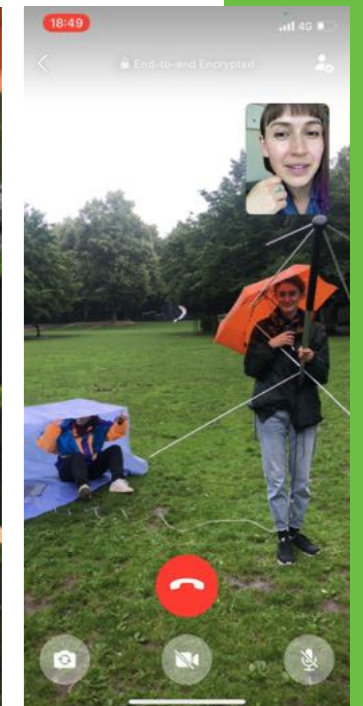
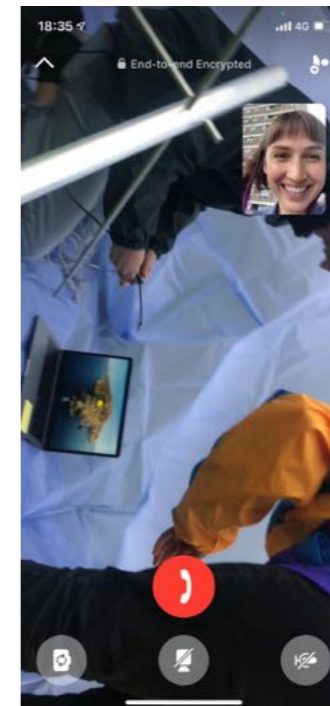
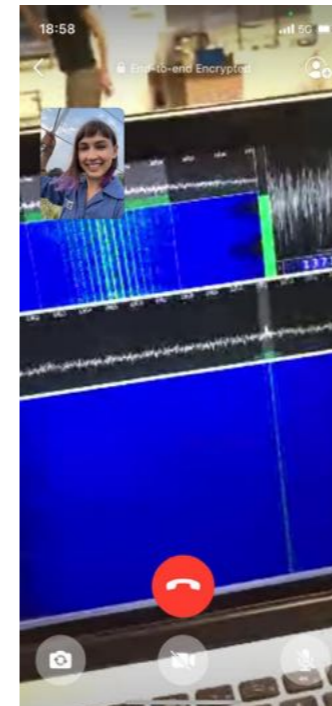
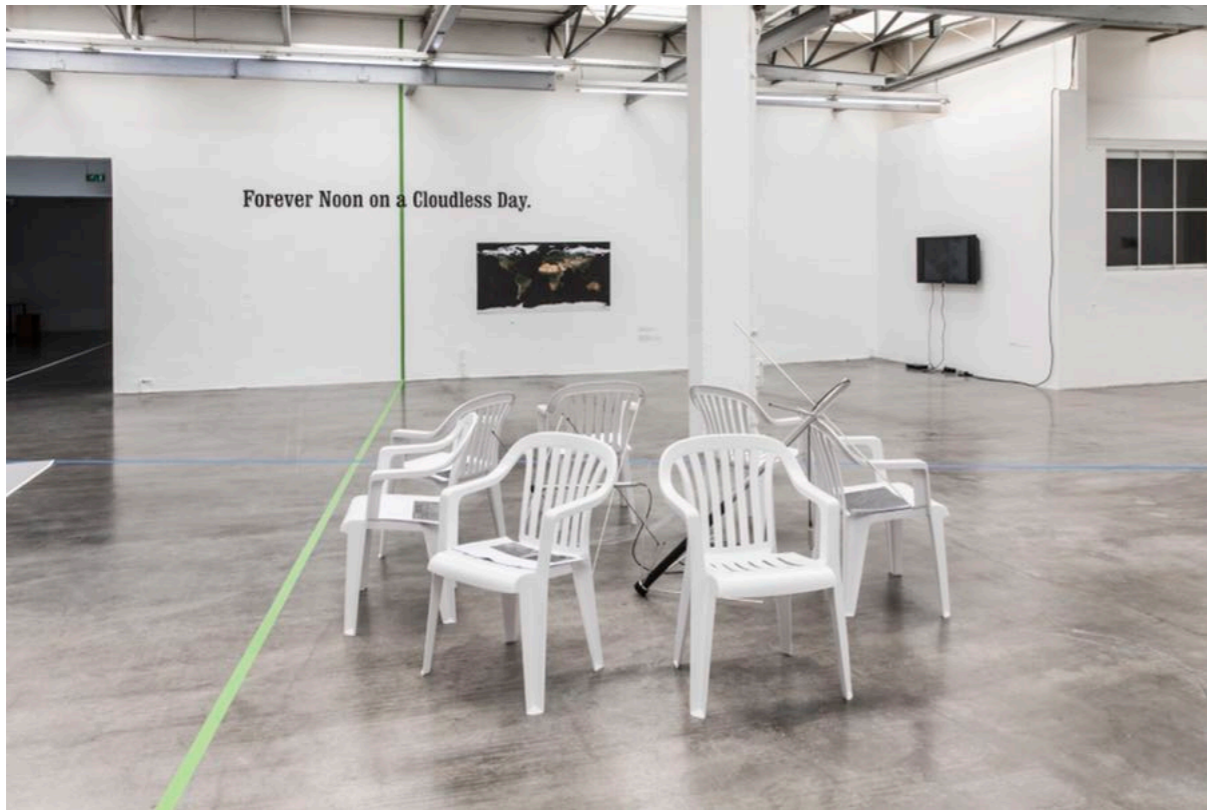


OPEN WEATHER (Sasha Engelmann & Sophie Dyer) The Im/Possible Weather Station & Workshop





Images this page and front page: im/possible images installation views, photos: Dominik Gigler, Lothringer 13 Halle, 2021

Above: Screenshots of phonecall by Sasha Engelman, concerning: Turnstile Antenna, Rosa Menkman, 2021

The Im/Possible Weather Station & Workshop

OPEN WEATHER (SASHA ENGELMANN & SOPHIE DYER)

Turnstile antenna, coaxial cable, RTL-SDR dongle, white plastic garden chairs, poster prints, NOAA-15, NOAA-18 and NOAA-19.

