CNNs FOR ELECTRON IDENTIFICATION

April 22, 2020

Viraj Bagal

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AIM AND CONTENT
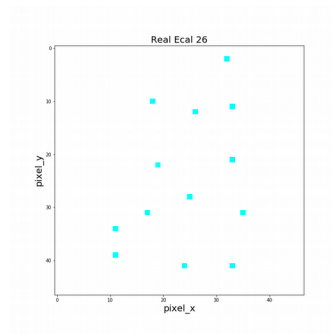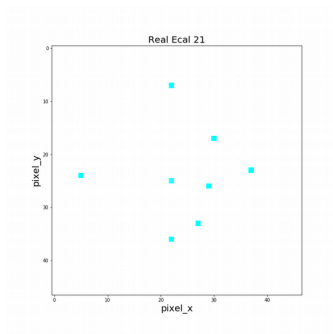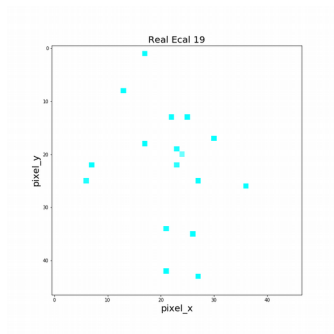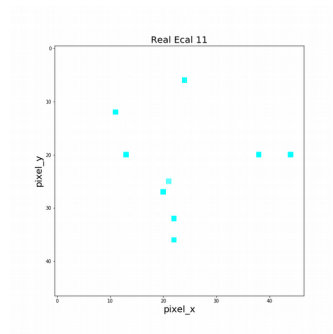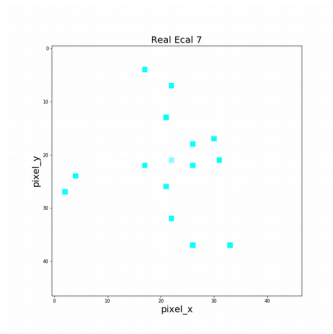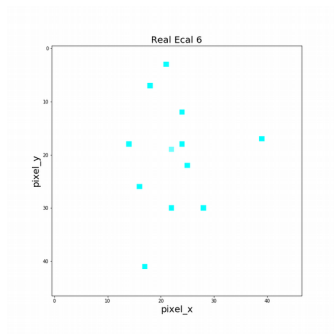
- **Aim:** To find good combination of background pixel intensities for visualization of Calorimeter deposit images.

- **Content:**

  - RBG Color Code Plot

  - Real & Fake Electron Ecal Images with different uniform background pixel intensities.

  - Real & Fake Electron Hcal Images with different uniform background pixel intensities.
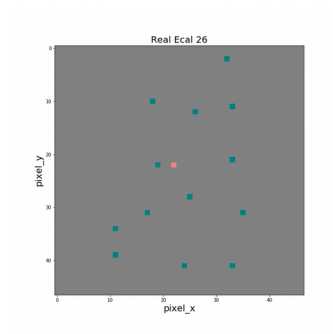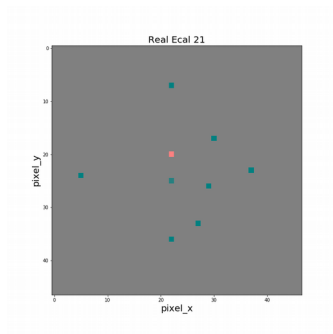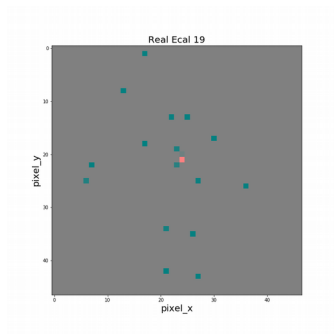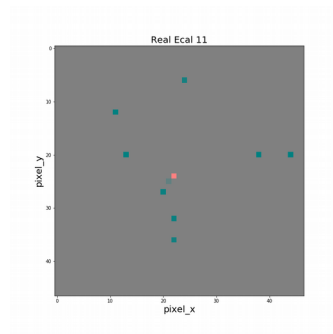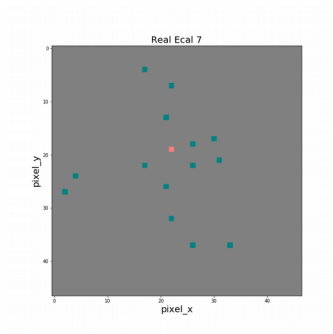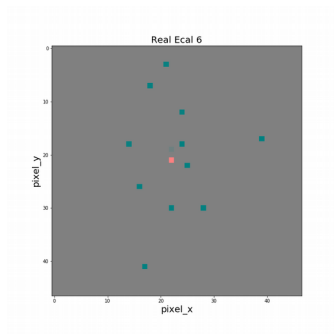
RGB COLOR CODE

