

ENVIRONMENTAL IMPACT STATEMENT

SPACEX STARSHIP-SUPER HEAVY LAUNCH VEHICLE AT LAUNCH COMPLEX 39A

at the Kennedy Space Center, Merritt Island, Florida

Final, Volume II, Appendix C.1, Part 3

January 2026



**Federal Aviation
Administration**

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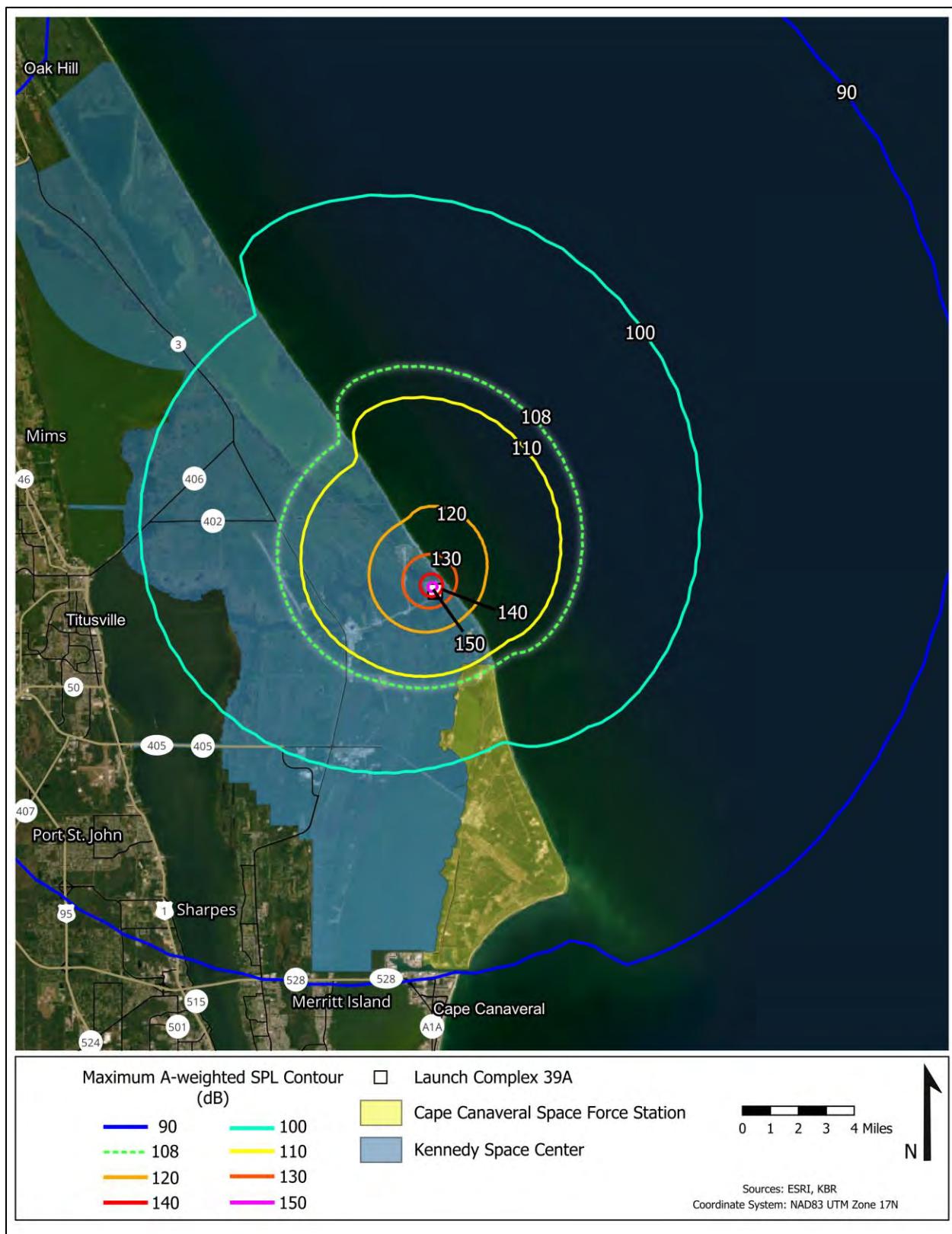


Figure 61. Starship Orbital Launch from LC-39A: Maximum A-Weighted Sound Levels: Summer Day

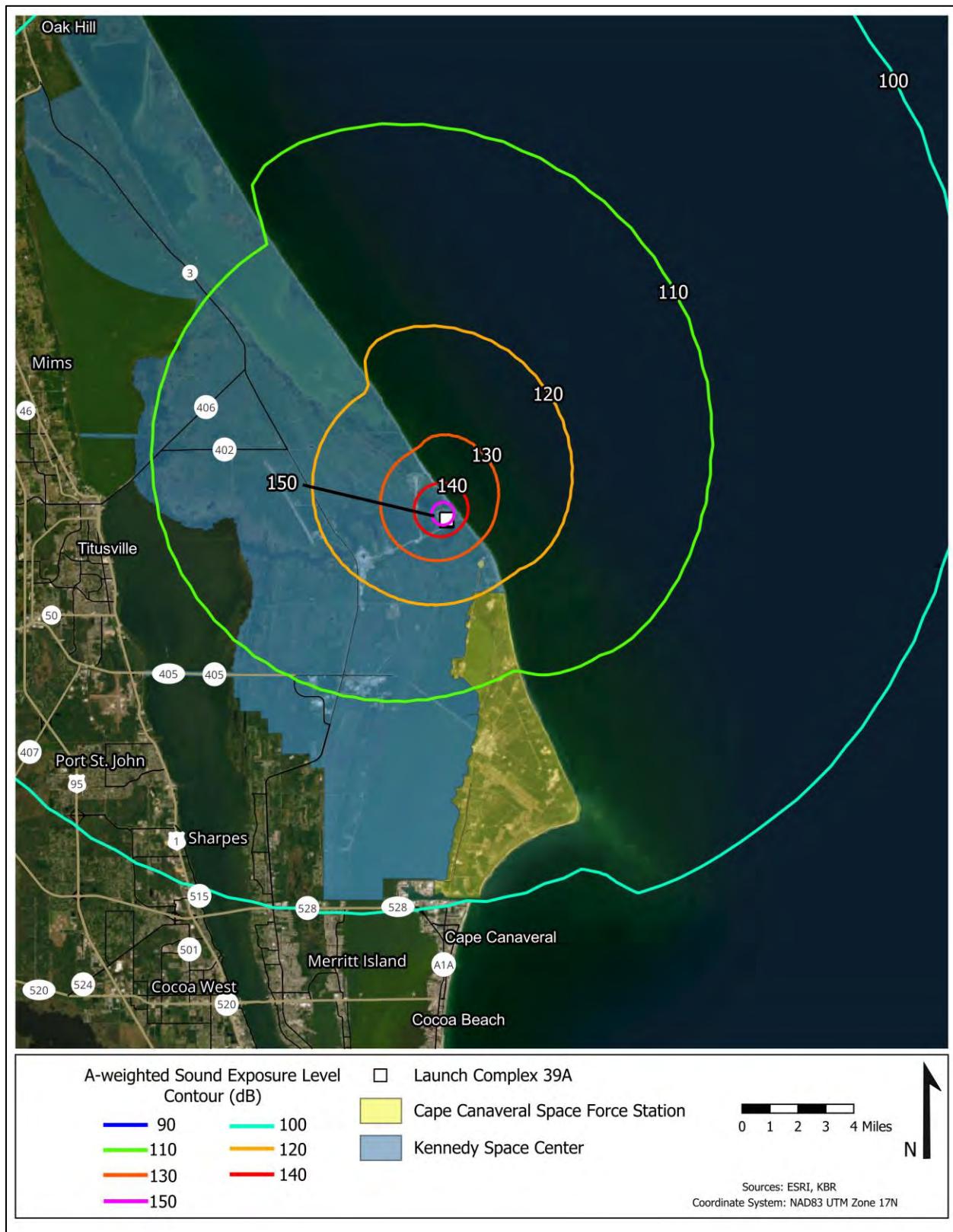


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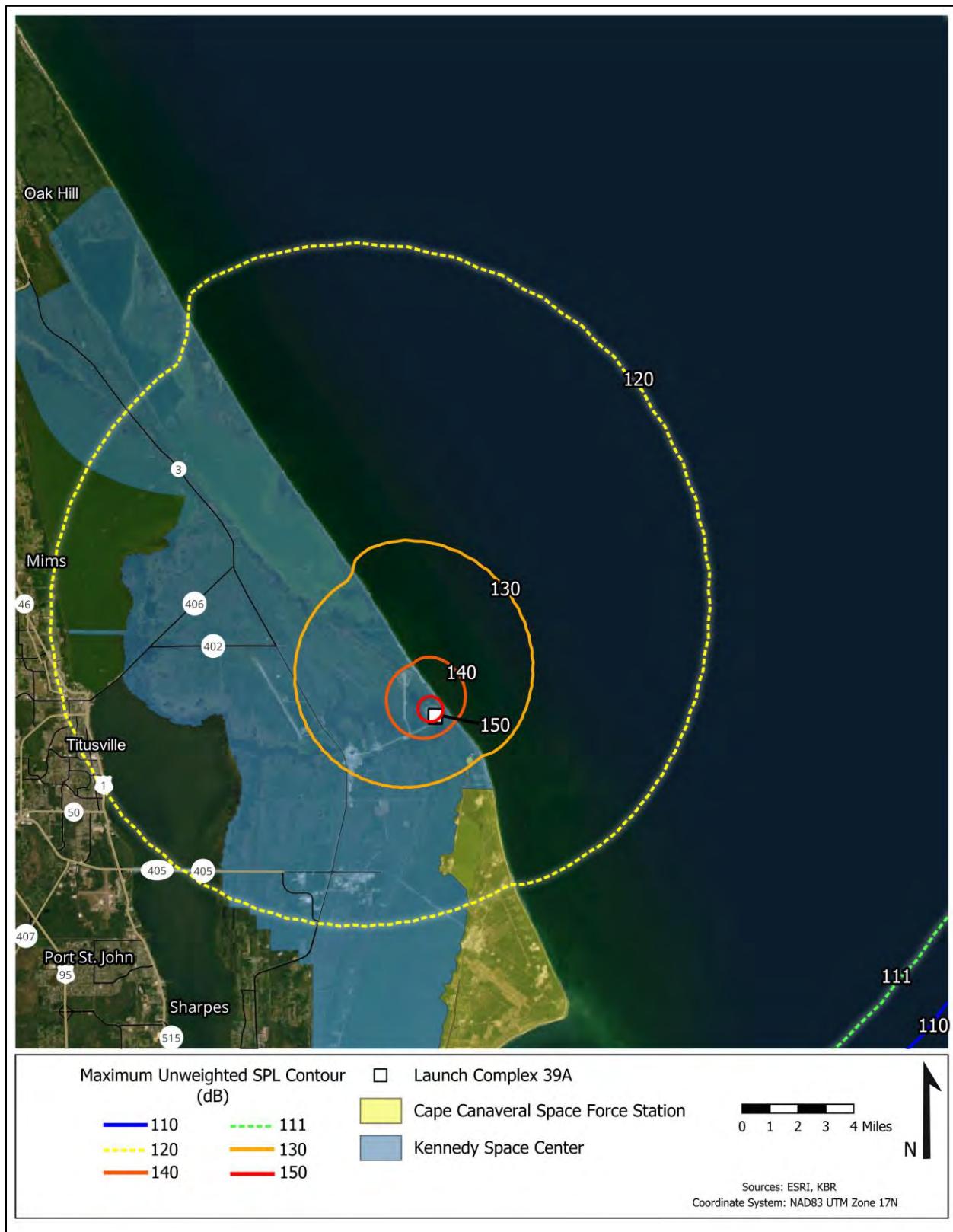


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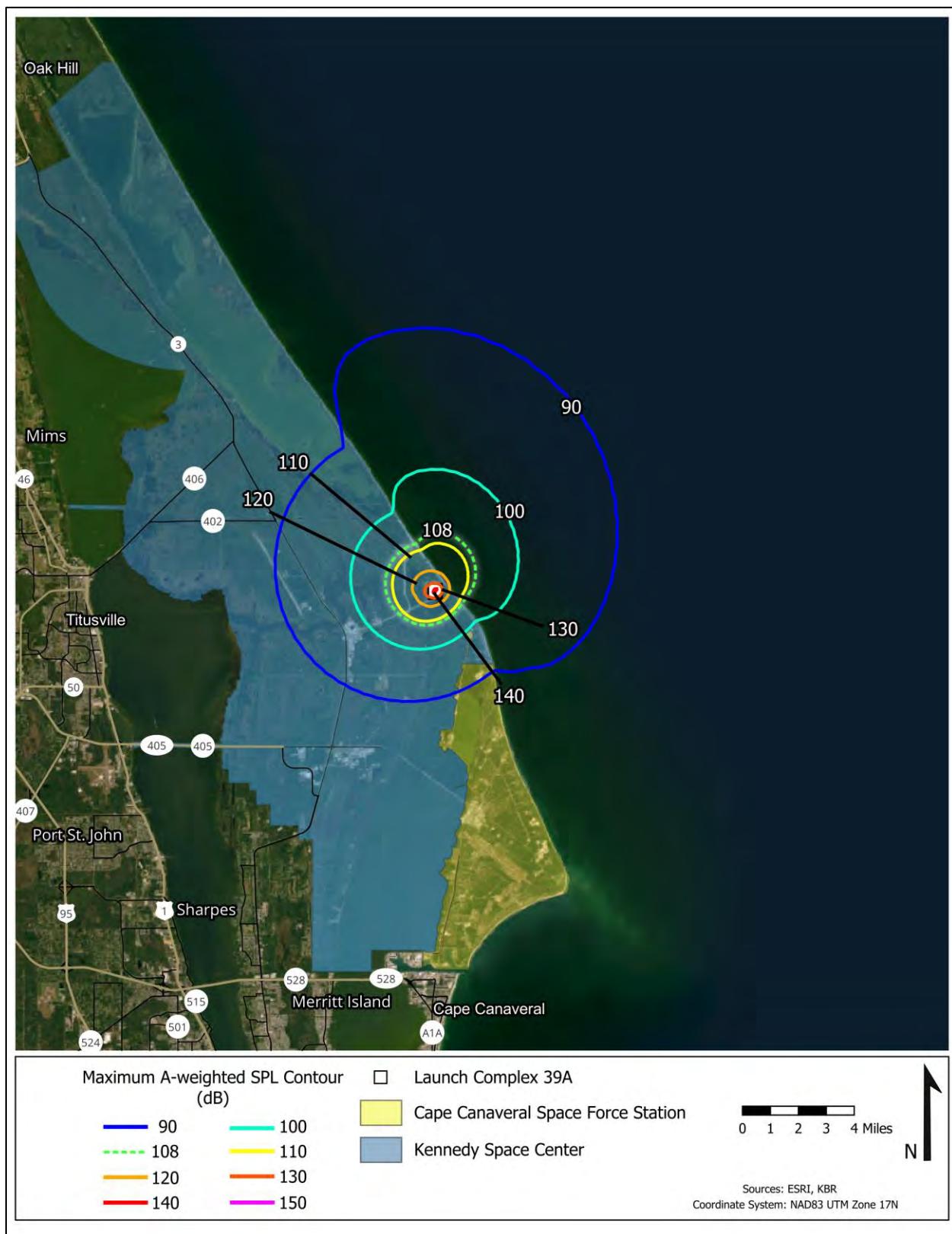


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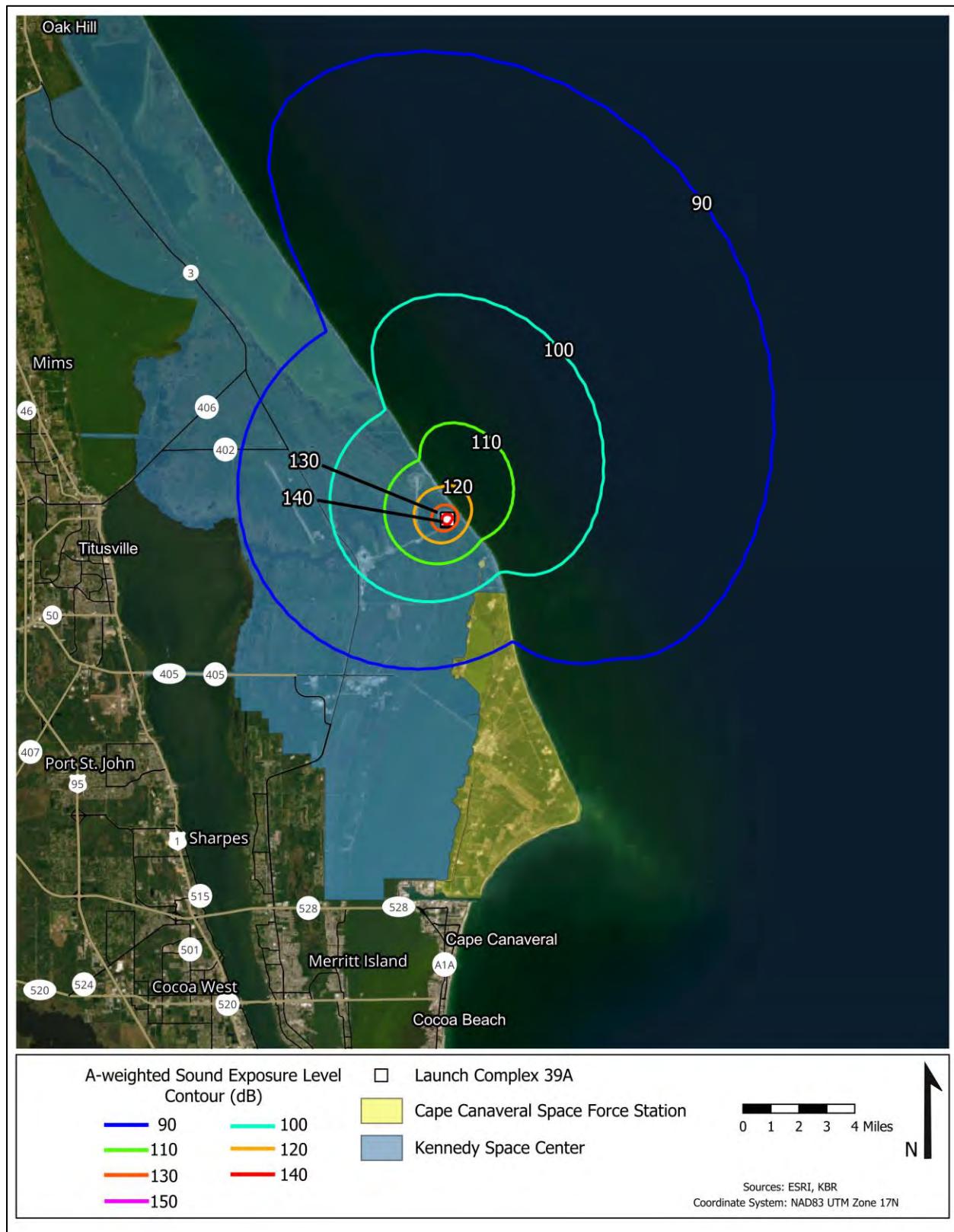


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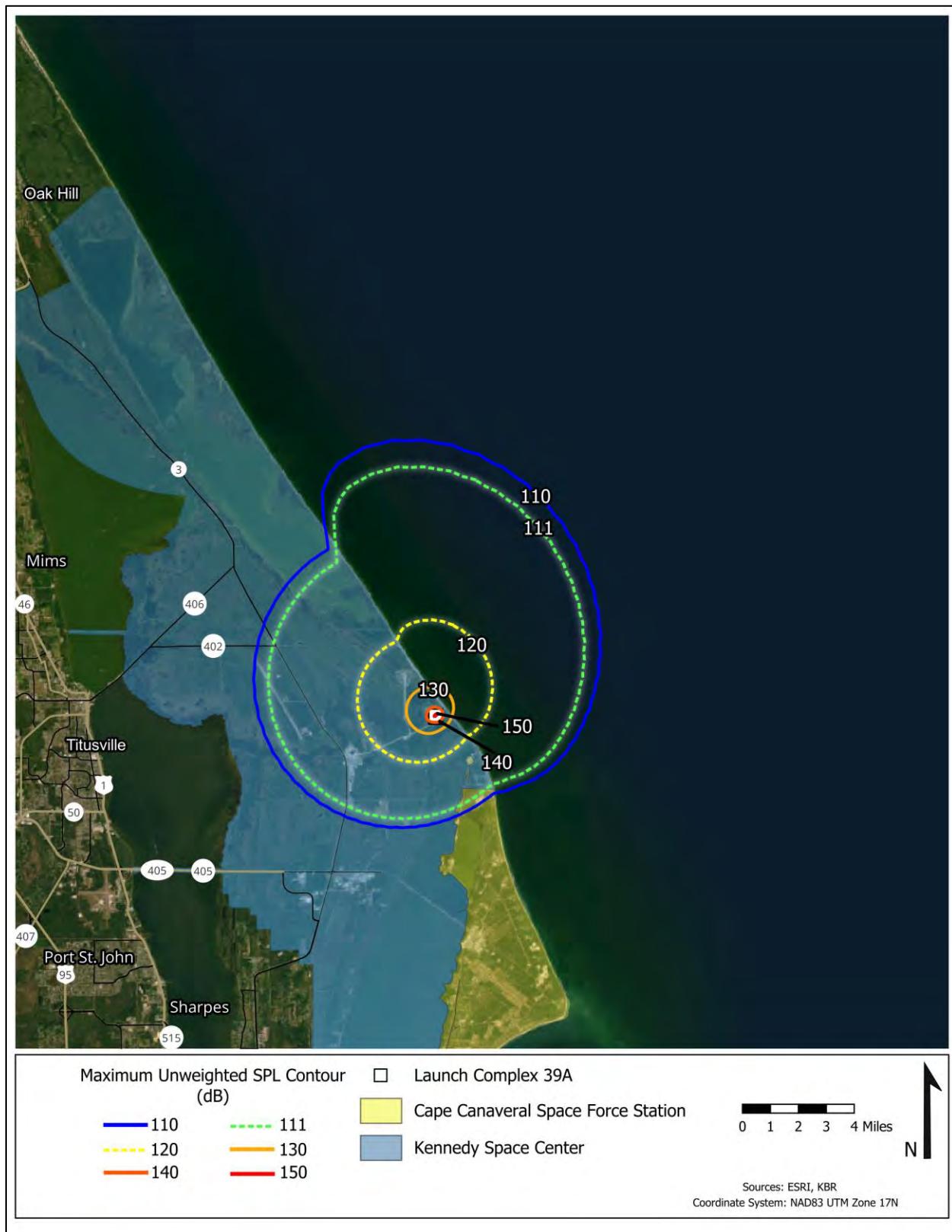


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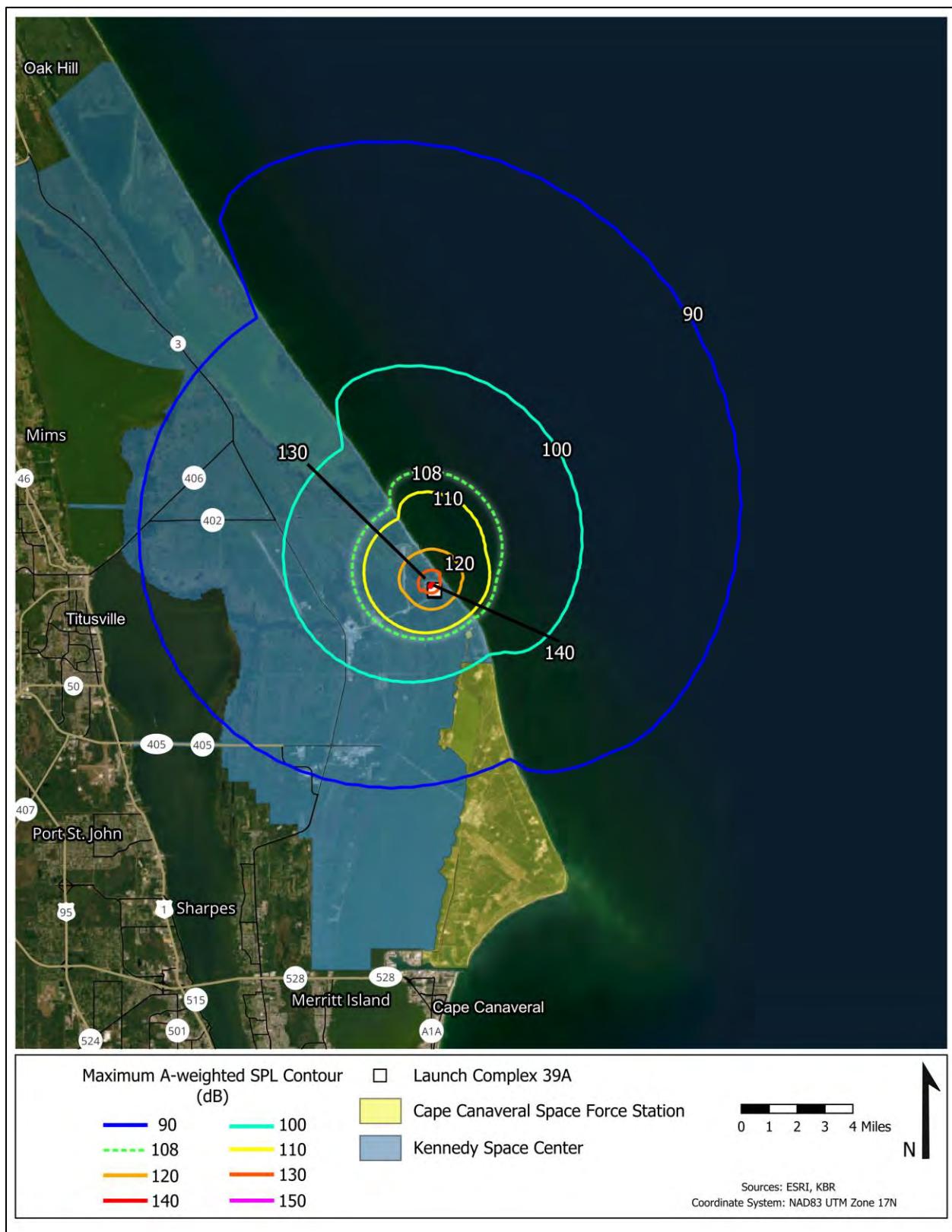


Figure 67. Super Heavy Landing at LC-39A (Nominal): Max A-Weighted Sound Levels: Summer Day

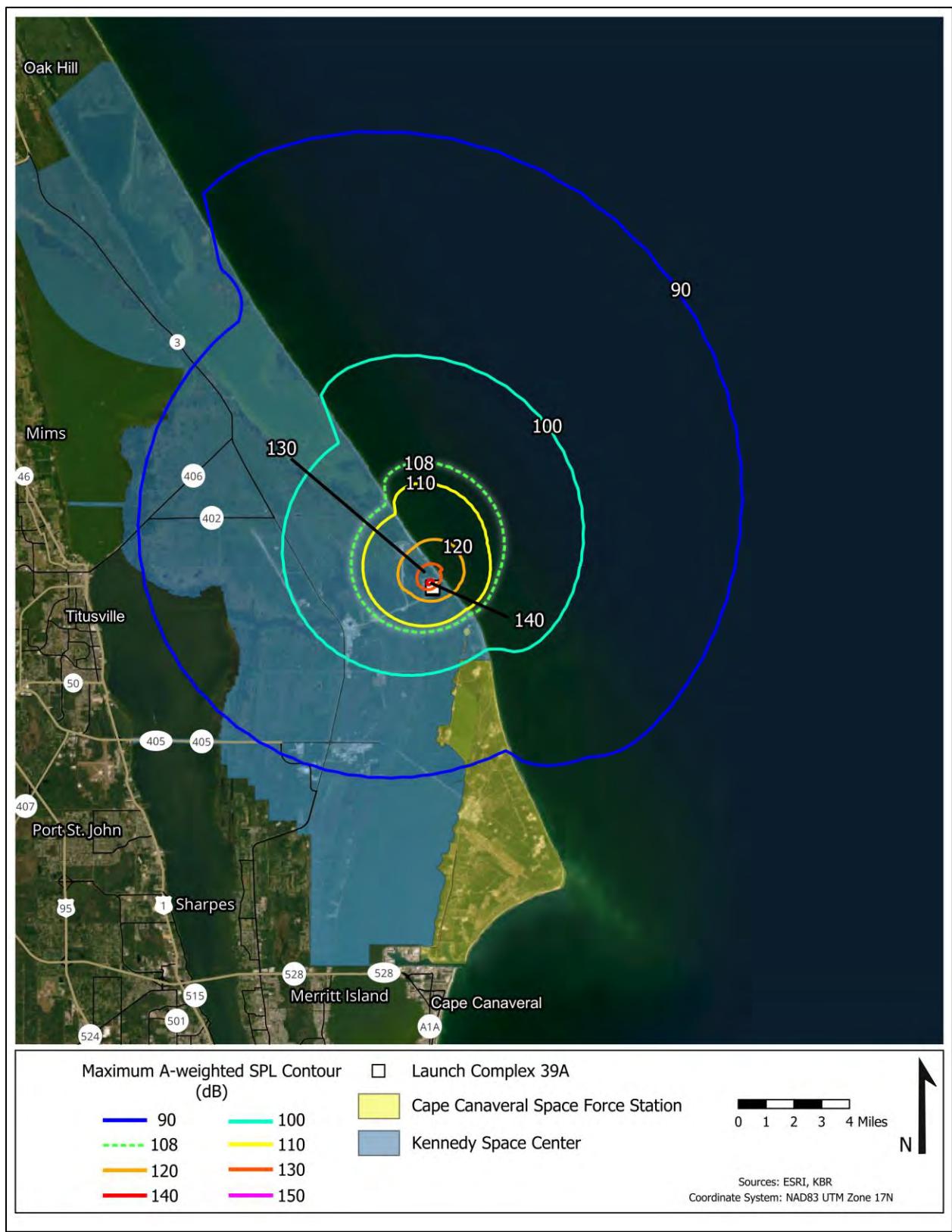


Figure 68. Super Heavy Landing at LC-39A (40-Degrees): Max A-Weighted Sound Levels: Summer Day

