

Did you know that 86% of global evaporation occurs over the ocean?

# AQUARIUS

Did you know that 78% of global precipitation occurs over the ocean?

## **Thematic “Student Outcomes” Resources**

**<http://aquarius.nasa.gov/education-outcomes.html>**

Video of scientists, conceptual visualizations & science articles that address student outcomes in the thematic areas of Water Cycle, Ocean Circulation, Climate & 21st Century Technology.

## **Interactive Ocean Data Tools**

**<http://aquarius.jpl.nasa.gov>**

### **Annual mean maps & In-water profiles for Salinity - Temperature - Density**

Interactive maps of surface conditions can be clicked to create in-water profiles of salinity, temperature, or density. Data are also shown in tables that are easily downloaded into Excel.

### **Monthly and Yearly mean maps & Time-series graphs for Salinity - Temperature - Density**

Create global maps of mean conditions from the ocean surface to depths of 1500m.

Monthly and yearly (1800-2005) time-series graphs can be plotted for up to six different locations. These time-series graphs can also represent up to six different depths.

## **Salinity & Environmental Data Analysis**

**<http://aquarius.nasa.gov/education-datatools.html>**

Use a “Data Tracking Sheet” to compare long-term average monthly maps of air temperature, sea surface temperature, evaporation (E), precipitation (P), and "E-P" with sea surface salinity in the North Atlantic Ocean.

## **“Hands on” Classroom Activities**

**<http://aquarius.nasa.gov/education-classroom.html>**

Evaporation Investigation, Can Sea Water Freeze?,  
Properties of Fresh & Sea Water... *and more!*

**[www.tos.org/hands-on/teaching\\_phys.html](http://www.tos.org/hands-on/teaching_phys.html)**

Teaching Physical Concepts in Oceanography: An Inquiry-Based Approach. *In English, Spanish, Catalan & French!*



*Join our education mailing list by contacting Annette deCharon <annette.decharon@maine.edu>*

# AQUARIUS EDUCATION & PUBLIC OUTREACH RESOURCES

Contact [annette.decharon@maine.edu](mailto:annette.decharon@maine.edu) for more information



## iPhone App (free!)

<http://aquarius.nasa.gov/iphone.html>

iTunes Store: <http://itunes.apple.com/us/app/aquarius/id437313730?mt=8>

## "Mission Overview" & "Latest Status" videos

<http://aquarius.gsfc.nasa.gov/gallery-interviews.html>

## Thematic Science Visualizations

<http://aquarius.gsfc.nasa.gov/gallery-animations.html>

### **Salinity & Water Cycle**

Original files: <http://svs.gsfc.nasa.gov/goto?10709>

YouTube: <http://www.youtube.com/watch?v=KsV7kvxyGQU&feature=youtu.be>

### **Salinity & Ocean Circulation**

Original files: <http://svs.gsfc.nasa.gov/goto?10710>

YouTube: <http://www.youtube.com/watch?v=vP4QTyVQTUo&feature=youtu.be>

### **Salinity & Climate**

Original files: <http://svs.gsfc.nasa.gov/goto?10735>

YouTube: <http://www.youtube.com/watch?v=8LiEEEvnO10&feature=youtu.be>

## Satellite & Observatory Visualizations

<http://aquarius.gsfc.nasa.gov/gallery-animations.html>

### **Aquarius instrument gathering data**

Original files: <http://svs.gsfc.nasa.gov/goto?3830>

### **Aquarius/SAC-D observatory in orbit**

Original files: <http://svs.gsfc.nasa.gov/goto?20144> ("Aquarius-Multipass" QT)

## Slideshows of Instrument & Observatory Development

<http://aquarius.nasa.gov/gallery-slideshows.html>

## Aquarius/SAC-D Brochure (12 pages)

[http://aquarius.gsfc.nasa.gov/pdfs/Aquarius\\_Mission\\_Brochure\\_508\\_Compliant.pdf](http://aquarius.gsfc.nasa.gov/pdfs/Aquarius_Mission_Brochure_508_Compliant.pdf)

## Aquarius/SAC-D Lithograph

[http://aquarius.gsfc.nasa.gov/pdfs/aq\\_sacd\\_litho\\_final.pdf](http://aquarius.gsfc.nasa.gov/pdfs/aq_sacd_litho_final.pdf)

## Aquarius Interactive Data Tool

<http://aquarius.jpl.nasa.gov/>

World Ocean Atlas salinity, temperature & density data (GoogleEarth & flat map interfaces)

## Aquarius "Salinity Quiz"

[http://climate.nasa.gov/Salinity\\_quiz/quiz\\_template.cfm](http://climate.nasa.gov/Salinity_quiz/quiz_template.cfm)

## Aquarius "Hands On" Activities

<http://aquarius.gsfc.nasa.gov/education-classroom.html>

## Press Kit

[http://www.jpl.nasa.gov/news/press\\_kits/aquariusLaunch.pdf](http://www.jpl.nasa.gov/news/press_kits/aquariusLaunch.pdf)