



ESA/Hubble outreach

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Overview

- Press
- Online
- Image processing
- Social media
- Hubblecast

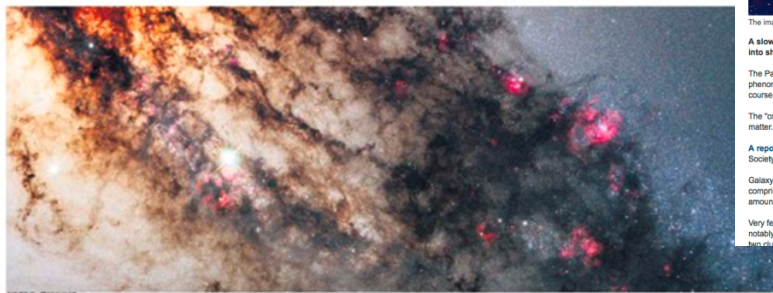
Institutional setup

- Under contract to ESO since end of ST-ECF
- Integrated with ESO public outreach
 - Share staff and facilities
 - Eliminates single-point failures
 - Continuity with how things were before
 - For most purposes, just one telescope in the portfolio
- Budget: €162k in 2011
 - Contracts, staff, service expenses, etc
- Extensive collaboration with STScI and ESA
- To the outside world, a continuation of ESA/Hubble as existed since 1999

Press



11 million light years away, clues to a cosmic collision



Hardline IMF forced Berlin to guarantee Greek bailout

Germany isolated as it tries to spread pain of €125bn rescue plan

By The Guardian
Continued from page 1

The plan is to fund the rescue of the Greek economy by the International Monetary Fund (IMF) and the European Central Bank (ECB) and the German government.

While the IMF has been successful in securing the loan, the German government has been unable to secure the same from the ECB.

Stefan Wulff, a member of the ECB's governing council, has warned that the ECB will not provide the loan unless the German government agrees to a series of conditions.

The IMF's decision to provide the loan is a significant step towards resolving the Greek debt crisis. However, the German government's refusal to provide the same support has isolated Germany and put the entire rescue plan at risk. The IMF's decision is based on the fact that the Greek government has agreed to a series of reforms that will help to reduce its debt. The German government, on the other hand, has been reluctant to provide the same support, citing concerns about the impact on the German economy. This has led to a series of negotiations between the two sides, but no agreement has been reached yet.

As well as the IMF, the German government has also been seeking support from other international organizations, such as the World Bank and the International Labour Organization. However, these organizations have also been reluctant to provide the same support, citing concerns about the impact on the German economy.

NEWS SCIENCE & ENVIRONMENT

22 June 2011 Last updated at 18:09 GMT

'Pandora' galaxy cluster crash yields dark matter clues

By Jason Palmer
Science and technology reporter, BBC News

The image shows haphazardly scattered galaxies, hot gas (false-coloured red) and dark matter (blue)

A slow-motion cosmic "car crash" of immense proportions has come into sharp focus for astronomers.

The Pandora cluster - so named because it comprises so many unusual phenomena - is a mess of four galaxy clusters that have collided over the course of 350 million years.

The "crash investigator" should yield clues about the nature of dark matter.

A report to be published in Monthly Notices of the Royal Astronomical Society outlines the unique find.

Galaxy clusters are the largest structures we know of in the Universe, comprising hundreds of galaxies and trillions of stars - along with huge amounts of hot gas - and dark matter.

Very few galaxy cluster collisions have been caught in the act. Most notably, the Bullet Cluster made its name as the site of a collision between two clusters in a crash that should in time have unusual some of dark

Related Stories

- Cosmic crash unmasks dark matter
- 'Galaxy city' seen in its youth
- Hubble makes 3D dark matter map

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OLUTION DES EXOPLANÈTES

Dans l'*Astronomie* de février 2011, nous faisons état de la possible détection d'une exoplanète très enrichie en carbone. Ce mois-ci au contraire, c'est l'appauvrissement en carbone qui est suggéré dans l'exoplanète Jupiter chaude HD 189733b par rapport à son étoile parente.



La plus petite planète extrasolaire

La mission KEPLER de la Nasa utilise une photométrie ultra-précise pour détecter des planètes extrasolaires qui passent devant leur étoile, vu de la Terre, induisant alors une diminution de la luminosité de l'étoile parente. Lancée le 7 mars 2009, la mission a commencé ses observations scientifiques en mai 2009 et a enregistré de nombreuses courbes de lumière pouvant être dues à des transits de planètes candidates. Pour confirmer définitivement la détection d'une planète, il est nécessaire de la détecter par une autre méthode, celle des vitesses radiales en spectroscopie. En janvier 2011, huit planètes « Kepler » ont ainsi été confirmées. La dernière en date - Kepler 10b - est la plus petite en taille des exoplanètes dont on a pu mesurer le diamètre : 1,45 fois le rayon de la Terre. Déjà la précédente - Kepler 9d - avait un rayon 1,64 fois celui de la Terre. La mission confirme ainsi ses potentialités pour détecter des terres, si possible dans la zone habitable de leur étoile parente (ce qui n'est pas encore le cas). CoRoT 7b, la plus petite exoplanète découverte par le satellite CoRoT du Cnes en 2009, a un rayon égal à 1,68 fois celui de la Terre (voir *Astronomie* 23, janvier 2010). Kepler 10b a une masse 4,6 fois celle de la Terre et une densité moyenne de 8,8 g/cm³, similaire à celle du bronze. C'est une véritable planète tellurique.

R. F. ■

Press

■ Science releases

- Based on peer-reviewed science
- European authors

■ Photo releases

- Highlight observations rather than science, so not restricted by nationality of PI