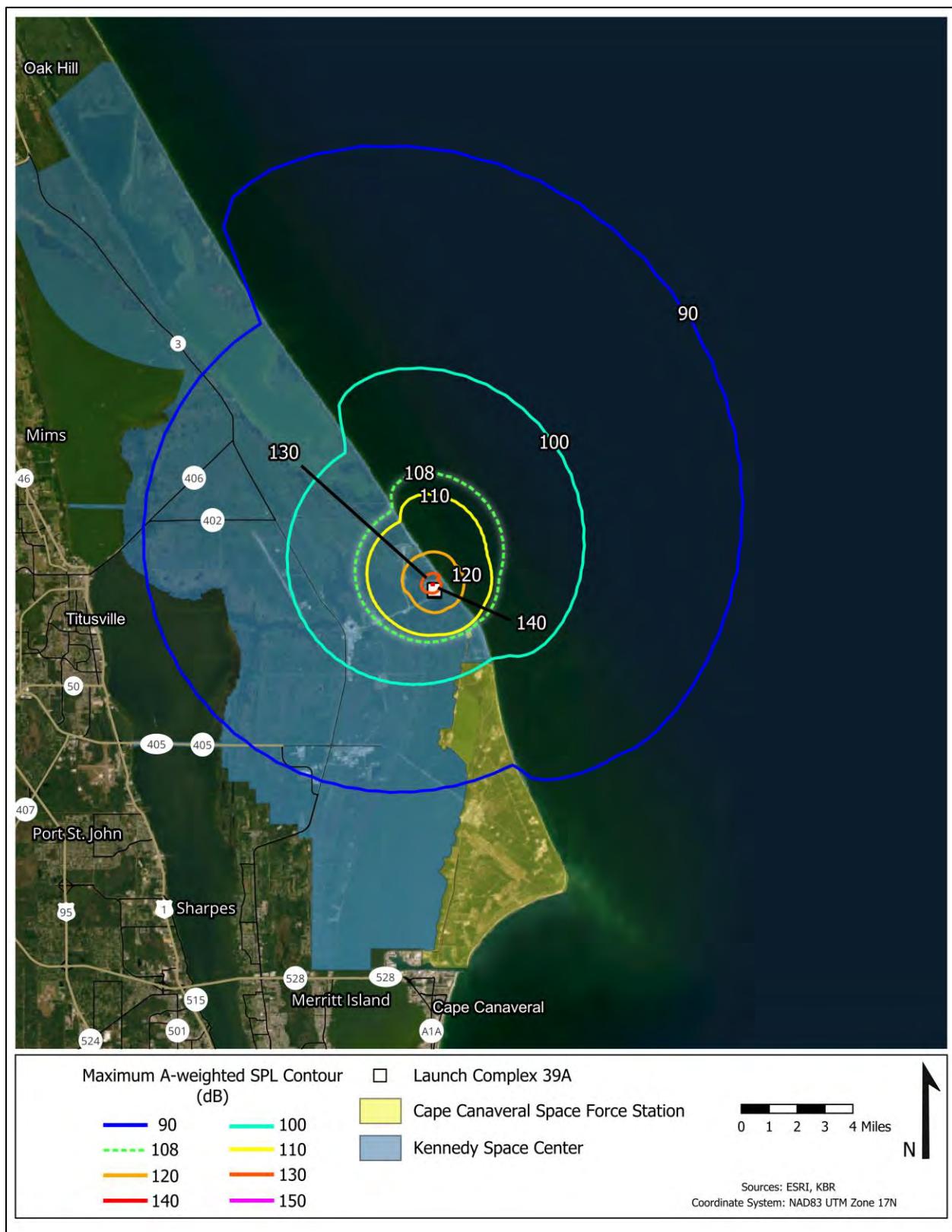


Figure 69. Super Heavy Landing at LC-39A (115-Degrees): Max A-Weighted Sound Levels: Summer Day

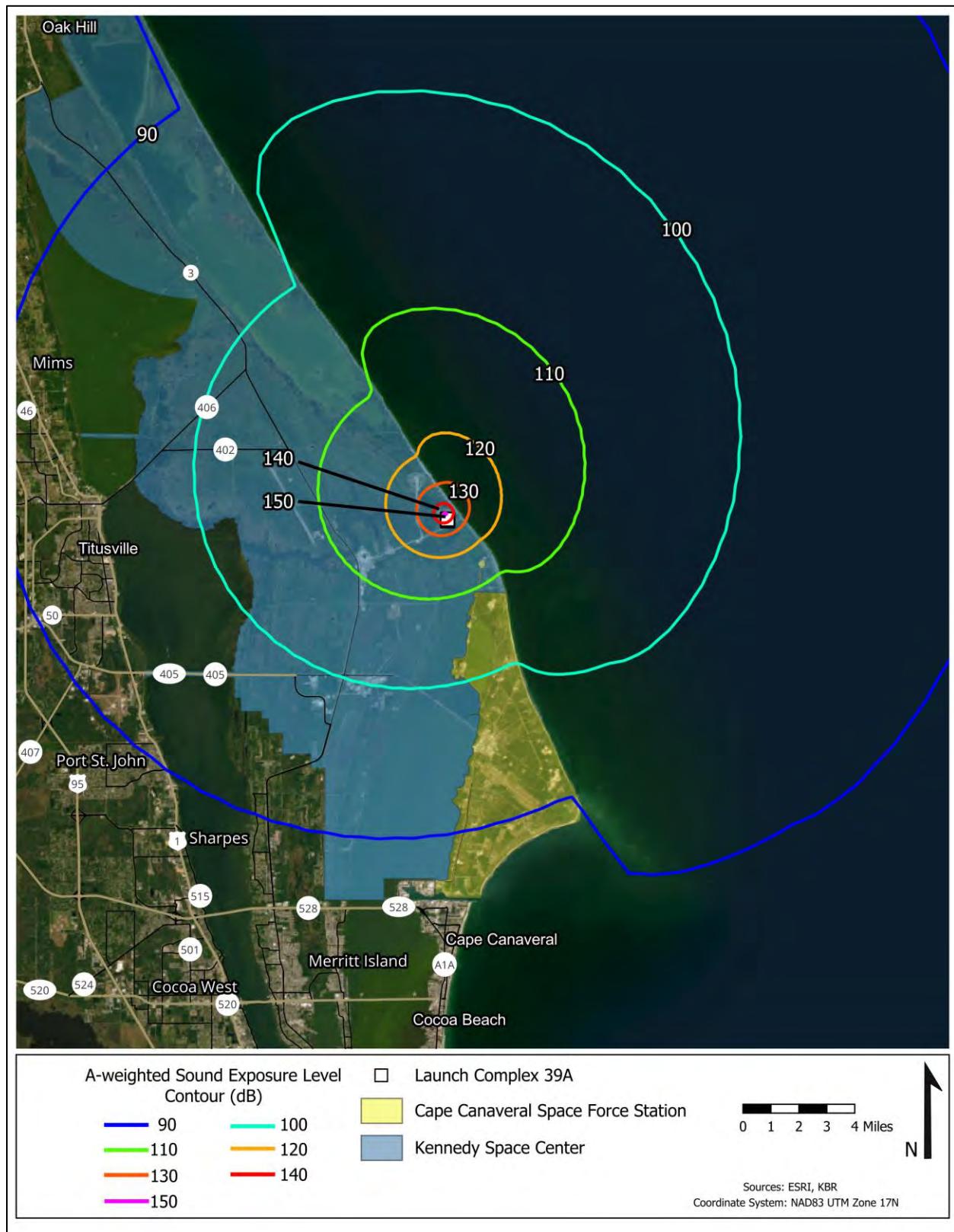


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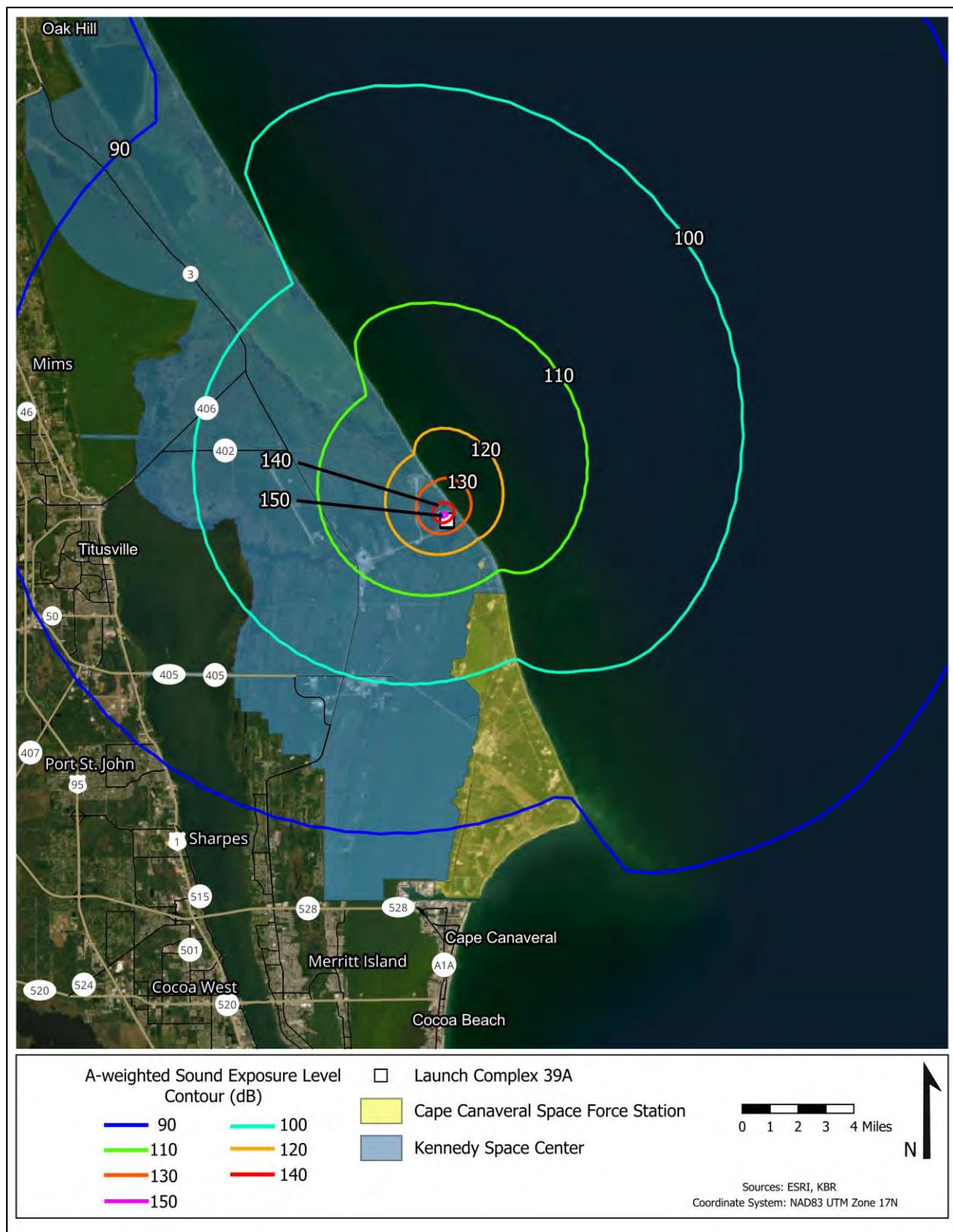


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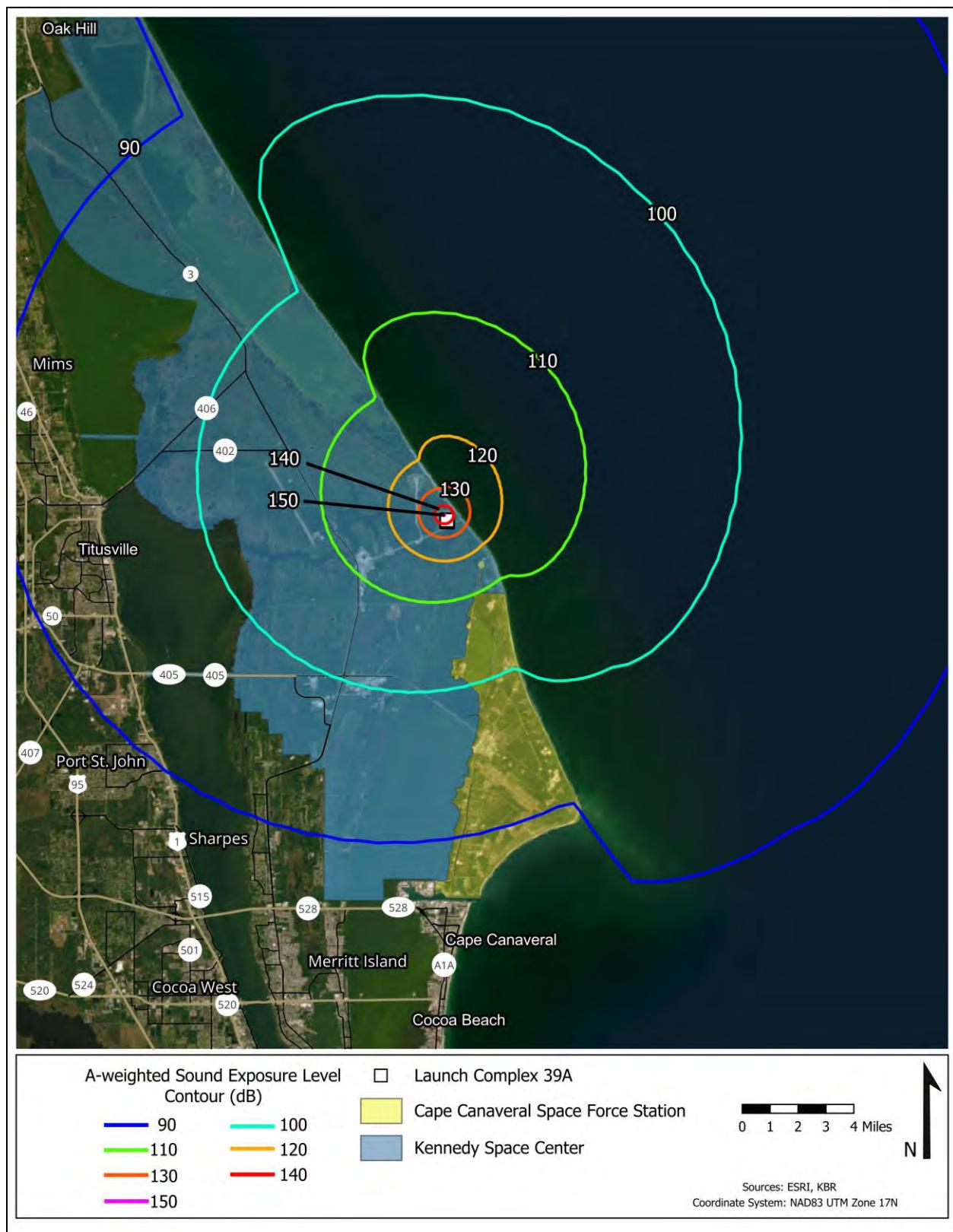


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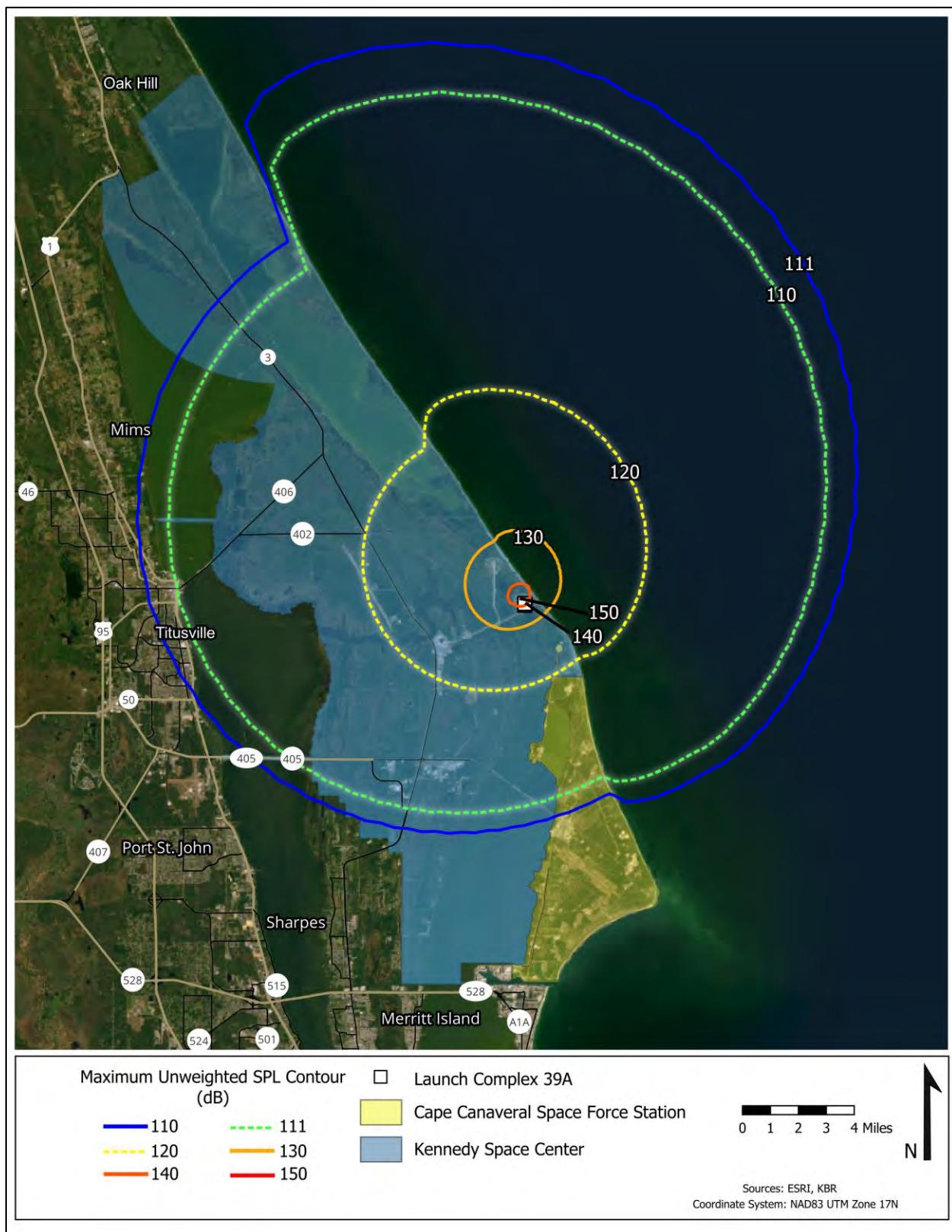


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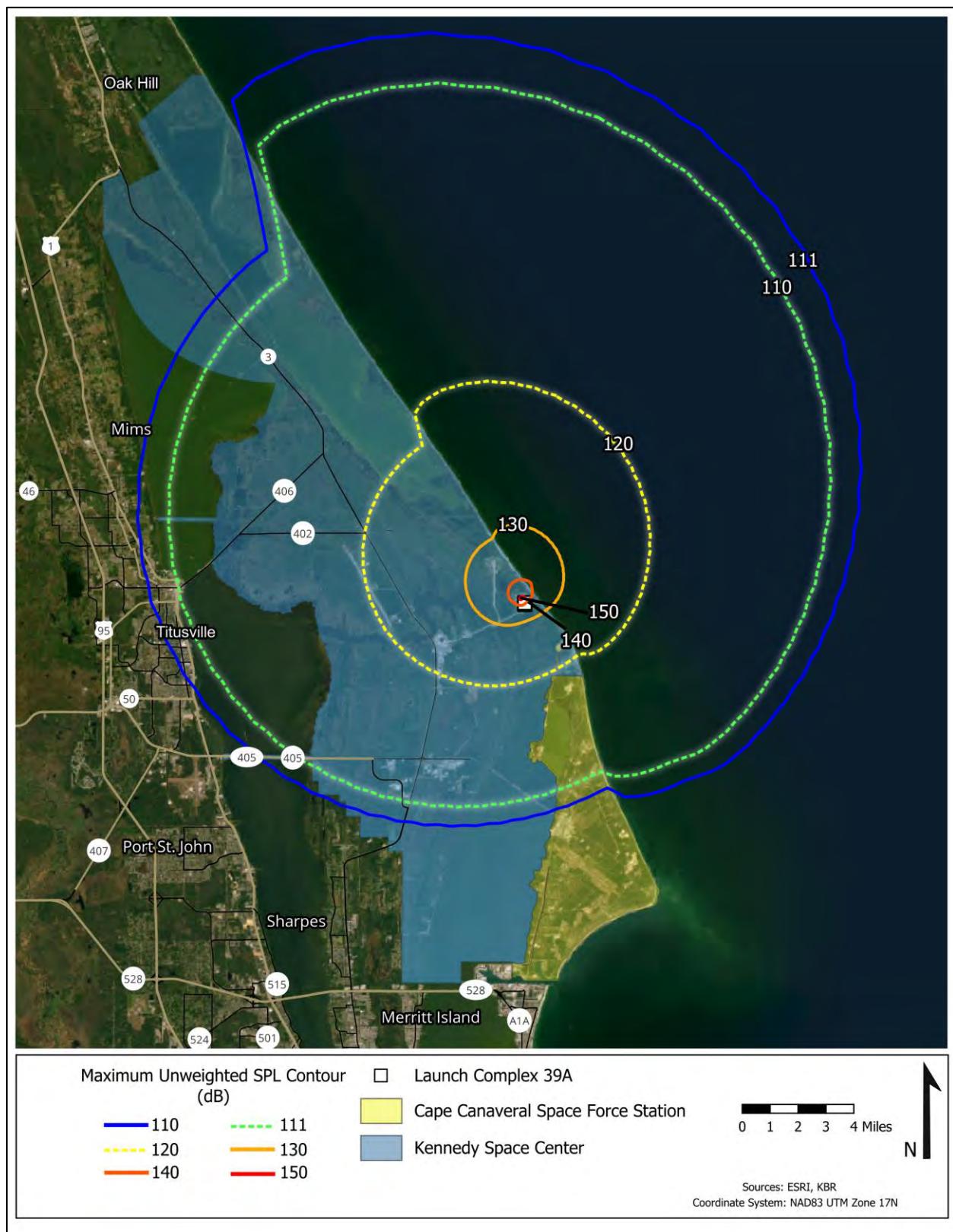


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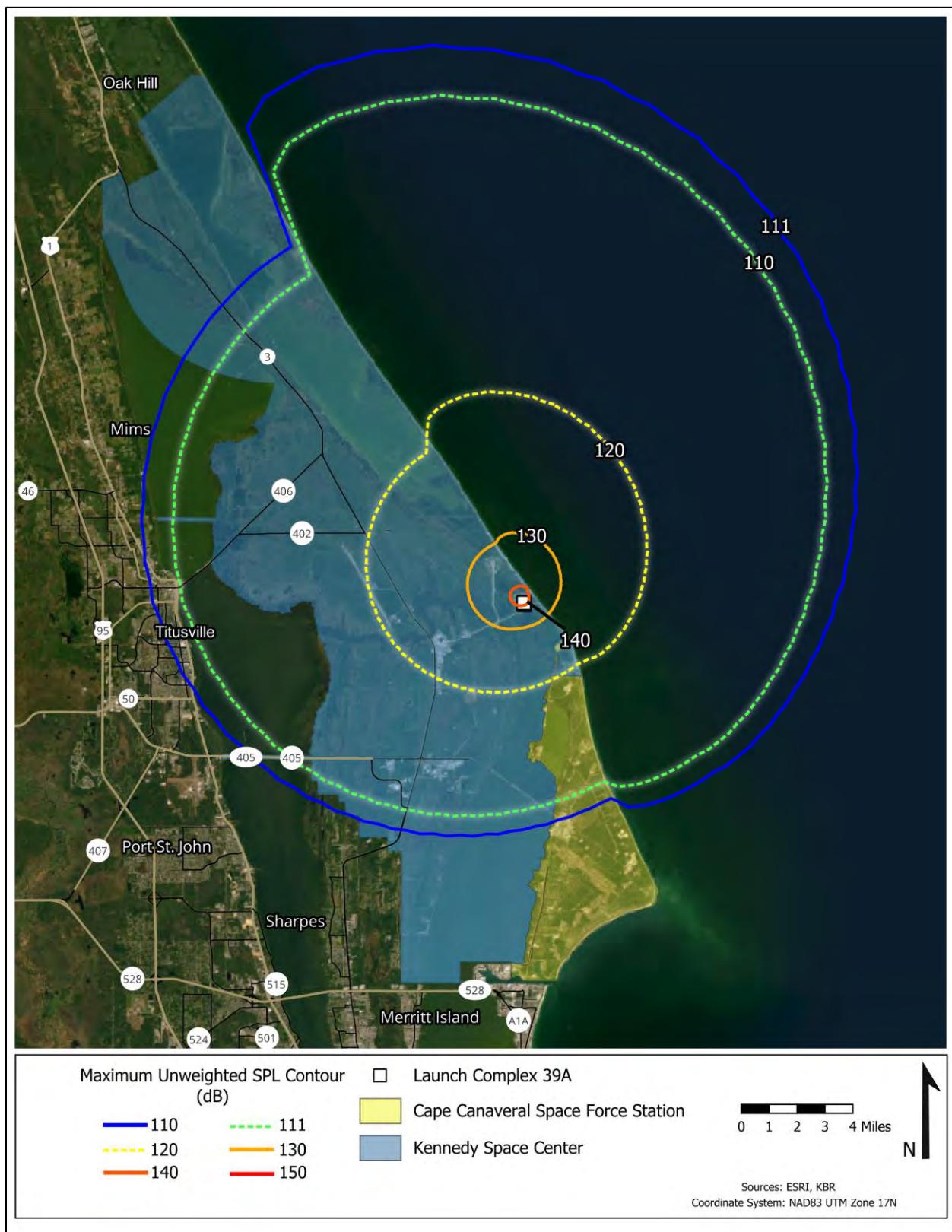


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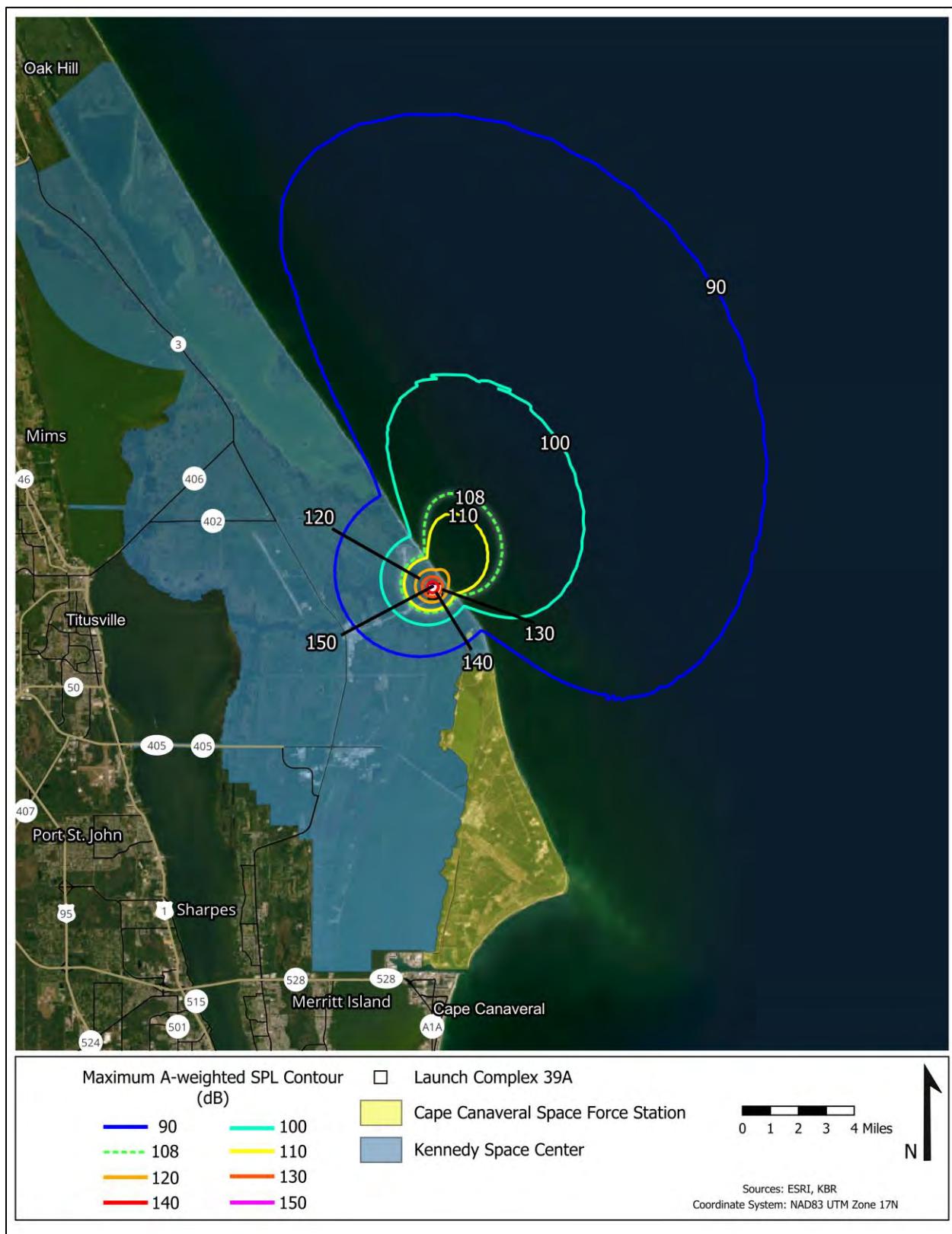


