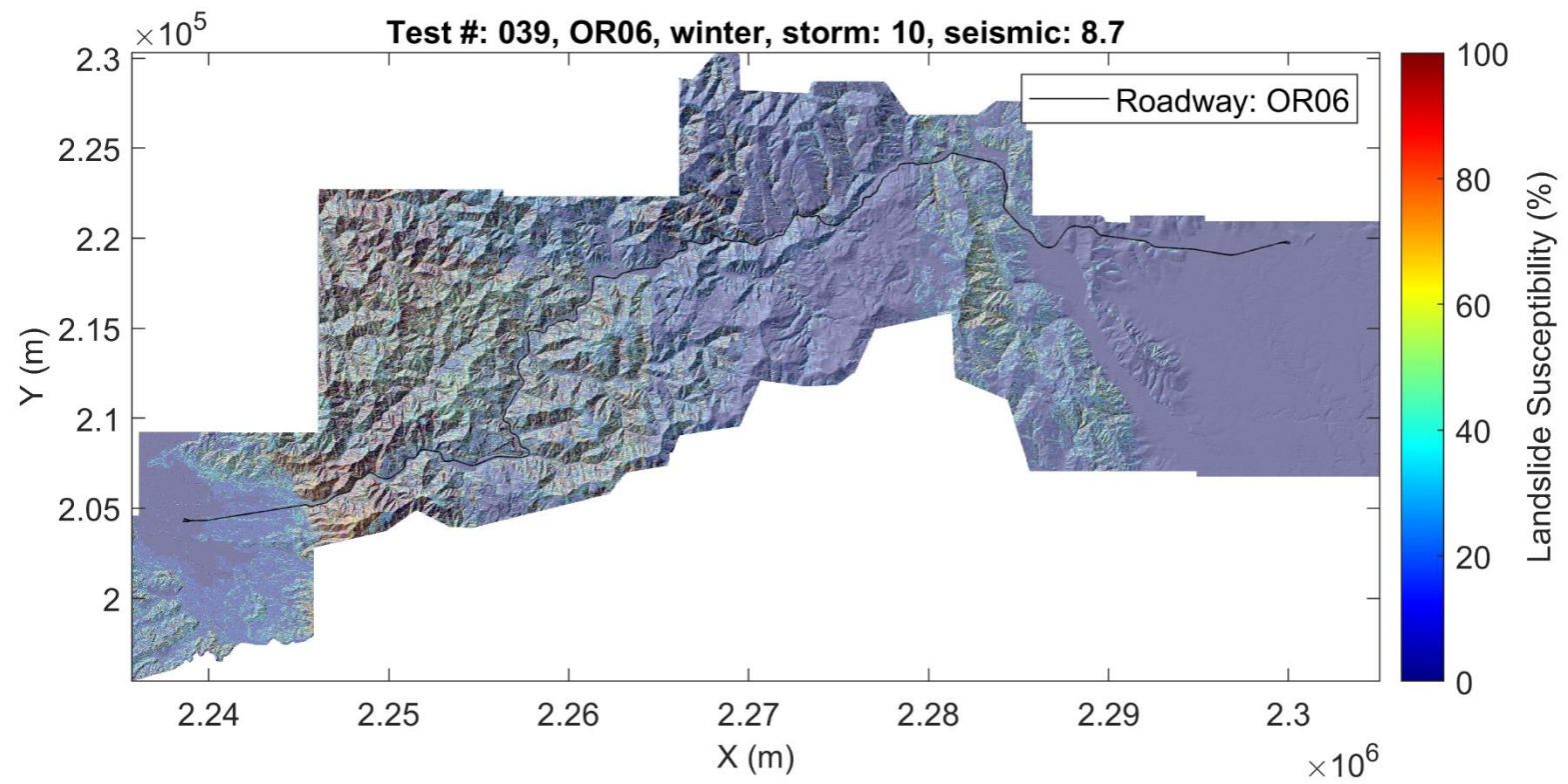


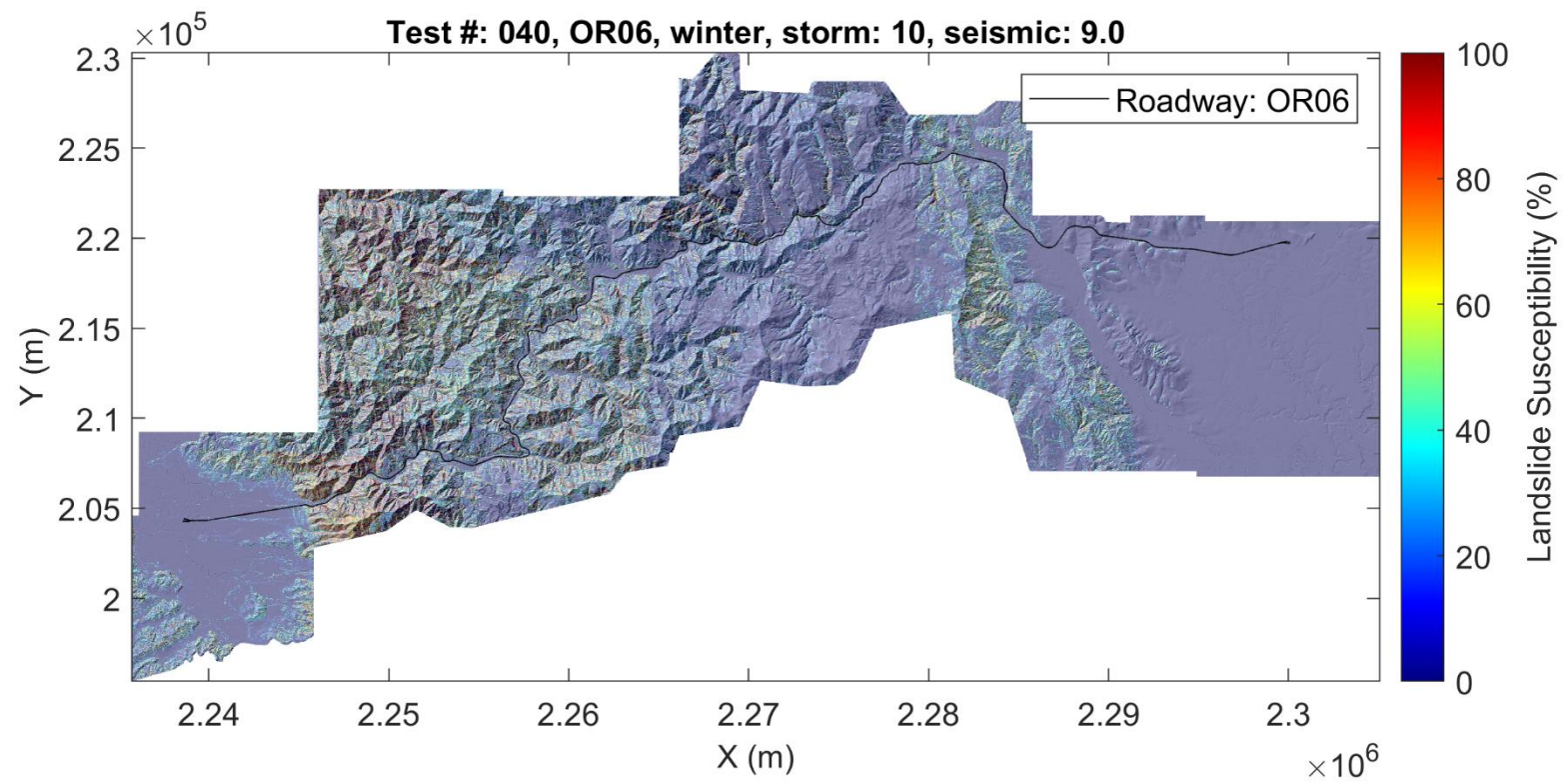


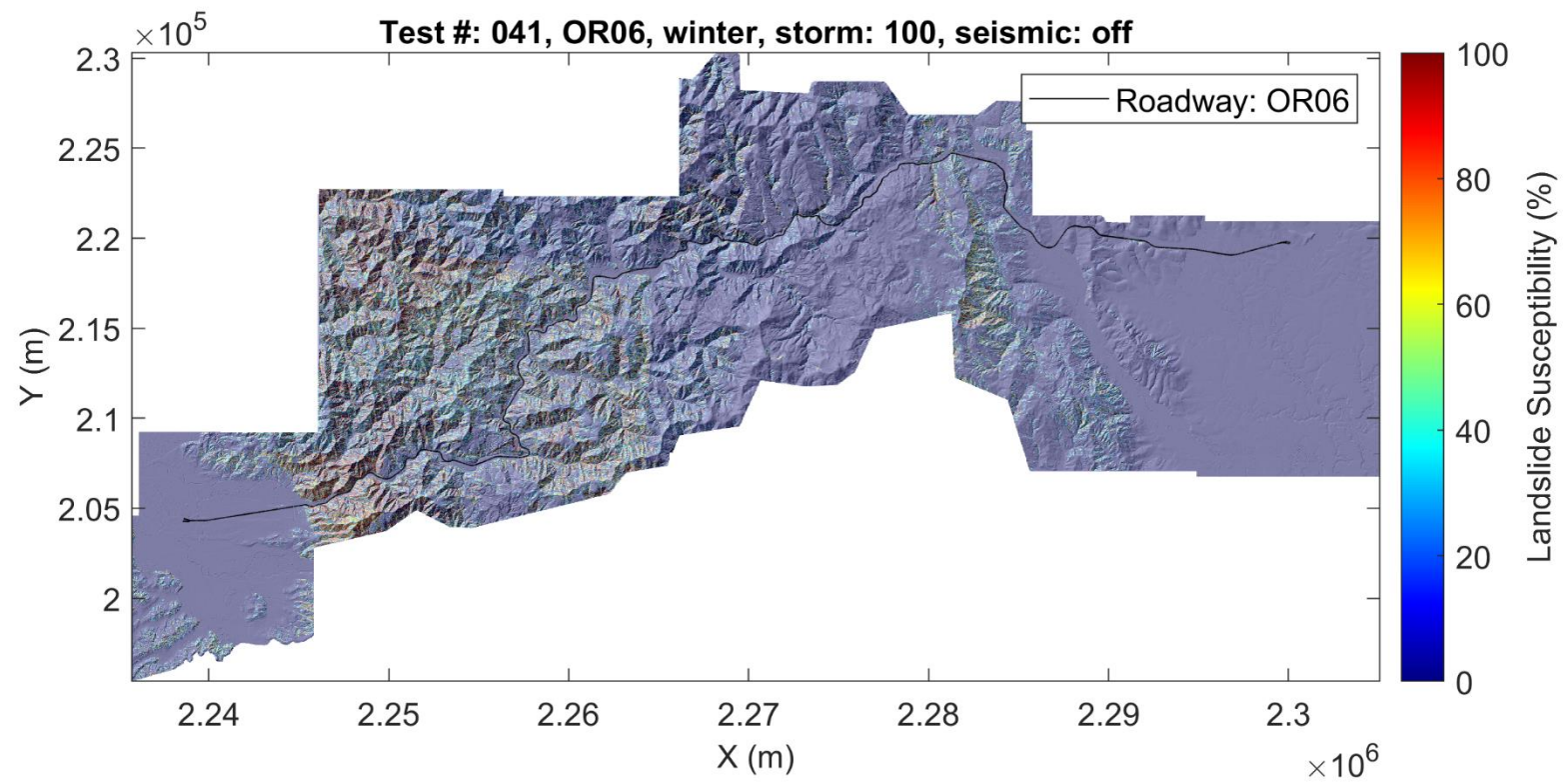


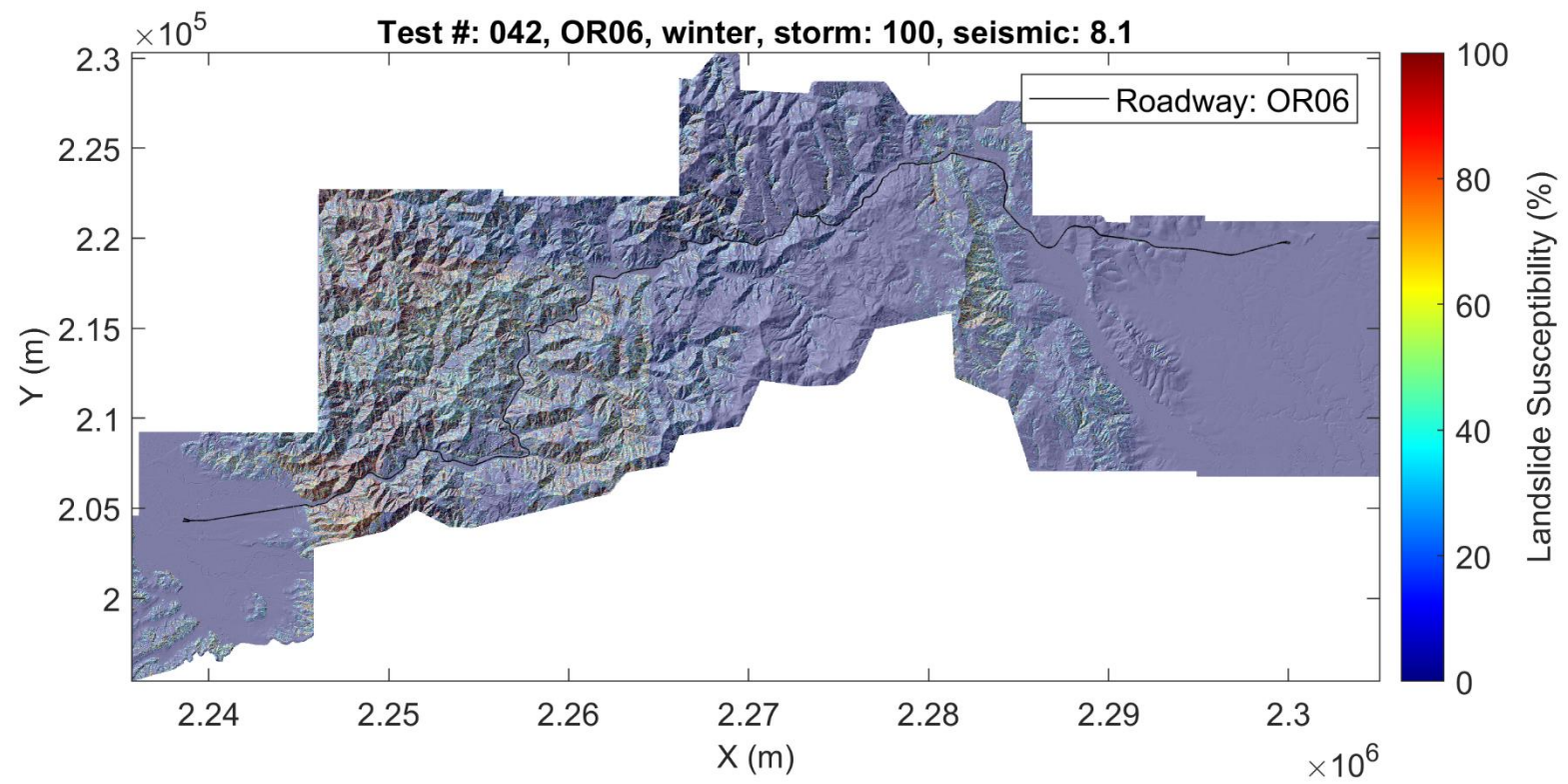


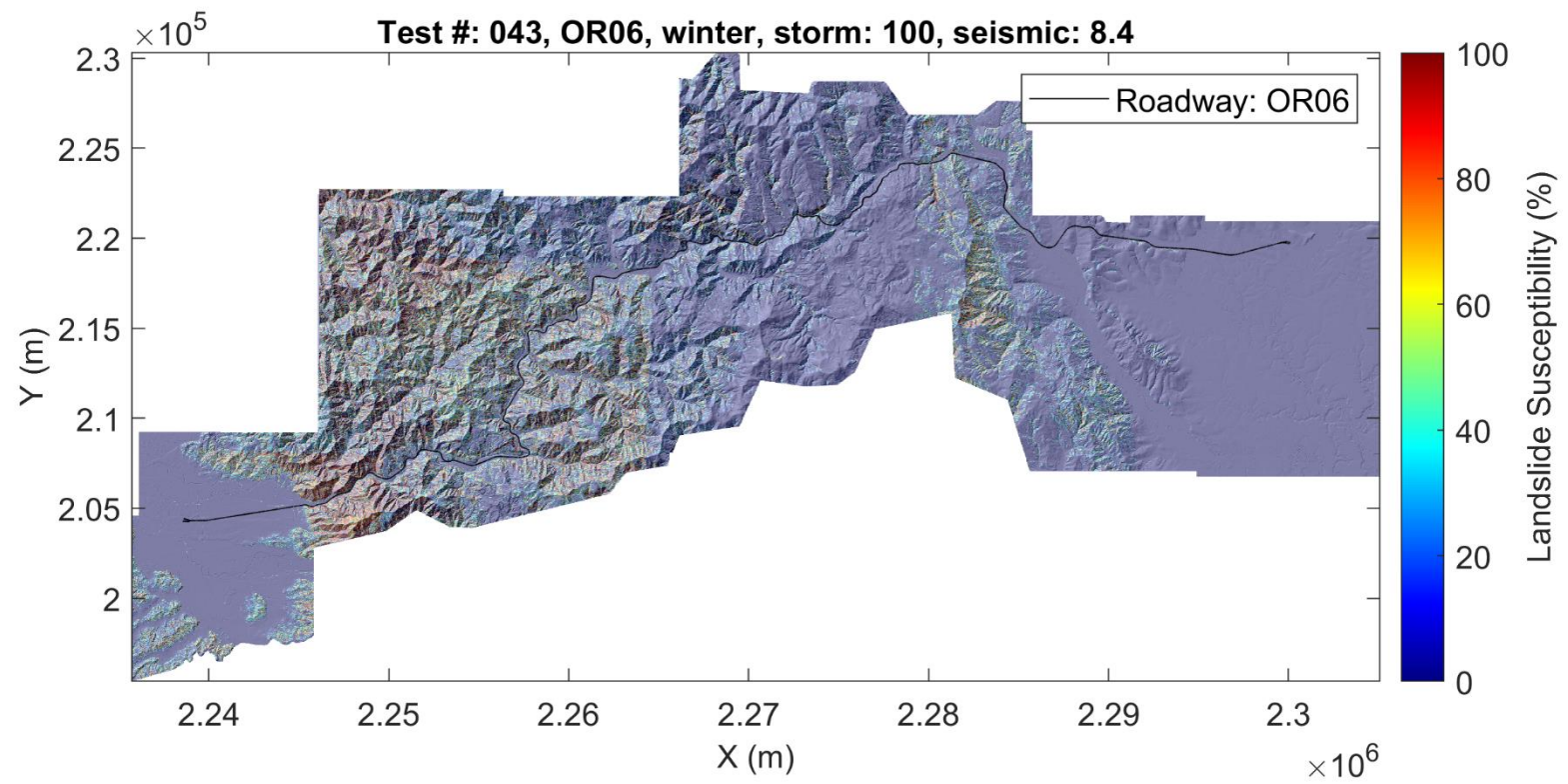


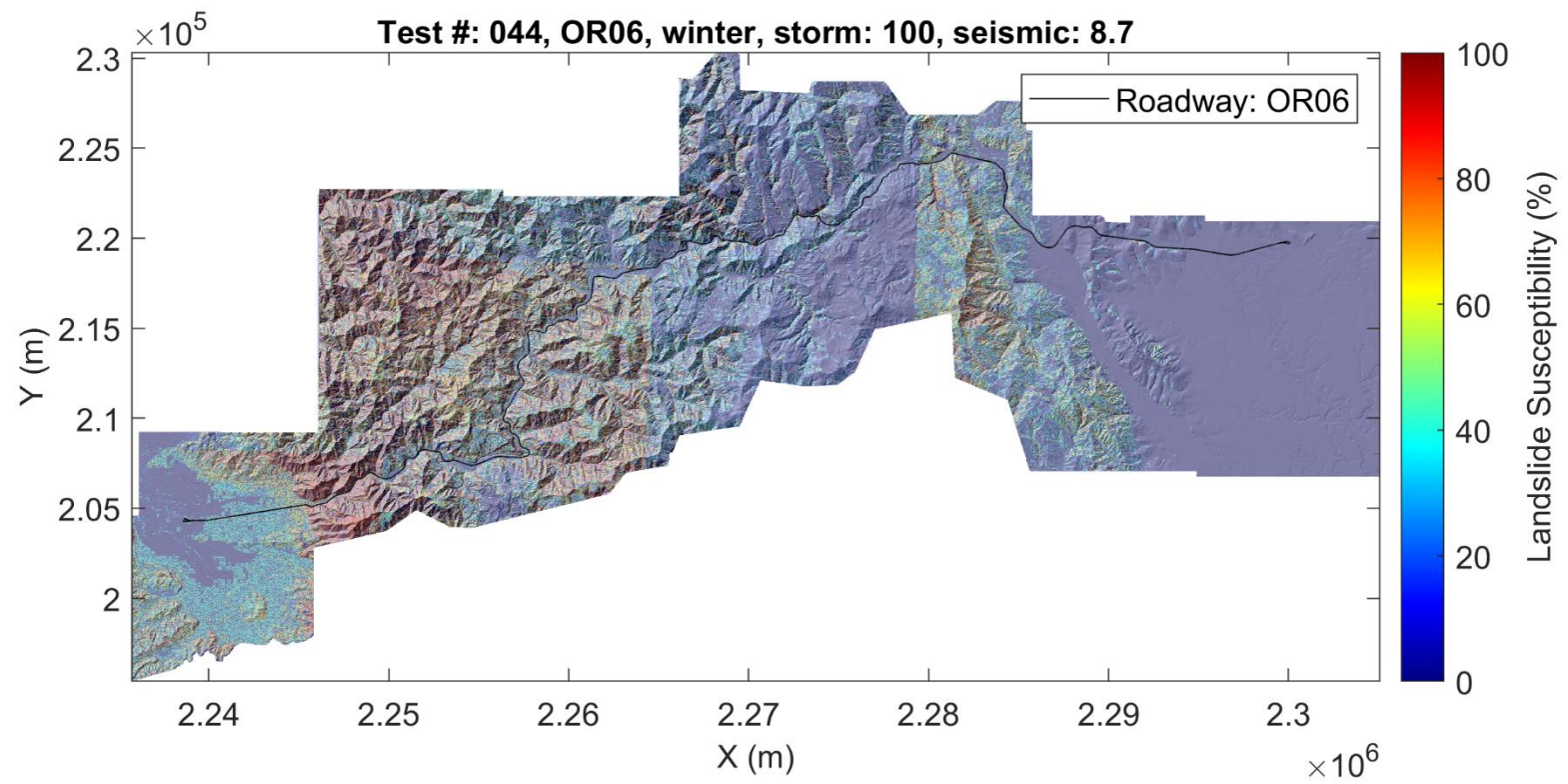


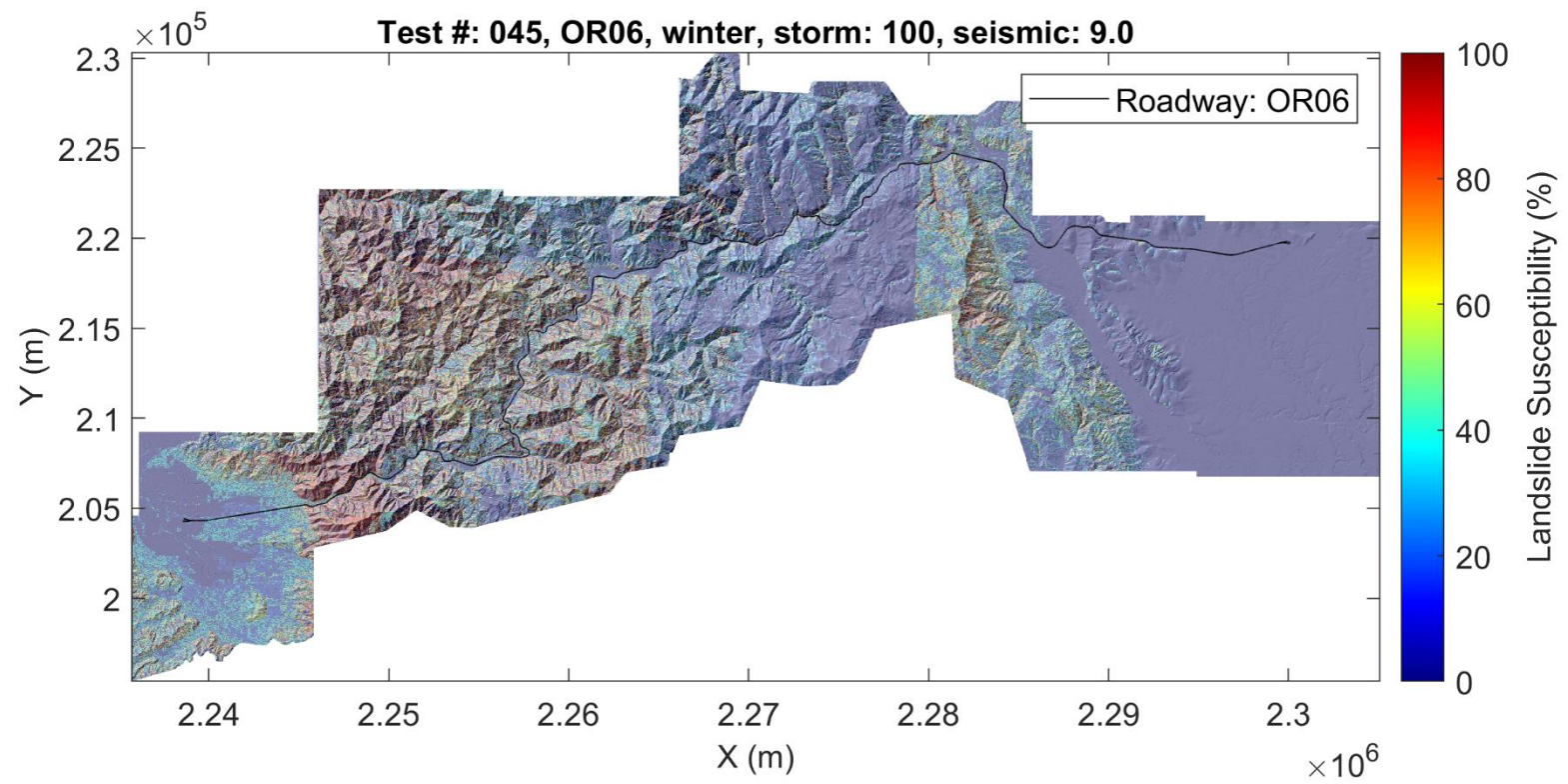


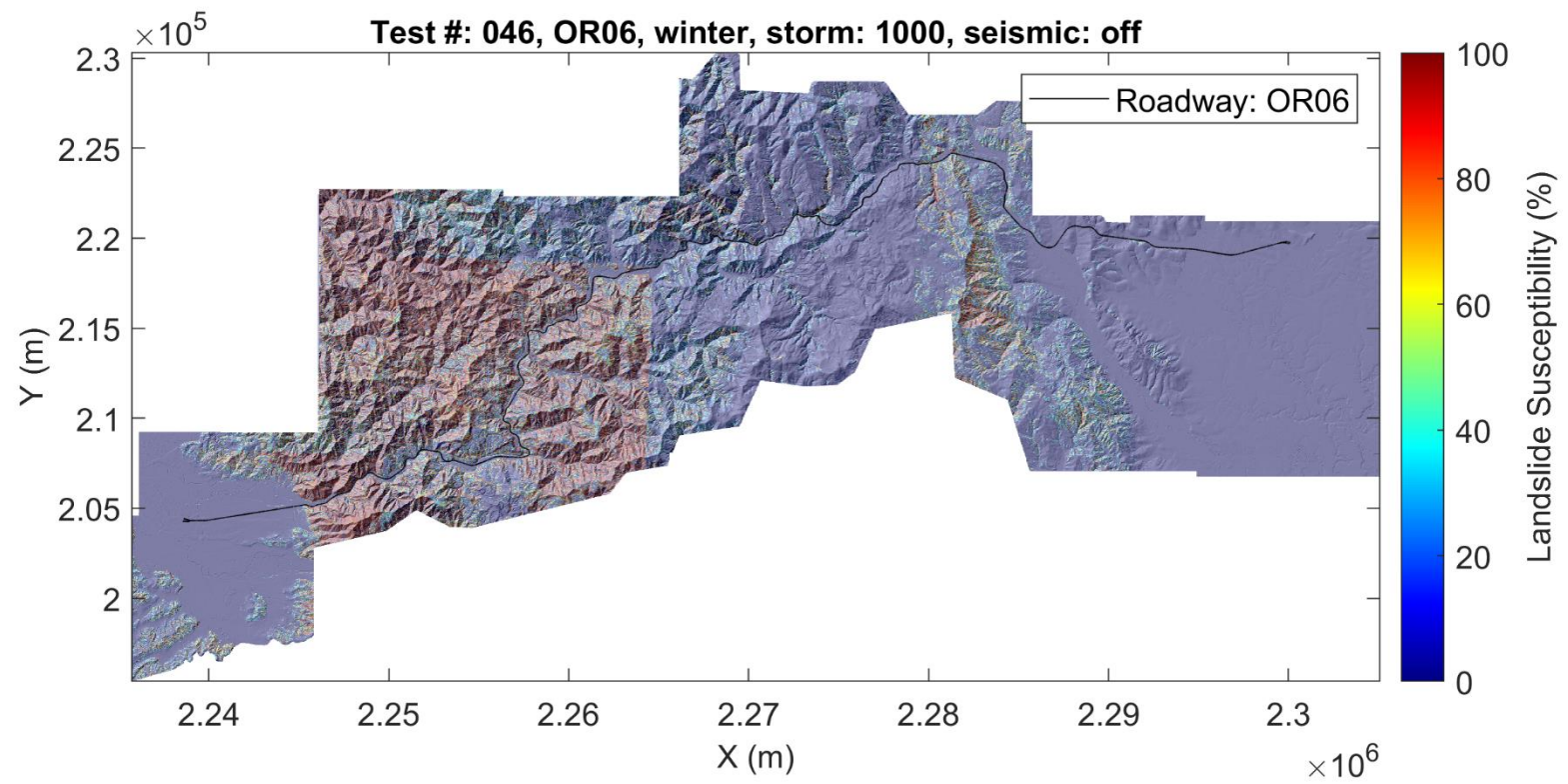


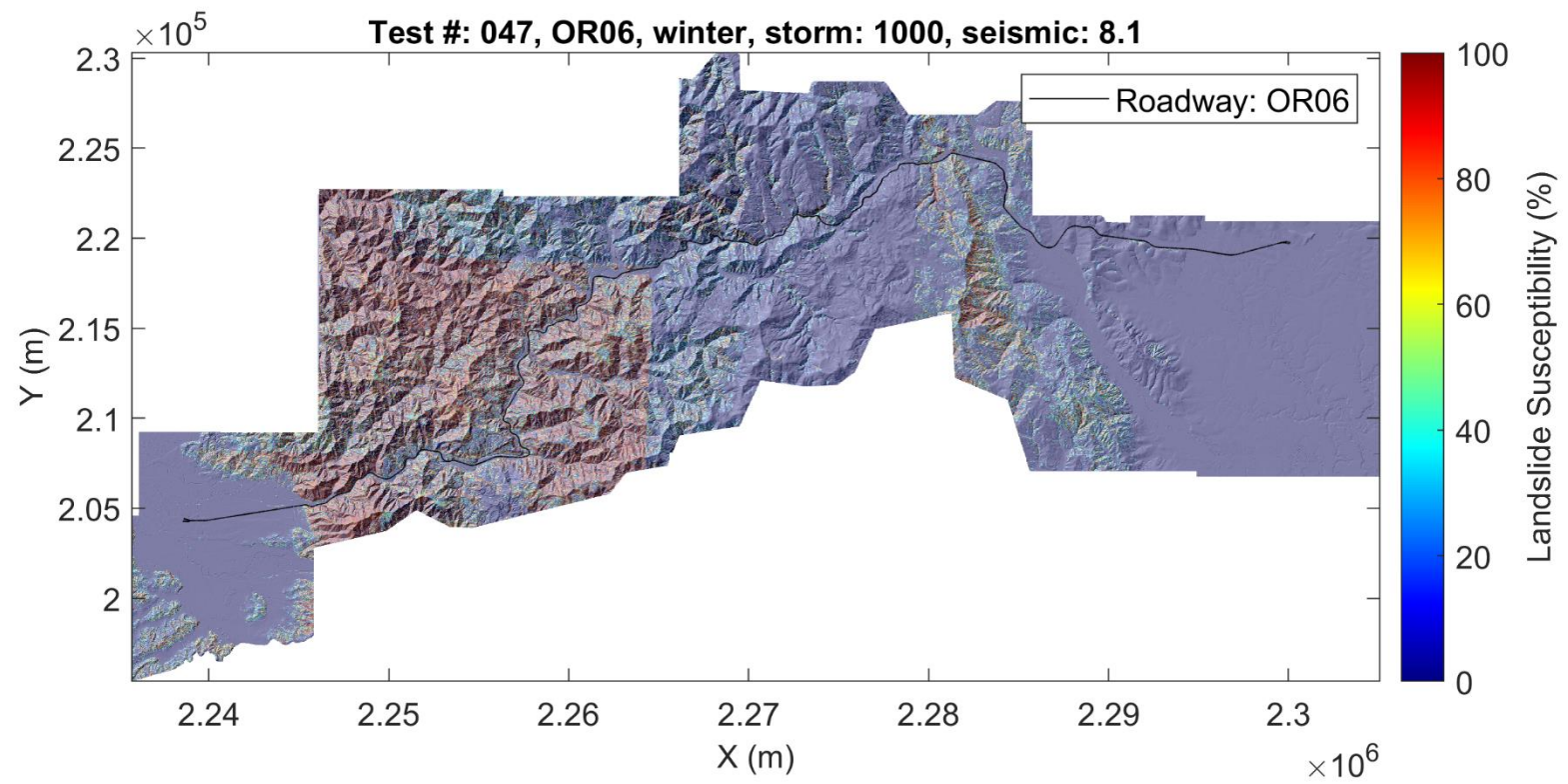


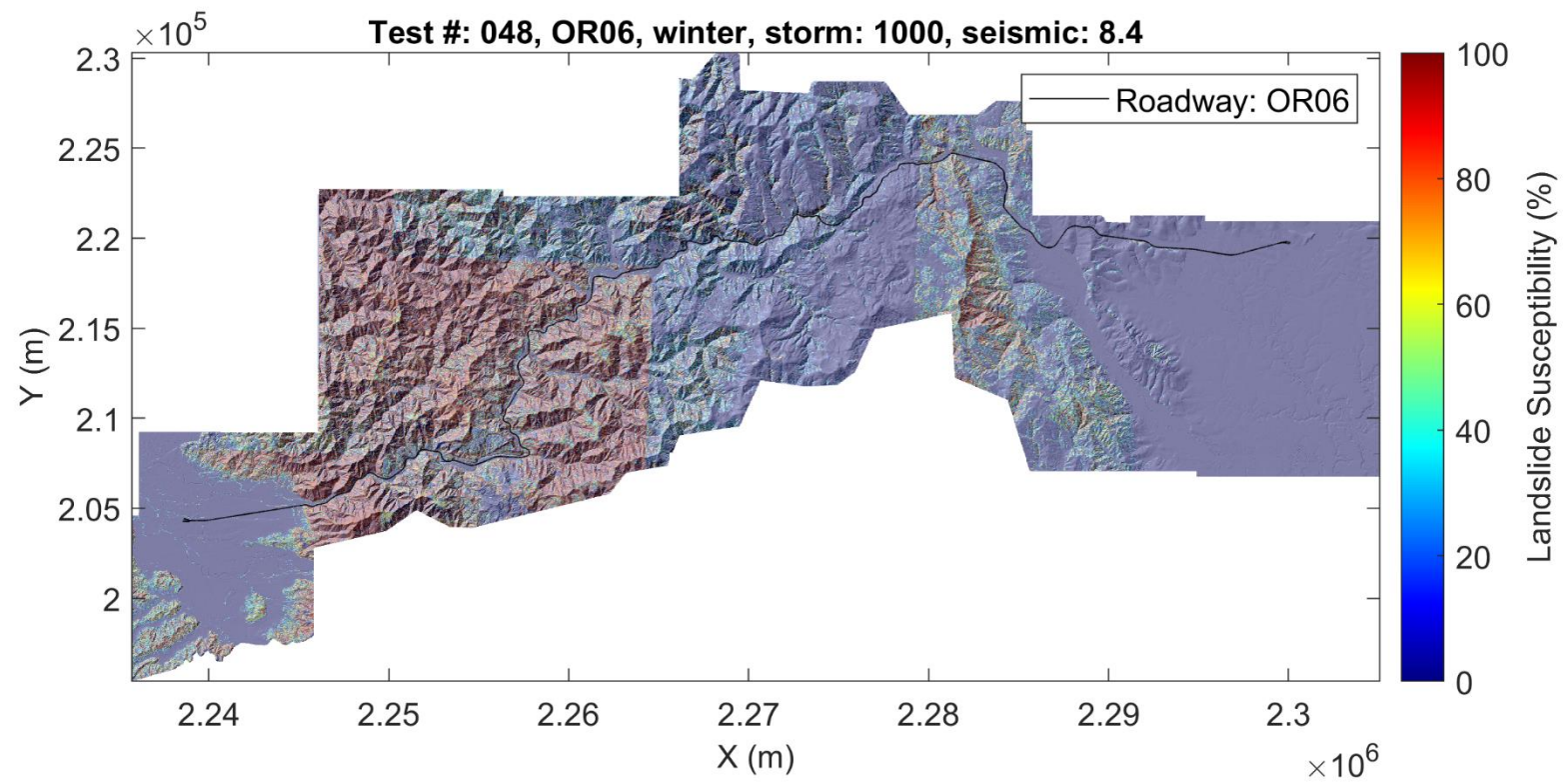


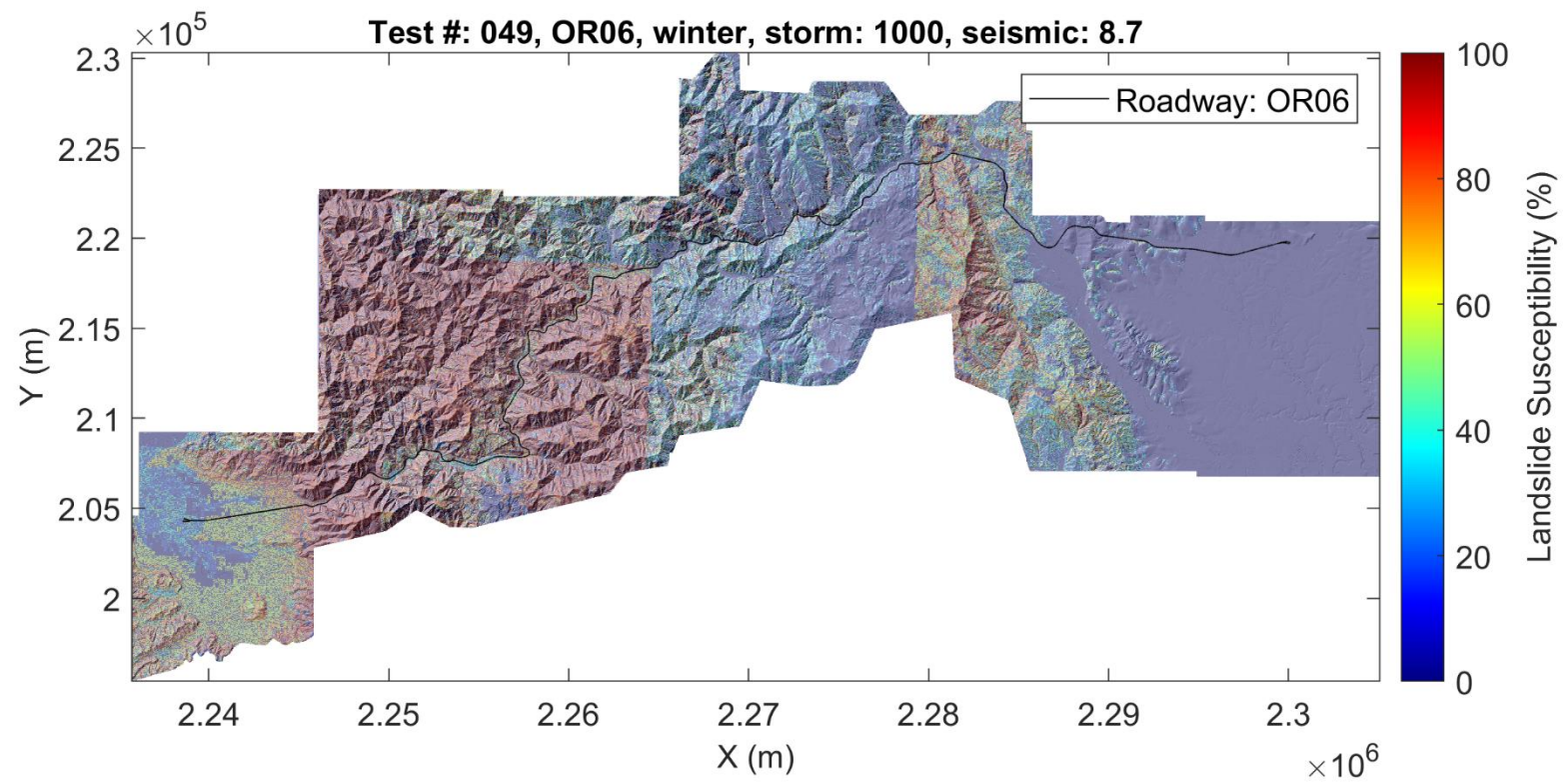


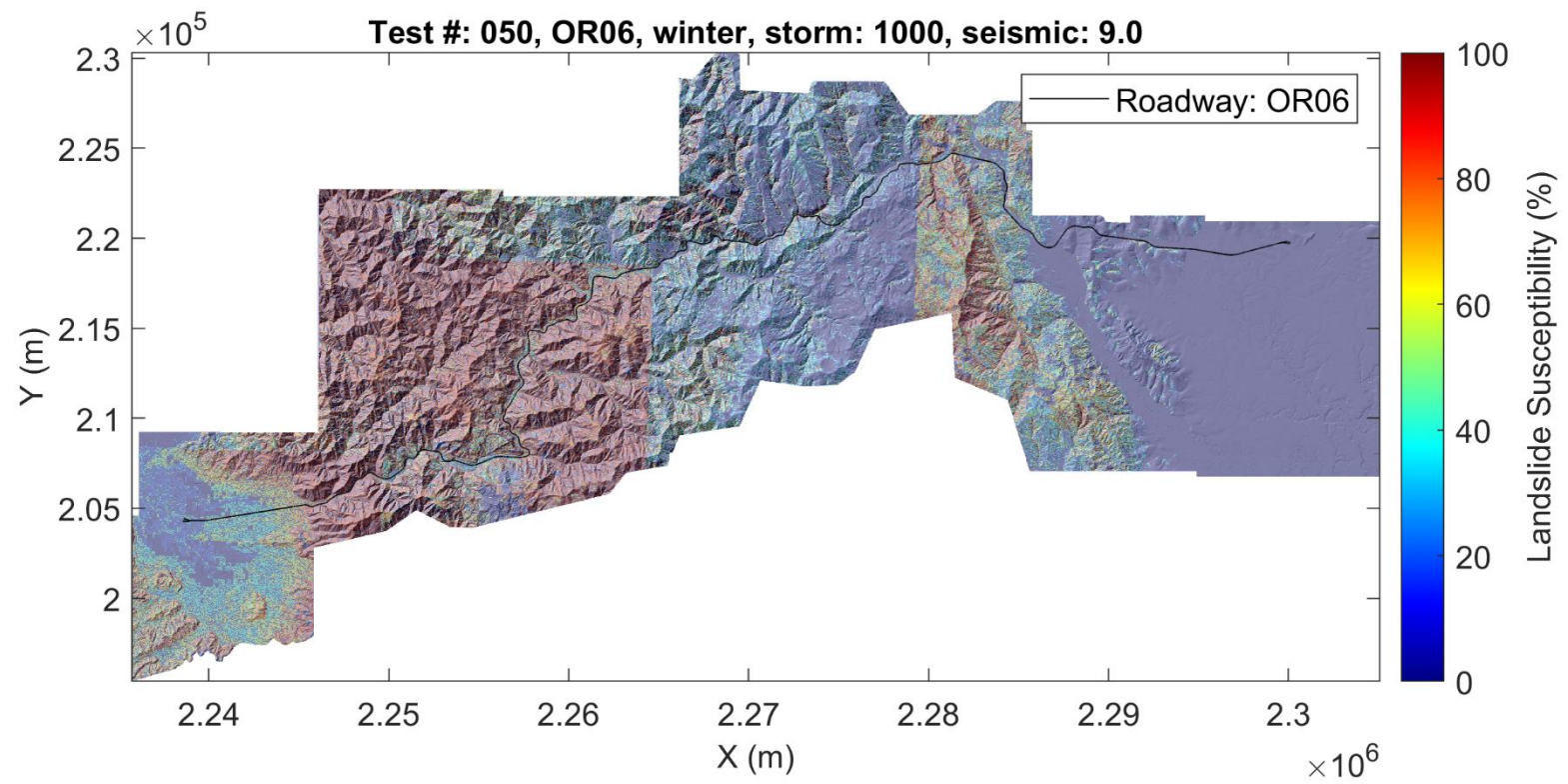


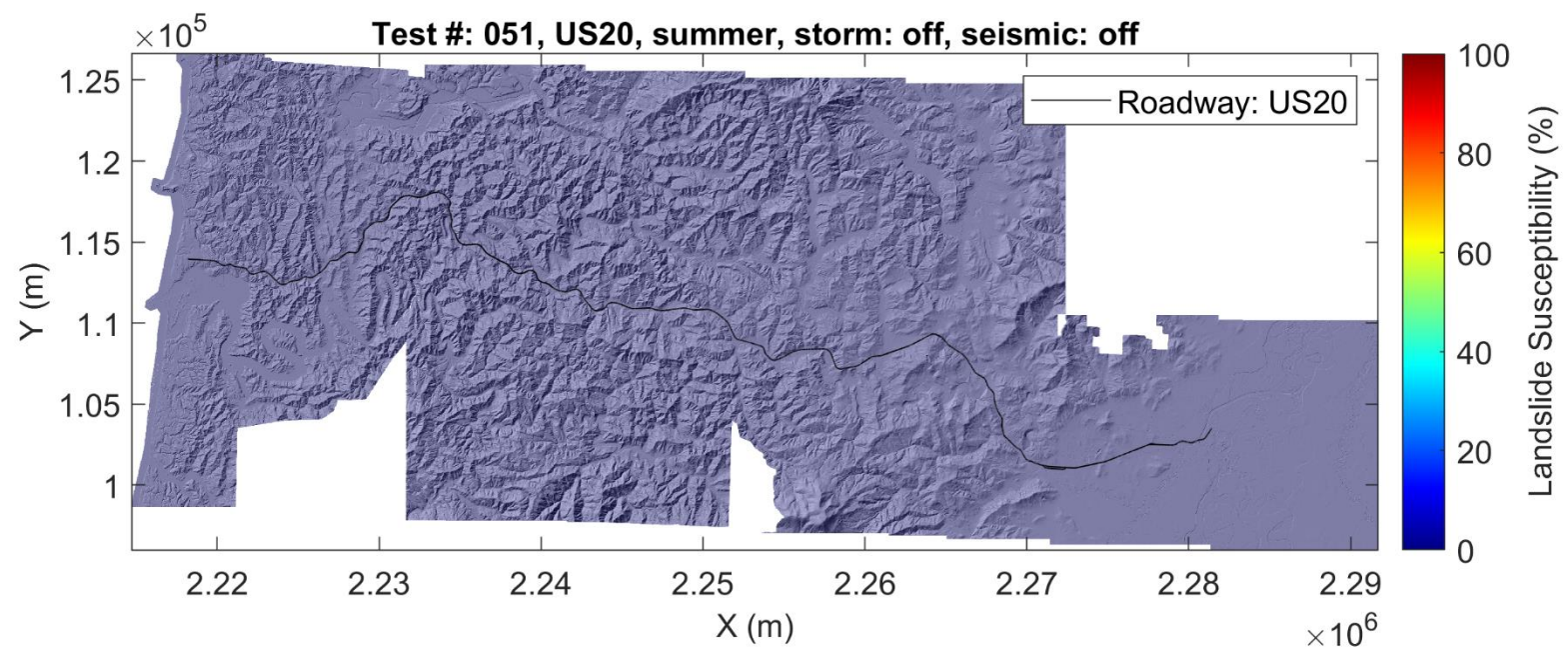


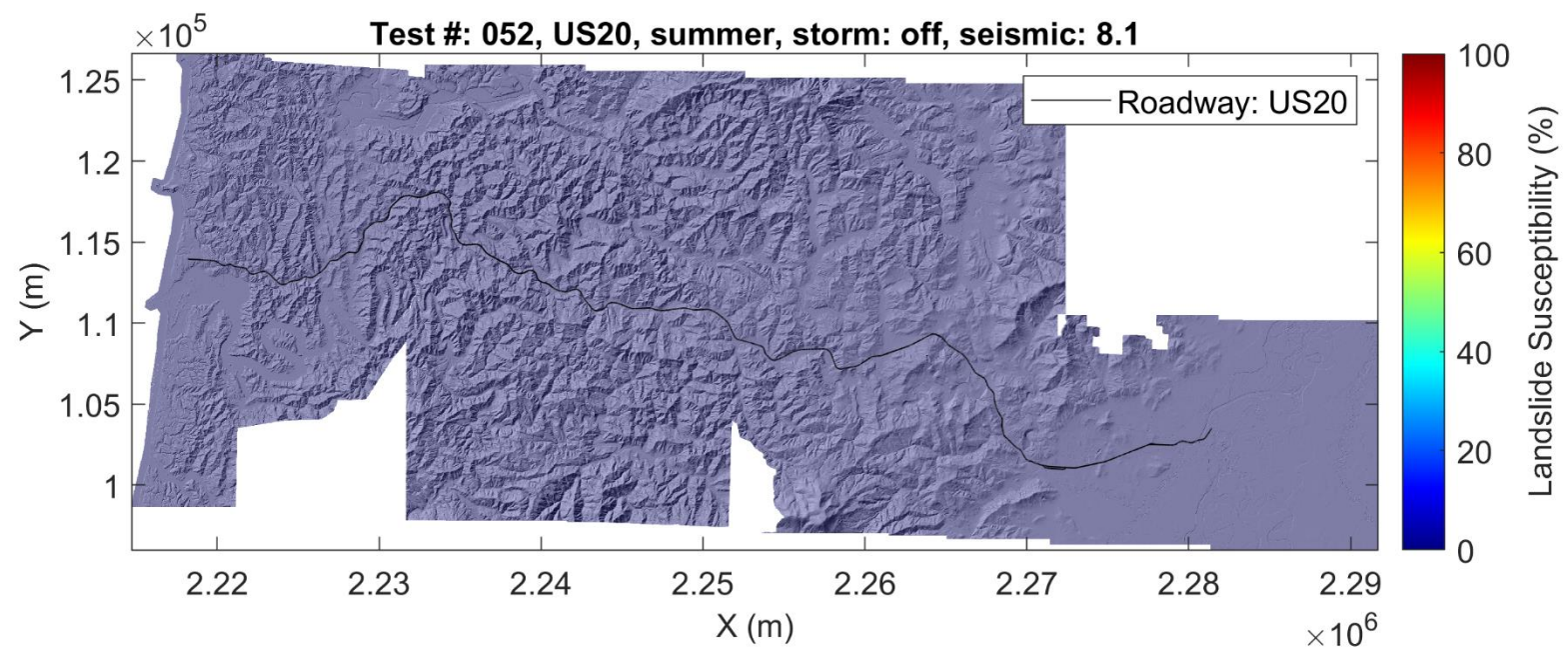


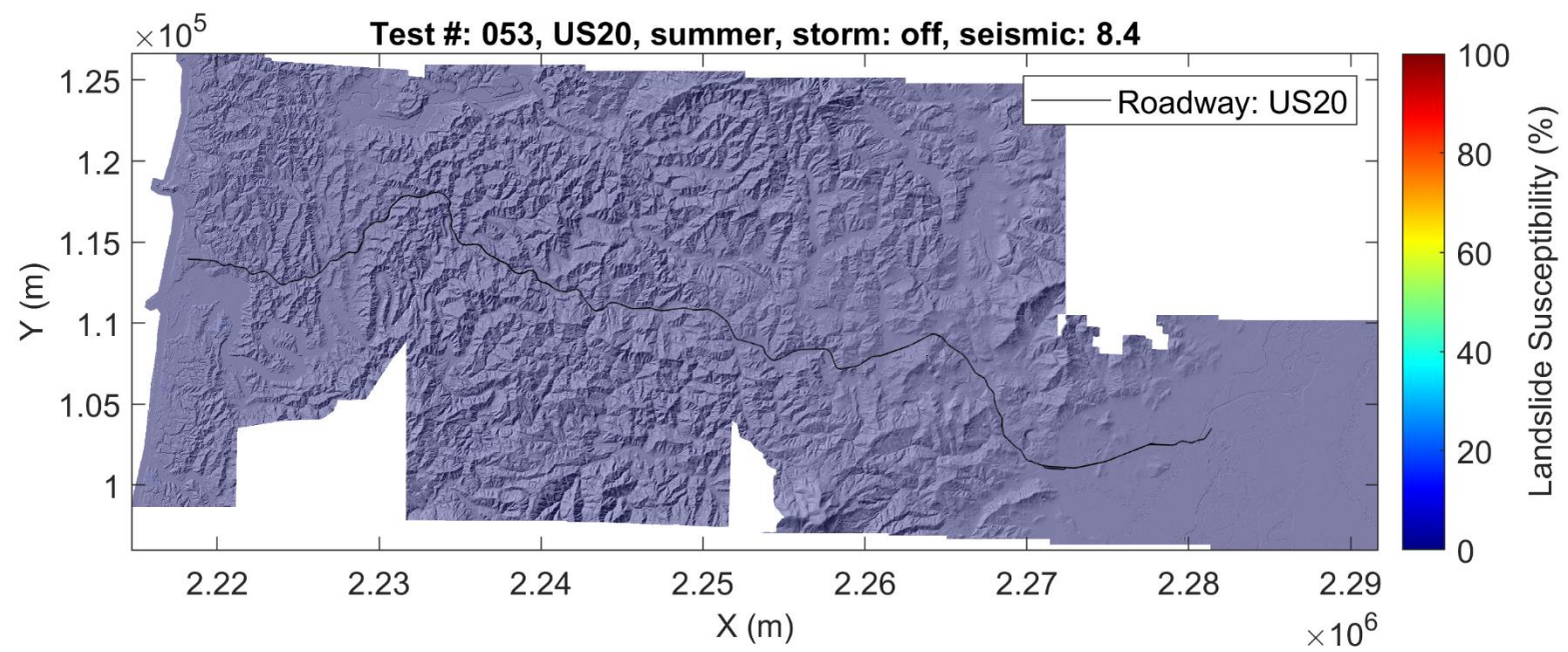


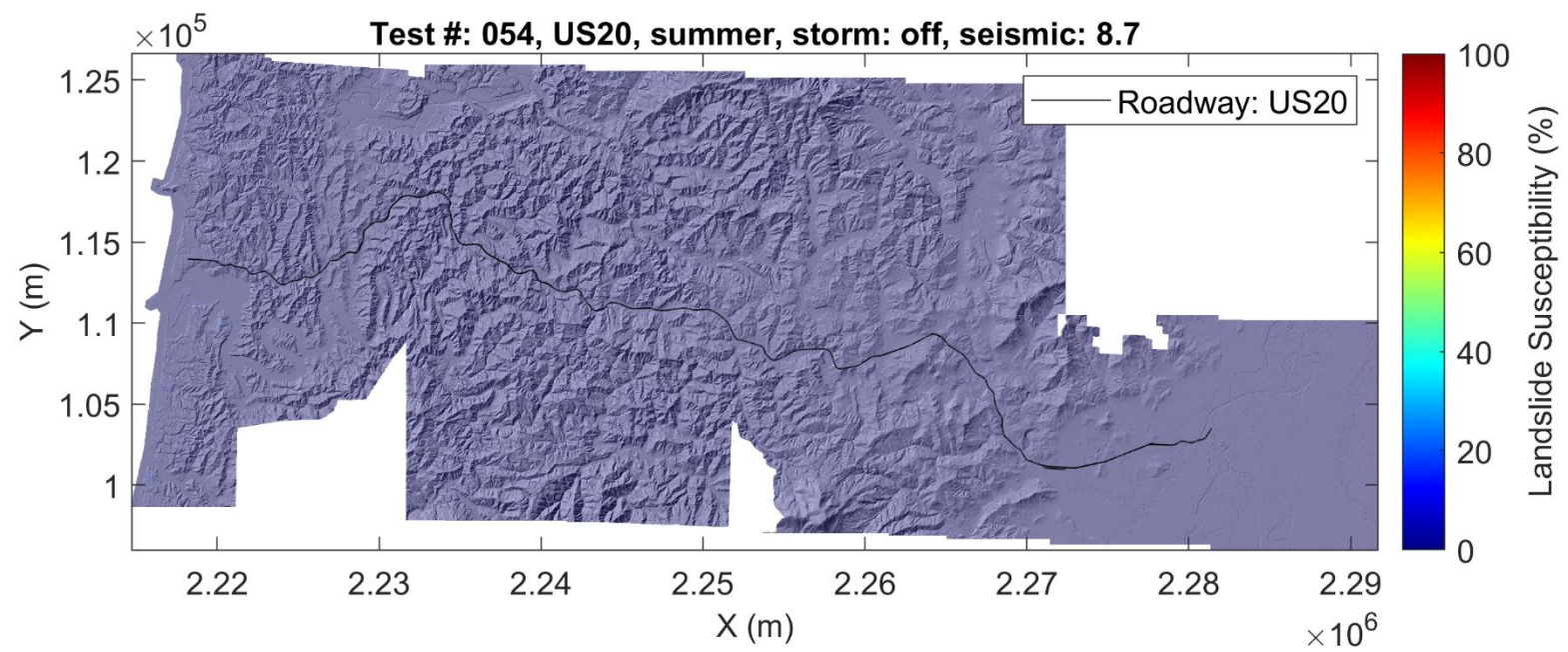


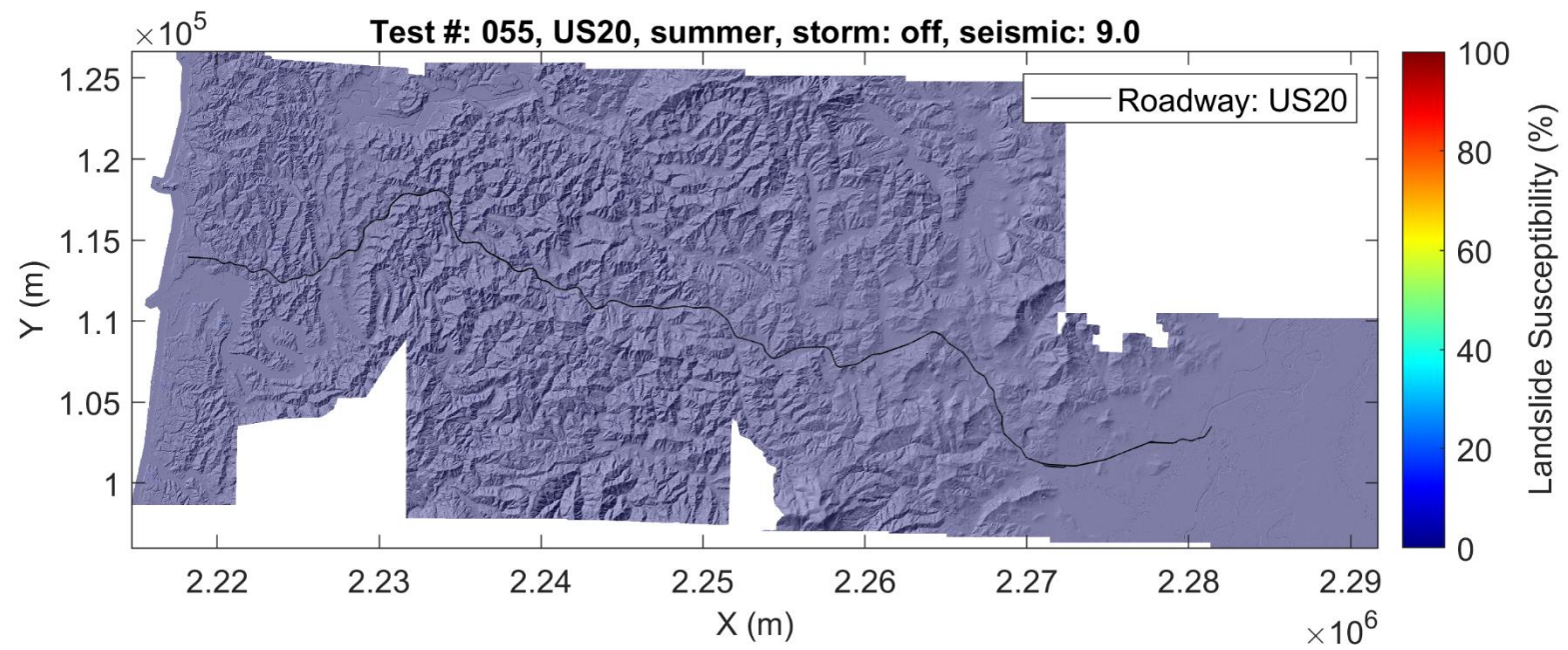


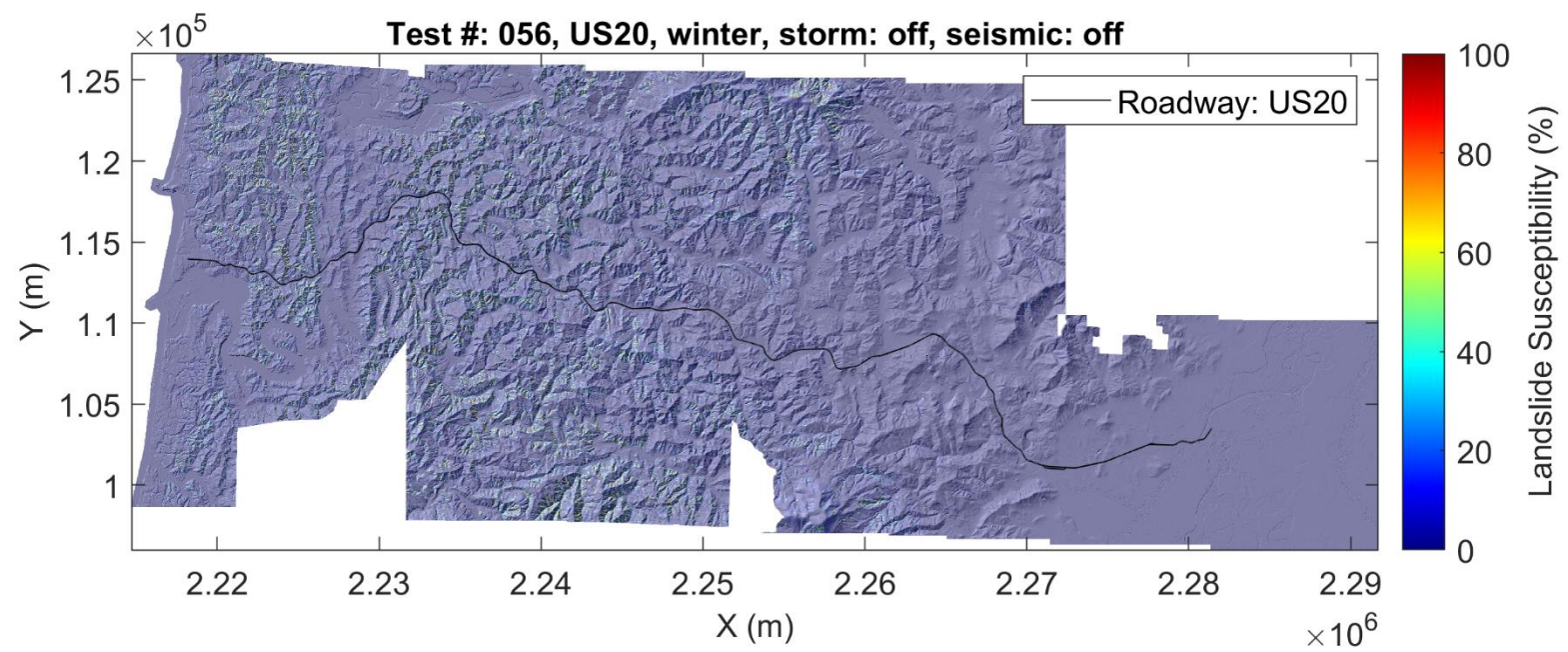


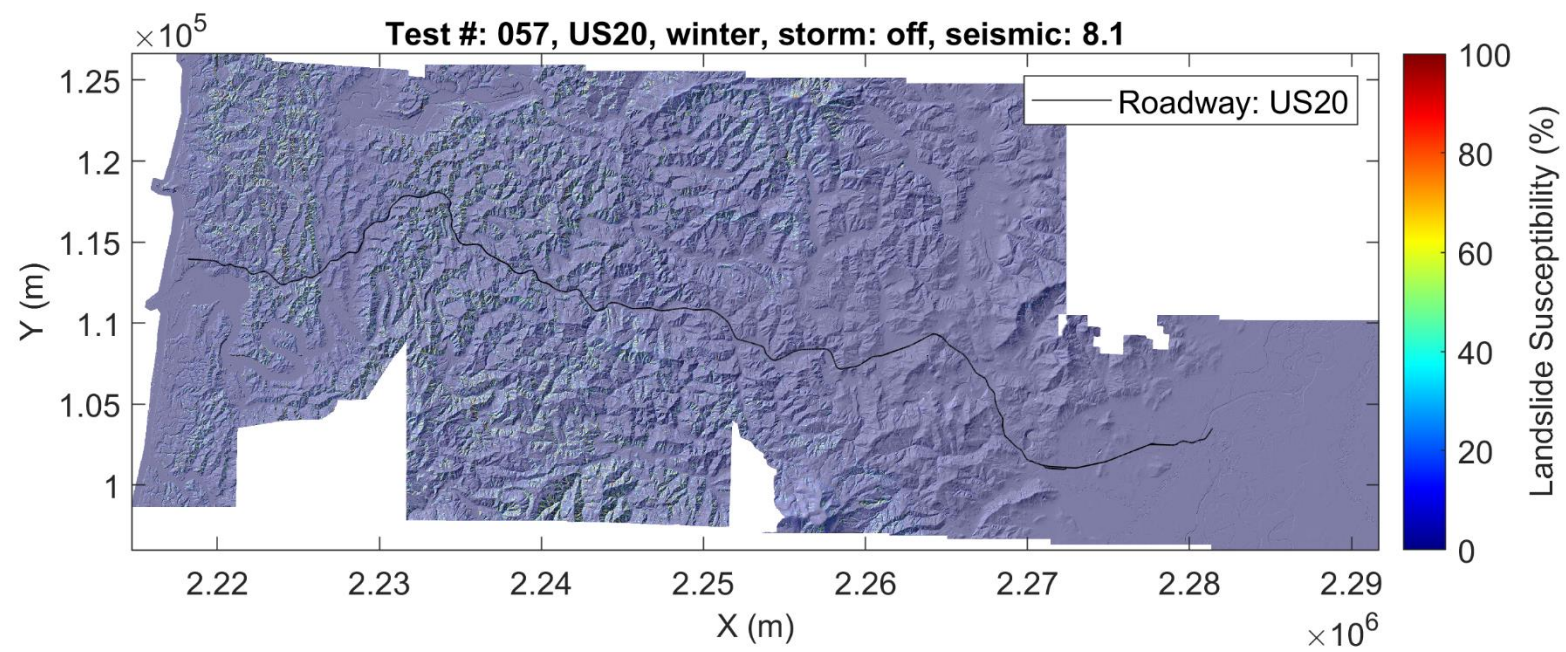


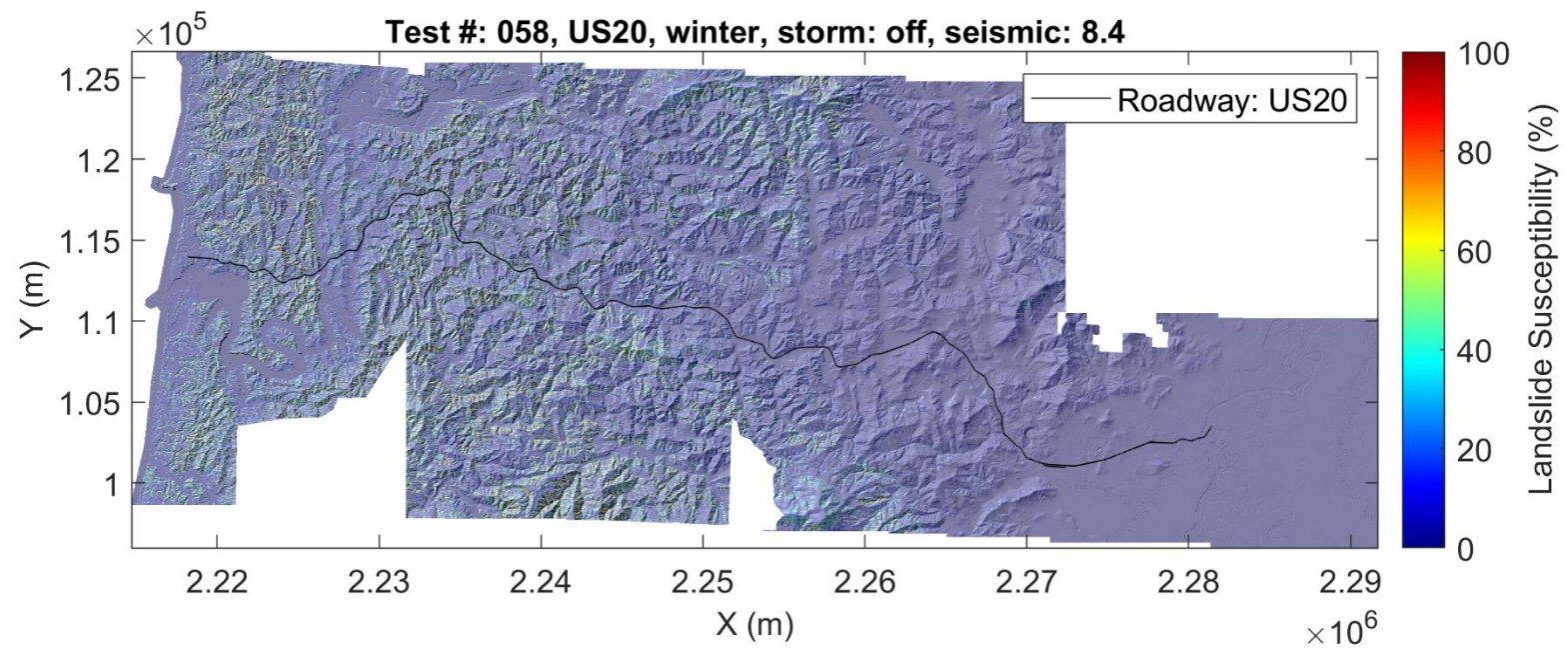


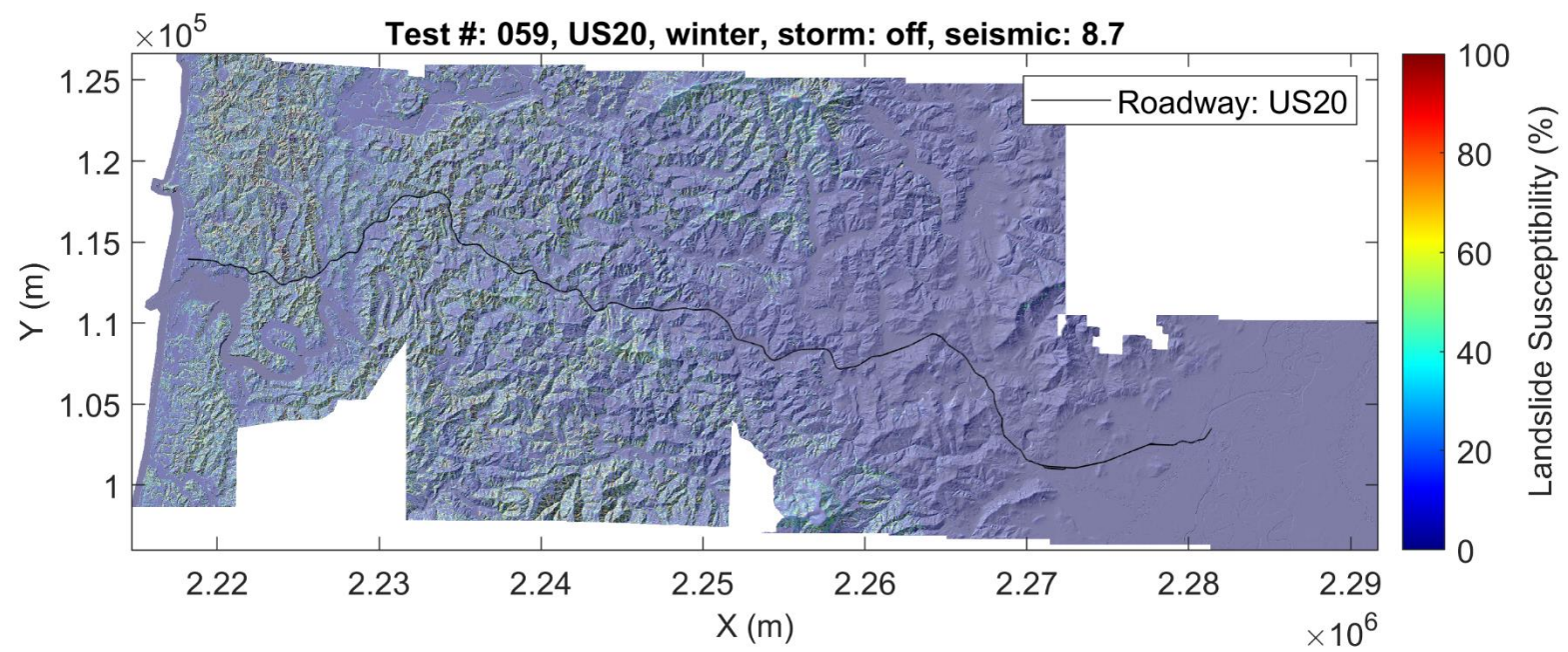


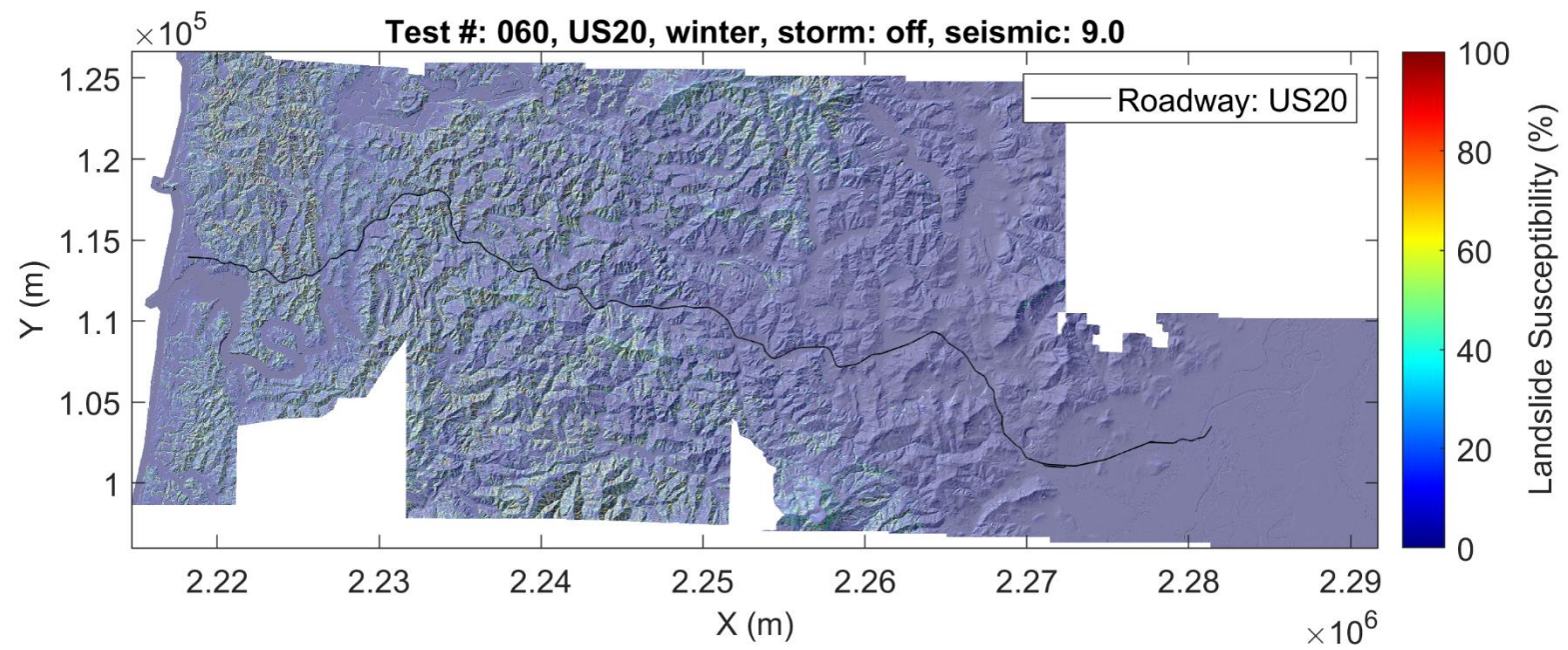


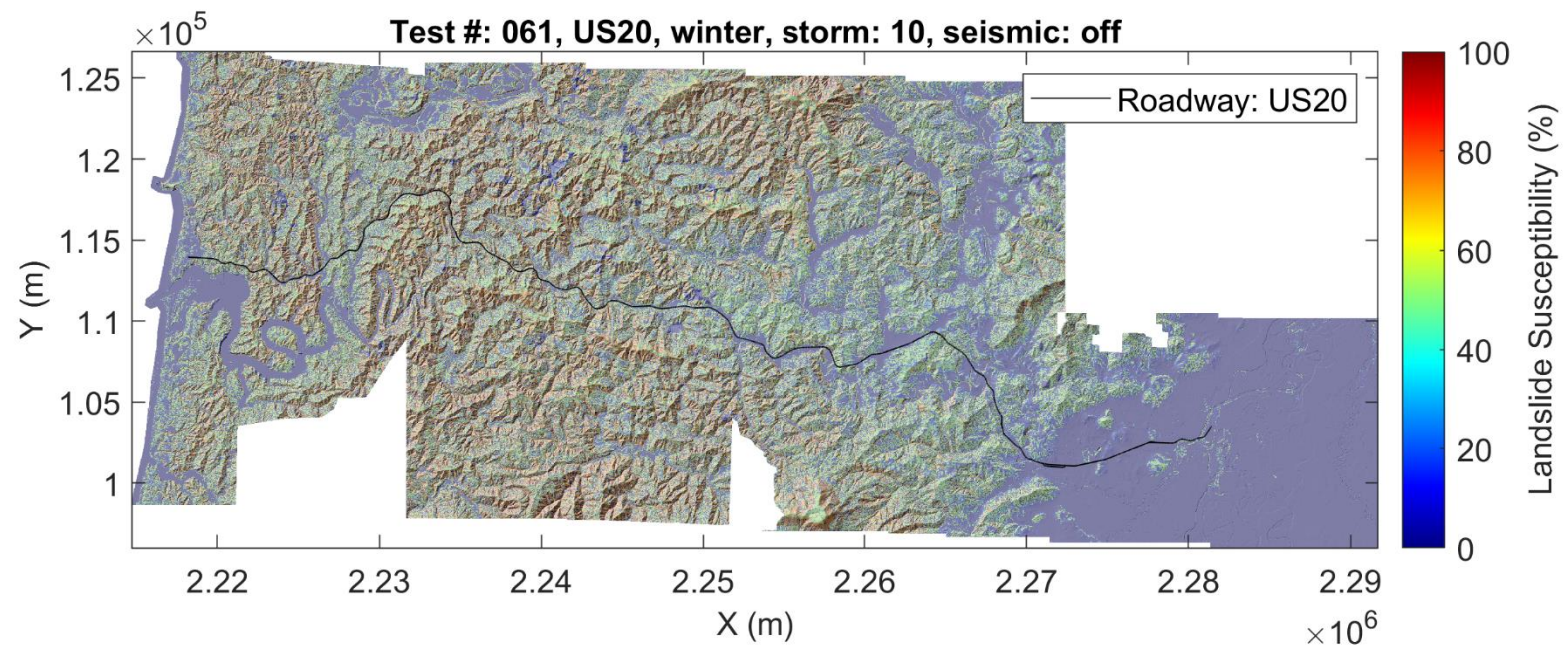


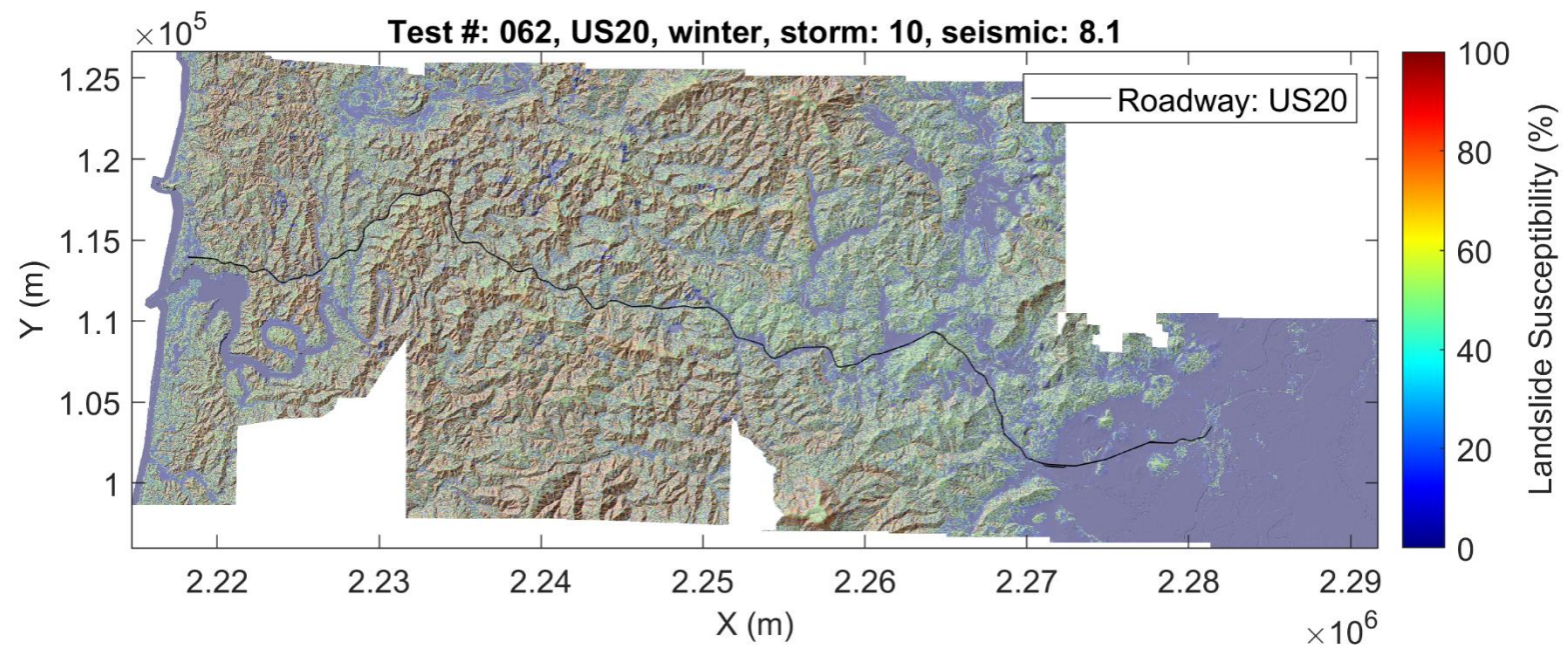


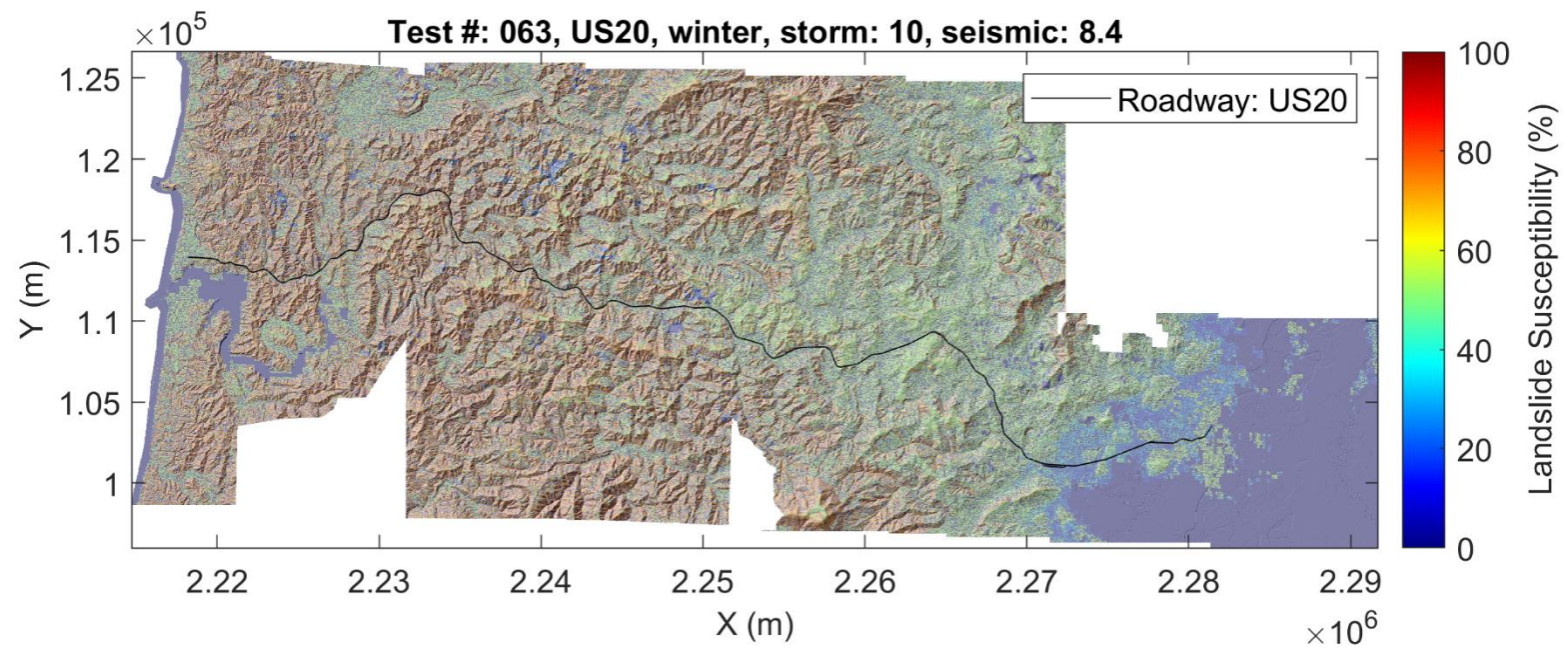


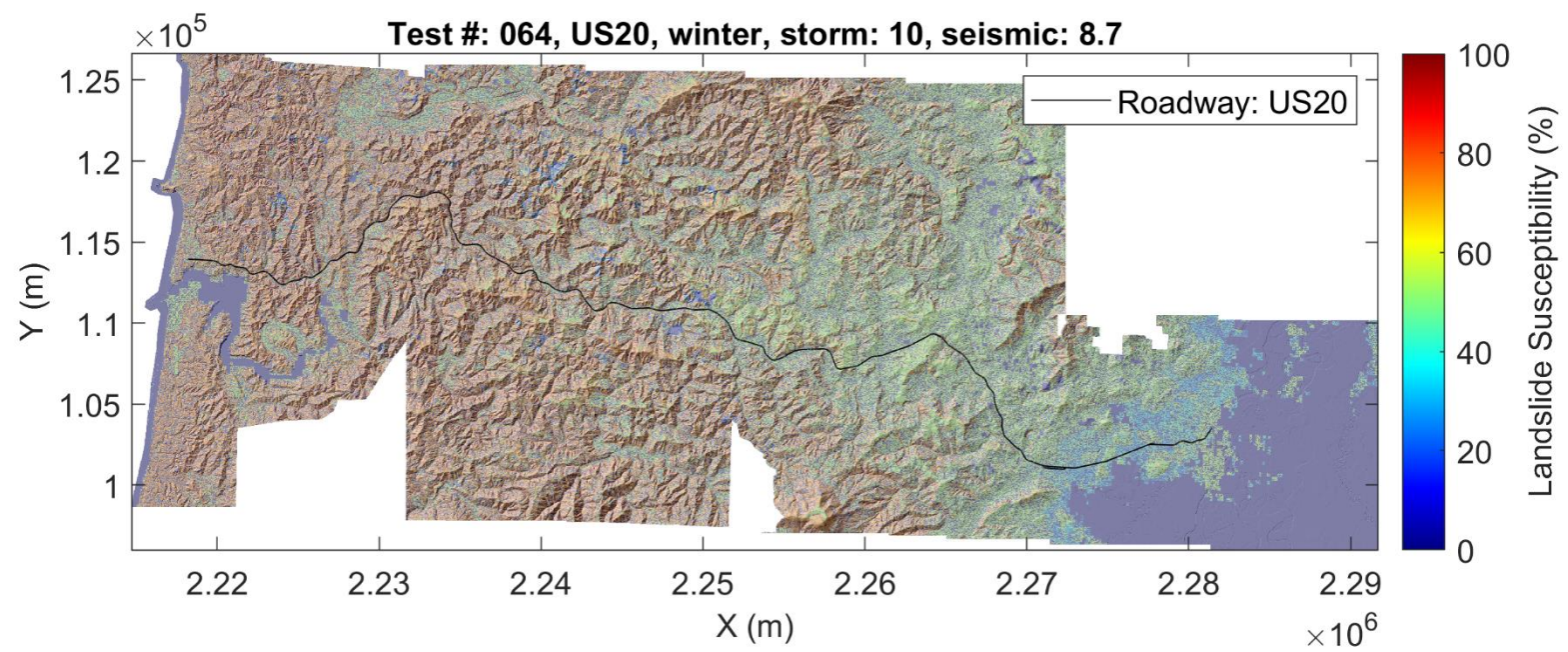


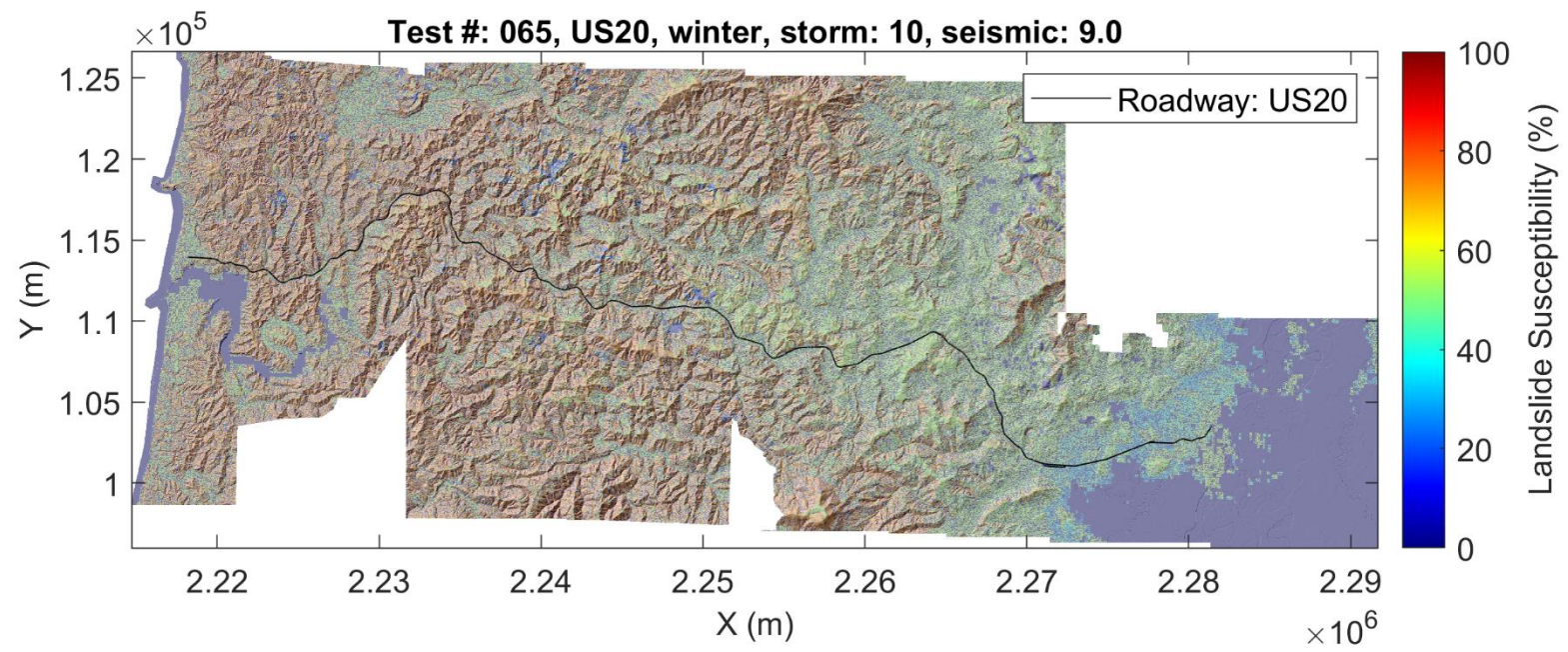


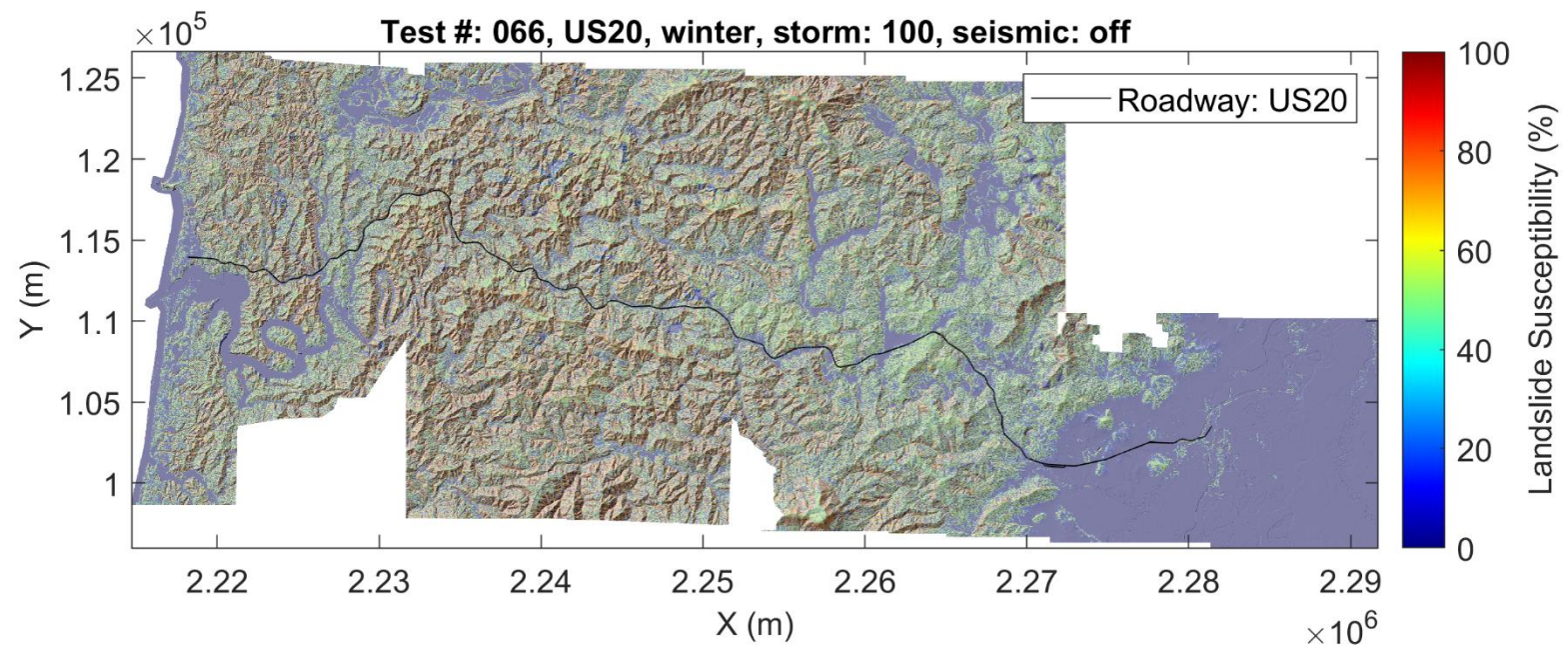


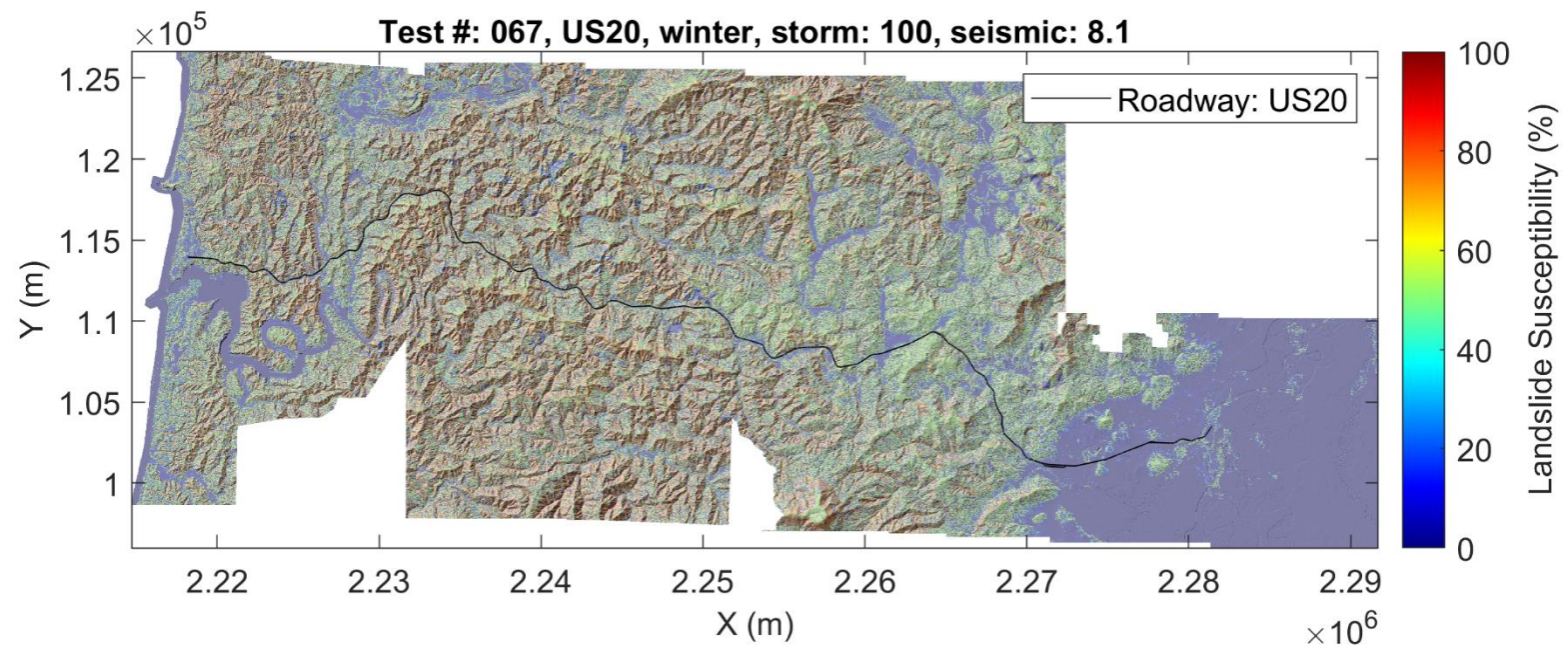


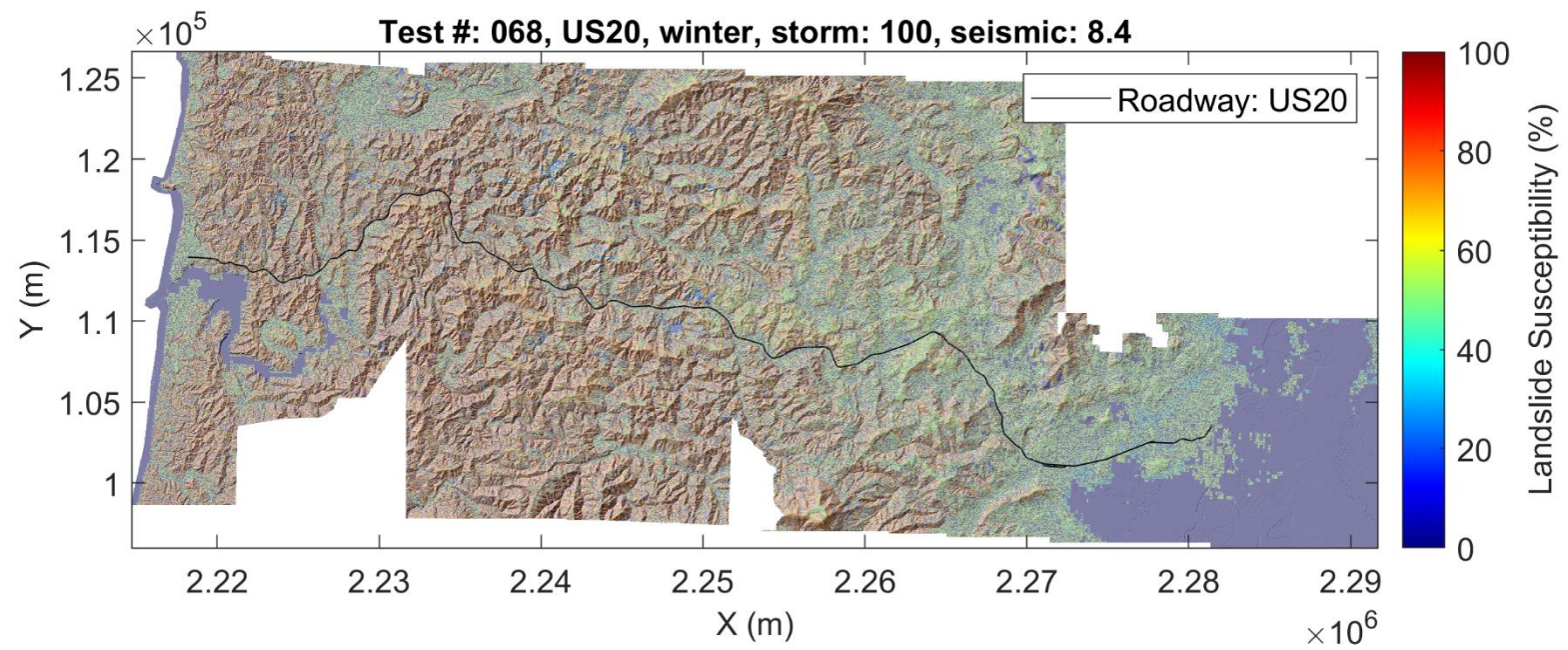


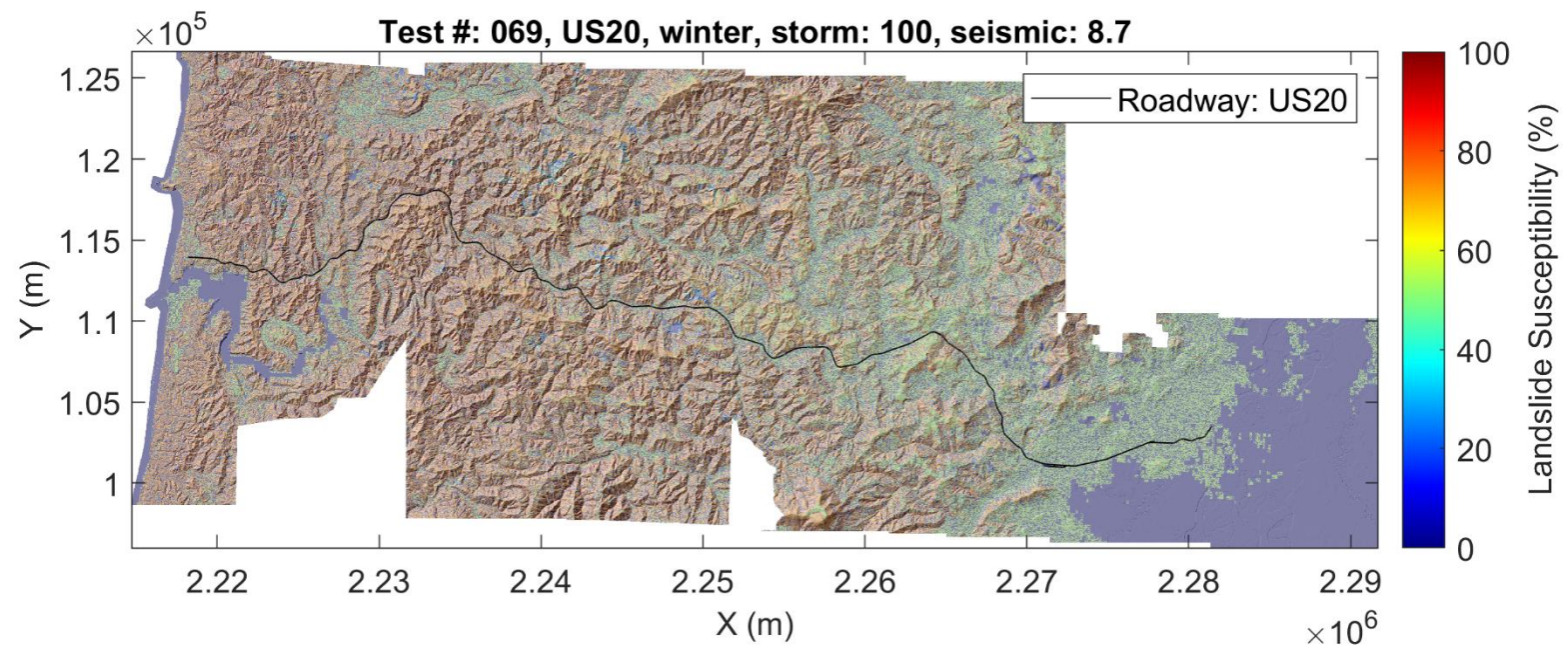


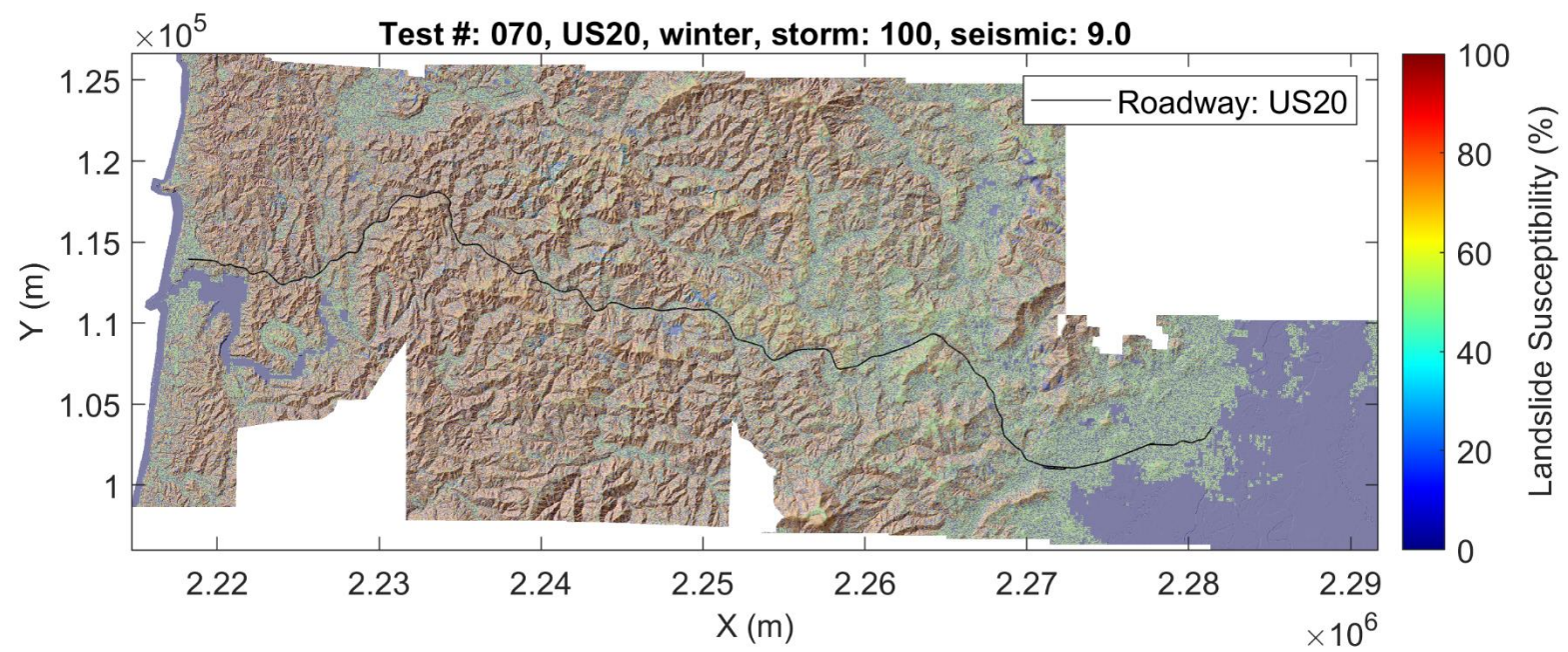


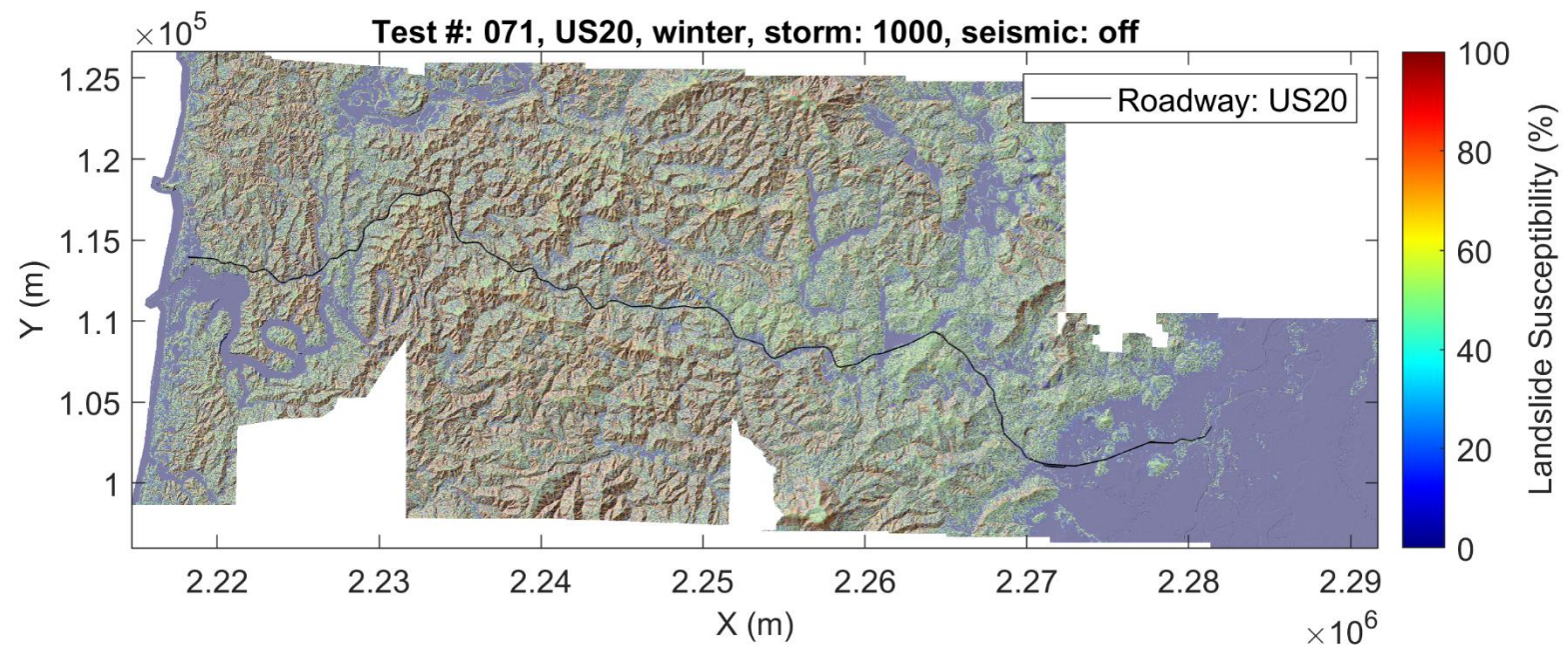


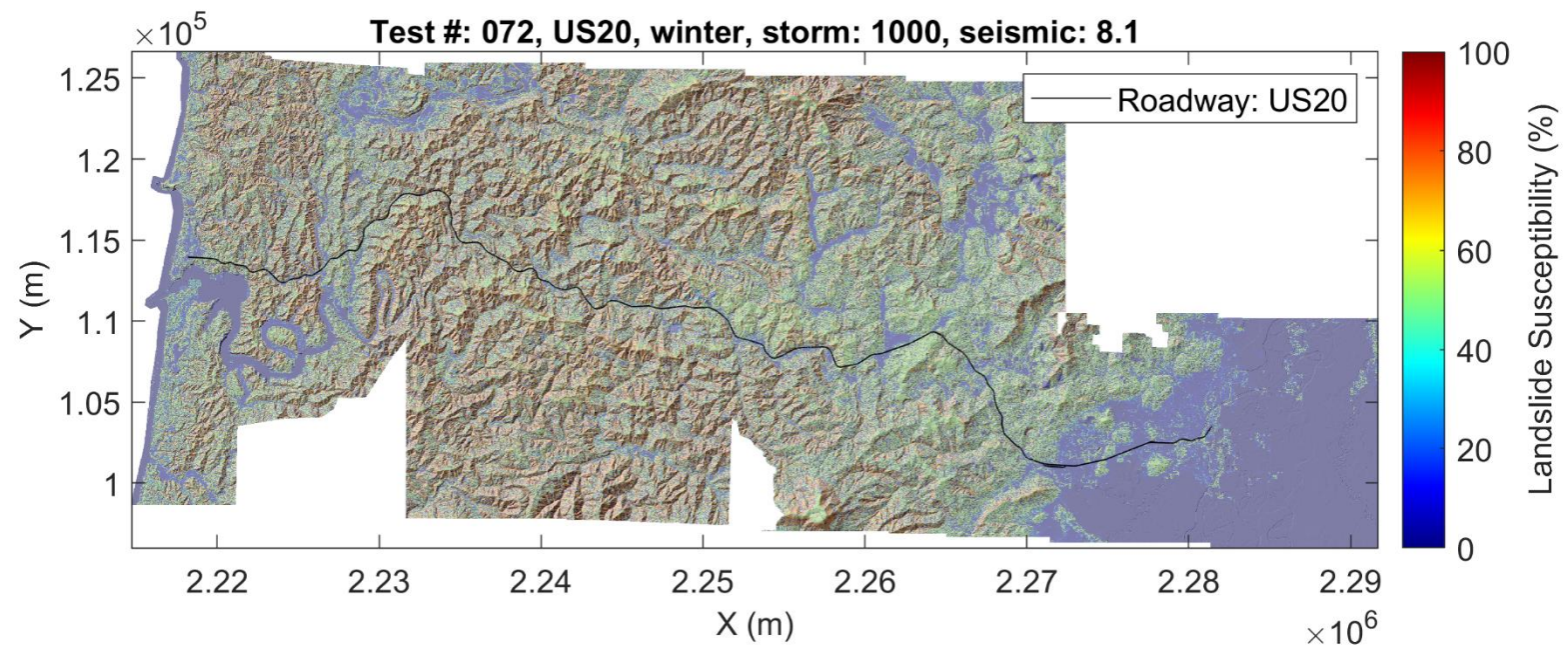


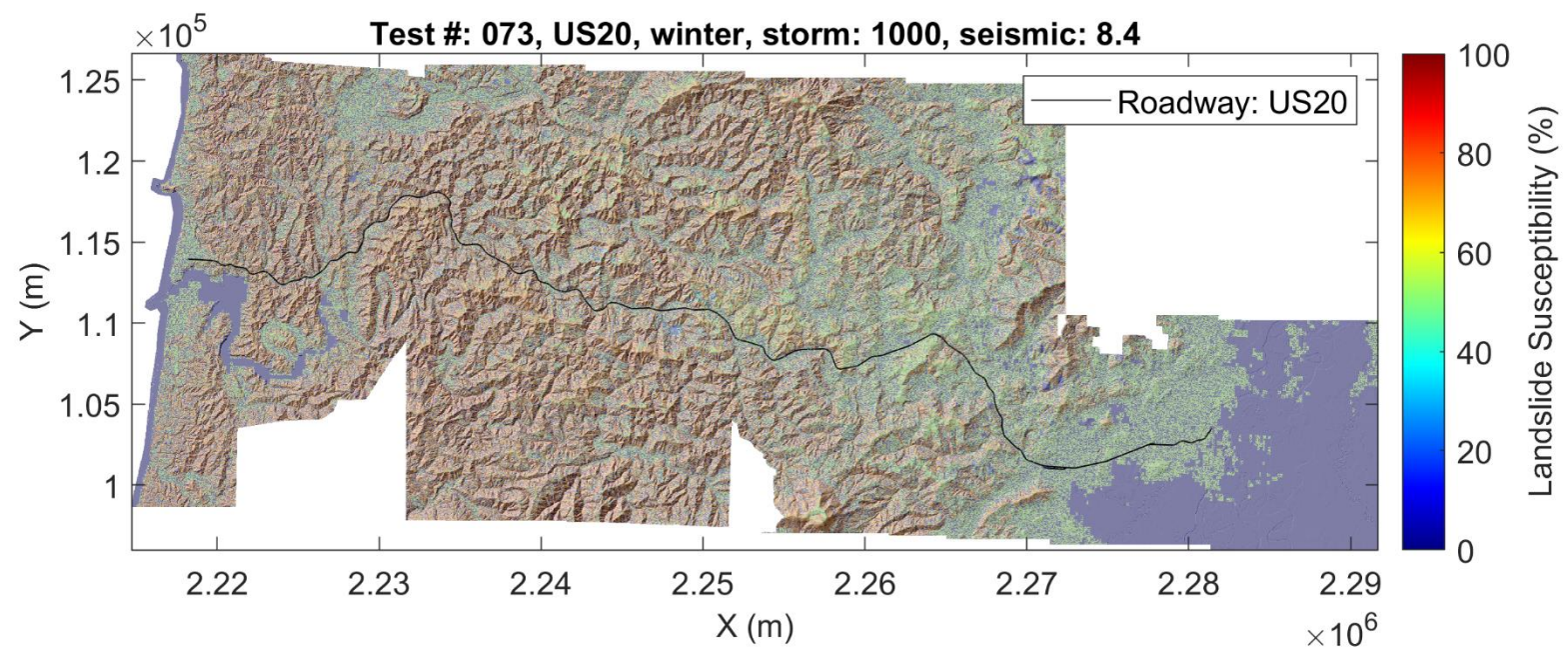


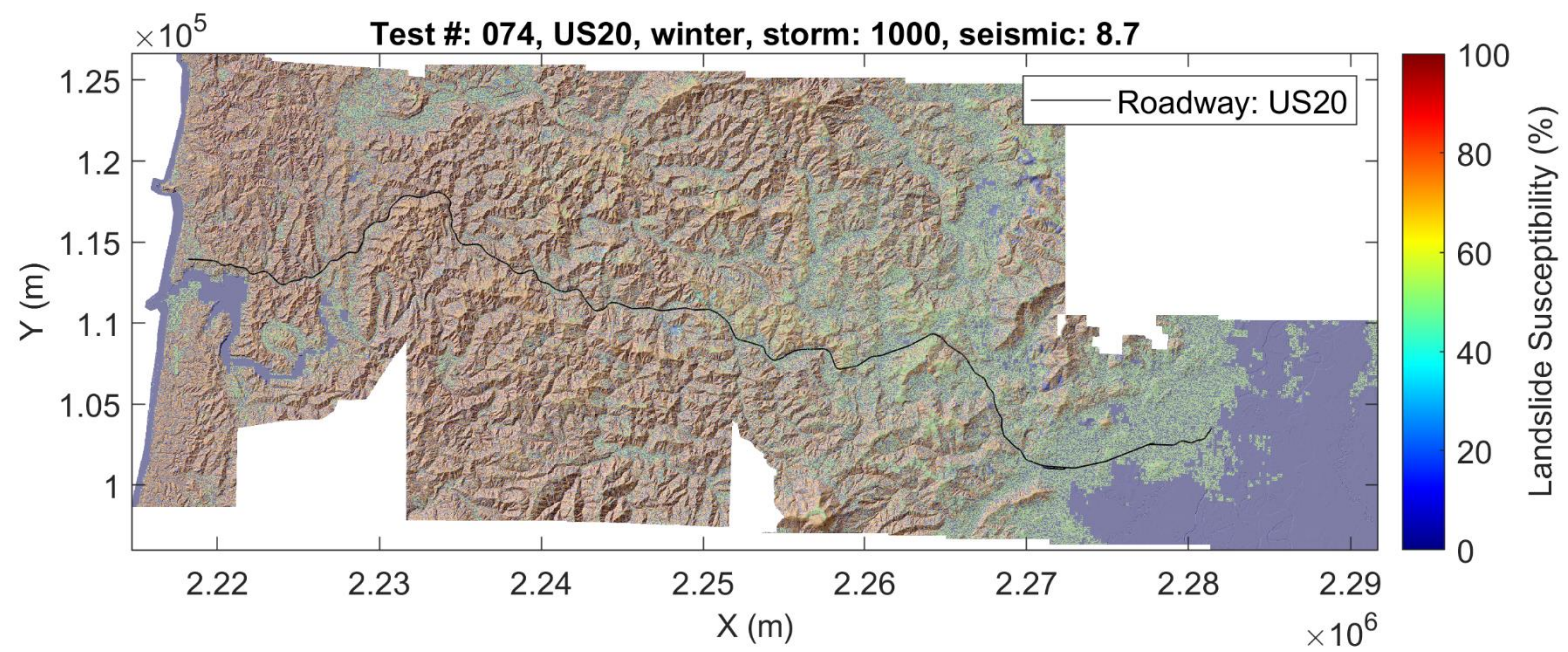


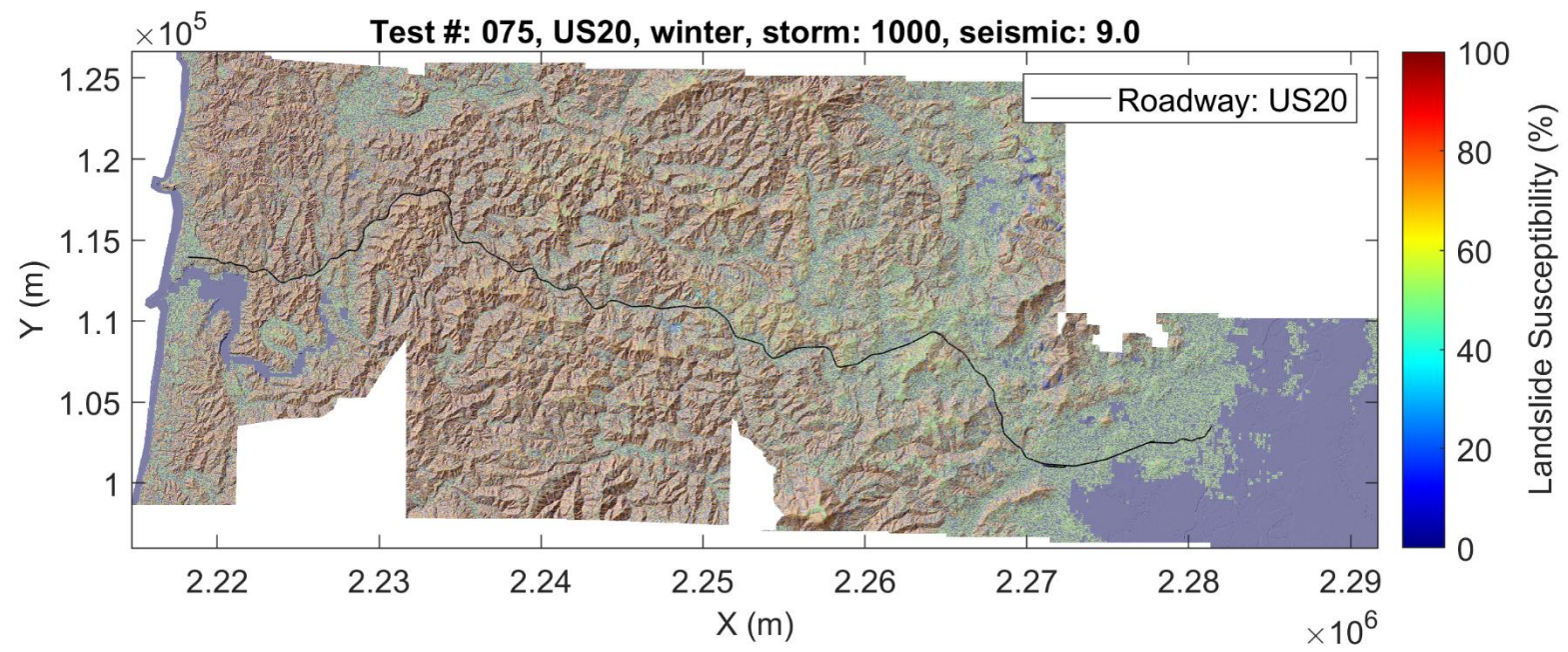


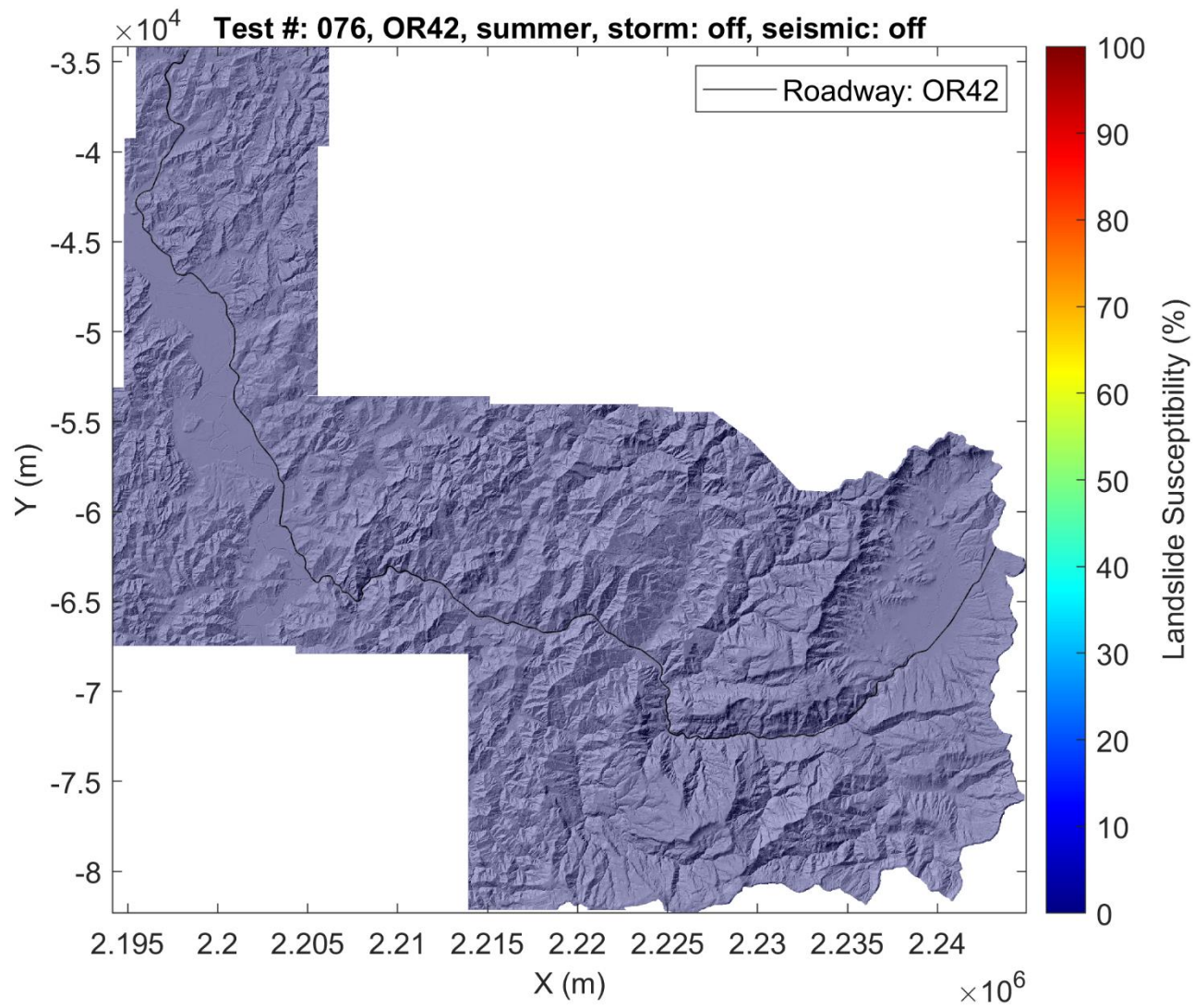


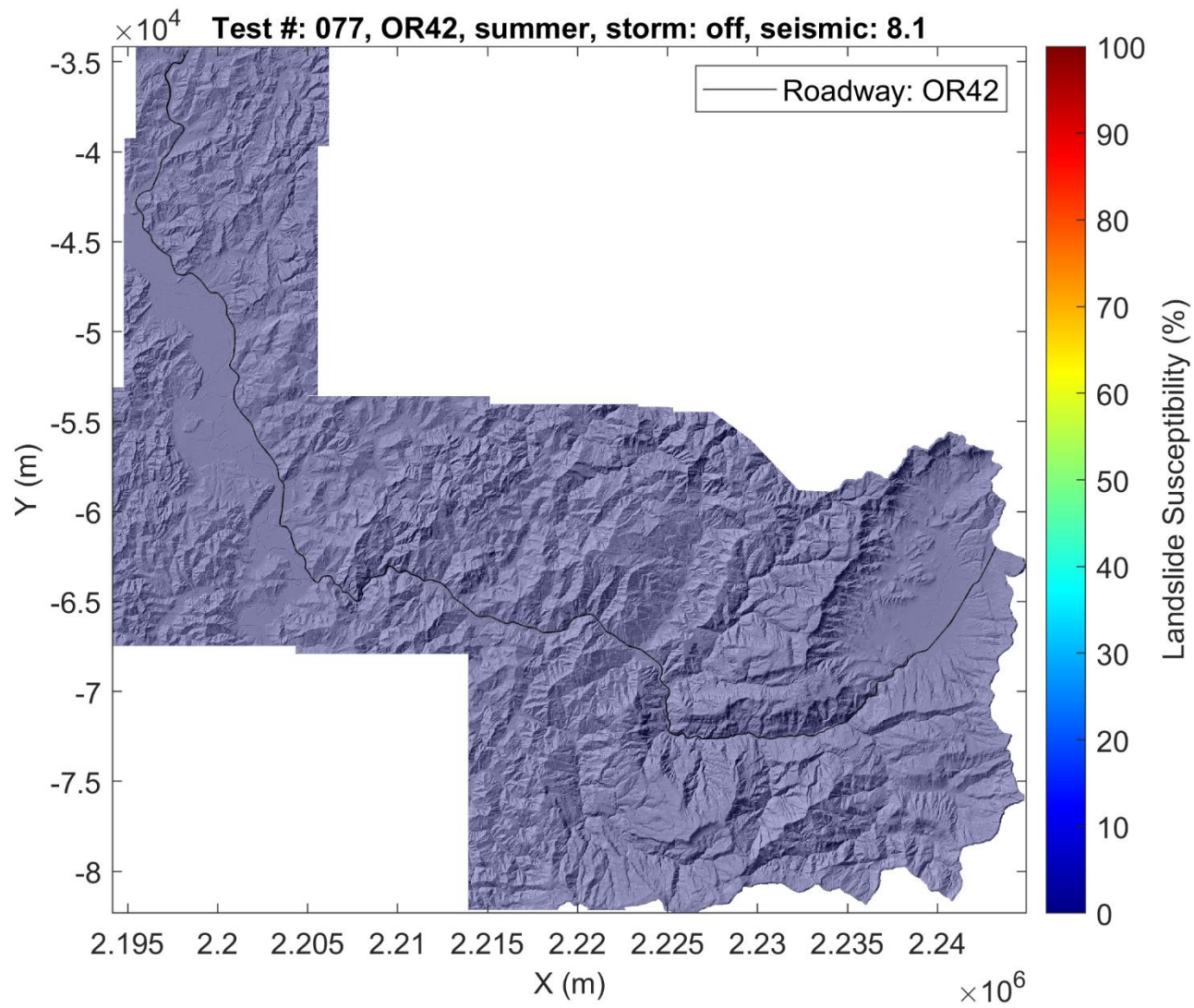


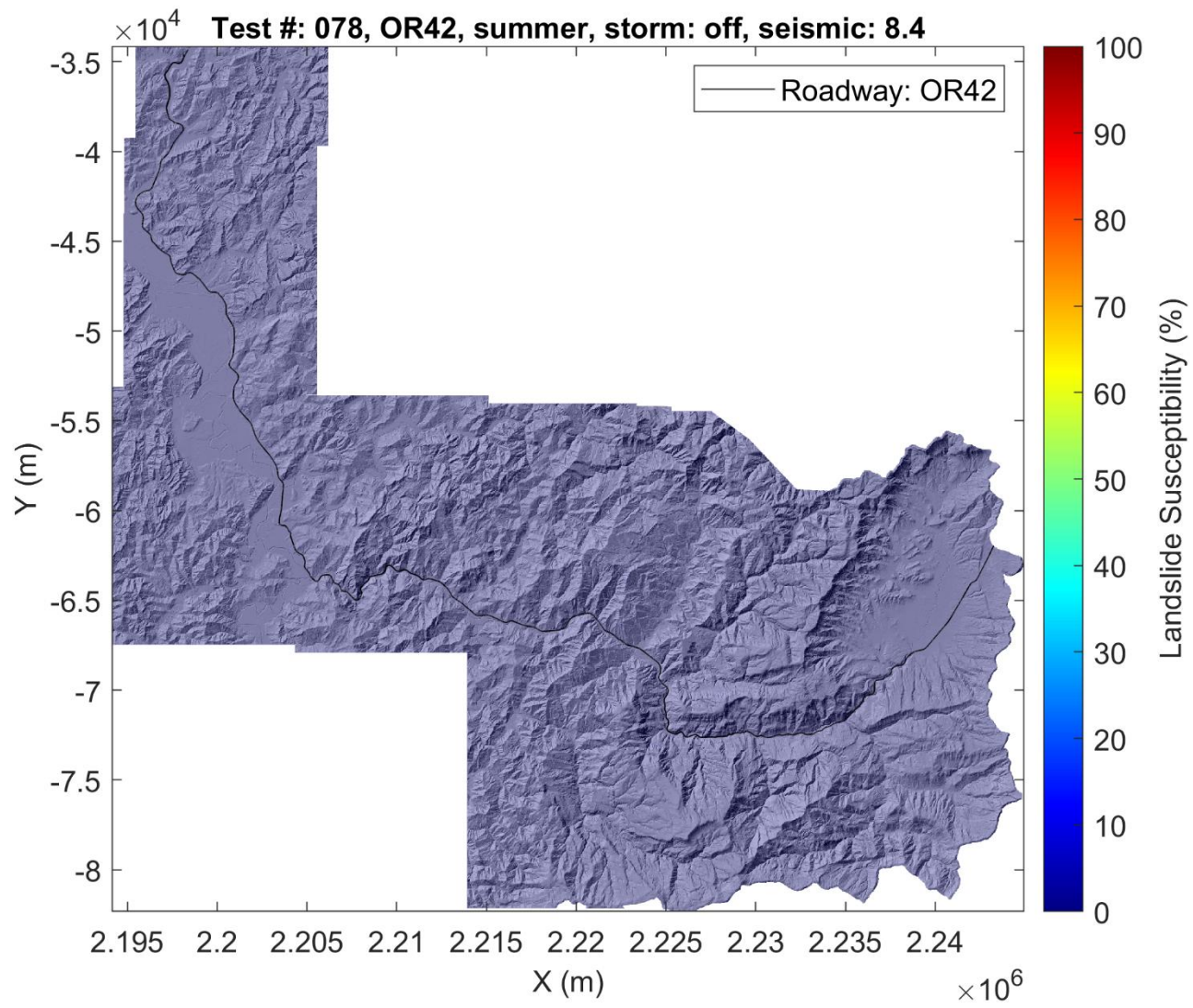


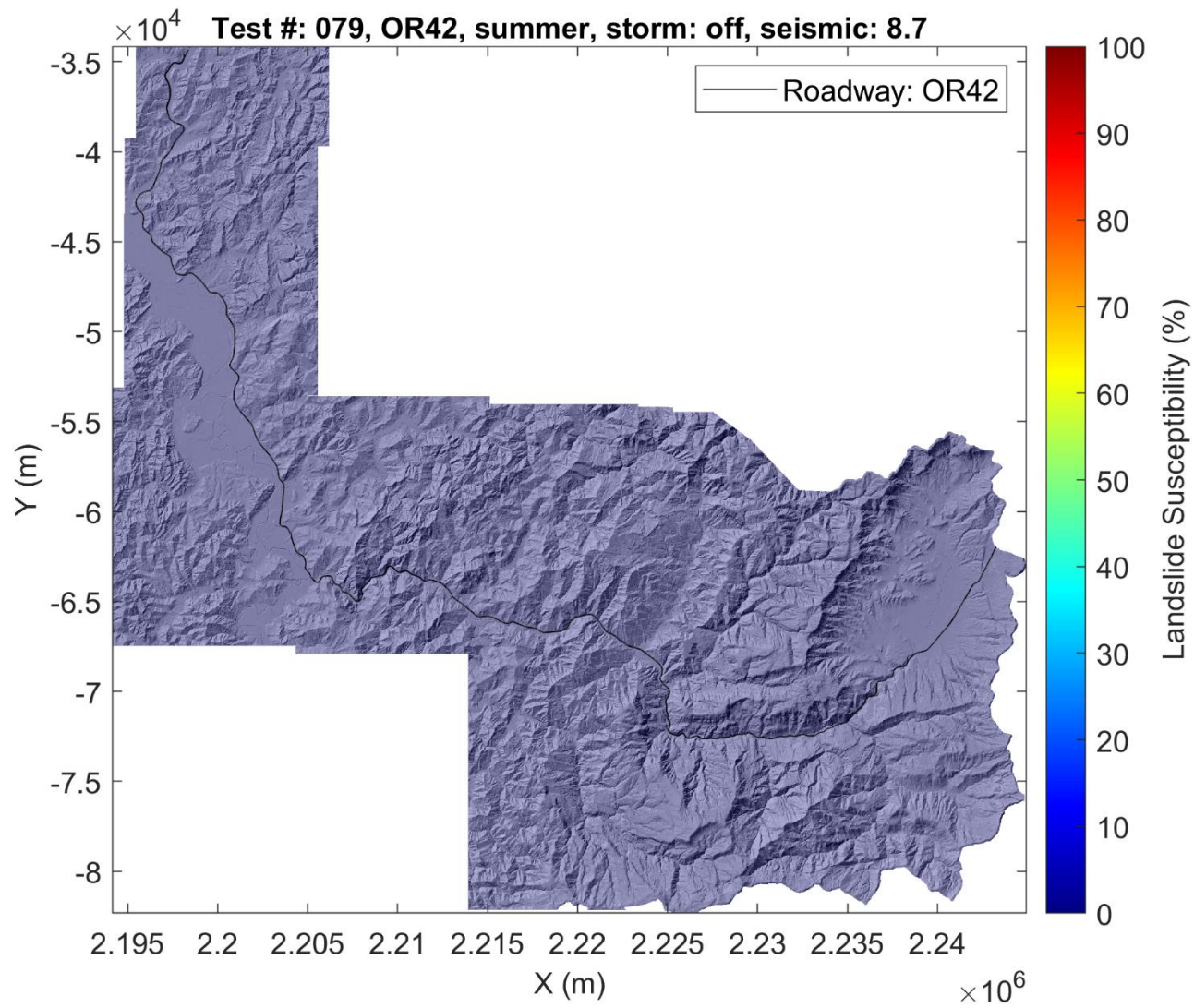


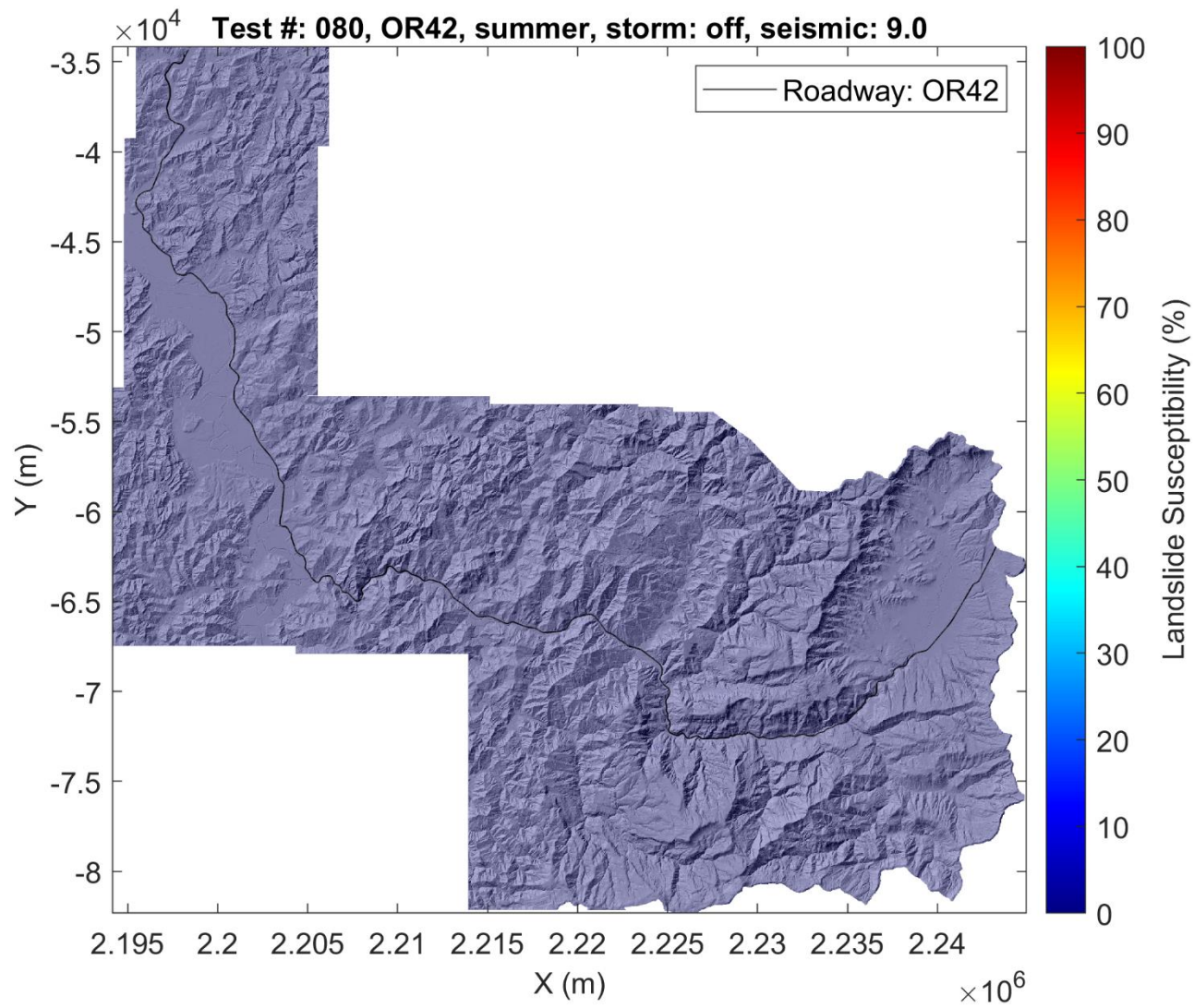


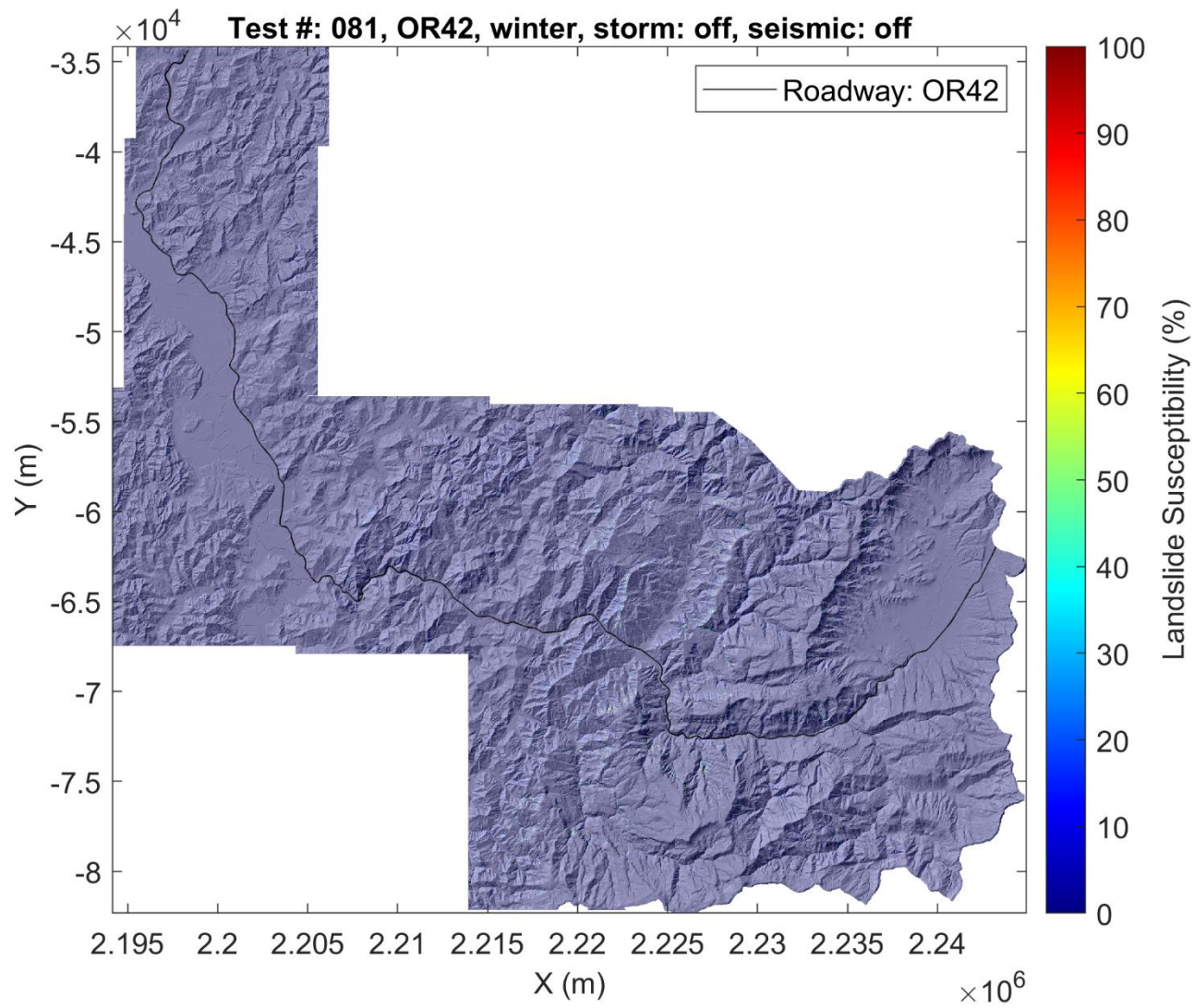


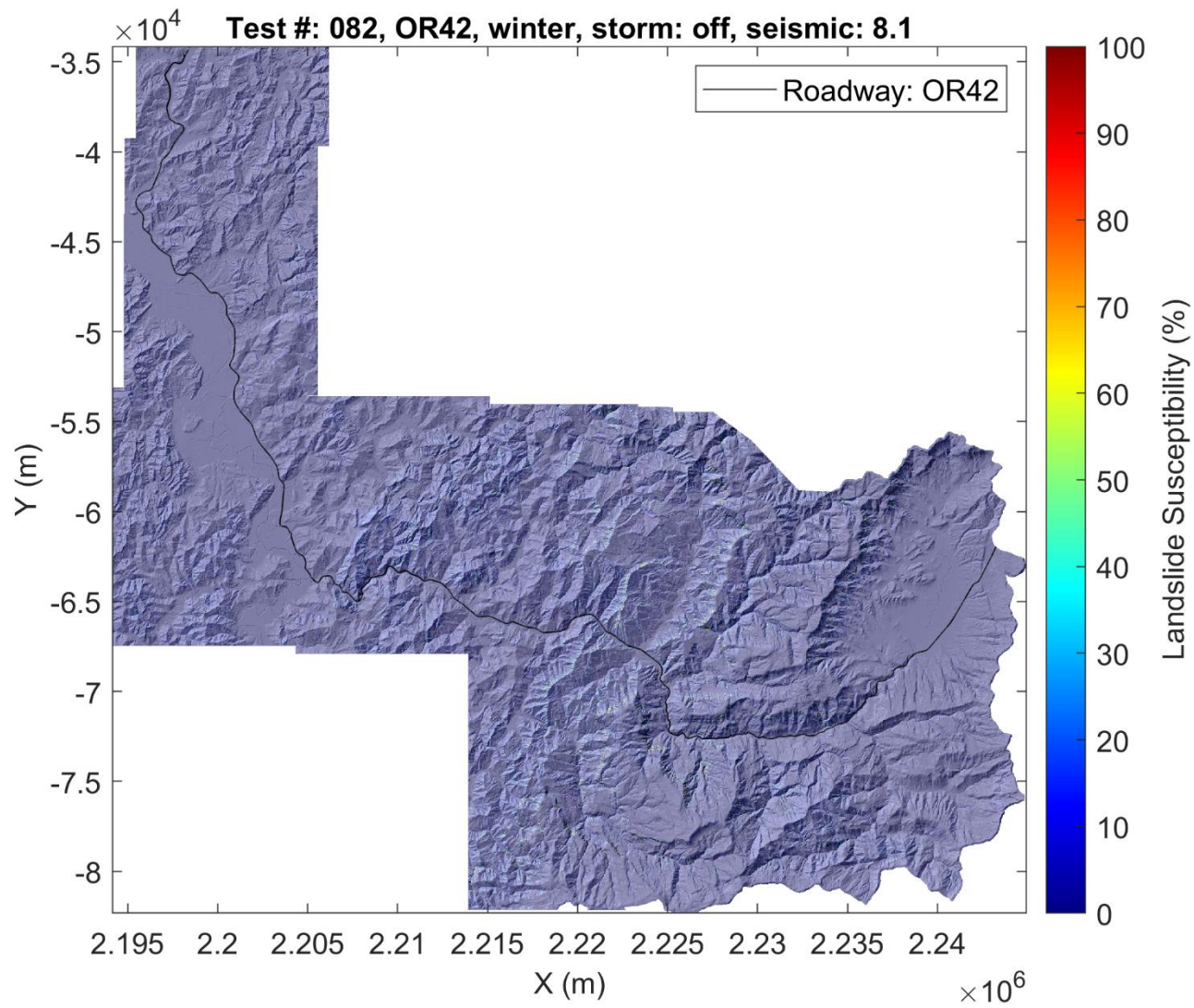


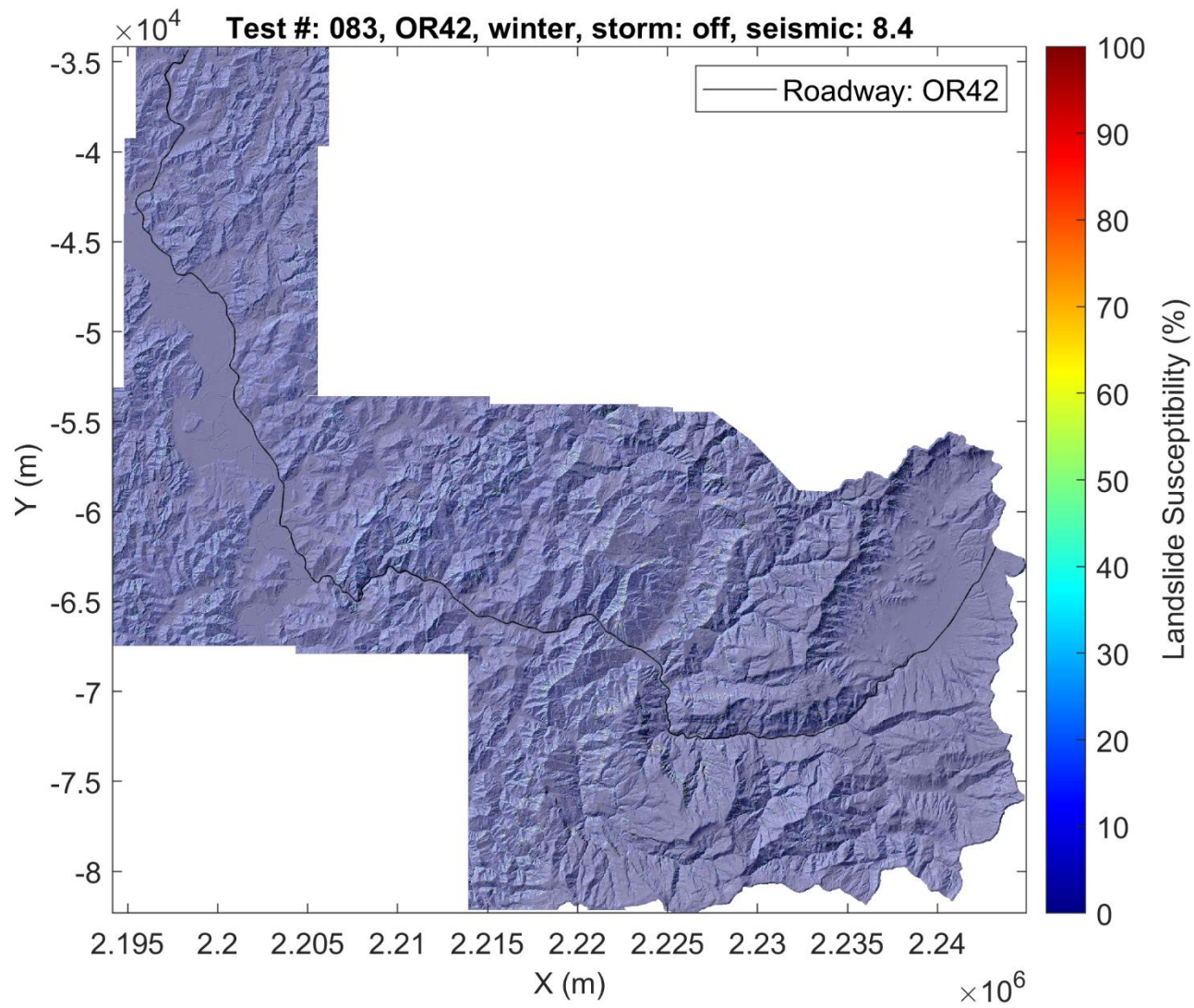


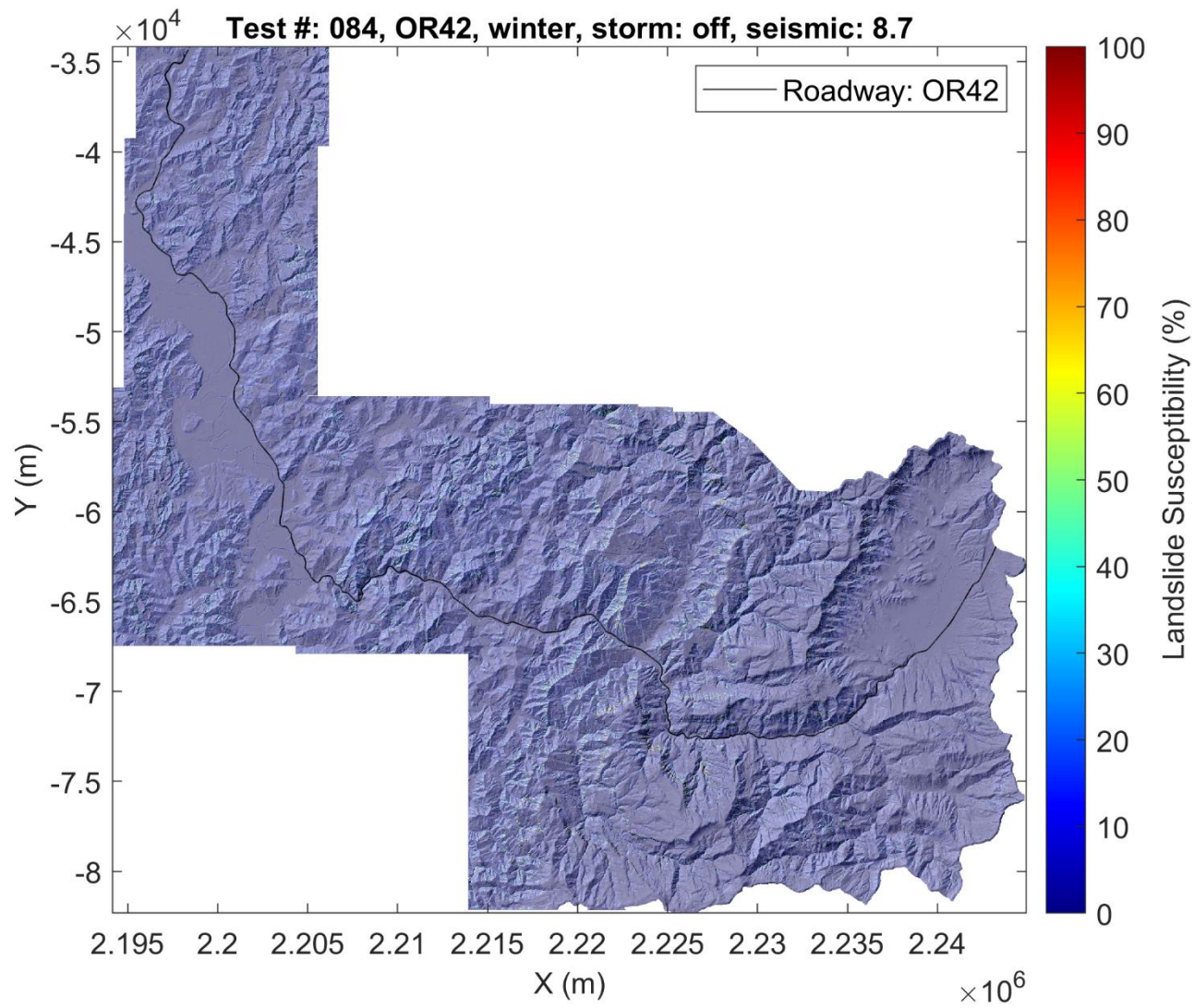


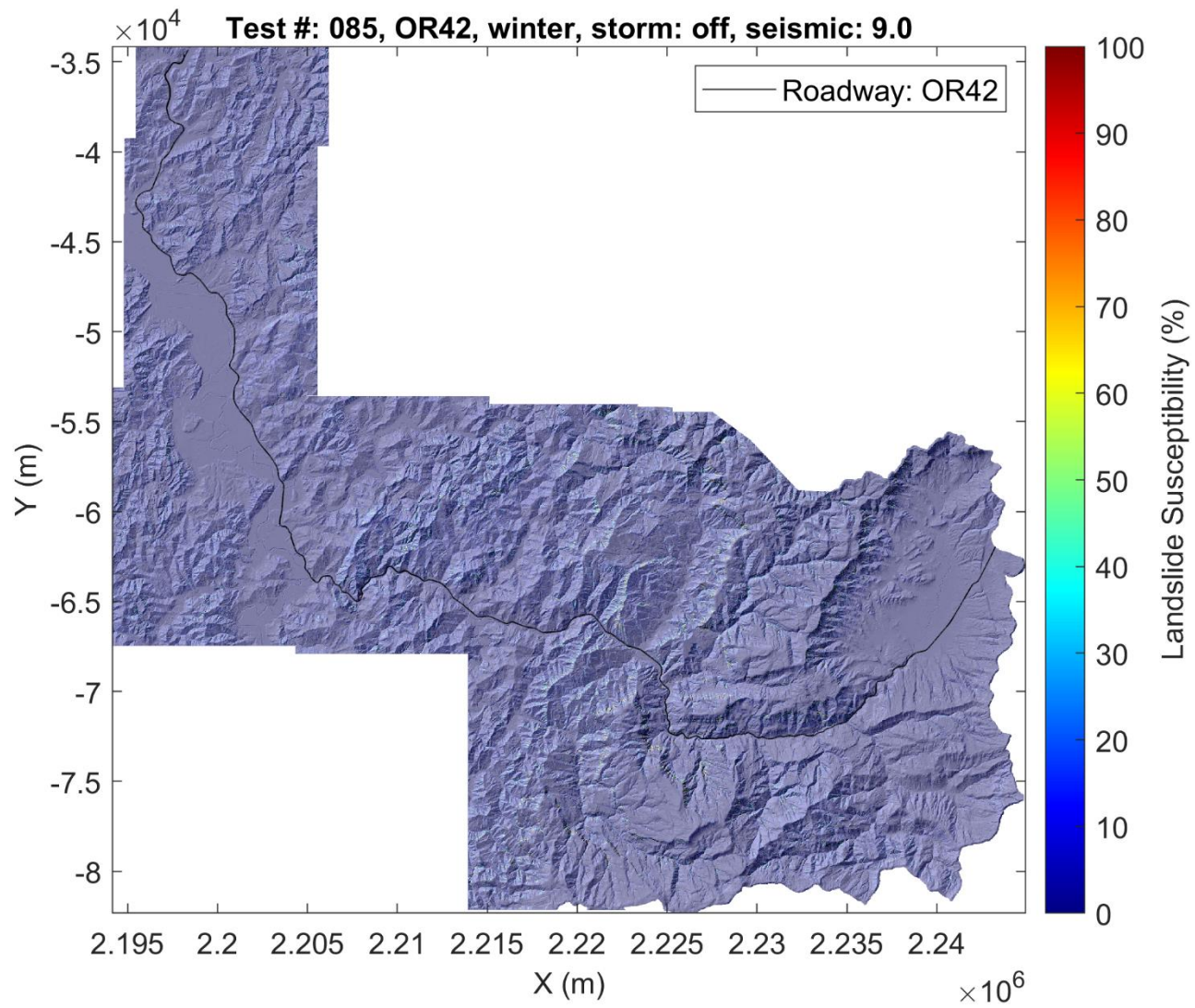


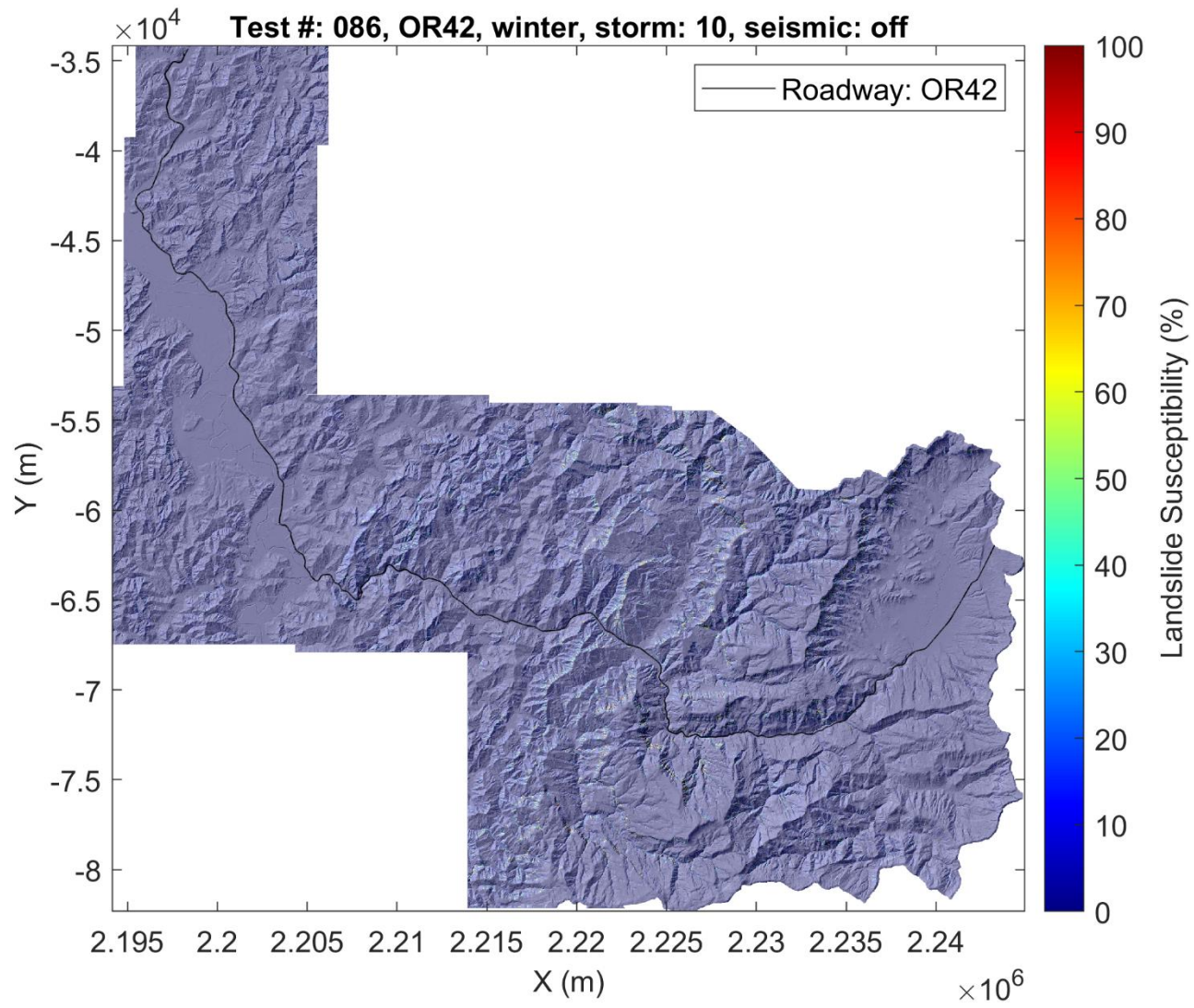


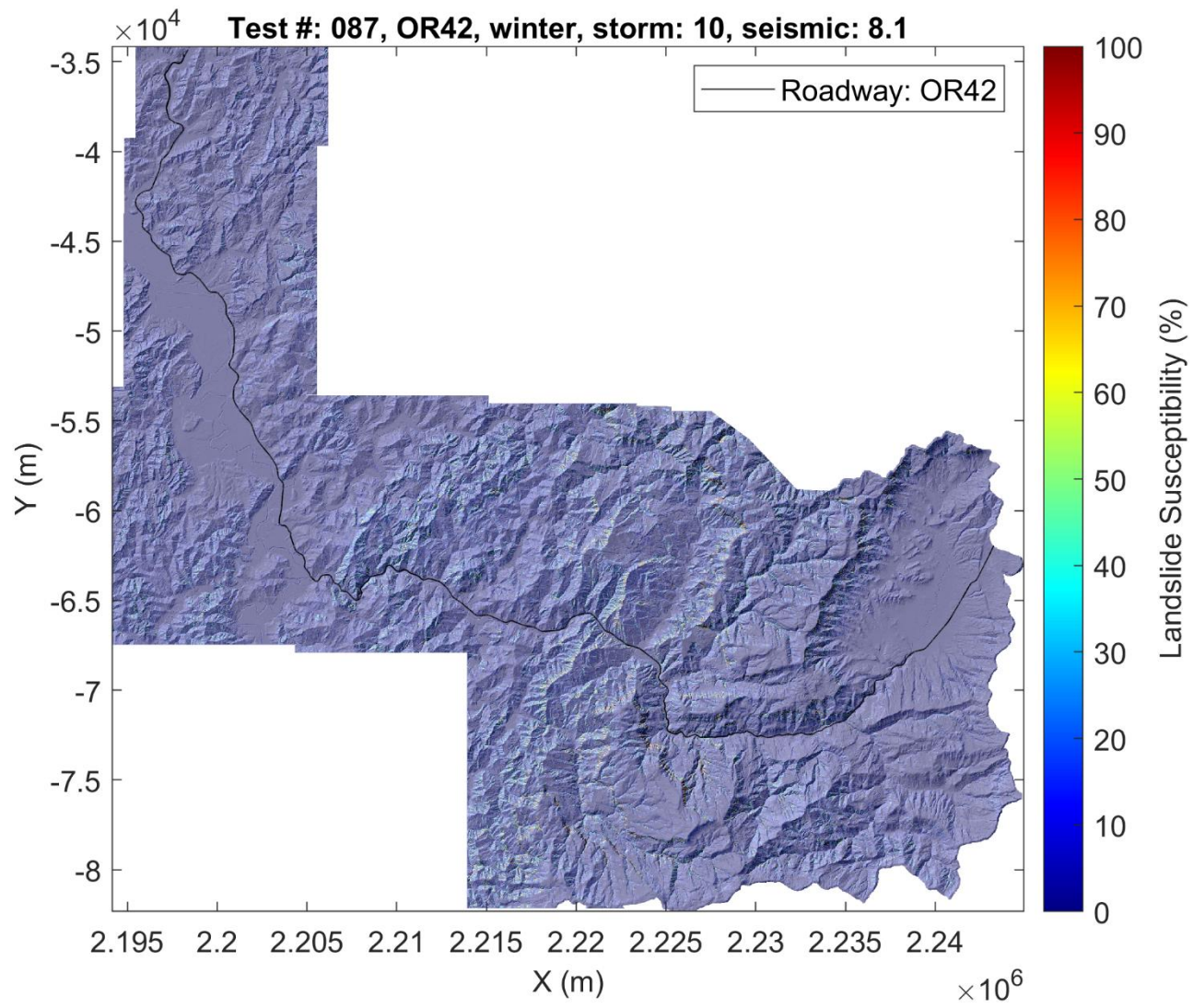


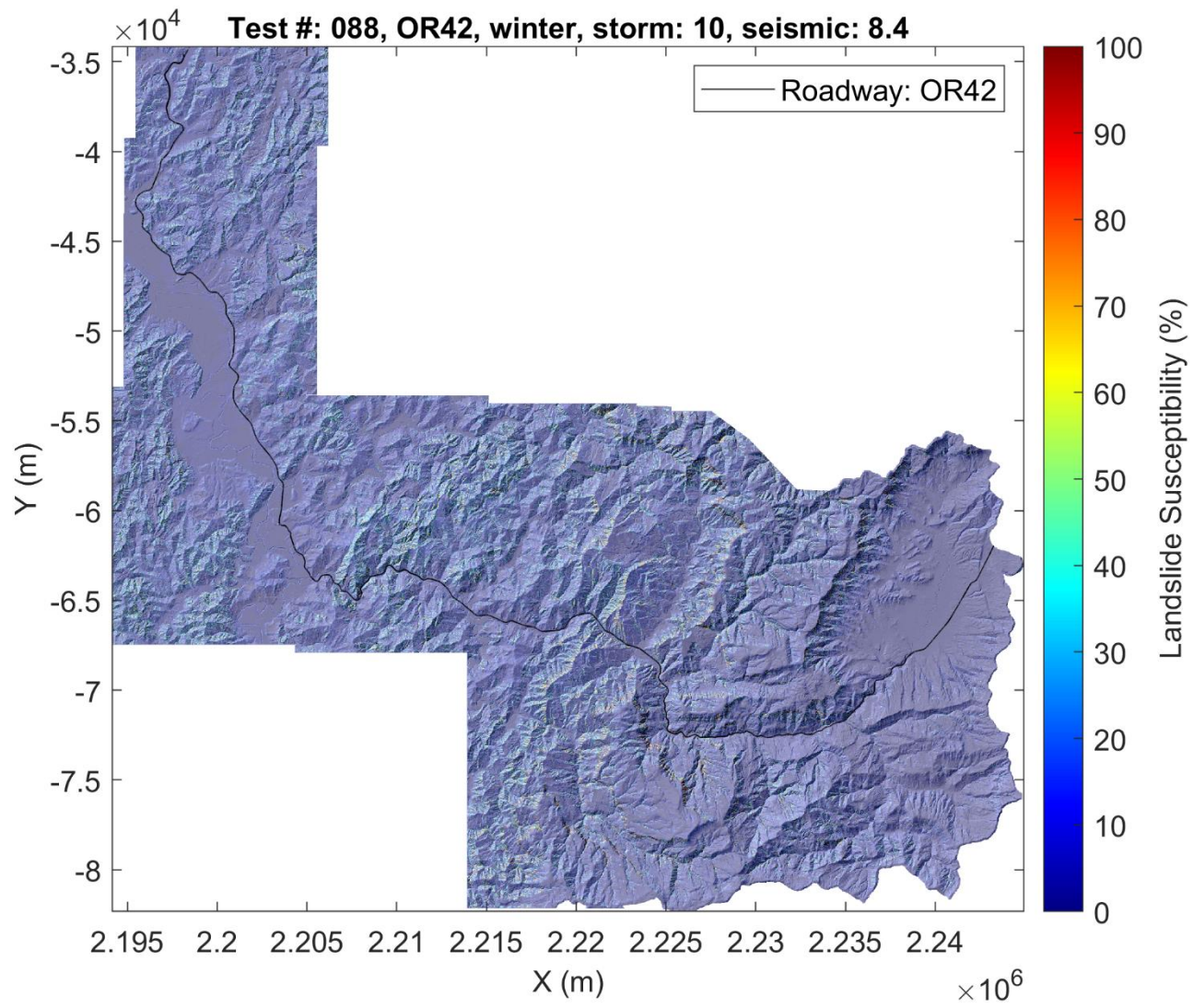


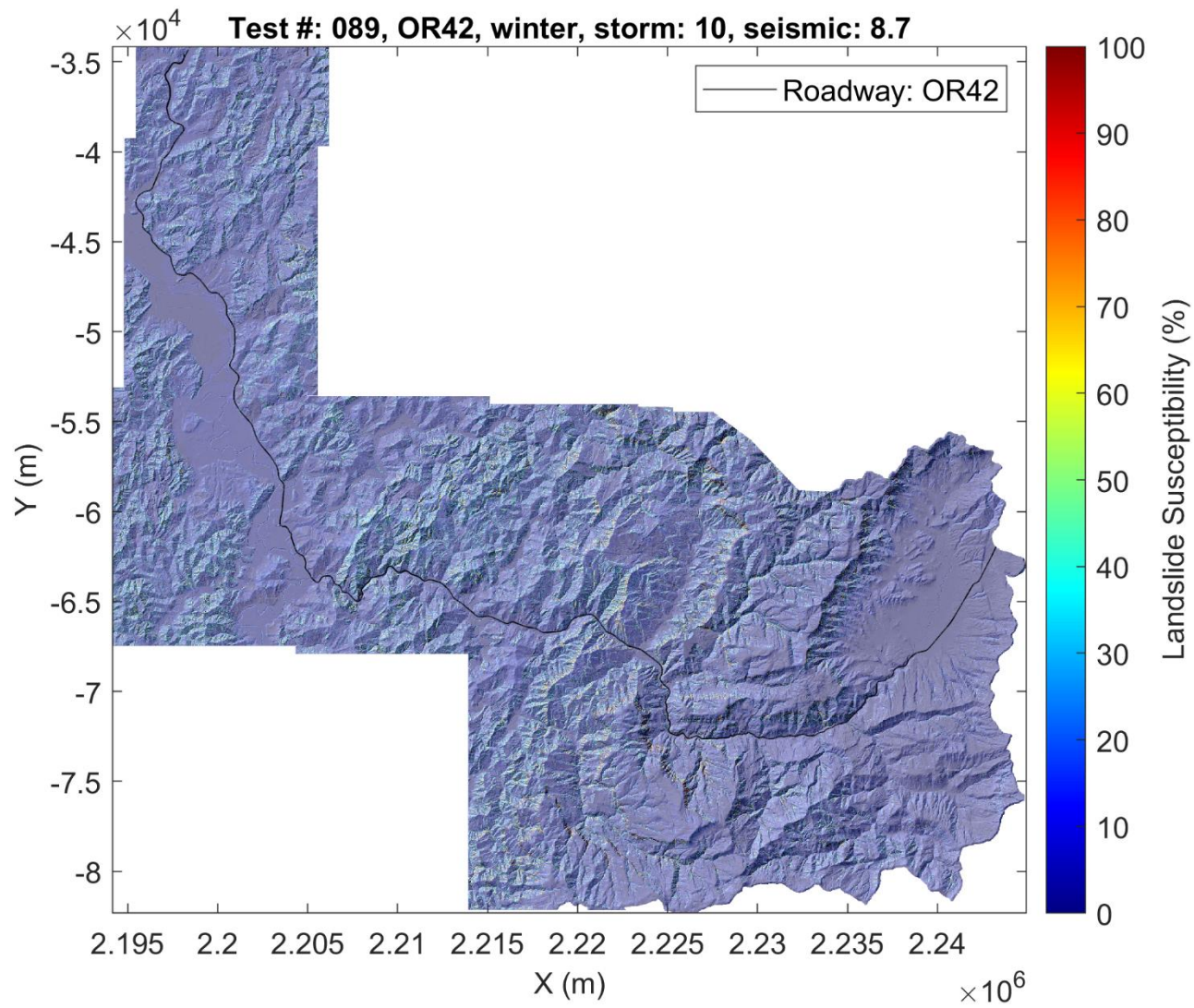


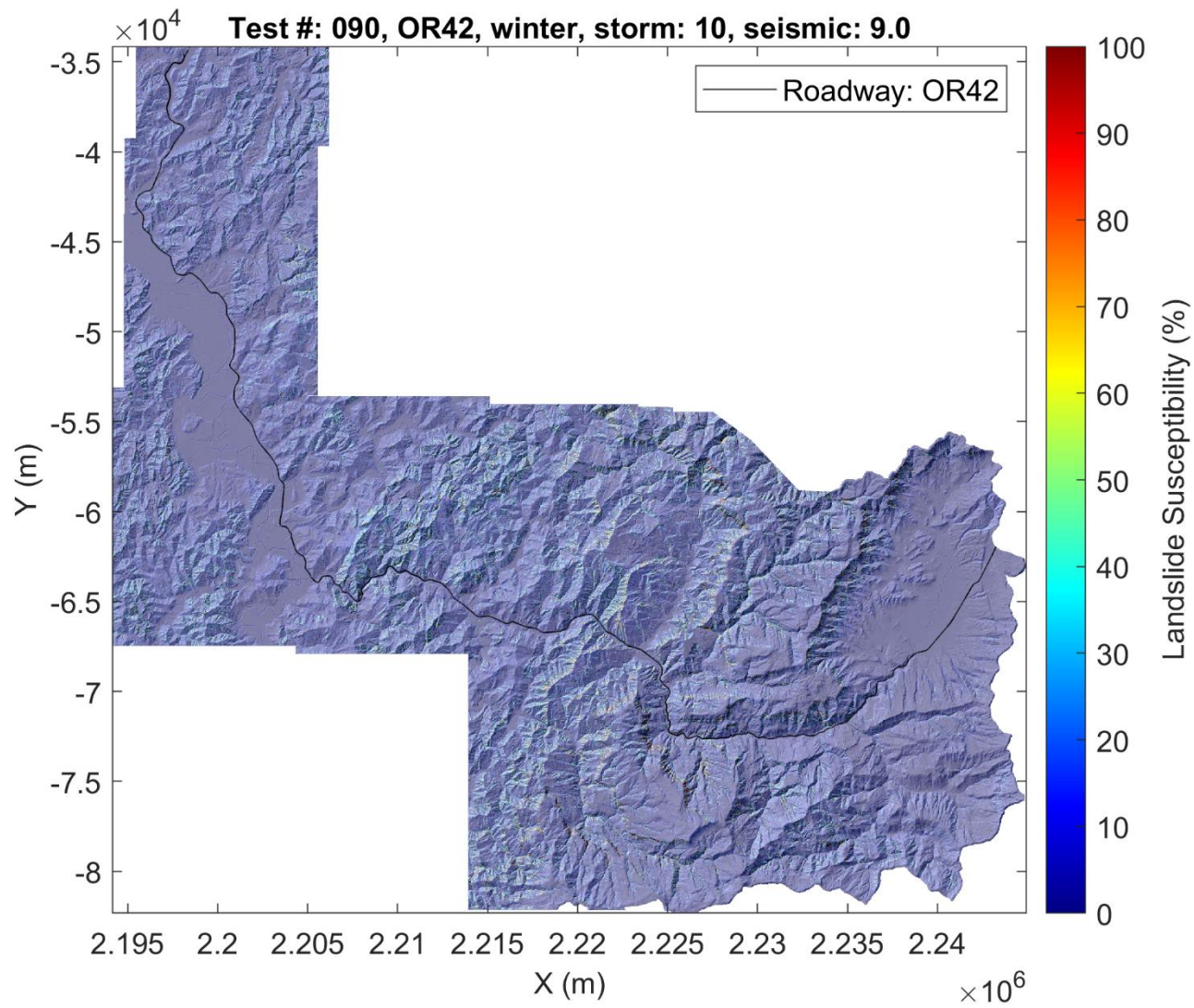


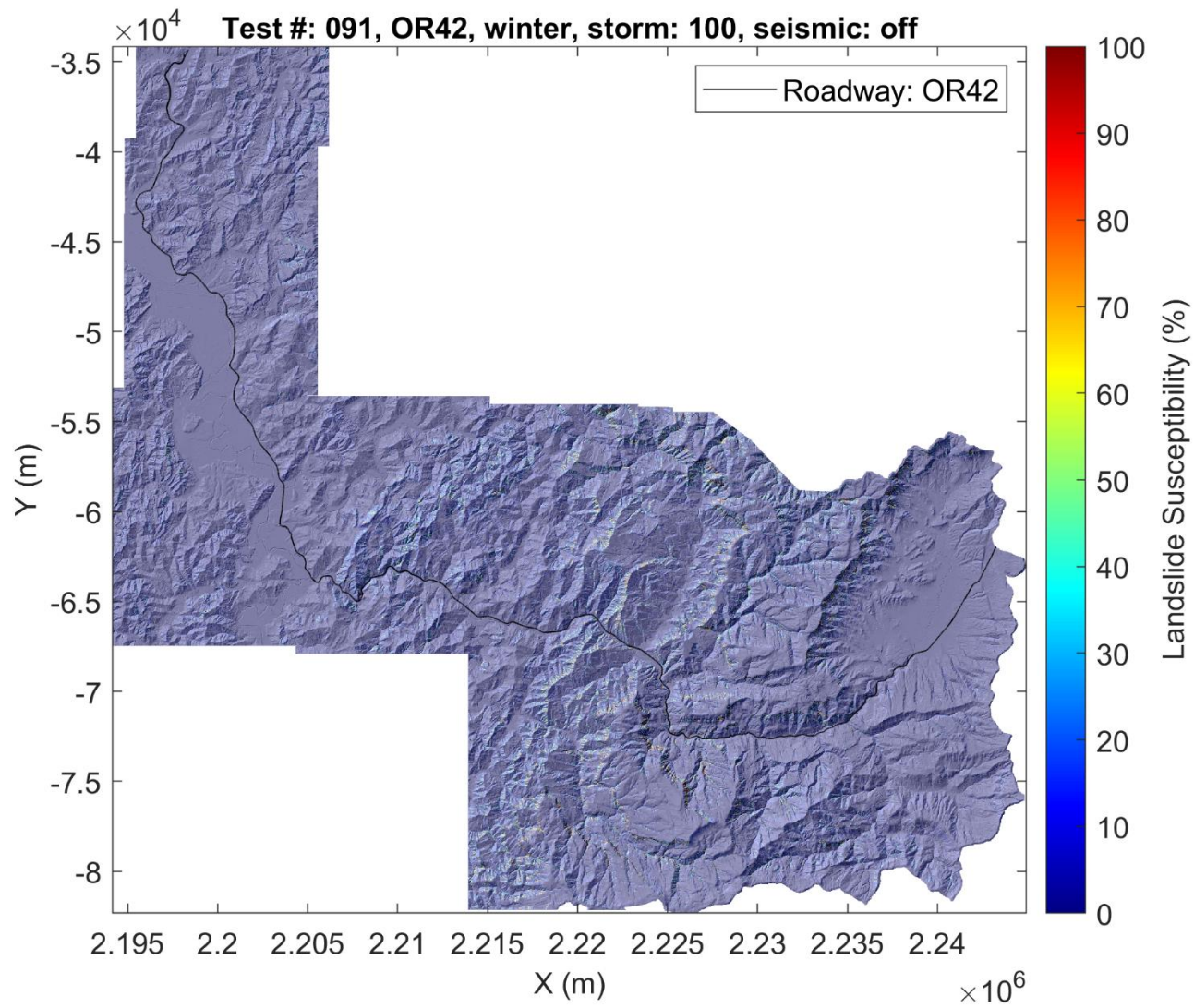


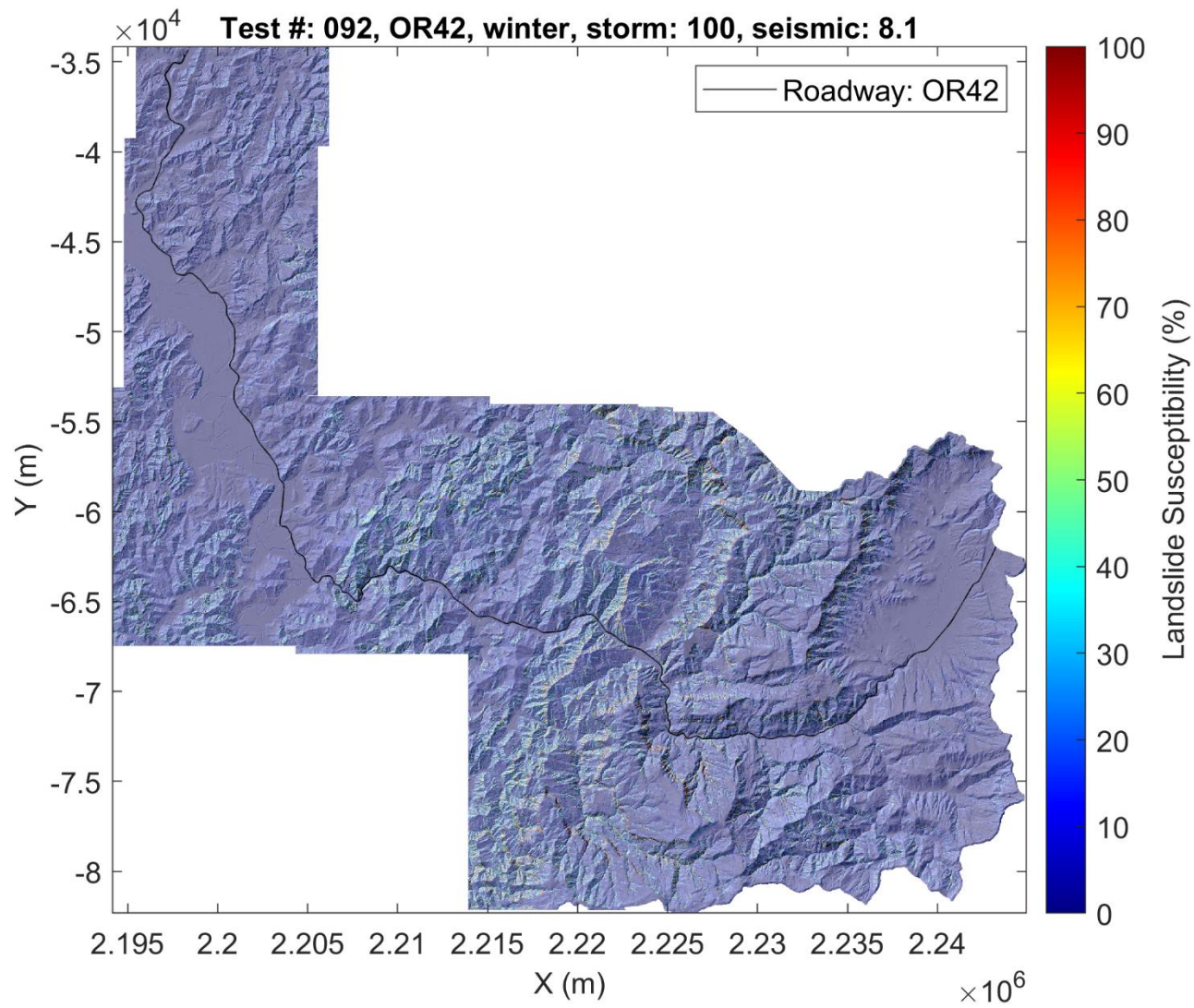


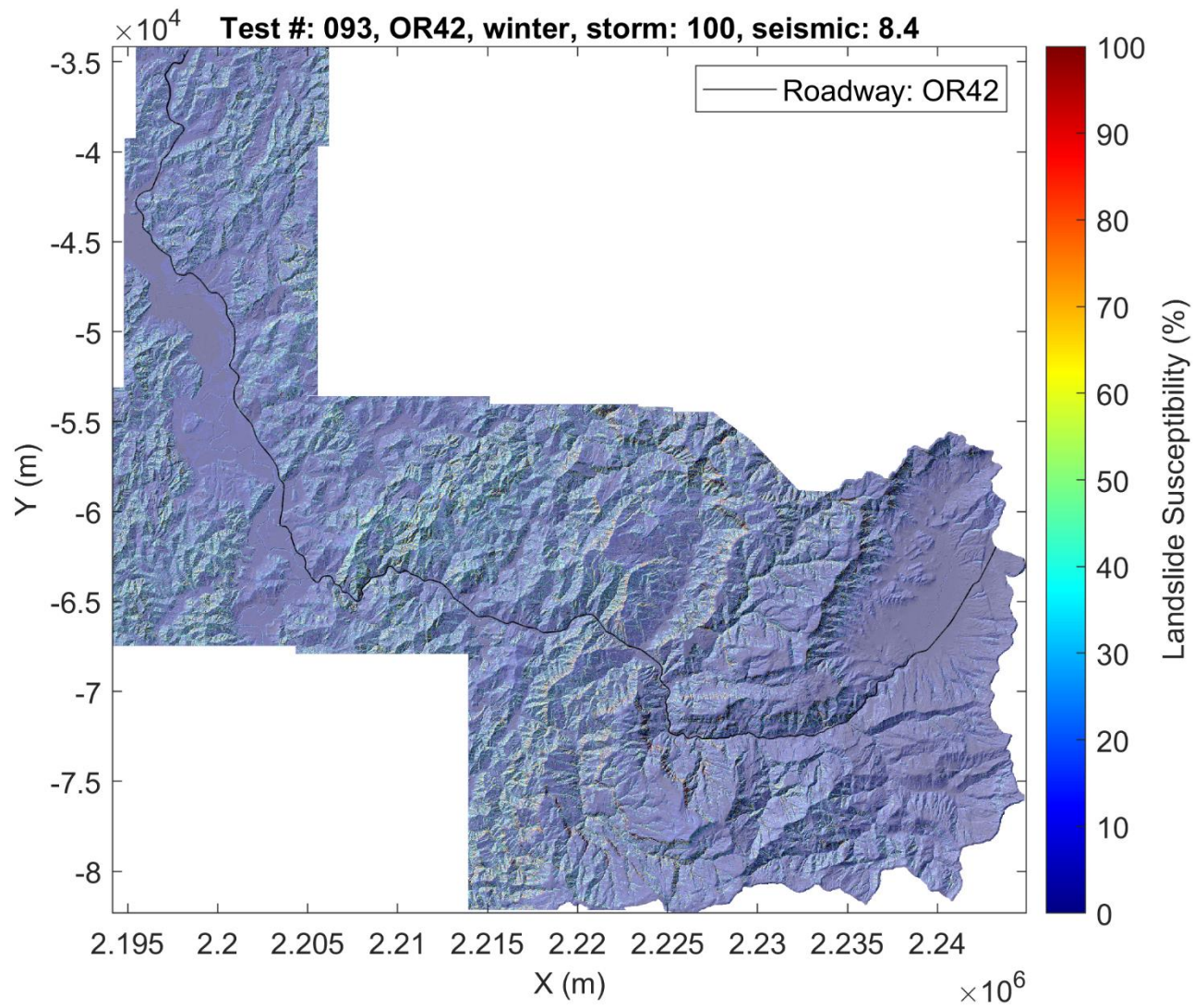


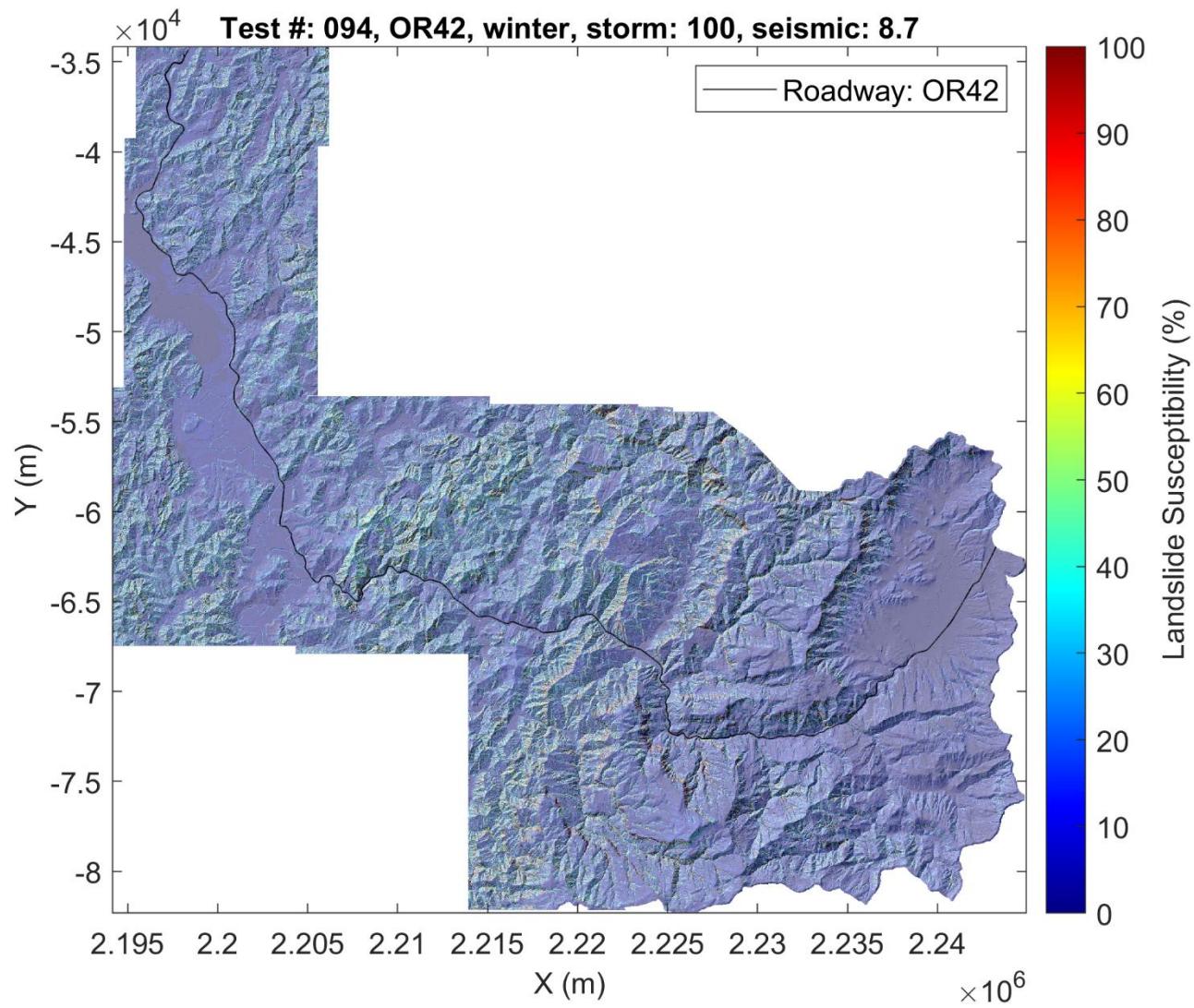


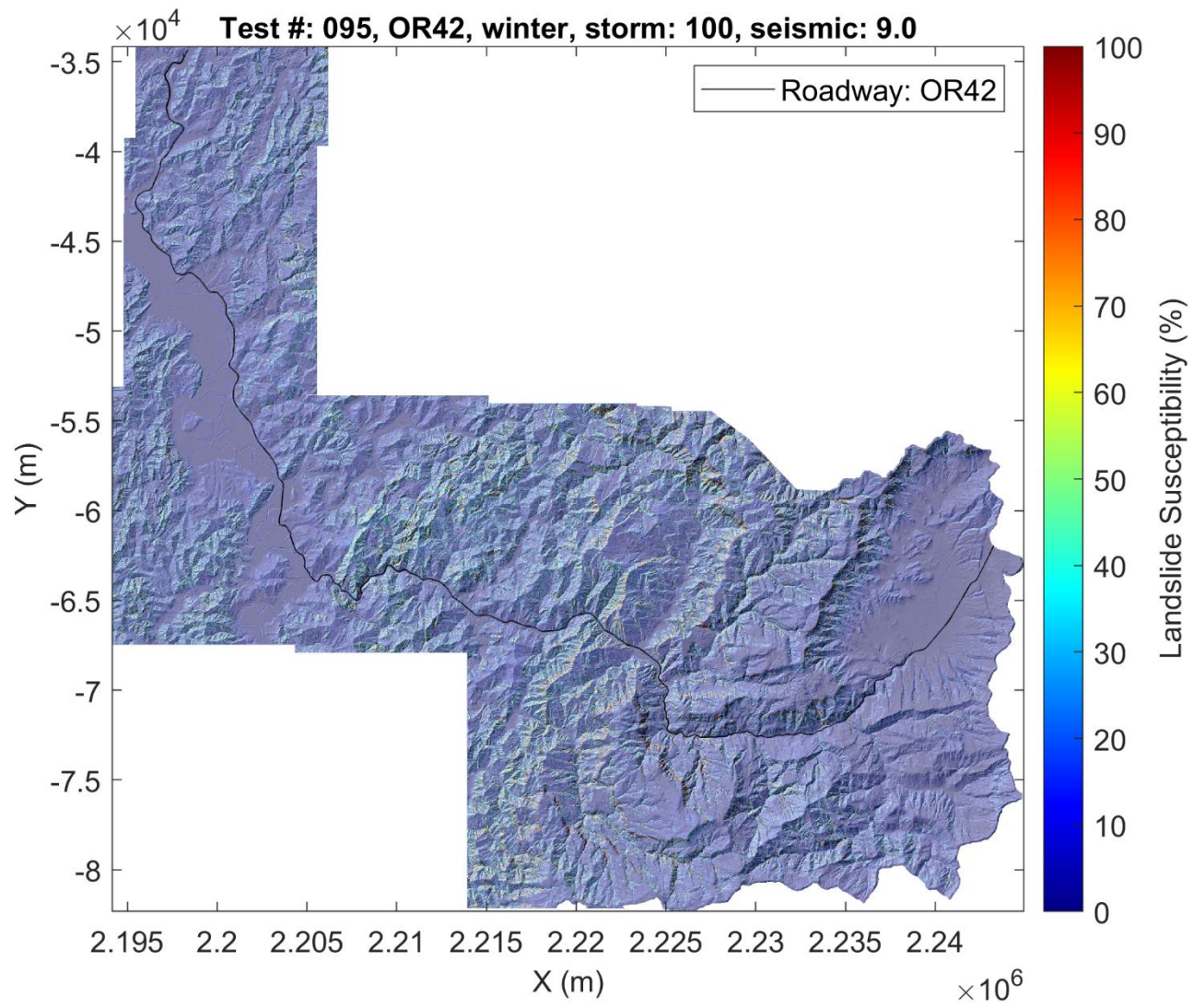


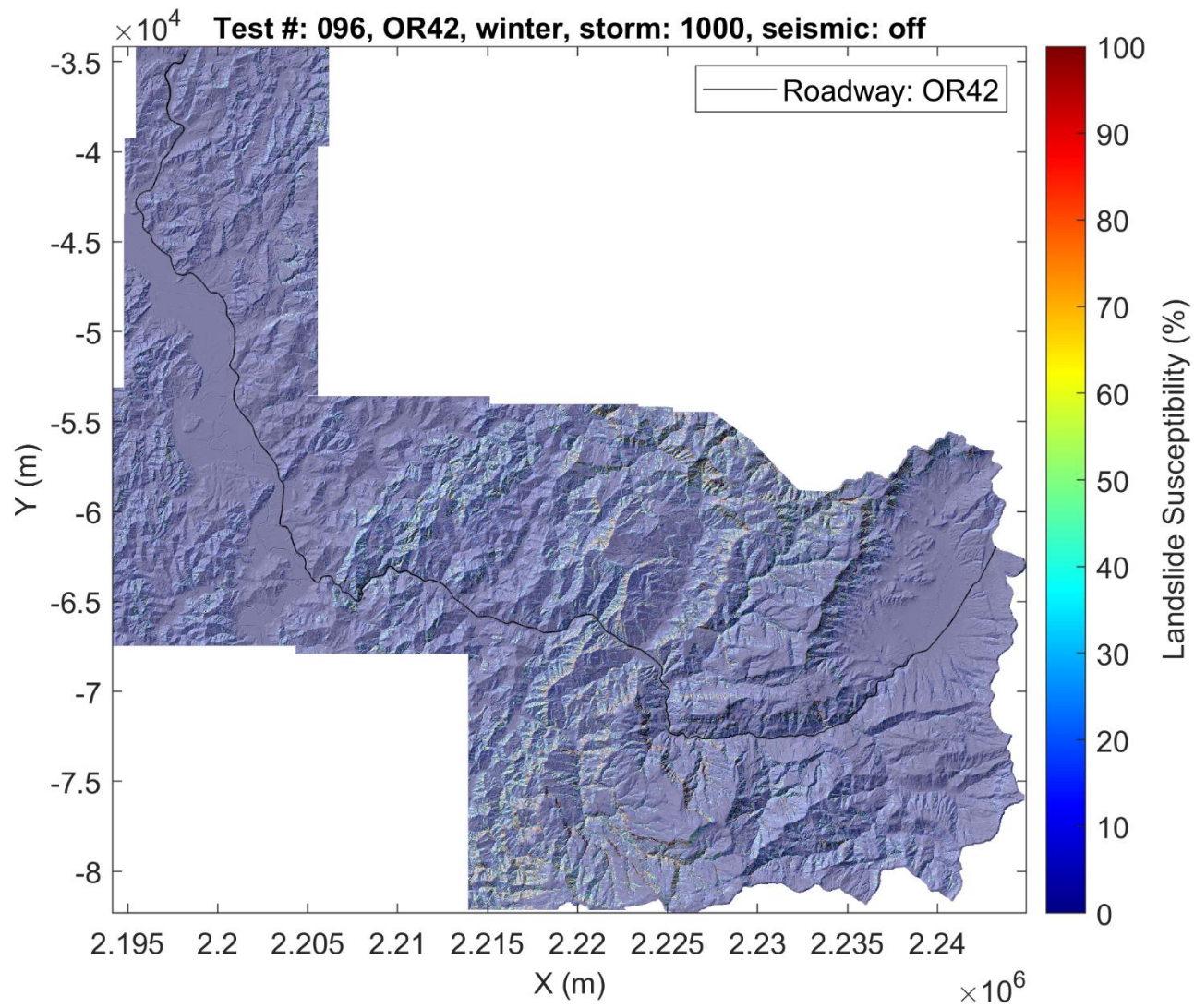


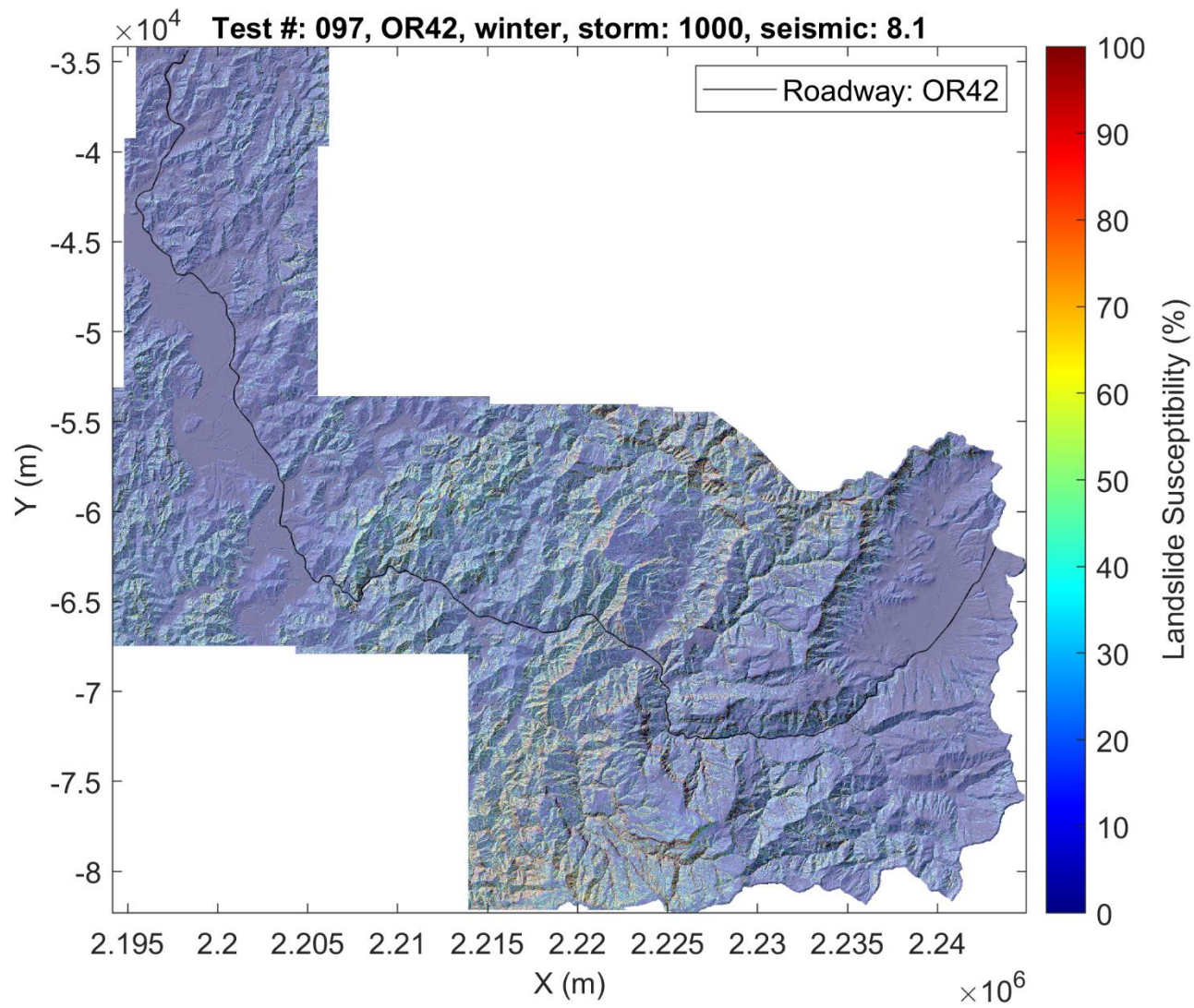


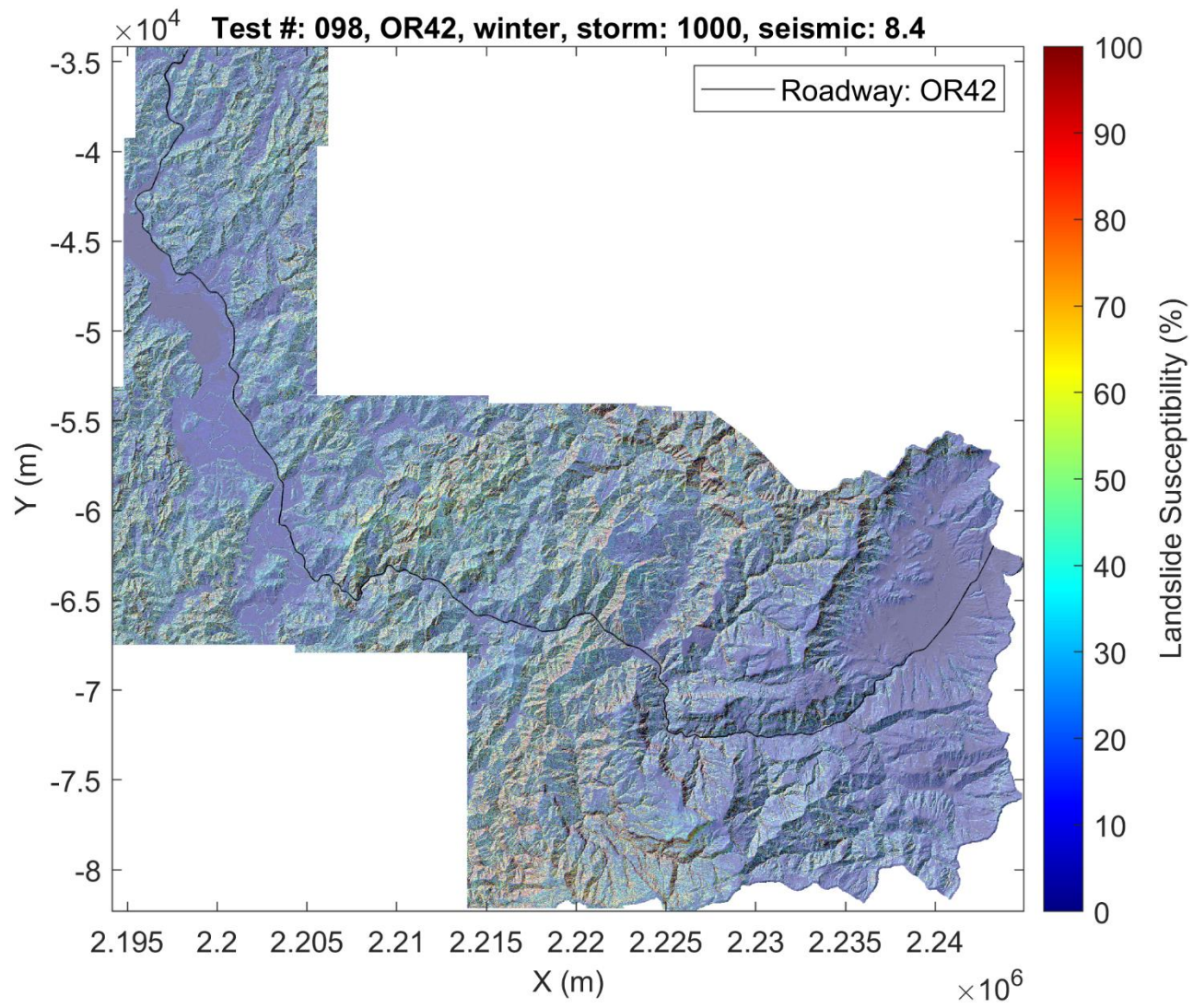


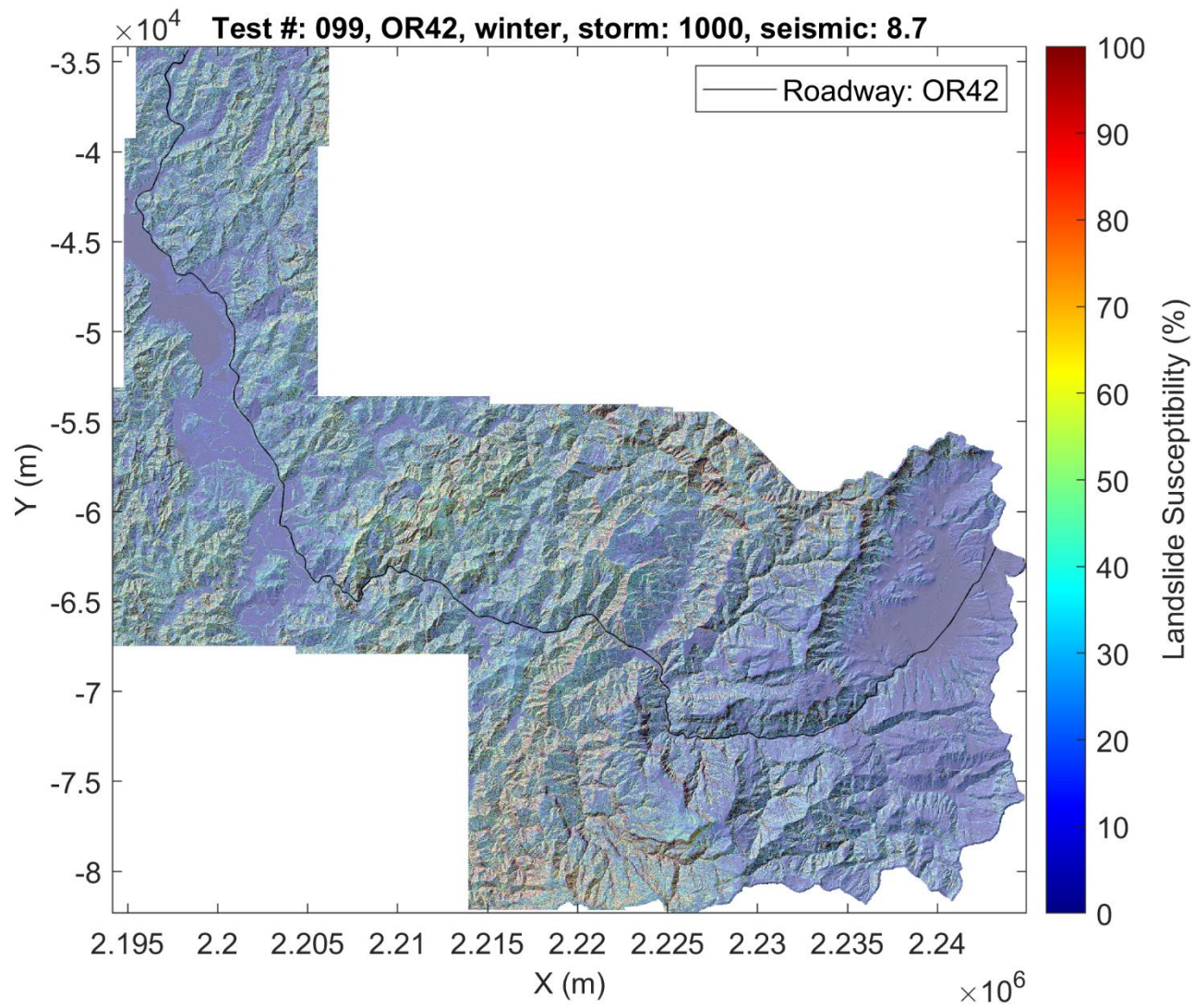


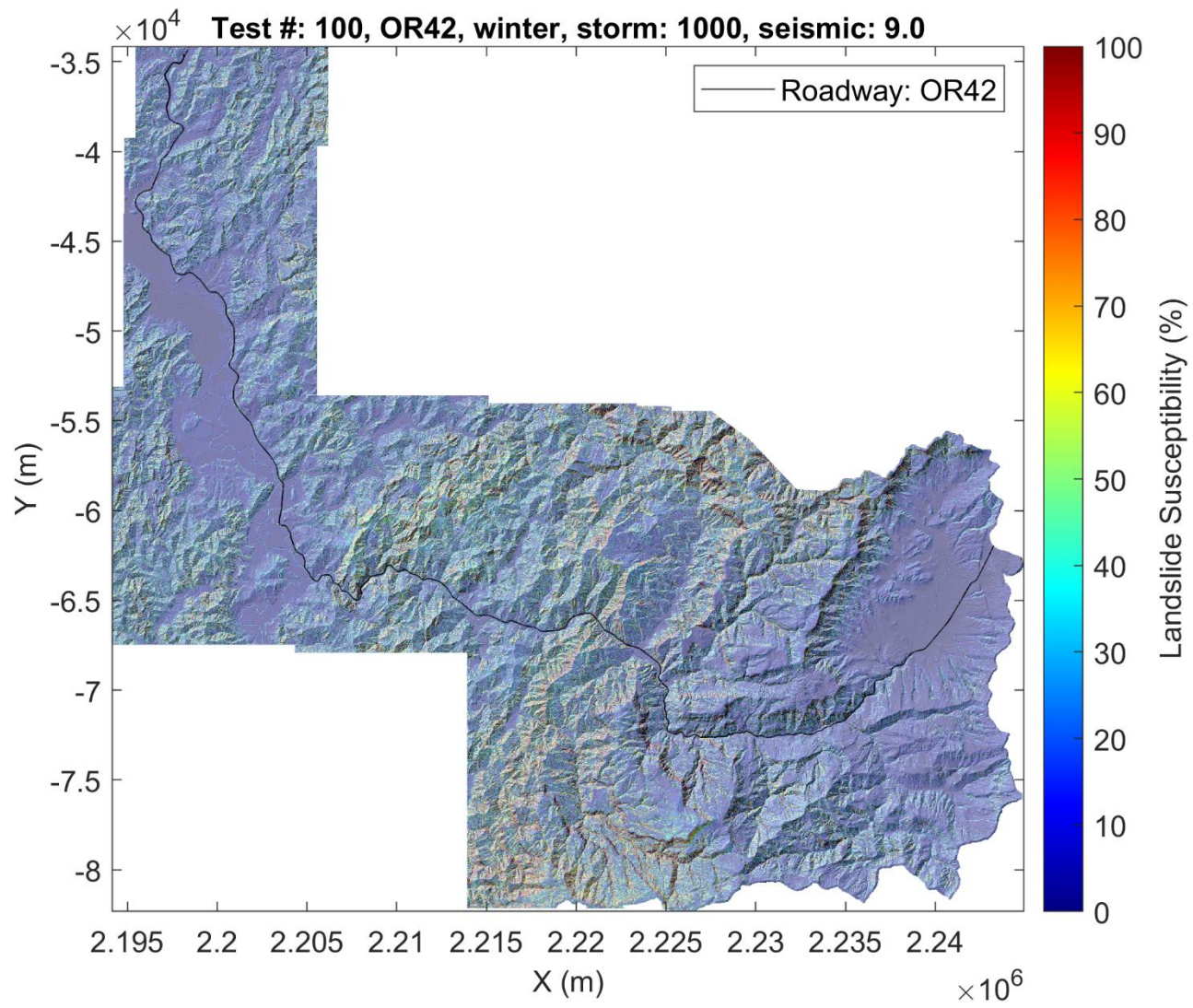


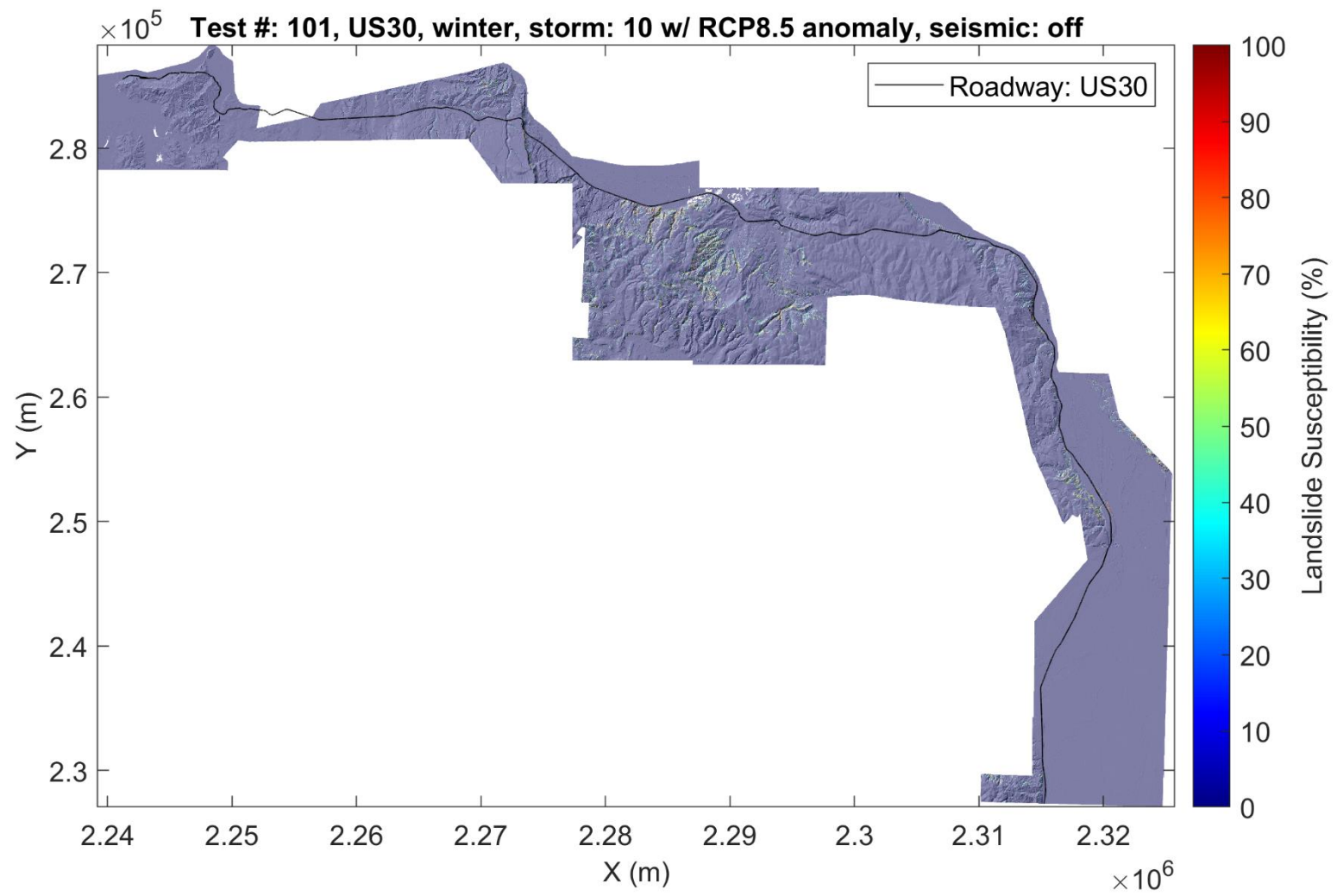


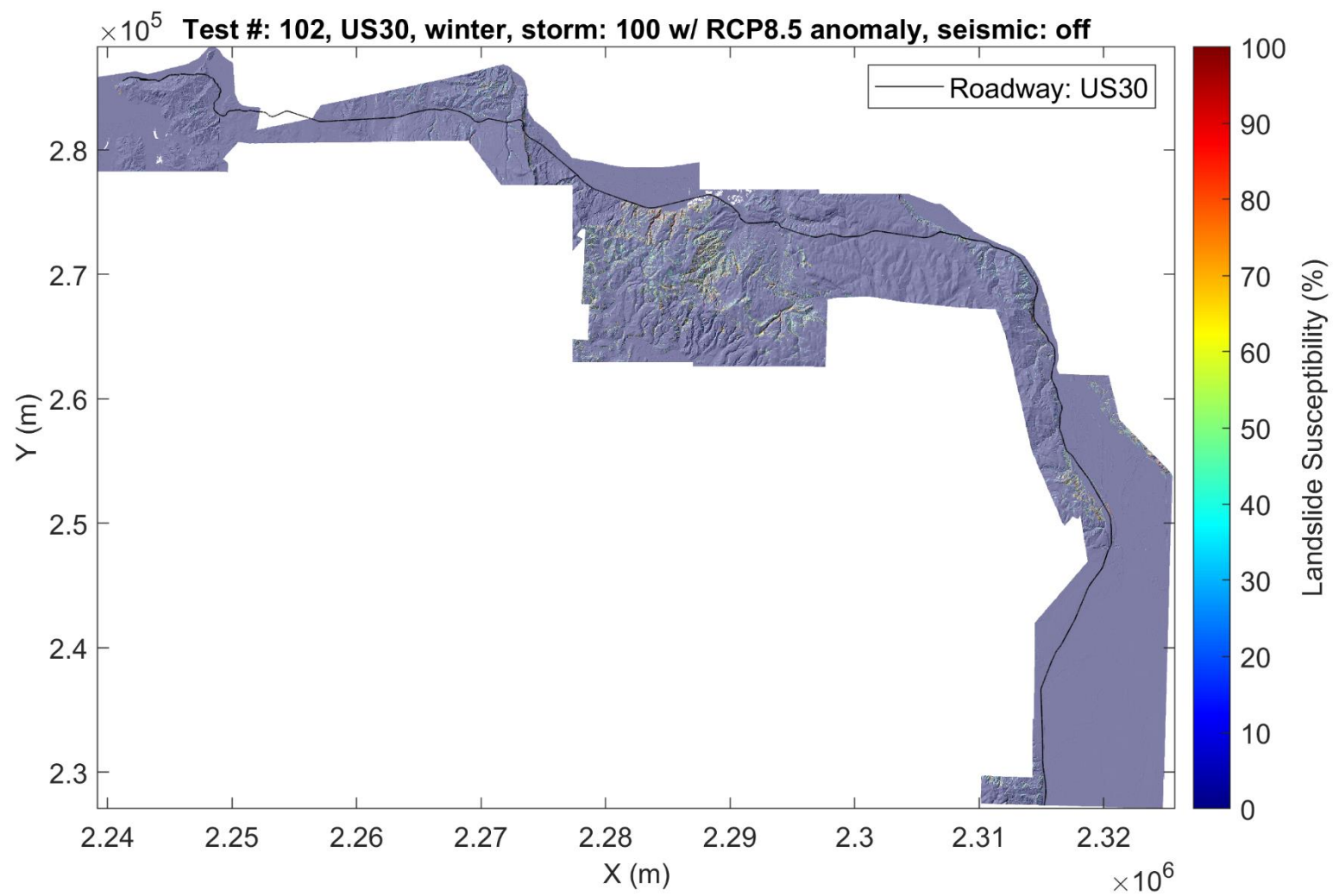


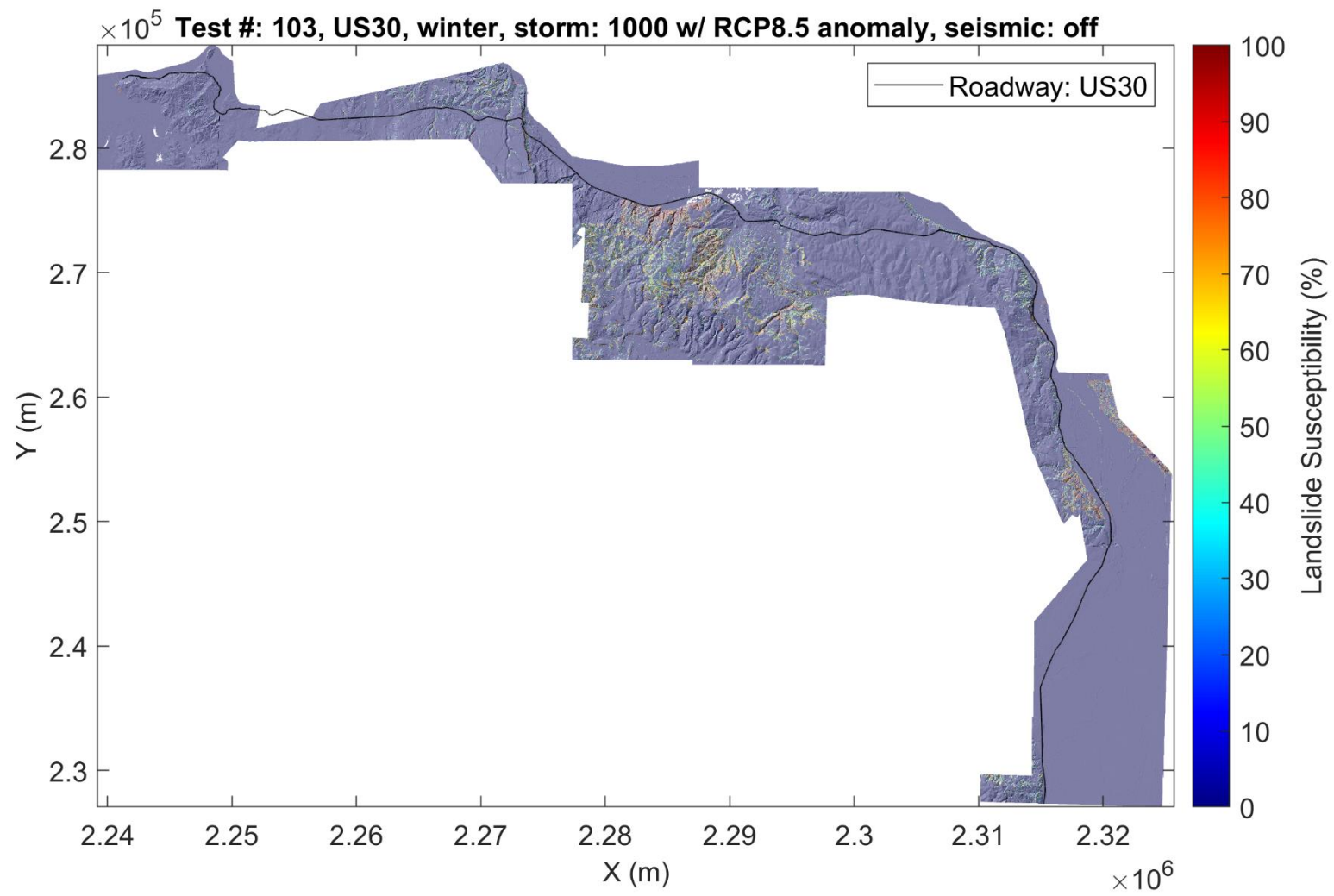


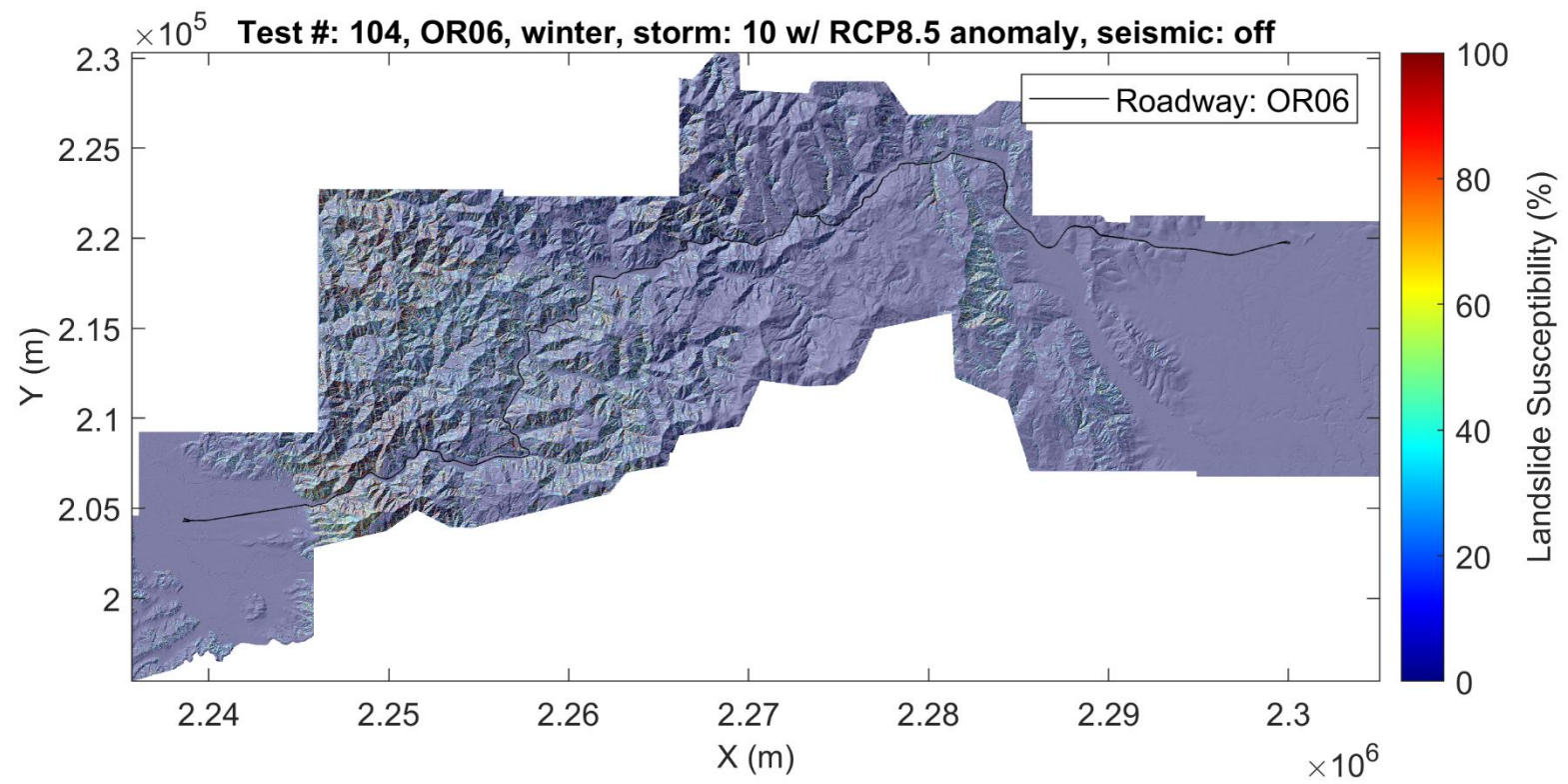


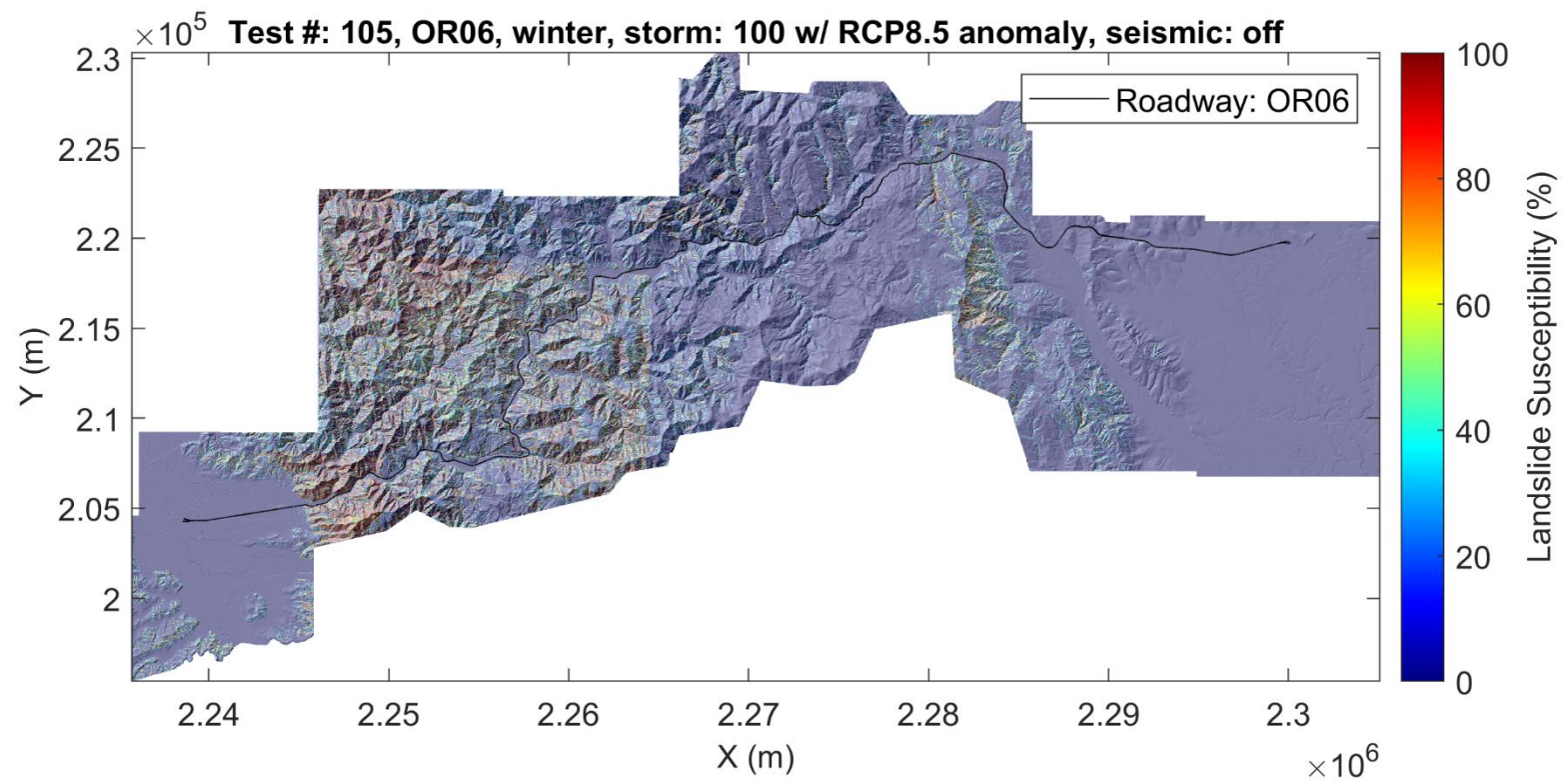


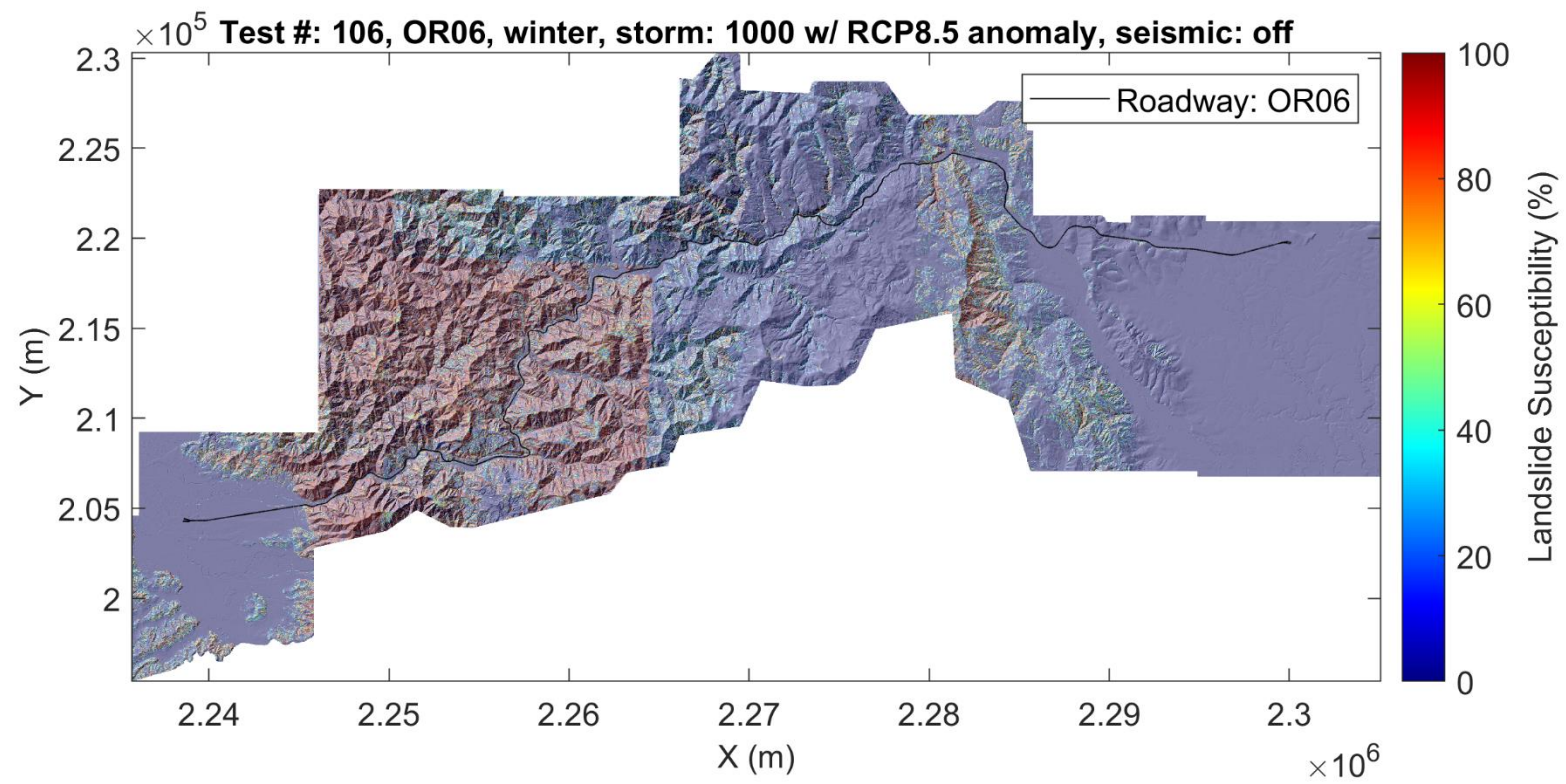


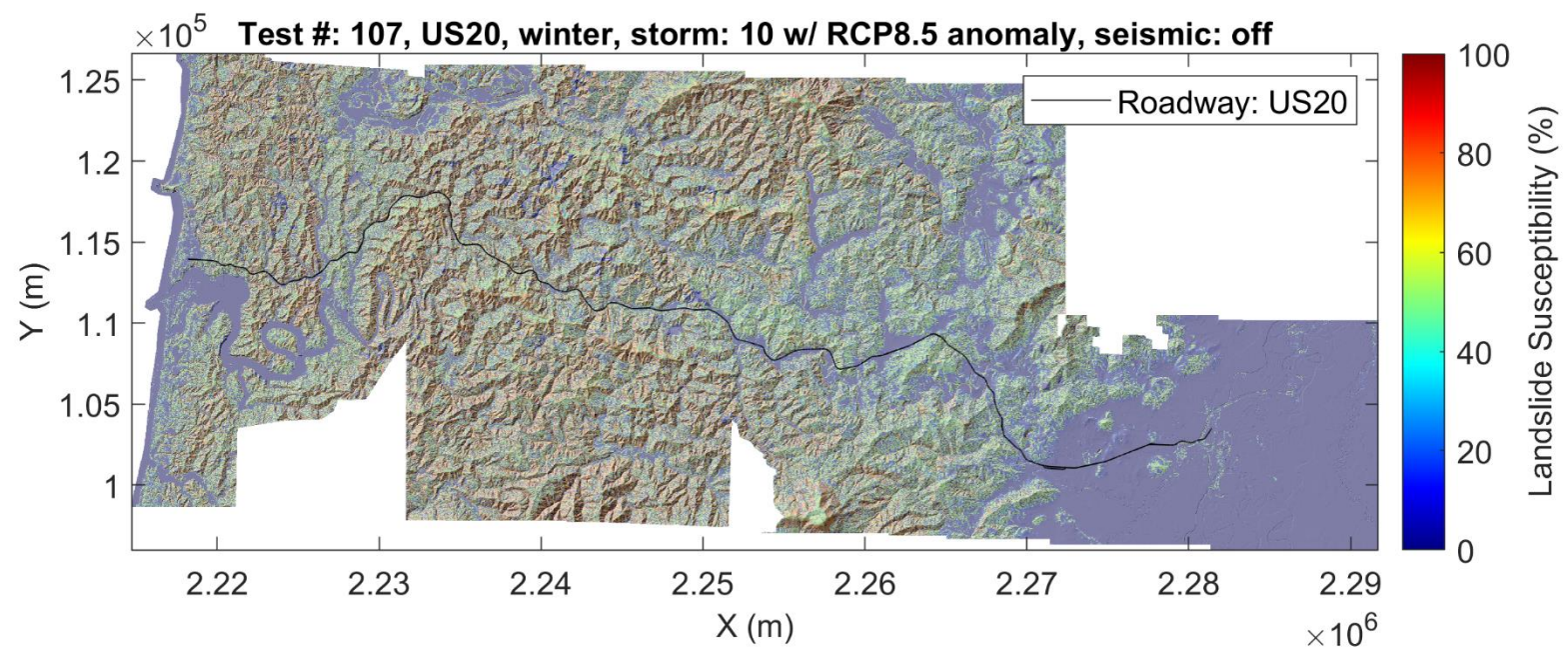


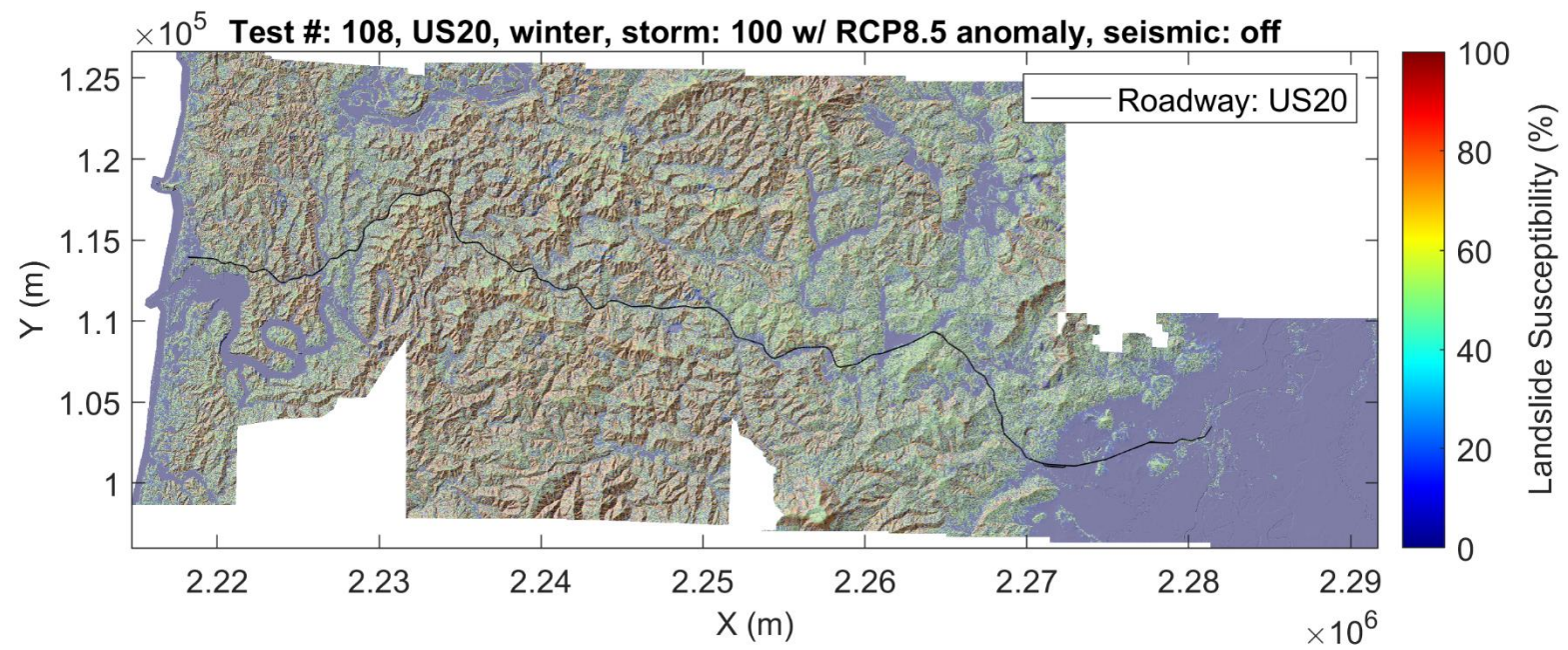


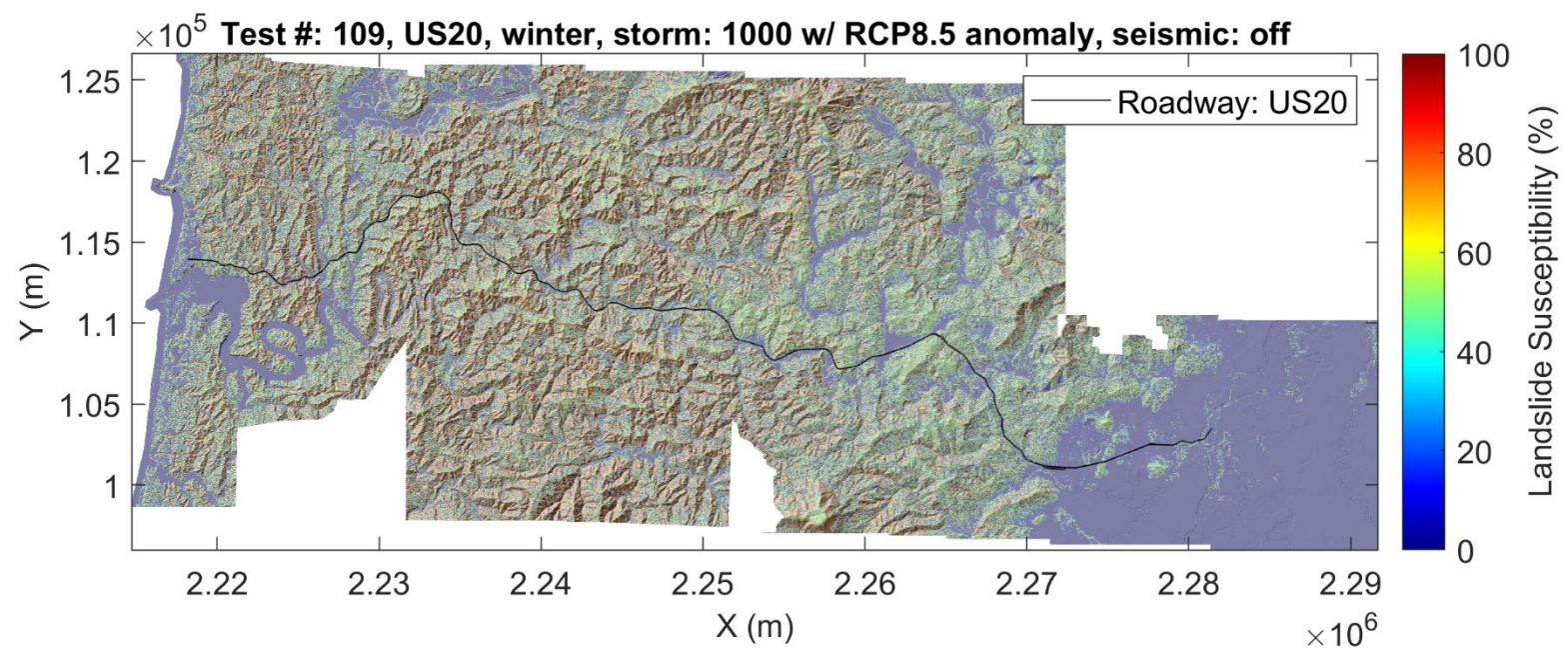


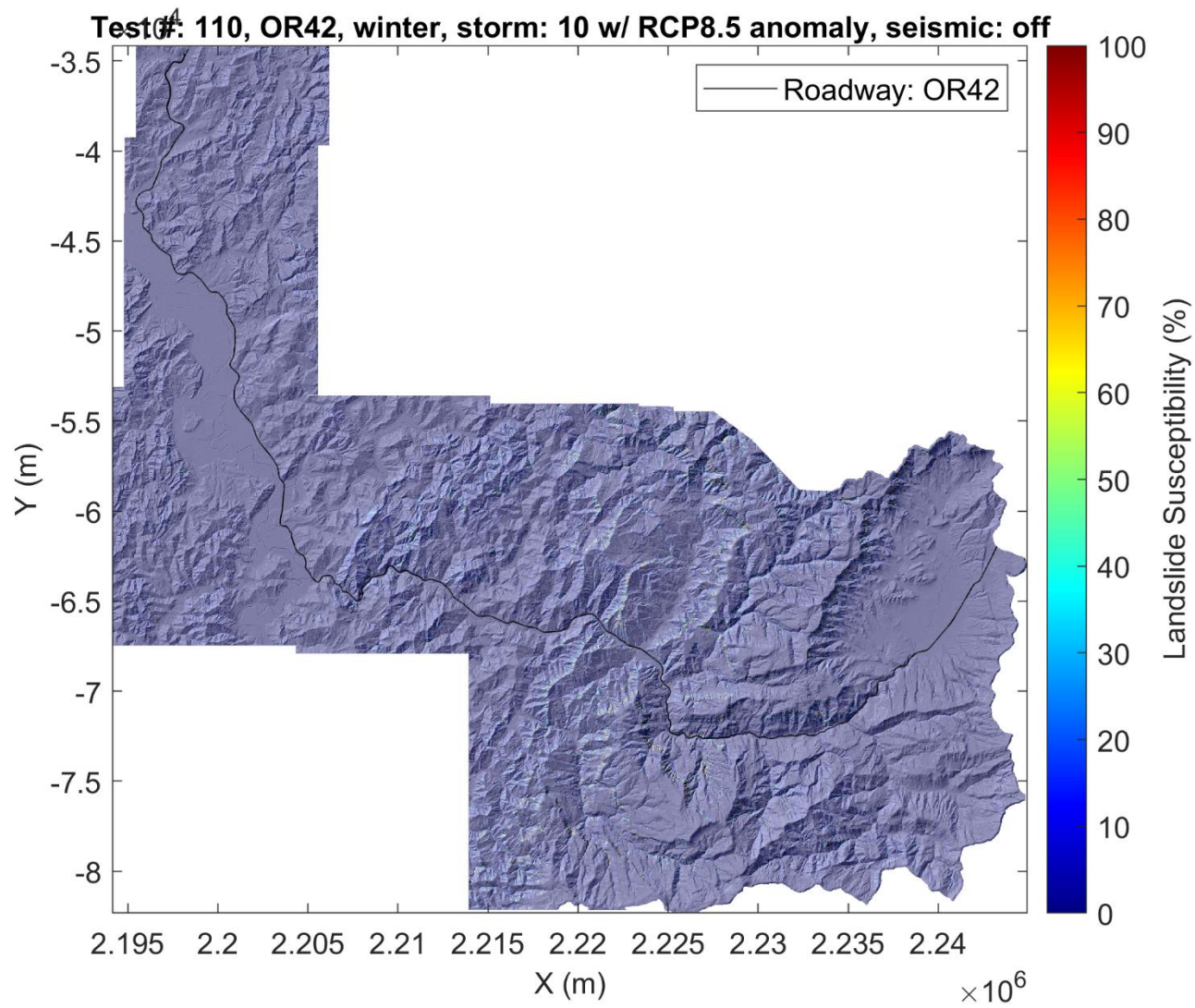


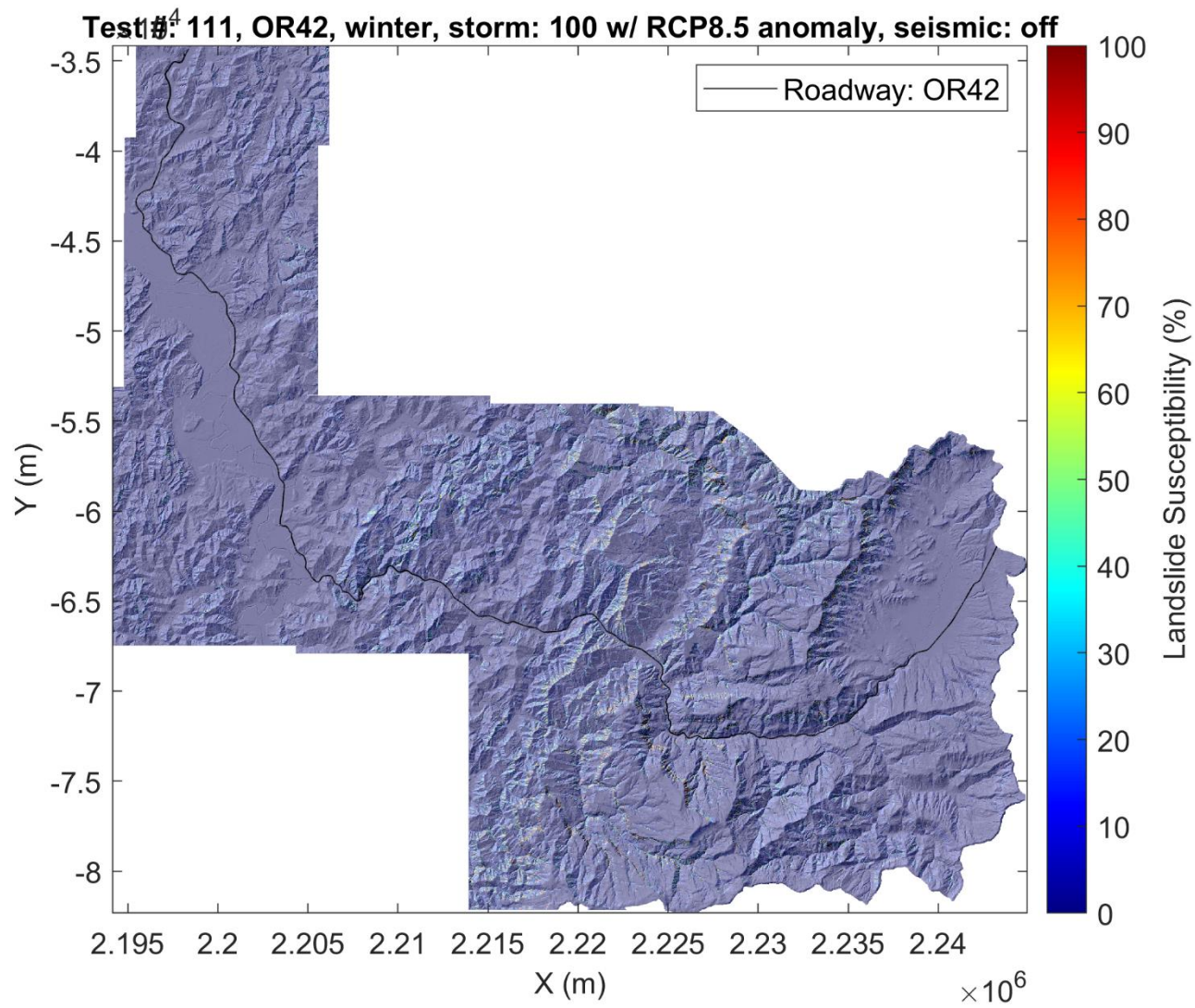


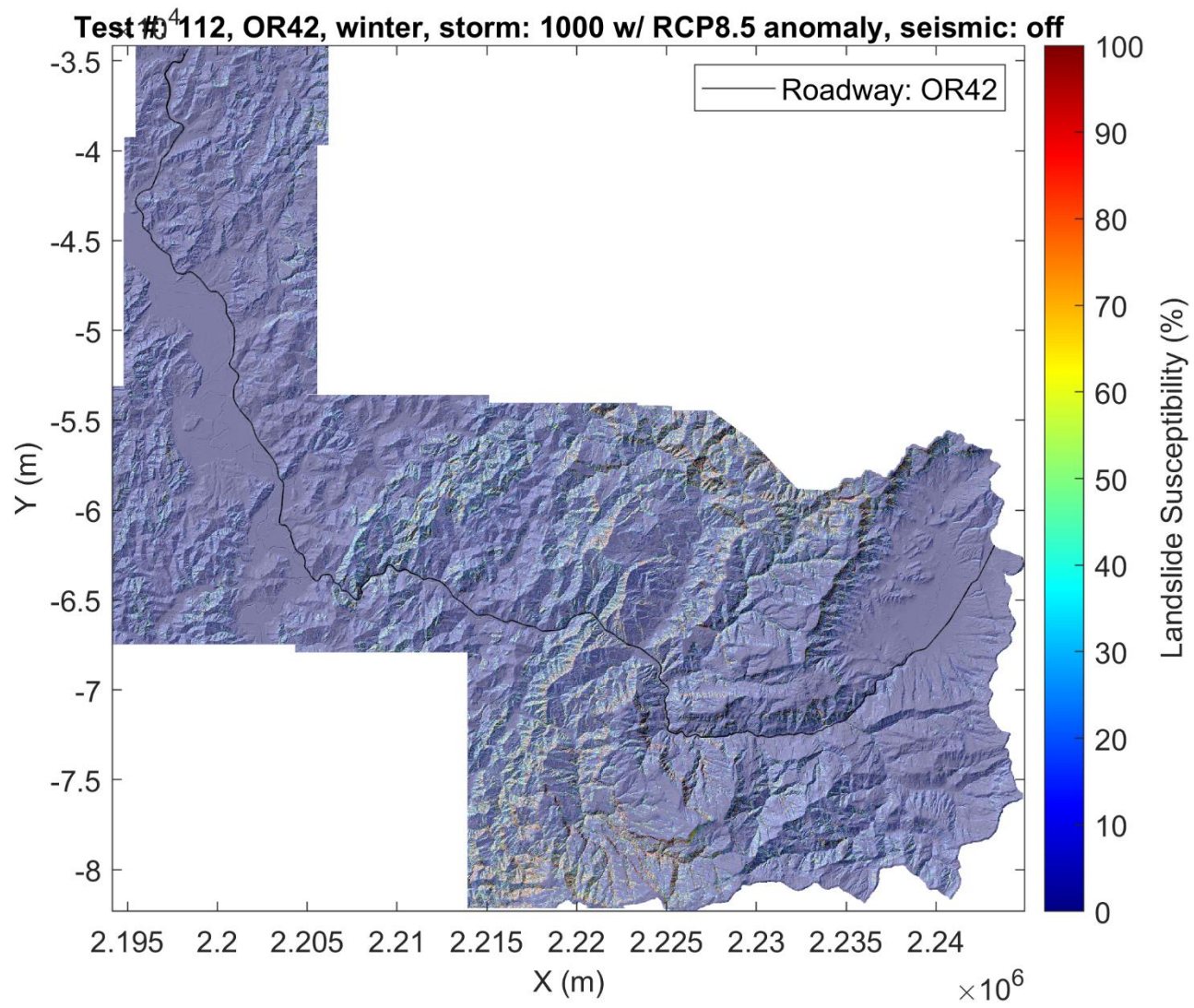






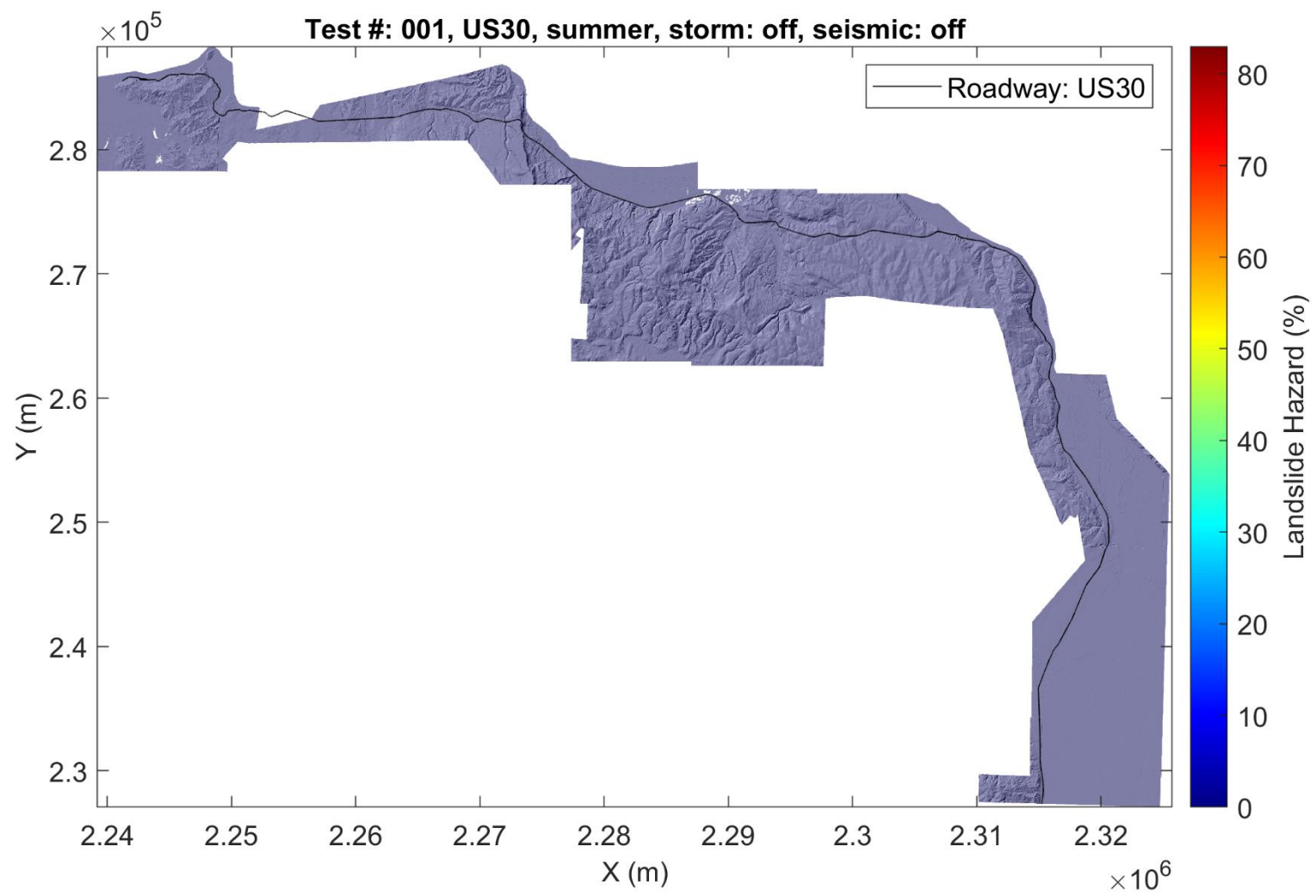


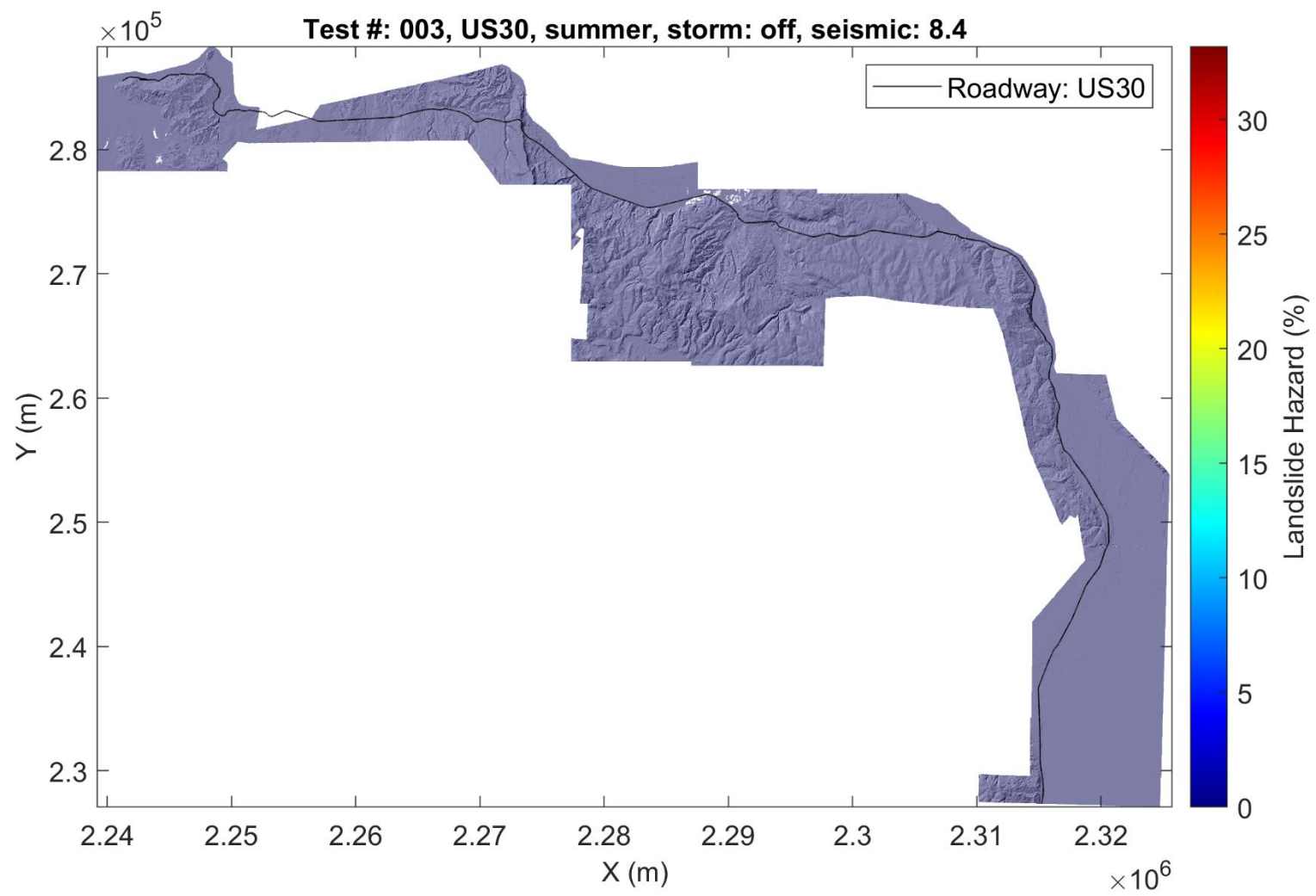


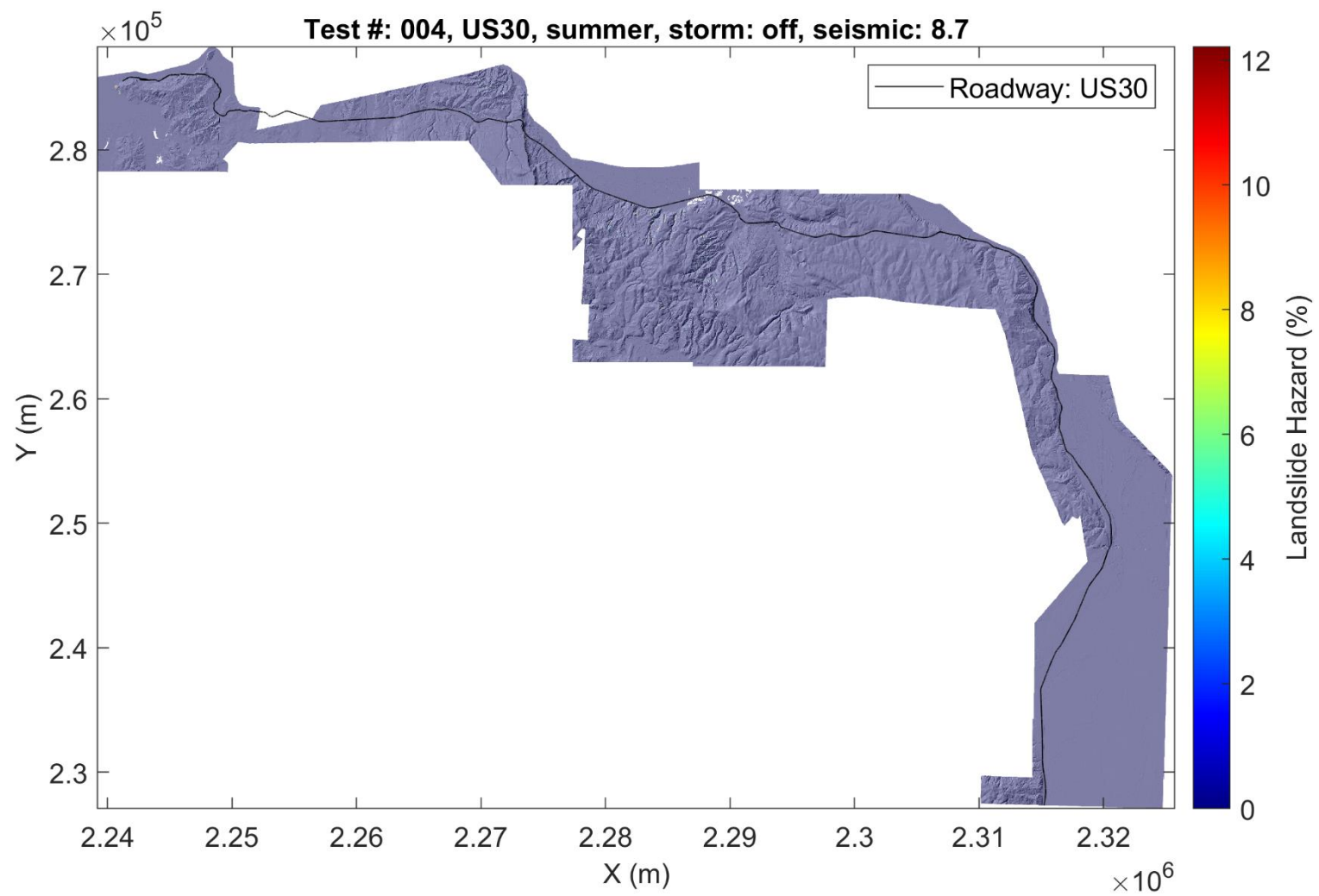


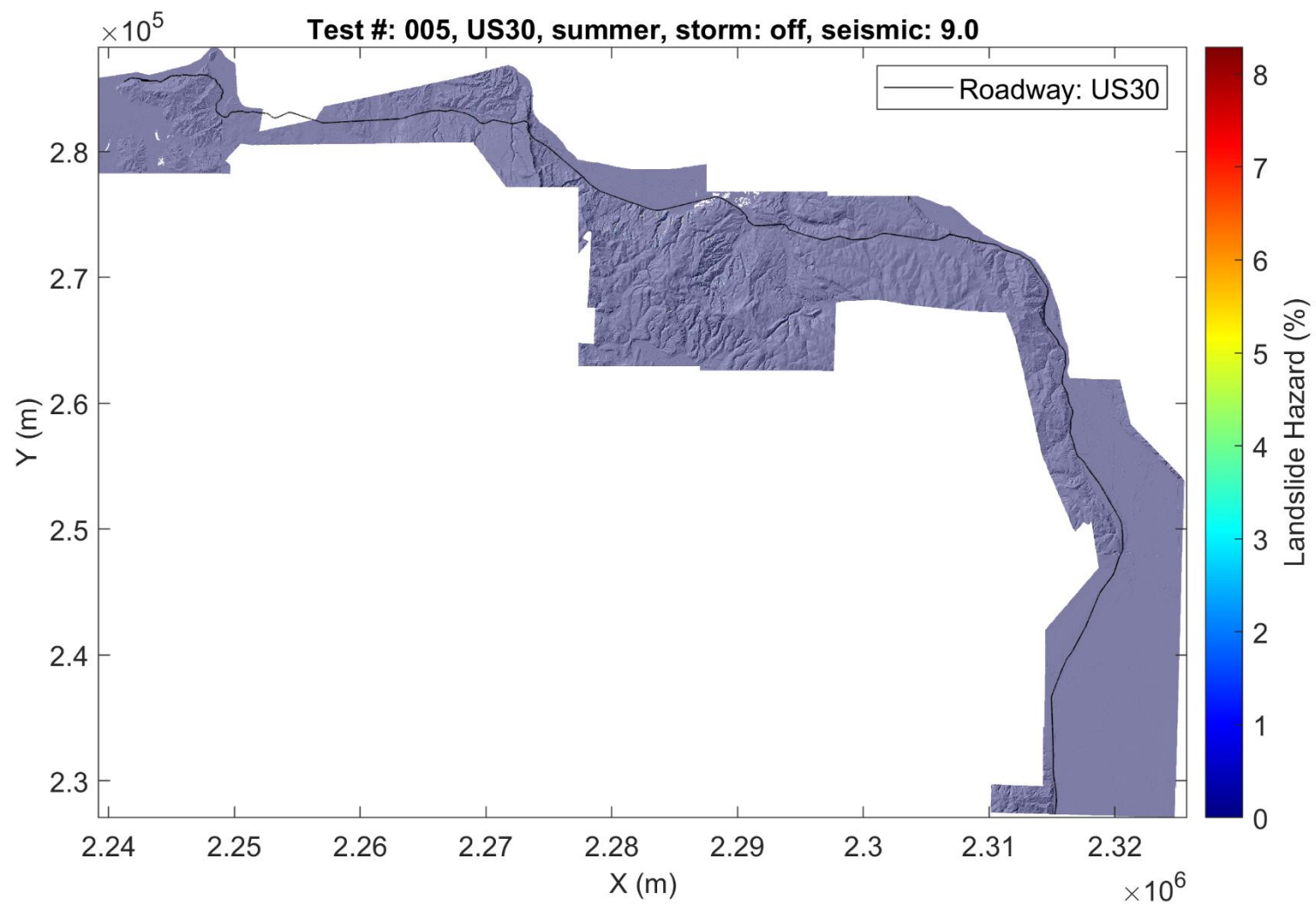
APPENDIX B: HAZARD MAPS

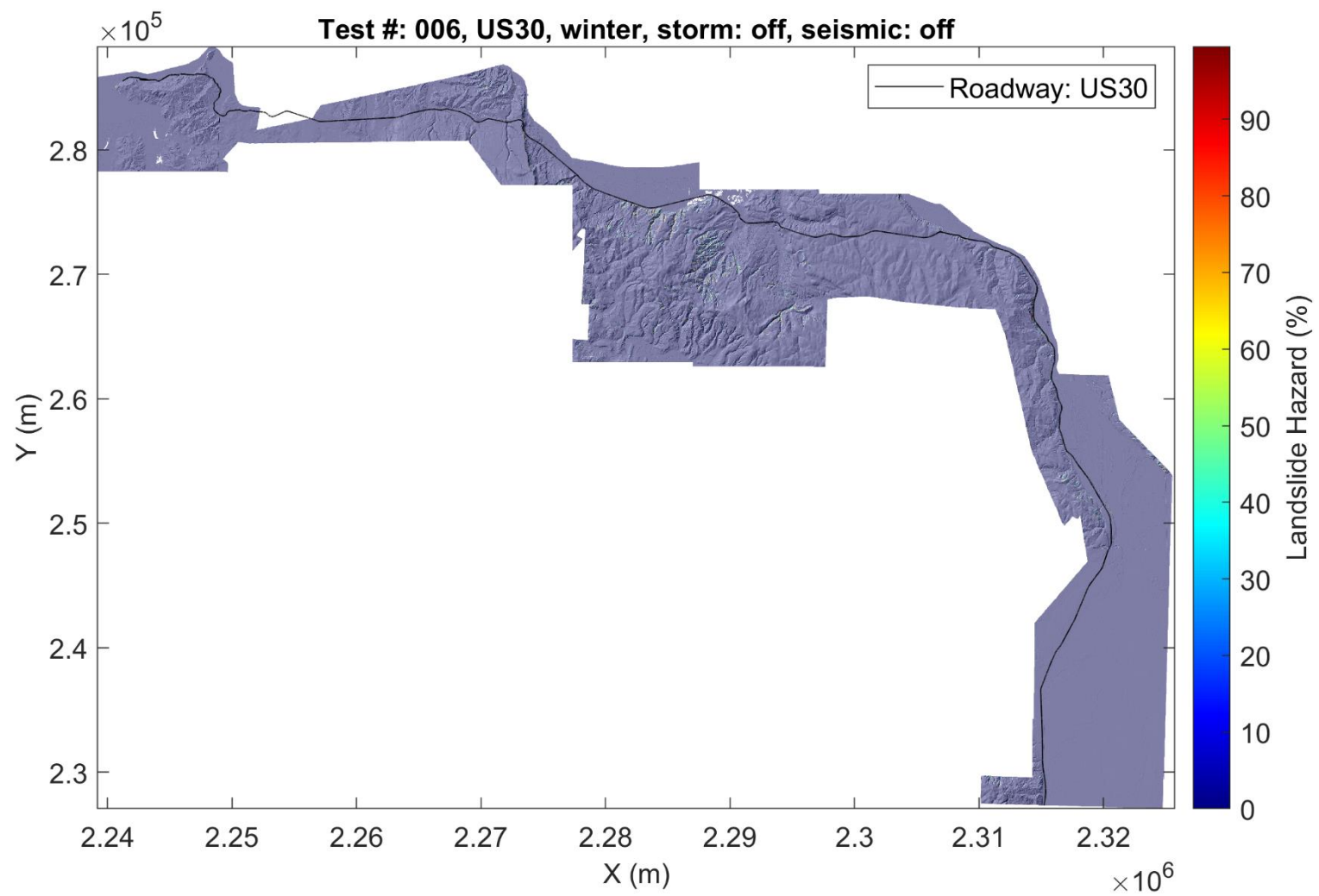
This appendix contains a full suite of hazard maps for all scenarios considered for SPR808. These scenarios consider a combination of physical drivers, including seasonal variations in antecedent moisture, rainfall inputs, seismicity, and climate-change induced precipitation anomaly. A directory describing all tests not considering future climate may be found in Table 4.4. A directory describing all tests considering future climate may be found in Table 4.7.

