

# Resultado de segmentacion y cálculo de tamaño de rocas por imagen

Realizado por Mijail Guerrero

Imagen utilizada disponible en Roboflow: <https://universe.roboflow.com/nsysu/stone2-zcyrx/dataset/6>

In [ ]: *# Imagenes de testeo*

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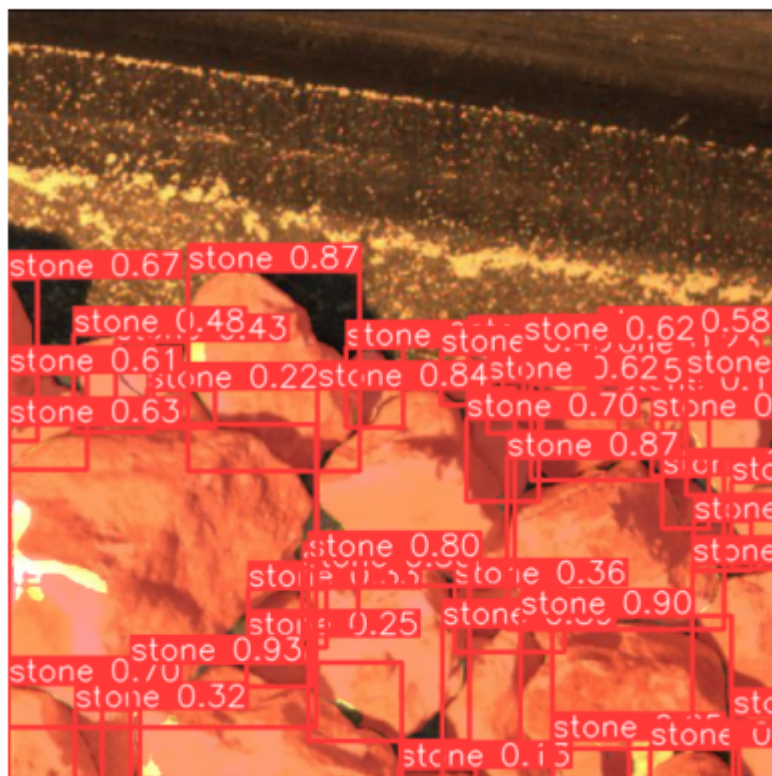
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## Segmentacion con 01 imagen

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In [ ]: # Resultado de segmentacion con imagen ejemplo de rocas
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Segmentacion de rocas







Resultado N°: 0

Nombre: stone ; clase: 0 ; confianza: 0.9298855066299438 ; box: {'x1': 81.9028091430664, 'y1': 433.2730407714844, 'x2': 261.0826110839844, 'y2': 511.68621826171875}

Nombre: stone ; clase: 0 ; confianza: 0.9018309712409973 ; box: {'x1': 340.644775390625, 'y1': 402.3489685058594, 'x2': 480.26849365234375, 'y2': 490.38873291015625}

Nombre: stone ; clase: 0 ; confianza: 0.888118326663971 ; box: {'x1': 288.62701416015625, 'y1': 409.025390625, 'x2': 361.63433837890625, 'y2': 512.0}

Nombre: stone ; clase: 0 ; confianza: 0.8722655177116394 ; box: {'x1': 331.094482421875, 'y1': 297.29229736328125, 'x2': 475.873046875, 'y2': 411.5113830566406}

Nombre: stone ; clase: 0 ; confianza: 0.8673317432403564 ; box: {'x1': 119.0108413696289, 'y1': 173.36447143554688, 'x2': 233.10244750976562, 'y2': 306.451171875}

Nombre: stone ; clase: 0 ; confianza: 0.8381745219230652 ; box: {'x1': 205.2698211669922, 'y1': 251.2109832763672, 'x2': 336.49609375, 'y2': 382.89471435546875}

Nombre: stone ; clase: 0 ; confianza: 0.798280656337738 ; box: {'x1': 199.44613647460938, 'y1': 364.8885803222656, 'x2': 306.0345153808594, 'y2': 485.19580078125}

Nombre: stone ; clase: 0 ; confianza: 0.699960470199585 ; box: {'x1': 304.66339111328125, 'y1': 271.54888916015625, 'x2': 352.37957763671875, 'y2': 326.05181884765625}

Nombre: stone ; clase: 0 ; confianza: 0.6959534883499146 ; box: {'x1': 0.15804442763328552, 'y1': 447.877685546875, 'x2': 62.62126922607422, 'y2': 511.92828369140625}

Nombre: stone ; clase: 0 ; confianza: 0.6665021181106567 ; box: {'x1': 0.0, 'y1': 178.46568298339844, 'x2': 19.73333740234375, 'y2': 286.05755615234375}

Nombre: stone ; clase: 0 ; confianza: 0.6356917023658752 ; box: {'x1': 450.15997314453125, 'y1': 242.3835906982422, 'x2': 511.8408203125, 'y2': 322.06134033203125}

Nombre: stone ; clase: 0 ; confianza: 0.6343180537223816 ; box: {'x1': 0.0, 'y1': 275.572998046875, 'x2': 204.1586456298828, 'y2': 476.6669006347656}

Nombre: stone ; clase: 0 ; confianza: 0.6221403479576111 ; box: {'x1': 342.445068359375, 'y1': 220.63314819335938, 'x2': 388.71783447265625, 'y2': 255.15103149414062}

Nombre: stone ; clase: 0 ; confianza: 0.6201438903808594 ; box: {'x1': 318.3581237792969, 'y1': 246.23287963867188, 'x2': 354.31585693359375, 'y2': 281.1980285644531}

Nombre: stone ; clase: 0 ; confianza: 0.6113923192024231 ; box: {'x1': 454.86505126953125, 'y1': 367.4837646484375, 'x2': 511.6244201660156, 'y2': 475.208984375}

Nombre: stone ; clase: 0 ; confianza: 0.6093837022781372 ; box: {'x1': 0.0, 'y1': 241.7580108642578, 'x2': 52.285118103027344, 'y2': 305.5545959472656}

Nombre: stone ; clase: 0 ; confianza: 0.5769678354263306 ; box: {'x1': 392.0611572265625, 'y1': 215.90267944335938, 'x2': 457.05078125, 'y2': 256.2374572753906}

Nombre: stone ; clase: 0 ; confianza: 0.5604454278945923 ; box: {'x1': 480.57501220703125, 'y1': 313.68359375, 'x2': 511.9144592285156, 'y2': 371.9877014160156}

Nombre: stone ; clase: 0 ; confianza: 0.5455756187438965 ; box: {'x1': 427.71820068359375, 'y1': 271.71893310546875, 'x2': 465.12982177734375, 'y2': 309.49053955078125}

Nombre: stone ; clase: 0 ; confianza: 0.5197975635528564 ; box: {'x1': 347.8790588378906, 'y1': 248.866943359375, 'x2': 434.4461364746094, 'y2': 312.88238525390625}

Nombre: stone ; clase: 0 ; confianza: 0.49616187810897827 ; box: {'x1': 195.3104248046875, 'y1': 371.08673095703125, 'x2': 232.6593475341797, 'y2': 412.5668029785156}

Nombre: stone ; clase: 0 ; confianza: 0.4751231074333191 ; box: {'x1': 43.410606384277344, 'y1': 215.17788696289062, 'x2': 96.41127014160156, 'y2': 280.2848205566406}

Nombre: stone ; clase: 0 ; confianza: 0.4505382776260376 ; box: {'x1': 287.479736328125, 'y1': 228.589599609375, 'x2': 328.27679443359375, 'y2': 262.36053466796875}

Nombre: stone ; clase: 0 ; confianza: 0.44158685207366943 ; box: {'x1': 481.81658935546875, 'y1': 468.1456604003906, 'x2': 511.92596435546875, 'y2': 511.7771911621094}

Nombre: stone ; clase: 0 ; confianza: 0.42604807019233704 ; box: {'x1': 71.91325378417969, 'y1': 220.5583038330078, 'x2': 119.6207275390625, 'y2': 261.06982421875}

Nombre: stone ; clase: 0 ; confianza: 0.35549196600914 ; box: {'x1': 296.47161865234375, 'y1': 382.0262145996094, 'x2': 369.564697265625, 'y2': 426.242919921875}

Nombre: stone ; clase: 0 ; confianza: 0.3427124321460724 ; box: {'x1': 426.0951232910156, 'y1': 489.80792236328125, 'x2': 485.7373046875, 'y2': 512.0}

Nombre: stone ; clase: 0 ; confianza: 0.3282478153705597 ; box: {'x1': 455.34796142578125, 'y1': 339.95611572265625, 'x2': 493.1592712402344, 'y2': 372.3763427734375}

