Share of Voice (SOV)  
Nov 3, 2016 - Nov 3, 2017

Online article count

- Hubble Space Telescope | US: 20.15k
- Webb Telescope | US: 8.64k
- Spitzer: 2.95k
- Kepler: 1.91k
- Chandra: 2.41k
Media Exposure
Jan 1, 2017 - Nov 3, 2017

Count
0 500 1k 1.5k 2k

Hubble Space Telescope | US

NEWS OFFICE
Communications and Public Outreach
Media Exposure
Jan 1, 2017 - Nov 3, 2017

Count

1.5k
1k
0.5k
0

Jan 1

Oct 30-3

Hubble Space Telescope | US

Gravitational Waves

Europa Plumes

Trappist-1 Exoplanets

NEWS OFFICE
Communications and Public Outreach
Most Americans get science news infrequently and tend to happen upon it

% of U.S. adults who say they get science news...

- 36% get science news at least a few times a week
- 10% nearly every day
- 26% a few times a week
- 30% a few times a month
- 34% less often

Mostly because they are looking for it: 30
Mostly because they happen to come across it: 68

Note: Respondents who did not give an answer are not shown.
Source: Survey conducted May 30-June 12, 2017.
“Science News and Information Today”

PEW RESEARCH CENTER
Distribution of press release topics, 1994-2017

- Solar system
- Stellar evolution
- Exoplanets
- Galaxies & galaxy evolution
- Deep surveys
- Cosmology, exotic phenomena
HST News Stories from Cycle 20-22

46% imaging news stories
54% spectroscopy news stories
Instrument allocation

- cycle 20-22 imaging
- cycle 20-22 spectroscopy
Civic Scientific Literacy in the United States, 1988-2016

J.D. Miller
International Center for the Advancement of Scientific Literacy
About one-in-six U.S. adults are active science news consumers

% of U.S. adults who are each type of science news consumer

<table>
<thead>
<tr>
<th>ACTIVE CONSUMERS</th>
<th>CASUAL CONSUMERS</th>
<th>UNINTERESTED CONSUMERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get science news weekly AND tend to look for it</td>
<td>Get science news weekly OR tend to look for it</td>
<td>Get science news monthly or less AND tend to come across it</td>
</tr>
<tr>
<td>17%</td>
<td>32</td>
<td>49</td>
</tr>
</tbody>
</table>

Note: Respondents who did not give an answer to either question are not shown. 
Source: Survey conducted May 30-June 12, 2017. “Science News and Information Today”

PEW RESEARCH CENTER
“Just-in-Time” Information Acquisition Model

In the Electronic Era, people seek science information when they want it or think they need it.

Science news acquisition is driven by what a person thinks is important to them (a schema) and what kinds of information they want to acquire.

We do not set an agenda that they follow.

We provide information in a language and at a level that can be comprehended and used.

Science and Space Information Acquisition in a Just-in-Time World
J.D. Miller
International Center for the Advancement of Scientific Literacy
Health, food and technology are science news topics with highest level of interest

% of U.S. adults who say they are ____ in each science news topic

<table>
<thead>
<tr>
<th>Topic</th>
<th>Most interested</th>
<th>Interested, but not most interested</th>
<th>NET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and medicine</td>
<td>28%</td>
<td>43%</td>
<td>70%</td>
</tr>
<tr>
<td>Food and nutrition</td>
<td>17%</td>
<td>44%</td>
<td>61%</td>
</tr>
<tr>
<td>Technology</td>
<td>17%</td>
<td>39%</td>
<td>57%</td>
</tr>
<tr>
<td>Energy and environment</td>
<td>9%</td>
<td>41%</td>
<td>50%</td>
</tr>
<tr>
<td>The mind and brain</td>
<td>9%</td>
<td>40%</td>
<td>50%</td>
</tr>
<tr>
<td>Space and astronomy</td>
<td>9%</td>
<td>31%</td>
<td>40%</td>
</tr>
<tr>
<td>Evolution of humans/animals</td>
<td>2%</td>
<td>24%</td>
<td>26%</td>
</tr>
</tbody>
</table>

Note: Respondents who are not interested in each topic or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.
“Science News and Information Today”

PEW RESEARCH CENTER
Our Audience

In 2016, about 10% of American adults thought they were “well informed” about space science and exploration, down from about 15% three decades ago.

In 2016, about 8% of American adults qualified as attentive to space science and exploration. This attentive public includes approximately 19 million adults.

Adults who are attentive to space science and exploration tend to follow space news over periods of years and often seek new space-related information on issues or topics of interest to them. They are also significantly more likely to contact public officials to express a policy preference in disputes over space policy or funding.

Science and Space Information Acquisition in a Just-in-Time World
J.D. Miller
International Center for the Advancement of Scientific Literacy
Is the Science Finding Newsworthy?

Represents a major discovery of a new phenomenon or class of object.
Is the Science Finding Newsworthy?

Sets a new astronomical record or benchmark
The ”-EST” factor

Scientists are saying that the universe is waaaayyyyy bigger than we thought

By Walter Einenkel
Friday Oct 14, 2016 2:15 PM EDT

45 Comments (45 New)

According to scientists using the Hubble Space Telescope, there are probably something in the vicinity of 2 trillion galaxies in our universe. Once you get into the billions it becomes virtually impossible to imagine anyway but if this is correct, that would expand the size of our known universe 10 times.
Is the Science Finding Newsworthy?