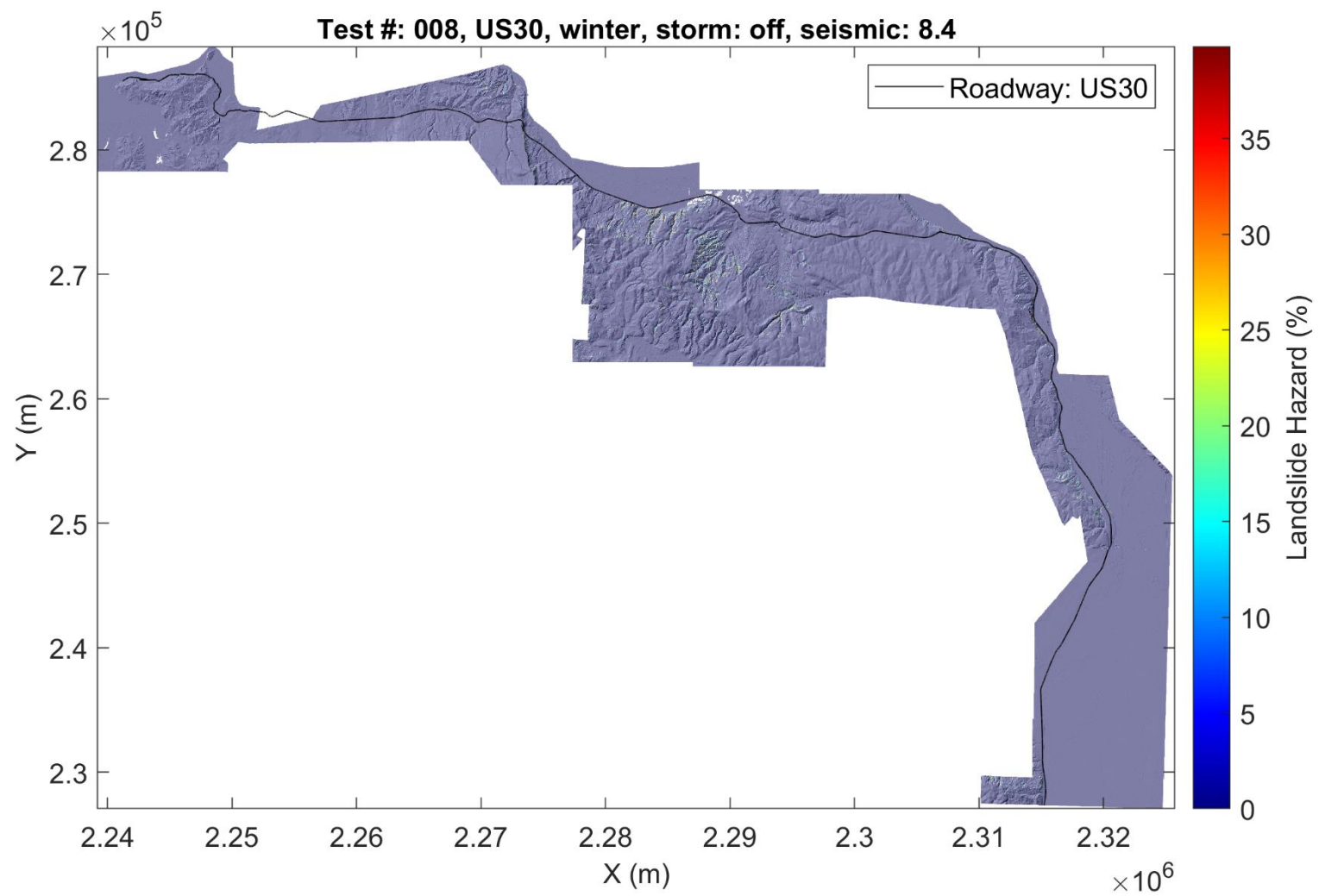


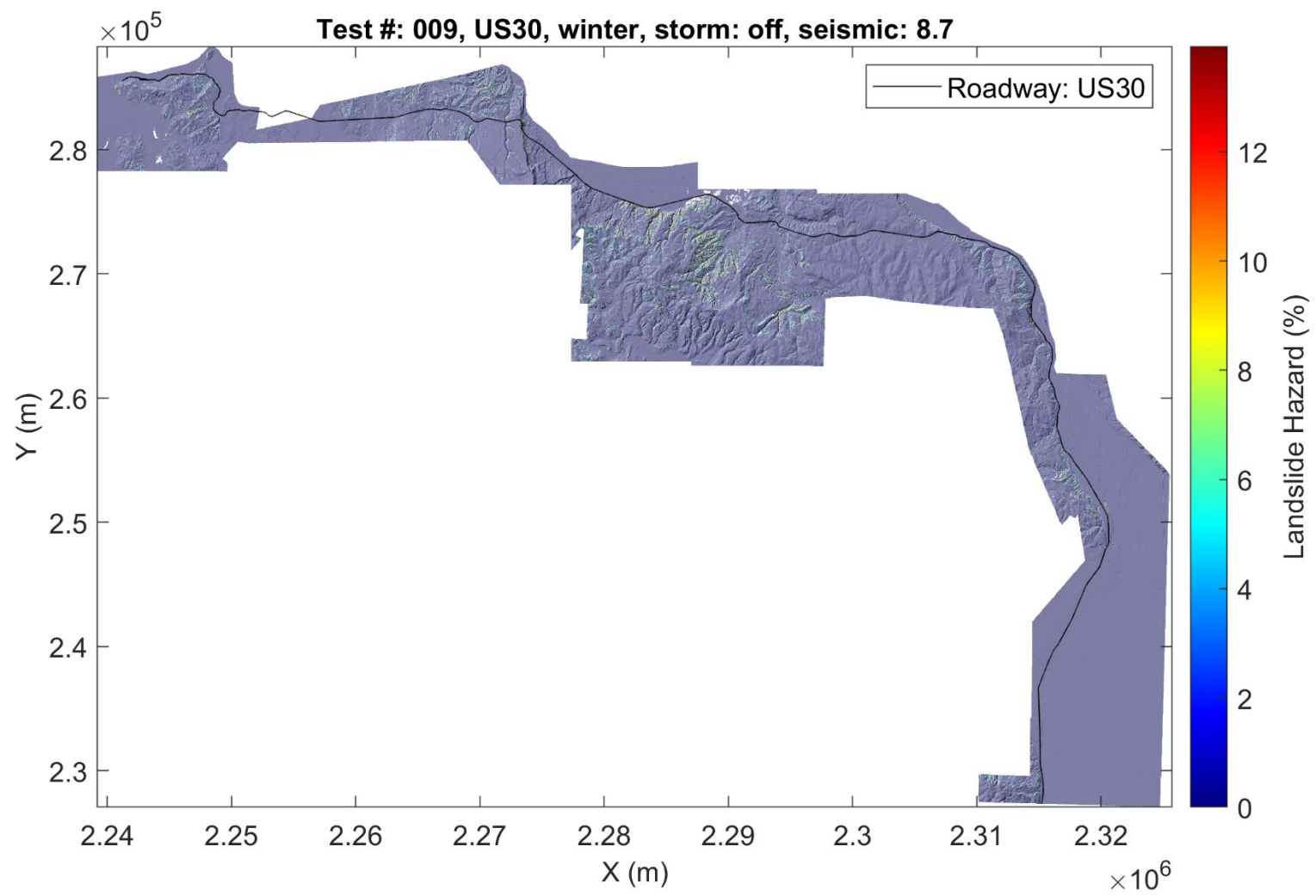


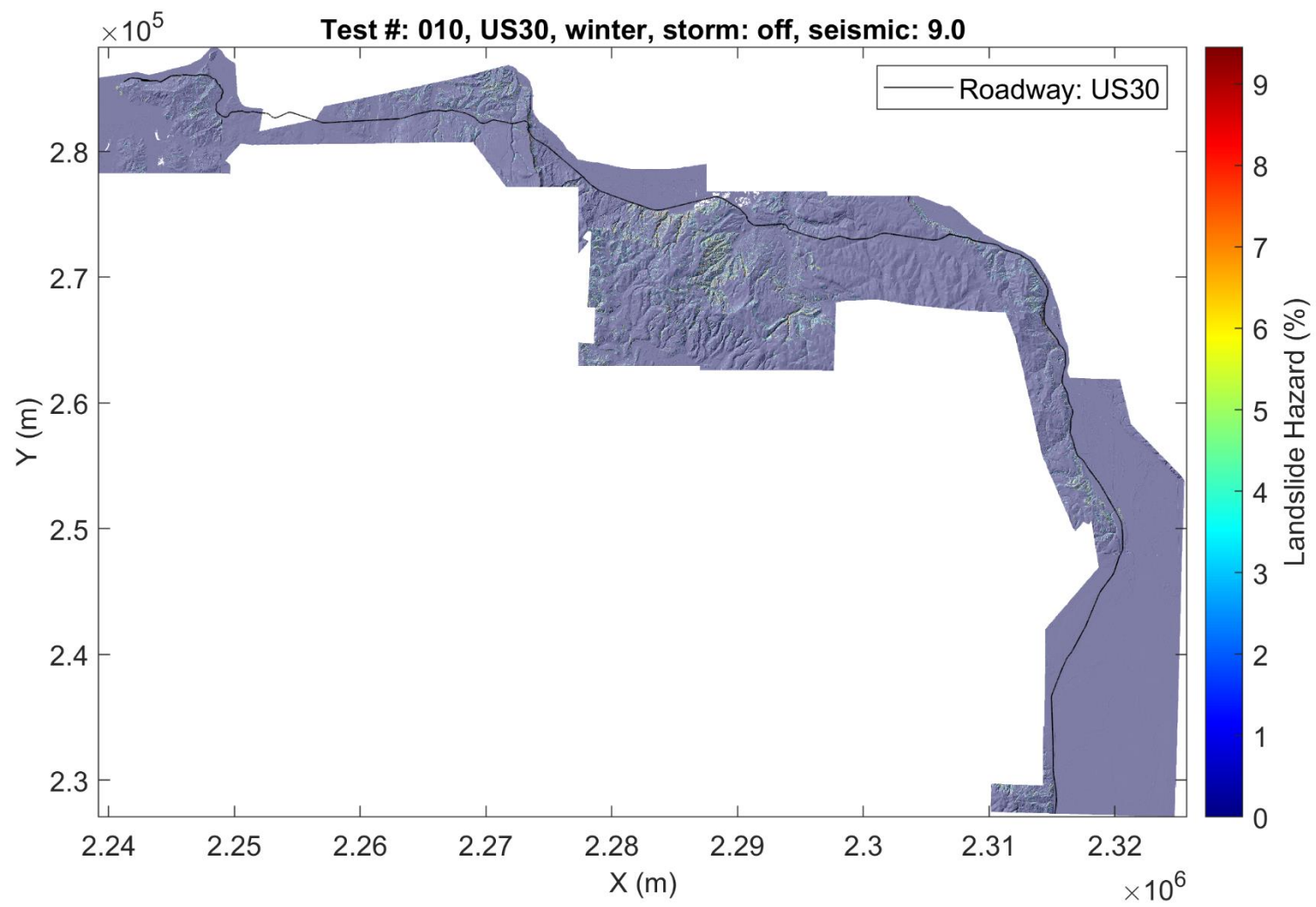


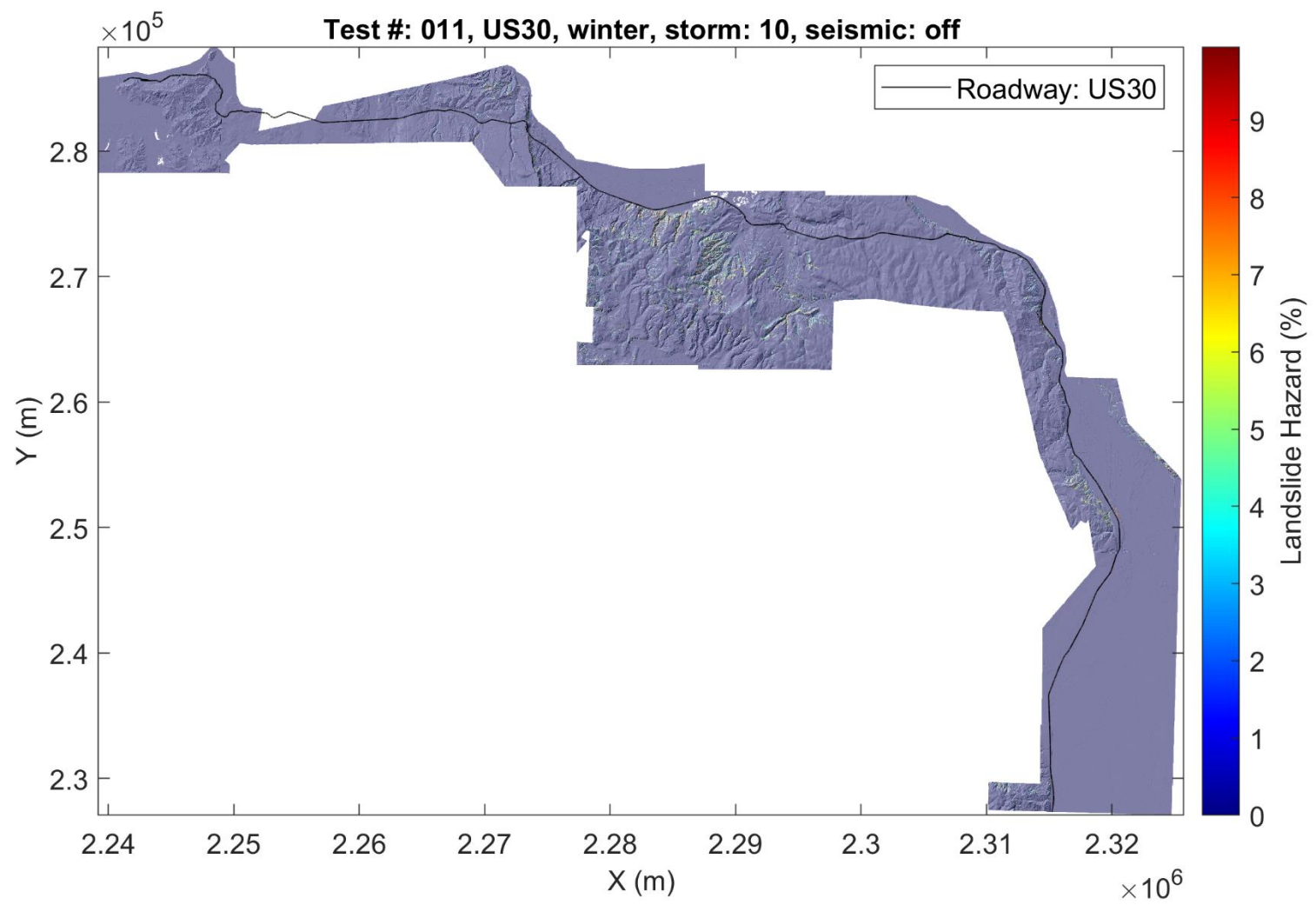


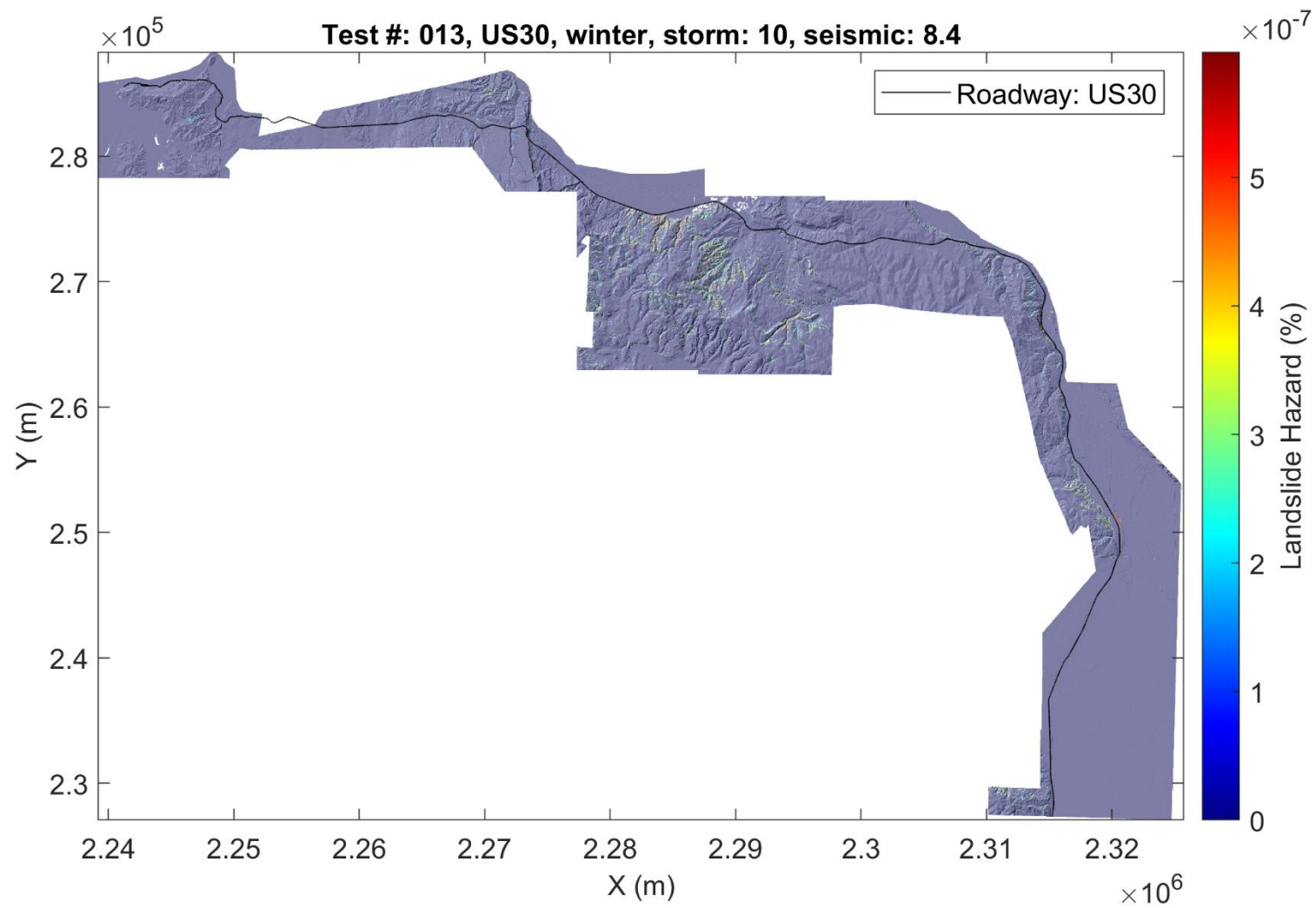


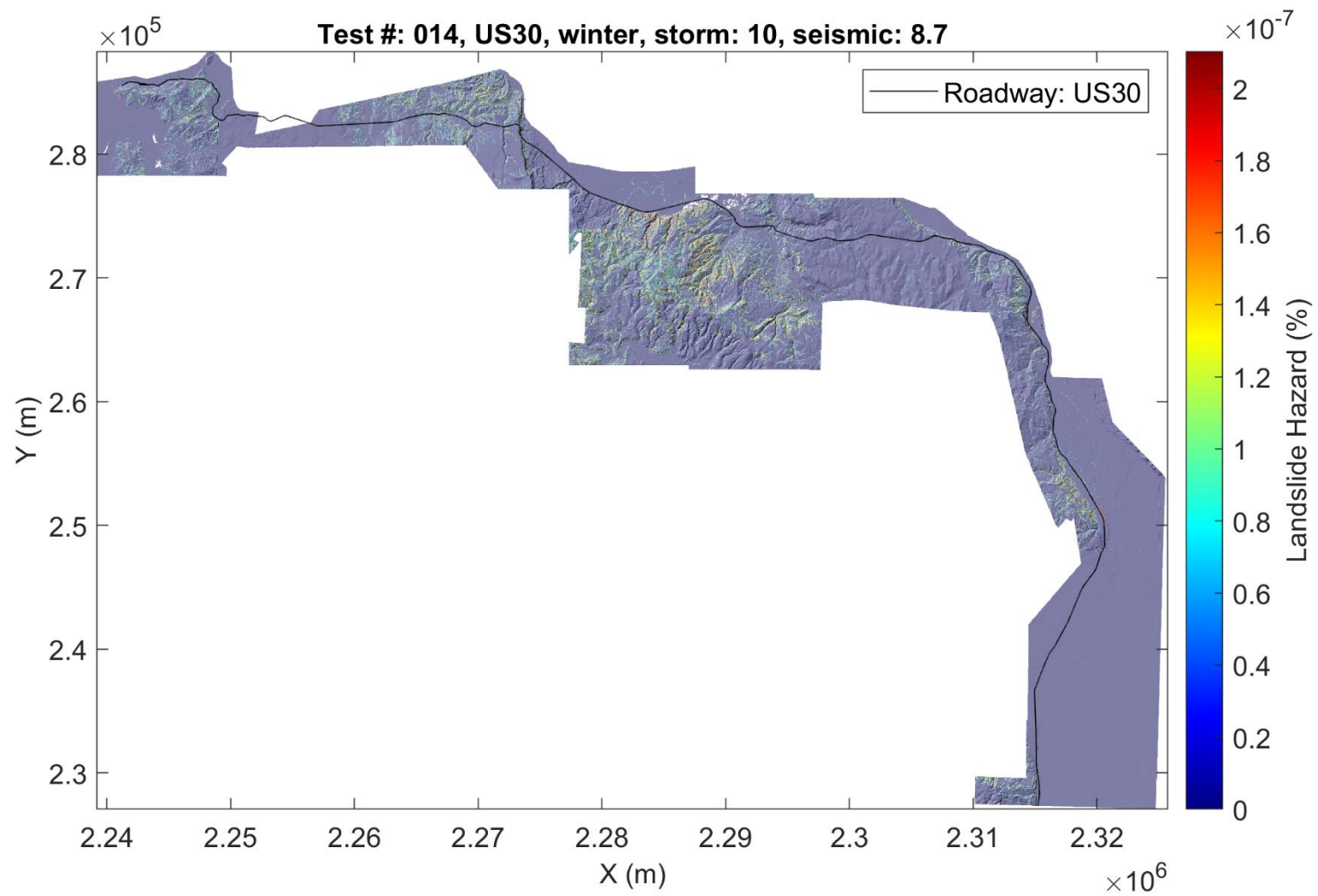


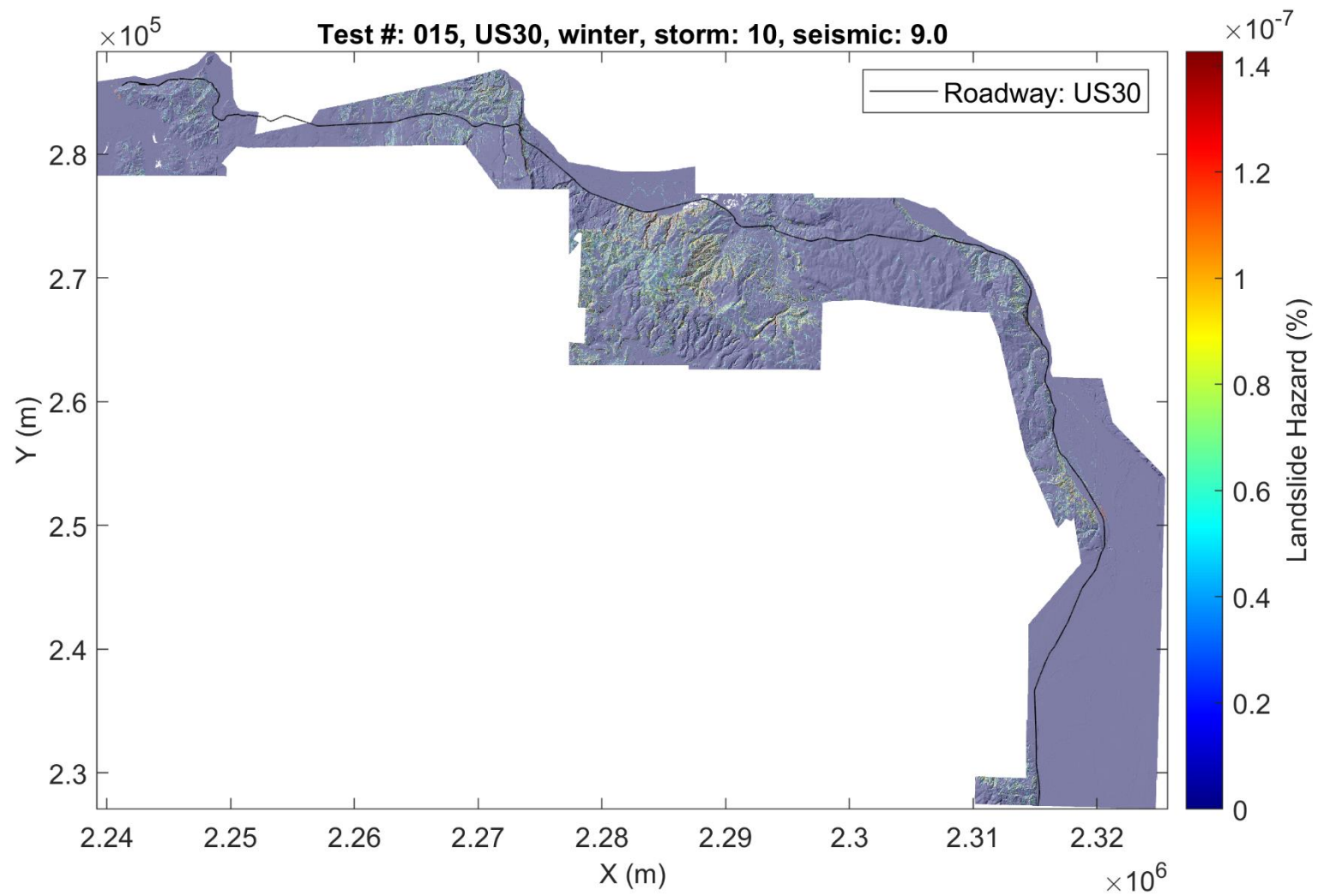


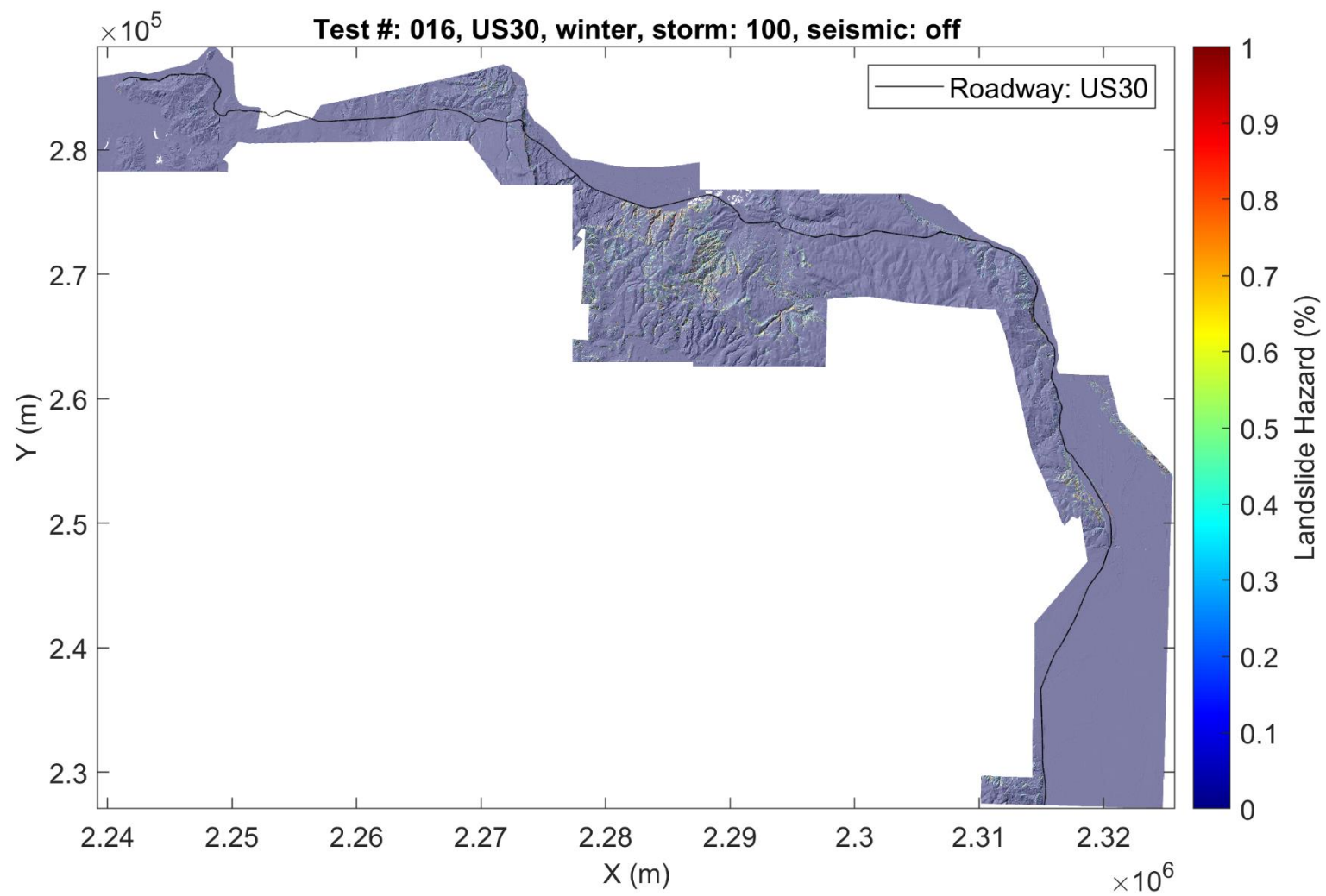


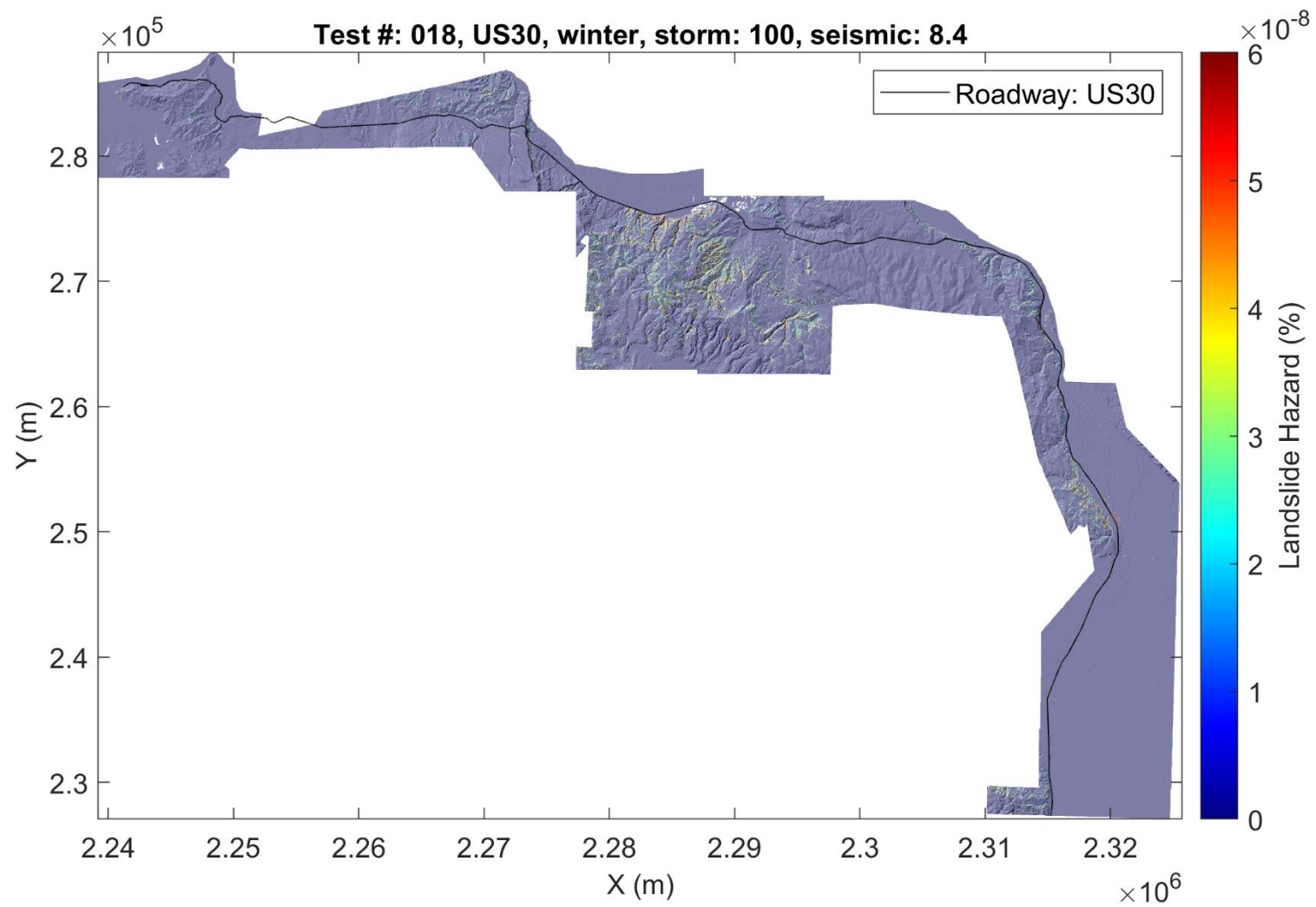


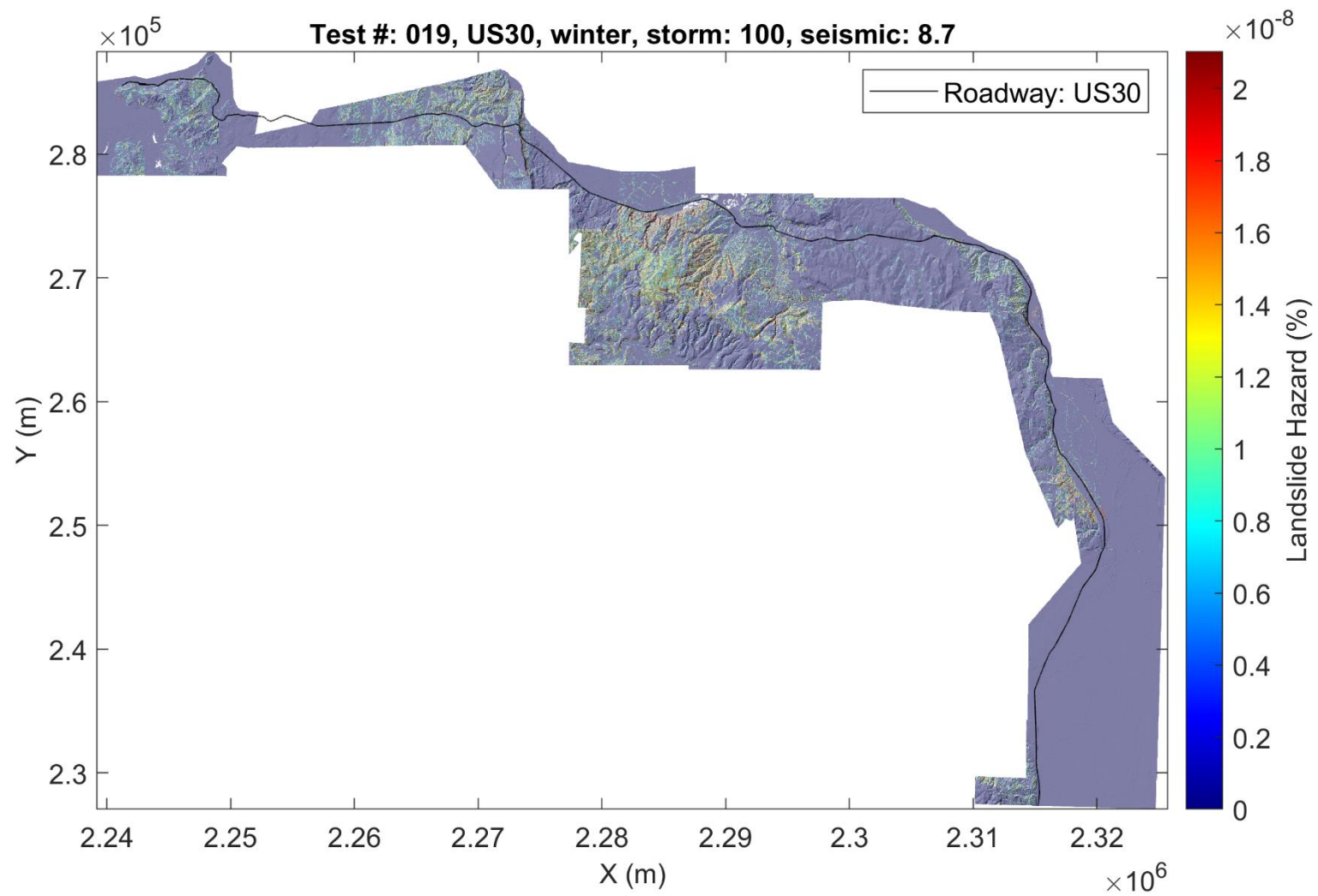


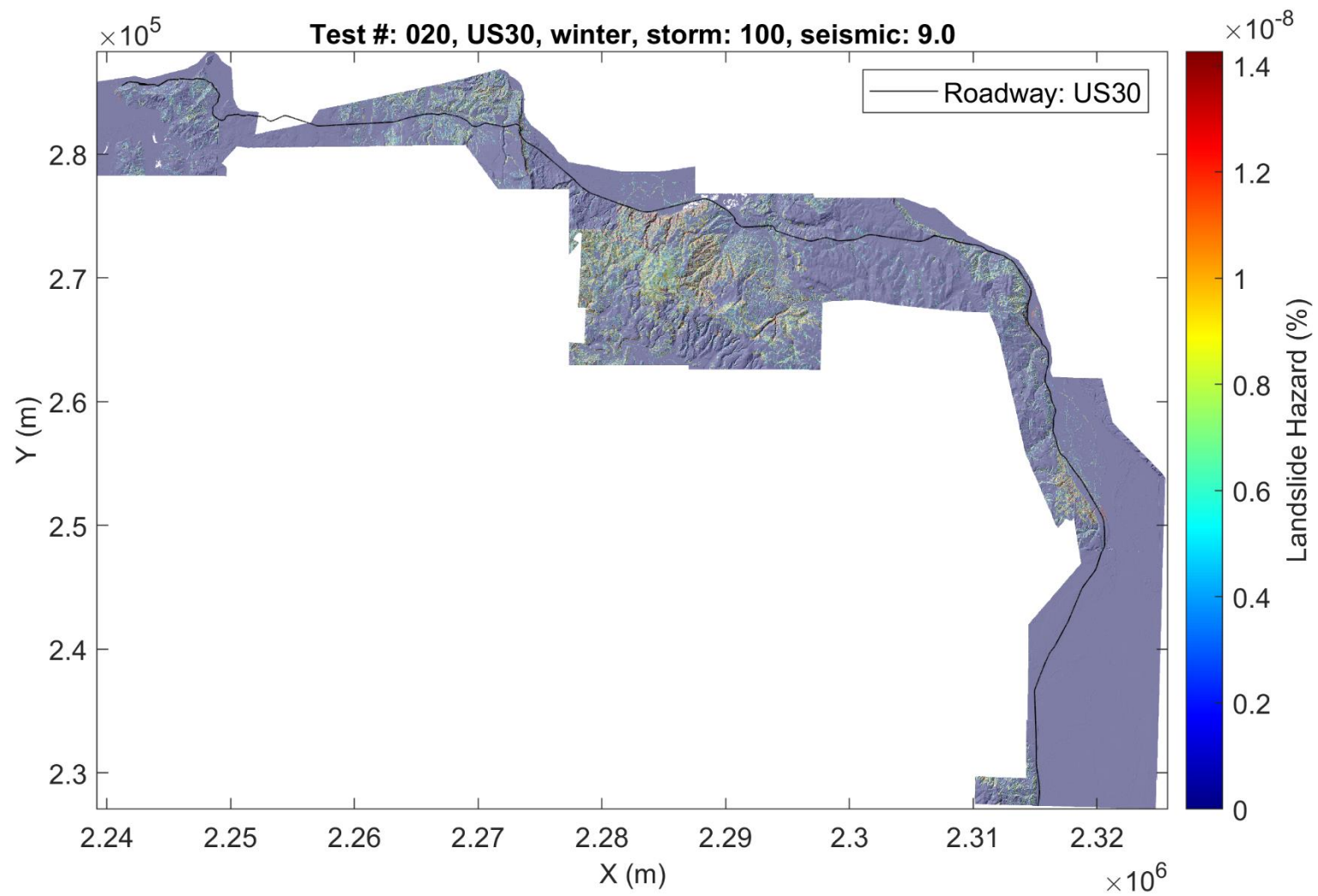


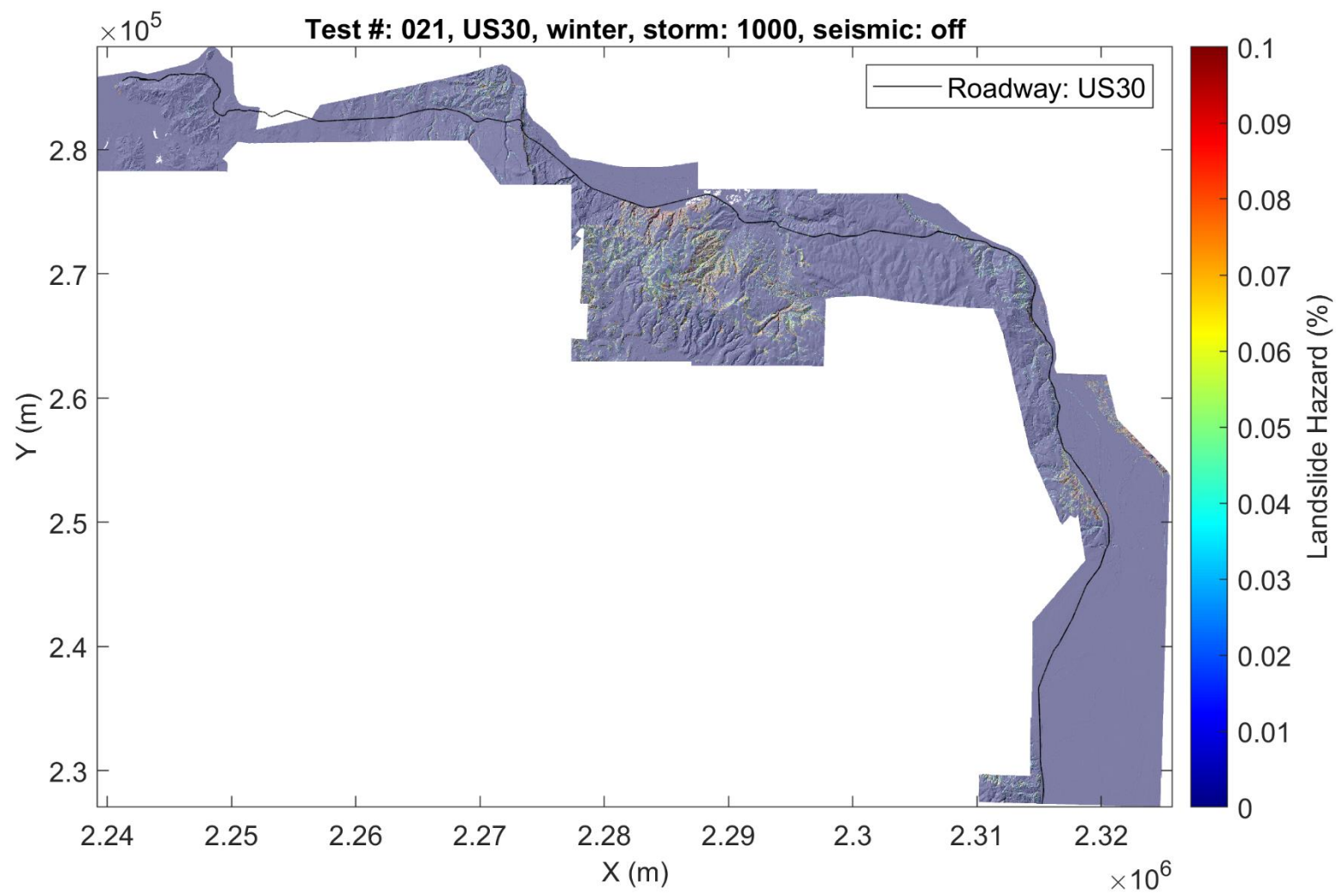


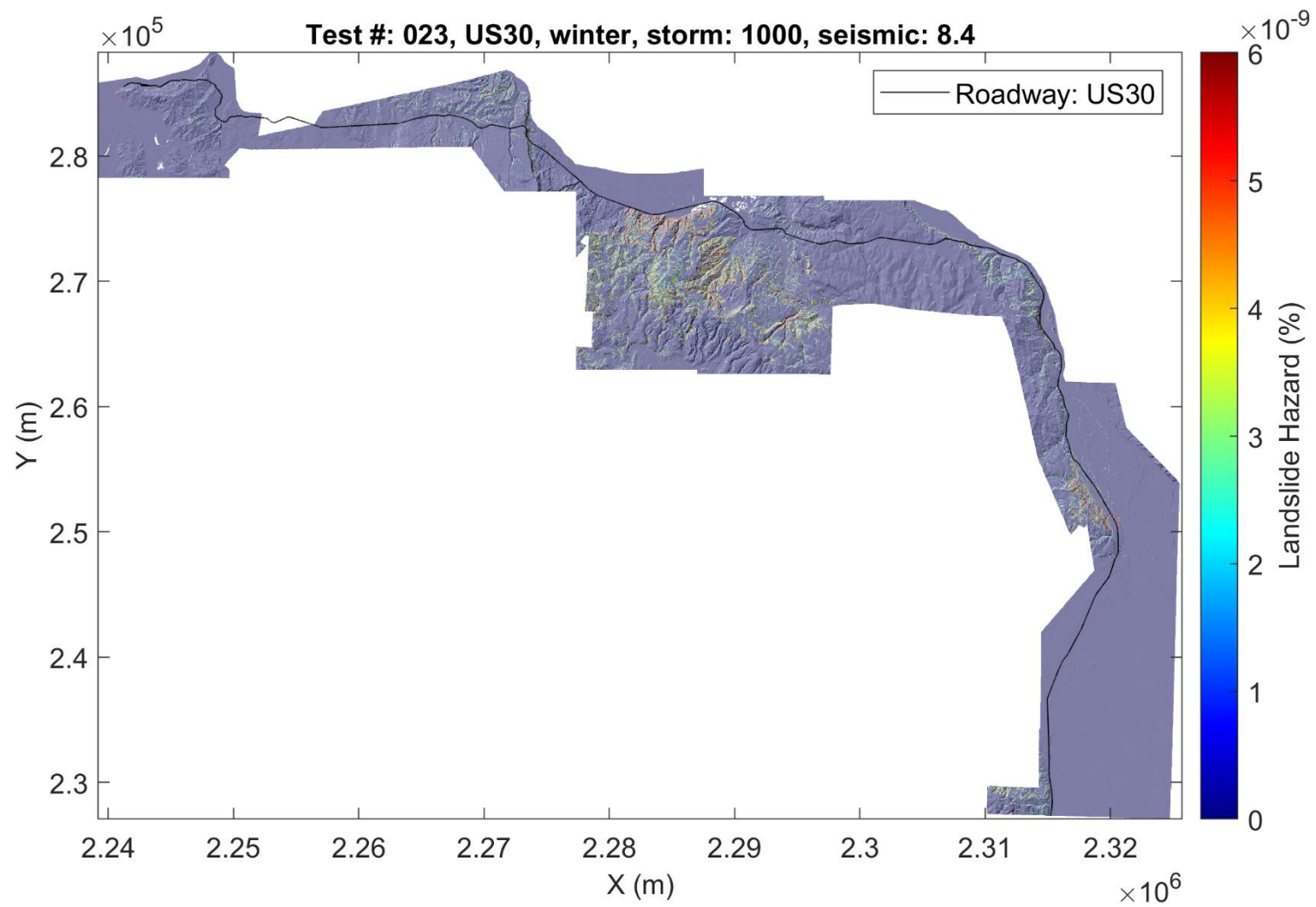


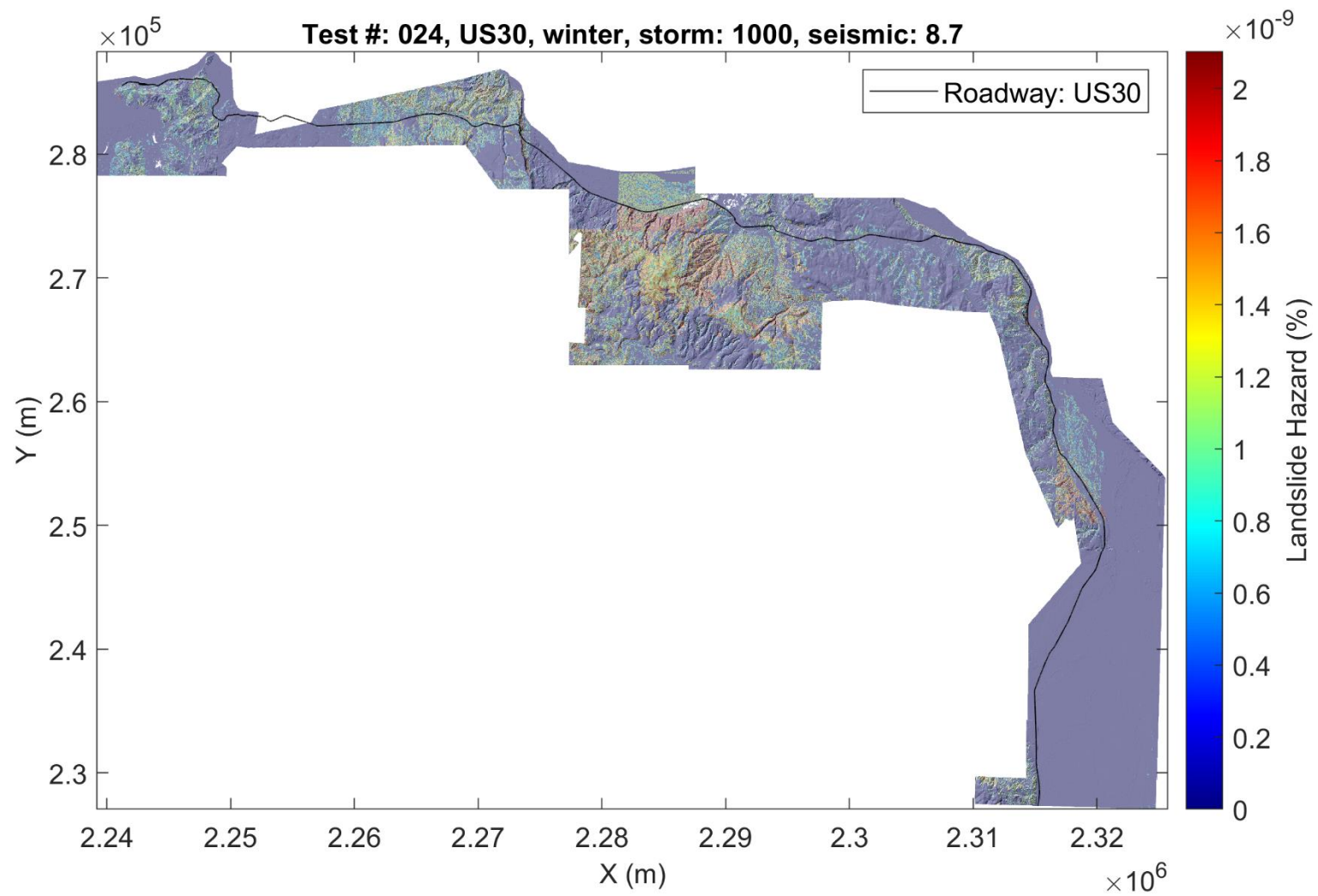


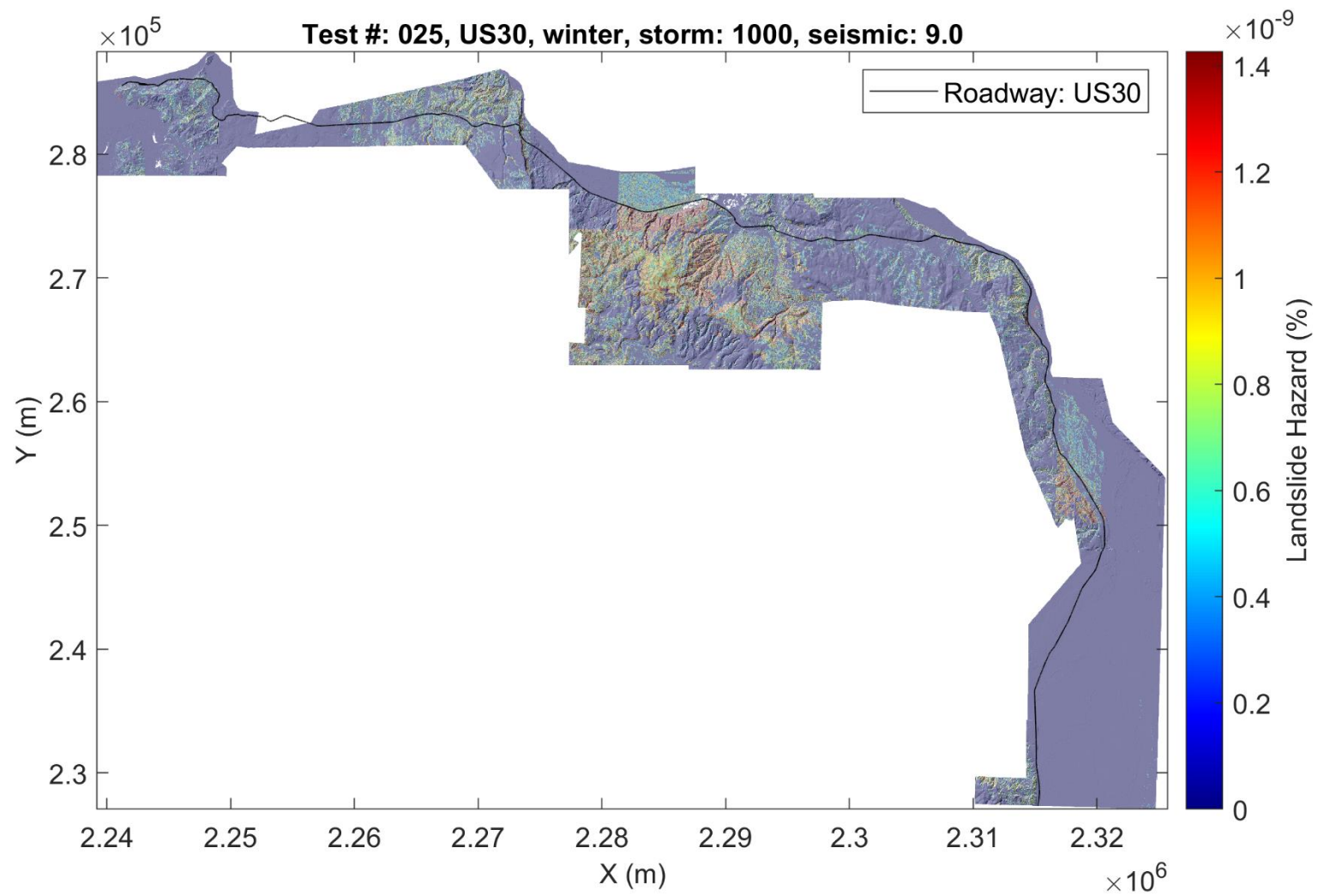


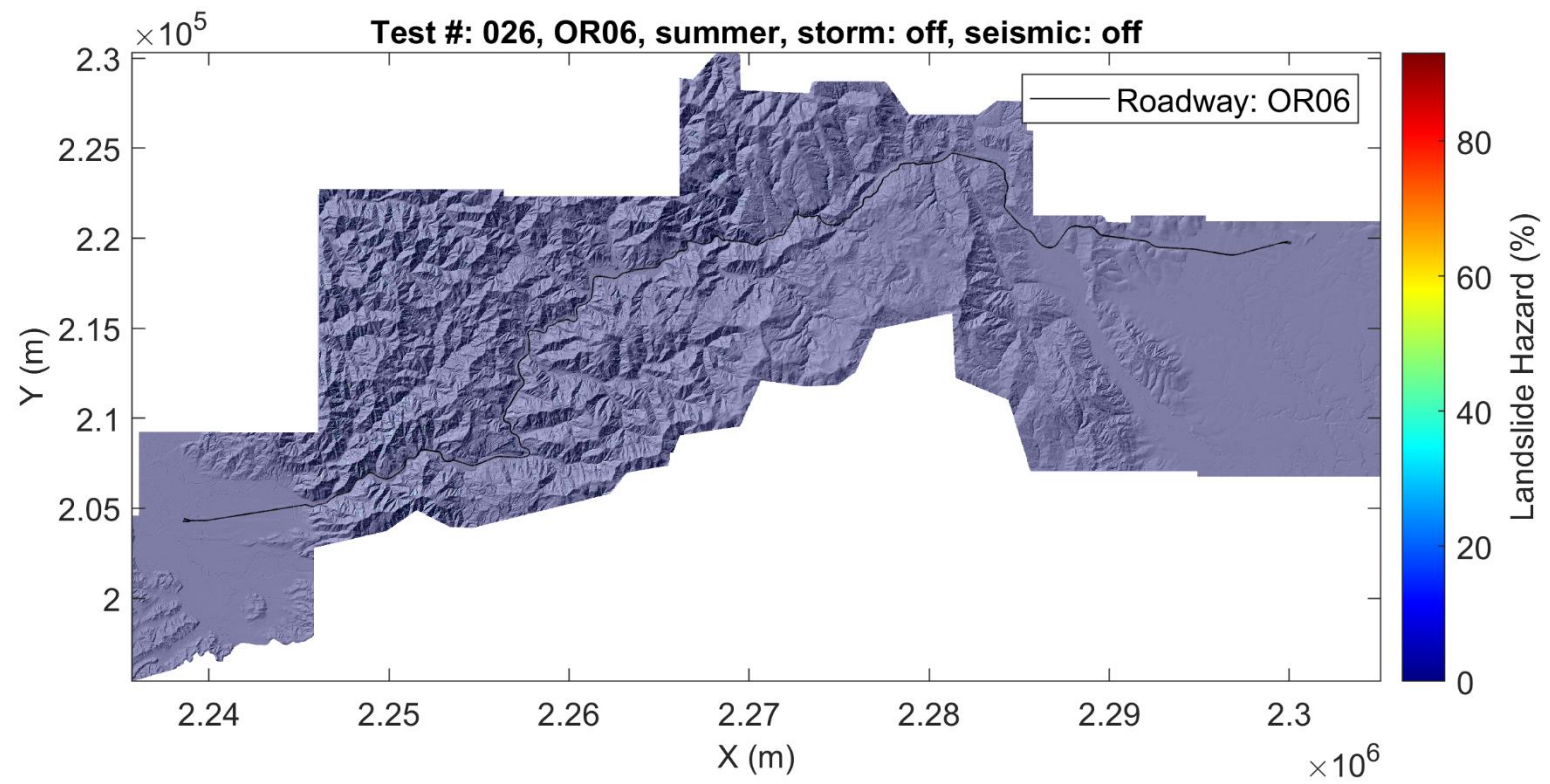


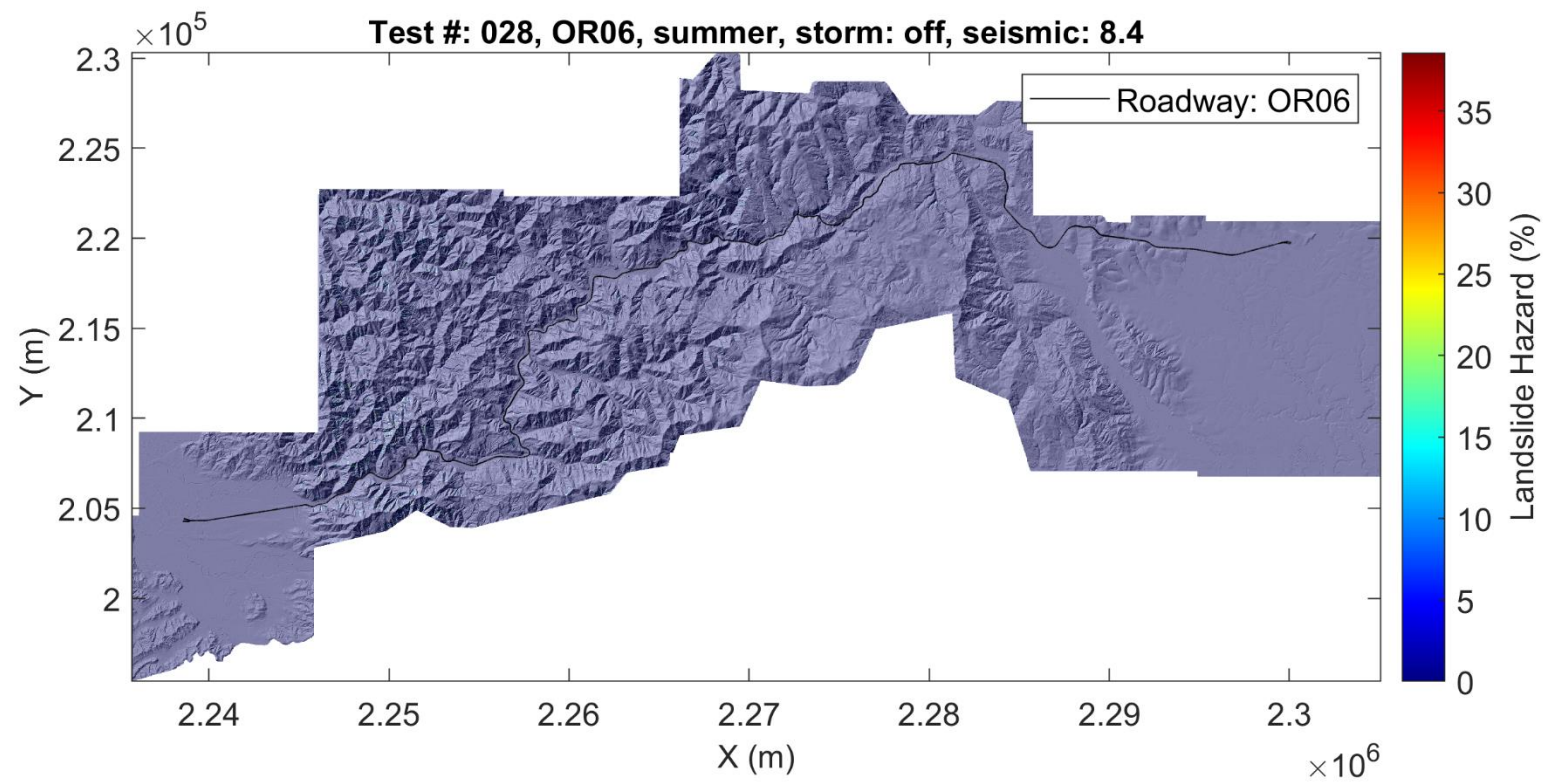


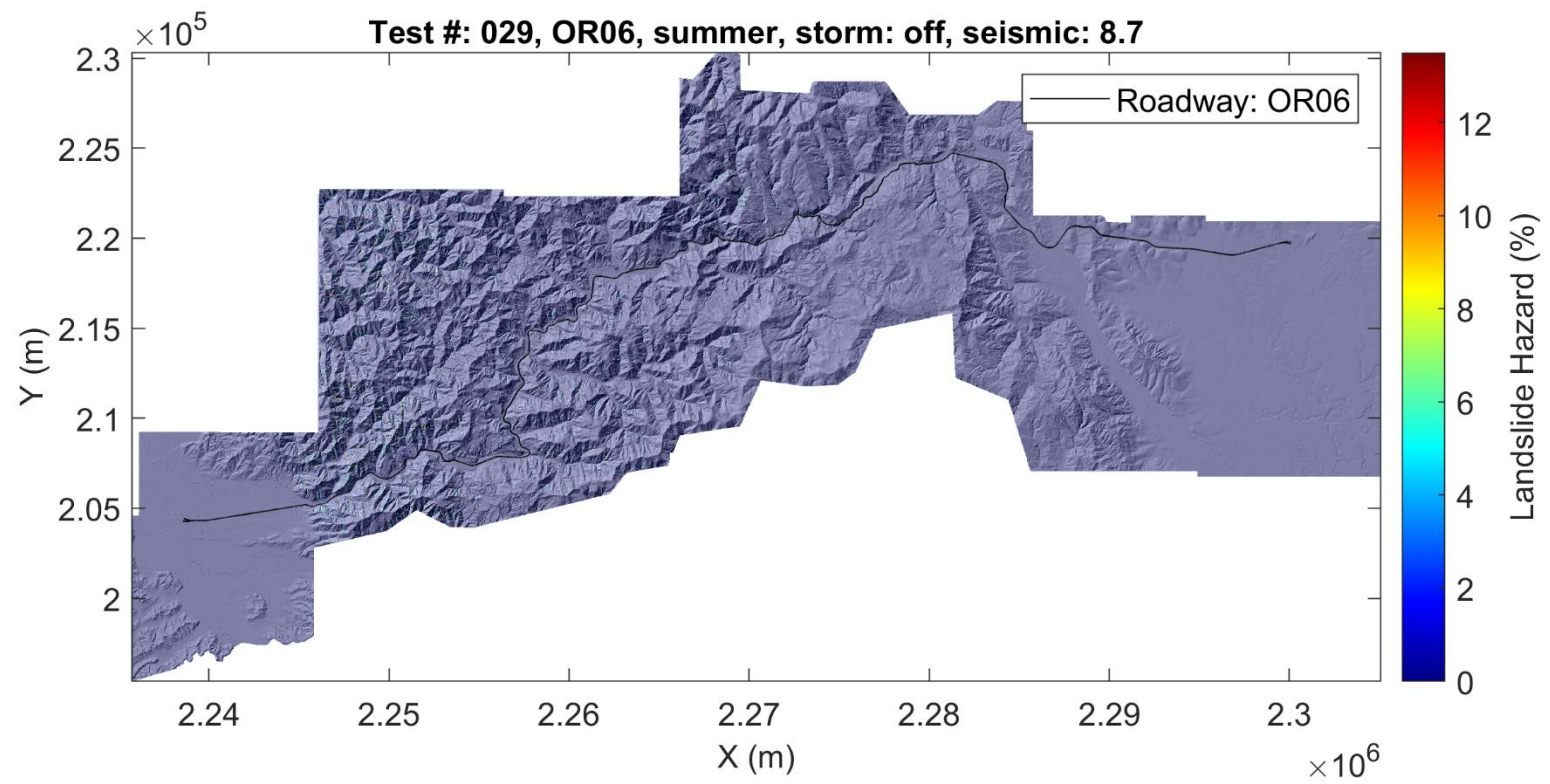


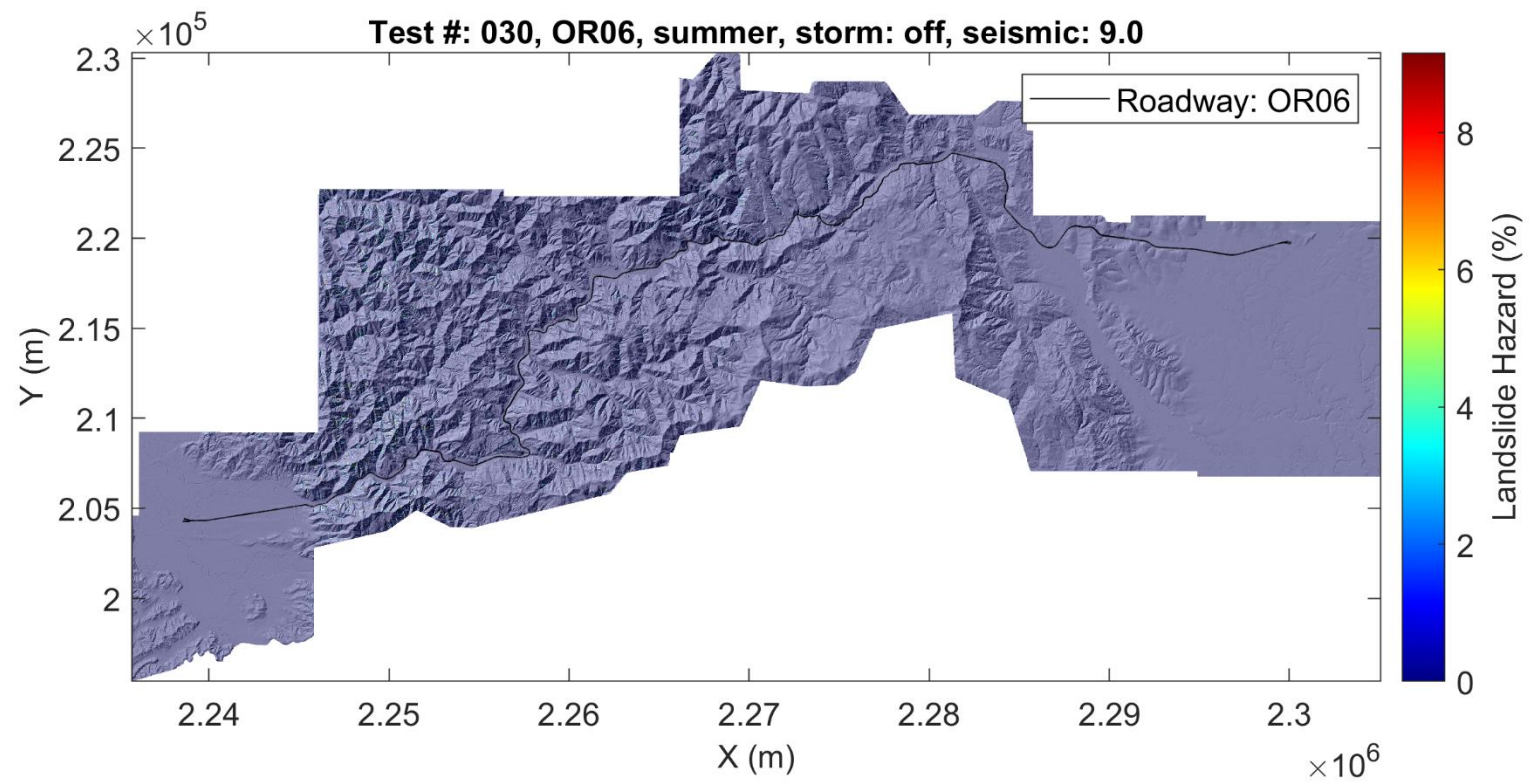


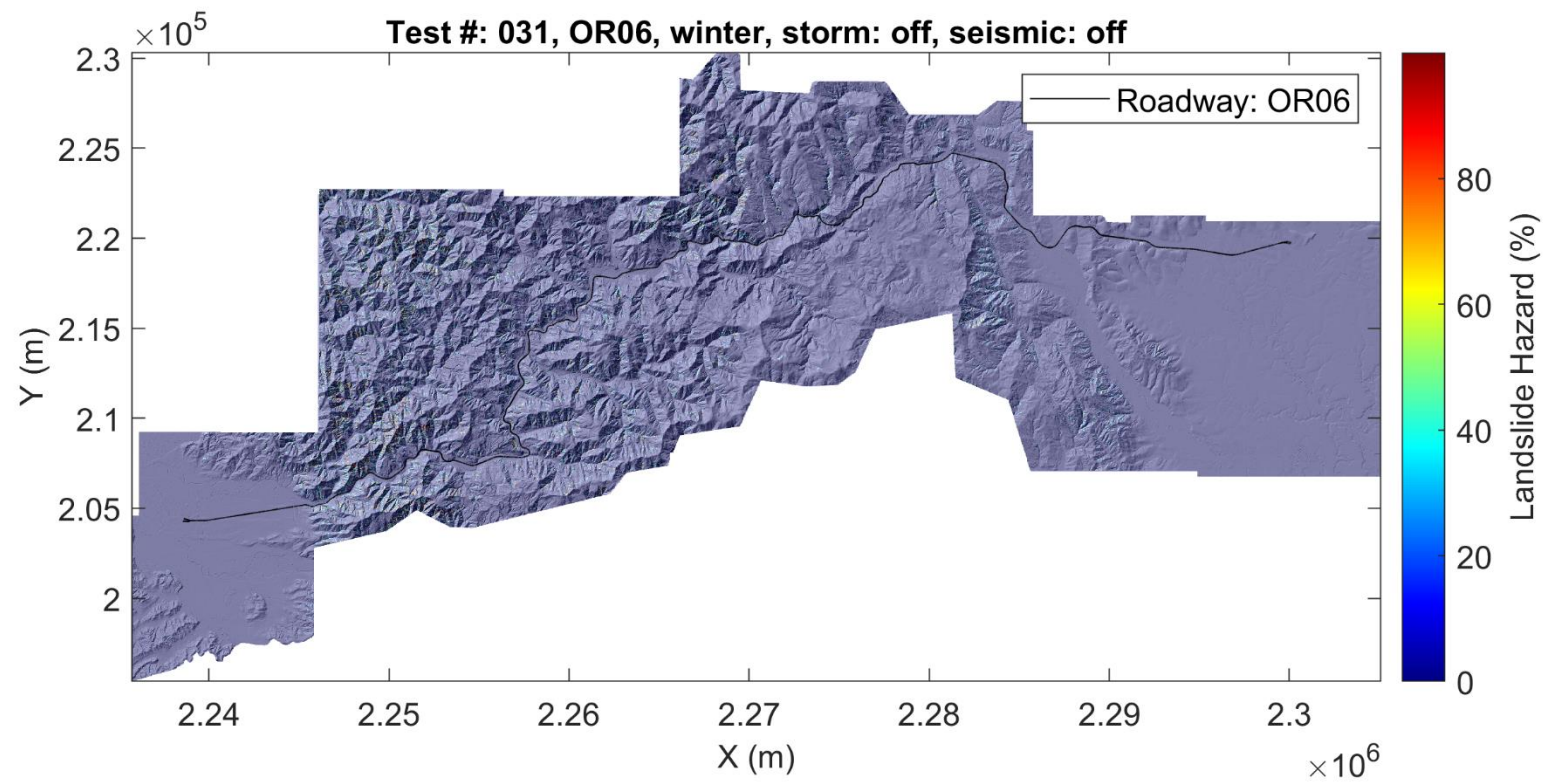


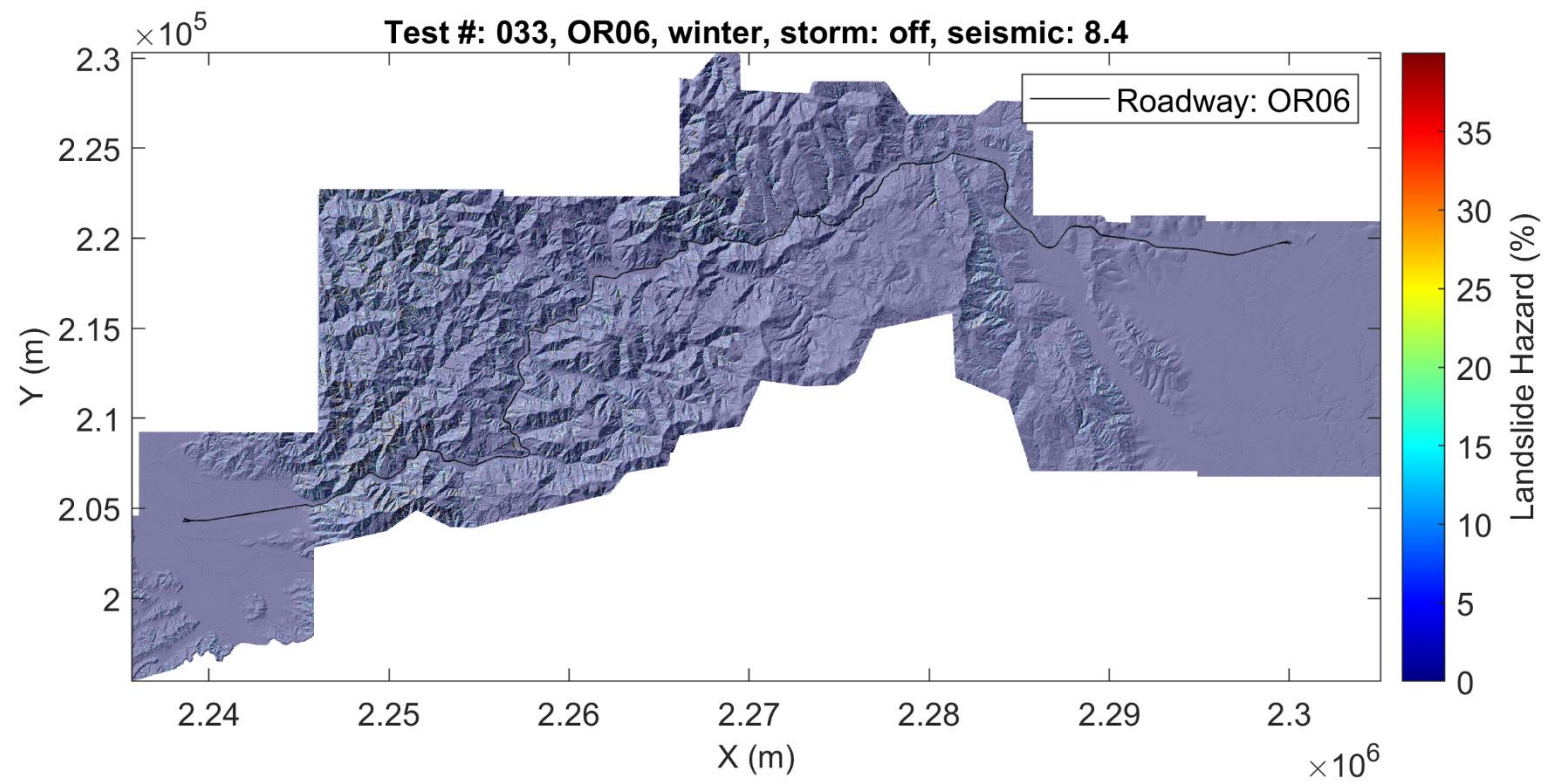


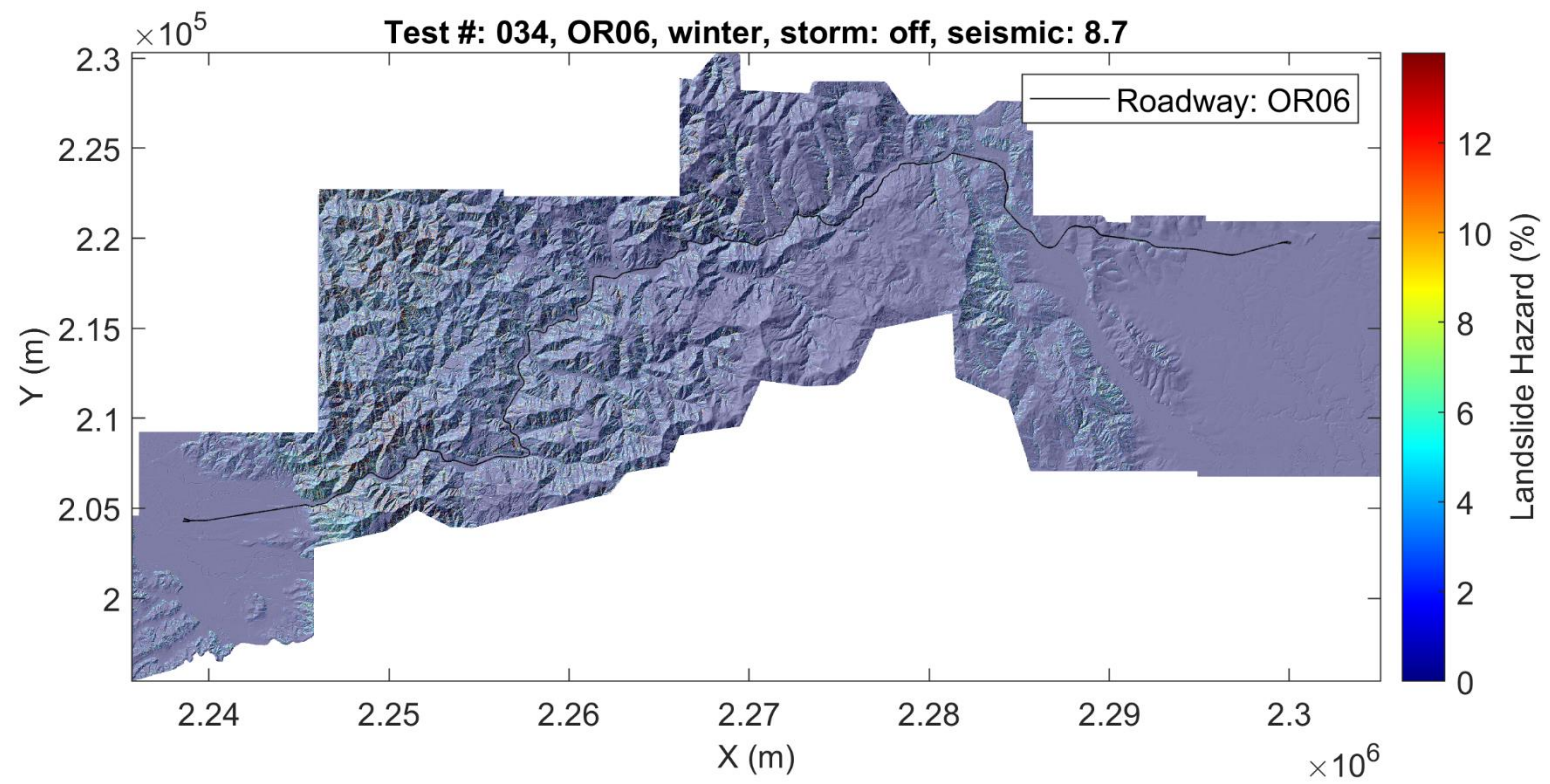


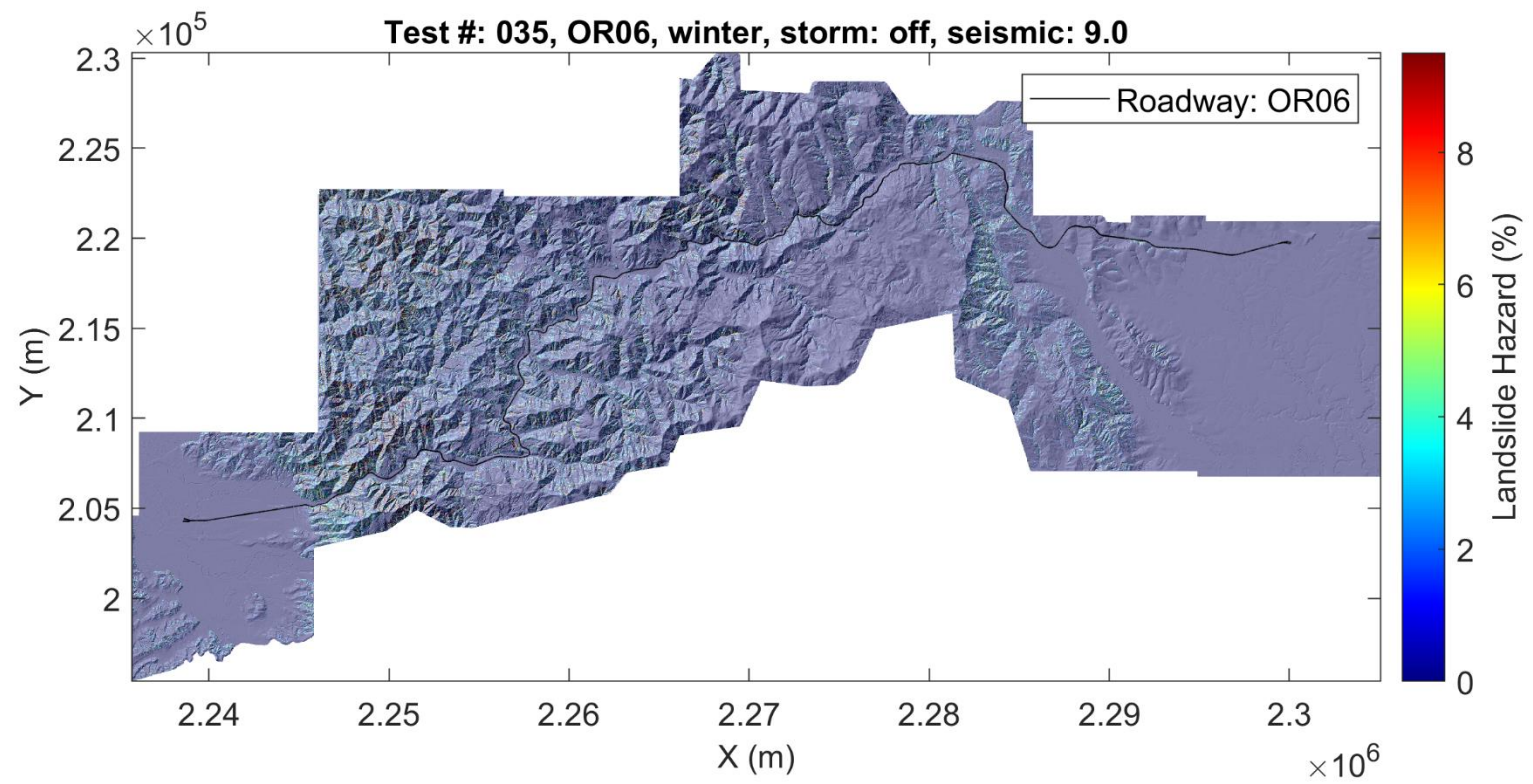


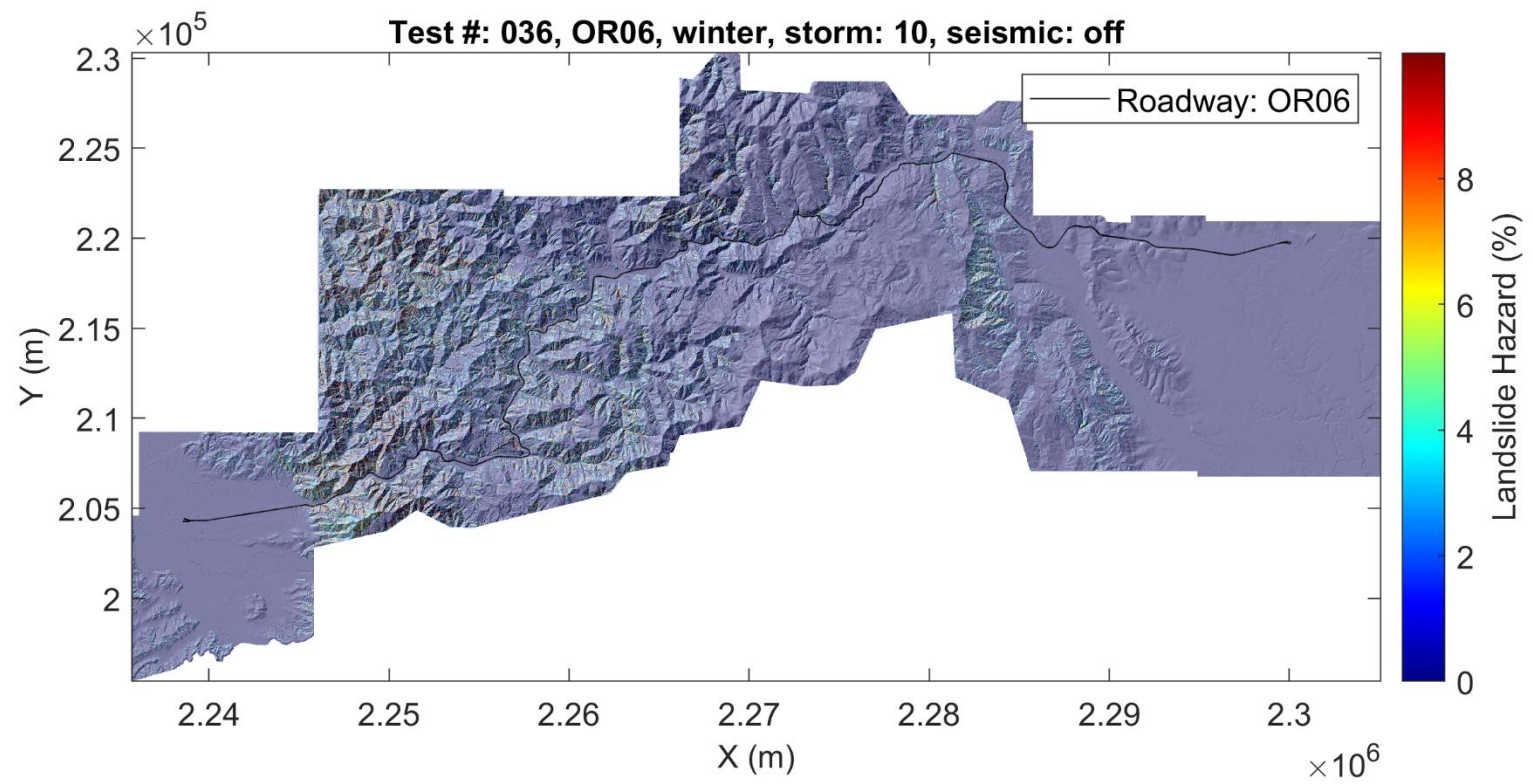


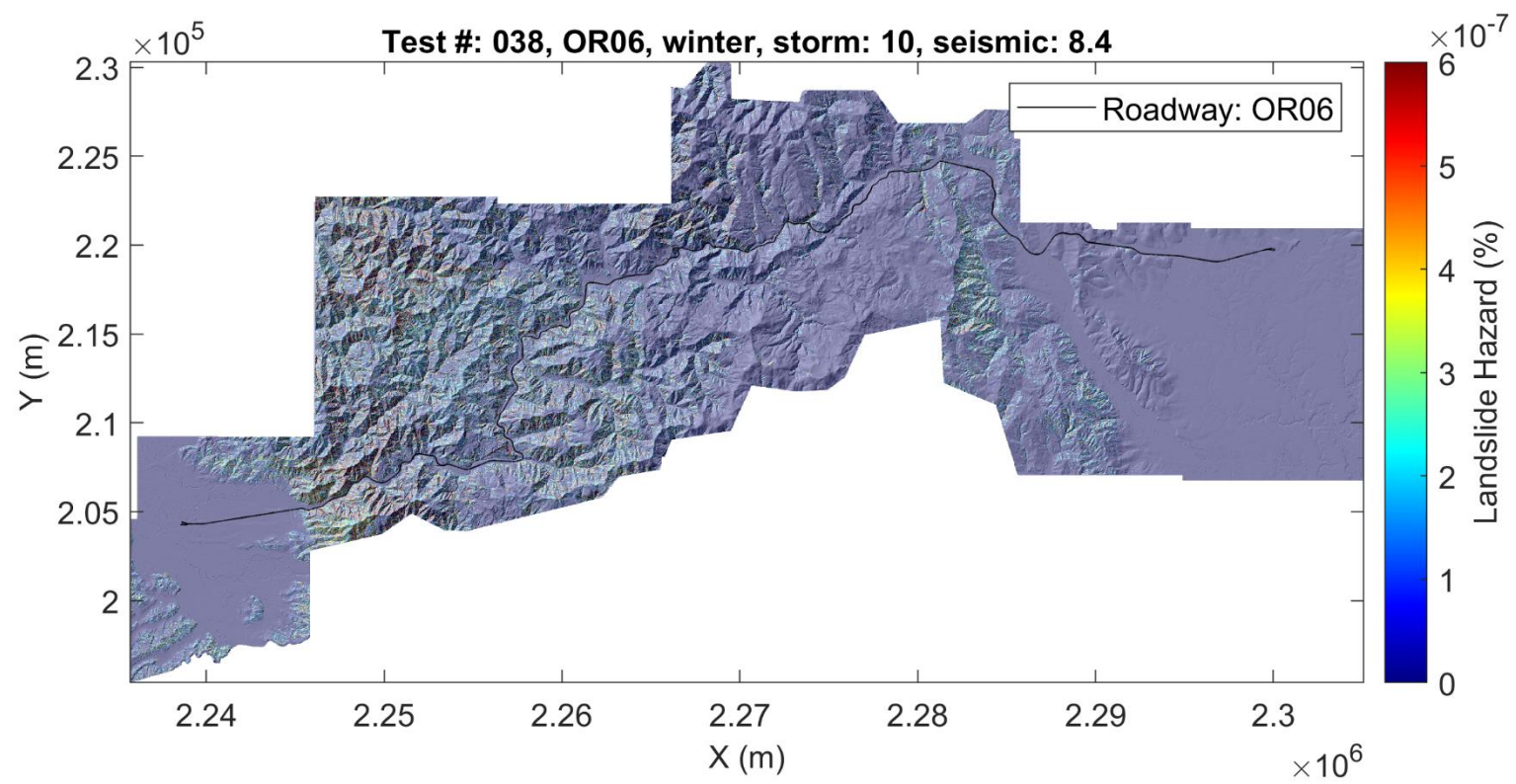


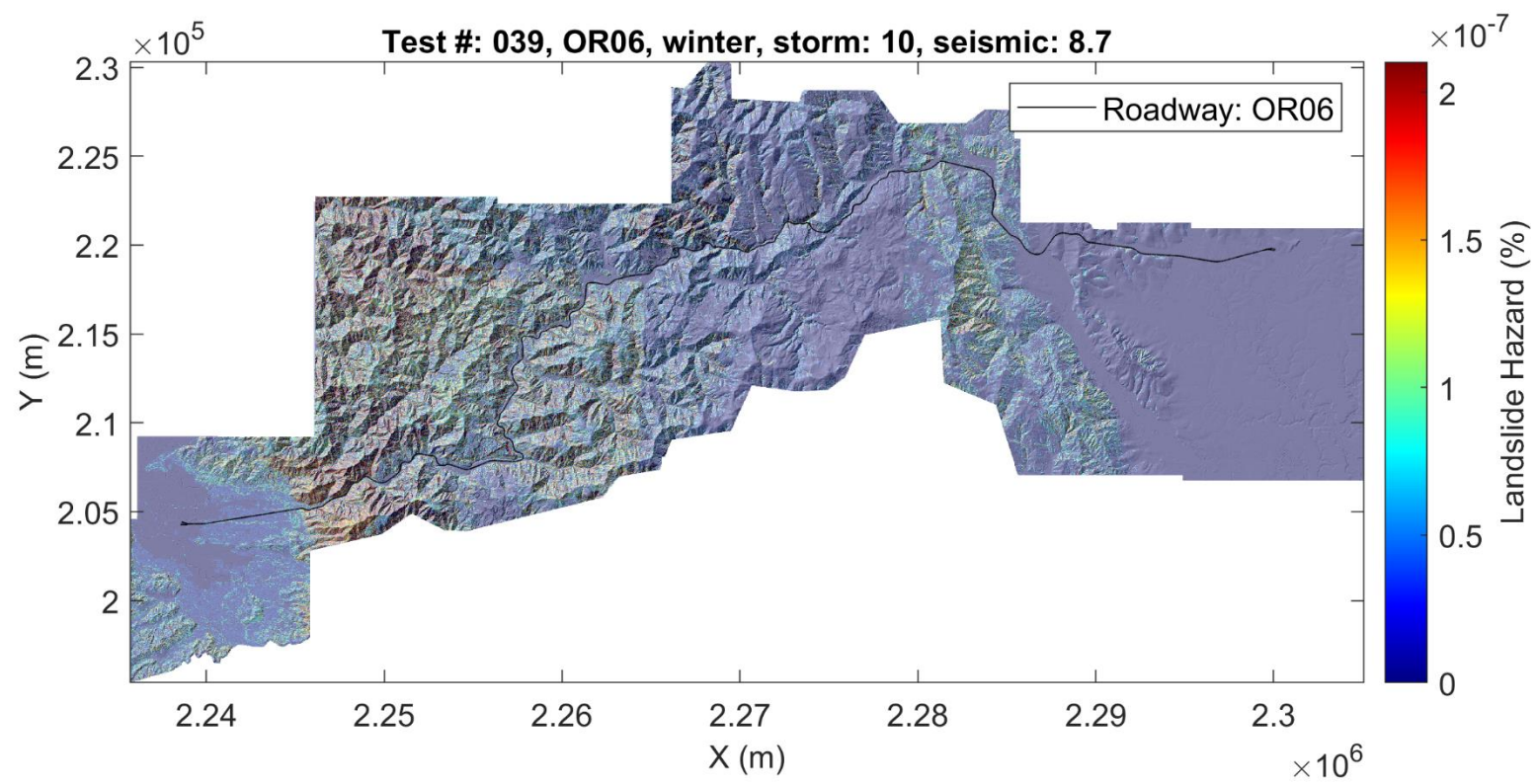


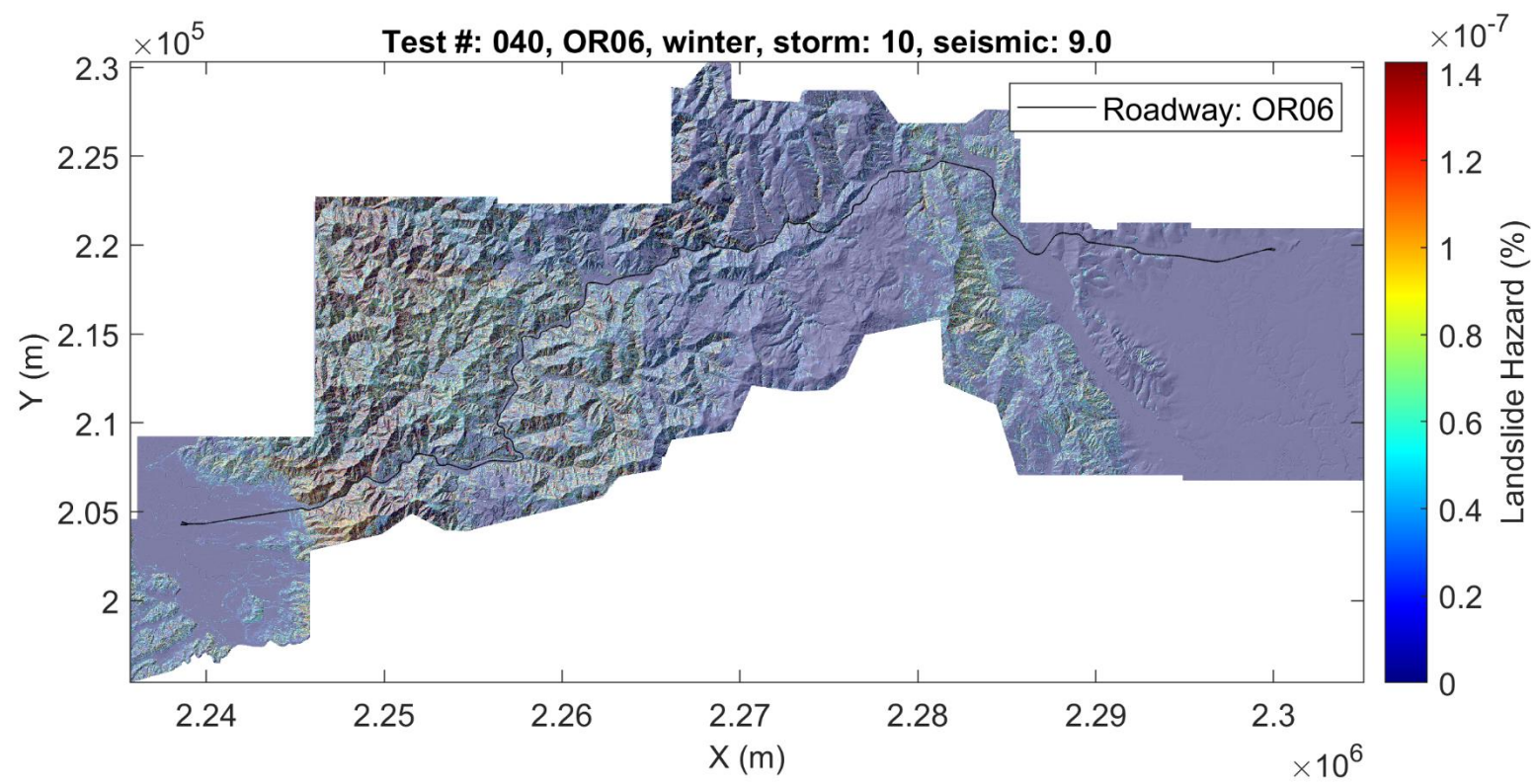


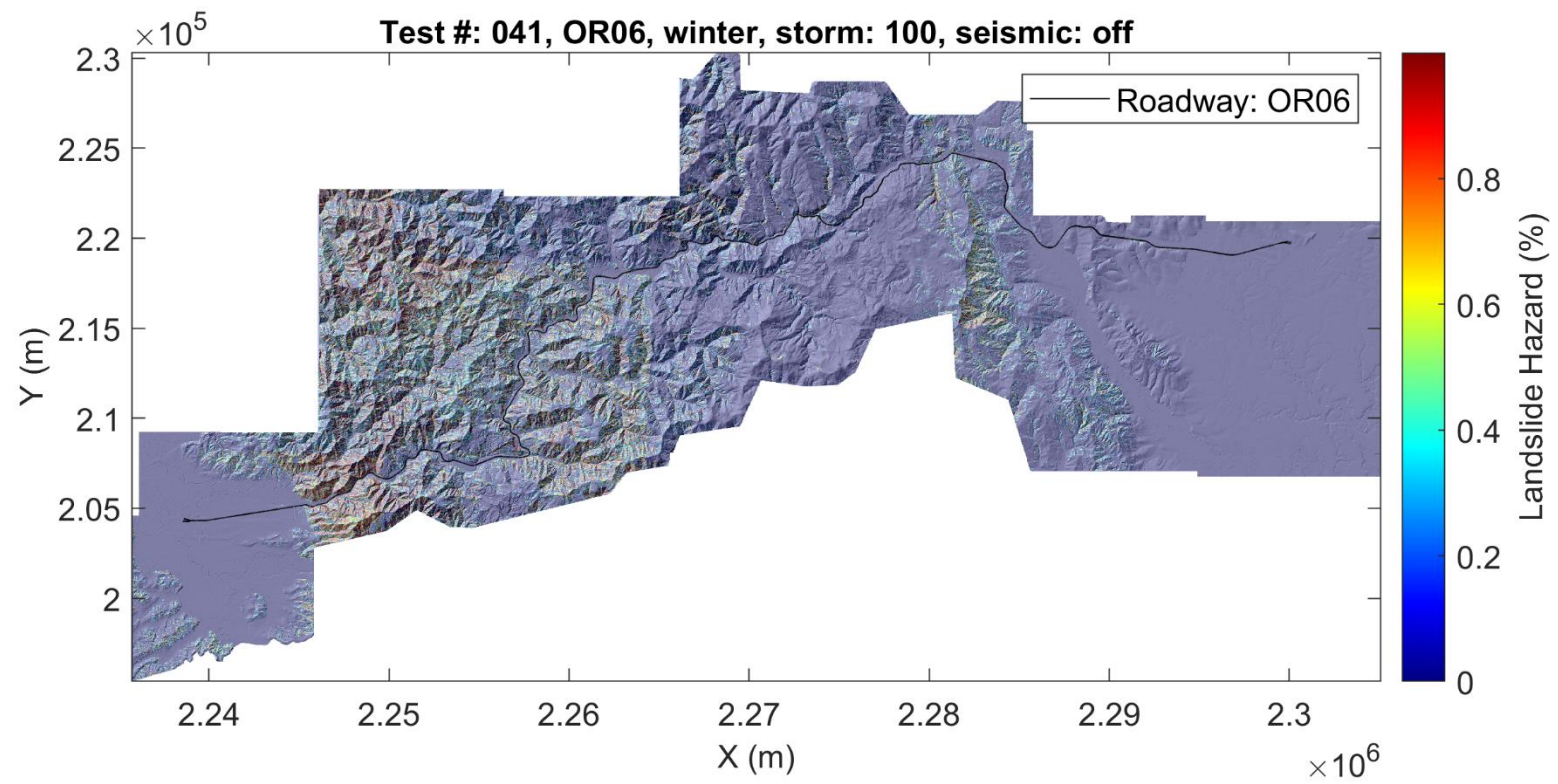


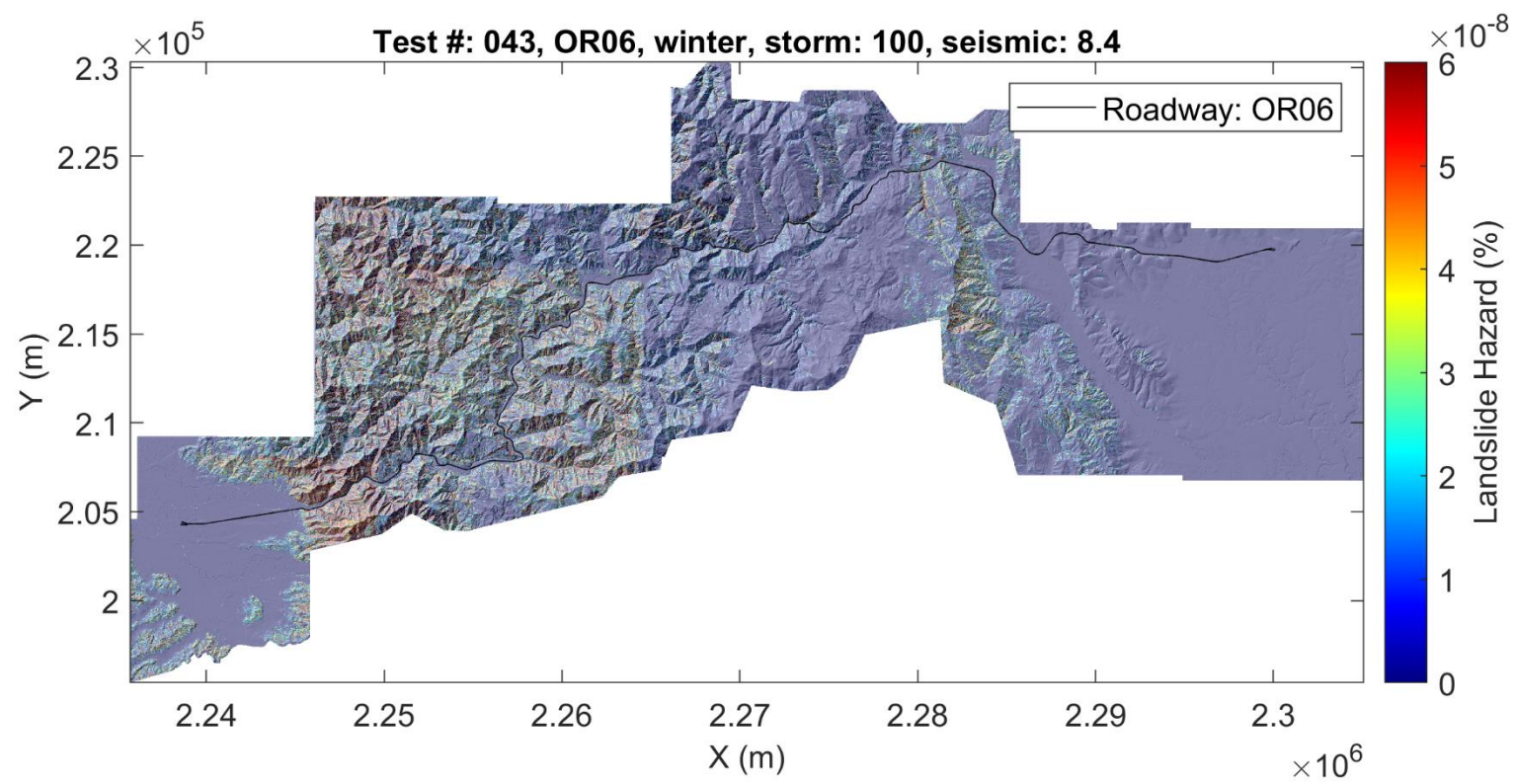


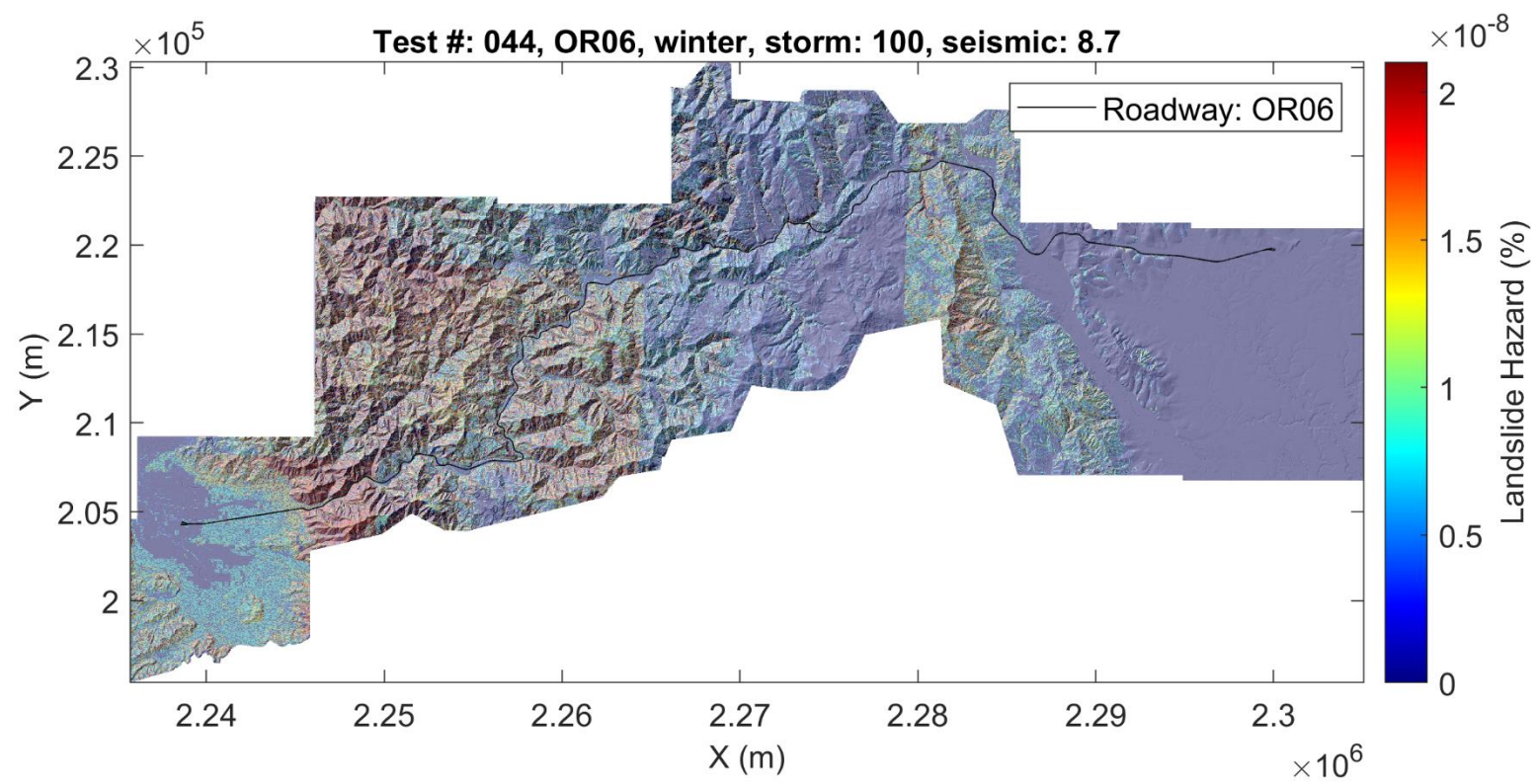


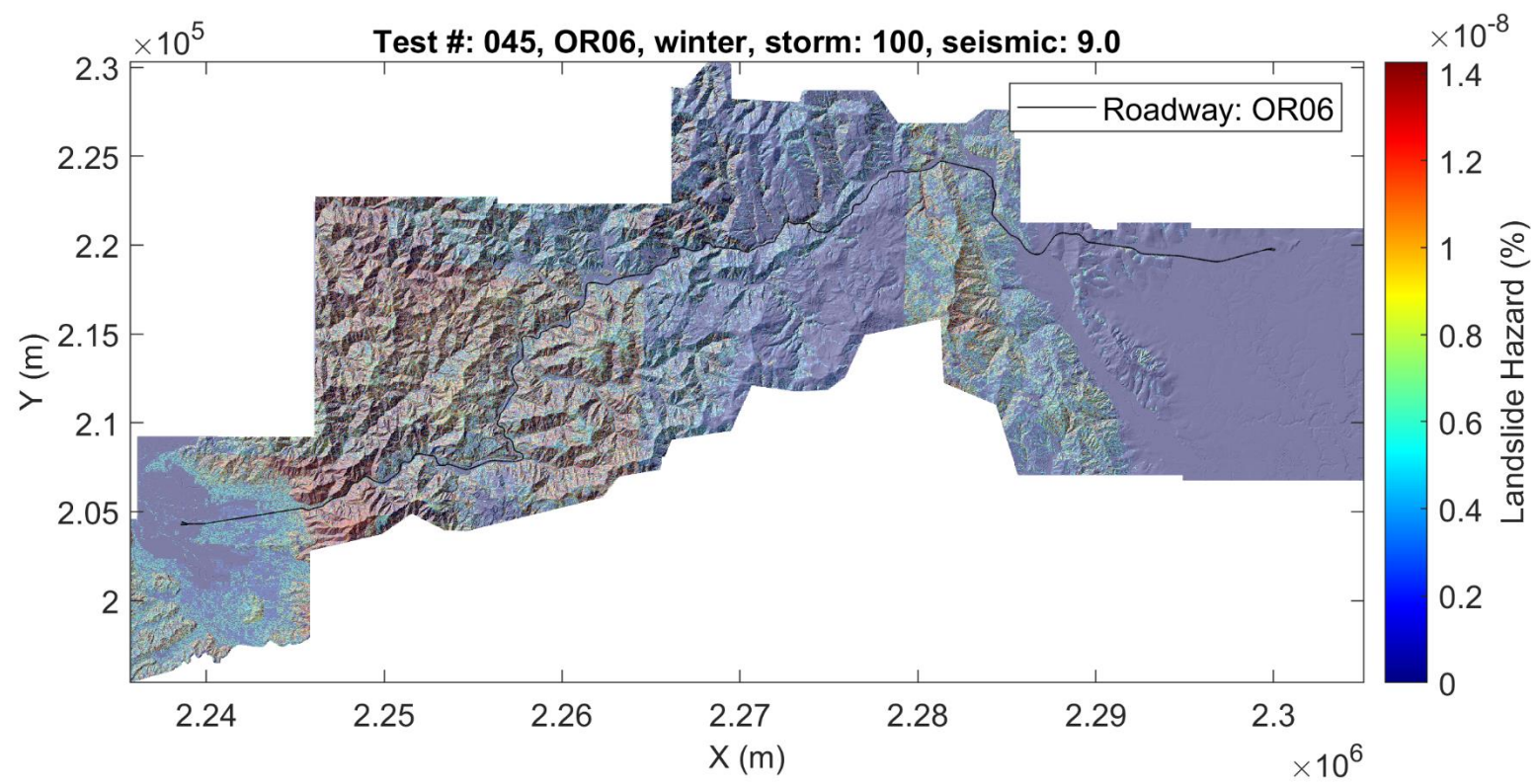


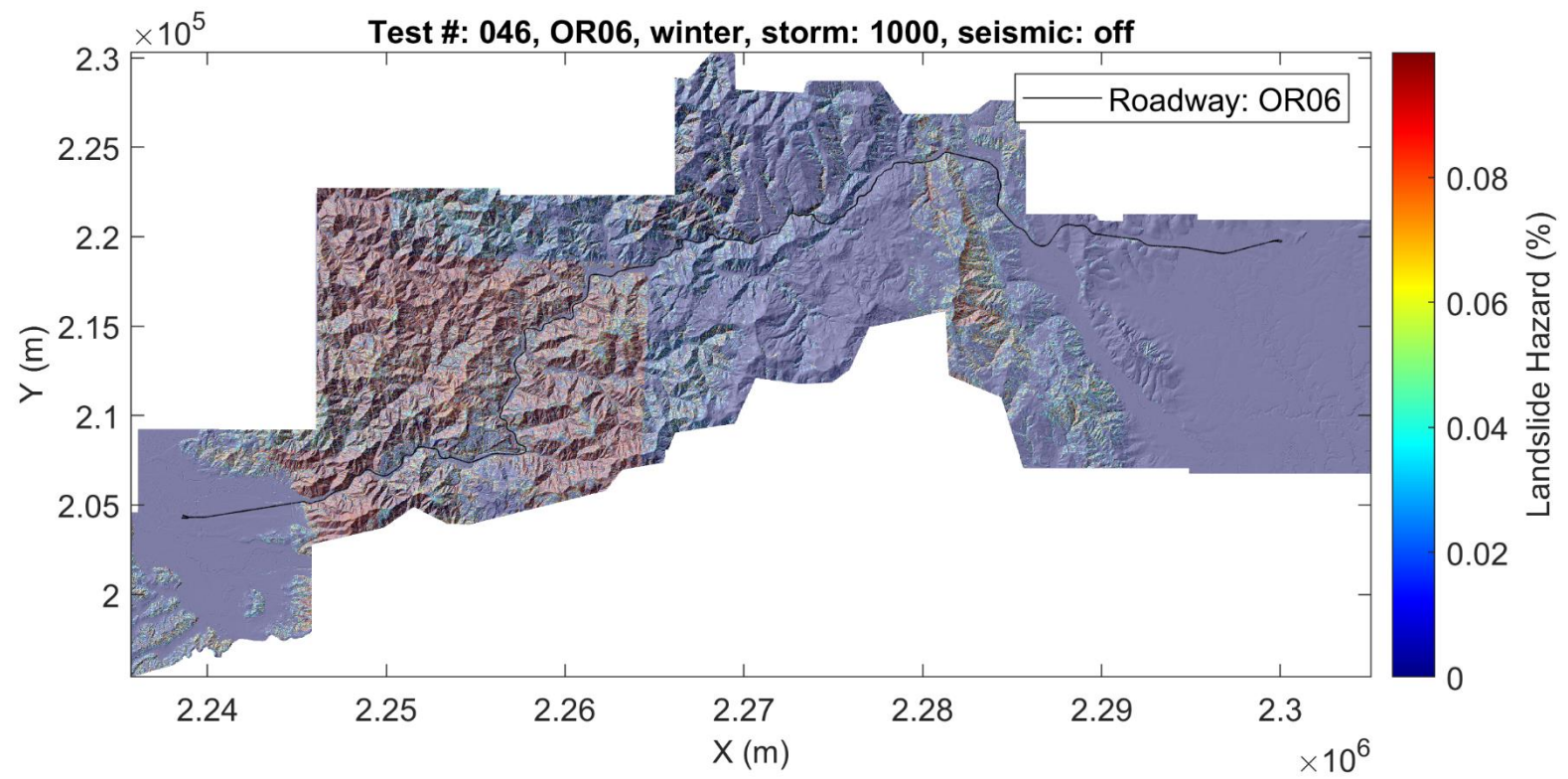


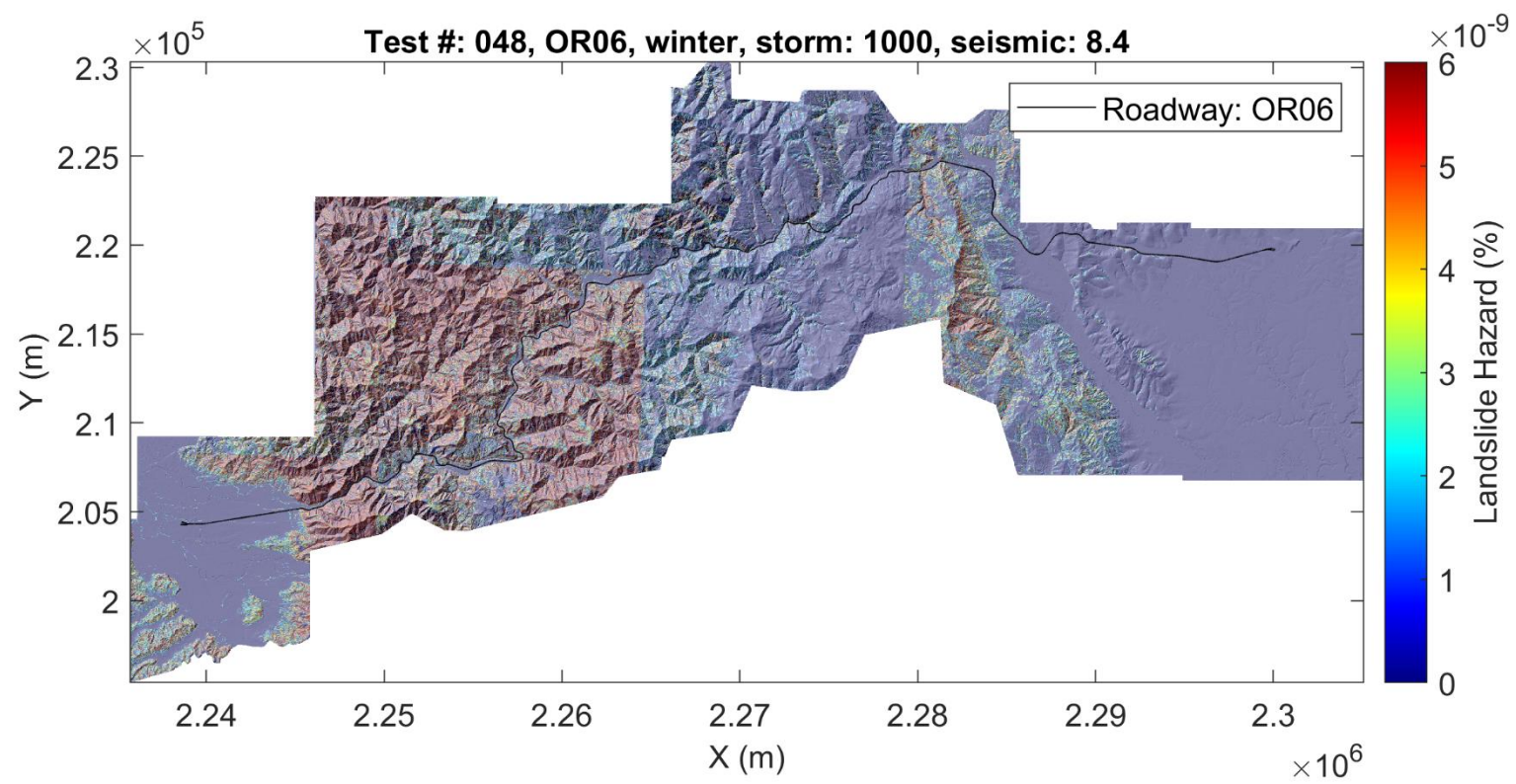


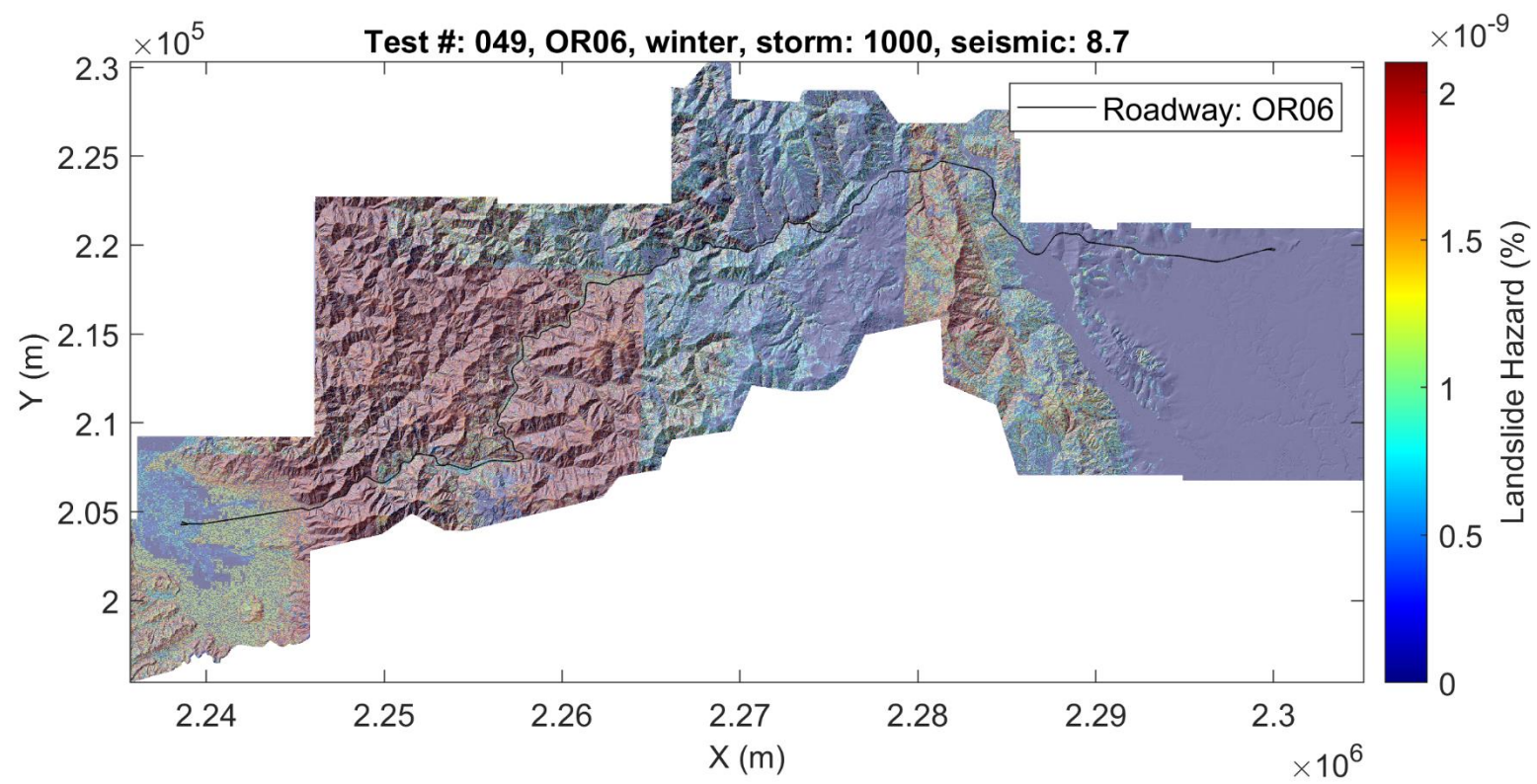


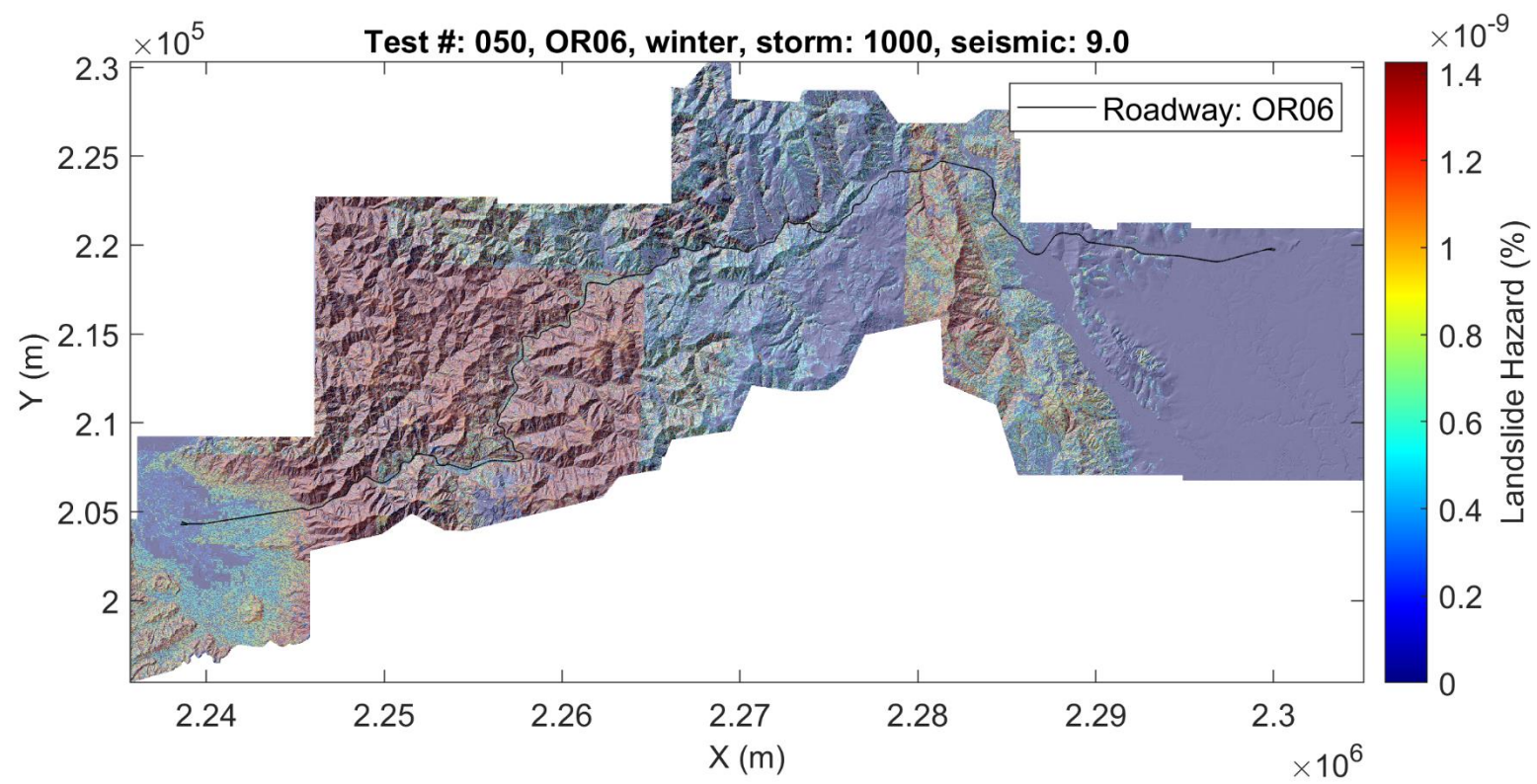


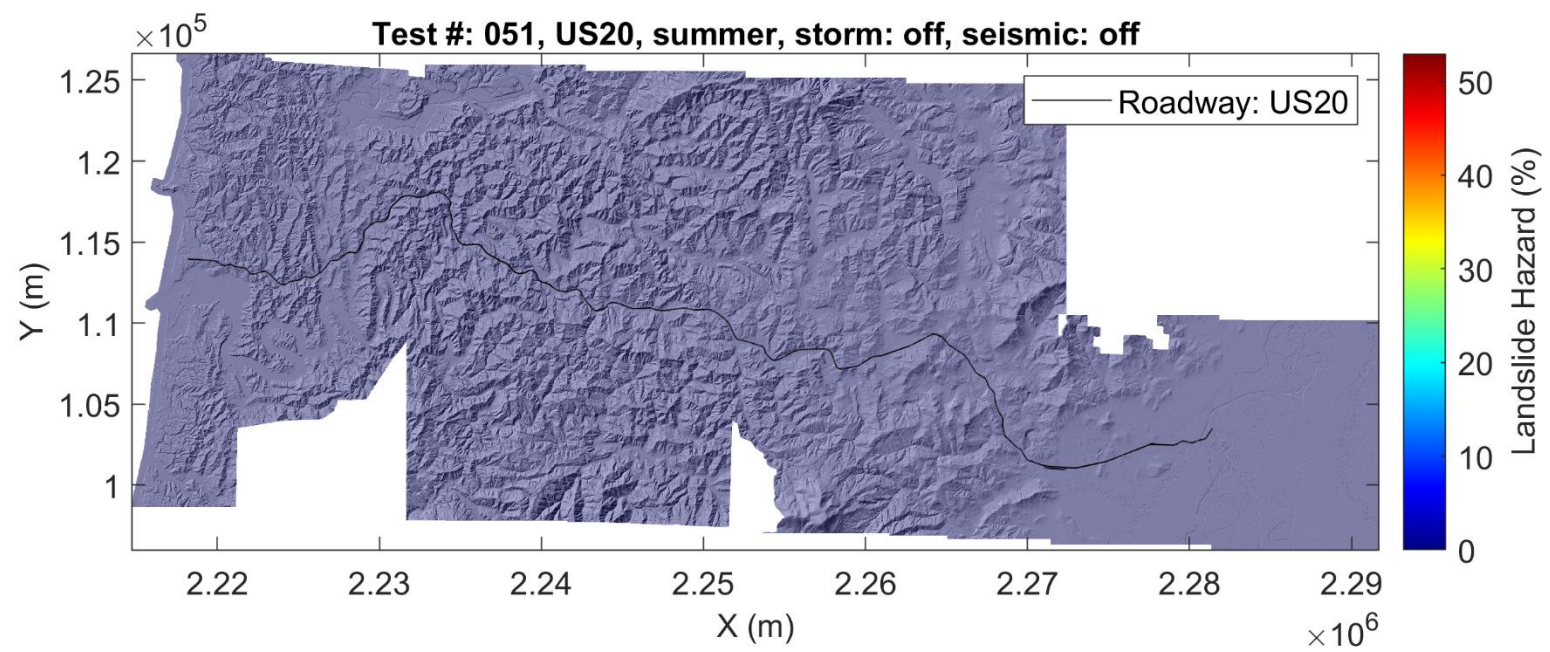


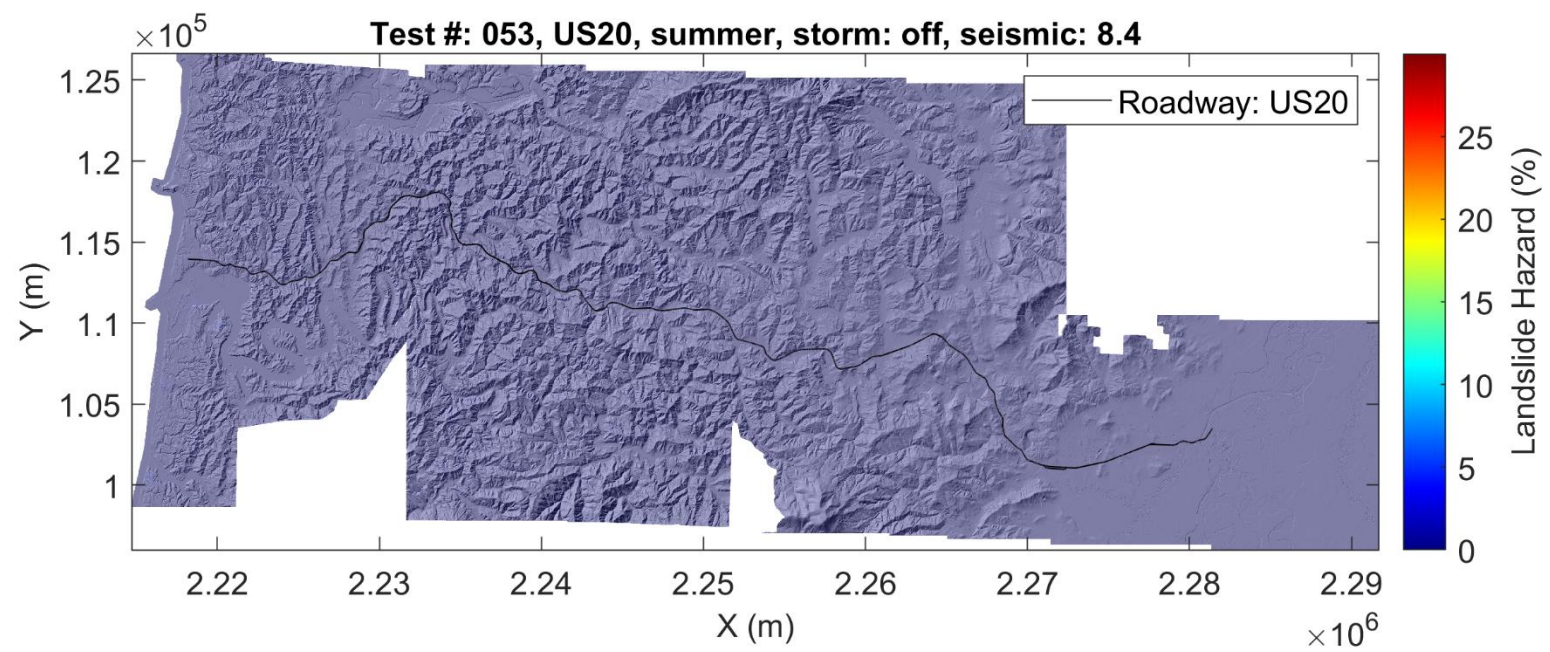


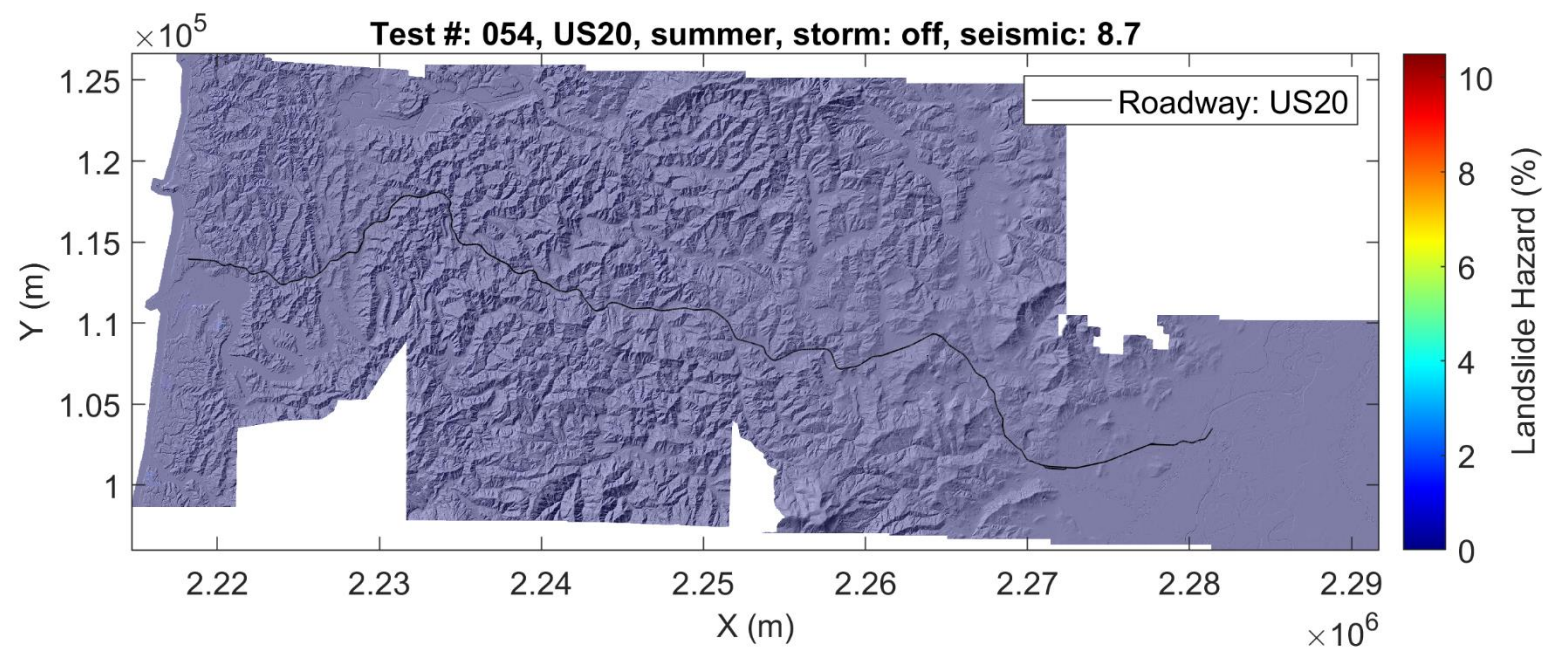


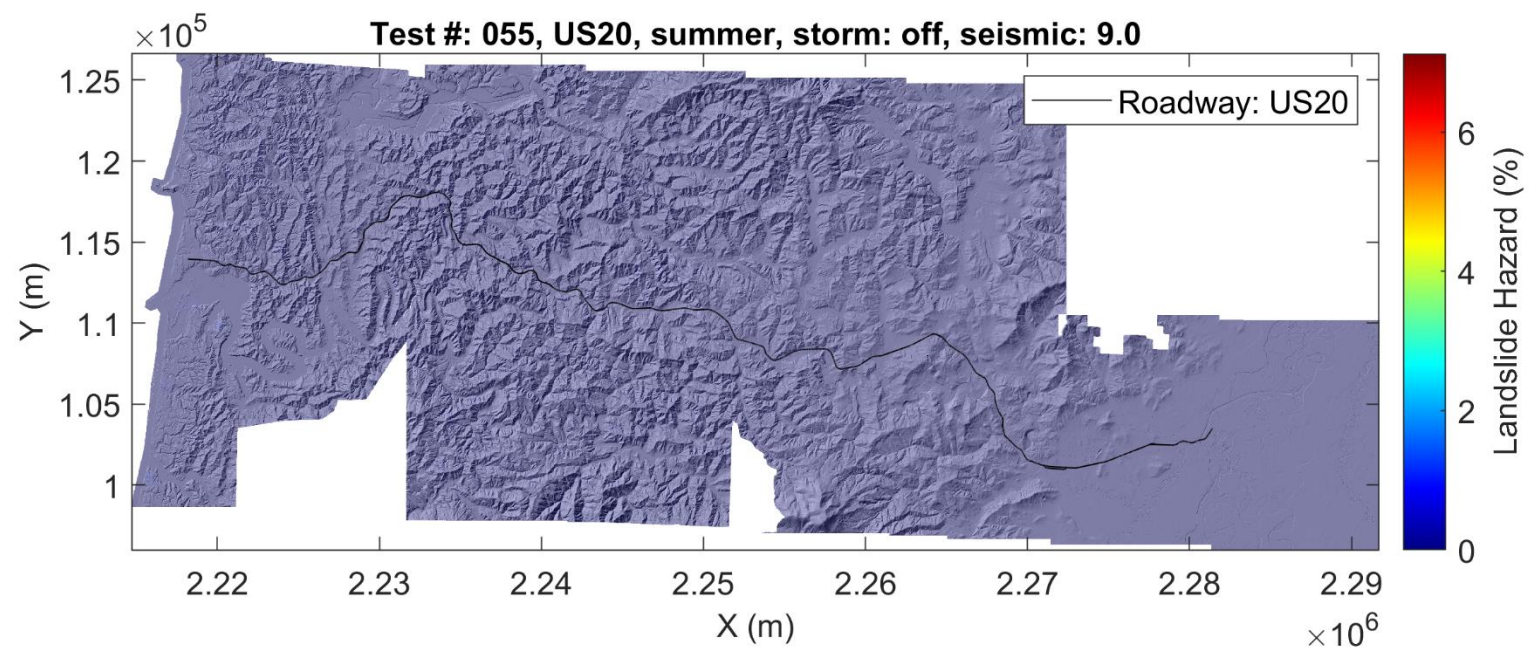


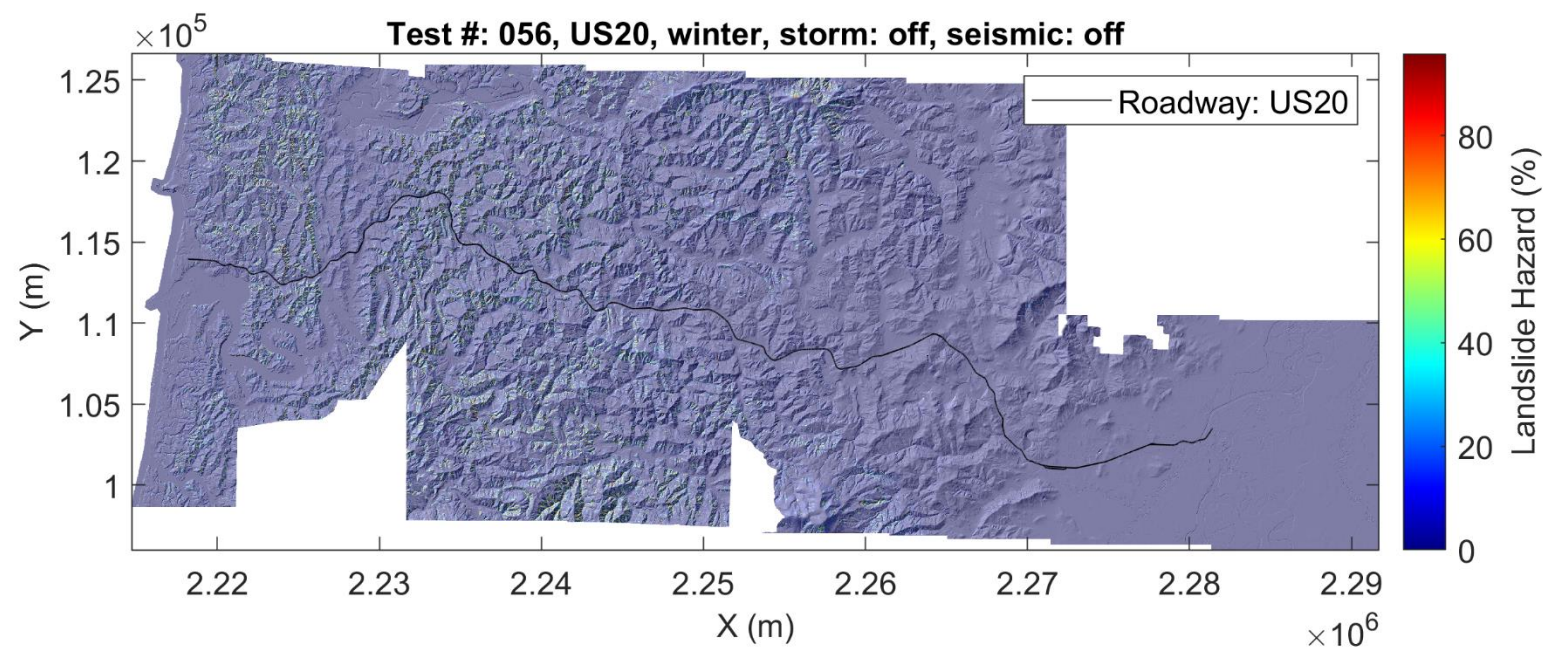


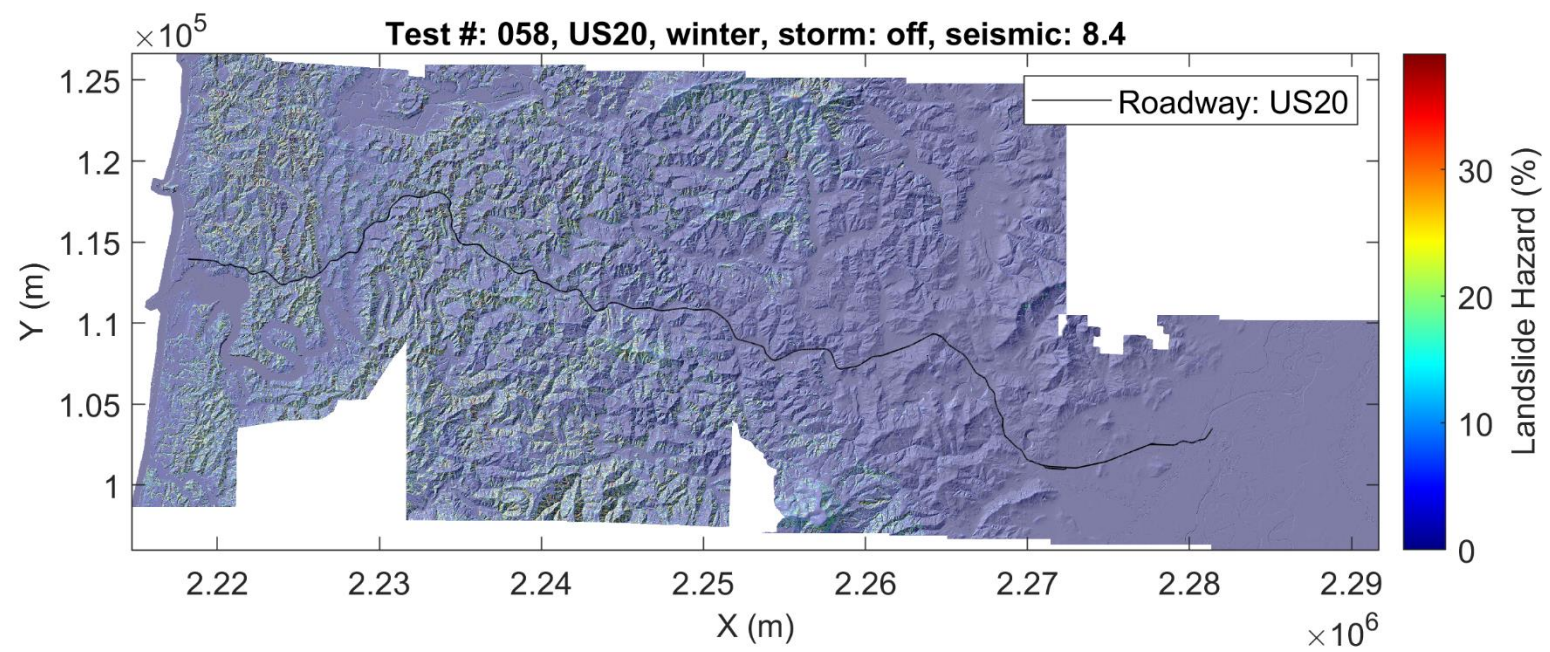


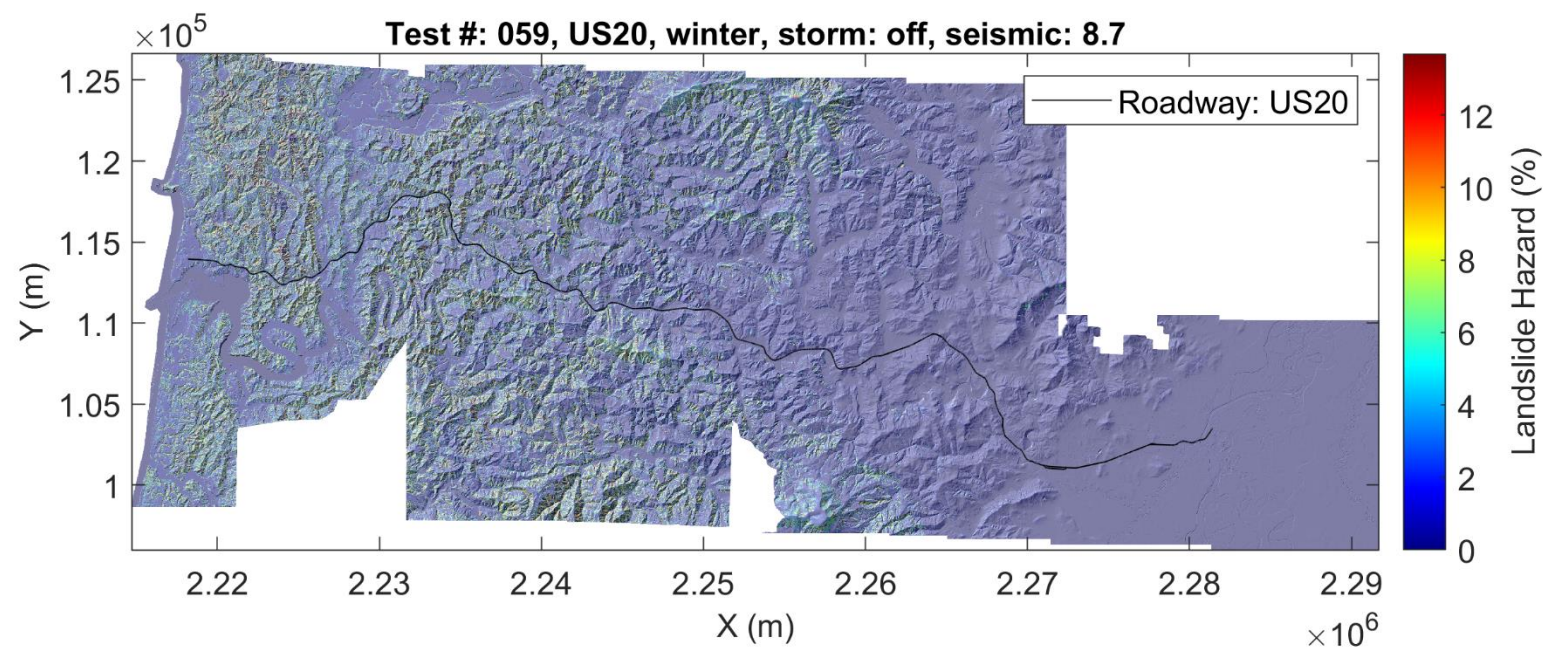


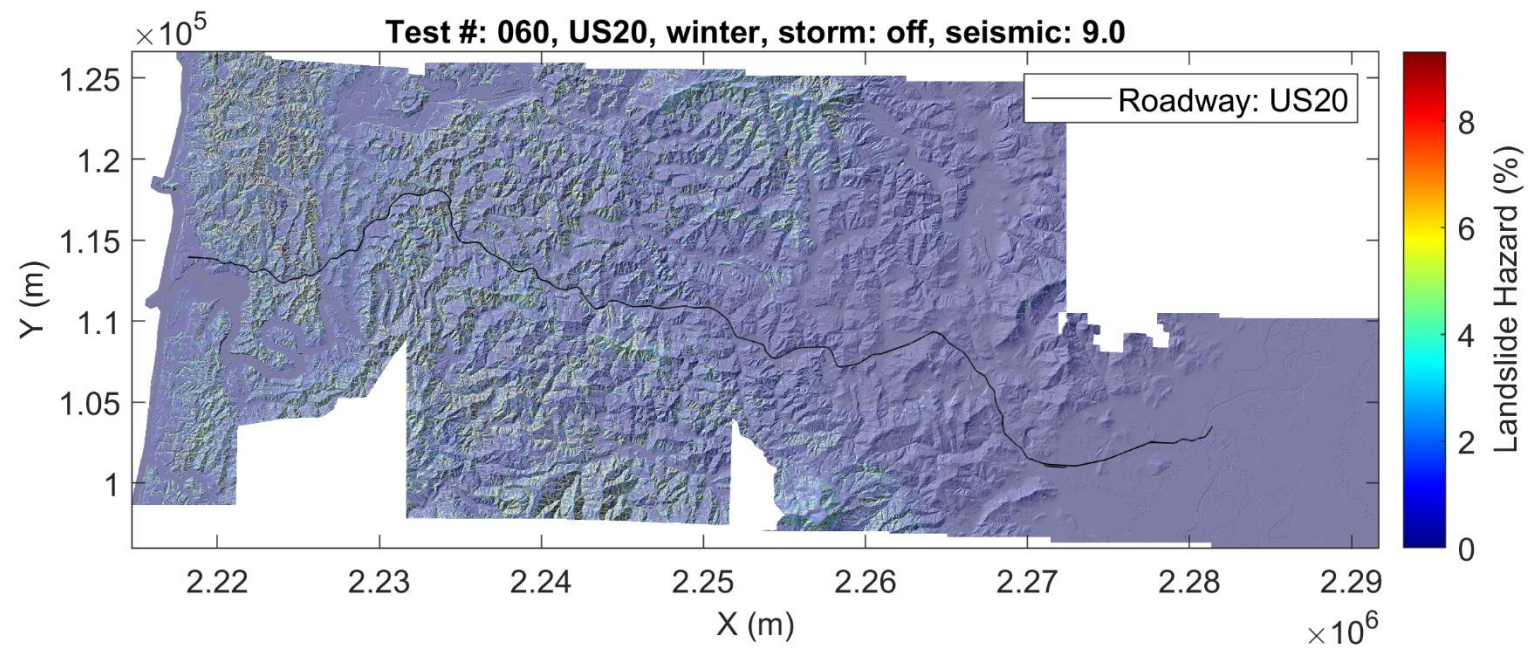


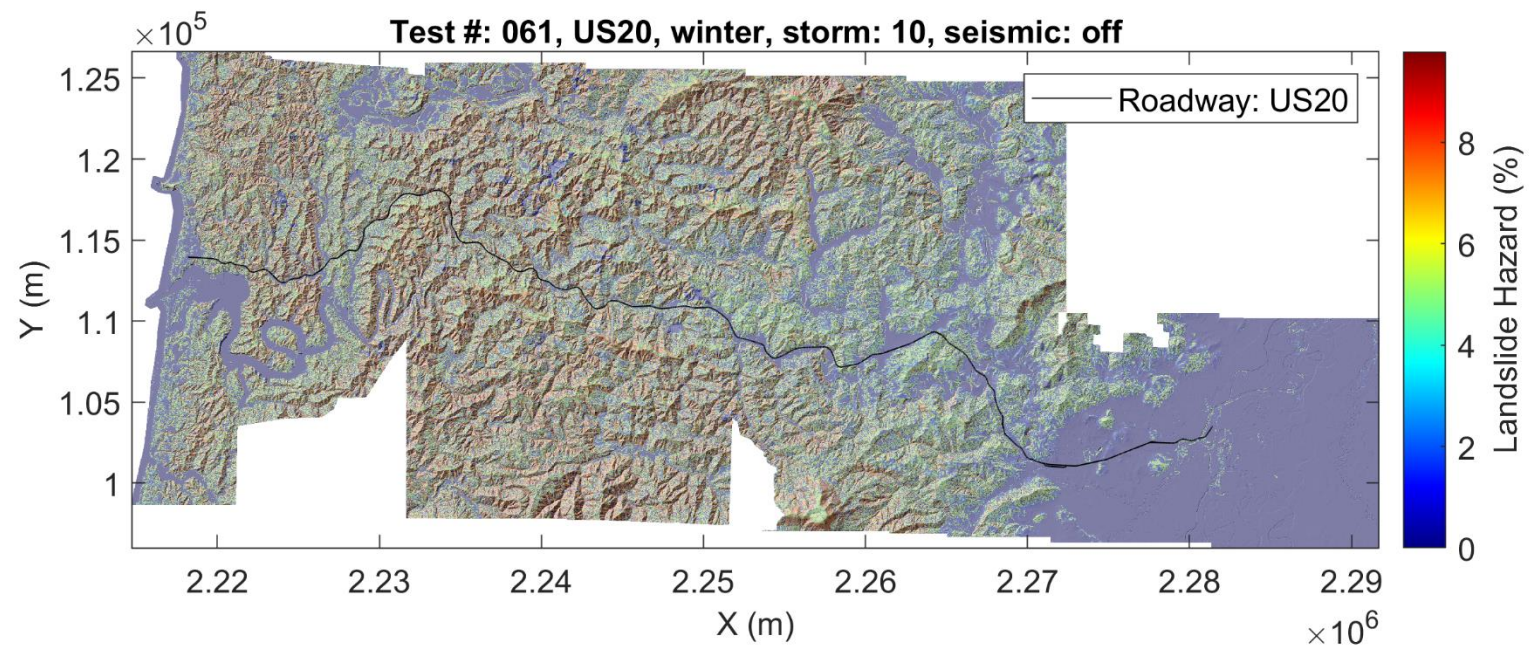


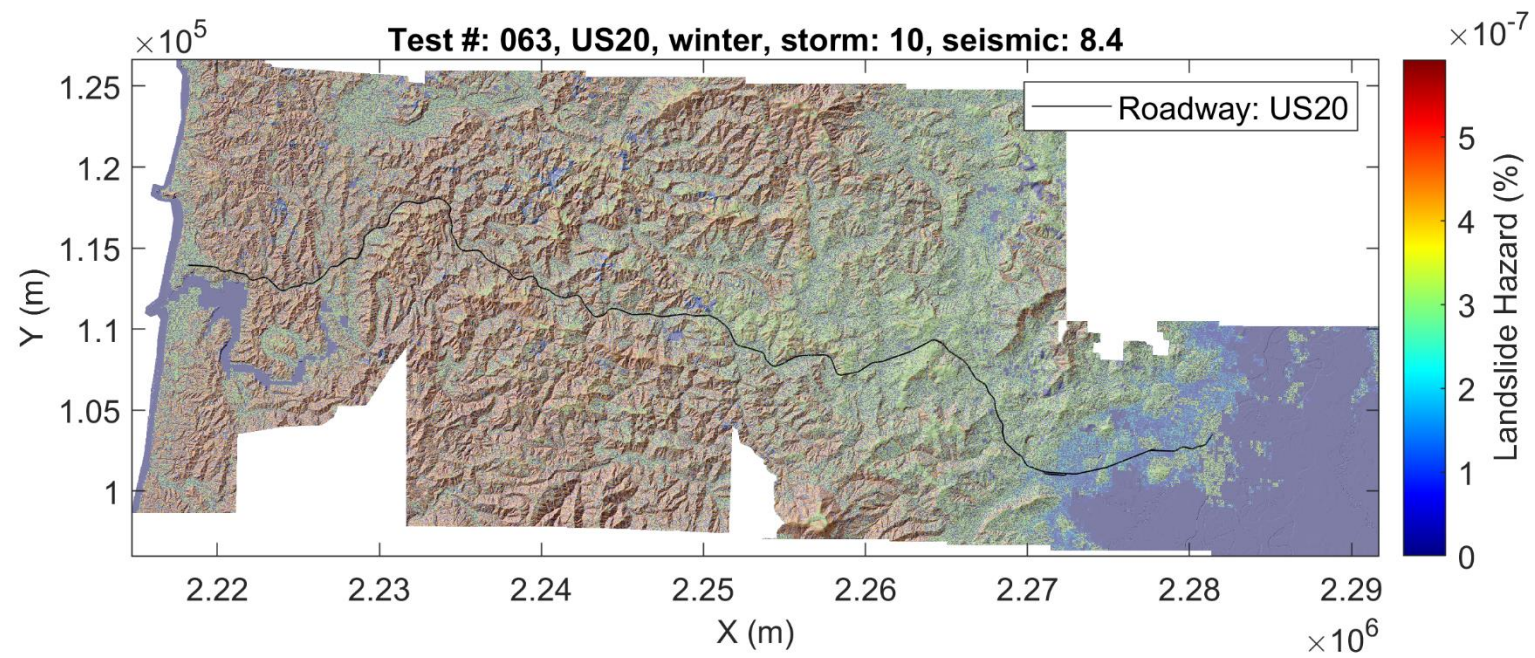


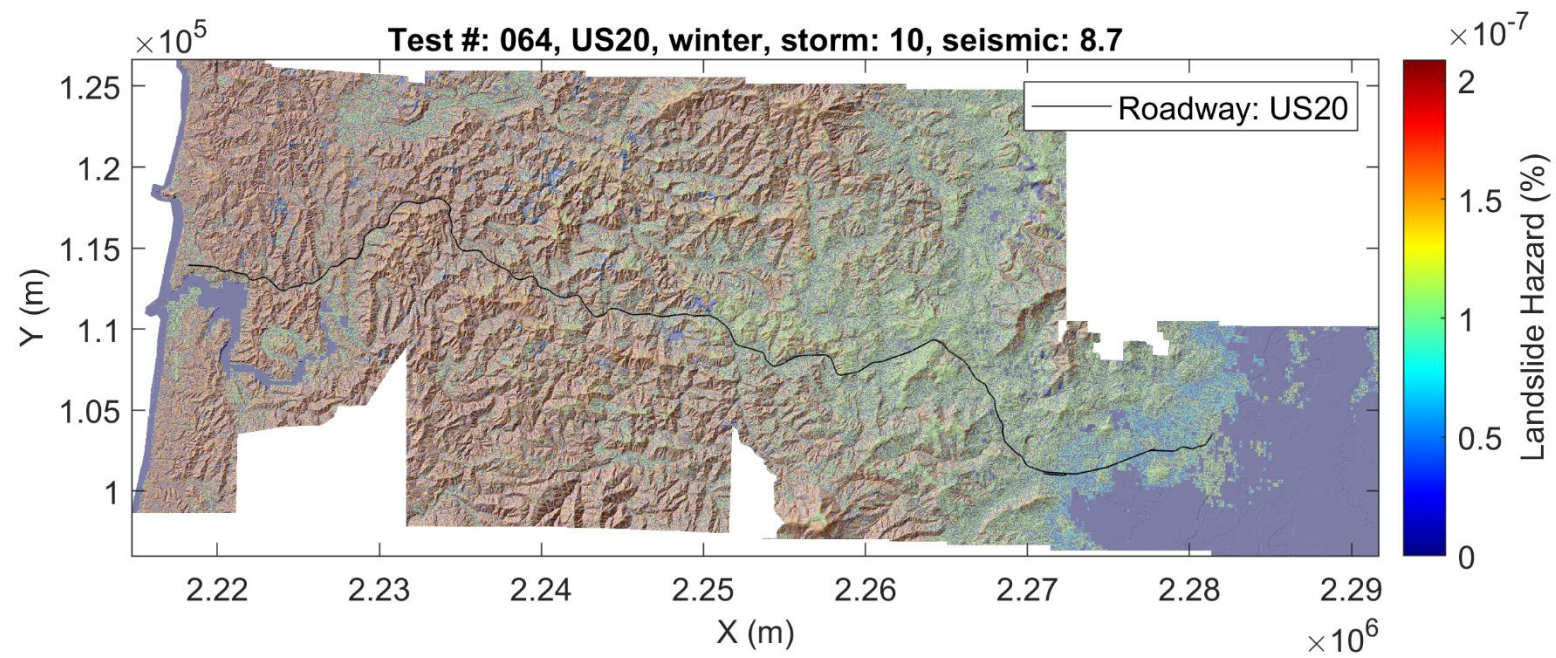


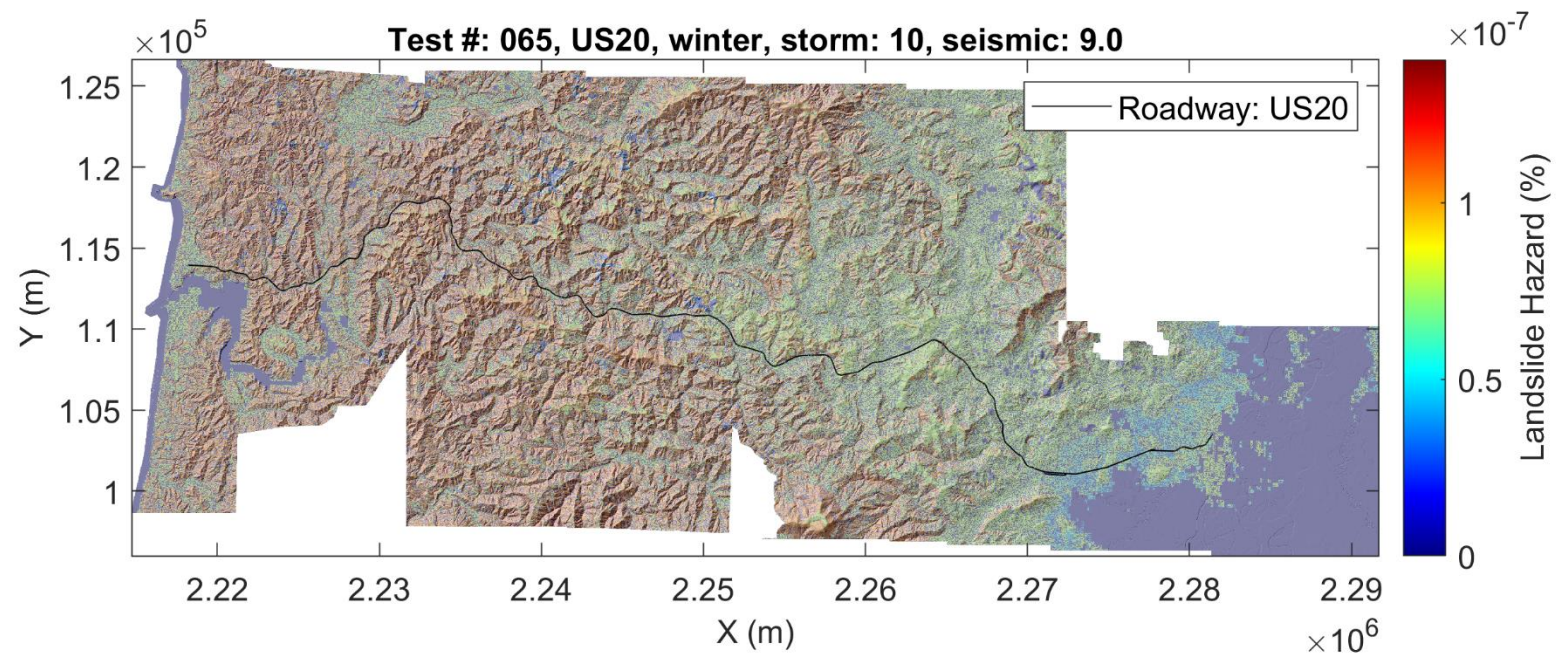


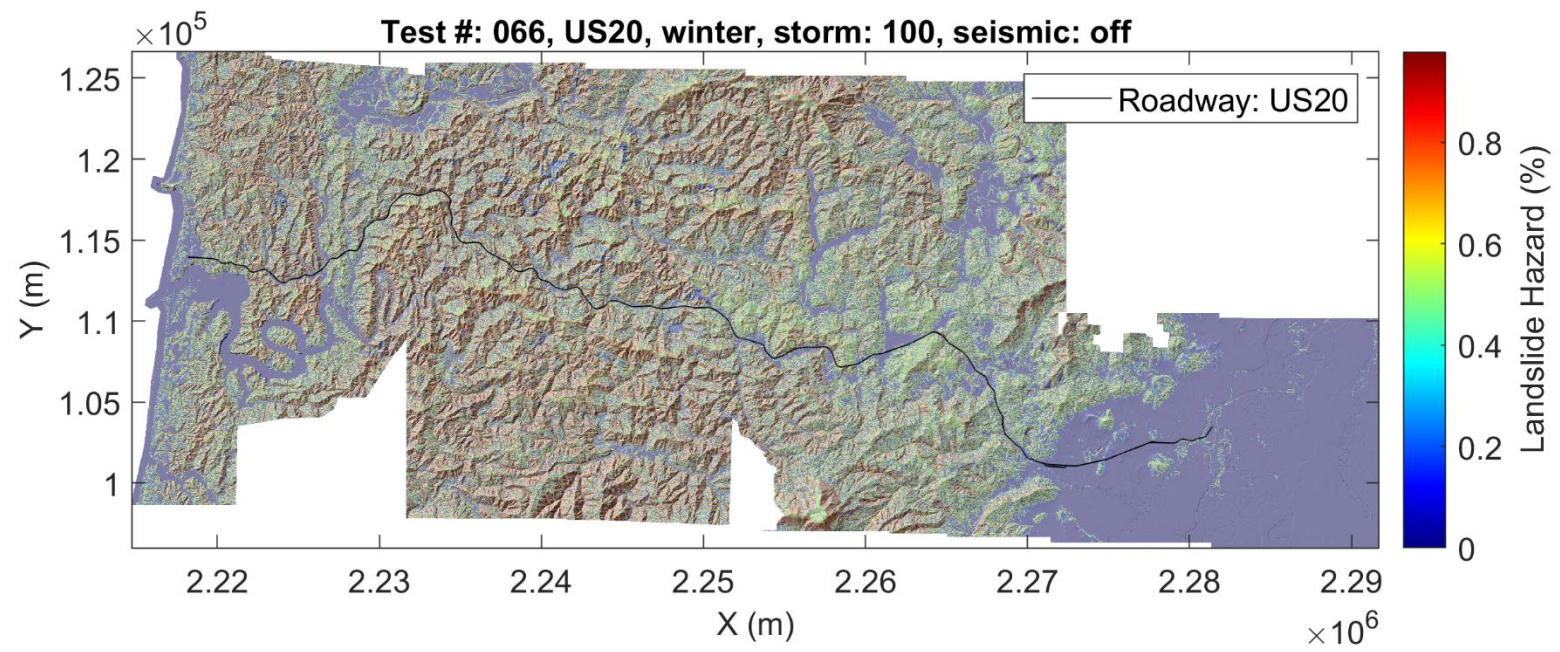


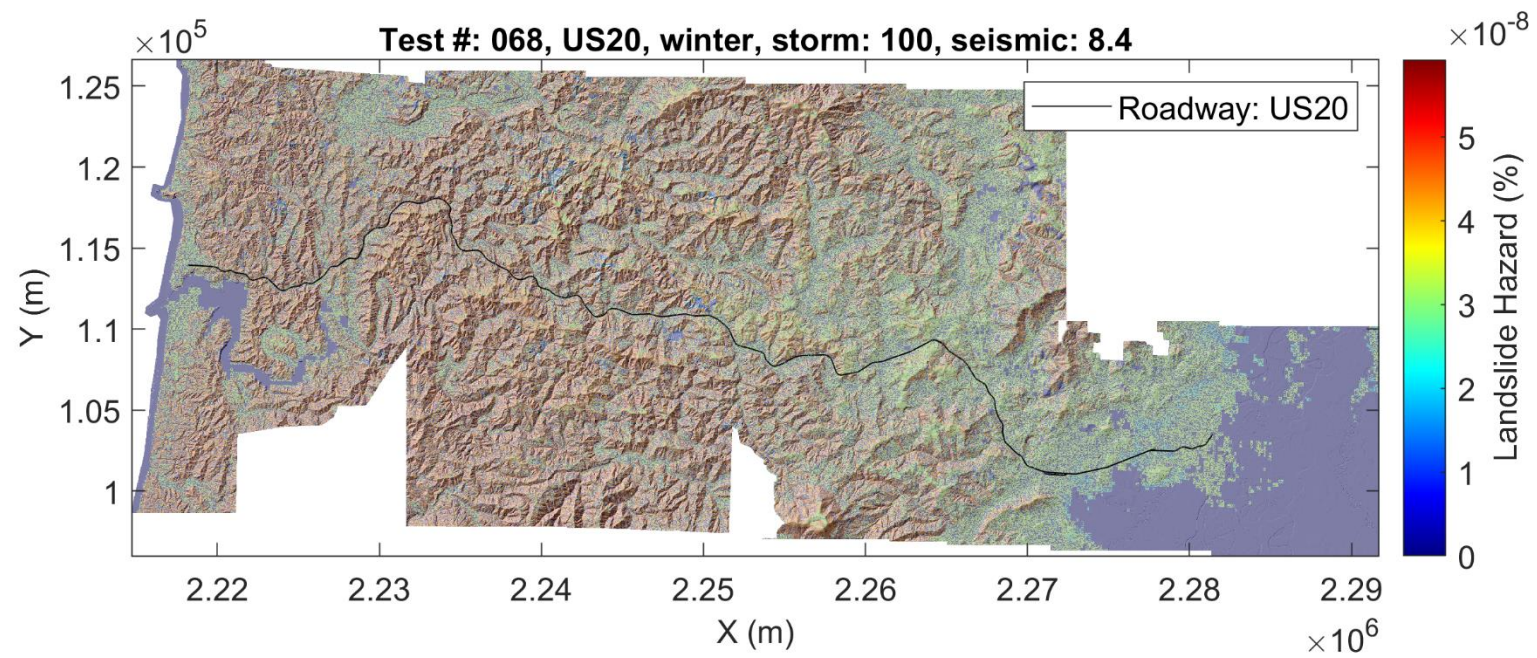


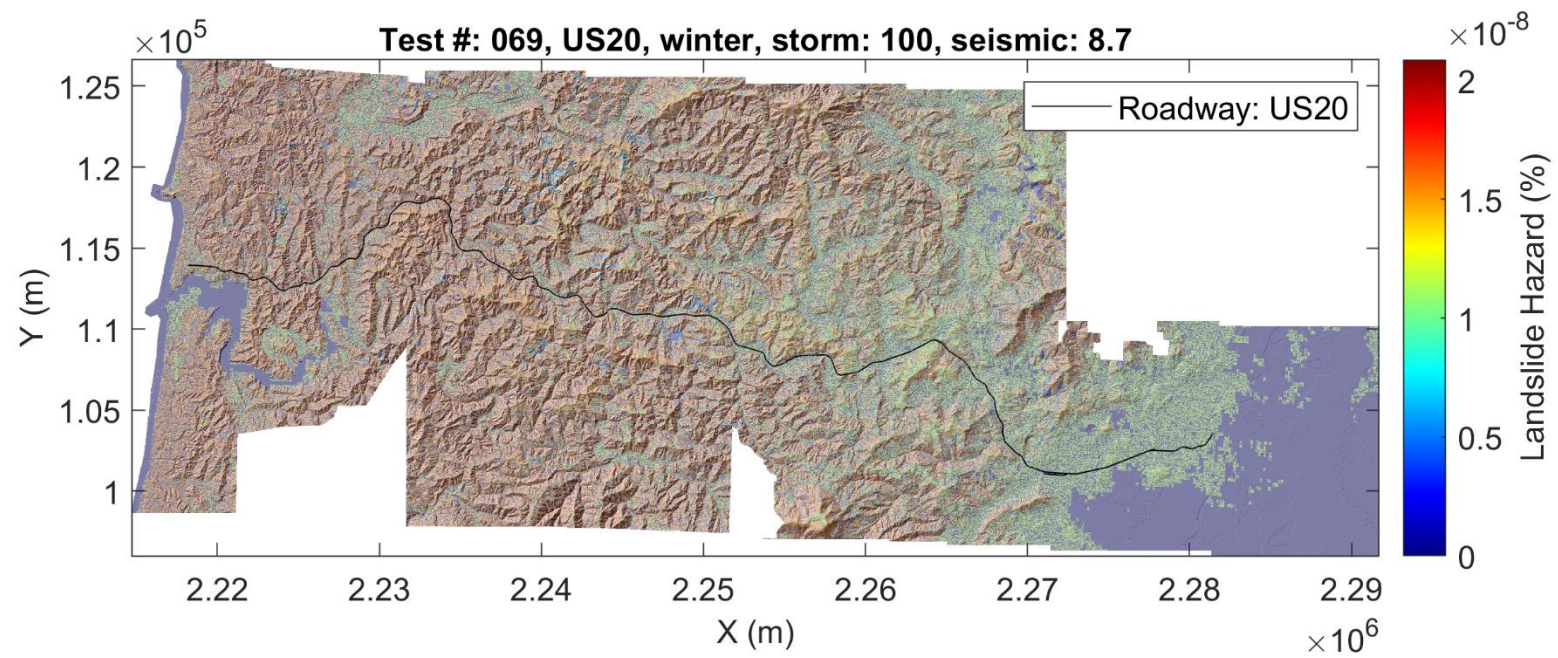


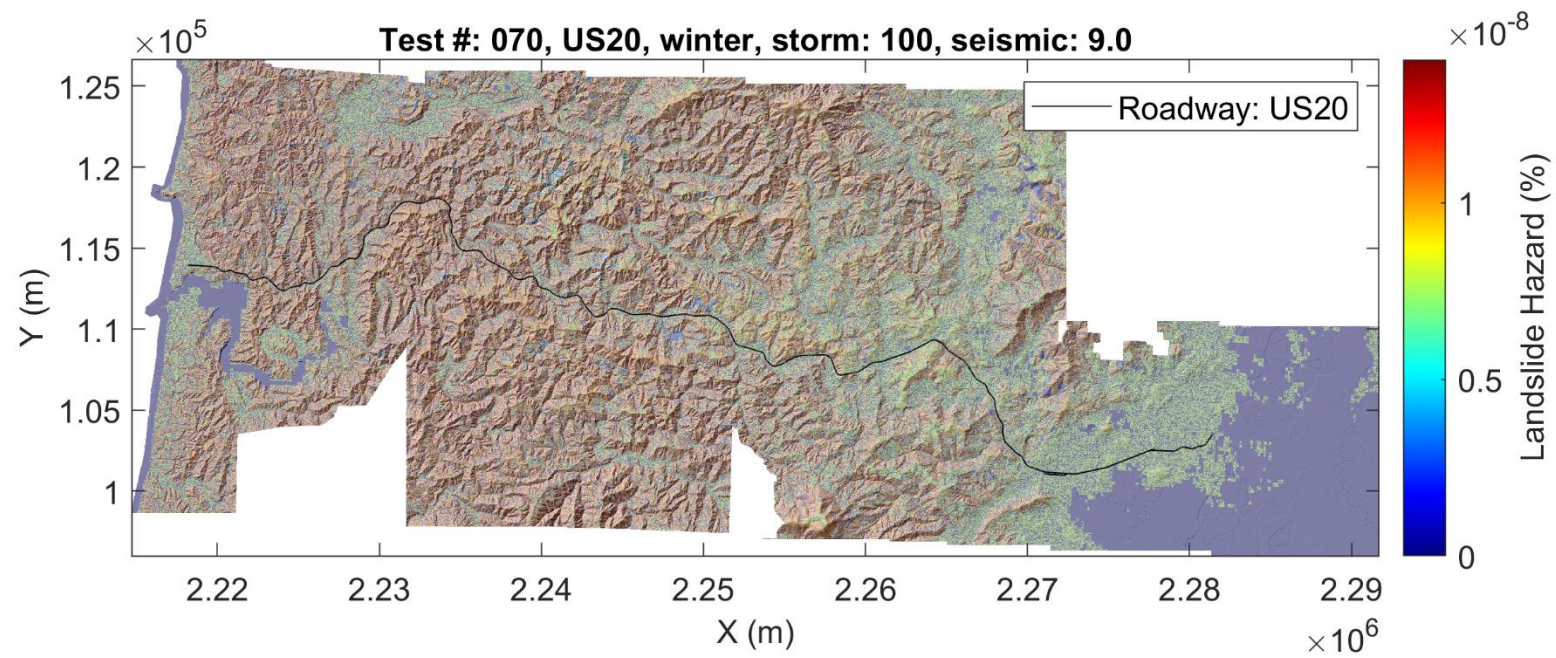


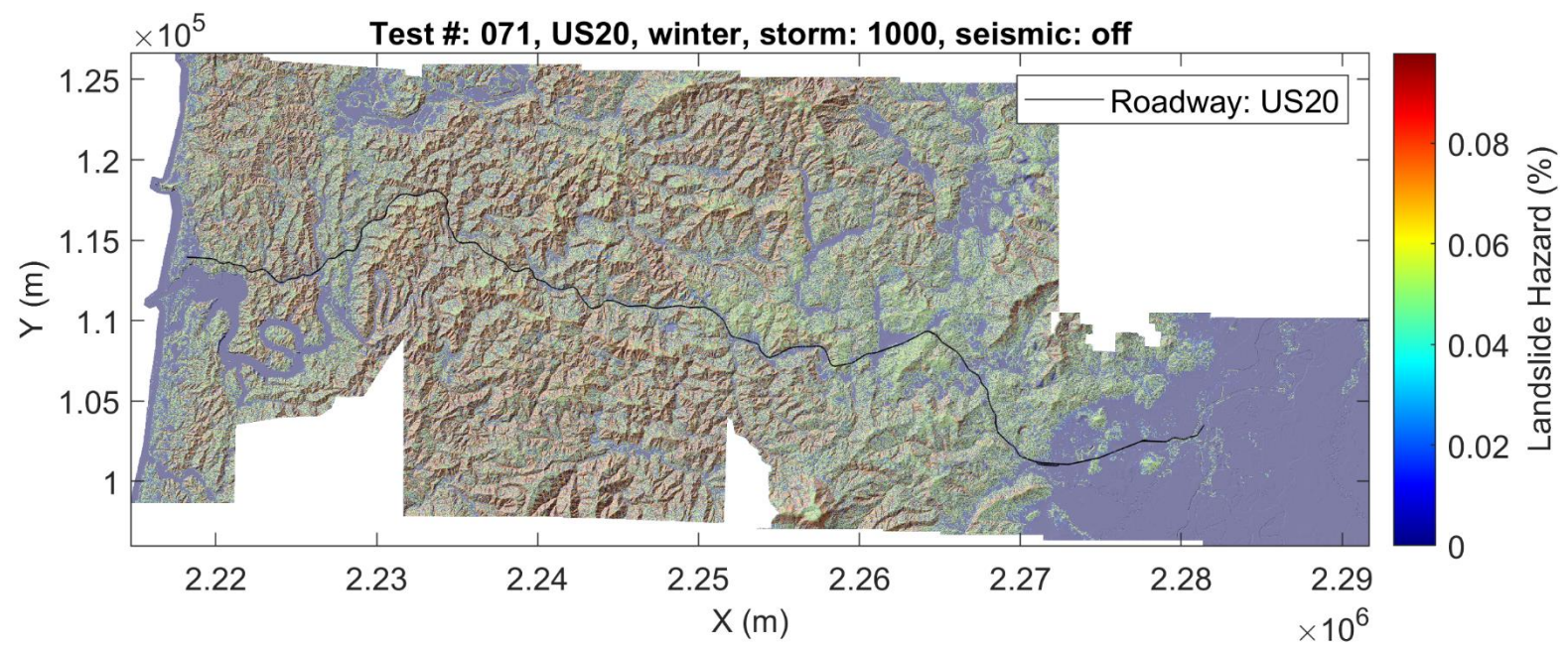


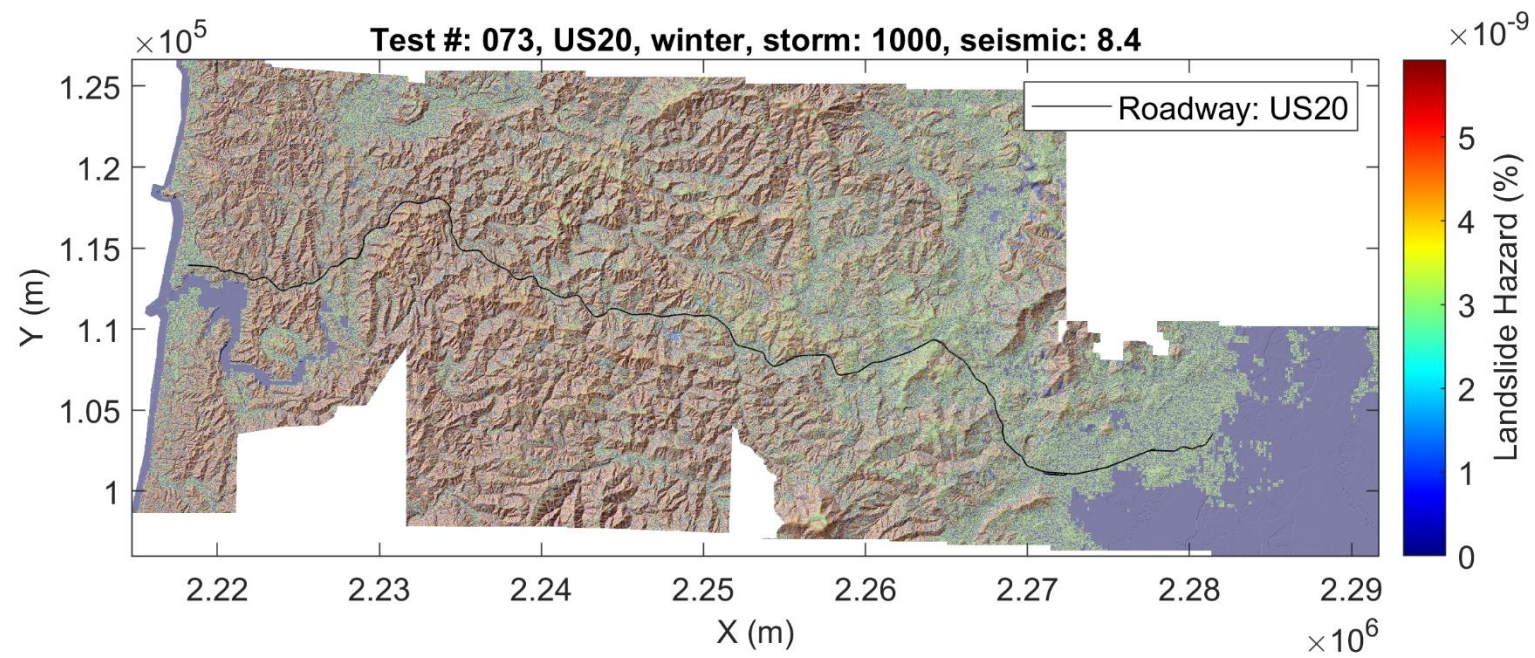


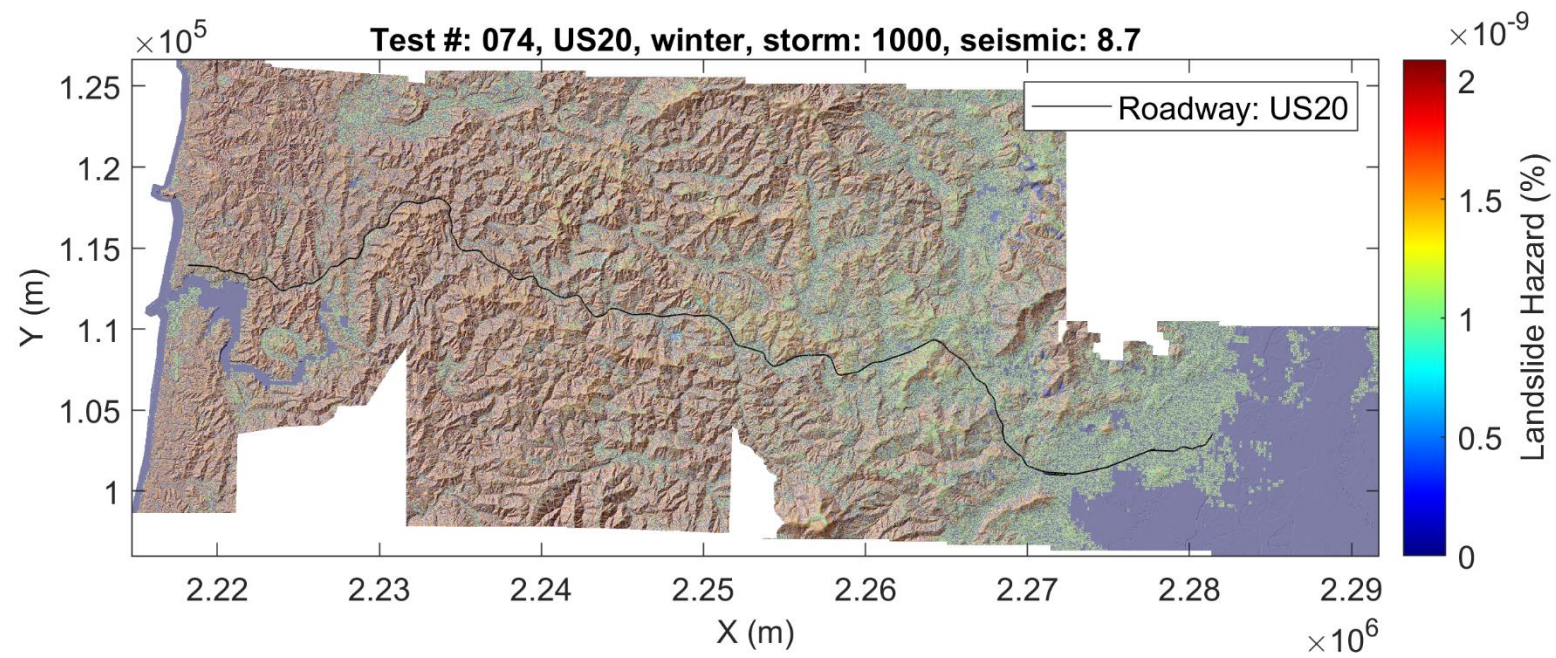


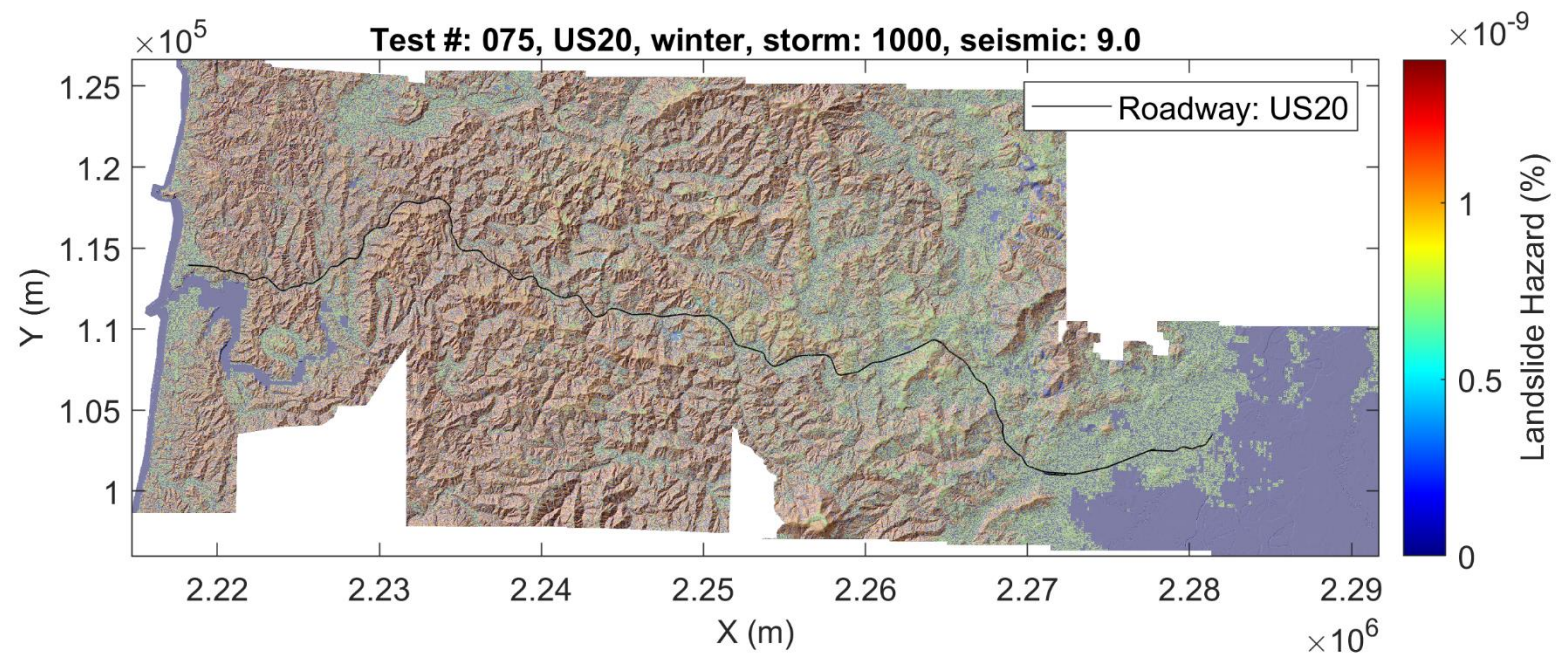


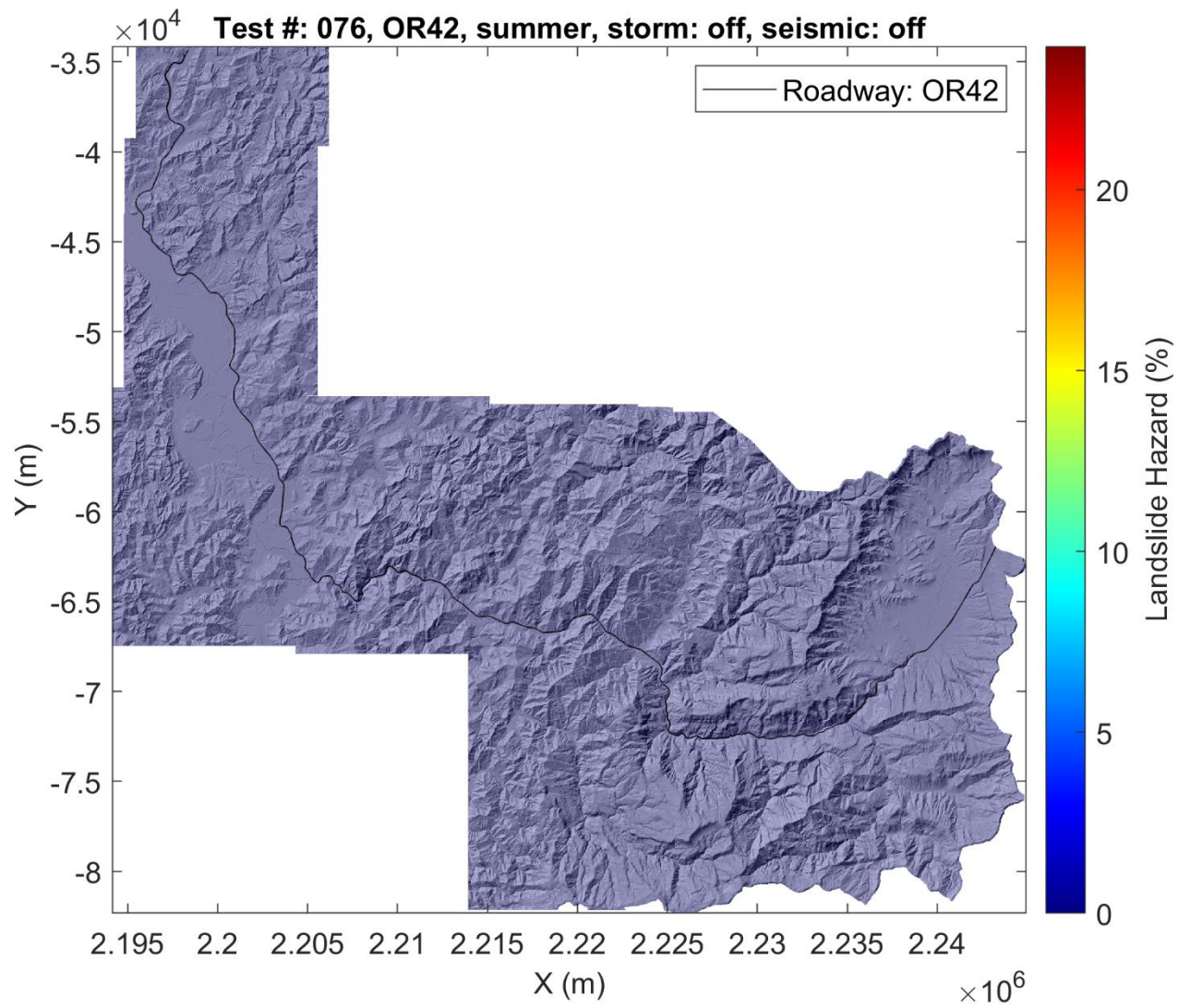


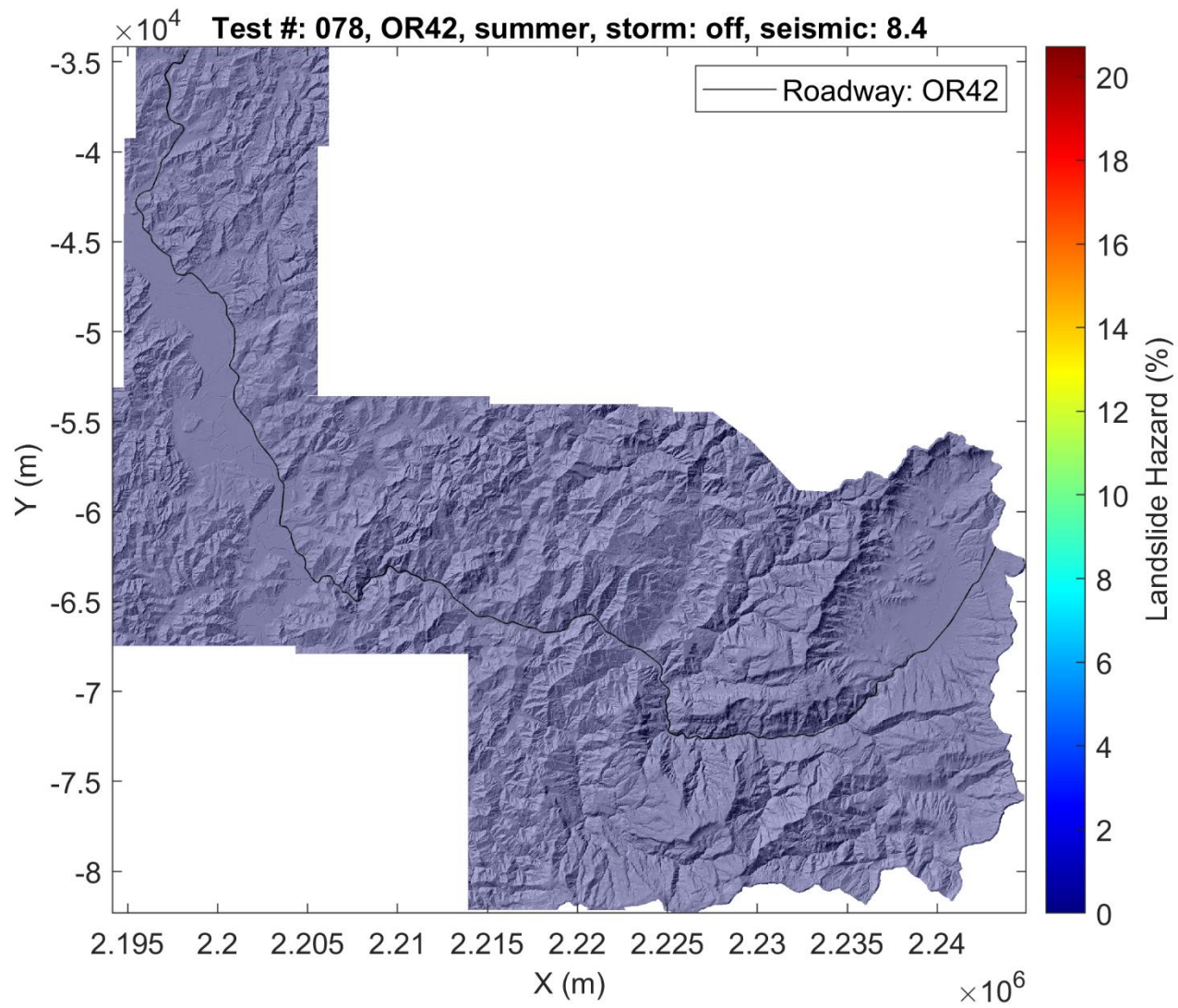


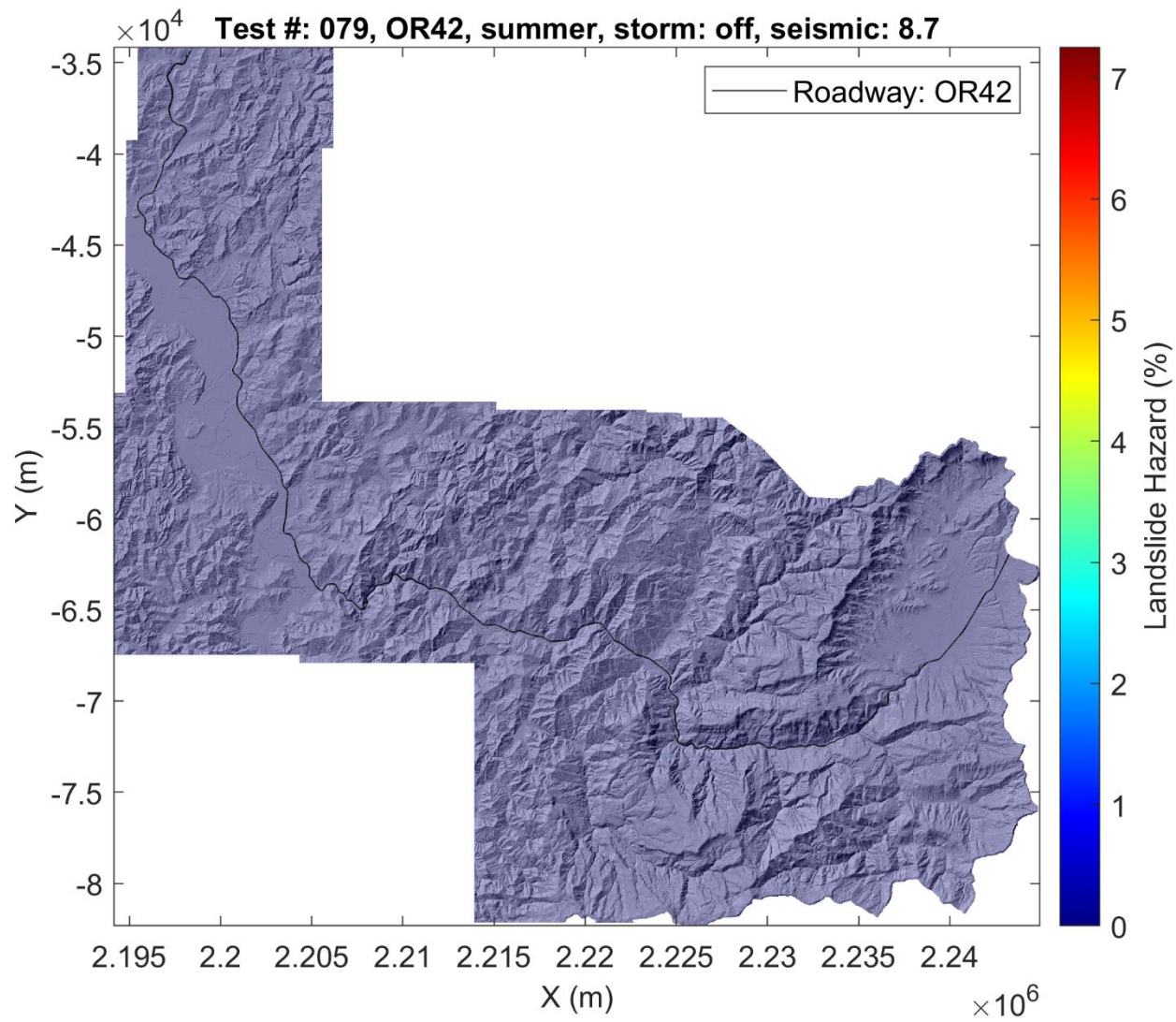


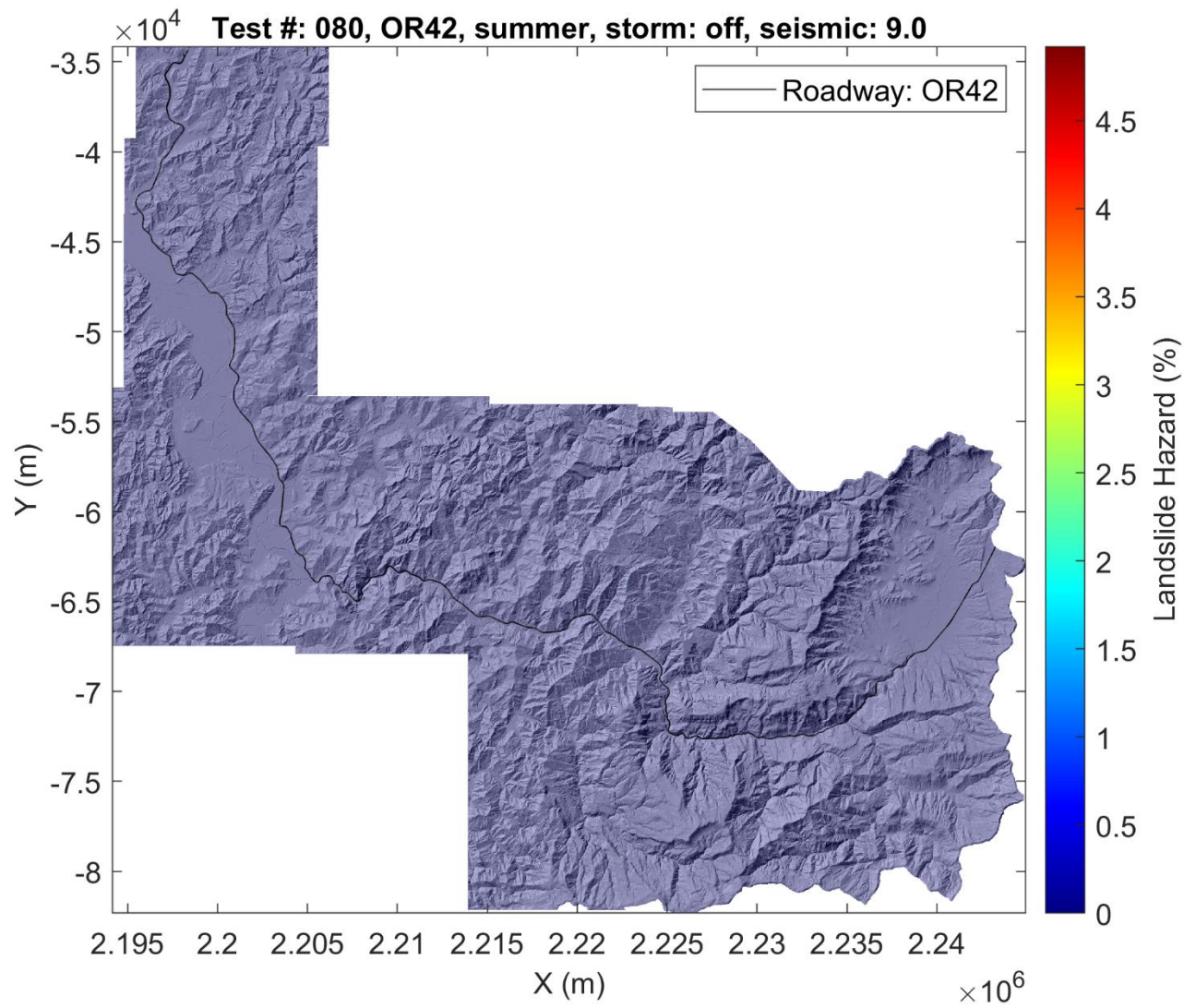


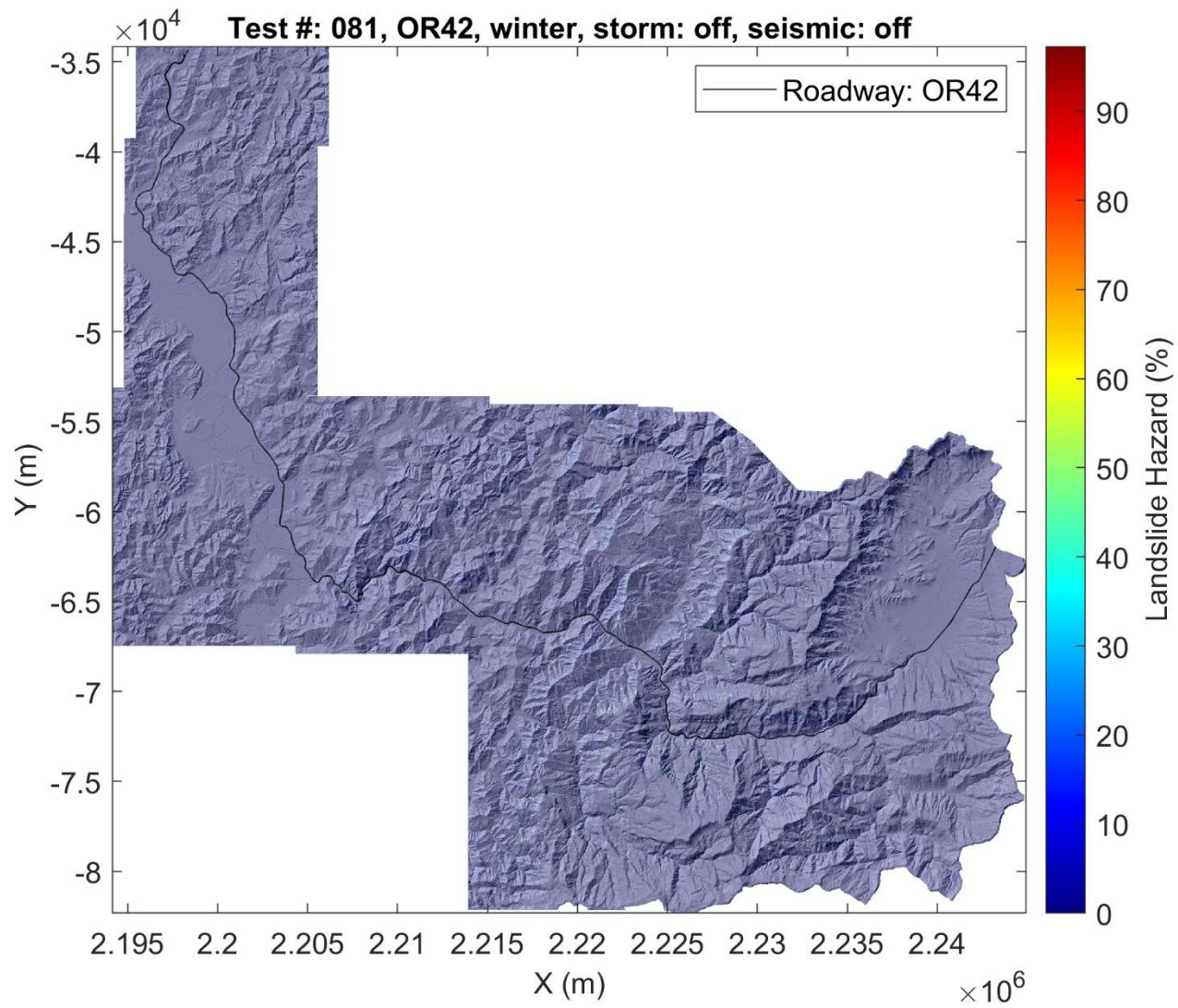


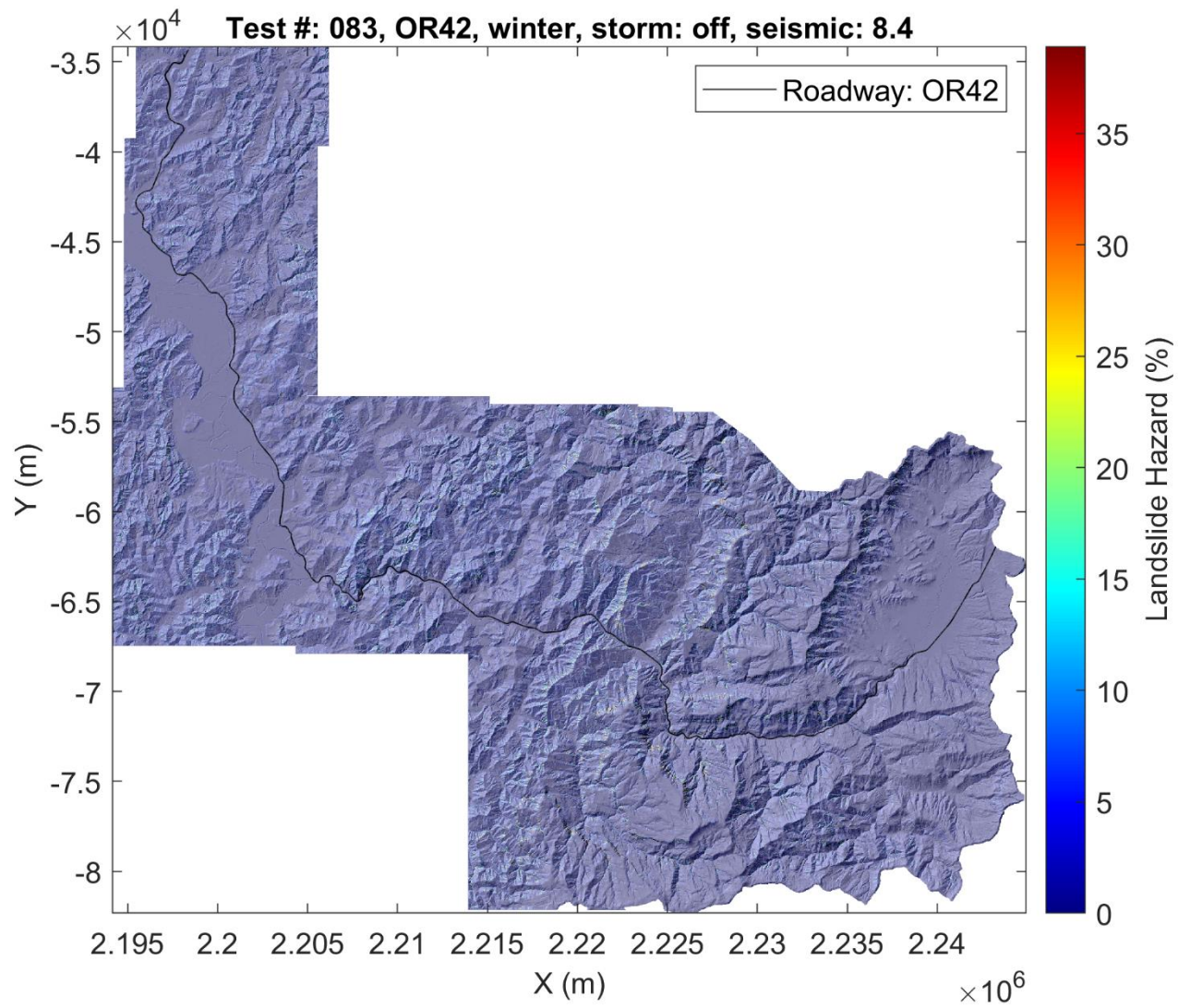


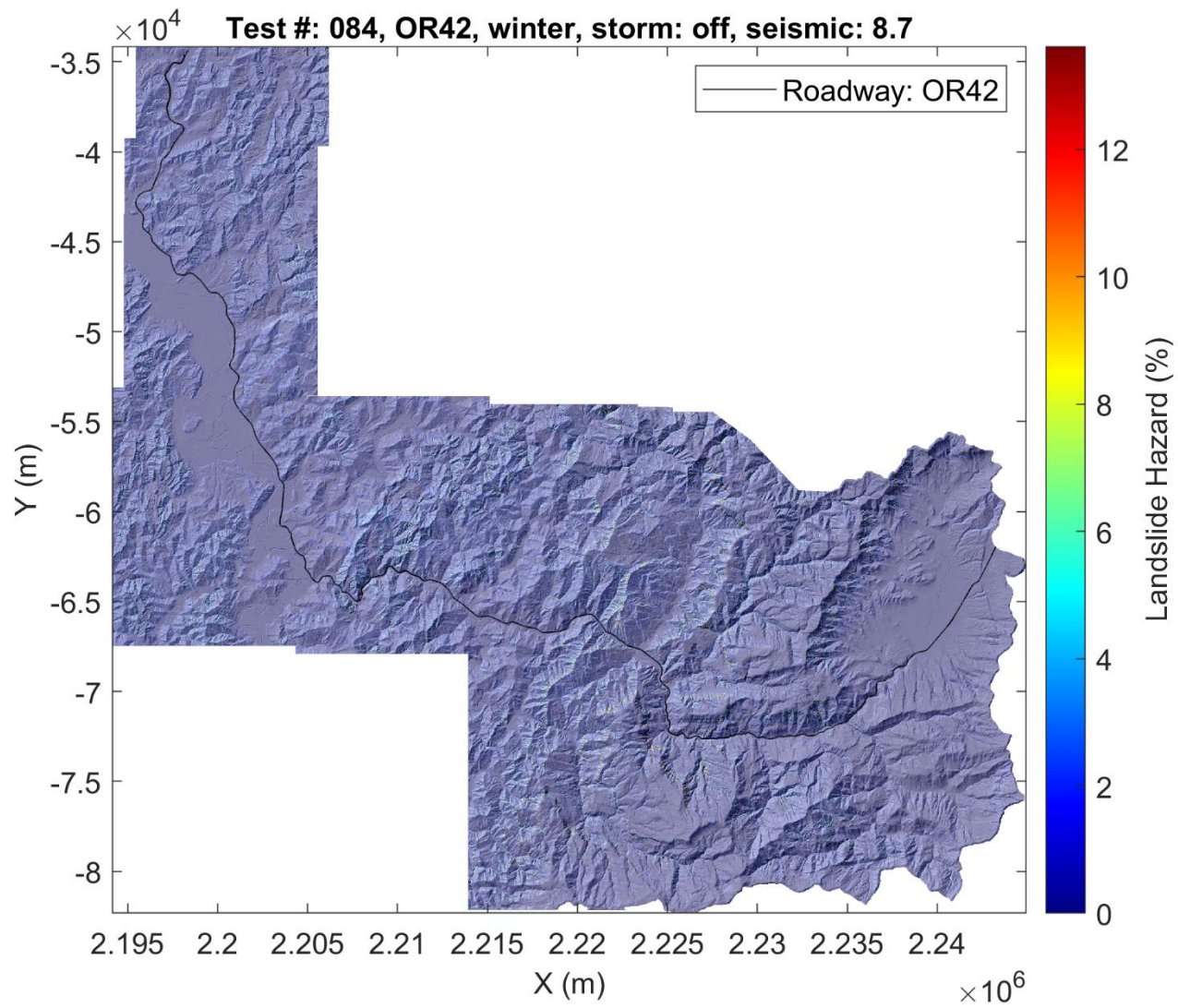


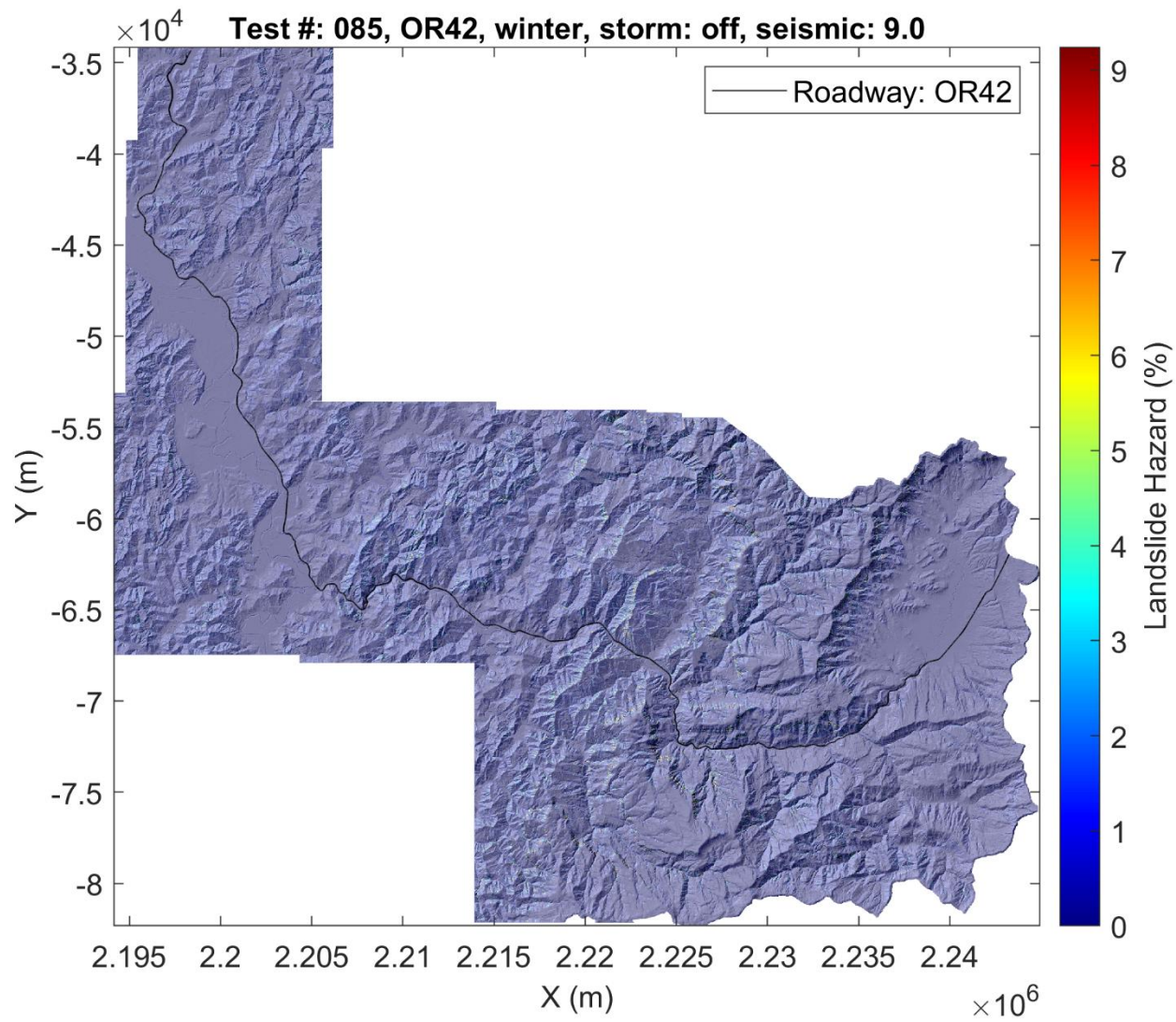


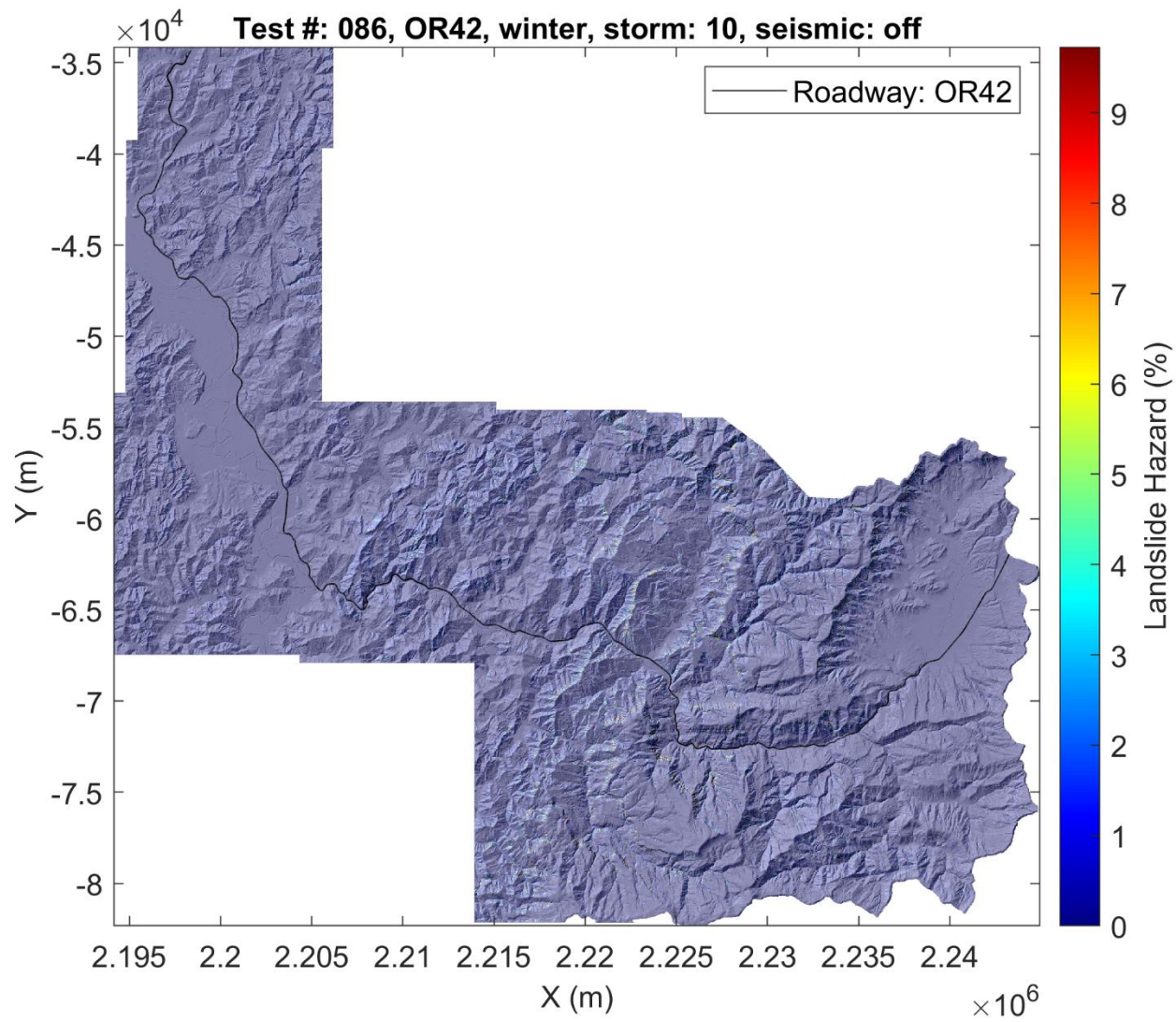


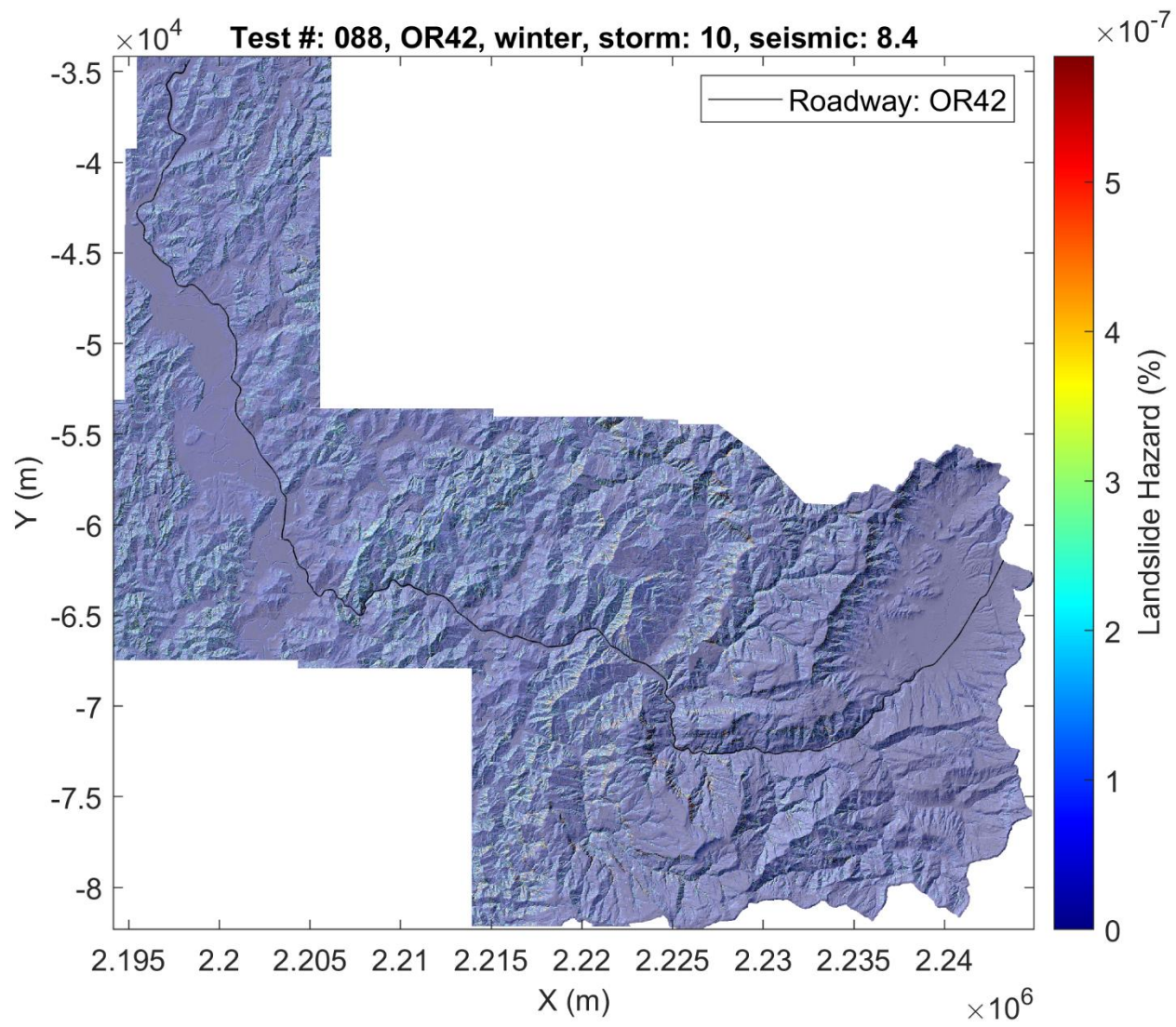


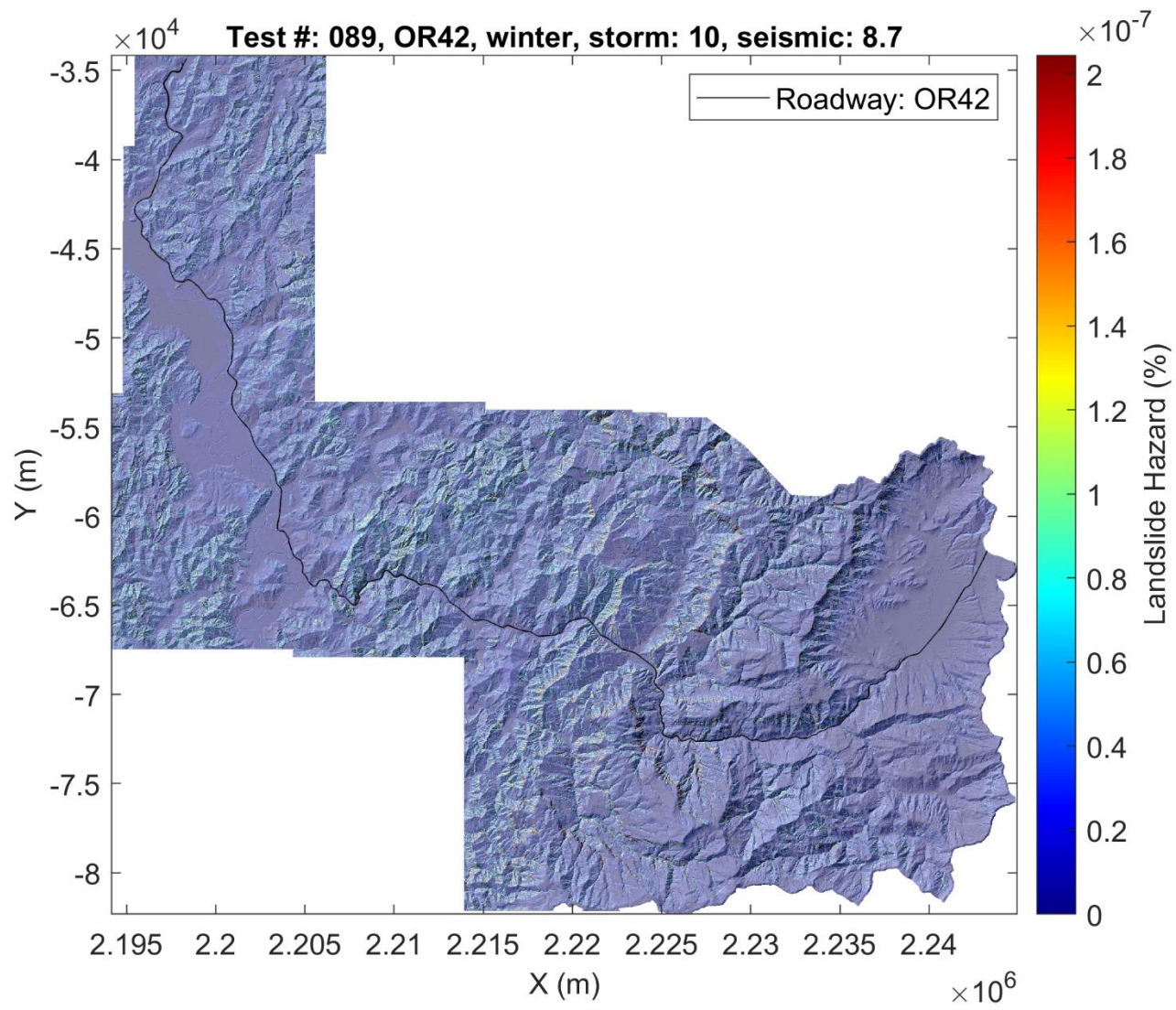


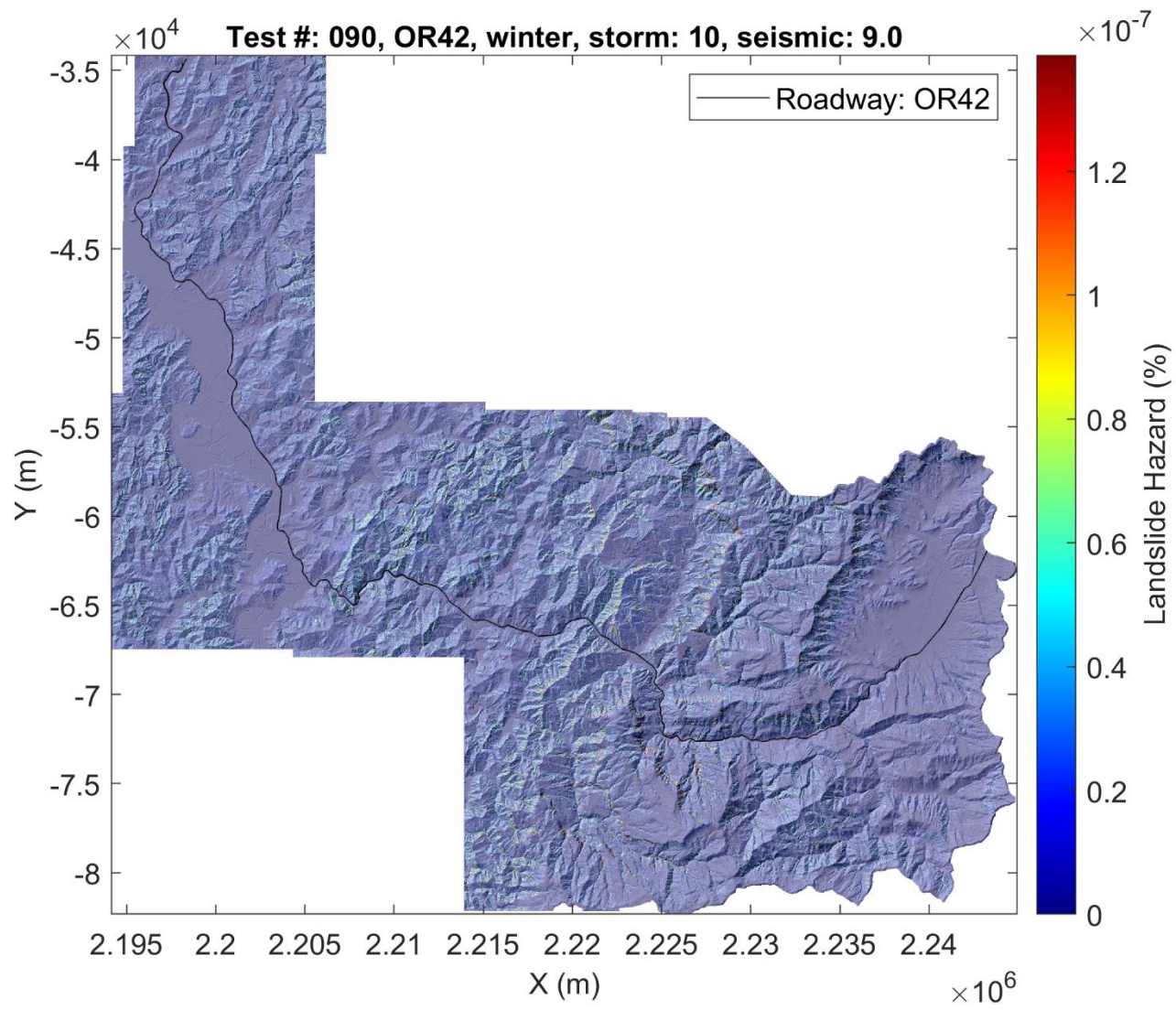


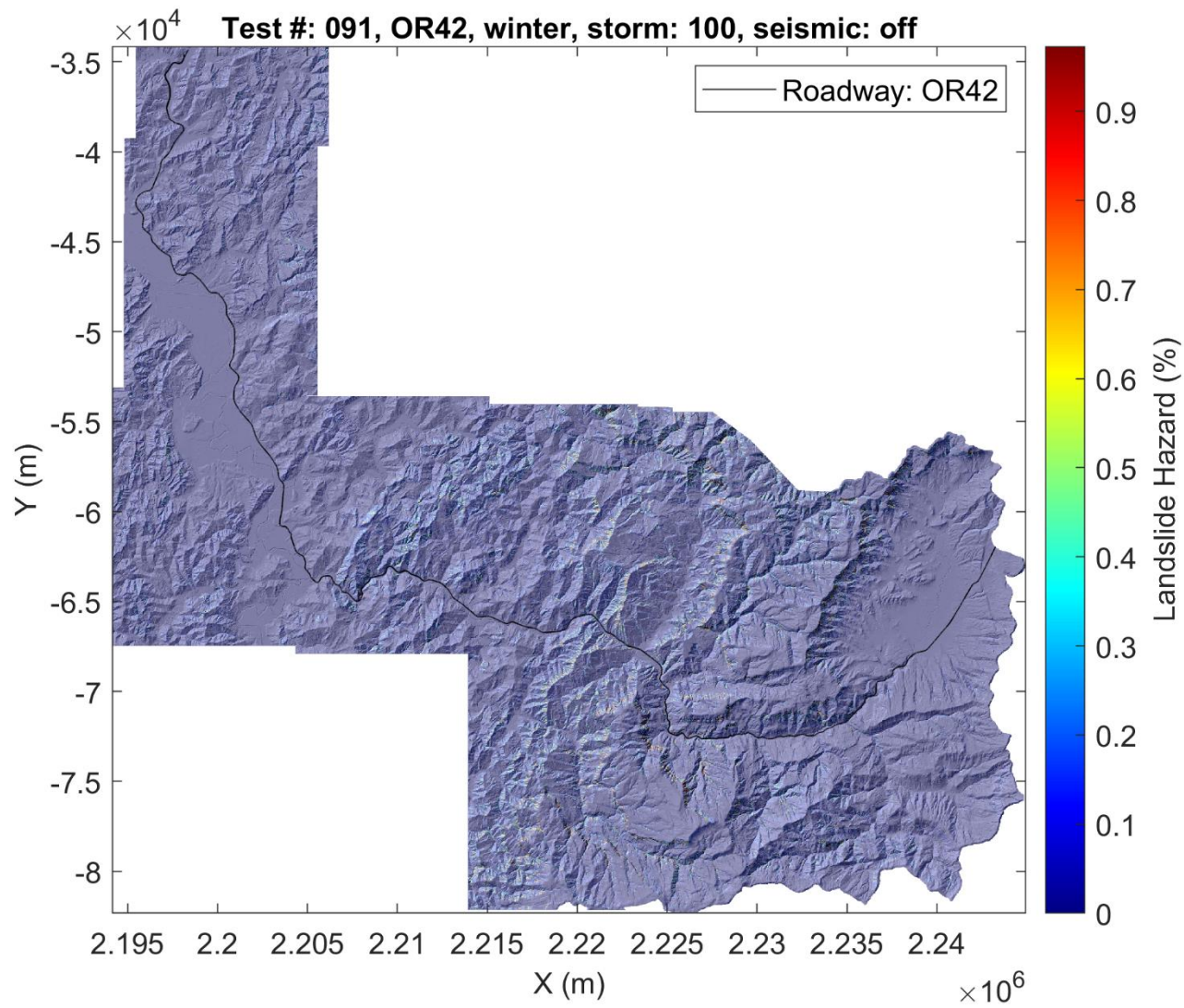


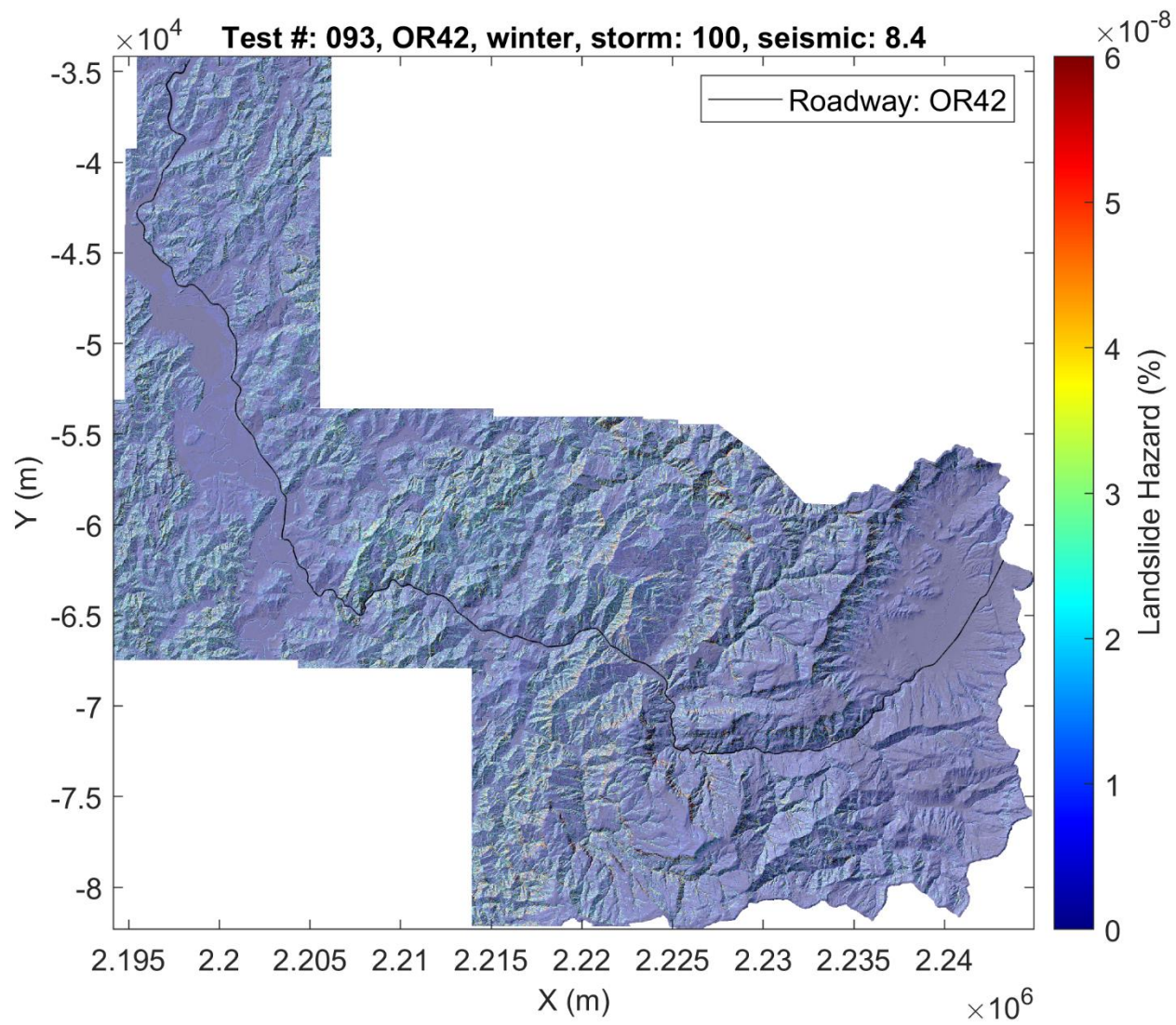


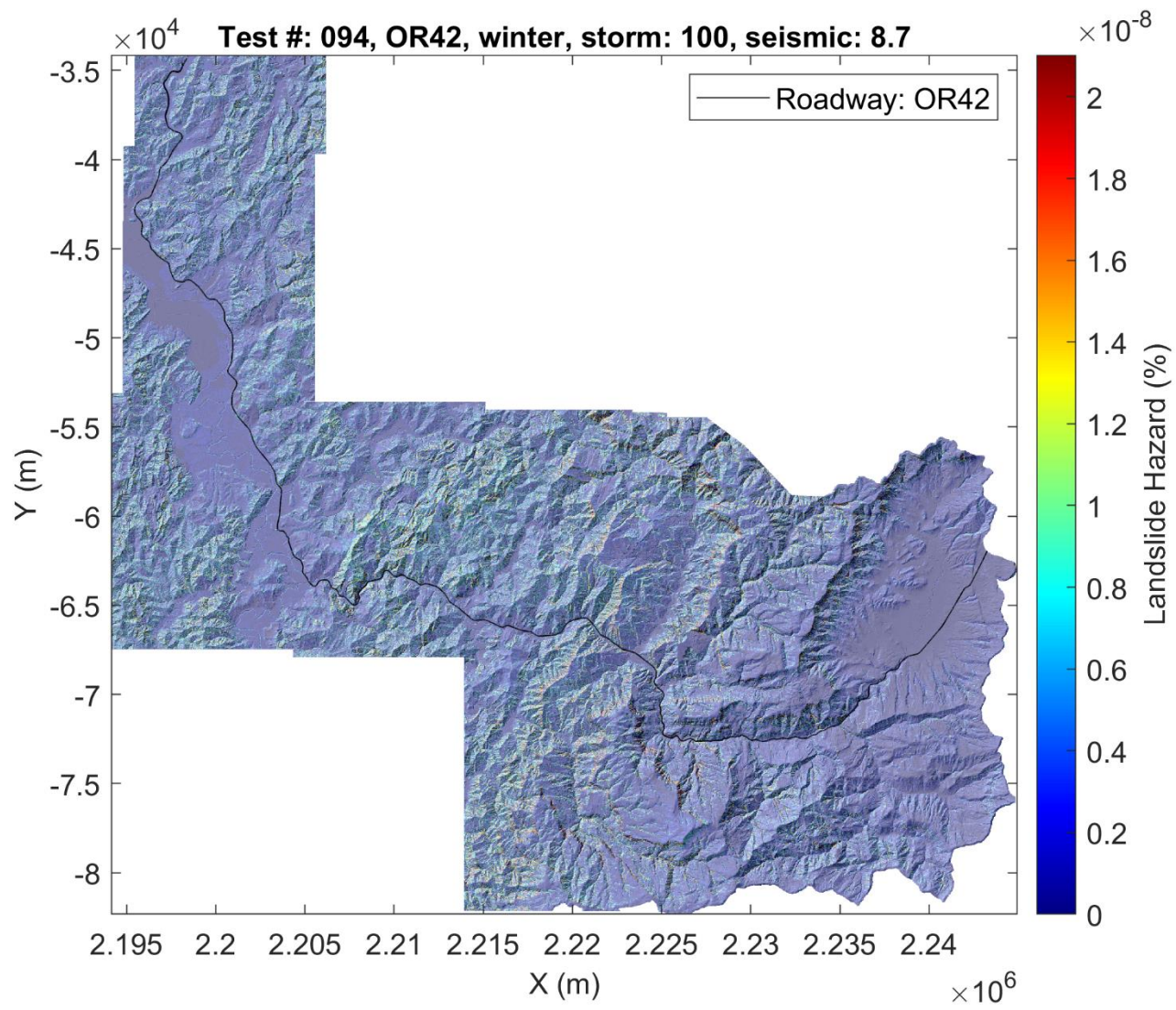


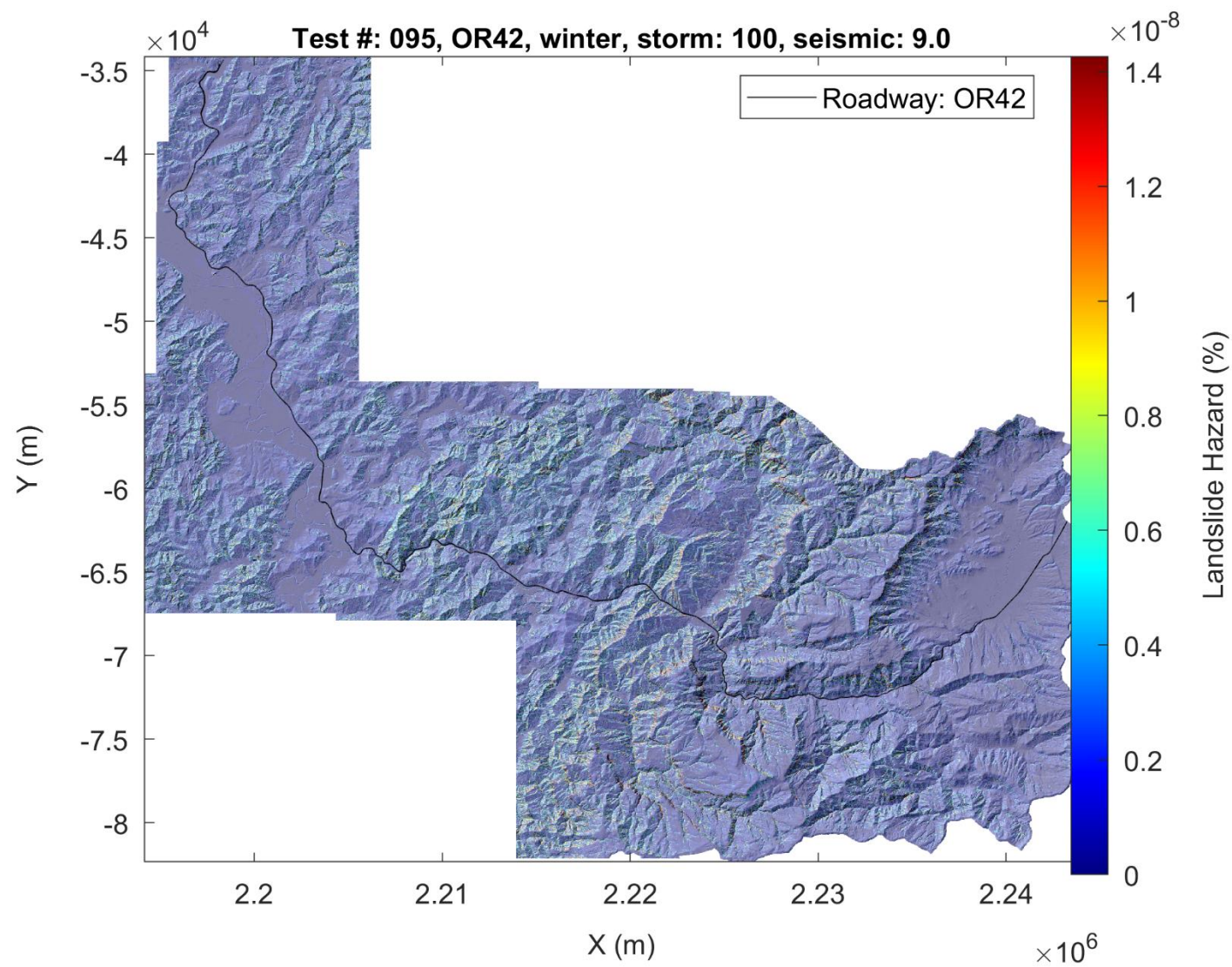


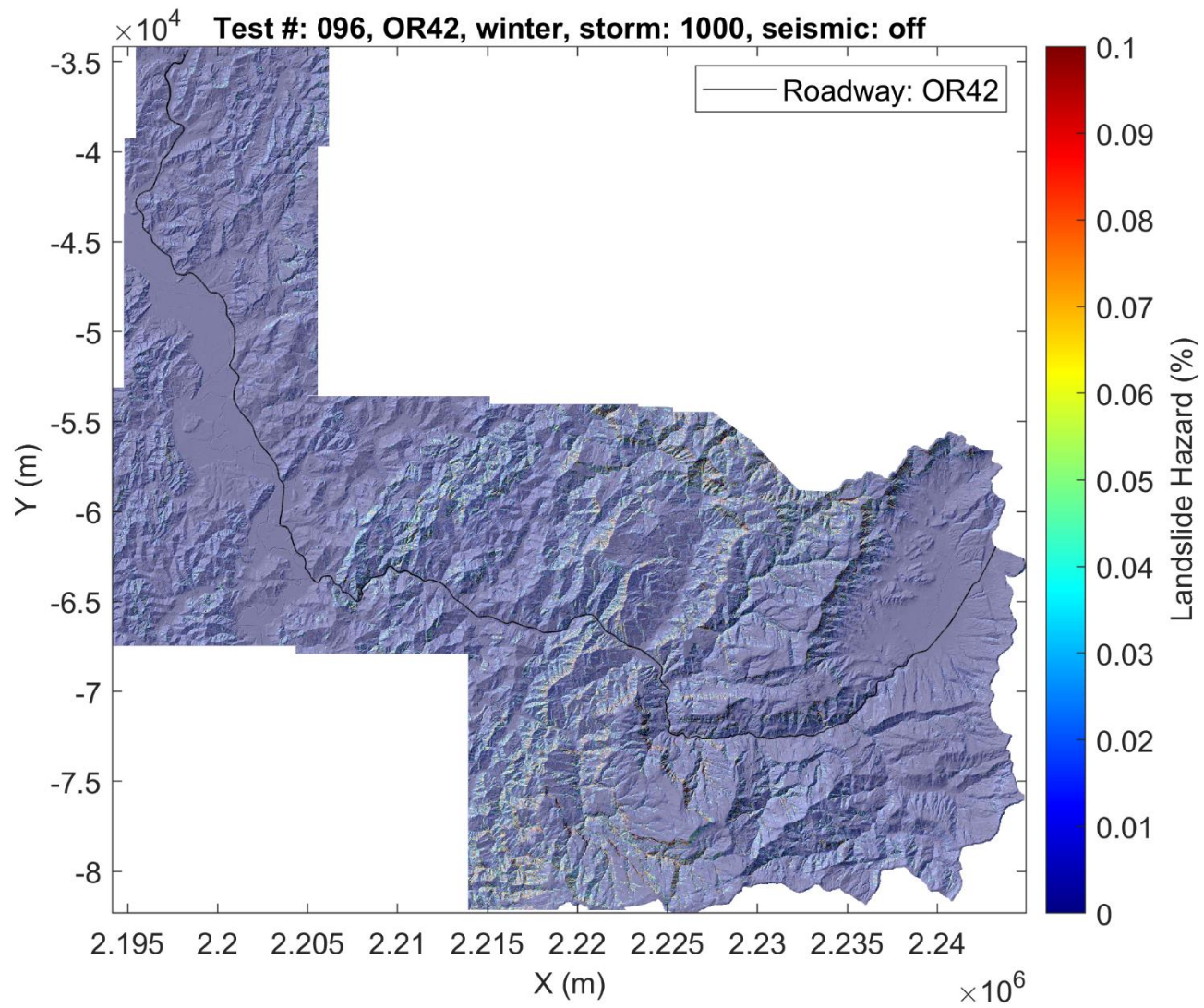


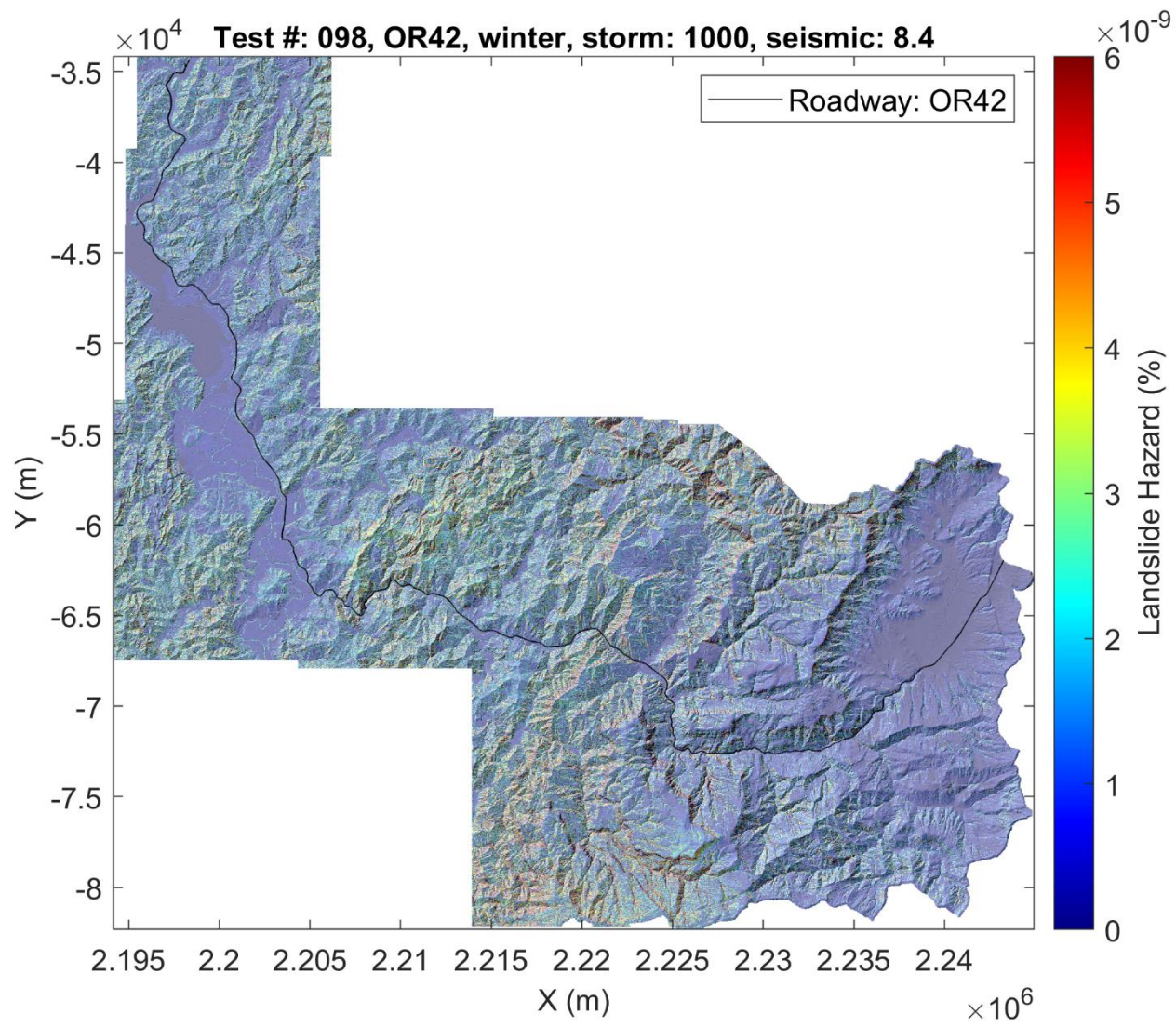


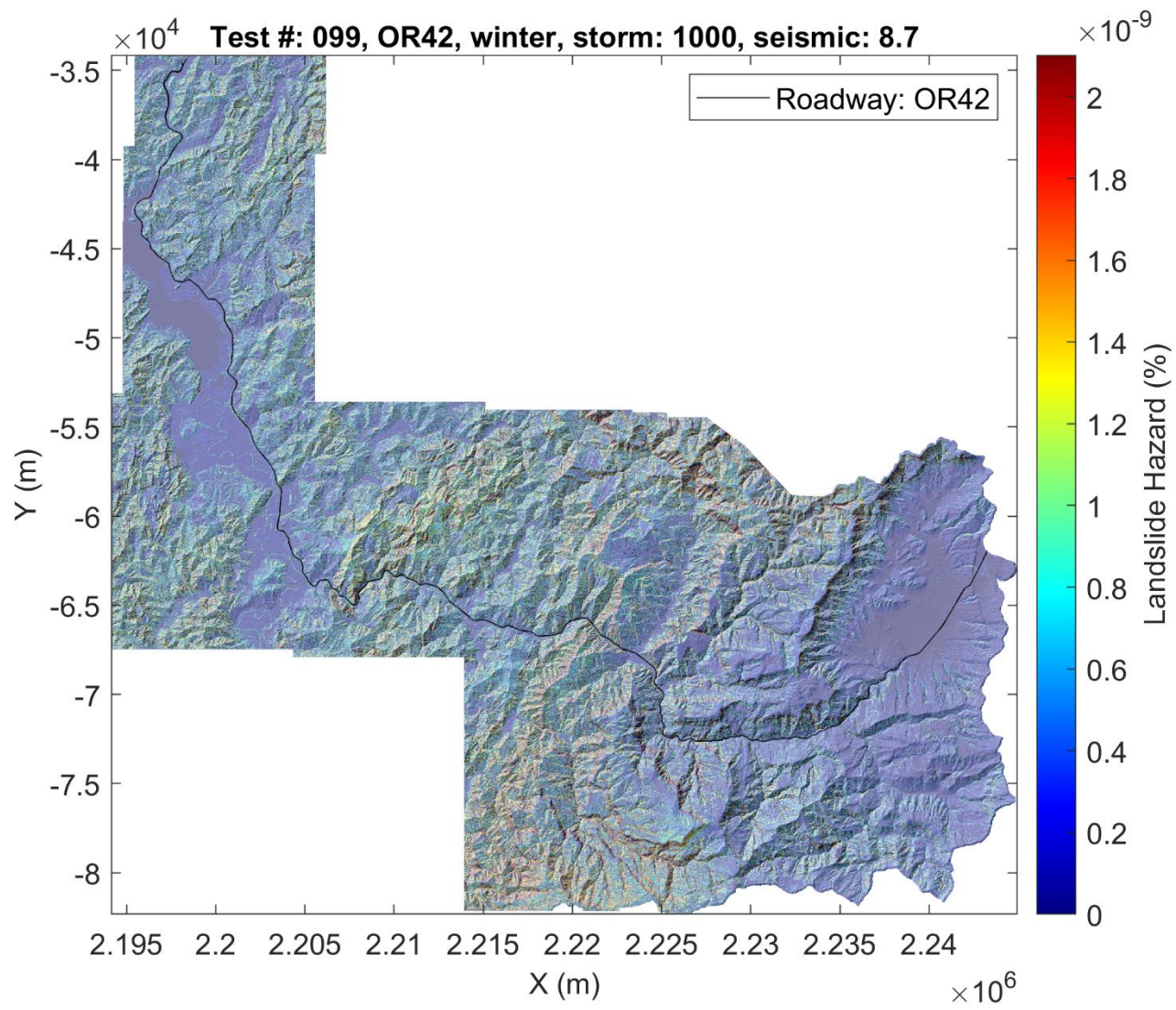


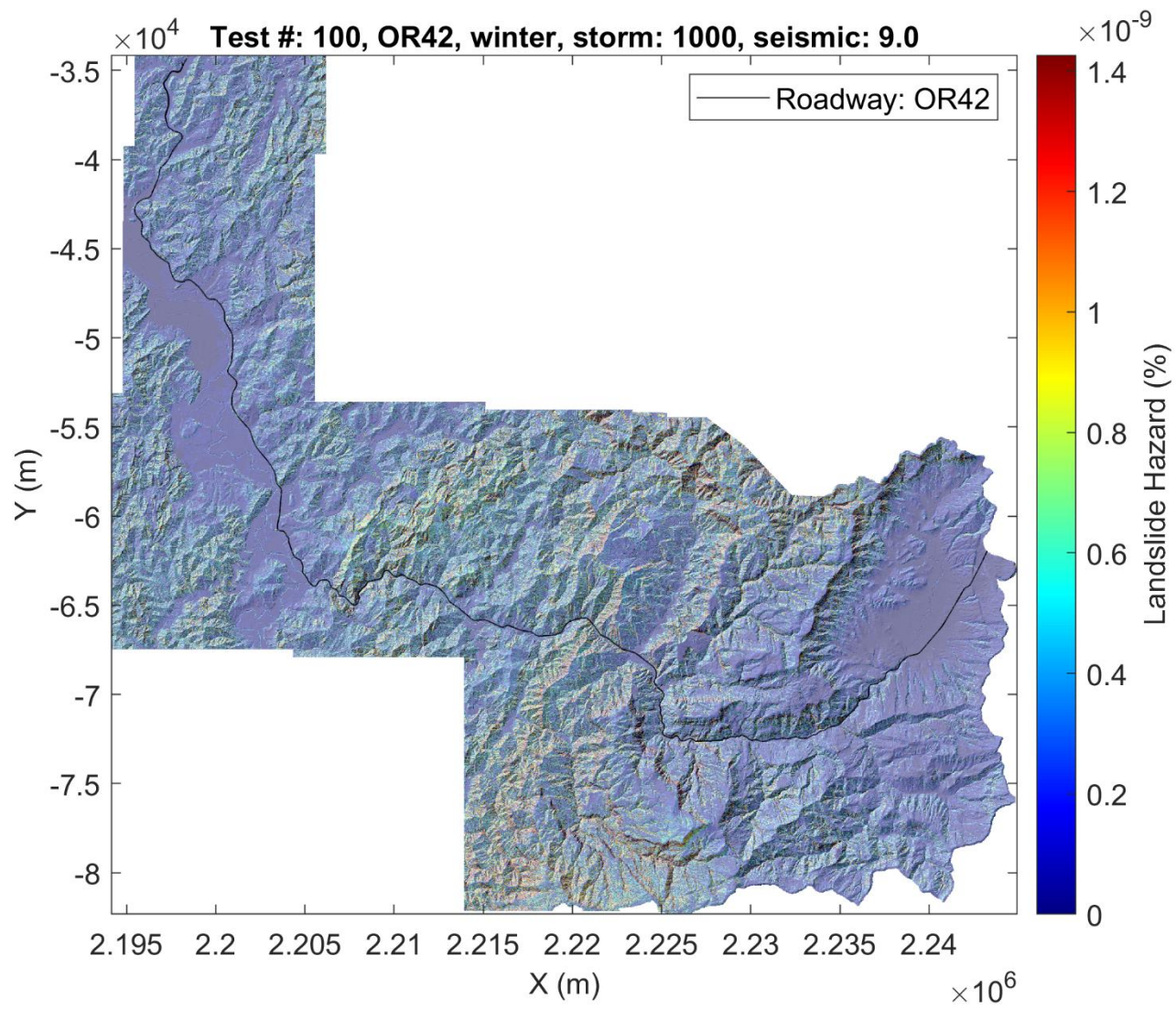


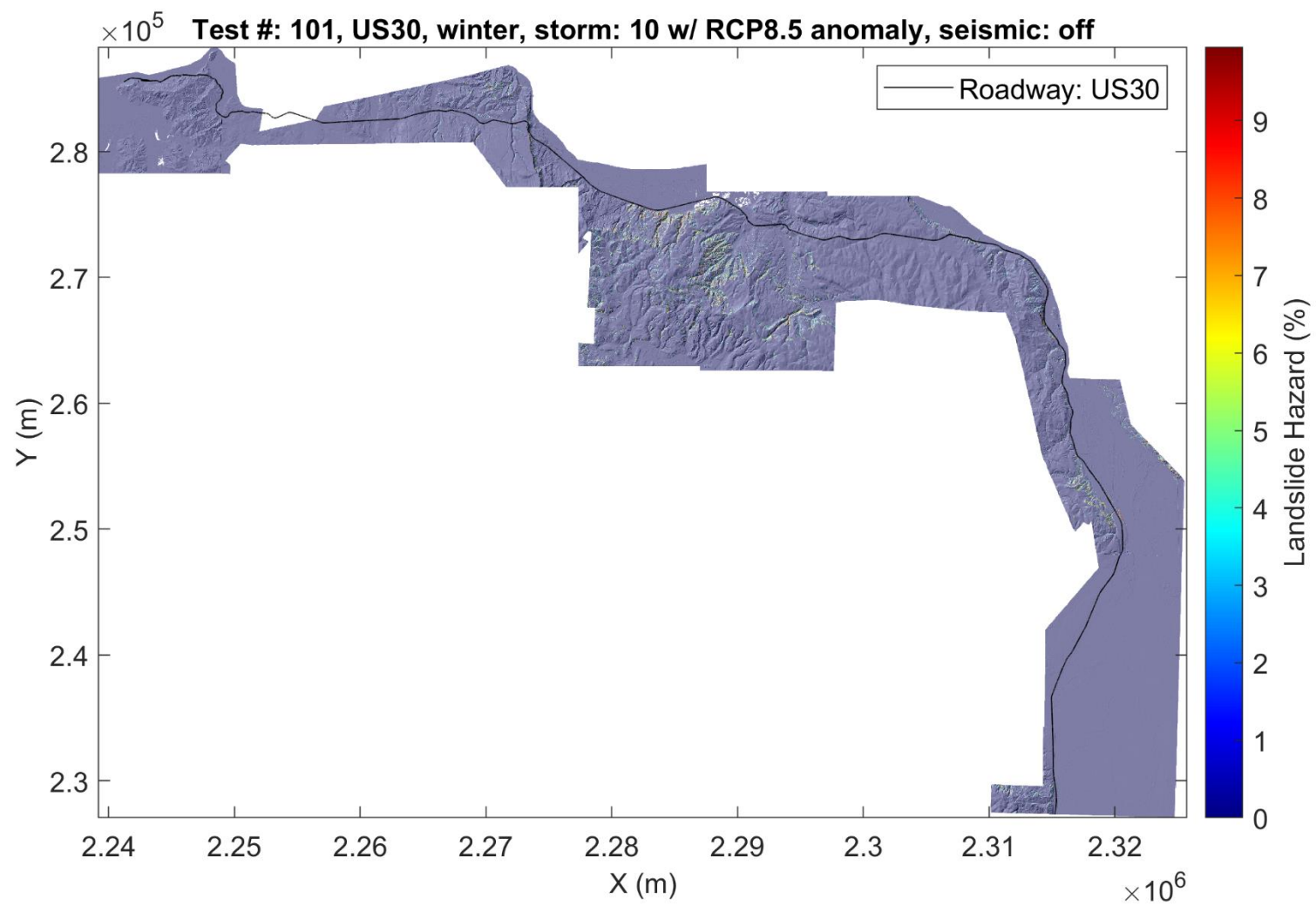


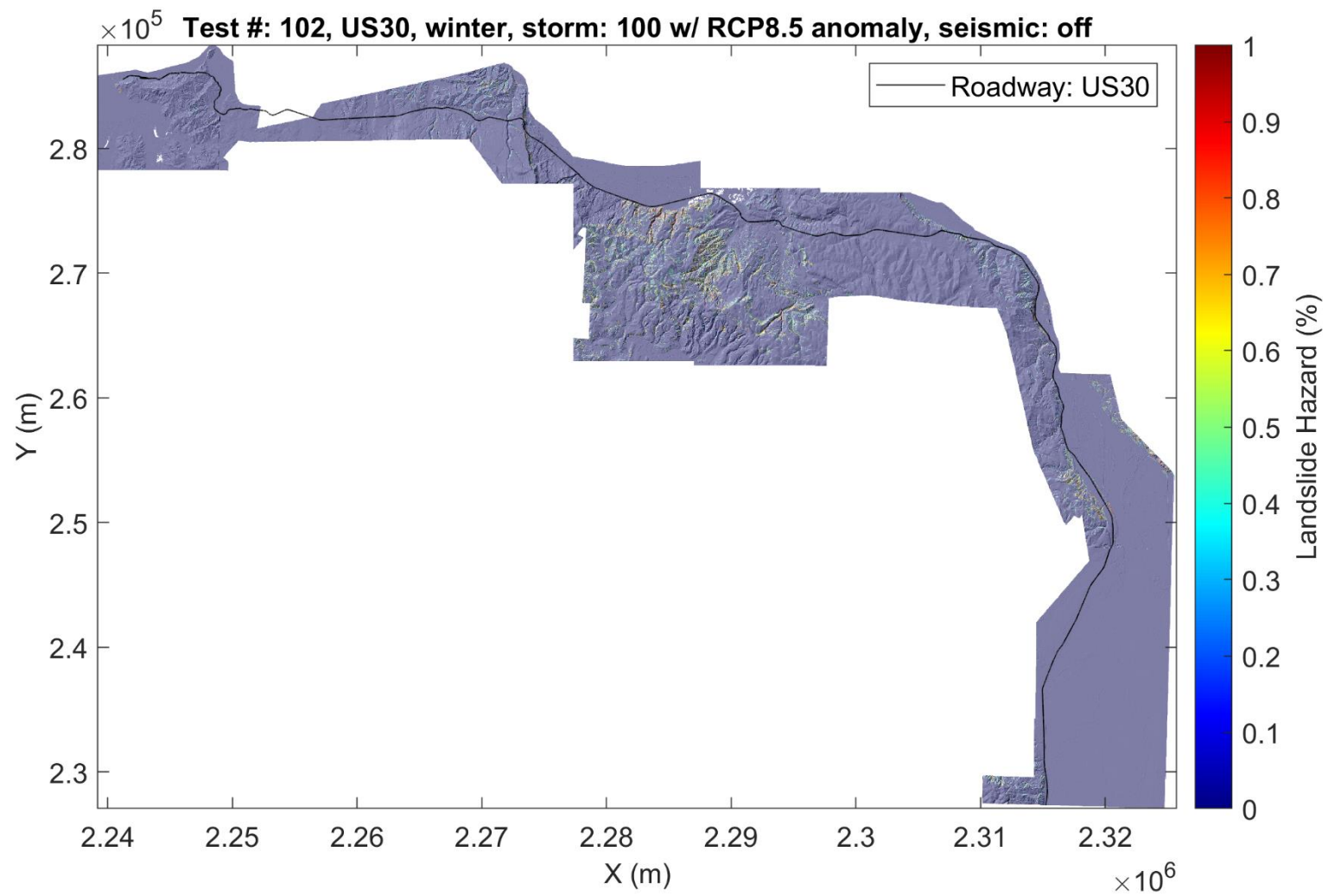


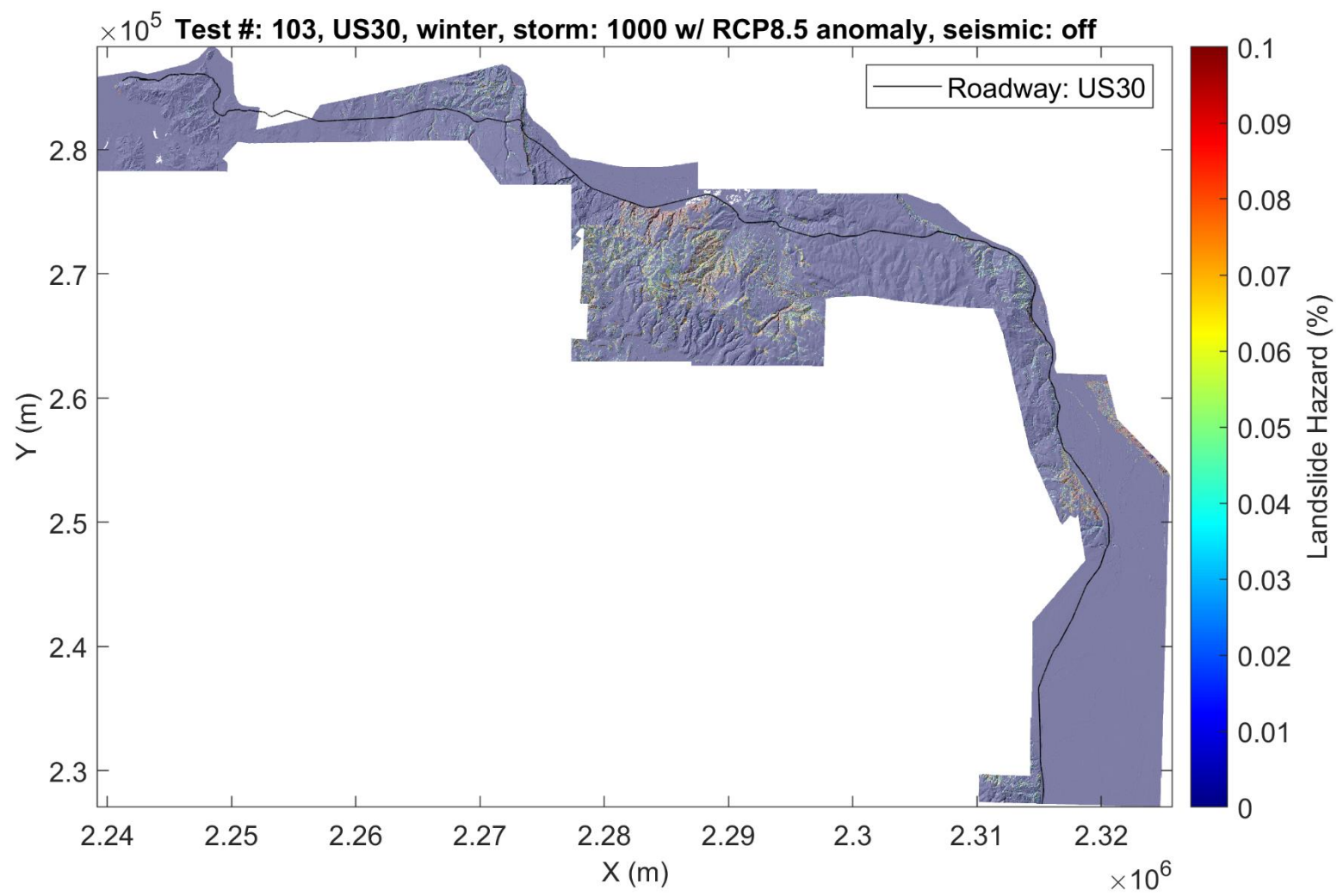


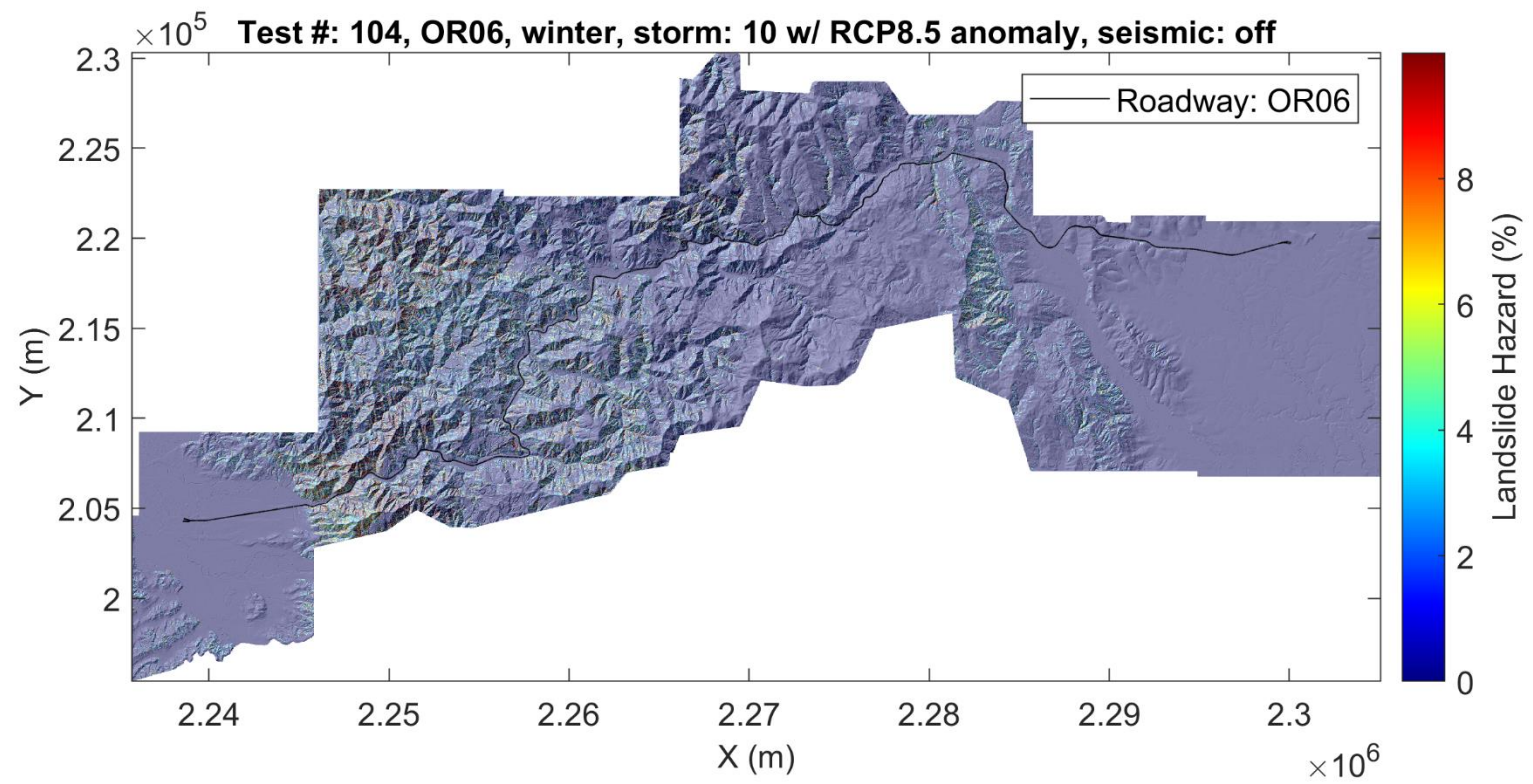


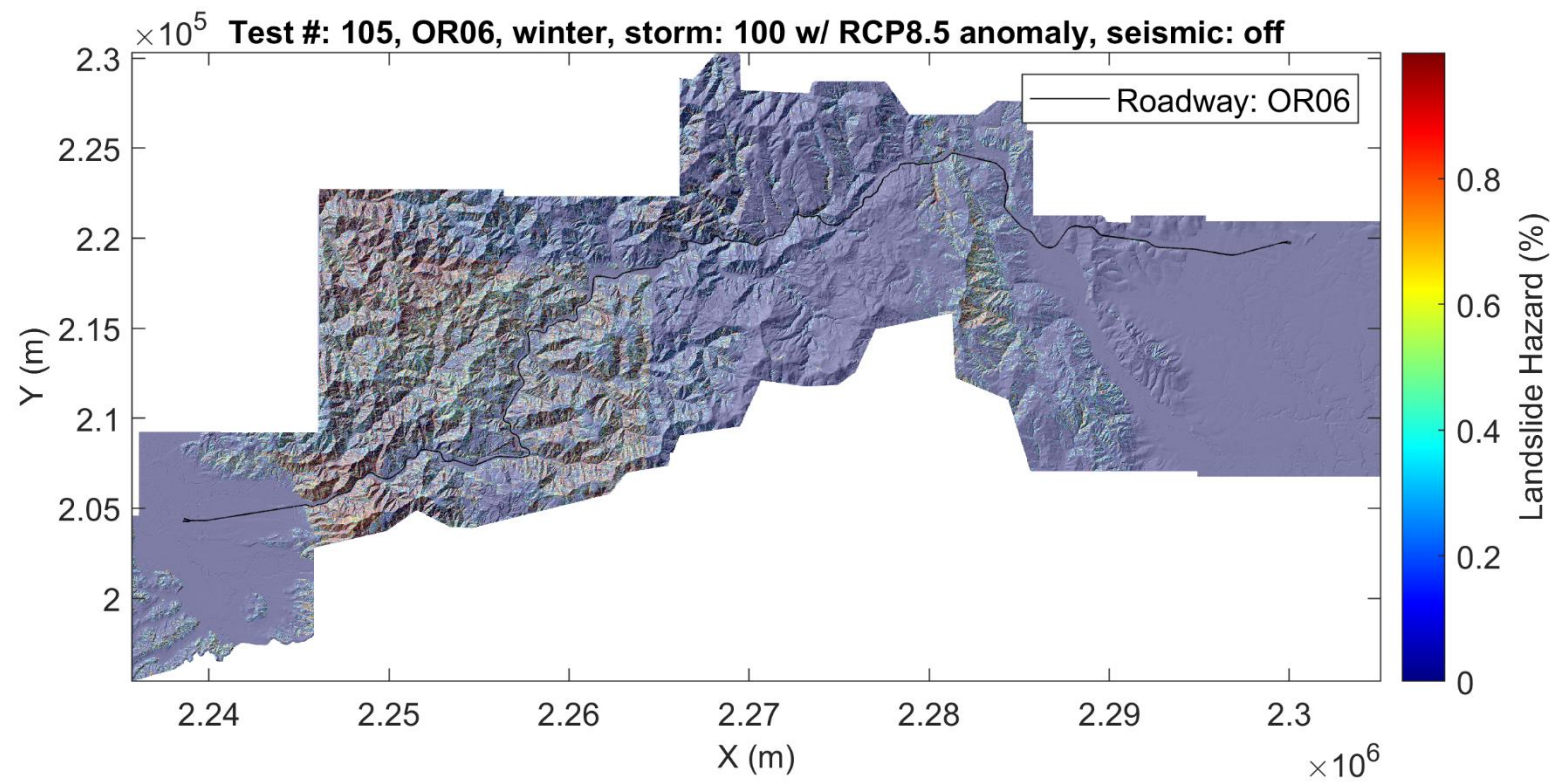


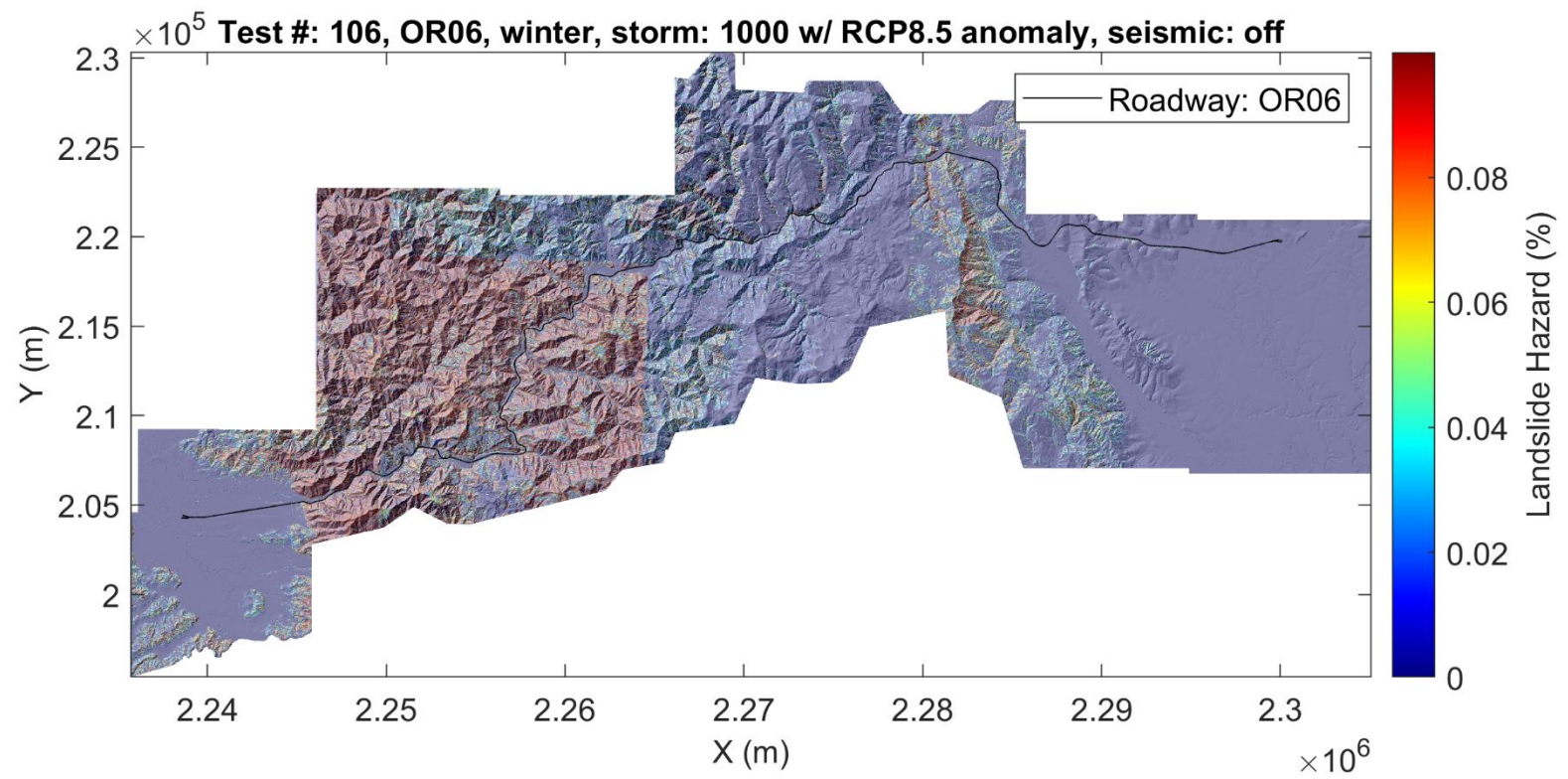


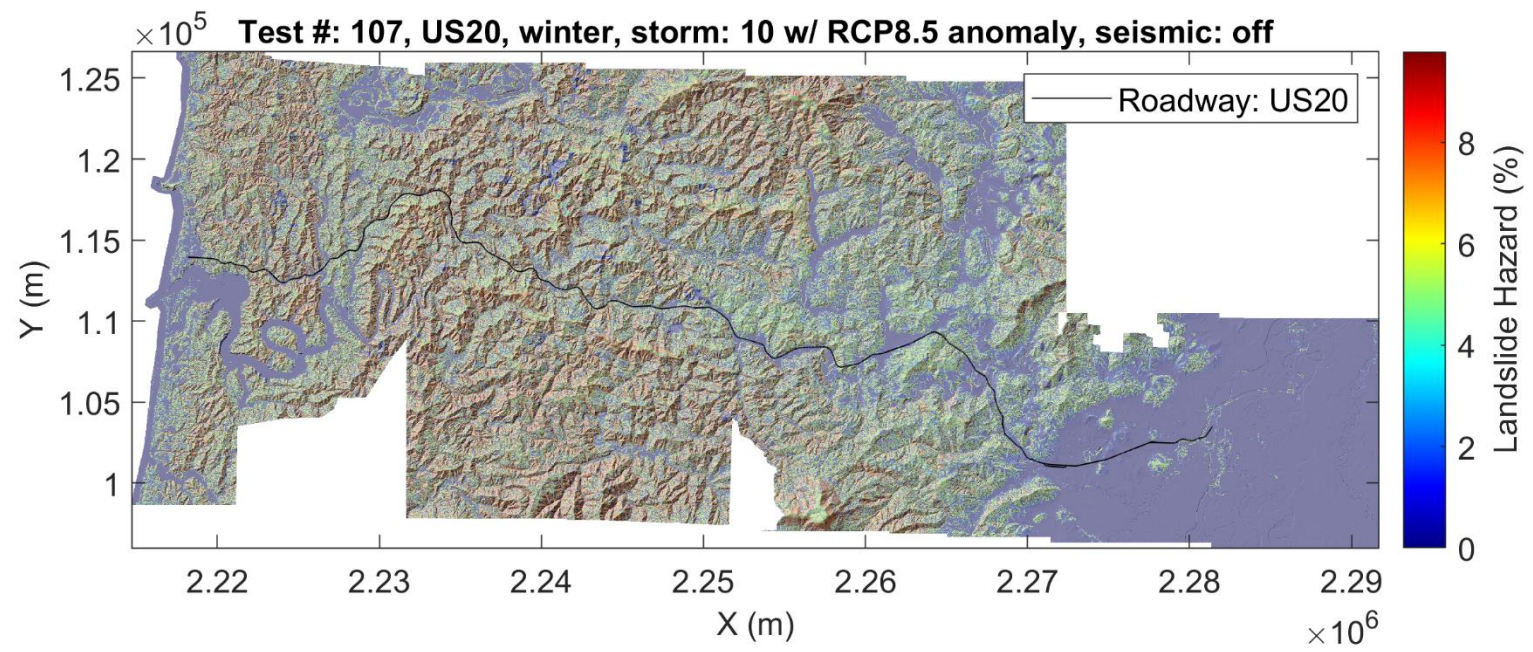


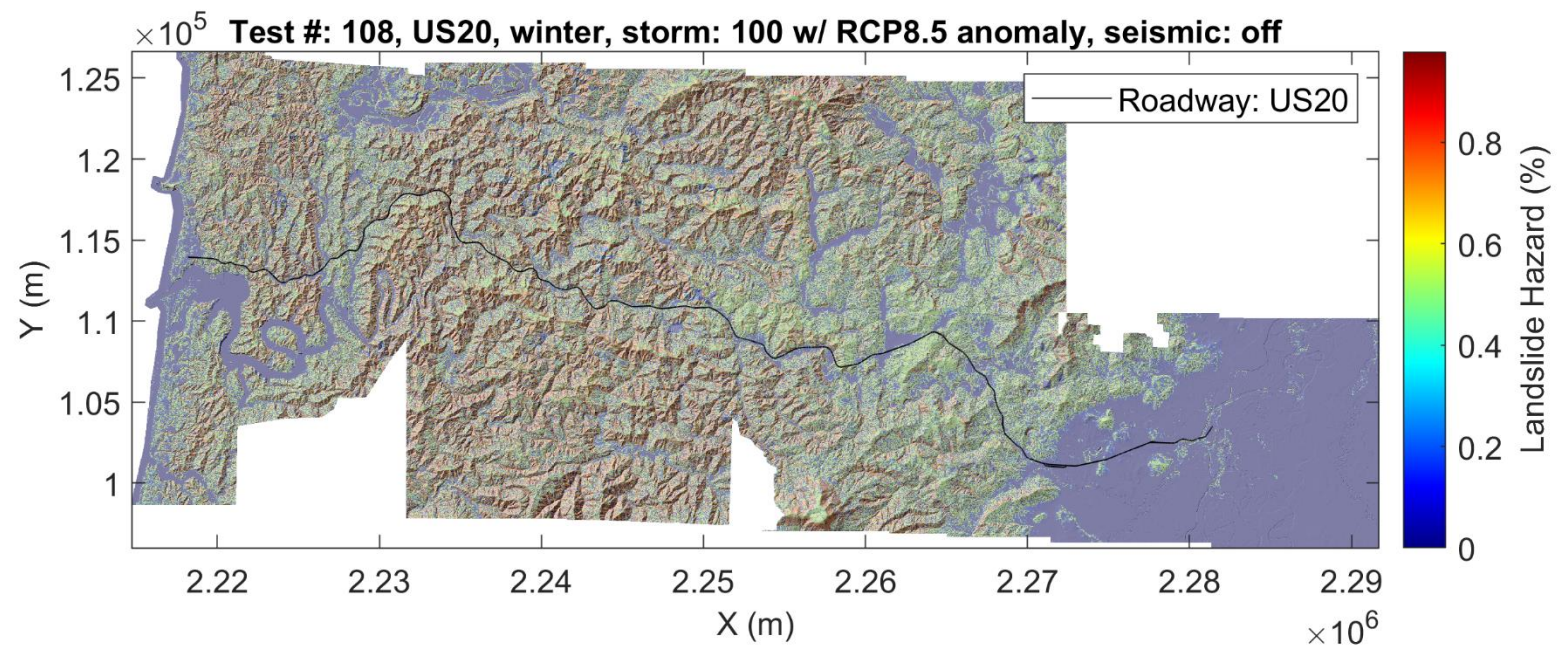


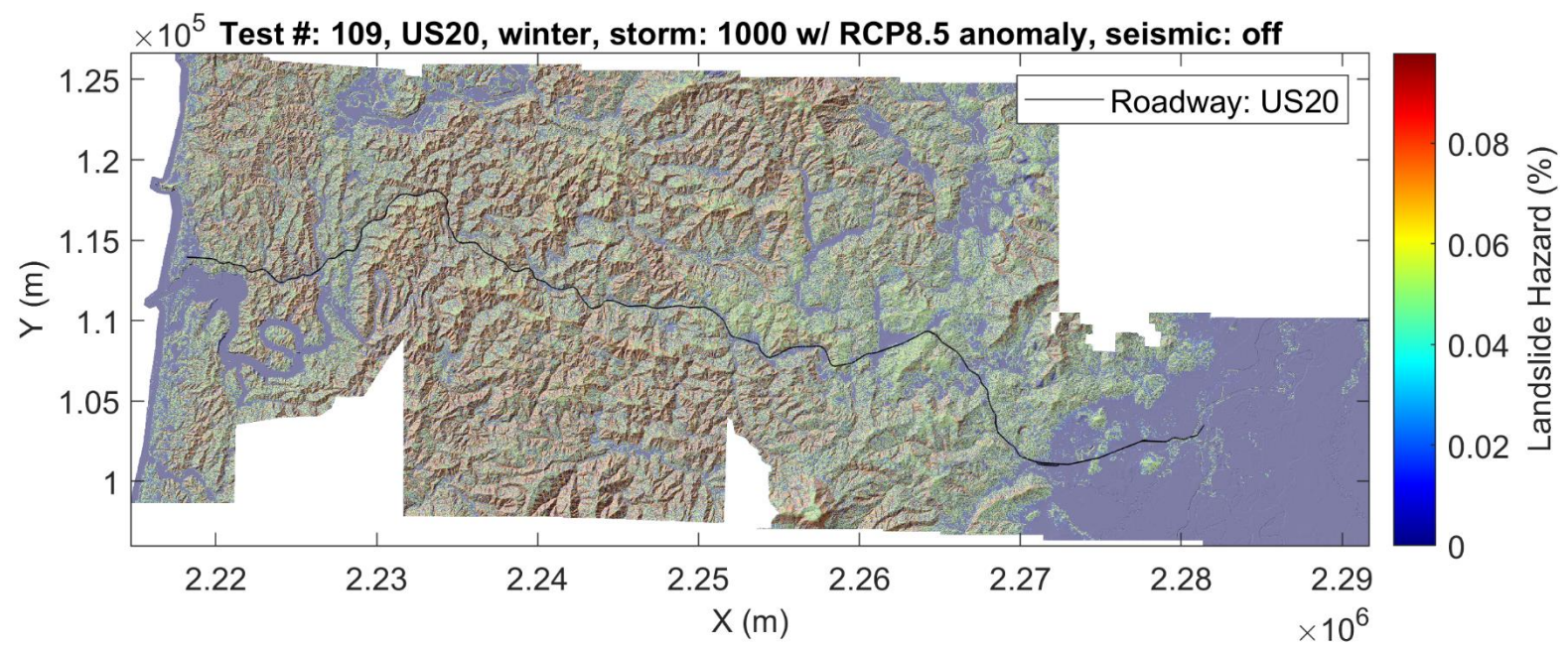


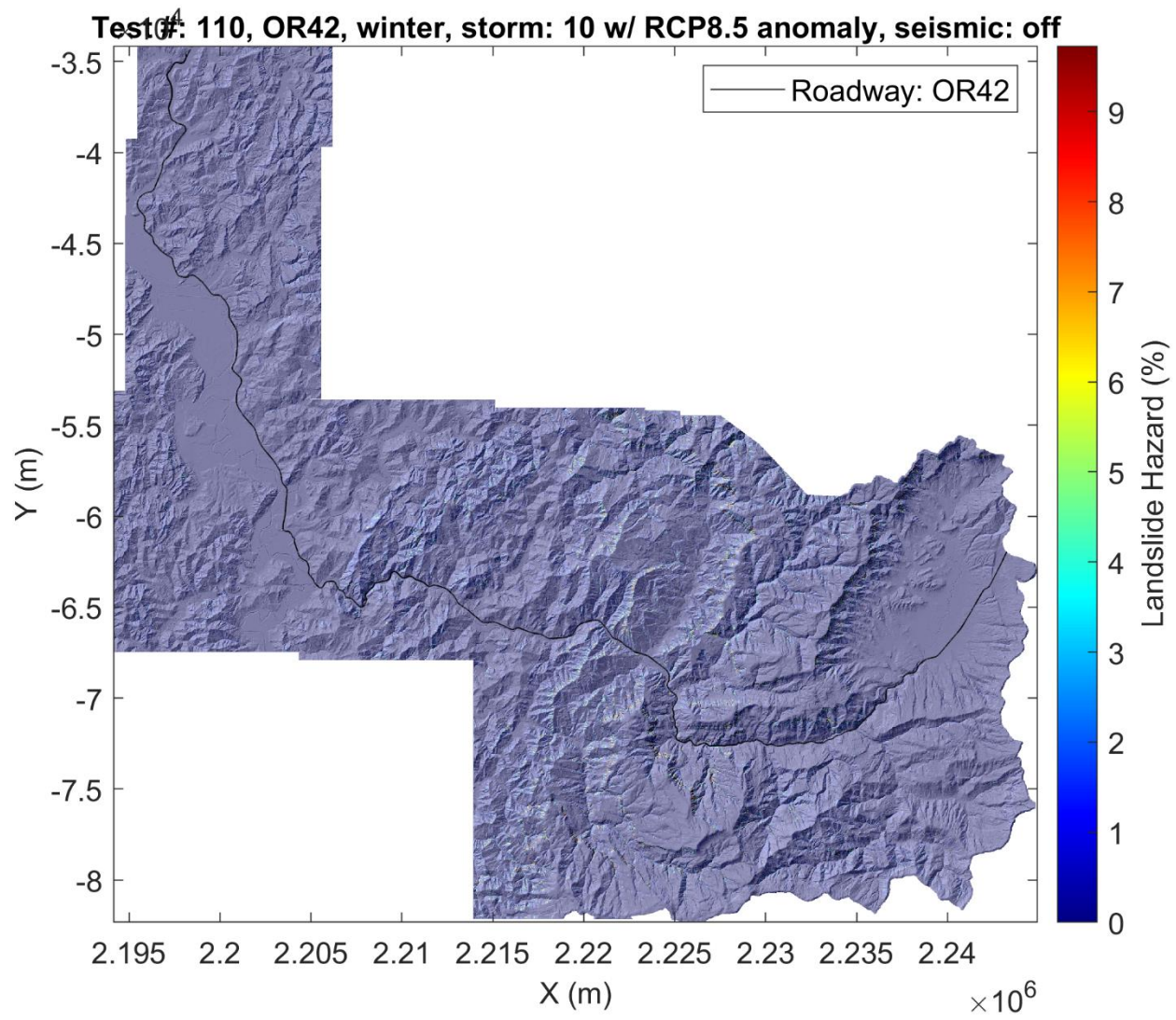


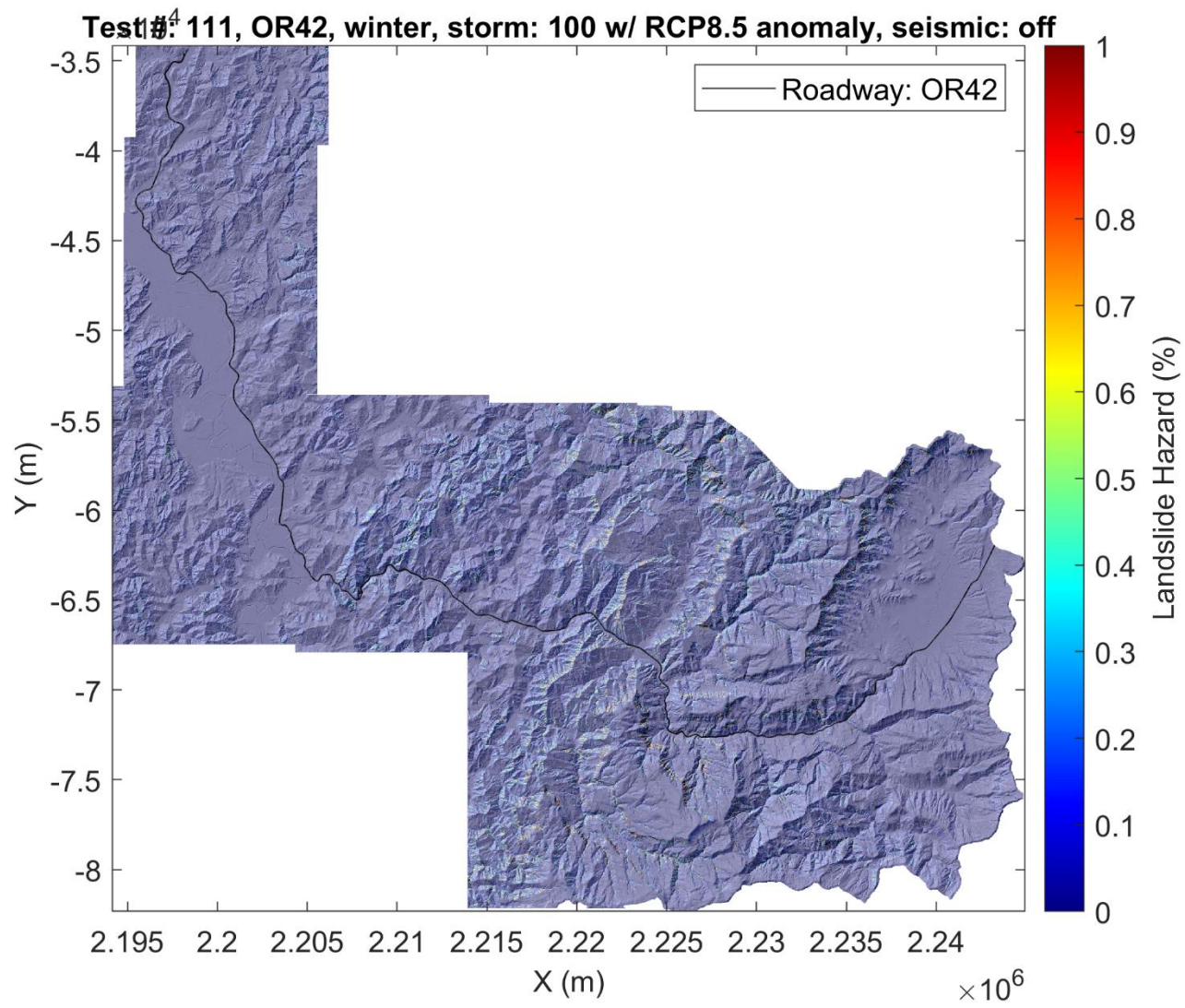


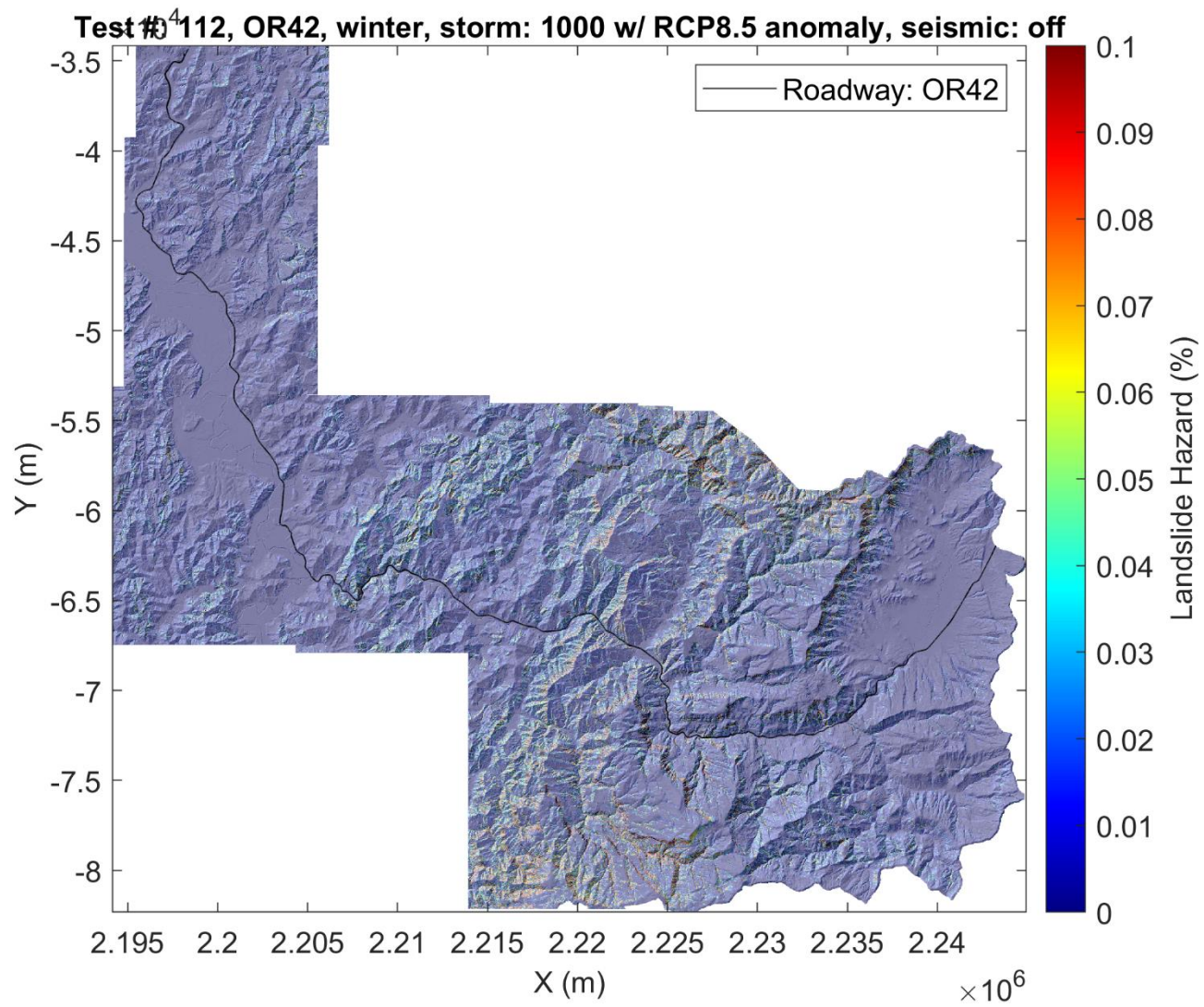






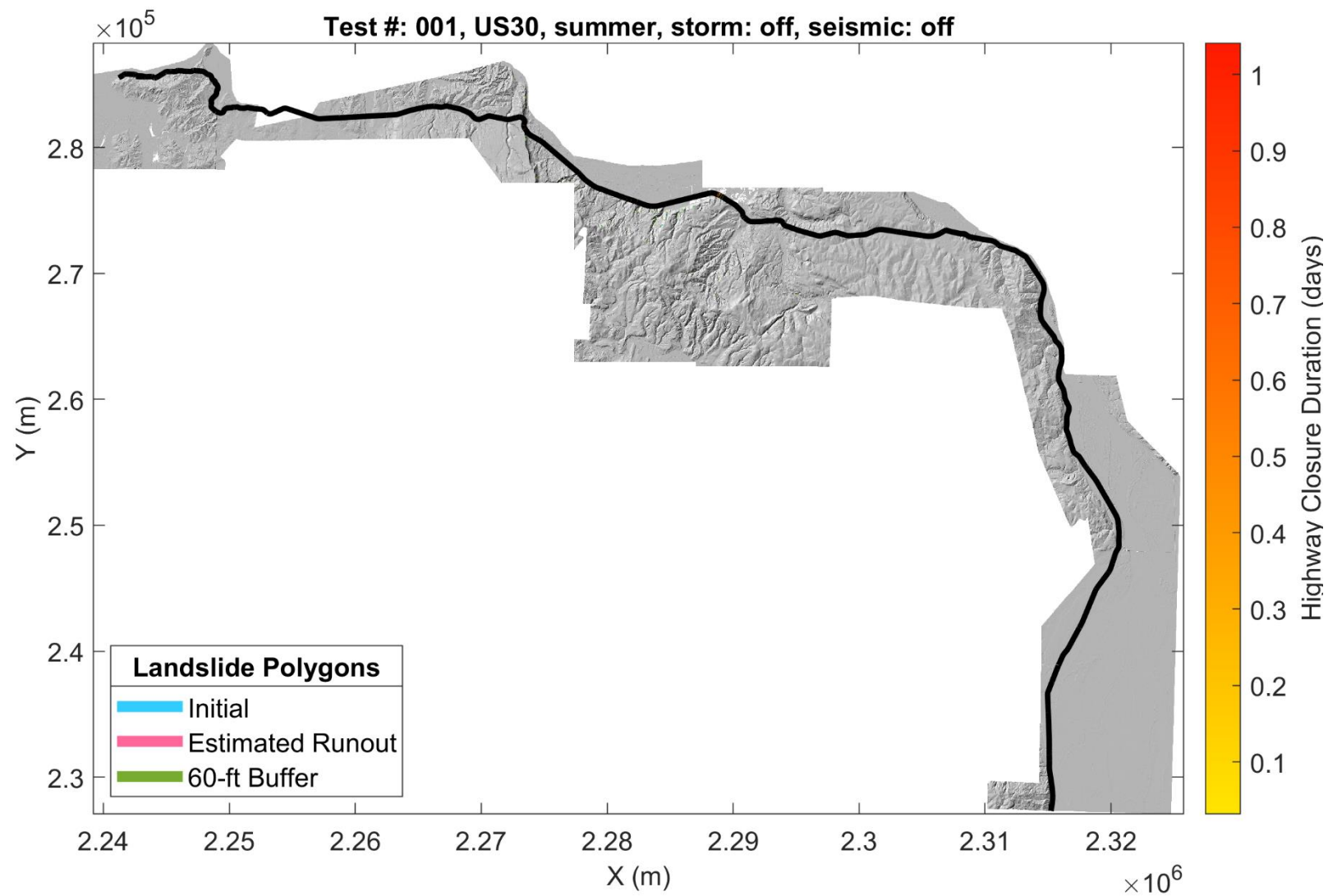


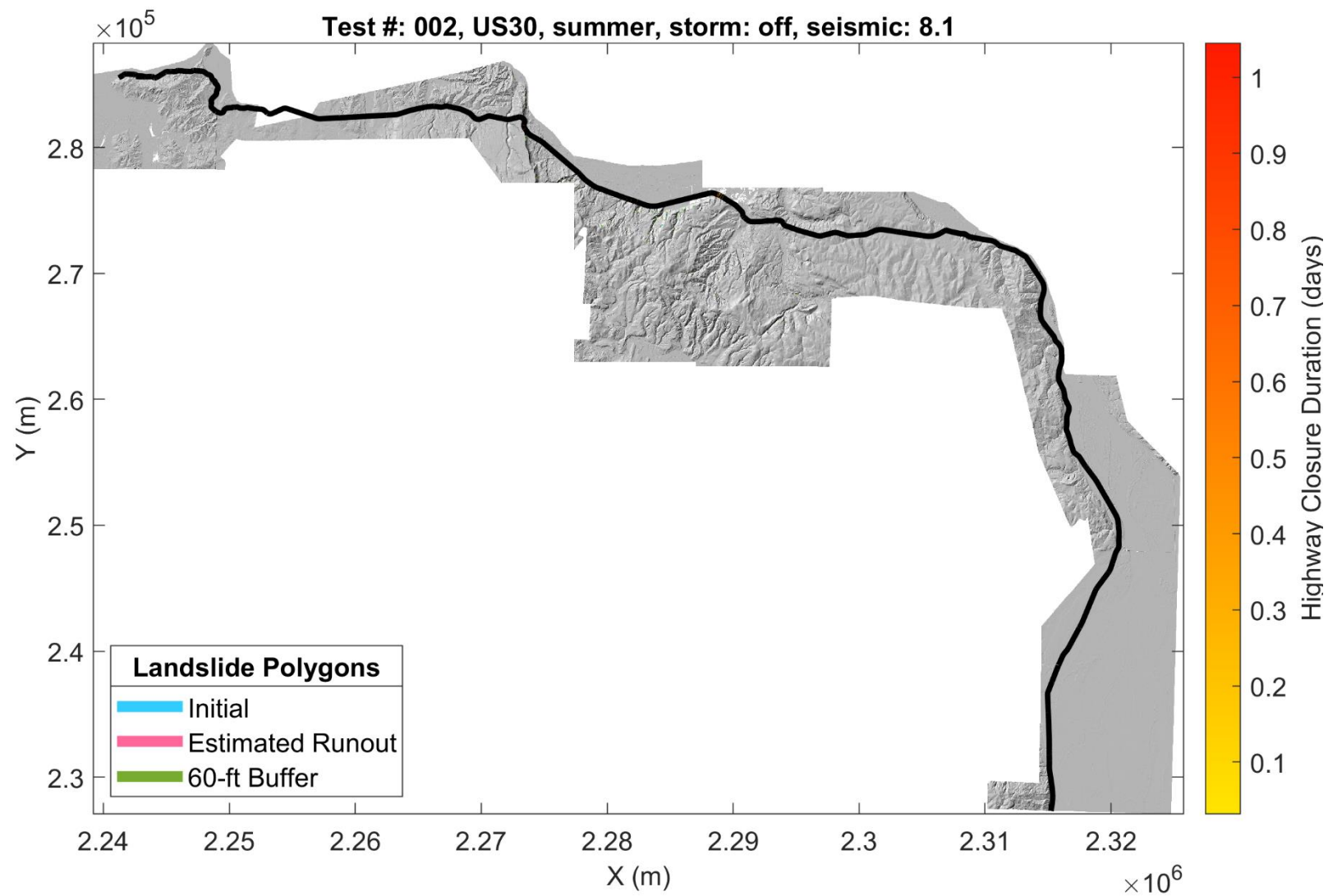


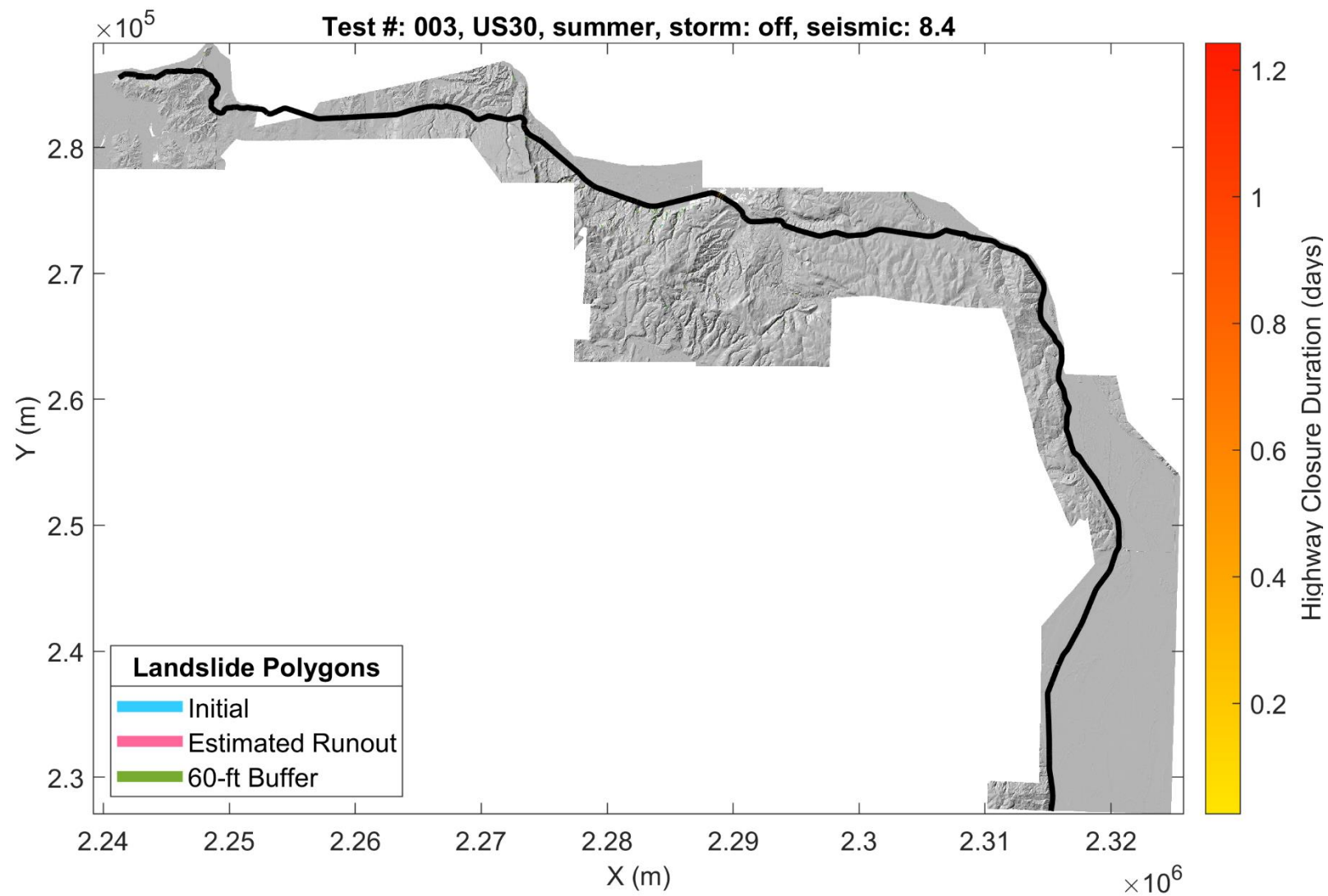


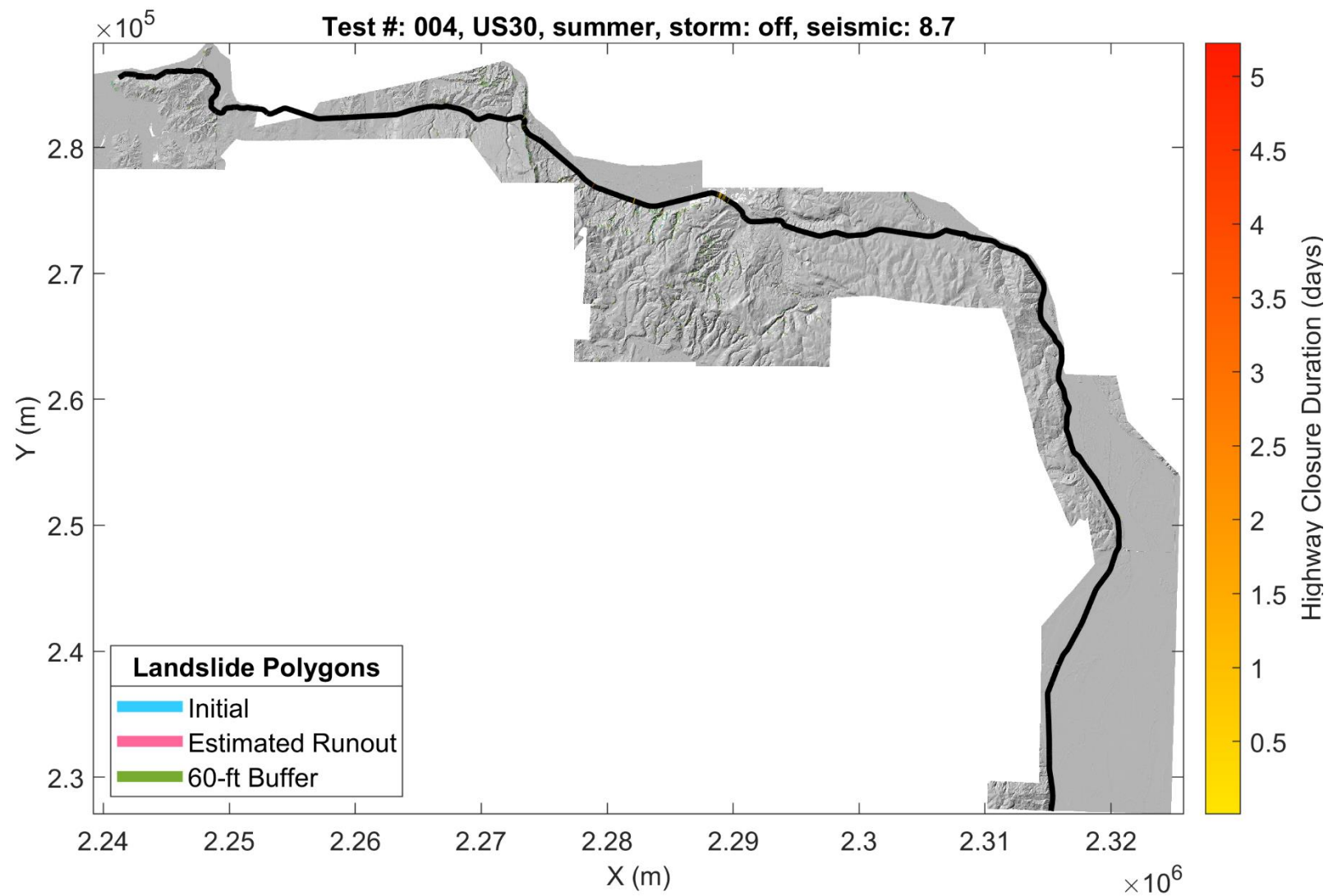
APPENDIX C: RISK MAPS WITHOUT 60 FOOT LANDSLIDE BUFFERS

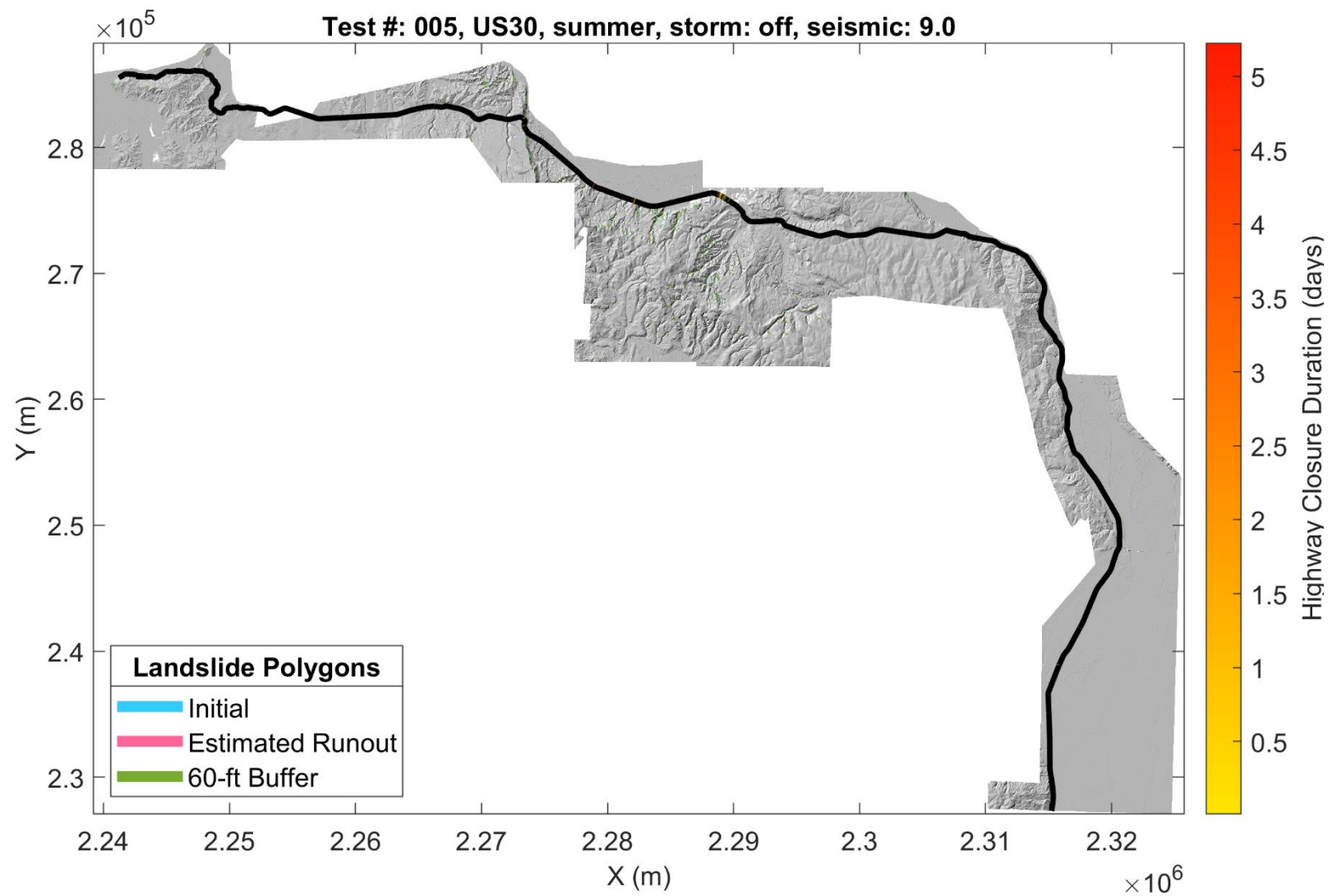
This appendix contains a full suite of risk maps, containing landslide polygons computed as described in Section 3.10.1, and highway closure times (closure times do not consider landslide buffer) for all scenarios considered for SPR808. These scenarios consider a combination of physical drivers, including seasonal variations in antecedent moisture, rainfall inputs, seismicity, and climate-change induced precipitation anomaly. A directory describing all tests not considering future climate may be found in Table 4.4. A directory describing all tests considering future climate may be found in Table 4.7.

