Errata for Online Journal Articles in the Physical Sciences:

an empirical study

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What are journal errata?

Corrections, usually

- printed and included in a subsequent issue
- printed separately
- online in subsequent issue or separate area

Importance of published errata:

- vital to scientists using the literature
- enable the preservation of the written record (fixity of content)

Finding errata

- Citation indexing (print and online articles)
- Subject indexes and abstracts (print and online)
- Tables of contents (print vs. online)
- Publishers' search engines (online)
- E-print servers (online)
- Links from original articles (online)

Limits of this study:

- Empirical approach
- Selected journals in the physical sciences
- Journals have a full-text online presence
- Errata are published within a journal issue
 - checked at least 3 journals per publisher
 checked 3 errata/originals per journal, if present





Figure 1. Original and later publications exist independently.

Reader views online piece at "x":



Figure 2. Links in both directions, for awareness and convenience.

Selected Publishers:

- Academic Press
- American Chemical Society
- American Institute of Physics
- American Physical Society
- Annual Reviews
- Elsevier
- Institute of Physics Publishing
- Institution of Electrical and Electronics Engineers
- Kluwer
- Optical Society of America
- Royal Society of Chemistry
- Springer-Verlag
- Wiley

Observed Links

- 42 journals surveyed
- Almost half had links from articles to corrections AND links from corrections to articles
- 10% linked corrections to articles, but not vice versa
- Half of the journals lacked any observed links; some did not include errata in the online versions

		Article L	Article Linked to Erratum			Erratum Linked to Article			
Publishers	Journals Sampled	Yes	Some	Νο	Yes	Some	No		
Academic Press	Annals of Physics (NY)		X			X			
	Atomic Data & Nuclear Data Tables Journal of Magnetic Resonance	х		х	x		х		
AIP	Applied Physics Letters Journal of Applied Physics	x x			x x				
	Journal of Chemical Physics	Х			X				
Annual Reviews	Ann. Rev. Astron. Astrophys. Ann. Rev. Fluid Mechanics Ann. Rev. Nuclear & Particle Sci.	X X X			X X X				
APS	Physical Review D Physical Review Letters Reviews of Modern Physics	x x x			x x x				
Elsevier	Materials Science & Engineering: R Nuclear Physics B	×		χ <	x		χ <		
	Physics Letters B Physics Reports Progress in Nucl. Mag. Res.	X		x	X		x		
	Spectroscopy			x			х		
Institute of Physic	s Journal of Physics B Reports on Progress in Physics Superconductor Science and	X	x		X	x			
	Technology	X			X				
Opt. Soc. Amer.	Journal of the Opt. Soc. Amer. A Optics Express Optics Letters	x		x x	х	χ <	Х		
Springer-Verlag	Journal of Biological Inorganic Chemistry		x		x				

Observed Article-Erratum Links, by Publisher

Publishers	Journals Sampled	Article Linked to Erratum			Erratum Linked to Article		
		Yes	Some	No	Yes	Some	No
Academic Press	Journal of Magnetic Resonance	x			x		
Amer. Inst. Phys.	Applied Physics Letters	Х			Х		
	Journal of Applied Physics	Х			Х		
	Journal of Chemical Physics	Х			Х		
Annual Reviews	Ann. Rev. Astron. Astrophys.	Х			Х		
	Ann. Rev. Fluid Mechanics	Х			Х		
	Ann. Rev. Nuclear & Particle Science	Х			х		
Amer.Phys. Soc.	Physical Review D	Х			Х		
	Physical Review Letters	х			Х		
	Reviews of Modern Physics	Х			Х		
Elsevier	Nuclear Physics B	х			Х		
	Physics Letters B	Х			Х		
Institute of Physics	Journal of Physics B Superconductor Science and	х			х		
	Technology	х			Х		
Optical Soc. Amer.	Optics Letters	x			х		
	Journal of Biological Inorganic						
Springer-Verlag	Chemistry		х		х		

No Links Found

		Articles Linked to Errata			Errata Linked to Articles		
Publishers	Journals Sampled	Yes	Some	Νο	Yes	Some	Νο
Academic Press	Atomic Data & Nuclear Data Tables			х			х
Elsevier	Materials Science & Engineering: R			x <			x <
	Physics Reports			Х			Х
	Progress in Nucl. Mag. Res. Spectroscopy			Х			Х
IEEE	IEEE Journal of Quantum Electronics			Х			х
	IEEE Photonics Technology Letters			Х			Х
	IEEE Transactions on Plasma Science			Х			Х
Kluwer	Journal of Atmospheric Chemistry			х			Х
	Journal of Biomolecular NMR			Х			Х
	Solar Physics			Х			Х
	Space Science Reviews			Х			Х
Opt. Soc. Amer.	Journal of the Optical Society Of America A			Х			х
Royal Soc. Chem.	Chemical Communications			x <			x <
	Faraday Discussions			x <			x <
	New Journal of Chemistry			x <			x <
Springer-Verlag	Theoretical Chemistry Accounts			х			х
	Zeitschrift fur Physik C			Х			Х
Wiley	Angewandte Chemie, International Edition			х			х
	Chemistry, A European Journal			Х			Х
	Journal of Computational Chemistry			X			Х

