

Conakry, Guinea – 1310 UTC

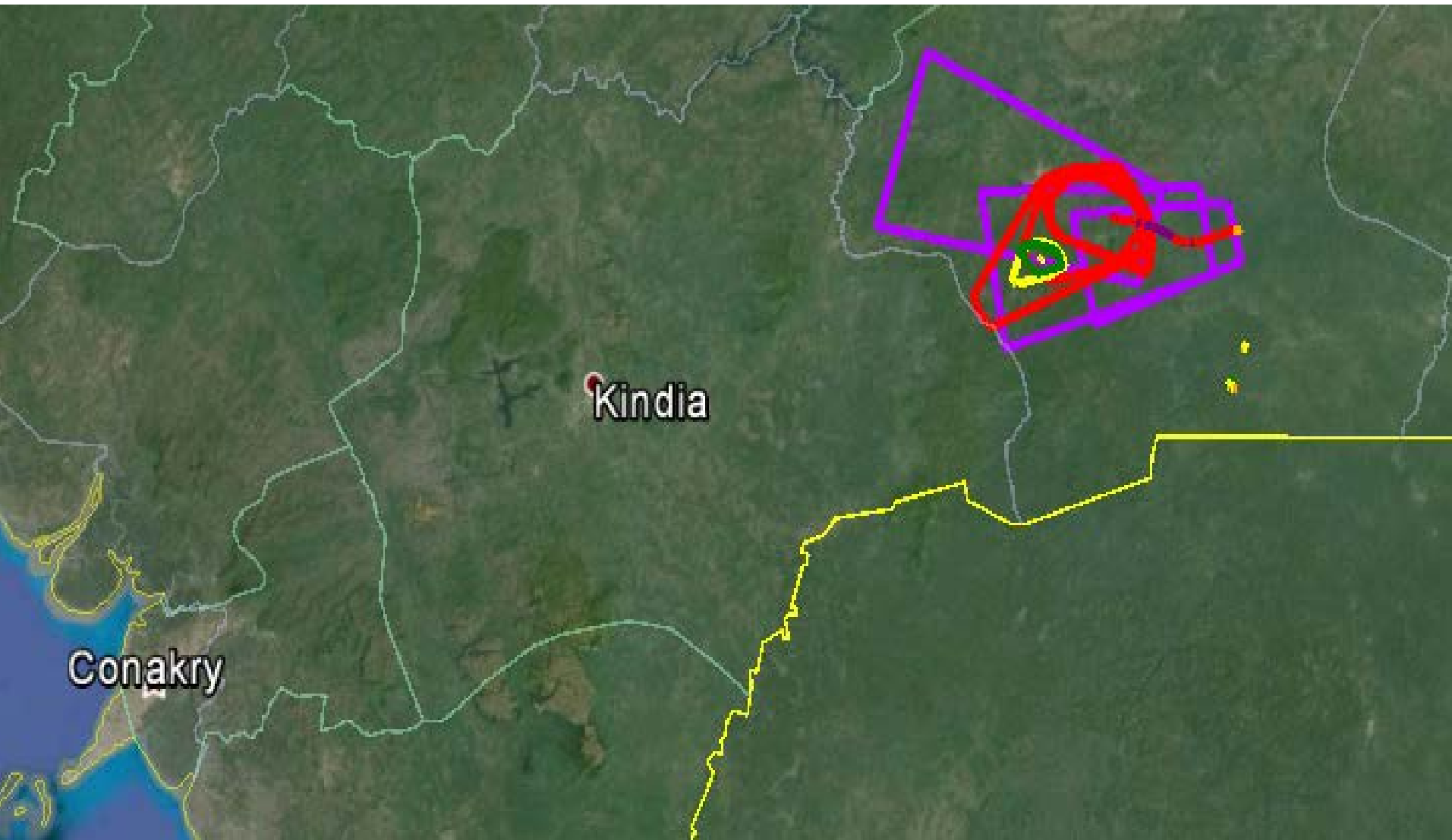
1st **Dangerous Thunderstorm Alert (DTA)** issued ~175km NE of Conakry.
Severe Storm Cell highlighted.



2 hours 50 minutes
to Coyah event.

