

SAFARI 2000 MAS Flight 00178

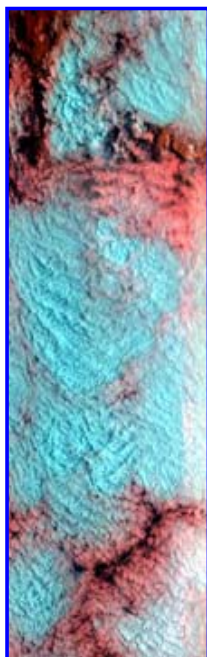
The SAFARI 2000 MAS contains 146 GB of data. Individual HDF files may exceed the size of a CD, and are best written to DVD. You may use this automated interface to order data from selected tracks (flight segments). If you require large portions of this data, we recommend that you contact us by email or phone and make special arrangements.

Flight #00-178

RBG Images

[Click Image](#)

Track #15



R:2.15 microns
G:0.91 microns
B:0.55 microns

Track #16

Summary Information

Date: **September 21, 2000**

ER-2 Flight Number: **00-178**

Location: **South Africa, Mozambique and Indian Ocean**

Principal Investigator: **Dr. Michael King (NASA GSFC)**

Flight Scientist: **Steve Platnick (NASA GSFC)**

Additional Sensors: **AirMISR, CLS, LAS, MAS, MOPITT-A, S-HIS, SSFR** (see [Instrument Status](#) below)

Processing Information

Level-1B Data processed by: **Ames Research Center**

Level-1B Data Version: **#2**

Level-1B Configuration: ([sample file](#))

Calibration Type: **final**

Calibration Version: **1.0**

Level-1B Browse Imagery

Straight Line Flight Tracks: **17 processed**

Scanlines Processed: **95898**

[Solar Azimuth and Zenith Angles](#)

Flight Track Map

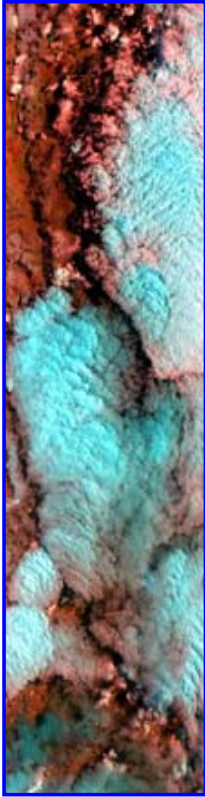


[Click to enlarge](#)

Browse Images

Click on the Flight Track number to see track images.
Click on the Check Box to list HDF files prior to adding to shopping cart.
Lat/Lon ranges are for the BEG-END scanline nadir pixels.

List	Flight Track	Time_Span (GMT)	Heading (Deg)	Lat_Range (Deg_S)	Lon_Range (Deg_E)	Length (Scanlines)	Altitude (msl)
<input type="checkbox"/>	01	07:28-07:55	87	22.96-22.77	31.10-34.28	9999	18581
<input type="checkbox"/>	02	07:55-08:11	86	22.77-22.63	34.28-36.12	5831	19507
<input type="checkbox"/>	03	08:19-08:46	13	22.28-19.34	36.08-36.74	9999	19497
<input type="checkbox"/>	04	08:46-08:48	12	19.34-19.12	36.74-36.79	751	19748
<input type="checkbox"/>	05	08:52-09:11	190	19.04-21.11	36.46-35.97	7018	19671
<input type="checkbox"/>	06	09:15-09:33	16	21.06-19.02	35.62-36.08	6835	19764
<input type="checkbox"/>	07	09:37-09:56	192	18.95-20.93	35.73-35.28	6778	19778
<input type="checkbox"/>	08	09:59-10:14	16	20.89-19.31	34.92-35.28	5300	19706
<input type="checkbox"/>	09	10:19-10:46	222	19.55-21.73	35.00-32.78	9999	19092
<input type="checkbox"/>	10	10:46-11:13	223	21.73-23.89	32.78-30.58	9999	19032
<input type="checkbox"/>	11	11:13-11:22	222	23.89-24.60	30.58-29.86	3271	19055
<input type="checkbox"/>	12	11:22-11:32	227	24.62-25.36	29.84-28.96	3644	19044
<input type="checkbox"/>	13	11:32-11:40	166	25.44-26.23	28.93-29.13	2673	19027
<input type="checkbox"/>	14	11:45-11:57	1	26.29-24.91	28.70-28.72	4670	18984
<input type="checkbox"/>	15	11:58-12:08	33	24.85-23.86	28.74-29.45	3913	18881



R:2.15 microns
G:0.91 microns
B:0.55 microns

16	12:14-12:20	217	23.67-24.22	29.09-28.64	2371	18708
17	12:26-12:33	36	24.50-23.79	28.96-29.50	2847	18682
All images in sequence						

ER-2 Flight Log

Author: [Steve Platnick](#)
Mission Scientist: [Dr. Michael King](#)
ER-2 Pilot: [Jan Nystrom](#)
Takeoff: [21Sep2000 0000 UTC](#)
Landing: [21Sep2000 0000 UTC](#)
Duration: [06:05:00](#)

Objective:

(1) Overfly expected stratocumulus cloud decks off the Mozambique Channel with SAWB JRB (outfitted for cloud microphysical sampling) coordinated with Terra overpass, (2) Overfly powerplants east of Johannesburg (Witbank, Secunda and Tutuka), along with industrial sites south of Johannesburg and the Vredefort dome (ancient impact crater site).

The NCAR CCN counter was returned to SAWB Aerocommander JRB aircraft after the loss of the University of Washington CV-580 aircraft in Namibia due to mechanical problems. Along with cloud probes (hot wire, FSSP), JRB provides a platform for cloud microphysical validation. Because of a late overflight clearance for Mozambique, JRB was unable to take off in time to coordinate with the ER-2. As an alternate, JRB sampled a stratocumulus deck in the vicinity of Pietersburg at the time of the Terra overpass. Cloud tops were about 9,500 ft. at the time of the overpass to over 12,000 ft. a couple of hours later; cloud base was about 6500 feet. A smoke plume entering cloud base was sampled. Rain/drizzle was noted in one isolated region.

The ER-2 flight tracks were oriented parallel to Terra with a 0840 UTC overpass. The Terra ground track was approximately 600 km west of the flight tracks (47 degree viewing angle, within MODIS swath). The flight legs over the power plants were reported by the pilot to be overcast and the legs were aborted.

Key Flight Legs:

No comments (See flight objectives)

Highlights: N/A

Surface sites and features overflown during this mission:

Pilot Report:

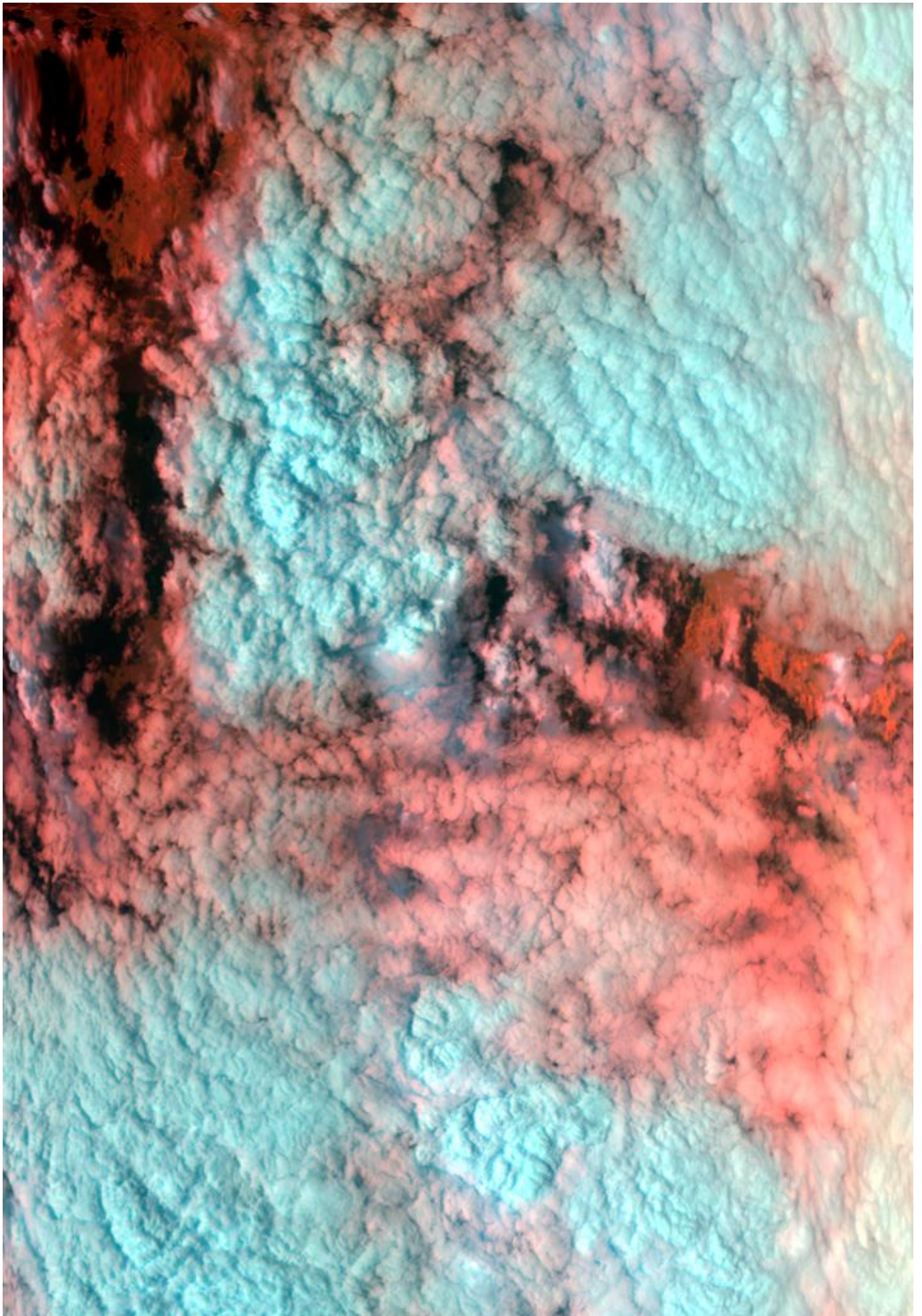
N/A

Meteorology:

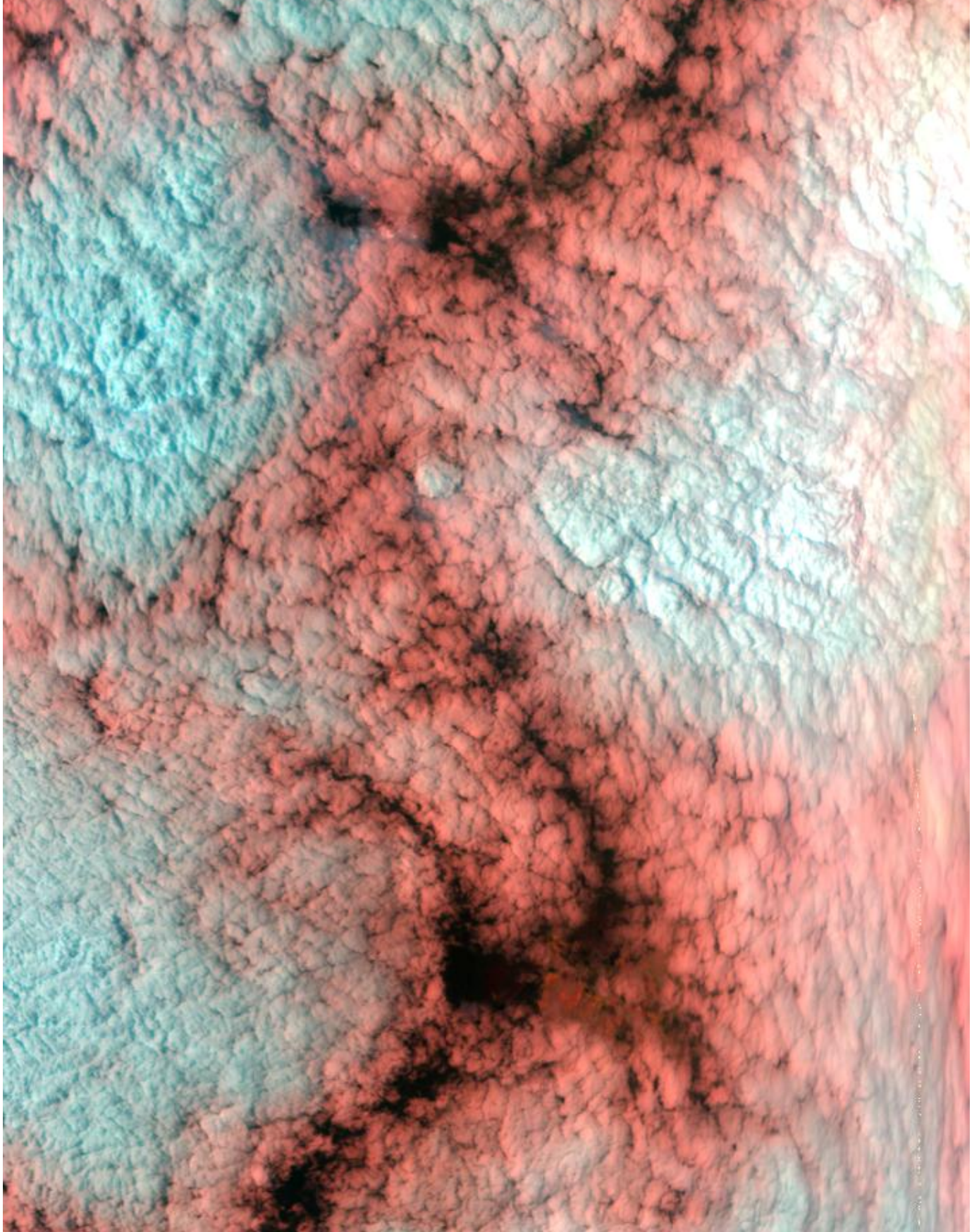
A high to the south of the South Africa is extending a ridge northwards along the eastern seaboard. A weak upper trough is to the east of the subcontinent with an upper ridge developing over the country. Moist cool air exists in the lower levels over northeastern and northern South Africa, southern Zimbabwe, southern Mozambique and Malawi. Offshore flow along west coast, but onshore over northern Namibia.

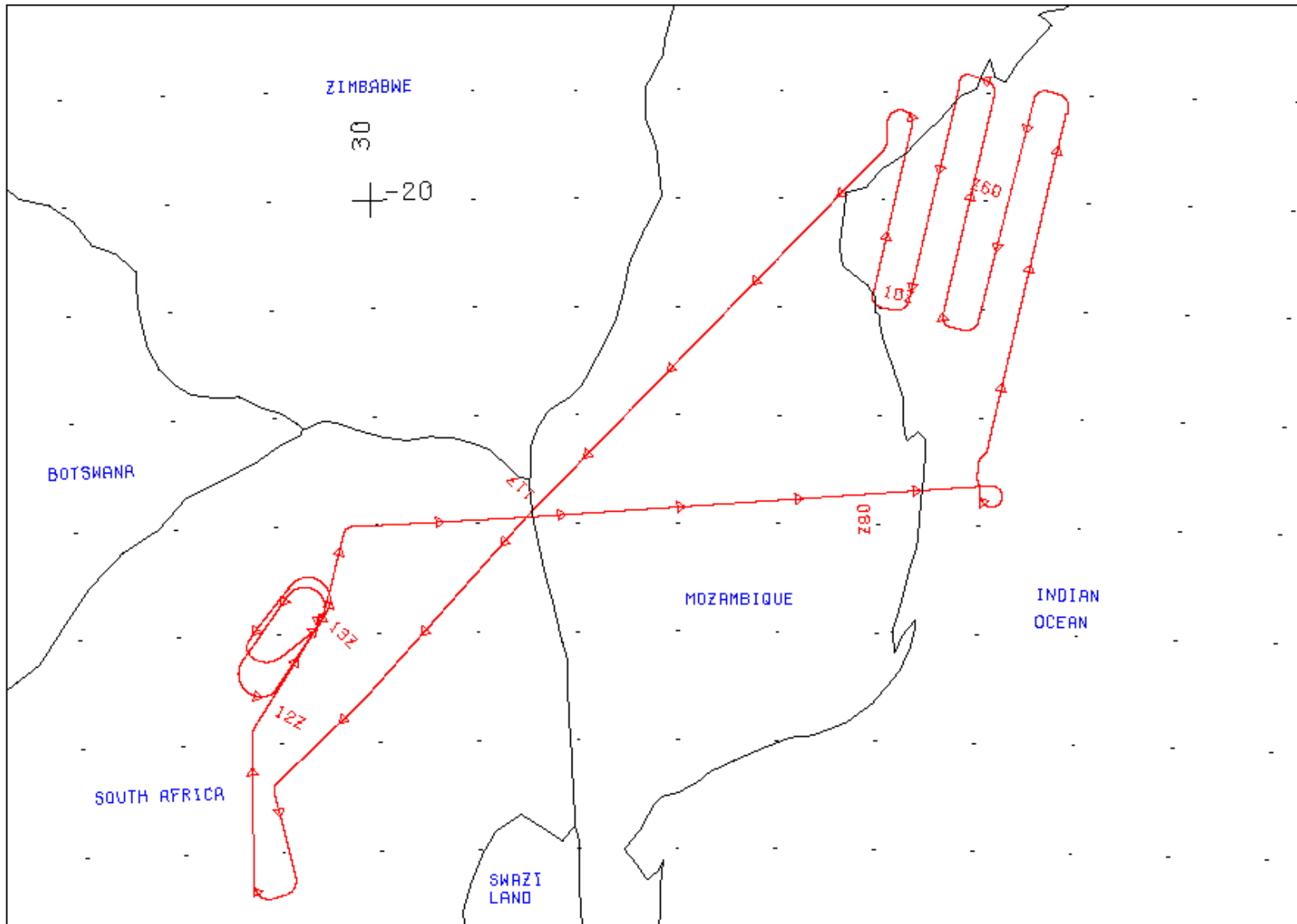
Instrument Status:

- AirMISR (Airborne Multi-angle Imaging Spectroradiometer): not on aircraft
- CLS (Cloud Lidar System): Lidar worked properly, but navigation data not recorded
- LAS (Leonardo Airborne Simulator): not on aircraft
- MAS (MODIS Airborne Simulator): worked well
- MOPITT-A (MOPITT Airborne Simulator): Worked well
- S-HIS (High-resolution Interferometer Sounder): operated in scanning mode
- SSFR (Solar Spectral Flux Radiometer): Worked well
- RC-10 (Tracking Camera): Worked well









FLIGHT 00-178

21 SEPTEMBER 2000

A/C 809

SAFARI

FLIGHT 00-178

21 SEPTEMBER 2000

A/C 809

SAFARI

50 MAS Configuration for 00-178 21 Sep 2000 Mozambique Channel

01	01	16	0	0.040787	0.0000	0.452	0.472	0.493	0.100	1981.92
02	02	16	0	0.043400	0.0000	0.534	0.554	0.577	0.100	1857.88
03	03	16	0	0.029094	0.0000	0.635	0.658	0.689	0.100	1549.55
04	04	16	0	0.033930	0.0000	0.687	0.708	0.731	0.100	1386.41
05	05	16	0	0.025762	0.0000	0.729	0.750	0.773	0.100	1260.07
06	06	16	0	0.026439	0.0000	0.810	0.830	0.855	0.100	1053.65
07	07	16	0	0.026314	0.0000	0.853	0.874	0.895	0.100	962.82
08	08	16	0	0.021177	0.0000	0.893	0.912	0.934	0.100	869.28
09	09	16	0	0.022970	0.0000	0.933	0.954	0.974	0.100	784.92
10	10	16	0	0.003628	0.0000	1.586	1.612	1.640	0.100	244.16
11	11	16	0	0.006756	0.0000	1.642	1.668	1.695	0.010	227.32
12	12	16	0	0.003201	0.0000	1.698	1.722	1.749	0.010	201.29
13	13	16	0	0.003166	0.0000	1.751	1.776	1.801	0.010	176.56
14	14	16	0	0.003254	0.0000	1.805	1.830	1.855	0.010	156.28
15	15	16	0	0.003107	0.0000	1.855	1.880	1.906	0.010	139.66
16	16	16	0	0.002946	0.0000	1.906	1.932	1.956	0.100	131.21
17	17	16	0	0.002672	0.0000	1.956	1.982	2.006	0.010	122.76
18	18	16	0	0.002608	0.0000	2.006	2.032	2.057	0.010	109.78
19	19	16	0	0.002514	0.0000	2.058	2.082	2.107	0.010	98.67
20	20	16	0	0.002550	0.0000	2.107	2.132	2.157	0.010	86.28
21	21	16	0	0.005354	0.0000	2.156	2.180	2.205	0.010	76.85
22	22	16	0	0.002904	0.0000	2.205	2.230	2.255	0.010	73.57
23	23	16	0	0.002970	0.0000	2.255	2.280	2.305	0.010	68.38
24	24	16	0	0.002771	0.0000	2.306	2.330	2.354	0.010	58.53
25	25	16	0	0.002696	0.0000	2.355	2.380	2.404	0.010	57.88
26	26	16	1	0.956000	0.0000	3.105	3.180	3.261	0.001	20.15
27	27	16	1	0.960000	0.0000	3.250	3.325	3.401	0.001	17.66
28	28	16	1	0.961000	0.0000	3.405	3.475	3.559	0.001	15.05
29	29	16	1	0.949000	0.0000	3.556	3.640	3.718	0.001	13.06
30	30	16	1	0.945000	0.0000	3.702	3.770	3.847	0.001	11.39
31	31	16	1	0.942000	0.0000	3.857	3.940	4.023	0.001	9.98
32	32	16	1	0.940000	0.0000	4.014	4.095	4.183	0.001	8.69
33	33	16	1	0.939000	0.0000	4.138	4.210	4.291	0.001	7.73
34	34	16	1	0.938000	0.0000	4.288	4.360	4.441	0.001	6.71
35	35	16	1	0.935000	0.0000	4.471	4.550	4.632	0.001	5.63
36	36	16	1	0.934000	0.0000	4.622	4.700	4.784	0.001	4.87
37	37	16	1	0.933000	0.0000	4.773	4.860	4.937	0.001	4.28

38	38	16	1	0.932000	0.0000	4.917	4.990	5.084	0.001	3.80
39	39	16	1	0.931000	0.0000	5.055	5.165	5.235	0.001	3.39
40	40	16	1	0.930000	0.0000	5.215	5.315	5.371	0.001	3.03
41	41	16	1	0.932000	0.0000	5.342	5.380	5.421	0.001	2.80
42	42	16	1	0.966000	0.0000	8.330	8.564	8.759	0.010	0.45
43	43	16	1	0.963000	0.0000	9.436	9.665	9.928	0.010	0.28
44	44	16	1	0.960000	0.0000	10.218	10.474	10.711	0.010	0.20
45	45	16	1	0.957000	0.0000	10.694	10.943	11.209	0.010	0.17
46	46	16	1	0.947000	0.0000	11.684	11.953	12.208	0.010	0.12
47	47	16	1	0.943000	0.0000	12.583	12.803	13.035	0.010	0.09
48	48	16	1	0.948000	0.0000	12.939	13.193	13.446	0.010	0.08
49	49	16	1	0.939000	0.0000	13.425	13.712	14.035	0.010	0.07
50	50	16	1	0.944000	0.0000	13.953	14.193	14.403	0.010	0.06

| | | | | | | | | |
| | | | | | | | | | =(!)
| | | | | | | | | =-Scale Factor
| | | | | | | | =- Right 50% spectral response
| | | | | | | =-Peak 100% spectral response (microns)
| | | | | | =-Left 50% spectral response (microns)
| | | | | =-Calibration intercept (only used for visible bands)
| | | | | =-----Calibration slope (only used for visible bands 1-25)
| | | | Blackbody emmissivity (only used for IR bands 26-50)
| | | =-----0 => visible band, 1 => thermal infrared band"
| | =-----Number of bits in this channel (8 or 10)
| =-----Spectral band assigned to this channel
=----- Channel number
(!) Sensor weighted solar spectral irradiance (Watts/meter²/micron)
at mean Earth-Sun distance

NOTE: Factor in column 10 is used to scale radiances in
calibrated data by the following method:
value_stored = int(radiance / factor) for each channel

Title	MODIS Airborne Simulator (MAS) Level-1B Data
Sensor_ID_Code	M5 105 MAS50
ExperimentName	SAFARI 2000
AircraftPlatform	NASA ER-2 (809)
NavFormatCode	Format (A-1)

LocationCode	Inertial (INU)
AltitudeCode	Inertial (INU)
CalibrationVersion	Version 1.0 Calibration
CalibrationName	SAFARI_Jul19-Oct19
SRF_Dataset	/rarray/calibrat/mas/srf/Oct_00/
SRF_FTP	ftp://asapdata/mas/srf/Oct_00/
NavDataSource	ER2 navigation recorder
NavDataPath	/nav/2000/er2/00-178
TbackBand	45, 47, 31, 273.0
GranuleVersion	1.0.0
MetadataVersion	1.0.0

 Conversion from counts to radiance in VIS and NIR channels is
 $rad = (count - (cbb_avg)) * slope$

"where,"

rad = radiance

cbb_avg = cold black body counts (running average)

slope = from column 7 in above table

count = count value

IR Emissivity Correction (for MAS-50)

From Chris Moeller (UWisc)

This is done in 2 steps:

1. Get the (TBACK Band) scan head count and convert it to a brightness temperature
2. Use the scan head temperature and the cold and warm black body counts/temperatures for computing the corrected slope and intercept for all IR bands.

(note: set to 1.0 for channels 1-25)

MAS BB Emissivity Coefficients

Hemispherical Reflectance (JPL) 11/00

convolved with MAS SRF (ARC) 10/00

Red spot Paint

Values in form Wavelength, Emissivity

For Bands 26 thru 50:

0.95600, 0.96000, 0.96100, 0.94900, 0.94500,
0.94200, 0.94000, 0.93900, 0.93800, 0.93500,
0.93400, 0.93300, 0.93200, 0.93100, 0.93000,
0.93200, 0.96600, 0.96300, 0.96000, 0.95700,
0.94700, 0.94300, 0.94800, 0.93900, 0.94400,

Config.asc creation date = 13-June-2001

Config.asc creation date = 13-June-2001

MODIS AIRBORNE SIMULATOR (MAS) FLIGHT LINE
 INFORMATION FOR 21 Sep 2000
 NASA FLIGHT NUMBER 00-178

START OF FLIGHT LINE					END OF FLIGHT				
LINE	FLIGHT DATA								
LINE	TIME	LAT	LON	SOLAR	TIME	LAT	LON		
SOLAR	SCAN	HEAD	ALT	ZEN	AZIM	HH:MM:SS	DEG	DEG	
ZEN	AZIM	LINES	DEG	M (GPS)					
1	07:28:47	-22.963	31.096	41.2	60.1	07:55:33	-22.768	34.281	33.7
49.6	9999	86.9	18581						
2	07:55:33	-22.767	34.282	33.7	49.6	08:11:10	-22.627	36.115	29.8
41.6	5831	86.1	19507						
3	08:19:45	-22.282	36.084	28.2	38.5	08:46:31	-19.341	36.738	22.0
26.9	9999	13.3	19497						
4	08:46:31	-19.341	36.738	22.0	26.9	08:48:32	-19.122	36.795	21.6
25.8	751	12.4	19748						
5	08:52:21	-19.042	36.462	21.3	24.3	09:11:09	-21.106	35.967	22.0
11.8	7018	190.1	19671						
6	09:15:01	-21.056	35.616	21.9	10.2	09:33:19	-19.016	36.077	19.5
356.2	6835	15.8	19764						
7	09:37:51	-18.952	35.732	19.5	353.9	09:56:00	-20.933	35.279	22.2
343.6	6778	192.0	19778						
8	09:59:51	-20.887	34.923	22.4	342.0	10:14:02	-19.309	35.281	22.4
331.0	5300	15.7	19706						
9	10:19:49	-19.547	35.003	23.1	328.6	10:46:35	-21.727	32.784	27.3
322.3	9999	221.7	19092						
10	10:46:35	-21.727	32.784	27.3	322.3	11:13:20	-23.887	30.576	31.6
317.4	9999	223.3	19032						
11	11:13:21	-23.887	30.576	31.6	317.4	11:22:06	-24.600	29.861	33.0
316.0	3271	221.9	19055						
12	11:22:18	-24.617	29.844	33.1	316.0	11:32:03	-25.361	28.960	34.6

314.6	3644	227.1	19044						
13	11:32:53	-25.444	28.927	34.8	314.5	11:40:02	-26.225	29.126	36.6
312.7	2673	166.2	19027						
14	11:45:11	-26.290	28.701	37.2	311.7	11:57:41	-24.906	28.724	38.5
306.6	4670	1.0	18984						
15	11:58:14	-24.847	28.744	38.6	306.4	12:08:42	-23.859	29.446	40.6
302.0	3913	33.2	18881						
16	12:14:15	-23.665	29.088	41.3	300.8	12:20:36	-24.224	28.643	42.5
300.3	2371	216.8	18708						
17	12:26:15	-24.504	28.964	44.0	299.0	12:33:52	-23.794	29.495	45.6
296.3	2847	35.8	18682						

NUMBER OF FILES FOR THIS FLIGHT = 17
 TOTAL NUMBER OF SCAN LINES = 95898
 DATE THESE FILES WERE PROCESSED = 22-Aug-2002
 DATE THIS LIST WAS CREATED = Wed Sep 11

17:54:36 PDT 2002

GRANULE VERSION = 2

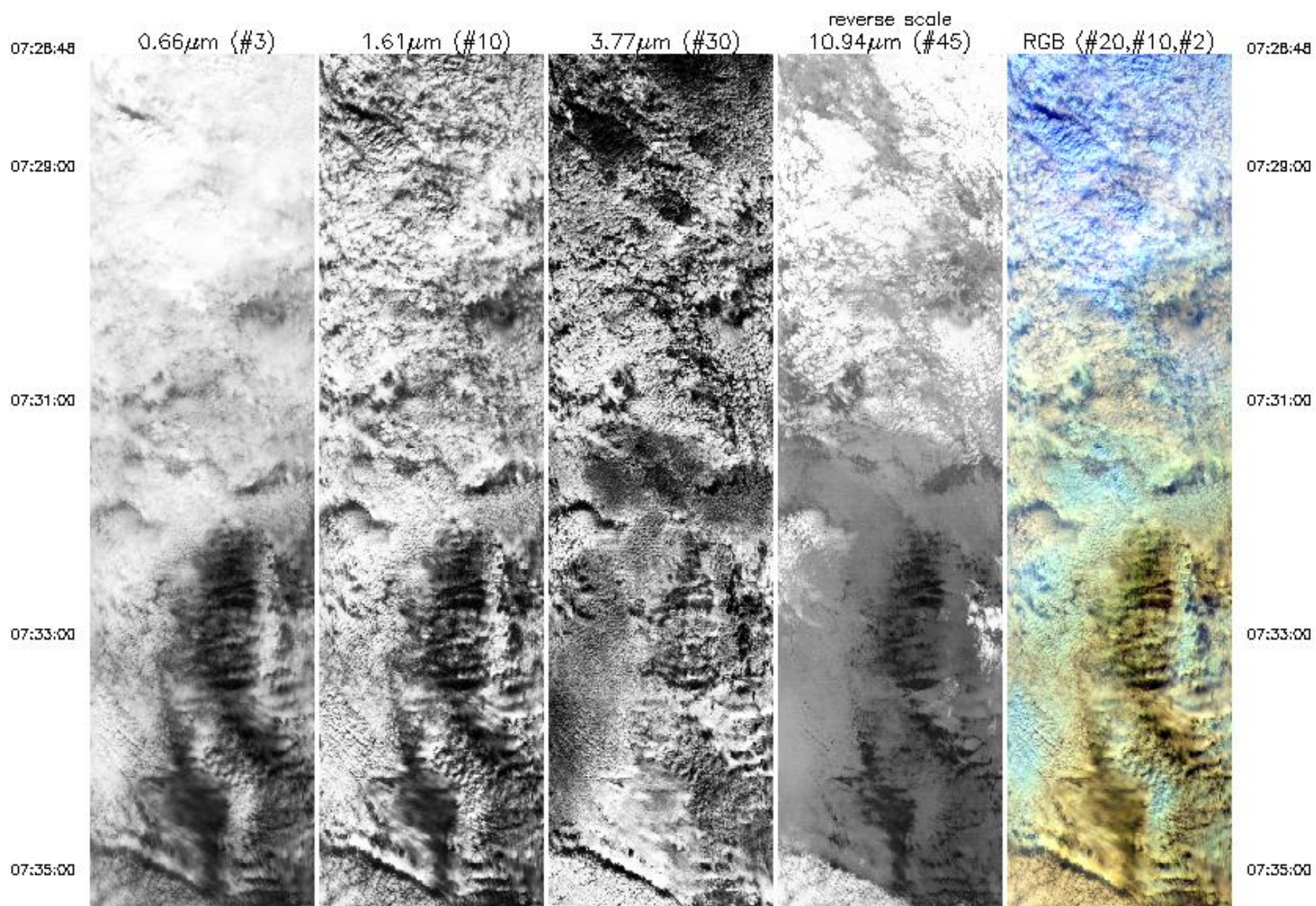
GLOBAL ATTRIBUTES

Attribute Name	Description
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CreationDate	22-Aug-2002 23:00:04
AircraftPlatform	NASA ER-2 (809)
NavFormatCode	Format (A-1)
LocationCode	Inertial (INU)
AltitudeCode	Inertial (INU)
NavDataSource	ER2 navigation recorder
NavDataPath	/nav/2000/er2/00-178
CalibrationName	SAFARI_Jul19-Oct19
Reference	NCSA HDF Reference Manual, Version 4.1r4, 2000
title	MODIS Airborne Simulator (MAS) Level-1B Data
ExperimentName	SAFARI 2000

FlightNumber	00-178
FlightDate	21 Sep 2000
SiteLineRun	void
GeographicArea	Mozambique
SRF_FTP	ftp://asapdata/mas/srf/Oct_00/
SRF_dataset	/rarray/calibrat/mas/srf/Oct_00/
FlightLineNumber	1
TotalFlightLines	17
DataUsersGuideSource	http://ltpwww.gsfc.nasa.gov/MAS/
SoftwareVersion	Level-1b Version 10.1.1 UR
CalibrationVersion	Version 1.0 Calibration
data_set	MAS SAFARI 2000
day_night_flag	D
granule_version	2
metadata_version	2.0.0
data_quality	Good
Other_Aircraft_Sensors	AirMISR, CLS, MOPPIT-A, Leonardo
Principal_Investigator	King
lat_UL	-23.10851
lon_UL	31.10351
lat_UR	-22.81764
lon_UR	31.09133
lat_LL	-22.92798
lon_LL	34.29655
lat_LR	-22.60822
lon_LR	34.27187
begin_date	20000921 072848
end_date	20000921 075534
RunTime	690,240 ms, or 69 ms/scanline
CompletionDate	22-Aug-2002 23:17:46
producer_granule_id	

MASL1B_00178_01_20000920_0728_0755_V02.hdf

MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
Mozambique
Flight #00-178 Track #1



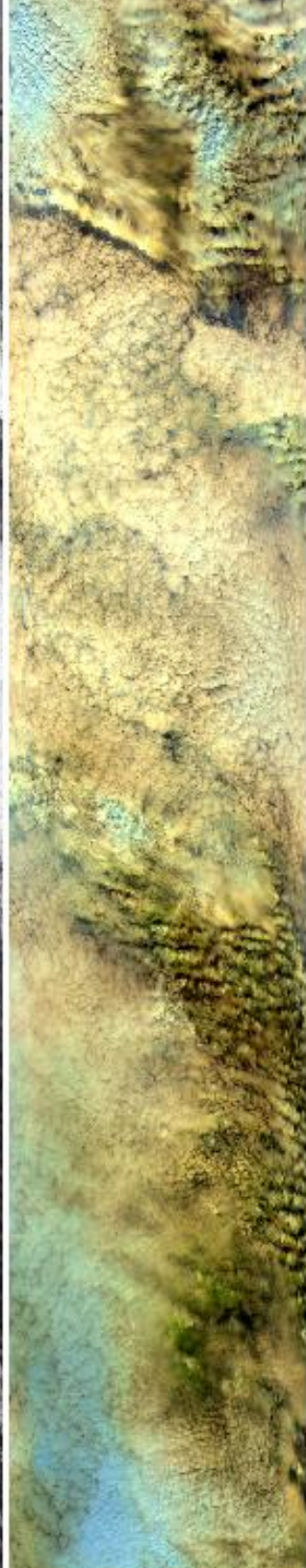
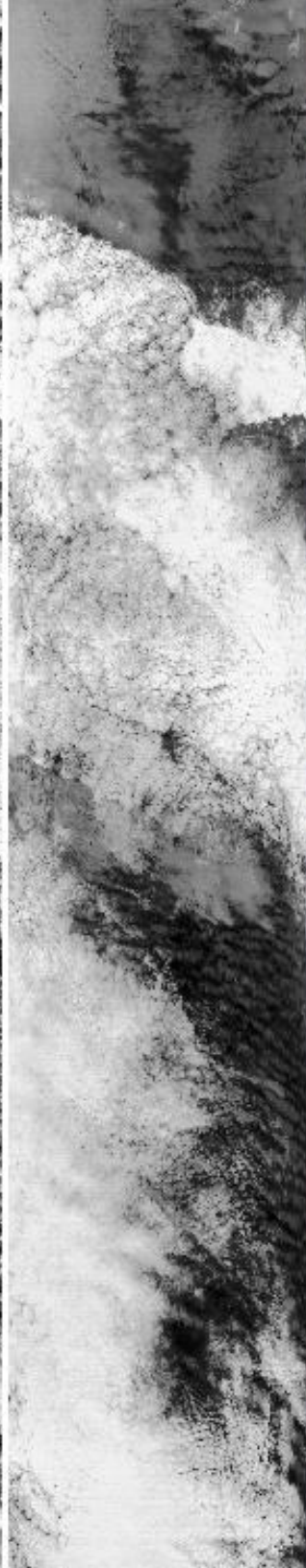
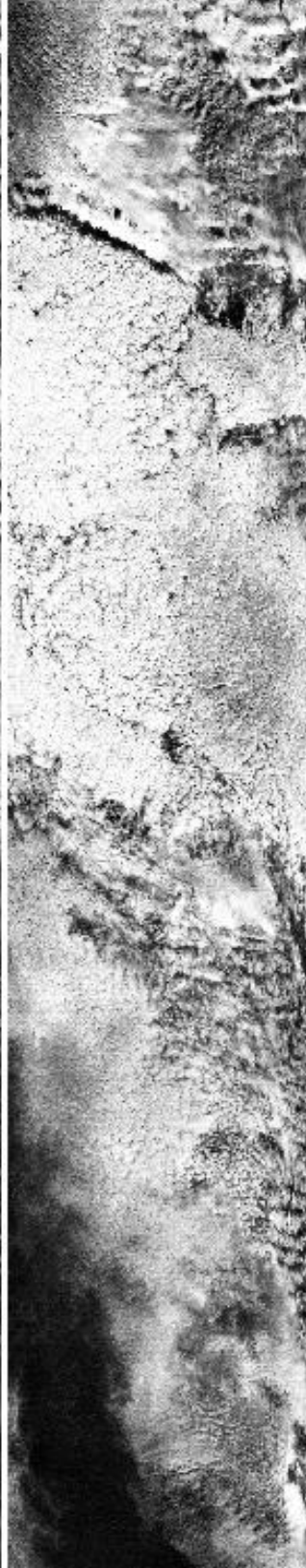
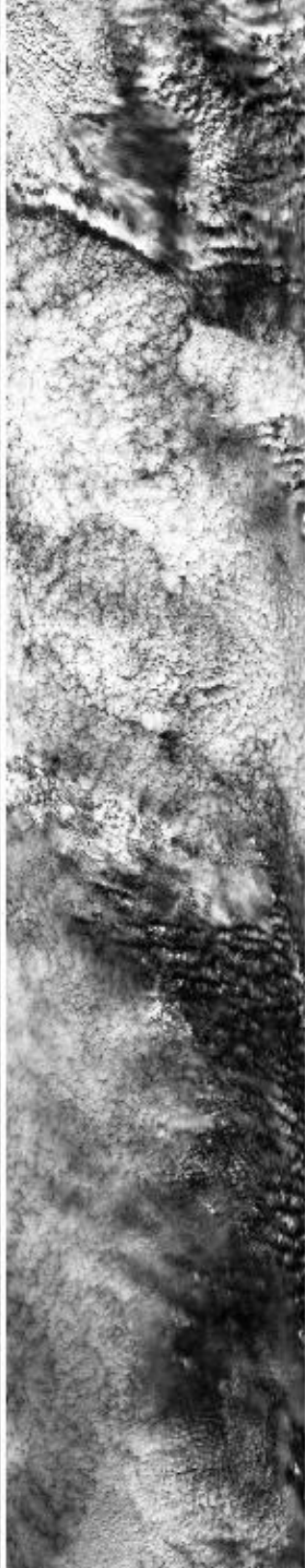
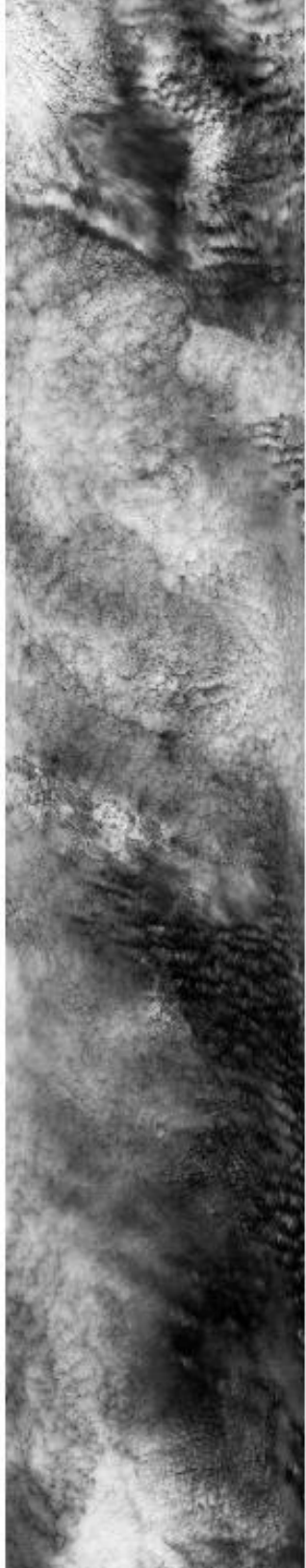
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07:43:00



07:35:00

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07:39:00

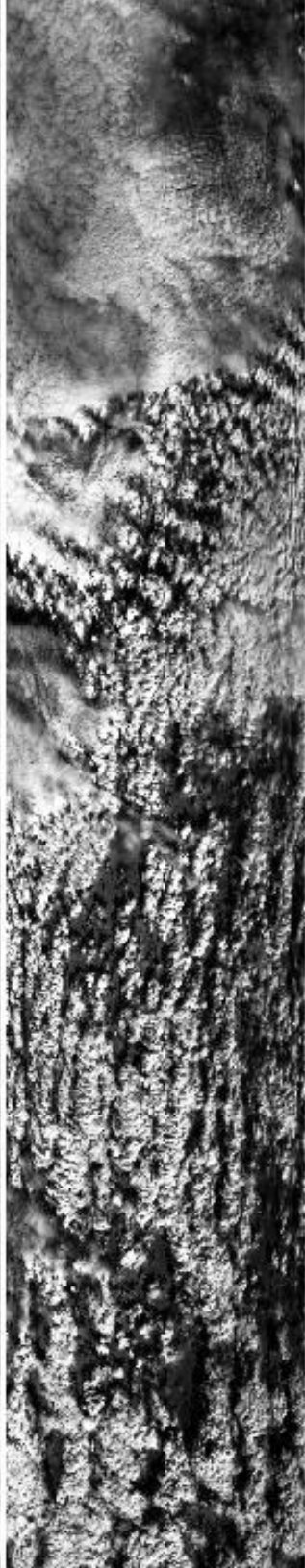
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07:43:00

