

## **PixMin™ Image Processing: Timely Asset Management Prospects**

*So much data ... so little time.* High resolution images from drones, aircraft, and fixed cameras can now be affordably obtained and carefully inspected to manage land or water assets. But poring over all that imagery takes so long that timely asset management may not be feasible. [Machine learning](#) and [artificial intelligence](#) processes can highlight events automatically, but uploading all that data to the internet and processing it with cloud servers takes time and costs money.

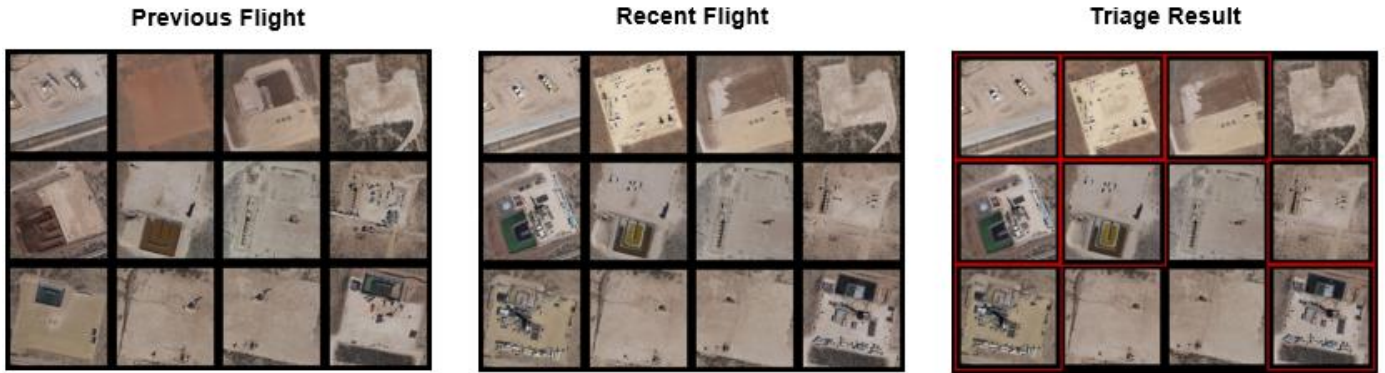
Timely triage solutions. Recently refined PixMin™ image processing can now *triage* events immediately after drone or other aircraft flights, enabling events to be quickly highlighted and effectively treated on the spot. Here are five use cases:

- Land Management Change Detection (Fig. 1). Land managers can now look for changes in oil pad and other land or sea maps immediately after image capture with one click.
- Car Counting (Fig. 2). Shopping center managers can now count cars in parking lots or count assets elsewhere immediately after drone flights.
- Bridge Distress Detection (Fig. 3). Bridge and other equipment inspectors can now take closer looks at signs of distress or damage immediately after drone flights.
- Desert Tortoise Detection (Fig. 4). Environmental biologists can now reach and treat endangered wildlife immediately after drone flights. This triage solution will save \$70K/yr. per survey and cover twice the terrain. Search and rescue can work likewise.
- Endangered Whale Detection (Fig. 5). This triage solution saves \$200K/yr. per survey.

Where PixMin fits in. PixMin sensor [triage](#) can run at or near remote sensors. PixMin can triage images immediately after or even during image capture. PixMin can run at the computing [edge](#) so that events of interest stand out, immediate action can be taken, and triaged snippets can be quickly transported to the [cloud](#) for timely validation.

Next steps. To find out how remote sensor triage solutions can meet your needs, or to see operational demonstrations of these and other use cases, feel free to contact us.





