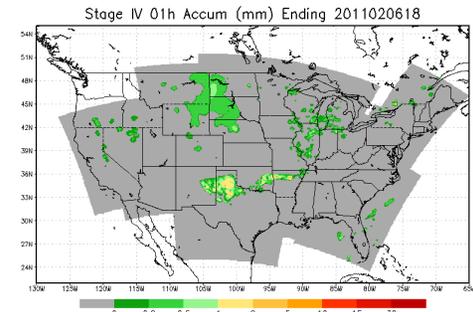
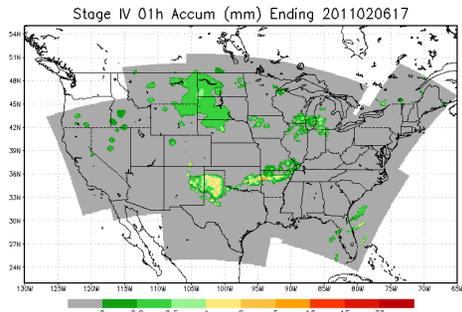
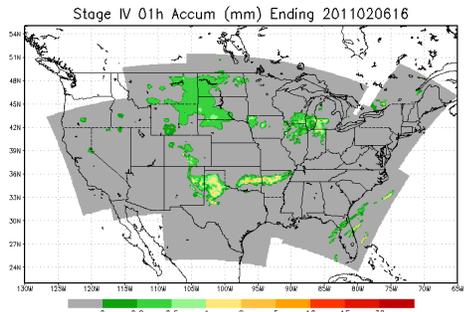
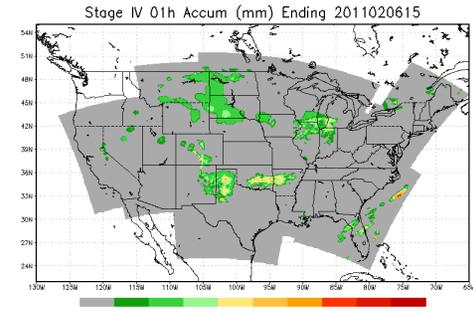
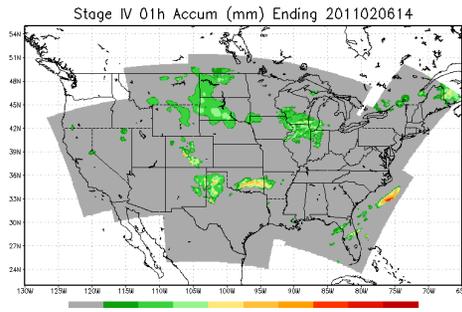
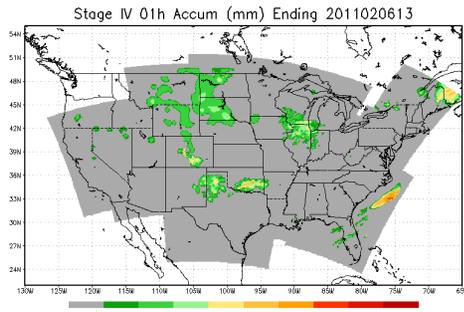
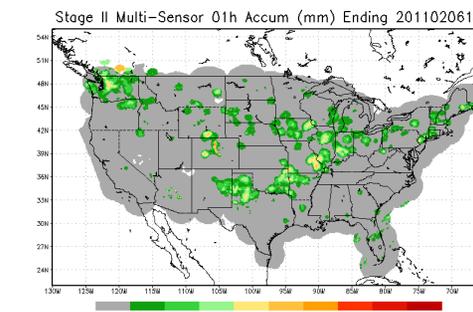
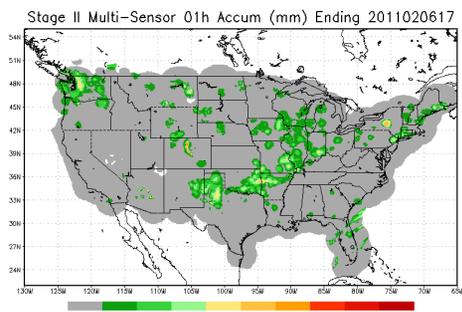
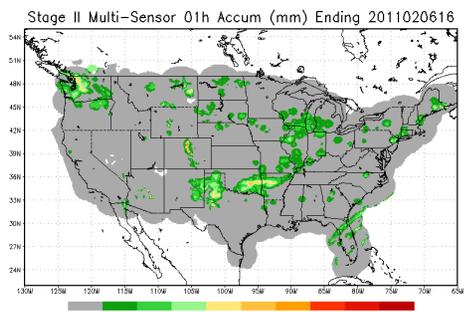
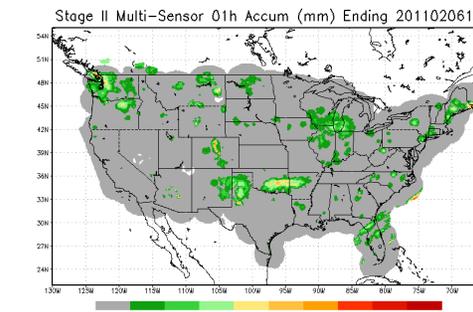
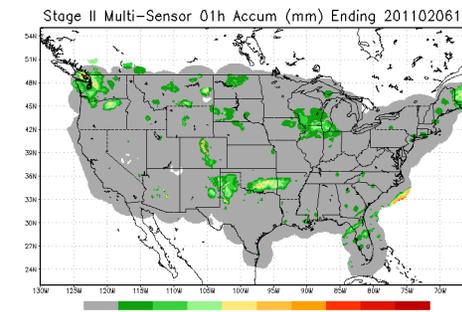
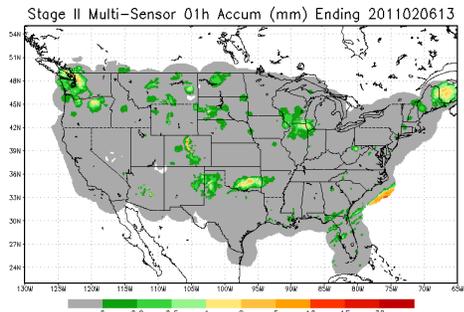


