

MSG 232A - RED FD16 EARTH OBS TEXT

1 METs are times of closest approach to targets.

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3 Based on your scheduled landing time, this will be your final Earth
4 Observations flightnote for this mission. We are extremely pleased
5 with both the quantity and quality of the digital imagery that has
6 been downlinked and reviewed so far. We are looking forward to our
7 crew debriefing on your diligent photography efforts.

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10 RED AND BLUE

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12 MET 14/16:32 TOSKA LAKES, EGYPT. Good context photos of this area
13 are needed to continue to document the surprising
14 westward expansion of these lakes formed by pumping
15 excess water from the Aswan Reservoir on the Nile
16 River. Look well left of track for best views. CVIS.
17 Oblique. Digital Camera 180mm. Atlas page 16.

18

19 MET 14/18:05 LAKE CHAD. Astronaut photography over the years has
20 documented the desiccation and now slow recovery of
21 this large lake in southwestern Chad for over two
22 decades. Your track is north and east of this feature
23 and sunglint may be used to enhance detection of
24 surface water features. Look well right of track. CVIS.
25 Oblique. Digital Camera 180mm. Atlas page 15.

26

27 MET 14/18:12 MOUNT KILIMANJARO, TANZANIA. This remains an
28 unfulfilled target request for ISS crews and no recent
29 shuttle photos document the conditions of the rapidly
30 shrinking ice fields on this isolated, 19,000 ft,
31 volcanic peak. Look carefully just left of track and
32 try for detailed views of this small, but impressive
33 feature. CVIS. Near Vertical. Digital Camera 400mm.
34 Atlas page 18.

35

36 MET 14/18:16 NORTHERN MADAGASCAR. Tropical Cyclone Fari slammed into
37 the northeast coast of Madagascar two days ago and has
38 meandered slowly southwestward over the island dumping
39 torrential rains. On this pass over the northern tip of
40 the island, document the bright red sediment plumes of
41 rivers with a heavy discharges induced by recent rains.
42 CVIS. Near Vertical. Atlas pages 38, 39.

43

44 MET 14/19:38 LAGOS, NIGERIA. This city of well over 10 million
45 people is Nigeria's largest city and is packed on a low
46 lying coastal plain with a lagoon to the east the
47 Atlantic to the south. Your pass and clear weather
48 favor excellent nadir views. CVIS. Near Vertical.
49 Digital Camera 180mm. Atlas page 15.

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END OF PAGE 1 OF 4, MSG 232A

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1 MET 14/21:21 SOUTH AFRICAN AEROSOLS. High pressure dominates
2 southern Africa allowing for air stagnation and aerosol
3 buildup. As you track southeastward over the Vaal and
4 Orange River valleys, try for oblique views
5 northeastward to the left of track to detect the depth
6 and extent of aerosols generated in the highly
7 industrialized cities of Johannesburg and Pretoria.
8 CVIS. Oblique. Hasselblad 110mm. Atlas page 37.

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11 RED

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13 MET 15/00:05 GULF OF VENEZUELA - LAKE MARICAIBO. These two shallow
14 basins are connected by a narrow channel and are the
15 heart of Venezuela's strike-bound petroleum production.
16 Try for nadir views of these water bodies either side
17 of track, noting the complex infrastructure supporting
18 the production and delivery of oil. CVIS. Near
19 Vertical. Digital Camera 180mm. Atlas page 13.

20
21 MET 15/03:20 ATACAMA DESERT - CENTRAL ANDES DUST SOURCES. Your pass
22 over the Atacama Desert and central Andes of Chile and
23 Argentina includes a number of source areas of
24 atmospheric dust. Try for oblique views either side of
25 track to detect both dust plumes and their point
26 sources. CVIS. Oblique. Digital Camera 180mm. Atlas
27 page 33.

28
29 MET 15/04:54 ROBINSON CRUSOE ISLAND, SOUTH PACIFIC. Easternmost of
30 the remote Islas Juan Fernandez, this rugged,
31 picturesque island is the setting for Daniel Defoe's
32 famous book. With unusually fair weather conditions,
33 this small green island lies just left of track. CVIS.
34 Near Vertical. Digital Camera 180mm. Atlas page 33.

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37 RED AND BLUE

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39 MET 15/06:12 MARQUISES ARCHIPELAGO. Your pass runs the length of
40 this small, relatively isolated part of French
41 Polynesia. Take advantage of high sun and fair weather
42 to document details of the atolls and island reef
43 structures of these rarely photographed islands. CVIS.
44 Near Vertical. Digital Camera 400mm. Atlas page 31.

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MSG 232A - RED FD16 EARTH OBS TEXT

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2 BLUE
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4 MET 15/10:31 LUZON ISLAND, PHILIPPINES. Your pass is over the
5 rugged, northern end of this large island. Here two
6 north-south mountain ranges flank the valley of the
7 northward flowing Cagayan River. Carefully map details
8 of the topography and land use patterns using near
9 vertical views. CVIS. Near Vertical. Digital Camera
10 180mm. Atlas page 21.
11
12 MET 15/10:46 NEW CALEDONIA. Tropical Cyclone Beni ravaged this
13 beautiful island earlier this week with 110 knot winds.
14 As you track the length of the island located right of
15 track, use the long lens to look for details that may
16 indicate damage such as areas of debris and water color
17 changes. CVIS. Oblique. Digital Camera 400mm. Atlas
18 page 29.
19
20 MET 15/12:03 PHNOM PENH - HO CHI MINH CITY. These important
21 Southeast Asian cities are just seconds apart on this
22 pass. Phnom Penh with over a million inhabitants on the
23 west bank of the Mekong river lies just to the right of
24 track while Ho Chi Minh City with nearly four million
25 is just inland and to the left of track. CVIS. Near
26 Vertical. Digital Camera 180mm. Atlas page 20.
27
28 MET 15/13:30 BOMBAY, INDIA. Look just left of track for a good view
29 of this immense, high density city of over 15 million
30 people, India's largest. Near Vertical. Digital Camera
31 180mm. Atlas page 19.
32
33 MET 15/13:51 LAKE EYRE, SOUTH AUSTRALIA. With the current El Nino
34 underway, we are lacking any recent contextual views of
35 the Lake Eyre region to track its hydrologic anticipated
36 response (drying) to this event. Look well to the left
37 of track to detect any water or inflow into this now
38 mostly dry lake bed. CVIS. Oblique. Digital Camera
39 180mm. Atlas pages 27, 28.
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41 *****
42 RED AND BLUE
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44 MET 15/15:21 SOUTHWESTERN AUSTRALIAN BURN SCARS. Although interest
45 is focused on current fires in southeastern Australia,
46 large fires burned in the southwest, earlier this
47 summer season. Use this break in the weather to
48 document the patterns and extent of both new and older
49 fire scars in this extensive prairie region. CVIS. Near
50 Vertical. Oblique. Digital Camera 50mm. Atlas page 27.
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1 MET 15/16:34 ADDIS ABABA, ETHIOPIA. There are few good photos of the
2 Ethiopian capital. Look just right of track for this
3 city of almost three million people. CVIS. Near
4 Vertical. Digital Camera 180mm. Atlas page 18.
5

6 MET 15/16:36 SOMALI COASTAL VEGETATION. We are continuing to monitor
7 vegetation conditions along the immediate coast of
8 Somalia for the greenup experienced during the last El
9 Nino. Although no unusual weather conditions have been
10 reported so far during the current El Nino, please
11 document baseline conditions as you track across the
12 coastline from the northwest. CVIS. Near Vertical.
13 Digital Camera 180mm. Atlas page 18.
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