The impact of the seabed roughness on

the location of the 2,500 m isobath

and the foot of the continental slope

Galo Carrera

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Overview

- Case: Hudson Canyon, West-Atlantic continental margin

- The problem: seabed roughness

- The 2,500 m isobath and the foot of the slope

- Solution attempts:

  1 Decimation   2 Non-linear filtering
  3 Linear filtering   4 Wiener adaptive filtering
  5 Wavelet decomposition

- Recommendations

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Bathymetric Data of the Hudson Canyon Region

- **US NGDC Coastal Relief Model**
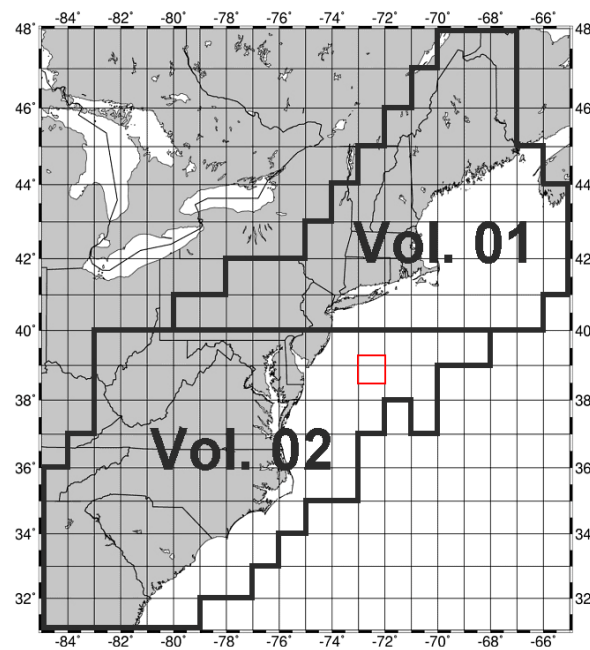
  3″ x 3″ 6″ x 6″ 15″ x 15″
  30″ x 30″ **60″ x 60″**

- **Predicted Bathymetry: 2′x 2′**

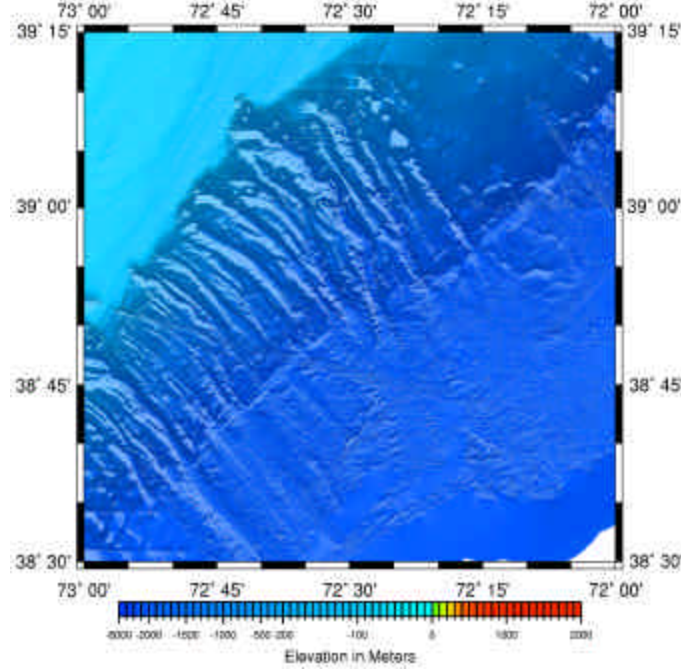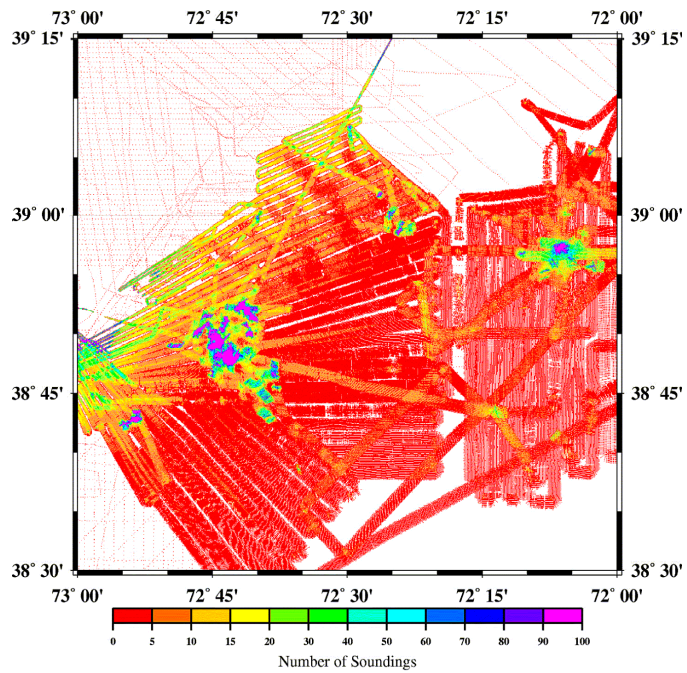- **GEBCO97: 2,000 m and 2,500 m isobaths**

