

Turbulence Information Provider

***NOAA / NWS's Aviation Weather Center (AWC),
Kansas City, MO***

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Turbulence Information - 2005

- ***SIGMET***

- Primary
- Severe or extreme non-convective turbulence
- Valid 4 hours
- Mainly PIREP driven.
 - *Forecasters use various tools (GTG and other models data) as guidance to define area.*
 - *Forecasters weigh subjective PIREPs in decision process to issue, continue, and cancel.*

- ***Convective SIGMET:***

- Primary
- Severe or Greater turbulence is implied in definition

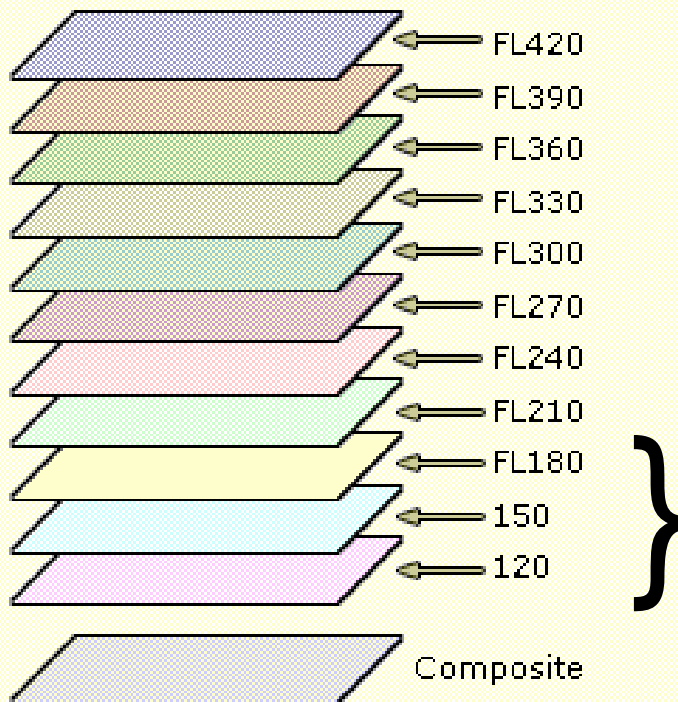
Turbulence Information - 2005

- ***AIRMET:***
 - Primary
 - Moderate non-convective turbulence
 - 6 hour forecasts (smears)
 - Forecasters use PIREPs and suite of model data (RUC, NAM, GFS) indices (e.g., Ellrod), and GTG to define area, issue, update, and cancel.
 - 24x7 forecaster quality control
 - Verified against available PIREPs

Turbulence Information - 2005

- ***GTG (Graphical Turbulence Guidance):***
 - **Restricted & Supplemental**
 - Approved for operational use by mets and dispatchers, and supplements AIRMETs and SIGMETs.
 - **Produced at AWC**
 - **RUC model and PIREPs within the last 1 1/2 hours to diagnoses Clear Air Turbulence (CAT) for the RUC forecast times.**
 - **0, 3, 6, 9, and 12 hour forecast every 3 hours**
 - **A product for every 1,000 feet from FL200-450**
 - **Total of 1,566 GTG products per day**

Turbulence Information - 2006



•GTG:

- FL100-FL200 D4 Operational in 3Q CY2006.
- Will increase GTG production to 2,126 products per day

Turbulence Information - 2007

- **G-AIRMET :**

- 2007
- Primary
- **Finer spatial and temporal resolution**
 - *Both graphic and text.*
 - *3,6,9,12 hour graphical snap shots, and 6 hour graphic and text smear.*
 - *Planning users conference in 2Q CY2006.*

