

# Water Management for Sustainable Development: Neural Networks + Satellite Imagery

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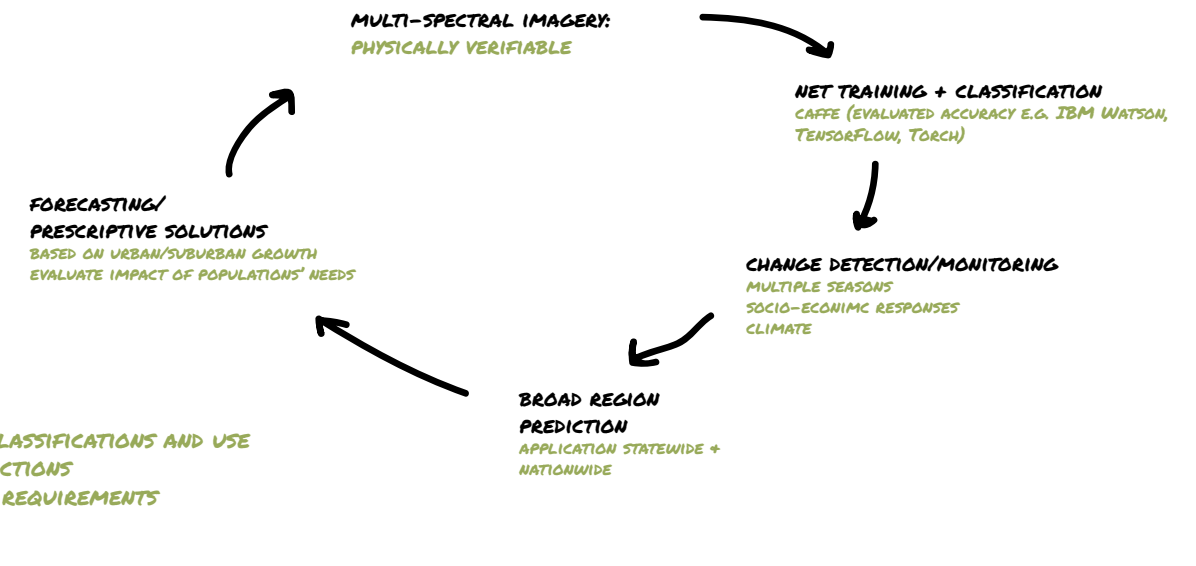
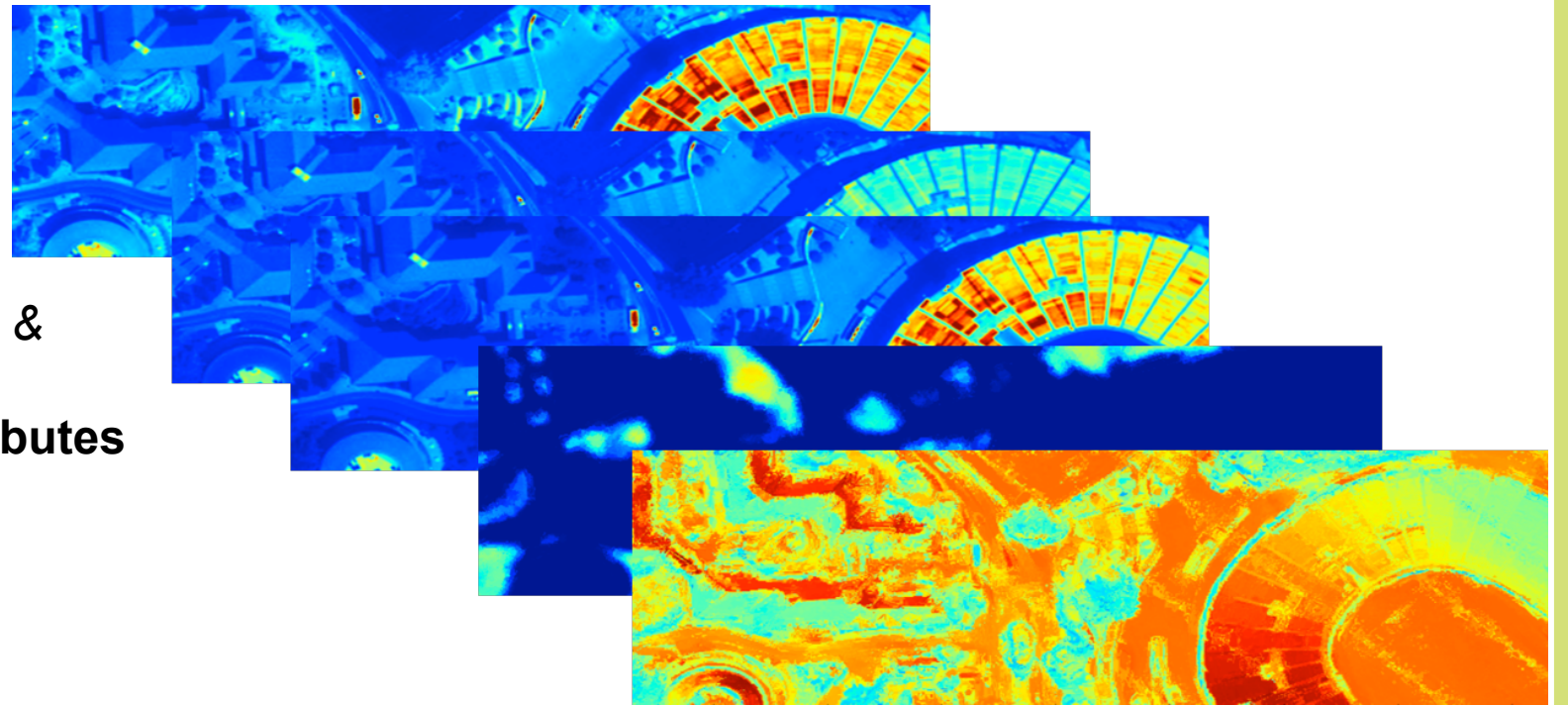
OmniEarth

