Advanced Flood Management Training
Week-2 Homework Exercise

Bolivia Flood, March 2014
MODIS NRT

This exercise is designed to provide practice in using MODIS NRT to monitor surface inundation. Please go through the following case study of over Bolivia and answer the questions below.

Part 1: Inundation Map

- Go to http://oas.gsfc.nasa.gov/floodmap/
- Click on the map of South America
- Click on the grid 070W—10S (over Bolivia)
- Using the Calendar navigate to March 2014
- Click on March 15, 2014 to get the inundation map for this date with '3 day composite' (select this from the options available above the calendar)
- Click on the map to zoom in
- Using the calendar observe the flood maps from 15-21 March 2014
- Note down the date when the maximum area covered with surface inundation is seen
- From the Product Table next to the Calendar click on 'png' to save the Flood Water map image for March 21, 2014 on your computer
- Click on the '14 day composite' for March 21, 2014 and save the resulting map as png on your computer
- Compare the maps you get from '3 day composite' and '14 day composite'

Part 2: Flood Map in Google Earth (Optional)

Note : you will need Google Earth downloaded and installed on your computer
You can download Google Earth for free from the following website:
https://www.google.com/earth/

Go through Part 1 above and continue the following steps for the 3-day composite map:

- From the Products Table, click on the date when the maximum surface inundation was noted
- In the Products Table above the map click on the 'KMZ' file for 'MODIS Flood Water'
- This will open the Flood Water map in Google Earth
- Zoom in and note down the name of the area where inundation is seen

Week-2 Homework Questions

Answer the following questions based on the exercise of MODIS flooding over Bolivia.

1) From the MODIS flood water map name the river where flooding was observed.

2) What was the date when maximum inundation was observed?

3) The flooding occurred to the northeast of the capital city of La Paz

a) true b) false

4) The blue areas on the map show

a) Surface Water b) Flood Water c) Reference Water

5) Compare the 3-day composite flood map and 14-day composite flood map for 21 March 2014. Do they show the same information about the inundated areas? (explain your answer based on the units used for showing inundation).