AWC Ensemble Product Needs 28 May 2004

	FUNCTIONALITY	CENTRALLY MADE PRODUCTS	LOCALLY GENERATED PRODUCTS
1	Mean of selected members	Trop Height Trop Temp Freezing level Cloud amount Visibility Ceiling Cloud Top Conv. Cld. Amount Conv. Cld. Speed Max Wind Level Max Wind Speed 10 m Wind	
2	Spread of selected members	Trop Height Trop Temp Freezing level Cloud amount Visibility Ceiling Cloud Top Conv. Cld. Amount Conv. Cld. Speed Max Wind Level Max Wind Speed 10 m Wind	
3	Median of selected members		
4	Lowest value in selected members	Cloud amount	
5	Highest value in selected members	Cloud amount	
6	Range between lowest and highest values in selected members		
7	Univariate exceedance probabilities for a selectable threshold value	Jet Stream >80kt for 18K, 34K, and 45Kft. Jet Stream> 100 kt for 18K, 34K, and 45Kt Prob of Icing at 00,03,06,09,12,15,18, 24Kft. Prob of Icing within 00-24Kft. Prob of clear, scat, broken, overcast clds. Prob of VFR, MVFR, IFR, LIFR. Prob of light turb every 3Kft Sfc to 45Kft. Prob of mod turb every 3Kft Sfc to 45Kft. Prob of sev turb every 3 Kft Sfc to 45Kft. Prob of mod turb between Sfc and 18Kft. Prob of mod turb between 18K and 45Kft. Prob of vert wind shear Sfc-2Kft >10kt, >20kt.	

		Prob of 10 m wind > 10, 20, or 30kt.	
8	Multivariate (up to 5) exceedance probabilities for a selectable threshold value		
9	Forecast value associated with selected univariate percentile value		
10	Tracking center of maxima or minima in a gridded field (eg - low pressure centers)		
11	Objective grouping of members		
12	Plot Frequency / Fitted probability density function at selected location and time (lower priority)		
13	Plot Frequency / Fitted probability density function plot as a function of forecast lead time, at selected location (lower priority)		

HPC Ensemble Product Needs **28 May 2004** (updated 2005)

All products listed should be NA domain for both global and regional ensemble EXCEPT...

MEAN and SPREAD of QPF, 500mb height, 500mb avor, 850 avor, pmsl which should be on a scale large enough to cover BOTH the western hemisphere north of 0 lat - and south of 0 lat (for South America).

All products in 6h increments to 84h and then 12h to 192h.

	FUNCTIONALITY	CENTRALLY MADE PRODUCTS	LOCALLY GENERATED PRODUCTS
1 (H) W	Mean of selected members	Hght: 250, 500, 700, 850 Tmpk: 500, 700, 750, 800, 850, 900, BL Wind: 250, 500, 700, 850, BL RH: 500-900mb mean layer VV: 500-700mb mean layer AVOR: 500, 850 pmsl QPF PW CAPE CIN LI Theta – E (sfc)	
2 (H) W	Spread of selected members	500 hght pmsl QPF BL temp	
3	Median of selected members		
4 (M) W	Lowest value in selected members	Snow accum ZR accum QPF MOS Max T MOS Min T MOS PoP 12h	
5 (M) W	Highest value in selected members	As in 4	
6 (L) W	Range between lowest and highest values in selected members	As in 4	
7 (H) W	Univariate exceedance probabilities for a selectable threshold value	Snow: 1", 4", 8" 12" ZR: .01", .10" .25" .50" QPF .50" 1", 2" 3" 5" Most probable ptype	
8 (M)	Multivariate (up to 5) exceedance probabilities for a selectable	BL < 0 and QPF > 0	