Dimension: 13,700 km (the diameter of Low Earth Orbit)

DE Open-weather ist ein Experiment zur Bildgebung und unserer Vorstellung der Erde und ihrer Wettersysteme. Es wurde von der Designerin und Aktivistin Sophie Dyer und der kreativen Geografin Sasha Engelmann im April 2020 gegründet und umfasst eine Reihe von Anleitungen, kritischen Rahmenwerken und öffentlichen Workshops zum Empfangen von Satellitenbildern mit kostenloser oder kostengünstiger Amateur*innenfunktechnologie. Wir sind es gewohnt, den Globus als eine einheitliche Karte zu verstehen – so wie es etwa Google Earth vorschlägt. Doch wie Ingrid Burrington in „Forever Noon on a Cloudless Day“ (2017) zeigt, ist Googles Basiskarte voller Ungereimtheiten und Unschärfen. Sie blendet die Wolken, Wettersysteme und Elemente der Erdatmosphäre aus. Googles glattes, nahtloses Bild des Planeten ist ebenso ungenau wie unmöglich: Es zeigt uns nicht die Fehler, Bereinigungen und Kompromisse, die notwendig sind, damit ein solches Bild überhaupt existieren kann. Open-weather stellt den Körper als situierte Technologie in den Vordergrund und versucht die dominierenden Strukturen und Narrative, die mit dem Sammeln von und dem Zugang zu Umweltdaten verbunden sind, zu kartieren und mit alternativen Vorstellungen zu Wetter, jenseits des Meteorologischen, herauszufordern. Im Rahmen des im/possible images Projekts tragen Sophie Dyer und Sasha Engelmann eine Installation und einen open-weather Workshop bei. Die ‚Impossible Weather Station‘ öffnet einen Raum zur Produktion von Gegenbildern des Wetters, die die Unmöglichkeit sowohl der zeitgenössischen Wettervorhersagen als auch der Optik von Google Earth demonstrieren. Im Workshop lernen Teilnehmer*innen, wie sie ihre eigenen DIY-Satelliten-Bodenstationen aufbauen und betreiben können, um Übertragungen von NOAA-Wettersatelliten zu erfassen und zu entschlüsseln.

EN Sophie Dyer is a feminist researcher and designer specialised in visual and open source investigations. She works with Amnesty International's Evidence Lab and is an Affiliate of The Berkman Klein Center for Internet & Society at Harvard University.

Sasha Engelmann is a geographer exploring interdisciplinary, feminist and creative approaches to environmental knowledge-making. Her new book *Sensing Art in the Atmosphere* (Routledge, 2020) narrates a series of artistic and activist initiatives to investigate the aesthetics and politics of atmosphere. She is Lecturer in GeoHumanities at Royal Holloway University of London.

DE Sophie Dyer ist als feministische Forscherin und Designerin spezialisiert auf visuelle und Open-Source-Untersuchungen. Sie arbeitet mit dem Evidence Lab von Amnesty International und ist Mitglied des Berkman Klein Center for Internet & Society an der Harvard University.

Sasha Engelmann ist Geografin und forscht zu interdisziplinären, feministischen und kreativen Ansätzen zur Erarbeitung von Umweltwissen. Ihr neues Buch *Sensing Art in the Atmosphere* (Routledge, 2020) erzählt von einer Reihe künstlerischer und aktivistischer Initiativen zur Erforschung der Ästhetik und Politik der Atmosphäre. Sie ist Dozentin für GeoHumanities an der Royal Holloway University of London.

<https://open-weather.community/>

<https://cop26-nowcast-open-weather.community/>

ANNA PASCO BOLTA

Local operator of the Im/Possible Weather Station at Lothringer 13 Halle

EN During the two-month duration of the im/possible images project, Anna Pasco Bolta conducted weekly weather readings. The images received were made accessible to visitors as posters in the exhibition space.

Anna Pasco Bolta (*1990 in Barcelona), lives and works in Munich. She graduated in Fine Arts at the University of Barcelona and in the class of Olaf Nicolai at the Academy of Fine Arts Munich. She made further trainings with artists like Cécile B. Evans, Nora Schultz or Ceal Floyer. In her artistic work she is interested in the structures and organizational systems of reality and combines various disciplines of the scientific-technical fields with those of art.

Her works have been exhibited at the Museum La Capella, Kunsthalle Kempten, Galerie der KünstlerInnen, Galerie Britta von Rettberg, Kunstakaden Munich, Kunstverein Munich, Instituto Cervantes Munich and Eingen+Art Lab Berlin, among others.

Since 2021 Anna Pasco Bolta works as a mediator and visitor supervisor for the Lothringer 13 Halle.

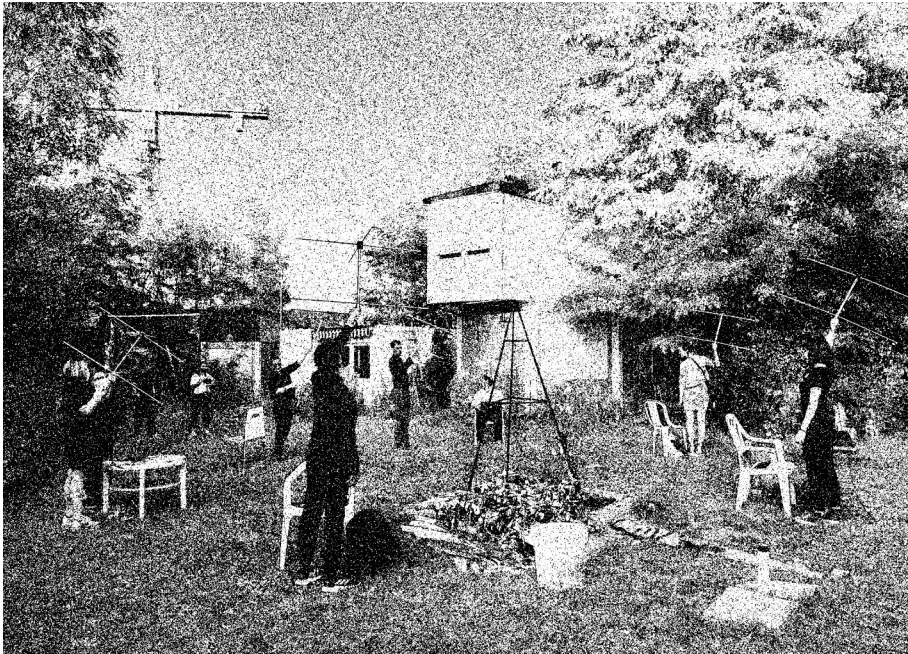
<https://www.annapascobolta.com/>

DE Während der zweimonatigen Laufzeit des im/possible images Projekts, führte Anna Pasco Bolta wöchentliche Wetter-Auslesungen durch. Die so empfangenen Bilder wurden Besuchenden als Plakate im Ausstellungsraum zur Verfügung gestellt.

Anna Pasco Bolta (*1990 in Barcelona), lebt und arbeitet in München. Sie machte ihre Abschlüsse in Bildender Kunst an der Universität Barcelona und in der Klasse von Olaf Nicolai an der Akademie der Bildenden Kunst München. Weiterbildungen machte sie mit KünstlerInnen wie Cécile B. Evans, Nora Schultz oder Ceal Floyer.