Figure 76. Starship Spacecraft Static Fire Test at LC-39A: Max A-Weighted Sound Levels: Summer Day

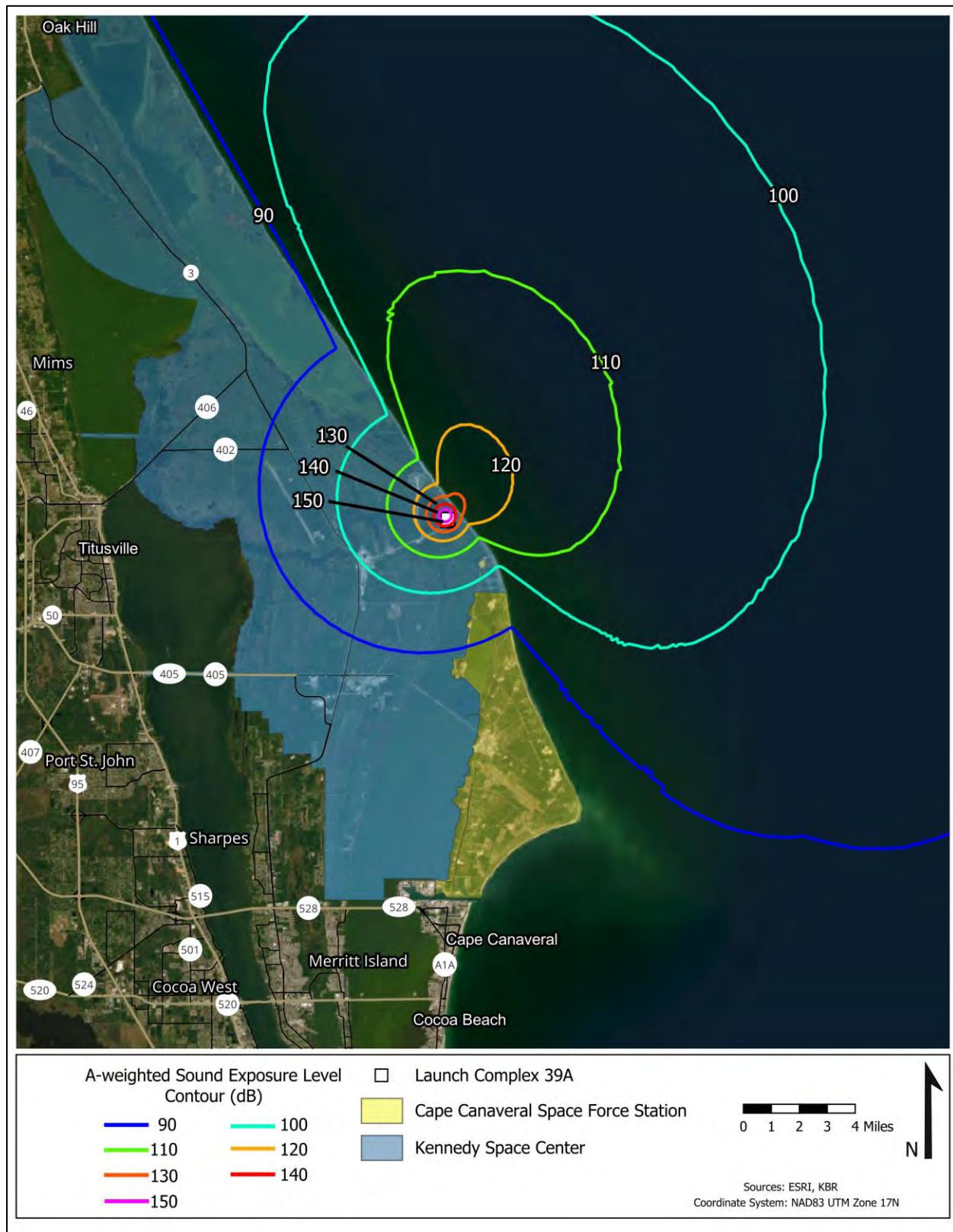


Figure 77. Starship Spacecraft Static Fire Test at LC-39A: Sound Exposure Levels: Summer Day

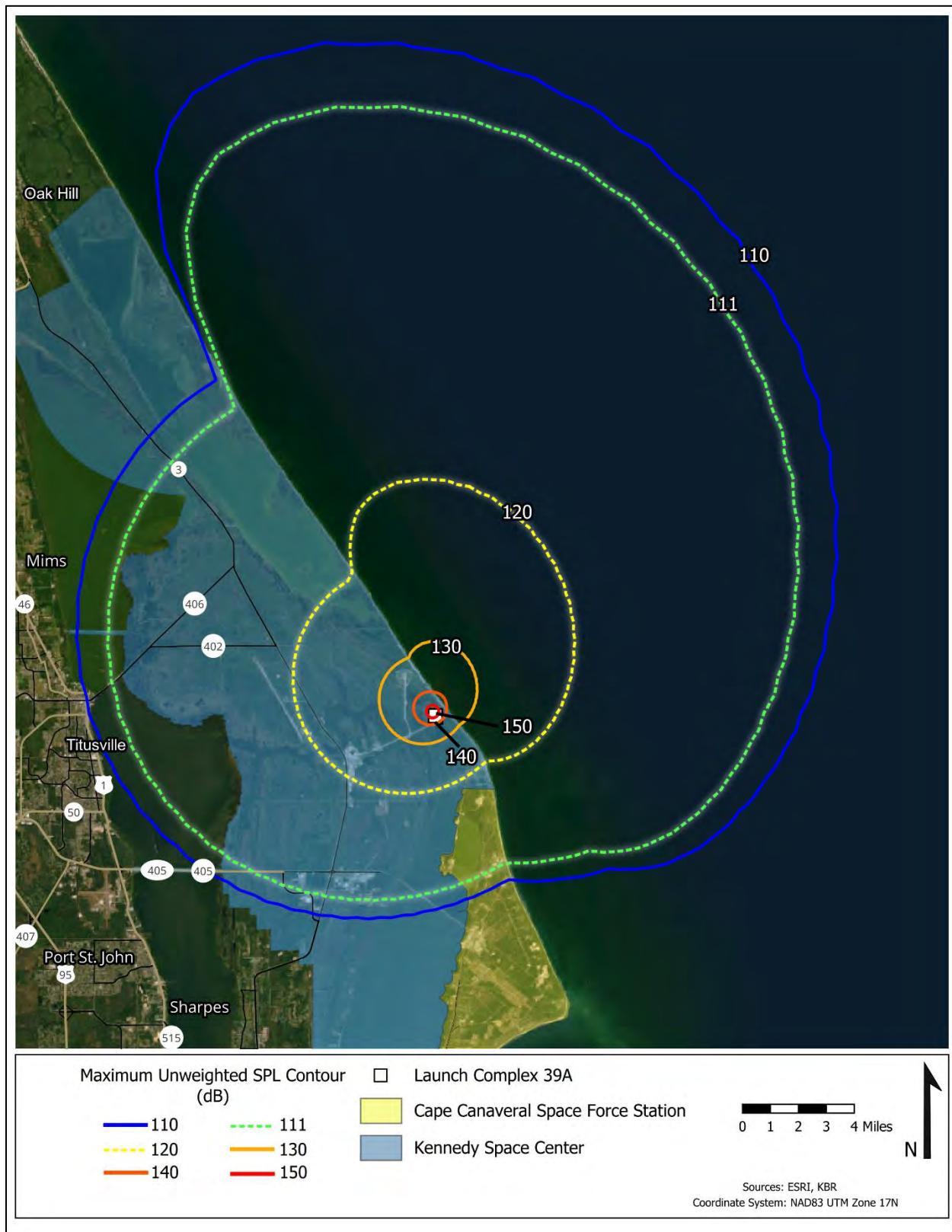


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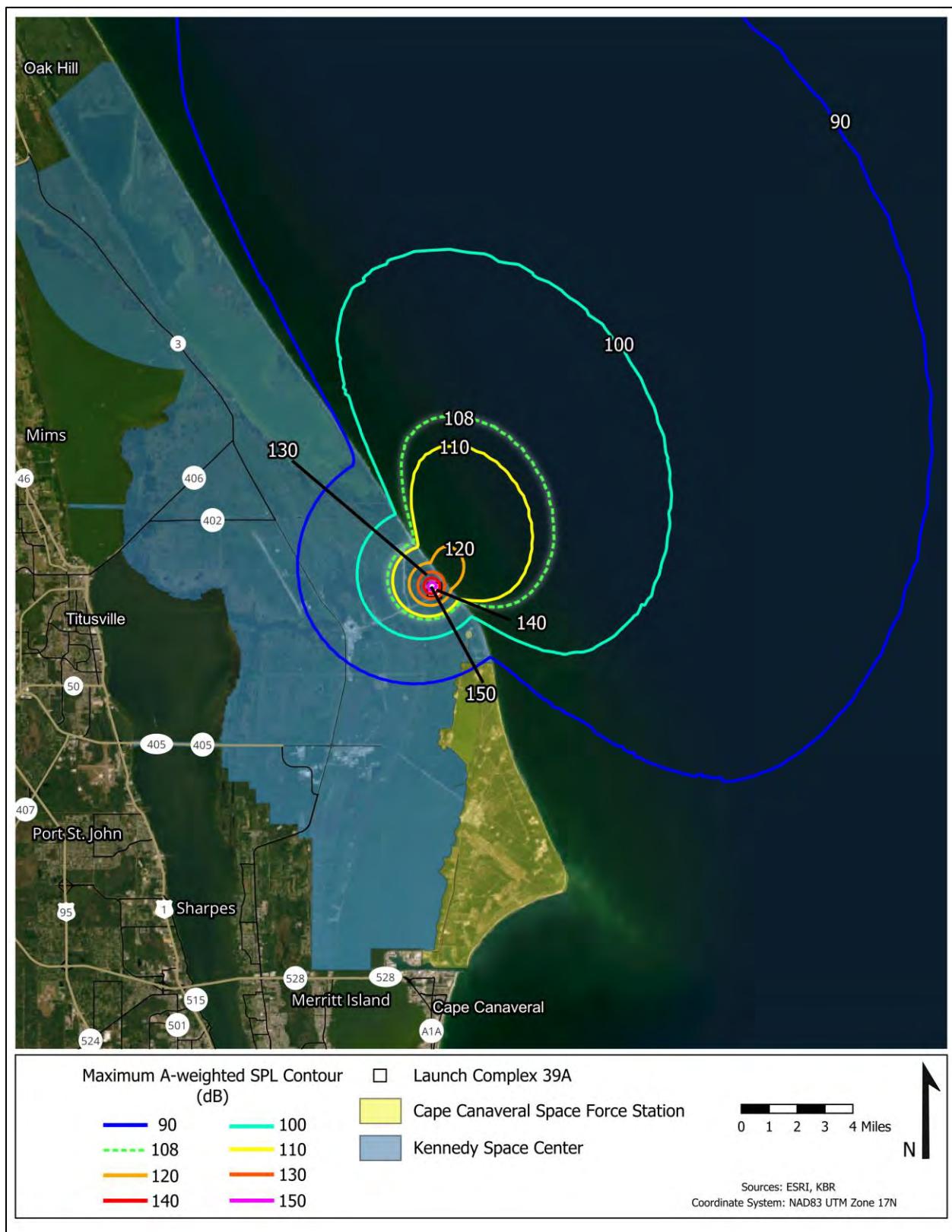


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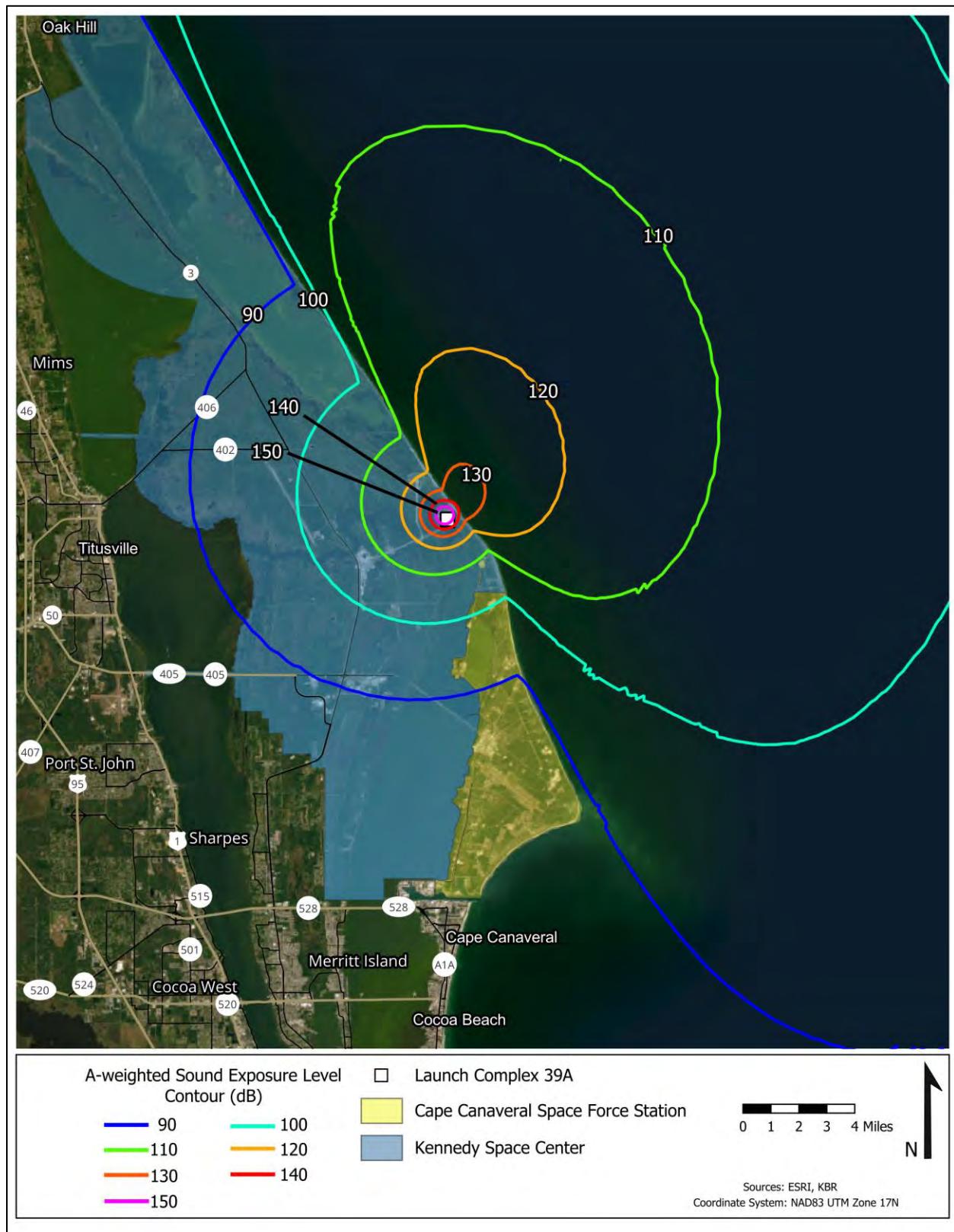


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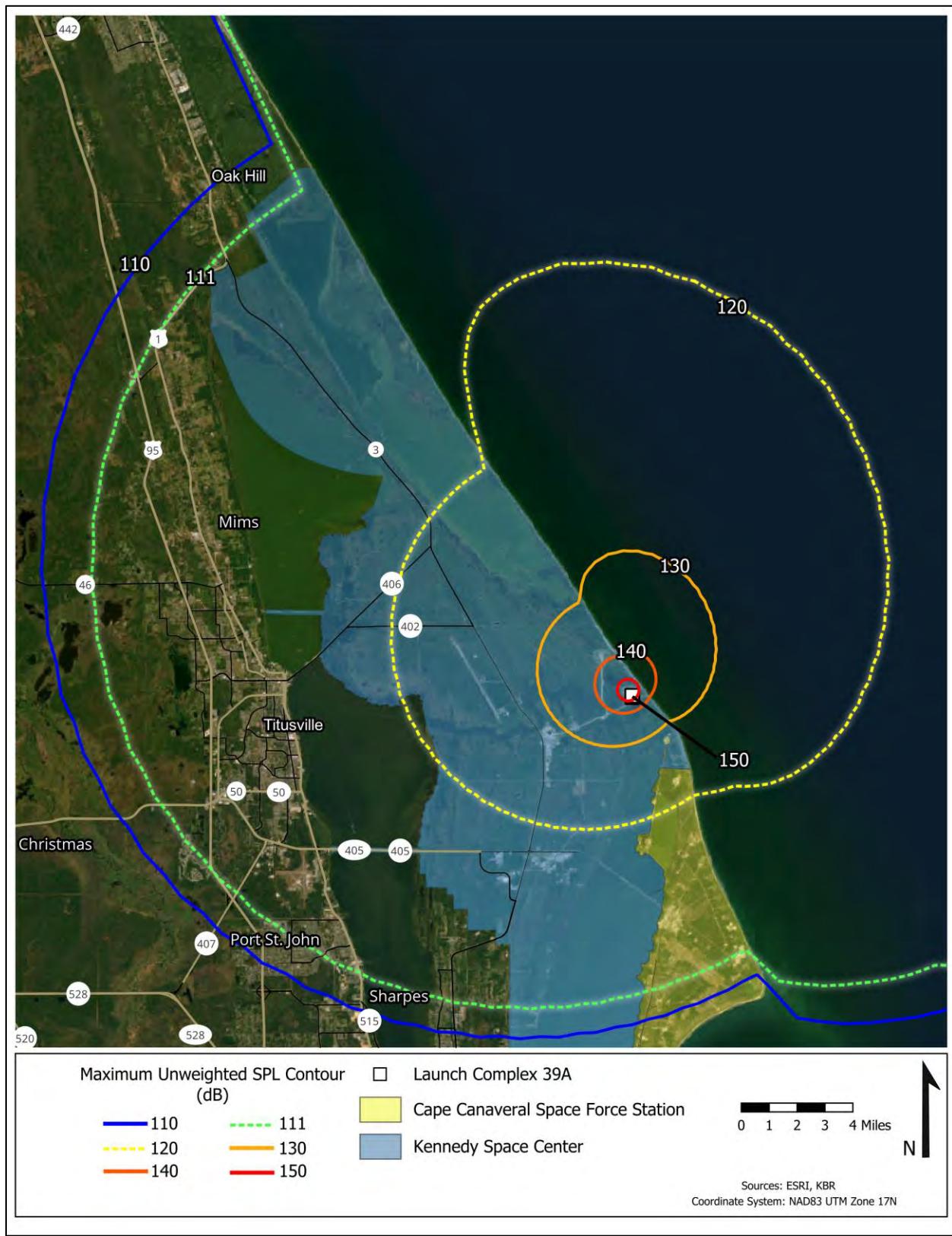


Figure 81. Super Booster Static Fire Test at LC-39A: Maximum Unweighted Sound Levels: Summer Day

3.1.3 Rocket Noise: L_{Amax} , SEL, and L_{max} Contour Figures: Summer Night

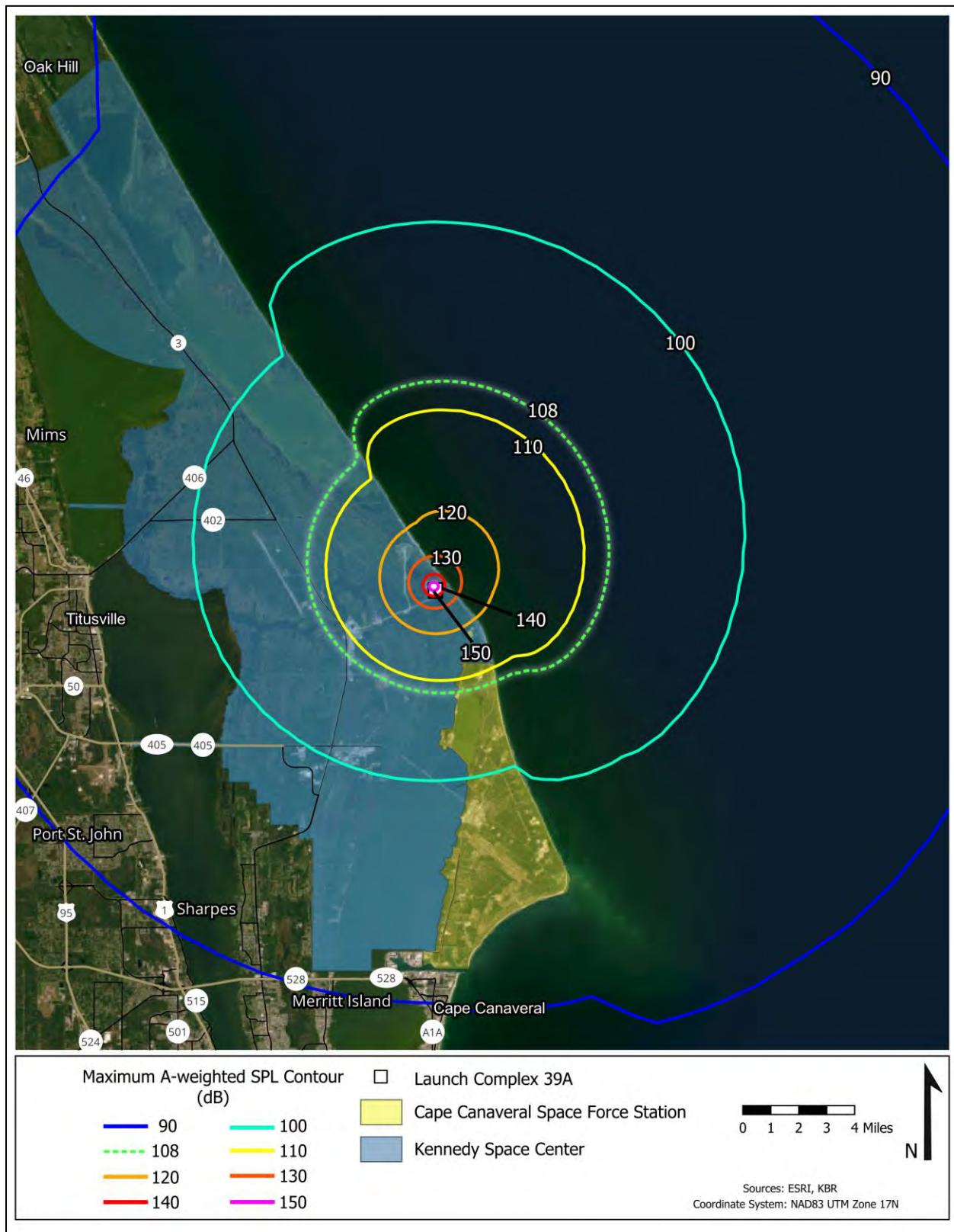


Figure 82. Starship Orbital Launch from LC-39A: Maximum A-Weighted Sound Levels: Summer Night

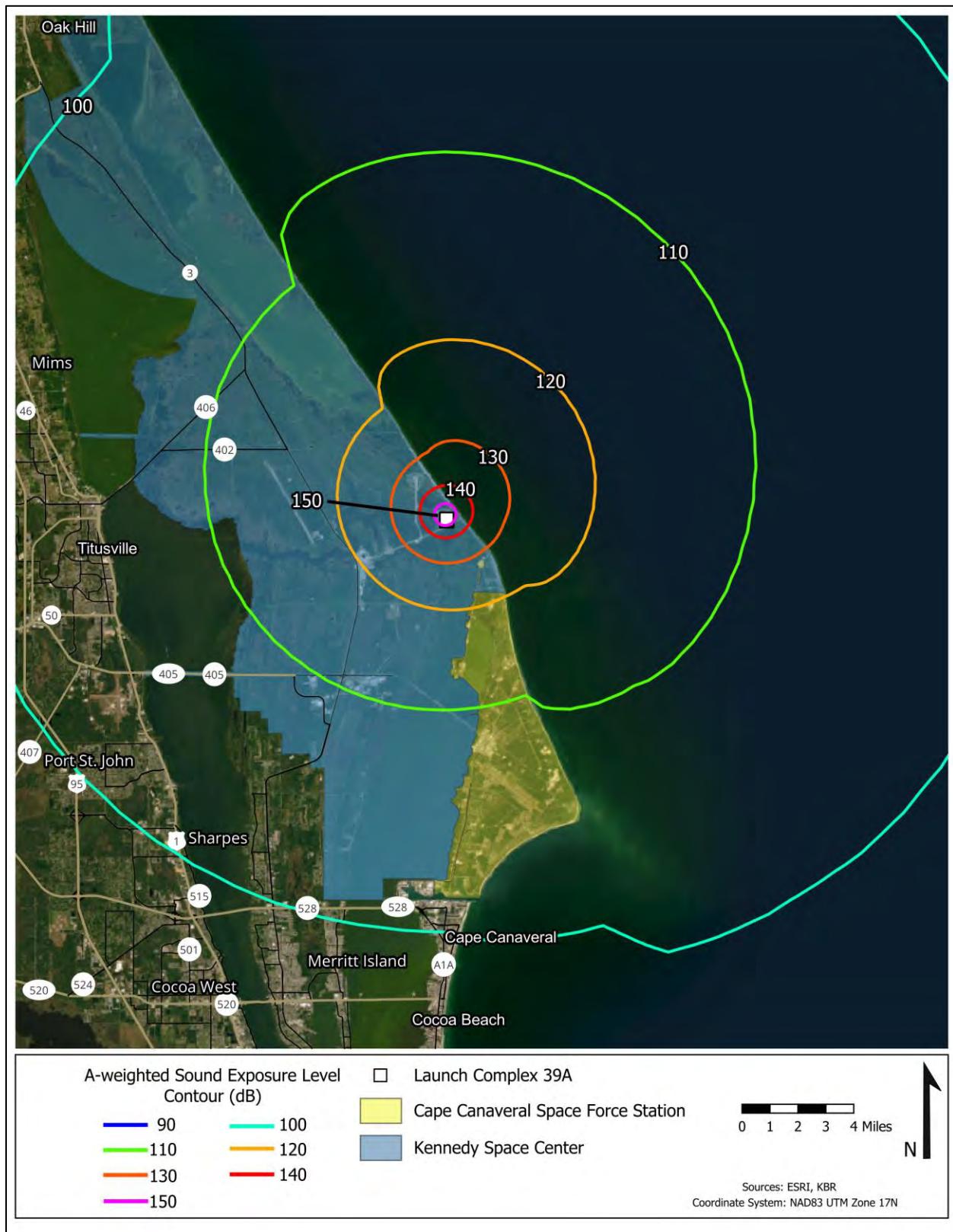


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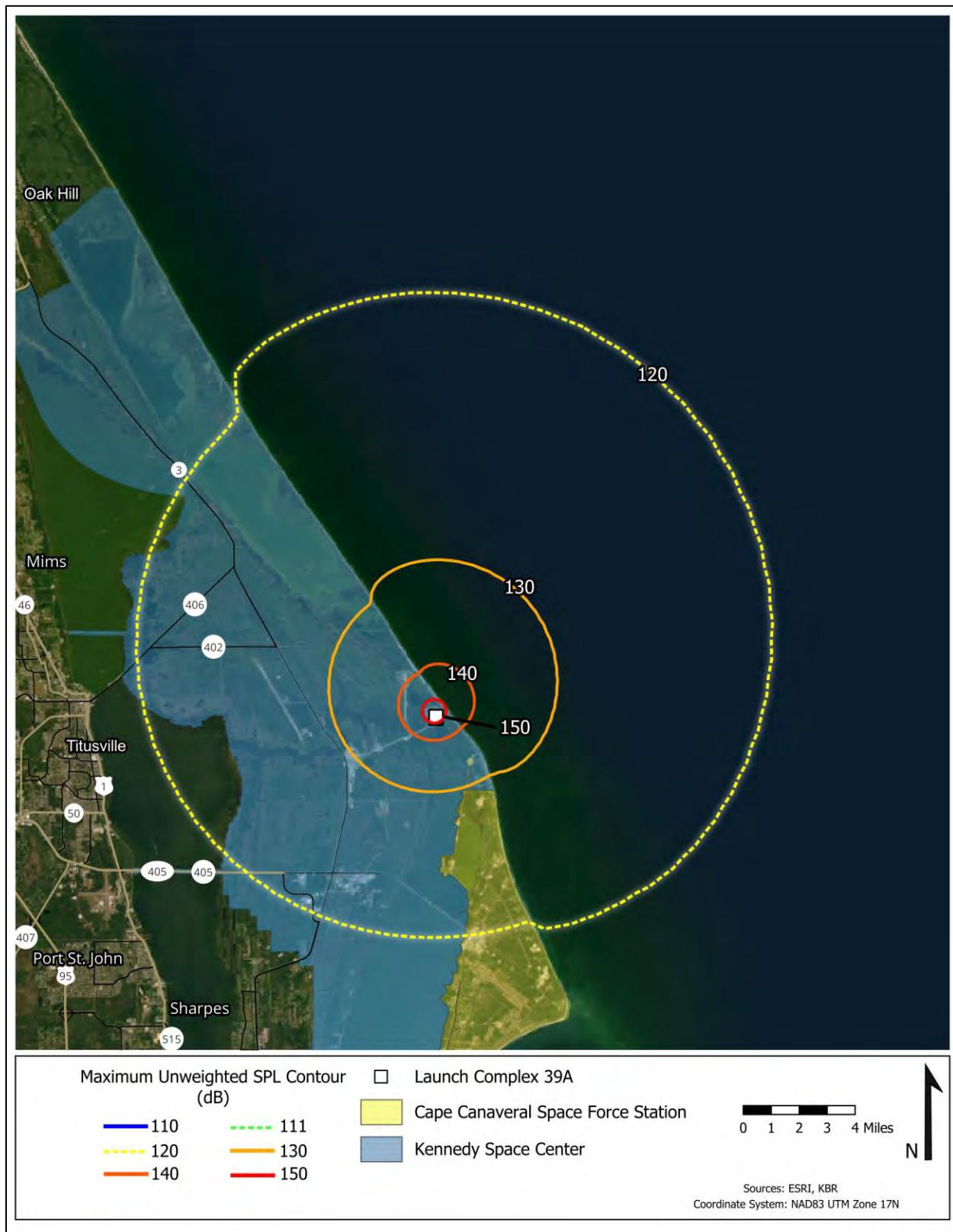


