



Iterative Single Aircraft Operation Sensitivity Analysis in Support of the Development of Air Tour Management Plans

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Single Aircraft Operation Sensitivity Analysis



Use data from single operation results to perform an iterative analysis to:

- ◆ Develop smart alternatives
 - Show which routes are potentially quieter and how far sounds may be audible
 - Show which aircraft are potentially quieter and how far sounds may be audible
- ◆ Develop flexible alternatives
 - Account for IOA changes
- ◆ Refine alternatives and potential mitigation
 - How many is too much
 - Management opportunities
 - New entrants and industry growth opportunities





Single Aircraft Operation Modeling Scenarios

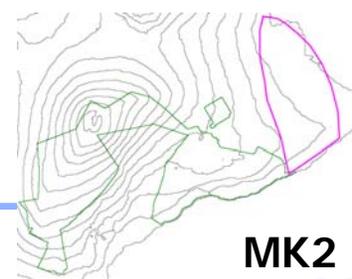
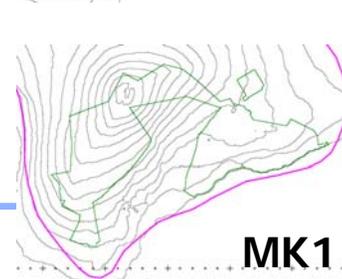
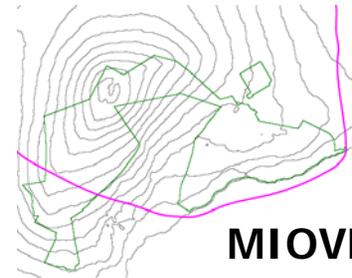
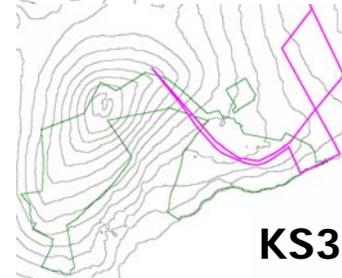
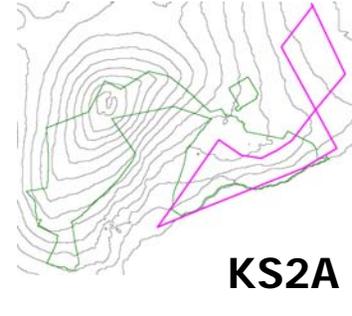
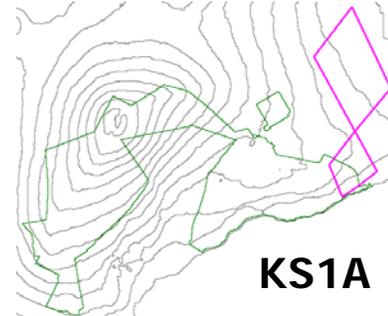
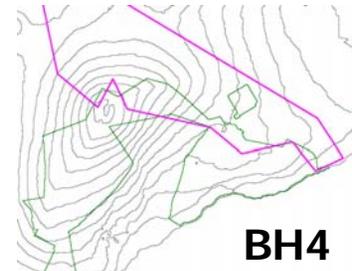
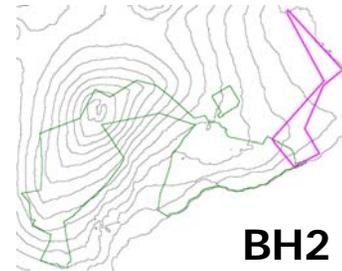


■ Task 1: Model Aerospatiale AS350 on 8 Different Air Tour Routes

- Route BH2 (19% of Total Ops)
- Route KS1A (24.5% of Total Ops)
- Route KS2A (<1% of Total Ops)
- Route KS3 (1% of Total Ops)
- Route MIOVF (<1% of Total Ops)
- Route MK1 (39% of Total Ops)
- Route MK2 (<1% of Total Ops)
- Route BH4 (15.3% of Total Ops)