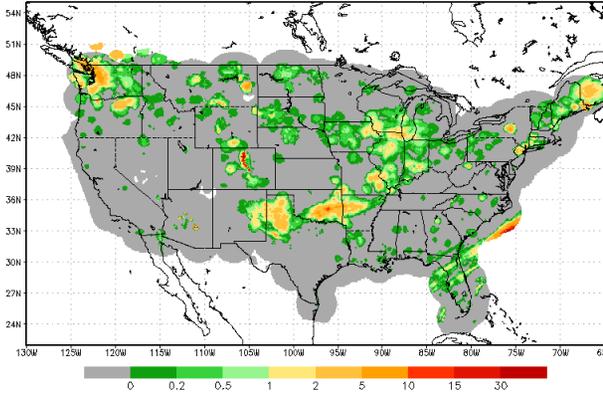
Hourly Stage IV



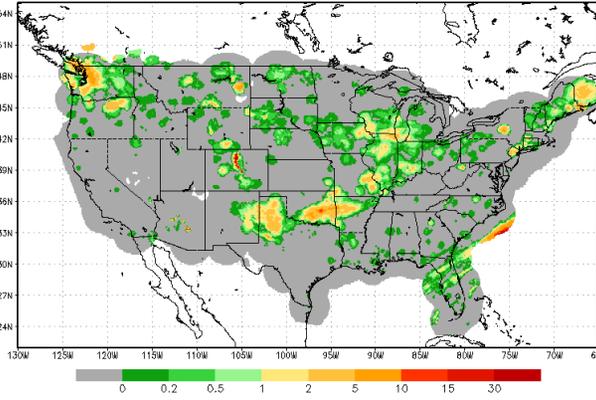
Hourly Stage II



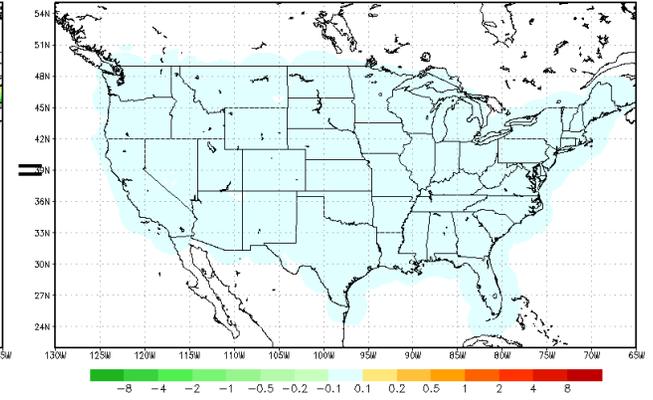
Stage II Multi-Sensor 6(01h) Accum (mm) Ending 2011020618



Stage II Multi-Sensor 06h Accum (mm) Ending 2011020618



Stage II Multi-Sensor Diff 6(01h)-6h Accum (mm) Ending 2011020618



Sum of 6 one-hourly Stage II

6-hourly Stage II

Identical

How different between sum of 6 one-hourly Stage II and 6-hourly Stage II?

