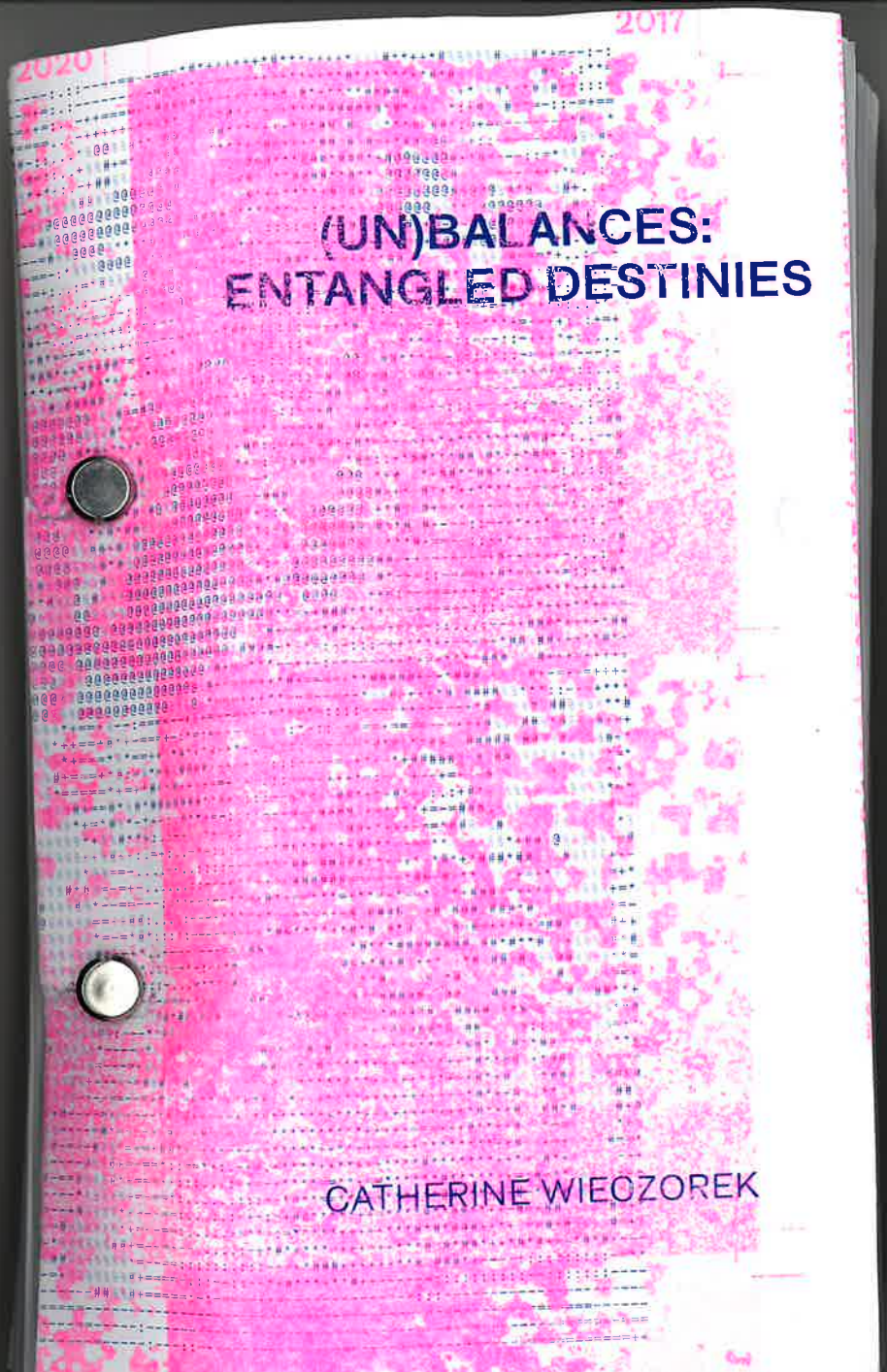

2020
2017
(UN)BALANCES:
ENTANGLED DESTINIES
CATHERINE WIECZOREK

COLOPHON

This zine was made in Atlanta, Georgia in April 2025 to accompany the 30" x 30" print titled *(Un) balances: Entangled Destinies*. It was assembled using a combination of digital layout in InDesign and hand formatting. Body text and headings are set in Standard, designed by Bryce Wilner.

The two images in this project were sourced from the National Park Service (NPS). They were reproduced in black and white and processed using a custom distortion script informed by the NPS dataset Wolf & Moose Populations 1980 to Today [2019]. This dataset was extended to span 1945–2044 with the assistance of ChatGPT 4o.

The final black-and-white images served as masters for Risograph printing. Prints were produced on Astrobright Smooth White 80lb paper using a Riso 590 at Simply Design Emporium Press in Atlanta, Georgia on April 1, 2025. The wolf images were printed first in Riso Dark Blue at 60% opacity; the moose images followed in Riso Fluorescent Pink at 60% opacity.

Each zine was hand-assembled using Chicago screw bindings. For now, this remains a single-edition publication.

Special thanks to Enrico Berkes for collaboration on the dataset and processing code, to Sarah Lawrence for generously providing access to the Risograph printer and materials, and to Amanda Wieczorek for her aesthetic insights and printmaking support.

(UN)BALANCES: ENTANGLED DESTINIES

In this project, I examine the dataset "Wolf & Moose Populations 1980 to Today"[1] created by the National Park Service. The dataset provides information on the fluctuating numbers of wolves and moose on Isle Royale, Michigan, from 1980 to 2019. It illustrates the dynamic predator-prey relationship between the two species. As the wolf population declines, the moose population tends to increase, and vice versa. In 1980, there were 50 wolves and 664 moose, whereas by 2019, the numbers had shifted to 14 wolves and 2,060 moose. These fluctuations are influenced by prey-predator dynamics, as well as external factors such as food availability, weather conditions, and seasonal changes, all of which impact the health and reproduction rates of both species.

To explore alternative temporalities within this dataset, I used ChatGPT-4o to extrapolate 35 years into both the past and future, drawing on ecological knowledge of Isle Royale as a frame of reference (the AI-generated data is highlighted in grey on the opposite page). The purpose of this project was twofold. First, I wanted to visualize how long-term ecological change, such as shifts in population, often escapes our immediate perception. At a glance, the images appear nearly identical. But over time, subtle differences emerge: features absent in earlier frames begin to take shape. What first seemed static reveals itself as quietly in flux. This mirrors our experience of ecological processes, which unfold not in dramatic bursts but in slow, layered transformations. In such systems, both loss and rebirth are rarely sudden—they are gradual erosions and emergences shaped over decades. Second, the work probes the capacity

YEAR	WOLF	MOOSE
1945	2	700
1946	3	725
1947	4	750
1948	5	775
1949	7	790
1950	5	800
1951	7	850
1952	10	900
1953	12	950
1954	15	1100
1955	17	1250
1956	20	1300
1957	22	1350
1958	25	1400
1959	28	1500
1960	30	1600
1961	32	1700
1962	35	1800
1963	38	1900
1964	40	2000
1965	42	2100
1966	45	2200
1967	47	2300
1968	50	2400
1969	48	2200
1970	45	2000
1971	42	1800
1972	38	1600
1973	35	1500
1974	32	1400
1975	30	1300
1976	32	1200
1977	35	1000
1978	40	800
1979	45	700
1980	50	664
1981	30	650
1982	14	700
1983	23	900
1984	24	811
1985	22	1062
1986	20	1025
1987	16	1380
1988	12	1653
1989	11	1397
1990	15	1216
1991	12	1313
1992	12	1600
1993	13	1880
1994	15	1800

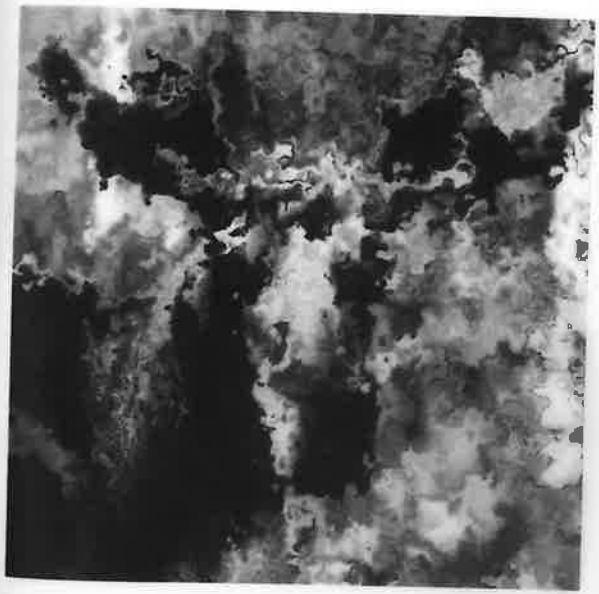
YEAR	WOLF	MOOSE
1995	16	2400
1996	22	1200
1997	24	500
1998	14	700
1999	25	750
2000	29	850
2001	19	900
2002	17	1000
2003	19	900
2004	29	750
2005	30	540
2006	30	385
2007	21	450
2008	23	650
2009	24	530
2010	19	510
2011	16	515
2012	9	750
2013	8	975
2014	9	1050
2015	3	1250
2016	2	1300
2017	2	1600
2018	2	1500
2019	14	2060
2020	16	1900
2021	20	1750
2022	25	1600
2023	31	1450
2024	33	1300
2025	35	1200
2026	36	1100
2027	35	1000
2028	33	950
2029	32	900
2030	30	880
2031	28	860
2032	26	900
2033	24	950
2034	23	1000
2035	22	1050
2036	21	1100
2037	20	1150
2038	19	1200
2039	18	1250
2040	15	1300
2041	14	1350
2042	13	1400
2043	12	1450
2044	11	1500

of generative AI to speculate on ecological dynamics beyond the bounds of available data. Can it imagine a credible past and future? Or does the absence of hard data leave the status quo as our best prediction?

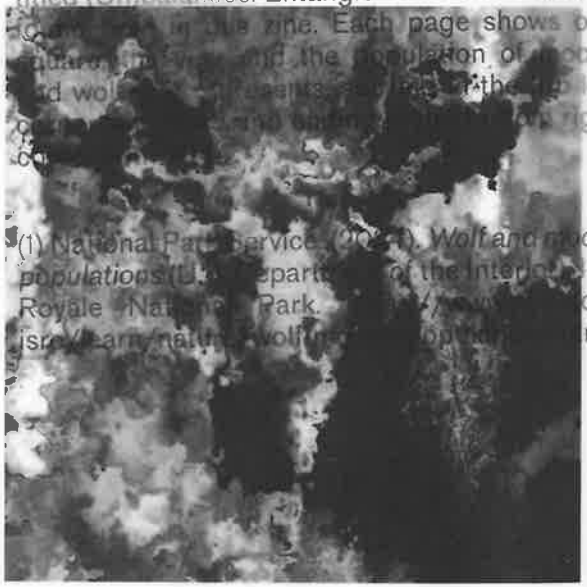
As described in the colophon, images of moose and wolves that are altered by the population count during that year are layered on top of each other to highlight the entangled relationship of predator-prey relations. Visually combining these images shows both change and continuity over time.

The squares that are seen in the 30" x 30" print titled (Un)balances: Entangled Destinies are also found here in this zine. Each page shows one square, the year and the population of moose and wolves it represents, starting in the top left corner with 1945 and ending in the bottom right corner with 2044.

(1) National Park Service. (2024). *Wolf and moose populations* (U.S. Department of the Interior). Isle Royale National Park. https://www.nps.gov/isro/learn/nature/wolf-moose-populations.htm

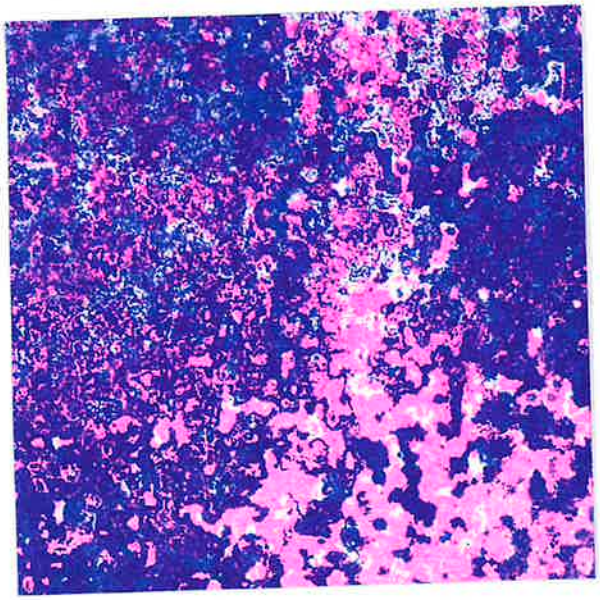


The squares that are seen in the 30" x 30" print titled (Un)balances: Entangled Destinies are also



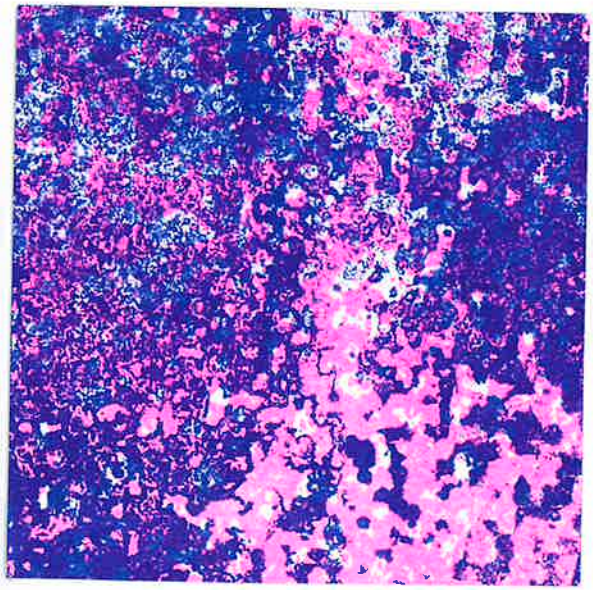
(1) National Park Service. (2021). *Wolf and moose populations* (U.S. Department of the Interior). Isle Royale National Park. https://www.nps.gov/isro/learn/nature/wolf-moose-population.htm

