

73 points total

Part 1 (10 points)

- 1 j
- 2 g
- 3 e
- 4 f
- 5 h
- 6 d
- 7 c
- 8 a
- 9 b
- 10 i

Part 2 (16 Points)

- 1. 705 km (438 mi)
- 2. 98.14 degrees
- 3. 1:30
- 4. AQUA
- 5. 3rd
- 6. CALIPSO
- 7. 5th
- 8. GCOM-W1 "SHIZUKU"
- 9. 2nd
- 10. Cloudsat
- 11. 4th
- 12. OCO-2
- 13. 1st
- 14. Aura
- 15. 6th
- 16. PARASOL

Part 3 (8 points)

- 1 SPOT
- 2 SEASAT
- 3 MOS-1, momo1
- 4 GOES
- 5 Terra
- 6 SeaWiFS or GeoEye's OrbView-2 (AKA SeaStar)
- 7 Landsat
- 8 Glory

Part 4 (12 points)

1. A
2. D
3. A
4. B
5. C
6. C
7. B
8. D
9. C
- 10 D
- 11 B
- 12 B

Part 5 Imagery (27 points)

1. $4.25 \text{ km}^2 \pm 0.14 \text{ km}^2$ [1 point calculations, 1 point answer, 1 point units]
2. $280 \text{ m} \pm 9 \text{ m}$ [1 point calculations, 1 point answer, 1 point units]
3. $32,000 \text{ m}^2 \pm 1,150 \text{ m}^2$ [1 point calculations, 1 point answer, 1 point units]
4. True color
5. Summer, (late spring or early fall)
6. More sediment because hurricane washed sediment into waterways
[1 point complete sentences, 1 point reasonable answer]
7. Less vegetation in november over riverbanks. Greater contrast with the dark water.
[1 point complete sentences, 1 point reasonable answer]
8. This is storm debris washed onto the beach and not yet cleared out to sea.
[1 point complete sentences, 1 point reasonable answer]
9. Jamaica is roughly 1 deg by 1 deg or $111 \text{ km} * \cos(22 \text{ deg}) * 111 \text{ km} = 11,000 \text{ km}^2$
[1 point calculations, 1 point answer, 1 point units]
10. Taking into account that 10-20% of the island experienced no rain, it appears that 4-6 inches of total average rainfall would be an appropriate answer.
[1 point complete sentences, 1 point reasonable answer]
11. 5 inches = 0.127 m. $11,000,000,000 \text{ m}^2 * 0.127 \text{ m} * 1,000 \text{ litres/m}^3 = 1.4 \times 10^{12}$ liters
12. Taking into account that 10-20% of the island experienced no rain, it appears that 4-6 inches of total average rainfall would be an appropriate answer.
[1 point complete sentences, 1 point reasonable answer]
13. Any year 2004-2006 earns 1 point.
14. Northeast