REAL ELECTRON ECAL IMAGES

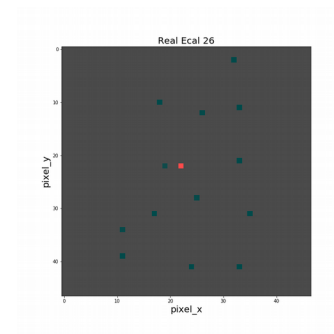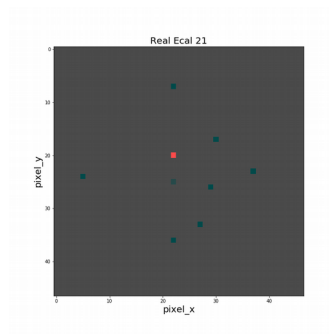G=225, B=255, R=255 except at entries
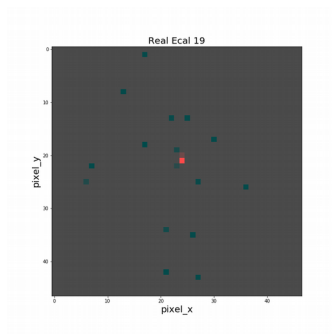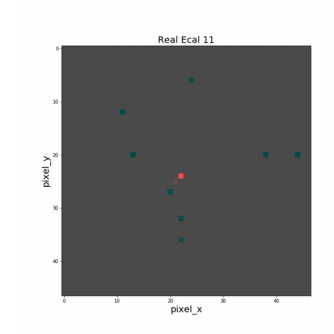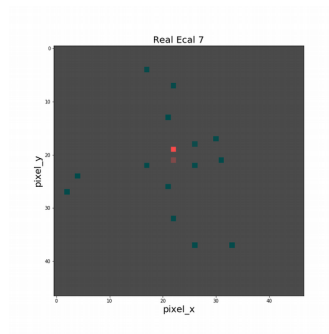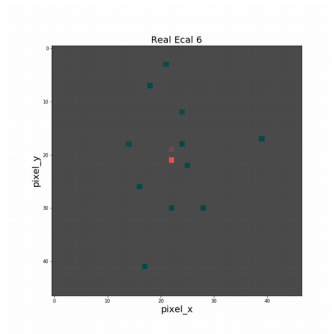Max Normalization Used

REAL ELECTRON ECAL IMAGES

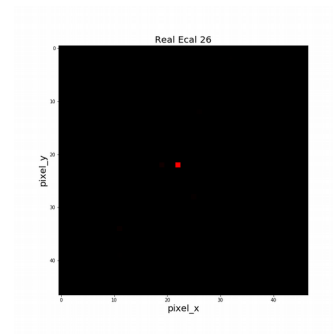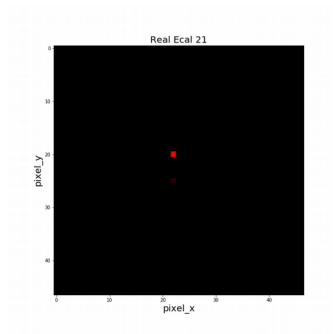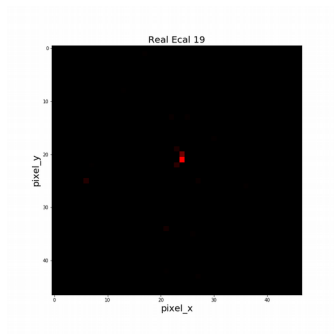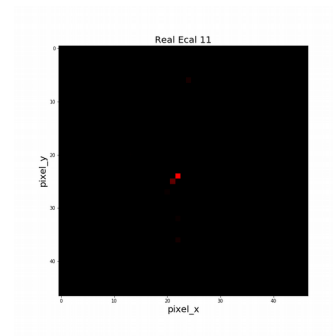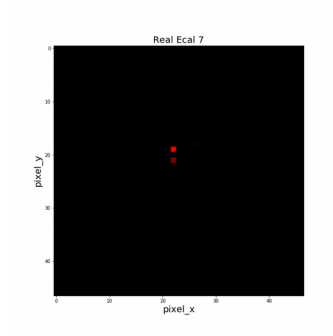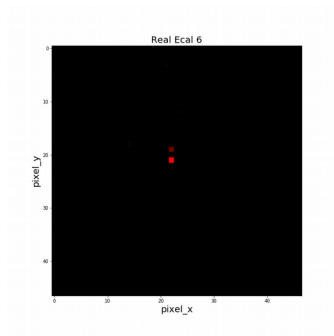G=128, B=128, R=128 except at entries
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REAL ELECTRON ECAL IMAGES
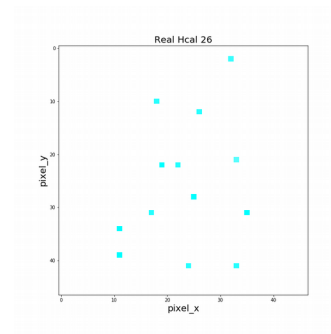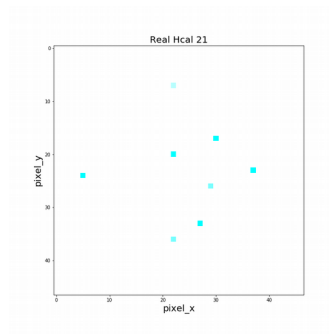
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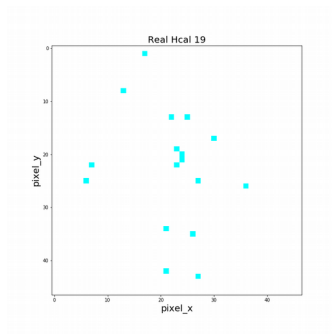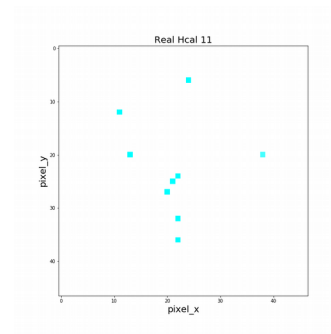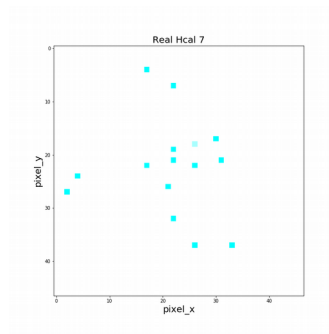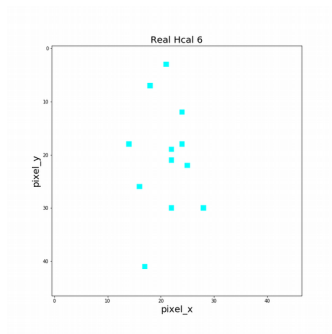Max Normalization Used