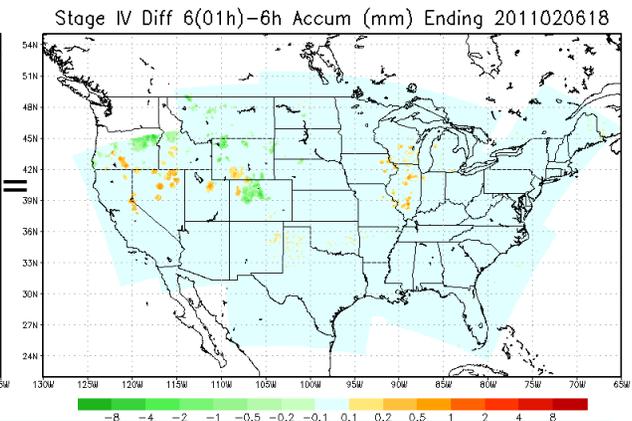
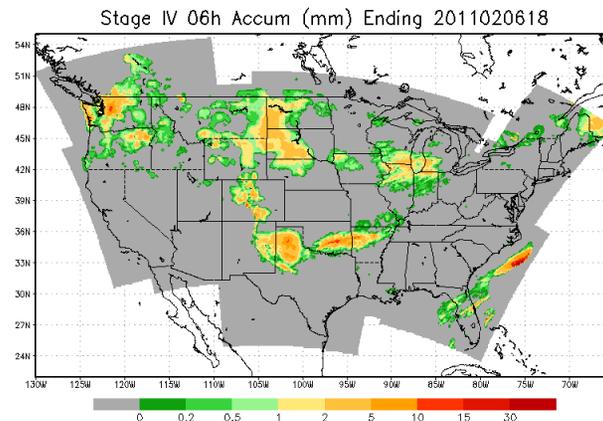
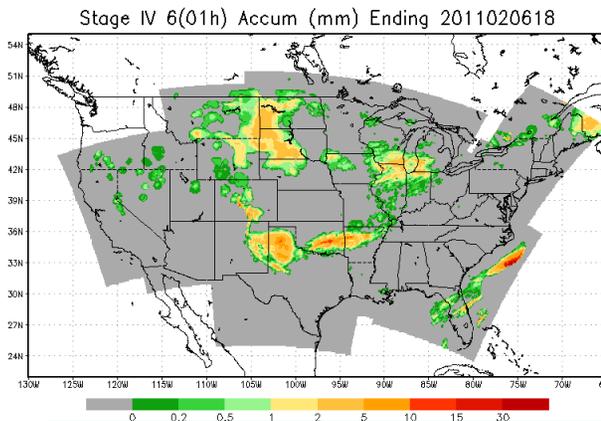
Answer : identical

- Same Full Data Coverage over CONUS
- Same Data Quality
- Same Data grid and format

Sum of 6 one-hourly Stage IV

6-hourly Stage IV

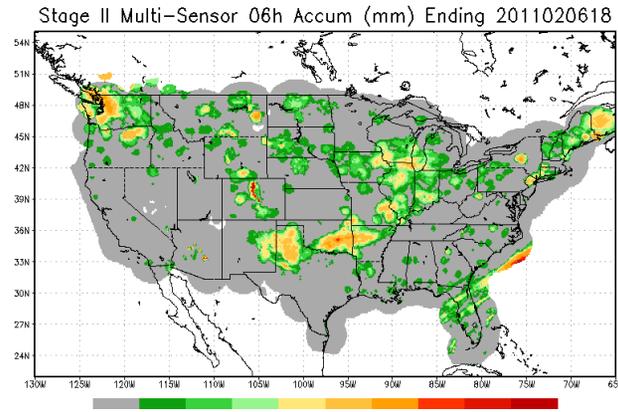
Slight Difference



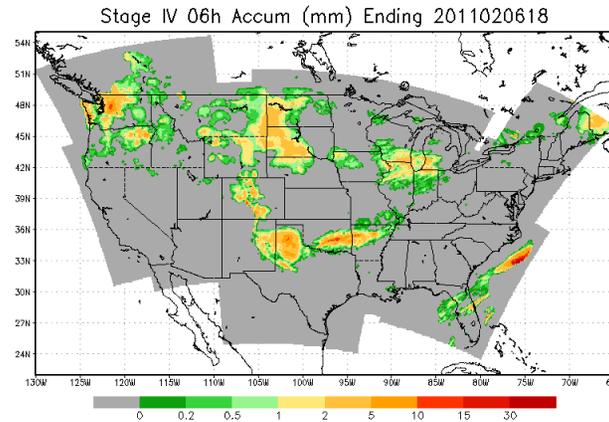
How different between sum of 6 one-hourly Stage IV and 6-hourly Stage IV?

