

NASA (ARSET) Training on Climate Variability, Hydrology, and Flooding
2nd GEO-CIEHLYC Water Cycle Capacity Building Workshop
Cartagena, Colombia
May 19-22, 2015

Case Study Analysis Sheet

Group Members: _____

Case Study Name: _____

Date(s): _____

Resources Used:

1. Which region/river basin does your case study focus on? How did you decide on or find this flood case?
2. Do you see increase in streamflow or 'above threshold flood depth' for this case?
3. Can you see surface inundation in the affected river channel during the flooding event or in the subsequent period? If not, what might be the reason for the absence of inundation?
4. Can you identify/describe the rain system that caused the flooding? What was the duration (in days) and amount of rain? Can you see the rain system approaching before the flood started? (Hint: Try using animation of rain rates)
5. Did the flood event affect heavily populated areas? Which information did you use to make this assessment?

6. What was the ENSO condition during the month of flooding (warm, cold, normal)? What was it in the previous 3-4 months? What information did you use to determine your answer?

7. Do you think the flood event you are analyzing occurred due to the ENSO condition? Hint: Go back to the IRI Map Room and review the precipitation probability maps you analyzed on Tuesday, 20th May. Does it help to you support your answer?

8. Considering that the seasonal forecast is that 2015 will be an El Nino year, what kind of hydrological conditions – precipitation and surface temperature – (dry, wet, normal/ hot, cold, normal) would you expect in the next season in the area your case study? Explain your answer.

9. How could you use this information for planning risk reduction activities and actions?