**Figure 1a. Oil Field Management: gross oil pad triage \*  
(triaged pads have red borders)**



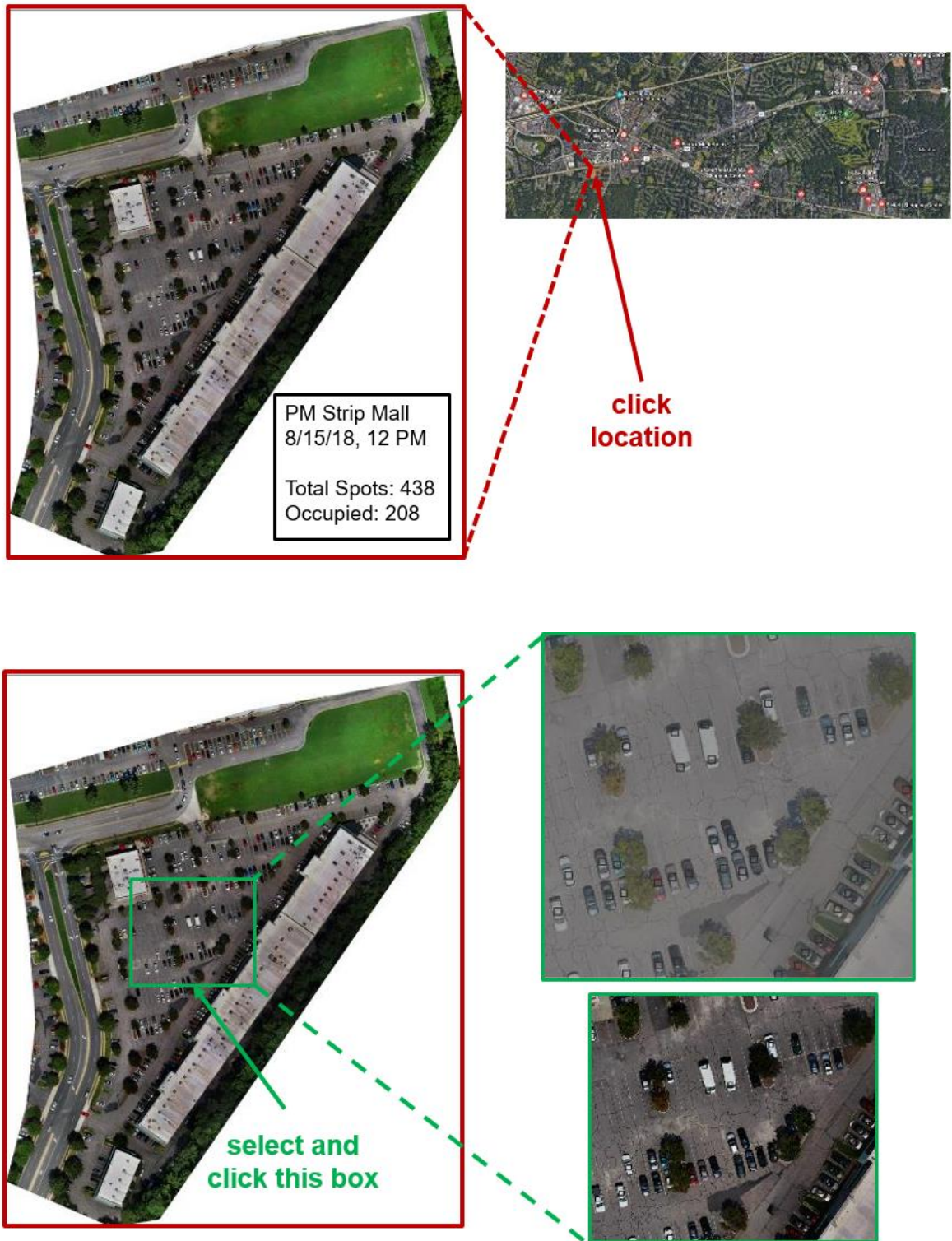
**Figure 1b. Oil Field Management: triaged oil pad 01**



