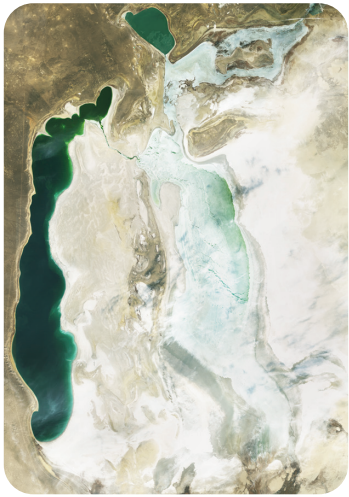
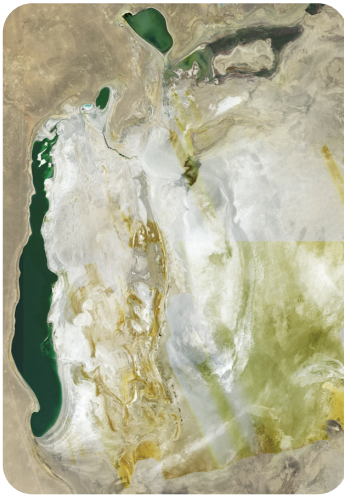


A



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A



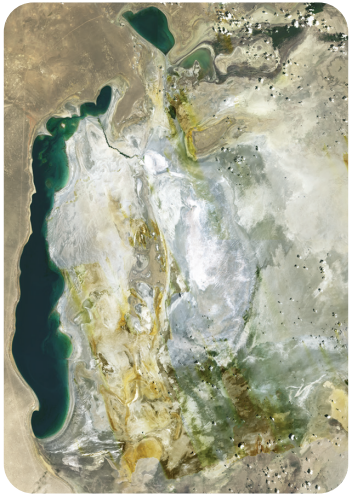
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A



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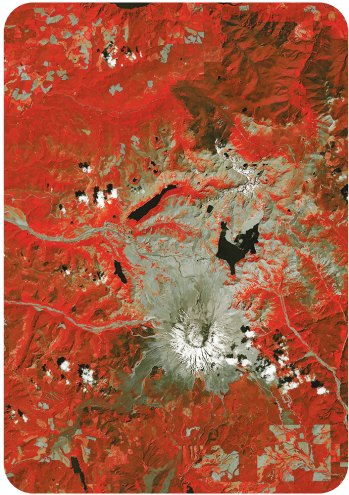
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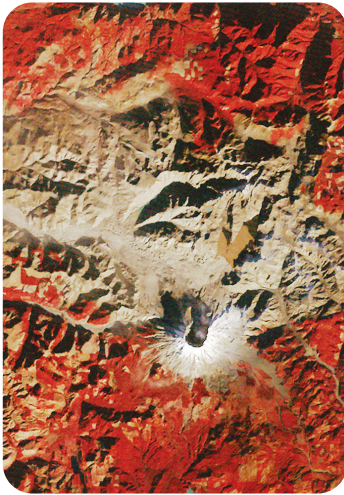
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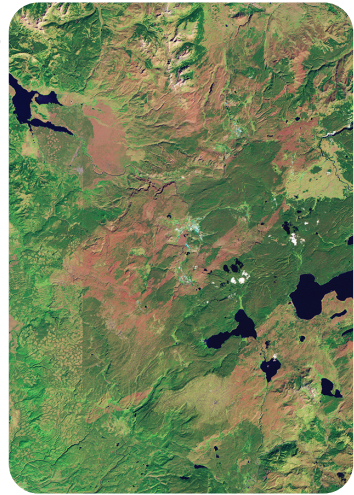
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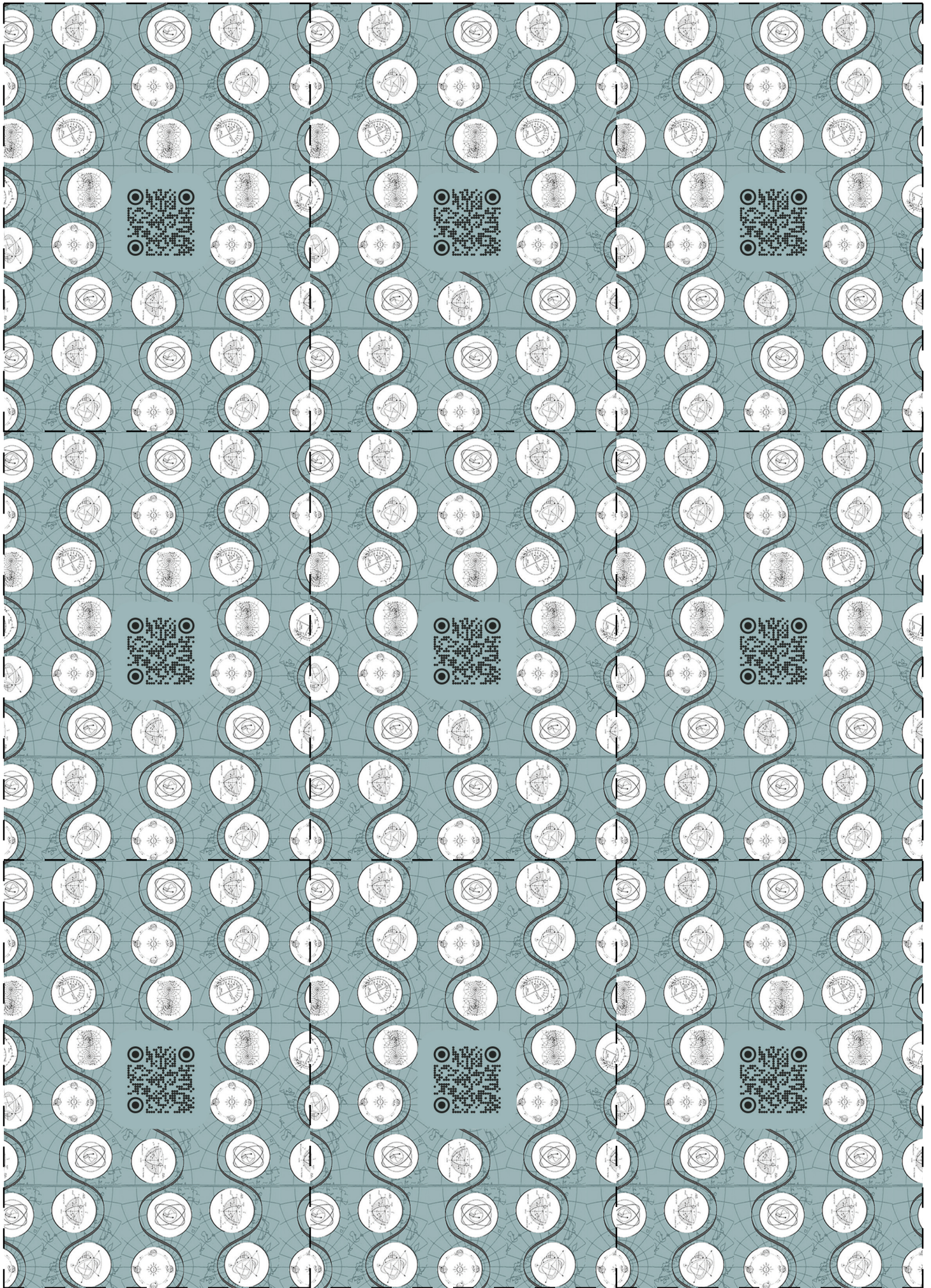