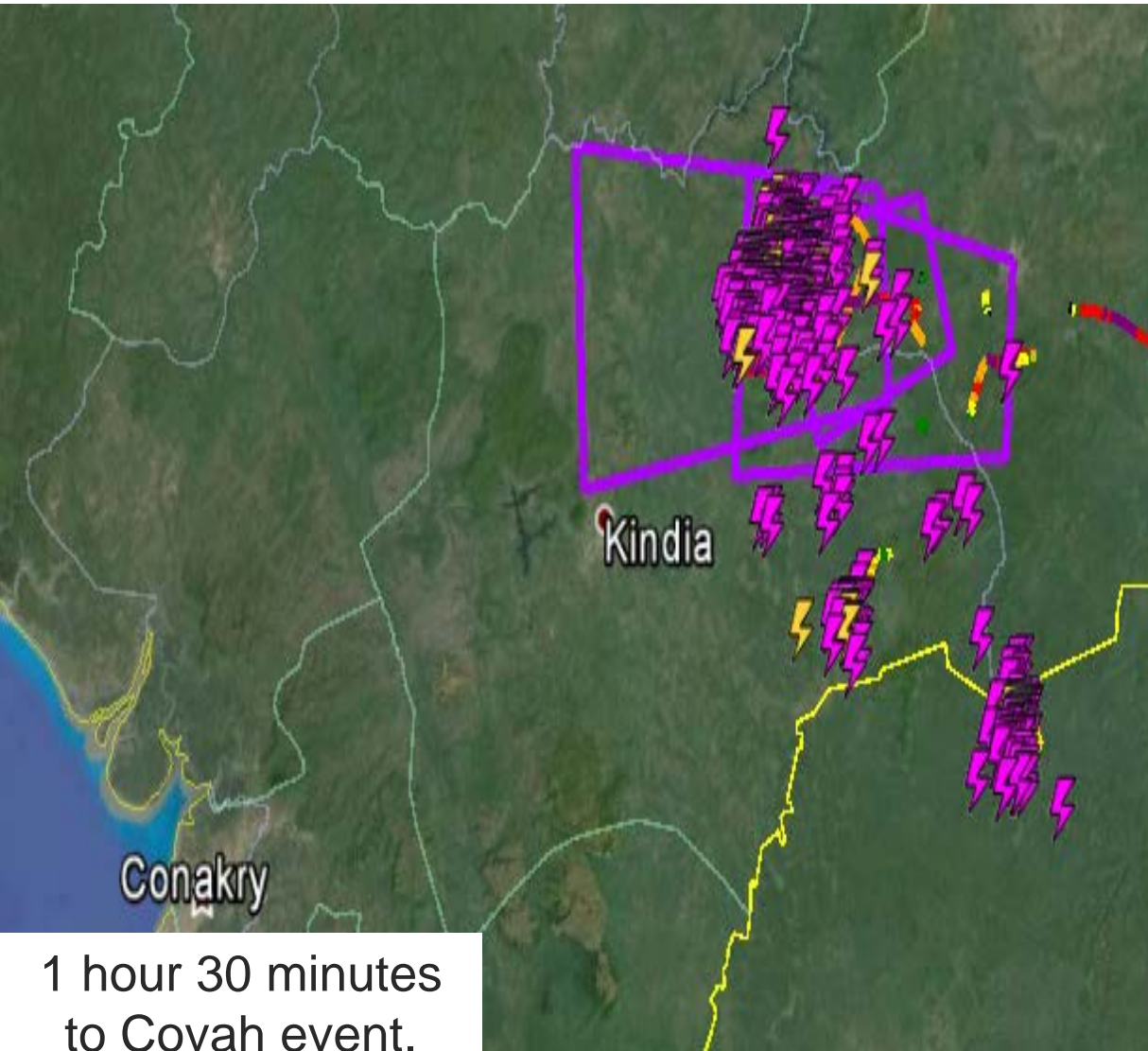
Conakry, Guinea – 1340 UTC

Additional **DTAs** and **Severe Storm Cells** detected ~150km NE.



Conakry, Guinea – 1430 UTC

DTAs, heavy lightning activity approaching Kindia. Pinpoints lightning activity.