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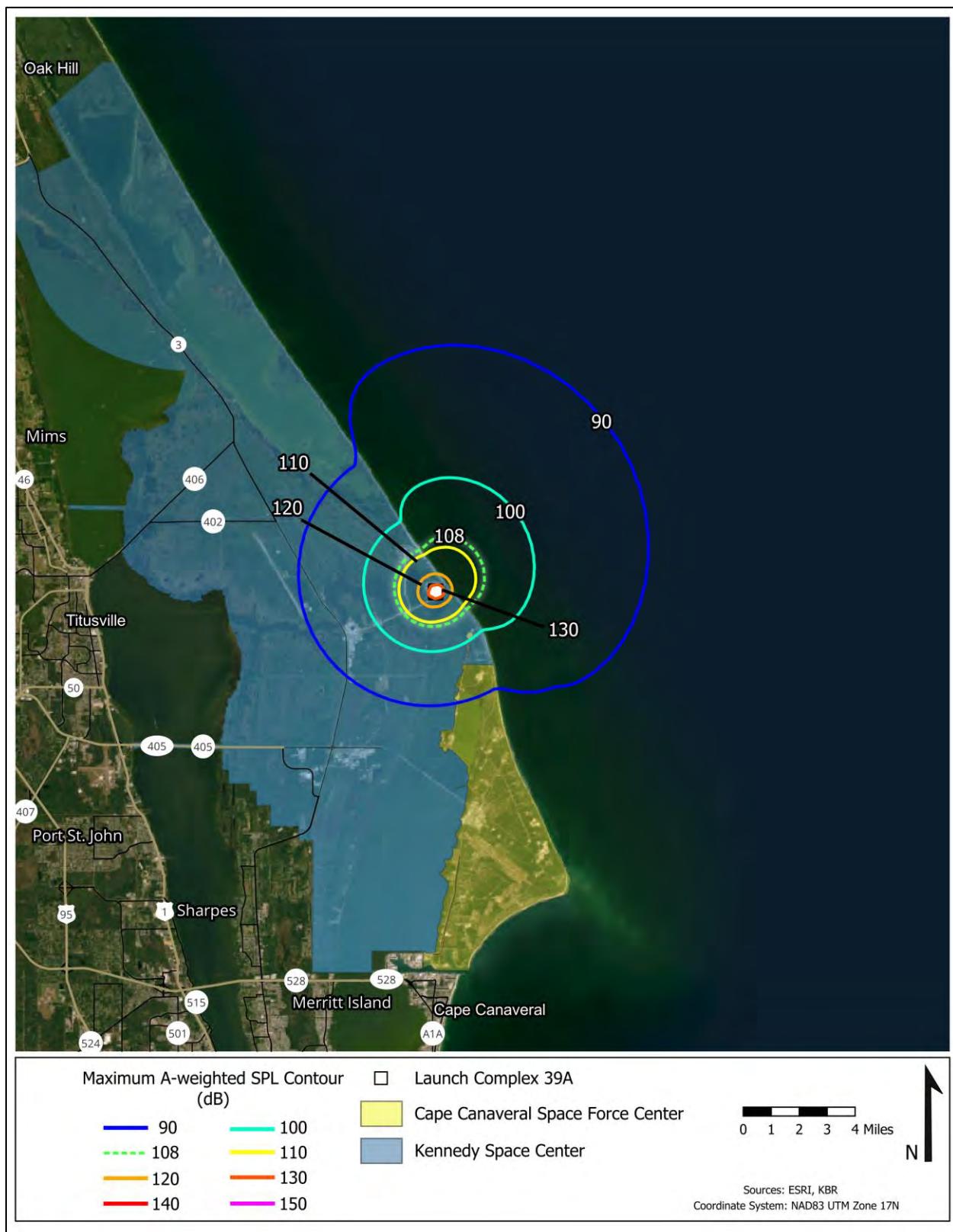


Figure 85. Starship Spacecraft Landing at LC-39A: Maximum A-Weighted Sound Levels: Summer Night

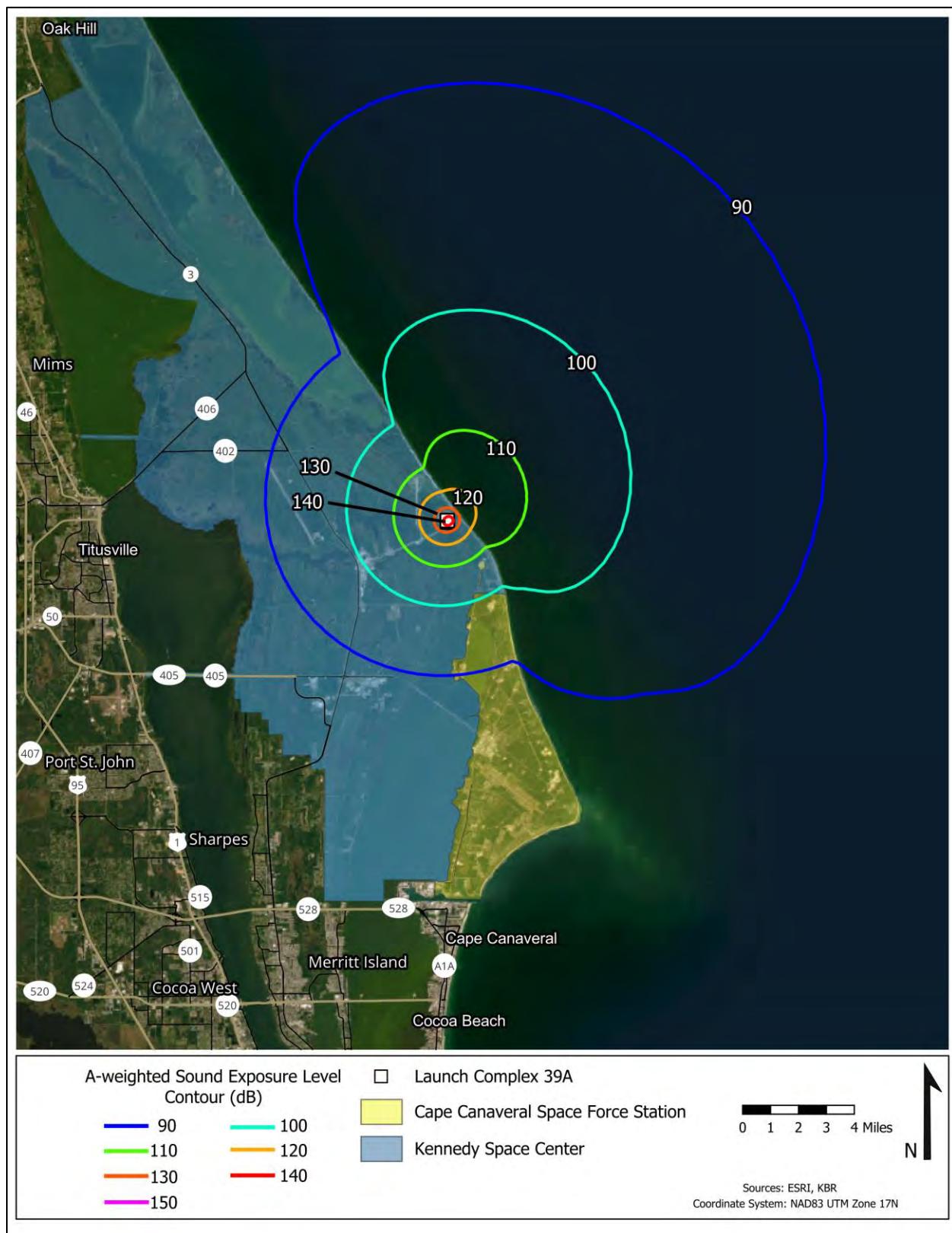


Figure 86. Starship Spacecraft Landing at LC-39A: Sound Exposure Levels: Summer Night

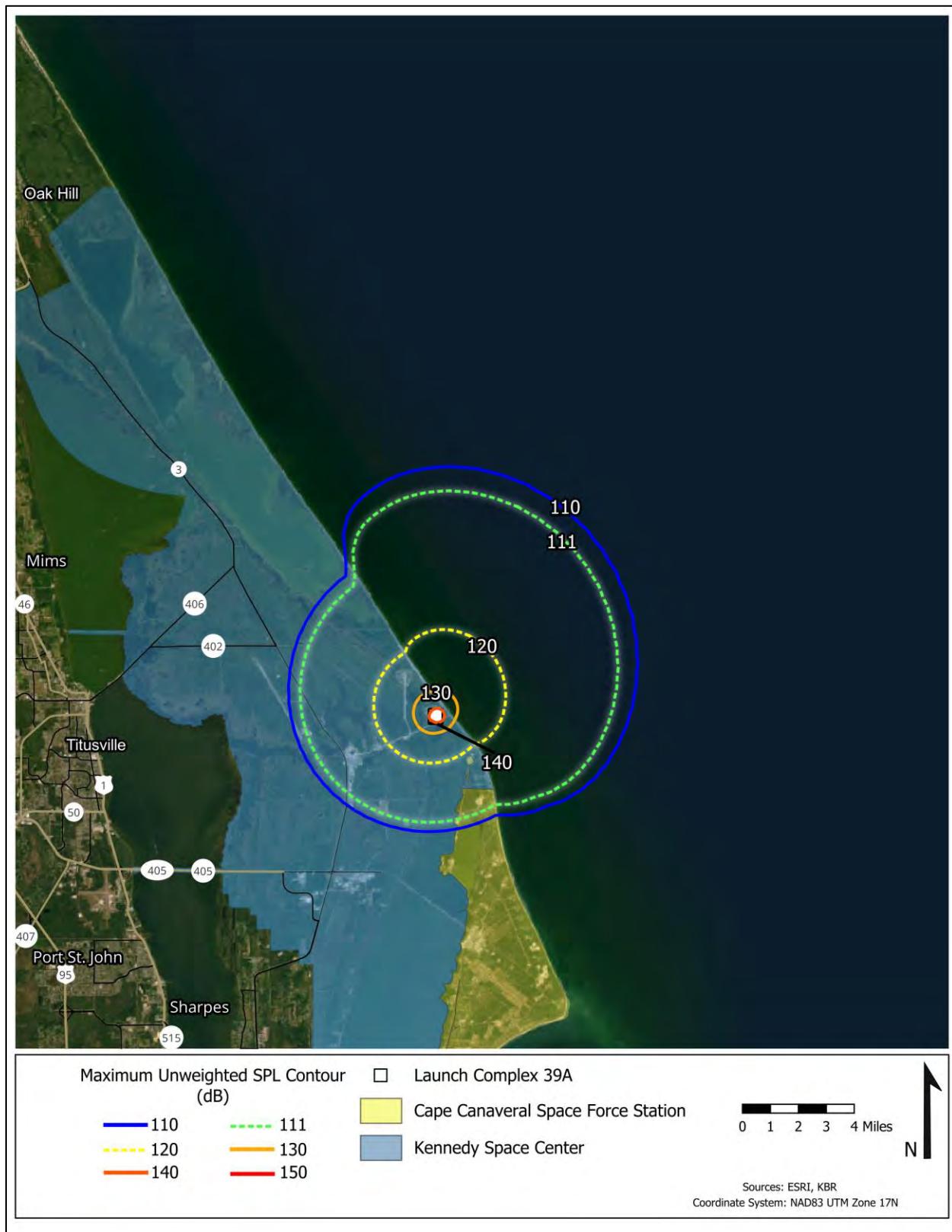


Figure 87. Starship Spacecraft Landing at LC-39A: Maximum Unweighted Sound Levels: Summer Night

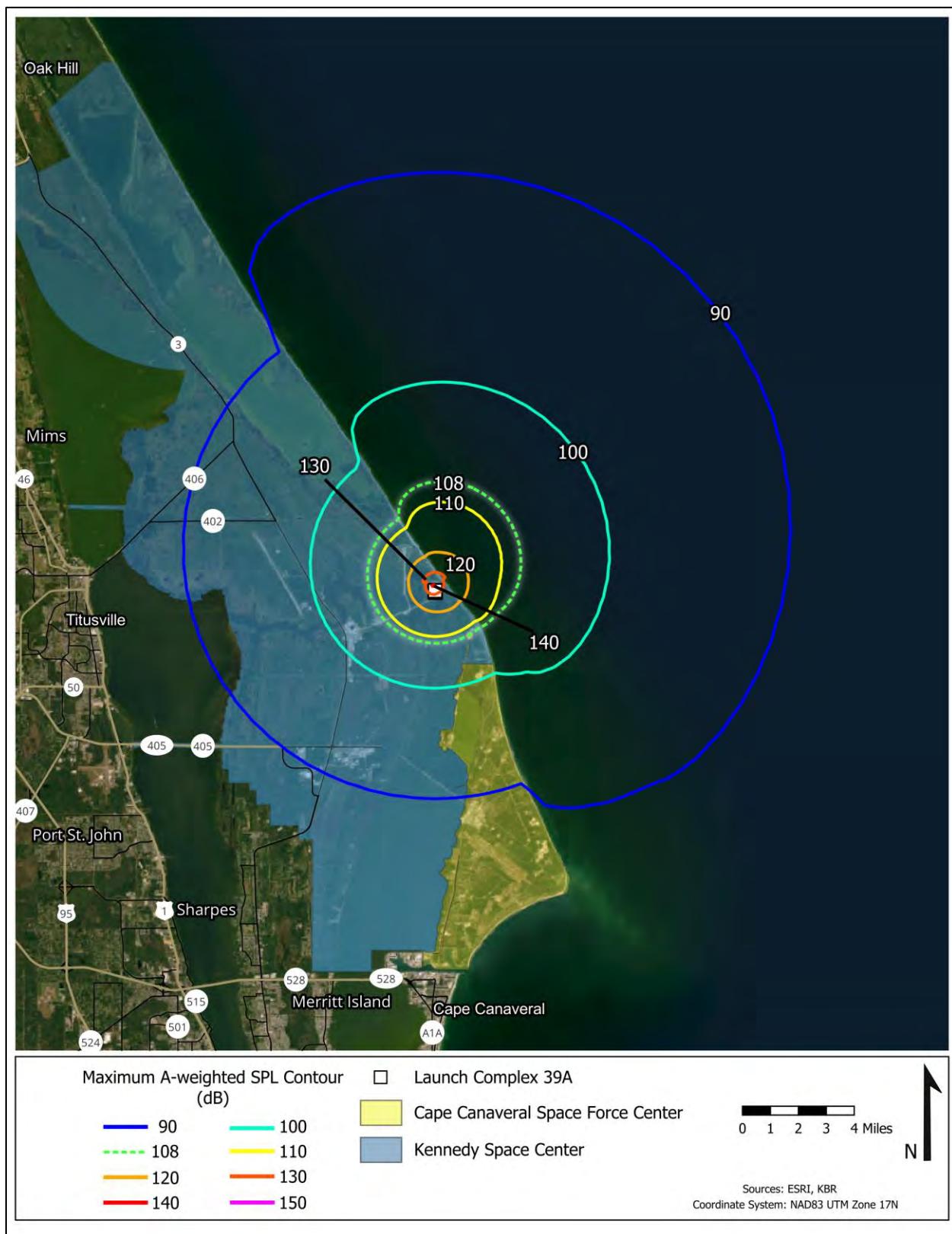


Figure 88. Super Heavy Landing at LC-39A (Nominal): Max A-Weighted Sound Levels: Summer Night

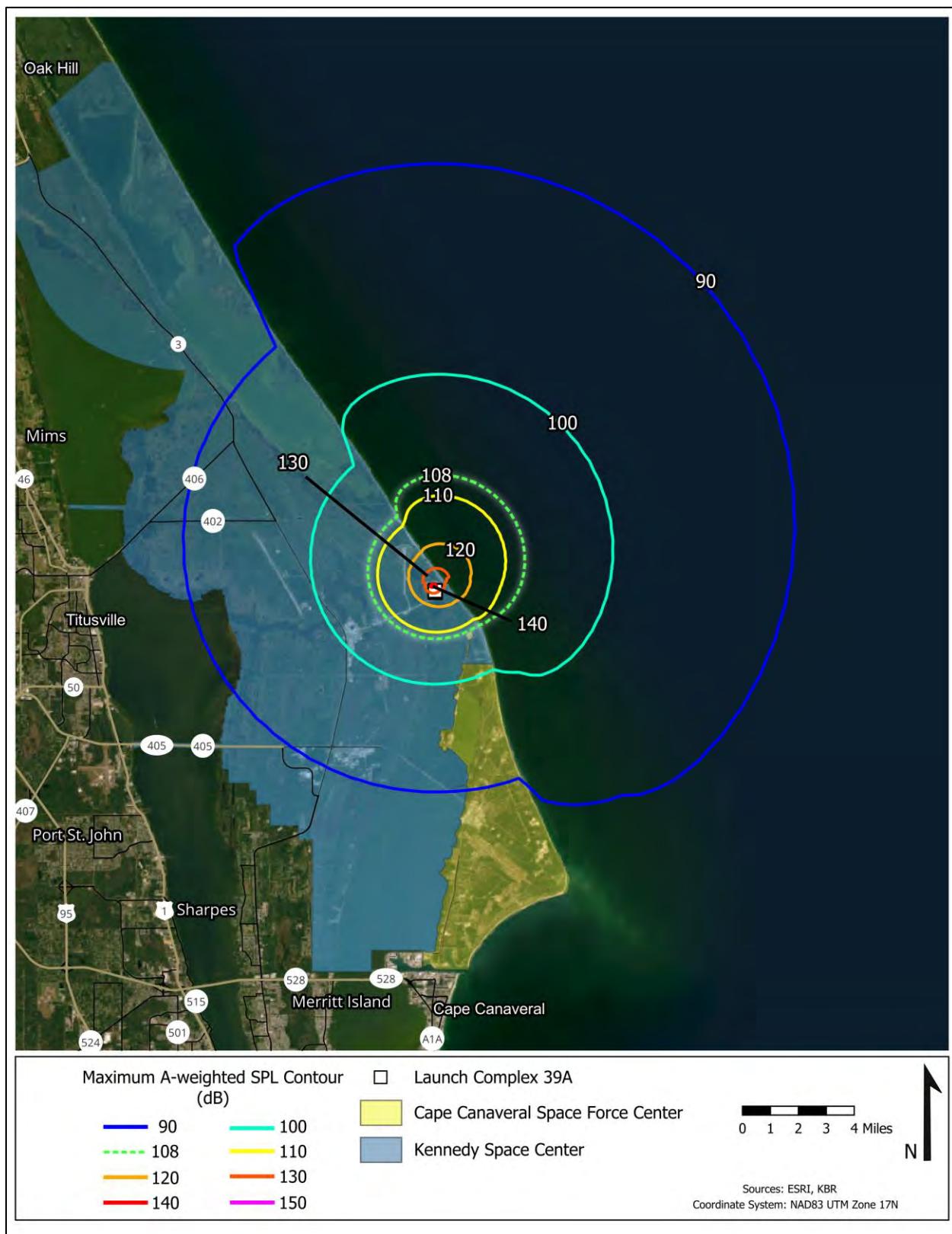


Figure 89. Super Heavy Landing at LC-39A (40-Degrees): Max A-Weighted Sound Levels: Summer Night

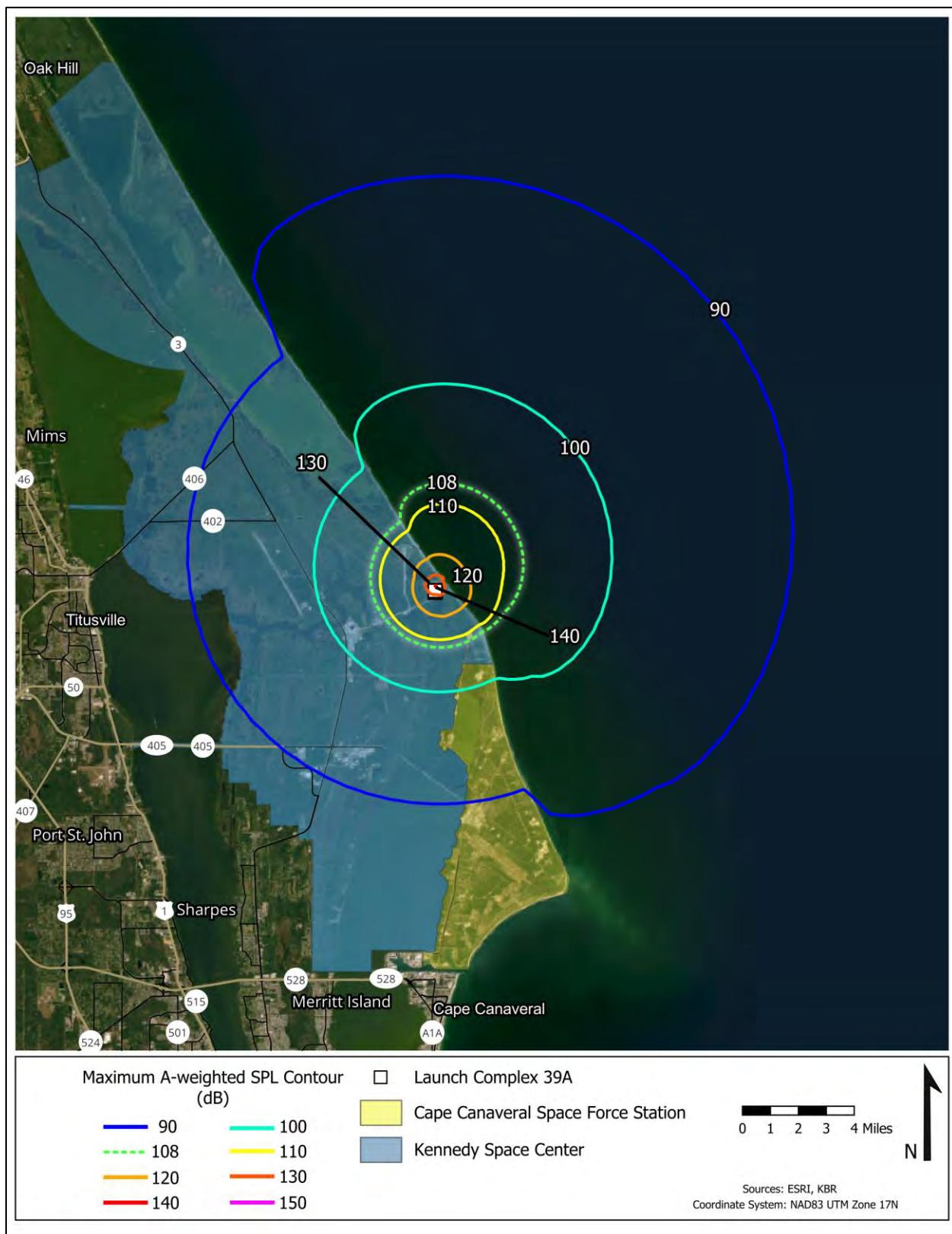


Figure 90. Super Heavy Landing at LC-39A (115-Degrees): Max A-Weighted Sound Levels: SummerNight

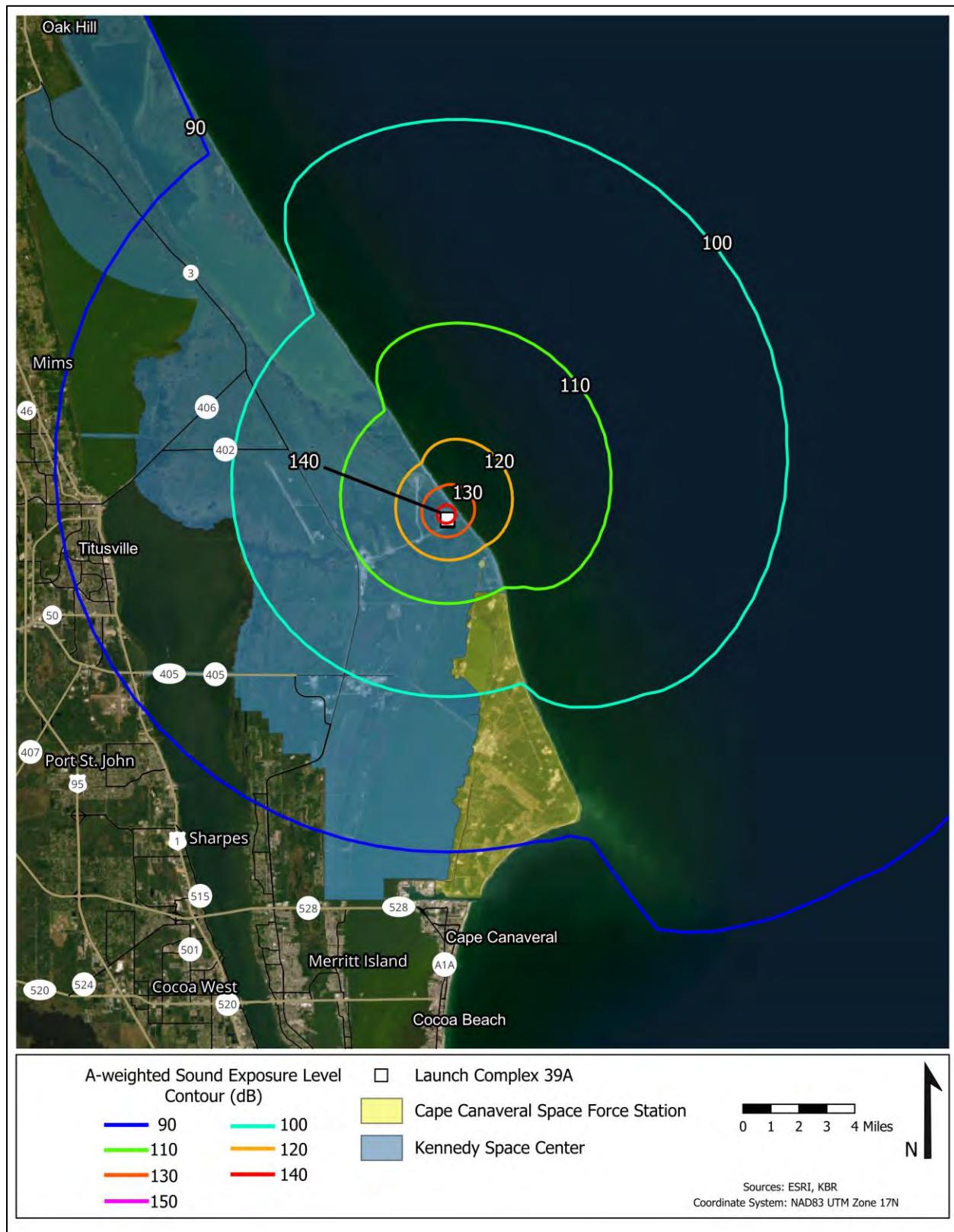


Figure 91. Super Heavy Landing at LC-39A (Nominal): Sound Exposure Levels: Summer Night

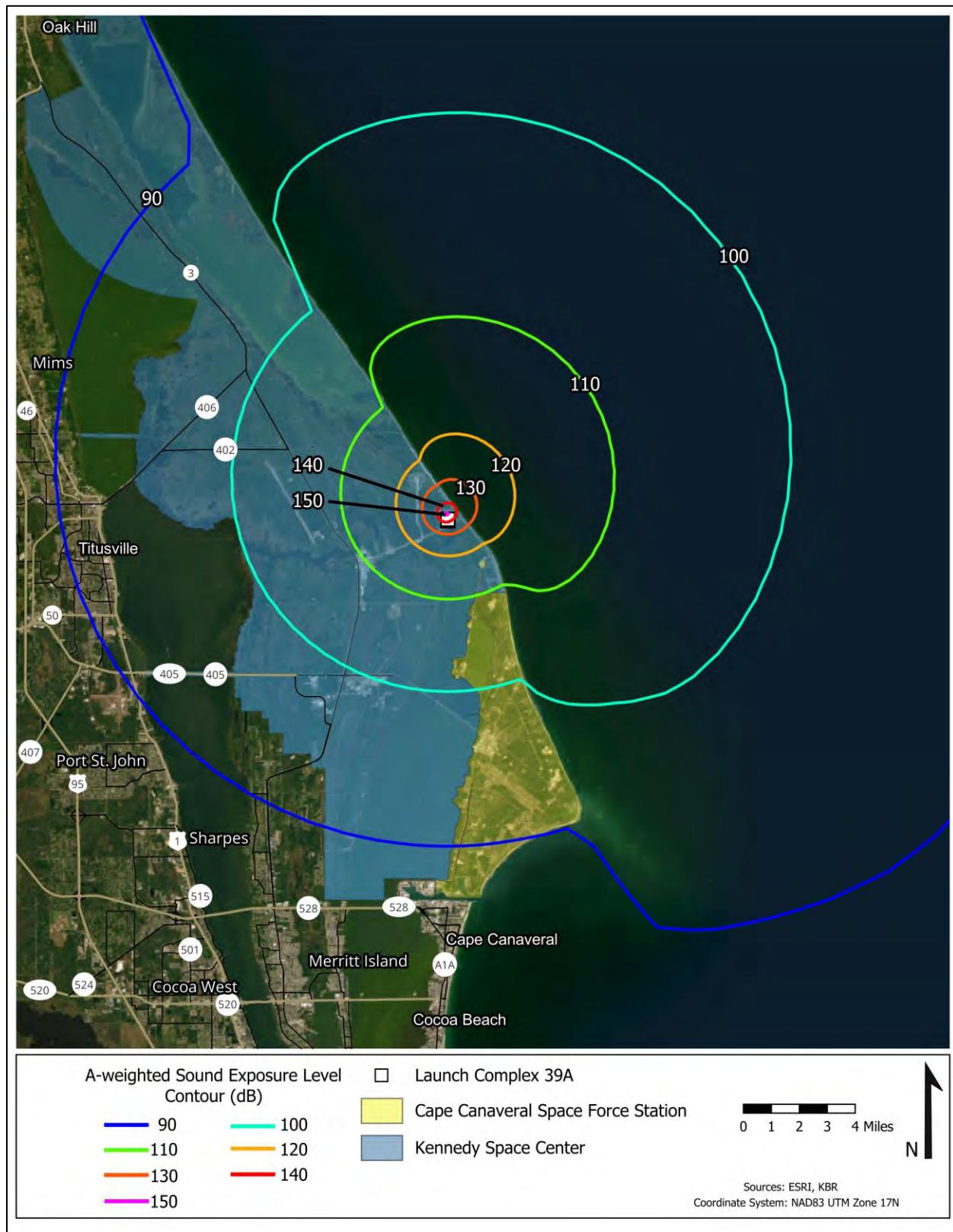


Figure 92. Super Heavy Landing at LC-39A (40-Degrees): Sound Exposure Levels: Summer Night