1945



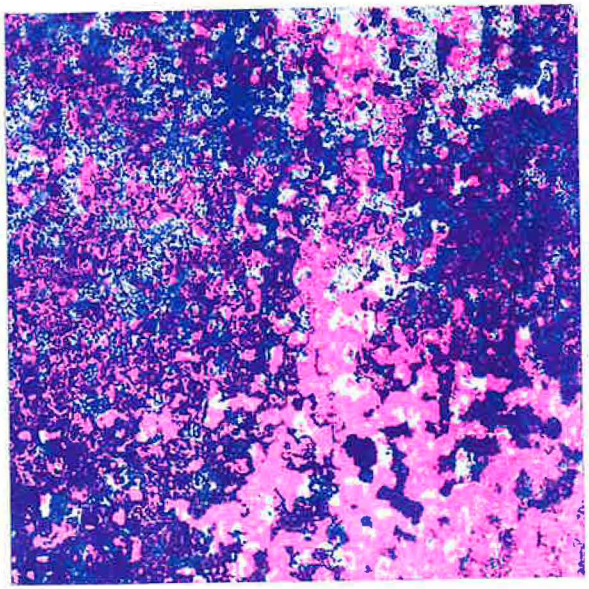
W: 2 M: 700

1946



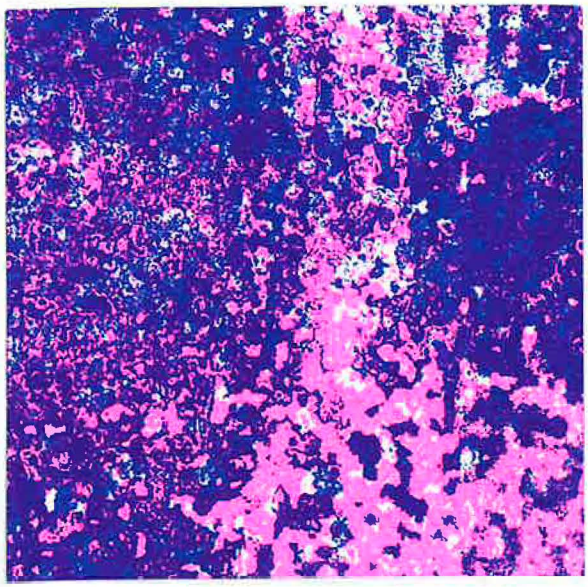
W: 3 M: 725

1947



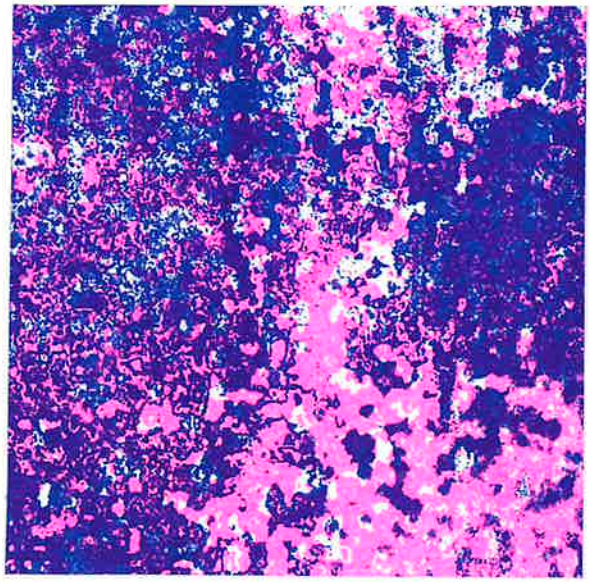
W: 4 M: 750

1948



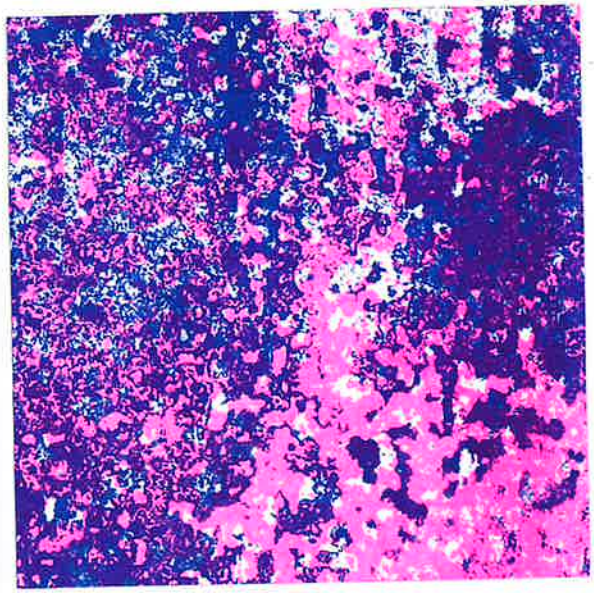
W: 5 M: 775

1949



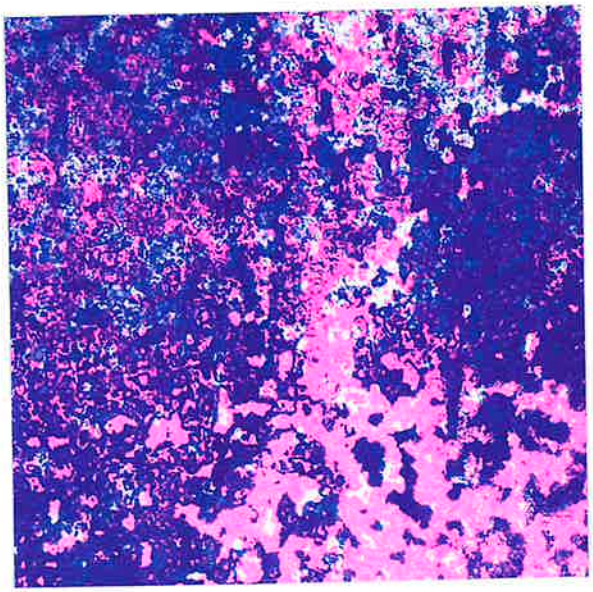
W: 7 M: 790

1950



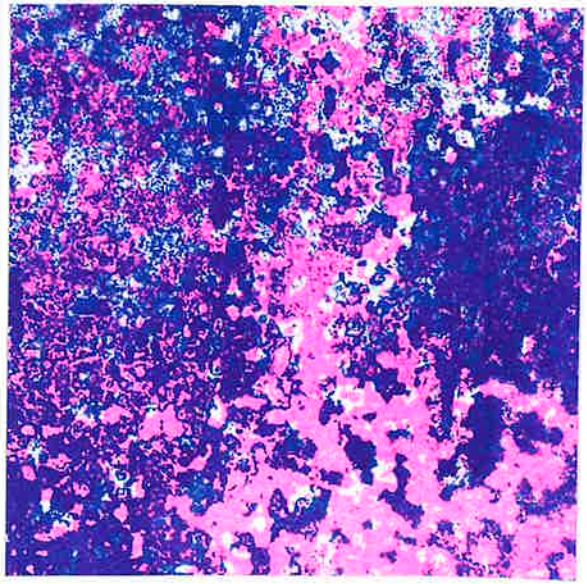
W: 5 M: 800

1951



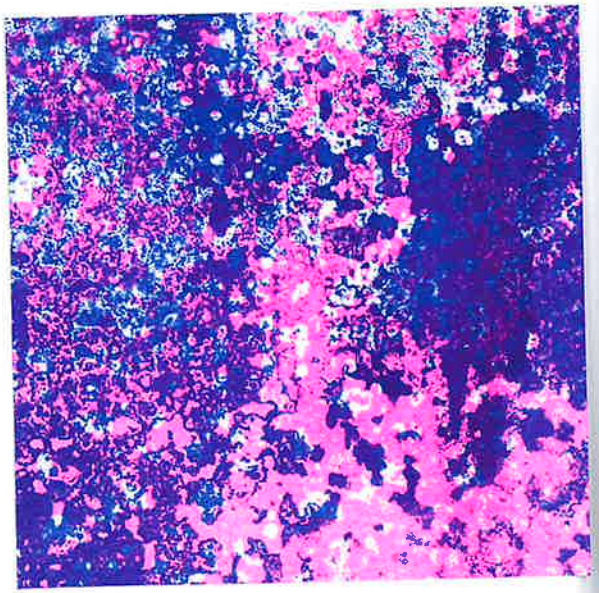
W: 7 M: 850

1952



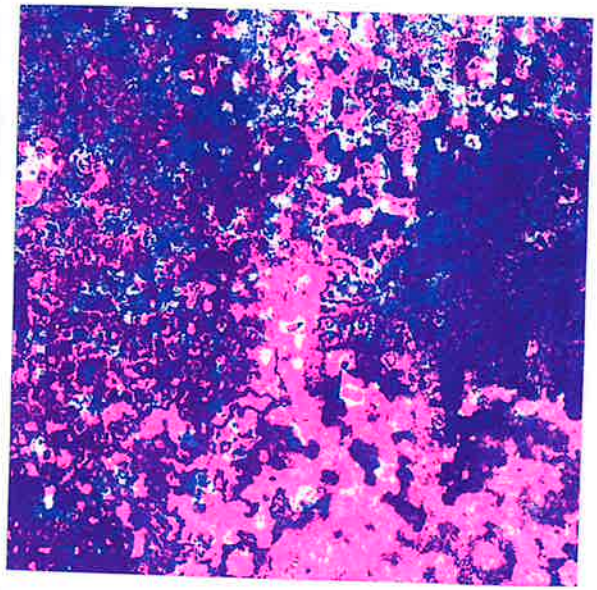
W: 10 M: 900

1953



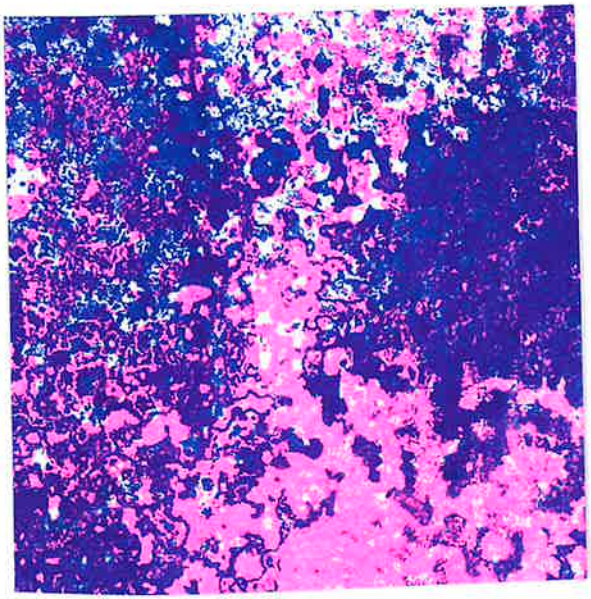
W: 12 M: 950

1954



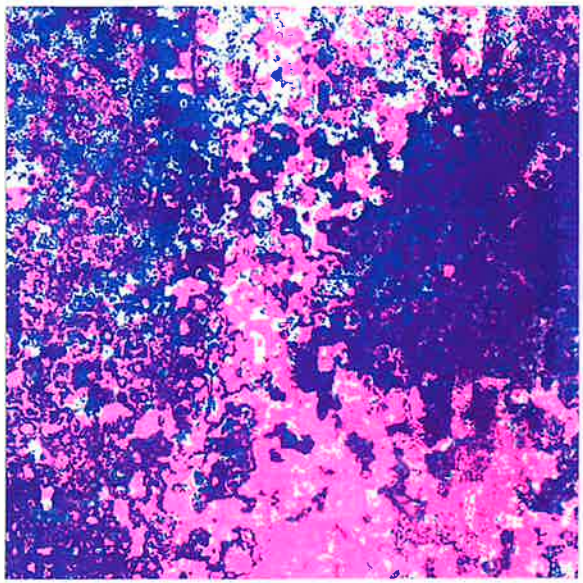
W: 15 M: 1100

1955



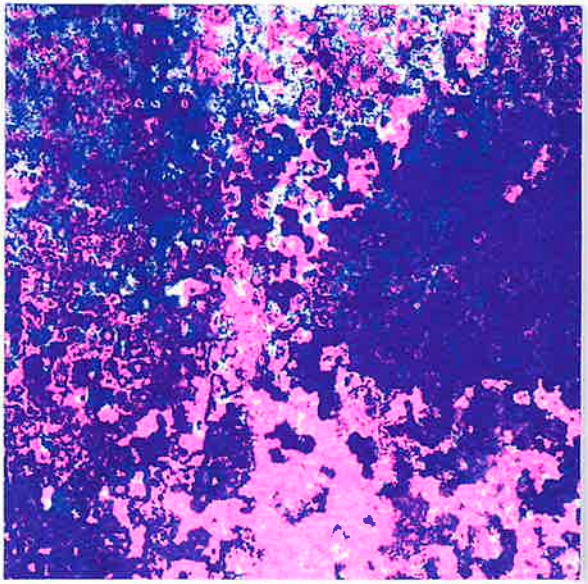
W: 17 M: 1250

1956



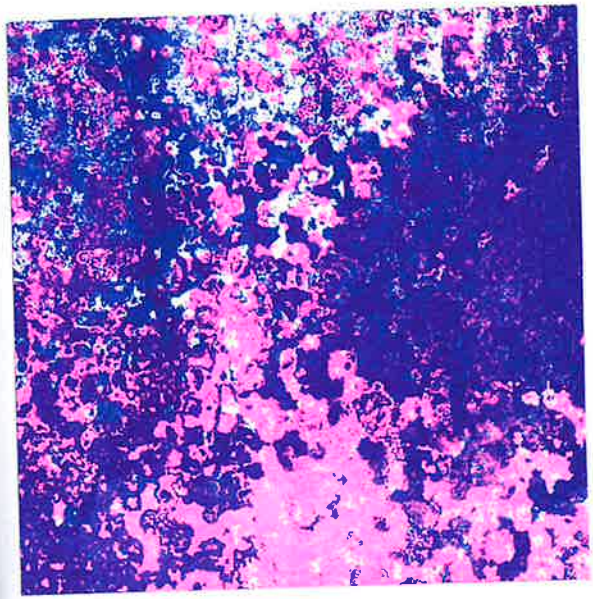
W: 20 M: 1300

1957



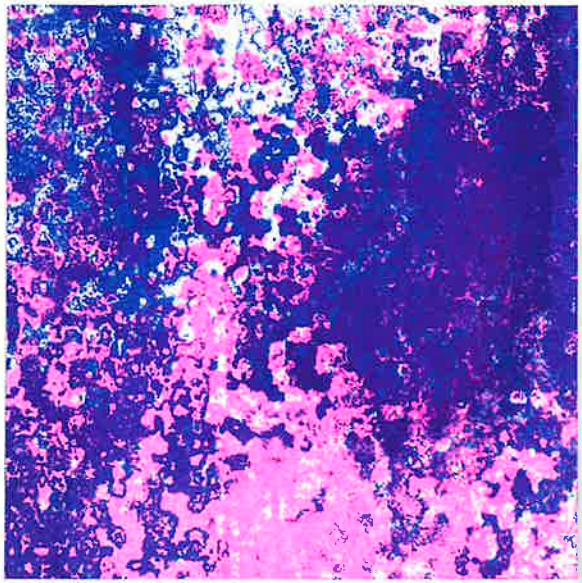
W: 22 M: 1350

1958



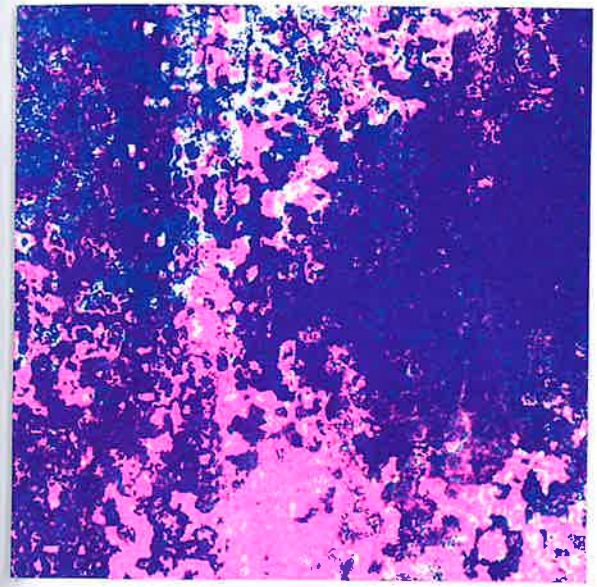
W: 25 M: 1400

1959