REAL ELECTRON ECAL IMAGES

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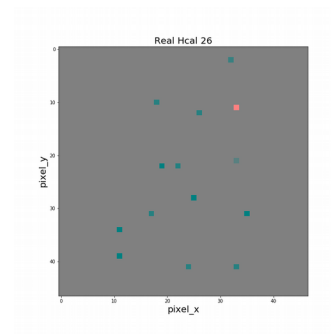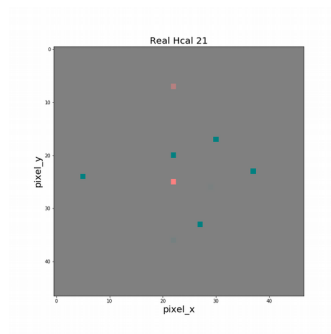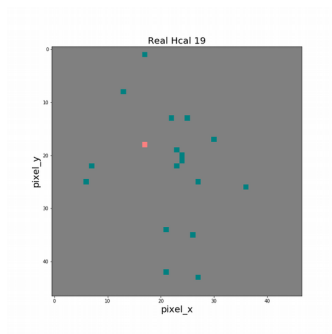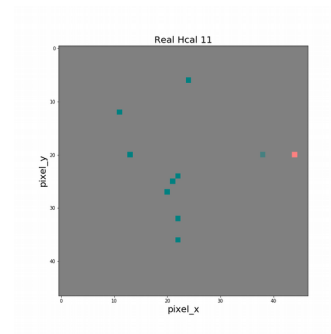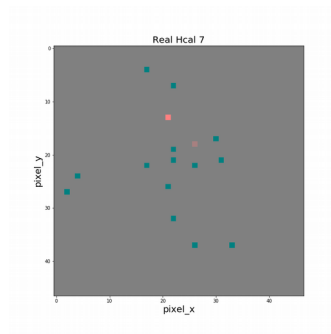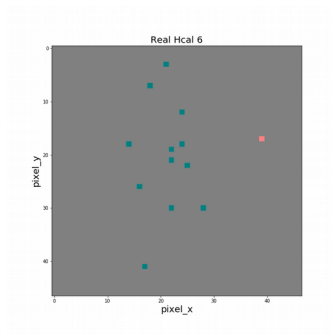Max Normalization Used