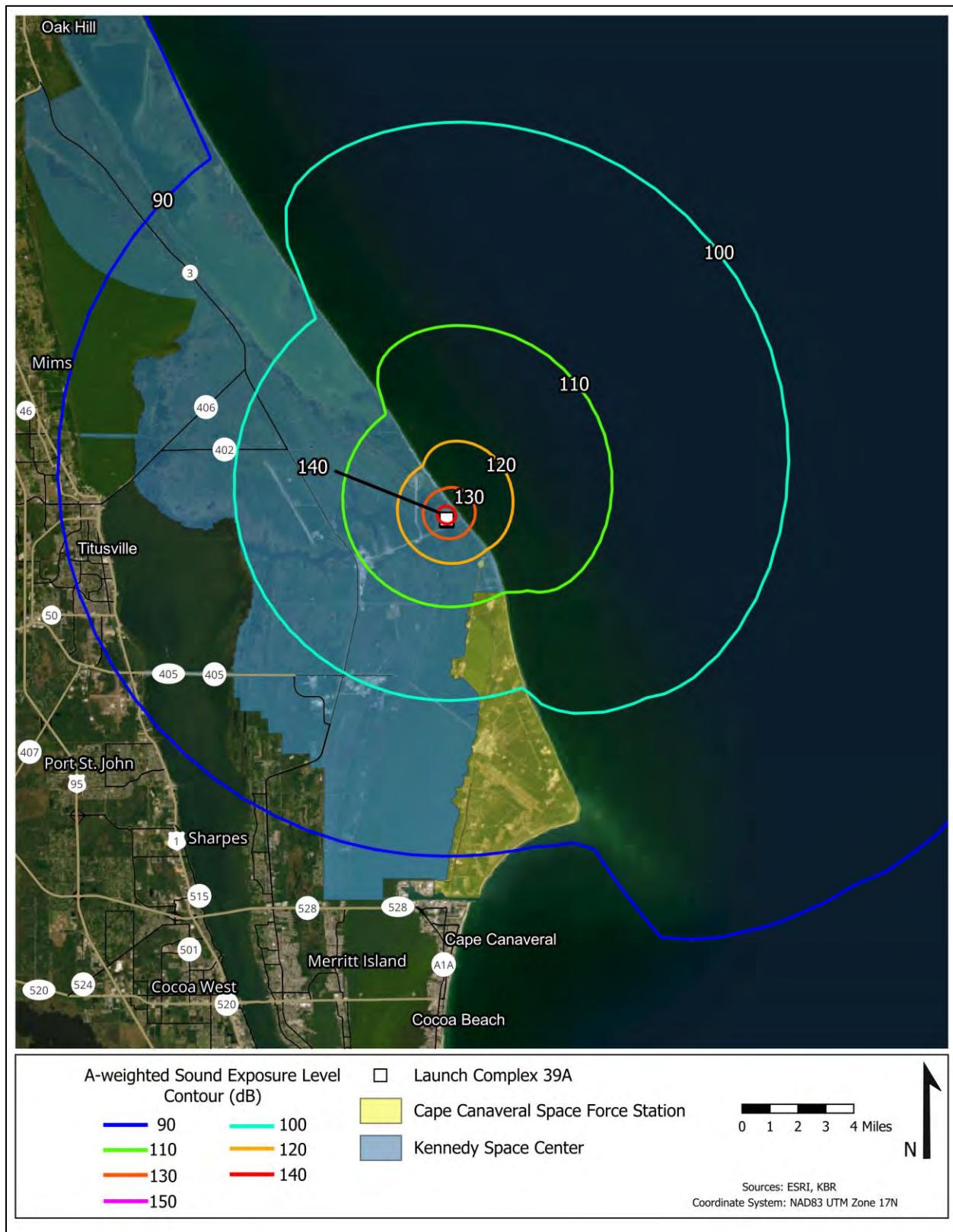


Figure 93. Super Heavy Landing at LC-39A (115-Degrees): Sound Exposure Levels: Summer Night

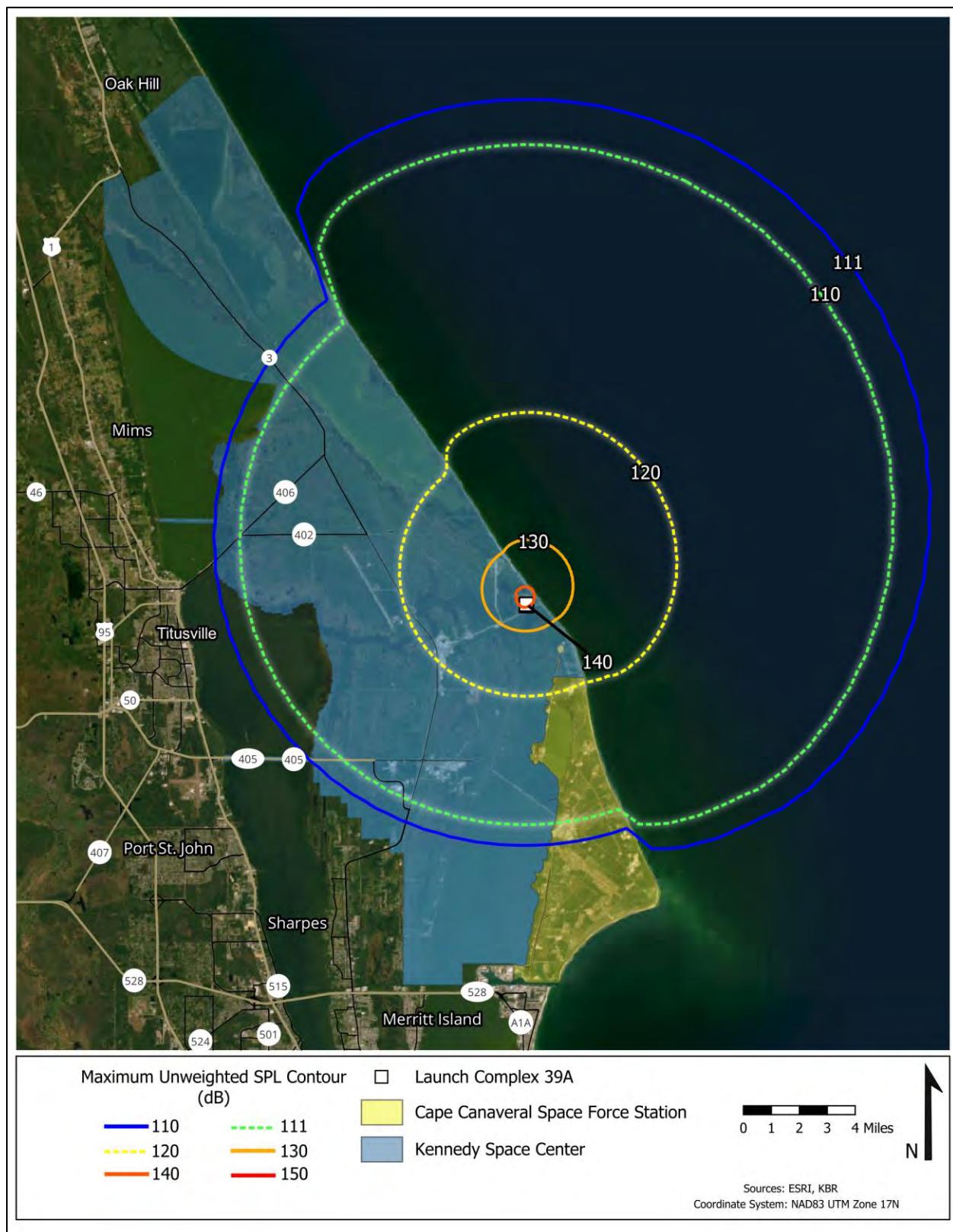


Figure 94. Super Heavy Landing at LC-39A (Nominal): Max Unweighted Sound Levels: Summer Night

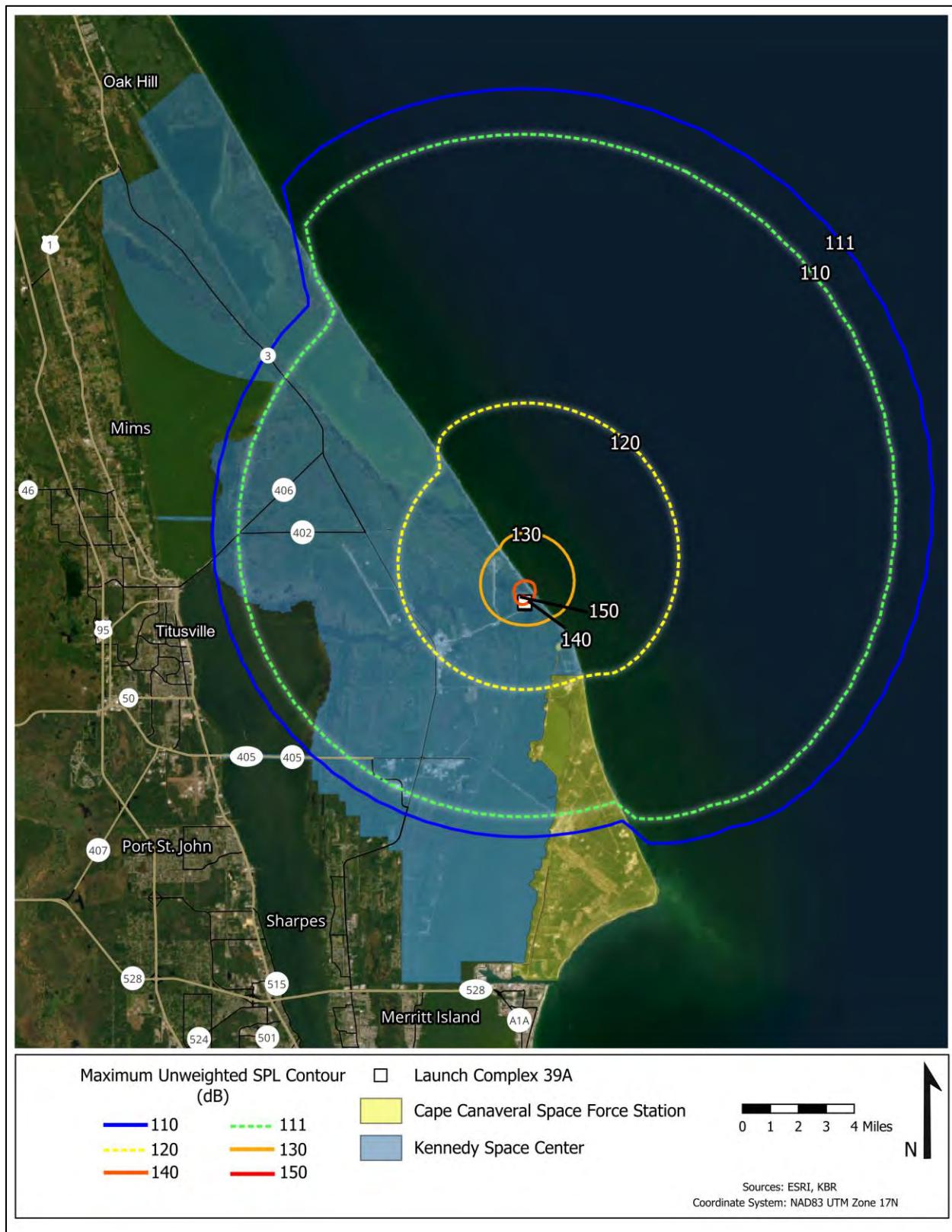


Figure 95. Super Heavy Landing at LC-39A (40-Degrees): Max Unweighted Sound Levels: Summer Night

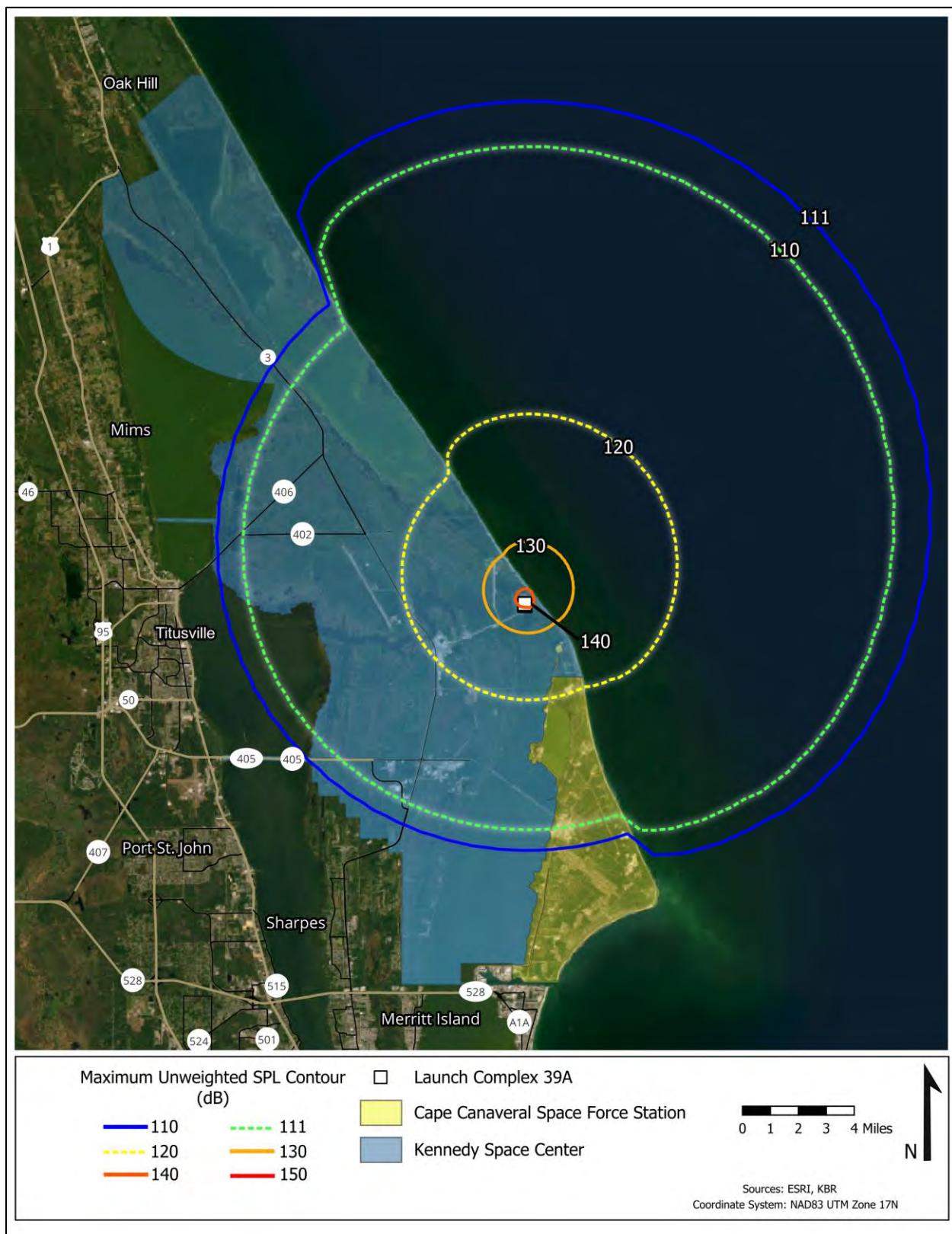


Figure 96. Super Heavy Landing at LC-39A (115-Degrees): Max Unweighted Sound Levels: Summer Night

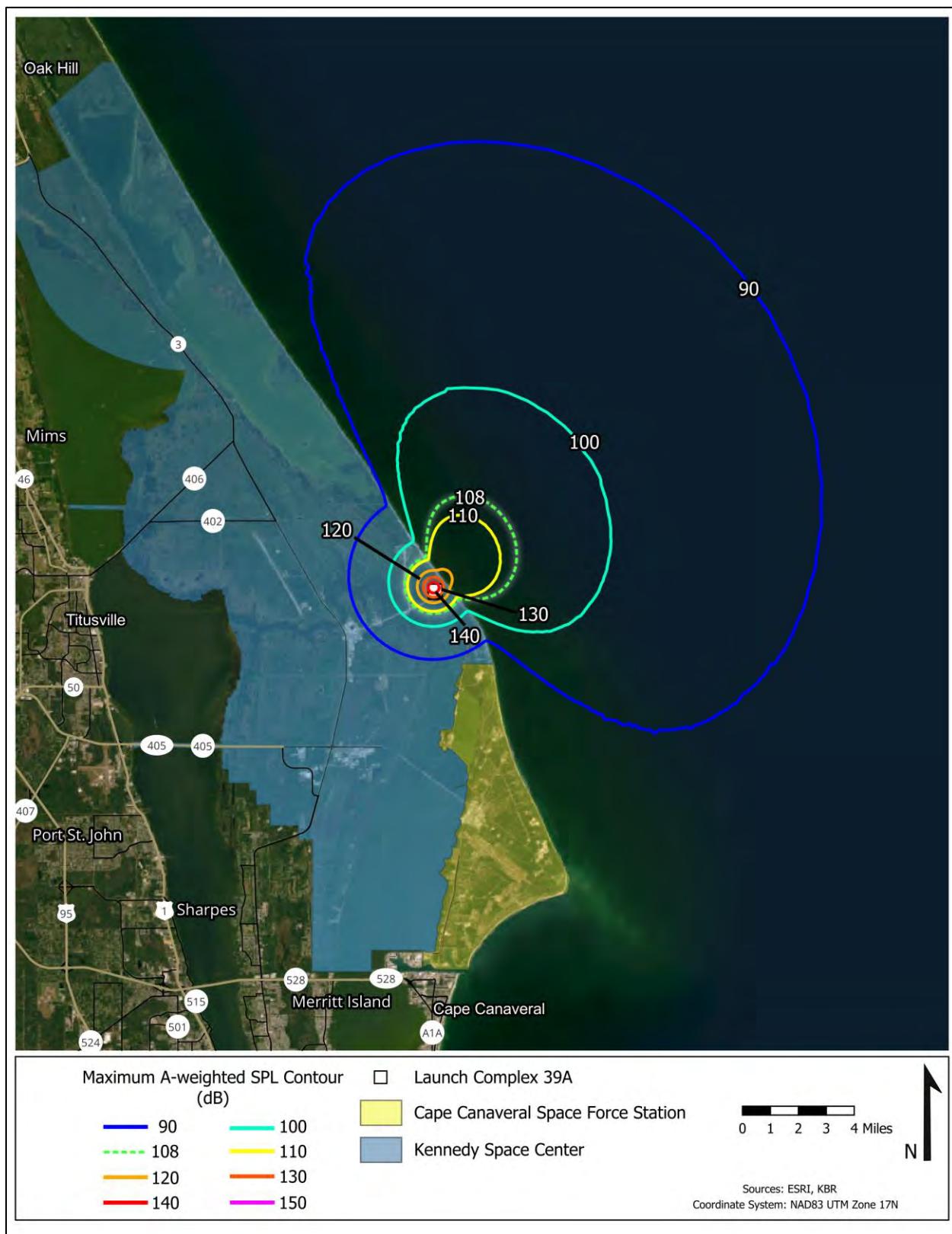


Figure 97. Starship Spacecraft Static Fire Test at LC-39A: Max A-Weighted Sound Levels: Summer Night

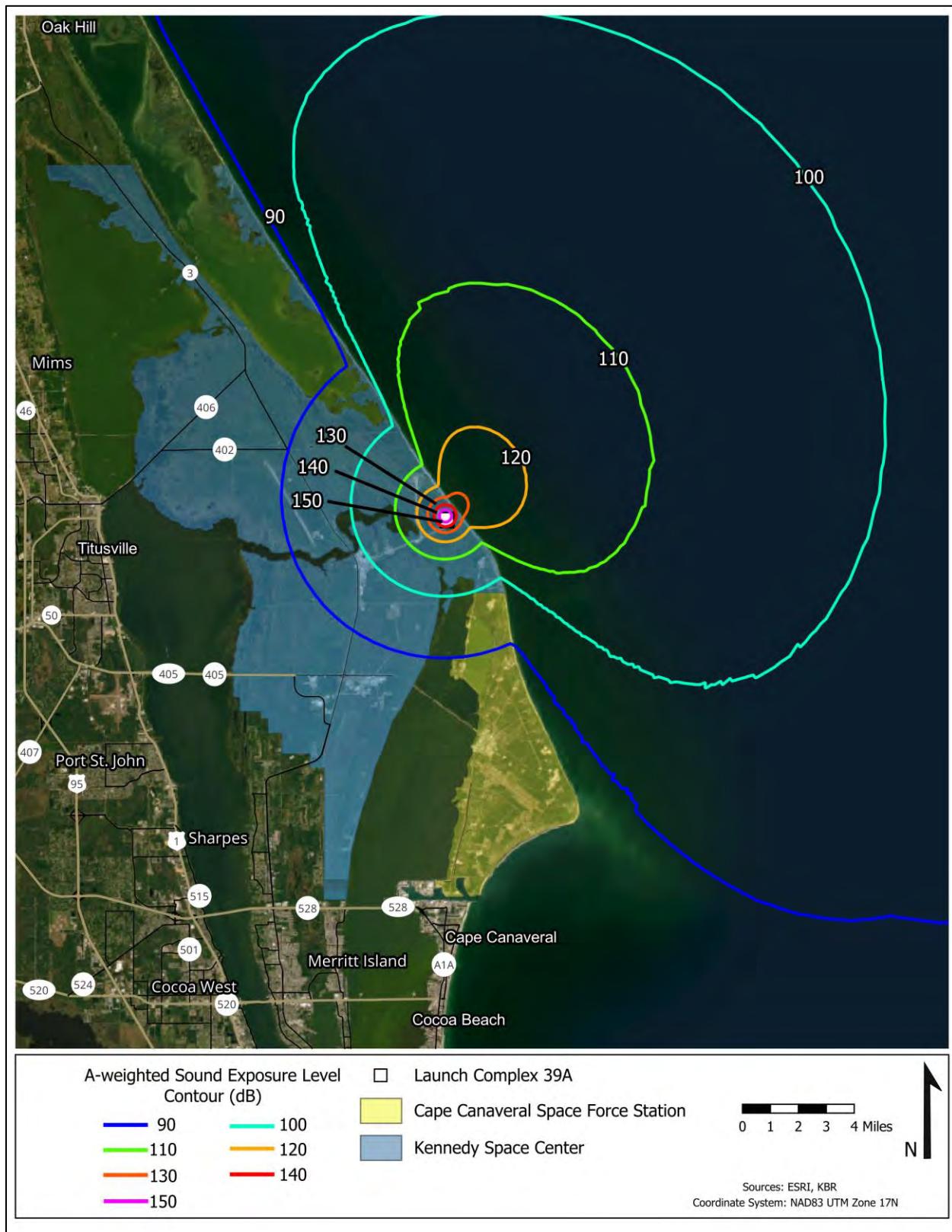


Figure 98. Starship Spacecraft Static Fire Test at LC-39A: Sound Exposure Levels: Summer Night

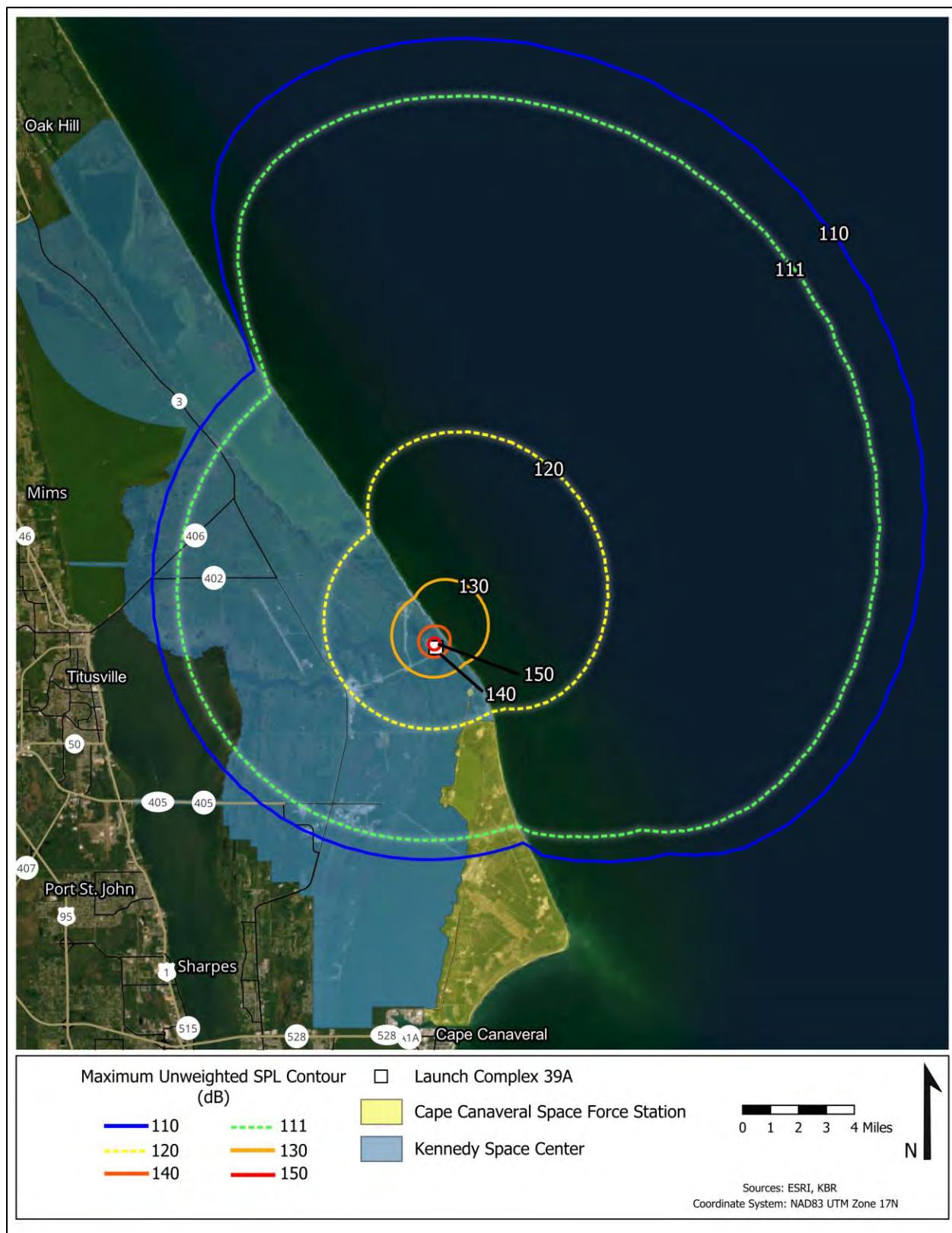


Figure 99. Starship Spacecraft Static Test at LC-39A: Max Unweighted Sound Levels: Summer Night

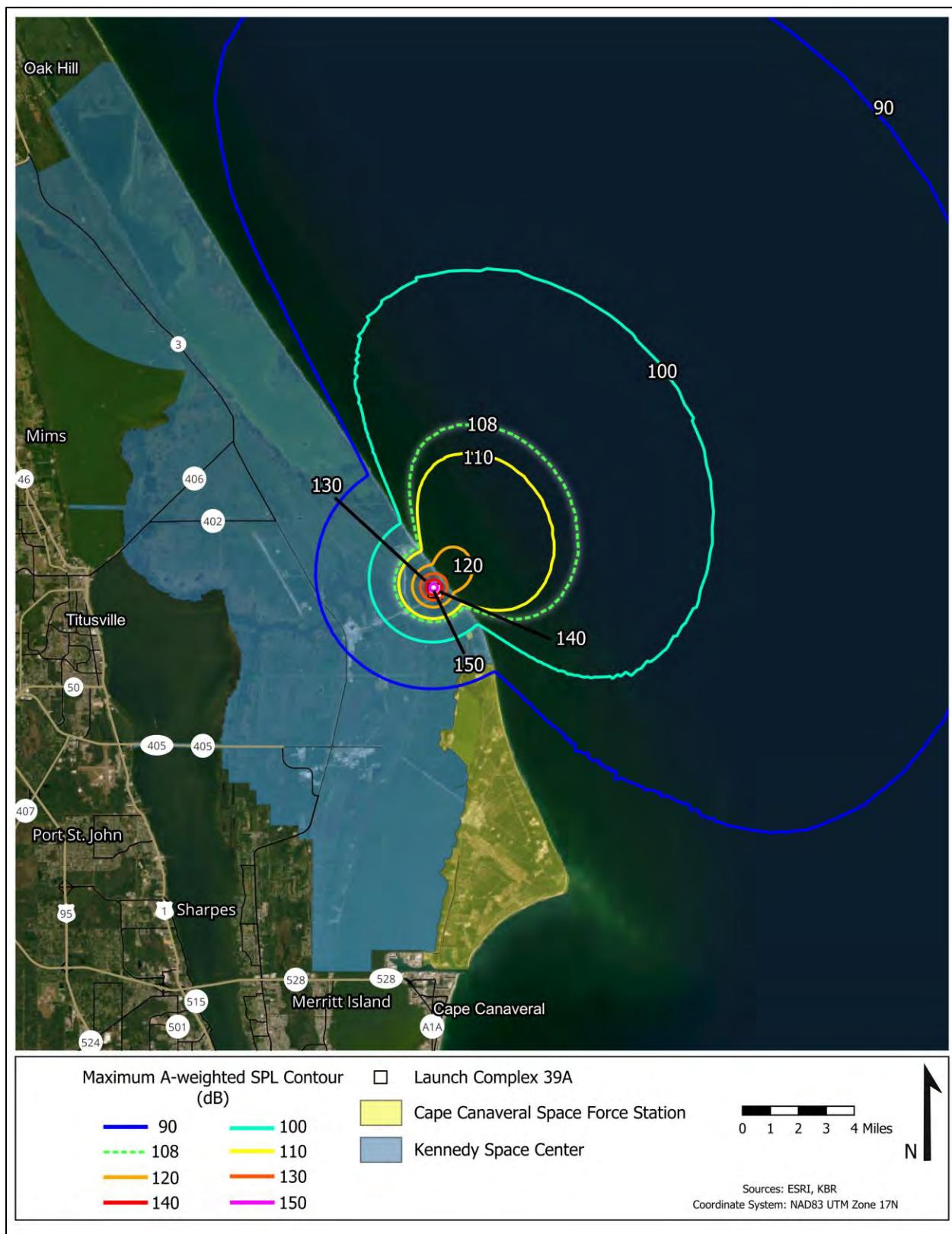


Figure 100. Super Heavy Static Fire Test at LC-39A: Maximum A-Weighted Sound Levels: Summer Night

