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 Landsat Thematic Mapper Satellite Image 2005,
 UTM Zone 15 NAD83, LOSCO (2007).
 Using bands 5-7-3 as an RGB composite.

- GNIS2006
- + Railroads
- Highways
- - - Proposed Site of IHNC Barrier
- parishes

NO.	DATE	REVISION DESCRIPTION	BY
			CKD

Infrastructure, environment, facilities

IHNC Hydroperiod
Modeling

DRAWN JEC	DATE 6/9/2006	PROJECT MANAGER FRC	DEPARTMENT MANAGER FRC
Base Map with Project Location		SCALE AS SHOWN	CHECKED FRC
PROJECT NUMBER		FIGURE NUMBER 1	



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 Landsat Thematic Mapper Satellite Image 2005,
 UTM Zone 15 NAD83, LOSCO (2007).
 Using bands 5-7-3 as an RGB composite.

- Railroads
- Highways
- Proposed Site of IHNC Barrier

NO.	DATE	REVISION DESCRIPTION	BY
			CKD

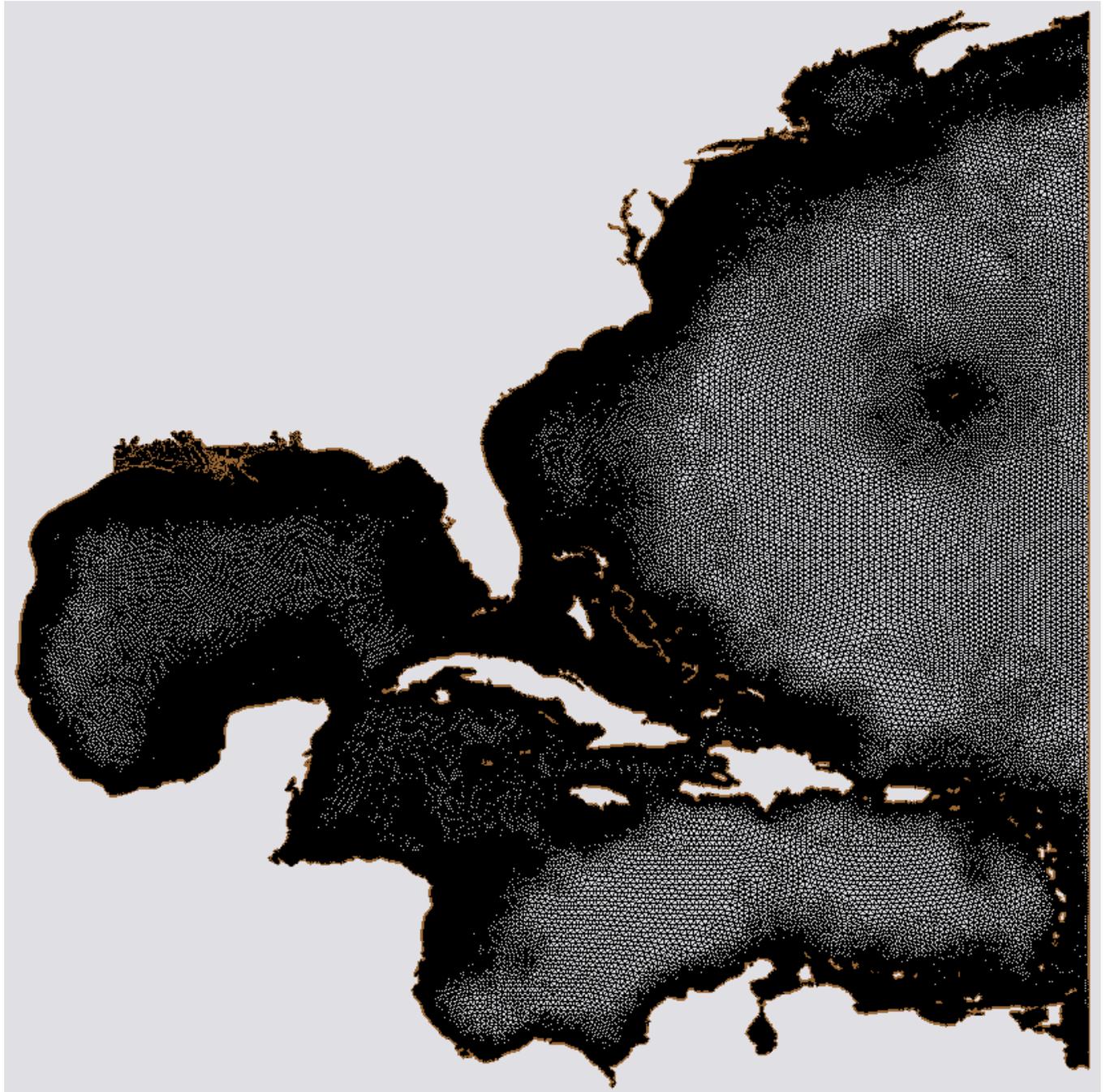
ARCADIS
 Infrastructure, environment, facilities

Bioengineering GROUP

HNTB

IHNC Hydroperiod Modeling

DRAWN JEC	DATE 6/9/2006	PROJECT MANAGER FRC	DEPARTMENT MANAGER FRC
Base Map with Project Location Including MRGO Closure at Bayou La Loutre		SCALE AS SHOWN	CHECKED FRC
		PROJECT NUMBER	FIGURE NUMBER 2