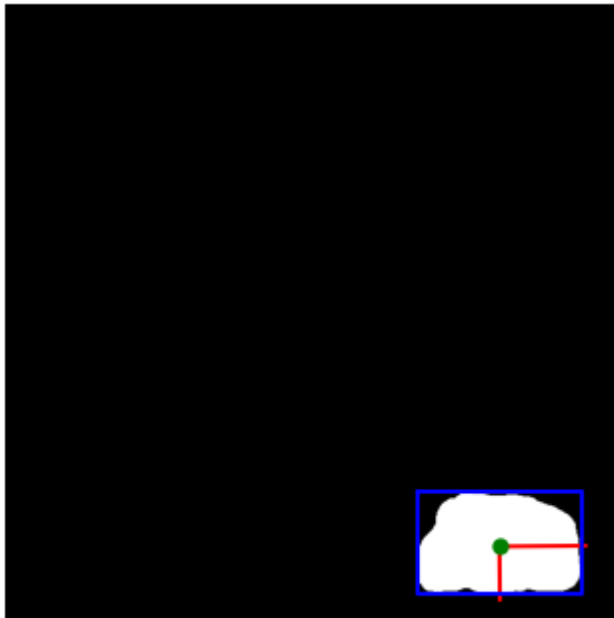
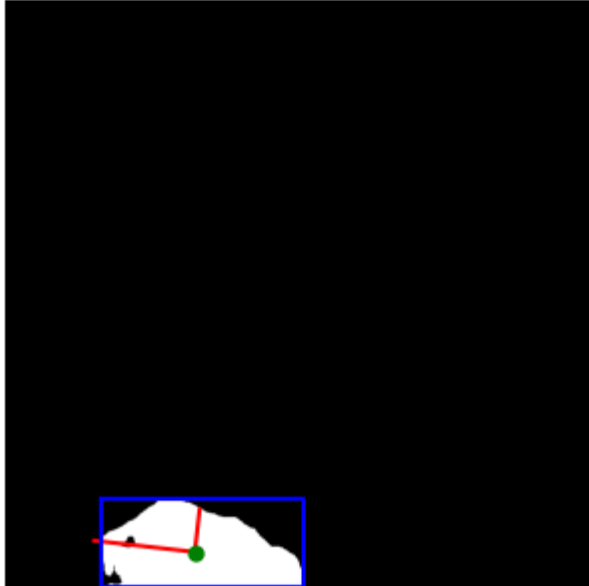
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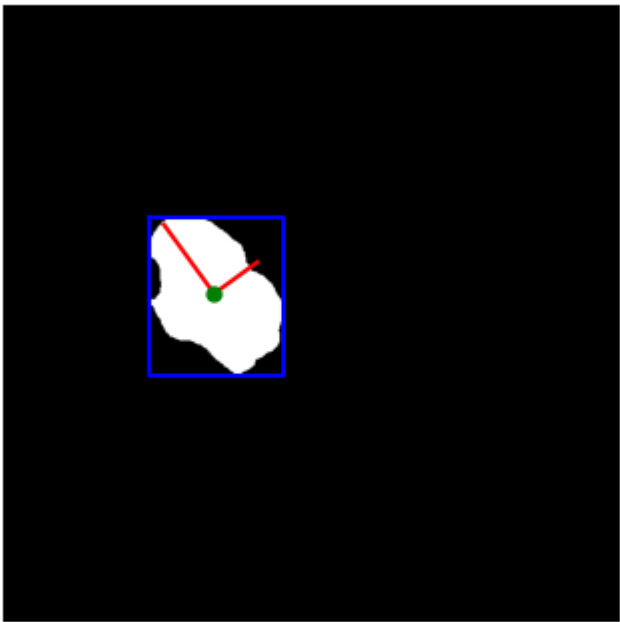
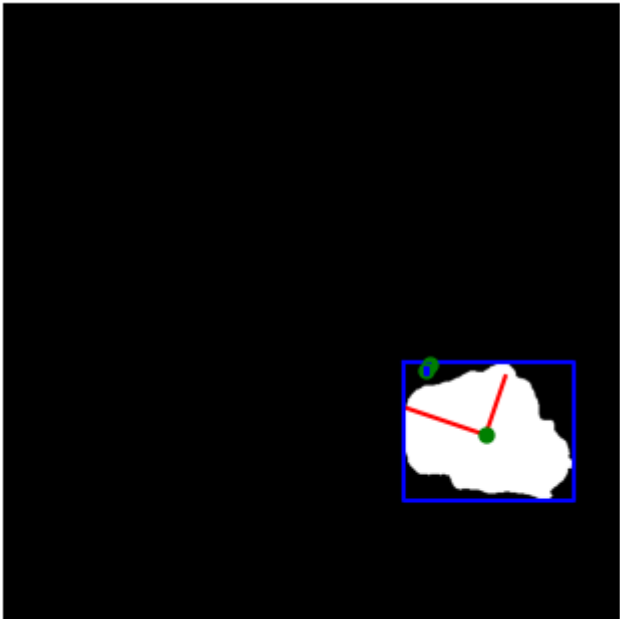
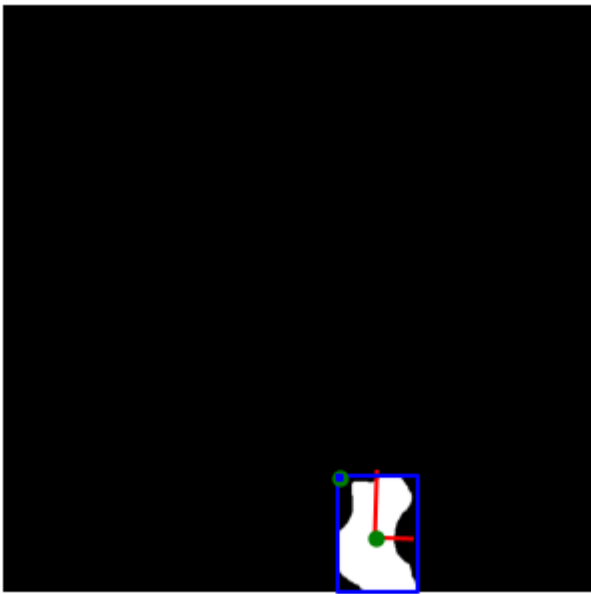
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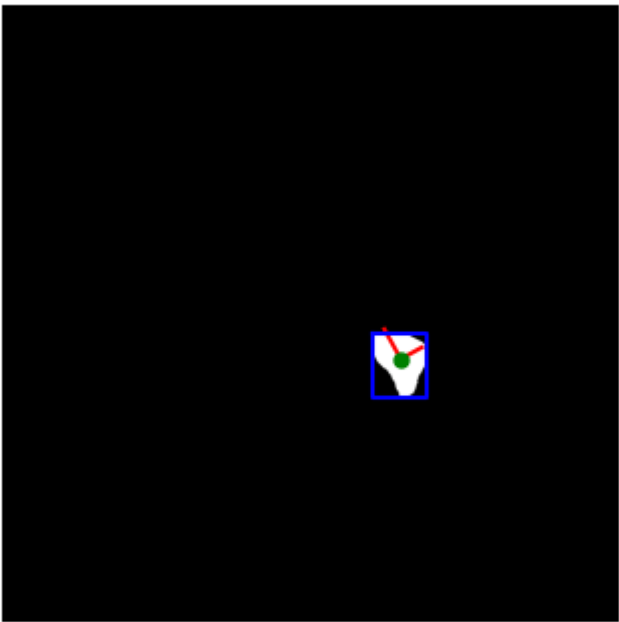
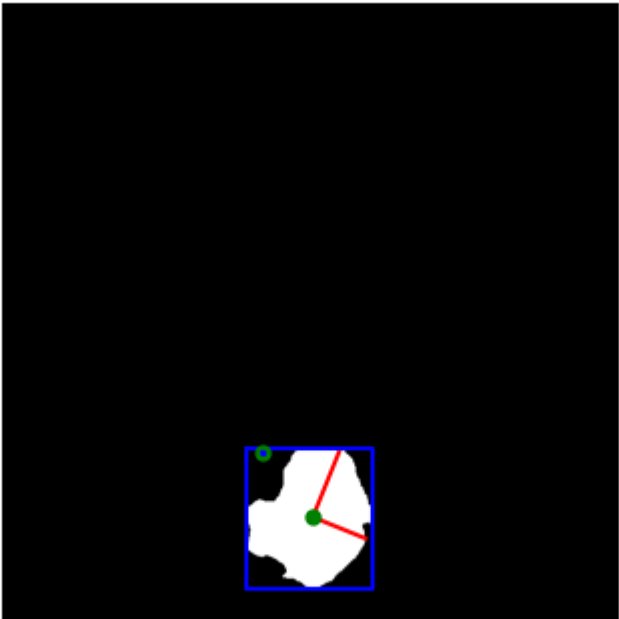
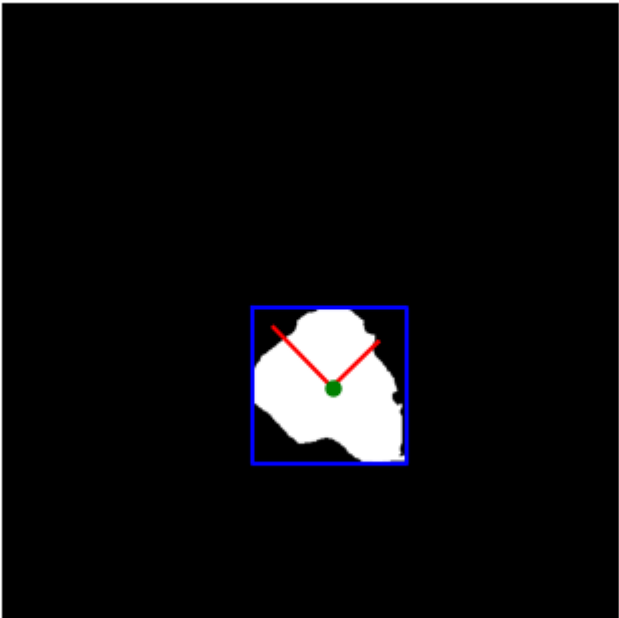
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Nombre: stone ; clase: 0 ; confianza: 0.270673006772995 ; box: {'x1': 434.050537109375, 'y1': 309.9493713378906, 'x2': 465.23870849609375, 'y2': 344.978271484375}