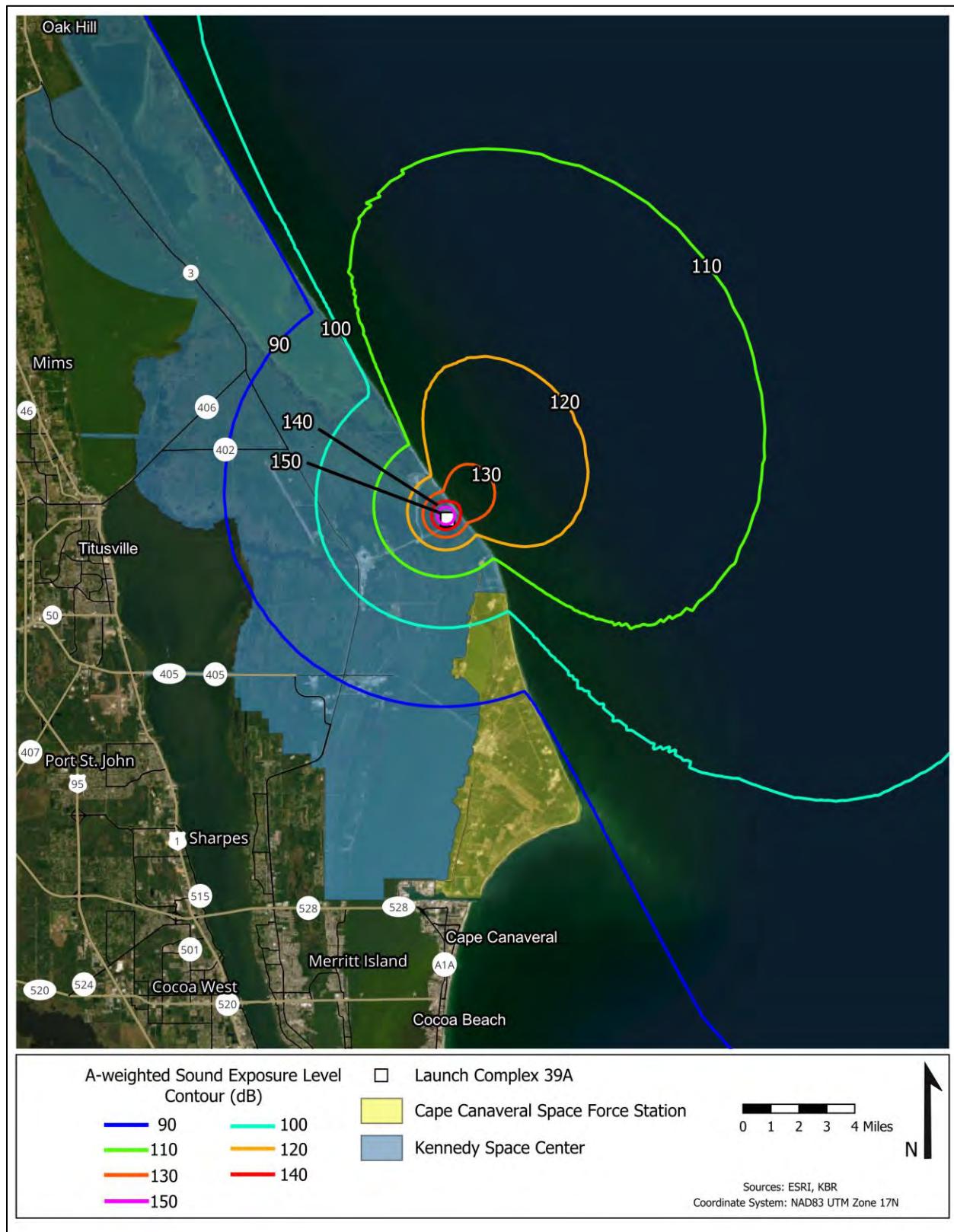


Figure 101. Super Heavy Static Fire Test at LC-39A: Sound Exposure Levels: Summer Night

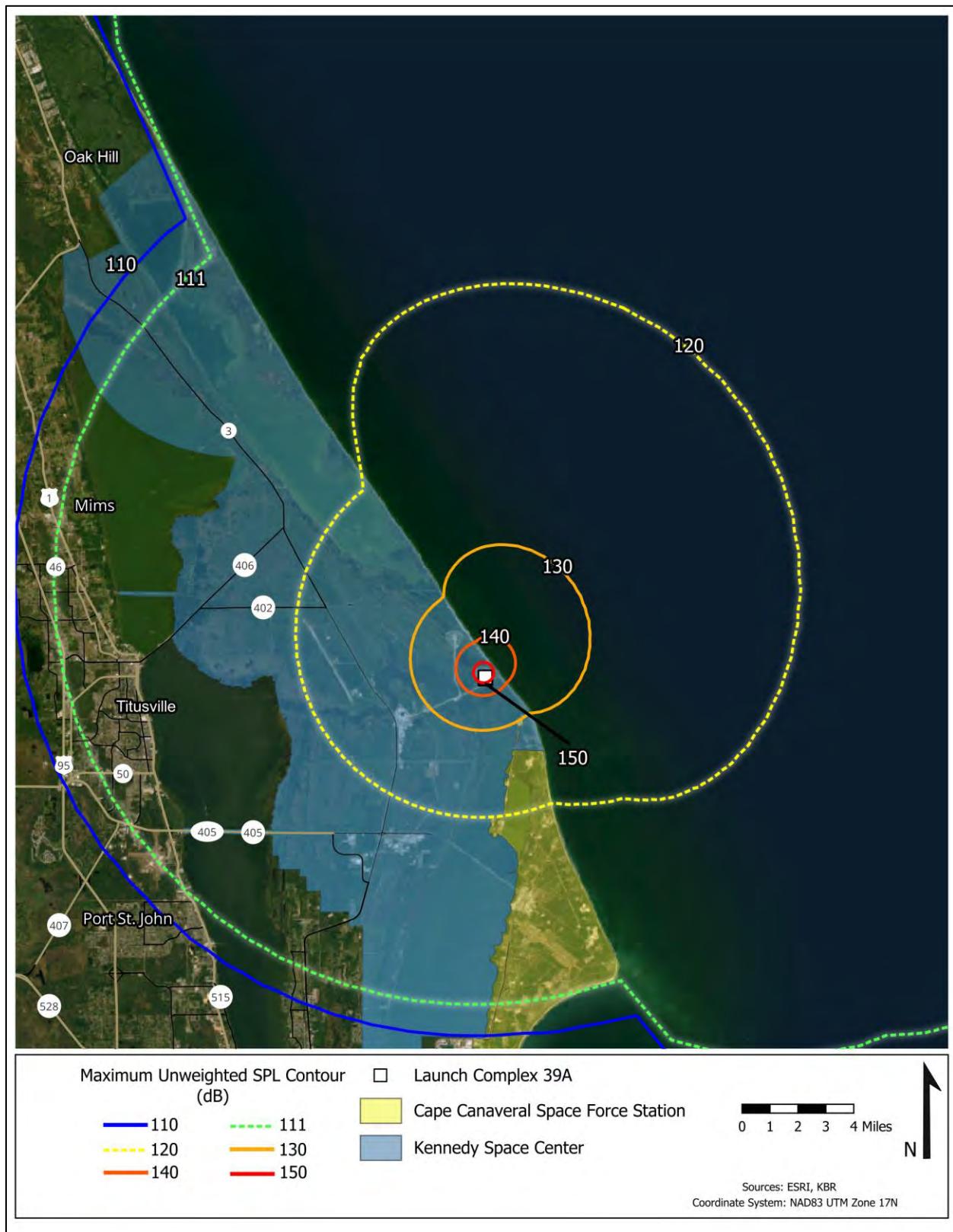


Figure 102. Super Heavy Static Fire Test at LC-39A: Max Unweighted Sound Levels: Summer Night

3.1.4 Rocket Noise: $L_{A\max}$, SEL, and L_{\max} Contour Figures: Winter Day

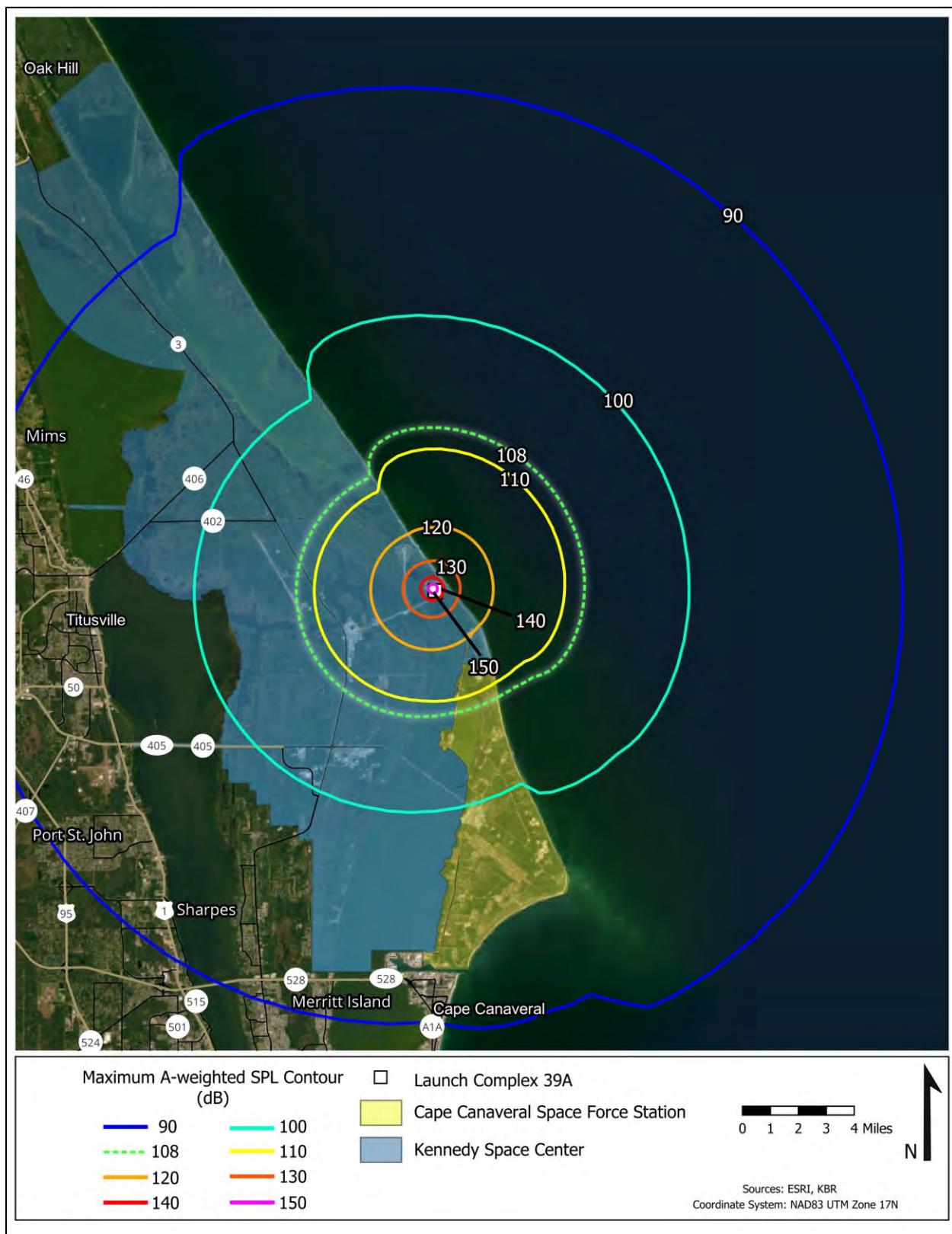


Figure 103. Starship Orbital Launch from LC-39A: Maximum A-Weighted Sound Levels: Winter Day

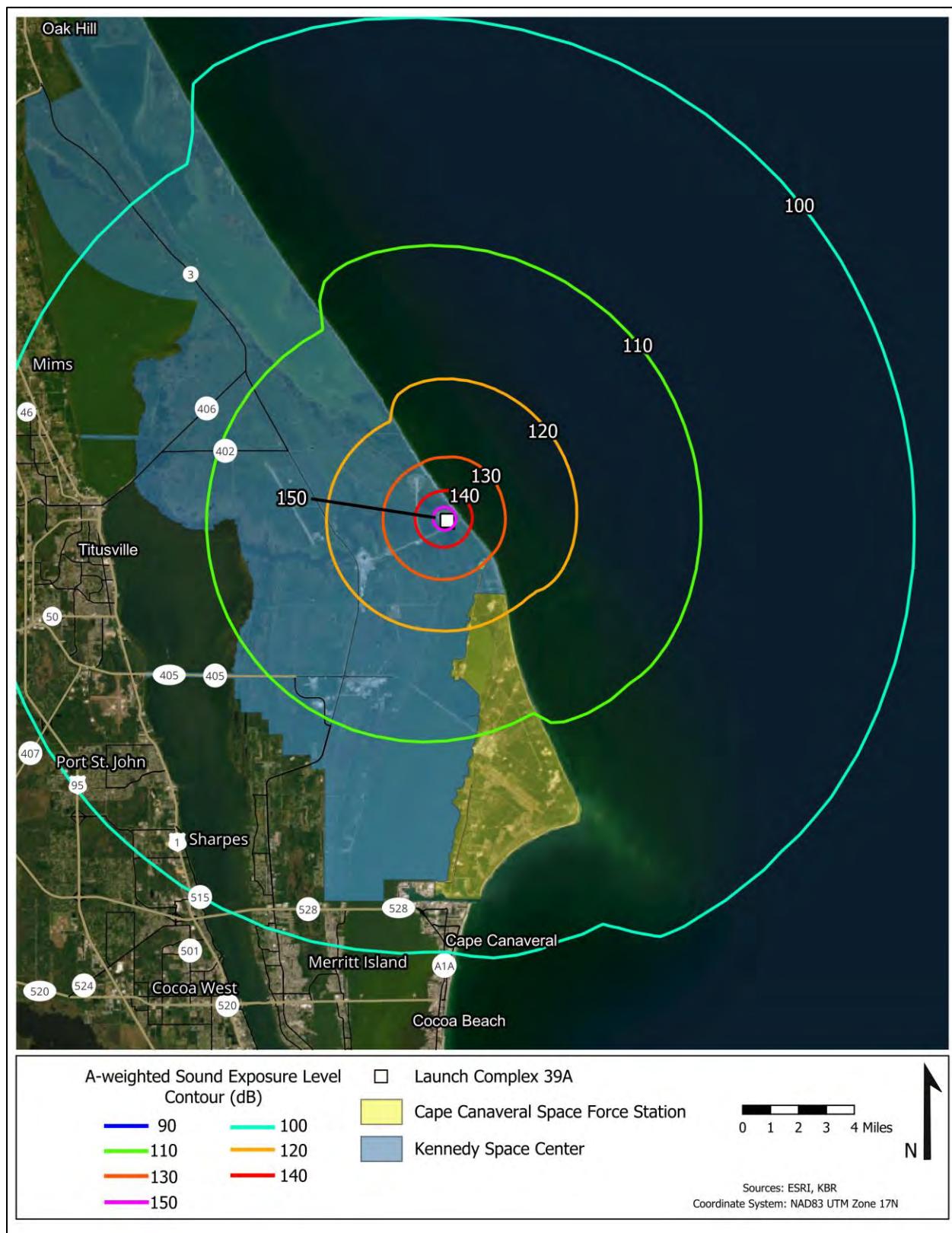


Figure 104. Starship Orbital Launch from LC-39A: Sound Exposure Levels: Winter Day

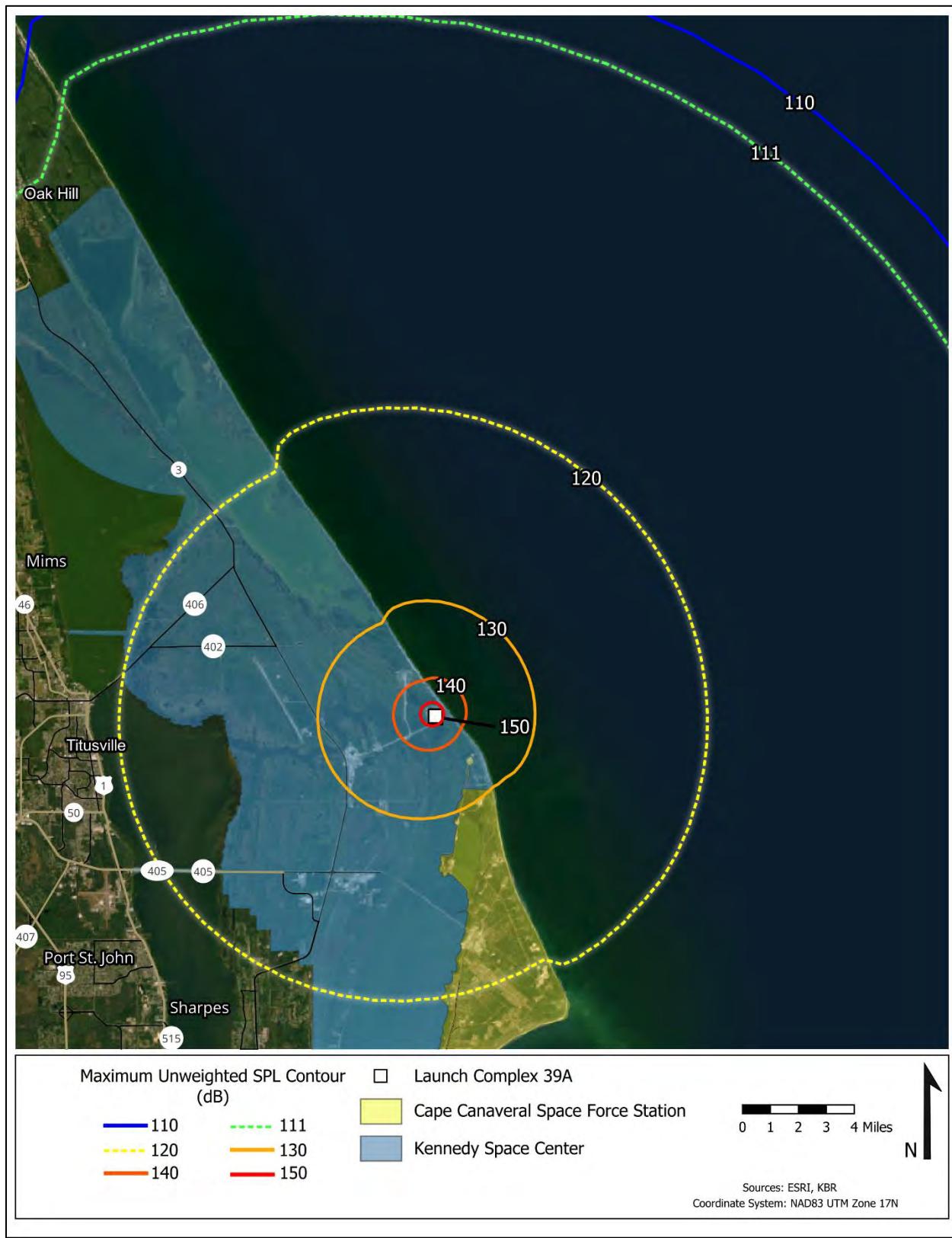


Figure 105. Starship Orbital Launch from LC-39A: Maximum Unweighted Sound Levels: Winter Day

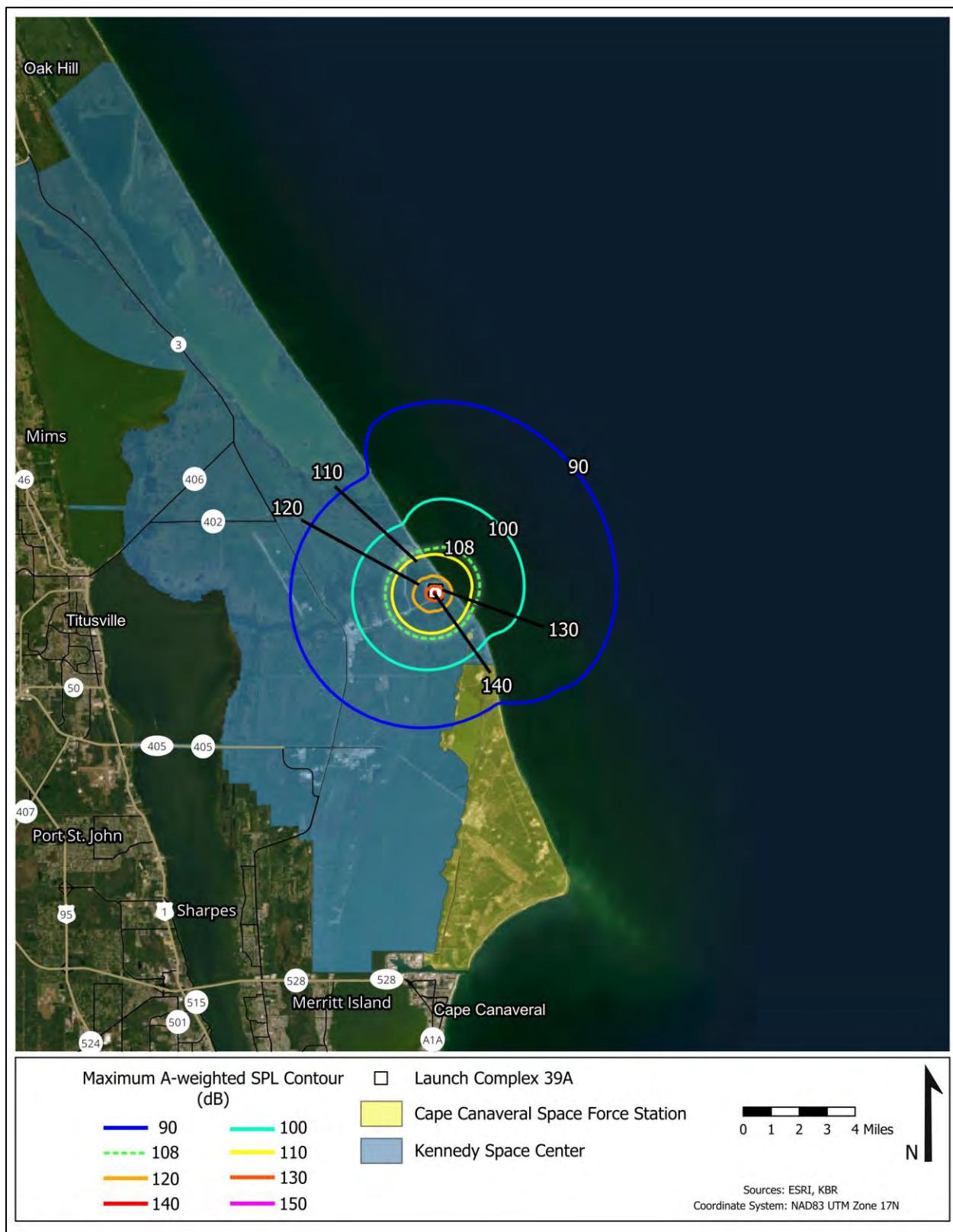


Figure 106. Starship Spacecraft Landing at LC-39A: Maximum A-Weighted Sound Levels: Winter Day

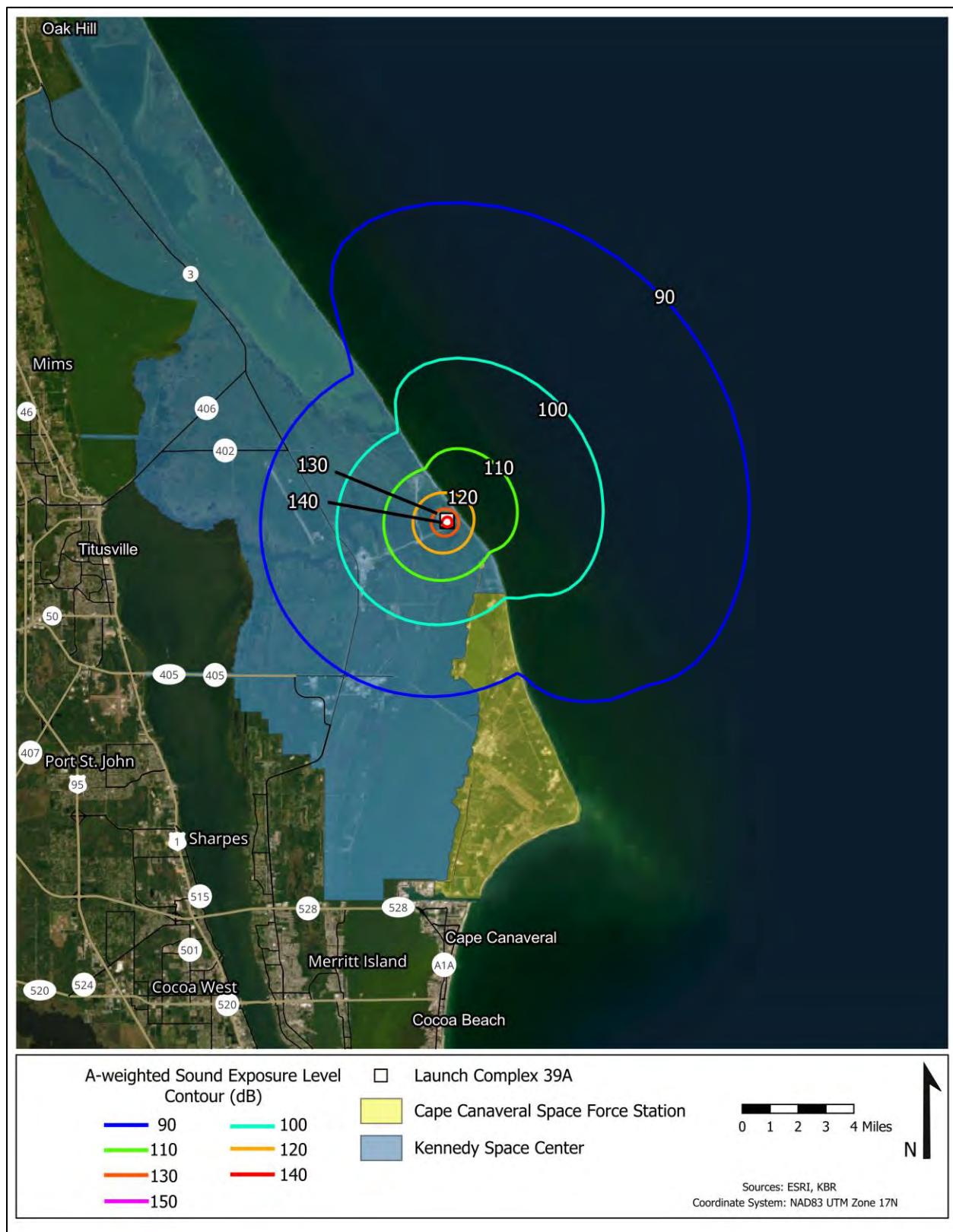


Figure 107. Starship Spacecraft Landing at LC-39A: Sound Exposure Levels: Winter Day