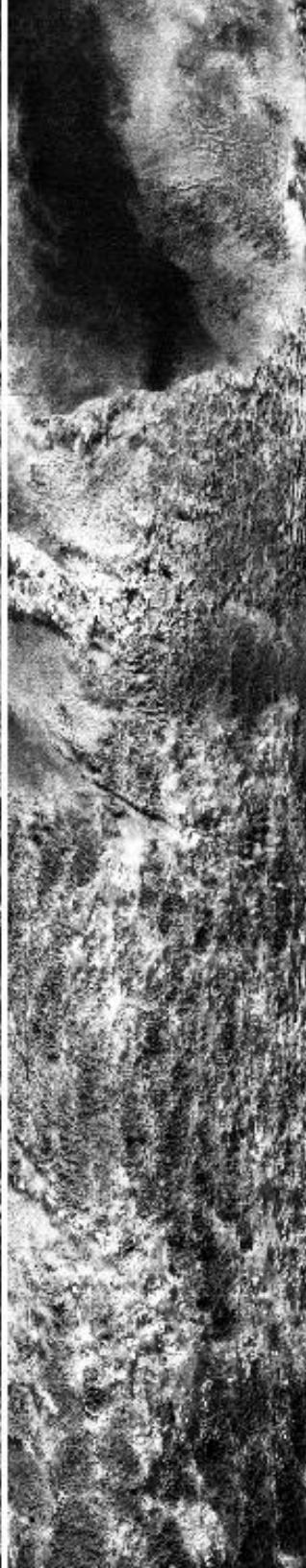
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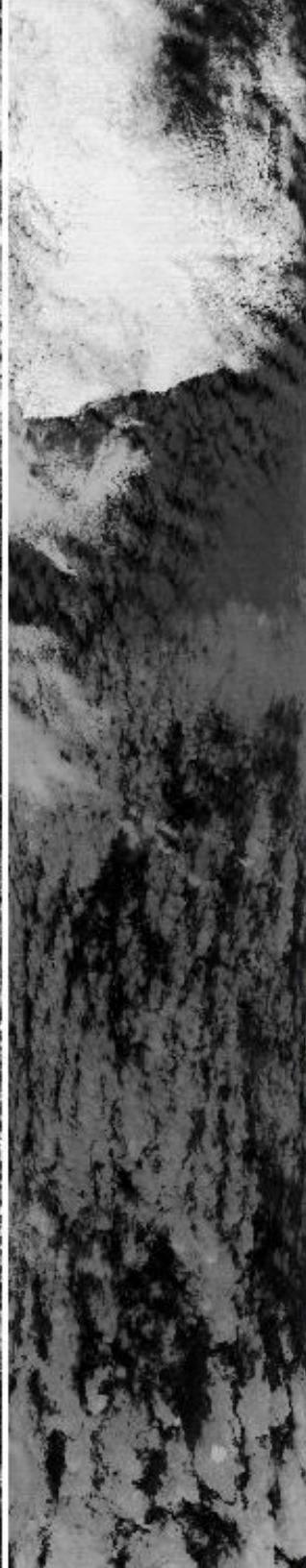
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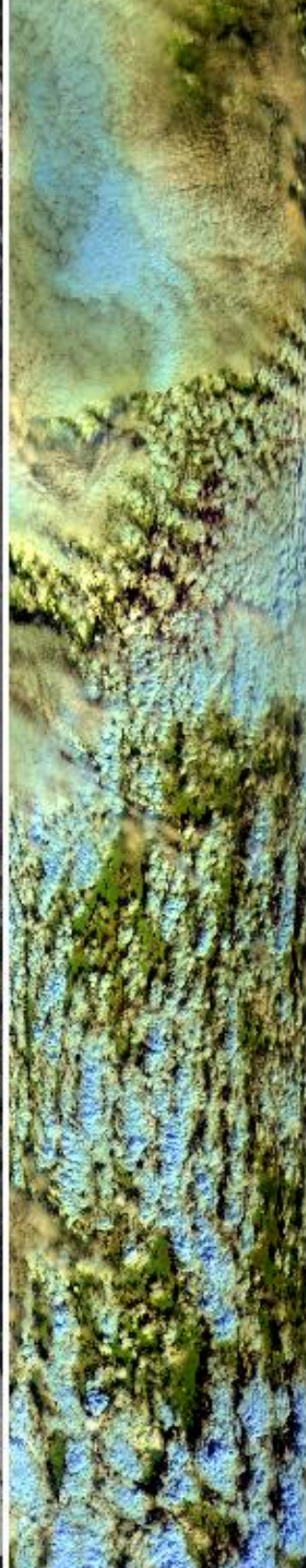
07:47:00



07:49:00



07:51:00



07:43:00

07:45:00

07:47:00

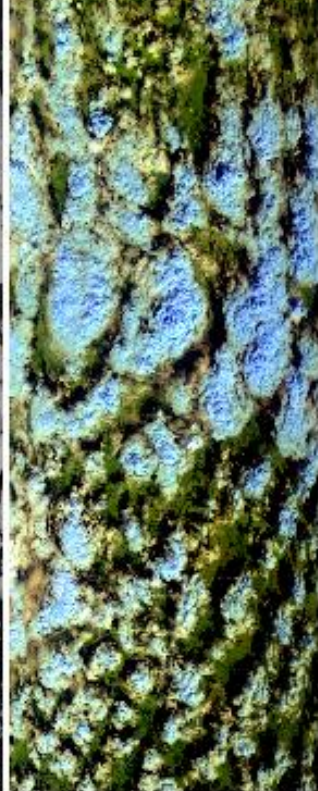
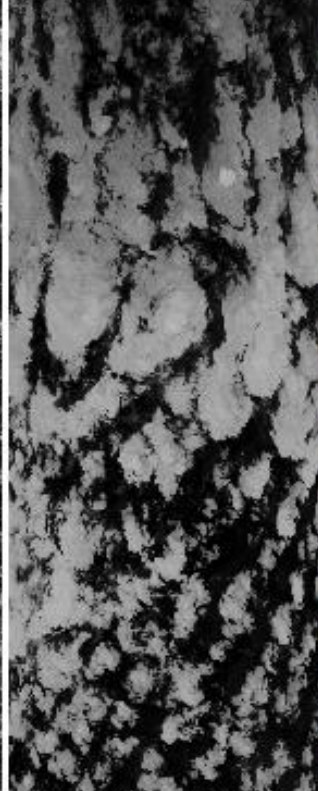
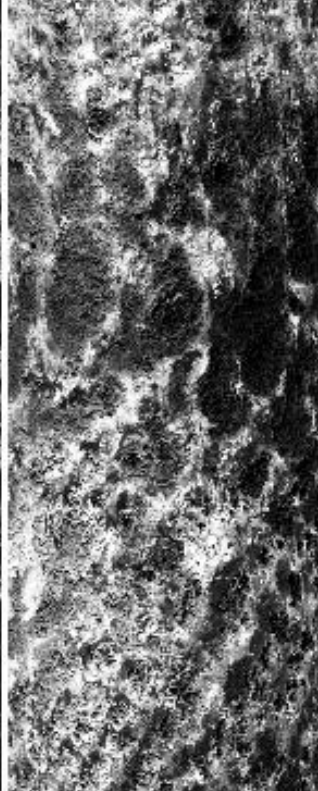
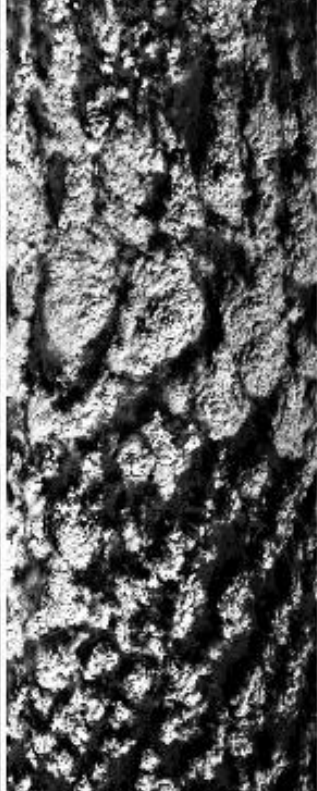
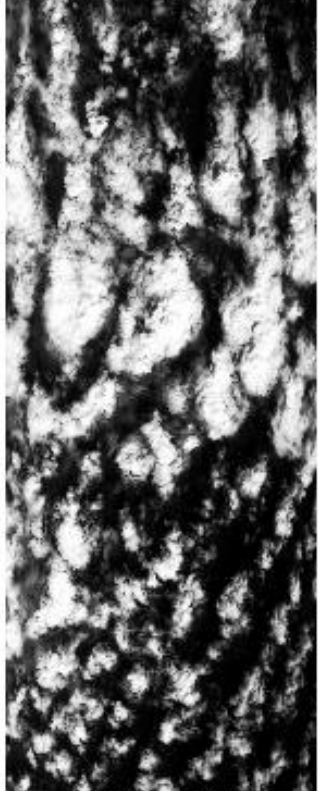
07:49:00

07:51:00

07:51:00

07:53:00

07:55:34



07:51:00

07:53:00

07:55:34

0.66µm (#3)

1.61µm (#10)

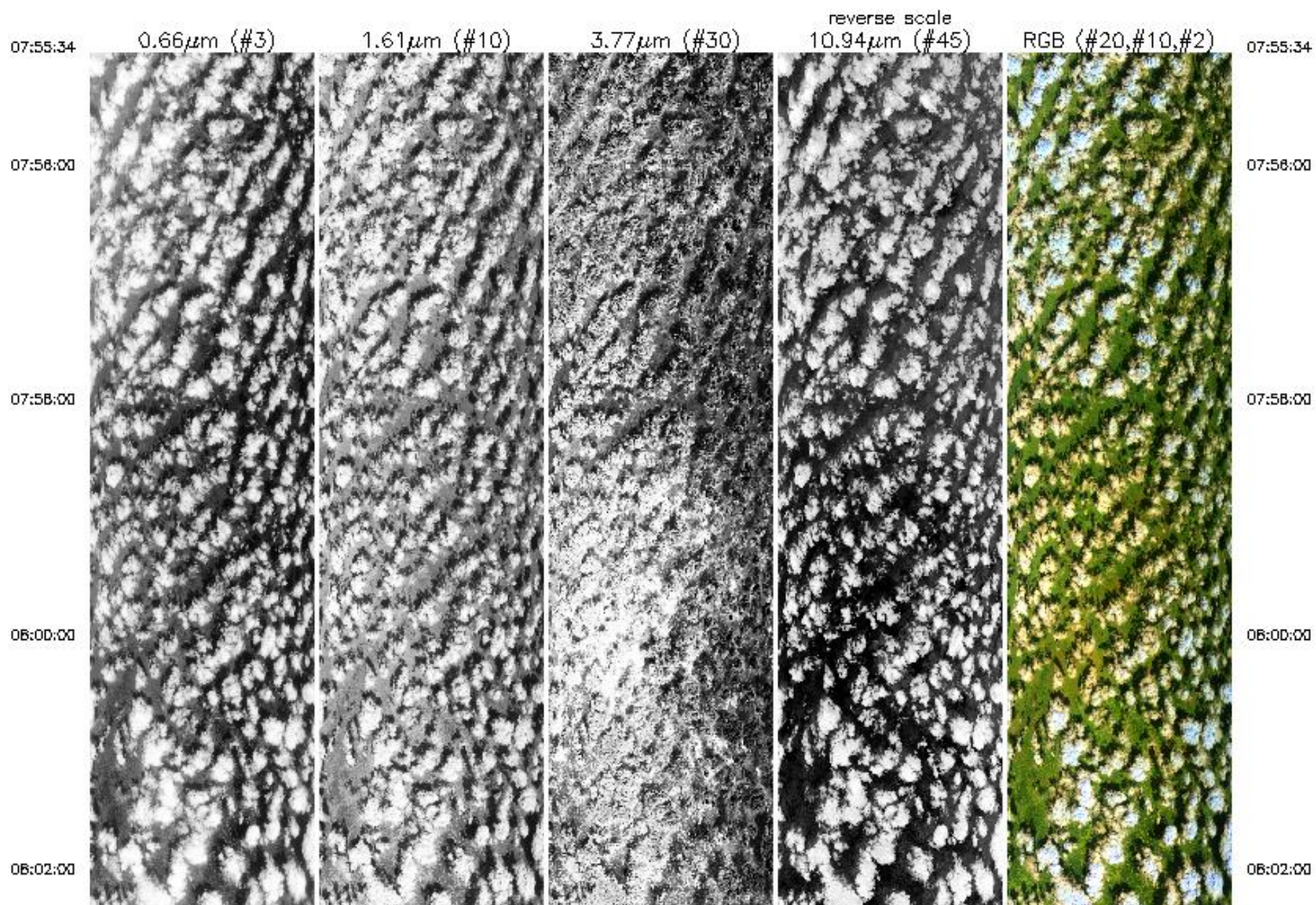
3.77µm (#30)

10.94µm (#45)
reverse scale

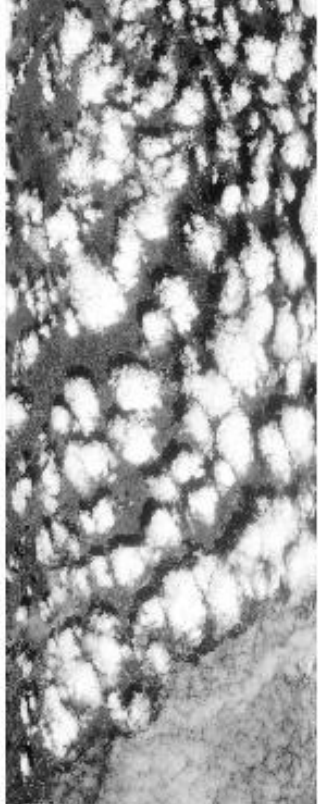
RGB (#20,#10,#2)

Upper Left Lat, Lon = -23.1°, 31.1°
 Lower Right Lat, Lon = -22.6°, 34.3°
 Aircraft Heading = 87.8°
 Solar Zenith = 41.3°
 GPS Altitude = 18977. m (MSL)

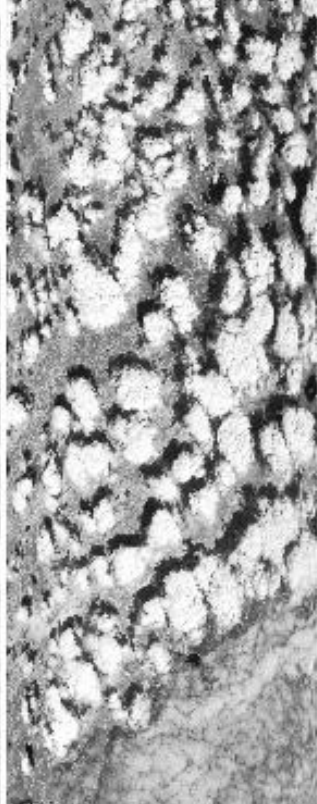
MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
Mozambique/I. Ocean
Flight #00-178 Track #2



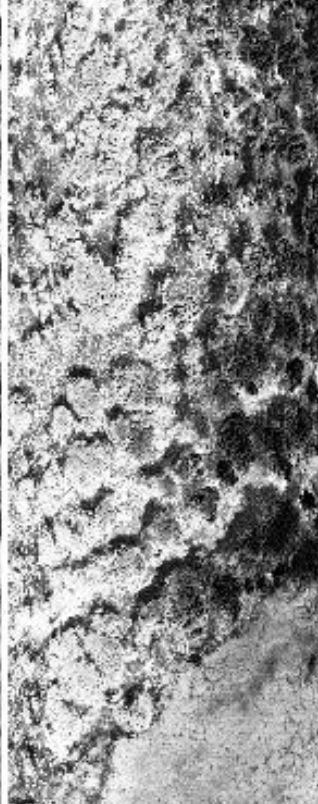
06:02:00



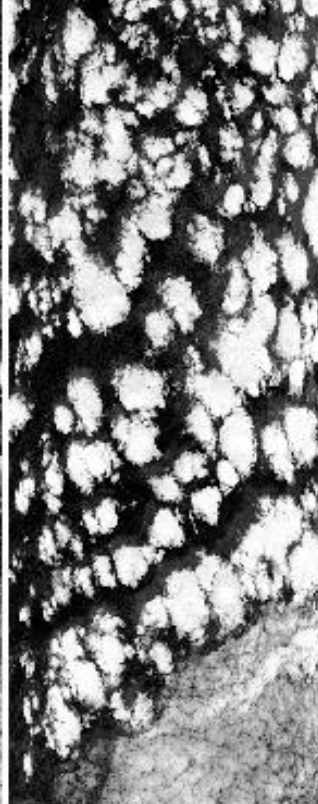
06:04:00



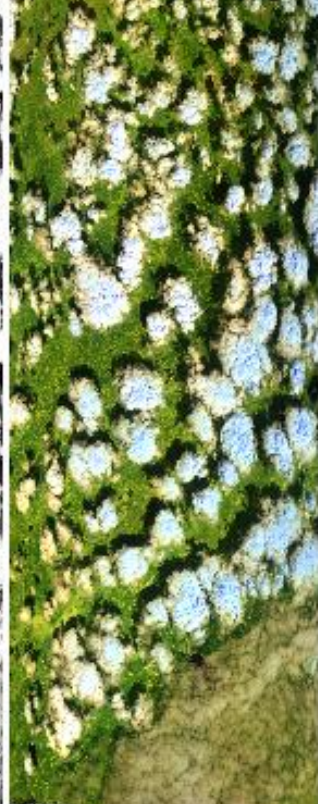
06:06:00



06:08:00



06:10:00



06:02:00

06:04:00

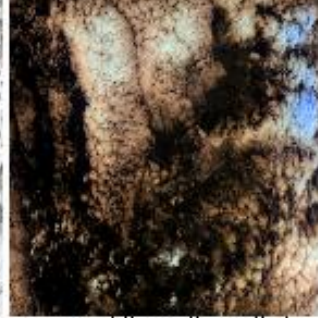
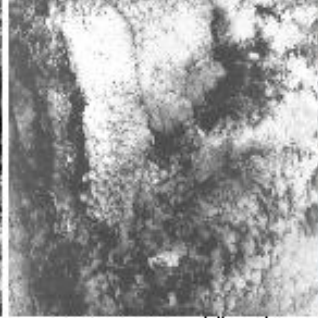
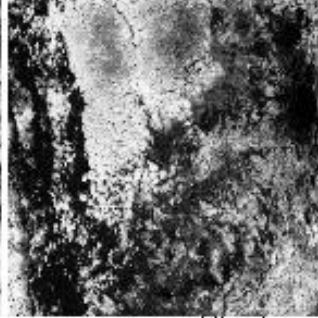
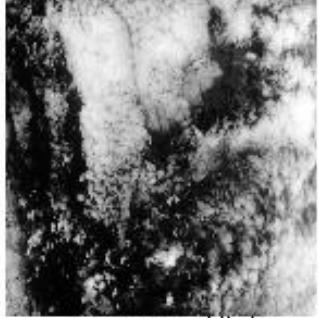
06:06:00

06:08:00

06:10:00



06:10:00



06:10:00

06:11:10

06:11:10

0.66 μ m (#3)

1.61 μ m (#10)

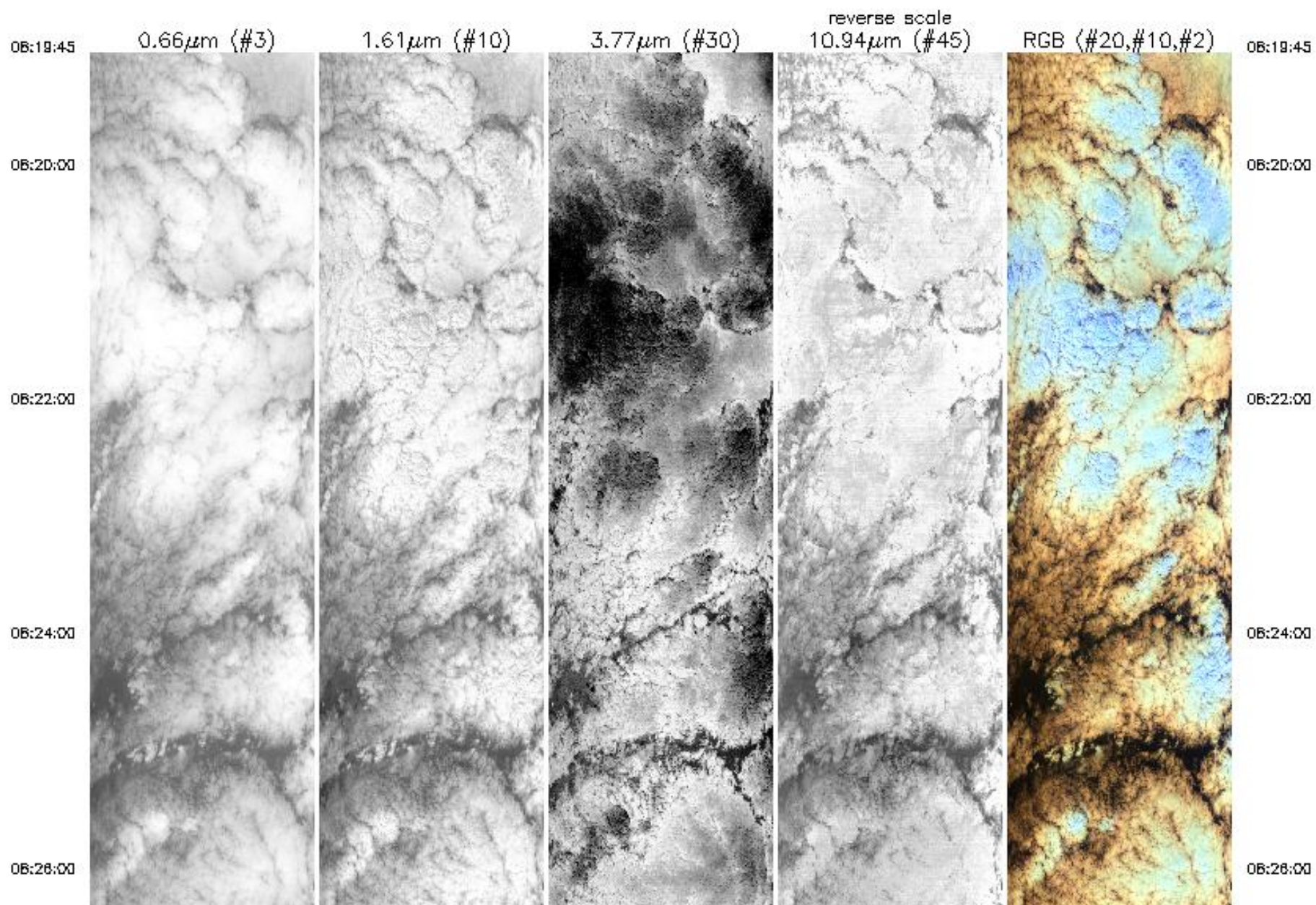
3.77 μ m (#30)

10.94 μ m (#45)
reverse scale

RGB (#20,#10,#2)

Upper Left Lat, Lon = -22.9°, 34.3°
Lower Right Lat, Lon = -22.5°, 36.1°
Aircraft Heading = 85.9°
Solar Zenith = 33.8°
GPS Altitude = 19513. m (MSL)

MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
Indian Ocean
Flight #00-178 Track #3



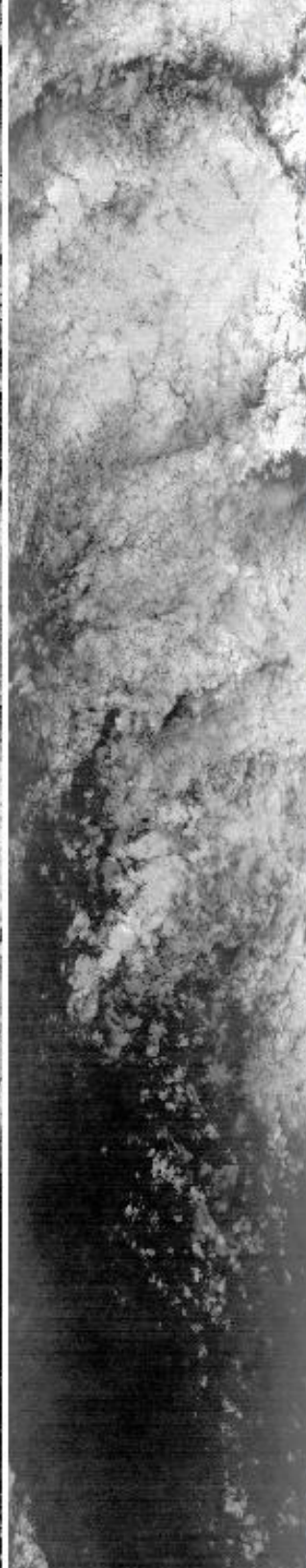
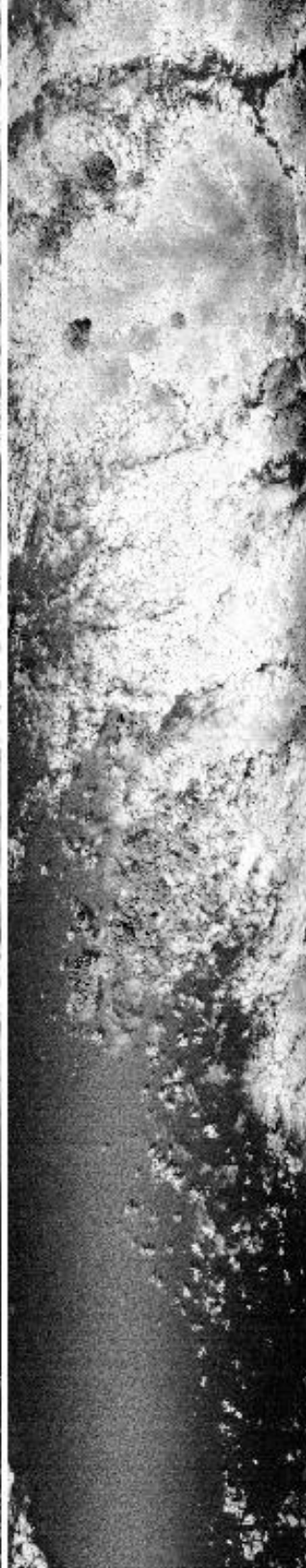
06:26:00

06:28:00

06:30:00

06:32:00

06:34:00



06:26:00

06:28:00

06:30:00

06:32:00

06:34:00

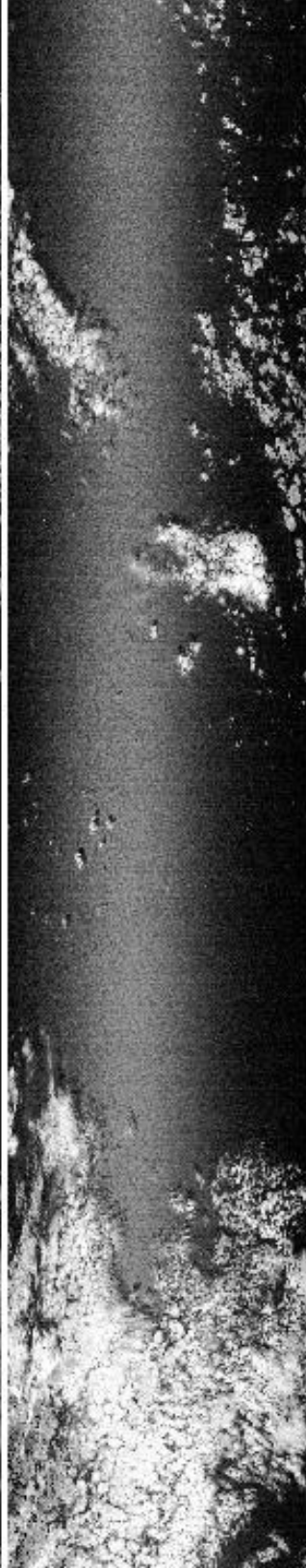
06:34:00



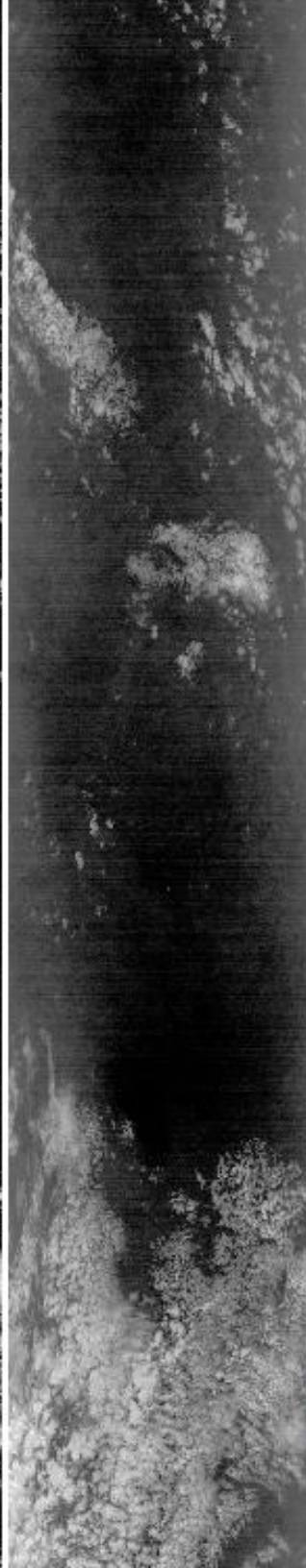
06:36:00



06:38:00



06:40:00



06:42:00



06:34:00

06:36:00

06:38:00

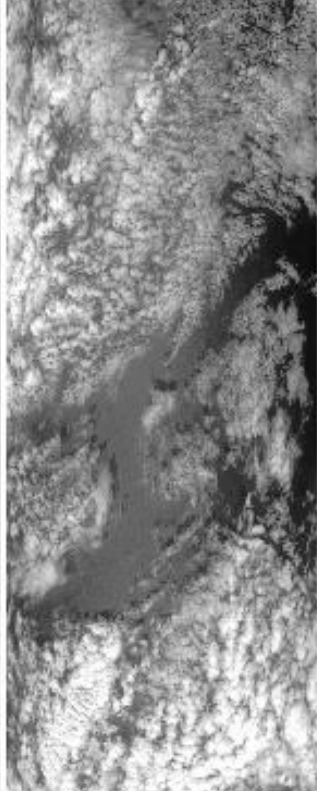
06:40:00

06:42:00

06:42:00

06:44:00

06:48:31



06:42:00

06:44:00

06:48:31

0.66µm (#3)

1.61µm (#10)

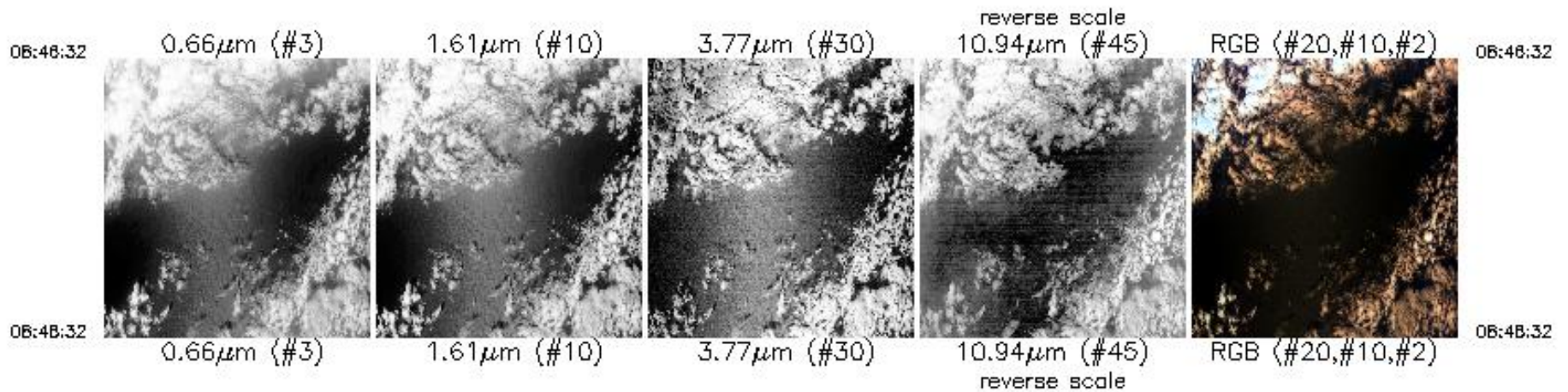
3.77µm (#30)

10.94µm (#45)
reverse scale

RGB (#20,#10,#2)

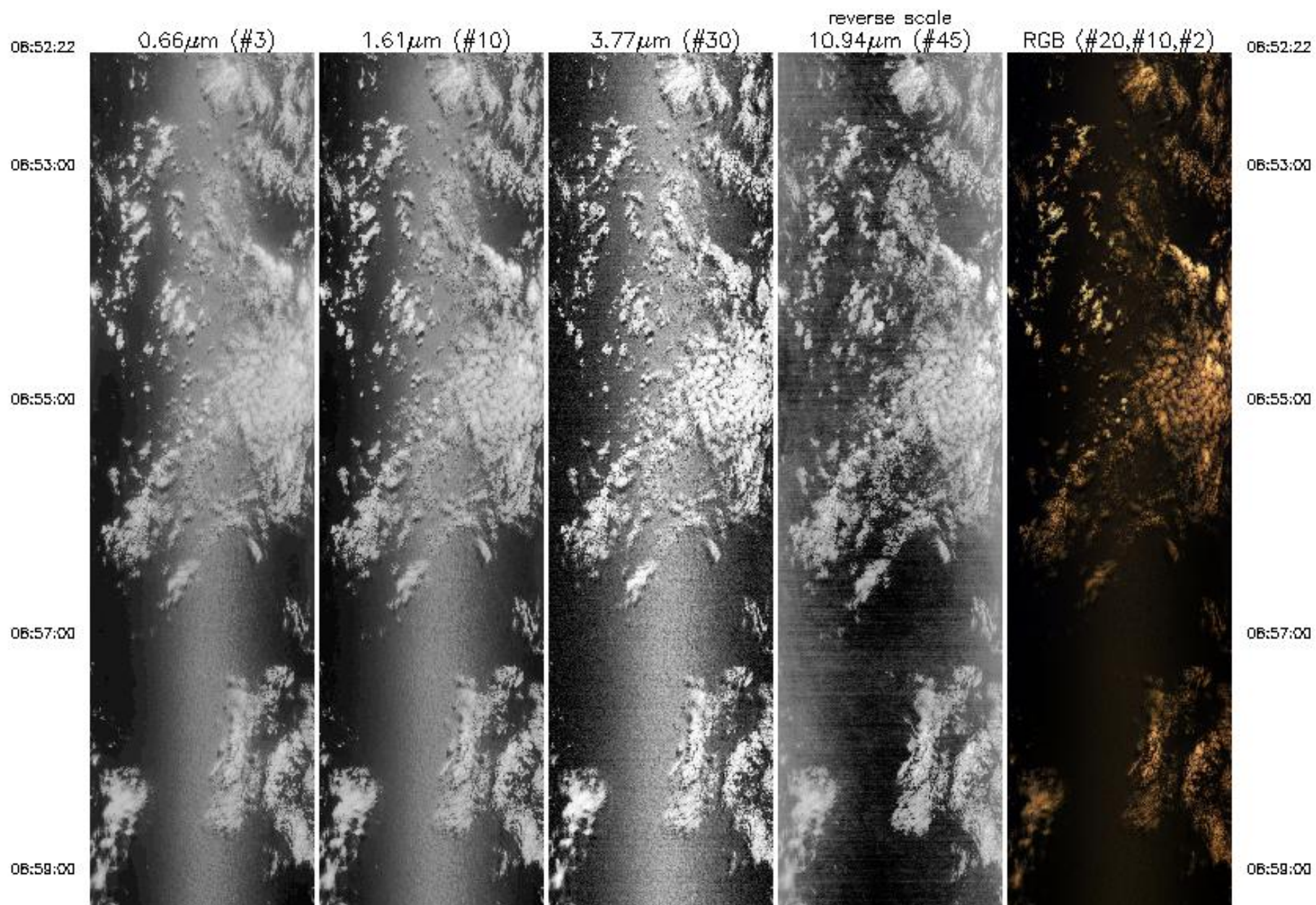
Upper Left Lat, Lon = -22.3° , 36.3°
 Lower Right Lat, Lon = -19.3° , 36.6°
 Aircraft Heading = 12.3°
 Solar Zenith = 28.2°
 GPS Altitude = 19535. m (MSL)

MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
Indian Ocean
Flight #00-178 Track #4



Upper Left Lat, Lon = -19.4° , 36.9°
Lower Right Lat, Lon = -19.1° , 36.6°
Aircraft Heading = 14.3°
Solar Zenith = 22.0°
GPS Altitude = 19749. m (MSL)

MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
Indian Ocean
Flight #00-178 Track #5



08:58:00

09:01:00

09:03:00

09:05:00

09:07:00



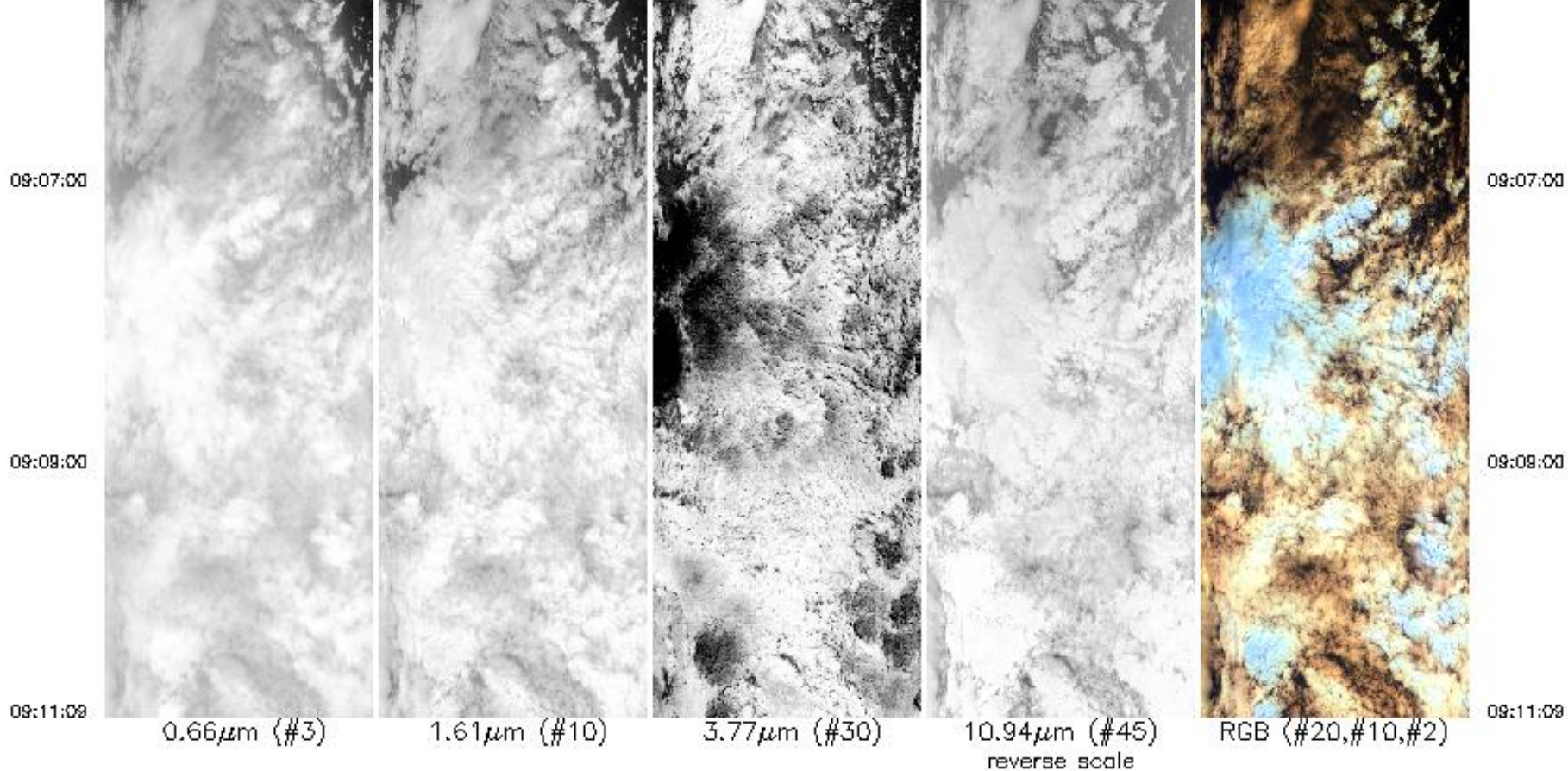
08:58:00

09:01:00

09:03:00

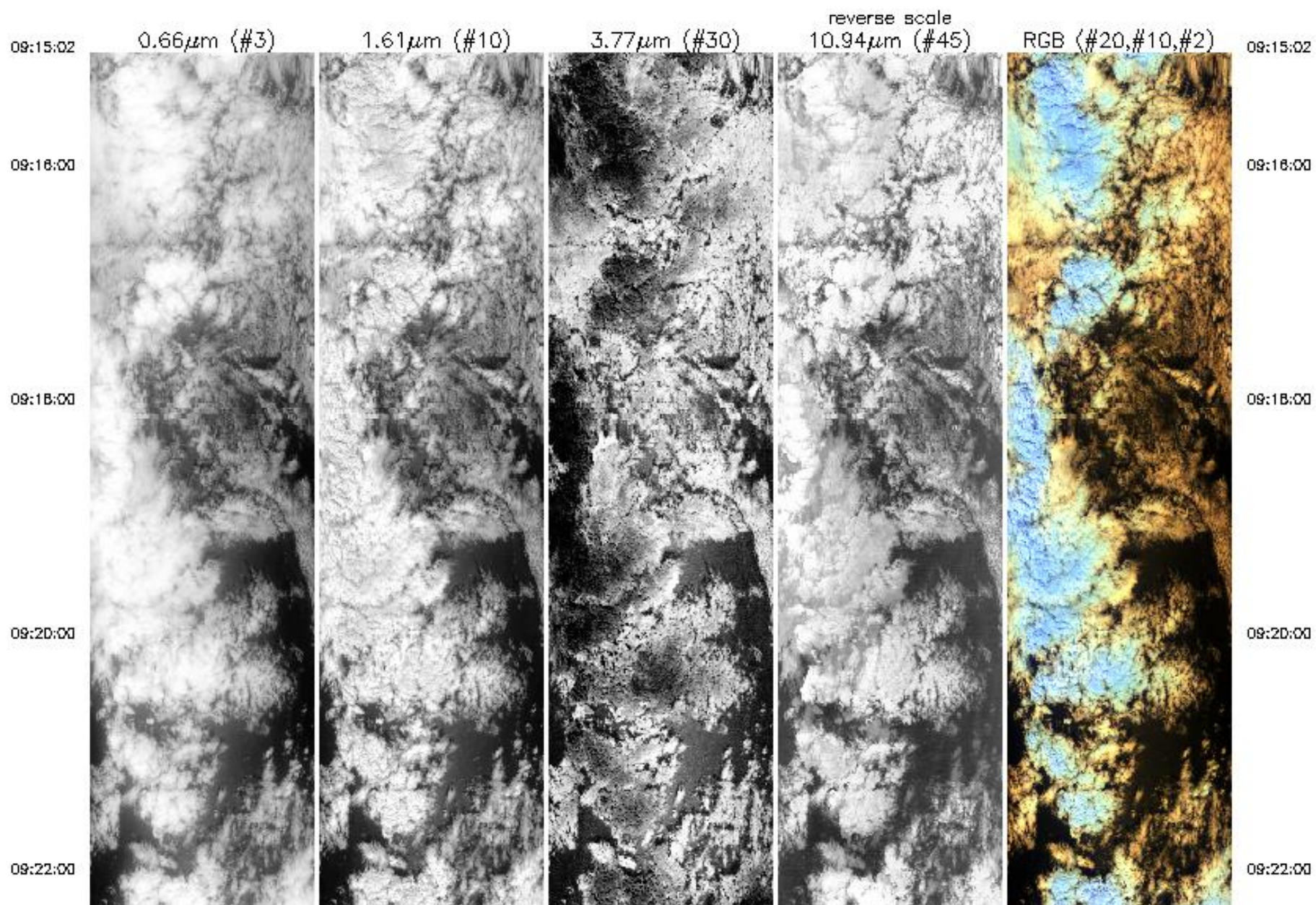
09:05:00

09:07:00



Upper Left Lat, Lon = -19.0° , 36.3°
 Lower Right Lat, Lon = -21.1° , 36.1°
 Aircraft Heading = 188.6°
 Solar Zenith = 21.3°
 GPS Altitude = 19745. m (MSL)

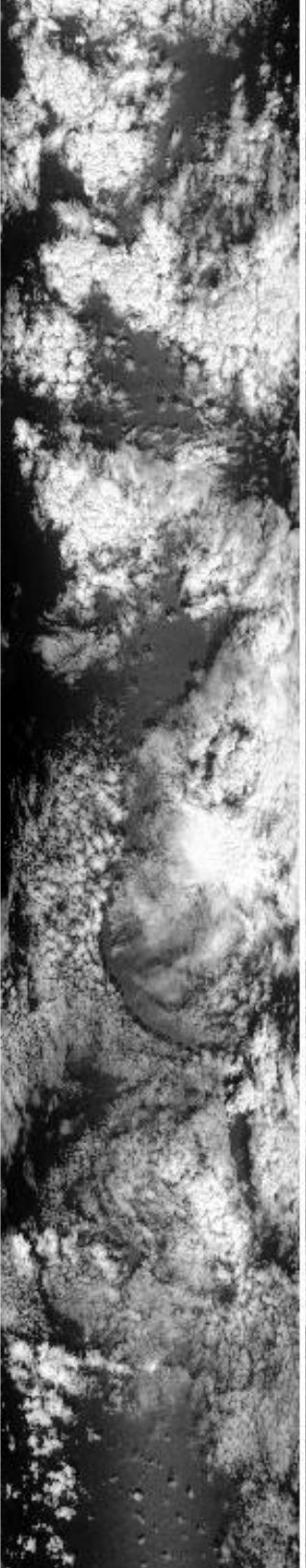
MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
Indian Ocean
Flight #00-178 Track #6