■ Organisational releases

- Institutional stories, e.g. closure of ST-ECF

■ Announcements

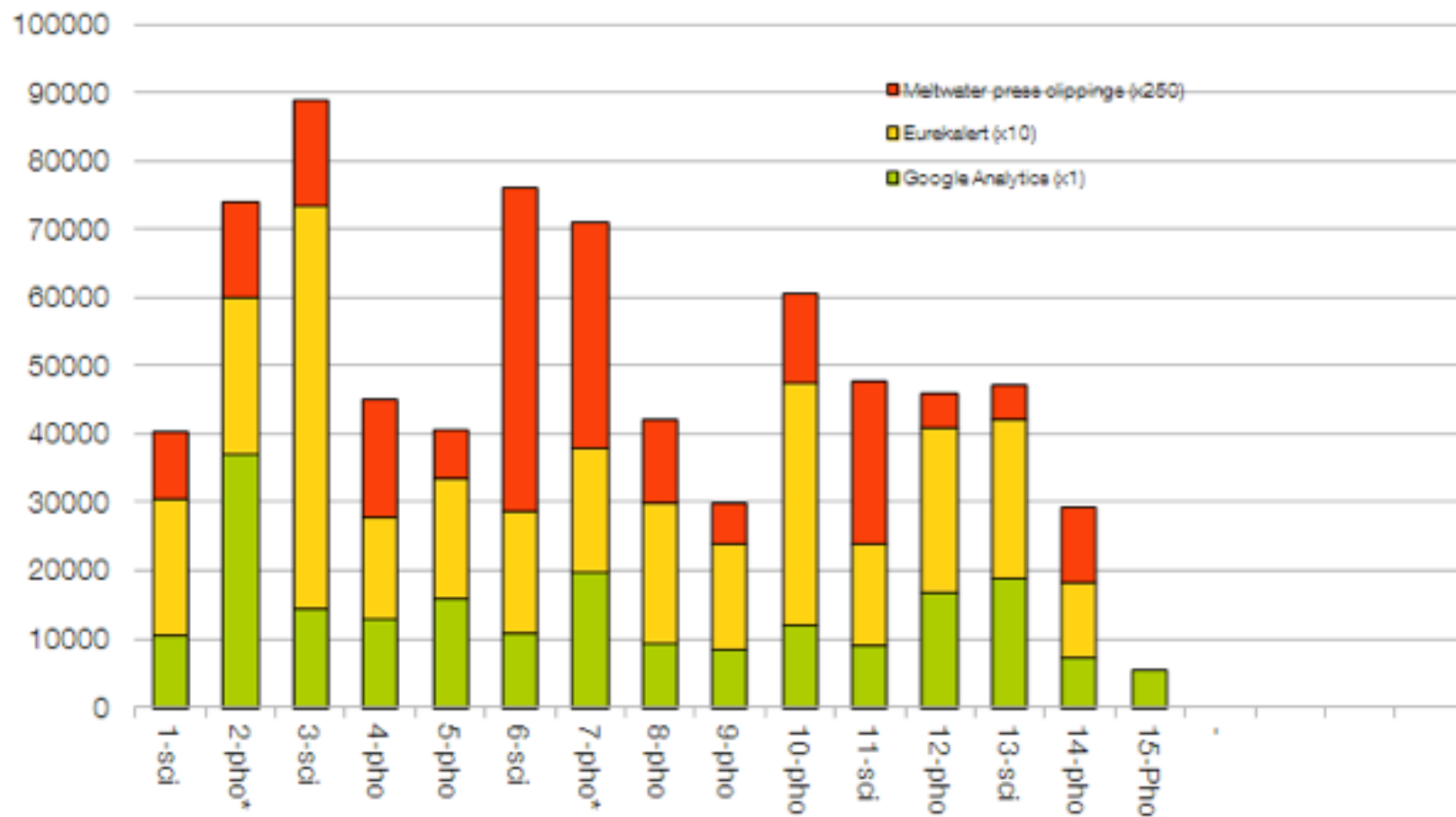
- Catch-all category for less important news items

Press

- Published online
- Promoted through social media
- Targeted at journalists via email
- Embargo list for trusted reporters
- Target officially 16 per year (but we aim higher)
- Purpose is to encourage coverage, not act as gatekeepers

Press

spacetelescope.org 2011: News Popularity



Press

■ Sources of press release stories:

- Scouting on astro-ph
- Direct contact by PIs
- Contact from other institutions (in particular STScI)

■ How we decide what to cover:

- Assessment of news value
- Assessment of scientific content

Press

■ Focus on high quality

- All releases are scientifically vetted
- All science releases are based on peer-reviewed articles
- All releases have new images
- Almost all releases have HD video

Press

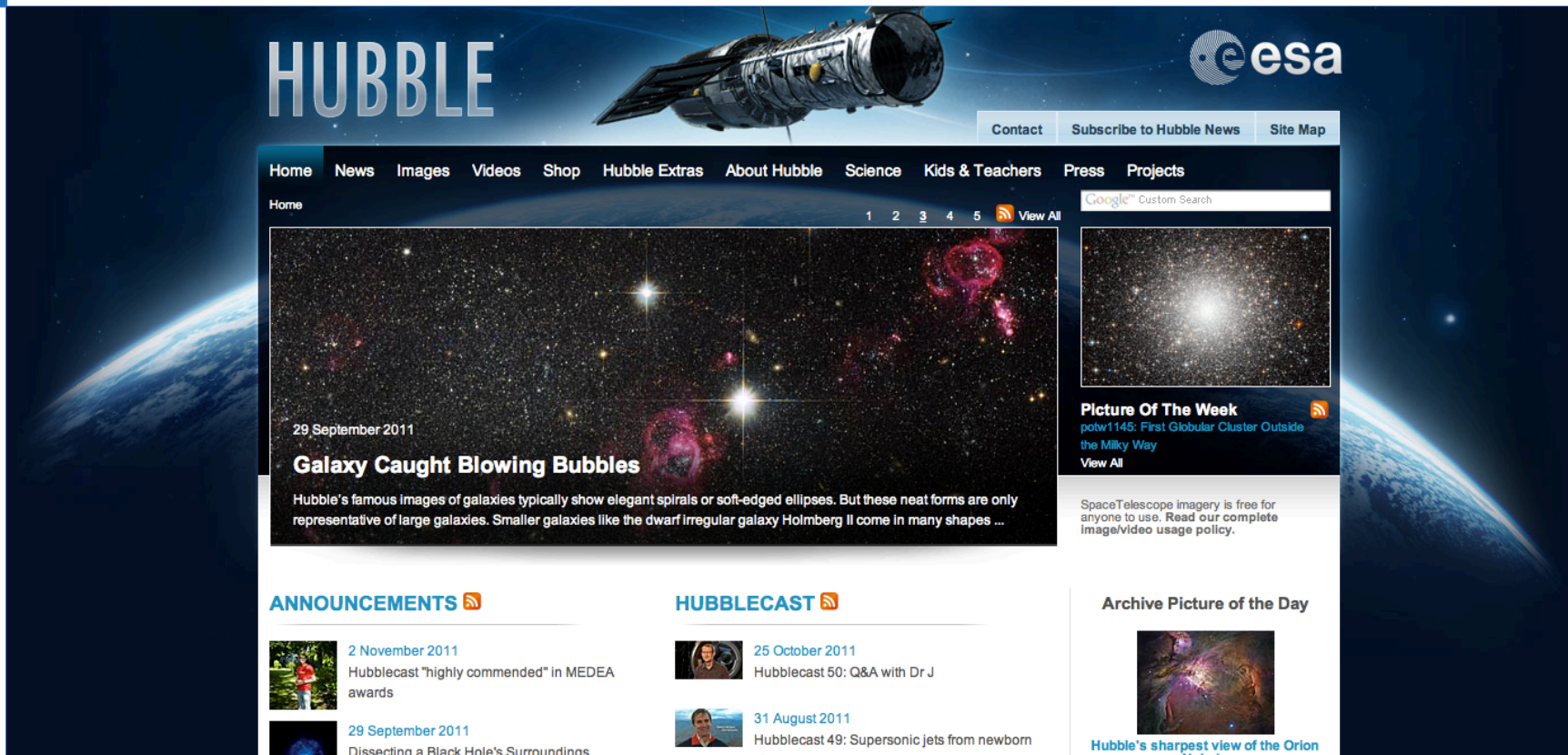
■ Approvals:

- Review by Newsteam
- PI
- Head of department (Lars Lindberg Christensen)
- ESA Mission Manager (Antonella Nota)
- Press Release Committee
- Various people also kept in the loop:
 - Bob Fosbury
 - ESA
 - Karen O’Flaherty
 - Markus Bauer
 - Salim Ansari

■ Announcements have a streamlined procedure



Web



spacetelescope.org



Web

- All content published online – “if it’s not online, it doesn’t exist”
- Updated at least weekly, usually more often
- Web exclusive content, including background information, fact sheets, and the Picture of the Week series
- Average 225k visitors/month in 2011
- +38% over 2010

Web

- Archival material remains highly relevant: most content remains valuable long after first publication
- Archive consists of:
 - More than 3000 images
 - 800 videos including 50 Hubblecasts
 - 200 news releases
 - 100 Pictures of the Week
 - Background information and fact sheets



Web























	Page None ▾		Pageviews ↓	Unique Pageviews	Avg. Time on Page	Bounce Rate	% Exit	\$ Index
1.	 /news/heic1116/		45,892	40,892	00:02:56	74.15%	70.67%	\$0.00
2.	 /		34,133	25,681	00:01:38	47.61%	42.71%	\$0.00
3.	 /images/archive/top100/ ARCHIVE		30,311	14,927	00:01:12	53.45%	33.11%	\$0.00
4.	 /images/ ARCHIVE		24,326	12,998	00:00:37	46.47%	17.13%	\$0.00
5.	 /videos/ ARCHIVE		11,464	6,568	00:00:38	43.83%	15.54%	\$0.00
6.	 /images/heic1107a/		8,768	6,687	00:00:43	49.33%	19.81%	\$0.00
7.	 /static/archives/images/screen/heic1116a.jpg		5,527	5,086	00:01:23	60.98%	66.08%	\$0.00
8.	 /images/heic1007a/ ARCHIVE		5,387	4,370	00:00:49	42.66%	20.94%	\$0.00
9.	 /news/heic1115/		5,382	4,292	00:01:40	64.34%	45.06%	\$0.00
10.	 /images/heic1116a/		5,202	4,356	00:00:39	43.97%	45.41%	\$0.00
11.	 /videos/heic1116a/		5,049	4,599	00:02:03	73.68%	61.70%	\$0.00
12.	 /images/archive/category/galax/ ARCHIVE		4,817	2,430	00:00:28	40.00%	6.29%	\$0.00
13.	 /images/archive/category/solarsystem/ ARCHIVE		4,794	3,054	00:00:42	70.76%	10.83%	\$0.00
14.	 /images/archive/wallpapers/ ARCHIVE		4,790	2,390	00:00:38	34.94%	11.11%	\$0.00
15.	 /images/heic0601a/ ARCHIVE		4,519	3,351	00:00:53	47.77%	25.71%	\$0.00
16.	 /videos/archive/category/hubblecast/ ARCHIVE		4,311	2,566	00:01:20	42.28%	24.03%	\$0.00
17.	 /images/heic0506b/ ARCHIVE		4,243	3,232	00:01:10	56.01%	29.44%	\$0.00
18.	 /news/		4,174	2,974	00:00:55	56.42%	28.44%	\$0.00
19.	 /images/heic1116b/		4,168	3,687	00:00:54	36.46%	42.85%	\$0.00
20.	 /images/heic0602a/ ARCHIVE		3,889	2,796	00:00:50	50.16%	38.80%	\$0.00
21.	 /images/archive/category/quasar/ ARCHIVE		3,868	2,312	00:00:31	63.46%	8.89%	\$0.00
22.	 /images/page/2/ ARCHIVE		3,833	1,910	00:00:29	54.39%	5.53%	\$0.00