HTML Tour

selected link strategies and examples-chosen for positive aspects but not necessarily representative

Note to website users: these links are not live; please copy and paste into your browser. Non-subscribers will have access to some examples, but not all.

1. Use of "See also" note in abstract; use of PACS code for errata

• Journal of Chemical Physics (American Institute of Physics)

Examples

Original article abstract with link to erratum as "See also" note: <u>http://ojps.aip.org/getabs/servlet/GetabsServlet?prog=normal&id=JCPSA600011500</u> <u>0020009113000001&idtype=cvips&gifs=yes</u>

Erratum abstract with link to original as "See also" note: <u>http://ojps.aip.org/getabs/servlet/GetabsServlet?prog=normal&id=JCPSA600011600</u> <u>0008003502000001&idtype=cvips&gifs=Yes</u>

- 2. Use of inset box with related links; link from HTML full text to erratum
- Annual Review of Astronomy & Astrophysics (Annual Reviews)

Examples

- Original HTML full text article with links, including erratum: http://astro.annualreviews.org/cgi/content/full/38/1/191
- HTML erratum with links, including original article full text: http://astro.annualreviews.org/cgi/content/full/38/1/191/DC1

3. Use of notes ("Referred to" and "Referred to by") to link between HTML article abstract and erratum; these links are not included in inset.

• *Physics Letters B* (Elsevier)

Examples

Original HTML abstract (ScienceDirect platform) http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6TVN-3VY01D3-M&_user=501045&_coverDate=02%2F25%2F1999&_rdoc=18&_fmt=summary&_orig =browse&_srch=%23toc%235539%231999%23995519996%2373089!&_cdi=5539&_so rt=d&_docanchor=&_acct=C000022659&_version=1&_urlVersion=0&_userid=501045 &md5=de396f662ceff86cff987beaca37cc4c

HTML erratum

http://www.sciencedirect.com/web-editions?_ob=ArticleURL&_udi=B6TVN-44RNMSM-

2&_user=778139&_coverDate=02%2F07%2F2002&_rdoc=30&_fmt=full&_orig=brows e&_srch=%23toc%235539%232002%23994739996%23283397!&_cdi=5539&_sort=d& _acct=C000043102&_version=1&_urlVersion=0&_userid=778139&md5=edf8e8e6307c 8bd836b2c7d992f966be

- 4. Inset box with links; table of contents listing with links to erratum and original Examples:
- Journal of Magnetic Resonance (Academic)

Original article abstract with link to erratum http://www.idealibrary.com/links/doi/10.1006/jmre.2001.2313

Erratum abstract with link to original "referring article" http://www.idealibrary.com/links/doi/10.1006/jmre.2001.2435

Tables-of-contents a) Erratum is last entry: http://www.idealibrary.com/links/toc/jmre/153/1/0 b) Original article on p. 71: http://www.idealibrary.com/links/toc/jmre/150/1/0 5. Standard phrase, near beginning, is used to provide links between erratum and original full-text or abstract; navigation frame does not provide connecting link

Examples:

• Journal of Biological Inorganic Chemistry (Springer)

Original full-text with link to erratum http://link.springerny.com/link/service/journals/00775/contents/01/00266/paper/s007750100266ch000.html

Erratum linked to full-text

http://link.springer-ny.com/link/service/journals/00775/contents/02/00349/paper/s00775-002-0349-zch000.html

Challenges for the Reader

- Most links only found in "welcome mat" abstract, not in full article
- Errata included in some issues, absent from others
- Some errata not part of online version
- Some errata not identified as such in contents
- Variations in style
- Broken URLs
- Full citations lacking in abstract

Indexing

- Science Citation Index (ISI) the best
- Subject indexes varied coverage
- Publisher search engines convenient, but not as consistent as SCI
- arXiv.org, physics e/pre-print server usually includes all versions of article in full

Conclusions

- Excellent models exist
- Improvements in consistency of online journal content and production are needed
- Use of subject terms and classification, such as PACS code for errata
- Standardization for citation style and an accepted location for forward links would improve ease of use