09:22:00



09:24:00



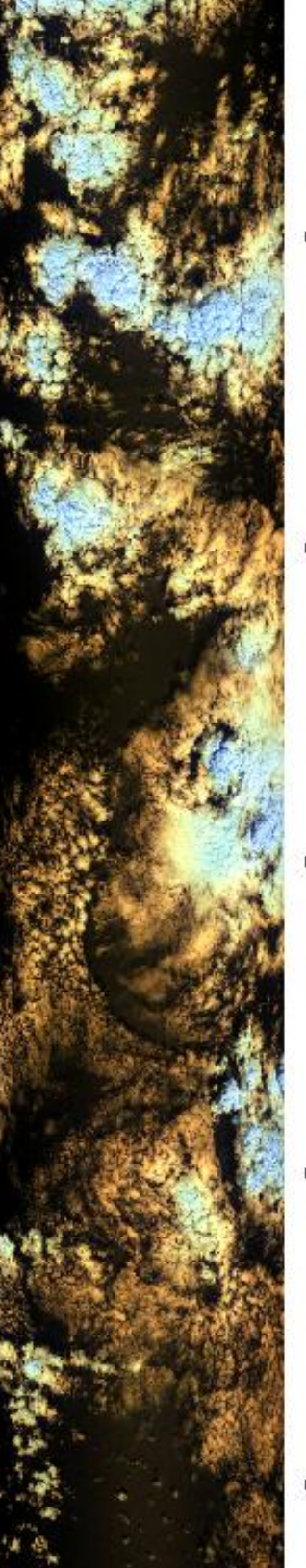
09:26:00



09:28:00



09:30:00



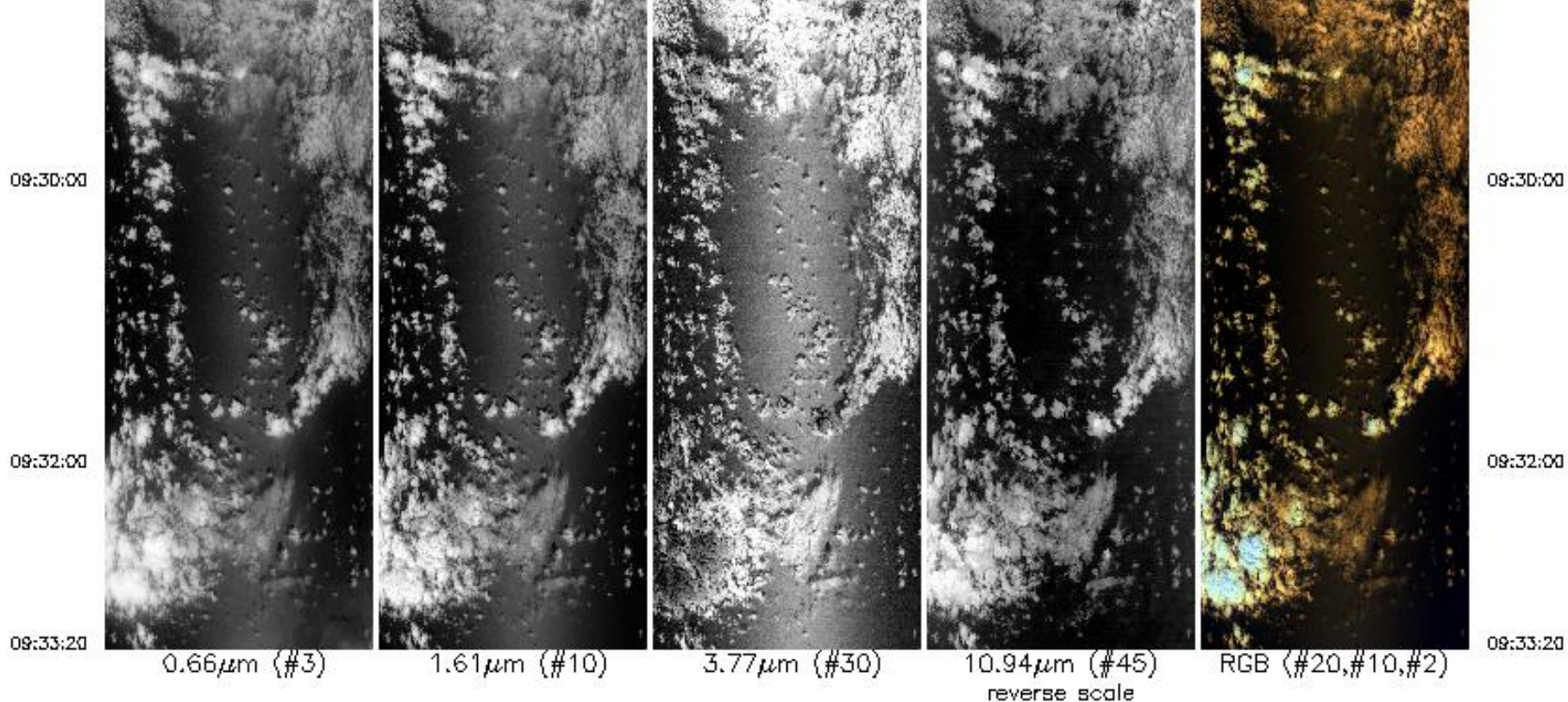
09:22:00

09:24:00

09:26:00

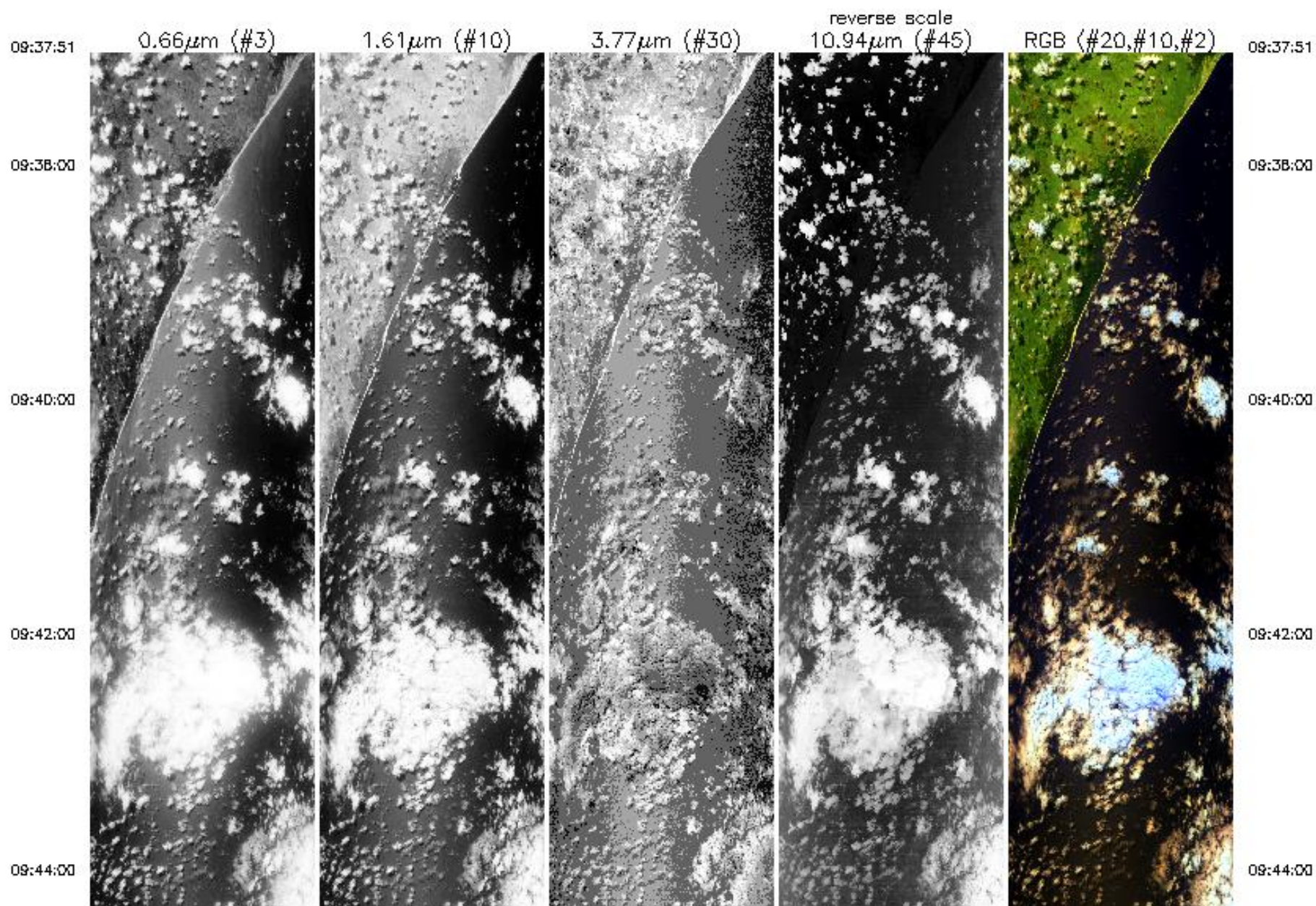
09:28:00

09:30:00



Upper Left Lat, Lon = -21.1° , 35.8°
 Lower Right Lat, Lon = -19.0° , 35.9°
 Aircraft Heading = 17.2°
 Solar Zenith = 21.9°
 GPS Altitude = 19802. m (MSL)

MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
Indian Ocean
Flight #00-178 Track #7



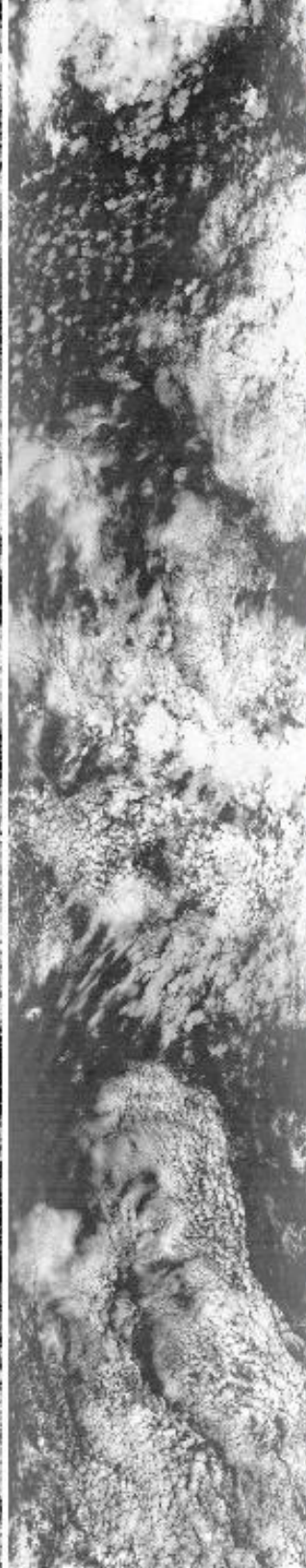
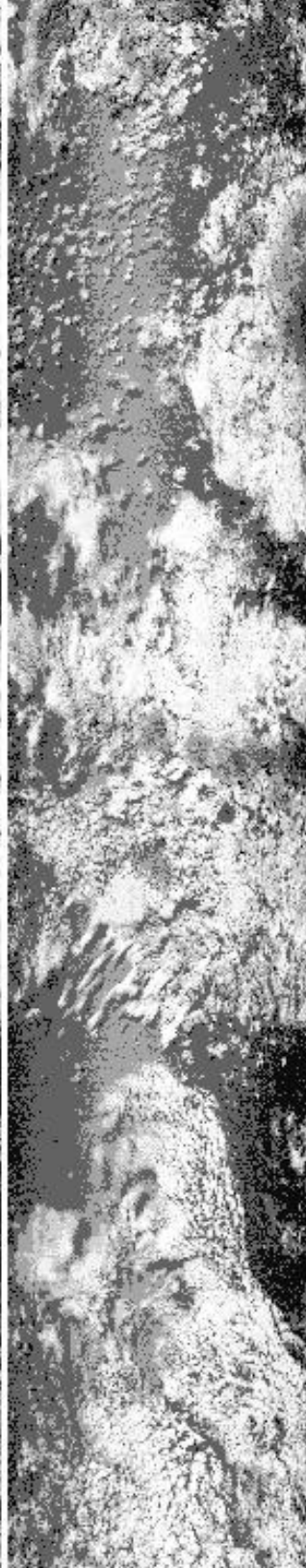
09:44:00

09:46:00

09:48:00

09:50:00

09:52:00



09:44:00

09:46:00

09:48:00

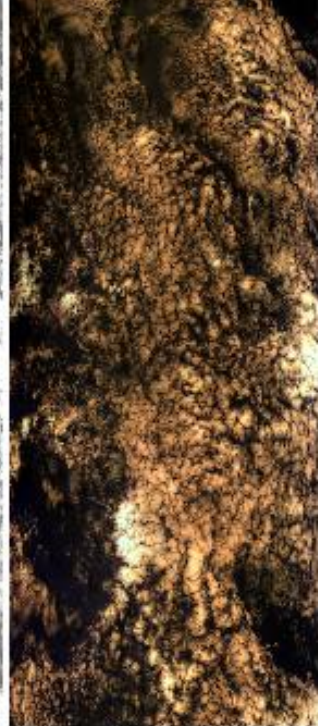
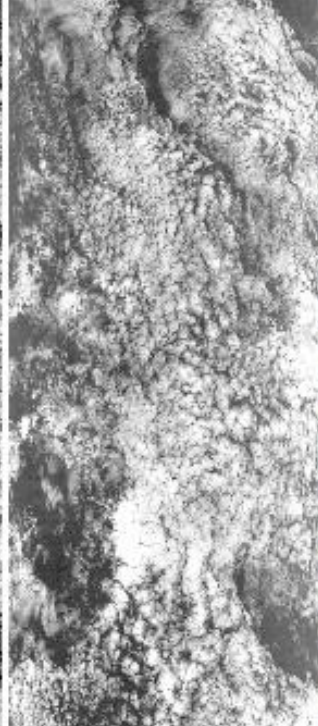
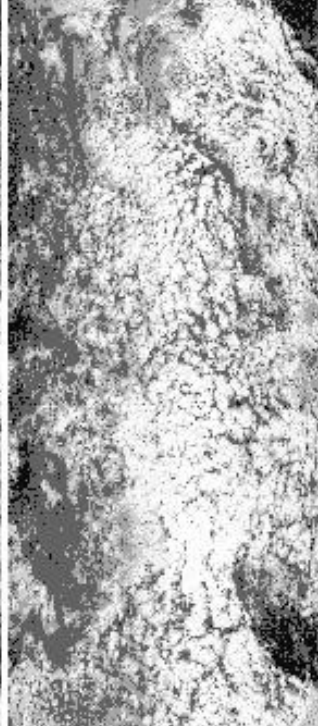
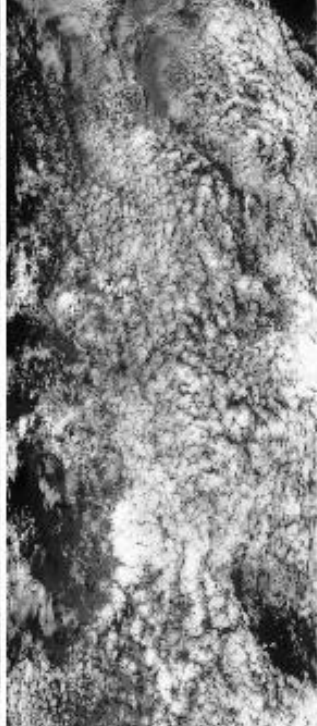
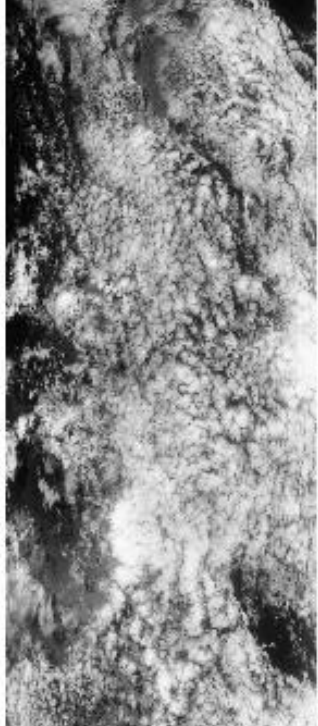
09:50:00

09:52:00

09:52:00

09:54:00

09:58:00



09:52:00

09:54:00

09:58:00

0.66µm (#3)

1.61µm (#10)

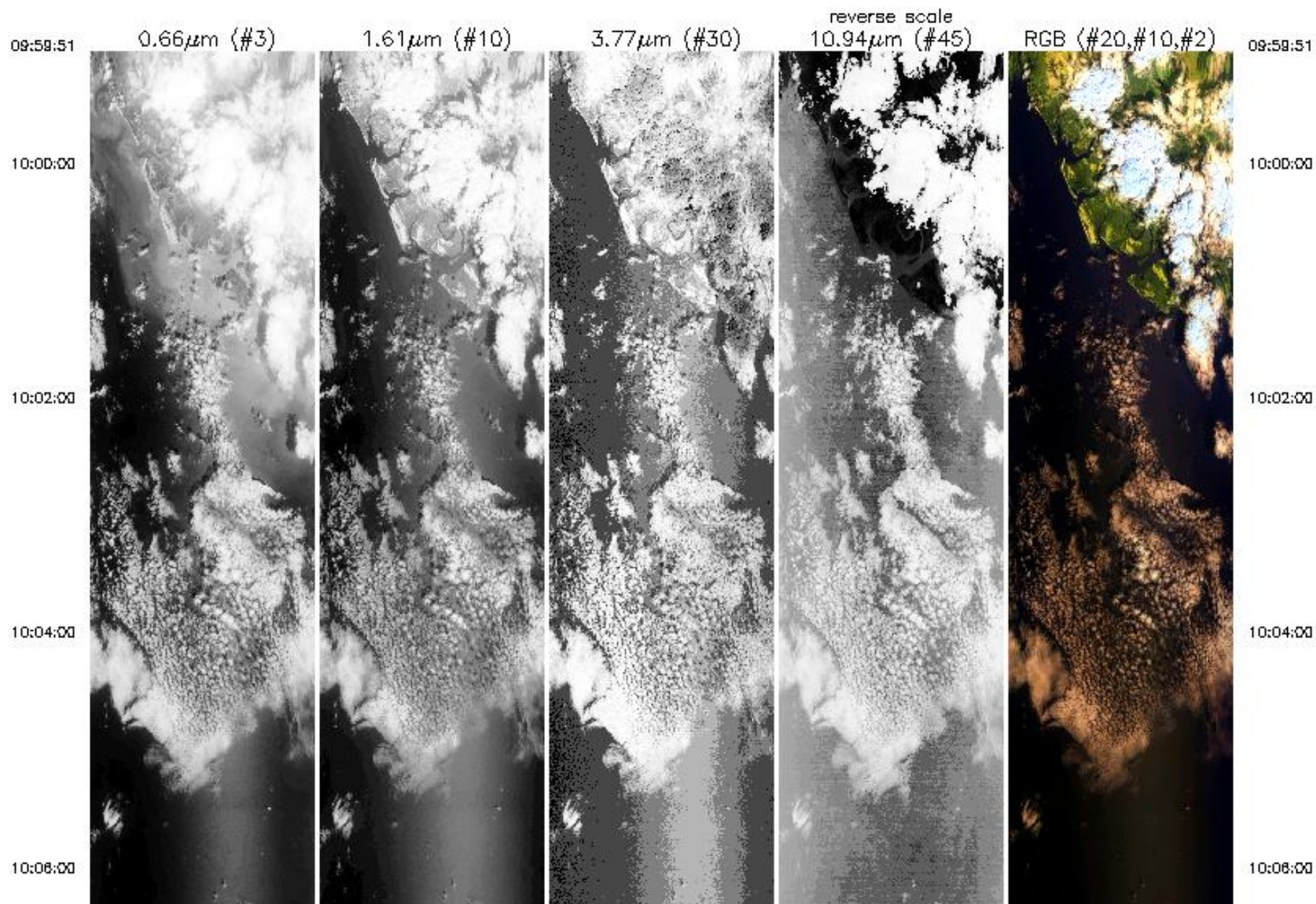
3.77µm (#30)

10.94µm (#45)
reverse scale

RGB (#20, #10, #2)

Upper Left Lat, Lon = -18.9°, 35.6°
 Lower Right Lat, Lon = -21.0°, 35.5°
 Aircraft Heading = 193.2°
 Solar Zenith = 19.5°
 GPS Altitude = 19769. m (MSL)

MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
Indian Ocean/Moz.
Flight #00-178 Track #8



10:08:00

10:08:00

10:10:00

10:12:00

10:14:03

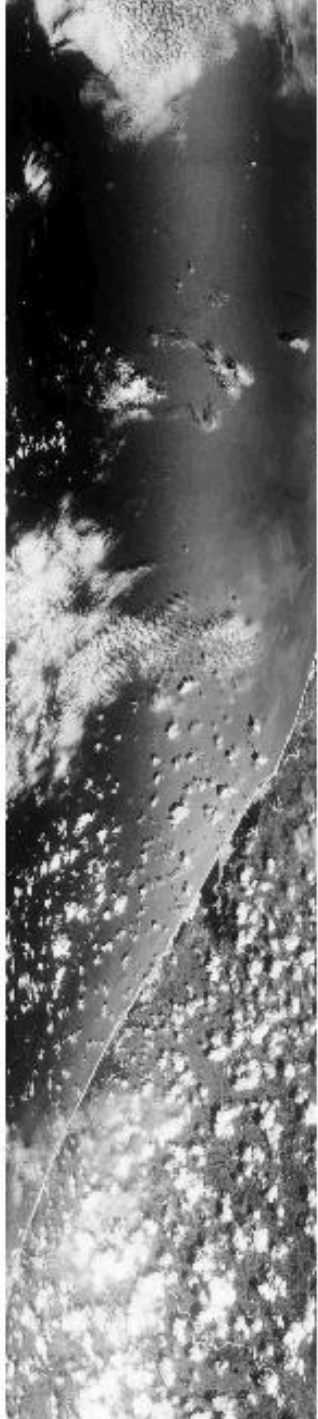
10:08:00

10:08:00

10:10:00

10:12:00

10:14:03



0.66 μ m (#3)

1.61 μ m (#10)

3.77 μ m (#30)

10.94 μ m (#45)
reverse scale

RGB (#20,#10,#2)

Upper Left Lat, Lon = -20.9° , 35.1°

Lower Right Lat, Lon = -19.3° , 35.1°

Aircraft Heading = 17.3°

10:14:03



0.66 μm (#3)



1.61 μm (#10)



3.77 μm (#30)



10.94 μm (#45)
reverse scale

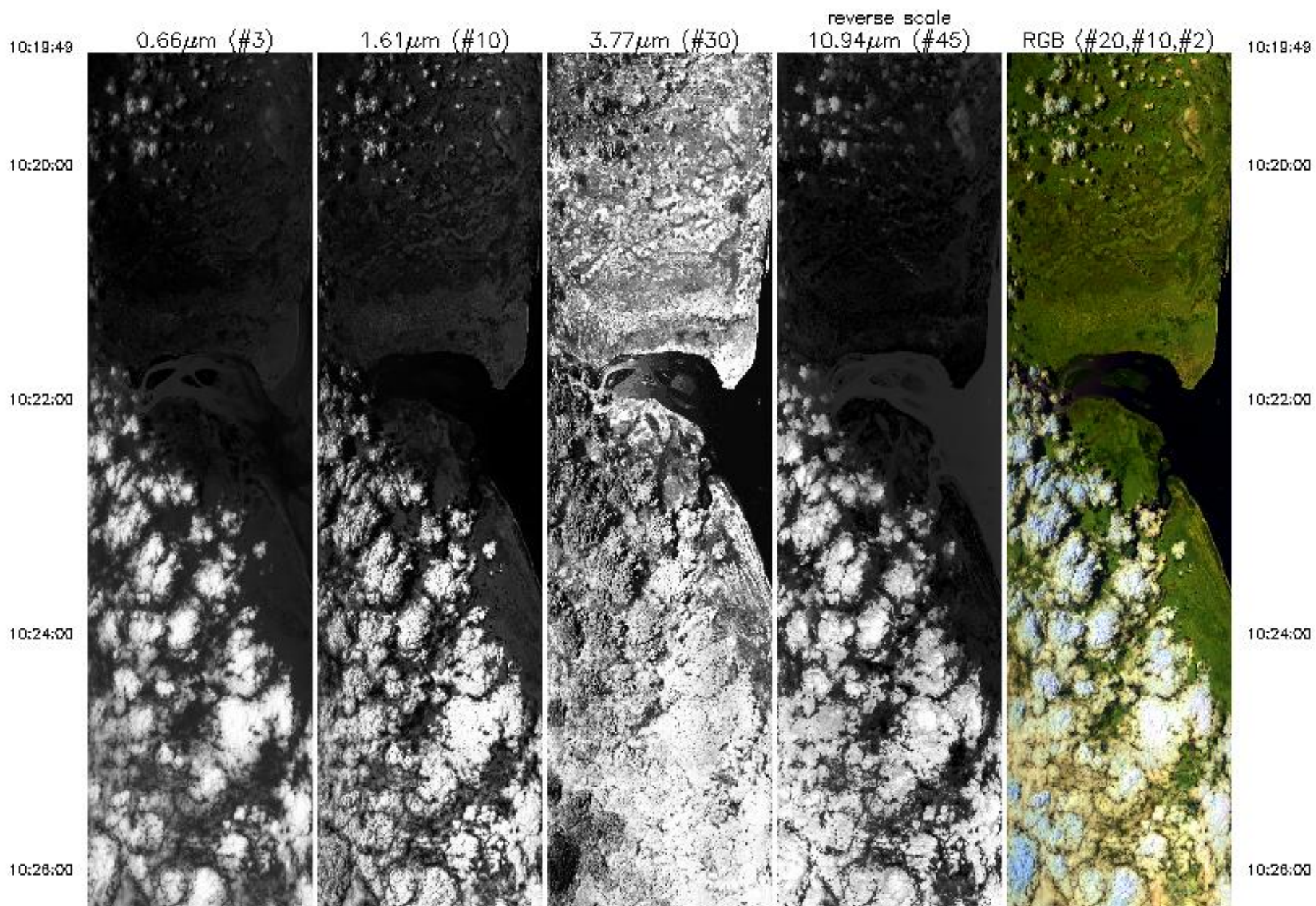


RGB (#20,#10,#2)

10:14:03

Upper Left Lat, Lon = -20.9° , 35.1°
Lower Right Lat, Lon = -19.3° , 35.1°
Aircraft Heading = 17.3°
Solar Zenith = 22.4°
GPS Altitude = 19758. m (MSL)

MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
Mozambique
Flight #00-178 Track #9



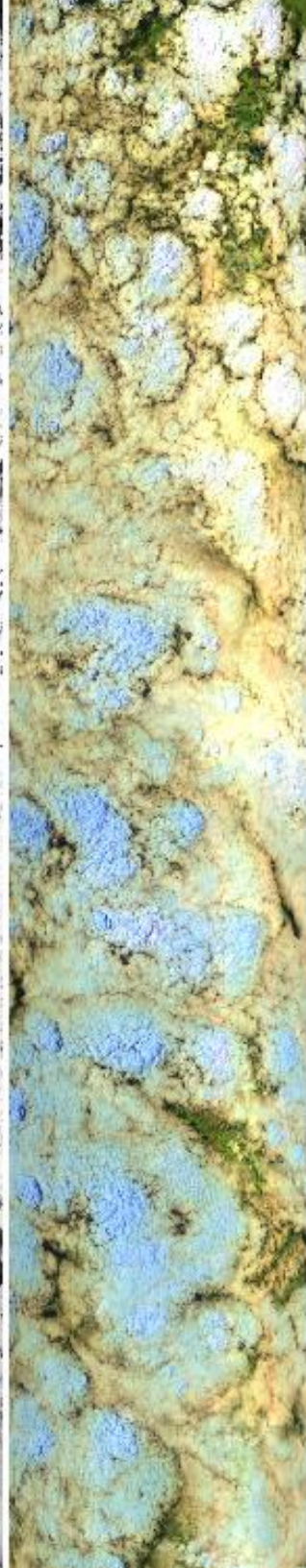
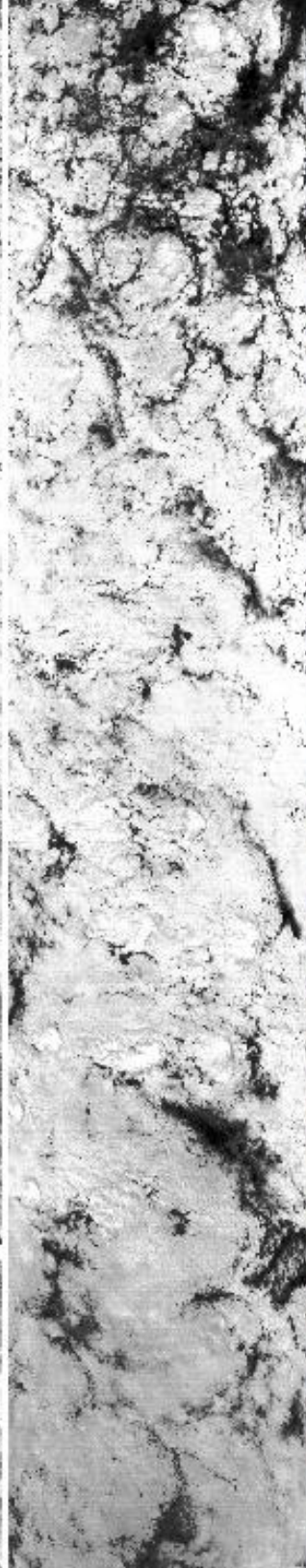
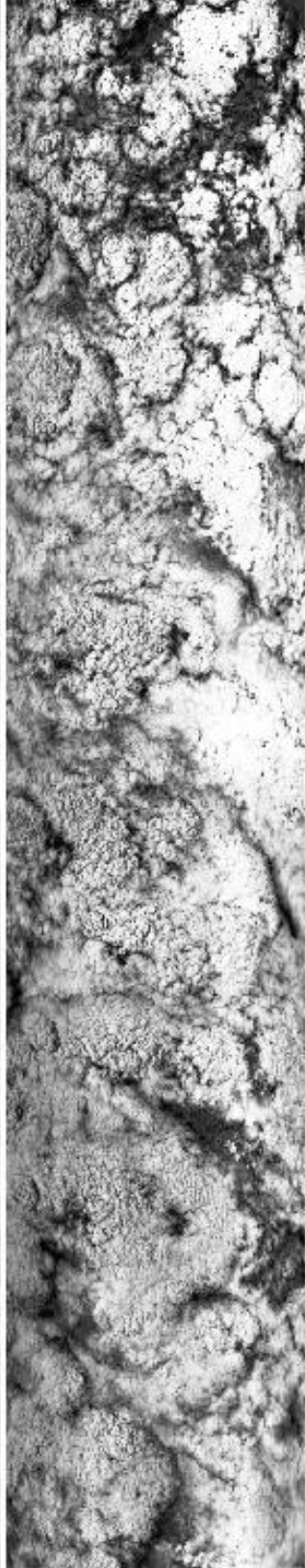
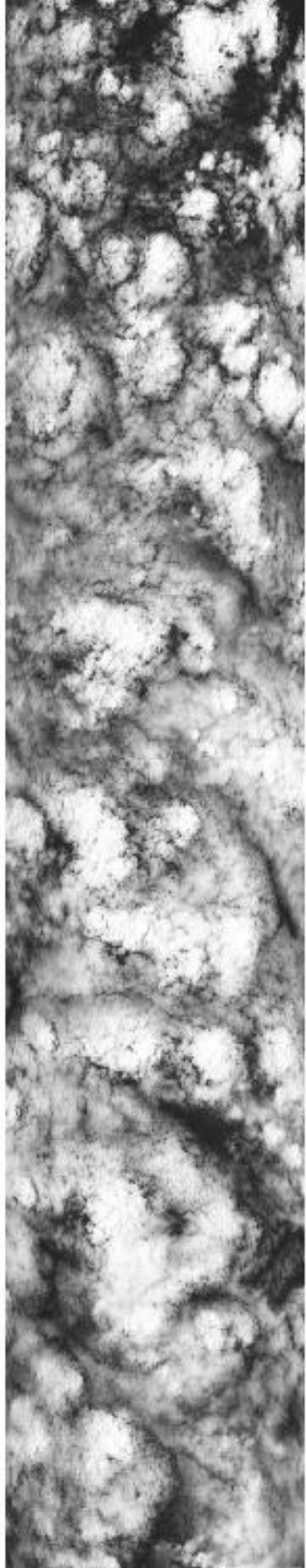
10:26:00

10:26:00

10:30:00

10:32:00

10:34:00



10:26:00

10:26:00

10:30:00

10:32:00

10:34:00

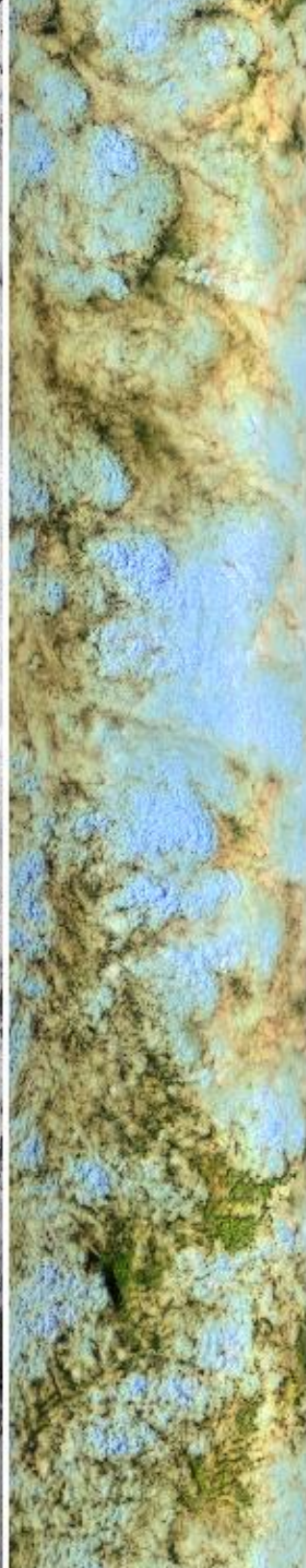
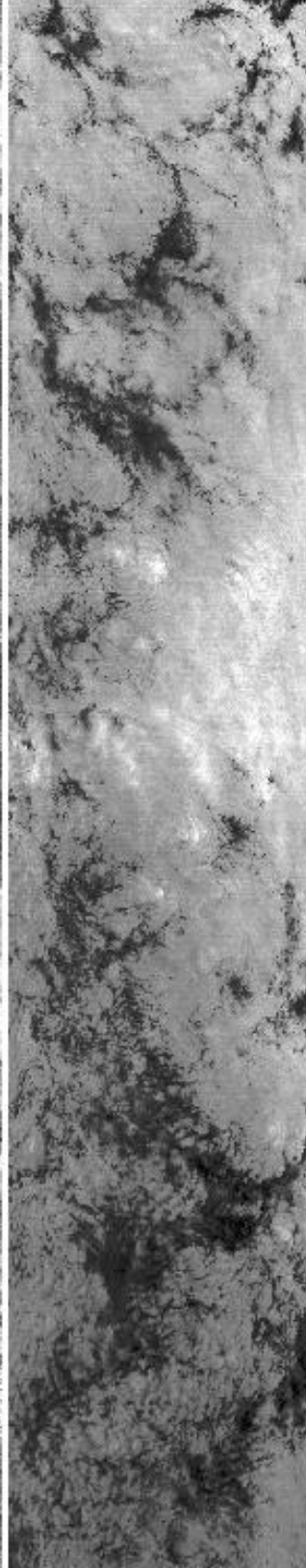
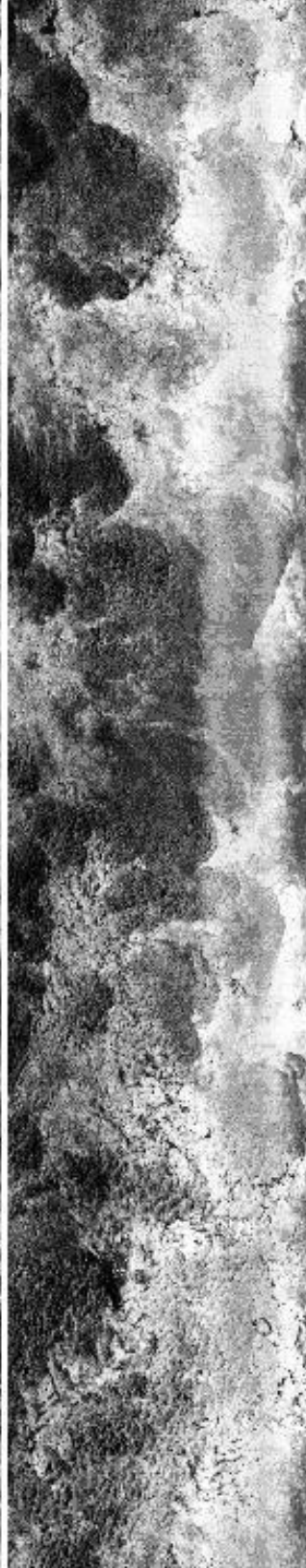
10:34:00

10:36:00

10:38:00

10:40:00

10:42:00



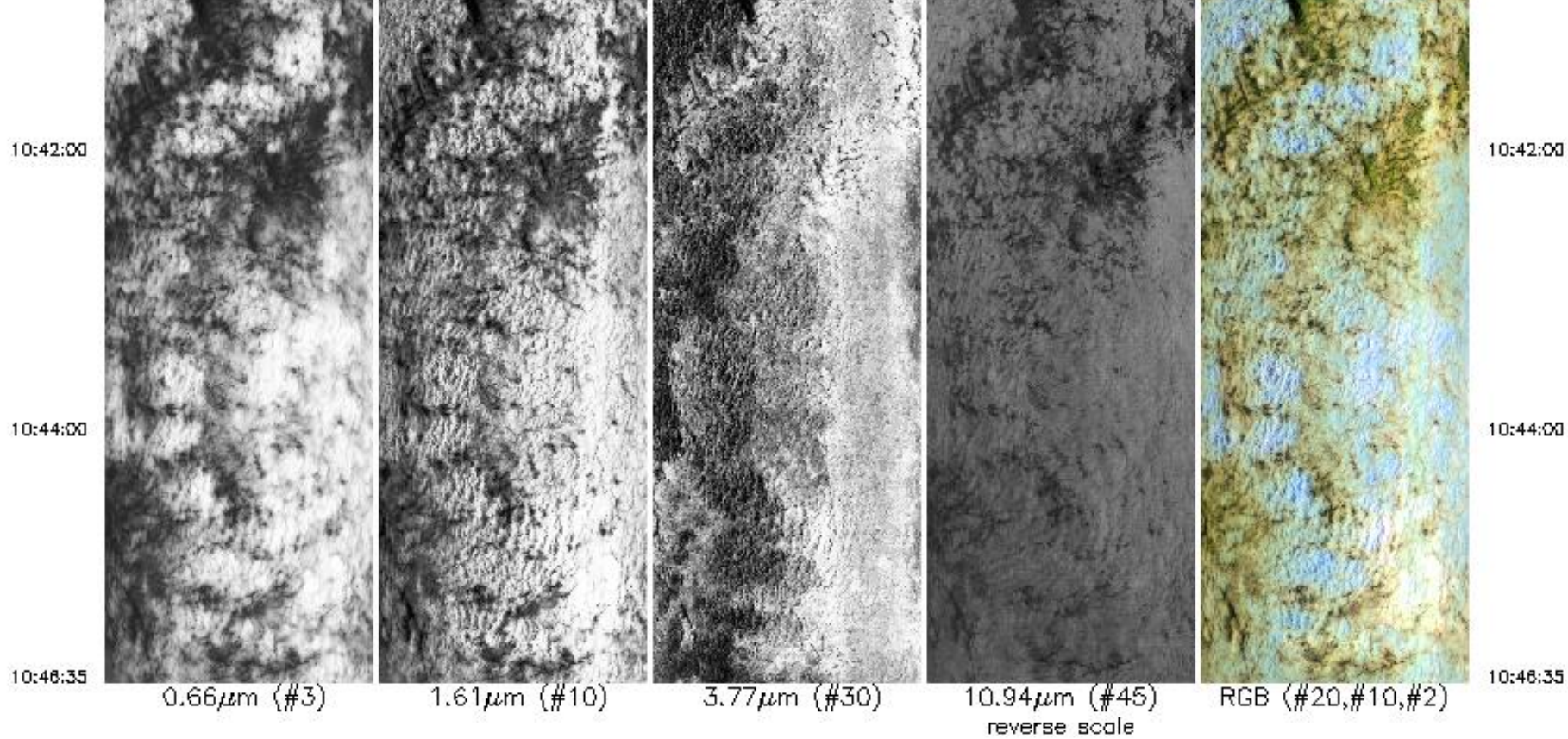
10:34:00

10:36:00

10:38:00

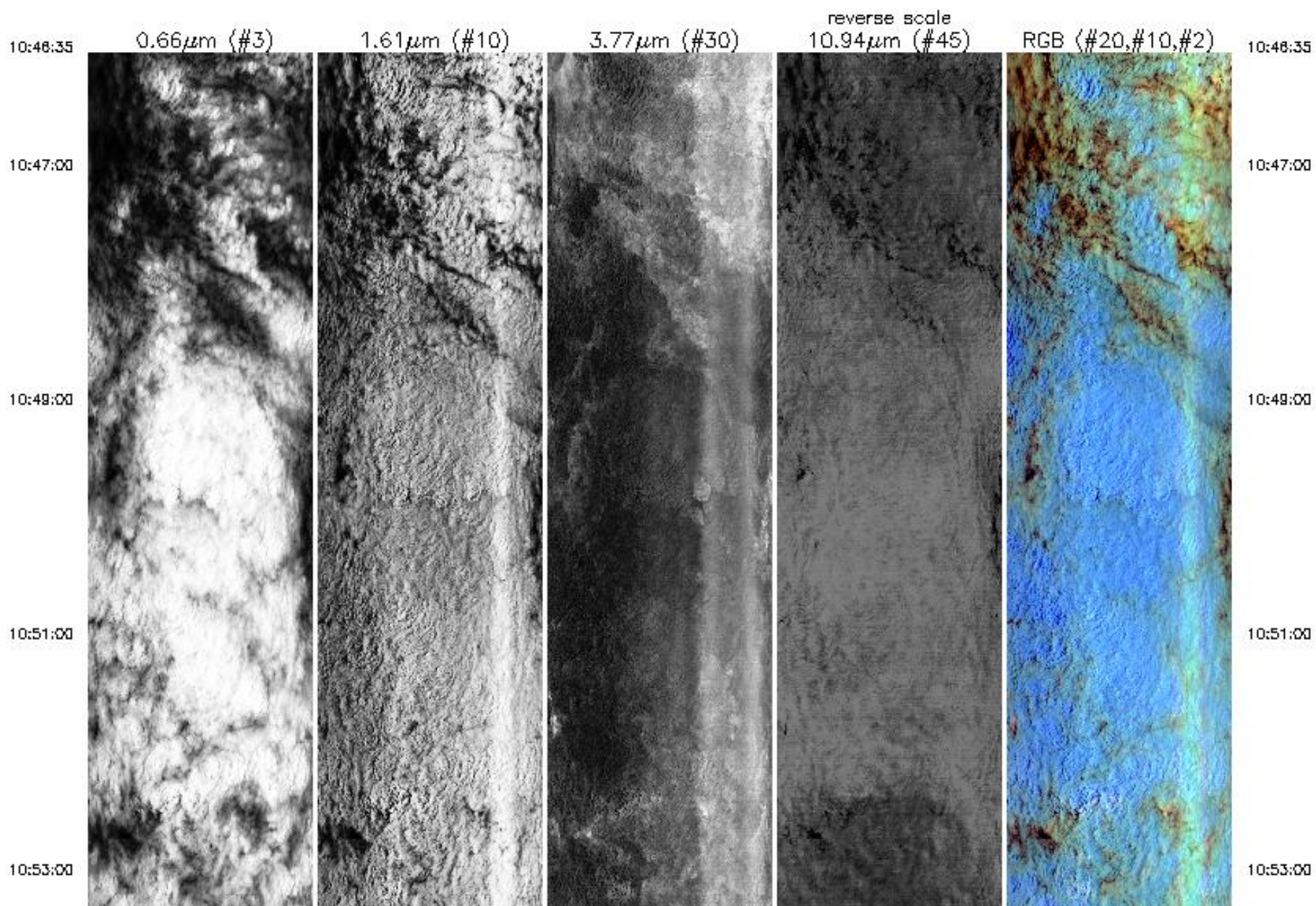
10:40:00

10:42:00

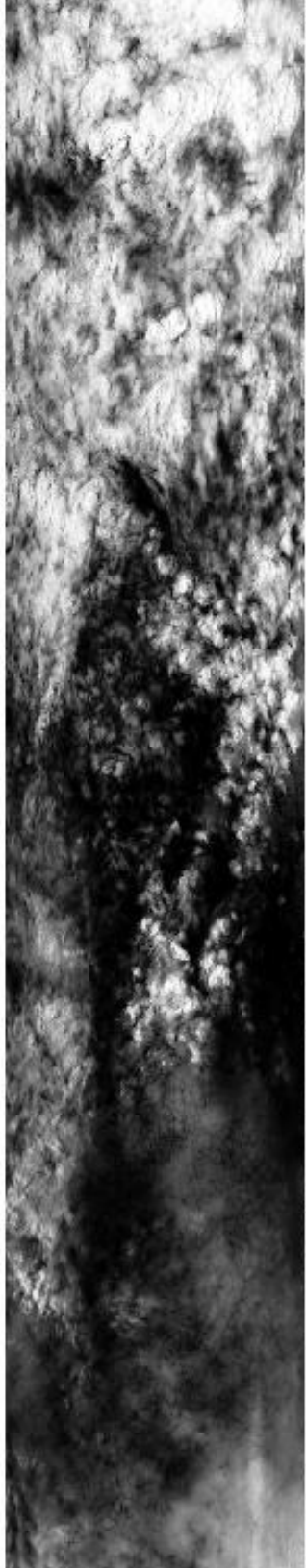


Upper Left Lat, Lon = -19.4° , 34.9°
 Lower Right Lat, Lon = -21.8° , 32.9°
 Aircraft Heading = 219.2°
 Solar Zenith = 23.0°
 GPS Altitude = 19036. m (MSL)

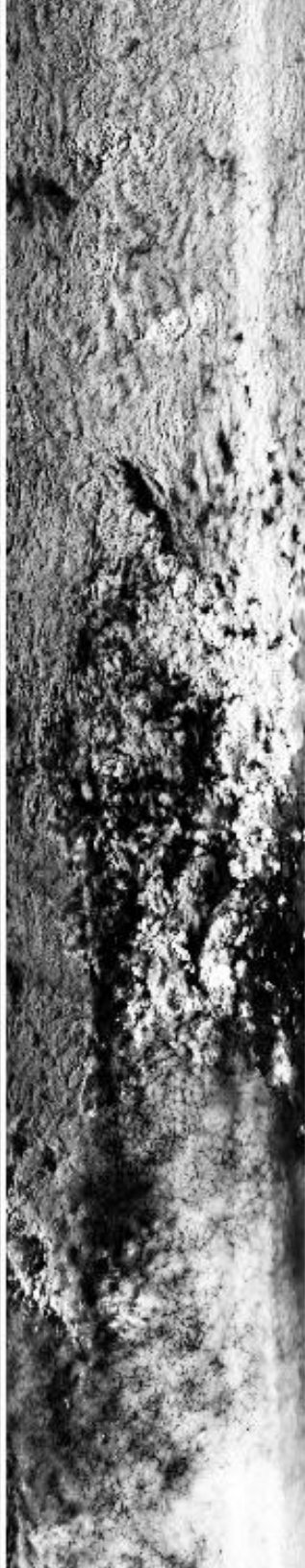
MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
Moz./S. Africa
Flight #00-178 Track #10