Image processing and graphics

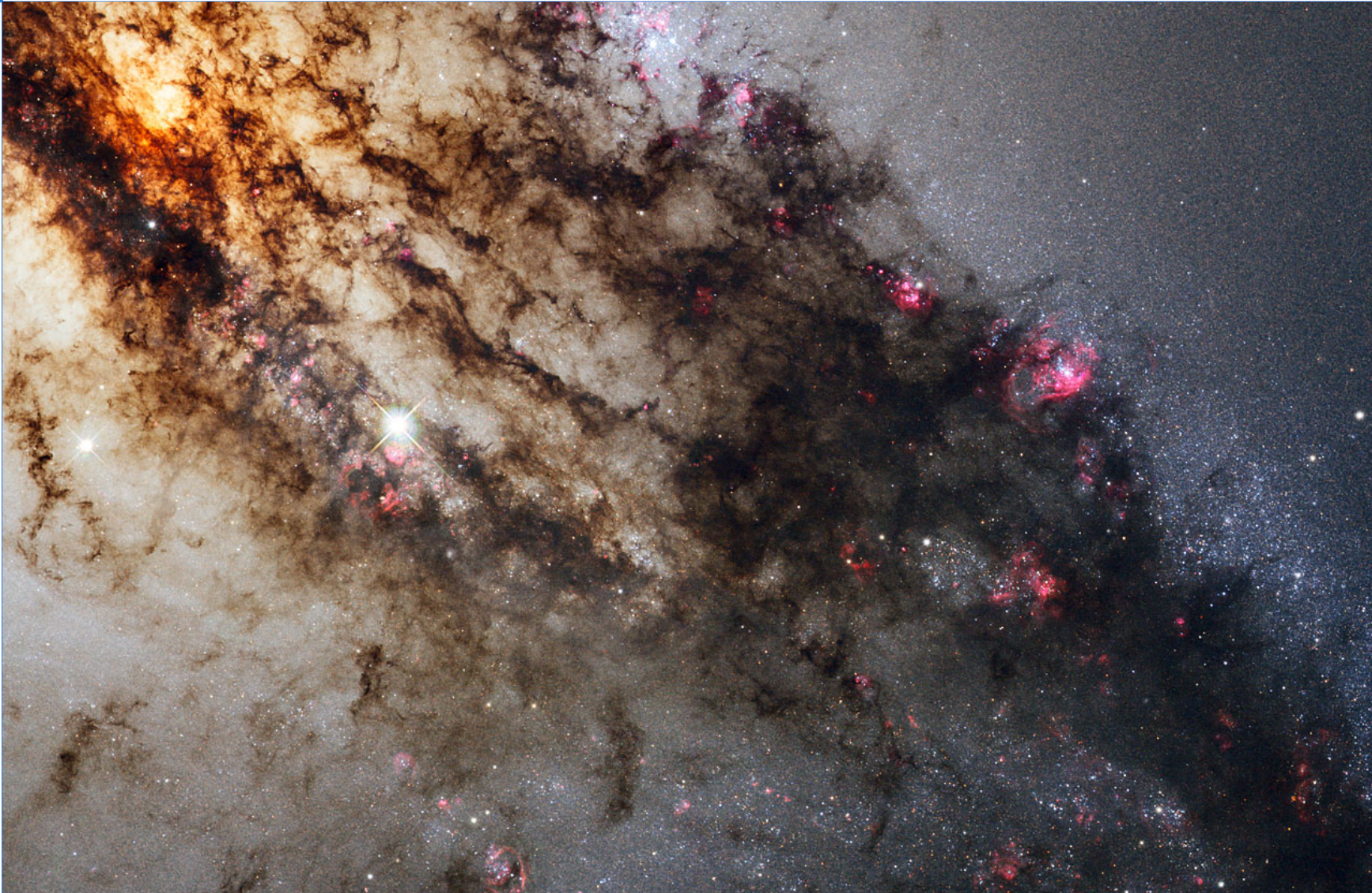


Image processing and graphics

- Comparable (if not greater) numbers to STScI
 - *but* comparison with STScI is not like-with-like
- Weekly images in the PotW
- Images for press releases
- Pipeline of 100+ forthcoming images
- Regular scouting of archives
- FITS Liberator
- Graphic designers and artists

Image processing and graphics

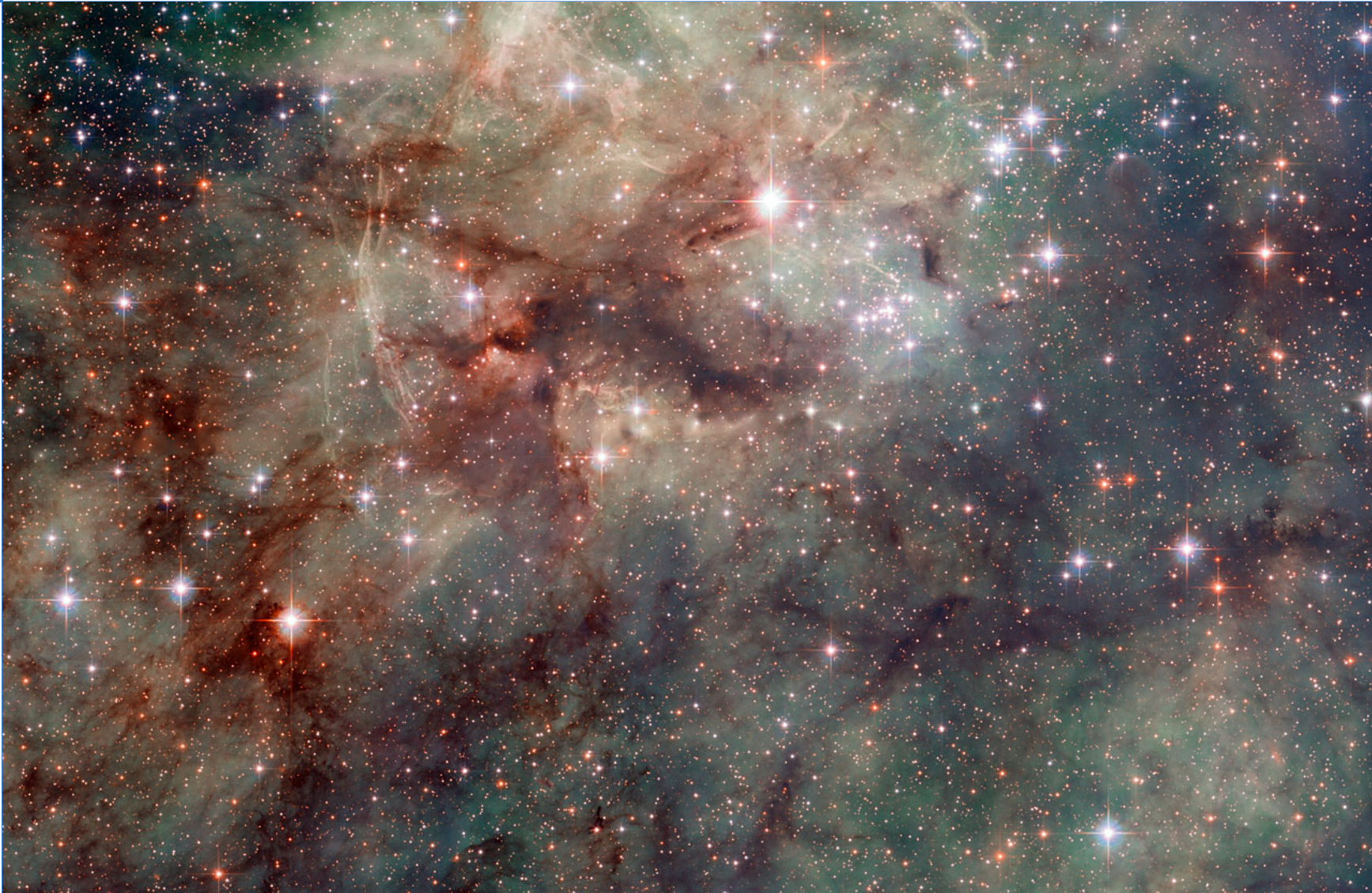
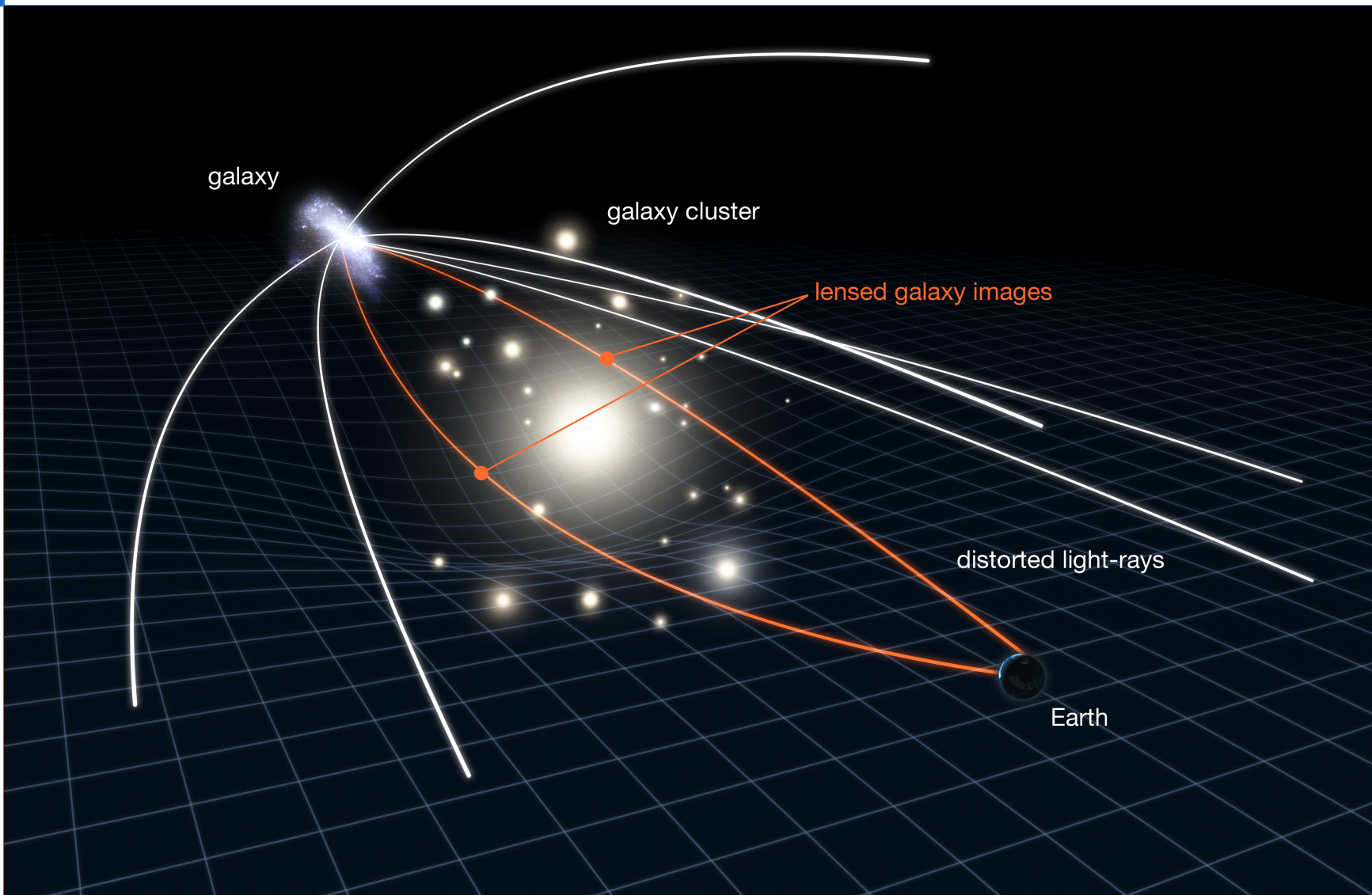