In ihrer künstlerischen Arbeit interessiert sich für die Strukturen und Organisationssysteme von Realität und verbindet verschiedene Disziplinen der naturwissenschaftlich-technischen Bereiche mit denen der Kunst. Ihre Arbeiten wurden unter anderem in dem Museum La Capella, der Kunsthalle Kempten, der Galerie der KünstlerInnen, der Galerie Britta von Rettberg, der Kunstakaden München, dem Kunstverein München, dem Instituto Cervantes München und dem Eingen+Art Lab Berlin ausgestellt.

Seit 2021 arbeitet Anna Pasco Bolta als Vermittlerin und Besuchendenbetreuerin für die Lothringer 13 Halle.



open-weather, 2020. DIY Satellite Ground Station workshop at Wagenhallen Stuttgart, hosted by Akademie Schloss Solitude. open-weather CC BY 4.0

Impossible Weather Station

open-weather

The Impossible Weather Station is a tactical space for producing counter-images of weather that demonstrate the impossibility of both contemporary weather images and the optics of satellite base maps such as Google Earth.

Images of weather, from TV weather maps and charts in smart phone apps, present 'snapshots' of current weather conditions. These images suggest that weather is uniquely contemporary, it is happening right now. Yet, as Denise Ferreira da Silva reminds us, the very heat in the air is a transformation of the "extensive and intensive extraction of matter from the earth, in the form of fossil fuels, soil nutrients to feed crops and livestock, and the (human and more-than-human) work that sustains capital" over the last several centuries (2018: np). Images of weather are not images of the present; these images capture histories of coloniality, raciality, and capitalism.

Google Earth is a seemingly unified and complete map of the globe. Yet, as Ingrid Burrington shows in 'Forever Noon on a Cloudless Day' (2017) Google's base map is full of inconsistencies and obscurities. It also eliminates the clouds, weather systems and elements of earth's atmosphere. Google's seamless image of the planet is as inaccurate as it is impossible: it smooths over the errors, erasures and compromises needed for such an image to exist.

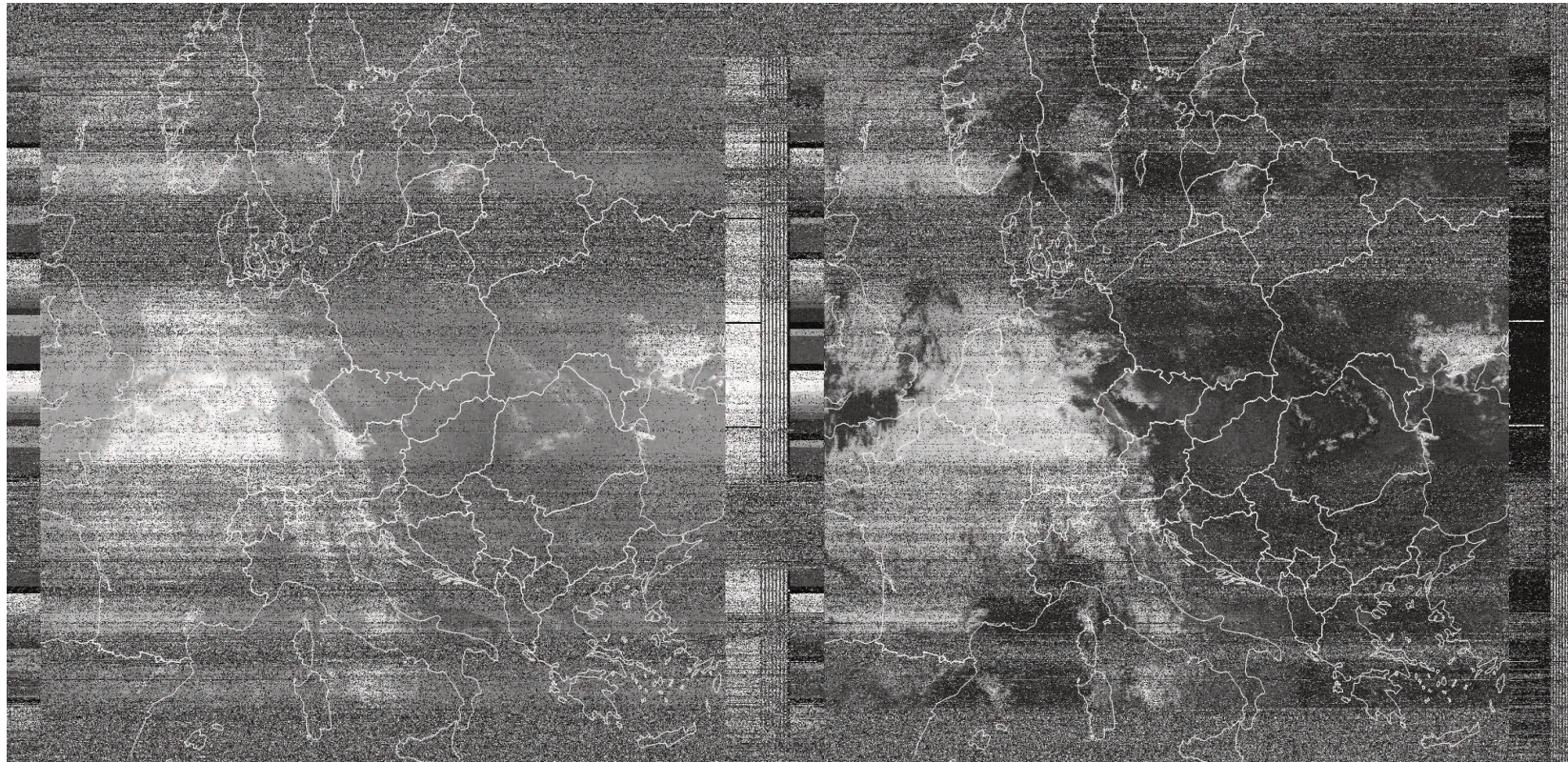
What would counter-images of earth look like? How can we image the weather as well as the systems that produce it over time? Once per week, the Impossible Weather Station is activated by the Lothringer team in order to capture a transmission from a National Oceanic and Atmospheric Administration (NOAA) satellite. The process of capturing this image is more-than-technical: it involves

attending to local meteorological conditions, centring the body in the technical system, and sensing the satellite in visible, audible and electromagnetic registers.

The images received at Lothringer 13Halle reflect numerous visible and invisible phenomena. Rather than taking a 'snapshot' of earth, a NOAA satellite senses a narrow strip of the earth's surface, and relays this information simultaneously. The resulting image is built line by line. Each line of pixels in the image has a different time stamp. Yet, local phenomena such as buildings block the transmission and radio frequency interference can disturb the signal. As we hold the antenna, our bodies, too, alter its frequency response. The presence of noise is thus evidence of the human body as well as the 'electromagnetic commons' (Dyer, Thanki and Jangala, 2017) in which reception takes place.