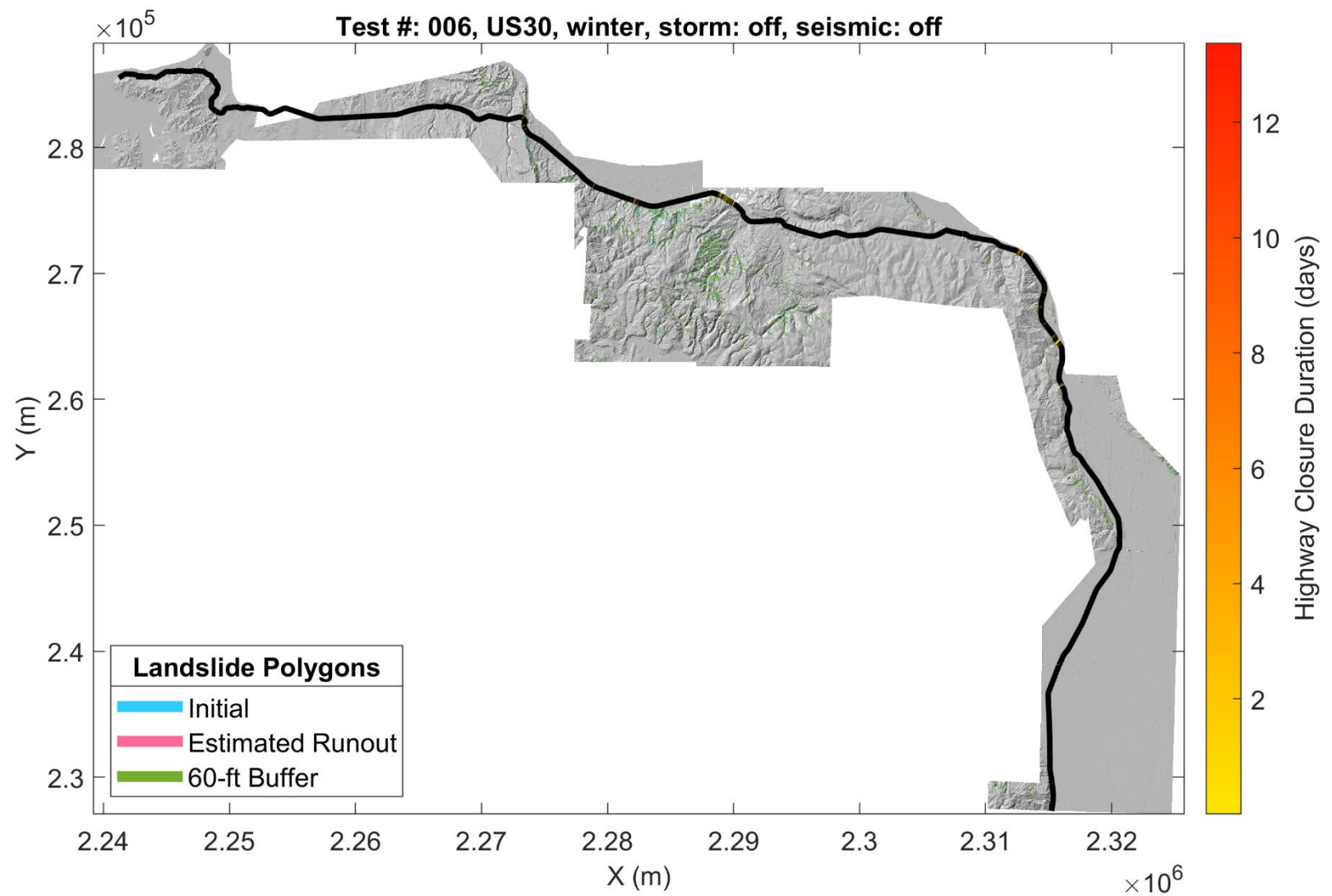


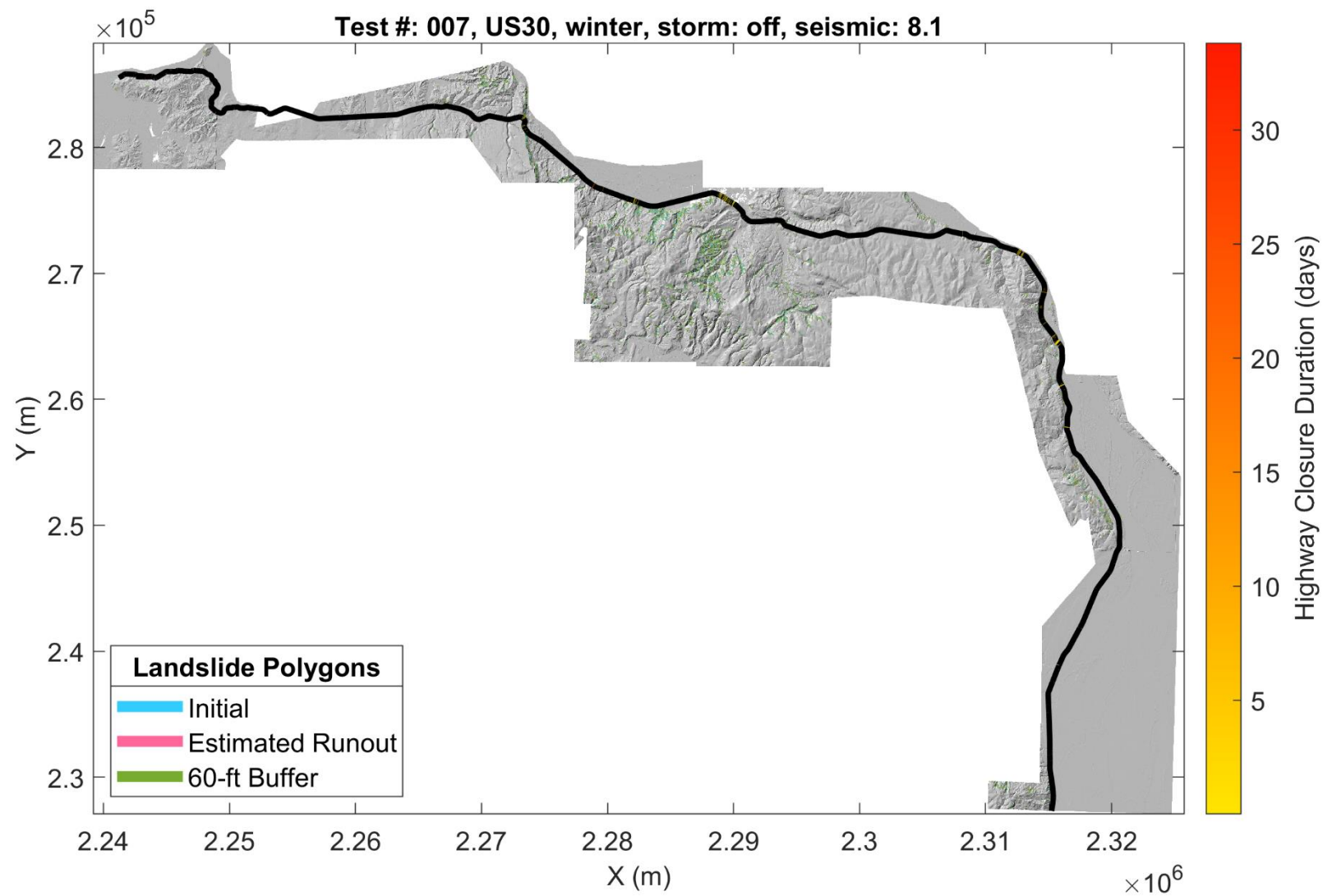


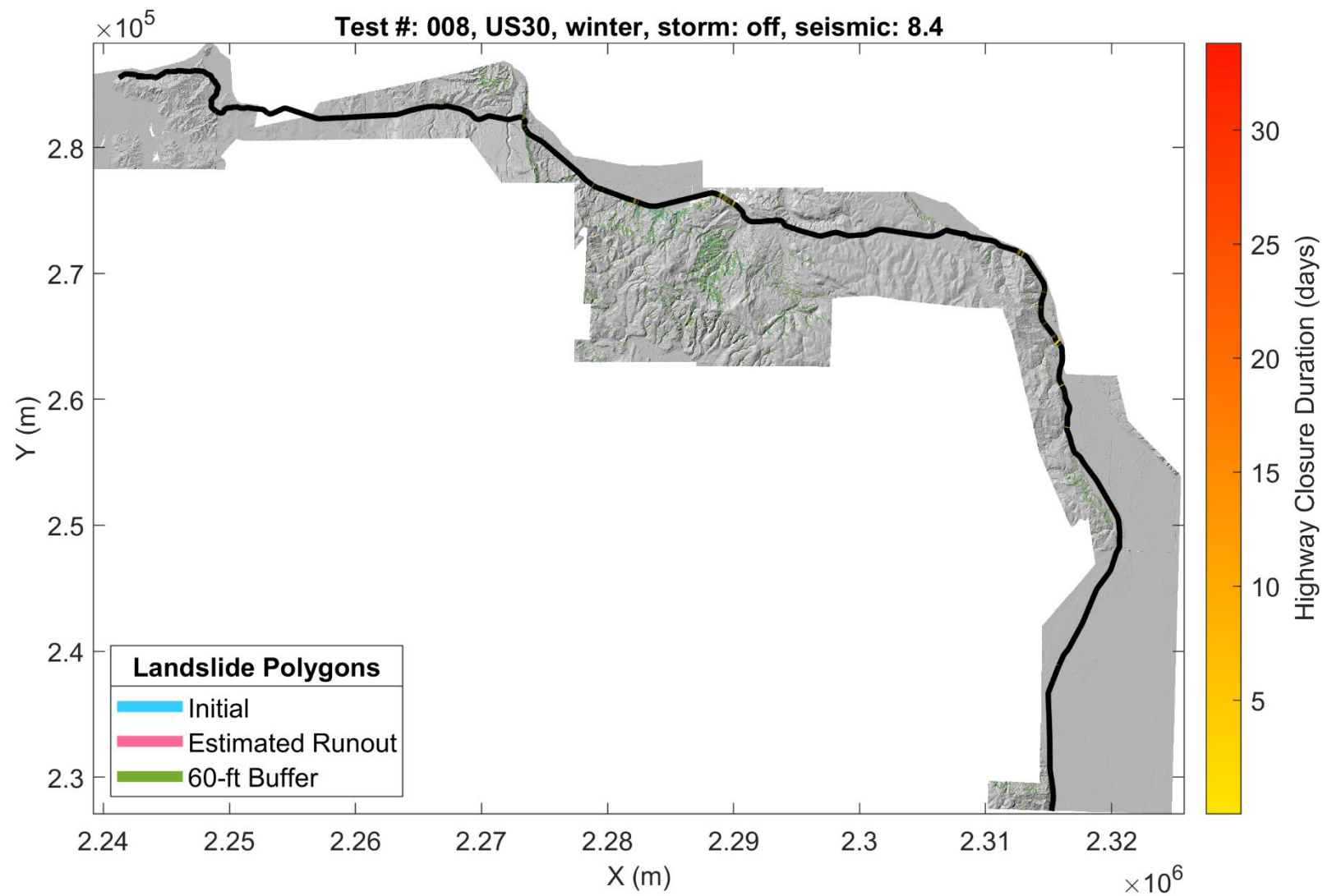


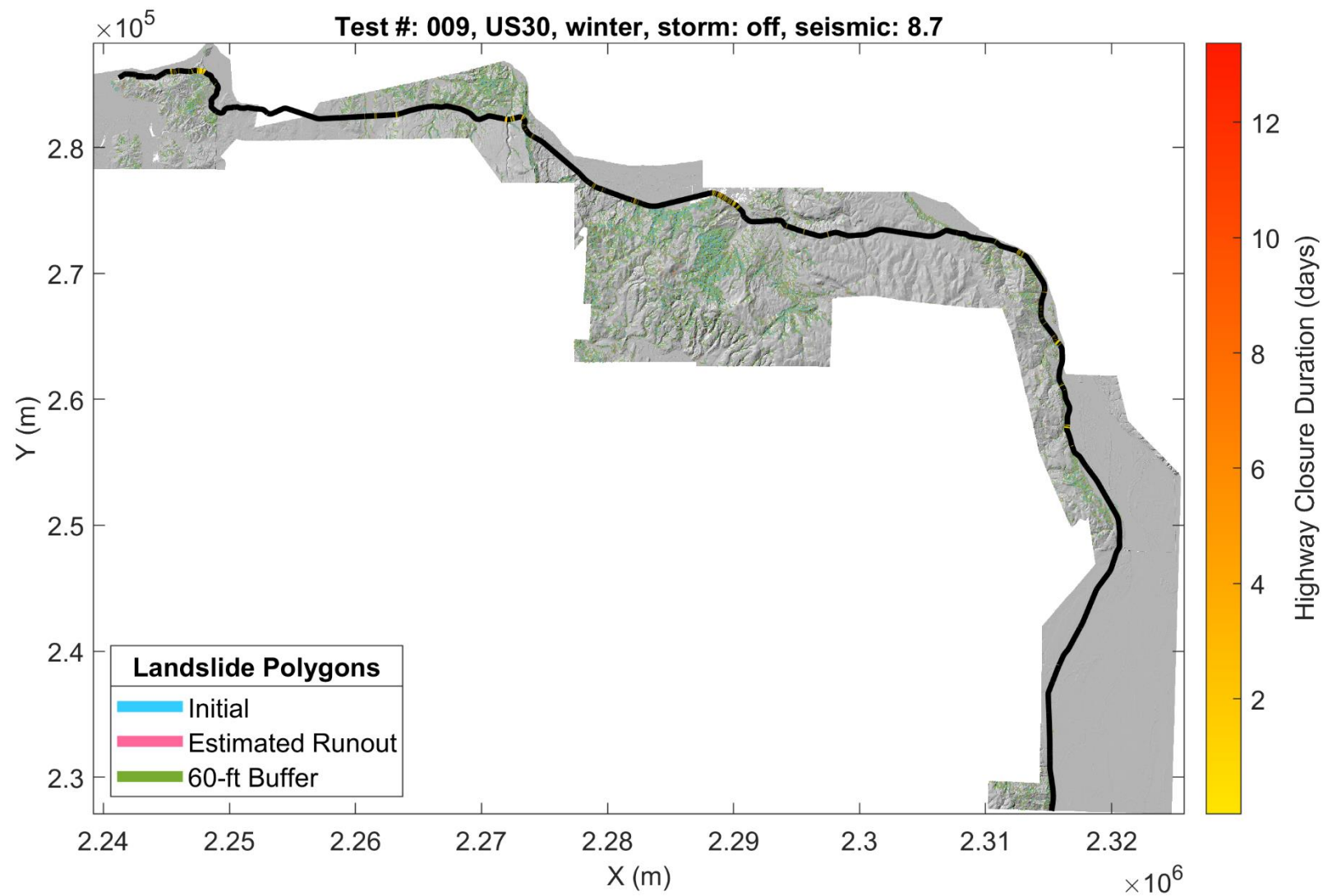


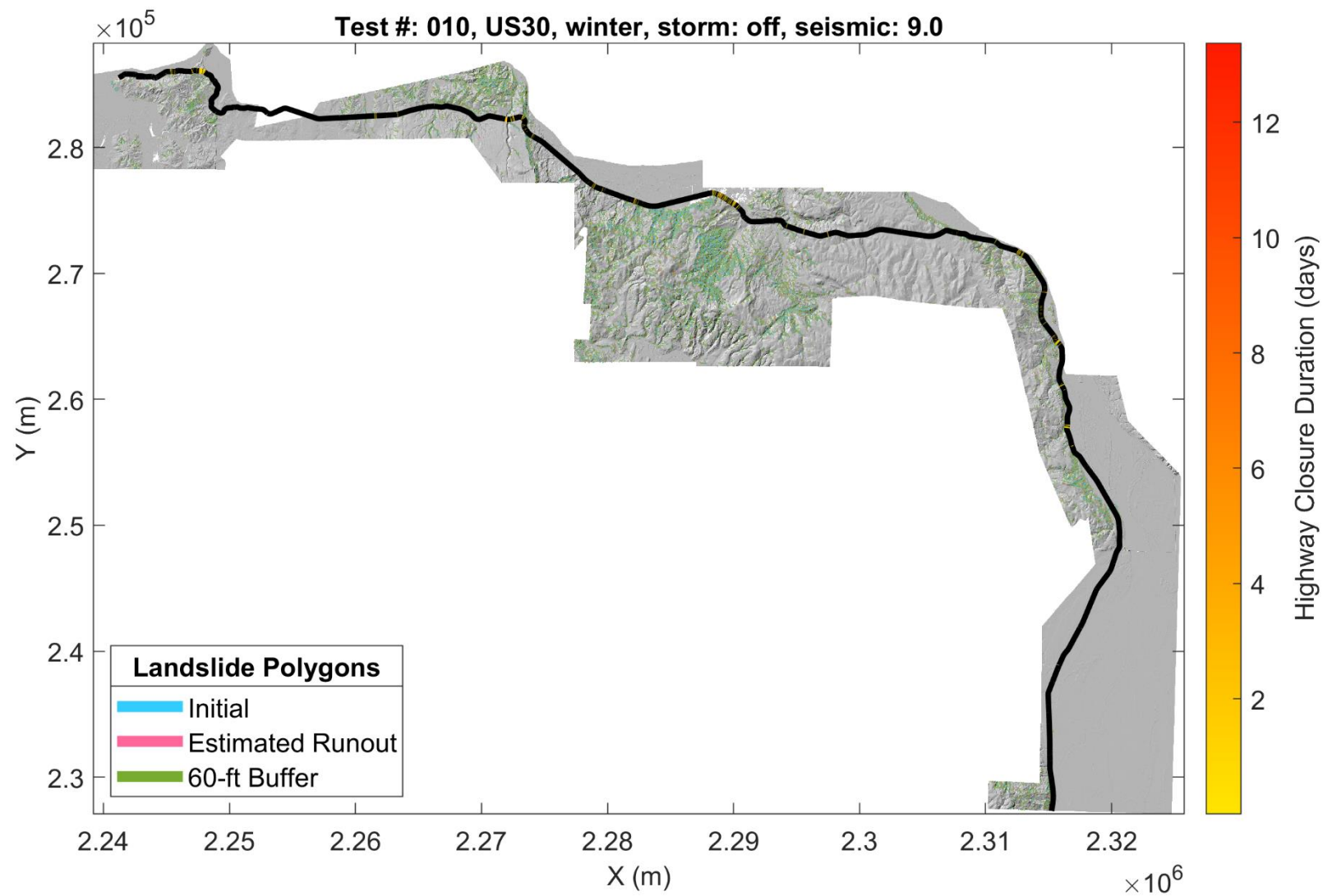


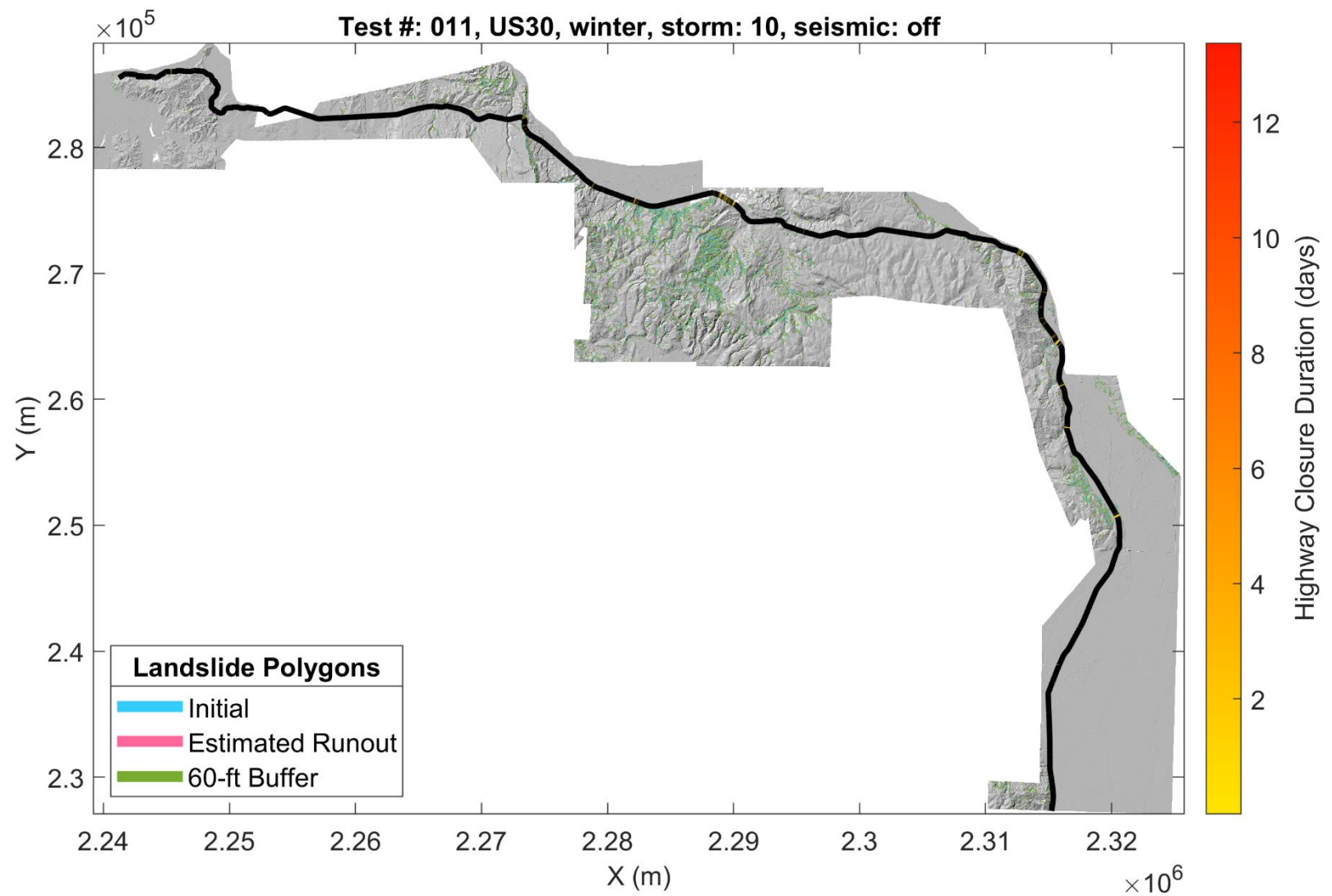


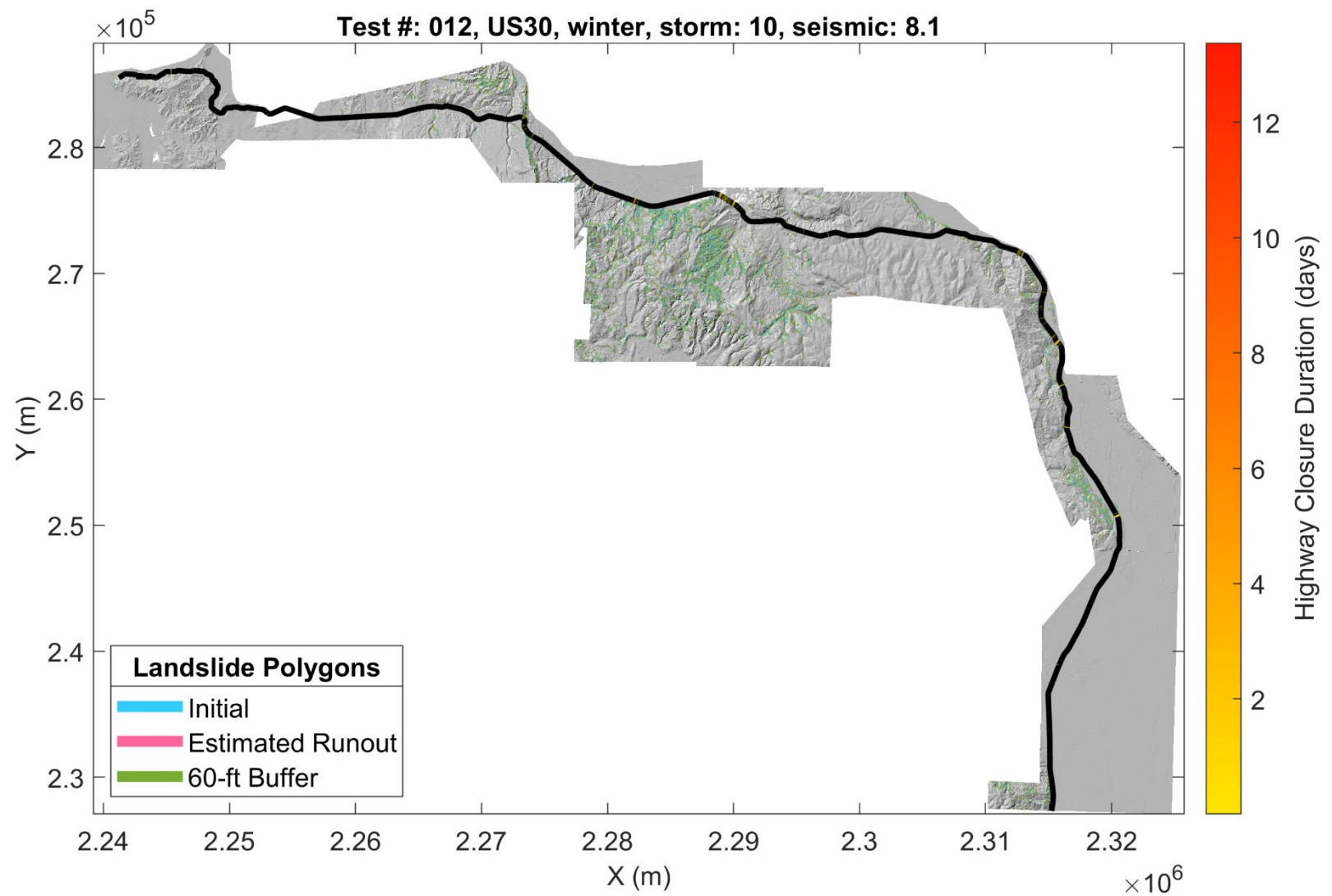


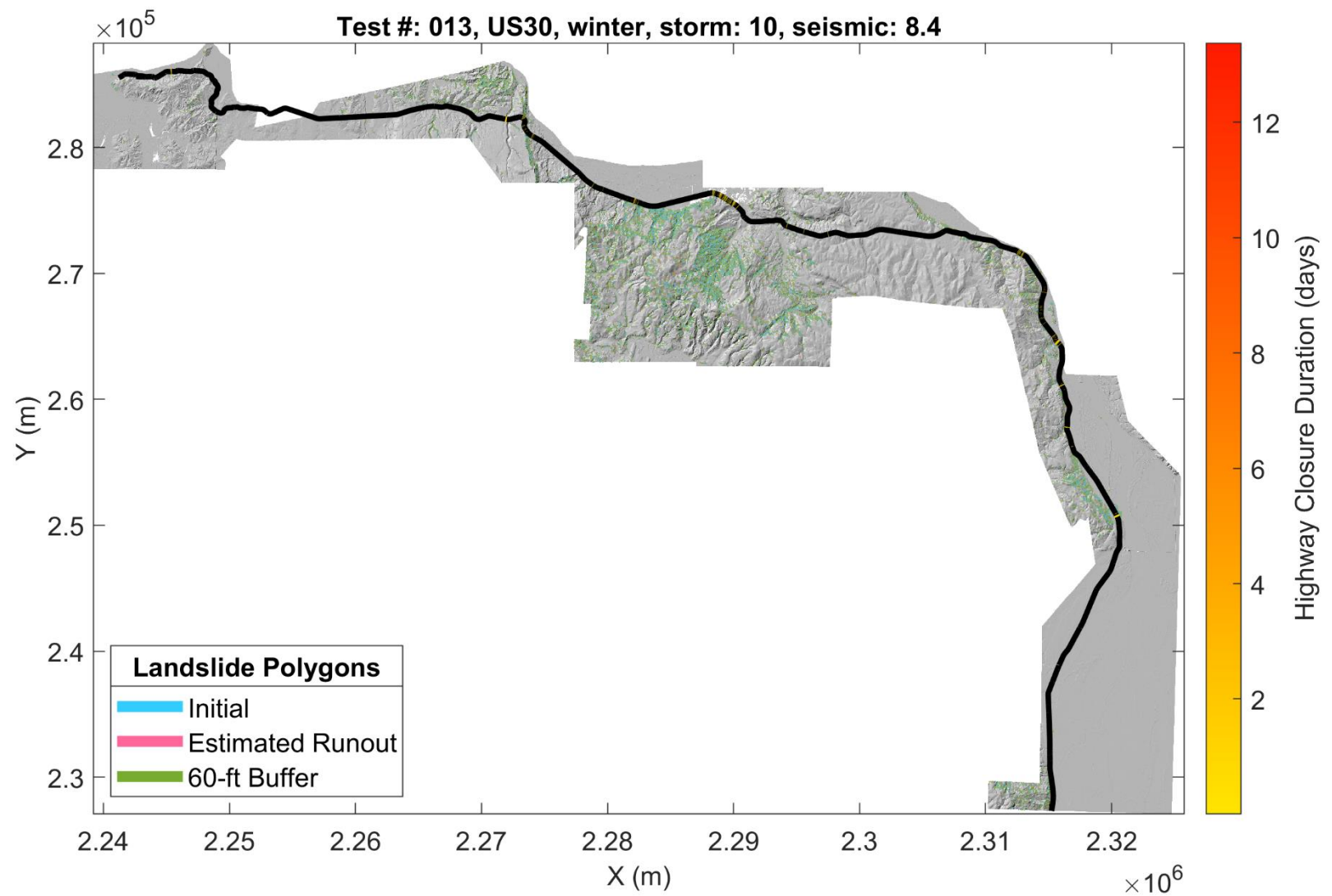


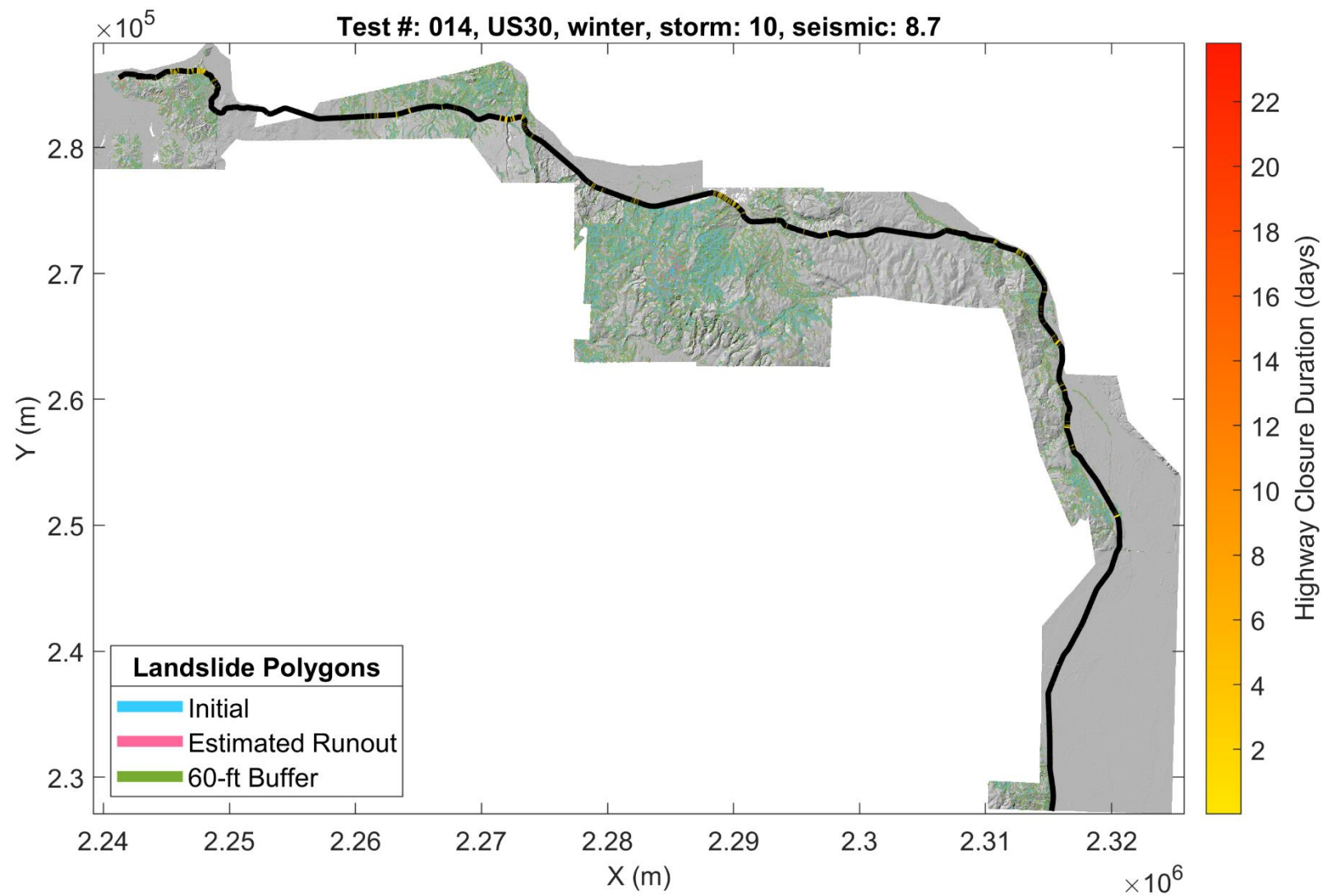


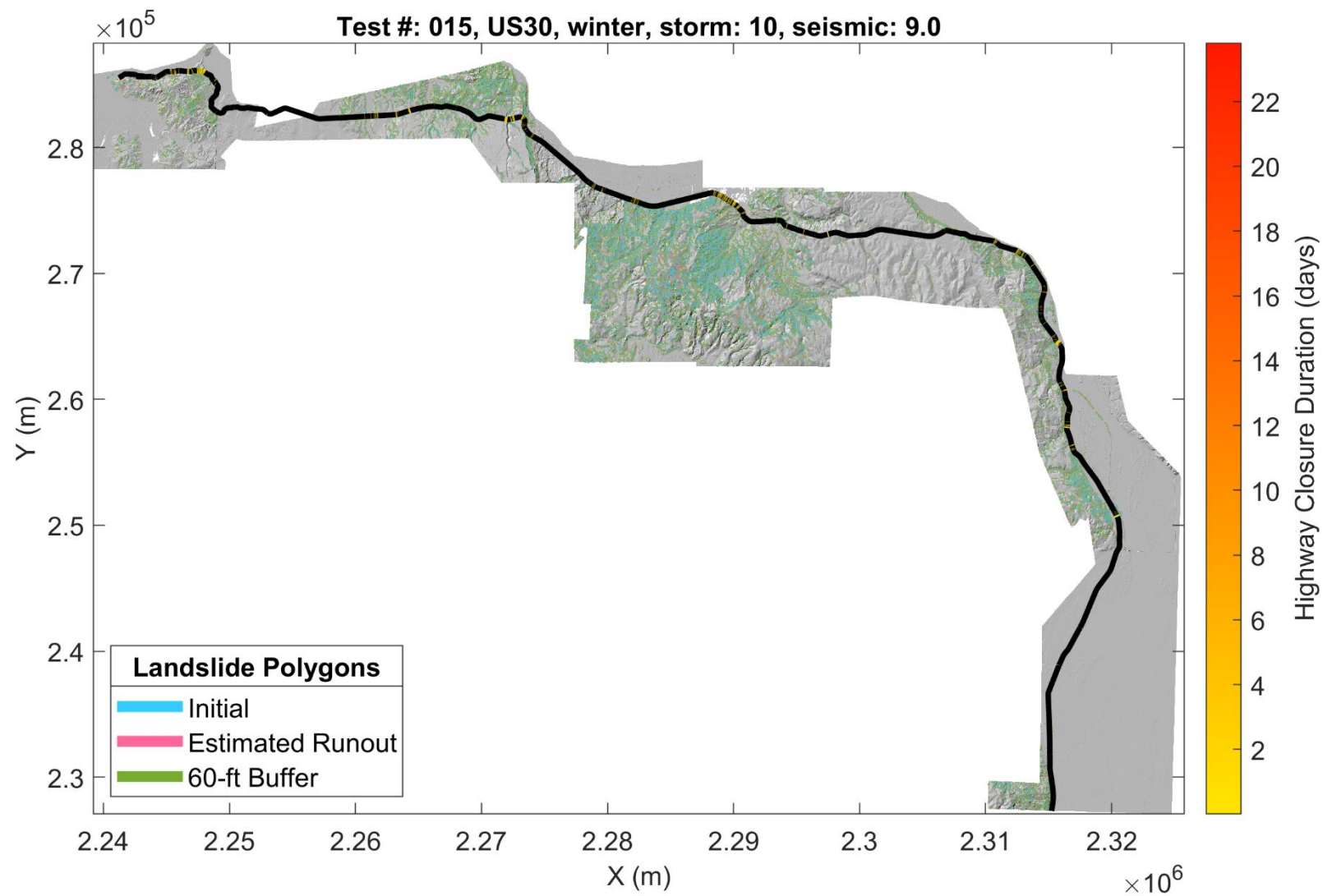


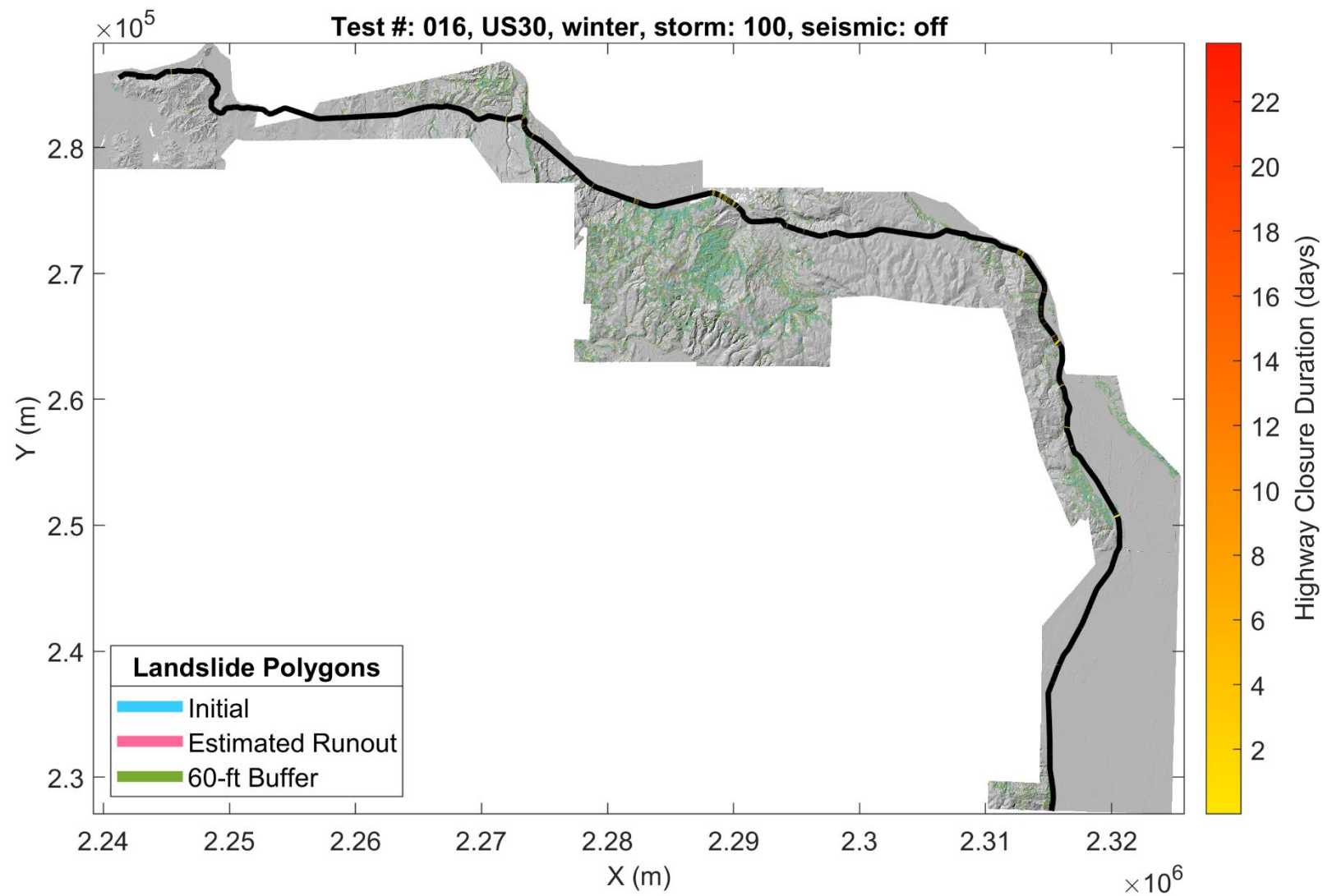


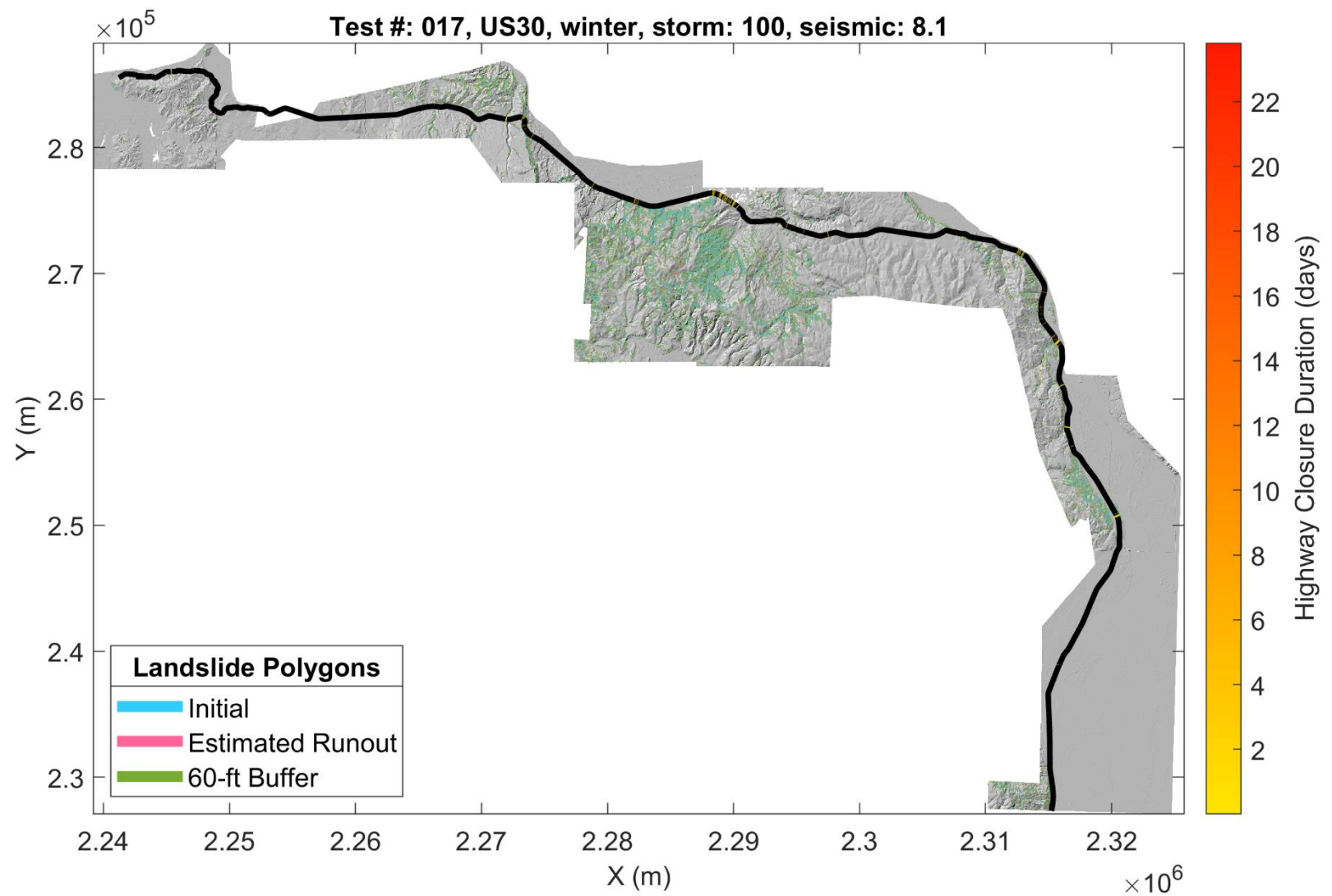


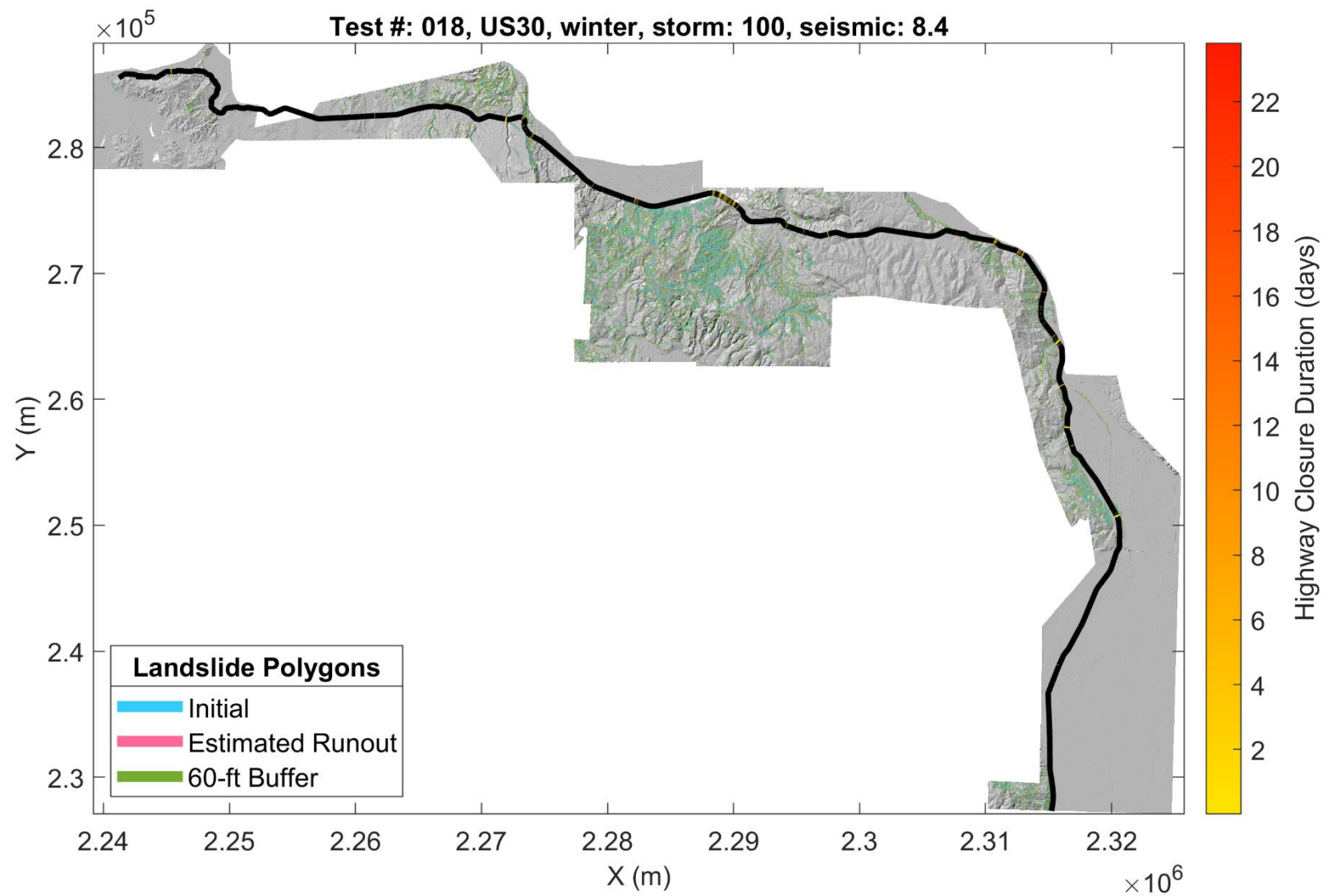


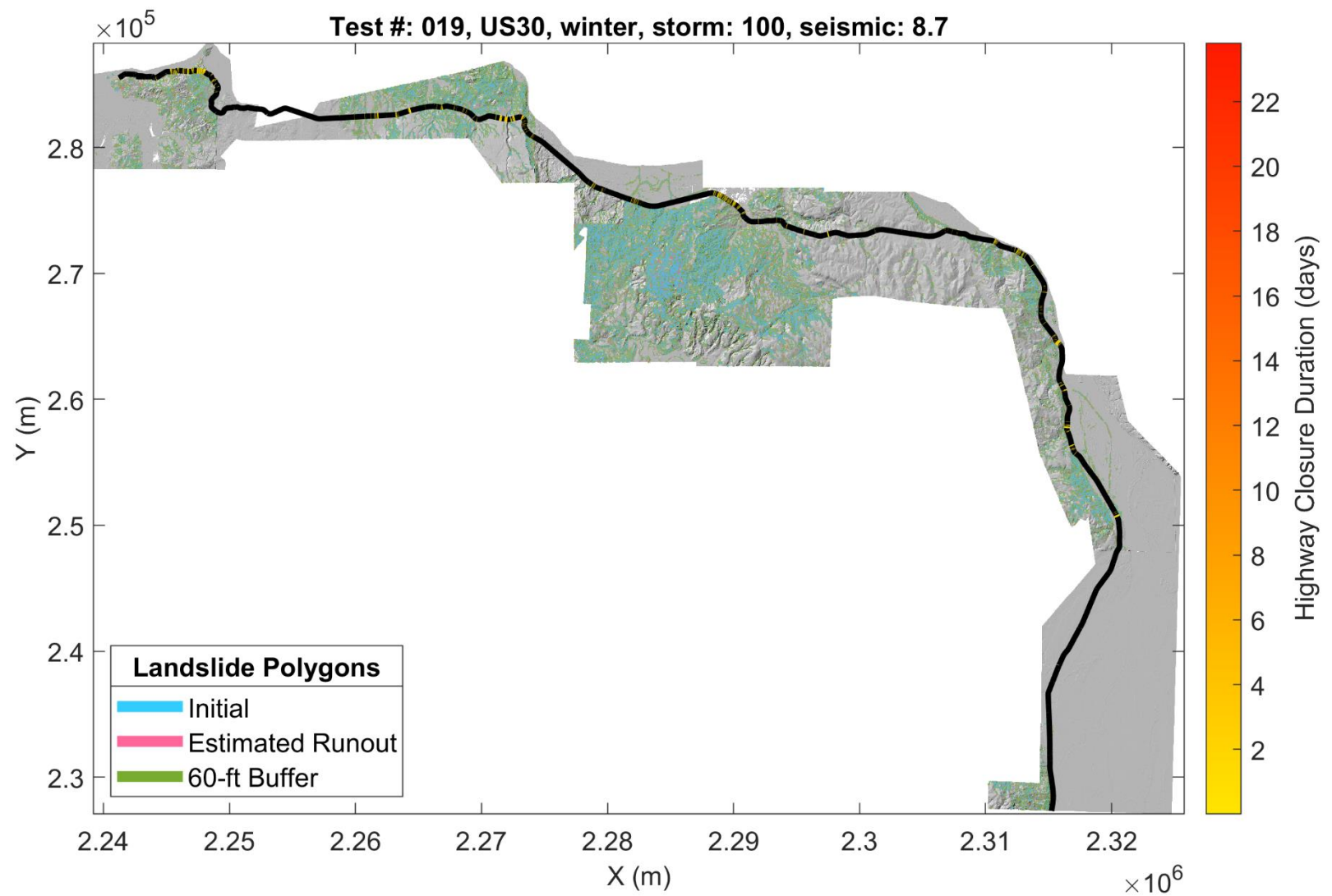


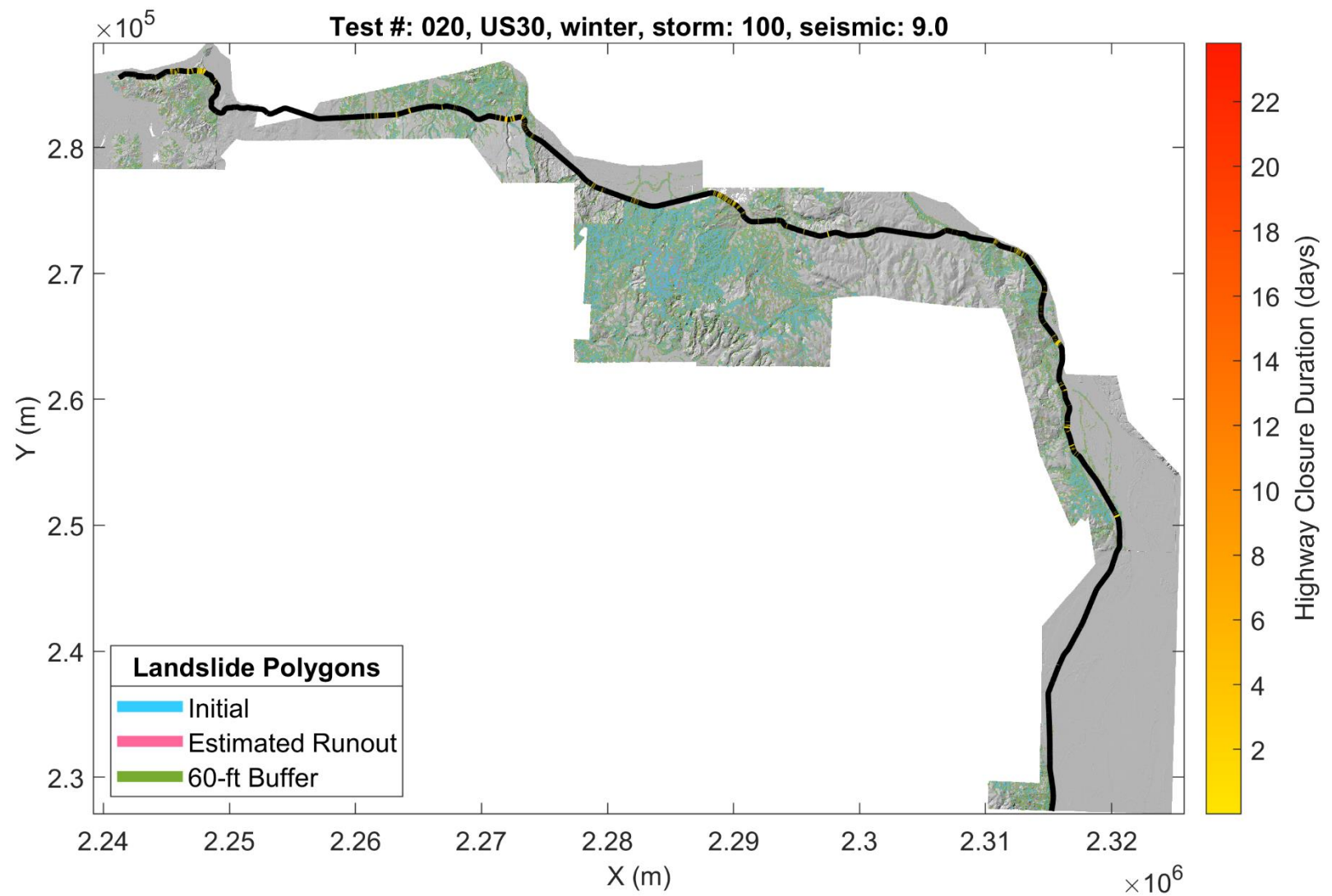


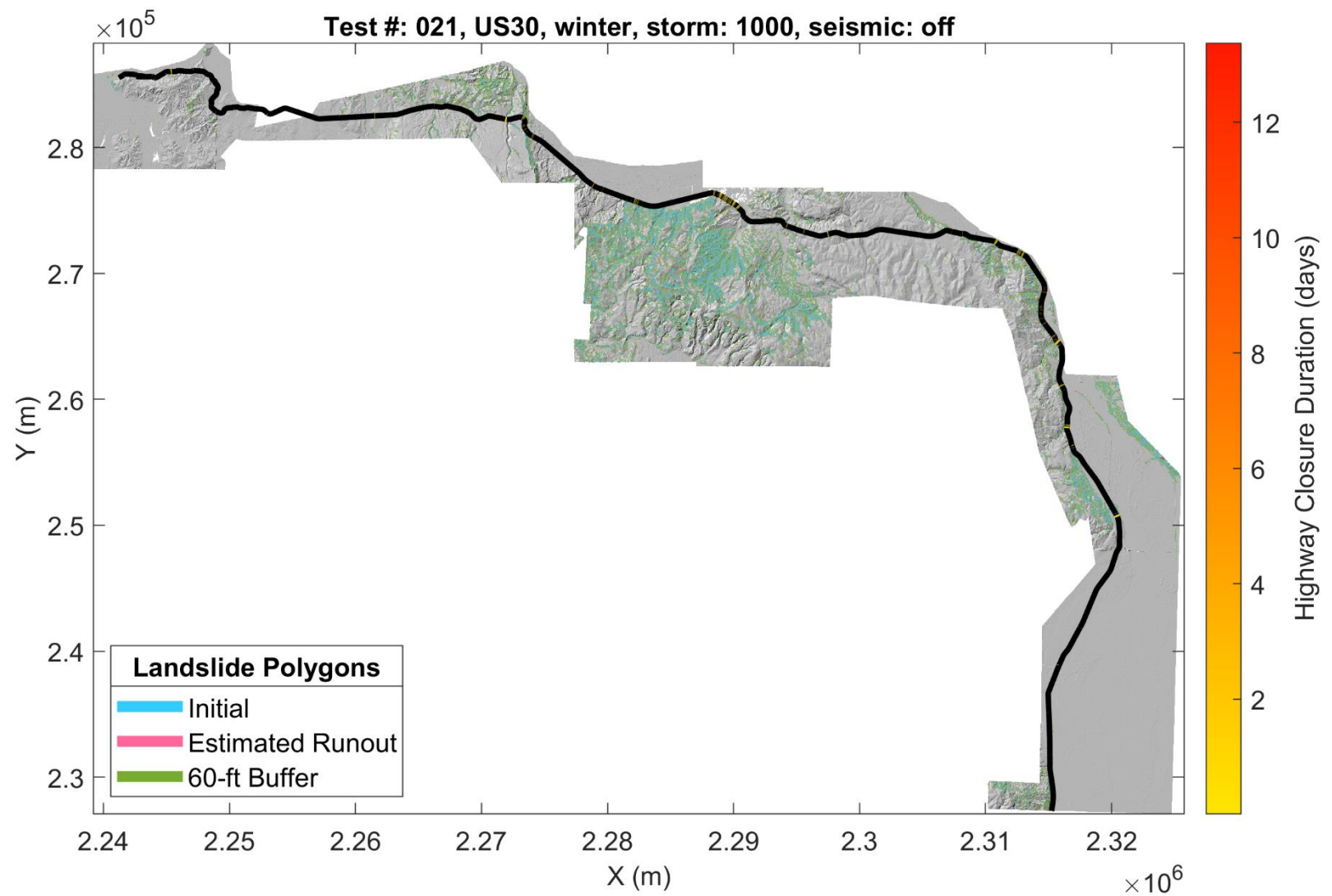


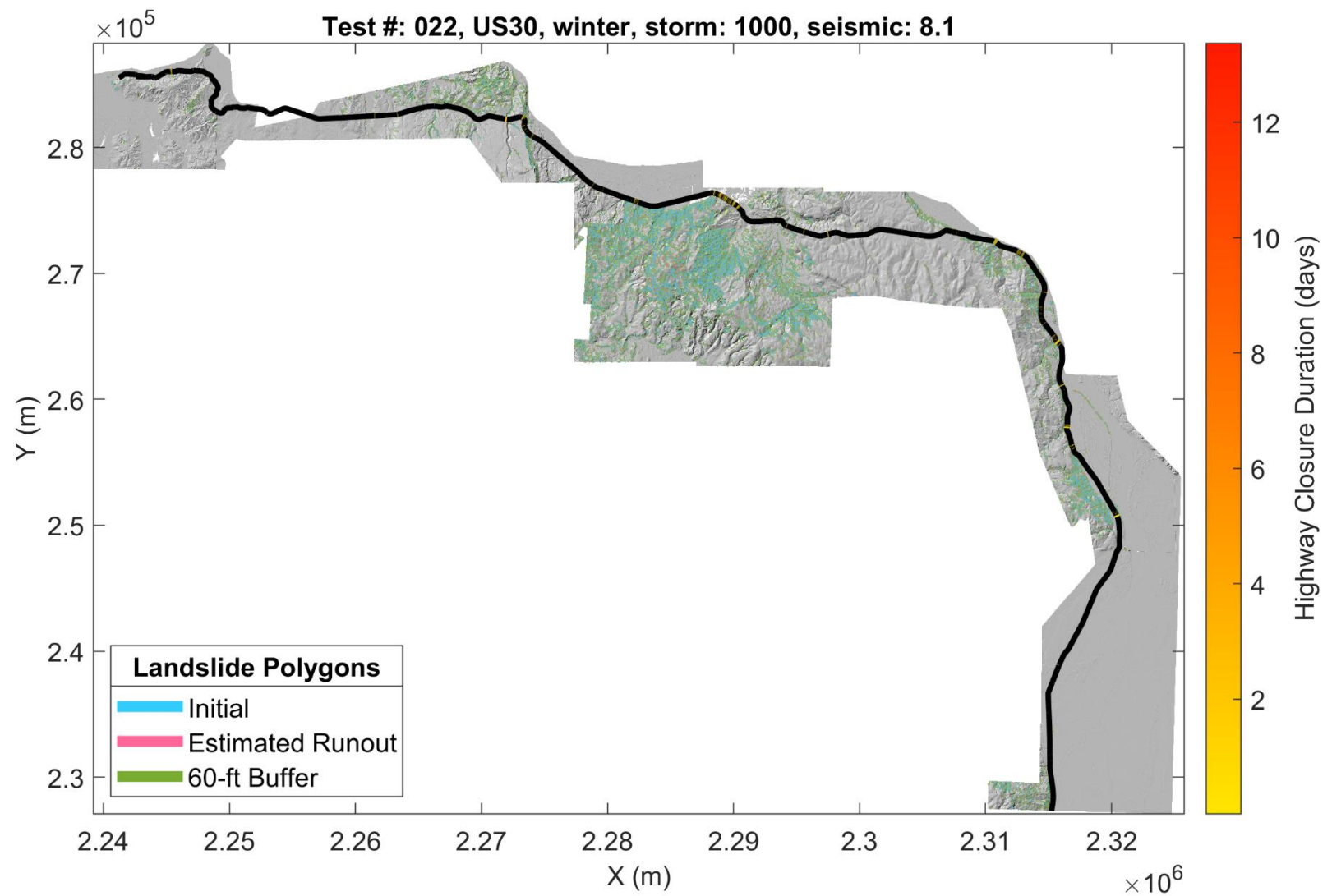


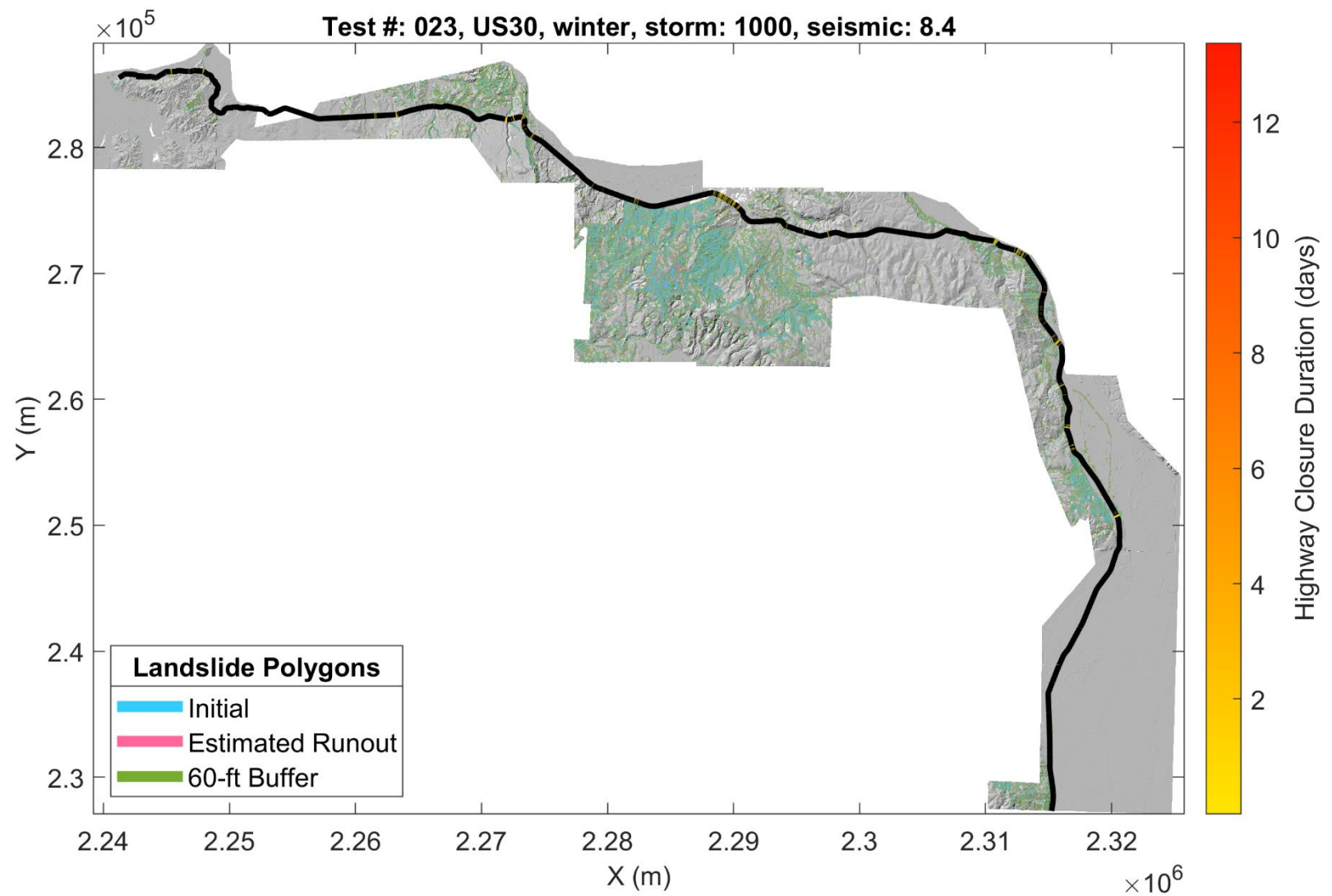


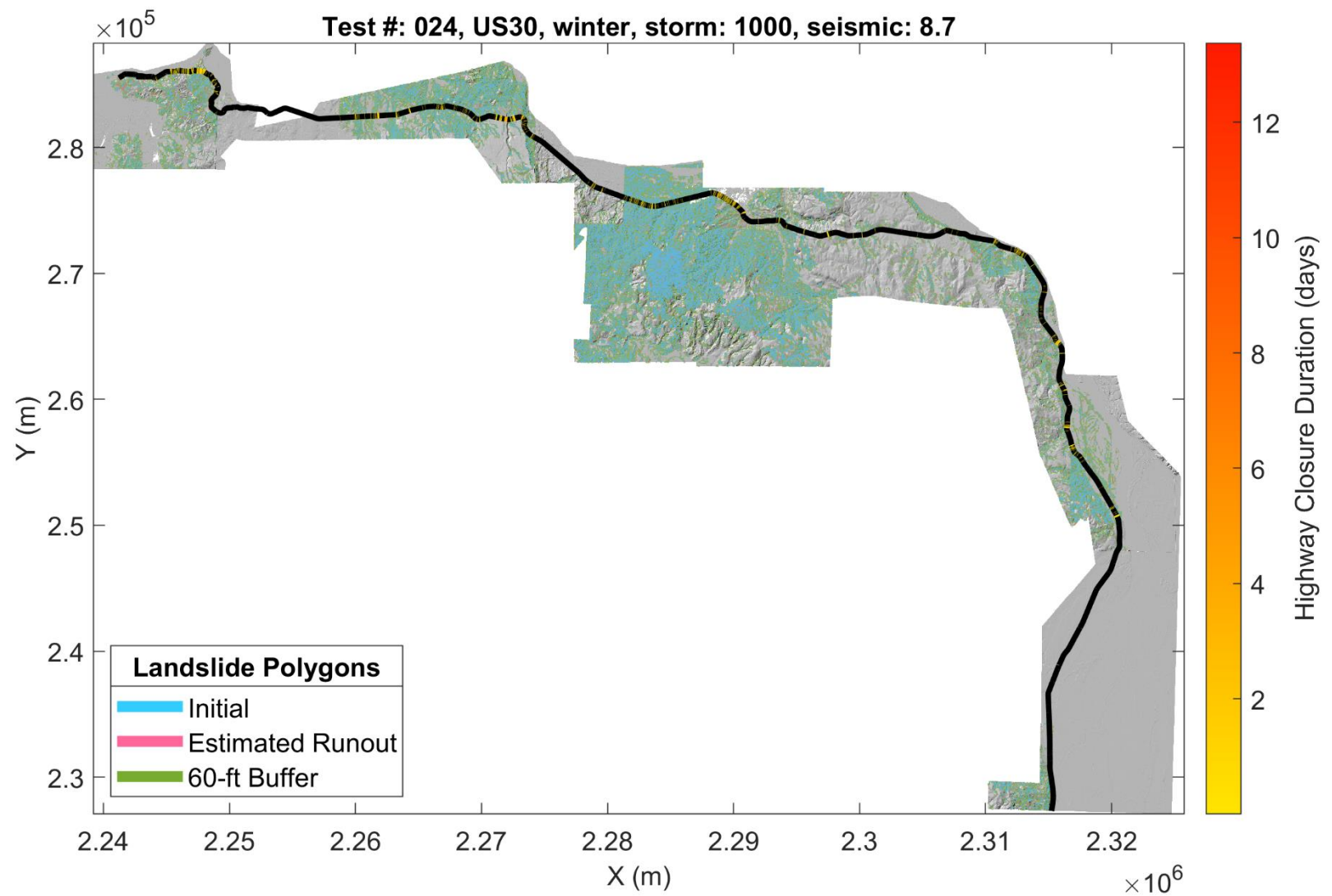


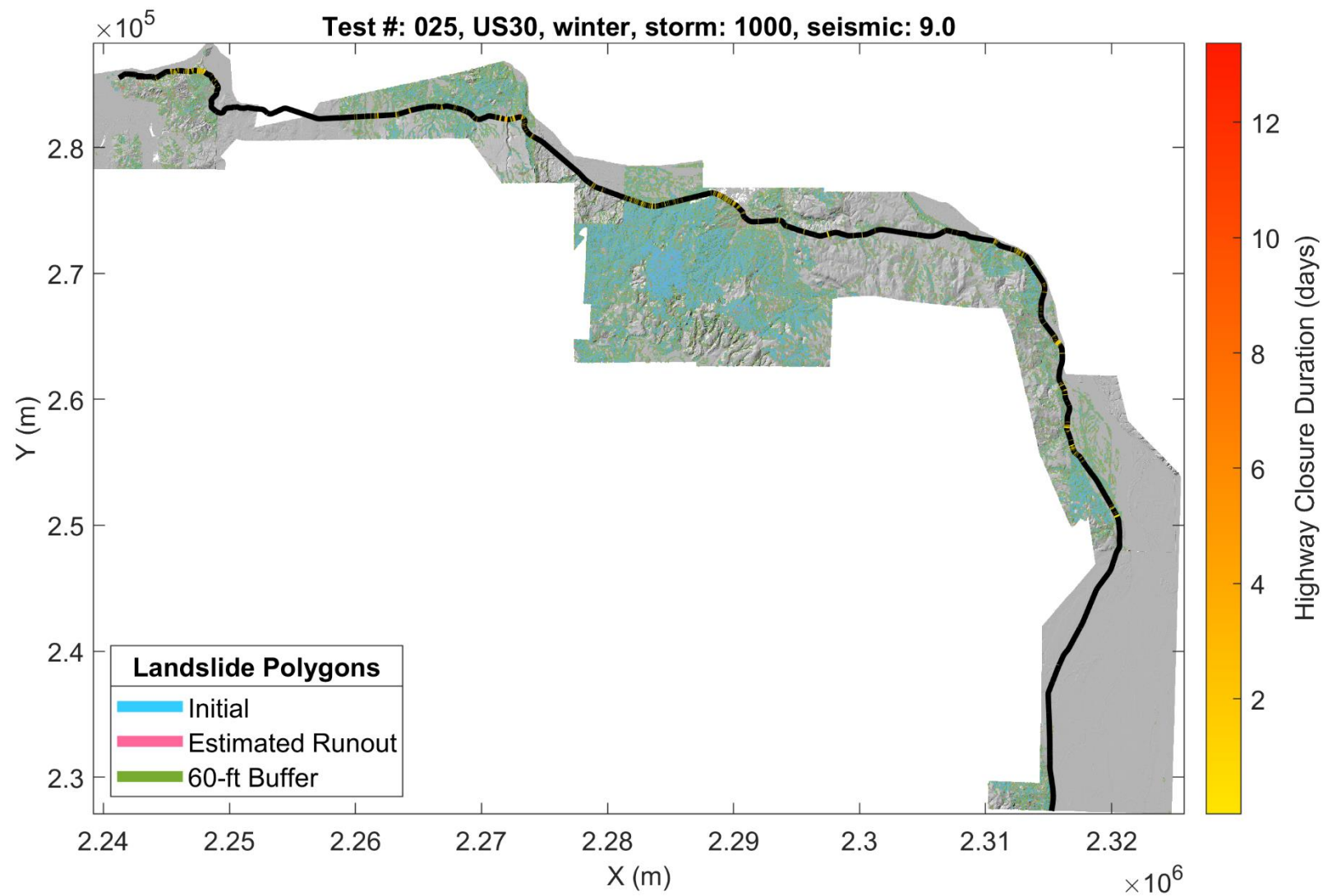


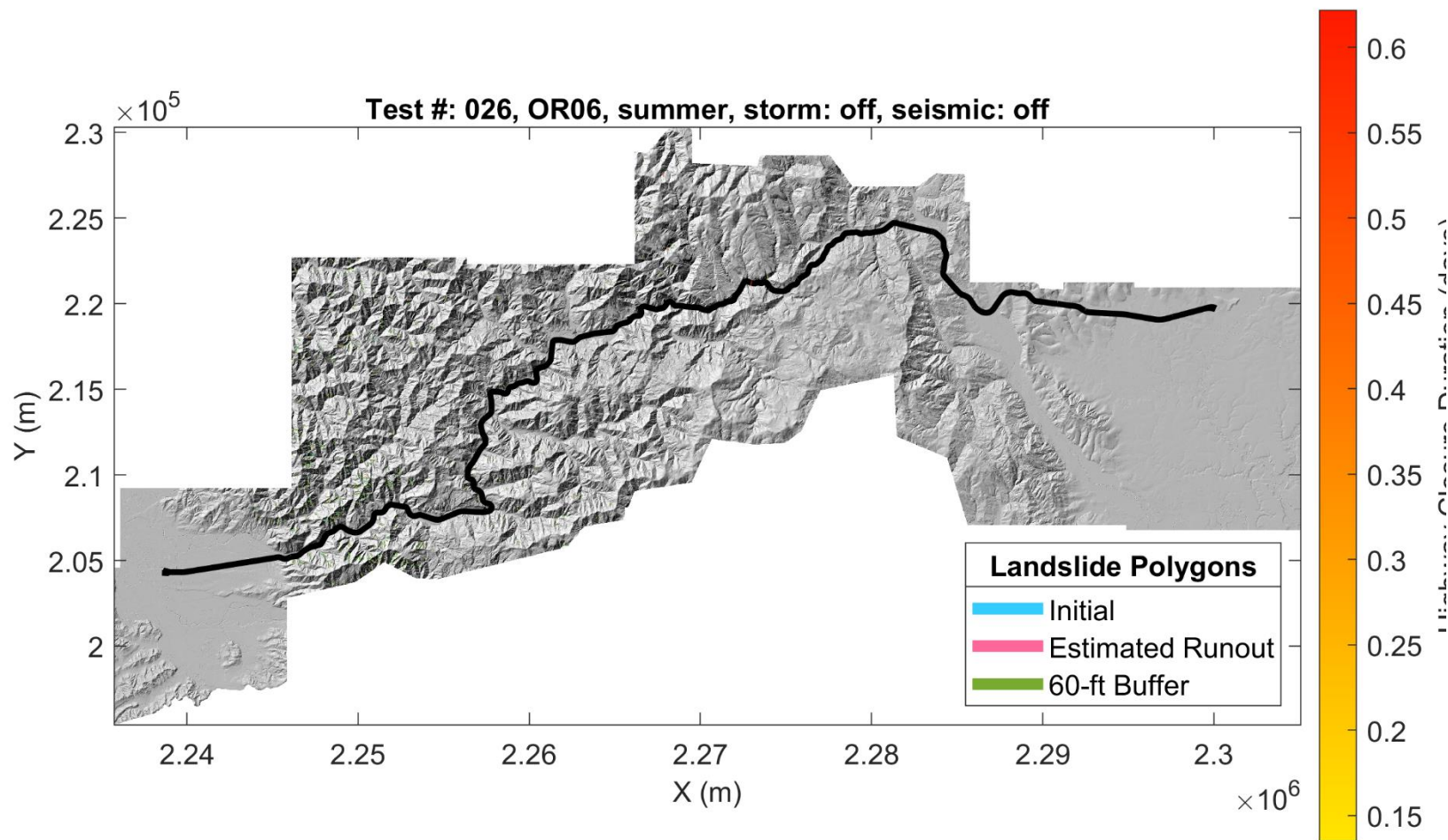


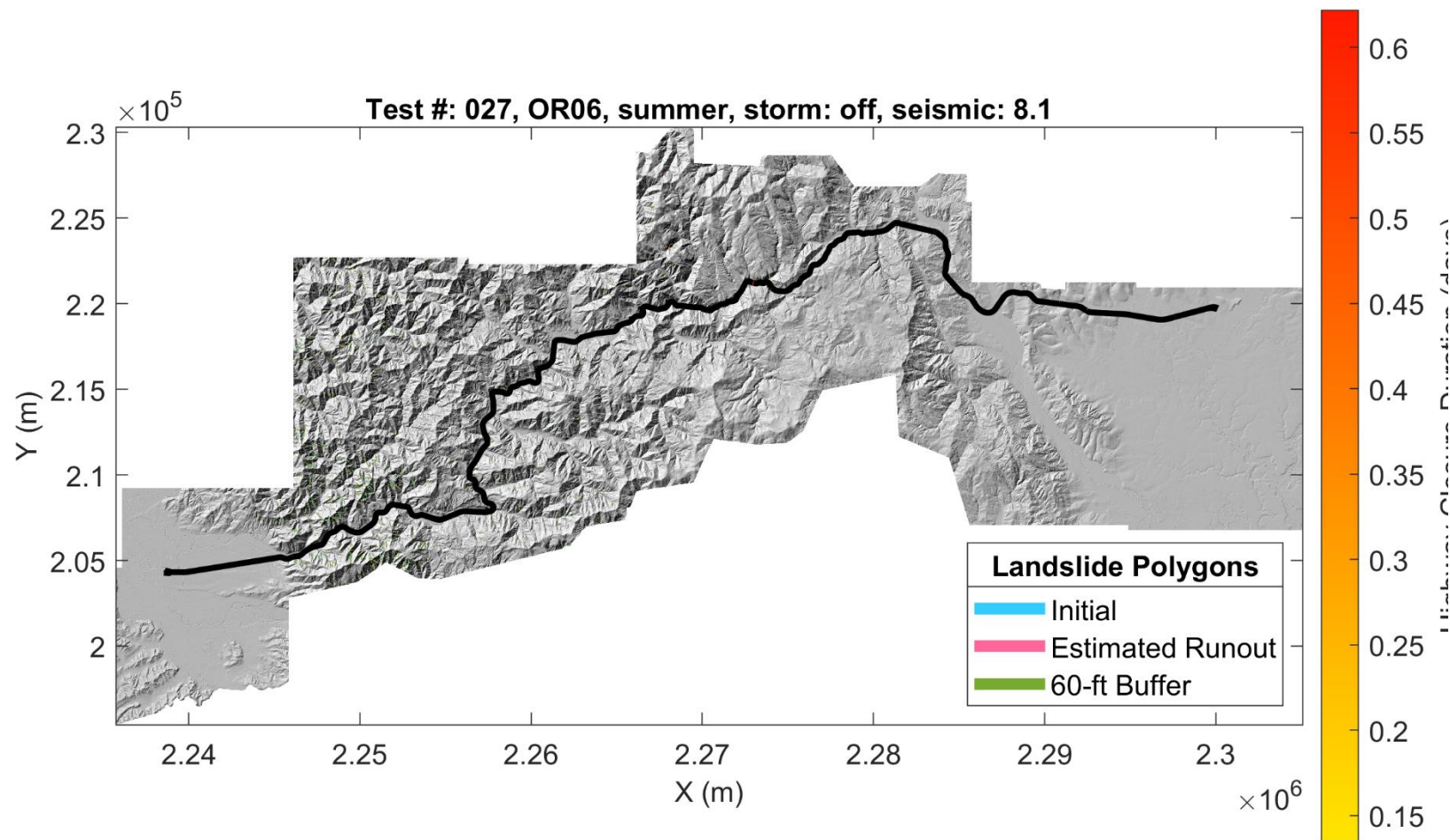


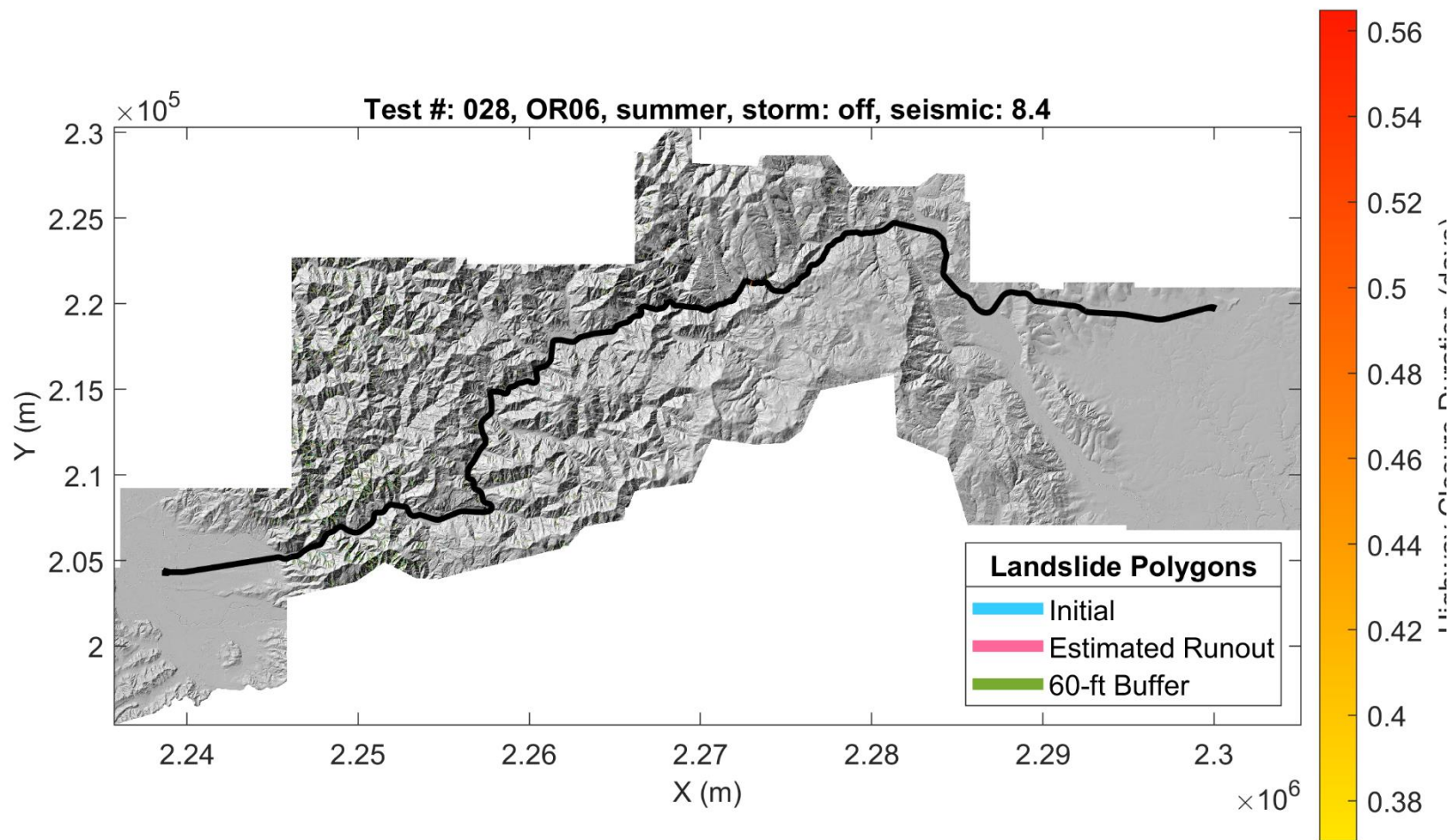


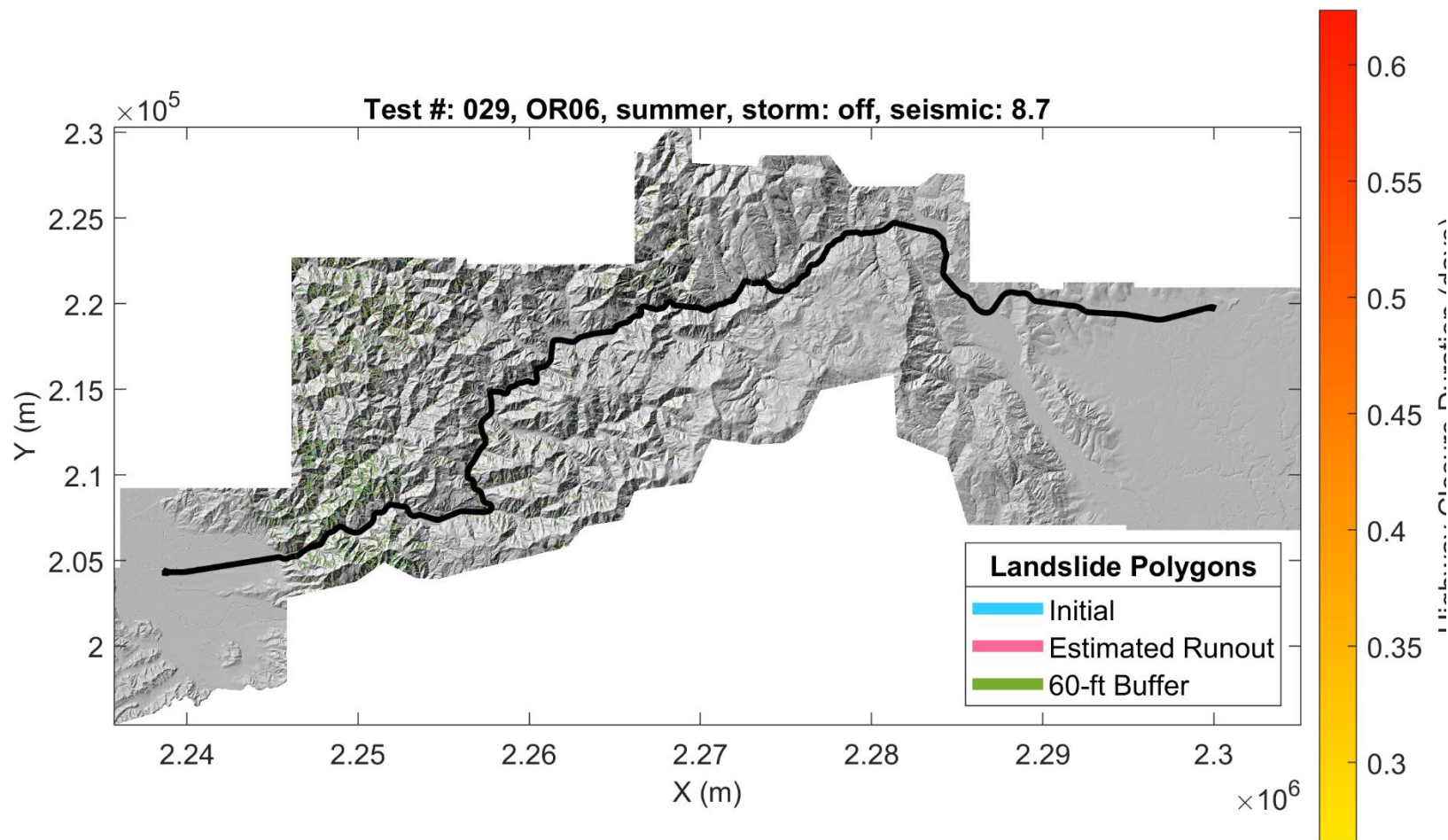


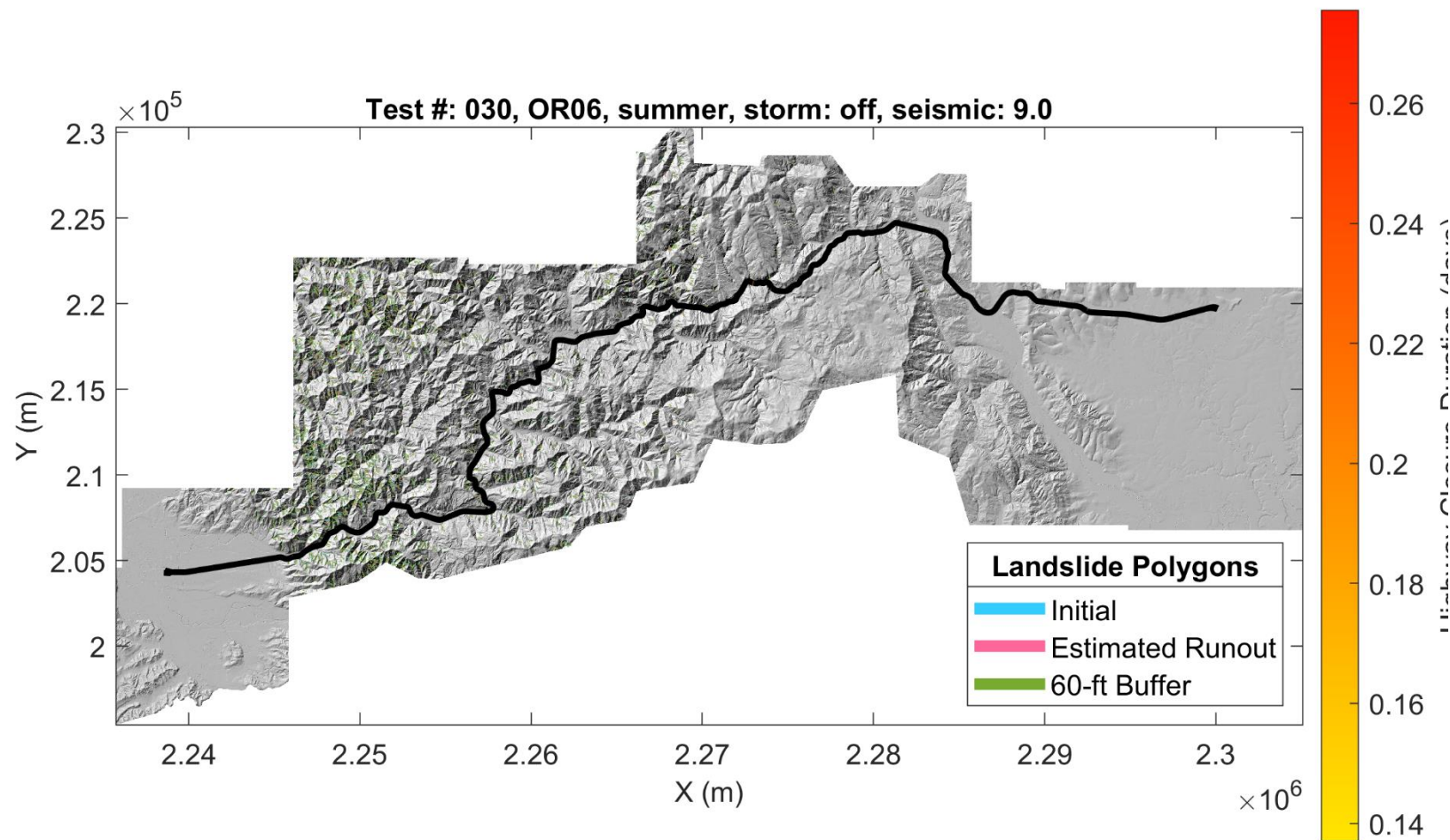


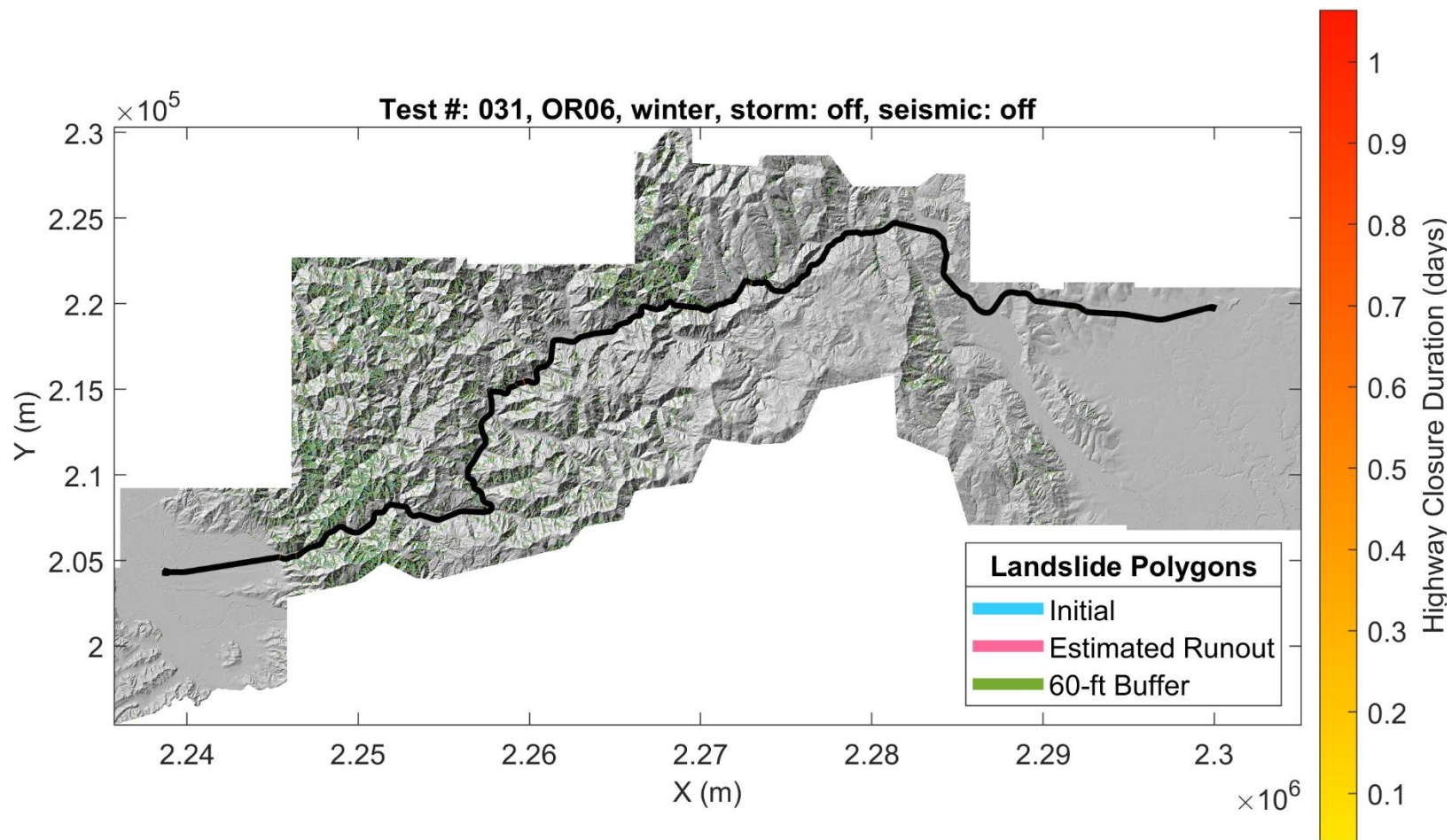


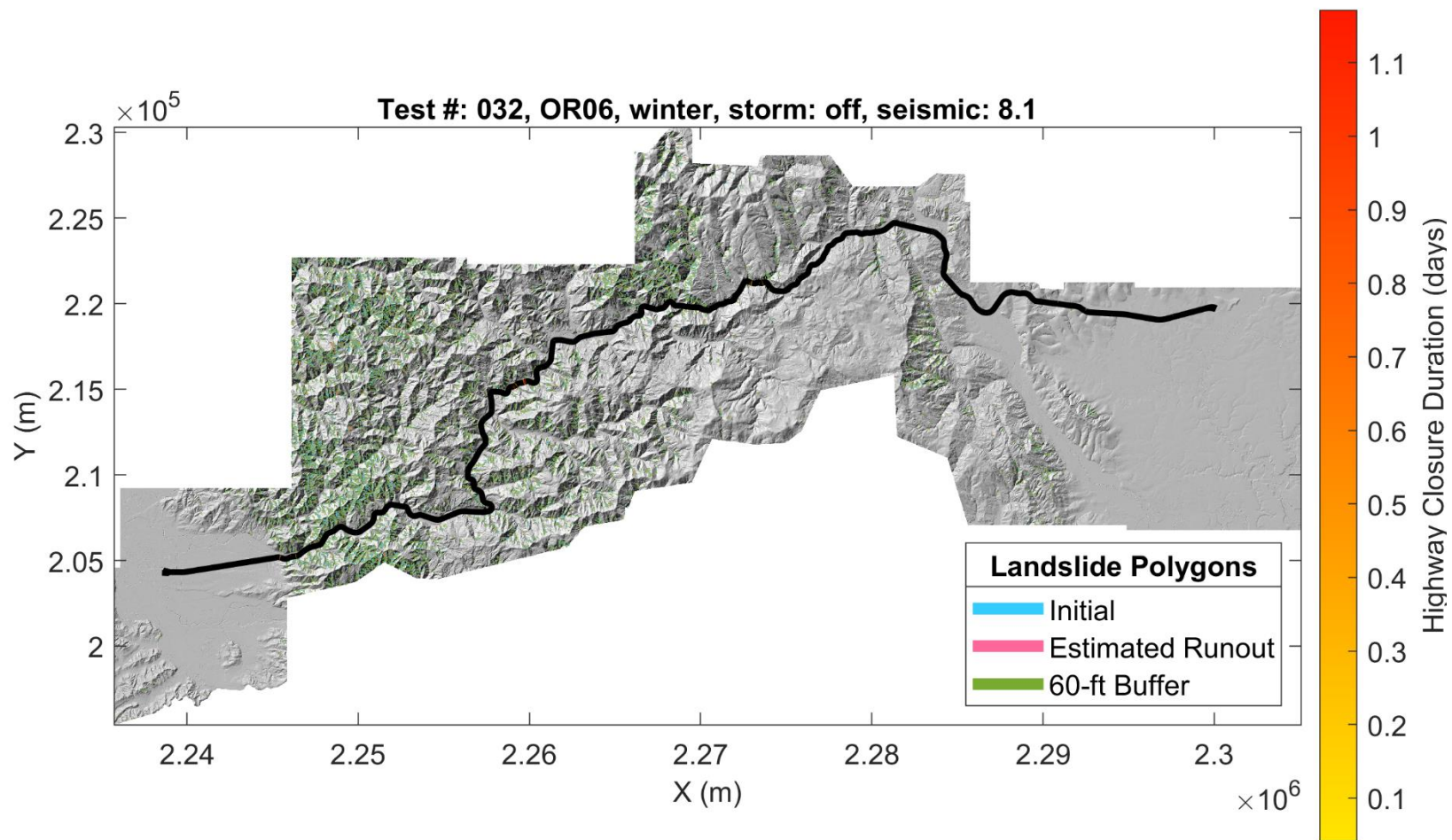


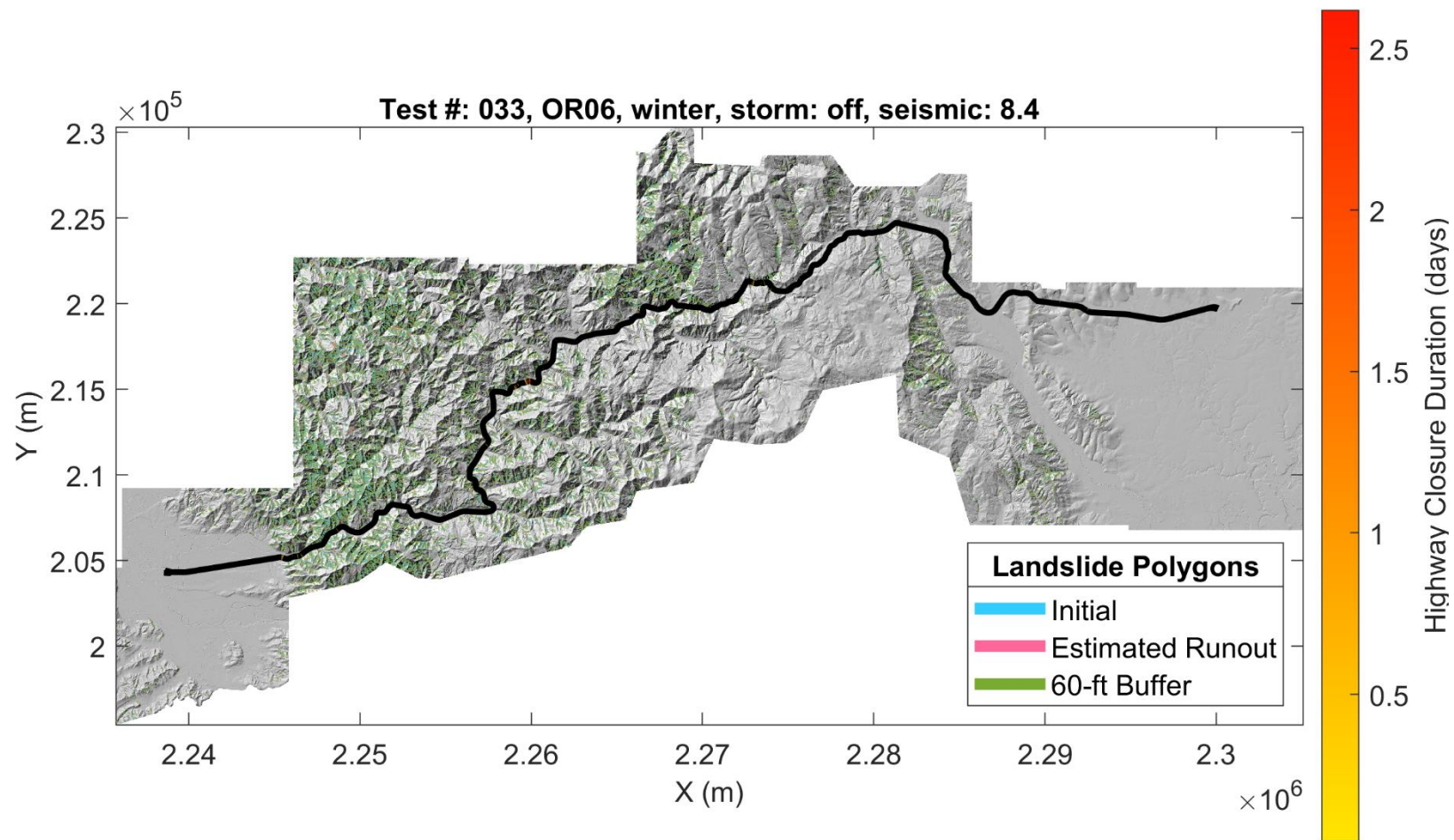


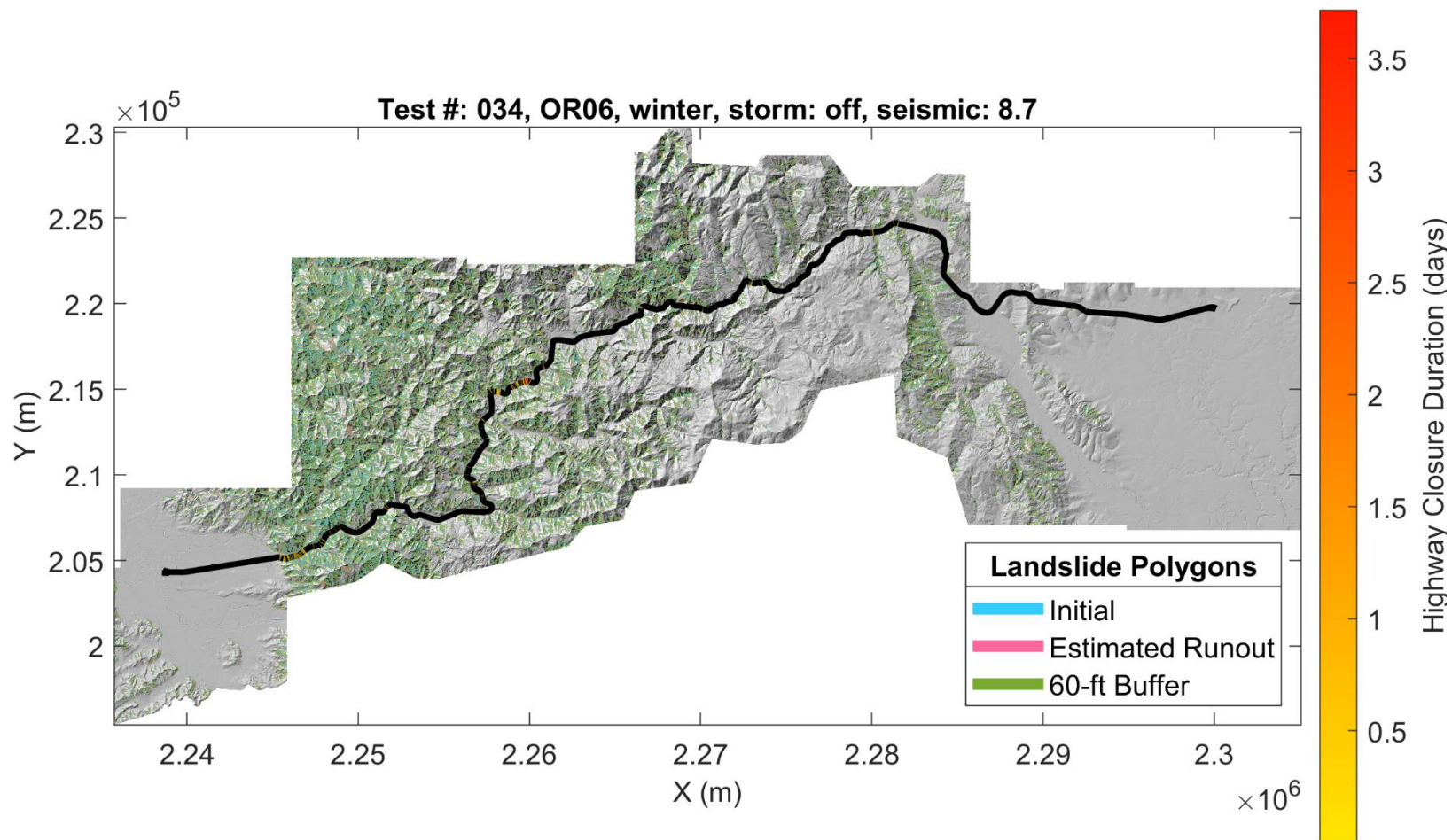


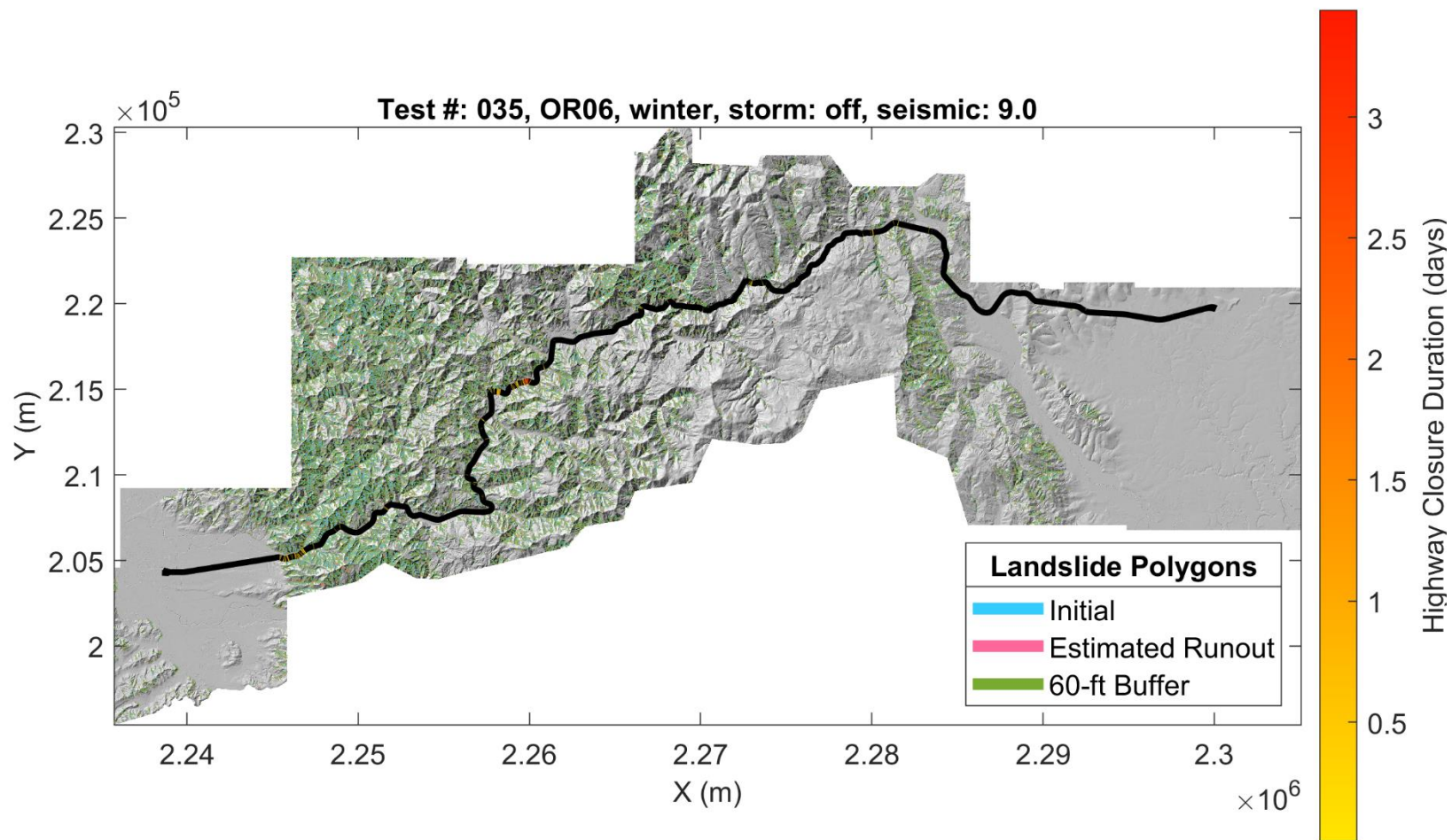


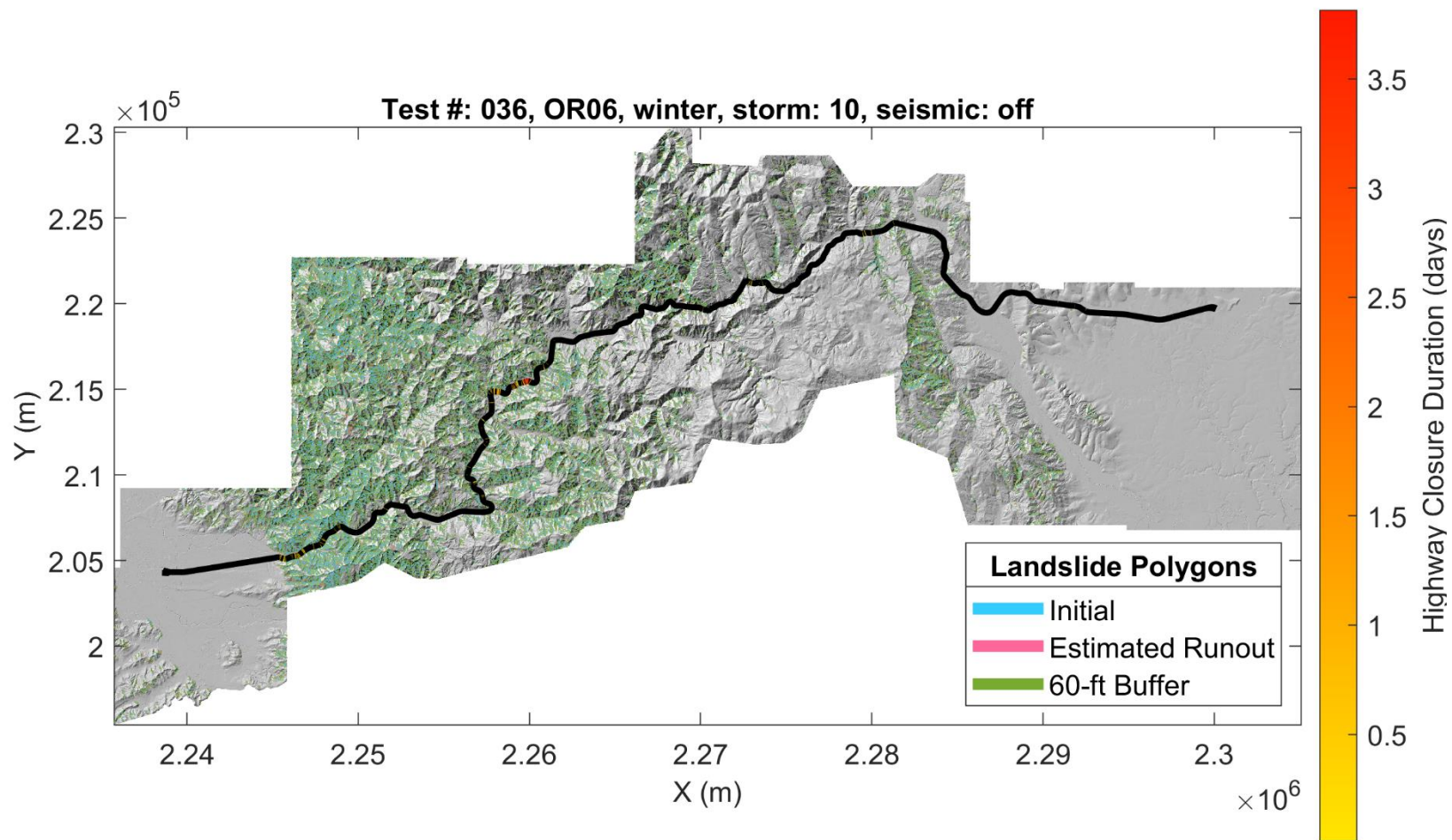


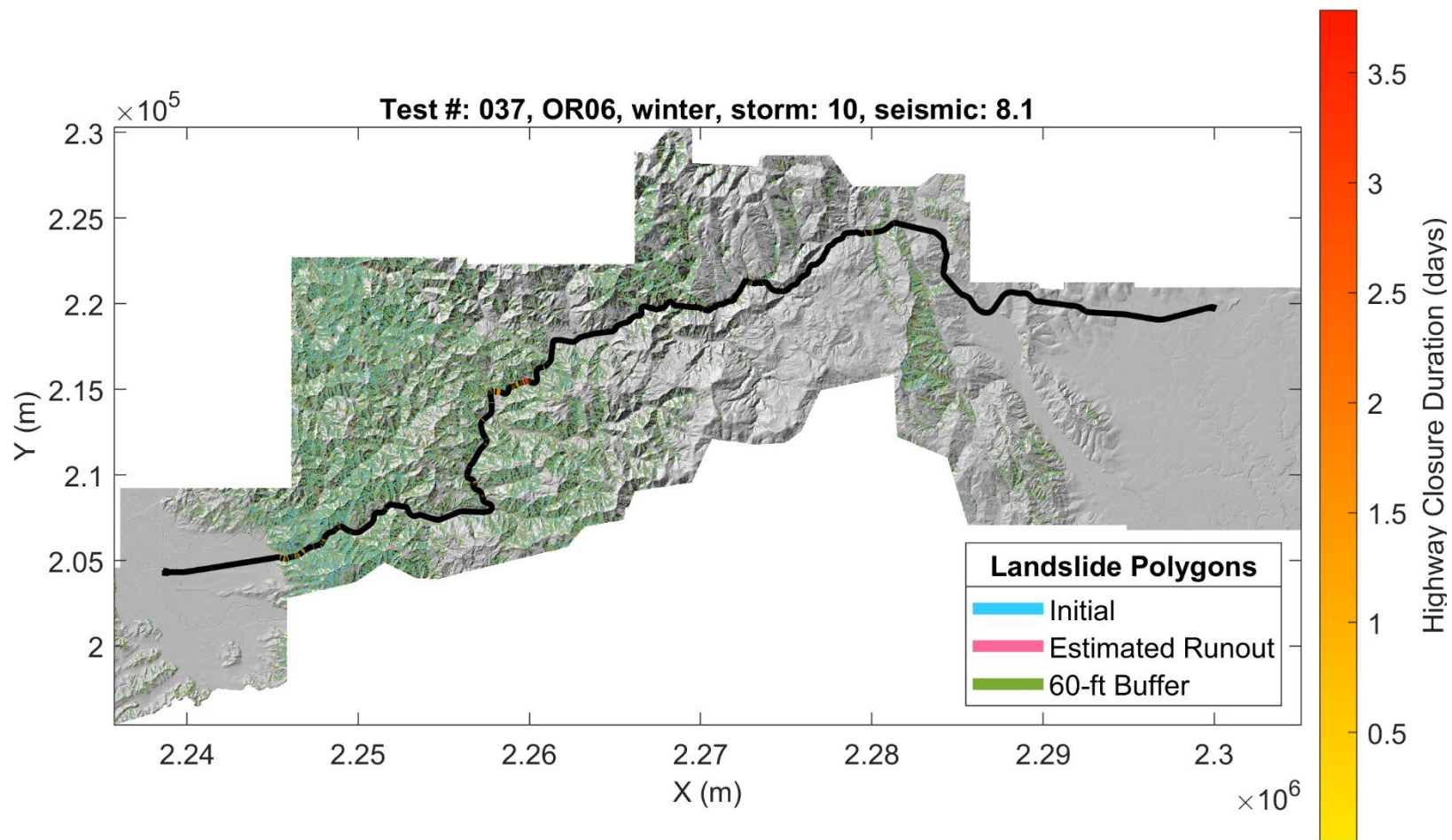


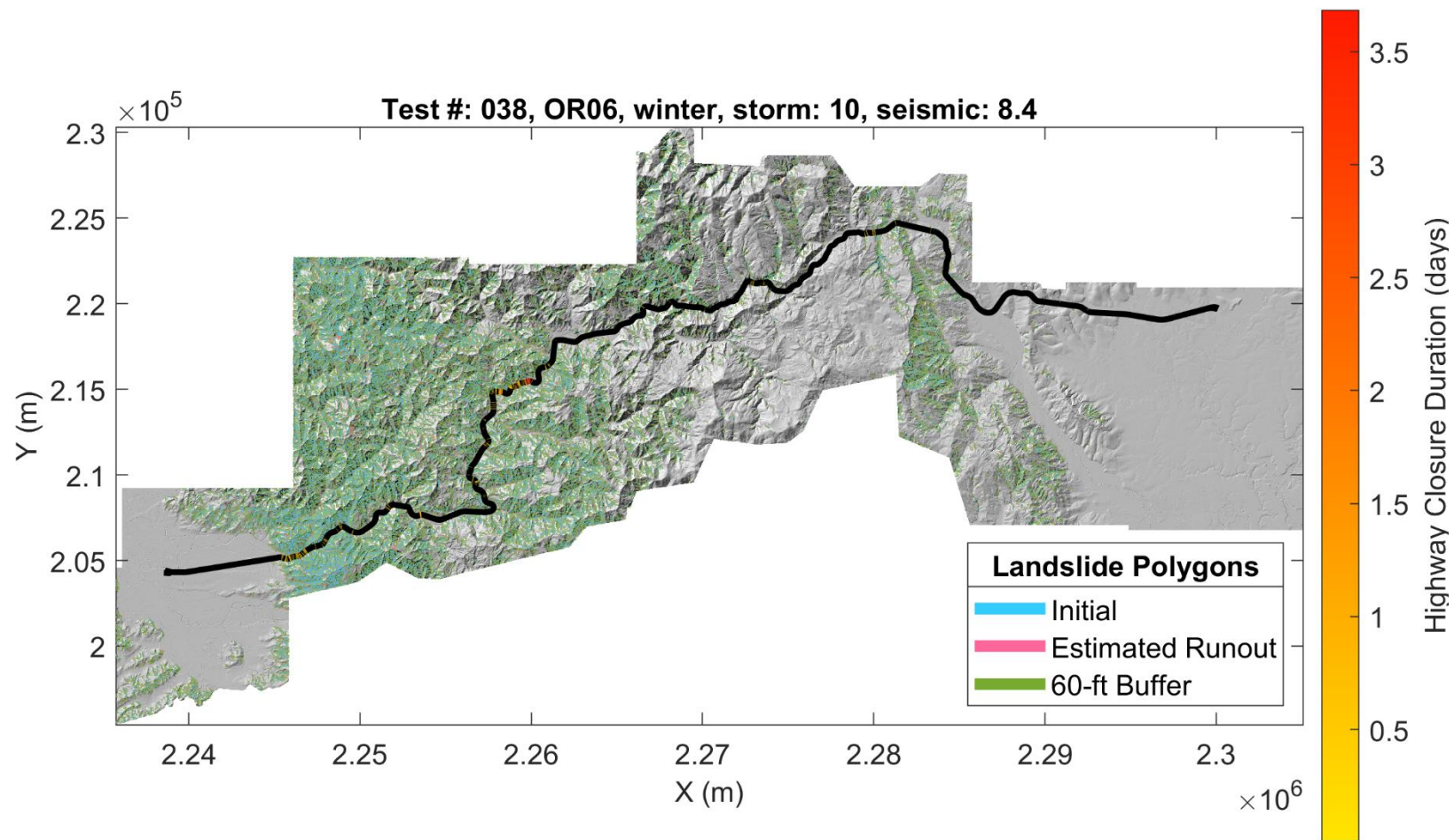


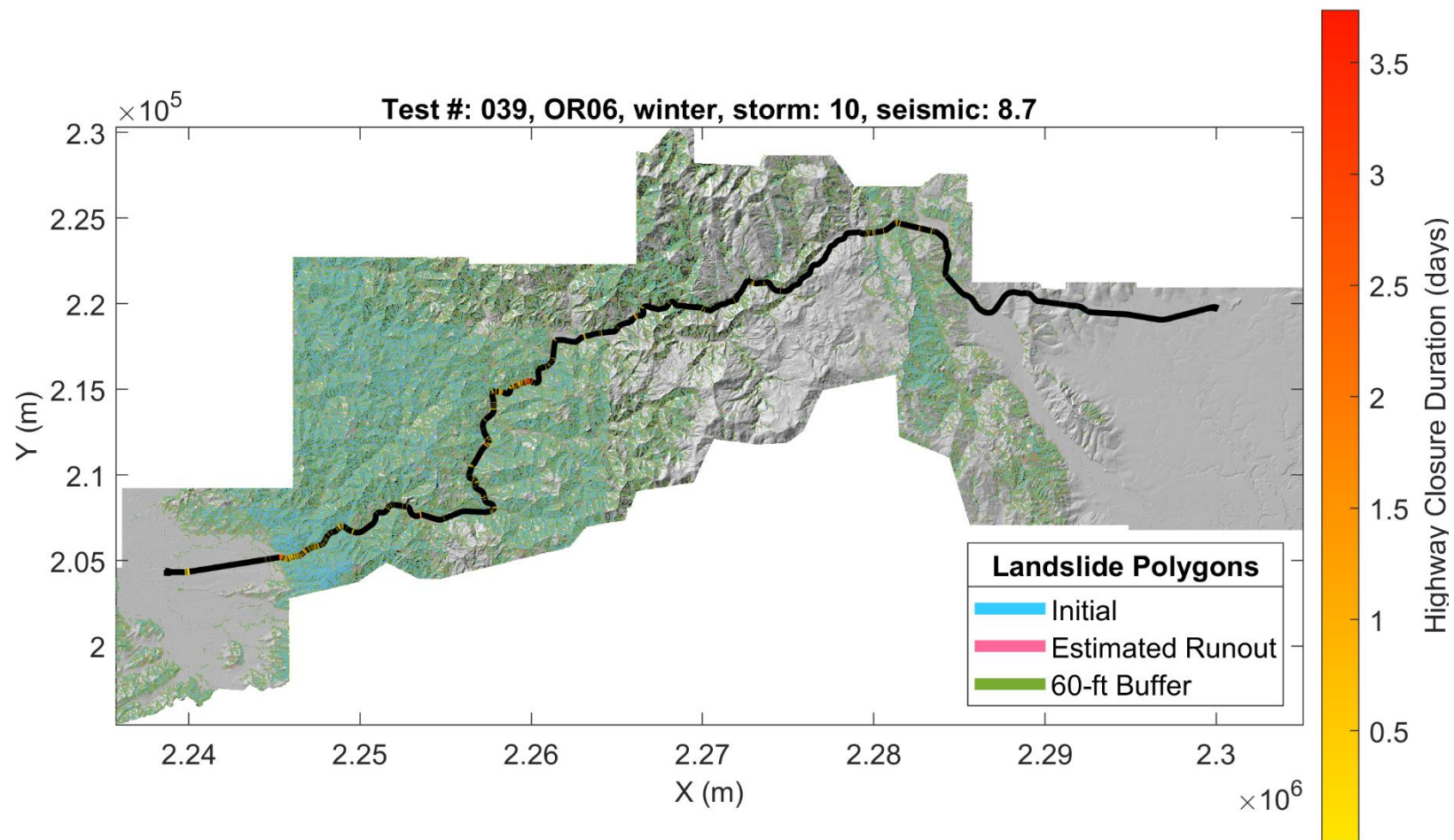


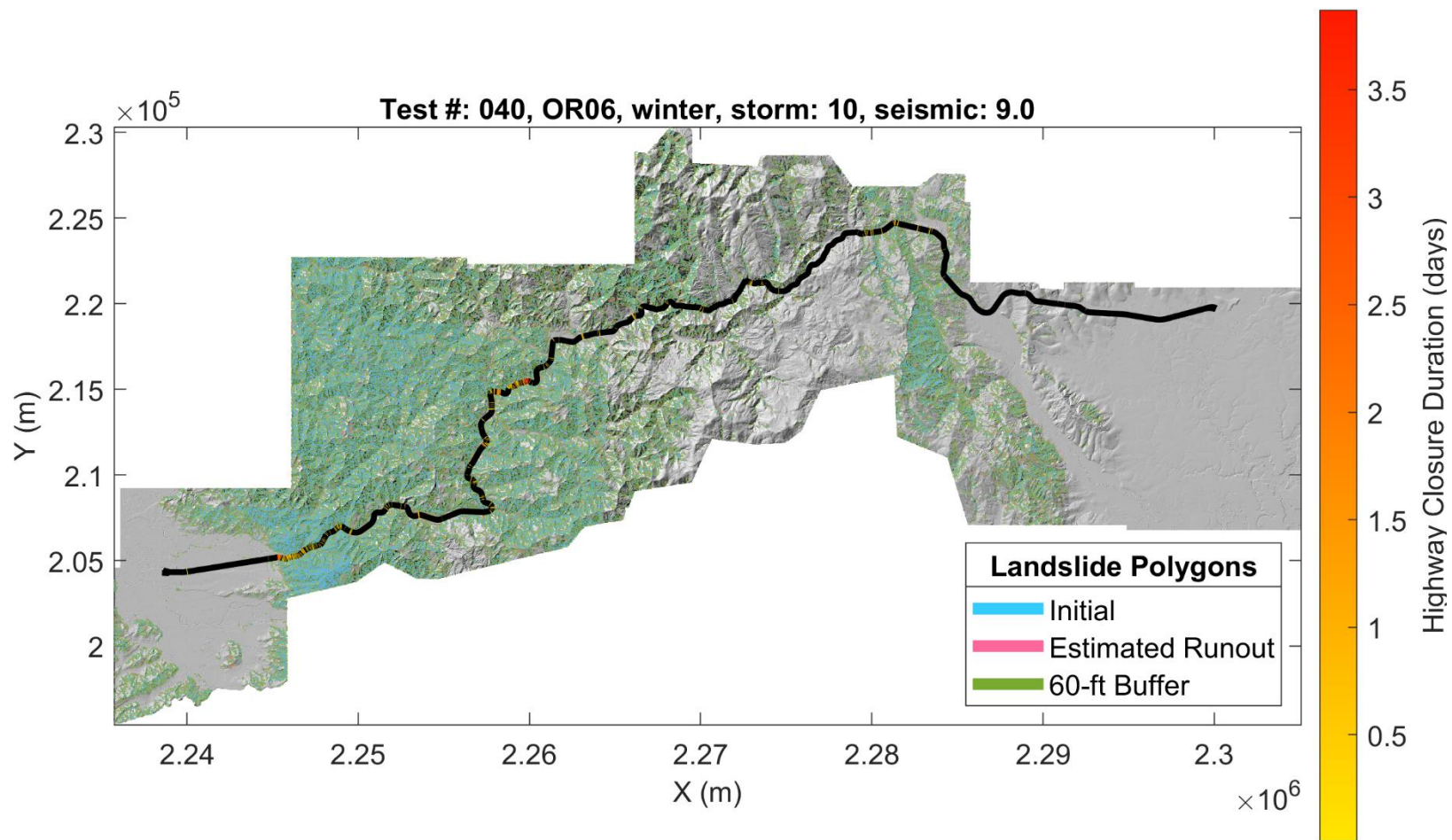


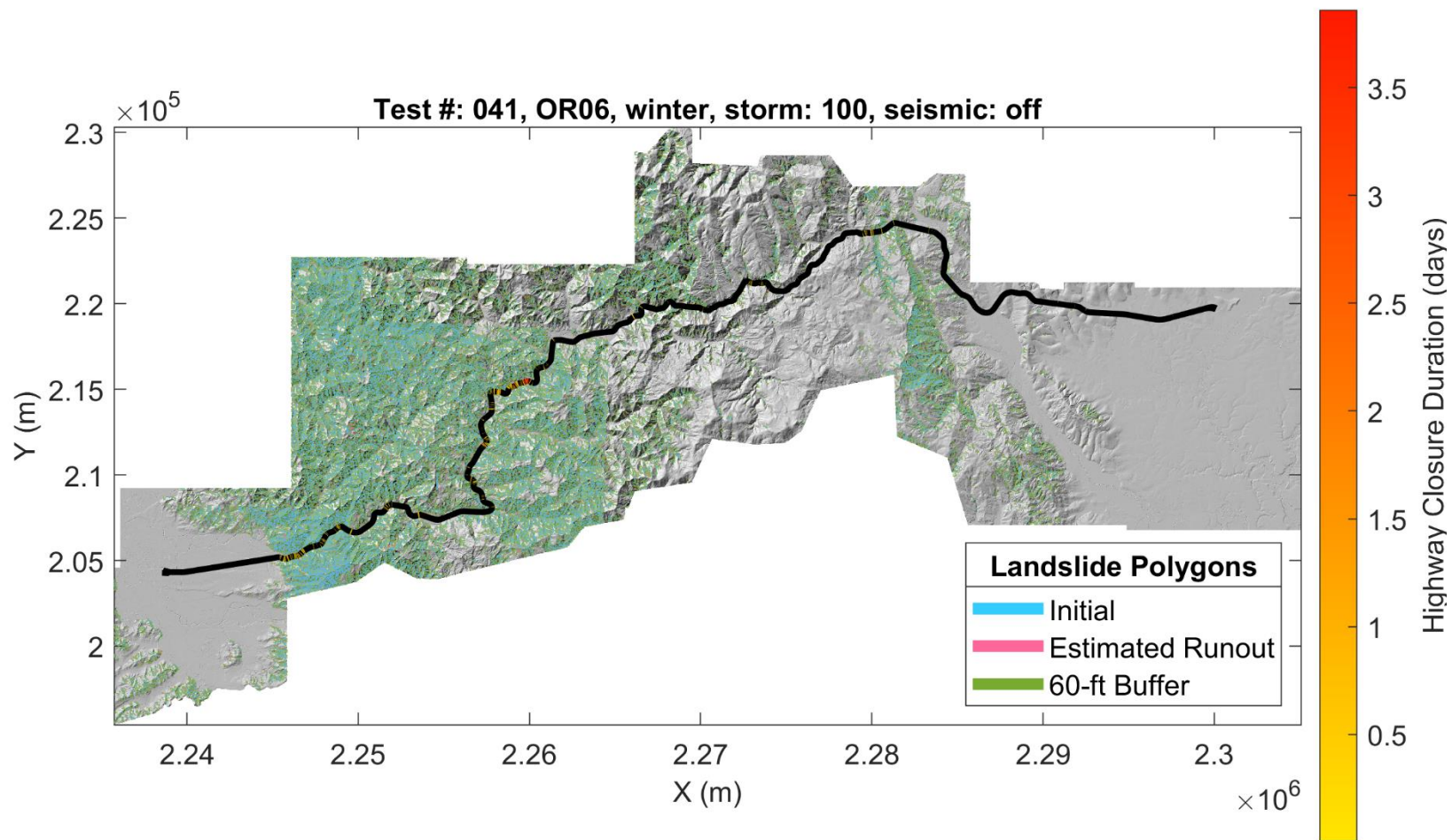


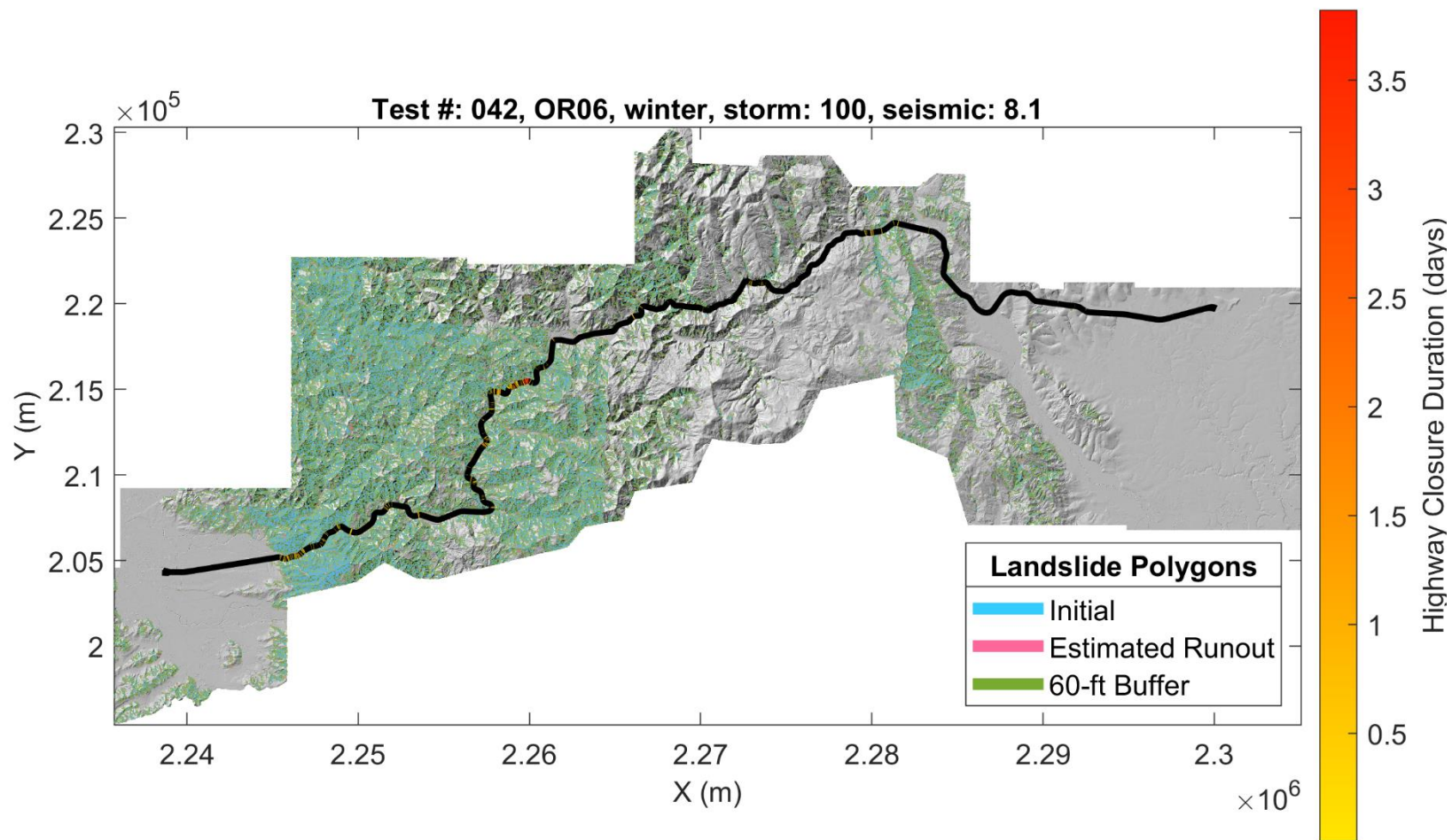


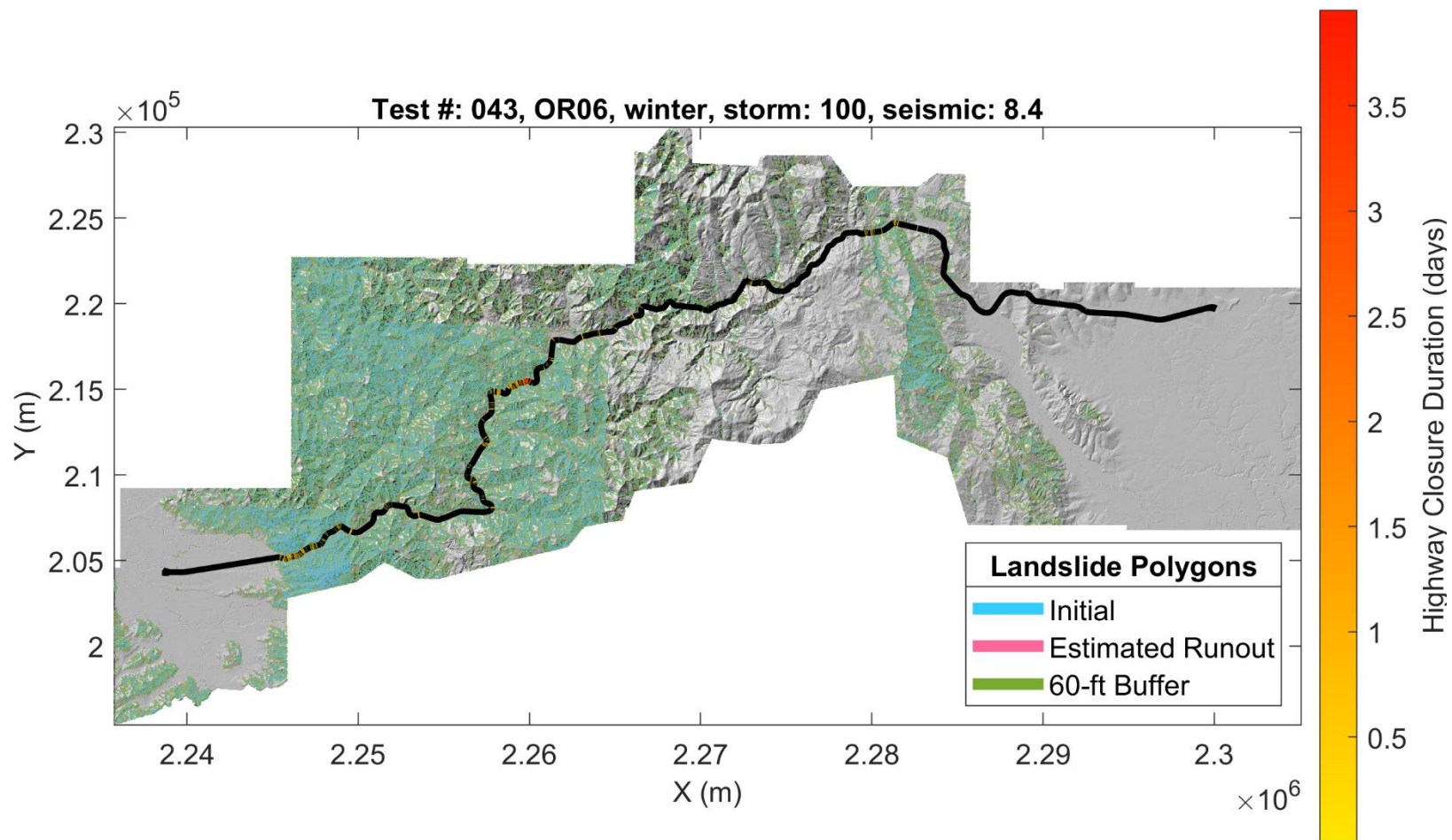


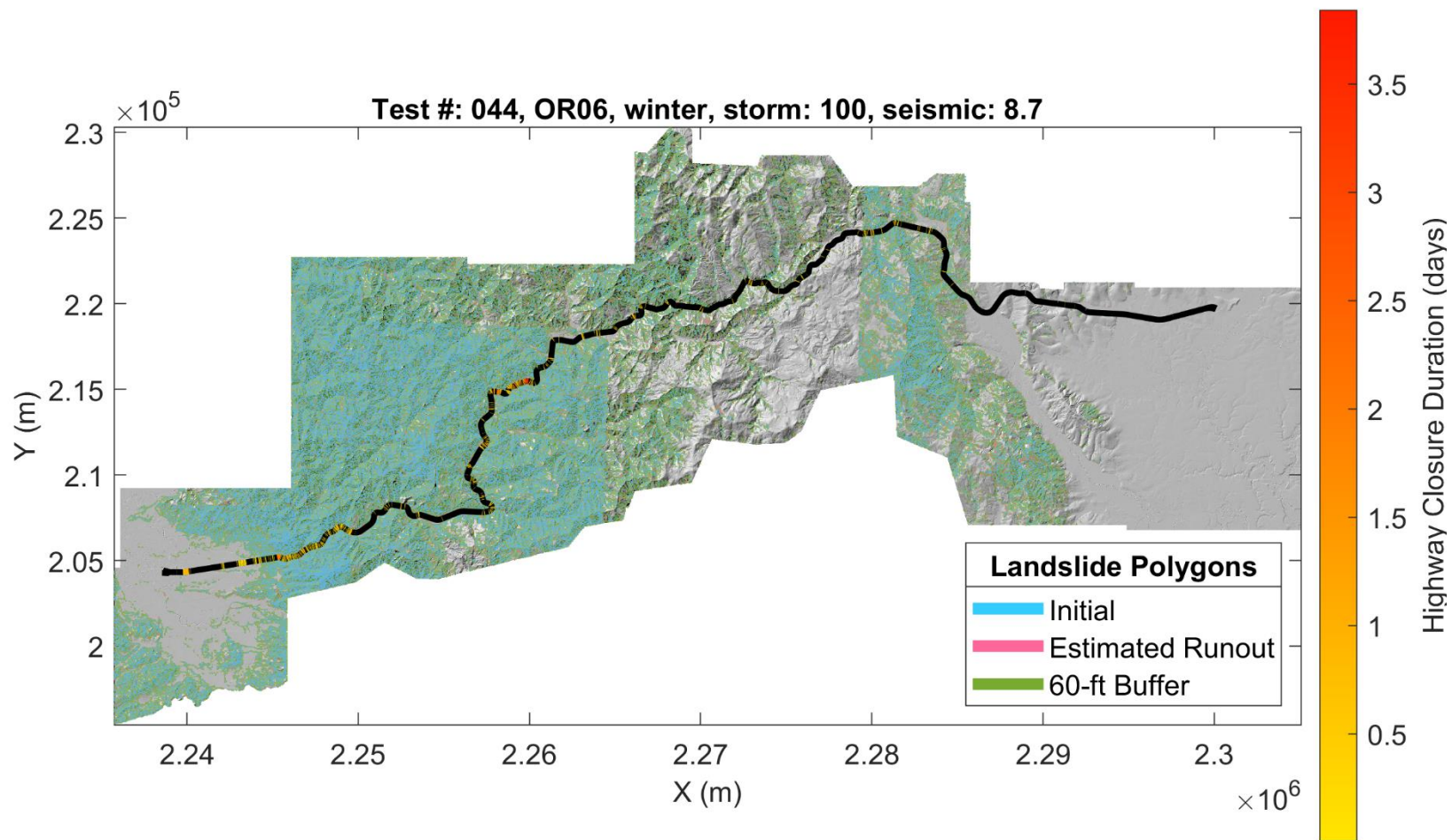


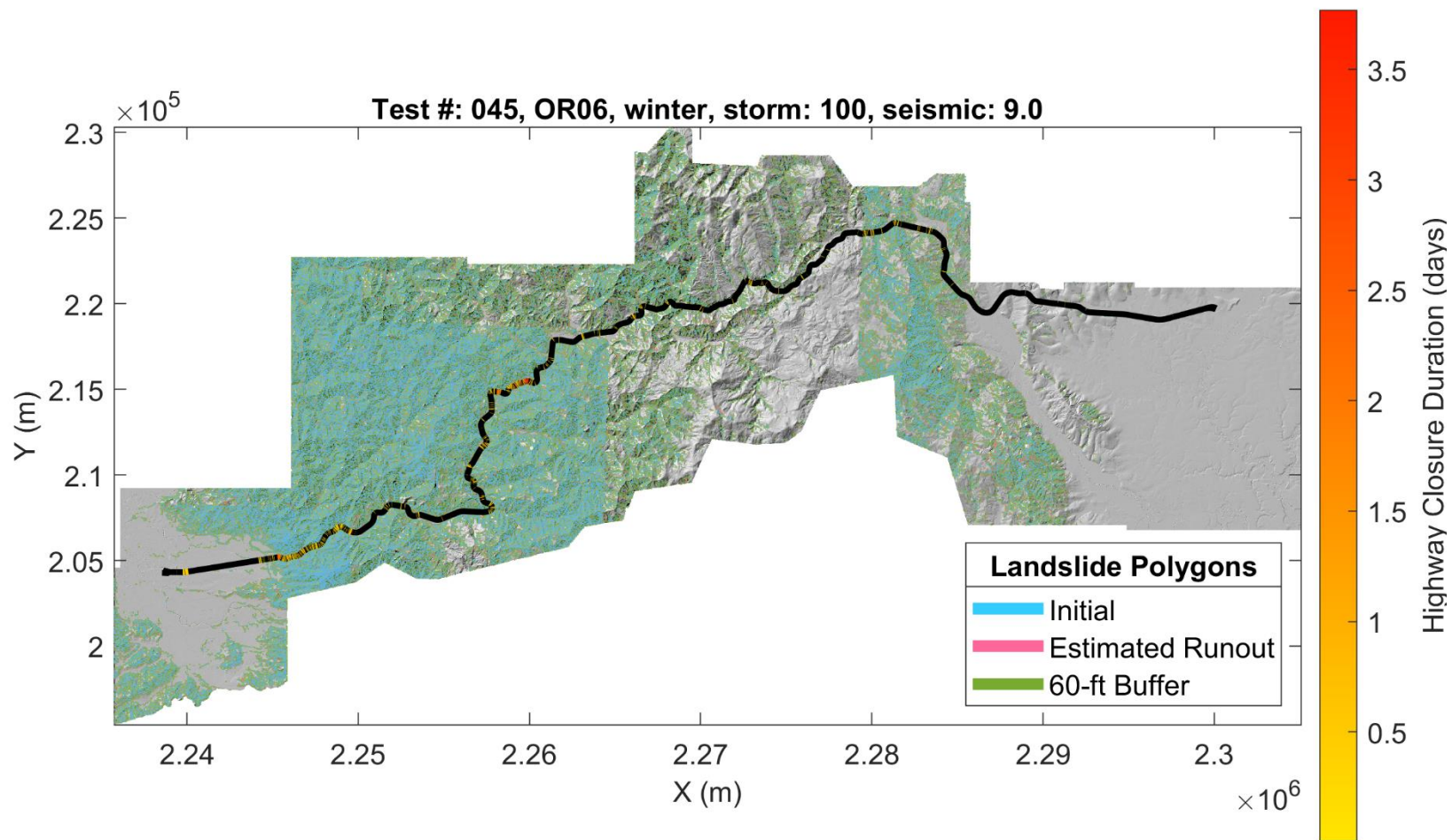


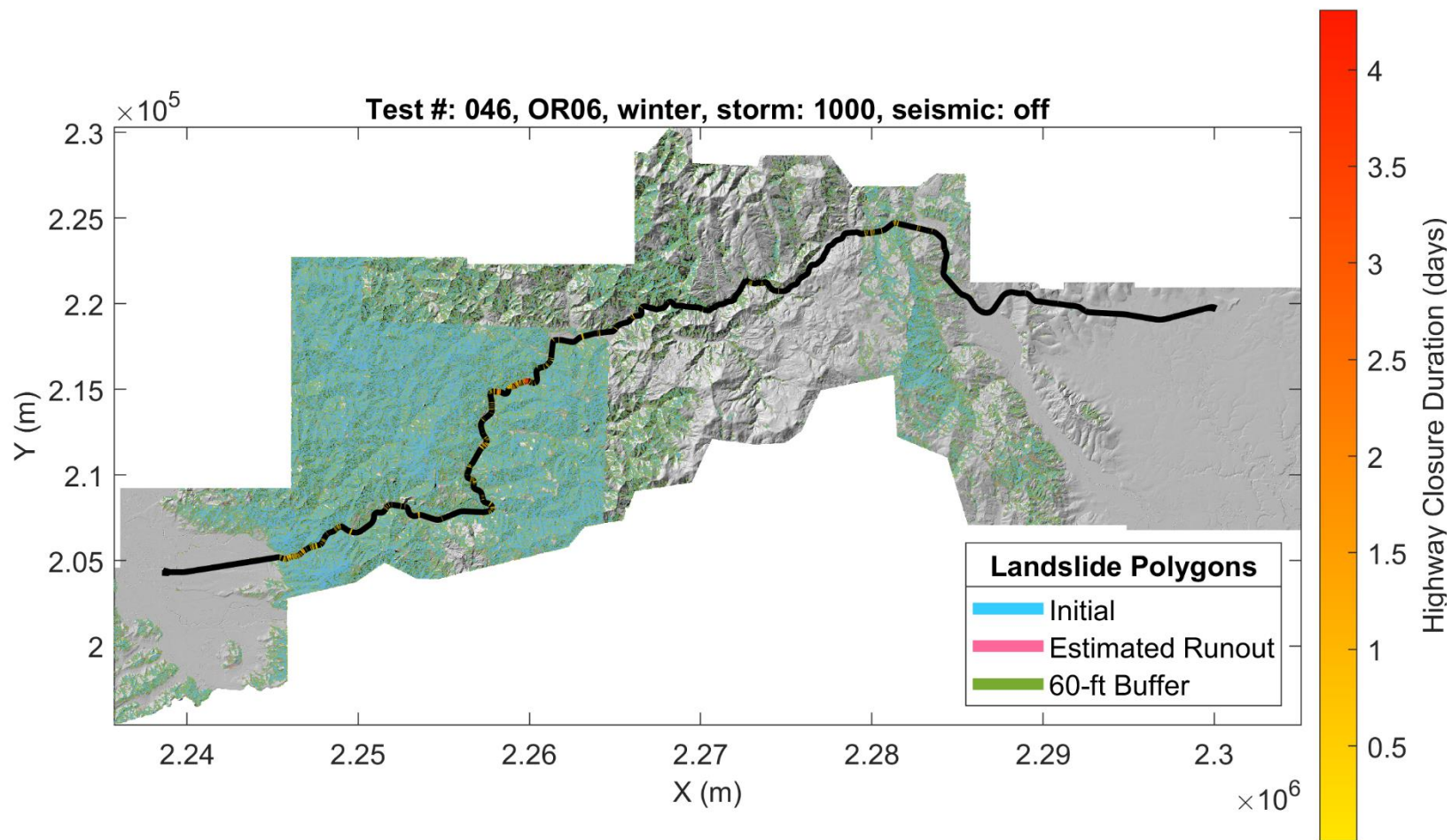


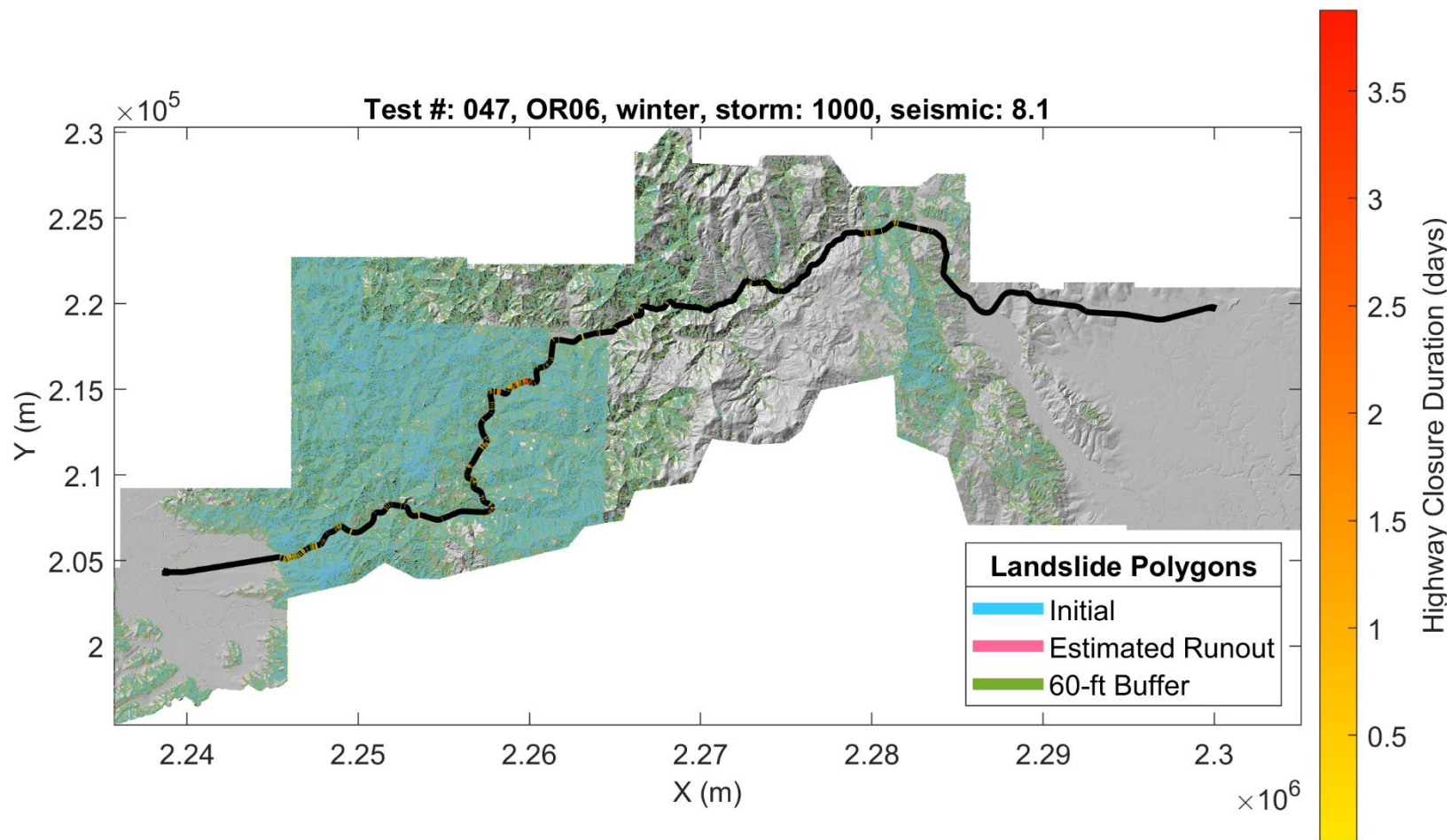


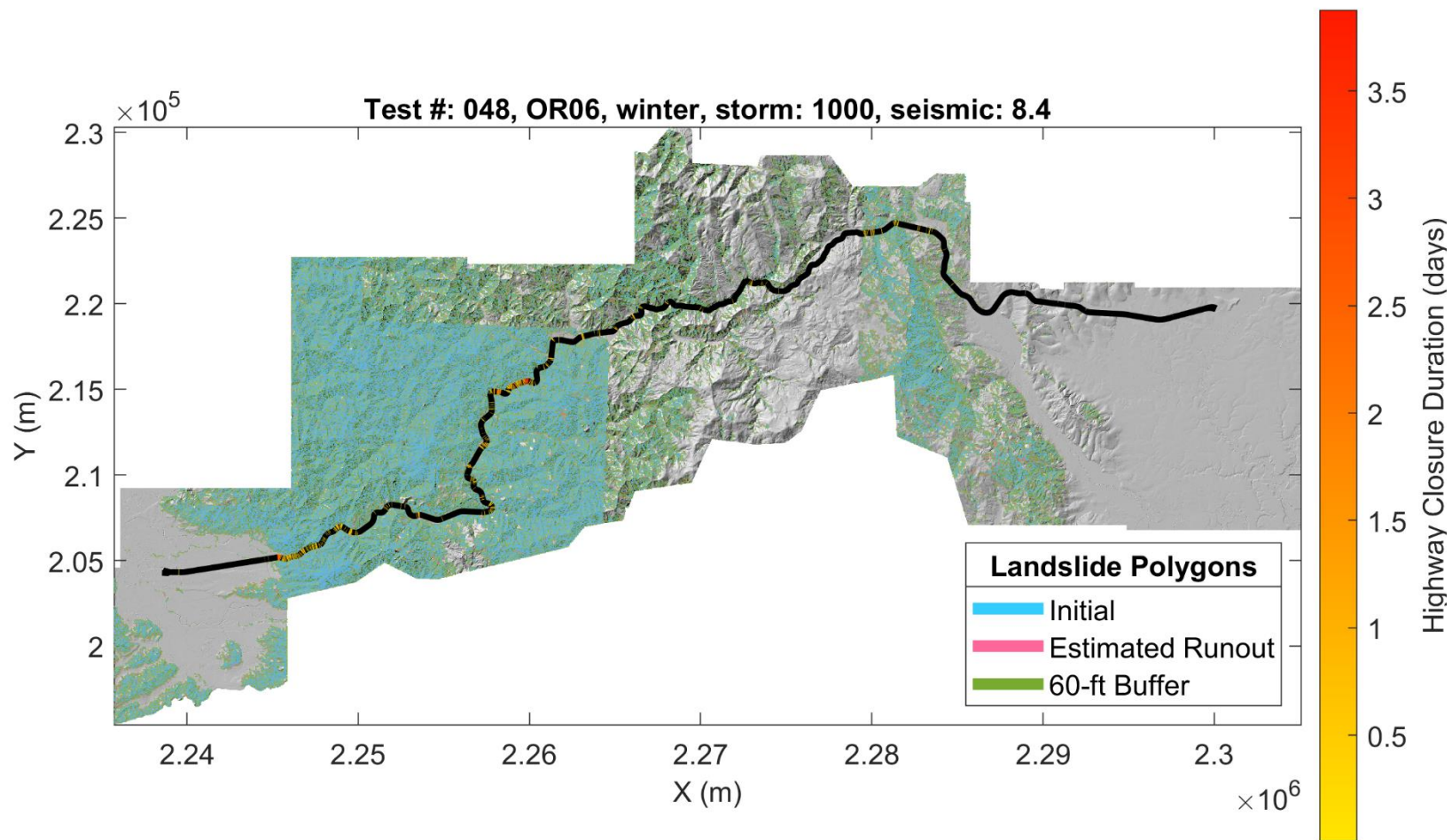


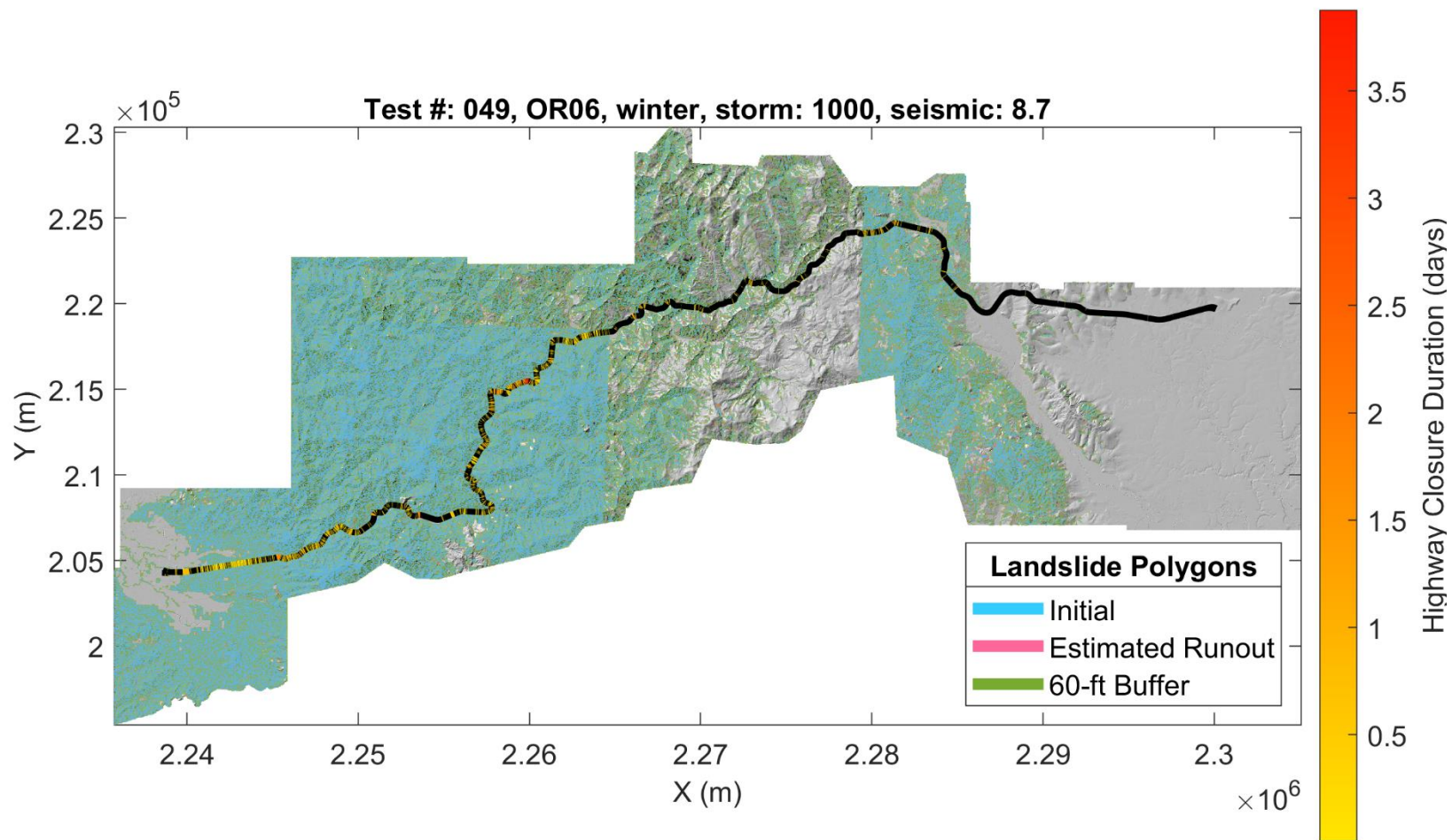


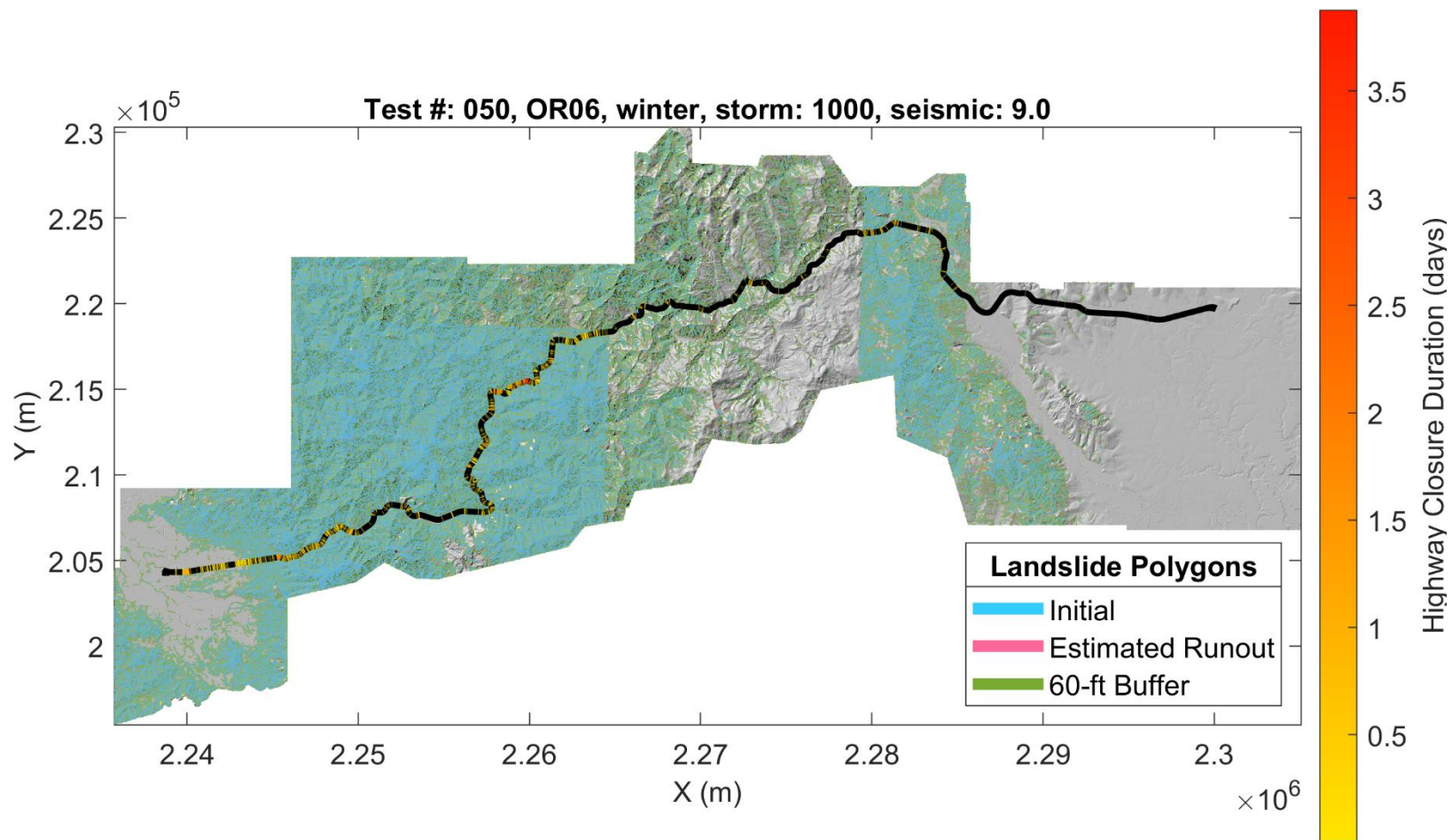


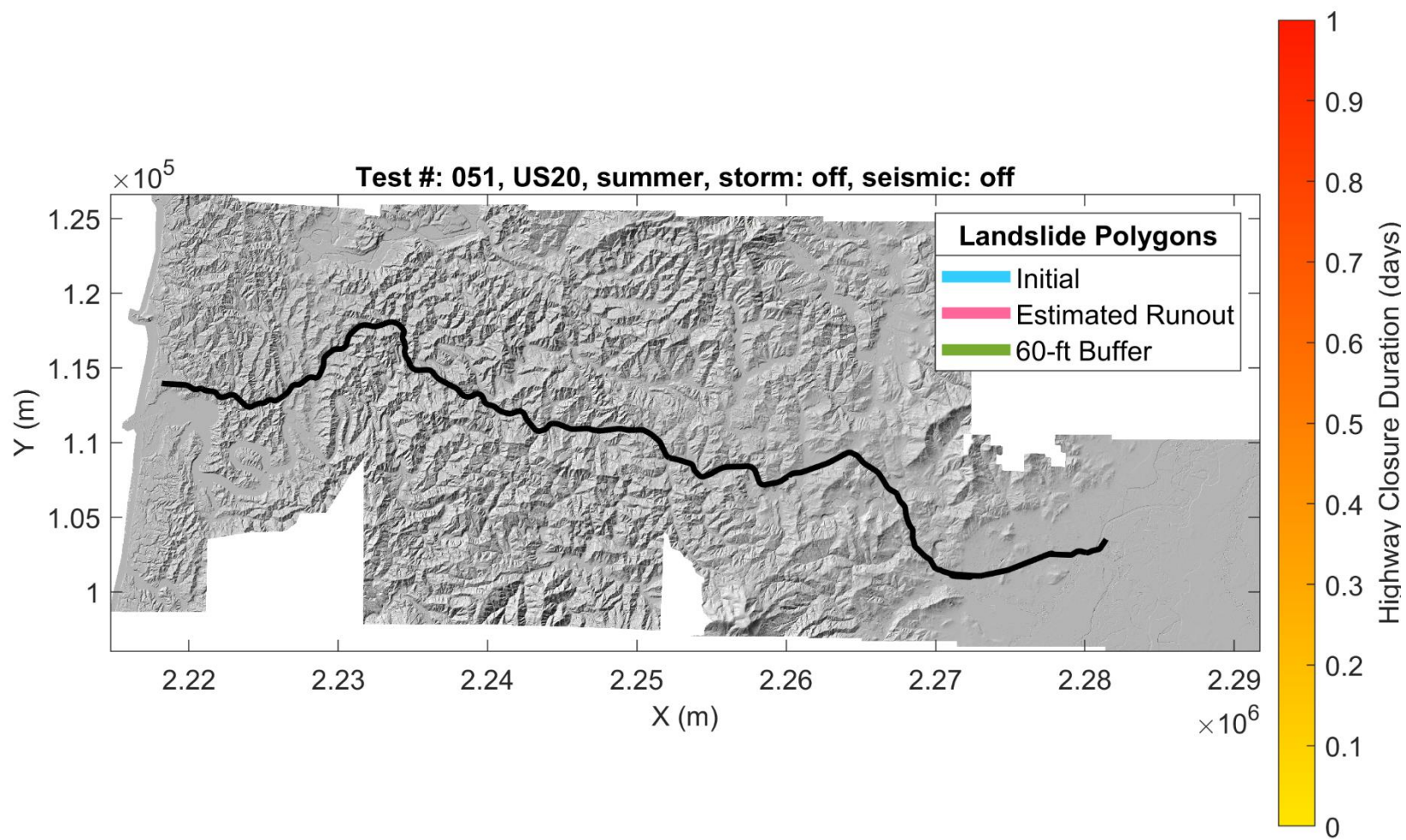


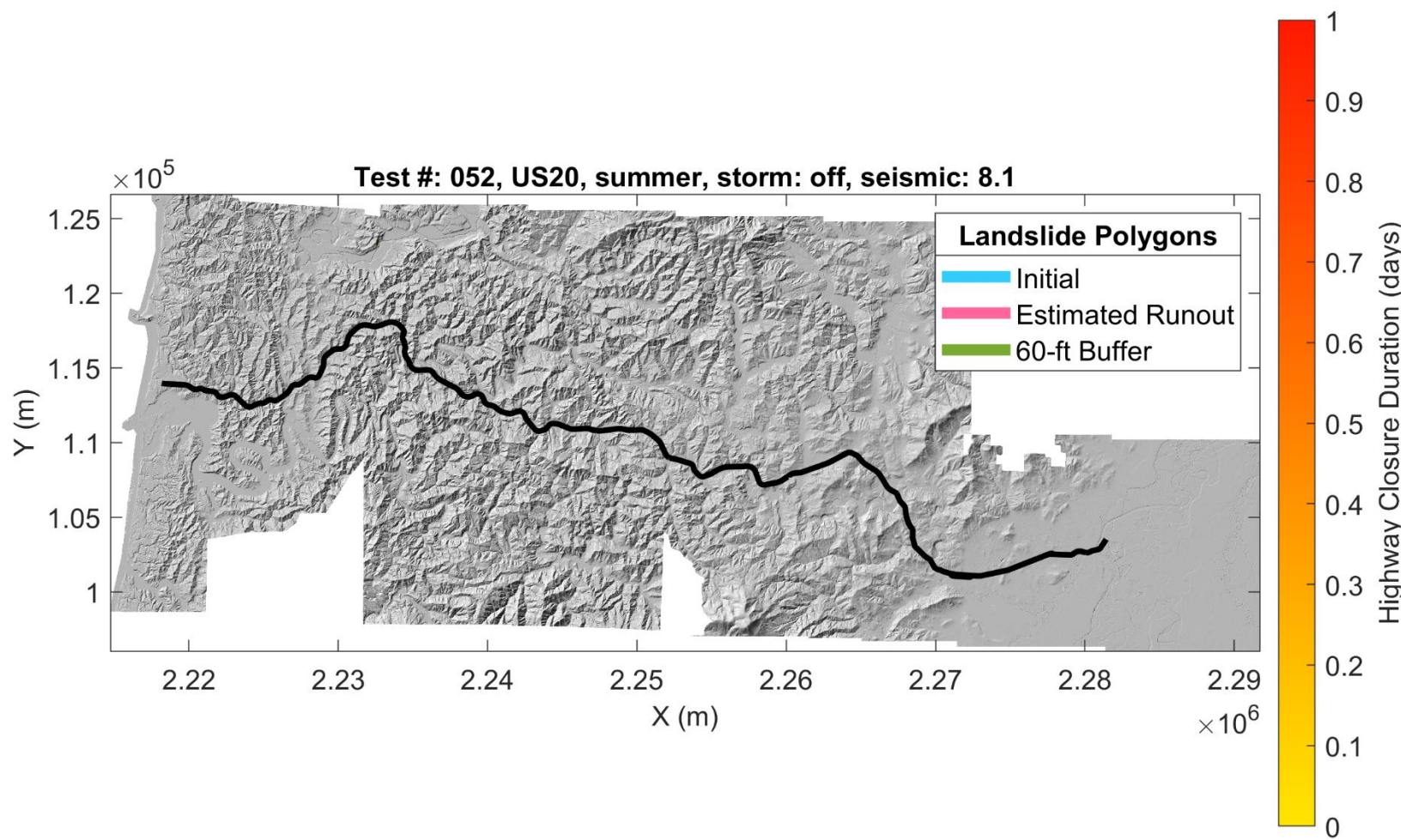


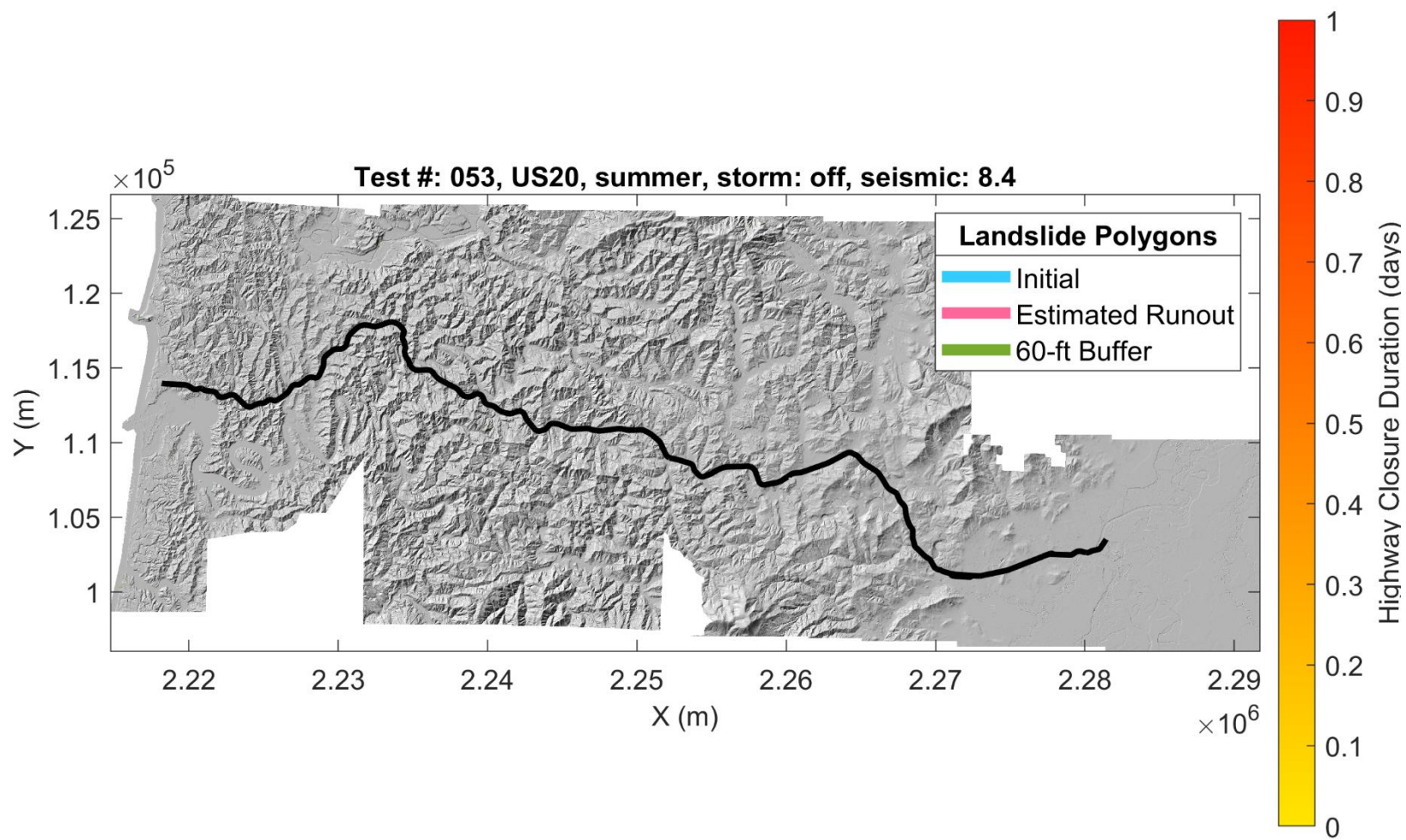


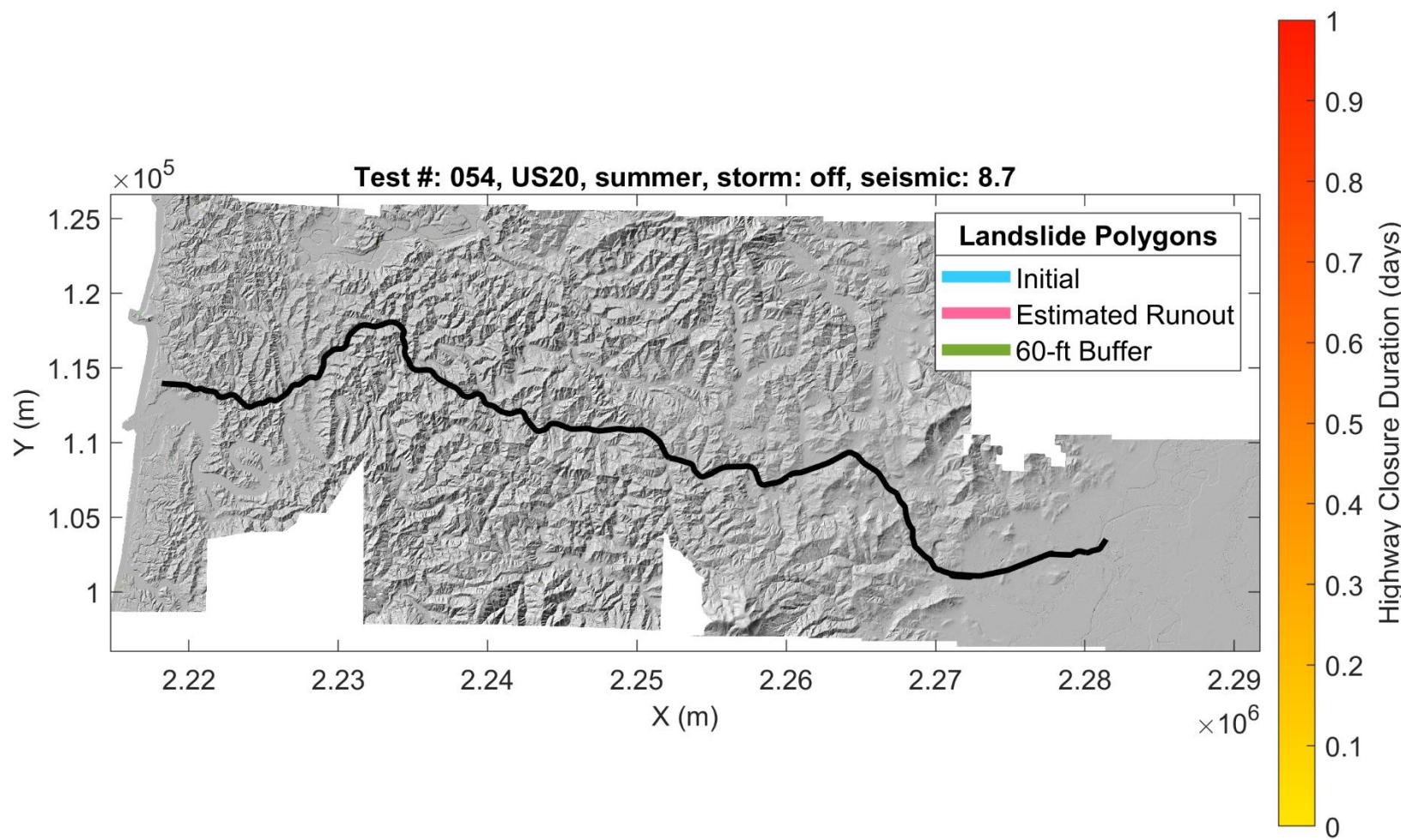


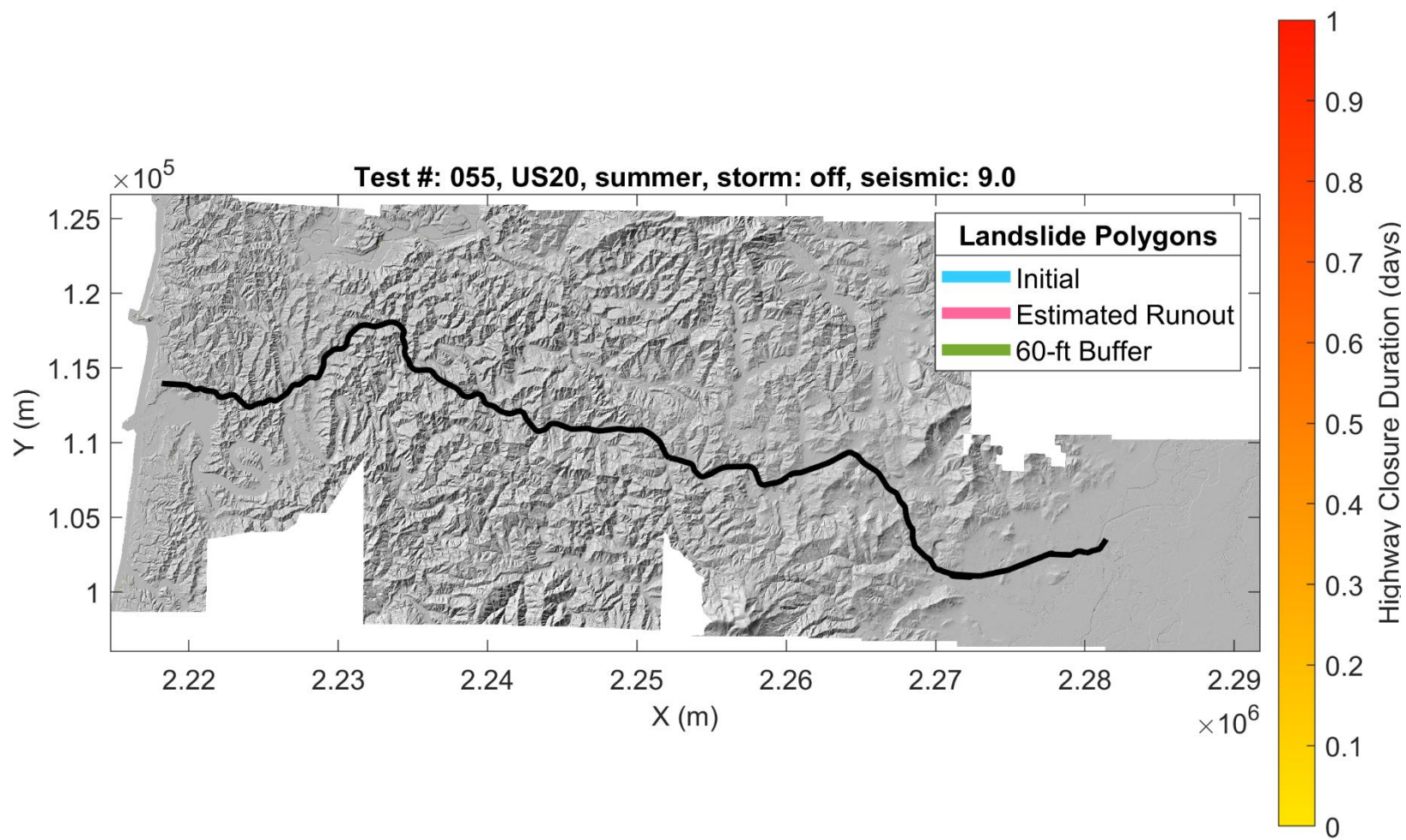


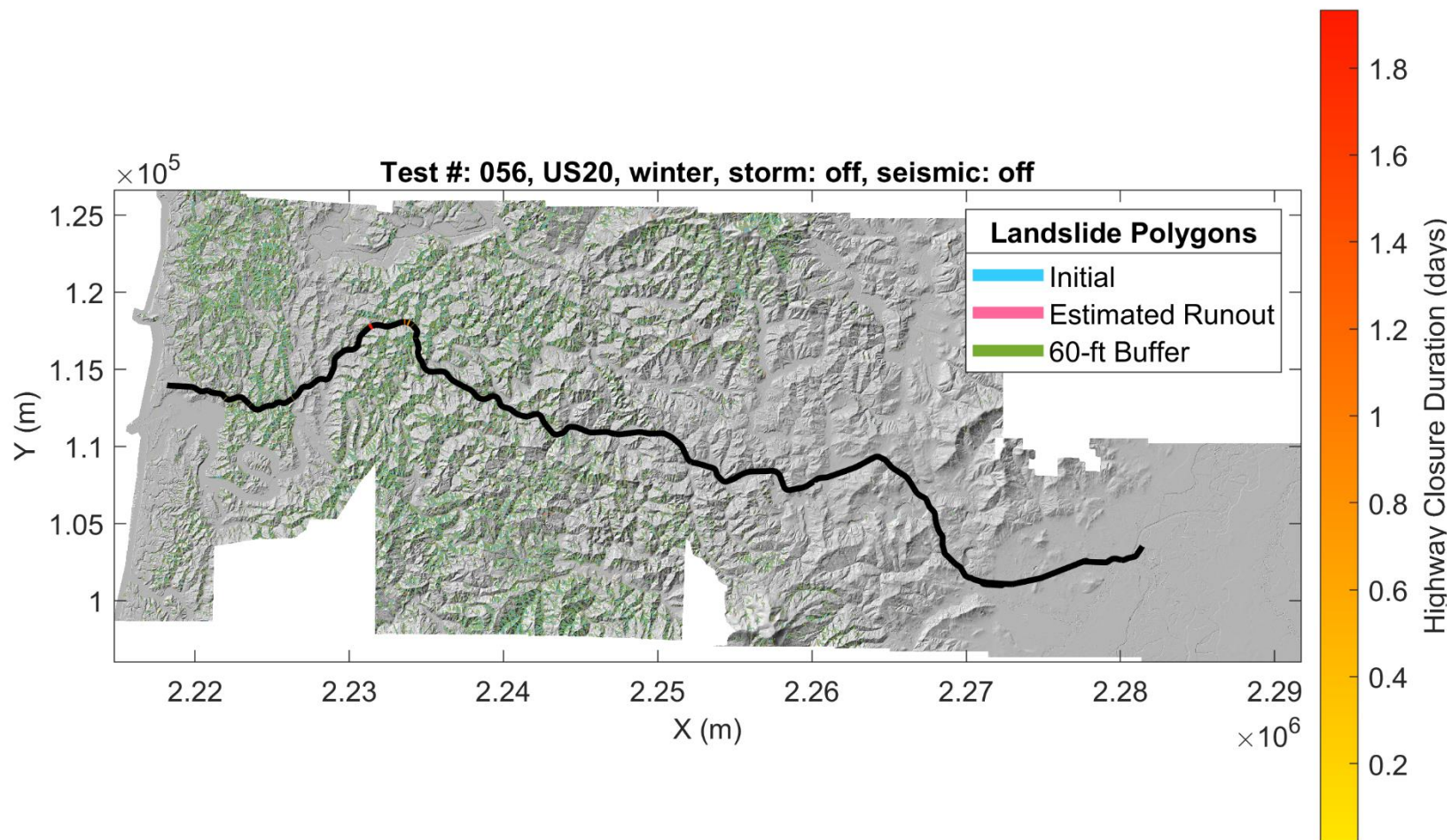


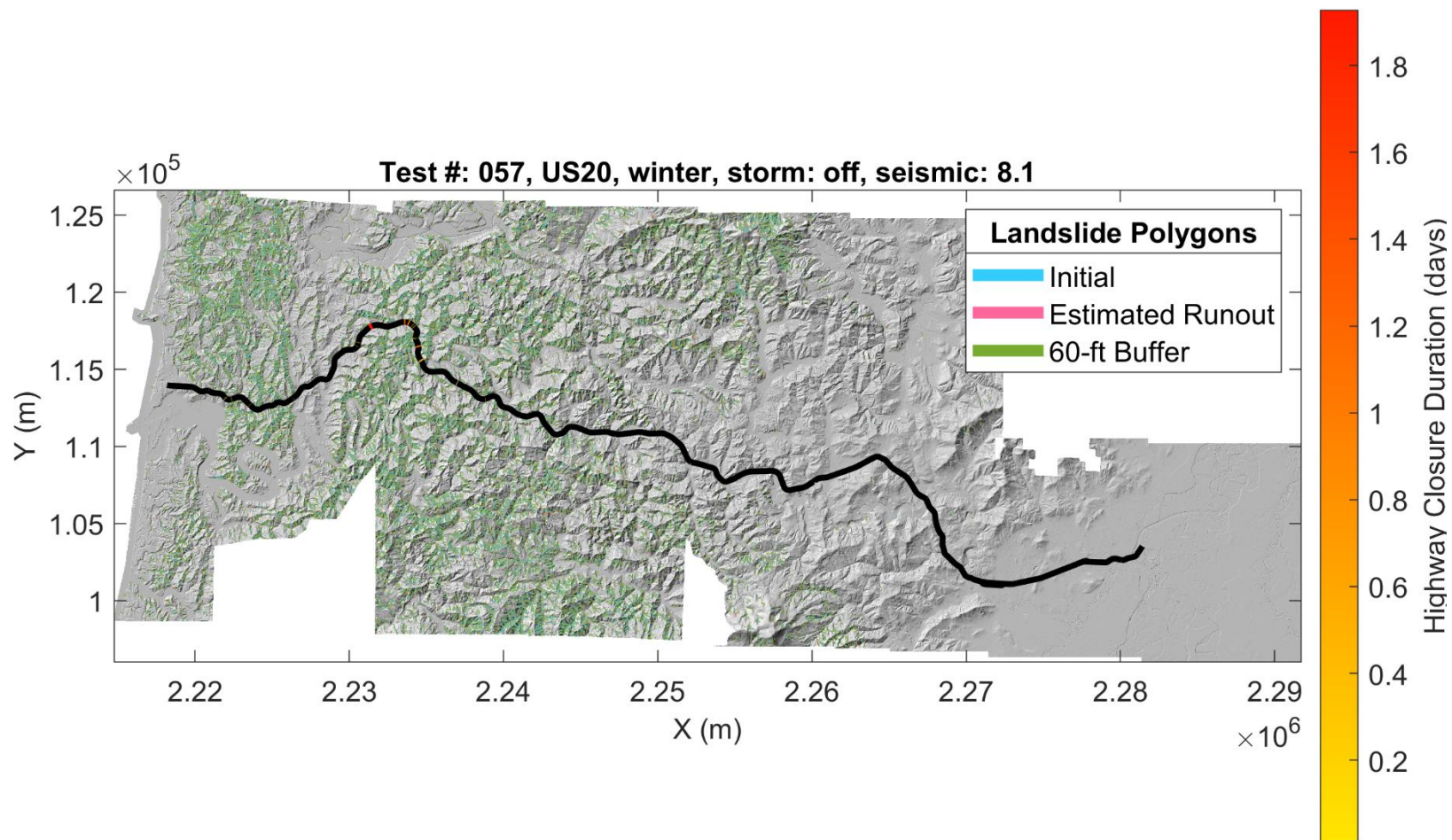


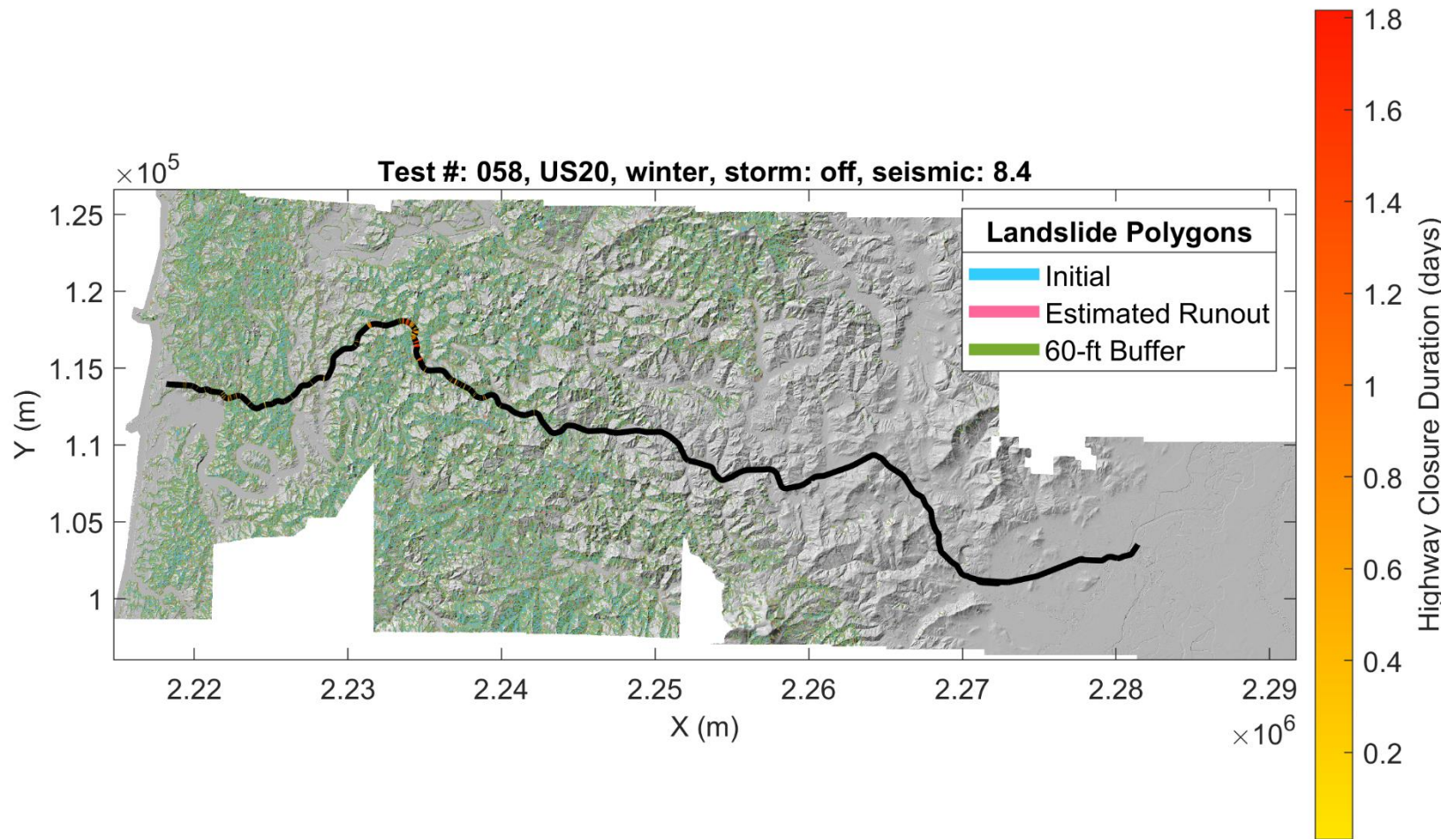


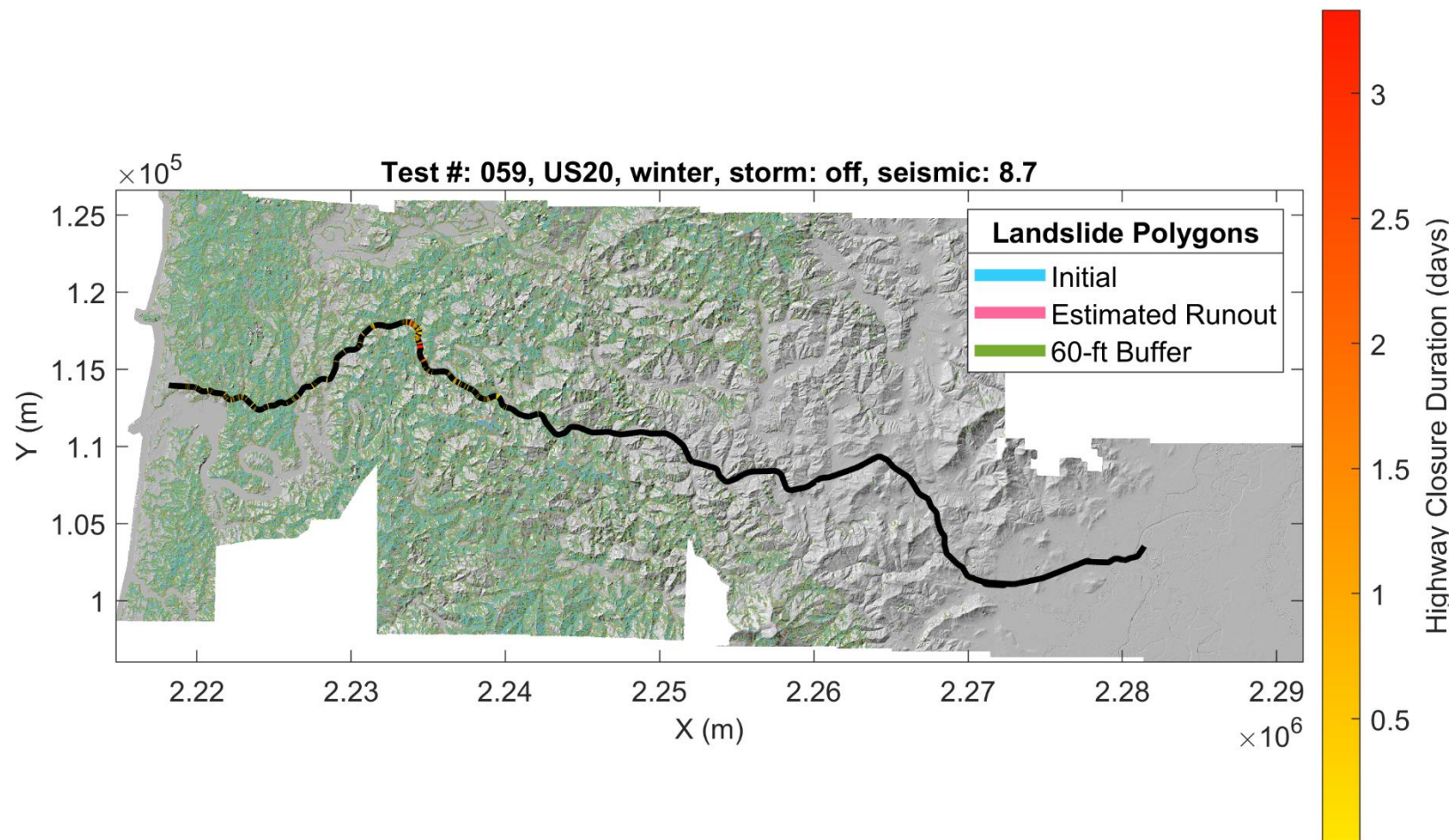


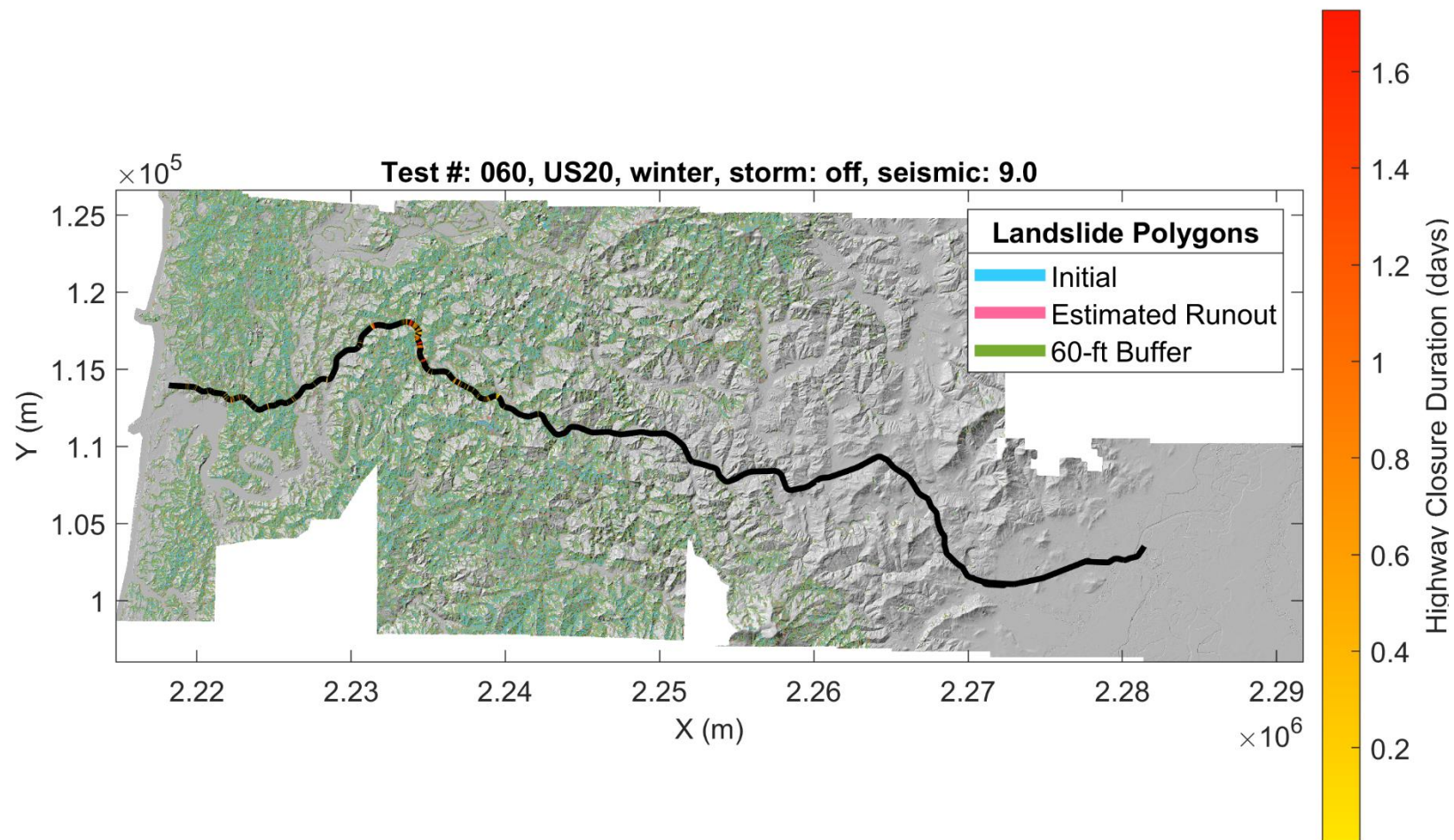


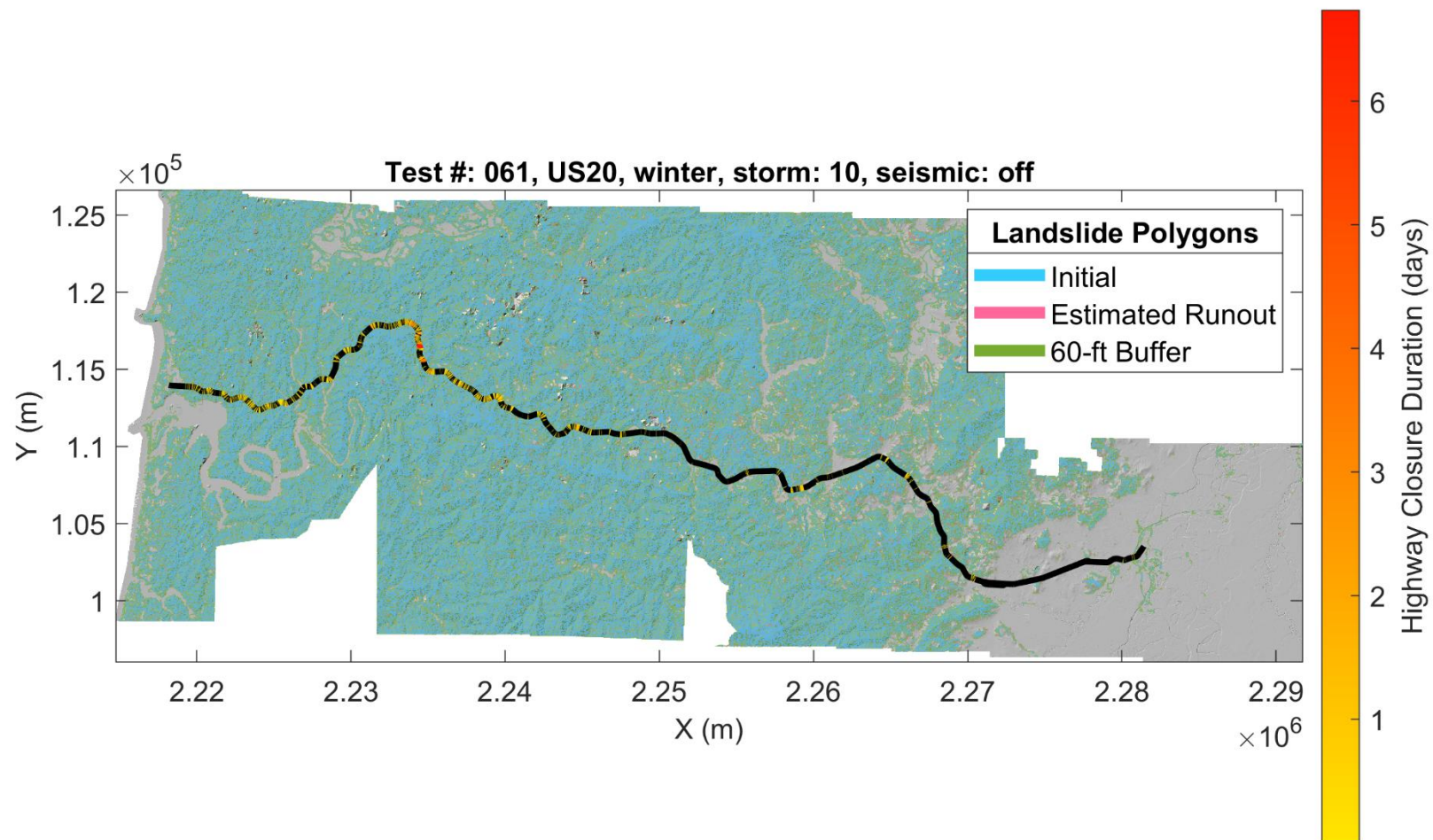


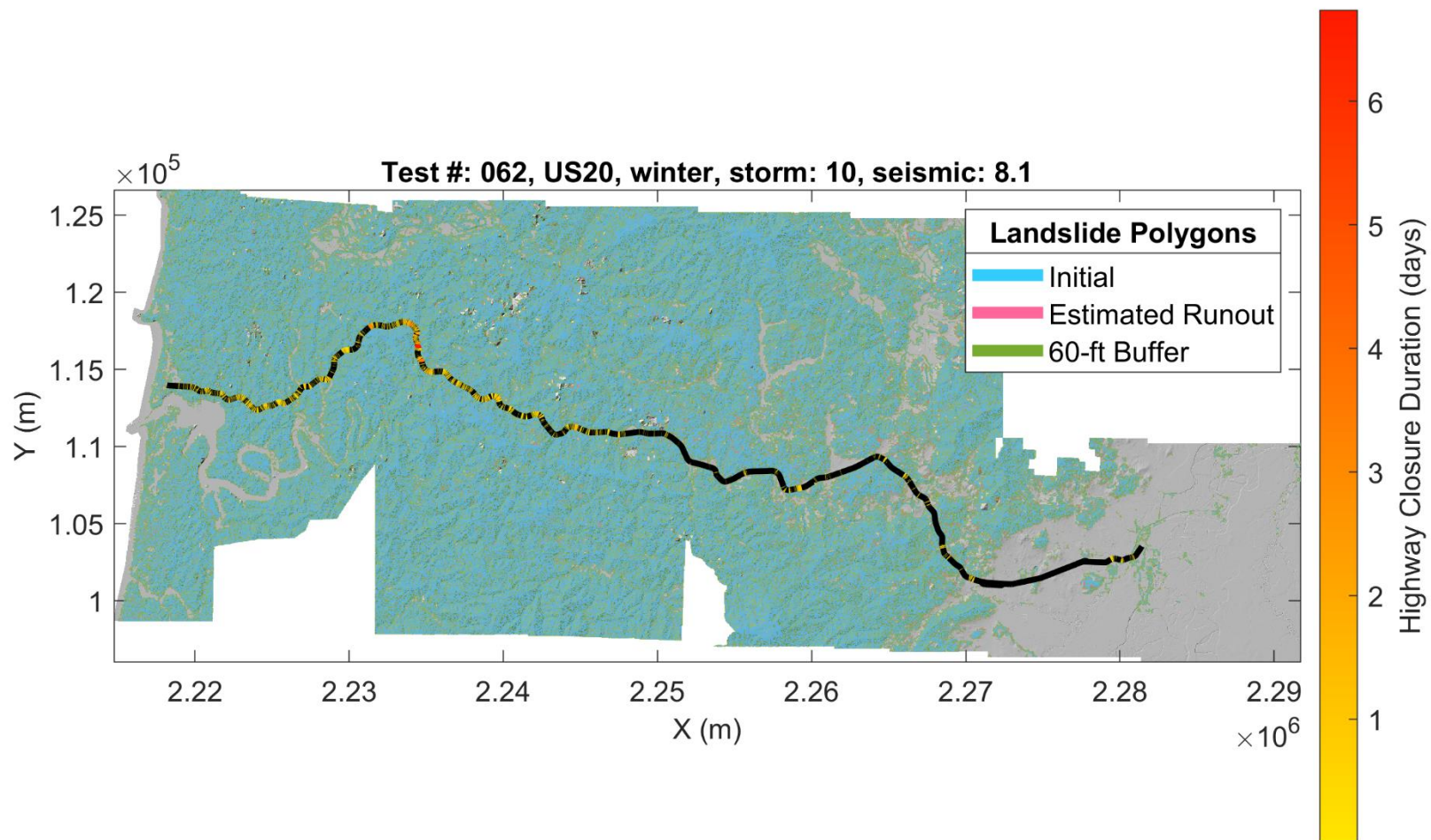


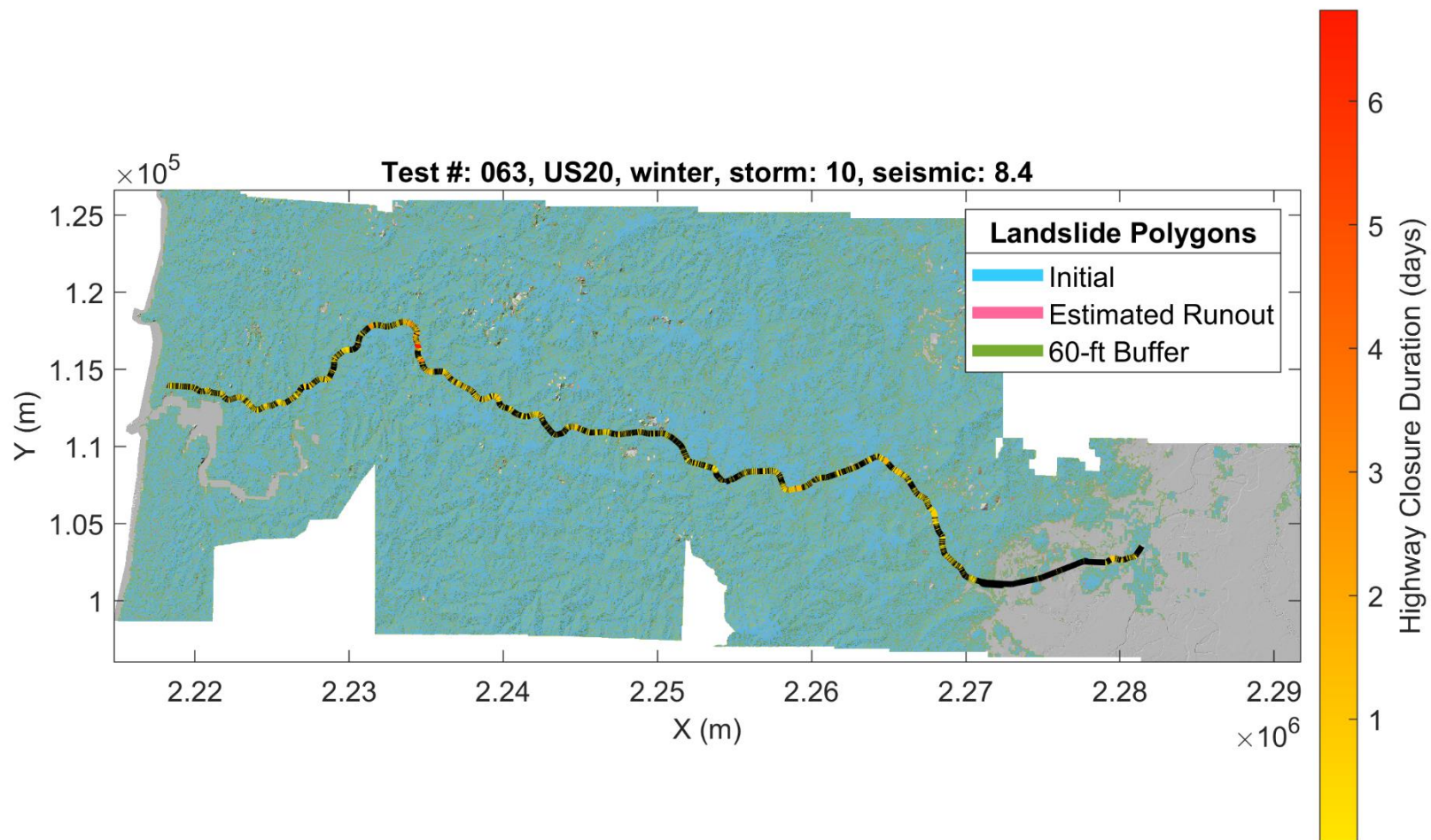


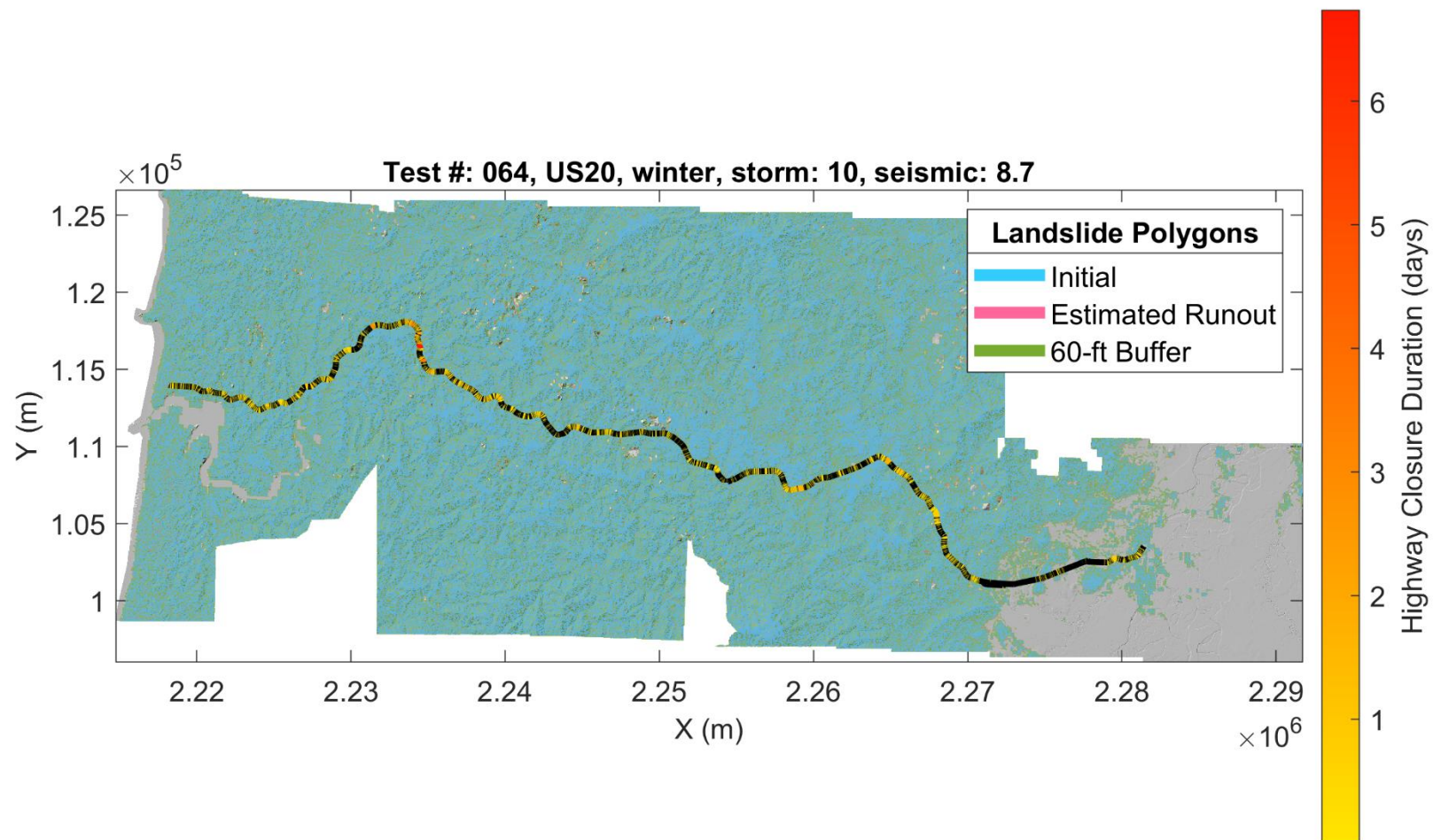


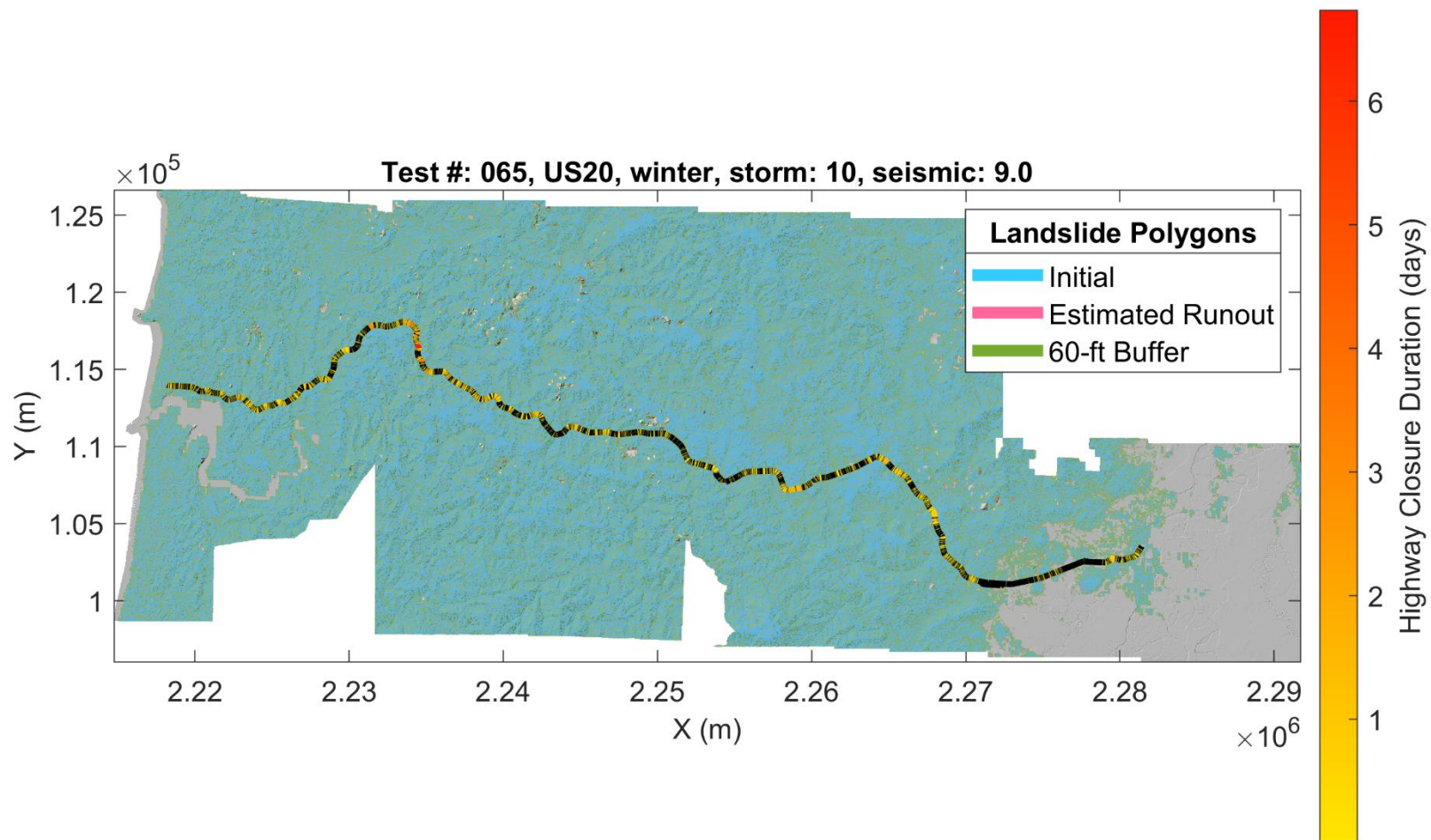


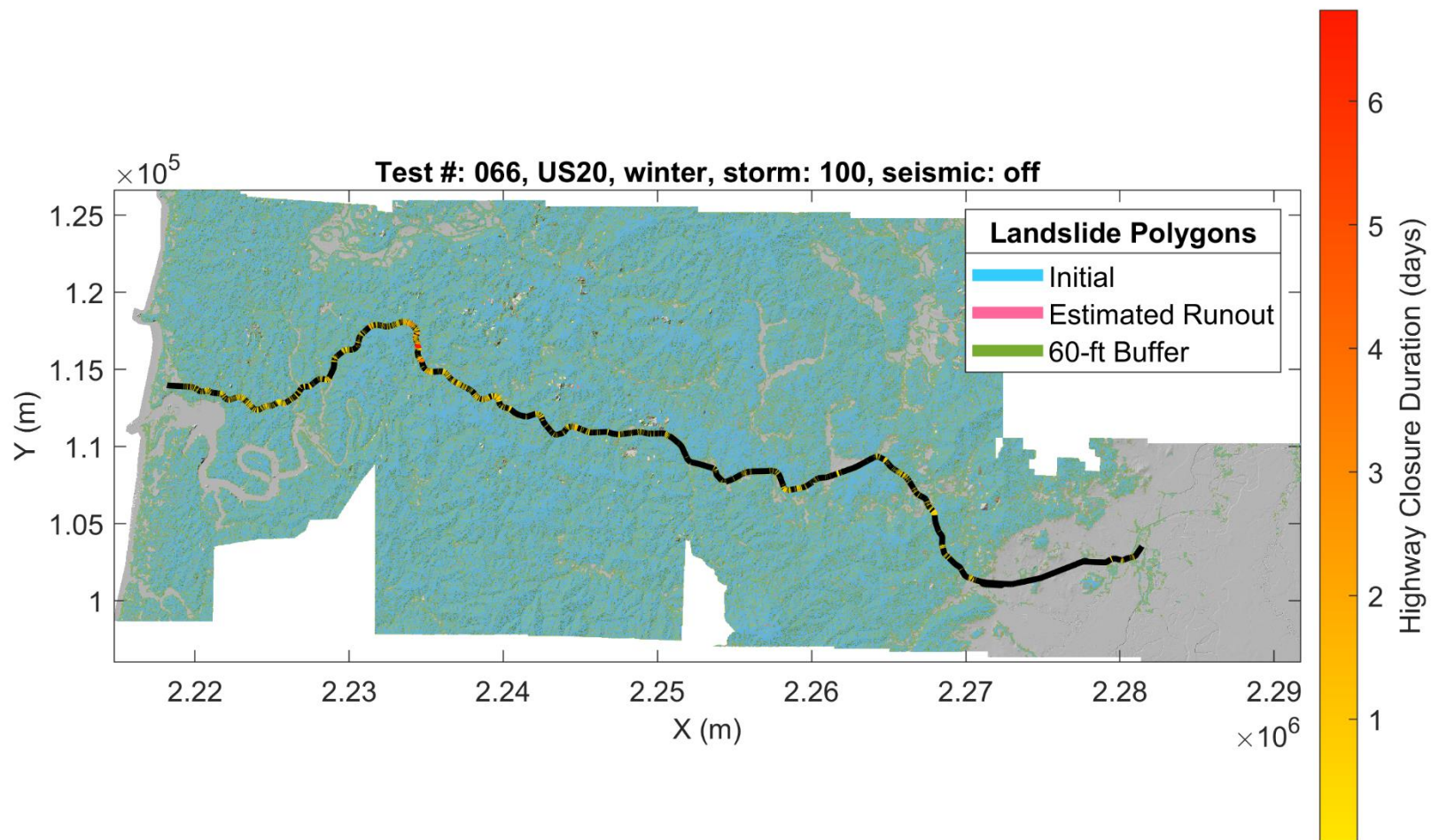


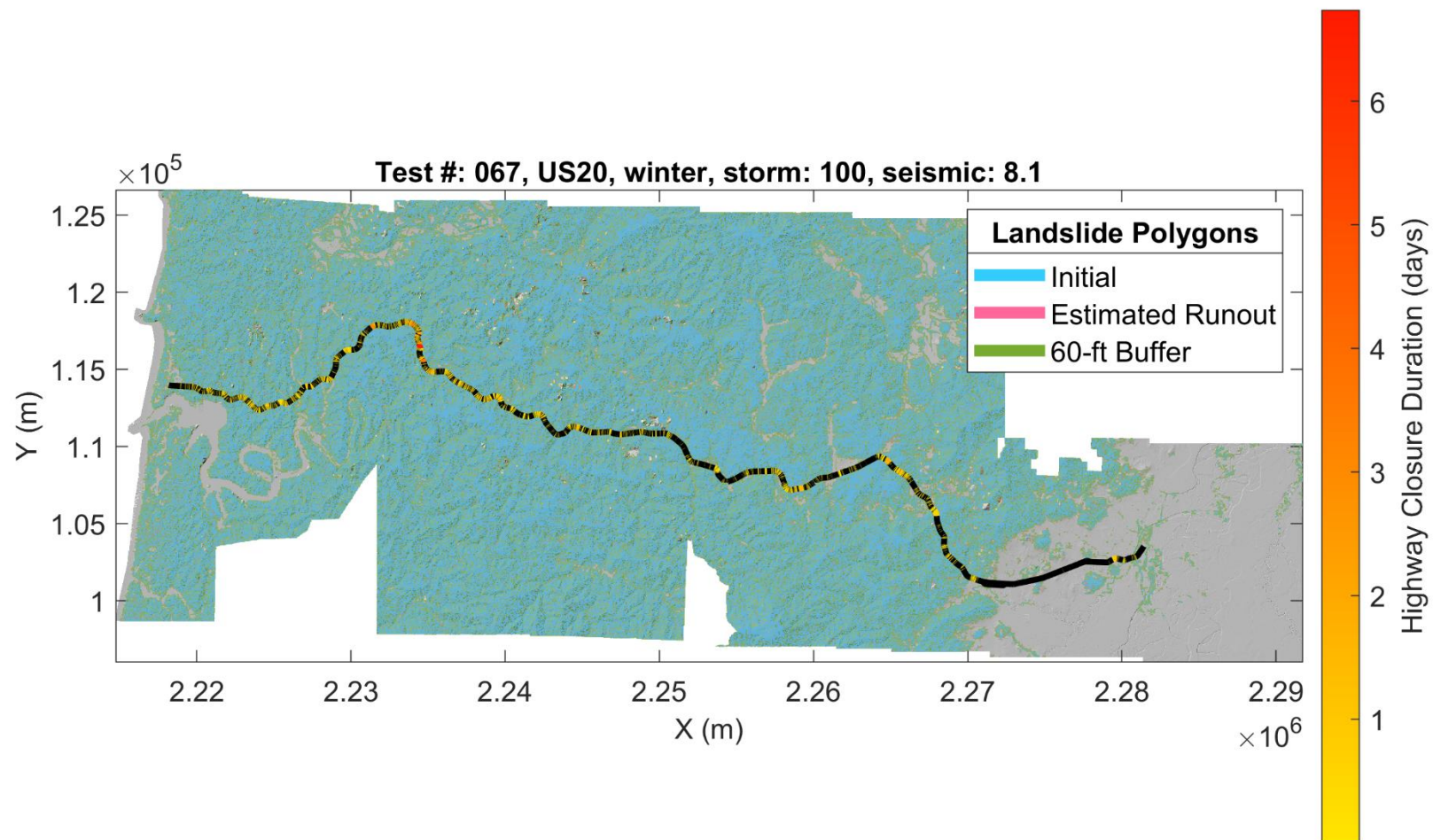


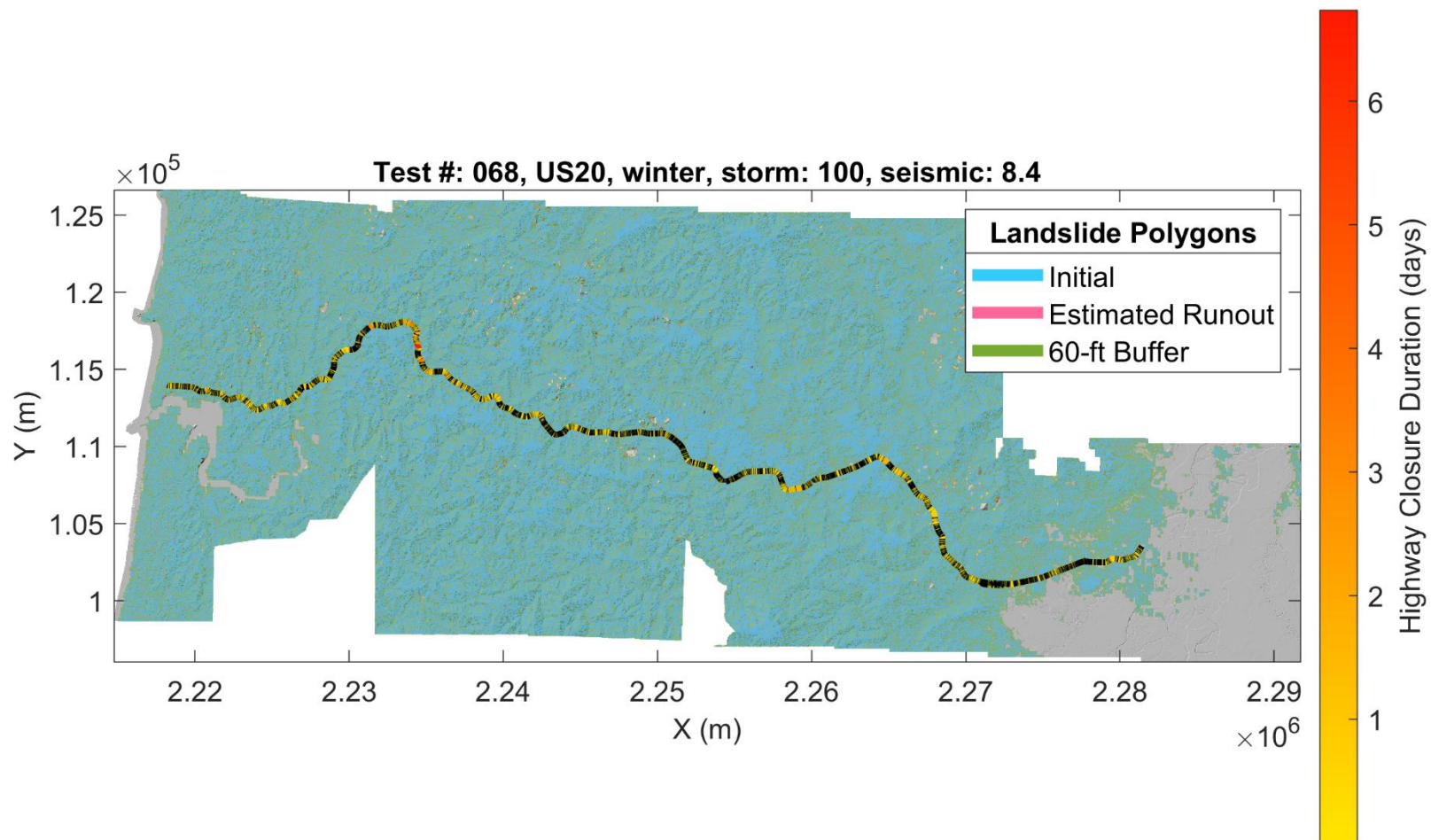


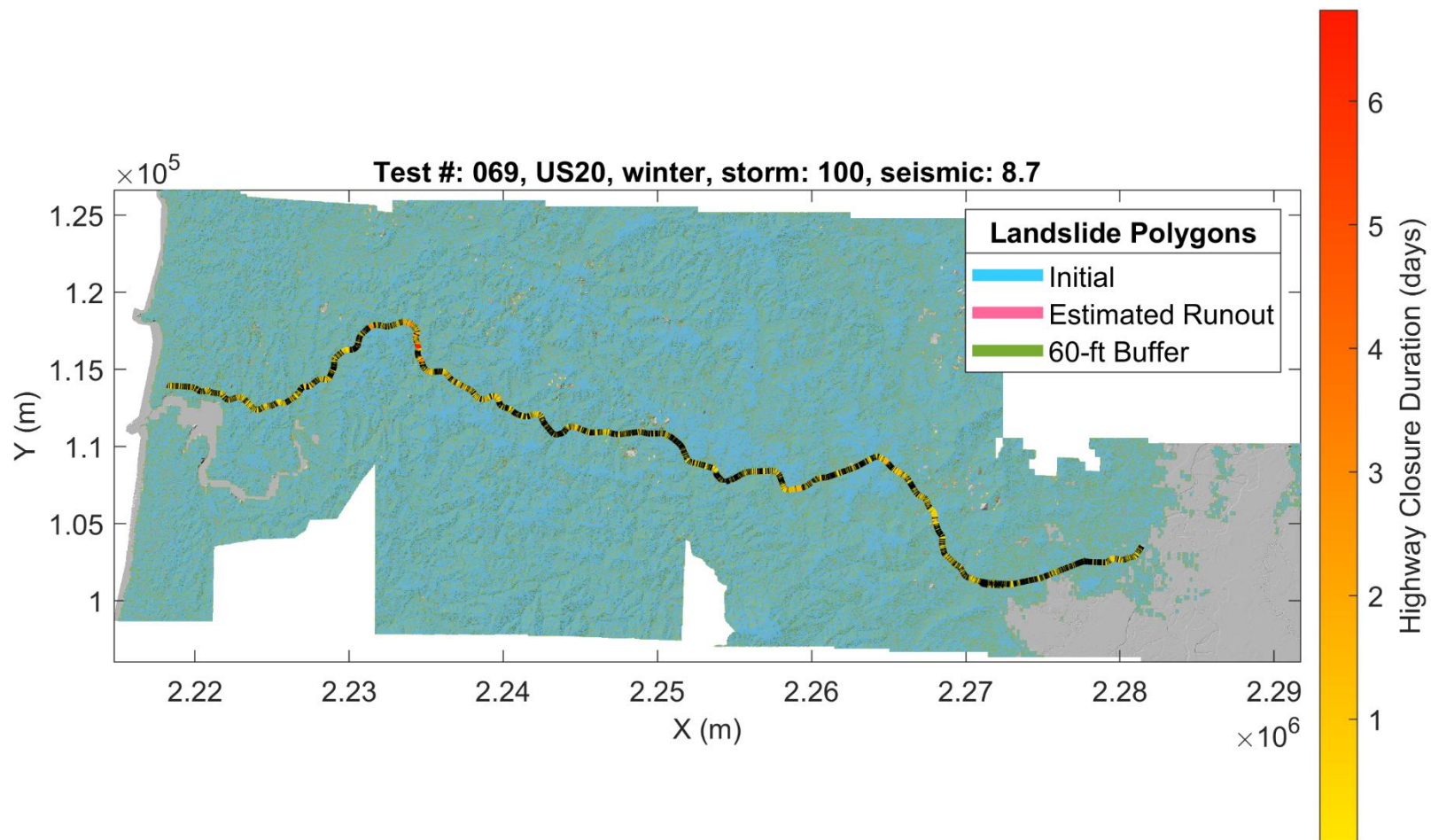


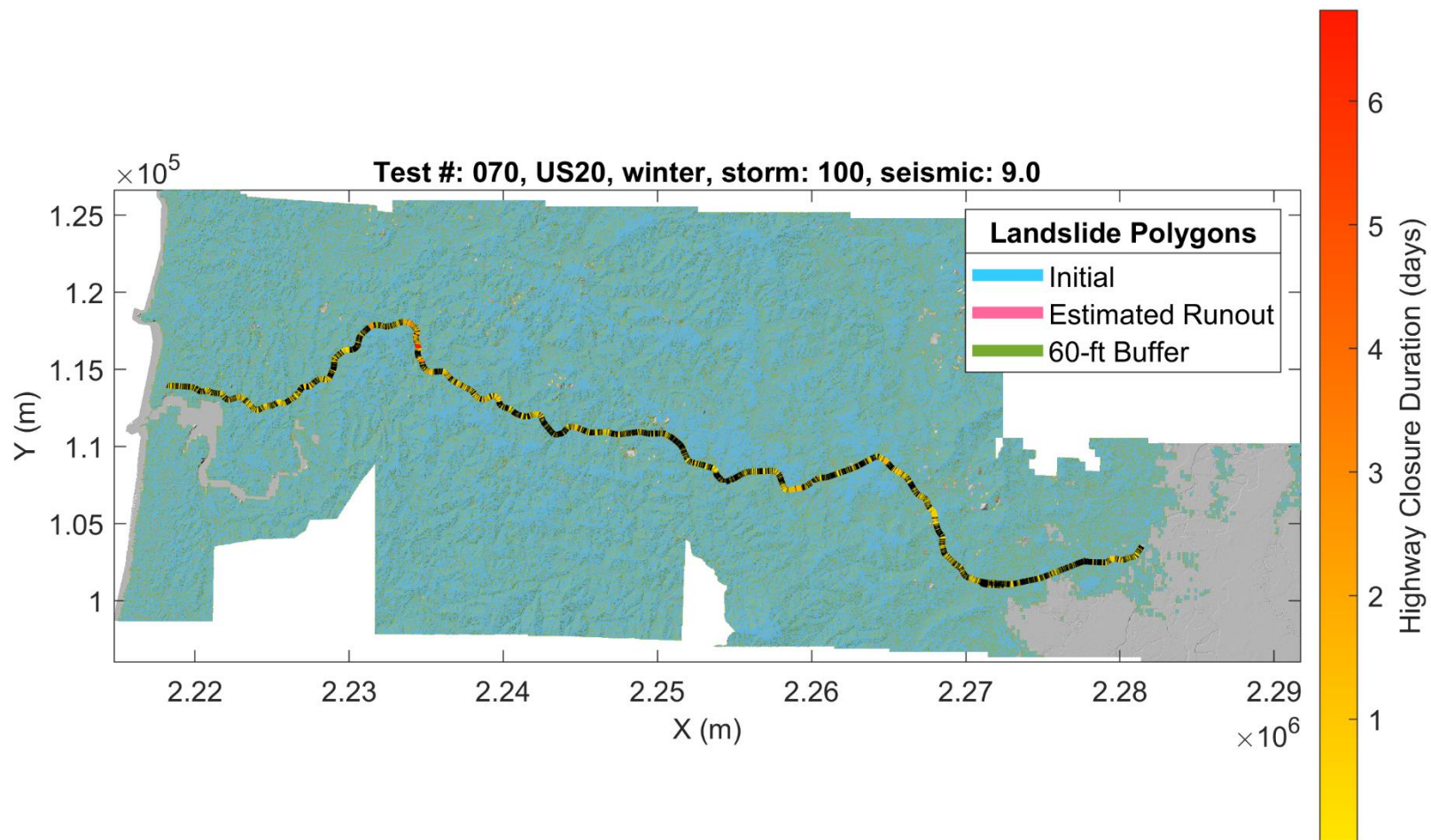


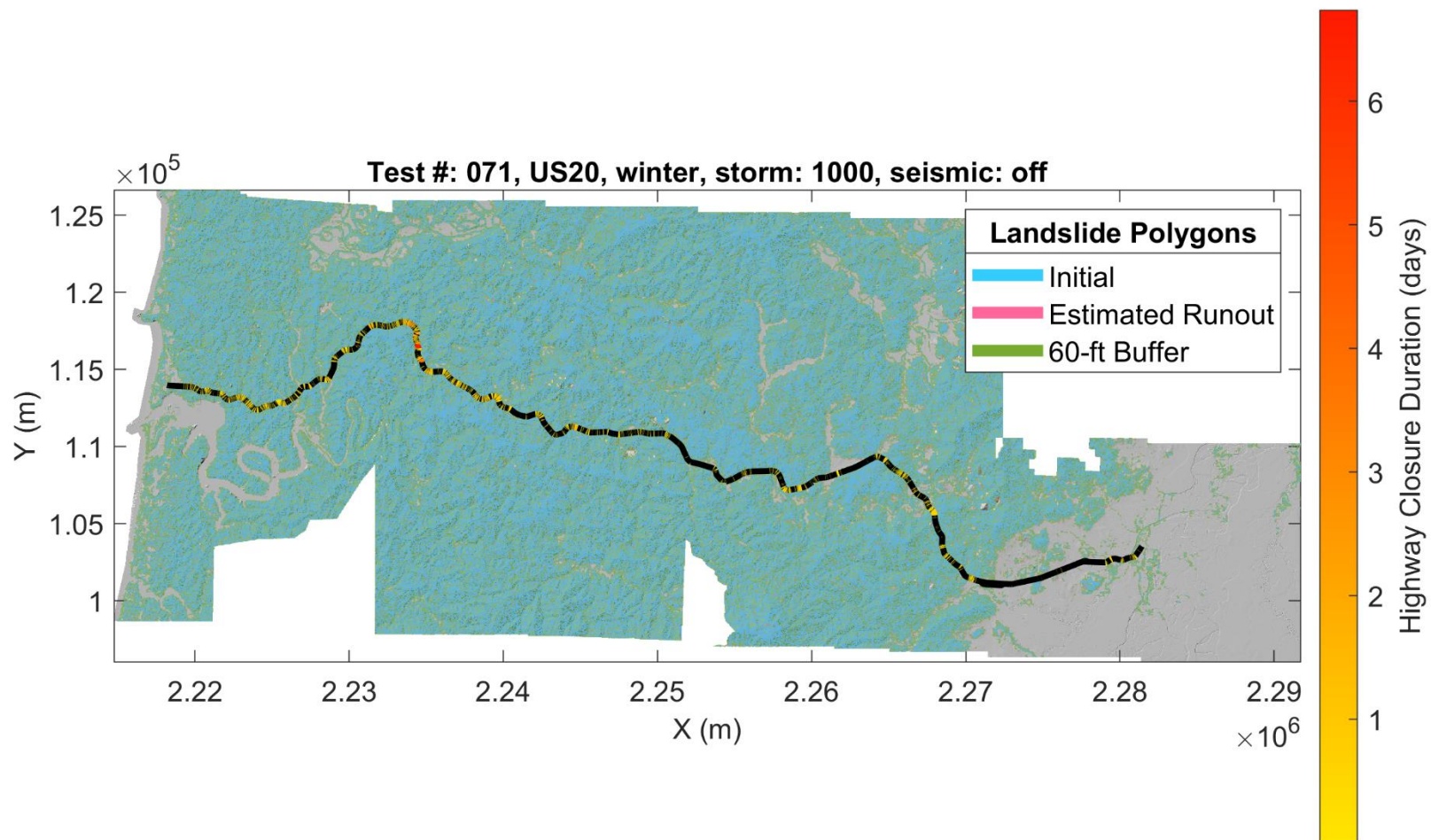


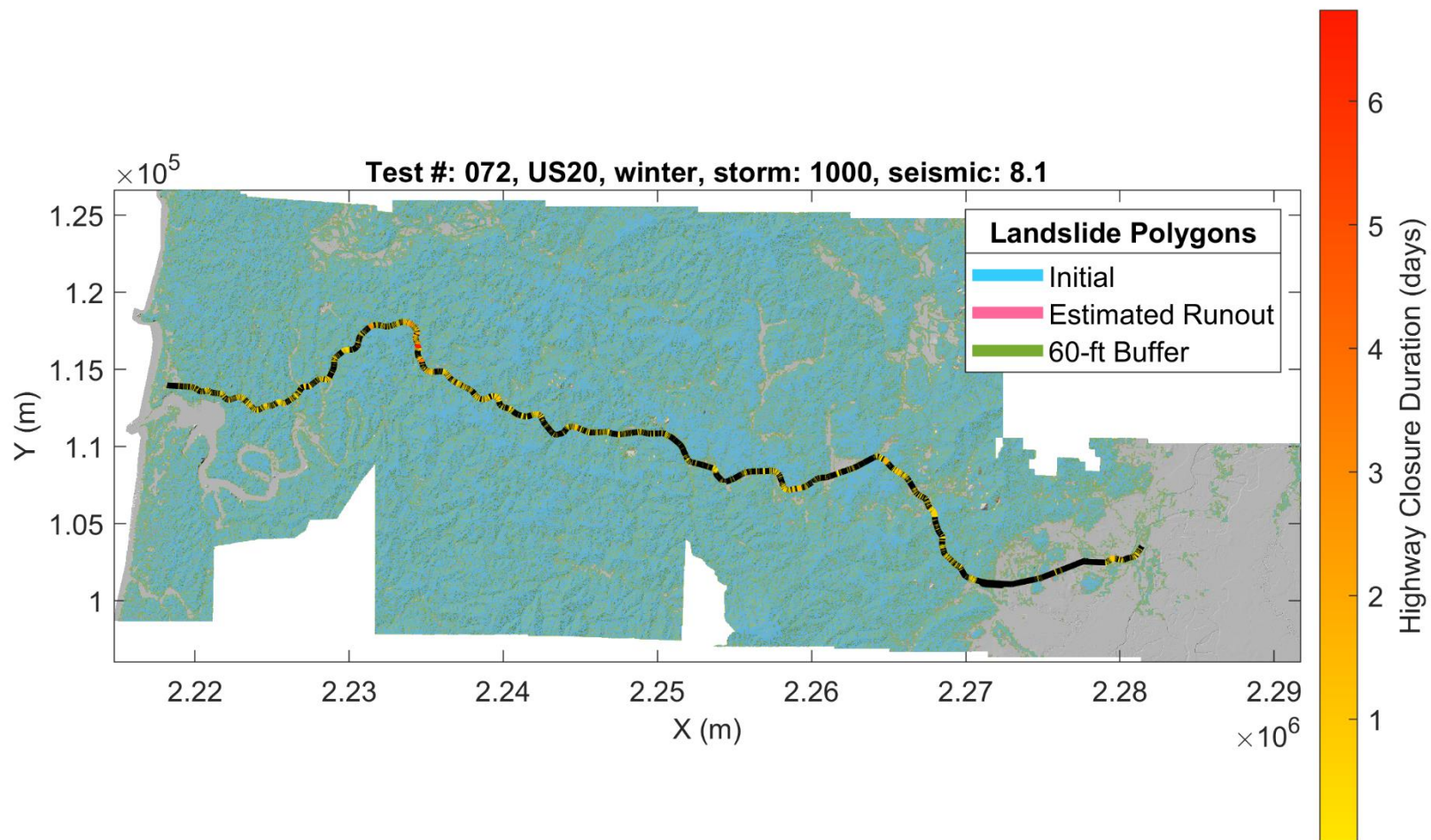


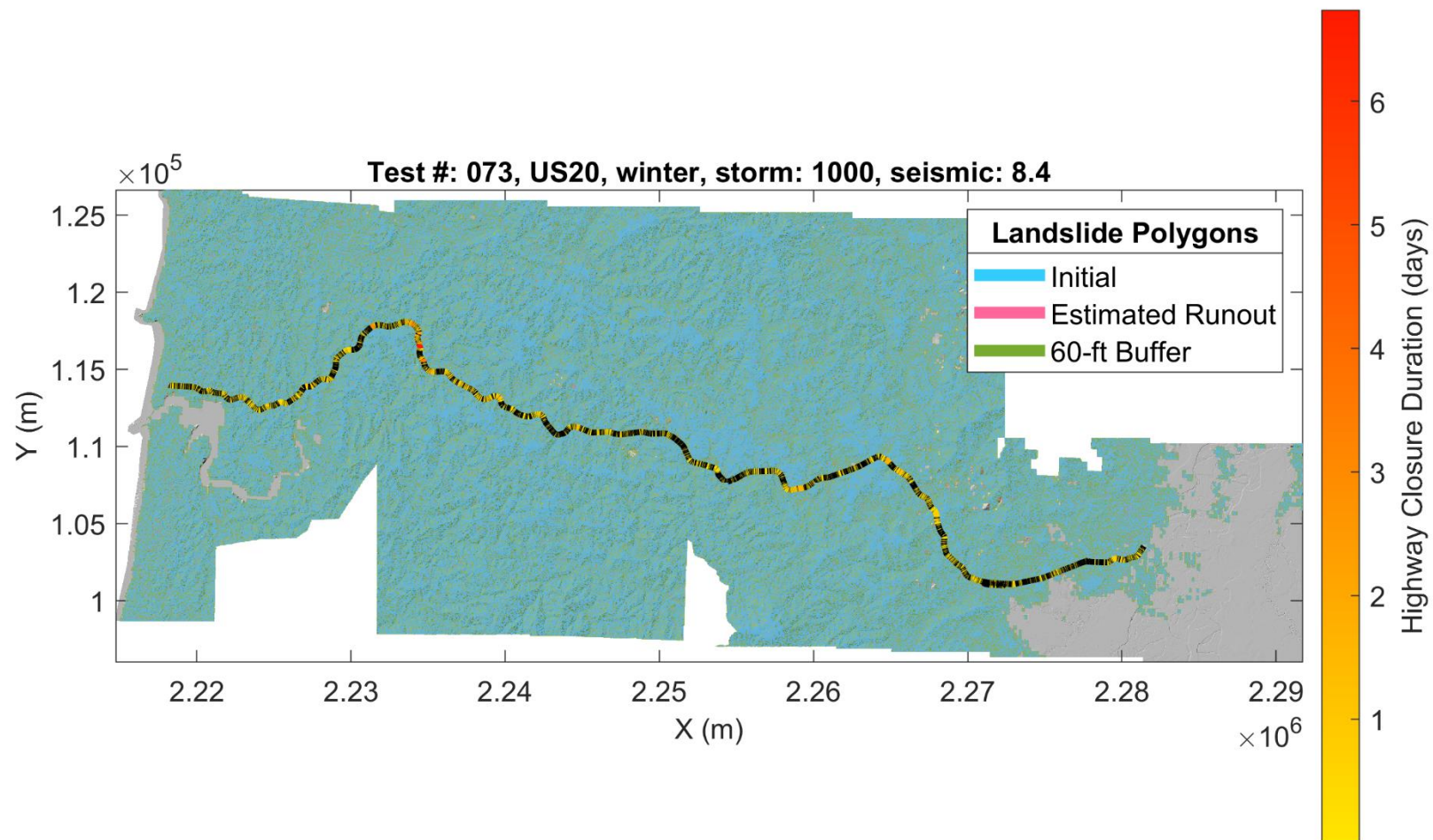


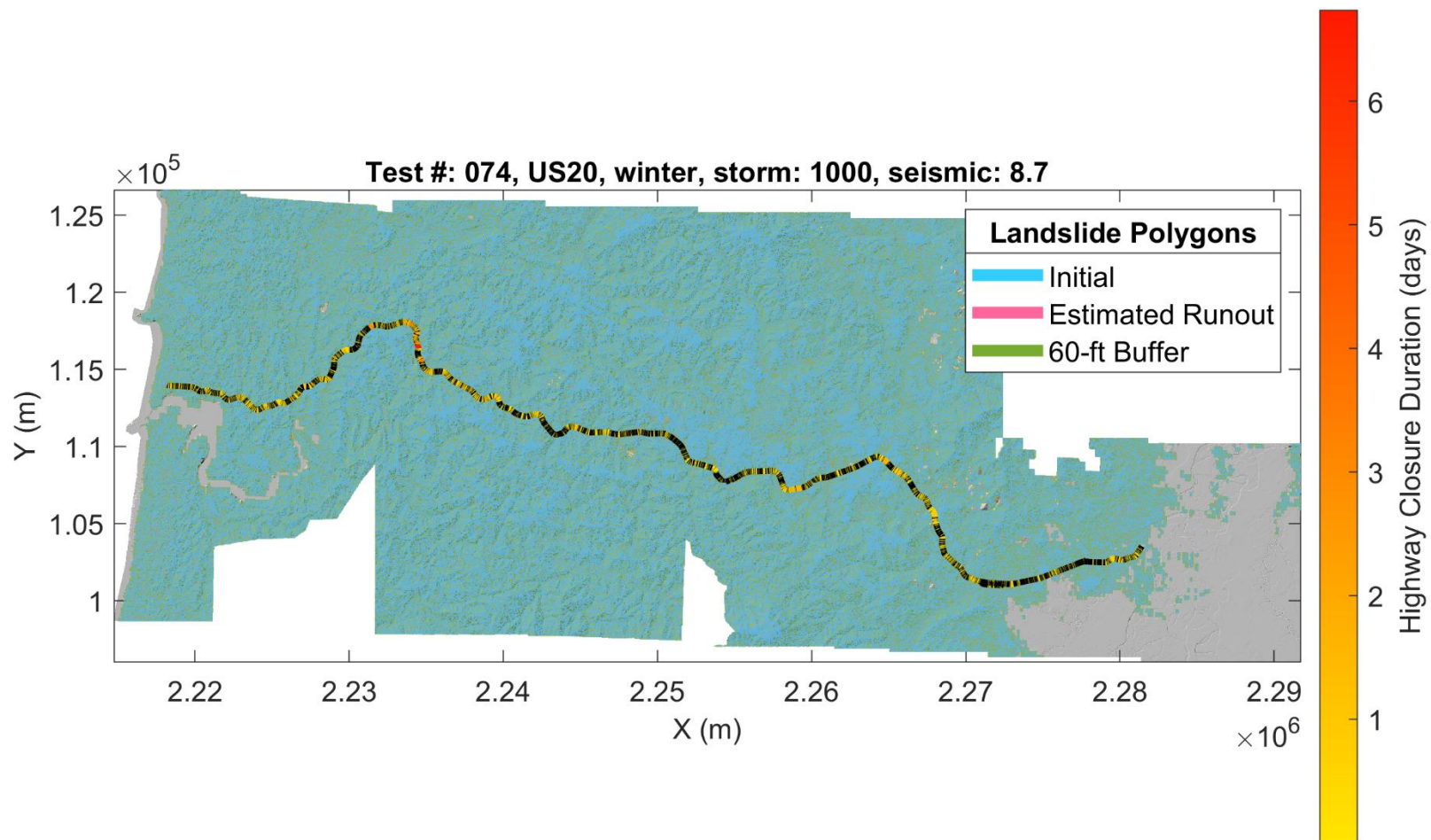


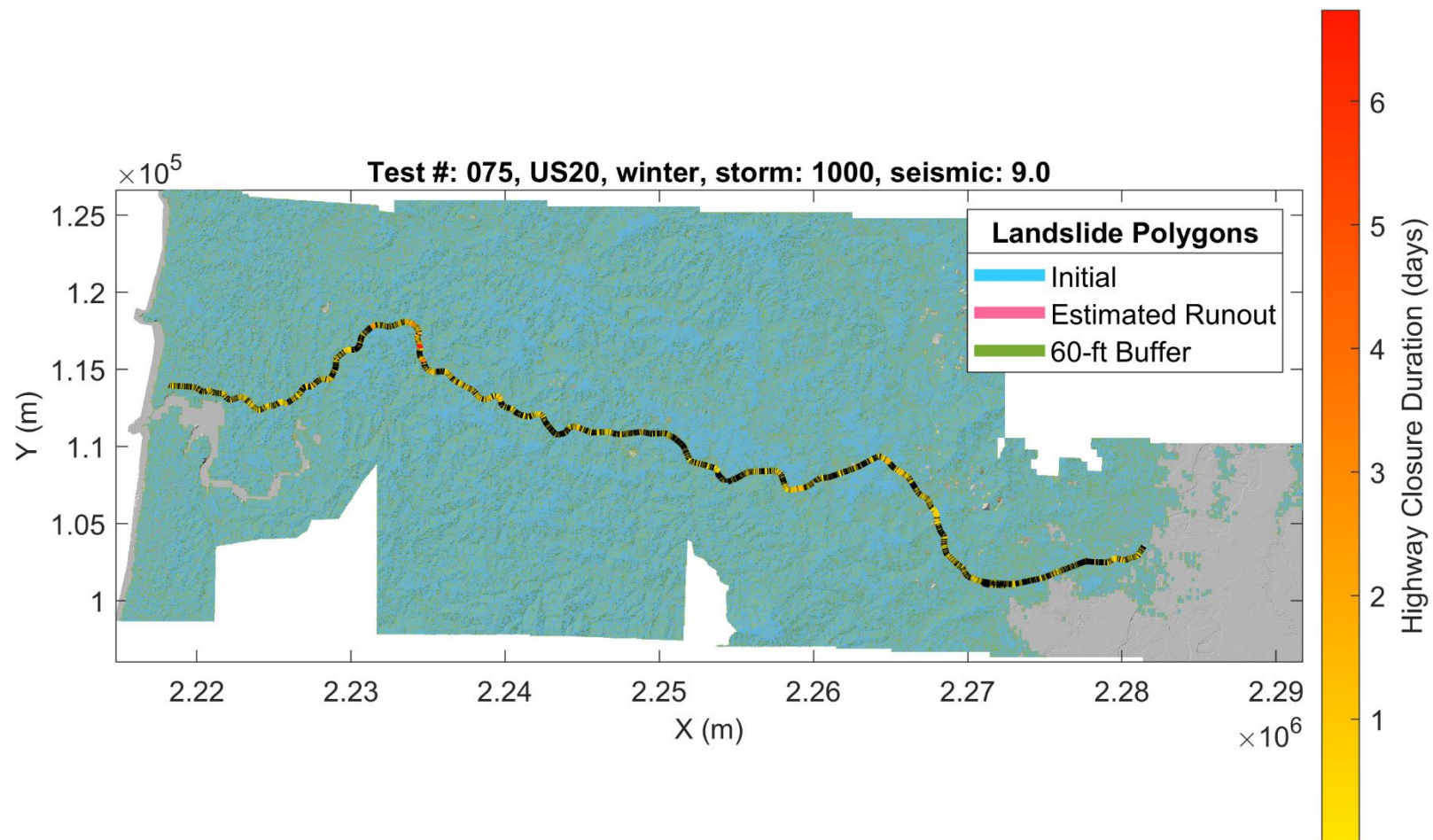


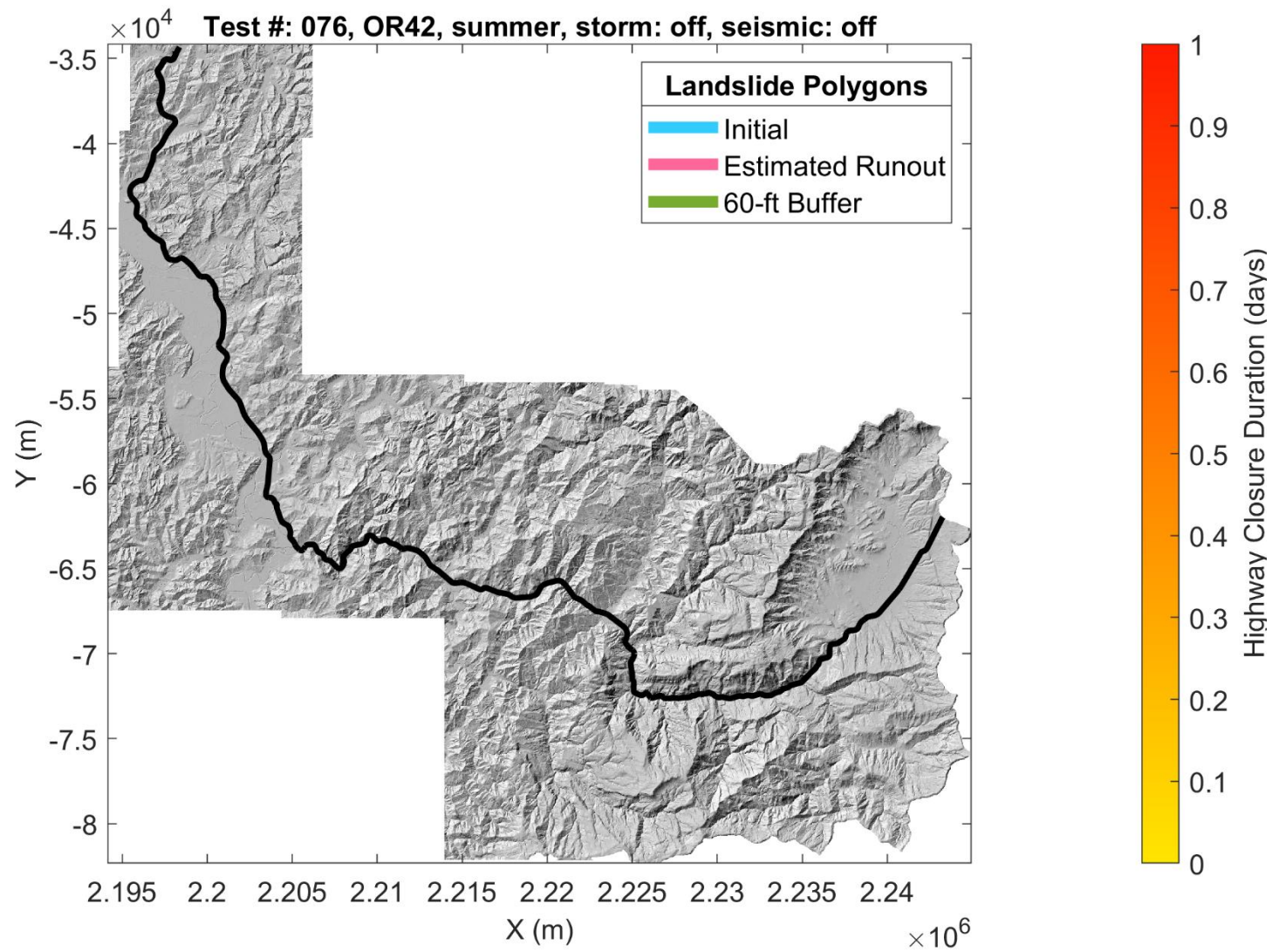


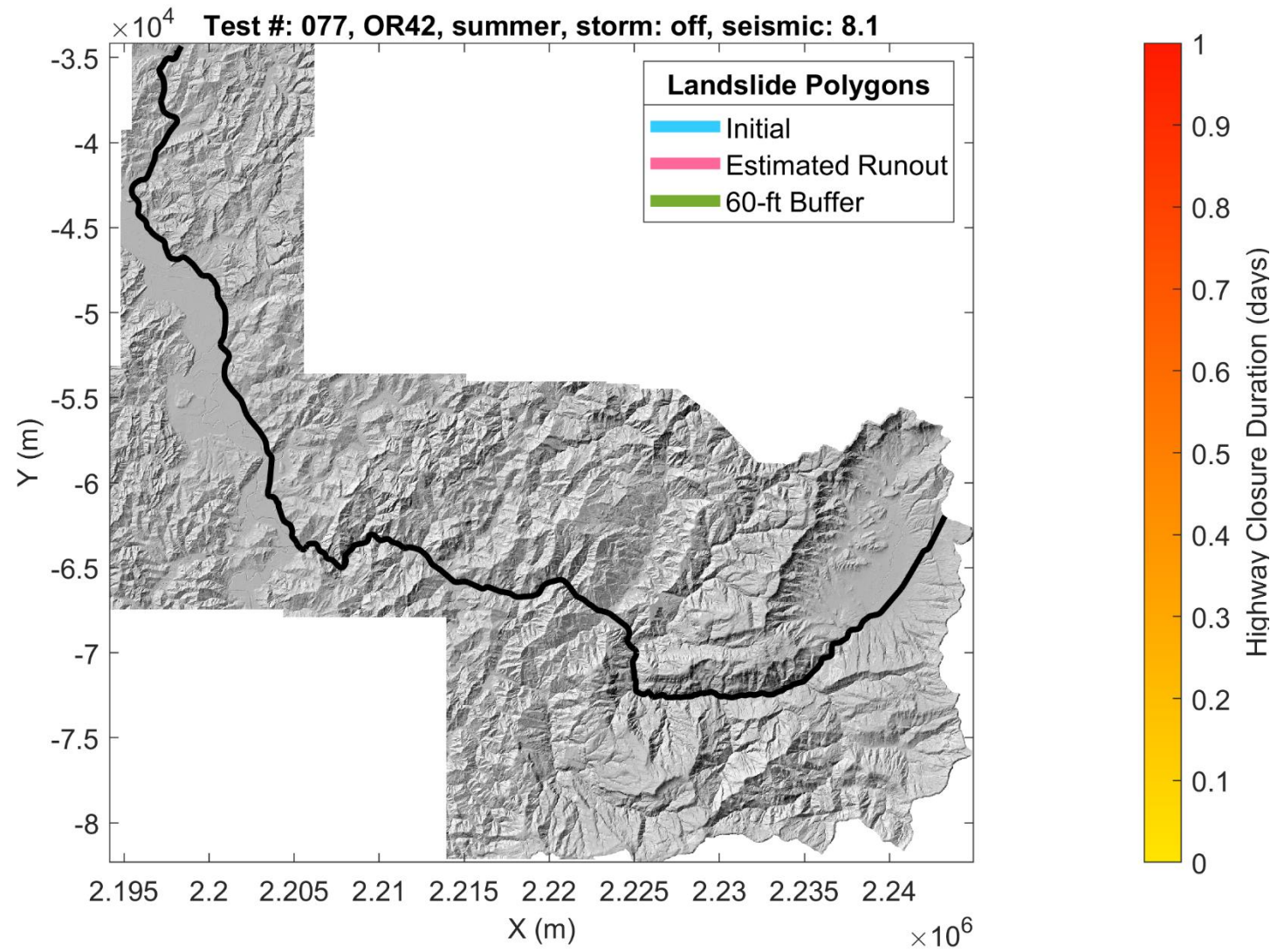


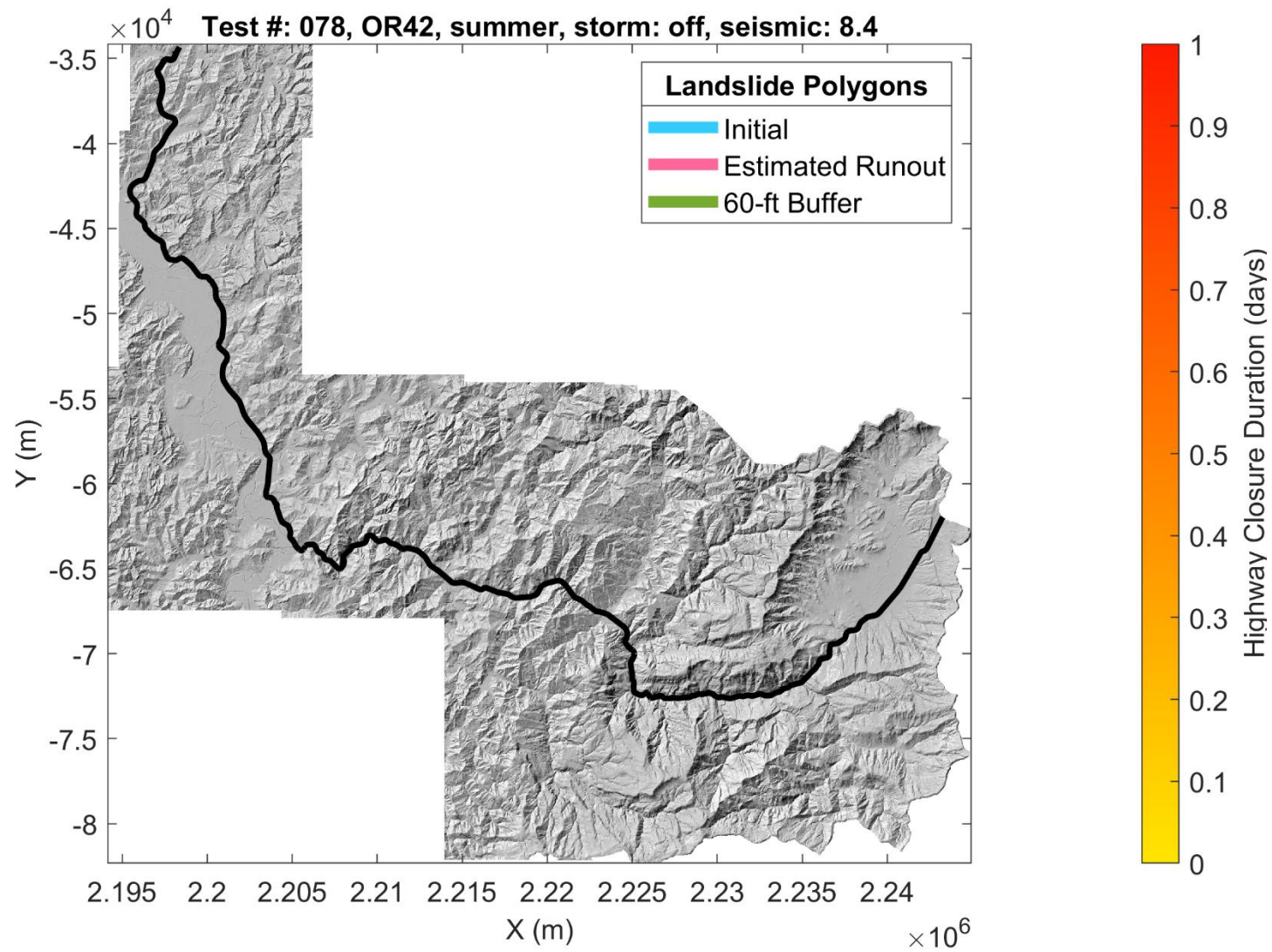


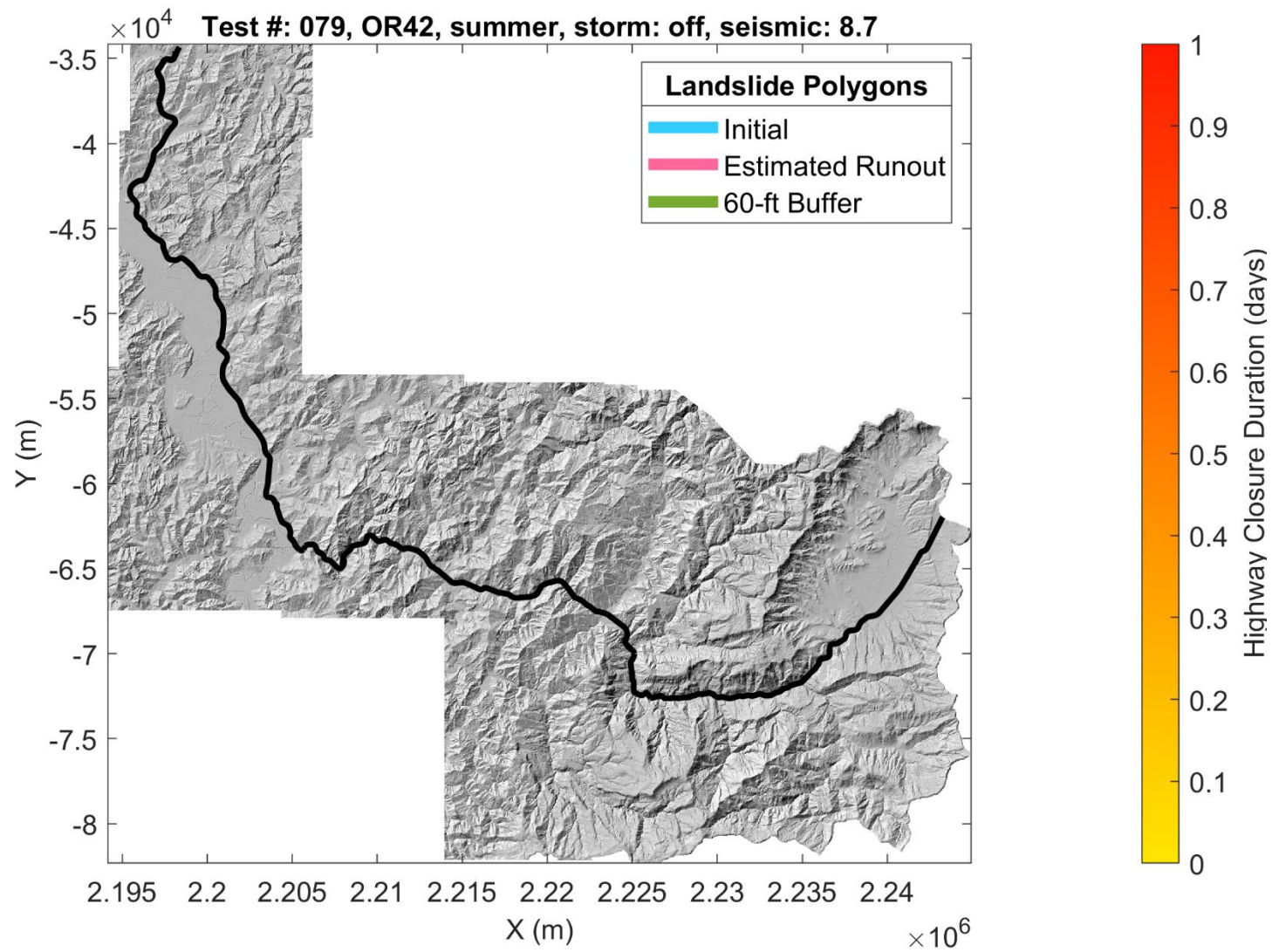


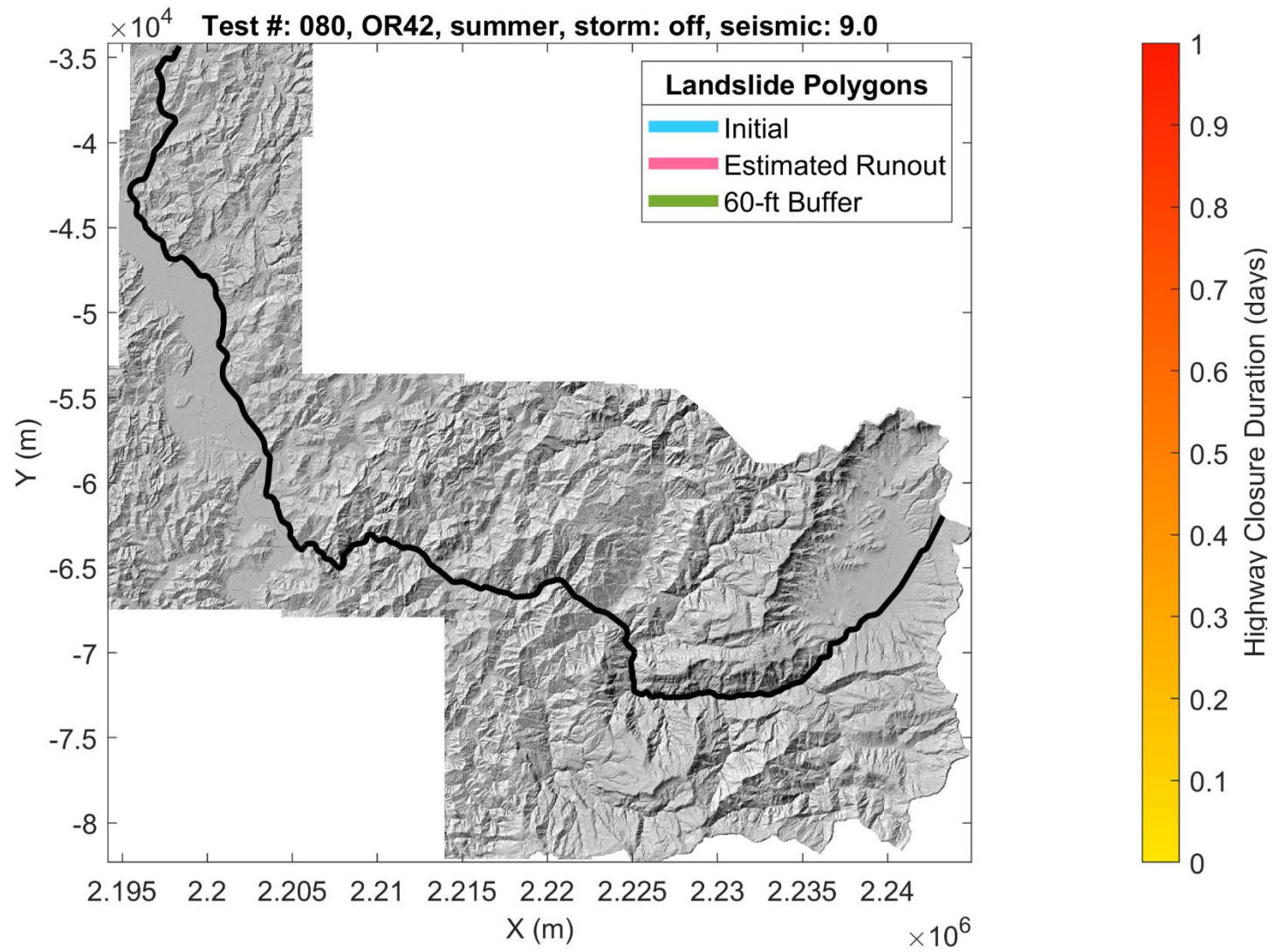


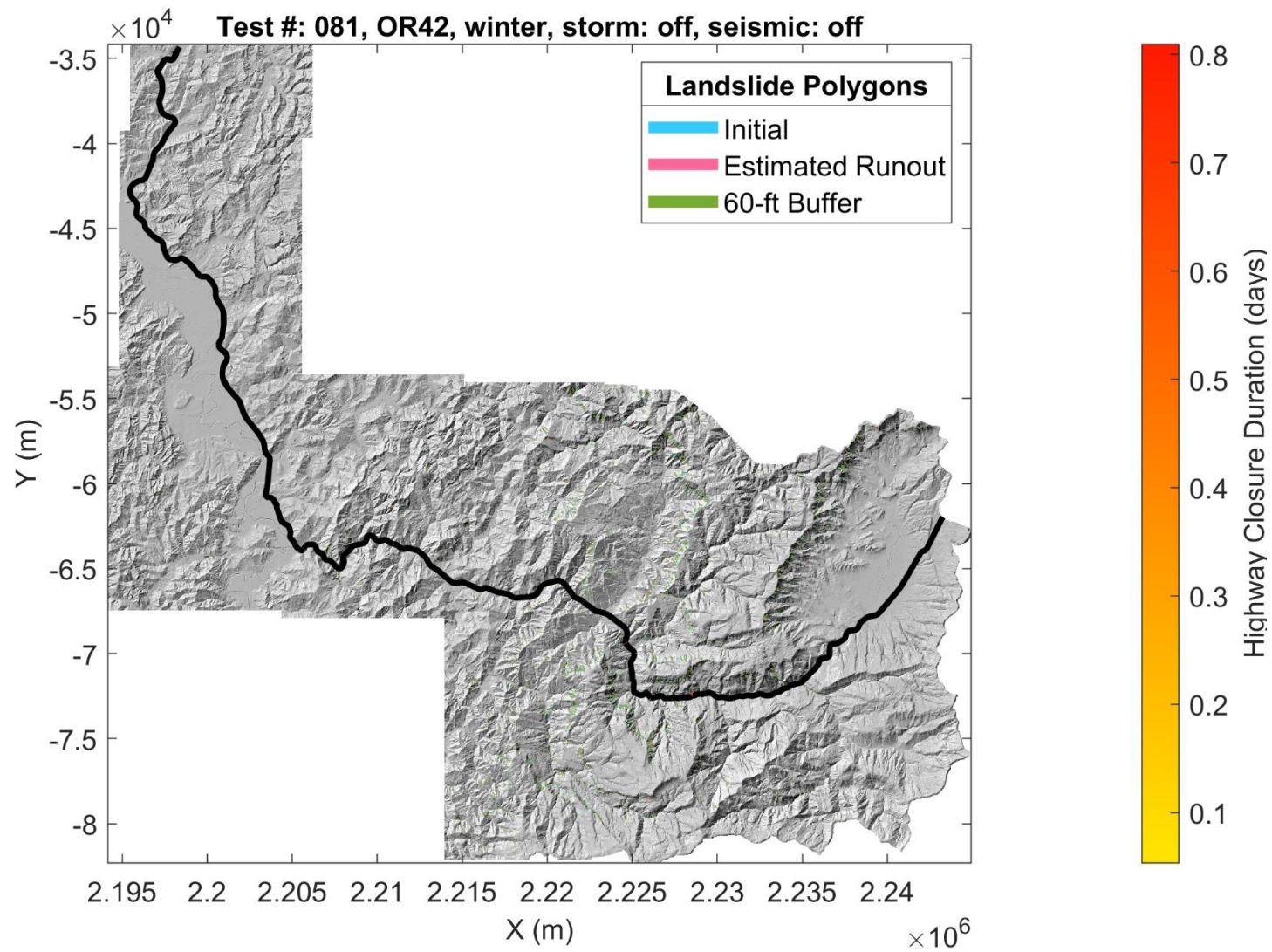


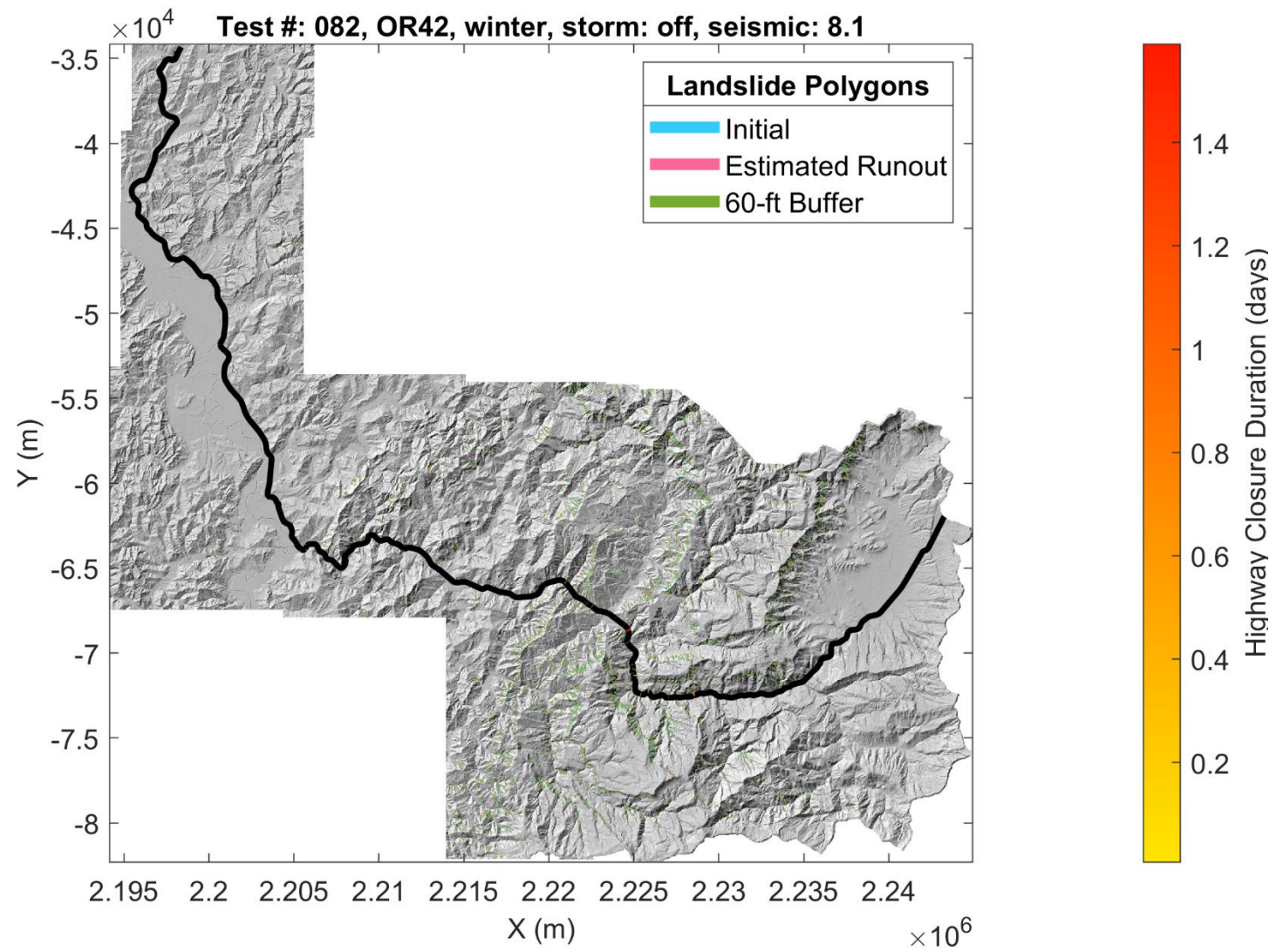


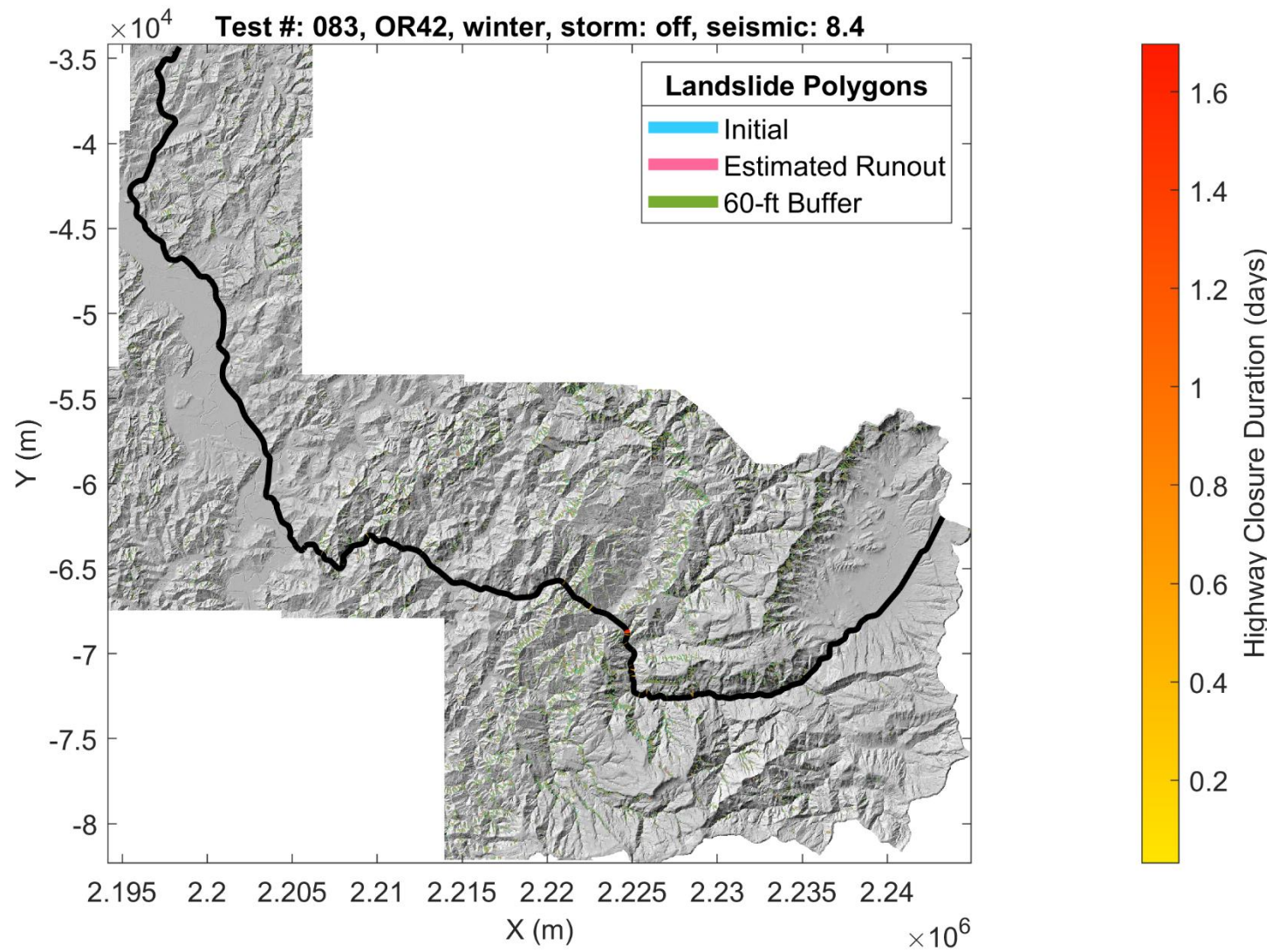


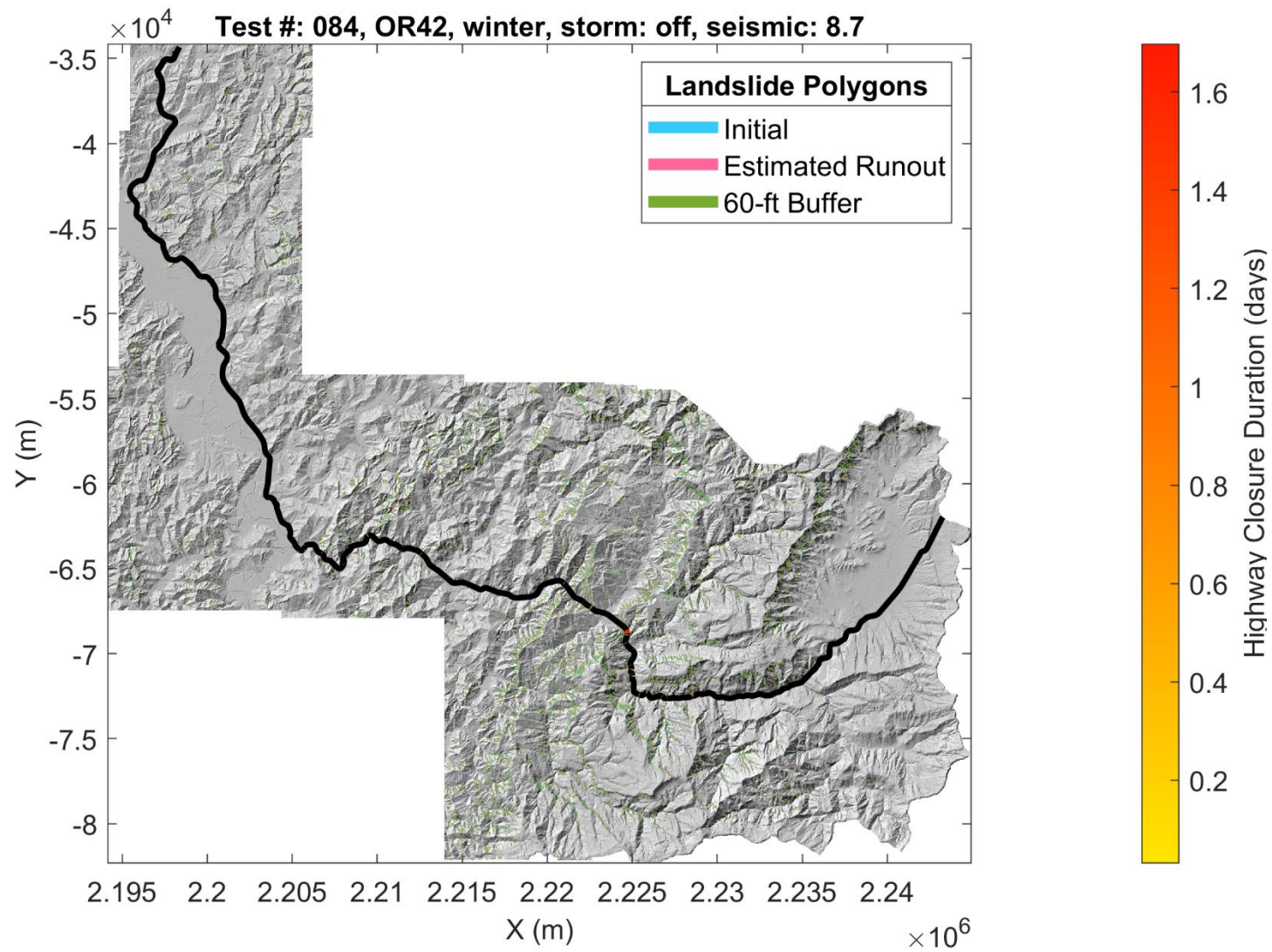


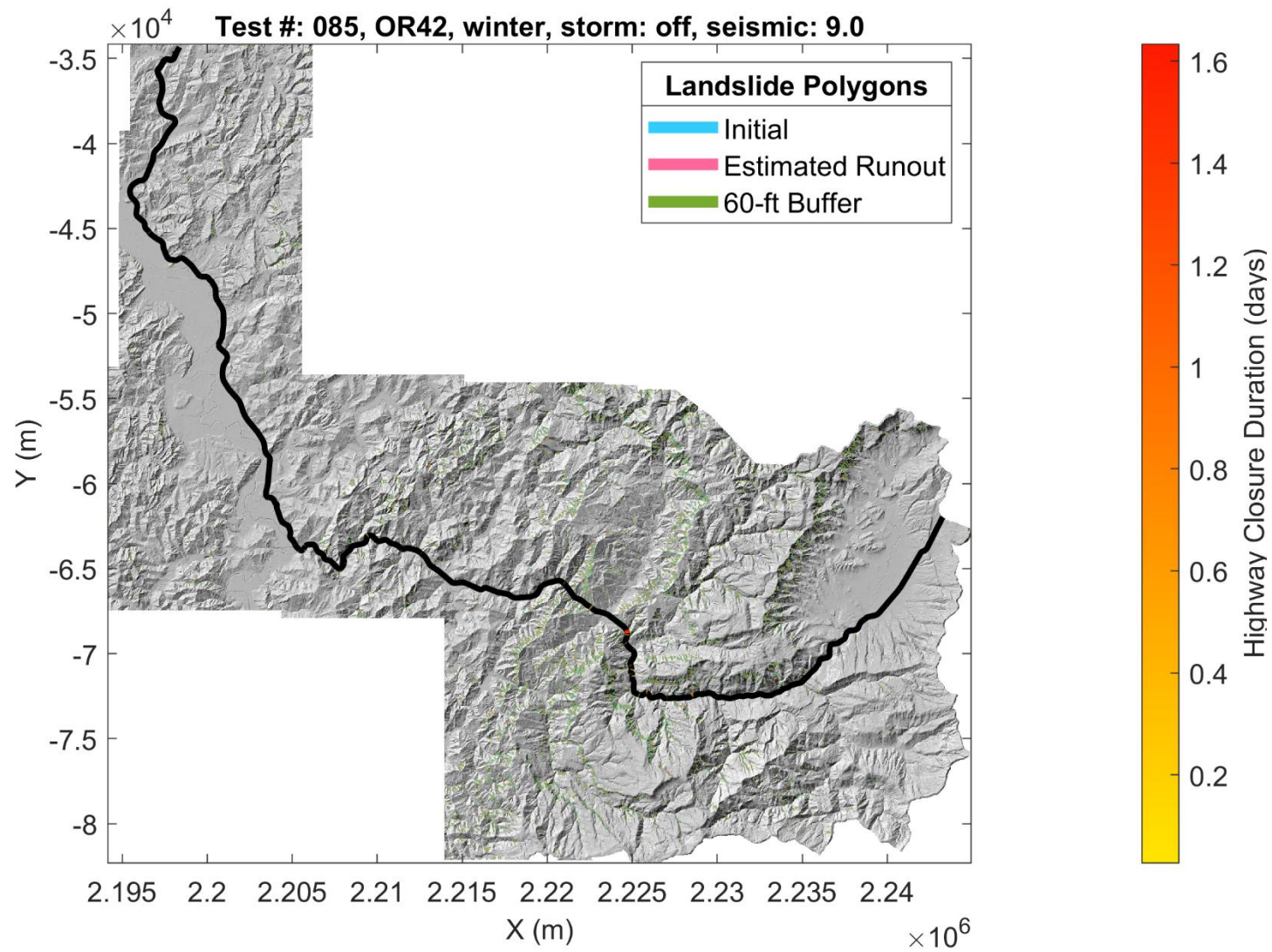


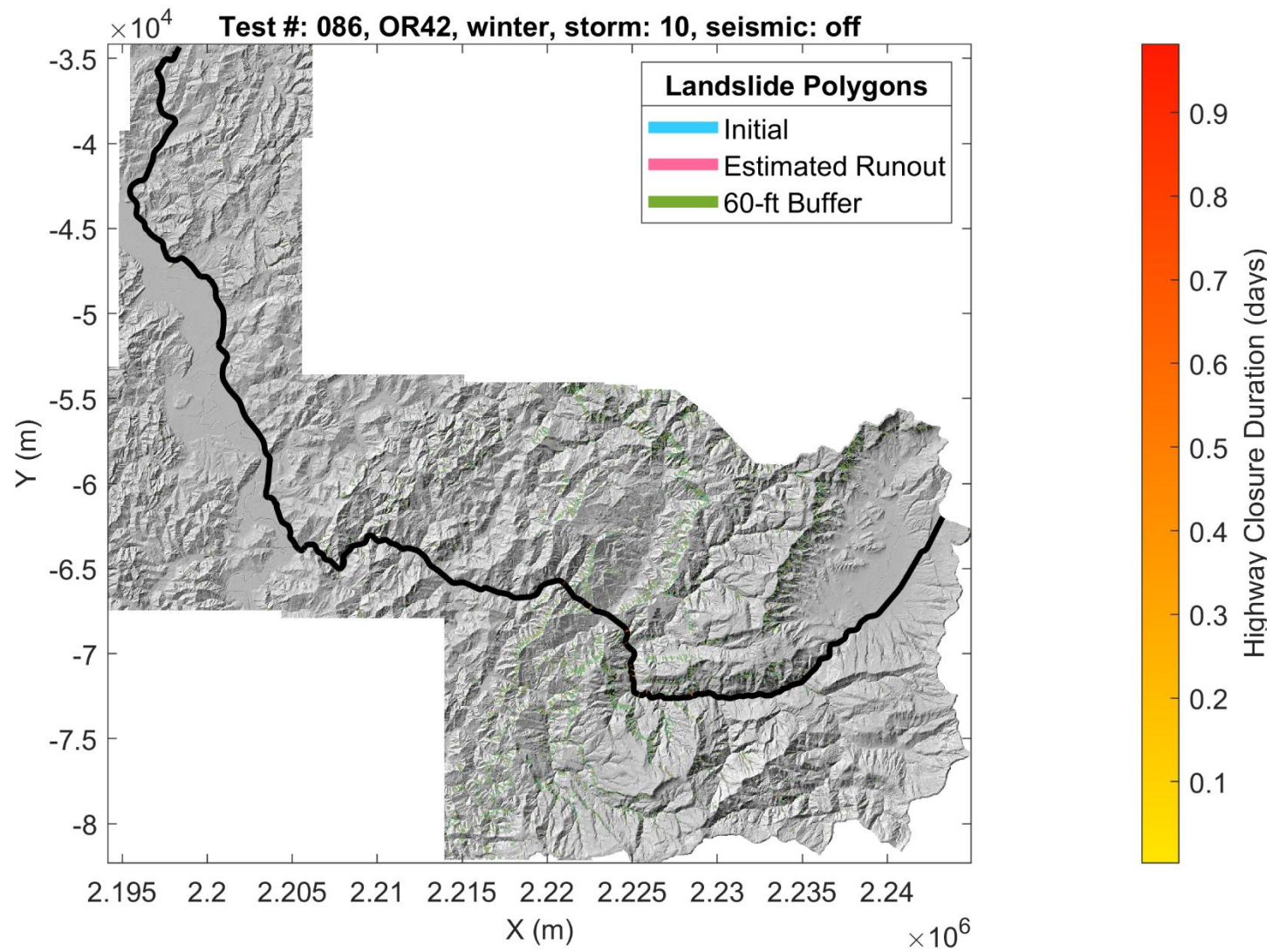


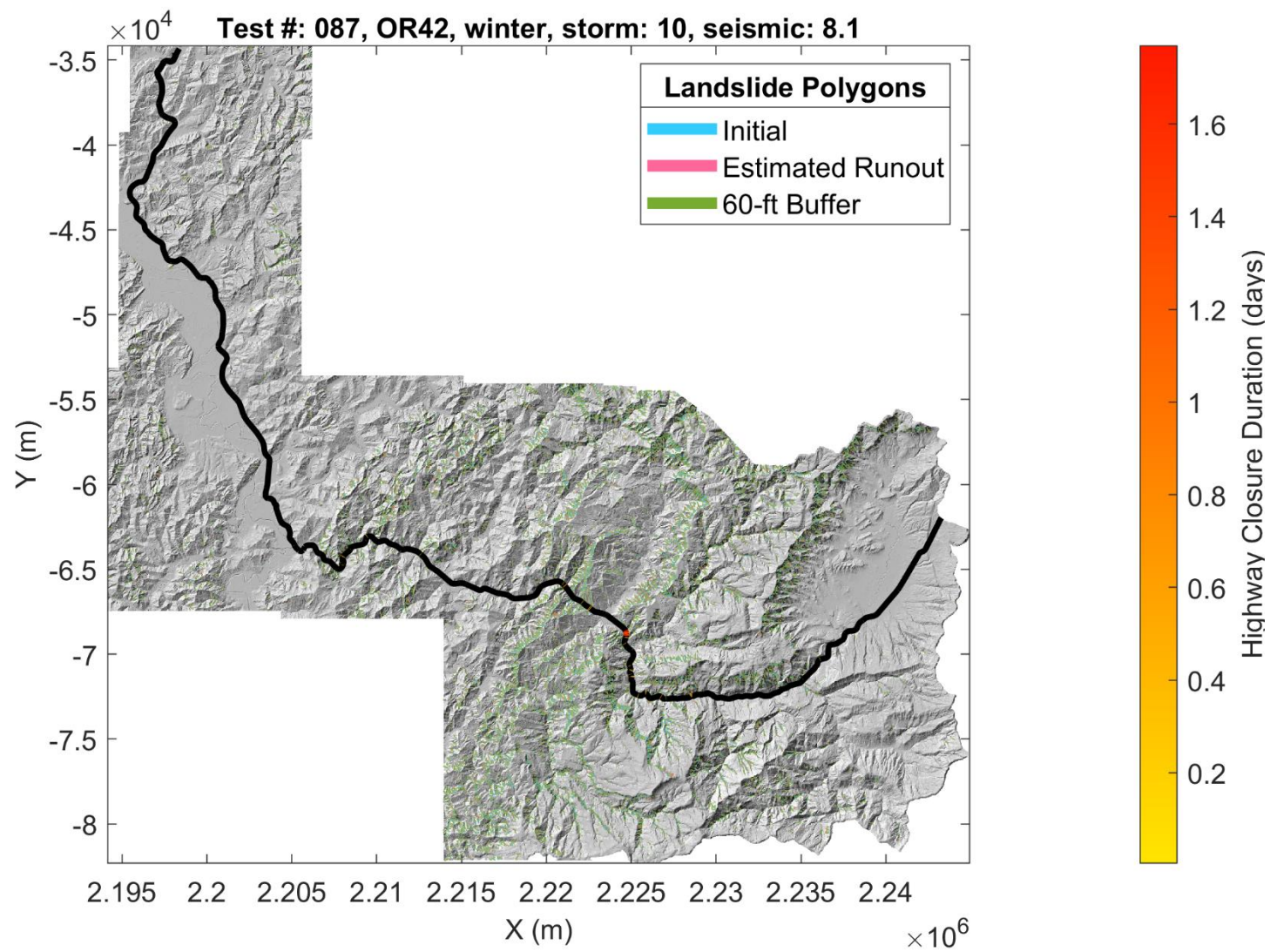


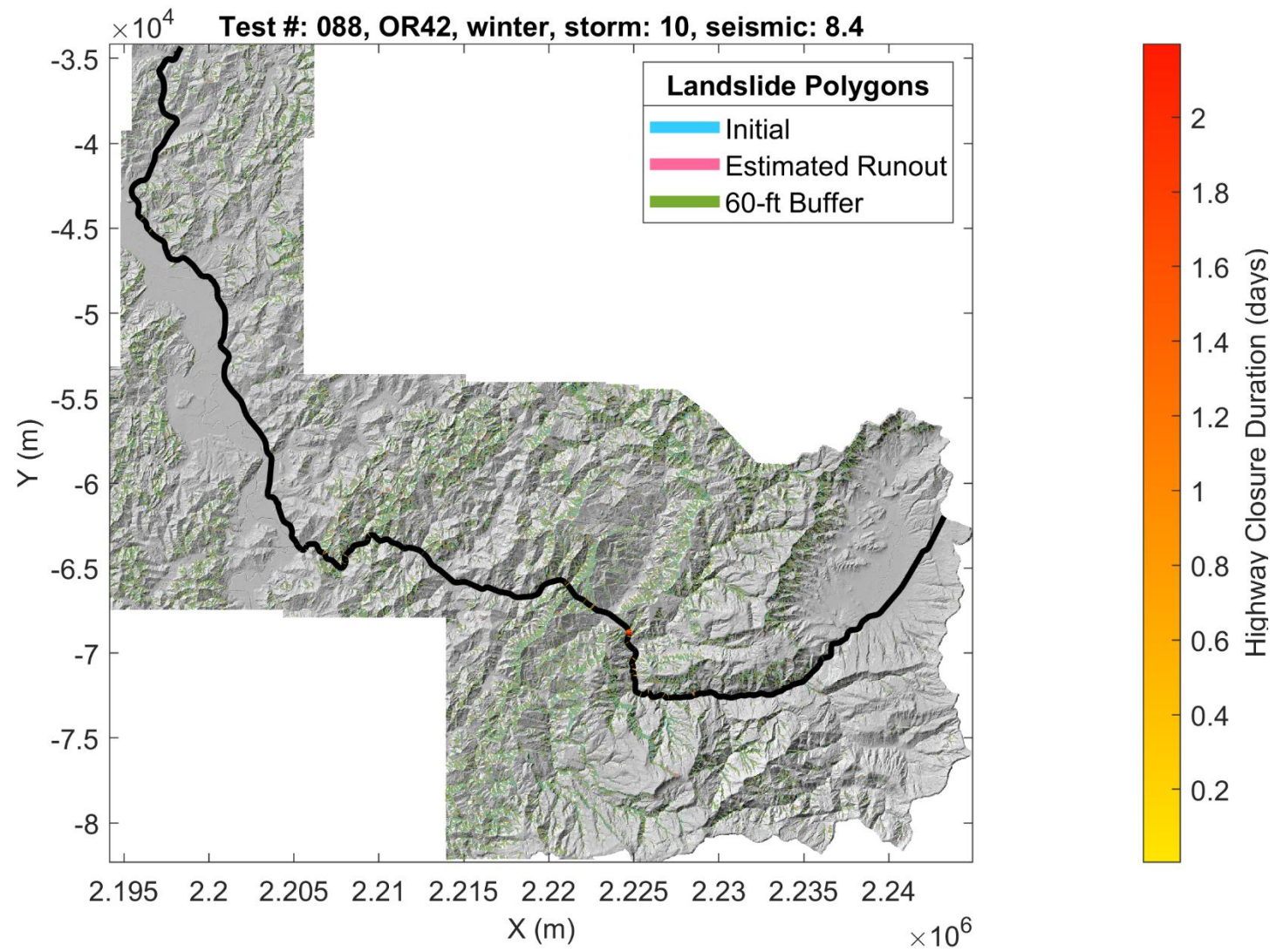


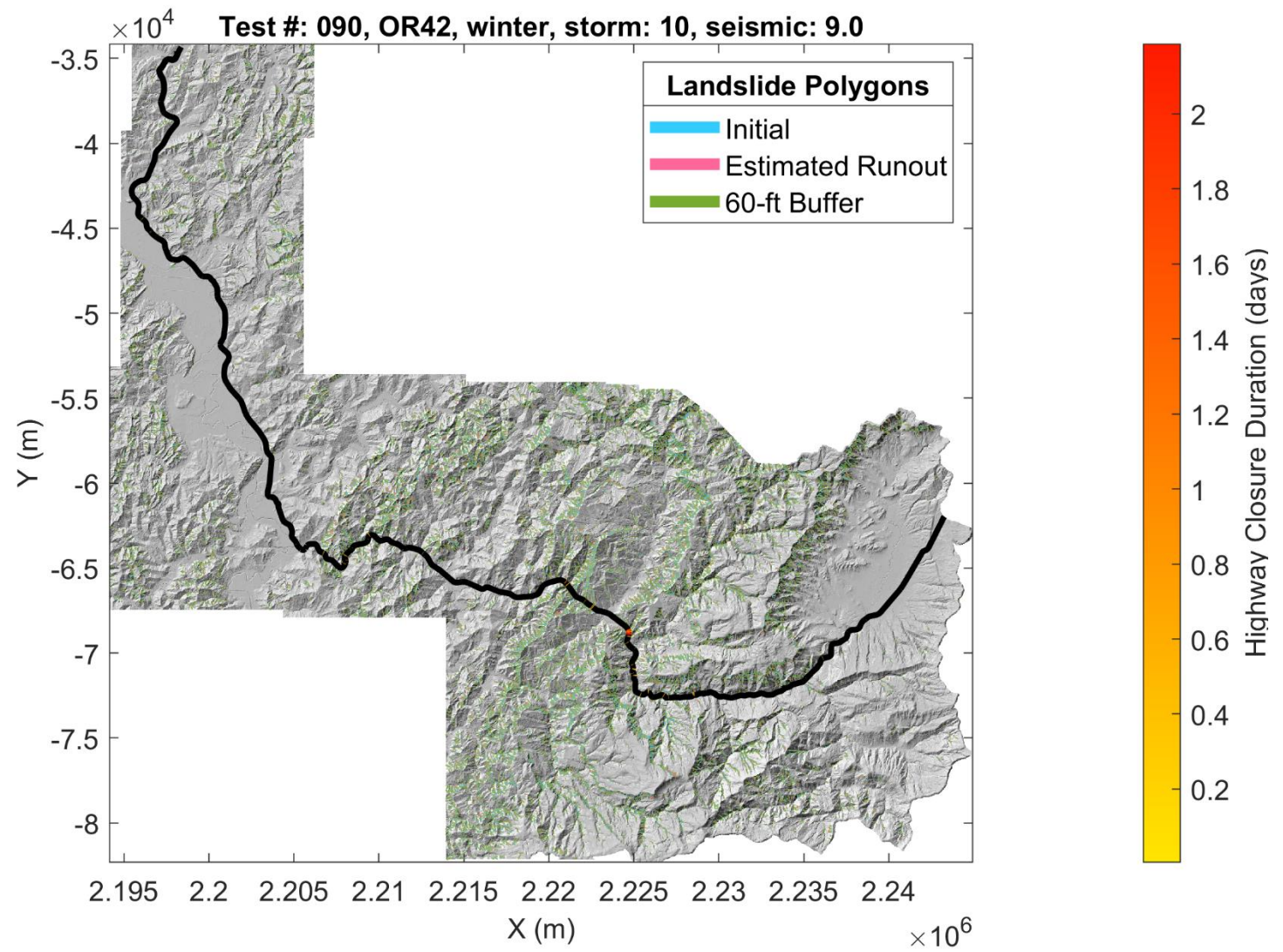


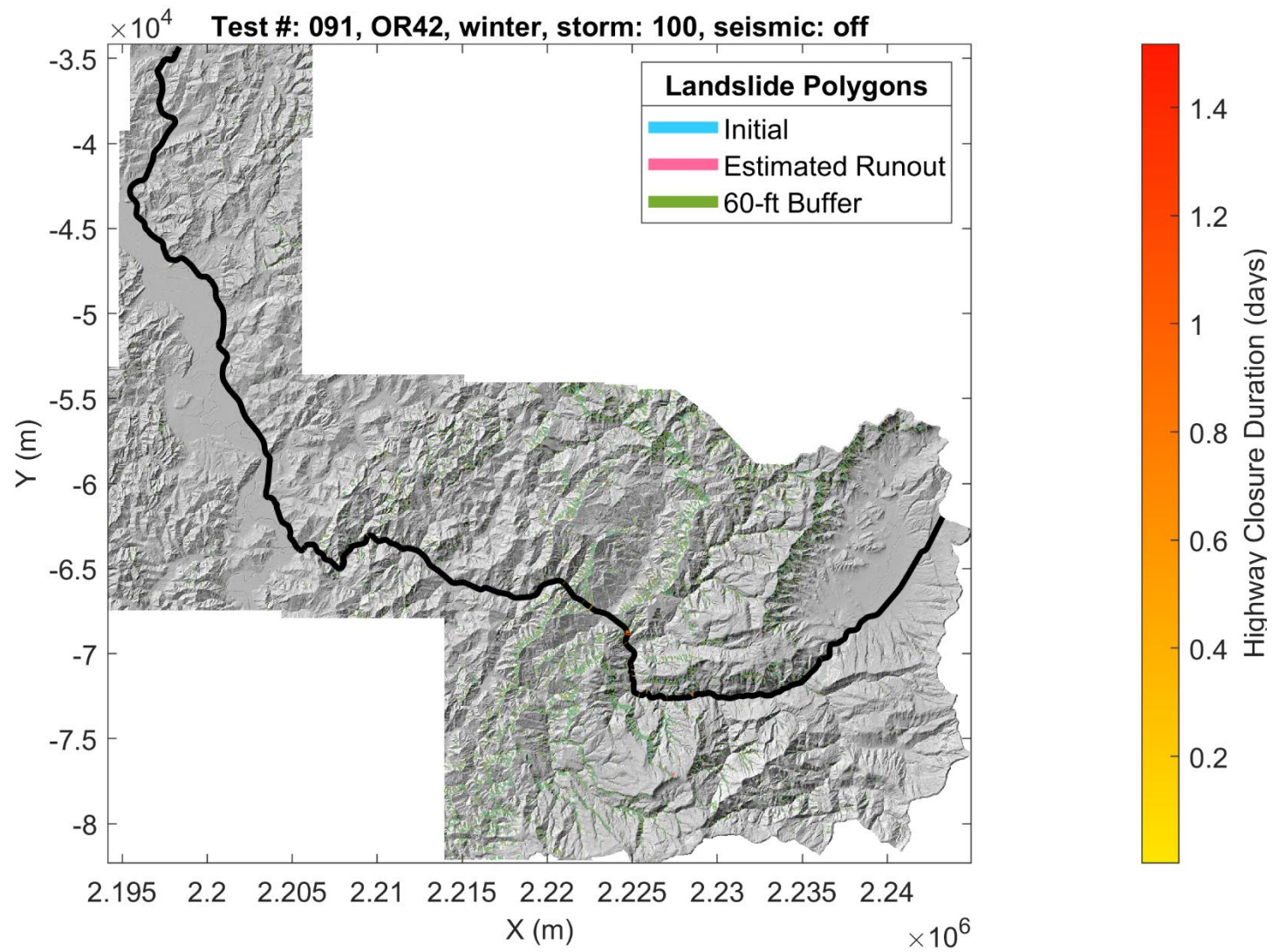


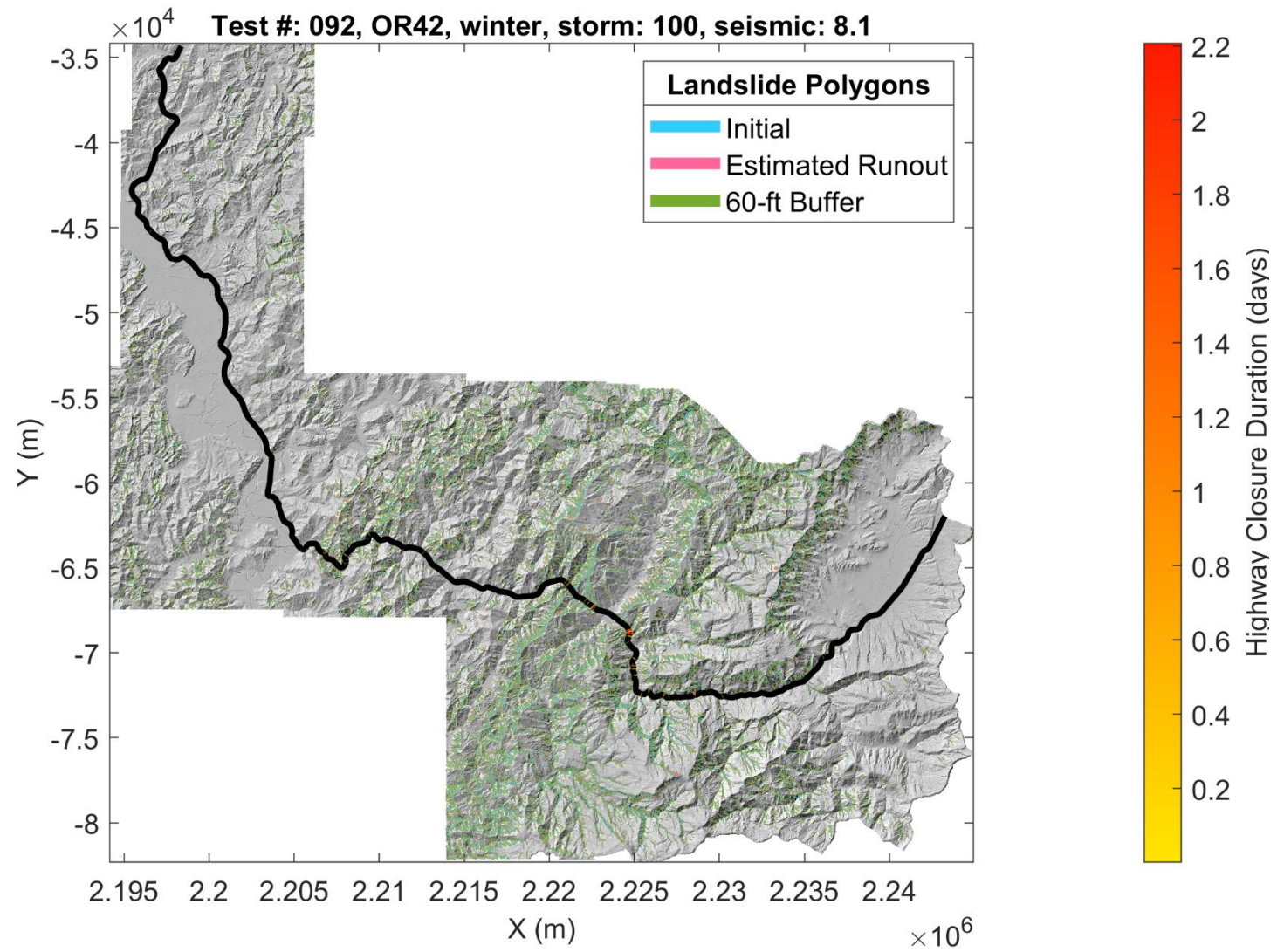


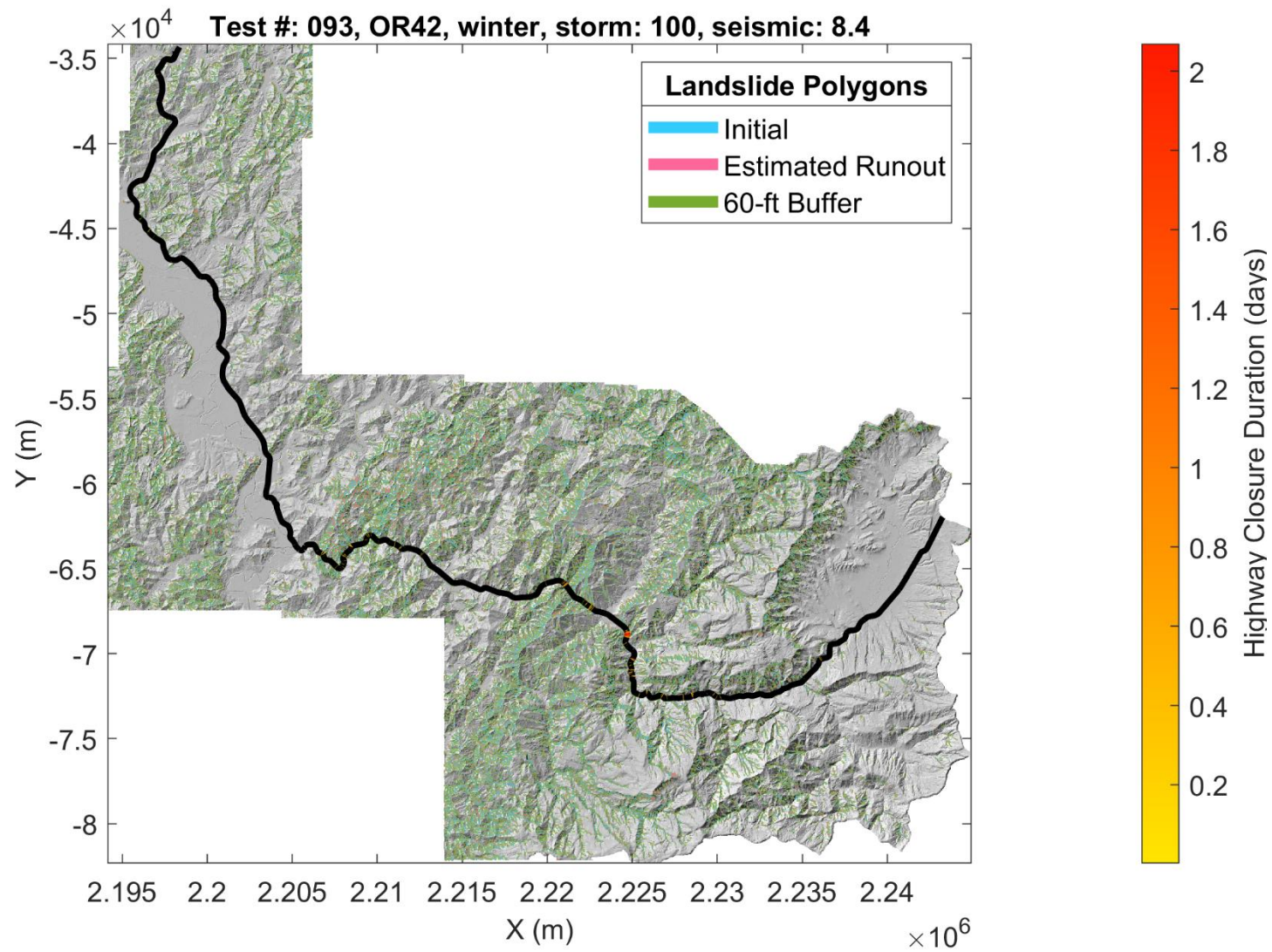


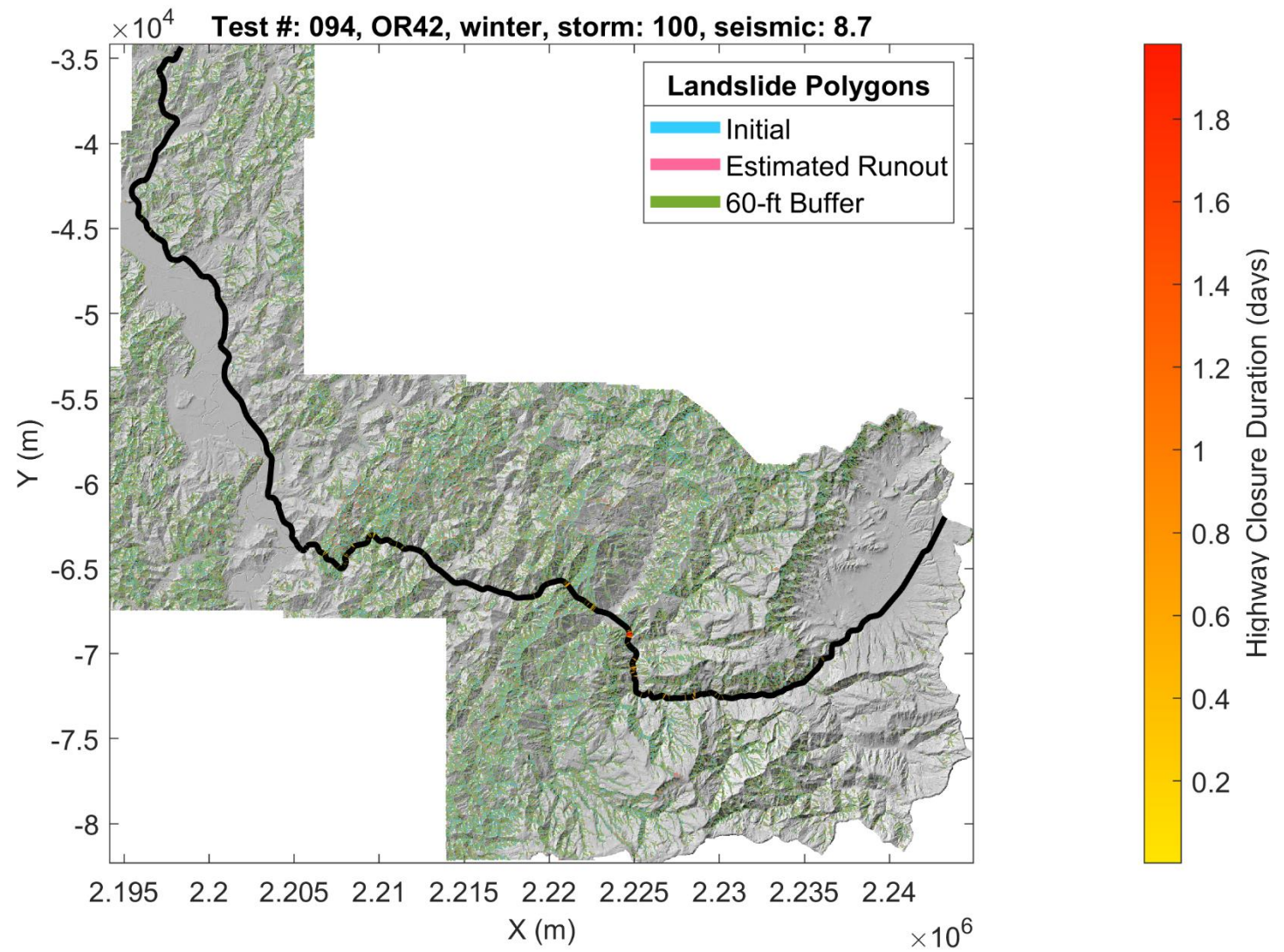


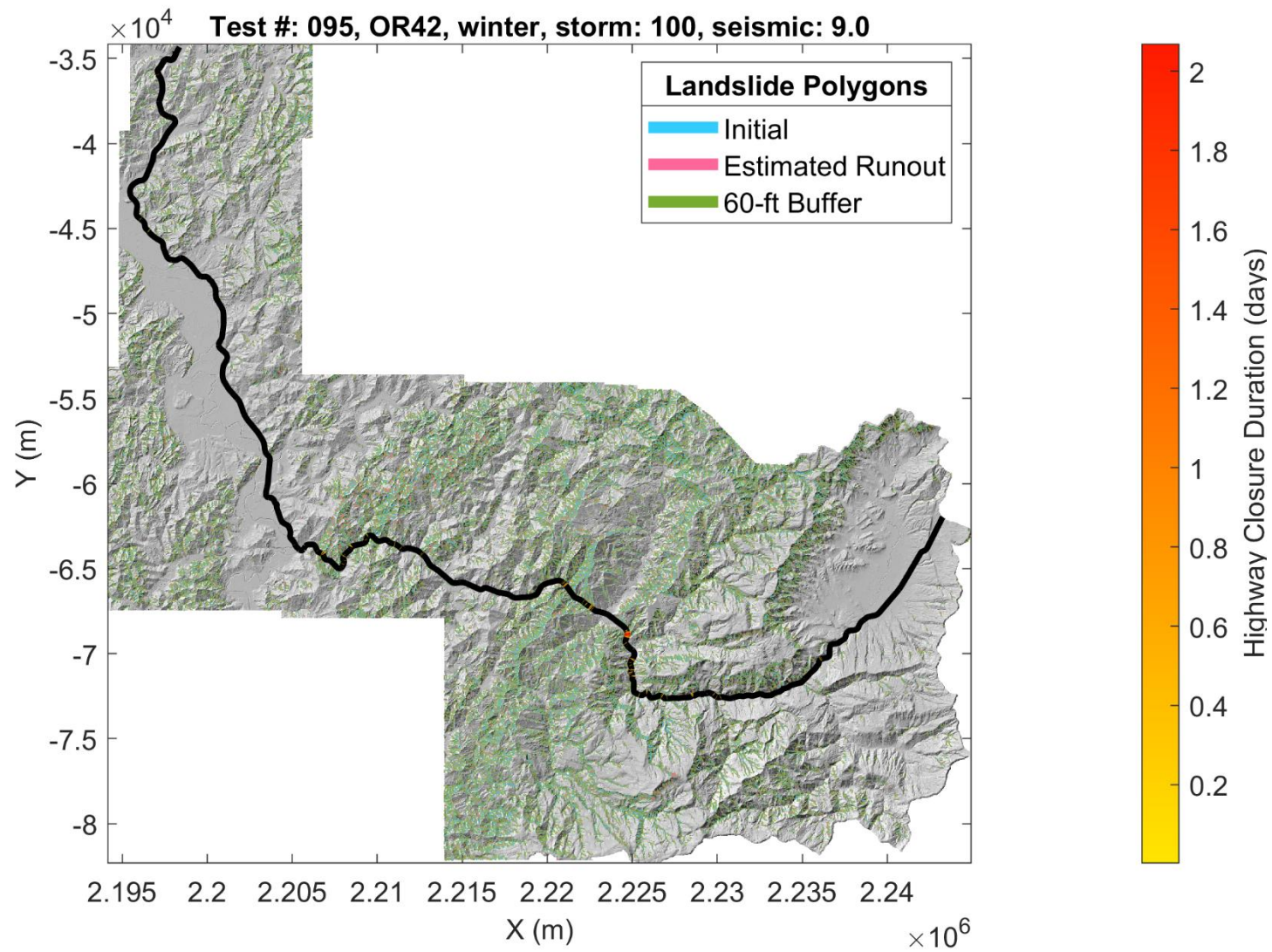


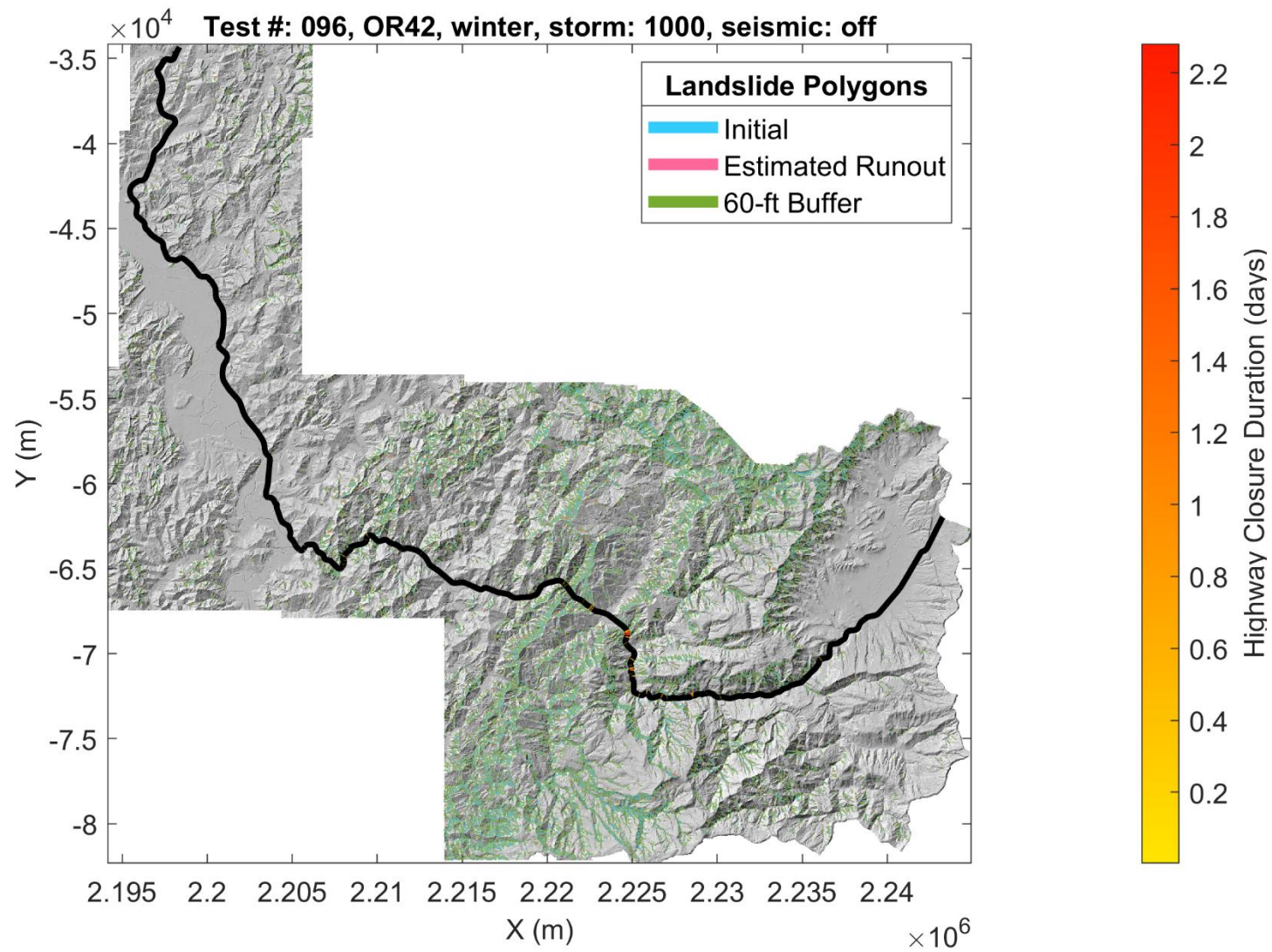


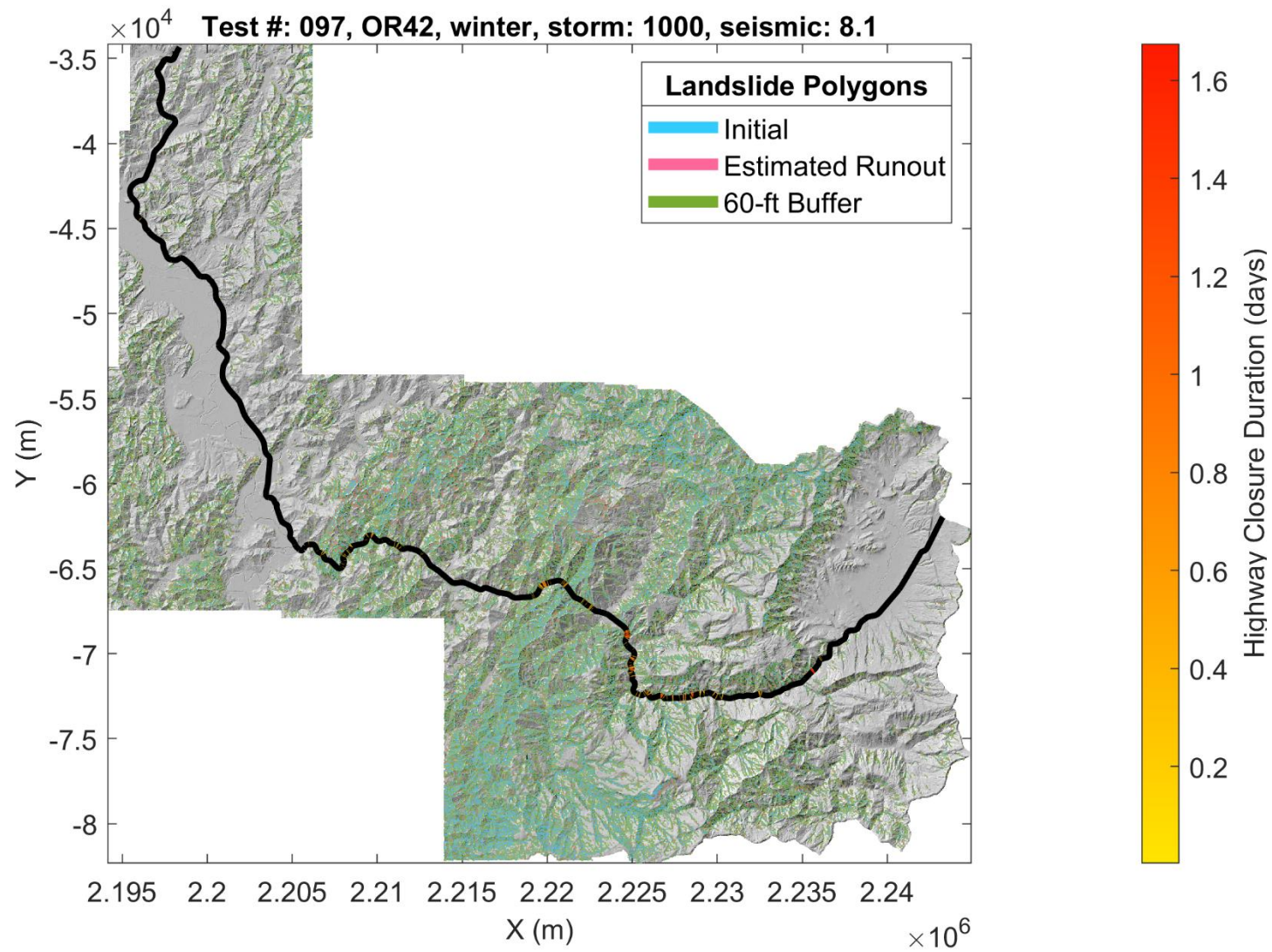


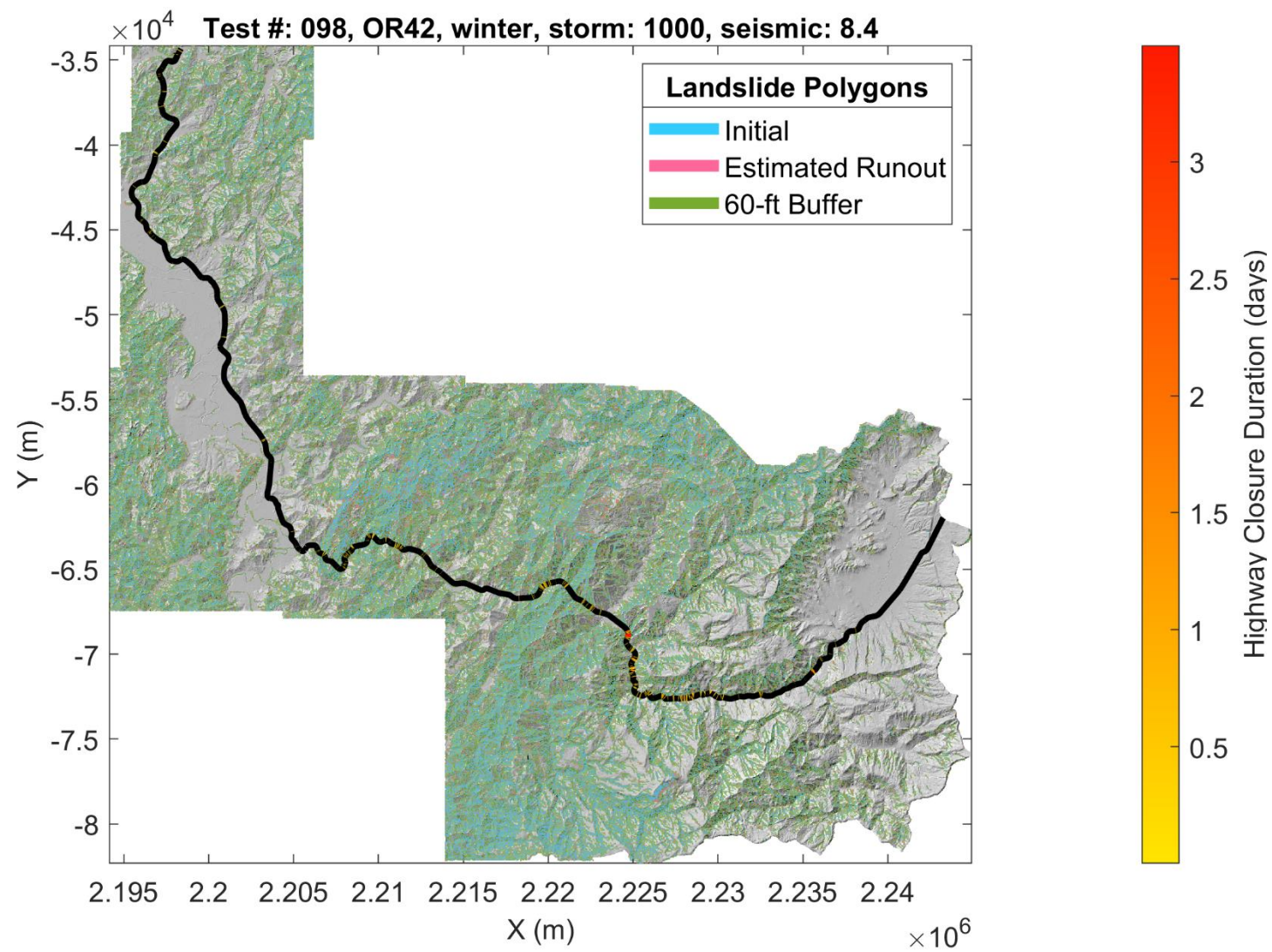


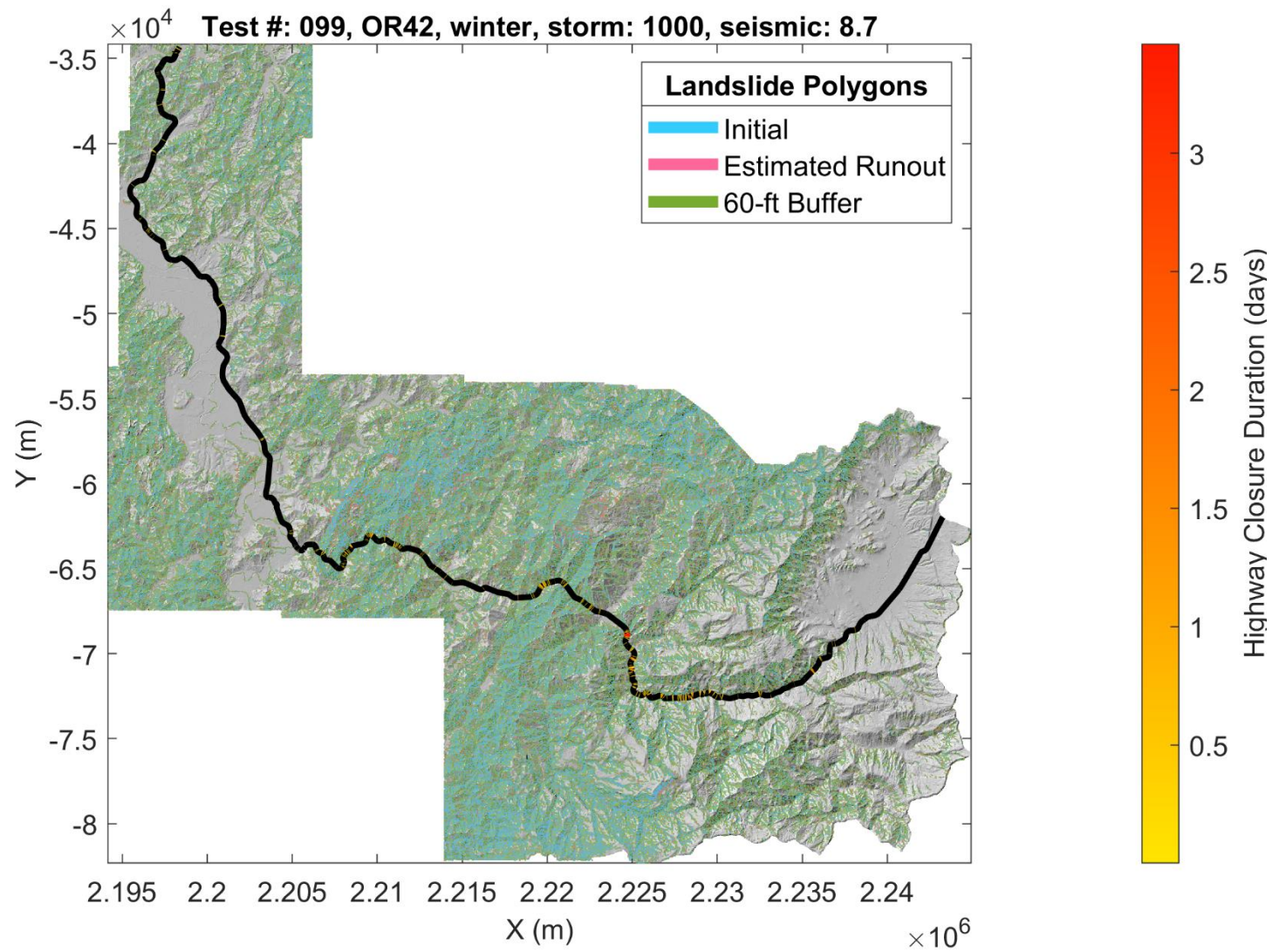


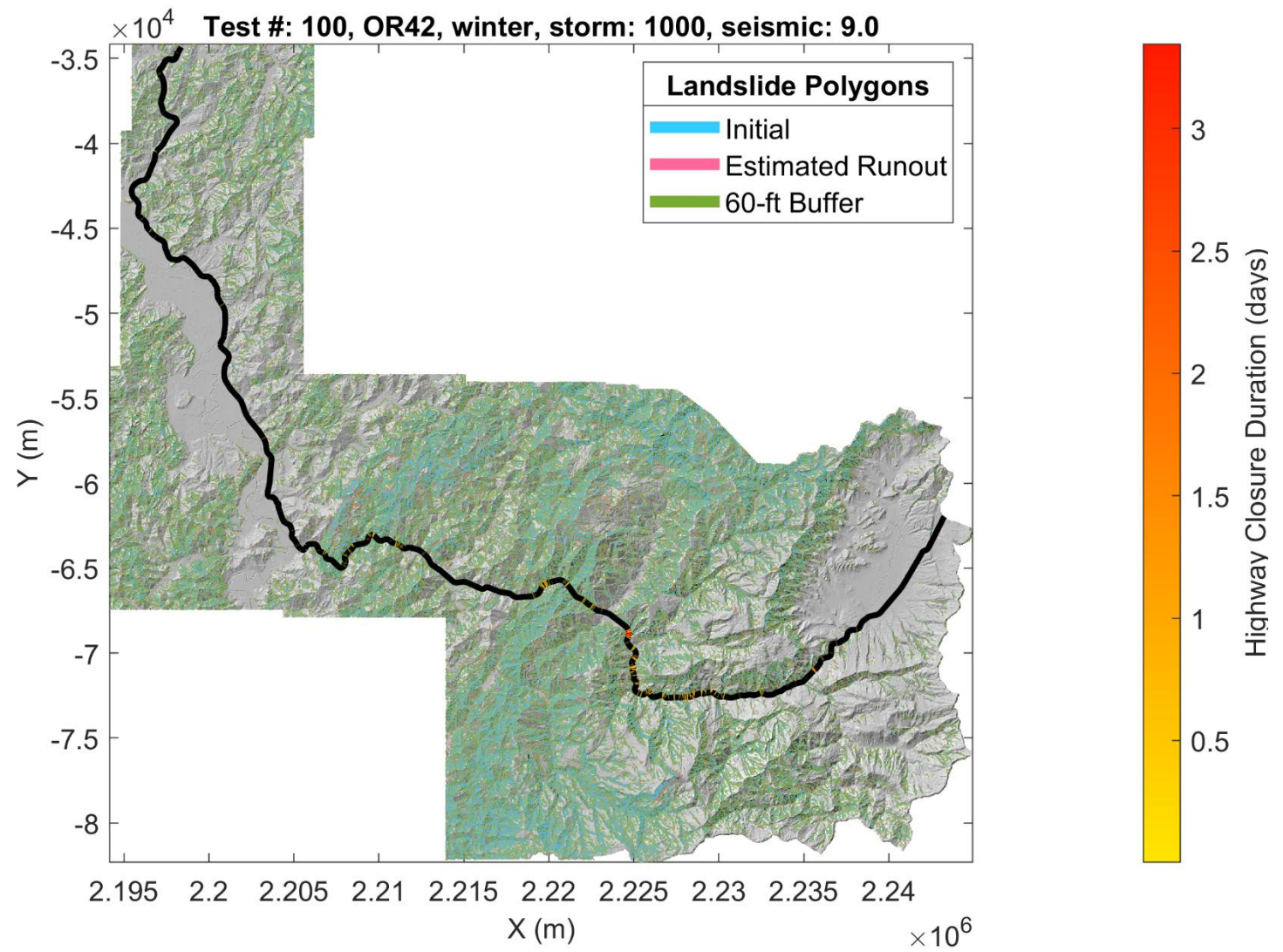


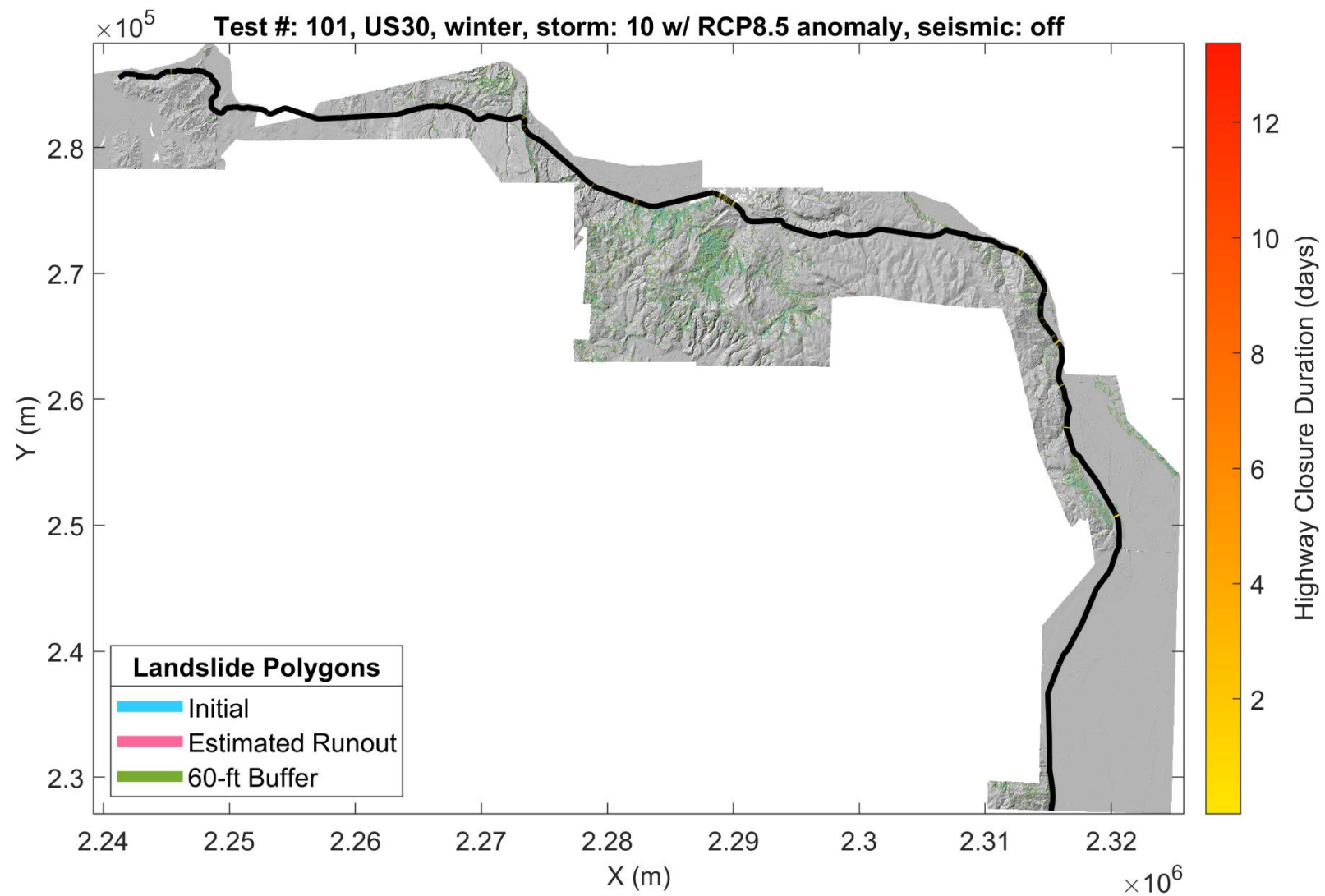


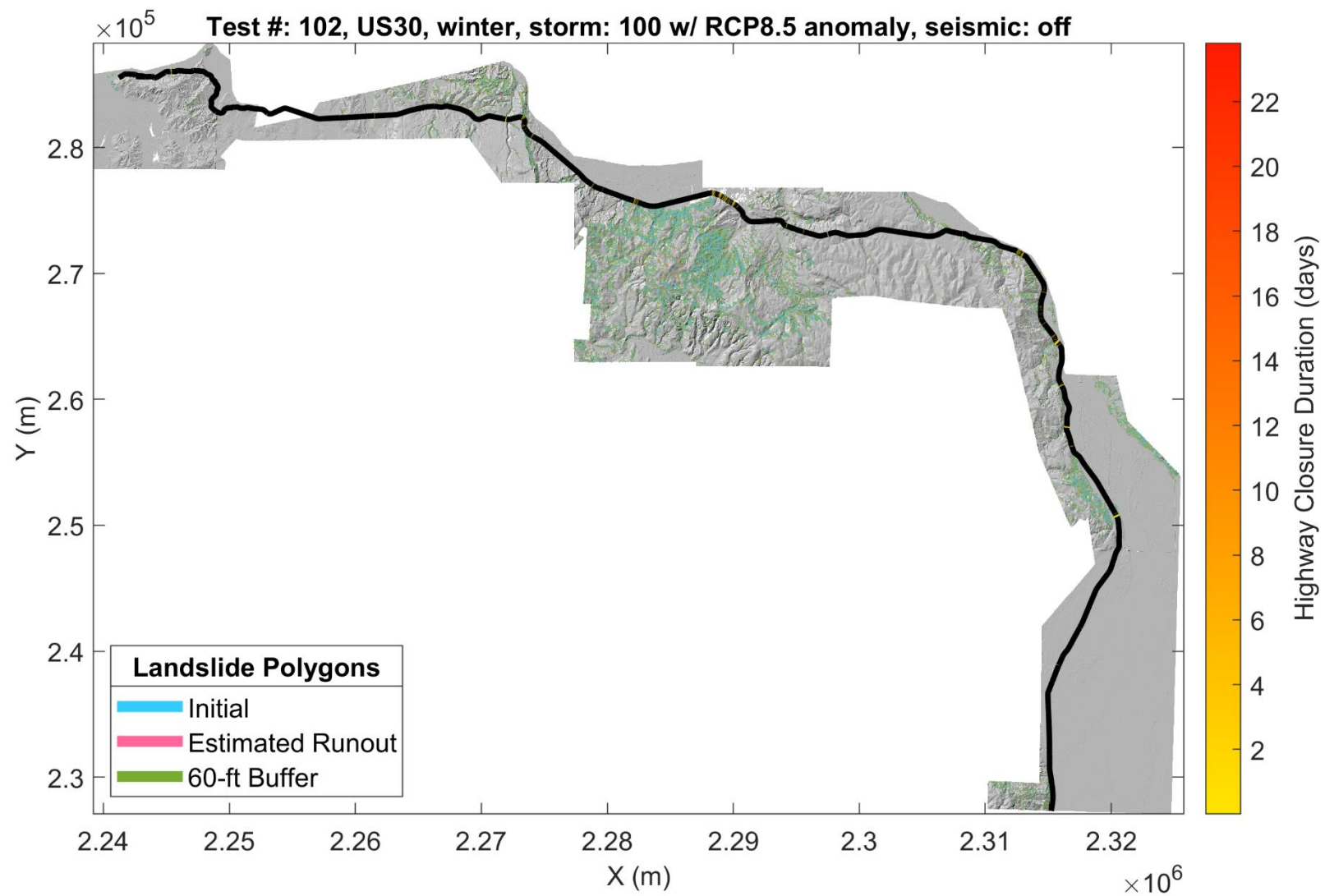


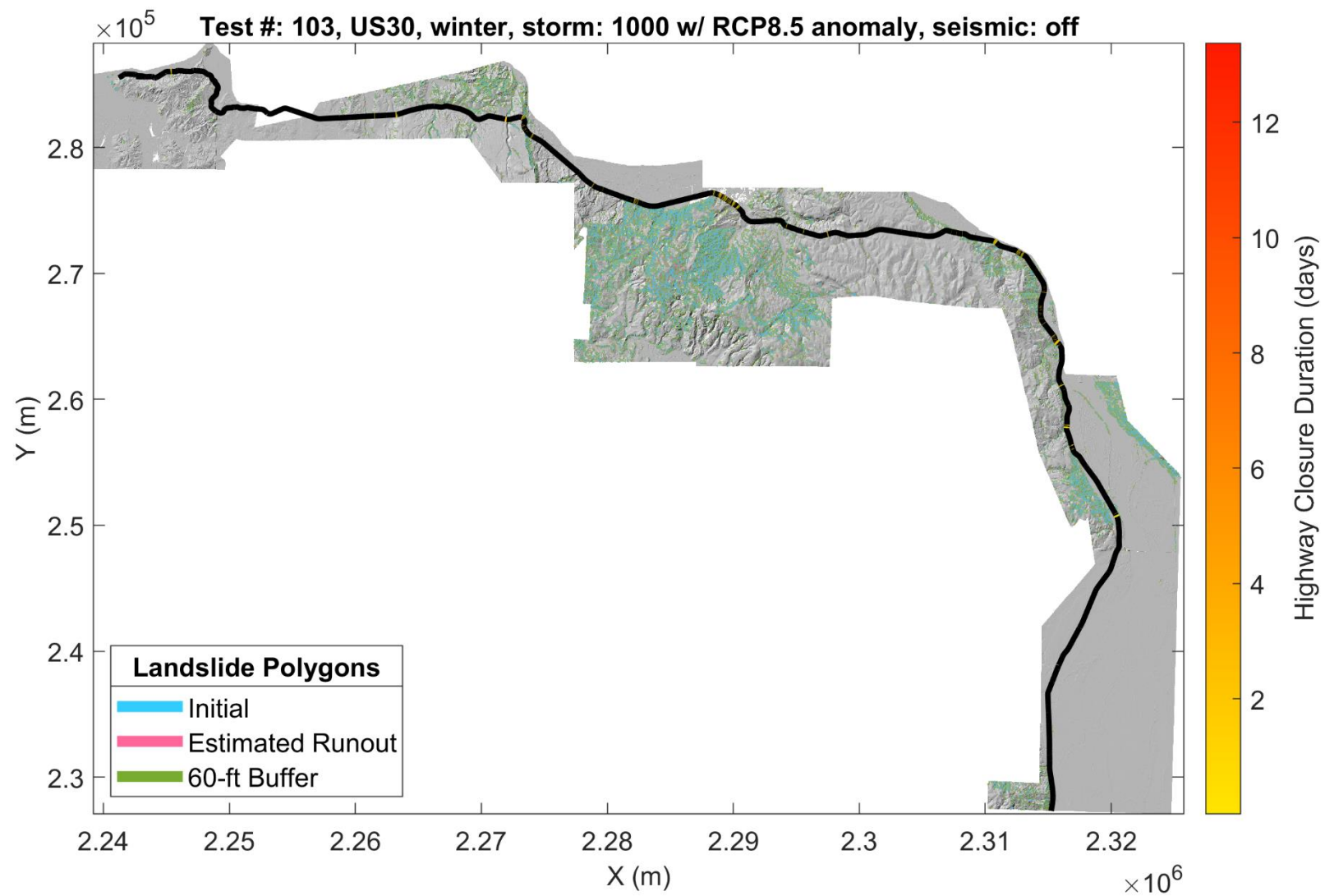


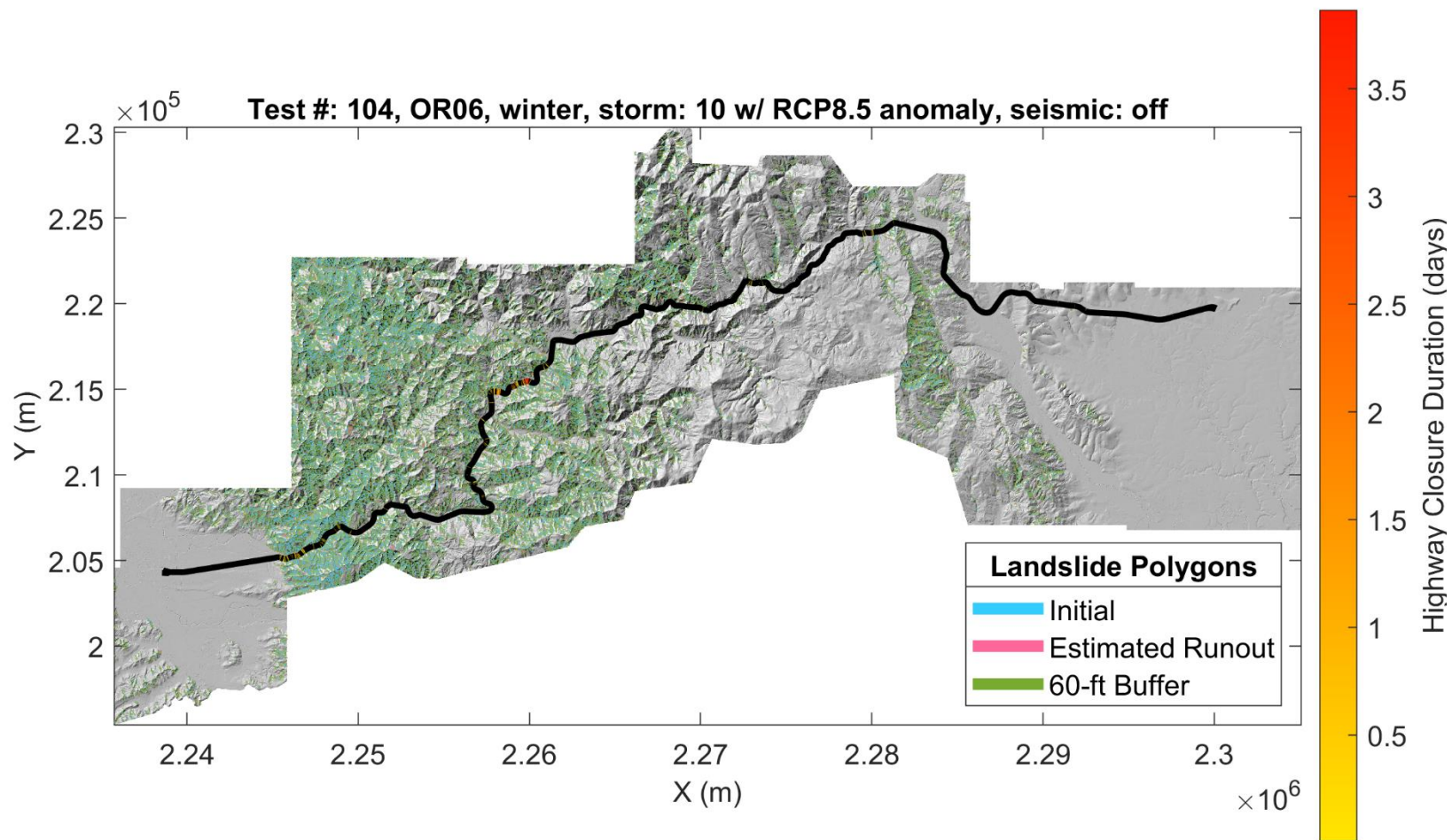


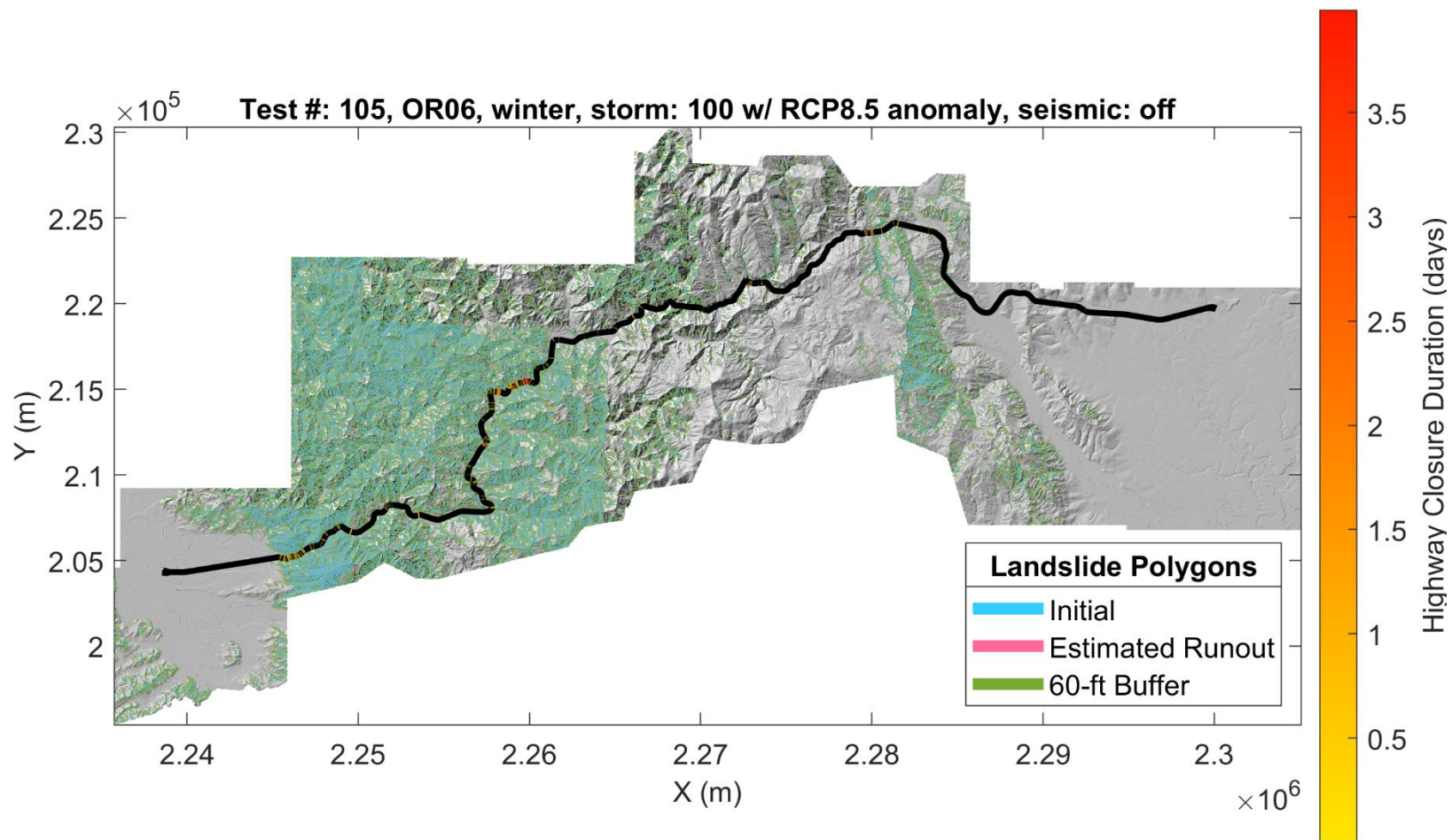


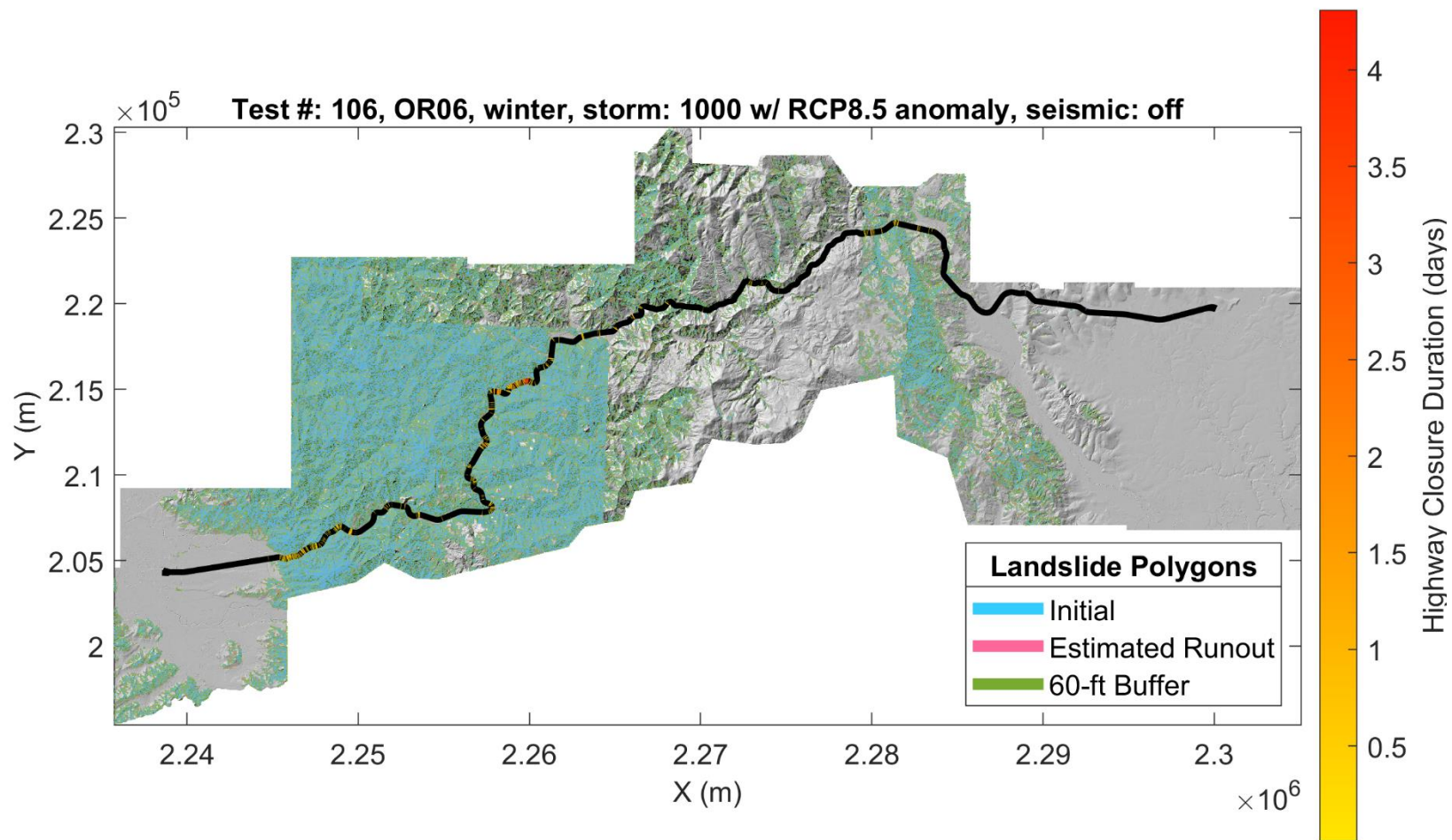


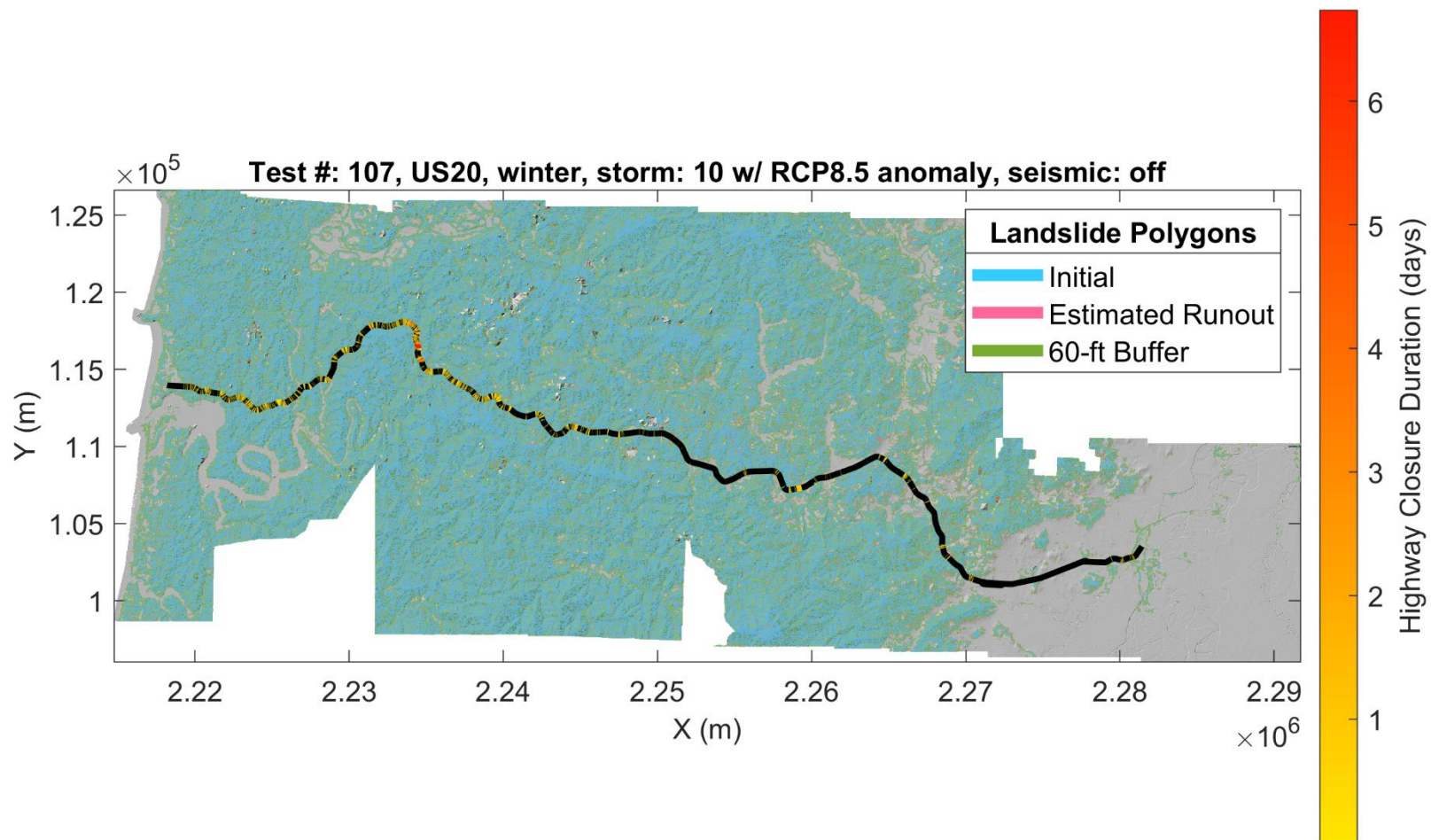


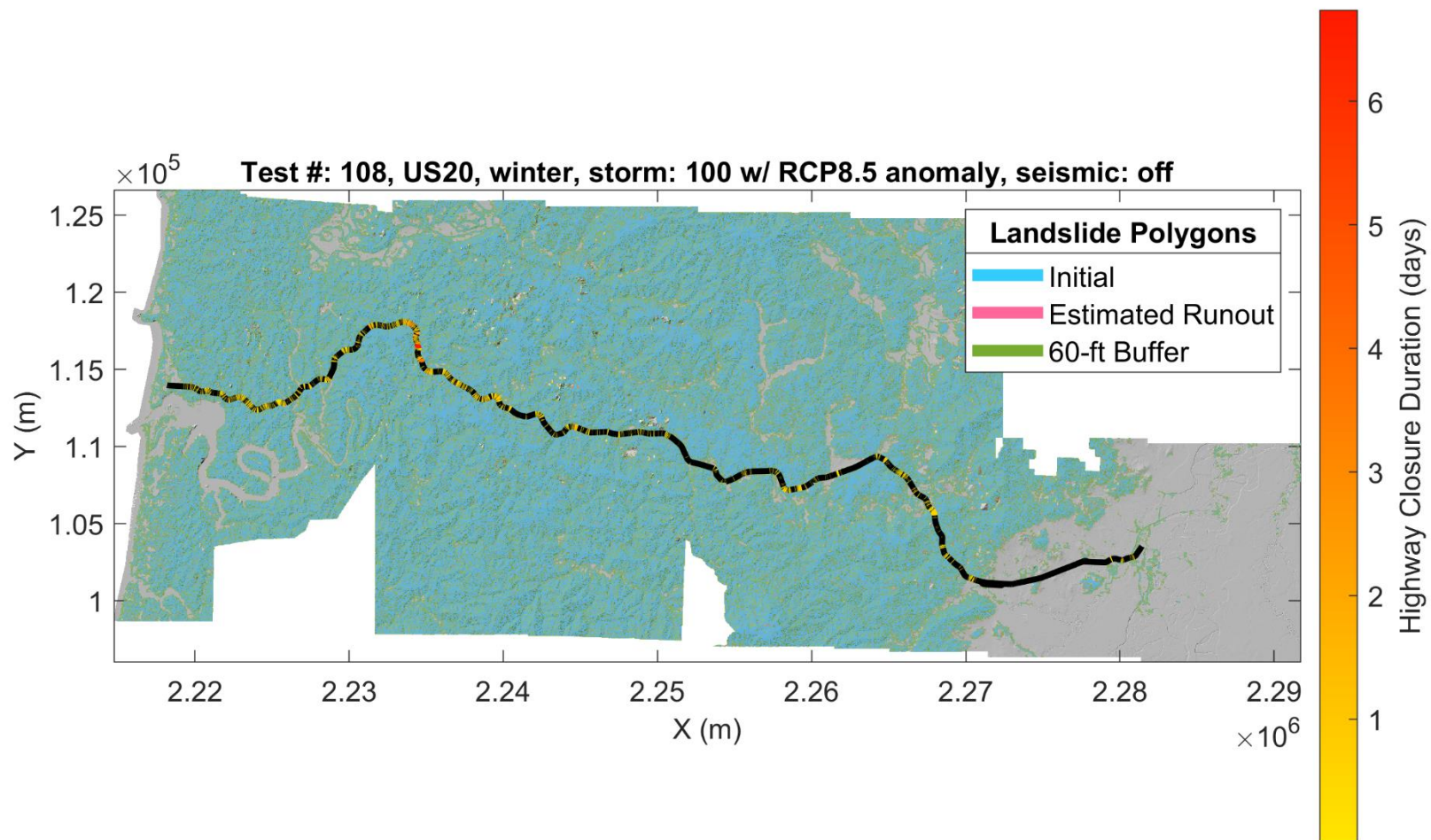


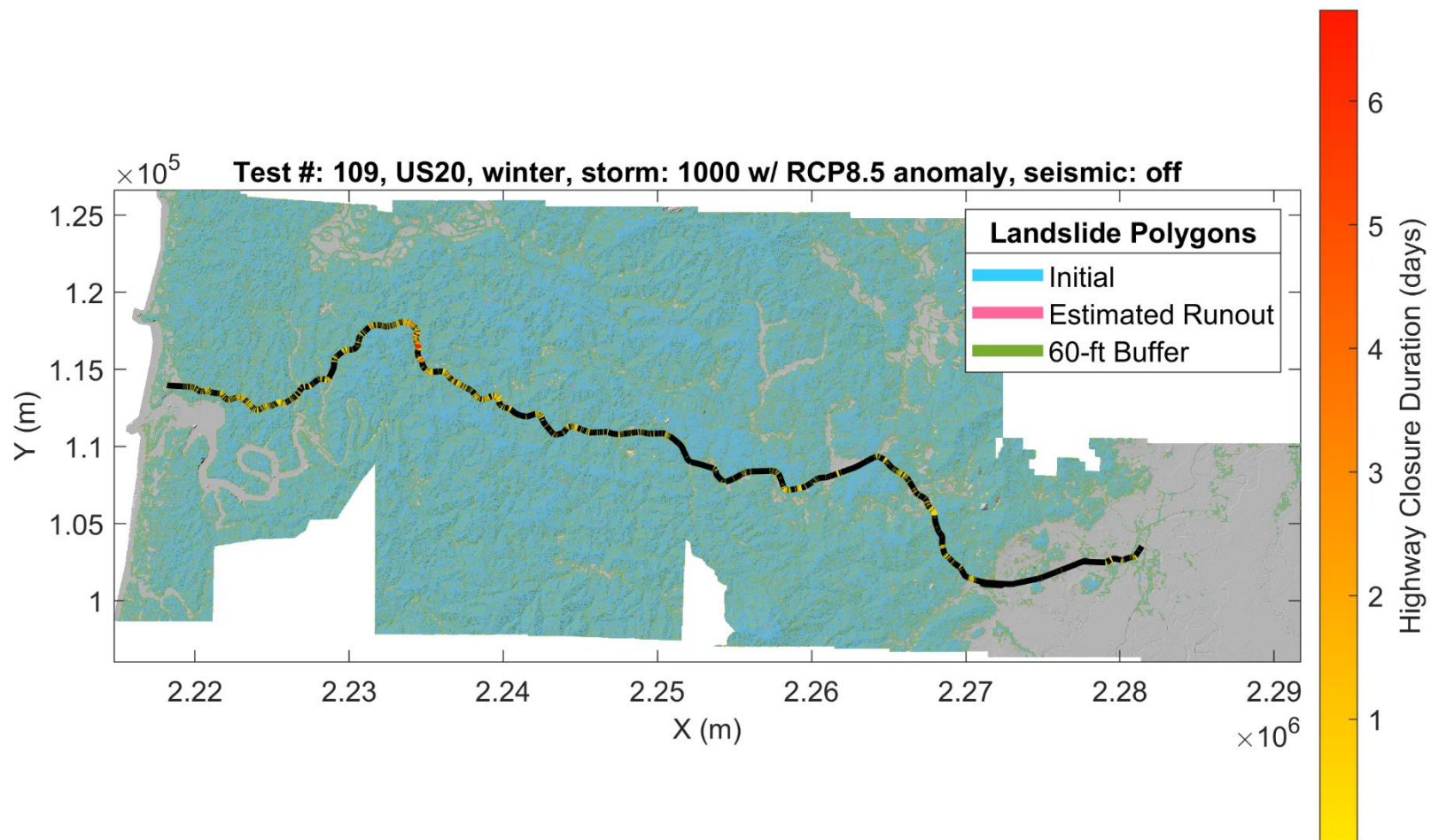


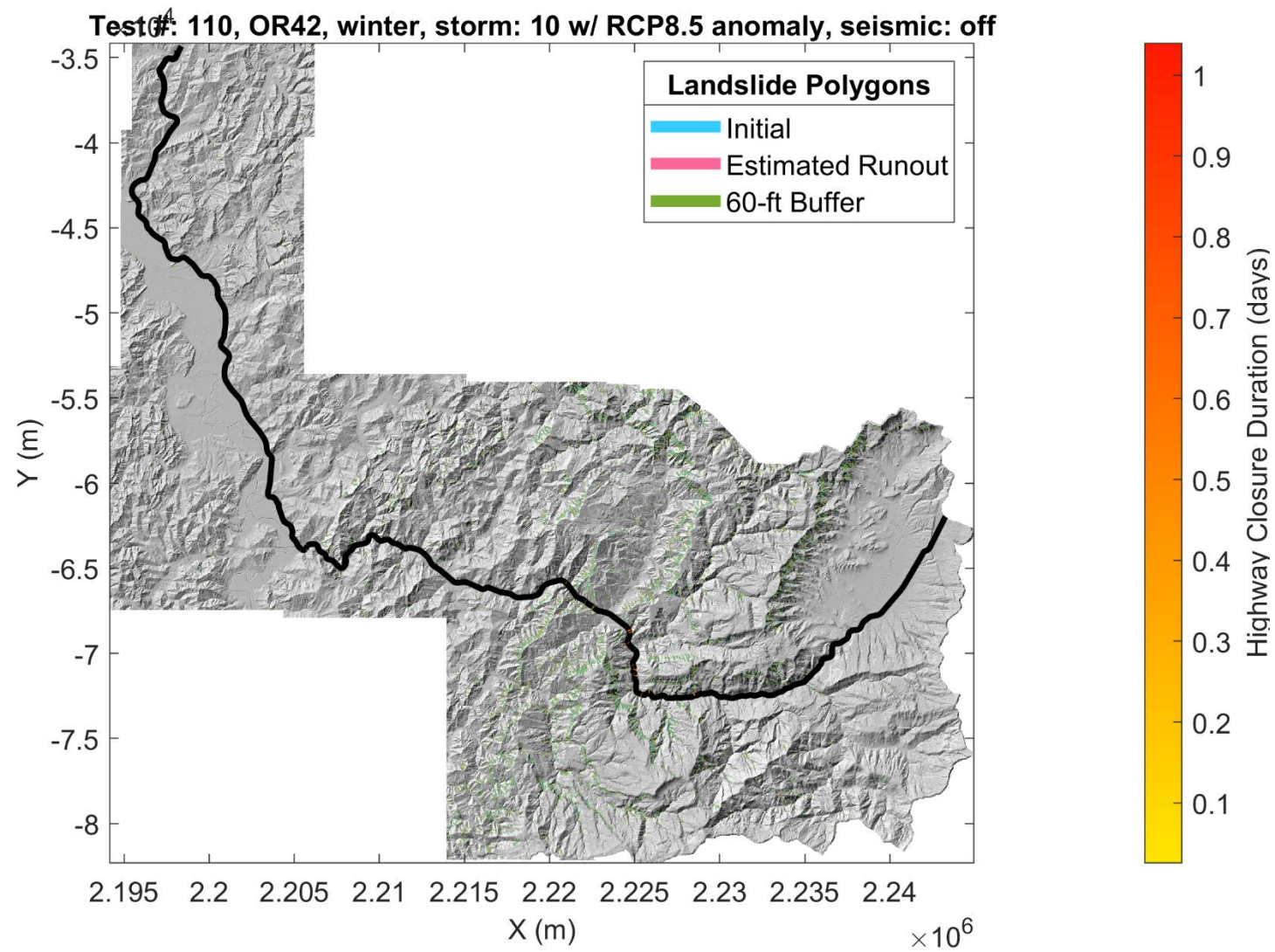


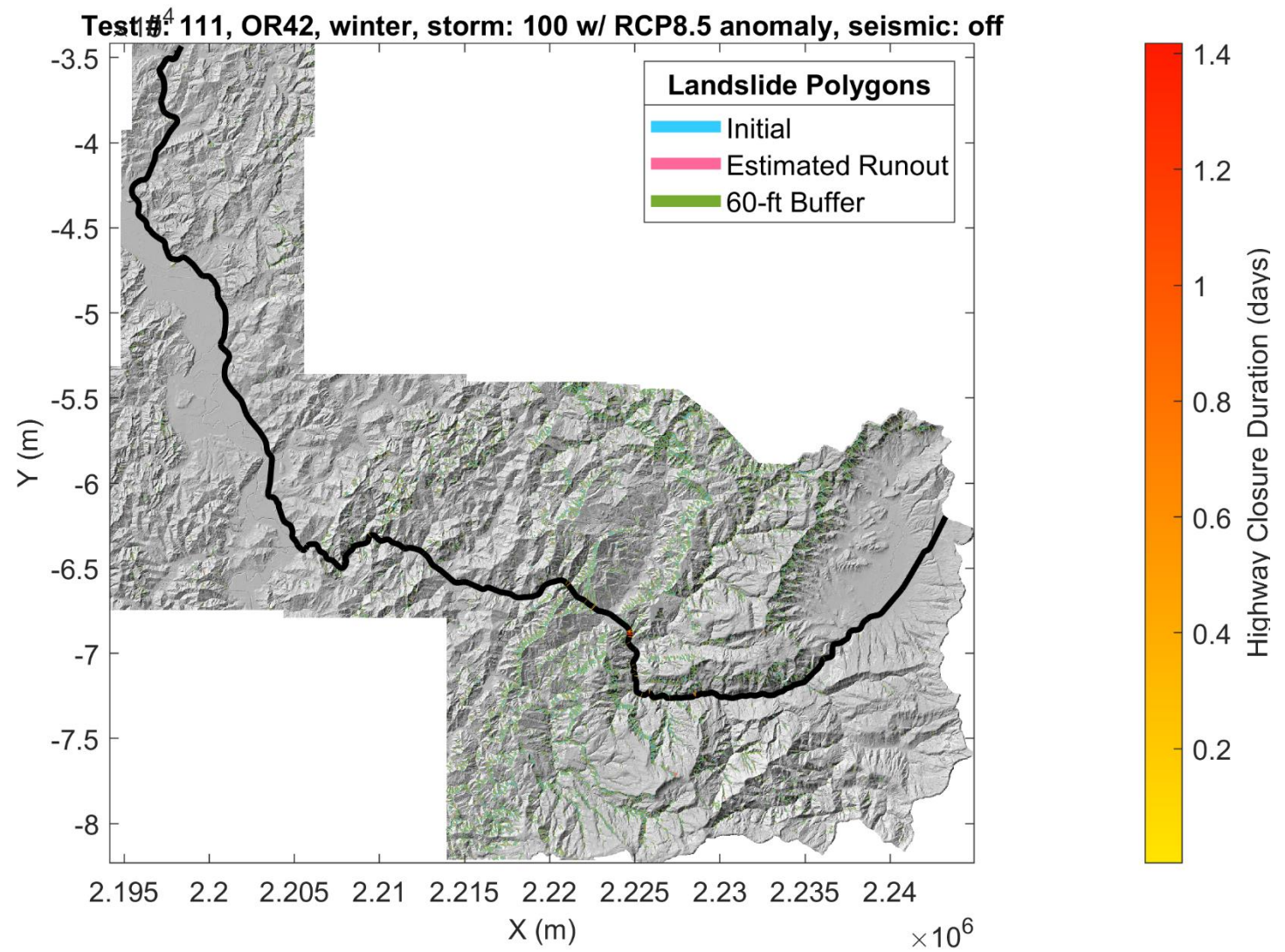


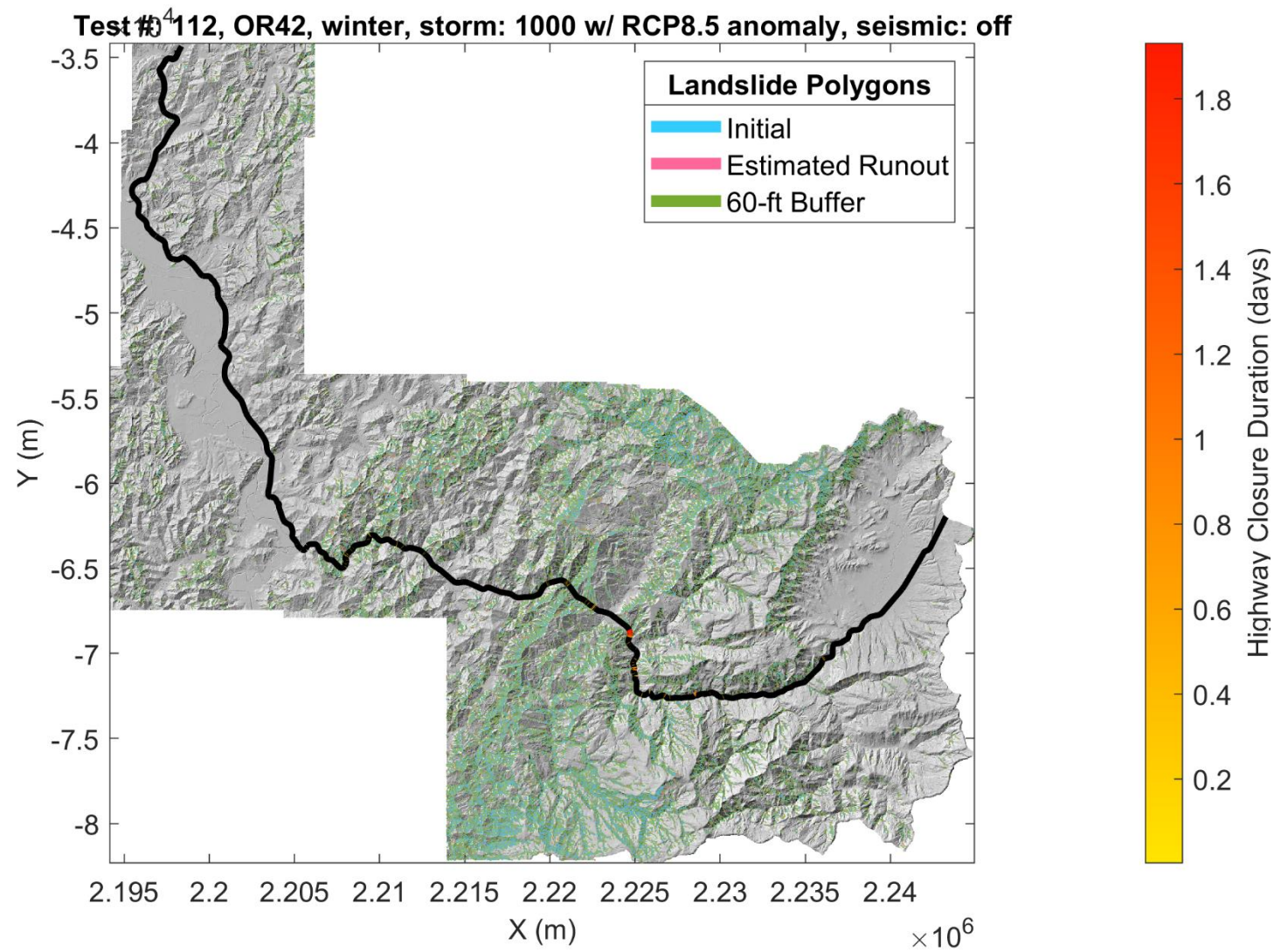






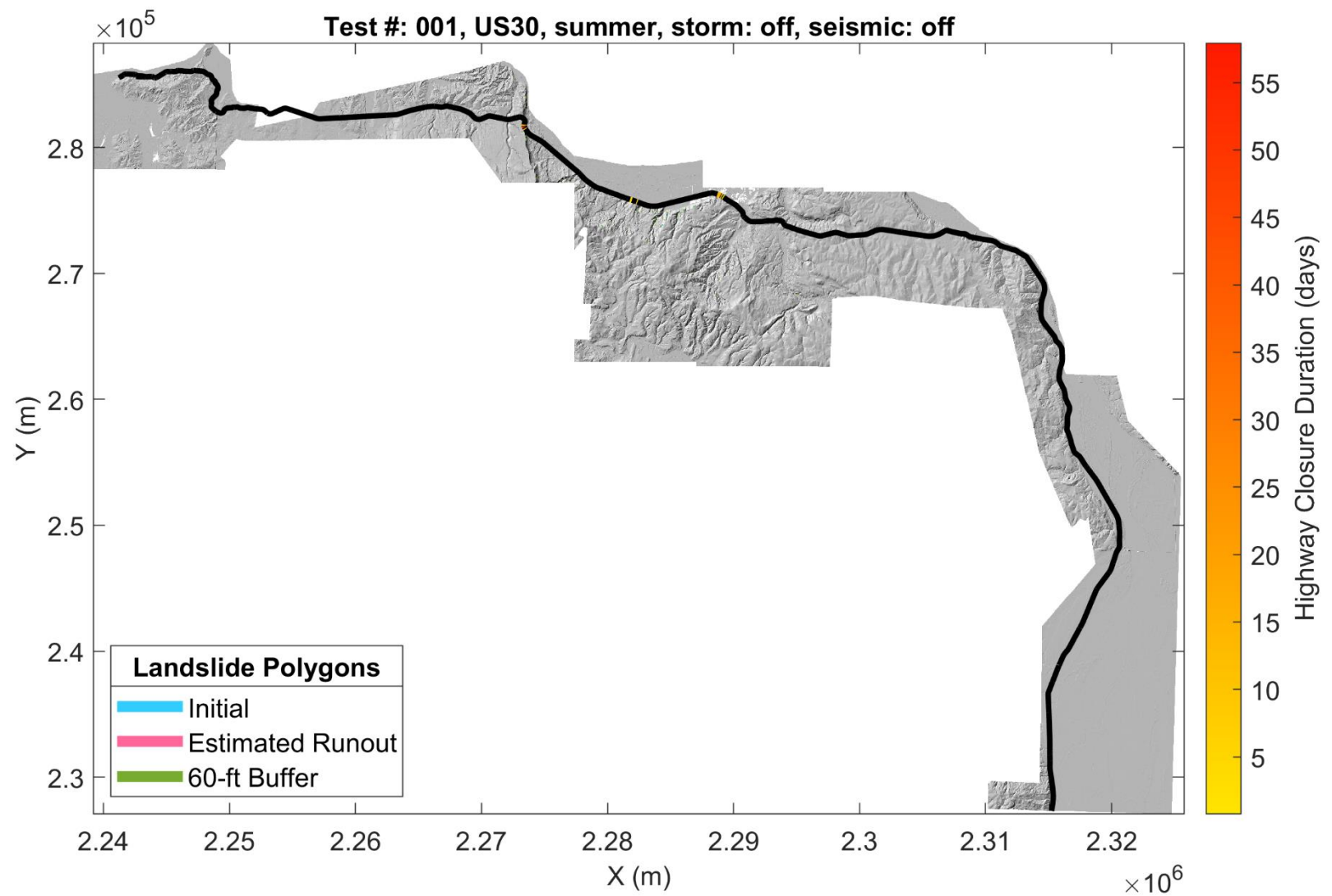


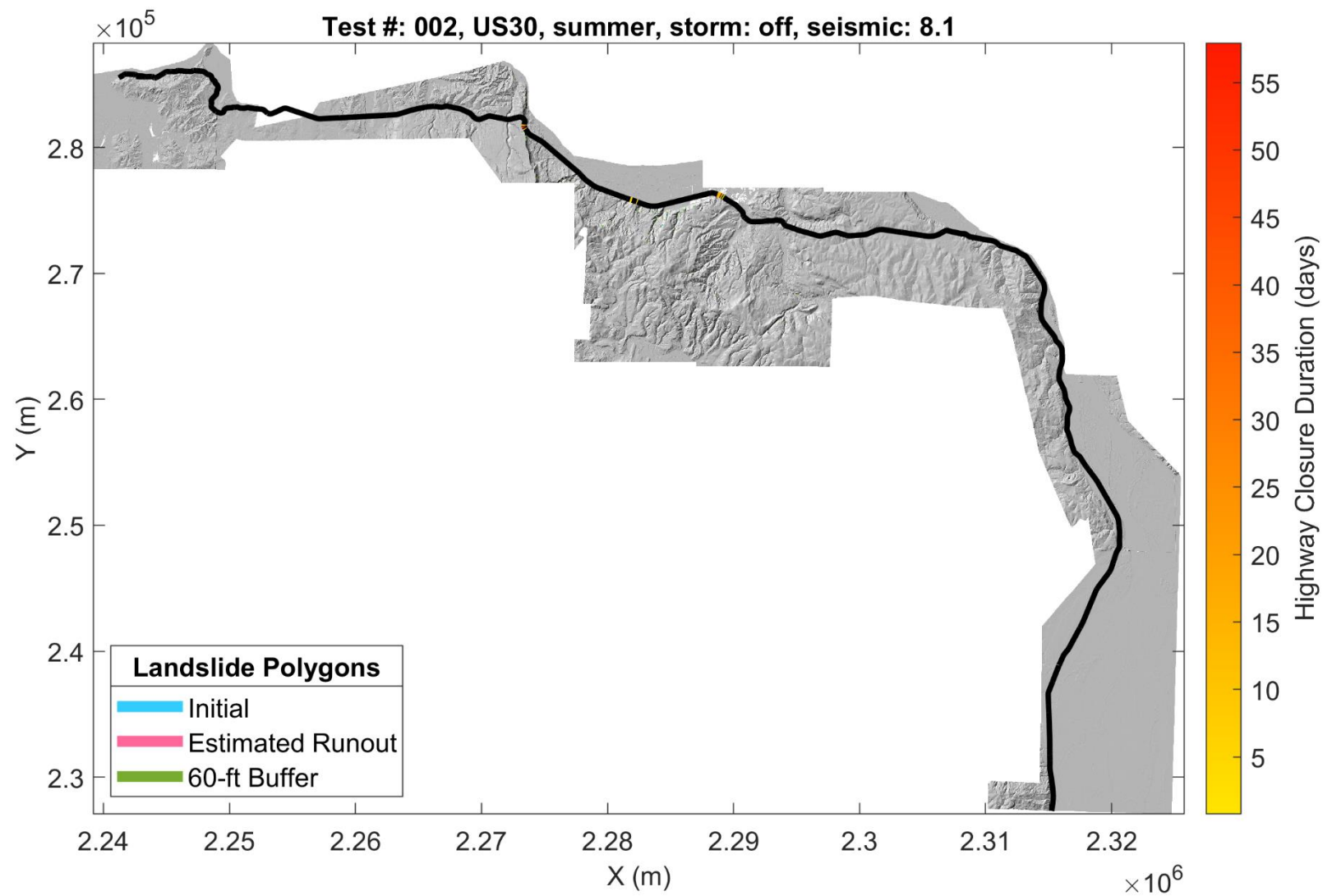


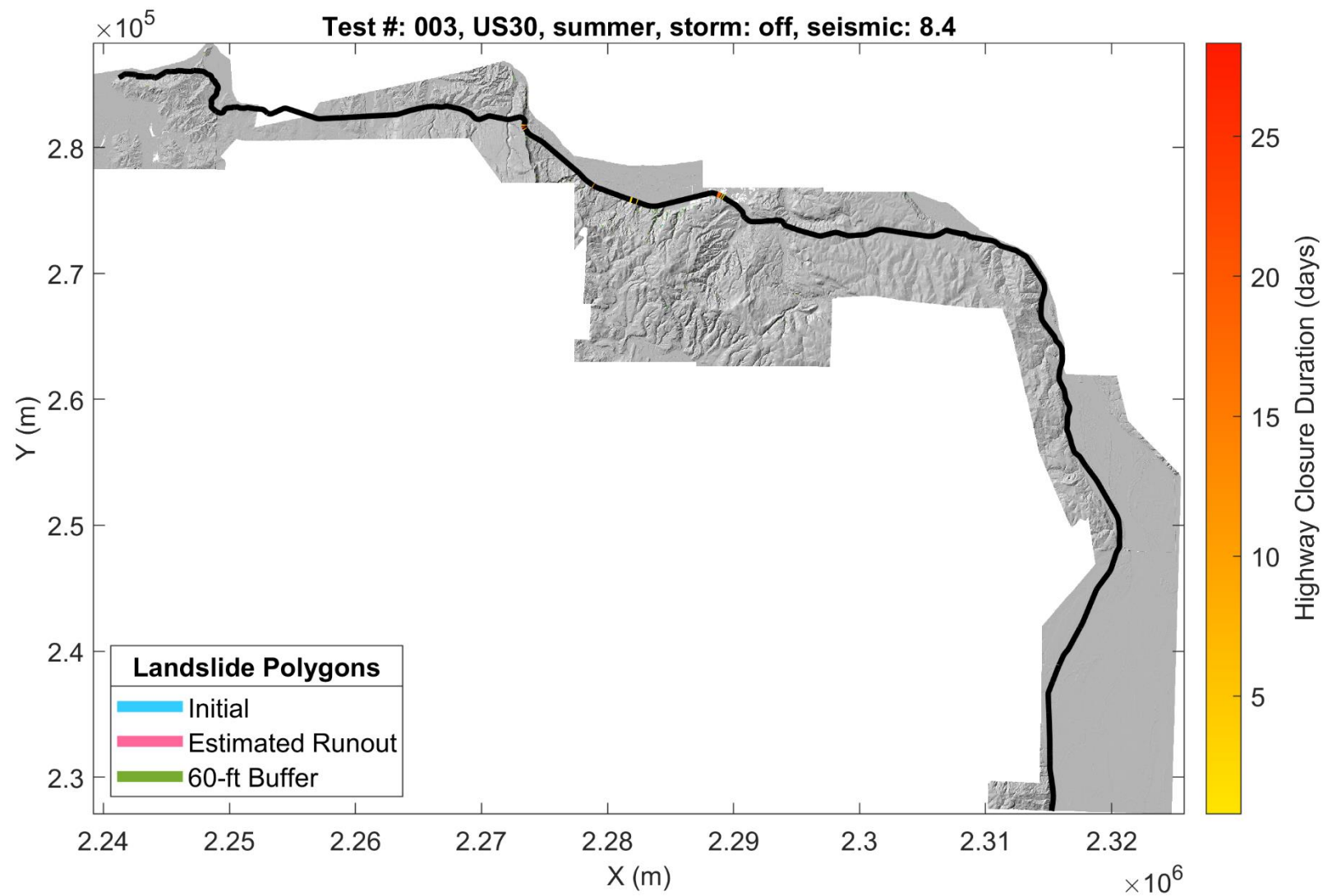


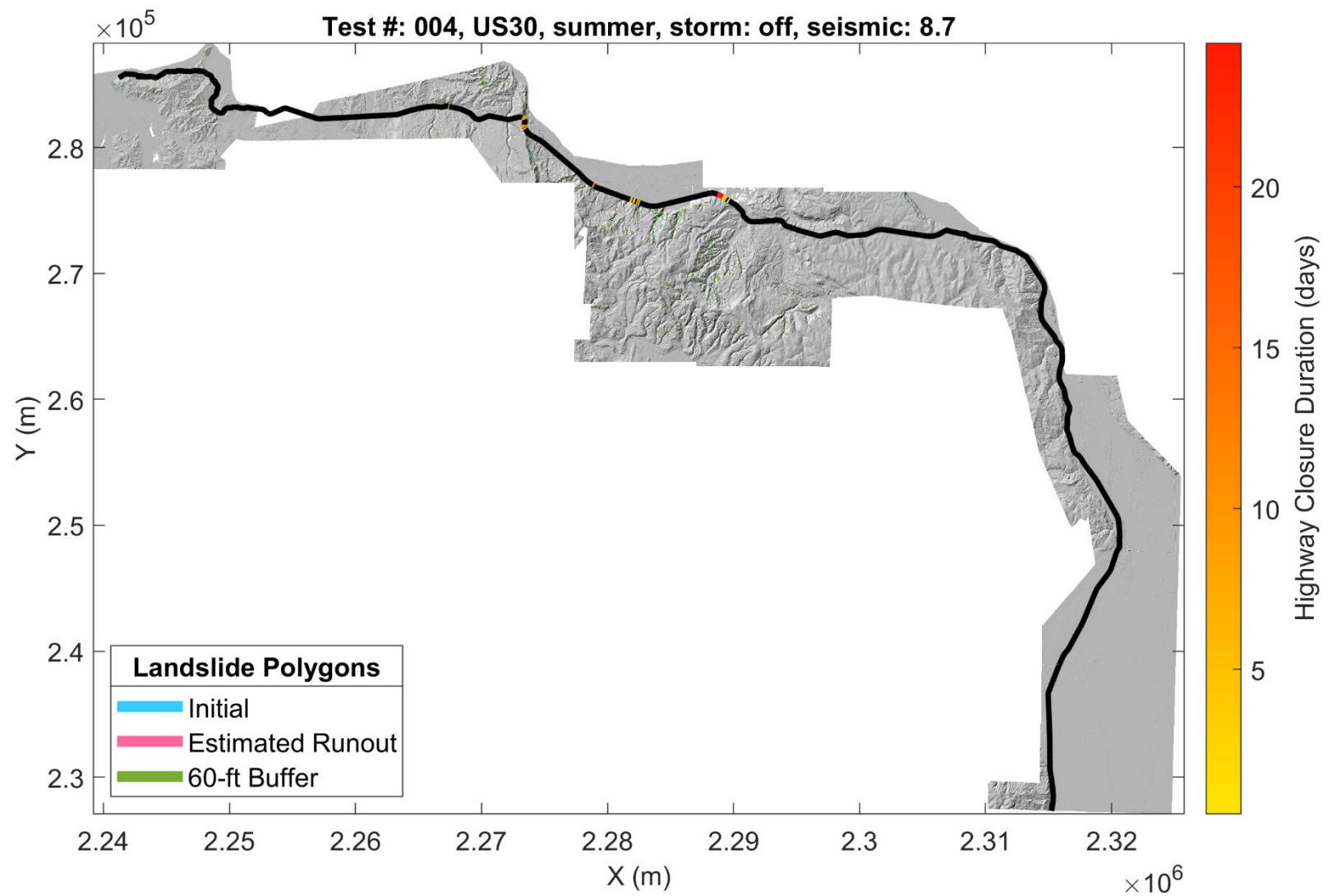
APPENDIX D: RISK MAPS WITH 60 FOOT LANDSLIDE BUFFERS

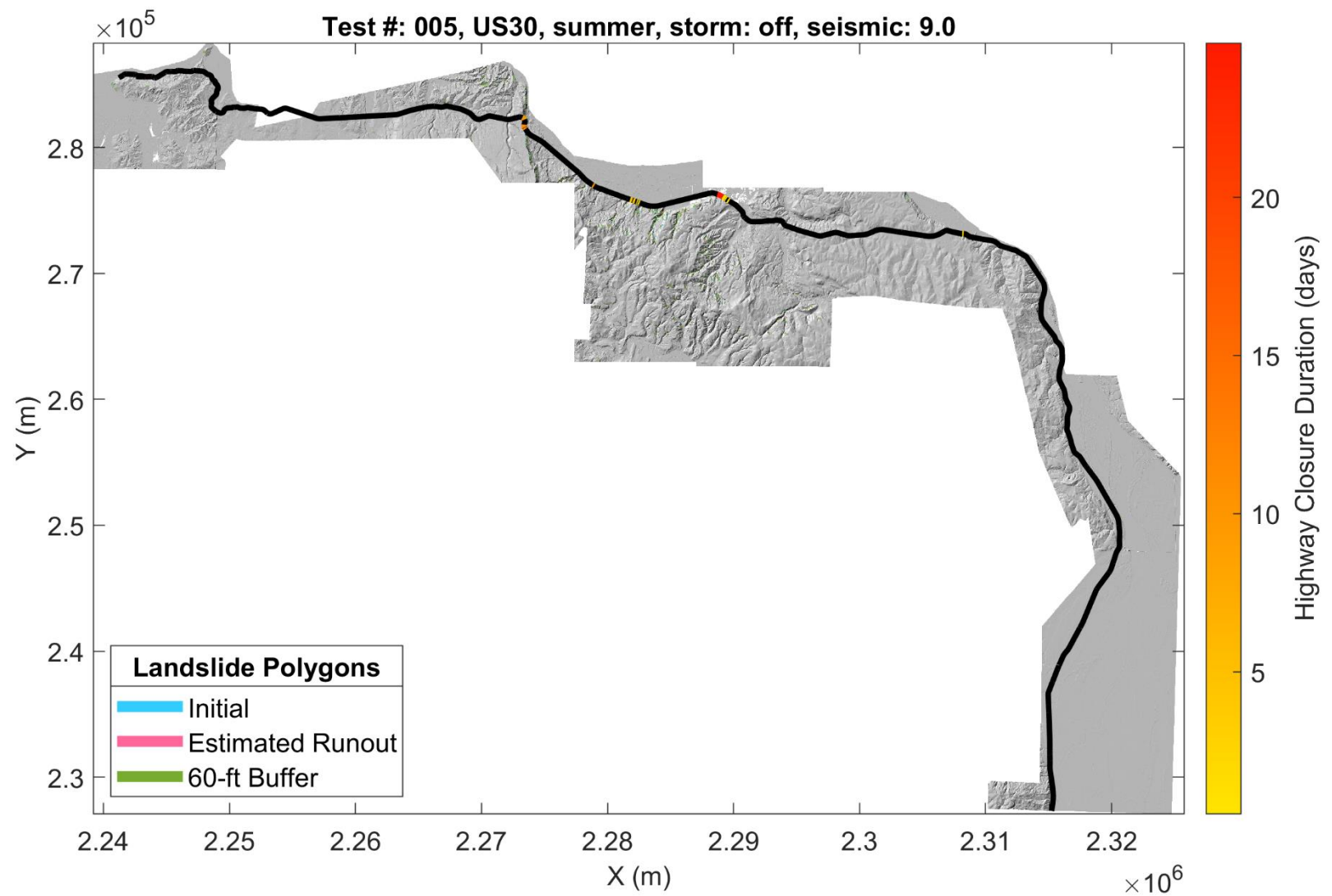
This appendix contains a full suite of risk maps, containing landslide polygons computed as described in Section 3.10.1, and highway closure times (closure times here consider landslide buffer) for all scenarios considered for SPR808. These scenarios consider a combination of physical drivers, including seasonal variations in antecedent moisture, rainfall inputs, seismicity, and climate-change induced precipitation anomaly. A directory describing all tests not considering future climate may be found in Table 4.4. A directory describing all tests considering future climate may be found in Table 4.7.

