



How to Start Mapping with Drones

UAS Mapping Palm Springs
September 13, 2016

Aerotas enables mappers to use drones

Aerotas helps surveyors use drones.

We focus on providing value with drones today, not in some vague future.



This forces us to tackle real challenges head on.

Know the Limits

Technology

- Can only map what you can photograph
- Accuracy Limits (~0.1')

Regulations

- Max Altitude 400'
- Visual Line of Sight (VLOS)
- No flights over people

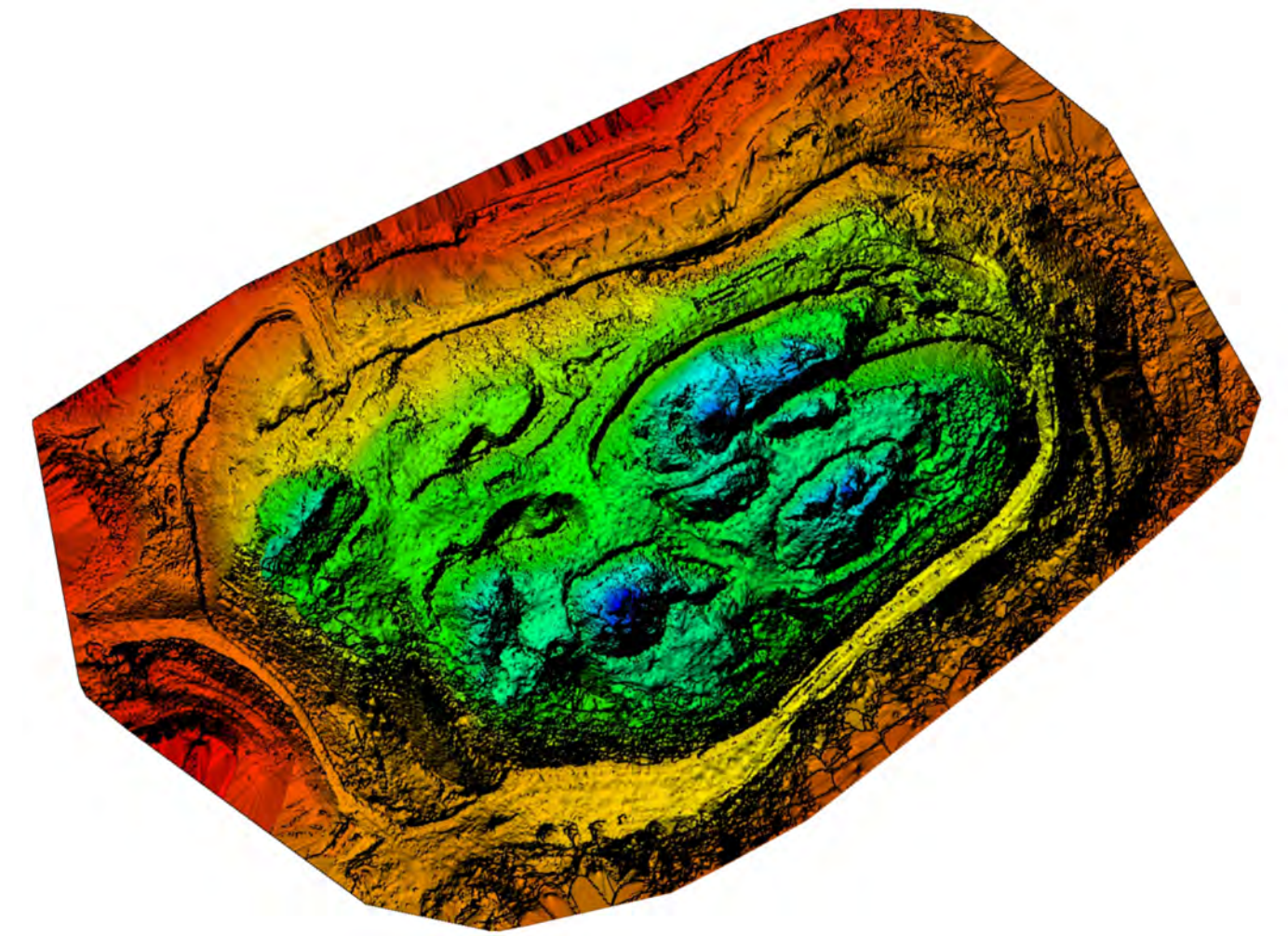
Financials

- 1 or 2 people per operation
- \$100,000+ hardware, bad ROI
- Time is Money



Set Realistic Goals

Photos - Basic Mapping - High-Accuracy Mapping - 3D Modeling



Understand the Ground Rules

Safe

- People
- Property
- Other airplanes
- Your company

Legal

- Pilot certification
- Aircraft registration
- Airspace restrictions

Cost Effective