10:53:00



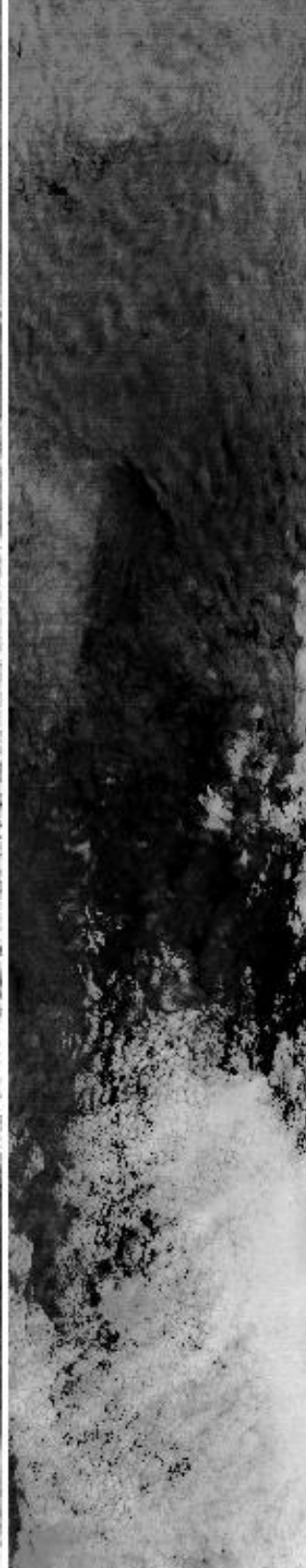
10:55:00



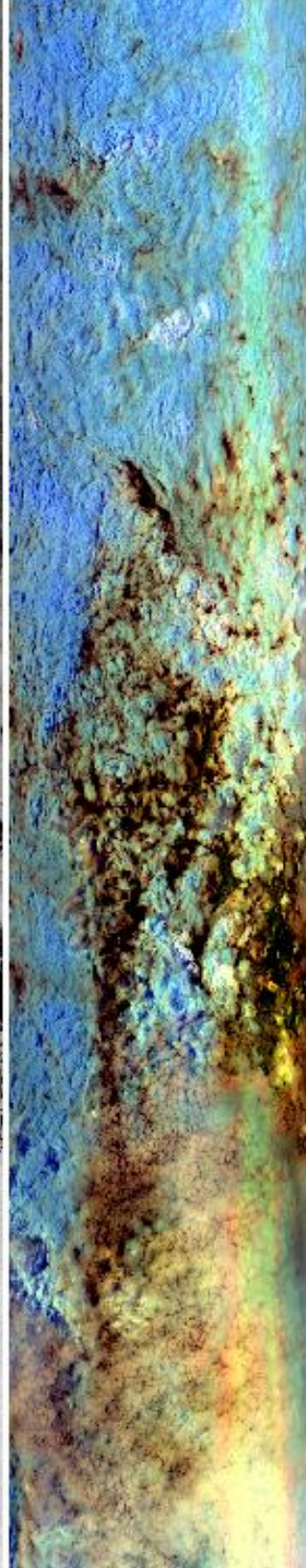
10:57:00



10:58:00



11:01:00



10:53:00

10:55:00

10:57:00

10:58:00

11:01:00

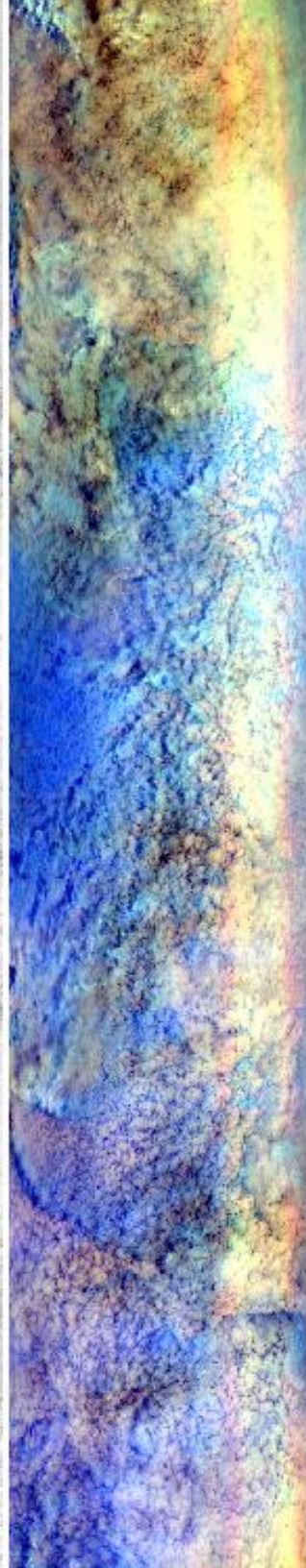
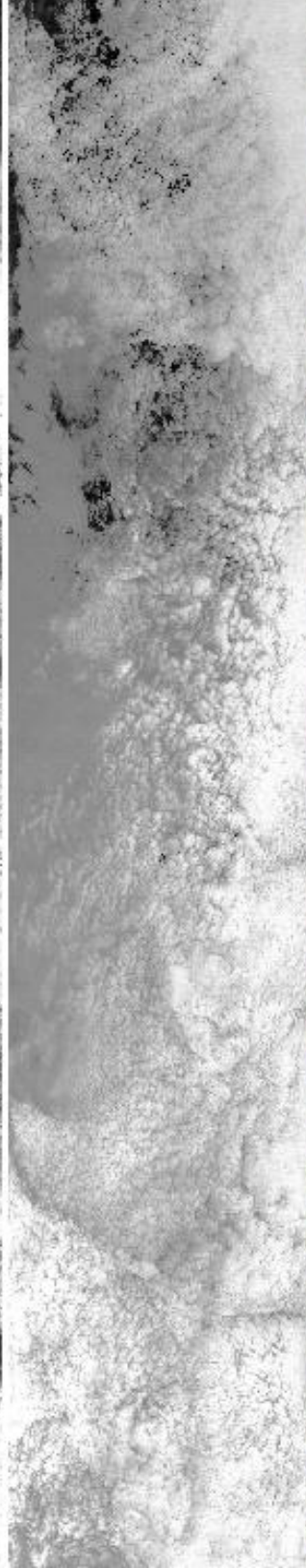
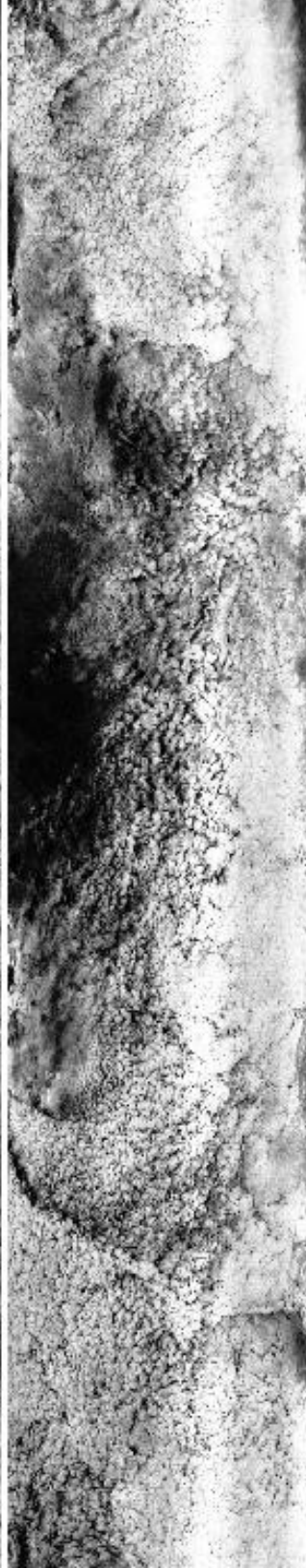
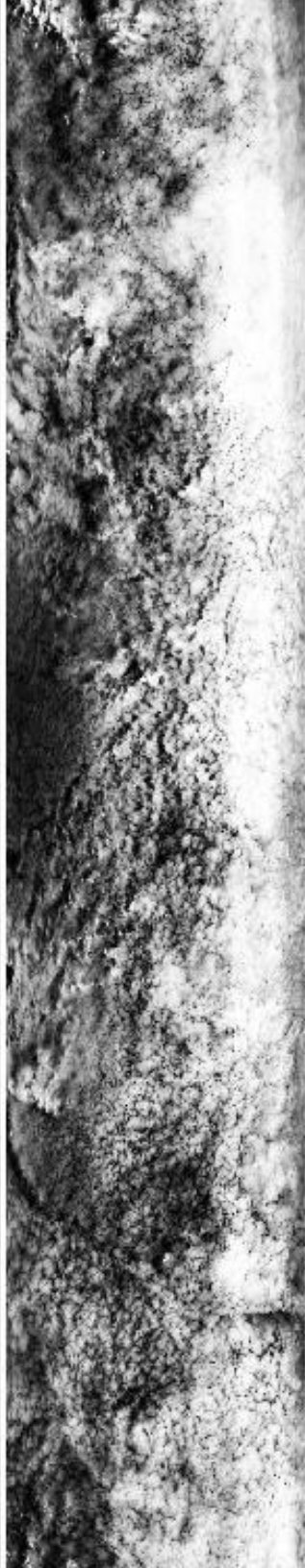
11:01:00

11:03:00

11:05:00

11:07:00

11:08:00



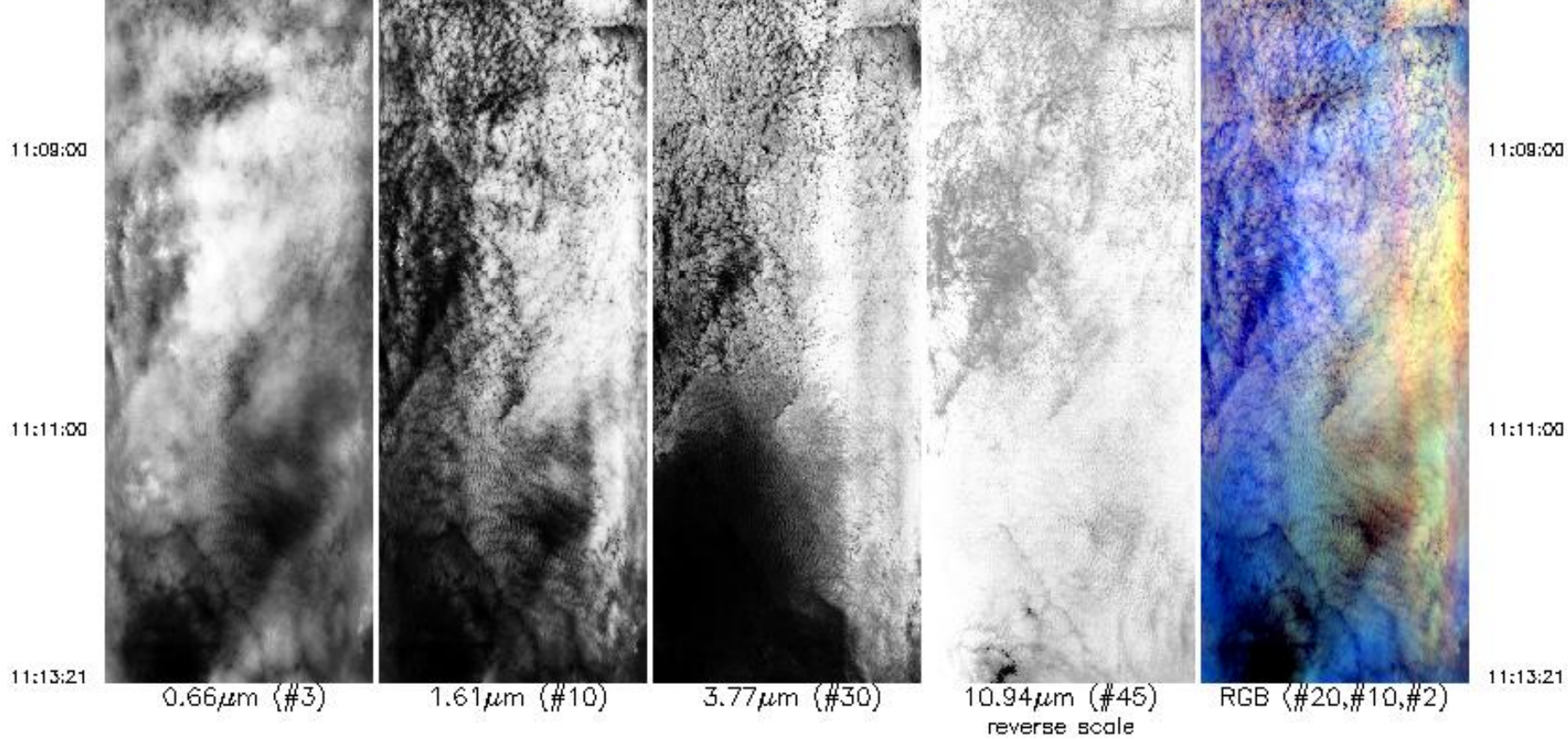
11:01:00

11:03:00

11:05:00

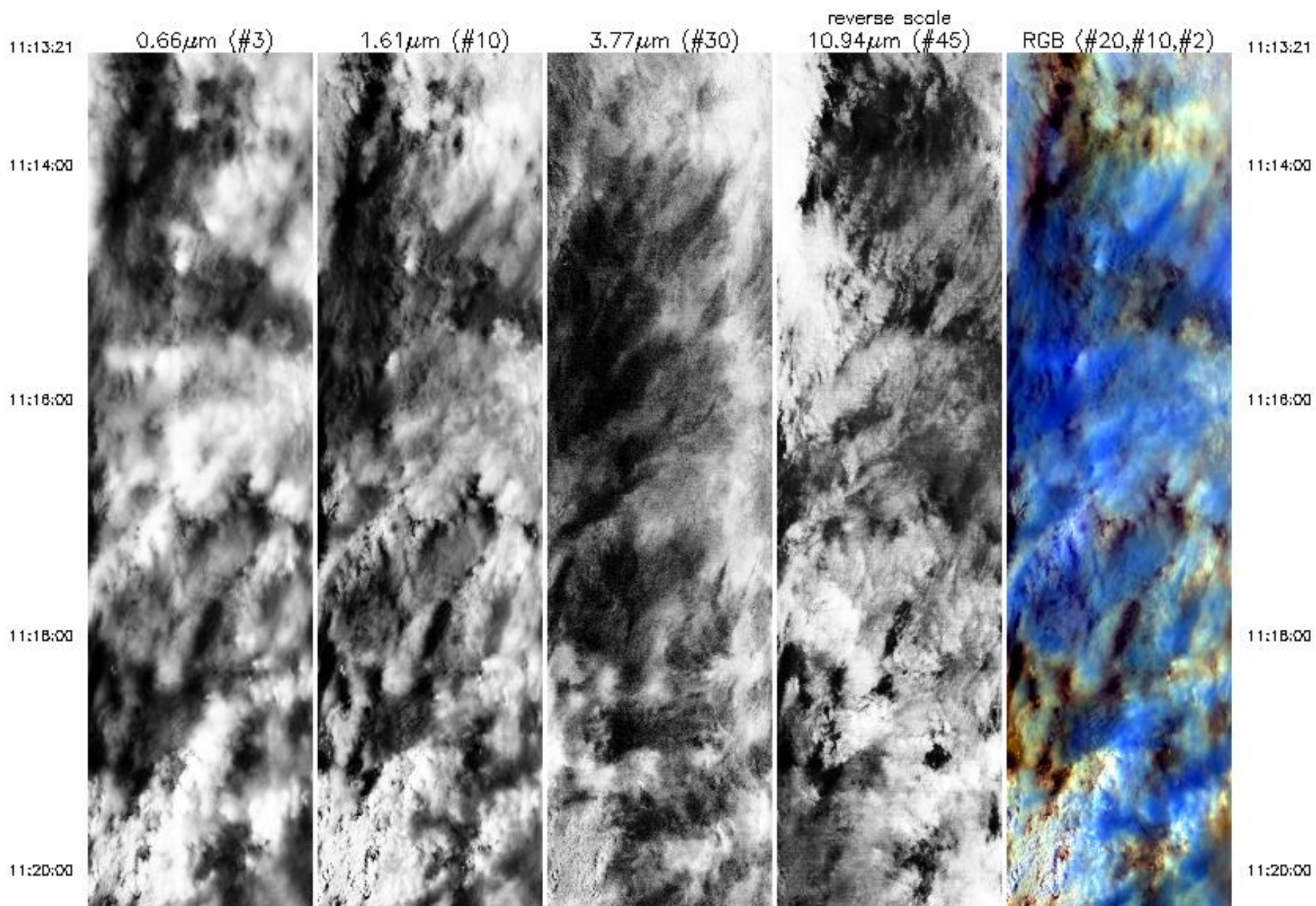
11:07:00

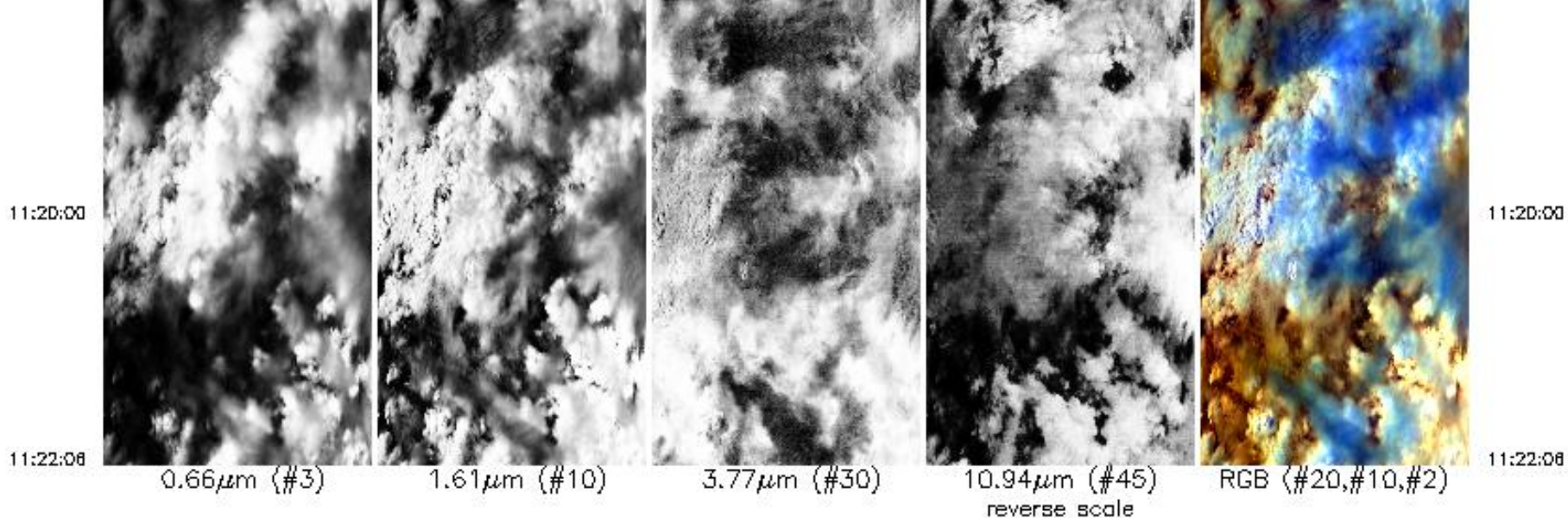
11:08:00



Upper Left Lat, Lon = -21.6° , 32.7°
 Lower Right Lat, Lon = -24.0° , 30.7°
 Aircraft Heading = 224.2°
 Solar Zenith = 27.1°
 GPS Altitude = 18999. m (MSL)

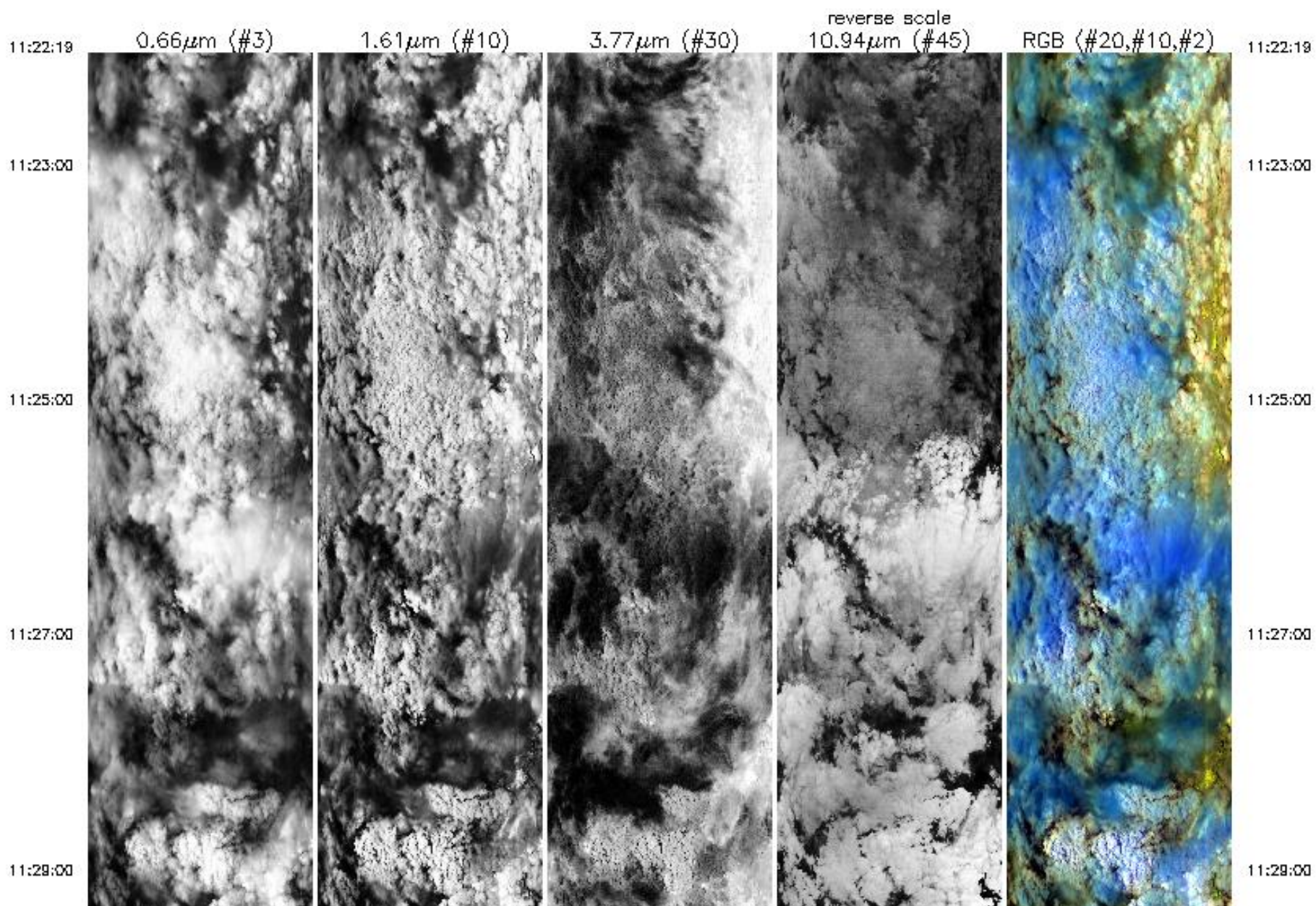
MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
South Africa
Flight #00-178 Track #11





Upper Left Lat, Lon = -23.8° , 30.4°
 Lower Right Lat, Lon = -24.7° , 30.0°
 Aircraft Heading = 222.4°
 Solar Zenith = 31.5°
 GPS Altitude = 19059. m (MSL)

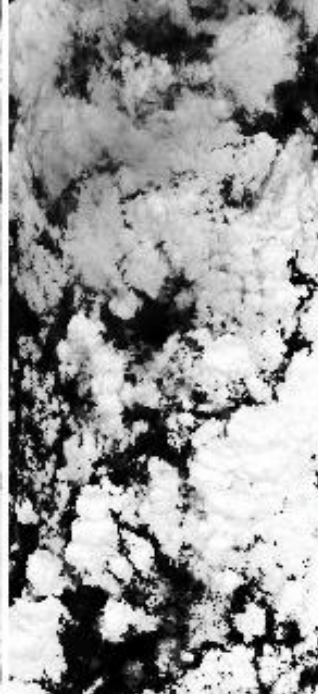
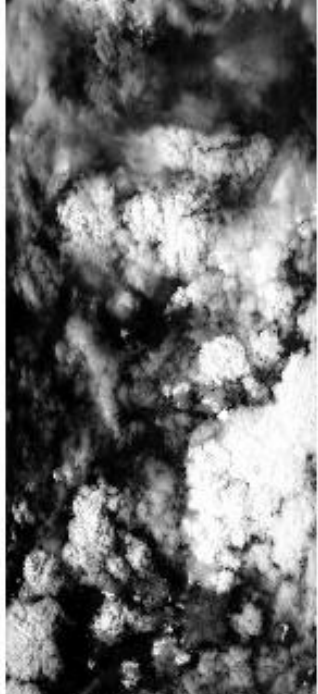
MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
South Africa
Flight #00-178 Track #12



11:29:00

11:31:00

11:32:04



11:29:00

11:31:00

11:32:04

0.66µm (#3)

1.61µm (#10)

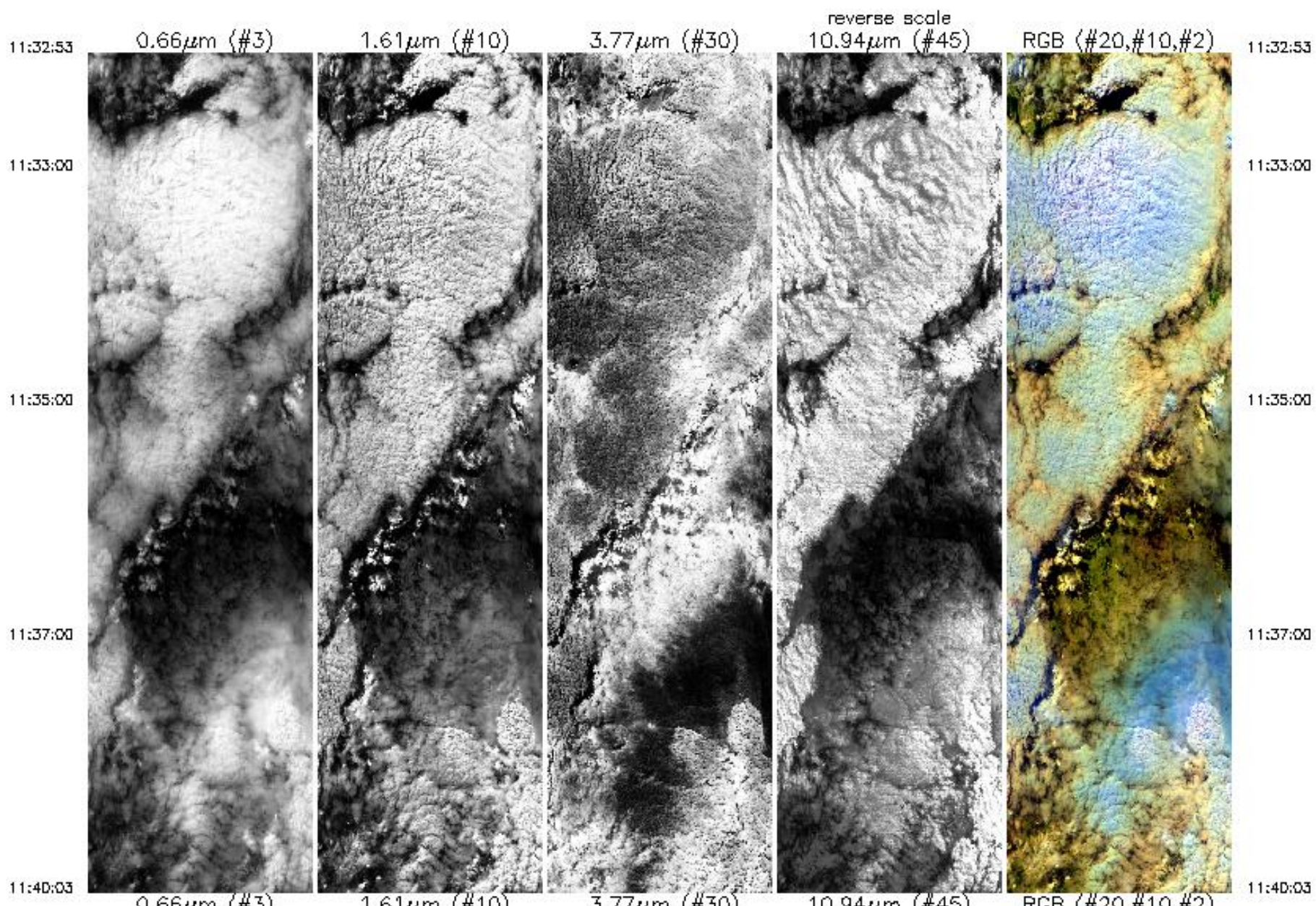
3.77µm (#30)

10.94µm (#45)
reverse scale

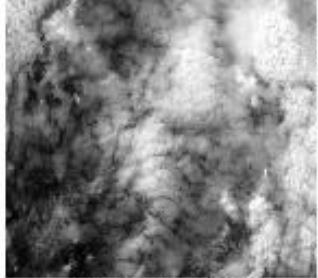
RGB (#20,#10,#2)

Upper Left Lat, Lon = -24.5°, 29.7°
 Lower Right Lat, Lon = -25.5°, 29.1°
 Aircraft Heading = 226.3°
 Solar Zenith = 32.9°
 GPS Altitude = 19046. m (MSL)

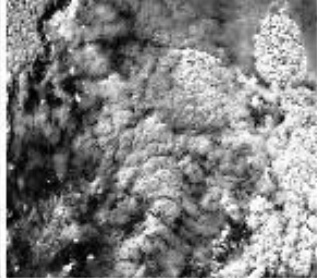
MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
South Africa
Flight #00-178 Track #13



11:40:03



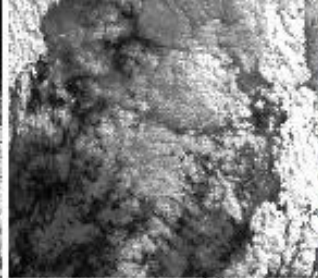
0.66 μm (#3)



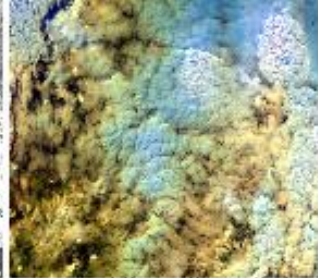
1.61 μm (#10)



3.77 μm (#30)



10.94 μm (#45)
reverse scale

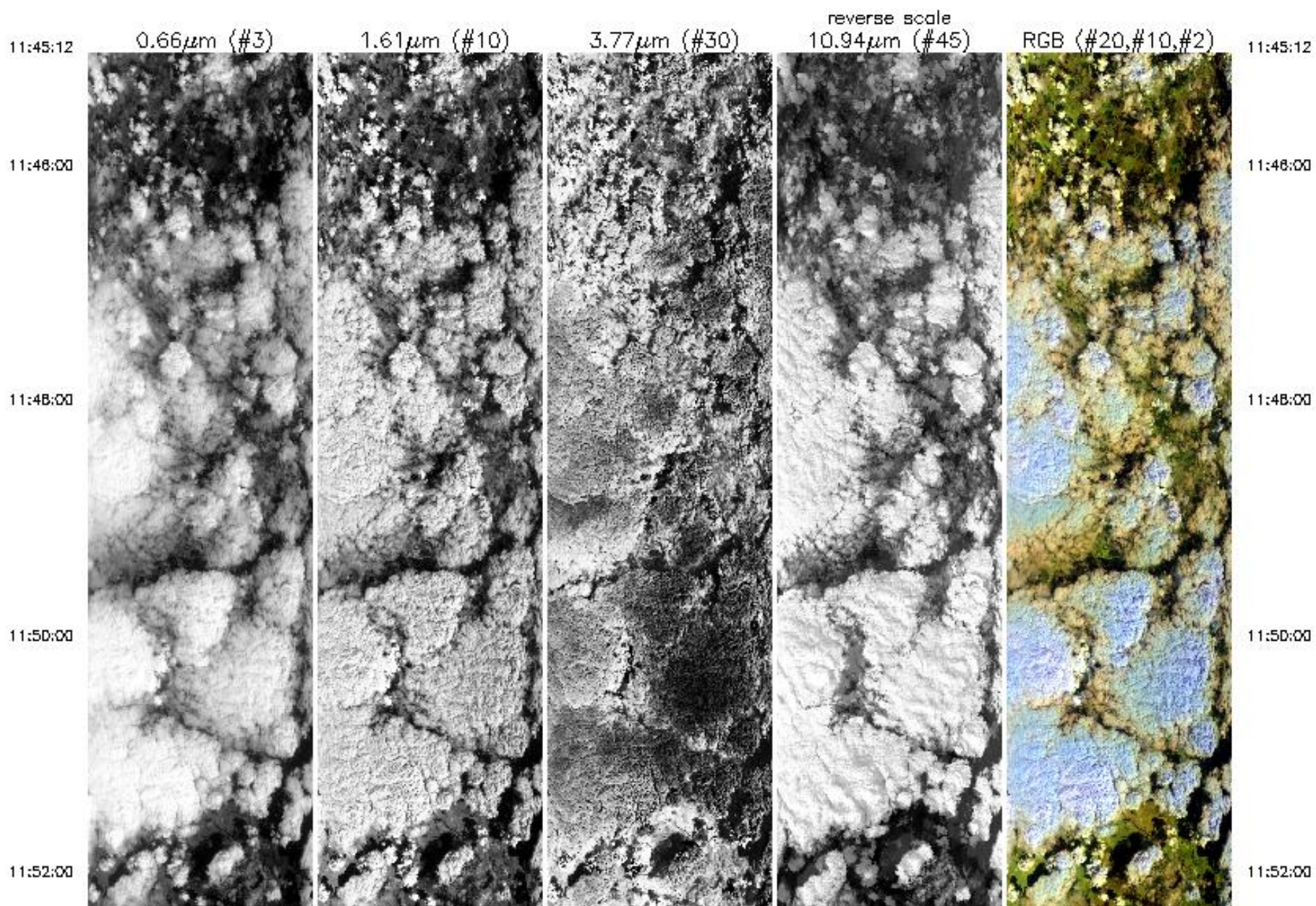


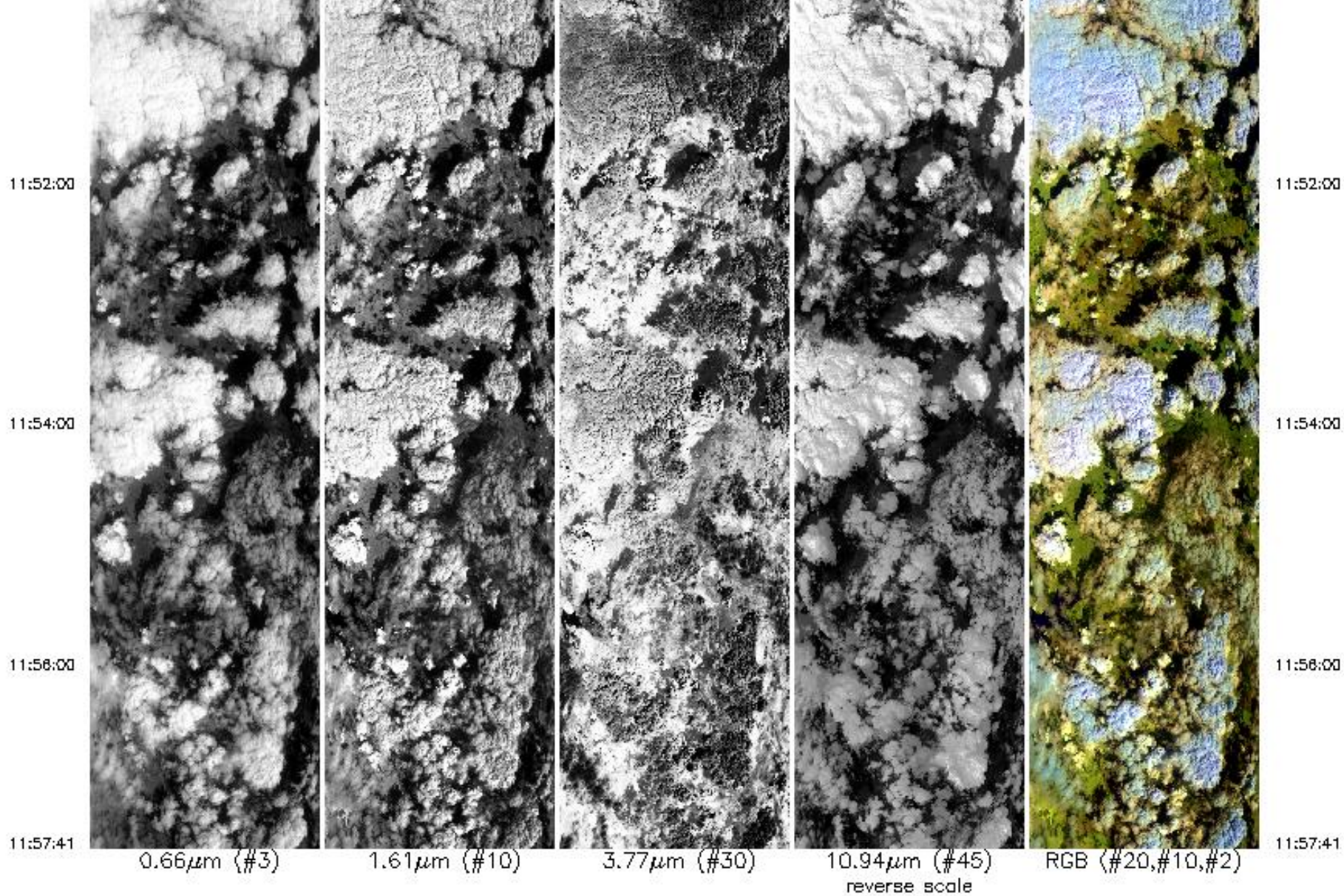
RGB (#20,#10,#2)

11:40:03

Upper Left Lat, Lon = -25.5° , 28.8°
Lower Right Lat, Lon = -26.2° , 29.3°
Aircraft Heading = 165.8°
Solar Zenith = 34.7°
GPS Altitude = 19035. m (MSL)

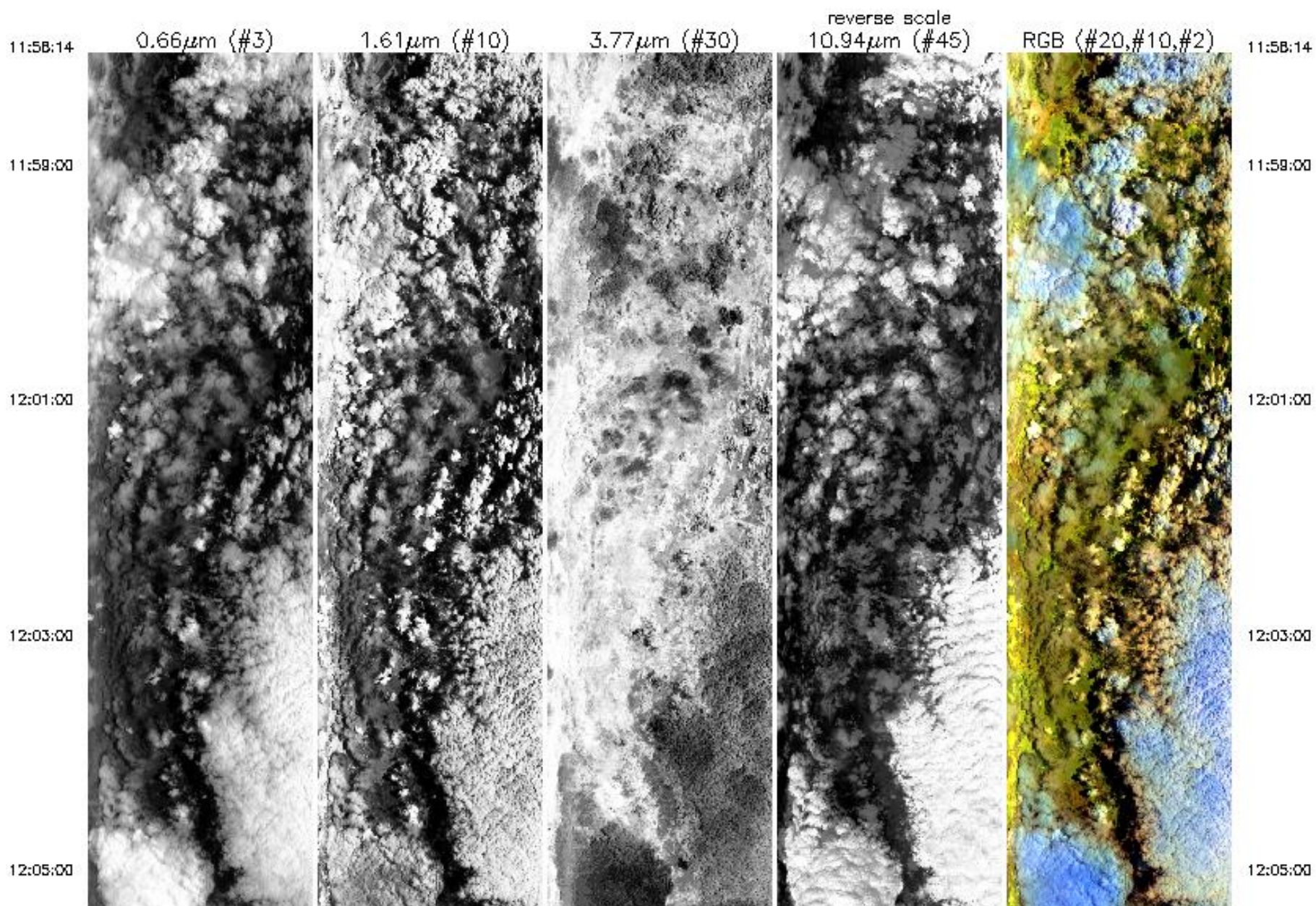
MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
South Africa
Flight #00-178 Track #14





Upper Left Lat, Lon = -26.3° , 28.9°
 Lower Right Lat, Lon = -24.9° , 28.6°
 Aircraft Heading = 359.9°
 Solar Zenith = 37.3°
 GPS Altitude = 19061. m (MSL)

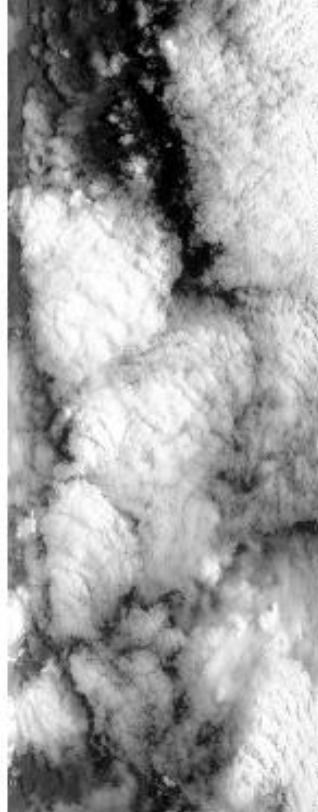
MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
South Africa
Flight #00-178 Track #15



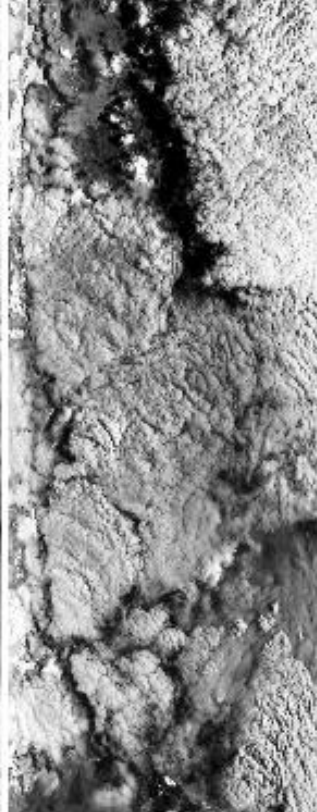
12:05:00

12:07:00

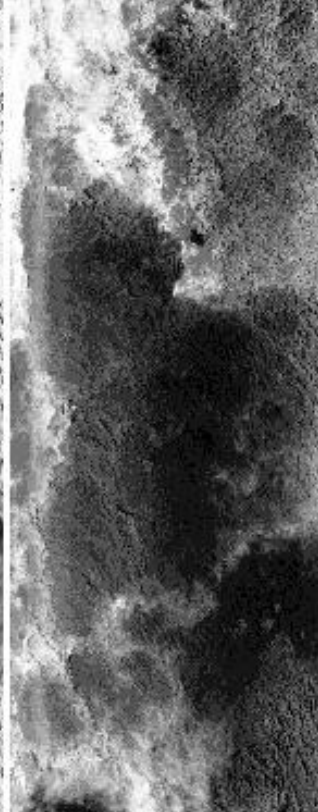
12:08:42



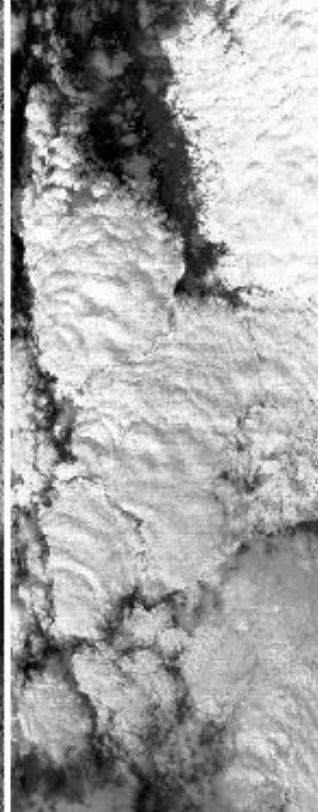
0.66 μ m (#3)