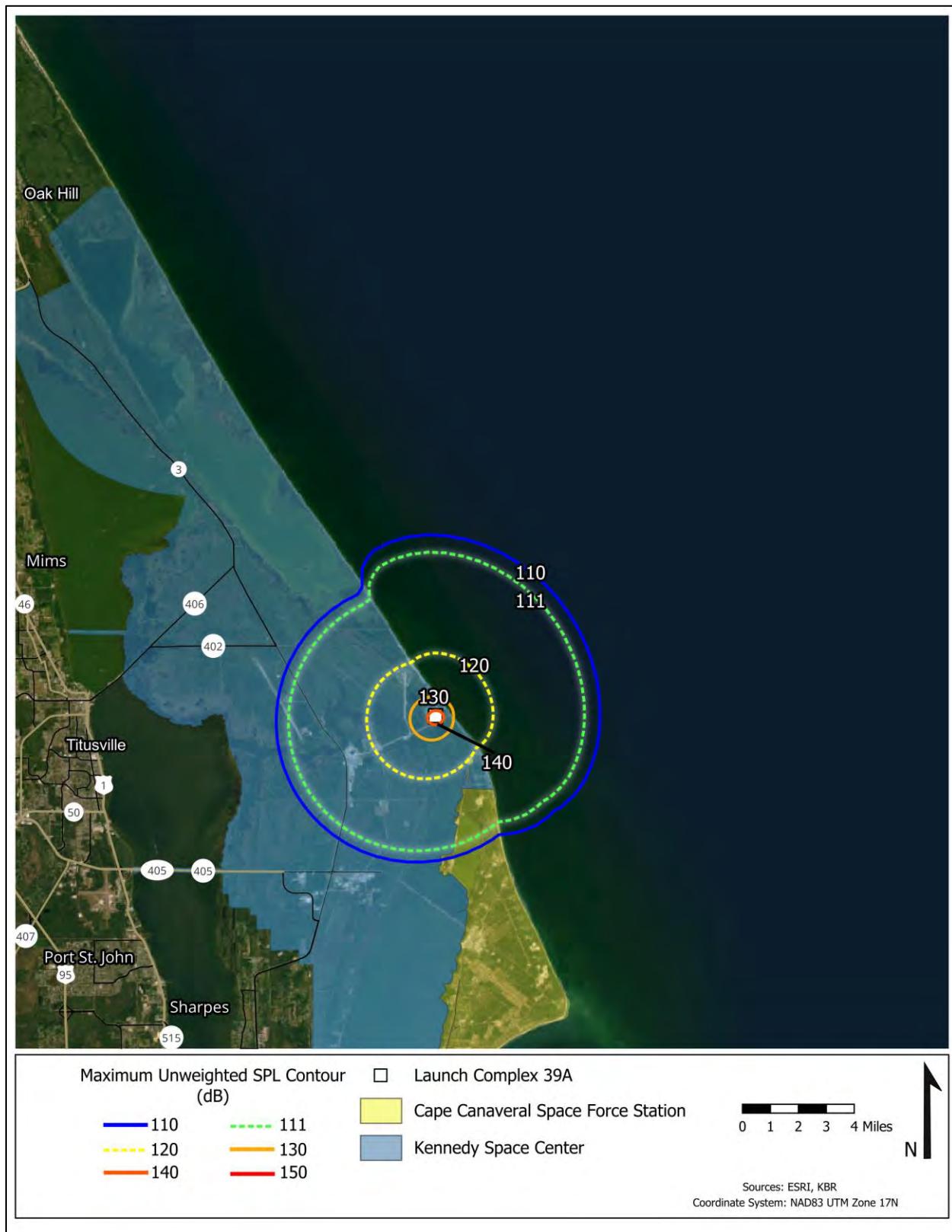


Figure 108. Starship Spacecraft Landing at LC-39A: Maximum Unweighted Sound Levels: Winter Day

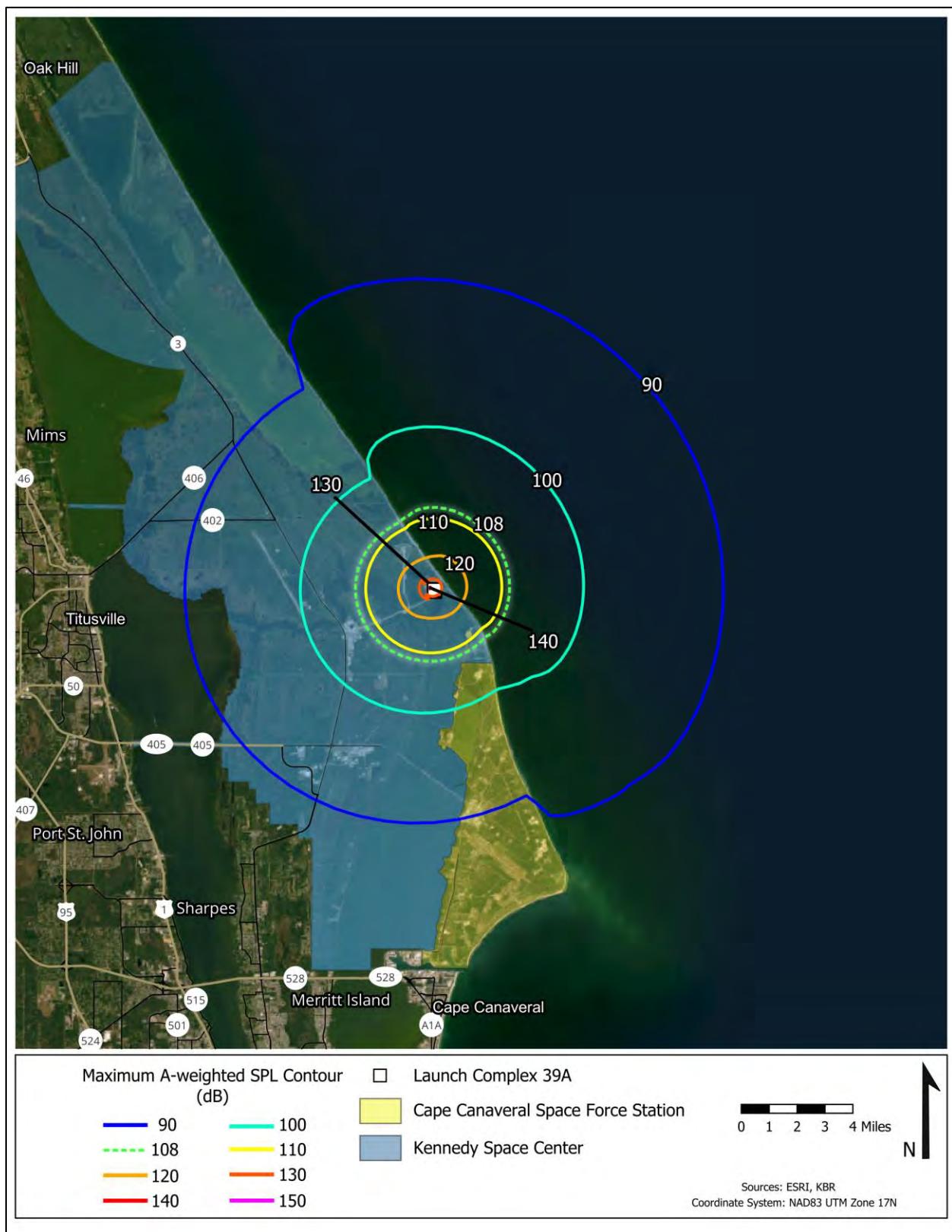


Figure 109. Super Heavy Landing at LC-39A (Nominal): Max A-Weighted Sound Levels: Winter Day

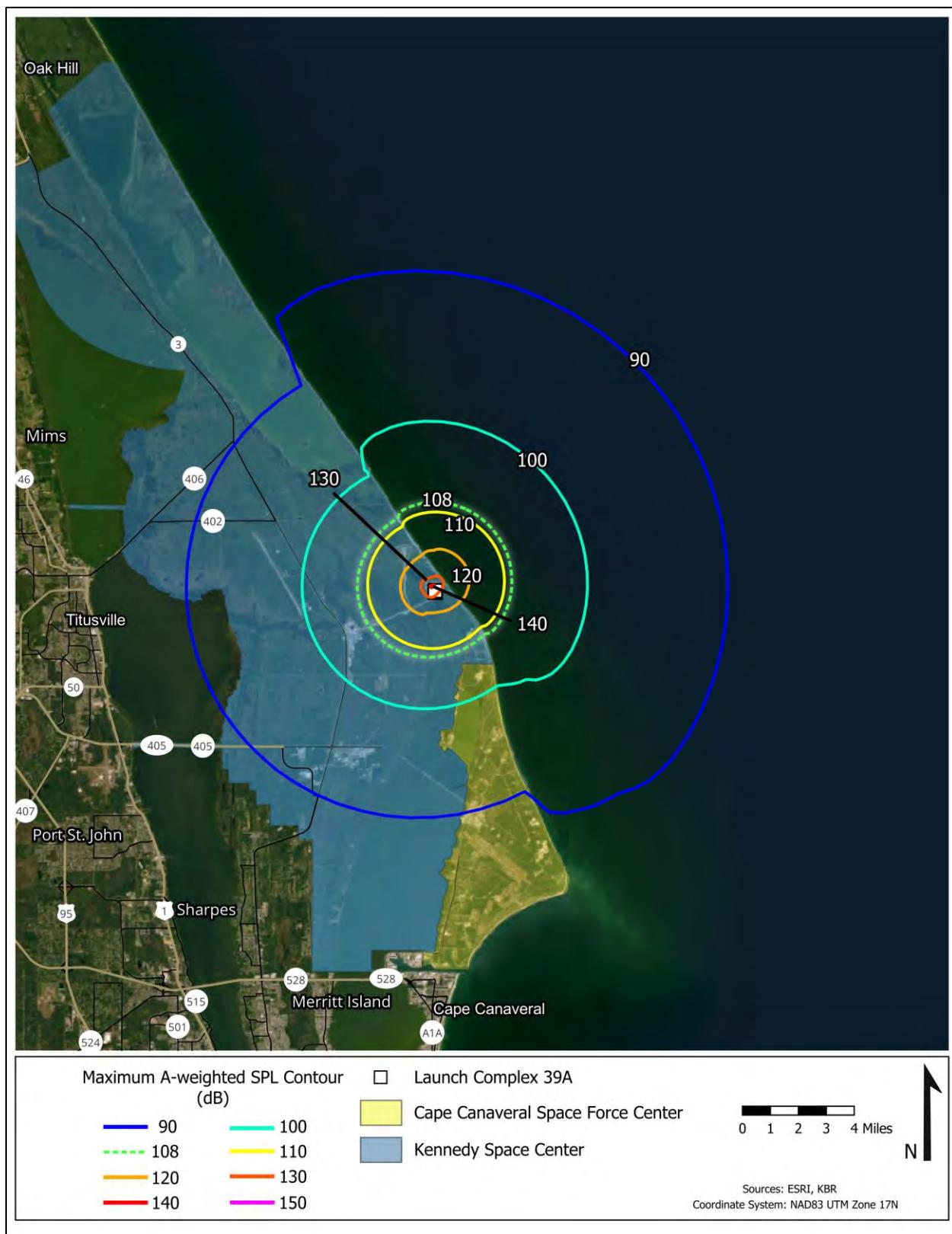


Figure 110. Super Heavy Landing at LC-39A (40-Degrees): Max A-Weighted Sound Levels: Winter Day

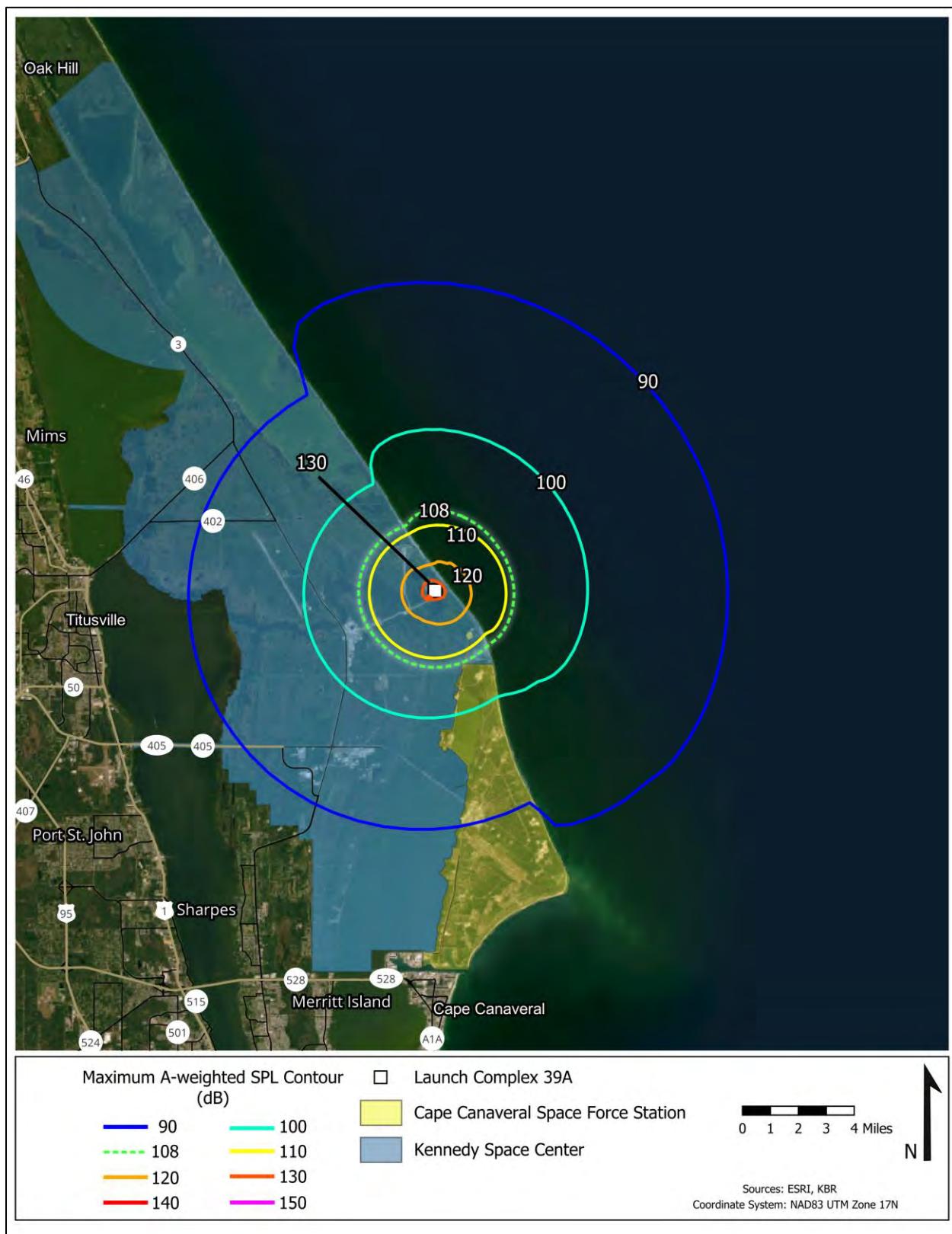


Figure 111. Super Heavy Landing at LC-39A (115-Degrees): Max A-Weighted Sound Levels: Winter Day

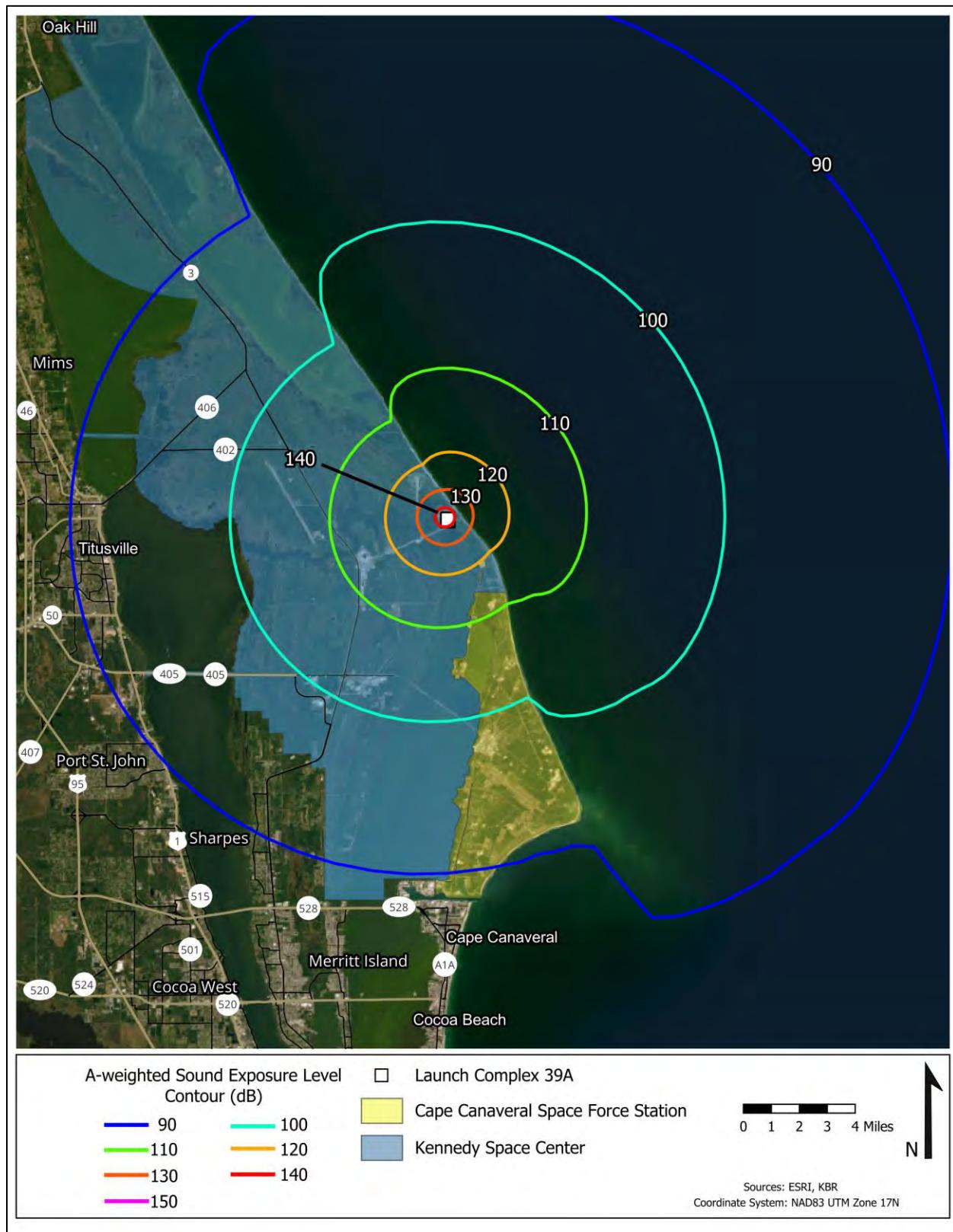


Figure 112. Super Heavy Landing at LC-39A (Nominal): Sound Exposure Levels: Winter Day

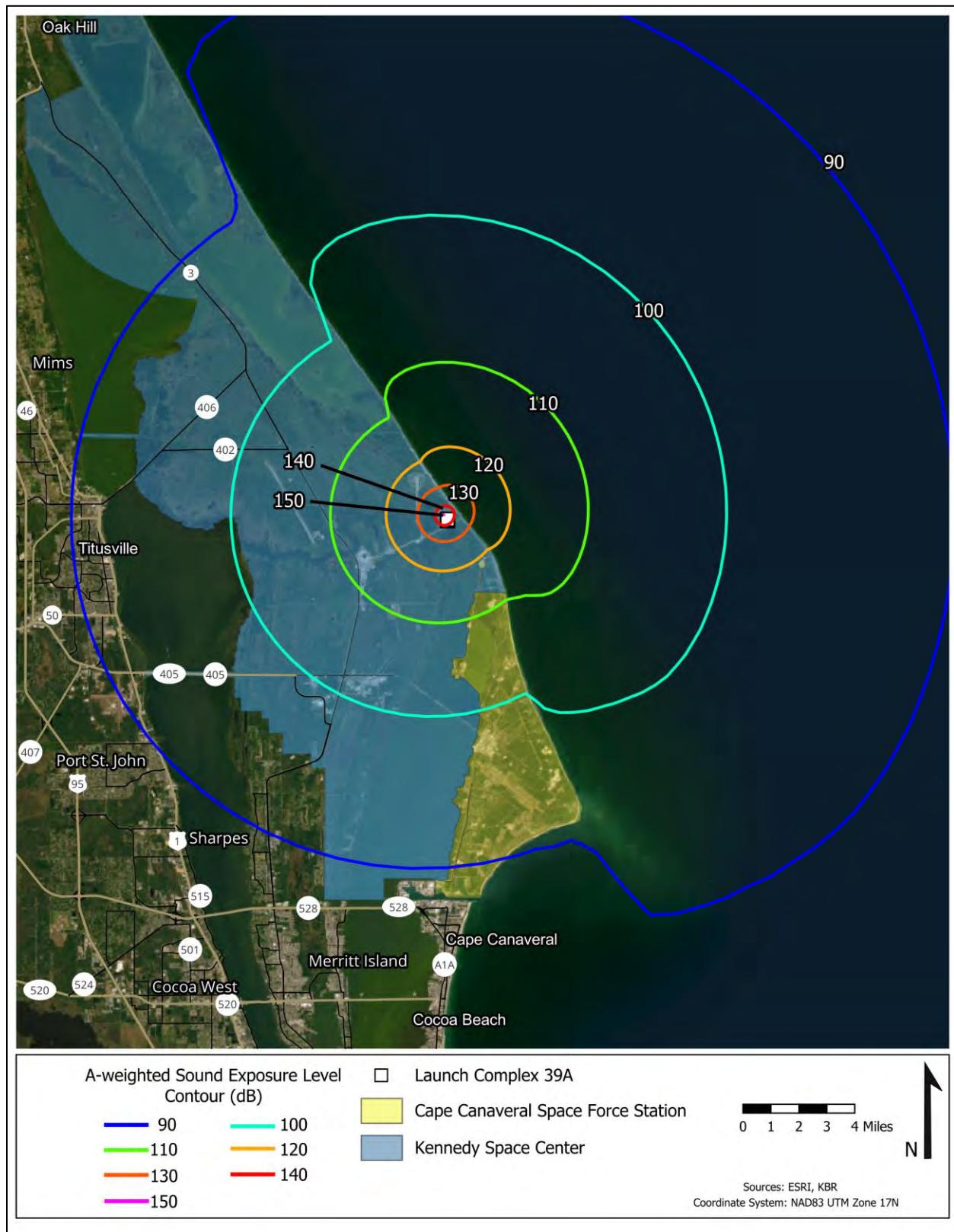


Figure 113. Super Heavy Landing at LC-39A (40-Degrees): Sound Exposure Levels: Winter Day

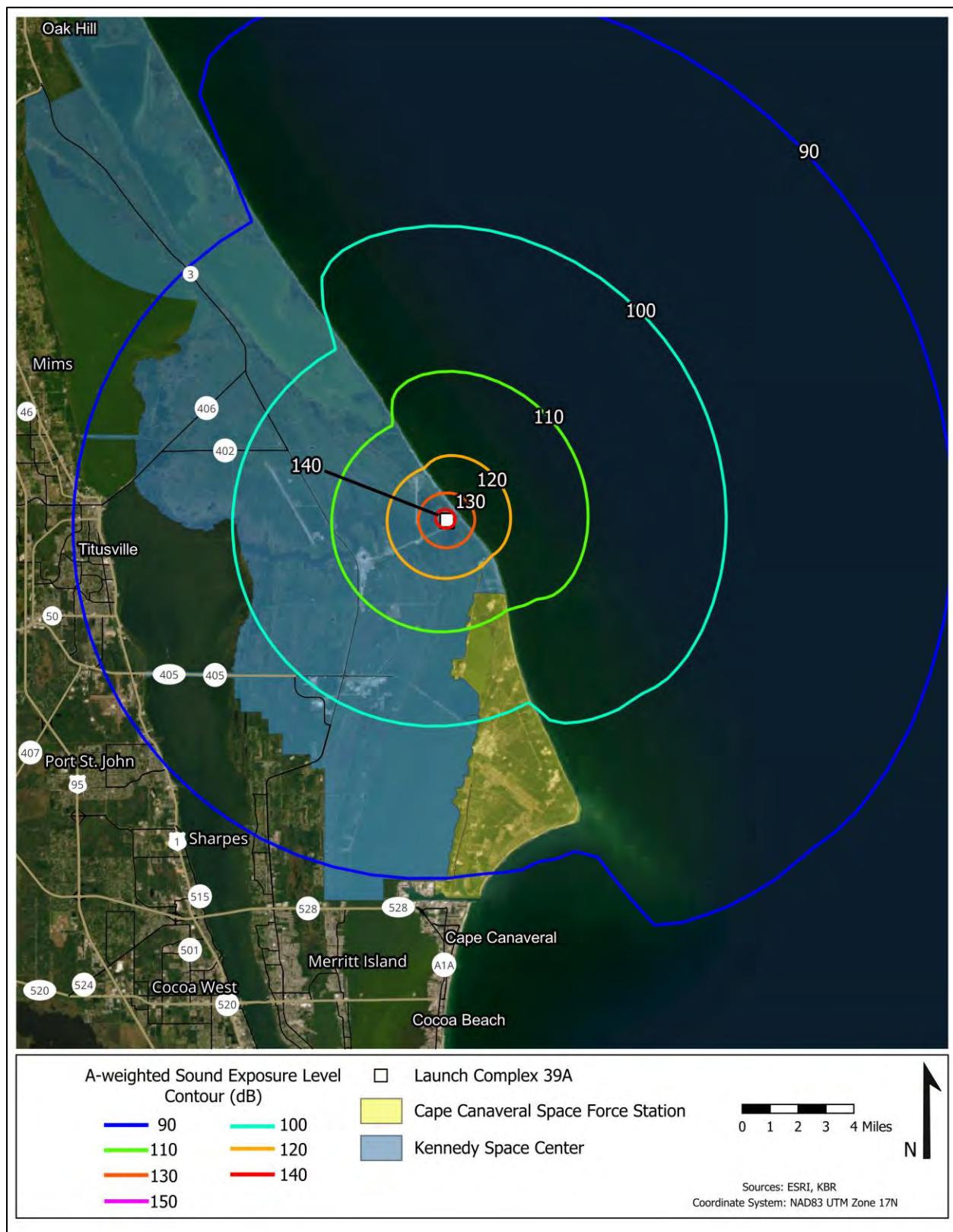


Figure 114. Super Heavy Landing at LC-39A (115-Degrees): Sound Exposure Levels: Winter Day

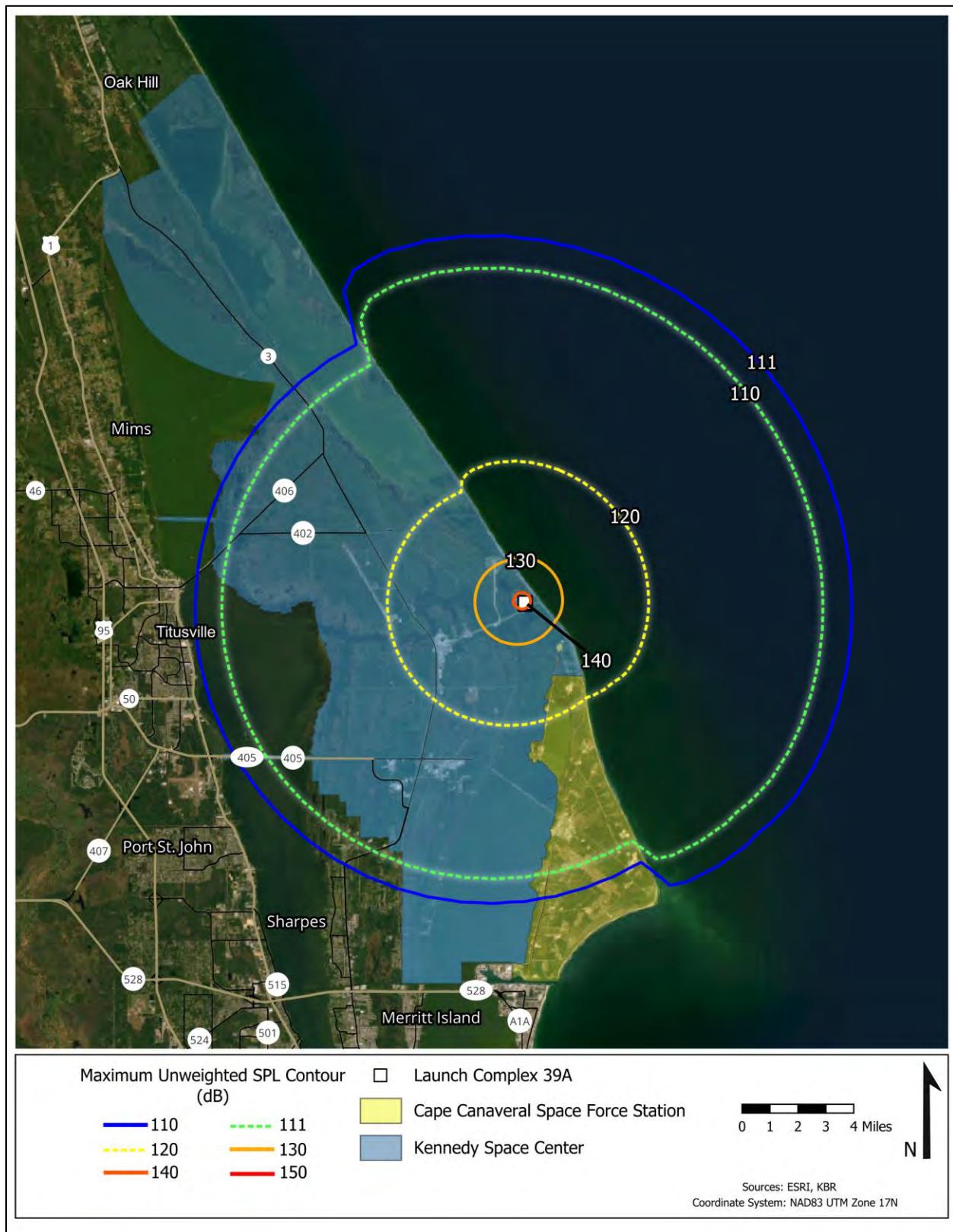


Figure 115. Super Heavy Landing at LC-39A (Nominal): Max Unweighted Sound Levels: Winter Day

