



EarthCARE Product Disclaimer – ATLID

Mission	EarthCARE	
Sensor	Atmospheric Lidar- ATLID	
Product	<ul style="list-style-type: none"> Level 1B A-NOM 	
Product Notice ID		
Issue/Rev Date	1.0	
Preparation	ESA L1 Processor Team	
Approval	ESA Project Management	

Summary

This Product disclaimer addresses EarthCARE Atmospheric Lidar (ATLID) Level-1B processing baselines published to the public at launch +6 months.

The notice describes the A-NOM Level-1B status of baseline AD in terms of known issues and limitations of the data.



Processing Baselines

Processing Baseline	<ul style="list-style-type: none"> AD
ECGP version	<ul style="list-style-type: none"> ATLID ECGP v.4.6

Current Operational Processing Baselines

ECGP	ECGP Version	Into operations since
ATLID ECGP	v 4.6	TBC

Known product quality limitations

ATLID Level-1B processing baseline AD has the following known limitations:

Speckle noise

- Large random spikes in the signal particularly in the region of the South Atlantic Anomaly
- Affects approximately 20 in 100,000 profiles, typically each spike covers a few adjacent vertical samples
- Majority of these are now detected and corrected by the level 1 processing, but some may remain undetected

Spike at the Low resolution to High resolution boundary

- Signal is too high in the first high resolution sample on the Mie and Rayleigh channels
- Affects vertical sample 41 (at approximately 20km)

Damaged/hot Pixels

- Damage in some pixels causing increased dark signal in specific vertical samples
- The effect is corrected by an update to the dark signal non-uniformity (DSNU) map following a dark current calibration (DCC), there will be short periods after a new pixel becomes damaged where the DSNU map will not yet be updated and the increased dark signal will be visible

Known issues in specific samples

- Signal appears too small in Mie sample 113 beginning in frame 01852H, still under investigation
- Signal appears slightly too large in Rayleigh sample 98 beginning in frame 02417G, still under investigation



References

End of the Product Notice