

AIS-Space...

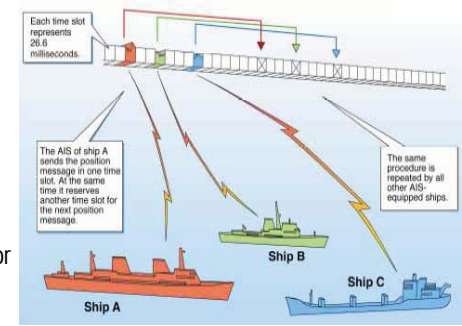
Contributing to global safety and security

Presented

By
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February 26, 2009

AIS Overview

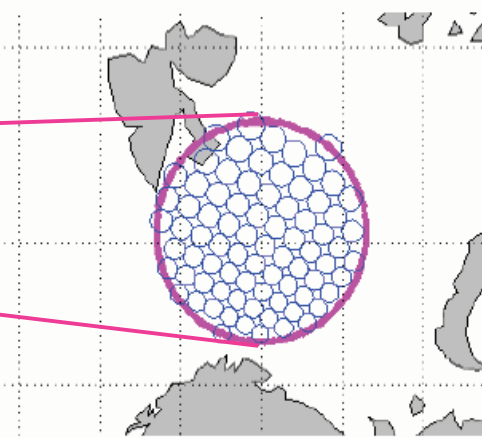
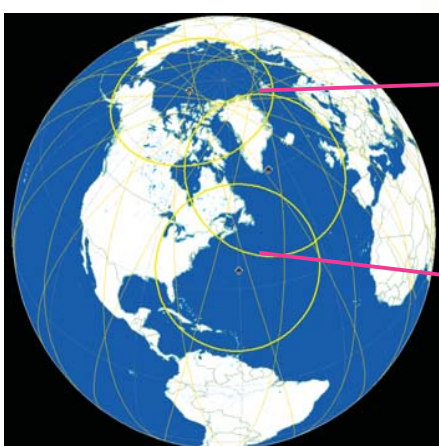
- Automatic Identification System
- International Maritime Organization (IMO)
- Ship ID, Position, Course, Speed, other
- Initially collision avoidance but now used for many applications



Generally limited to 50 nm
Not designed for reception in space

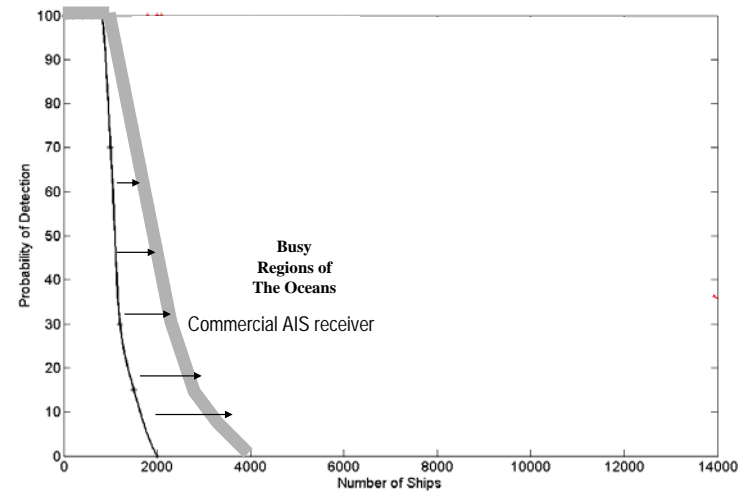
Over 68,000 Ships equipped with transceivers