Image processing and graphics



Image processing and graphics



Picture of the Week

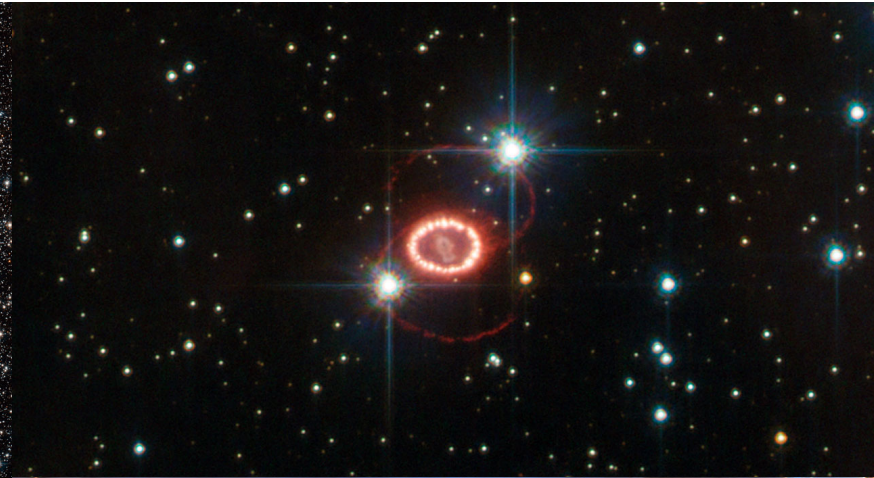
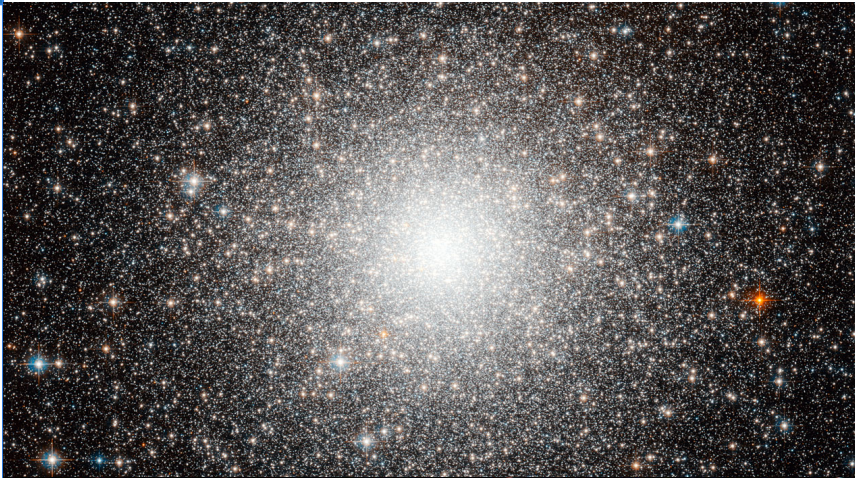


Image processing and graphics

- Images are now all tagged with metadata:
 - Filters and colour allocations
 - Exposures
 - Objects (cross-referenced with SIMBAD)
 - Distance (where appropriate)
 - Coming soon: field of view, coordinates, allowing integration with third party tools like Google Sky.

iPad app



Top 100

images from Hubble

Available on the
App Store



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facebook

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Hubble Space Telescope
Non-profit organisation

Wall Hubble Space Telescope · Everyone (Most recent)

Share: Post Link Video

Write something...