	threshold value		
9 (M)	Forecast value associated with	67% for QPF, S, ZR	
	selected univariate percentile		
	value		
10 (M)	Tracking center of maxima or	Pmsl low	
W	minima in a gridded field (eg – low		
	pressure centers)		
11 (H)	Objective grouping of members	500mb heights	
		pmsl	
12	Plot Frequency / Fitted probability		
	density function at selected		
	location and time (lower priority)		
13	Plot Frequency / Fitted probability		
	density function plot as a		
	function of forecast lead time, at		
	selected location (lower priority)		
14 (H)	Spaghetti plots	200, 300, 500 height, pmsl	
W		850 0C isotherm	
		BL 0C isotherm	
		QPF .01, .25.; .5; 1; 2; 3; 4 (6hr and 24h)	
		Snow 1" 2" 4" 6" 8" 12" 18" 24" (6h and	
		24h)	
		ZR .01", .1"; .25"; .5" ; 1" (6h and 24h)	

OPC Ensemble Product Needs 28 May 2004

6 hourly domain - Northern Hemisphere Global (for High Seas) and SREF (Offshore waters) Highest available resolution

	FUNCTIONALITY	CENTRALLY MADE PRODUCTS	LOCALLY GENERATED PRODUCTS
1	Mean of selected members	MSLP U and V at 10 m, 925 mb, 850 mb, 700 mb, 500 mb, 300 mb, 250 mb, 200 mb Z at 850 mb, 700 mb, 500 mb T at 925 mb, 850 mb, 700 mb, 500 mb, 300 mb, 250 mb, and 200 mb	
2	Spread of selected members	MSLP Wind speed at 10 m, 925 mb, 850 mb, 500 mb, and 200 mb Z at 850 mb, 700 mb, 500 mb	
3	Median of selected members	MSLP Z at 500 mb Wind speed at 10m	
4	Lowest value in selected members	MSLP Z at 500 mb Wind speed at 10 m	
5	Highest value in selected members	MSLP, 500 hPa, Wind speed at 10m sig. wave height, visibility	
6	Range between lowest and highest values in selected members	MSLP, 500 hPa, Wind speed at 10m, sig. wave height	
7	Univariate exceedance probabilities for a selectable threshold value	Wind speed at 10 m; thresholds 20, 34, 50, and 64 kt, Sig. wave height at various values	
8	Multivariate (up to 5) exceedance probabilities for a selectable threshold value	10m winds, sig. wave height, visibility, TSTORM potential	
9	Forecast value associated with selected univariate percentile value	Wind speed at 10 m; approx. 25 th , 50 th , 75 th , and 90 th percentiles	
10	Tracking center of maxima or minima in a gridded field (eg - low pressure centers)	Minima and maxima in MSLP Maxima in 850 mb relative vorticity, wind speed at 10m, sig. wave height	
11	Objective grouping of members	By: lows/troughs/minima and highs/ridges/maxima in: MSLP 850 mb relative vorticity Z at 500 mb	
12	Plot Frequency / Fitted probability	10m winds, sig. wave heights, visibility	

	density function at selected		
	location and time (lower priority)		
13	Plot Frequency / Fitted probability	10m winds, sig. wave heights, visibility	
	density function plot as a		
	function of forecast lead time, at		
	selected location (lower priority)		

SPC Ensemble Product Needs **28 May 2004** (updated 2005)

Products are requested for both regional (SREF, 3-hourly output out to 87 hrs on 40 km grid) and global (12-hourly output out to 10 days on 1x1 lat/lon grid) ensembles.

(S) = spaghetti (i.e., every member in the output gempak file for display in nmap2 at spc)