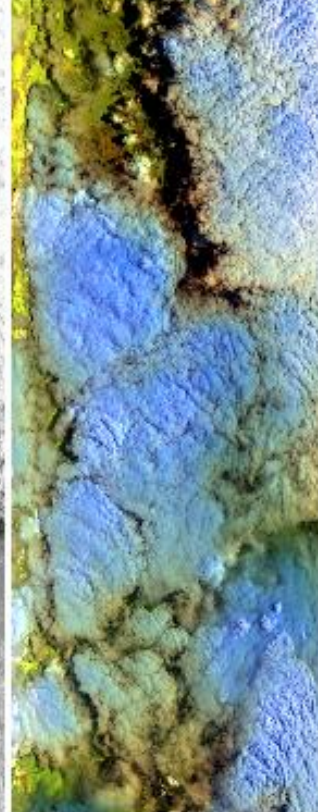
1.61 μ m (#10)



3.77 μ m (#30)



10.94 μ m (#45)
reverse scale



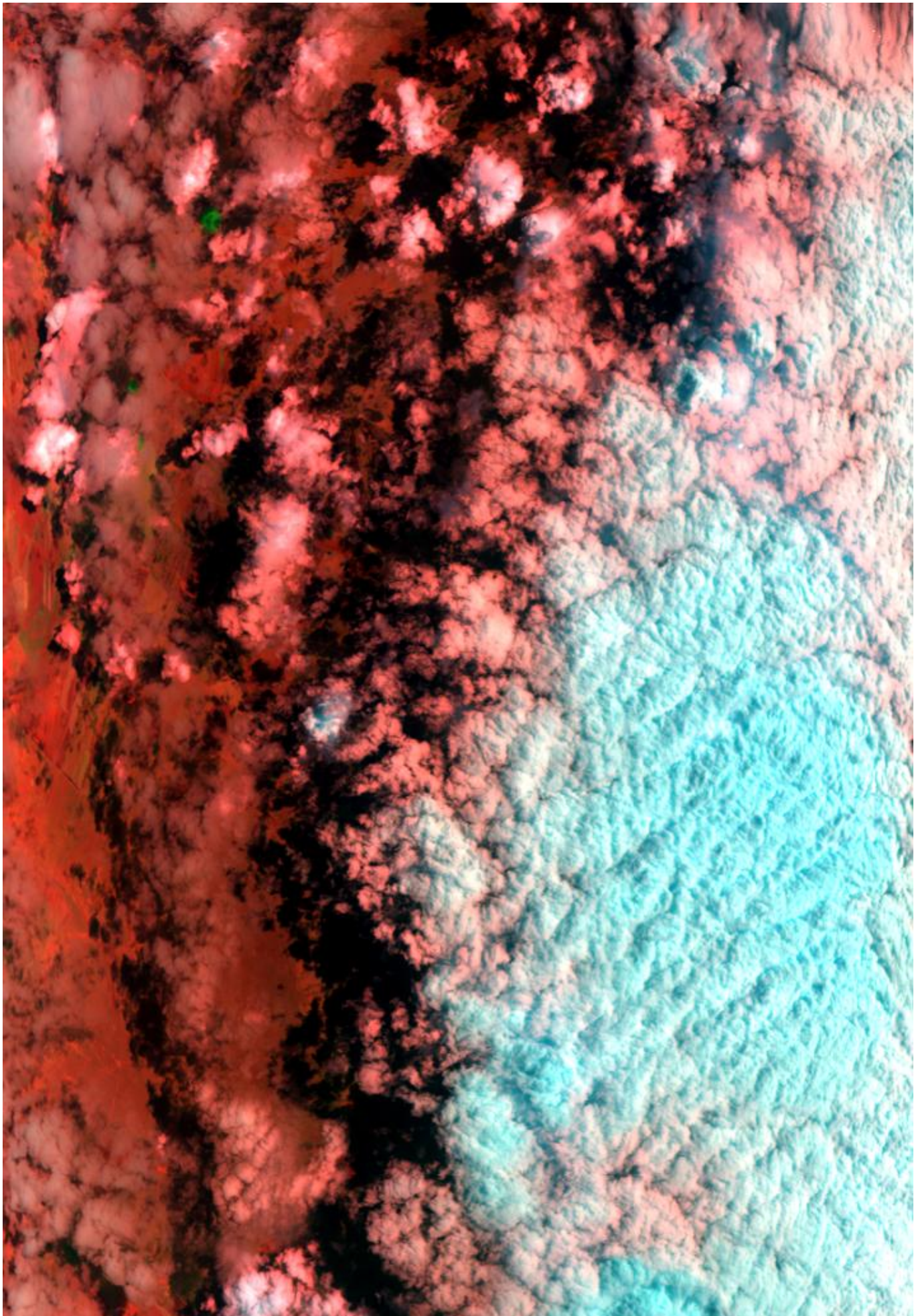
RGB (#20,#10,#2)

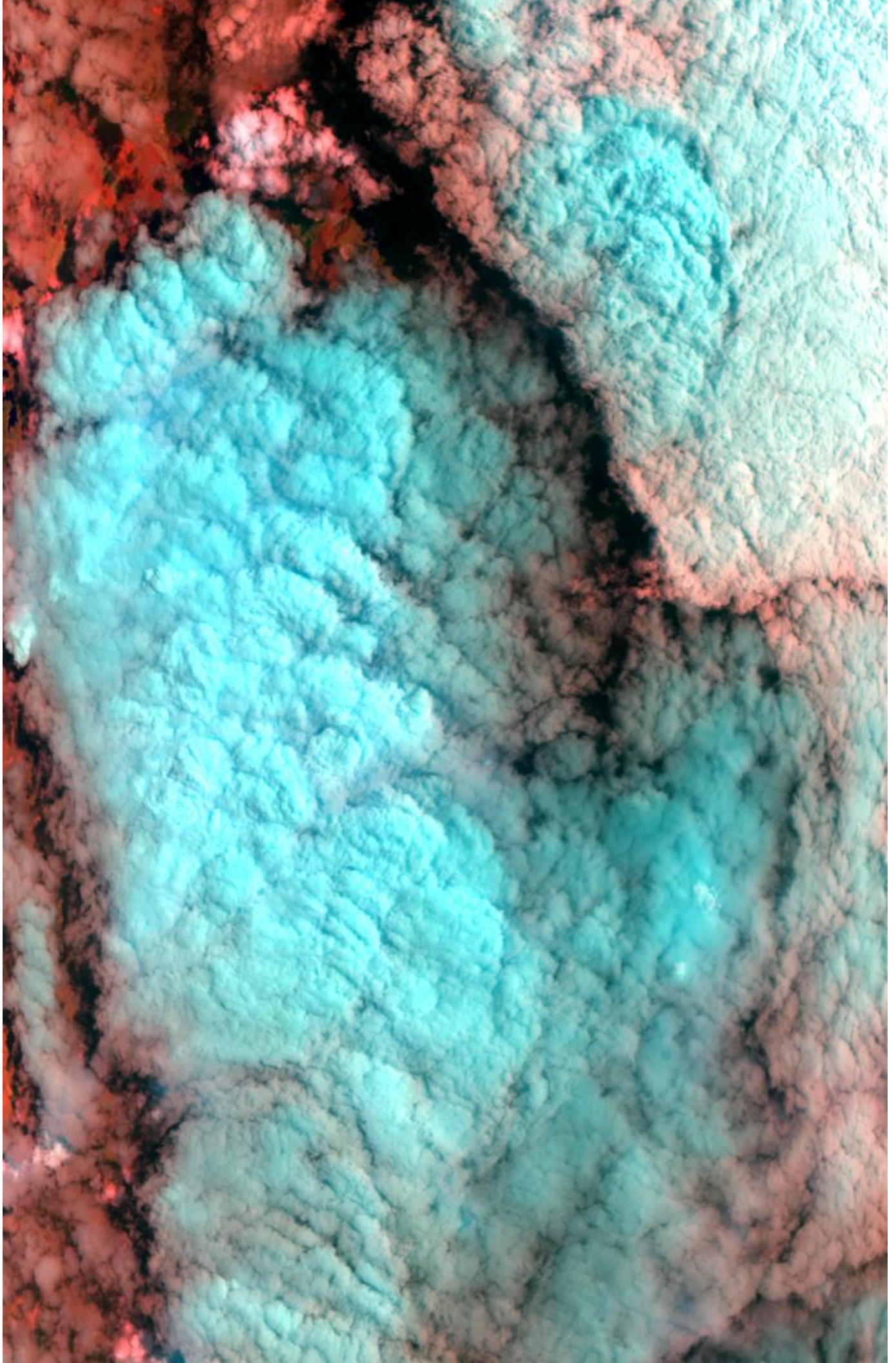
12:05:00

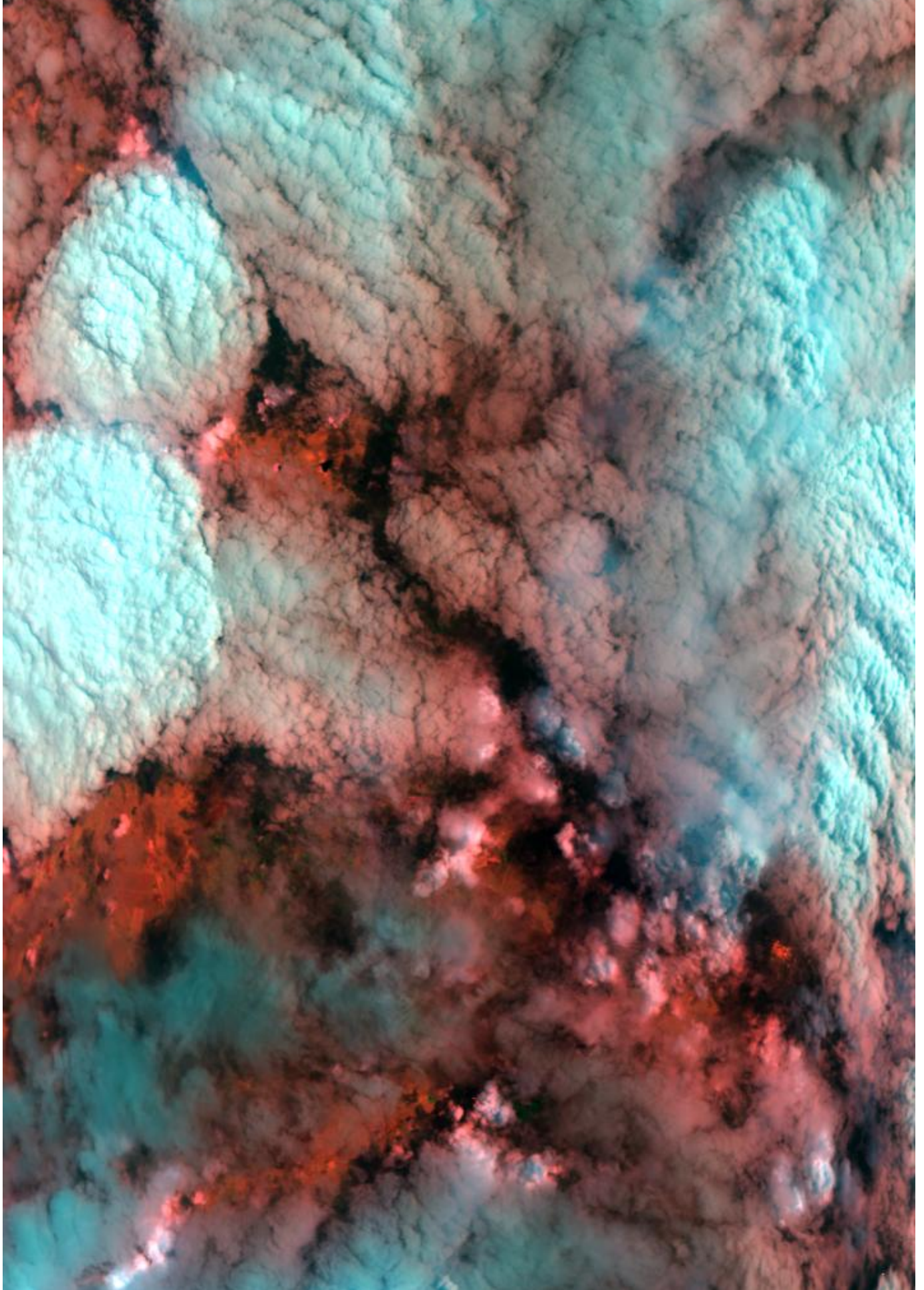
12:07:00

12:08:42

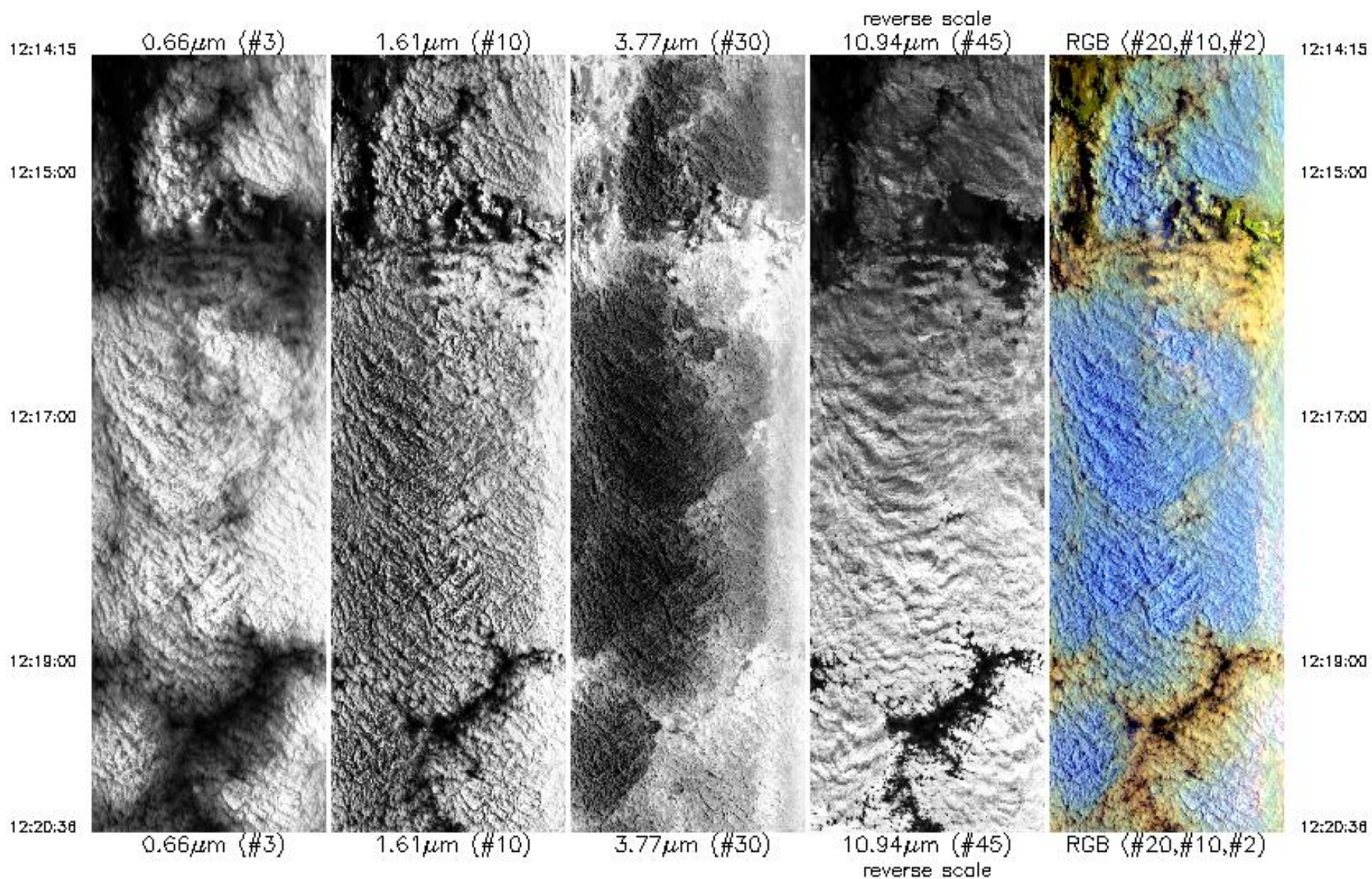
Upper Left Lat, Lon = -24.9°, 28.9°
 Lower Right Lat, Lon = -23.8°, 29.3°
 Aircraft Heading = 31.9°
 Solar Zenith = 38.8°
 GPS Altitude = 18831. m (MSL)







MODIS Airborne Simulator Browse Imagery
 SAFARI 2000 Campaign – 21 Sep 2000
 South Africa
 Flight #00-178 Track #16



Upper Left Lat, Lon = -23.6° , 29.0°
 Lower Right Lat, Lon = -24.3° , 28.8°

12:20:38



0.66 μm (#3)



1.61 μm (#10)



3.77 μm (#30)



10.94 μm (#45)
reverse scale

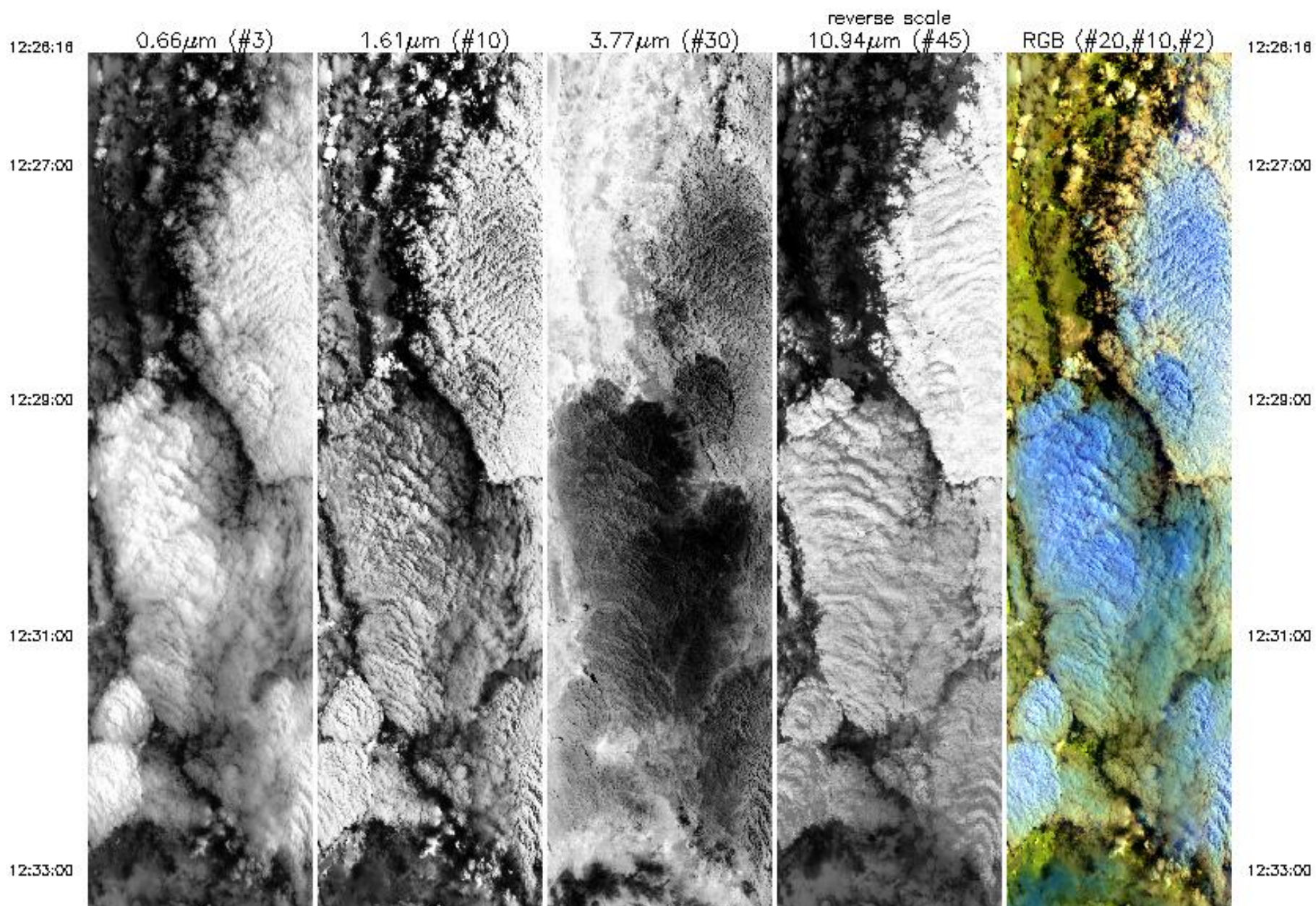


RGB (#20,#10,#2)

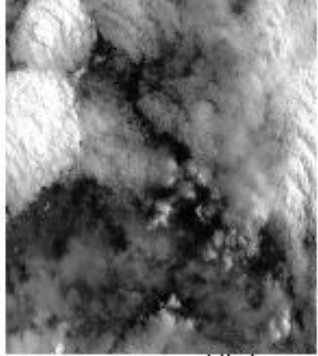
12:20:38

Upper Left Lat, Lon = -23.6° , 29.0°
Lower Right Lat, Lon = -24.3° , 28.8°
Aircraft Heading = 217.1°
Solar Zenith = 41.1°
GPS Altitude = 18735. m (MSL)

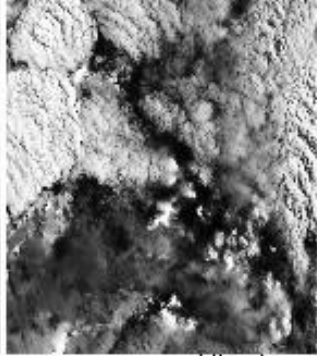
MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
South Africa
Flight #00-178 Track #17



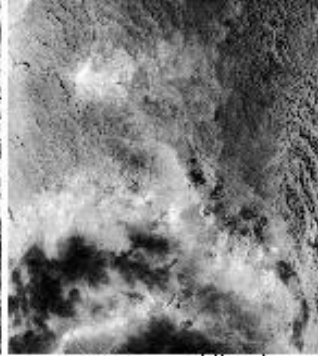
12:33:00



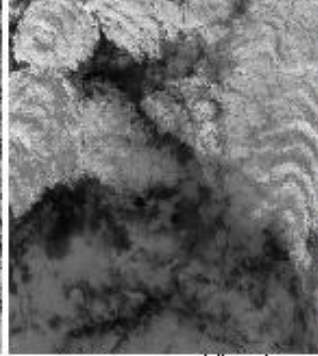
0.66 μm (#3)



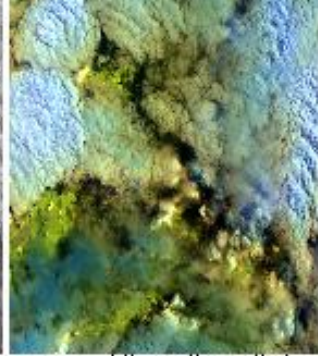
1.61 μm (#10)



3.77 μm (#30)



10.94 μm (#45)
reverse scale



RGB (#20,#10,#2)

12:33:53

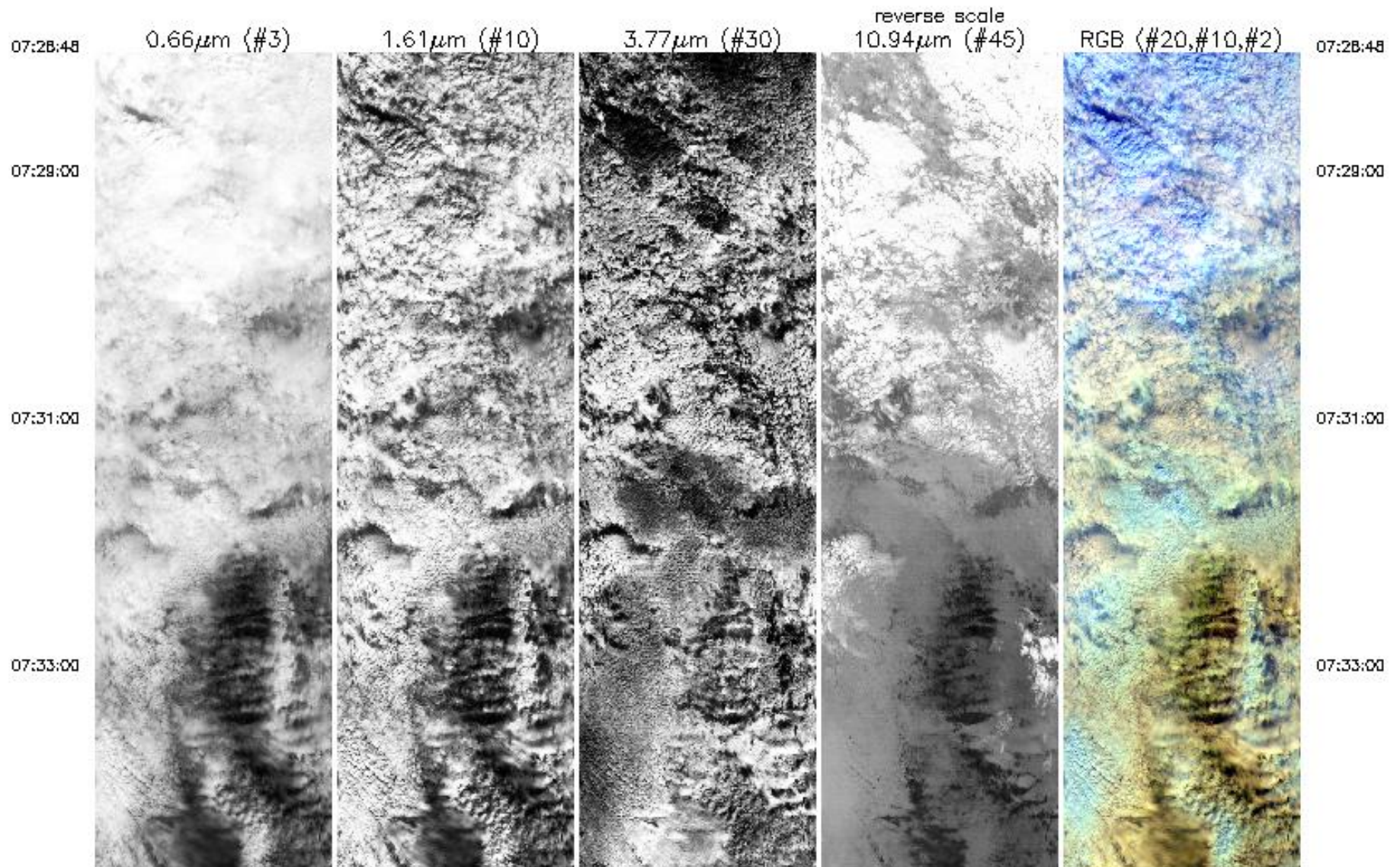
12:33:00

12:33:53

Upper Left Lat, Lon = -24.6° , 29.1°
Lower Right Lat, Lon = -23.7° , 29.4°
Aircraft Heading = 35.7°
Solar Zenith = 44.1°
GPS Altitude = 18651. m (MSL)

Flight #00-178 Browse Imagery

MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
Mozambique
Flight #00-178 Track #1



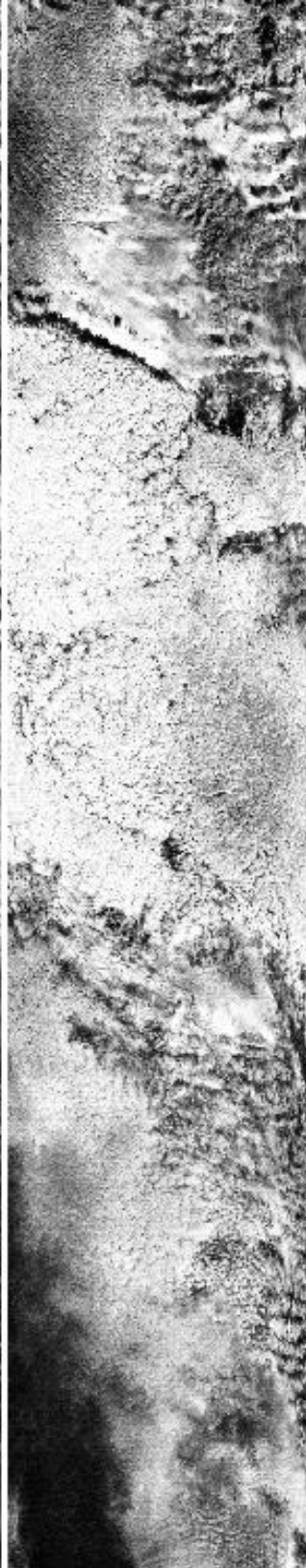
07:33:00



07:35:00



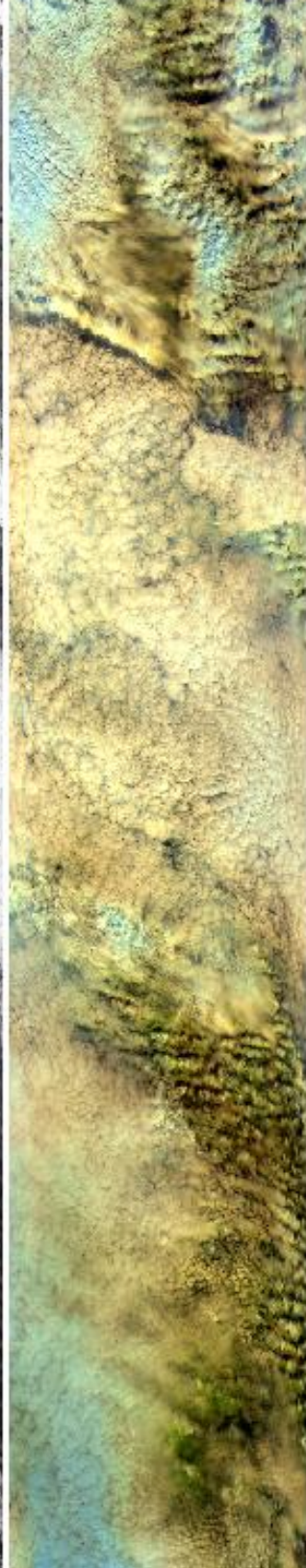
07:37:00



07:39:00



07:41:00



07:33:00

07:35:00

07:37:00

07:39:00

07:41:00

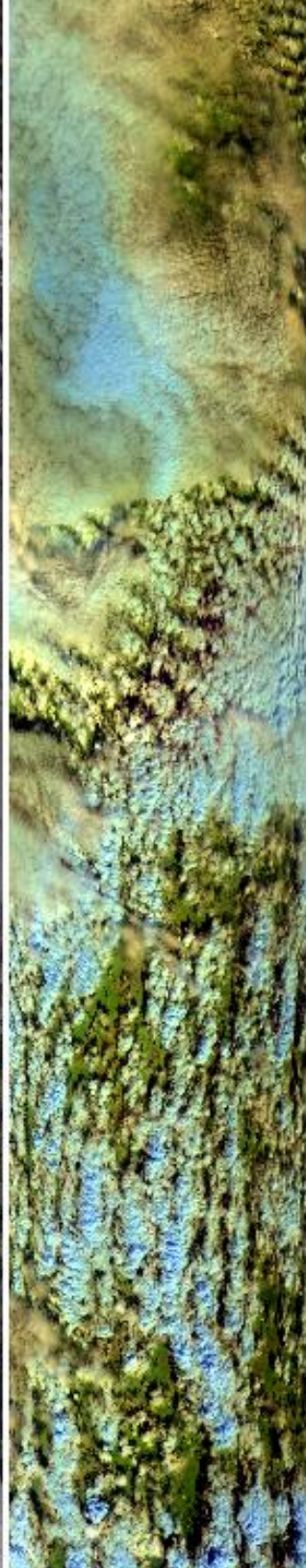
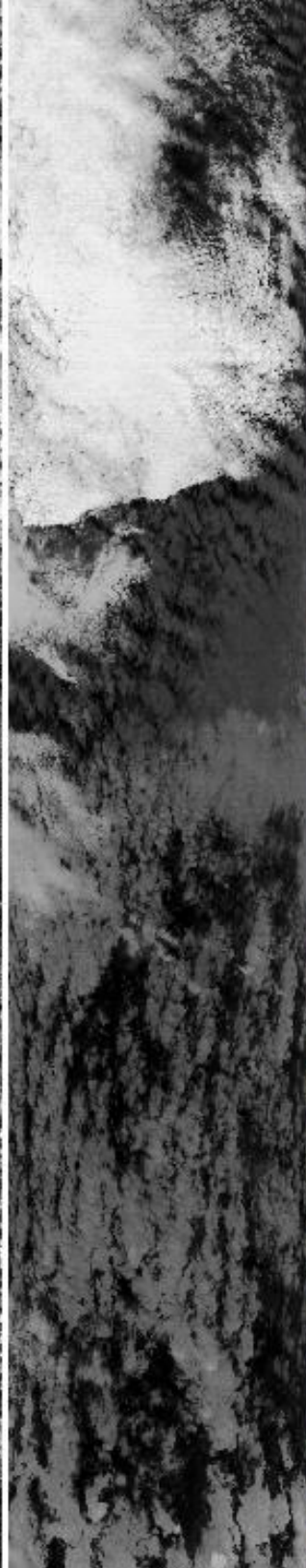
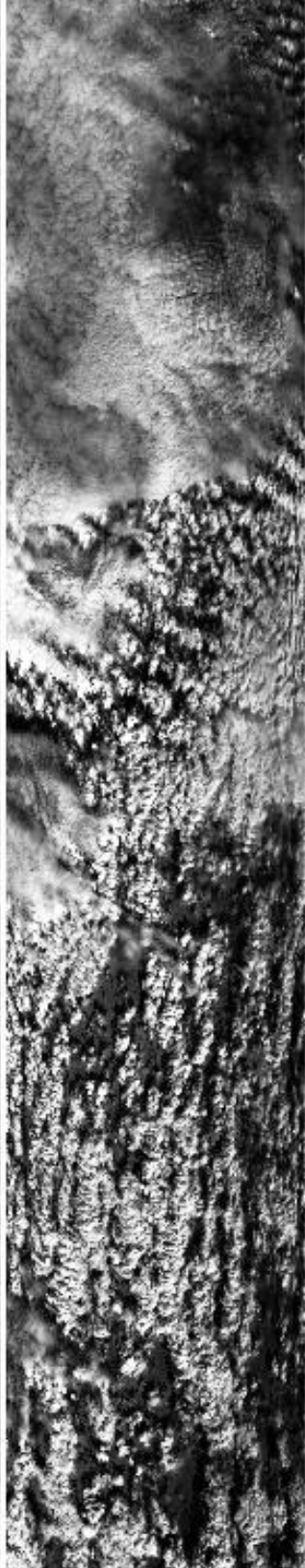
07:43:00

07:45:00

07:47:00

07:49:00

07:51:00



07:43:00

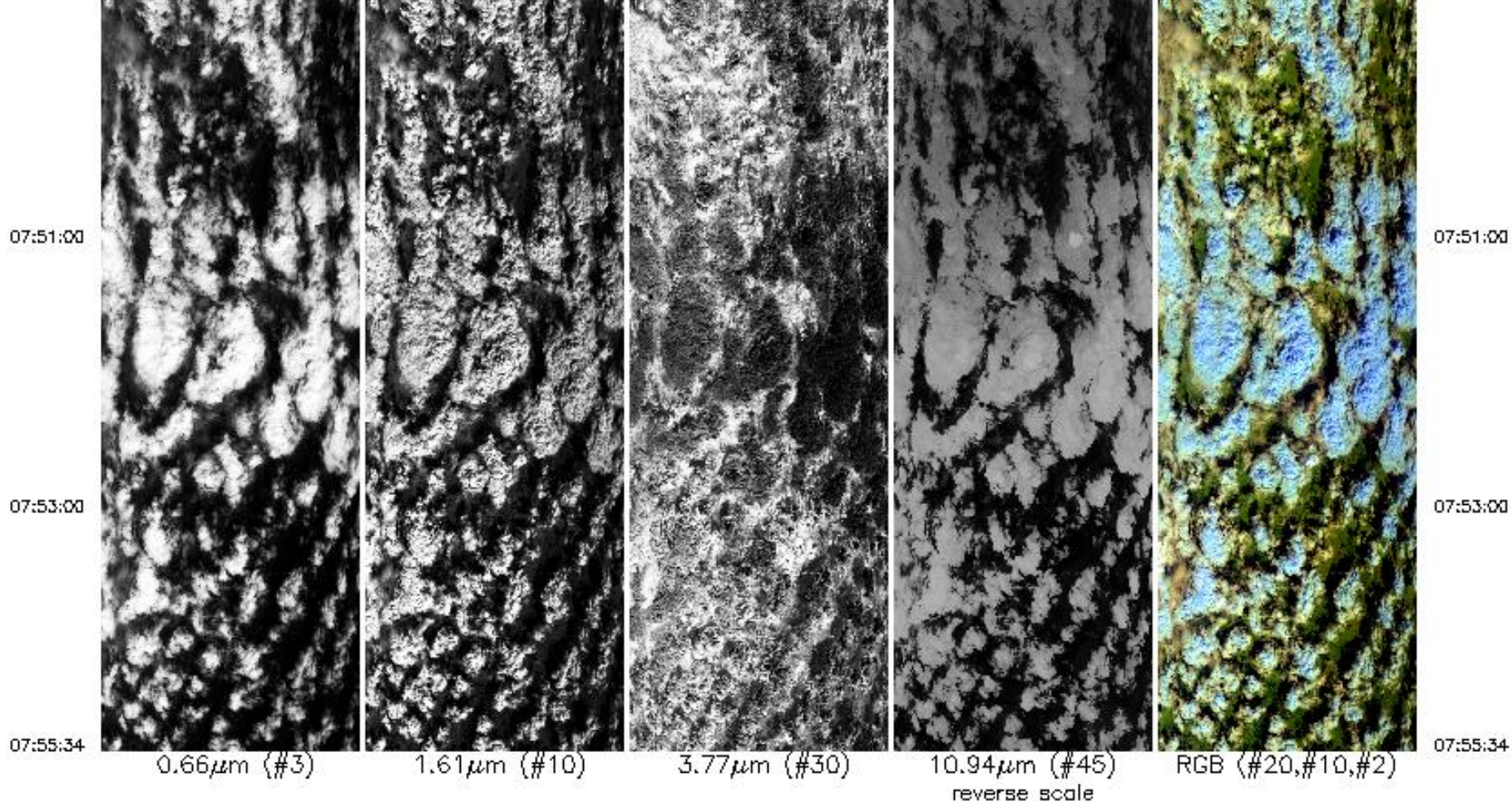
07:45:00

07:47:00

07:49:00

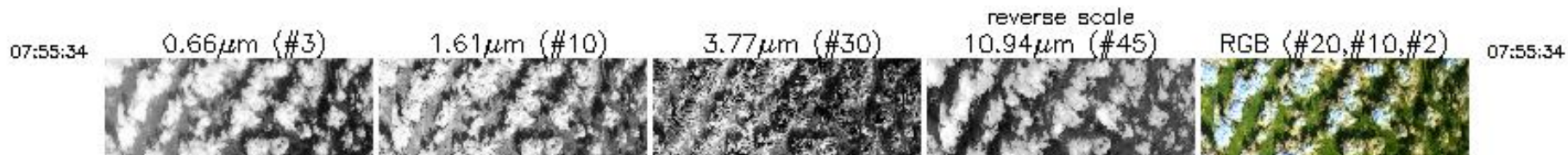
07:51:00



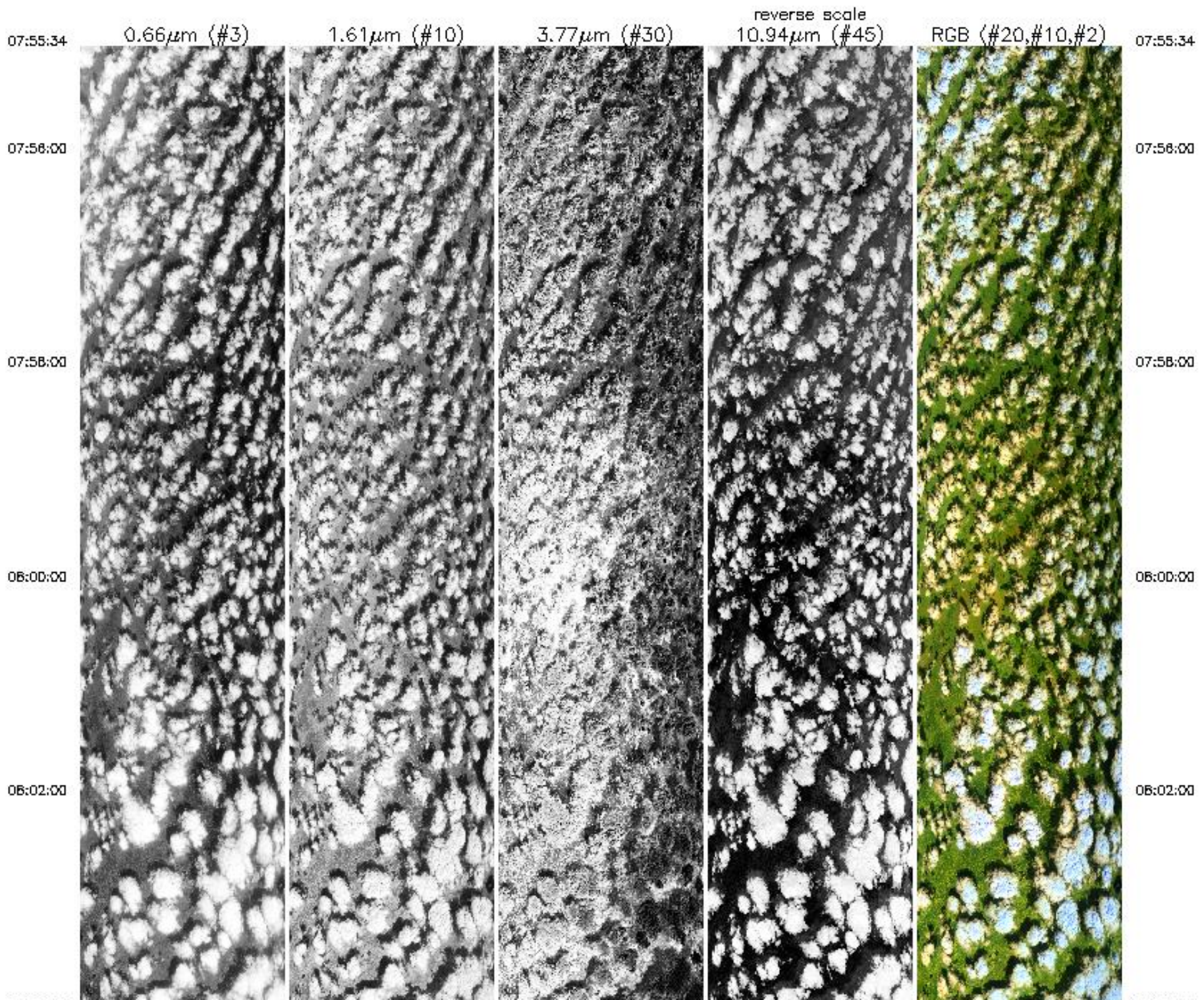


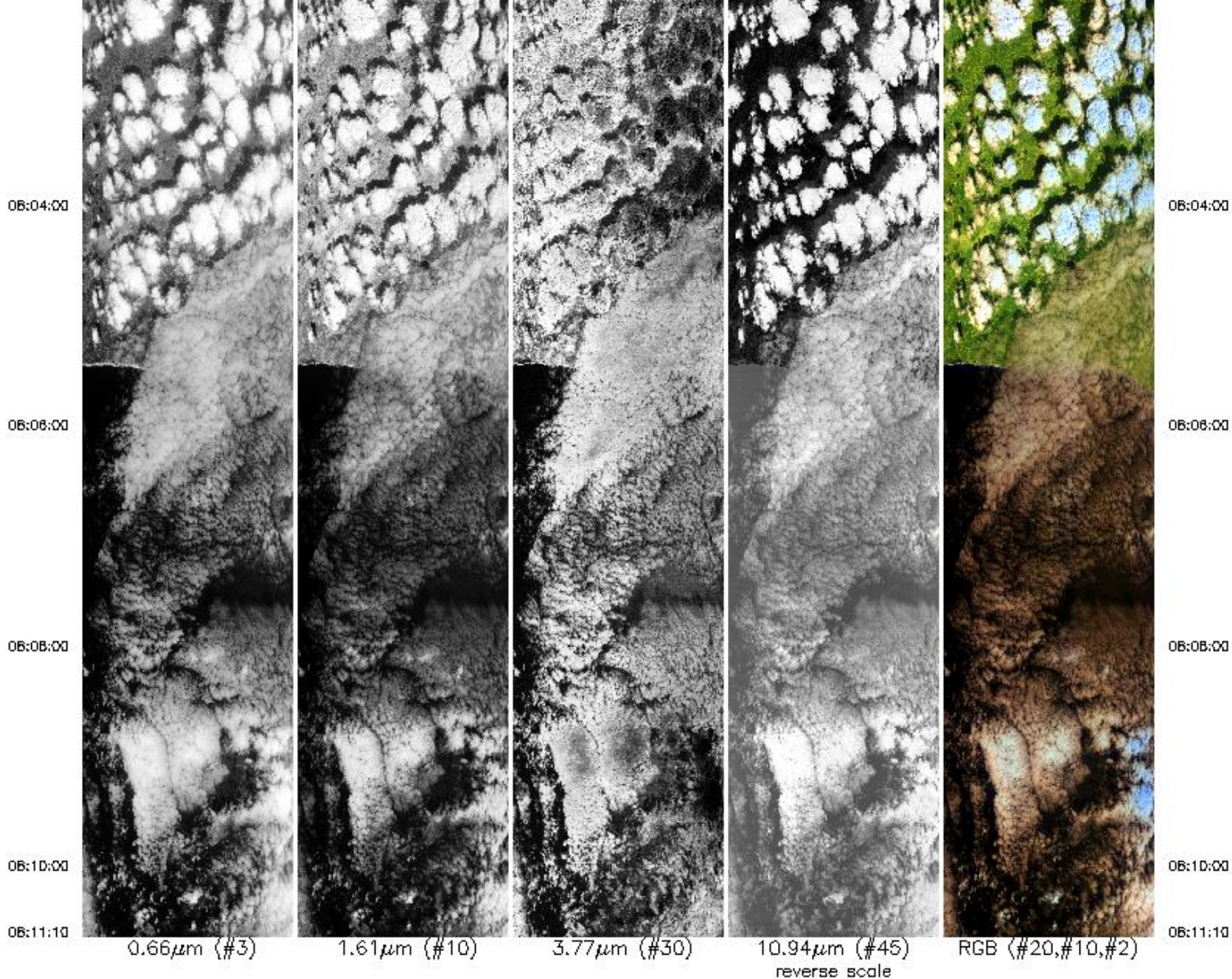
Upper Left Lat, Lon = -23.1° , 31.1°
 Lower Right Lat, Lon = -22.6° , 34.3°
 Aircraft Heading = 87.8°
 Solar Zenith = 41.3°
 GPS Altitude = 18977. m (MSL)