Over the course of the im/possible images exhibition, the public is invited to join the Lothringer team in weekly satellite imaging experiments, and to consider the local and translocal histories, more-than-meteorological climates and weathers in which the exhibition is situated. ♣

open-weather.community



Satellite:
NOAA-18

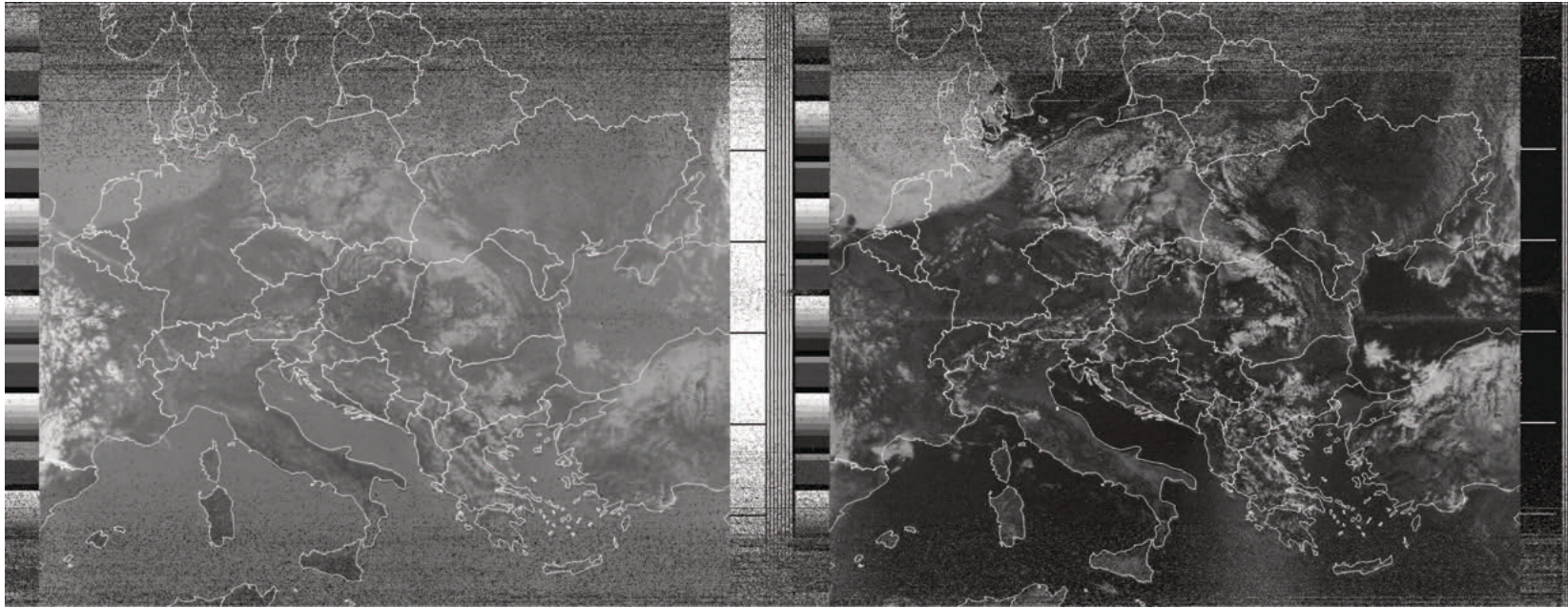
Direction of pass:
Southbound

Local date:
13 July 2021

Local start time:
11:25 am

Ground station:
Lothringer Str. 13
81667 München