REAL ELECTRON HCAL IMAGES

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Max Normalization Used
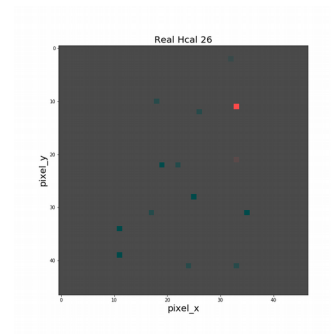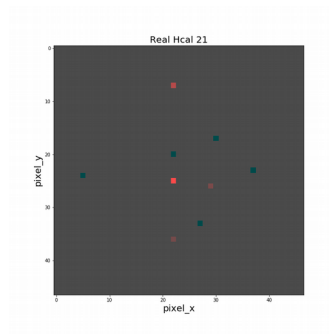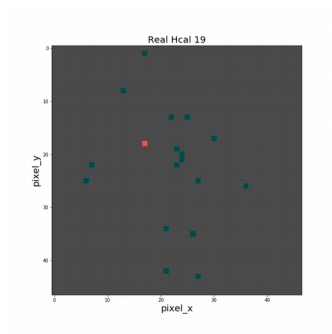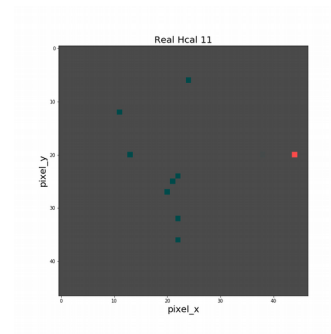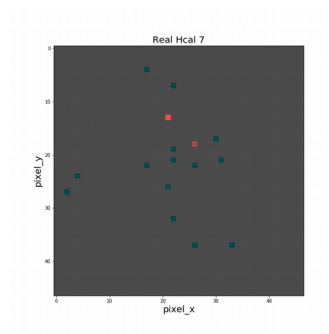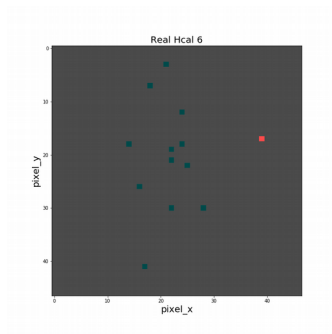
REAL ELECTRON HCAL IMAGES

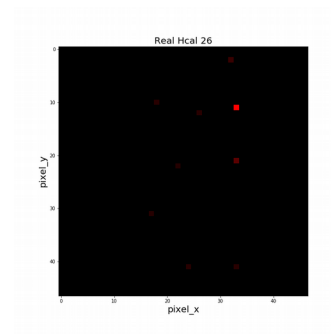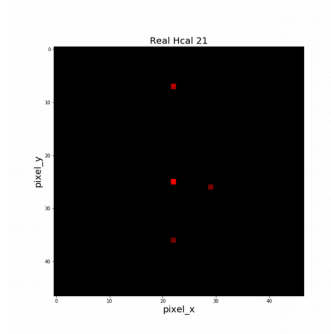G=128, B=128, R=128 except at entries
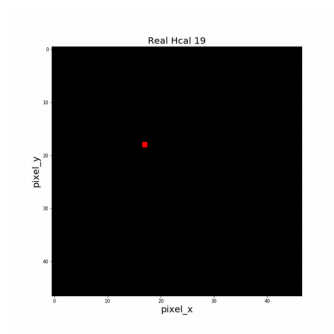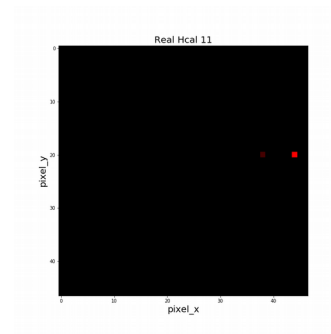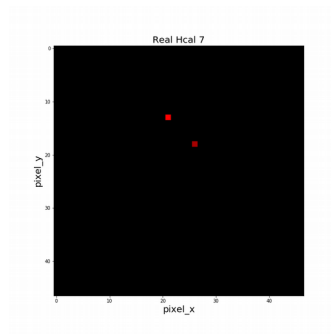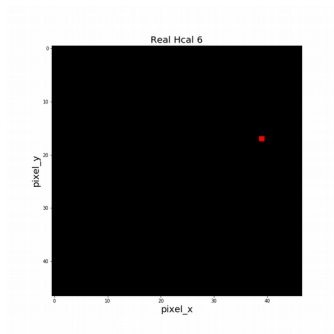Max Normalization Used

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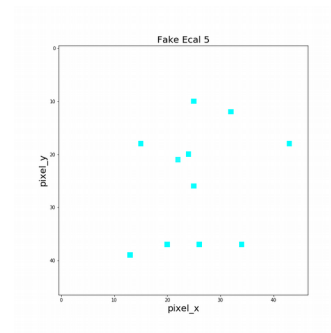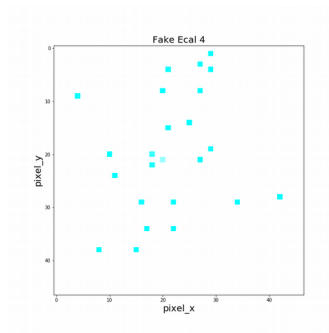
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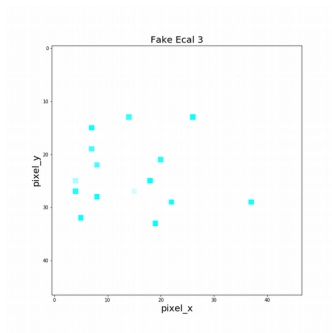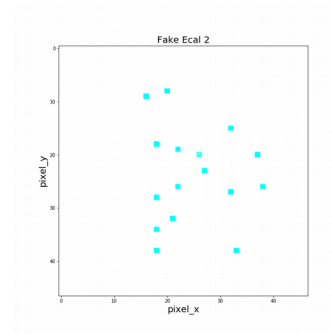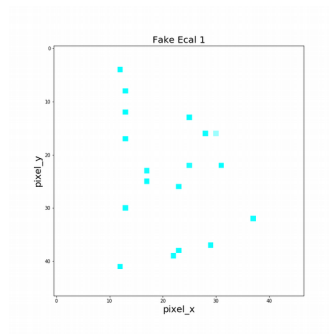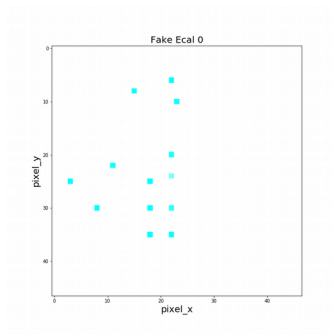Max Normalization Used

