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Burning Landfill in Bishkek, Kyrgyzstan detected by VIIRS Nightfire

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Environment

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Kyrgyz eco-activist's 'trashion' tackles a burning problem

BISHKEK, April 7 (Reuters) - A Kyrgyz environmental activist has found a way to combat toxic fumes choking her city by literally turning trash into treasure, sewing clothes out of waste that would otherwise be burnt in a landfill or someone's stove.

Garments are a major industry in the Central Asian nation of 7 million, but manufacturers often discard scrap material in landfills outside the capital, Bishkek, to be burned or scavenged to heat people's homes.

Those fumes make the air even more toxic in Bishkek, which is already one of the world's most polluted cities, thanks to its widespread use of coal.

Reuter's article continued.....

The task engenders a warming feeling that motivates her to keep doing it, says Alamanova, while helping to keep alive the tradition.

"Every single item that we make with students imparts a very pleasant feeling that at least for a tiny bit, we have made Kyrgyzstan cleaner, and helped maintain the purity of its air, water and land," she added.

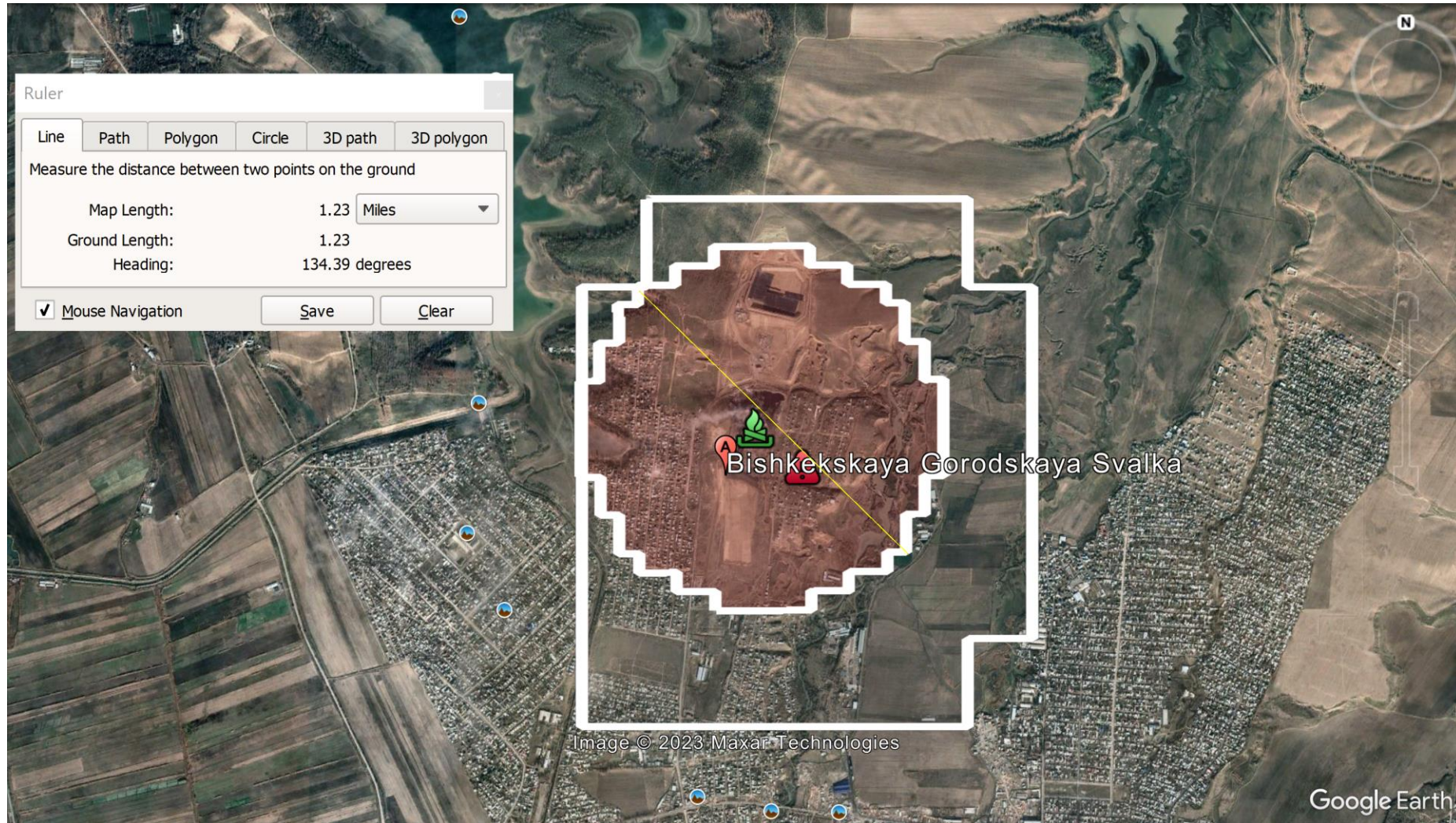
Her team, which has grown to more than 80 women aged between 25 and 79, has processed 300 kg (661 pounds) of fabric within a few months, winning public acclaim for fighting pollution while popularising kurak.