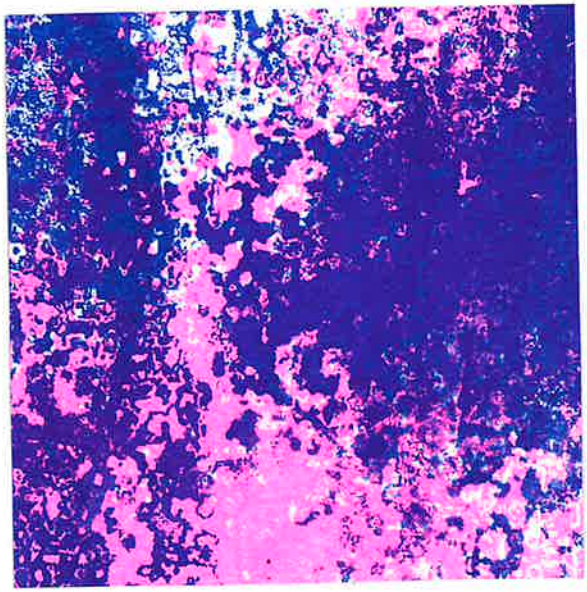
W: 28 M: 1500

1960



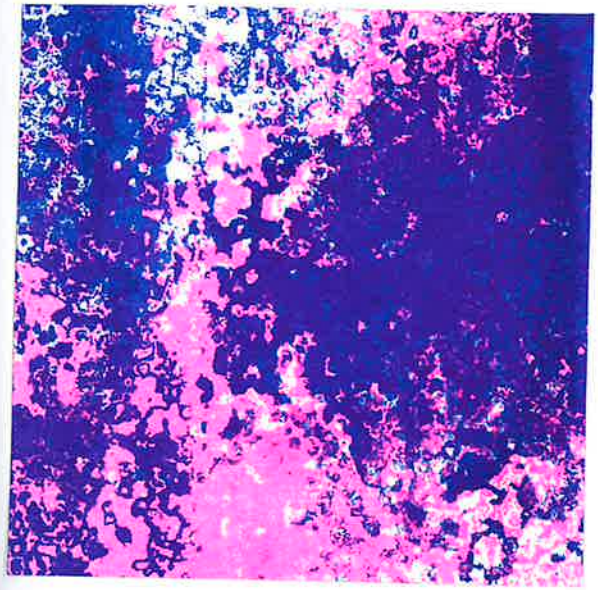
W: 30 M: 1600

1961



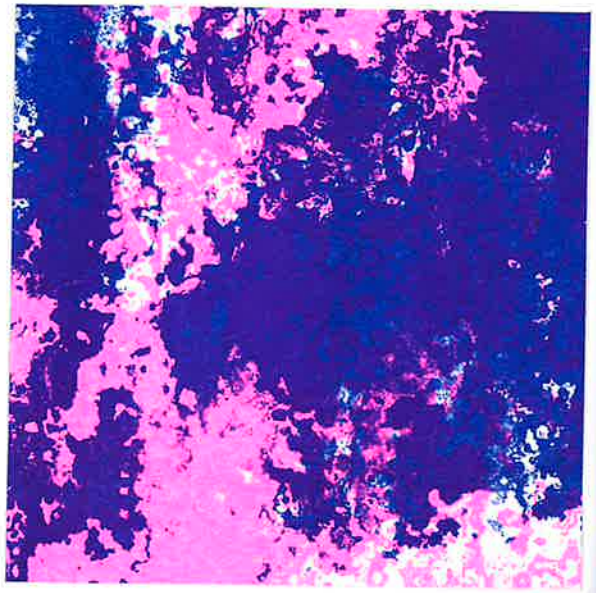
W: 32 M: 1700

1962



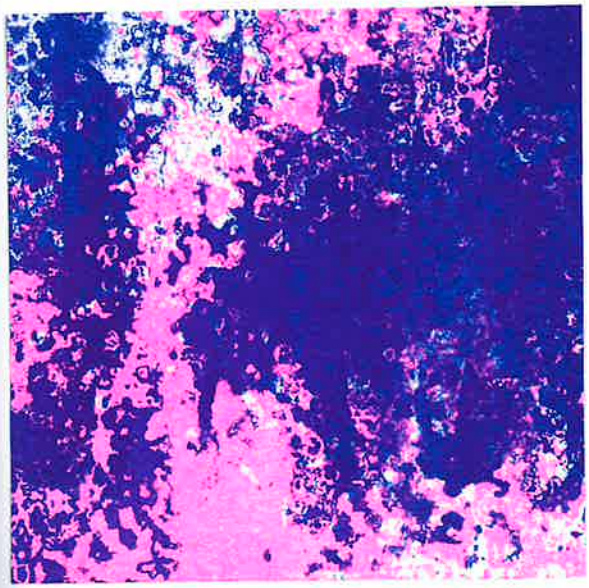
W: 35 M: 1800

1963



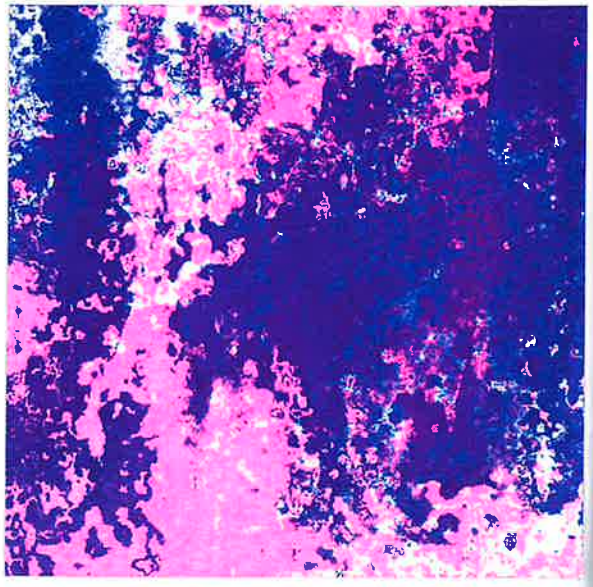
W: 38 M: 1900

1964



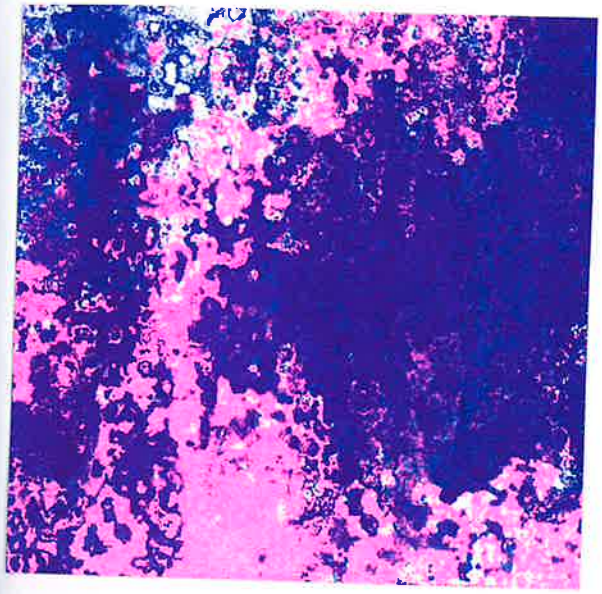
W: 40 M: 2000

1965



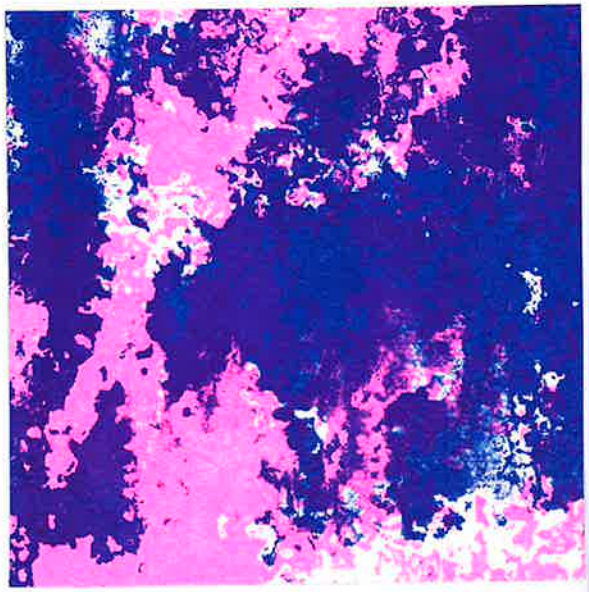
W: 42 M: 2100

1966



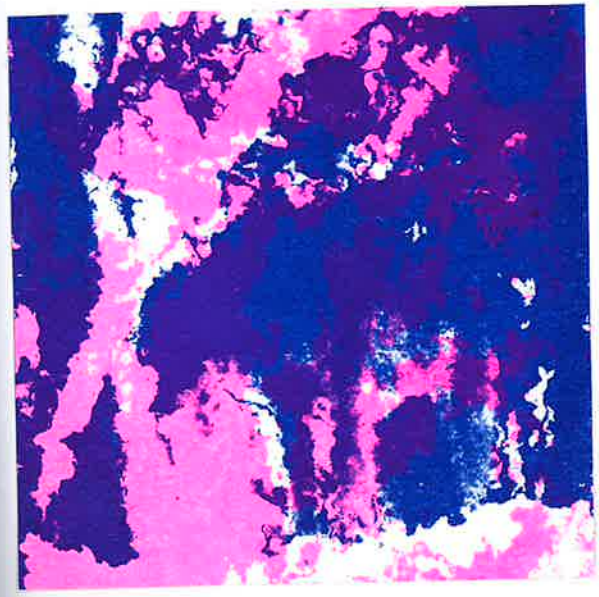
W: 45 M: 2200

1967



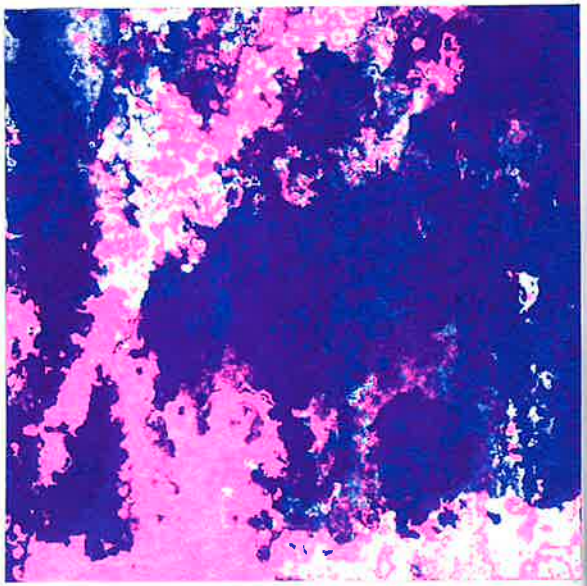
W: 47 M: 2300

1968



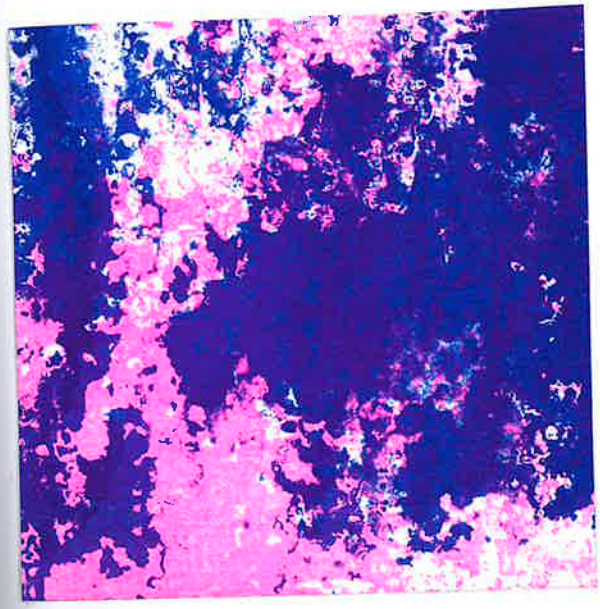
W: 50 M: 2400

1969



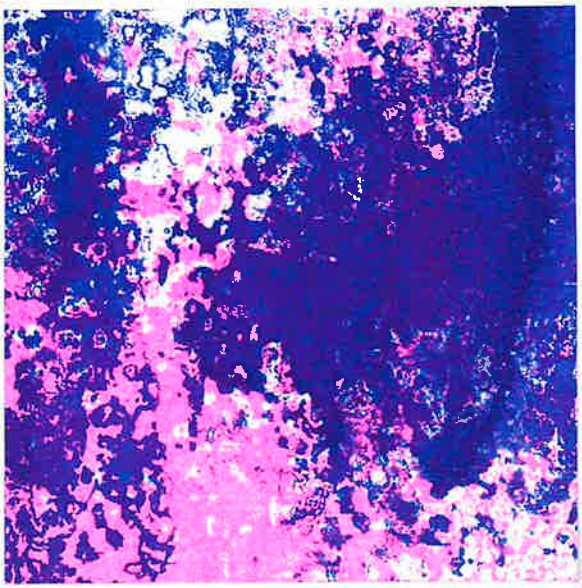
W: 48 M: 2200

1970



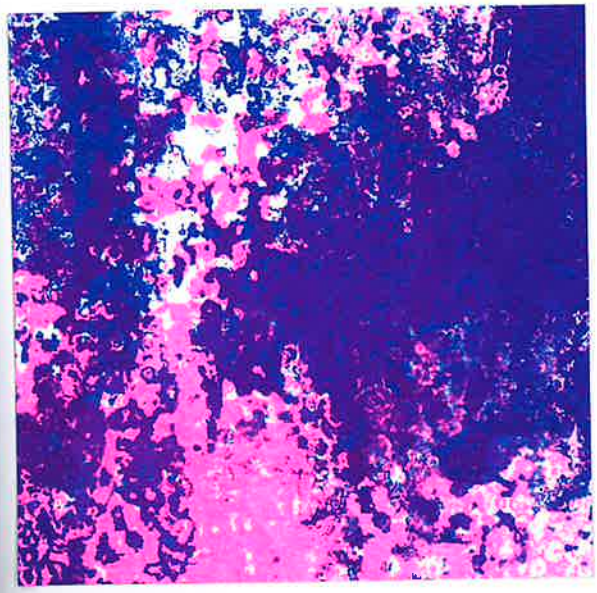
W: 45 M: 2000

1971



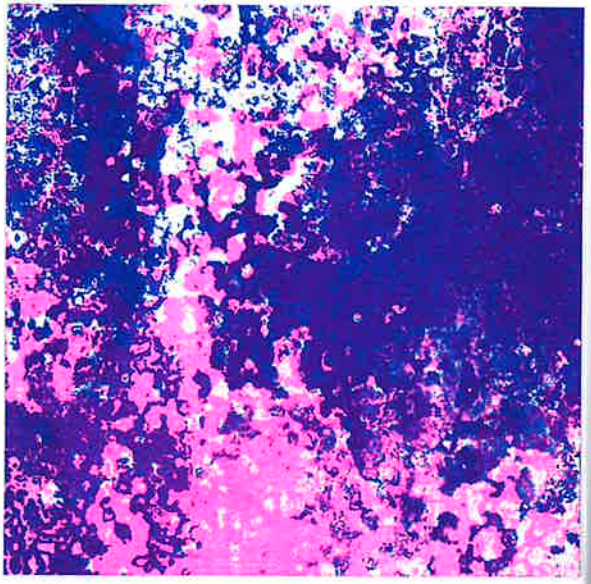
W: 42 M: 1800

1972



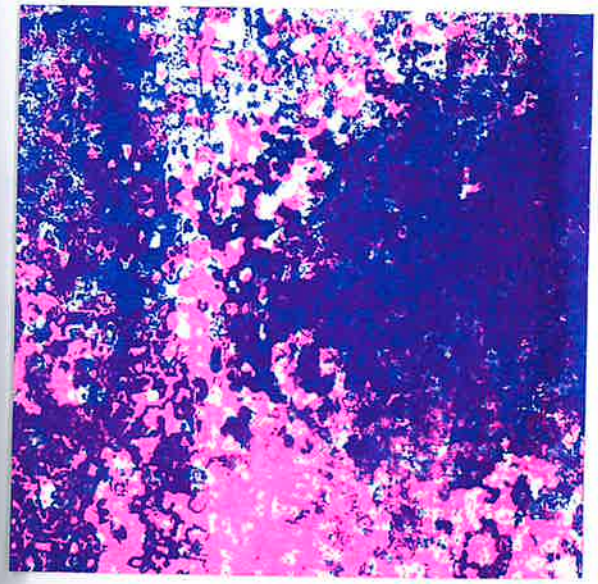
W: 38 M: 1600

1973