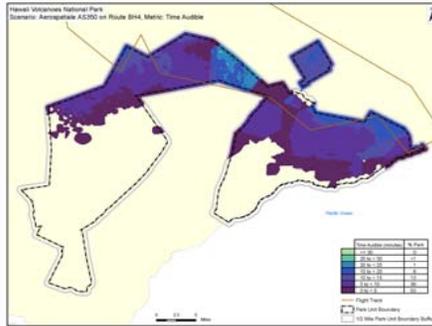
■ Task 2: Model a Single Operation of 9 Different Aircraft Types on Route BH4

- Aerospatiale AS350 (39% of Total Ops)
- Eurocopter EC-130 (5% of Total Ops)
- Hughes H500D (11% of Total Ops)
- Cessna 172 (19% of Total Ops)
- Cessna 206 (11% of Total Ops)
- Cessna 207 (11% of Total Ops)
- Maule M-7235C (<1% of Total Ops)
- Piper PA28 Warrior (3% of Total Ops)
- Piper PA31 Chieftain (<1% of Total Ops)

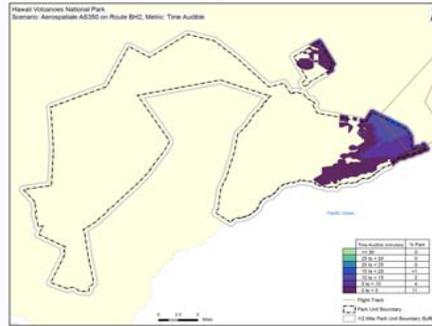


Hawaii Volcanoes National Park Alternative Development Meetings Single Aircraft Operation Sensitivity Analysis: Aerospatiale AS350D on 8 Routes

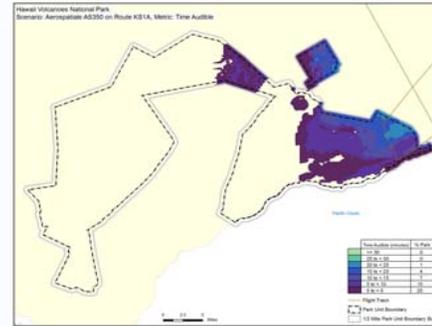
**Route BH4
(15% of Total Operations)**



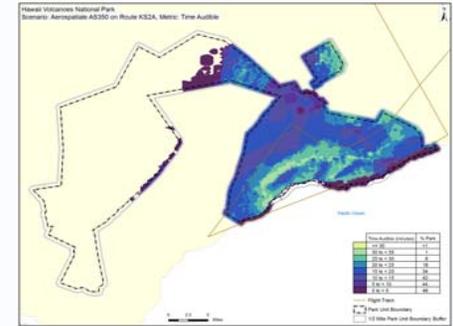
**Route BH2
(19% of Total Operations)**



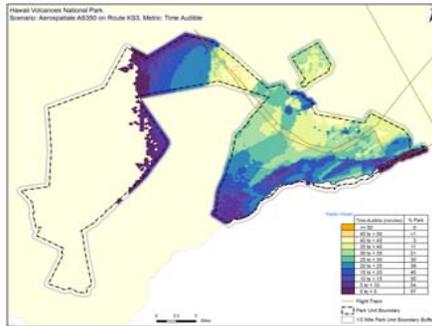
**Route KS1A
(25% of Total Operations)**



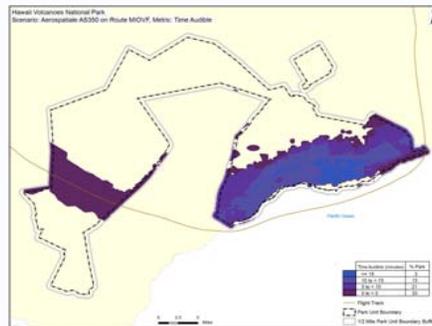
**Route KS2A
(<1% of Total Operations)**