- Cost of the program
- Cost of people
- Benefit

5-Factors to a Successful UAV Program

Hardware

Software

Operations

Training

Insurance



Hardware

Fixed Wing vs. Multicopter

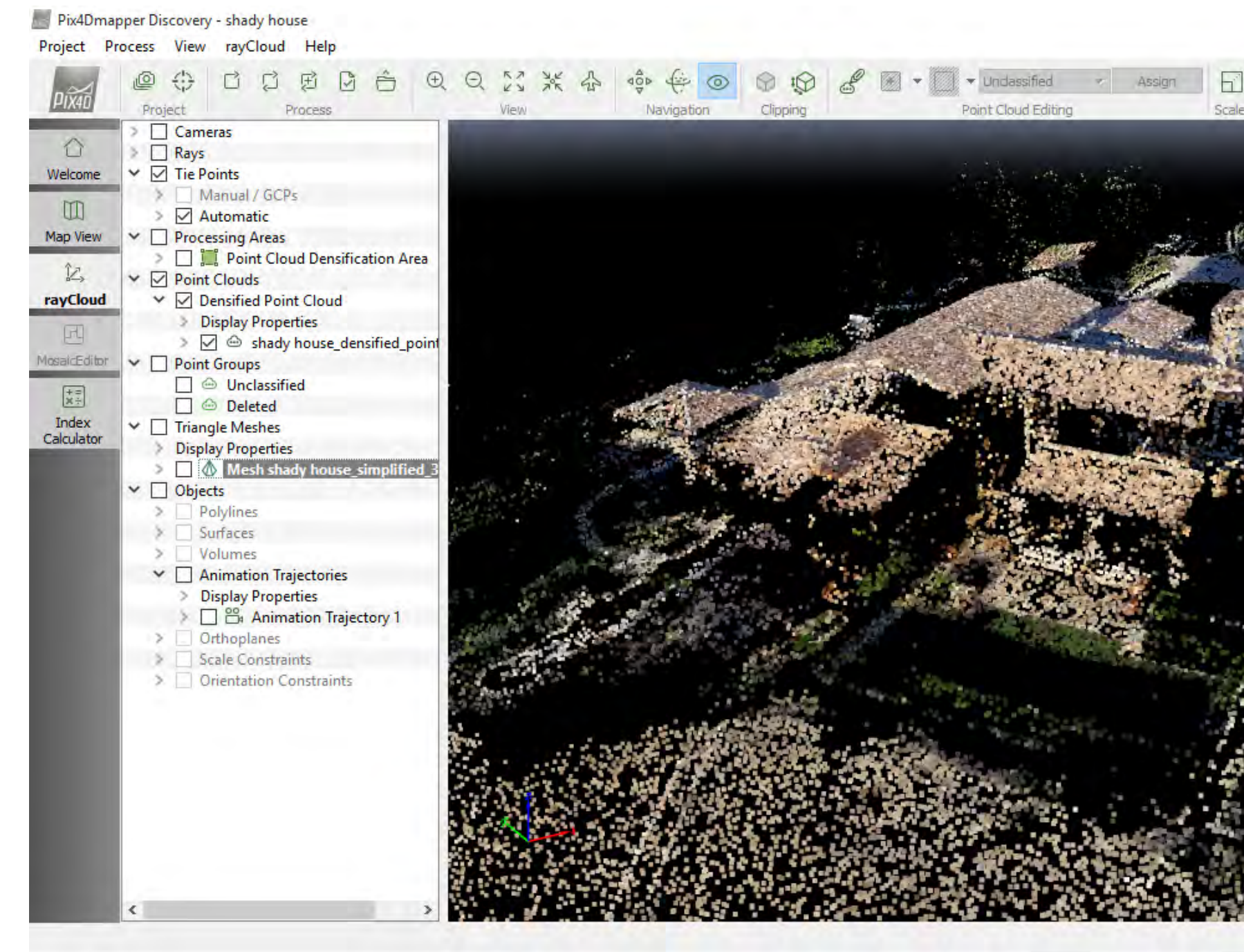


Consumer vs. Professional



Software

Autopilot



Data Processing



Operations

Operations Plan

Checklists

Data Workflow



Training

Operations Training

Legal Training



Insurance

Are your operations safe?

Are your operations reliable?

Is your aircraft maintained?



Start Simple

Aerotas Map Package

- Hardware for mapping
- Full operations manual
- Online training for FAA pilot certificate
- 1-day in-person flight training
- Liability & hull insurance
- Ongoing support
- Cloud-based processing (optional)



What can drones do in the future?

Larger areas

Flights over people

Higher accuracy

Better data processing



Questions?