**PC\* DS type Mines-Ponts 21 - 03 – 2025**

**Durée 1h30**

**🡪** *Merci de composer sur deux feuilles doubles différentes, une pour chaque partie. Veillez à de sauter des lignes pour la traduction et à laisser une marge confortable pour la partie expression*

**🡪** N’oubliez pas d’indiquer le nombre de mots utilisés pour chaque question dans la partie expression et de mettre une barre de comptage tous les 20 mots.

**Partie 1 Traduction**

Voici l’histoire d’un fantôme, qui s’est glissé dans ma vie par un matin d’été ensoleillé, et qui dès lors ne m’a plus quittée. Catherine Dior a surgi alors que je déambulais dans le jardin de La Colle Noire, l’élégant château de son frère Christian. Elle y a vécu quelque temps, après la mort de celui-ci.

Elle vient au monde en août 1917, juste avant que Raymond, son frère aîné, ne parte pour le front. Mais lors de ce séjour enchanteur à La Colle Noire, j’étais loin de songer à la guerre.

(…)

Grâce aux souvenirs d’un voisin qui vit dans l’immeuble depuis son enfance, je retrouve l’appartement parisien où Catherine se réfugie pendant la guerre. L’occupant actuel connaît bien l’histoire des lieux. Il me sourit avec douceur, caresse une plante, près de la fenêtre : « Je suis sûr que Catherine aimerait qu’on mette des plantes.

- Et les papillons ? Je lui montre les cadres en verre suspendus aux murs.

- Ça, c’est une autre histoire ! Ils me rappellent Catherine, et j’ai le sentiment que ces créatures ailées protègent des cauchemars.

- Vos cauchemars à vous ?

- Non, ceux de Catherine. Vous comprenez pourquoi, n’est-ce pas ? »

J’acquiesce en silence.

Adapté de Justine Picardie, Miss Dior, 2021

*Tournez la page svp*

**Partie 2 - Expression**

**The UK’s gamble on solar geoengineering is like using aspirin for cancer**

[Raymond Pierrehumbert](https://www.theguardian.com/profile/raymond-pierrehumbert) and [Michael Mann](https://www.theguardian.com/profile/michael-e-mann) Wed 12 Mar 2025 *The Guardian*

Some years ago in the pages of the Guardian, we [sounded the alarm](https://www.theguardian.com/commentisfree/2021/apr/22/climate-crisis-emergency-earth-day) about the increasing attention being paid to solar geoengineering – a [barking mad](https://slate.com/technology/2015/02/nrc-geoengineering-report-climate-hacking-is-dangerous-and-barking-mad.html) scheme to cancel global heating by putting pollutants in the atmosphere that dim the sun by reflecting some sunlight back to space.

In one widely touted proposition, fleets of aircraft would continually inject sulphur compounds into the upper atmosphere, simulating the effects of a massive array of volcanoes erupting continuously. In essence, we have broken the climate by releasing gigatonnes of fossil-fuel carbon dioxide, and solar geoengineering proposes to “fix” it by breaking a very different part of the climate system.

The fix is more like taking aspirin for cancer, treating symptoms but leaving the underlying malignancy to keep growing. It poses arguably unsurmountable governance issues in our turbulent modern political environment.

Since our 2021 commentary, the situation has grown far worse, with tens of millions of dollars pouring into the scheme, mostly from private philanthropy. Bill Gates was an early backer, and the tech industries have piled on since. But we never imagined that the UK government itself would be leading the charge into what is almost universally recognized as the most dangerous and destabilizing sort of research: field trials that risk developing dangerous technology and paving the way for deployment. That is precisely the emphasis as the UK’s Advanced Research and Invention Agency (Aria) [prepares to hand over](https://www.aria.org.uk/opportunity-spaces/future-proofing-our-climate-and-weather/exploring-climate-cooling/#ourgoal) $58m for solar geoengineering research and development. Outdoor experimentation is such a controversial undertaking that even the Simons Foundation, which funds research in solar geoengineering, has shied away from making grants in this area.

The Aria programme [thesis document](https://www.aria.org.uk/media/wotbzgsm/aria-actively-cooling-the-earth-programme.pdf) on “cooling the Earth” makes for chilling reading. The project goes all-in on the supposed need for field trials, without making a case that such trials could answer any of the really important questions about what would happen with a sustained global-scale deployment. That the trials are described as “small scale” is little comfort, because even small-scale trials risk developing the technology somebody else (think Musk, Trump or Putin) might use for a large-scale deployment.

There is extreme danger in launching such field trials into an environment with neither national nor international governance in place. The only governance would be that imposed by Aria directors, who are accountable to basically nobody. Worse, Aria can fund projects outside the UK, which invites shopping for sites with poor environmental regulations and limited opportunities for public protest.

The Aria geoengineering programme is a dangerous distraction from the work that needs to be done to achieve net-zero carbon dioxide emissions. The net-zero goal is one that is enshrined in UK law, and one that the Labour government purports to uphold. The UK government should not encourage false solutions like solar geoengineering and the people of the UK should not stand for it.

* Raymond T Pierrehumbert FRS is professor of planetary physics at the University of Oxford.
* Michael E Mann ForMemRS is presidential distinguished professor at the University of Pennsylvania.

QUESTIONS (N’oubliez pas d’indiquer le nombre de mots à la fin de chaque réponse)

1. Why are the authors worried about the development of solar geoengineering programmes and more particularly the UK government’s intention to support fields trials ? *Answer the question in your own words 80 words +/- 10%*
2. Should we rely on technology to solve climate issues ? Discuss. *180 words +/- 10%*