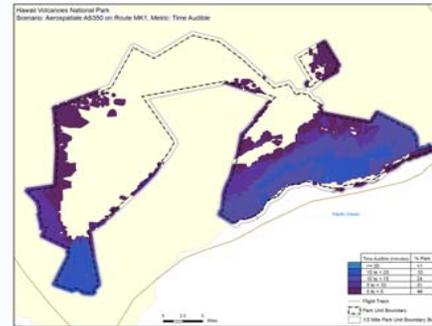
**Route KS3
(1% of Total Operations)**



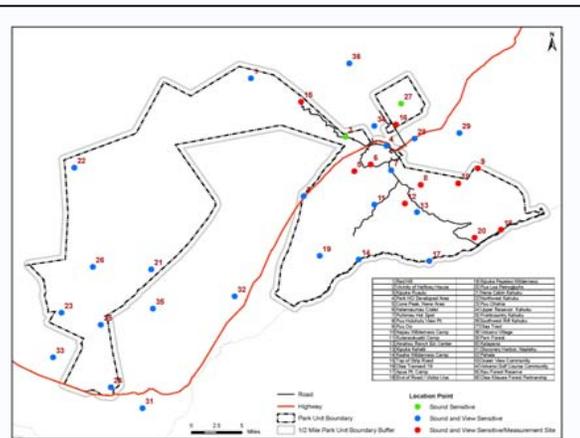
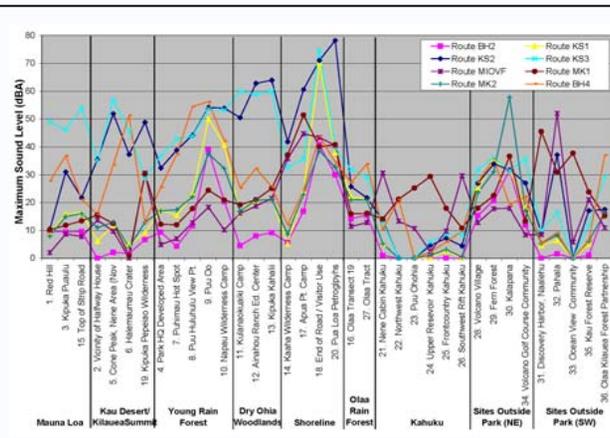
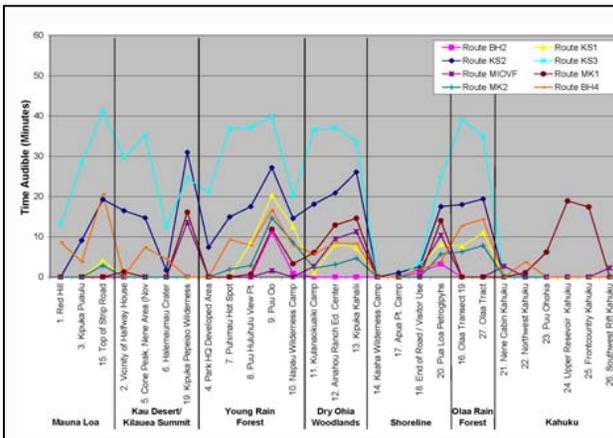
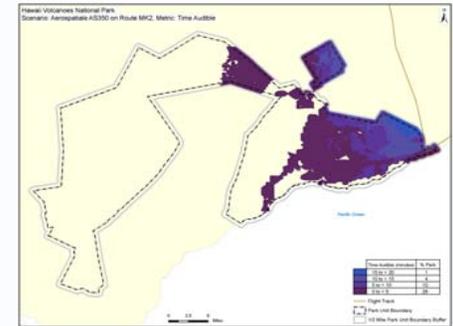
**Route MIOVF
(<1% of Total Operations)**