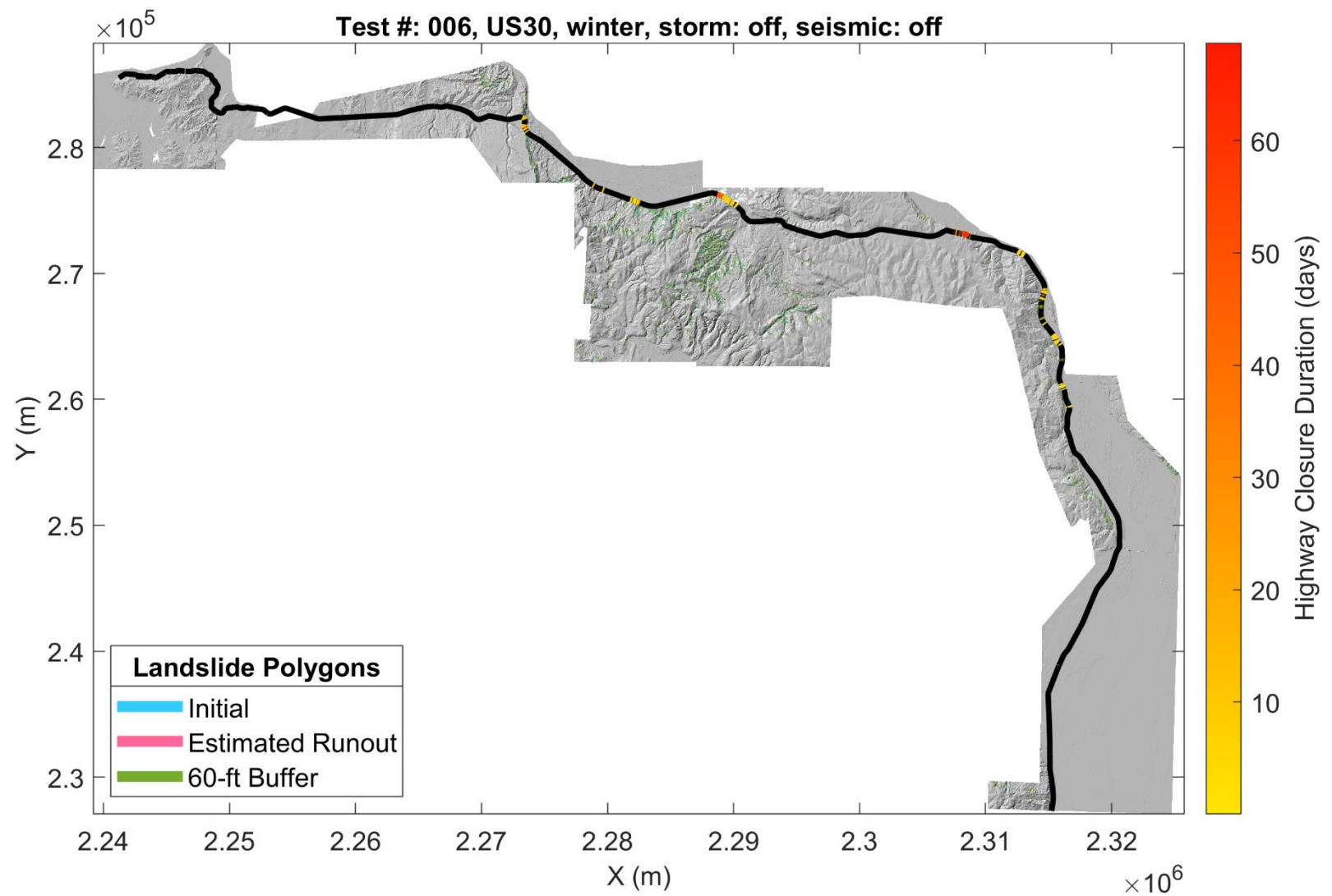


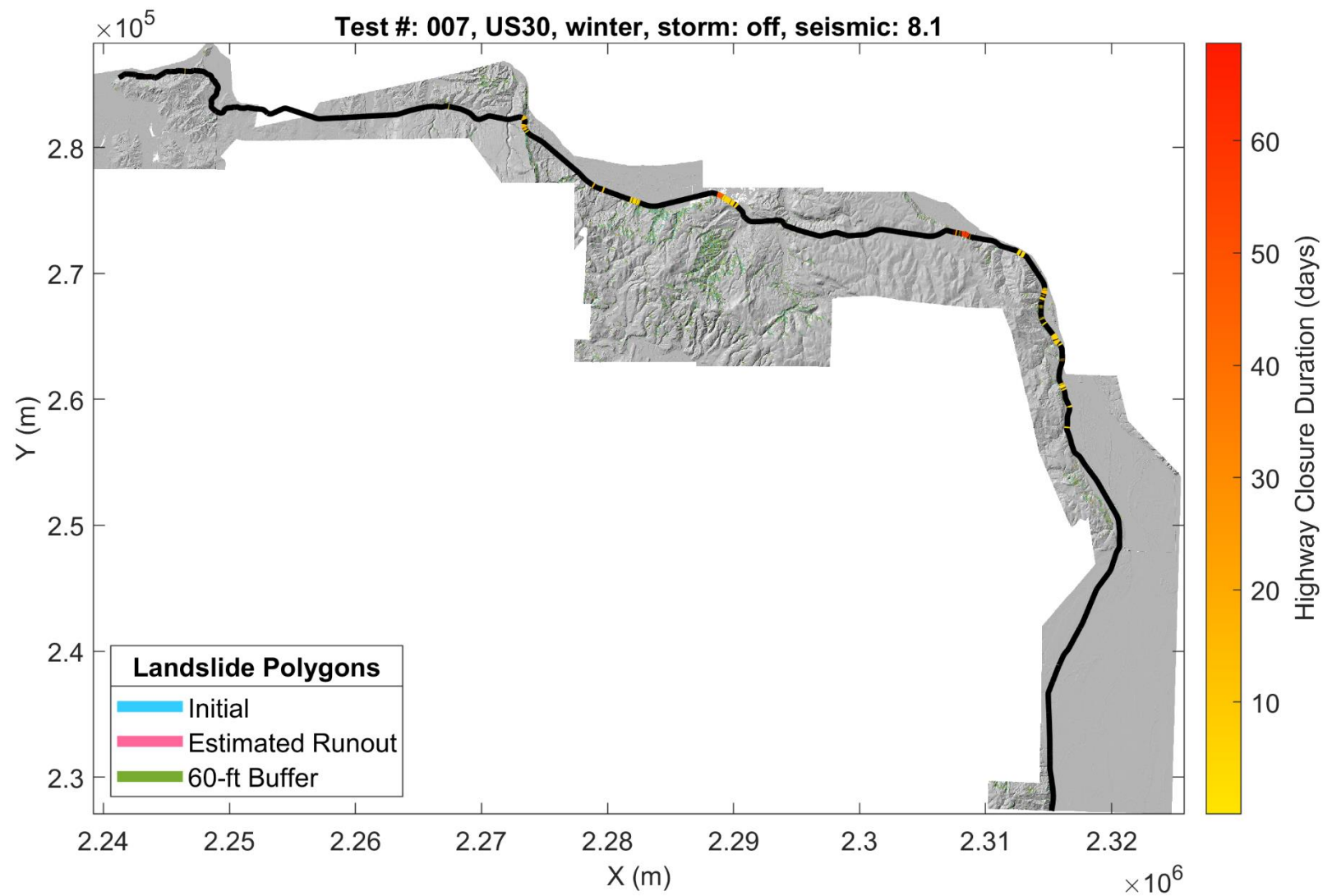


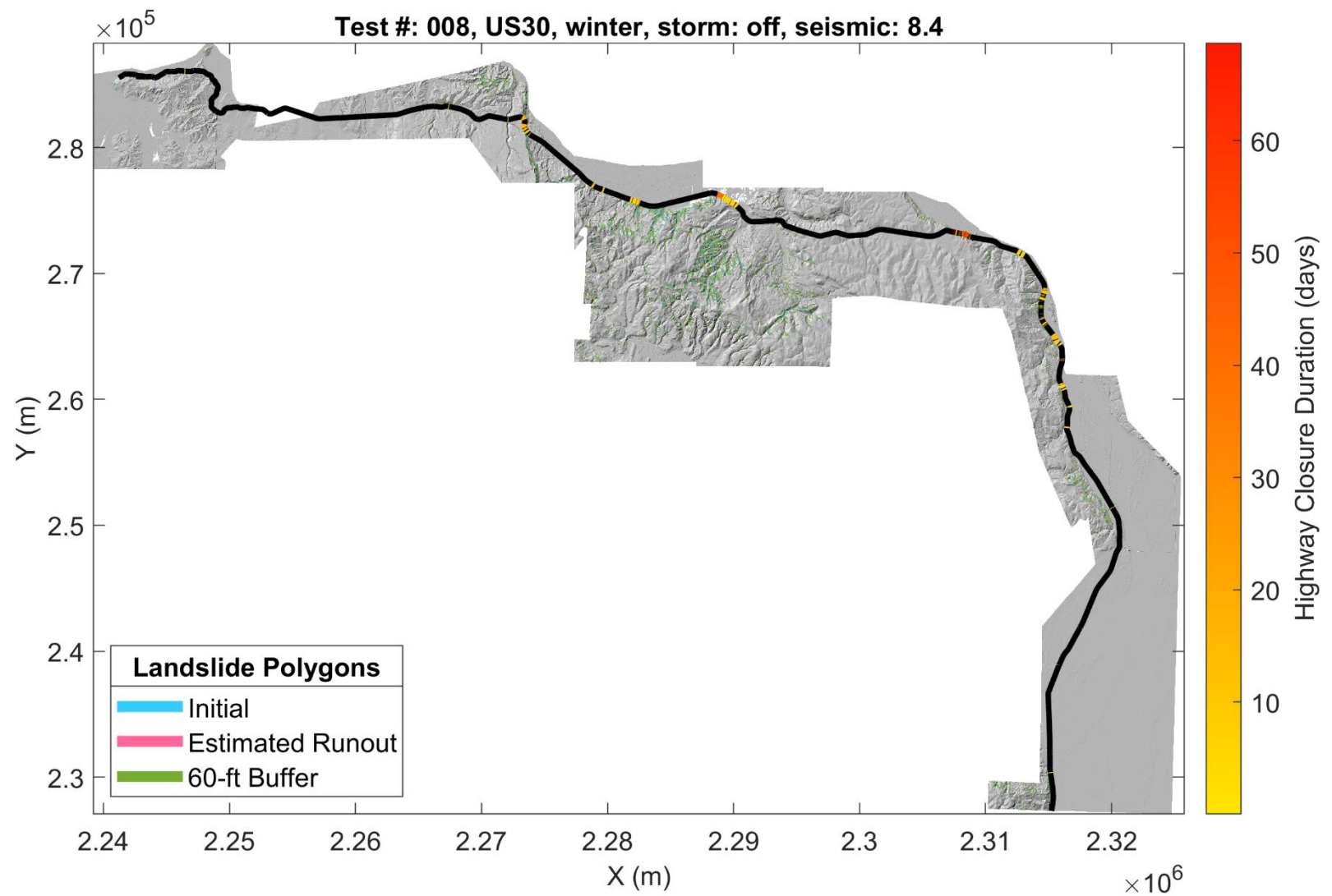


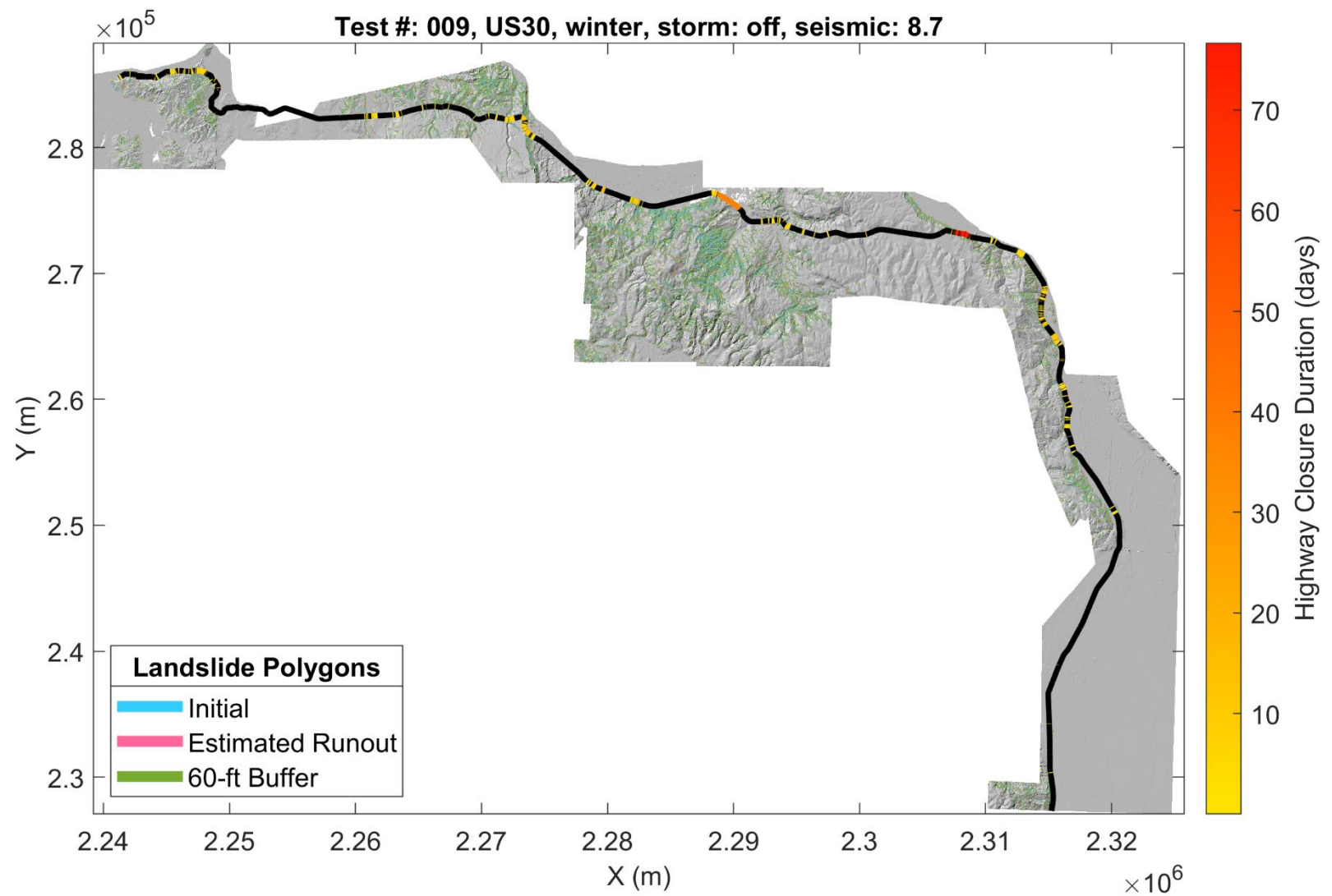


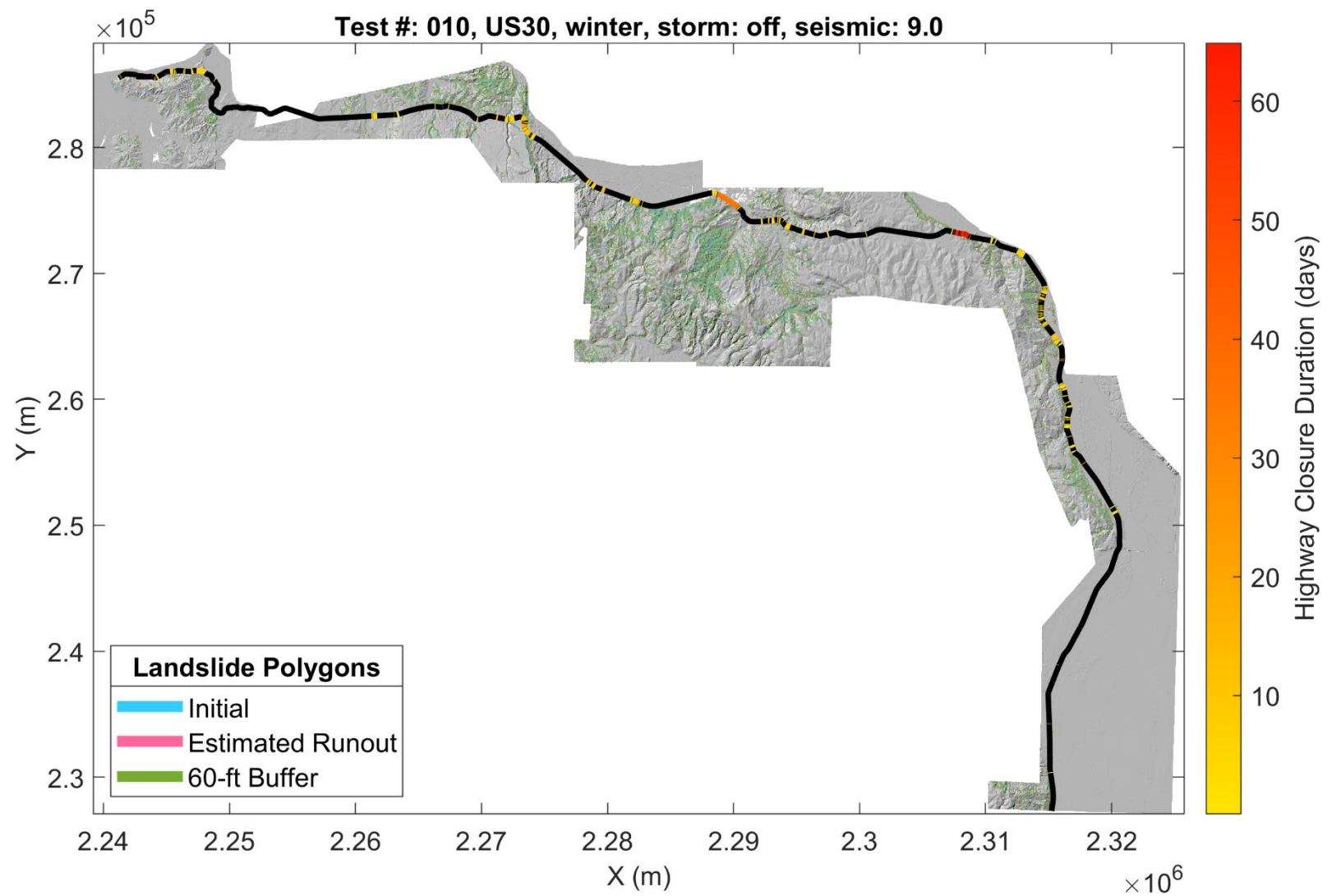


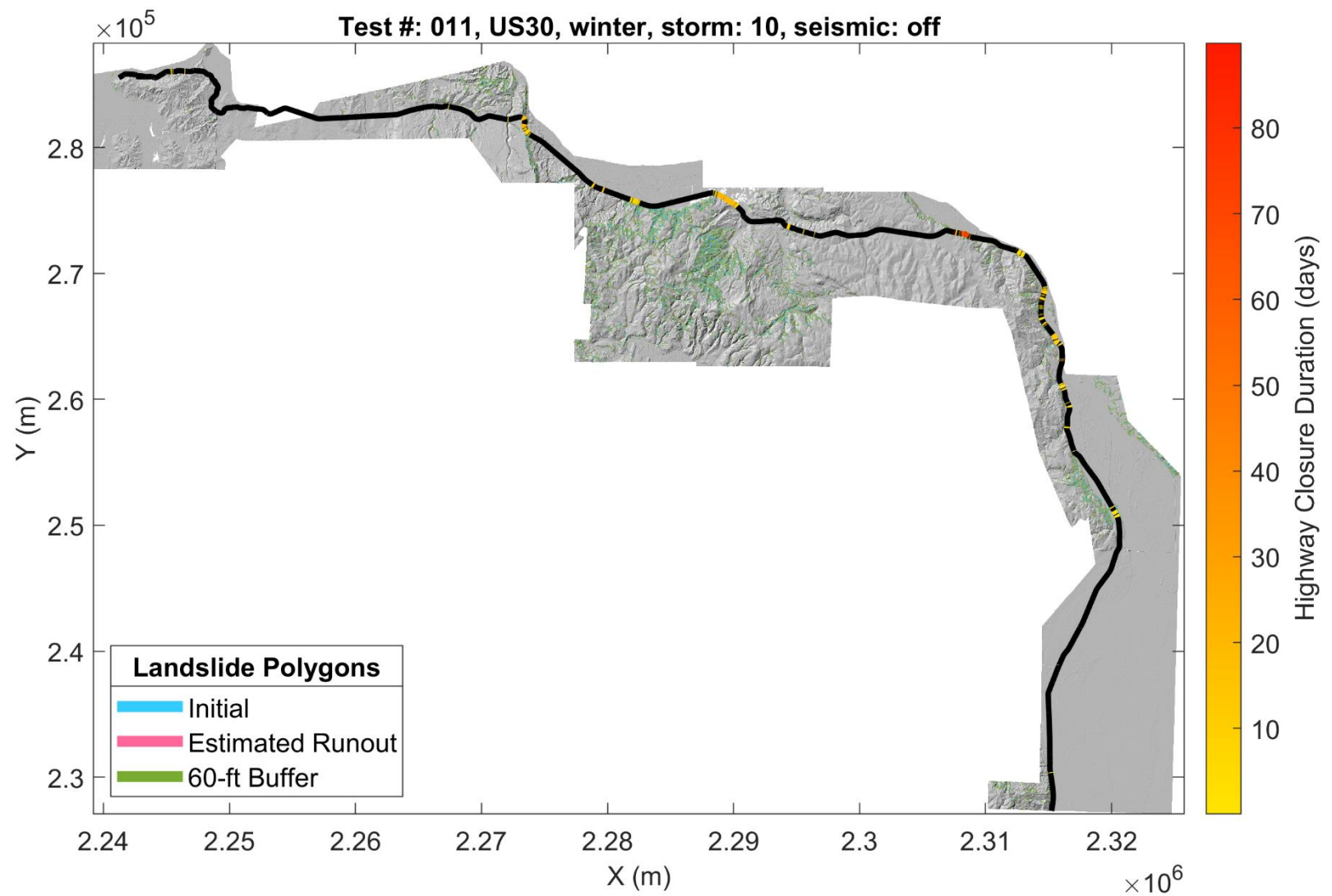


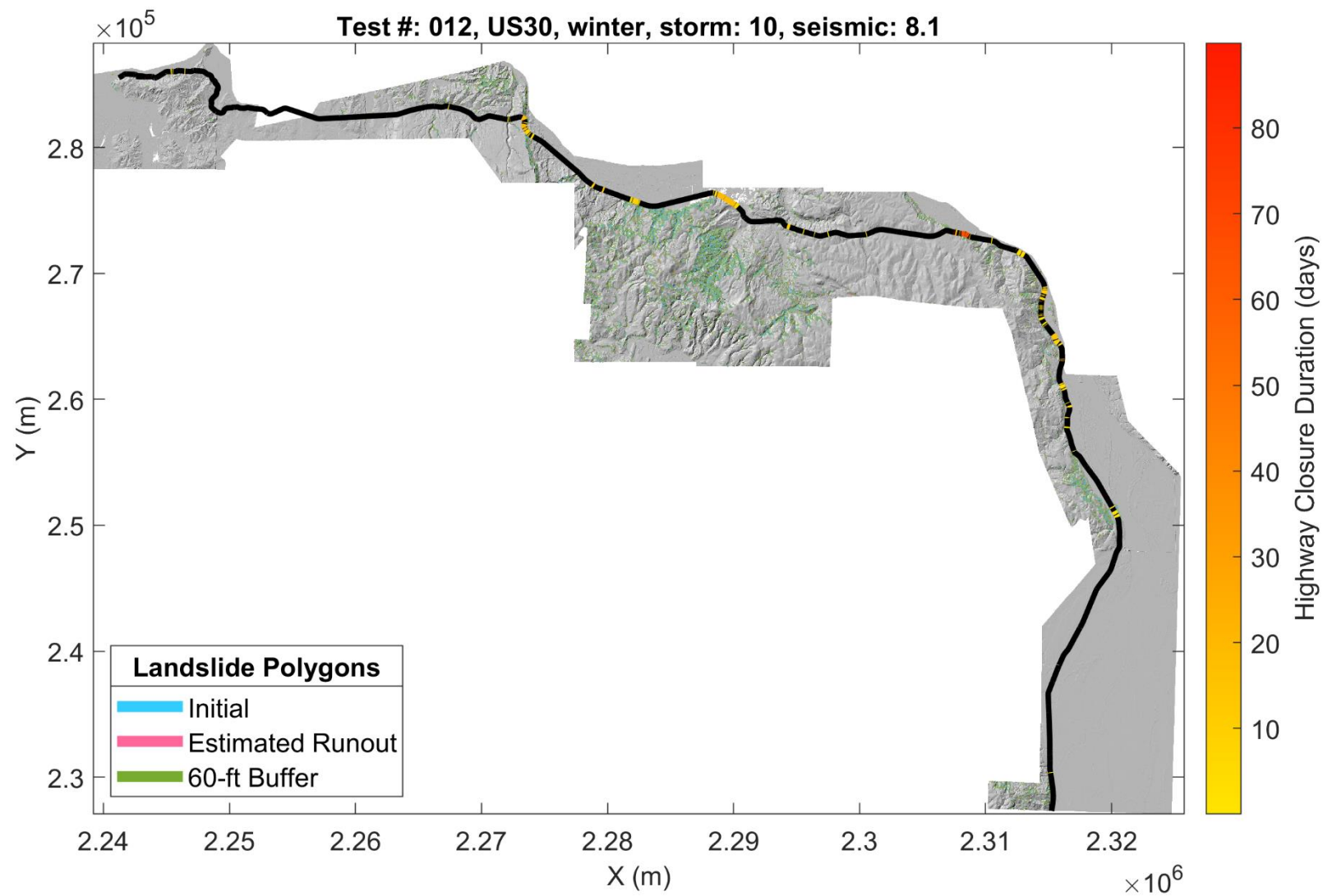


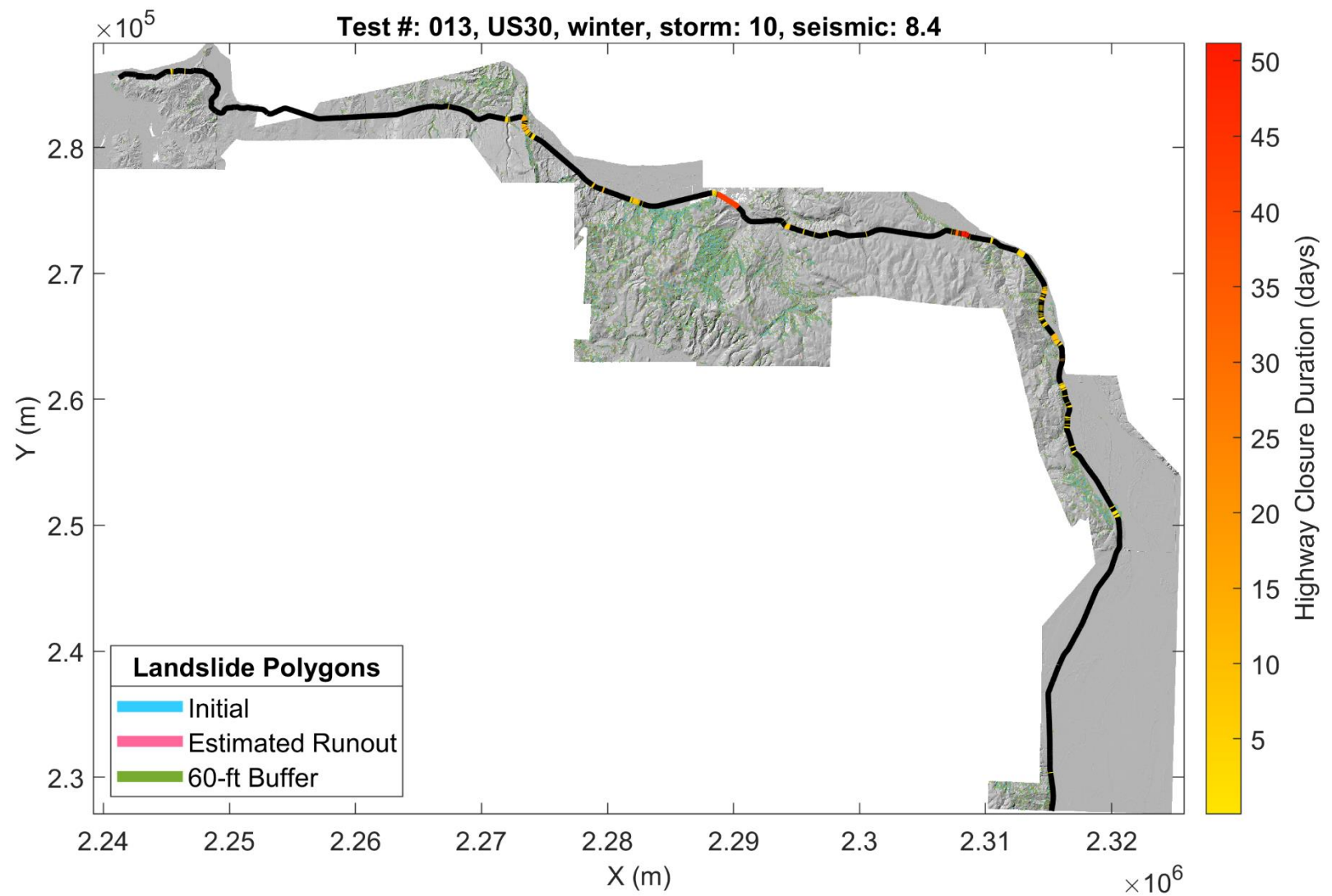


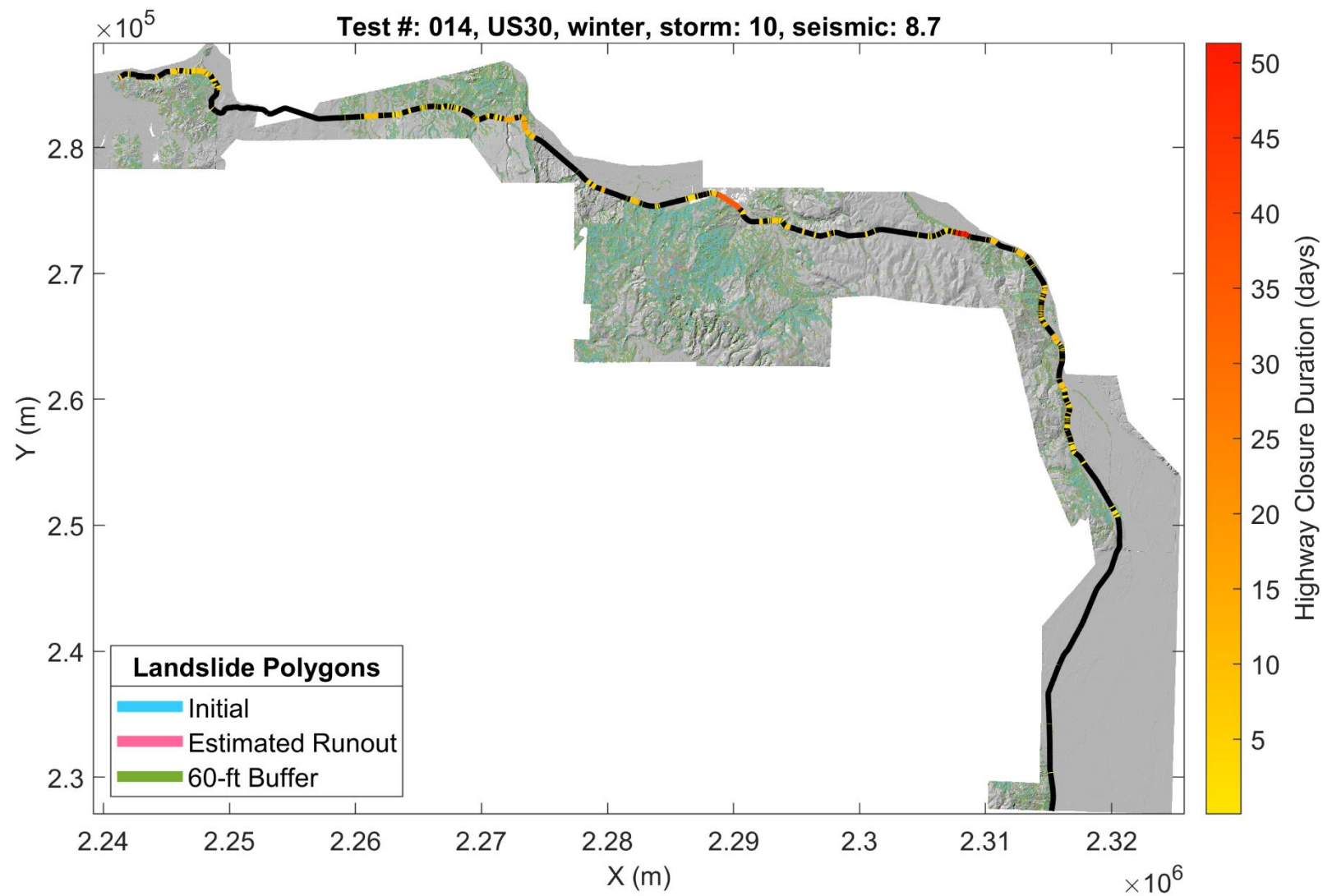


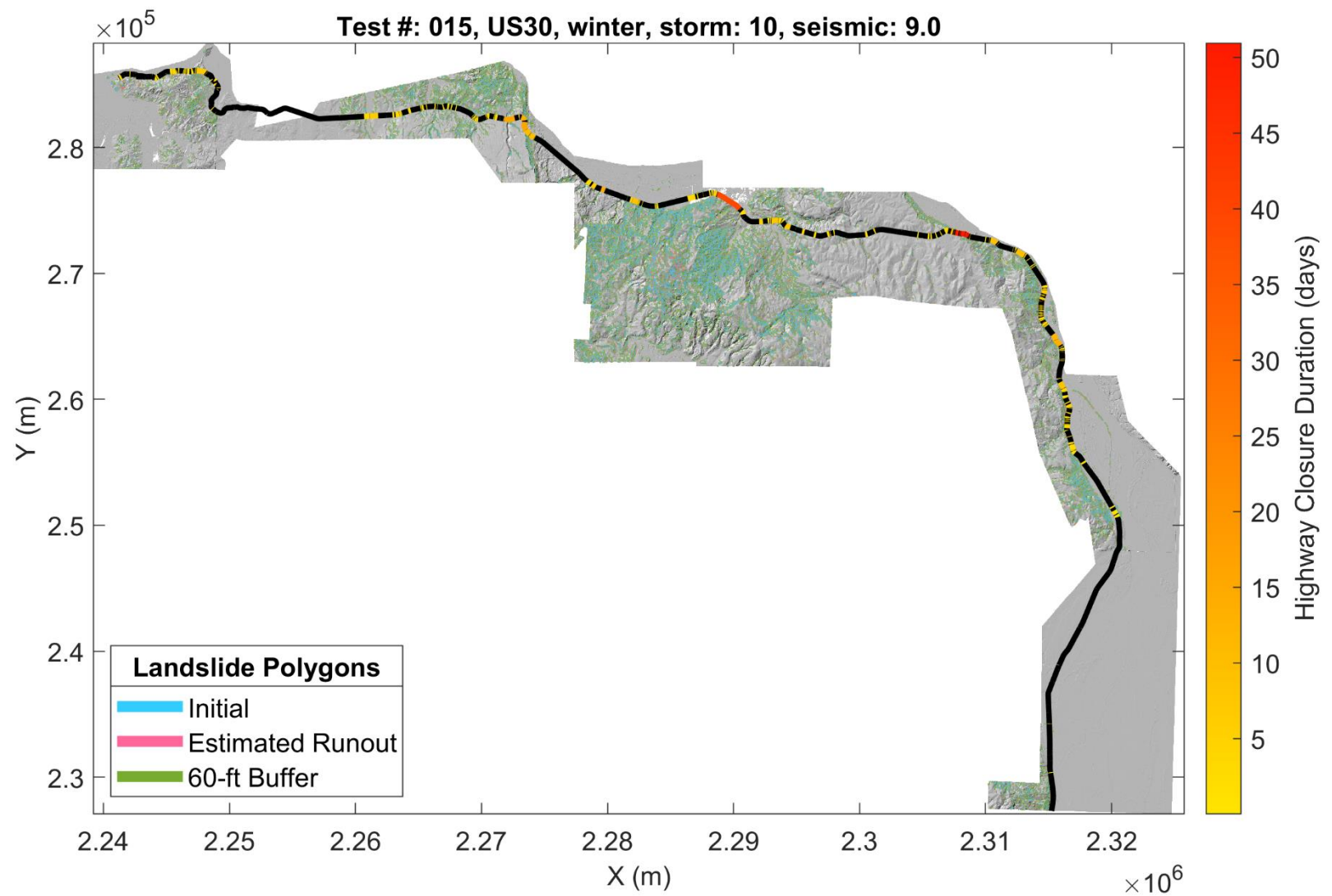


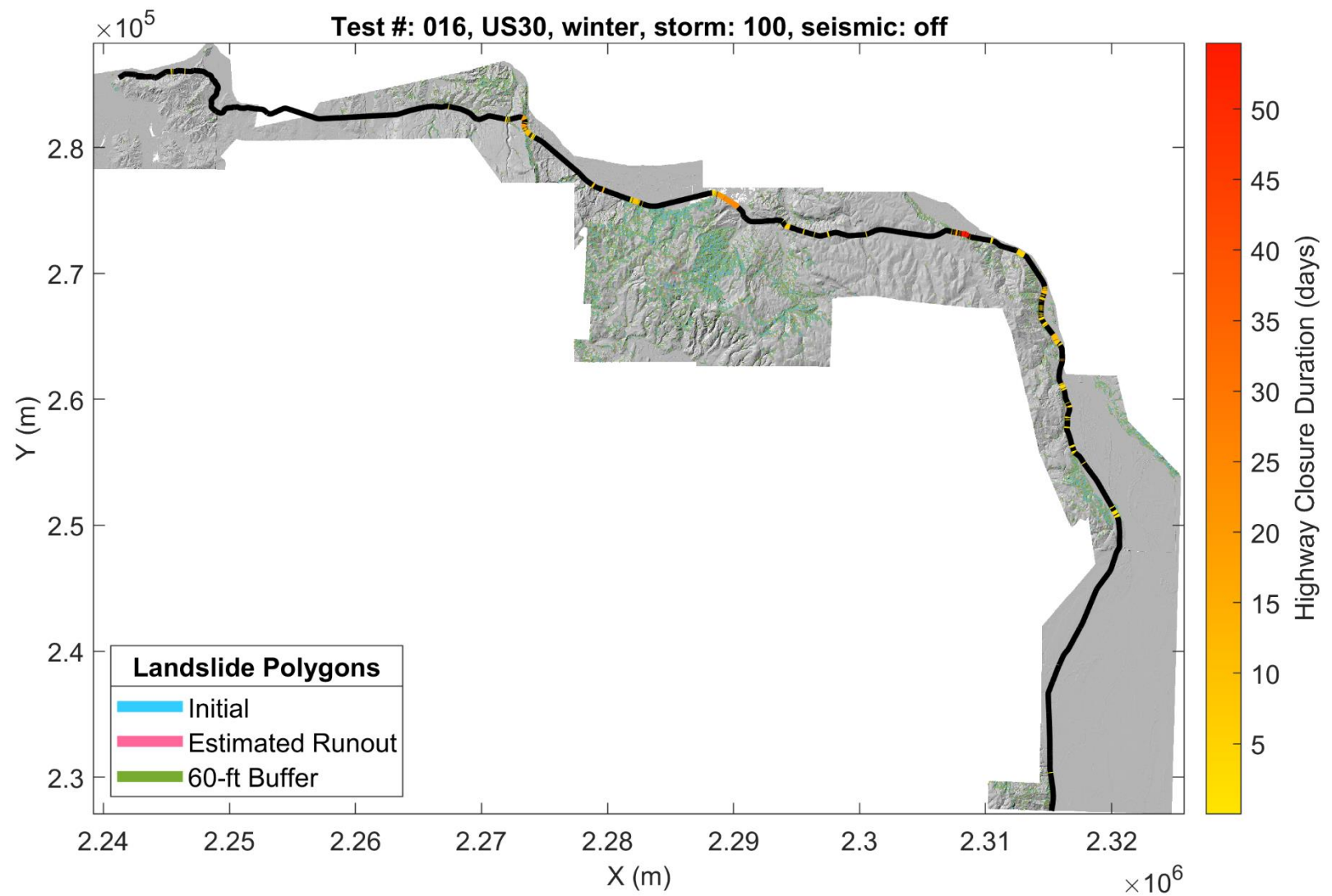


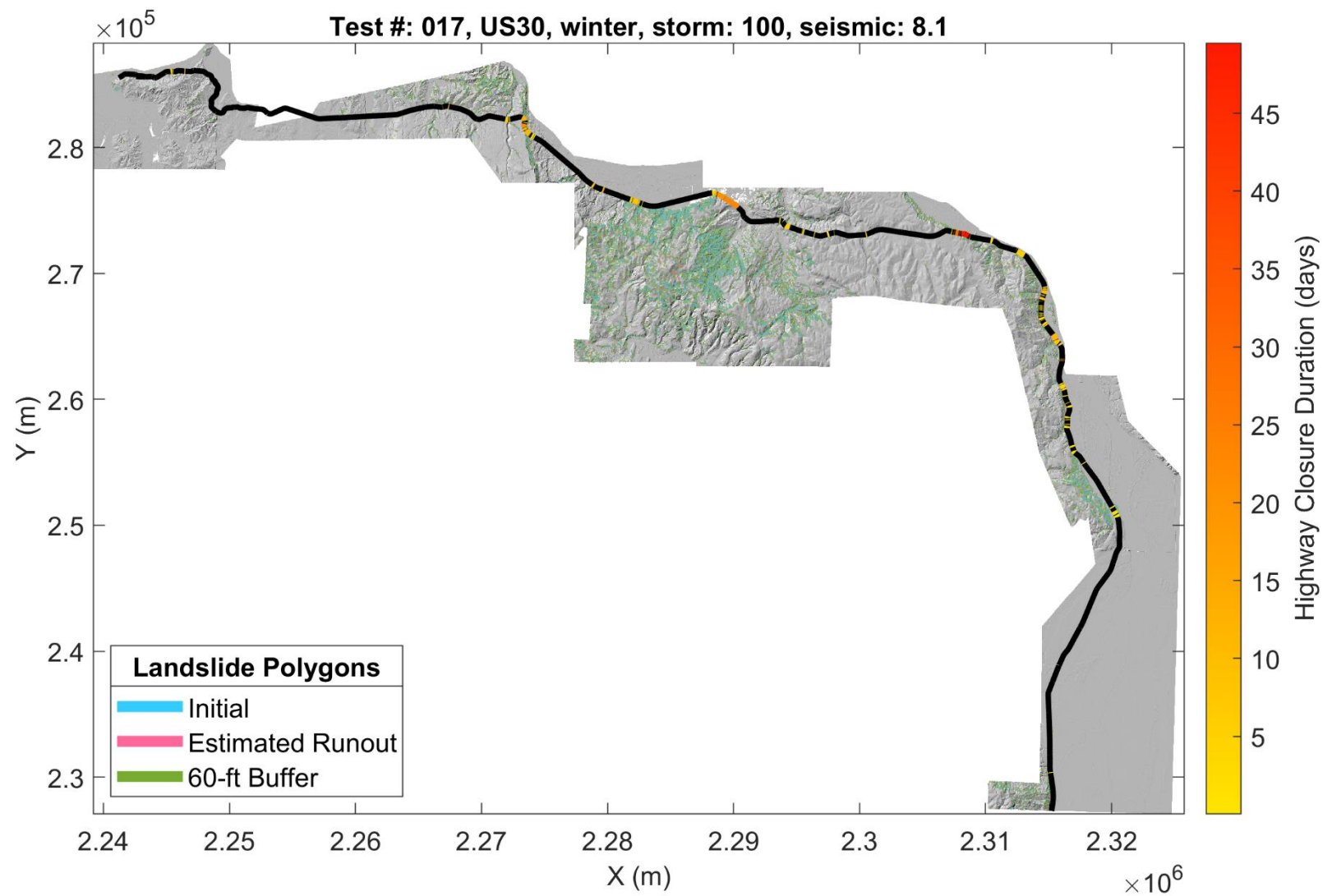


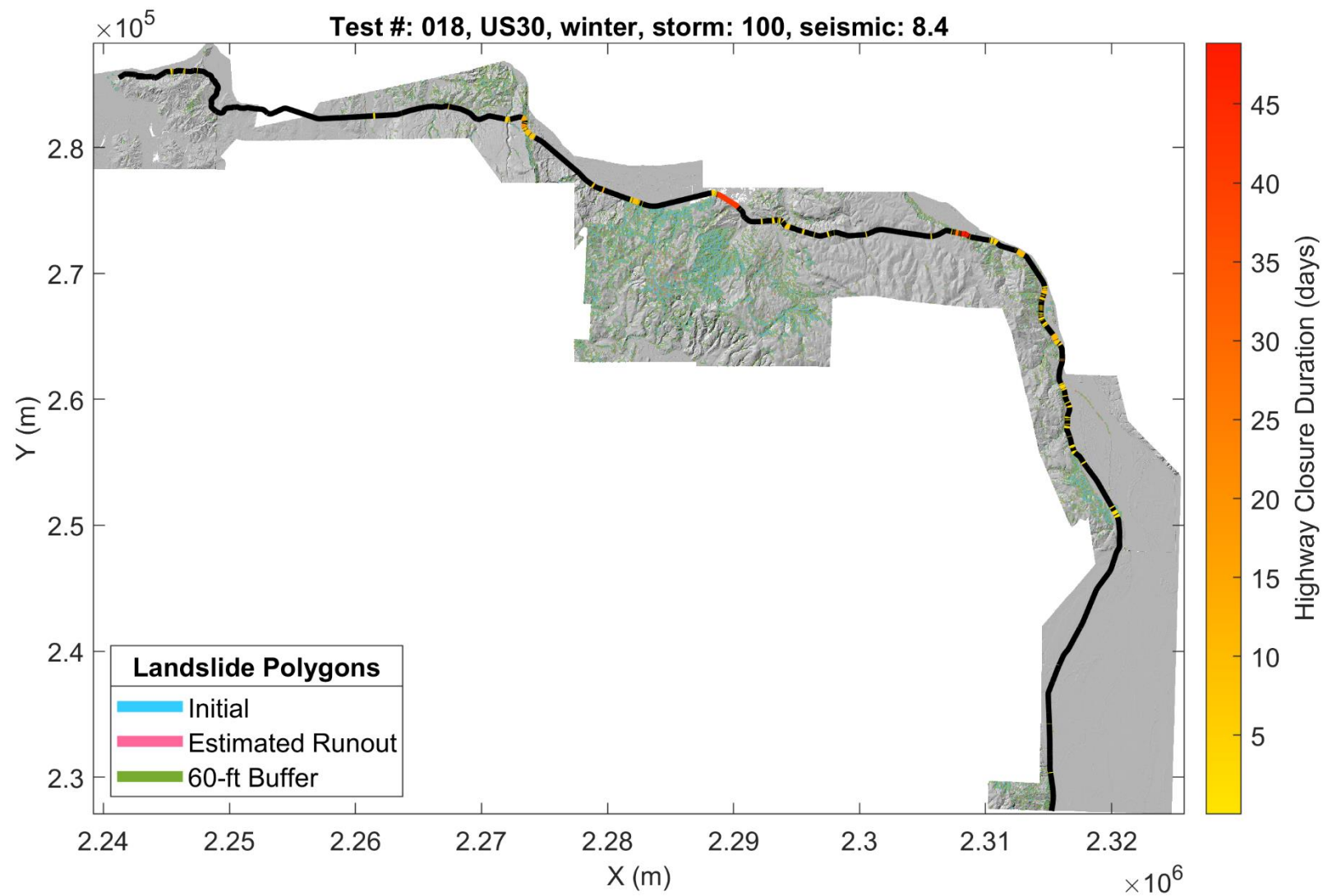


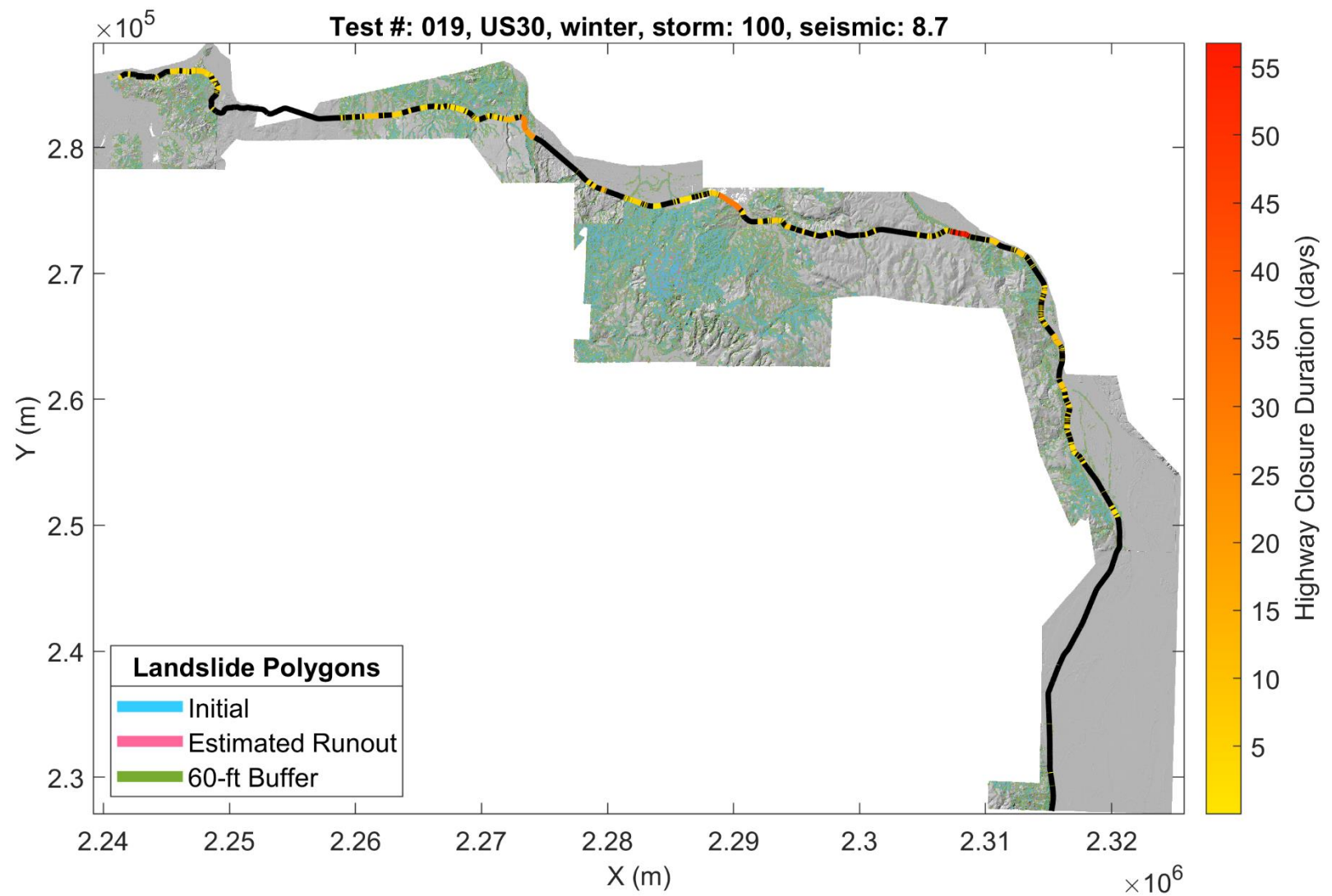


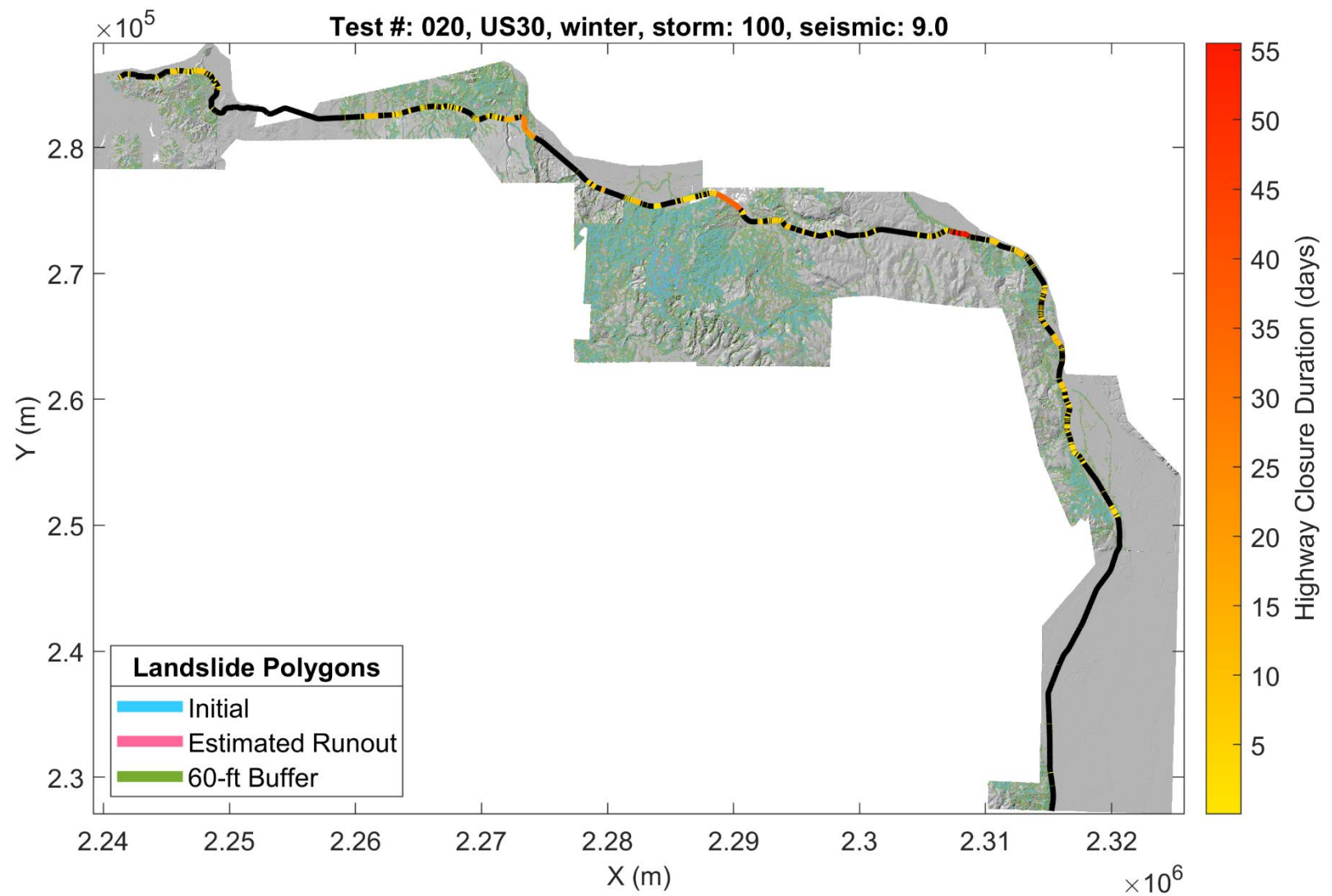


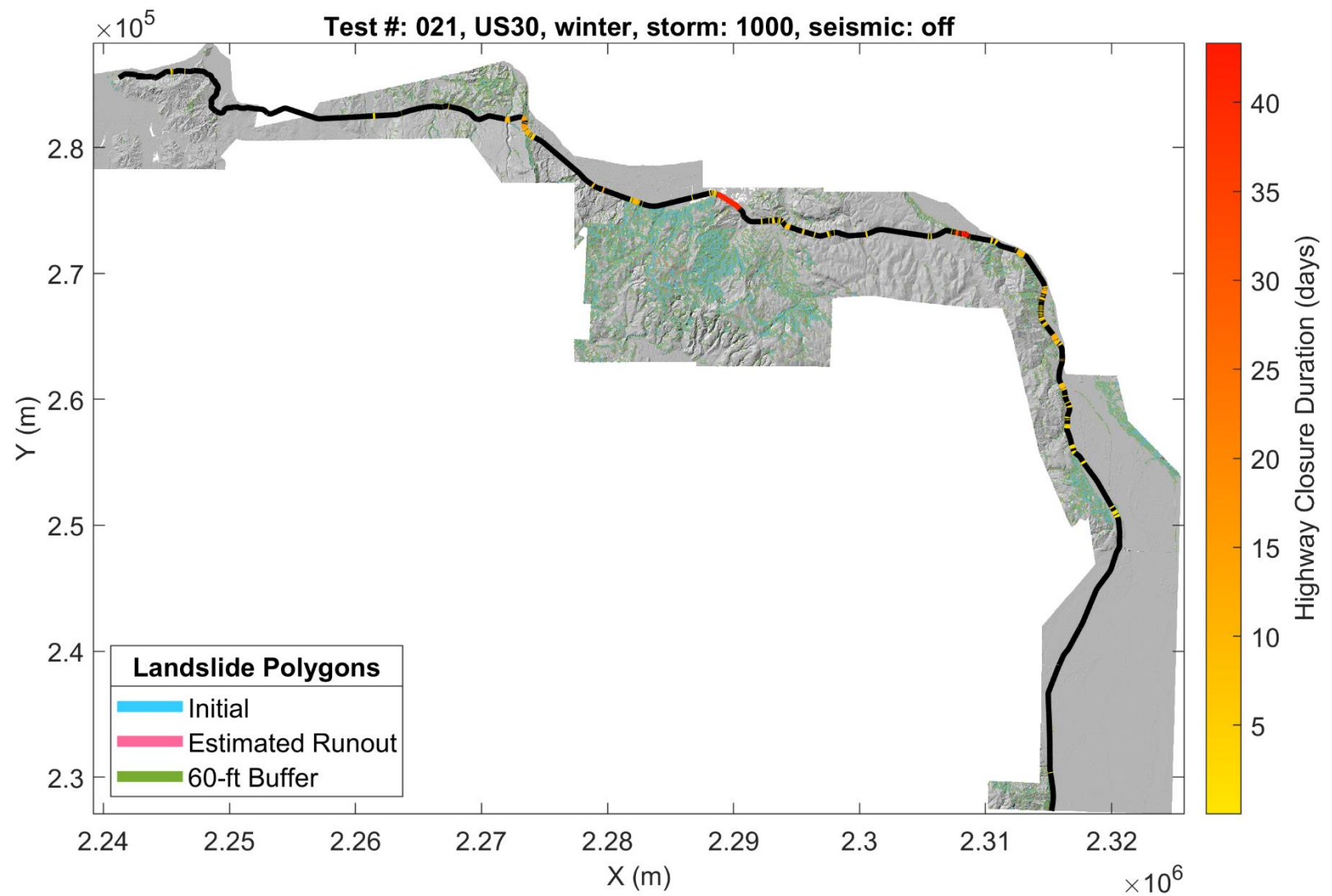


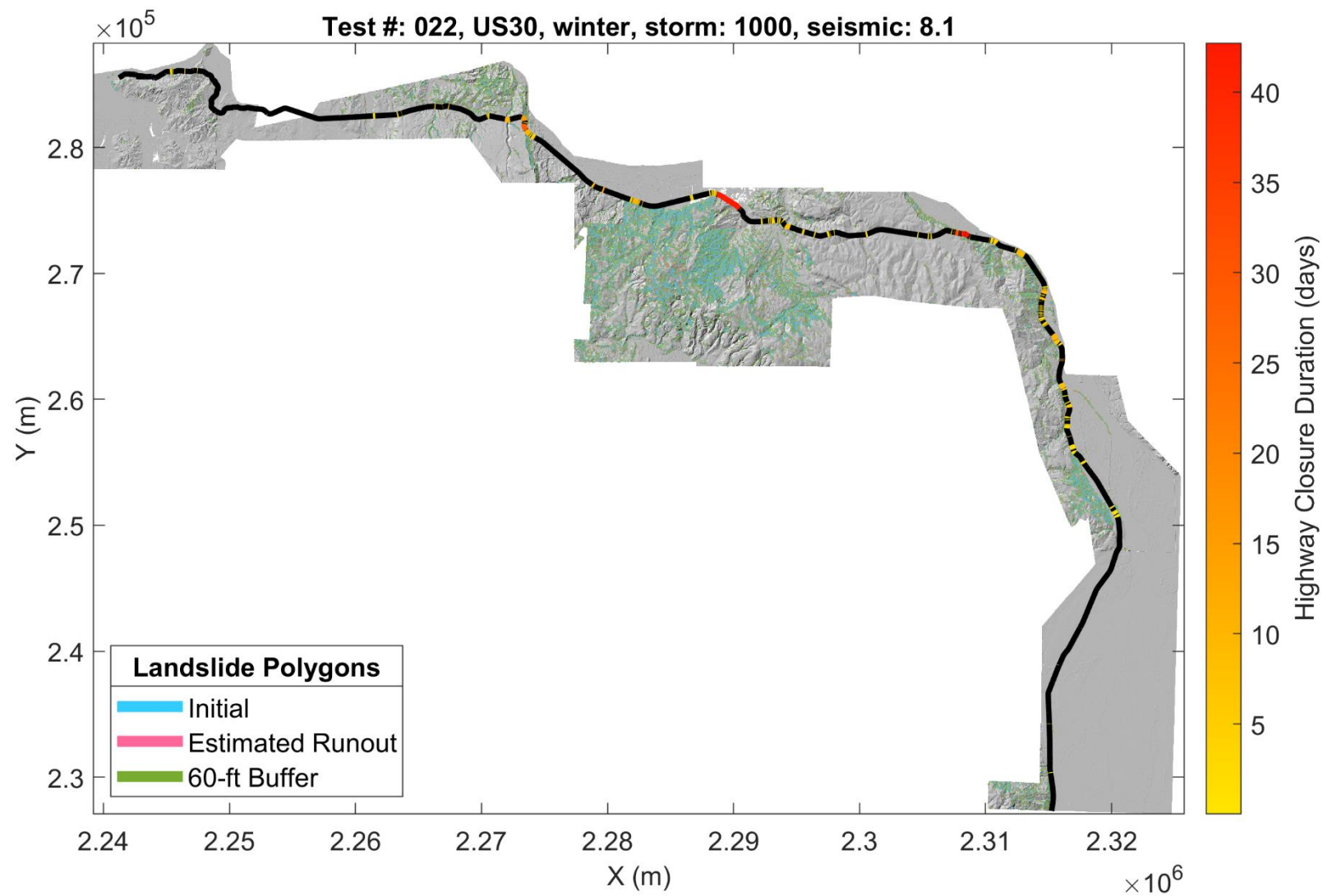


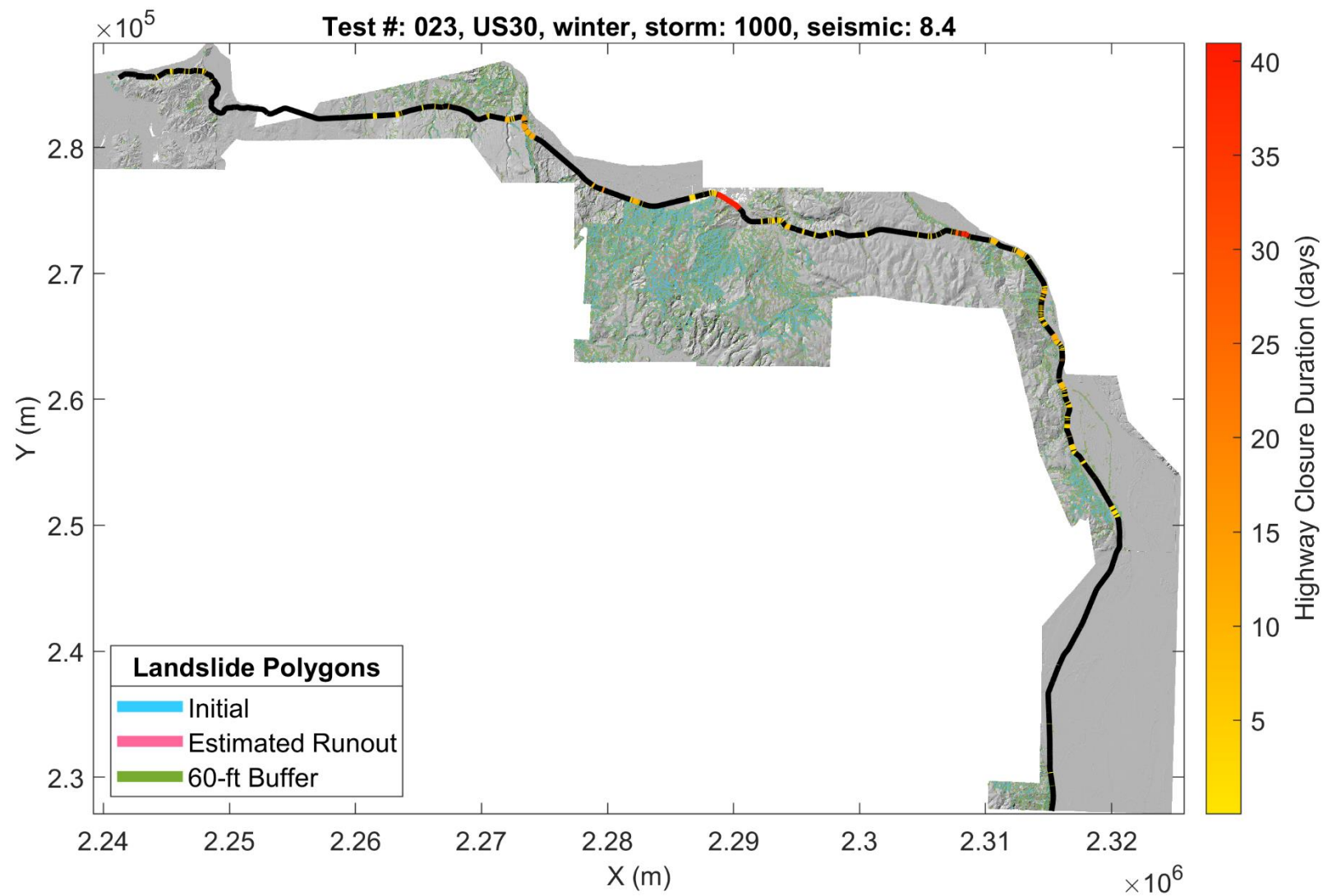


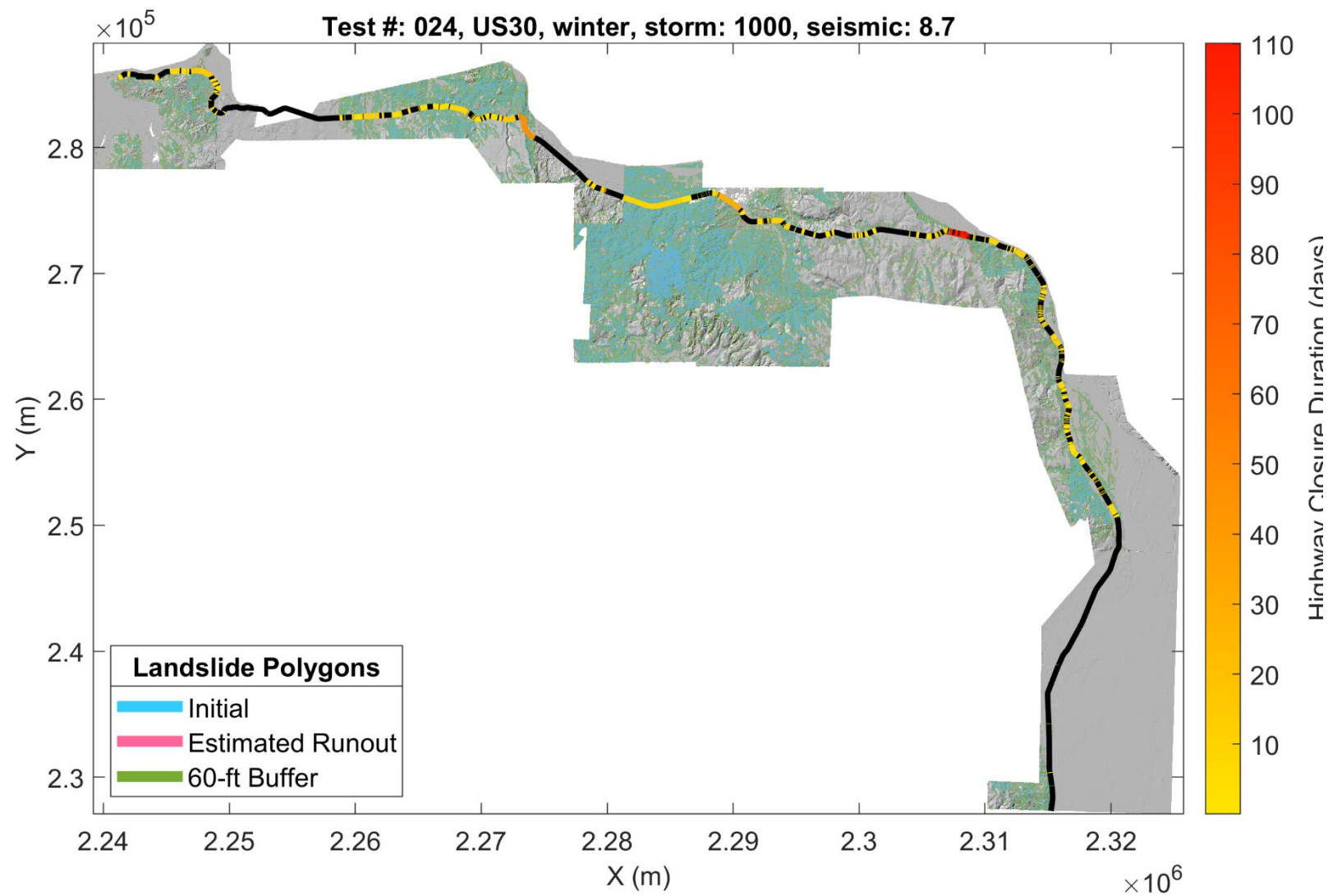


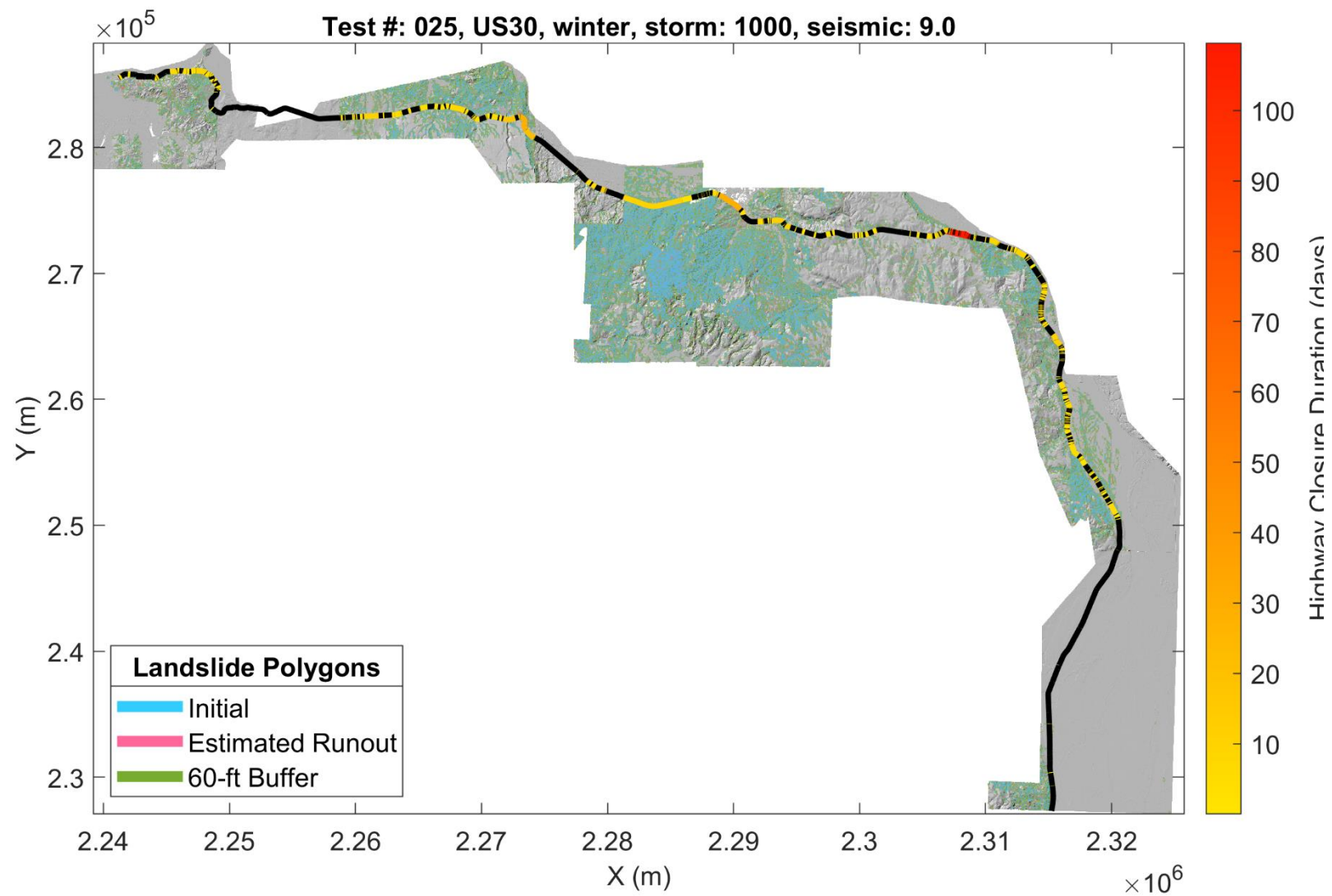


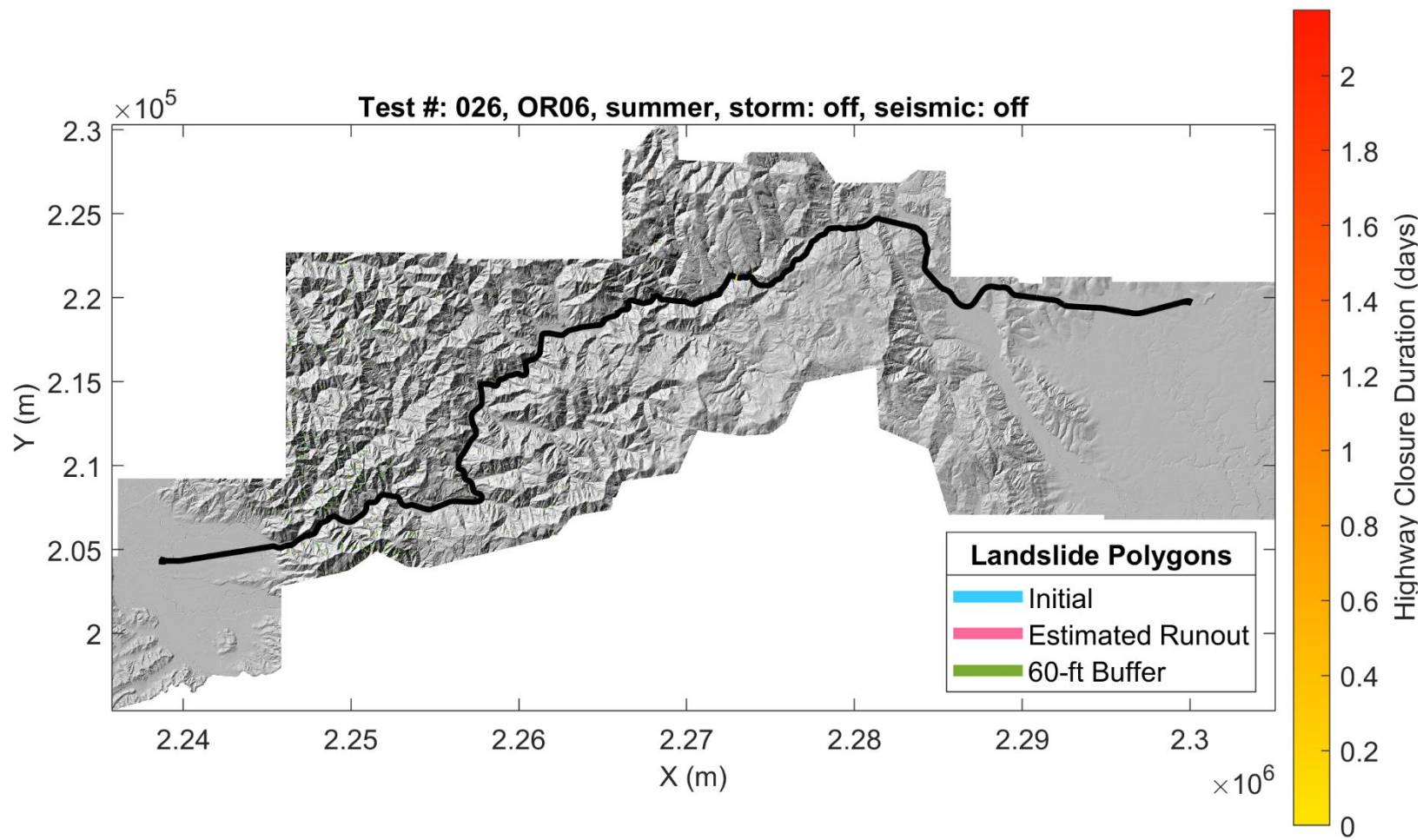


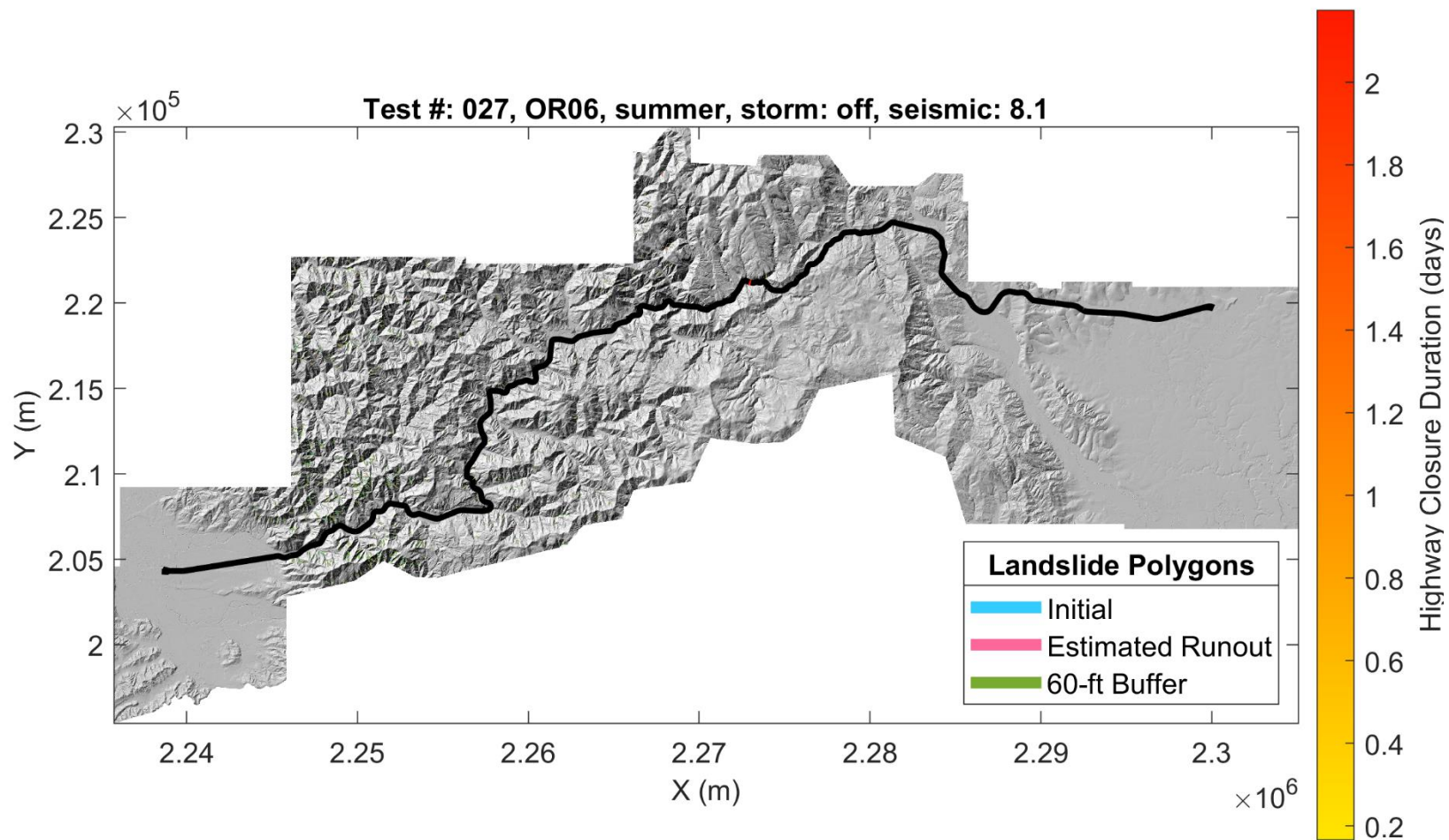


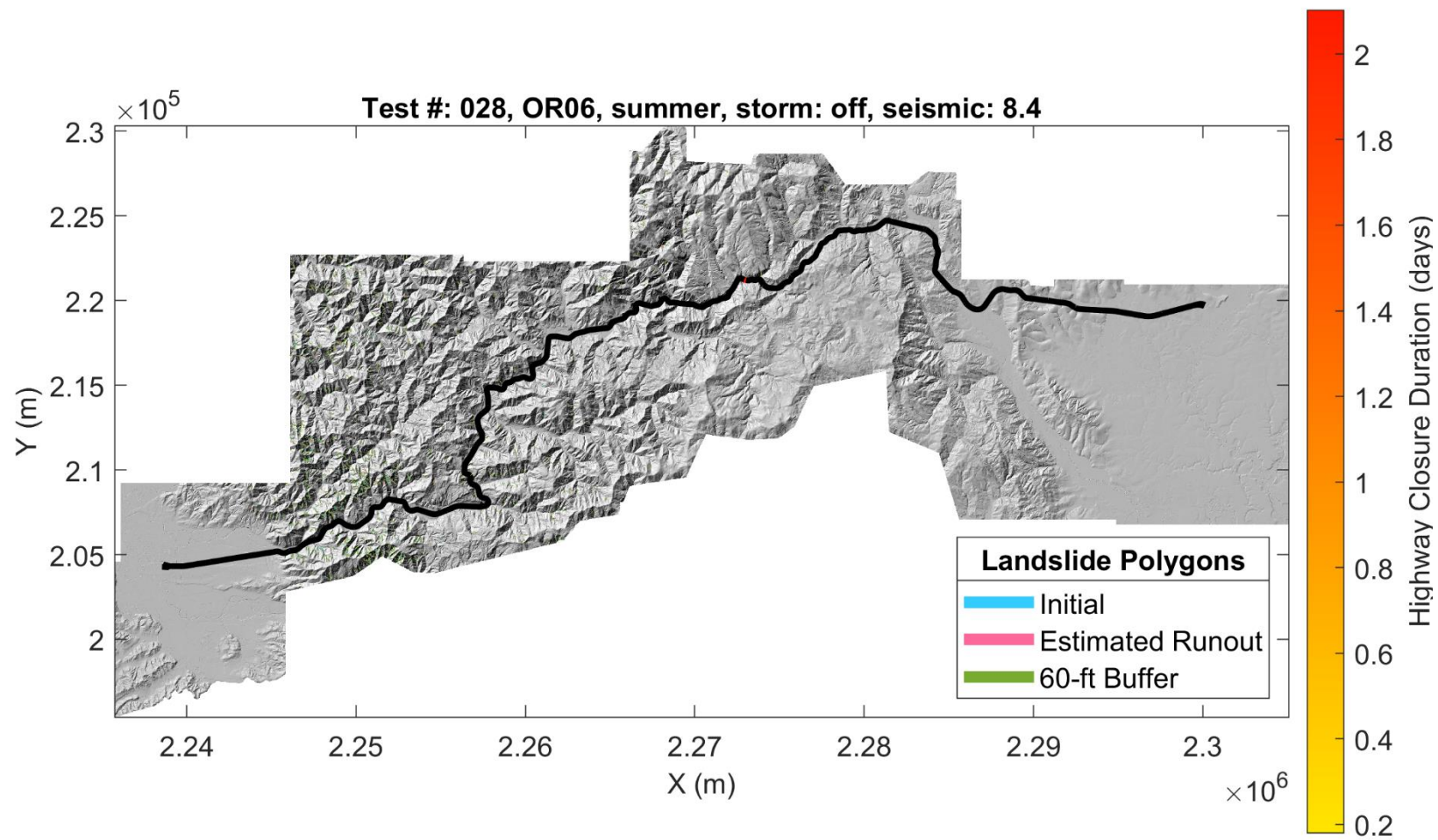


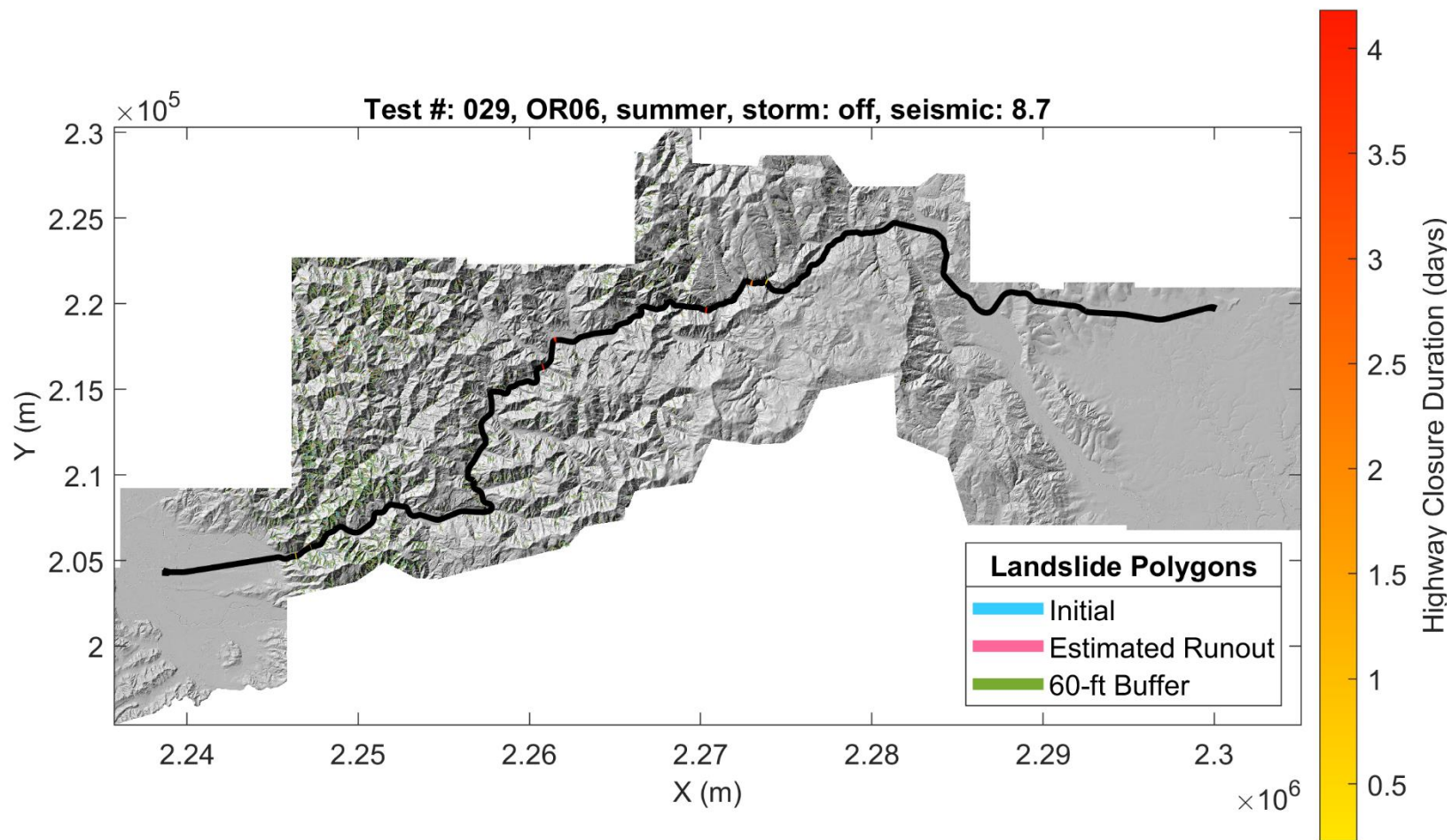


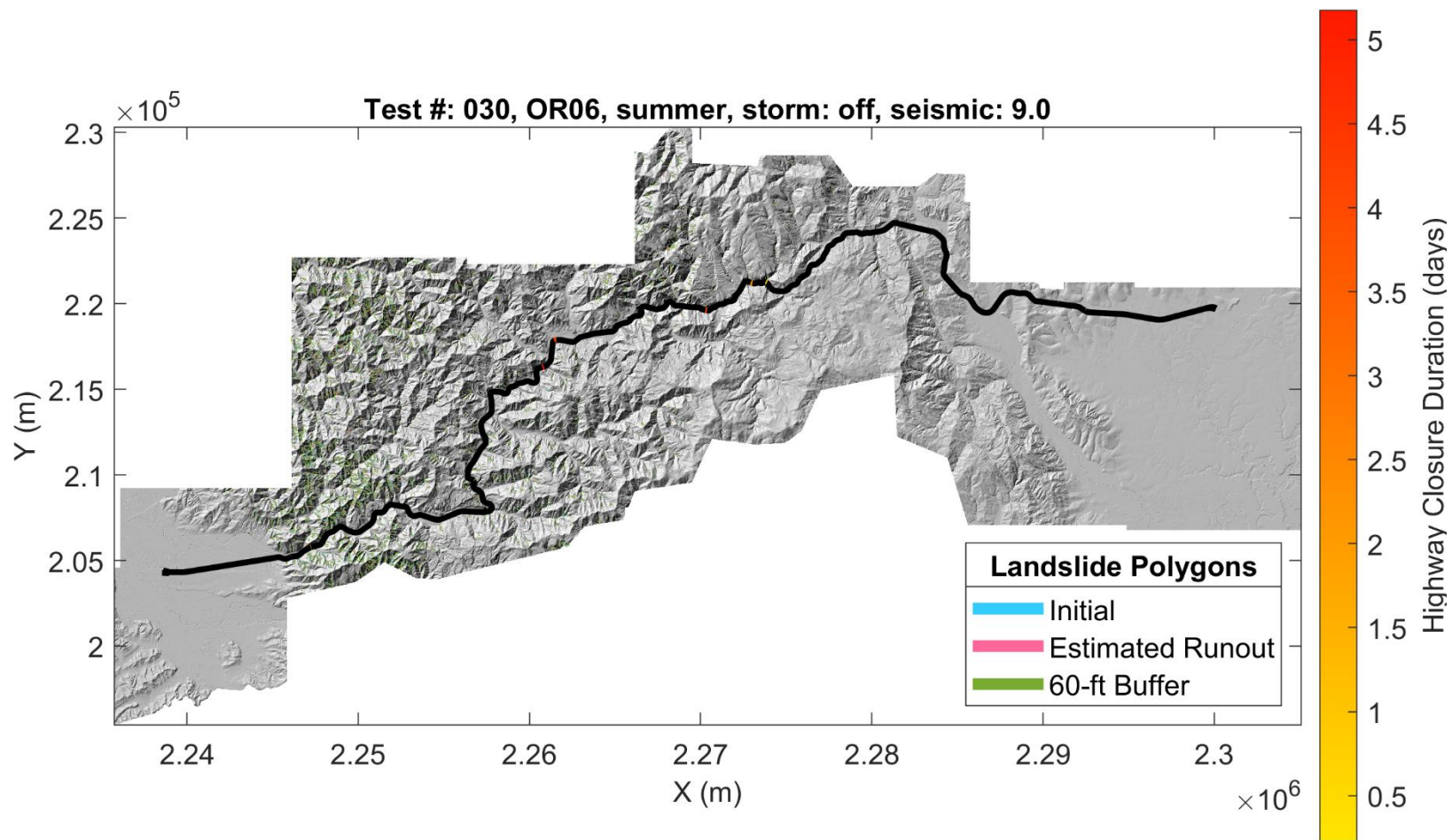


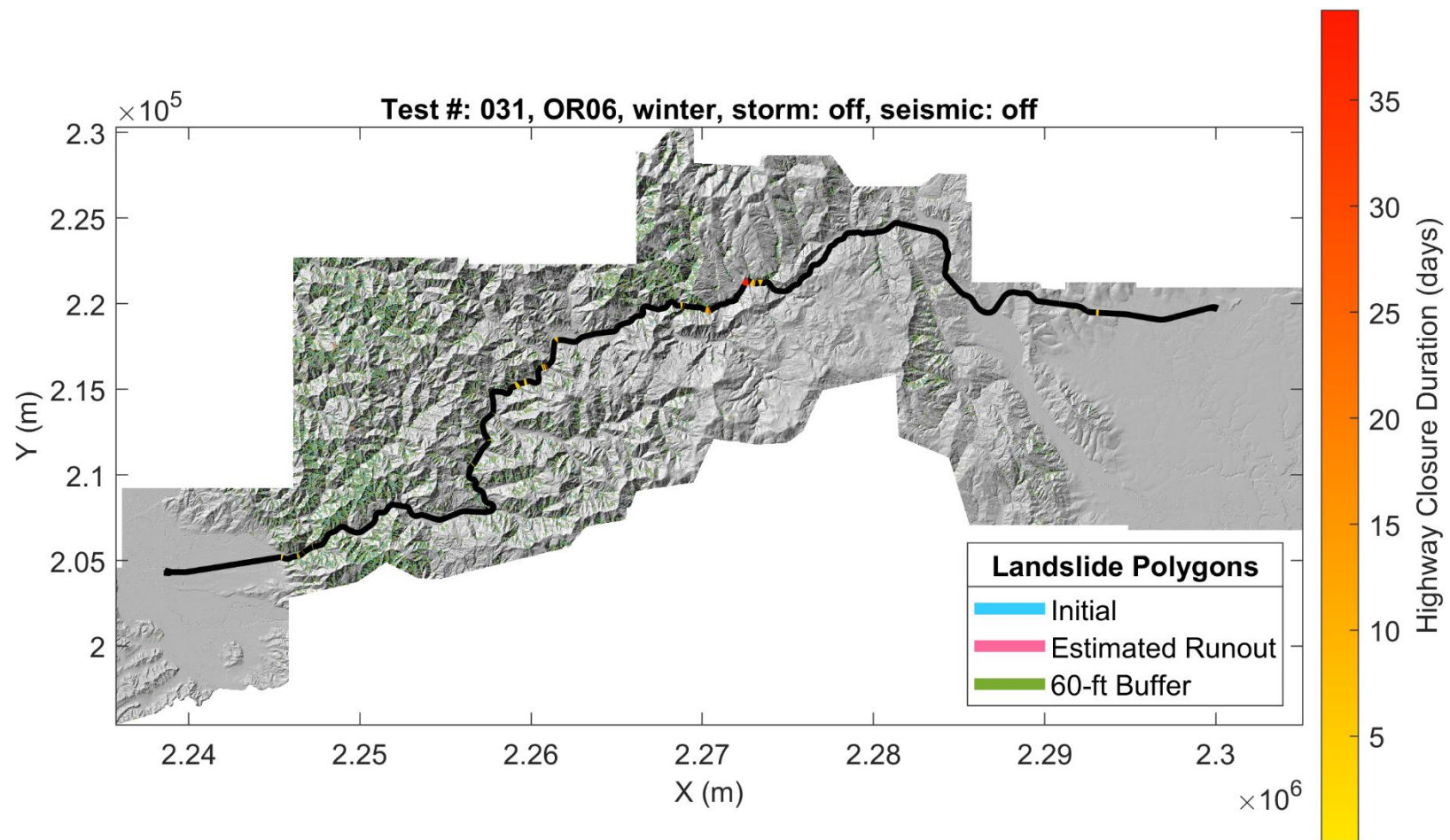


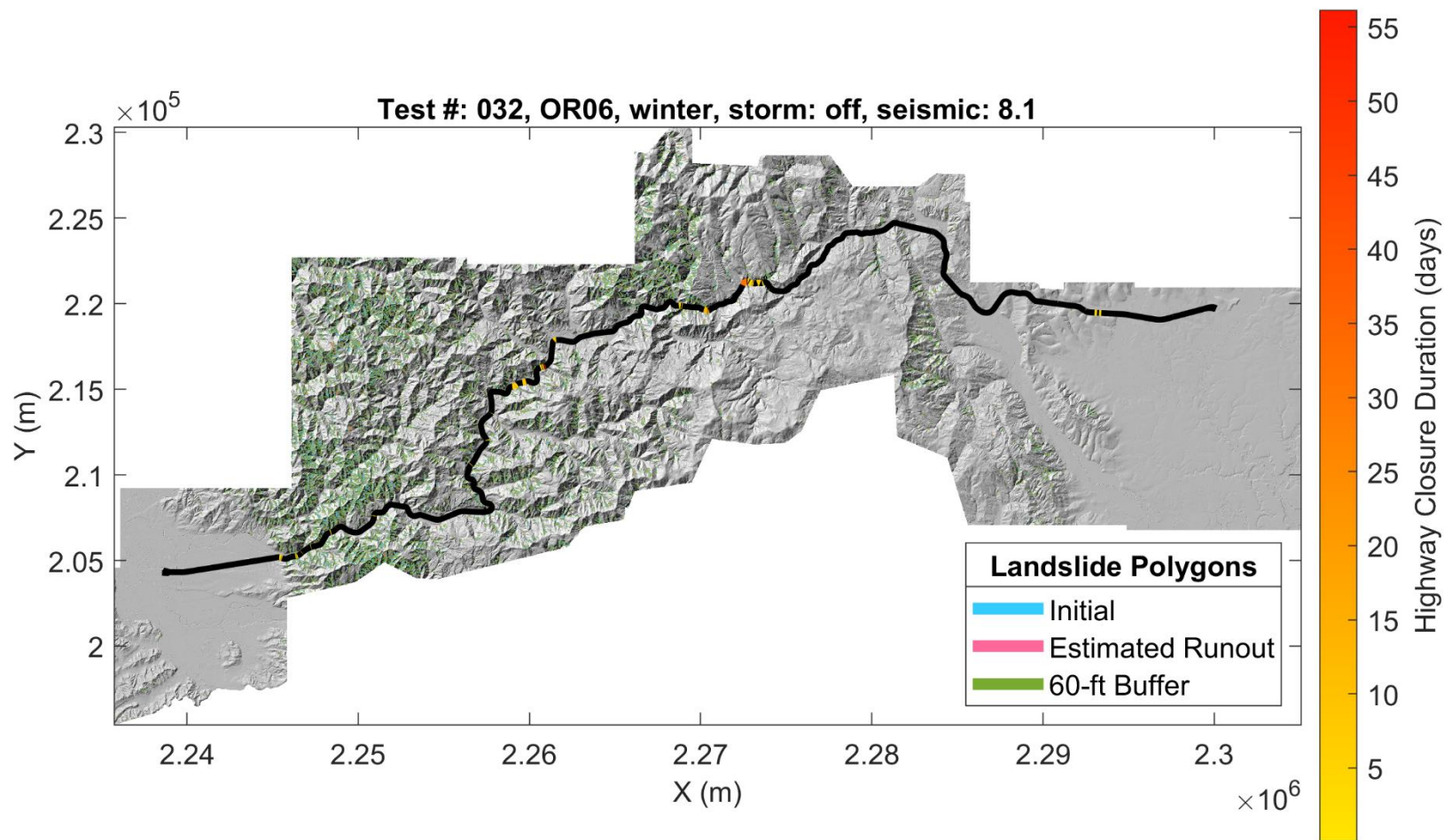


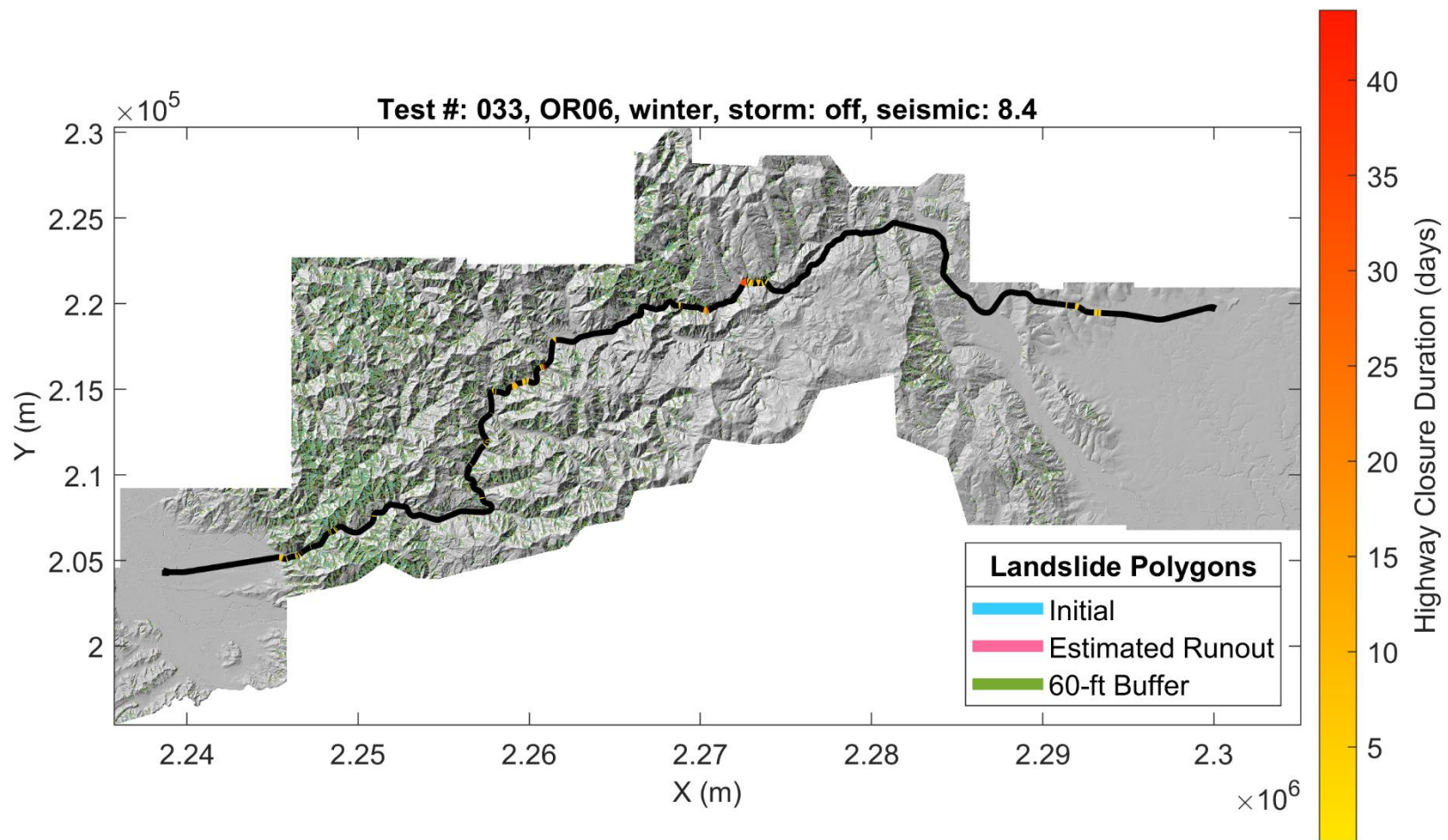


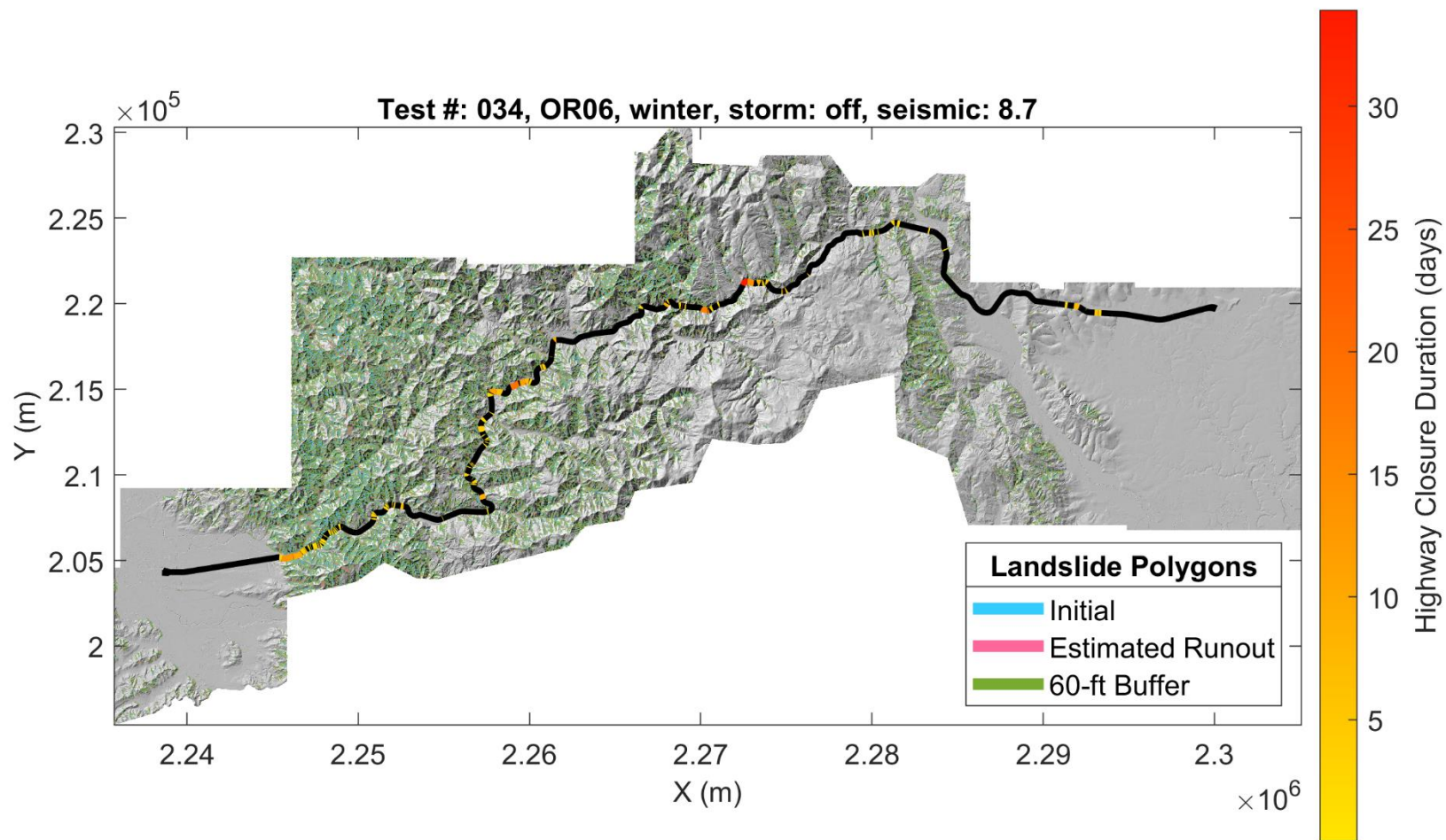


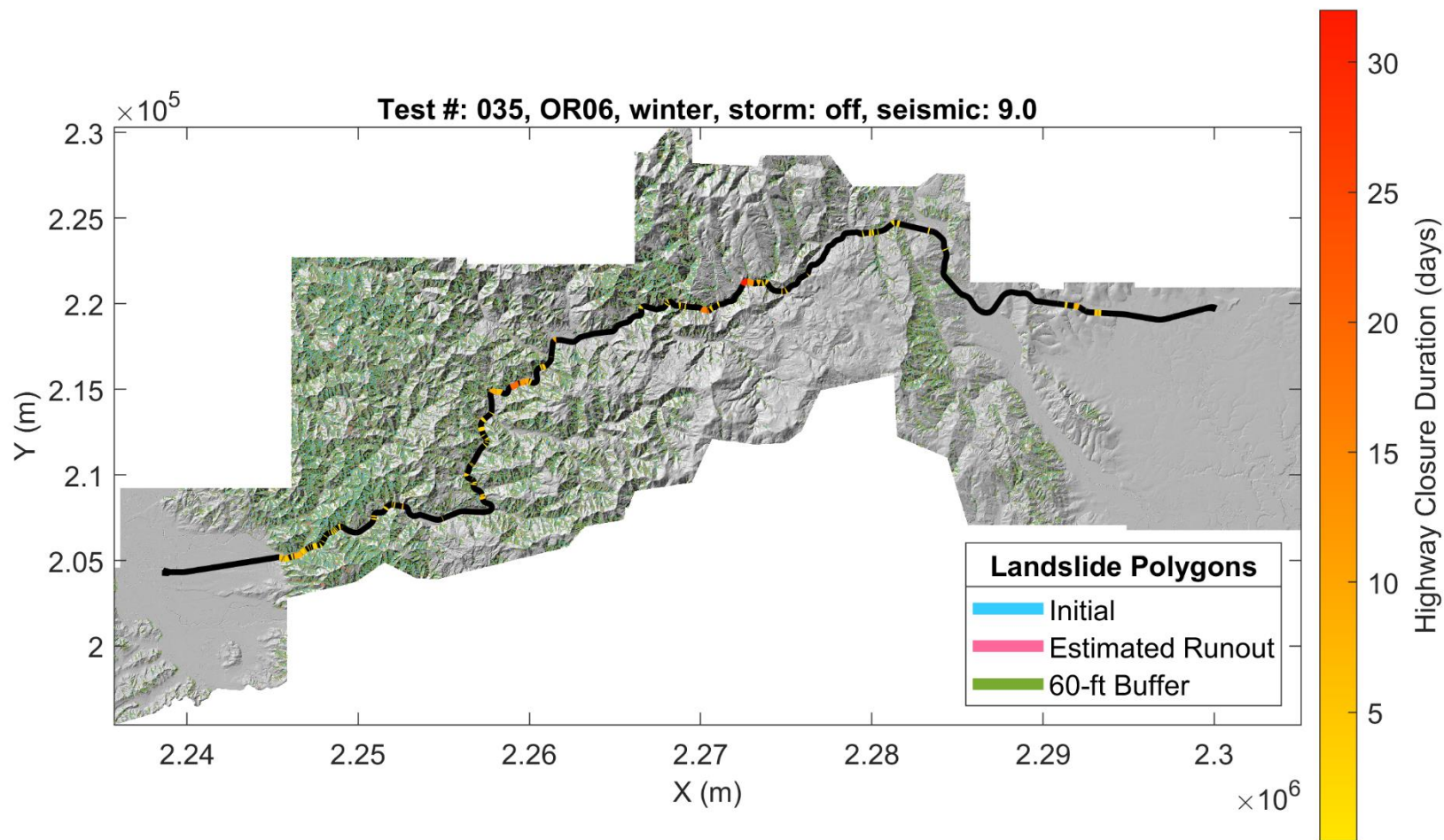


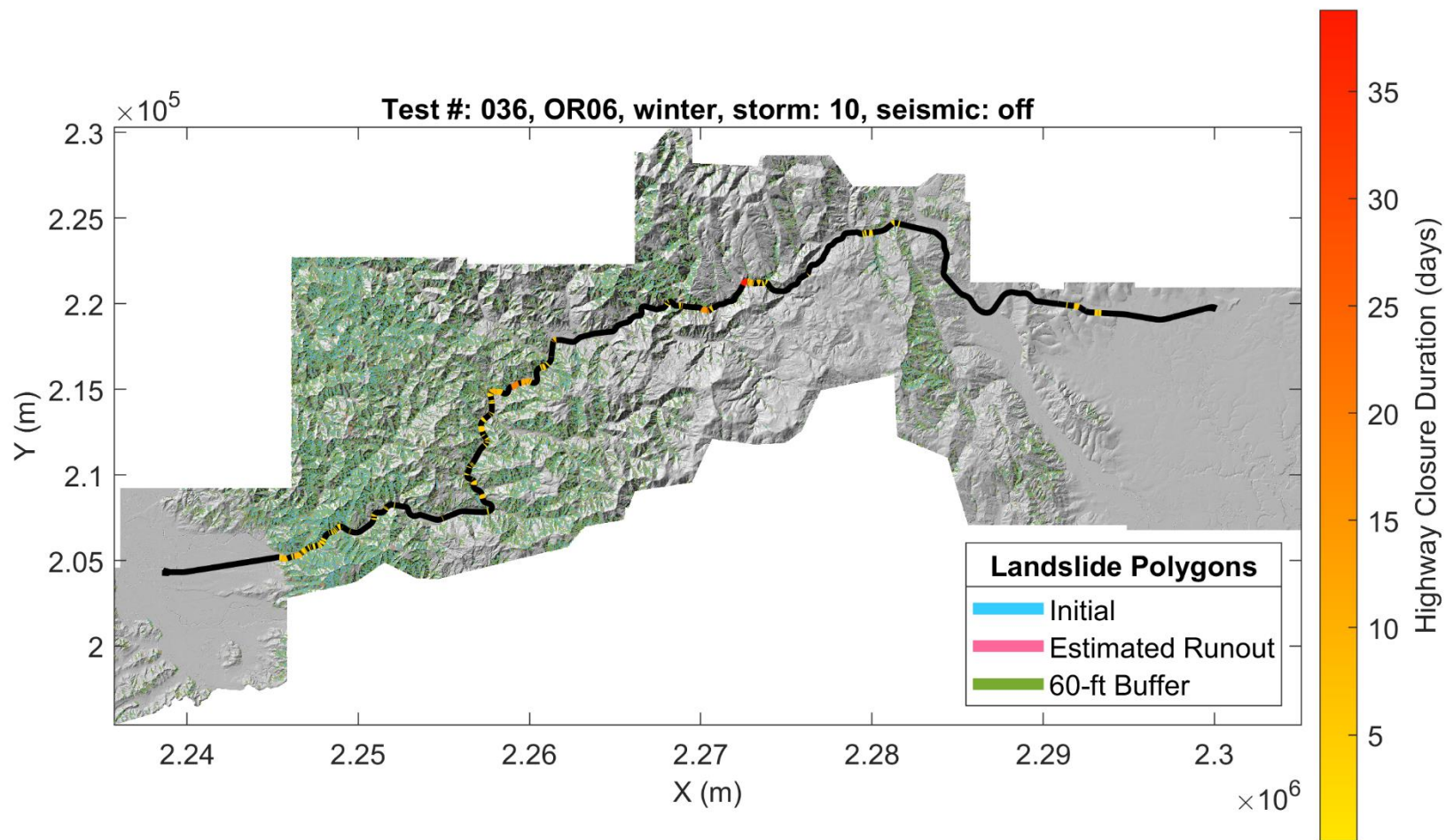


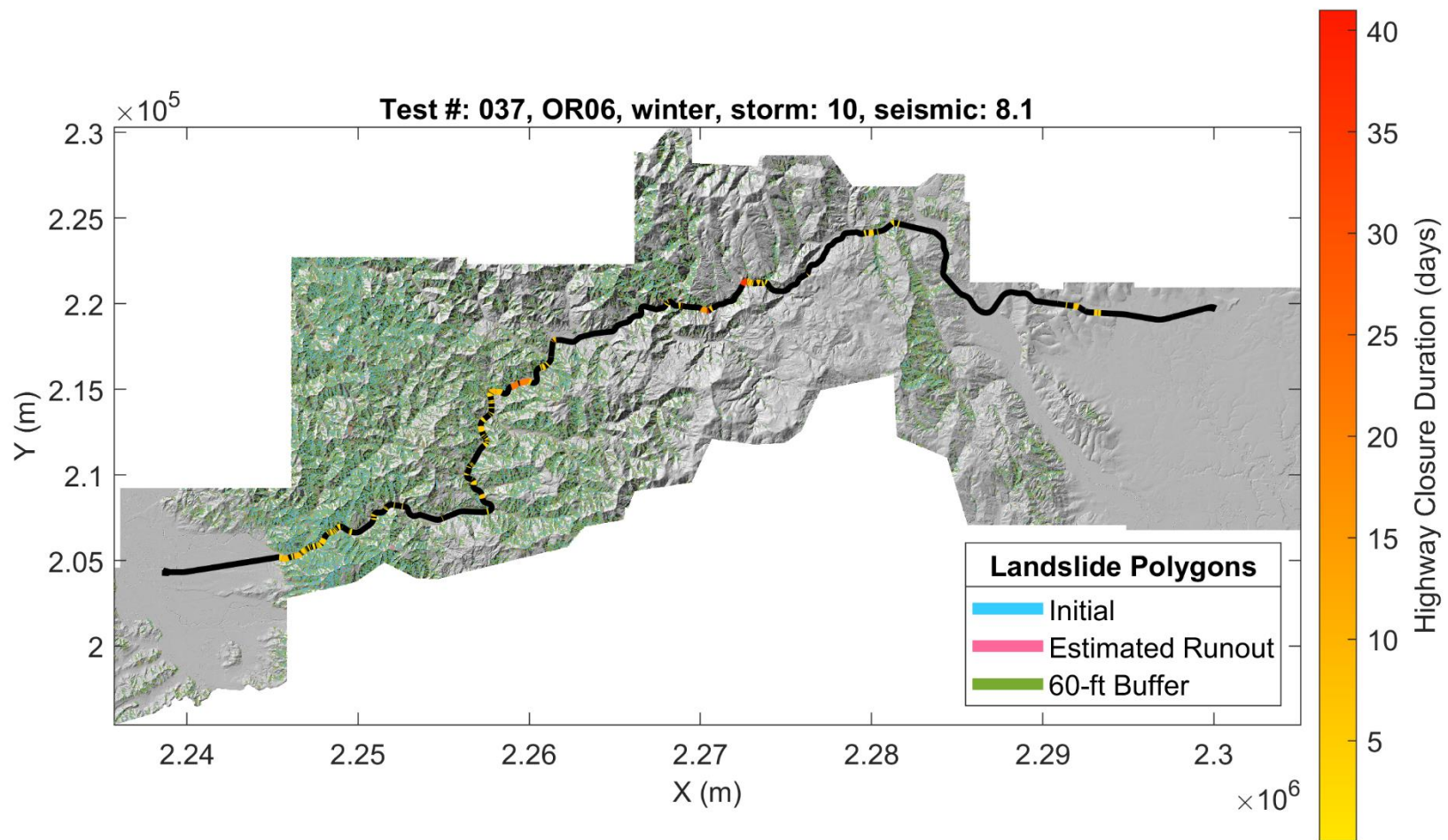


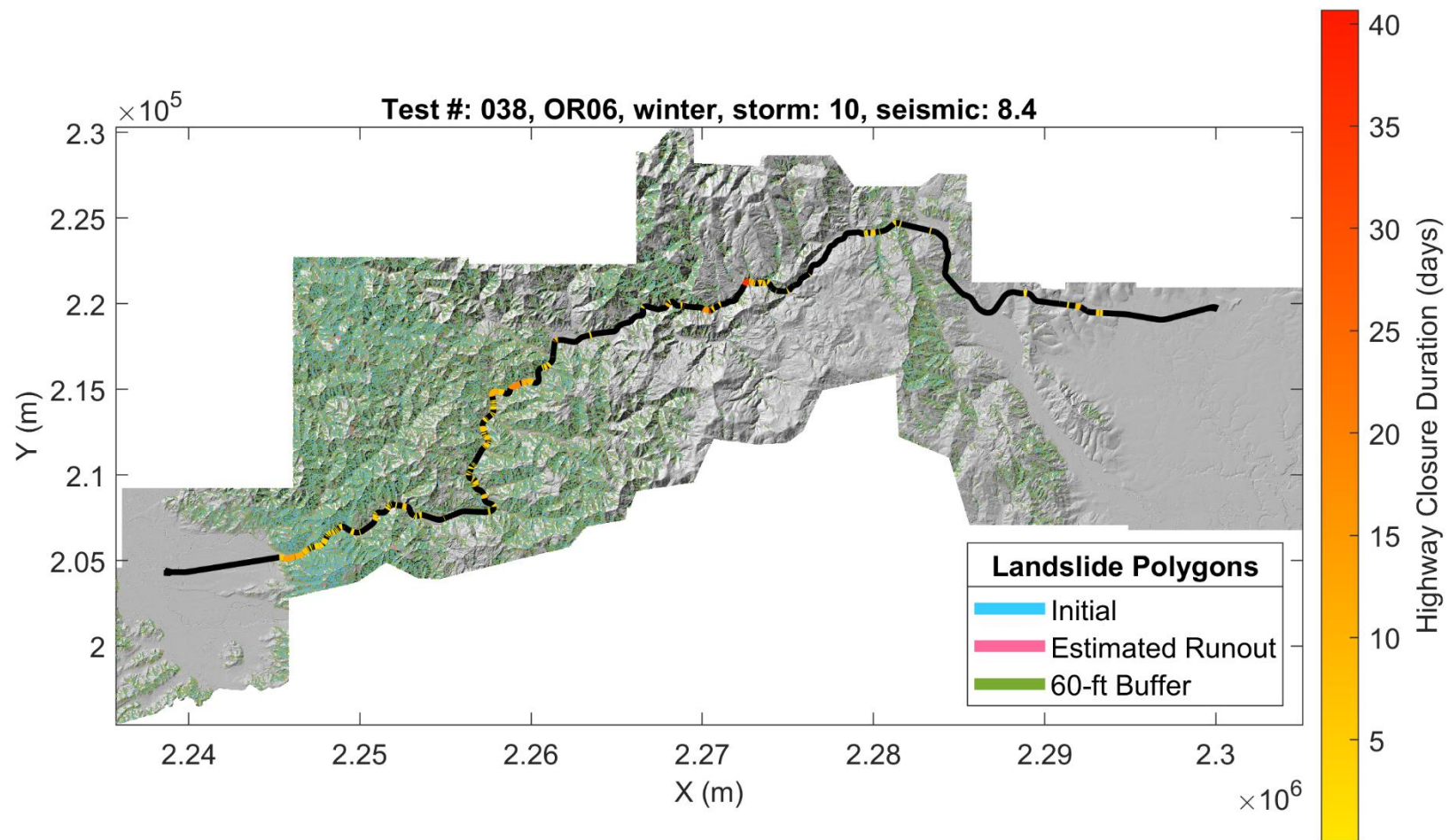


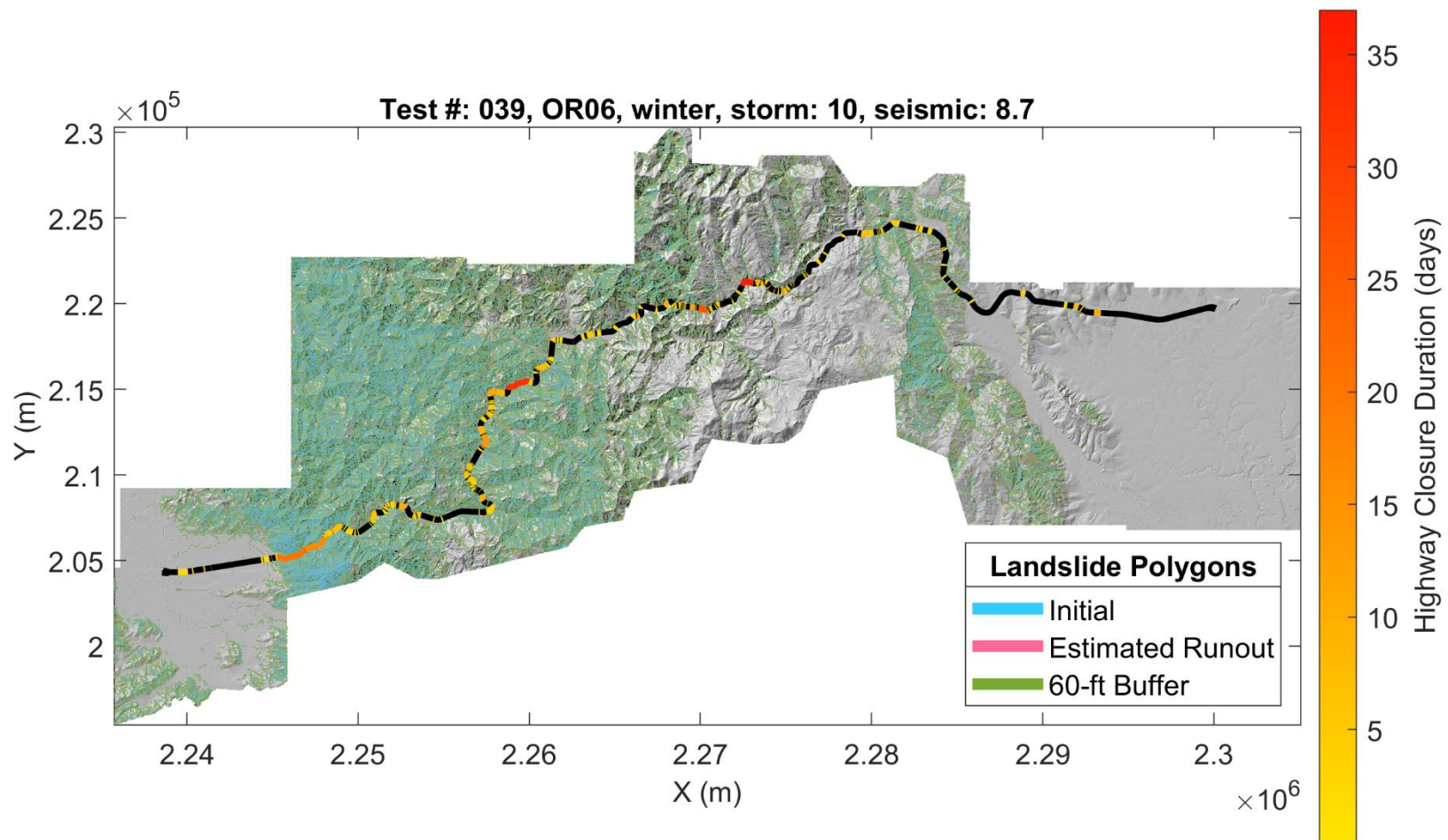


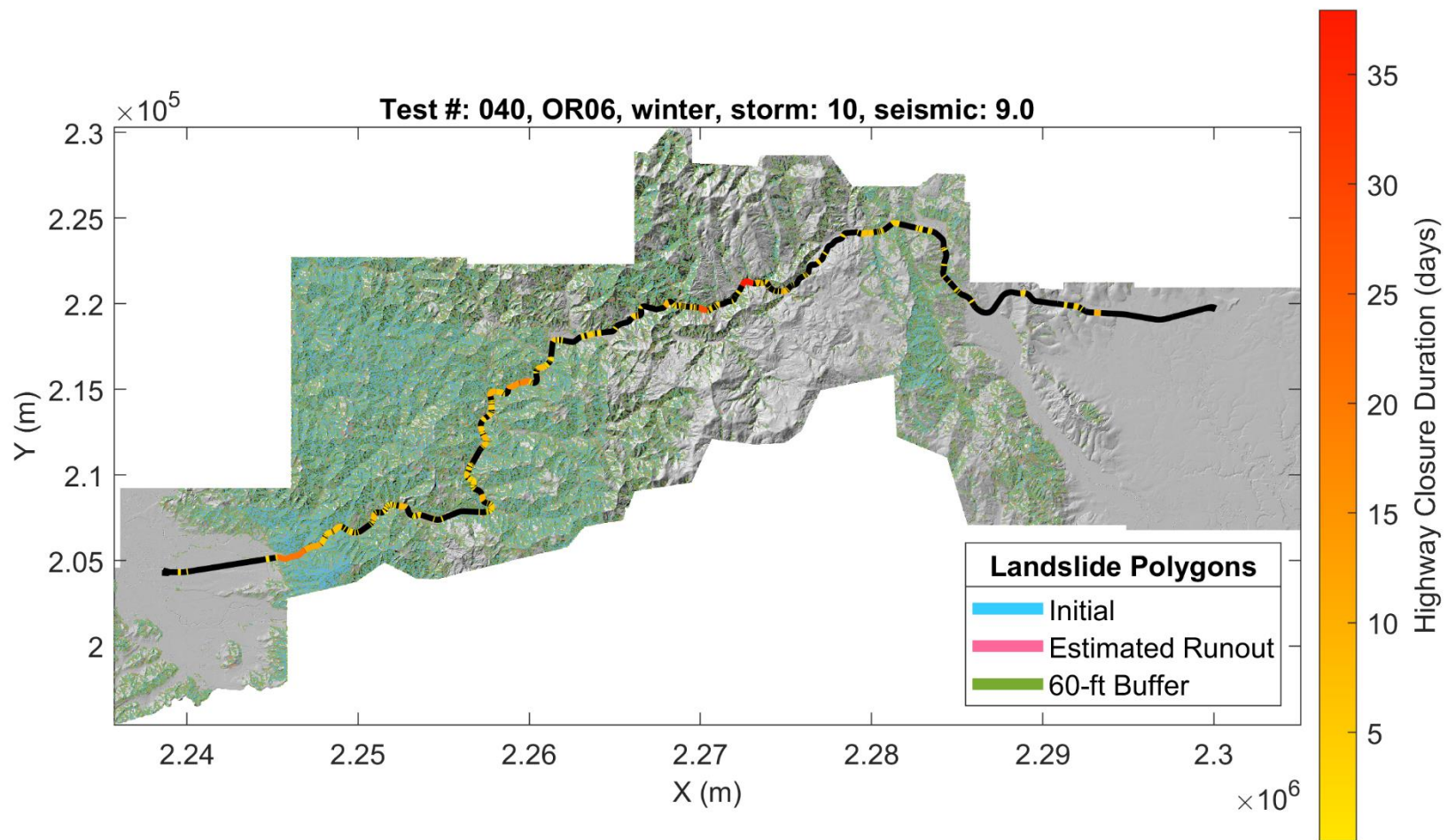


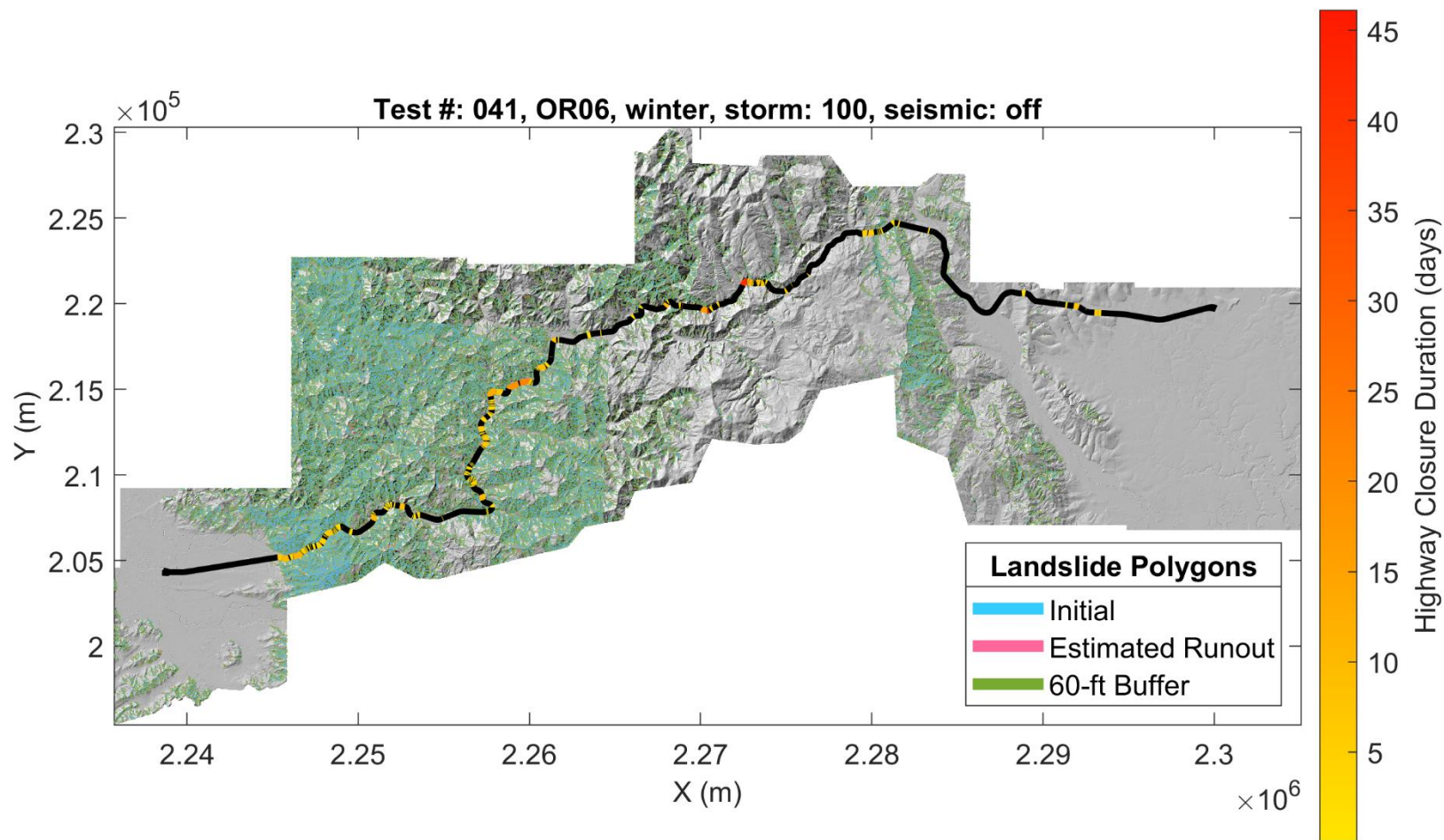


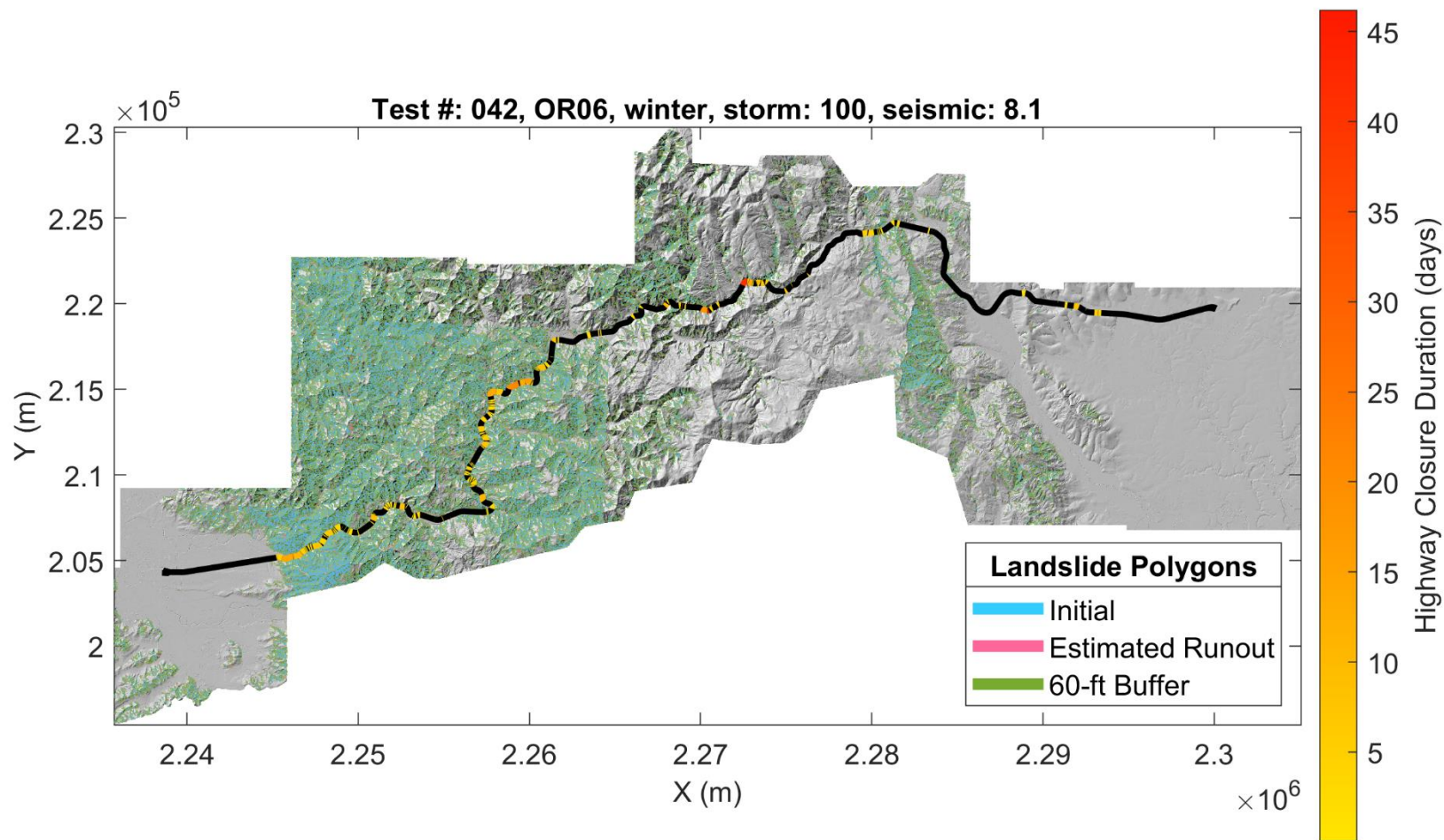


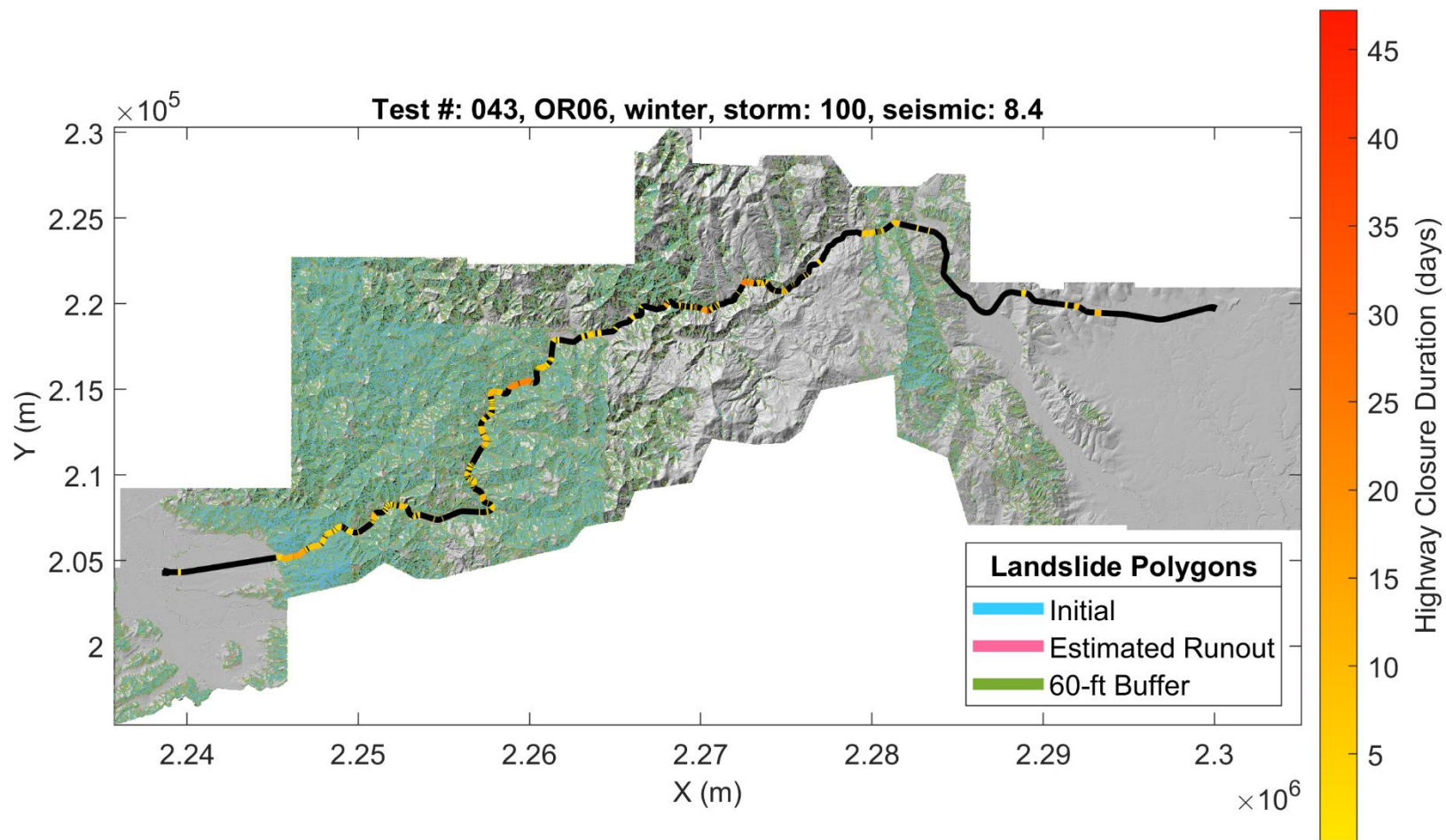


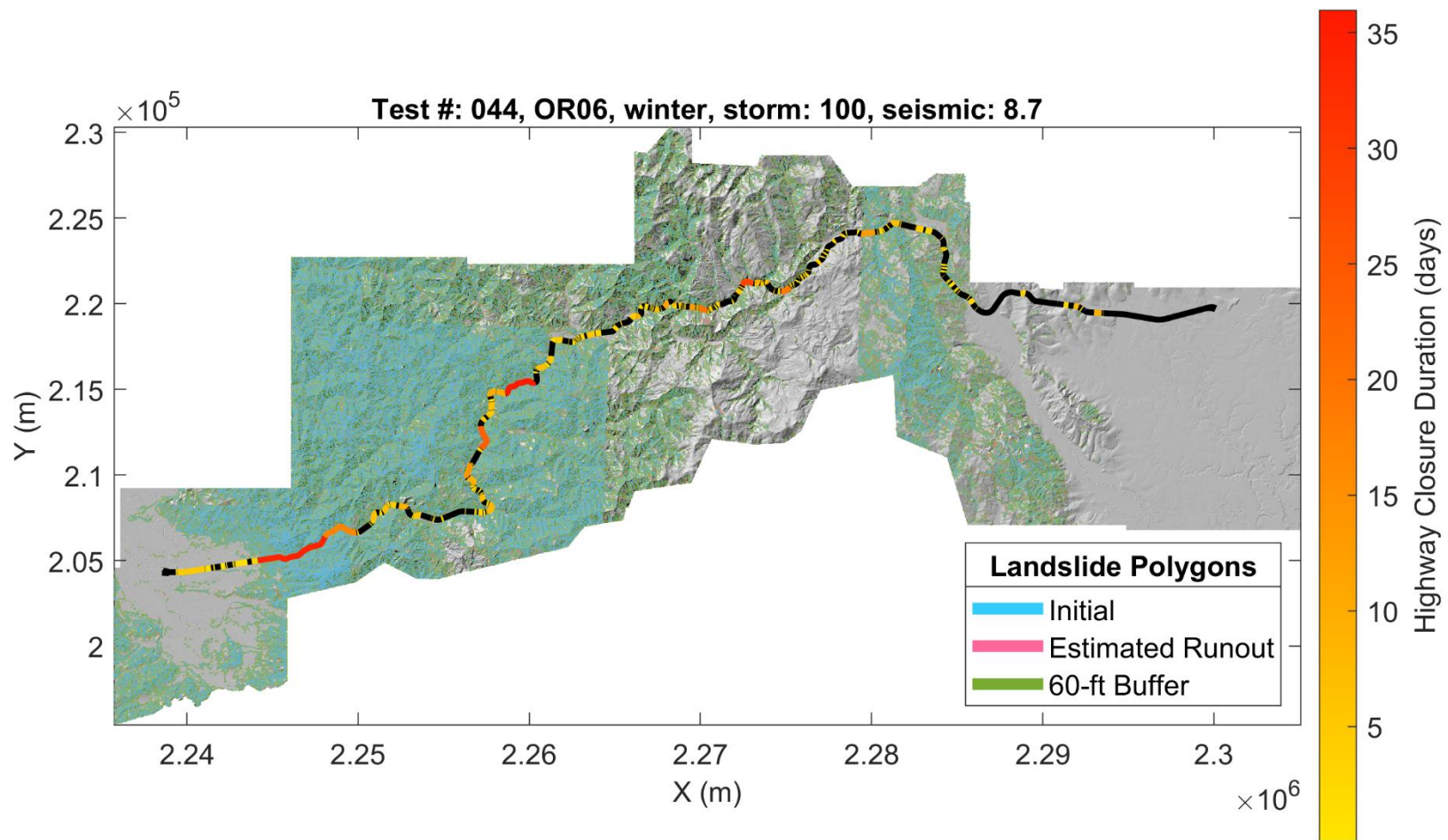


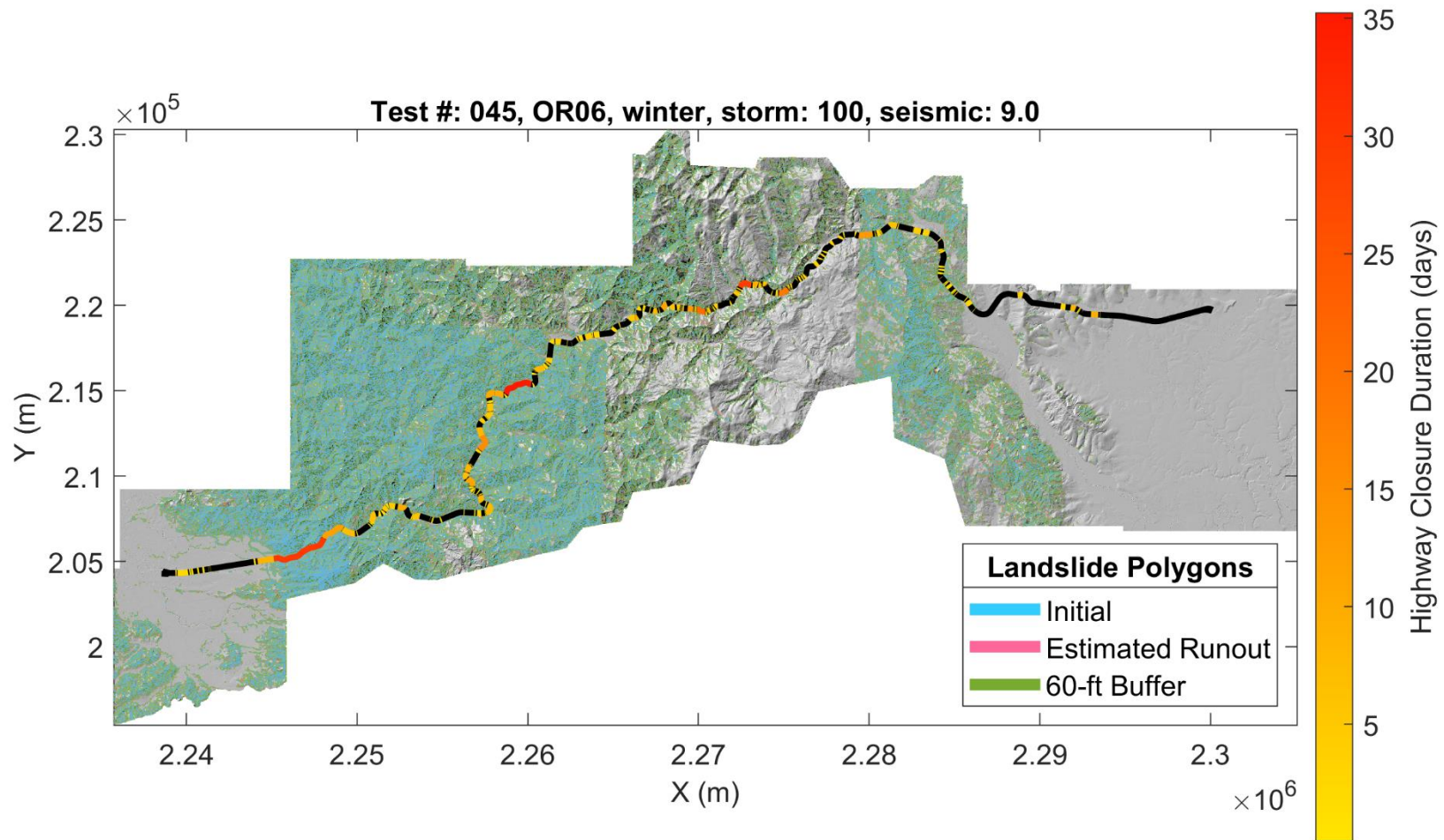


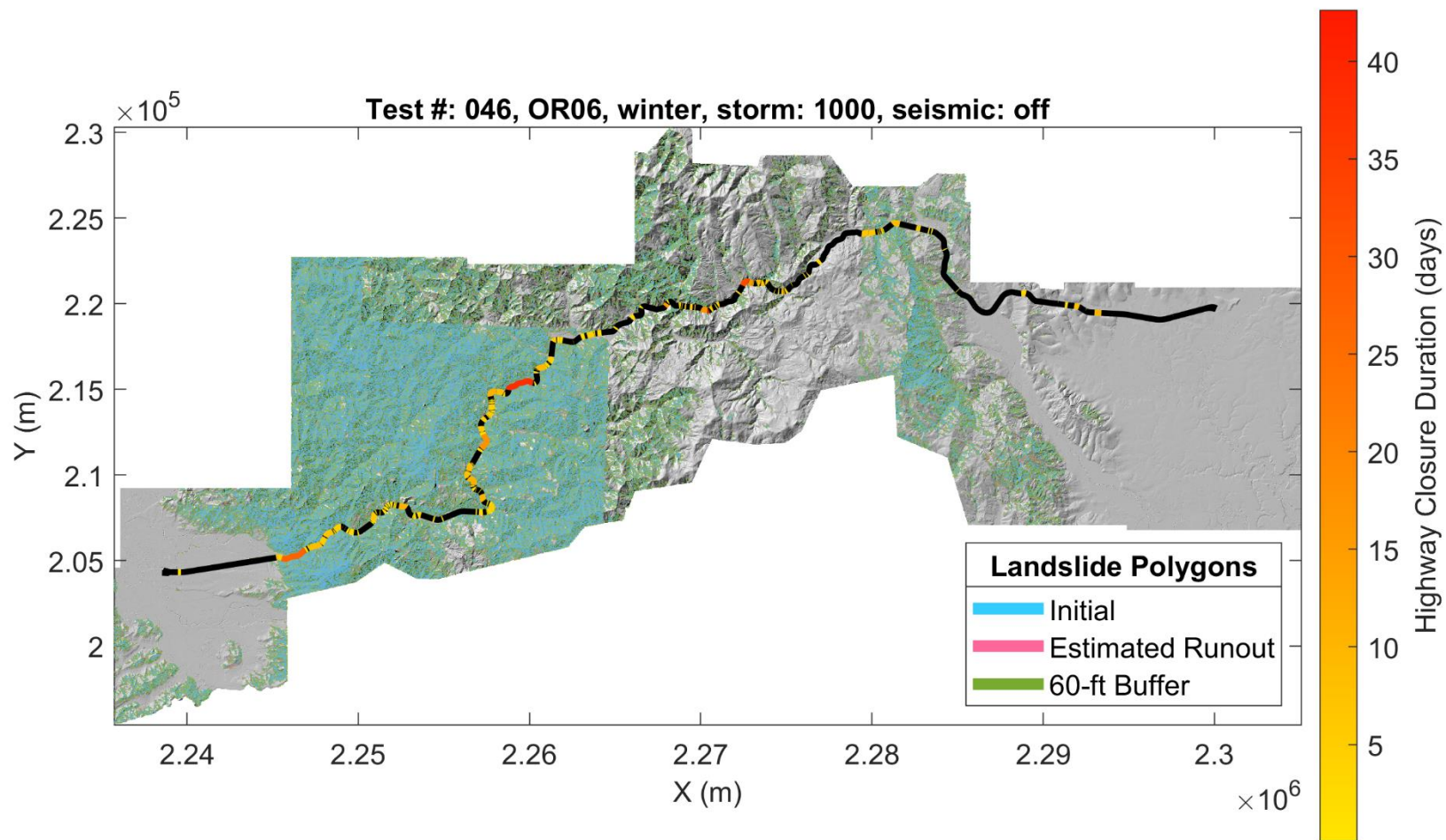


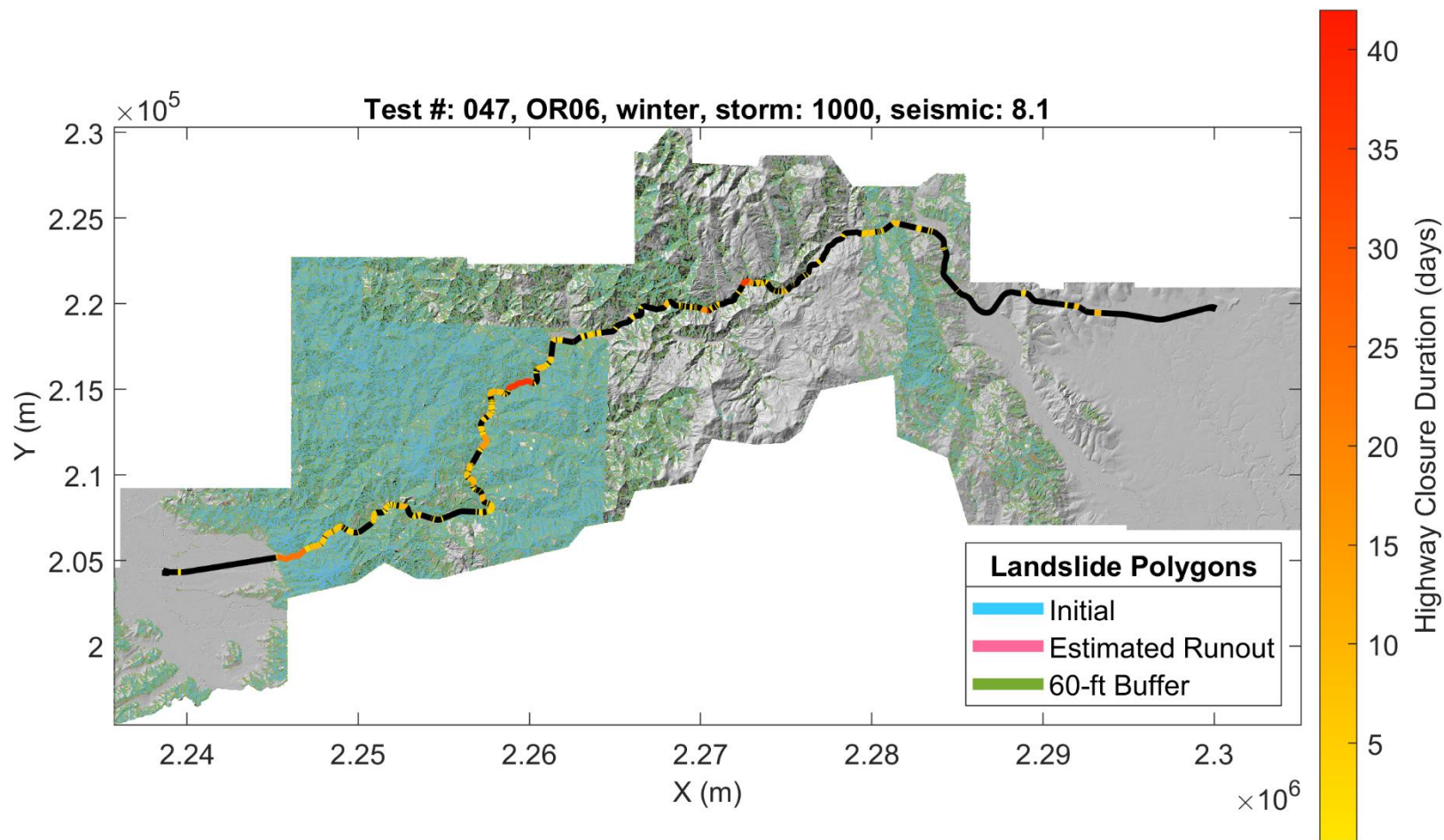


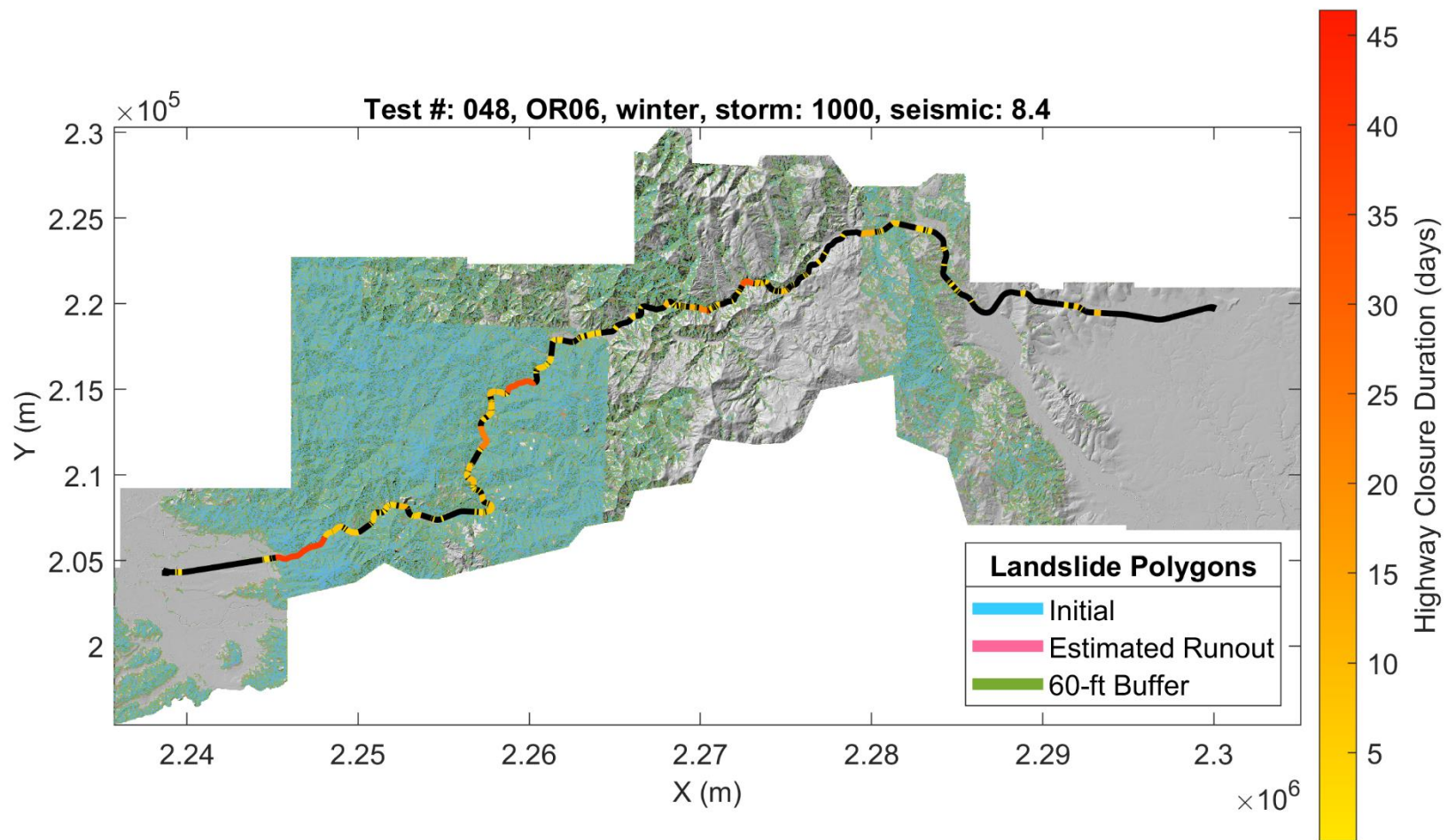


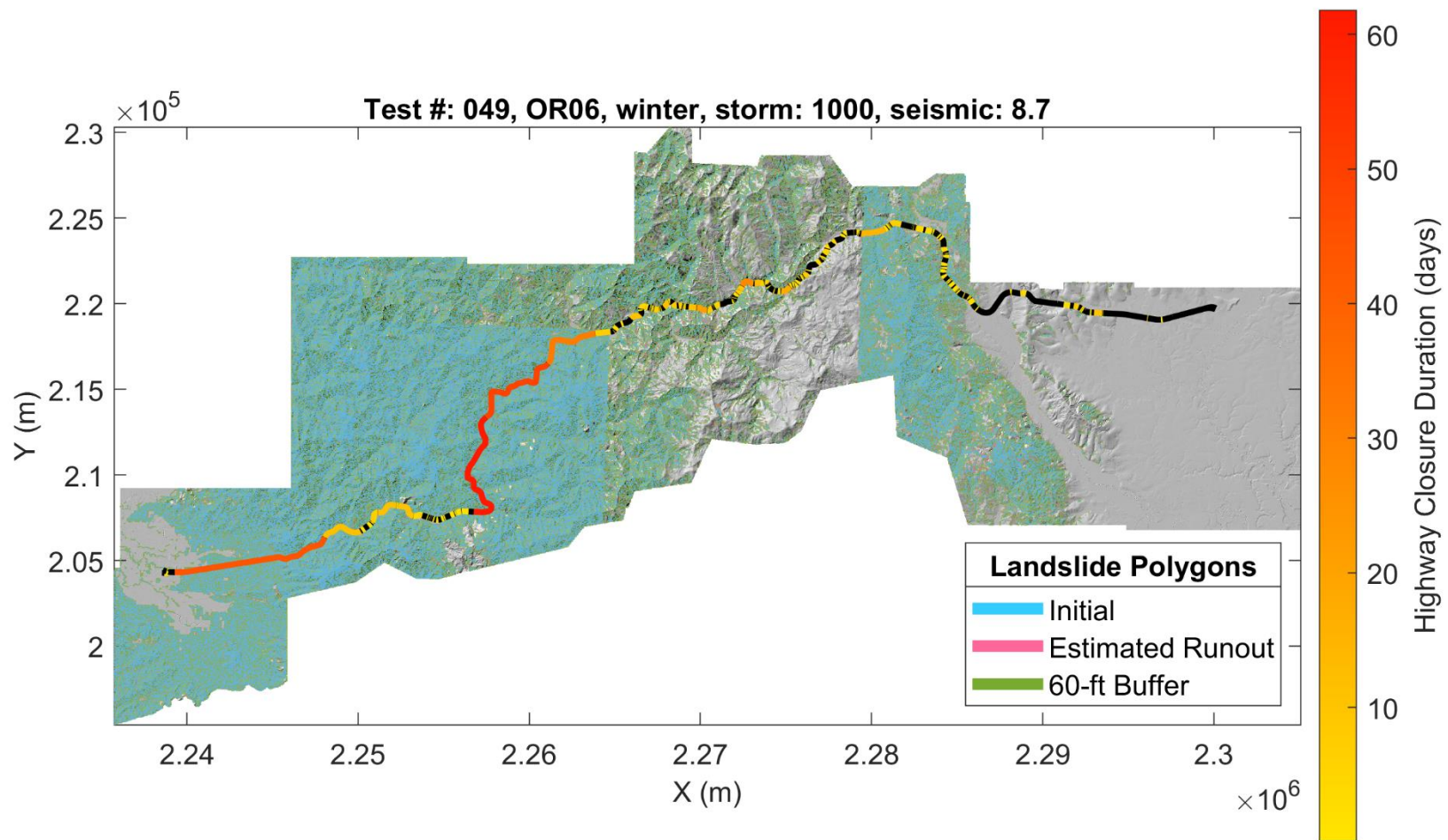


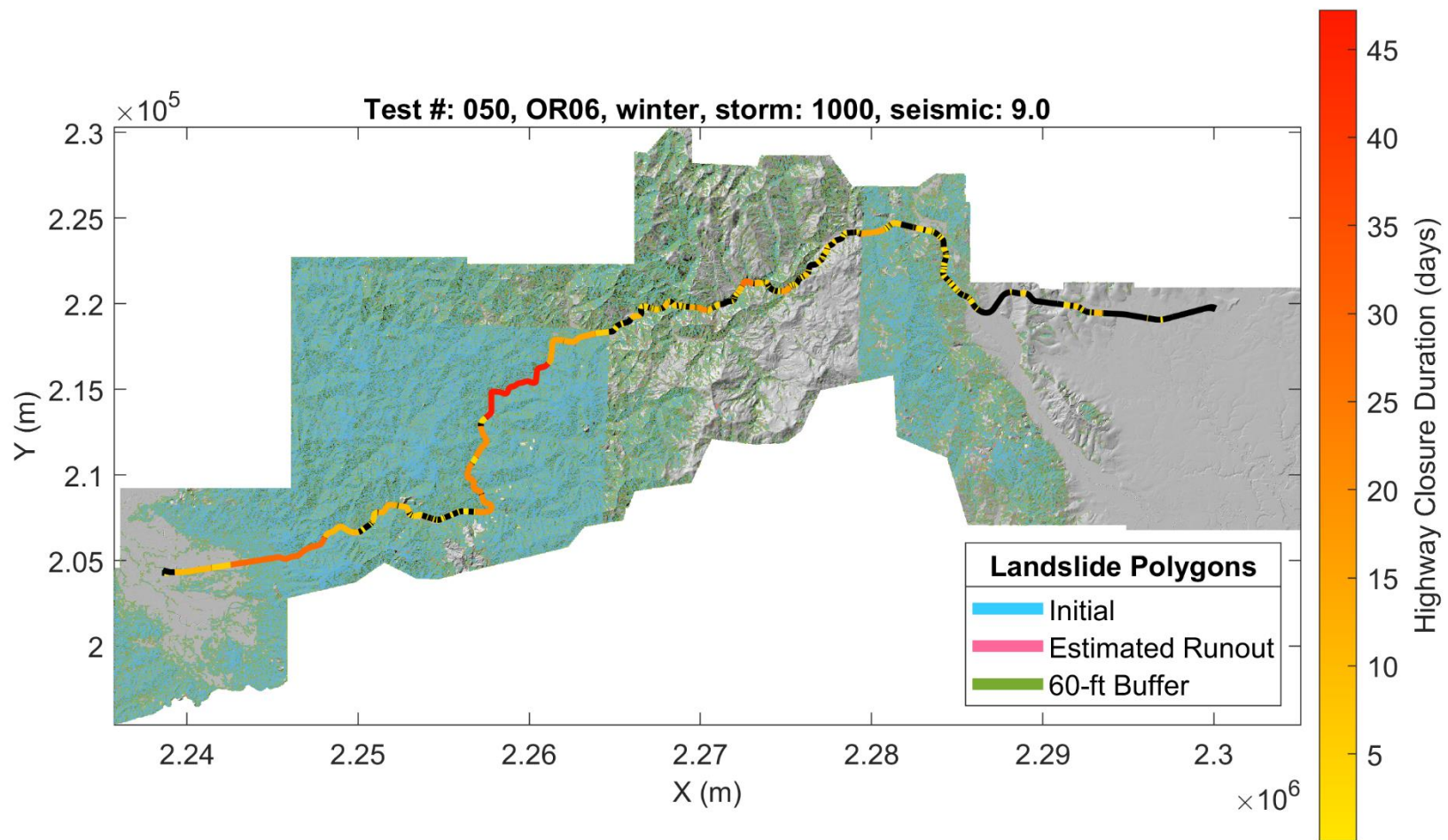


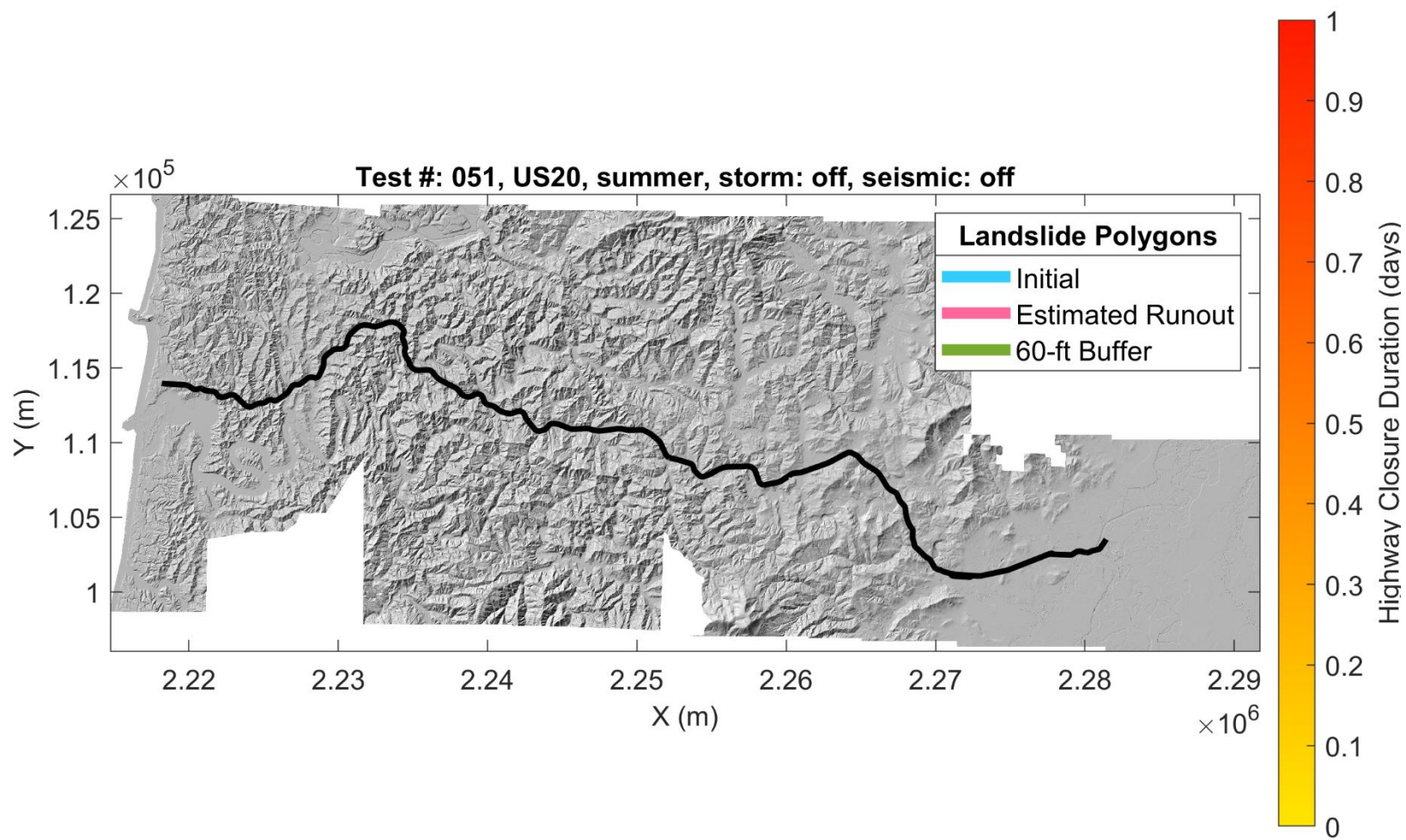


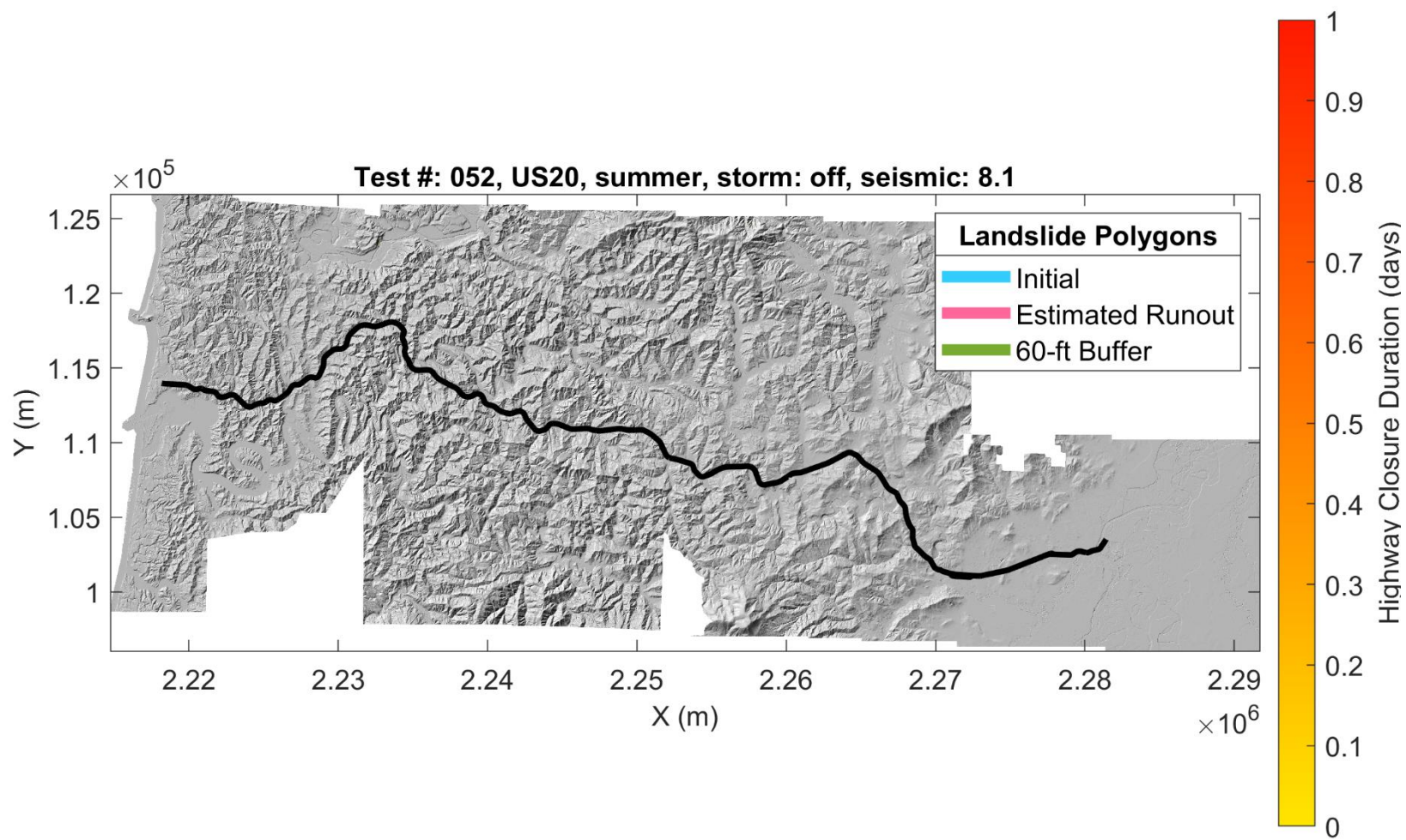


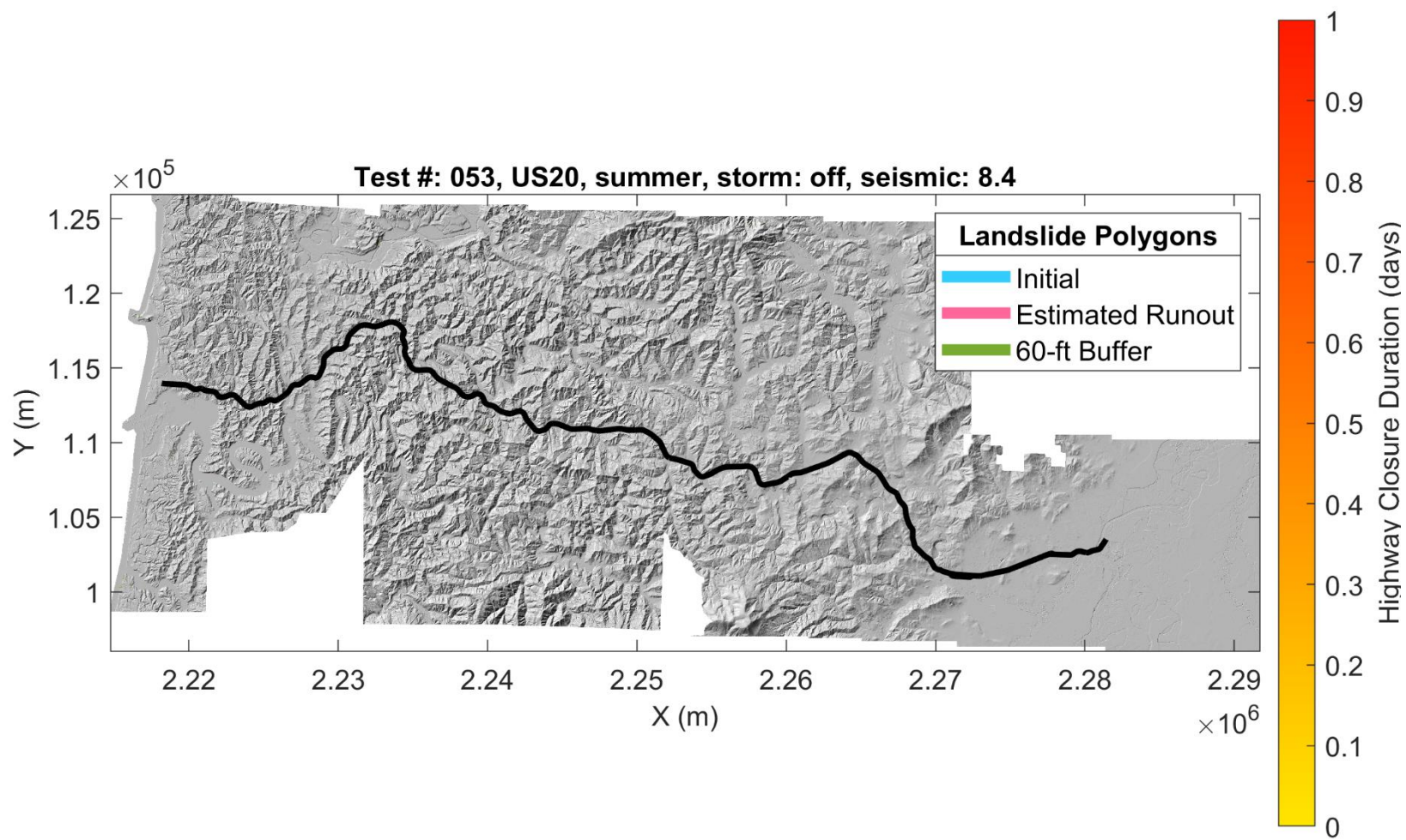


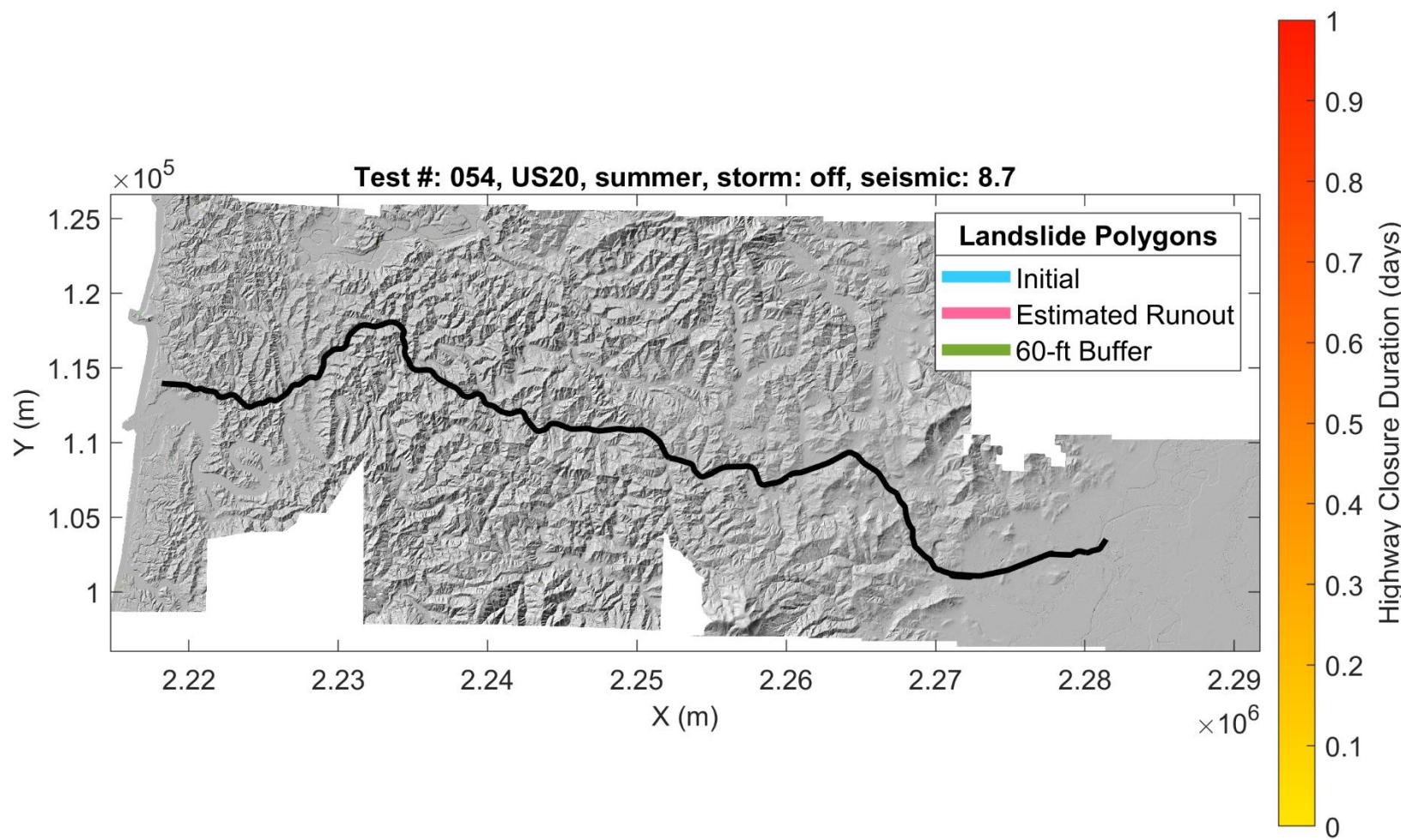


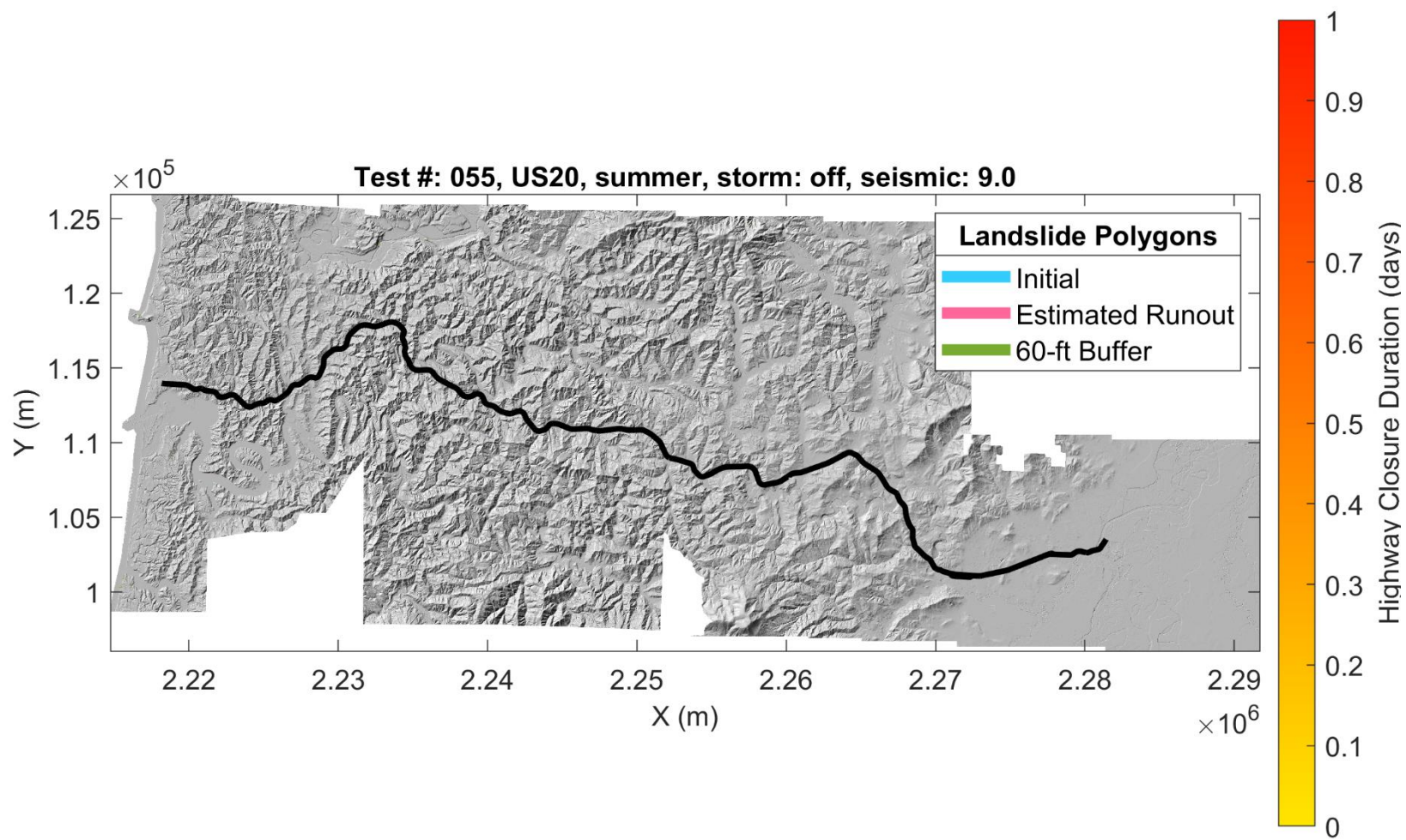


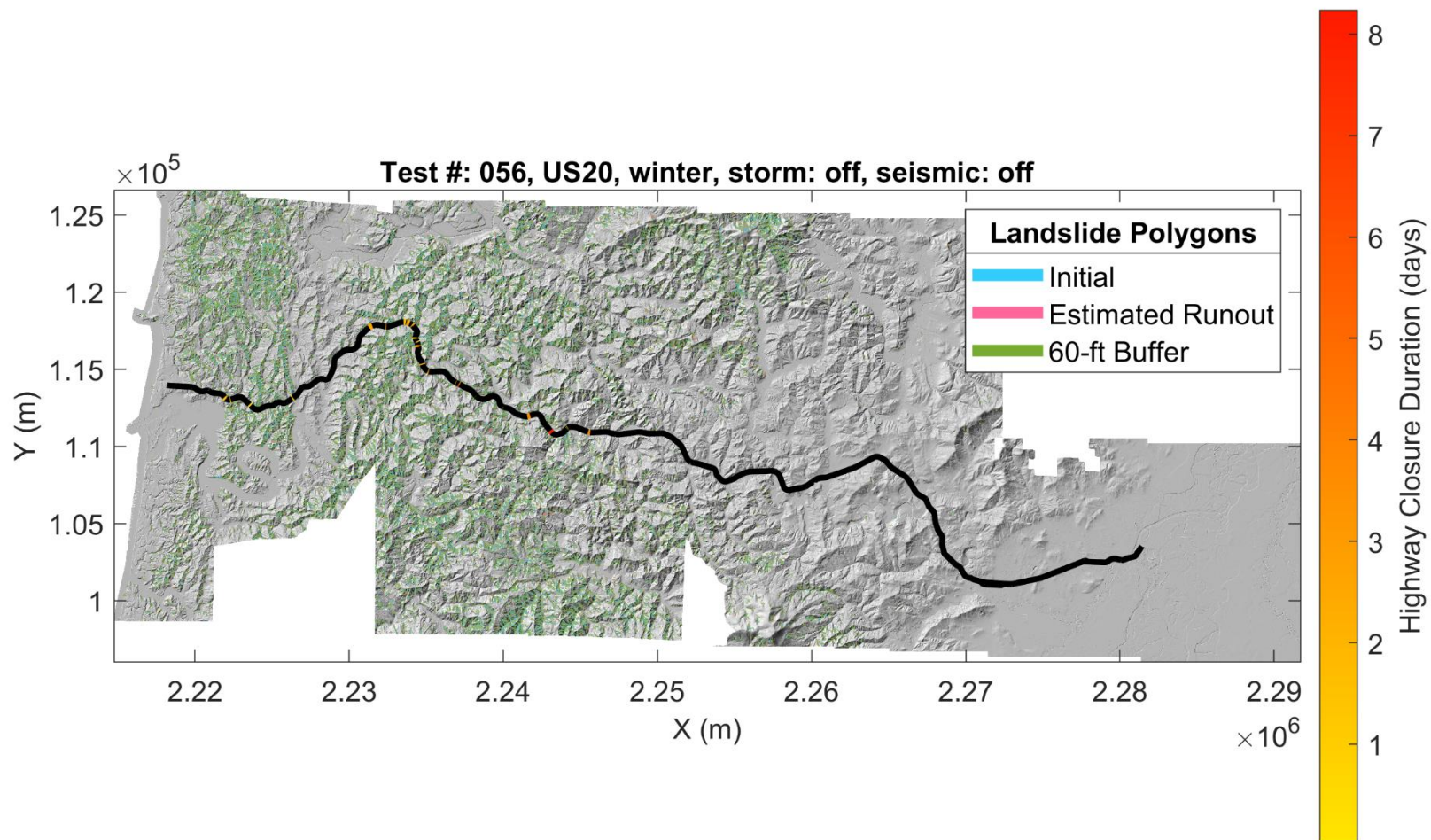


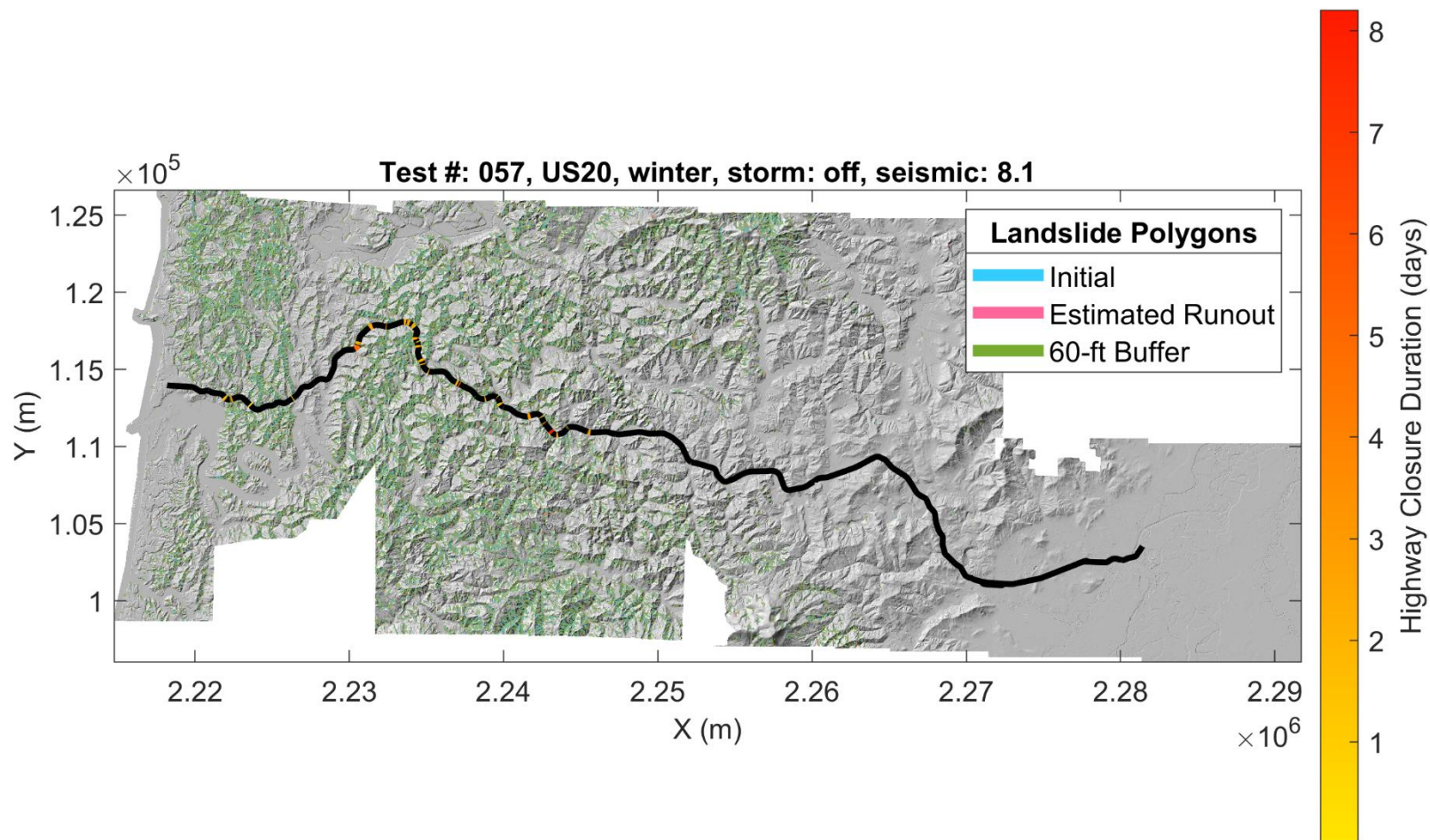


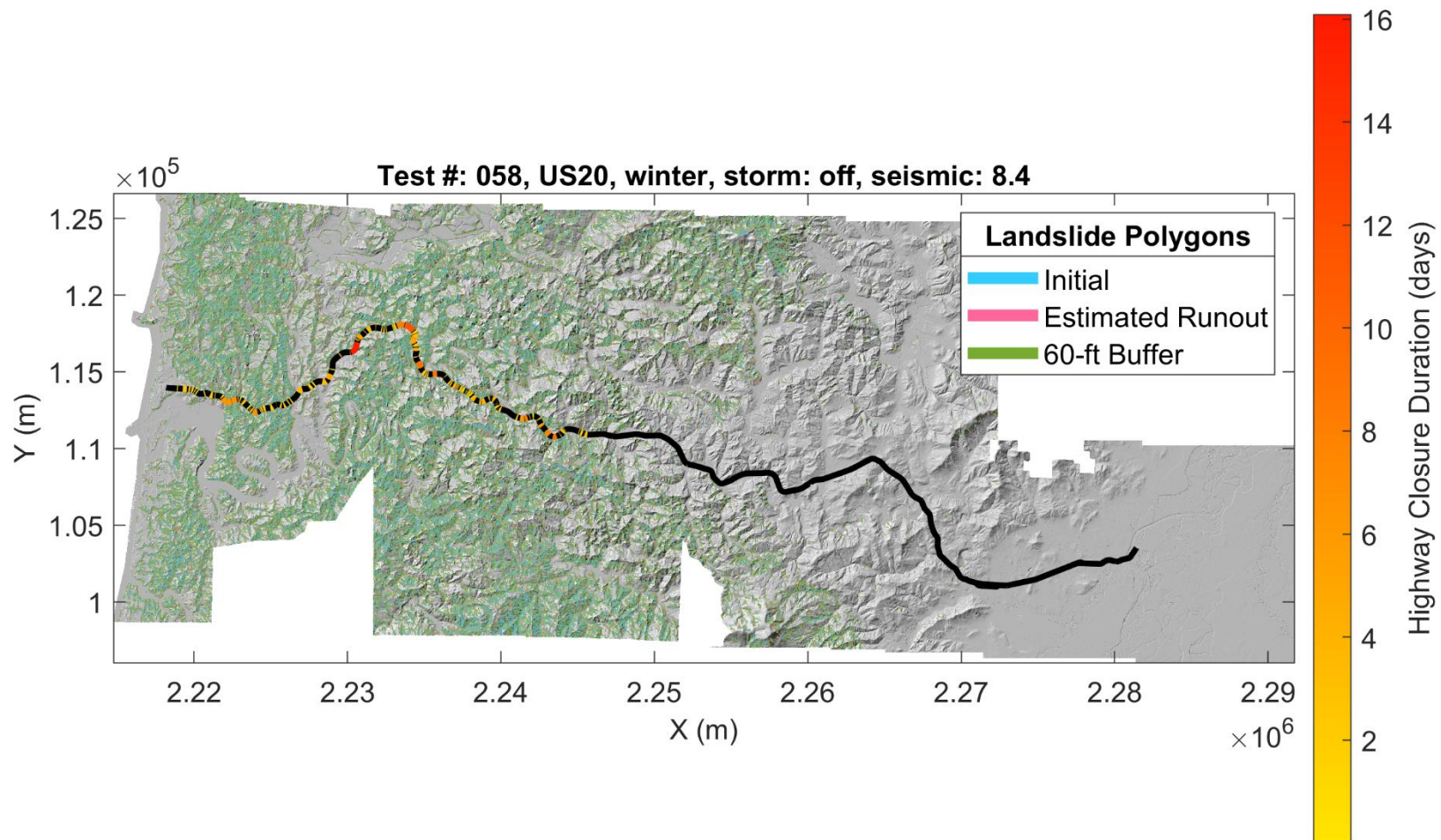


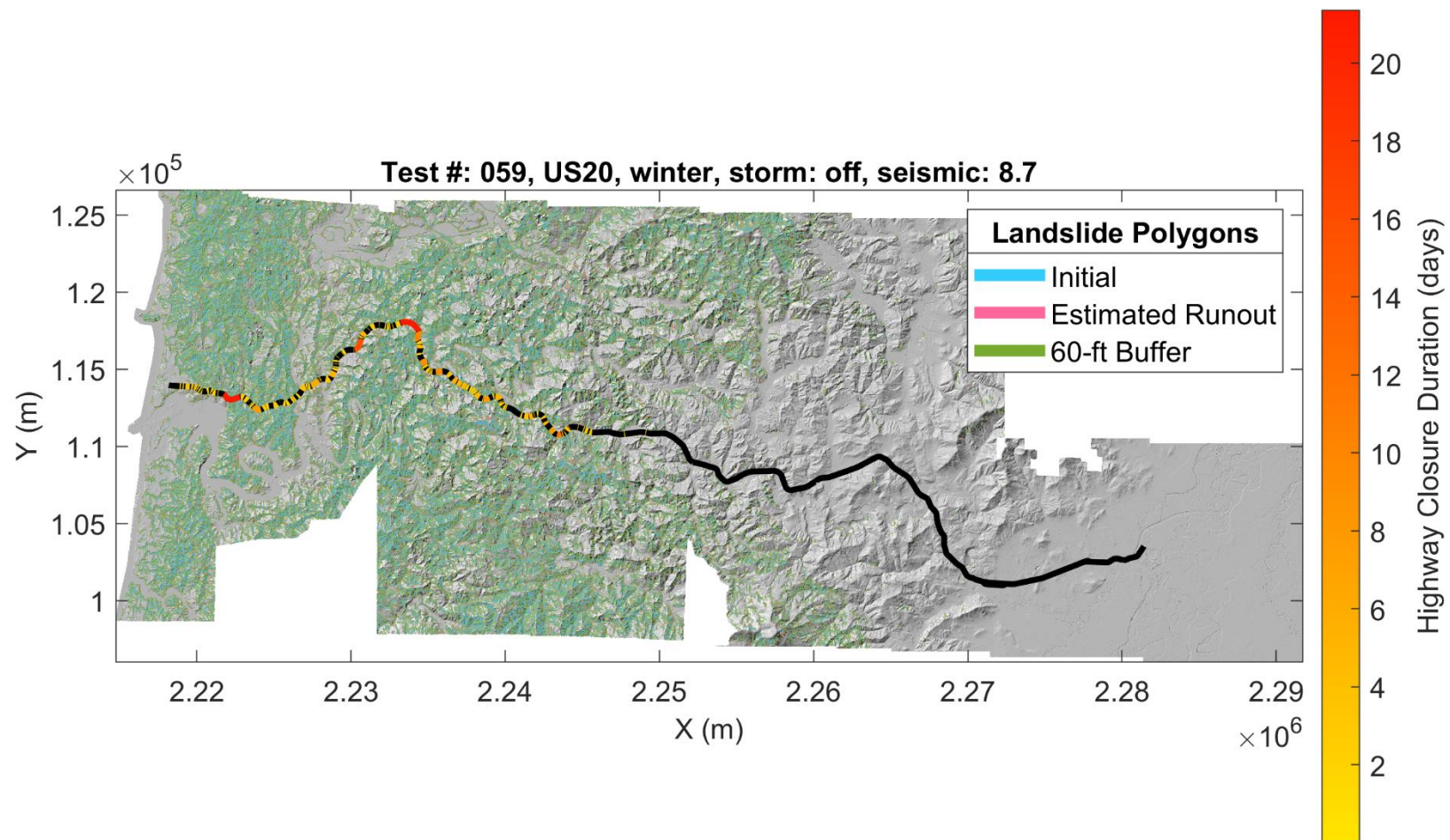


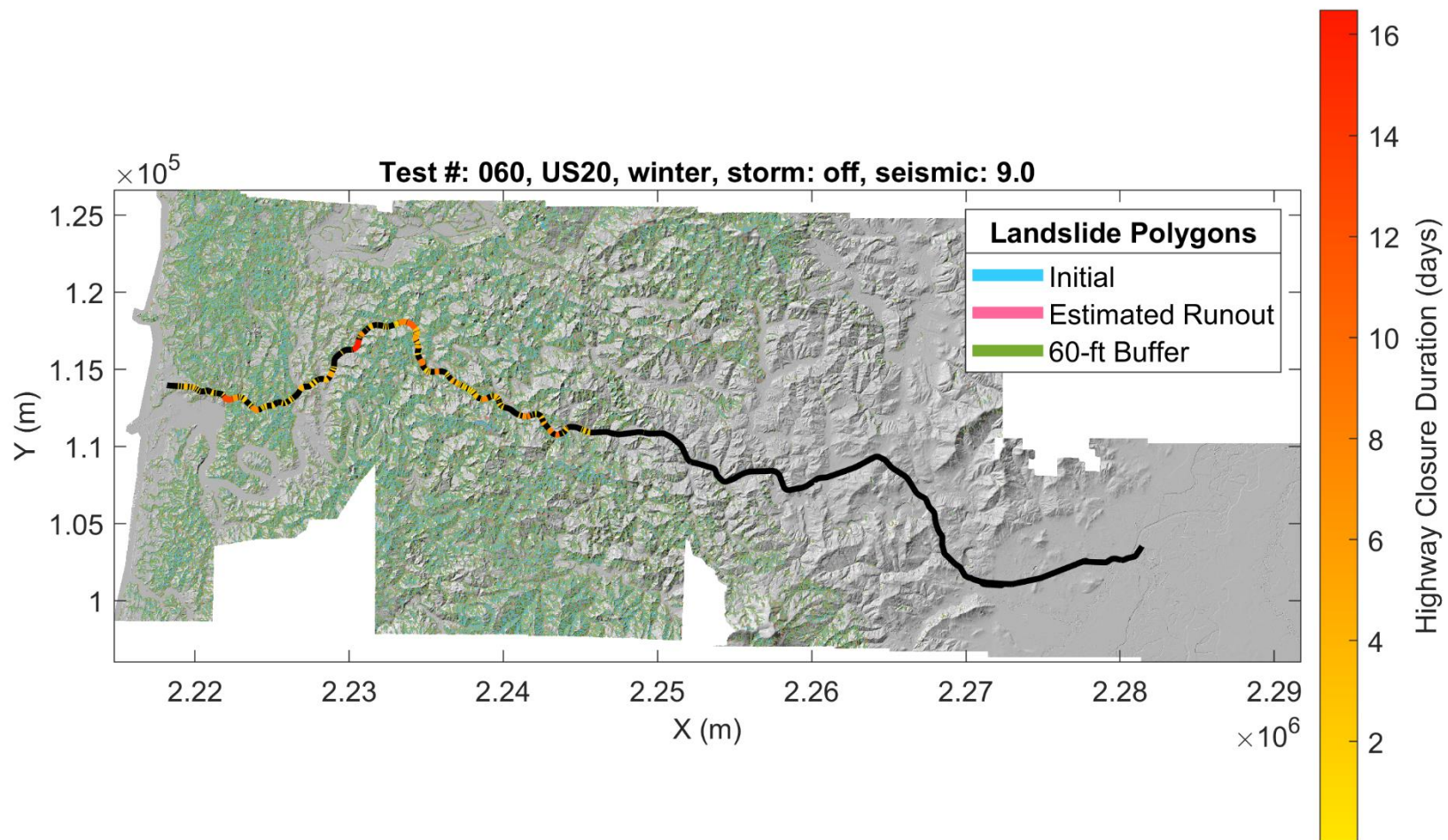


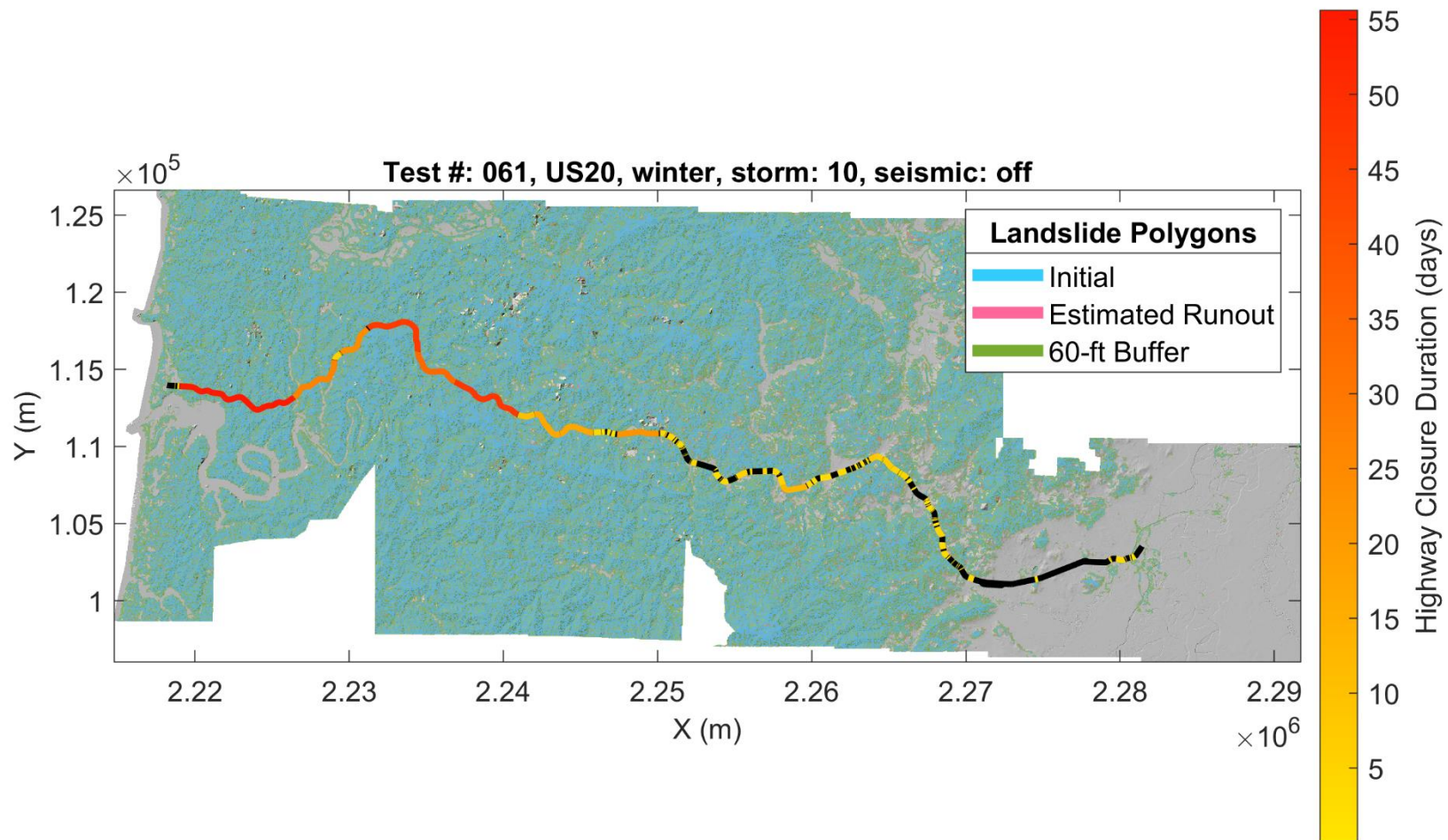


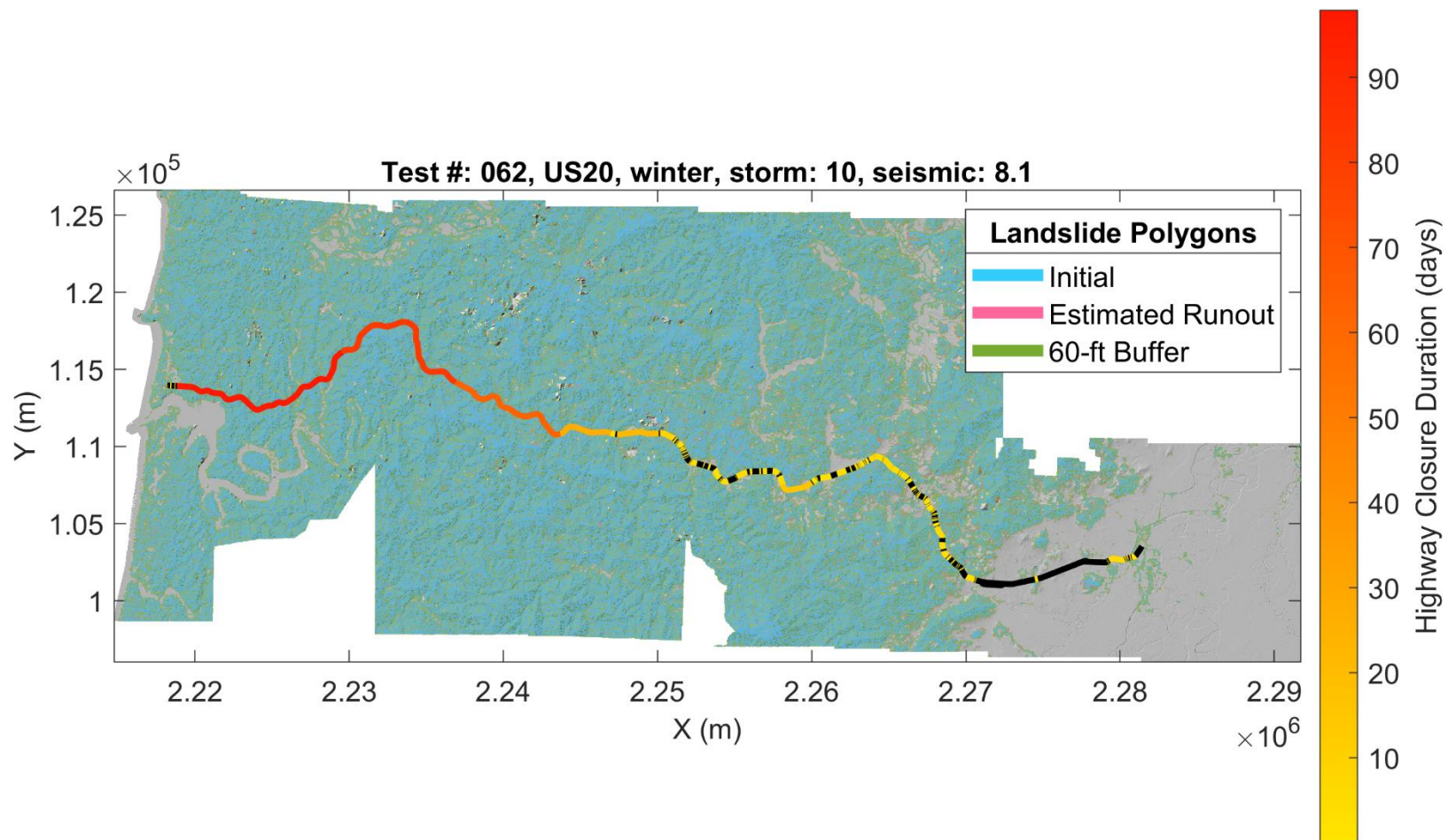


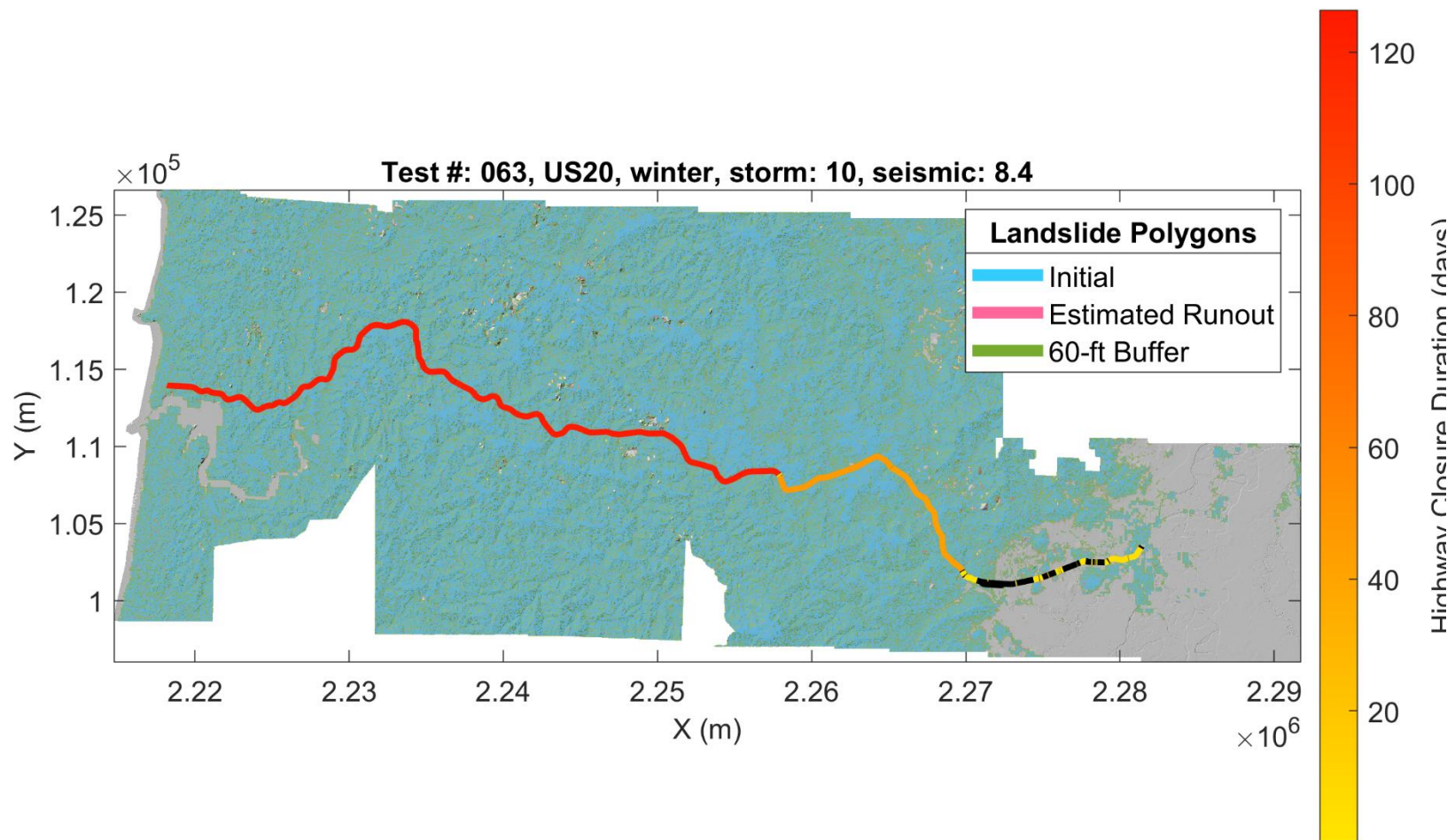


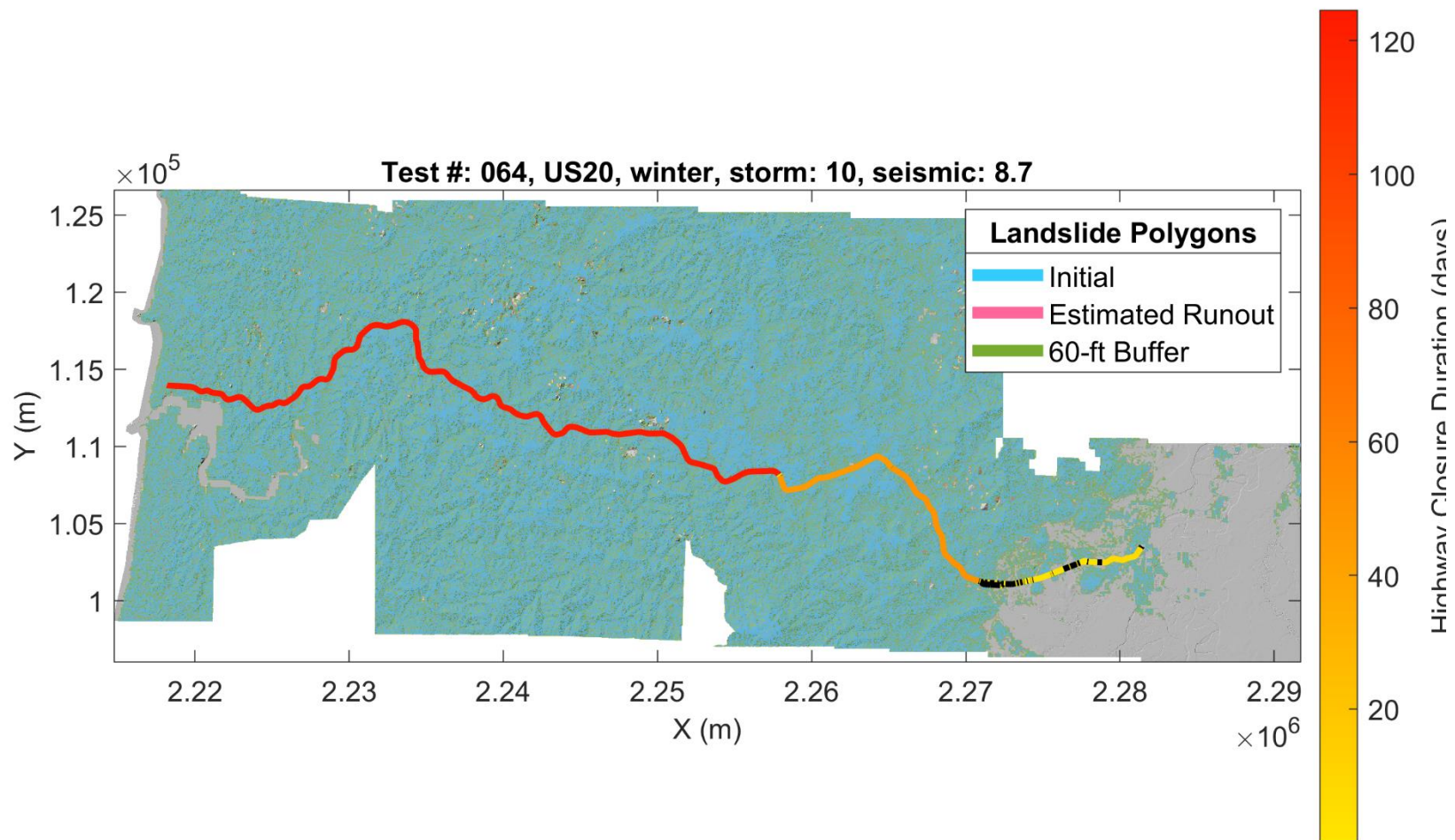


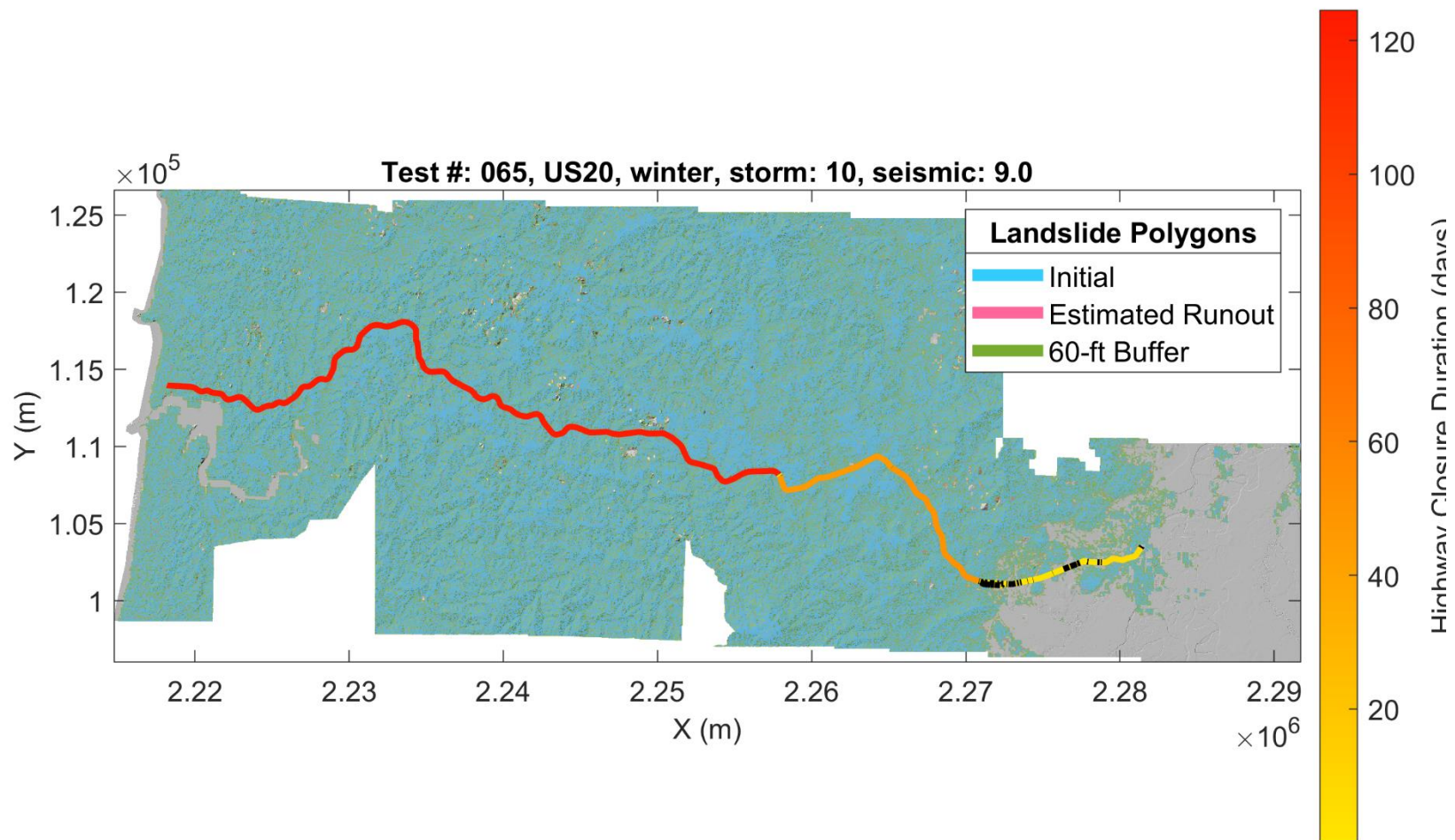


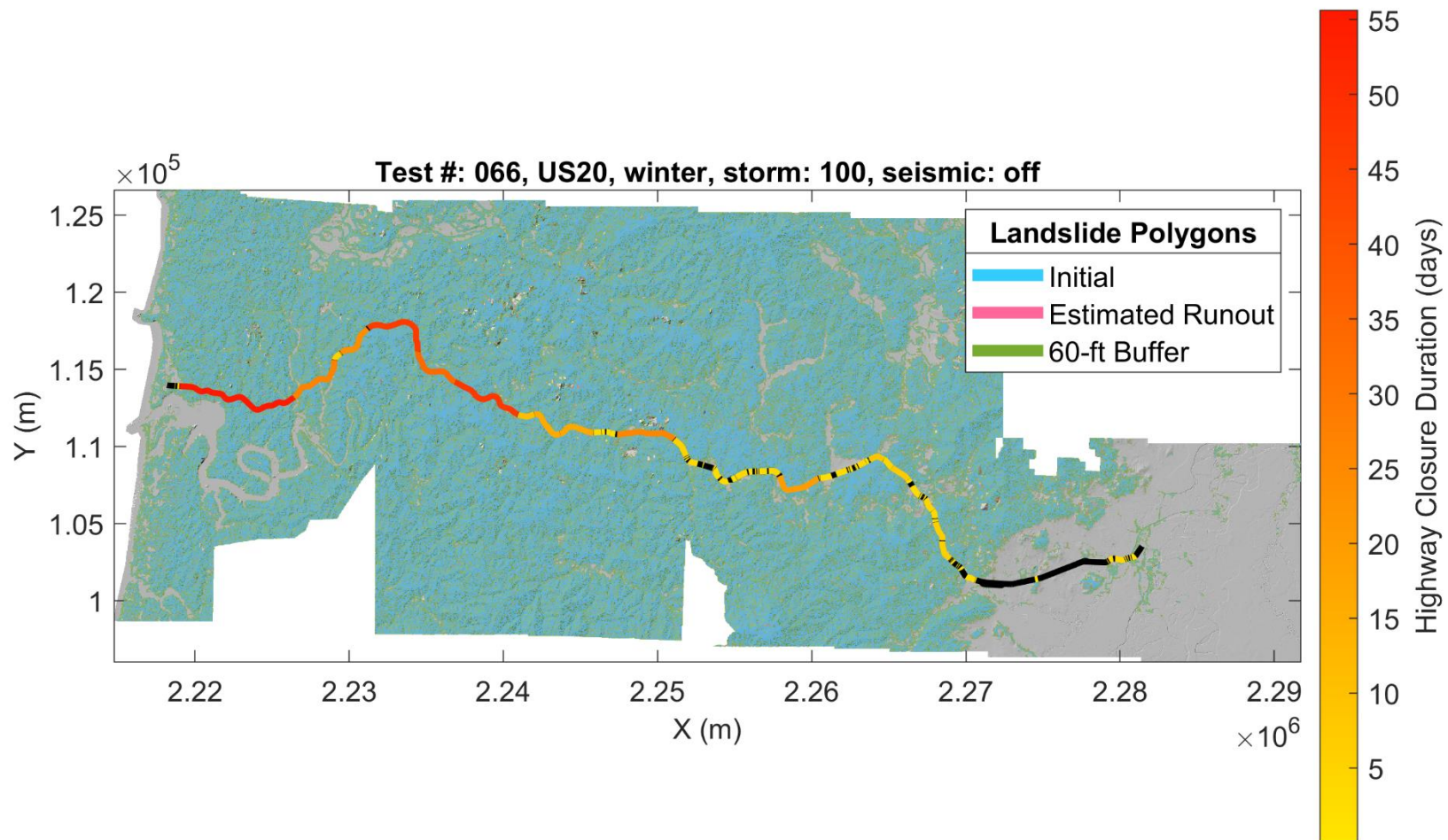


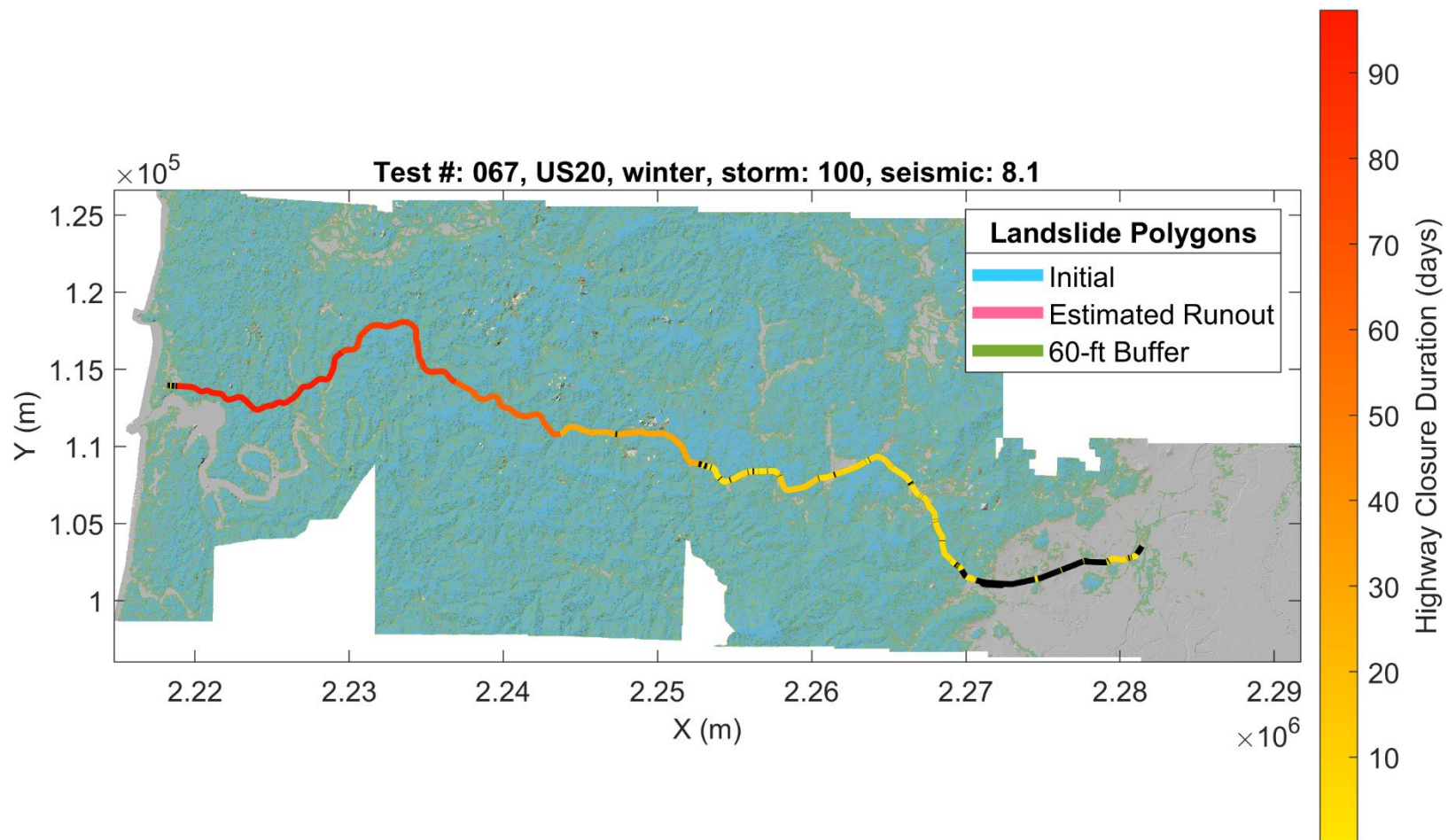


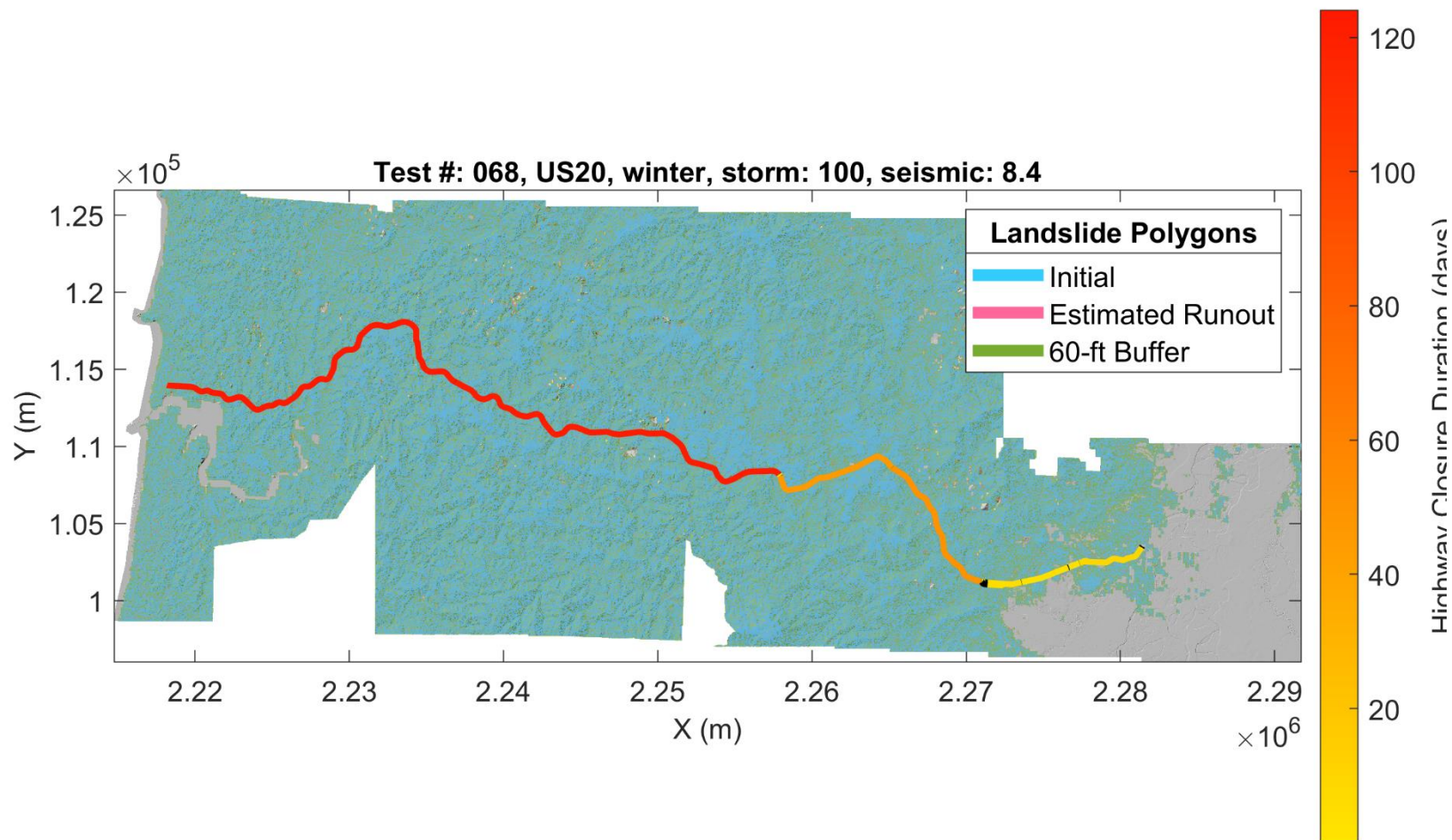


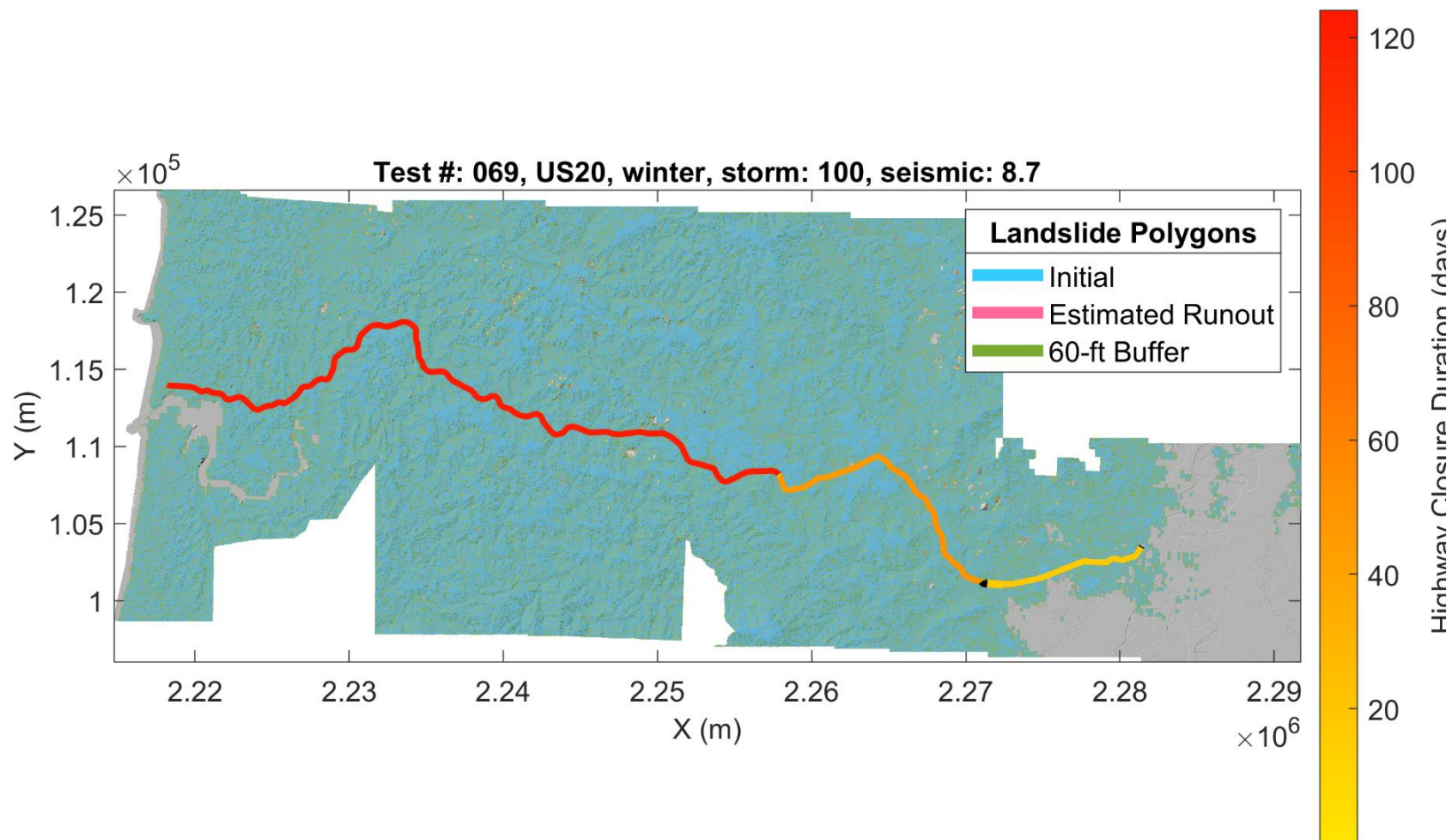


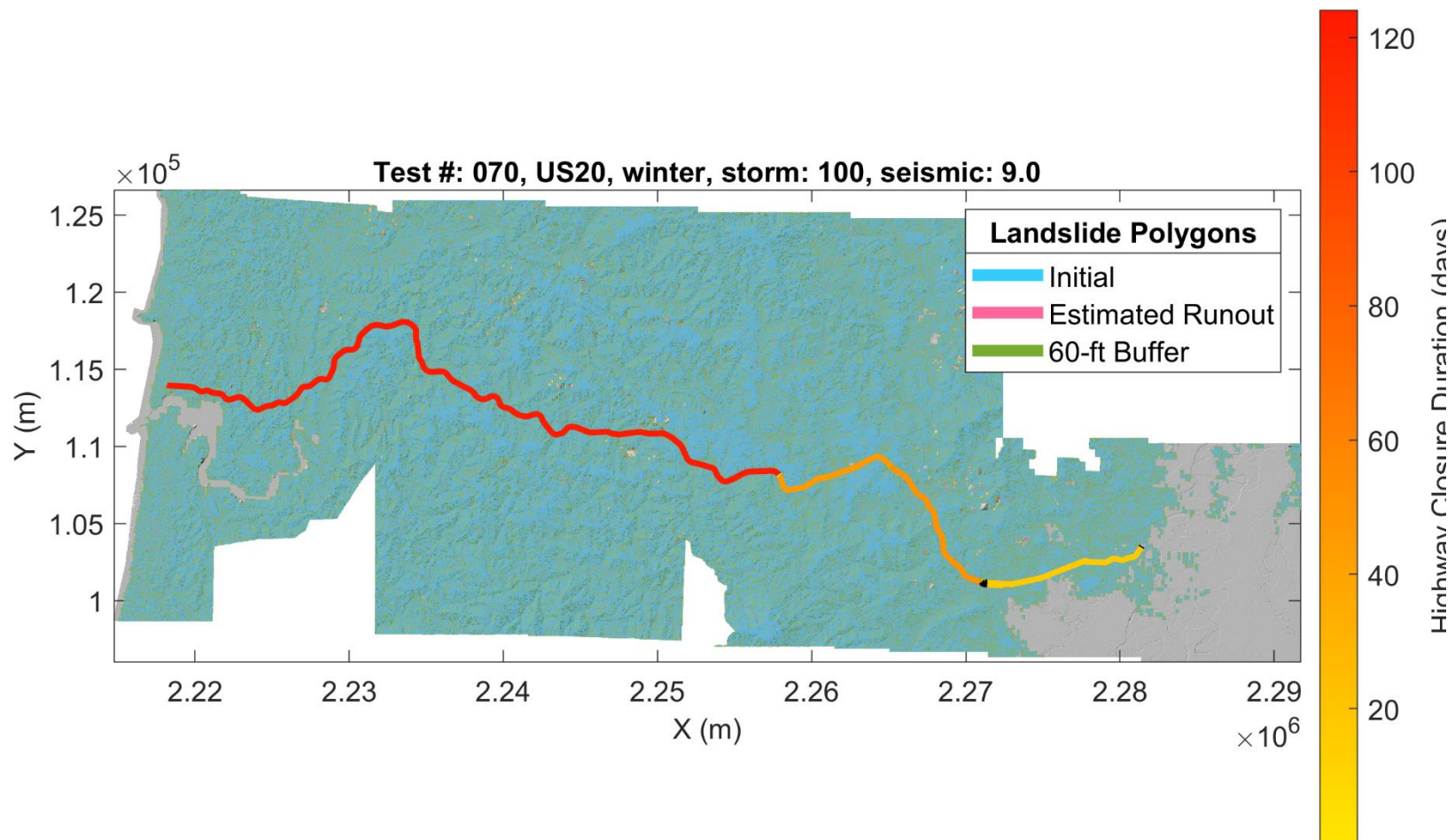


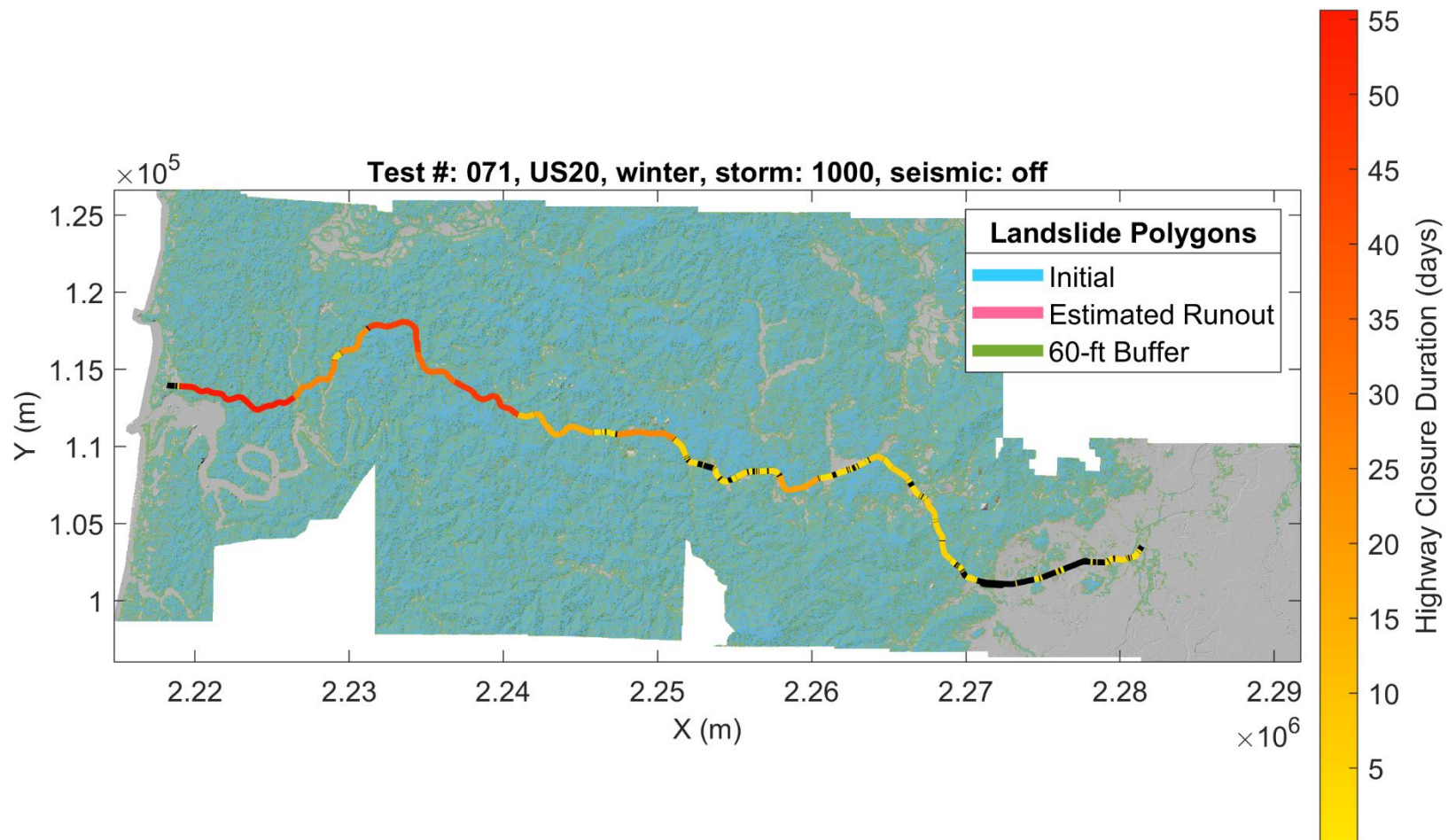


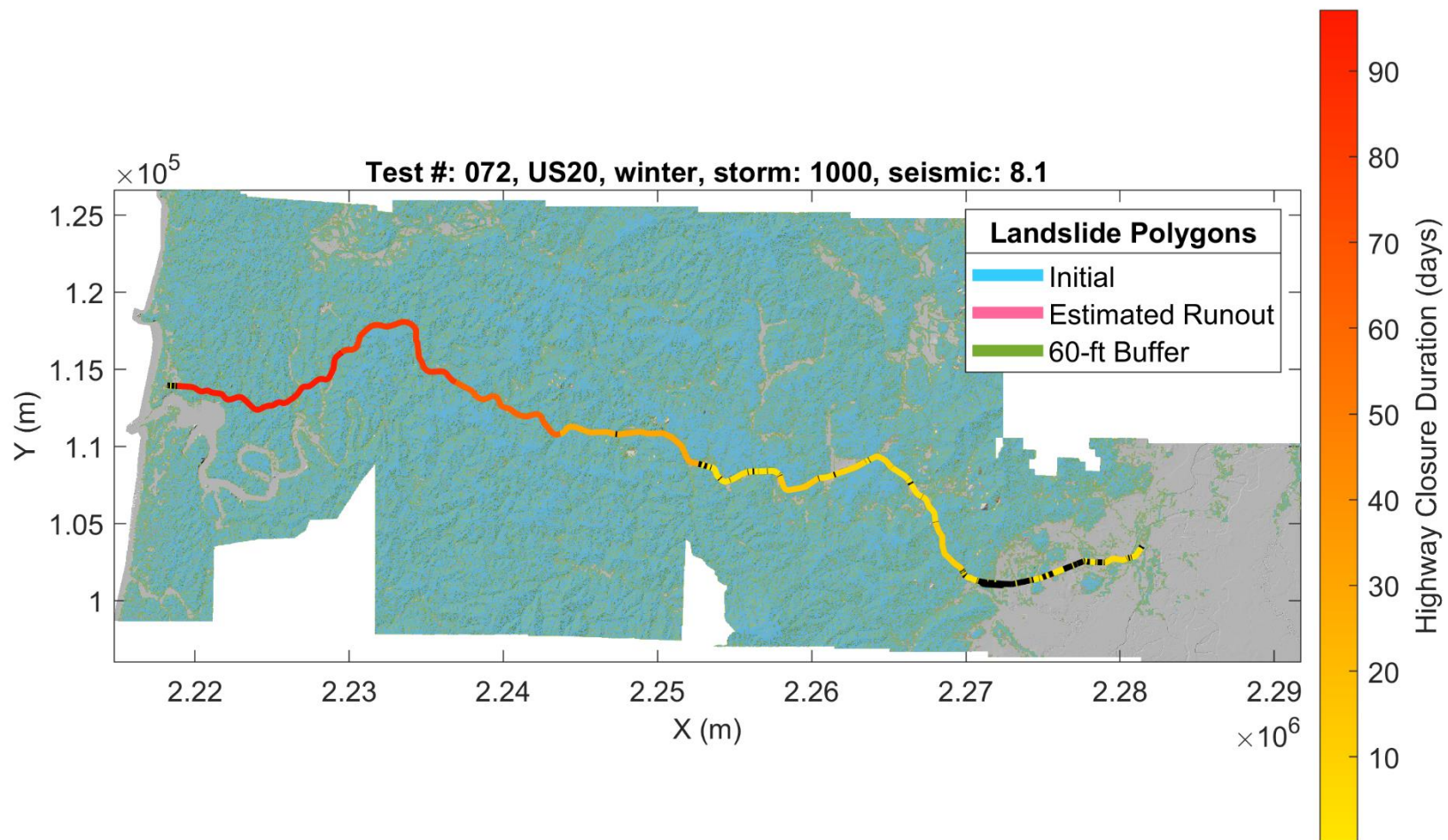


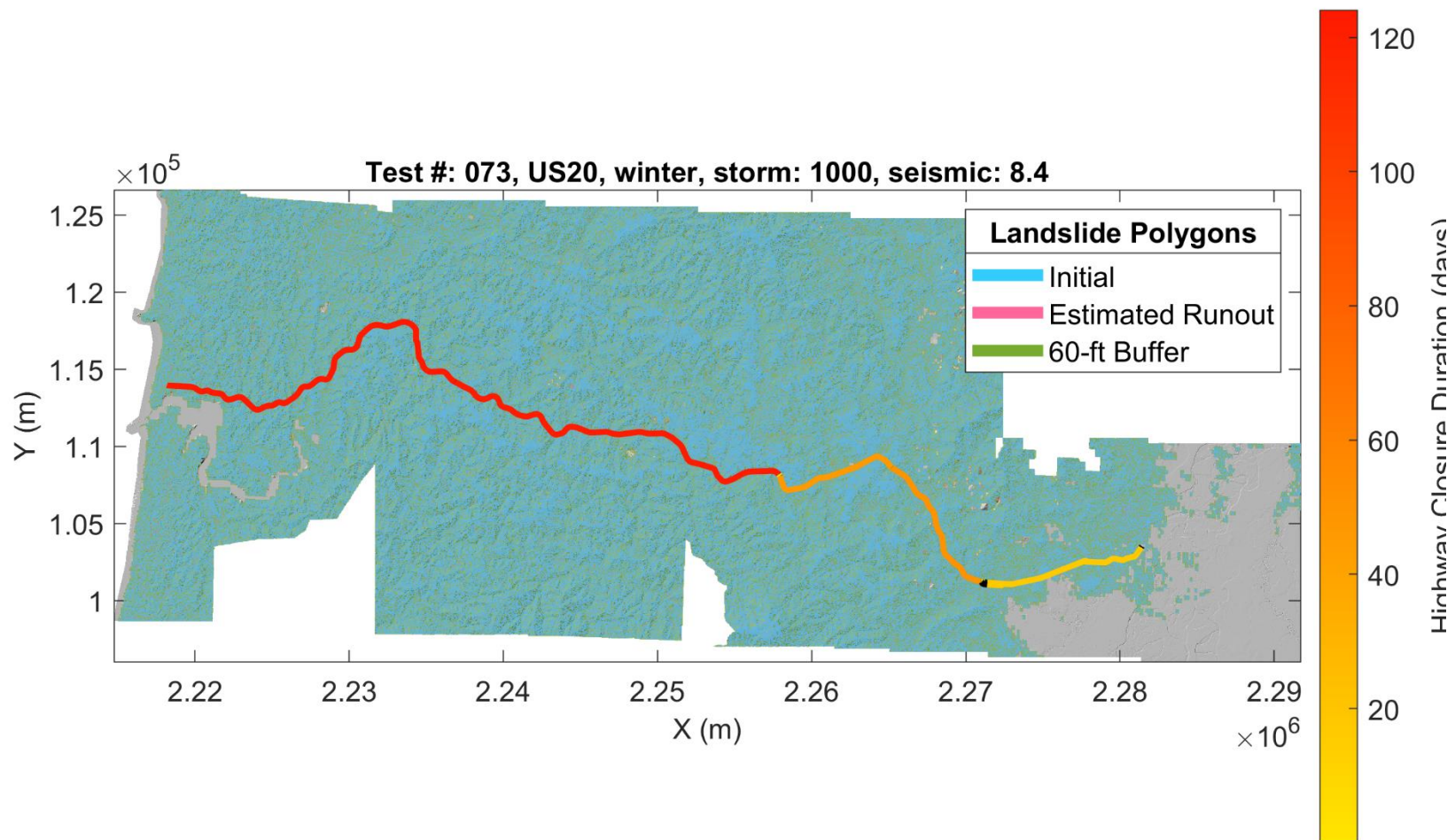