- **ETOPO5: 5′ x 5′**

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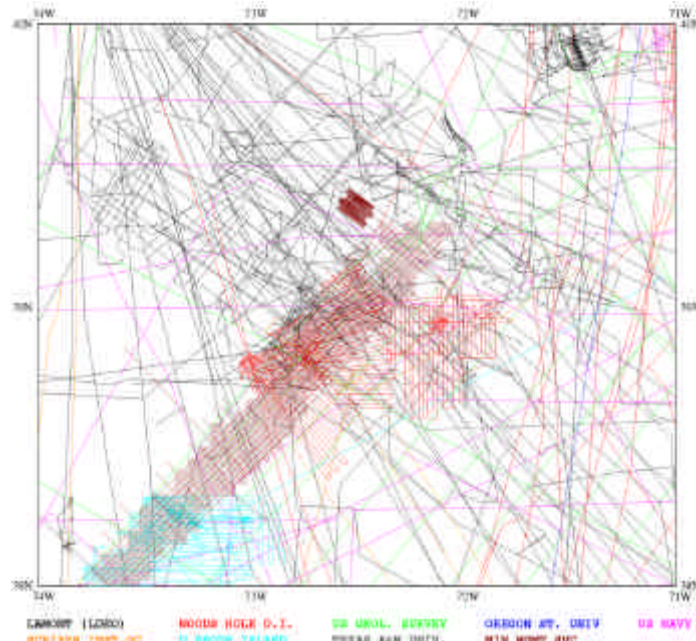
US NGDC Coastal Relief Model Information

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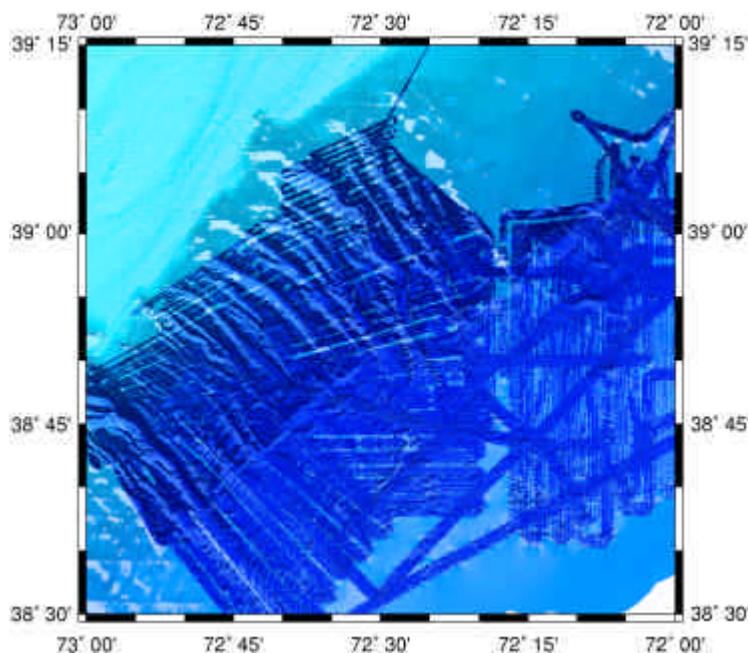
US NGDC Digital Model: Hudson Canyon Region

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US NGDC Sounding Data: Hudson Canyon Region

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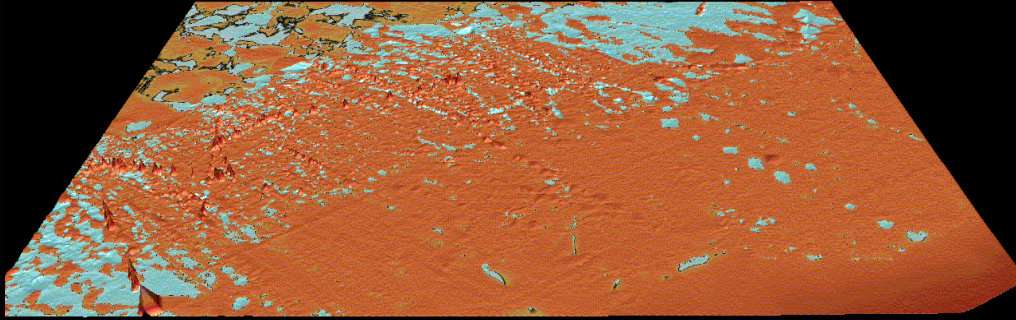8 September 1999