Antenna type:
V Dipole



Satellite:
NOAA-18

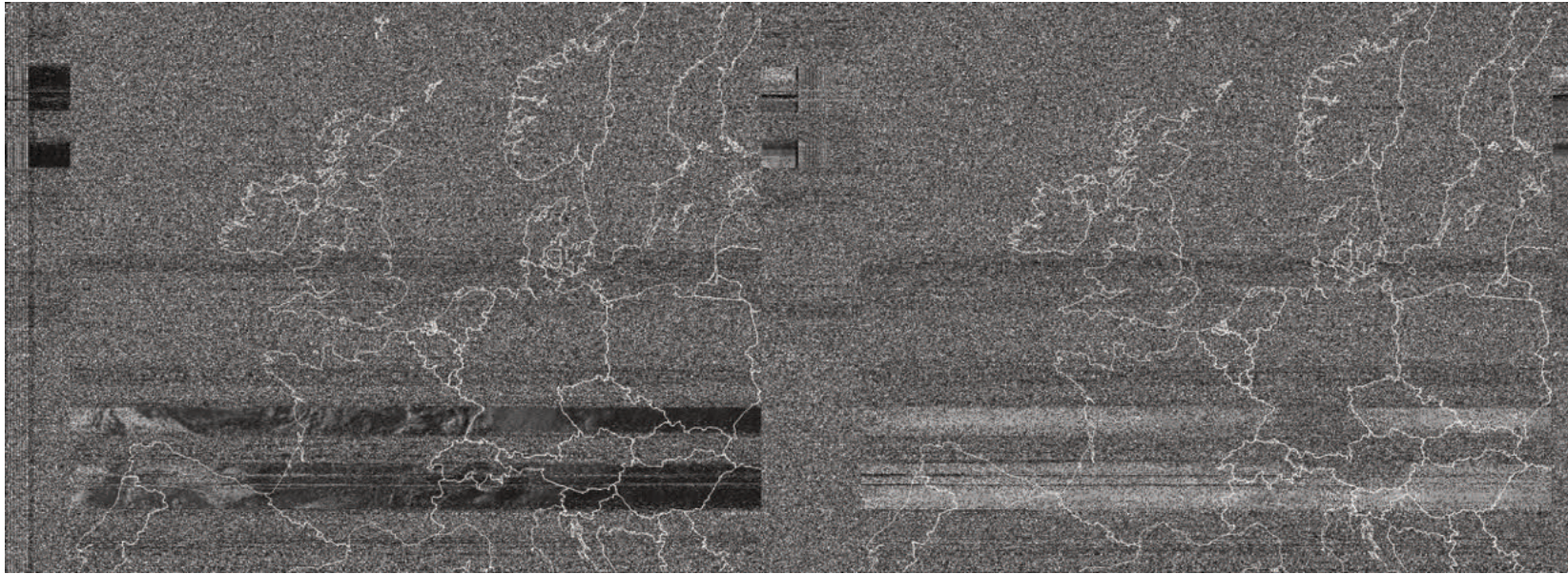
Direction of pass:
Southbound

Local date:
23 July 2021

Local start time:
11:07 am

Ground station:
Lothringer Str. 13
81667 München

Antenna type:
V Dipole



Satellite:
NOAA-19

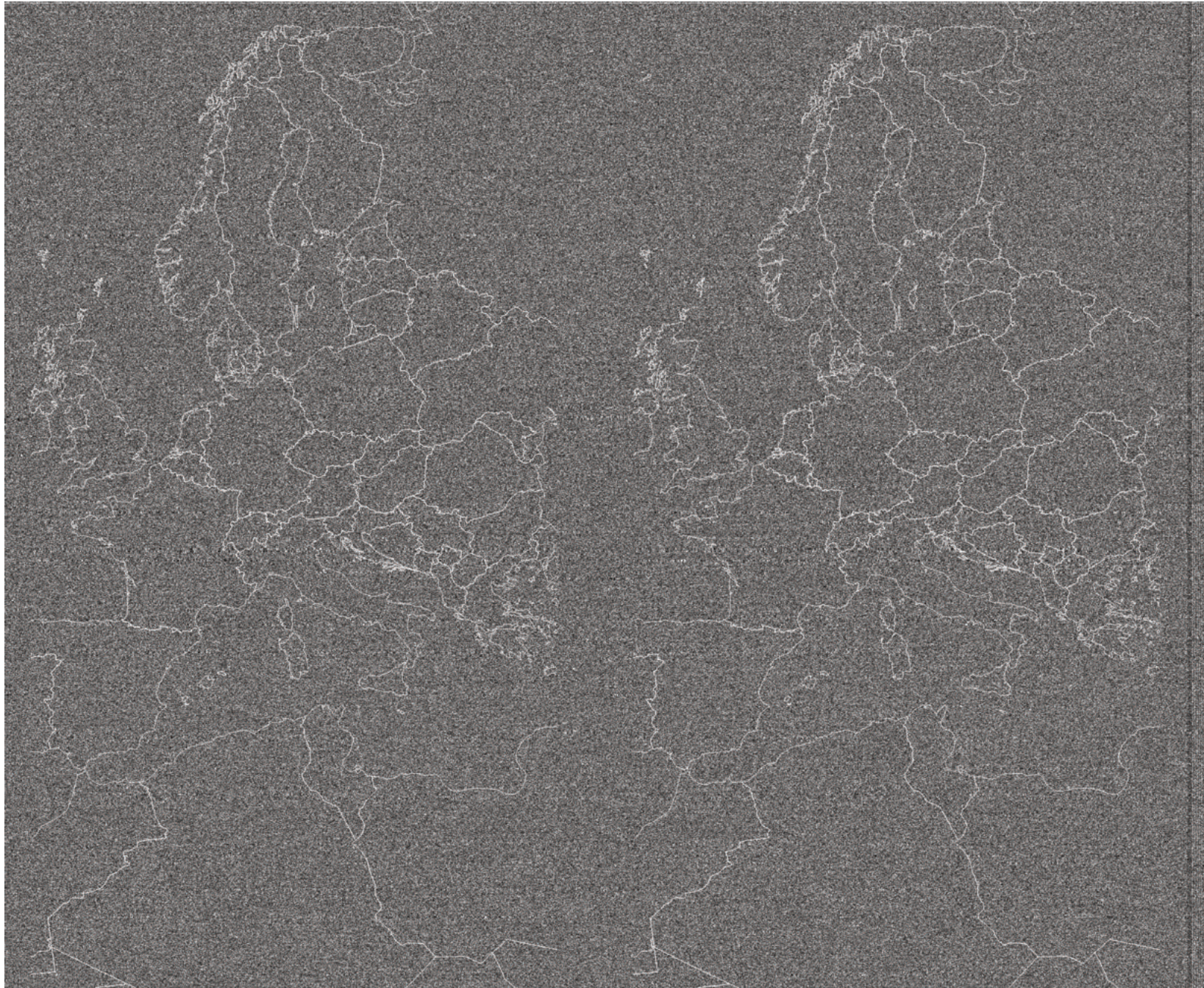
Direction of pass:
Northbound

Local date:
24 July 2021

Local start time:
07:57 pm

Ground station:
Lothringer Str. 13
81667 München

Antenna type:
Turnstile



Satellite:
NOAA-18