- Data Coverage over CONUS
Sum of 6 one-hourly data : no data in NWRFC
6-hourly data: Full coverage
- Data Quality — 6-hourly dataset is better than sum of 6 one-hourly data
- Data grid and format: Same

- Significant different between 6-hourly Stage II and 6-hourly Stage IV
- Very close between 6-hourly Stage IV and 6-hourly CCPA

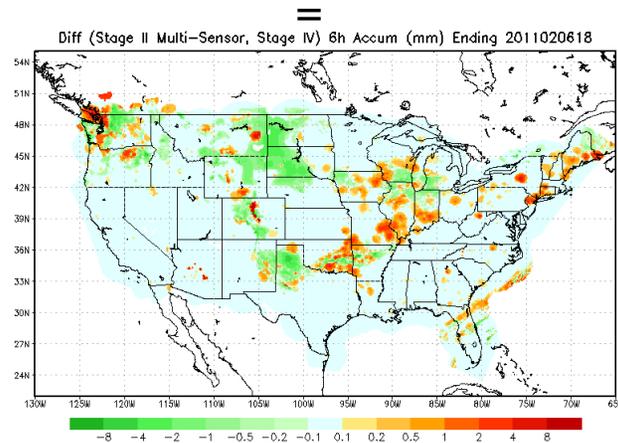
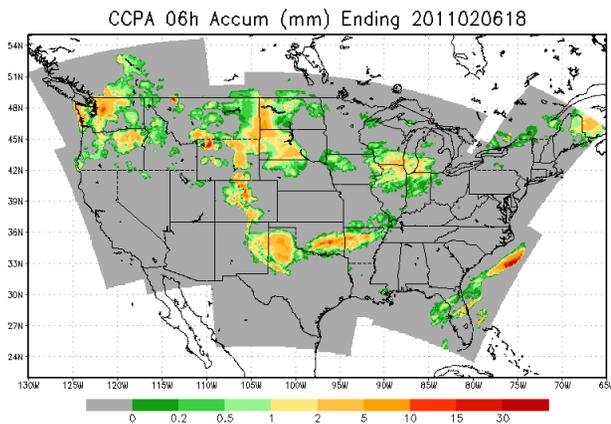


6-hourly Stage II



6-hourly Stage IV

6-hourly CCPA



**Difference:
6-hourly Stage II
minus
6-hourly Stage IV**

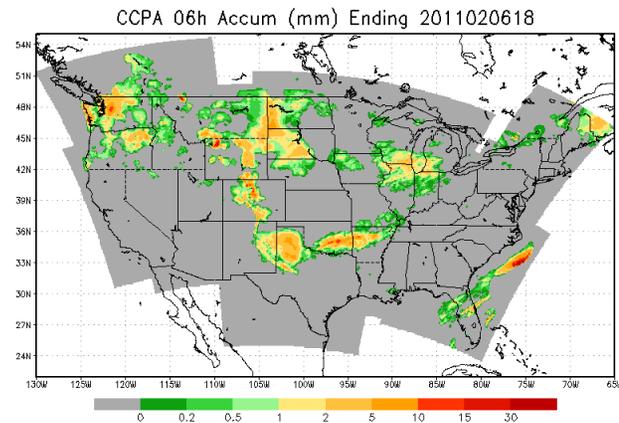
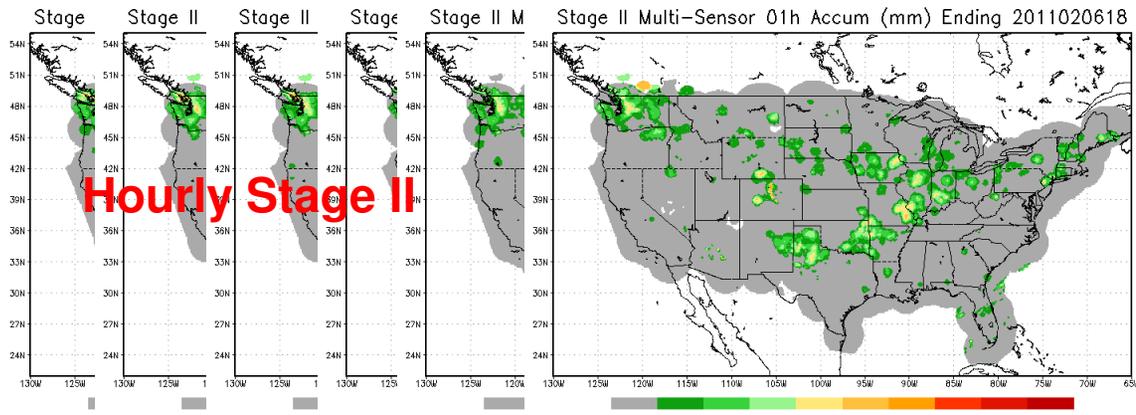
How to derive 3-hourly CCPA?

