TROPICAL CYCLONE ANALYSIS WORKSHEET

Vernon F. Dvorak
May 1982

T-NUMBER ESTIMATE FROM MEASUREMENTS FOR DATA T-NUMBER (DT) COMPUTATION

T-NUMBER ESTIMATE FROM MODEL AND DT CONSTRAINTS

STEP →	1		2A,B				2C				2D	2E				3	4	5	6	7,8	9	10		
DESCRIPTION →	Location		Curved Band or Shear				Eye		$E_{No}+E_{Adj}=CF$		CDO	Emb. Centr	Data T-Number Computation			CCC	Trend	MET	PAT	FT	CI	24-Hr. Fcst.		INITIALS
RULES →	Locate Cloud System Center at focal point of cloud curvature		Use Spiral Arc Length				(VIS) Use Embedded Distance	(IR) Use Surrounding Temperature	From Rules	Eye Definition	Use Size	(IR) Use Surrounding Temperature	CF+BF=DT			Use Rules	24-Hr change			Use Rules		Adj. Model Fcst. if nec.		
DATE/TIME	LAT	LONG	DT 1.5	DT 2.5	DT 3.5	DT 4.5			E_{No}	E_{Adj}	Central Dense Overcast		CF	BF	DT	Central Cold Cover	Developing W-weakening S-same	Model Expected T-Number	Pattern T-Number	Final T-Number	Current Intensity Number	Last Rule Used	Forecast Intensity Number	

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T-Number Estimates from Measurements for Data-T (DT) Computation

T-Number Estimates from Model and DT Constraints

STEP:	1.0		2A, B						2C				2D	2E				3	4	5	6	7, 8	9	10		
Description	Location		Curved Band or Shear						Eye Pattern		Eye # + Eye Adj = Central Feature (CF)		CDO	Embedded Center				CCC	Trend	MET	PAT	FT	CI	24-hour forecast		
Rules:	Locate cloud system center (CSC) at focal point of cloud curvature		Use spiral arc length (tenths) or shear distance (degrees latitude)						(VIS) Use embedded distance (deg. Latitude)	(EIR) Use surrounding temperature (shade on BD curve)	From the VIS and EIR tables and rules		(VIS) Size of Central Dense Overcast (deg. latitude)	(EIR) Embedded temperature (shade on BD curve)	Data T-Number Computation CF + Banding Feature (BF) = DT			Use rules	24-hr change	From 24-hr old FT and Step 4 trend	From pictographs on the flowcharts	Use rules	Use rules	Adjust model forecast if necessary		
Date/Time (UTC)	Lat. (°N)	Lon. (°W)	DT1.5 ±0.5	DT2.5	DT3.0	DT3.5	DT4.0	DT4.5			Eye number	Eye adjustment			CF	BF	DT	Central Cold Cover	D -Developing W - Weakening S – Steady/Same	Model Expected T-Number	Pattern T-Number	Final T-Number	Current Intensity Number	List Rule Used	Forecast Intensity Number	Analyst Initials