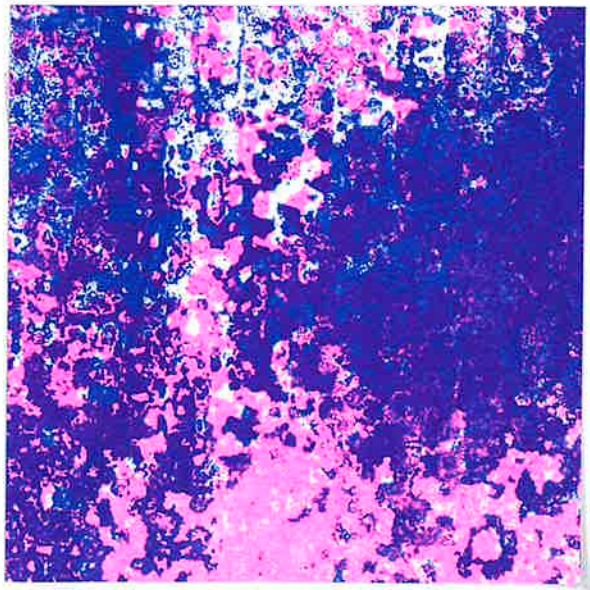
W: 35 M: 1500

1974



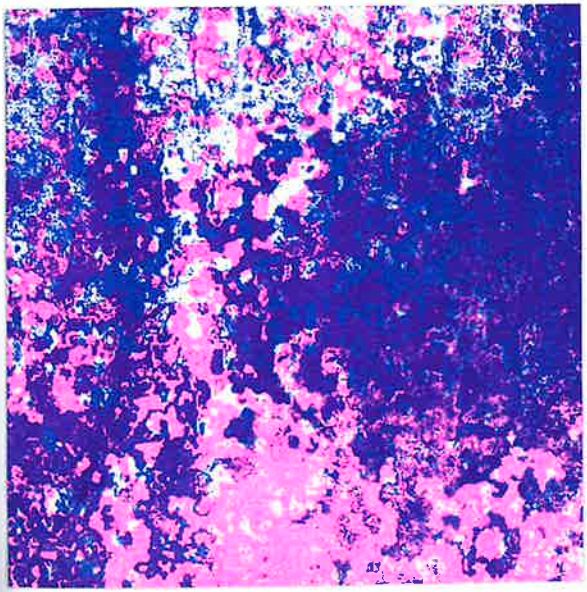
W: 32 M: 1400

1975



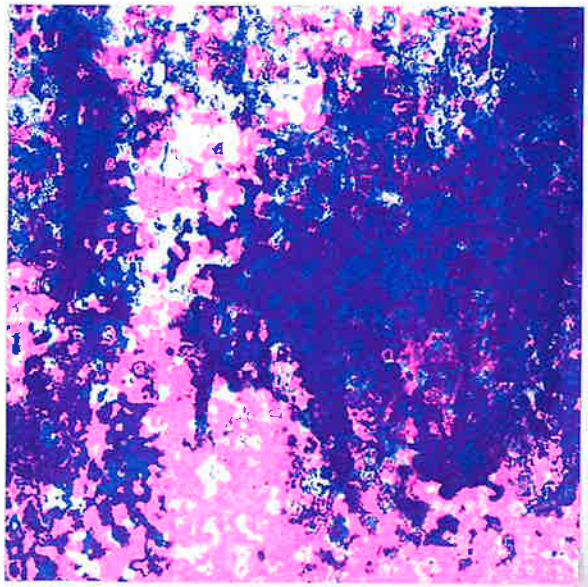
W: 30 M: 1300

1976



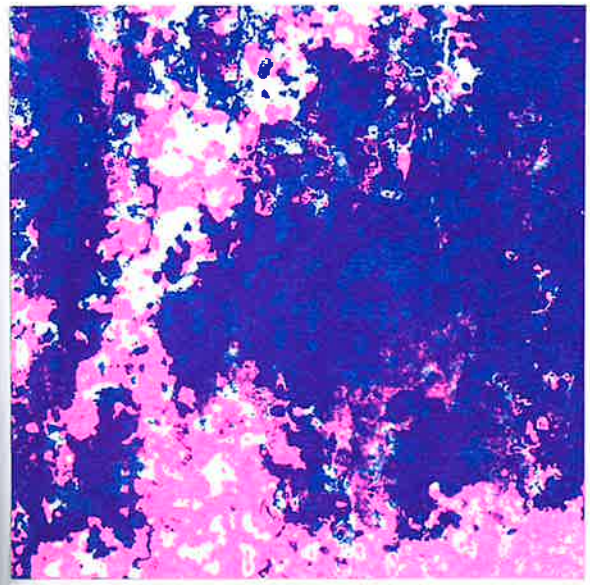
W: 32 M: 1200

1977



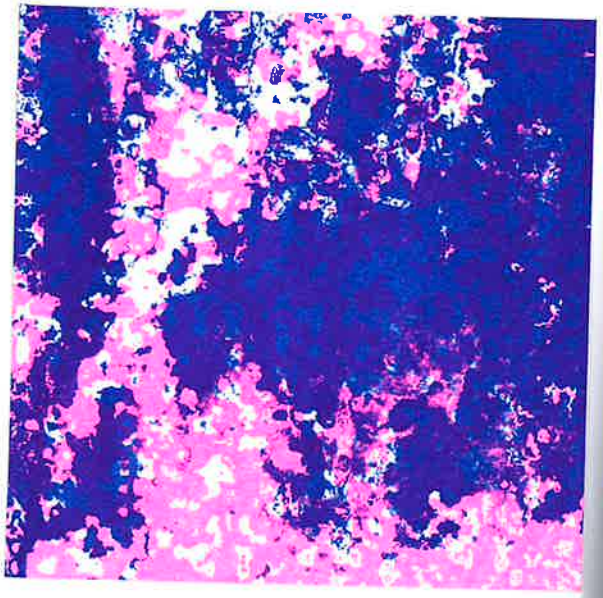
W: 35 M: 1000

1978



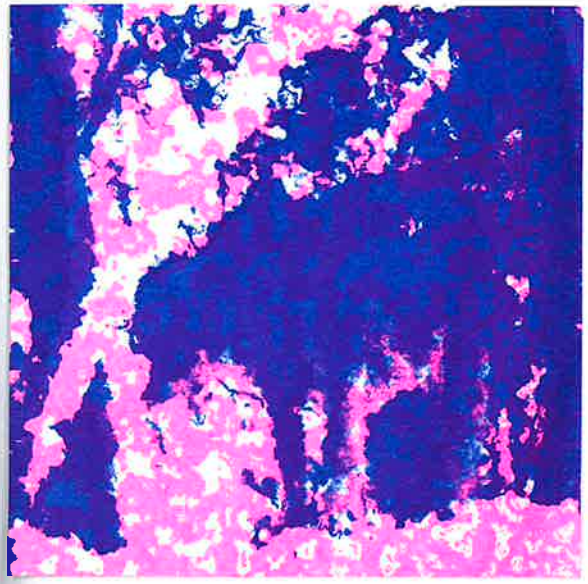
W: 40 M: 800

1979



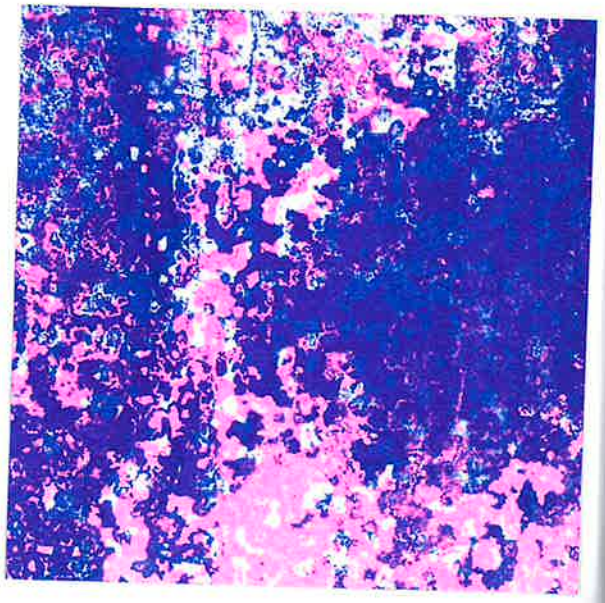
W: 45 M: 700

1980



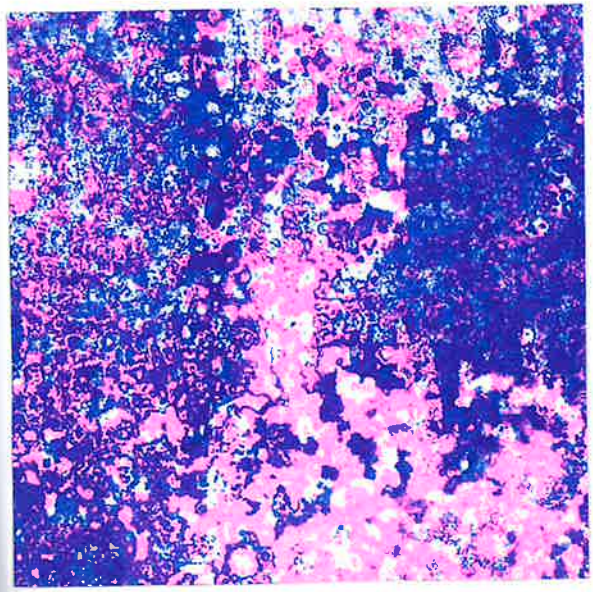
W: 50 M: 664

1981



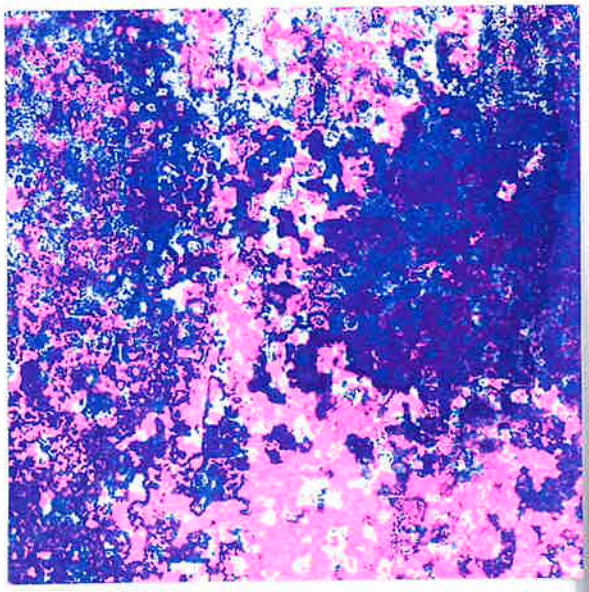
W: 30 M: 650

1982



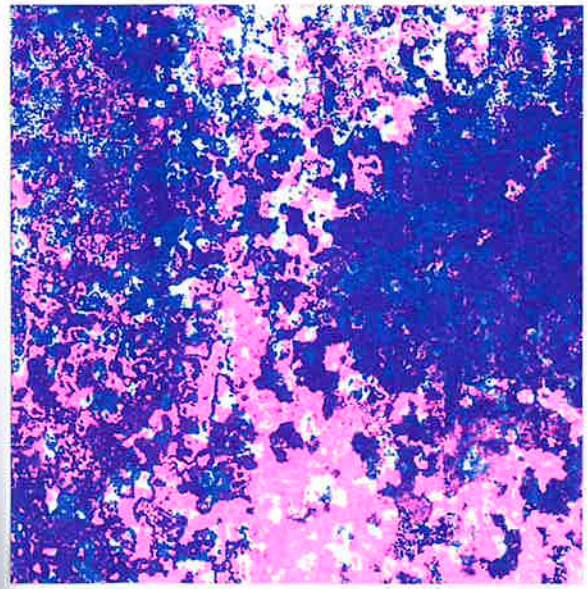
W: 14 M: 700

1983



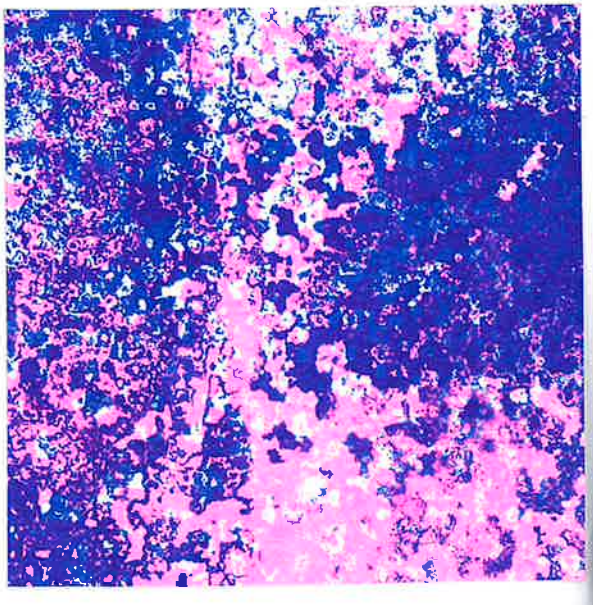
W: 23 M: 900

1984



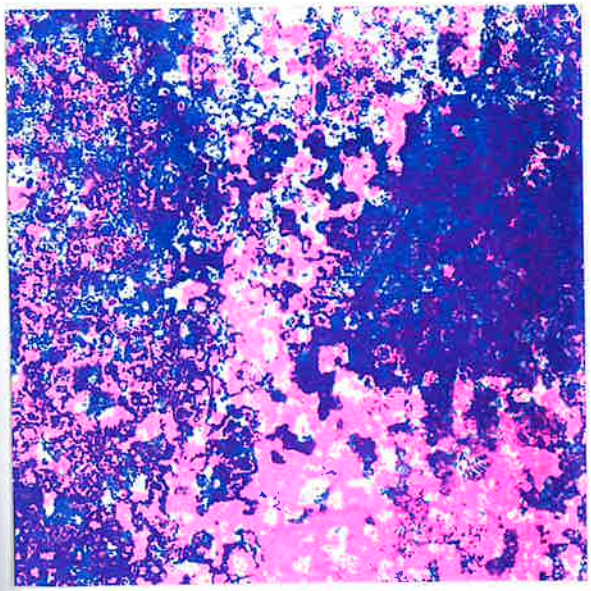
W: 24 M: 811

1985



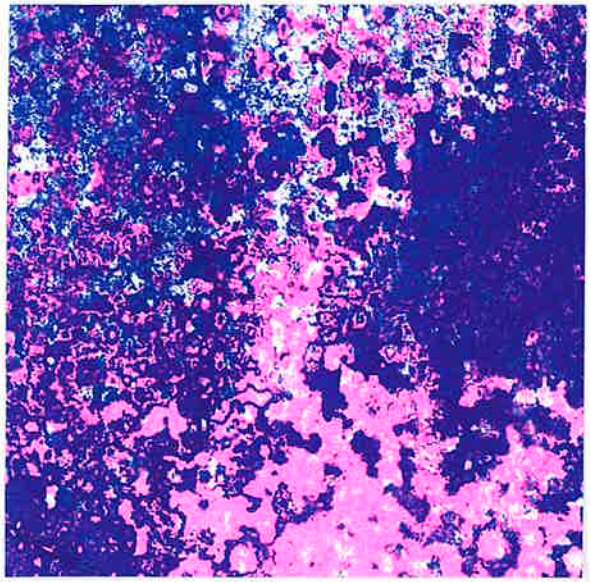
W: 22 M: 1062

1986



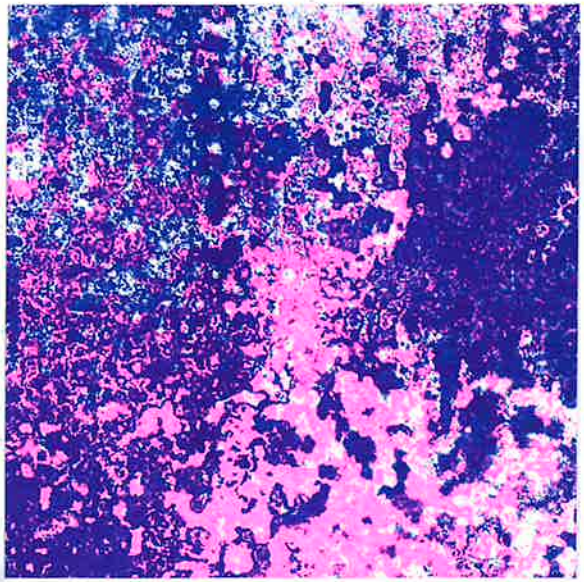
W: 20 M: 1025

1987