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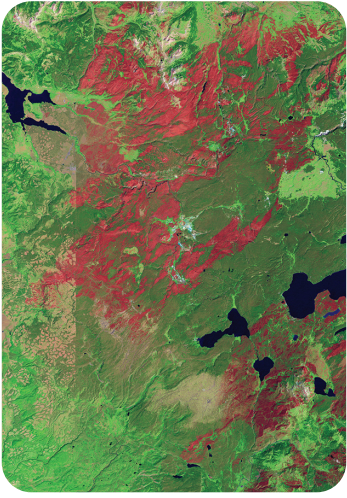
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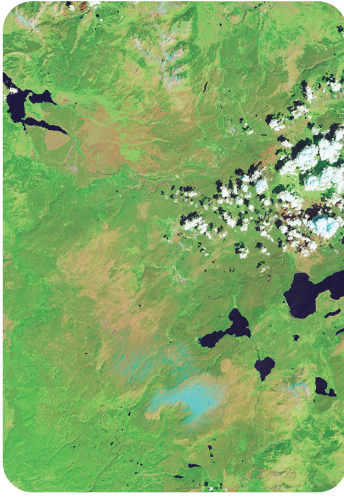


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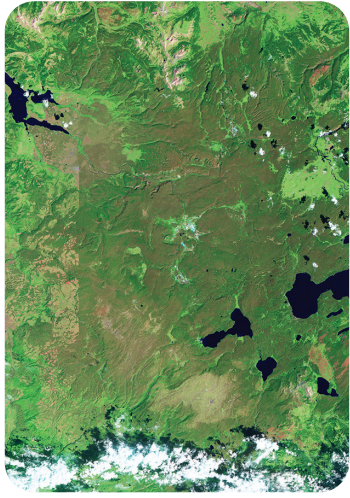
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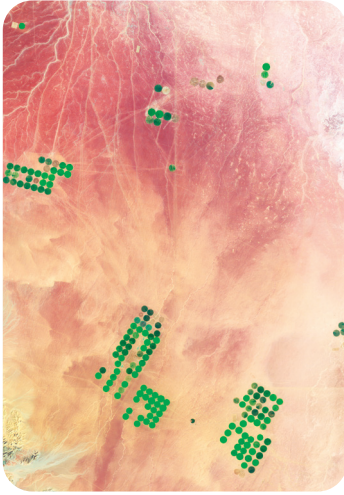
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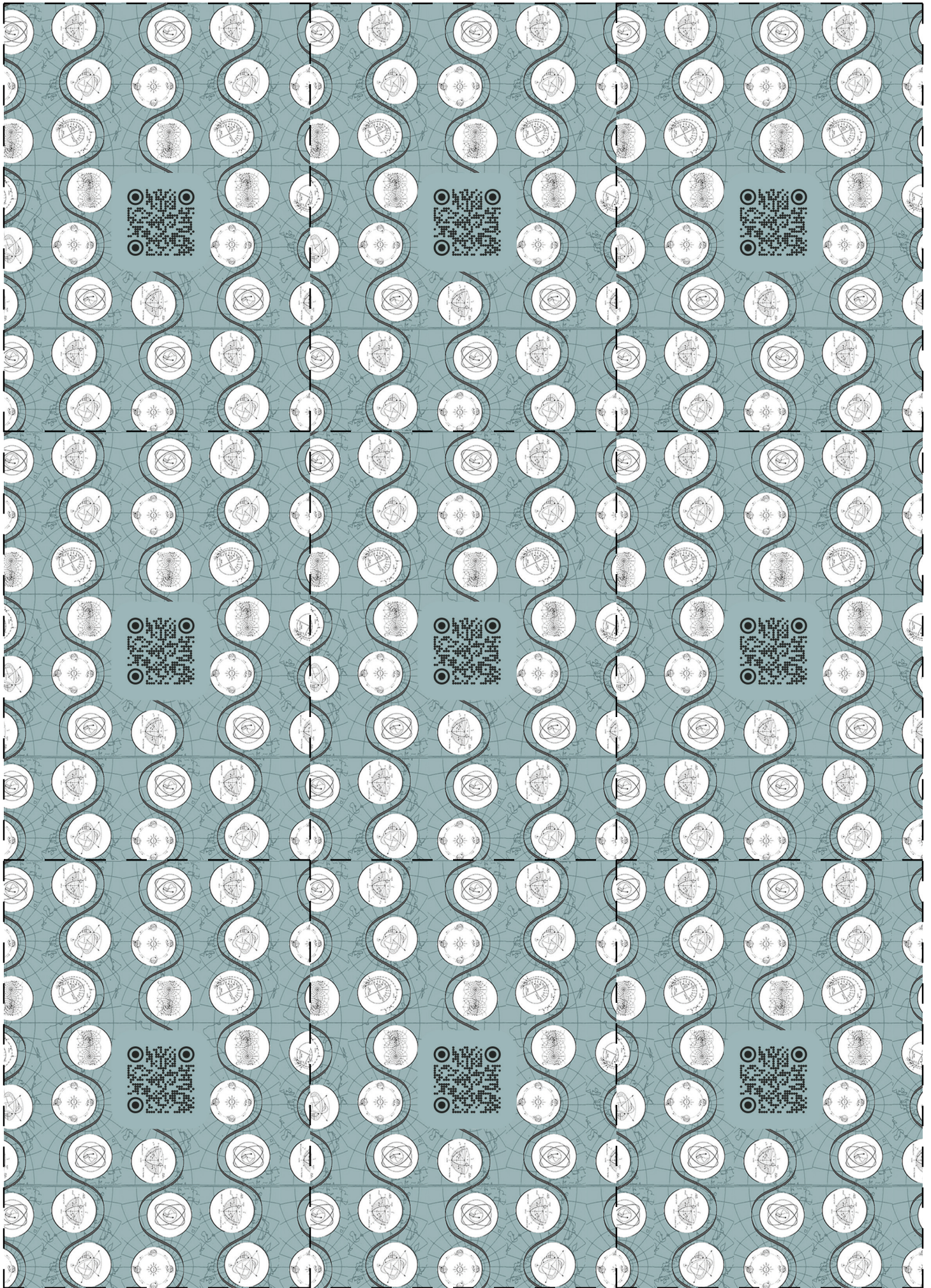