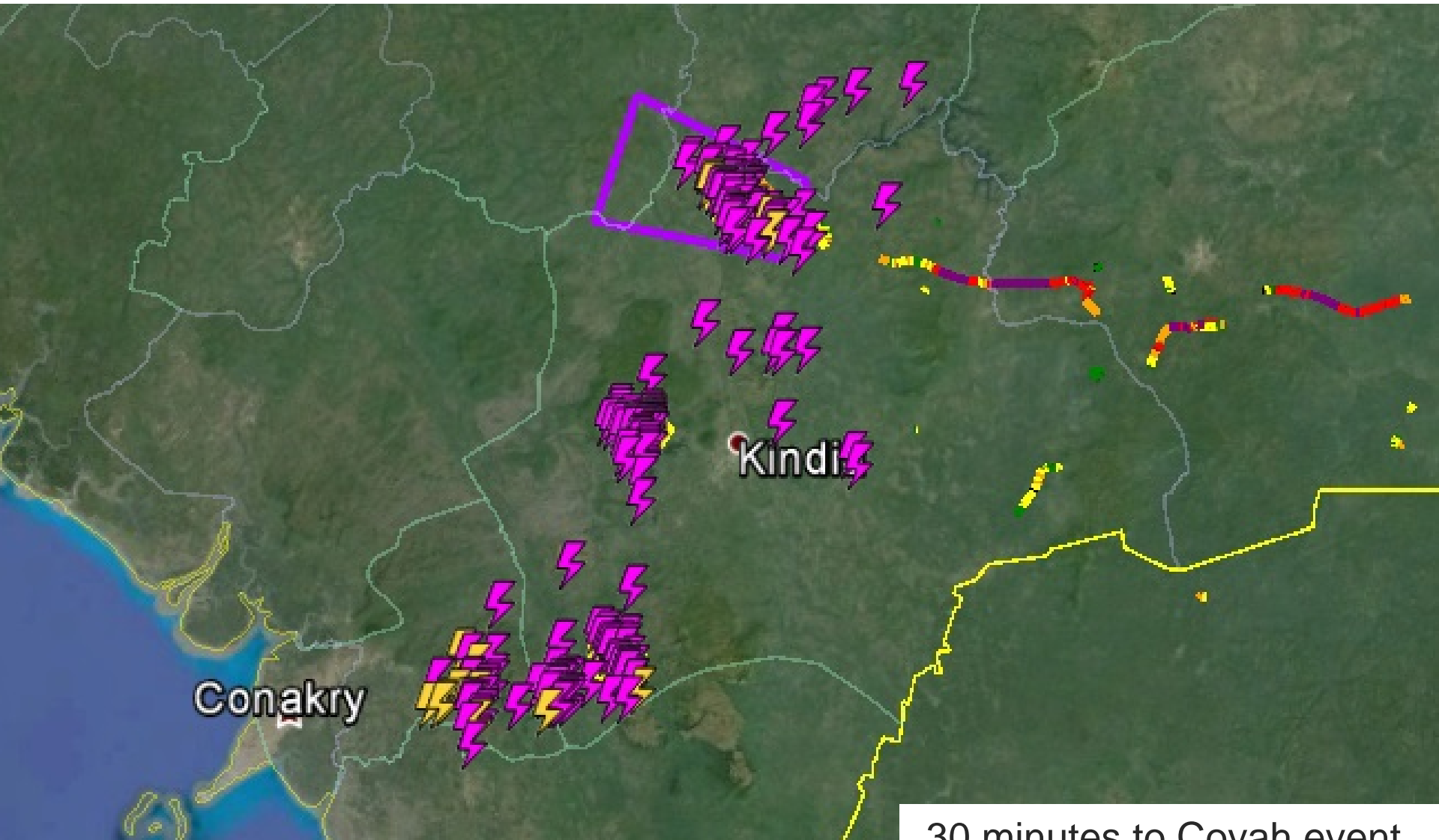


Cell Id	WAF201405271356001
Cell Time	05/27/2014 14:31 UTC
Cell Area In Square Km	531.08
Cell Centroid LatLon	10.32922, -12.45256
Total Lx Rate Per Min	65.34
IC Rate Flashes Per Min	63.67
CG Rate Flashes Per Min	1.67
Total Lx Rate Change	0.02
IC Lx Rate Change	0.04
CG Lx Rate Change	1.67
Direction In Degrees	87.00
Speed In km/hr	47.38
Start Time	05/27/2014 14:31 PM
End Time	05/27/2014 15:16 PM
Alert Threshold	20.00
Alert Level	3.00

1 hour 30 minutes
to Coyah event.