**Figure 1c. Oil Field Management: triaged oil pad 06**

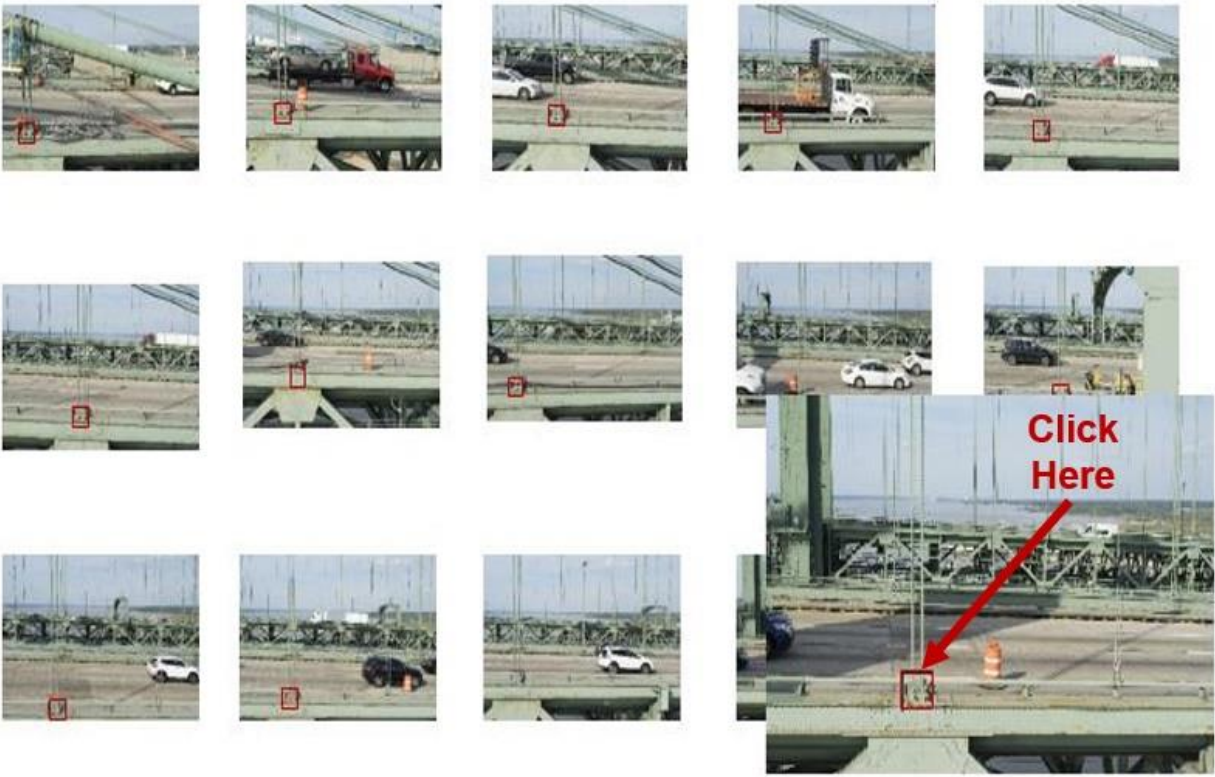
\*Imagery kindly supplied by [Dreamhammer](https://www.dreamhammer.com/)

Figure 2. Car Counting Use Case\*



\*Imagery kindly supplied by [Icaros](#)

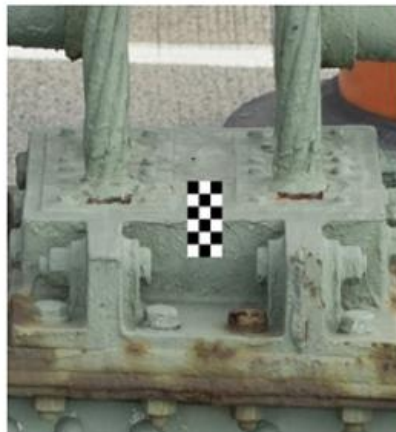
**Figure 3. Bridge Distress Detection Use Case\***