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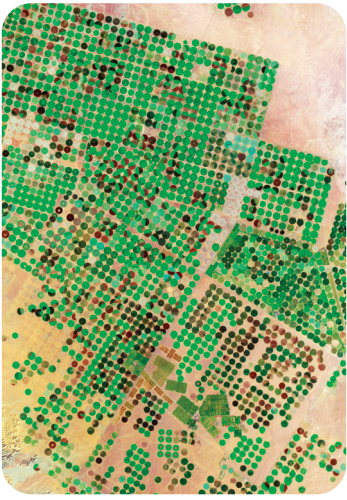
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9

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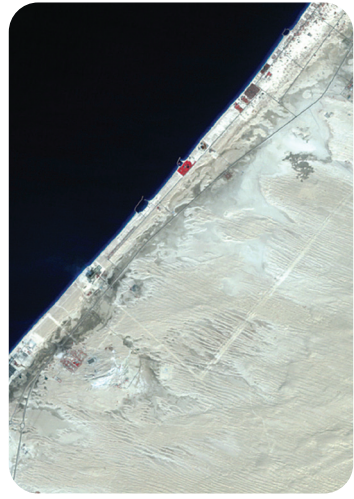
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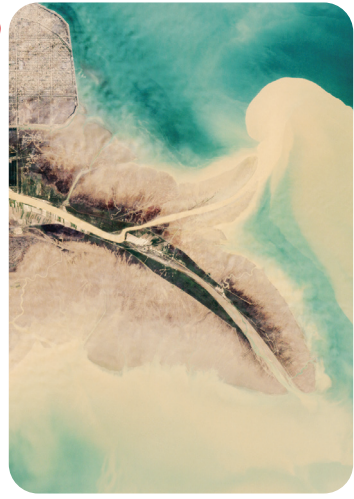
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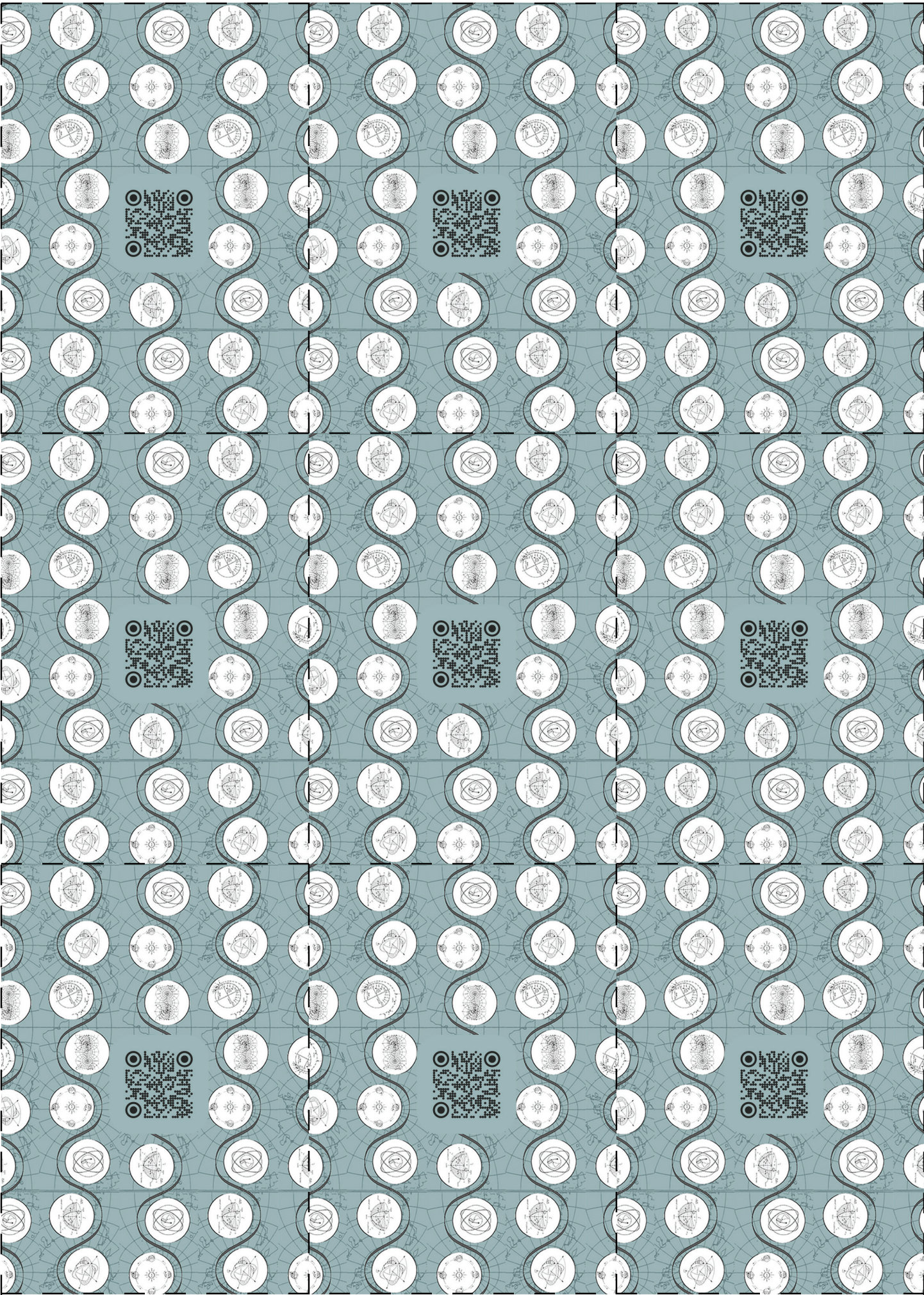


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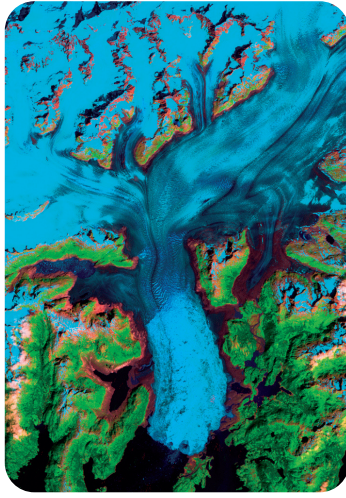