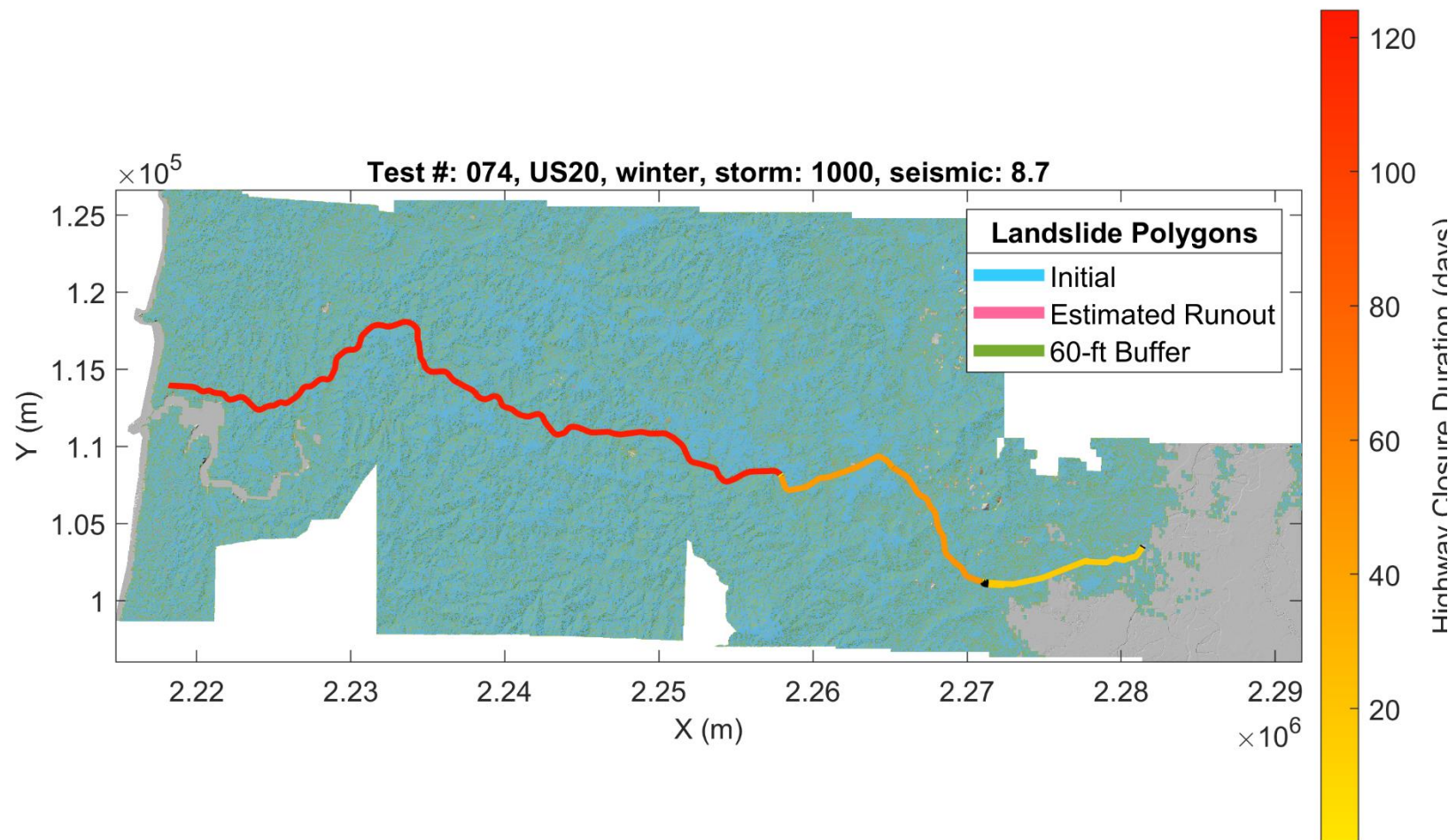


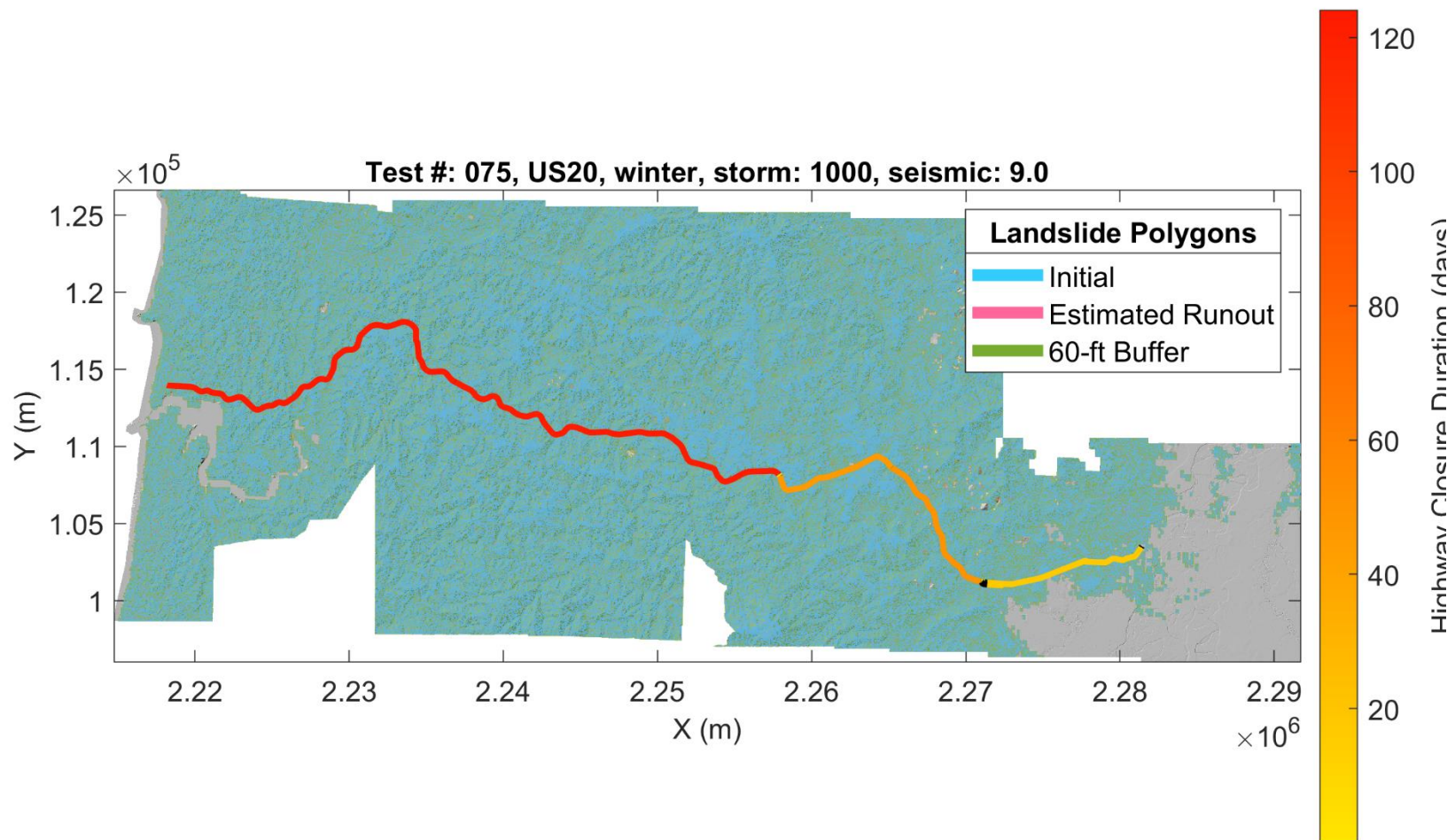


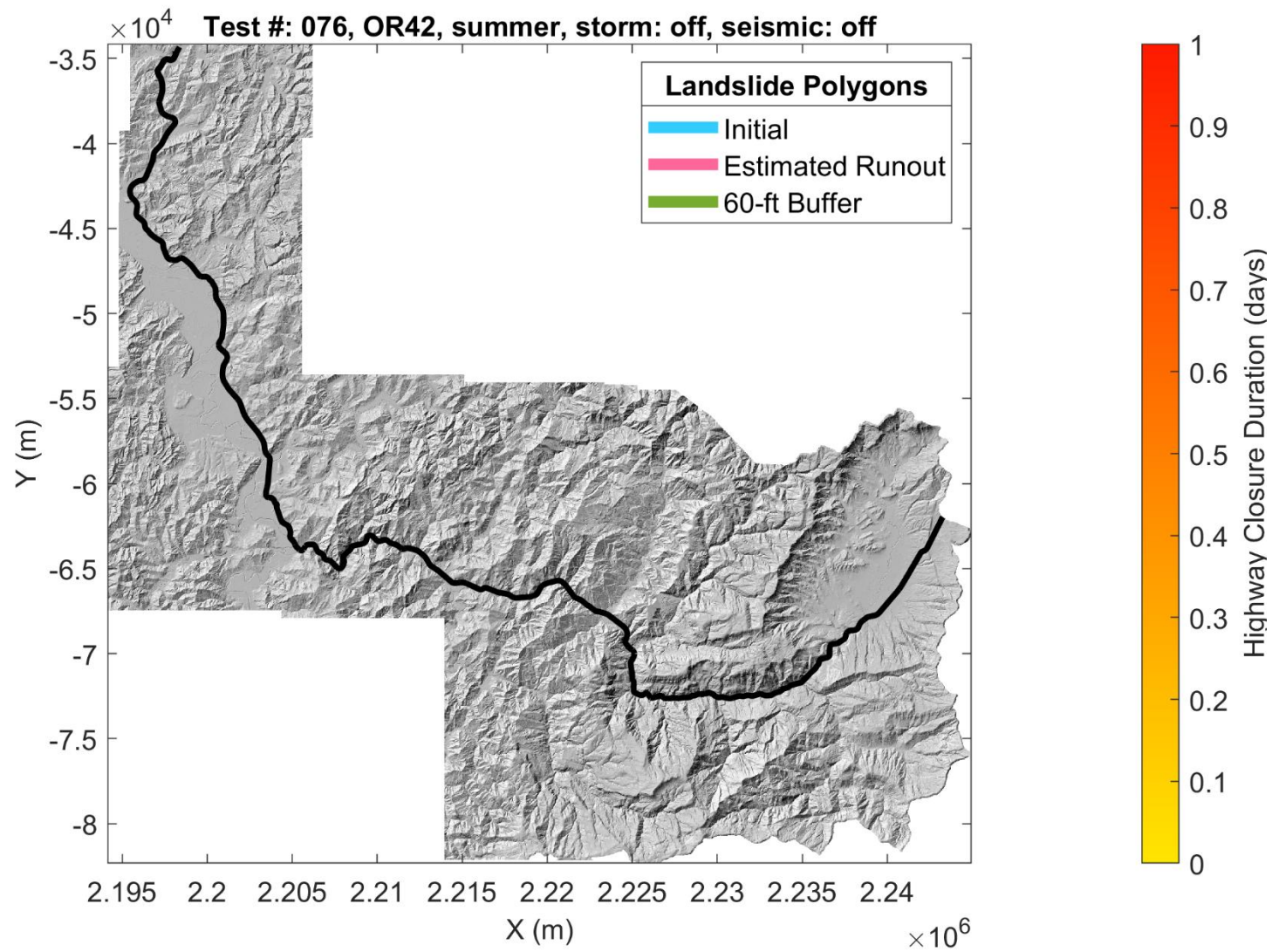


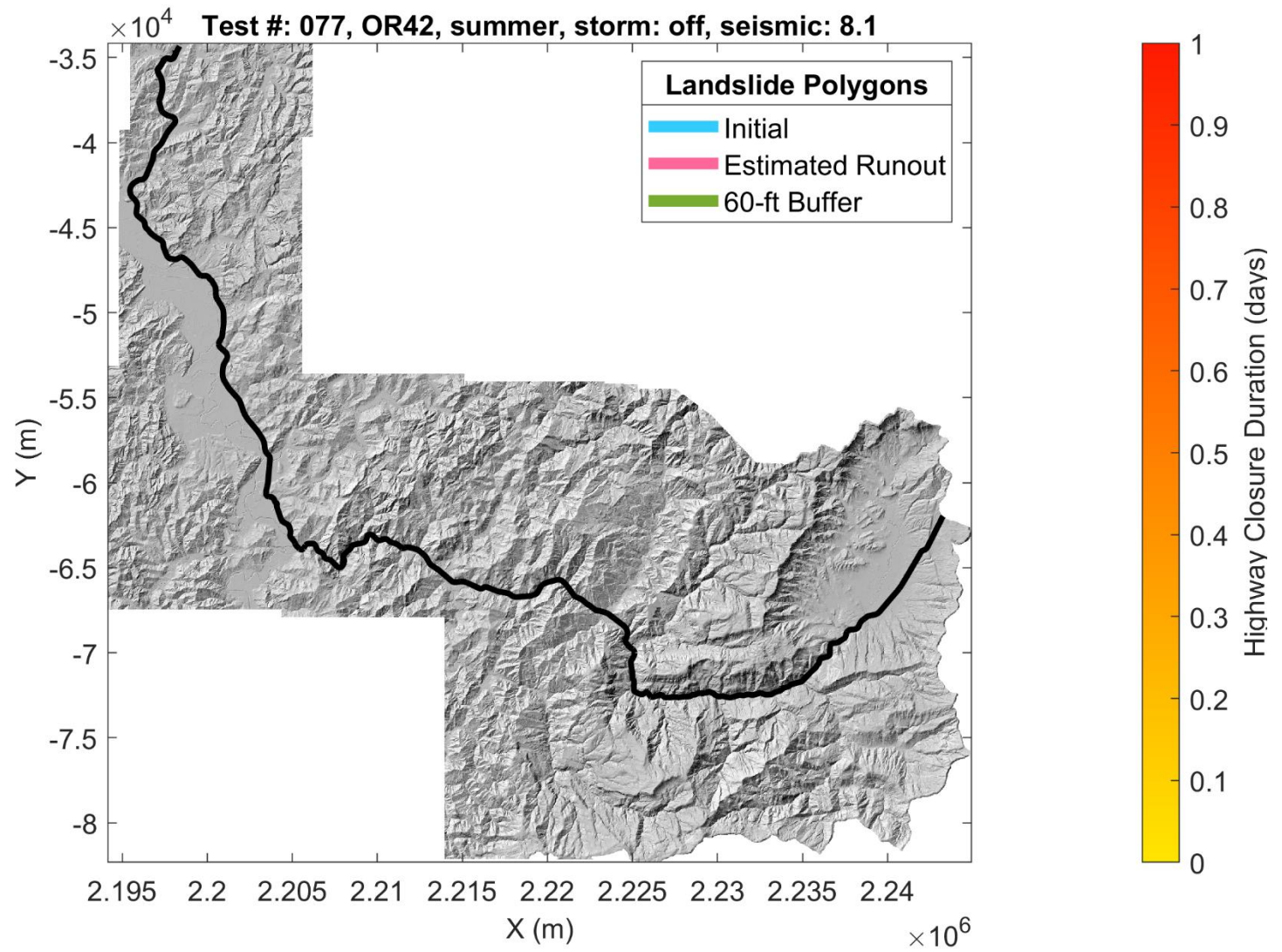


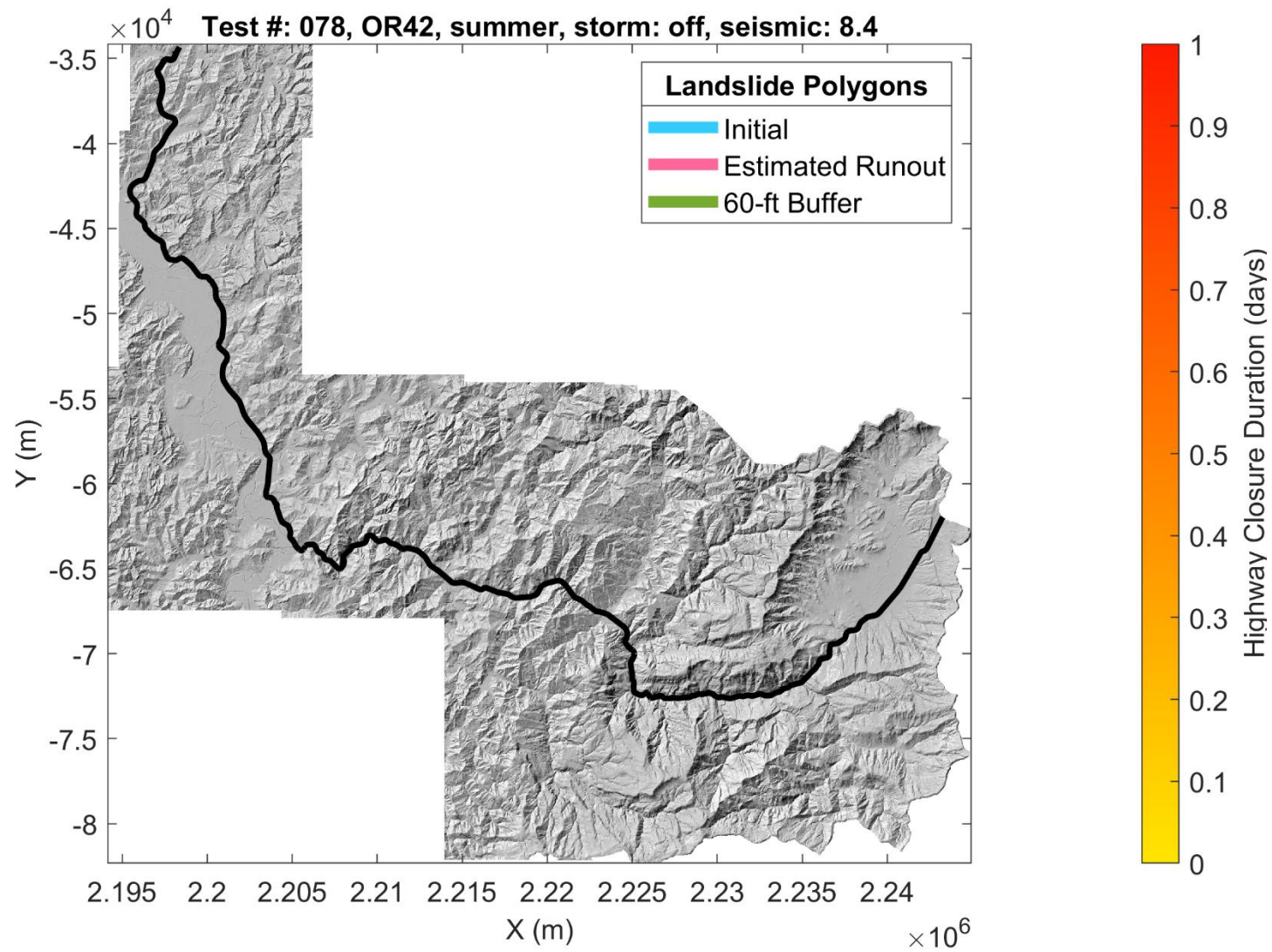


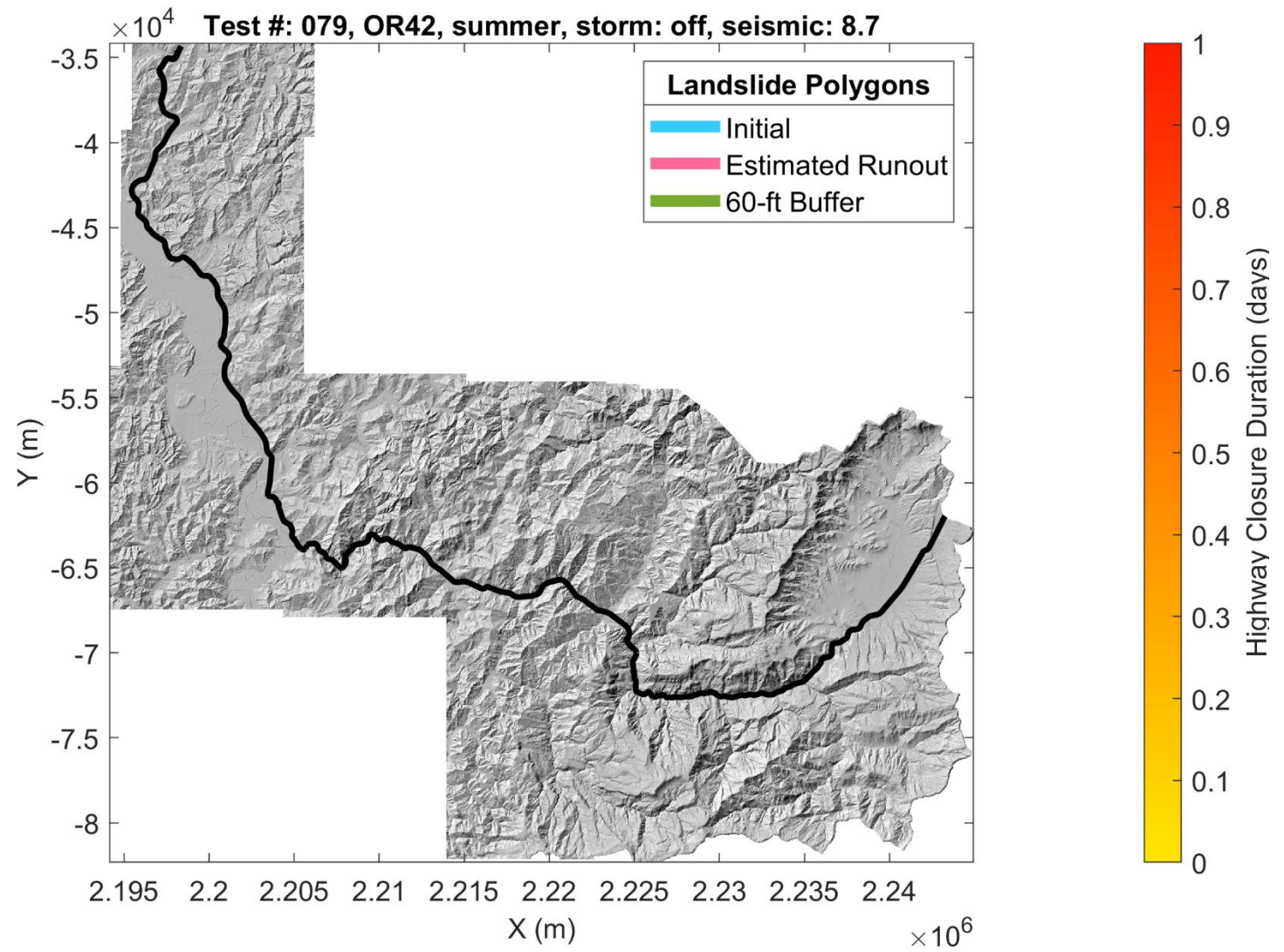


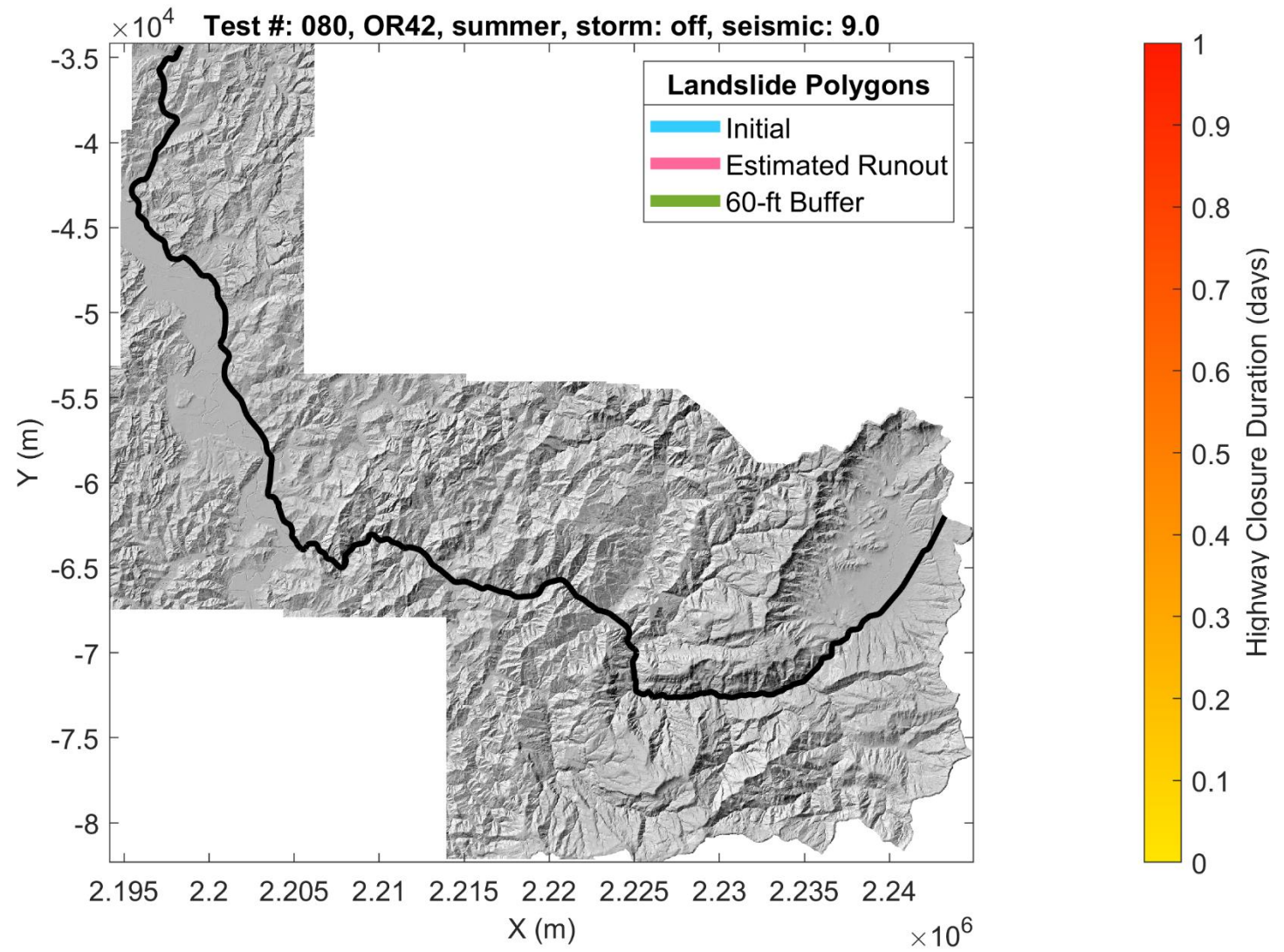


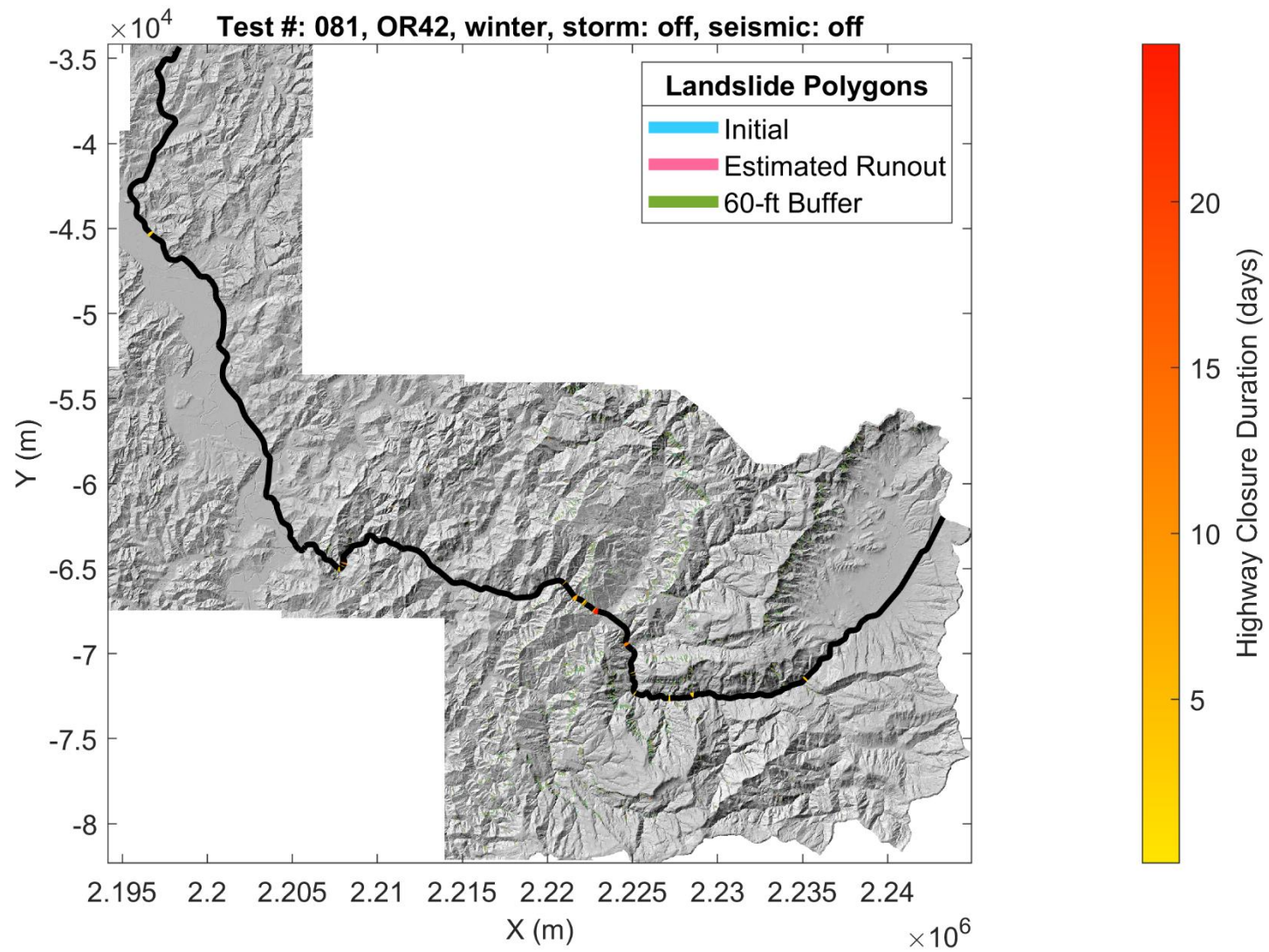


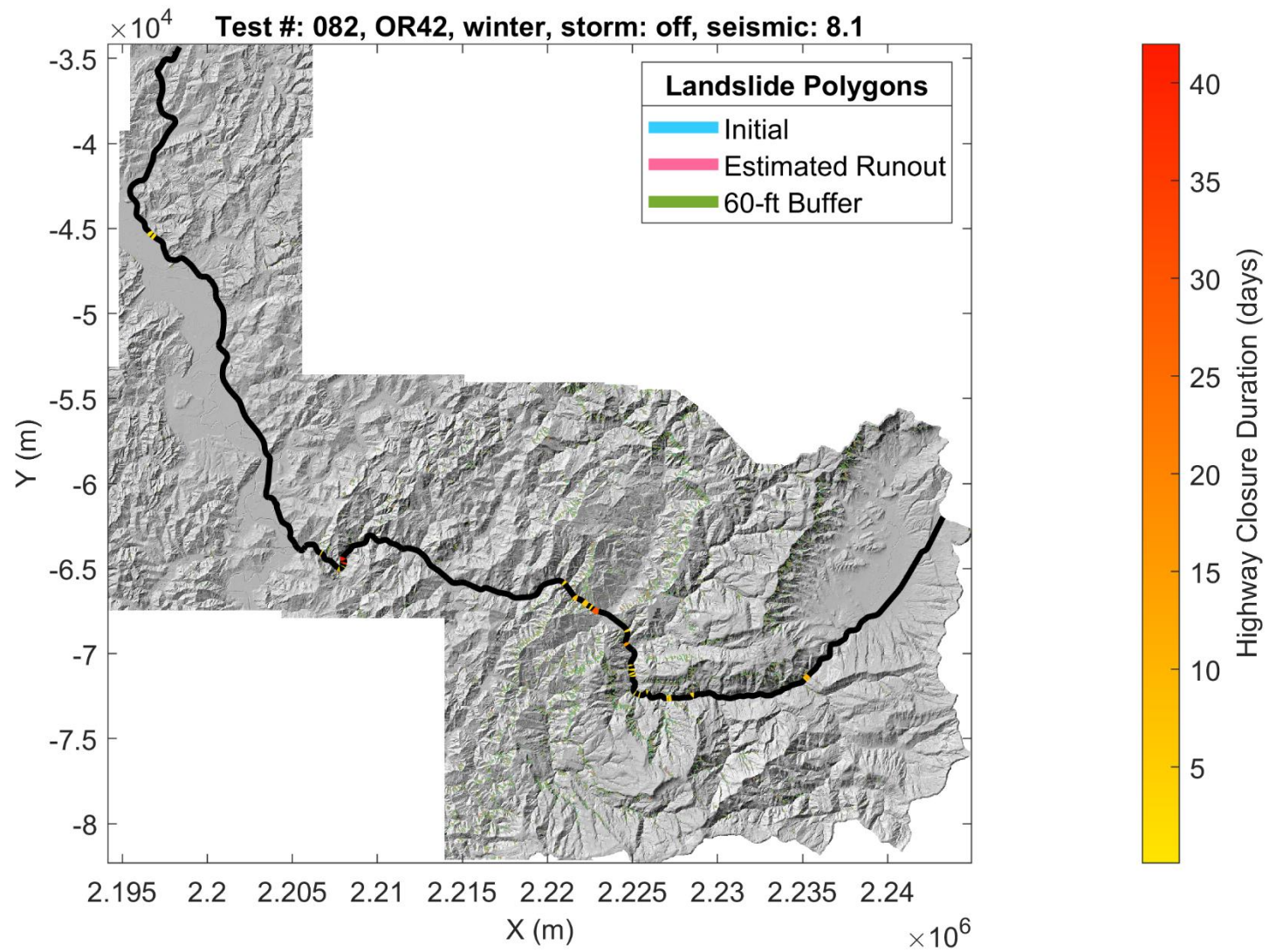


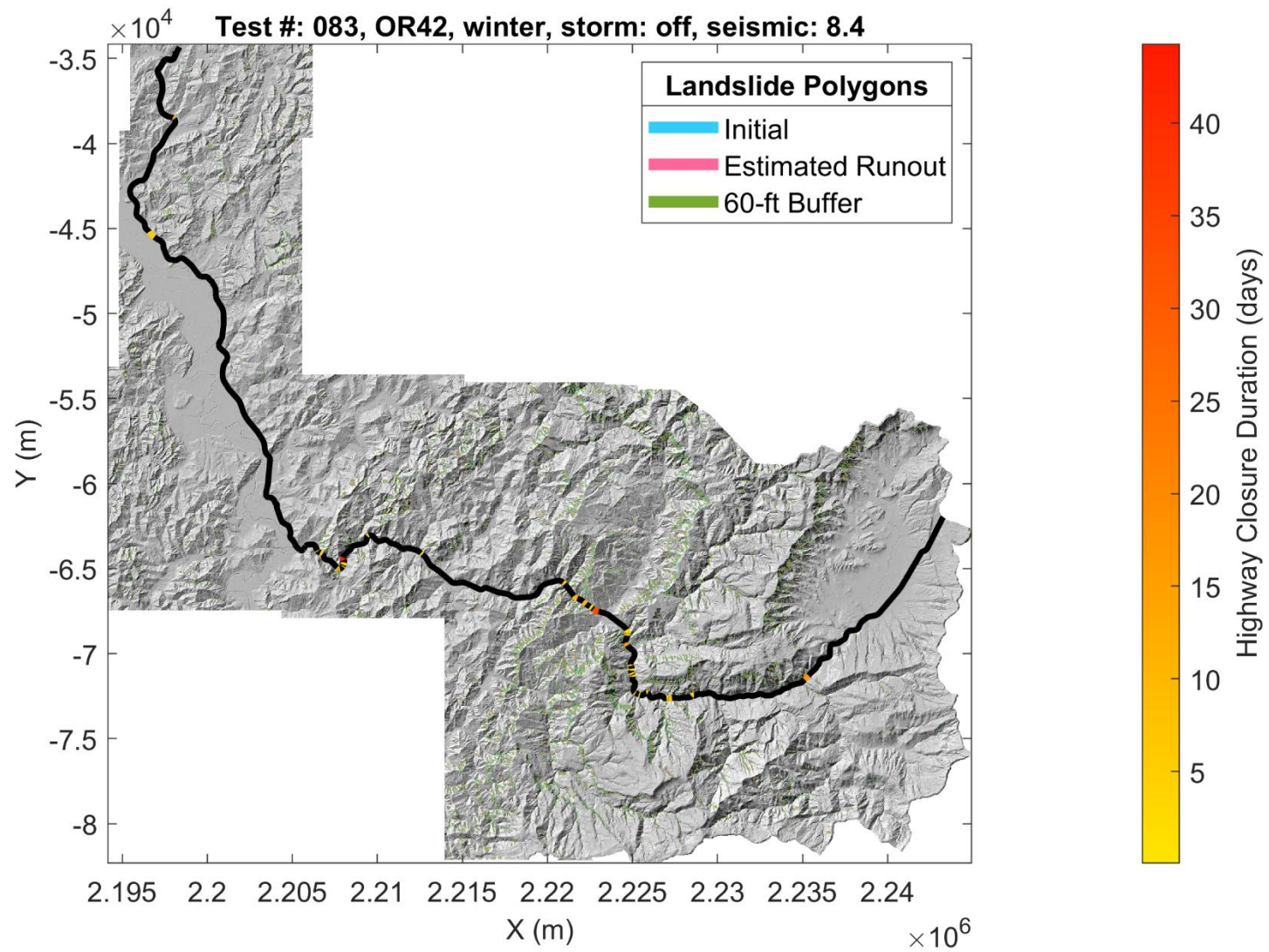


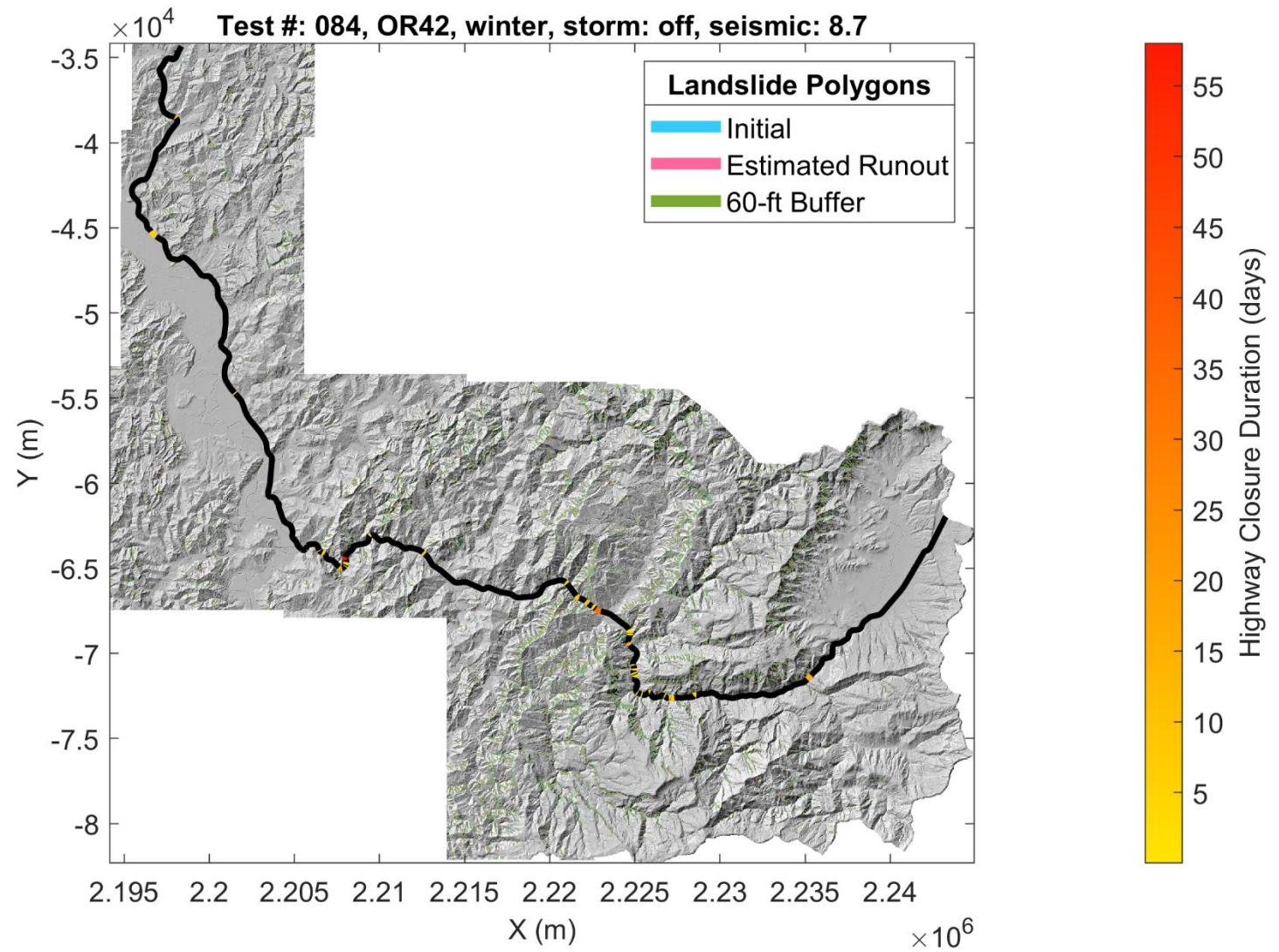


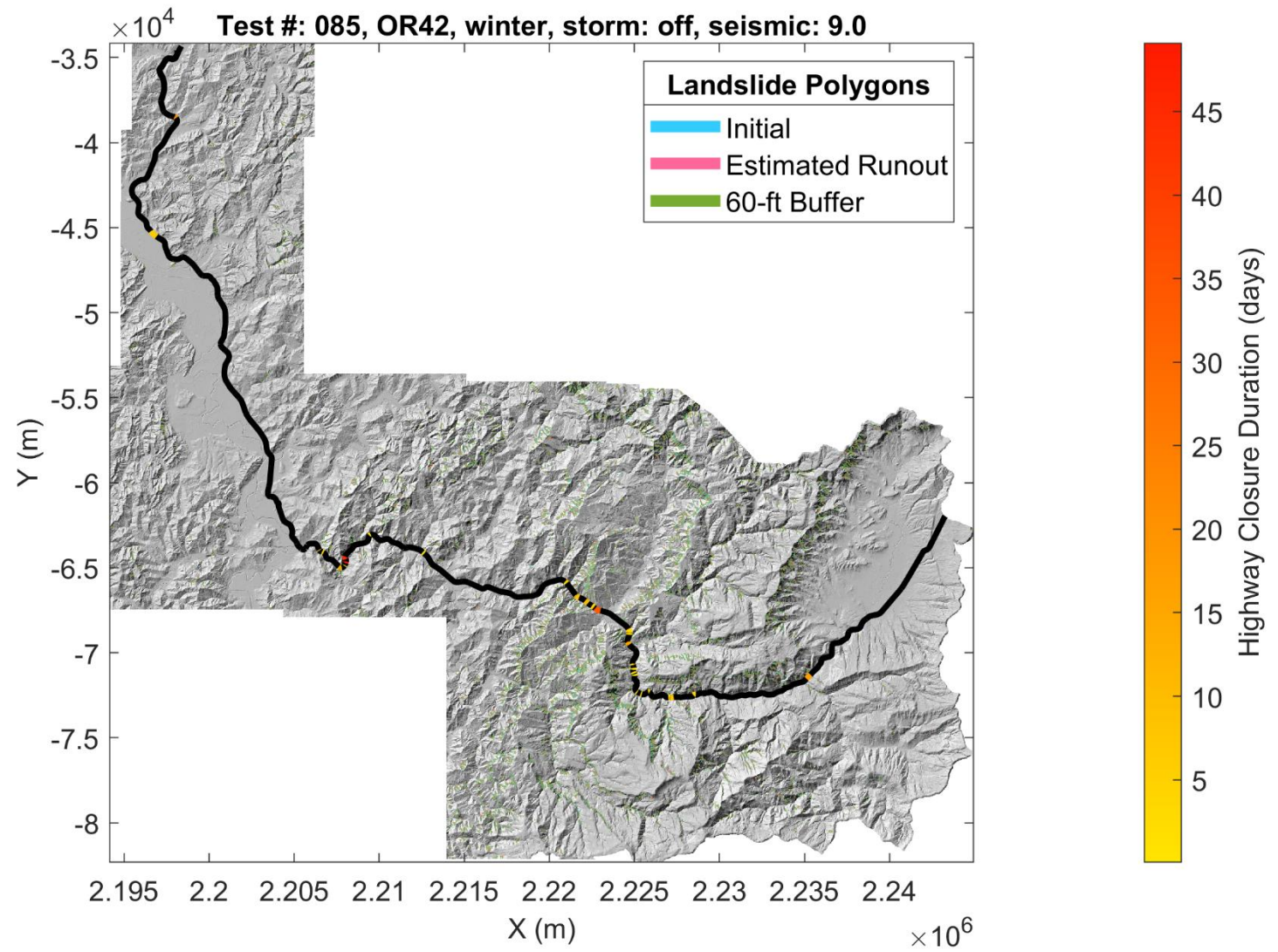


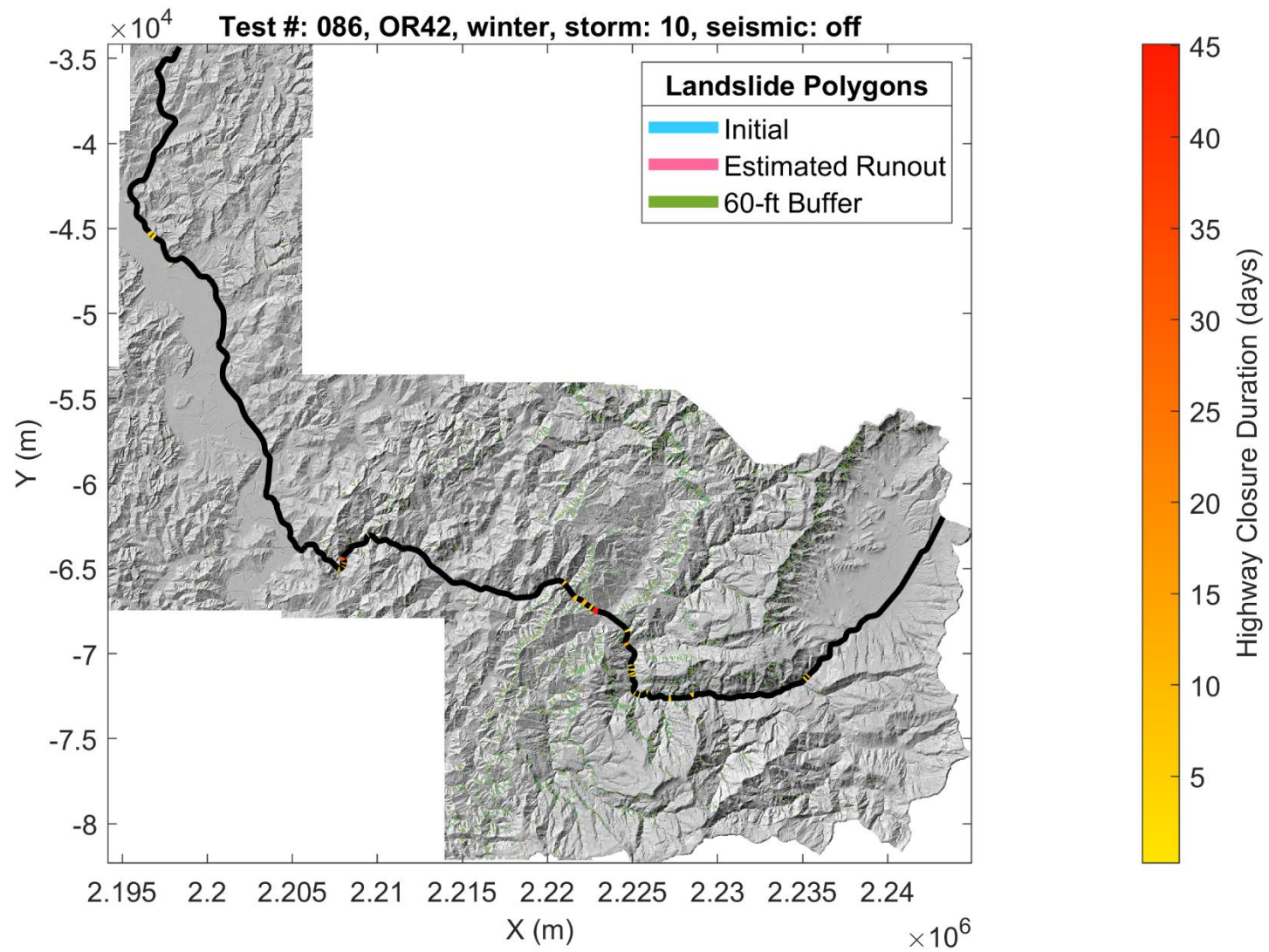


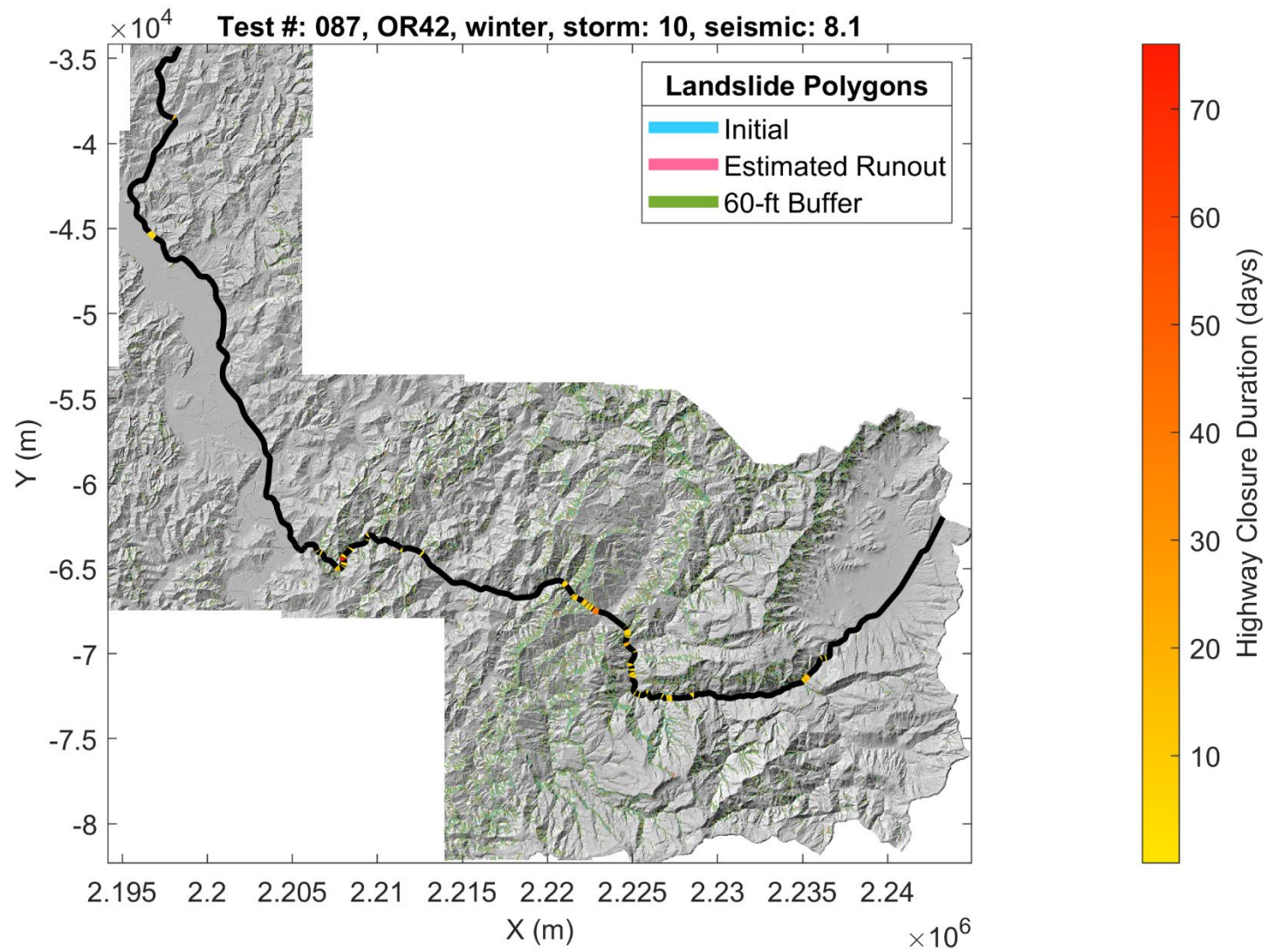


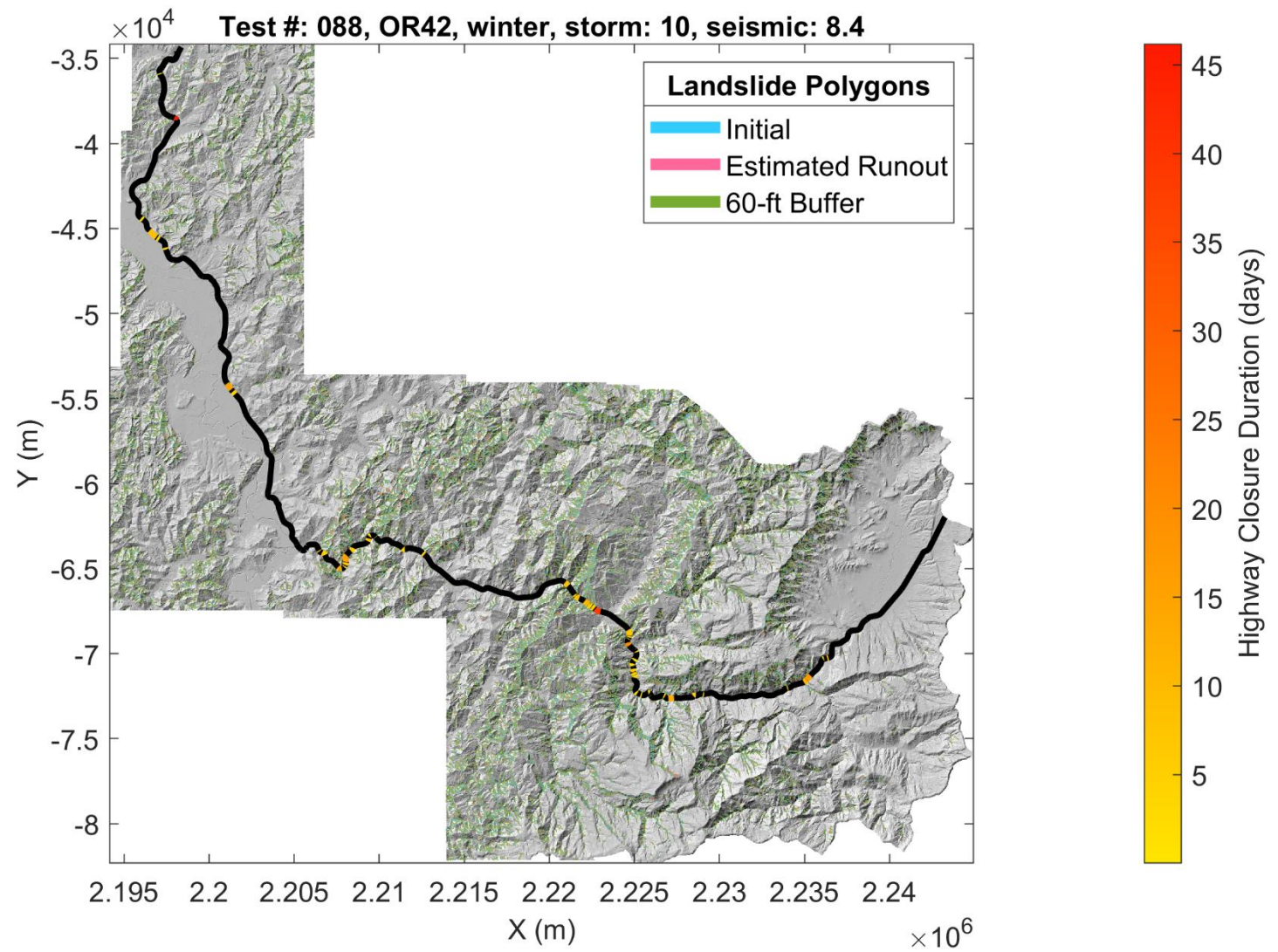


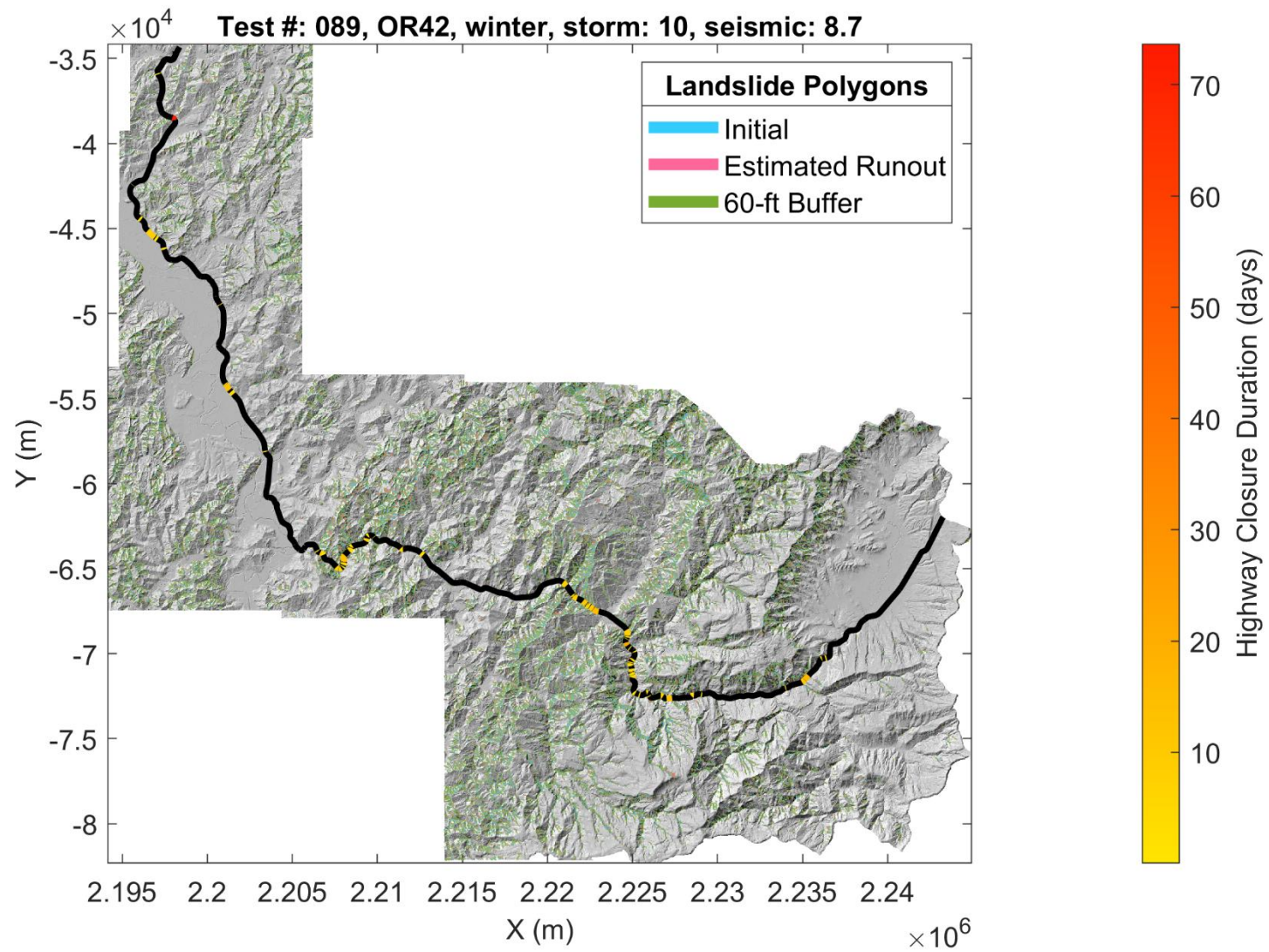


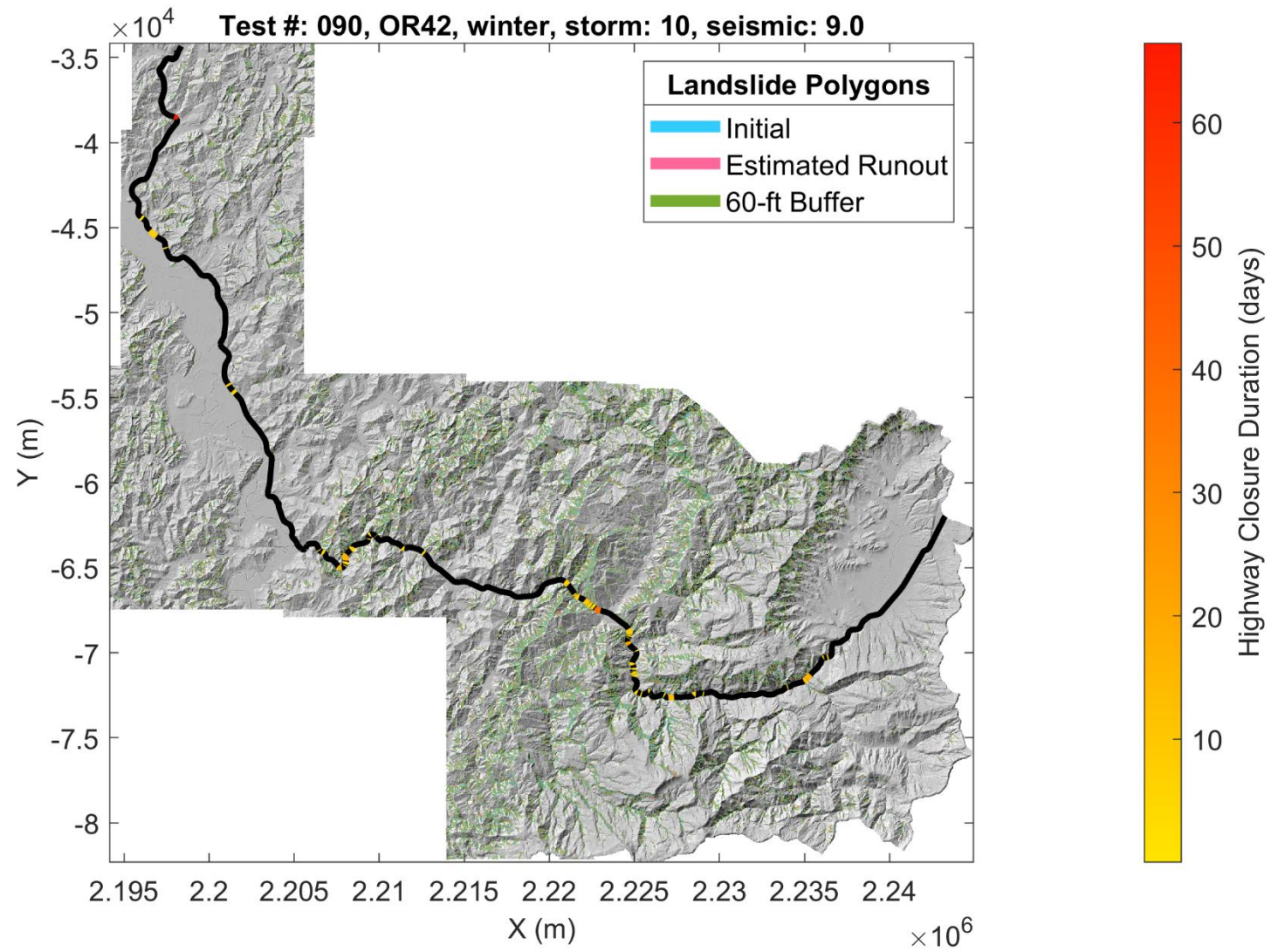


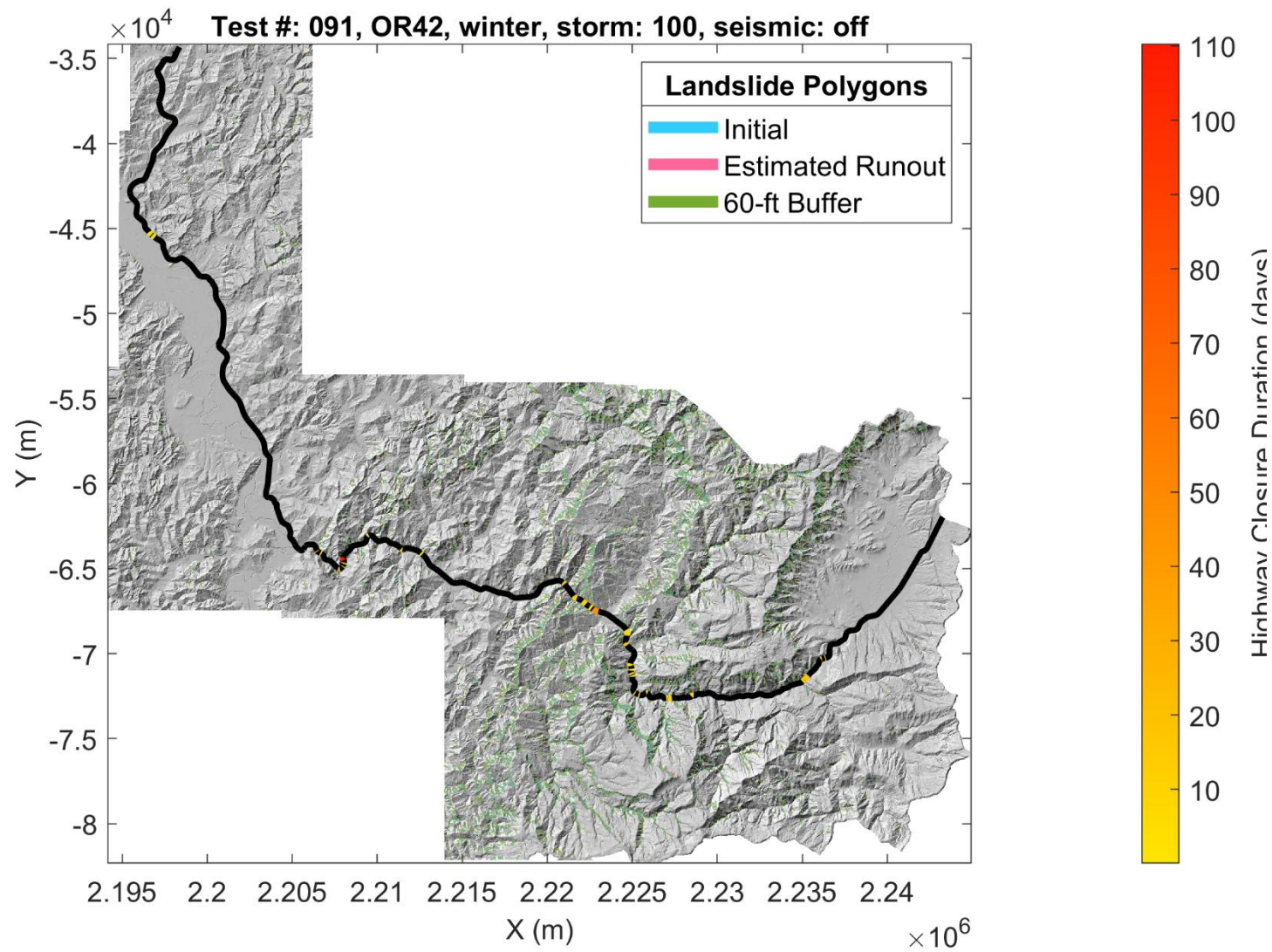


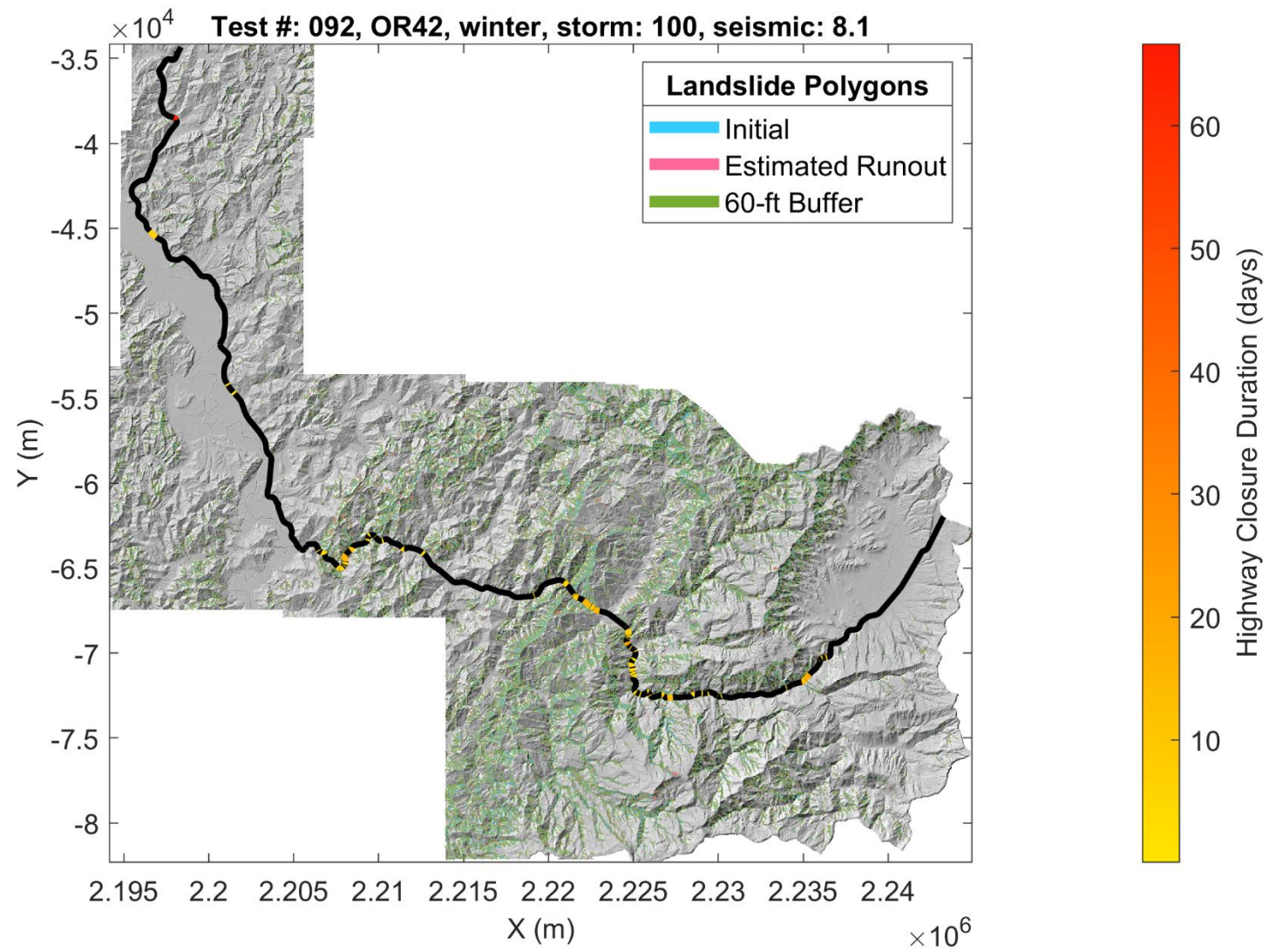


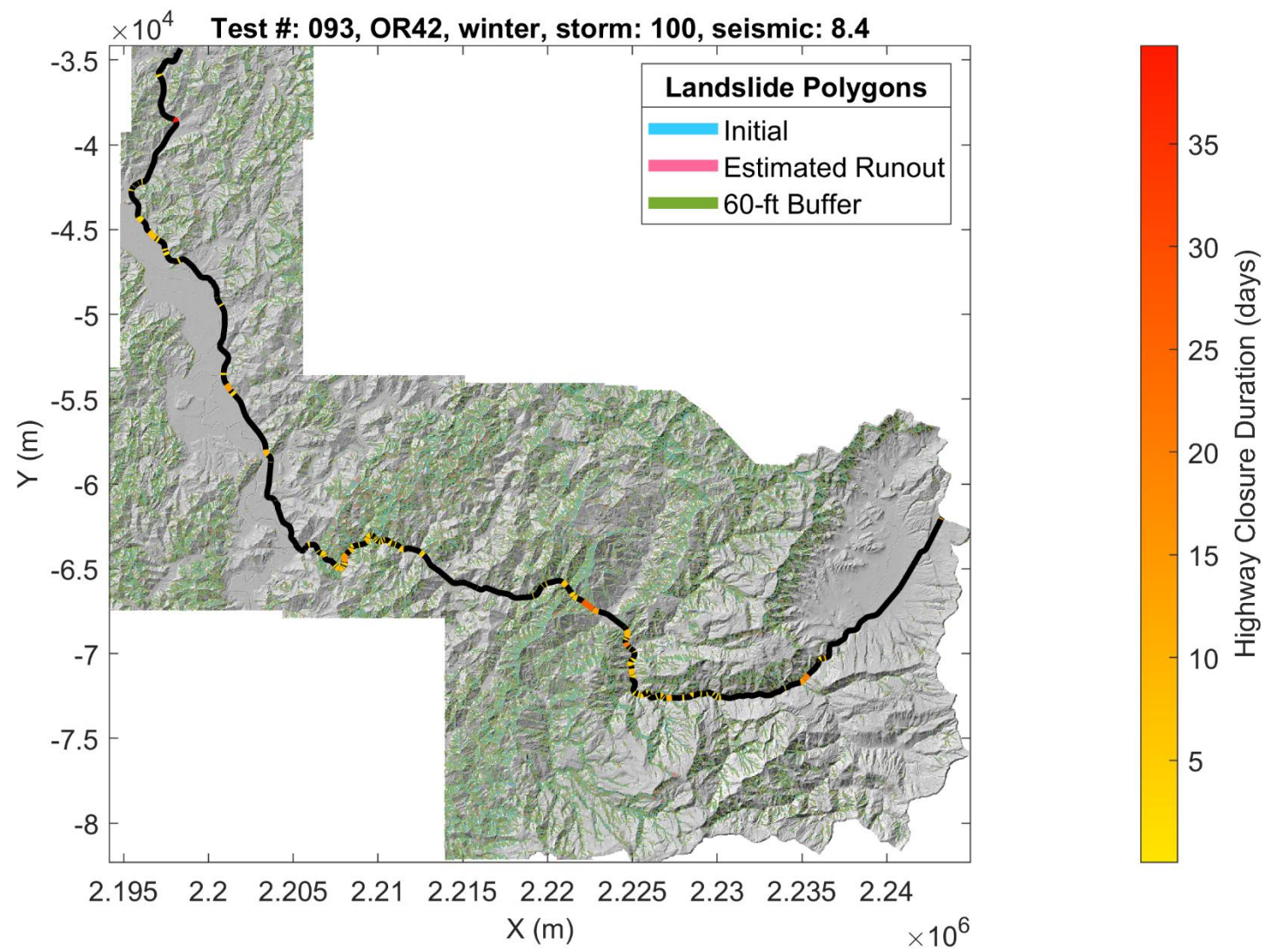


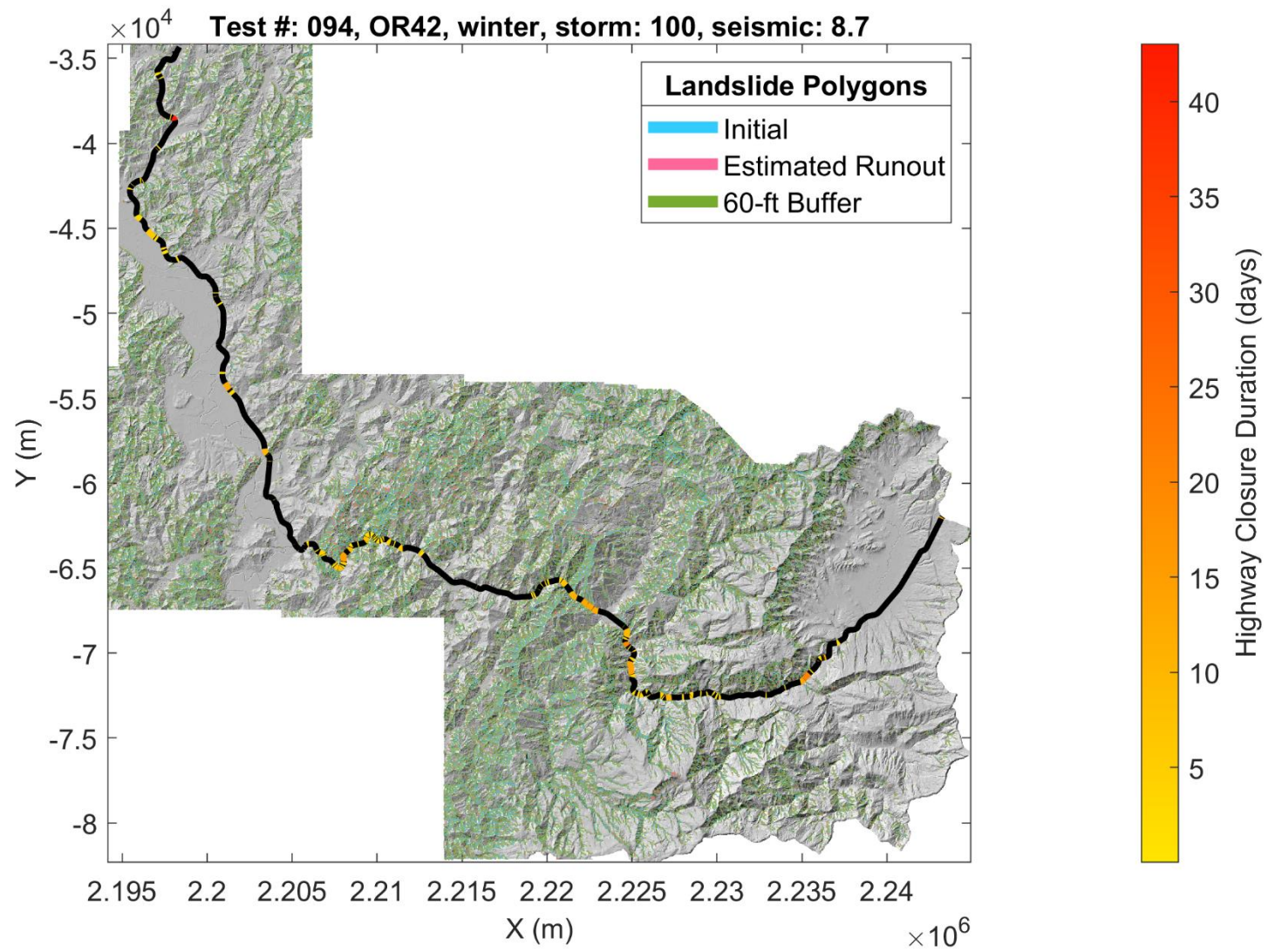


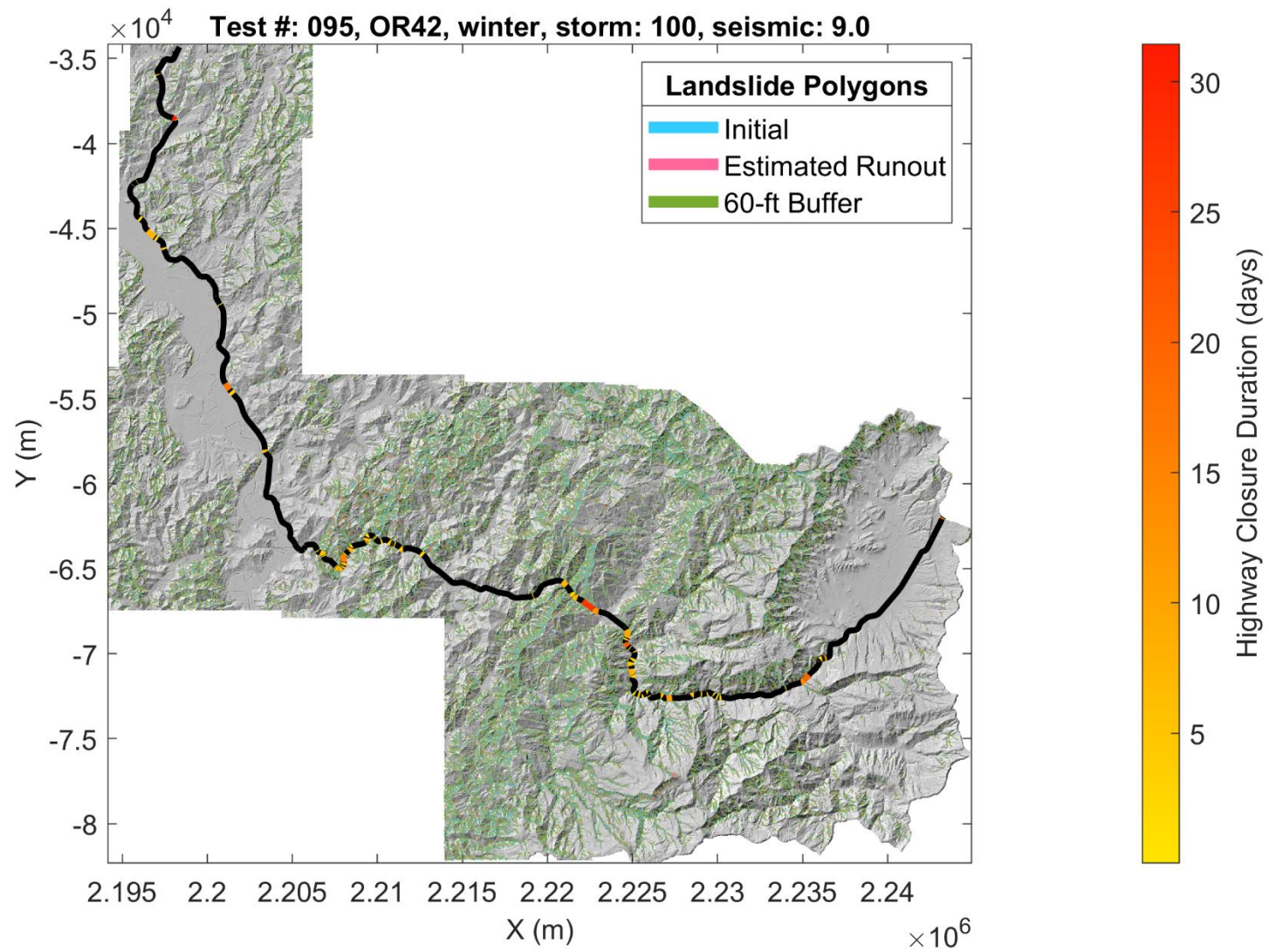


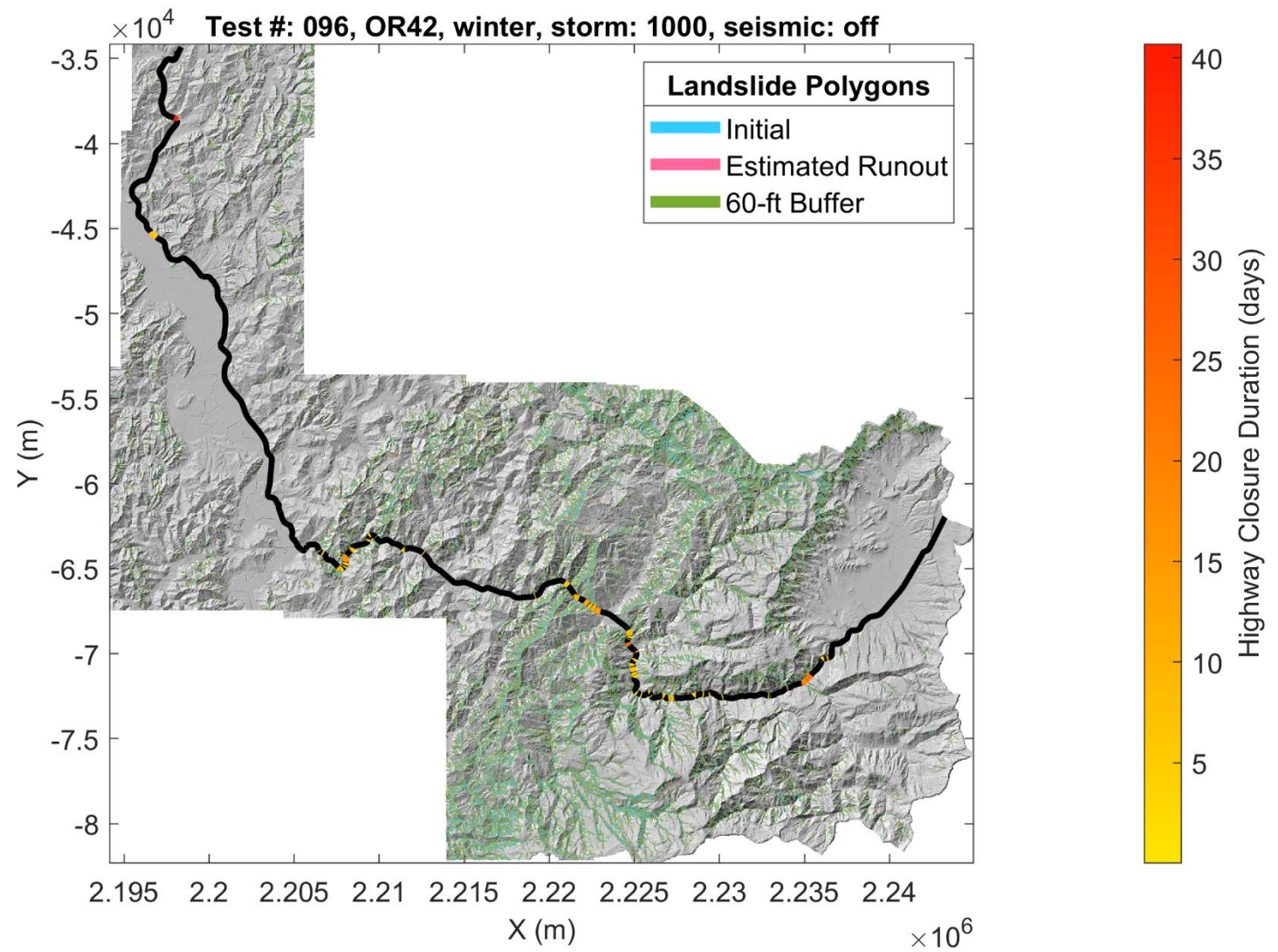


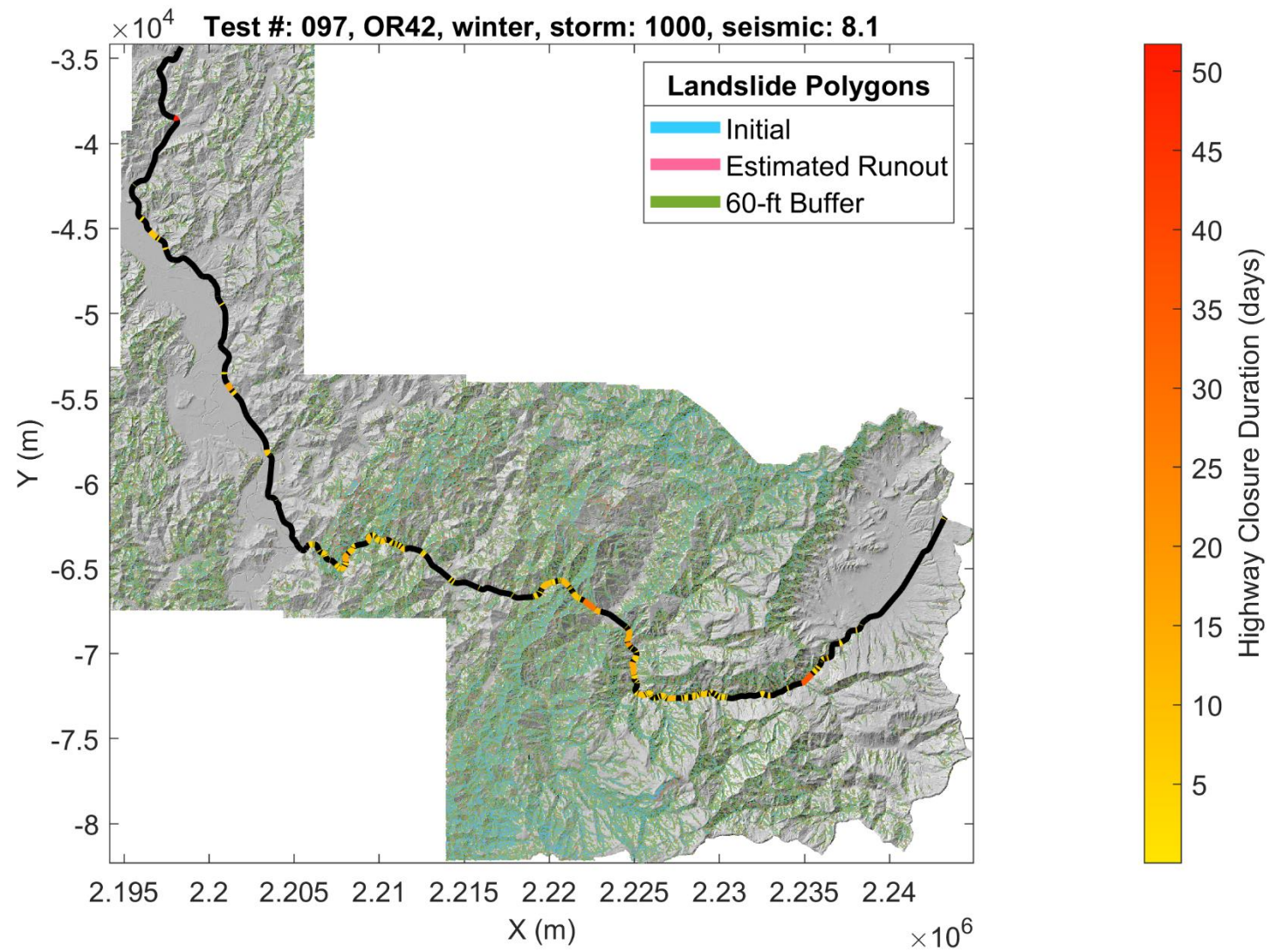


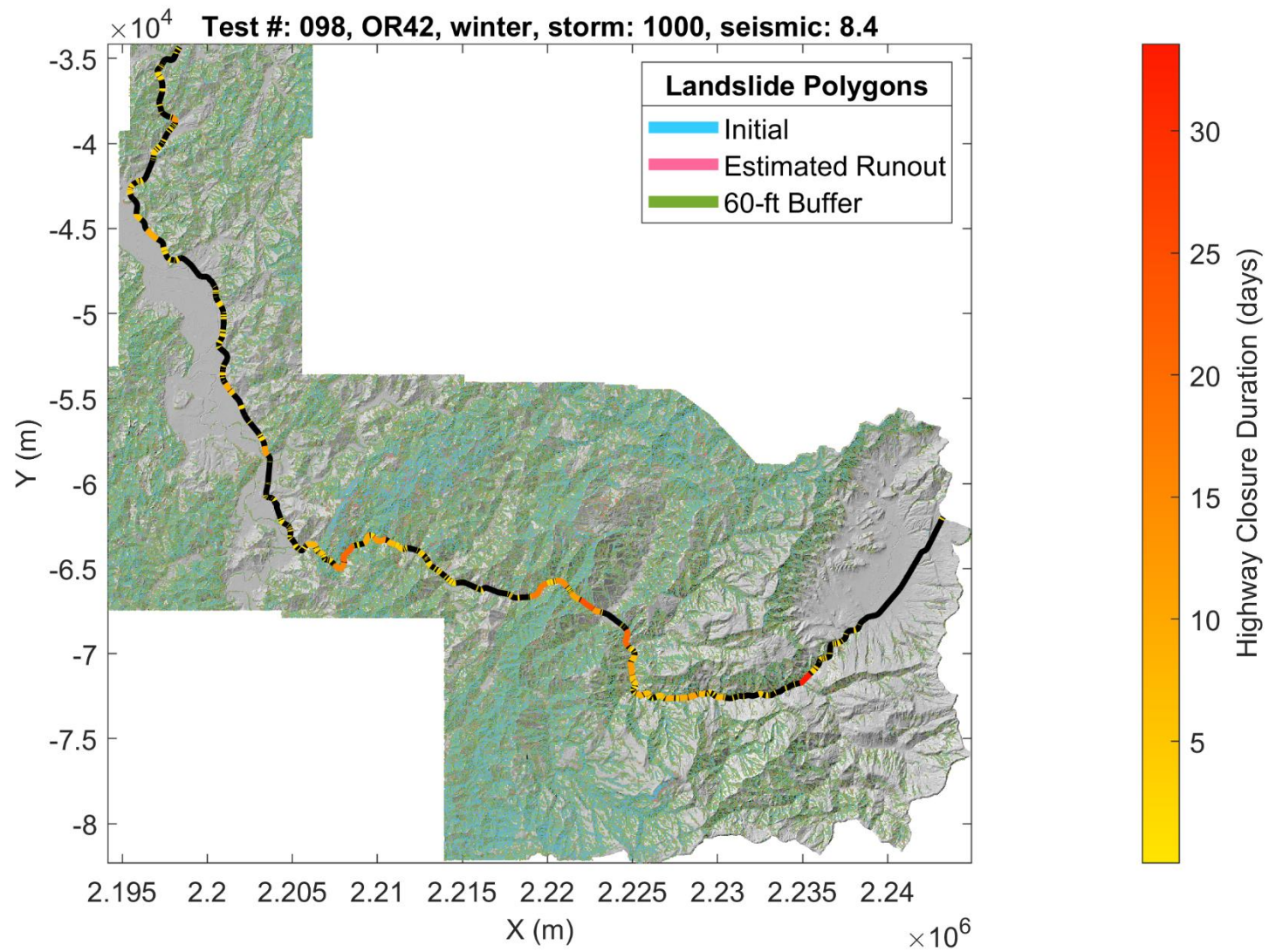


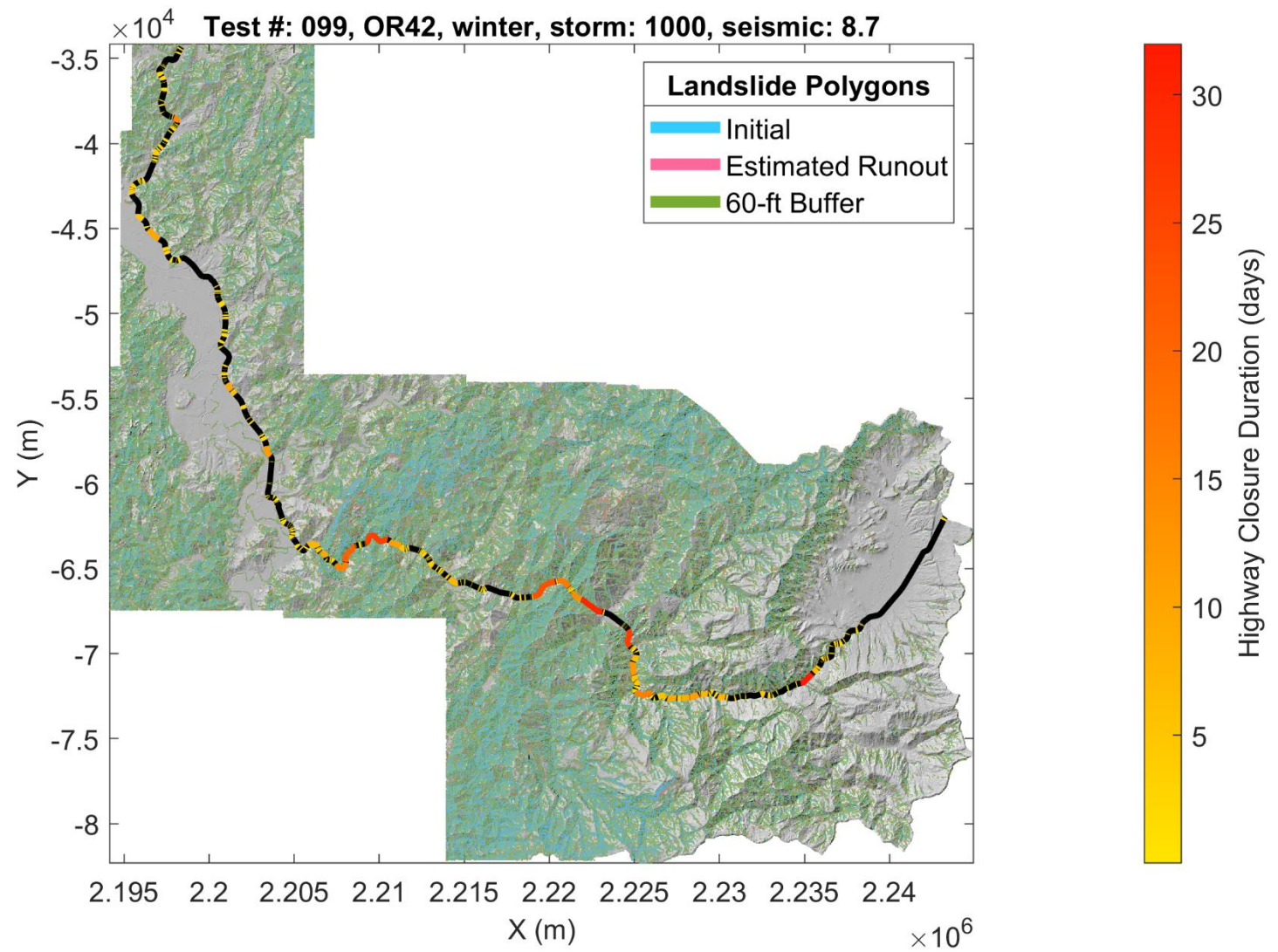


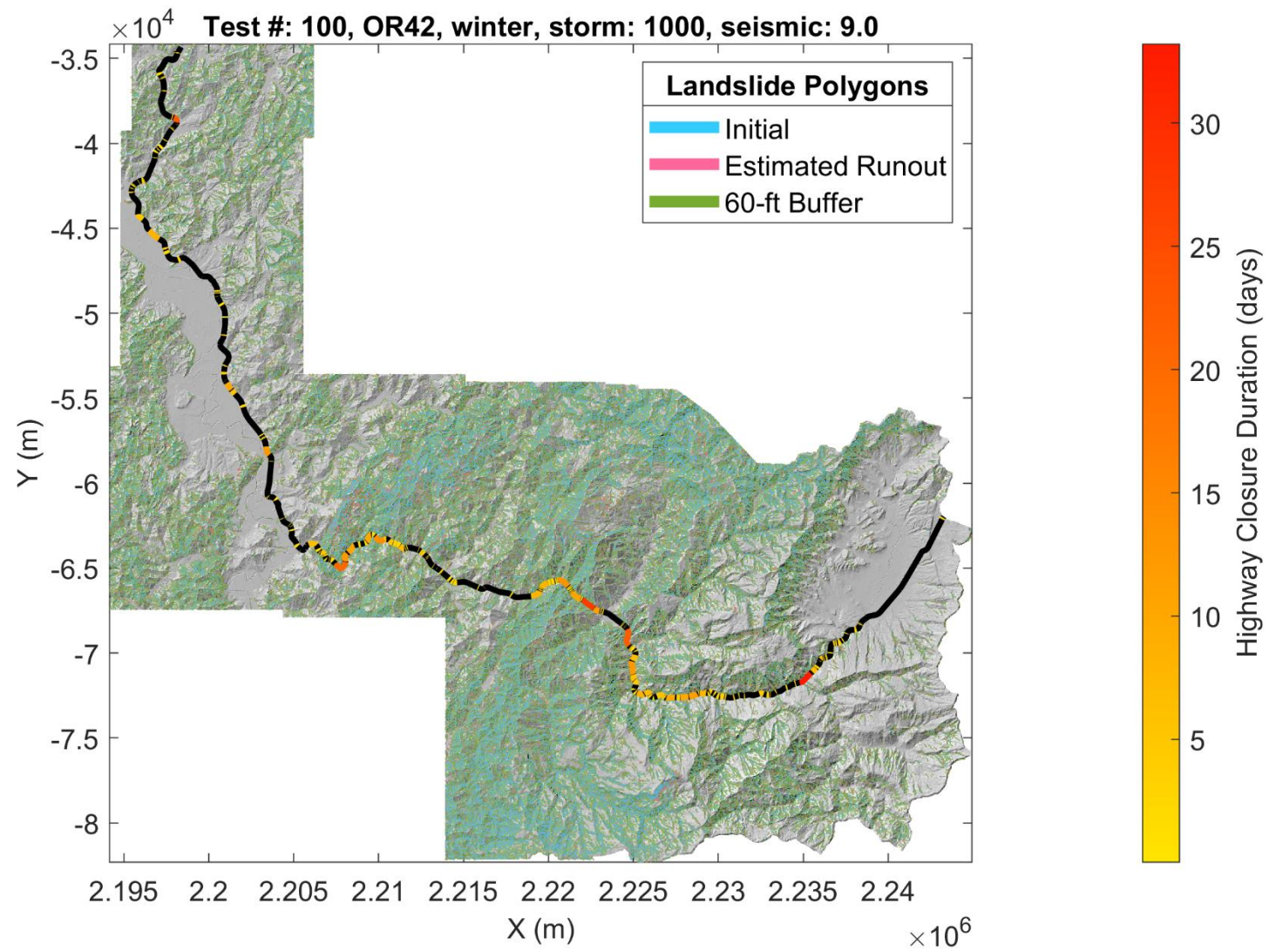


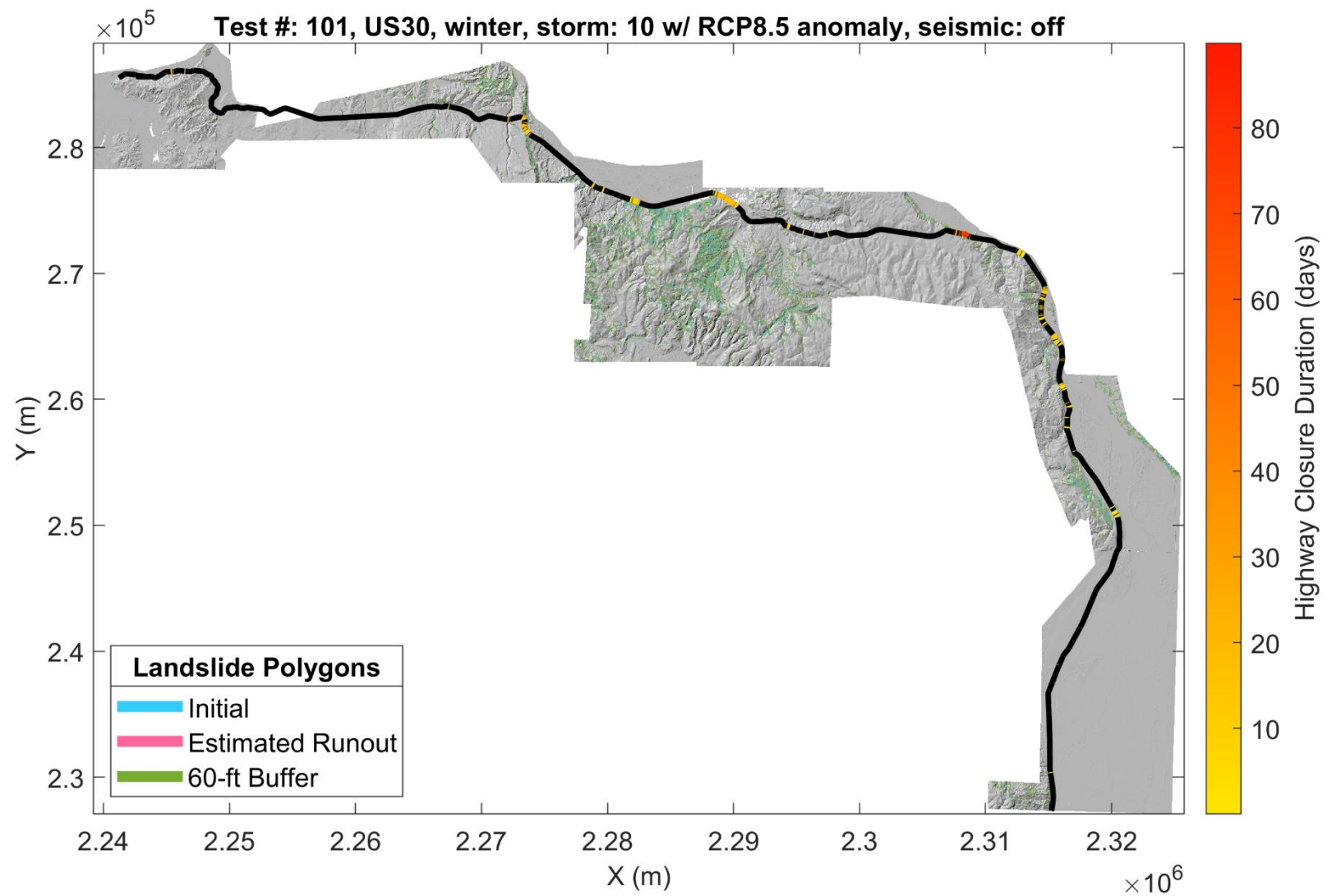


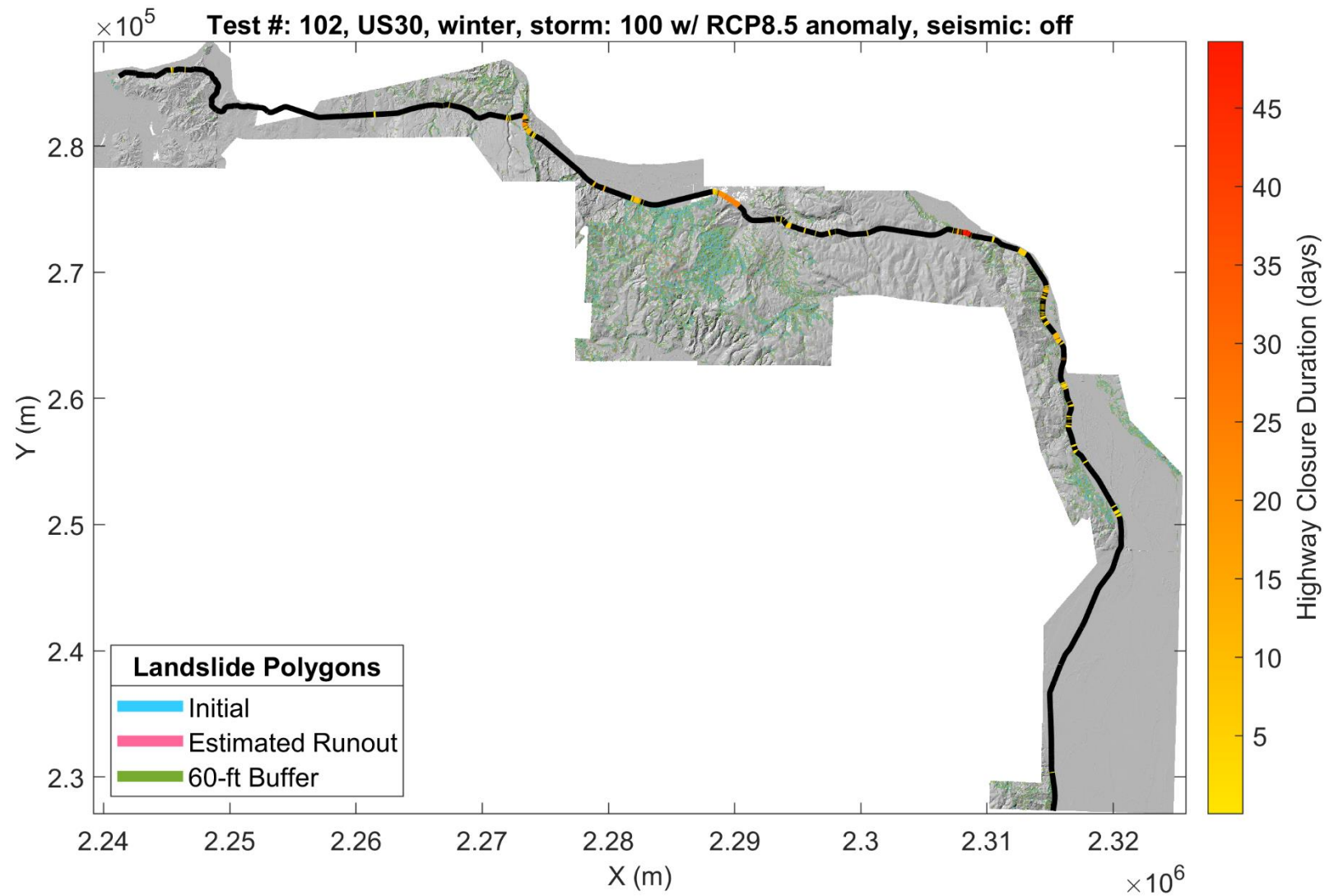


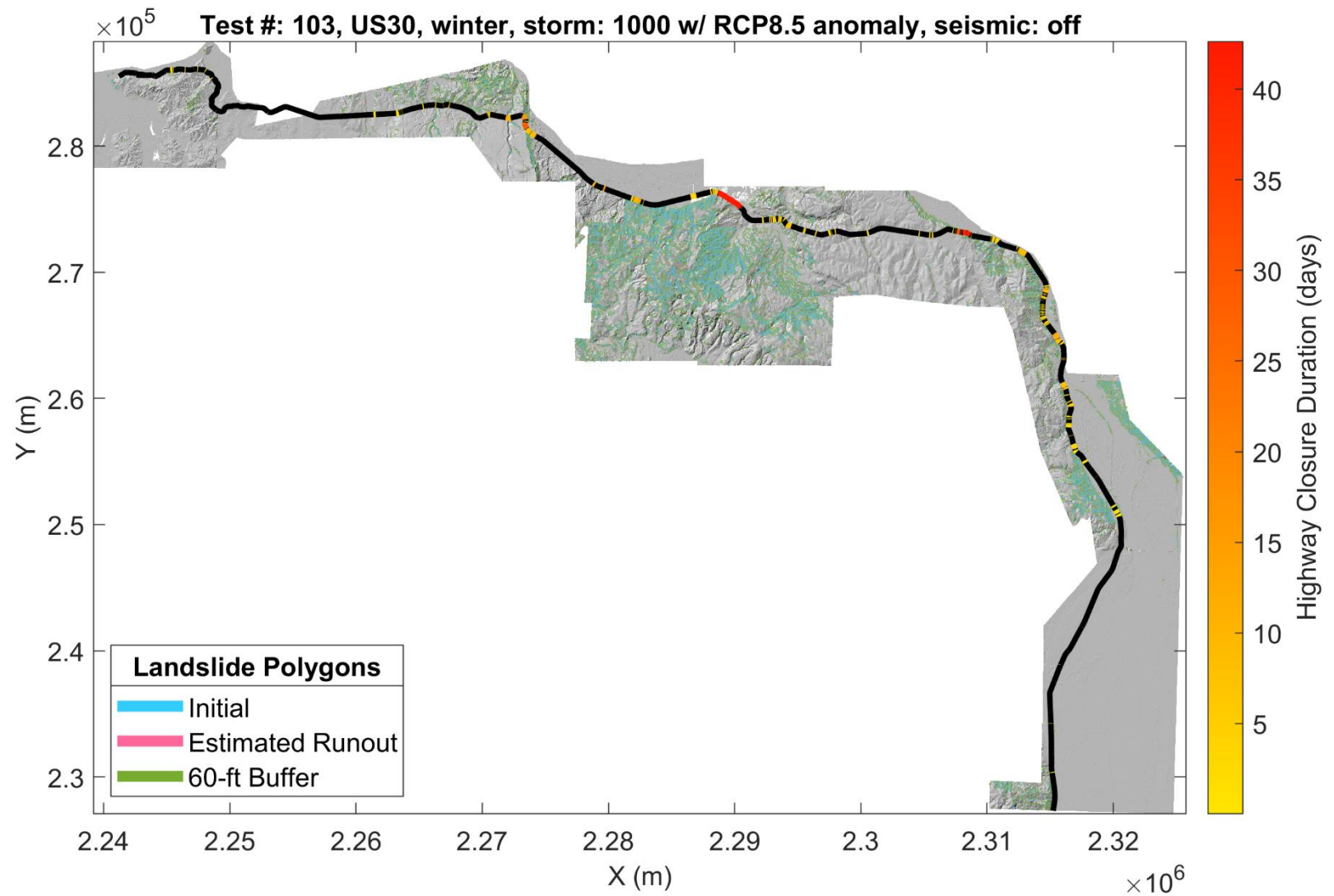


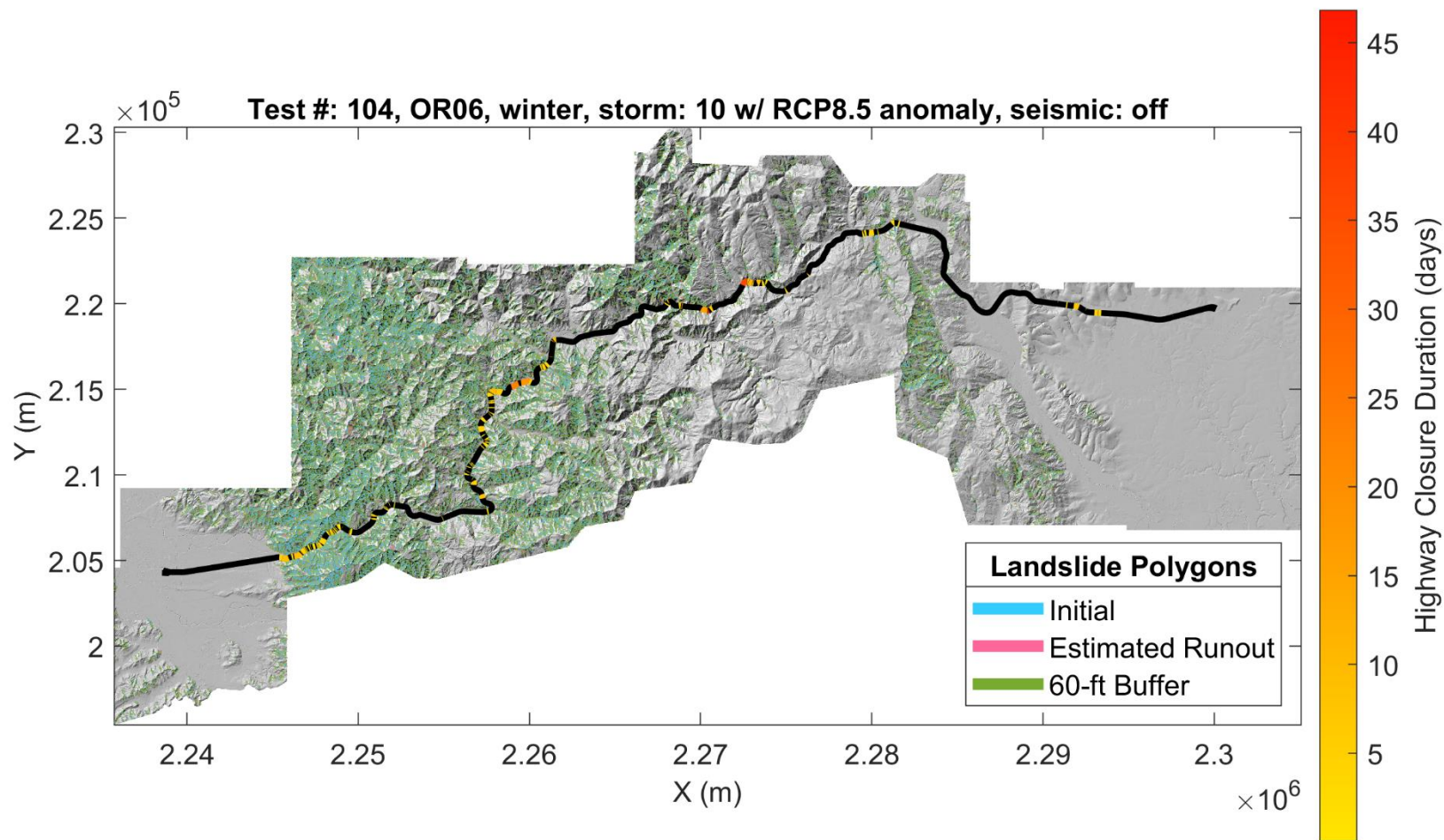


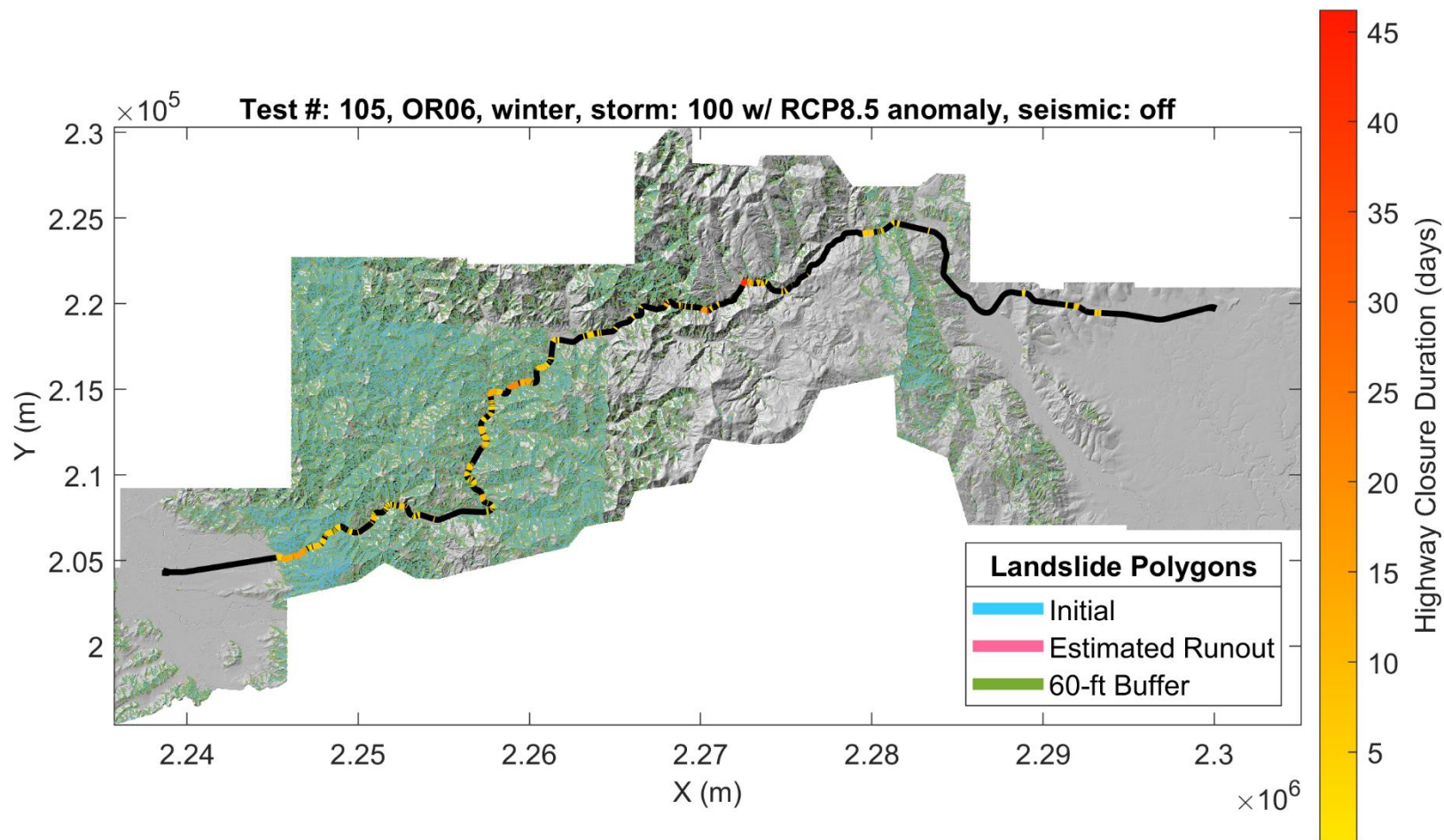


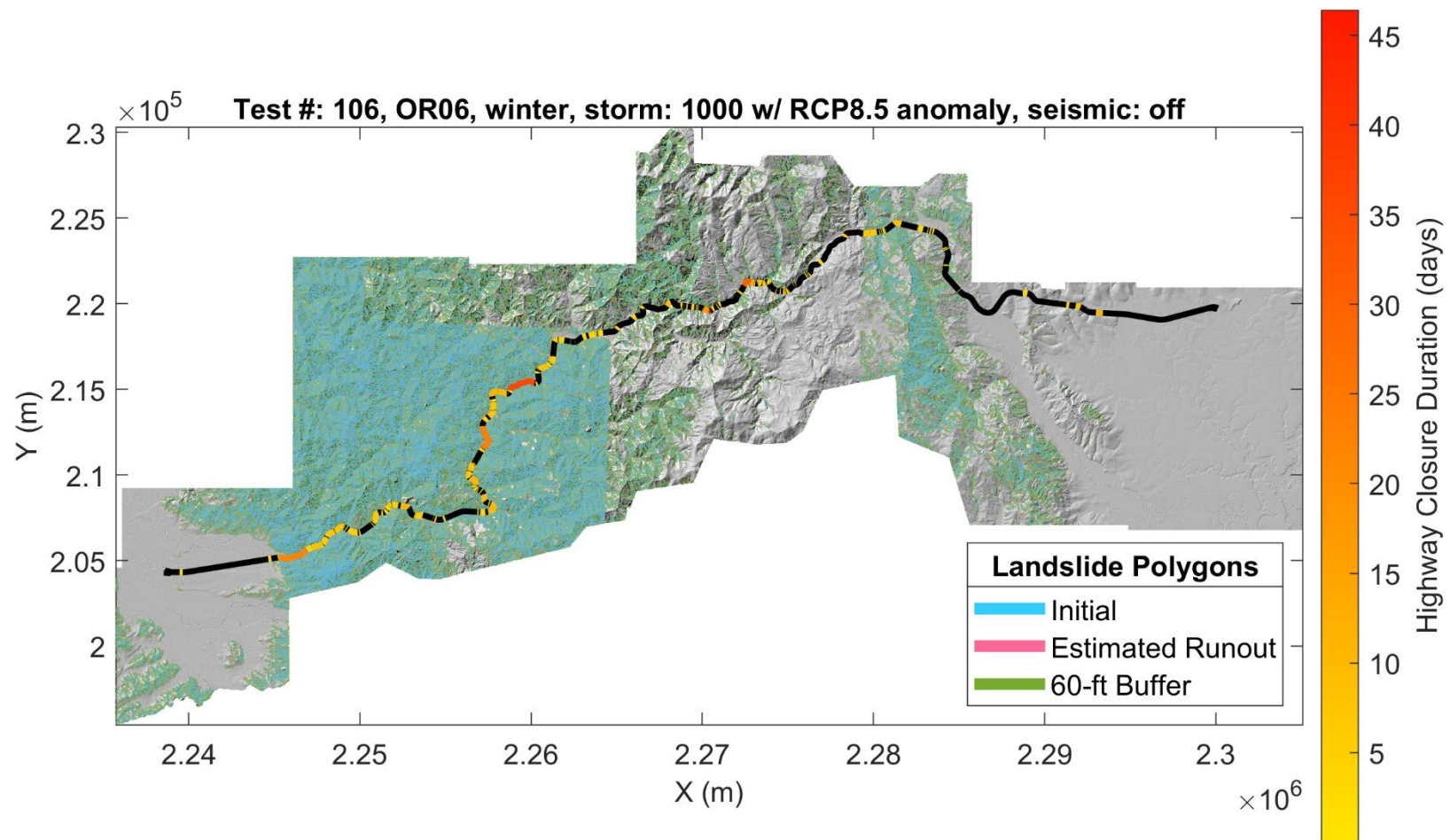


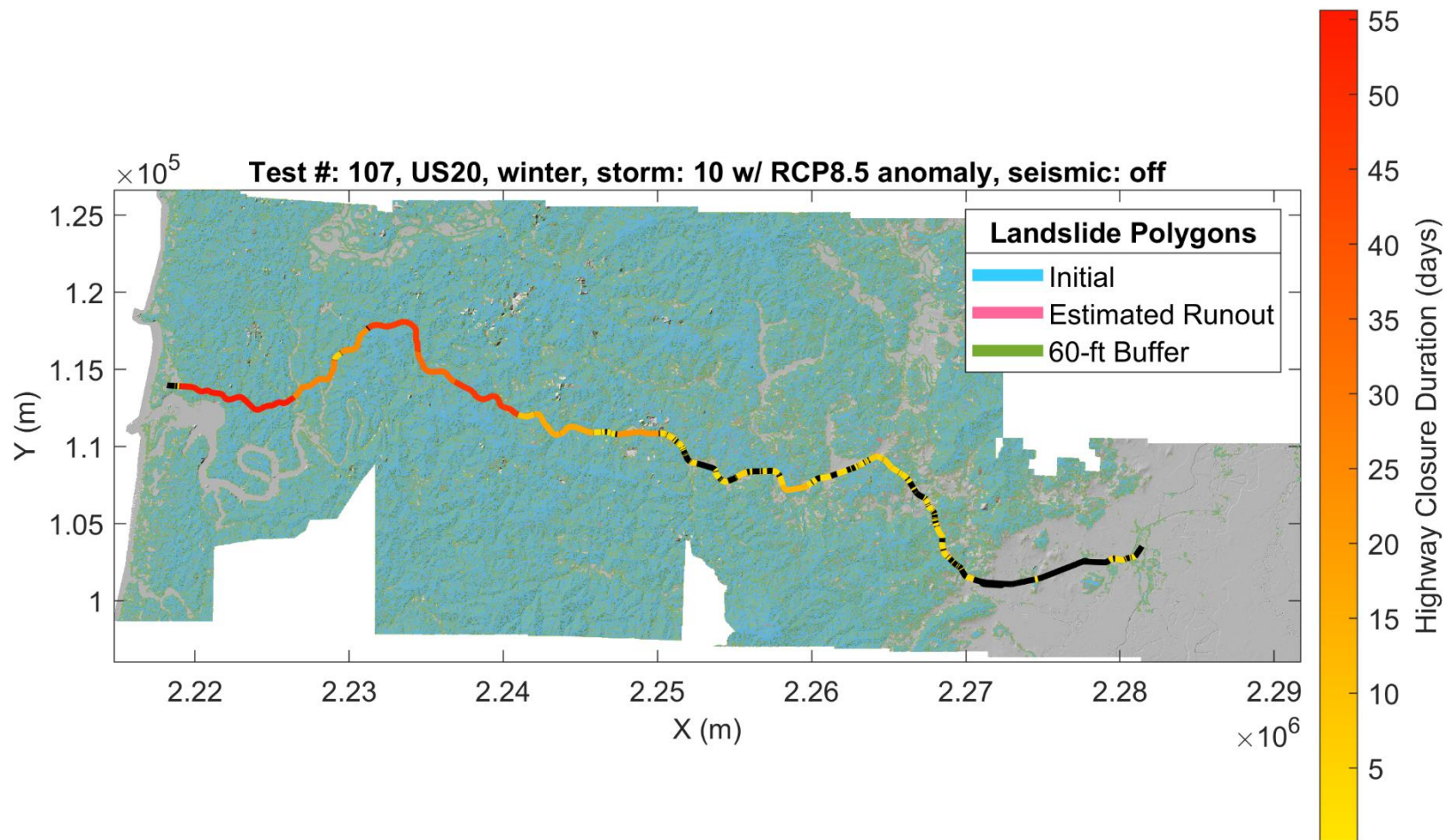


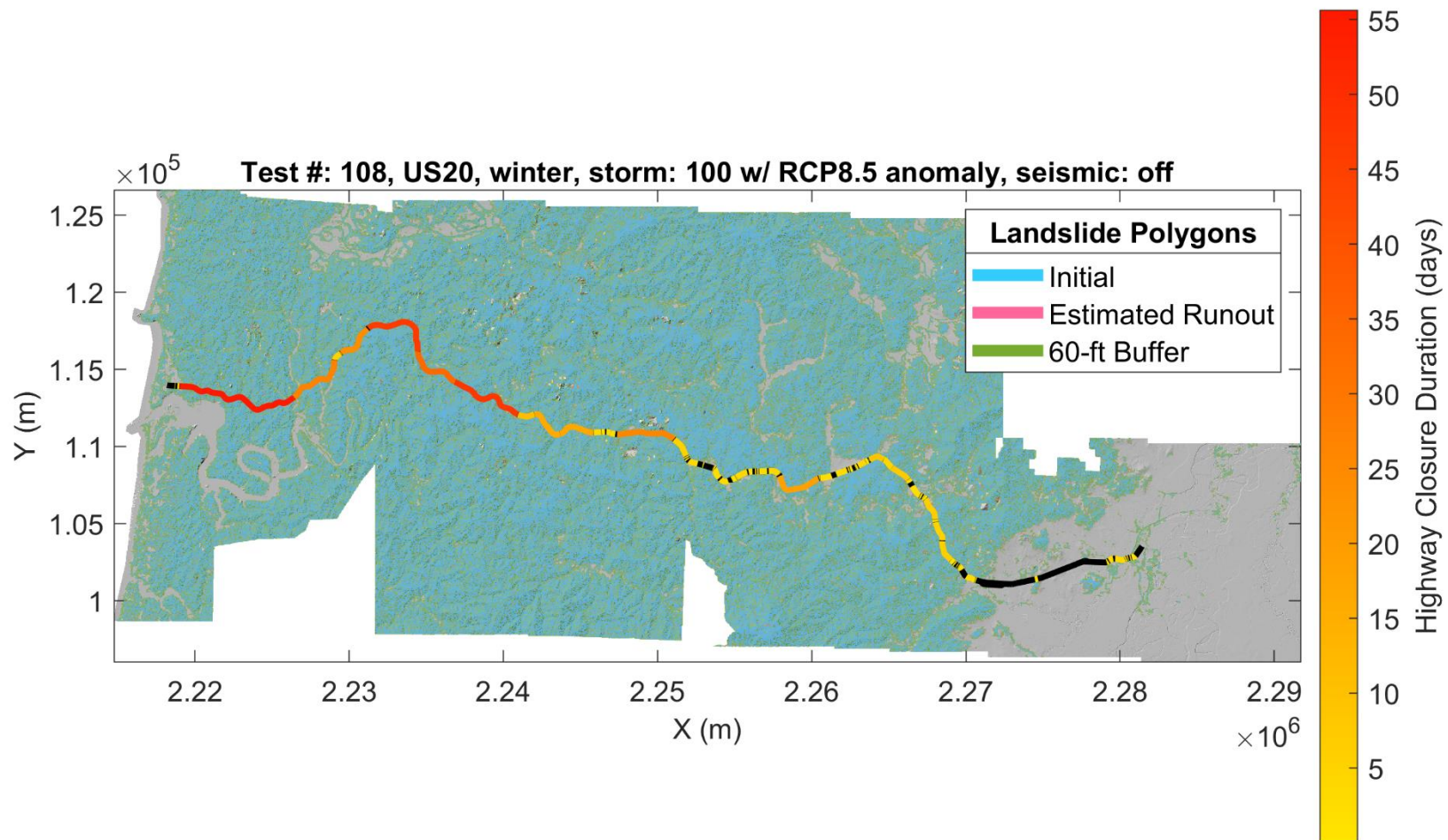


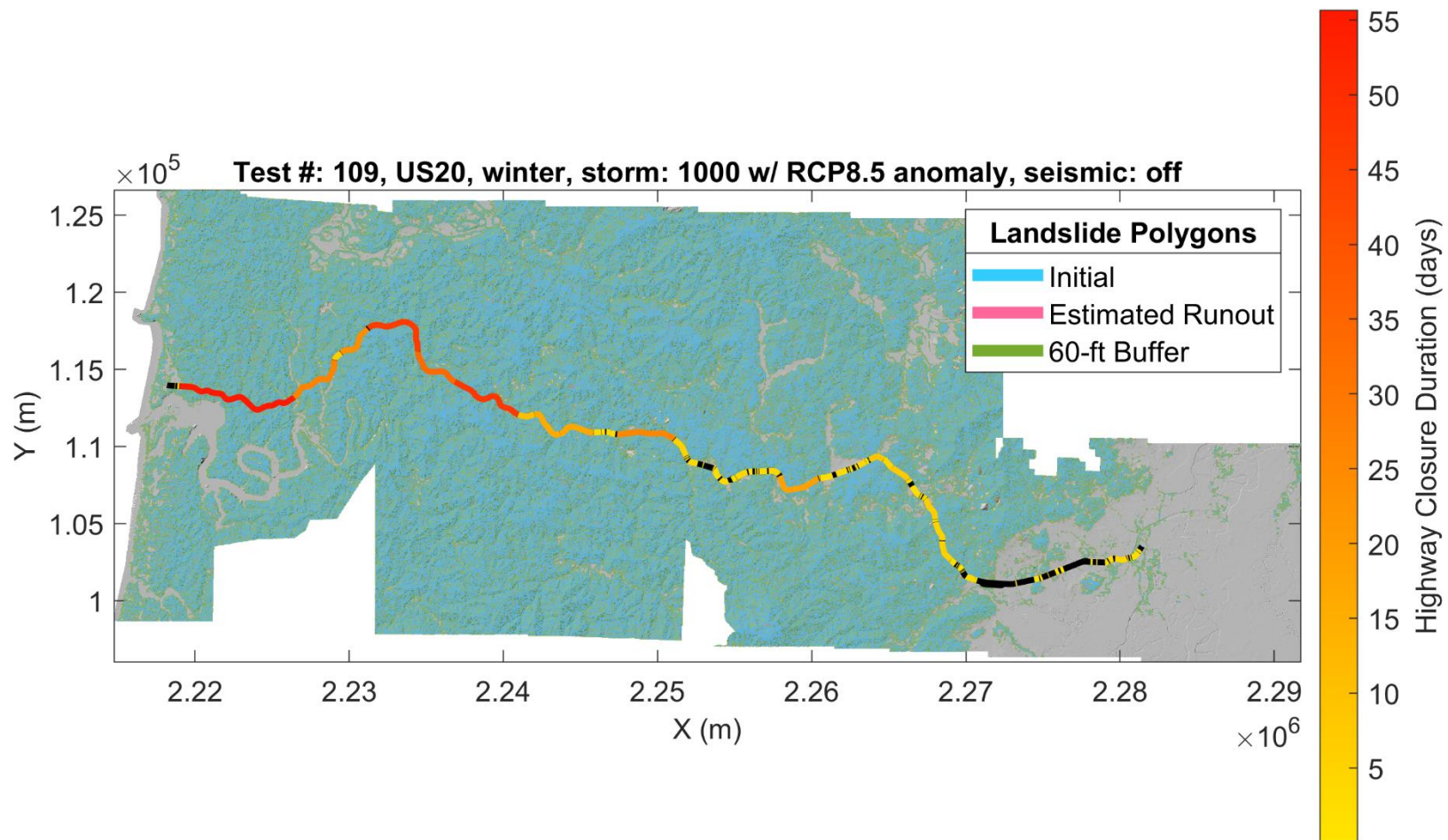


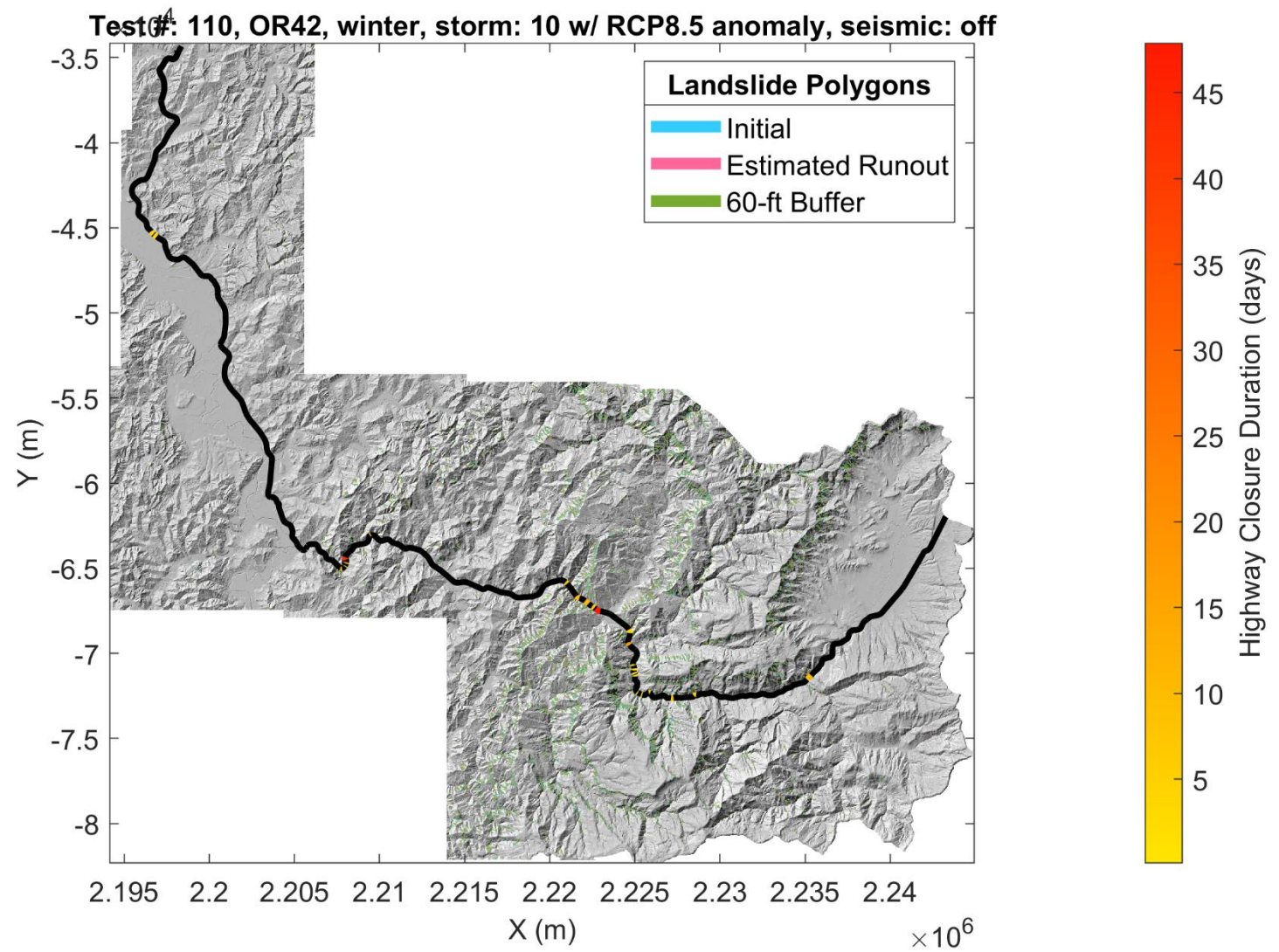


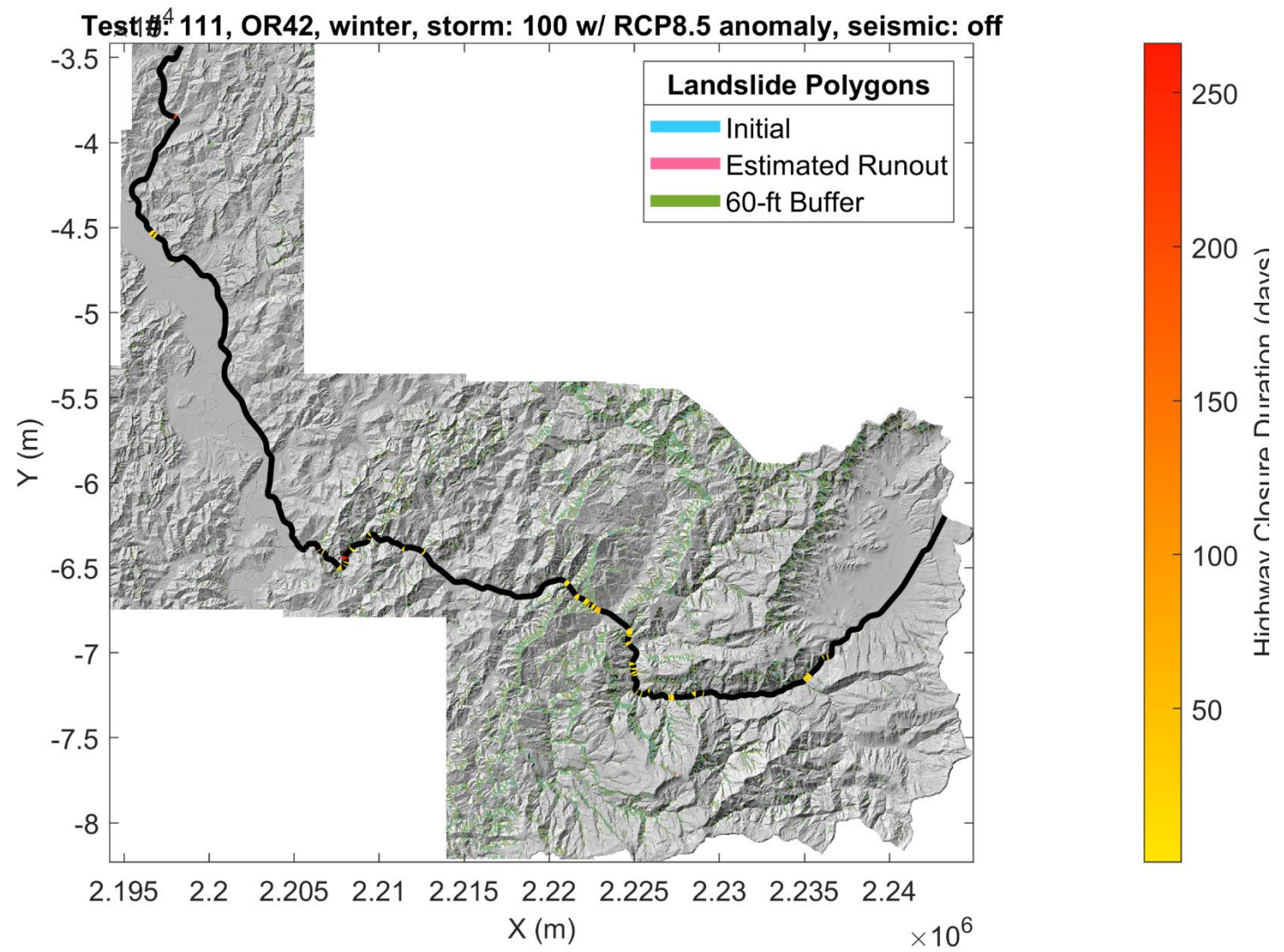


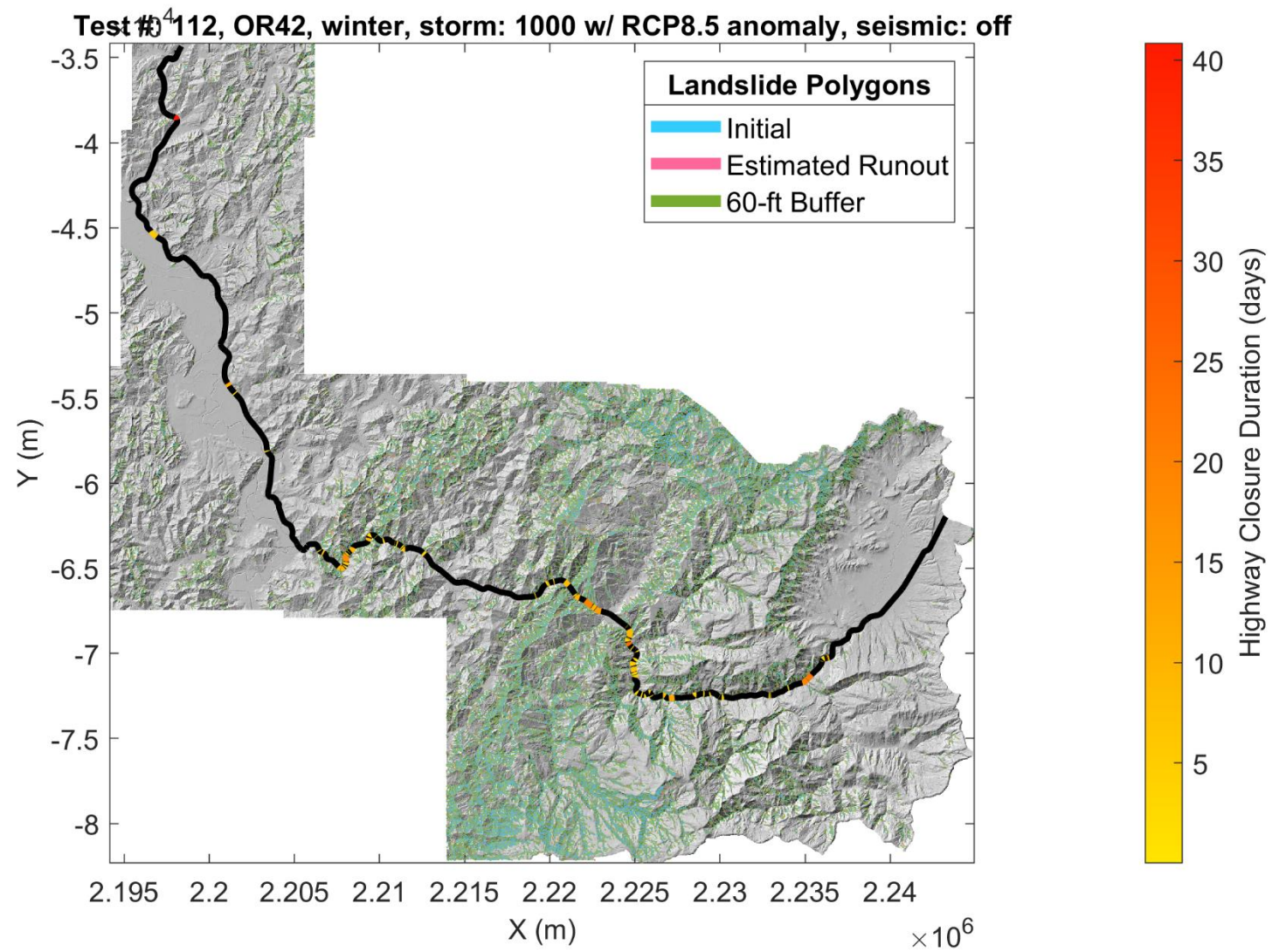






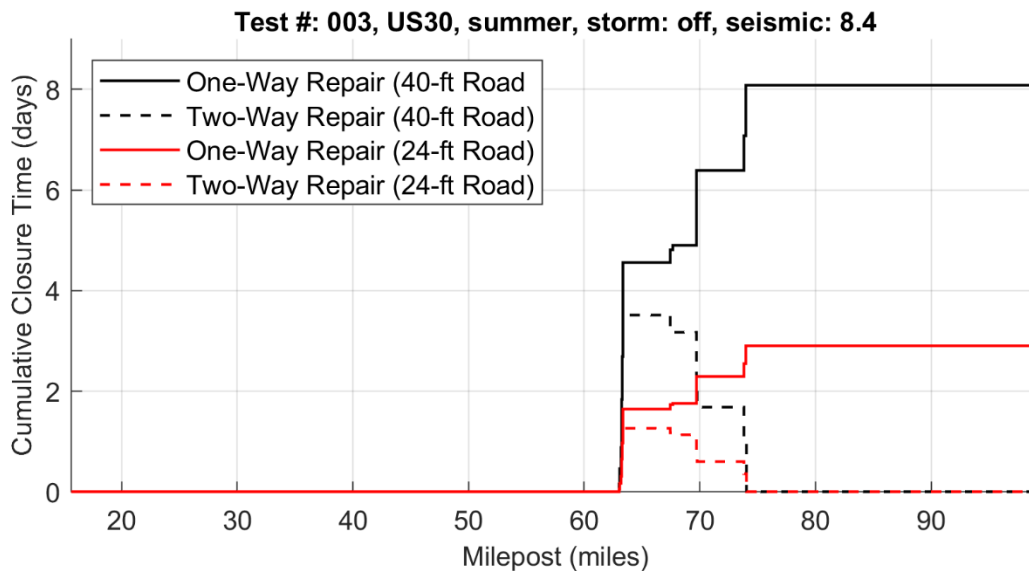
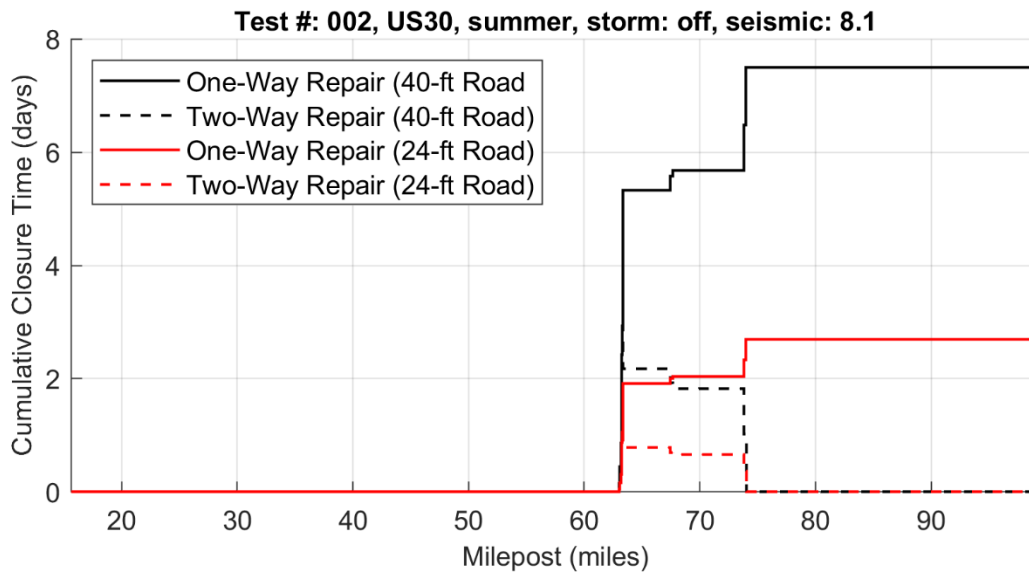
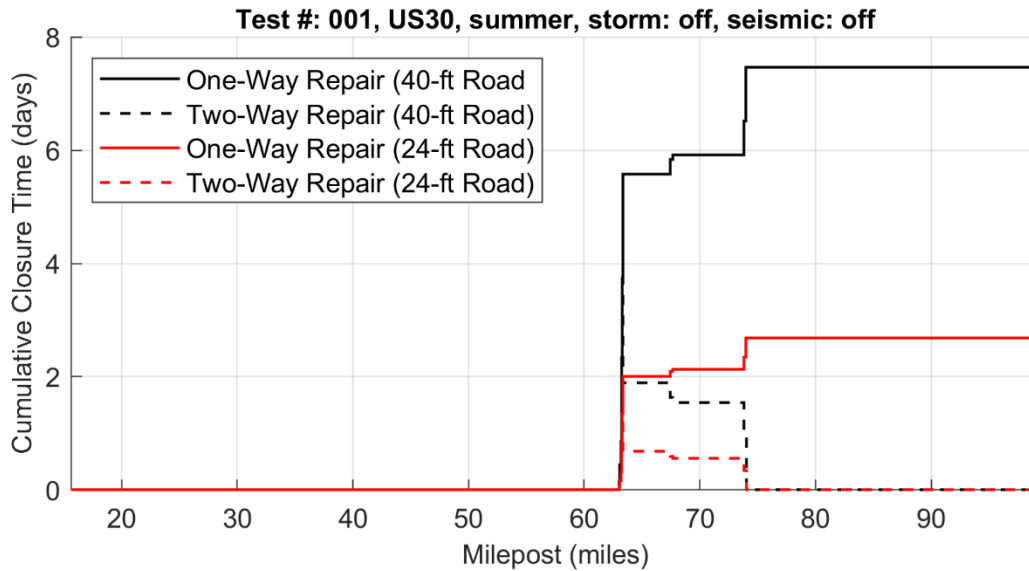


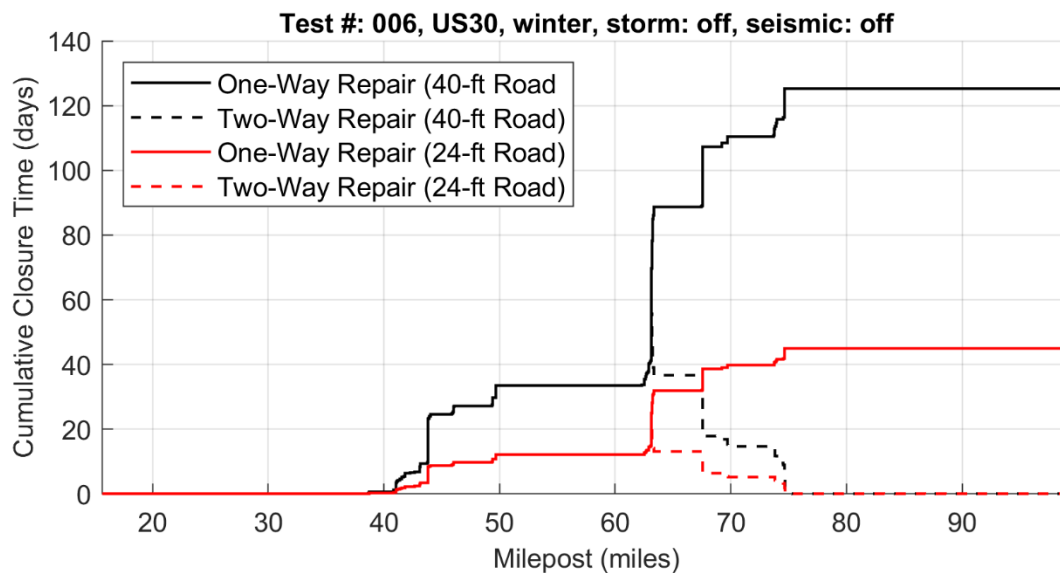
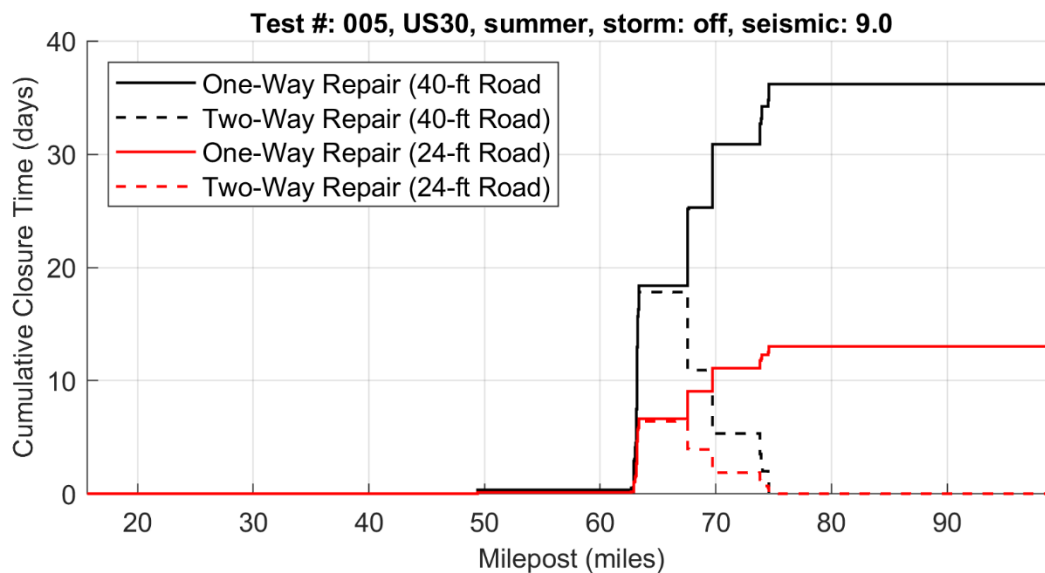
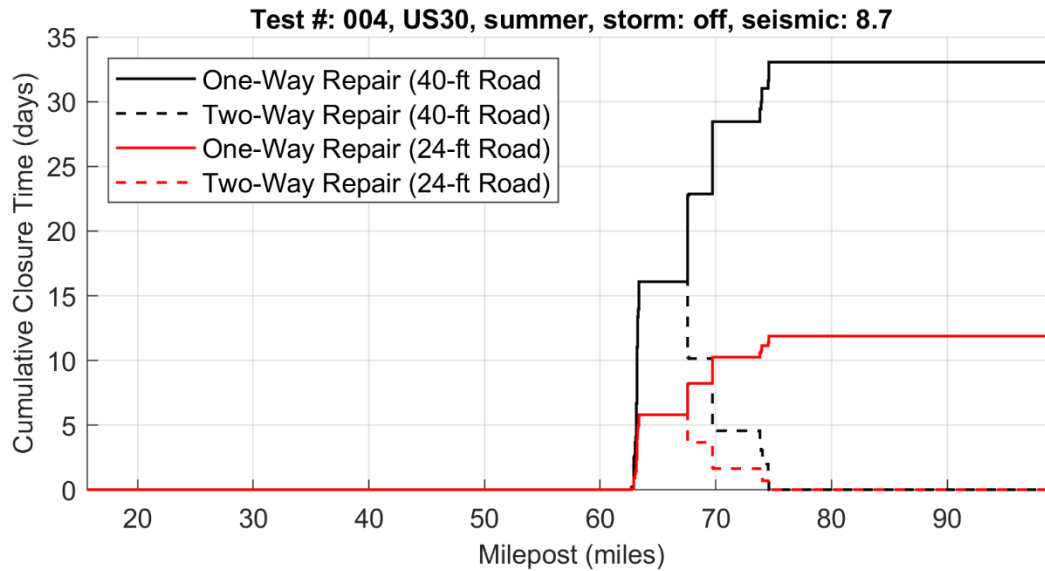


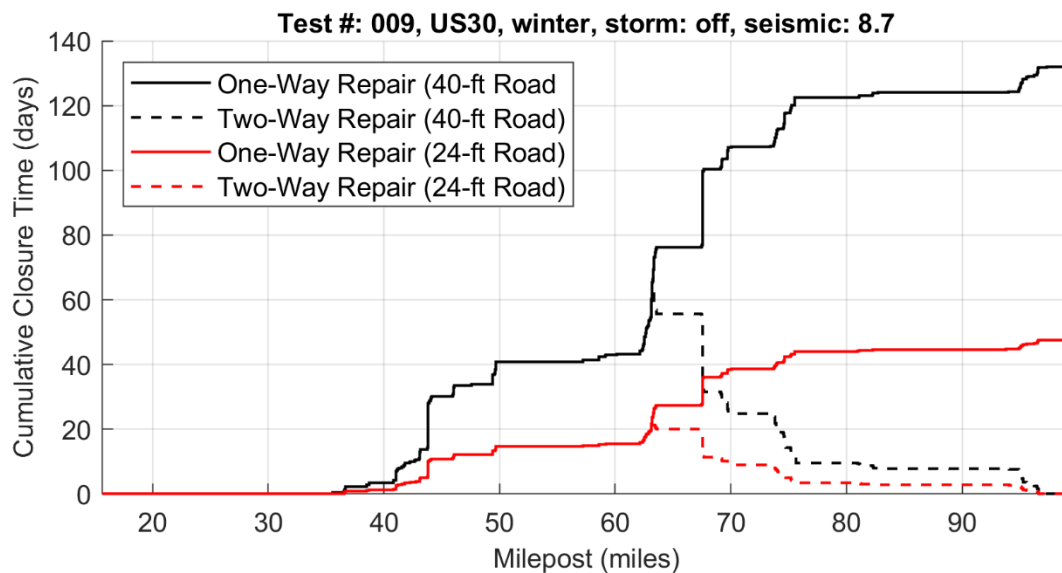
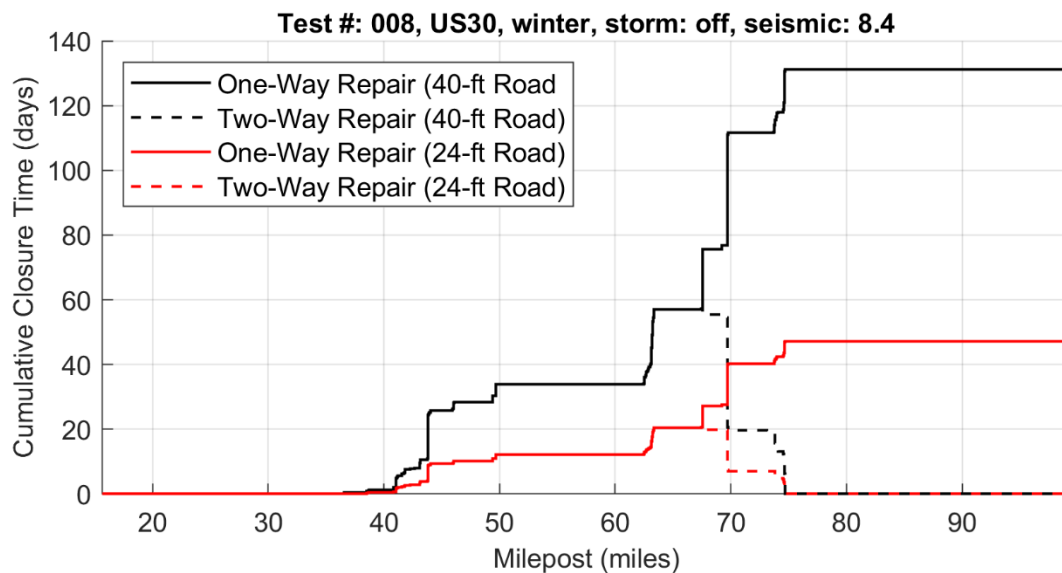
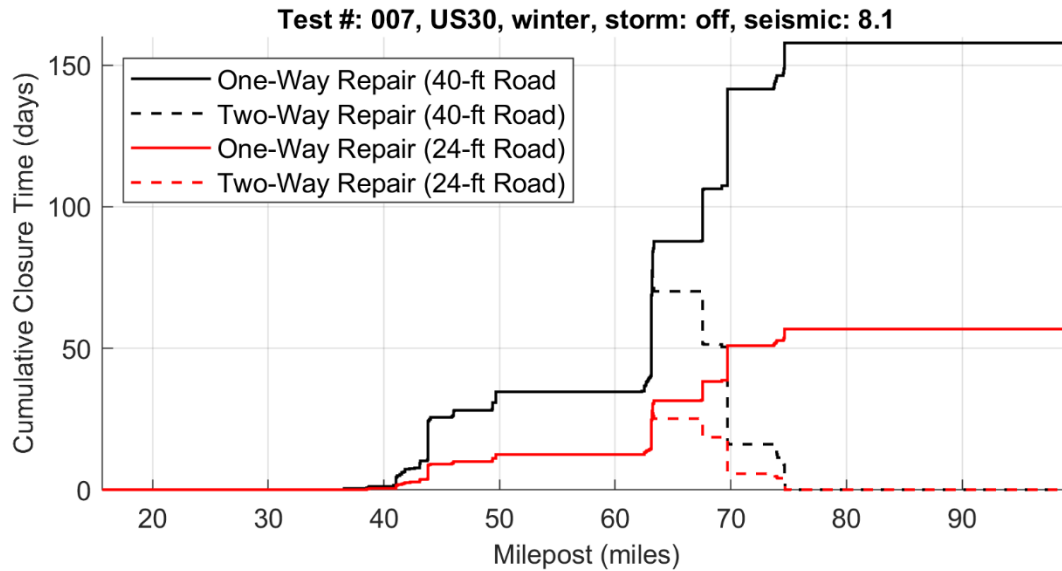


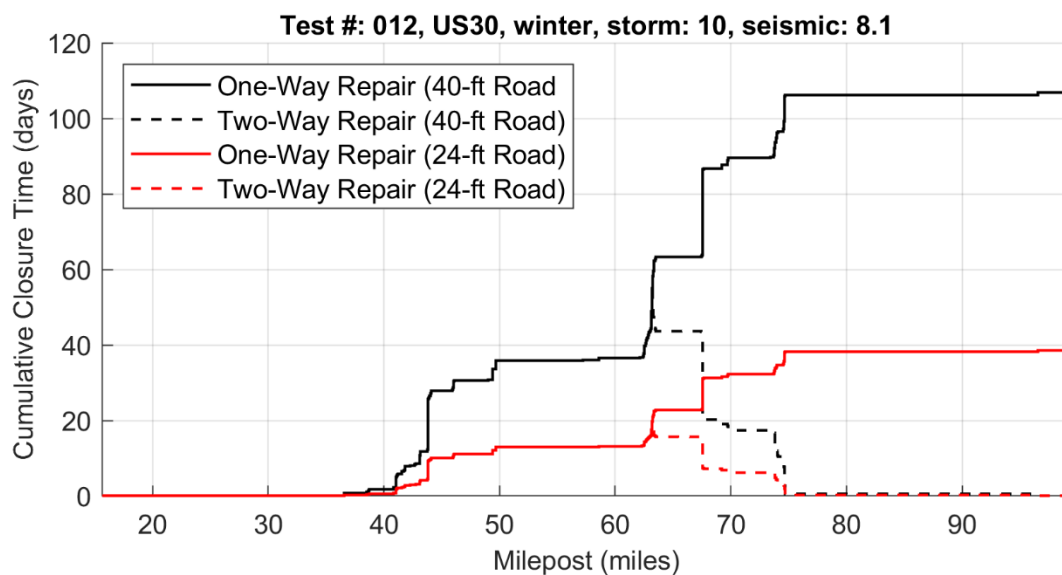
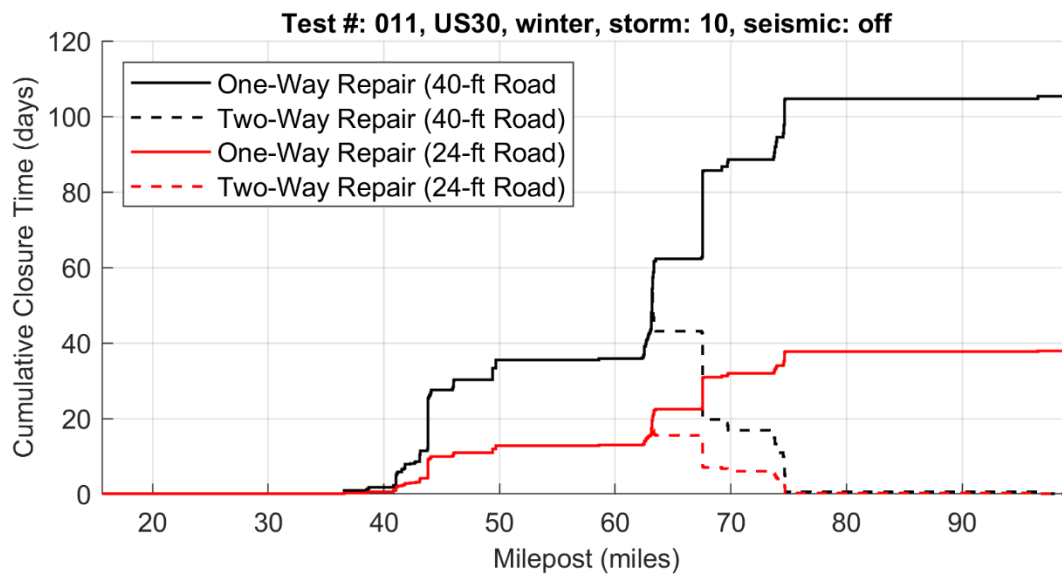
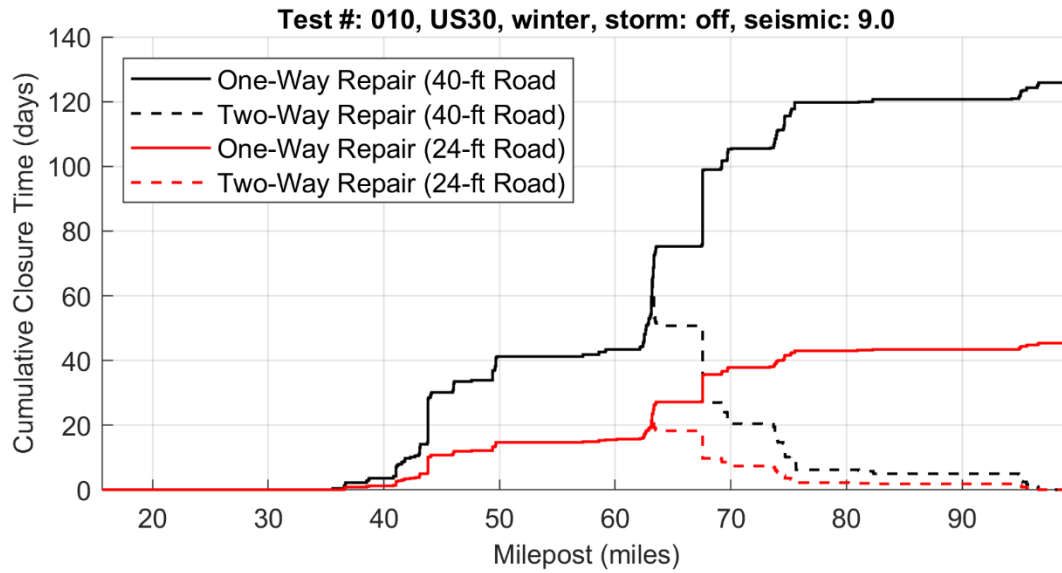
APPENDIX E: RISK METRIC PROFILES: MILEPOST VS. CUMULATIVE CLOSURE TIME (WITHOUT 60 FOOT LANDSLIDE BUFFER)

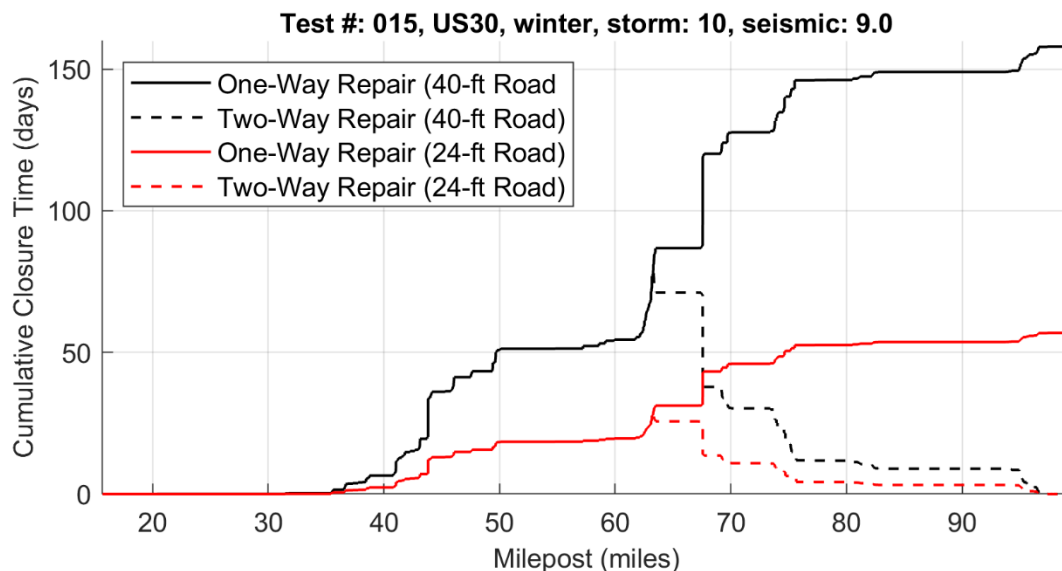
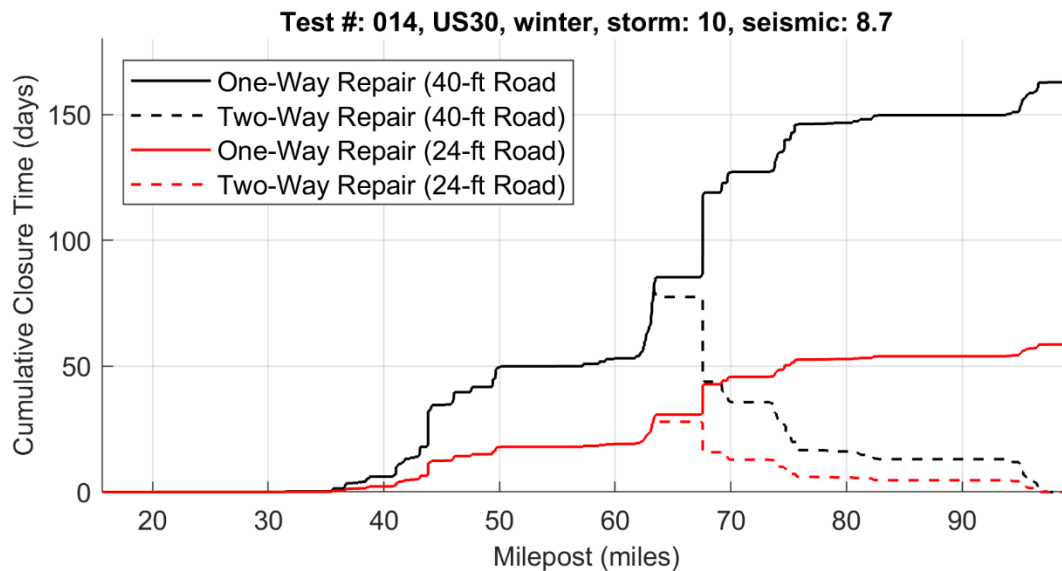
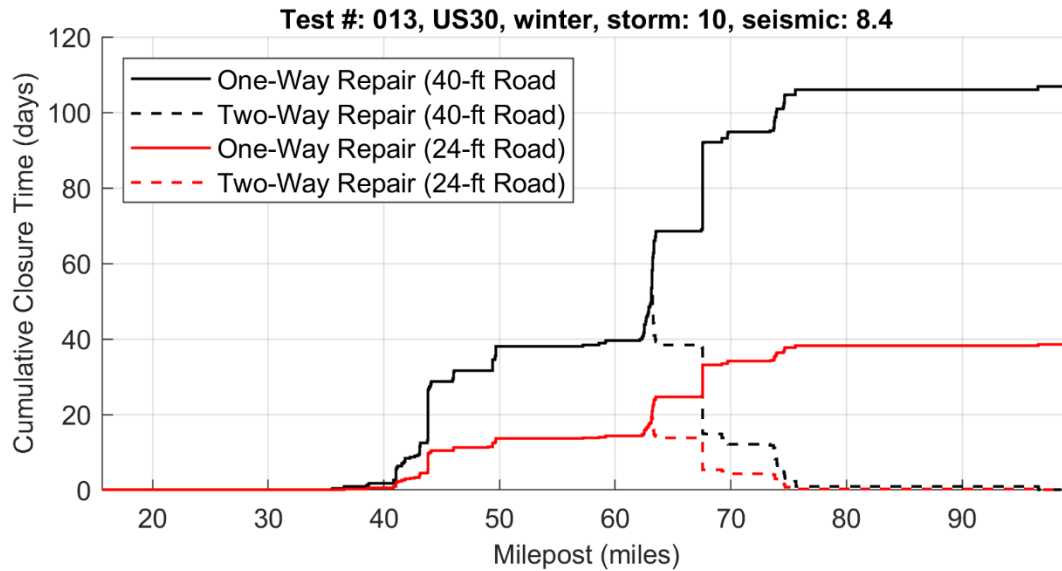
This appendix contains a full suite of milepost vs cumulative closure time profiles (closure times do not consider landslide buffer) for all scenarios considered for SPR808. These scenarios consider a combination of physical drivers, including seasonal variations in antecedent moisture, rainfall inputs, seismicity, and climate-change induced precipitation anomaly. A directory describing all tests not considering future climate may be found in Table 4.4. A directory describing all tests considering future climate may be found in Table 4.7.

