



Sixty Second Adventures in Astronomy

Gaia and The Killer Asteroids

David Mitchell:

60 Second Adventures in Astronomy. Number fourteen, Gaia and The Killer Asteroids.

If Hollywood has taught us one thing it's that an asteroid crashing into the Earth is not exactly something to look forward to.

The asteroids most likely to attack us are the Aten and Apollo asteroids – the ones with an orbit closest to our own. Talk about annoying neighbours.

And unfortunately these asteroids are pretty difficult to keep track of – because, to see them from the Earth you'd have to look directly towards the Sun.

Fortunately the Gaia spacecraft is going to be positioned 1.5 million kilometres beyond the Earth at a point where gravity will keep it in a fixed orbit. This is the second Lagrangian point – or L2 to its friends.

From this vantage point Gaia can look back towards the Sun to spot any potentially dangerous asteroids that we may otherwise have missed. Like a lookout in the crows nest – or Kevin Costner in *The Bodyguard*.

But while it's obviously good to know if a killer asteroid is, indeed, on the way – the next challenge will be what we're going to do about it if Gaia spots one.