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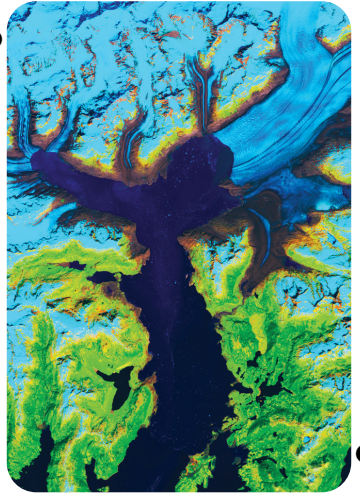
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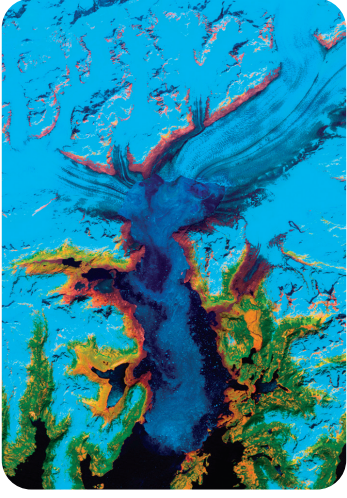
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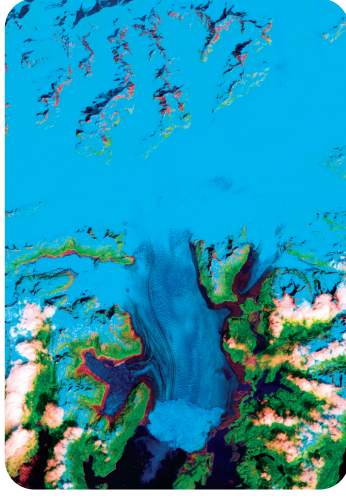
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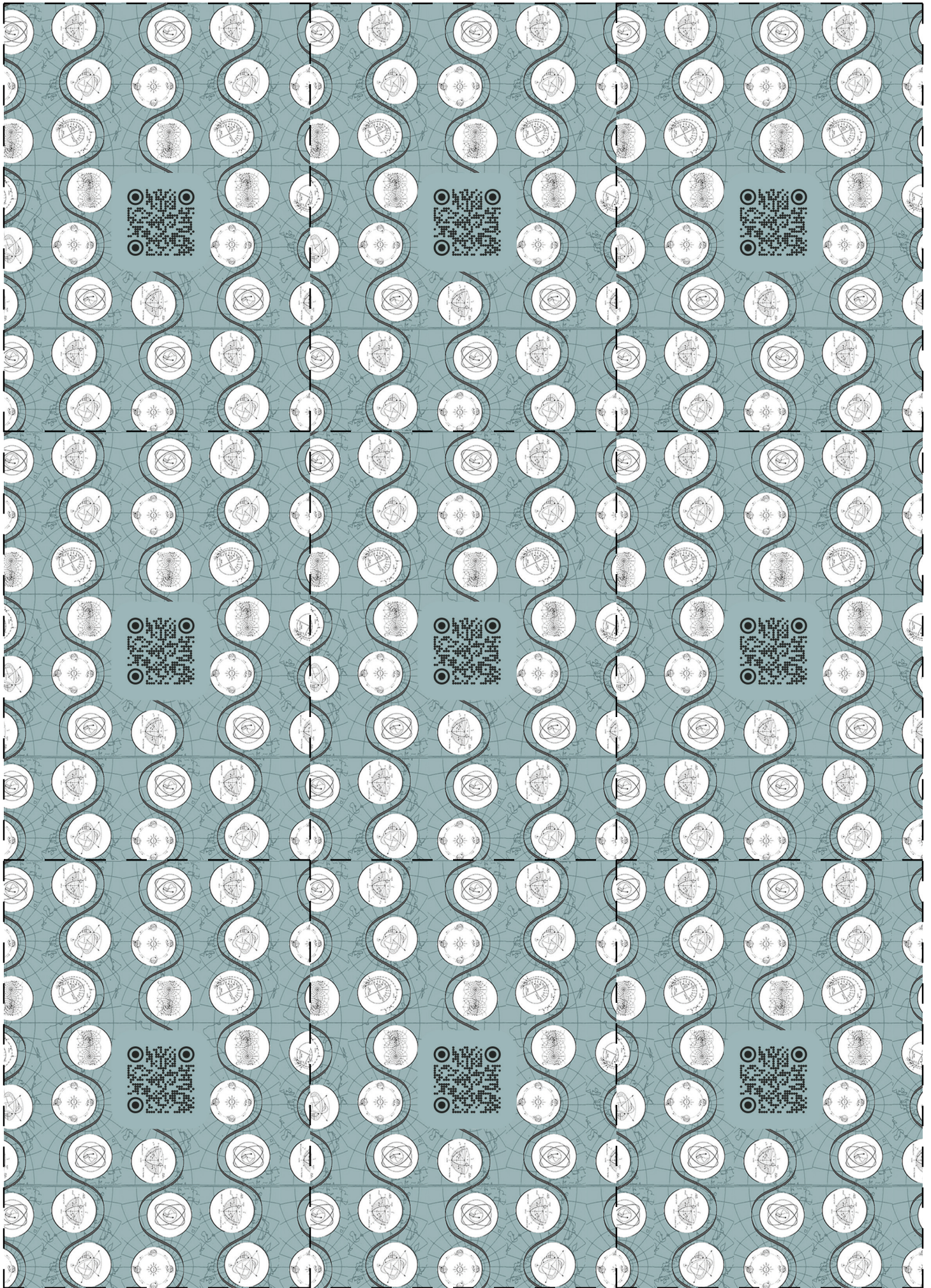