Collisions = THE challenge to AIS-S

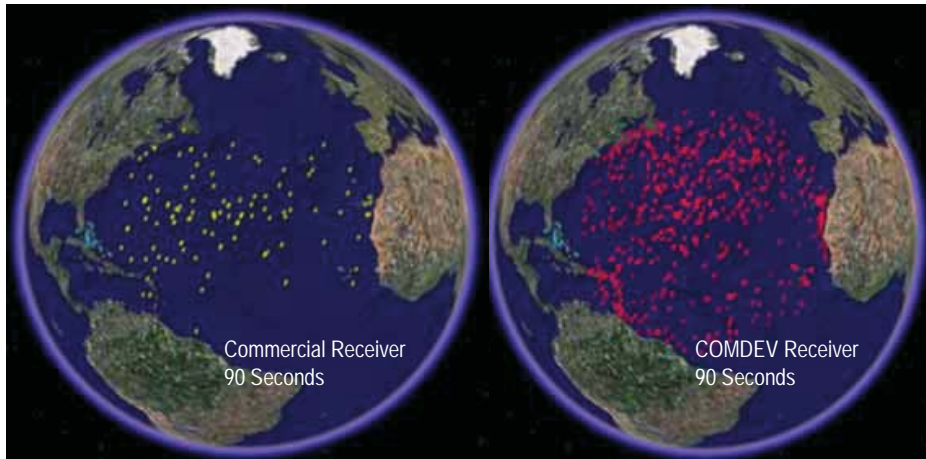


COMDEV solution retains wide field of view

The key challenge



Real-World Data Supports Our Simulations



Images © 2008 TerraMetrics Image NASA © 2008 Google

Google Earth Tour

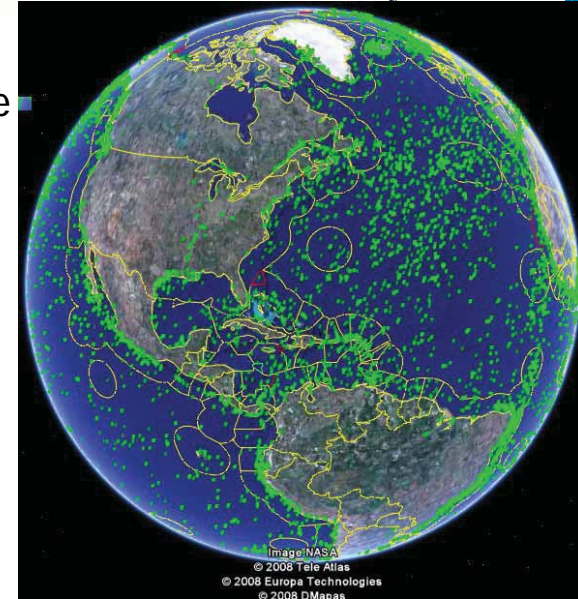
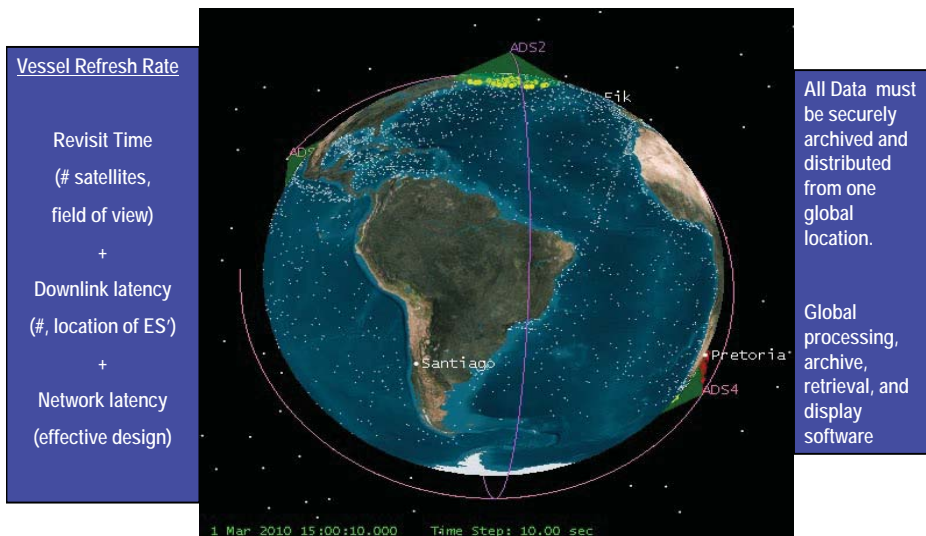


Image NASA
© 2008 Tele Atlas
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COM DEV Proprietary Data

Global Solution Requires More Than High Capture Ratio



Vessel Refresh Rate

- Revisit Time
(# satellites, field of view)
- +
- Downlink latency
(#, location of ES)
- +
- Network latency
(effective design)

All Data must be securely archived and distributed from one global location.