Works by Alamanova and her students, displayed at an art show in neighbouring Kazakhstan last month, have inspired Kazakh women to follow suit, with one of her Kazakh students vowing to start a similar project there.

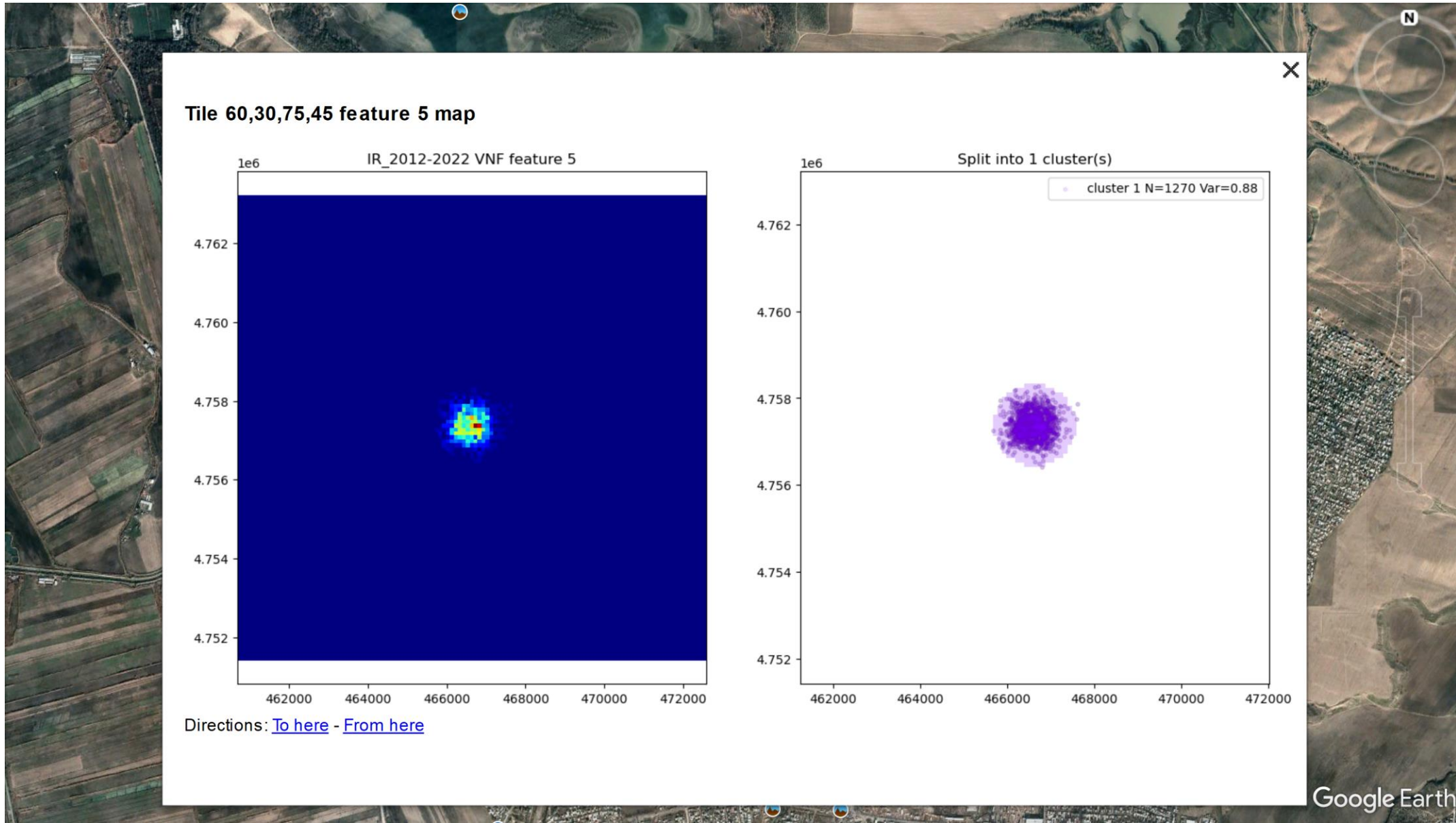
Smoke can be seen coming from the landfill in google earth