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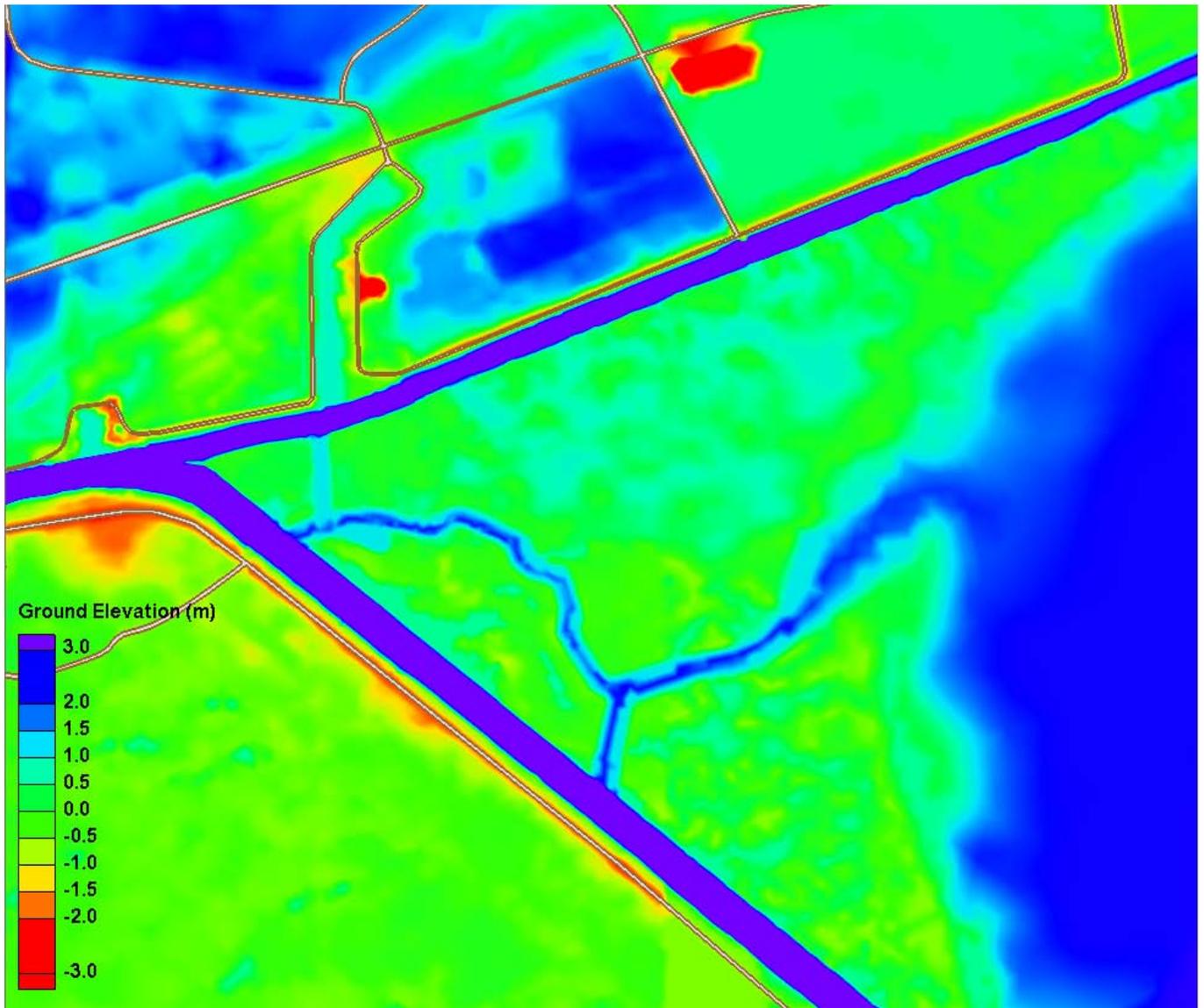
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**The unstructured ADCIRC SL15 grid of the
total domain**



FIGURE
3



DUE TO BATHYMETRY BEING CONSIDERED "POSITIVE" IN THE MODEL, "NEGATIVE" ELEVATION VALUES INDICATE RAISED TOPOGRAPHY

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Detail of the SL15 domain with bathymetry and topography (in meters) in the area of the proposed IHNC barrier with raised features shown in brown