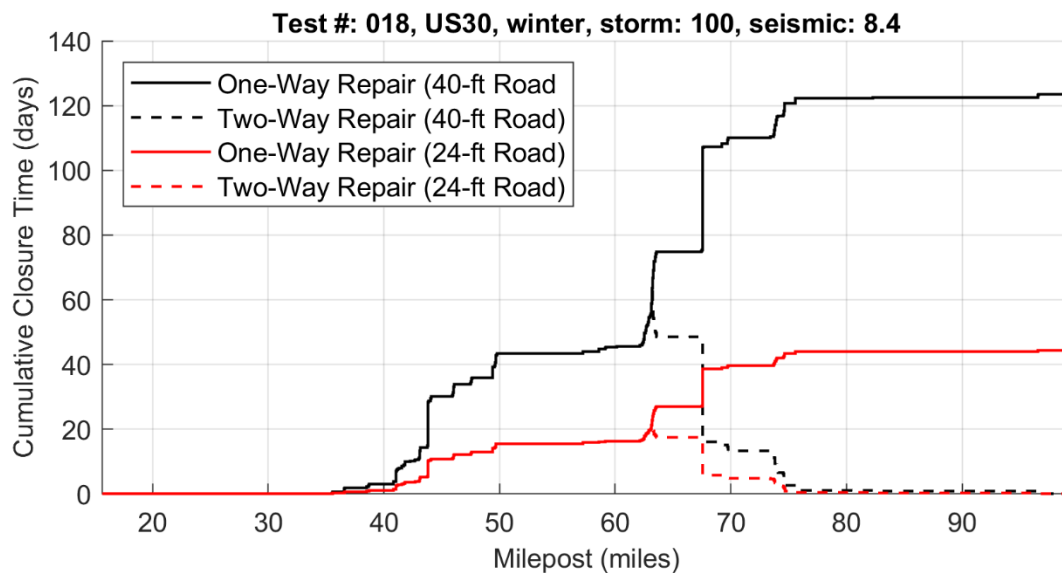
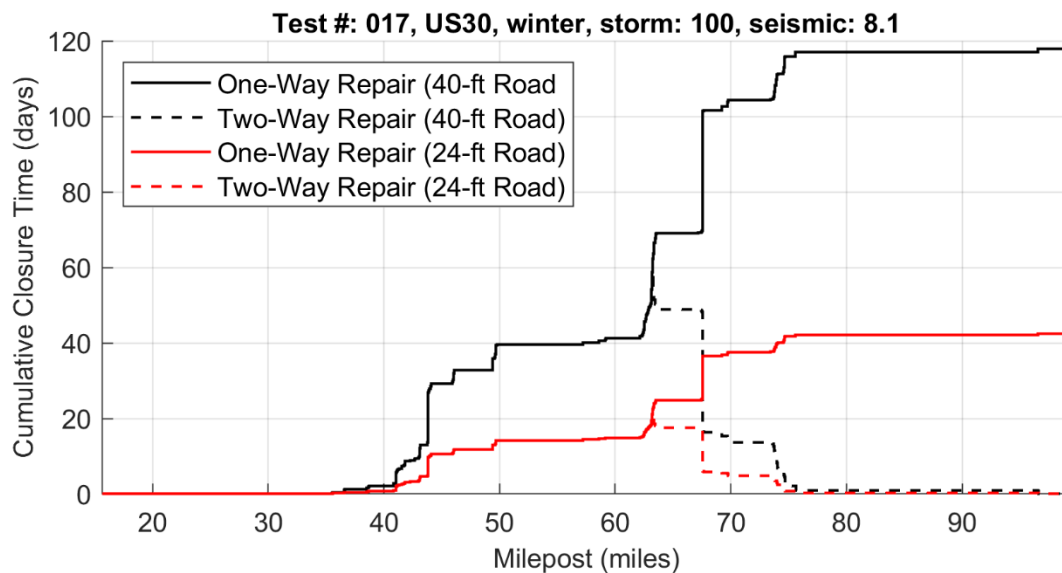
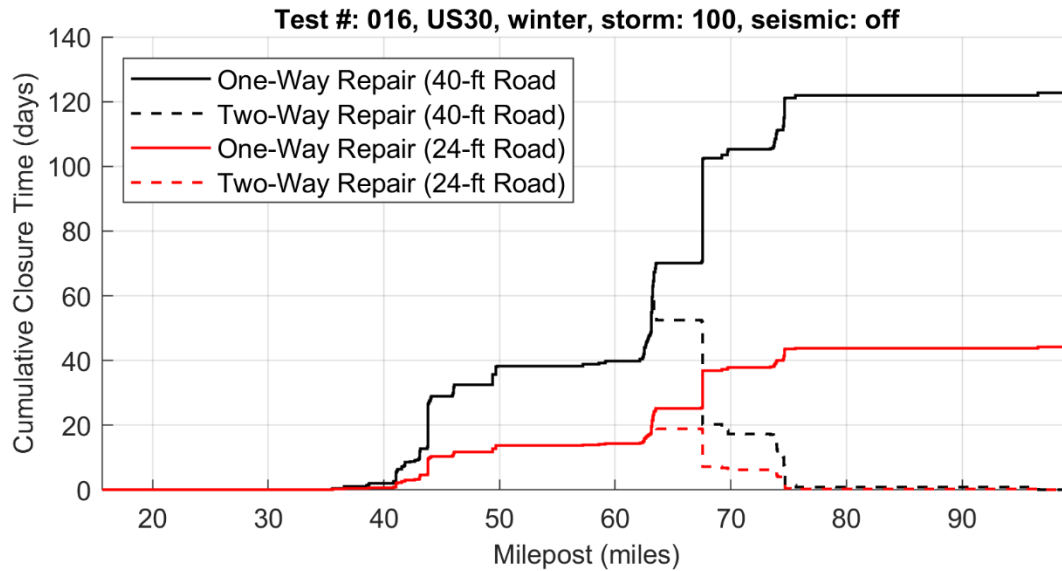


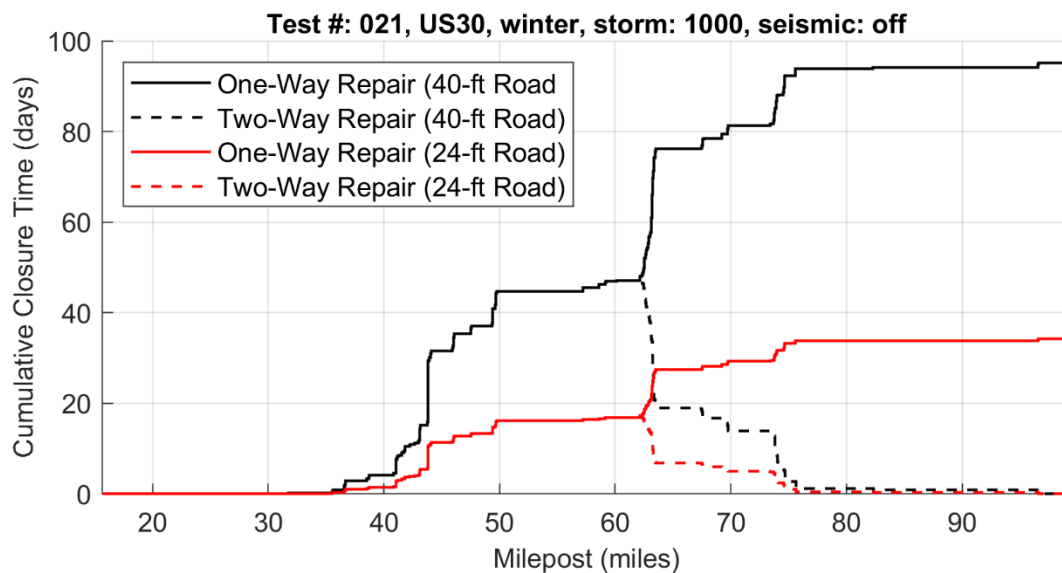
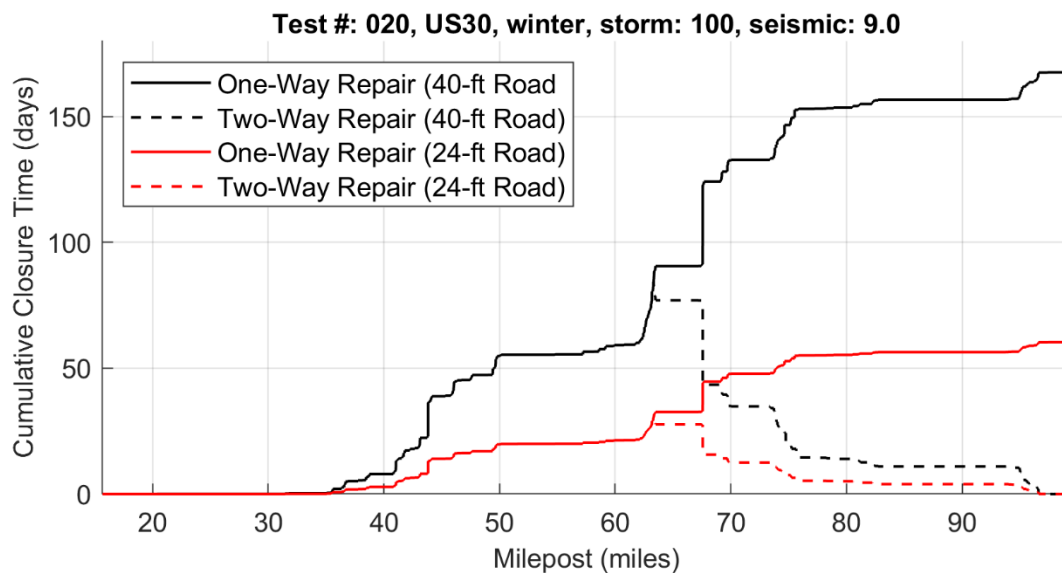
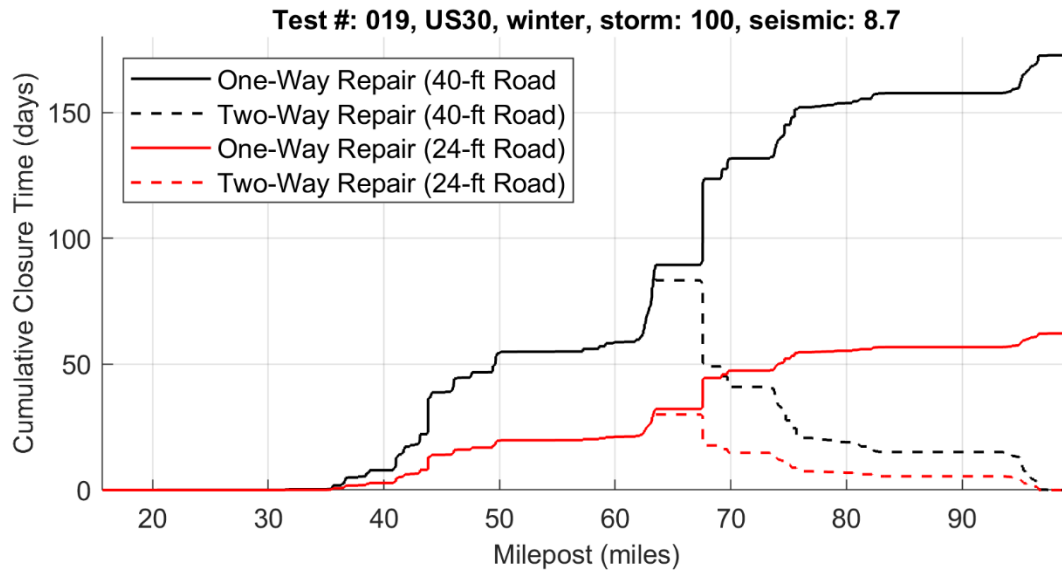


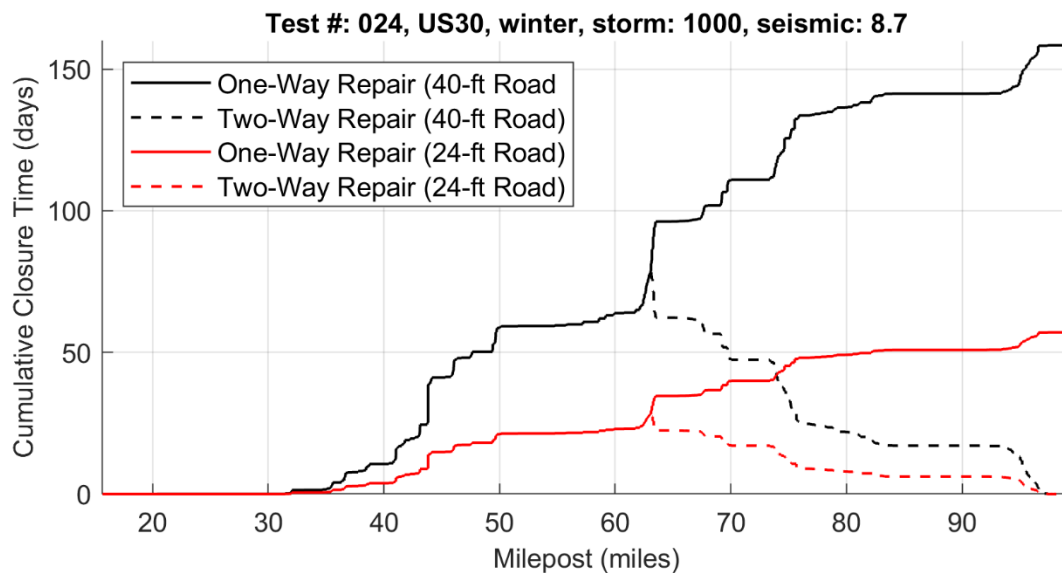
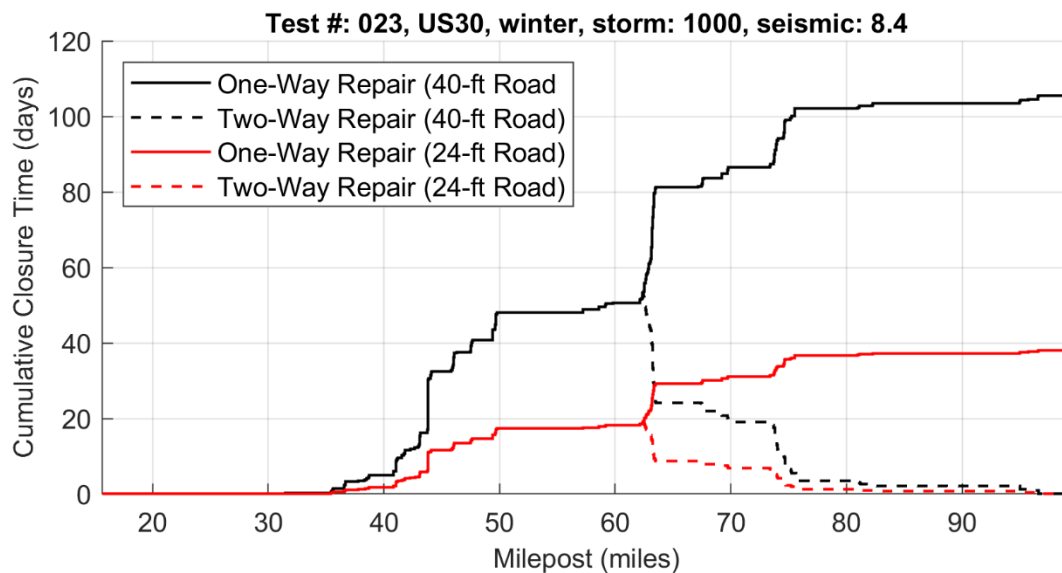
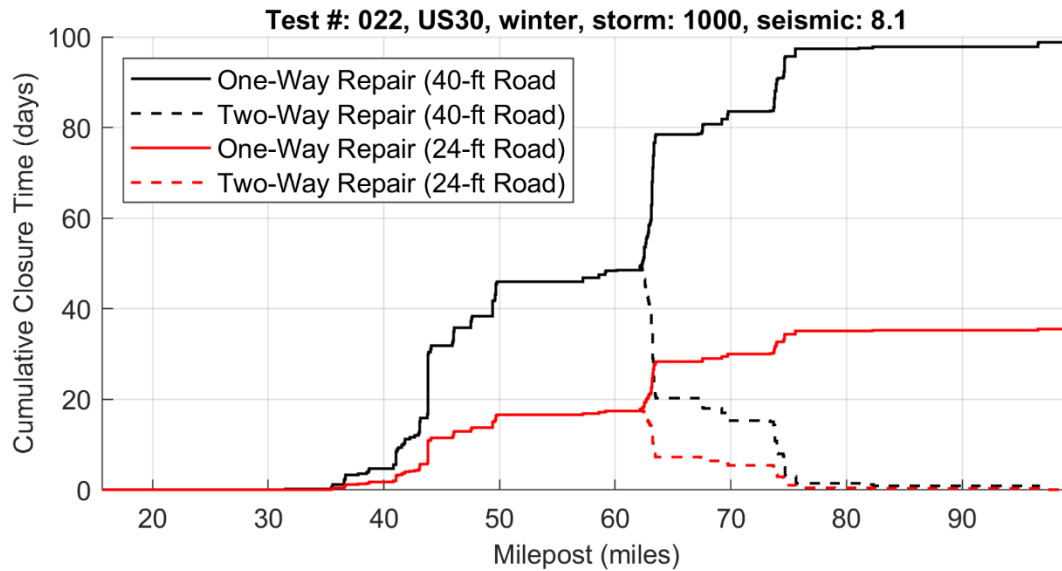


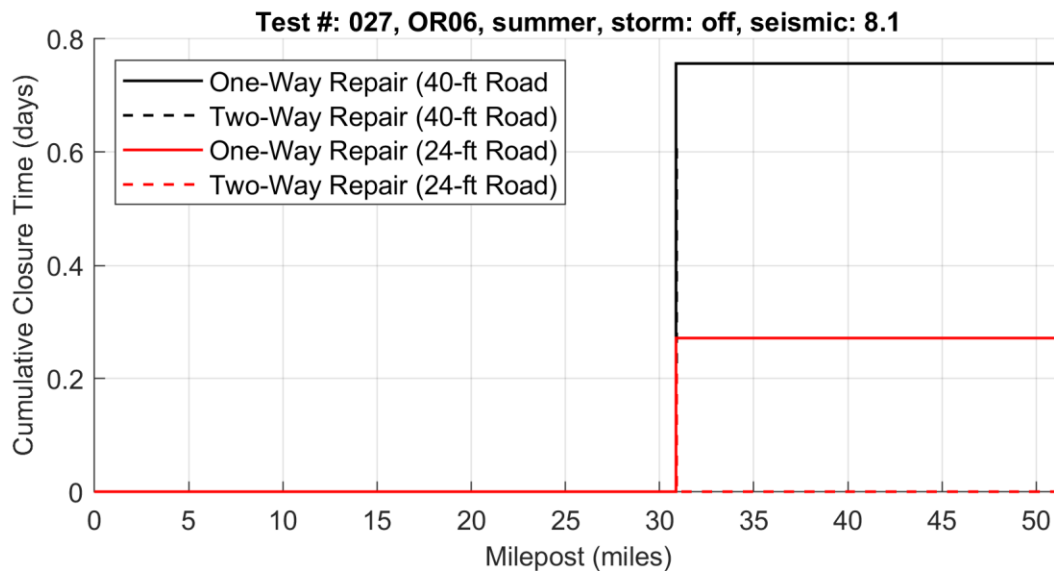
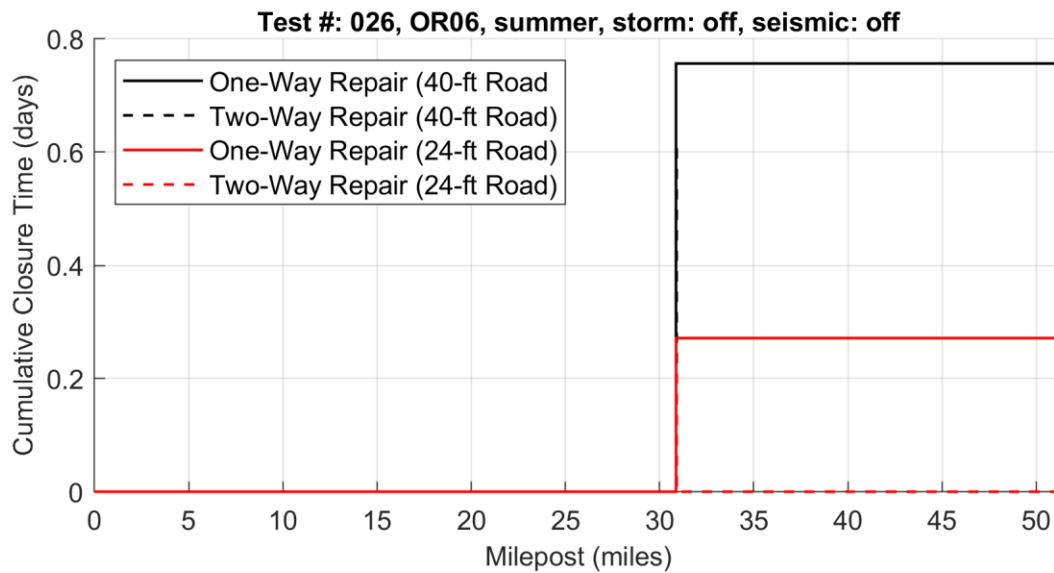
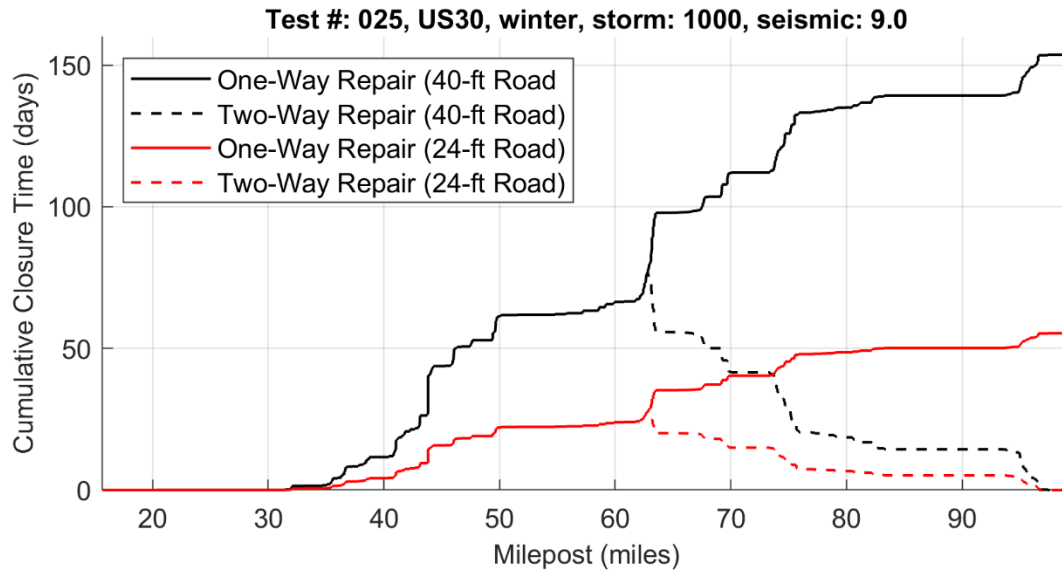


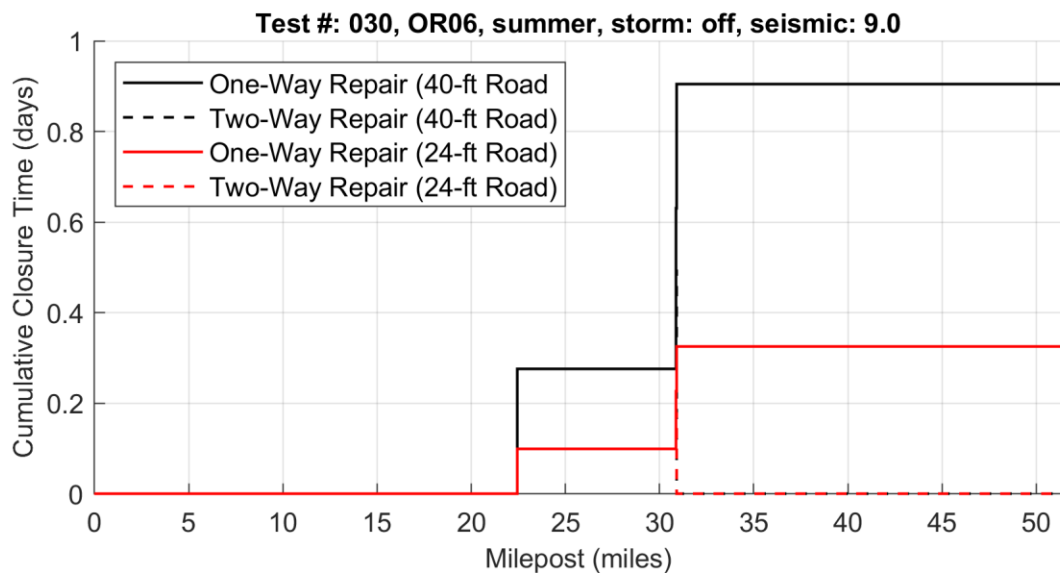
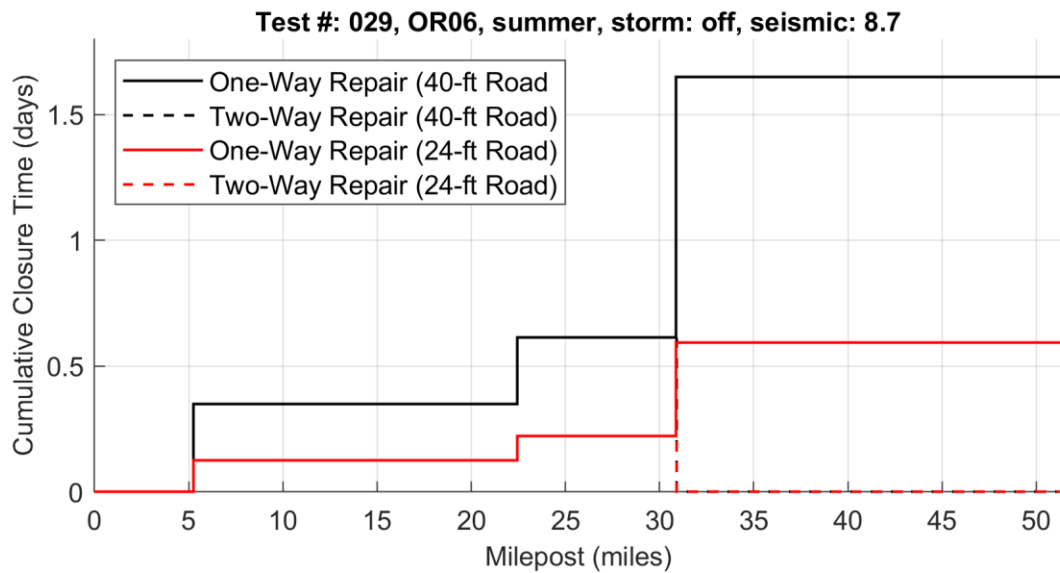
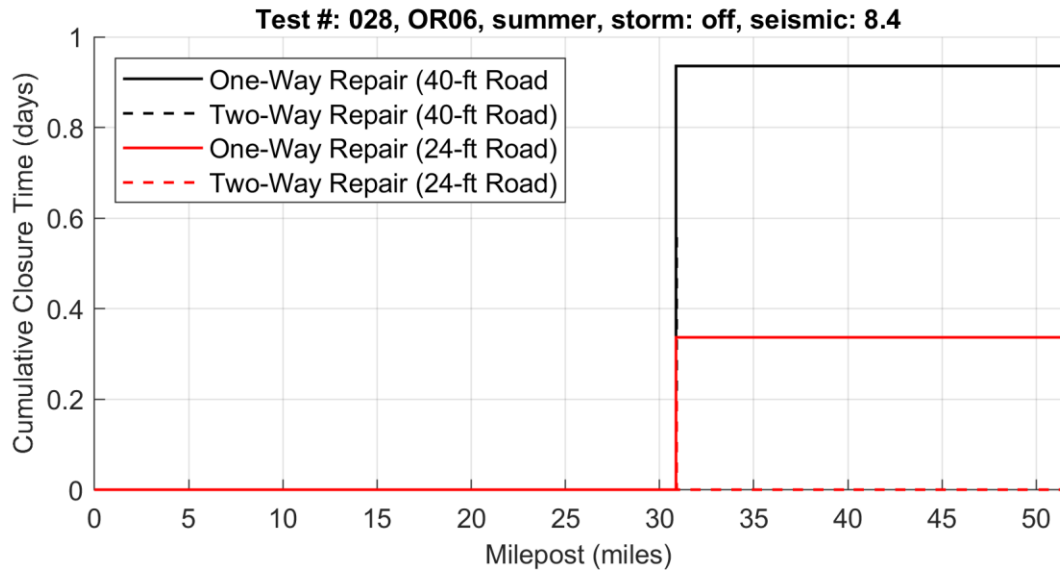


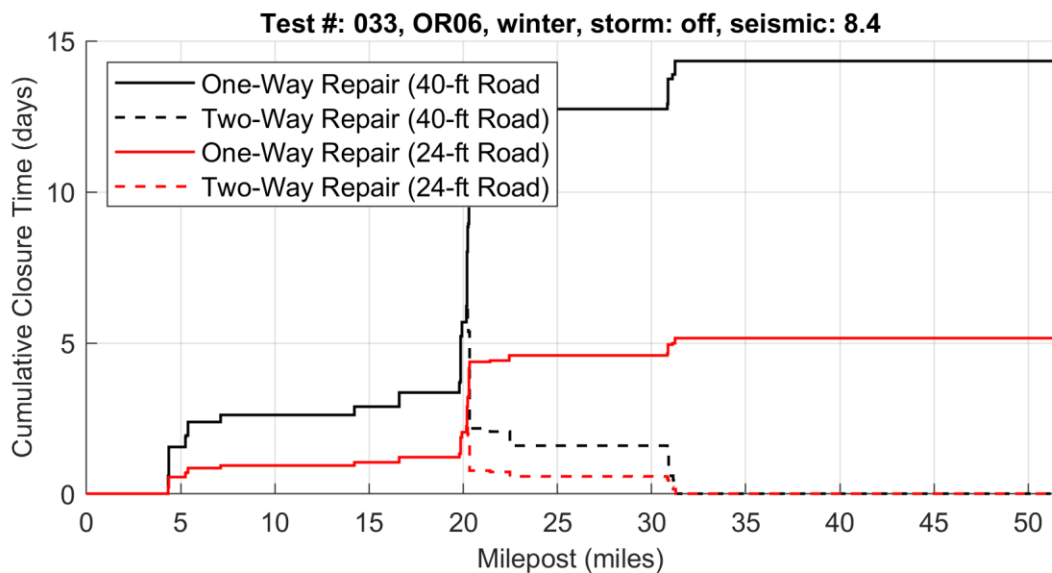
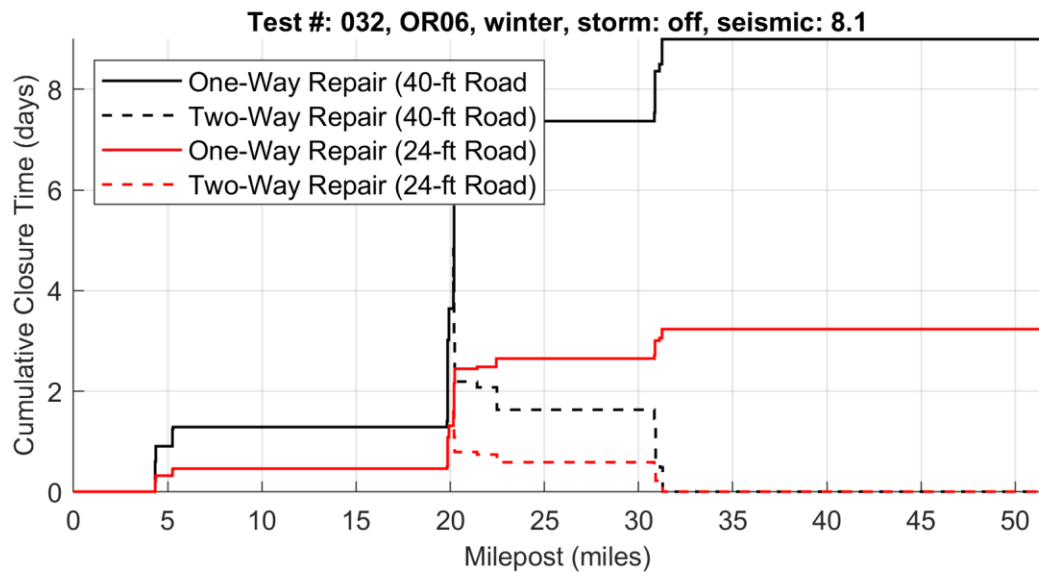
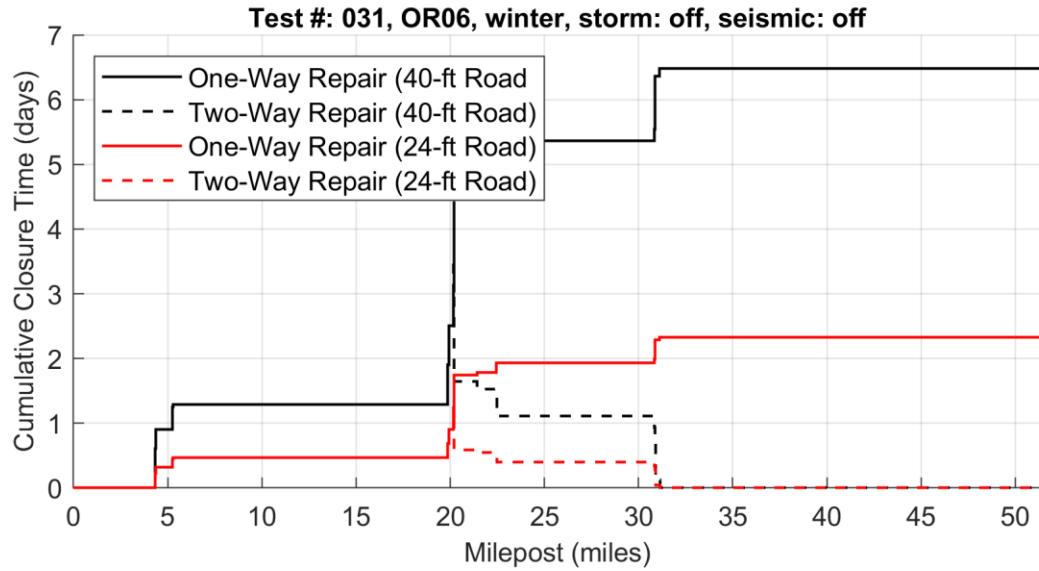


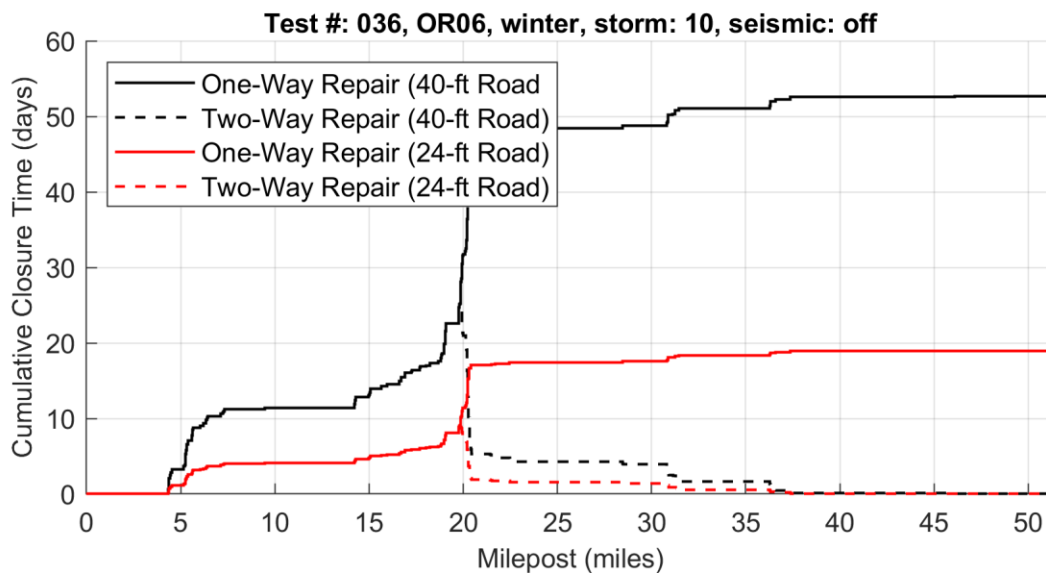
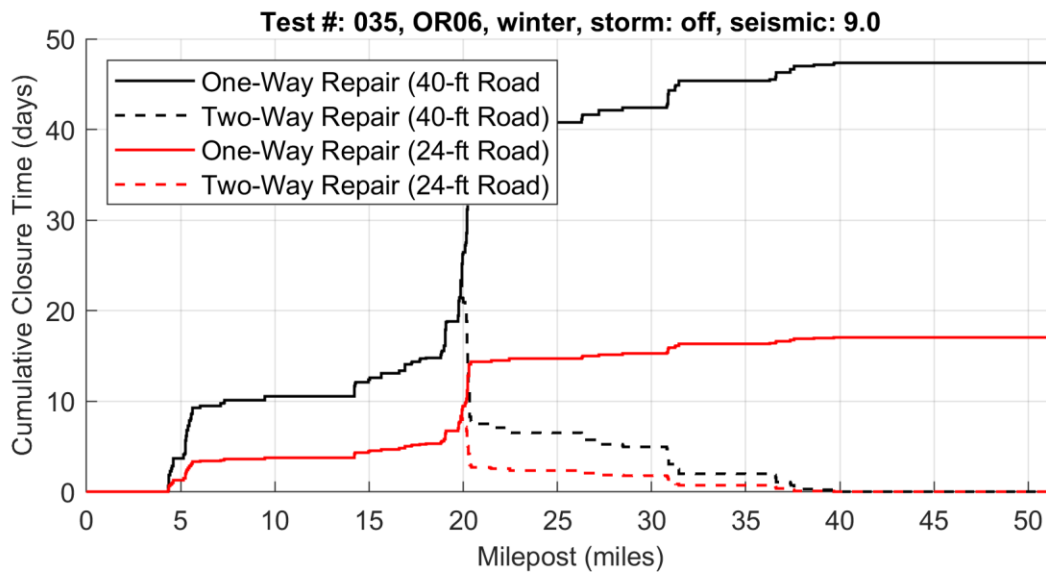
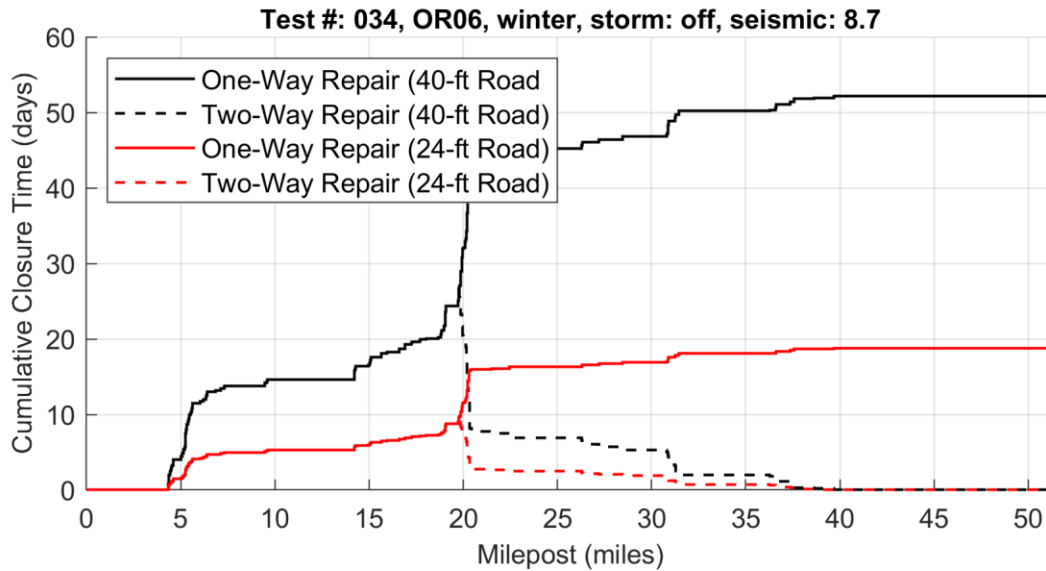


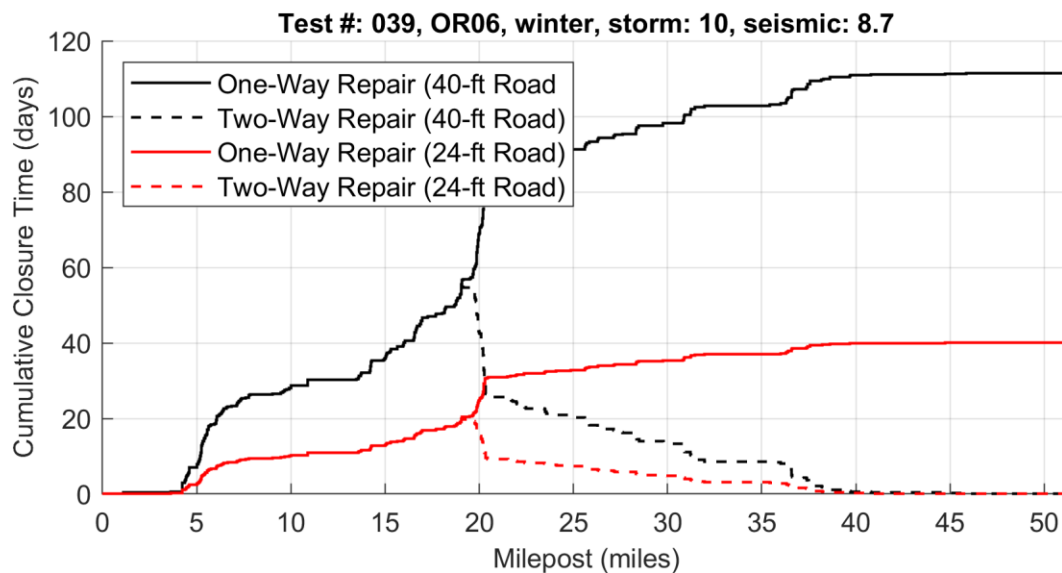
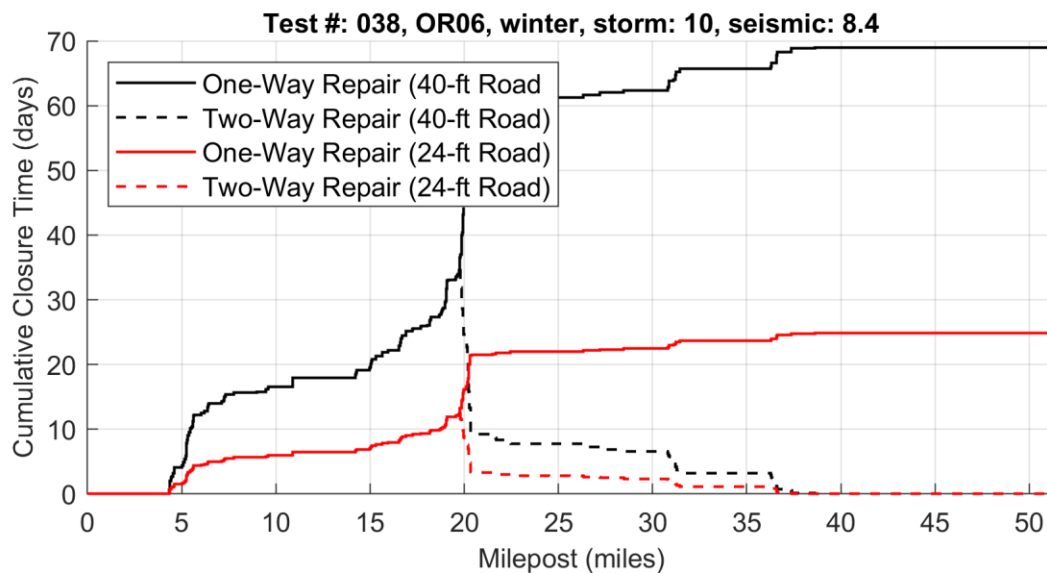
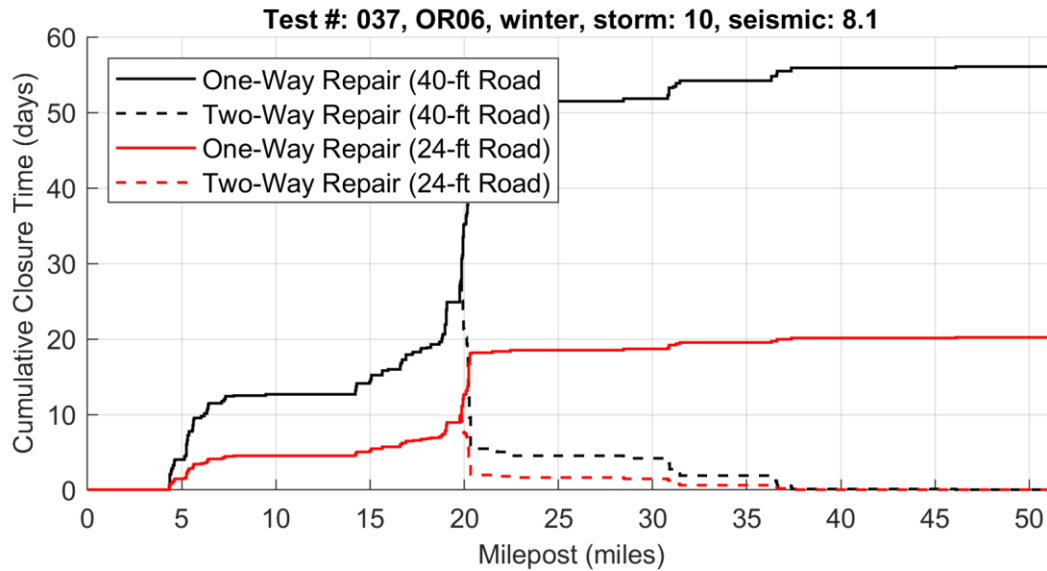


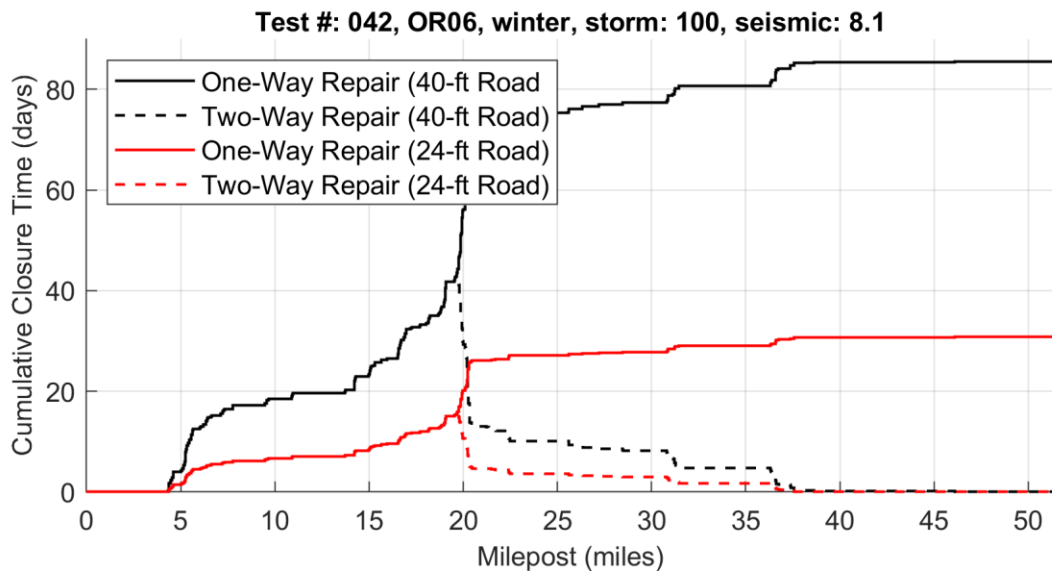
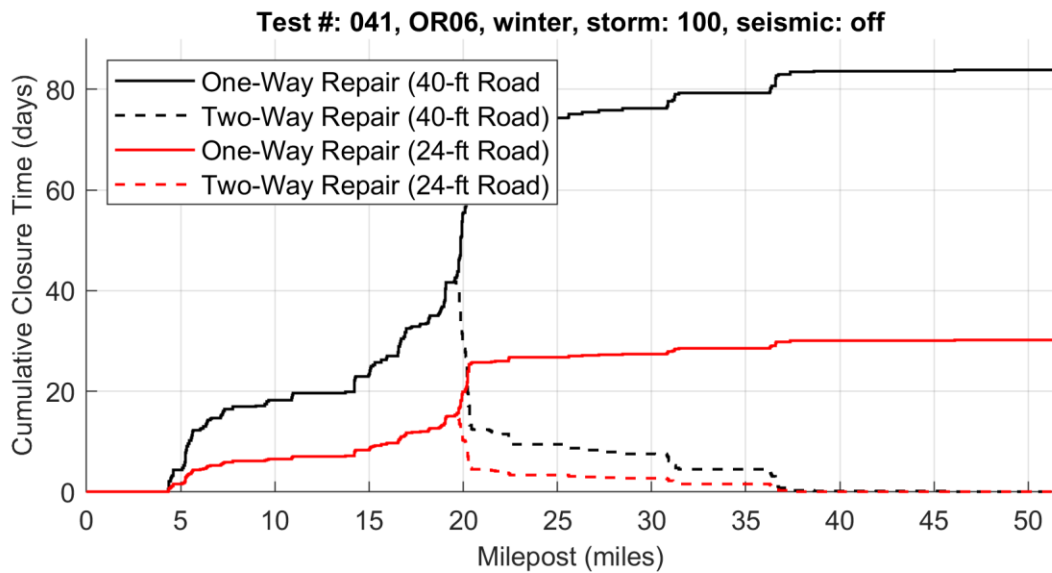
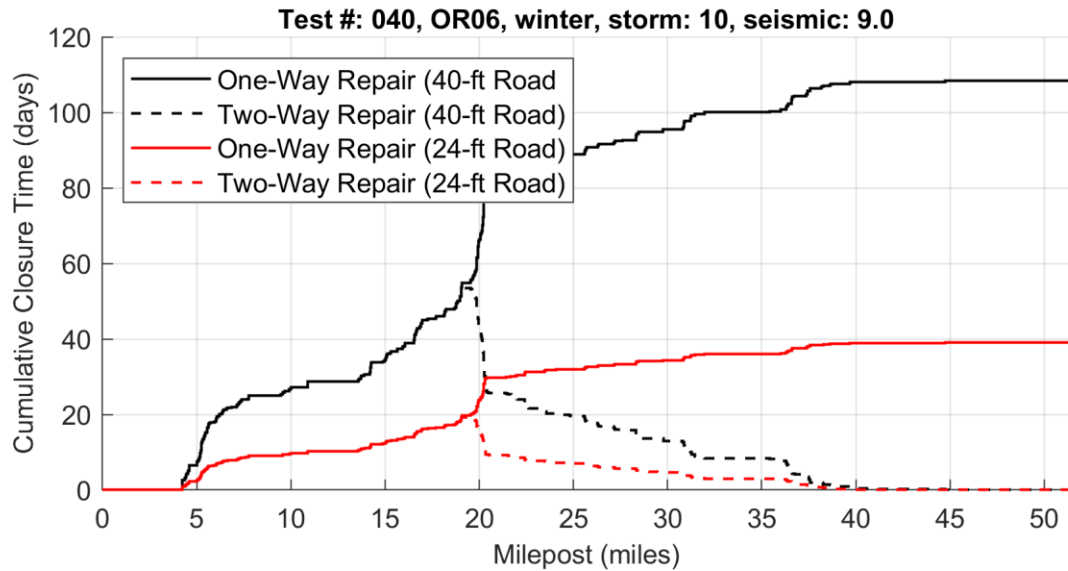


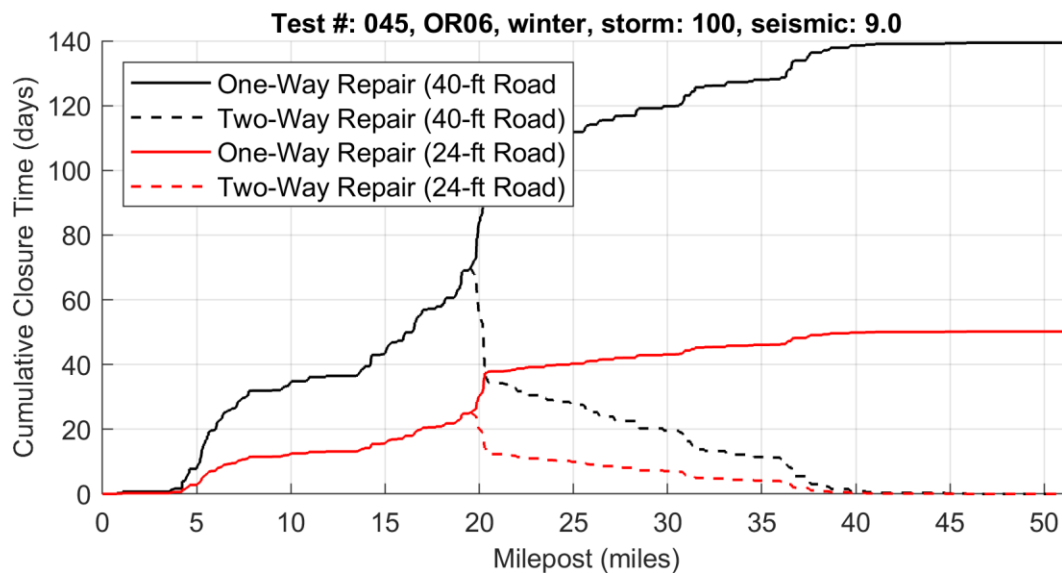
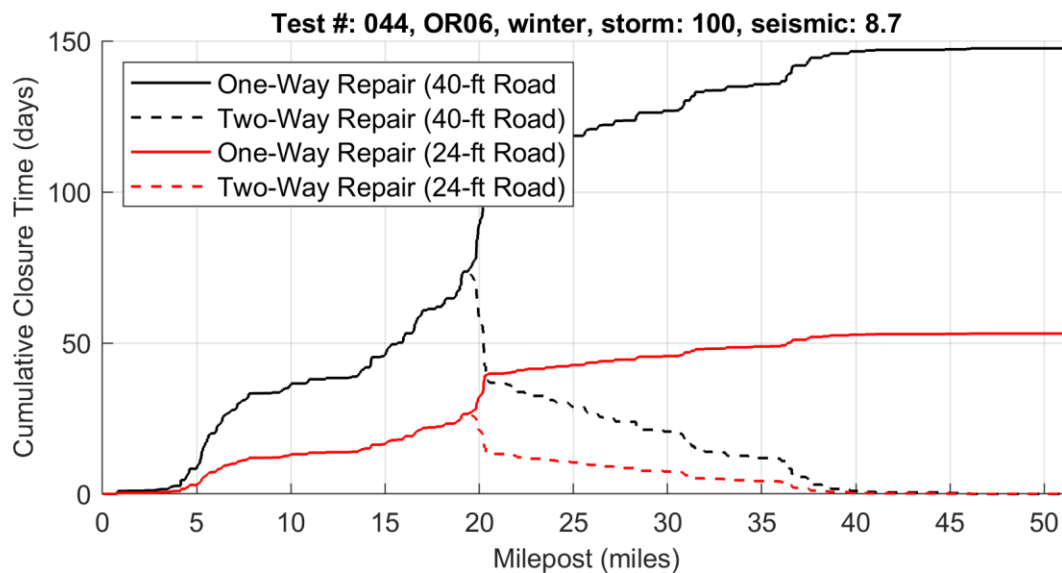
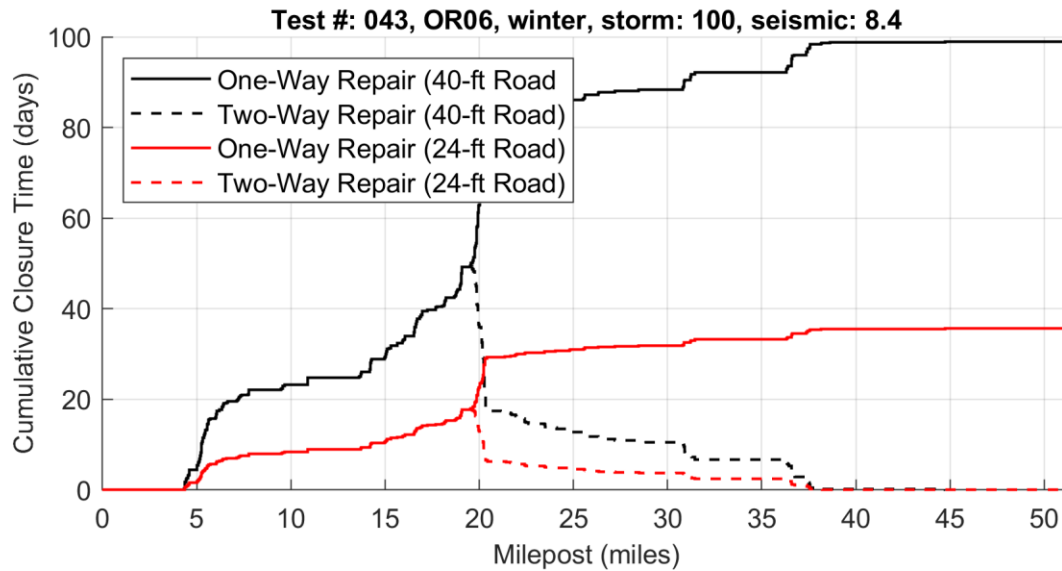


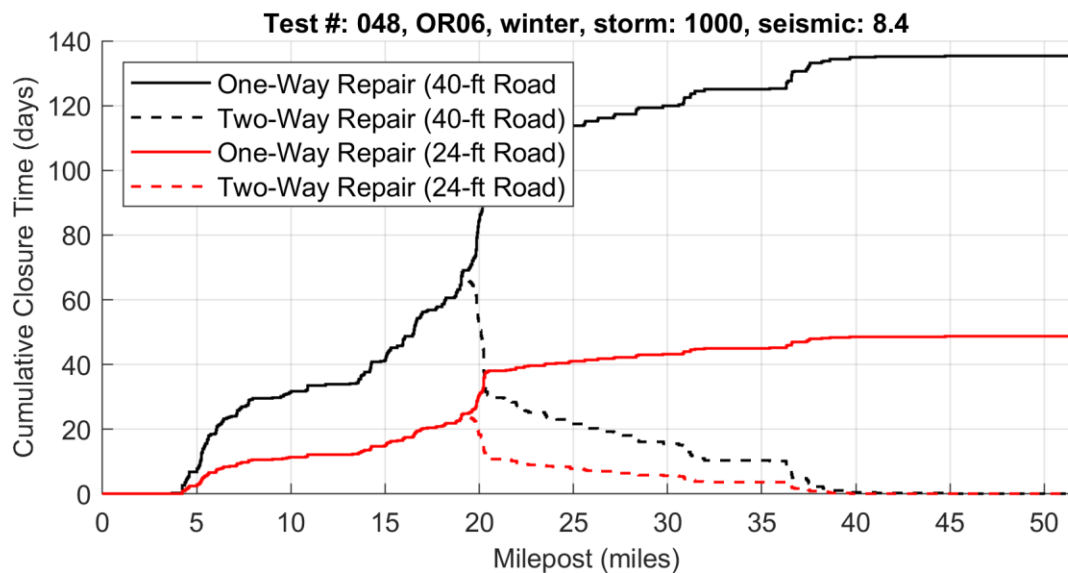
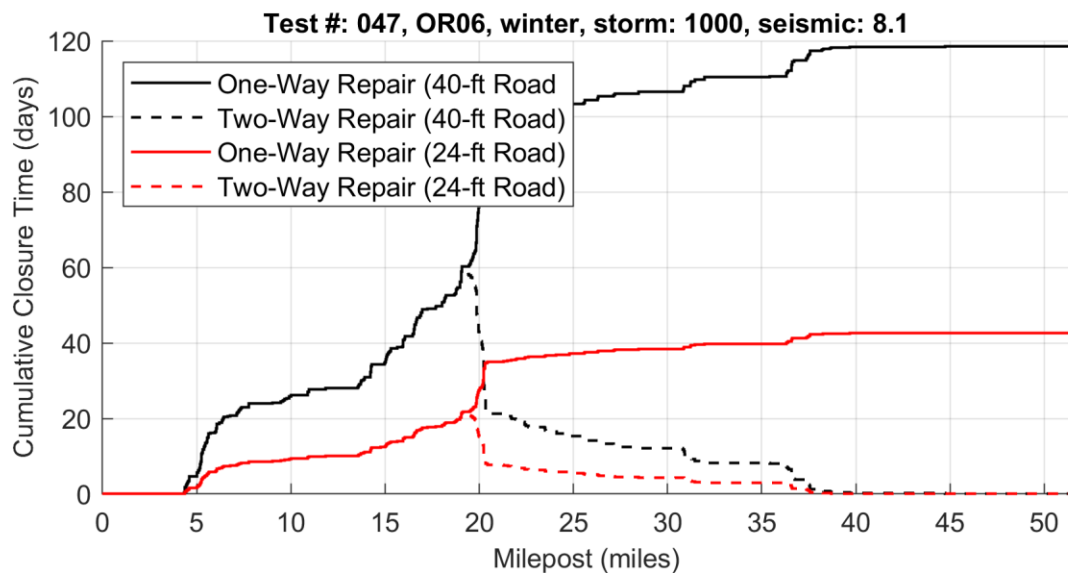
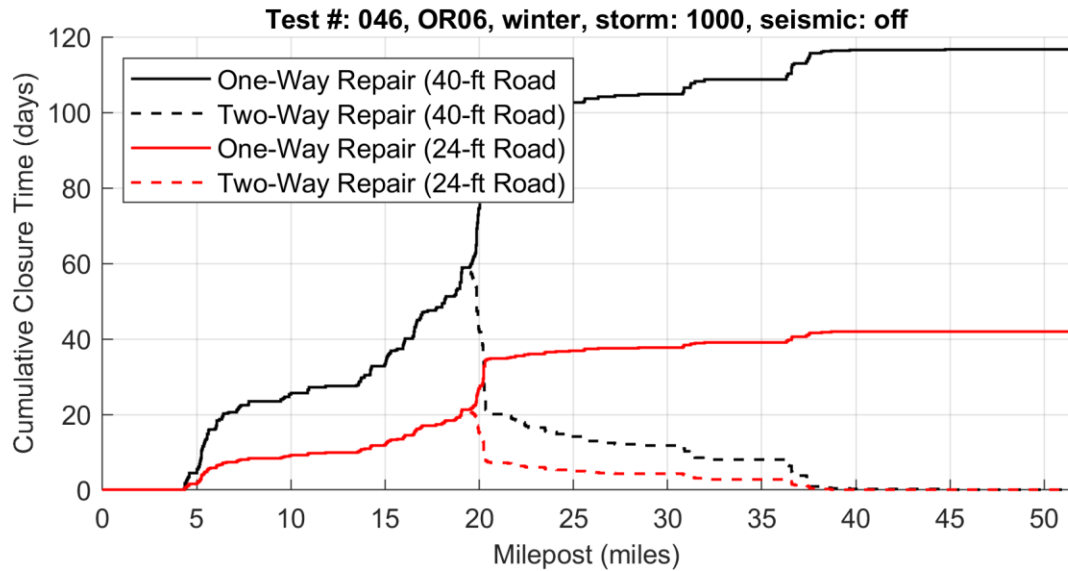


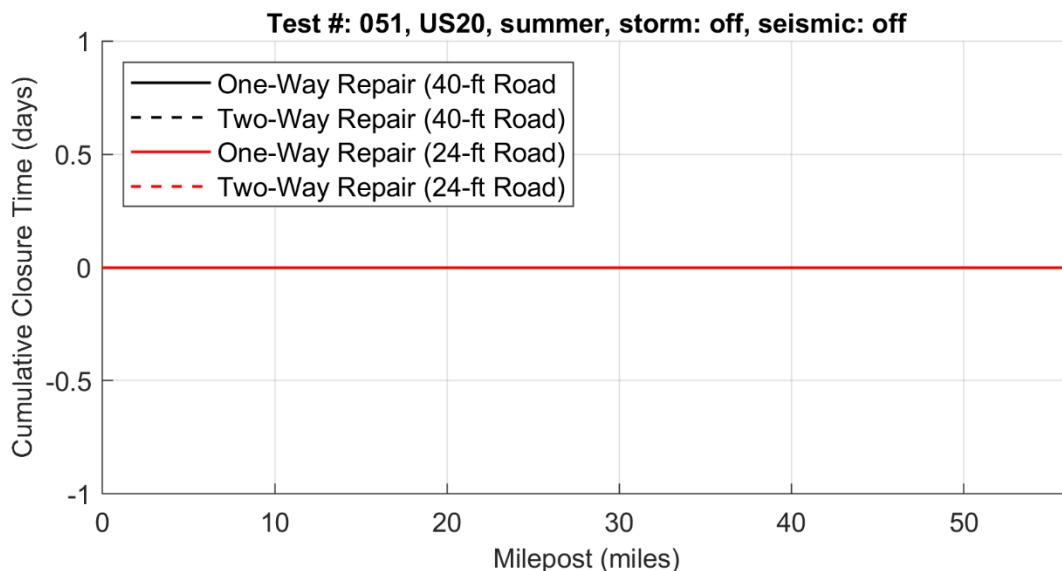
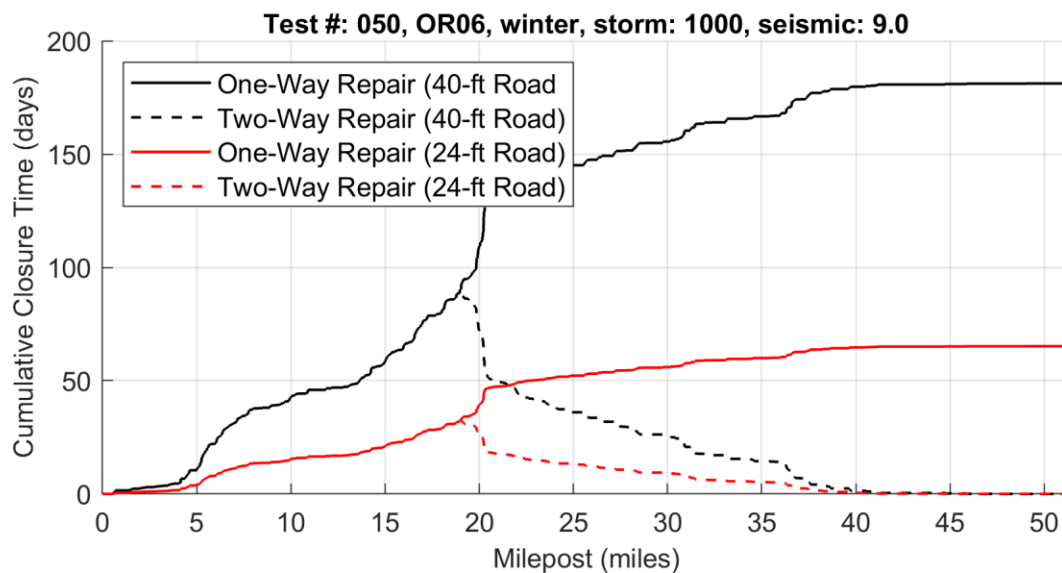
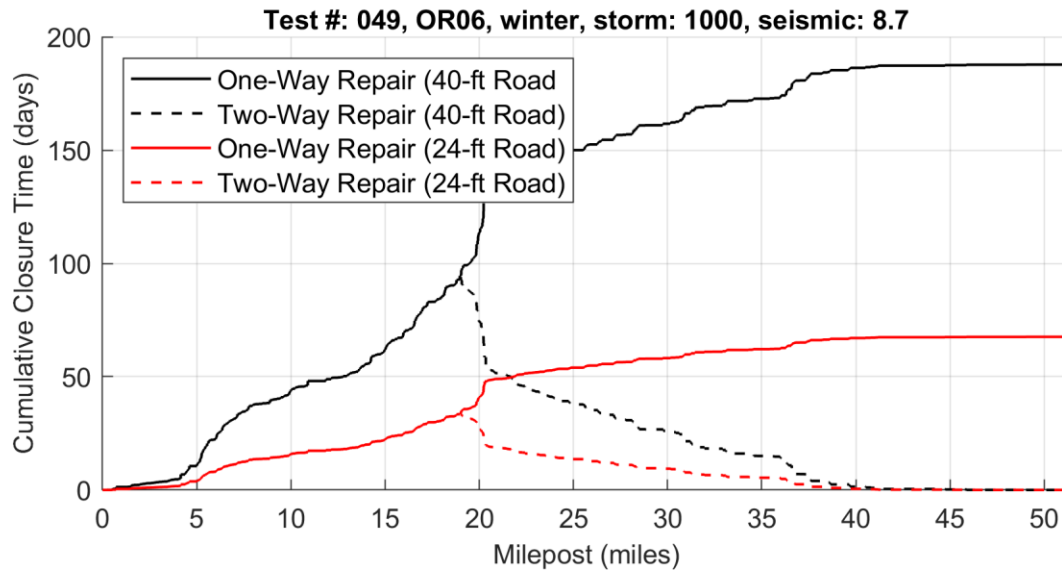


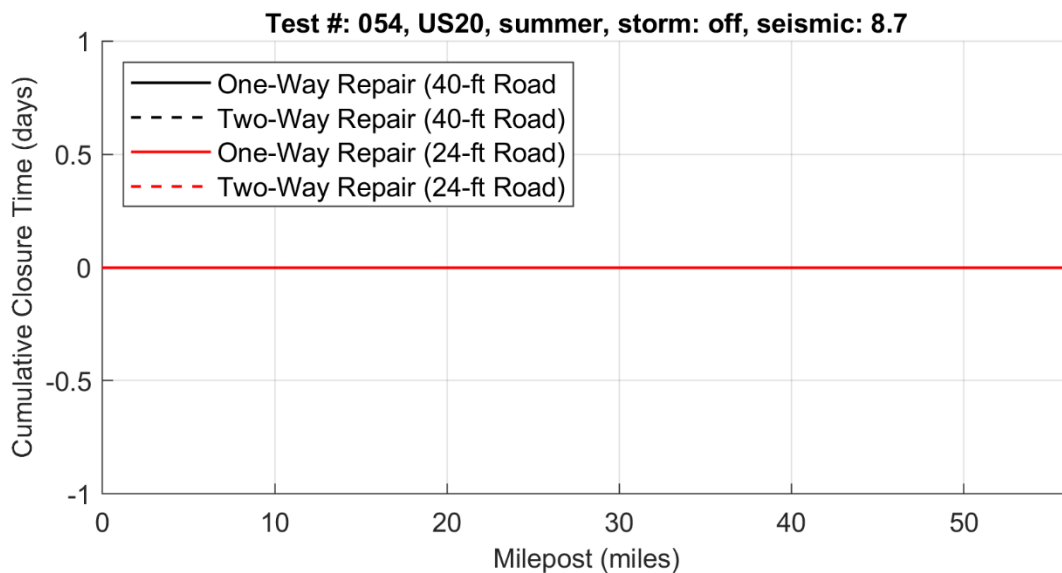
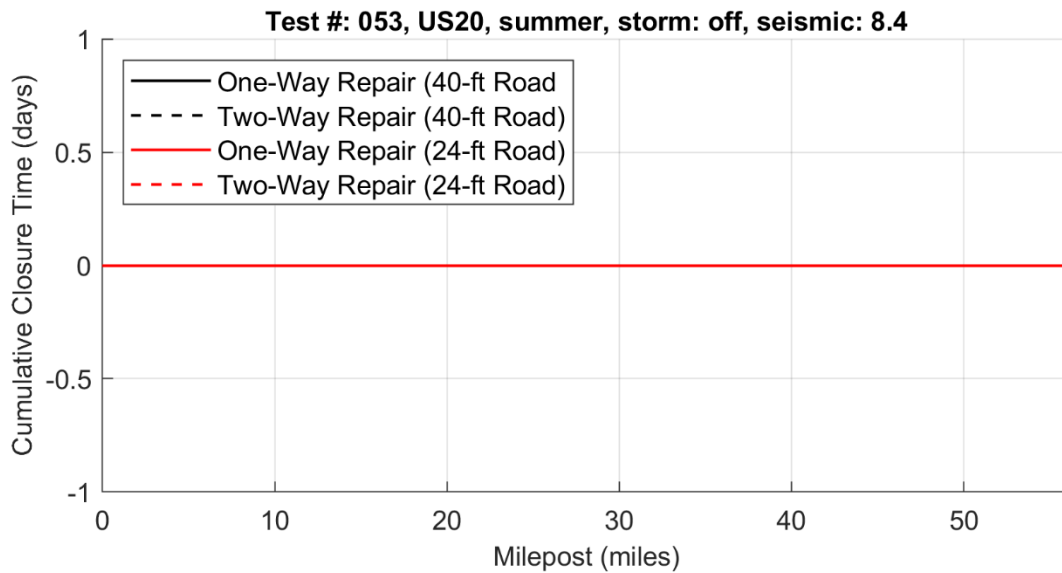
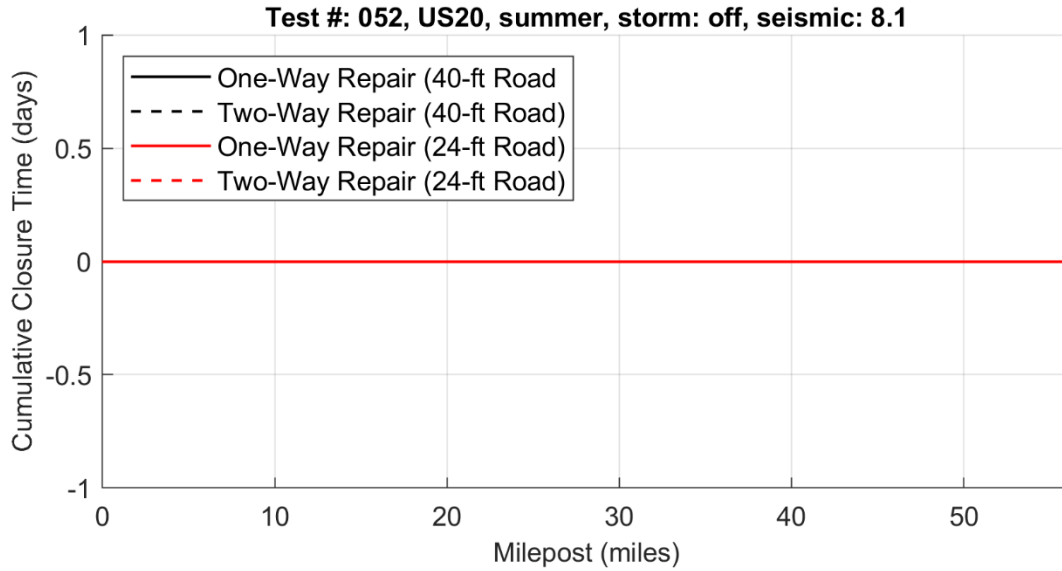


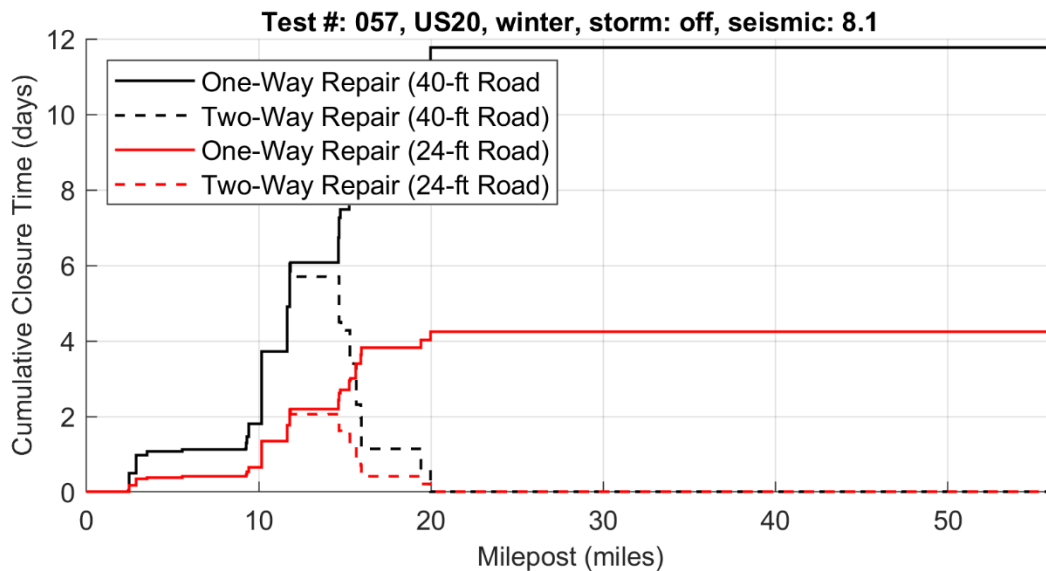
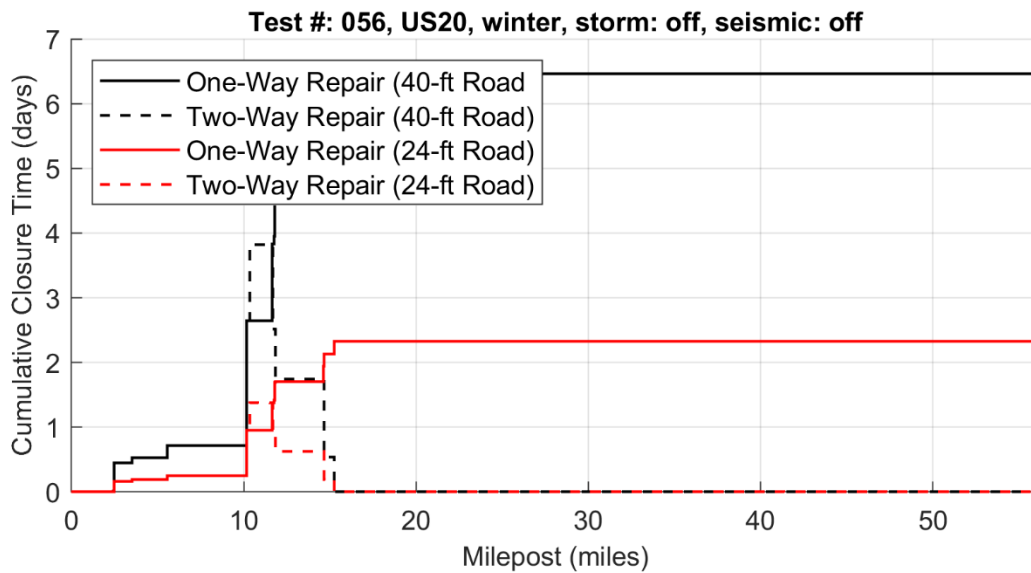
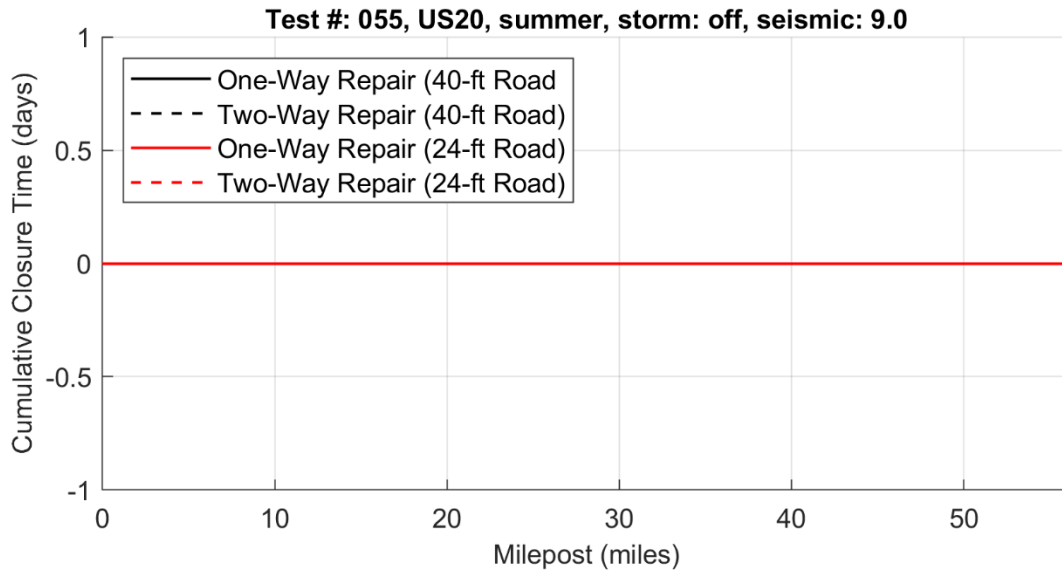


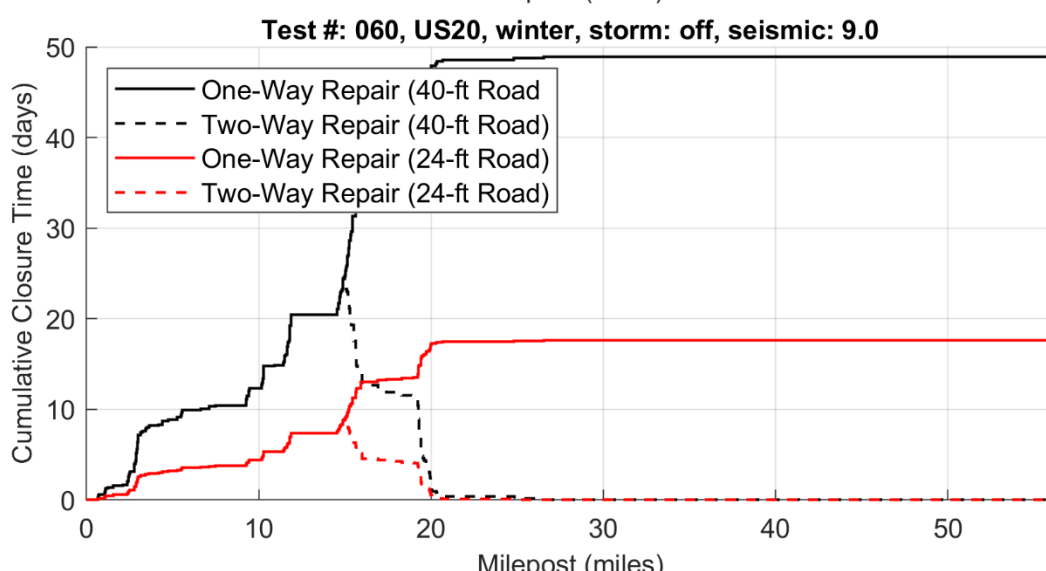
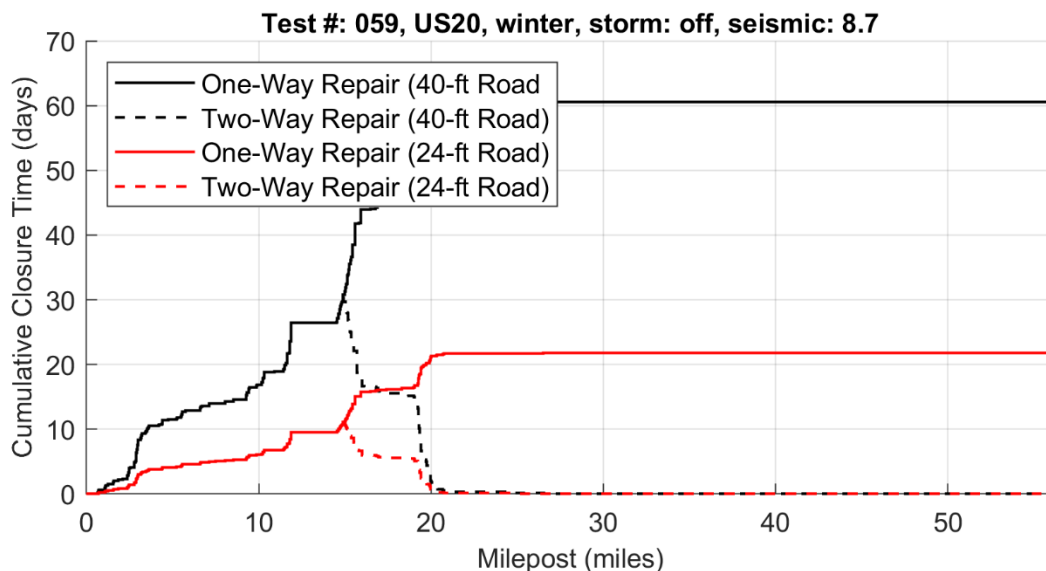
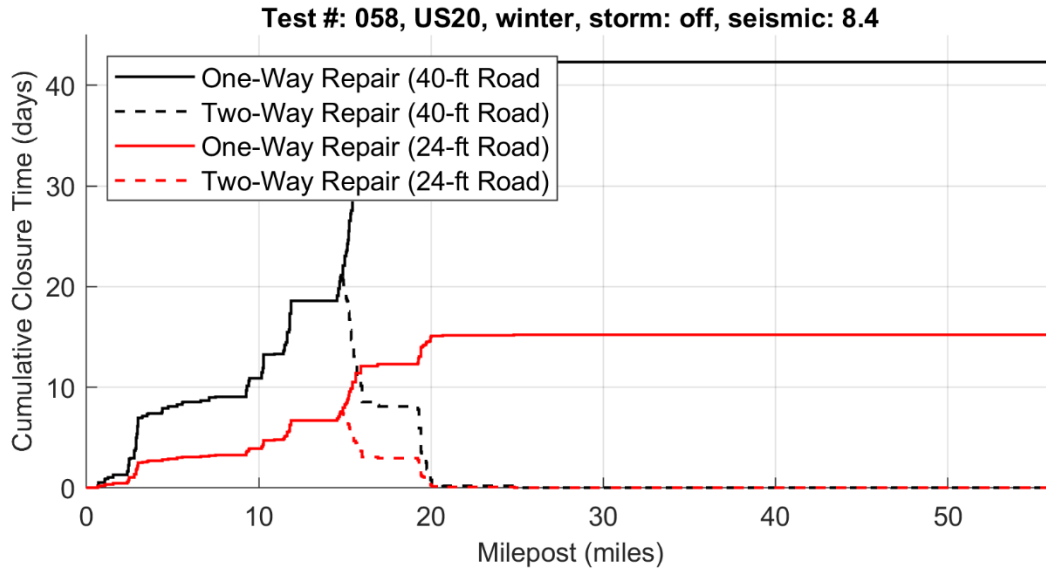


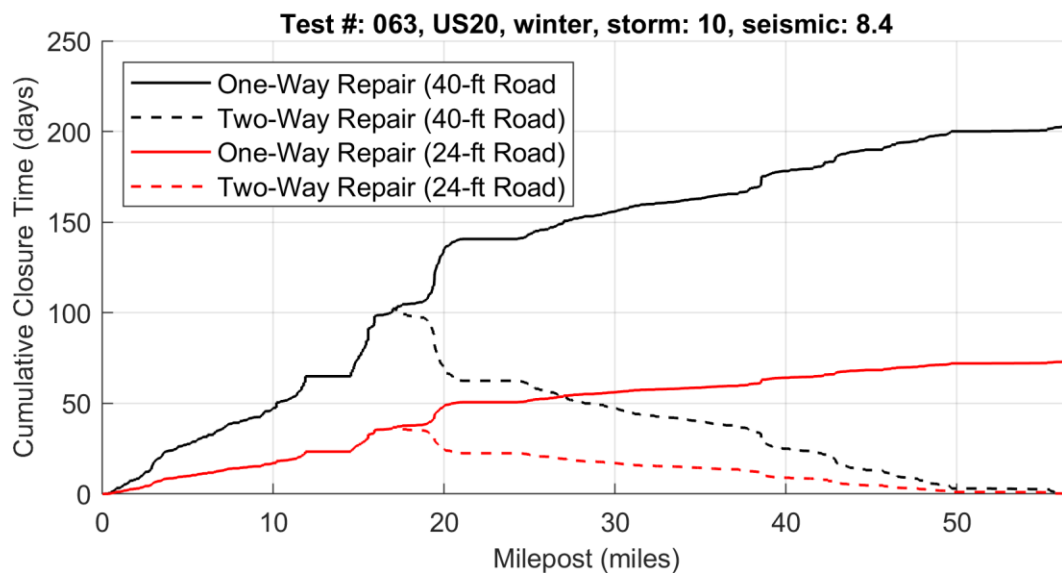
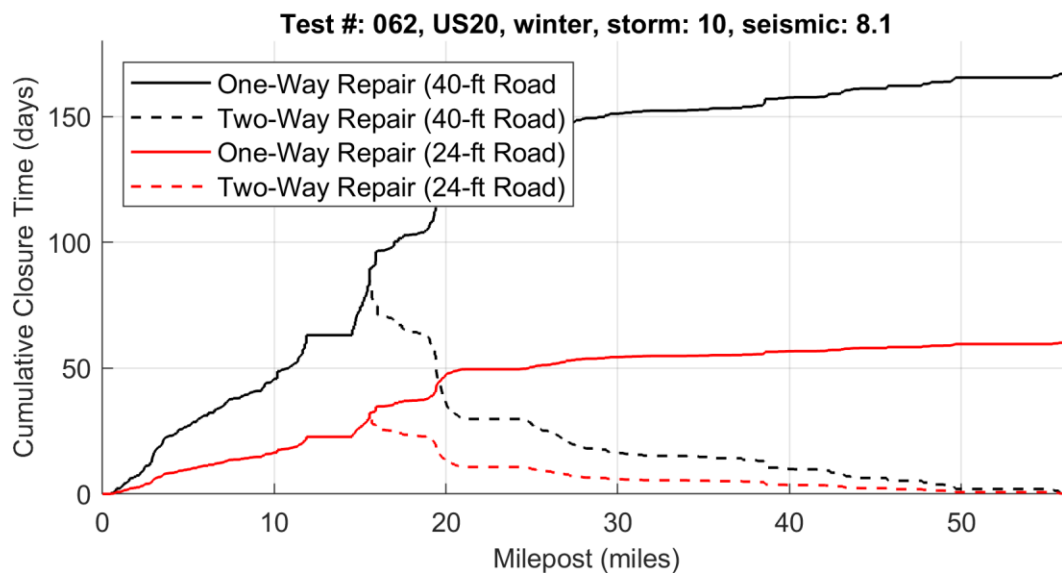
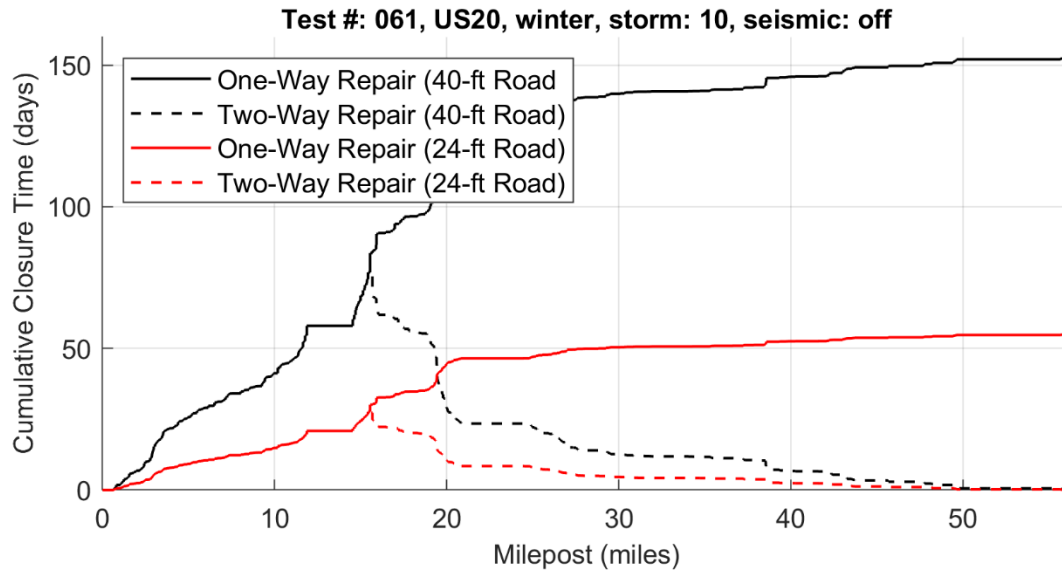


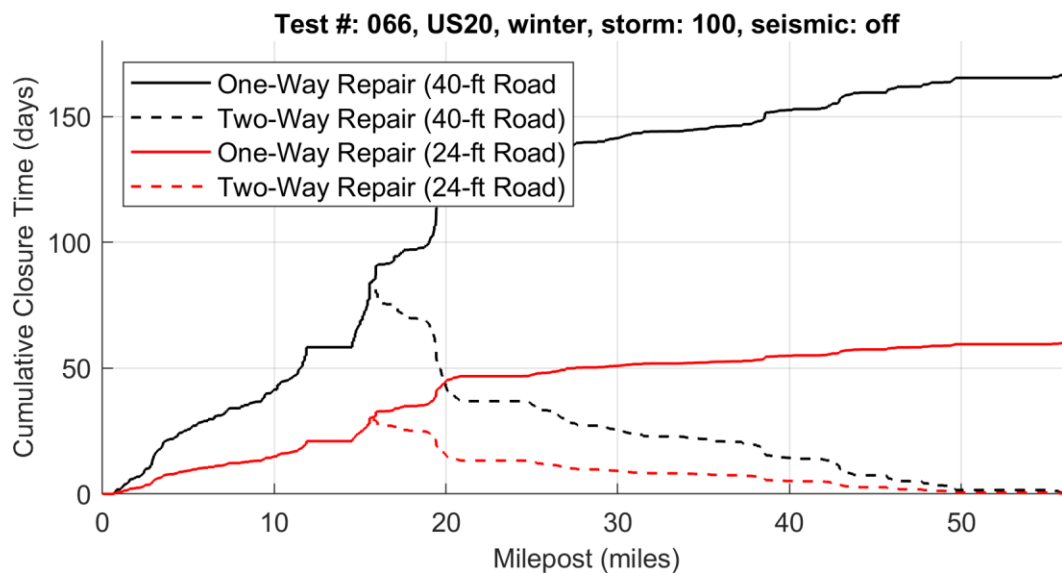
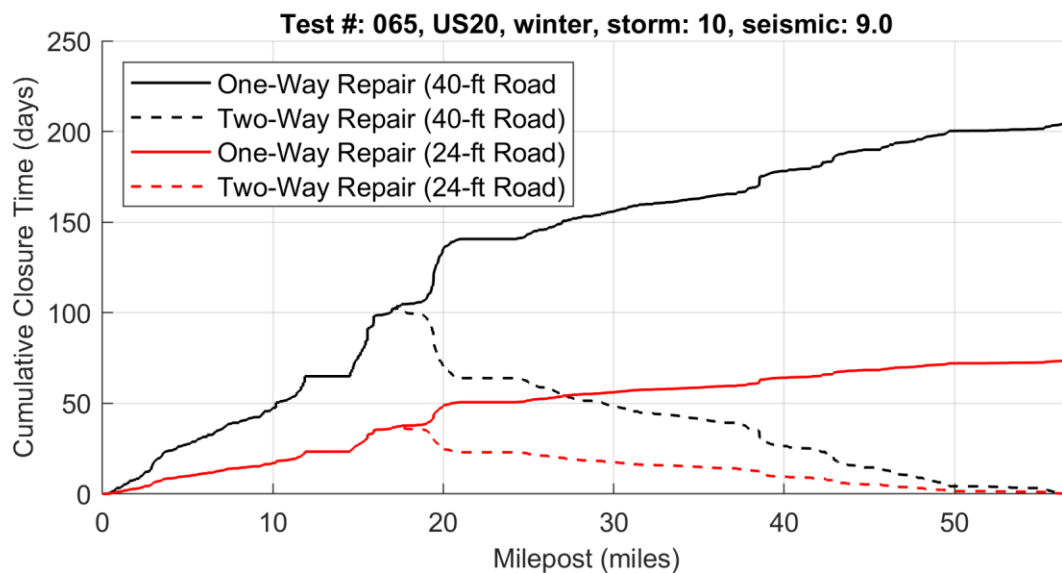
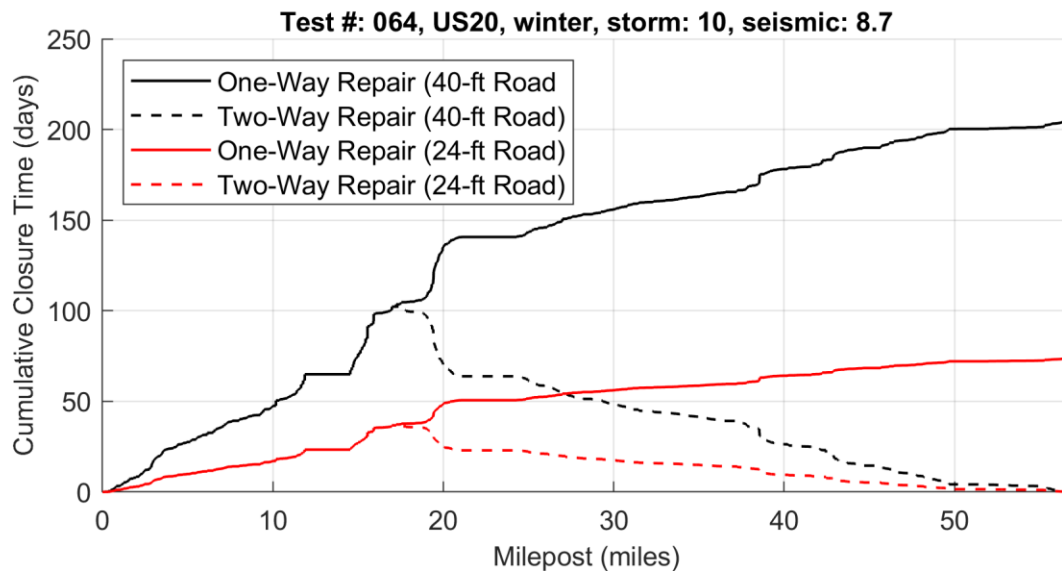


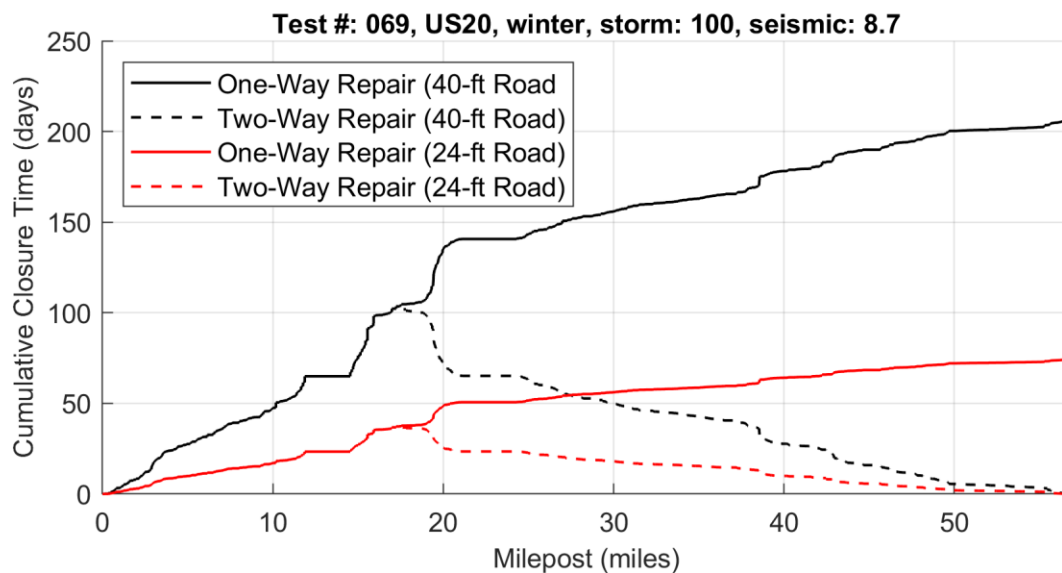
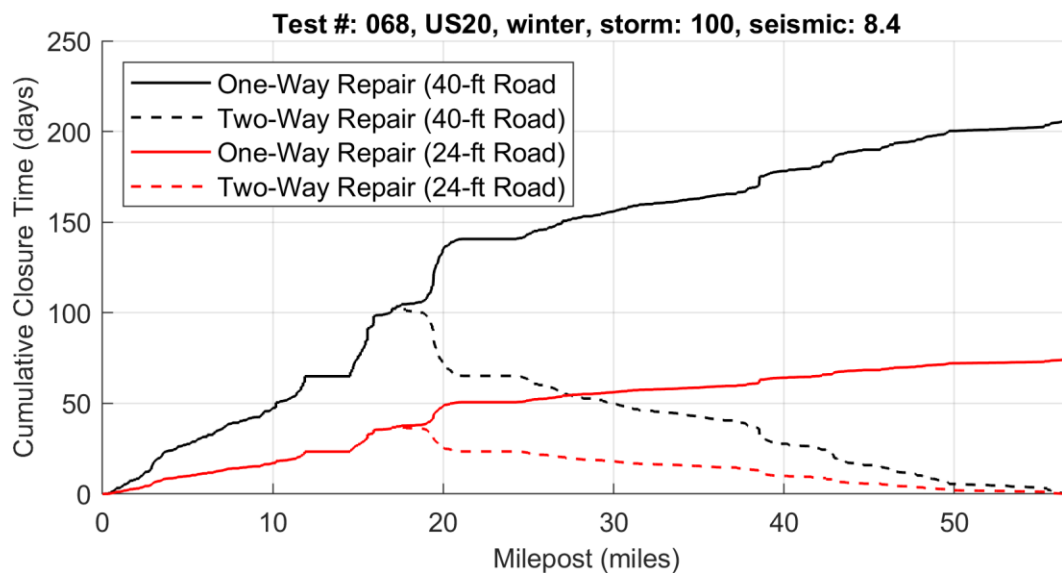
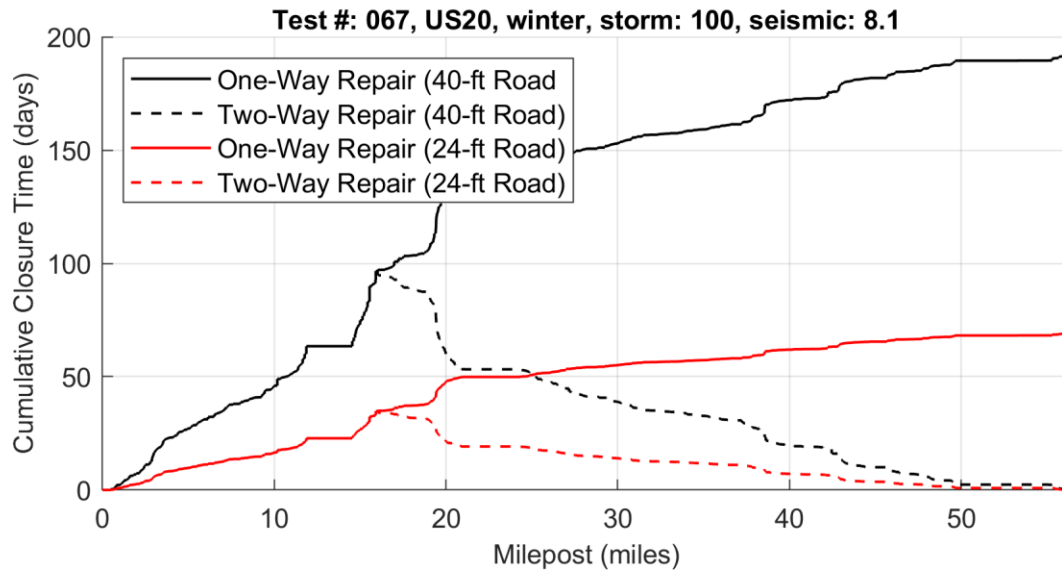


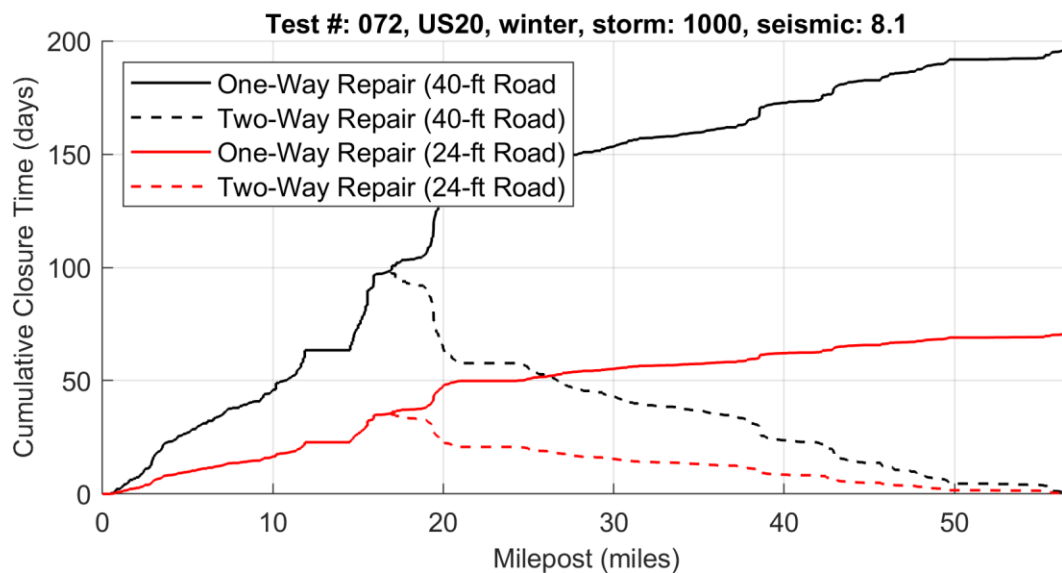
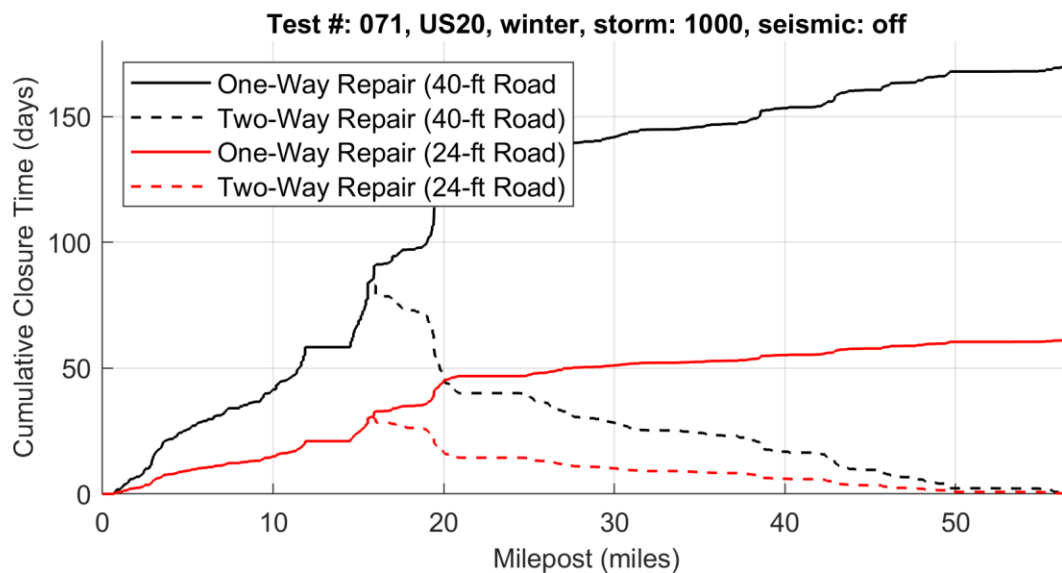
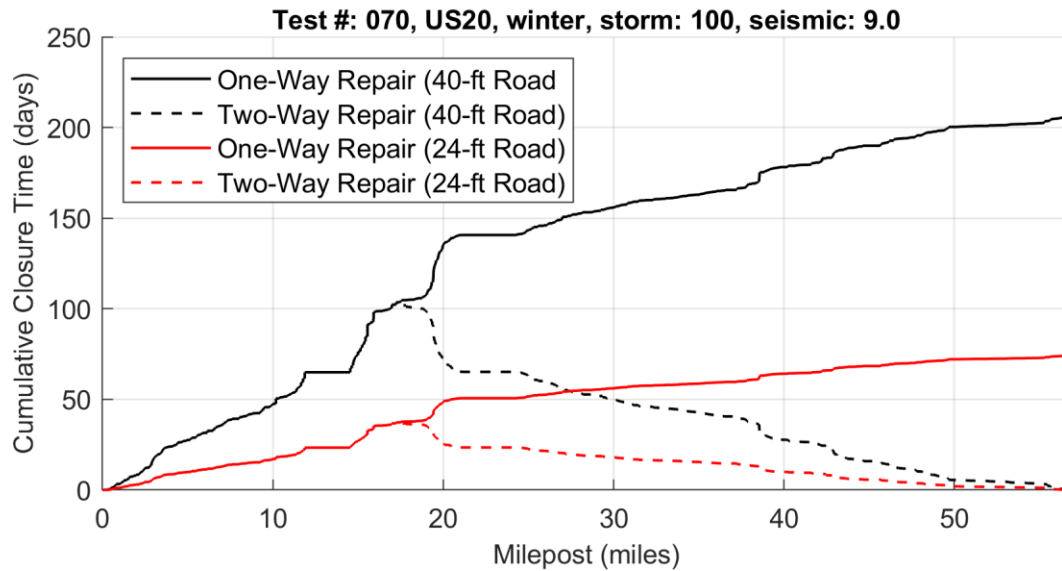


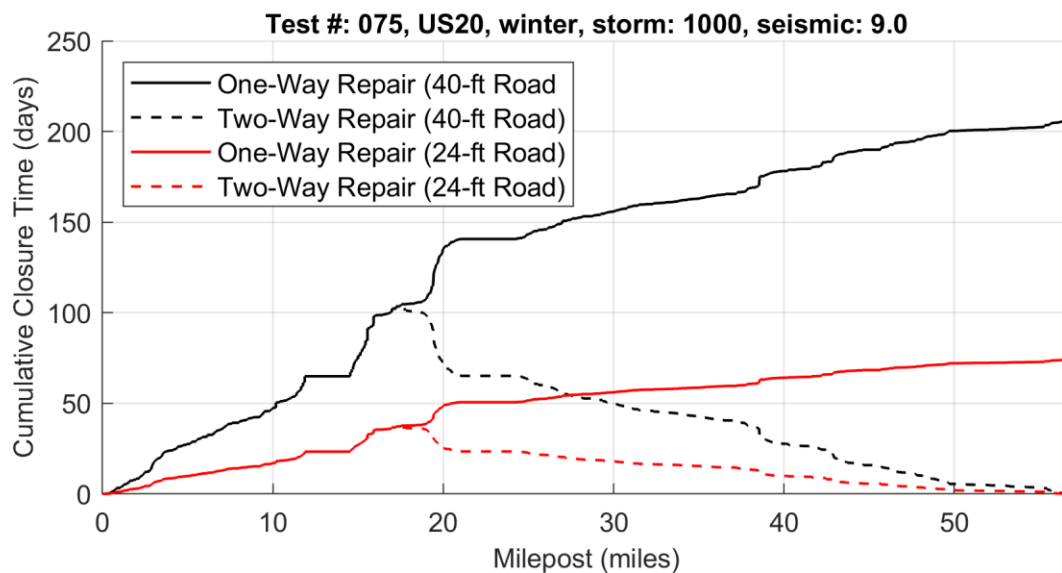
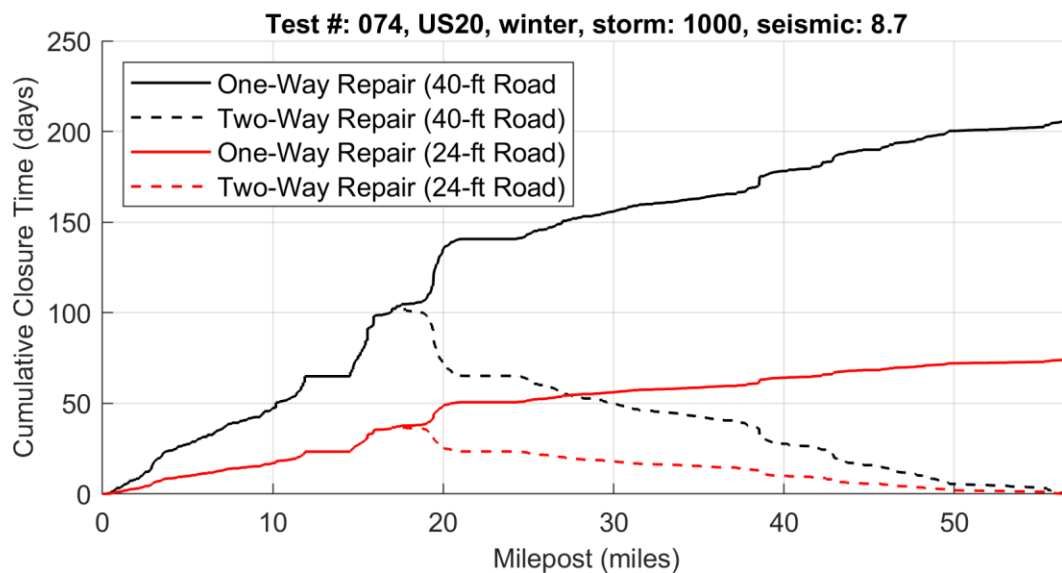
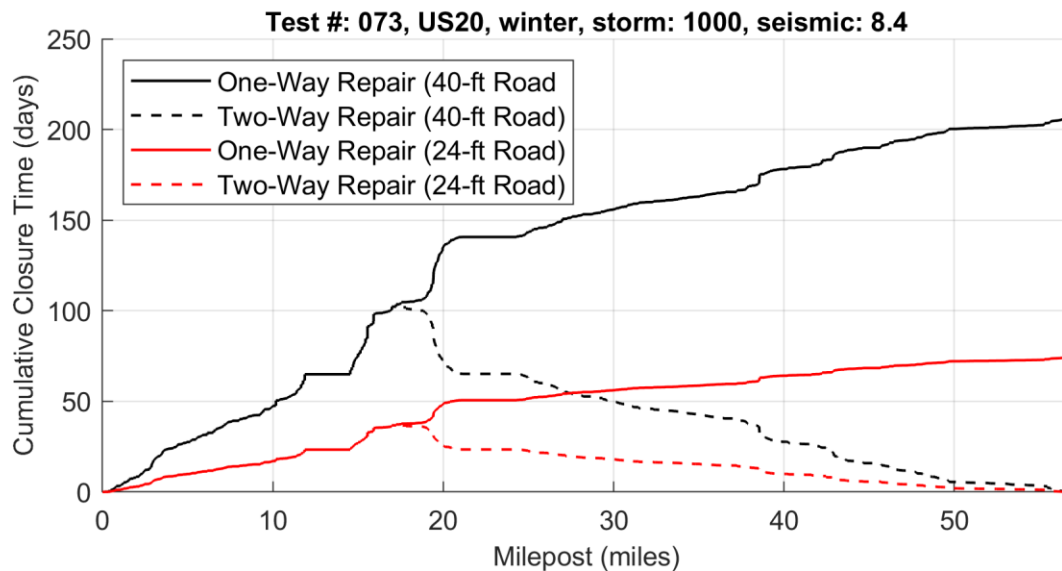


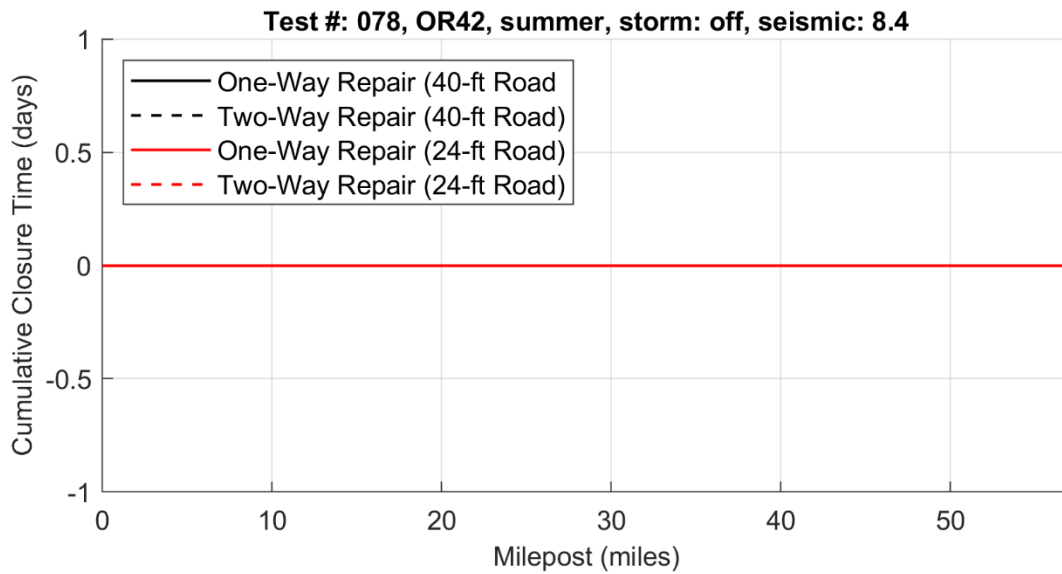
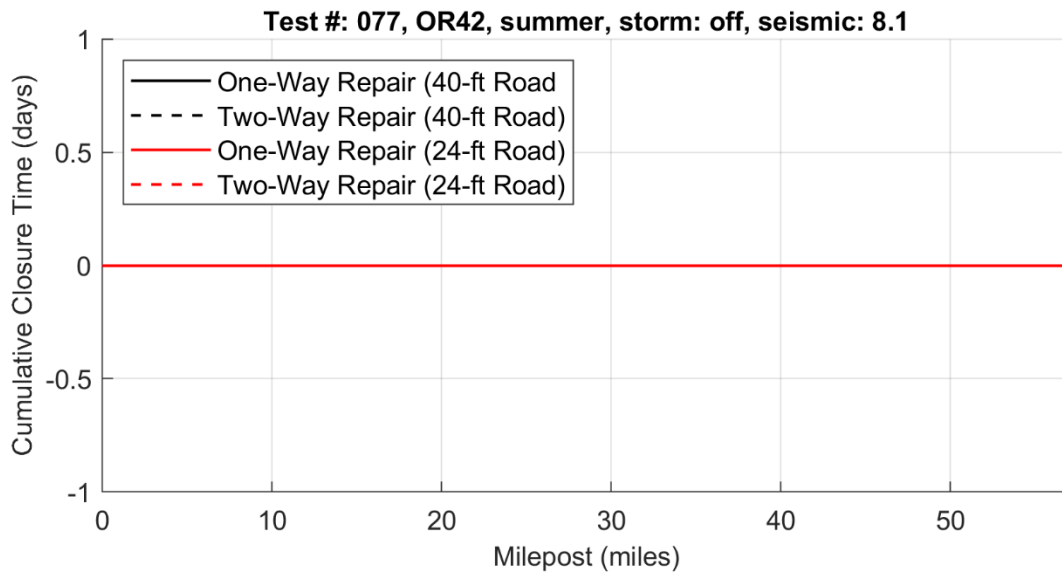
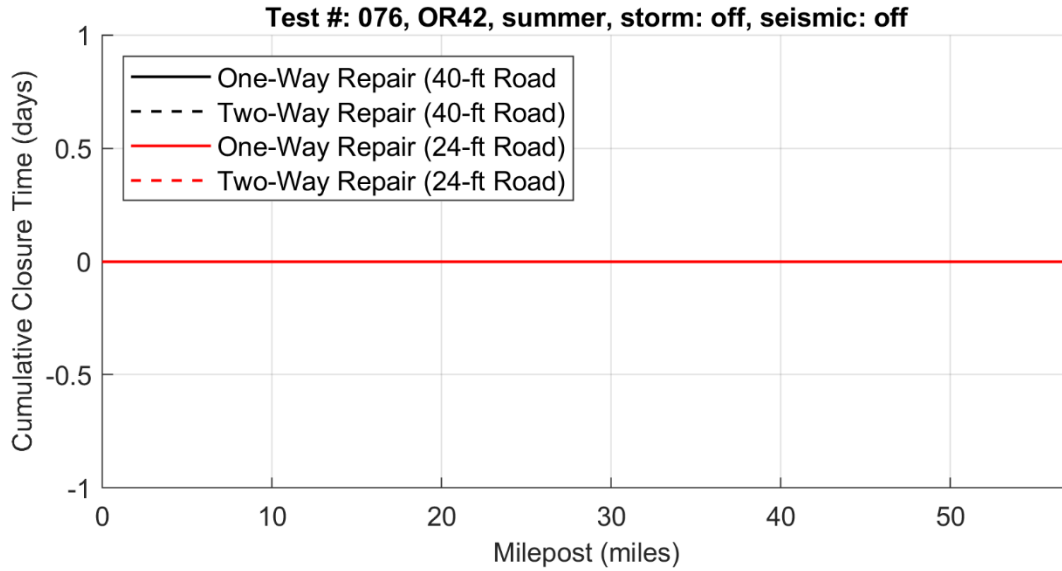


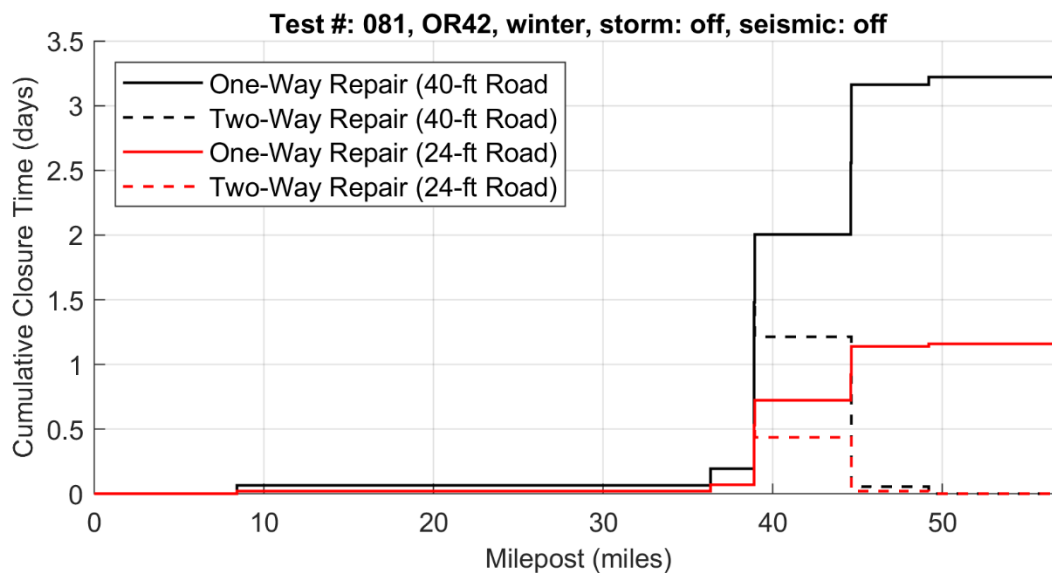
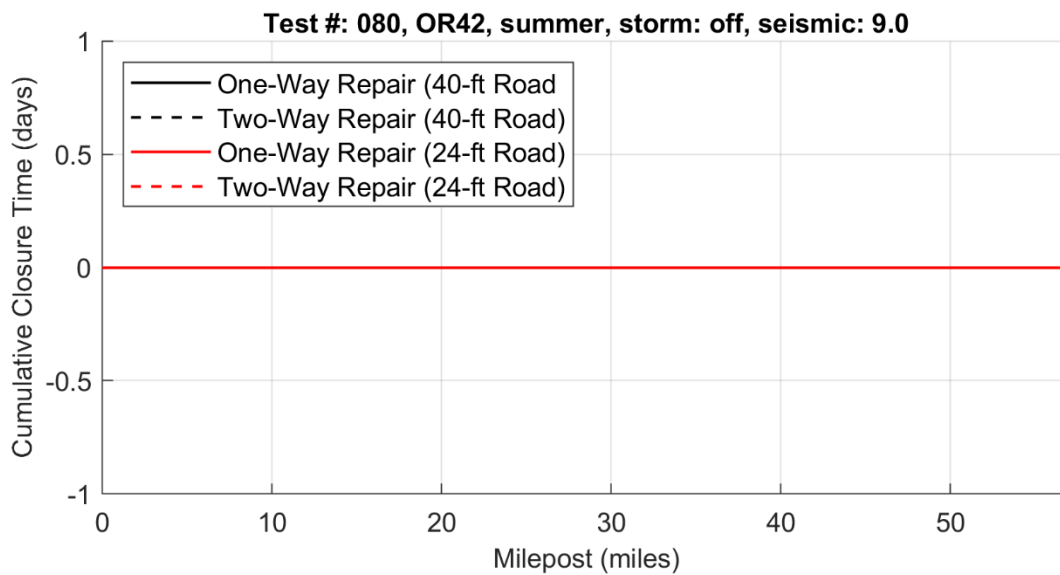
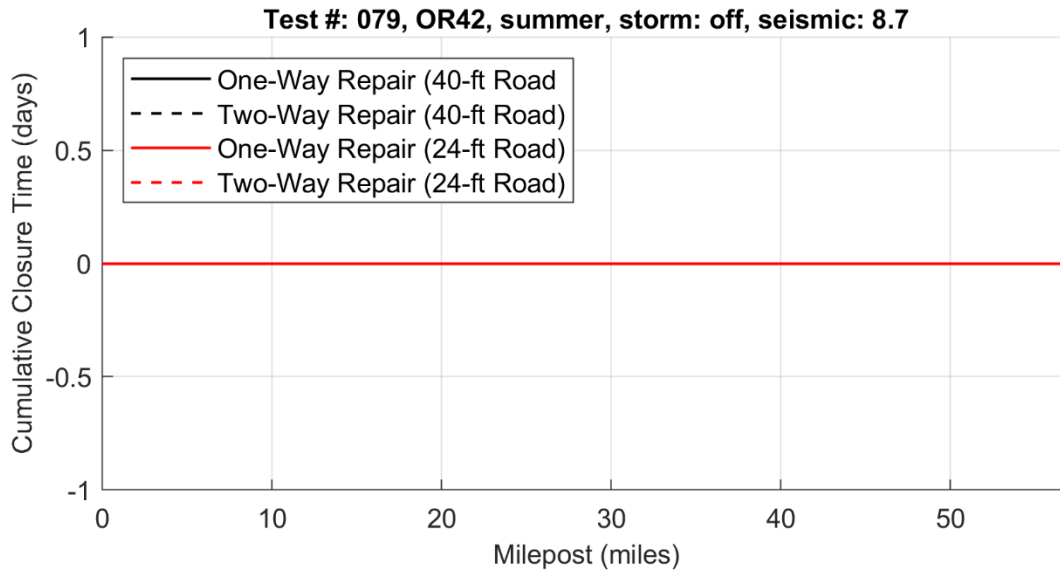


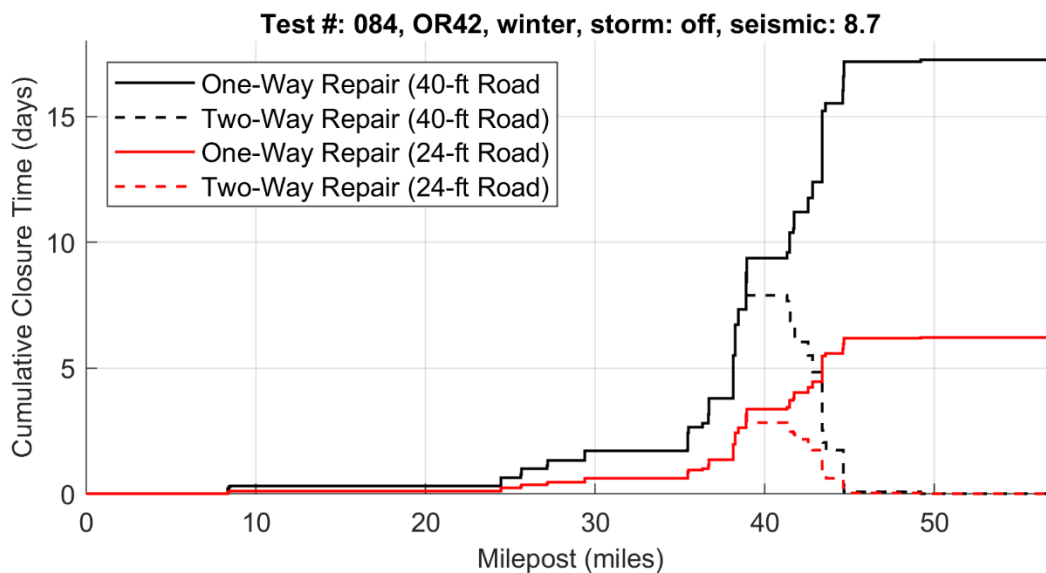
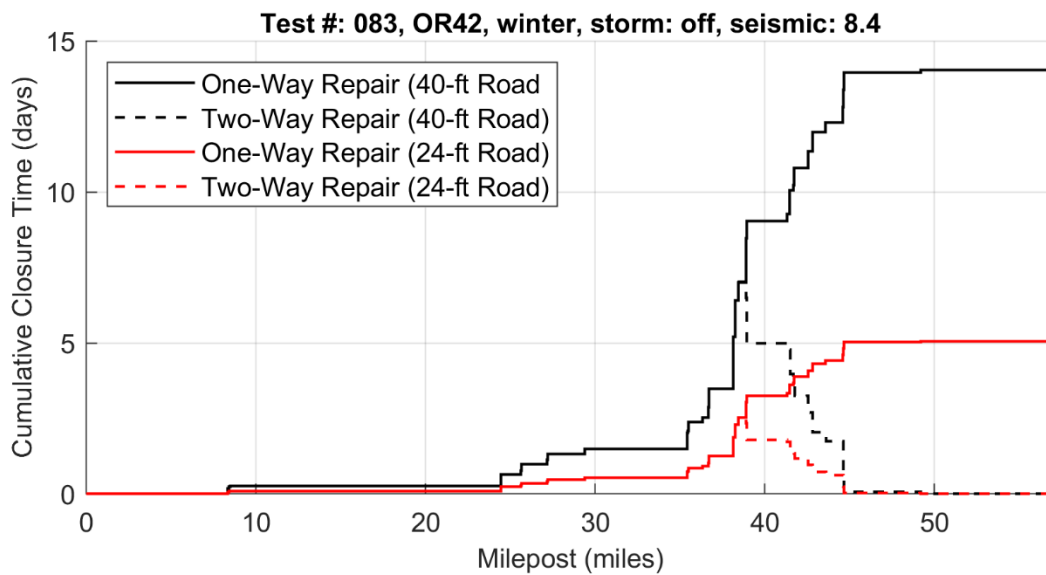
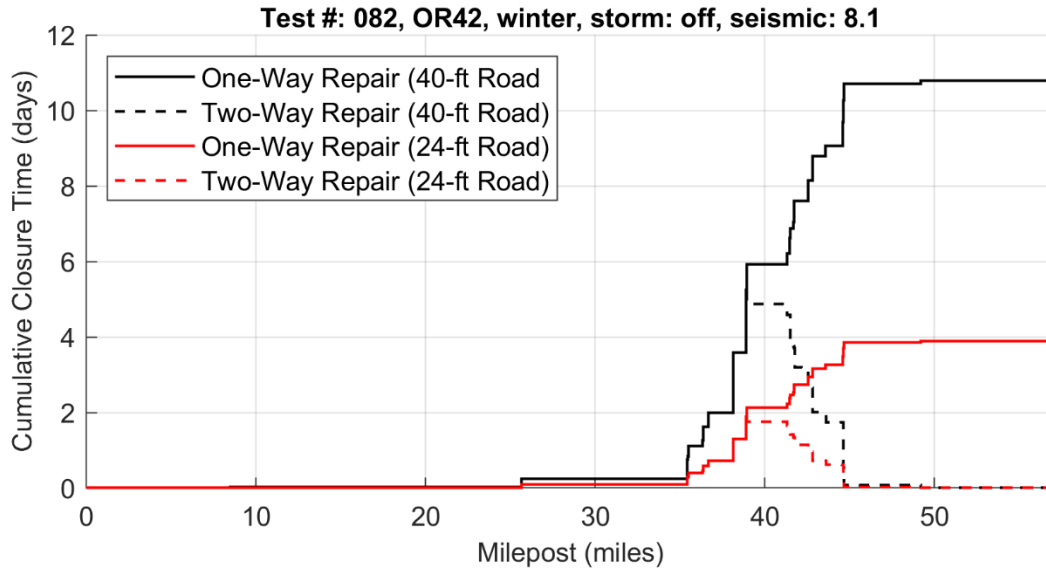


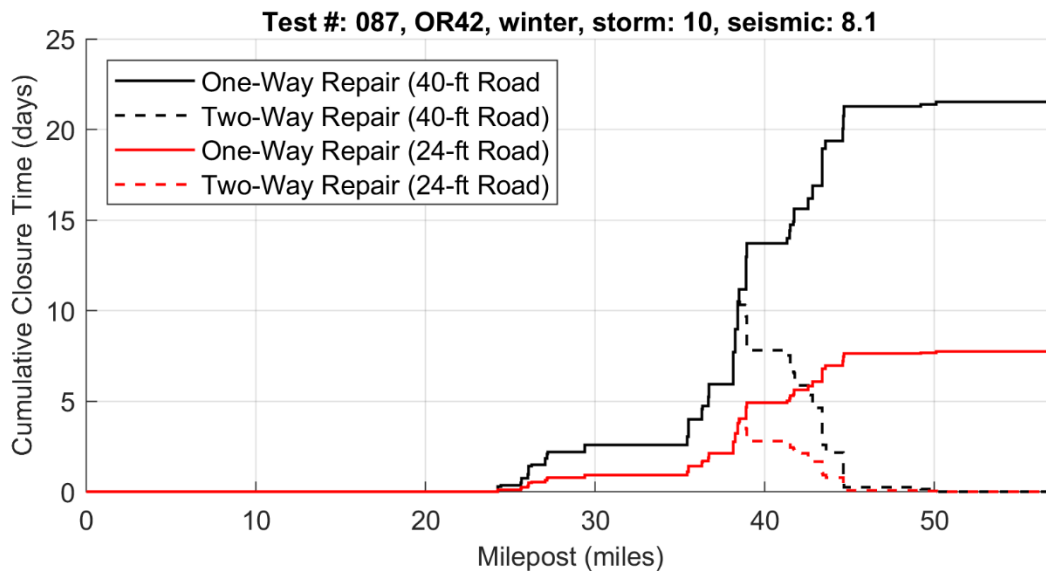
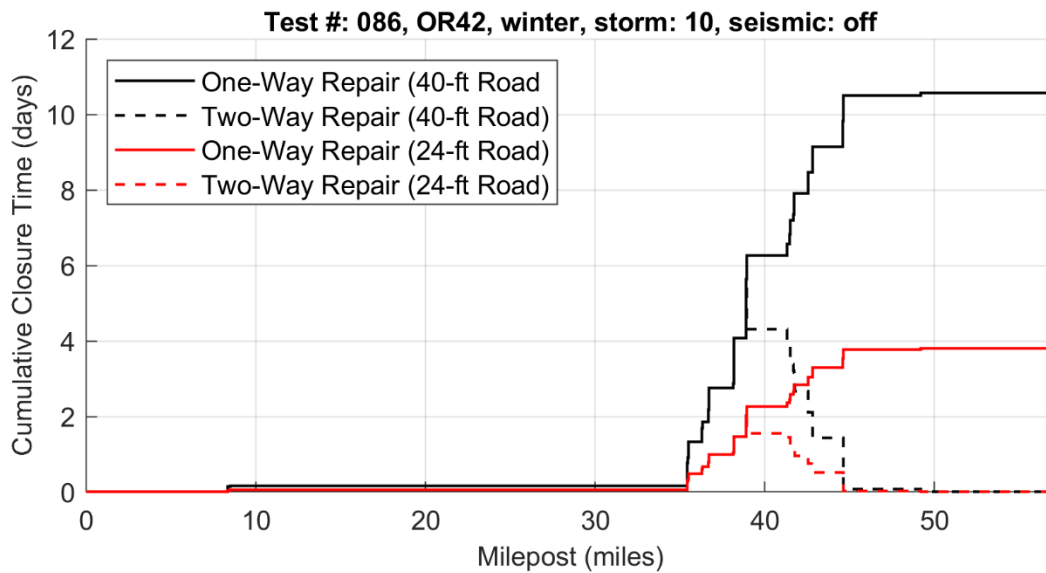
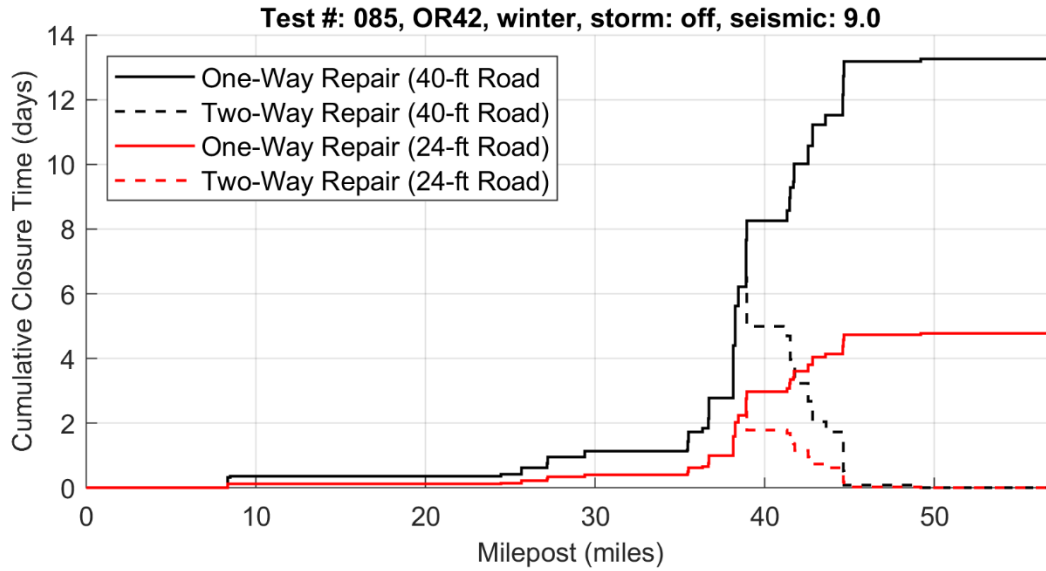


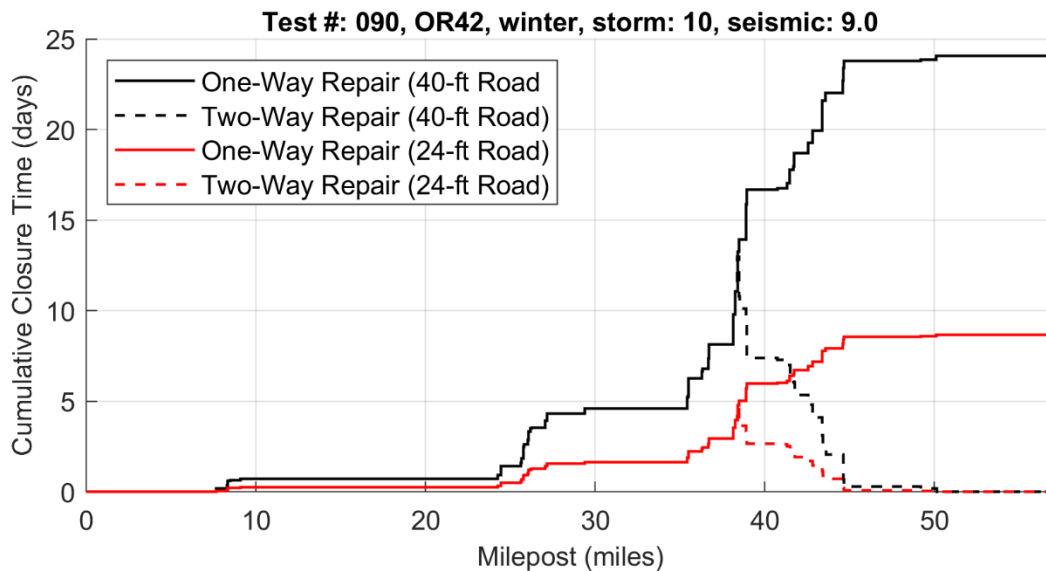
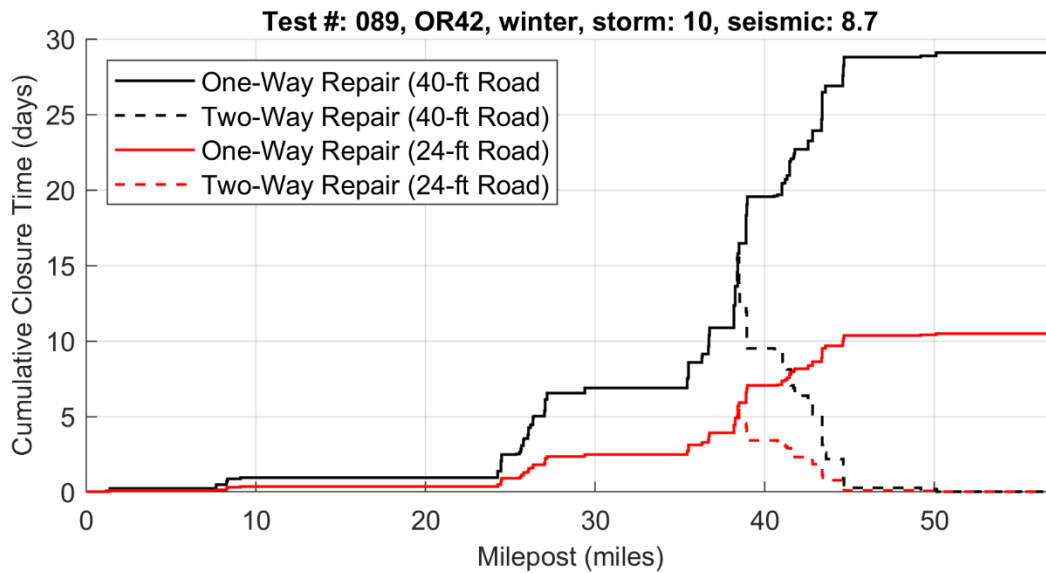
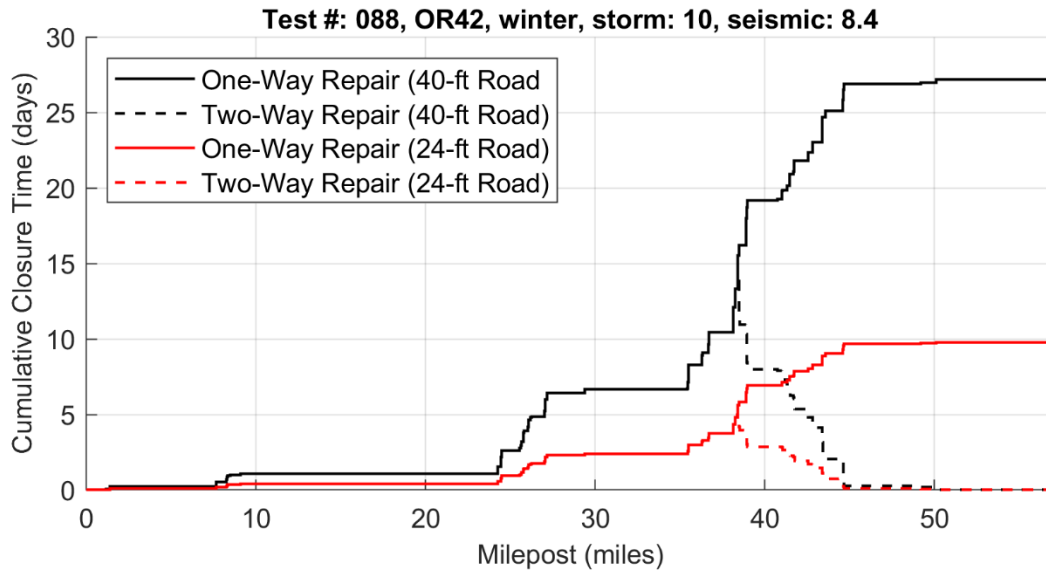


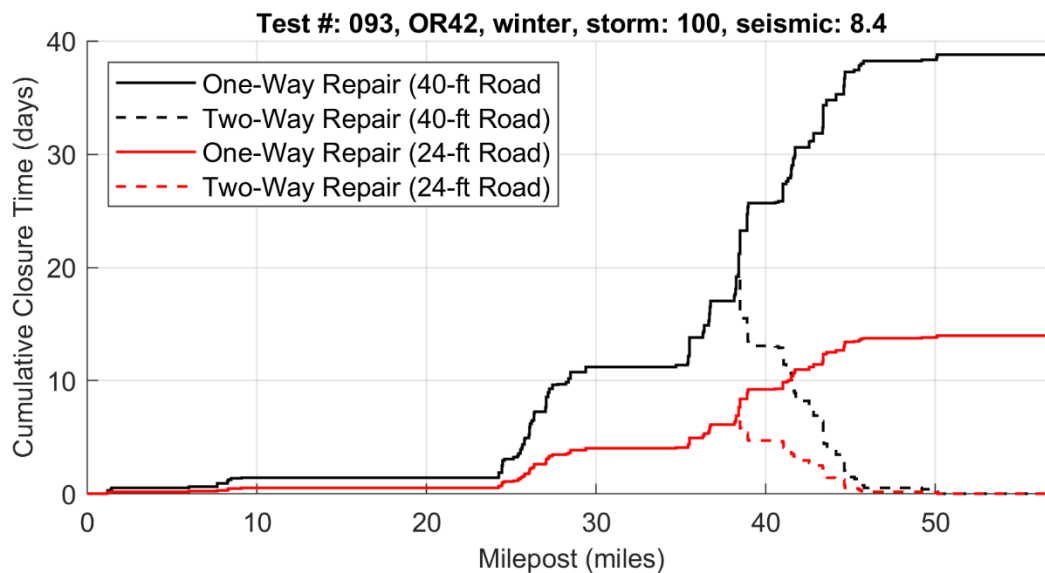
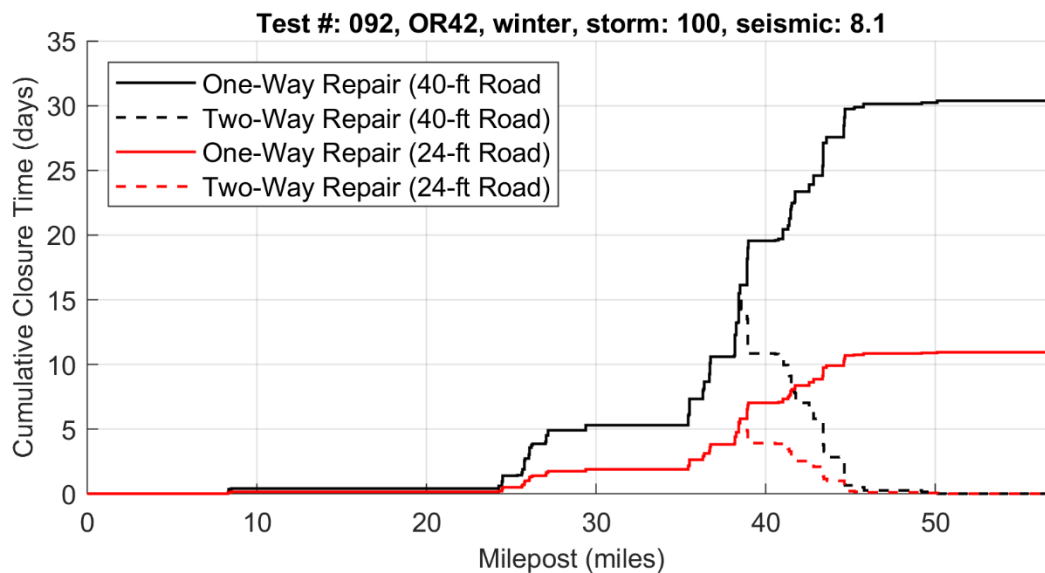
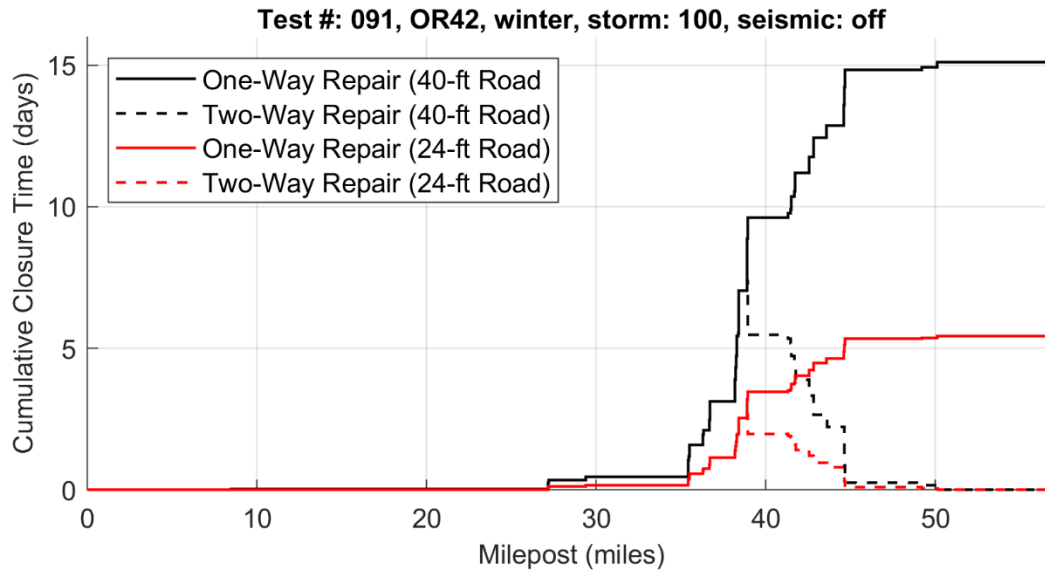


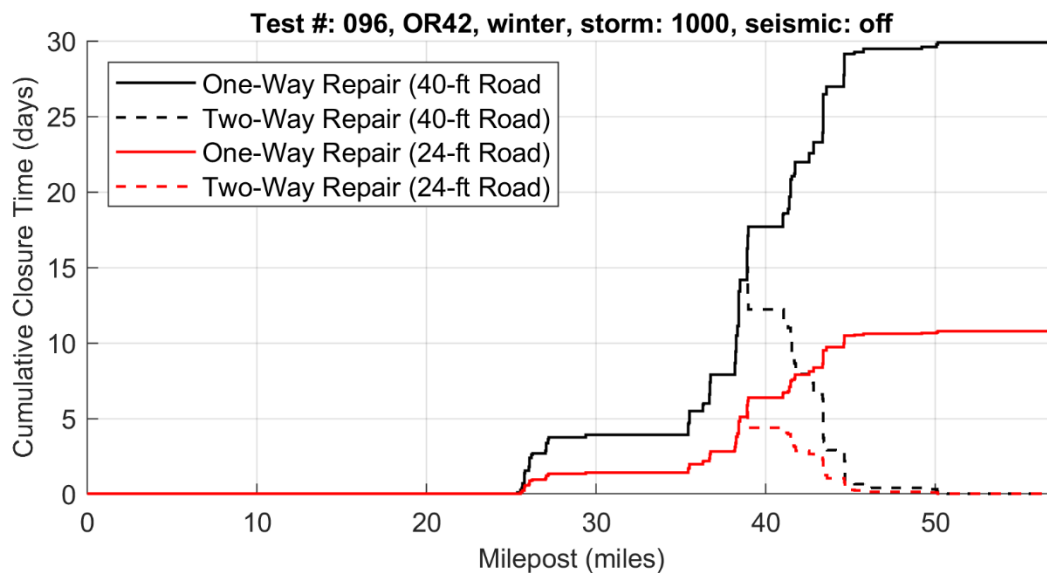
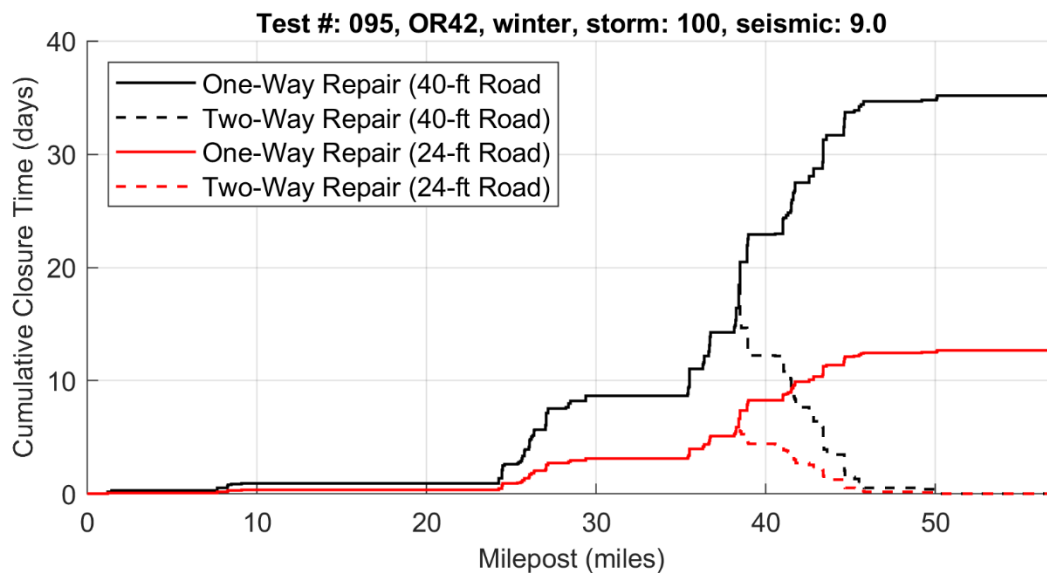
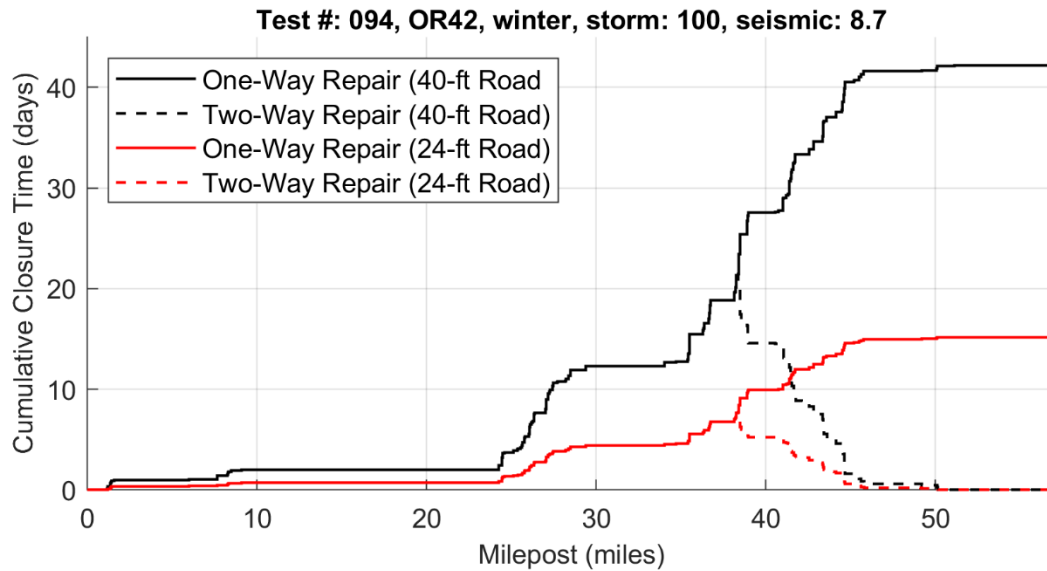


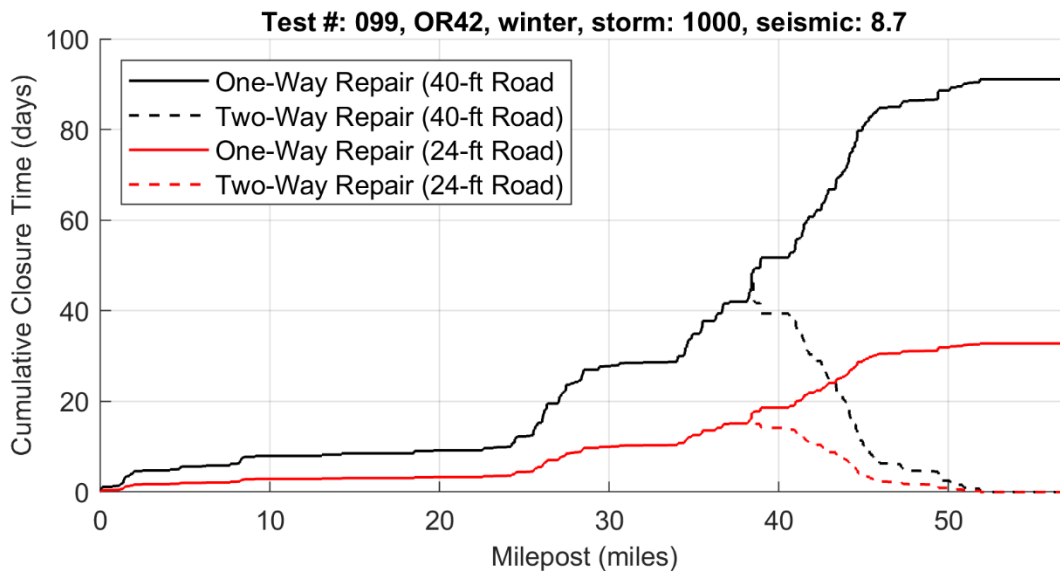
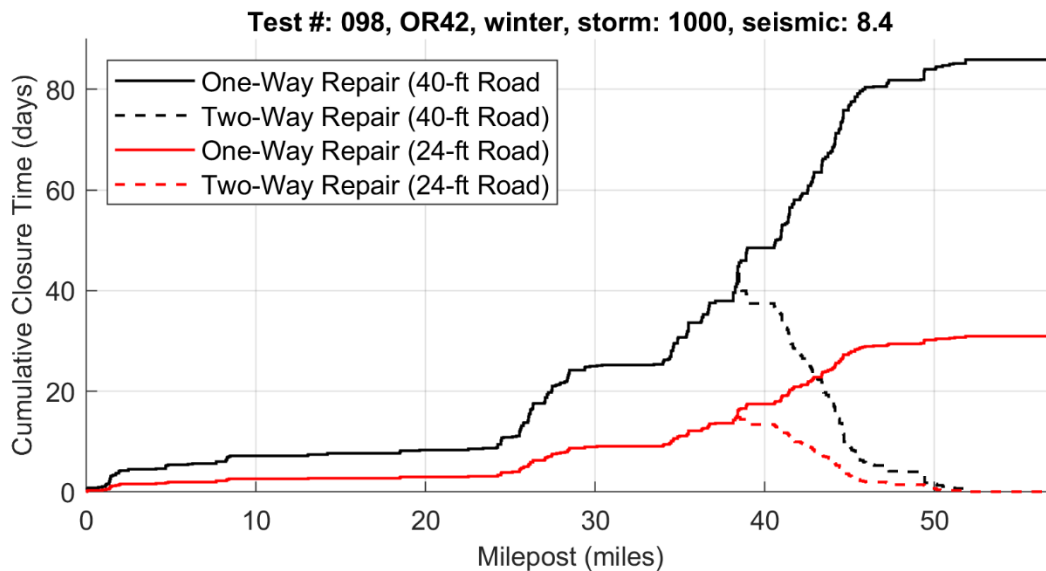
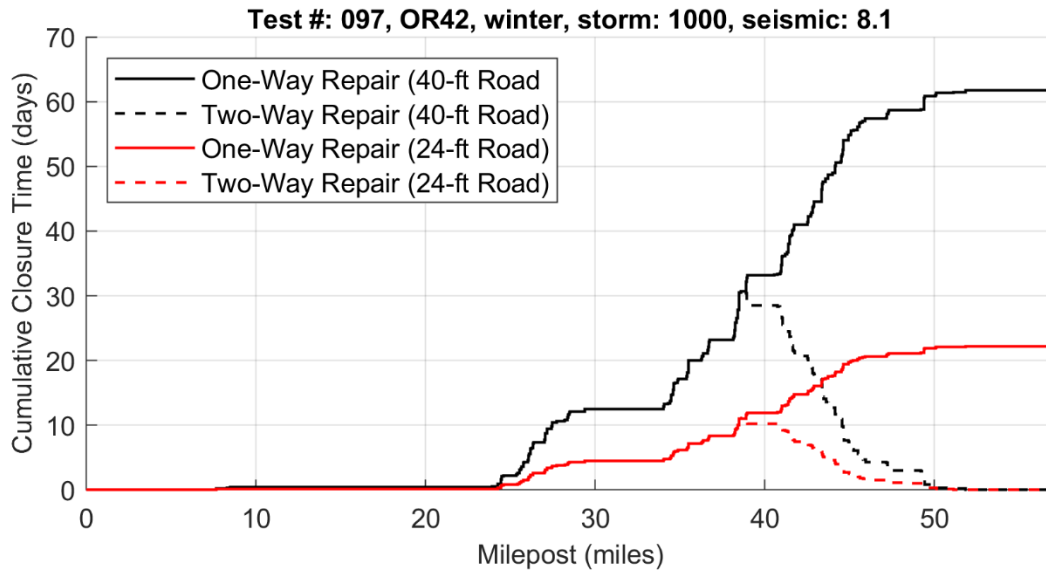


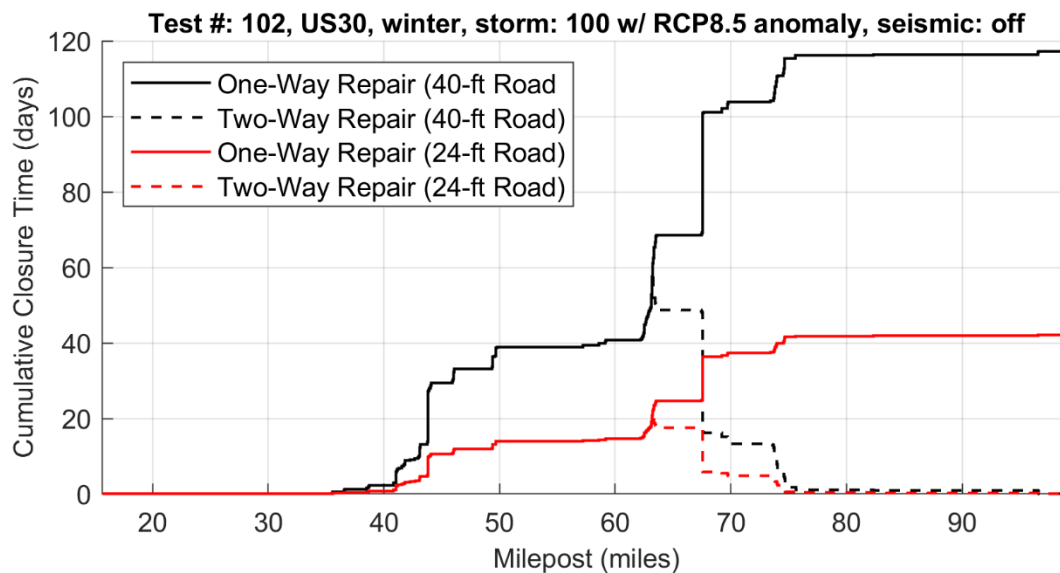
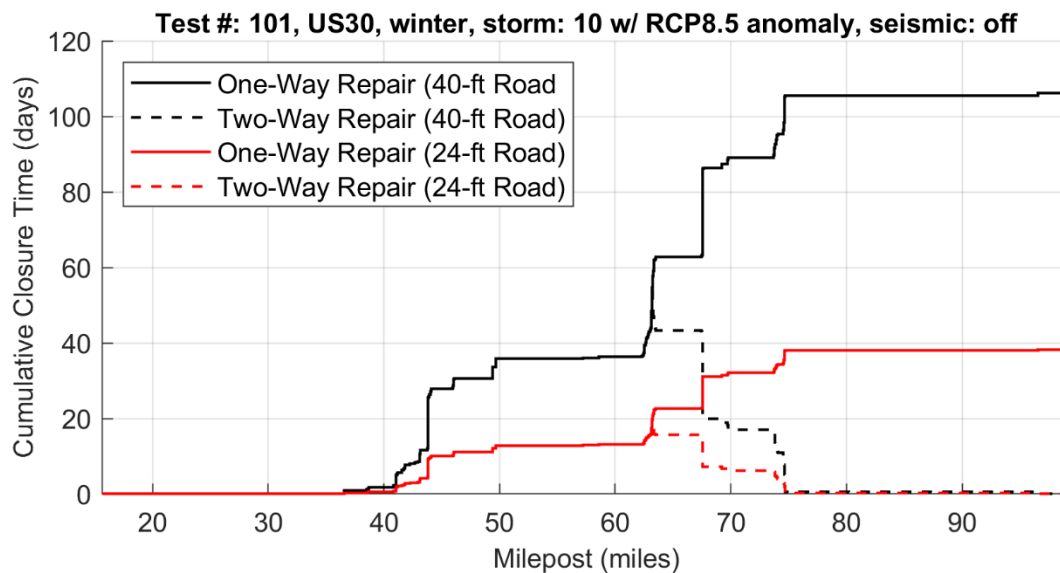
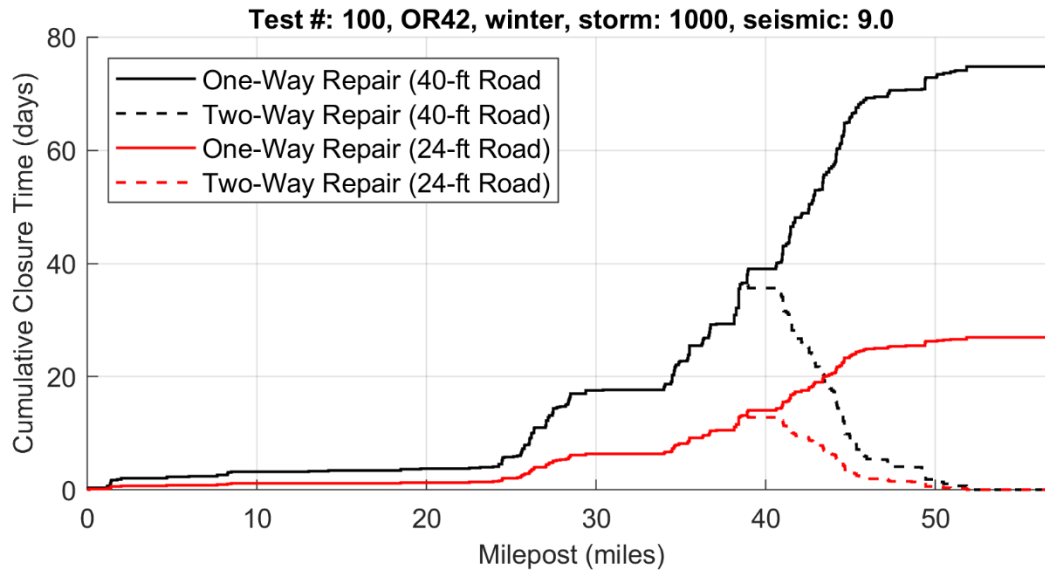


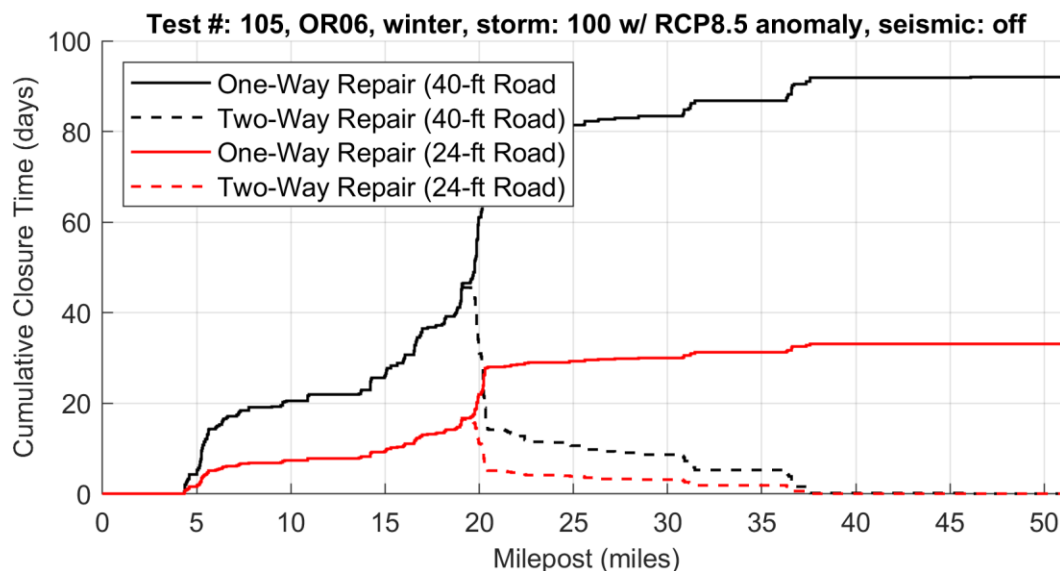
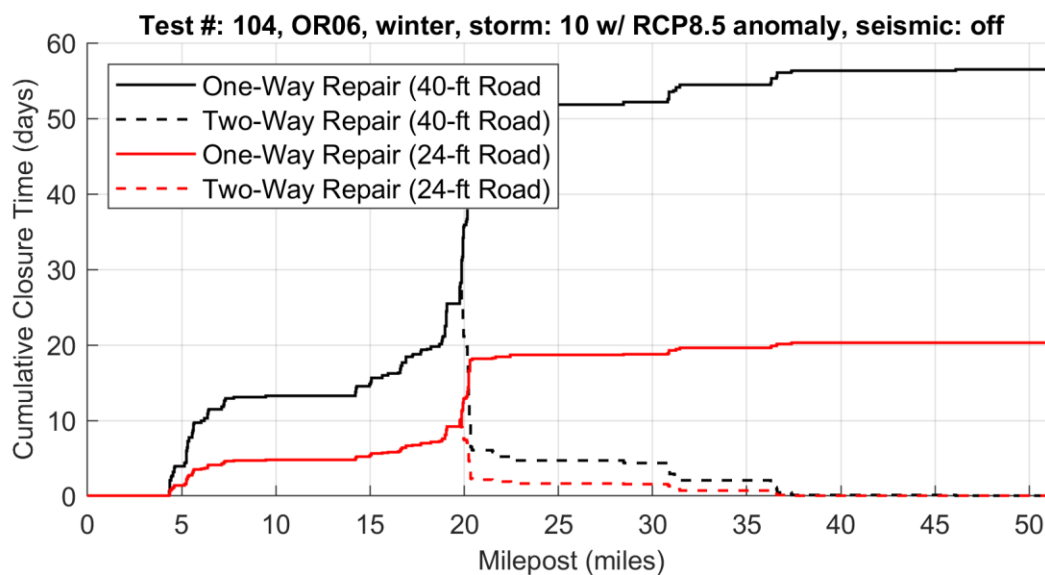
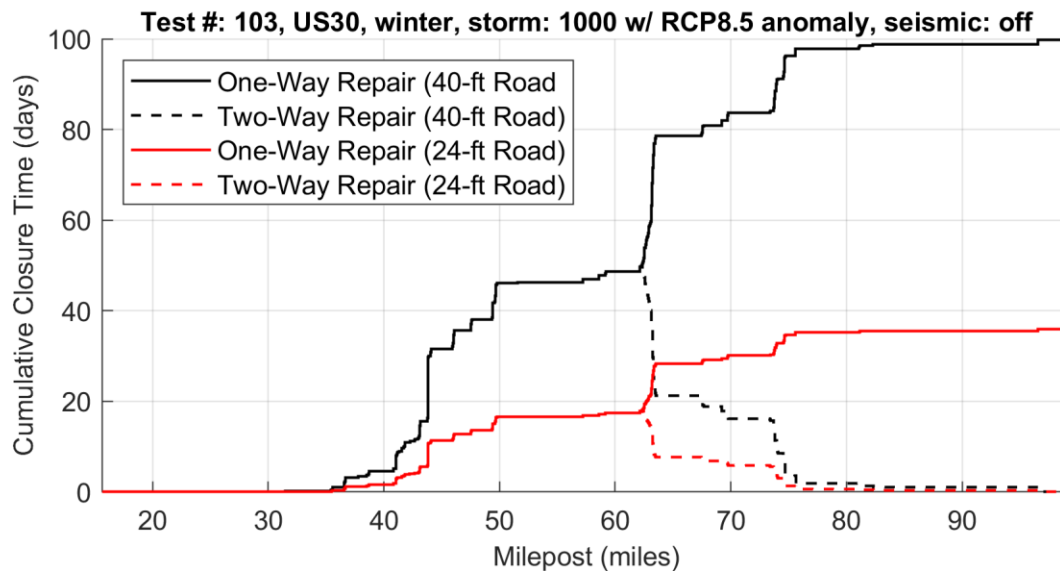


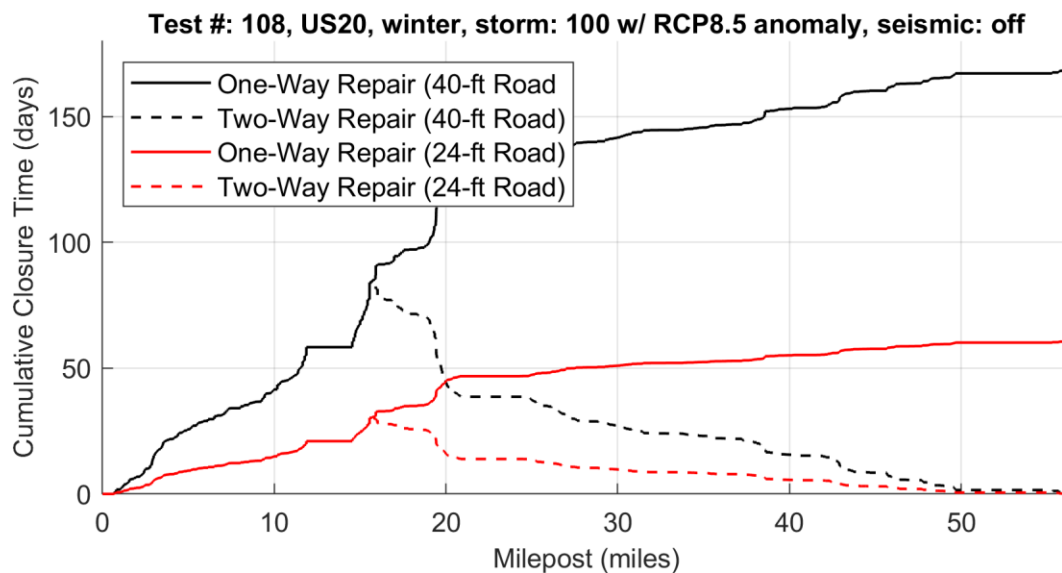
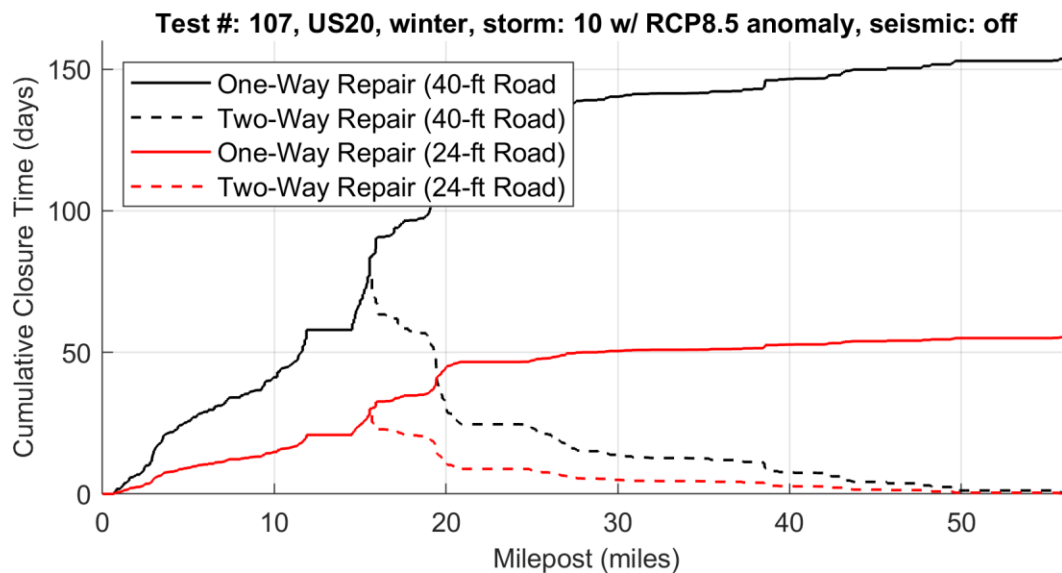
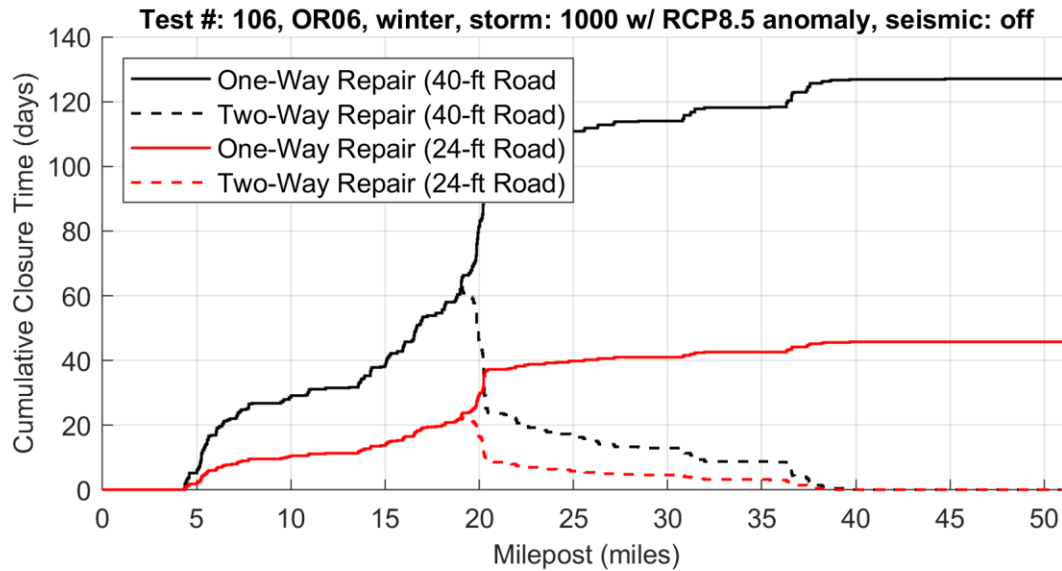


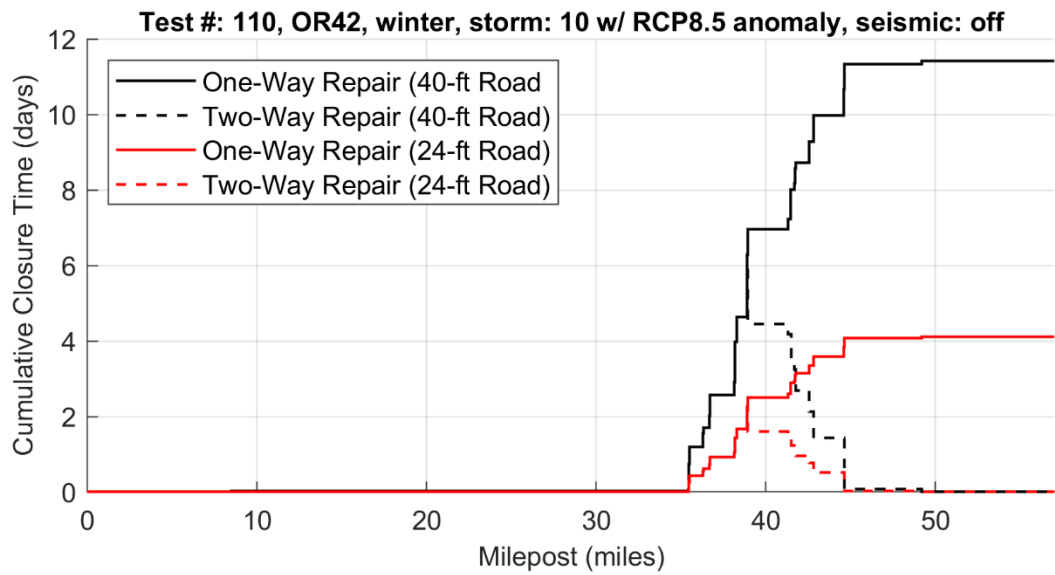
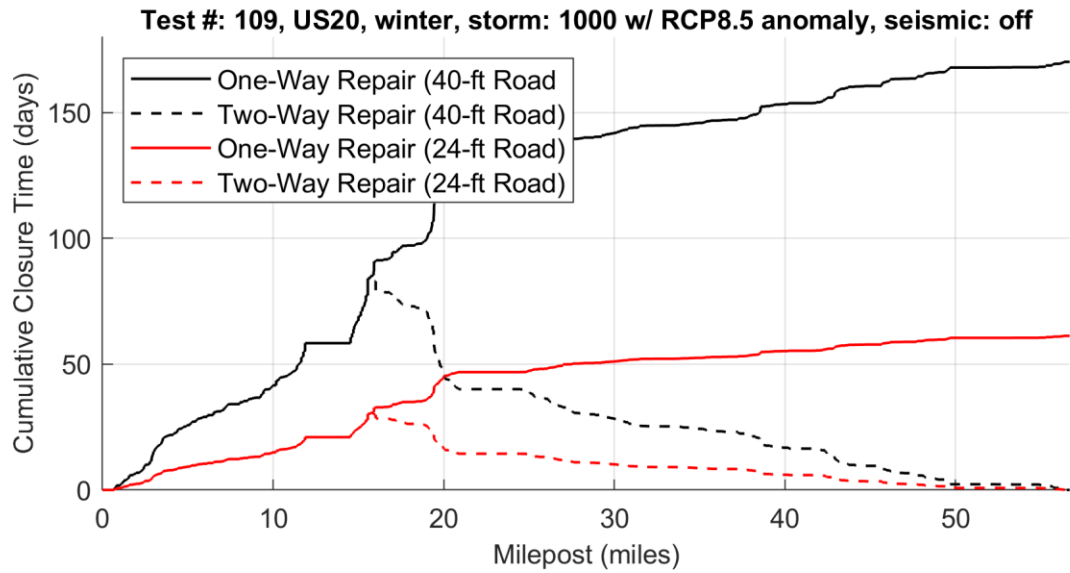


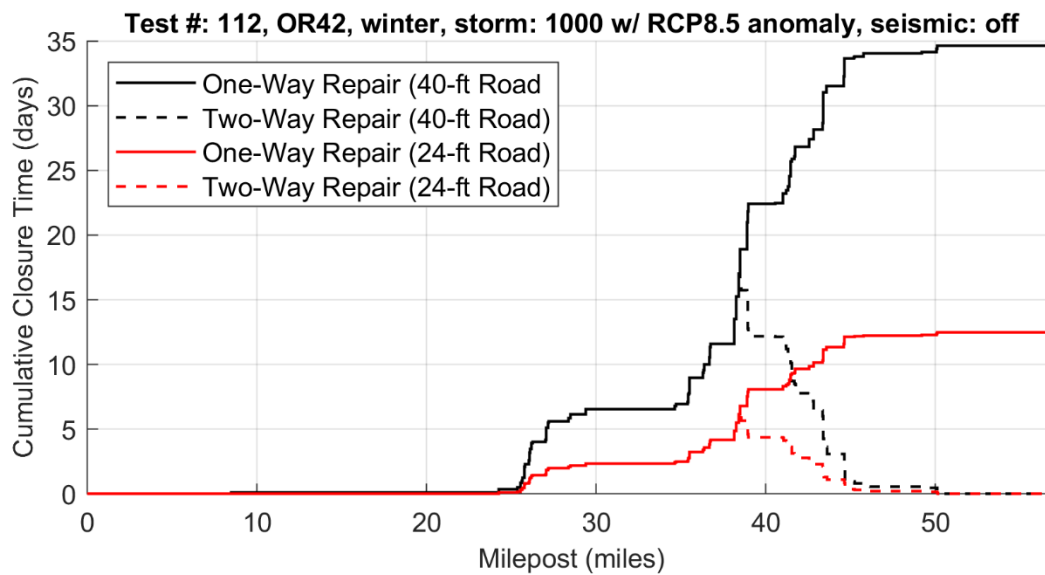
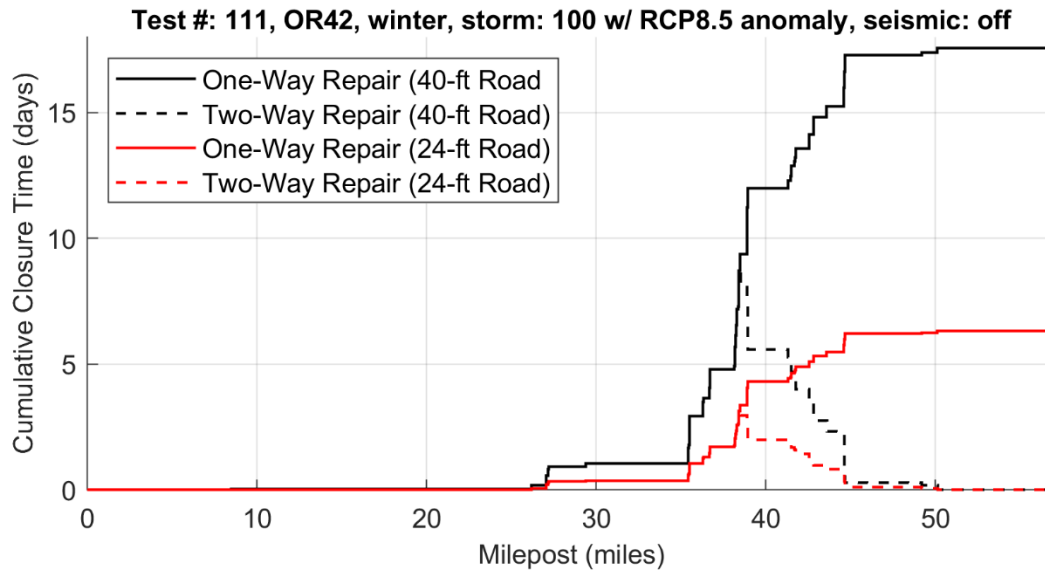






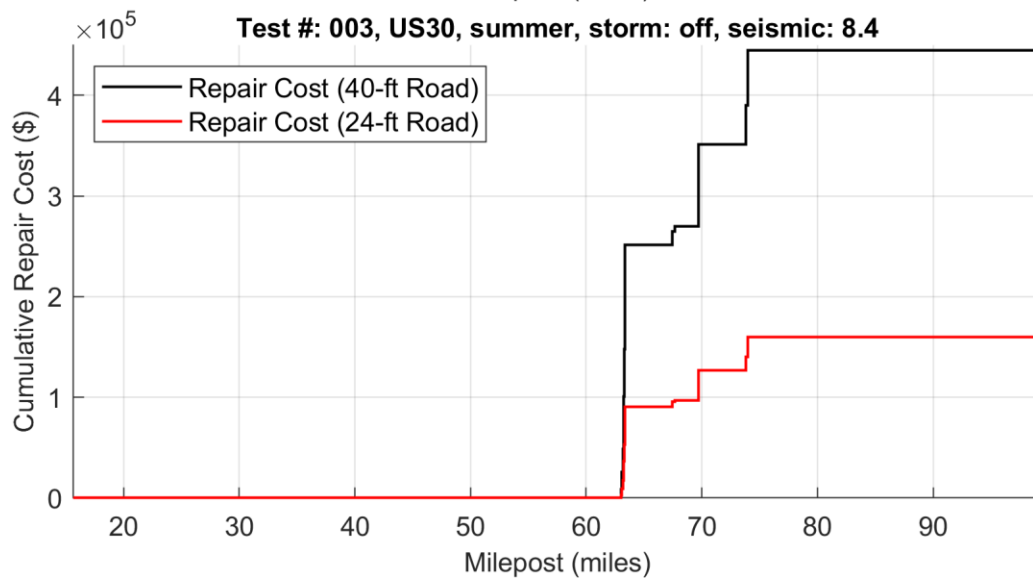
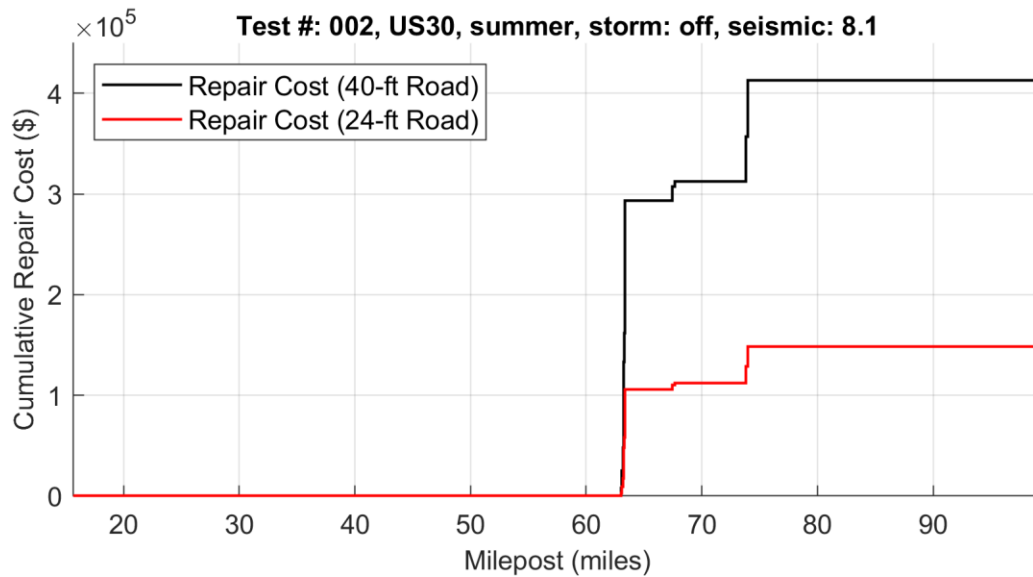
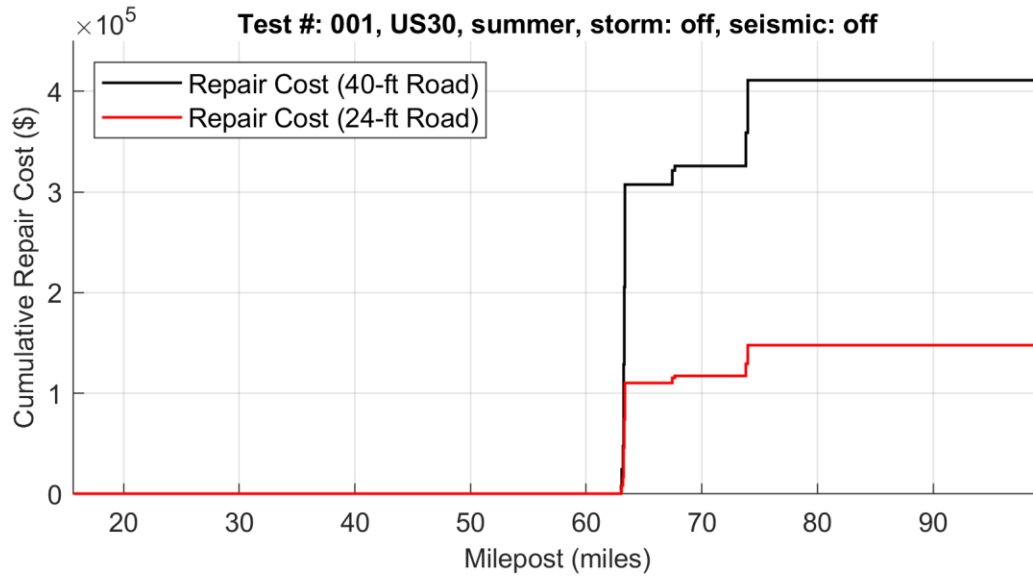


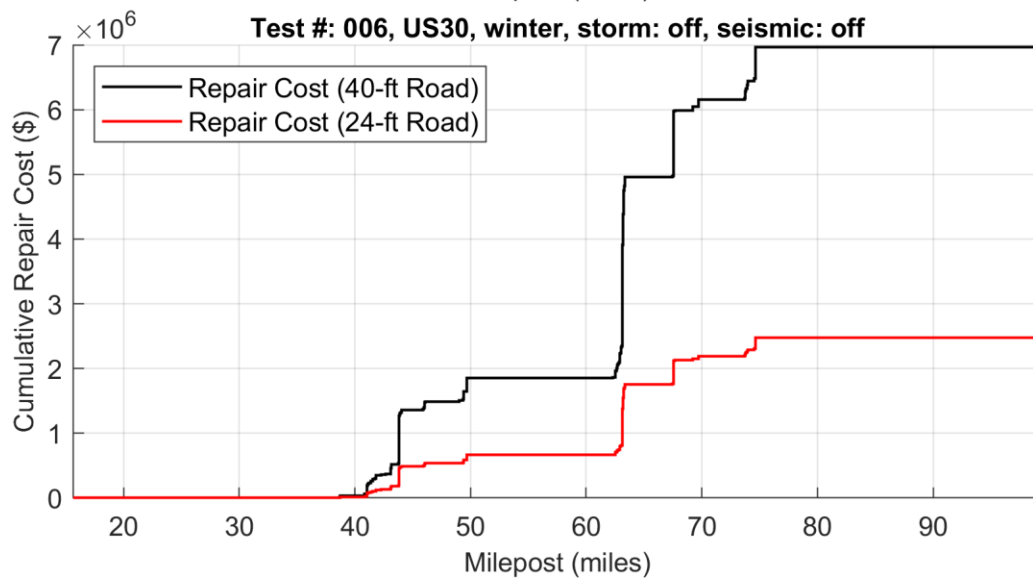
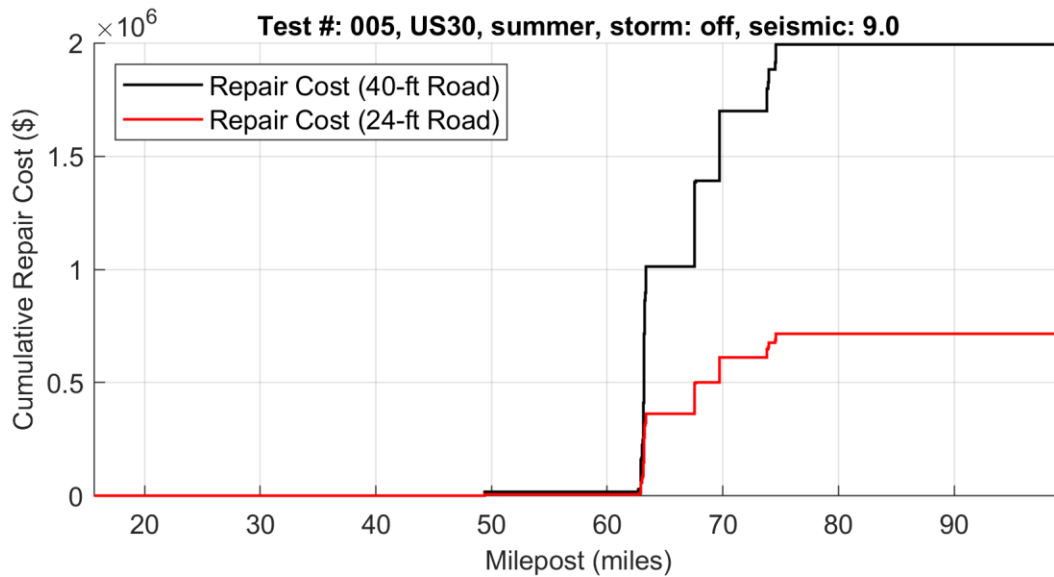
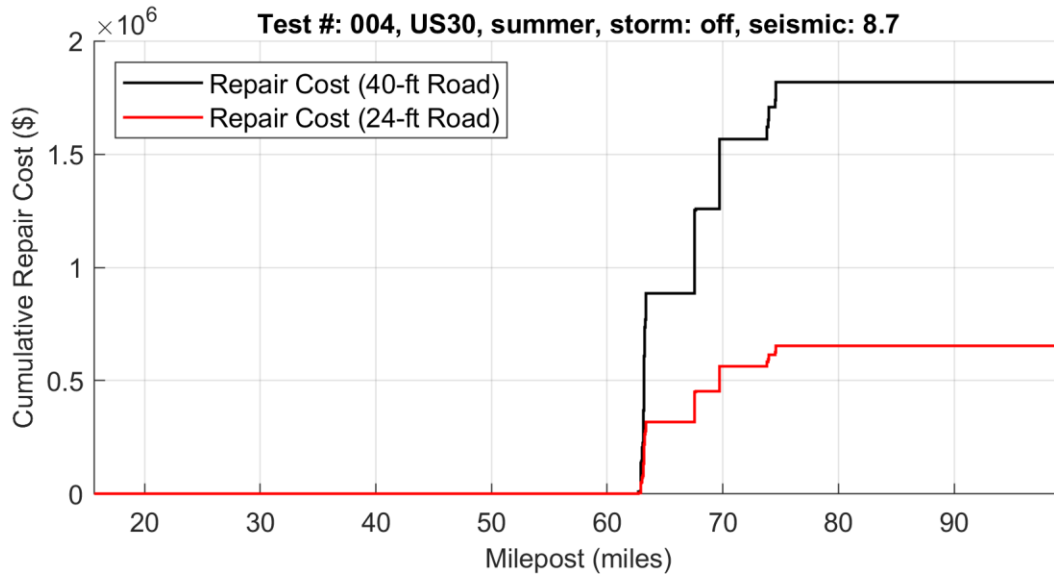


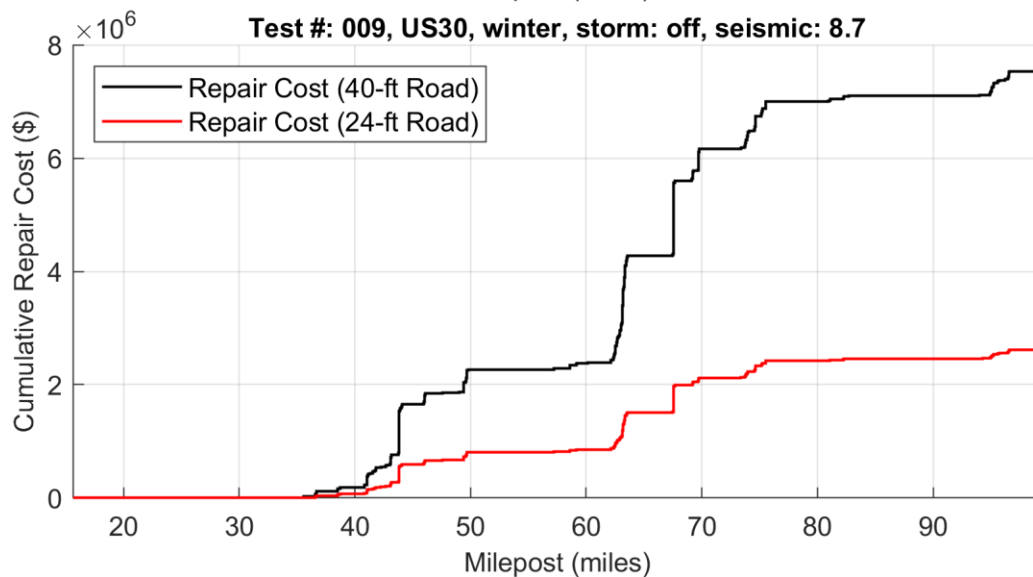
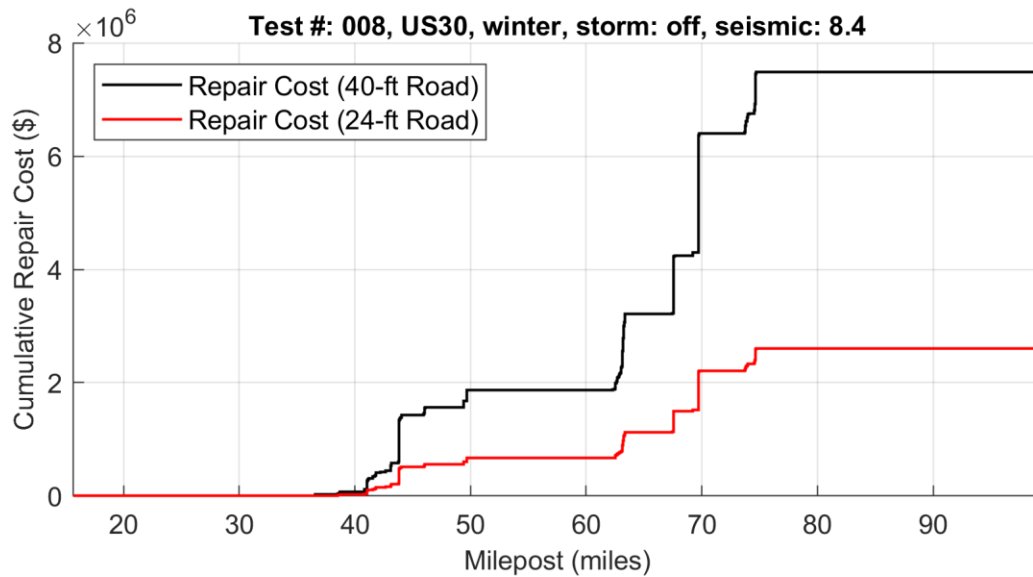
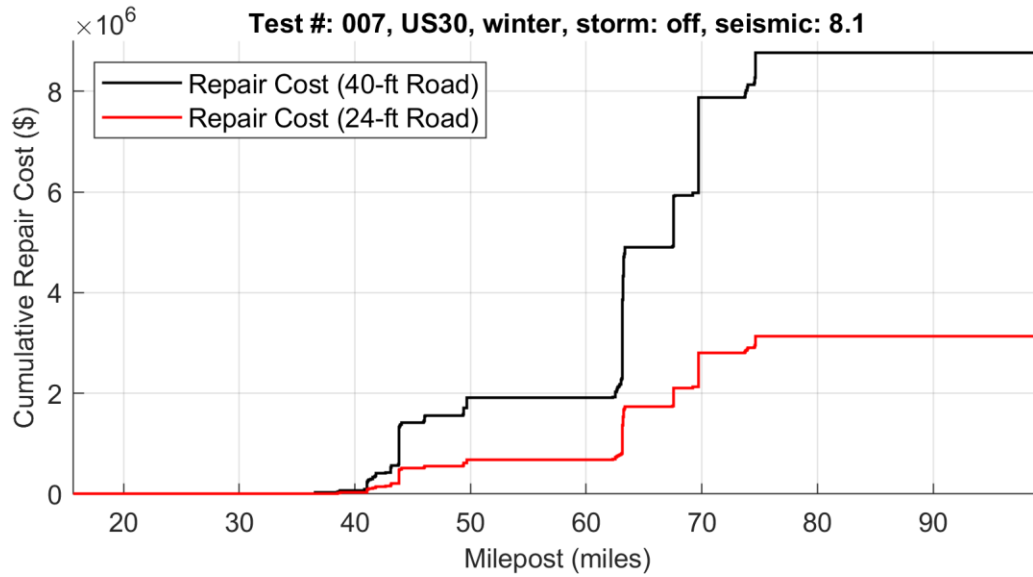


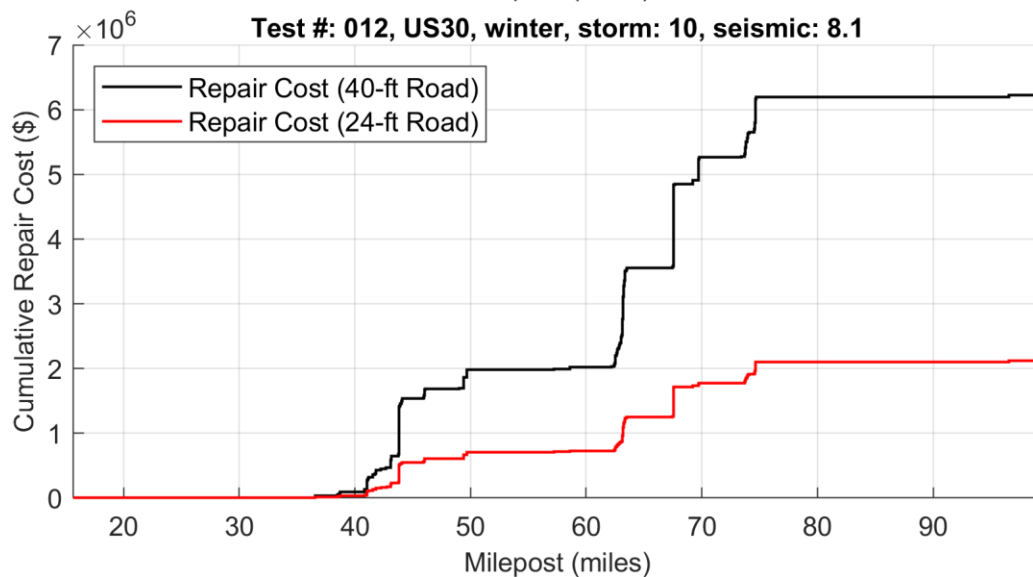
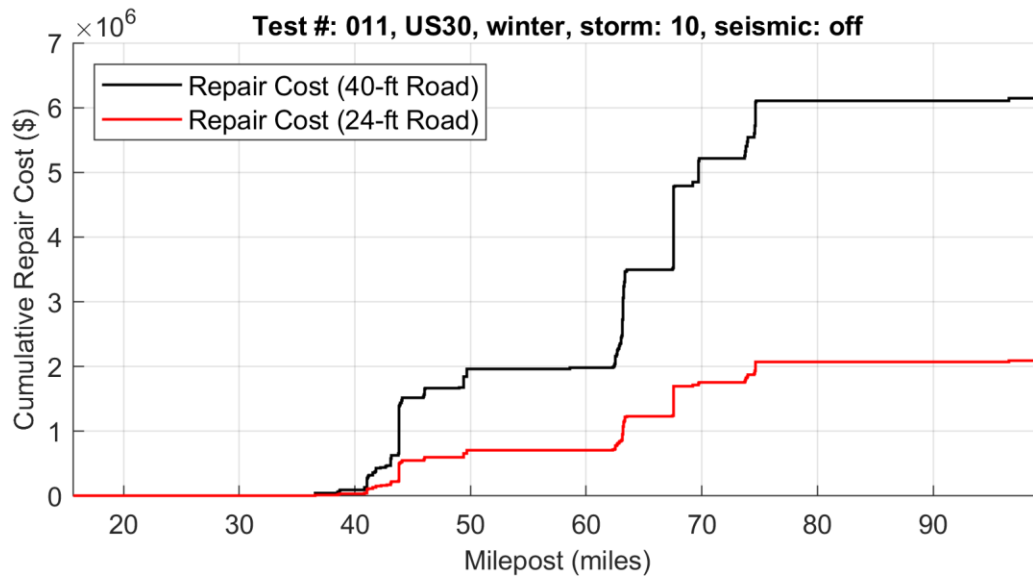
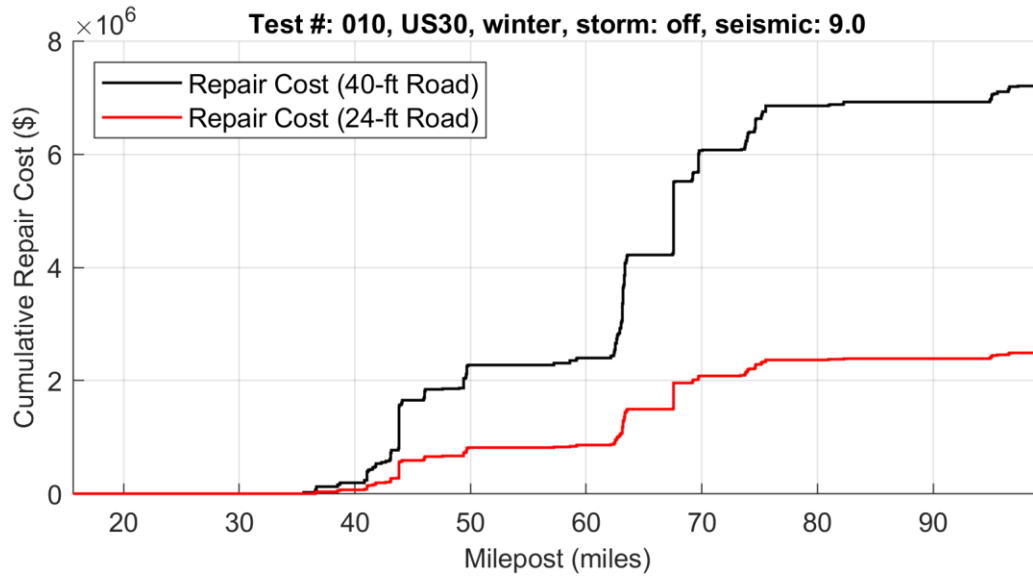
APPENDIX F: RISK METRIC PROFILES: MILEPOST VS. CUMULATIVE COST OF REPAIR (WITHOUT 60 FOOT LANDSLIDE BUFFER)

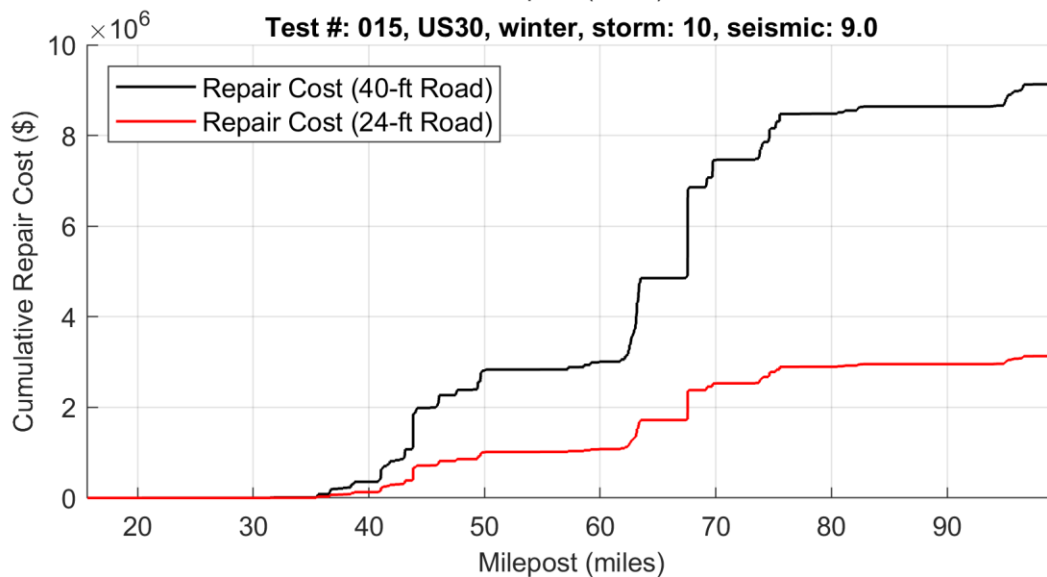
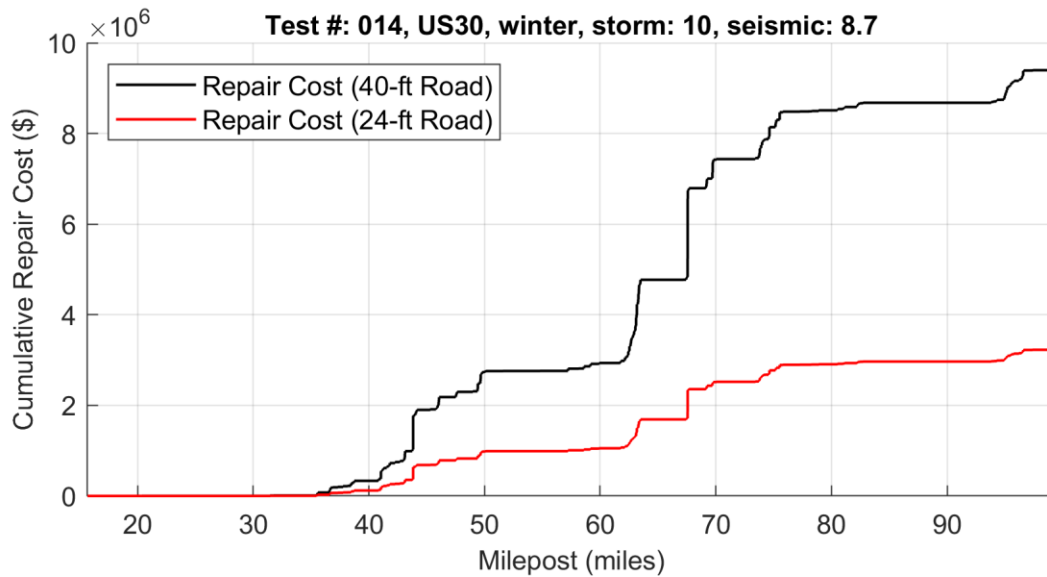
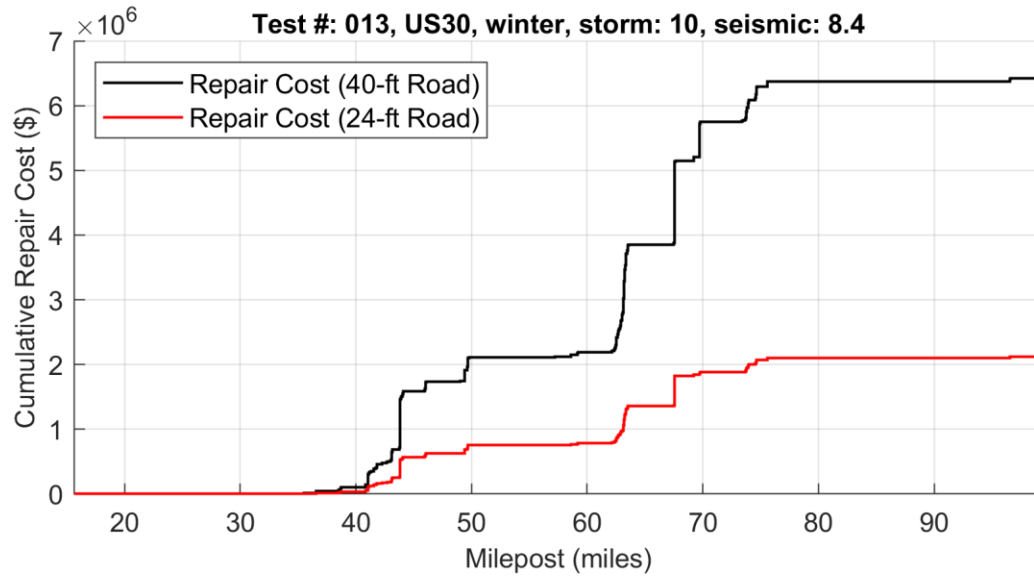
This appendix contains a full suite of milepost vs cumulative repair cost profiles (closure costs do not consider landslide buffer) for all scenarios considered for SPR808. These scenarios consider a combination of physical drivers, including seasonal variations in antecedent moisture, rainfall inputs, seismicity, and climate-change induced precipitation anomaly. A directory describing all tests not considering future climate may be found in Table 4.4. A directory describing all tests considering future climate may be found in Table 4.7.

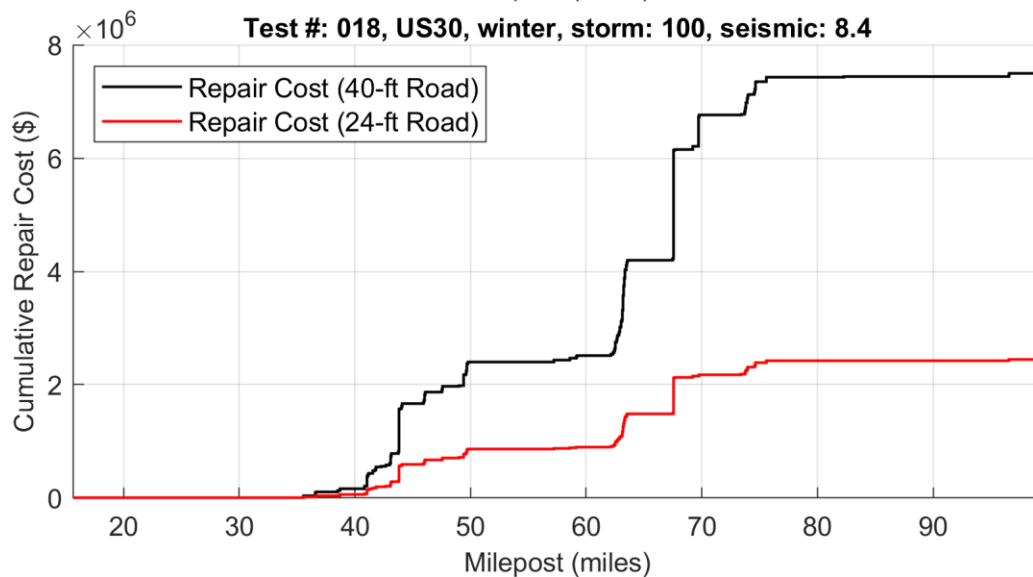
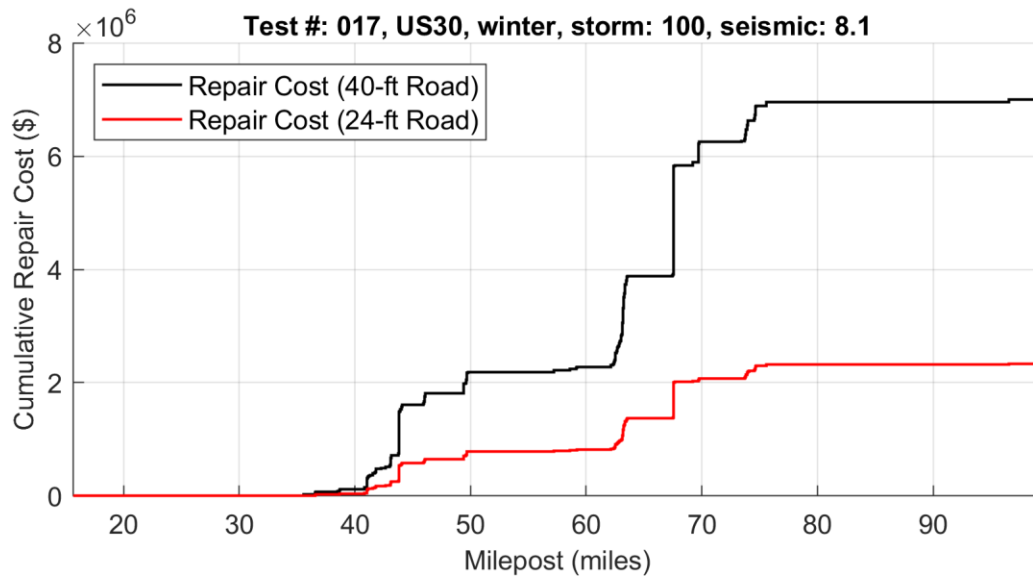
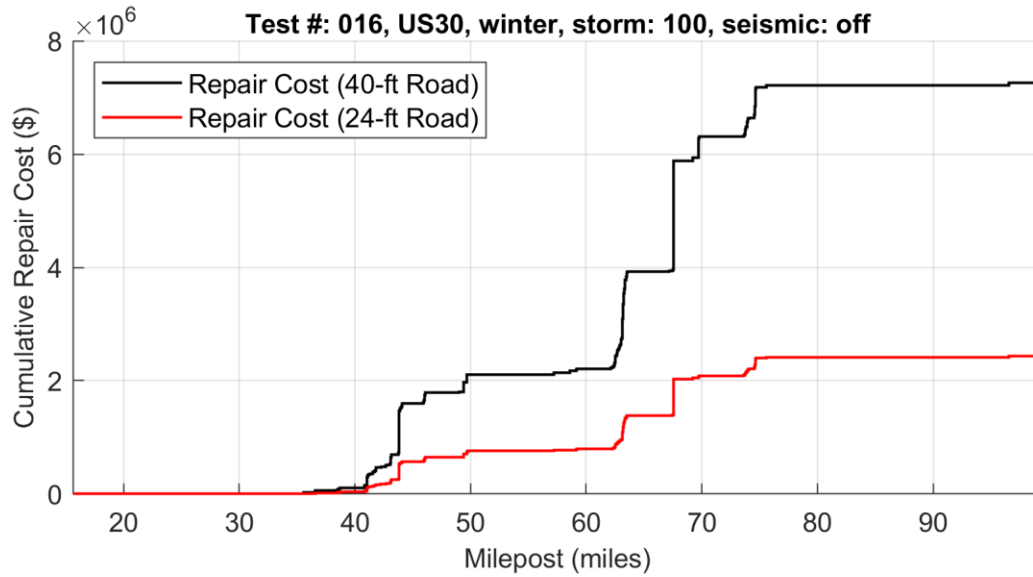


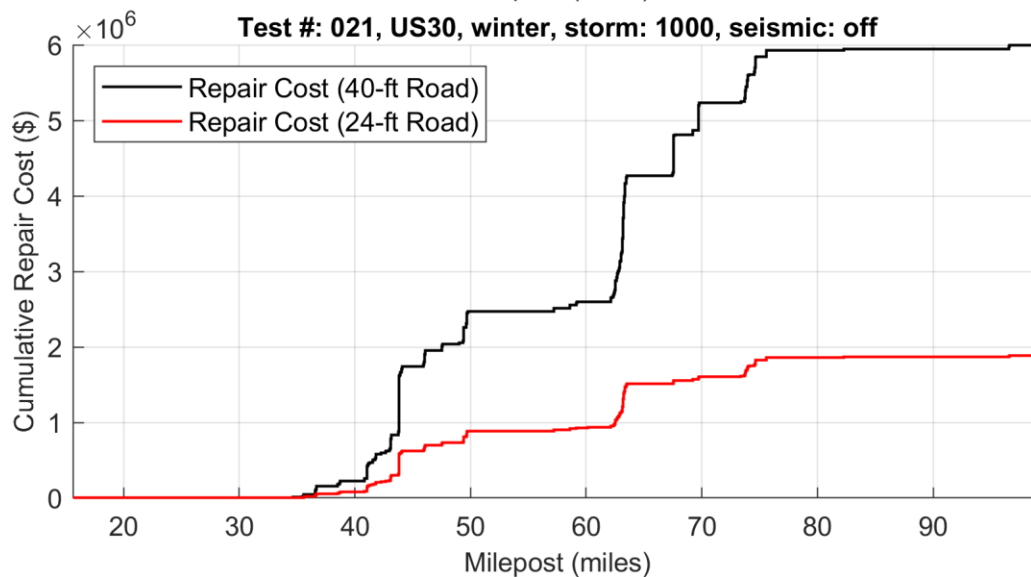
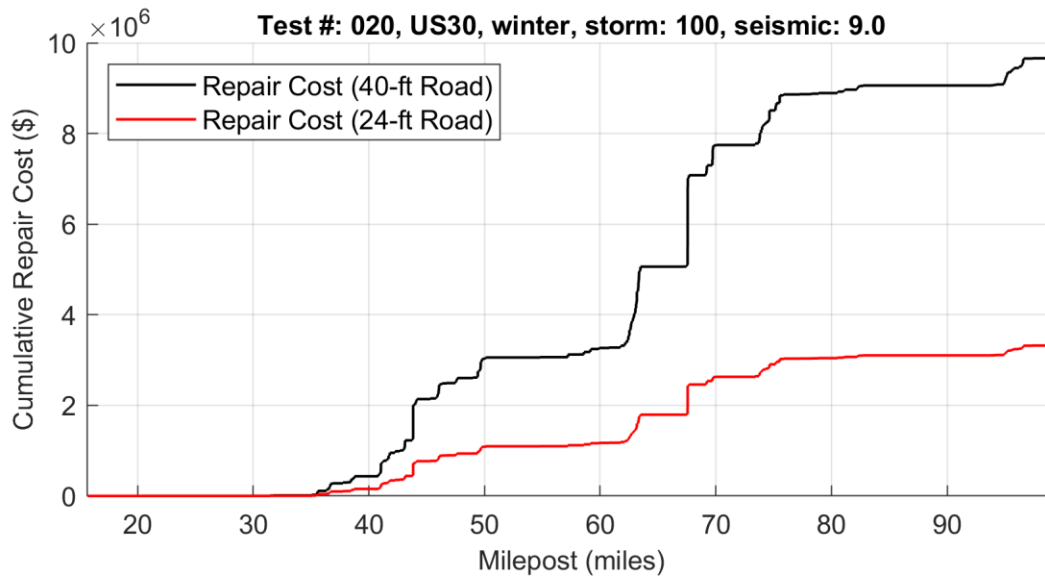
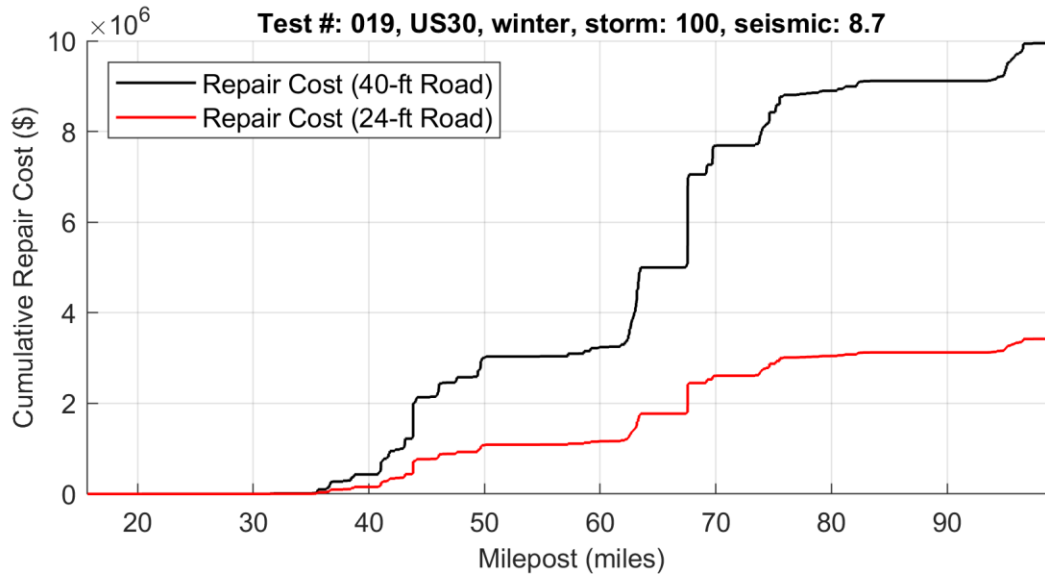


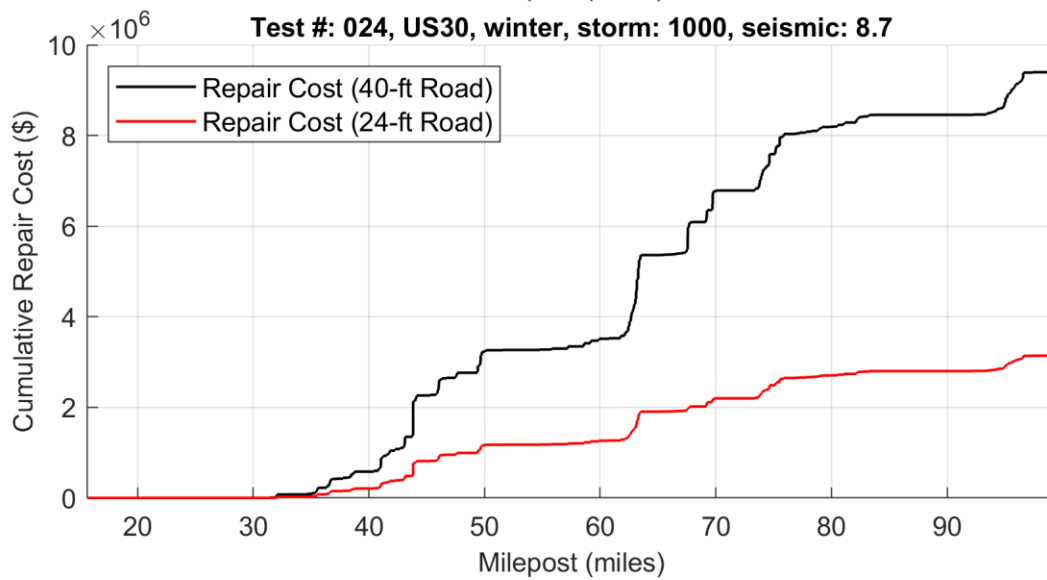
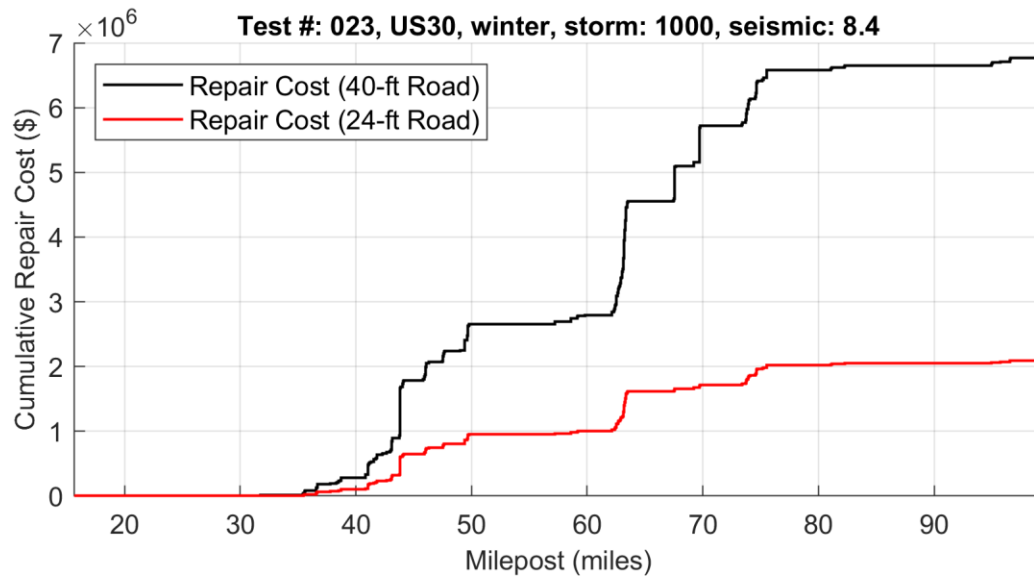
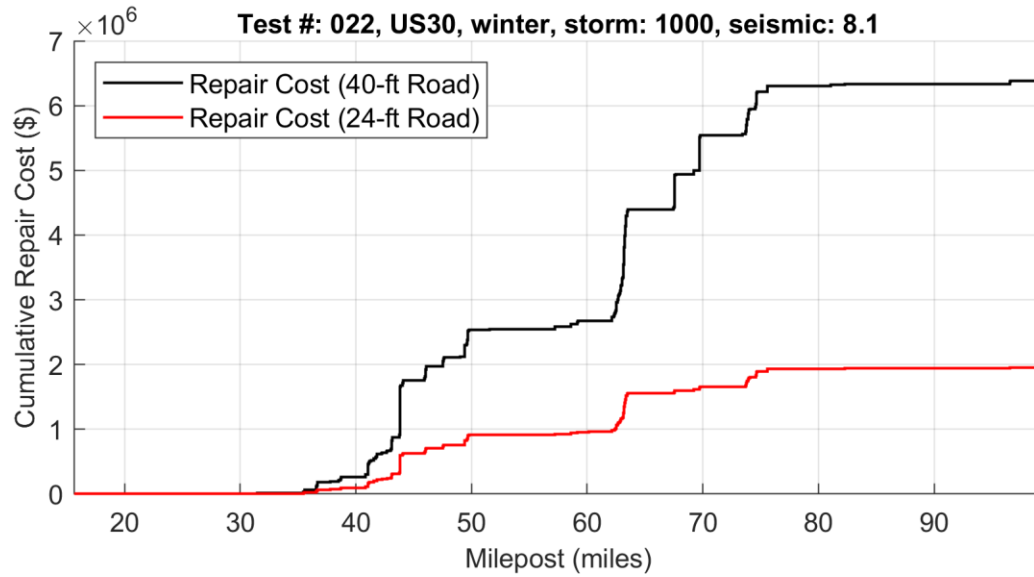


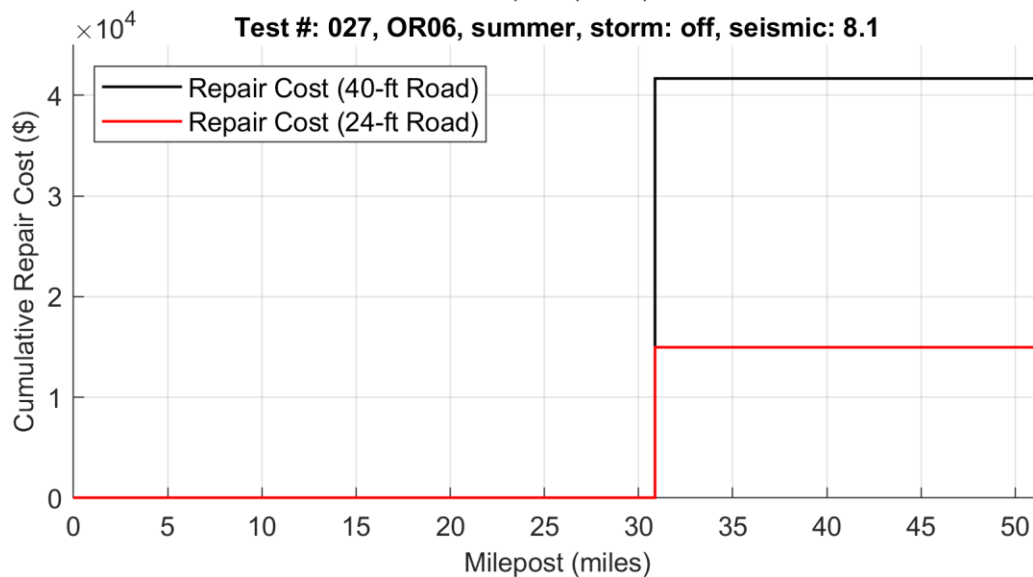
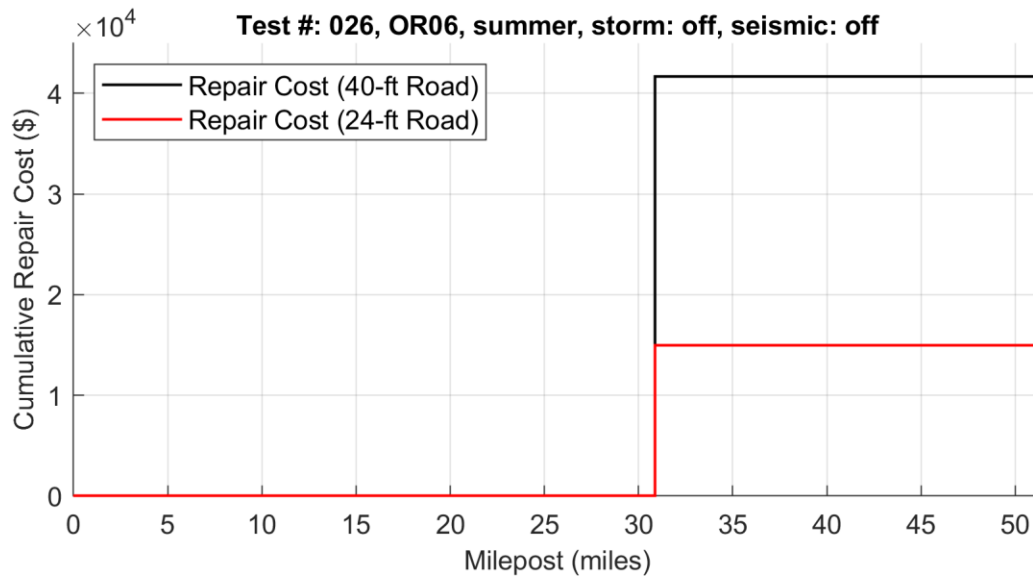
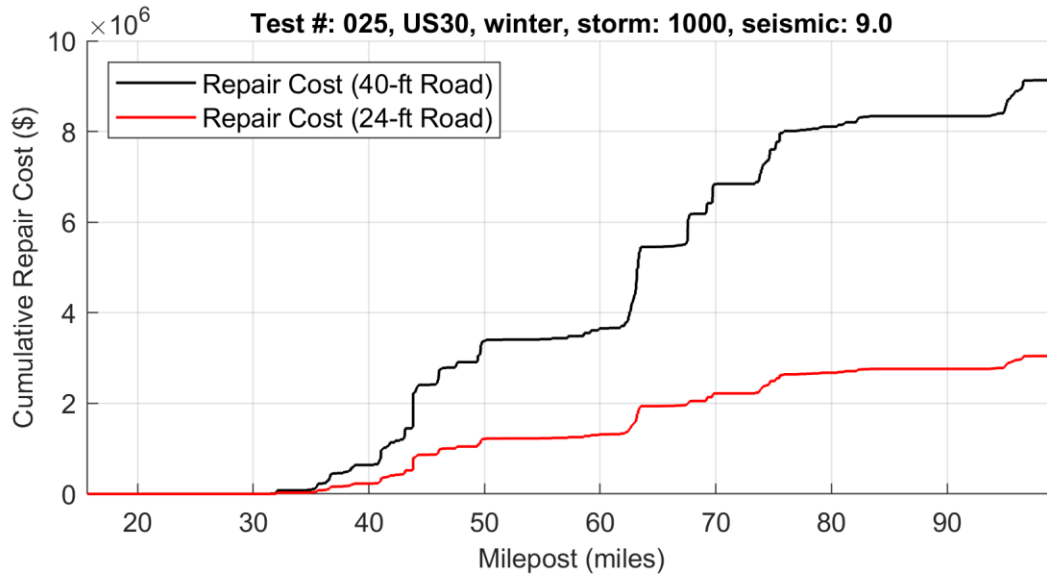


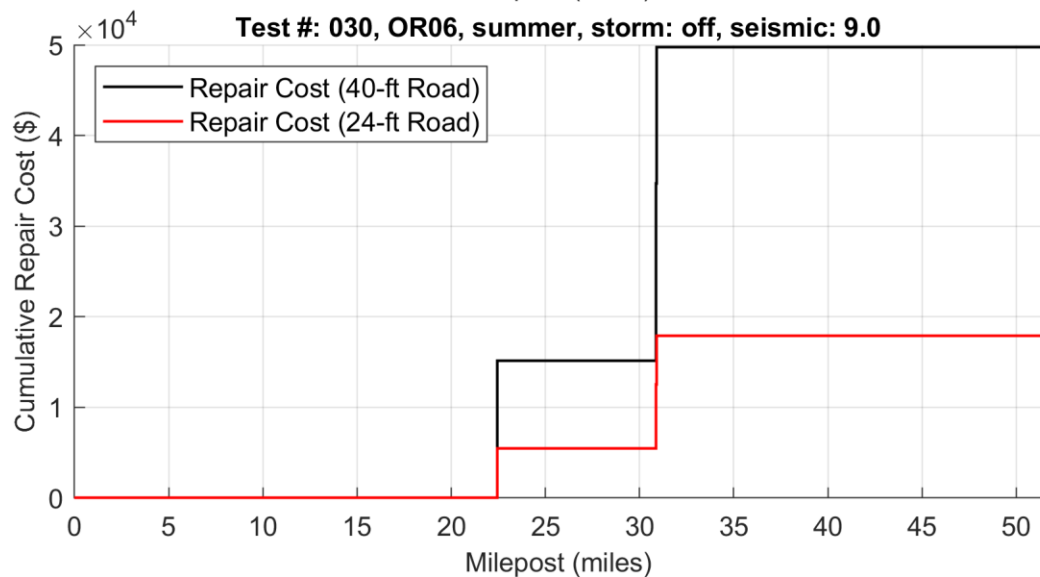
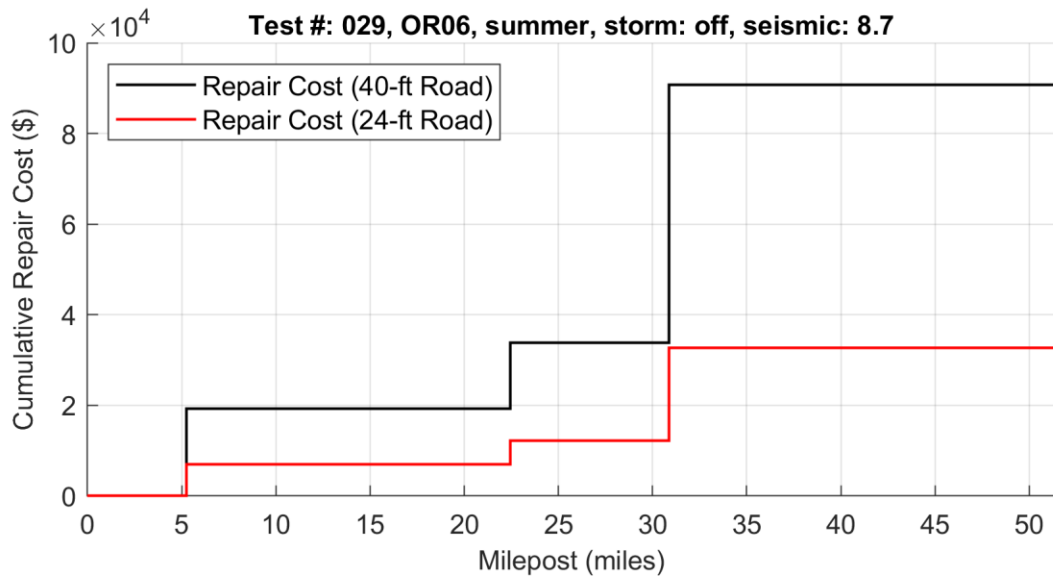
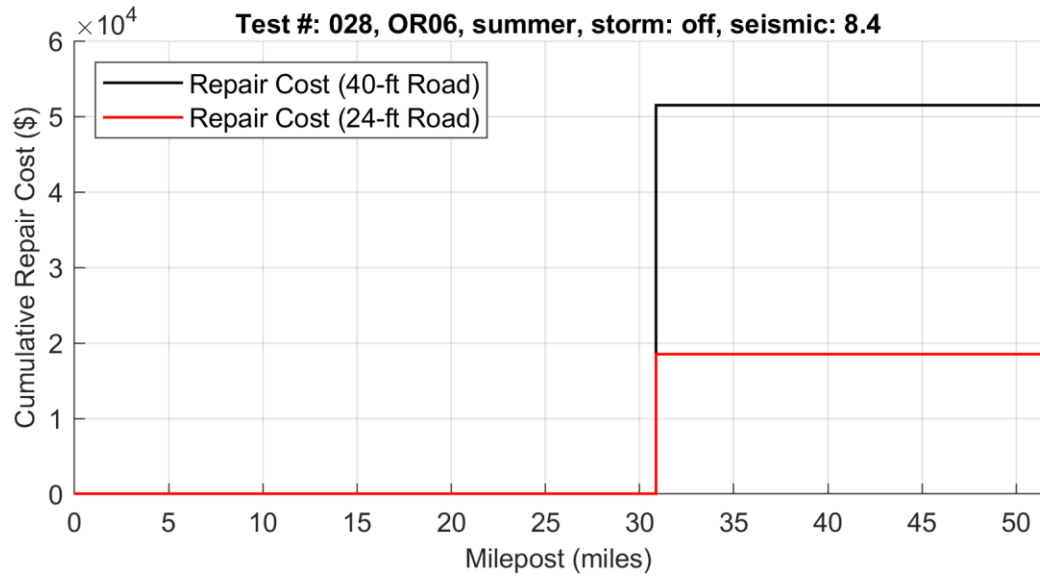


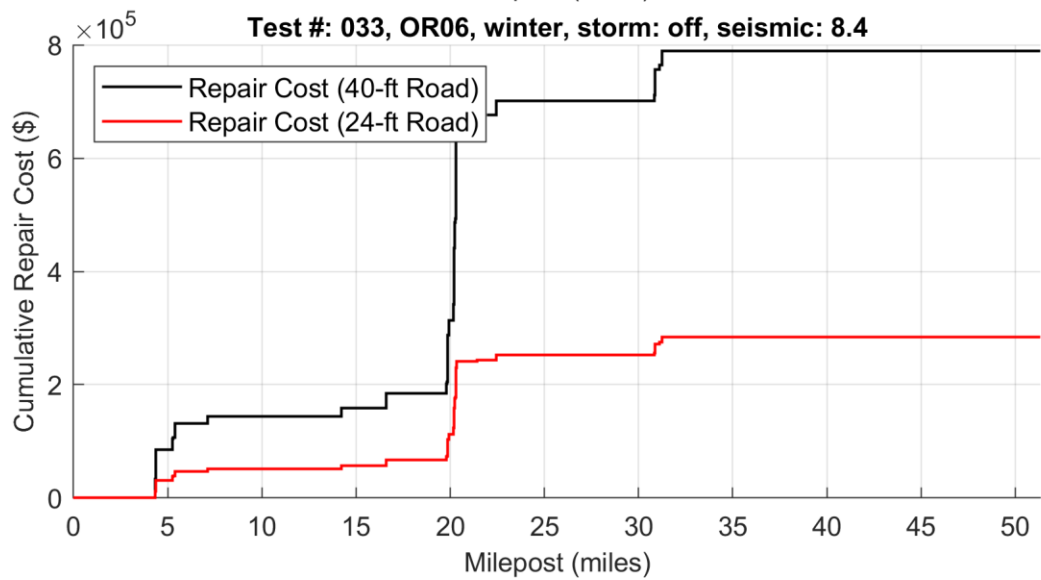
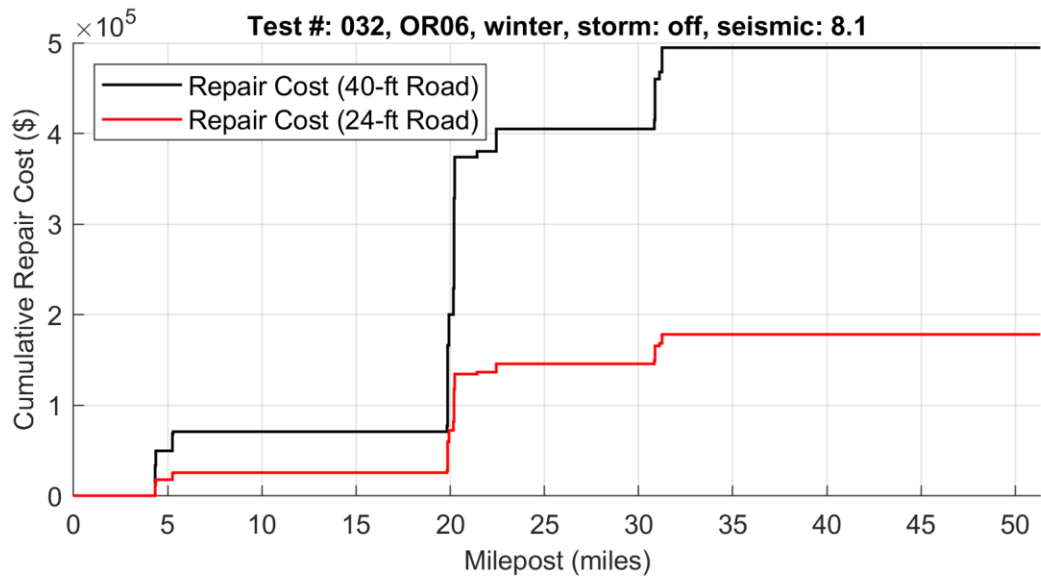
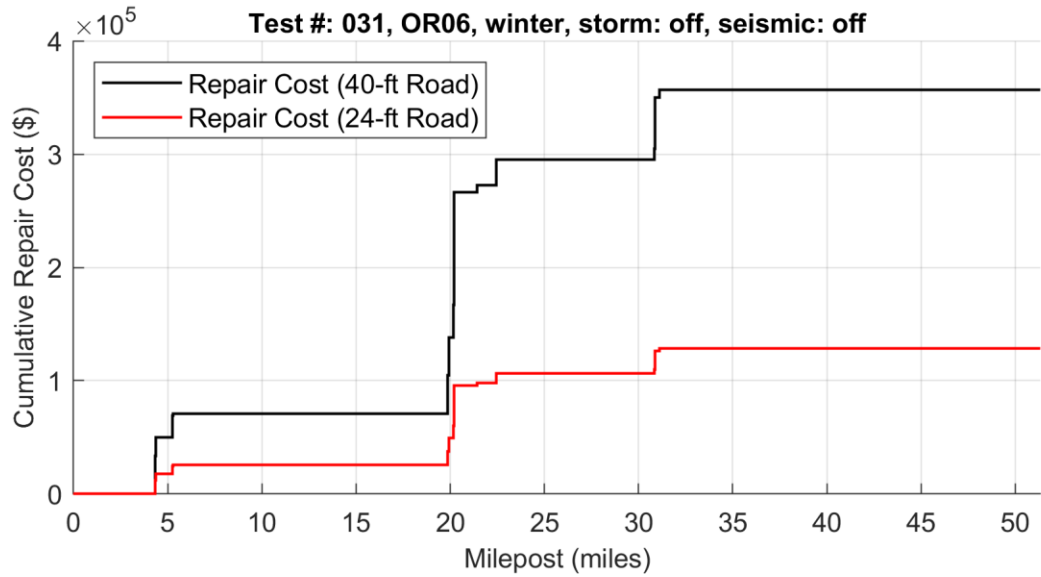


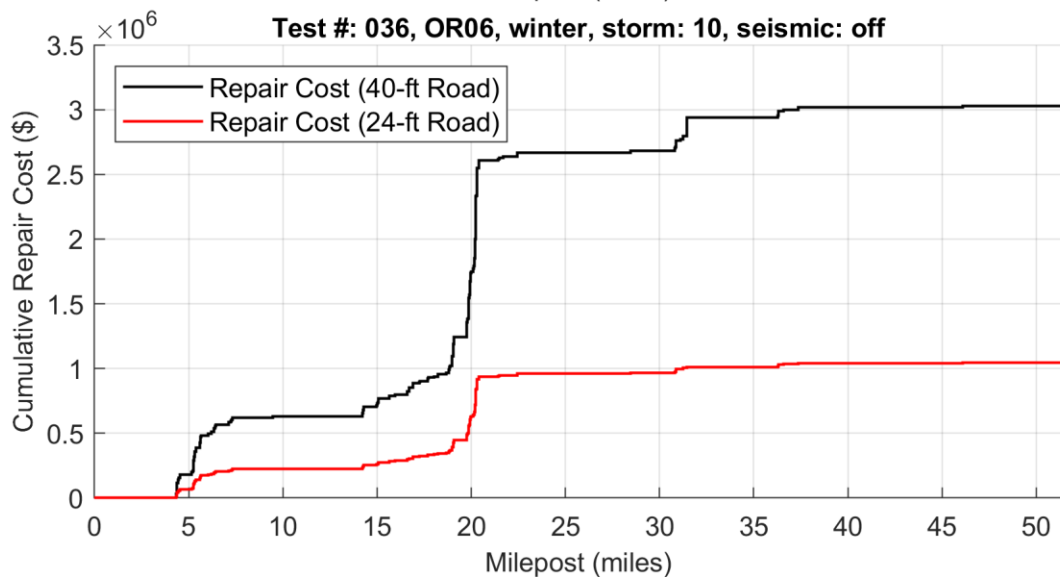
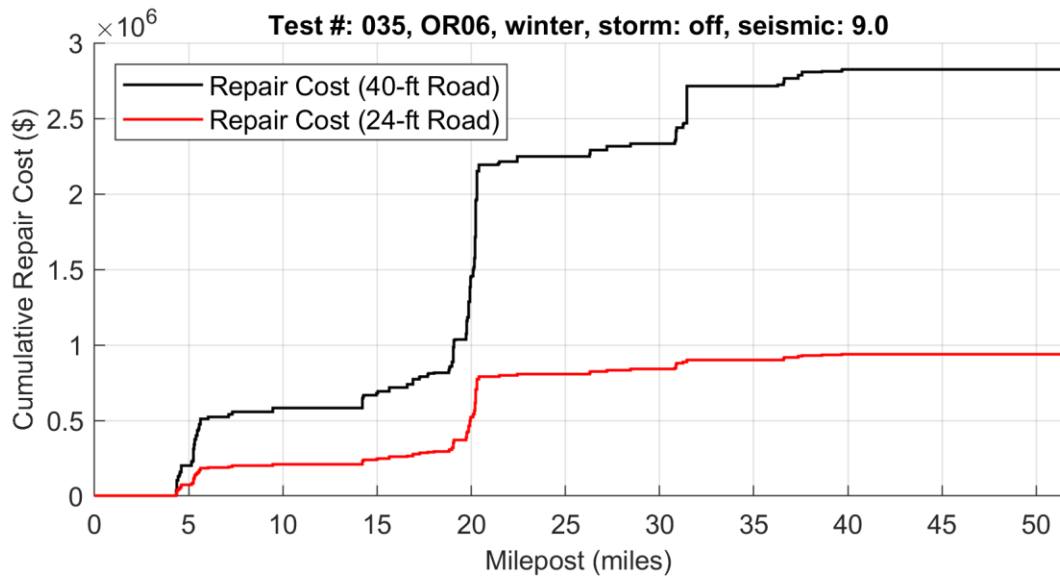
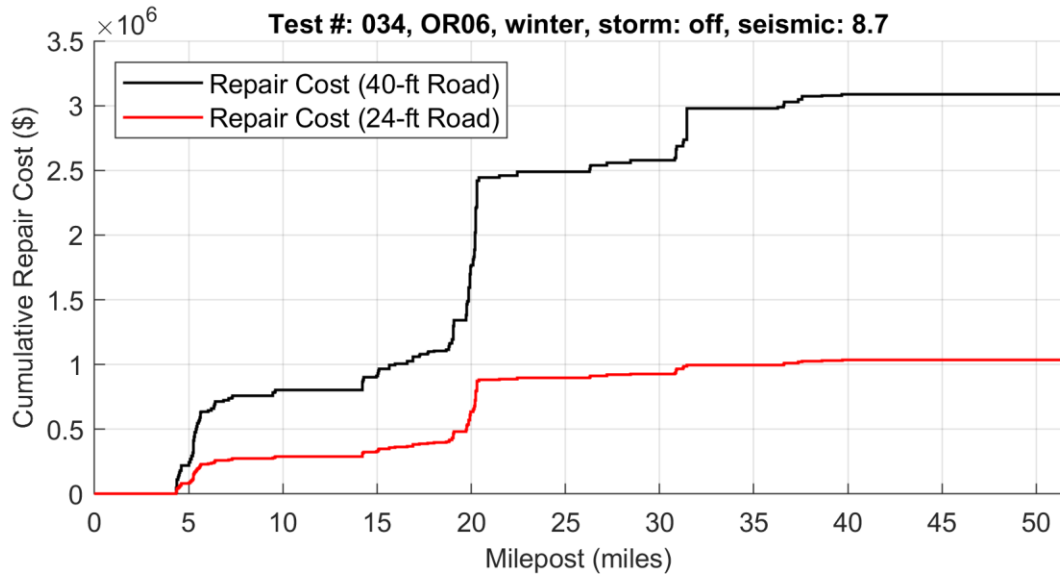


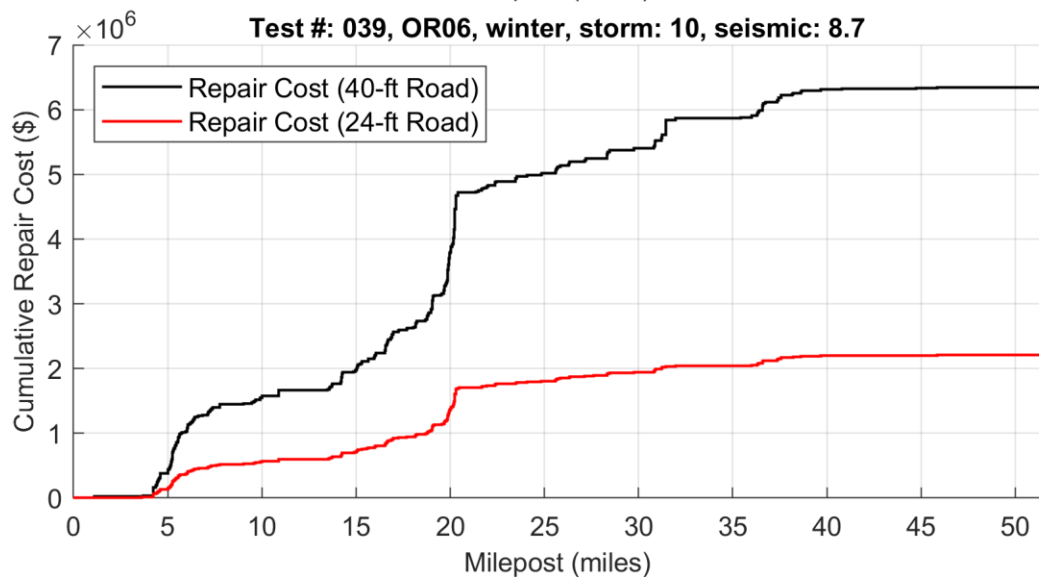
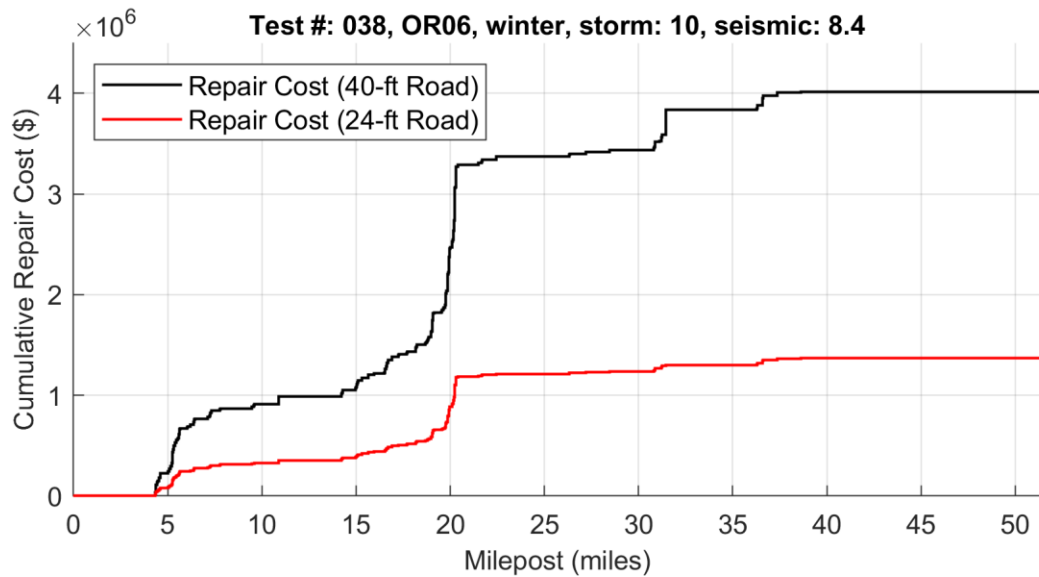
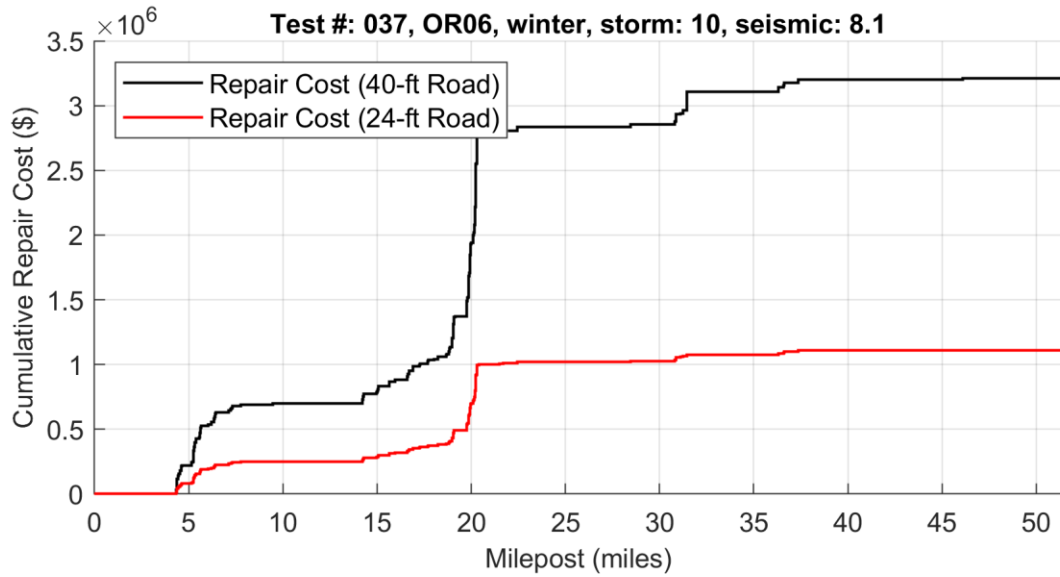


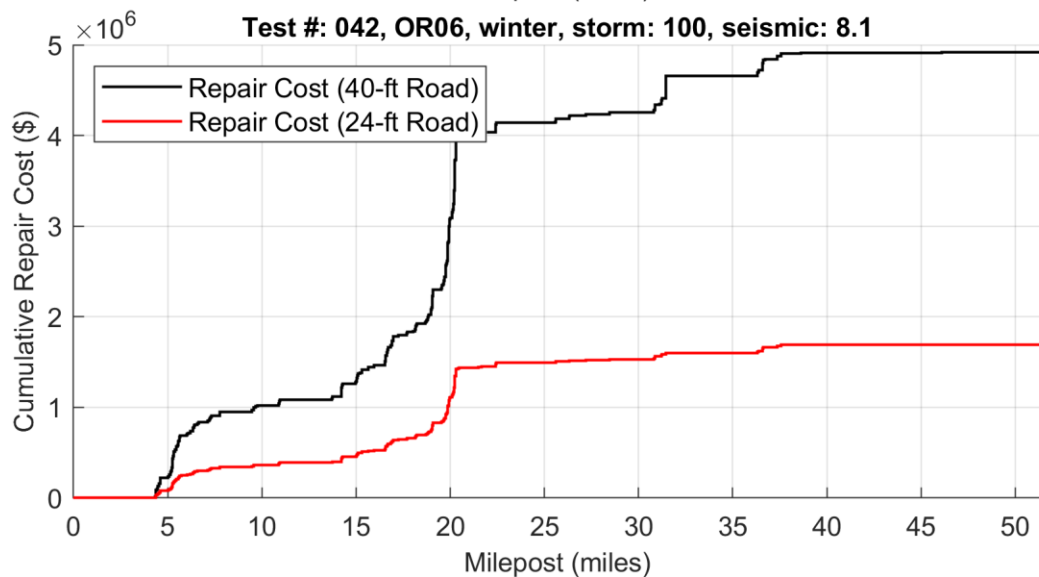
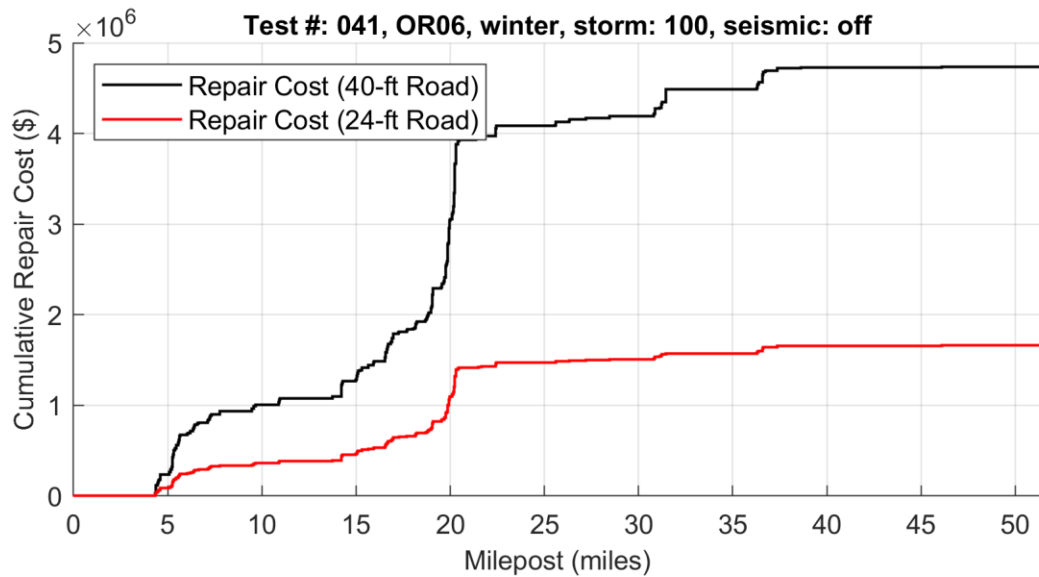
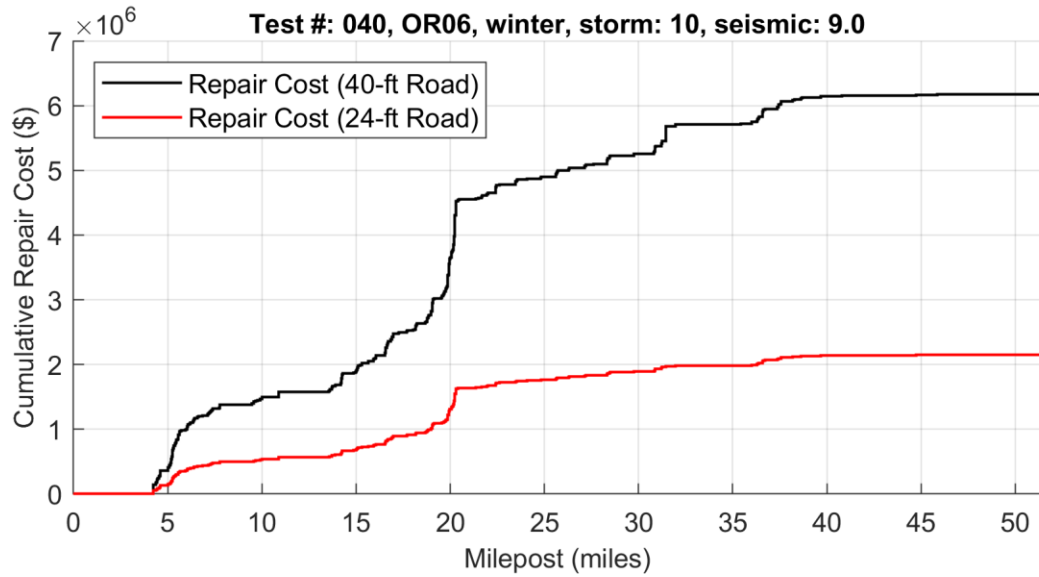


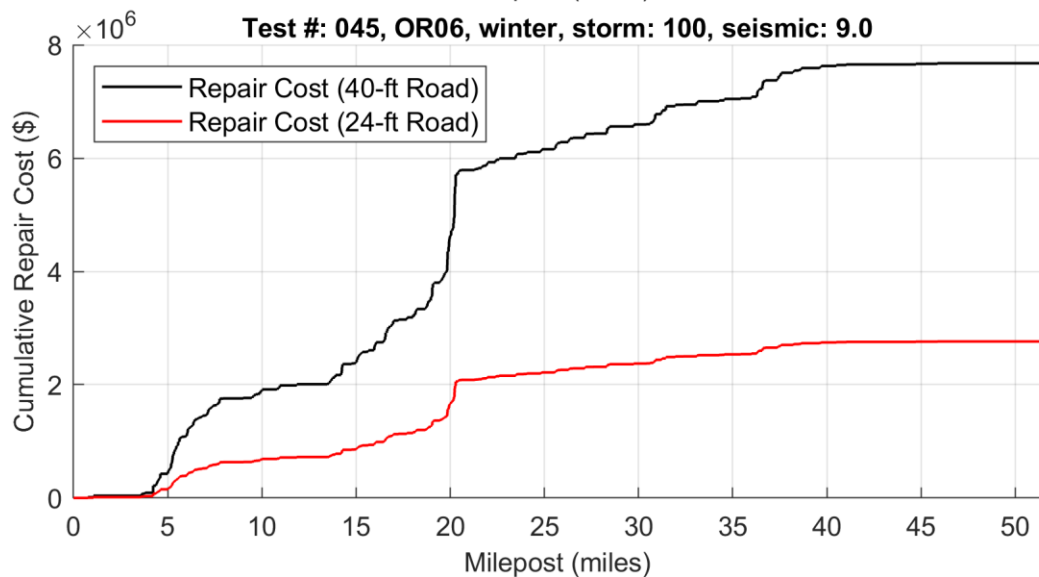
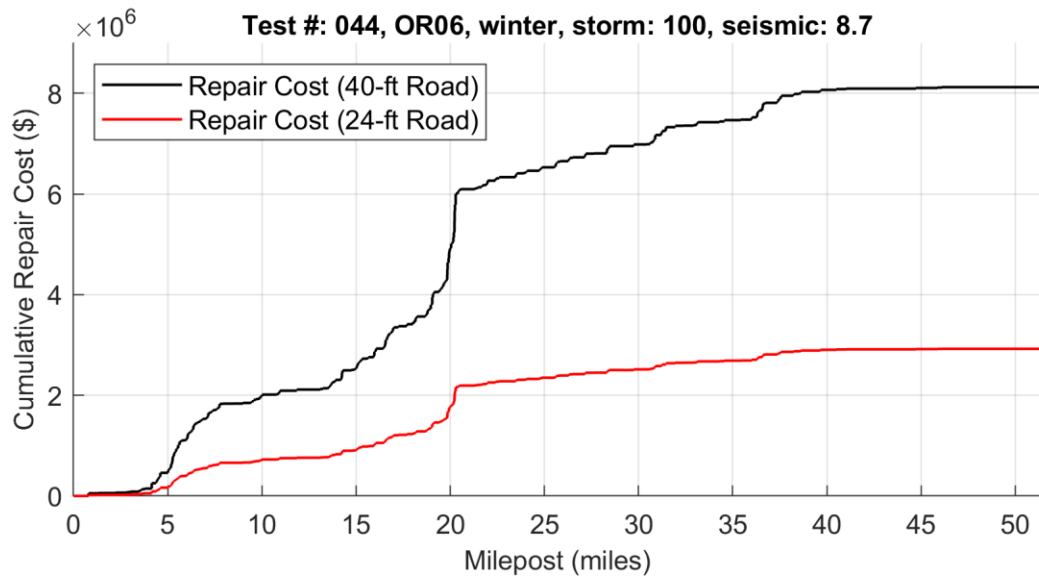
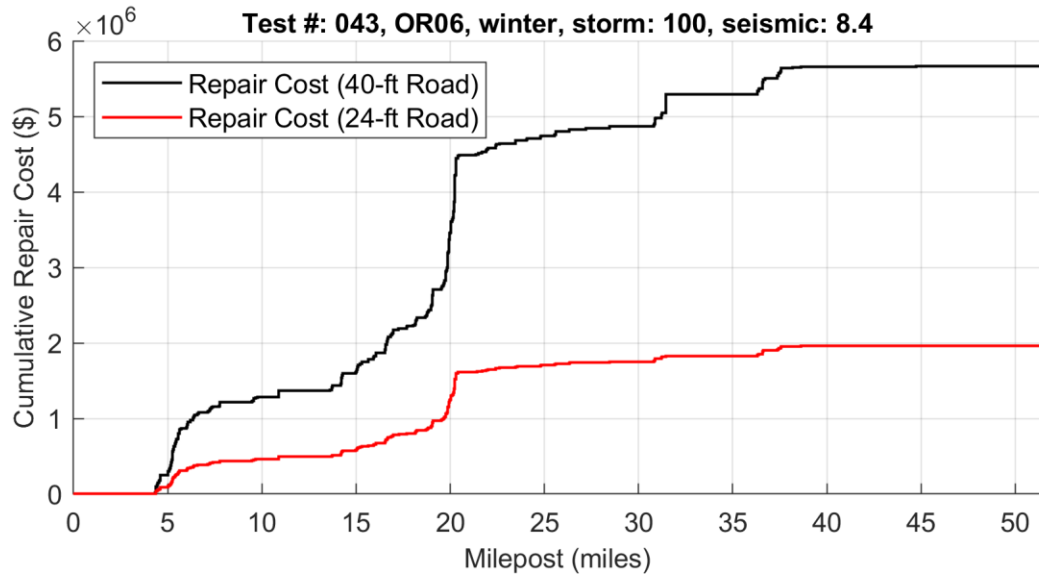


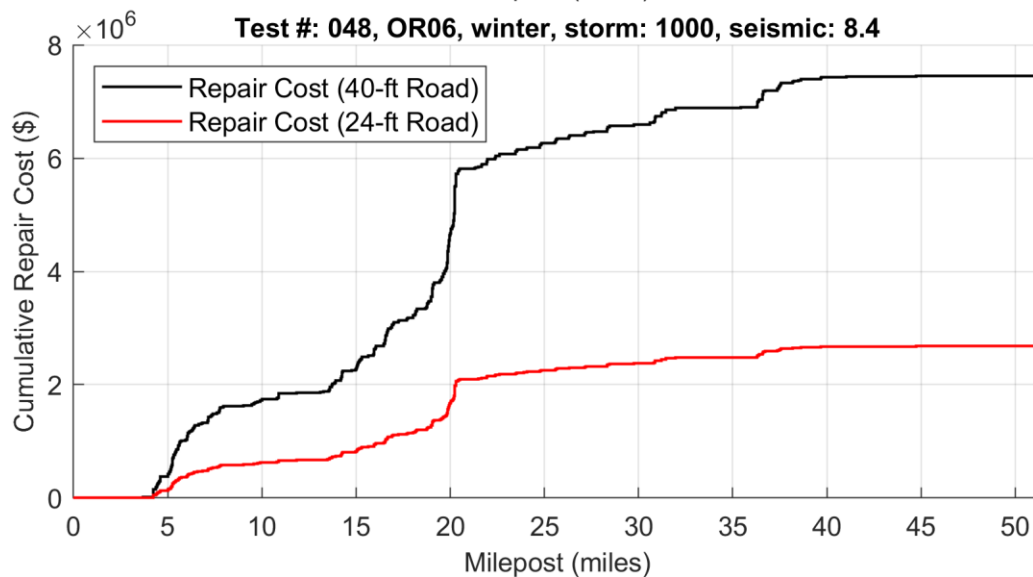
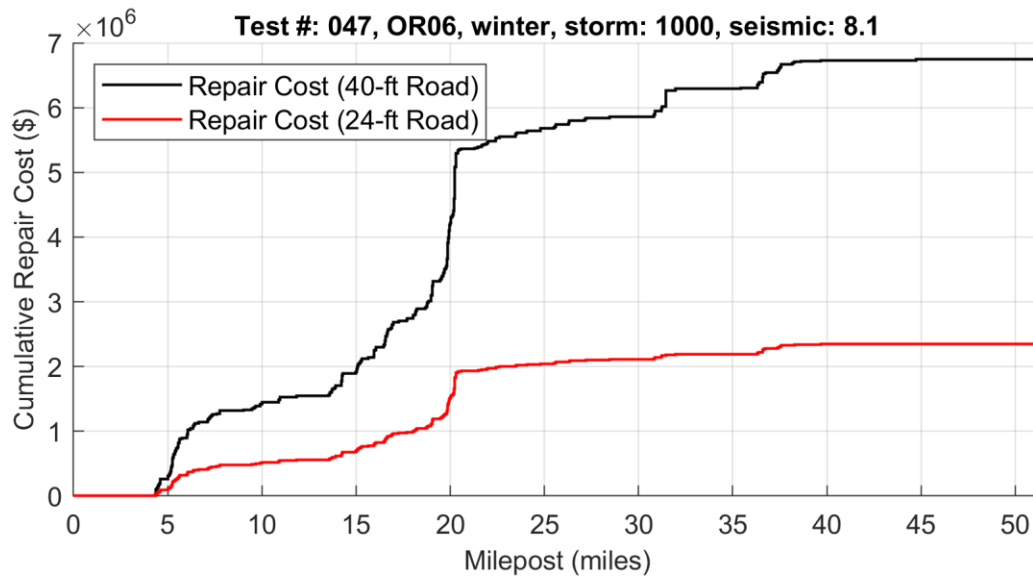
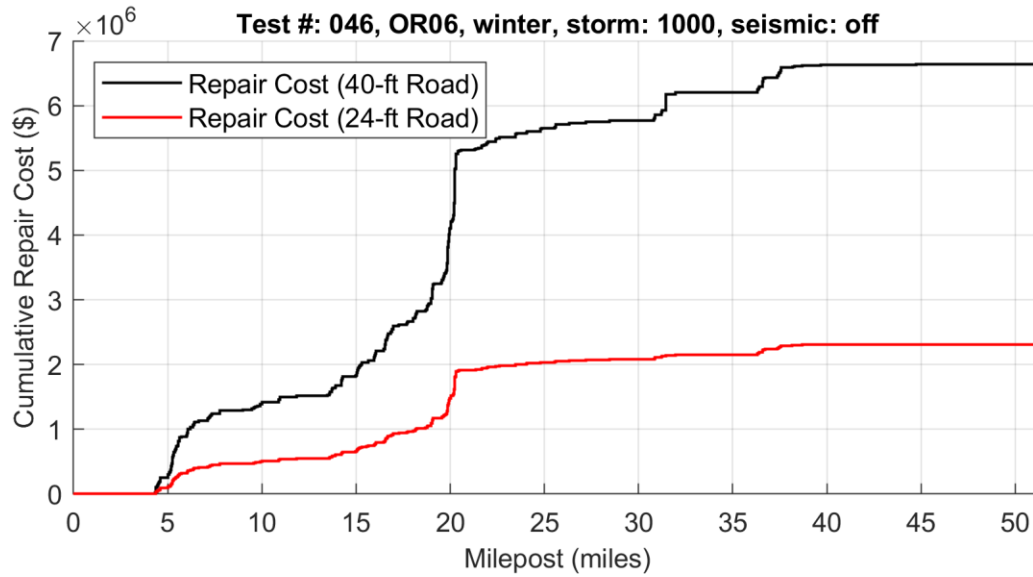


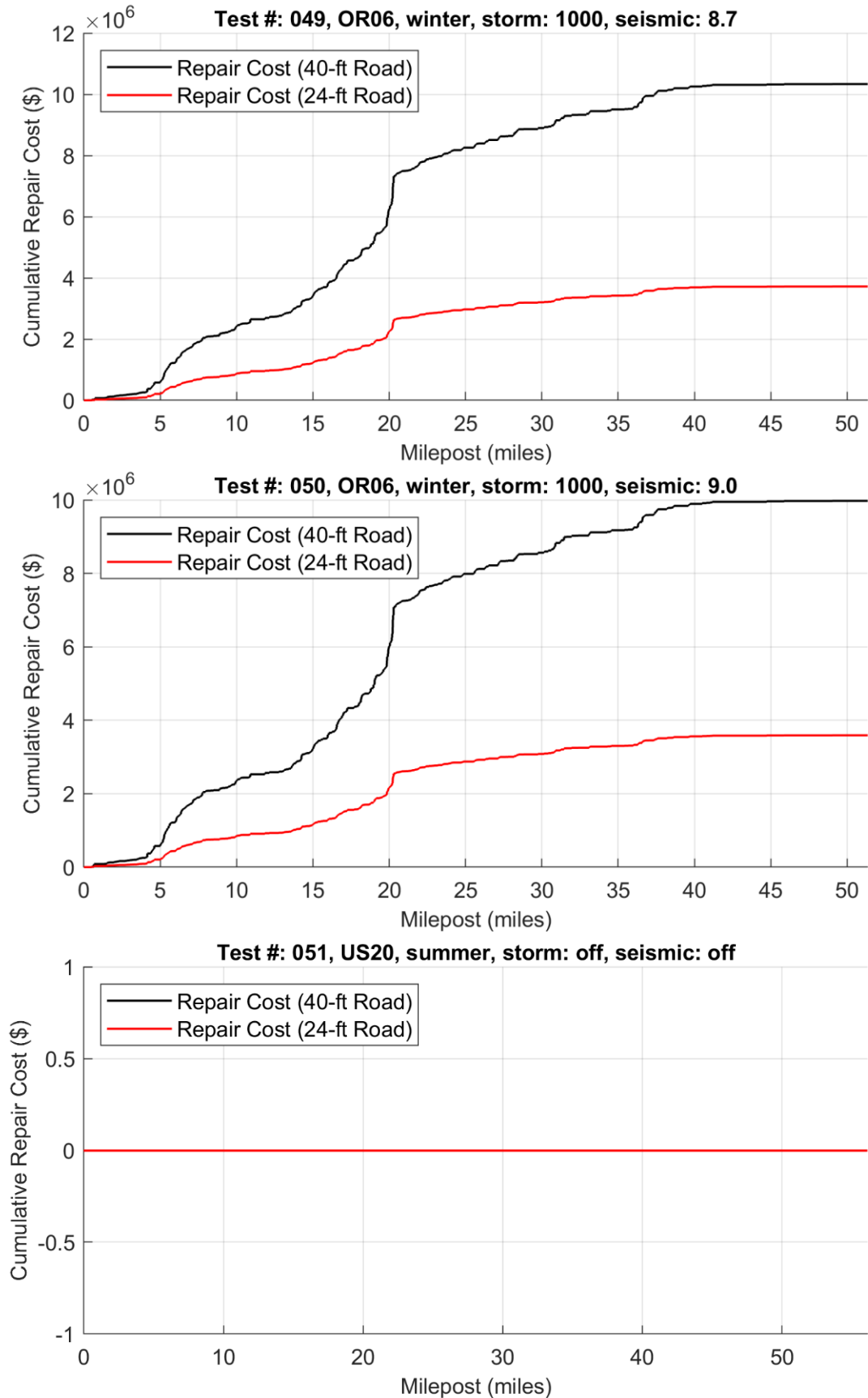


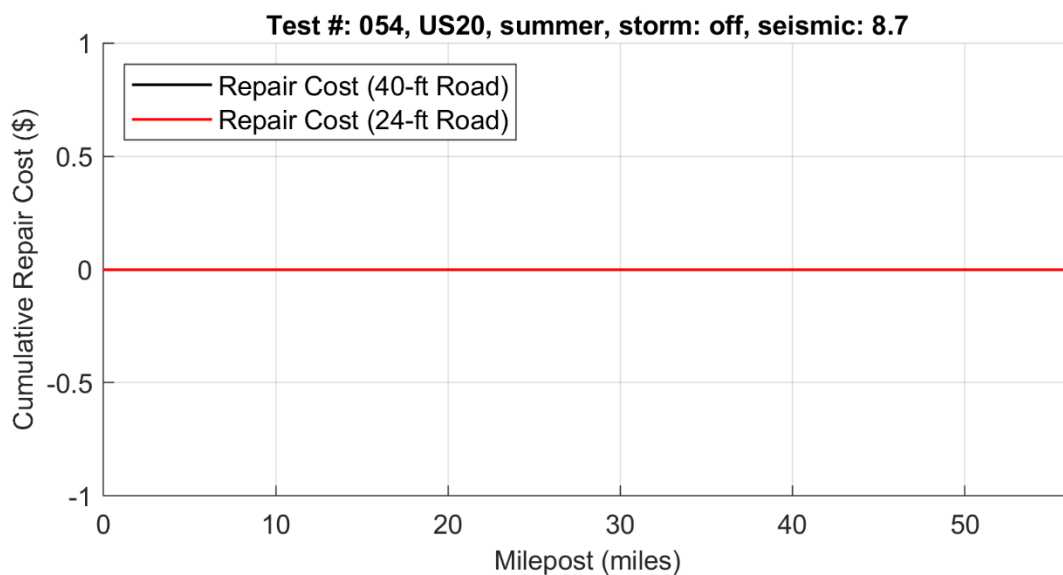
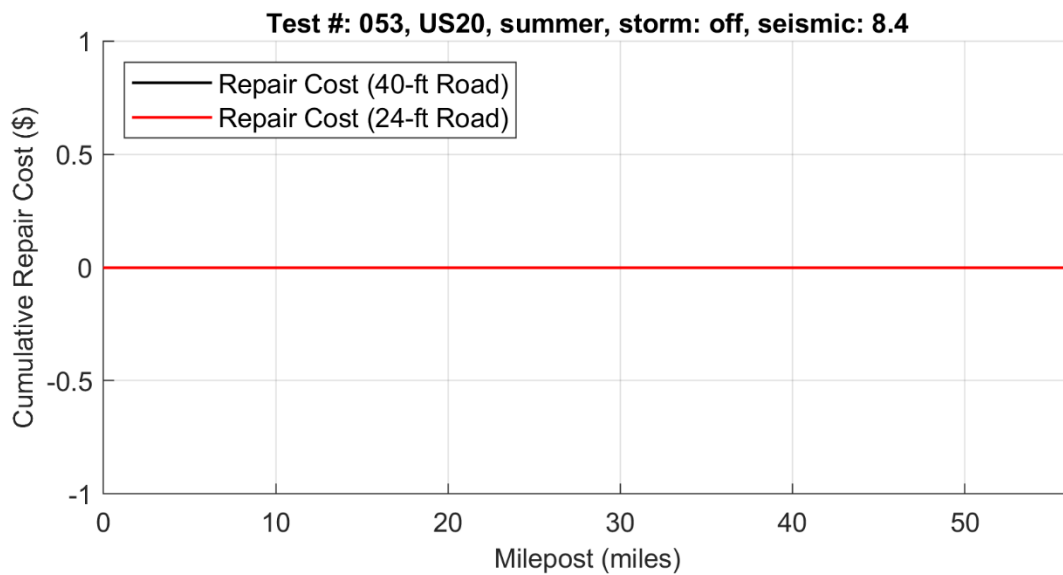
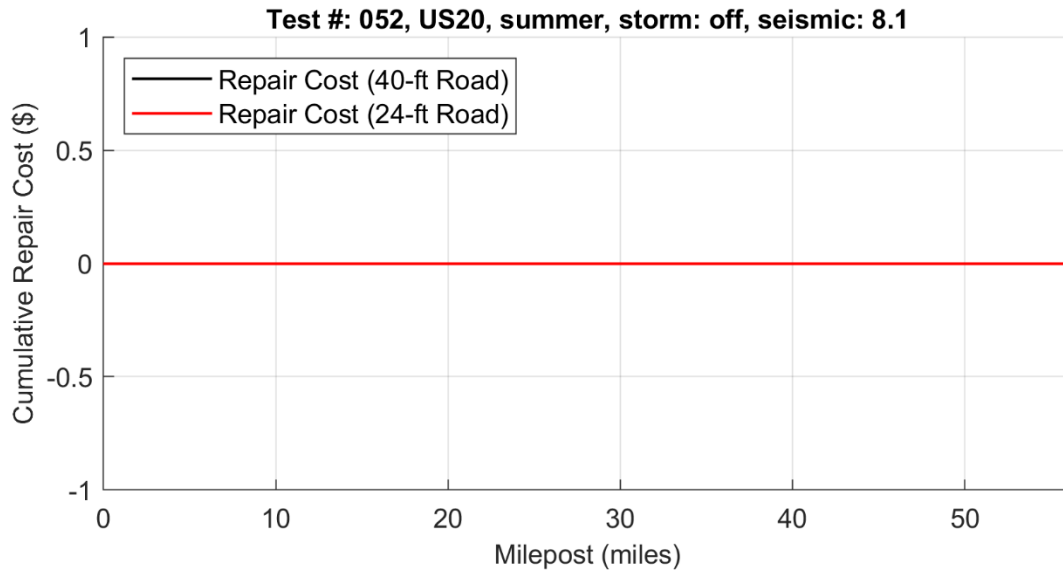


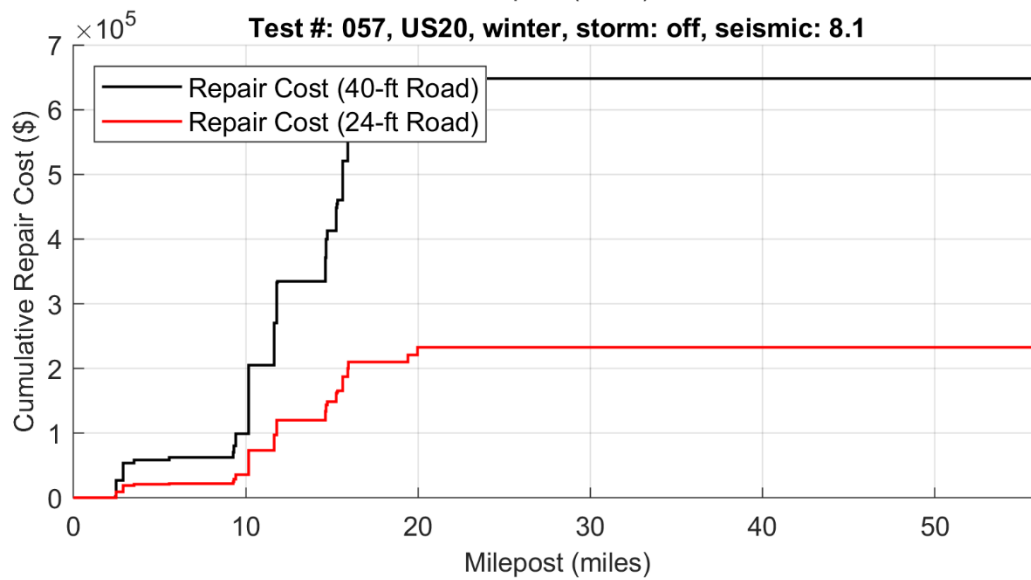
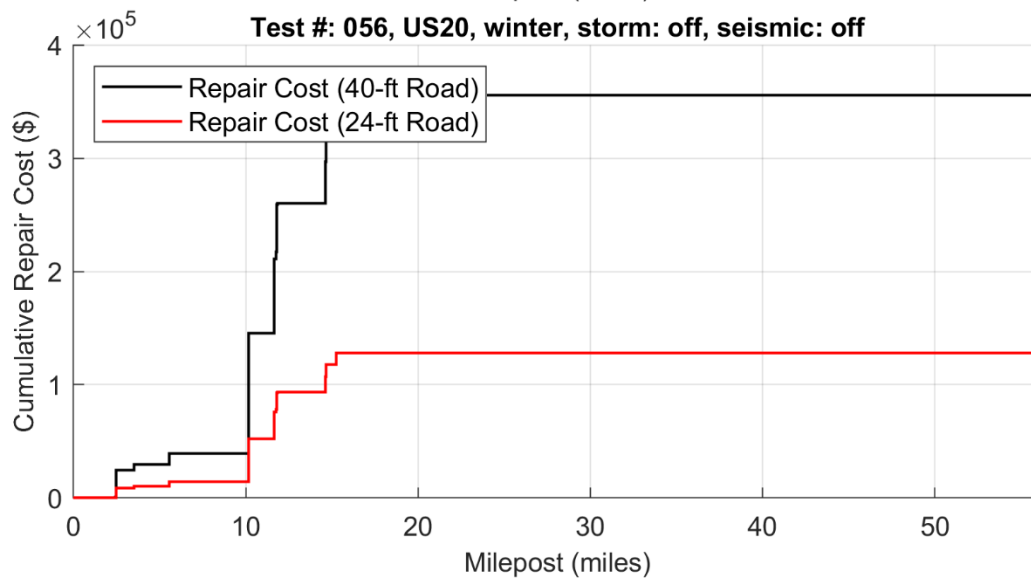
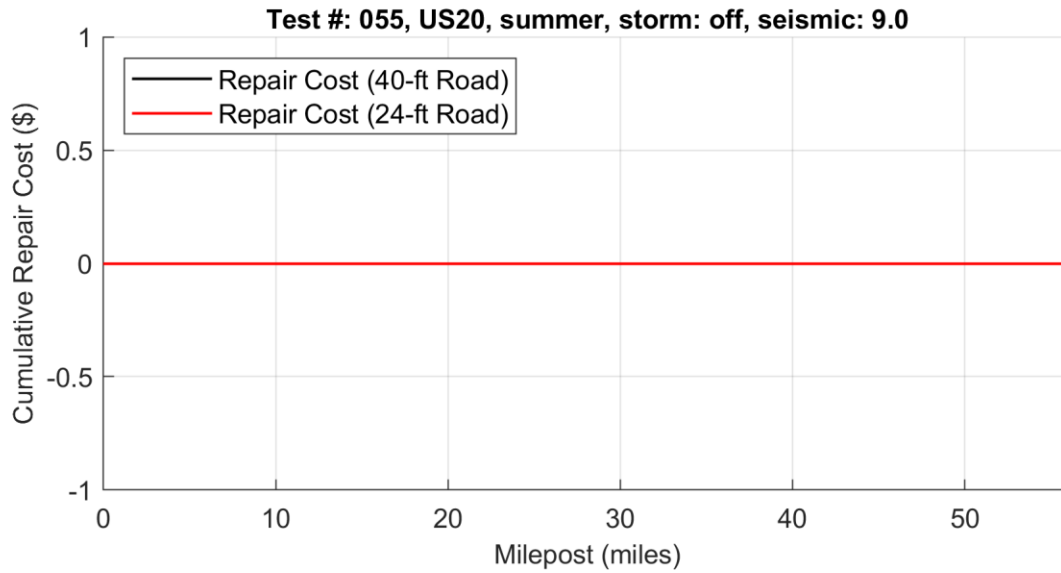