REAL ELECTRON HCAL IMAGES

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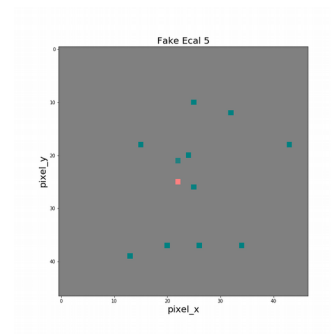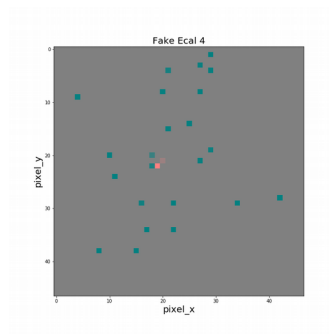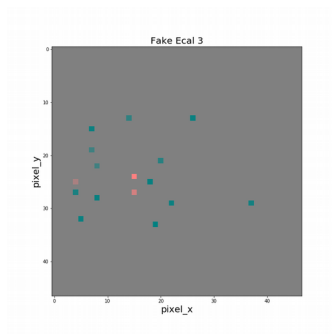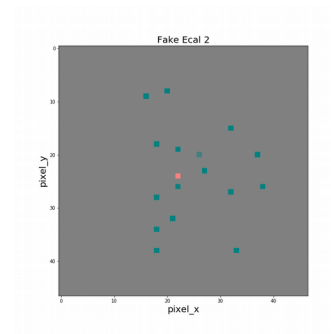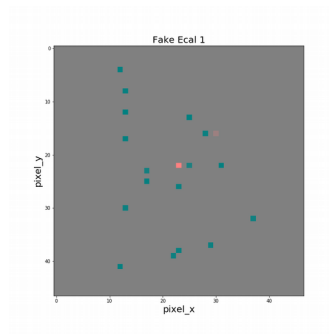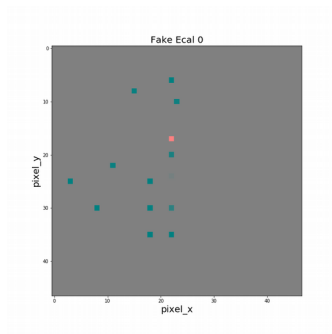# FAKE ELECTRON ECAL IMAGES

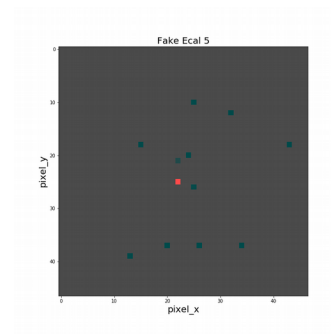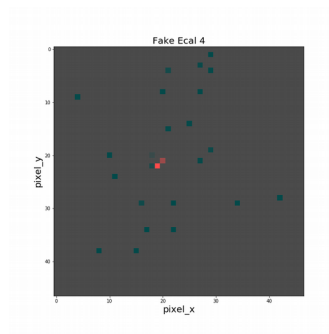G=225, B=225, R=225 except at entries
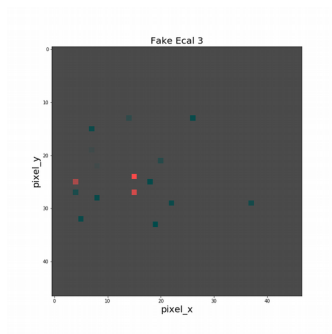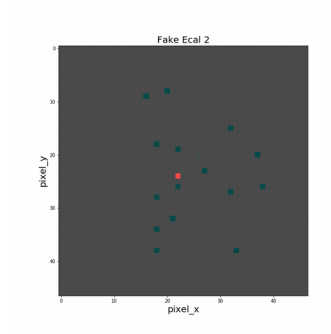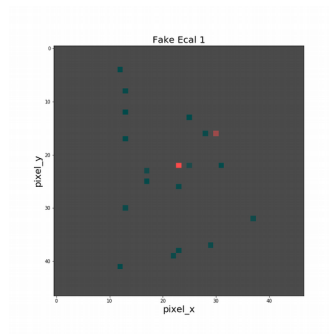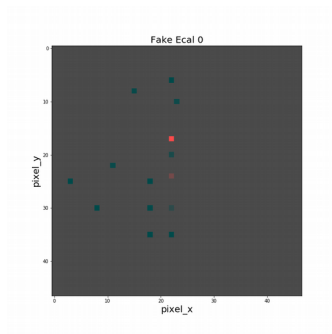Max Normalization Used