 **ARCADIS** | **FIGURE 4**

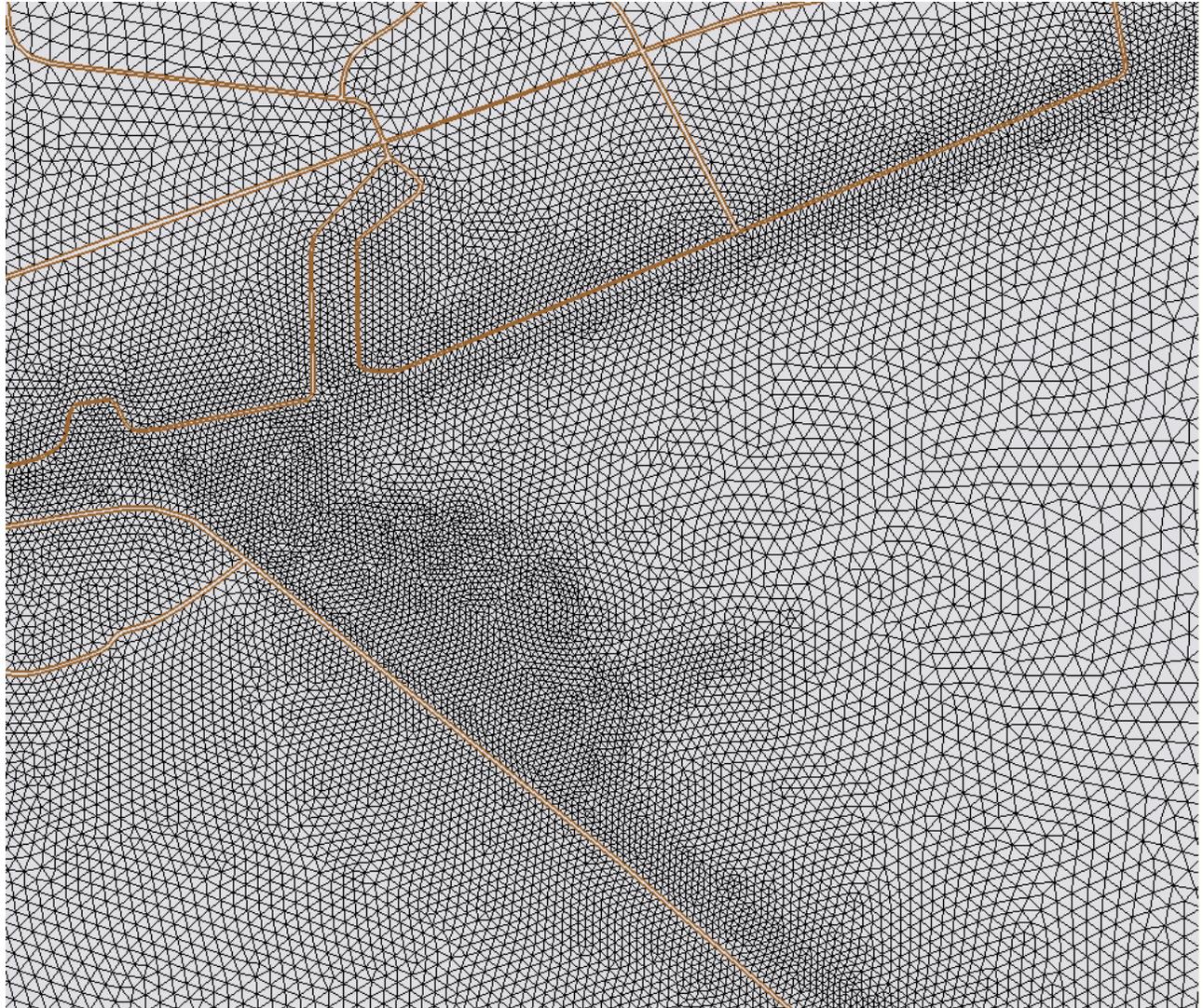
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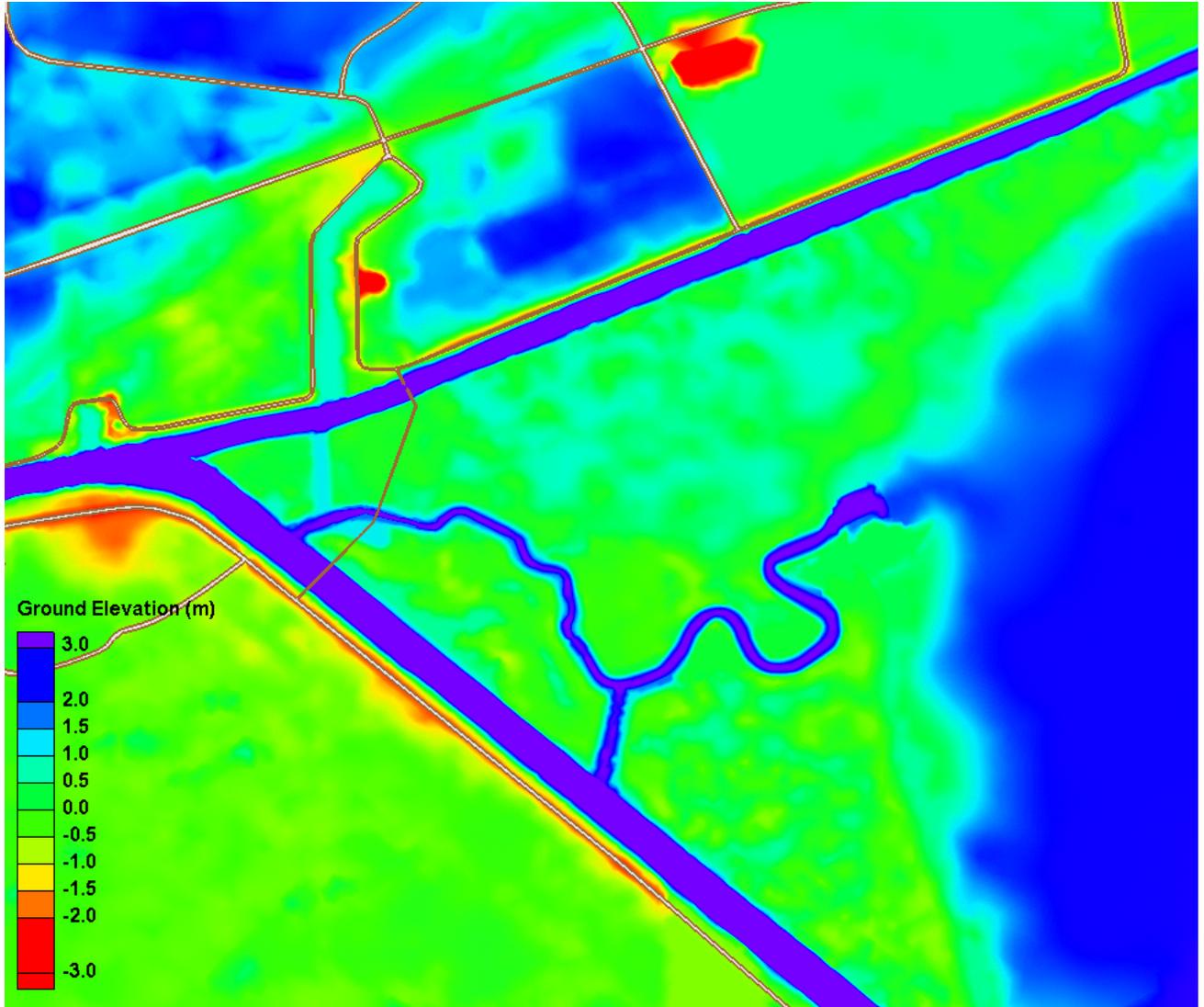
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**Detail of the unstructured ADCIRC SL15
mesh in the area of the proposed IHNC
barrier with raised features shown in brown**



FIGURE
5



DUE TO BATHYMETRY BEING CONSIDERED "POSITIVE" IN THE MODEL, "NEGATIVE" ELEVATION VALUES INDICATE RAISED TOPOGRAPHY

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Detail of the IHNC Hydroperiod mesh domain with bathymetry and topography (in meters) in the area of the proposed IHNC barrier with raised features shown in brown