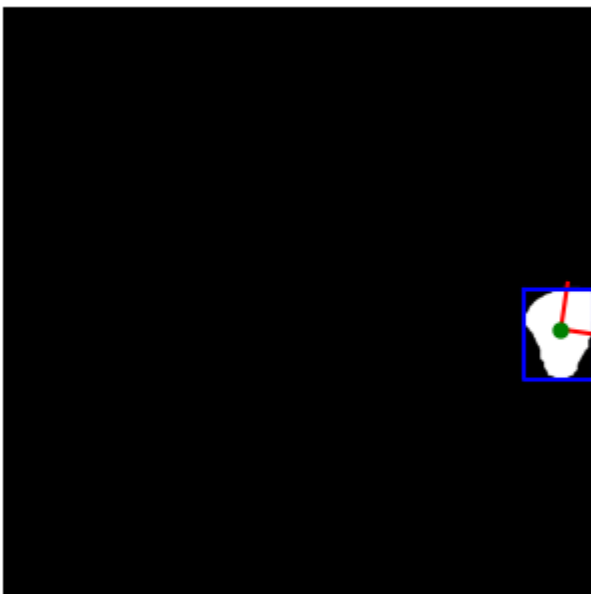
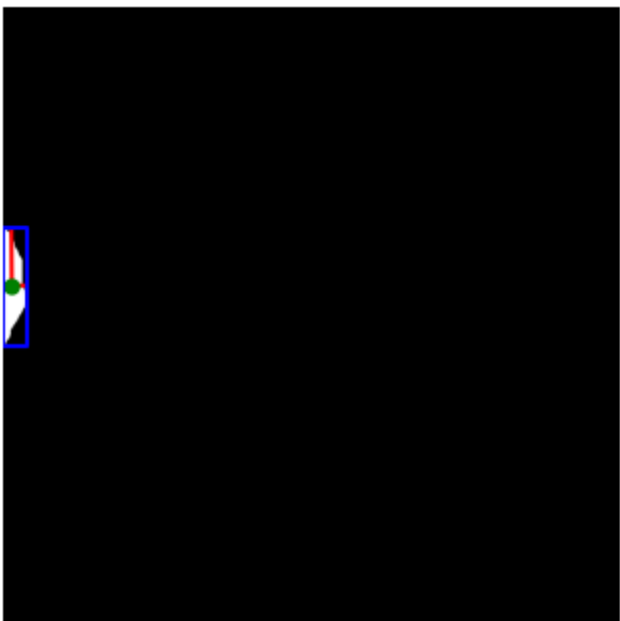
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Nombre: stone ; clase: 0 ; confianza: 0.22653236985206604 ; box: {'x1': 385.25152587890625, 'y1': 229.6553192138672, 'x2': 408.17340087890625, 'y2': 255.8061981201172}  
Nombre: stone ; clase: 0 ; confianza: 0.2155769020318985 ; box: {'x1': 92.91377258300781, 'y1': 252.4175262451172, 'x2': 137.0972137451172, 'y2': 277.573486328125}  
Nombre: stone ; clase: 0 ; confianza: 0.15520568192005157 ; box: {'x1': 405.9249572753906, 'y1': 254.8712615966797, 'x2': 449.4640197753906, 'y2': 287.3783874511719}  
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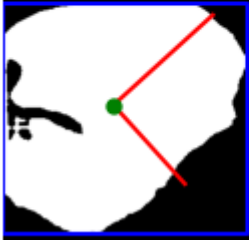


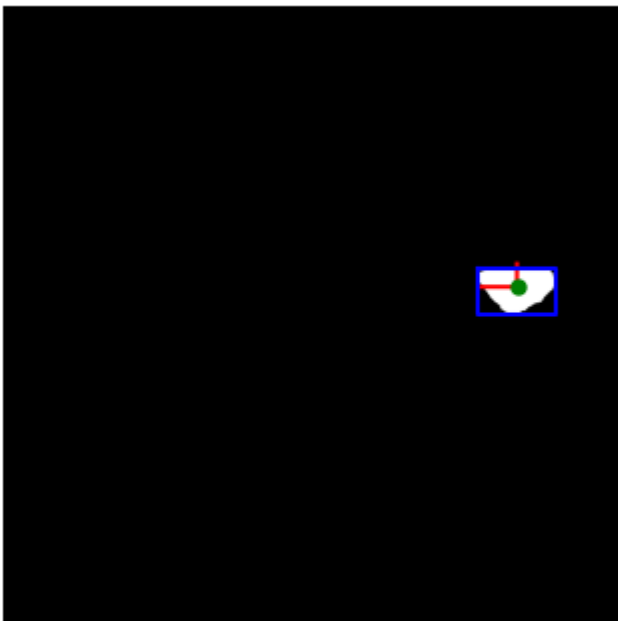
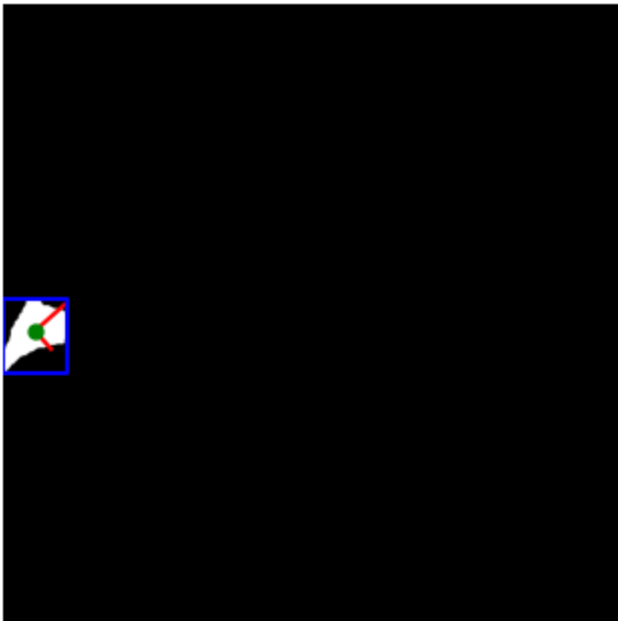
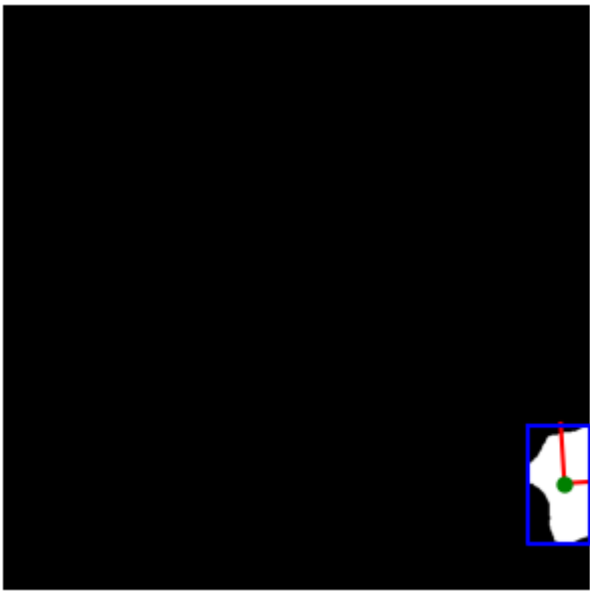