FAKE ELECTRON ECAL IMAGES

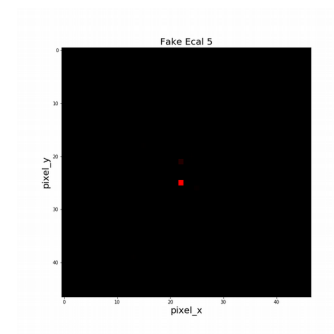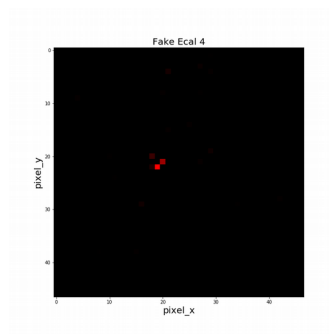G=128, B=128, R=128 except at entries
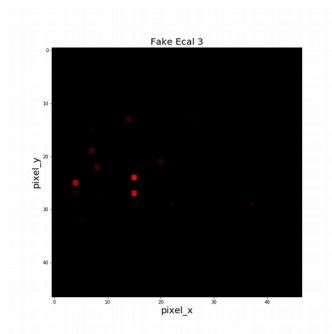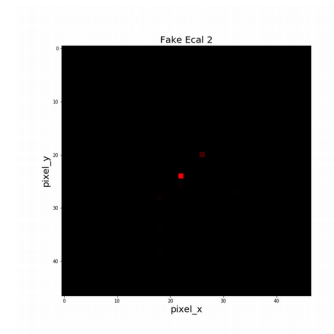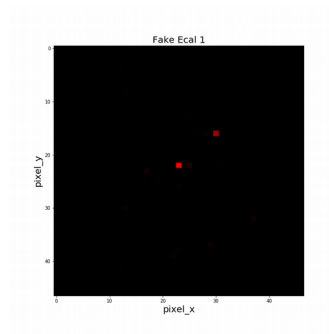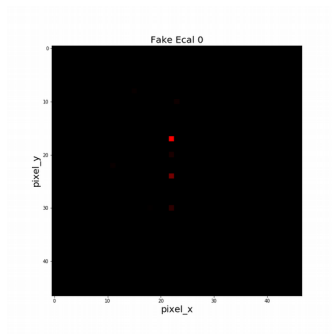Max Normalization Used

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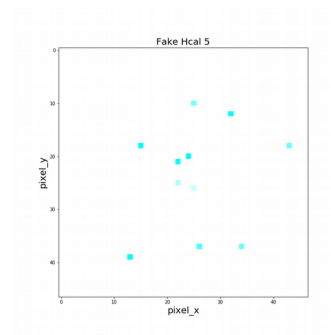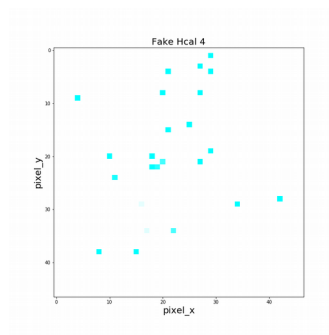
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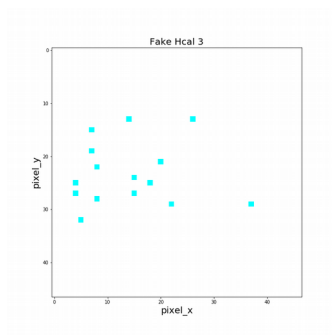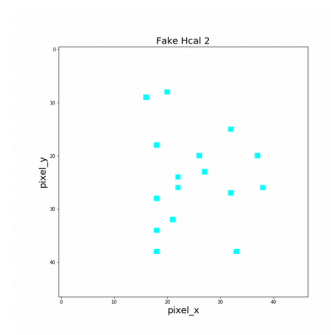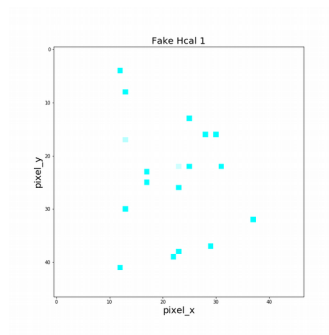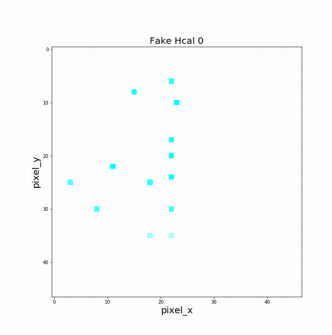Max Normalization Used