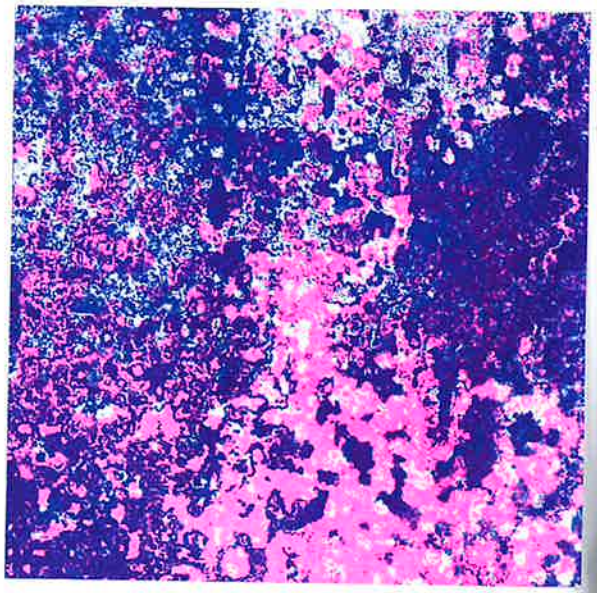
W: 16 M: 1380

1988



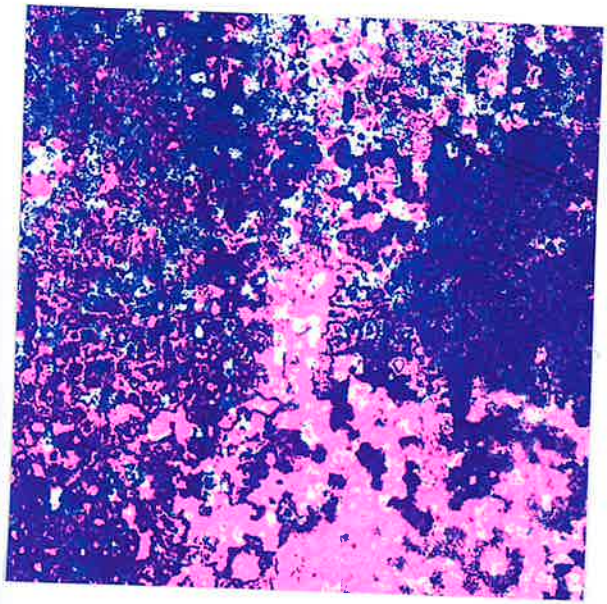
W: 12 M: 1653

1989



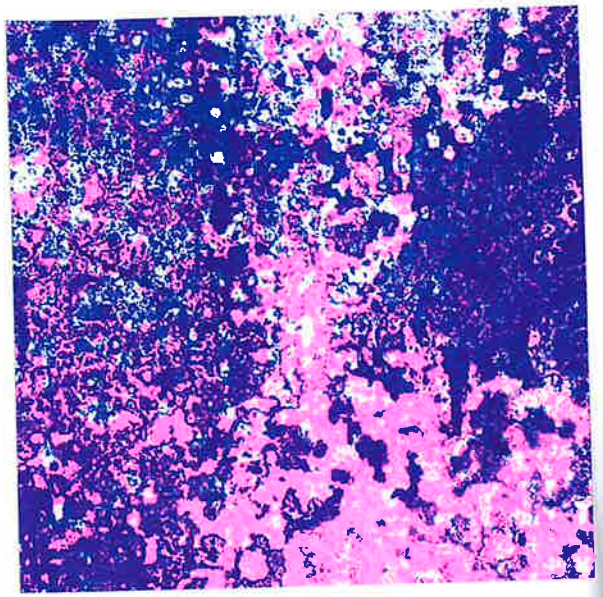
W: 11 M: 1397

1990



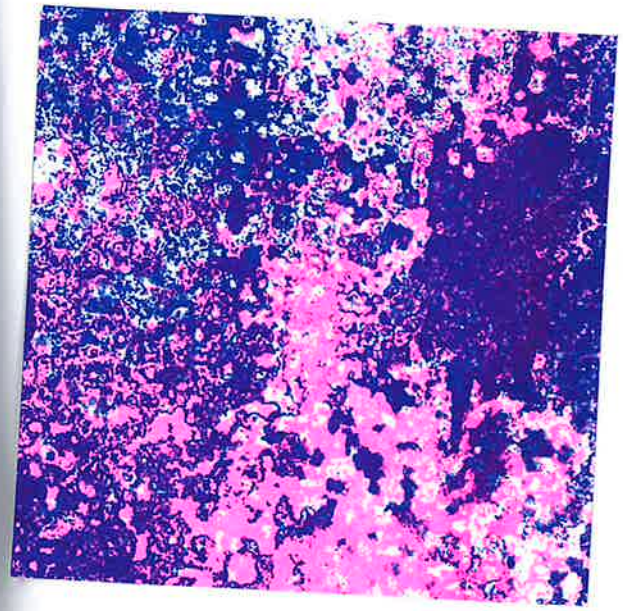
W: 15 M: 1216

1991



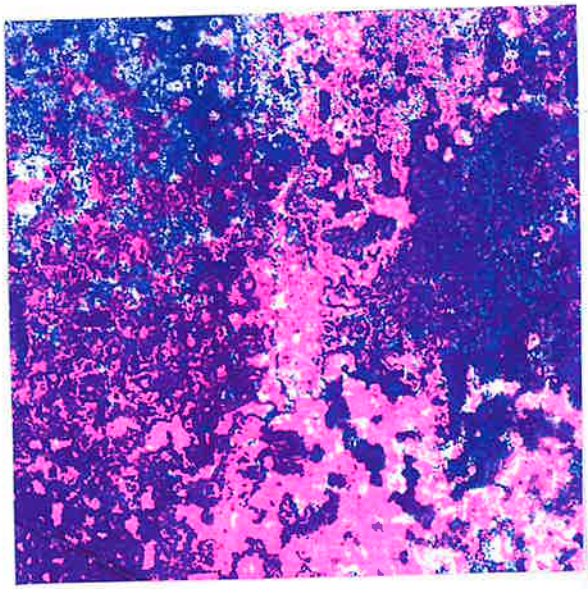
W: 12 M: 1313

1992



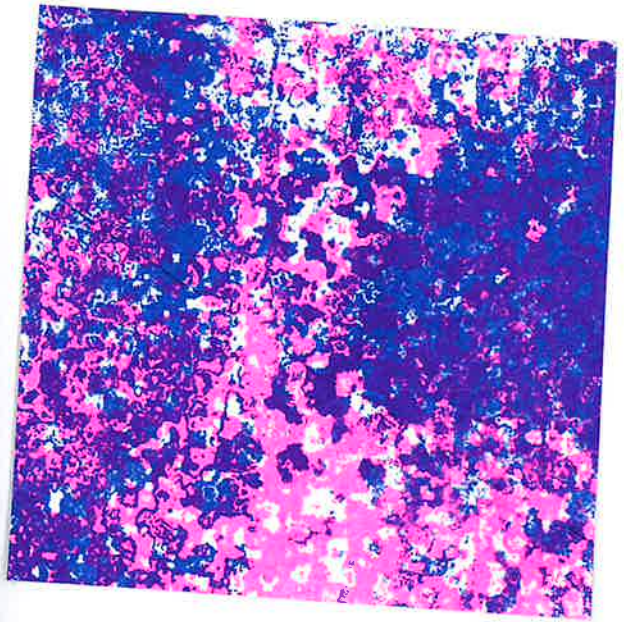
W: 12 M: 1600

1993



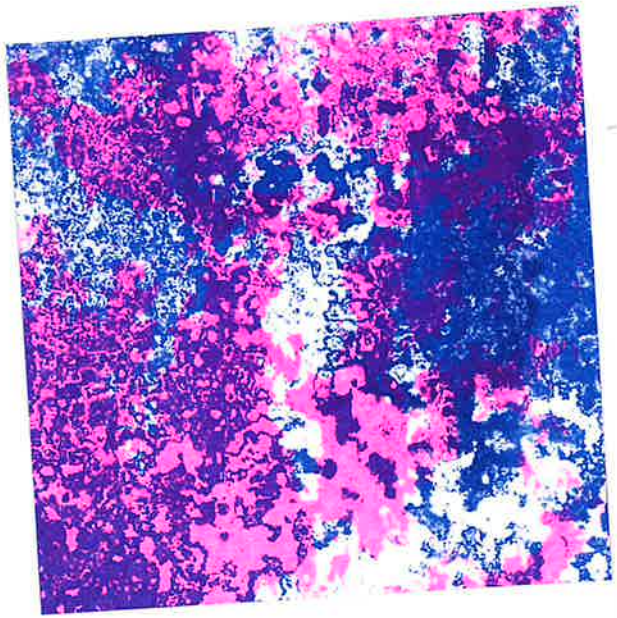
W: 13 M: 1880

1994



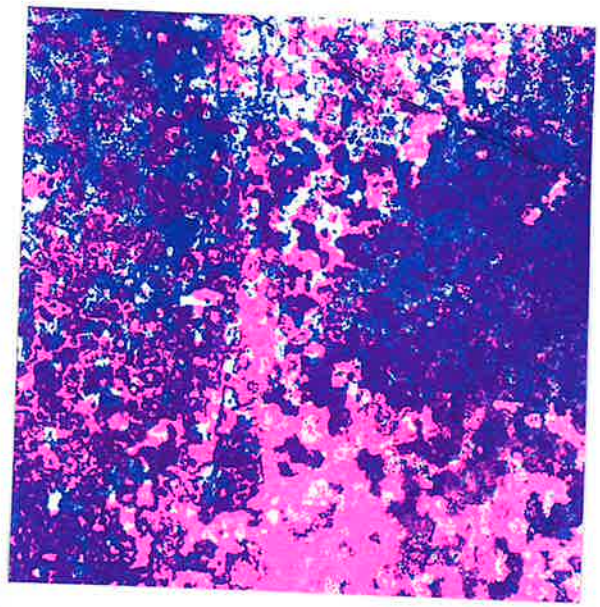
W: 15 M: 1800

1995



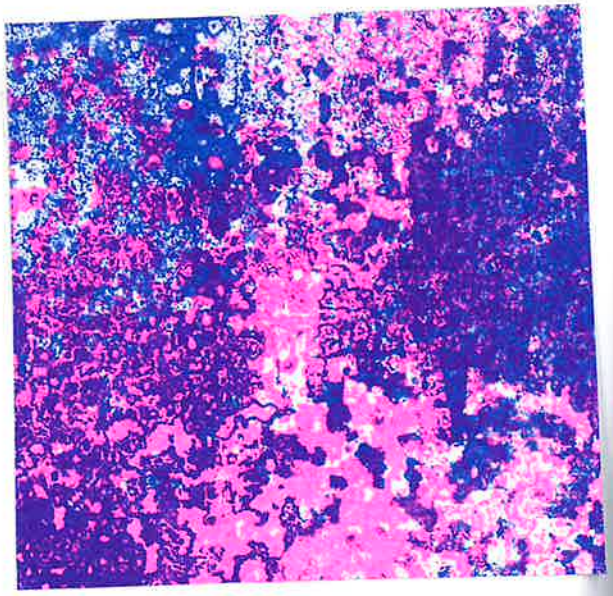
W: 16 M: 2400

1996



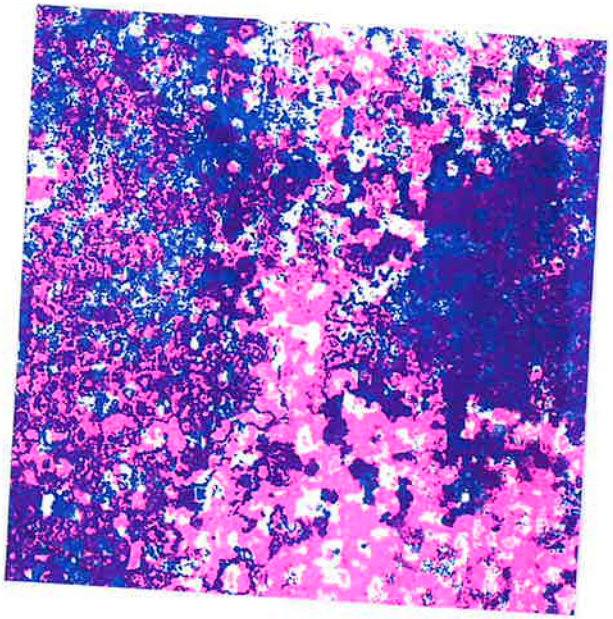
W: 22 M: 1200

1997



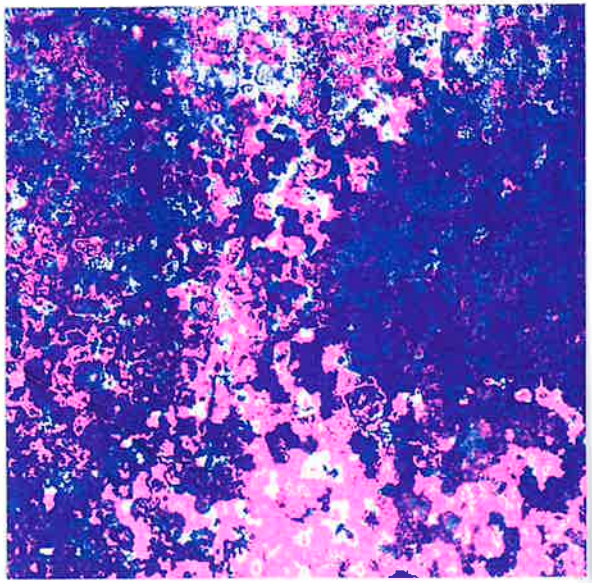
W: 24 M: 500

1998



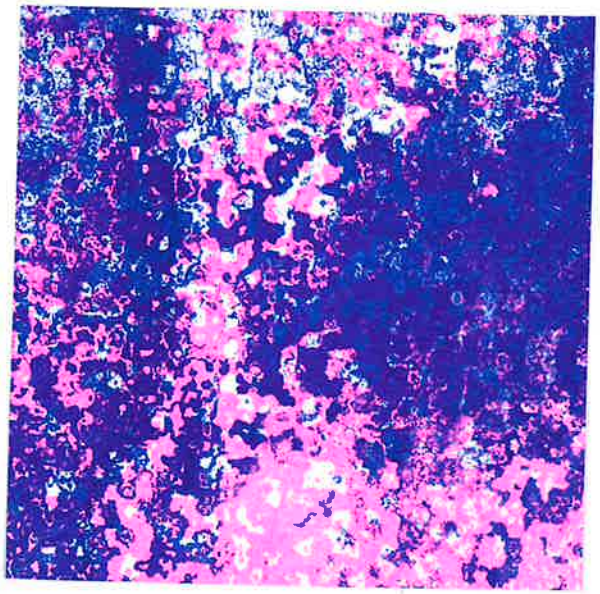
W: 14 M: 700

1999



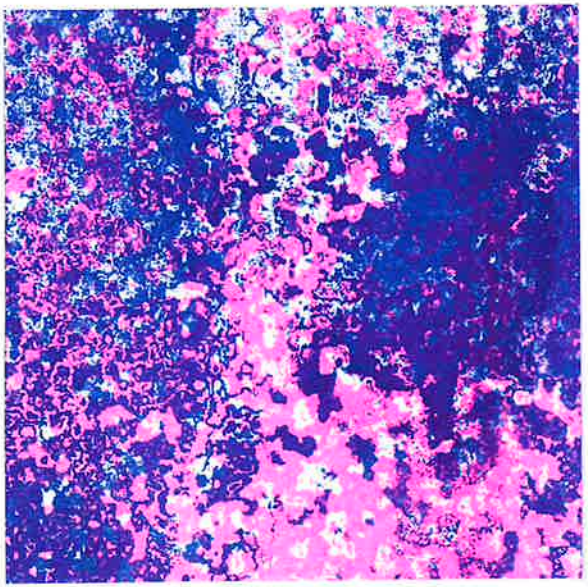
W: 25 M: 750

2000



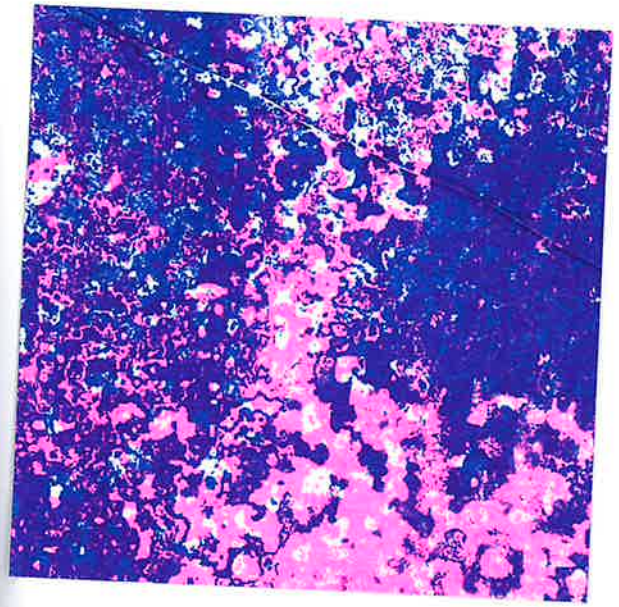
W: 29 M: 850

2001



