

A comet's tale: How much of the world came to miss the most spectacular sky spectacle in decades

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Abstract

In January 2007 comet C/2006 P1, named McNaught, became brighter than Venus, was visible in the daytime sky and developed the most dramatic dust tail in recent memory. For those with clear skies during the crucial days and in the right geographical latitudes it was a sight to remember, a subject of everyday conversation, gaining local presence in the general media as well. But the world's media at large practically ignored what was literally the greatest astronomical story in decades, except in regional markets. This paper traces the surprising failure of the early 21st century media machinery to several interrelated factors and concludes that there was simply "no one in charge" at the crucial moments. Finally, the case of comet 17P/Holmes – which increased its brightness a million times two weeks after CAP2007 – is treated as a complementary case study in progress.

An inconvenient orbit

Soon after McNaught's discovery on 7 August 2006, when enough astrometry was available to determine a reliable orbit, McNaught (2006) and other comet specialists (mainly in the amateur community) realised that C/2006 P1 could become very bright in the following January. However, since comets can display all kinds of behaviour when approaching the Sun and as this one had never been observed before, no one was willing to "go public". The absolute magnitude and thus size of the nucleus of McNaught was not large, and so it was even considered possible that it would disintegrate and simply disappear as it heated up. Despite half a dozen space missions to comets and ground-based observing records of hundreds of comet apparitions there is simply no way to predict a comet's behaviour based on its physical state at a particular time. The only hope lies in observations covering months and extrapolations of the brightness development.

The author first learned of the possibility of a great show at a conference of German comet observers in early November 2006 and decided to alert the German amateur community at least – not with any bold claims about great brilliance, but at least the geometrical circumstances for the world in the crucial weeks two months hence, Fischer (2006a). Other than that article, and a note in an English-language news service, Fischer (2006b), the impending approach of comet McNaught was, to my knowledge, totally ignored by the well-known astronomical media, let alone the general press, and this remained the case until the end of 2006. For an obvious reason: the comet was so close to the Sun that its behaviour simply could not be monitored reliably. Only when it was recovered at about the "right" brightness in late December, did enthusiasm among

amateur astronomers specialising in comets begin to climb, as reported by Fischer (2007), although hardly anyone else knew about what might unfold in the coming weeks.

Waking up

By 4 January 2007 McNaught had reached magnitude +2 and only then did two major international news services for space enthusiasts run reports by Sinnott (2007) and Rao (2007). At this time the comet was best seen from high northern latitudes, such as Alaska and Scandinavia. This explains why the first news stories in the general media seem to have originated there; in the US the comet was even treated at first as an “Alaskan” phenomenon, as reported by Loomis (2007). For temperate northern latitudes it was very low on the horizon but already visible to the naked eye by the second week of January. This is rare enough that it should have warranted press coverage, especially since perihelion was still a week away and the comet was obviously not fizzling out, but, to the author’s surprise, little happened (see the articles linked in the sidebar of Fischer (2006b)). The German public, for example, learned about the comet’s existence largely from brief clips in TV weather reports that had been instigated by individual amateur astronomers contacting the weather desk (Horn 2007). The author knows of no press release issued before McNaught’s perihelion or a major wire story describing its stunning development in the first two weeks of January when its brightness increased daily, beating even Venus in the end – there were even independent “discoveries” reported by lay people.

Around perihelion on 13 January McNaught was so bright that it could be spotted – in very clear skies at least – just 5° away from the Sun with little or no optical aid. This rare phenomenon, unseen since the apparition of the even brighter C/1965 S1 (Ikeya-Seki) in 1965, again did not make it into the general news, but this may actually have been a good thing. It would have been difficult to describe to the general public in the necessary detail how to try to make observations safely so close to the Sun, especially with binoculars. Then the comet swung south, and in Australia, at least, it was already expected. Encouraged by McNaught’s great brilliance at perihelion and its obvious survival, papers such as the Sydney Morning Herald informed their readers about the visibility in the coming week. It helped, of course, that the McNaught himself was working in Australia, and, in the end, Bryant (2007) described it as: “*the best publicised comet since Halley*”. While parts of Australia had to struggle with clouds, “*once the comet was bright and hanging over the Indian Ocean in a warm clear and still daylight sky, [...] it became headline news in all West Australian papers and television newscasts and stayed there for a week or so. The beaches were crowded with onlookers every night*”, recalls Gifford (2007). “*It was mentioned in just about every evening news service I heard around the time*”, agrees a report by Jones (2007) from Adelaide. “*The coverage of great comet McNaught in the media in Australia was absolutely phenomenal and unprecedented.*”

The view from Down Under

Several Australian amateur astronomers have reported, that the real means of transporting the news about the great comet show were not the traditional media but internet forums¹ – which