- Based on 6-hourly CCPA and hourly data from Stage II and/or Stage IV.
- Use hourly data as weights to disaggregate 6-hourly CCPA

Proposed two approaches to get hourly data for 3-hourly CCPA:

- Approach I: use of Stage II hourly data only
- Approach II: use of combination of Stage II and Stage IV hourly data

Approach I



3-hourly CCPA

Method:

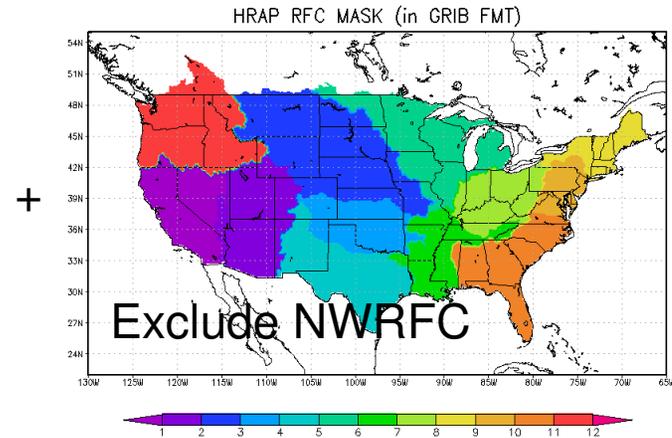
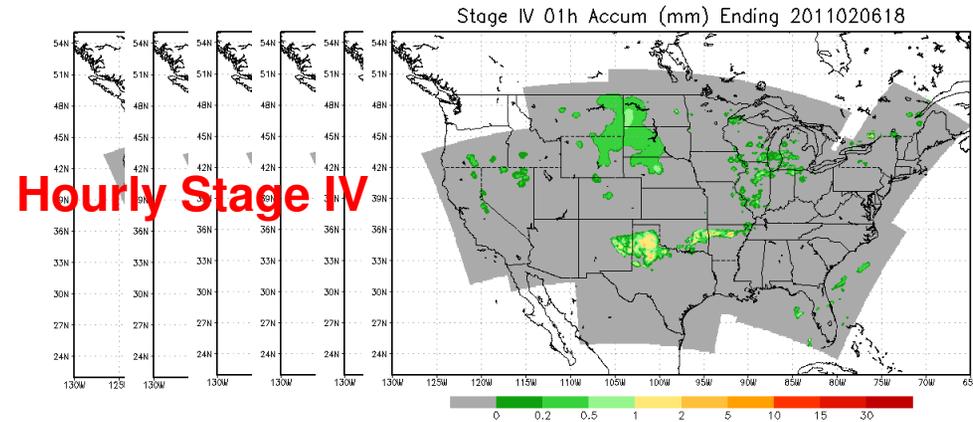
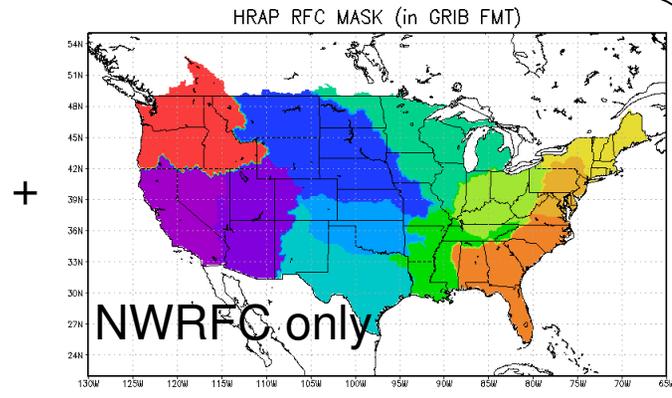
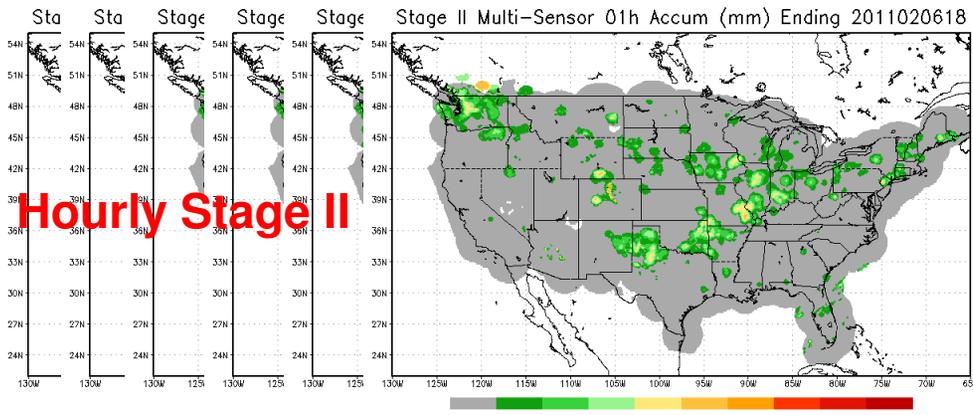
Use hourly Stage II as weights to disaggregate 6-hourly CCPA