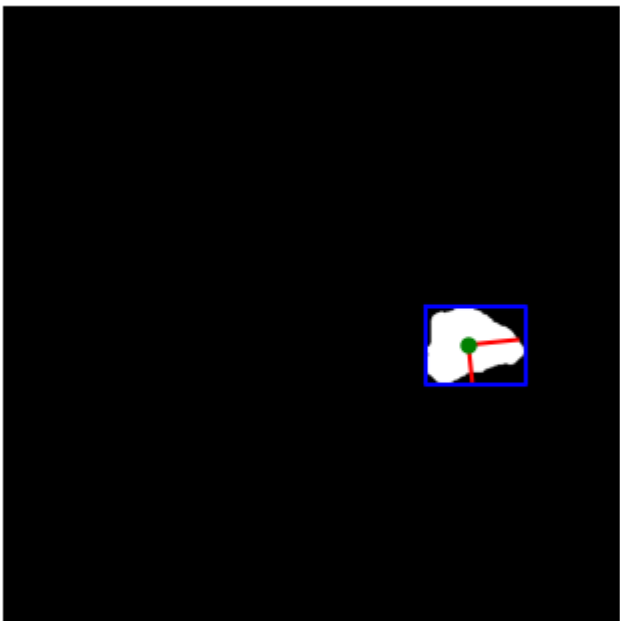
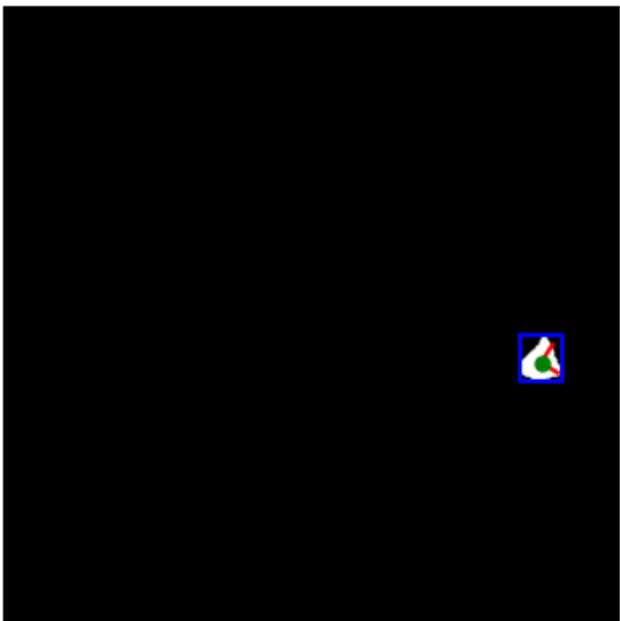


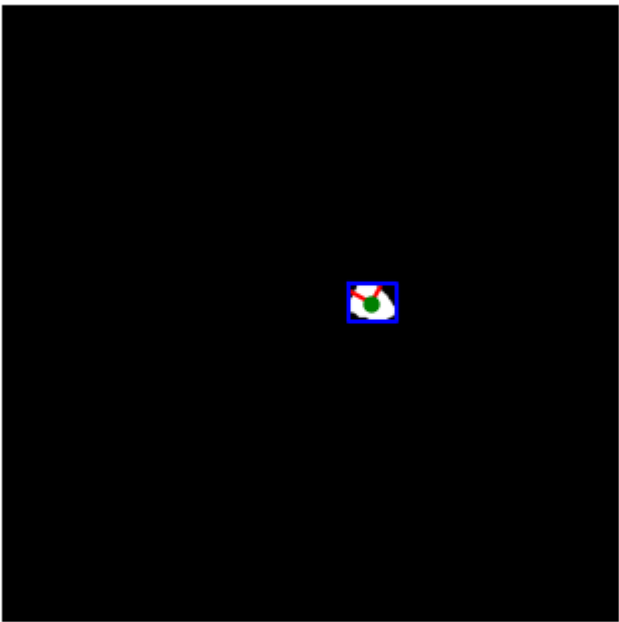
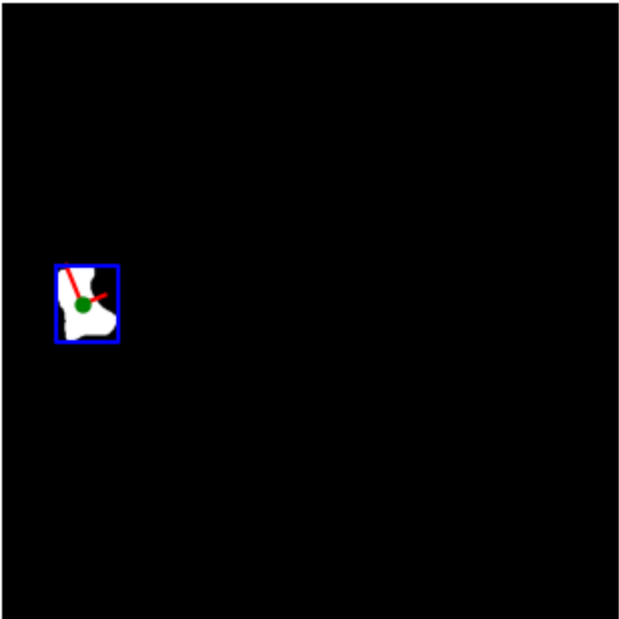
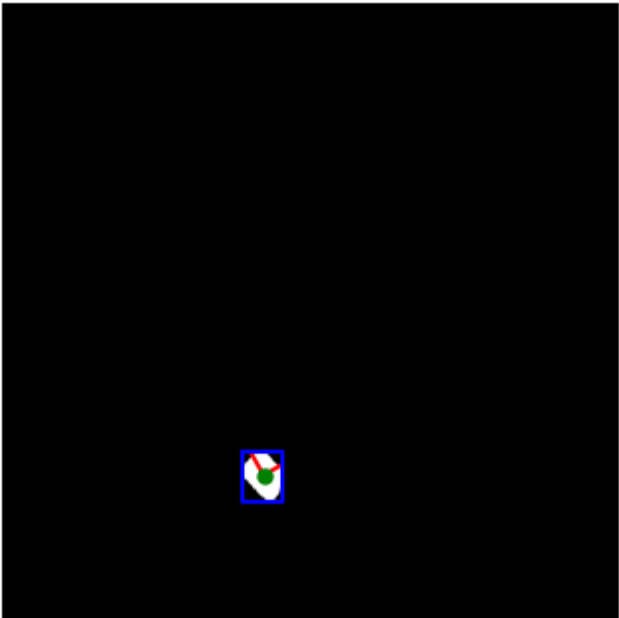