Global processing, archive, retrieval, and display software

1 Mar 2010 15:00:10.000 Time Step: 10.00 sec

COM DEV Proprietary

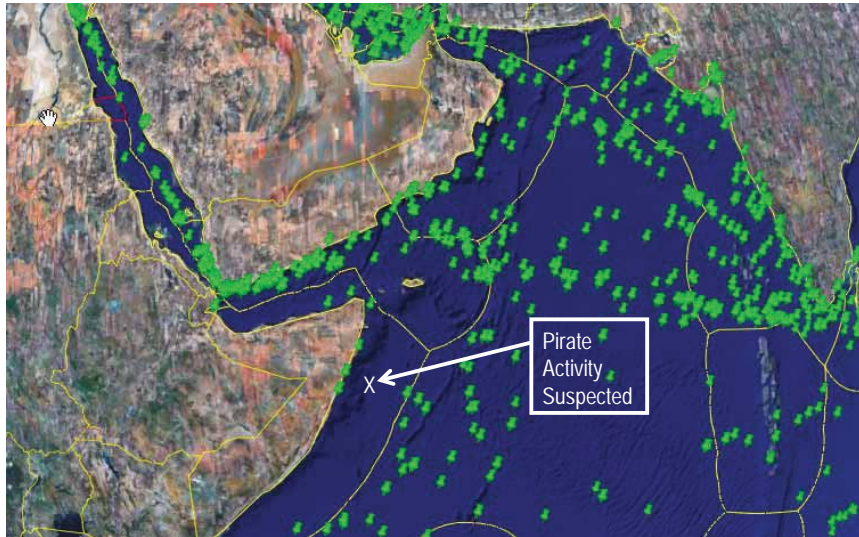
Maritime Border Security is key



Argentine Fishing Fleet!?

COM DEV Proprietary Data

Who do you warn of threats?



COM DEV Proprietary Data

Driving Needs – Four Key Applications



Coastal Security



Search and Rescue



Vessel Traffic Management



Environmental

COM DEV Proprietary Information

The first fully global view of world ship densities

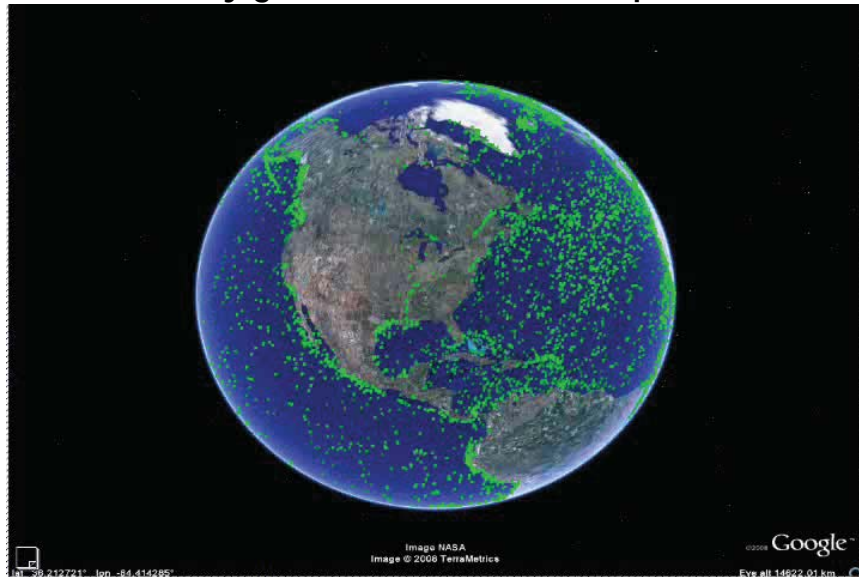


Image NASA Image © 2006 TerraMetrics © 2006 Google™ Evr all 14922.01 km

Thank You !

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