Hubble Space Telescope
First globular cluster outside the Milky Way — ESA/Hubble Picture of the Week
<http://www.spacetelescope.org/images/potw1145a/>

First Globular Cluster Outside the Milky Way | ESA/Hubble
www.spacetelescope.org
The object shown in this beautiful Hubble image, dubbed Messier 54, could be just another globular cluster, but this dense and faint group of stars was in fact the first globular cluster found that is outside our galaxy. Discovered by the famous astronomer Charles Messier in 1778, Messier 54 belongs...

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313 people like this.

View all 17 comments 92 shares

Evans Williams Thank u very much Bruce I was just wondering what it was it so bright
10 hours ago · Like

ElJuan Felipe Peña super:)
5 hours ago · Like

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73,332
like this

2,835
talking about this

Likes
Hubble European Picture of the Week
ESO Astronomy

Create a Page

You and Hubble Space Telescope

10 friends like this.
 ESO Astronomy

Birthdays [See all](#)
Corinne Doff
It's her birthday.
 Say Happy Birthday

Recommended Pages [View all](#)
spAts
Oana Sandu likes this.
 Like

Sponsored [See all](#)
The Spartan Diet
 Learn how actors from The Movie 300 and gained muscle, and burned fat, fast, free and easy.

Games QA Tester Course
train2game.com
 Study in East London and become a Games QA Tester at Train2Game.com. Register for FREE in 30 seconds.

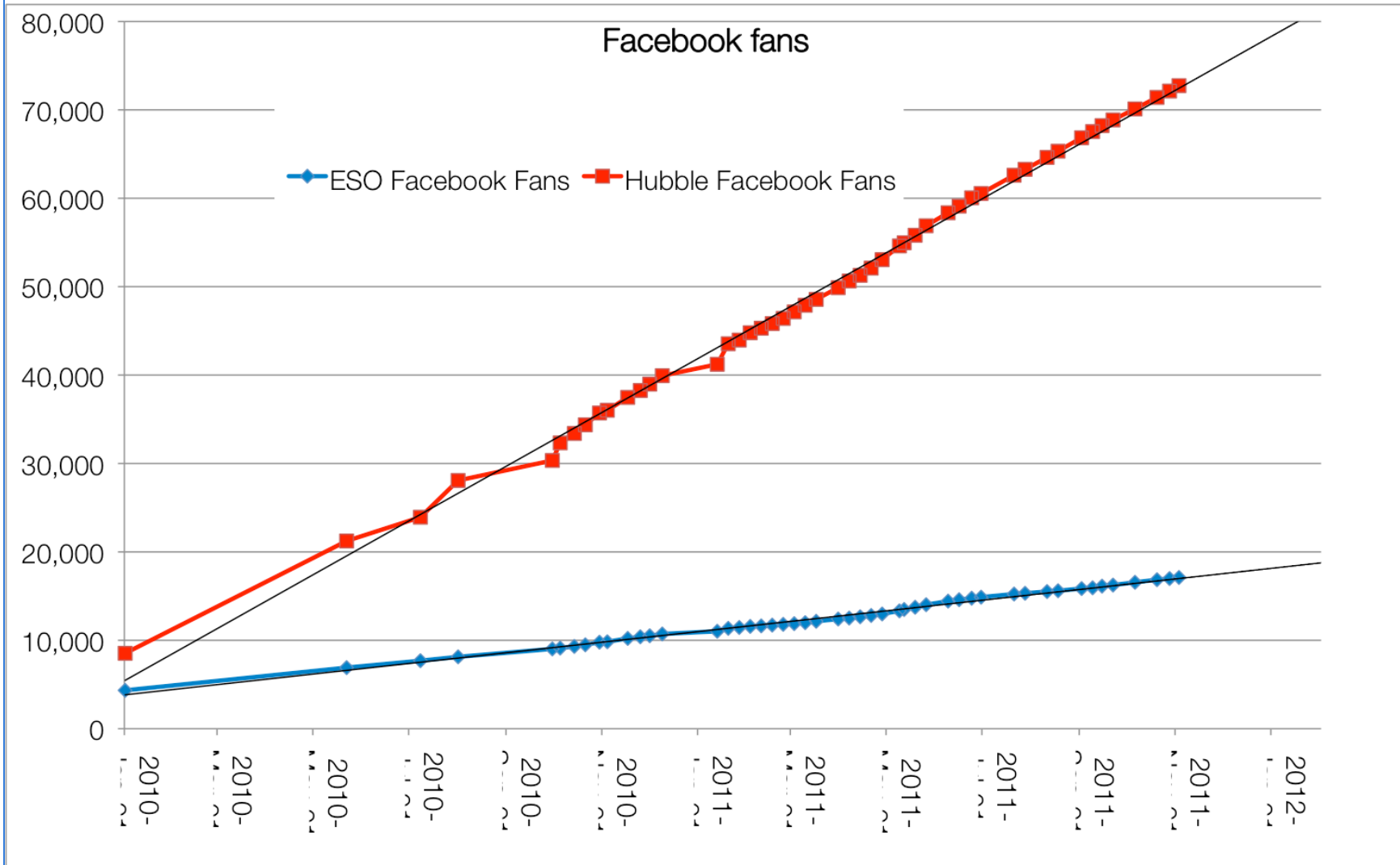
Social media: Facebook

- Updated with all releases, podcasts, pictures, etc
- Reposting of archival images
- Active engagement with fans
 - Answering questions and comments
 - Inviting suggestions for the Hubblecast

Social media: Facebook

- 73,000 fans
- Increasing by ~3,000 per month
- 1.6m post views per month
- 12,000 likes or comments per month
- Most popular in 25-34 age group

Social media: Facebook





Social media: Twitter



HUBBLE
SPACETELESCEPE.ORG

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twitter 

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HUBBLE
@HUBBLE_space space
The official feed of the Hubble Space Telescope, the space-based observatory which has revolutionised modern astronomy. Tweets run by @oanasandu
<http://www.spacetelescope.org>