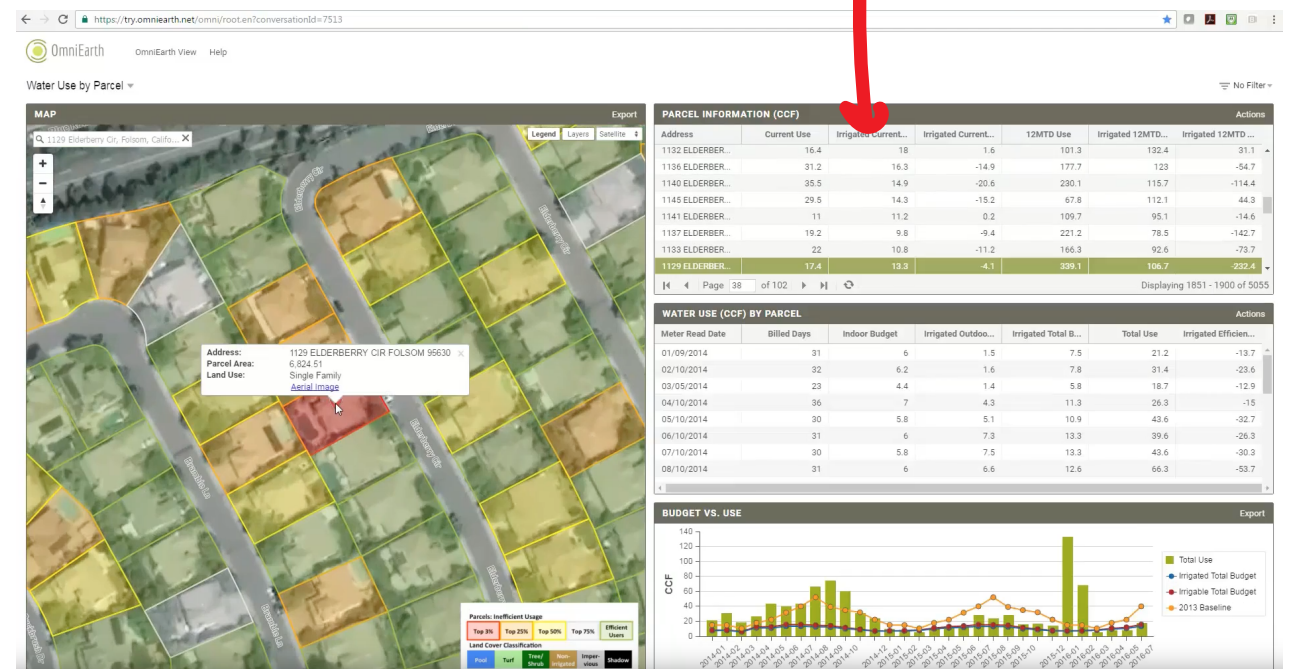
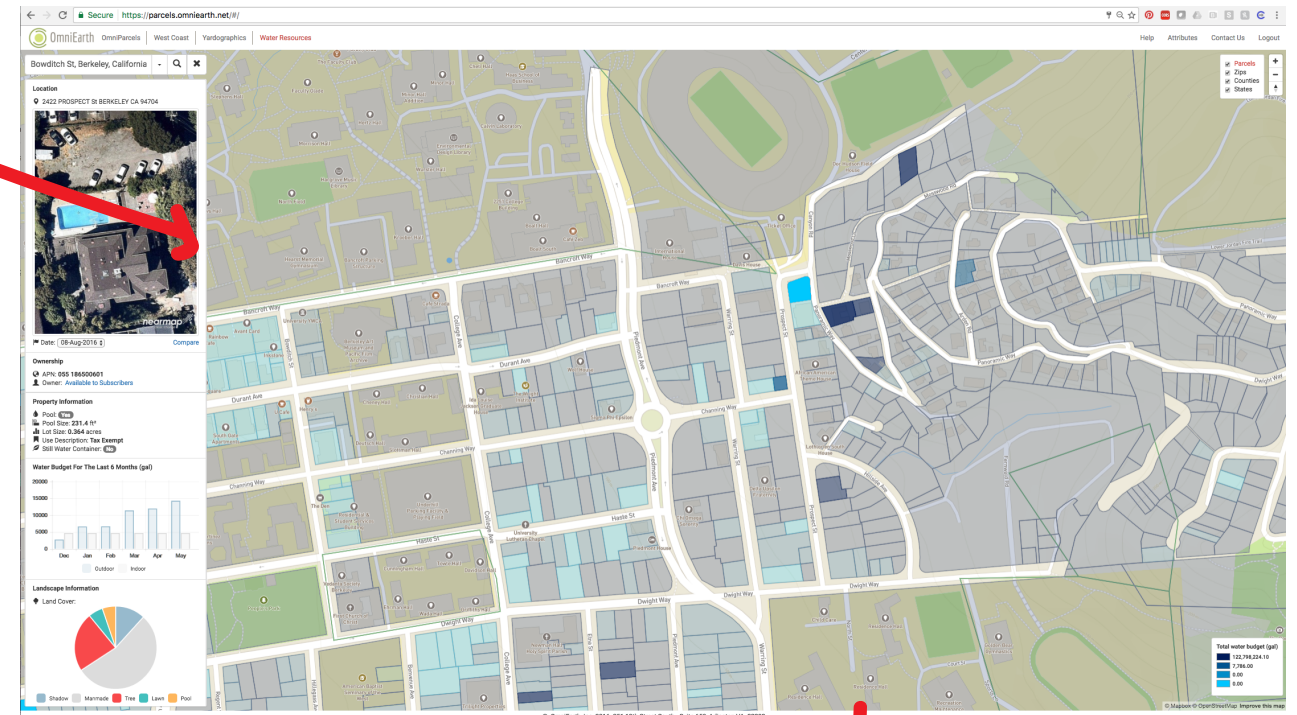
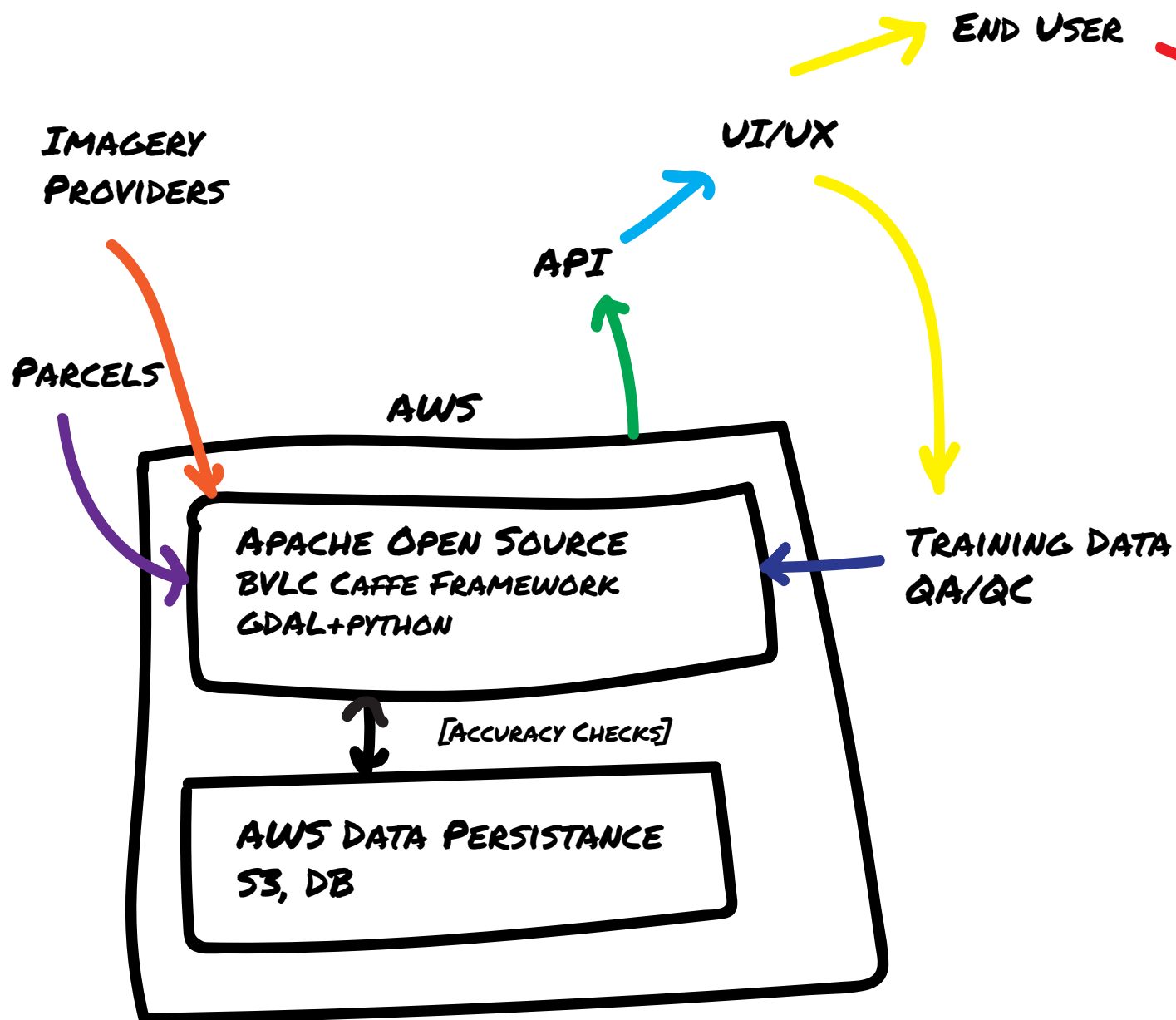
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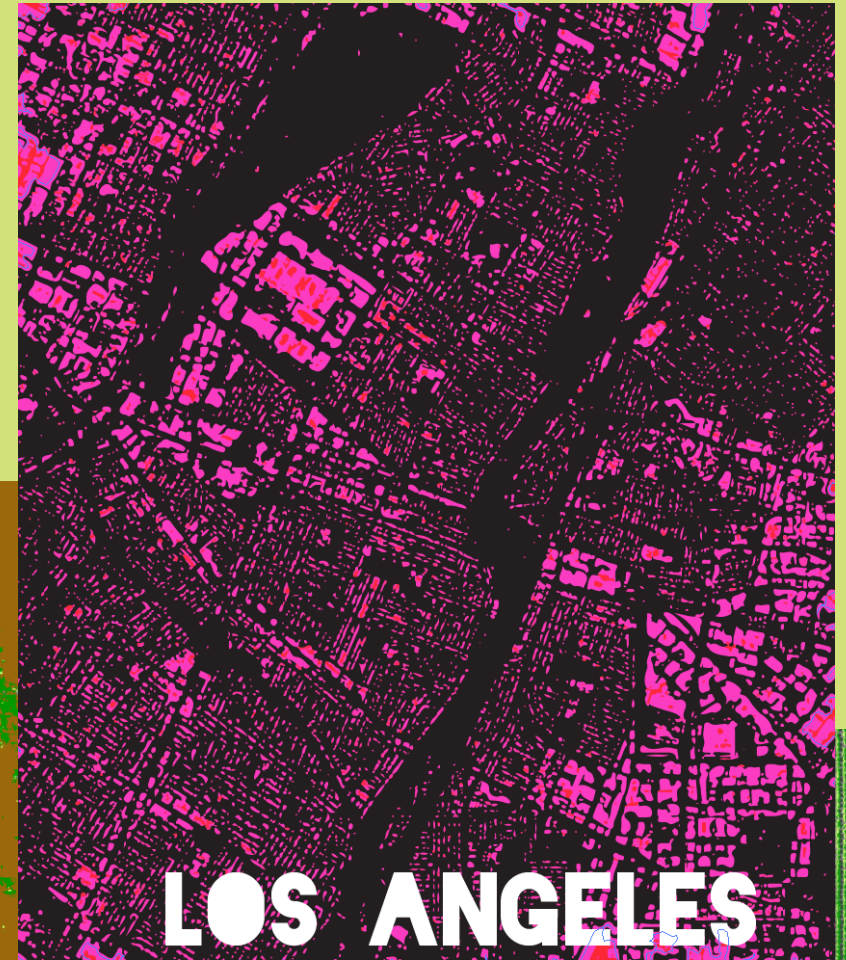
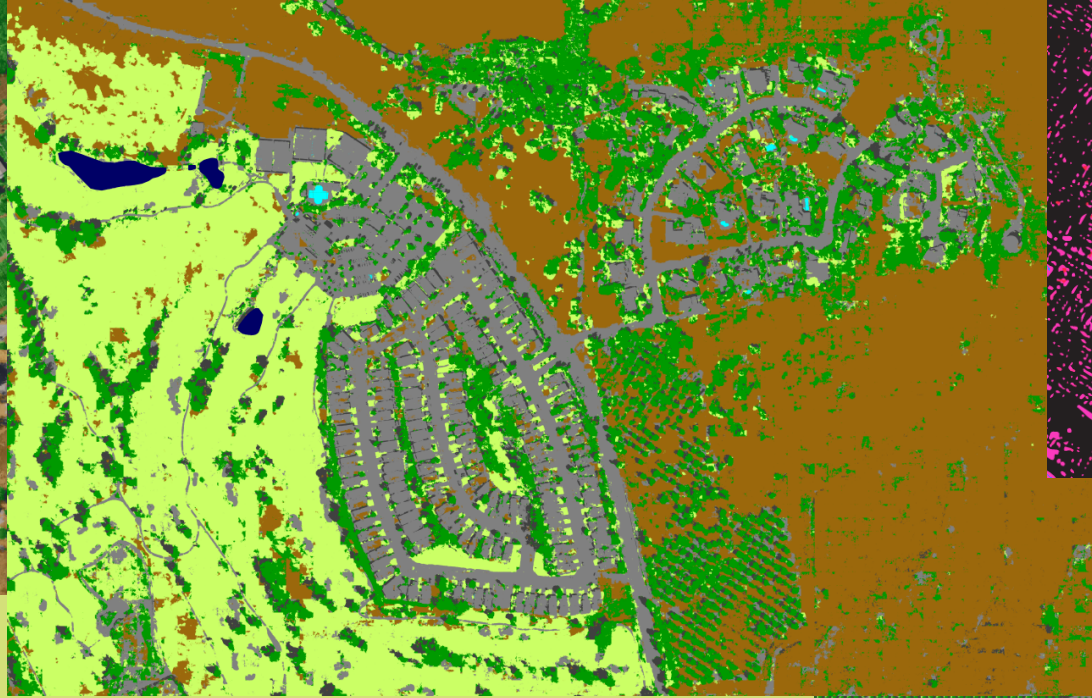


- **OmniEarth works with water municipalities to conserve water & reduce associated costs**
  - Governor mandated restrictions in CA
  - Parcel-Level evaluation
    - High accuracy needed for identifying overuse & guiding management*
- **Multispectral imagery + LiDAR + SAR + Parcel attributes**
- **Robust classification: Neural Networks**
- **Largest areas of water use (& potential savings) = outdoor consumption**
  - > 1/2 home's water use
  - 1 sq ft irrigated lawn + pool = 40 gallons/day in CA
- **AWS cloud infrastructure facilities 40x efficiency**
  - > 120 Terabytes imagery to physically verify each parcel in CA
- **Sustainable Development Goals: Water Conservation**









**LOS ANGELES**



#satsummit 2017