Comments:

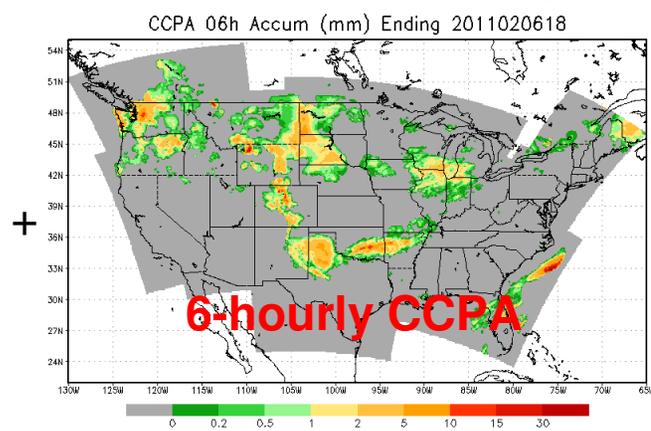
Advantage- simple, straightforward, small data flow ingest and low computational cost

Disadvantage - possible poor quality due to no qc on Stage II

Approach II

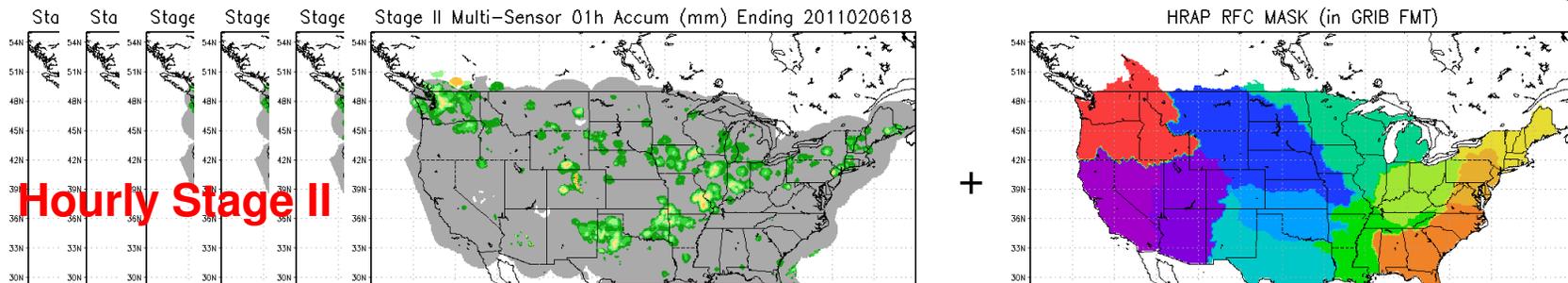


Hourly Stage composite



3-hourly CCPA

Approach II



Hourly Stage II

Method:

Use hourly Stage composite as weights to disaggregate 6-hourly CCPA

Comments:

Advantage - possible good quality due to mostly qc on Stage IV

Disadvantage - complicated, huge data flow ingestion and high computational cost