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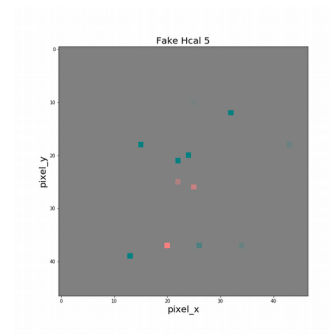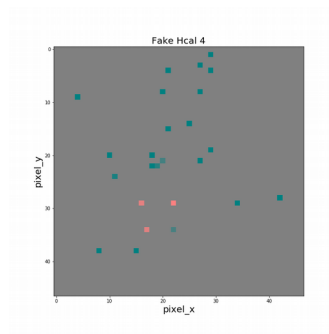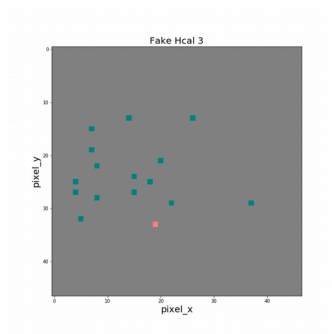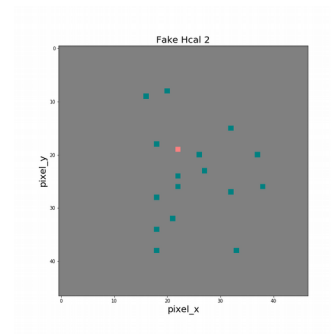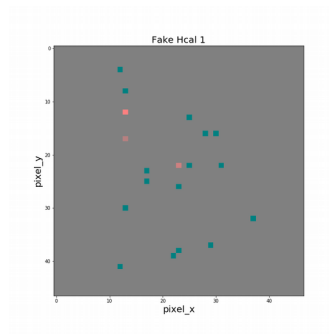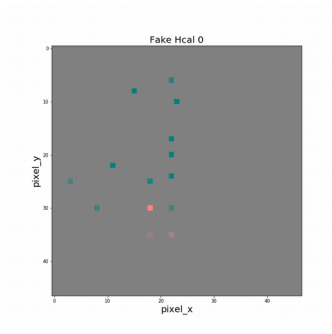Max Normalization Used

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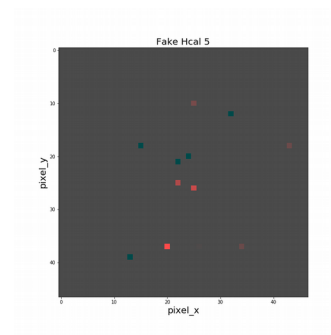
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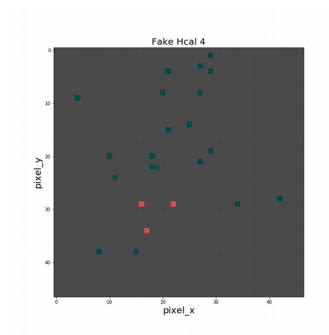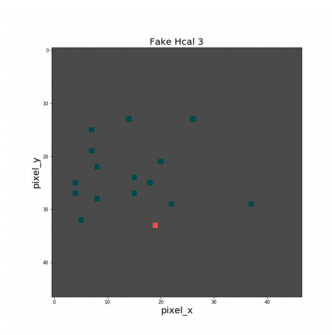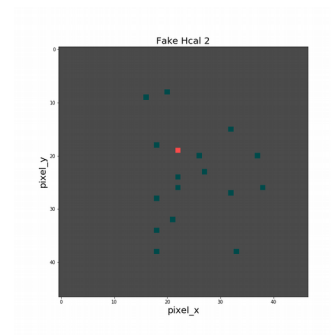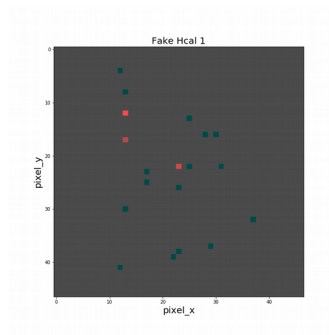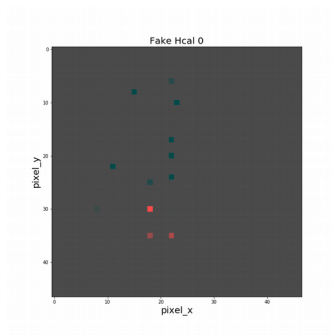