 **ARCADIS** | **FIGURE 6**

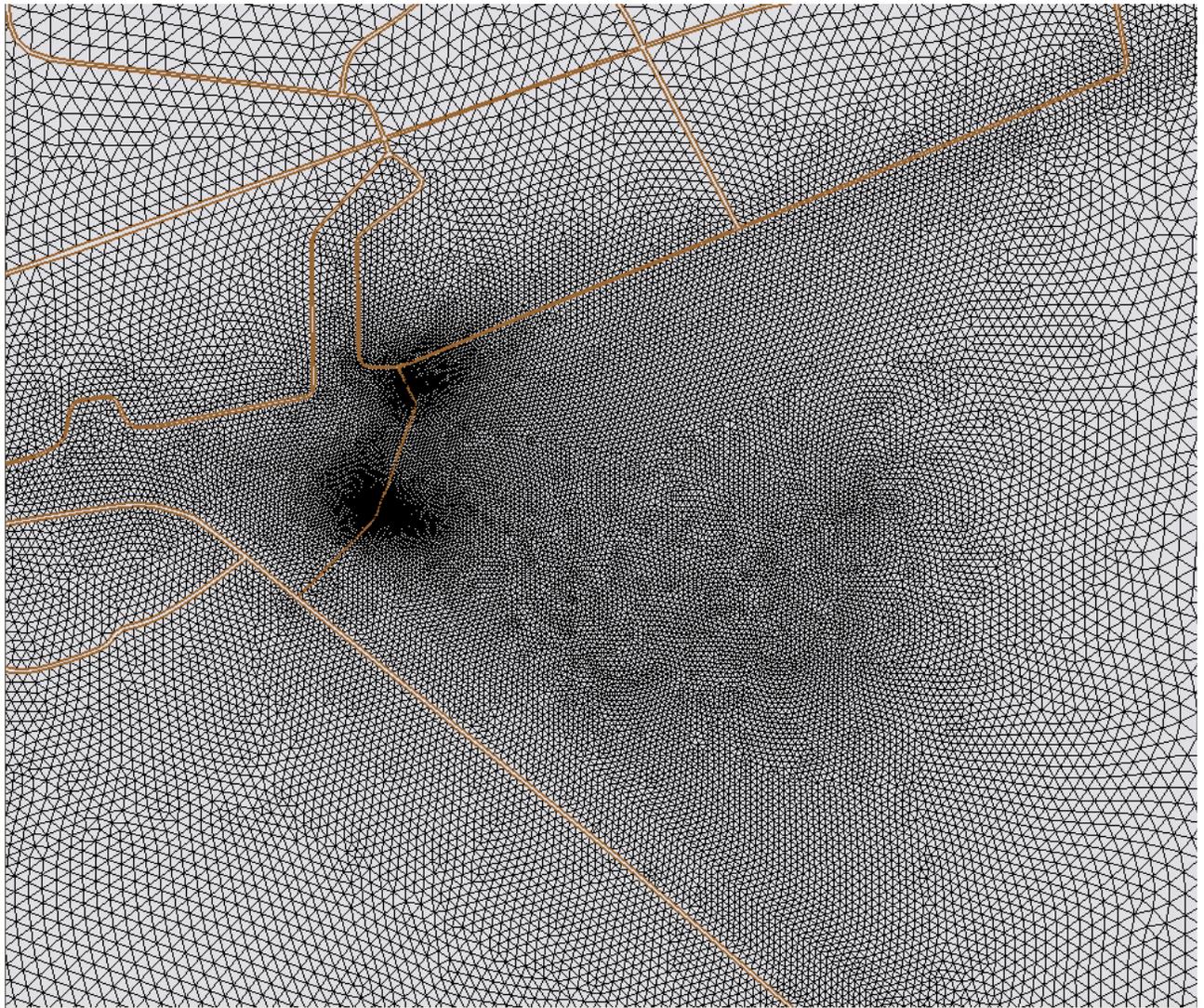
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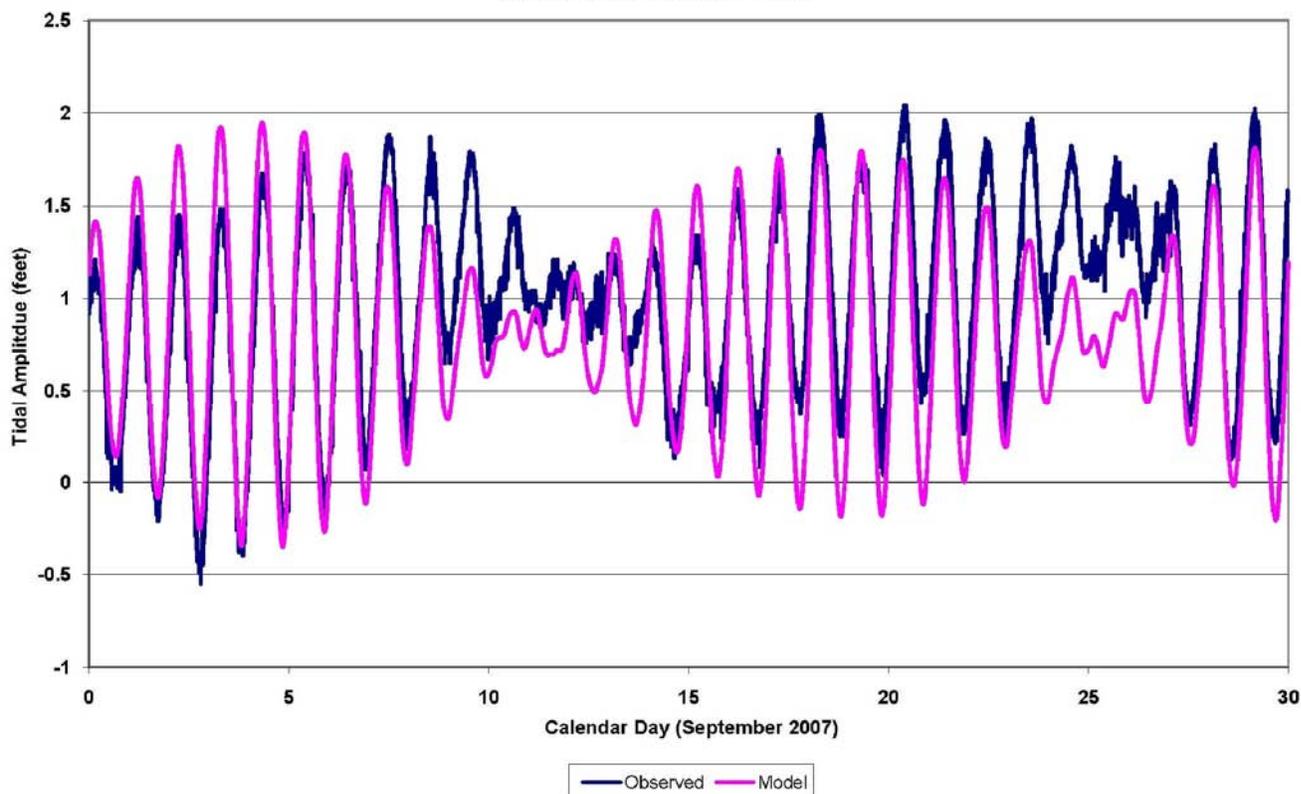
**Detail of the hydroperiod analysis
unstructured ADCIRC mesh in the area of
the proposed IHNC barrier with raised
features shown in brown**



FIGURE

7

NOAA Observed Tidal Data & ADCIRC Model Output
 at Pilots Station East, Southwest Pass, Louisiana
 NOAA Tide Station 8760922