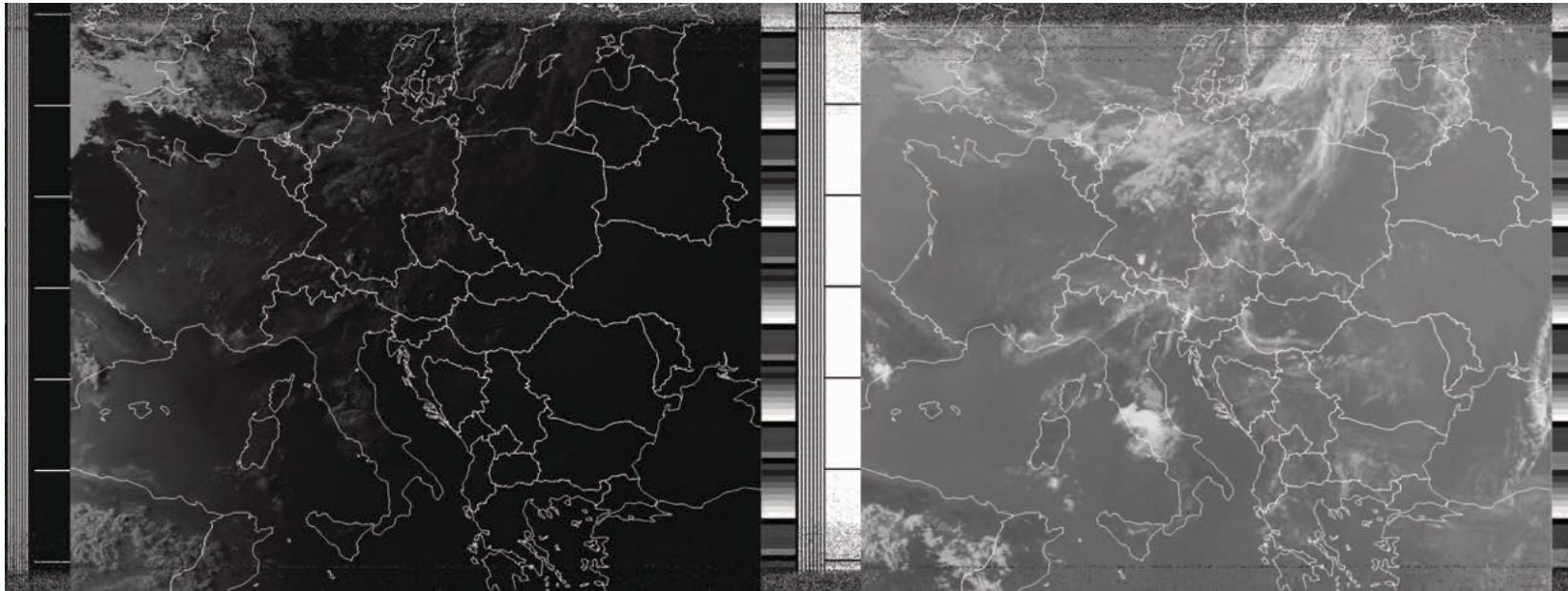
Direction of pass:
Northbound

Local date:
06 August 2021

Local start time:
11:38 am

Ground station:
Lothringer Str. 13
81667 München

Antenna type:
Turnstile



Satellite:
NOAA-19

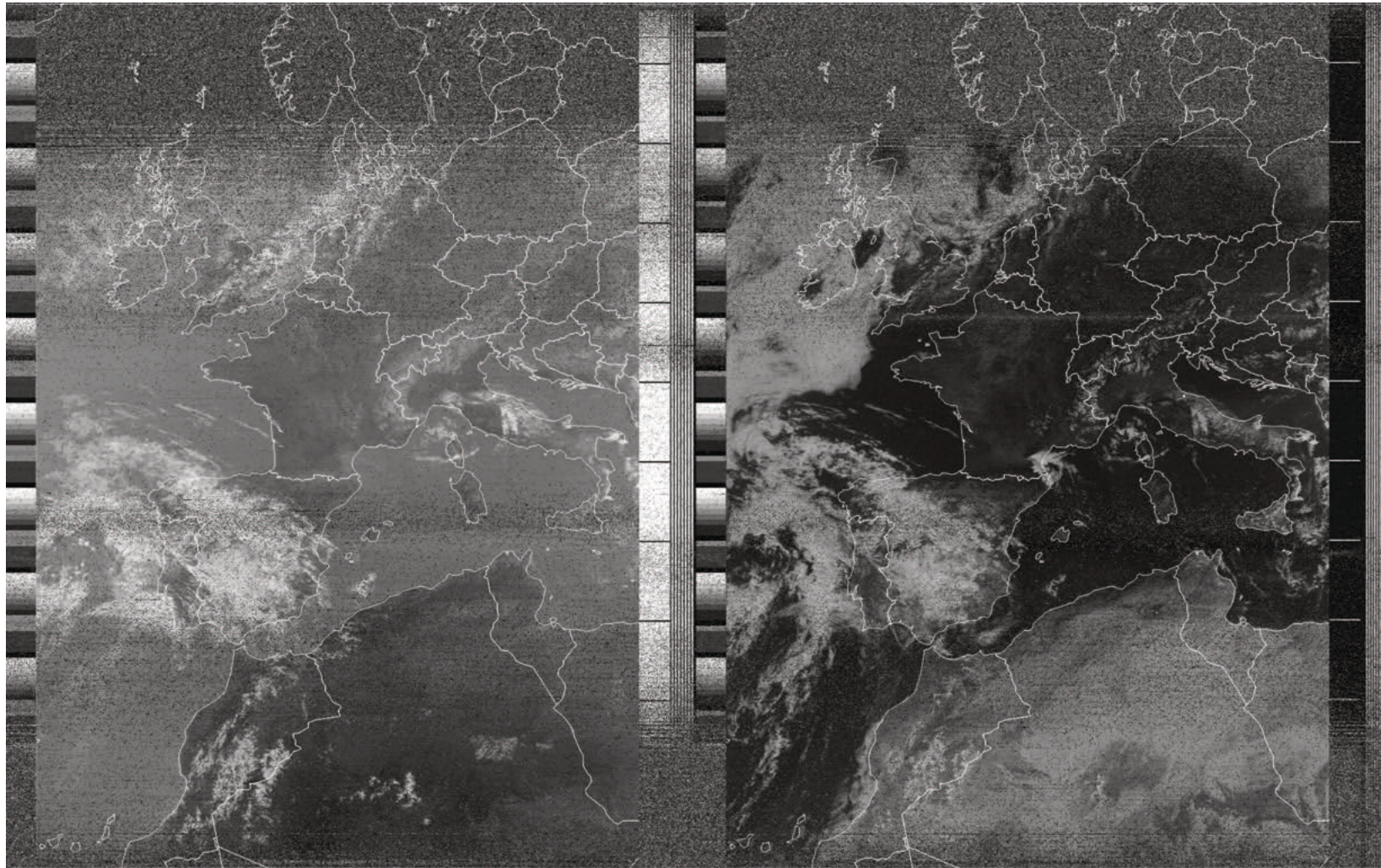
Direction of pass:
Southbound

Local date:
13 August 2021

Local start time:
07:17 pm

Ground station:
Lothringer Str. 13
81667 München

Antenna type:
V Dipole



Satellite:
NOAA-18

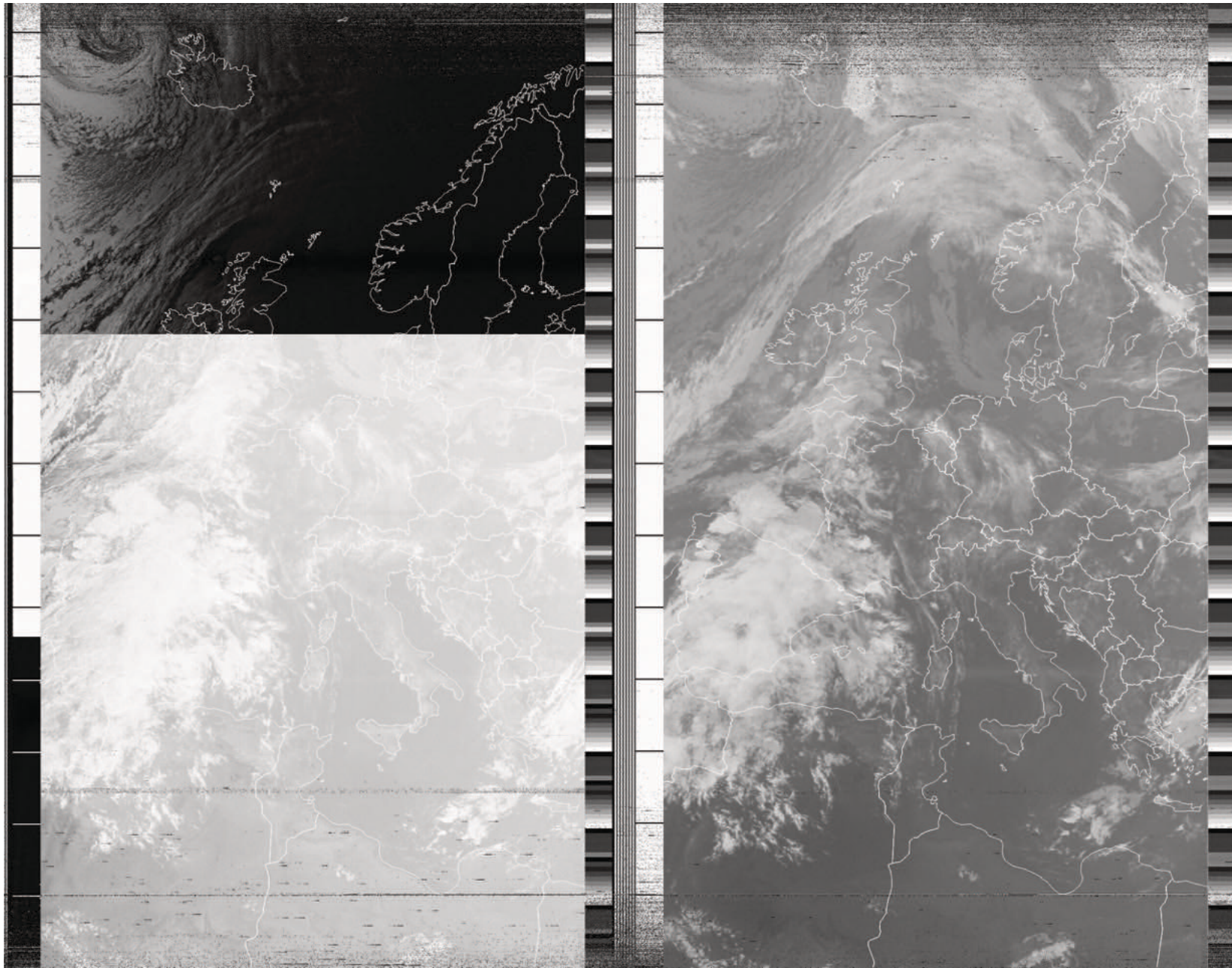
Direction of pass:
Southbound

Local date:
06 September 2021

Local start time:
12:14 am

Ground station:
Lothringer Str. 13
81667 München

Antenna type:
V Dipole



Satellite:
NOAA-19

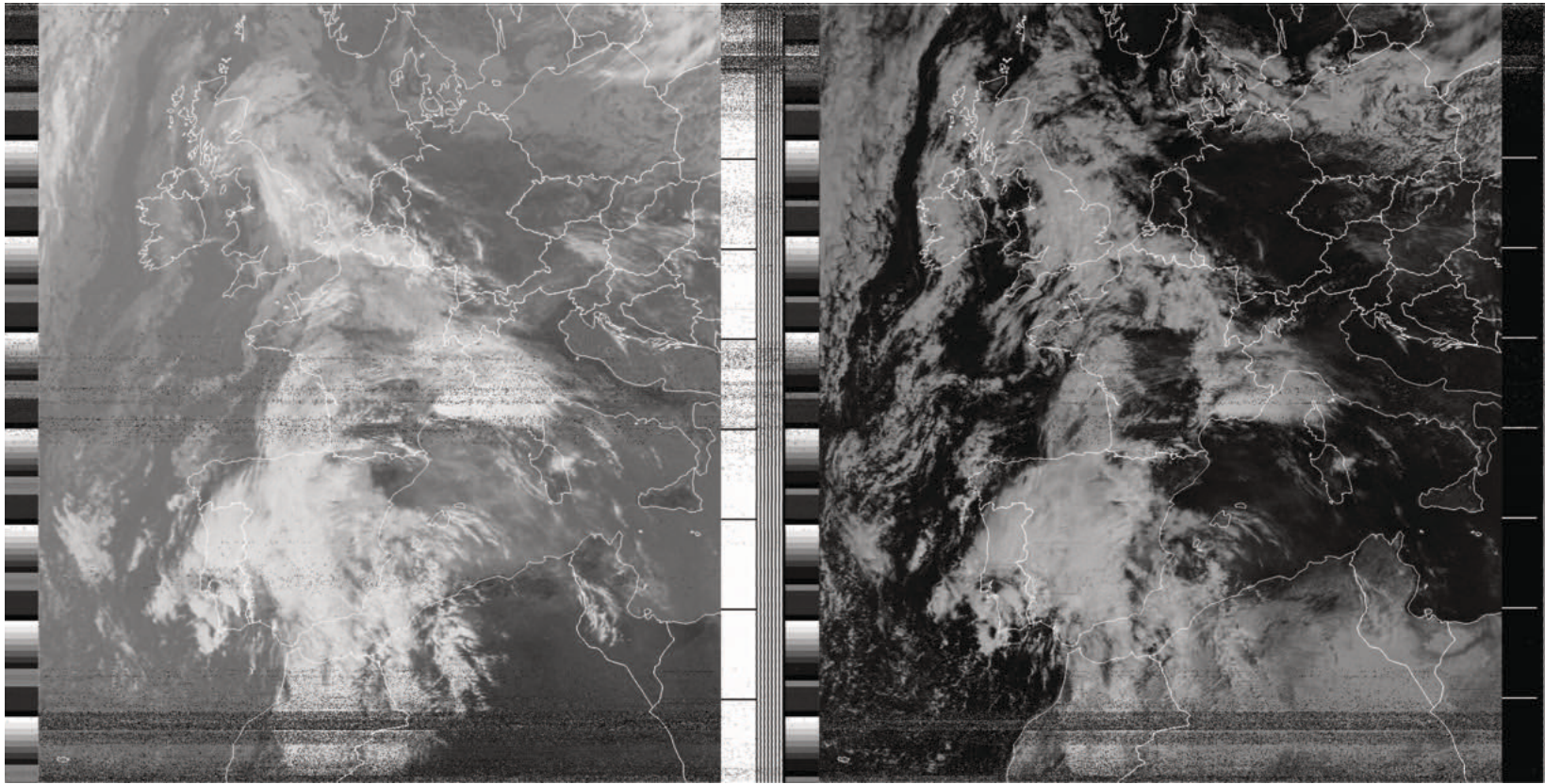
Direction of pass:
Southbound

Local date:
13 September 2021

Local start time:
19:55 pm

Ground station:
Lothringer Str. 13
81667 München

Antenna type:
Turnstile



Satellite:
NOAA-18

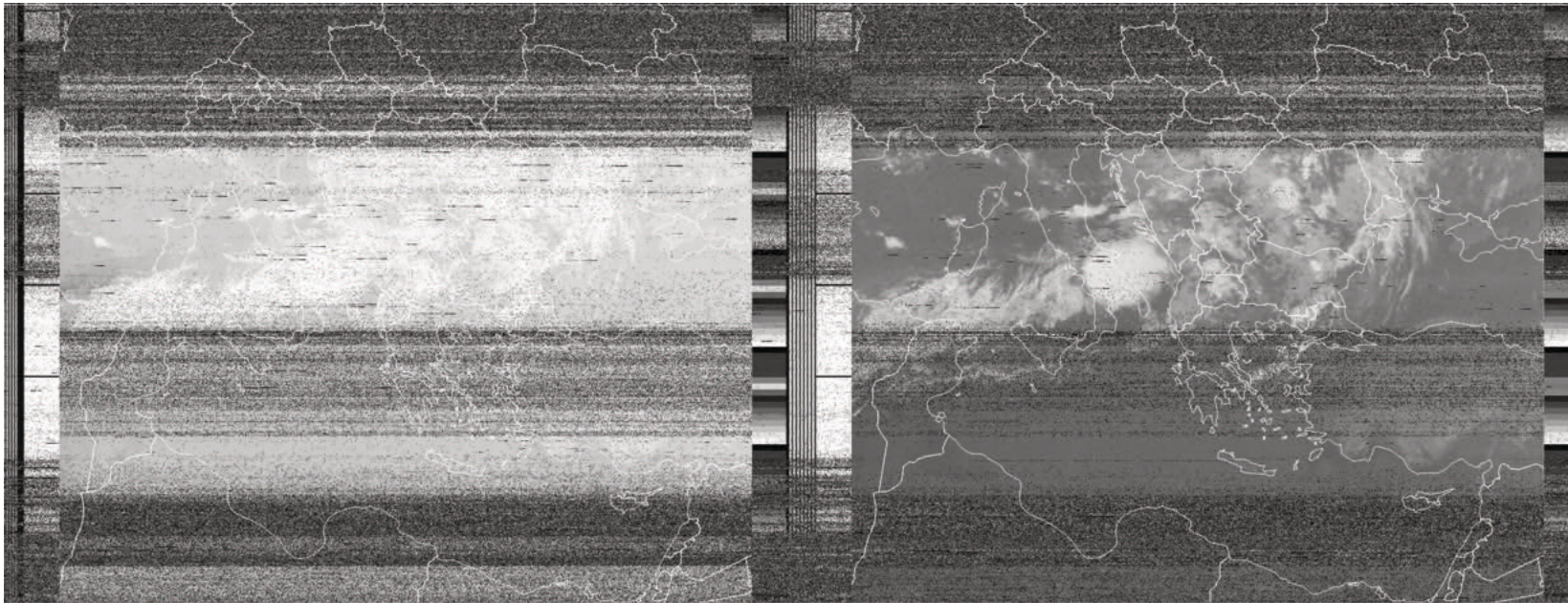
Direction of pass:
Northbound

Local date:
14 September 2021

Local start time:
12:20 pm

Ground station:
Lothringer Str. 13
81667 München

Antenna type:
Turnstile



Satellite:
NOAA-19

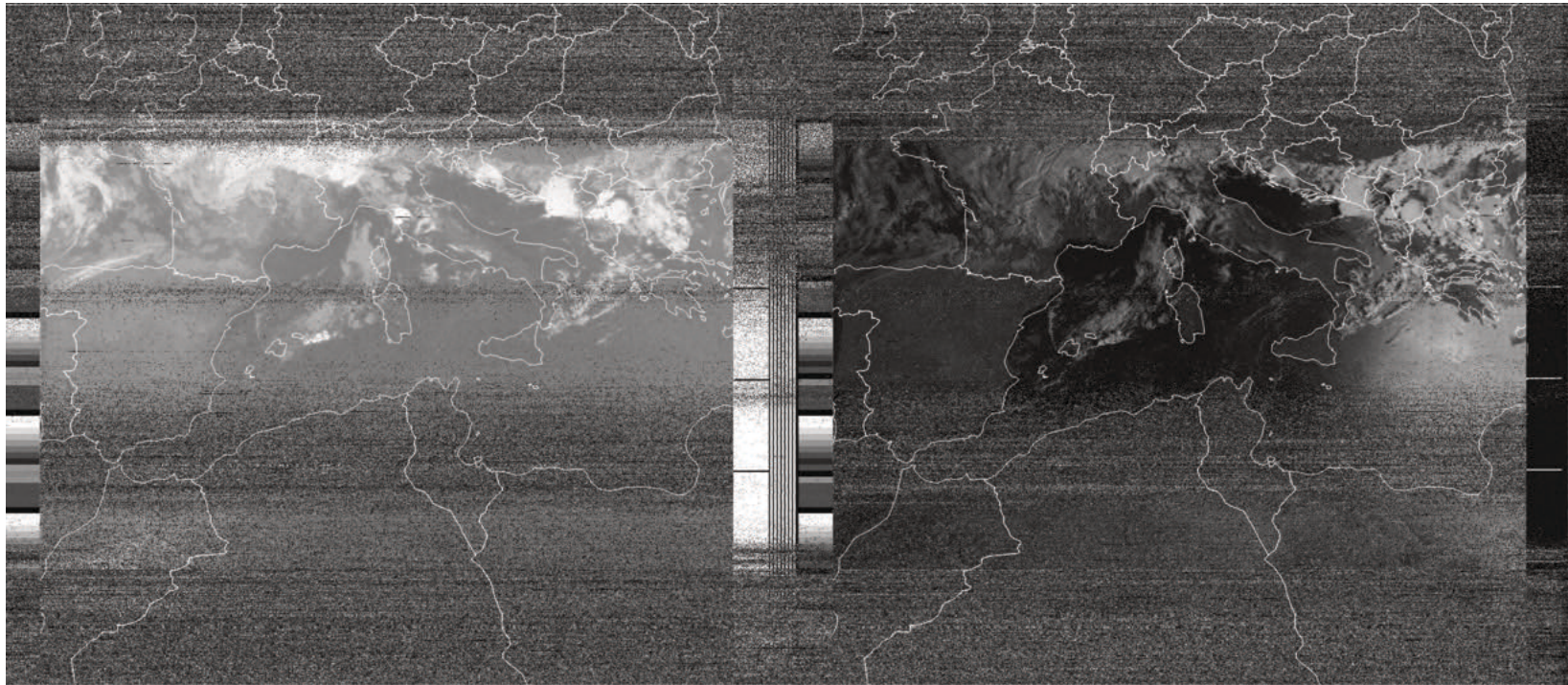
Direction of pass:
Southbound

Local date:
17 September 2021

Local start time:
07:09 pm

Ground station:
Lothringer Str. 13
81667 München

Antenna type:
Turnstile



Satellite:
NOAA-19

Direction of pass:
Northbound

Local date:
19 September 2021

Local start time:
09:00 am

Ground station:
Lothringer Str. 13
81667 München

Antenna type:
Turnstile