Tweet to @HUBBLE_space

Tweets Favorites Following ▾ Followers ▾ Lists ▾

 **HUBBLE_space** HUBBLE
First globular cluster outside the Milky Way [#ESA](#) [#HPoW](#)
bit.ly/uQlyTF
7 Nov

 **HUBBLE_space** HUBBLE
Hubble observes the disc of matter surrounding a faraway [#blackhole](#) bit.ly/rEBWAR
4 Nov

 **HUBBLE_space** HUBBLE
2011 [#MEDEA](#) awards jury judged the [#Hubblecast](#) to be among the best entries in this European competition bit.ly/sTCjeV
2 Nov

 **HUBBLE_space** HUBBLE 

 About @HUBBLE_space

234 Tweets **399** Following **5,479** Followers **478** Listed

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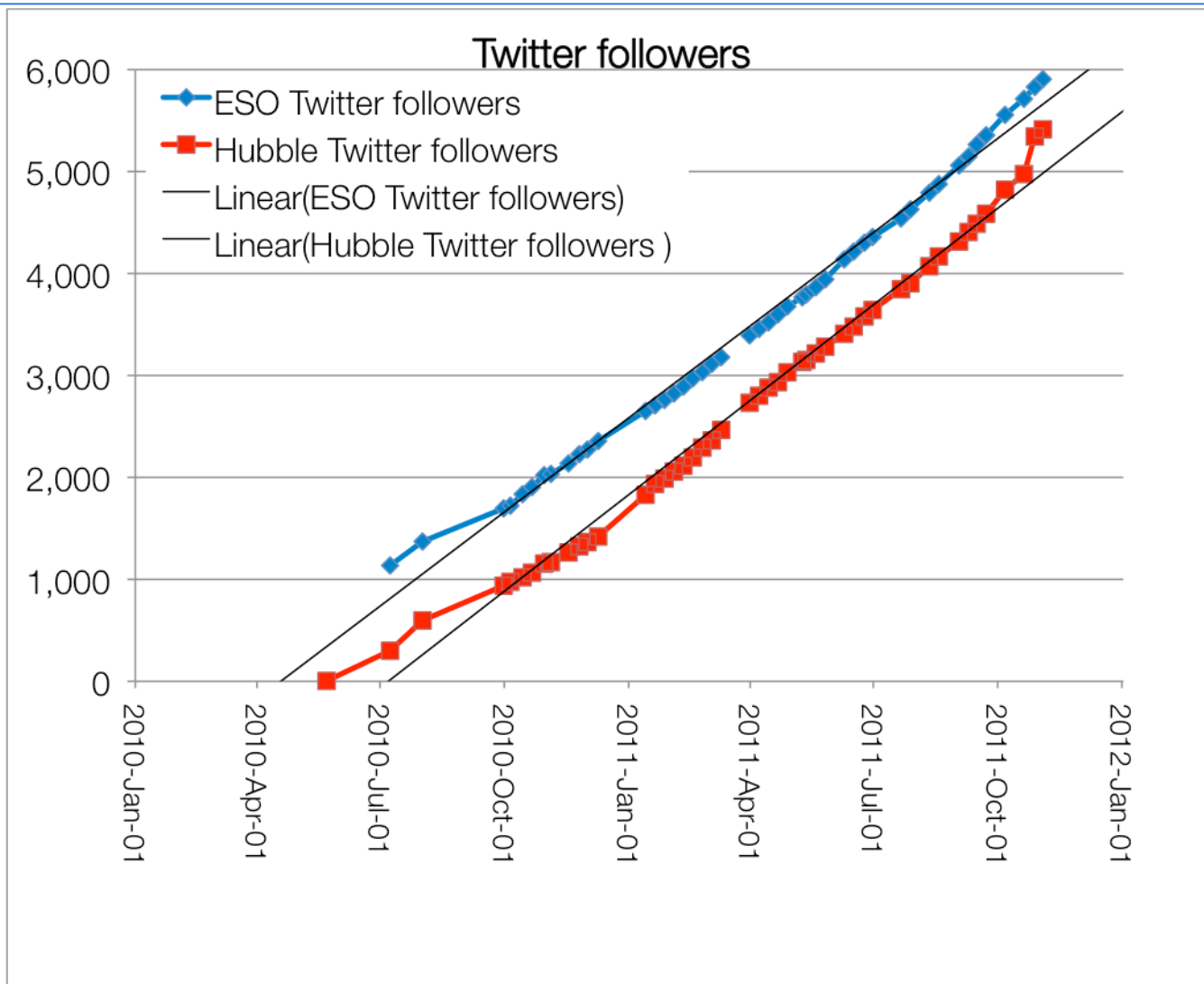