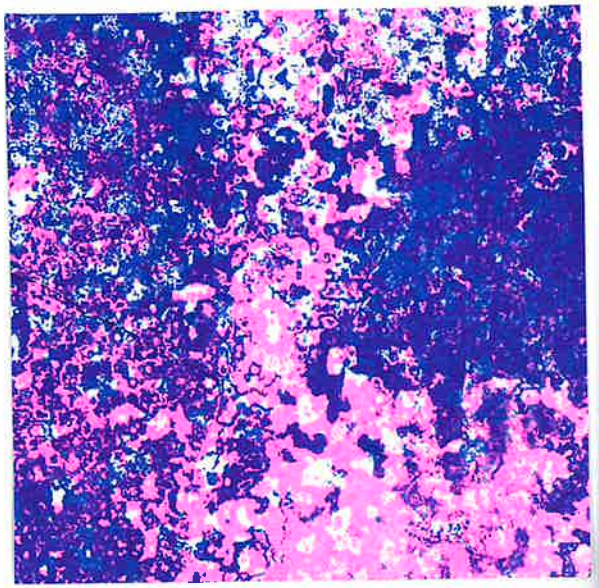
W: 19 M: 900

2002



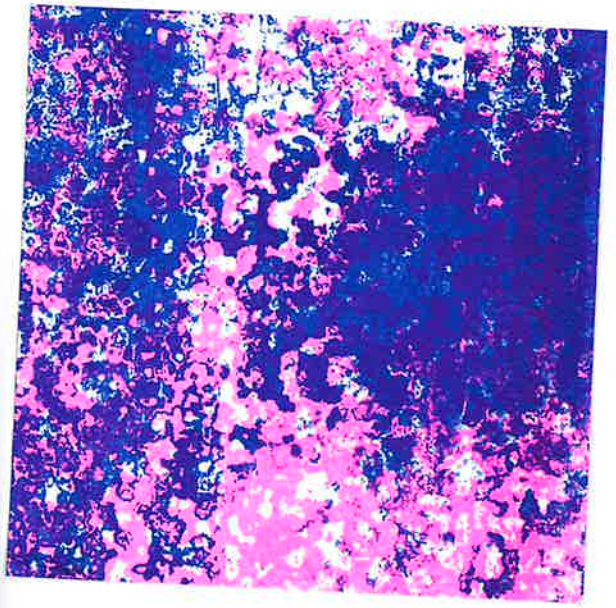
W: 17 M: 1000

2003



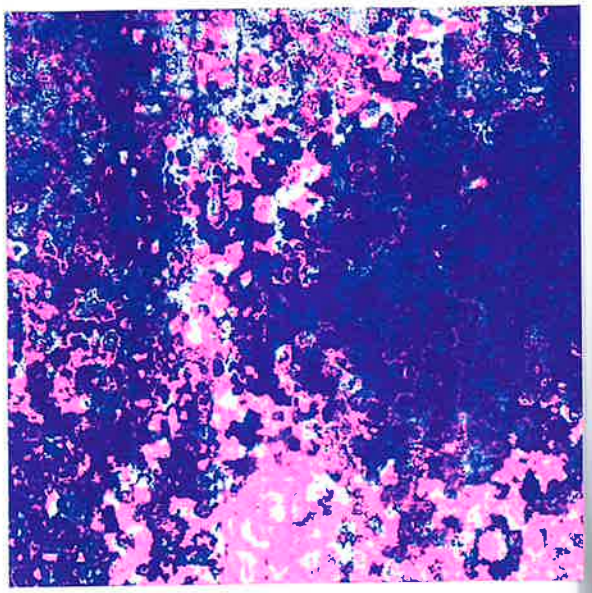
W: 19 M: 900

2004



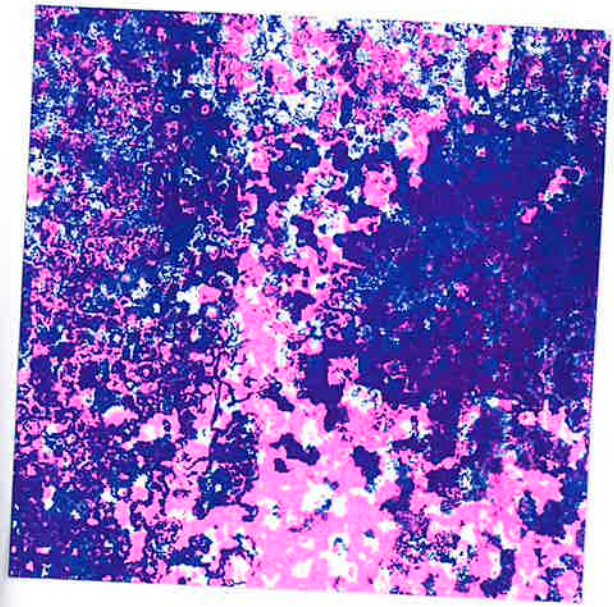
W: 29 M: 750

2005



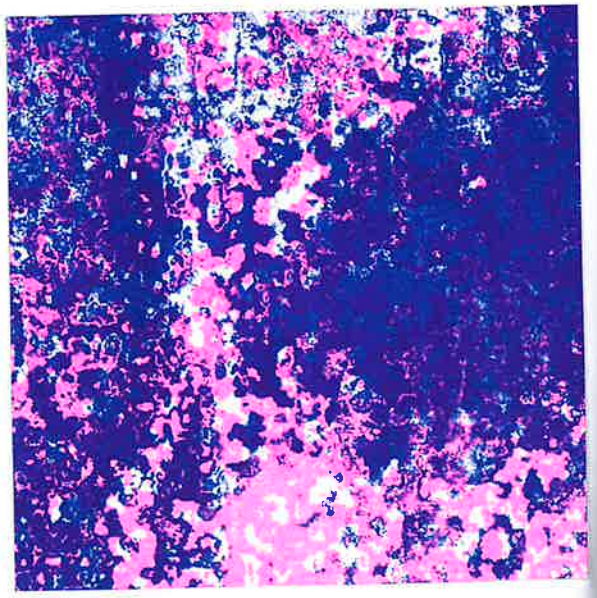
W: 30 M: 540

2006



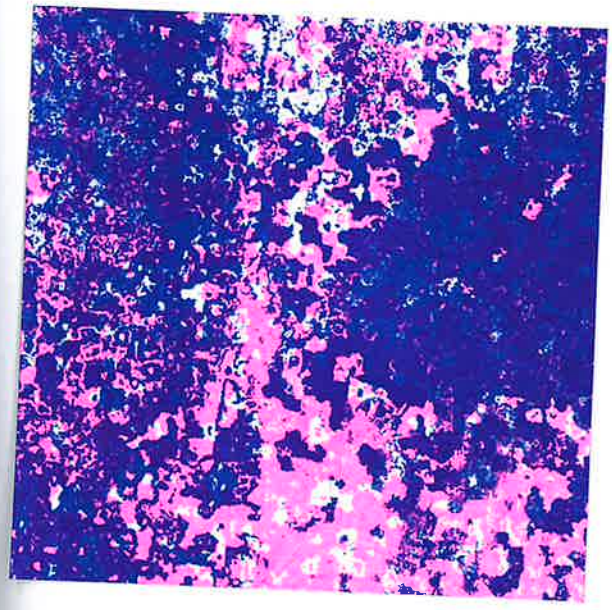
W: 30 M: 385

2007



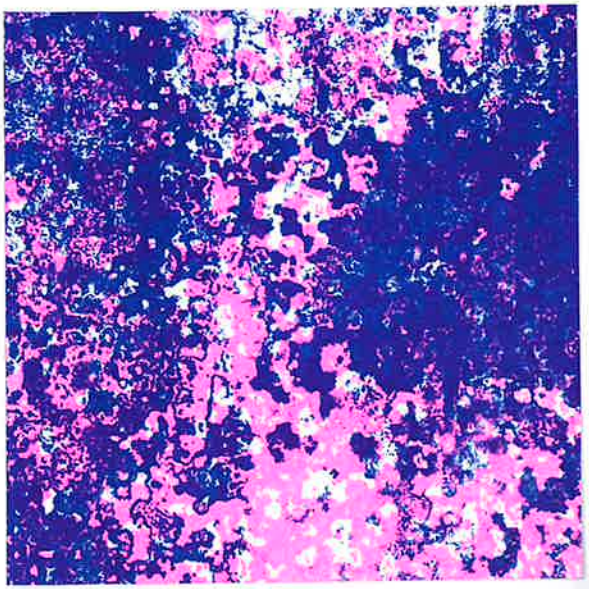
W: 21 M: 450

2008



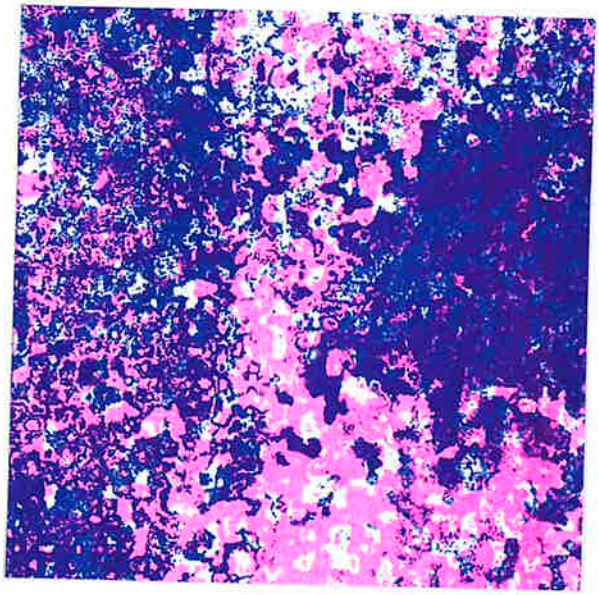
W: 23 M: 650

2009



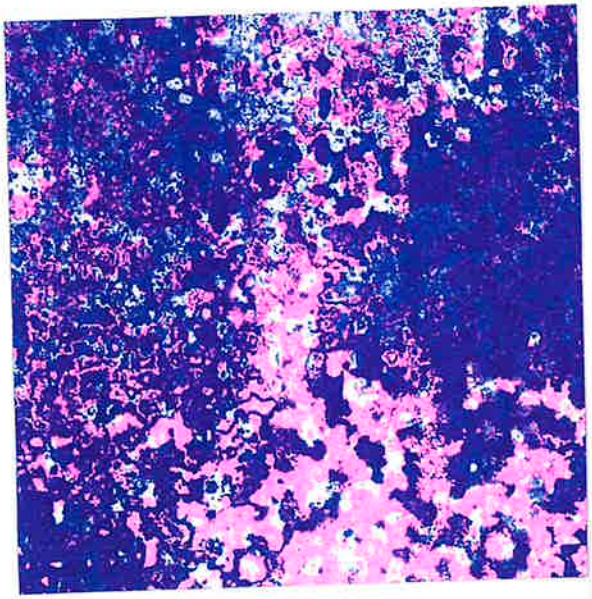
W: 24 M: 530

2010



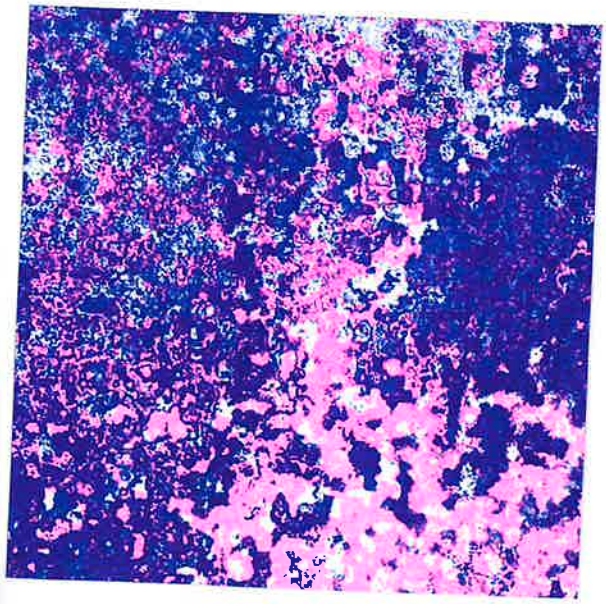
W: 19 M: 510

2011



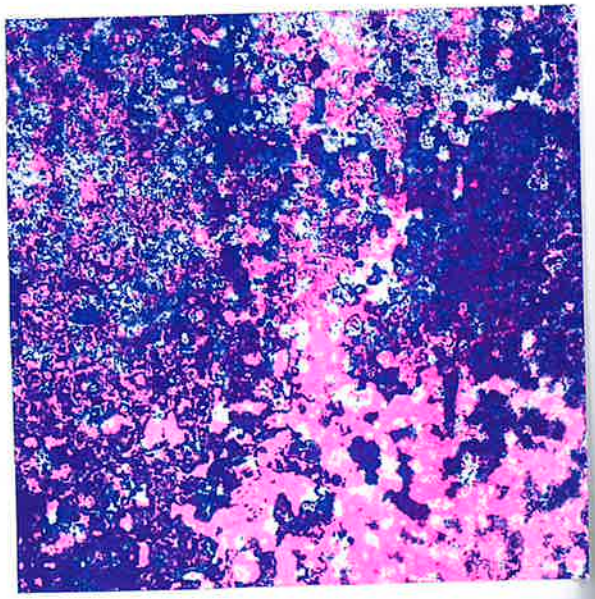
W: 16 M: 515

2012



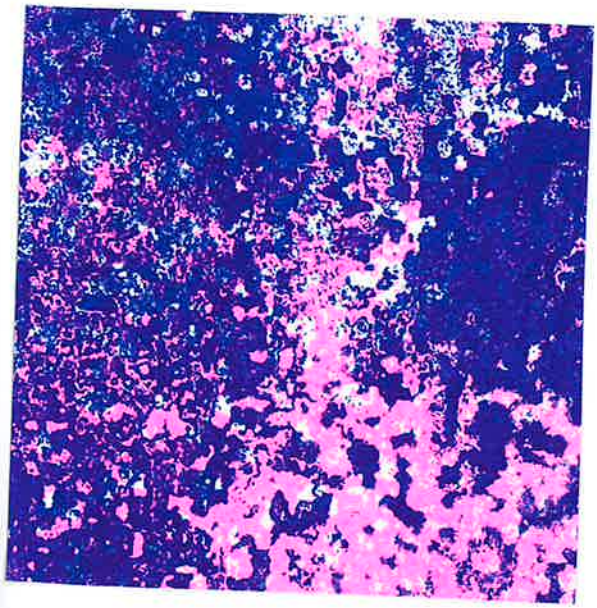
W: 9 M: 750

2013



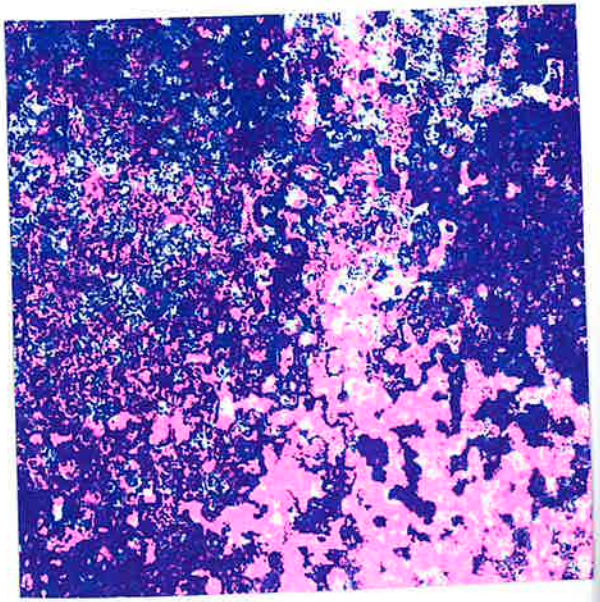
W: 8 M: 975

2014



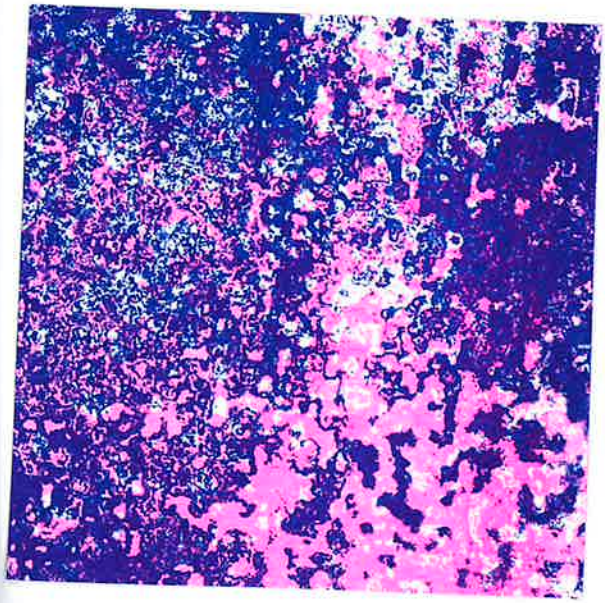
W: 9 M: 1050

2015



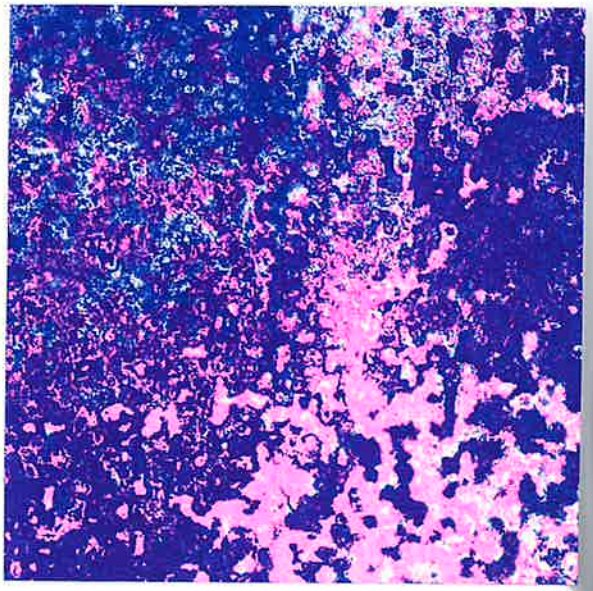