US NGDC Sounding Information Sources

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US NGDC Sounding Information Overlay

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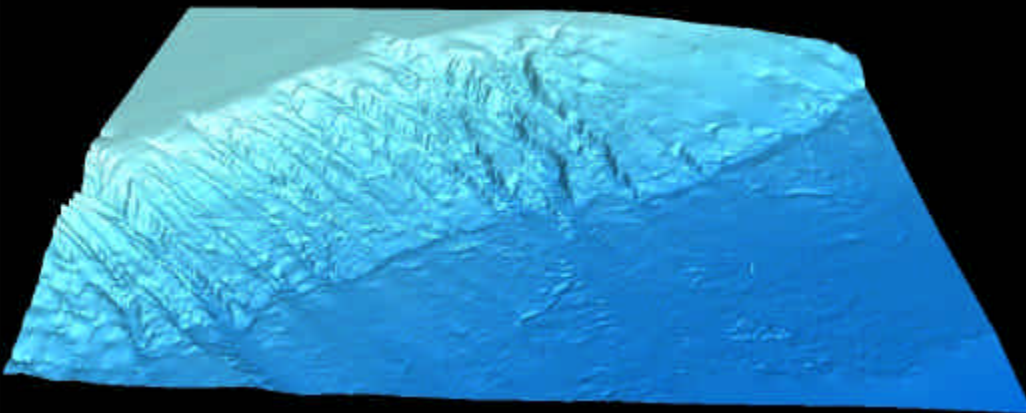ABLOS International Conference, IHB, Monaco
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GEODAS sounding data minus US NGDC Model

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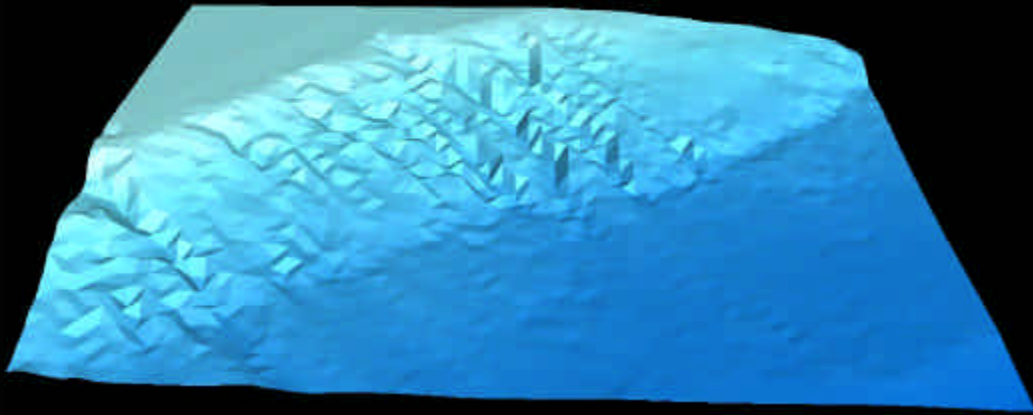8 September 1999

Digital Model of Hudson Canyon: 3" x 3"

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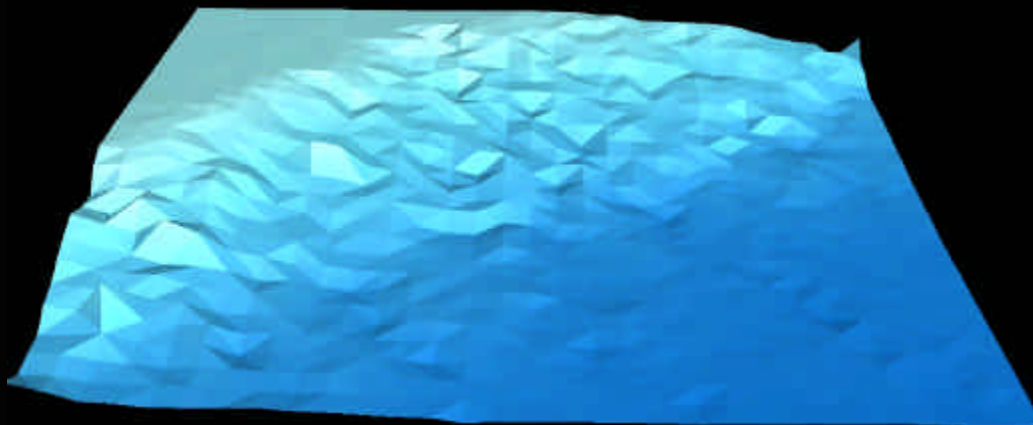ABLOS International Conference, IHB, Monaco
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Digital Model of Hudson Canyon: 1' x 1'

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Predicted Model of Hudson Canyon: 2' x 2'

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