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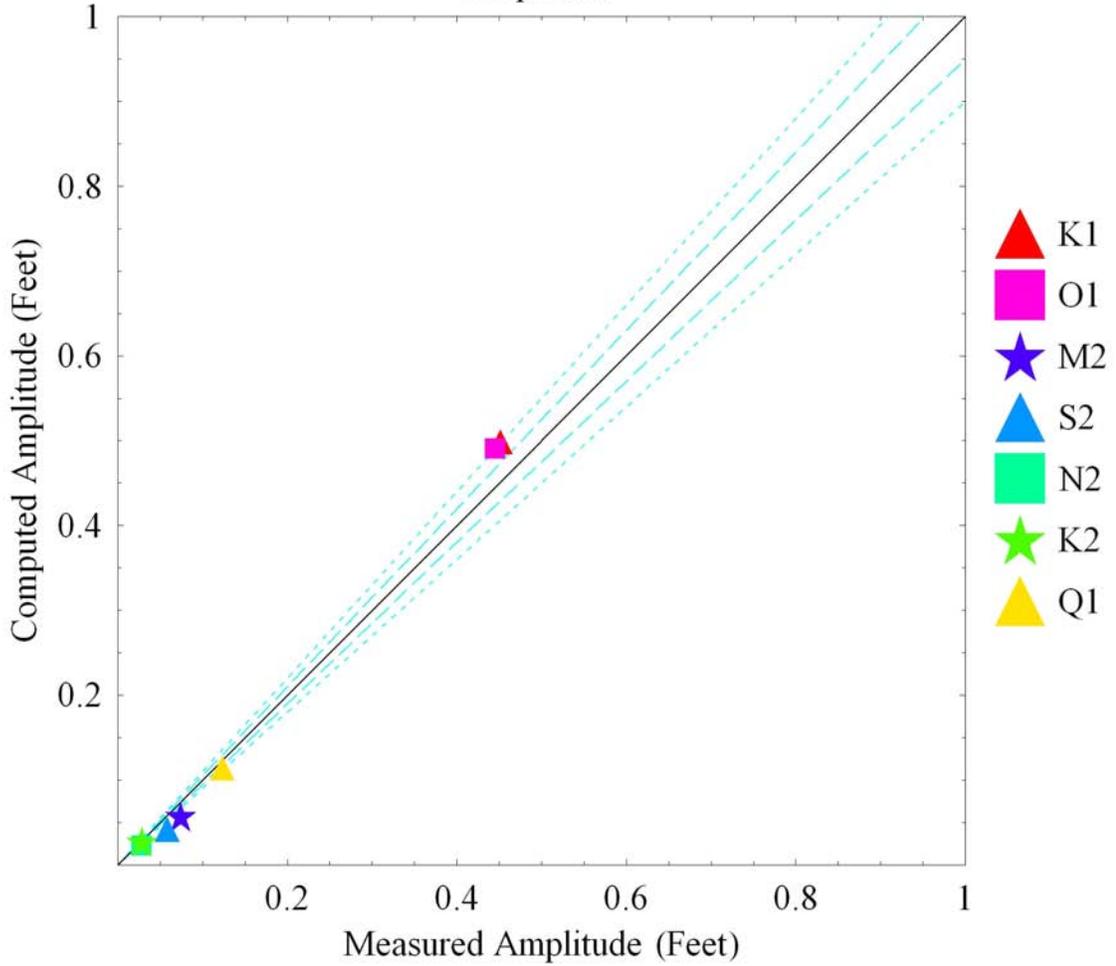
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NOAA Observed Tidal Data & ADCIRC Model
 Output at Pilots Station East, Southwest
 Pass, Louisiana



FIGURE
8

NOAA Station 8760943
S W Pass LA
Amplitude



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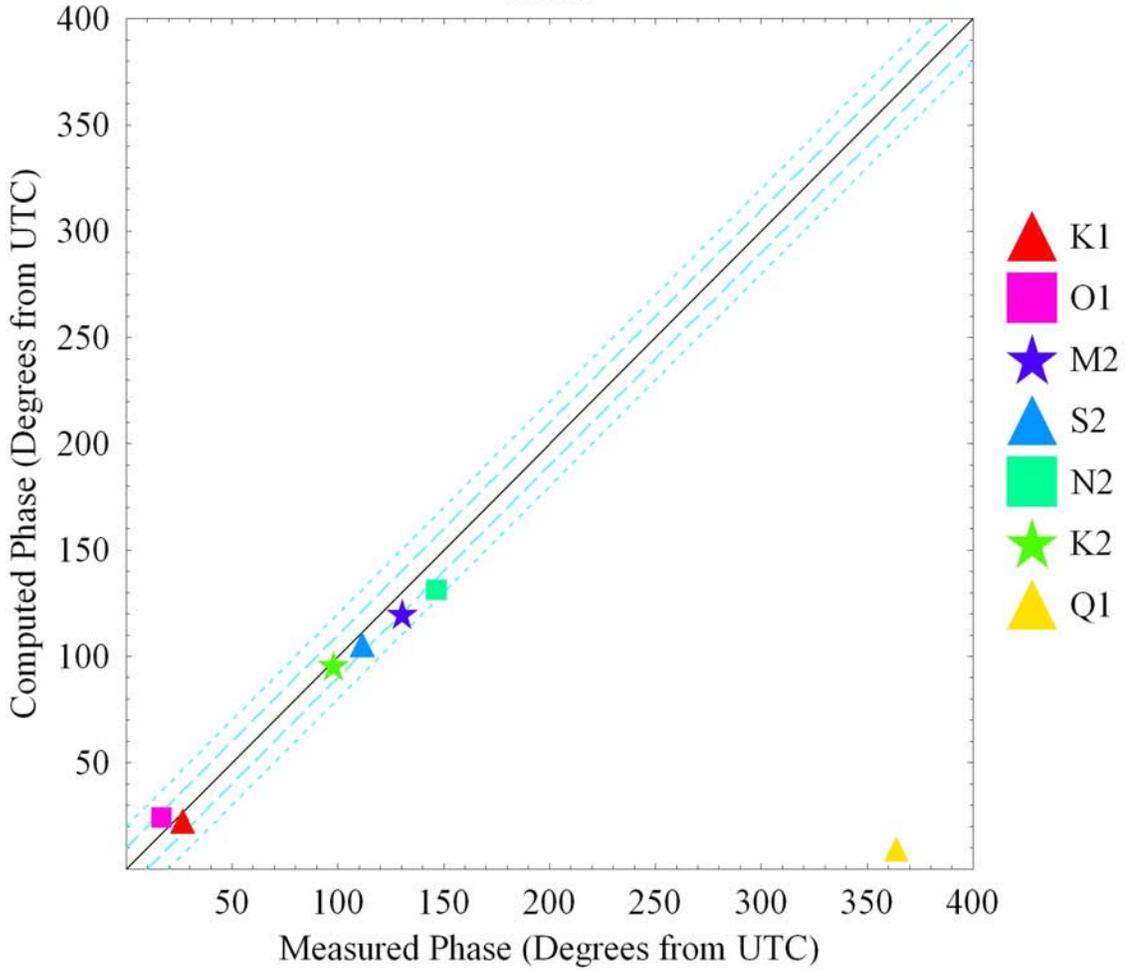
Scatter plot of the measured and computed amplitudes for the seven harmonic constituents at Southwest Pass, Louisiana