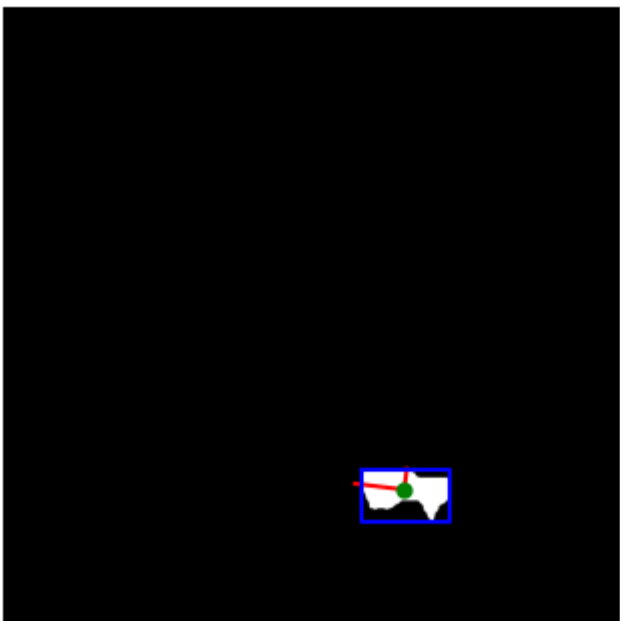
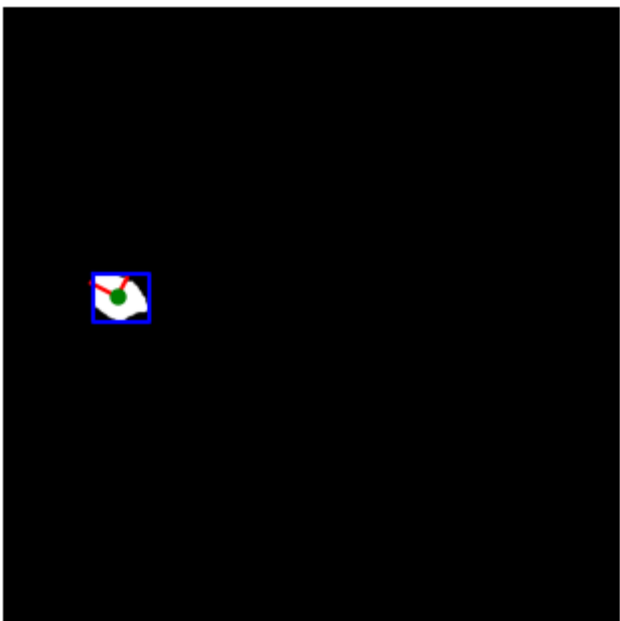
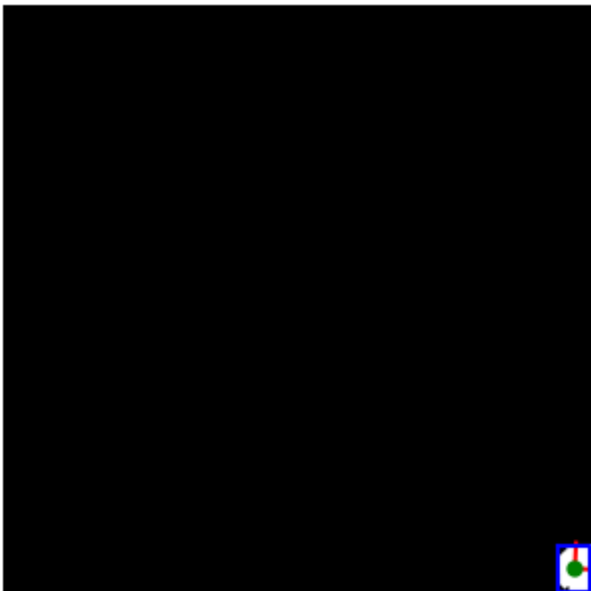


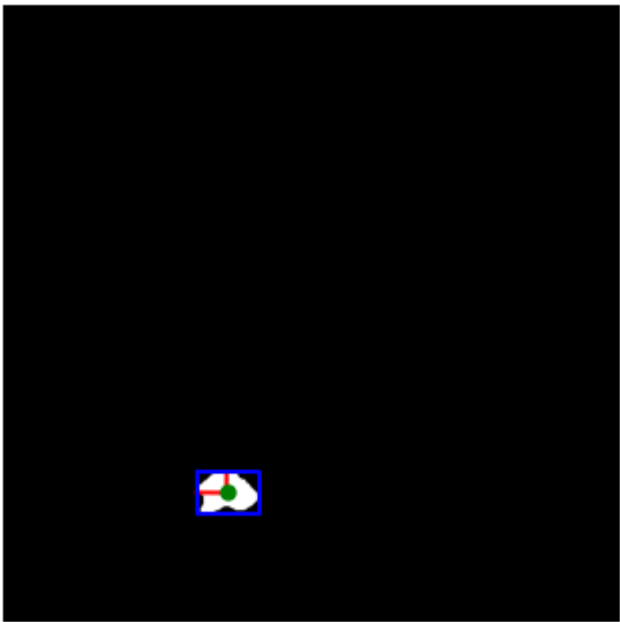
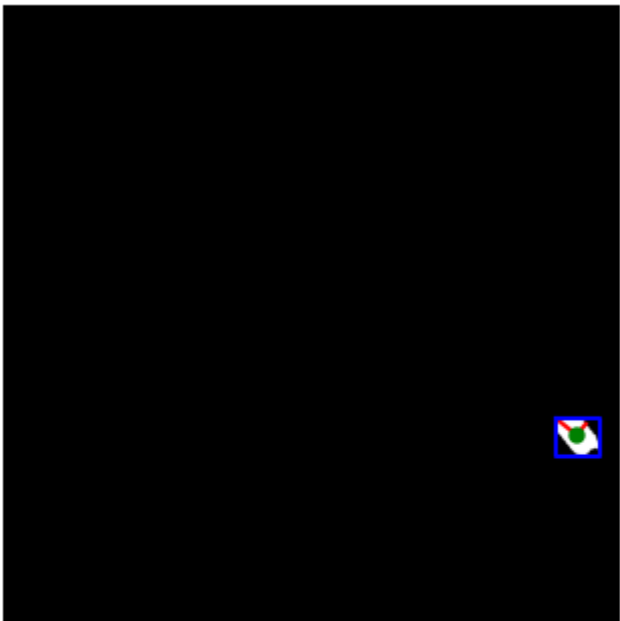
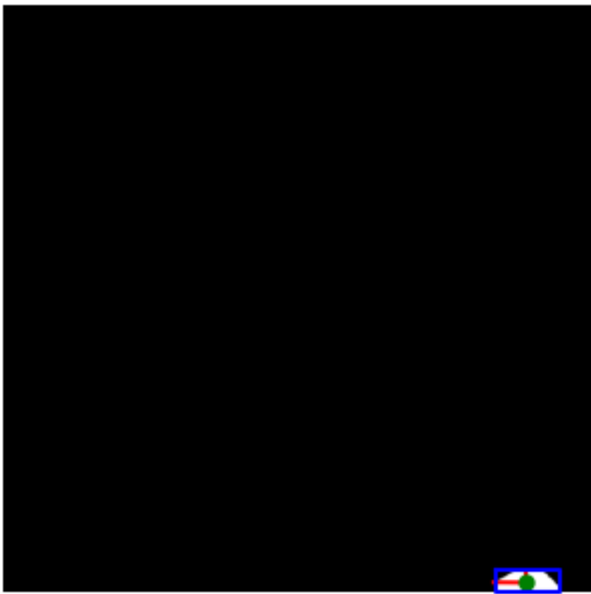


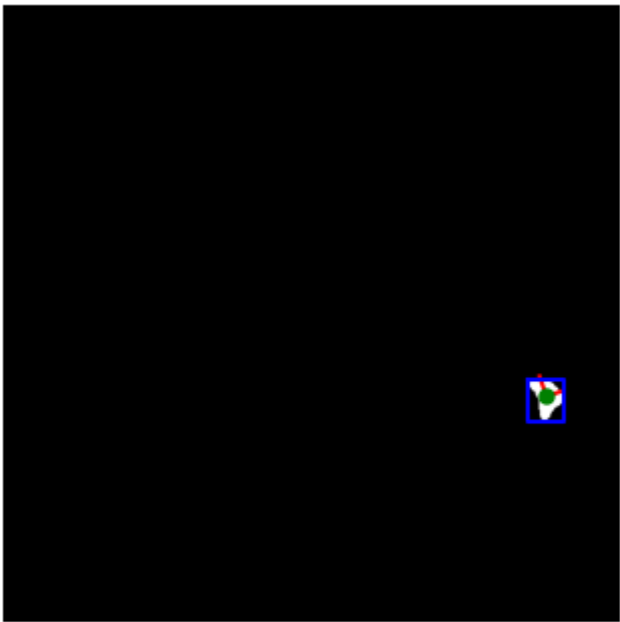
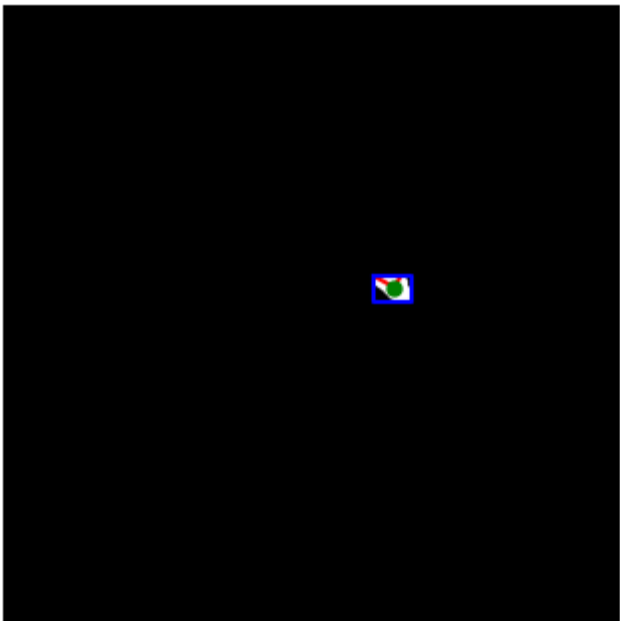
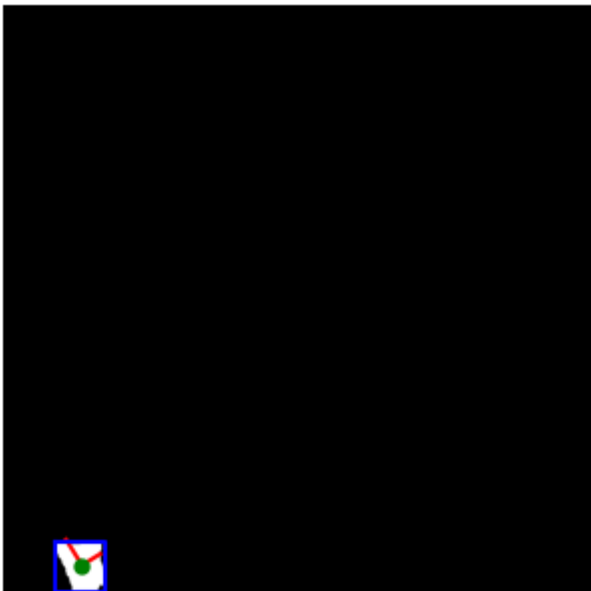


