



In *Disaster Playground*, firefighters train for an asteroid impact.

## PLANETARY SCIENCE

# Space-rock alert

**Alexandra Witze** watches a pair of films on asteroids — according to many, a vast accident waiting to happen.

**S**tep aside, *Armageddon* and *Deep Impact*: two films are in competition to be this generation's seminal asteroid movie. Both offer crucial information about the asteroid threat to new audiences.

*Disaster Playground* and *51° North* are released widely on 30 June, the inaugural celebration of Asteroid Day — the anniversary of the 1908 meteorite explosion over Tunguska, Siberia. The event is meant to spread awareness of the threat of space rocks, repackaging the alarms that a small group of skywatching scientists have been issuing for decades. The novelty comes in how these films do it.

Both explore the ramifications of what might happen if an asteroid were discovered on a collision course with Earth. Both feature a narrator who interacts with real-life asteroid experts in a variety of offbeat settings. Both are a far cry from conventional documentaries, being more mash-ups of scientific information with fictionalized narratives.

*Disaster Playground*, directed by Nelly Ben Hayoun, is a visually arresting roller-coaster ride through California and the American Southwest, featuring interviews with high-impact scientists from NASA, the Sandia National Laboratories and elsewhere. It

## **Disaster Playground**

DIRECTOR: NELLY BEN HAYOUN  
Nelly Ben Hayoun Studio: 2014.

## **51° North**

DIRECTOR: GRIGORIJ RICHTERS  
Films United: 2015.

opens in Texas, with a cowboy and his horse startled by a huge blast. Ambulances and firefighters race through the debris left by the impact. Within minutes, meteor scientist Peter Jenniskens of the SETI Institute — the organization in Mountain View, California, that explores life's place in the Universe — is presiding at an official-looking podium, somberly reading a statement about the disaster.

In real life, Hayoun has the impressive title “designer of experiences at the SETI Institute”. The film is certainly a designed experience. Hayoun ferries a bright-green toy dinosaur and a huge red telephone from interview to interview to represent the threat of mass extinction and the alerts needed to save the world from apocalypse. She uses offbeat camera angles, a pulsing soundtrack from rave band The Prodigy and title screens with giant capital letters to create a frenetic pace.

Hayoun coaxes scientists into the closest

thing they may ever achieve to performance art. Astronomer David Morrison of NASA's Ames Research Center in Moffett Field, California, recreates his influential 1993 speech to Congress on the asteroid threat; his boss, Pete Worden, breaks out a Viking helmet and shield as a backdrop for an otherwise staid office interview. Hayoun's own appearances bind it all together as she hurries from shoot to shoot, pausing only to buy a pair of cowboy boots on her way to explore Disaster City, an emergency-response training centre in Texas, where search and rescue teams work their way through intentionally collapsed buildings. There is no time to wait when disaster strikes.

Grigorij Richters' *51° North* is similarly kinetic but much more self-absorbed. It centres on a fictional YouTube star called Damon, who becomes obsessed with the asteroid threat. His reality-show audience is gradually alienated as he turns from taping his girlfriend and his dogs to making show after show about space-rock disasters. That all changes when — well, no spoilers. But given the title and the fact that it is about asteroids, you can guess what happens to London.

Richters has created a true millennial approach to the asteroid threat. Damon is constantly on camera: taping, uploading, tweeting, instagramming, sharing every moment. Brian May, Queen guitarist and astrophysicist, provides the soundtrack.

There is some science. Damon interacts with many of Britain's leading asteroid experts, and even tours the Spaceguard Centre in Knighton, the United Kingdom's leading asteroid-information centre. He works in smooth explanations of the various strategies for diverting an asteroid on a collision course with Earth. Footage from the many Russian car cameras that recorded the Chelyabinsk meteorite strike in February 2013 fits the video-focused approach. Unlike in *Disaster Playground*, there is no wider discussion of what the end of the world means for anyone other than the self-obsessed Damon.

Today, the cutting edge of asteroid science lies in pushing the limits of detection, searching for smaller and smaller risky space rocks. Scientists have pretty much nailed the chances of spotting any world-ending asteroid, a rock big enough to wipe out an entire region. What is left are the ones that can slip through the current net of telescopes and hit with little to no warning.

As New Year celebrations welcomed in 2014, an asteroid a few metres wide entered the atmosphere and disintegrated over the Atlantic Ocean — all while many of the astronomers who would normally track it were on a holiday break. We do live in a disaster playground. ■

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