

Test the accuracy of TDoA based Simulator

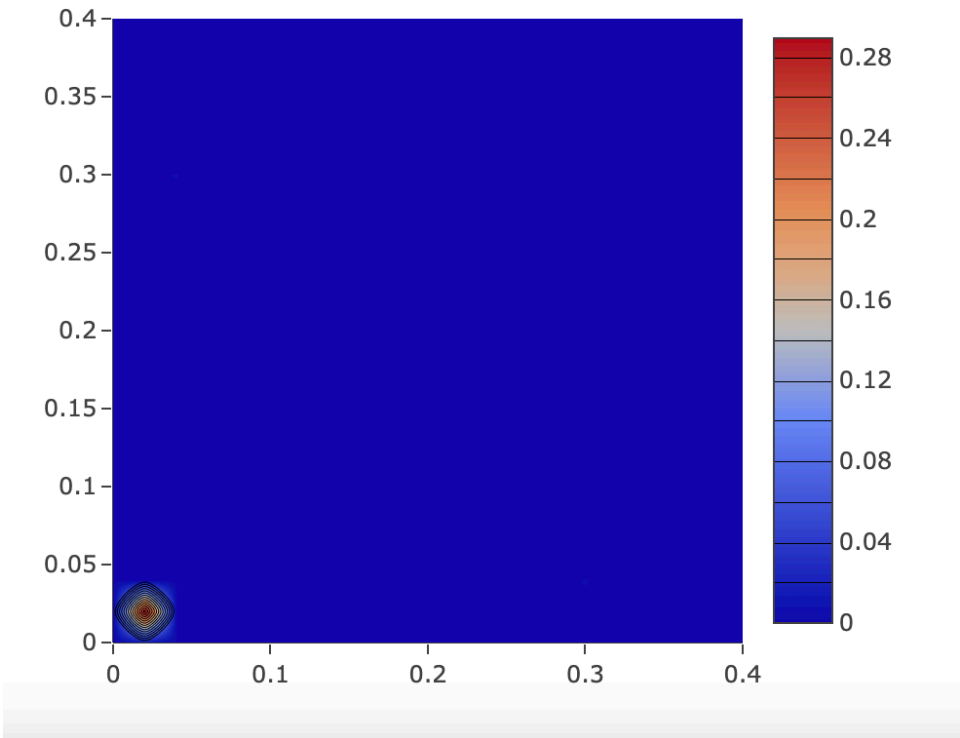
(Test special cases without noise)

Input: anchors on 4 corners; initial seed at room center

Anchor Locations Format: "x0,y0;x1,y1;x2,y2;x4,y4", where (x0,y0) are the coordinates for the initiator, and the others are the responders.	0,0;0,400;400,0;400,400
Room Size Format: "width*height", where width is the x-axis, and height is the y-axis.	400*400
Sample Density Format: "distance", indicating the distance between two sample points.	20
Gaussian Noise Format: "sigma", specifying the standard deviation of the noise to be added to the TDoA measurement for simulation.	0
Max Error Limit All errors larger than this will be represented with the same color as that of the limit.	1000
Solver Seed Method Format: "roomCenter", "origin", or "custom". For non-convex optimizations, initial seed can affect the final outcome.	roomCenter
Customize Initial Seed (if custom method) Format: "x,y". If you chose "custom" as the seed method, provide the coordinates of the initial seed. (Will be ignored for other methods.)	0,0
Anchor Selection Method Format: "all", or "best". Select whether the simulator uses all anchors to compute location, or only the best DoP combination of anchors.	all
Number of Trials Format: "trials". Number of trials with Gaussian noise at every sample location (results present the median error value).	50

Result: (expected to be almost 0 everywhere)