Conakry, Guinea – 1530 UTC

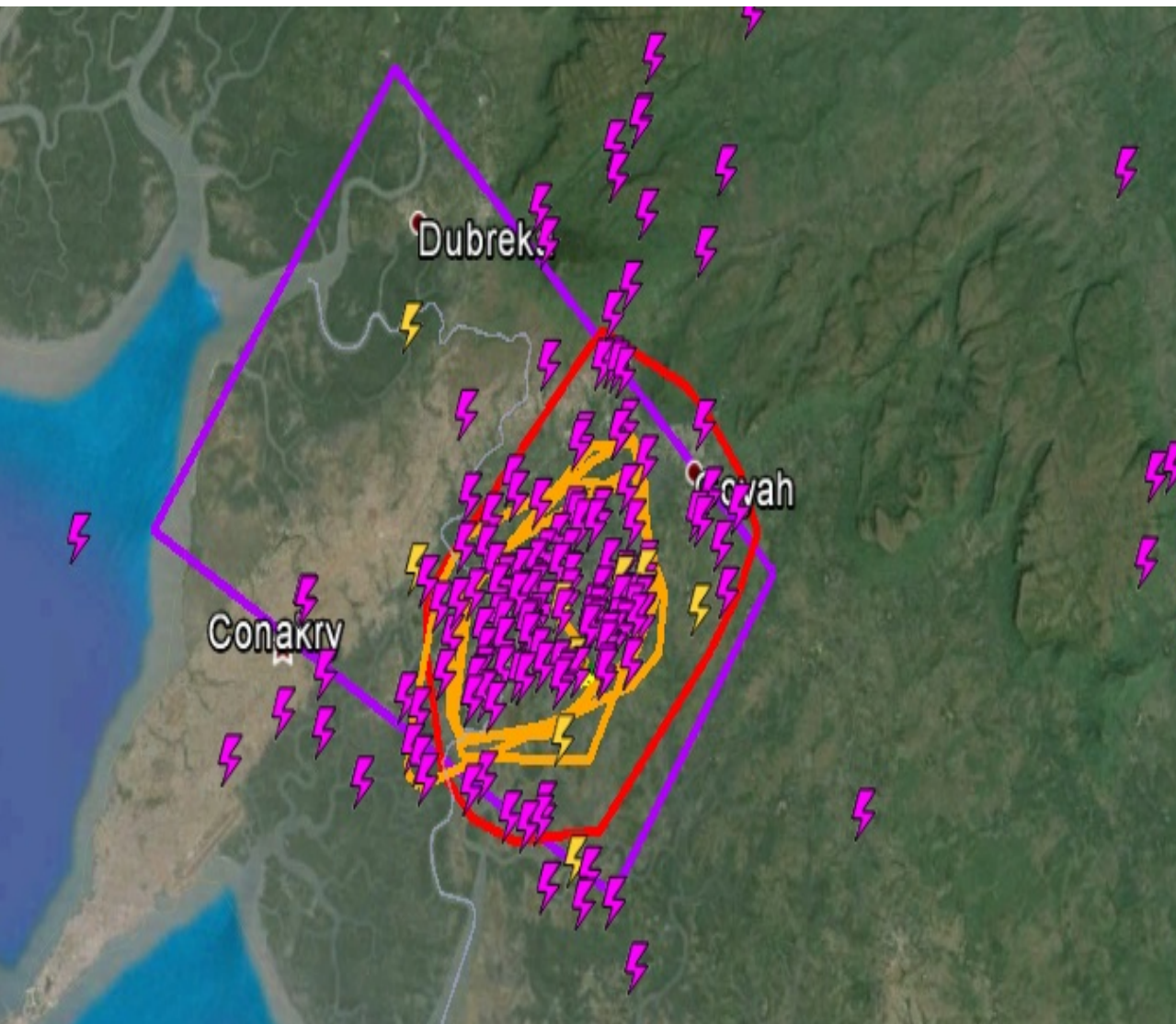
Original **DTAs** shift North. Lightning activity intensifies just East of Conakry.



30 minutes to Coyah event.