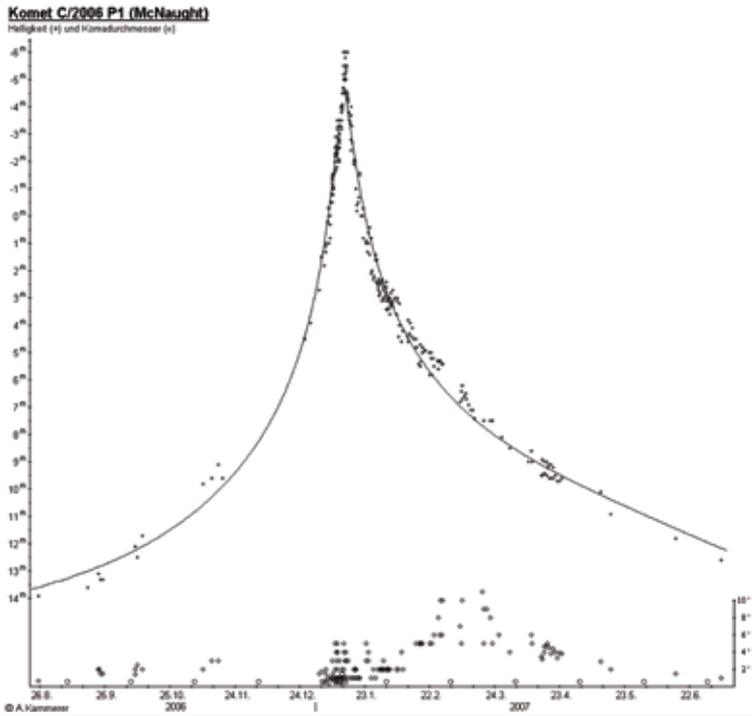
¹ such as www.iceinspace.com.au

became extremely popular – and by word of mouth! According to a report from Canberra by Herald (2007) (contrasting with the above-mentioned assessment of the Australian press), *“while the comet was not being mentioned much in the papers and the like, the public knew. For several nights, all the vantage points around Canberra were crowded (and I do mean crowded) with members of the public – many with cameras trying to take pictures. Also I have a daughter who lives in an outback town of 100 people, 100 km from the nearest town – and she tells me they were all looking at the comet.”* Even in Western Australia Gifford (2007) reported that *“much of the information came by word of mouth rather than from the media. Events happened so quickly that the media were always behind with their information”* – an interesting assessment of a billion-dollar business. Indeed: *“The difference from 20 years ago is probably the internet, so that knowledge of the event was not dependent upon the old media of print/radio/TV”*, (Herald 2007) – but the “old” media are still useful to trigger interest in a rare phenomenon in the first place! Electronic social networks also *“played a big part in being conduits of information and generating interest and excitement”* about McNaught (Jones 2007).

In New Zealand, Austin (2007) reported that the situation was similar, with *“sufficient publicity for hordes of the public to take a good look. I’ve never seen such large crowds in NZ for any astronomical event before. [...] The news media cooperated by giving it what they could, but like any of the news anywhere in the world, they are dependent on astronomers giving them the correct facts.”* In the absence of press releases from prestigious astronomical institutions – which to my knowledge did not appear before 19 January (ESO PAO (2007a), Gemini PAO (2007)) – initiatives by individual astronomers were the key by which news about McNaught percolated into local media around the world (Machholz 2007), though often only with difficulty, as editors were hard to convince to run the stories. And to tell the world about the comet, you first had to know about it yourself. Many, even in the popular astronomy world in the northern hemisphere, did not learn about the comet in time! *“So it wasn’t just the public who were unaware, there were those within the local astronomical community who were unaware the comet was visible”*, a report from the UK says – where, on the other hand, the comet was impressive enough pre-perihelion to awe the average pedestrian running into an astronomer by chance, as related by Overfield (2007).

Conclusions – and the next event

The final disappointment came in late January when comet McNaught had put on an outstanding performance for the southern hemisphere, documented in countless photographs – readily available on many websites, if one were just told to look. Yet I am unaware of any major news story in the northern hemisphere that would point this out to the public at large or of magazines running those pictures in all their glory. And the only press release after the “main show” (ESO PAO 2007b) only stressed an astrophysical detail, not the McNaught phenomenon as such. Not only was there “no one” with enough clout to announce to the world what might be coming – this reluctance can be forgiven, though the comet community should really try to improve comet forecasting techniques – but it is a missed opportunity for astronomy outreach that the world was not exposed to the sky show over Australia, South Africa and South America big time. Even when unable to view the comet’s spectacle with their own eyes, modern means of image transportation



www.aerith.net/comet/catalog/2006P1/2006P1.html

Figure 1 – The brightness development of the comet.



Figure 2 – The comet at its best, on 21 January 2007 as seen from the Glasshouse Mountains, Queensland, Australia.

could have turned the comet into a celebration for the whole “global village”. McNaught was big news as such, yet it was not carried with a vigour even close to its worth.

Less than two weeks after CAP2007, comet 17P/Holmes suddenly increased its brightness by 15 magnitudes, or a factor of one million, making it easily visible to the naked eye in Perseus (though looking like a fuzzy star, without any tail) for weeks. This time the media machinery worked somewhat better than in the case of McNaught, again “lubricated” by individual astronomers (including the author who triggered a press release by the German Amateur Astronomical Society that led to widespread coverage in Germany) or the Center for Astrophysics in Cambridge, Mass., with a rather unusual press release featuring amateur photographs by staff members (CfA PAO 2007). Being an “explosive” event surely helps, as, for example, the supernova 1987A, another strictly southern sky event, had generated ample news coverage in the northern hemisphere. But the astronomical communications community at large should find better ways to transport slowly – and unpredictably – developing astronomy stories as well, so that epochal events like comet McNaught don't just drown in a flood of lesser news.

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