MODIS Airborne Simulator Browse Imagery
 SAFARI 2000 Campaign – 21 Sep 2000
 Mozambique/I. Ocean
 Flight #00-178 Track #2



Flight #00-178 Track #2





Upper Left Lat, Lon = -22.9° , 34.3°
 Lower Right Lat, Lon = -22.5° , 36.1°
 Aircraft Heading = 85.9°
 Solar Zenith = 33.8°

06:11:10



0.66µm (#3)

1.61µm (#10)

3.77µm (#30)

10.94µm (#45)

RGB (#20,#10,#2)

06:11:10

reverse scale

Upper Left Lat, Lon = -22.9°, 34.3°

Lower Right Lat, Lon = -22.5°, 36.1°

Aircraft Heading = 85.9°

Solar Zenith = 33.8°

GPS Altitude = 19513. m (MSL)

MODIS Airborne Simulator Browse Imagery

SAFARI 2000 Campaign - 21 Sep 2000

Indian Ocean

Flight #00-178 Track #3

06:19:45

0.66µm (#3)

1.61µm (#10)

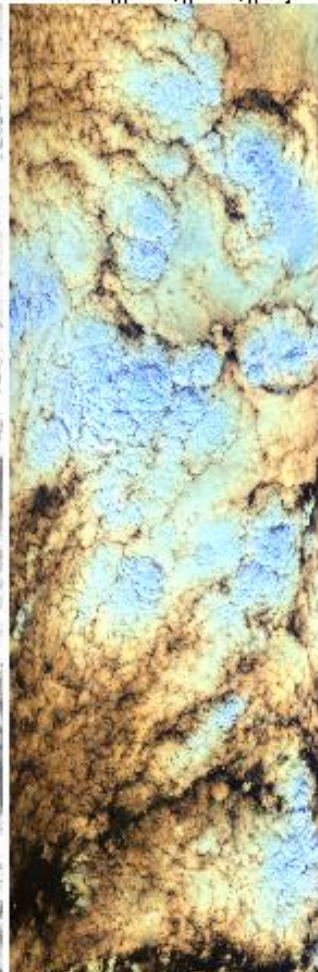
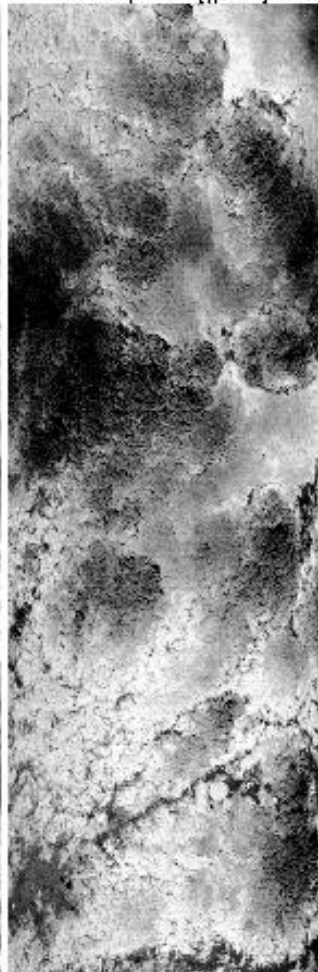
3.77µm (#30)

reverse scale
10.94µm (#45)

RGB (#20,#10,#2)

06:19:45

06:20:00



06:20:00

06:22:00

06:22:00

06:24:00

06:24:00

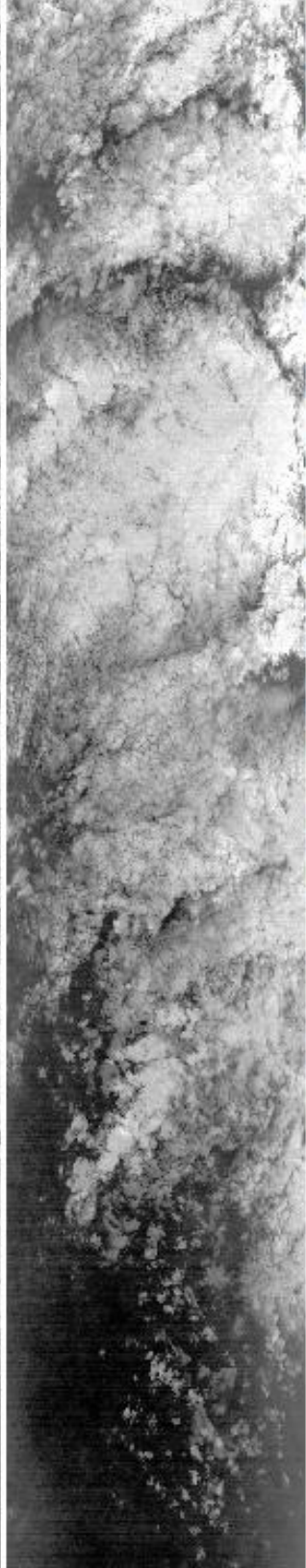
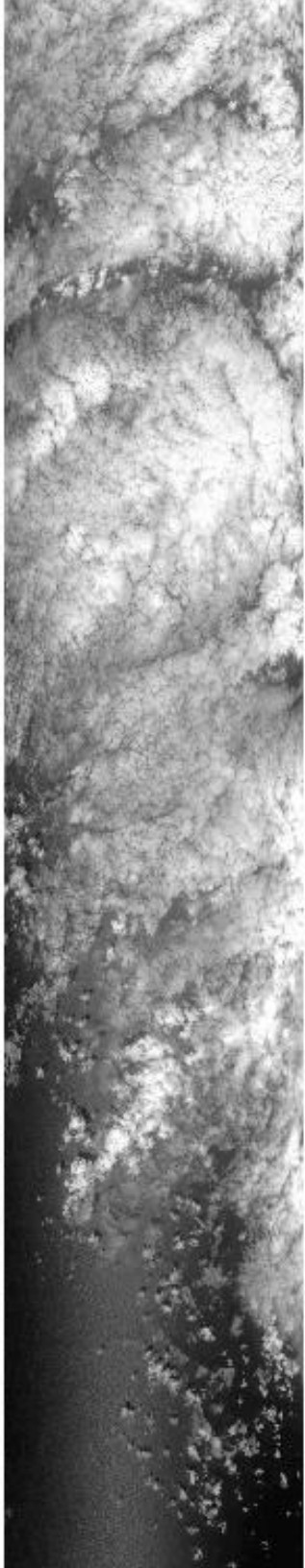
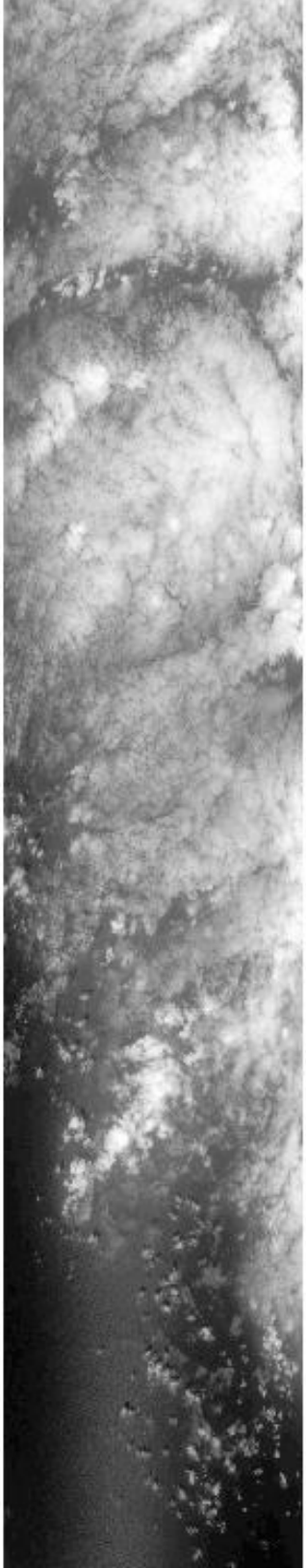
06:24:00

06:26:00

06:28:00

06:30:00

06:32:00



06:24:00

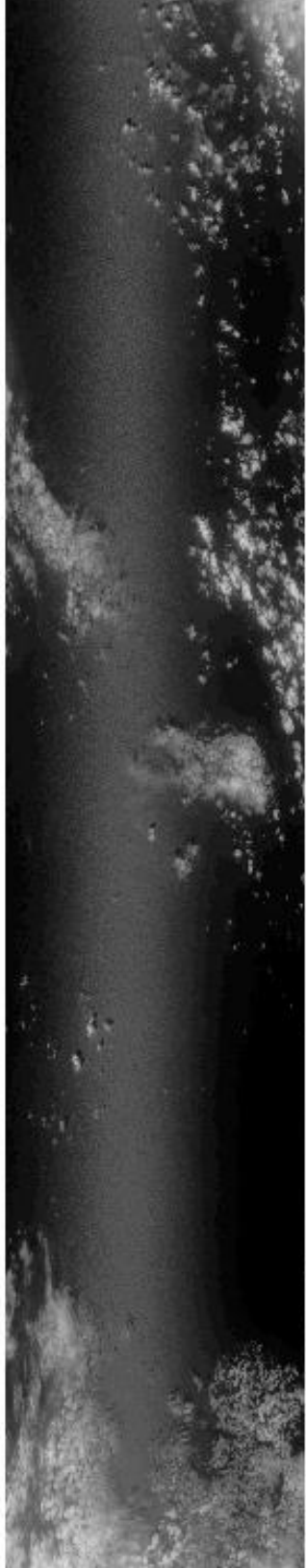
06:26:00

06:28:00

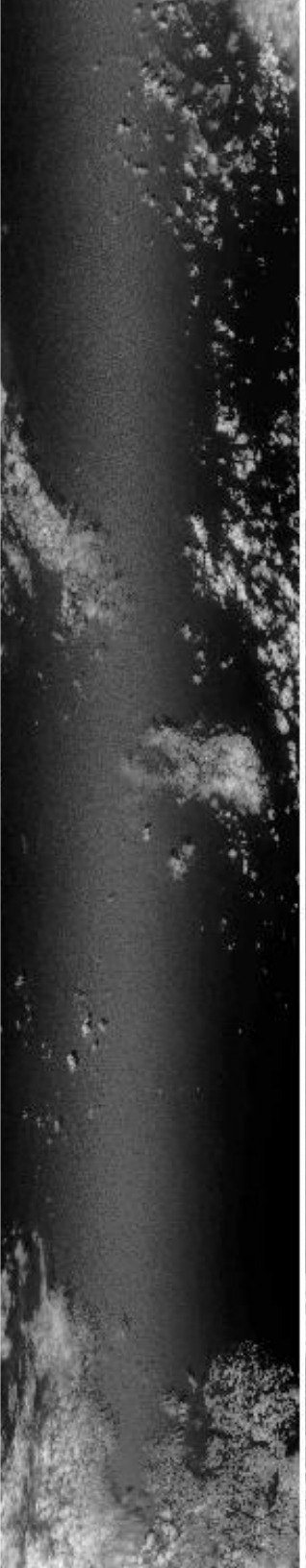
06:30:00

06:32:00

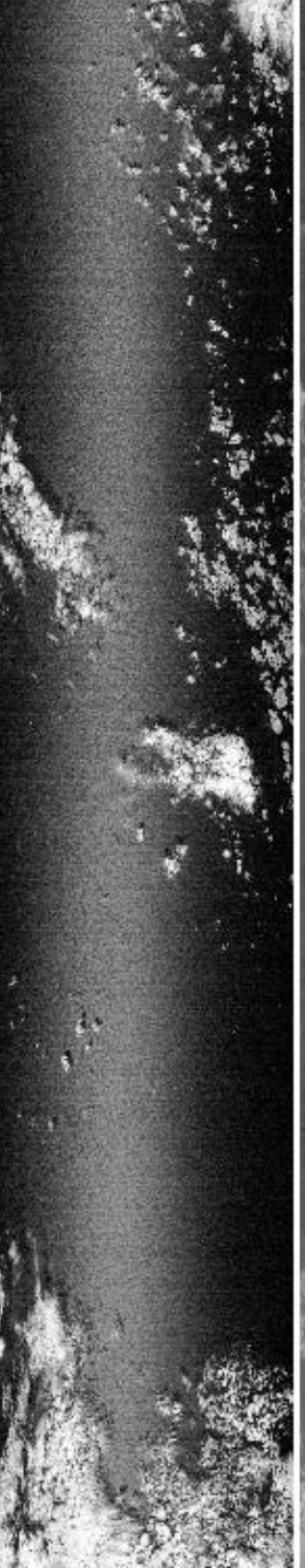
06:32:00



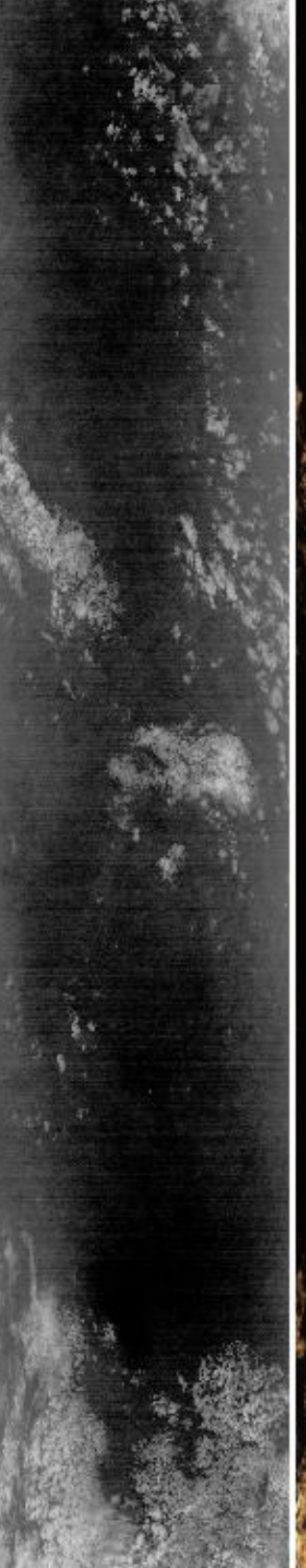
06:34:00



06:36:00



06:38:00



06:40:00



06:32:00

06:34:00

06:36:00

06:38:00

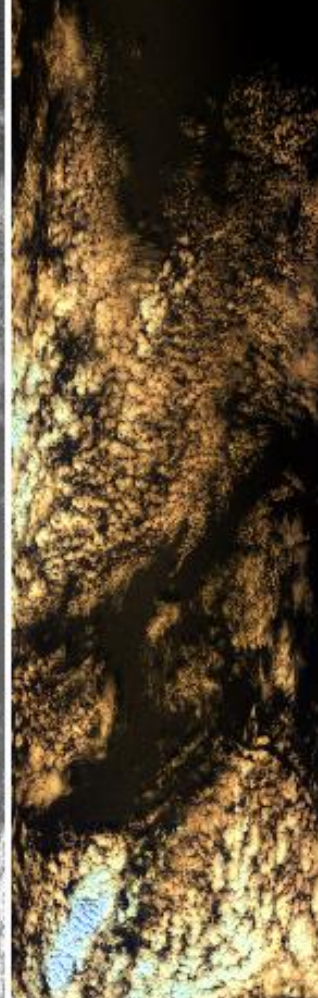
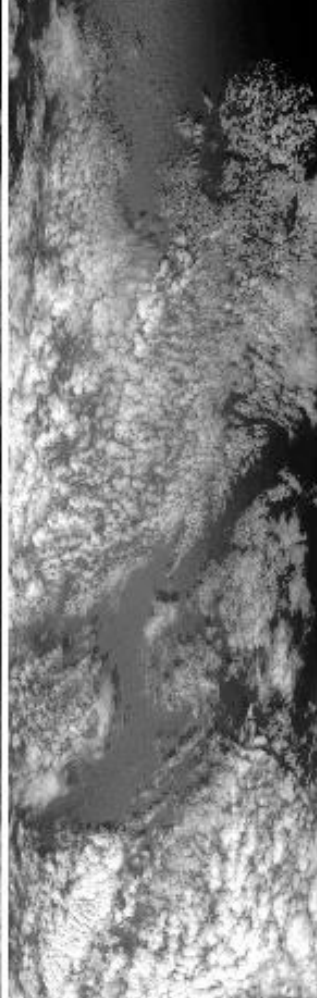
06:40:00

06:40:00

06:42:00

06:44:00

06:46:31



06:40:00

06:42:00

06:44:00

06:46:31

0.66µm (#3)

1.61µm (#10)

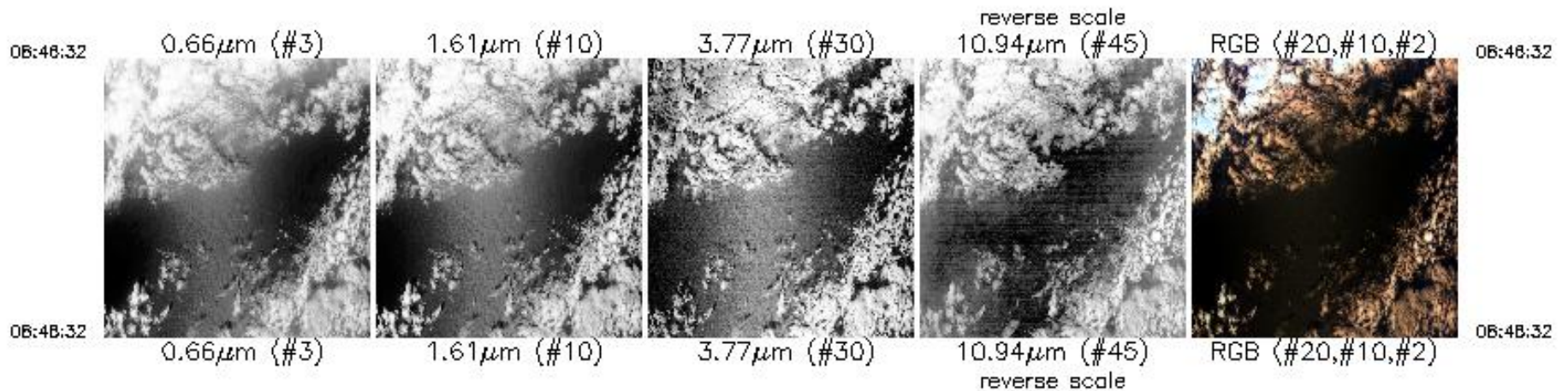
3.77µm (#30)

10.94µm (#45)
reverse scale

RGB (#20,#10,#2)

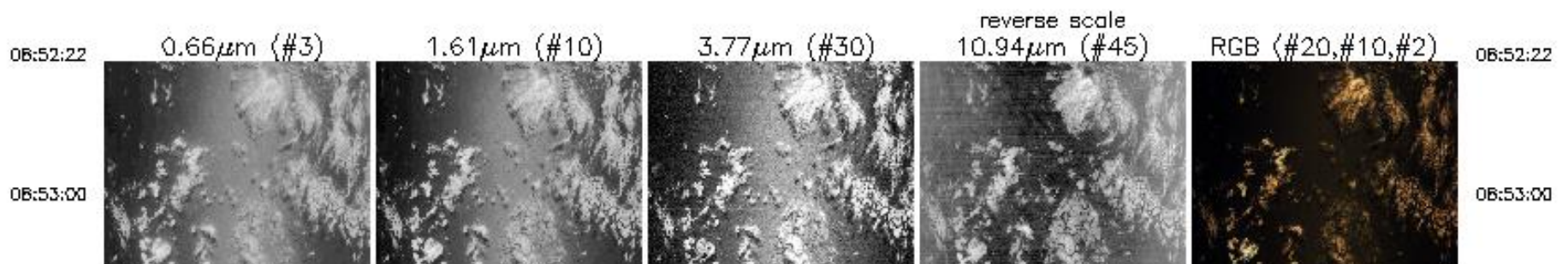
Upper Left Lat, Lon = -22.3°, 36.3°
 Lower Right Lat, Lon = -19.3°, 36.6°
 Aircraft Heading = 12.3°
 Solar Zenith = 28.2°
 GPS Altitude = 19535. m (MSL)

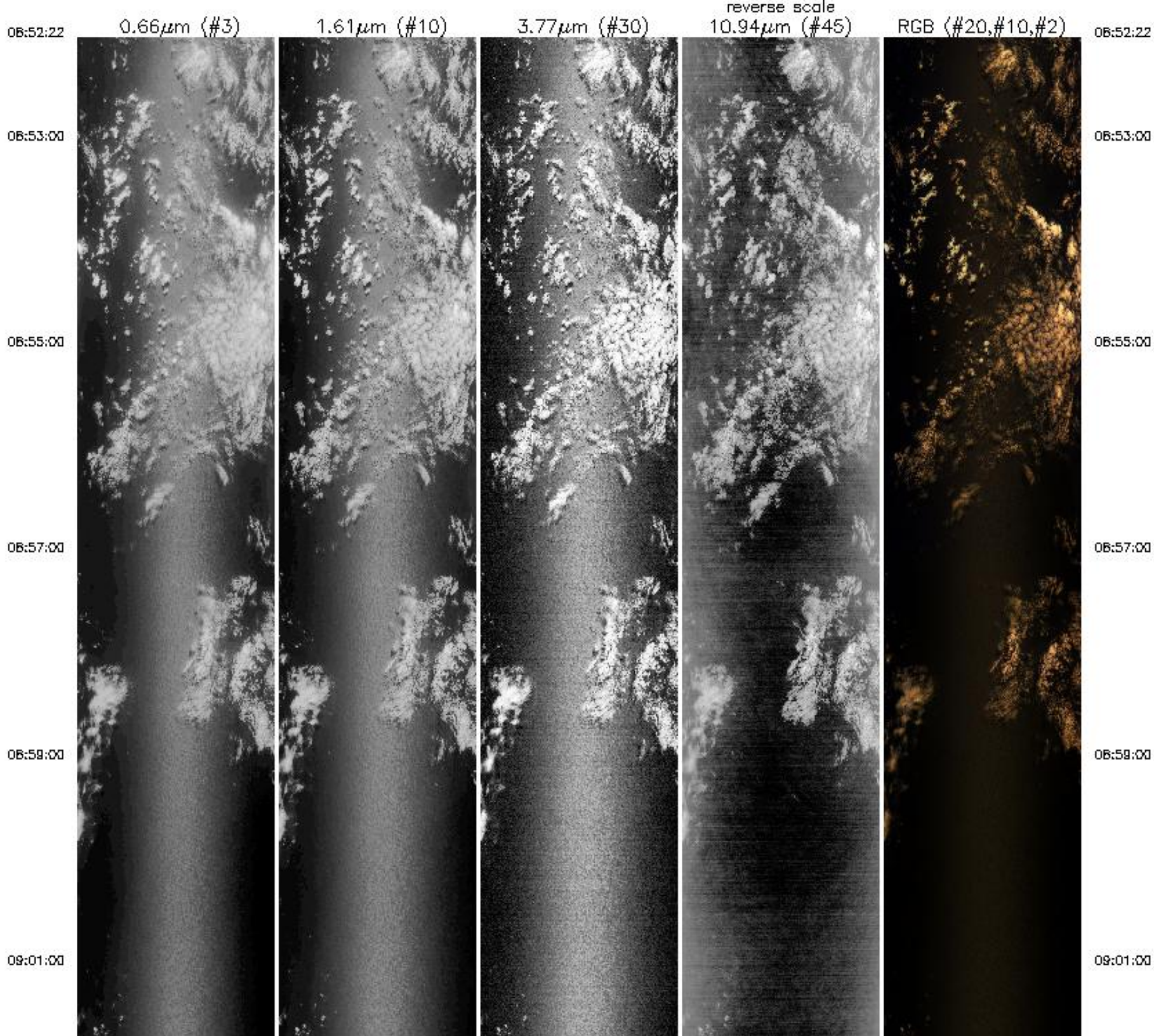
MODIS Airborne Simulator Browse Imagery
 SAFARI 2000 Campaign – 21 Sep 2000
 Indian Ocean
 Flight #00-178 Track #4



Upper Left Lat, Lon = -19.4° , 36.9°
 Lower Right Lat, Lon = -19.1° , 36.6°
 Aircraft Heading = 14.3°
 Solar Zenith = 22.0°
 GPS Altitude = 19749. m (MSL)

MODIS Airborne Simulator Browse Imagery
 SAFARI 2000 Campaign – 21 Sep 2000
 Indian Ocean
 Flight #00-178 Track #5





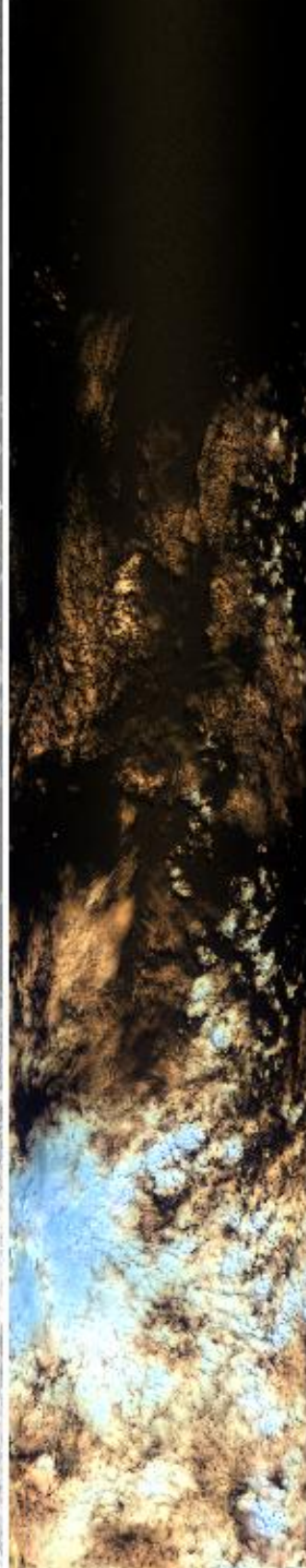
09:01:00

09:03:00

09:05:00

09:07:00

09:08:00



09:01:00

09:03:00

09:05:00

09:07:00

09:08:00

09:09:00



09:09:00

09:11:09

0.66µm (#3)

1.61µm (#10)

3.77µm (#30)

10.94µm (#45)

RGB (#20,#10,#2)

09:11:09

reverse scale

Upper Left Lat, Lon = -19.0°, 36.3°

Lower Right Lat, Lon = -21.1°, 36.1°

Aircraft Heading = 188.6°

Solar Zenith = 21.3°

GPS Altitude = 19745. m (MSL)

MODIS Airborne Simulator Browse Imagery

SAFARI 2000 Campaign - 21 Sep 2000

Indian Ocean

Flight #00-178 Track #6

09:15:02

0.66µm (#3)

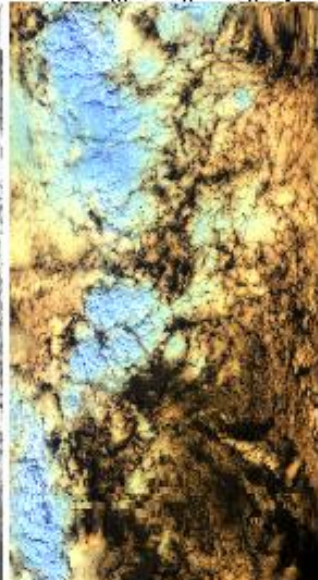
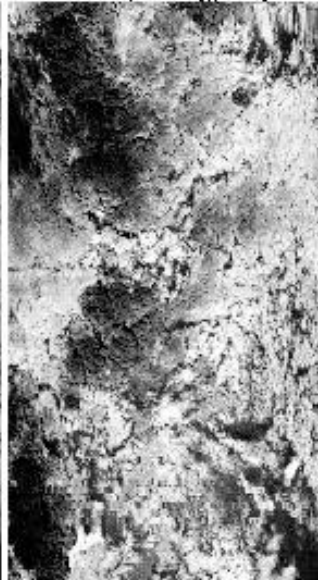
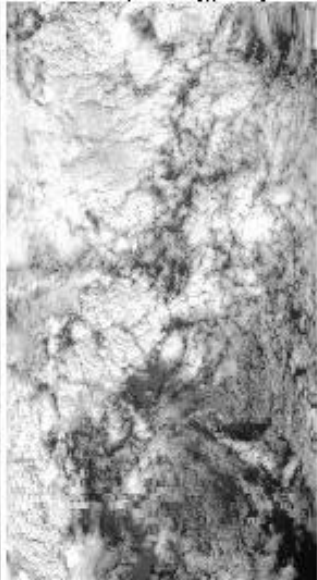
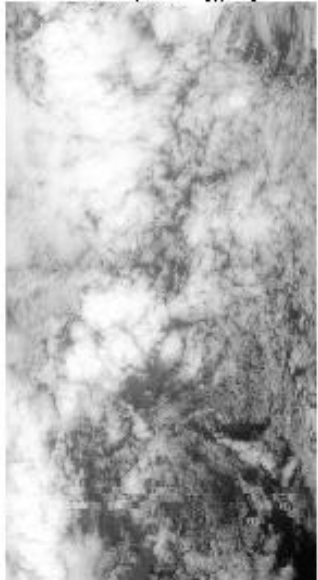
1.61µm (#10)

3.77µm (#30)

reverse scale
10.94µm (#45)

RGB (#20,#10,#2)

09:15:02



09:16:00

09:16:00

09:18:00

09:18:00

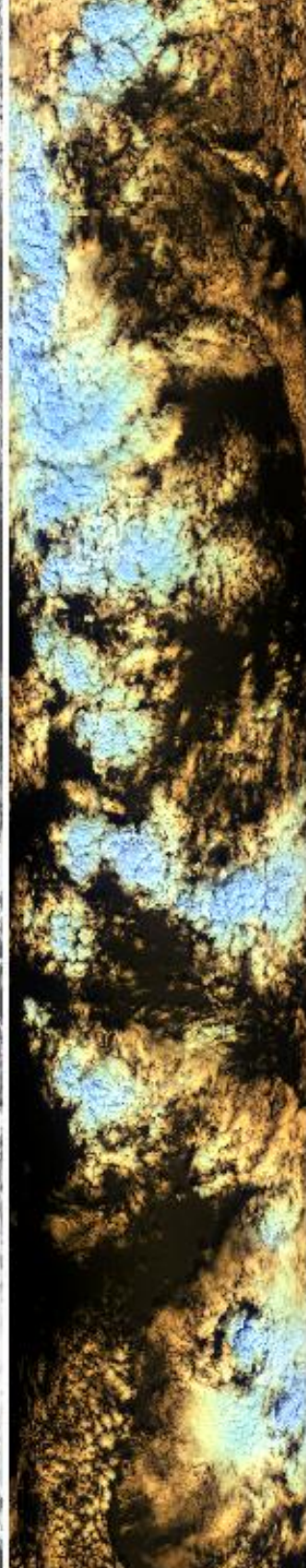
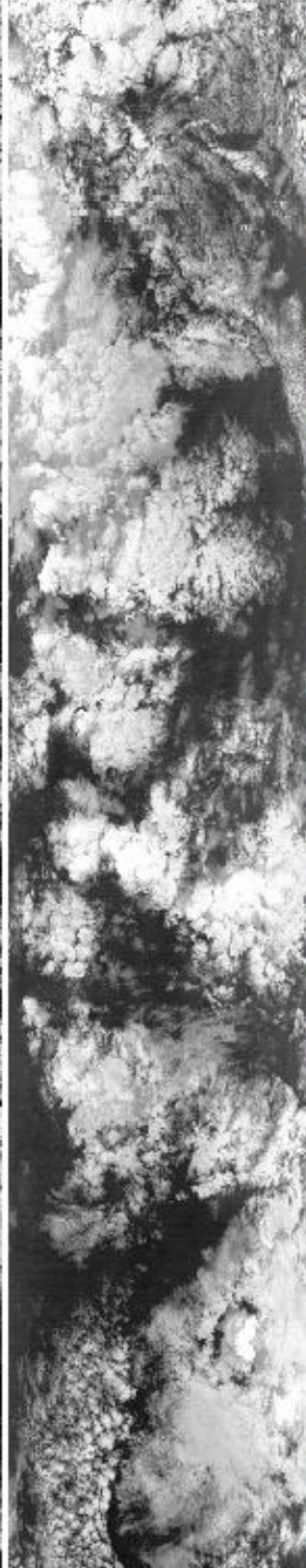
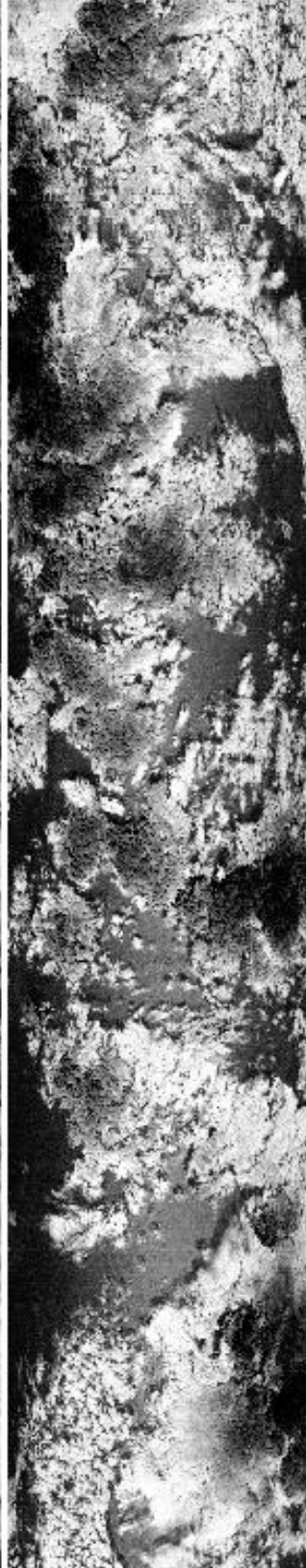
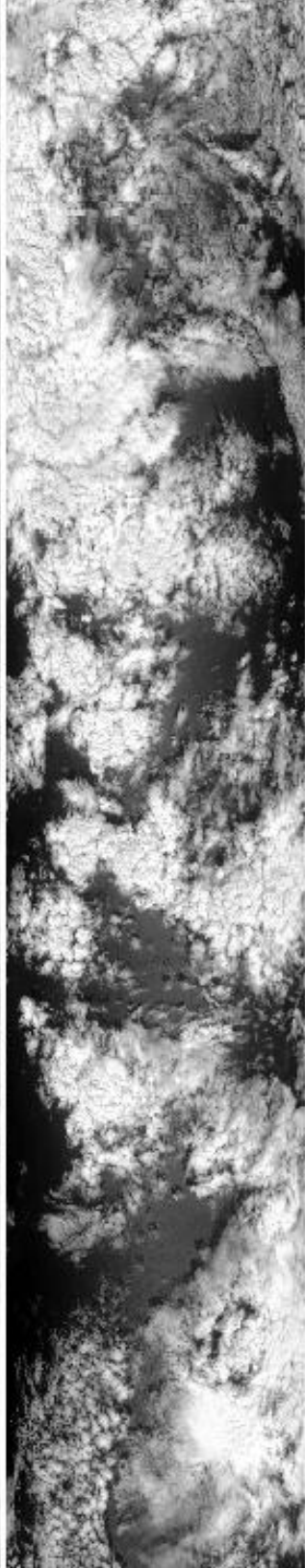
09:18:00

09:20:00

09:22:00

09:24:00

09:26:00



09:18:00

09:20:00

09:22:00

09:24:00

09:26:00

09:28:00

09:28:00

09:30:00

09:32:00

09:33:20



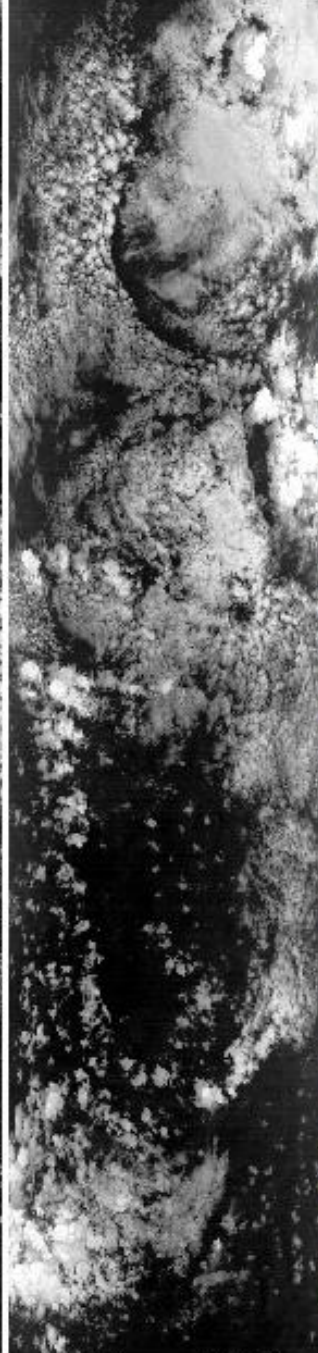
0.66 μ m (#3)



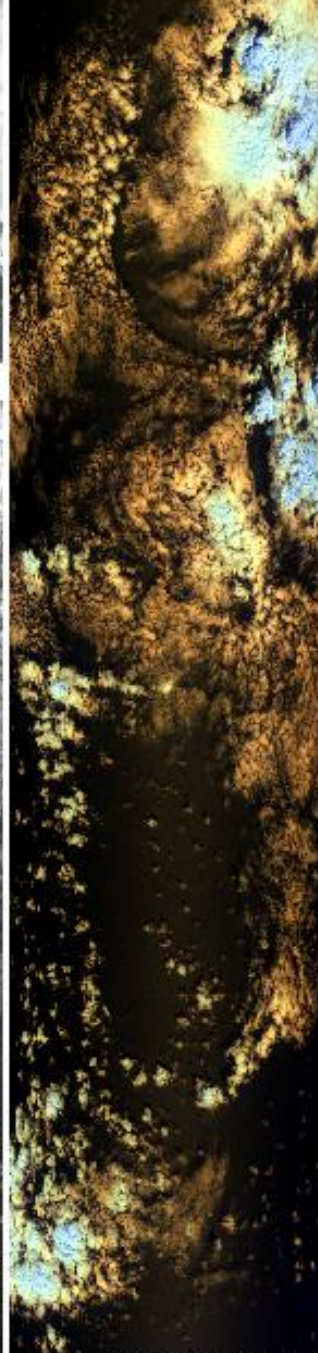
1.61 μ m (#10)



3.77 μ m (#30)



10.94 μ m (#45)
reverse scale



RGB (#20,#10,#2)

09:28:00

09:28:00

09:30:00

09:32:00

09:33:20

Upper Left Lat, Lon = -21.1° , 35.8°

Lower Right Lat, Lon = -19.0° , 35.9°

Aircraft Heading = 17.2°

Solar Zenith = 21.9°

GPS Altitude = 19802 m (MSL)

08:33:20

0.66 μ m (#3)

1.61 μ m (#10)

3.77 μ m (#30)

10.94 μ m (#45)

RGB (#20,#10,#2)

08:33:20

reverse scale

Upper Left Lat, Lon = -21.1°, 35.8°

Lower Right Lat, Lon = -19.0°, 35.9°

Aircraft Heading = 17.2°

Solar Zenith = 21.9°

GPS Altitude = 19802. m (MSL)

MODIS Airborne Simulator Browse Imagery

SAFARI 2000 Campaign - 21 Sep 2000

Indian Ocean

Flight #00-178 Track #7

08:37:51

0.66 μ m (#3)

1.61 μ m (#10)

3.77 μ m (#30)

reverse scale
10.94 μ m (#45)

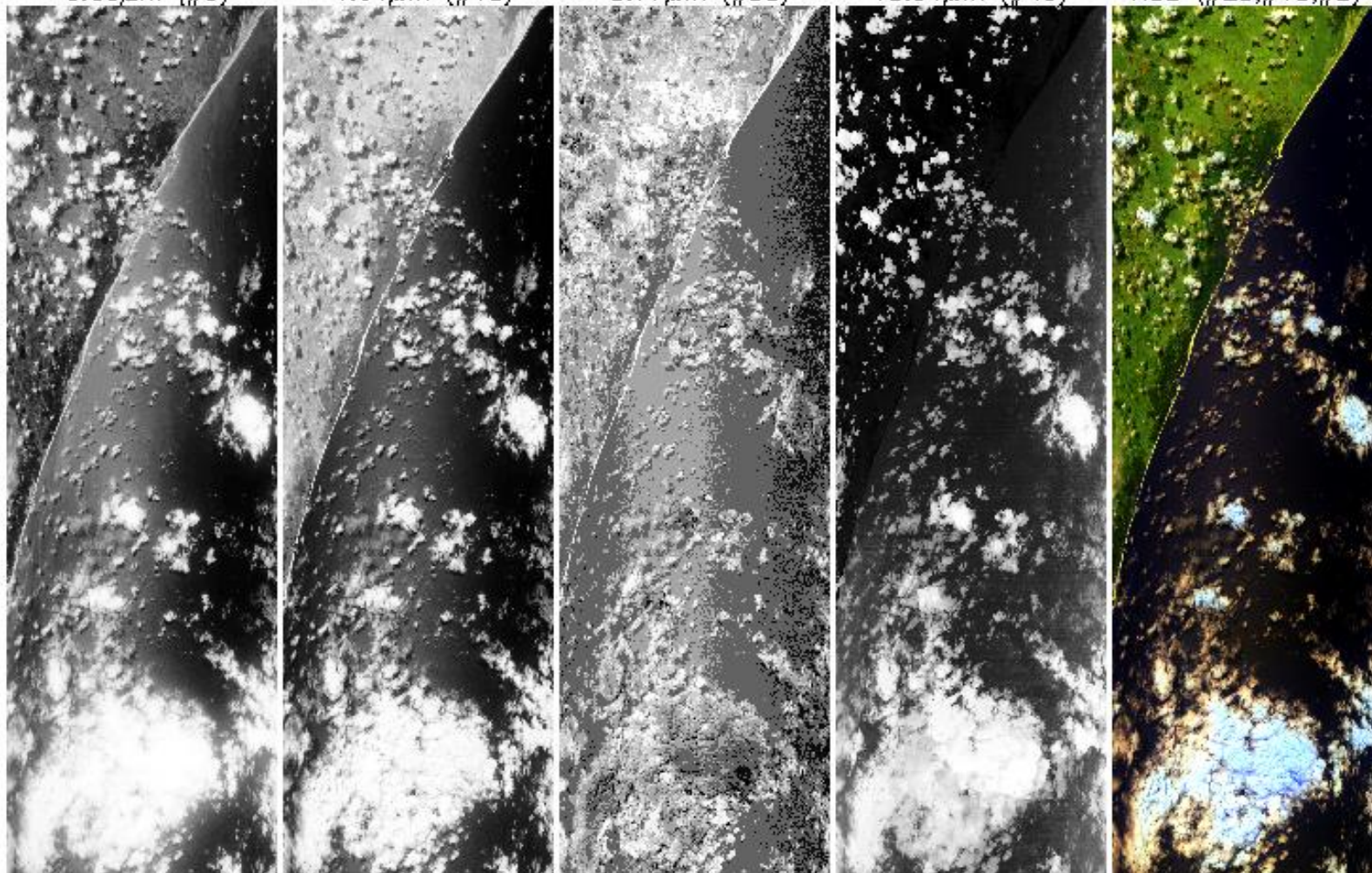
RGB (#20,#10,#2)