Colorscale for Contour Plot

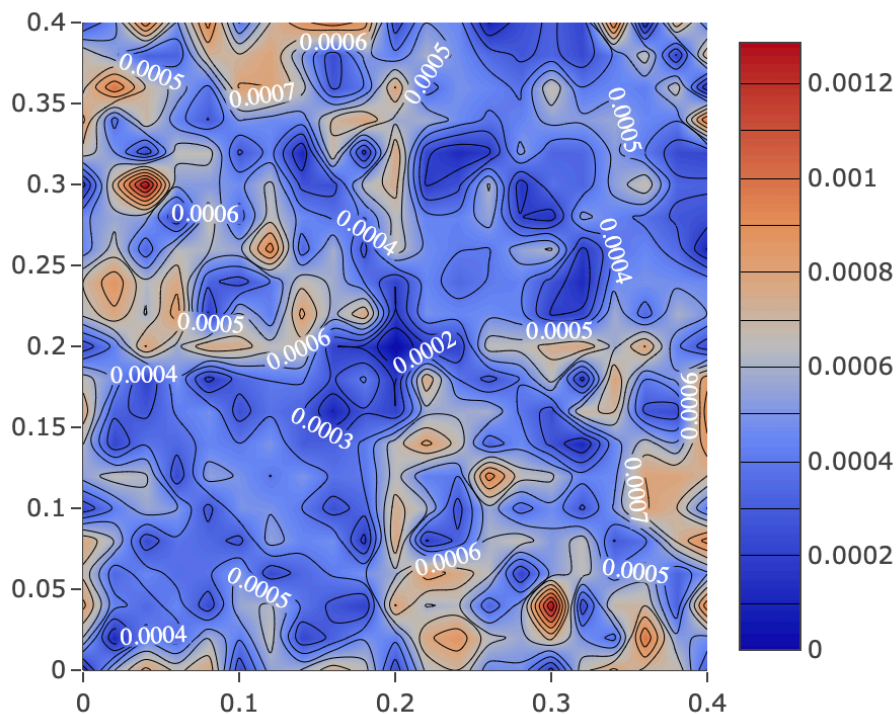


Test Input: anchors on 4 corners; initial seed at origin

Anchor Locations Format: "x0,y0;x1,y1;x2,y2;x4,y4", where (x0,y0) are the coordinates for the initiator, and the others are the responders.	0,0;0,400;400,0;400,400
Room Size Format: "width*height", where width is the x-axis, and height is the y-axis.	400*400
Sample Density Format: "distance", indicating the distance between two sample points.	20
Gaussian Noise Format: "sigma", specifying the standard deviation of the noise to be added to the TDoA measurement for simulation.	0
Max Error Limit All errors larger than this will be represented with the same color as that of the limit.	1000
Solver Seed Method Format: "roomCenter", "origin", or "custom". For non-convex optimizations, initial seed can affect the final outcome.	origin
Customize Initial Seed (if custom method) Format: "x,y". If you chose "custom" as the seed method, provide the coordinates of the initial seed. (Will be ignored for other methods.)	0,0
Anchor Selection Method Format: "all", or "best". Select whether the simulator uses all anchors to compute location, or only the best DoP combination of anchors.	all
Number of Trials Format: "trials". Number of trials with Gaussian noise at every sample location (results present the median error value).	50

Result: (expected to be almost 0 everywhere)

Colorscale for Contour Plot

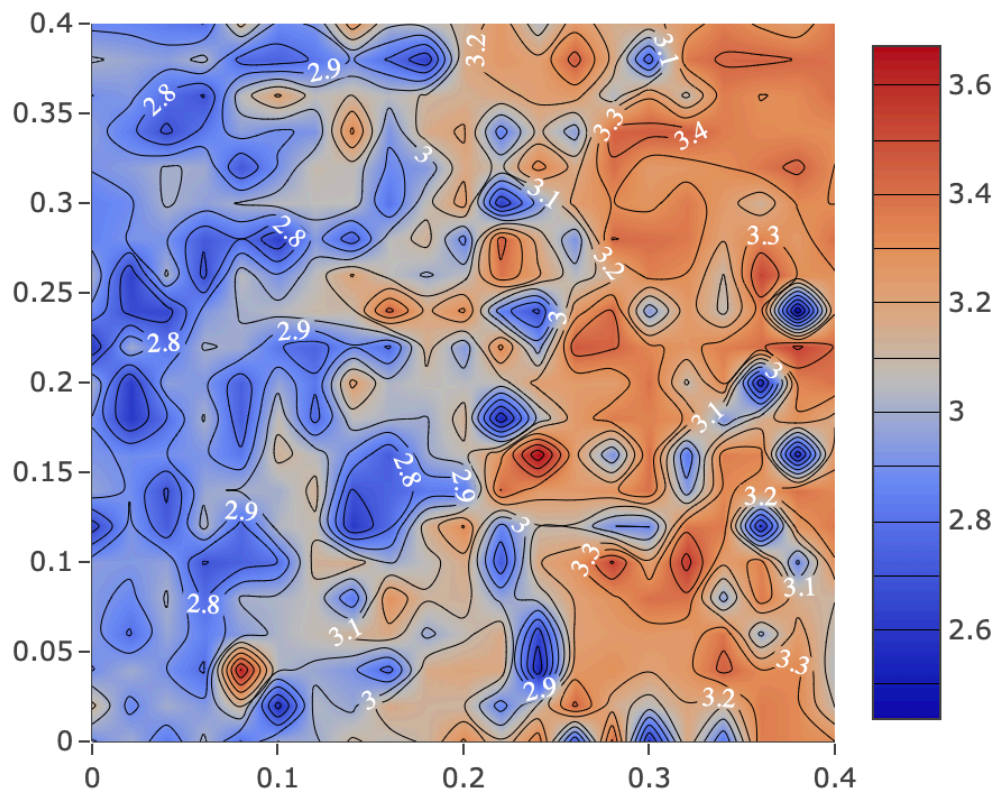


(Test special cases with noise)

Test Input:(colinear anchors positions along x axis)