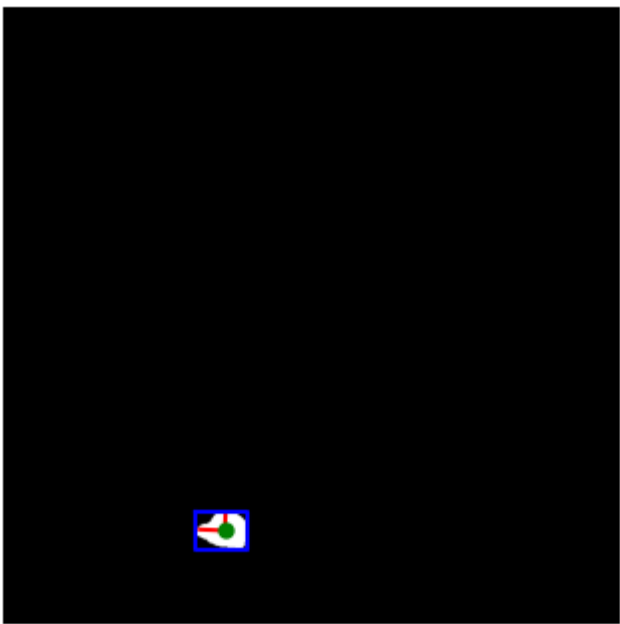
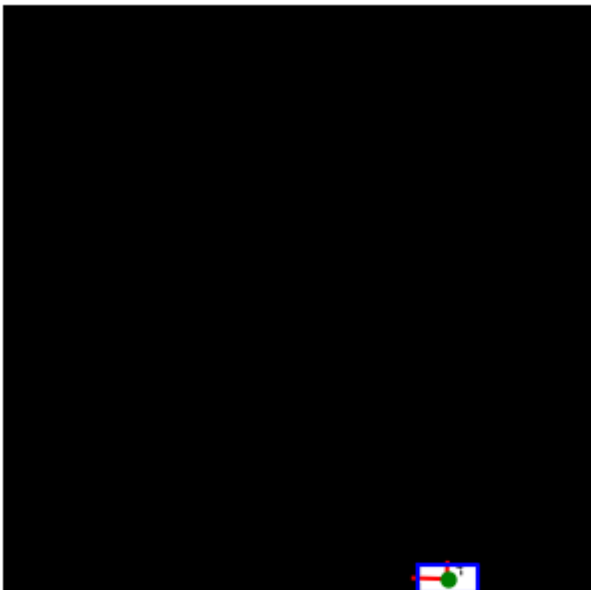
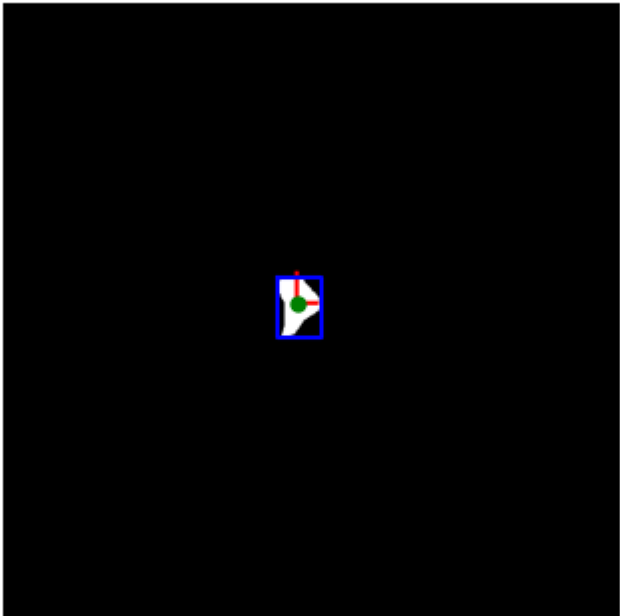


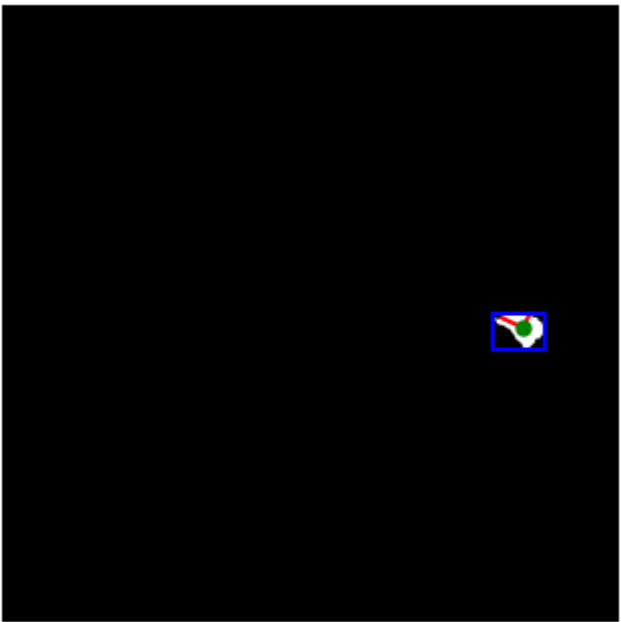
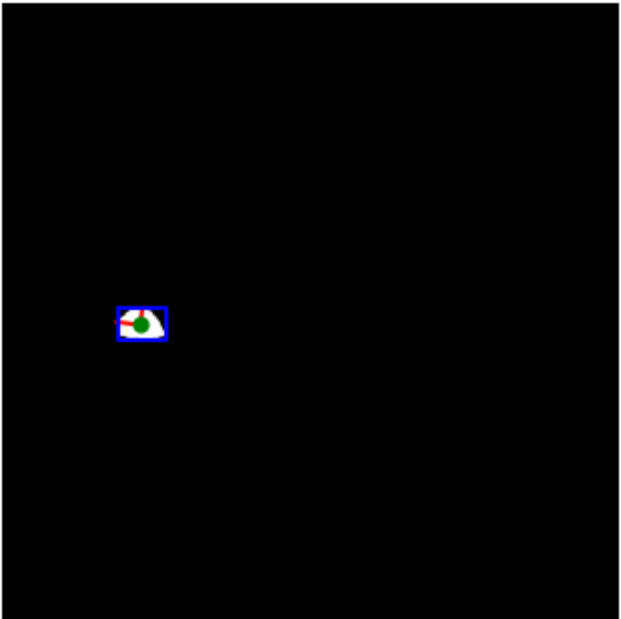
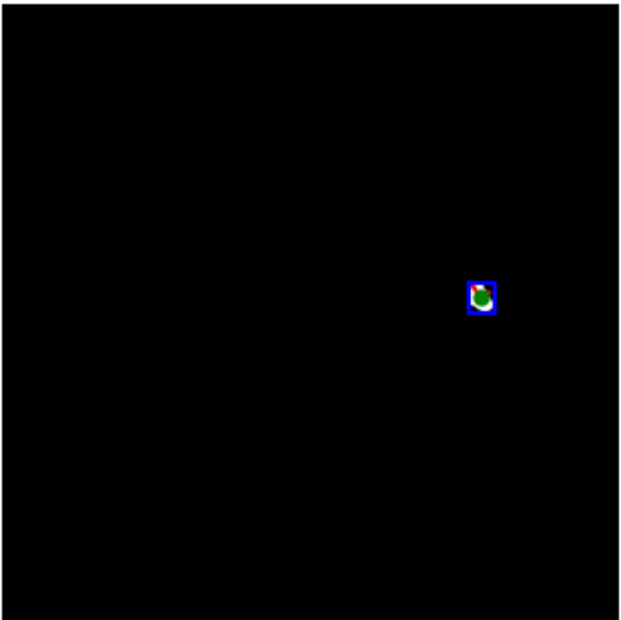