FIGURE

9

NOAA Station 8760943
S W Pass LA
Phase



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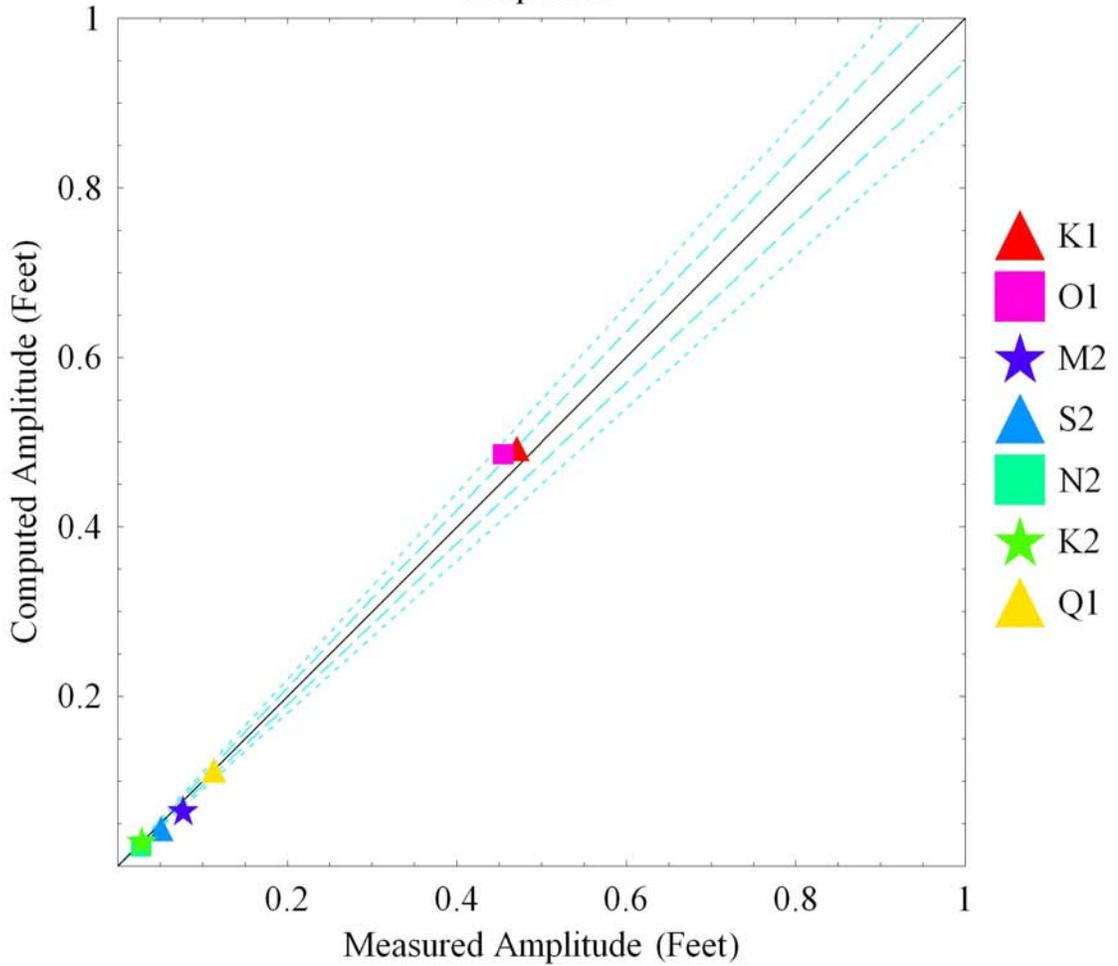
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Scatter plot of the measured and computed phases for the seven harmonic constituents at Southwest Pass, Louisiana



FIGURE
10

NOAA Station 8760551
 South Pass LA
 Amplitude



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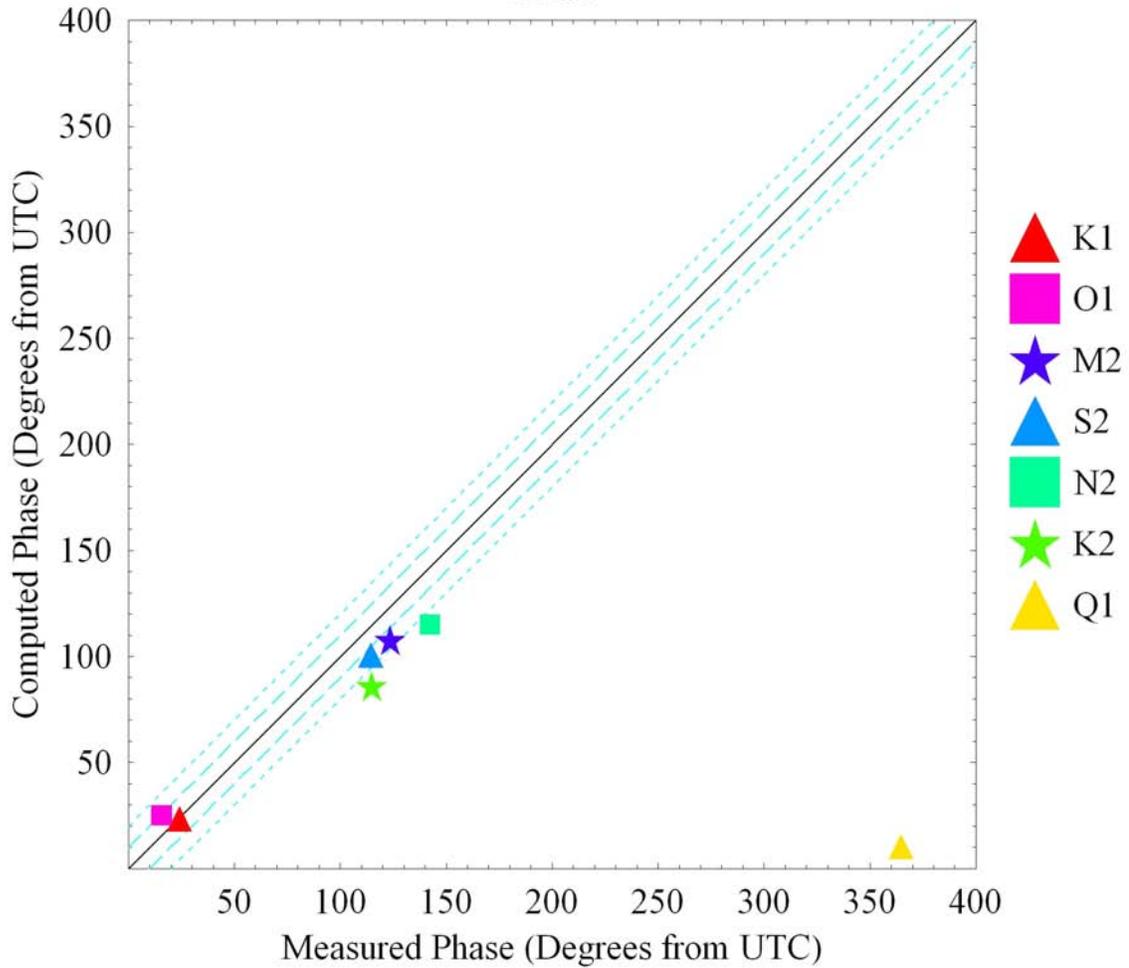
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Scatter plot of the measured and computed amplitudes for the seven harmonic constituents at South Pass, Louisiana