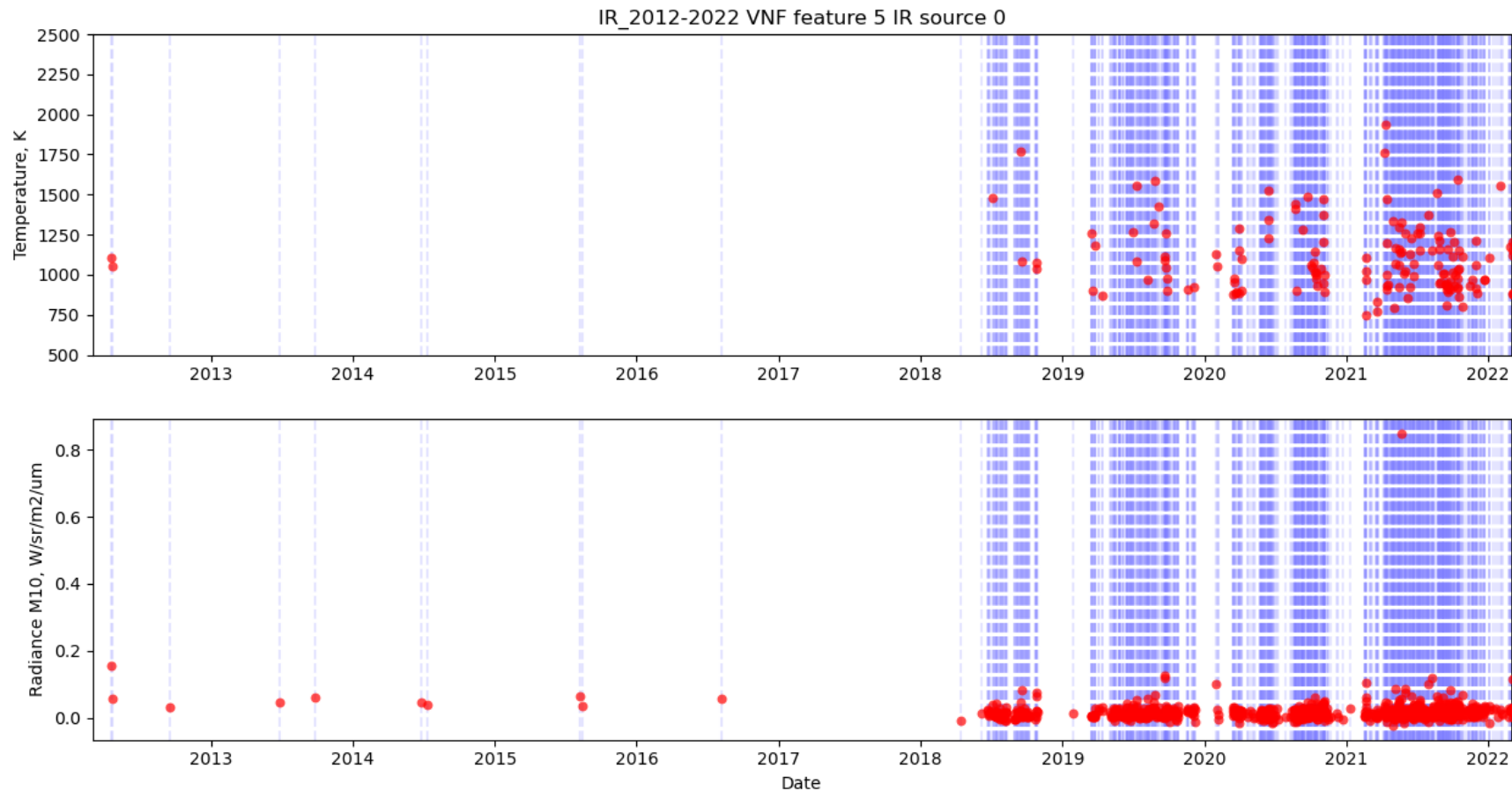
The site has been identified as an IR emitter in the multiyear VNF catalog



The VNF pixel center density map shows a single emitter



Temporal profiles shows the burning became routine in mid-2018 and has a gaps centered on January in 2019-2021. Average temperature near 1200 K.



Summary

- The Bishkek landfill fire is routinely detected by VIIRS nightfire.
- This is one of 279 landfills worldwide marked as IR emitters in EOG multiyear catalog.
- It may be possible to track reductions or changing in the burning pattern with VNF.
- EOG will continue tracking the burning at the site as part of our global monitoring program.



ABOUT THE AUTHOR

Christopher Elvidge

Senior Research Associate, Director of Earth Observation Group

Christopher D. Elvidge has decades of experience with satellite low light imaging data, starting in 1994. He pioneered nighttime satellite observation on visible lights, heat sources including gas flares and wild fires, as well as bright lit fishing vessels. He led the development of these nighttime remote sensed products with images from DMSP, JPSS, and Landsat satellites. These data are very popular and used globally in both public and private sectors. As of February 2018, he has more than 11,000 scholarly publication citations.

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