Conakry, Guinea – 1555 UTC

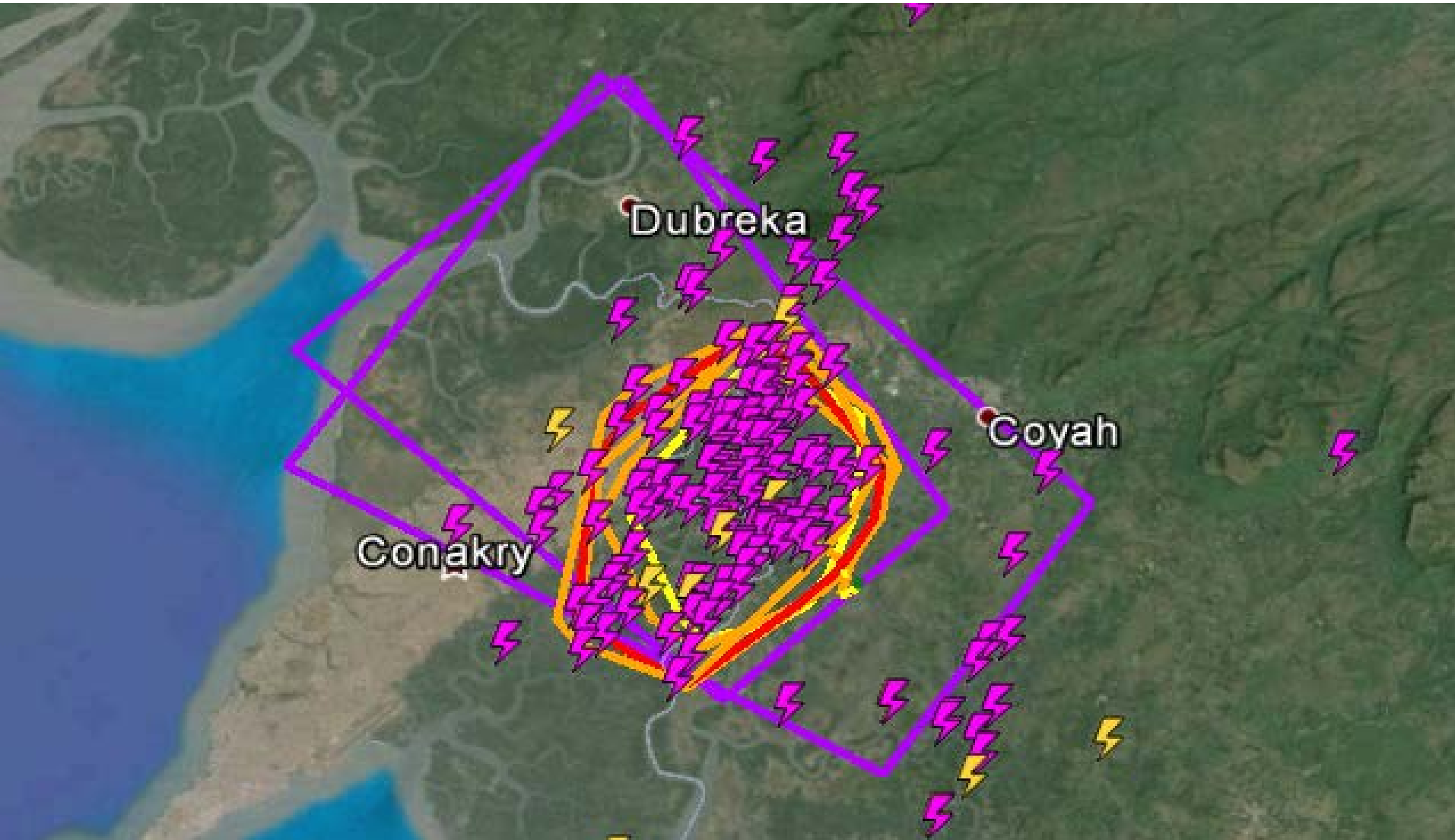
Heavy lightning around Coyah. Two fatalities and two injuries reported.



Cell Id	WAF201405271549001
Cell Time	05/27/2014 15:55 UTC
Cell Area In Square Km	193.19
Cell Centroid LatLon	9.65215, -13.43604
Total Lx Rate Per Min	20.66
IC Rate Flashes Per Min	20.33
CG Rate Flashes Per Min	0.33
Total Lx Rate Change	1.92
IC Lx Rate Change	1.86
CG Lx Rate Change	0.33
Direction In Degrees	125.00
Speed In km/hr	17.53
Start Time	05/27/2014 15:55 PM
End Time	05/27/2014 16:40 PM
Alert Threshold	20.00
Alert Level	3.00