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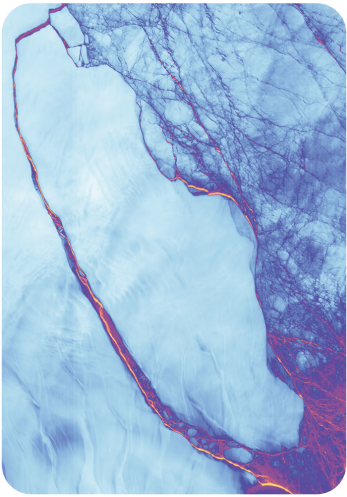
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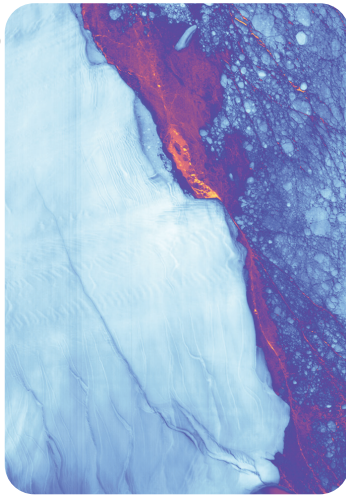


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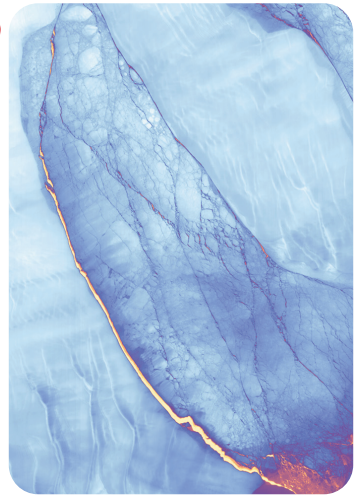
♠ 10

10 ♣



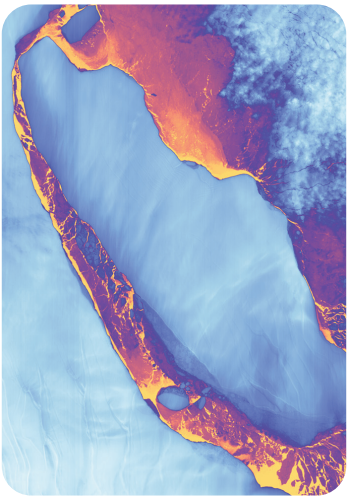
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10 ♥