**Previous**

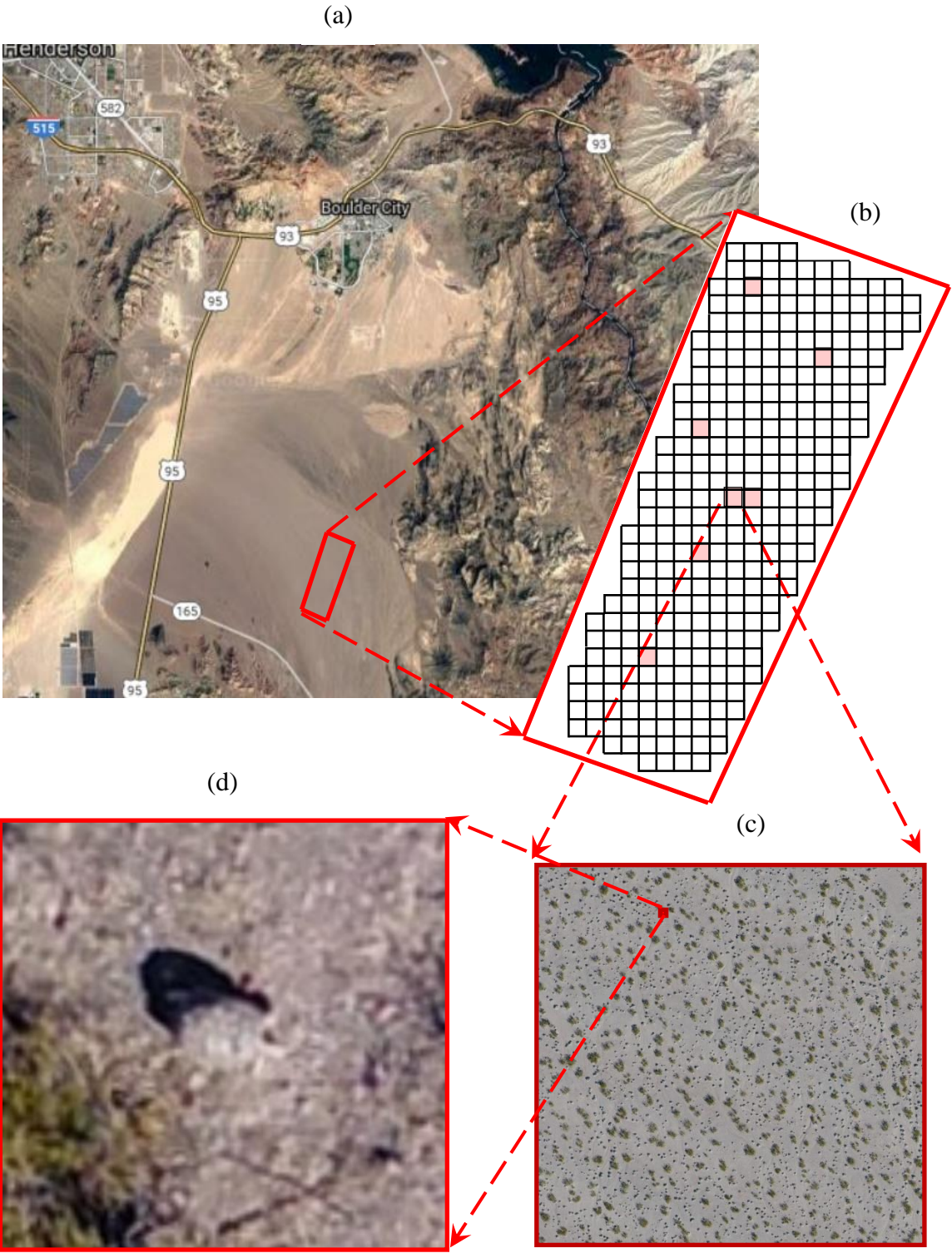
**Current**

**Change**



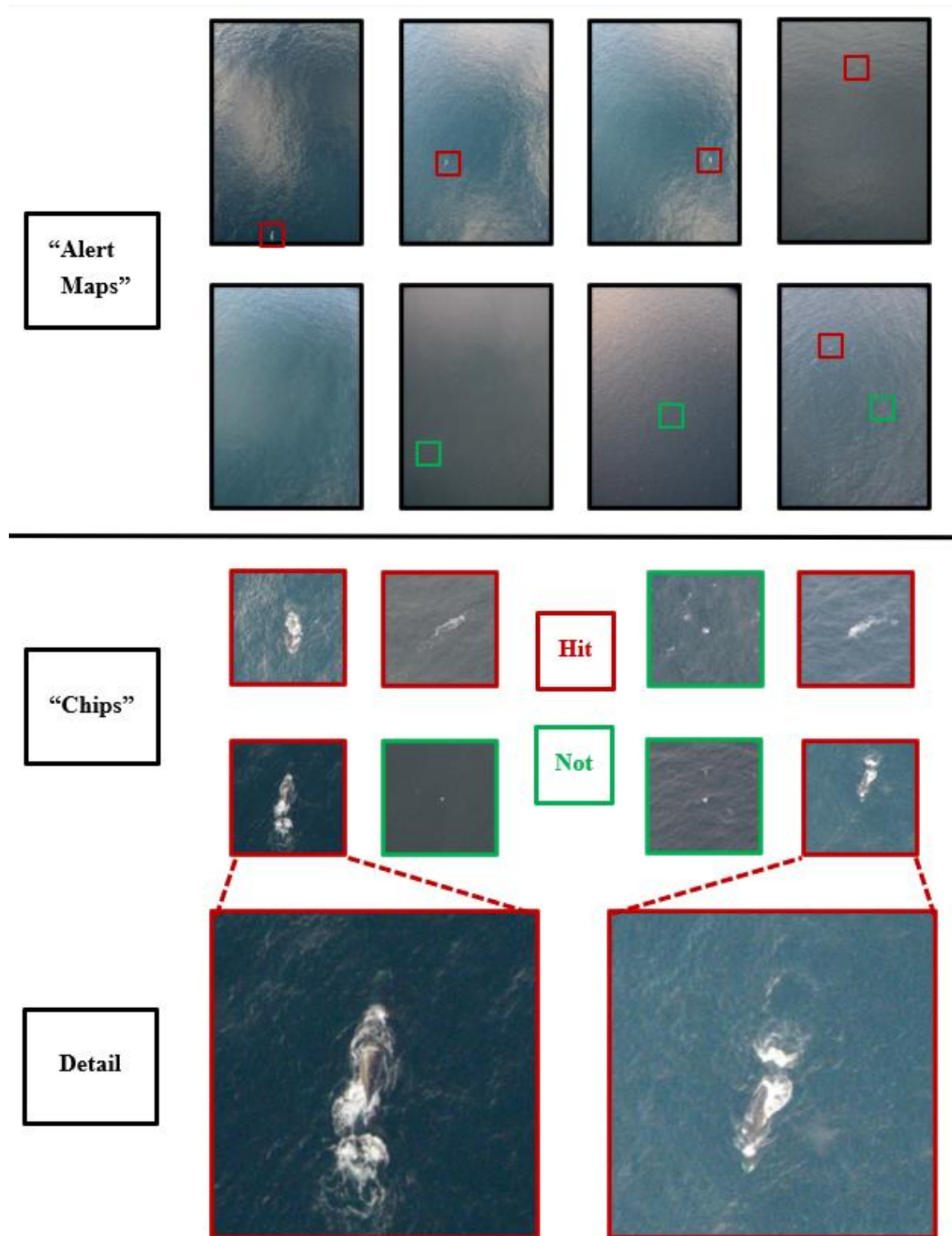
\*Imagery kindly supplied by [Keystone Aerial Surveys](#)

Figure 4. Desert Tortoise Detection Use Case\*



\*Imagery and results kindly funded by the Clark County Nevada [Desert Conservation Program](#)

Figure 5. Endangered Whale Detection Use Case\*



\*Images and results kindly supplied and funded by [Shell Oil](#)