08:37:51

08:38:00

08:40:00

08:42:00



08:38:00

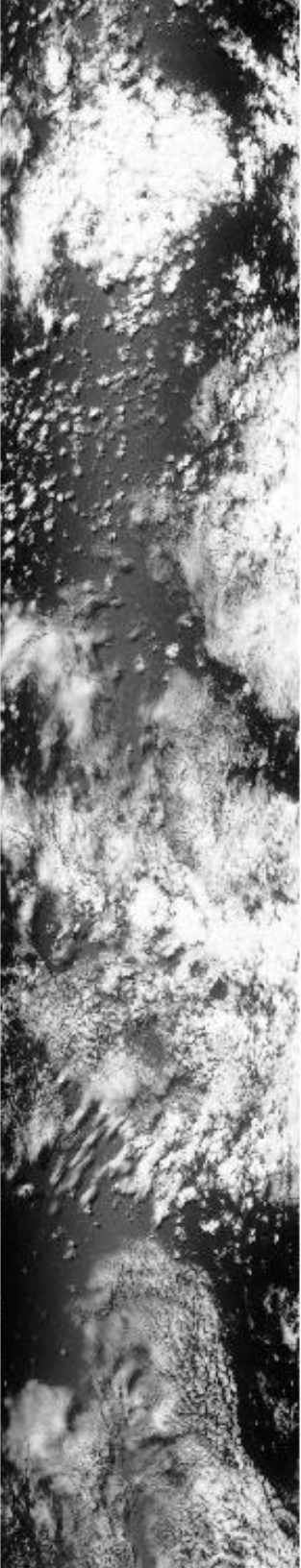
08:40:00

08:42:00

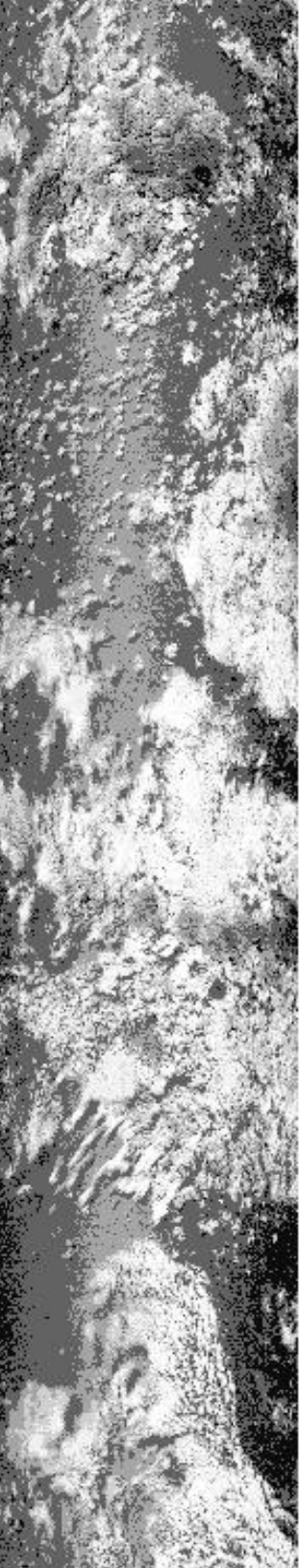
09:42:00



09:44:00



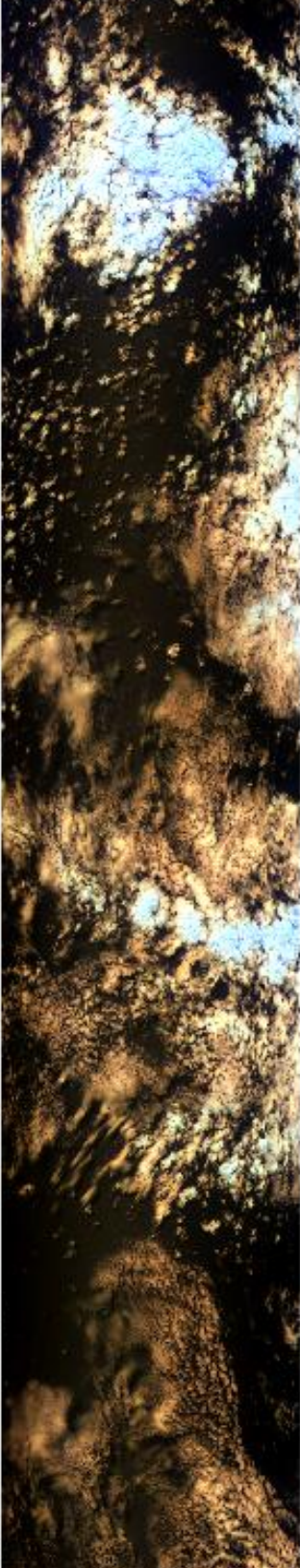
09:46:00



09:48:00



09:50:00



09:42:00

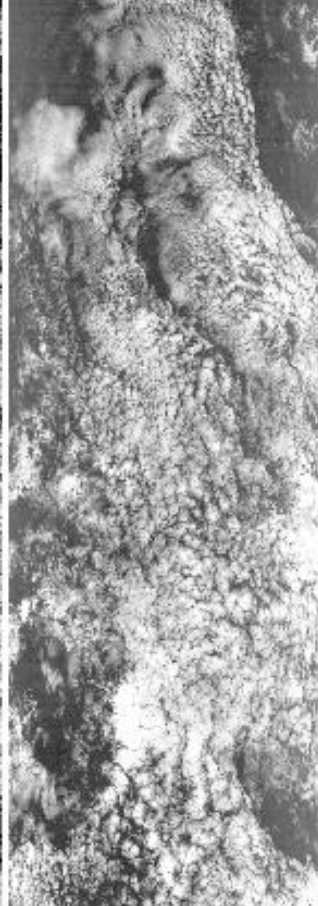
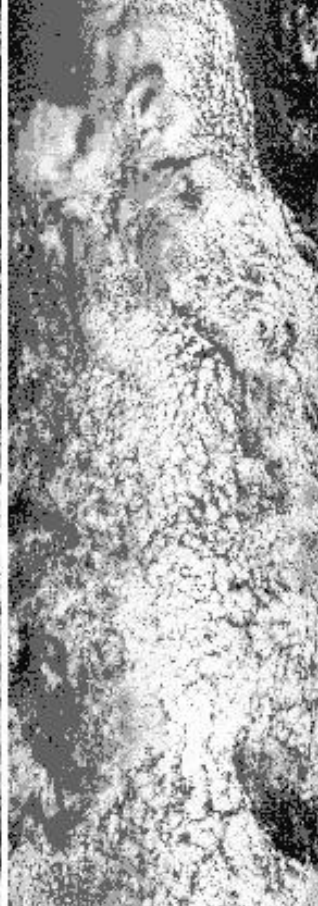
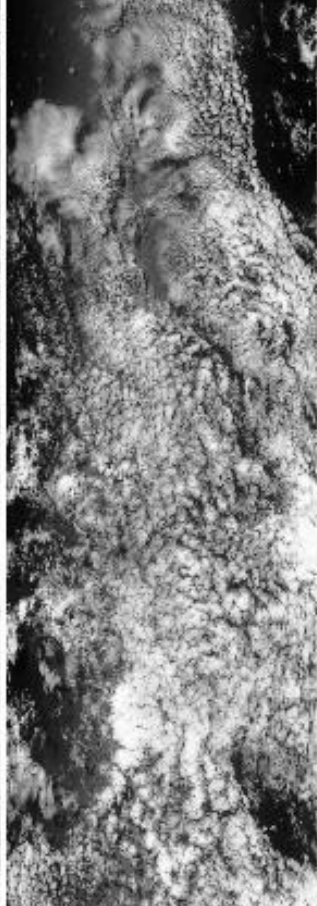
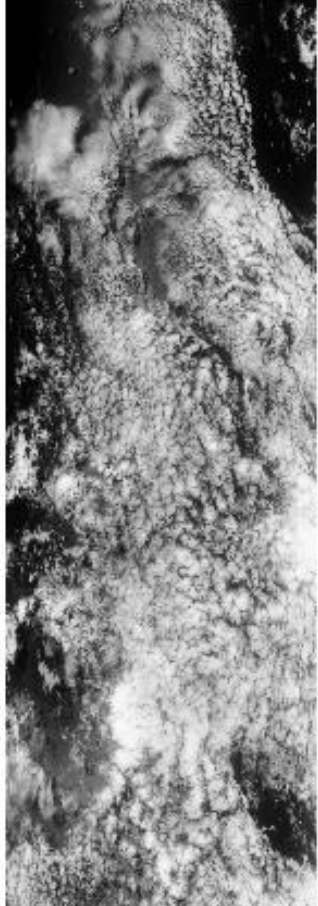
09:44:00

09:46:00

09:48:00

09:50:00

09:50:00
09:52:00
09:54:00
09:56:00



09:50:00
09:52:00
09:54:00
09:56:00

0.66µm (#3)

1.61µm (#10)

3.77µm (#30)

10.94µm (#45)
reverse scale

RGB (#20,#10,#2)

Upper Left Lat, Lon = -18.9°, 35.6°
Lower Right Lat, Lon = -21.0°, 35.5°
Aircraft Heading = 193.2°
Solar Zenith = 19.5°
GPS Altitude = 19769. m (MSL)

MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign - 21 Sep 2000
Indian Ocean/Moz.
Flight #00-178 Track #8

09:58:51



09:58:51

0.66µm (#3)

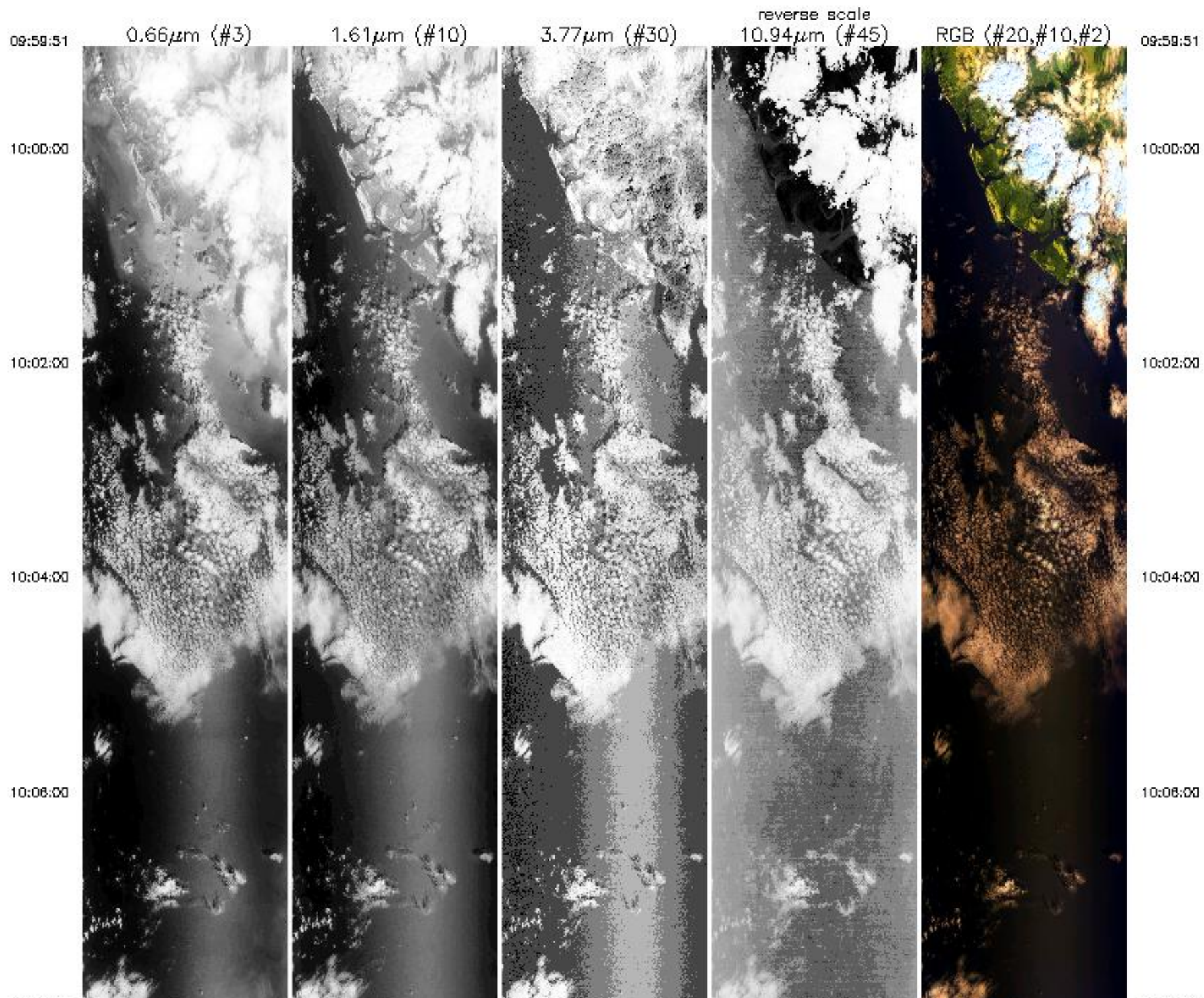
1.61µm (#10)

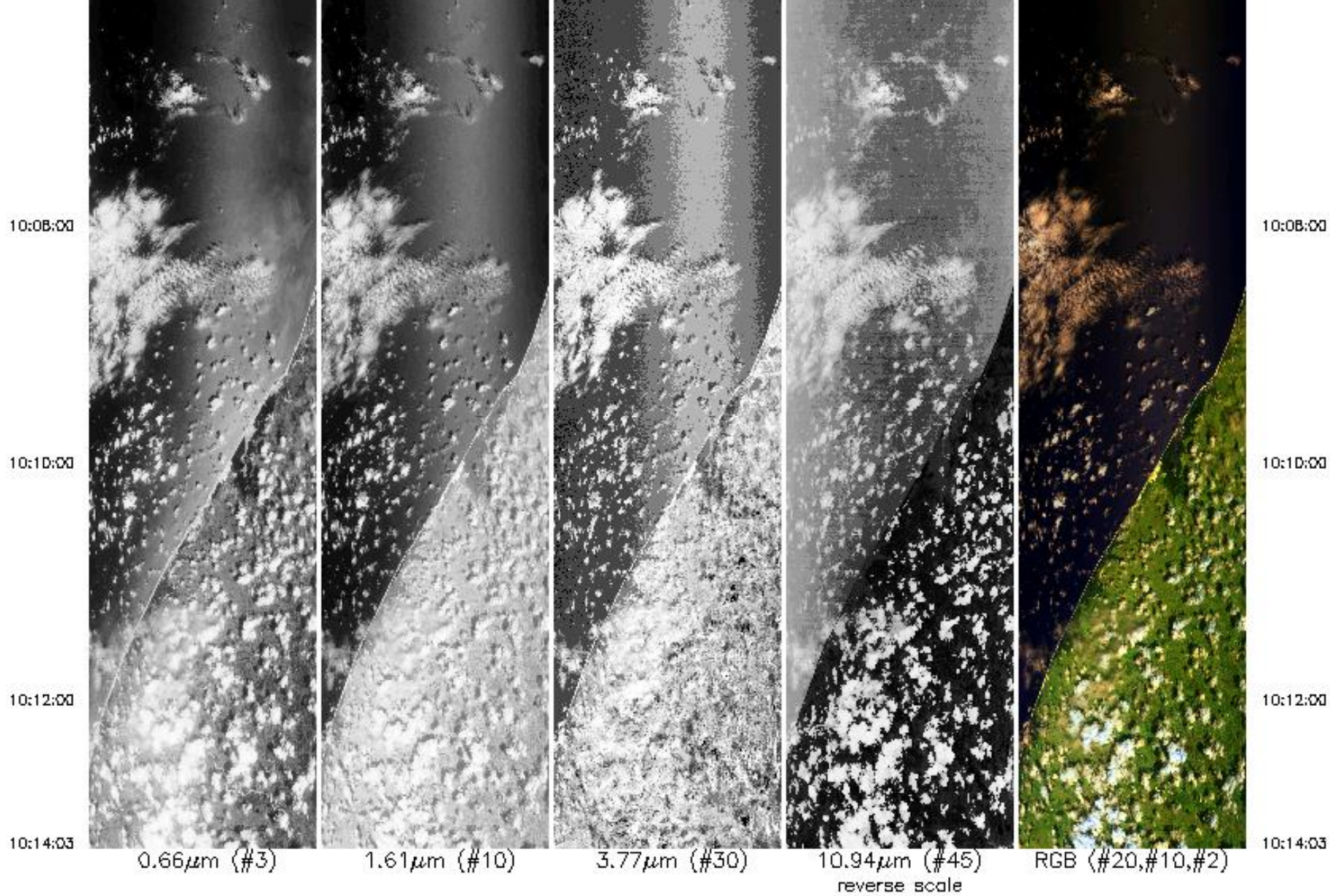
3.77µm (#30)

reverse scale
10.94µm (#45)

RGB (#20,#10,#2)

Flight #00-178 Track #8

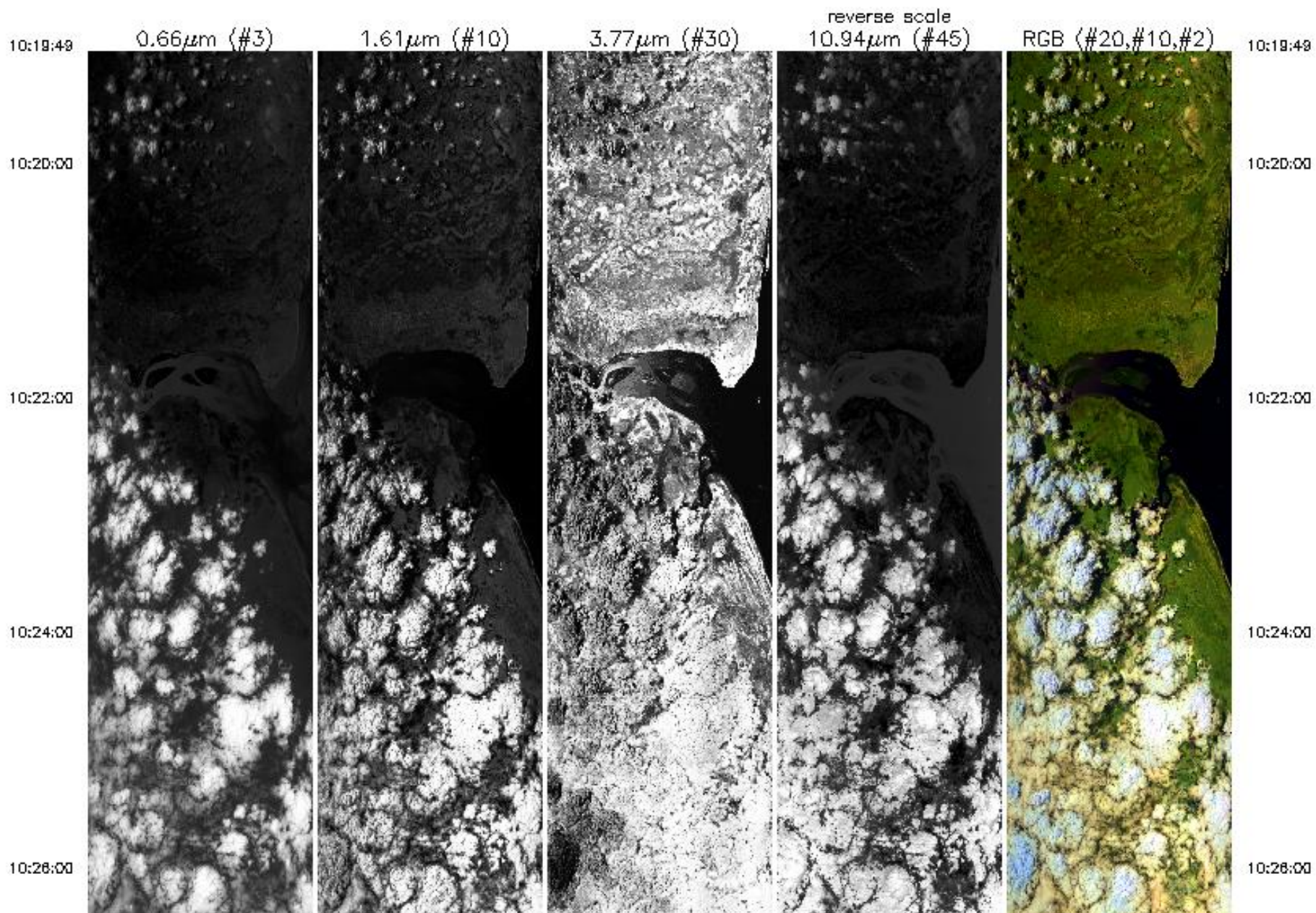




Upper Left Lat, Lon = -20.9° , 35.1°
 Lower Right Lat, Lon = -19.3° , 35.1°
 Aircraft Heading = 17.3°
 Solar Zenith = 22.4°
 GPS Altitude = 19758. m (MSL)

MODIS Airborne Simulator Browse Imagery
 SAFARI 2000 Campaign – 21 Sep 2000
 Mozambique
 Flight #00-178 Track #9

MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
Mozambique
Flight #00-178 Track #9



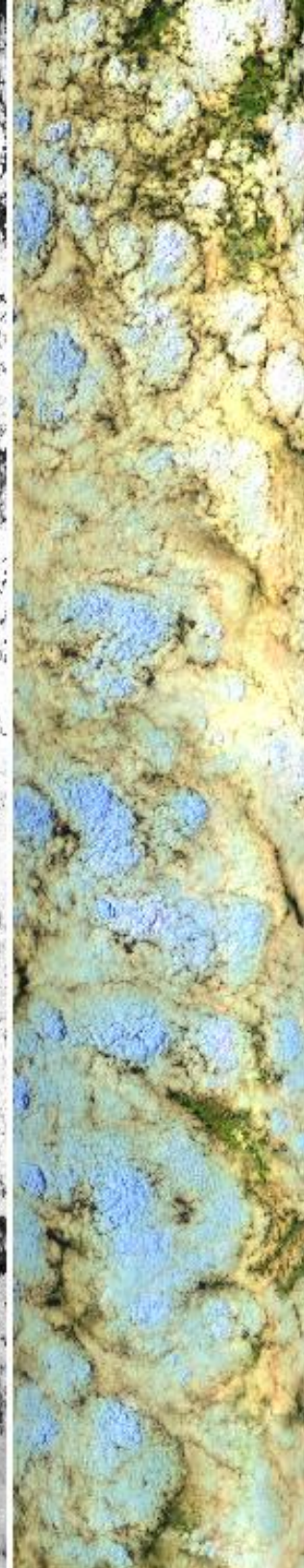
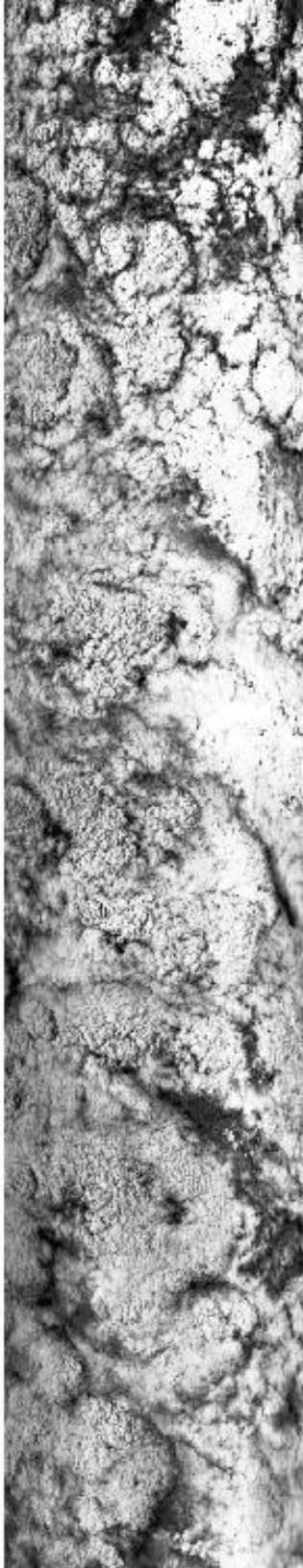
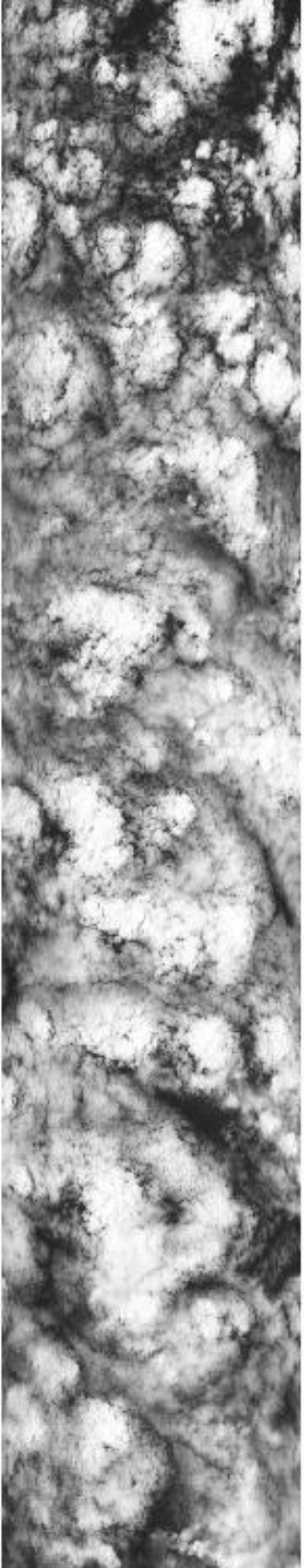
10:28:00

10:28:00

10:30:00

10:32:00

10:34:00



10:28:00

10:28:00

10:30:00

10:32:00

10:34:00

10:34:00



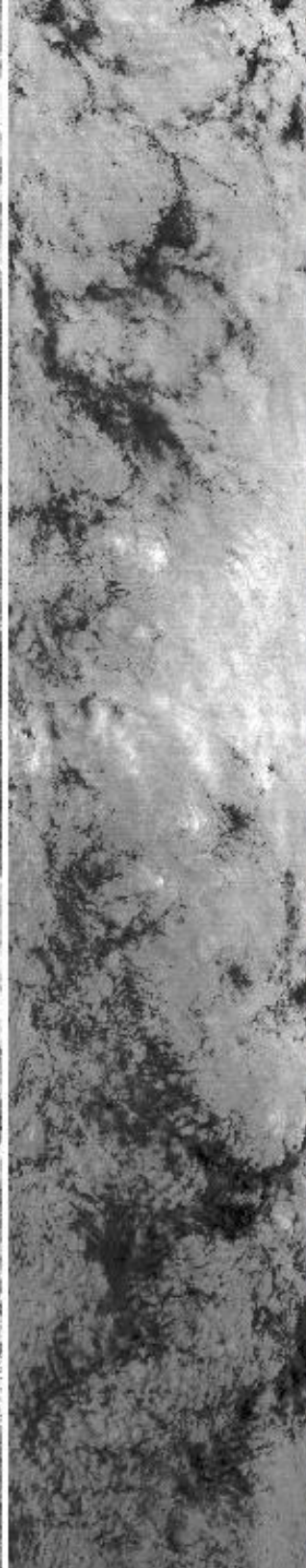
10:36:00



10:38:00



10:40:00



10:42:00



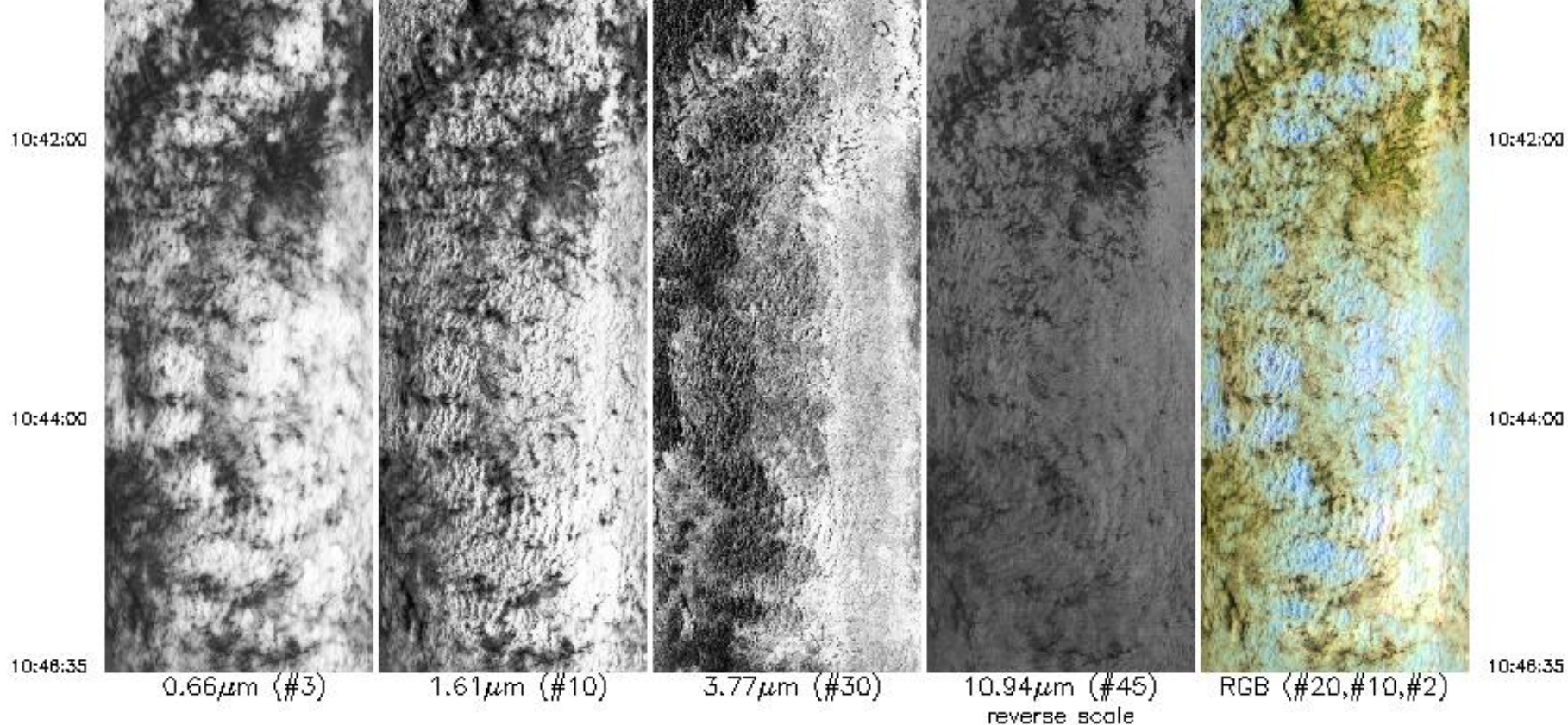
10:34:00

10:36:00

10:38:00

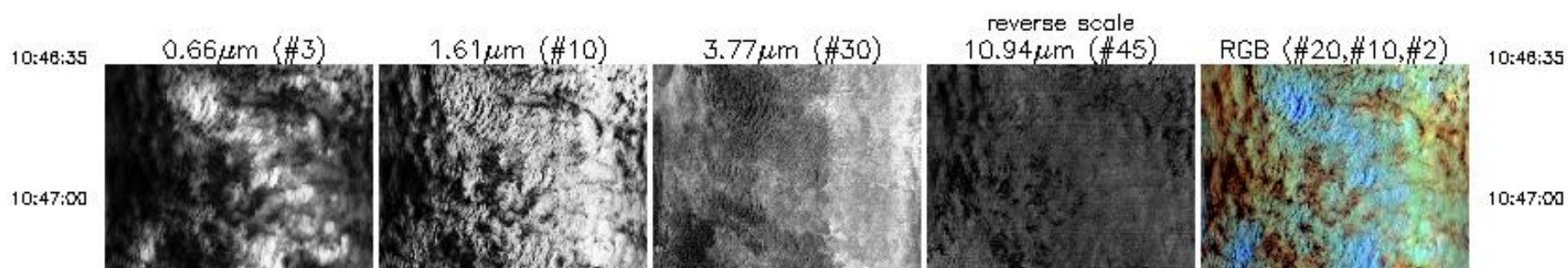
10:40:00

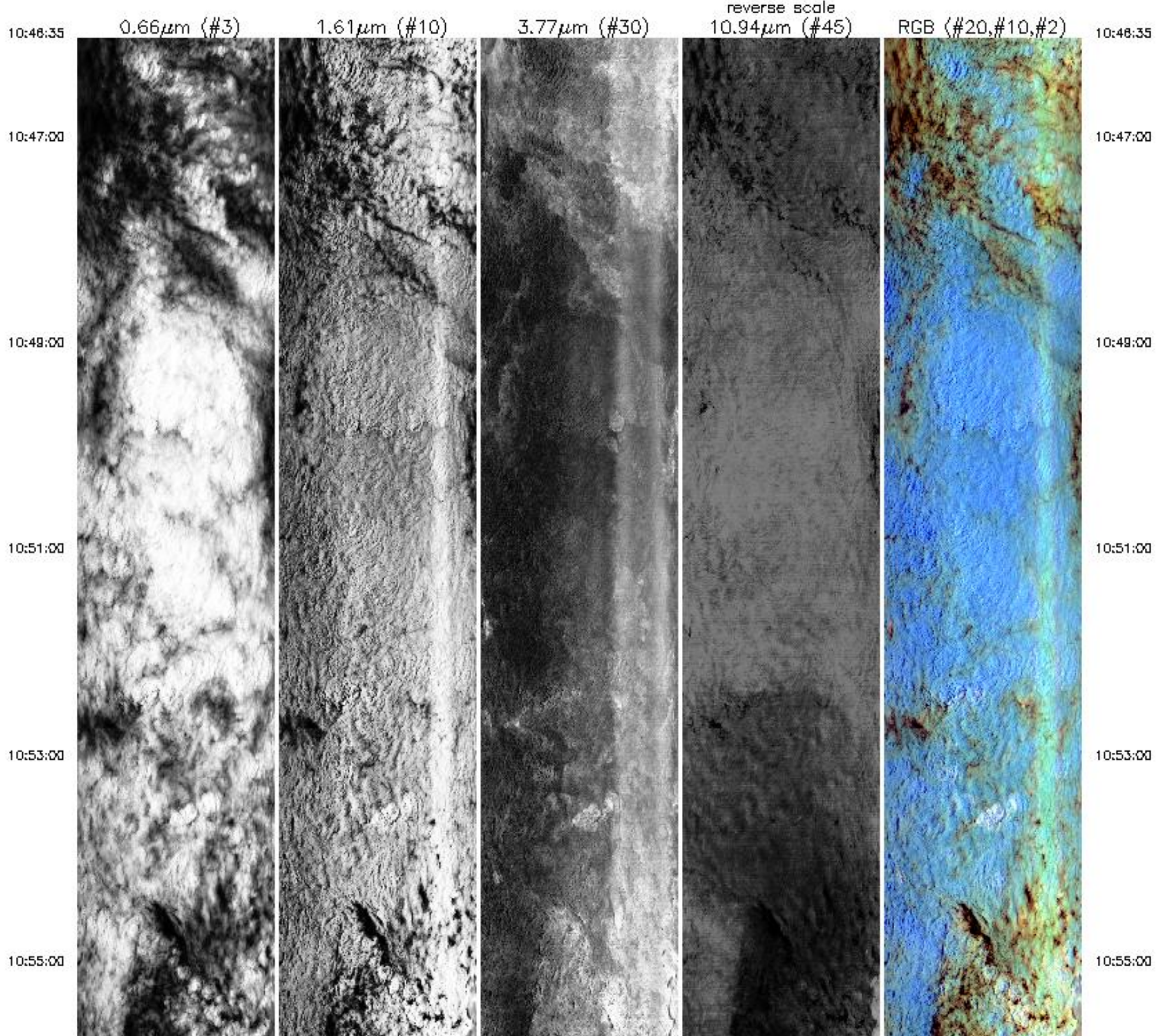
10:42:00



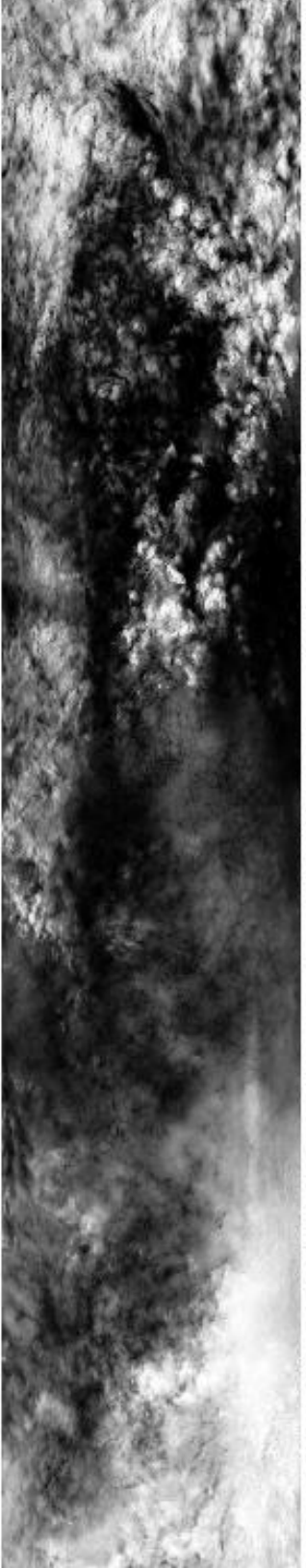
Upper Left Lat, Lon = -19.4° , 34.9°
 Lower Right Lat, Lon = -21.8° , 32.9°
 Aircraft Heading = 219.2°
 Solar Zenith = 23.0°
 GPS Altitude = 19036. m (MSL)

MODIS Airborne Simulator Browse Imagery
 SAFARI 2000 Campaign – 21 Sep 2000
 Moz./S. Africa
 Flight #00-178 Track #10

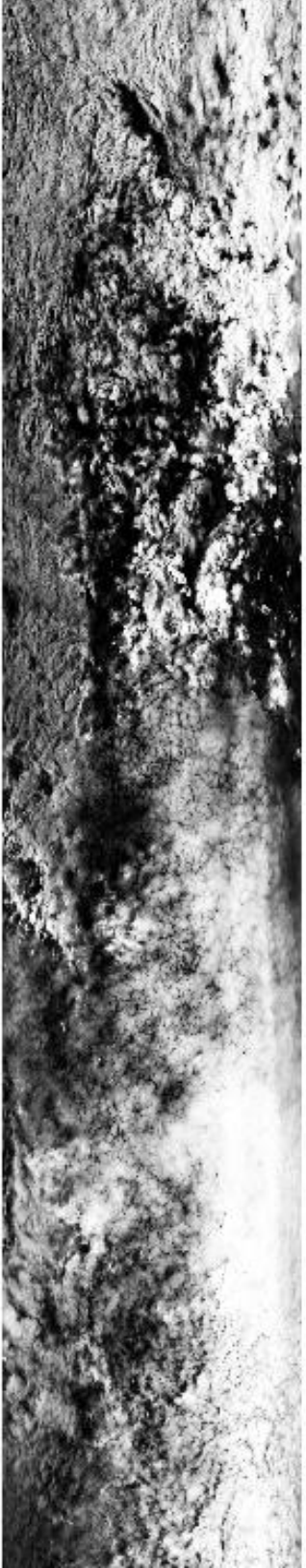




10:55:00



10:57:00



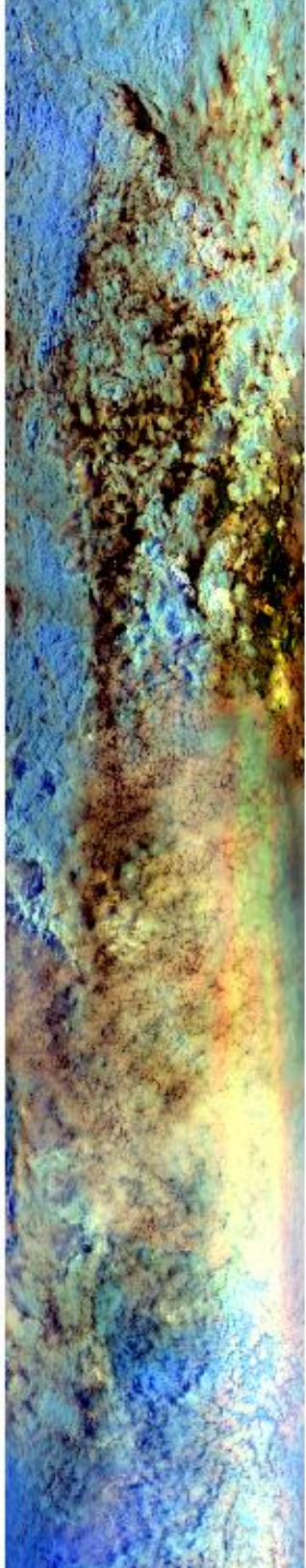
10:59:00



11:01:00



11:03:00



10:55:00

10:57:00

10:59:00

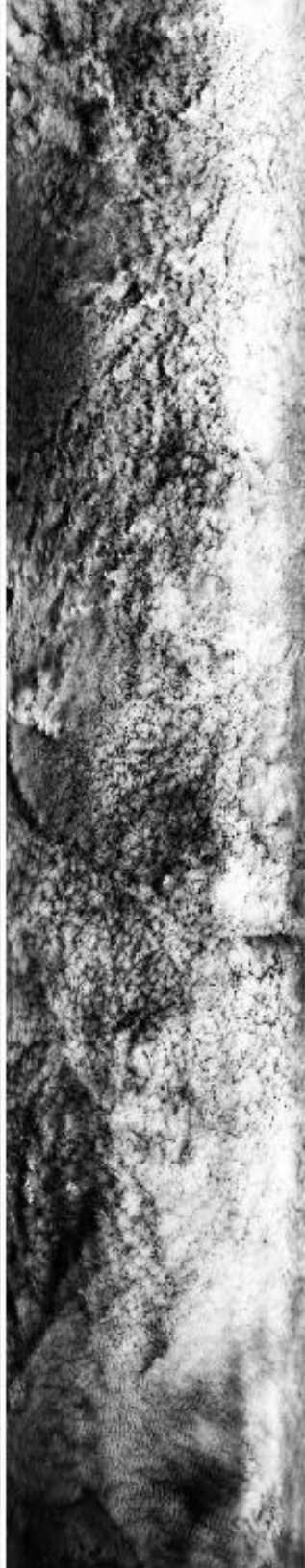
11:01:00

11:03:00

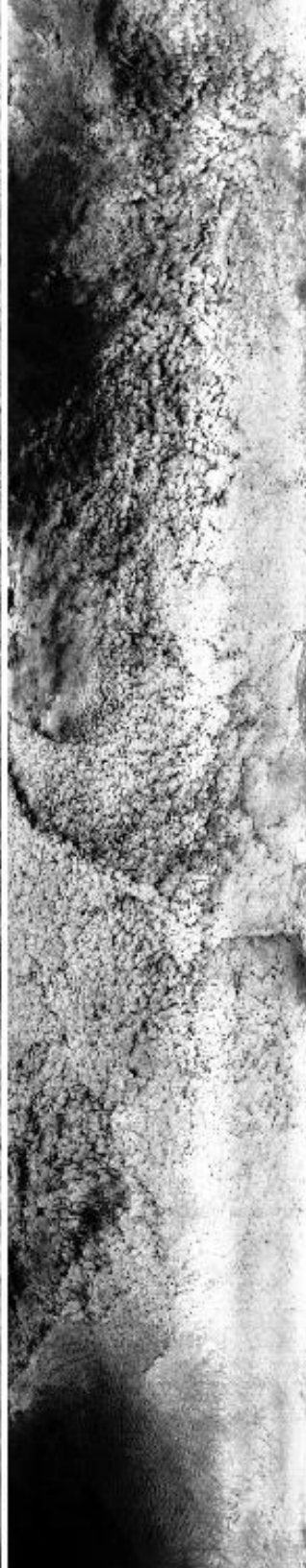
11:03:00



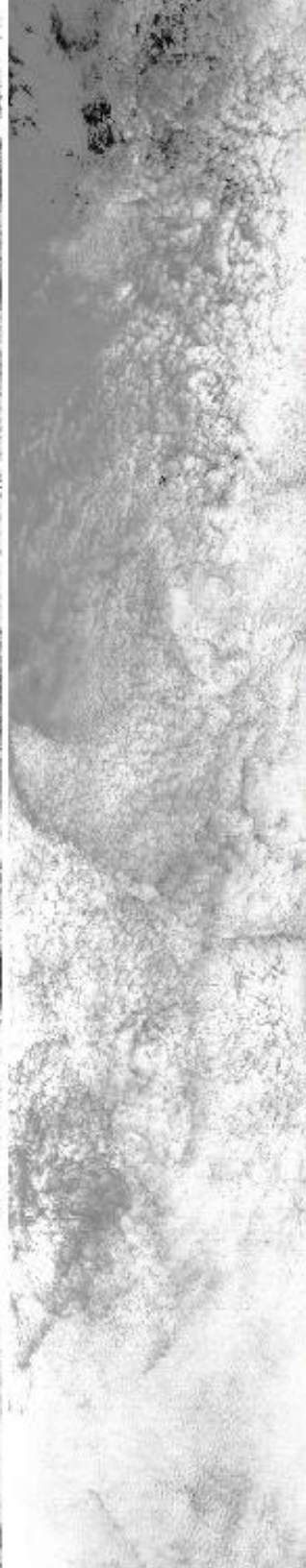
11:05:00



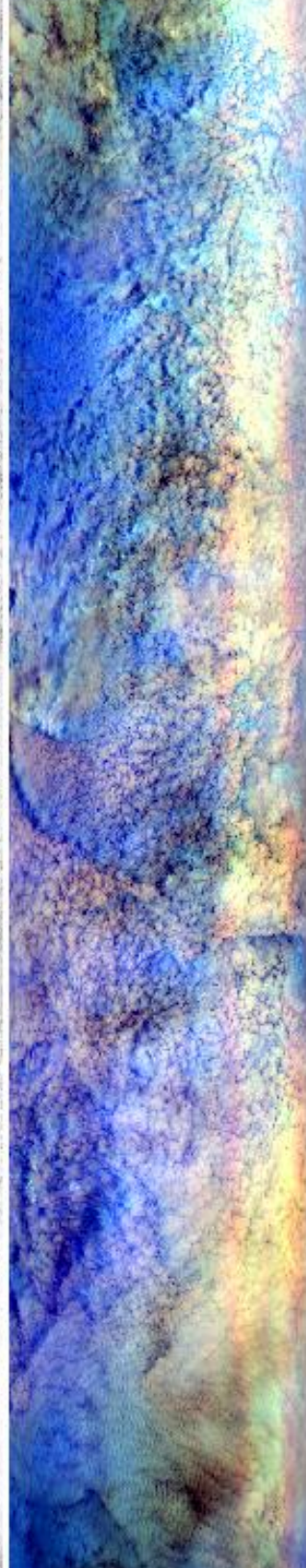
11:07:00



11:09:00



11:11:00



11:03:00

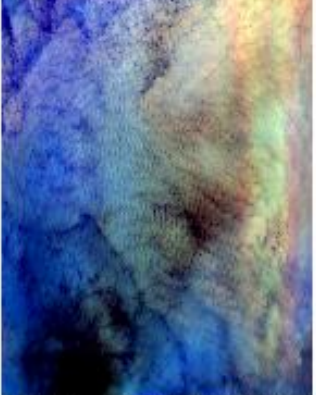
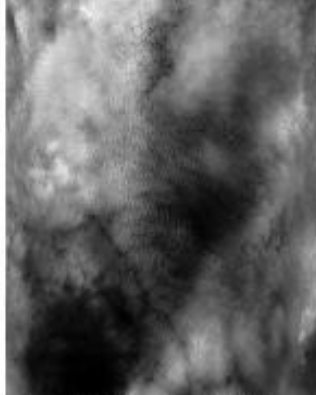
11:05:00

11:07:00

11:09:00

11:11:00

11:11:00



11:11:00

11:13:21

0.66 μm (#3)

1.61 μm (#10)

3.77 μm (#30)

10.94 μm (#45)
reverse scale

RGB (#20,#10,#2)

11:13:21

Upper Left Lat, Lon = -21.6°, 32.7°

Lower Right Lat, Lon = -24.0°, 30.7°

Aircraft Heading = 224.2°

Solar Zenith = 27.1°

GPS Altitude = 18999. m (MSL)

MODIS Airborne Simulator Browse Imagery

SAFARI 2000 Campaign - 21 Sep 2000

South Africa

Flight #00-178 Track #11

11:13:21

0.66 μm (#3)