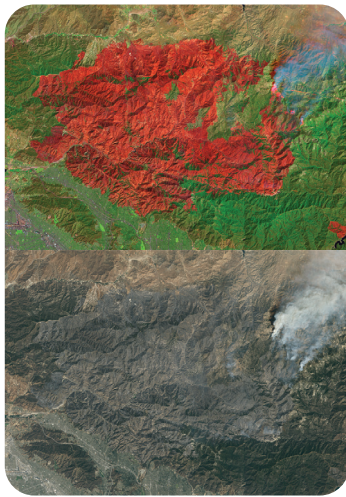
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10 ♦



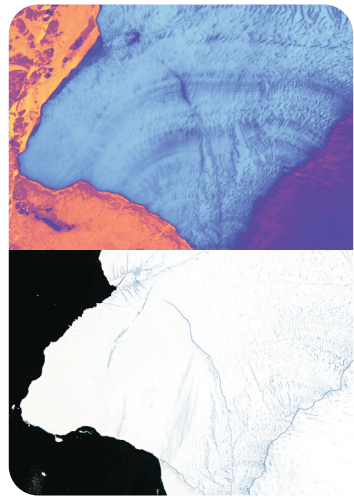
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J ♠



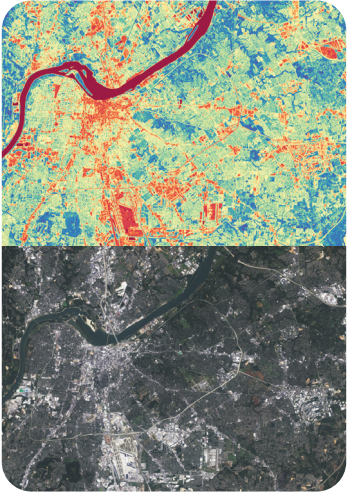
♠ J

J ♣



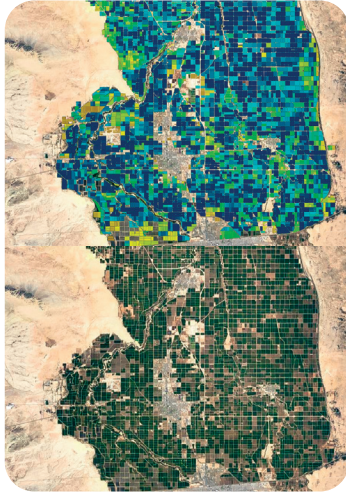
♣ J

J ♥



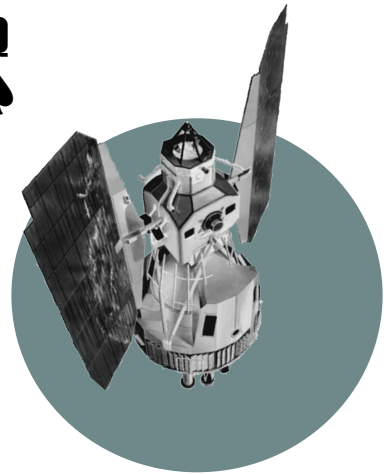
♥ J

J ♦



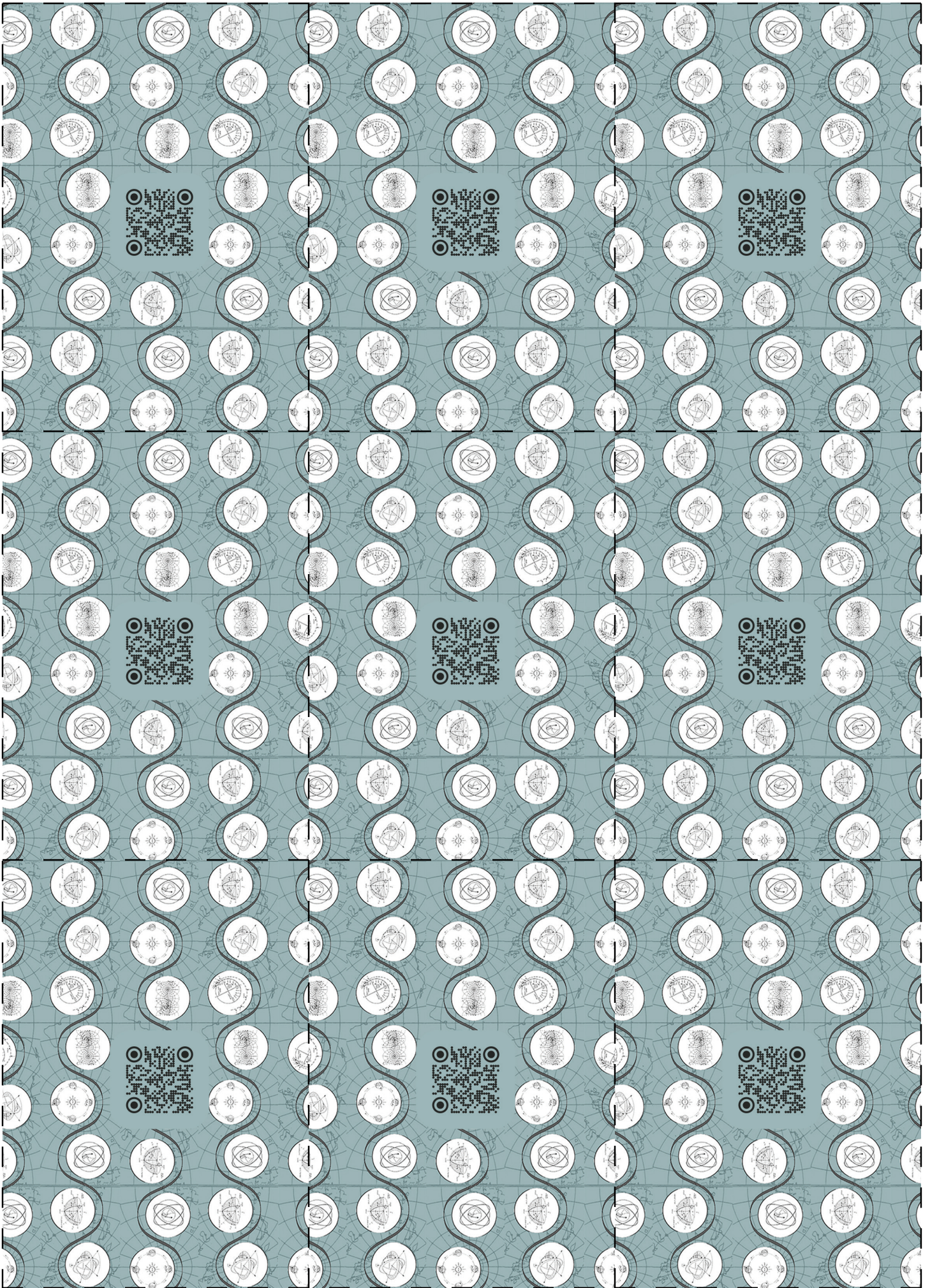
♦ J

Q ♠

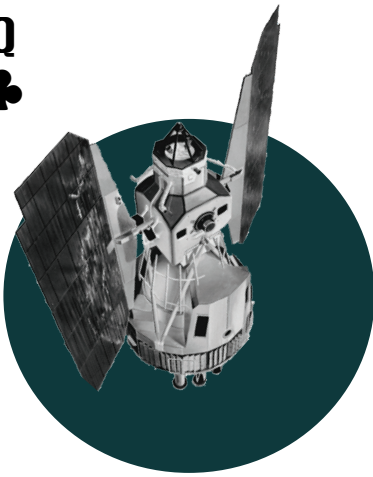


Landsat 1 - launched
July 23, 1972

♠ Q



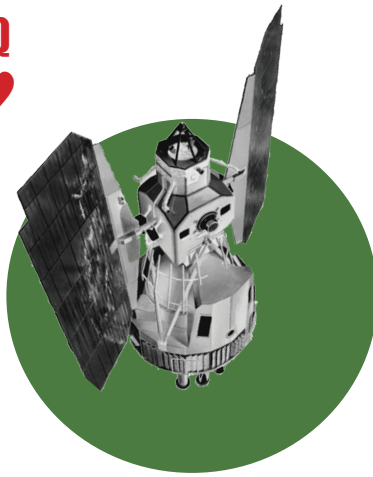
Q
♣



Landsat 2 - launched
January 22, 1975

♣
0

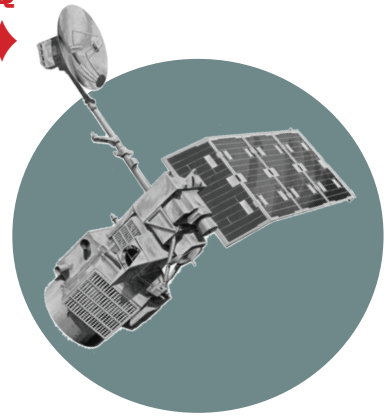
Q
♥



Landsat 3 - launched
March 5, 1978

♥
0

Q
♦



Landsat 4 - launched
July 16, 1982

♦
0

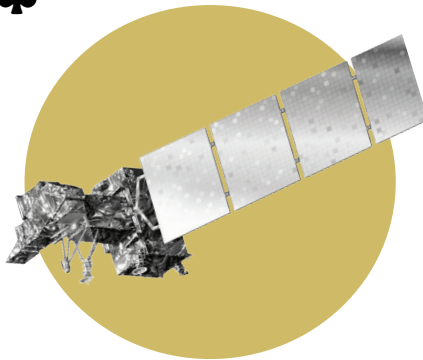
K
♠



Landsat 5 - launched
March 1, 1984

♠
K

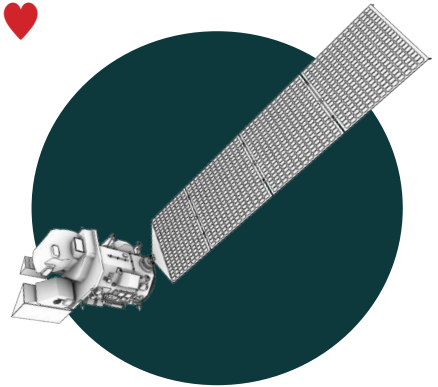