Anchor Locations Format: "x0,y0;x1,y1;x2,y2;x4,y4", where (x0,y0) are the coordinates for the initiator, and the others are the responders.	190,200;200,200;210,200
Room Size Format: "width*height", where width is the x-axis, and height is the y-axis.	400*400
Sample Density Format: "distance", indicating the distance between two sample points.	20
Gaussian Noise Format: "sigma", specifying the standard deviation of the noise to be added to the TDoA measurement for simulation.	100
Max Error Limit All errors larger than this will be represented with the same color as that of the limit.	100000
Solver Seed Method Format: "roomCenter", "origin", or "custom". For non-convex optimizations, initial seed can affect the final outcome.	origin
Customize Initial Seed (if custom method) Format: "x,y". If you chose "custom" as the seed method, provide the coordinates of the initial seed. (Will be ignored for other methods.)	0,0
Anchor Selection Method Format: "all", or "best". Select whether the simulator uses all anchors to compute location, or only the best DoP combination of anchors.	all
Number of Trials Format: "trials". Number of trials with Gaussian noise at every sample location (results present the median error value).	50

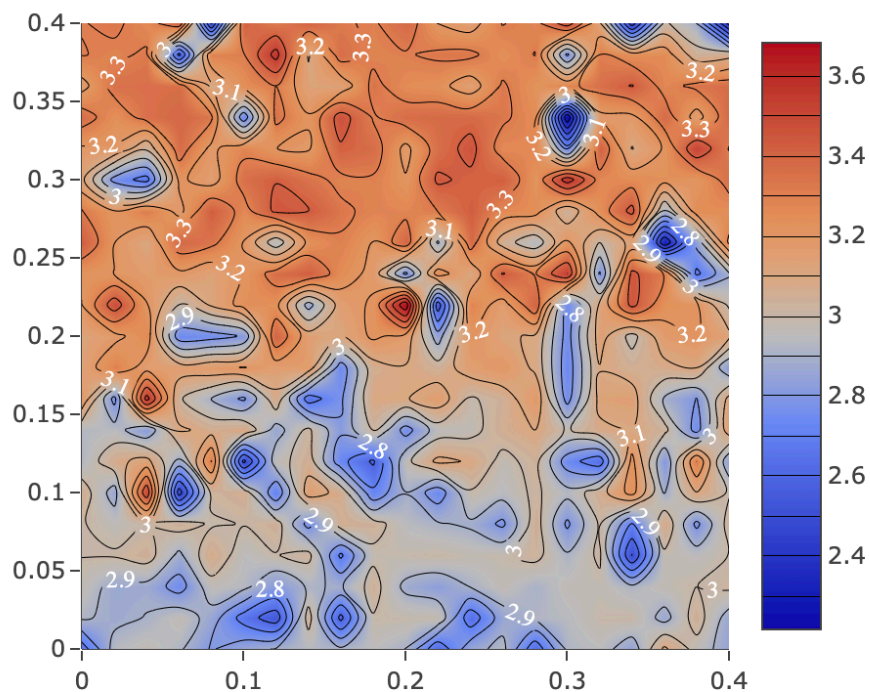
Result: (expected to be poor and symmetrical along y axis)



Test Inputs: (colinear anchors positions along y axis)

Anchor Locations Format: "x0,y0;x1,y1;x2,y2;x4,y4", where (x0,y0) are the coordinates for the initiator, and the others are the responders.	200,190;200,200;200,210
Room Size Format: "width*height", where width is the x-axis, and height is the y-axis.	400*400
Sample Density Format: "distance", indicating the distance between two sample points.	20
Gaussian Noise Format: "sigma", specifying the standard deviation of the noise to be added to the TDoA measurement for simulation.	100
Max Error Limit All errors larger than this will be represented with the same color as that of the limit.	100000
Solver Seed Method Format: "roomCenter", "origin", or "custom". For non-convex optimizations, initial seed can affect the final outcome.	origin
Customize Initial Seed (if custom method) Format: "x,y". If you chose "custom" as the seed method, provide the coordinates of the initial seed. (Will be ignored for other methods.)	0,0
Anchor Selection Method Format: "all", or "best". Select whether the simulator uses all anchors to compute location, or only the best DoP combination of anchors.	all
Number of Trials Format: "trials". Number of trials with Gaussian noise at every sample location (results present the median error value).	50

Result: (expected to be poor and symmetrical along x axis)



Test Inputs: (colinear anchors positions along the diagonal)

Anchor Locations Format: "x0,y0;x1,y1;x2,y2;x4,y4", where (x0,y0) are the coordinates for the initiator, and the others are the responders.	190,190;200,200;210,210
Room Size Format: "width*height", where width is the x-axis, and height is the y-axis.	400*400
Sample Density Format: "distance", indicating the distance between two sample points.	20
Gaussian Noise Format: "sigma", specifying the standard deviation of the noise to be added to the TDoA measurement for simulation.	100
Max Error Limit All errors larger than this will be represented with the same color as that of the limit.	100000
Solver Seed Method Format: "roomCenter", "origin", or "custom". For non-convex optimizations, initial seed can affect the final outcome.	origin
Customize Initial Seed (if custom method) Format: "x,y". If you chose "custom" as the seed method, provide the coordinates of the initial seed. (Will be ignored for other methods.)	0,0
Anchor Selection Method Format: "all", or "best". Select whether the simulator uses all anchors to compute location, or only the best DoP combination of anchors.	all
Number of Trials Format: "trials". Number of trials with Gaussian noise at every sample location (results present the median error value).	50

Result: (expected to be poor and symmetrical along the diagonal)