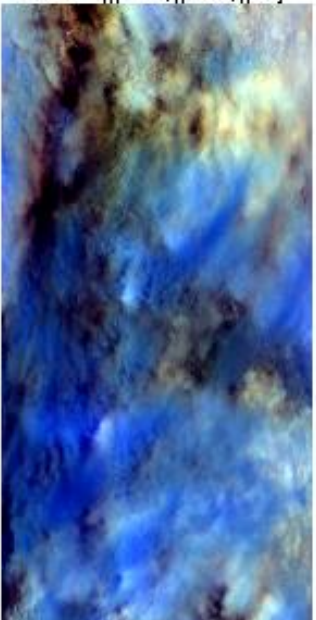
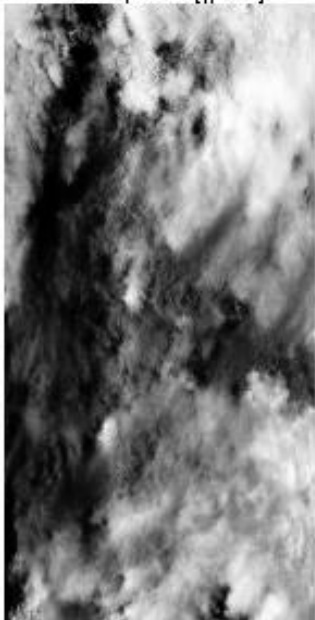
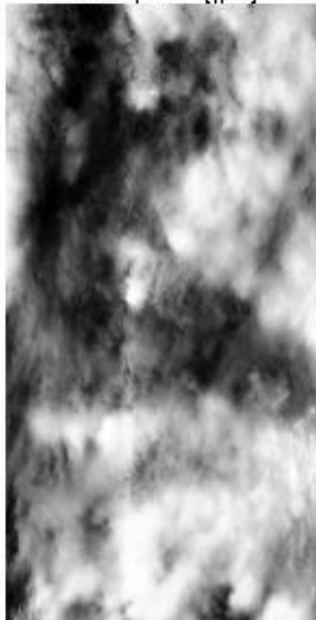
1.61 μm (#10)

3.77 μm (#30)

reverse scale
10.94 μm (#45)

RGB (#20,#10,#2)

11:13:21

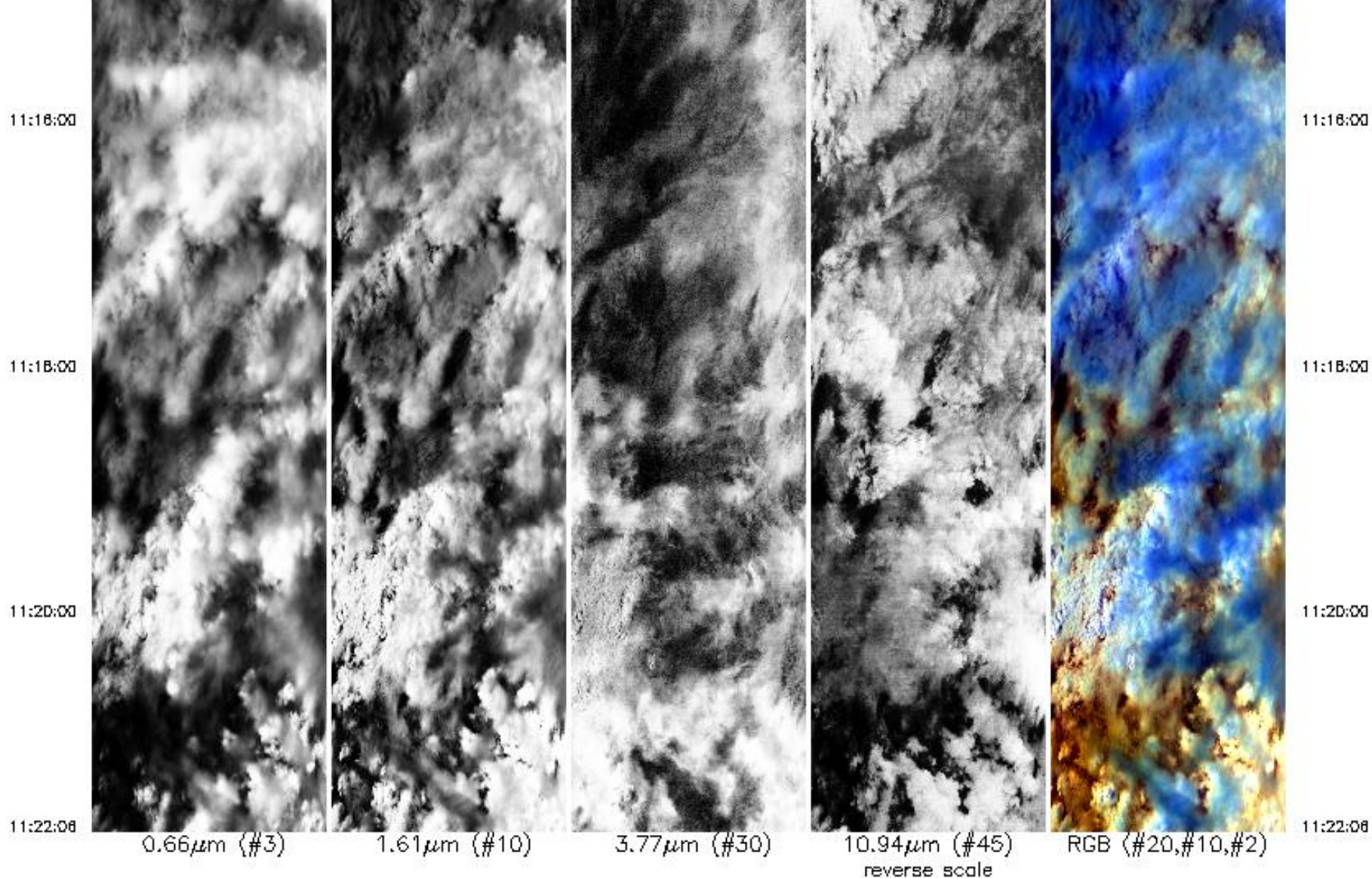


11:14:00

11:16:00

11:14:00

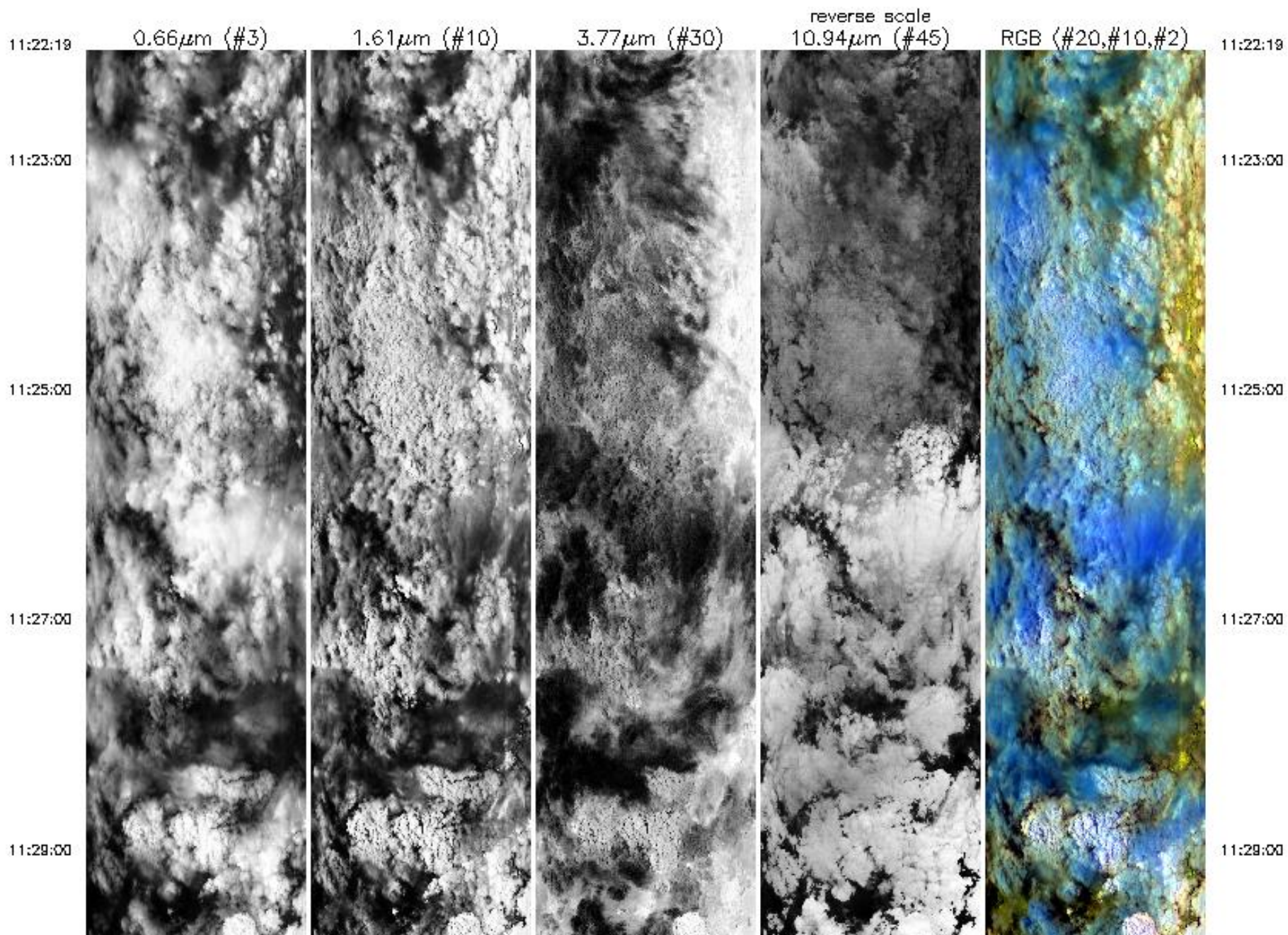
11:16:00



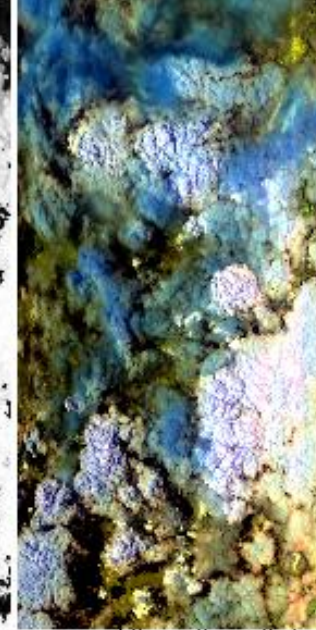
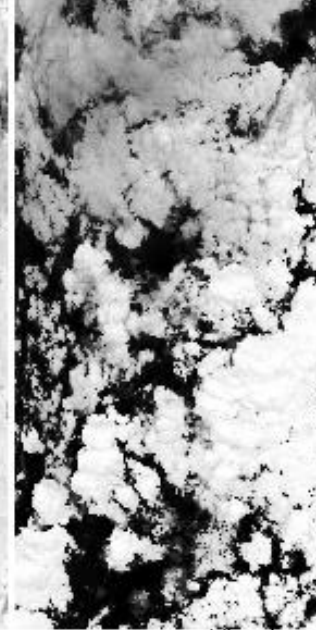
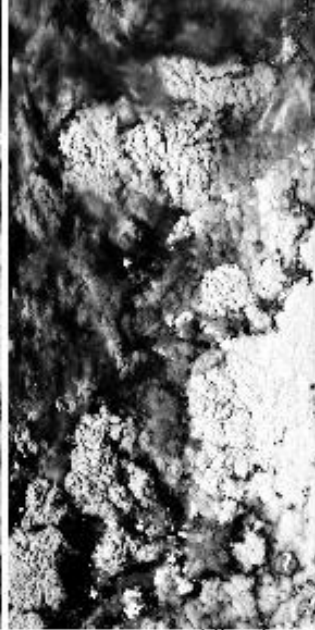
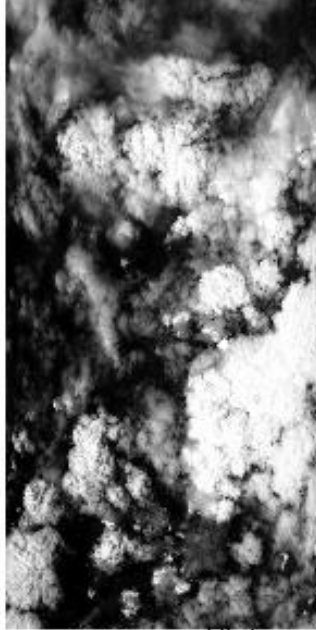
Upper Left Lat, Lon = -23.8° , 30.4°
 Lower Right Lat, Lon = -24.7° , 30.0°
 Aircraft Heading = 222.4°
 Solar Zenith = 31.5°
 GPS Altitude = 19059. m (MSL)

MODIS Airborne Simulator Browse Imagery
 SAFARI 2000 Campaign - 21 Sep 2000
 South Africa
 Flight #00-178 Track #12

MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
South Africa
Flight #00-178 Track #12



11:29:00



11:29:00

11:31:00

0.66µm (#3)

1.61µm (#10)

3.77µm (#30)

10.94µm (#45)
reverse scale

RGB (#20,#10,#2)

11:31:00

11:32:04

11:32:04

Upper Left Lat, Lon = -24.5°, 29.7°
Lower Right Lat, Lon = -25.5°, 29.1°
Aircraft Heading = 226.3°
Solar Zenith = 32.9°
GPS Altitude = 19046. m (MSL)

MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign - 21 Sep 2000
South Africa
Flight #00-178 Track #13

11:32:53

0.66µm (#3)

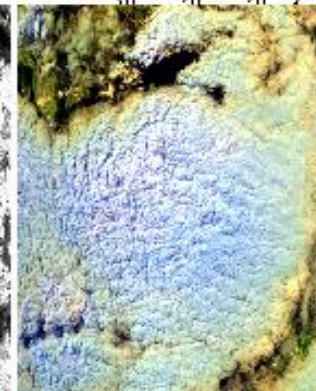
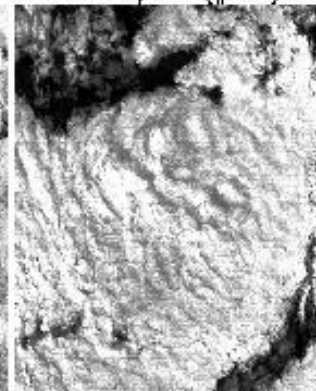
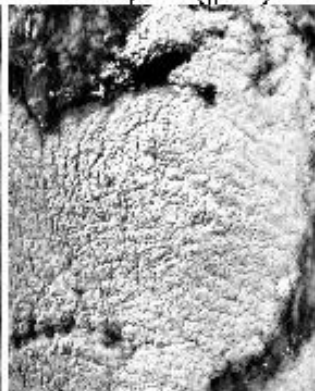
1.61µm (#10)

3.77µm (#30)

reverse scale
10.94µm (#45)

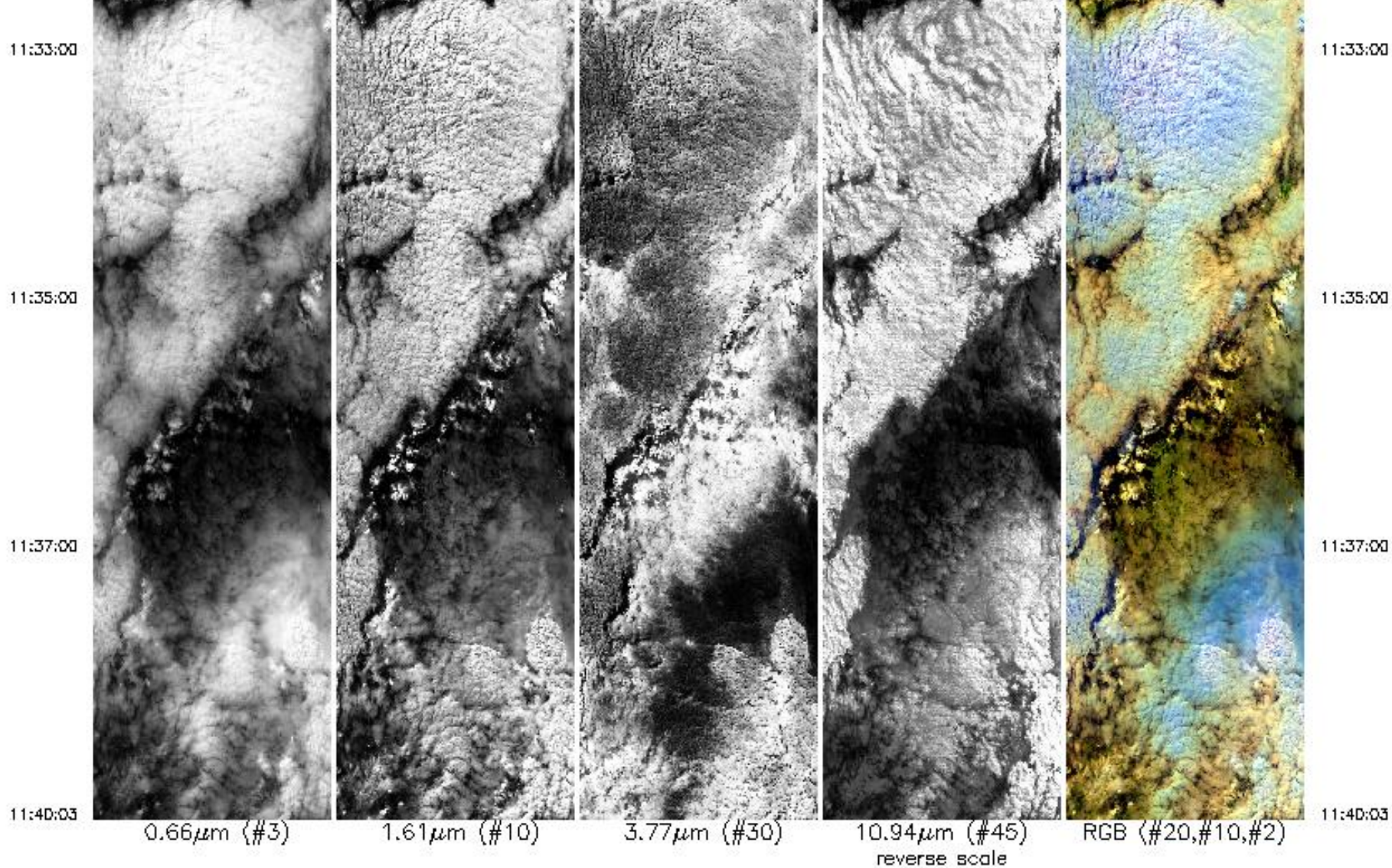
RGB (#20,#10,#2)

11:32:53



11:33:00

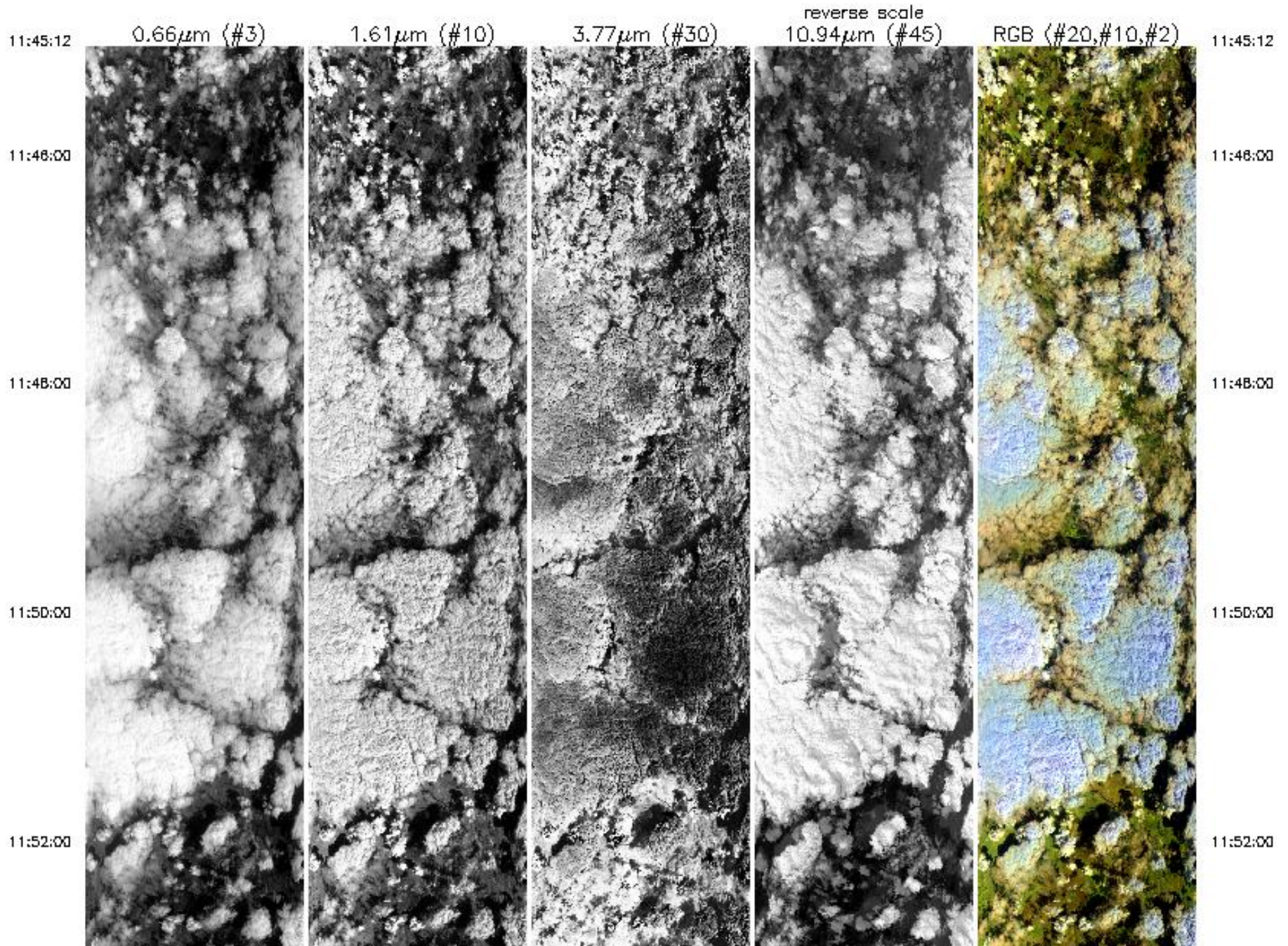
11:33:00



Upper Left Lat, Lon = -25.5° , 28.8°
 Lower Right Lat, Lon = -26.2° , 29.3°
 Aircraft Heading = 165.8°
 Solar Zenith = 34.7°
 GPS Altitude = 19035. m (MSL)

MODIS Airborne Simulator Browse Imagery
 SAFARI 2000 Campaign – 21 Sep 2000
 South Africa
 Flight #00-178 Track #14

MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
South Africa
Flight #00-178 Track #14

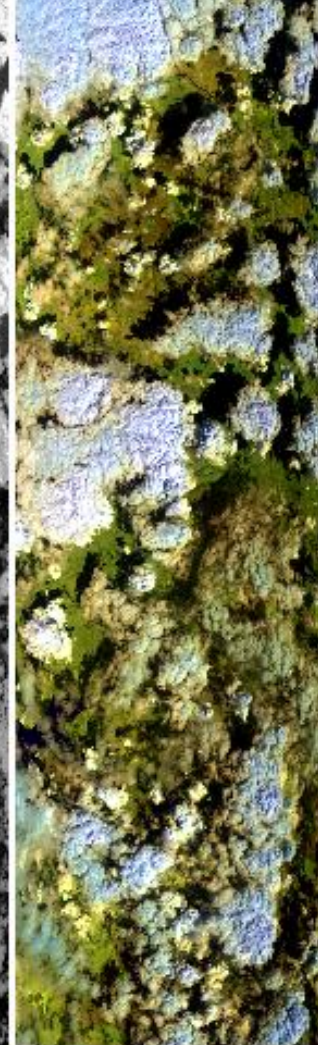
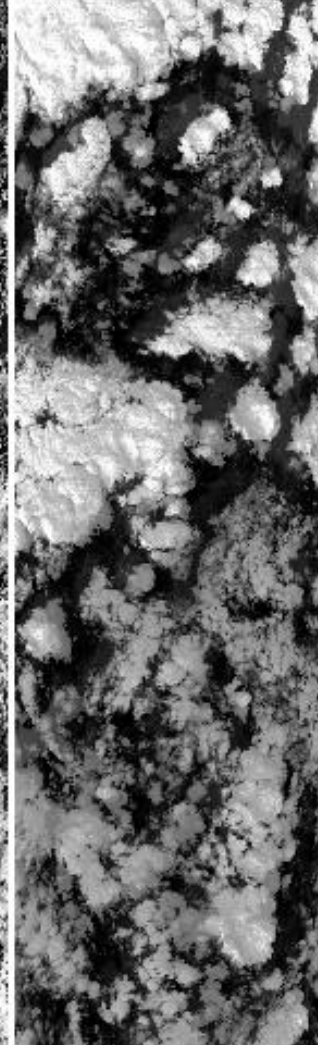
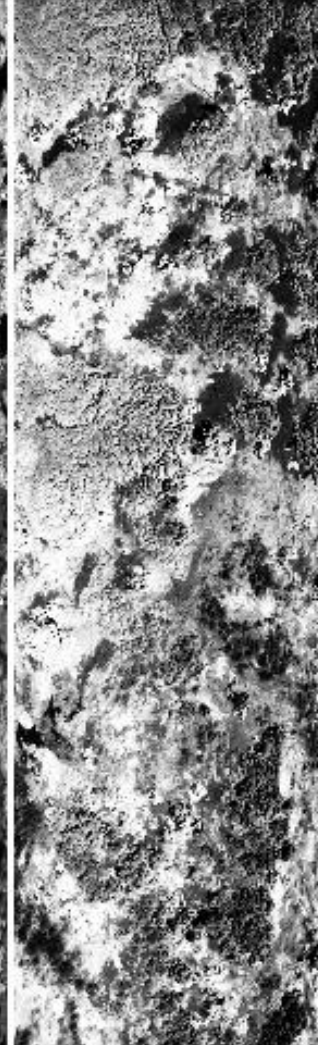
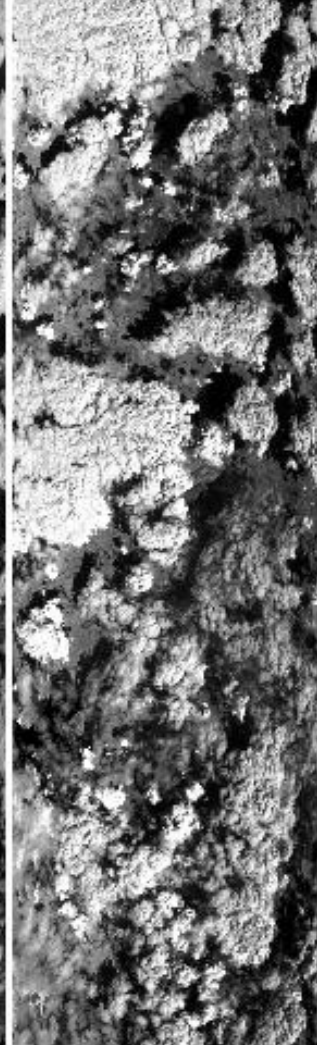
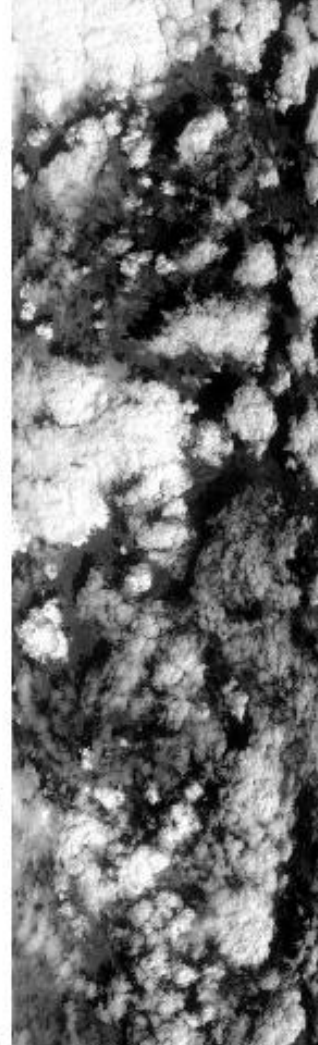


11:52:00

11:54:00

11:56:00

11:57:41



11:52:00

11:54:00

11:56:00

11:57:41

0.66µm (#3)

1.61µm (#10)

3.77µm (#30)

10.94µm (#45)
reverse scale

RGB (#20,#10,#2)

Upper Left Lat, Lon = -26.3°, 28.9°

Lower Right Lat, Lon = -24.9°, 28.6°

Aircraft Heading = 359.9°

Solar Zenith = 37.3°

GPS Altitude = 19061. m (MSL)

MODIS Airborne Simulator Browse Imagery

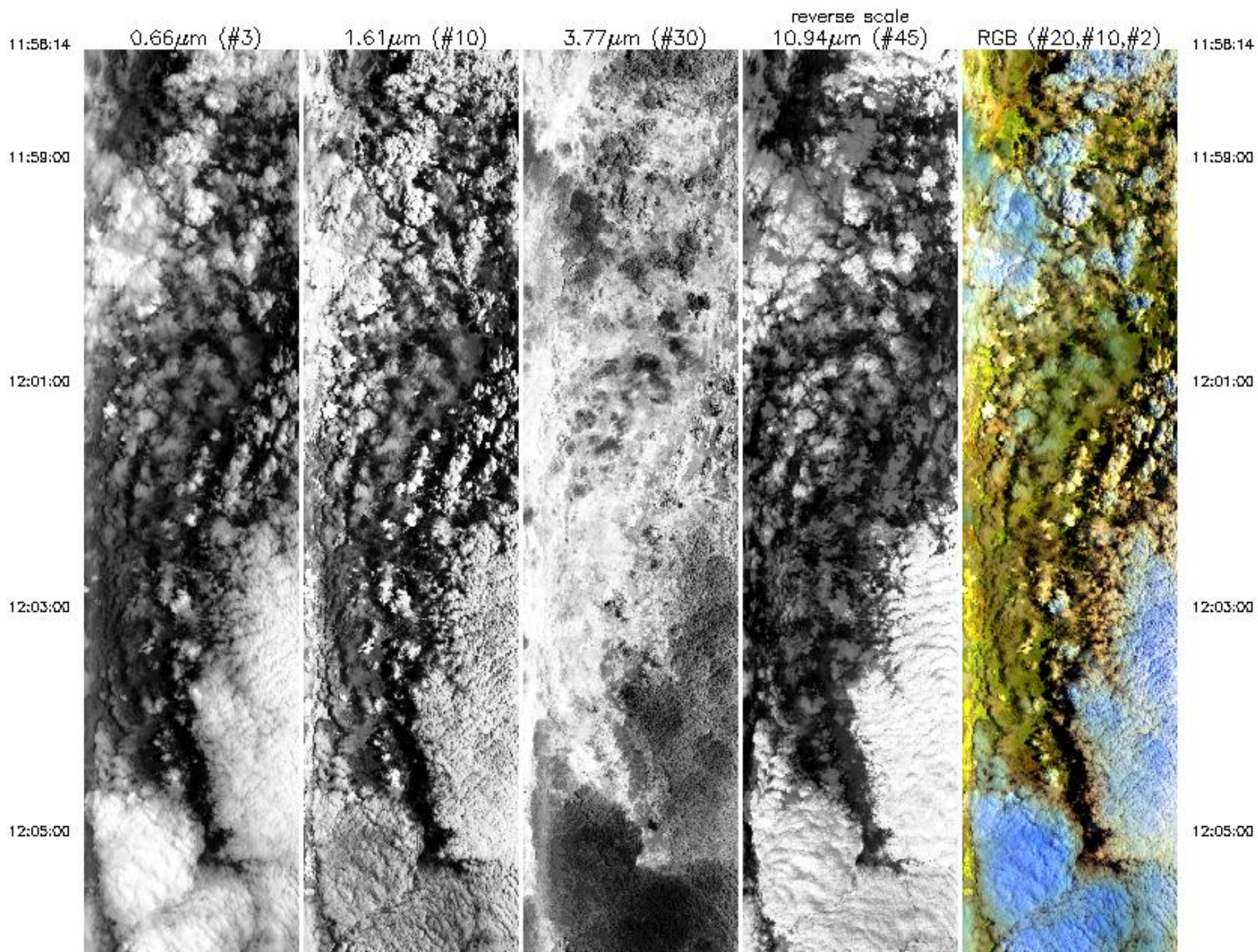
SAFARI 2000 Campaign - 21 Sep 2000

South Africa

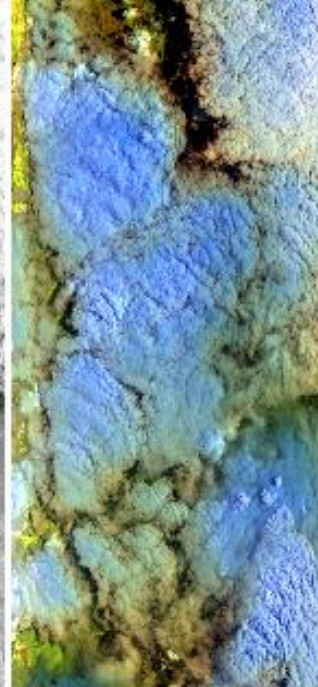
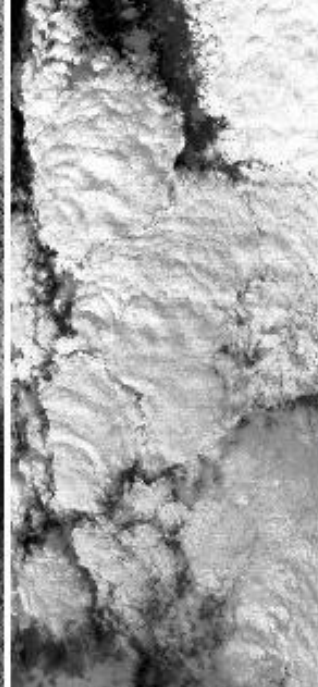
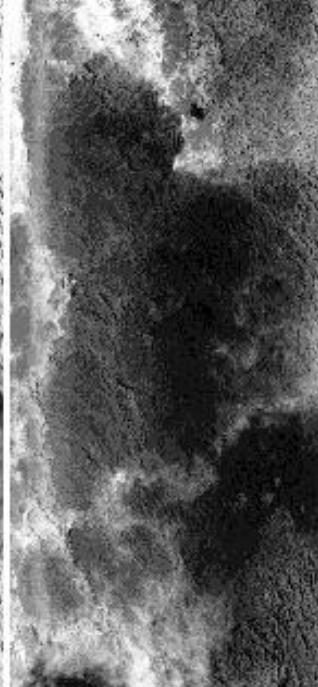
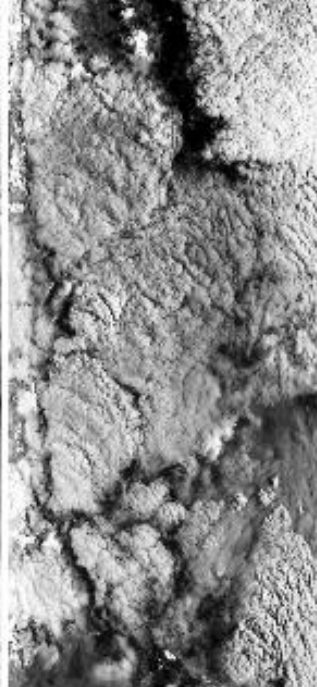
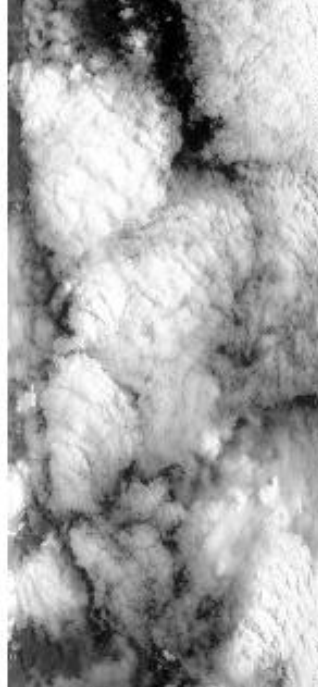
Flight #00-178 Track #15

reverse scale

MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
South Africa
Flight #00-178 Track #15



12:05:00



12:05:00

12:07:00

12:07:00

12:08:42

12:08:42

0.66 μ m (#3)

1.61 μ m (#10)

3.77 μ m (#30)

10.94 μ m (#45)
reverse scale

RGB (#20,#10,#2)

Upper Left Lat, Lon = -24.9°, 28.9°

Lower Right Lat, Lon = -23.8°, 29.3°

Aircraft Heading = 31.9°

Solar Zenith = 38.8°

GPS Altitude = 18831. m (MSL)

MODIS Airborne Simulator Browse Imagery

SAFARI 2000 Campaign - 21 Sep 2000

South Africa

Flight #00-178 Track #16

12:14:15

0.66 μ m (#3)

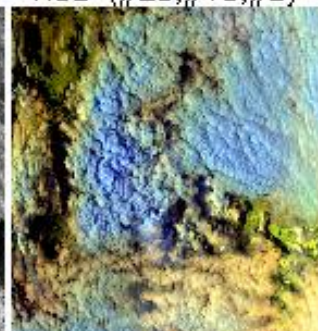
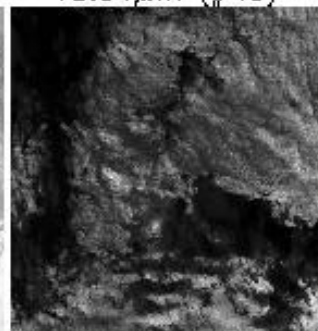
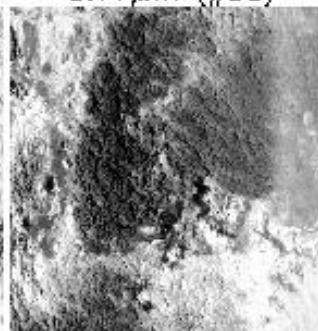
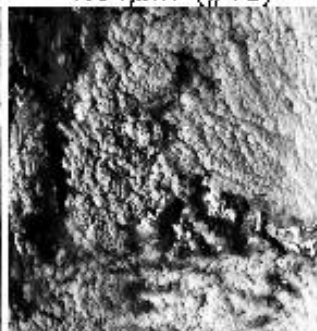
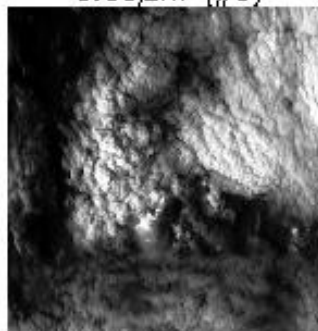
1.61 μ m (#10)

3.77 μ m (#30)

reverse scale
10.94 μ m (#45)

RGB (#20,#10,#2)

12:14:15



12:15:00

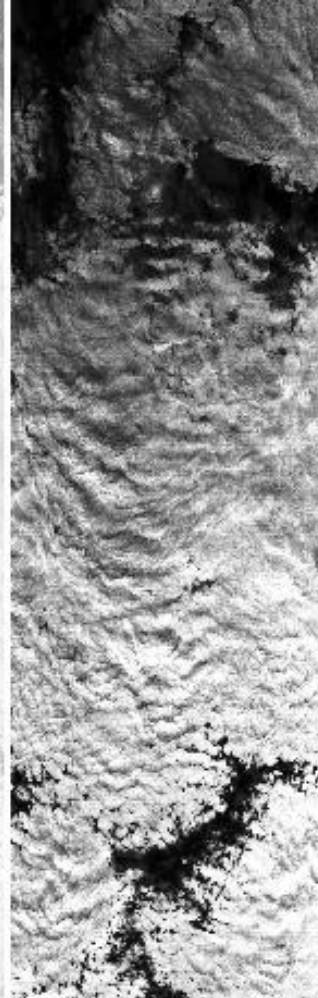
12:15:00

12:15:00

12:17:00

12:19:00

12:20:36



12:15:00

12:17:00

12:19:00

12:20:36

0.66µm (#3)

1.61µm (#10)

3.77µm (#30)

10.94µm (#45)
reverse scale

RGB (#20,#10,#2)

Upper Left Lat, Lon = -23.6°, 29.0°
Lower Right Lat, Lon = -24.3°, 28.8°
Aircraft Heading = 217.1°
Solar Zenith = 41.1°
GPS Altitude = 18735. m (MSL)

MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign - 21 Sep 2000
South Africa
Flight #00-178 Track #17

12:26:16

0.66µm (#3)

1.61µm (#10)

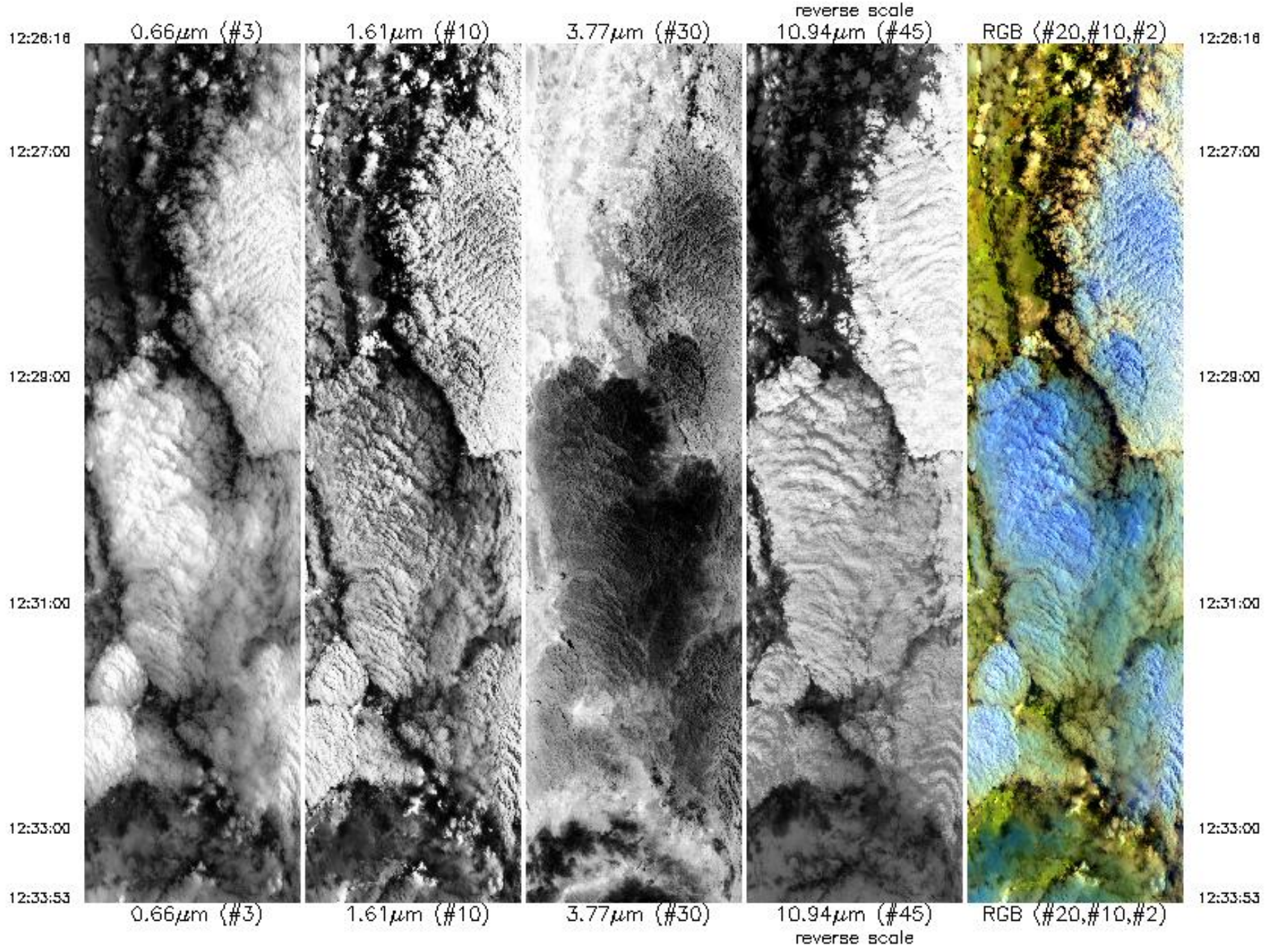
3.77µm (#30)

reverse scale
10.94µm (#45)

RGB (#20,#10,#2)

12:26:16

MODIS Airborne Simulator Browse Imagery
SAFARI 2000 Campaign – 21 Sep 2000
South Africa
Flight #00-178 Track #17

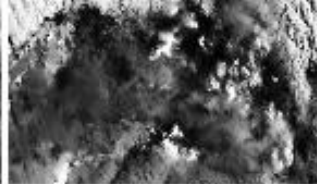


Upper Left Lat, Lon = -24.6°, 29.1°

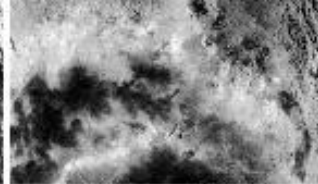
12:33:00



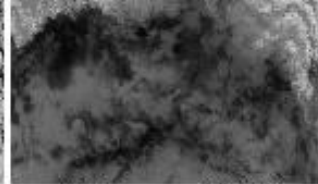
0.66 μm (#3)



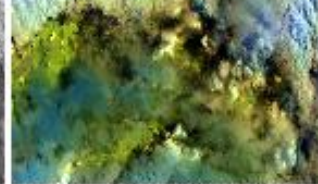
1.61 μm (#10)



3.77 μm (#30)



10.94 μm (#45)
reverse scale



RGB (#20,#10,#2)

12:33:00

12:33:53

12:33:53

Upper Left Lat, Lon = -24.6° , 29.1°
Lower Right Lat, Lon = -23.7° , 29.4°
Aircraft Heading = 35.7°
Solar Zenith = 44.1°
GPS Altitude = 18651. m (MSL)