**Route MK1
(39% of Total Operations)**



**Route MK2
(<1% of Total Operations)**

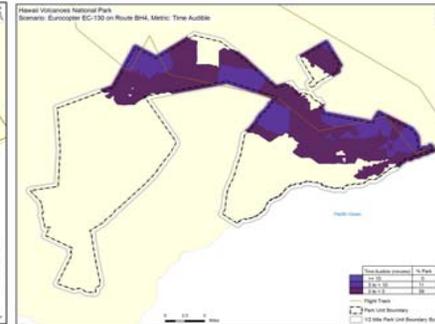
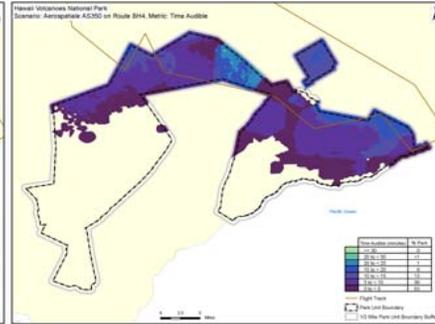
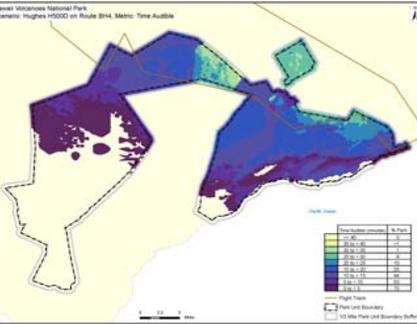
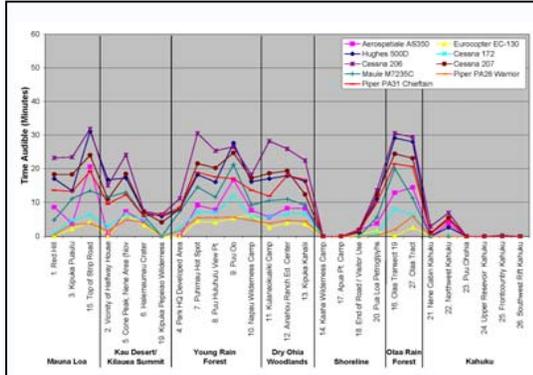


Hawaii Volcanoes National Park Alternative Development Meetings Single Aircraft Operation Sensitivity Analysis: 9 Aircraft on Route BH4

Hughes H500D
(11% of Total Operations)

Aerospatiale AS350D
(39% of Total Operations)

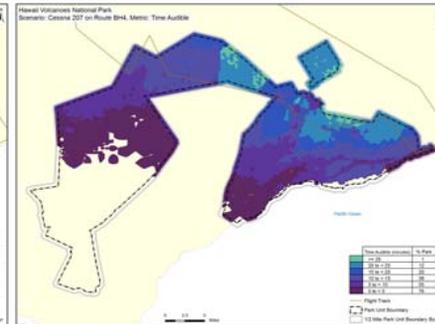
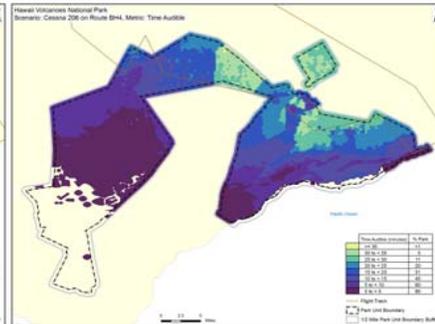
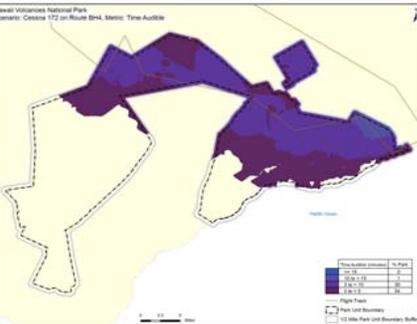
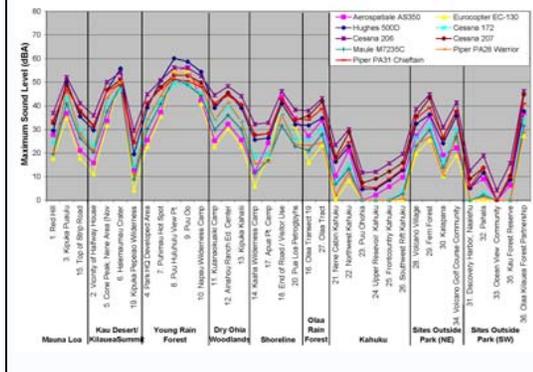
Eurocopter EC-130
(5% of Total Operations)



Cessna 172
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Maule M-7235
(<1% of Total Operations)

Piper PA28 Warrior
(3% of Total Operations)

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