FIGURE
11

NOAA Station 8760551
 South Pass LA
 Phase



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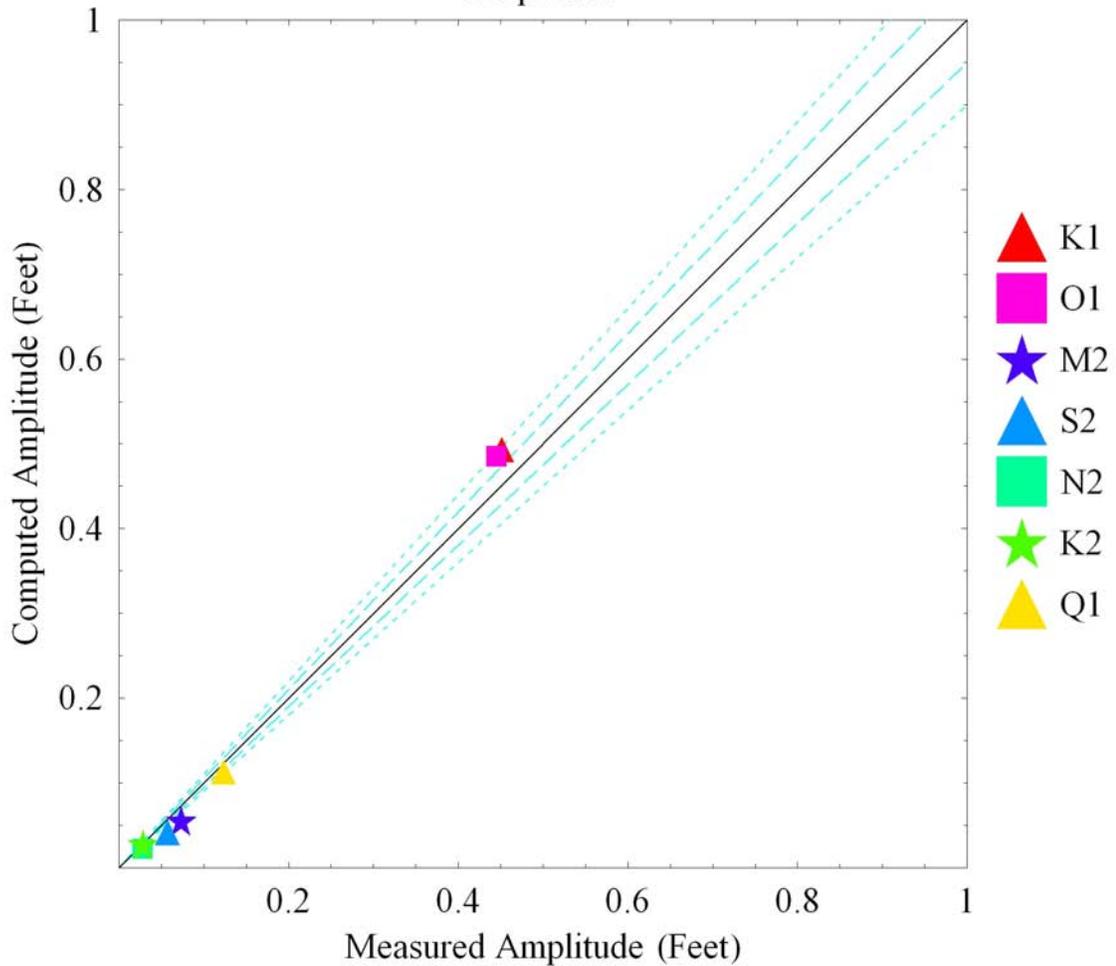
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Scatter plot of the measured and computed phases for the seven harmonic constituents at South Pass, Louisiana



FIGURE
12

NOAA Station 8760922
Pilots Station East LA
Amplitude



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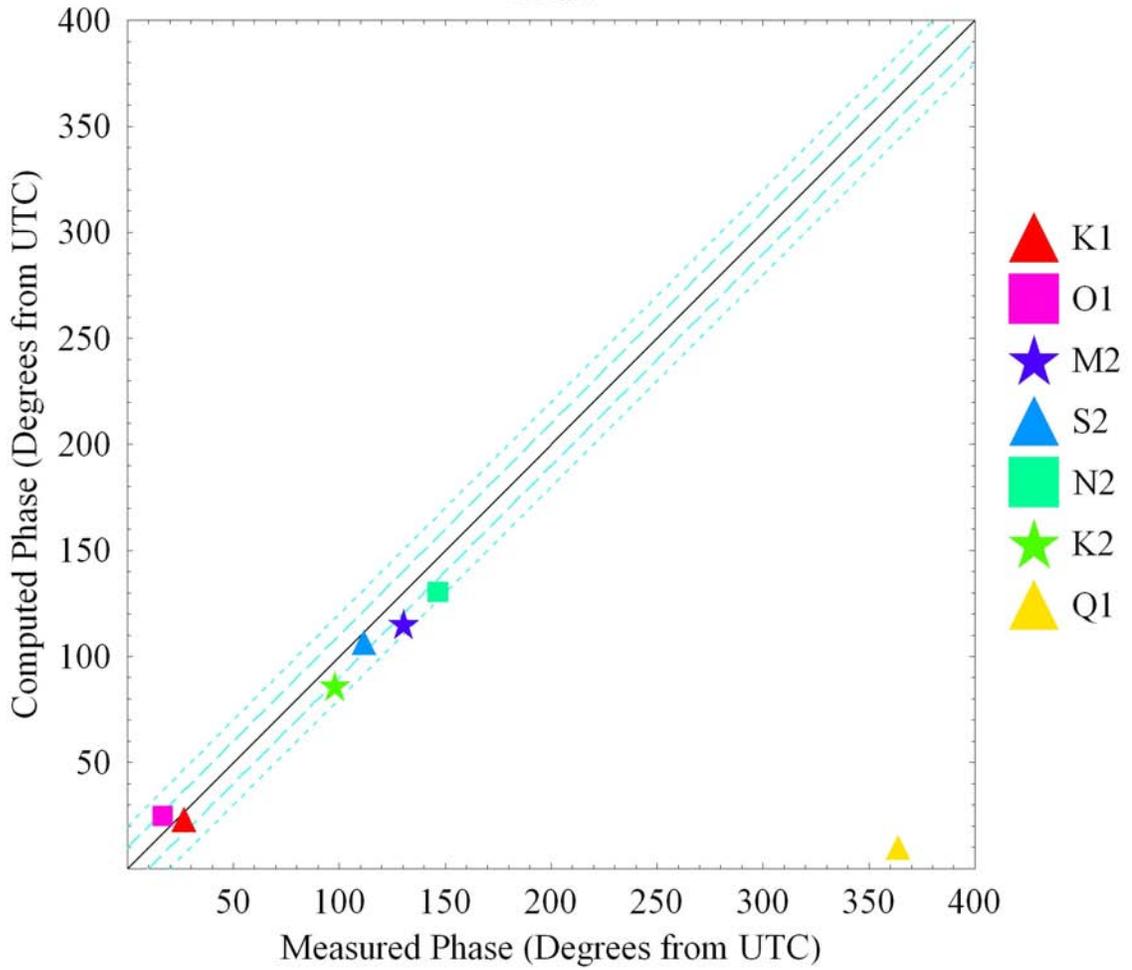
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Scatter plot of the measured and computed amplitudes for the seven harmonic constituents at Pilots Station East, Louisiana