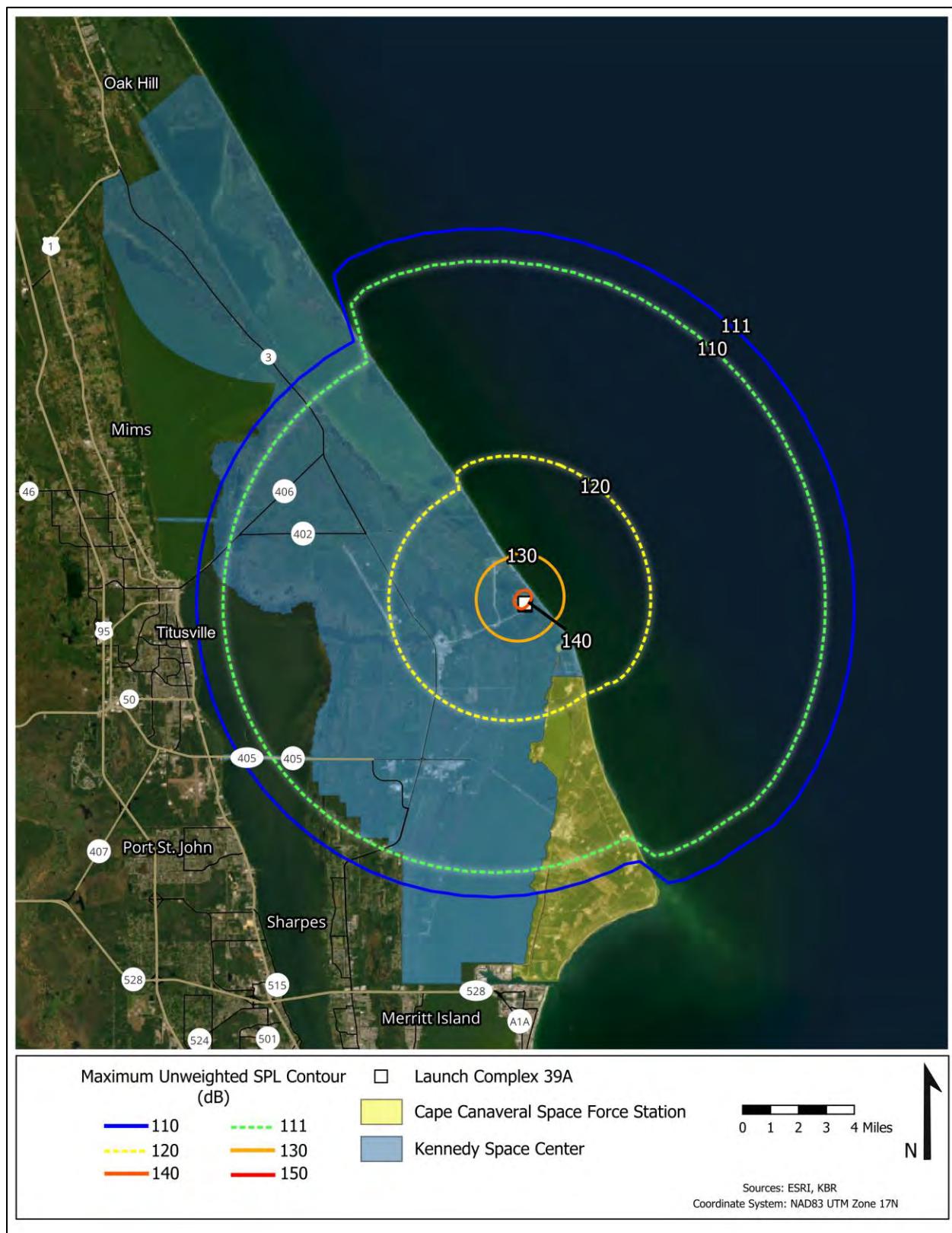


Figure 116. Super Heavy Landing at LC-39A (40-Degrees): Max Unweighted Sound Levels: Winter Day

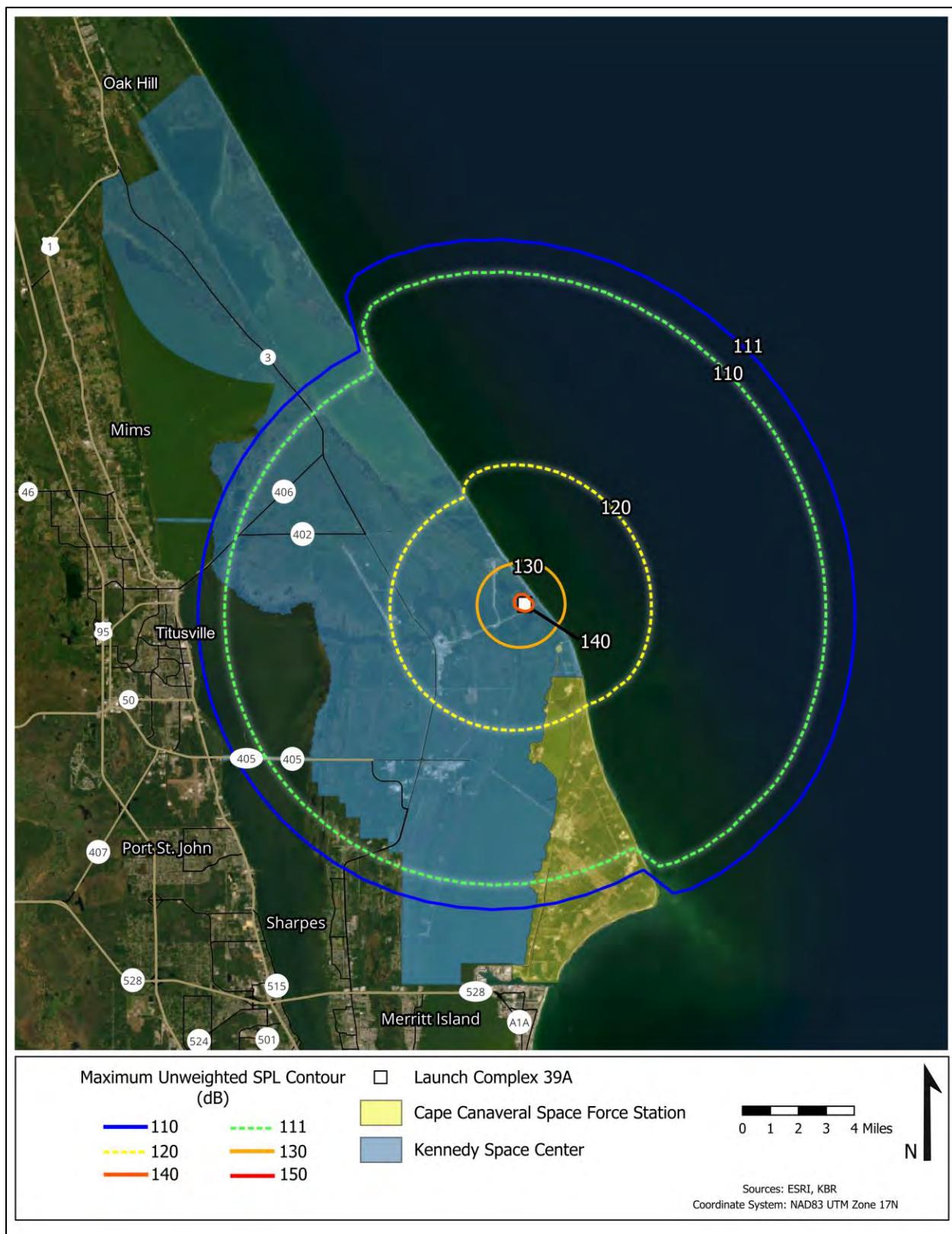


Figure 117. Super Heavy Landing at LC-39A (115-Degrees): Max Unweighted Sound Levels: Winter Day

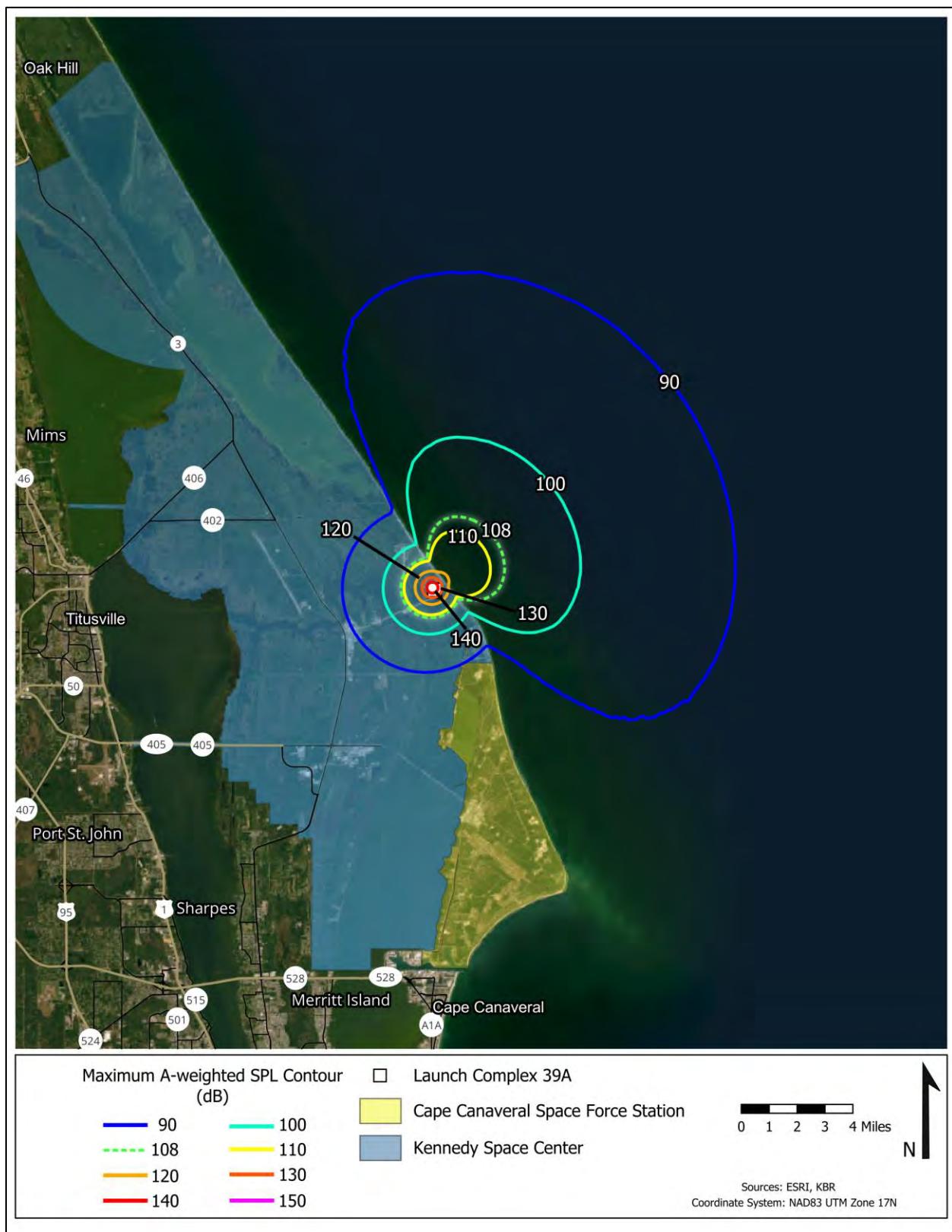


Figure 118. Starship Spacecraft Static Fire Test at LC-39A: Max A-Weighted Sound Levels: Winter Day

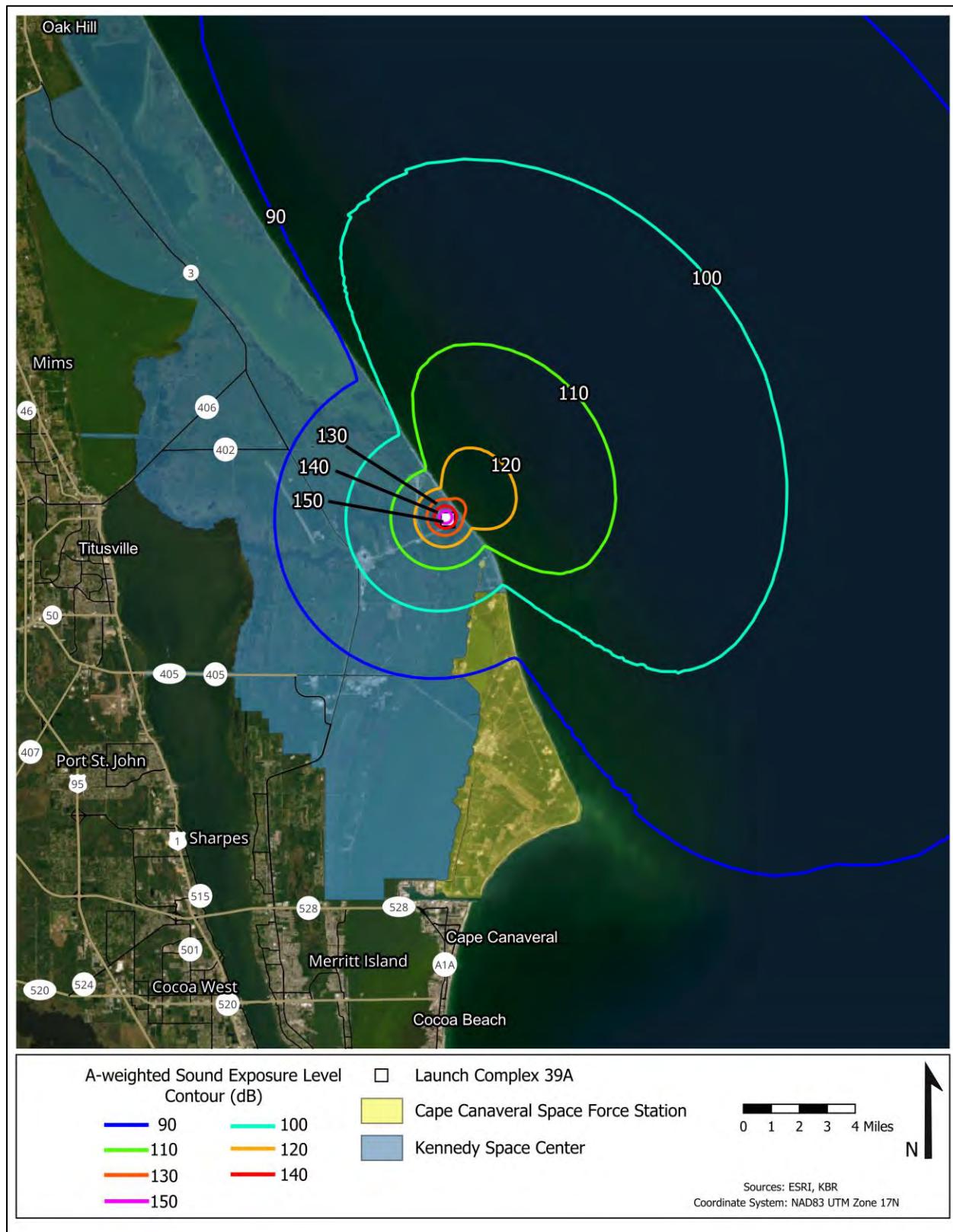


Figure 119. Starship Spacecraft Static Fire Test at LC-39A: Sound Exposure Levels: Winter Day

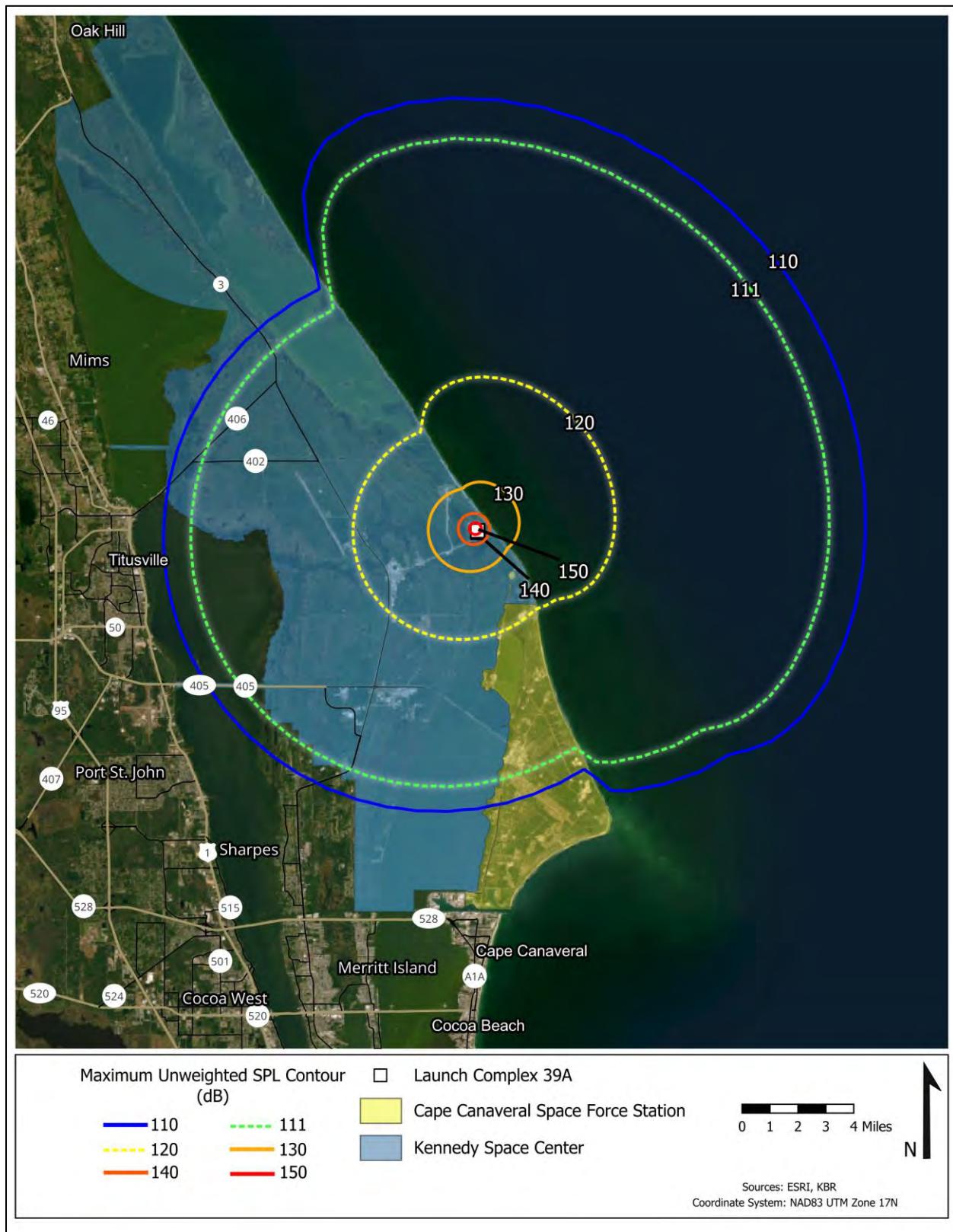


Figure 120. Starship Spacecraft Static Test at LC-39A: Max Unweighted Sound Levels: Winter Day

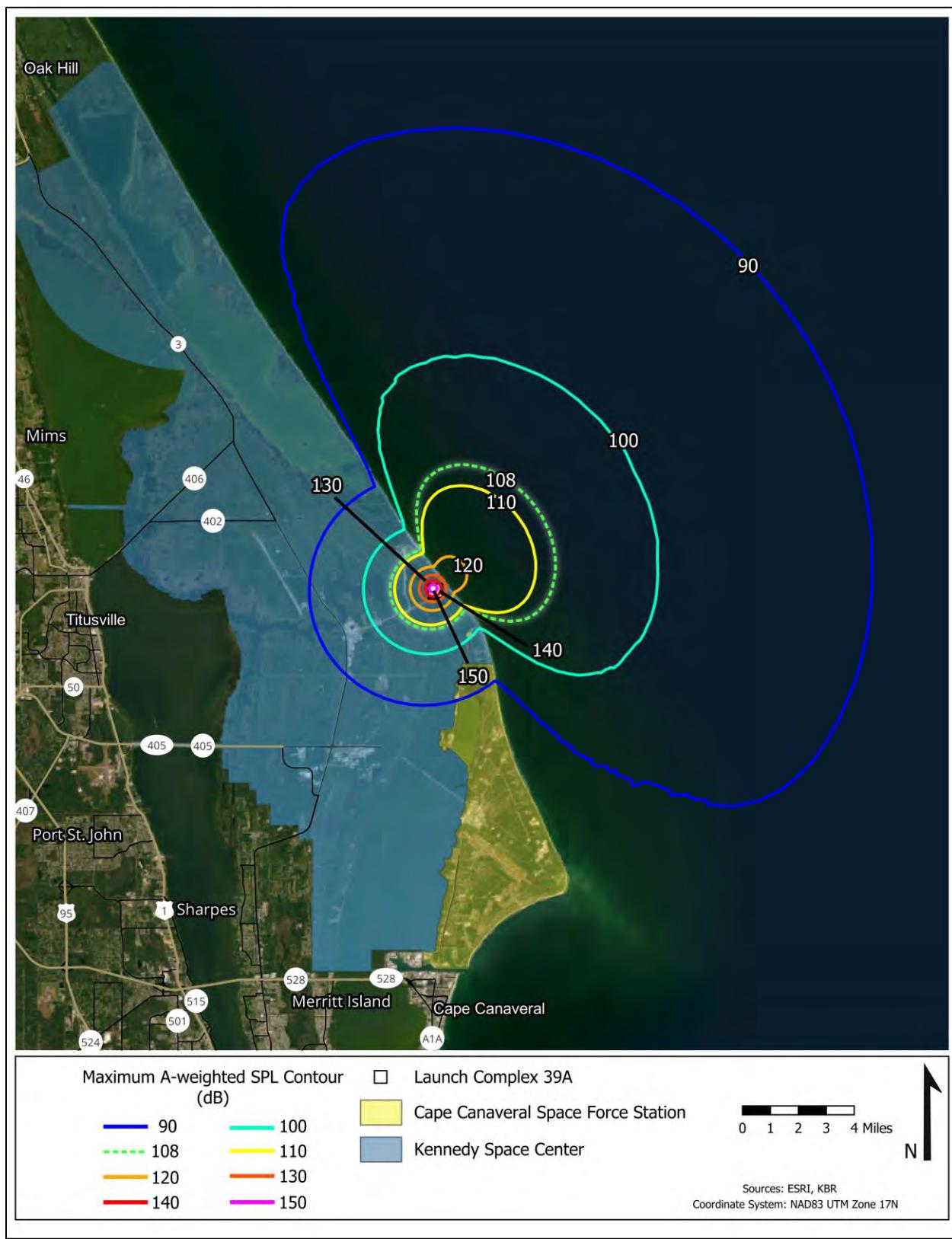
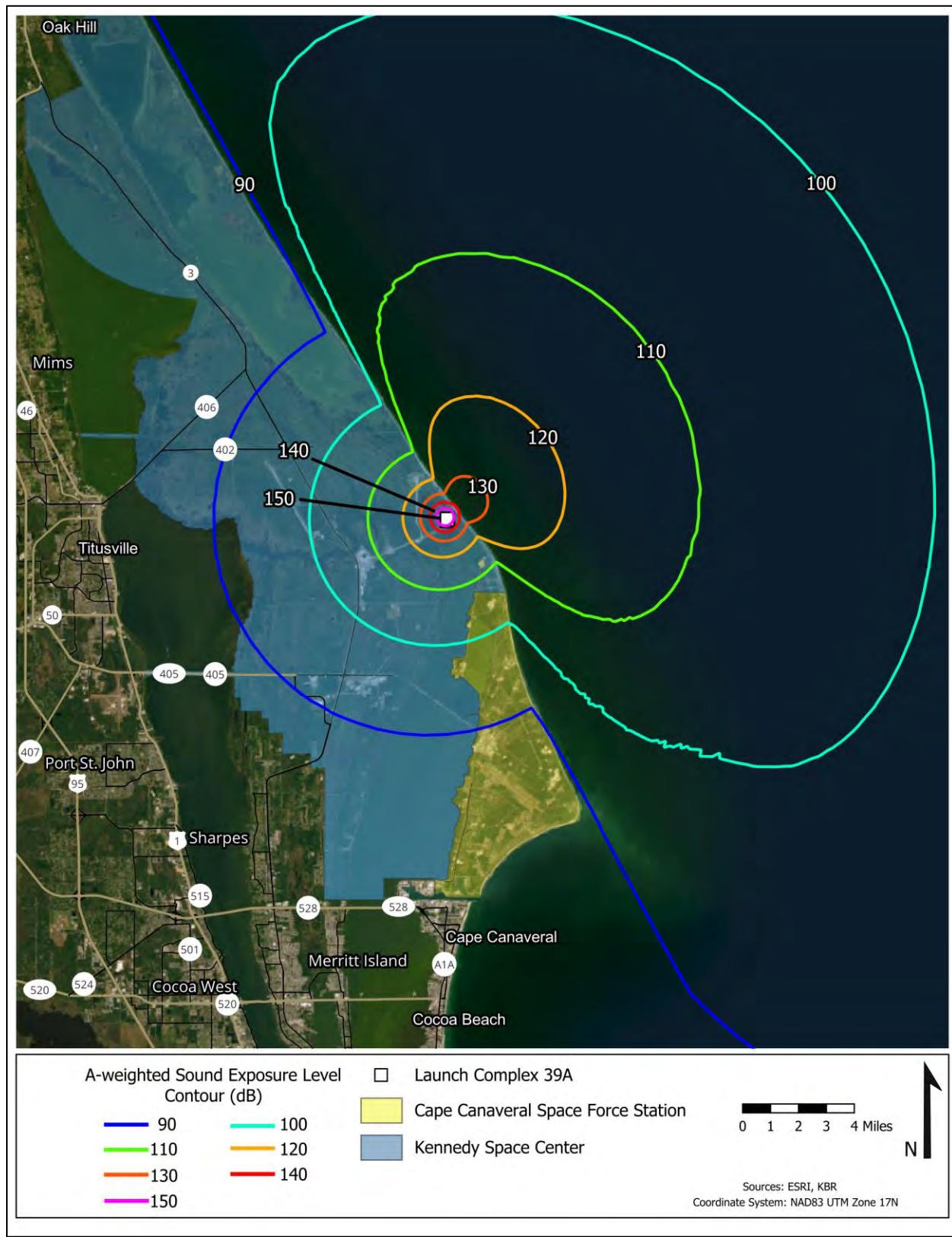


Figure 121. Super Heavy Static Fire Test at LC-39A: Maximum A-Weighted Sound Levels: Winter Day



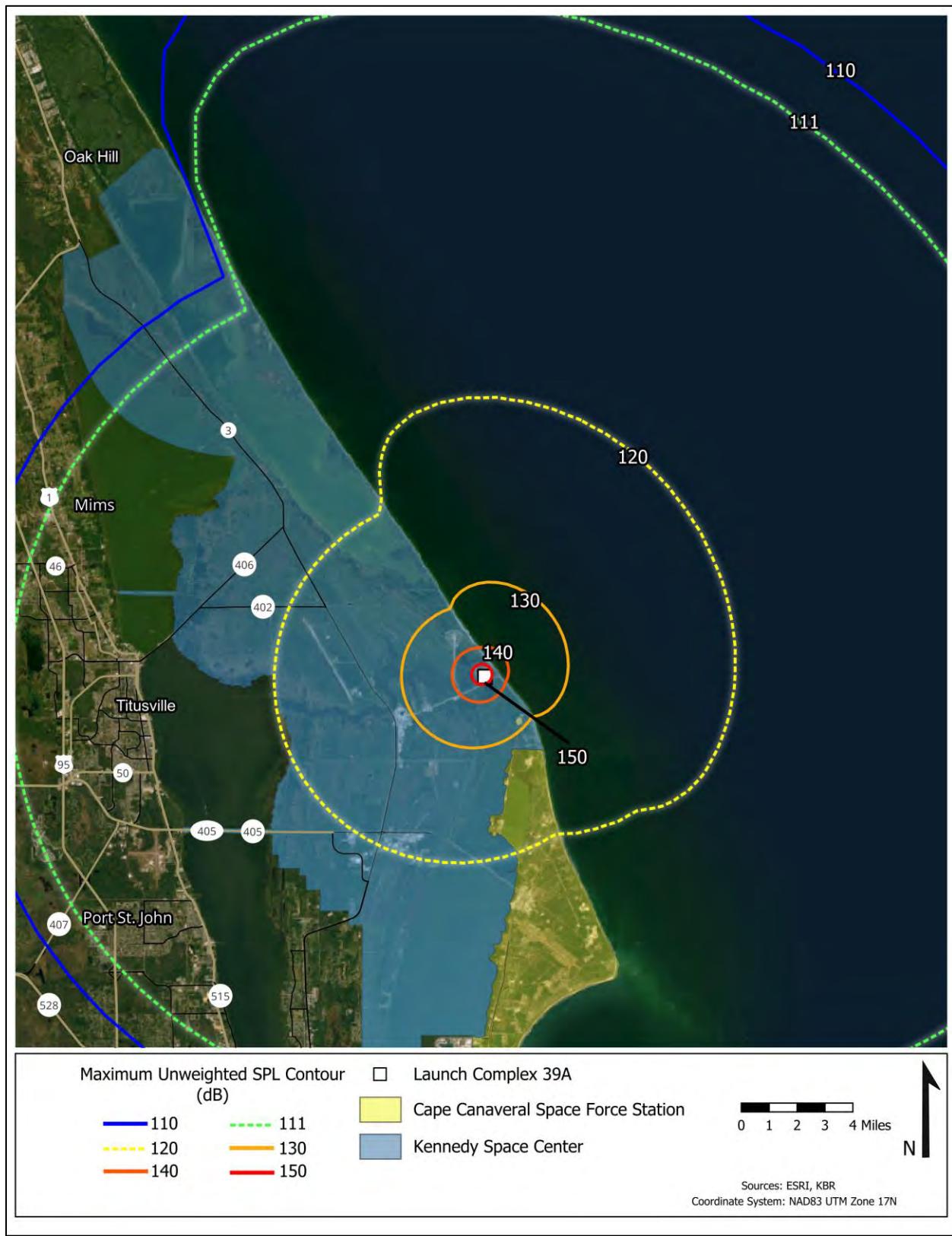


Figure 123. Super Booster Static Fire Test at LC-39A: Maximum Unweighted Sound Levels: Winter Day