W: 3 M: 1250

2016



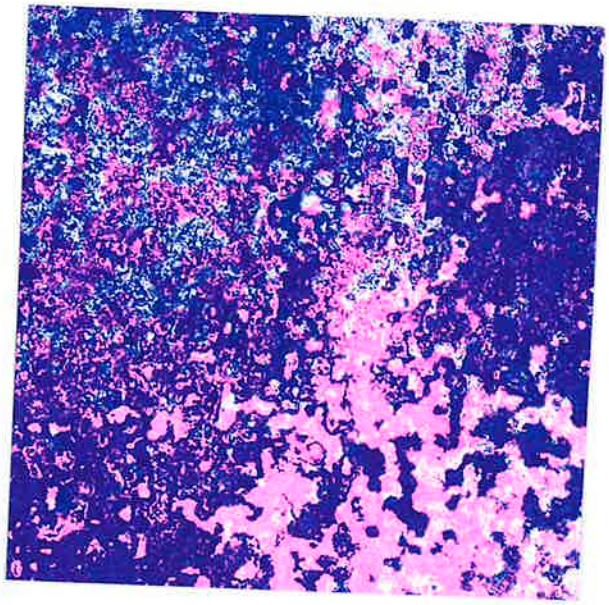
W: 2 M: 1300

2017



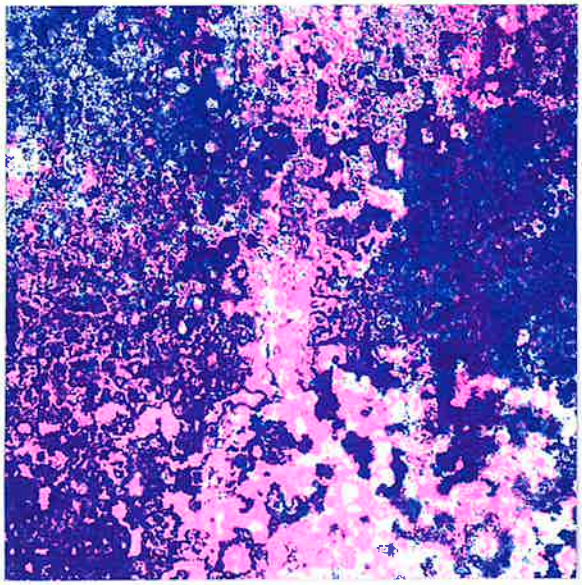
W: 2 M: 1600

2018



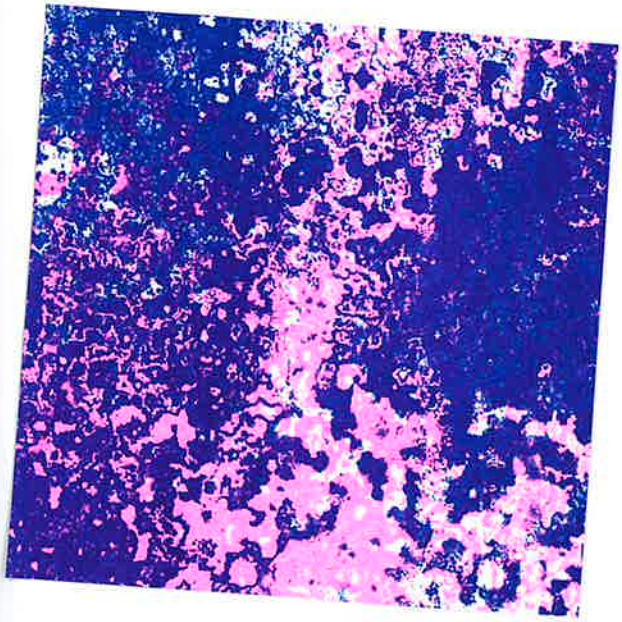
W: 2 M: 1500

2019



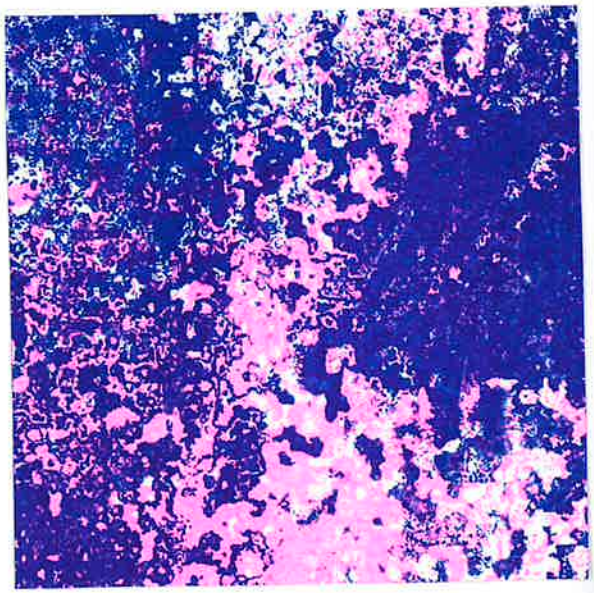
W: 14 M: 2060

2020



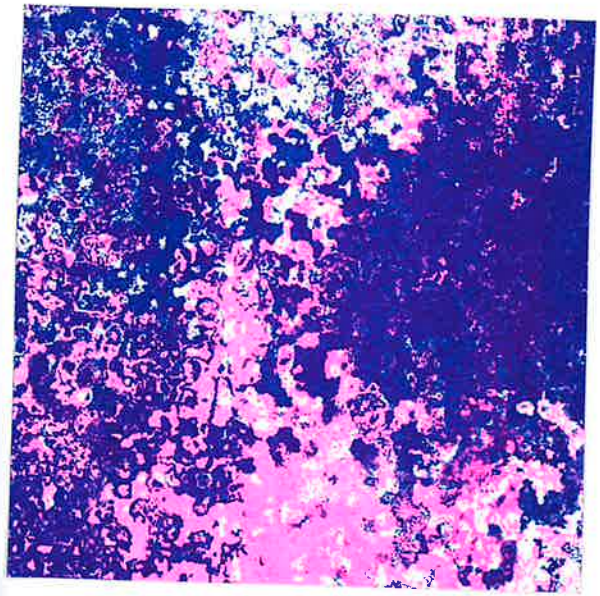
W: 16 M: 1900

2021



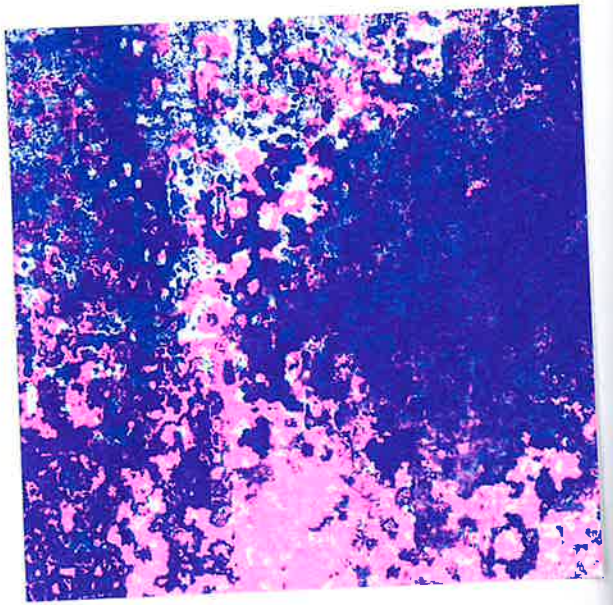
W: 20 M: 1750

2022



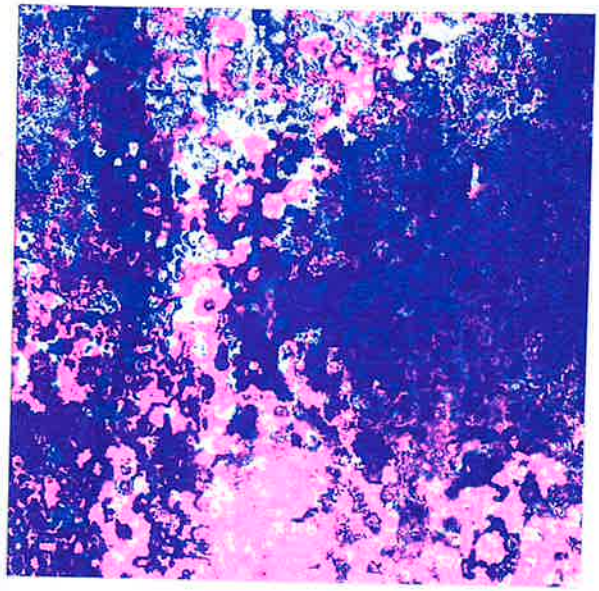
W: 25 M: 1600

2023



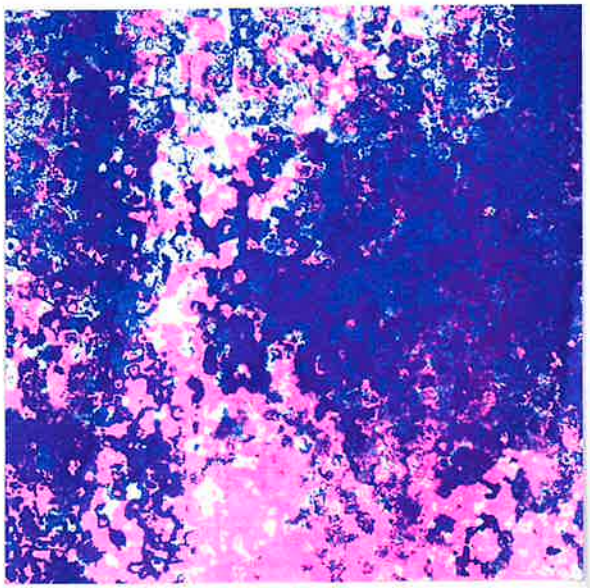
W: 31 M: 1450

2024



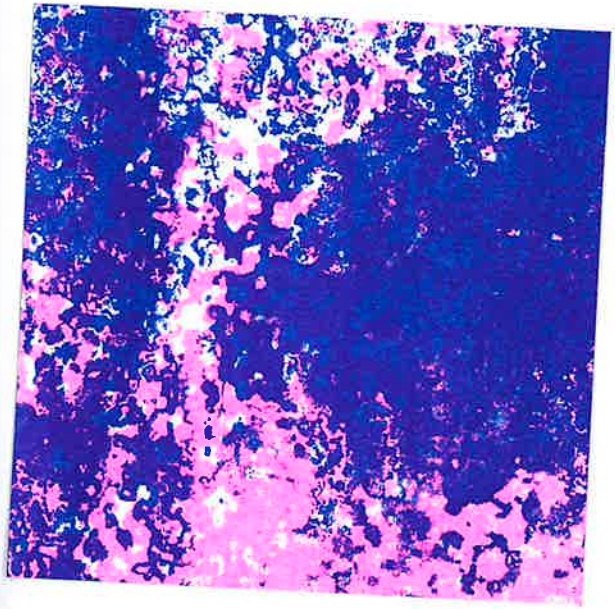
W: 33 M: 1300

2025



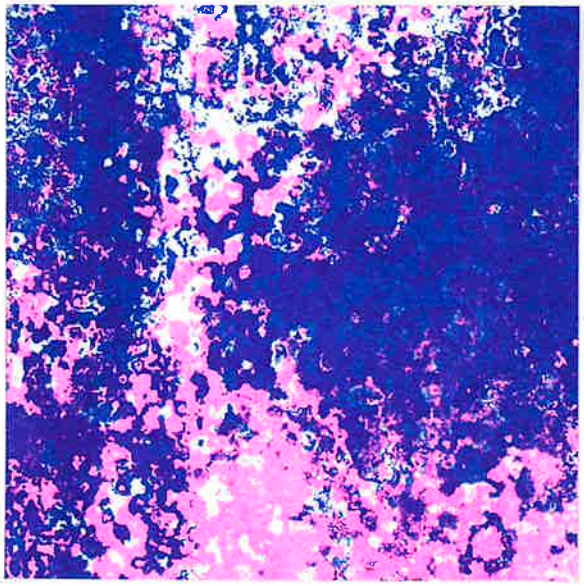
W: 35 M: 1200

2026



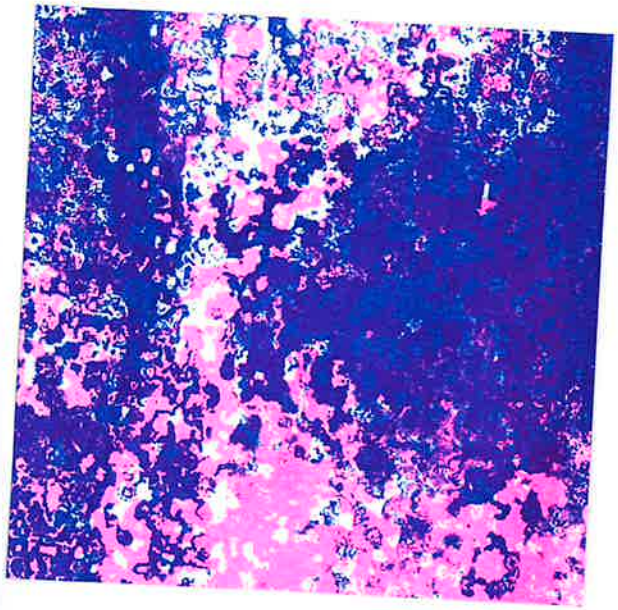
W: 36 M: 1100

2027



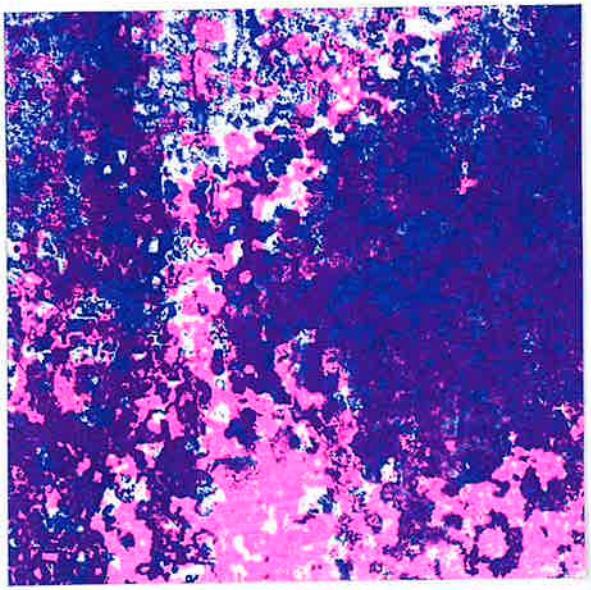
W: 35 M: 1000

2028



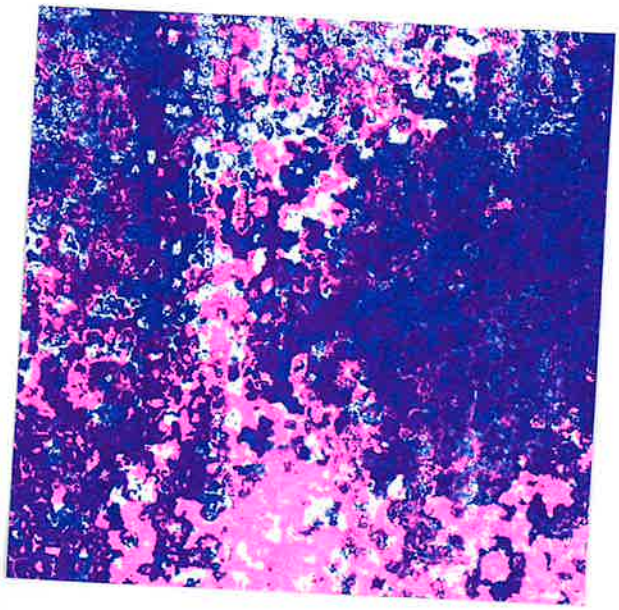
W: 33 M: 950

2029



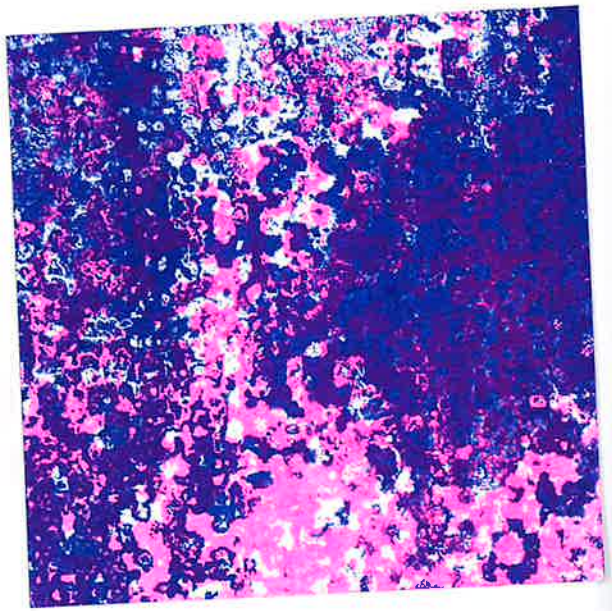
W: 32 M: 900

2030



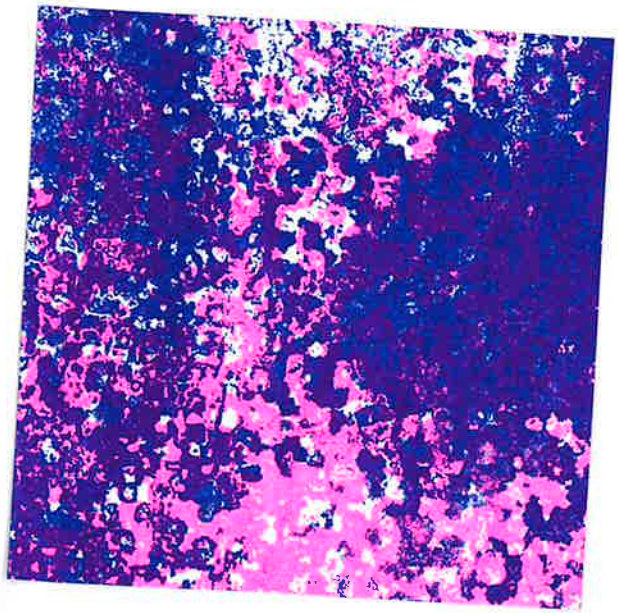
W: 30 M: 880

2031



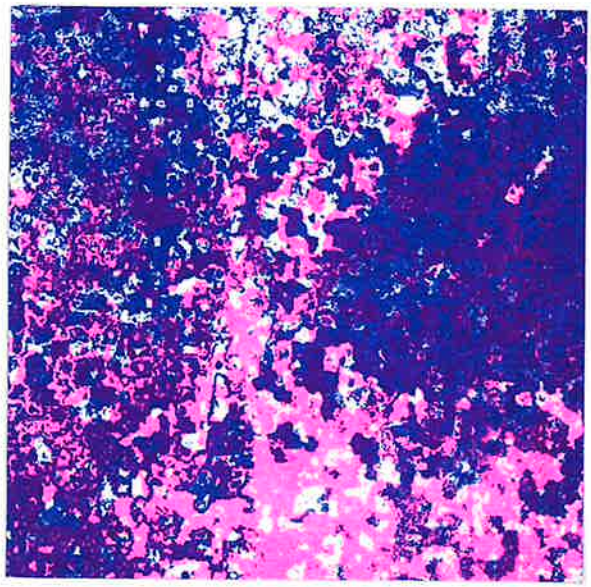
W: 28 M: 860

2032



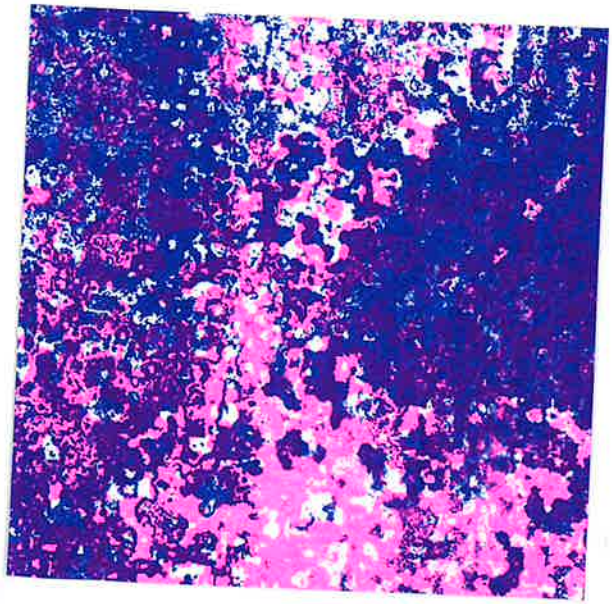
W: 26 M: 900

2033



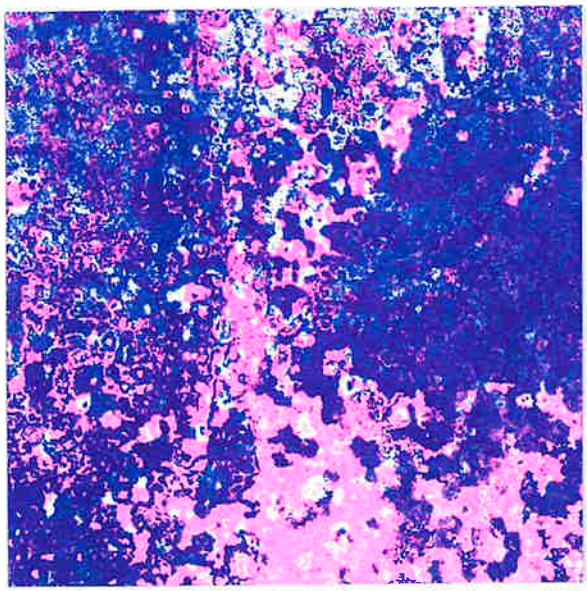
W: 24 M: 950

2034



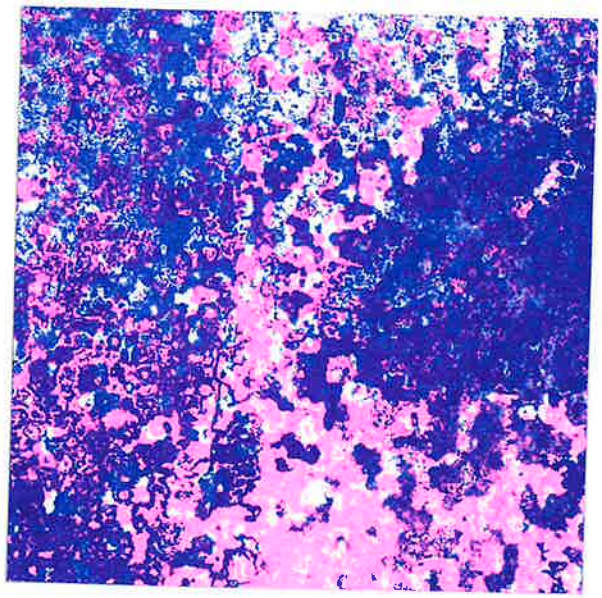
W: 23 M: 1000

2035



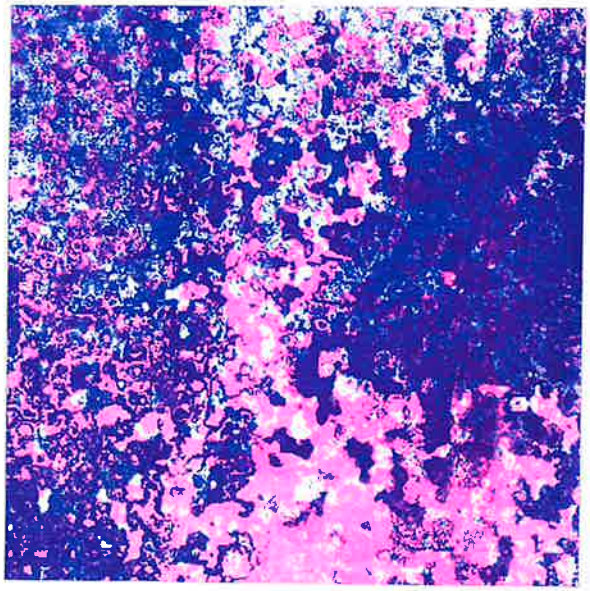
W: 22 M: 1050

2036



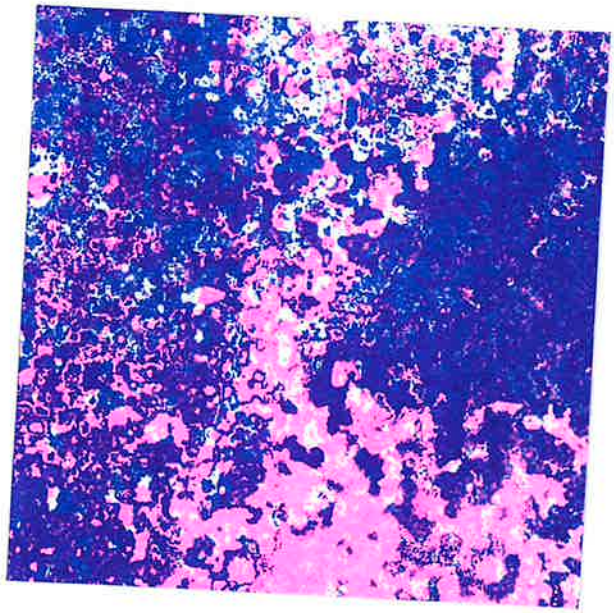
W: 21 M: 1100

2037



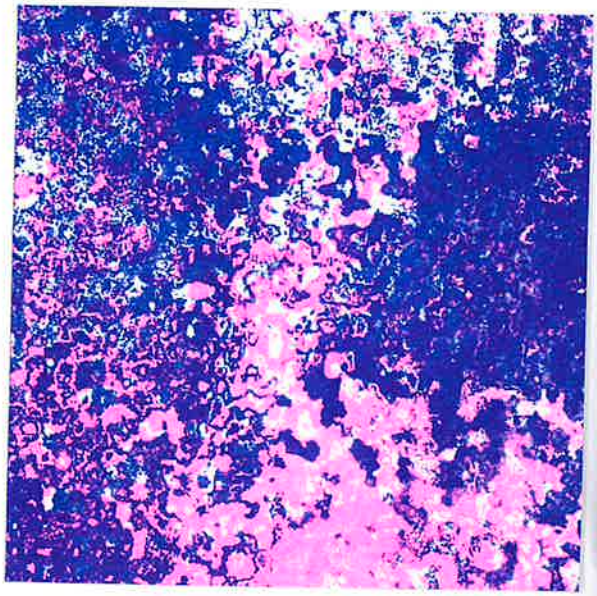
W: 20 M: 1150

2038



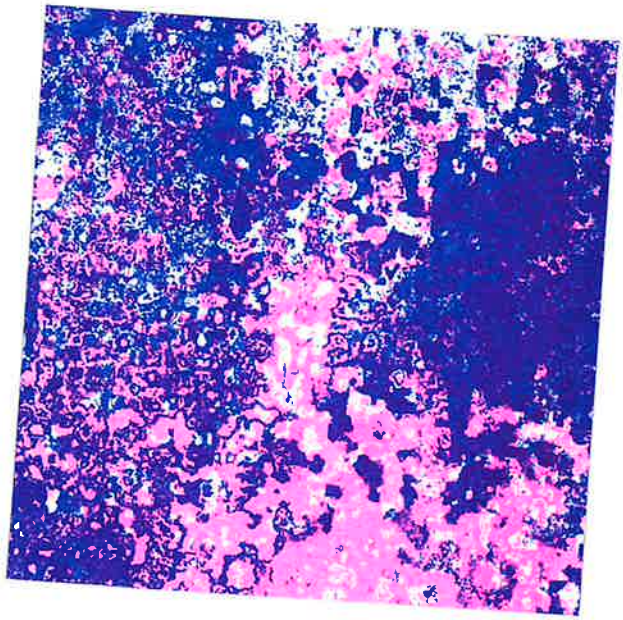
W: 19 M: 1200

2039



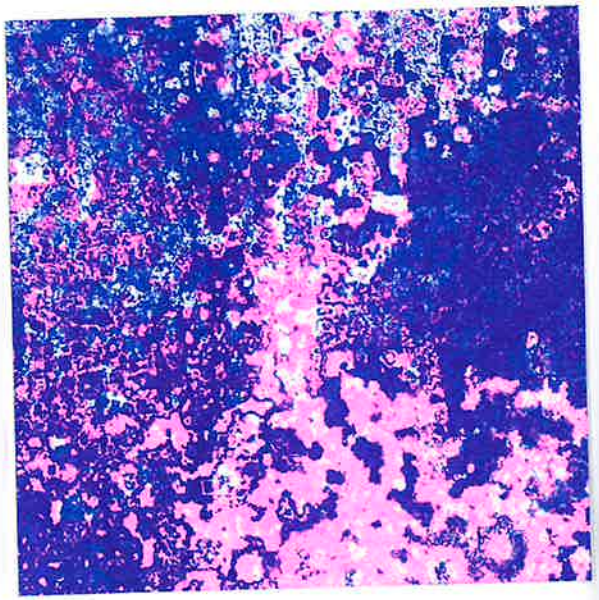
W: 18 M: 1250

2040



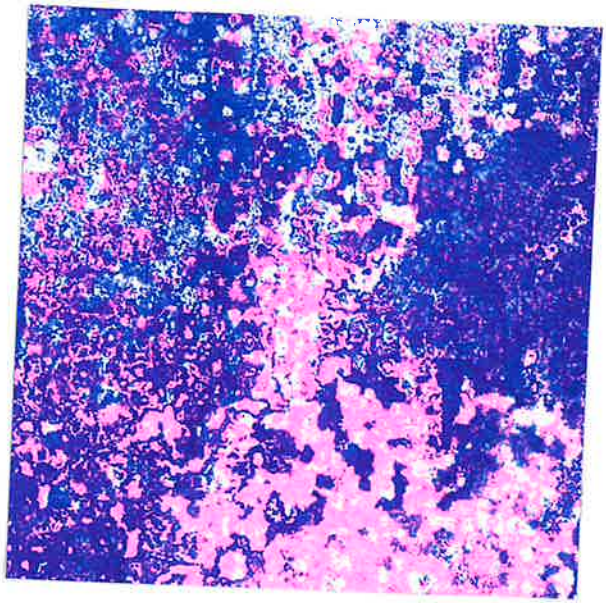
W: 15 M: 1300

2041



W: 14 M: 1350

2042



W: 13 M: 1400


(UN)BA

1966

1963

(UN)BALANCES: ENTANGLED DESTINIES

CATHERINE WIECZOREK

GRID RISO PROOFS [1963, 1964, 1965, 1966, 1967, 1968] MOOSE