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FAKE ELECTRON HCAL IMAGES

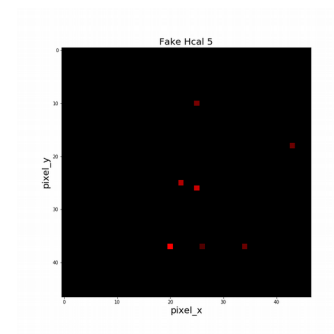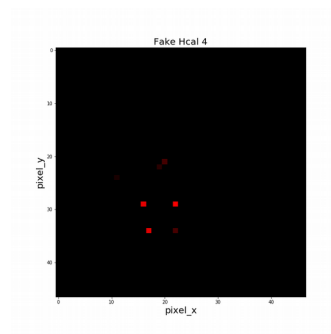G=128, B=128, R=128 except at entries
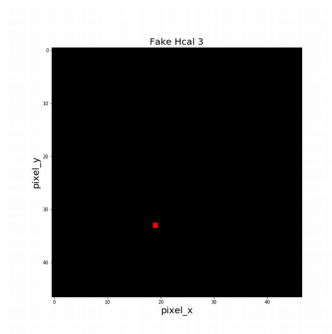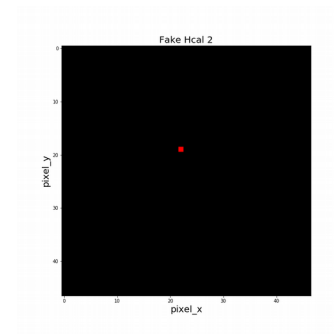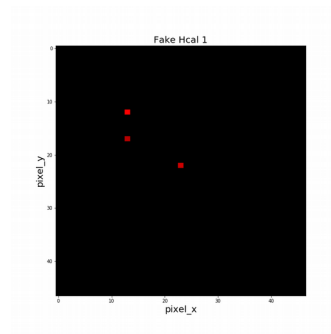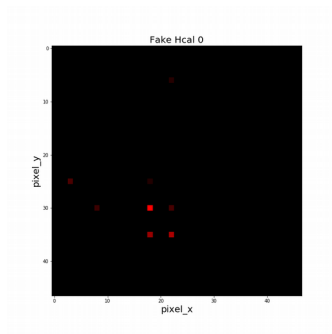Max Normalization Used

FAKE ELECTRON HCAL IMAGES
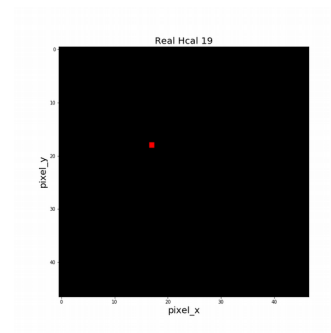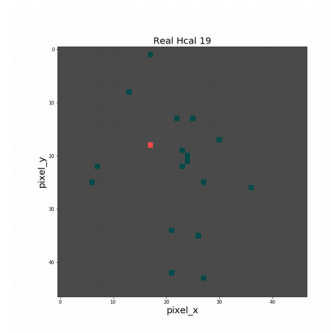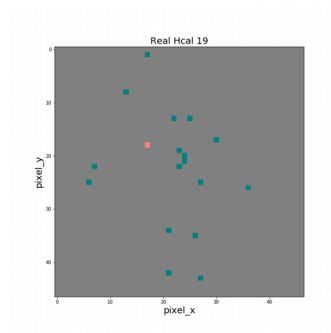
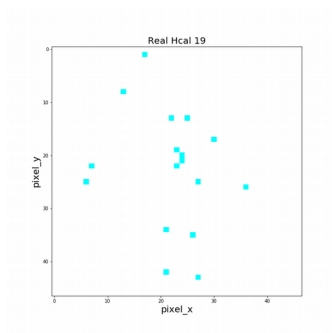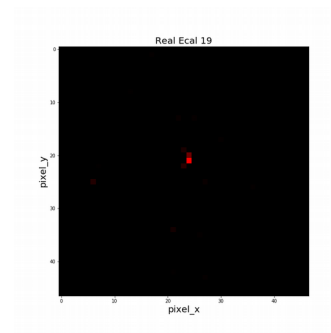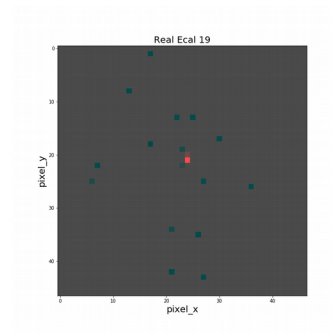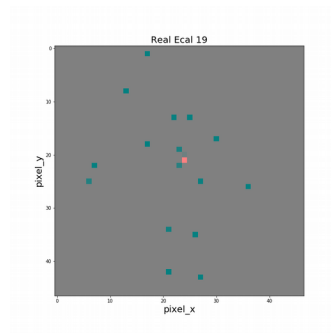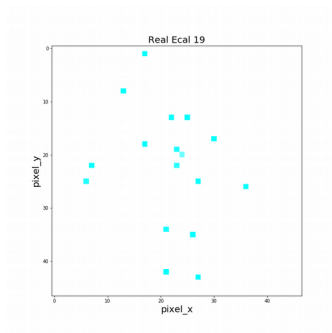G=75, B=75, R=75 except at entries

Max Normalization Used

FAKE ELECTRON HCAL IMAGES

G=0, B=0, R=0 except at entries
Max Normalization Used

REAL ELECTRON ECAL & HCAL IMAGES

Max Normalization Used

FAKE ELECTRON ECAL & HCAL IMAGES

Max Normalization Used