K
♣



Landsat 7 - launched
April 15, 1999

♣
K

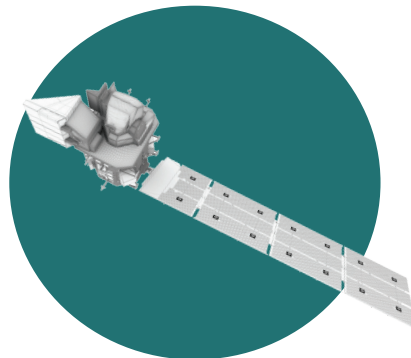
K
♥



Landsat 8 - launched
February 11, 2013

♥
K

K
♦



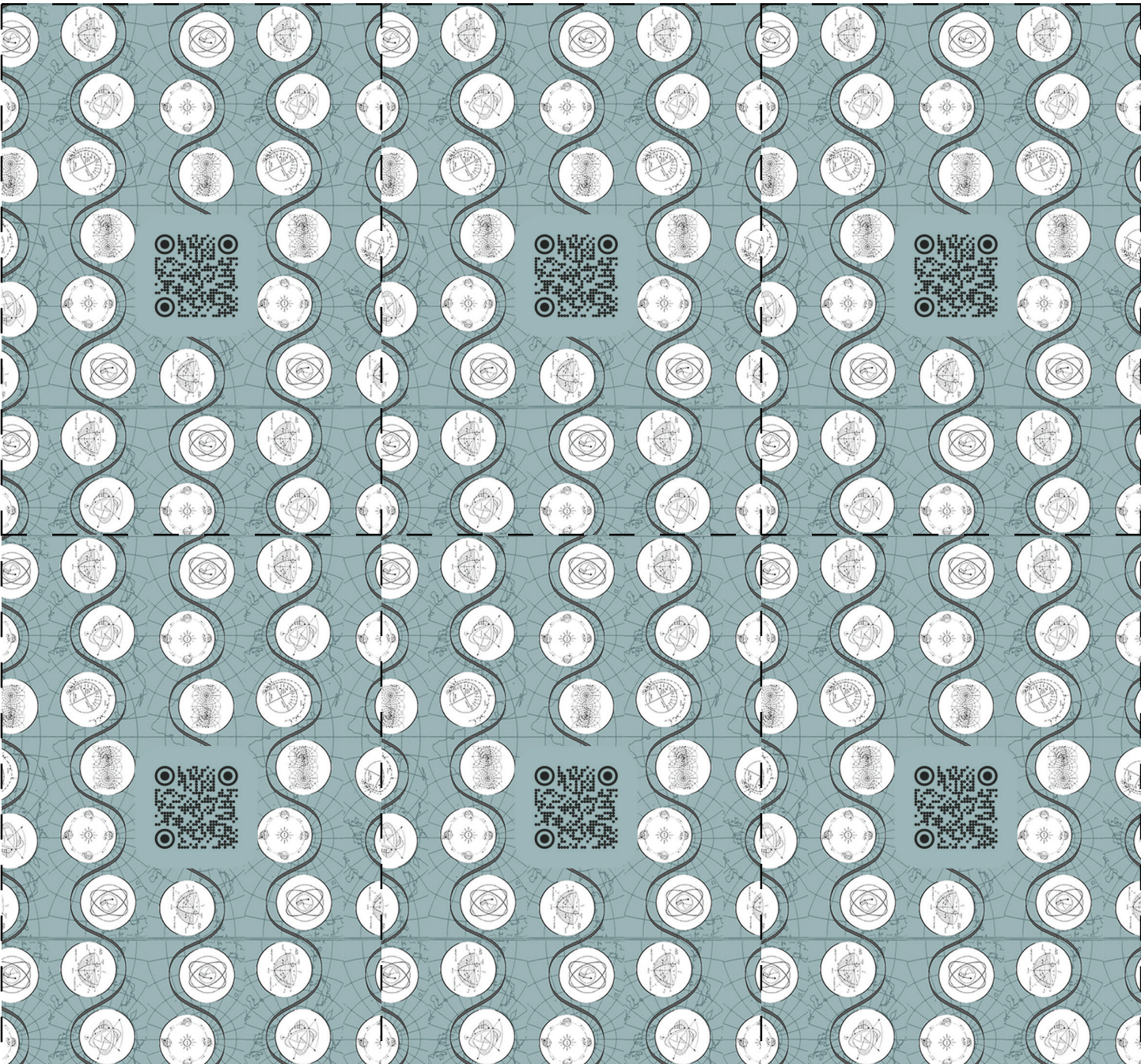
Landsat 9 - launched
September 27, 2021

♦
K

ANSWER KEY

	♠	♣	♥	♦
1. Aral Sea	2010	2021	2000	2014
2. Mt. St. Helens	1979	1996	2014	1981
3. Yellowstone	1999	1989	2019	1987
4. Rondônia, Brazil	1994	2015	1984	2004
5. Saudi Arabia	1991	2000	2012	1987
6. Dubai, UAE	2002	2021	2008	1986
7. Yellow River	2020	2009	1999	1989
8. Columbia Glacier	1995	2019	2011	1987
9. Wax Lake	2006	1987	1993	2017
10. Iceberg A-68	07/30 2017	07/11 2016	07/01 2018	09/16 2017





LANDSAT TECHNOLOGY

J - Data Applications

- ♠ Station Fire, California
Shortwave Infrared & Natural-color
- ♣ Brunt Ice Shelf, Antarctica
Thermal Infrared & Natural-color
- ♥ Louisville, Kentucky
Vegetation Index (NDVI) & Natural-color
- ♦ Salton Sea, California crop fields
Evapotranspiration & Natural-color

Q - Landsat Missions & Instruments

- ♠ Landsat 1: MSS & RBV
- ♣ Landsat 2: MSS & RBV
- ♥ Landsat 3: MSS & RBV
- ♦ Landsat 4: MSS & TM

K - Landsat Missions & Instruments

- ♠ Landsat 5: MSS & TM
- ♣ Landsat 7: ETM+
- ♥ Landsat 8: OLI & TIRS
- ♦ Landsat 9: OLI-2 & TIRS-2



In 1972, the launch of the Earth Resources Technology Satellite (ERTS), later renamed Landsat, marked the beginning of the longest continuous space-based record of the Earth's surface. Society continues to benefit from this valuable data record because it provides essential information that supports informed decisions about the Earth's resources and environments.

Landsat is a joint program between NASA and the U.S. Geological Survey.

landsat.gsfc.nasa.gov
usgs.gov/landsat