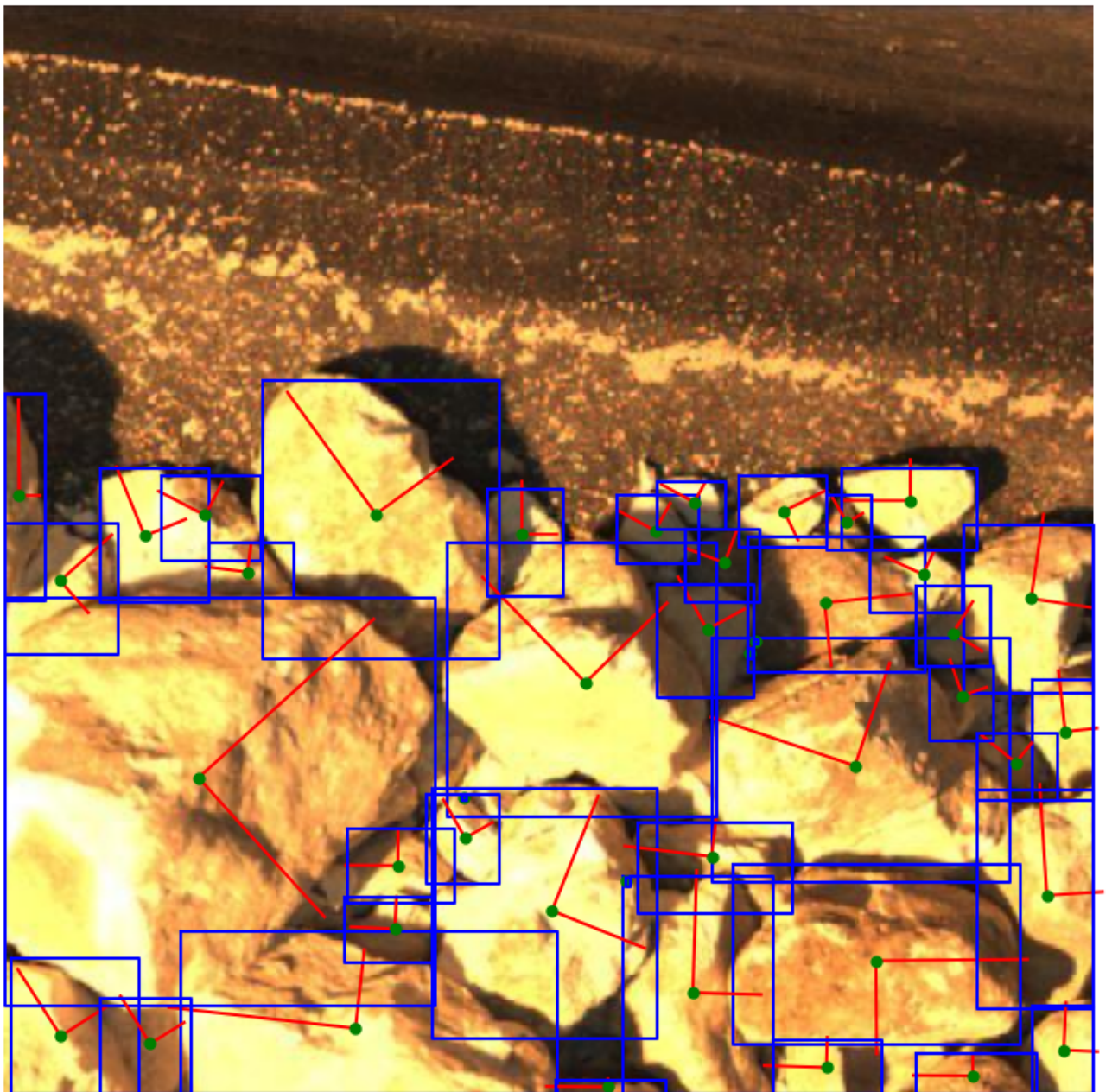








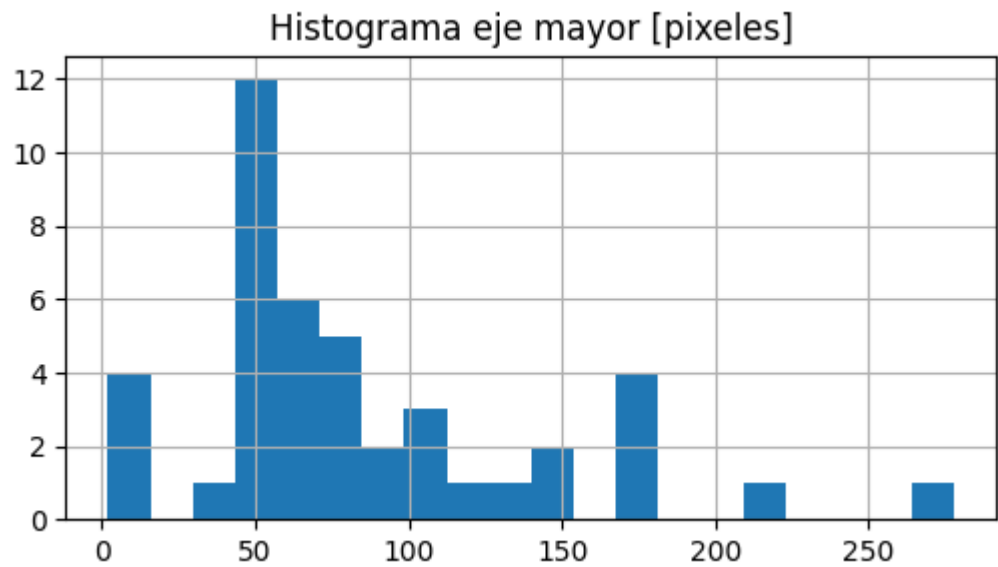




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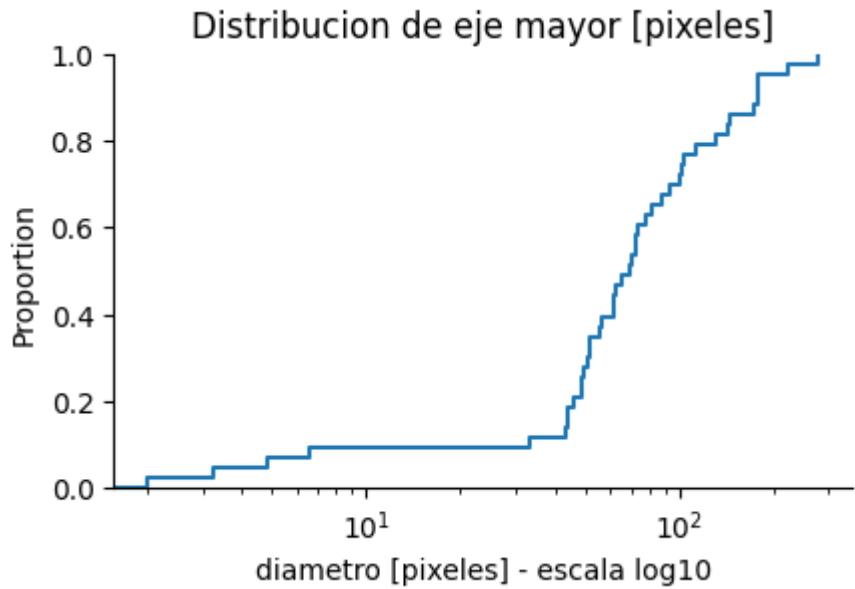
Ver distribucion e histograma segun tamaño de rocas segmentados

