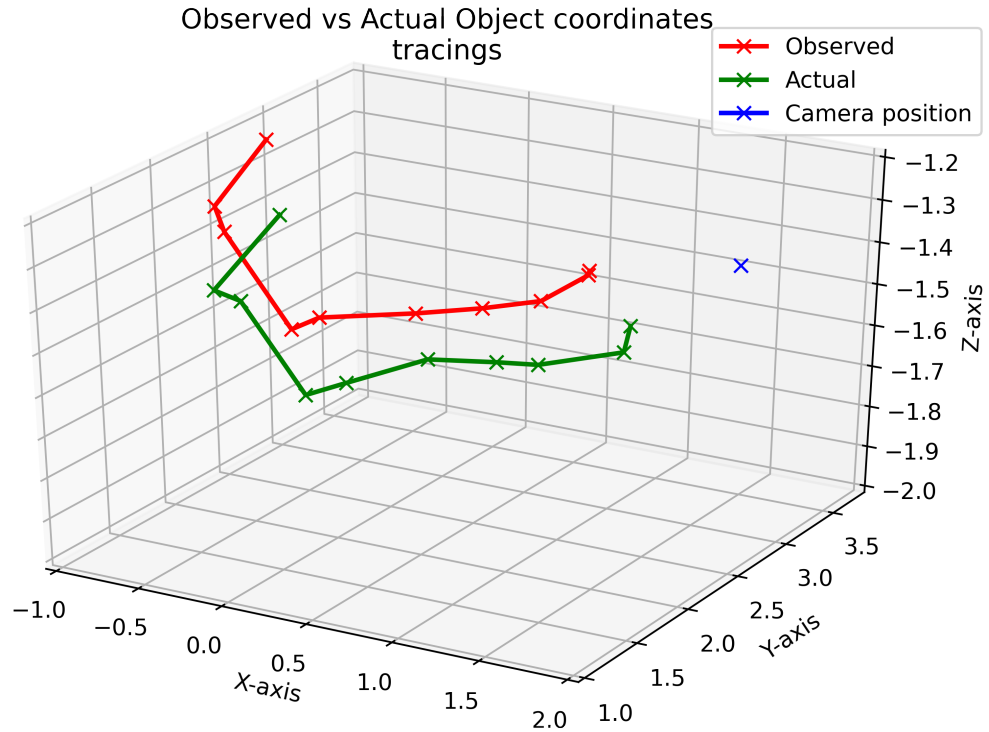


trace3D_obj_localization

May 26, 2020

```
[1]: from mpl_toolkits.mplot3d import axes3d
import matplotlib.pyplot as plt
import numpy as np
X,Y,Z = [1.4, 1.1, 0.8, 0.6, 0.35, 0.14, 0.15, 0.02, -0.12, -0.44],[2.1,2.6,2.
↪65,2.42,2.2,1.66,1.4,1.05,1.18,2.1],[-1.28,-1.38,-1.47,-1.47,-1.47,-1.42,-1.
↪41,-1.15,-1.12,-1.11]
X1,Y1,Z1 = [1.6,1.3,0.8,0.66,0.4,0.23,0.25,0.1,-0.1,-0.38],[2.16,2.62,2.63,2.
↪46,2.23,1.75,1.36,1.05,1.12,2.11],[-1.4,-1.55,-1.62,-1.6,-1.58,-1.58,-1.
↪55,-1.3,-1.3,-1.28]
x2,y2,z2 = [2.28],[2.0],[-1.19]
fig = plt.figure(figsize=(60,40), dpi=500)
ax = fig.add_subplot(666, projection='3d')
#ax.view_init(azim=-20)
ax.set_xlabel('X-axis')
ax.set_ylabel('Y-axis')
ax.set_zlabel('Z-axis')
ax.set_xlim3d(-1,2)
ax.set_ylim3d(1,3.78)
ax.set_zlim3d(-2,-1.2)
ax.plot(X, Y, Z, marker='x',color='red', linewidth=2, label='Observed')
ax.plot(X1, Y1, Z1,marker='x',color='green', linewidth=2, label='Actual')
ax.plot(x2, y2, z2,marker='x',color='blue', linewidth=2, label='Camera_
↪position')
plt.title('Observed vs Actual Object coordinates\ntracings')
plt.legend()
plt.show()
```



```
[ ]: from mpl_toolkits.mplot3d import axes3d
import matplotlib.pyplot as plt
import numpy as np
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X1,Y1,Z1 = [1.6,1.3,0.8,0.66,0.4,0.23,0.25,0.1,-0.1,-0.38], [2.16,2.62,2.63,2.
→46,2.23,1.75,1.36,1.05,1.12,2.11], [-1.4,-1.55,-1.62,-1.6,-1.58,-1.58,-1.
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fig = plt.figure(figsize=(60,40), dpi=500)
ax = fig.add_subplot(666, projection='3d')
#ax.view_init(azim=-20)
ax.set_xlabel('X-axis')
ax.set_ylabel('Y-axis')
ax.set_zlabel('Z-axis')
ax.set_xlim3d(-1,3.61)
ax.set_ylim3d(0,3.78)
ax.set_zlim3d(-2,0)
ax.plot(X, Y, Z, marker='x',color='red', linewidth=2, label='Observed')
ax.plot(X1, Y1, Z1,marker='x',color='green', linewidth=2, label='Actual')
ax.plot(x2, y2, z2,marker='x',color='blue', linewidth=2, label='Camera_
→position')
```

```
plt.title('Observed vs Actual Object coordinates\ntracings')
plt.legend()
plt.savefig('img.png')
plt.show()
```

[]:

[]: