

# Final Project

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OCE-311

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## Contents

<b>1 Statement of Problem</b>	<b>2</b>
<b>2 Hypotheses and Theories</b>	<b>2</b>
<b>3 Solution of the Problem</b>	<b>2</b>
<b>4 Conclusion</b>	<b>2</b>
<b>5 Statement of Problem</b>	<b>2</b>
<b>6 Hypotheses and Theories</b>	<b>2</b>
<b>7 Solution of the Problem</b>	<b>3</b>
<b>8 Conclusion</b>	<b>5</b>
<b>Appendices</b>	<b>6</b>
<b>A MATLAB Calculations</b>	<b>6</b>

## List of Figures

1 Wave Ray 20y Expected Wave Parameters at 150 deg Hires . . . . .	3
2 Wave Ray 20y Expected Wave Parameters at 180 deg . . . . .	3
3 Wave Ray 20y Expected Wave Parameters at 210 deg . . . . .	4
4 Wave Ray 50y Expected Wave Parameters at 150 deg . . . . .	4
5 Wave Ray 50y Expected Wave Parameters at 180 deg . . . . .	5
6 Wave Ray 50y Expected Wave Parameters at 210 deg . . . . .	5

Task 1

## **1 Statement of Problem**

## **2 Hypotheses and Theories**

## **3 Solution of the Problem**

## **4 Conclusion**

Task 2

## **5 Statement of Problem**

## **6 Hypotheses and Theories**

Wave propagation from deep to shallow water is influenced by changes in the sea floor. As regions of the sea floor change with height the waves refract, and their local angle of incidence shifts.

## 7 Solution of the Problem

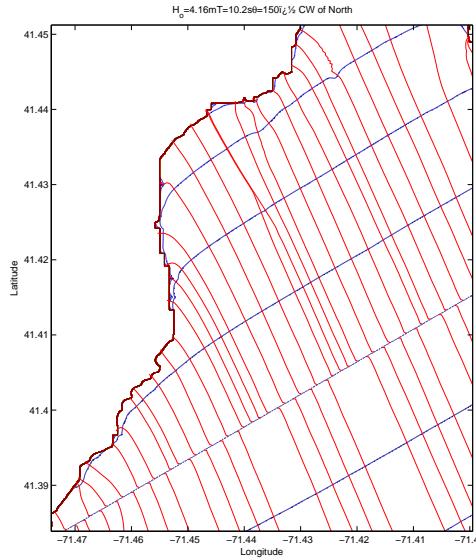


Figure 1: Wave Ray 20y Expected Wave Parameters at 150 deg Hires

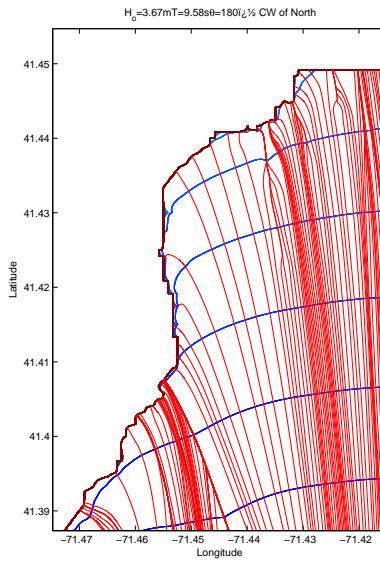


Figure 2: Wave Ray 20y Expected Wave Parameters at 180 deg

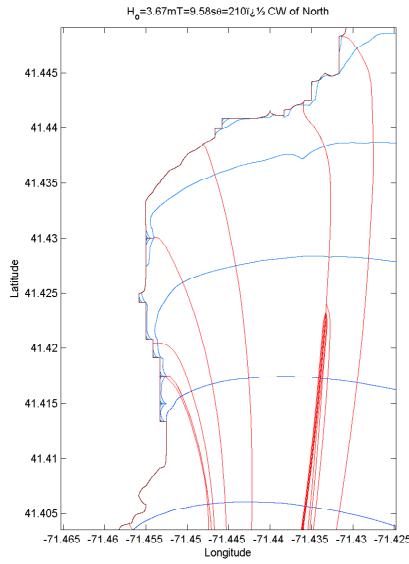


Figure 3: Wave Ray 20y Expected Wave Parameters at 210 deg

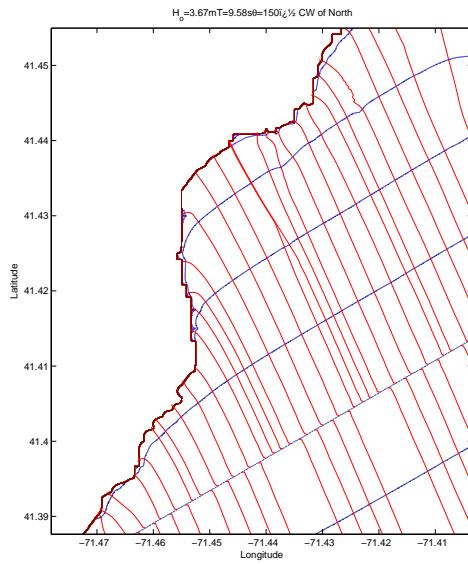
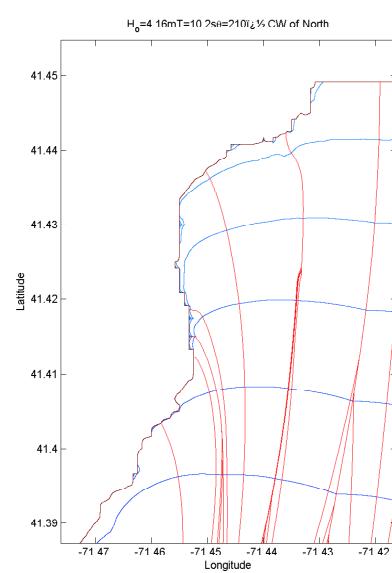
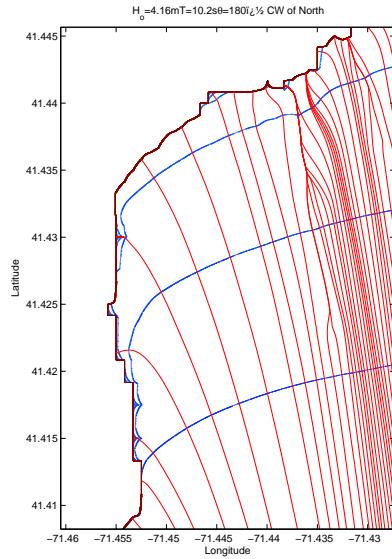


Figure 4: Wave Ray 50y Expected Wave Parameters at 150 deg



## 8 Conclusion

# Appendices

## A MATLAB Calculations