Cantidad rocas: 43

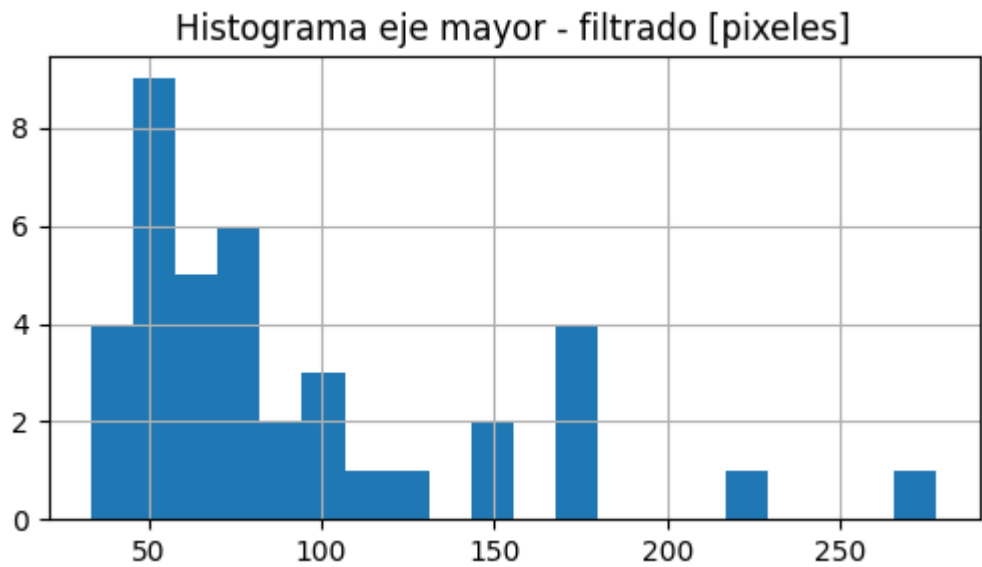


Cantidad rocas: 43

<Figure size 600x300 with 0 Axes>

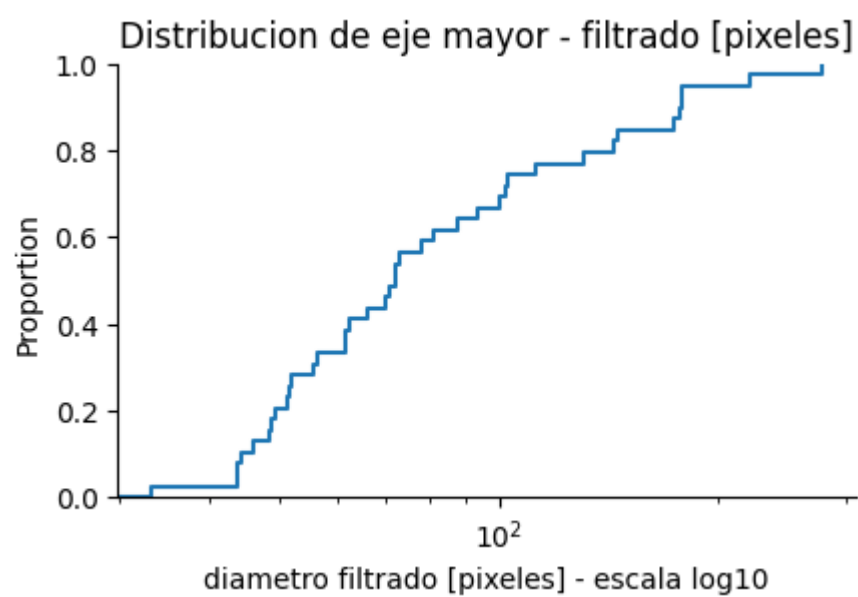


Cantidad rocas: 39



Cantidad rocas: 39

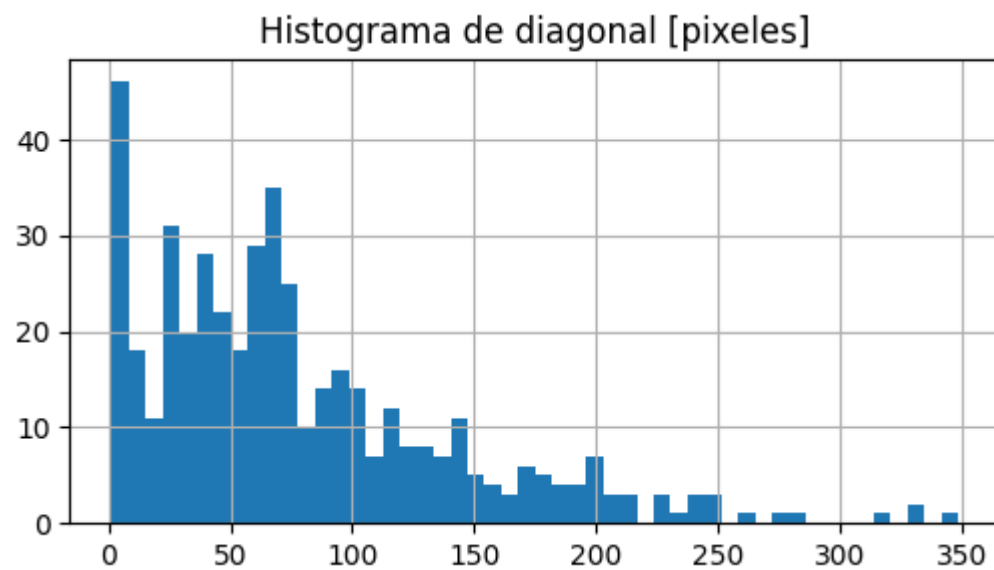
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## Segmentacion con múltiples imágenes

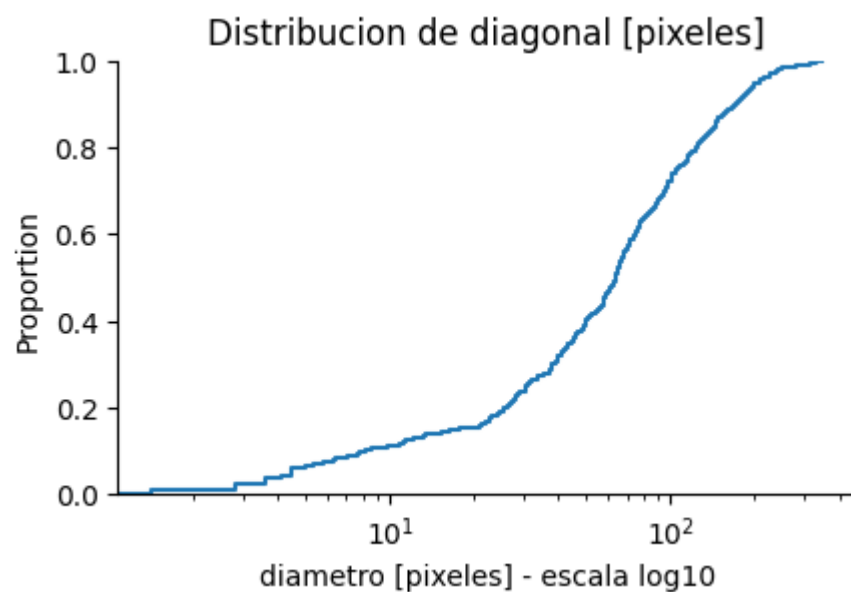
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In [ ]: # Histograma de tamaño segun eje mayor de rocas segmentadas
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Cantidad rocas: 451

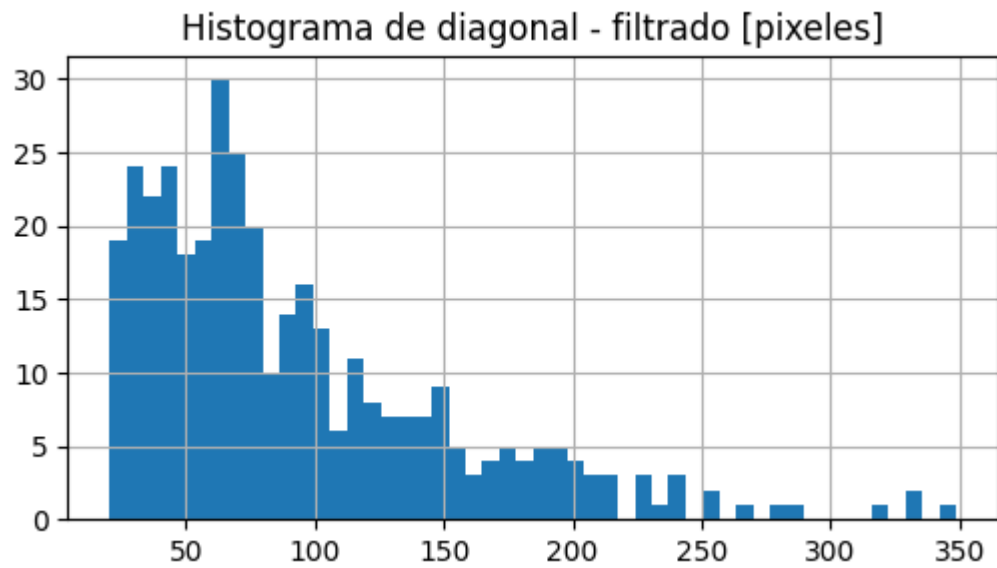


Cantidad rocas: 451

<Figure size 600x300 with 0 Axes>



Cantidad rocas: 366



Cantidad rocas: 366

<Figure size 600x300 with 0 Axes>