Offers new insights into astrobiology.
Is the Science Finding Newsworthy?

Helps resolve an area of controversy in astronomy
Is the Science Finding Newsworthy?

Presents a new mystery or unexpected new complexity to some known phenomenon.
Is the Science Finding Newsworthy?

Has a symbiosis with other NASA space missions.
Is the Science Finding Newsworthy?

Ties in with naked-eye sky events.
Is the Science Finding Newsworthy?

Has an element of novelty or pop culture uniqueness.
Submitting Research for Publicizing.

If GOs have a result they believe will be interesting to the public, the idea along with a confidential draft is submitted to:

http://outreachoffice.stsci.edu/scientist-news-form/

We also monitor: Astro-Ph, AAS abstracts, DD time allocation, notification of end of proprietary period.

The news team, in consultation with STScI scientists, will make a preliminary assessment of the newsworthiness.

We typically set up a teleconference with GOs to interpret and translate the “science story” for our audiences.
PI Name: Thomas Beatty

Email Address: tbeatty@psu.edu

Subject: First Observational Evidence for a Cold-trap on a Hot Jupiter From WFC3

Brief description of result: We observed two eclipses of Kepler-13Ab with WFC3. We got an eclipse spectrum that is more precise than usual, because we were able to use the binary companion Kepler-13BC as a reference star for differential photometry (like we do on the ground). Other hot Jupiters at this temperature (~3000K) all have daysides that either stay the same temperature, or get hotter, as you get higher up - which also happens in Solar System giant planets (and Earth). For hot Jupiters, this is believed to be caused by titanium oxide (TiO, what's in sunscreen) in the atmosphere. Unlike other hot Jupiters, we found that Kepler-13Ab gets steadily colder as you go higher up in its atmospHERE. Since Kepler-13Ab is 6 times more massive than typical hot Jupiters, we concluded that the high gravity is causing the TiO to "rain out" on the night side, removing it from the atmosphere. This was effect is called a cold-trap, and was predicted five years ago for hot Jupiters. This is the first observational evidence that it actually occurs. Understanding the behavior of cold-traps in more detail will tell us about how clouds form on exoplanets, and about the composition differences between hot daysides and cold nightsides.

URL of paper: https://arxiv.org/abs/1612.06409

Journal submission history (describe): In press with AJ.

HST GO Proposal IDs (optional): GO 13308

(Sent via STScI Office of Public Outreach)
Hi

This is a response from John Clarke to the usual "your proprietary period is about to expire" email that we send to GOs. Have not seen the paper tho. Not in Astroph. There are of course papers on Mars water from MAVEN and other NASA observatories.

Hi, Lou and Carol,

We have a paper submitted to JGR reporting on the results from this program:


Regards, John

----Carol

Dr. Carol Christian
Hubble Space Telescope Outreach Project Scientist
Space Telescope Science Institute 3700 San Martin Drive, Baltimore, MD 21218
contact: email best!! Tel if you must: 410-929-2359
Fax 410-338-4424 @carol91 :-bd
Publicizing Science Results

Requirements

A peer-reviewed publication is a prerequisite for a news release. Even a story leaked on Twitter will have maintained news value once the official NASA announcement comes out.

Exceptions:

Solar system discoveries announced in an IAU circular.

Presentations at science conferences as “works in progress.”
Publicizing Science Results

Process Timeline

It typically takes four to six weeks to prepare a news release, accompanying graphics, and video, and for NASA’s review and approval of the entire package. It is important to contact our team well in advance of a publication or conference deadline.
Publicizing Science Results

Keeping Research Confidential

Authors need to refrain from posting details on public sites like Astro-Ph until a news release is issued. Science journalists, who routinely scan sites like this for story ideas, do not have the same public reach that our team does. This potentially could preempt wider coverage of the officially publicized research.

The STScI news team keeps research results confidential and coordinates with science journals who also may have release restrictions (e.g., Nature and Science).
Publicizing Science Results

Designating a Science Contact for Reviews

Investigators need to be available to participate in revisions of the news release and any of its supporting products. The lead author, or their designee, serves as our key point of contact for interfacing with the rest of the research team to ensure scientific accuracy and timely reviews. After multiple iterations with NASA-PAO, the author or designee review the final press package assembled for the Internet posting.
Publicizing Science Results

The Review Process

- The team lead iterates with news writers until release copy is approved.
- STScI/HST mission office outreach project scientist reviews release.
- Hubble project scientists at NASA’s Goddard Space Flight Center and NASA Headquarters review the release along with the science paper. Queries from these NASA scientists may be sent back to the author for further clarification.
Publicizing Science Results

The Review Process

• The NASA newsroom may choose to issue a simplified version of the release, but the full story as written will be posted on STScI news site.

• What NASA deems highly significant science result is published out of HQ. This occasionally takes the form of a news media telecon or NASA-TV broadcast.
Publicizing Science Results

Sending Out the Release

The news release date often coincides with acceptance of the publication of research in a journal or an announcement at a conference. News releases tied to the publications that require strict news embargo times. We will also coordinate with the press office of the team’s home universities to ensure dissemination to local media.
HOLY HUBBLE!