Final Project Report

Preparation work:

We download yA31,yA11,yC31 300\*300\*300 FourScalars resolution. Then, we get the paths for all the files.

1. When does the airburst happen? Please pick up an ensemble member with airburst to answer this question. When the airburst happen, the asteroid is splitted into multiple pieces. Fig. 1 is an example, the asteroid is splitted into at least three smaller rocks and you cannot observe a complete sphere any more.
2. When does the asteroid hit the water surface? Please pick up an ensemble member without airburst to answer this question.
3. When is the tsunami (wave rim) generated and start to propagate? Please pick up an ensemble member without airburst to answer this question. Fig. 3 is an water rim example. We can observe the water wave rim.