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Social media: Twitter

- 5,500 followers
- Similar linear rise in followers to Facebook

Social media: Twitter

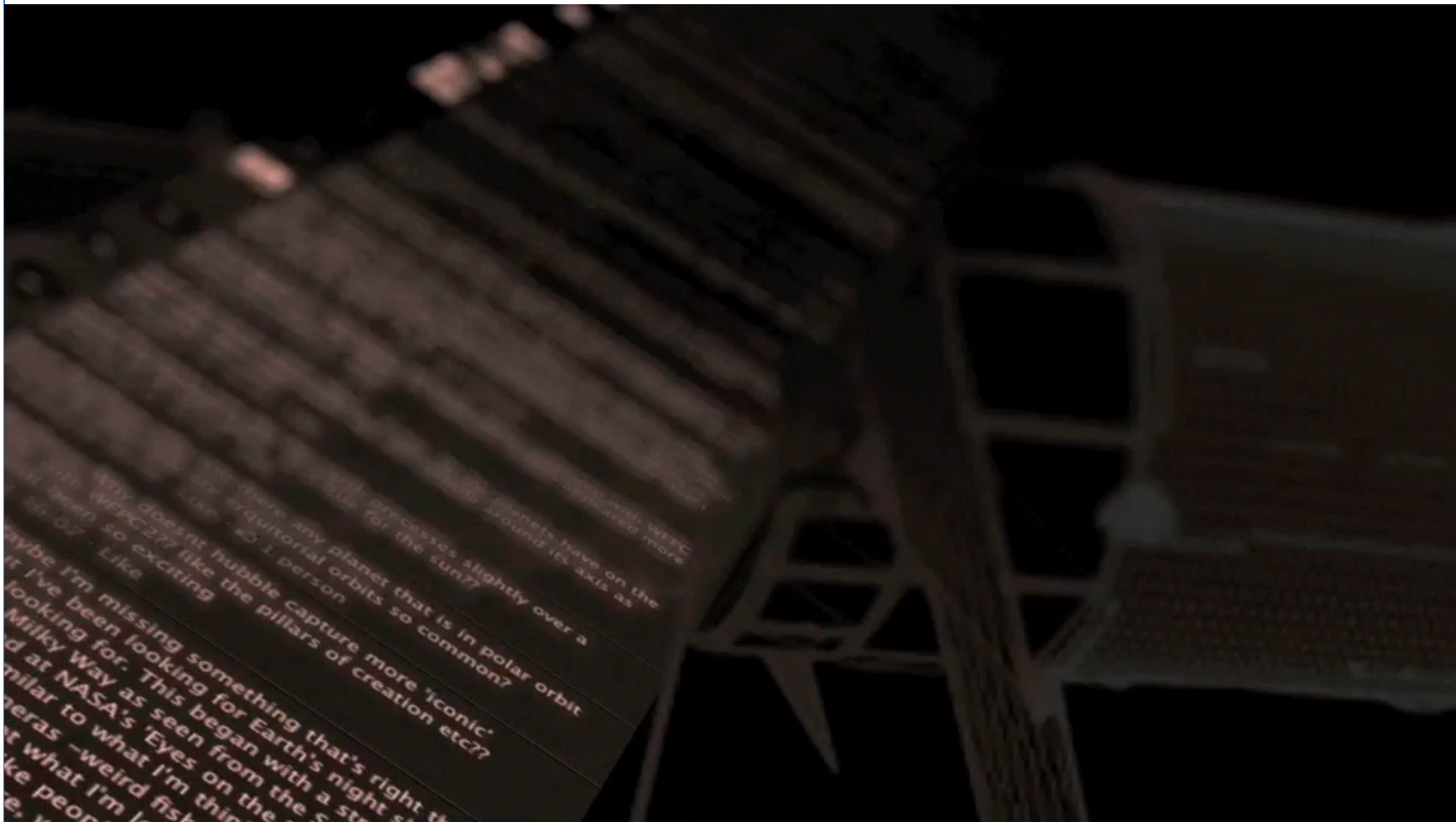


Hubblecast

BROUGHT TO YOU BY THE EUROPEAN SPACE AGENCY AND NASA



Hubblecast



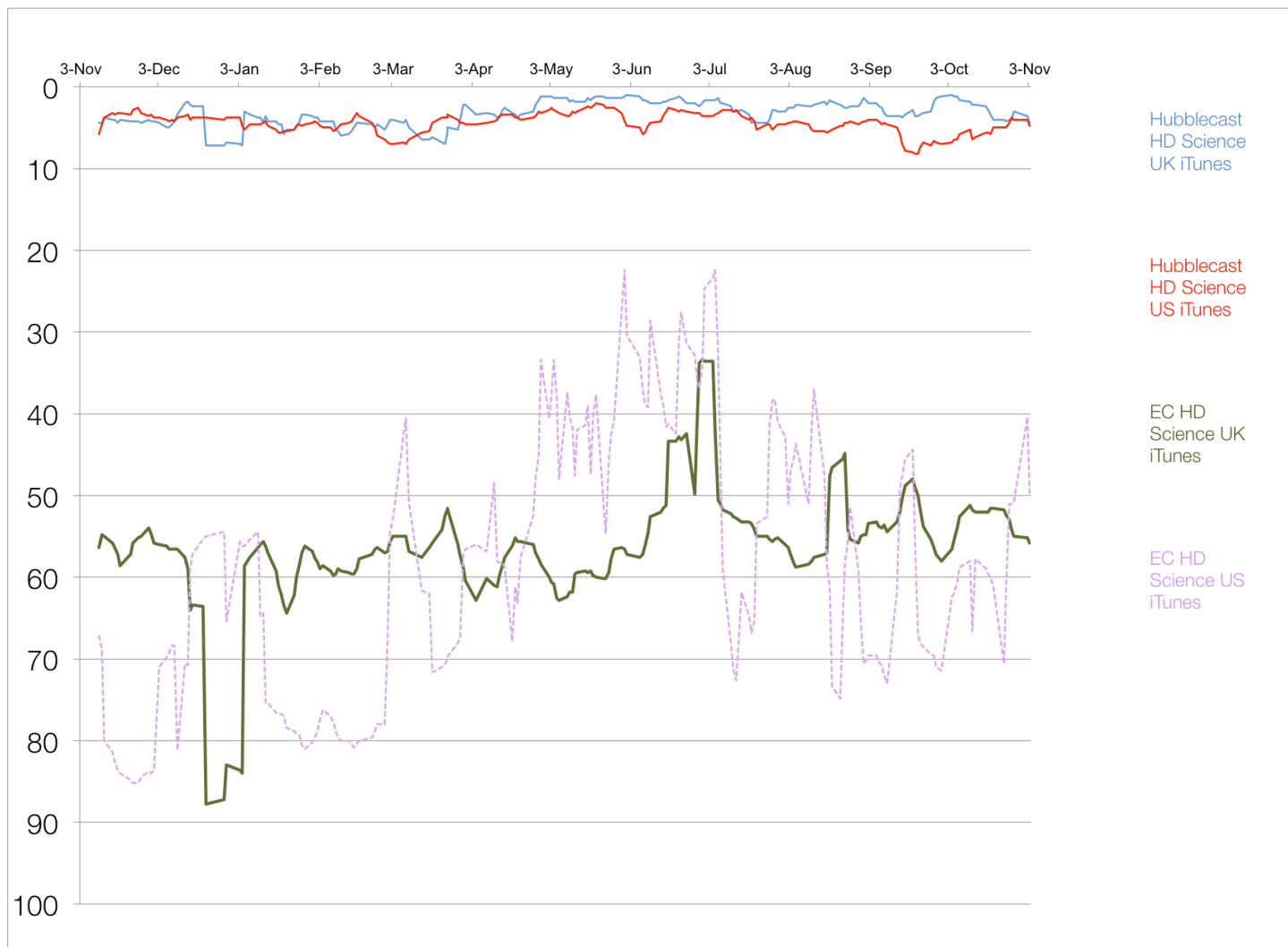
Hubblecast

- Each episode covers one topic
- 5-10 minutes long
- Usually studio-based
- Extensive use of graphics and animations
- Aimed at slightly less technical audience than press releases

Hubblecast

- One of the first HD video podcasts
- Top 10 in iTunes Science and Medicine category
- 50 episodes since 2007 (10-12 per year)
- Distribution:
 - iTunes
 - YouTube, Vimeo, DailyMotion
 - spacetelescope.org
 - Promotion via Facebook, Twitter, email
- 'Highly commended' in MEDEA 2011

Hubblecast





Hubblecast





Overview

- Press
- Online
- Image processing
- Social media
- Hubblecast

One more thing...







Contact



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