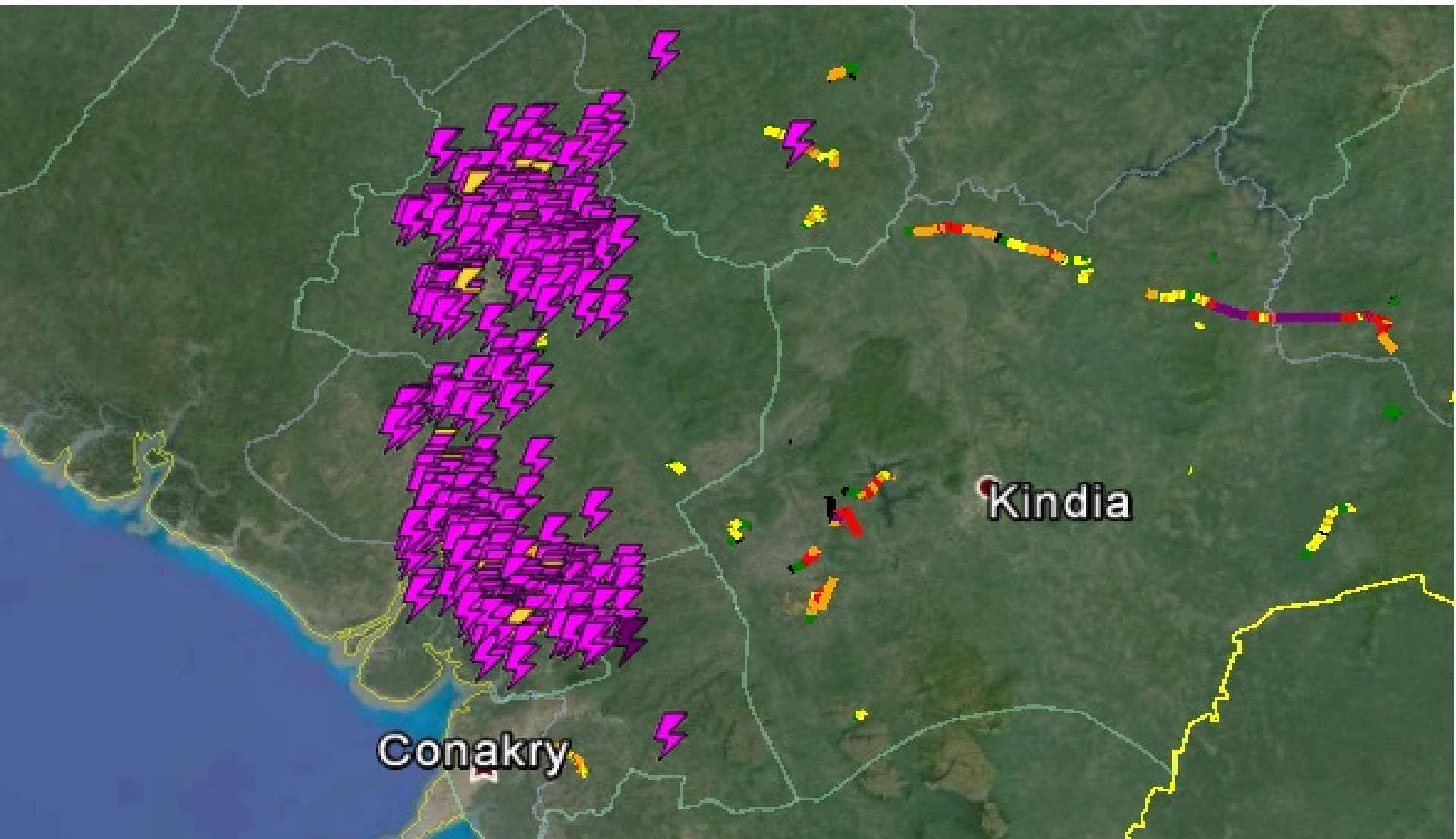
Conakry, Guinea – 1615 UTC

Height of storm reaches Eastern Conakry. Heavy IC Lightning, multiple DTAs



Conakry, Guinea – 1715 UTC

Storm continues North to hug Guinea coast. Path of storm cells highlighted.



Conclusion

- The **DTAs** provided an impressive lead time for severe storm activity in the Conakry region.
- First storm cells and lighting identified ~175km NE of Conakry at 1310, approx. *3hrs prior* to the height of the storm and Coyah fatalities.
- **Automated DTA** alerts enables early and *more precise* warning capabilities on quickly-forming storm cells.
- Note: This storm had massive amounts of In-Cloud and Cloud-Ground lightning. See figure.

All Storm Cells Identified and Alerts Issued for Severe Storm