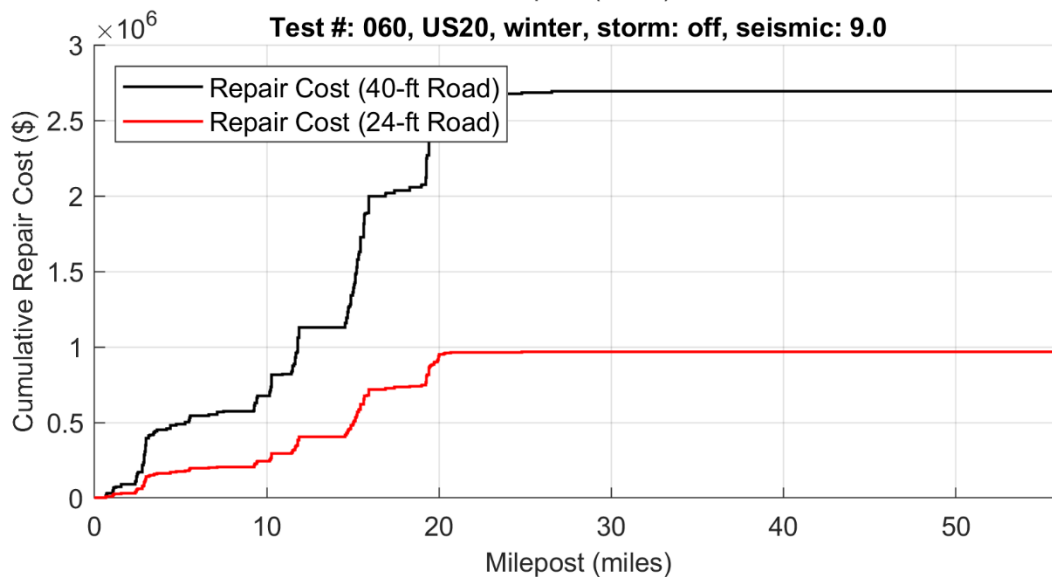
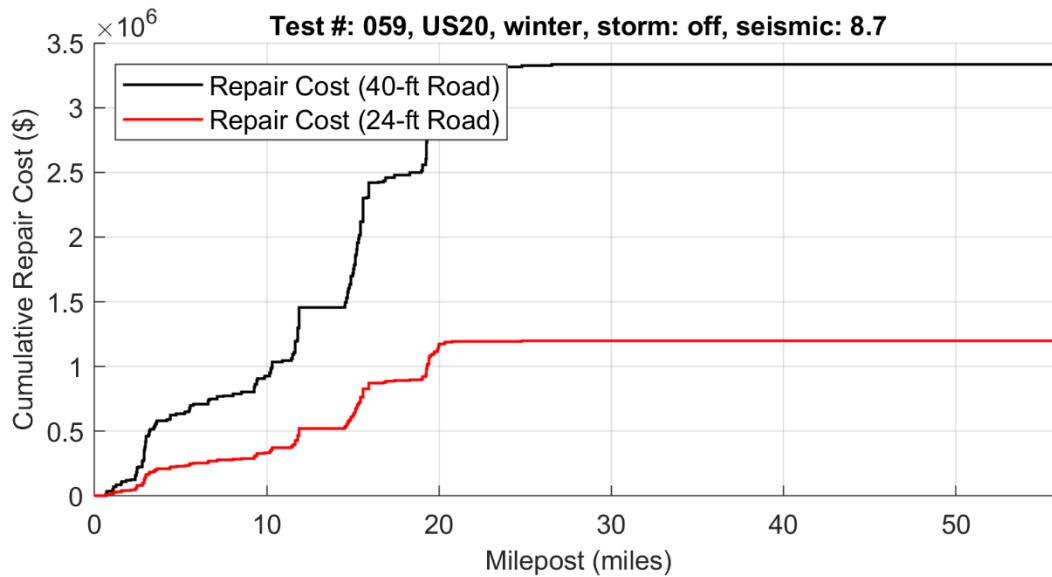
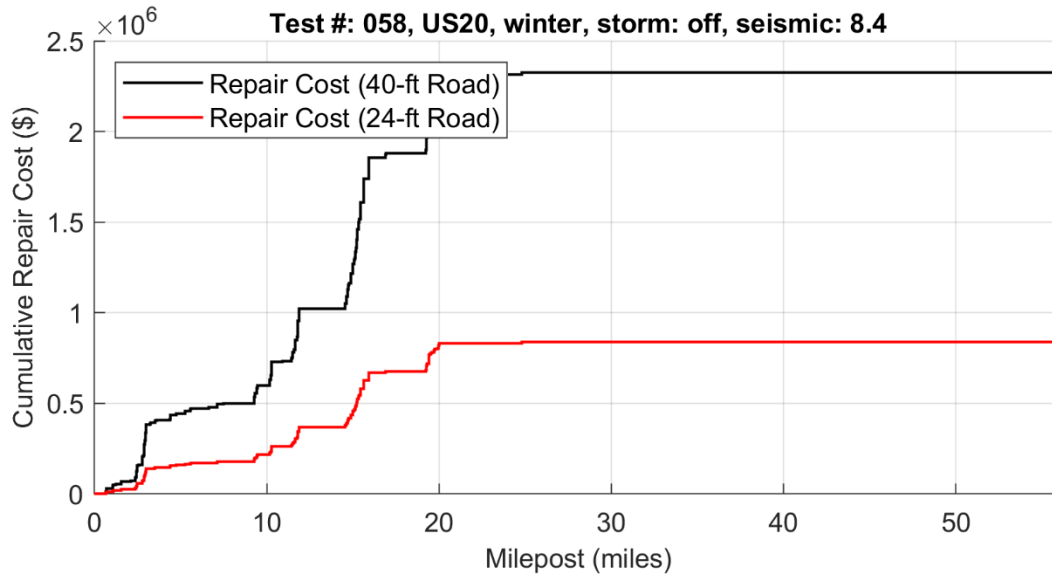


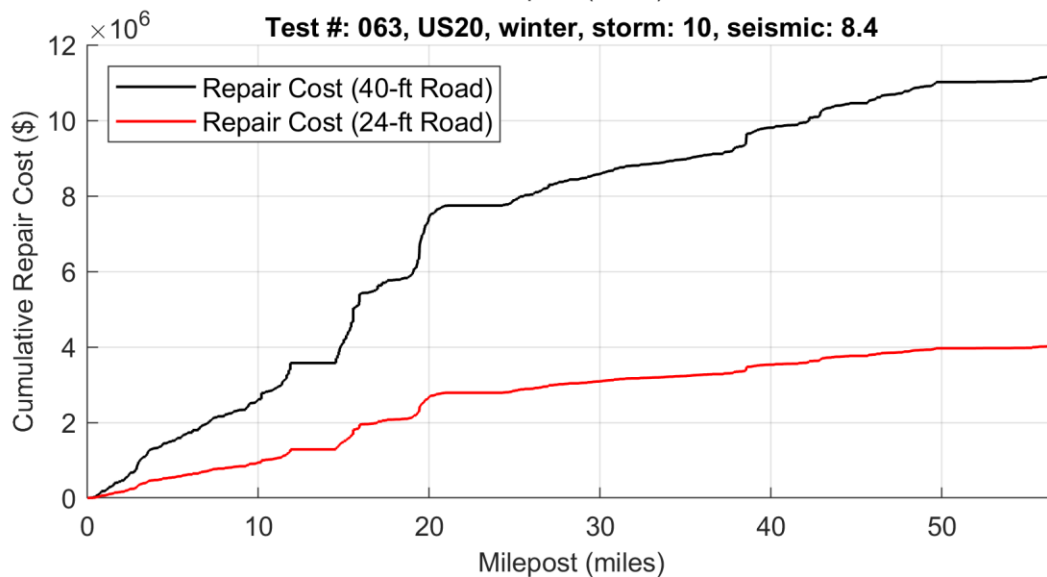
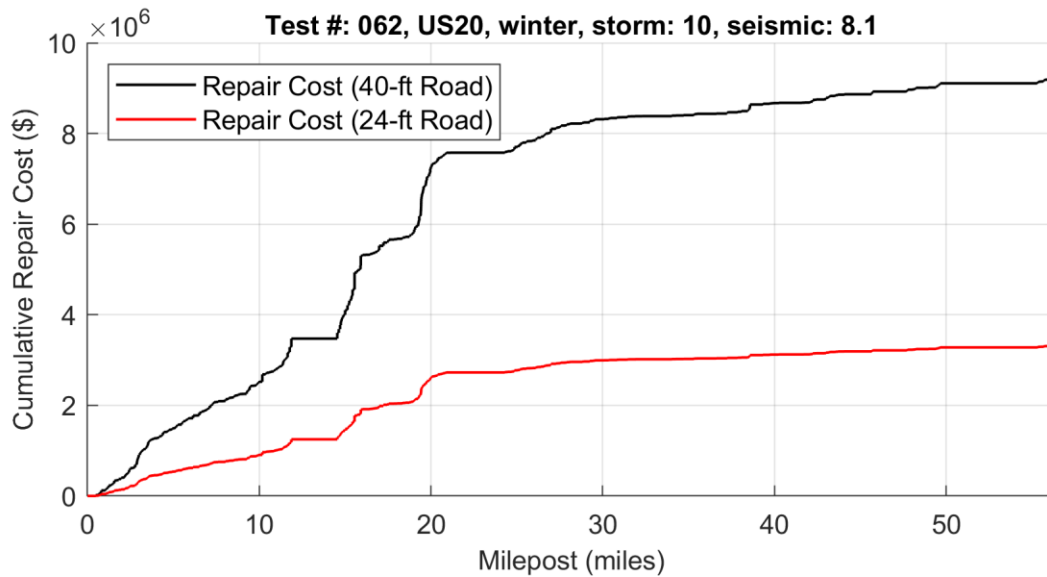
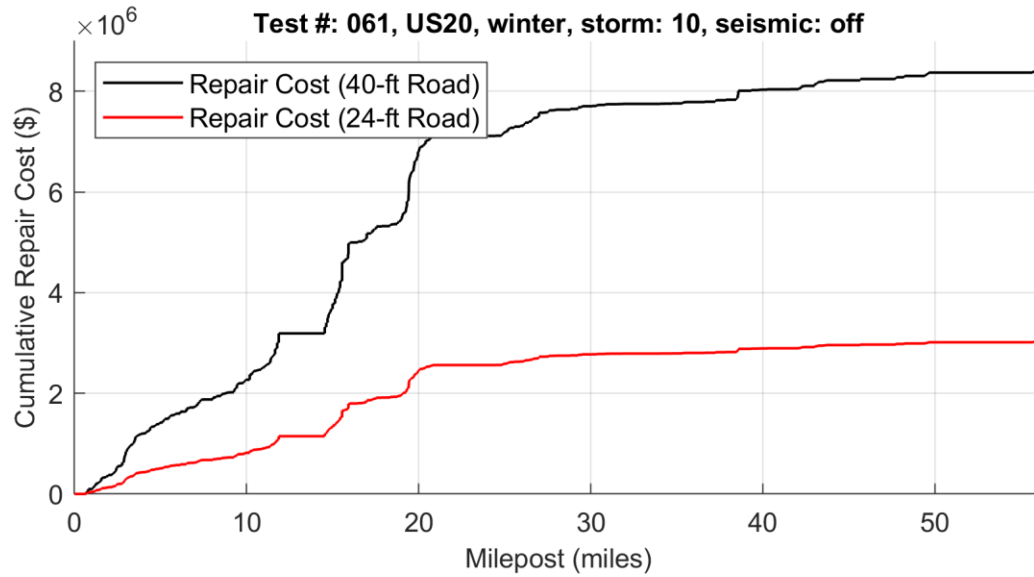


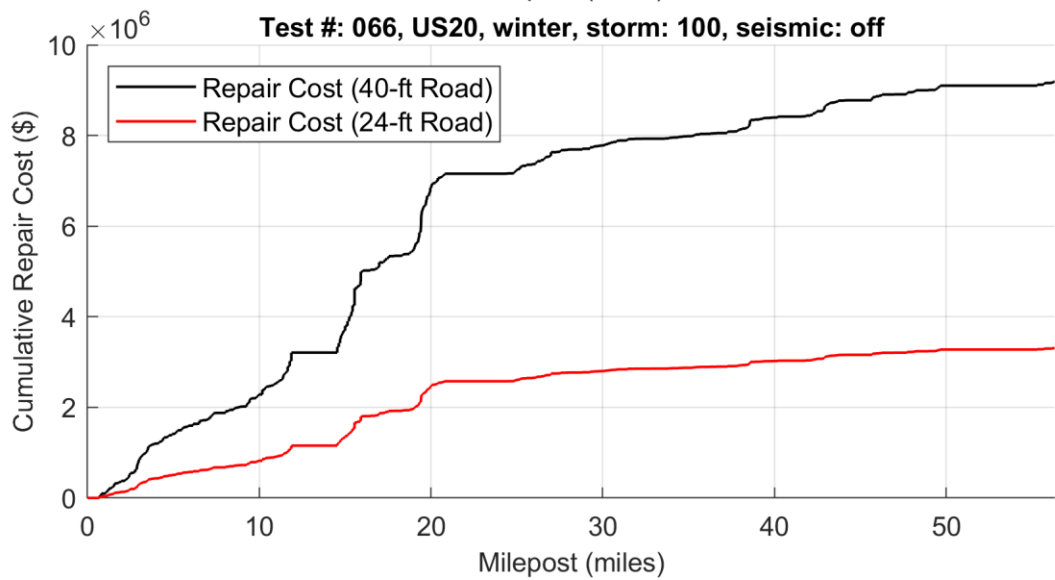
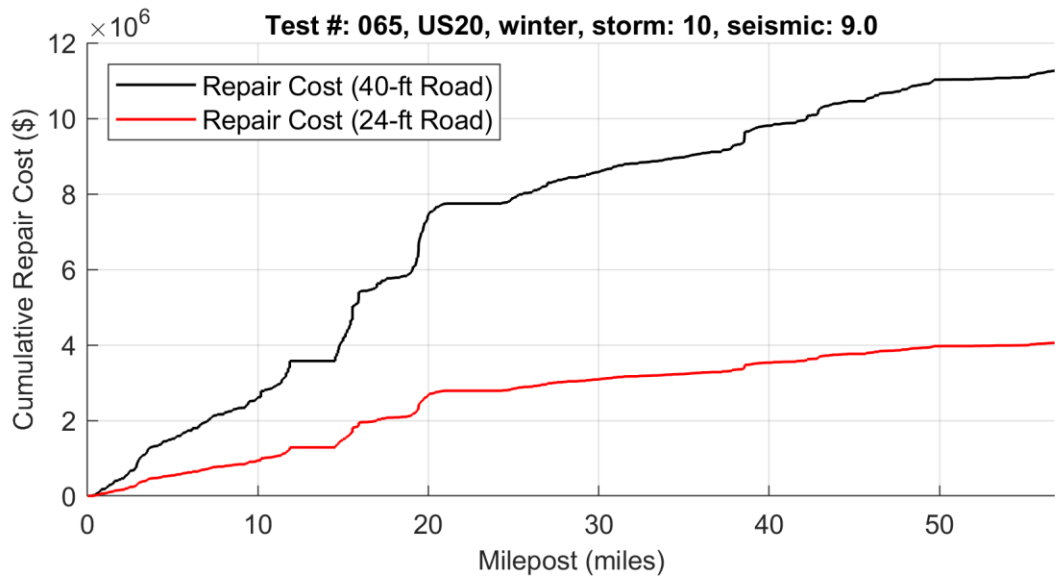
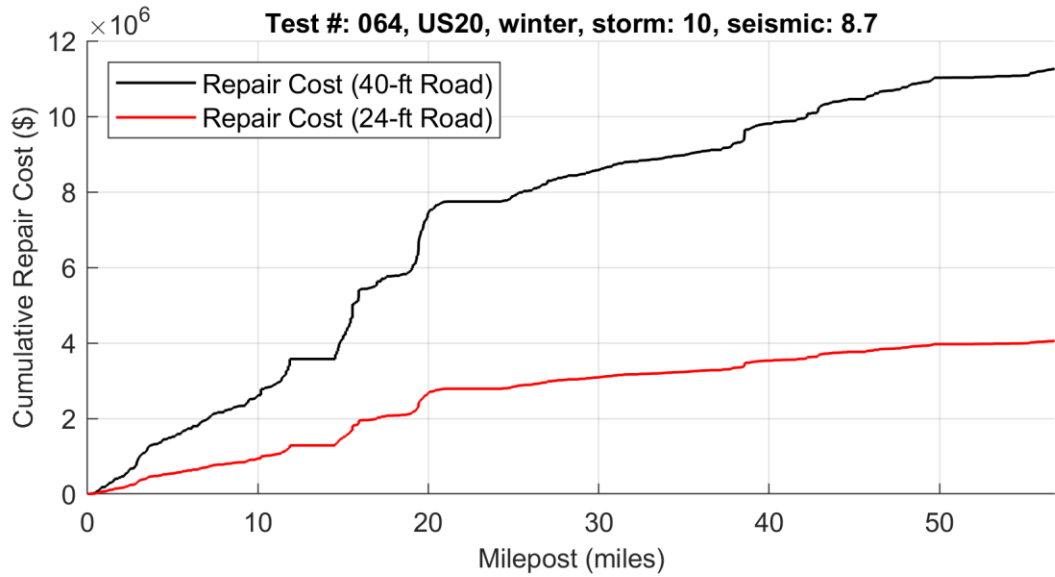


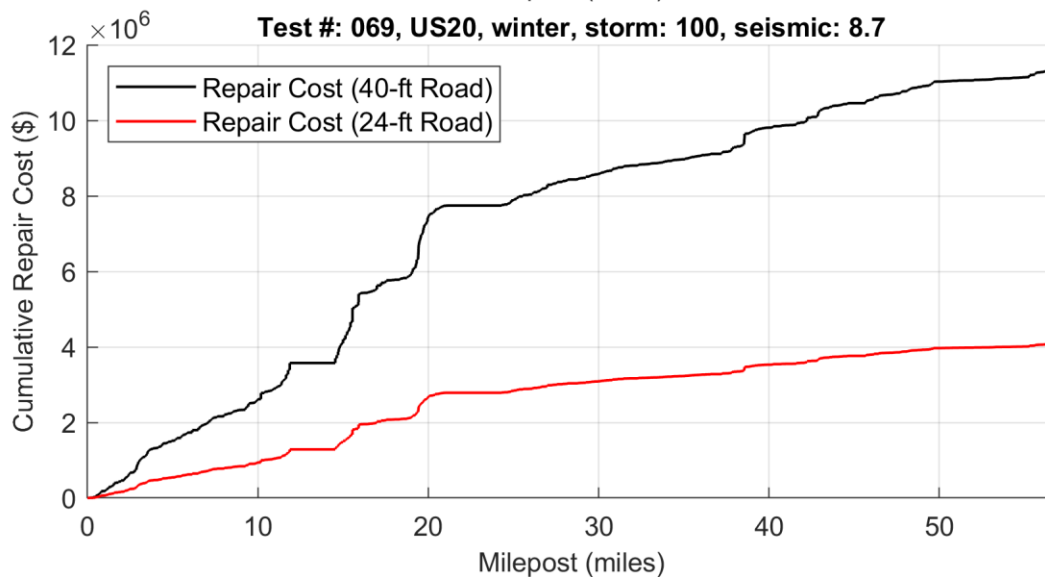
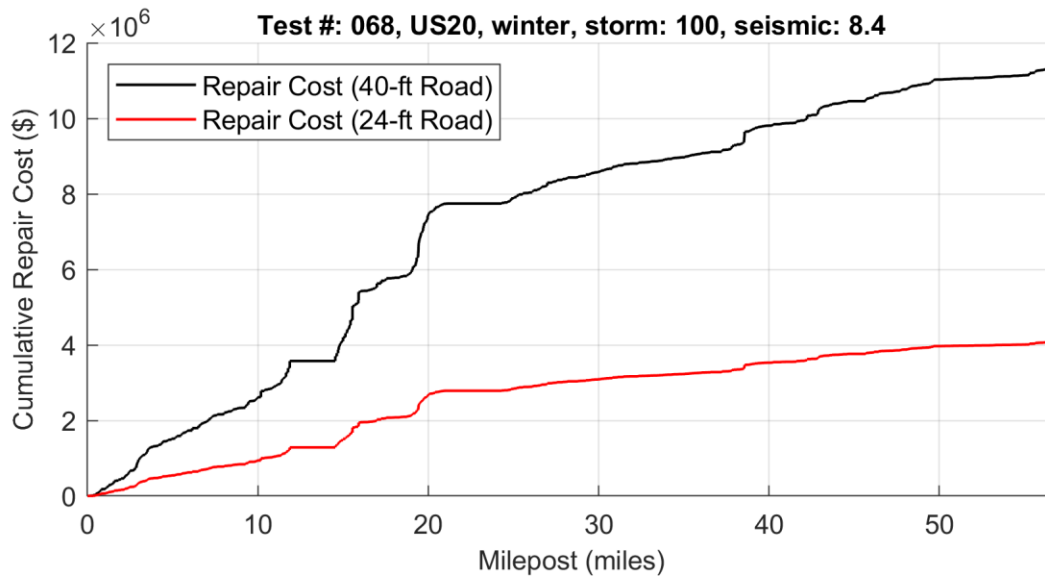
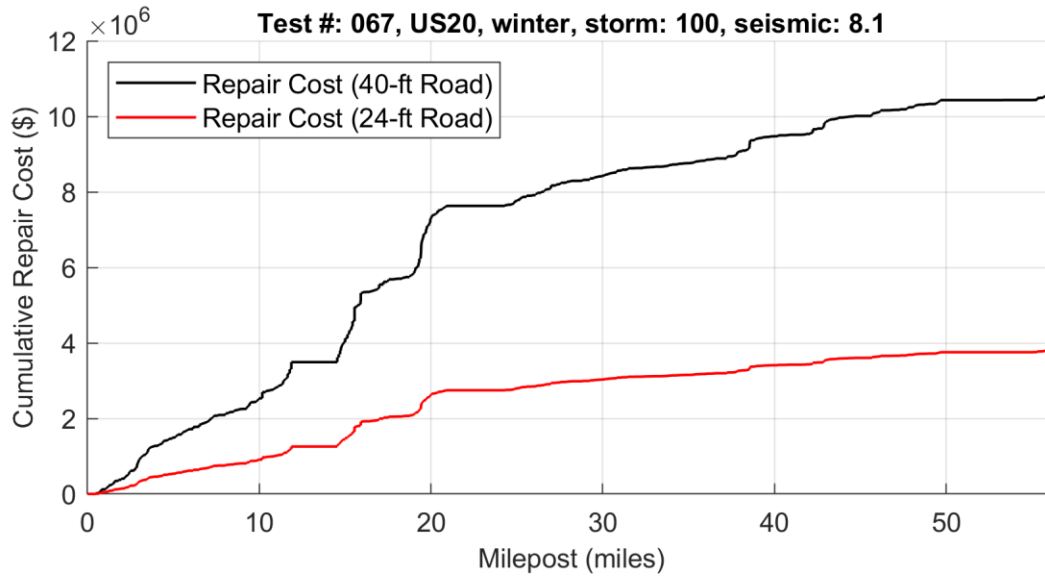


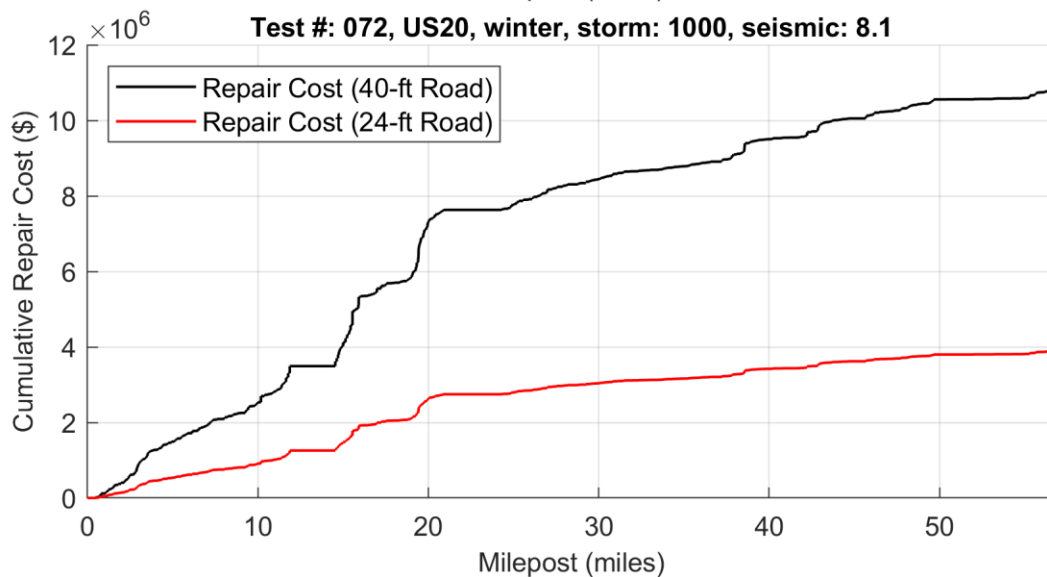
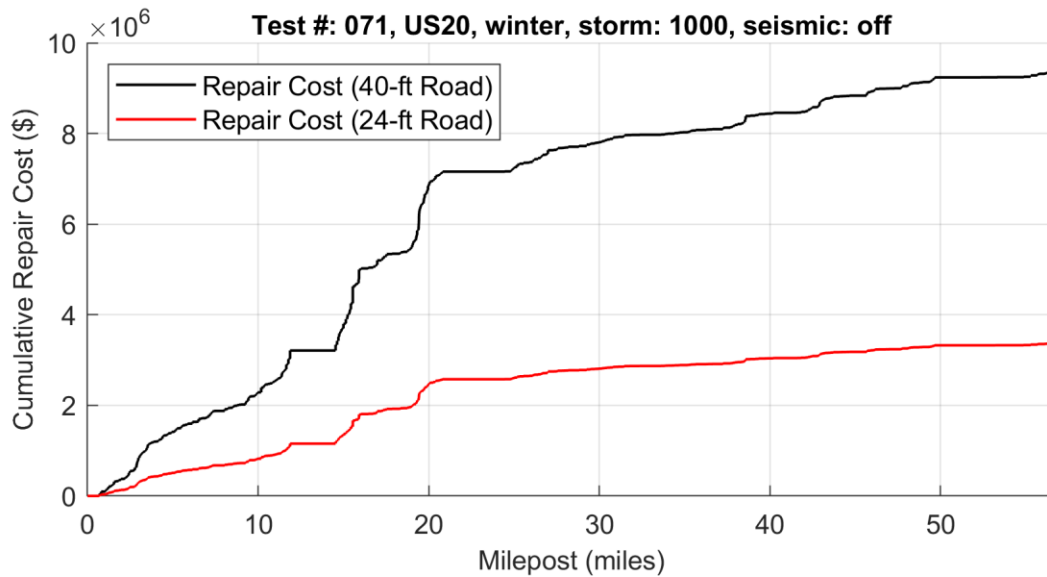
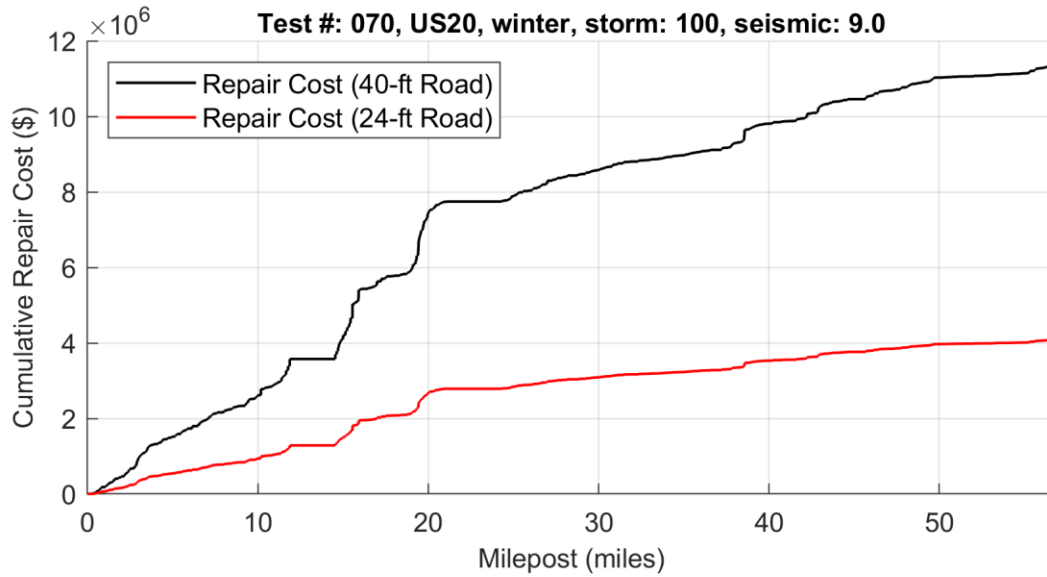


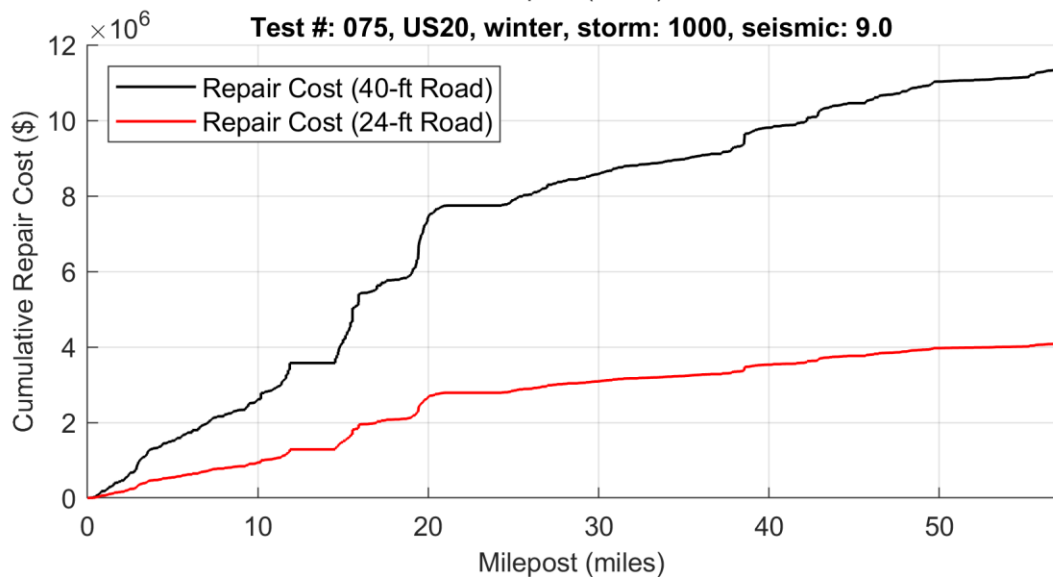
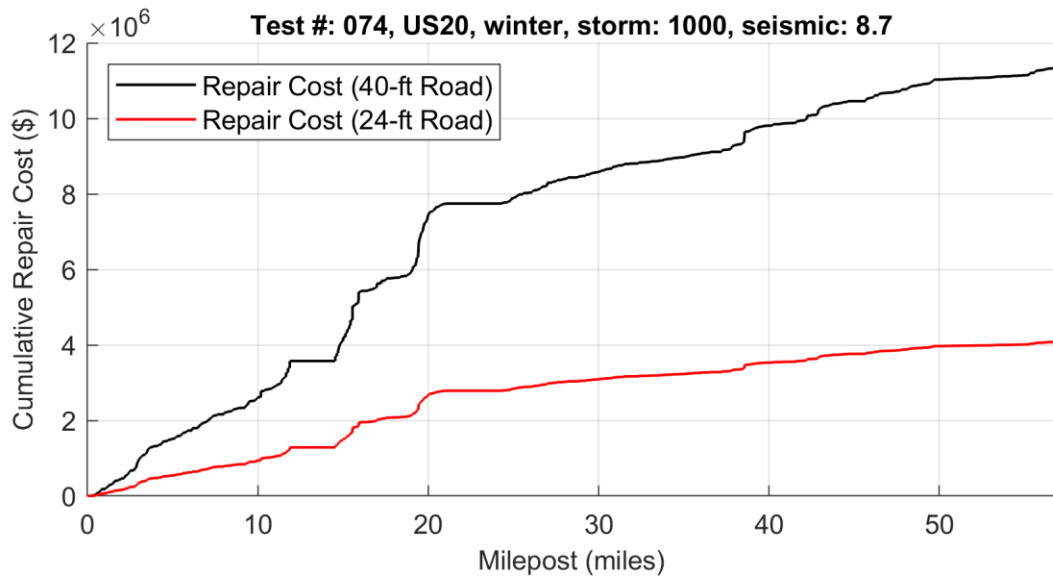
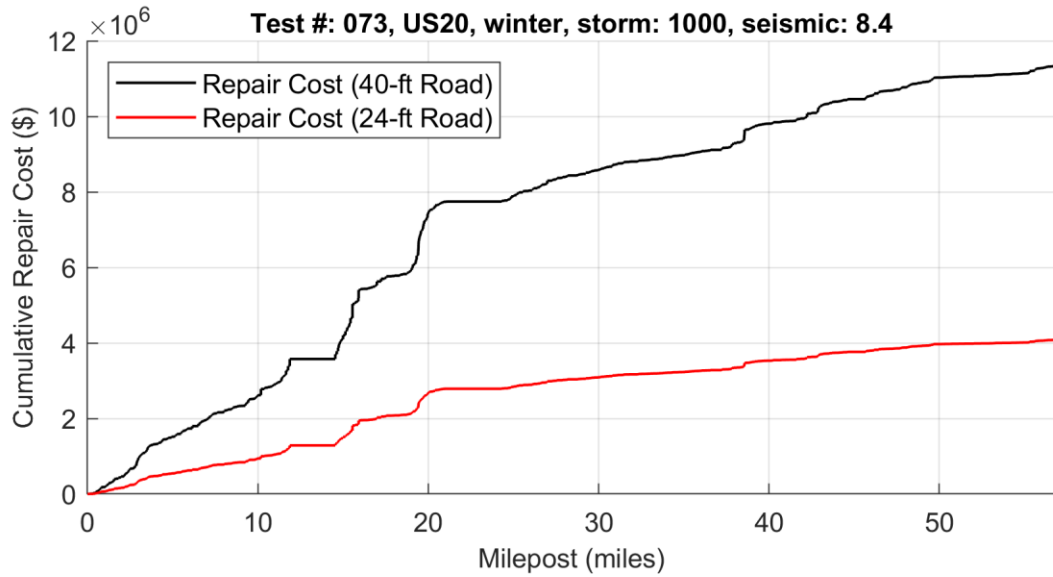


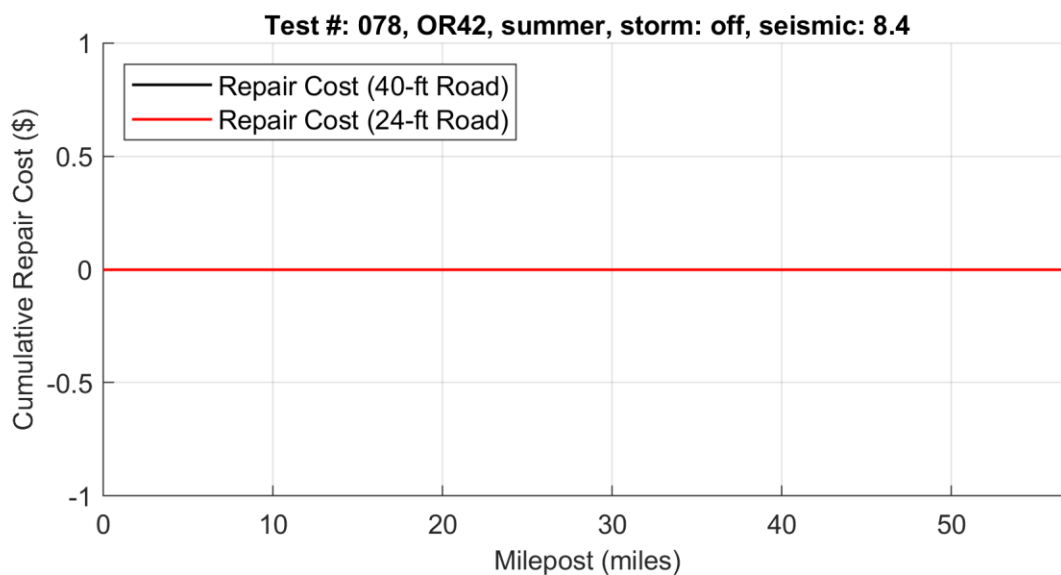
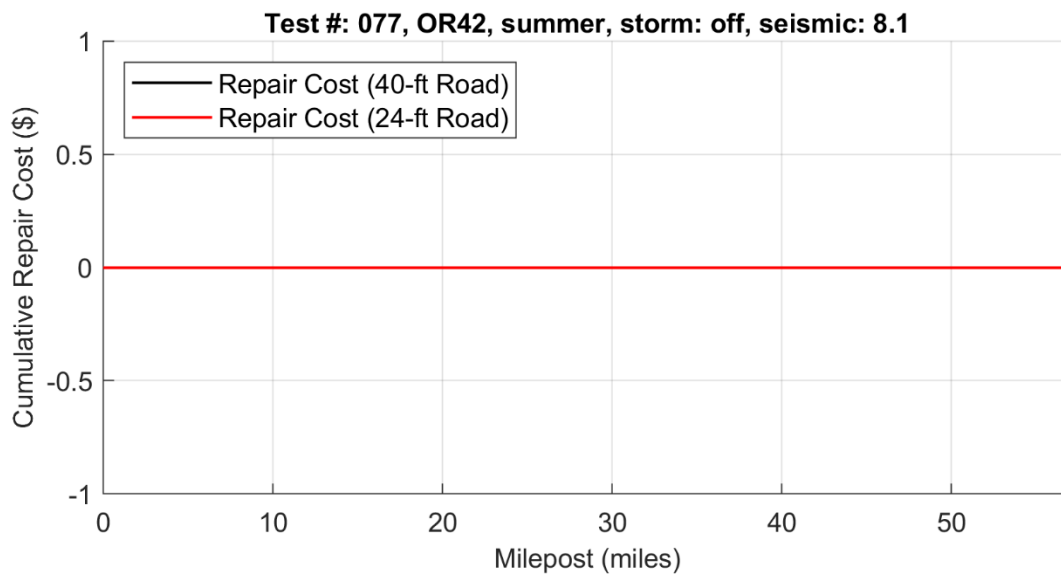
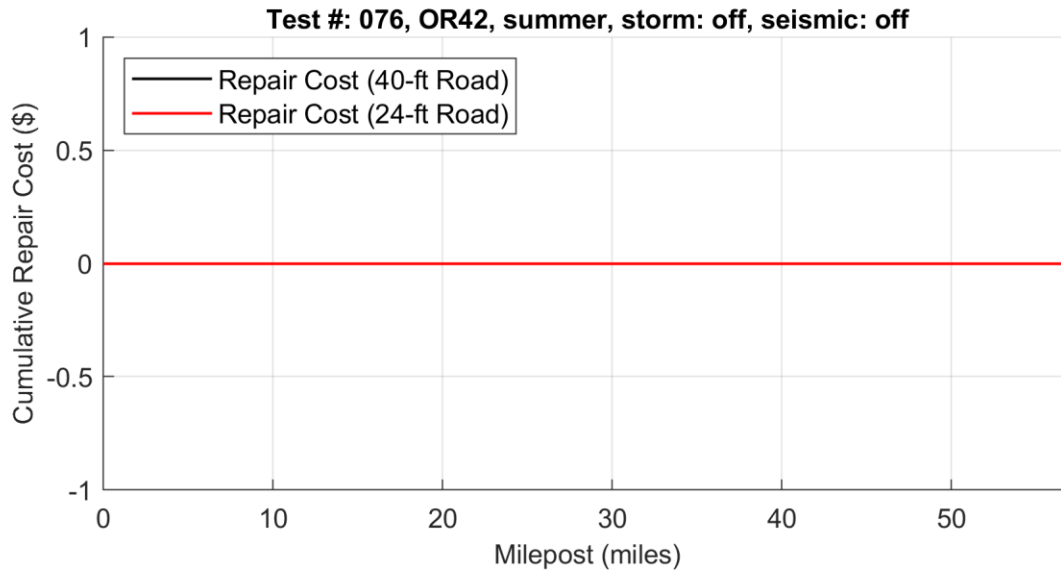


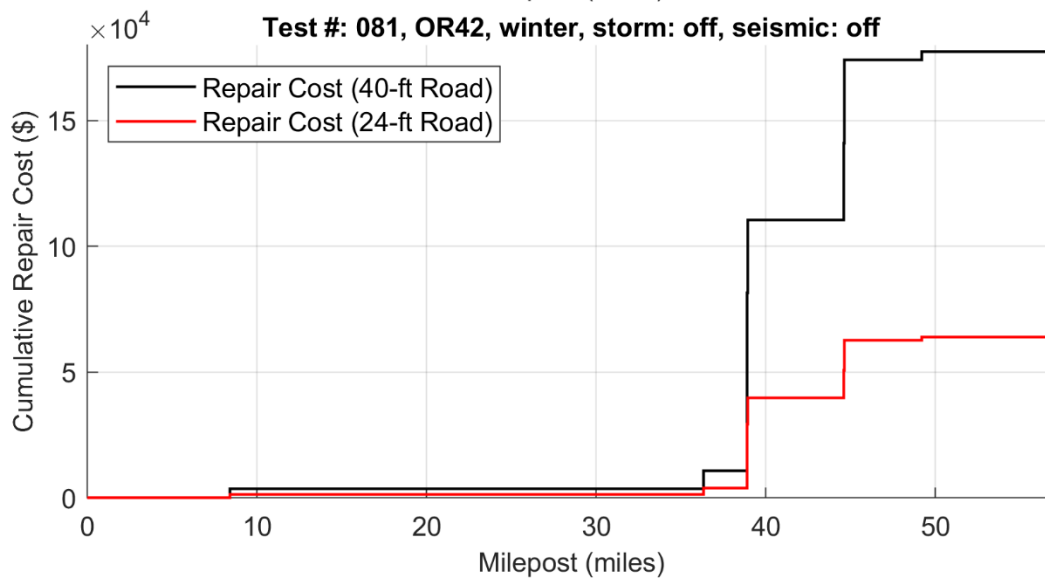
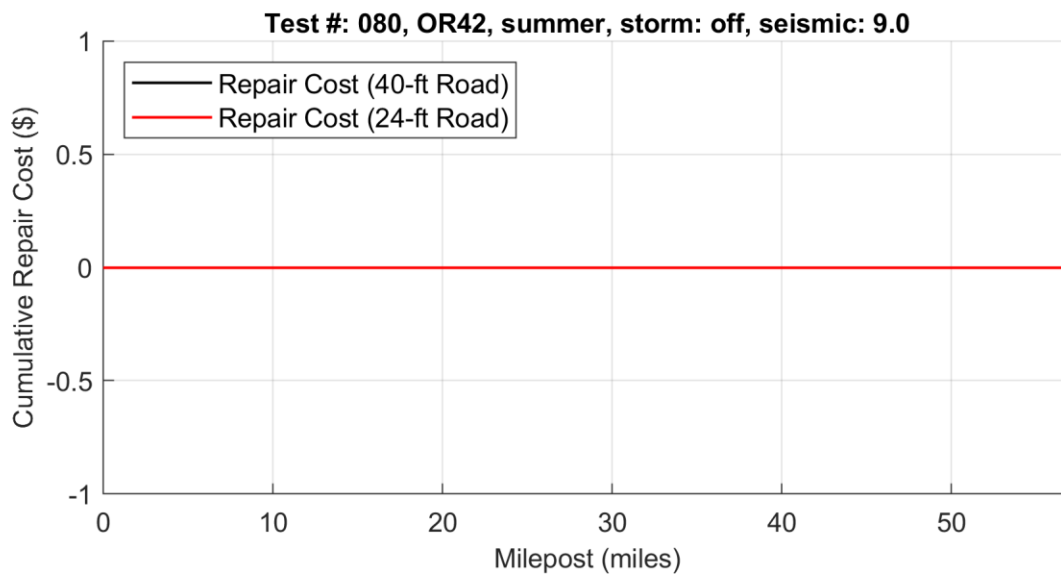
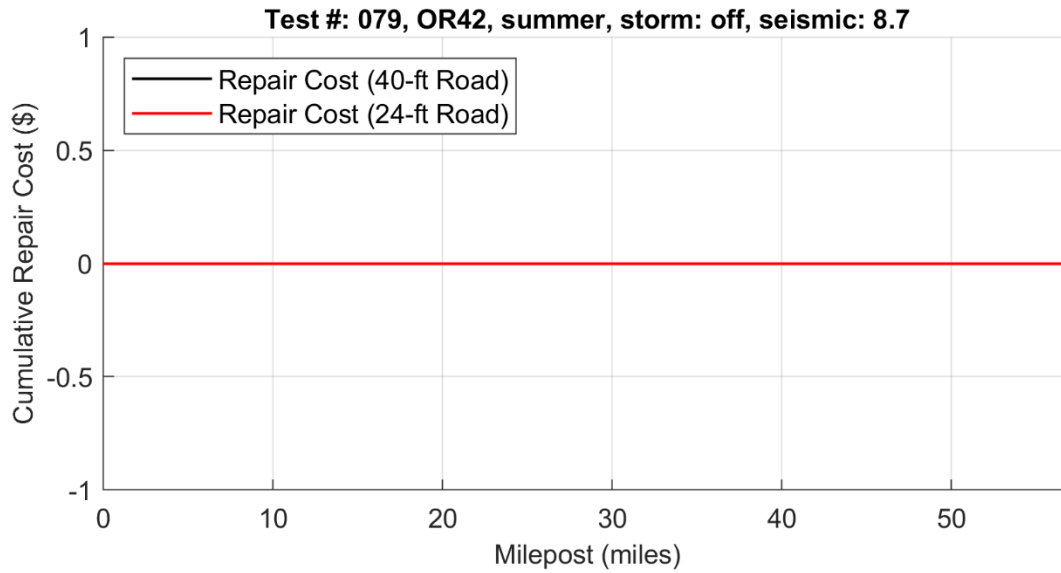


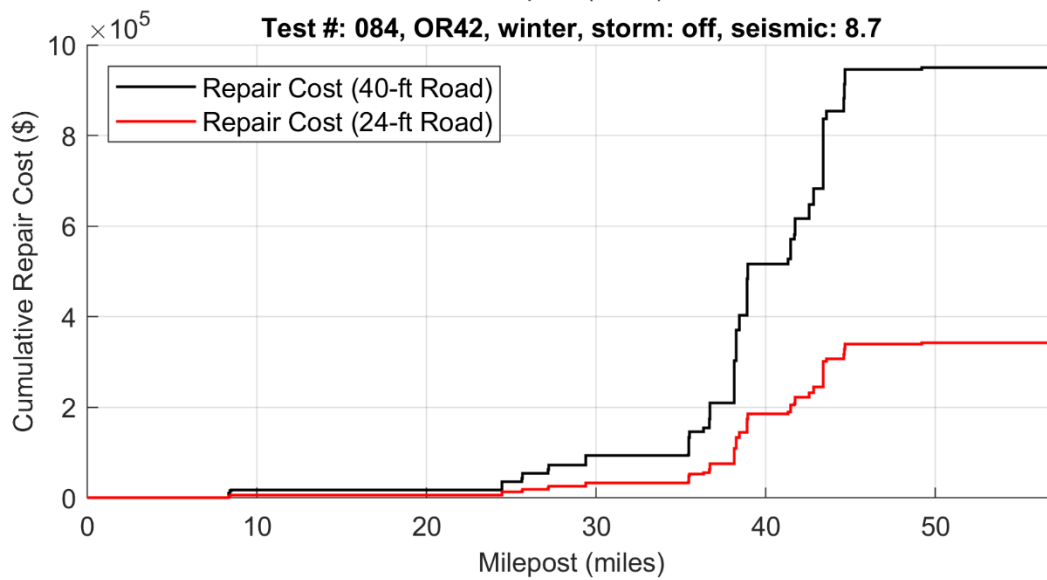
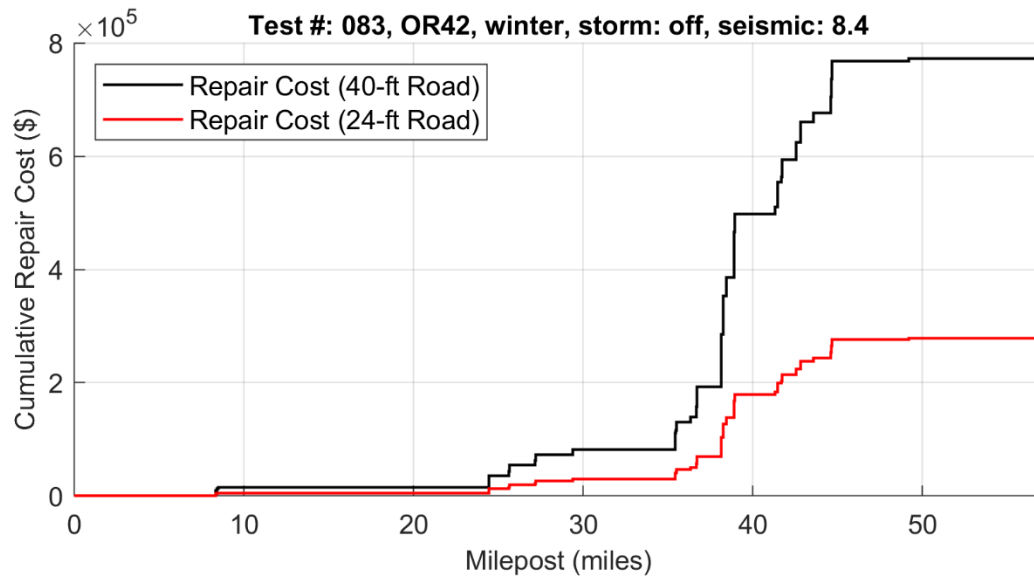
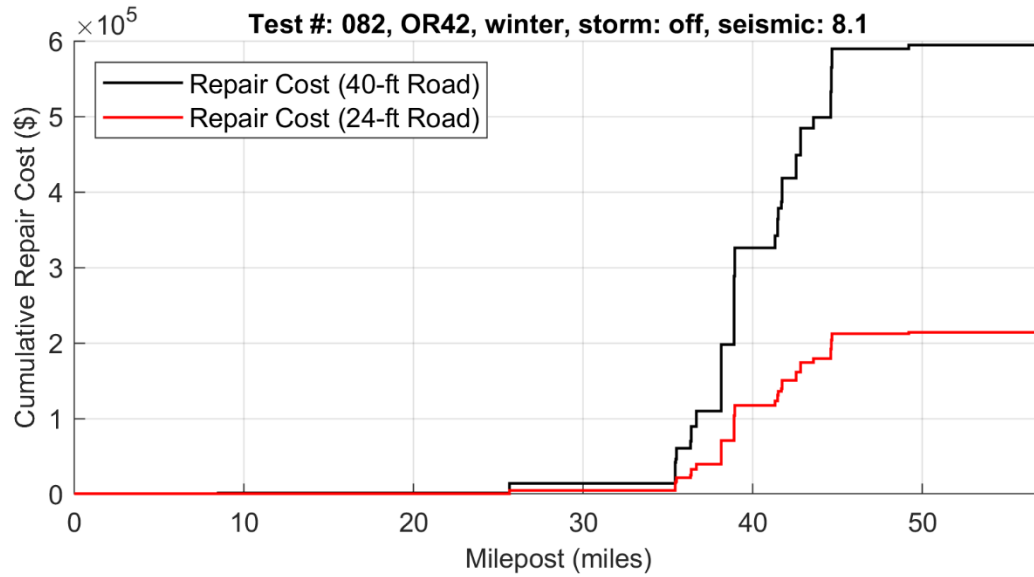


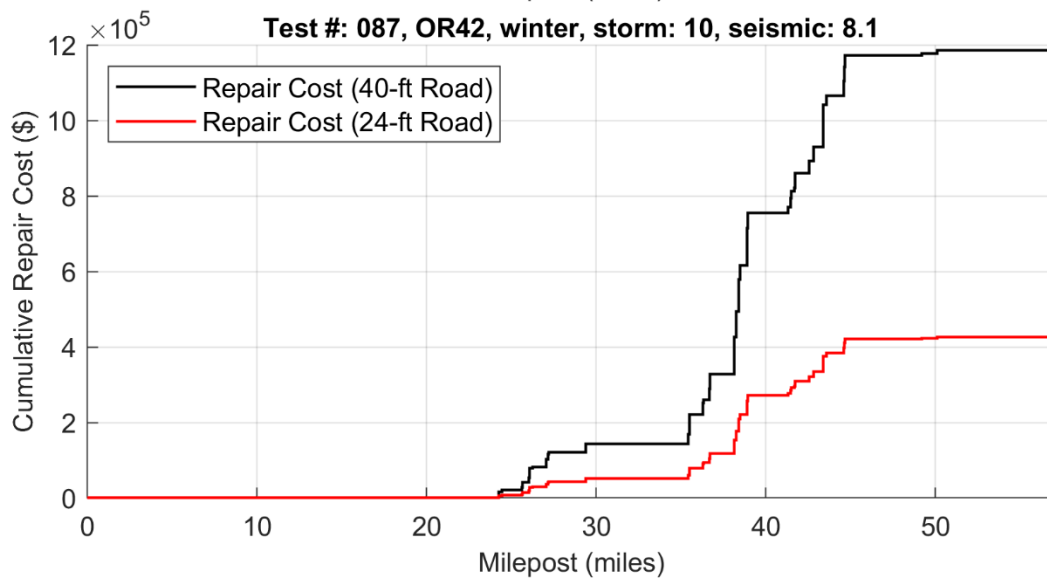
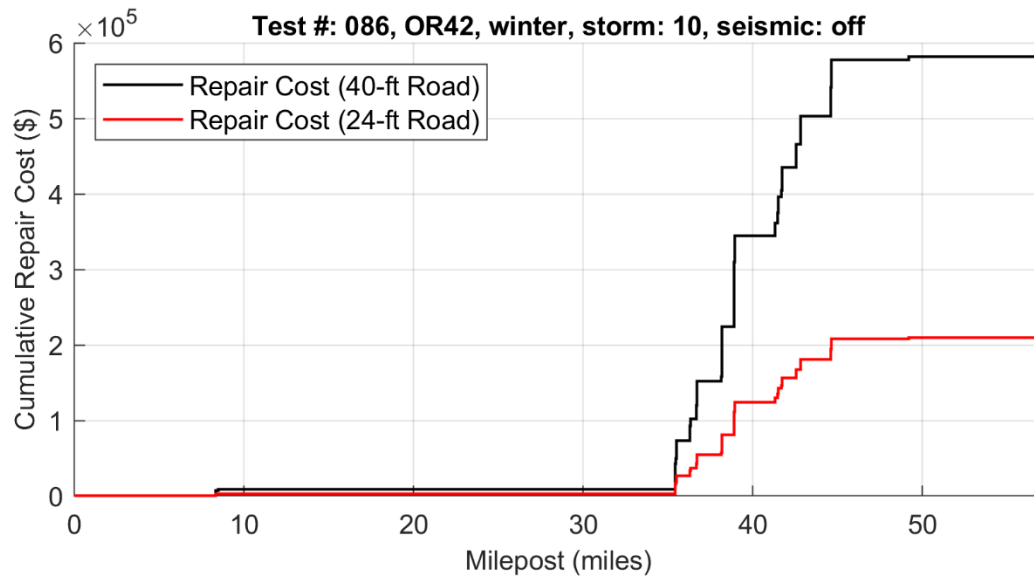
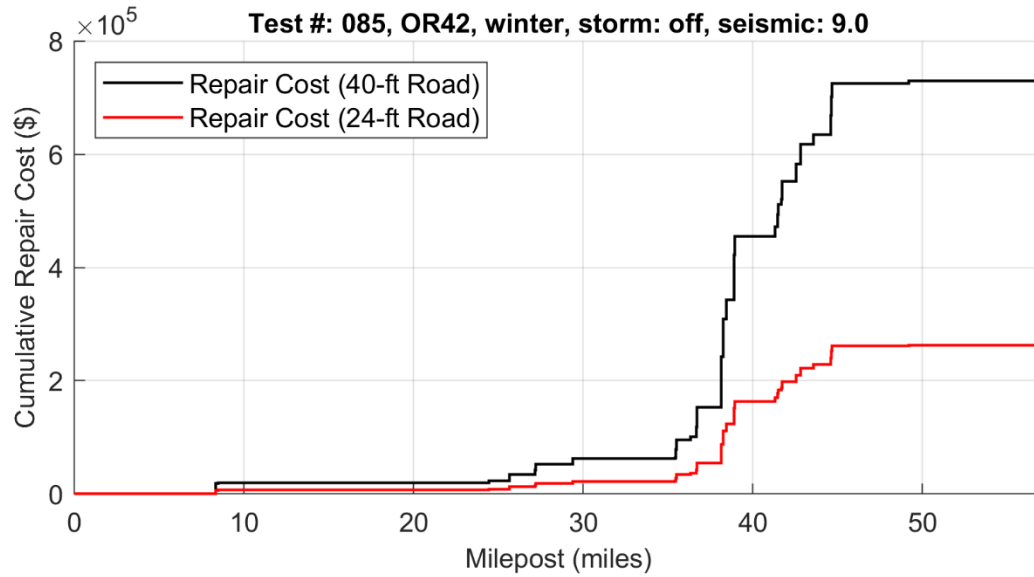


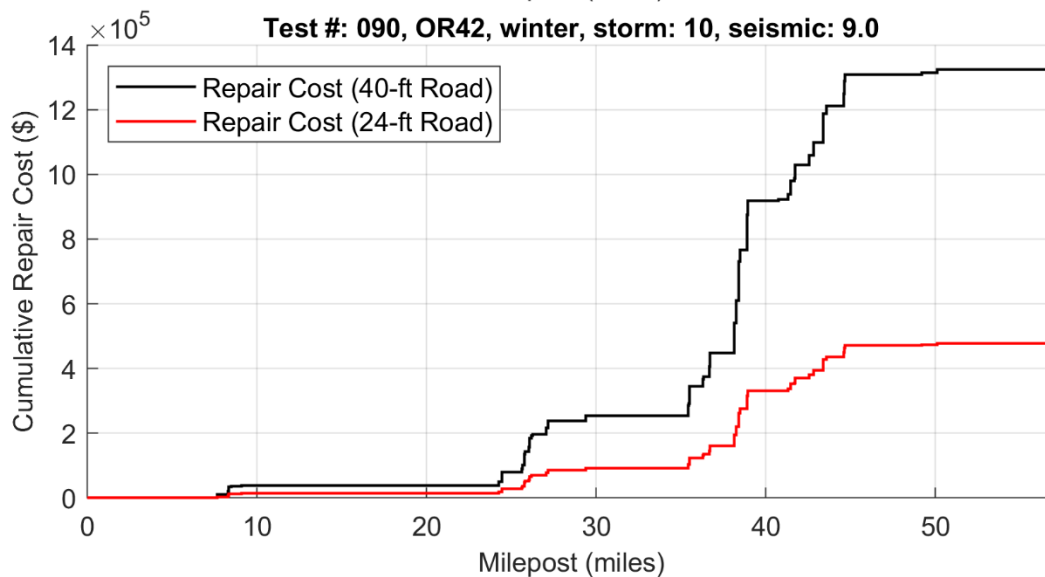
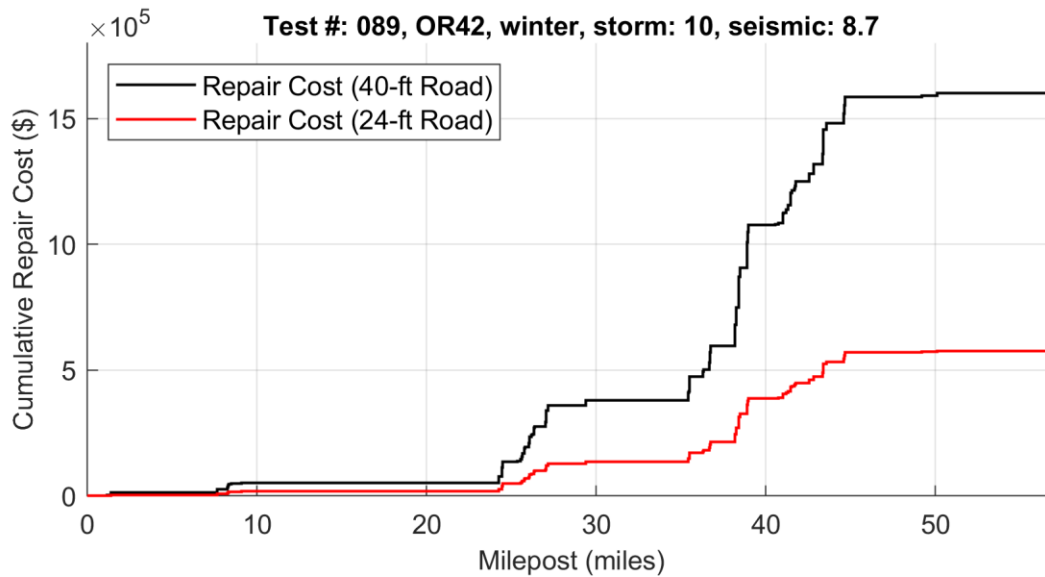
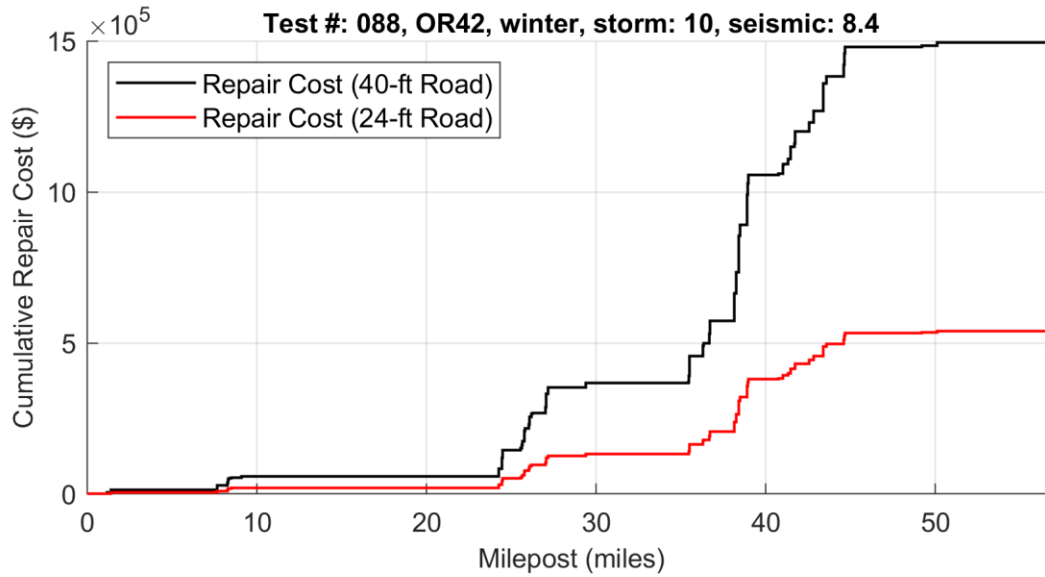


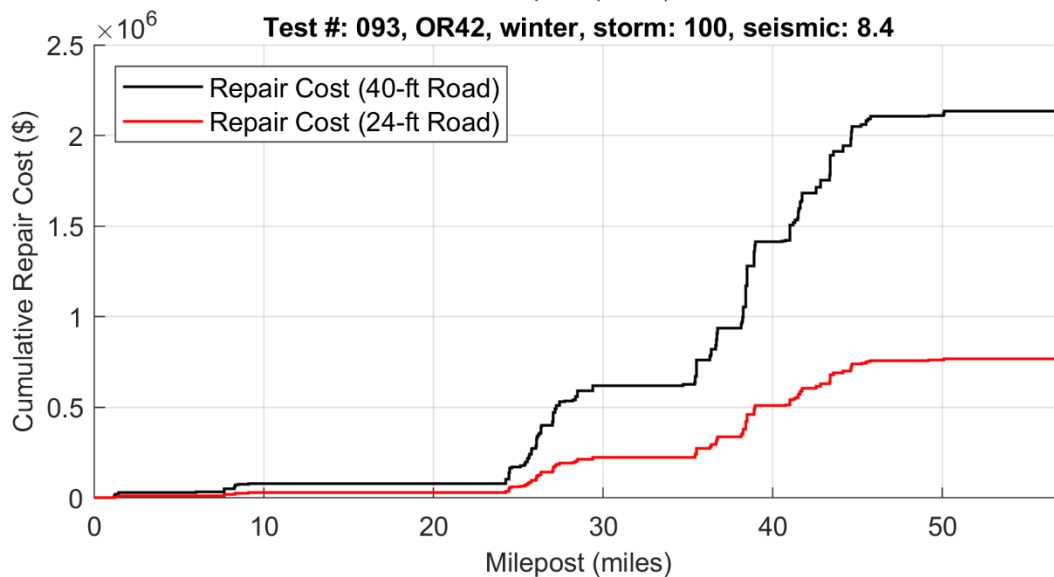
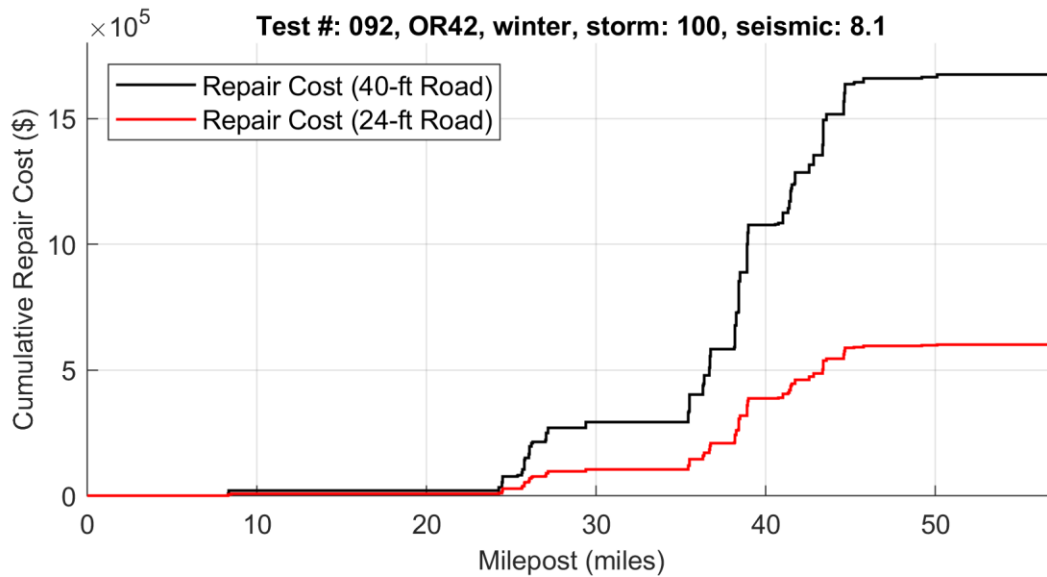
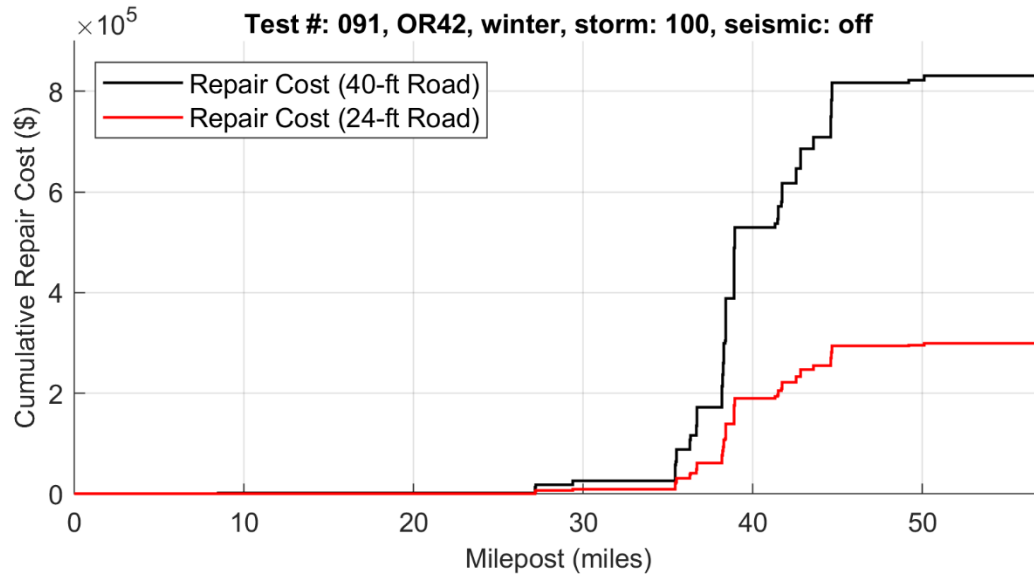


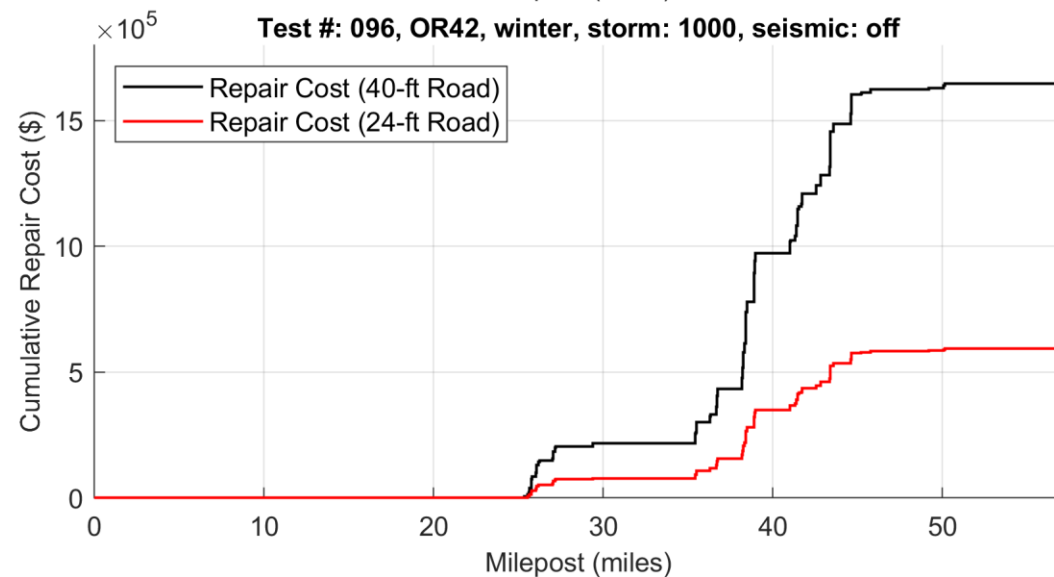
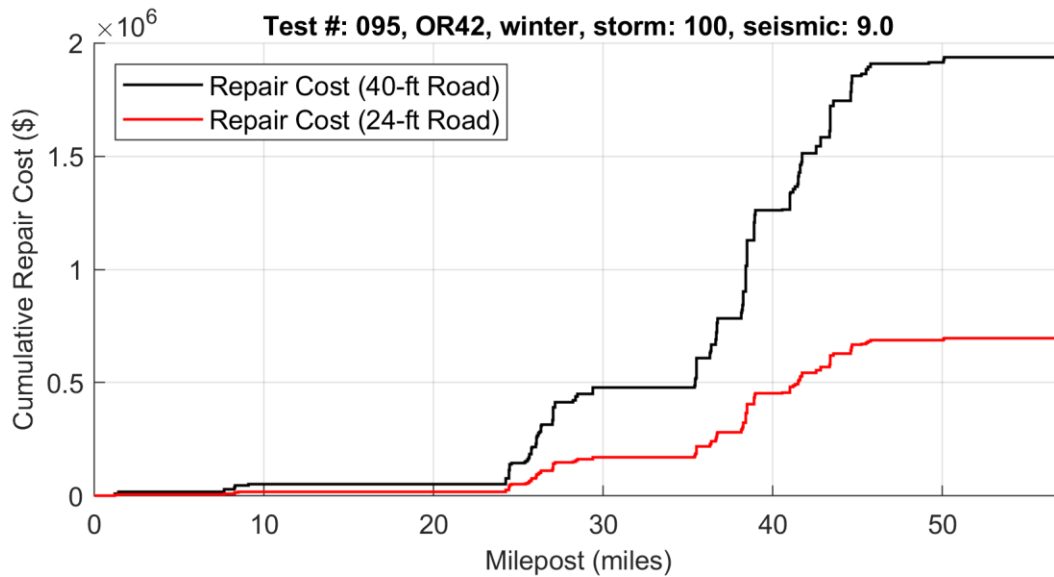
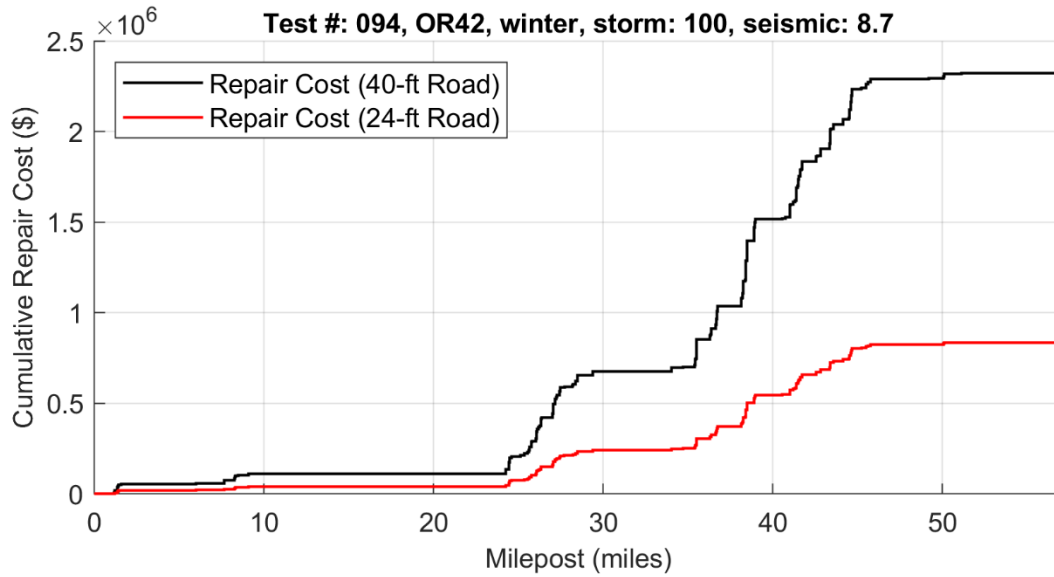


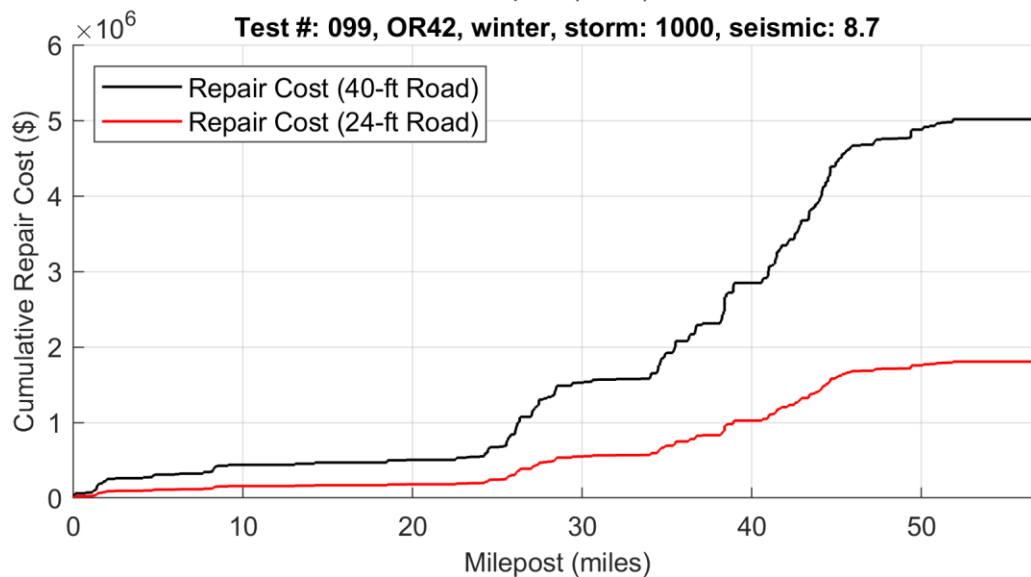
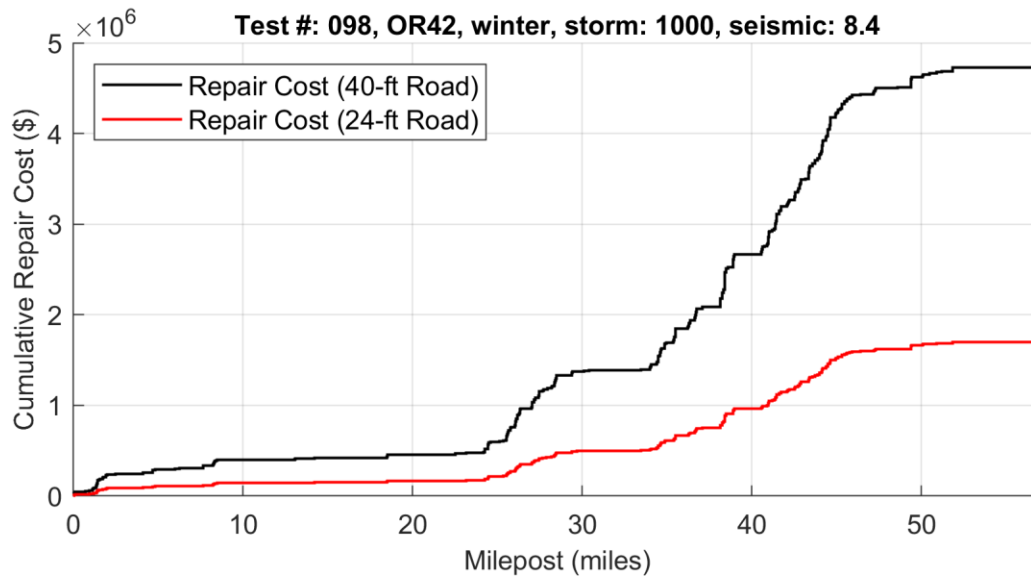
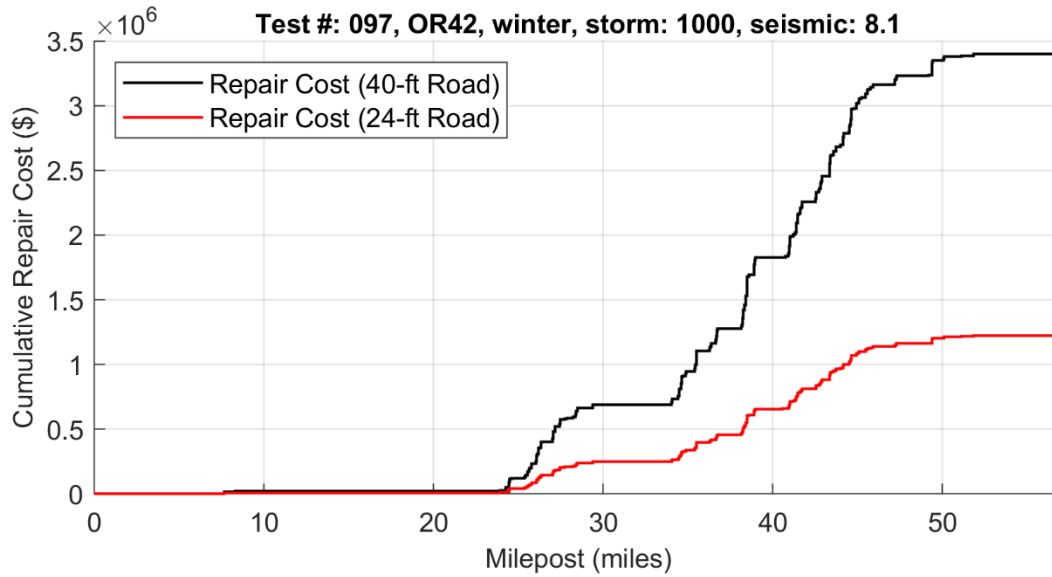


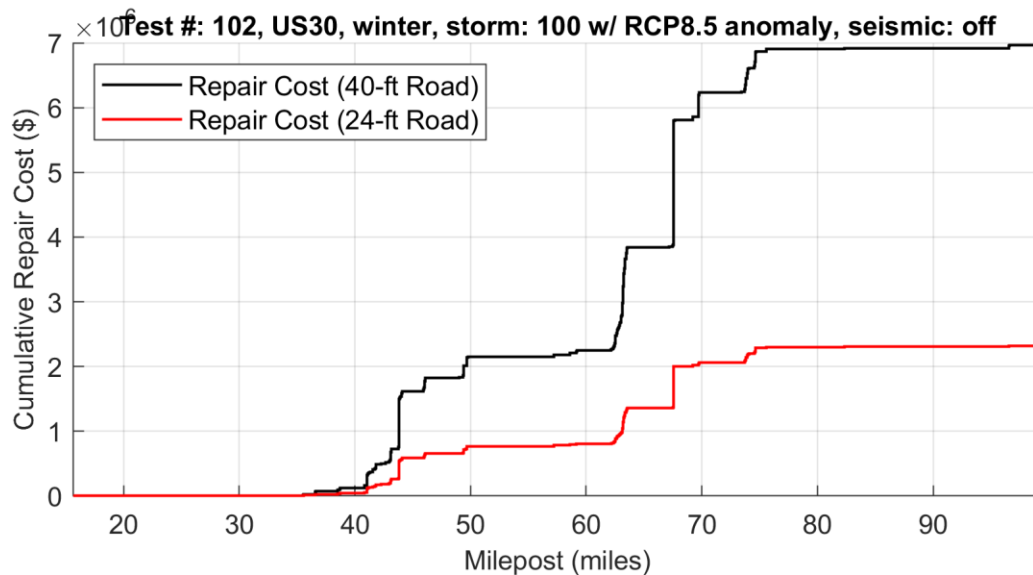
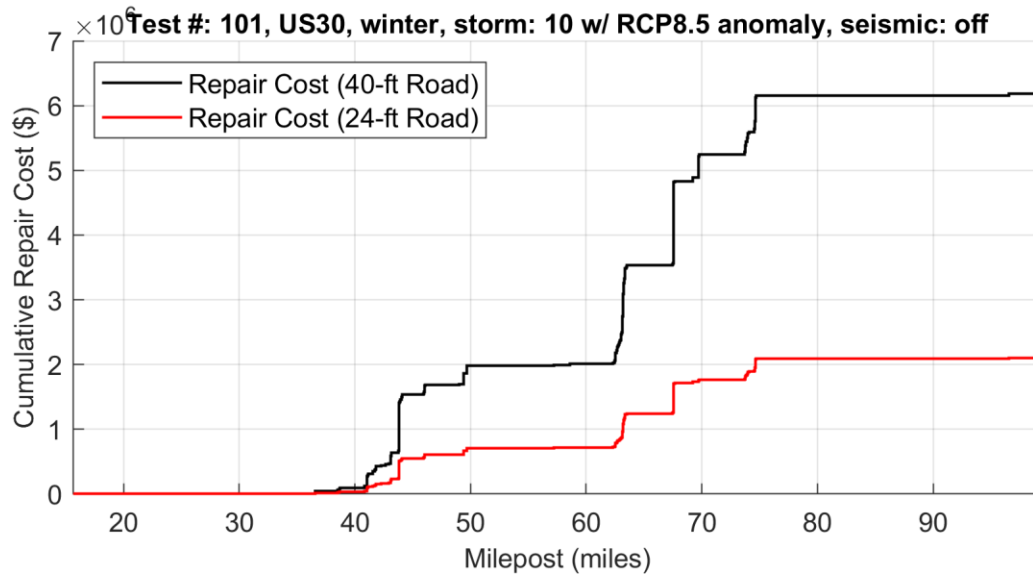
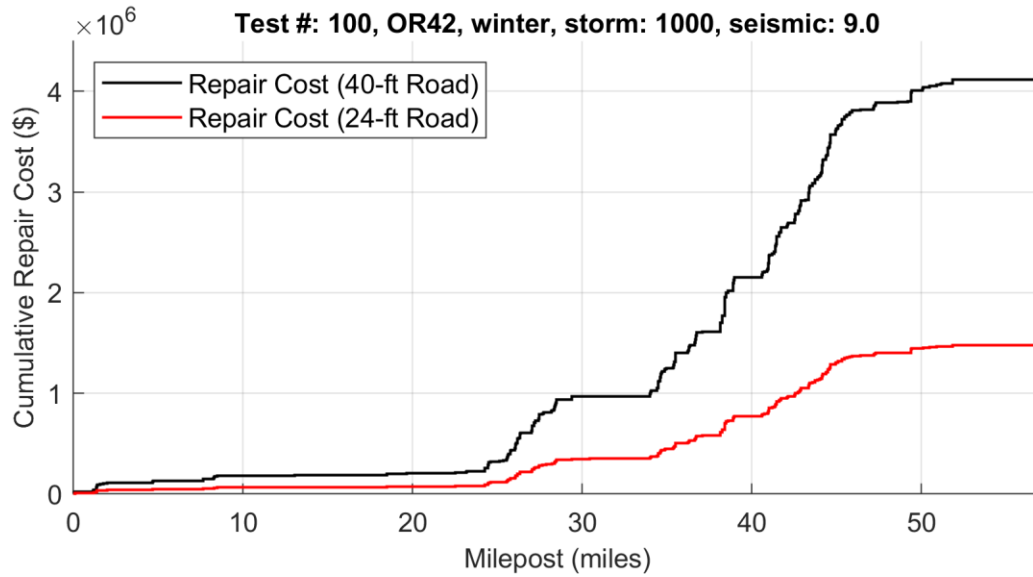


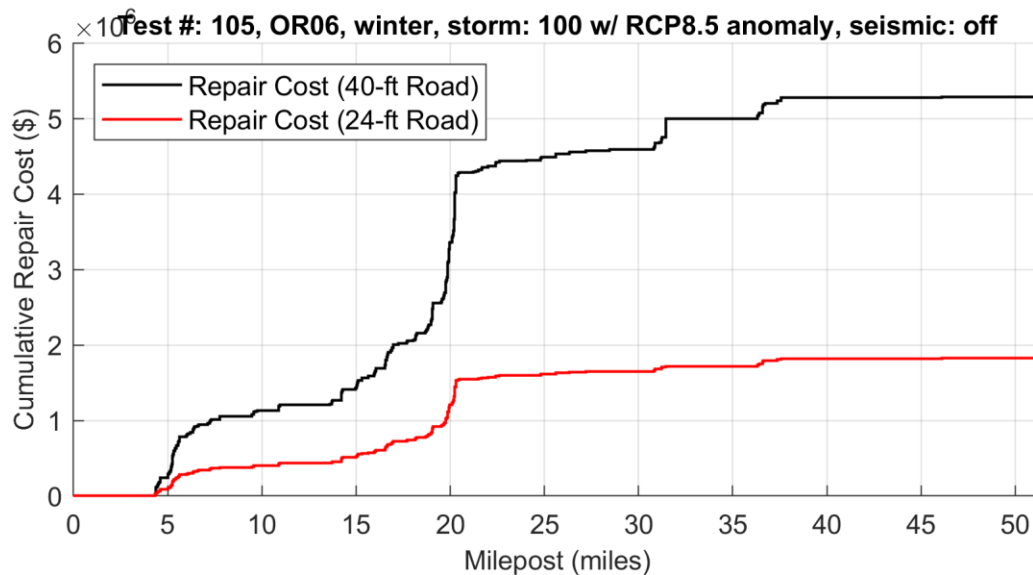
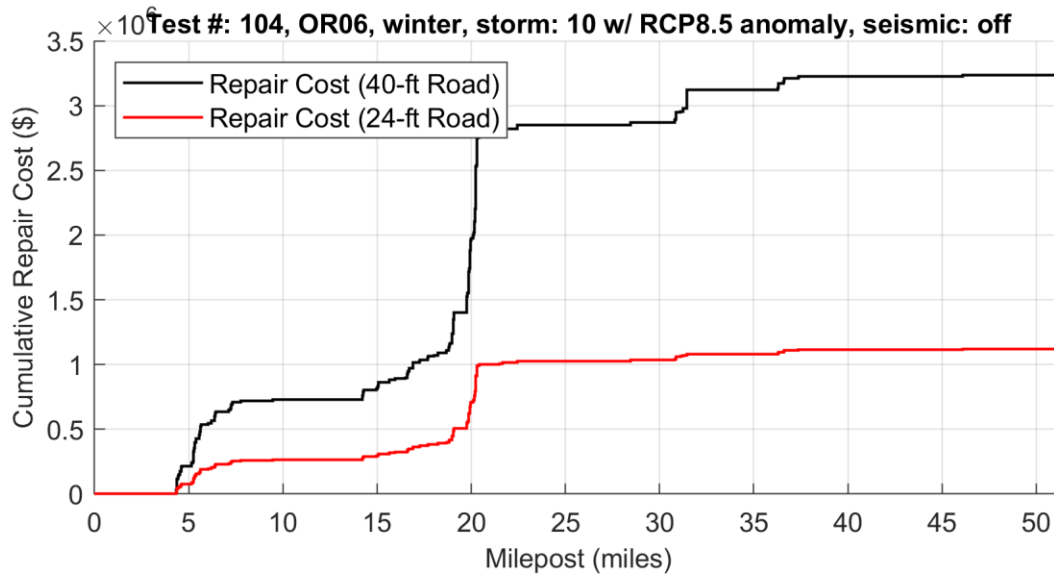
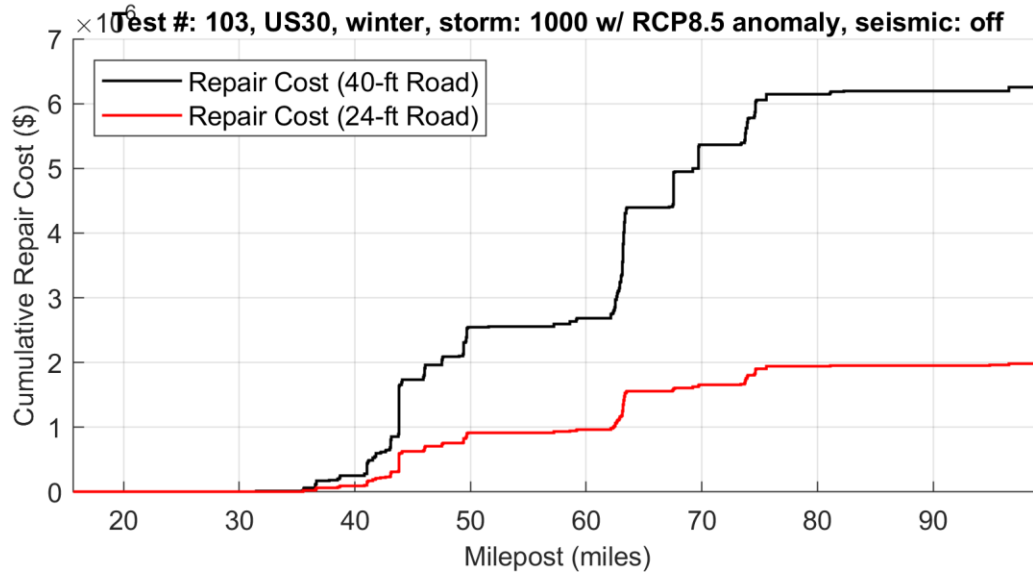


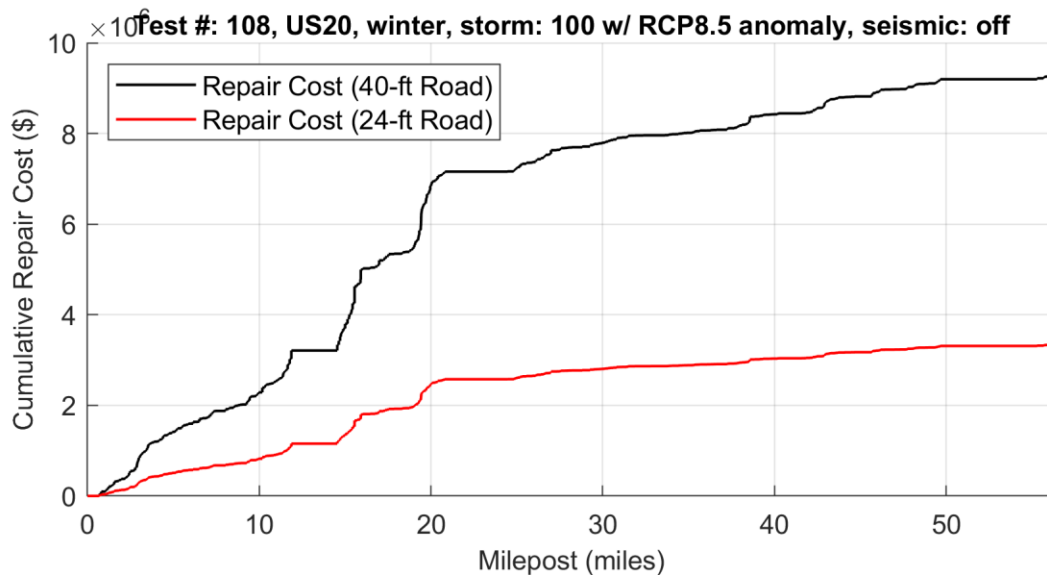
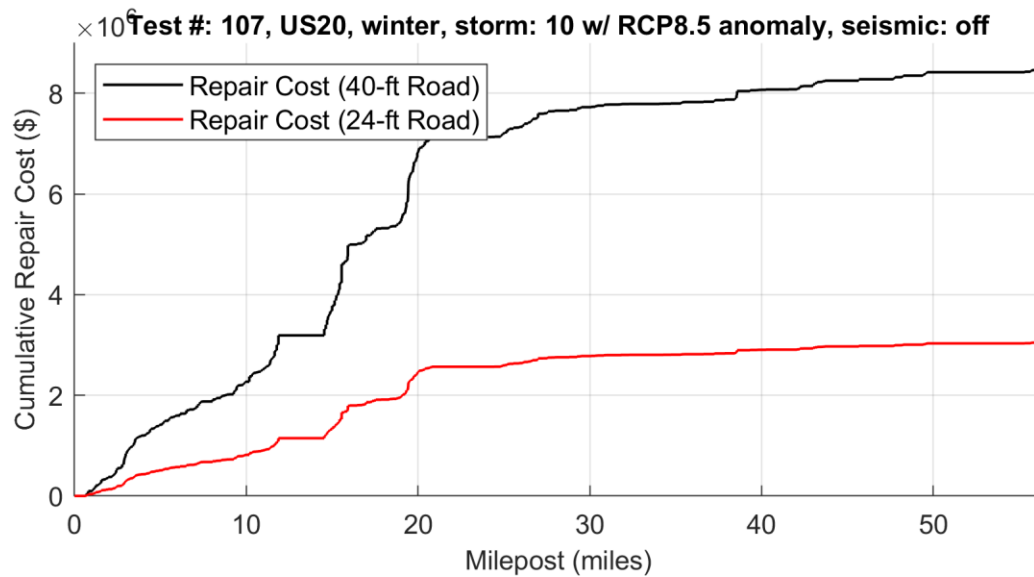
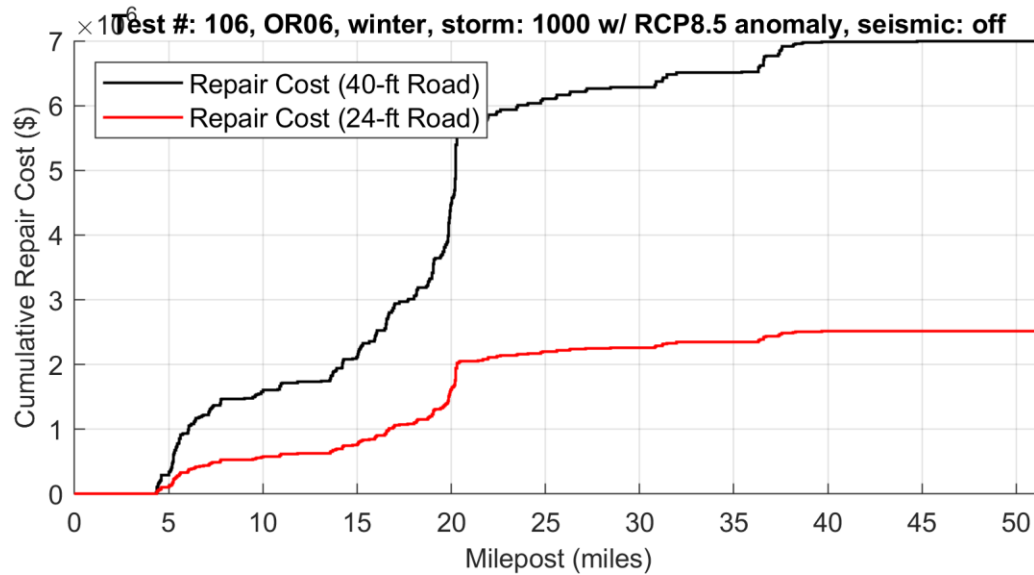


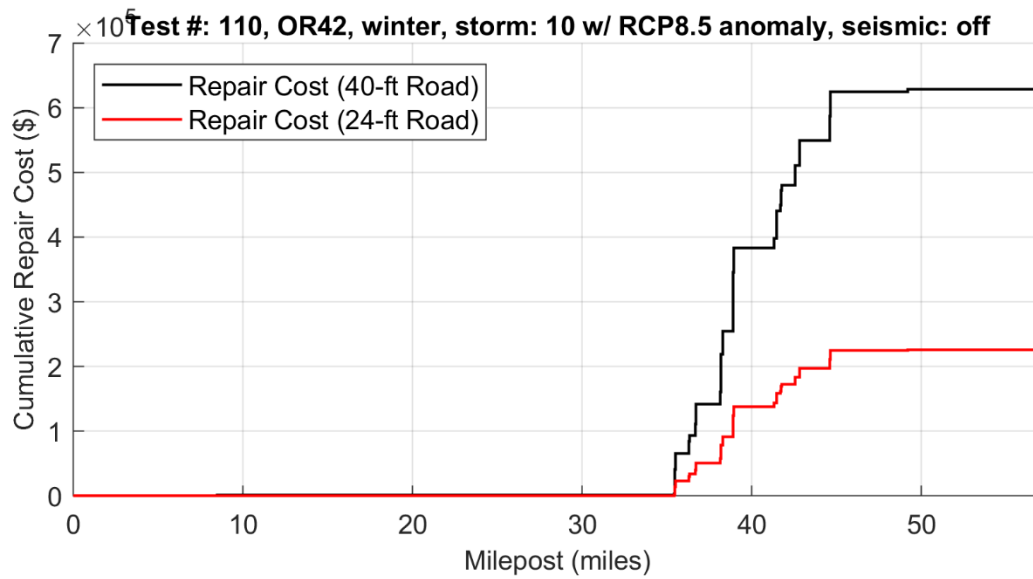
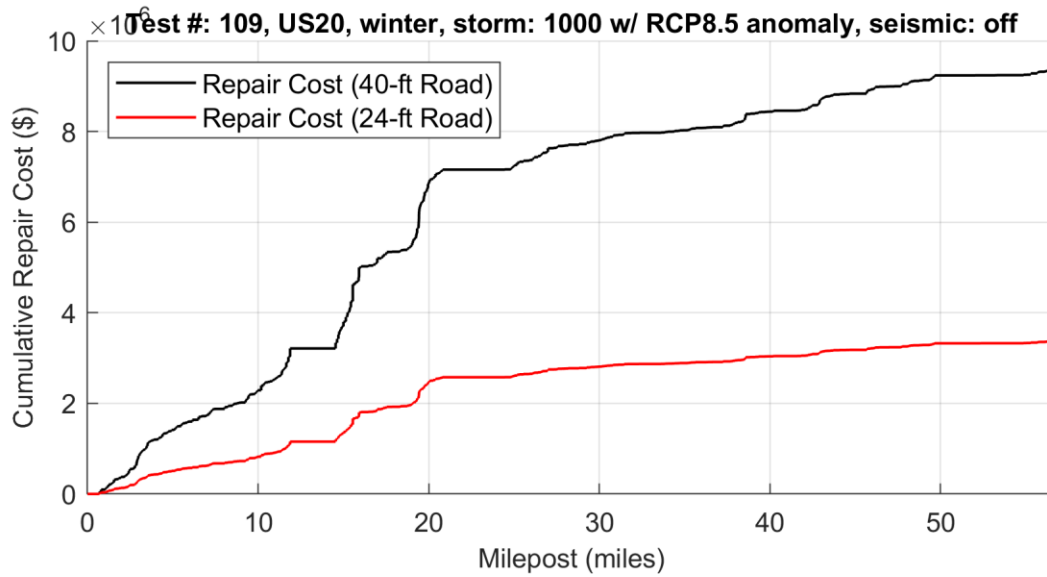


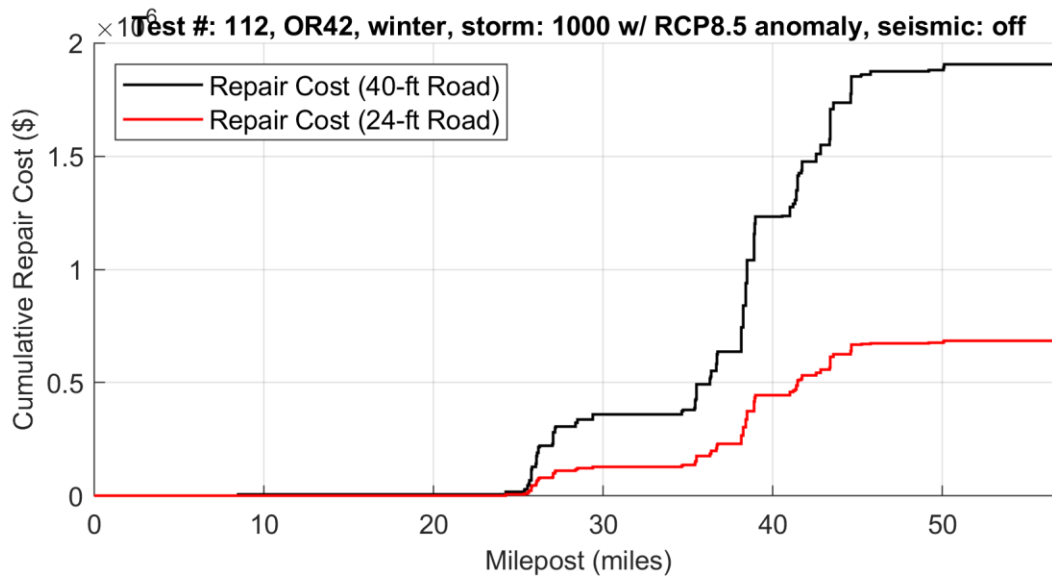
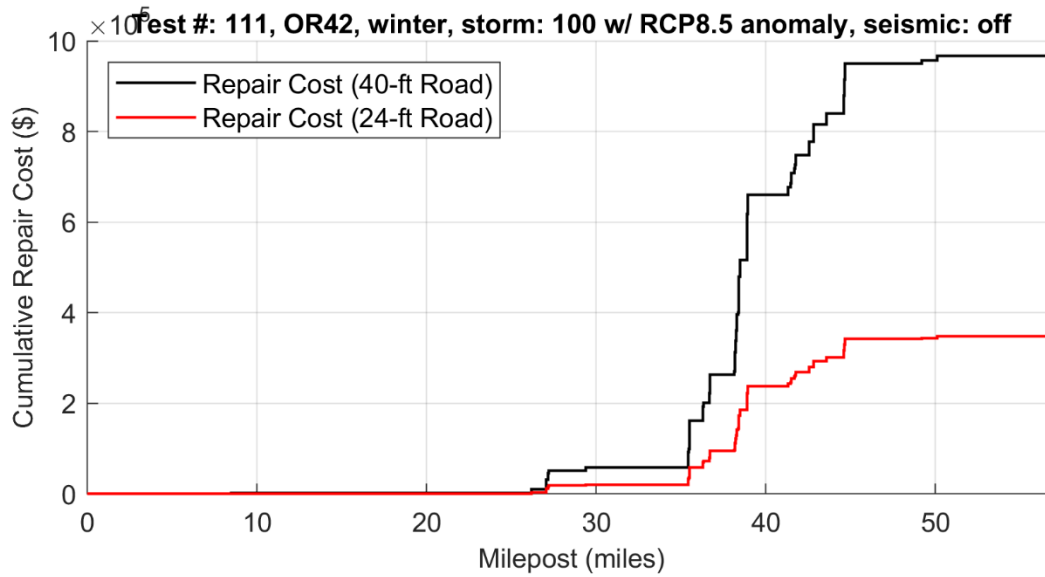






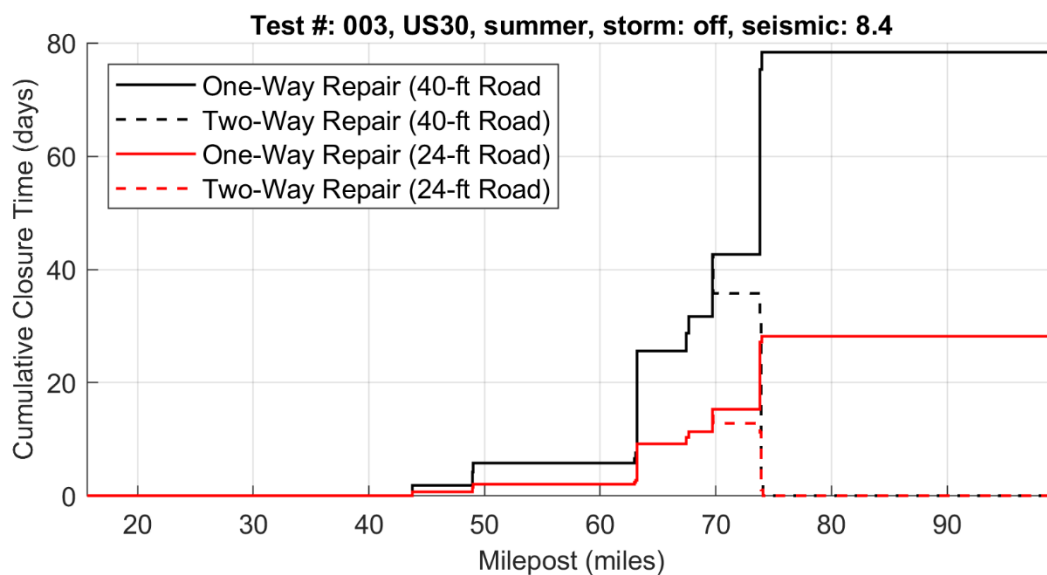
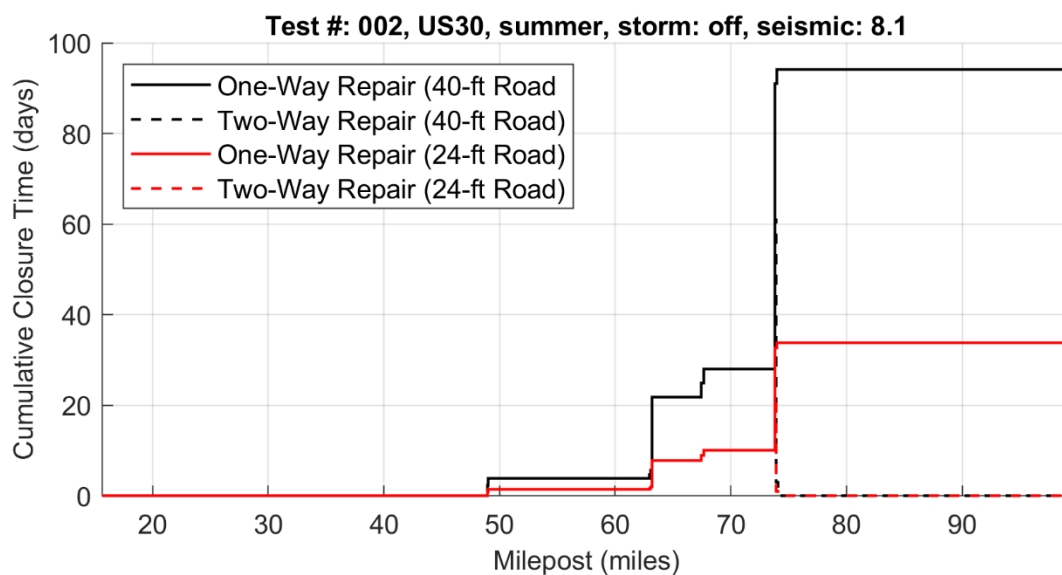
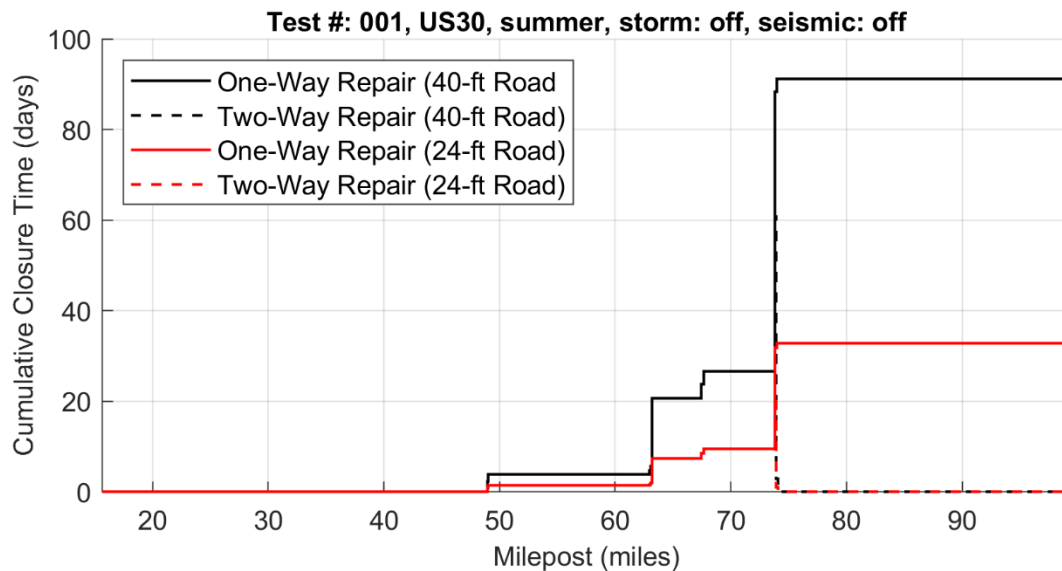


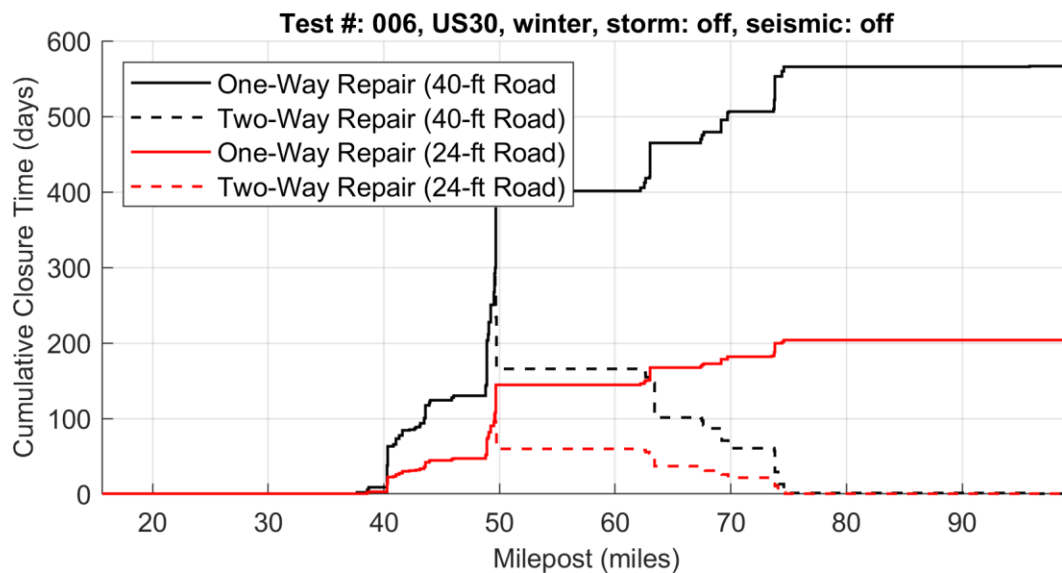
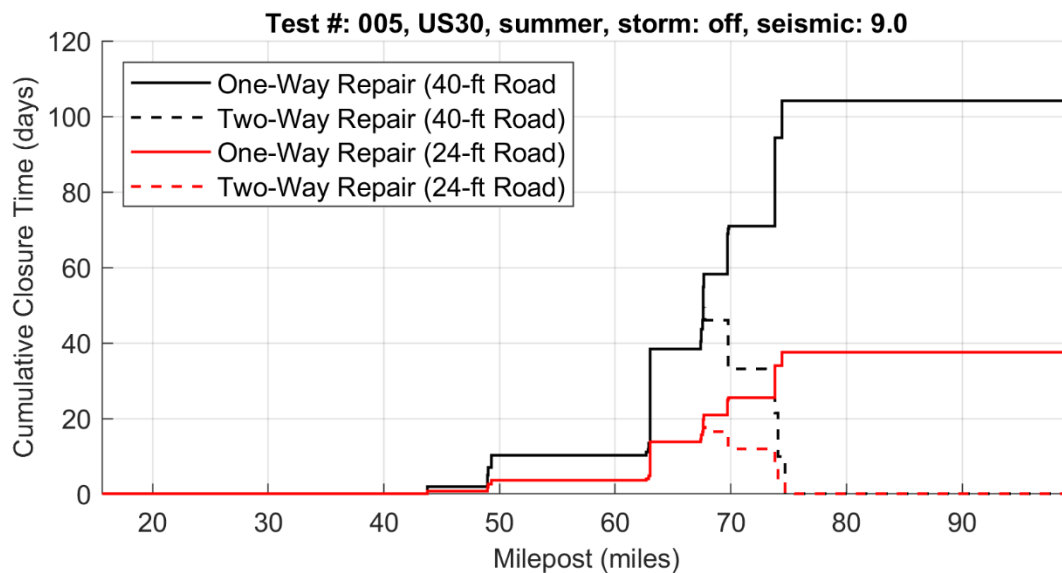
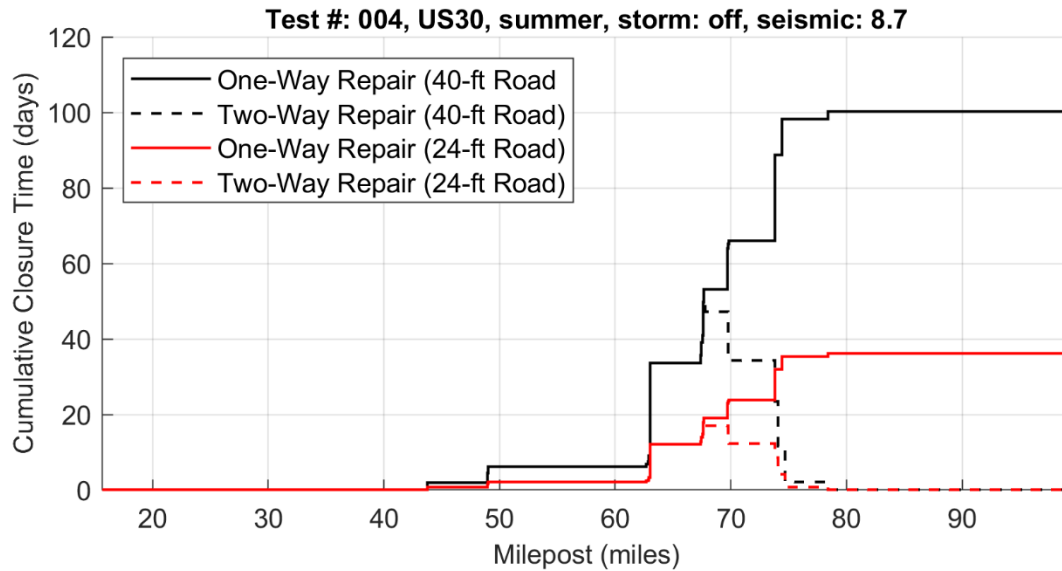


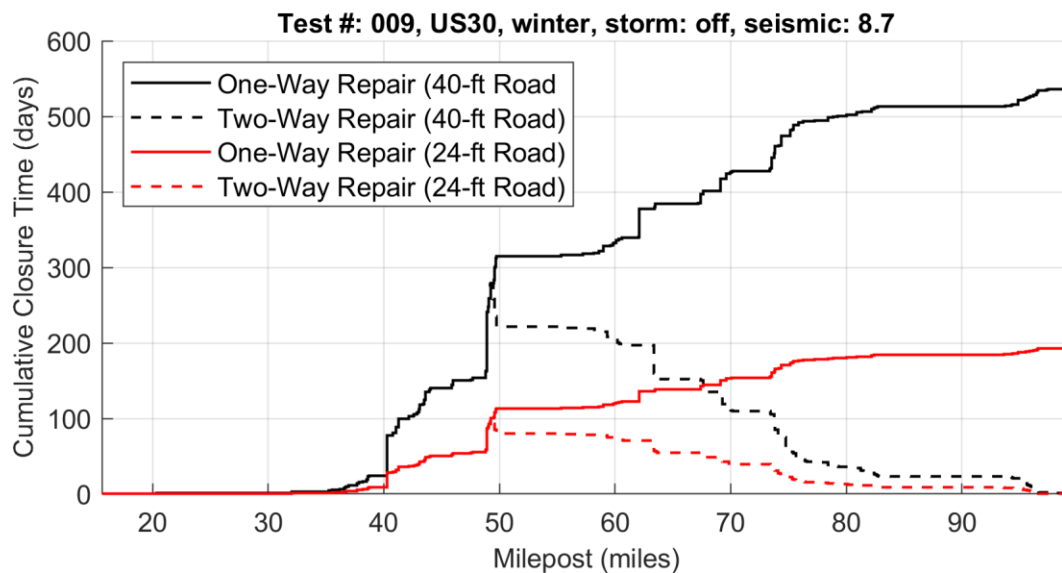
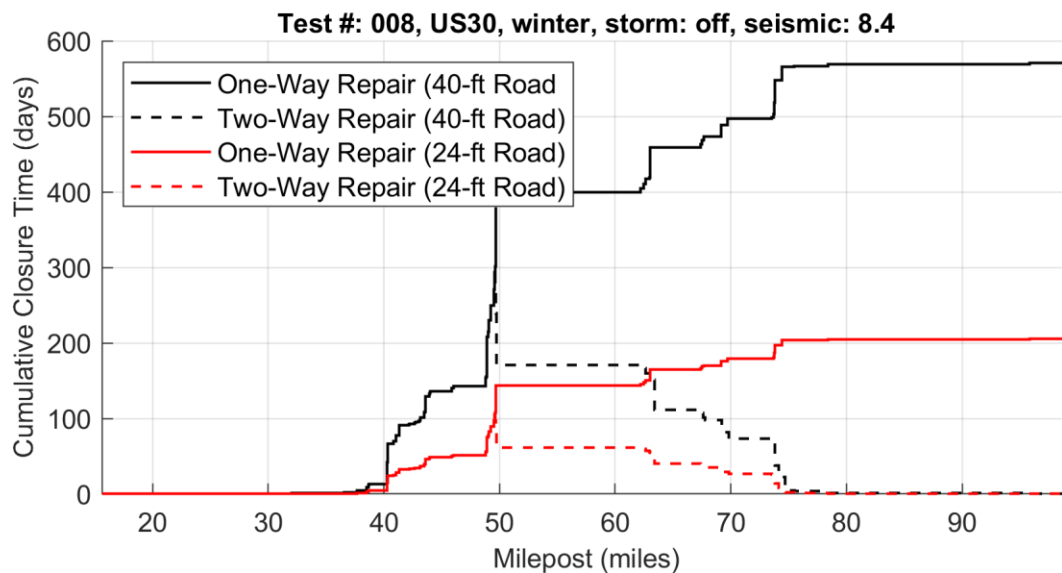
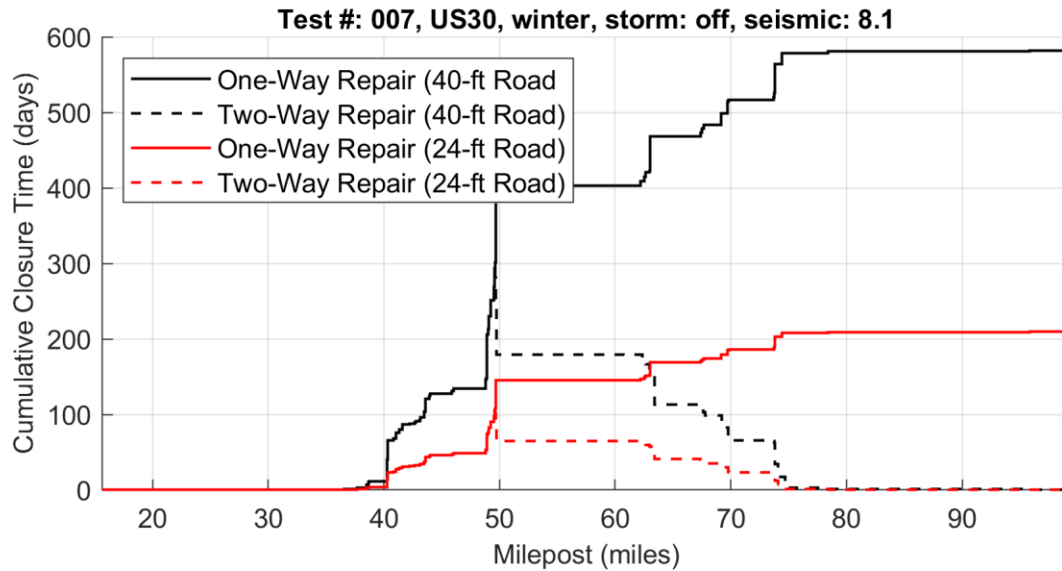


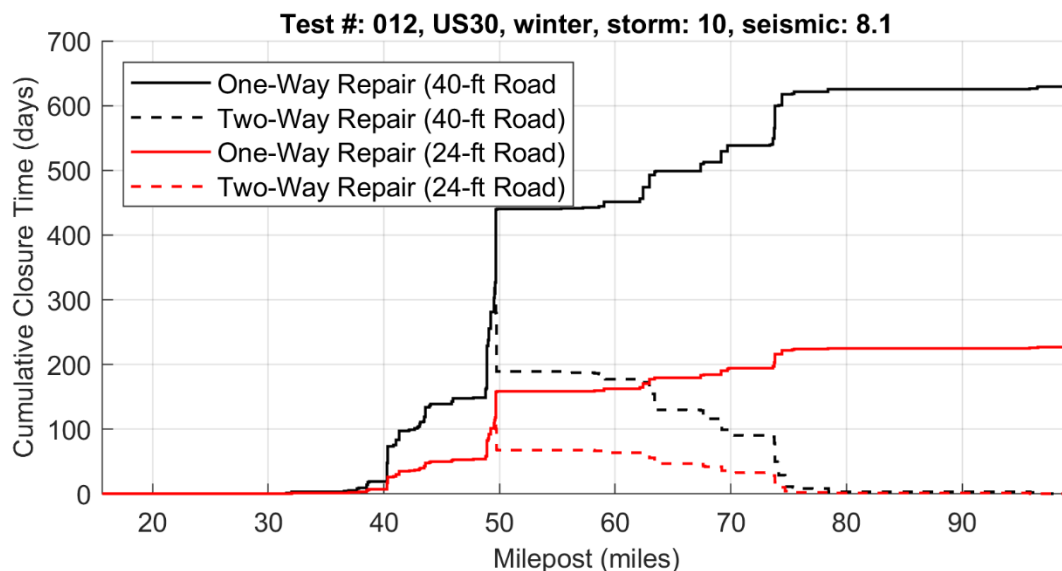
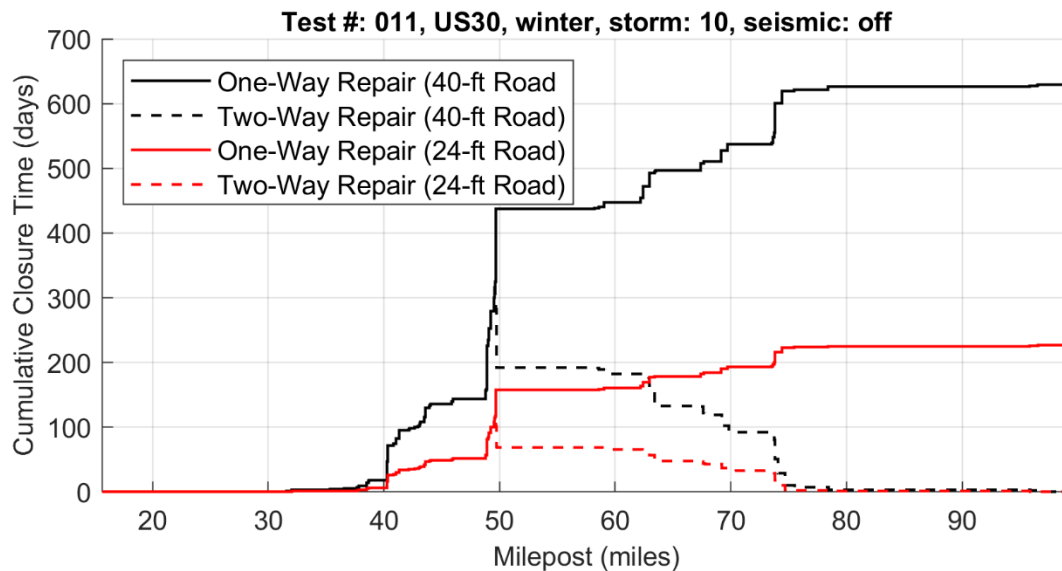
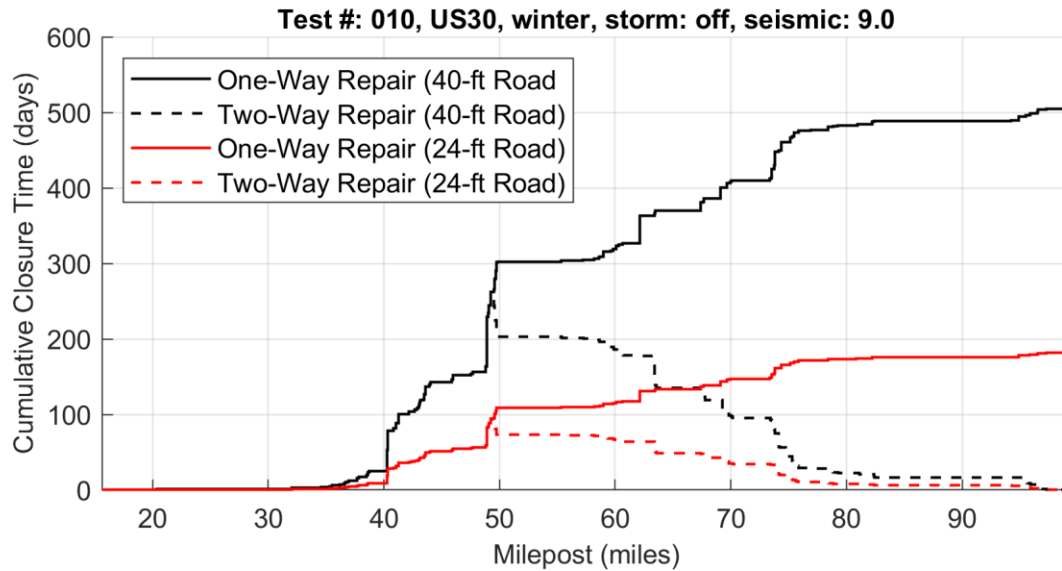
APPENDIX G: RISK METRIC PROFILES: MILEPOST VS. CUMULATIVE CLOSURE TIME (WITH 60 FOOT LANDSLIDE BUFFER)

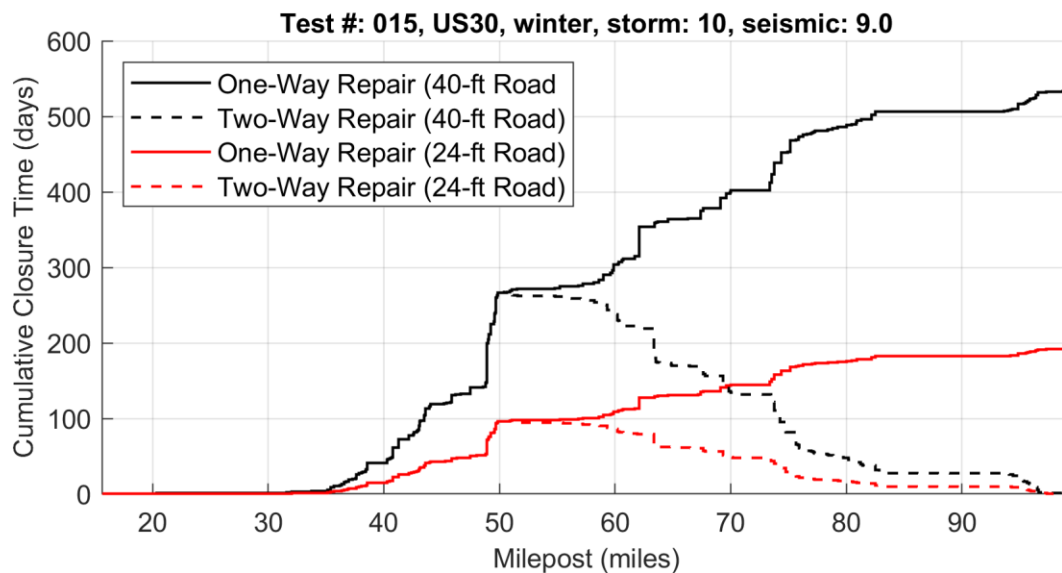
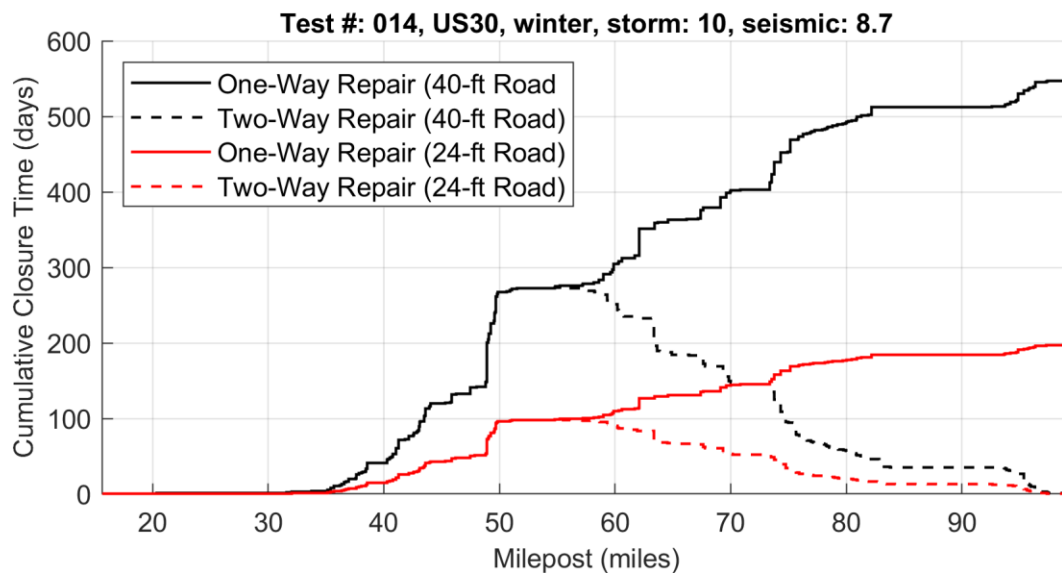
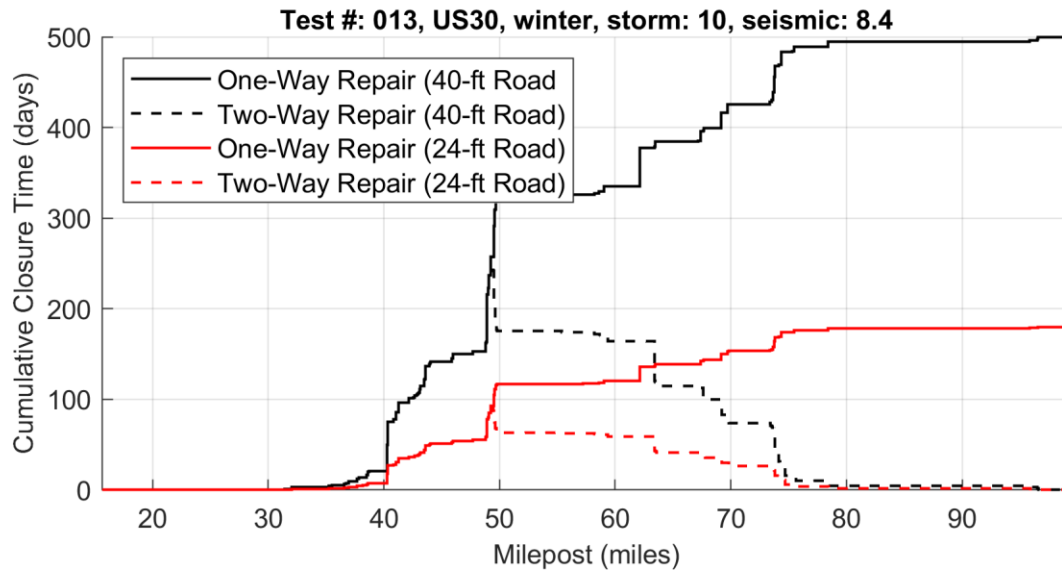
This appendix contains a full suite of milepost vs cumulative closure time profiles (closure times do consider landslide buffer) for all scenarios considered for SPR808. These scenarios consider a combination of physical drivers, including seasonal variations in antecedent moisture, rainfall inputs, seismicity, and climate-change induced precipitation anomaly. A directory describing all tests not considering future climate may be found in Table 4.4. A directory describing all tests considering future climate may be found in Table 4.7.

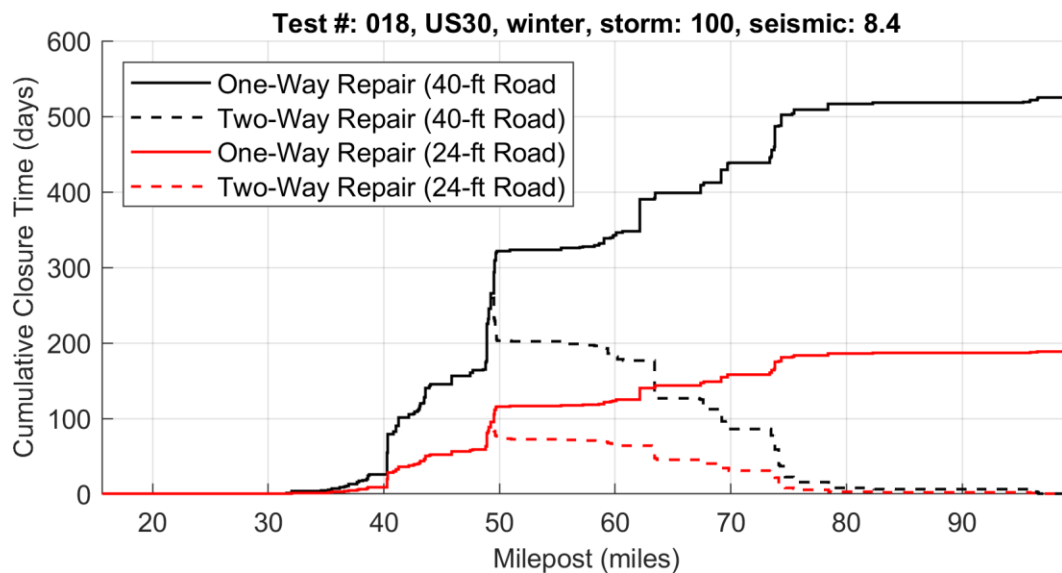
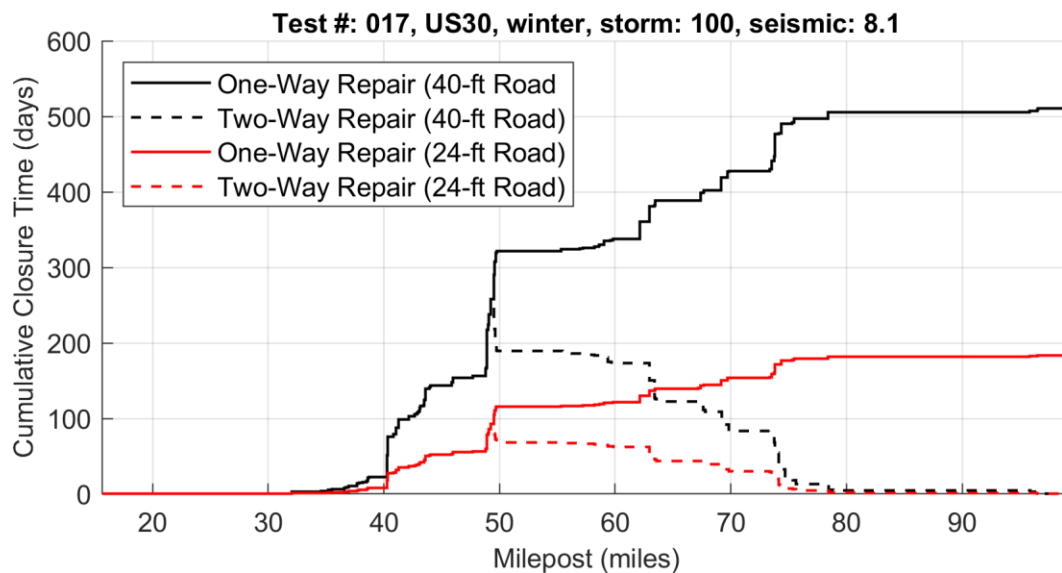
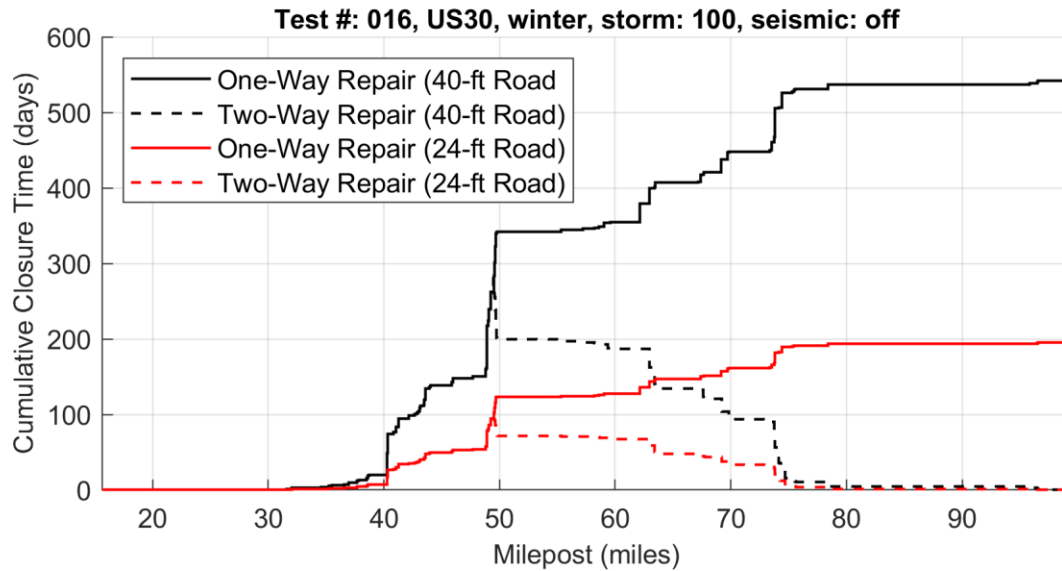


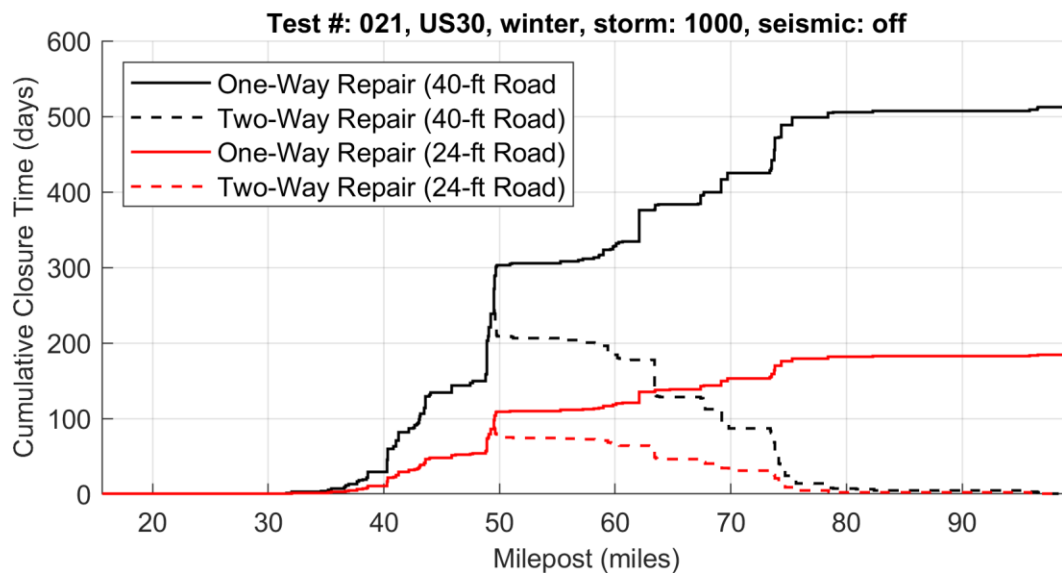
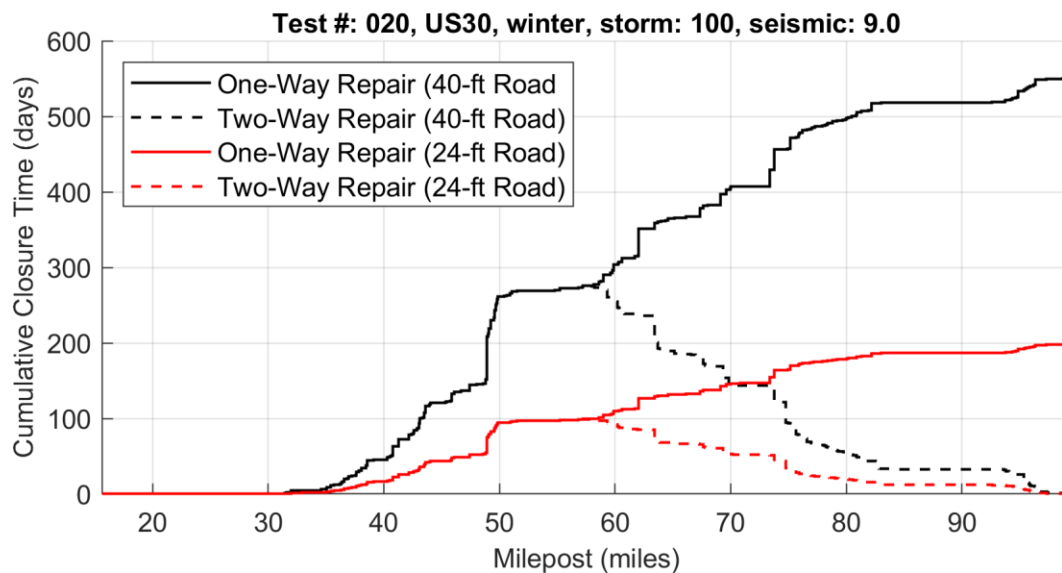
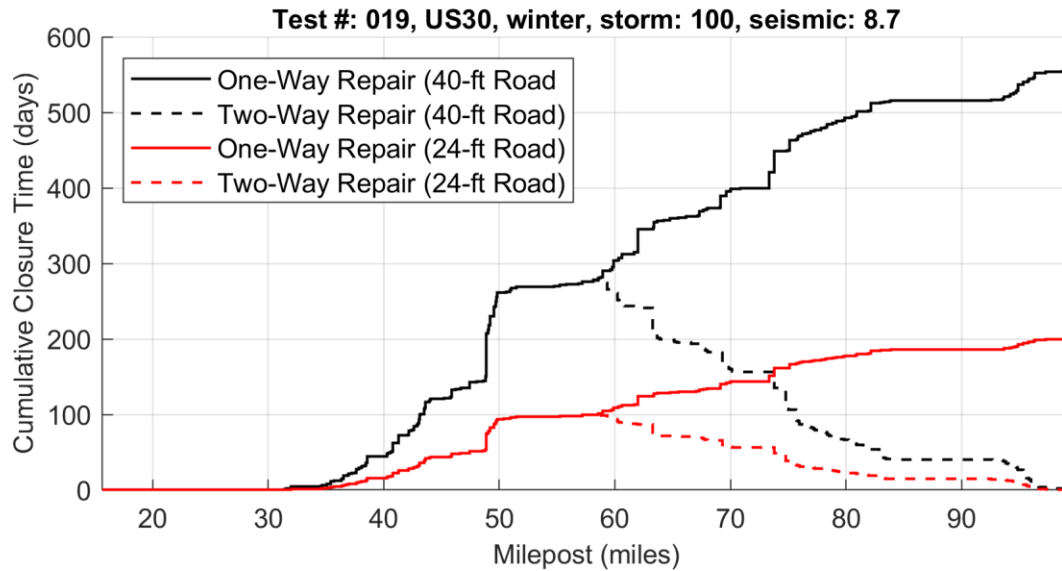


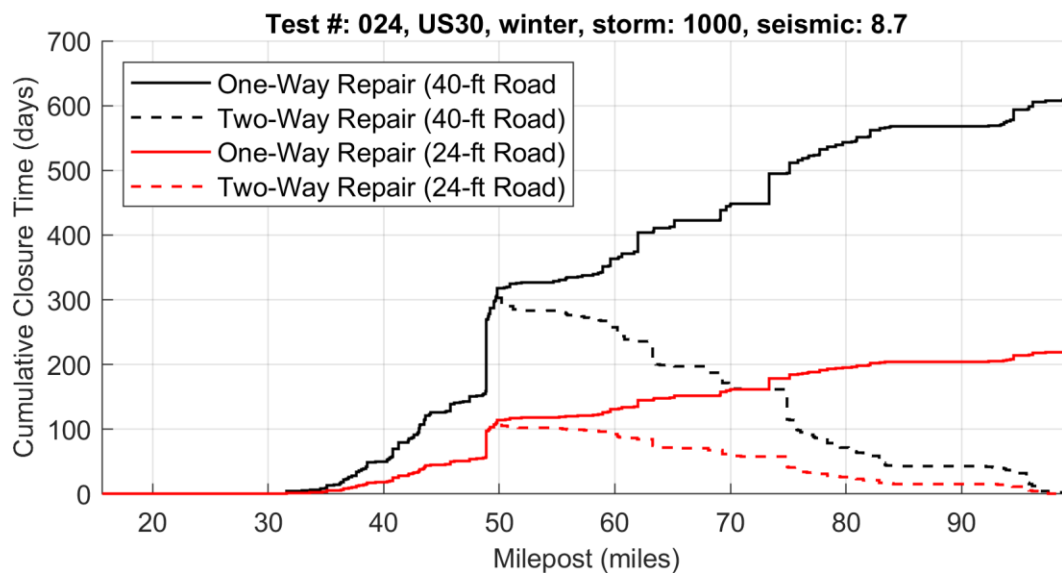
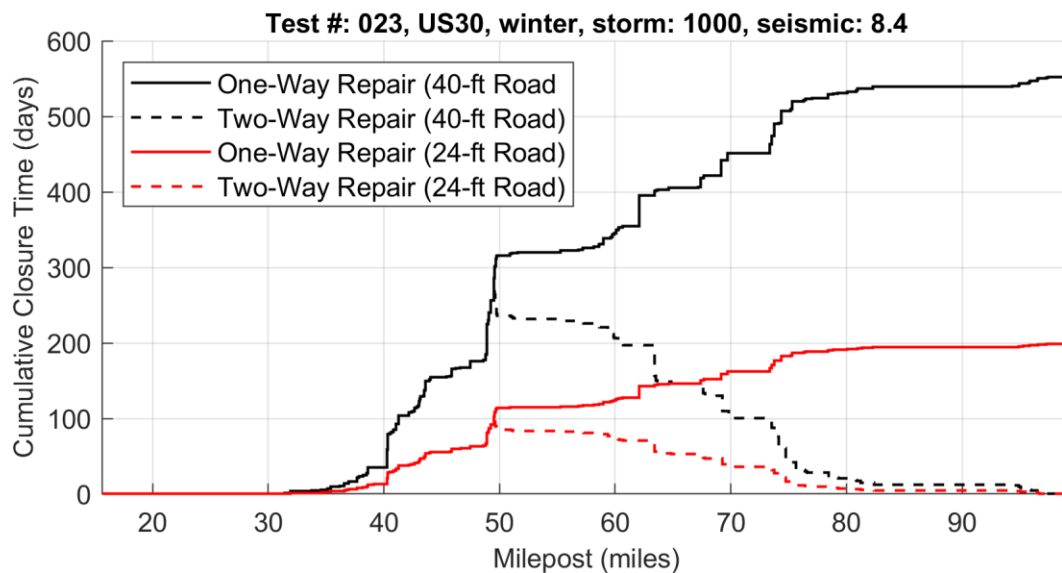
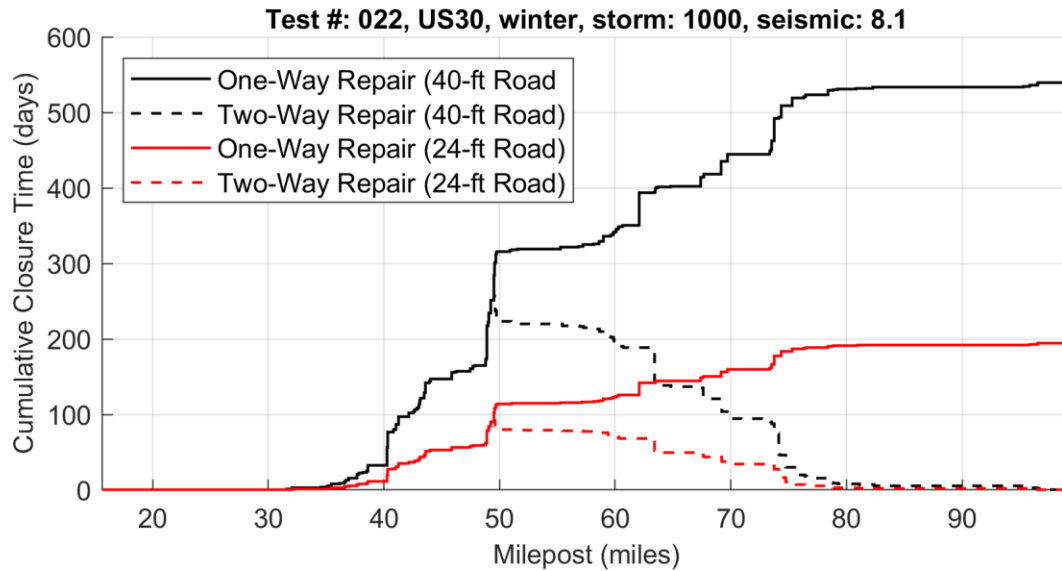


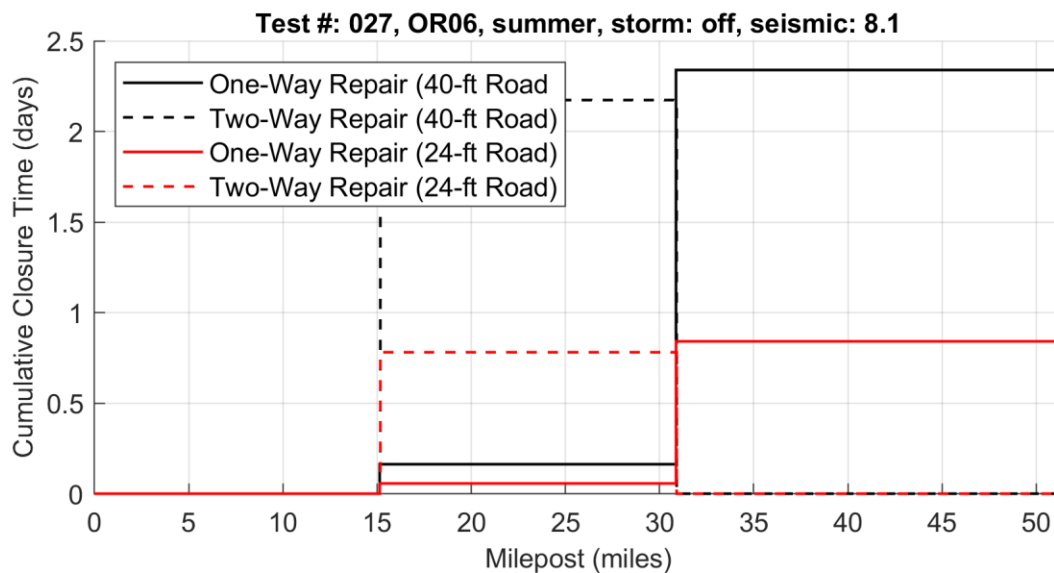
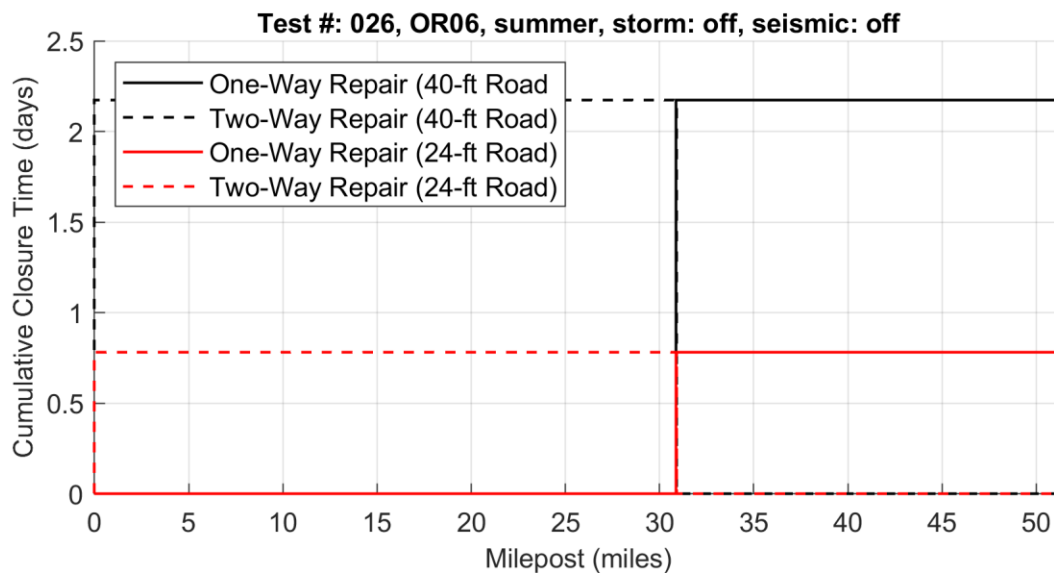
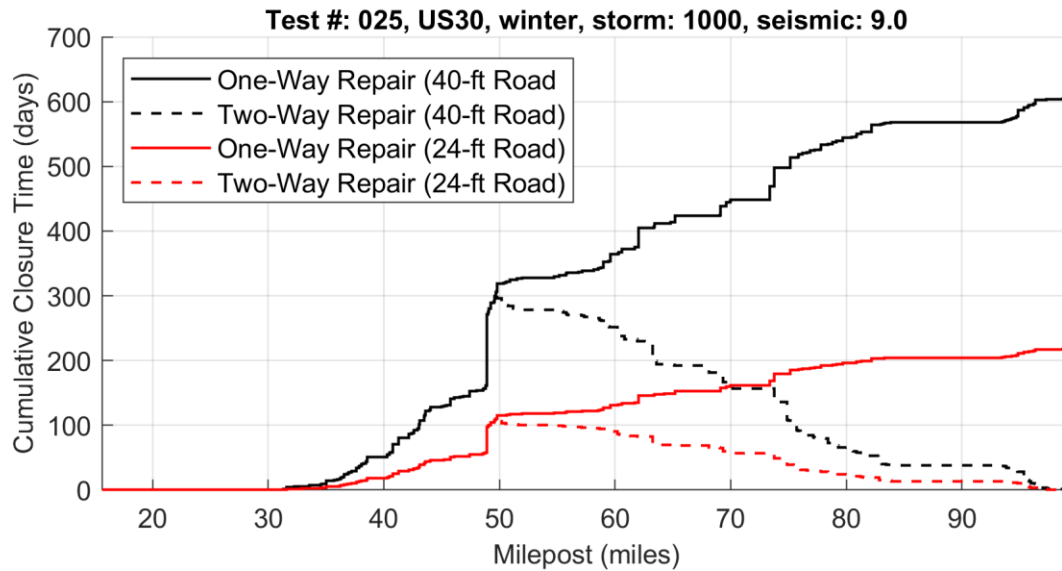


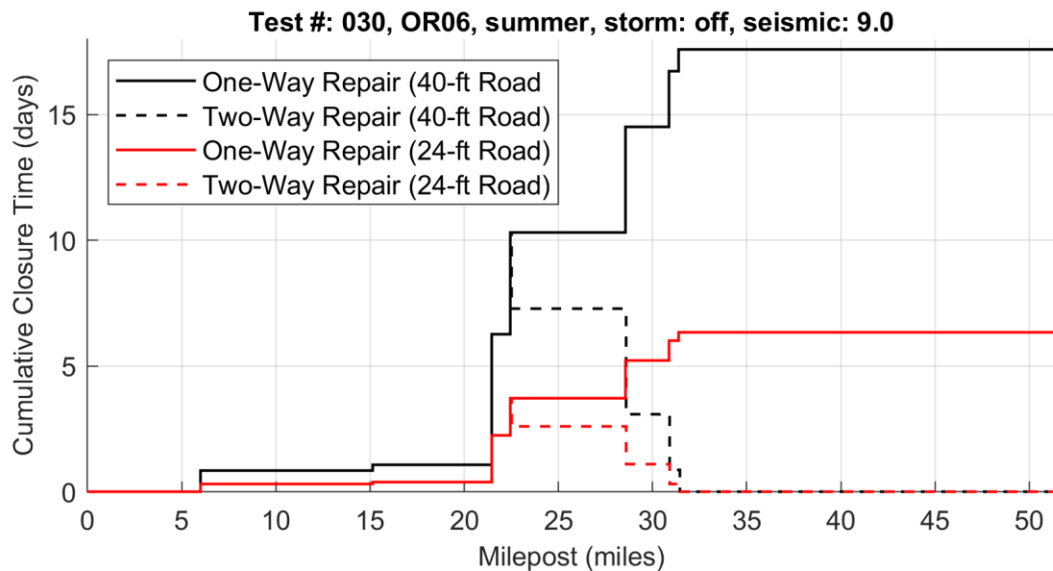
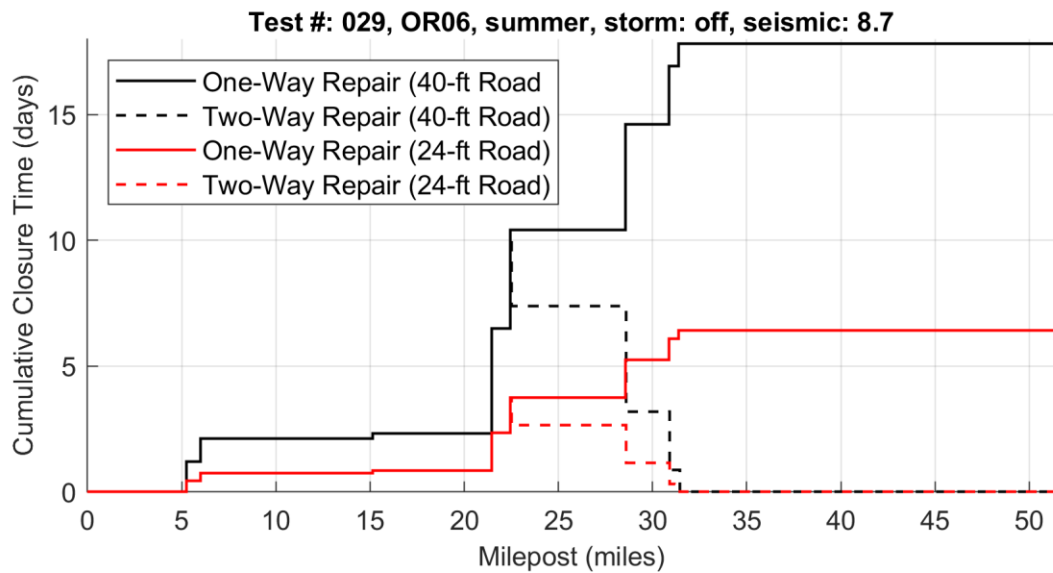
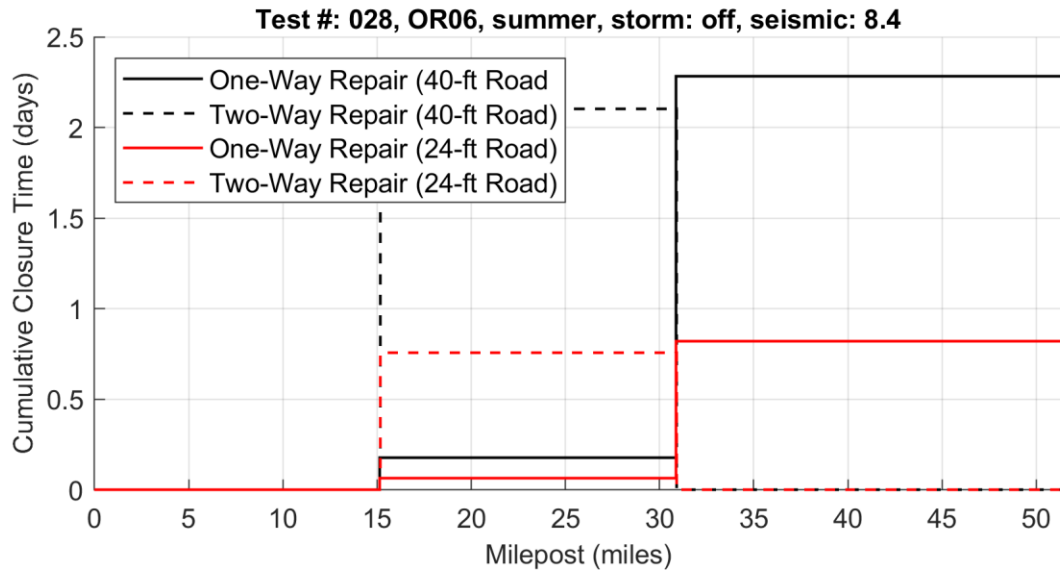


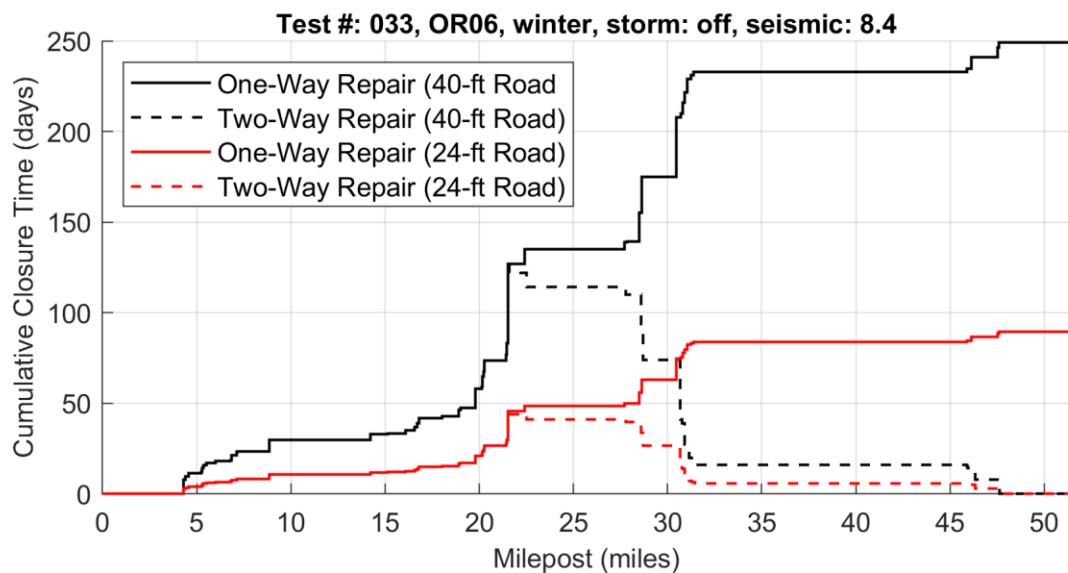
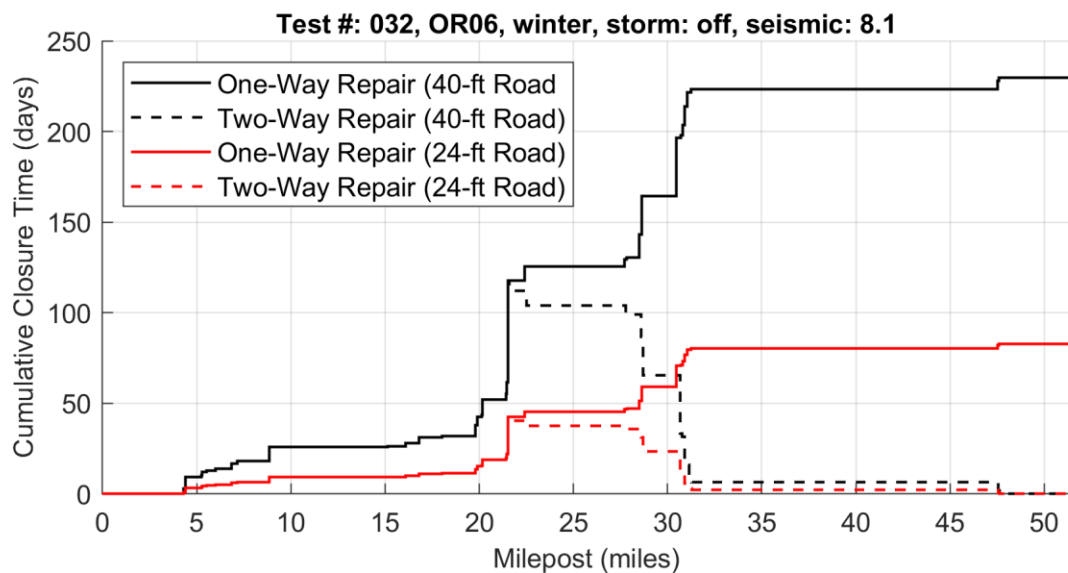
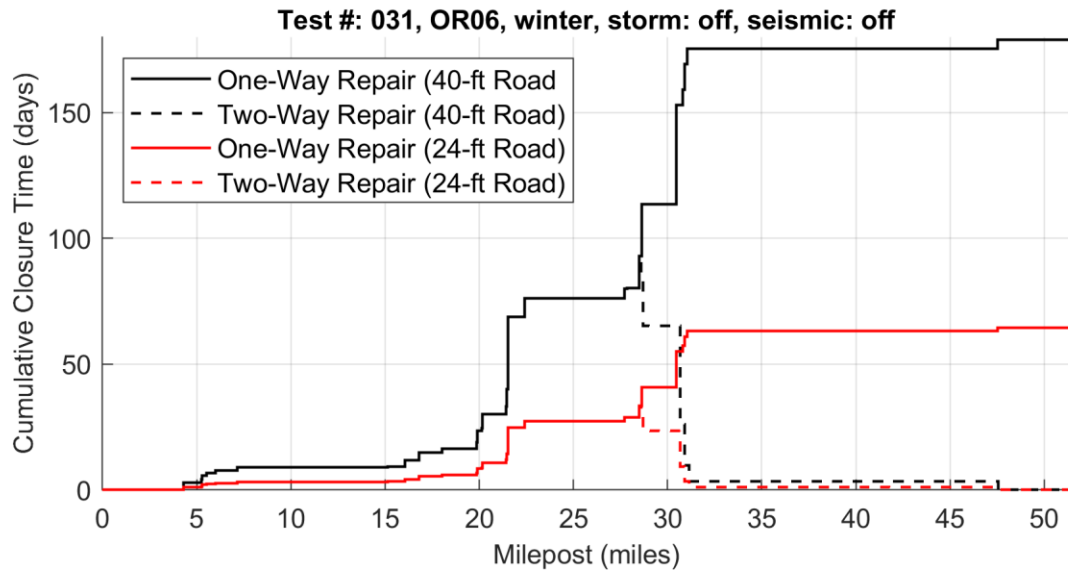


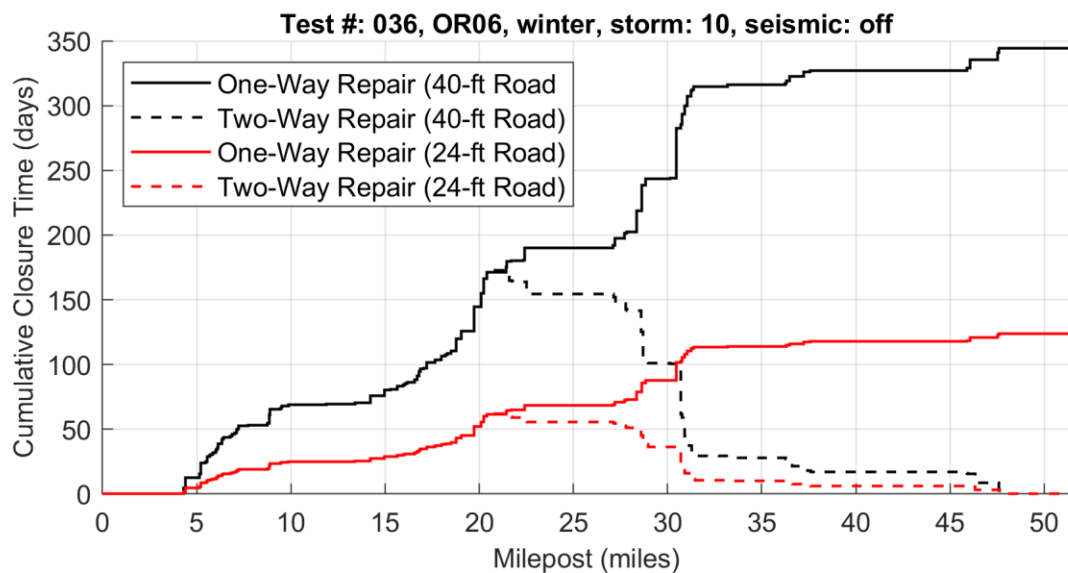
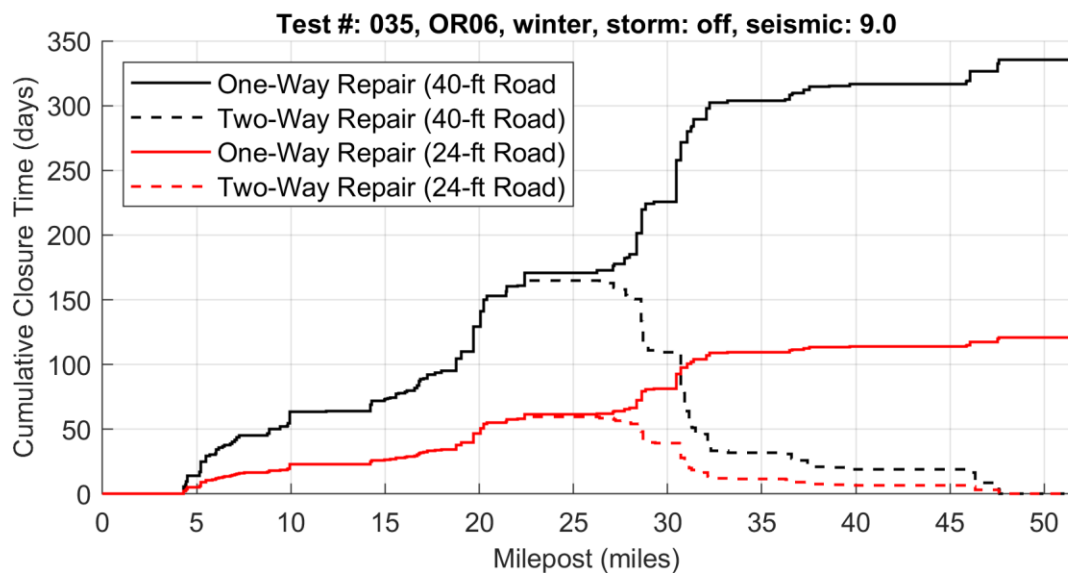
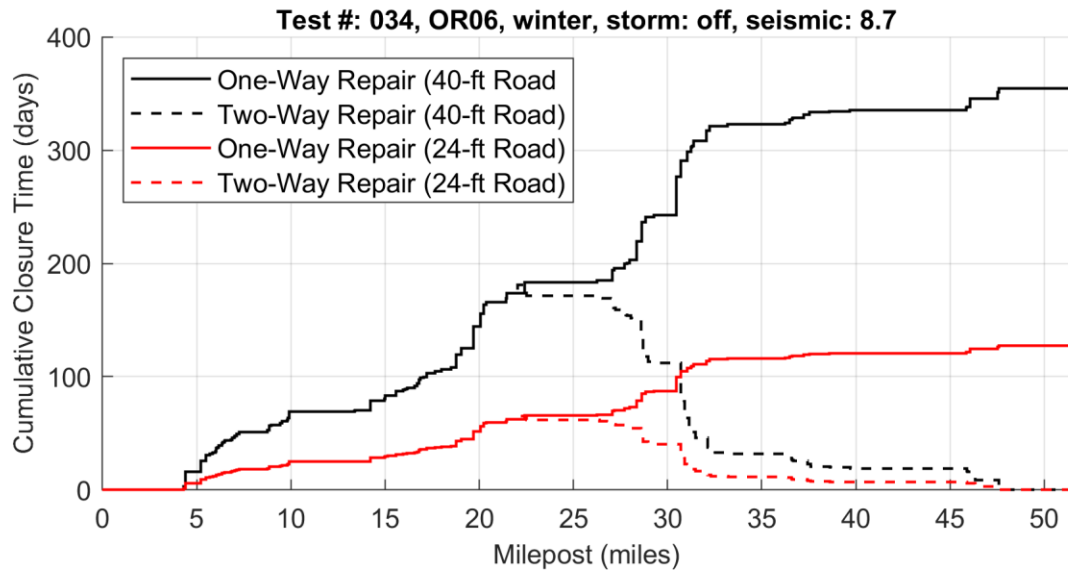


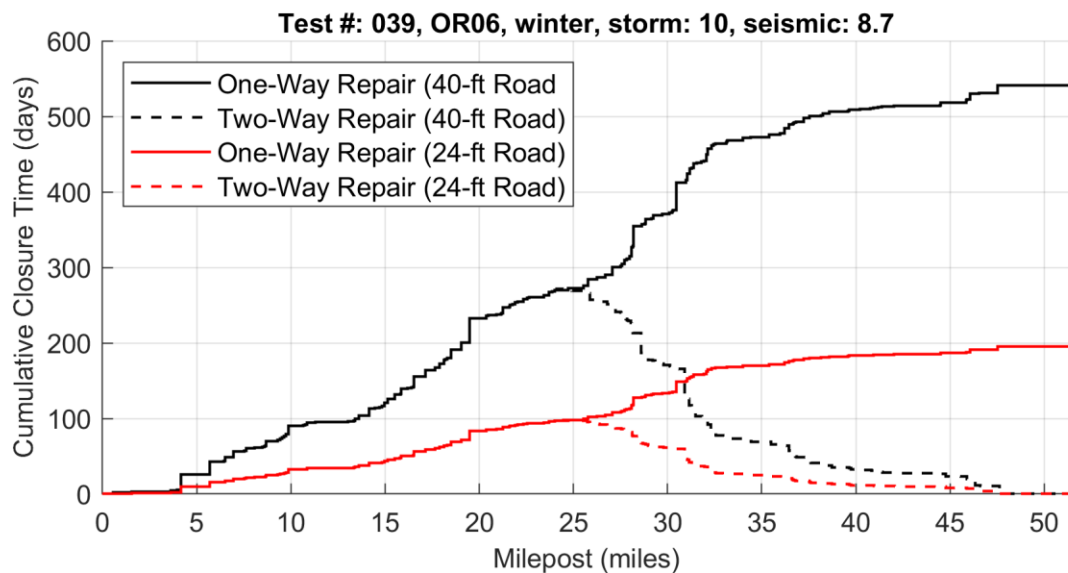
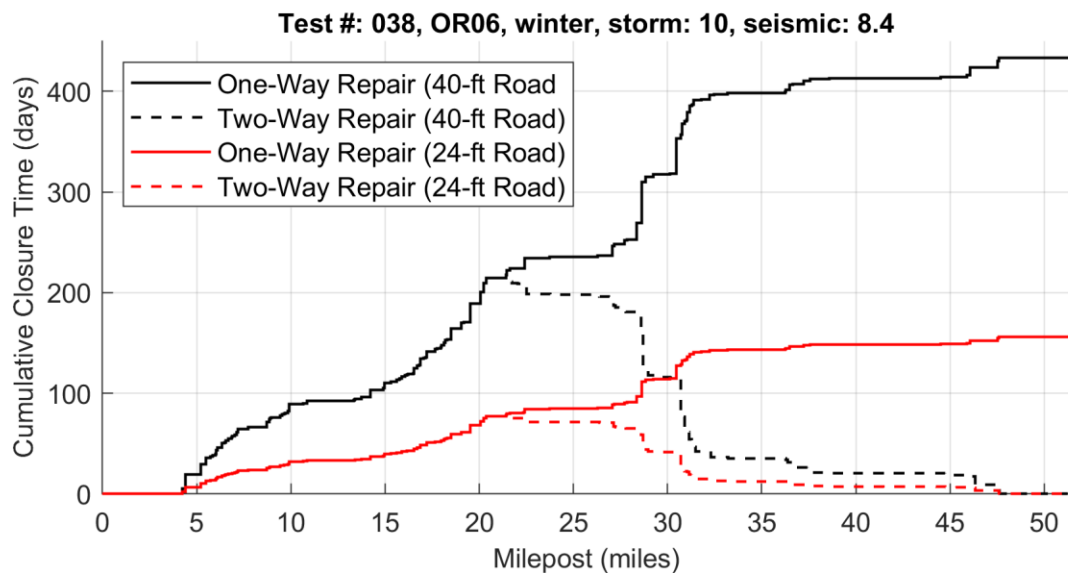
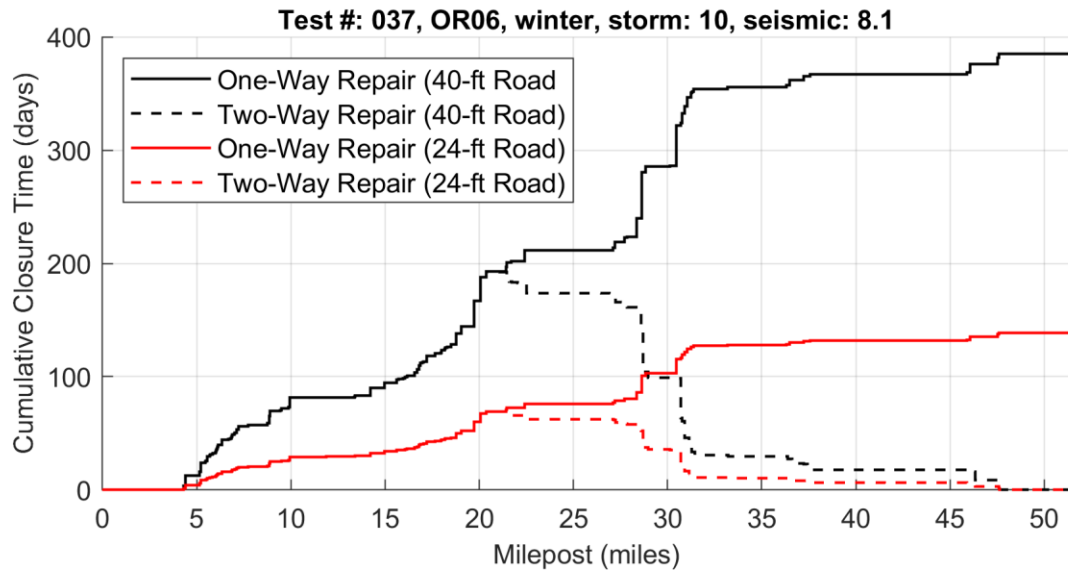


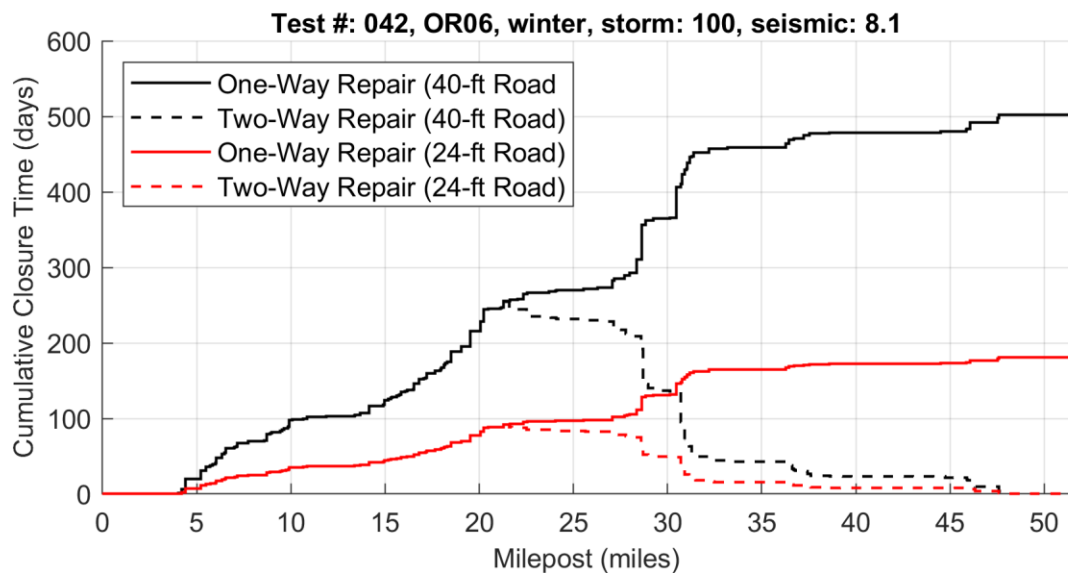
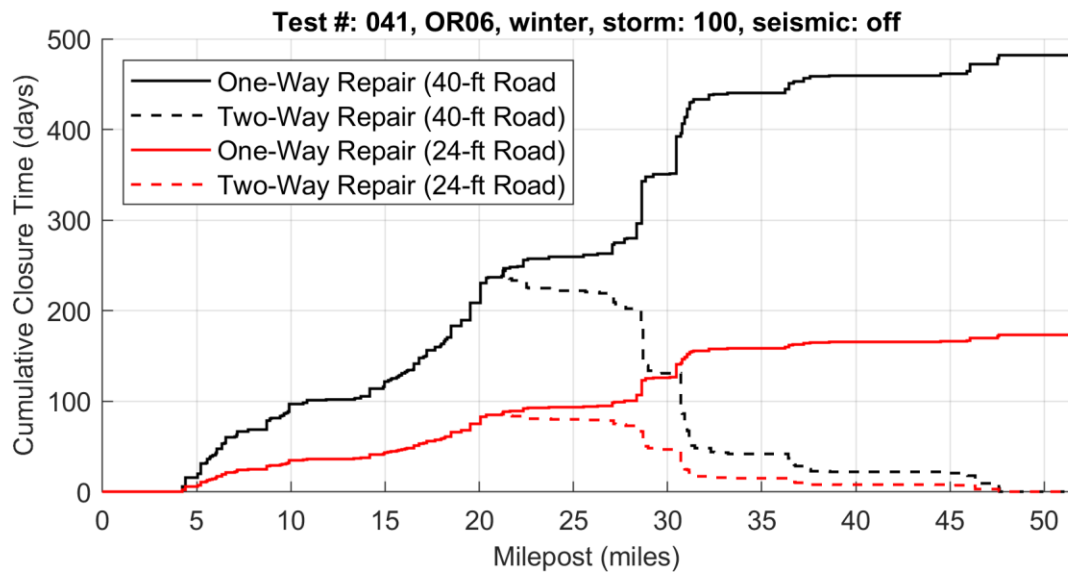
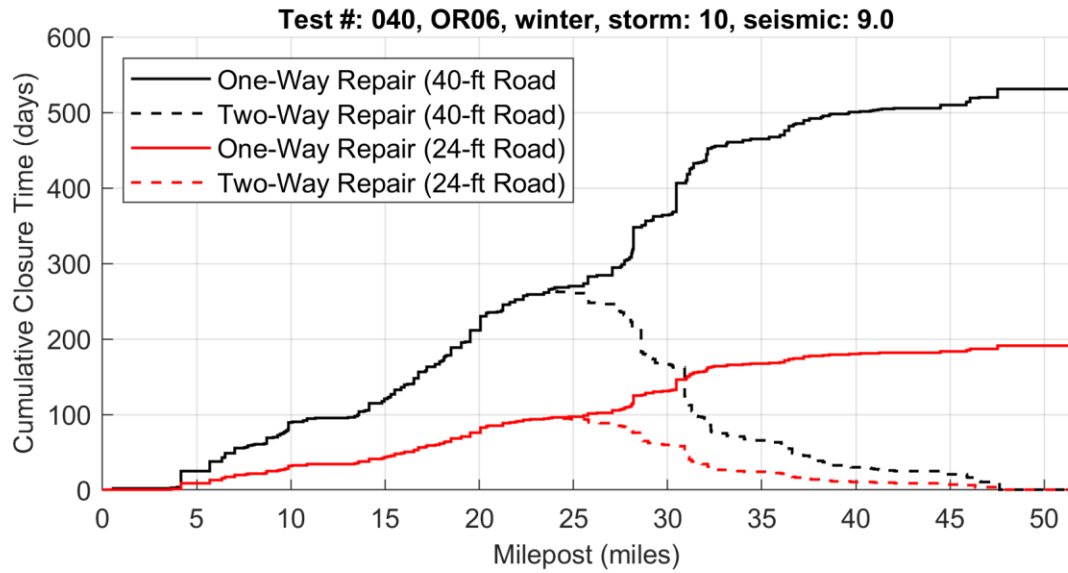


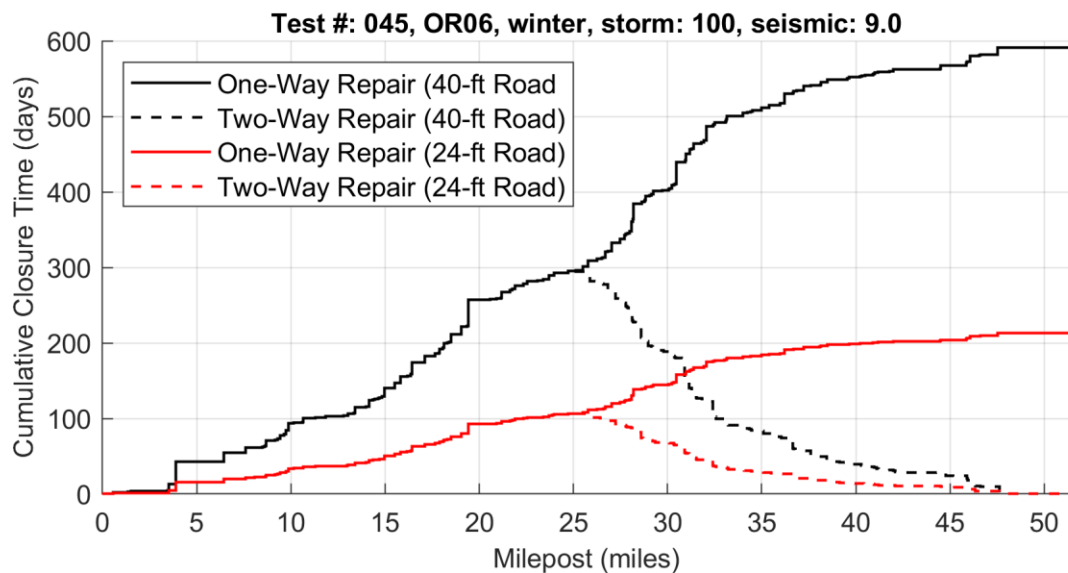
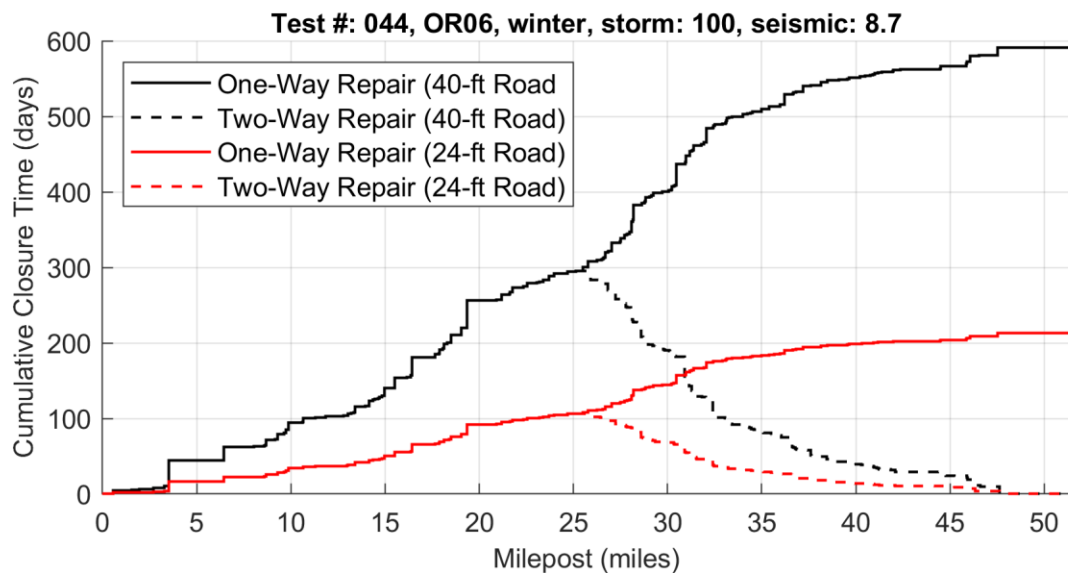
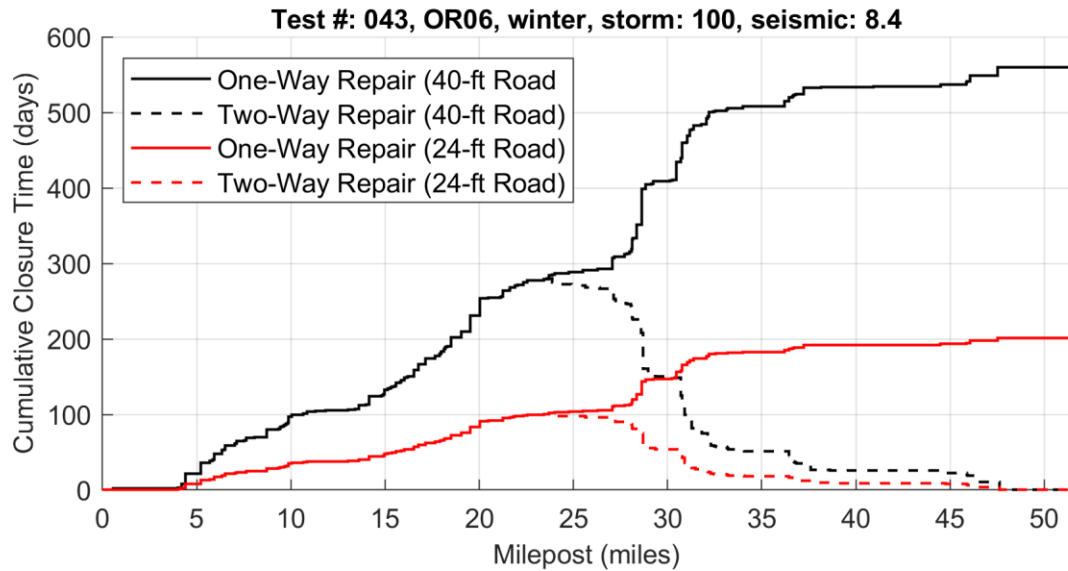


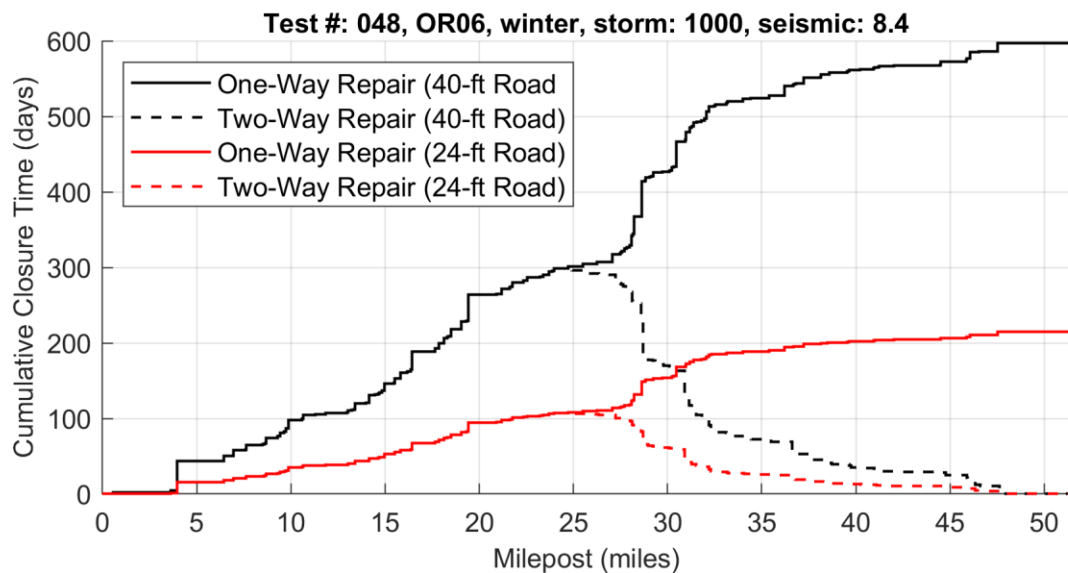
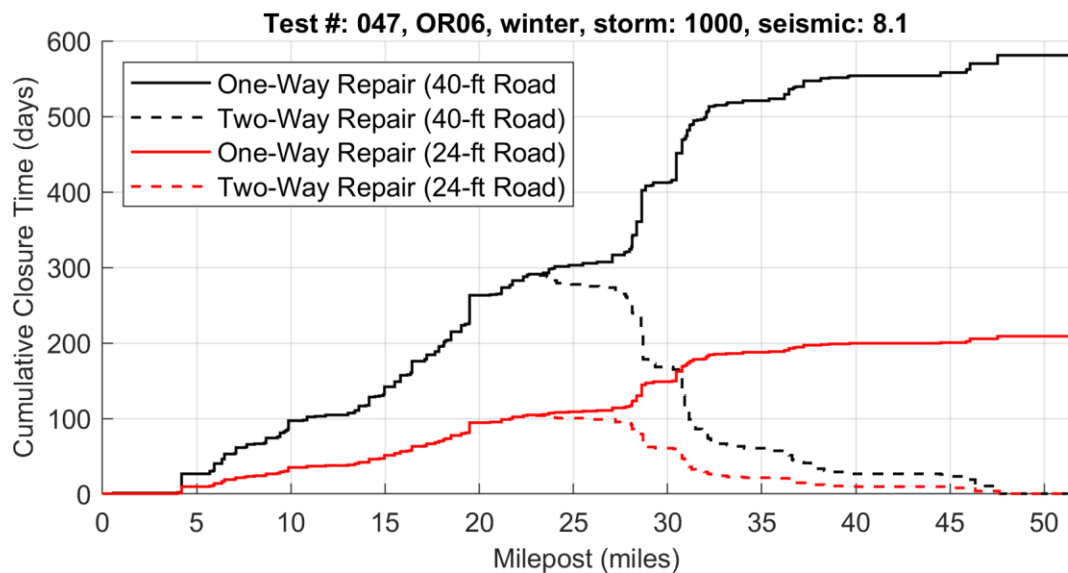
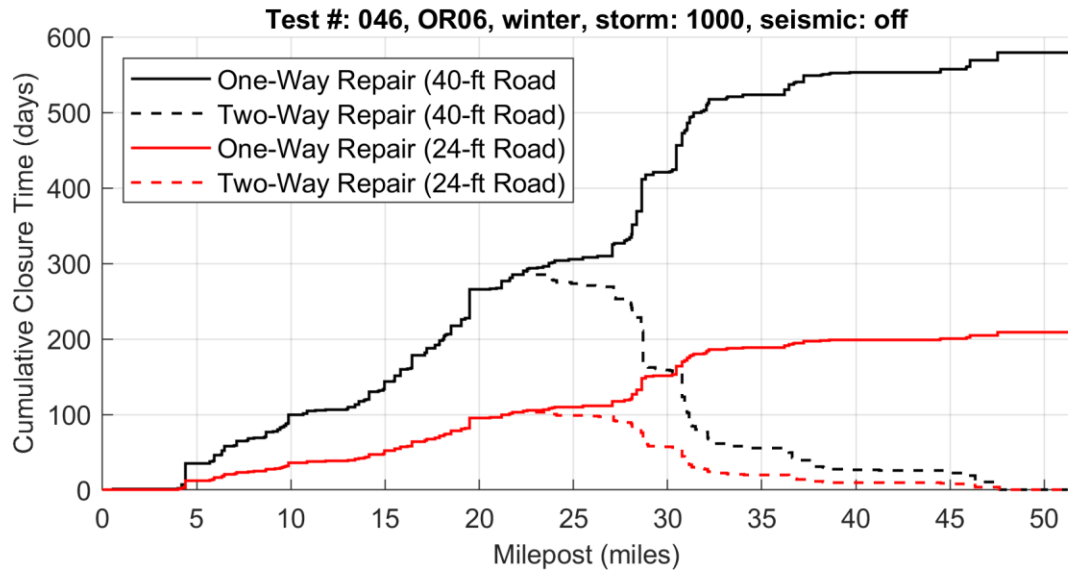


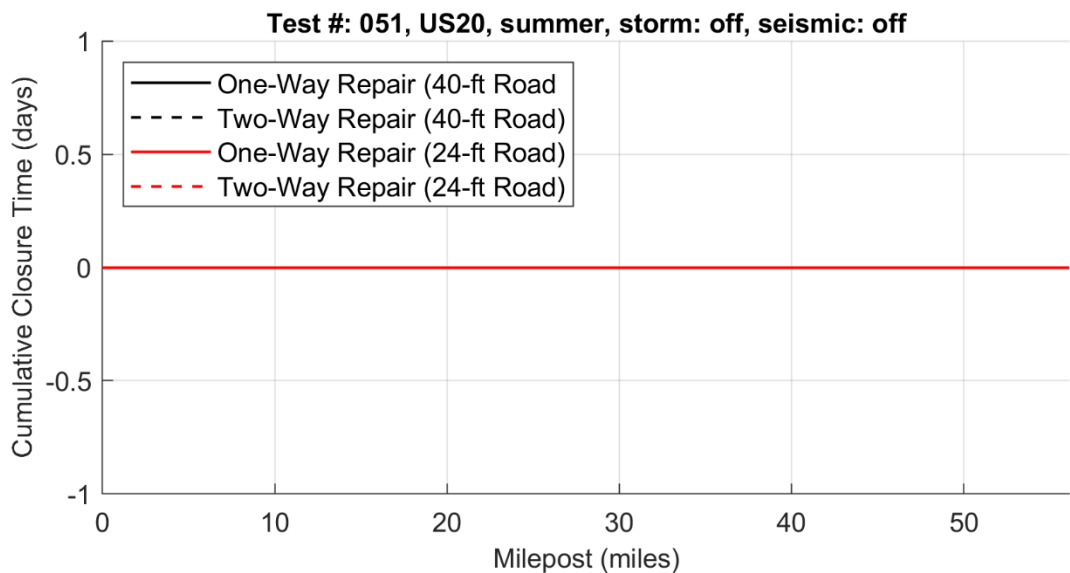
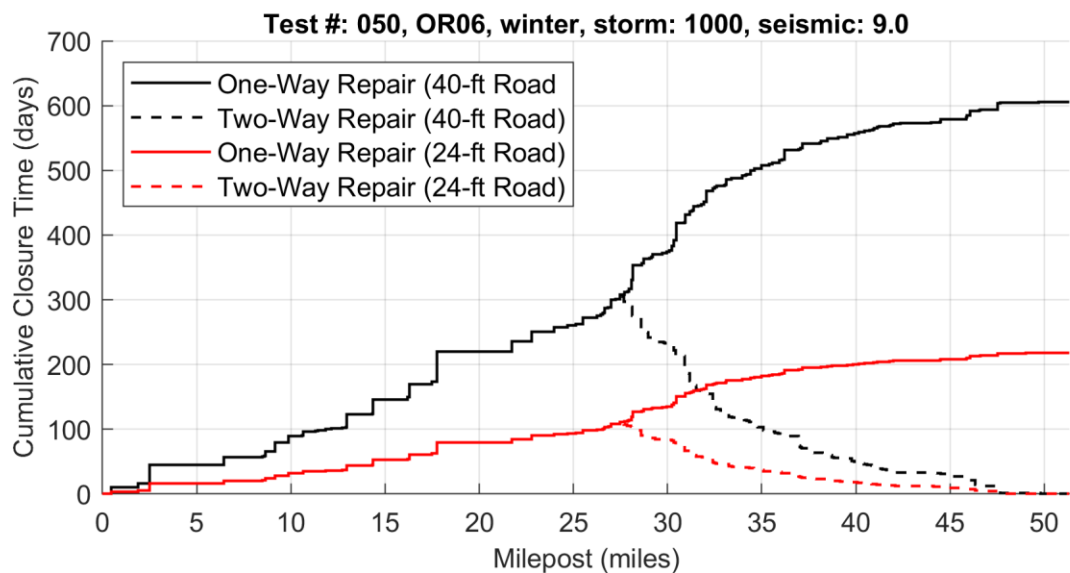
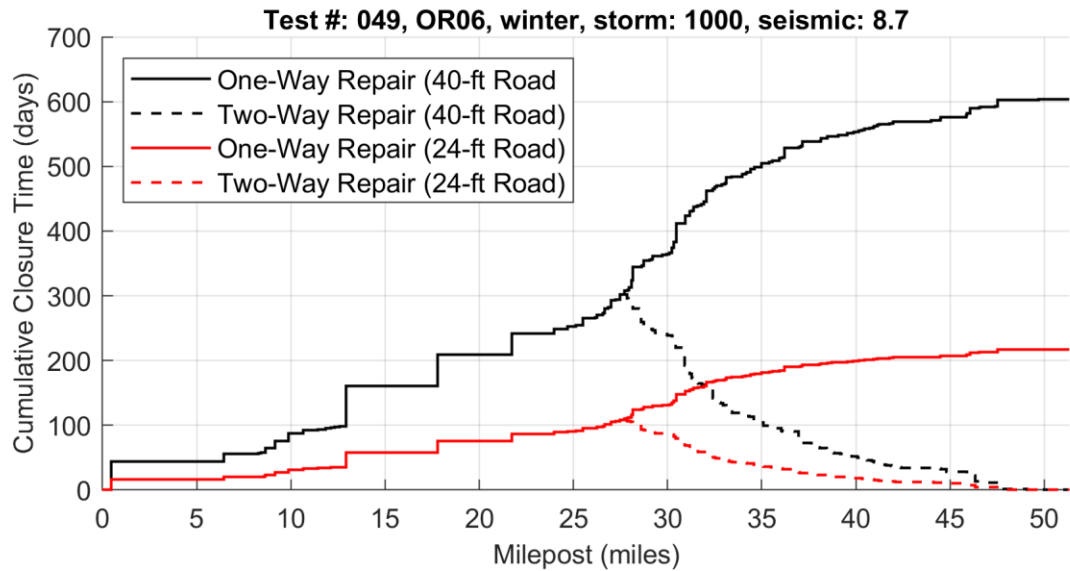


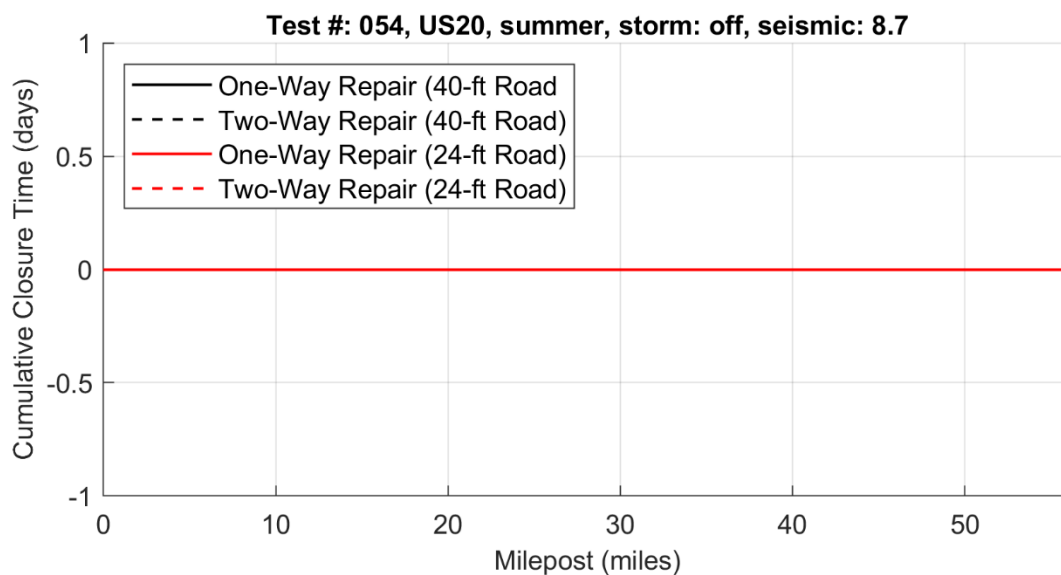
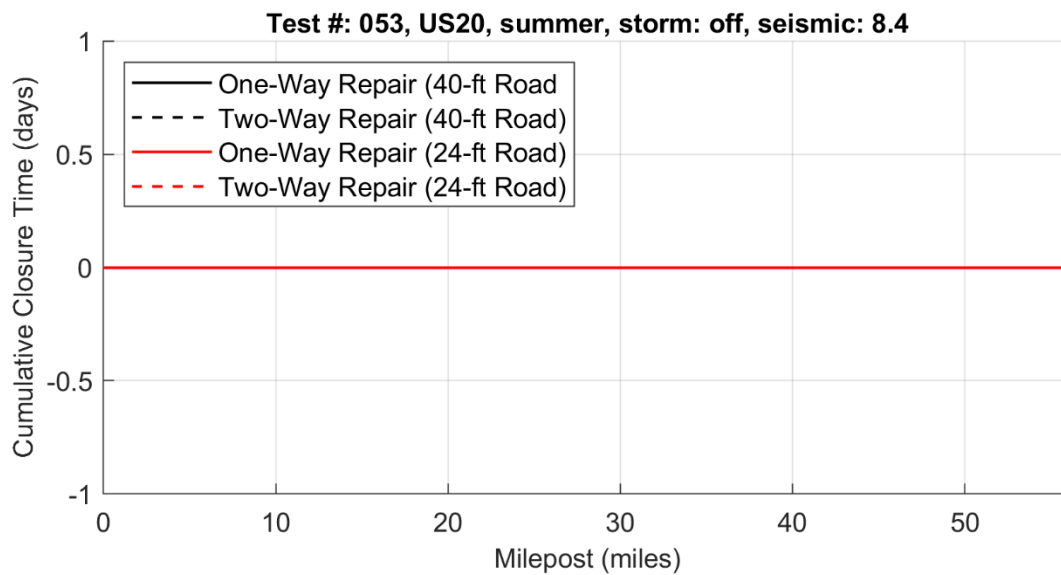
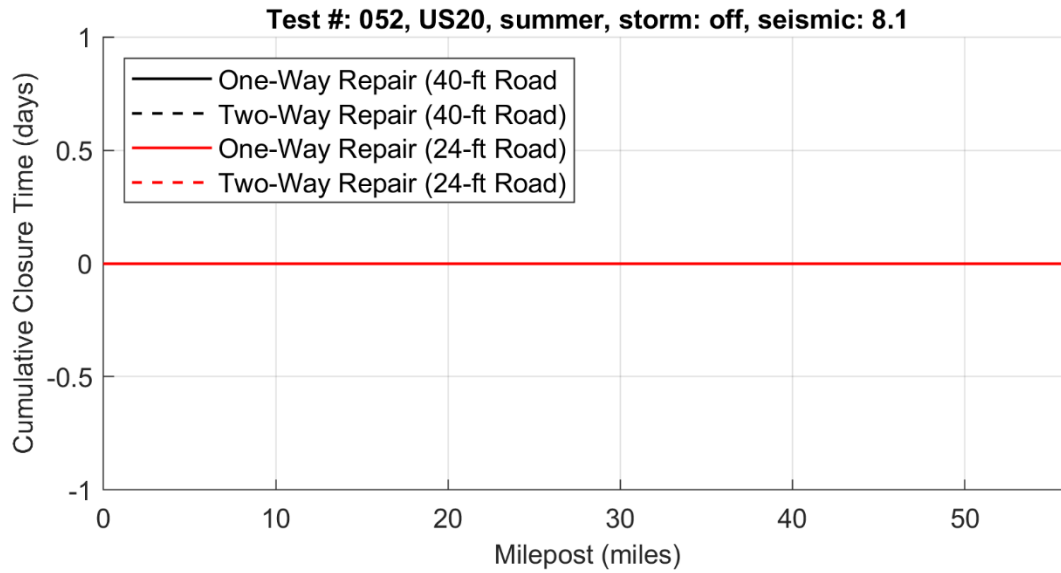


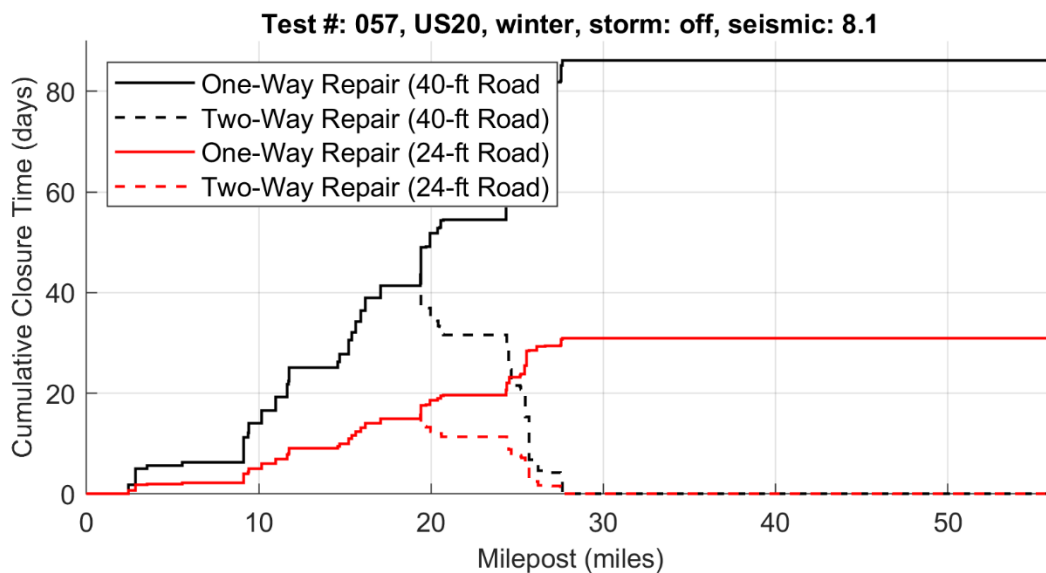
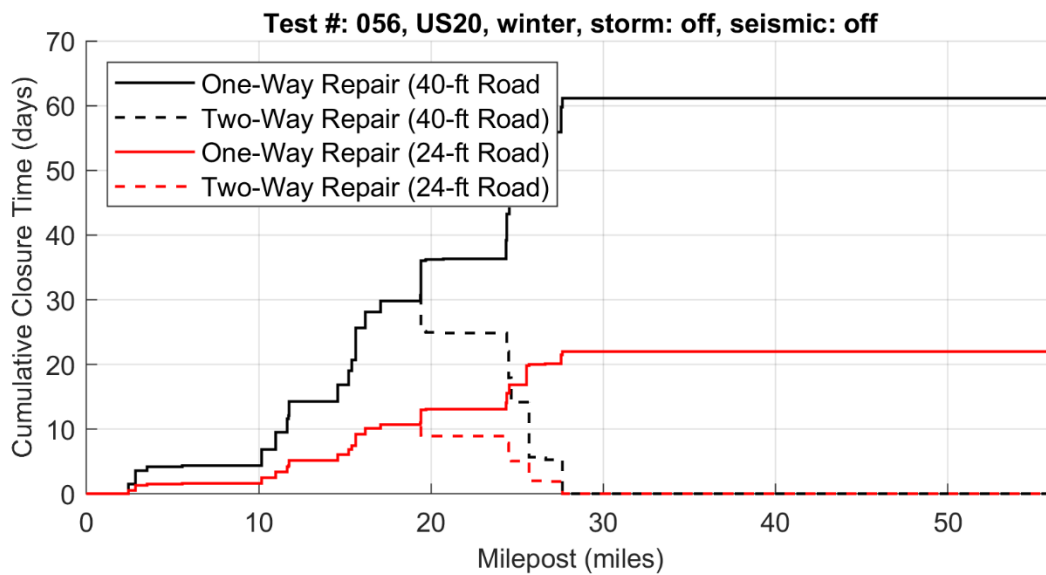
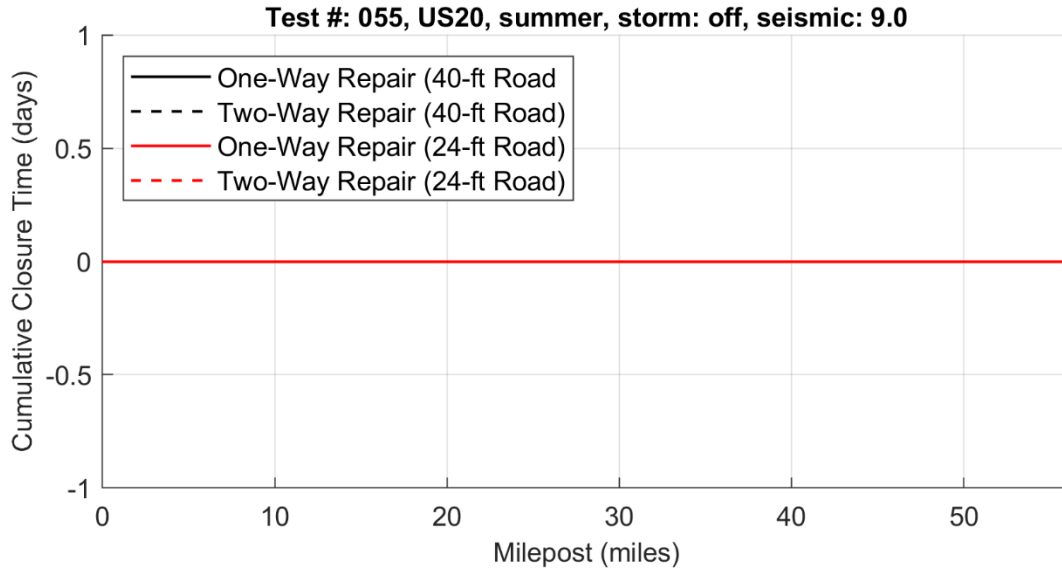


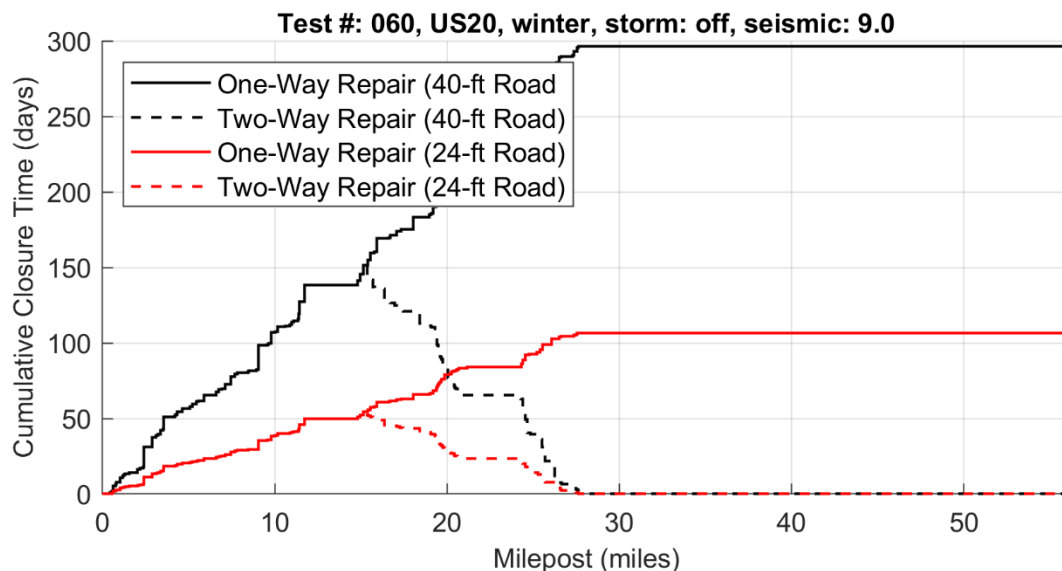
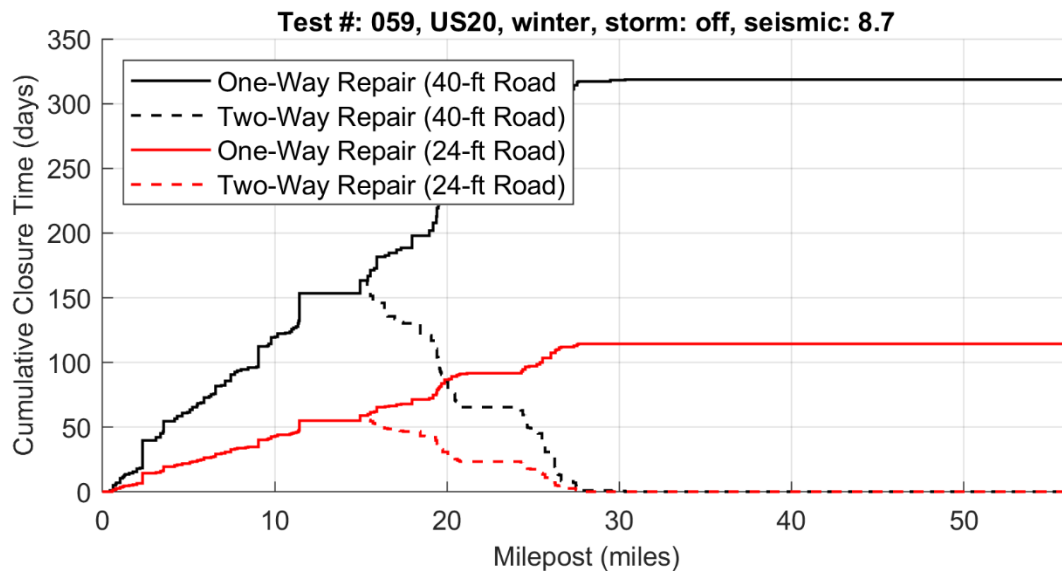
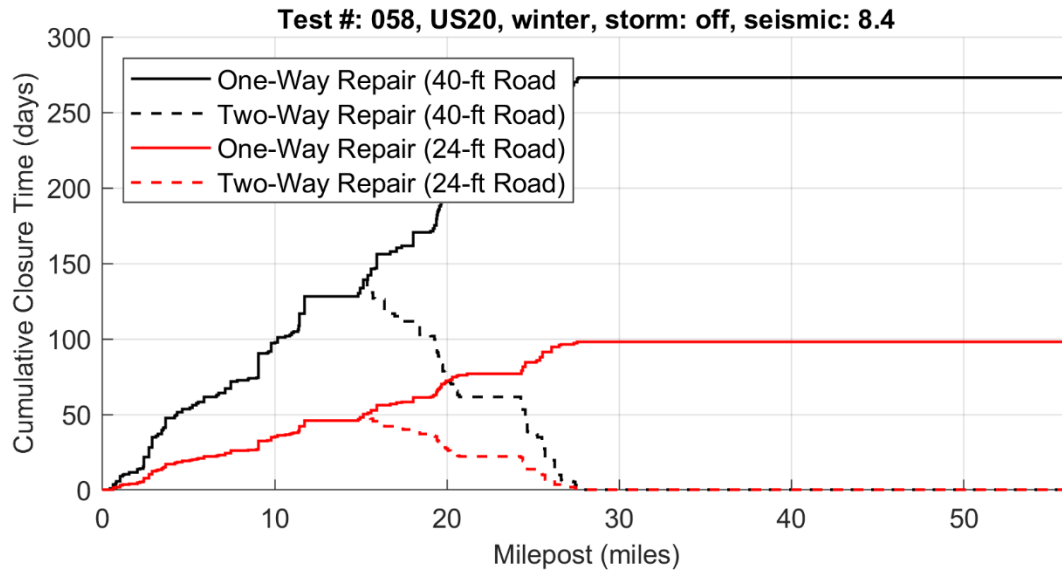


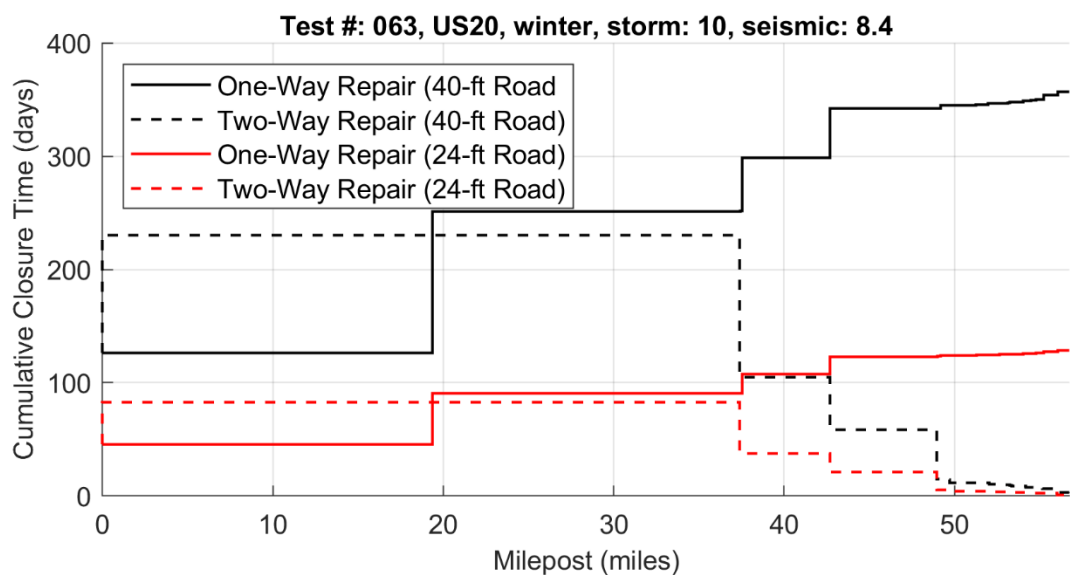
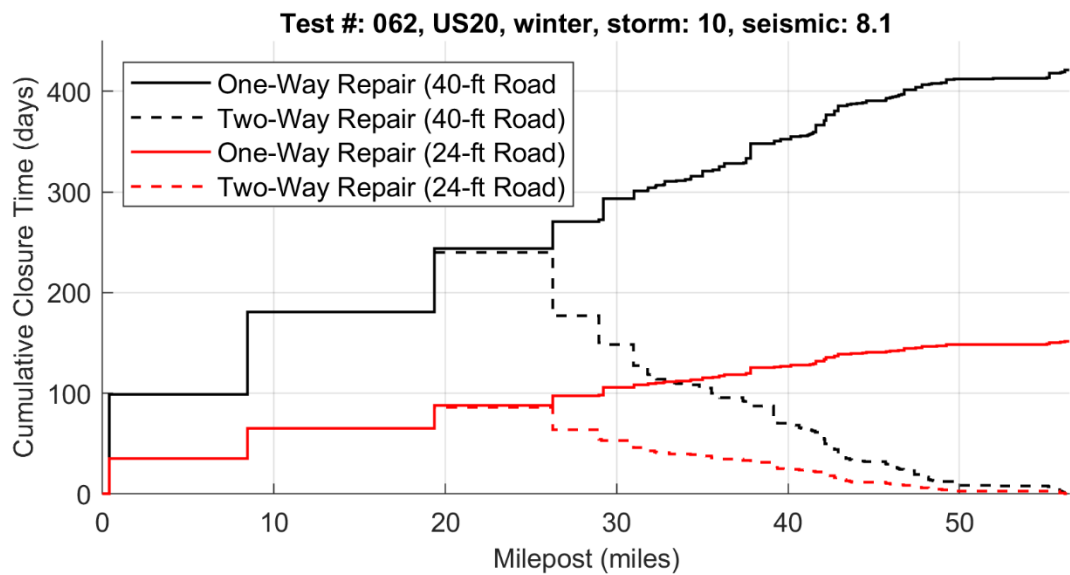
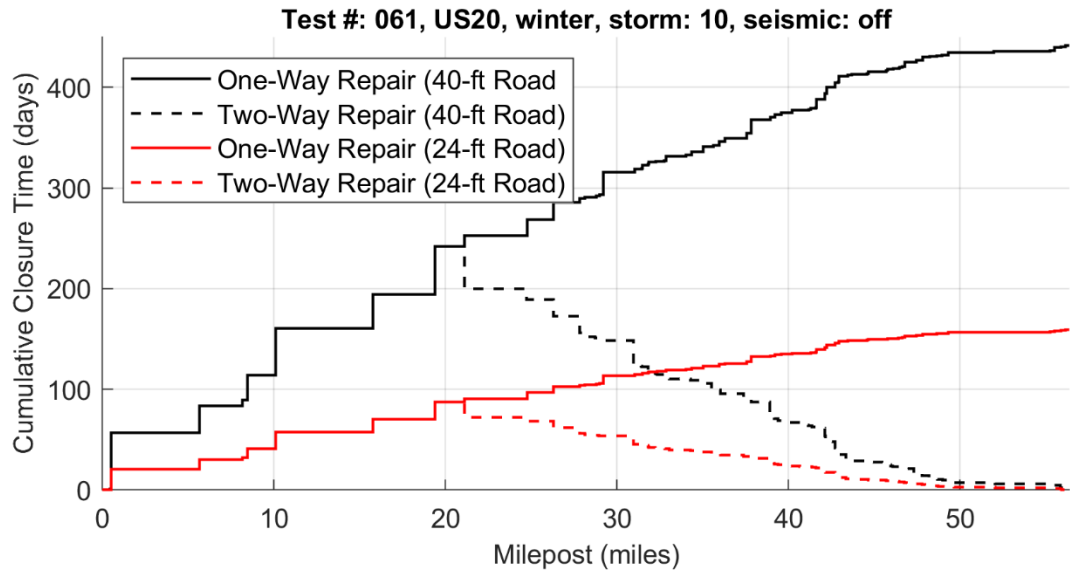


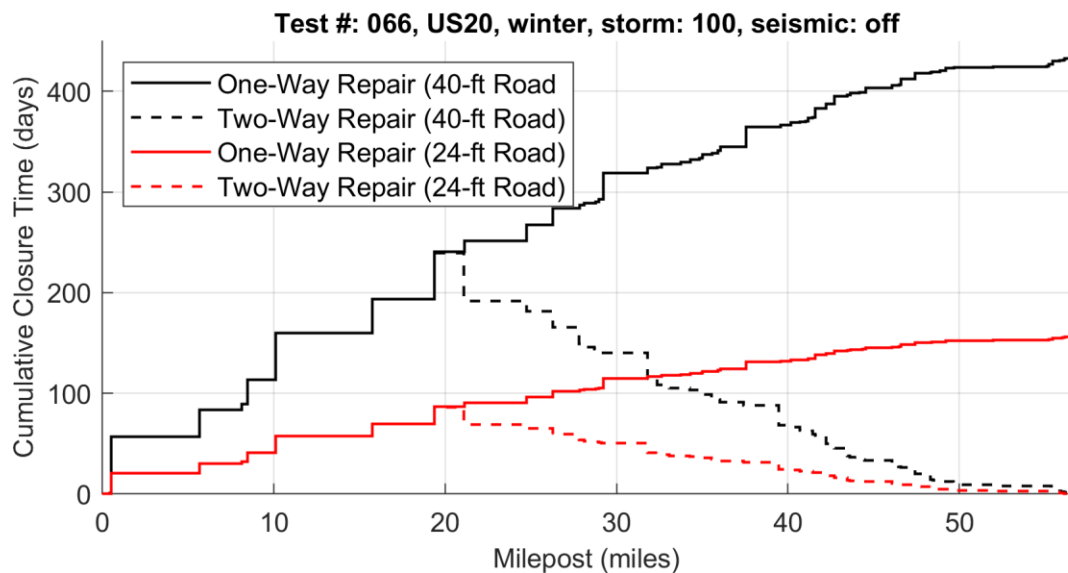
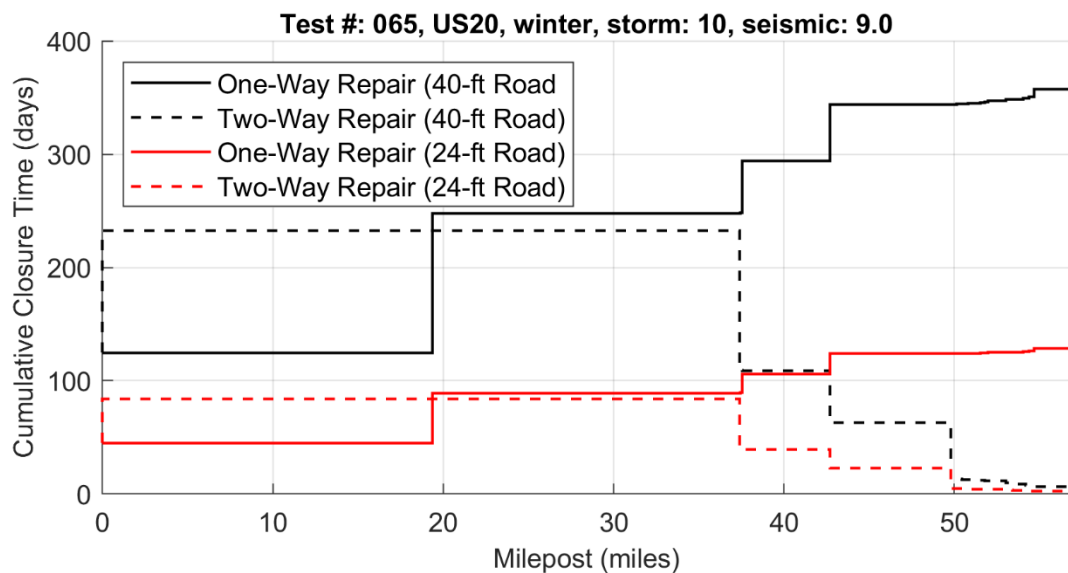
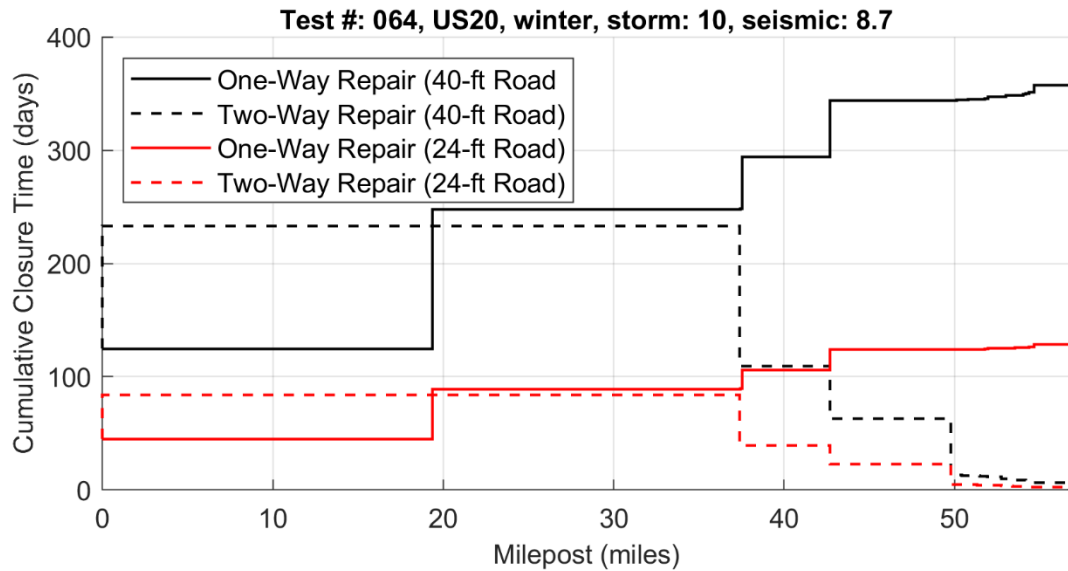


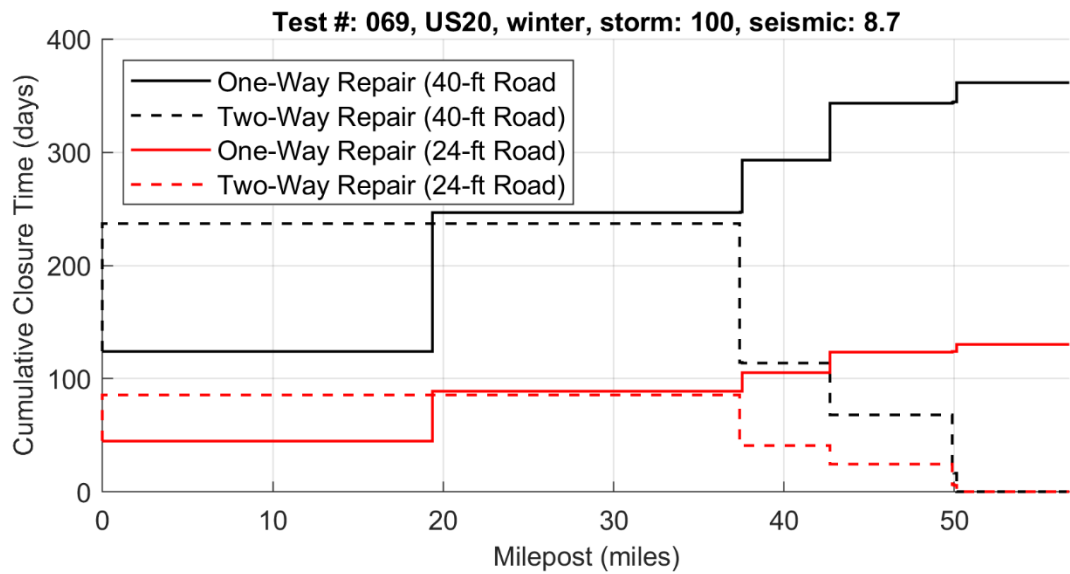
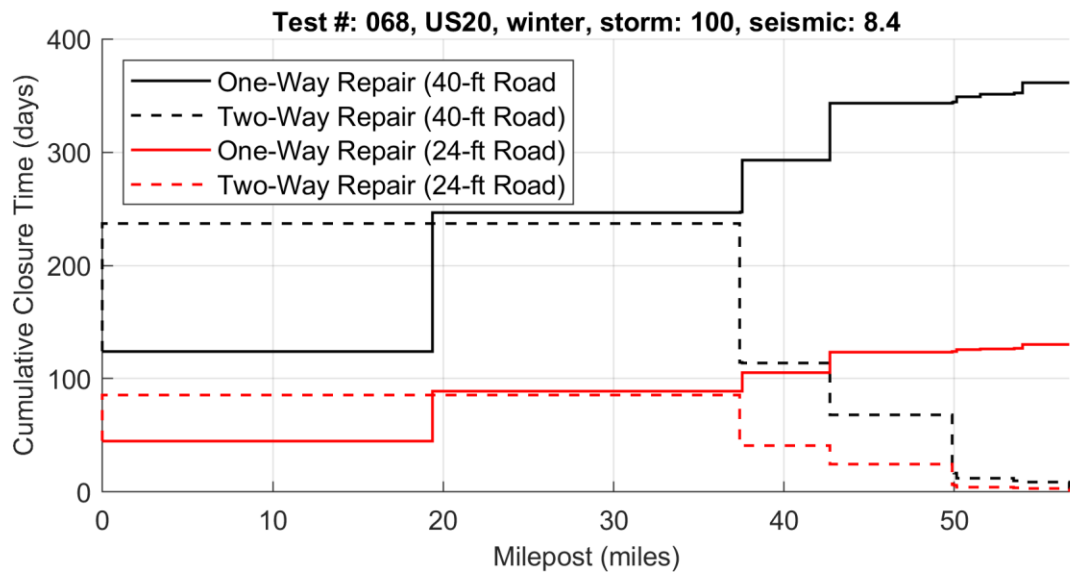
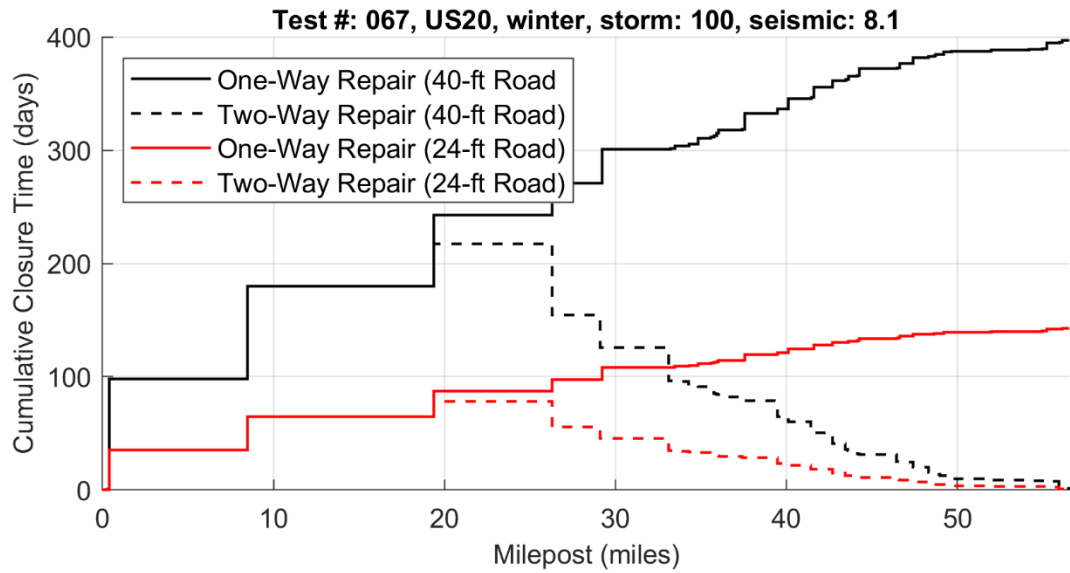


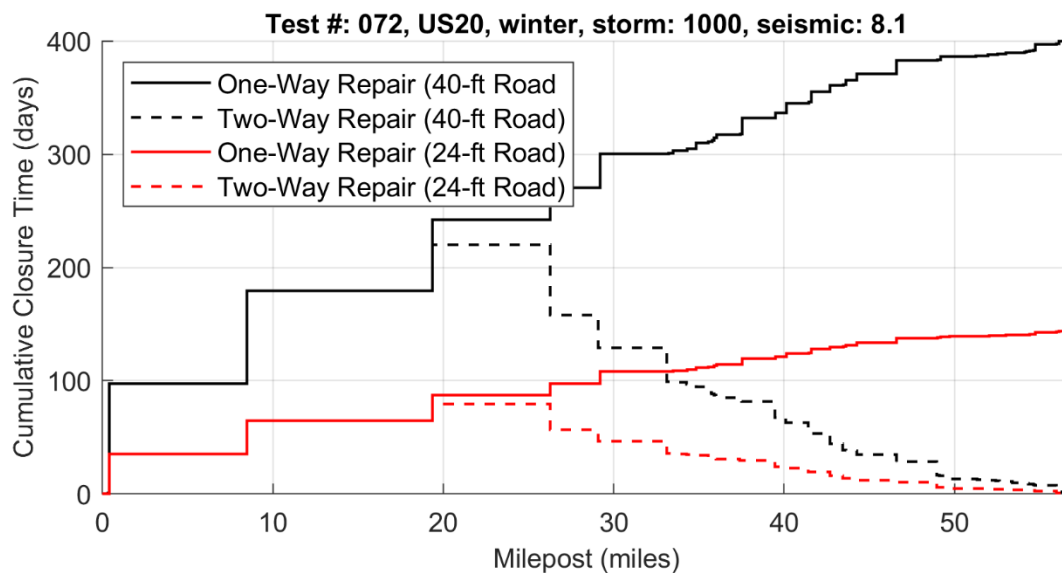
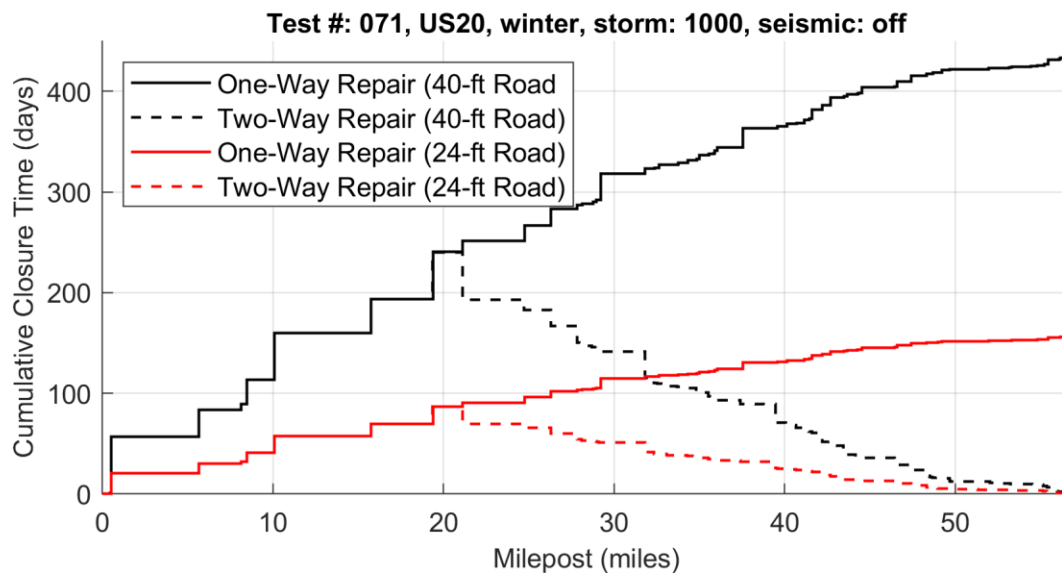
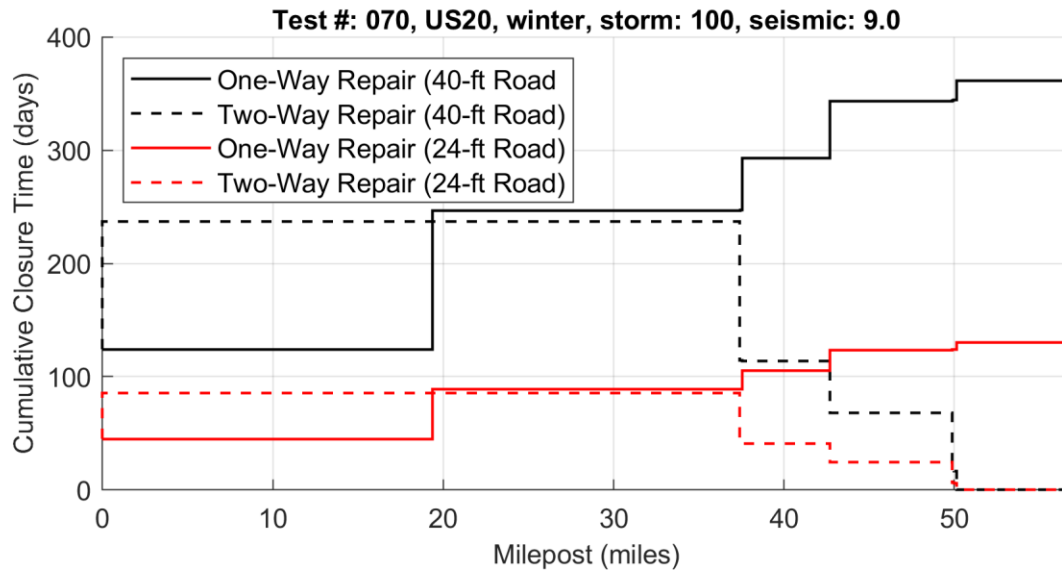


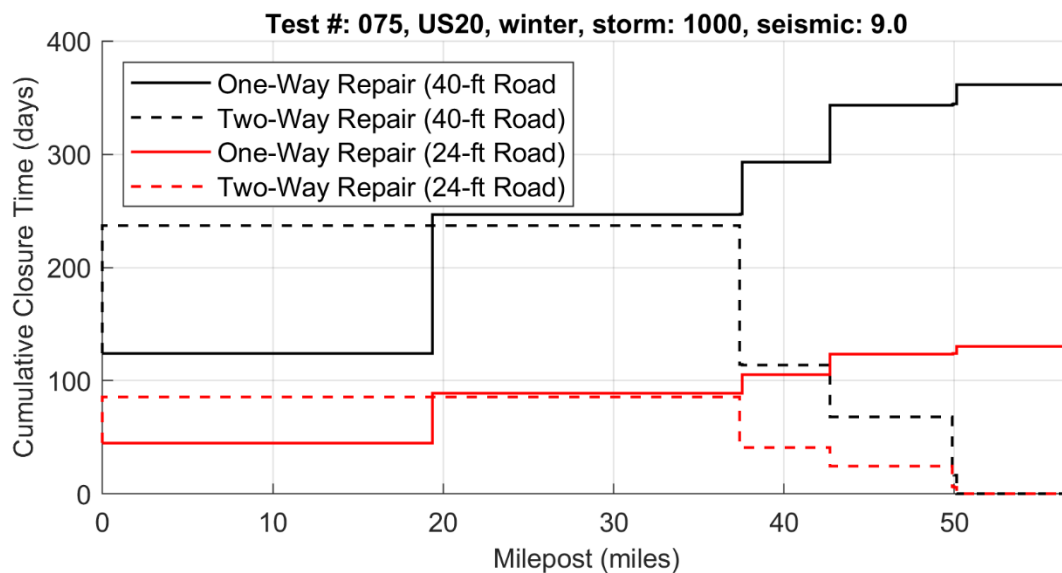
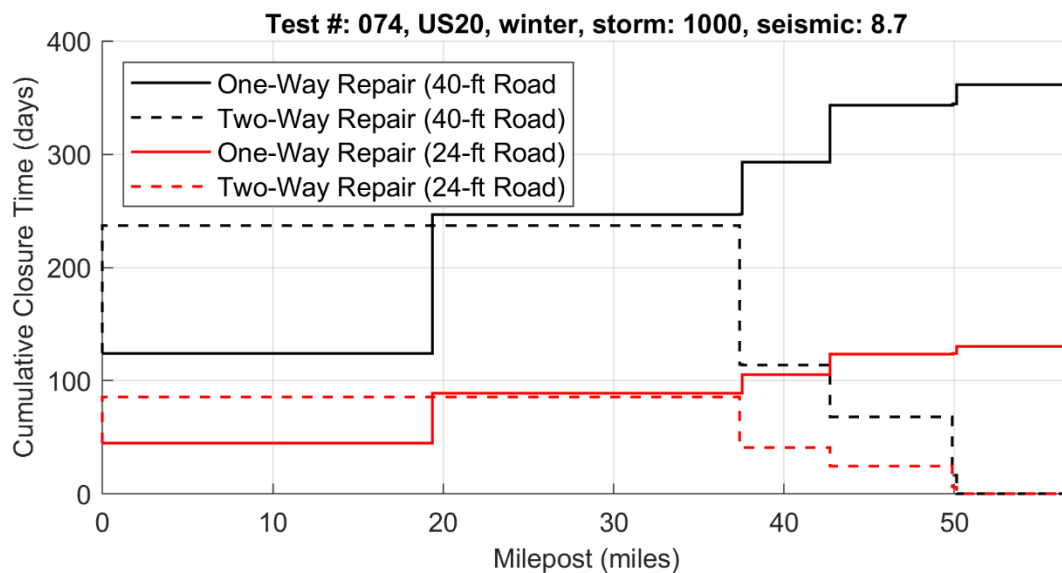
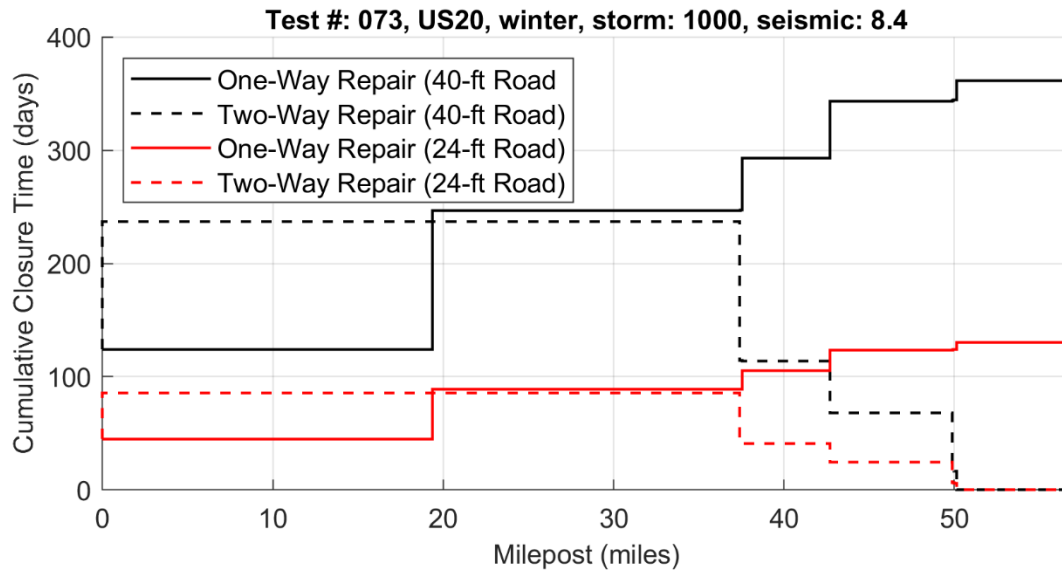


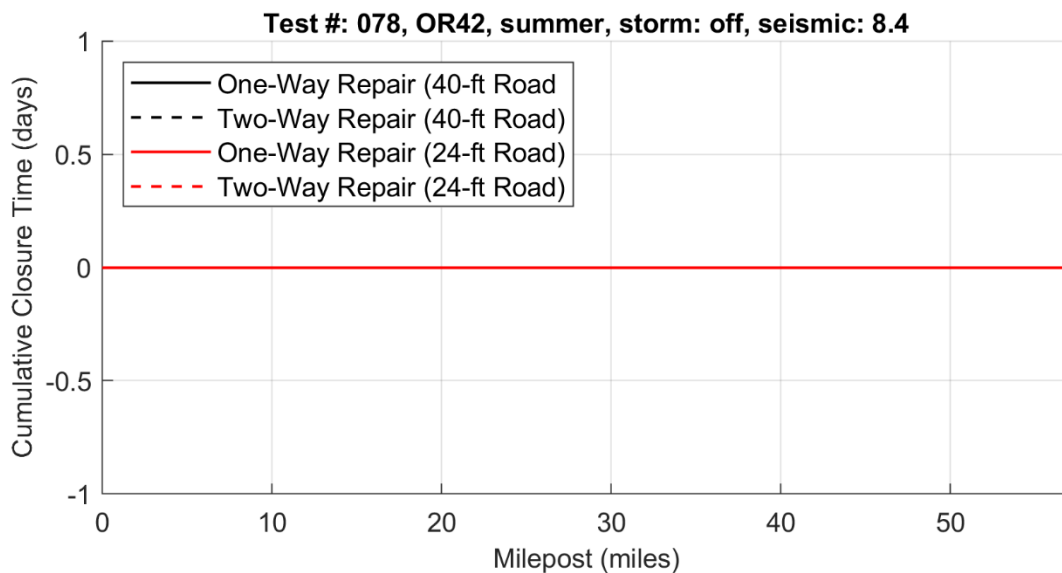
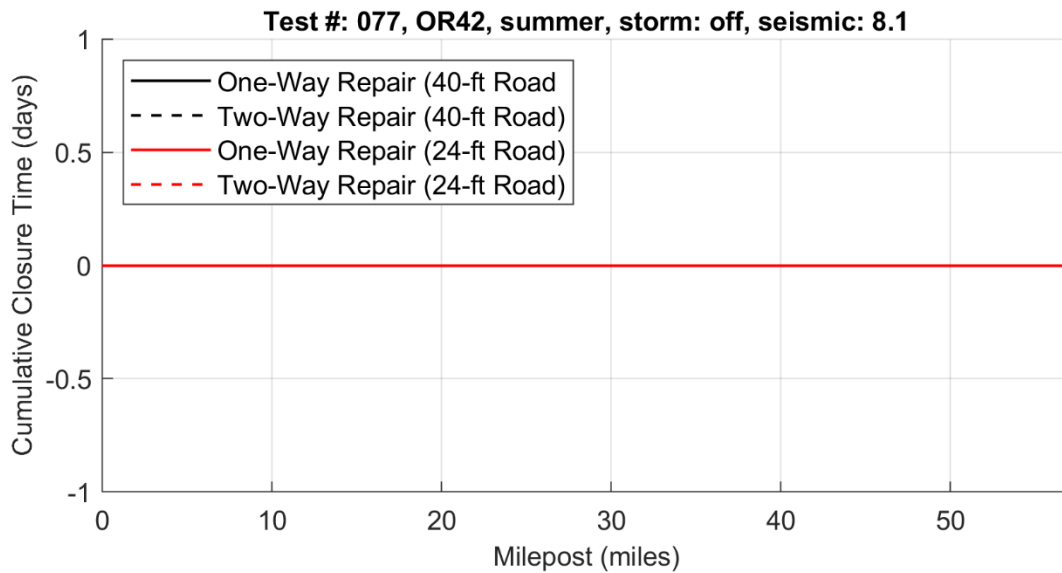
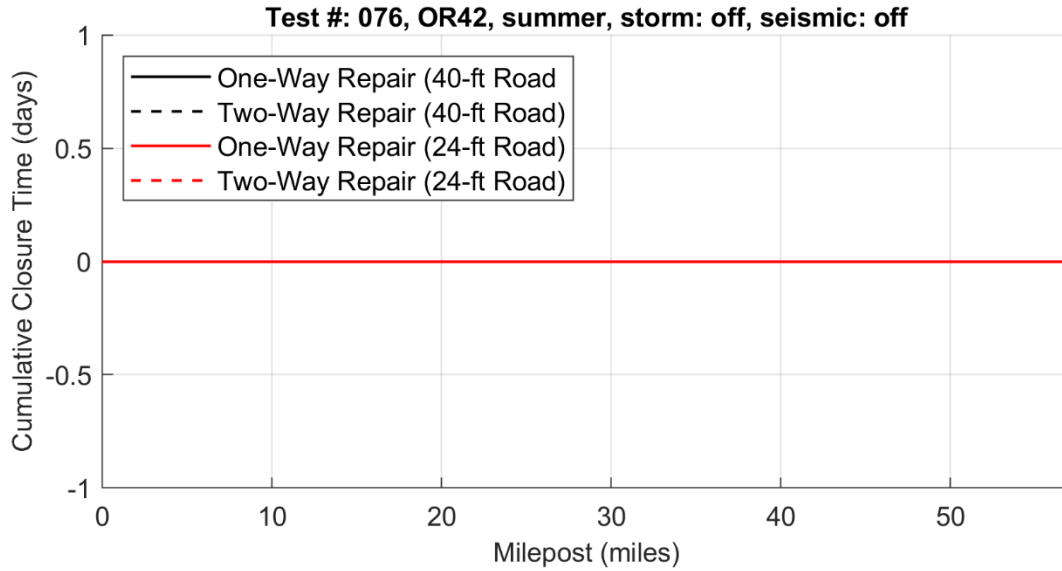


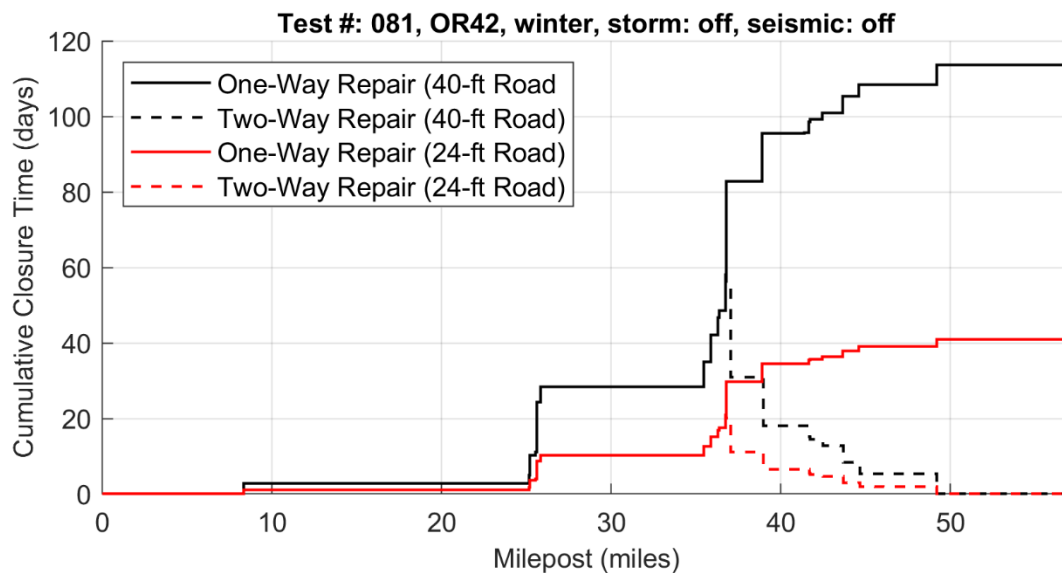
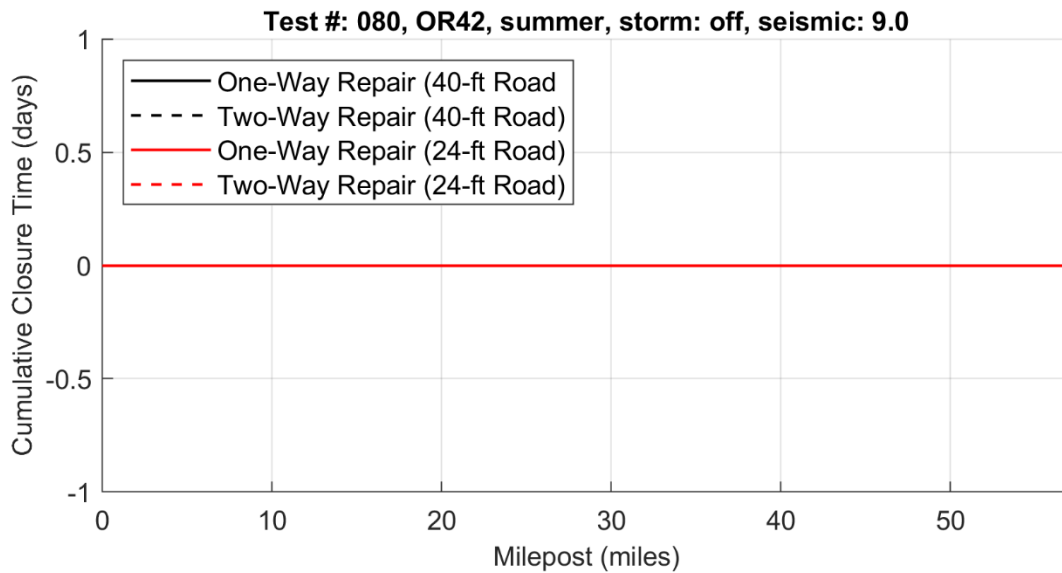
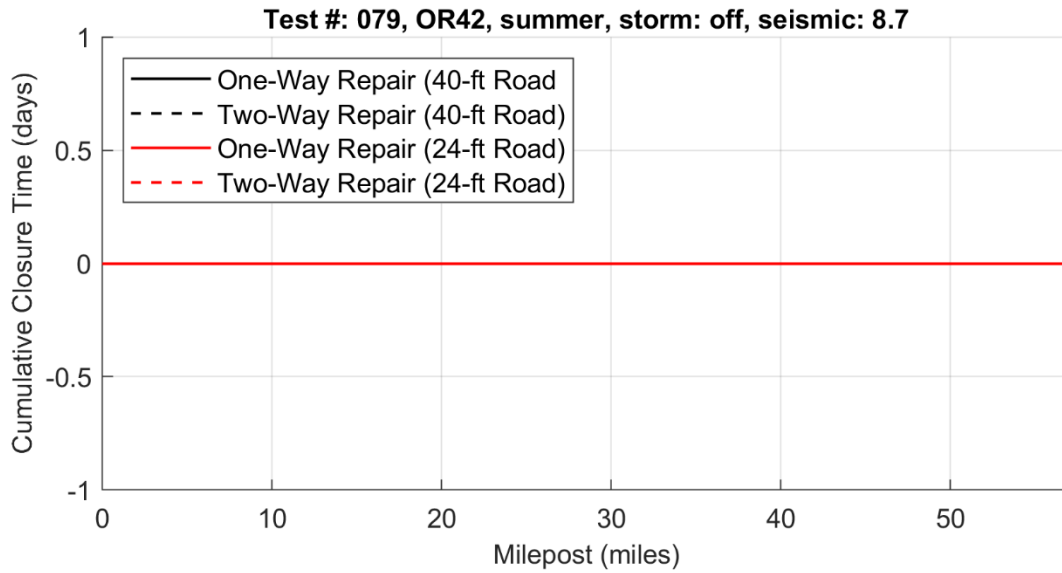


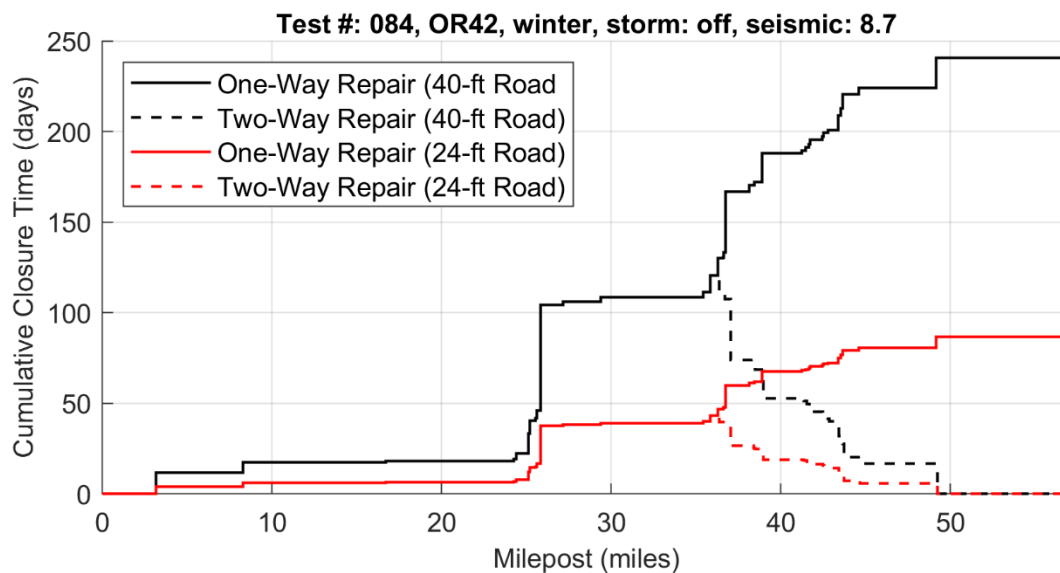
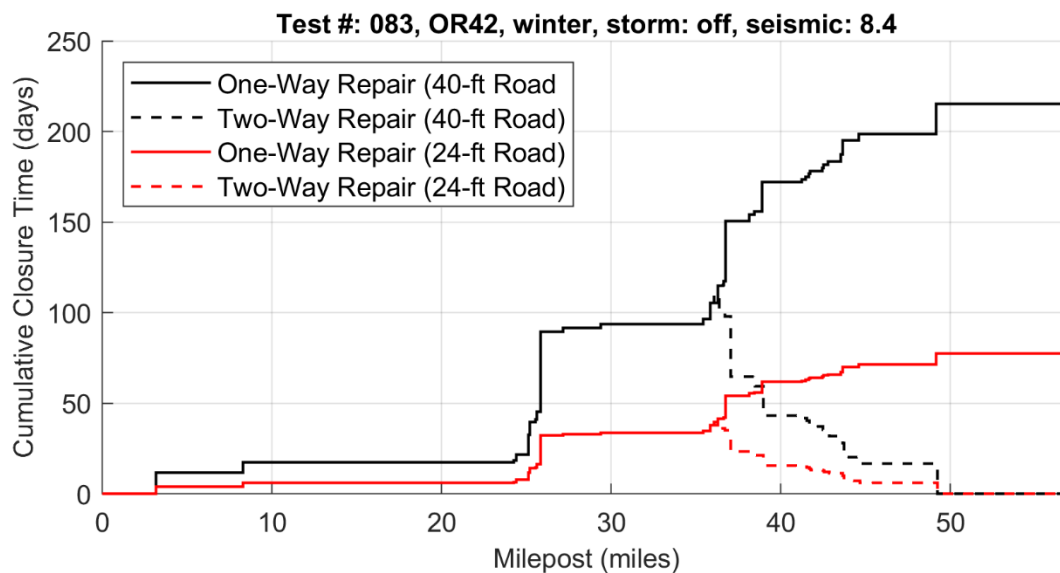
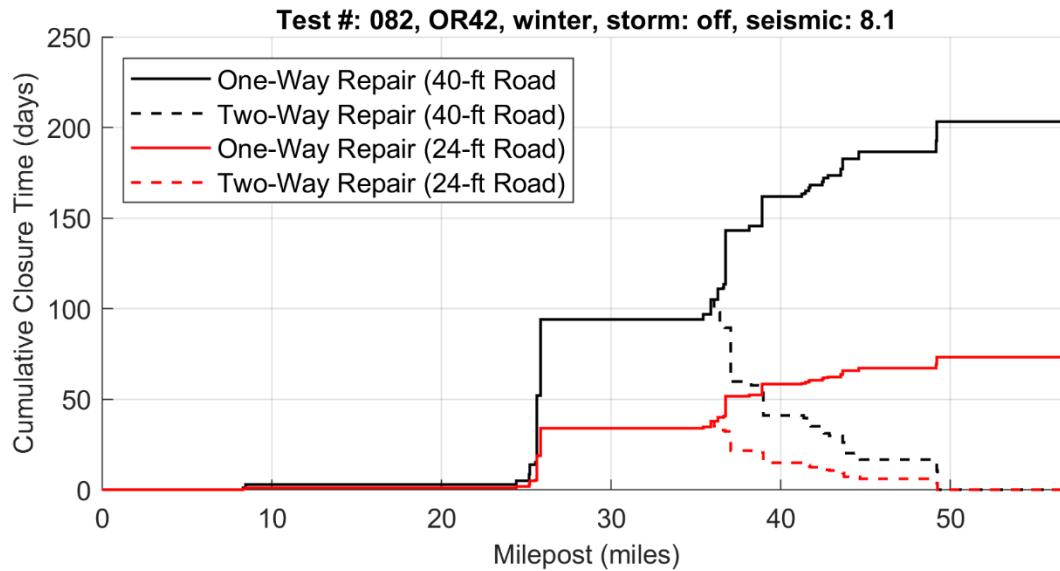


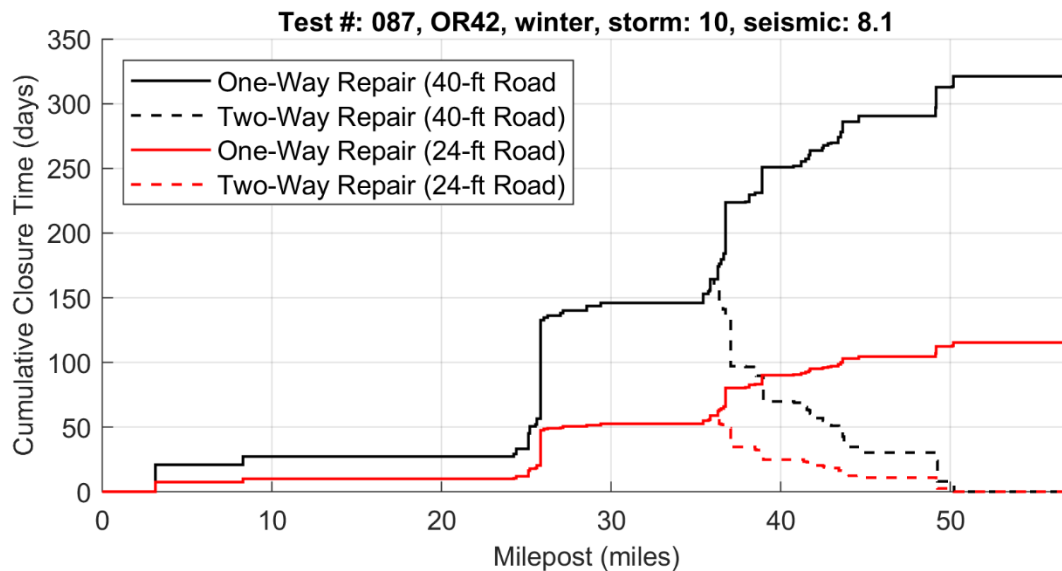
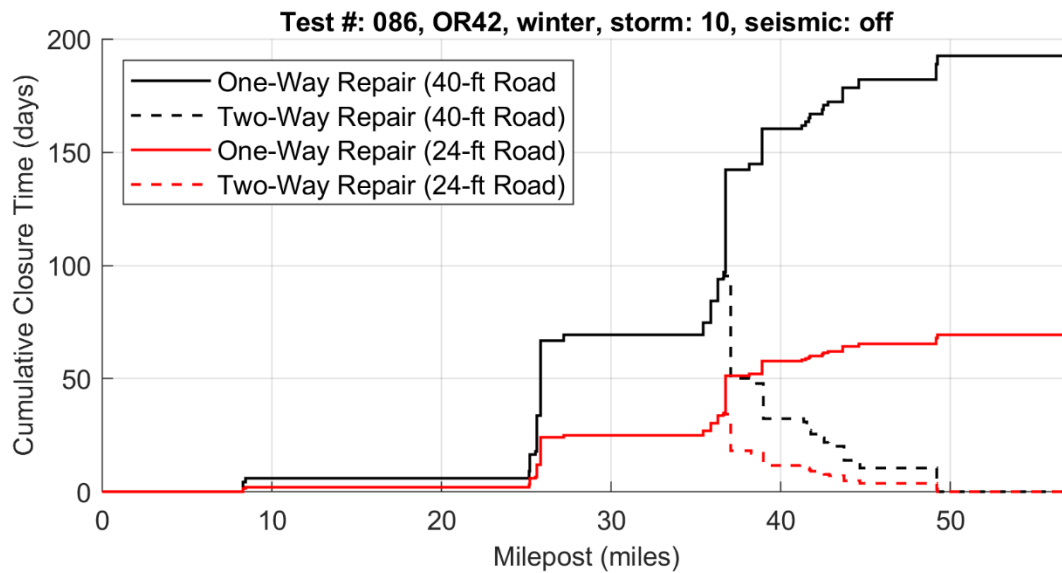
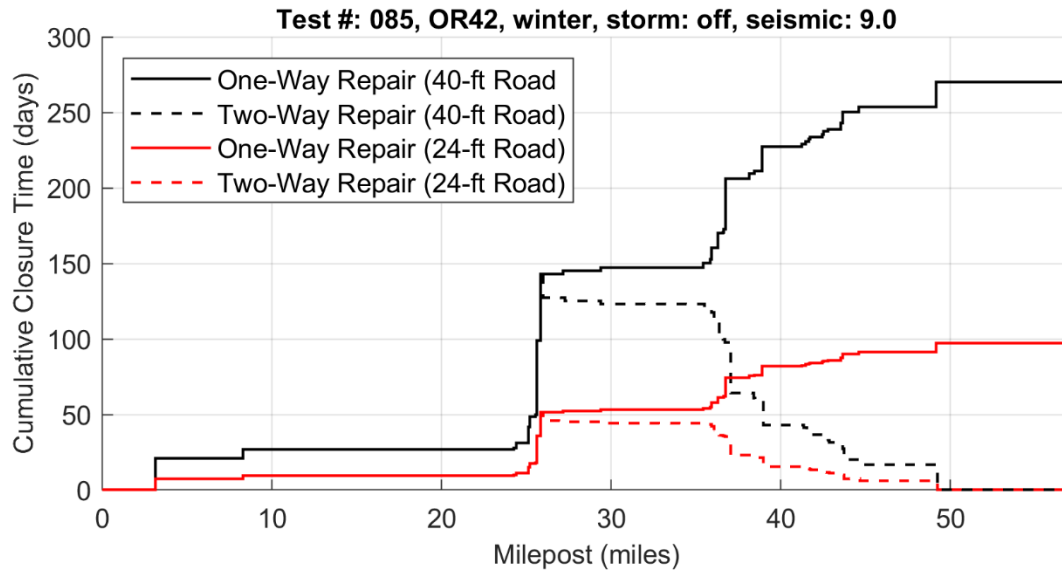


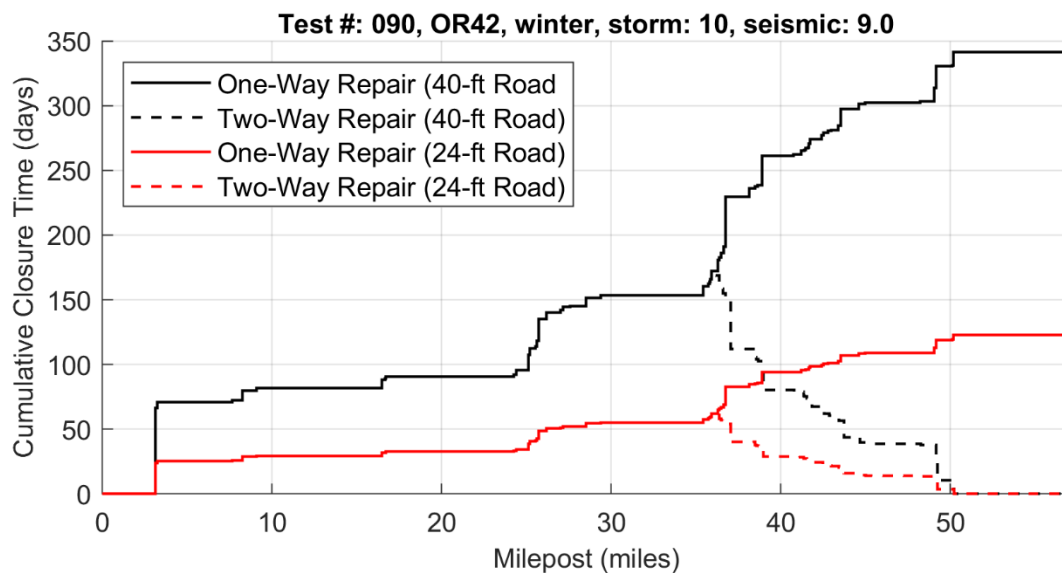
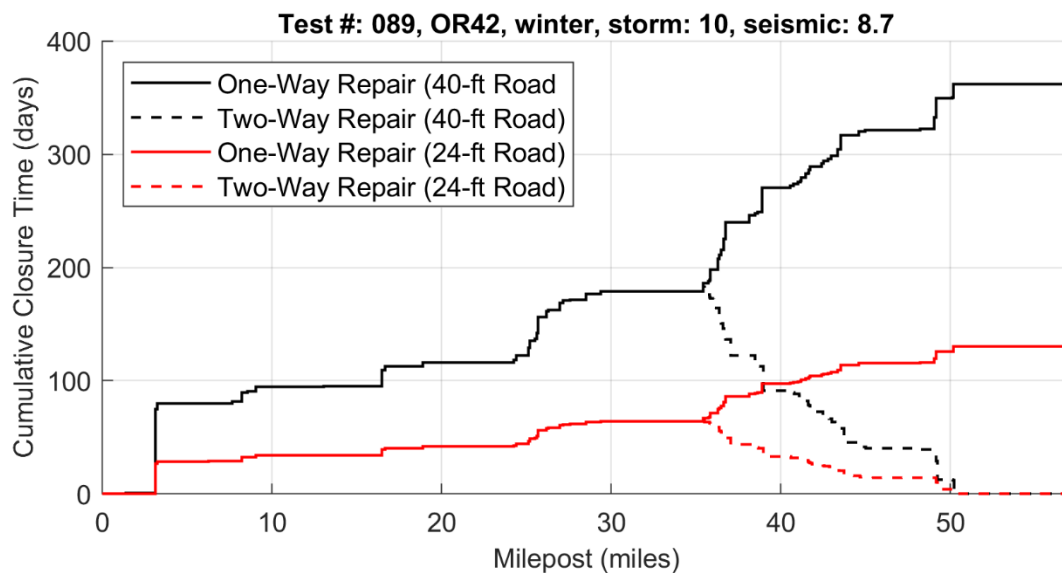
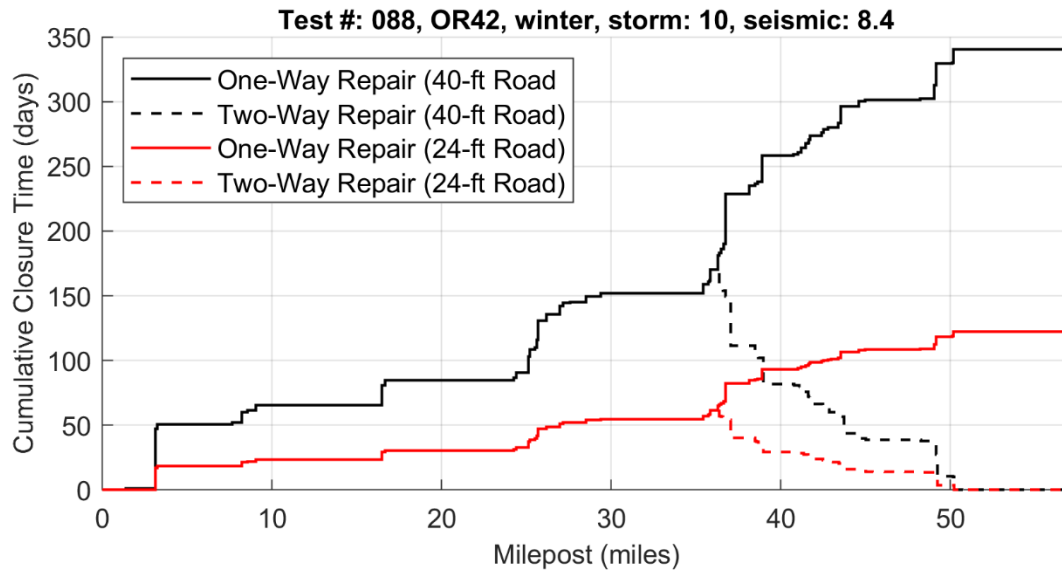


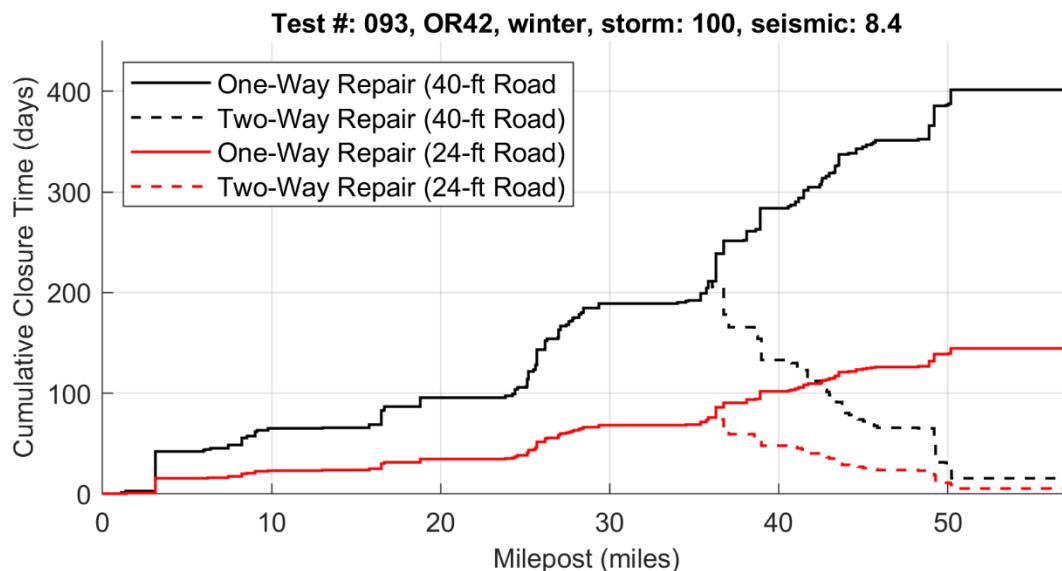
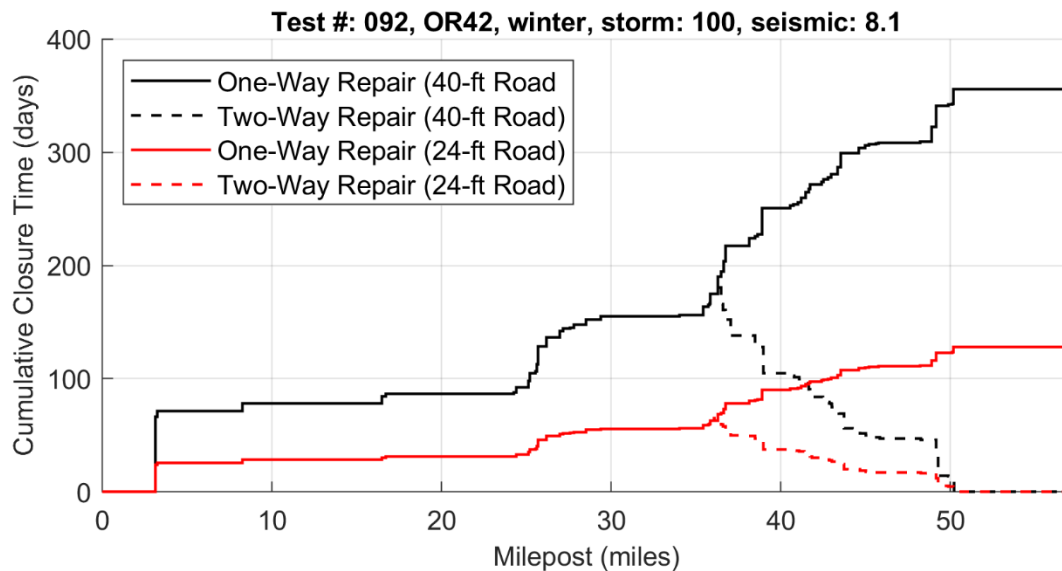
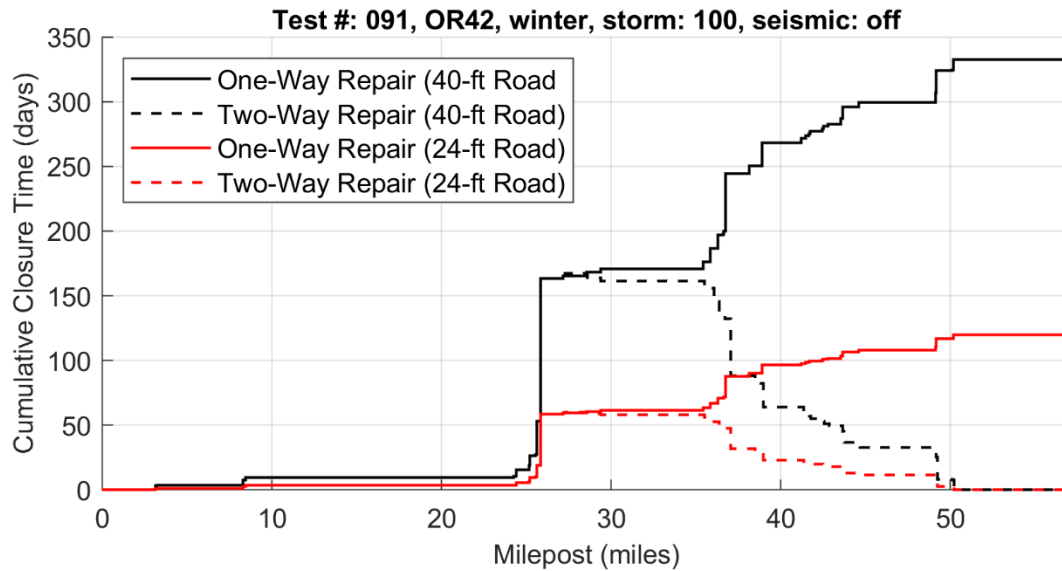


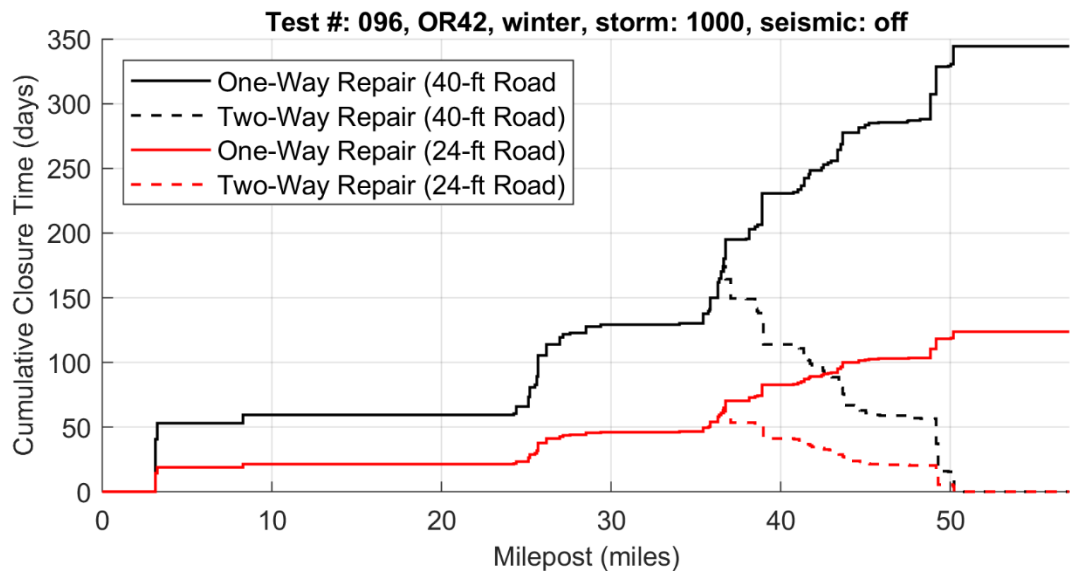
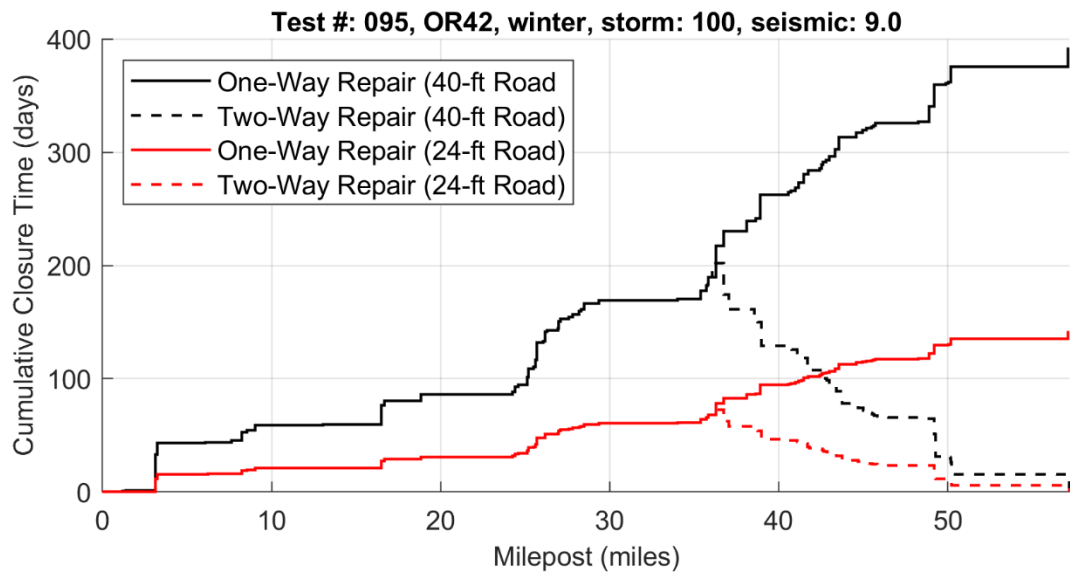
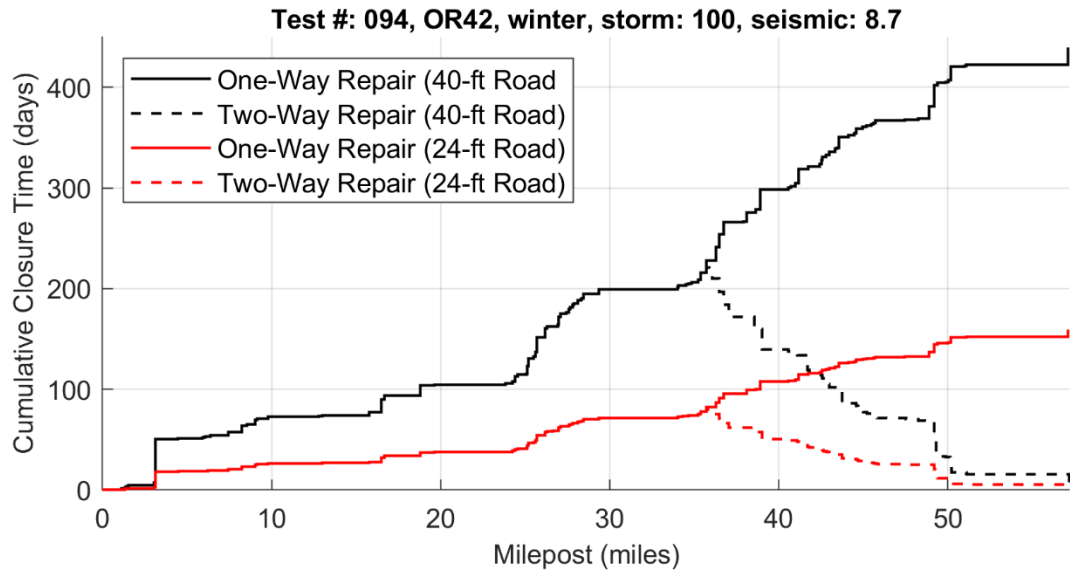