FIGURE
13

NOAA Station 8760922
Pilots Station East LA
Phase



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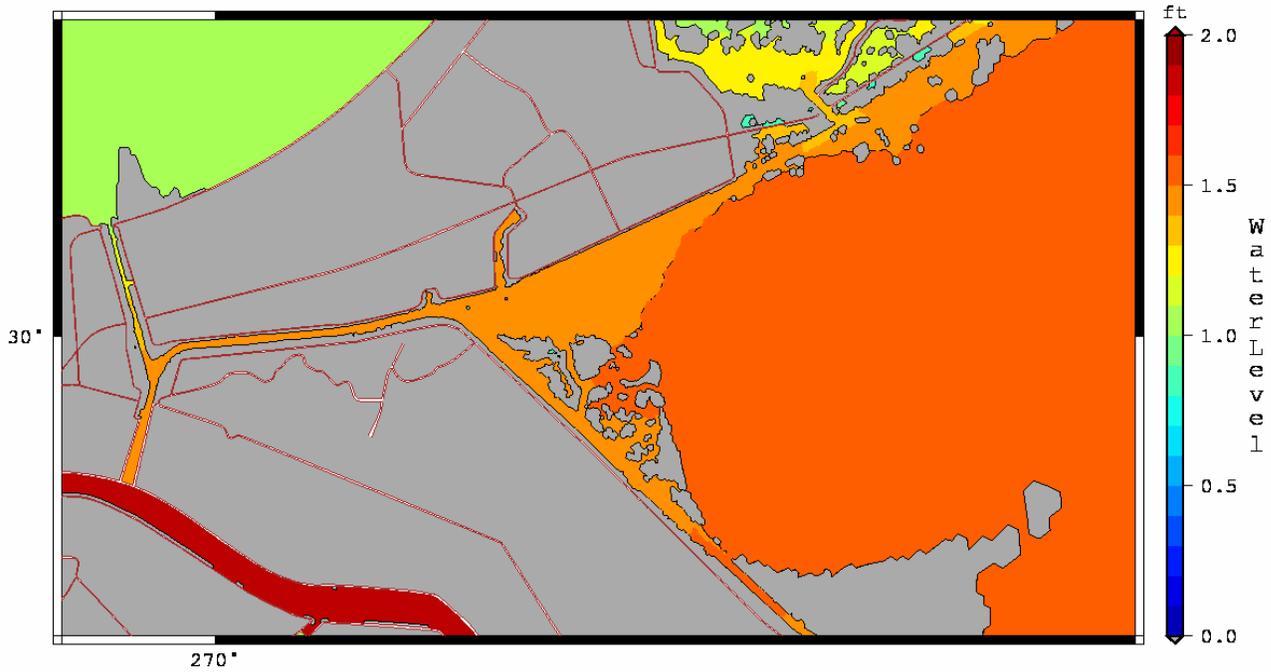
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Scatter plot of the measured and computed phases for the seven harmonic constituents at Pilots Station East, Louisiana



FIGURE
14



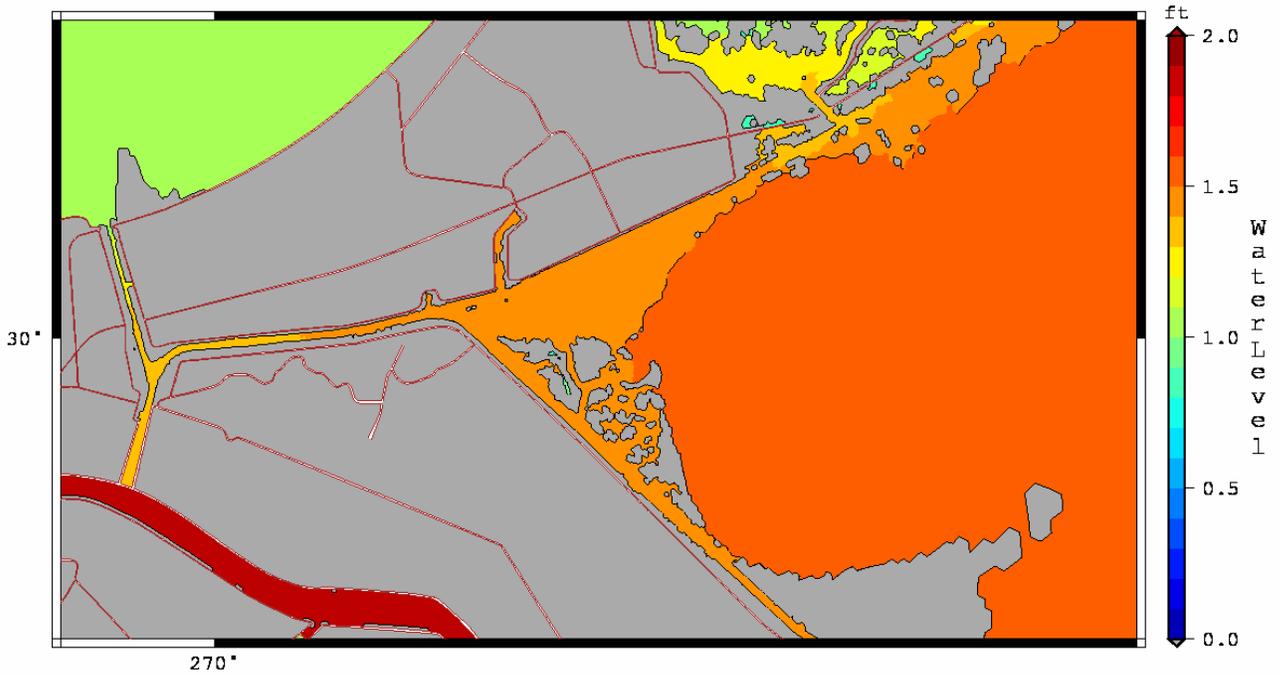
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Maximum water surface elevations (ft) for the existing conditions tidal simulation	
	FIGURE 15



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**Maximum water surface elevations (ft)
for the Scenario 2 tidal simulation**



FIGURE
16