

MSG 140 - RED FD10 EARTH OBS

1 MET's are at approximate time of encounter.
2
3 The images you have been downlinking taken with the 400 mm lens are fabulous! We are
4 working five of them (Havasu Canyon, Mashad, Iran, Namibia Dunes, etc.) as Image of the
5 Day releases on NASA's Earth Observatory. We usually only do 1 or 2 per Shuttle mission.
6 *****
7 RED AND BLUE
8
9 MET 08/18:06 LISBON, PORTUGAL. City will be south (right) of track. CVIS. Near Vertical.
10 Digital Camera 180mm 400mm. Atlas page 5.
11
12 MET 08/18:15 NILE DELTA, SINAI. Photograph areas within the delta that are no longer
13 suitable for agriculture. Could look from the south along the length of the Suez
14 Canal. Pass crosses the Sinai and just covers the Israeli coast on the Gulf of Aqaba.
15 CVIS. Near Vertical. Oblique. Digital Camera 180mm 400mm Hasselblad 110mm.
16 Atlas page 16.
17
18 MET 08/19:42 GIBRALTAR. Direct pass over the Strait of Gibraltar. As you approach, you
19 may be able to use sunglint to observe patterns of internal waves. Pass continues
20 over the Atlas mountains. CVIS. Near Vertical. Oblique. Digital Camera 180mm
21 Hasselblad 110mm. Atlas pages 5, 15.
22
23 MET 08/19:52 KHARTOUM, SUDAN. Look south (right) of track for the junction of the Blue
24 and White Nile at Khartoum. Detailed view of the city also of interest. CVIS. Near
25 Vertical. Oblique. Digital Camera 180mm 400mm Hasselblad 250mm. Atlas page 16.
26 *****
27 RED
28
29 MET 08/21:20 LAKE CHAD. Continuing photography of Lake Chad is important because of
30 the way it reflects regional climate. Changes in agricultural practices should also be
31 visible, but have not yet been well documented from human spaceflights. CVIS. Near
32 Vertical. Digital Camera 180mm 400mm Hasselblad 250mm. Atlas page 15.
33
34 MET 08/22:51 SENEGAL RIVER TO GHANA. This pass is a good opportunity to
35 photograph 3 major cities in western Africa. Starts on the Atlantic Coast at
36 Nouakchott, Mauritania, then along the Senegal River, over Bamako, Mali, and finally
37 Accra, Ghana on the Gold Coast (Gulf of Guinea). CVIS. Near Vertical. Digital
38 Camera 180mm 400mm. Atlas pages 14, 15.
39
40 MET 09/01:45 GEORGIA, FLORIDA. Jacksonville will be just north (left) of track. A broad
41 view of Florida looking obliquely toward the South. CVIS. Near Vertical. Oblique.
42 Digital Camera 180mm Hasselblad 110mm. Atlas page 2.
43
44 MET 09/03:10 CALIFORNIA AND ARIZONA. Land use and wetlands in the southern San
45 Joaquin valley are important issues. Take mapping strips across the valley. Edwards
46 AFB will be right (south) of track if you want to try again. Also good opportunity to
47 photograph the Phoenix metro area just right (south) of track. CVIS. Near Vertical.
48 Digital Camera 180mm 400mm. Atlas page 2.
49
50
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- 1 MET 09/03:19 YUCATAN. The northern edge of the Yucatan and the city of Merida (just
2 south/right of track) was decimated by a hurricane this summer. Pass continues just
3 south of Cozumel. A number of isolated banks and coral reefs in the Caribbean will
4 be near to your track. CVIS. Near Vertical. Digital Camera 180mm 400mm. Atlas
5 page 12.
6
- 7 MET 09/03:23 COLOMBIA, VENEZUELA, BRAZIL. City of Baranquilla and the Rio
8 Magdalena. Pass tracks along north of the Rio Negro, Brazil. Look for forest clearing.
9 Mapping strips along the river connecting to the junction of the Rio Branco and Rio
10 Negro, and on to Manaus will be most easy to locate. CVIS. Near Vertical. Digital
11 Camera 180mm 400mm Hasselblad 250mm. Atlas pages 13, 33, 34.
12
- 13 MET 09/05:06 PARAGUAY. Chaco Plain and the Rio Parana. This area is of interest to
14 geomorphologists studying large landforms and megafans. CVIS. Near Vertical.
15 Oblique. Digital Camera 180mm 50mm Hasselblad 110mm. Atlas pages 33, 34.
16 *****
17 RED AND BLUE
18
- 19 MET 09/07:48 HAWAII. Good opportunity to photograph all the major Hawaiian Islands.
20 Synoptic views make good presentation shots. Detailed mapping strips with longer
21 lenses provide the most new information on volcanic changes and coral reefs. CVIS.
22 Near Vertical. Digital Camera 180mm 400mm Hasselblad 250mm. Atlas page 24.
23 *****
24 BLUE
- 25 MET 09/09:08 NORTHERN HONSHU, JAPAN. A good opportunity to photograph the city of
26 Sendai, Miyagi Prefecture. Also photograph the distinctive patterns of Japanese
27 coastal land use. CVIS. Near Vertical. Digital Camera 180mm 400mm. Atlas page
28 21.
29
- 30 MET 09/10:40 SOUTH KOREA; HIROSHIMA, JAPAN. Your track over South Korea covers
31 some of the most important tidal mudflats in Asia. Look for patterns of coastal
32 development and diking. Direct pass over the city of Pusan. After crossing the
33 Korean Strait, will have a pass over Hiroshima and Shikoku. Land use and coastal
34 development is of interest here as well. CVIS. Near Vertical. Digital Camera 180mm
35 400mm. Atlas page 21.
36
- 37 MET 09/15:14 NORTHERN INDIA. Pass follows south of Delhi along the Yamuna River to
38 the point where it joins the Ganges. Look for the influence of megacity Delhi on the
39 land use of the entire region. CVIS. Near Vertical. Digital Camera 180mm Hasselblad
40 110mm 250mm. Atlas page 19.
41
- 42 MET 09/15:20 IRRAWADDY DELTA, MYANMAR. This is one of the major deltas chosen
43 for a regional study, and has few photographic opportunities. Land use change, delta
44 growth or recession, and mangrove clearing are the major issues. CVIS. Near
45 Vertical. Digital Camera 180mm Hasselblad 110mm. Atlas page 20.
46
- 47 MET 09/16:39 TUGRIS/EUPHRATES RIVER MOUTH. This pass begins over Syria and
48 then along the southern side of the Fertile Crescent between the Tigris and
49 Euphrates rivers. 90% of the wetlands here have been drained by Iraq over the last
50 10 years. Mapping strips with detail of the change in wetlands. CVIS. Near Vertical.
51 Digital Camera 180mm 400mm Hasselblad 250mm. Atlas page 17.

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