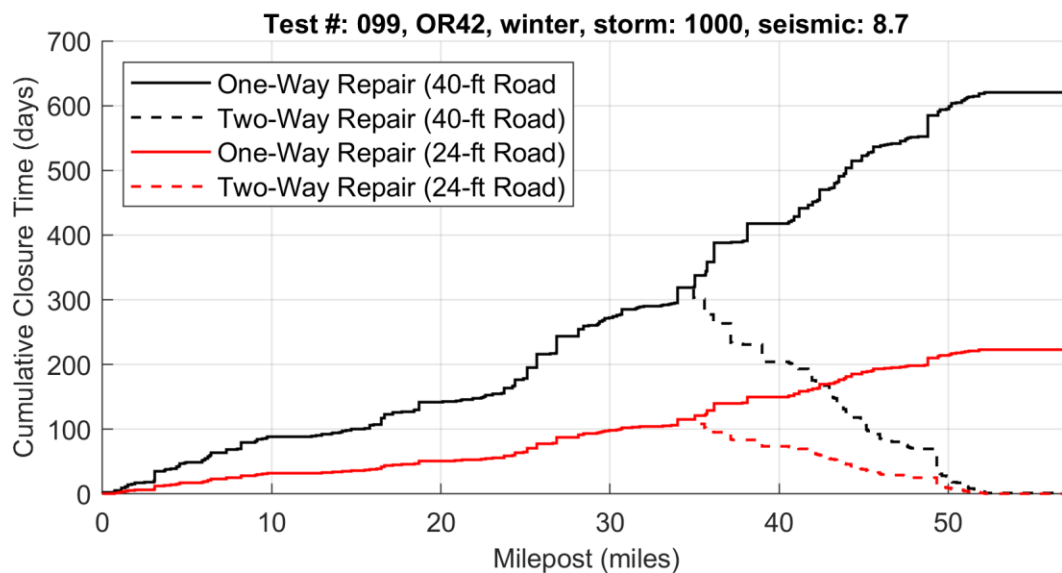
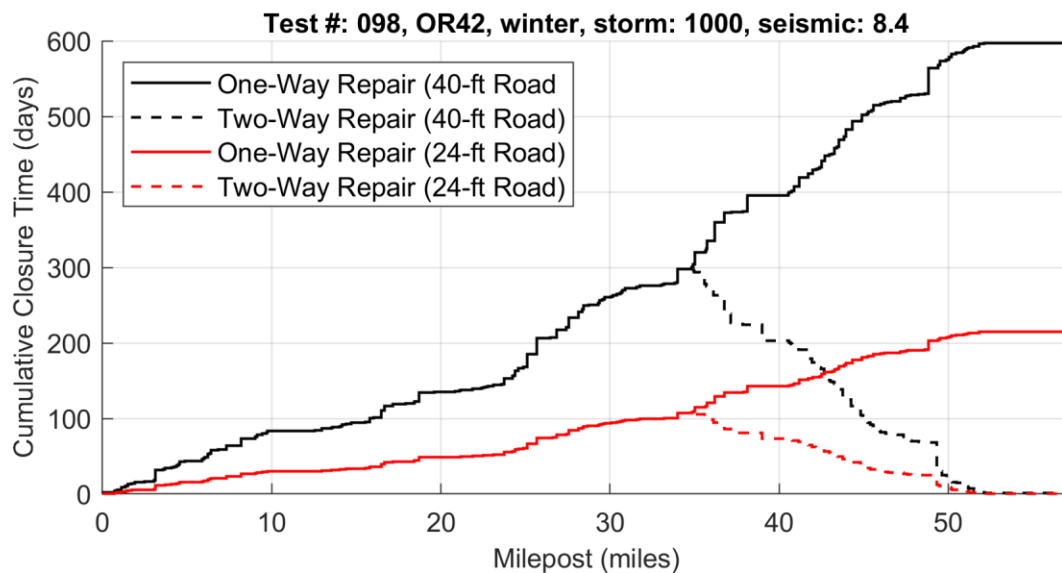
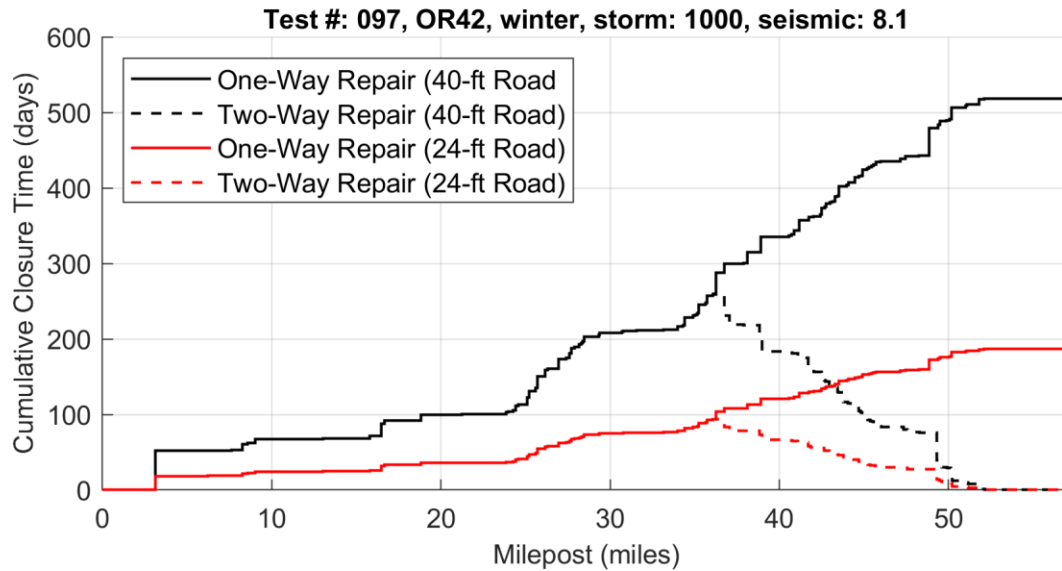


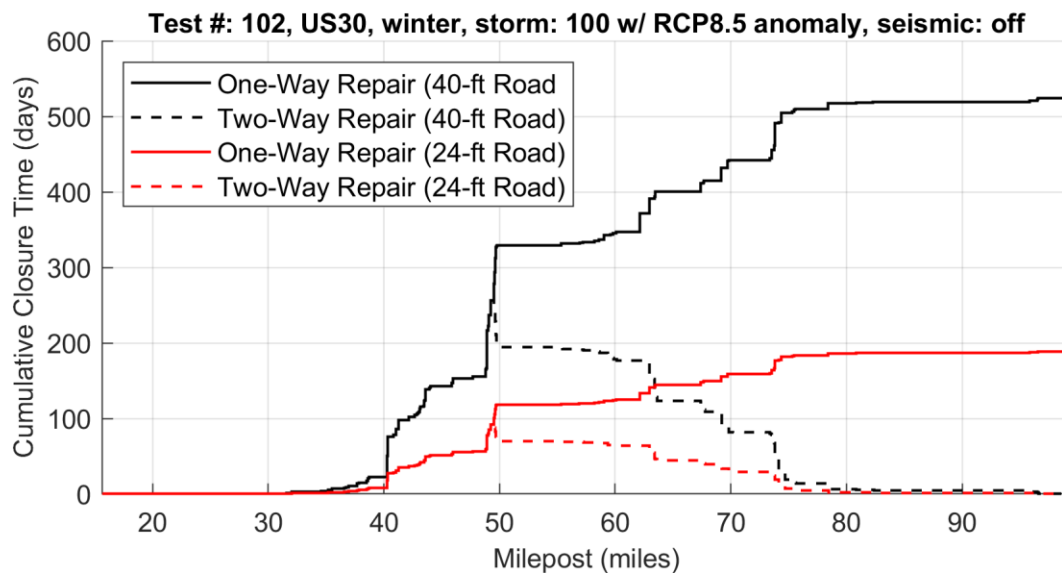
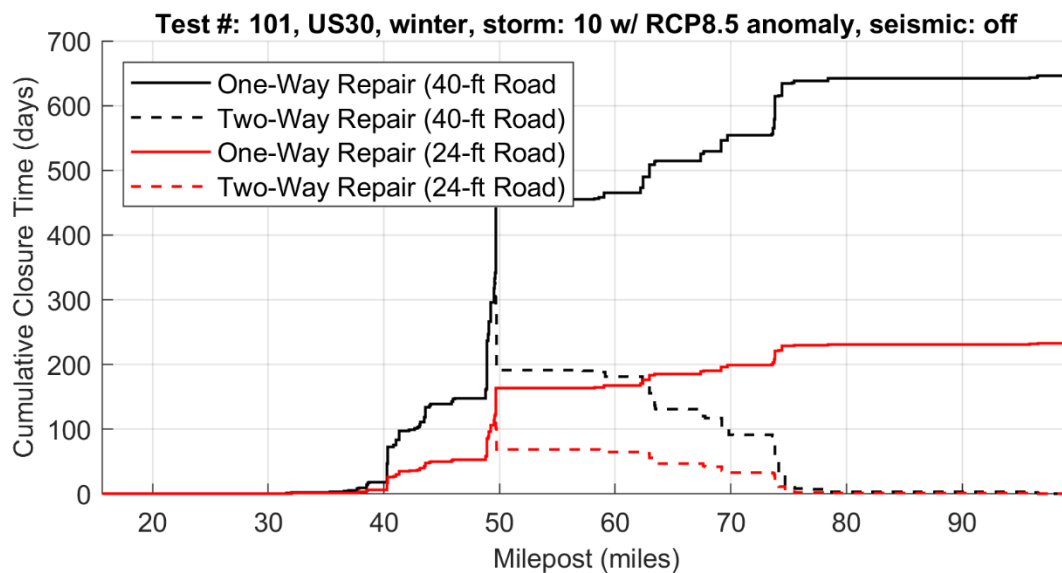
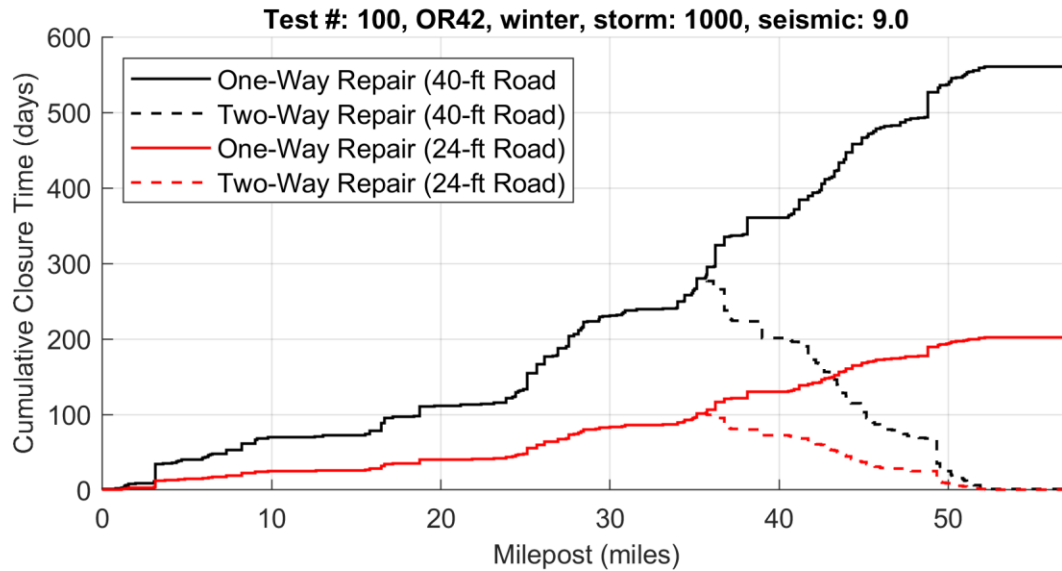


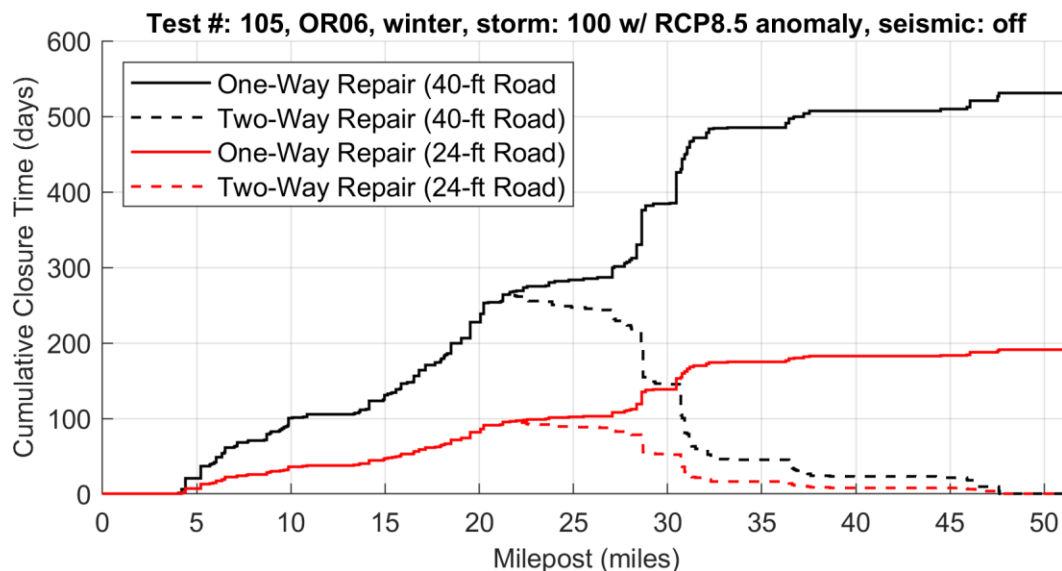
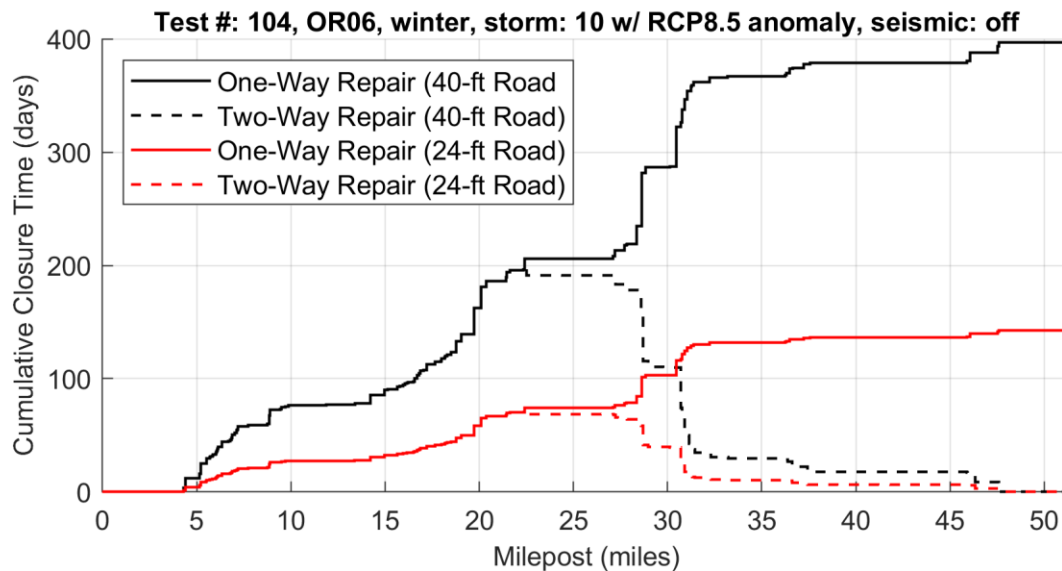
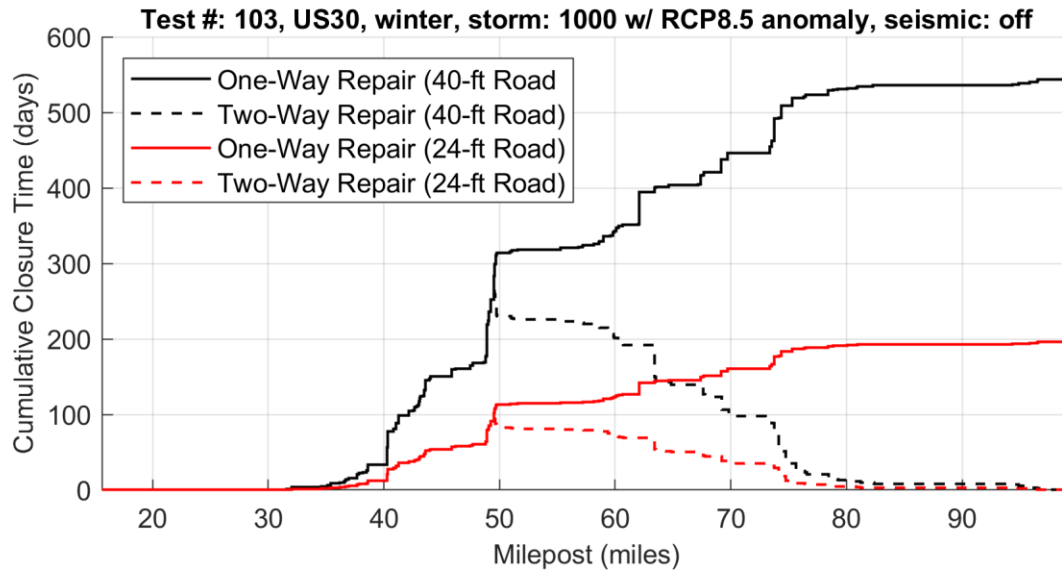


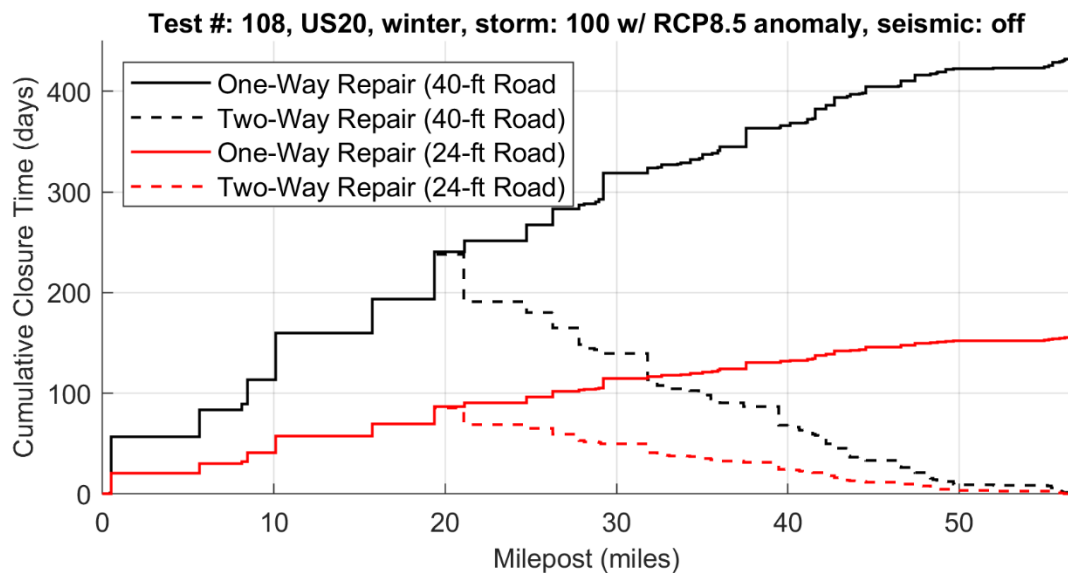
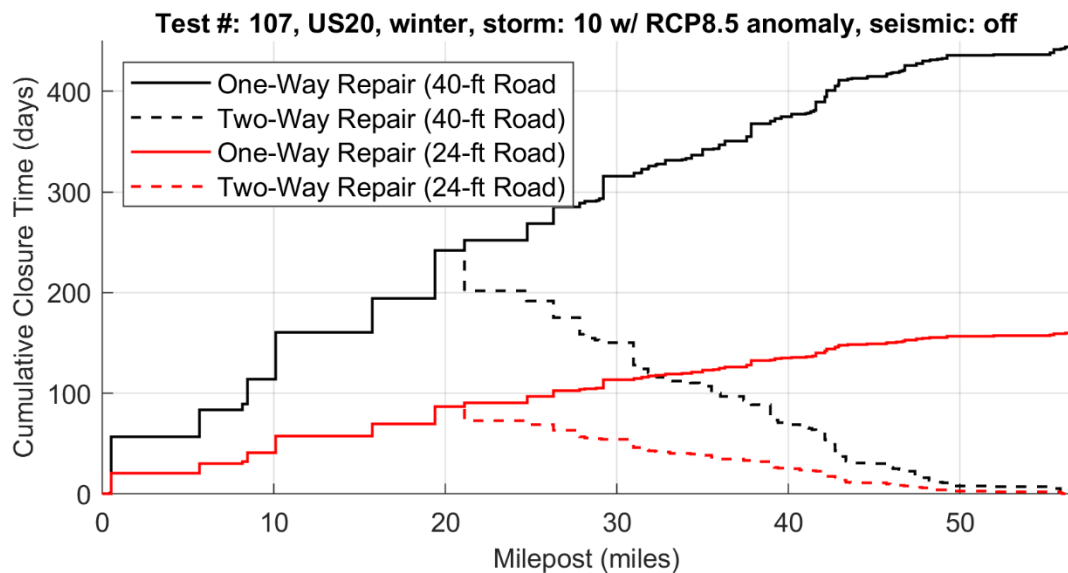
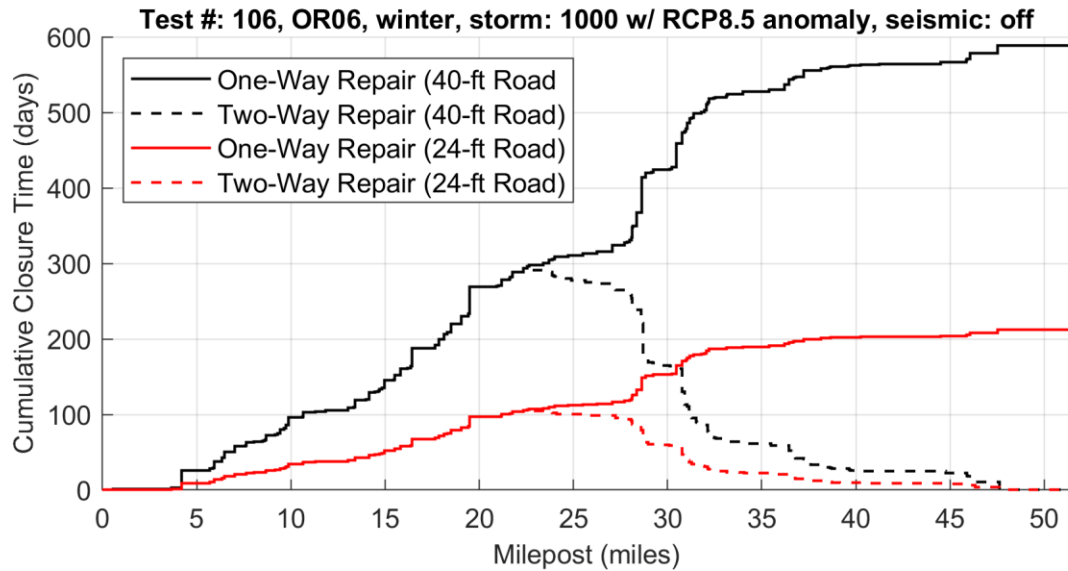


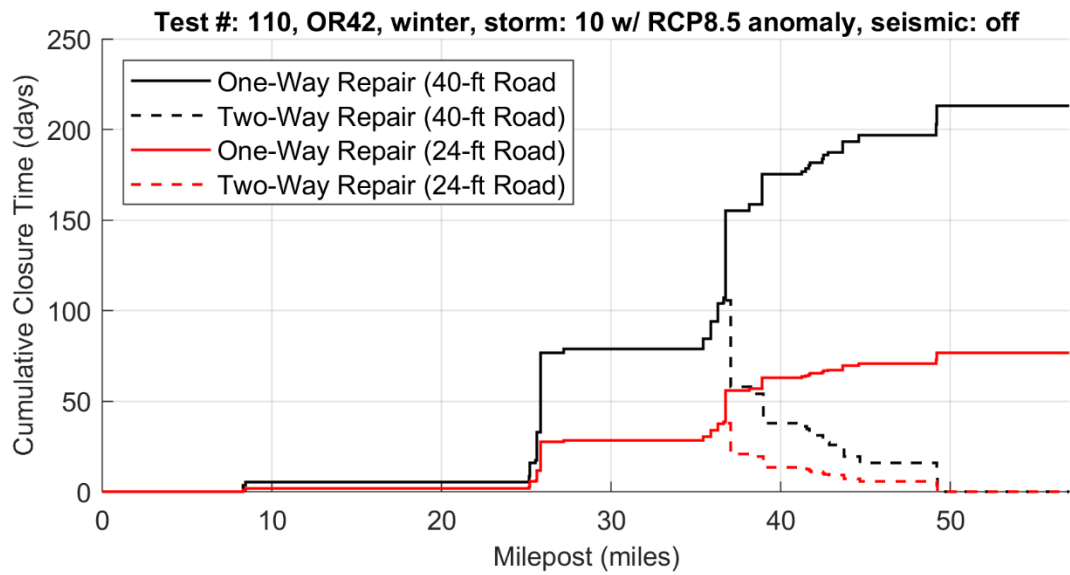
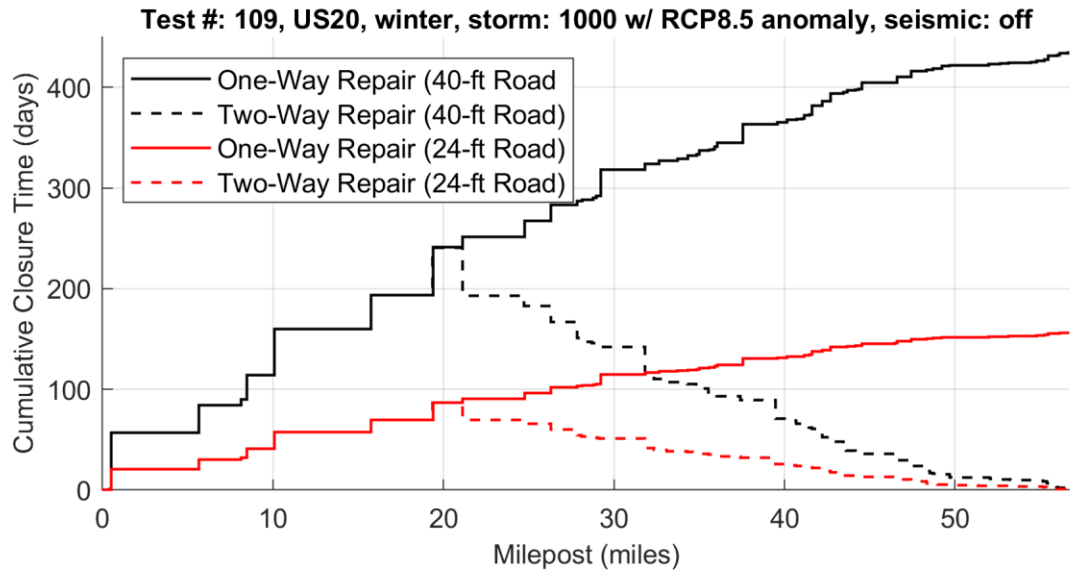


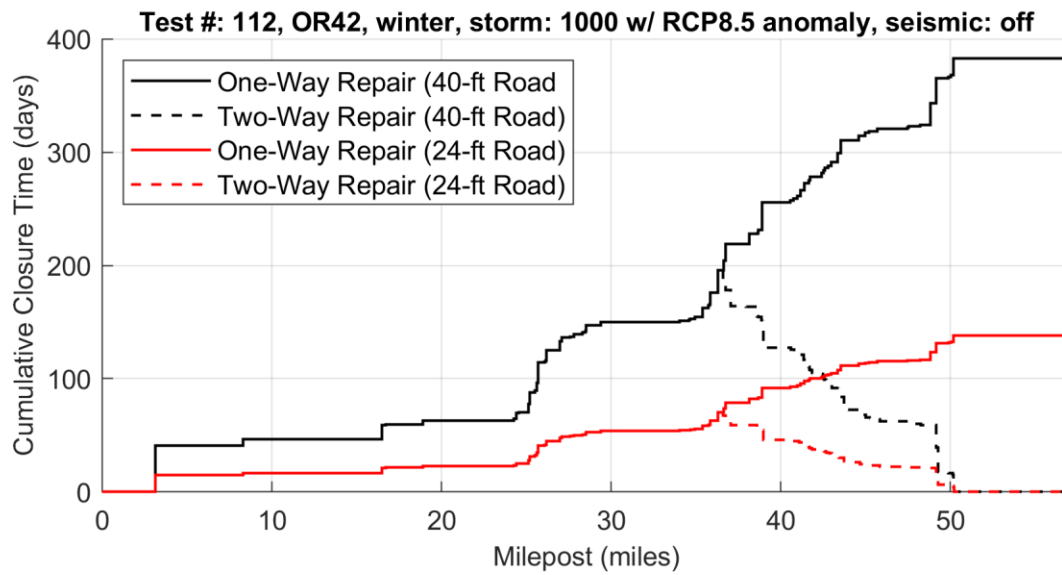
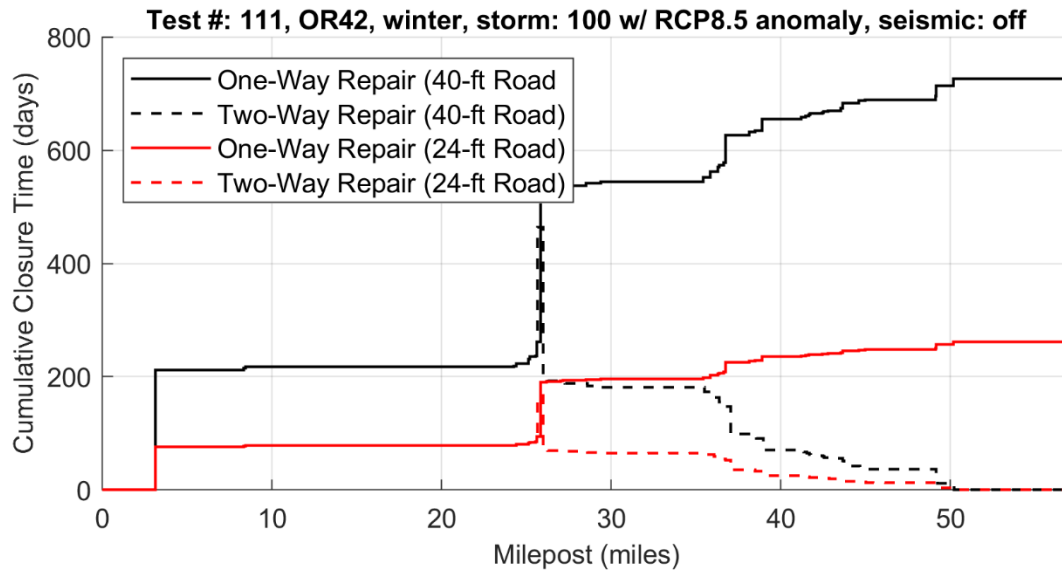






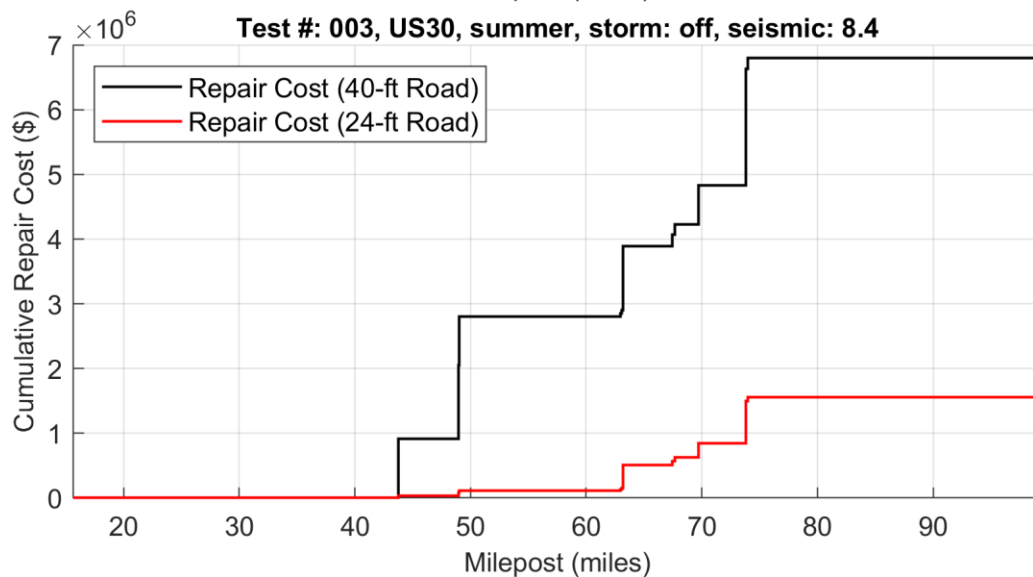
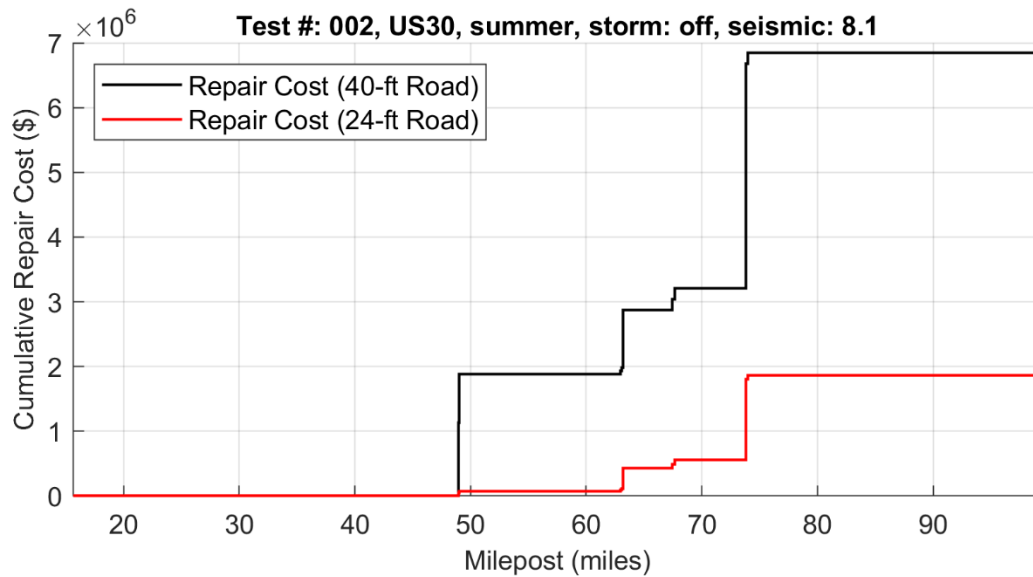
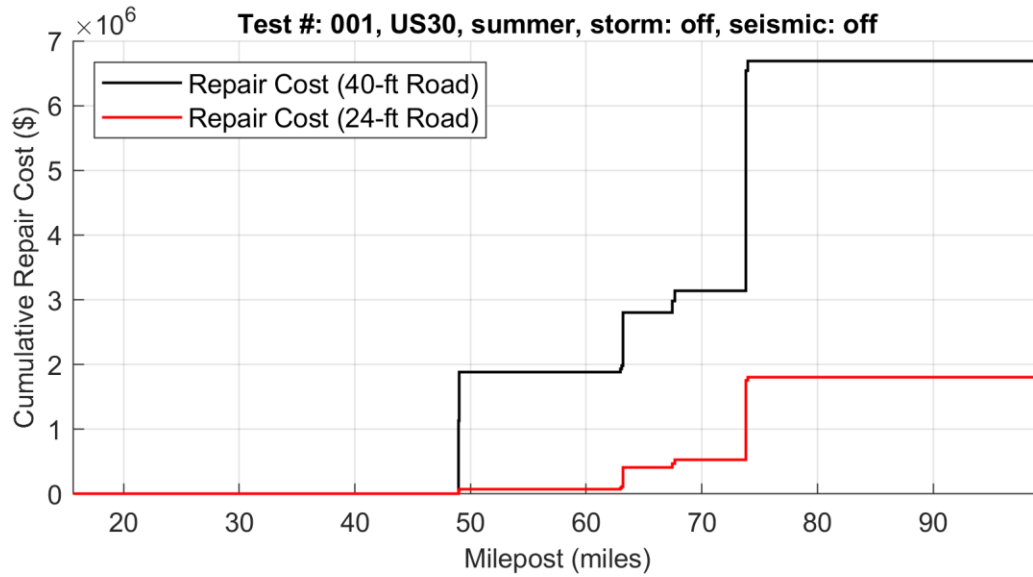


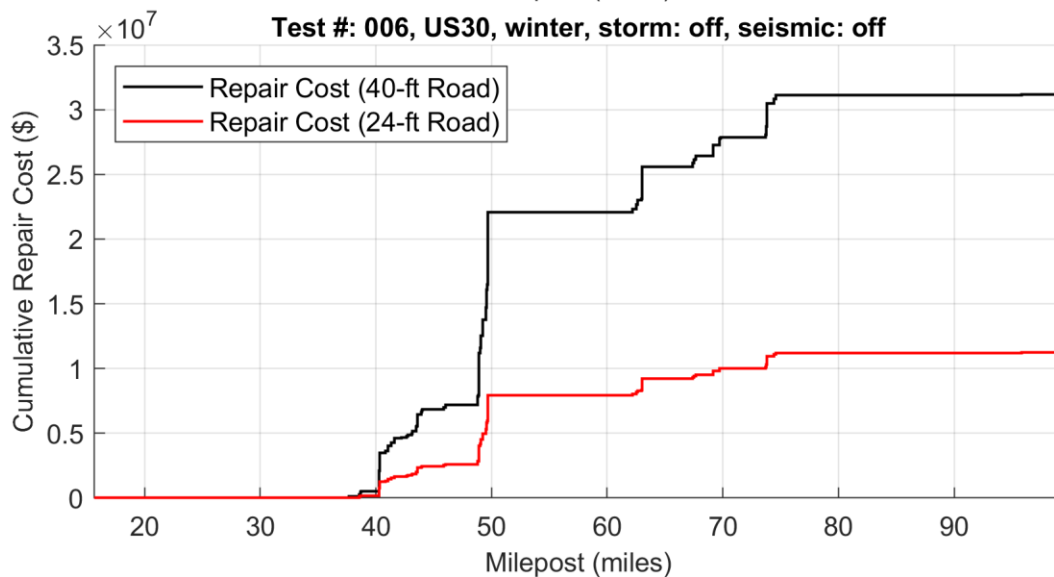
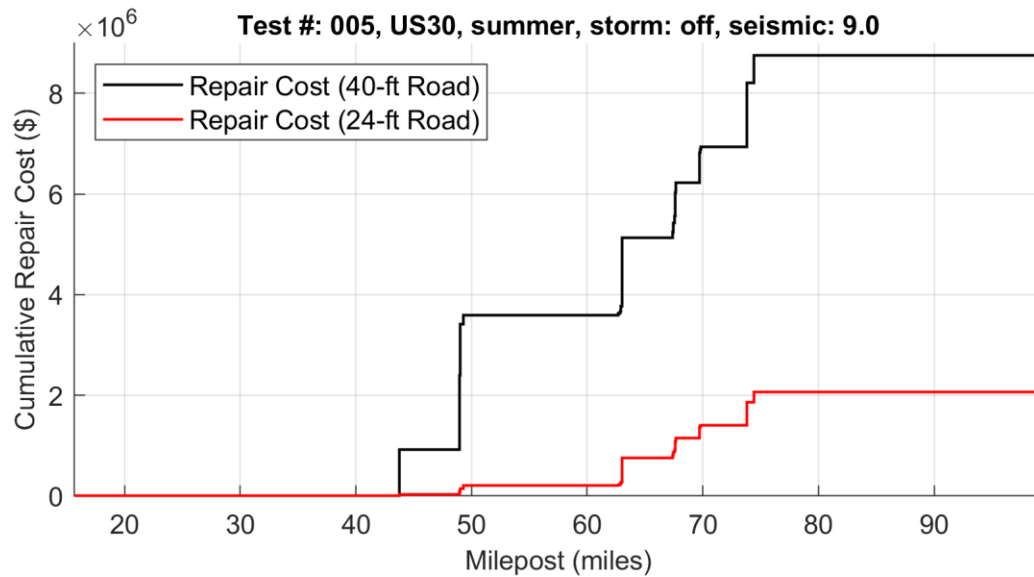
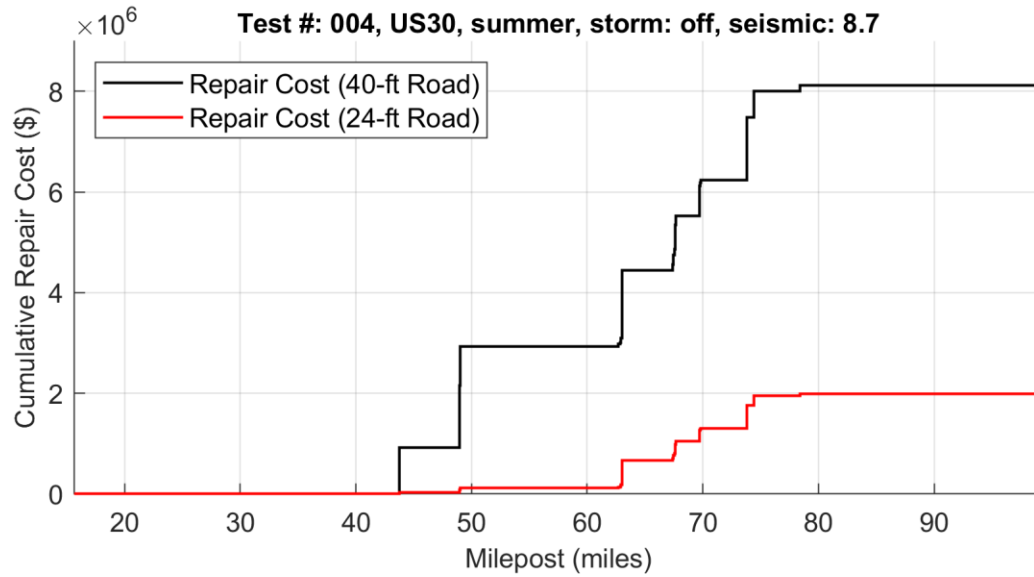


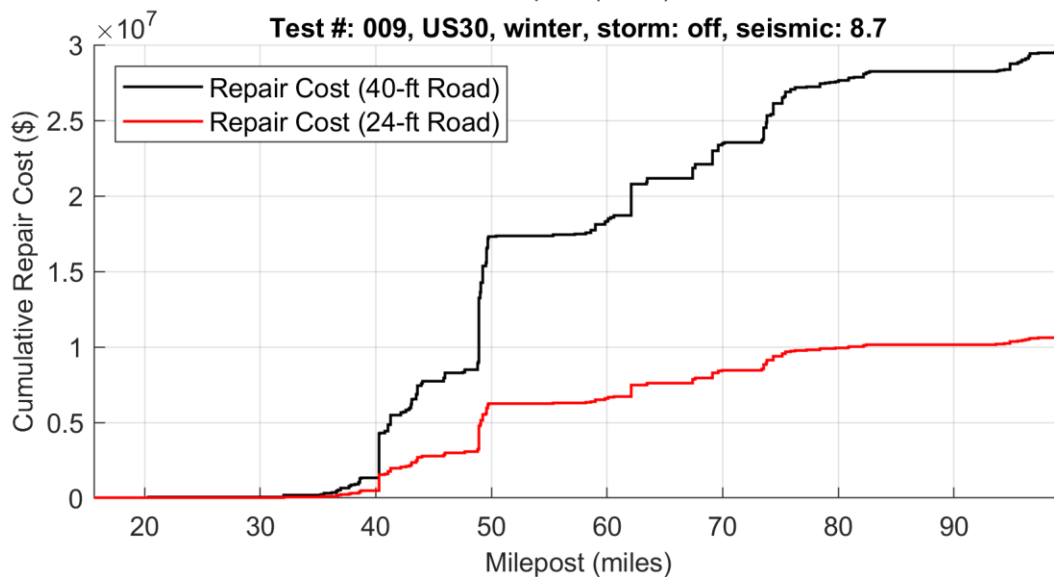
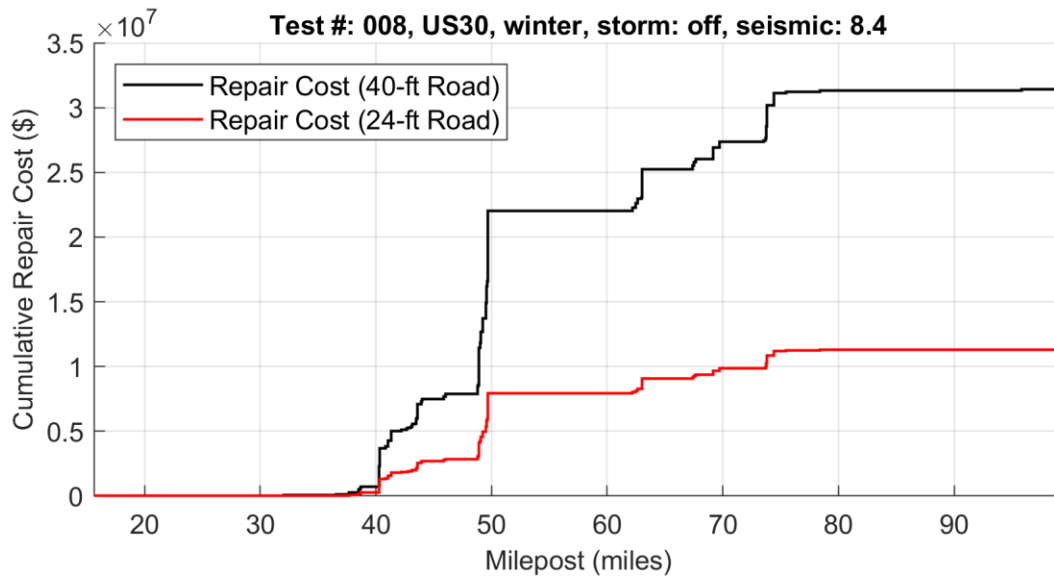
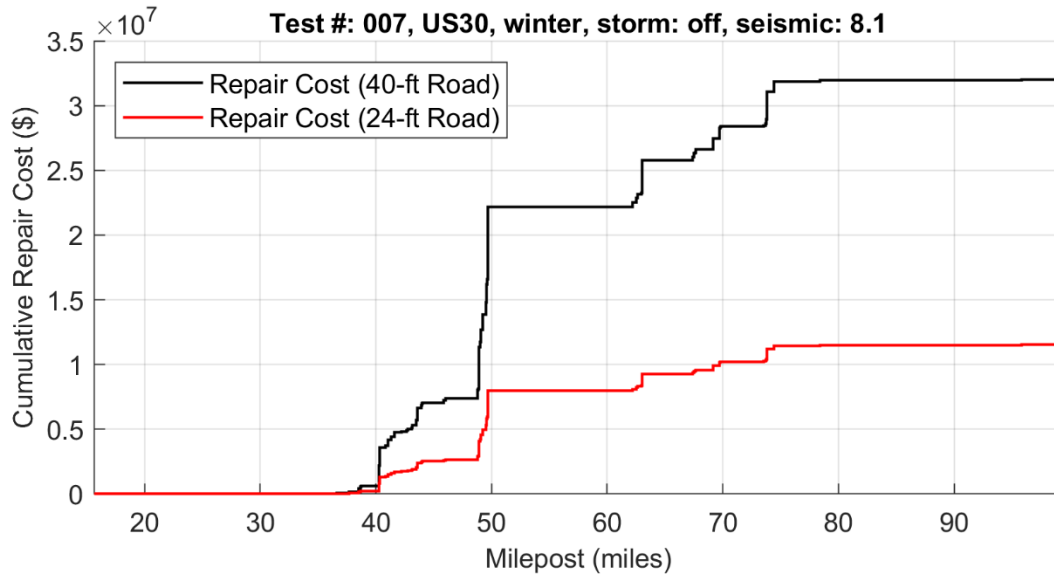


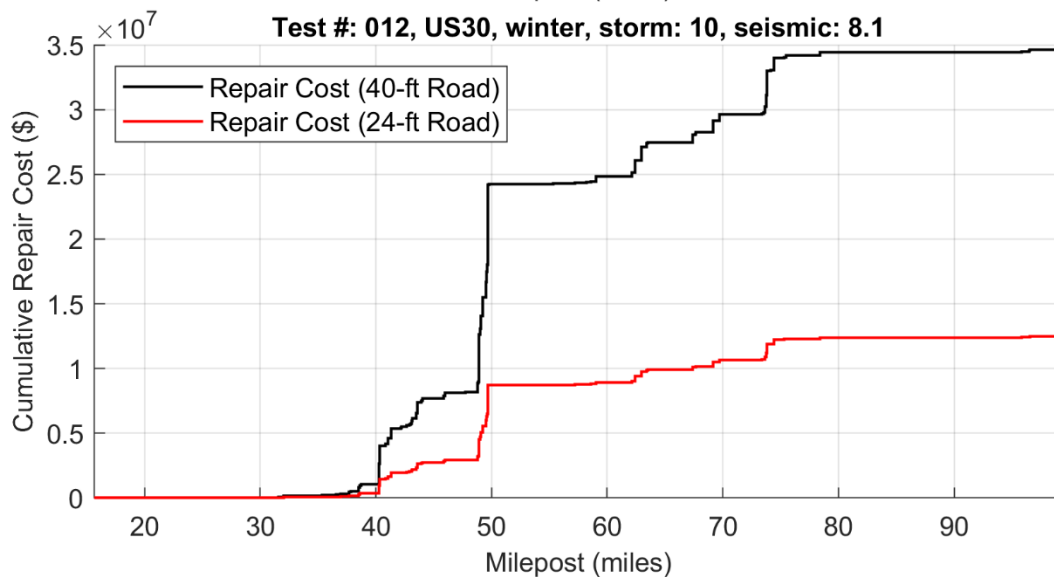
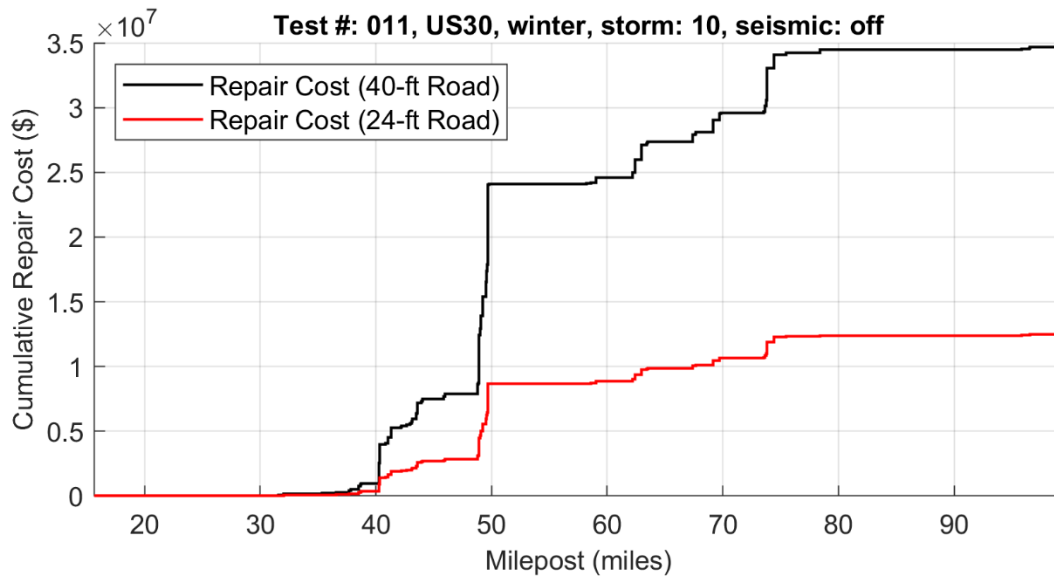
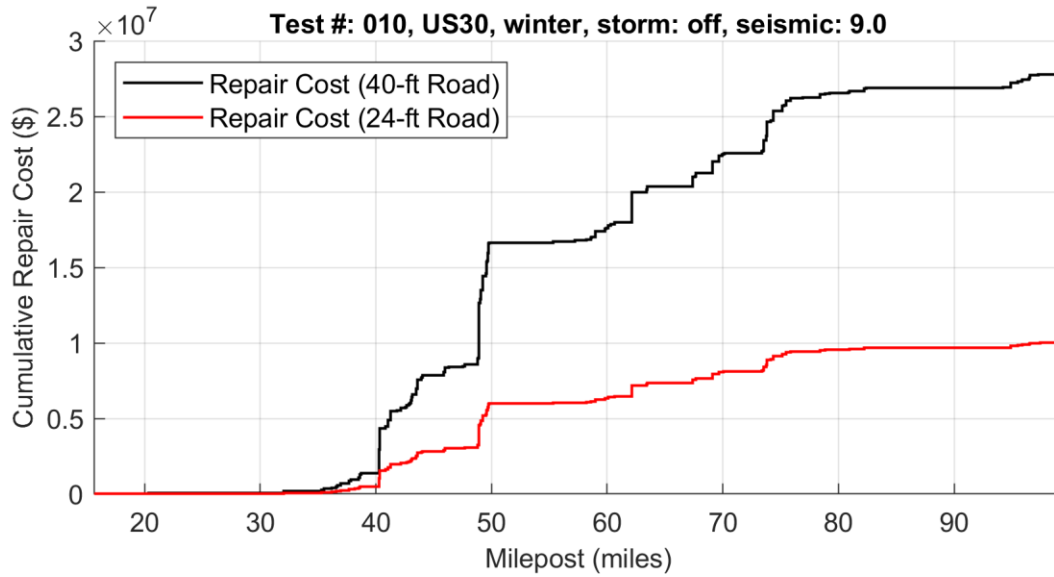
APPENDIX H: RISK METRIC PROFILES: MILEPOST VS. CUMULATIVE COST OF REPAIR (WITH 60 FOOT LANDSLIDE BUFFER)

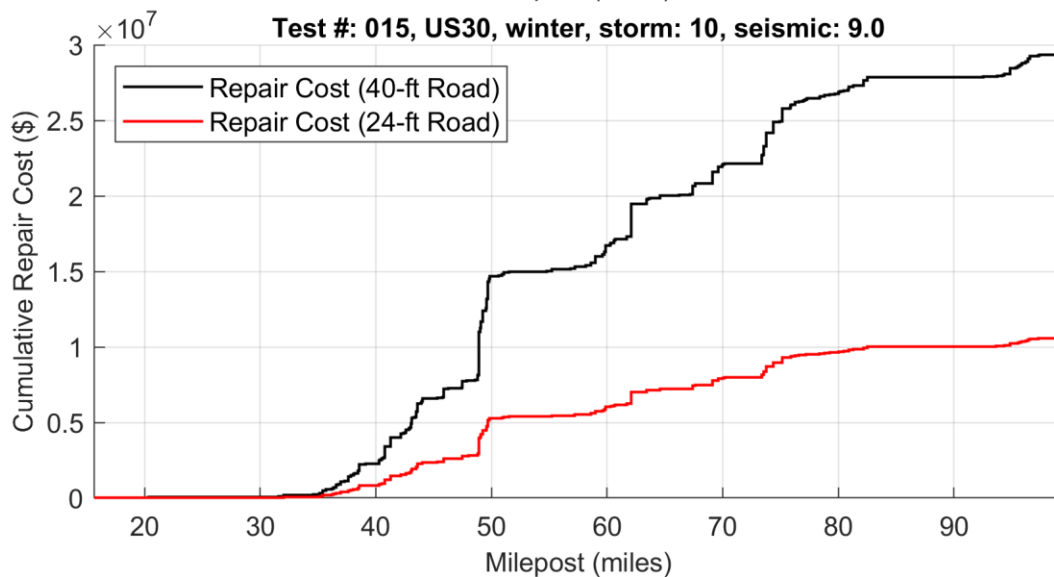
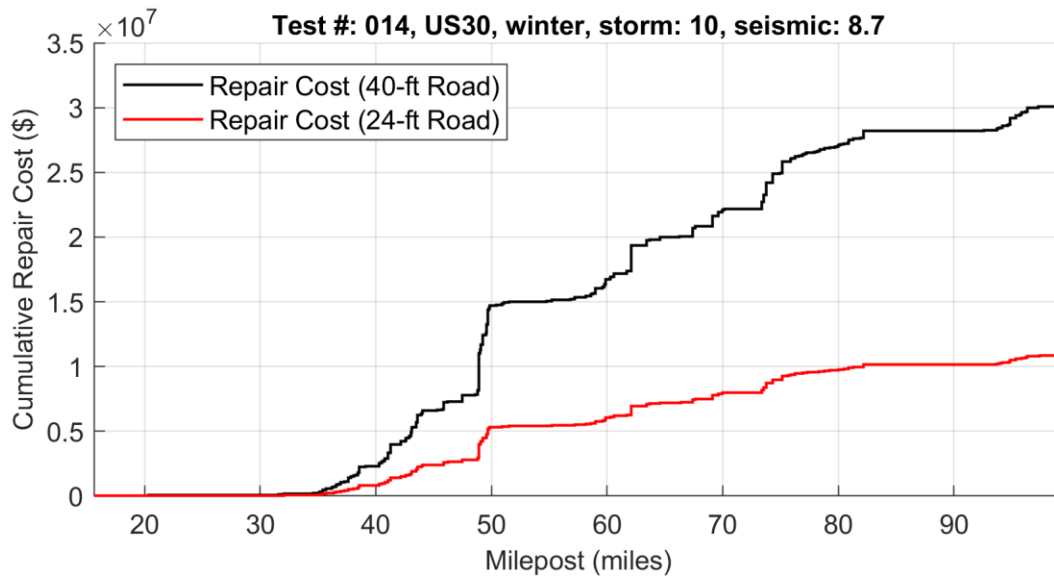
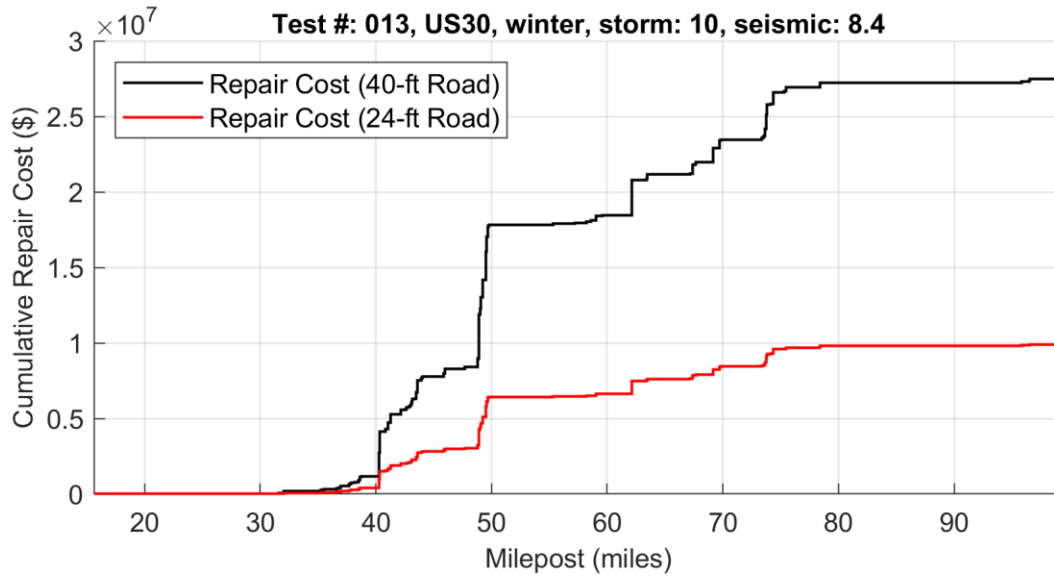
This appendix contains a full suite of milepost vs cumulative repair cost profiles (closure costs do consider landslide buffer) for all scenarios considered for SPR808. These scenarios consider a combination of physical drivers, including seasonal variations in antecedent moisture, rainfall inputs, seismicity, and climate-change induced precipitation anomaly. A directory describing all tests not considering future climate may be found in Table 4.4. A directory describing all tests considering future climate may be found in Table 4.7.

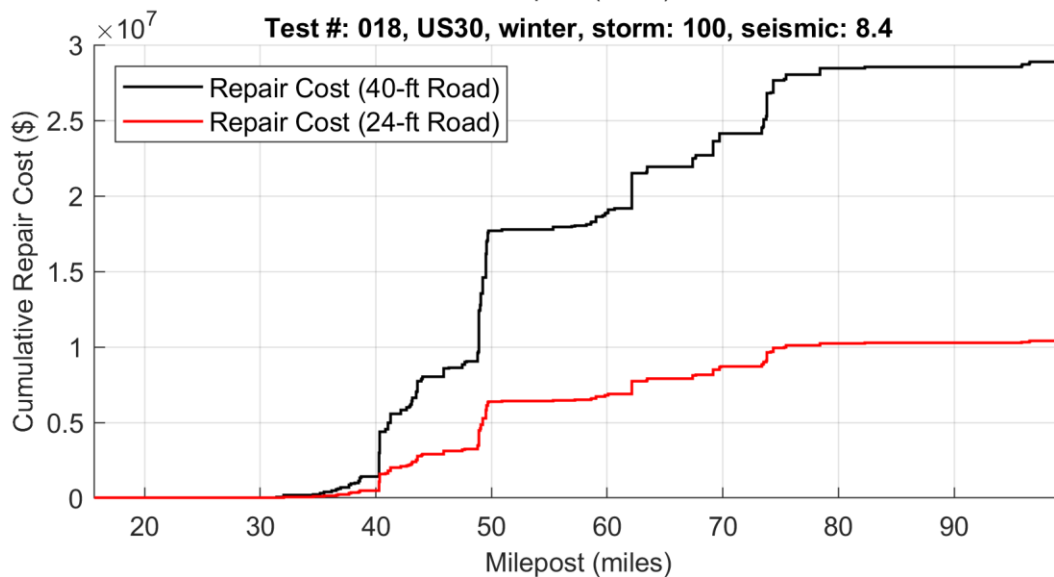
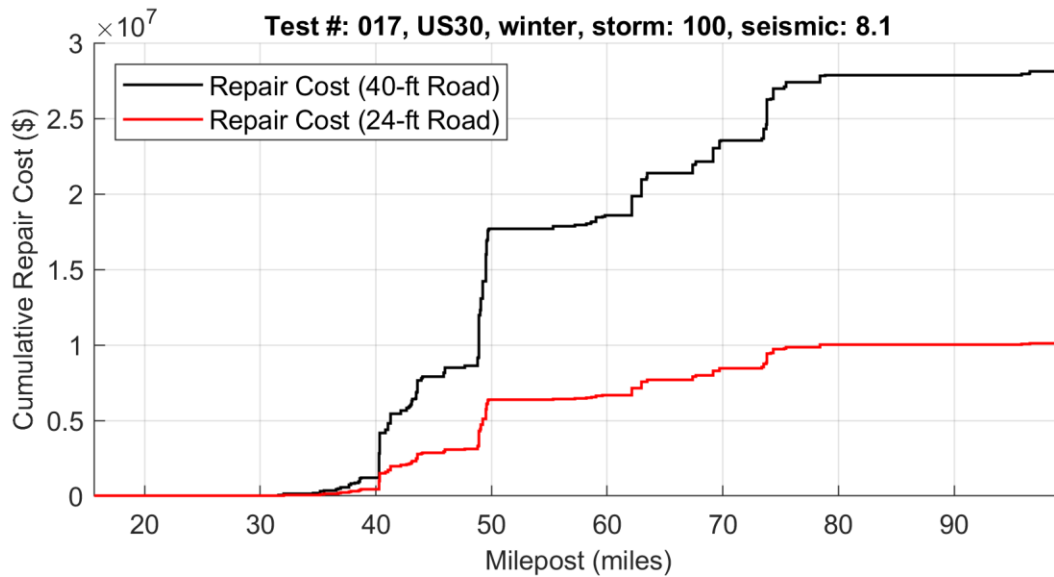
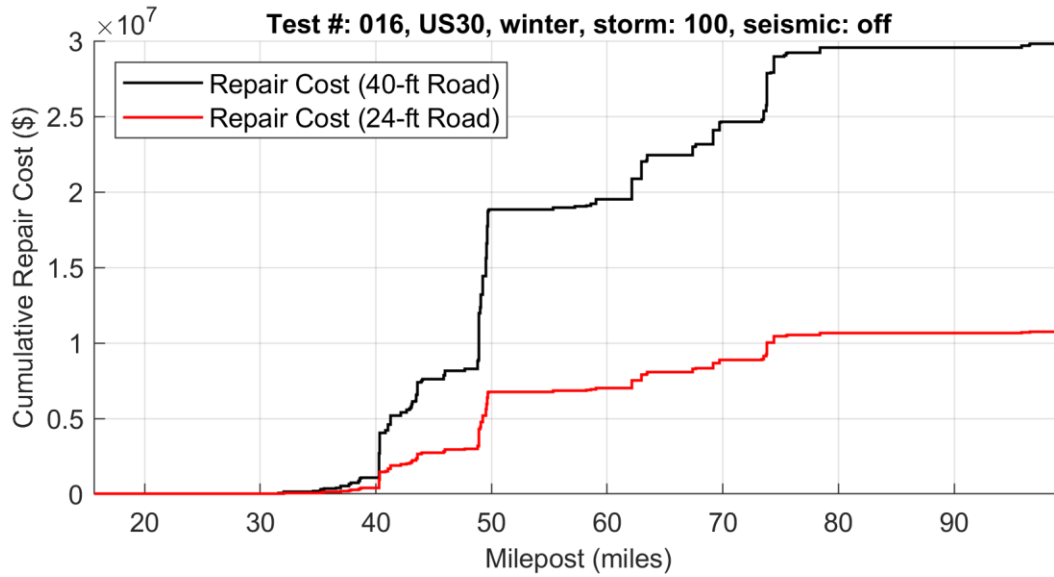


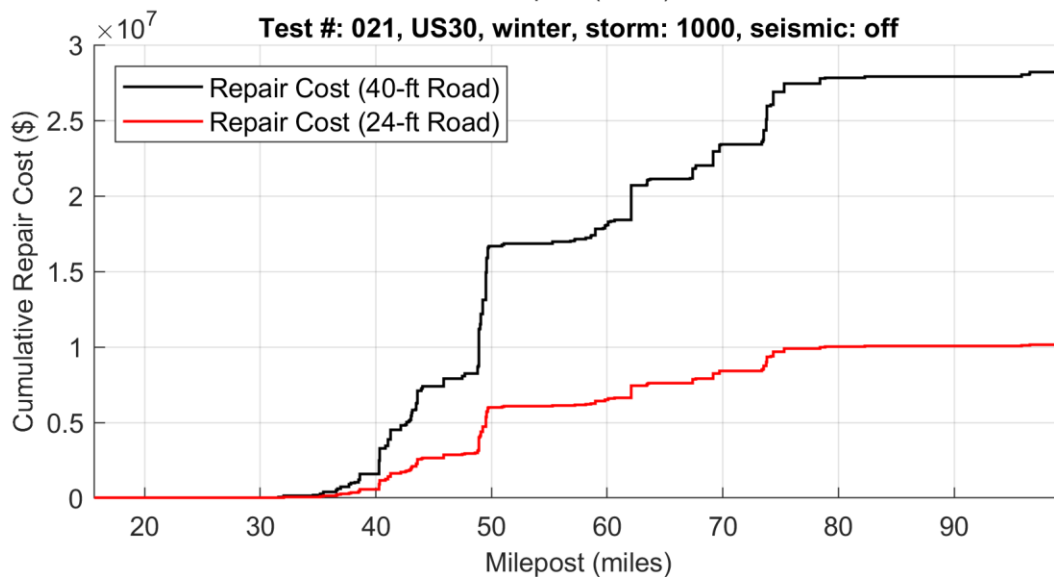
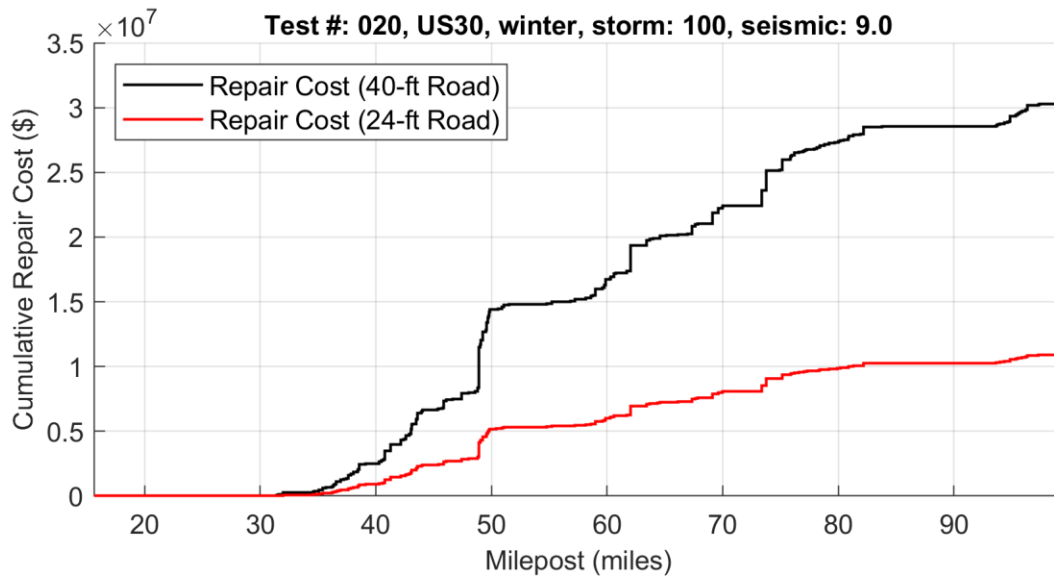
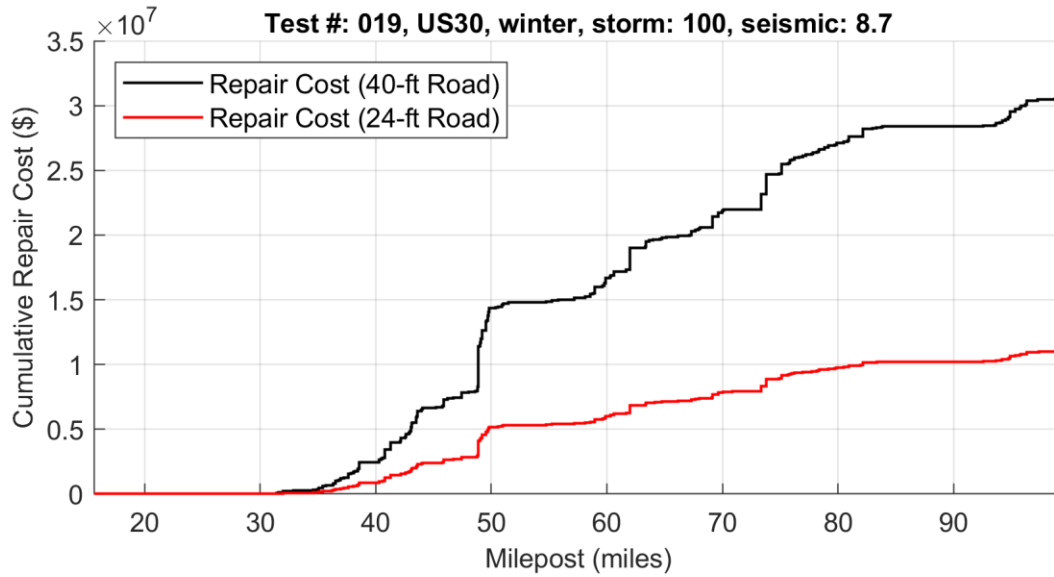


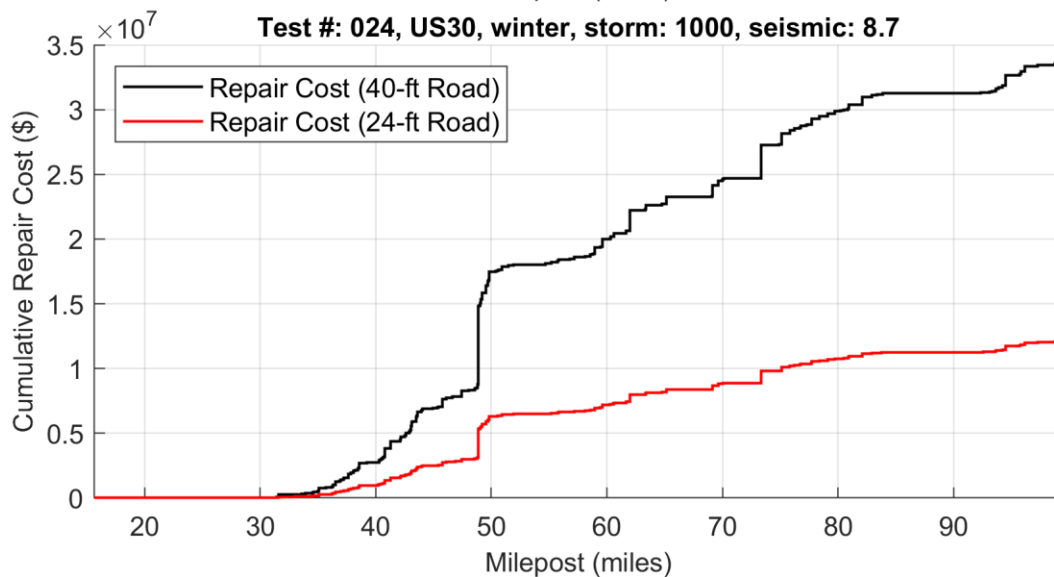
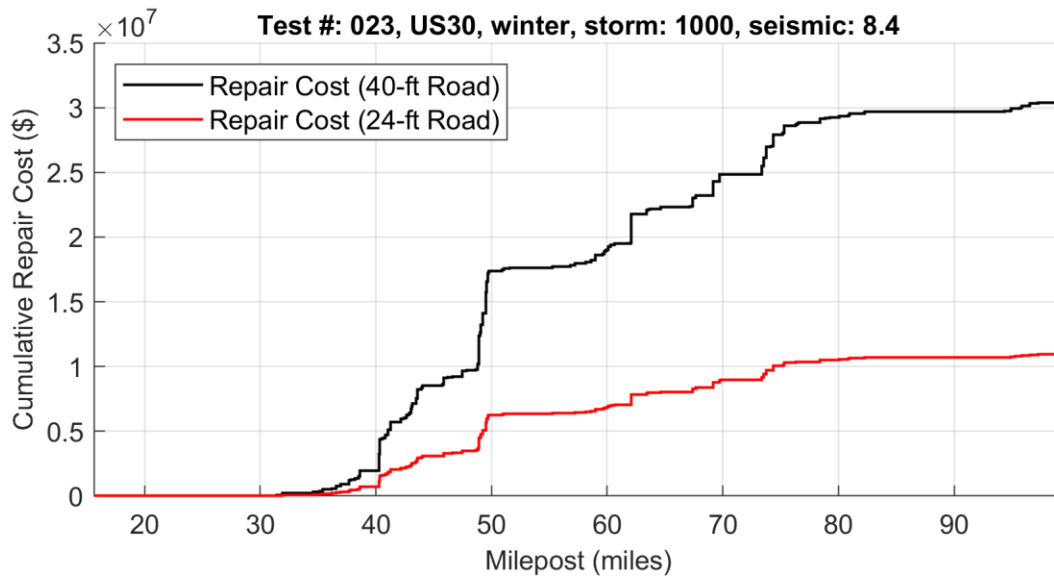
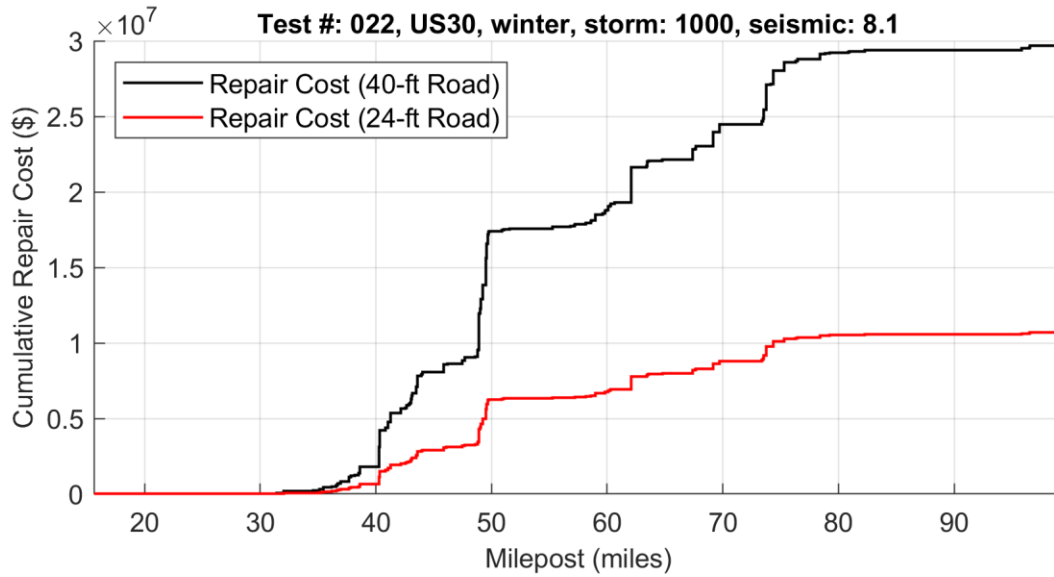


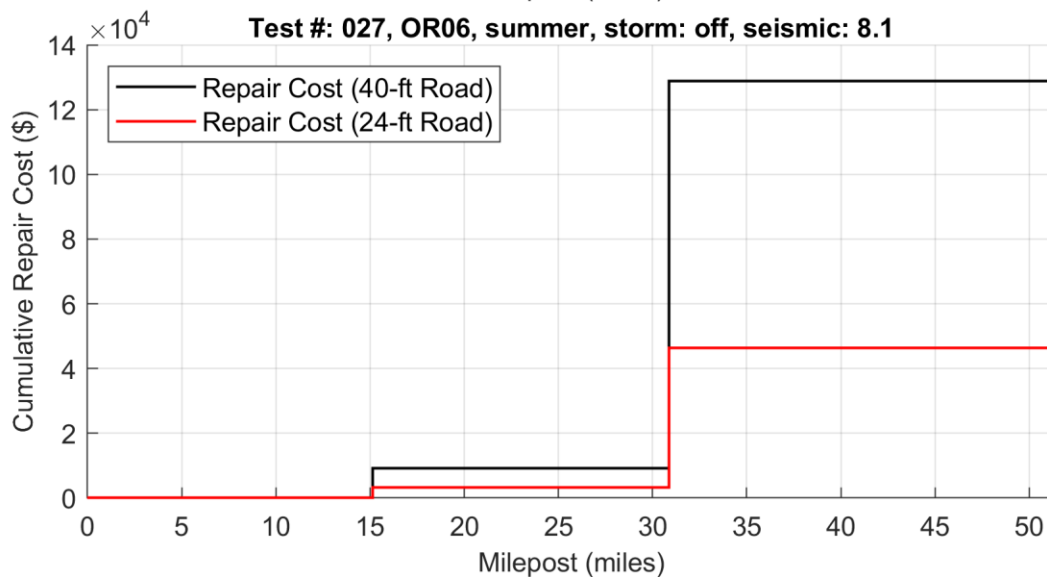
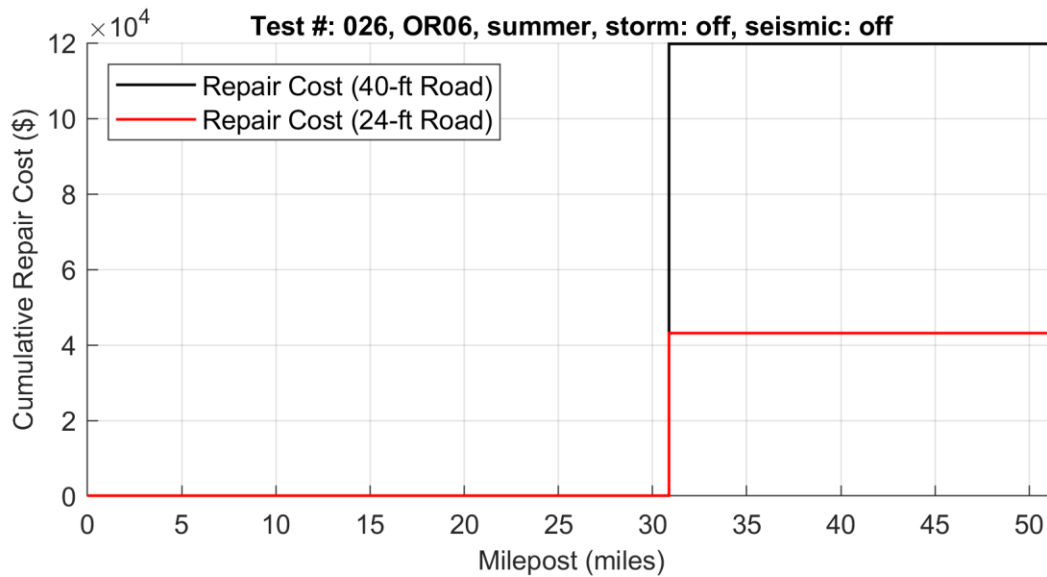
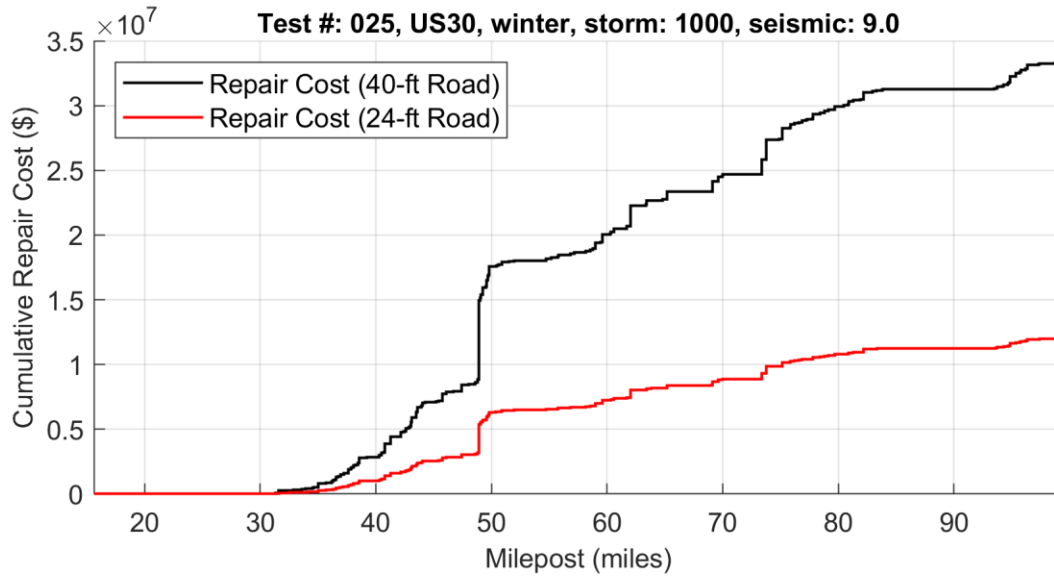


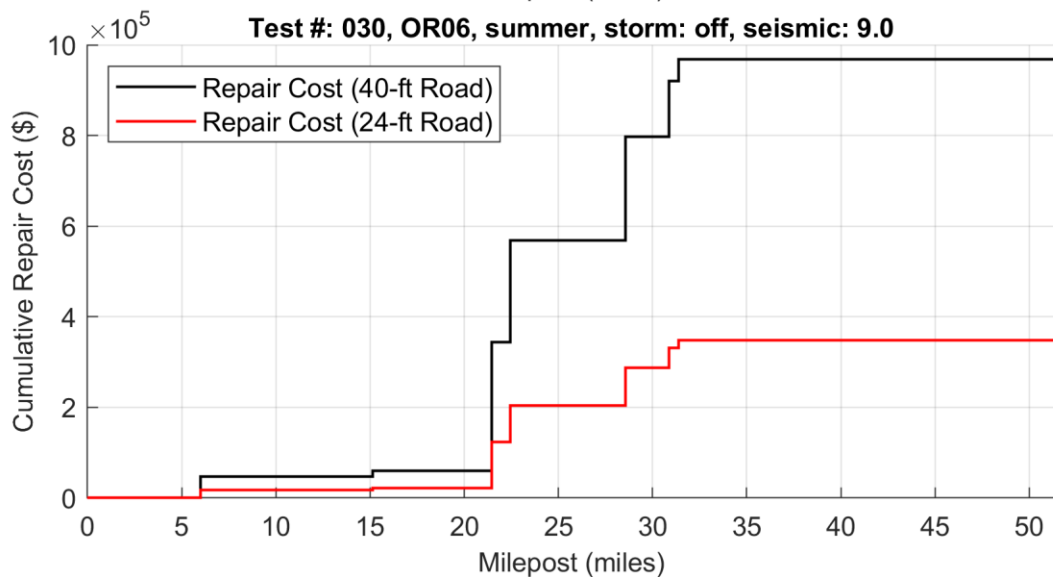
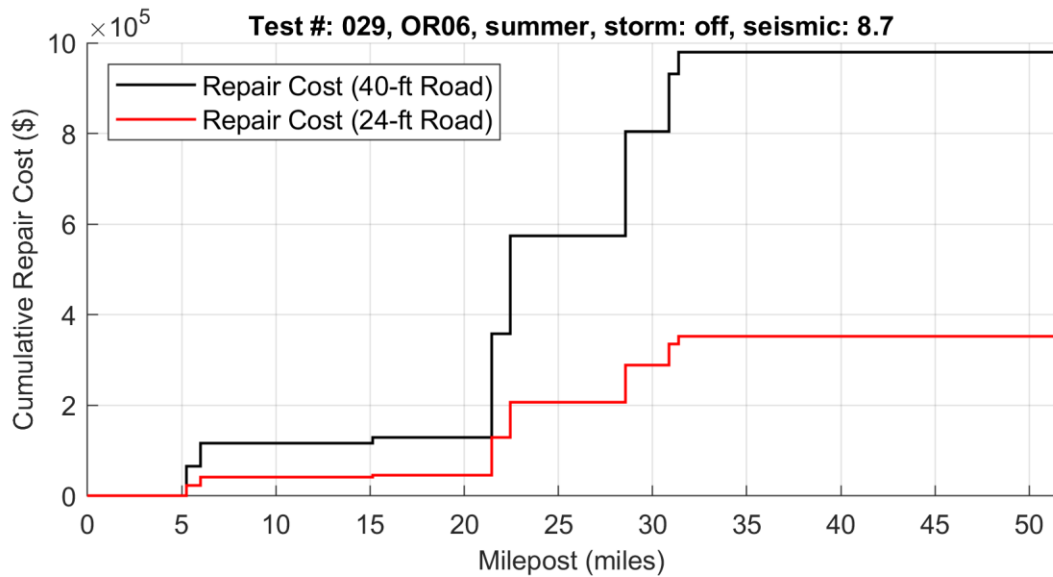
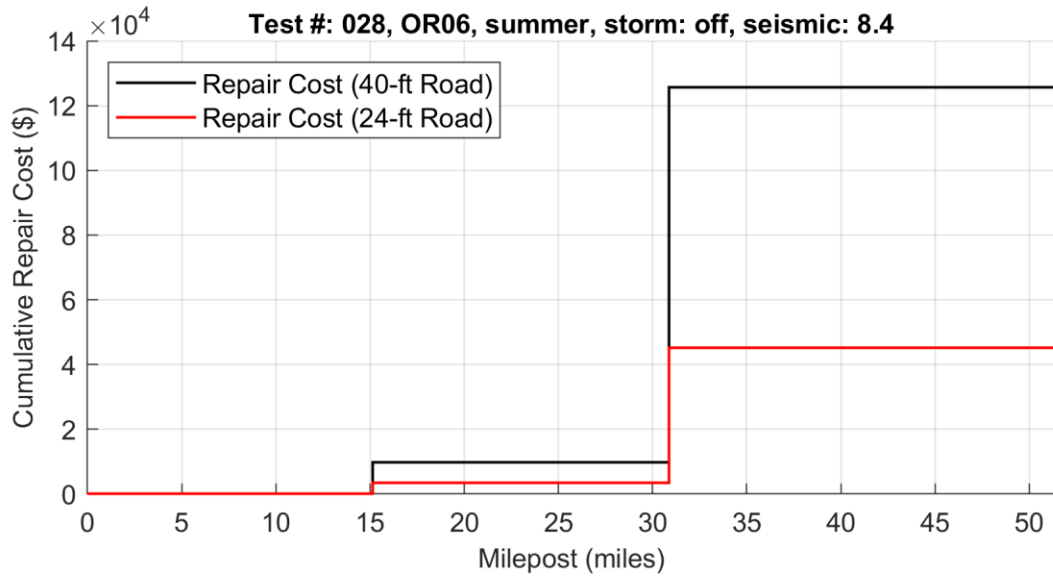


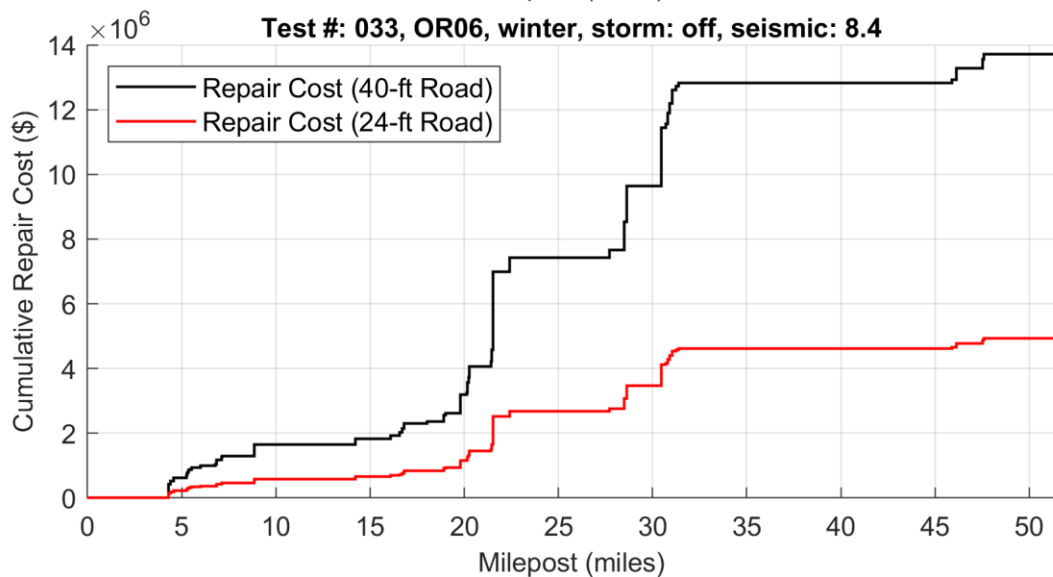
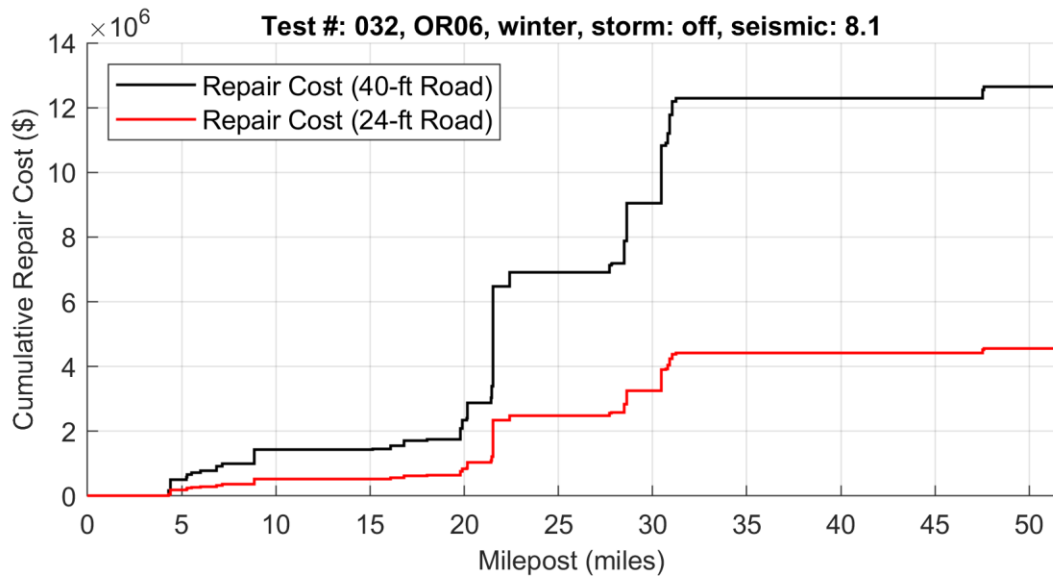
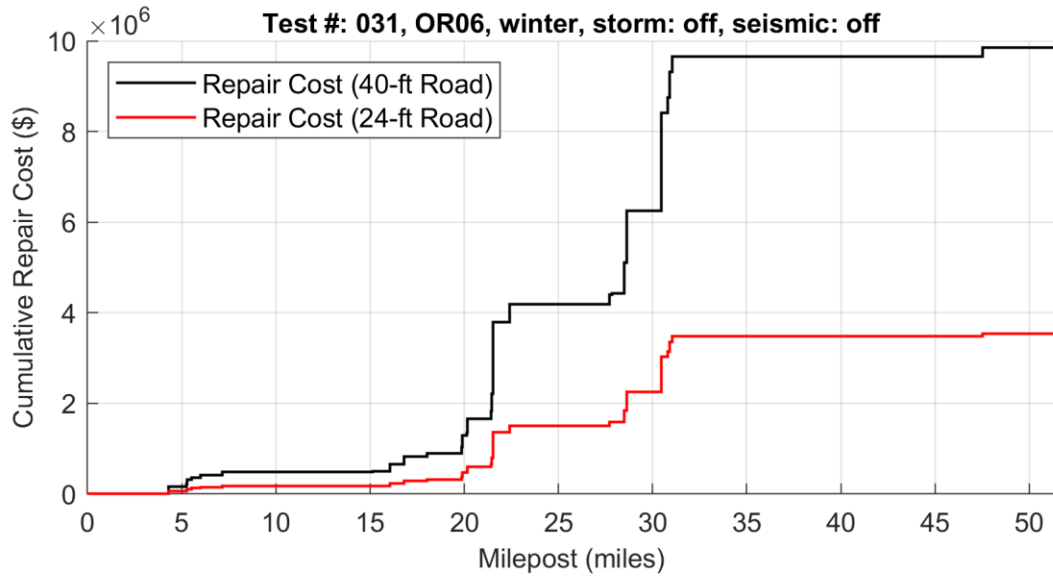


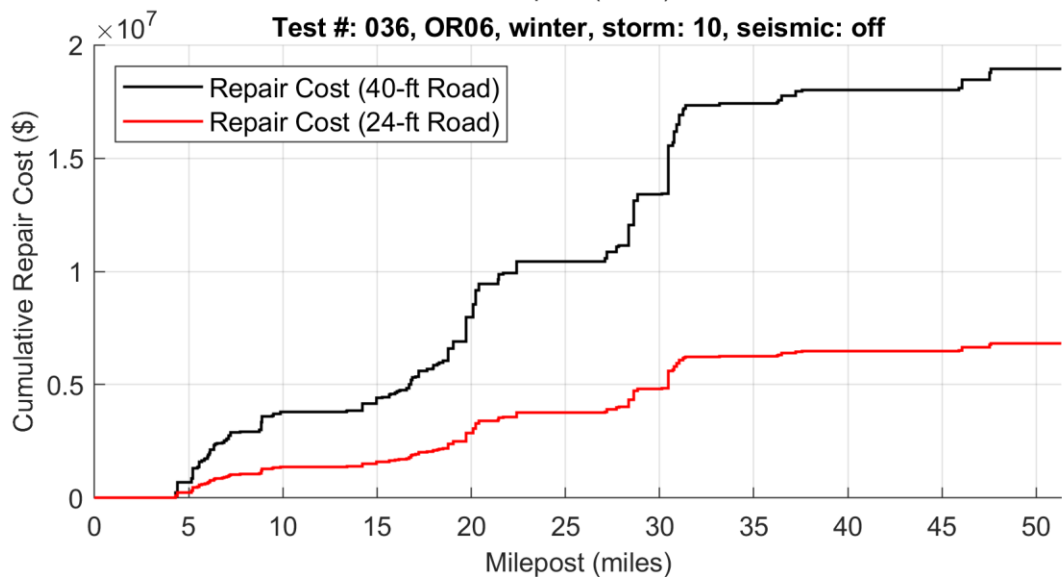
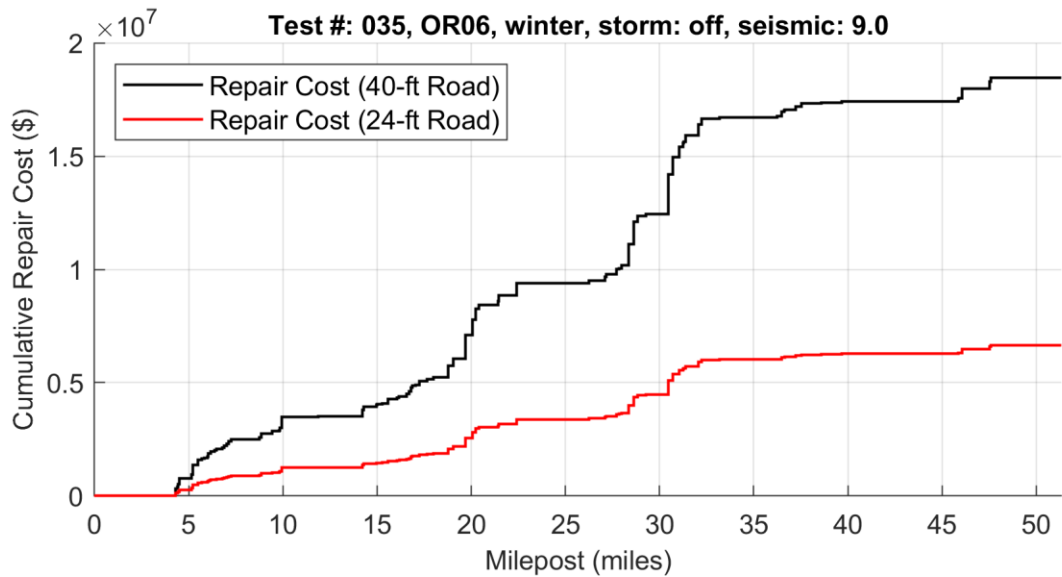
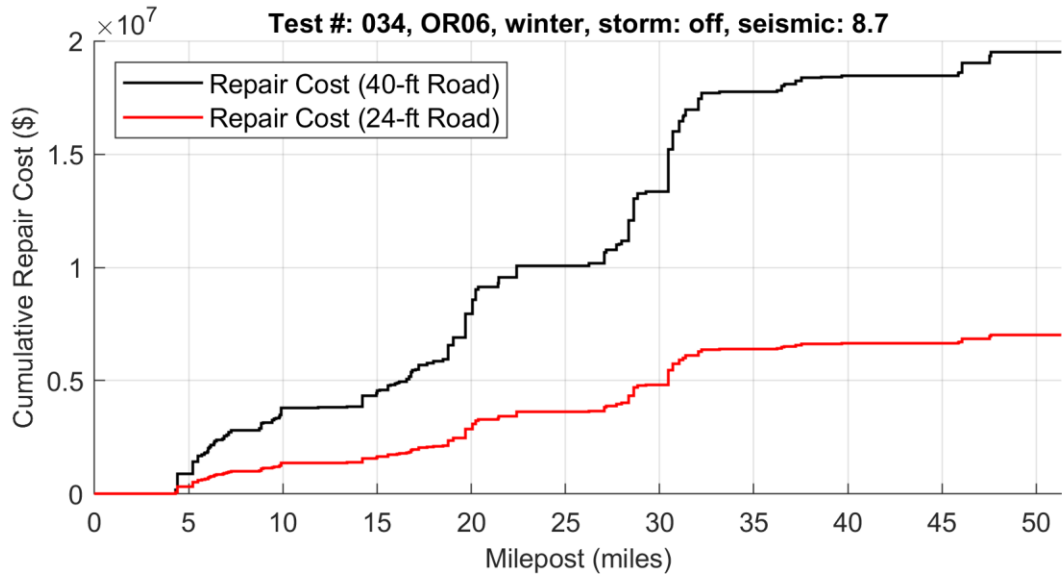


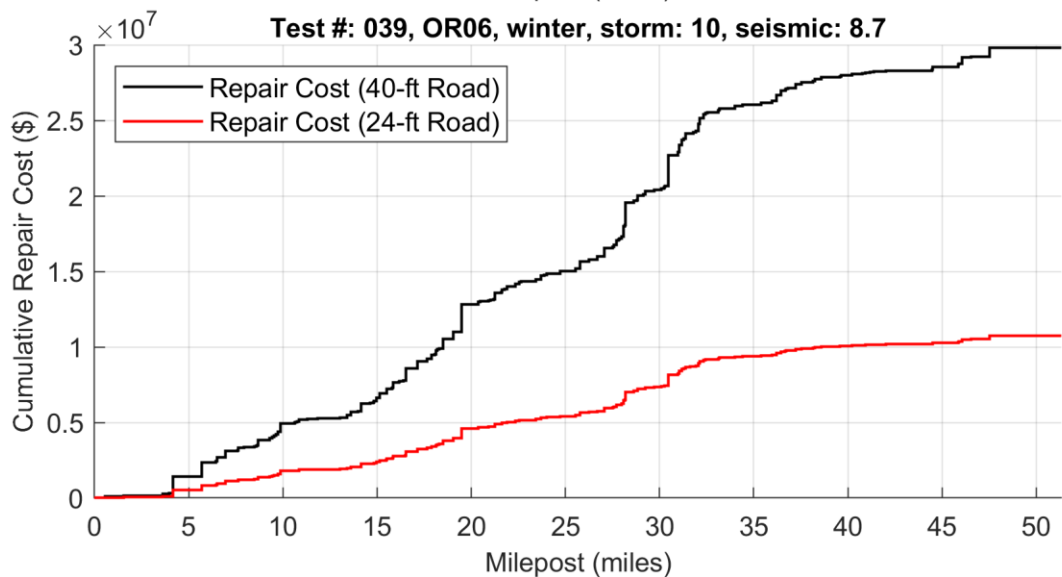
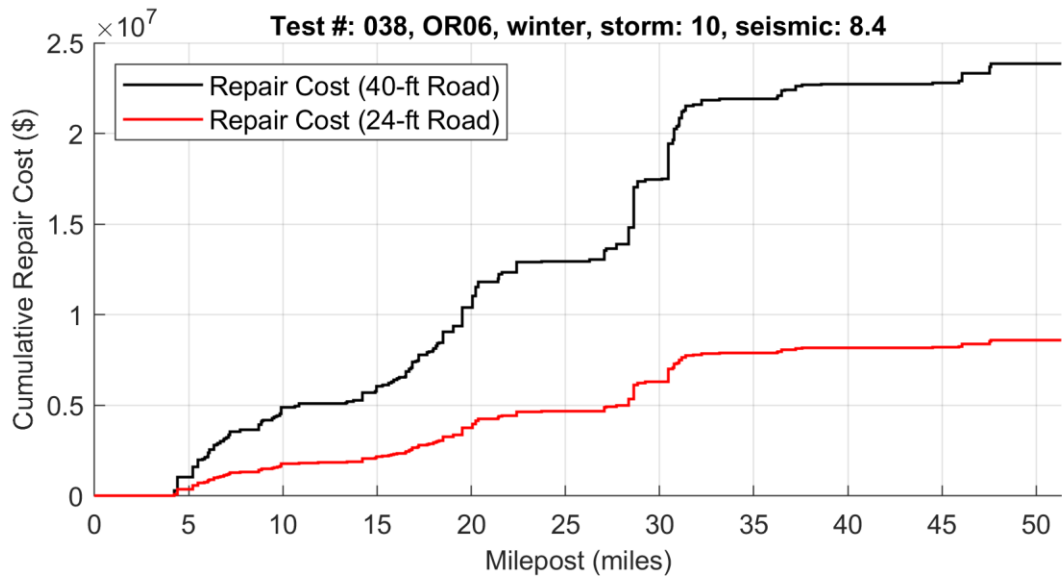
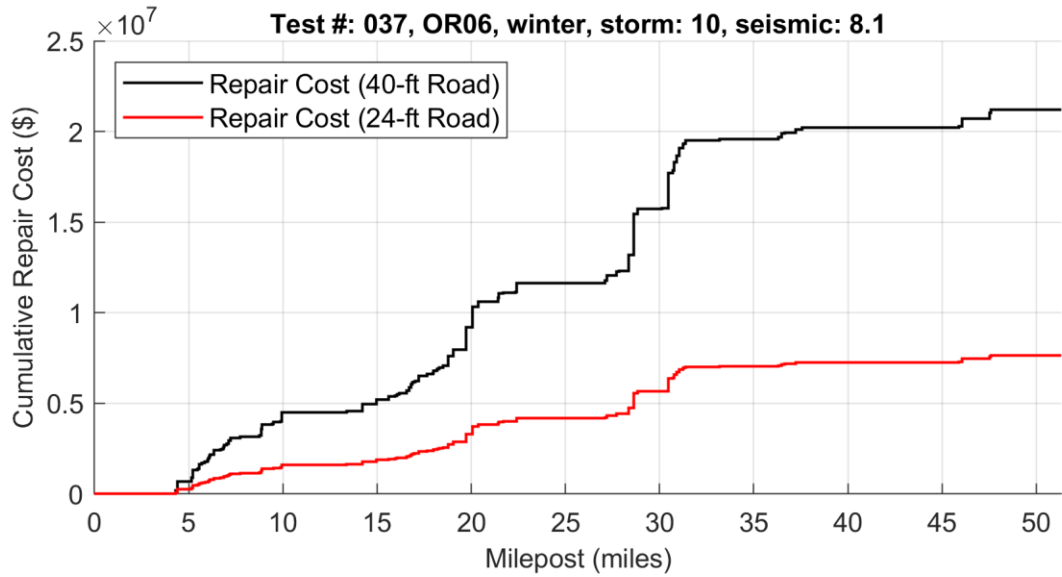


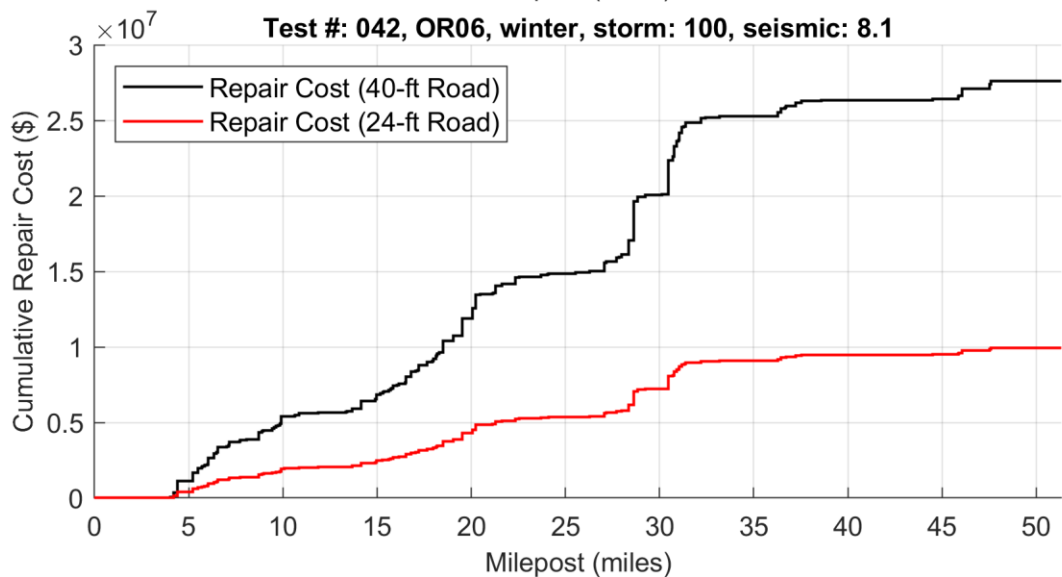
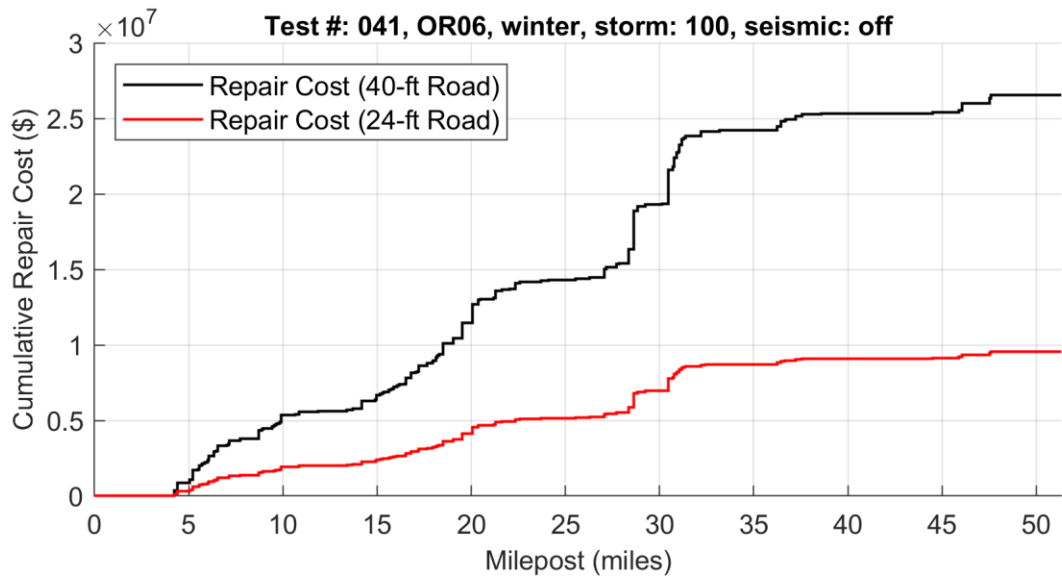
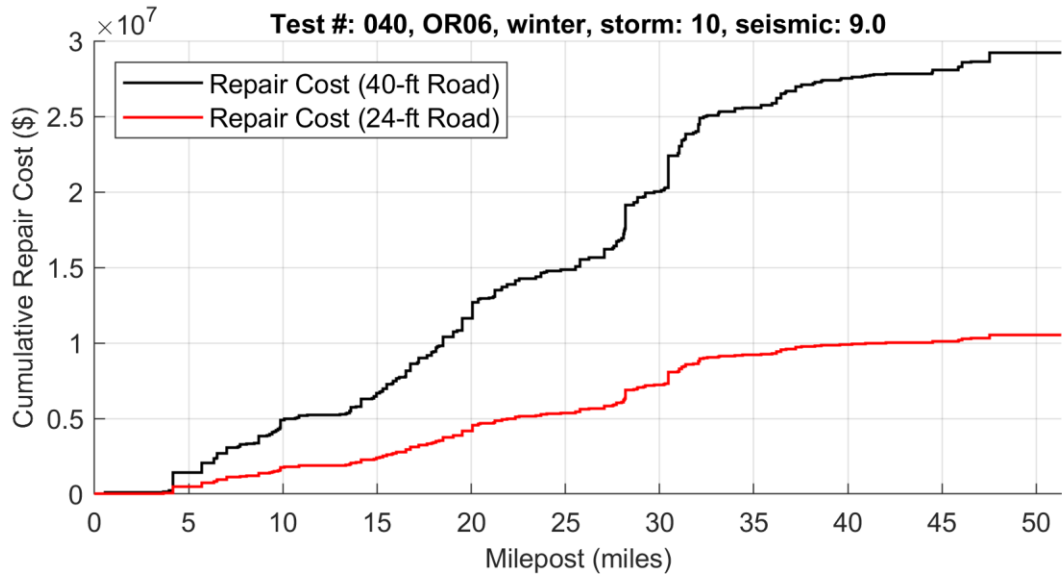


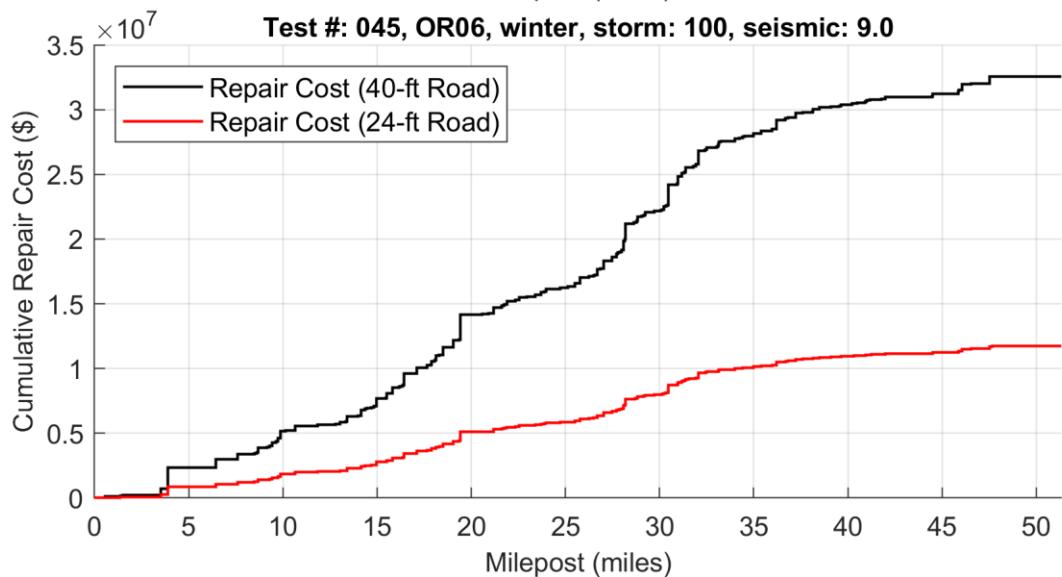
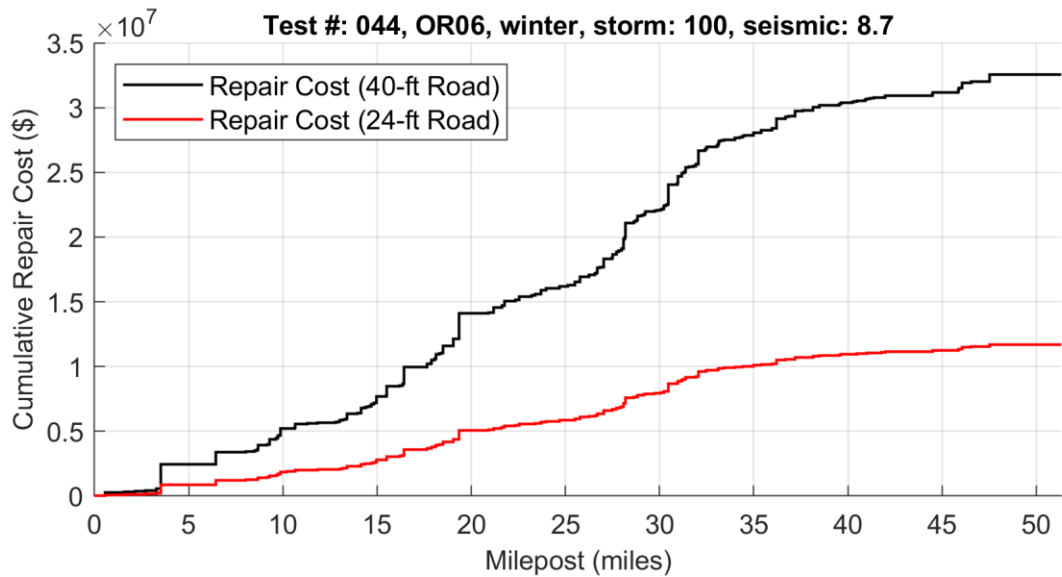
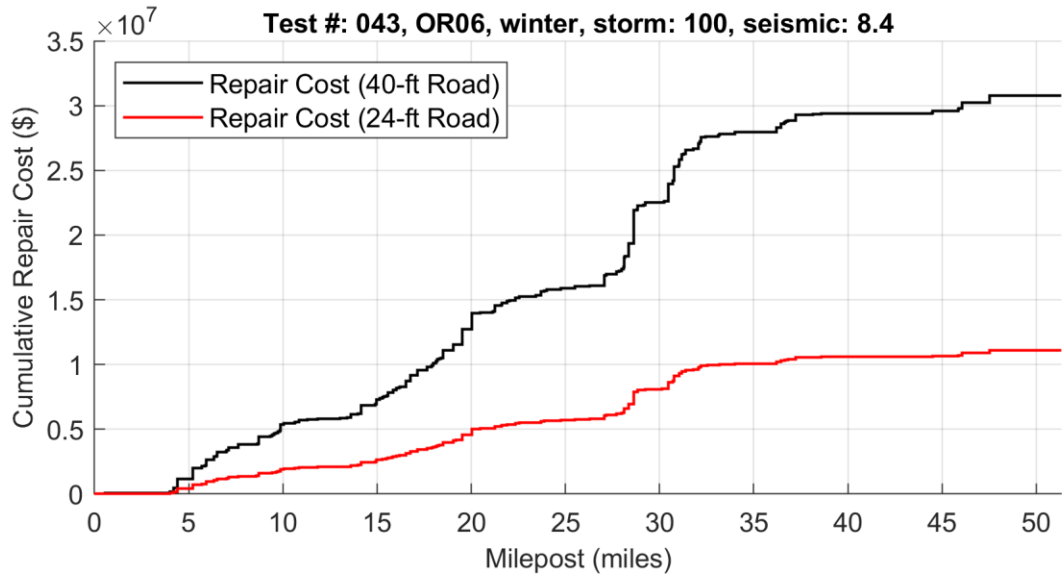


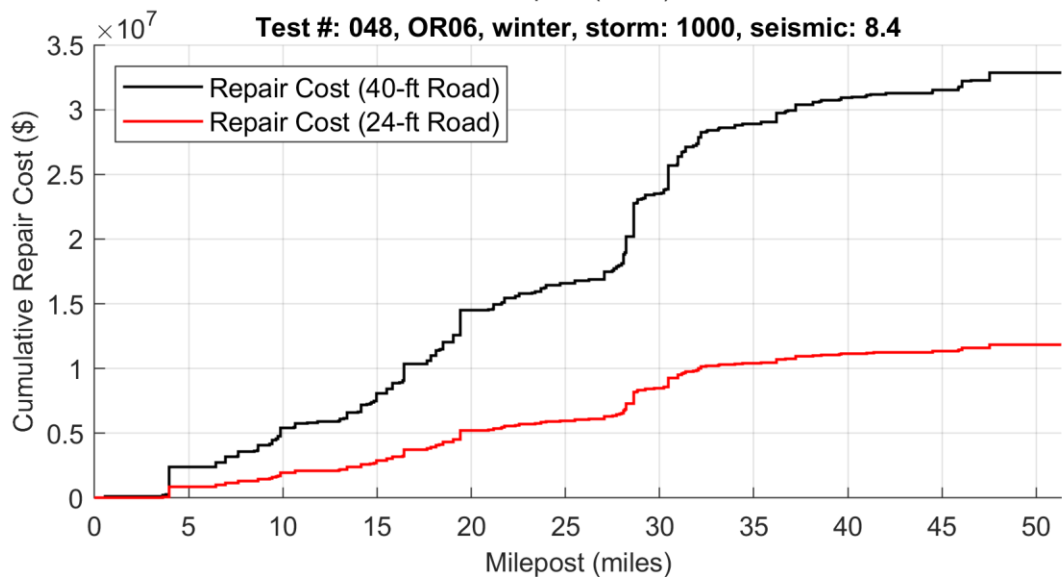
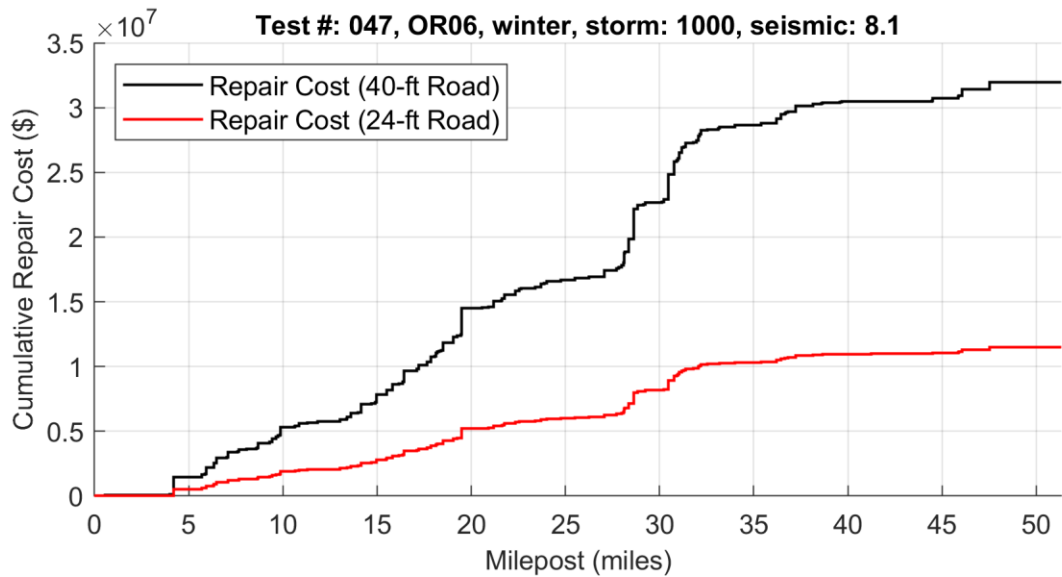
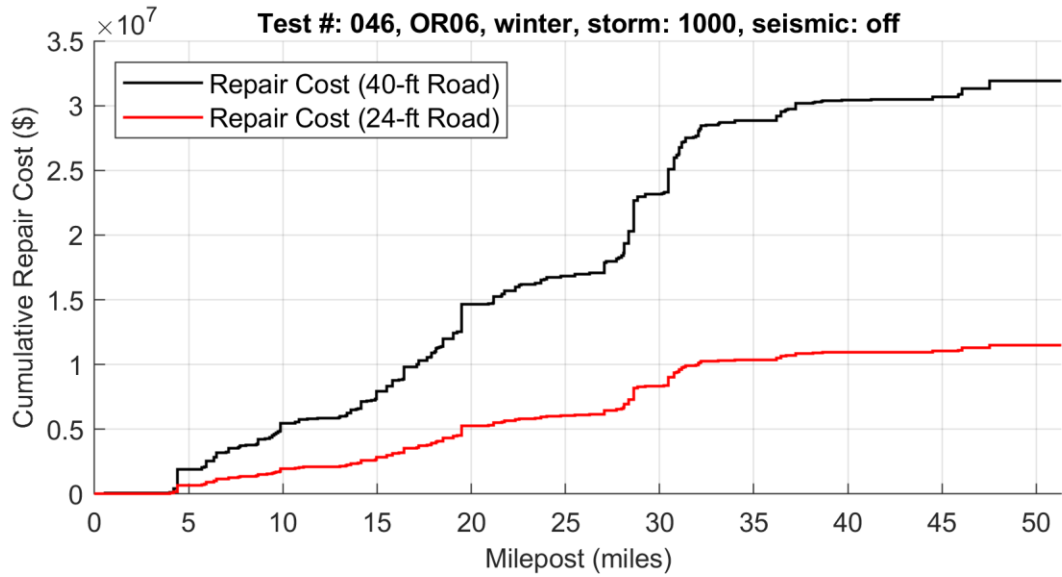


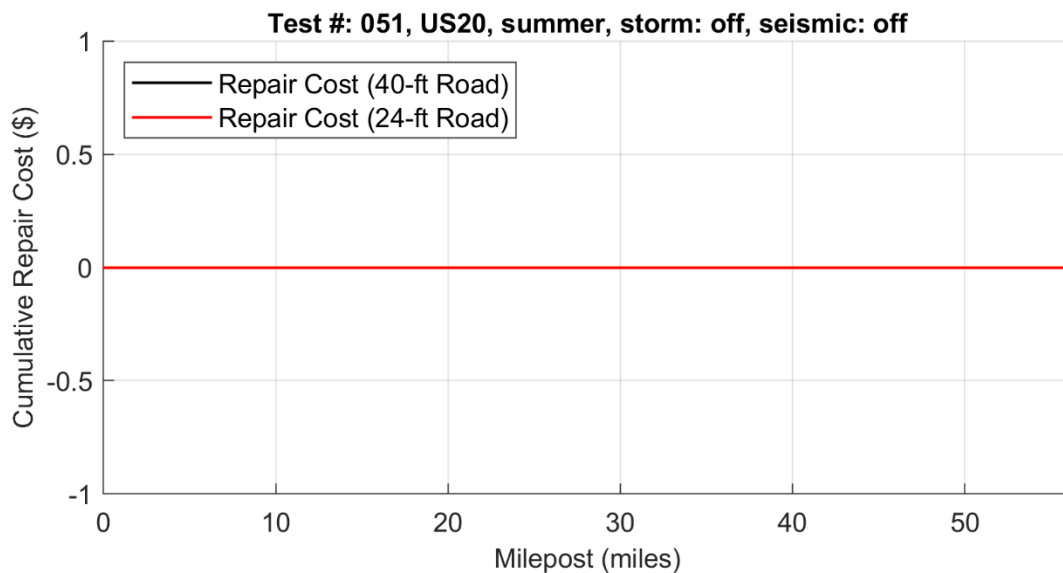
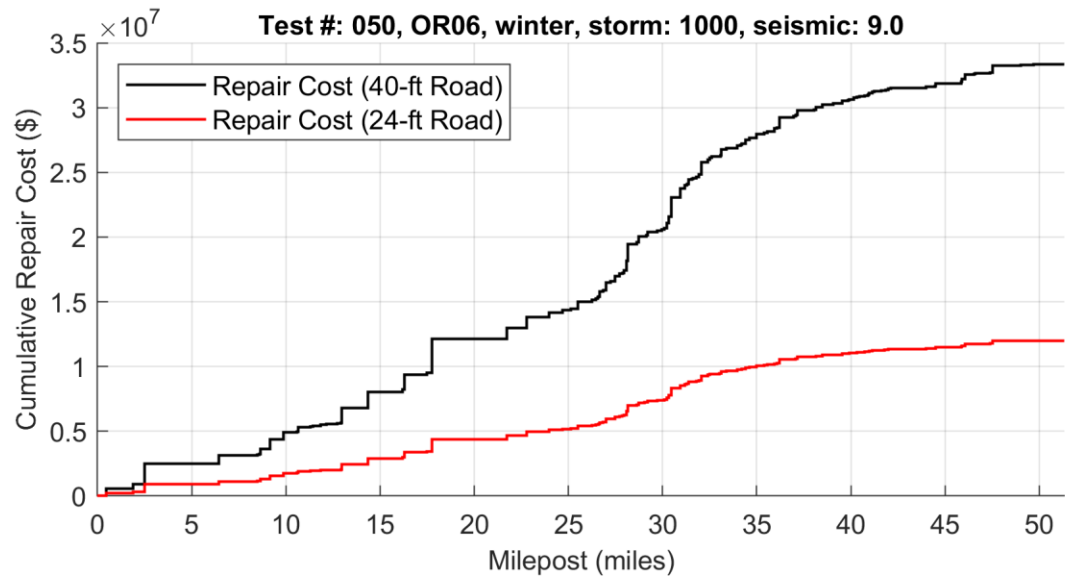
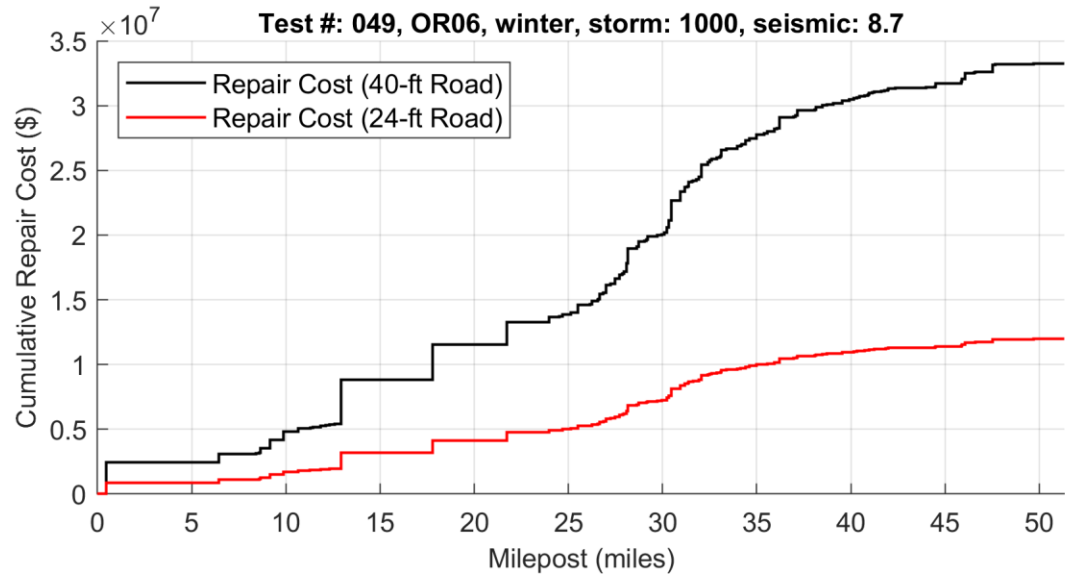


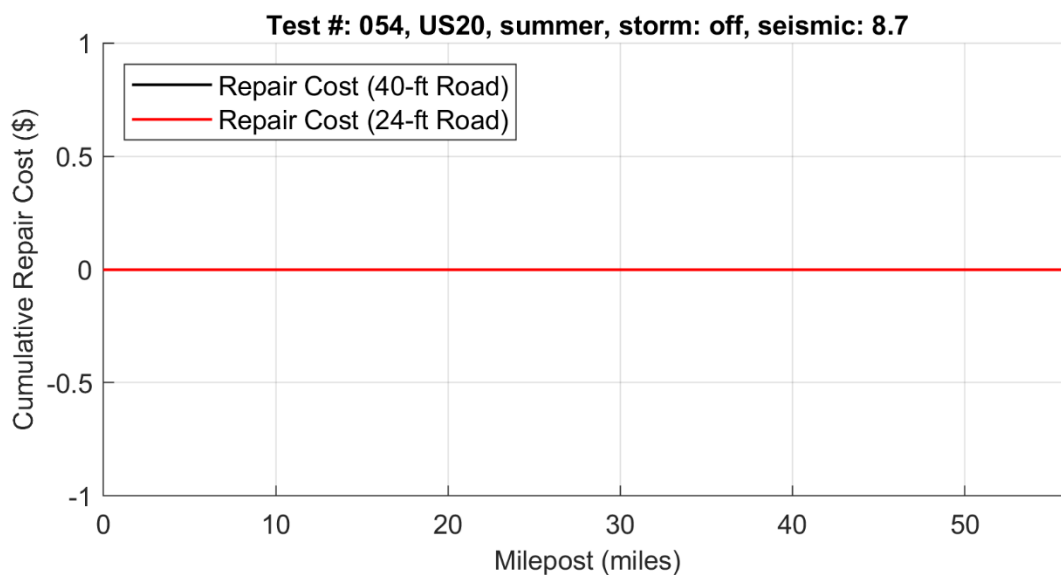
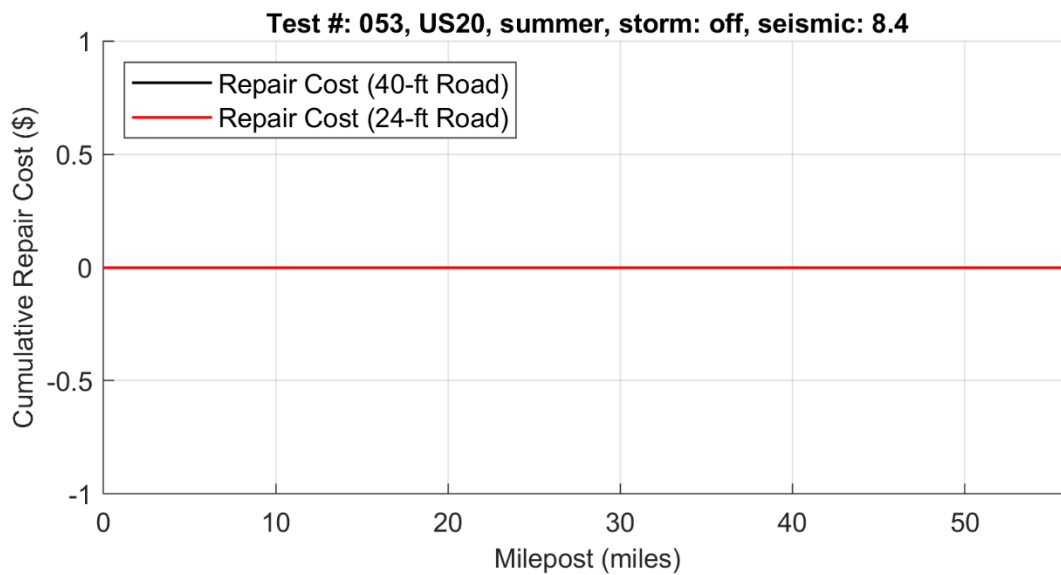
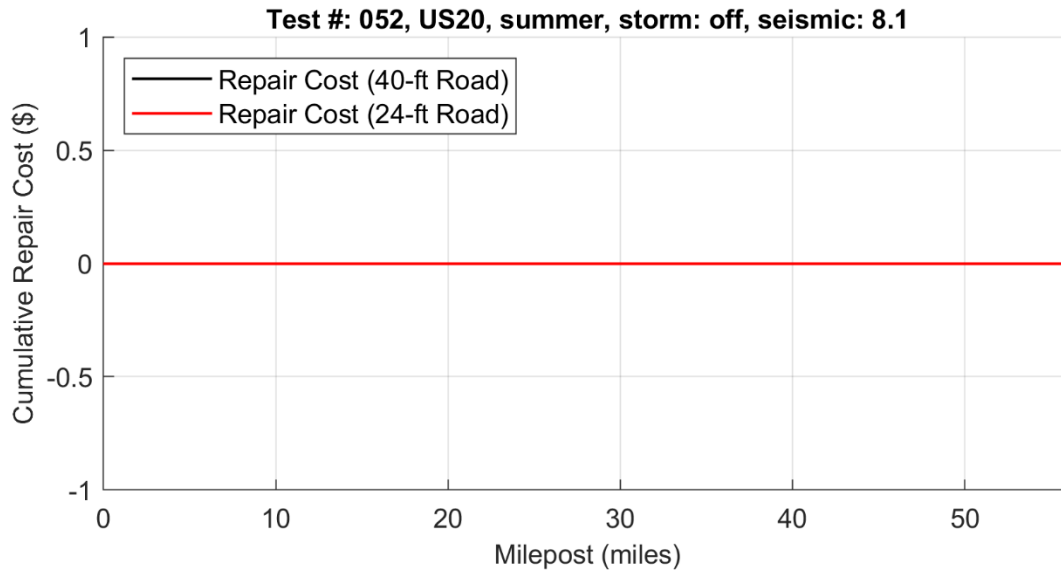


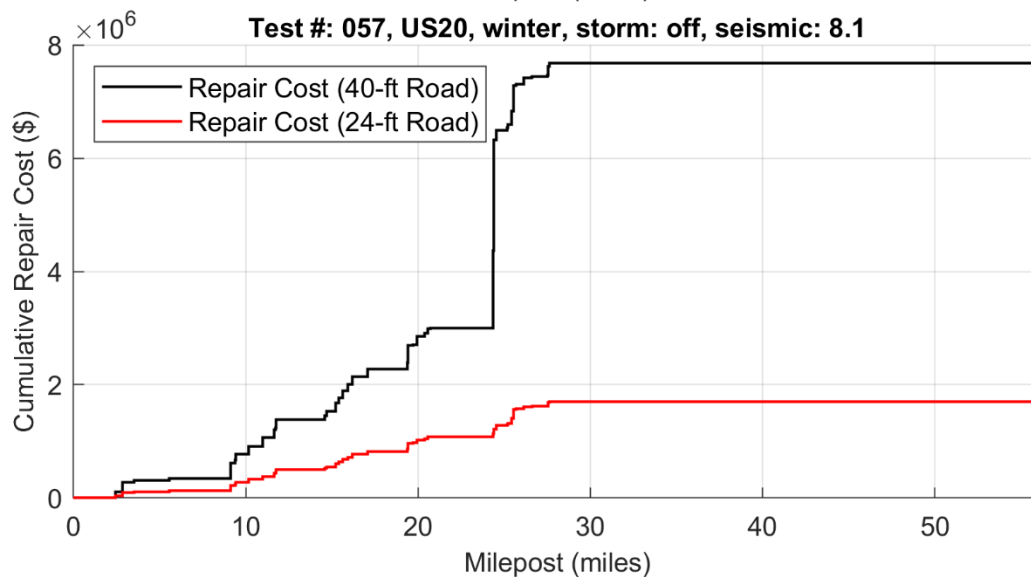
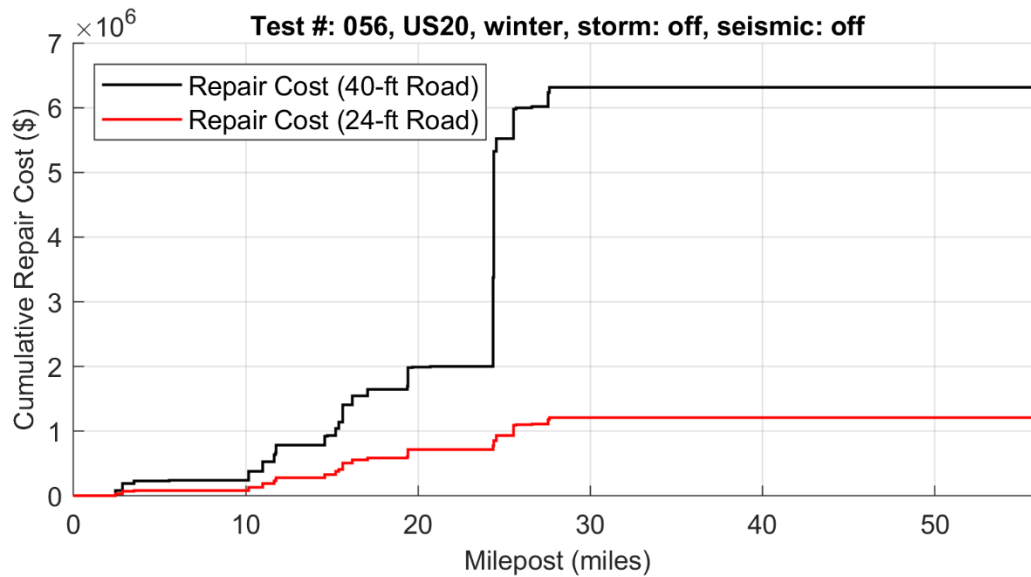
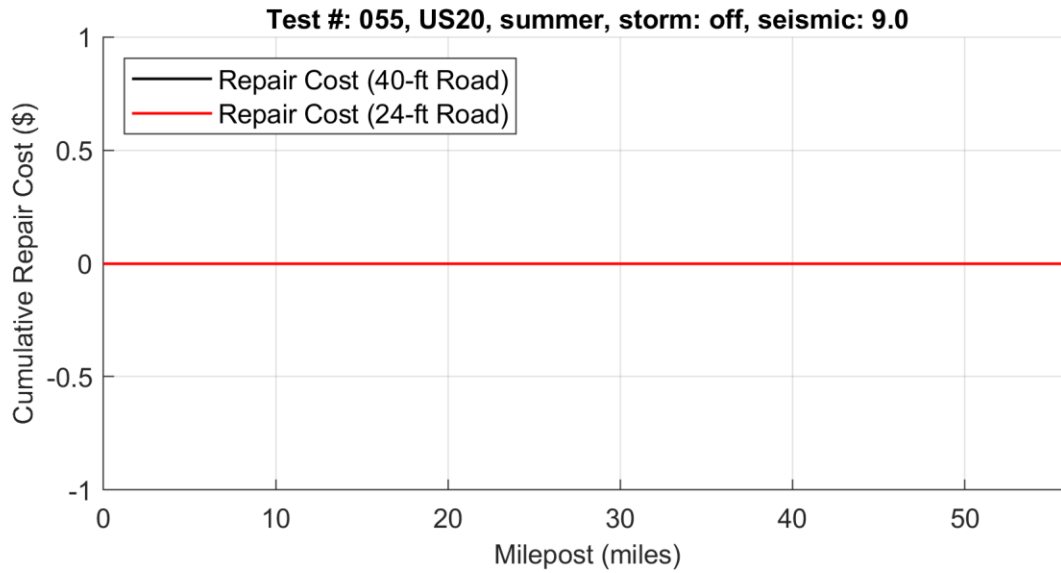


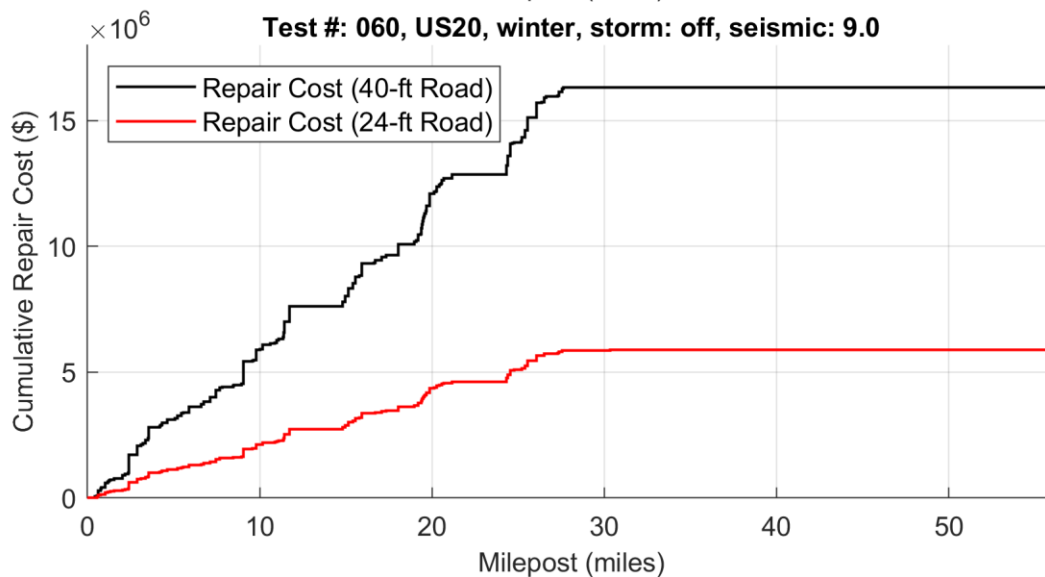
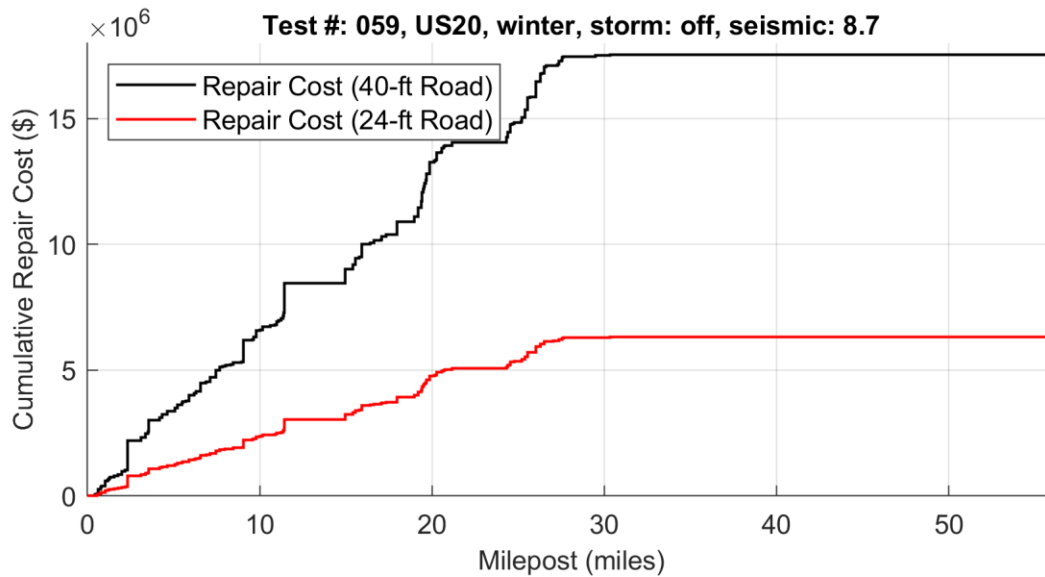
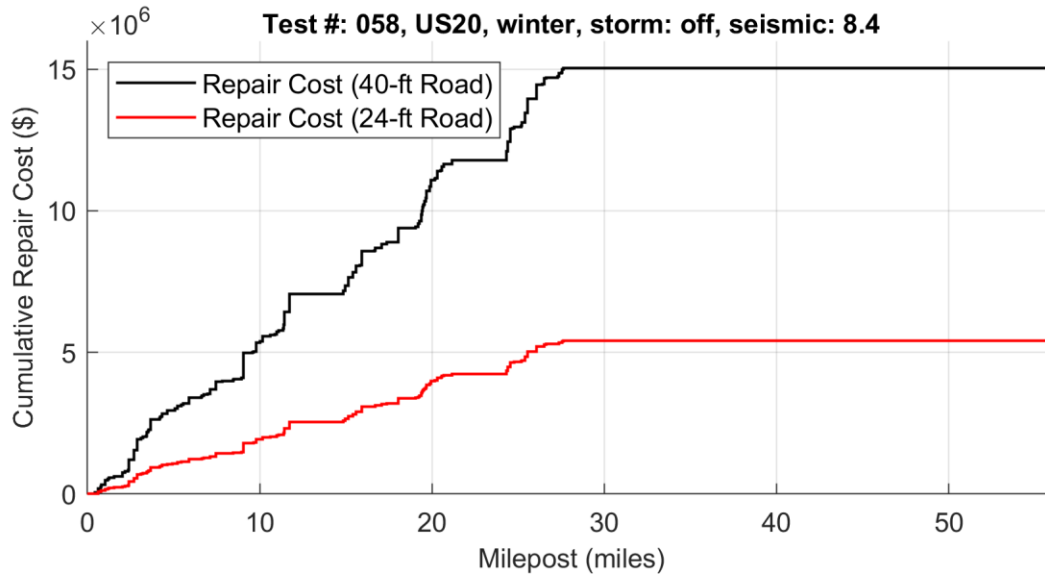


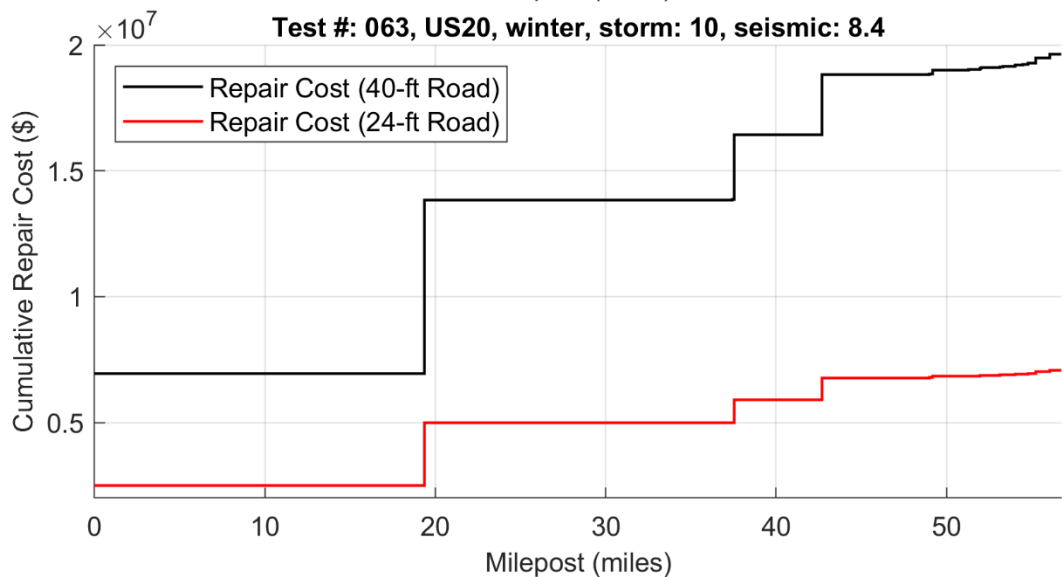
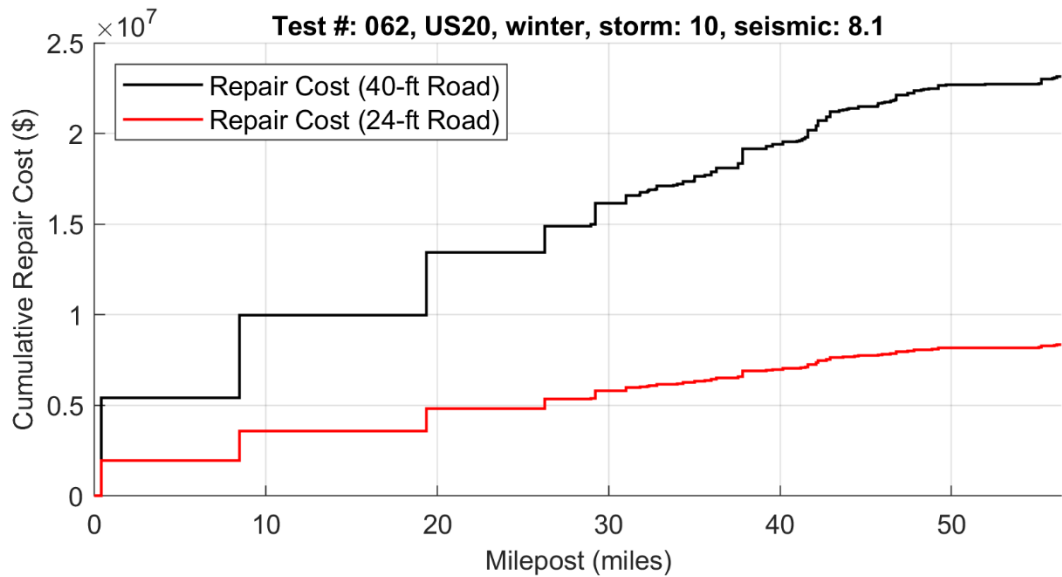
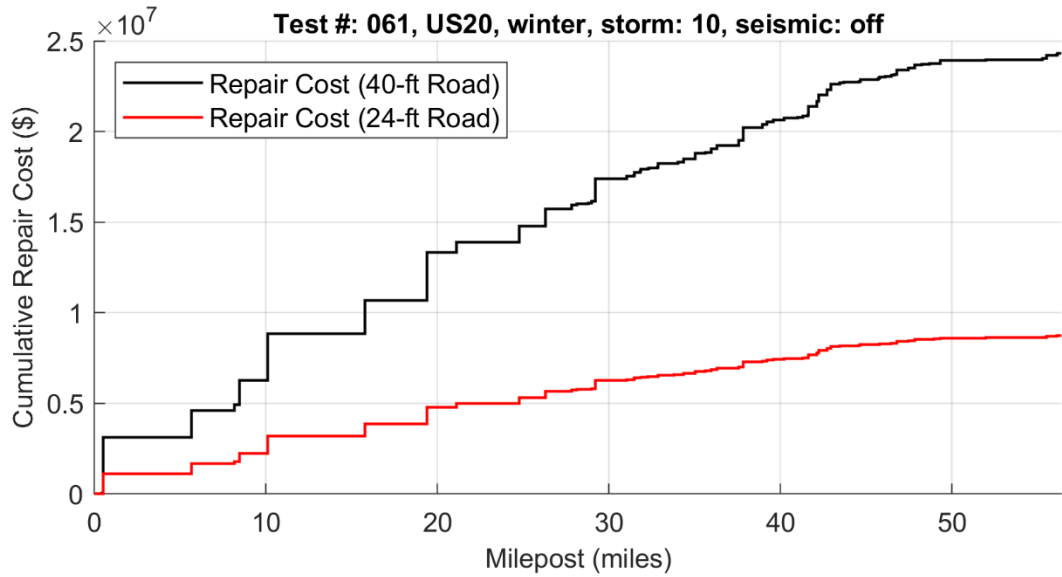


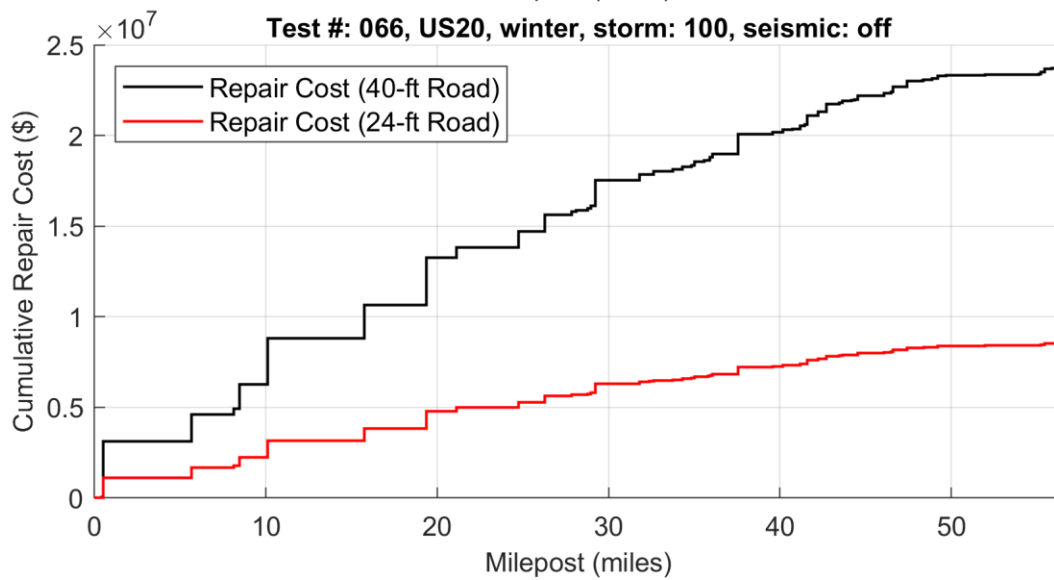
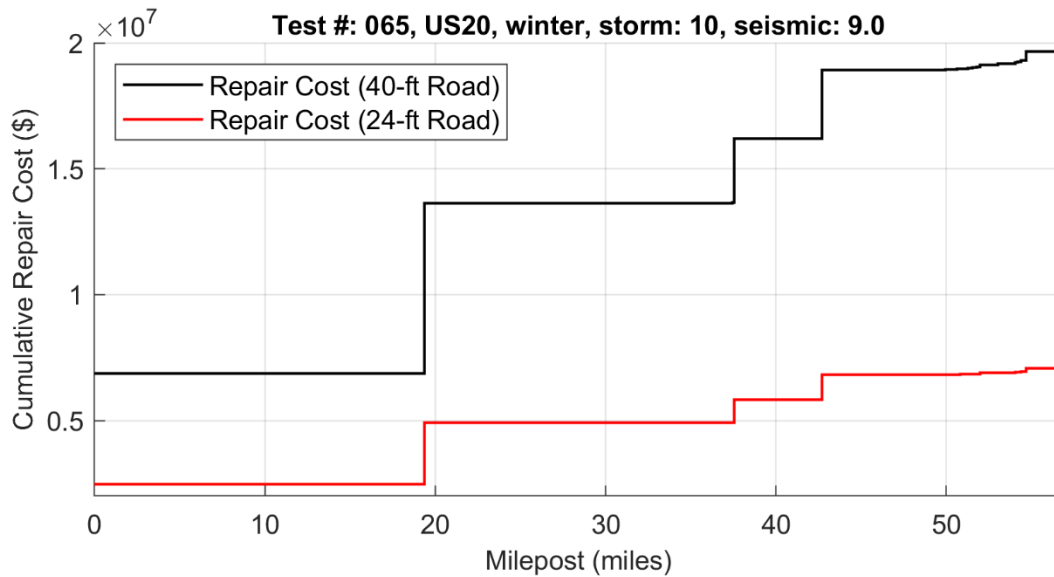
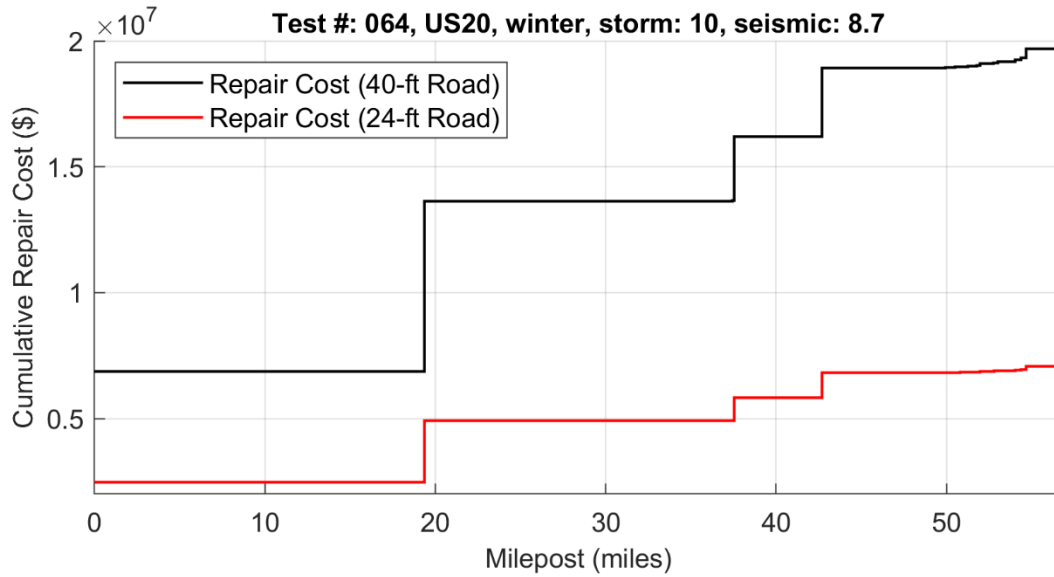


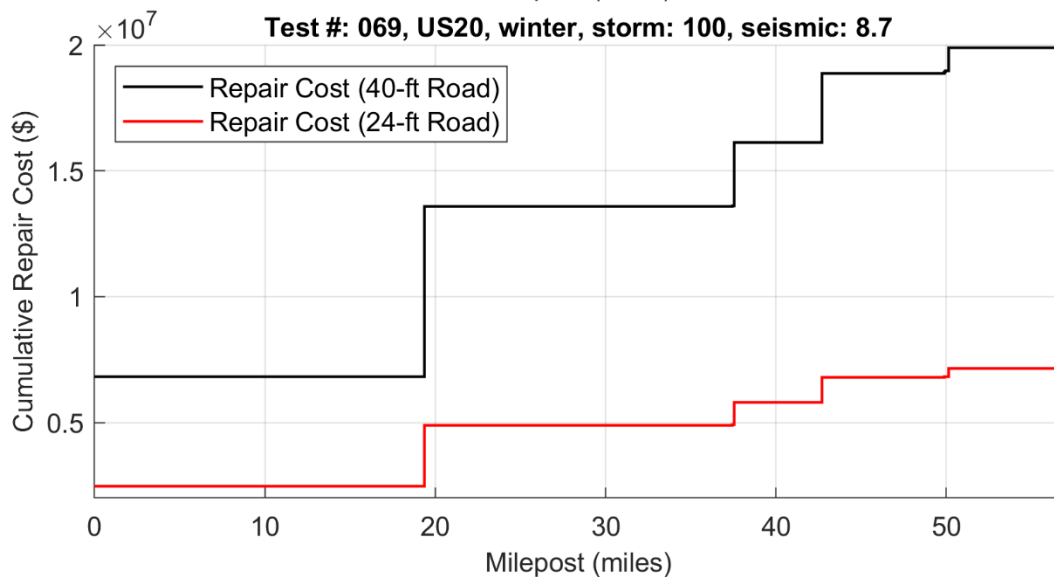
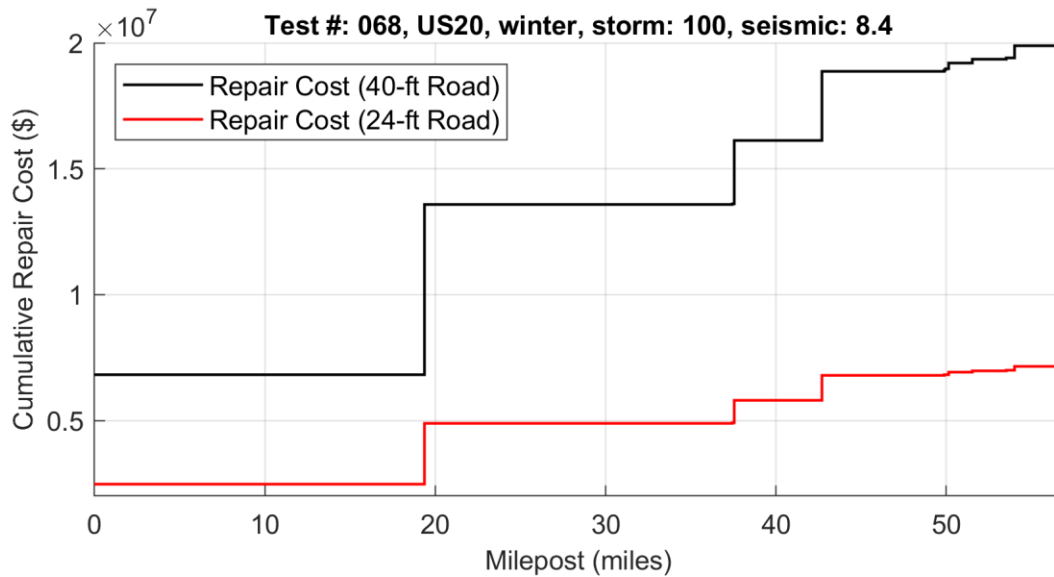
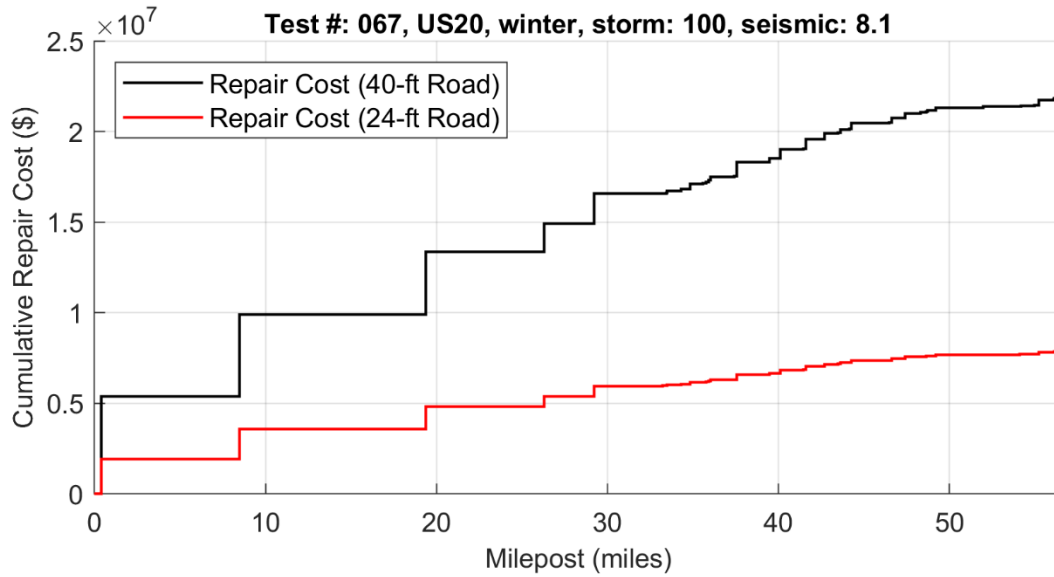


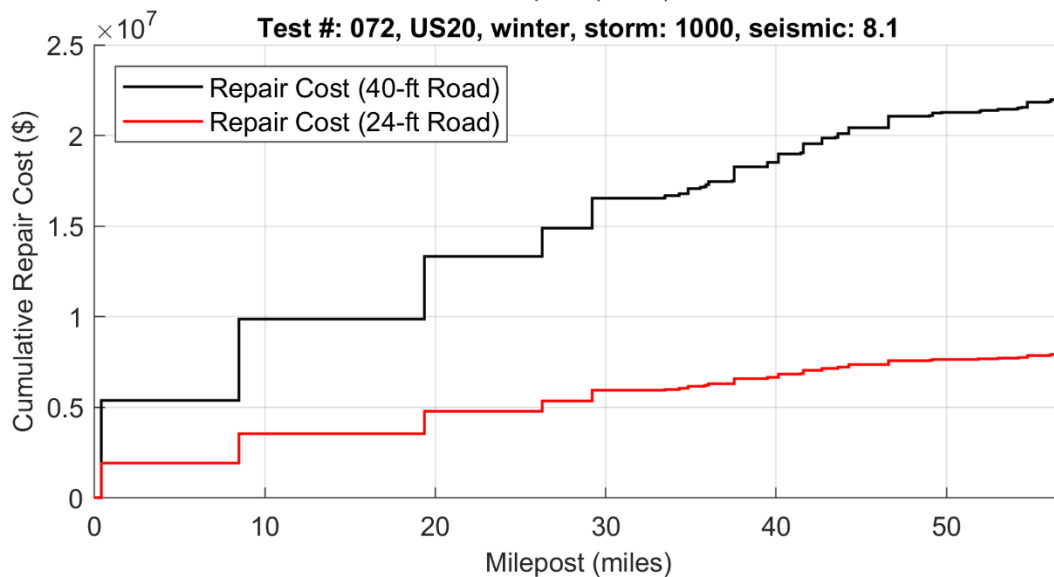
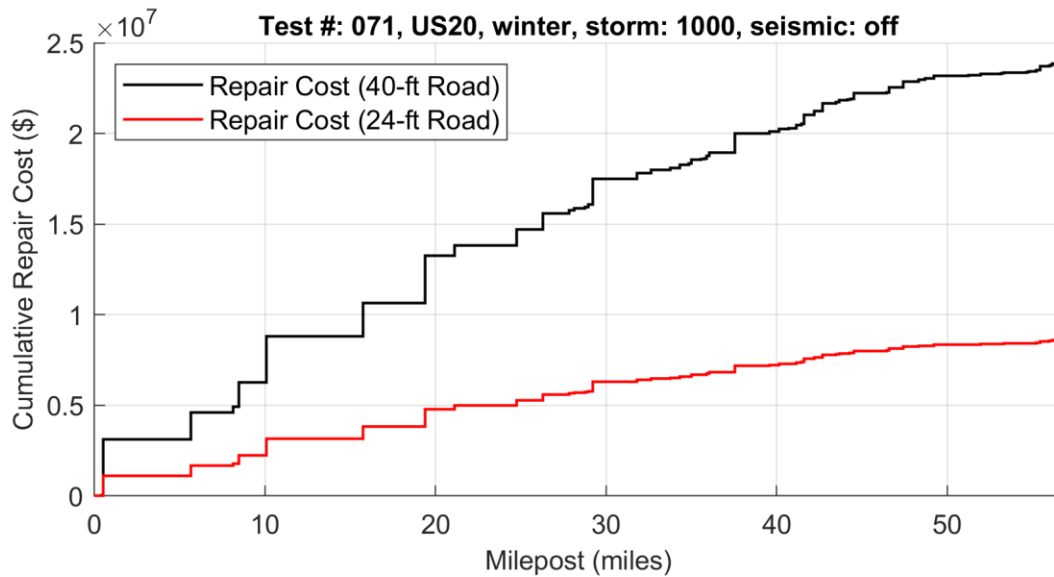
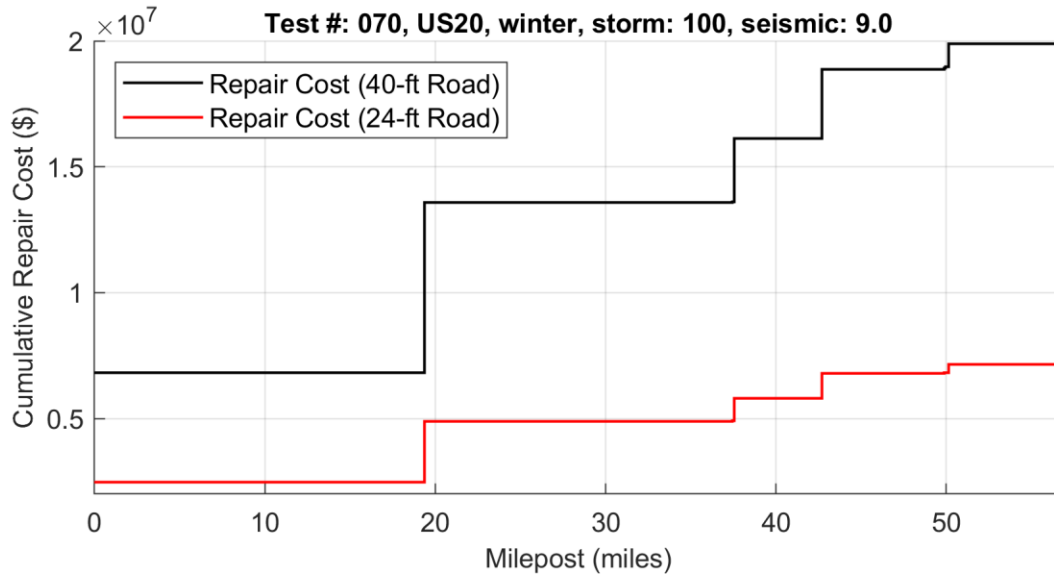


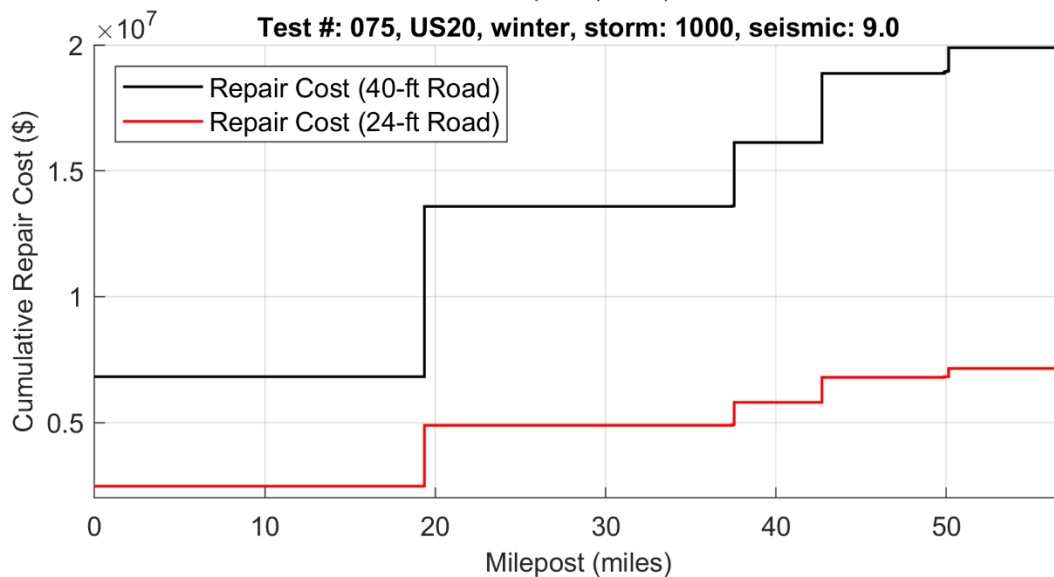
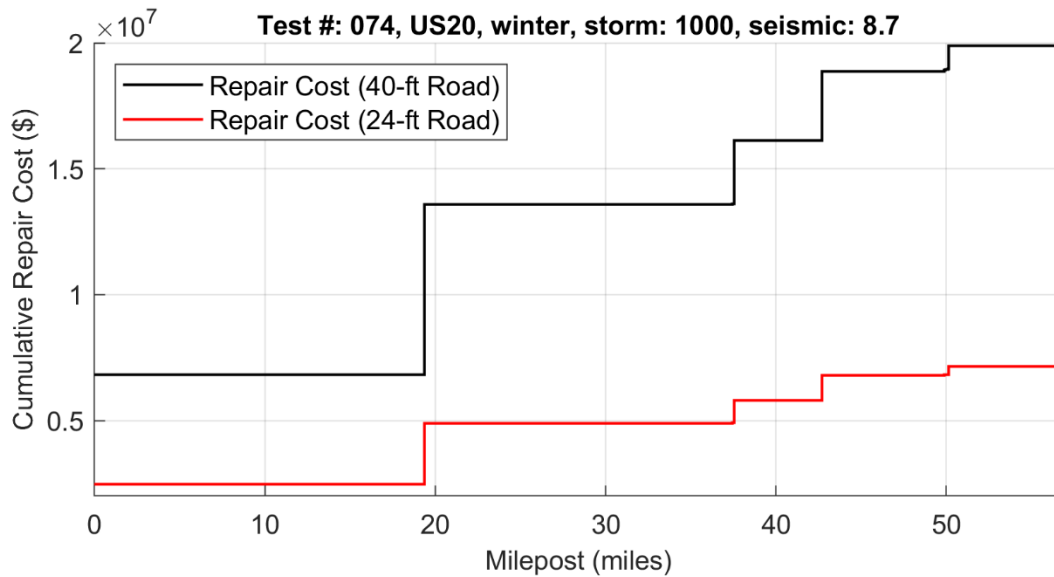
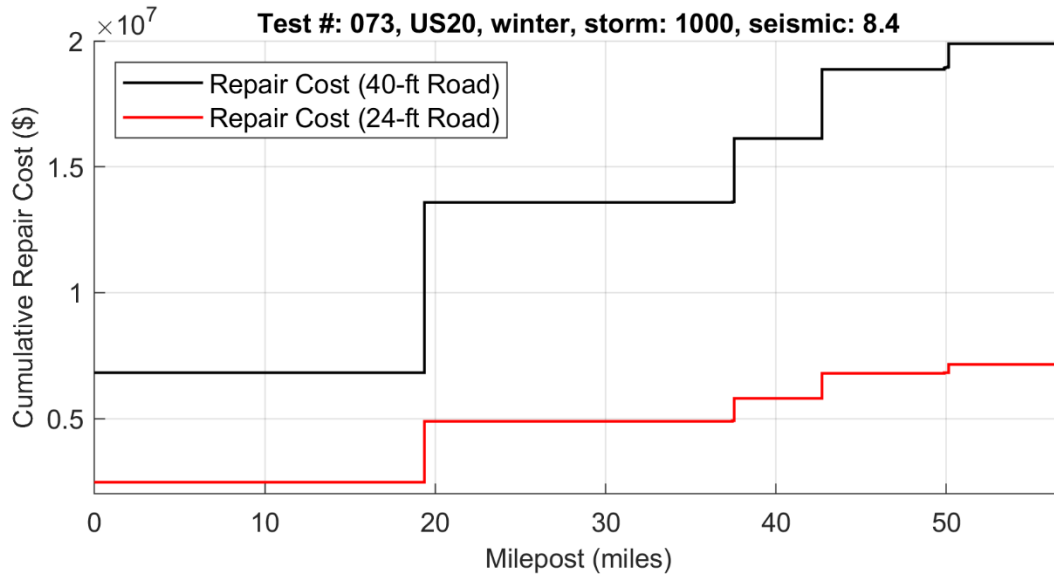


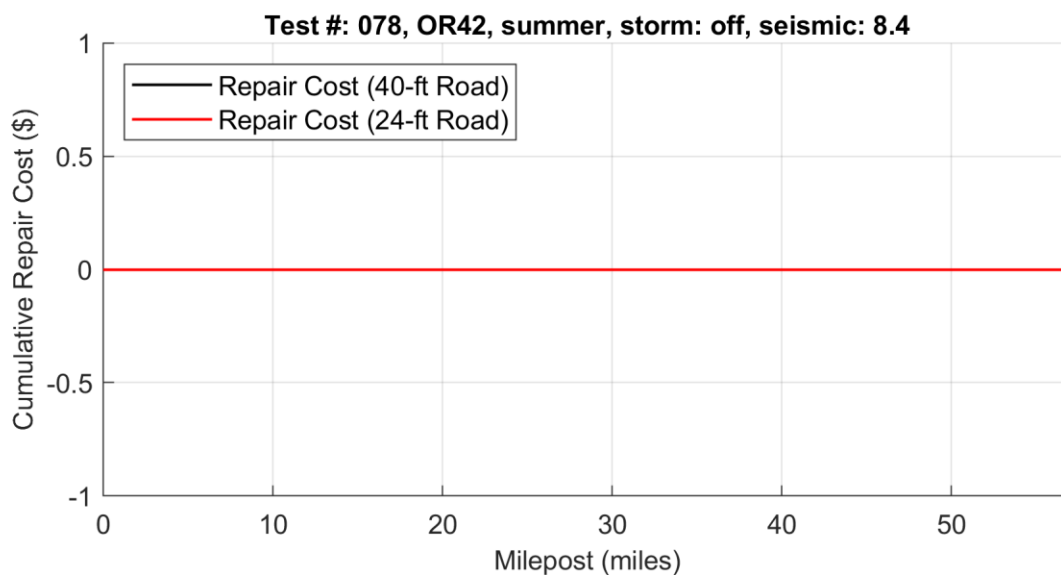
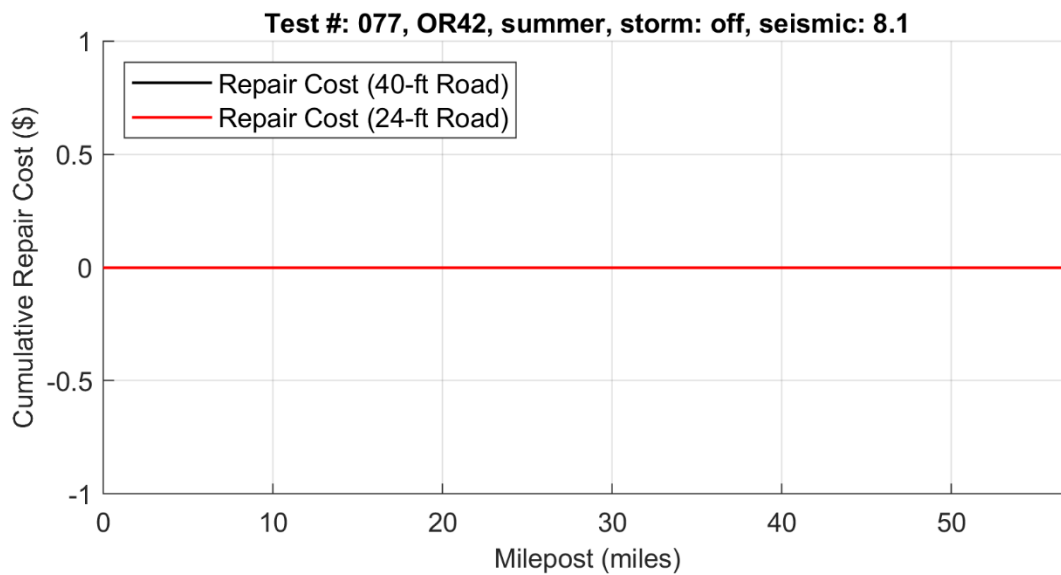
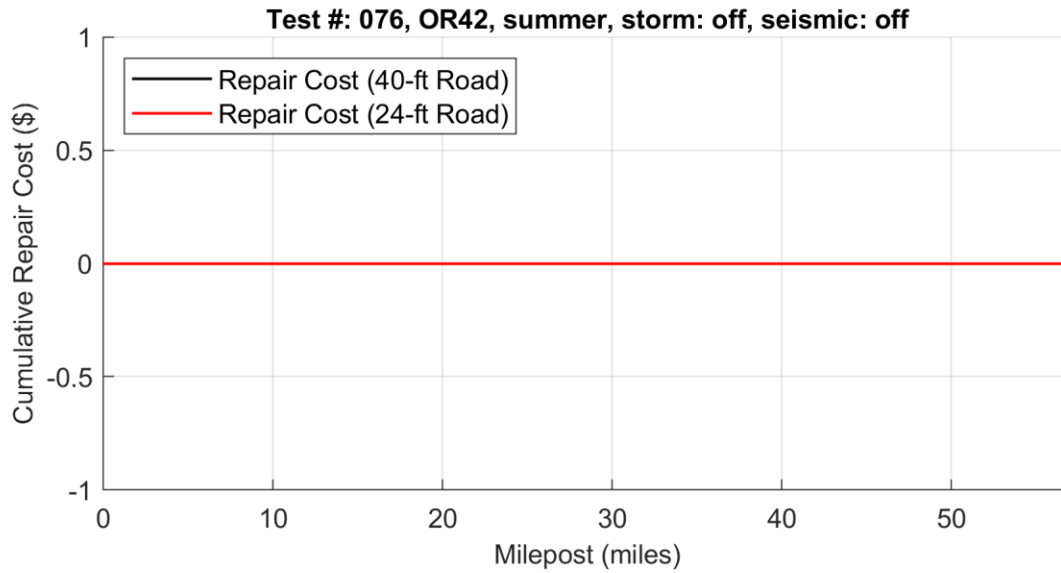


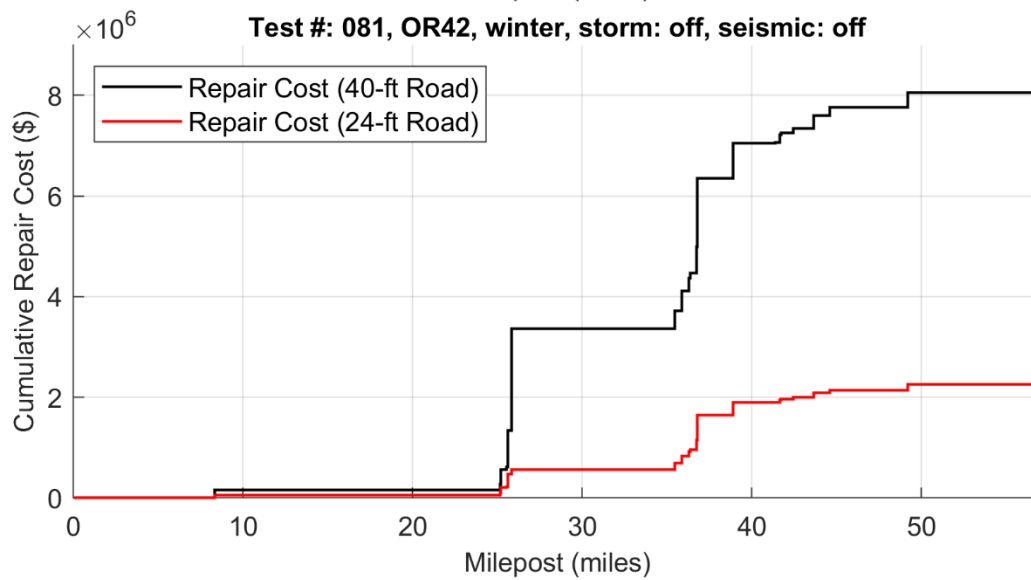
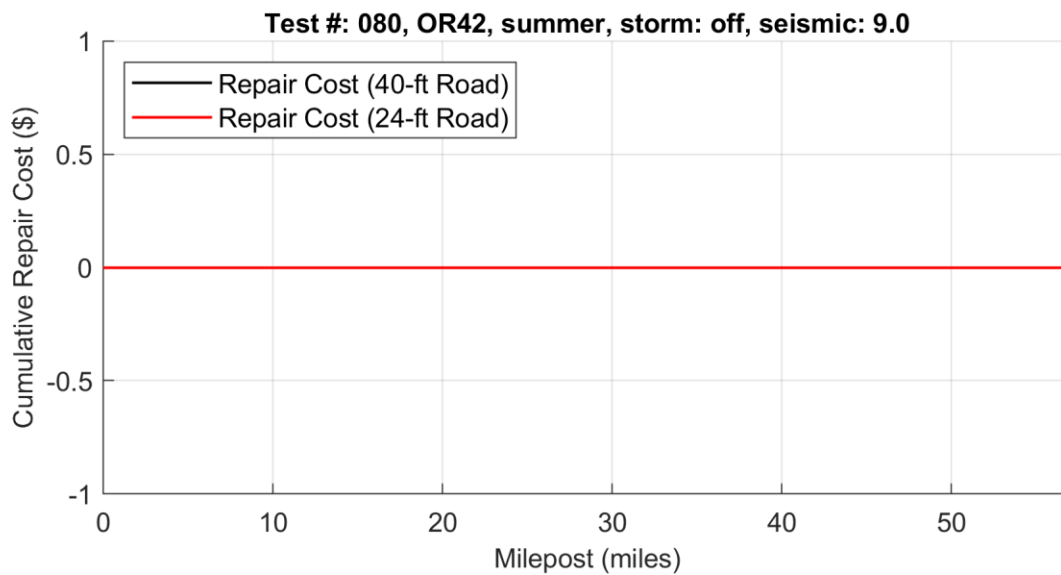
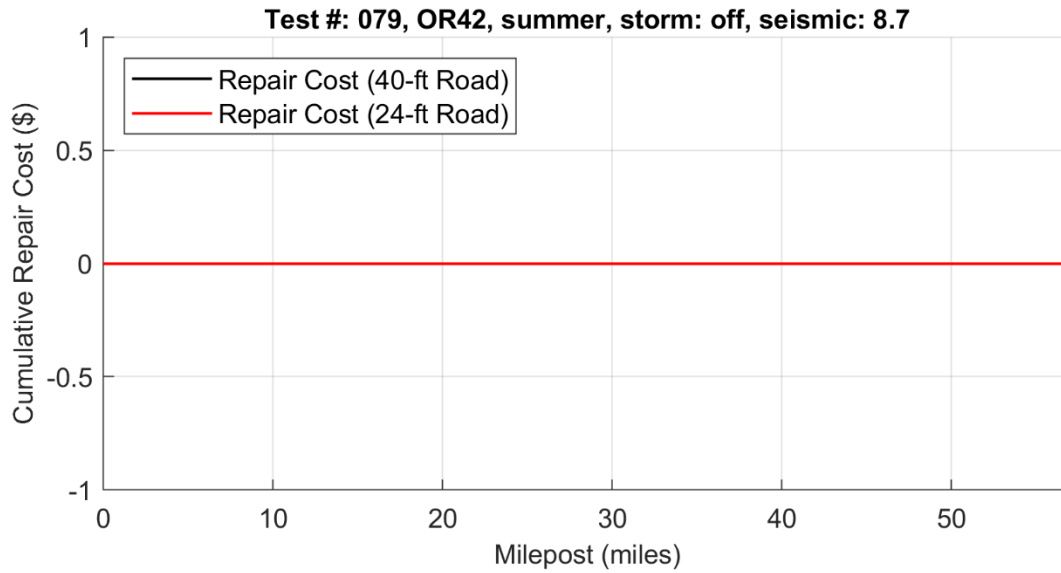


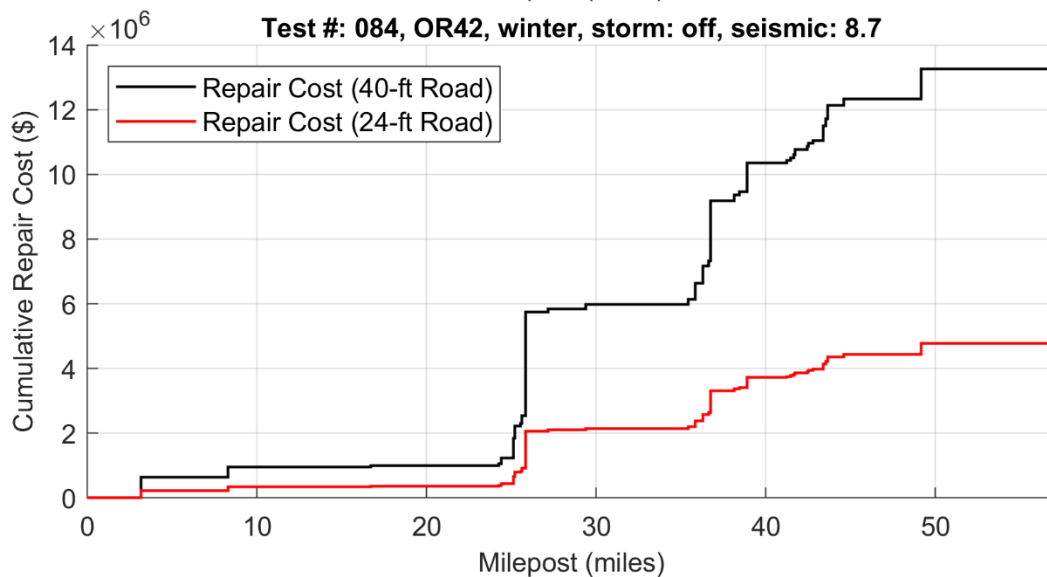
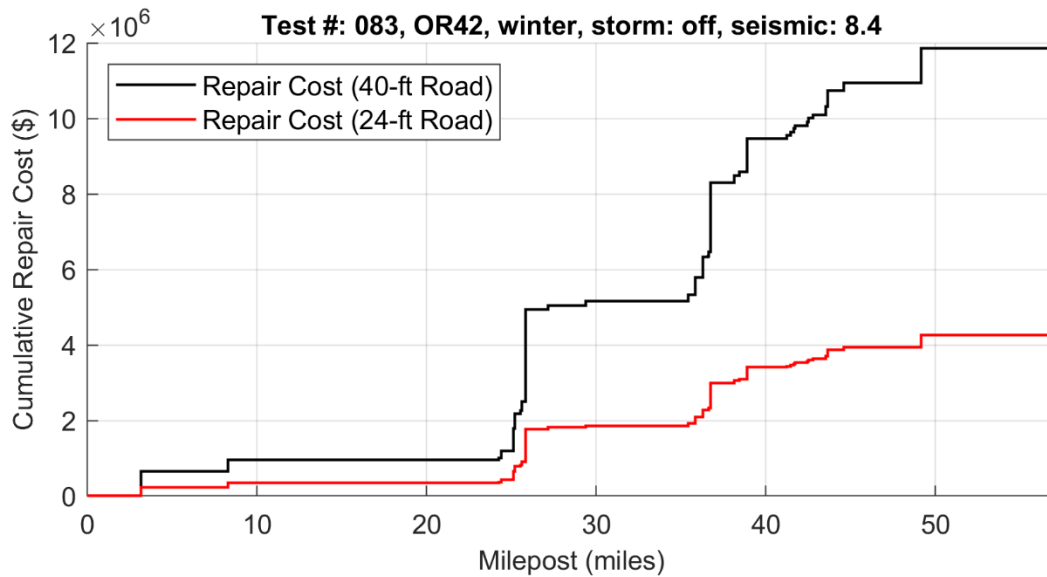
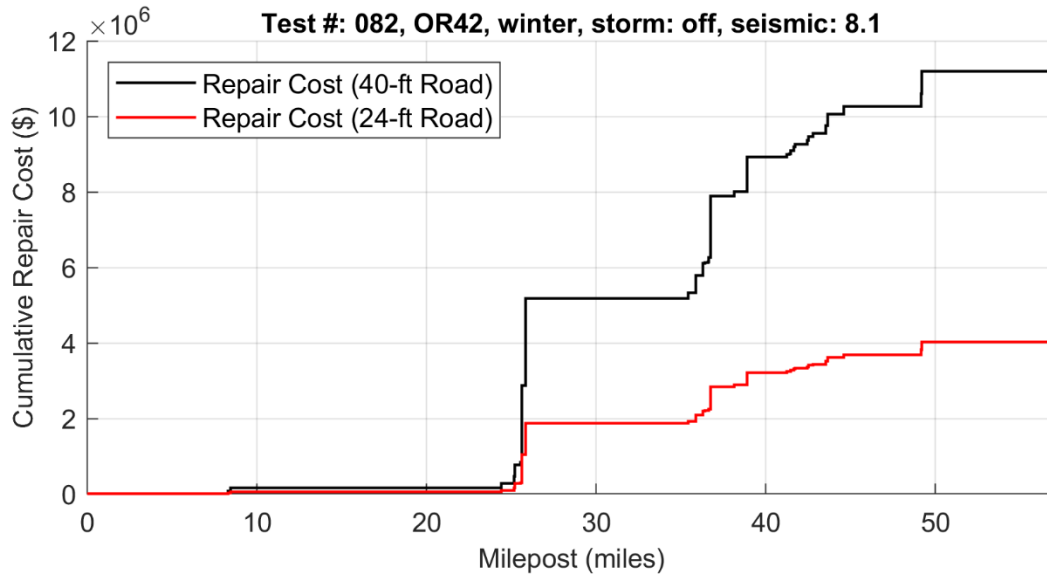


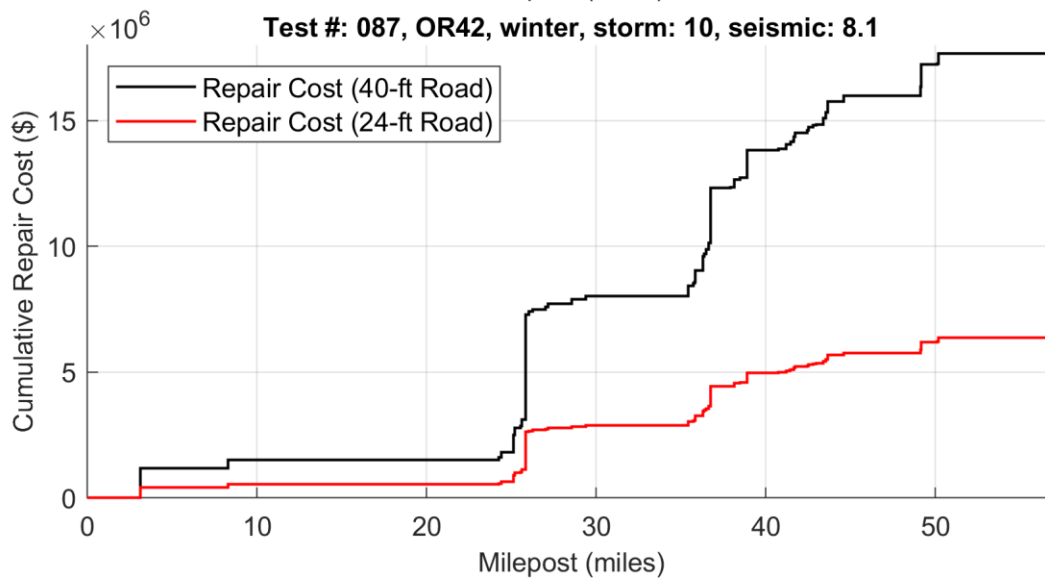
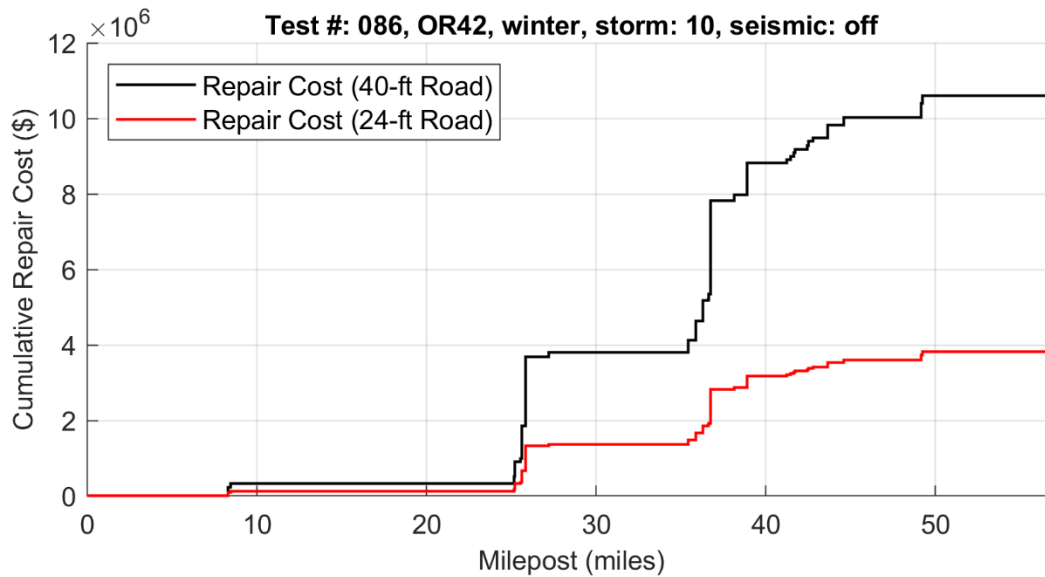
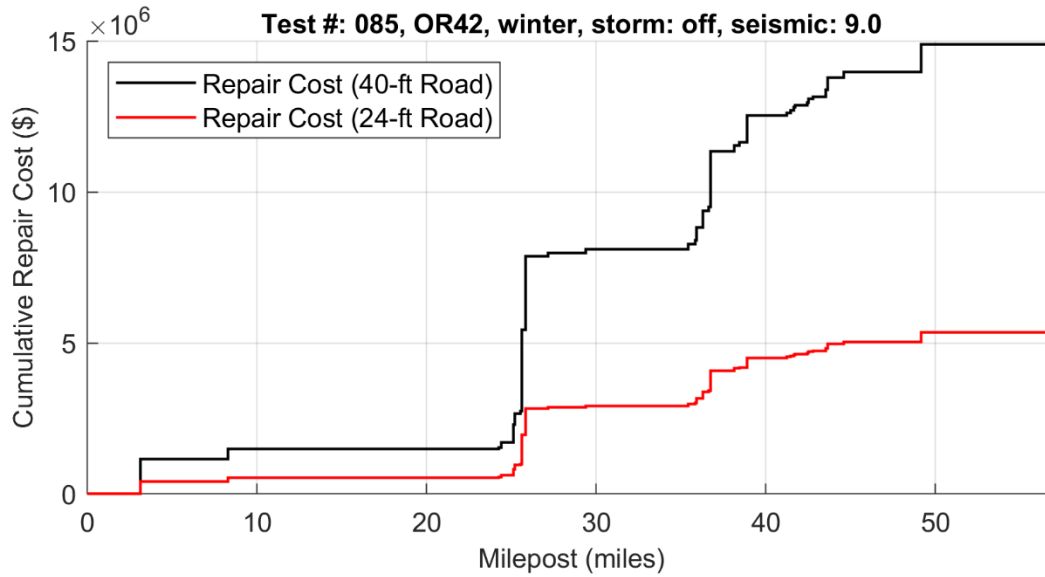


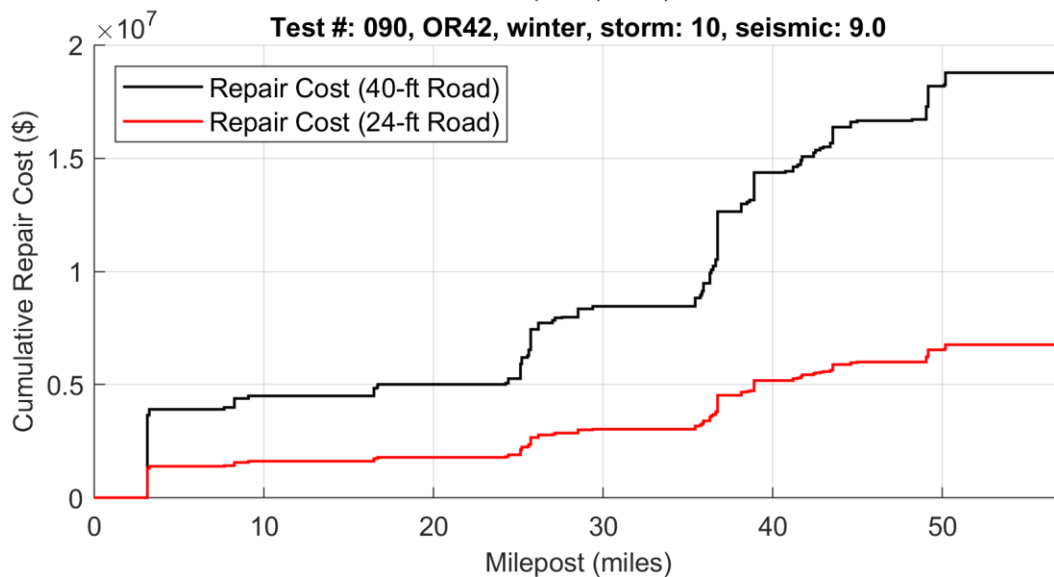
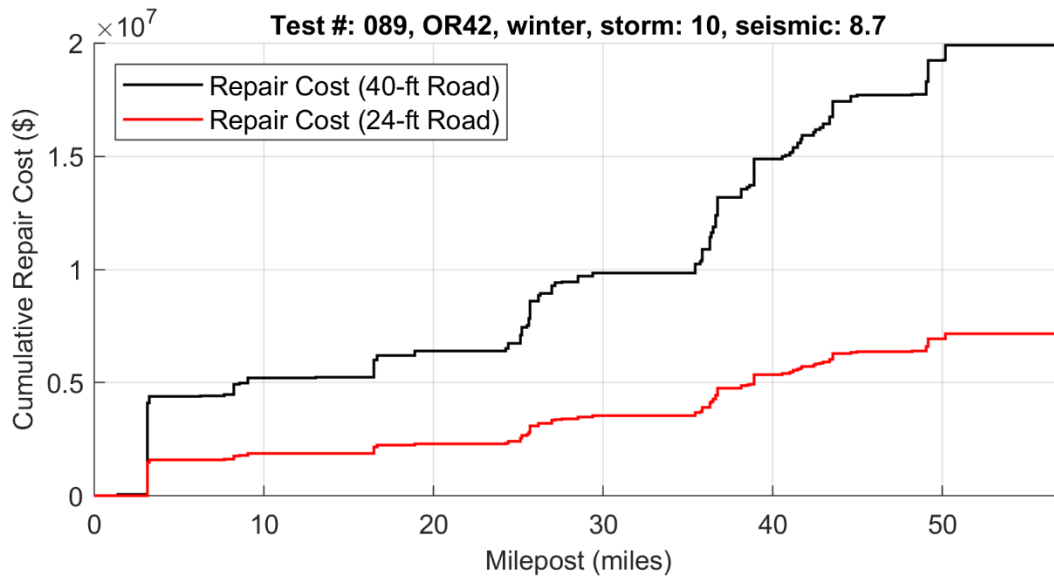
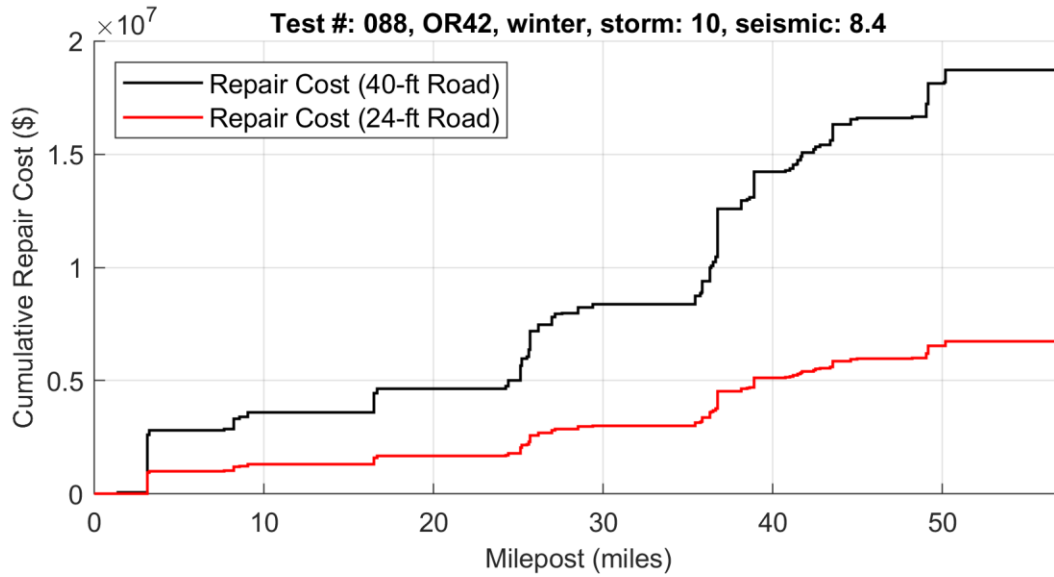


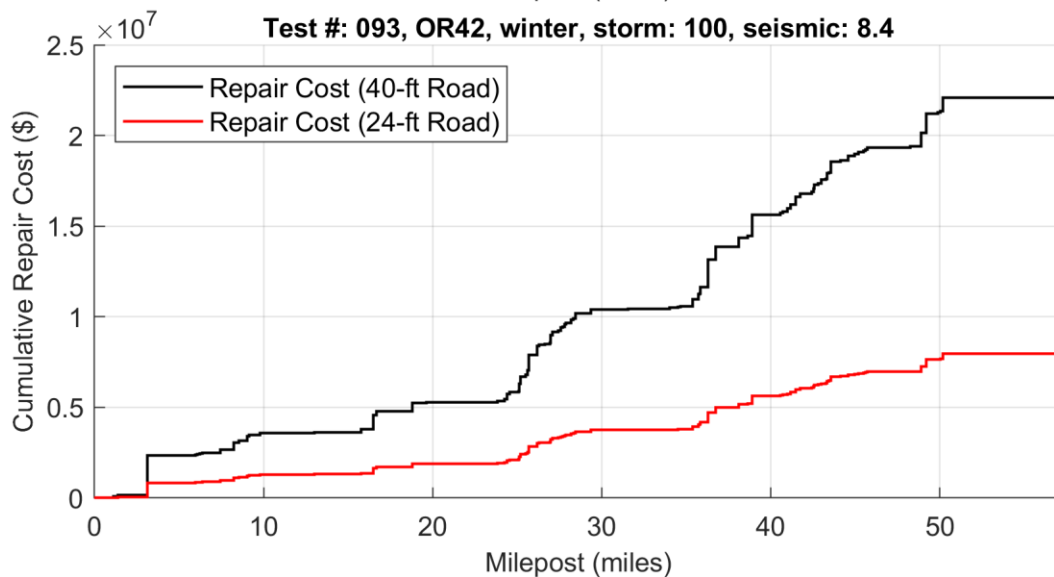
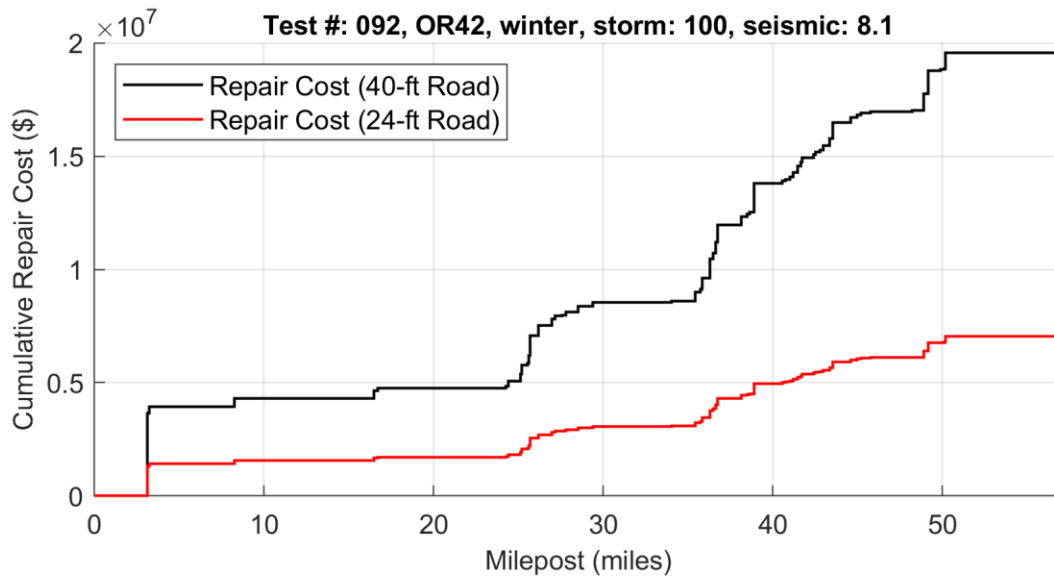
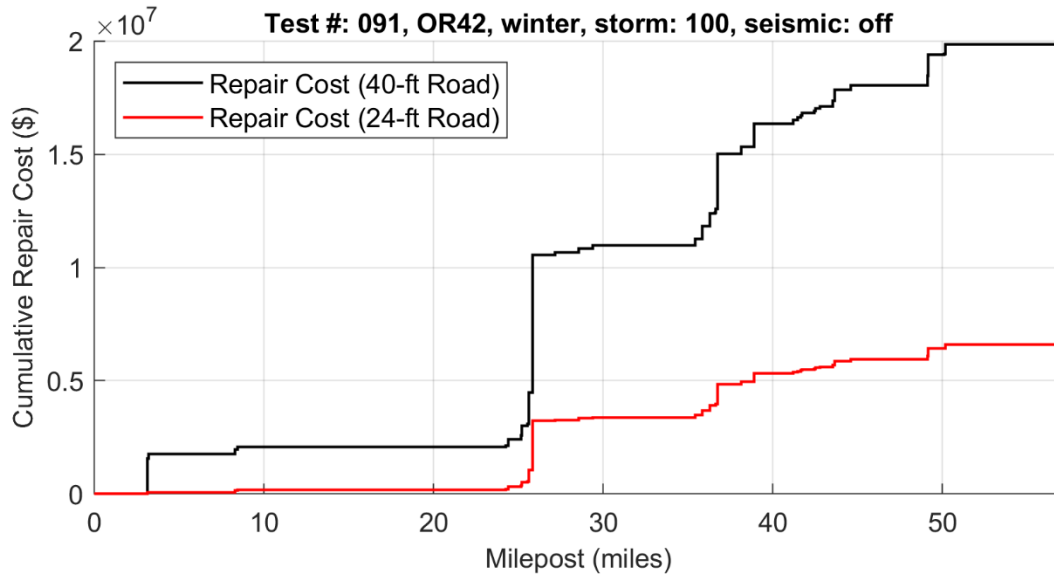


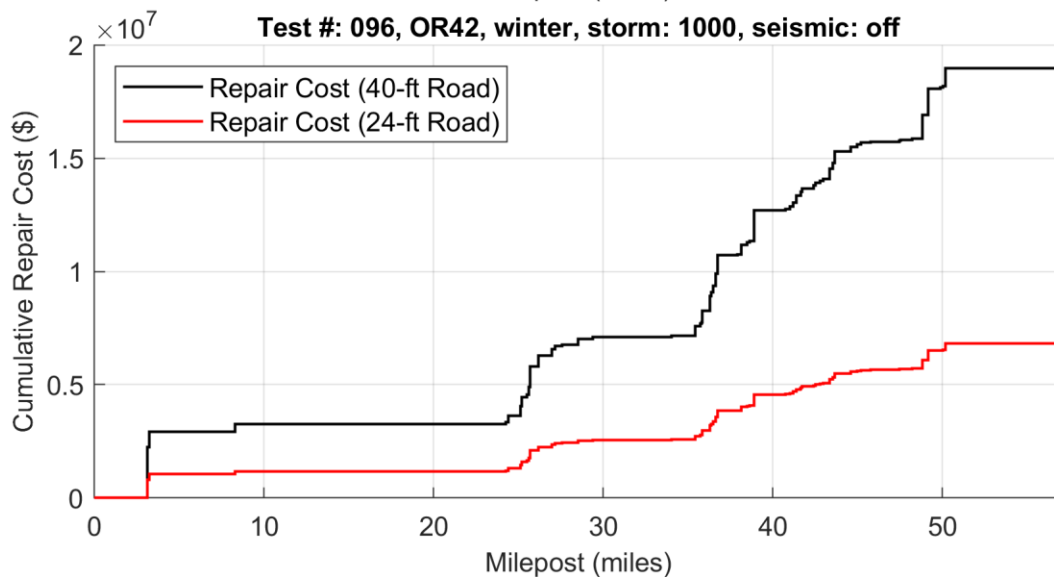
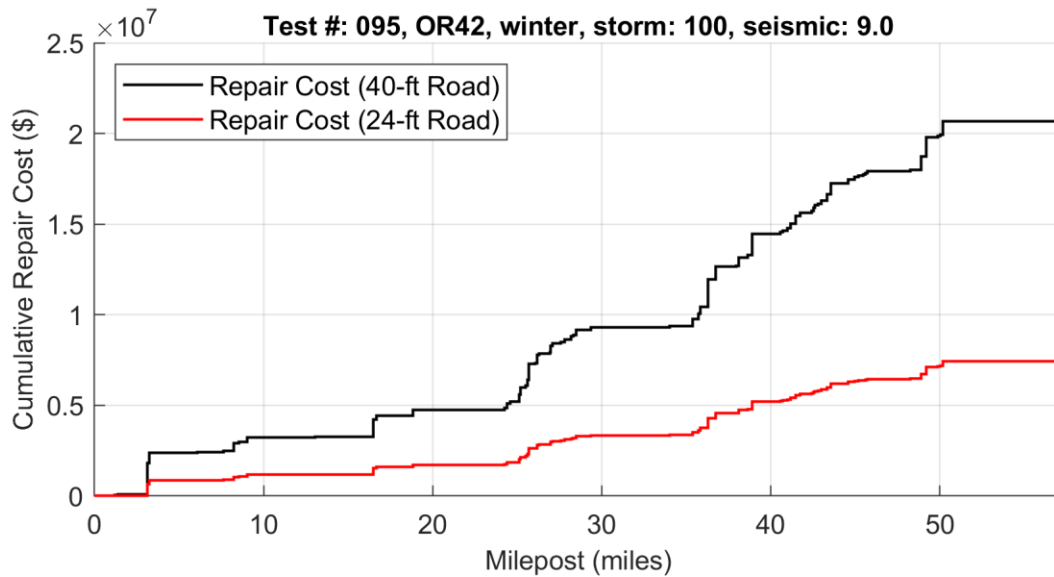
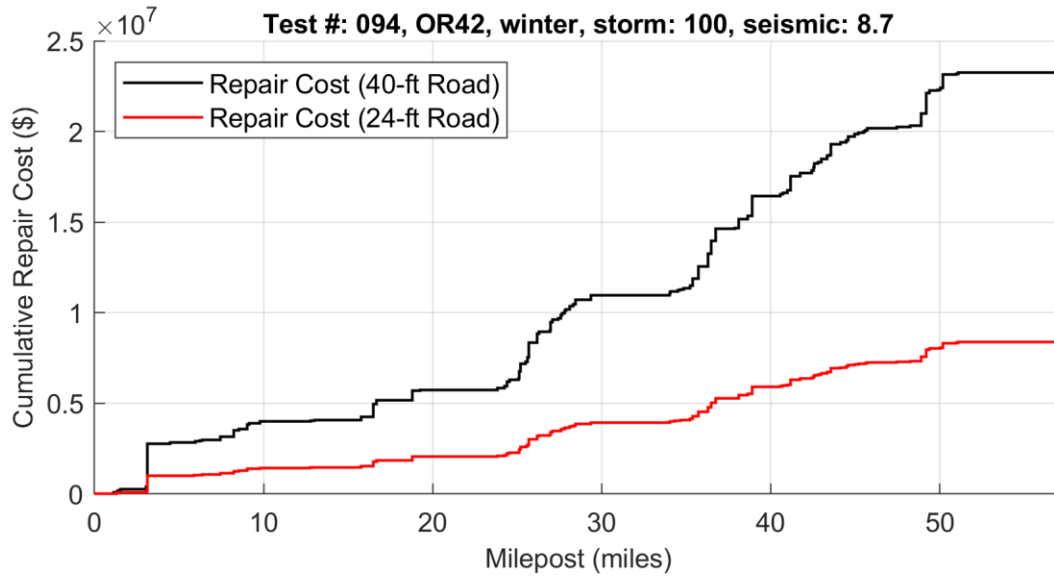


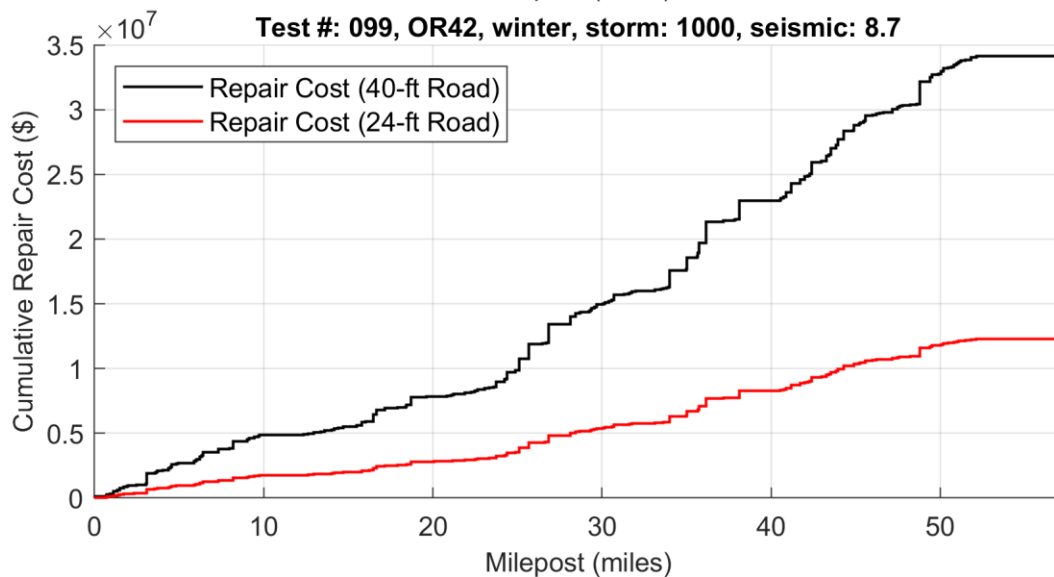
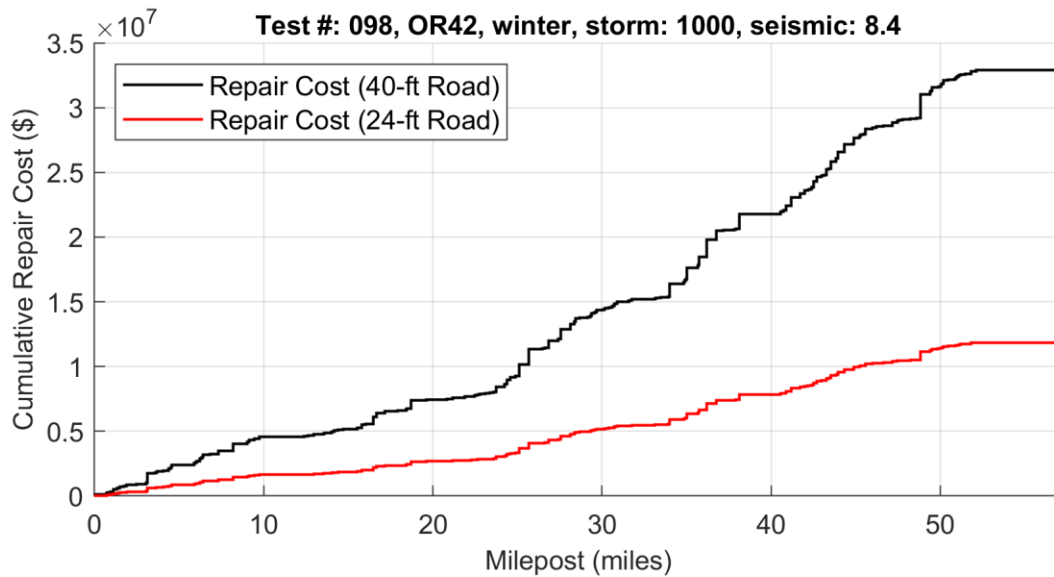
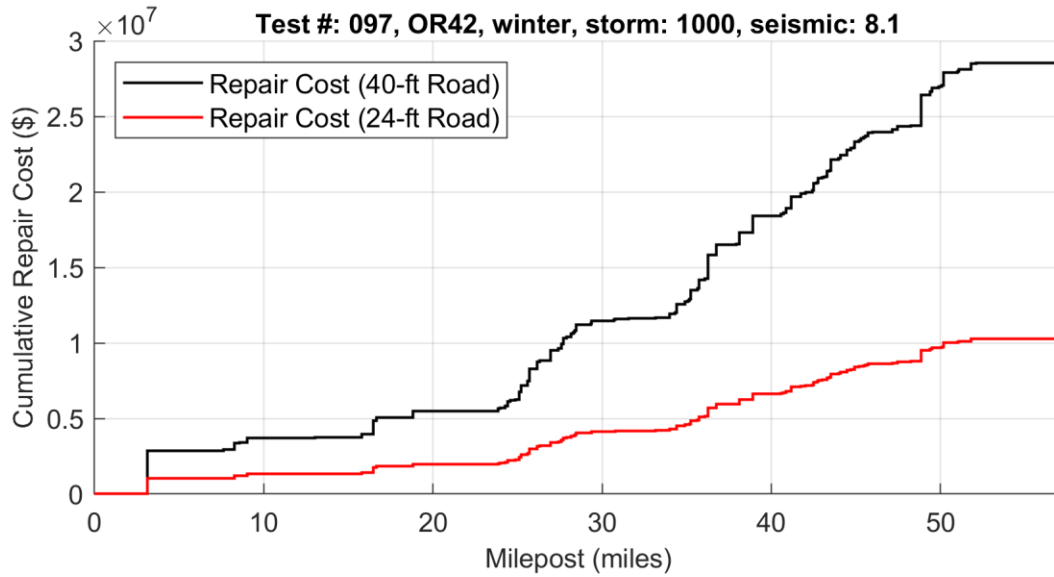


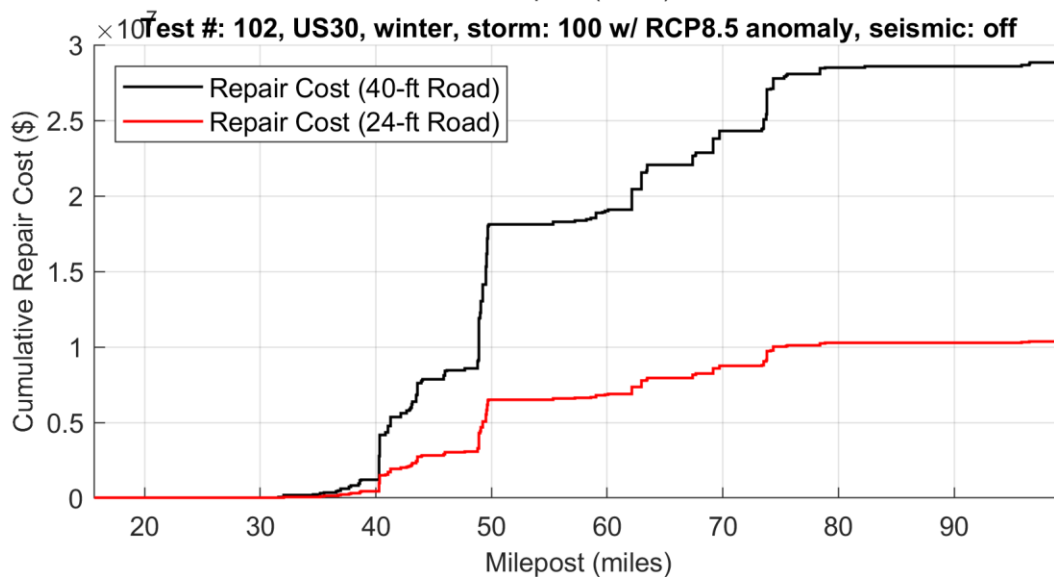
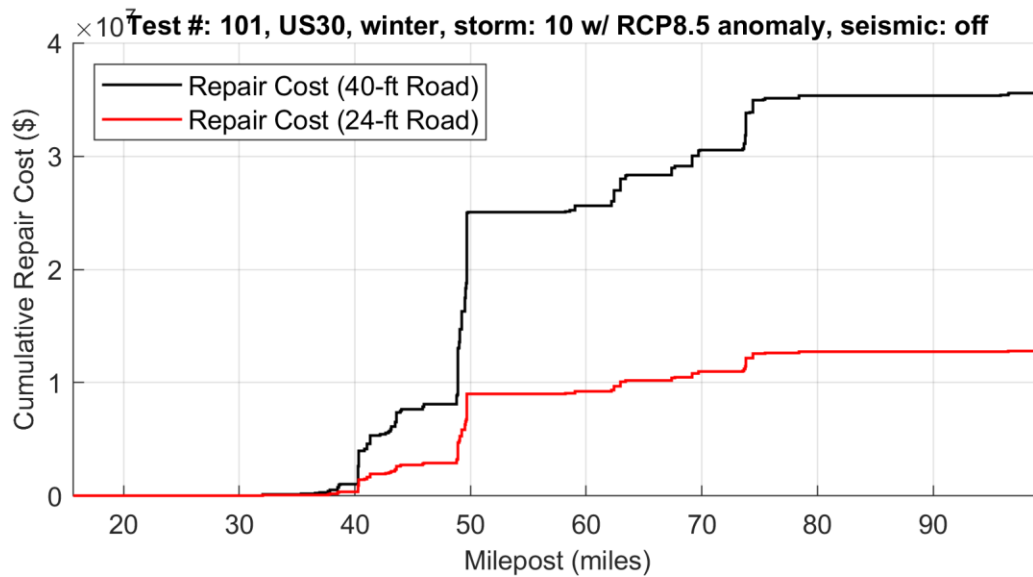
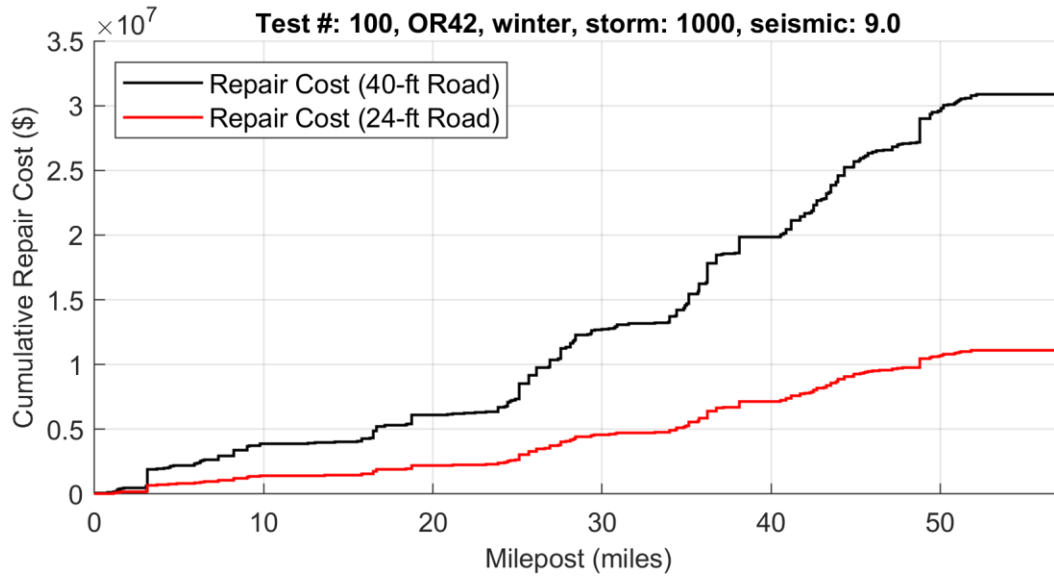


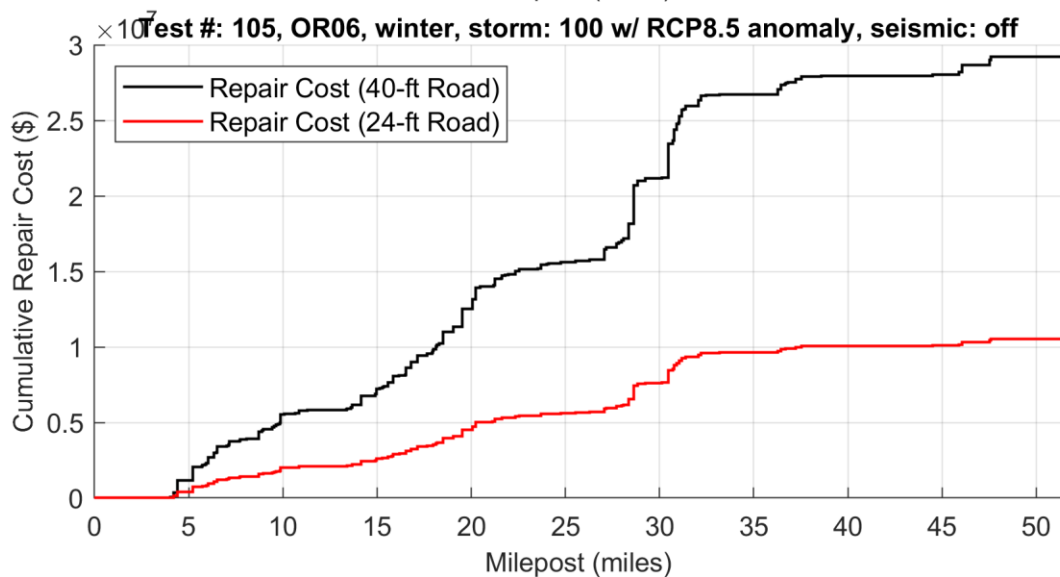
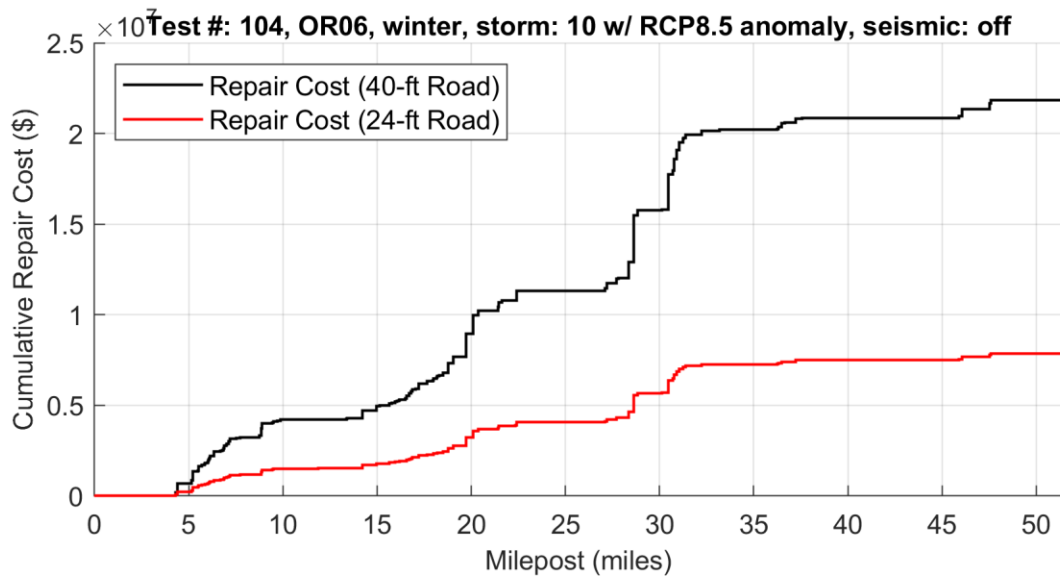
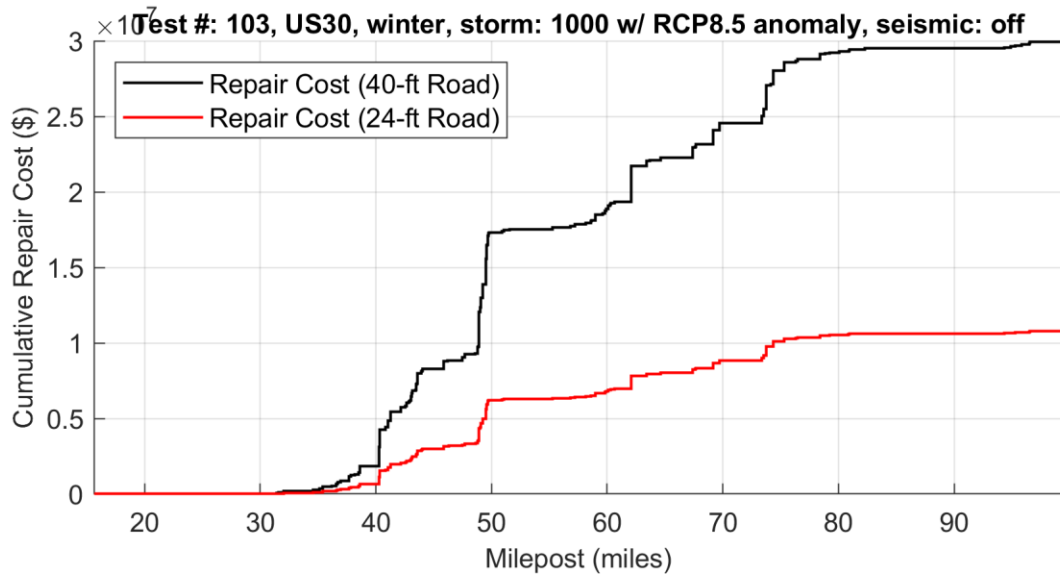


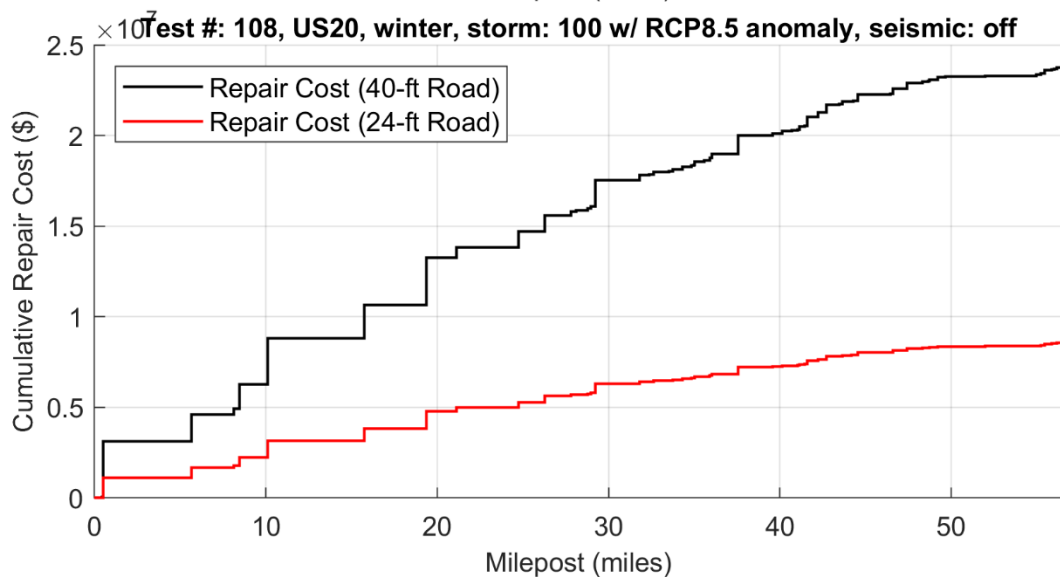
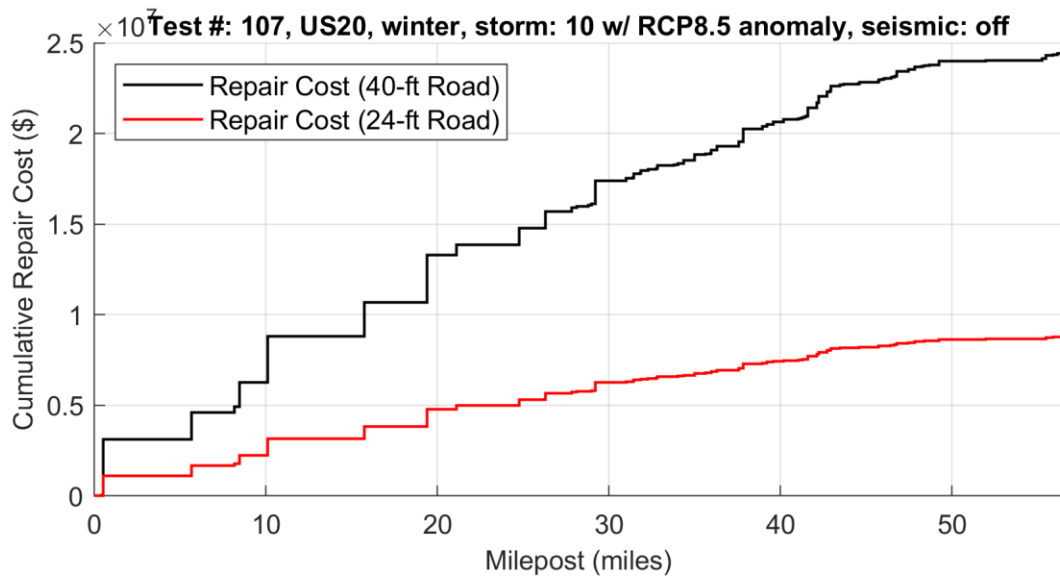
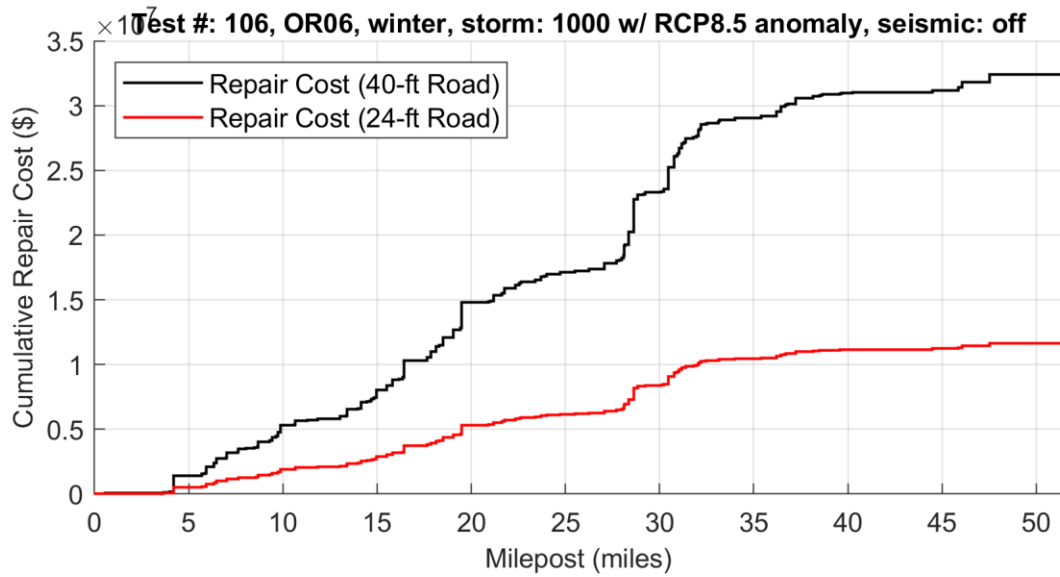


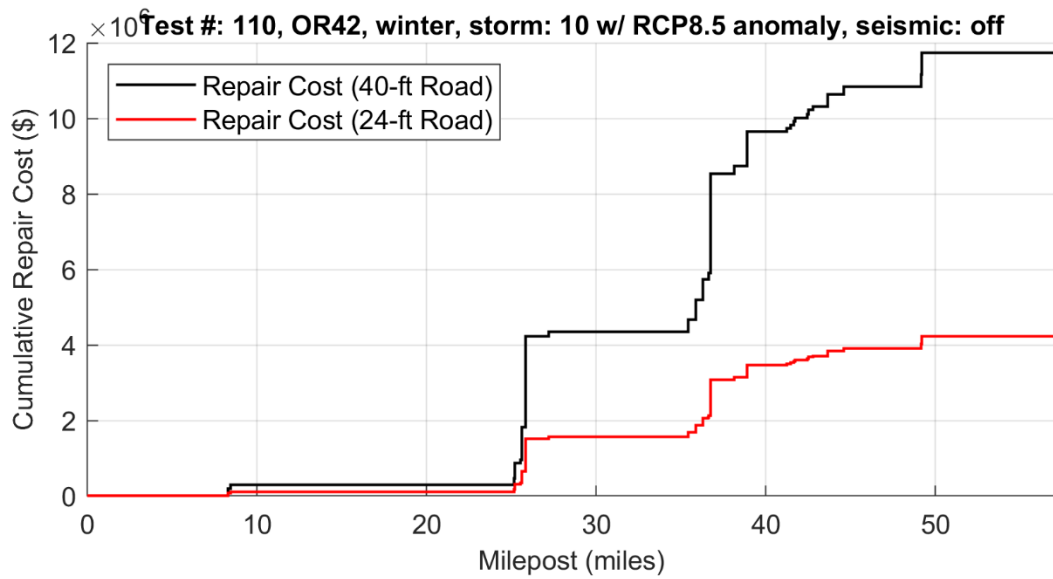
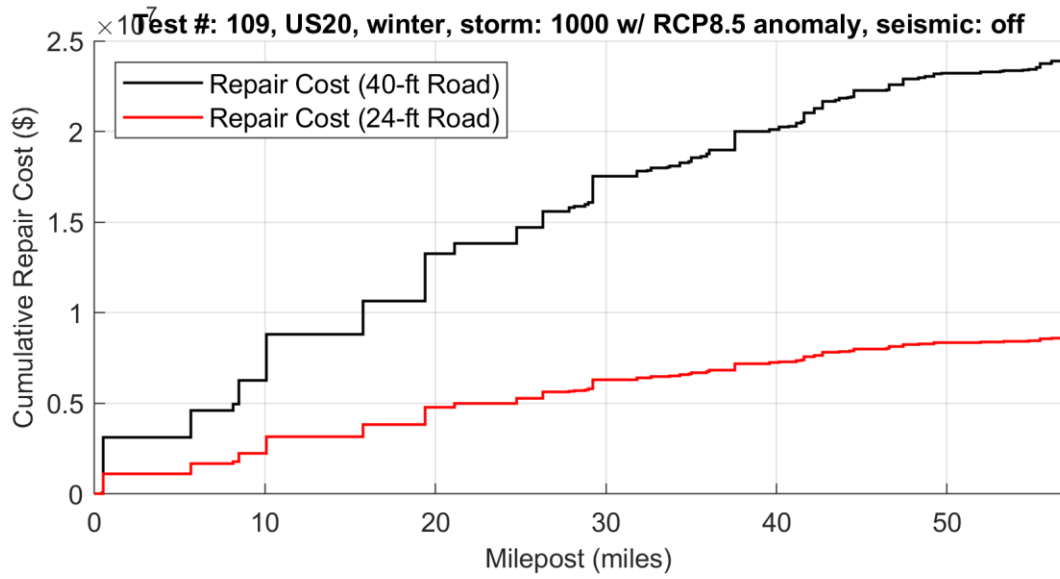


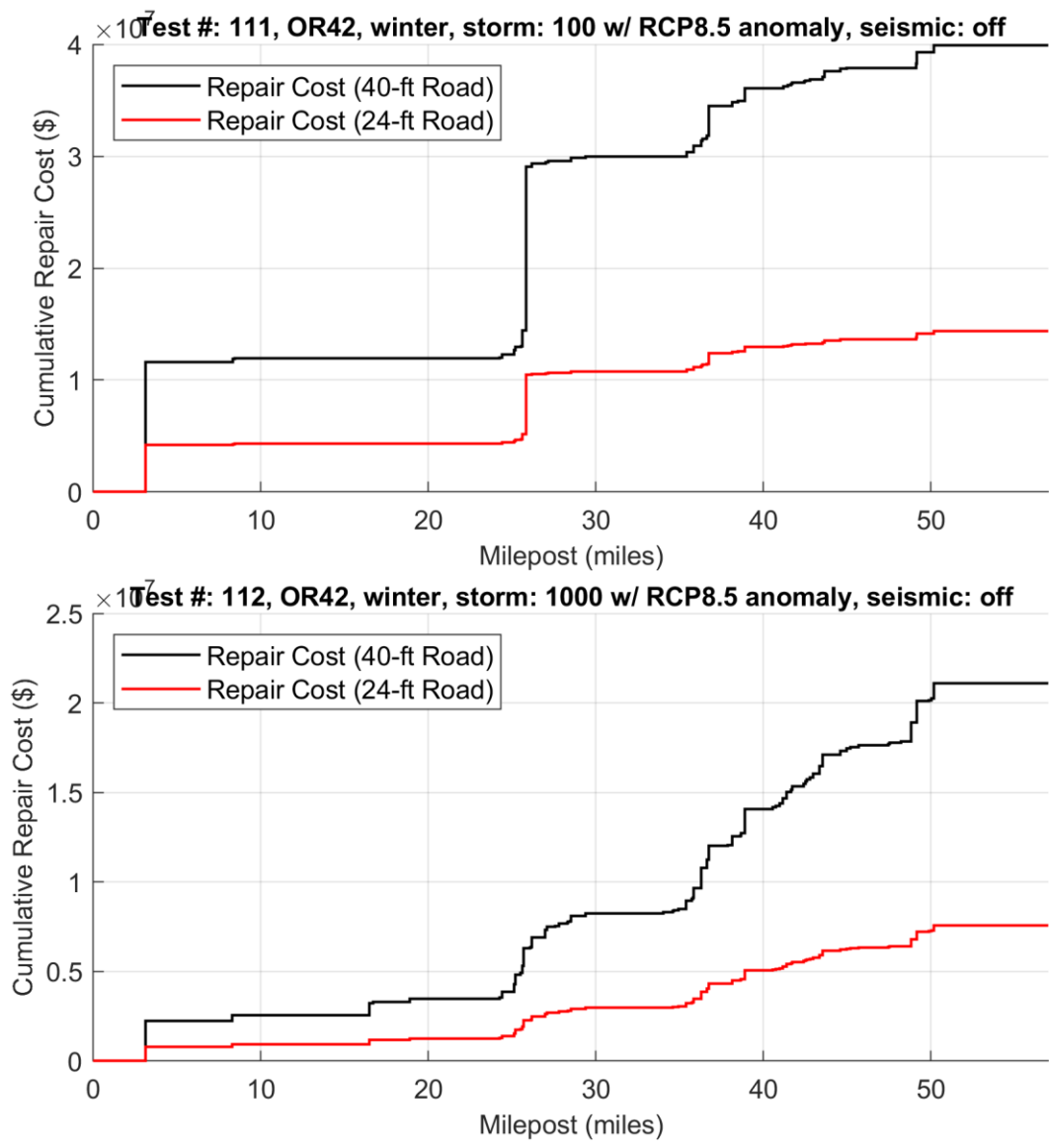












APPENDIX I: HARDWARE AND SOFTWARE

Table I.1 provides a list of hardware and software used to complete the research items contained herein.

Table I-0.1. Hardware and software utilized for SPR 808.

Hardware	Purpose
Dell Precision T3600	Computing
HP Z2	Computing
Software	Purpose
ArcMap 10.7	Processing geospatial data and creating maps
QGIS 3.14	Processing geospatial data and creating maps
MATLAB 2020	Various analyses including age-roughness, slope stability, and forensics

APPENDIX J: PME IMPORT CODE

```

clear
cd 'C:\Users\jonestu\Box\MATLAB\PZ'
N=0;

%% Input data from PZ_02.xls
PZ_L=39; % number of PZs
for i=1:PZ_L
    [~,~,raw]=xlsread('PZ_02.xls',i);
    PZ(i).Name=cell2mat(raw(2,1));
    PZ(i).Lat=cell2mat(raw(2,28)); % Degree Decimal
    PZ(i).Long=cell2mat(raw(2,29)); % Degree Decimal
    PZ(i).GS_Elev_m=0.3048*cell2mat(raw(2,24)); % (ft) converted to (m)
    PZ(i).Tip_Depth_m=0.3048*cell2mat(raw(2,25)); % (ft) BGS converted to (m)
    PZ(i).StickUp_m=0.3048*cell2mat(raw(2,26)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,10))-1,10));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i).Date=datetime(Date);
    % GW Elev
    A=raw(2:length(Date)+1,21);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
    % Head Pressure
    A=raw(2:length(Date)+1,19);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
    PZ(i).Pressure_Head_m=PZ(i).Head_Pressure_kPa/9.80665; % pressure (kPa) converted to
    head (m)
end

```

```

%% Input 4 depth data from PZ3_02.xls
N=PZ_L+N; % sum of PZs imported above
PZ_L=1; % number of PZs
for i=1:PZ_L % Depth 1
    [~,~,raw]=xlsread('PZ3_02.xls',i);
    PZ(i+N).Name=cell2mat(raw(2,1));
    PZ(i+N).Lat=cell2mat(raw(2,49)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(2,50)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(2,37)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,42)); % (ft) BGS converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,4))-1,4));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N).Date=datetime(Date);
    % GW Elev
    A=raw(2:length(Date)+1,29);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
    % Total Pressure
    A=raw(2:length(Date)+1,20);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
    % Baro Pressure
    A=raw(2:length(Date)+1,24);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
    PZ(i+N).Head_Pressure_kPa=PZ(i+N).Total_Pressure_kPa;
    PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
    converted to head (m)
end

```



```

for i=1:PZ_L % Depth 2
    [~,~,raw]=xlsread('PZ3_02.xls',i);
    PZ(i+N+PZ_L).Name=cell2mat(raw(2,1));
    PZ(i+N+PZ_L).Lat=cell2mat(raw(2,49)); % Degree Decimal
    PZ(i+N+PZ_L).Long=cell2mat(raw(2,50)); % Degree Decimal
    PZ(i+N+PZ_L).GS_Elev_m=0.3048*cell2mat(raw(2,37)); % (ft) converted to (m)
    PZ(i+N+PZ_L).Tip_Depth_m=0.3048*cell2mat(raw(2,43)); % (ft) BGS converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,4))-1,4));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N+PZ_L).Date=datetime(Date);
    % GW Elev
    A=raw(2:length(Date)+1,30);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N+PZ_L).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
    % Total Pressure
    A=raw(2:length(Date)+1,21);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N+PZ_L).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
    % Baro Pressure
    A=raw(2:length(Date)+1,24);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N+PZ_L).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
    PZ(i+N+PZ_L).Head_Pressure_kPa=PZ(i+N+PZ_L).Total_Pressure_kPa;
    PZ(i+N+PZ_L).Pressure_Head_m=PZ(i+N+PZ_L).Head_Pressure_kPa/9.80665; % pressure
    (kPa) converted to head (m) (m)
end

for i=1:PZ_L % Depth 3
    [~,~,raw]=xlsread('PZ3_02.xls',i);
    PZ(i+N+2*PZ_L).Name=cell2mat(raw(2,1));
    PZ(i+N+2*PZ_L).Lat=cell2mat(raw(2,49)); % Degree Decimal

```

```

PZ(i+N+2*PZ_L).Long=cell2mat(raw(2,50)); % Degree Decimal
PZ(i+N+2*PZ_L).GS_Elev_m=0.3048*cell2mat(raw(2,37)); % (ft) converted to (m)
PZ(i+N+2*PZ_L).Tip_Depth_m=0.3048*cell2mat(raw(2,44)); % (ft) BGS converted to (m)
% Convert date to string
Date=string(raw(2:length(raw(:,4))-1,4));
for j=1:length(Date)
if strlength(Date(j,1))<3
    Date(j,1)=NaN;
elseif strlength(Date(j,1))<12
    Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
else
    Date(j,1)=Date(j,1);
end
end
PZ(i+N+2*PZ_L).Date=datetime(Date);
% GW Elev
A=raw(2:length(Date)+1,31);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N+2*PZ_L).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
% Total Pressure
A=raw(2:length(Date)+1,22);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N+2*PZ_L).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
% Baro Pressure
A=raw(2:length(Date)+1,24);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N+2*PZ_L).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N+2*PZ_L).Head_Pressure_kPa=PZ(i+N+2*PZ_L).Total_Pressure_kPa;
PZ(i+N+2*PZ_L).Pressure_Head_m=PZ(i+N+2*PZ_L).Head_Pressure_kPa/9.80665; %
pressure (kPa) converted to head
end

for i=1:PZ_L % Depth 4
[~,~,raw]=xlsread('PZ3_02.xls',i);
PZ(i+N+3*PZ_L).Name=cell2mat(raw(2,1));
PZ(i+N+3*PZ_L).Lat=cell2mat(raw(2,49)); % Degree Decimal
PZ(i+N+3*PZ_L).Long=cell2mat(raw(2,50)); % Degree Decimal
PZ(i+N+3*PZ_L).GS_Elev_m=0.3048*cell2mat(raw(2,37)); % (ft) converted to (m)
PZ(i+N+3*PZ_L).Tip_Depth_m=0.3048*cell2mat(raw(2,45)); % (ft) BGS converted to (m)
% Convert date to string

```

```

Date=string(raw(2:length(raw(:,4))-1,4));
for j=1:length(Date)
if strlength(Date(j,1))<3
    Date(j,1)=NaT;
elseif strlength(Date(j,1))<12
    Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
else
    Date(j,1)=Date(j,1);
end
end
PZ(i+N+3*PZ_L).Date=datetime(Date);
% GW Elev
A=raw(2:length(Date)+1,32);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N+3*PZ_L).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
% Total Pressure
A=raw(2:length(Date)+1,23);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N+3*PZ_L).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
% Baro Pressure
A=raw(2:length(Date)+1,24);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N+3*PZ_L).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N+3*PZ_L).Head_Pressure_kPa=PZ(i+N+3*PZ_L).Total_Pressure_kPa;
PZ(i+N+3*PZ_L).Pressure_Head_m=PZ(i+N+3*PZ_L).Head_Pressure_kPa/9.80665; %
pressure (kPa) converted to head
end

PZ_L=PZ_L*4;
%% Input data from PZ_11.xls
N=PZ_L+N; % sum of PZs imported above
PZ_L=24; % number of PZs
for i=1:PZ_L
    [~,~,raw]=xlsread('PZ_11.xls',i);
    PZ(i+N).Name=cell2mat(raw(2,1));
    PZ(i+N).Lat=cell2mat(raw(2,28)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(2,29)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(2,24)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,25)); % (ft) BGS covered to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(2,26)); % (ft) covered to (m)

```

```

% Convert date to string
Date=string(raw(2:length(raw(:,10))-1,10));
for j=1:length(Date)
if strlength(Date(j,1))<3
    Date(j,1)=NaT;
elseif strlength(Date(j,1))<12
    Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
else
    Date(j,1)=Date(j,1);
end
end
PZ(i+N).Date=datetime(Date);
A=raw(2:length(Date)+1,21);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
A=raw(2:length(Date)+1,19);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

```

```

%% Input 1 depth data from PZ_12_CR_CC.xlsx
N=PZ_L+N; % sum of PZs imported above
PZ_L=11; % number of PZs
for i=1:PZ_L
    [~,~,raw]=xlsread('PZ_12_CR_CC.xlsx',i);
    PZ(i+N).Name=cell2mat(raw(2,1));
    PZ(i+N).Lat=cell2mat(raw(2,28)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(2,29)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(2,24)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,25)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(2,26)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,10))-1,10));
    for j=1:length(Date)
    if strlength(Date(j,1))<3
        Date(j,1)=NaT;
    elseif strlength(Date(j,1))<12
        Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
    end
    end
end

```

```

else
    Date(j,1)=Date(j,1);
end
end
PZ(i+N).Date=datetime(Date);
A=raw(2:length(Date)+1,21);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
A=raw(2:length(Date)+1,19);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

%% Input 3 depth data from PZ3_12_CR_CC.xlsx
N=PZ_L+N; % sum of PZs imported above
PZ_L=11; % number of PZs
for i=1:PZ_L % Depth 1
    [~,~,raw]=xlsread('PZ3_12_CR_CC.xlsx',i);
    PZ(i+N).Name=cell2mat(raw(2,1));
    PZ(i+N).Lat=cell2mat(raw(2,49)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(2,50)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(2,37)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,42)); % (ft) BGS converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,4))-1,4));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N).Date=datetime(Date);
    A=raw(2:length(Date)+1,25);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);

```



```

A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
A=raw(2:length(Date)+1,22);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end
for i=1:PZ_L % Depth 2
    [~,~,raw]=xlsread('PZ3_12_CR_CC.xlsx',i);
    PZ(i+N+PZ_L).Name=cell2mat(raw(2,1));
    PZ(i+N+PZ_L).Lat=cell2mat(raw(2,49)); % Degree Decimal
    PZ(i+N+PZ_L).Long=cell2mat(raw(2,50)); % Degree Decimal
    PZ(i+N+PZ_L).GS_Elev_m=0.3048*cell2mat(raw(2,37)); % (ft) converted to (m)
    PZ(i+N+PZ_L).Tip_Depth_m=0.3048*cell2mat(raw(2,43)); % (ft) BGS converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,4))-1,4));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N+PZ_L).Date=datetime(Date);
    A=raw(2:length(Date)+1,26);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N+PZ_L).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
    A=raw(2:length(Date)+1,23);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N+PZ_L).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
    PZ(i+N+PZ_L).Pressure_Head_m=PZ(i+N+PZ_L).Head_Pressure_kPa/9.80665; % pressure
    (kPa) converted to head (m)
end
for i=1:PZ_L % Depth 3
    [~,~,raw]=xlsread('PZ3_12_CR_CC.xlsx',i);
    PZ(i+N+2*PZ_L).Name=cell2mat(raw(2,1));
    PZ(i+N+2*PZ_L).Lat=cell2mat(raw(2,49)); % Degree Decimal

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PZ(i+N+2*PZ_L).Long=cell2mat(raw(2,50)); % Degree Decimal
PZ(i+N+2*PZ_L).GS_Elev_m=0.3048*cell2mat(raw(2,37)); % (ft) converted to (m)
PZ(i+N+2*PZ_L).Tip_Depth_m=0.3048*cell2mat(raw(2,44)); % (ft) BGS converted to (m)
% Convert date to string
Date=string(raw(2:length(raw(:,4))-1,4));
for j=1:length(Date)
if strlength(Date(j,1))<3
    Date(j,1)=NaT;
elseif strlength(Date(j,1))<12
    Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
else
    Date(j,1)=Date(j,1);
end
end
PZ(i+N+2*PZ_L).Date=datetime(Date);
A=raw(2:length(Date)+1,27);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N+2*PZ_L).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
A=raw(2:length(Date)+1,24);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N+2*PZ_L).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N+2*PZ_L).Pressure_Head_m=PZ(i+N+2*PZ_L).Head_Pressure_kPa/9.80665; %
pressure (kPa) converted to head (m)
end

```

```

PZ_L=PZ_L*3;
%% Input data from PZ_01.xlsx
N=PZ_L+N; % sum of PZs imported above
PZ_L=16; % number of PZs
for i=1:PZ_L
    [~,~,raw]=xlsread('PZ_01.xlsx',i);
    PZ(i+N).Name=cell2mat(raw(2,1));
    PZ(i+N).Lat=cell2mat(raw(2,28)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(2,29)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(2,24)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,25)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(2,26)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,10))-1,10));
    for j=1:length(Date)
    if strlength(Date(j,1))<3
        Date(j,1)=NaT;
    end
    end
end

```

```

elseif strlength(Date(j,1))<12
    Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
else
    Date(j,1)=Date(j,1);
end
end
PZ(i+N).Date=datetime(Date);
A=raw(2:length(Date)+1,21);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
A=raw(2:length(Date)+1,19);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

%% Input data from PZ_04.xls
N=PZ_L+N; % sum of PZs imported above
PZ_L=22; % number of PZs
for i=1:PZ_L
    [~,~,raw]=xlsread('PZ_04.xls',i);
    PZ(i+N).Name=cell2mat(raw(2,1));
    PZ(i+N).Lat=cell2mat(raw(2,28)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(2,29)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(2,24)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,25)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(2,26)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,10))-1,10));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N).Date=datetime(Date);
    A=raw(2:length(Date)+1,21);
    i1 = cellfun(@ischar,A);

```

```

sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
A=raw(2:length(Date)+1,19);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

%% Input data from PZ_05.xls
N=PZ_L+N; % sum of PZs imported above
PZ_L=29; % number of PZs
for i=1:PZ_L
    [~,~,raw]=xlsread('PZ_05.xls',i);
    PZ(i+N).Name=cell2mat(raw(2,1));
    PZ(i+N).Lat=cell2mat(raw(2,28)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(2,29)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(2,24)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,25)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(2,26)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,10))-1,10));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N).Date=datetime(Date);
    A=raw(2:length(Date)+1,21);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
    A=raw(2:length(Date)+1,19);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)

```

```

    PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
    converted to head (m)
end

%% Input data from PZ_06.xls
N=PZ_L+N; % sum of PZs imported above
PZ_L=10; % number of PZs
for i=1:PZ_L
    [~,~,raw]=xlsread('PZ_06.xls',i);
    PZ(i+N).Name=cell2mat(raw(2,1));
    PZ(i+N).Lat=cell2mat(raw(2,28)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(2,29)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(2,24)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,25)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(2,26)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,10))-1,10));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N).Date=datetime(Date);
    A=raw(2:length(Date)+1,21);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
    A=raw(2:length(Date)+1,19);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
    PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
    converted to head (m)
end

%% Input data from PZ_07.xls
N=PZ_L+N; % sum of PZs imported above
PZ_L=25; % number of PZs
for i=1:PZ_L

```



```

[~,~,raw]=xlsread('PZ_07.xls',i);
PZ(i+N).Name=cell2mat(raw(2,1));
PZ(i+N).Lat=cell2mat(raw(2,28)); % Degree Decimal
PZ(i+N).Long=cell2mat(raw(2,29)); % Degree Decimal
PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(2,24)); % (ft) converted to (m)
PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,25)); % (ft) BGS converted to (m)
PZ(i+N).StickUp_m=0.3048*cell2mat(raw(2,26)); % (ft) converted to (m)
% Convert date to string
Date=string(raw(2:length(raw(:,10))-1,10));
for j=1:length(Date)
if strlength(Date(j,1))<3
    Date(j,1)=NaT;
elseif strlength(Date(j,1))<12
    Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
else
    Date(j,1)=Date(j,1);
end
end
PZ(i+N).Date=datetime(Date);
A=raw(2:length(Date)+1,21);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
A=raw(2:length(Date)+1,19);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

%% Input data from PZ_08.xls
N=PZ_L+N; % sum of PZs imported above
PZ_L=5; % number of PZs
for i=1:PZ_L
    [~,~,raw]=xlsread('PZ_08.xls',i);
    PZ(i+N).Name=cell2mat(raw(2,1));
    PZ(i+N).Lat=cell2mat(raw(2,28)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(2,29)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(2,24)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,25)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(2,26)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,10))-1,10));

```

```

for j=1:length(Date)
if strlength(Date(j,1))<3
    Date(j,1)=NaT;
elseif strlength(Date(j,1))<12
    Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
else
    Date(j,1)=Date(j,1);
end
end
PZ(i+N).Date=datetime(Date);
A=raw(2:length(Date)+1,21);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
A=raw(2:length(Date)+1,19);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

```

```

%% Input data from PZ_09.xls
N=PZ_L+N; % sum of PZs imported above
PZ_L=16; % number of PZs
for i=1:PZ_L
    [~,~,raw]=xlsread('PZ_09.xls',i);
    PZ(i+N).Name=cell2mat(raw(2,1));
    PZ(i+N).Lat=cell2mat(raw(2,28)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(2,29)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(2,24)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,25)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(2,26)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,10))-1,10));
    for j=1:length(Date)
    if strlength(Date(j,1))<3
        Date(j,1)=NaT;
    elseif strlength(Date(j,1))<12
        Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
    else
        Date(j,1)=Date(j,1);
    end
end

```

```

end
PZ(i+N).Date=datetime(Date);
A=raw(2:length(Date)+1,21);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
A=raw(2:length(Date)+1,19);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

%% Input data from PZ_10.xlsx
N=PZ_L+N; % sum of PZs imported above
PZ_L=26; % number of PZs
for i=1:PZ_L
    [~,~,raw]=xlsread('PZ_10.xlsx',i);
    PZ(i+N).Name=cell2mat(raw(2,1));
    PZ(i+N).Lat=cell2mat(raw(2,28)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(2,29)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(2,24)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,25)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(2,26)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,10))-1,10));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
end
PZ(i+N).Date=datetime(Date);
A=raw(2:length(Date)+1,21);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
A=raw(2:length(Date)+1,19);

```

```

i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

%% Input 3 depth data from PZ3_10.xlsx
N=PZ_L+N; % sum of PZs imported above
PZ_L=1; % number of PZs
for i=1:PZ_L % Depth 1
    [~,~,raw]=xlsread('PZ3_10.xlsx',i);
    PZ(i+N).Name=cell2mat(raw(2,1));
    PZ(i+N).Lat=cell2mat(raw(2,49)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(2,50)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(2,37)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,42)); % (ft) BGS converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,4))-1,4));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaN;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N).Date=datetime(Date);
    A=raw(2:length(Date)+1,25);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
    A=raw(2:length(Date)+1,22);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
    PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
    converted to head (m)
end
for i=1:PZ_L % Depth 2
    [~,~,raw]=xlsread('PZ3_10.xlsx',i);

```

```

PZ(i+N+PZ_L).Name=cell2mat(raw(2,1));
PZ(i+N+PZ_L).Lat=cell2mat(raw(2,49)); % Degree Decimal
PZ(i+N+PZ_L).Long=cell2mat(raw(2,50)); % Degree Decimal
PZ(i+N+PZ_L).GS_Elev_m=0.3048*cell2mat(raw(2,37)); % (ft) converted to (m)
PZ(i+N+PZ_L).Tip_Depth_m=0.3048*cell2mat(raw(2,43)); % (ft) BGS converted to (m)
% Convert date to string
Date=string(raw(2:length(raw(:,4))-1,4));
for j=1:length(Date)
if strlength(Date(j,1))<3
    Date(j,1)=NaT;
elseif strlength(Date(j,1))<12
    Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
else
    Date(j,1)=Date(j,1);
end
end
PZ(i+N+PZ_L).Date=datetime(Date);
A=raw(2:length(Date)+1,26);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N+PZ_L).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
A=raw(2:length(Date)+1,23);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N+PZ_L).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N+PZ_L).Pressure_Head_m=PZ(i+N+PZ_L).Head_Pressure_kPa/9.80665; % pressure
(kPa) converted to head (m)
end
for i=1:PZ_L % Depth 3
    [~,~,raw]=xlsread('PZ3_10.xlsx',i);
    PZ(i+N+2*PZ_L).Name=cell2mat(raw(2,1));
    PZ(i+N+2*PZ_L).Lat=cell2mat(raw(2,49)); % Degree Decimal
    PZ(i+N+2*PZ_L).Long=cell2mat(raw(2,50)); % Degree Decimal
    PZ(i+N+2*PZ_L).GS_Elev_m=0.3048*cell2mat(raw(2,37)); % (ft) converted to (m)
    PZ(i+N+2*PZ_L).Tip_Depth_m=0.3048*cell2mat(raw(2,44)); % (ft) BGS converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,4))-1,4));
    for j=1:length(Date)
    if strlength(Date(j,1))<3
        Date(j,1)=NaT;
    elseif strlength(Date(j,1))<12
        Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
    else
        Date(j,1)=Date(j,1);
    end
    end
end

```



```

end
end
PZ(i+N+2*PZ_L).Date=datetime(Date);
A=raw(2:length(Date)+1,27);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N+2*PZ_L).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
A=raw(2:length(Date)+1,24);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N+2*PZ_L).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N+2*PZ_L).Pressure_Head_m=PZ(i+N+2*PZ_L).Head_Pressure_kPa/9.80665; %
pressure (kPa) converted to head (m)
end

```

```

PZ_L=PZ_L*3;
%% Input 1 depth data from PZ_12_EB_EC.xlsx
N=PZ_L+N; % sum of PZs imported above
PZ_L=7; % number of PZs
for i=1:PZ_L
    [~,~,raw]=xlsread('PZ_12_EB_EC.xlsx',i);
    PZ(i+N).Name=cell2mat(raw(2,1));
    PZ(i+N).Lat=cell2mat(raw(2,28)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(2,29)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(2,24)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,25)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(2,26)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,10))-1,10));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
end
PZ(i+N).Date=datetime(Date);
A=raw(2:length(Date)+1,21);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};

```

```

PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
A=raw(2:length(Date)+1,19);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

%% Input 3 depth data from PZ3_12_EB_EC.xlsx
N=PZ_L+N; % sum of PZs imported above
PZ_L=16; % number of PZs
for i=1:PZ_L % Depth 1
    [~,~,raw]=xlsread('PZ3_12_EB_EC.xlsx',i);
    PZ(i+N).Name=cell2mat(raw(2,1));
    PZ(i+N).Lat=cell2mat(raw(2,49)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(2,50)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(2,37)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,42)); % (ft) BGS converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,4))-1,4));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaN;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N).Date=datetime(Date);
    A=raw(2:length(Date)+1,25);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
    A=raw(2:length(Date)+1,22);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
    PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
    converted to head (m)
end

```

```

for i=1:PZ_L % Depth 2
    [~,~,raw]=xlsread('PZ3_12_EB_EC.xlsx',i);
    PZ(i+N+PZ_L).Name=cell2mat(raw(2,1));
    PZ(i+N+PZ_L).Lat=cell2mat(raw(2,49)); % Degree Decimal
    PZ(i+N+PZ_L).Long=cell2mat(raw(2,50)); % Degree Decimal
    PZ(i+N+PZ_L).GS_Elev_m=0.3048*cell2mat(raw(2,37)); % (ft) converted to (m)
    PZ(i+N+PZ_L).Tip_Depth_m=0.3048*cell2mat(raw(2,43)); % (ft) BGS converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,4))-1,4));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N+PZ_L).Date=datetime(Date);
    A=raw(2:length(Date)+1,26);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N+PZ_L).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
    A=raw(2:length(Date)+1,23);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N+PZ_L).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
    PZ(i+N+PZ_L).Pressure_Head_m=PZ(i+N+PZ_L).Head_Pressure_kPa/9.80665; % pressure
    (kPa) converted to head (m)
end
for i=1:PZ_L % Depth 3
    [~,~,raw]=xlsread('PZ3_12_EB_EC.xlsx',i);
    PZ(i+N+2*PZ_L).Name=cell2mat(raw(2,1));
    PZ(i+N+2*PZ_L).Lat=cell2mat(raw(2,49)); % Degree Decimal
    PZ(i+N+2*PZ_L).Long=cell2mat(raw(2,50)); % Degree Decimal
    PZ(i+N+2*PZ_L).GS_Elev_m=0.3048*cell2mat(raw(2,37)); % (ft) converted to (m)
    PZ(i+N+2*PZ_L).Tip_Depth_m=0.3048*cell2mat(raw(2,44)); % (ft) BGS converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,4))-1,4));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string

```

```

else
    Date(j,1)=Date(j,1);
end
end
PZ(i+N+2*PZ_L).Date=datetime(Date);
A=raw(2:length(Date)+1,27);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N+2*PZ_L).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
A=raw(2:length(Date)+1,24);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N+2*PZ_L).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N+2*PZ_L).Pressure_Head_m=PZ(i+N+2*PZ_L).Head_Pressure_kPa/9.80665; %
pressure (kPa) converted to head (m)
end

```

```

PZ_L=PZ_L*3;
%% Input 1 depth data from PZ_PD1.xlsx
N=PZ_L+N; % sum of PZs imported above
PZ_L=1; % number of PZs
for i=1:PZ_L
    [~,~,raw]=xlsread('PZ_PD1.xlsx',i);
    PZ(i+N).Name=cell2mat(raw(2,1));
    PZ(i+N).Lat=cell2mat(raw(2,28)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(2,29)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(2,24)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,25)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(2,26)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,10))-1,10));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N).Date=datetime(Date);
    A=raw(2:length(Date)+1,21);
    i1 = cellfun(@ischar,A);

```

```

sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
A=raw(2:length(Date)+1,19);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

%% Input 3 depth data from PZ3_PD1.xlsx
N=PZ_L+N; % sum of PZs imported above
PZ_L=1; % number of PZs
for i=1:PZ_L % Depth 1
    [~,~,raw]=xlsread('PZ3_PD1.xlsx',i);
    PZ(i+N).Name=cell2mat(raw(2,1));
    PZ(i+N).Lat=cell2mat(raw(2,49)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(2,50)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(2,37)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,42)); % (ft) BGS converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,4))-1,4));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N).Date=datetime(Date);
    A=raw(2:length(Date)+1,25);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
    A=raw(2:length(Date)+1,22);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)

```



```

    PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
    converted to head (m)
end
for i=1:PZ_L % Depth 2
    [~,~,raw]=xlsread('PZ3_PD1.xlsx',i);
    PZ(i+N+PZ_L).Name=cell2mat(raw(2,1));
    PZ(i+N+PZ_L).Lat=cell2mat(raw(2,49)); % Degree Decimal
    PZ(i+N+PZ_L).Long=cell2mat(raw(2,50)); % Degree Decimal
    PZ(i+N+PZ_L).GS_Elev_m=0.3048*cell2mat(raw(2,37)); % (ft) converted to (m)
    PZ(i+N+PZ_L).Tip_Depth_m=0.3048*cell2mat(raw(2,43)); % (ft) BGS converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,4))-1,4));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N+PZ_L).Date=datetime(Date);
    A=raw(2:length(Date)+1,26);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N+PZ_L).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
    A=raw(2:length(Date)+1,23);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N+PZ_L).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
    PZ(i+N+PZ_L).Pressure_Head_m=PZ(i+N+PZ_L).Head_Pressure_kPa/9.80665; % pressure
    (kPa) converted to head (m)
end
for i=1:PZ_L % Depth 3
    [~,~,raw]=xlsread('PZ3_PD1.xlsx',i);
    PZ(i+N+2*PZ_L).Name=cell2mat(raw(2,1));
    PZ(i+N+2*PZ_L).Lat=cell2mat(raw(2,49)); % Degree Decimal
    PZ(i+N+2*PZ_L).Long=cell2mat(raw(2,50)); % Degree Decimal
    PZ(i+N+2*PZ_L).GS_Elev_m=0.3048*cell2mat(raw(2,37)); % (ft) converted to (m)
    PZ(i+N+2*PZ_L).Tip_Depth_m=0.3048*cell2mat(raw(2,44)); % (ft) BGS converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,4))-1,4));
    for j=1:length(Date)
        if strlength(Date(j,1))<3

```

```

        Date(j,1)=NaT;
elseif strlength(Date(j,1))<12
    Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
else
    Date(j,1)=Date(j,1);
end
end
PZ(i+N+2*PZ_L).Date=datetime(Date);
A=raw(2:length(Date)+1,27);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N+2*PZ_L).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
A=raw(2:length(Date)+1,24);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N+2*PZ_L).Head_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N+2*PZ_L).Pressure_Head_m=PZ(i+N+2*PZ_L).Head_Pressure_kPa/9.80665; %
pressure (kPa) converted to head (m)
end

```

```

PZ_L=PZ_L*3;
%% Input data from PZ_13C.xlsx Sheet 1 (C7-750)
N=PZ_L+N; % sum of PZs imported above
PZ_L=3; % number of PZs
S=1;
n1=PZ_L*2+3;
[~,~,raw]=xlsread('PZ_13C.xlsx',S);
for i=1:PZ_L
    n=(i-1)*2;
    PZ(i+N).Name=cell2mat(raw(1,n1+i));
    PZ(i+N).Lat=cell2mat(raw(4,n1+i)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(5,n1+i)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(3,n1+i)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,n1+i)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(6,n1+i)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,1))-1,1));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else

```

```

    Date(j,1)=Date(j,1);
end
end
PZ(i+N).Date=datetime(Date);
% GW Elev
A=raw(2:length(Date)+1,4+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
% Total Pressure
A=raw(2:length(Date)+1,3+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
% Baro Pressure
A=raw(2:length(Date)+1,2);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Head_Pressure_kPa=PZ(i+N).Total_Pressure_kPa;
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

%% Input data from PZ_13C.xlsx Sheet 2 (F10-1001)
N=PZ_L+N; % sum of PZs imported above
PZ_L=20; % number of PZs
S=2;
n1=PZ_L*2+3;
[~,~,raw]=xlsread('PZ_13C.xlsx',S);
for i=1:PZ_L
    n=(i-1)*2;
    PZ(i+N).Name=cell2mat(raw(1,n1+i));
    PZ(i+N).Lat=cell2mat(raw(4,n1+i)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(5,n1+i)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(3,n1+i)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,n1+i)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(6,n1+i)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,1))-1,1));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;

```

```

elseif strlength(Date(j,1))<12
    Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
else
    Date(j,1)=Date(j,1);
end
end
PZ(i+N).Date=datetime(Date);
% GW Elev
A=raw(2:length(Date)+1,4+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
% Total Pressure
A=raw(2:length(Date)+1,3+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
% Baro Pressure
A=raw(2:length(Date)+1,2);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Head_Pressure_kPa=PZ(i+N).Total_Pressure_kPa;
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

%% Input data from PZ_13C.xlsx Sheet 3 (F10-1002)
N=PZ_L+N; % sum of PZs imported above
PZ_L=15; % number of PZs
S=3;
n1=PZ_L*2+3;
[~,~,raw]=xlsread('PZ_13C.xlsx',S);
for i=1:PZ_L
    n=(i-1)*2;
    PZ(i+N).Name=cell2mat(raw(1,n1+i));
    PZ(i+N).Lat=cell2mat(raw(4,n1+i)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(5,n1+i)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(3,n1+i)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,n1+i)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(6,n1+i)); % (ft) converted to (m)
    % Convert date to string

```

```

Date=string(raw(2:length(raw(:,1))-1,1));
for j=1:length(Date)
if strlength(Date(j,1))<3
    Date(j,1)=NaT;
elseif strlength(Date(j,1))<12
    Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
else
    Date(j,1)=Date(j,1);
end
end
PZ(i+N).Date=datetime(Date);
% GW Elev
A=raw(2:length(Date)+1,4+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
% Total Pressure
A=raw(2:length(Date)+1,3+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
% Baro Pressure
A=raw(2:length(Date)+1,2);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Head_Pressure_kPa=PZ(i+N).Total_Pressure_kPa;
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

```

```

%% Input data from PZ_13C.xlsx Sheet 4 (C6-650)
N=PZ_L+N; % sum of PZs imported above
PZ_L=6; % number of PZs
S=4;
n1=PZ_L*2+3;
[~,~,raw]=xlsread('PZ_13C.xlsx',S);
for i=1:PZ_L
    n=(i-1)*2;
    PZ(i+N).Name=cell2mat(raw(1,n1+i));
    PZ(i+N).Lat=cell2mat(raw(4,n1+i)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(5,n1+i)); % Degree Decimal
end

```



```

PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(3,n1+i)); % (ft) converted to (m)
PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,n1+i)); % (ft) BGS converted to (m)
PZ(i+N).StickUp_m=0.3048*cell2mat(raw(6,n1+i)); % (ft) converted to (m)
% Convert date to string
Date=string(raw(2:length(raw(:,1))-1,1));
for j=1:length(Date)
if strlength(Date(j,1))<3
    Date(j,1)=NaN;
elseif strlength(Date(j,1))<12
    Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
else
    Date(j,1)=Date(j,1);
end
end
PZ(i+N).Date=datetime(Date);
% GW Elev
A=raw(2:length(Date)+1,4+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
% Total Pressure
A=raw(2:length(Date)+1,3+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
% Baro Pressure
A=raw(2:length(Date)+1,2);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Head_Pressure_kPa=PZ(i+N).Total_Pressure_kPa;
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

%% Input data from PZ_13C.xlsx Sheet 5 (C6-550)
N=PZ_L+N; % sum of PZs imported above
PZ_L=6; % number of PZs
S=5;
n1=PZ_L*2+3;
[~,~,raw]=xlsread('PZ_13C.xlsx',S);
for i=1:PZ_L
    n=(i-1)*2;

```

```

PZ(i+N).Name=cell2mat(raw(1,n1+i));
PZ(i+N).Lat=cell2mat(raw(4,n1+i)); % Degree Decimal
PZ(i+N).Long=cell2mat(raw(5,n1+i)); % Degree Decimal
PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(3,n1+i)); % (ft) converted to (m)
PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,n1+i)); % (ft) BGS covered to (m)
PZ(i+N).StickUp_m=0.3048*cell2mat(raw(6,n1+i)); % (ft) covered to (m)
% Convert date to string
Date=string(raw(2:length(raw(:,1))-1,1));
for j=1:length(Date)
if strlength(Date(j,1))<3
    Date(j,1)=NaN;
elseif strlength(Date(j,1))<12
    Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
else
    Date(j,1)=Date(j,1);
end
end
PZ(i+N).Date=datetime(Date);
% GW Elev
A=raw(2:length(Date)+1,4+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
% Total Pressure
A=raw(2:length(Date)+1,3+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
% Baro Pressure
A=raw(2:length(Date)+1,2);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Head_Pressure_kPa=PZ(i+N).Total_Pressure_kPa;
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end
%% Input data from PZ_13C.xlsx Sheet 6 (F8_800)
N=PZ_L+N; % sum of PZs imported above
PZ_L=9; % number of PZs
S=6;
n1=PZ_L*2+3;
[~,~,raw]=xlsread('PZ_13C.xlsx',S);

```

```

for i=1:PZ_L
    n=(i-1)*2;
    PZ(i+N).Name=cell2mat(raw(1,n1+i));
    PZ(i+N).Lat=cell2mat(raw(4,n1+i)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(5,n1+i)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(3,n1+i)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,n1+i)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(6,n1+i)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,1))-1,1));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N).Date=datetime(Date);
    % GW Elev
    A=raw(2:length(Date)+1,4+n);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
    % Total Pressure
    A=raw(2:length(Date)+1,3+n);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
    % Baro Pressure
    A=raw(2:length(Date)+1,2);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
    PZ(i+N).Head_Pressure_kPa=PZ(i+N).Total_Pressure_kPa;
    PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
    converted to head (m)
end

%% Input data from PZ_13C.xlsx Sheet 7 (F8_801)
N=PZ_L+N; % sum of PZs imported above

```

```

PZ_L=16; % number of PZs
S=7;
n1=PZ_L*2+3;
[~,~,raw]=xlsread('PZ_13C.xlsx',S);
for i=1:PZ_L
    n=(i-1)*2;
    PZ(i+N).Name=cell2mat(raw(1,n1+i));
    PZ(i+N).Lat=cell2mat(raw(4,n1+i)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(5,n1+i)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(3,n1+i)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,n1+i)); % (ft) BGS covered to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(6,n1+i)); % (ft) covered to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,1))-1,1));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N).Date=datetime(Date);
    % GW Elev
    A=raw(2:length(Date)+1,4+n);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
    % Total Pressure
    A=raw(2:length(Date)+1,3+n);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
    % Baro Pressure
    A=raw(2:length(Date)+1,2);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
    PZ(i+N).Head_Pressure_kPa=PZ(i+N).Total_Pressure_kPa;
    PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
    converted to head (m)
end

```

```

%% Input data from PZ_13E.xls Sheet 1 (Cut7)
N=PZ_L+N; % sum of PZs imported above
PZ_L=3; % number of PZs
S=1;
n1=PZ_L*2+3;
[~,~,raw]=xlsread('PZ_13E.xls',S);
for i=1:PZ_L
    n=(i-1)*2;
    PZ(i+N).Name=cell2mat(raw(1,n1+i));
    PZ(i+N).Lat=cell2mat(raw(4,n1+i)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(5,n1+i)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(3,n1+i)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,n1+i)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(6,n1+i)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,1))-1,1));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N).Date=datetime(Date);
    % GW Elev
    A=raw(2:length(Date)+1,4+n);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
    % Total Pressure
    A=raw(2:length(Date)+1,3+n);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
    % Baro Pressure
    A=raw(2:length(Date)+1,2);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)

```



```

    PZ(i+N).Head_Pressure_kPa=PZ(i+N).Total_Pressure_kPa;
    PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
    converted to head (m)
end

%% Input data from PZ_13E.xls Sheet 2 (F7-700)
N=PZ_L+N; % sum of PZs imported above
PZ_L=8; % number of PZs
S=2;
n1=PZ_L*2+3;
[~,~,raw]=xlsread('PZ_13E.xls',S);
for i=1:PZ_L
    n=(i-1)*2;
    PZ(i+N).Name=cell2mat(raw(1,n1+i));
    PZ(i+N).Lat=cell2mat(raw(4,n1+i)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(5,n1+i)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(3,n1+i)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,n1+i)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(6,n1+i)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,1))-1,1));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaN;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N).Date=datetime(Date);
    % GW Elev
    A=raw(2:length(Date)+1,4+n);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
    % Total Pressure
    A=raw(2:length(Date)+1,3+n);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
    % Baro Pressure
    A=raw(2:length(Date)+1,2);

```

```

i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Head_Pressure_kPa=PZ(i+N).Total_Pressure_kPa;
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

%% Input data from PZ_13E.xls Sheet 3 (F4-400)
N=PZ_L+N; % sum of PZs imported above
PZ_L=6; % number of PZs
S=3;
n1=PZ_L*2+3;
[~,~,raw]=xlsread('PZ_13E.xls',S);
for i=1:PZ_L
    n=(i-1)*2;
    PZ(i+N).Name=cell2mat(raw(1,n1+i));
    PZ(i+N).Lat=cell2mat(raw(4,n1+i)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(5,n1+i)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(3,n1+i)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,n1+i)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(6,n1+i)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,1))-1,1));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaN;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N).Date=datetime(Date);
    % GW Elev
    A=raw(2:length(Date)+1,4+n);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
    % Total Pressure
    A=raw(2:length(Date)+1,3+n);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);

```

```

A(i1) = {NaN(1,sz(1))};
PZ(i+N).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
% Baro Pressure
A=raw(2:length(Date)+1,2);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Head_Pressure_kPa=PZ(i+N).Total_Pressure_kPa;
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

%% Input data from PZ_13E.xls Sheet 4 (F6-600)
N=PZ_L+N; % sum of PZs imported above
PZ_L=9; % number of PZs
S=4;
n1=PZ_L*2+3;
[~,~,raw]=xlsread('PZ_13E.xls',S);
for i=1:PZ_L
    n=(i-1)*2;
    PZ(i+N).Name=cell2mat(raw(1,n1+i));
    PZ(i+N).Lat=cell2mat(raw(4,n1+i)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(5,n1+i)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(3,n1+i)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,n1+i)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(6,n1+i)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,1))-1,1));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N).Date=datetime(Date);
    % GW Elev
    A=raw(2:length(Date)+1,4+n);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)

```

```

% Total Pressure
A=raw(2:length(Date)+1,3+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
% Baro Pressure
A=raw(2:length(Date)+1,2);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Head_Pressure_kPa=PZ(i+N).Total_Pressure_kPa;
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

%% Input data from PZ_13E.xls Sheet 5 (F7-701)
N=PZ_L+N; % sum of PZs imported above
PZ_L=17; % number of PZs
S=5;
n1=PZ_L*2+3;
[~,~,raw]=xlsread('PZ_13E.xls',S);
for i=1:PZ_L
    n=(i-1)*2;
    PZ(i+N).Name=cell2mat(raw(1,n1+i));
    PZ(i+N).Lat=cell2mat(raw(4,n1+i)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(5,n1+i)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(3,n1+i)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,n1+i)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(6,n1+i)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,1))-1,1));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N).Date=datetime(Date);
    % GW Elev
    A=raw(2:length(Date)+1,4+n);

```

```

i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
% Total Pressure
A=raw(2:length(Date)+1,3+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
% Baro Pressure
A=raw(2:length(Date)+1,2);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Head_Pressure_kPa=PZ(i+N).Total_Pressure_kPa;
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

%% Input data from PZ_13E.xls Sheet 6 (F4-401)
N=PZ_L+N; % sum of PZs imported above
PZ_L=8; % number of PZs
S=6;
n1=PZ_L*2+3;
[~,~,raw]=xlsread('PZ_13E.xls',S);
for i=1:PZ_L
    n=(i-1)*2;
    PZ(i+N).Name=cell2mat(raw(1,n1+i));
    PZ(i+N).Lat=cell2mat(raw(4,n1+i)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(5,n1+i)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(3,n1+i)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,n1+i)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(6,n1+i)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,1))-1,1));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
end

```



```

end
PZ(i+N).Date=datetime(Date);
% GW Elev
A=raw(2:length(Date)+1,4+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
% Total Pressure
A=raw(2:length(Date)+1,3+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
% Baro Pressure
A=raw(2:length(Date)+1,2);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Head_Pressure_kPa=PZ(i+N).Total_Pressure_kPa;
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

```

```

%% Input data from PZ_13E.xls Sheet 7 (F4-402)
N=PZ_L+N; % sum of PZs imported above
PZ_L=15; % number of PZs
S=7;
n1=PZ_L*2+3;
[~,~,raw]=xlsread('PZ_13E.xls',S);
for i=1:PZ_L
    n=(i-1)*2;
    PZ(i+N).Name=cell2mat(raw(1,n1+i));
    PZ(i+N).Lat=cell2mat(raw(4,n1+i)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(5,n1+i)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(3,n1+i)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,n1+i)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(6,n1+i)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,1))-1,1));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        end
    end
end

```

```

elseif strlength(Date(j,1))<12
    Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
else
    Date(j,1)=Date(j,1);
end
end
PZ(i+N).Date=datetime(Date);
% GW Elev
A=raw(2:length(Date)+1,4+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
% Total Pressure
A=raw(2:length(Date)+1,3+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
% Baro Pressure
A=raw(2:length(Date)+1,2);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Head_Pressure_kPa=PZ(i+N).Total_Pressure_kPa;
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

```

```

%% Input data from PZ_13E.xls Sheet 8 (F4-403)
N=PZ_L+N; % sum of PZs imported above
PZ_L=11; % number of PZs
S=8;
n1=PZ_L*2+3;
[~,~,raw]=xlsread('PZ_13E.xls',S);
for i=1:PZ_L
    n=(i-1)*2;
    PZ(i+N).Name=cell2mat(raw(1,n1+i));
    PZ(i+N).Lat=cell2mat(raw(4,n1+i)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(5,n1+i)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(3,n1+i)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,n1+i)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(6,n1+i)); % (ft) converted to (m)
end

```

```

% Convert date to string
Date=string(raw(2:length(raw(:,1))-1,1));
for j=1:length(Date)
if strlength(Date(j,1))<3
    Date(j,1)=NaN;
elseif strlength(Date(j,1))<12
    Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
else
    Date(j,1)=Date(j,1);
end
end
PZ(i+N).Date=datetime(Date);
% GW Elev
A=raw(2:length(Date)+1,4+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
% Total Pressure
A=raw(2:length(Date)+1,3+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
% Baro Pressure
A=raw(2:length(Date)+1,2);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Head_Pressure_kPa=PZ(i+N).Total_Pressure_kPa;
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

```

```

%% Input data from PZ_13E.xls Sheet 9 (Cut7)
N=PZ_L+N; % sum of PZs imported above
PZ_L=3; % number of PZs
S=9;
n1=PZ_L*2+3;
[~,~,raw]=xlsread('PZ_13E.xls',S);
for i=1:PZ_L
    n=(i-1)*2;
    PZ(i+N).Name=cell2mat(raw(1,n1+i));
end

```

```

PZ(i+N).Lat=cell2mat(raw(4,n1+i)); % Degree Decimal
PZ(i+N).Long=cell2mat(raw(5,n1+i)); % Degree Decimal
PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(3,n1+i)); % (ft) converted to (m)
PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,n1+i)); % (ft) BGS covered to (m)
PZ(i+N).StickUp_m=0.3048*cell2mat(raw(6,n1+i)); % (ft) covered to (m)
% Convert date to string
Date=string(raw(2:length(raw(:,1))-1,1));
for j=1:length(Date)
if strlength(Date(j,1))<3
    Date(j,1)=NaT;
elseif strlength(Date(j,1))<12
    Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
else
    Date(j,1)=Date(j,1);
end
end
PZ(i+N).Date=datetime(Date);
% GW Elev
A=raw(2:length(Date)+1,4+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
% Total Pressure
A=raw(2:length(Date)+1,3+n);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
% Baro Pressure
A=raw(2:length(Date)+1,2);
i1 = cellfun(@ischar,A);
sz = cellfun('size',A(~i1),2);
A(i1) = {NaN(1,sz(1))};
PZ(i+N).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
PZ(i+N).Head_Pressure_kPa=PZ(i+N).Total_Pressure_kPa;
PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
converted to head (m)
end

```

```

%% Input data from PZ_13E.xls Sheet 10 (Fill10)
N=PZ_L+N; % sum of PZs imported above
PZ_L=4; % number of PZs
S=10;

```

```

n1=PZ_L*2+3;
[~,~,raw]=xlsread('PZ_13E.xls',S);
for i=1:PZ_L
    n=(i-1)*2;
    PZ(i+N).Name=cell2mat(raw(1,n1+i));
    PZ(i+N).Lat=cell2mat(raw(4,n1+i)); % Degree Decimal
    PZ(i+N).Long=cell2mat(raw(5,n1+i)); % Degree Decimal
    PZ(i+N).GS_Elev_m=0.3048*cell2mat(raw(3,n1+i)); % (ft) converted to (m)
    PZ(i+N).Tip_Depth_m=0.3048*cell2mat(raw(2,n1+i)); % (ft) BGS converted to (m)
    PZ(i+N).StickUp_m=0.3048*cell2mat(raw(6,n1+i)); % (ft) converted to (m)
    % Convert date to string
    Date=string(raw(2:length(raw(:,1))-1,1));
    for j=1:length(Date)
        if strlength(Date(j,1))<3
            Date(j,1)=NaT;
        elseif strlength(Date(j,1))<12
            Date(j,1)=strcat(Date(j,1),' 12:00:00 AM'); % add in time of day if missing from string
        else
            Date(j,1)=Date(j,1);
        end
    end
    PZ(i+N).Date=datetime(Date);
    % GW Elev
    A=raw(2:length(Date)+1,4+n);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).GW_Elev_m=0.3048*cell2mat(A); % (ft) converted to (m)
    % Total Pressure
    A=raw(2:length(Date)+1,3+n);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).Total_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
    % Baro Pressure
    A=raw(2:length(Date)+1,2);
    i1 = cellfun(@ischar,A);
    sz = cellfun('size',A(~i1),2);
    A(i1) = {NaN(1,sz(1))};
    PZ(i+N).Baro_Pressure_kPa=6.89476*cell2mat(A); % (psi) converted to (kPa)
    PZ(i+N).Head_Pressure_kPa=PZ(i+N).Total_Pressure_kPa;
    PZ(i+N).Pressure_Head_m=PZ(i+N).Head_Pressure_kPa/9.80665; % pressure (kPa)
    converted to head (m)
end
save('PZ.mat','PZ'

```