WEB	FUNCTIONALITY	CENTRALLY MADE PRODUCTS	LOCALLY GENERATED PRODUCTS
W	GENERAL/MULTIPLE PROGRAMS Mean of selected members Spread of selected members Median of selected members Lowest value in selected members Highest value in selected members	SYNOPTIC FIELDS: H1000, M925, H850, H700, H500, H300 MB Hhght statistics (S) Htmpc statistics(S) Hdwpc statistics(S) Hwind statistics (vector and magnitude) (S) Havor statistics Hrelh statistics(S) Homeg statistics	Note: Spaghetti is easily displayable in nmap2 by adjusting the contouring
W		PMSL Hpmsl statistics(S) Mpmsl <= 1000 mb Mpmsl <= 980 mb Mpmsl <= 960 mb Mpmsl <= 1000 mb	
W		PRECIP WATER Hpwtr statistics(S) Mpwtr >= 25 mm Mpwtr >= 38 mm Mpwtr >= 50 mm	
W		2 METER TEMPS (degF) Htmpf statistics(S) Htmpf >= 60 degF Mtmpf >= 70 degF Ltmpf >= 80 degF Ltmpf >= 90 degF	
W		2 METER DEW POINT Hdwpf statistics (S) Hdwpf >= 45 degF Hdwpf >= 50 degF Hdwpf >= 55 degF Hdwpf >= 60 degF Hdwpf >= 65 degF Hdwpf >= 70 degF	
W		850 TEMP Htmpc statistics(S) Mtmpc <= 2 degC Mtmpc <= 0 degC	

	Mtmpc <= -2 degC
W	850 MB DEW POINT
•	Hdwpc statistics(S)
	Mdwpc >= 8 degC
	Mdwpc >= 12 degC
	Mdwpc >= 16 degC
W	10 METER WINDS (S)
· ·	Hwind (component and total
	magnitude) statistics
	Lmag(wind) >= 10 mph
	Hmag(wind) >= 20 mph
	Hmag(wind) >= 30 mph
	Mmag(wind) >= 40 mph
W	850 MB WINDS (S)
	Mwind (component and total
	magnitude) statistics
	Lmag(wind) >= 20 kts
	Mmag(wind) >= 30 kts
	Hmag(wind) >= 40 kts
	Hmag(wind) >= 50 kts
W	700 MB WINDS (S)
"	Mwind (component and total
	magnitude) statistics
	Lmag(wind) >= 20 kts
	Lmag(wind) >= 30 kts
	Lmag(wind) >= 40 kts
	Lmag(wind) >= 50 kts
	Lmag(wind) >= 60 kts
W	500 MB WINDS (S)
	Hwind (component and total
	magnitude) statistics
	Lmag(wind) >= 30 kts
	Lmag(wind) >= 40 kts
	Mmag(wind) >= 50 kts
	Lmag(wind) >= 60 kts
	Mmag(wind) >= 75 kts
	Lmag(wind) >= 90 kts
W	300 MB WINDS (S)
	Hwind (component and total
	magnitude) statistics
	Lmag(wind) >= 50 kts
	Lmag(wind) >= 75 kts
	Mmag(wind) >= 100 kts
	Mmag(wind) >= 125 kts
	Mmag(wind) >= 150 kts
W	700 MB OMEGA
	Homeg statistics
	Lomeg <= -1 (x10-3)pa/s
	Homeg <= -3 (x10-3)pa/s
	Homeg <= -5 (x10-3)pa/s
	Homeg <= -7 (x10-3)pa/s
	Homeg <= -9 (x10-3)pa/s
W	3 HOUR TOTAL
	PRECIPITATION (stratiform
	and convective)

HPUSM statistics(S)			
Mp03m >= 0.5" Mp03m >= 10" Mp03m >= 2.5" Lp03m >= 5.0" Lp03m >= 1.0" Hc03m satastiscs Hc03m >= 0.5" Mc03m >= 1.0" Mp06m >= 1.0" Mp06m >= 2.5" Lp06m >= 1.0" Mc06m >= 1.0" Mc06m >= 1.0" Mc06m >= 1.0" Mc06m >= 1.5" Mc06m >= 1.5" Mc06m >= 2.5" Lc06m >= 5.0" Lc06m >= 1.5" Mc06m >= 1.0" Mc06m >= 2.5" Lp12m >= 1.0" Mp12m >= 2.0" Lp12m >= 3.0" Mc12m >= 2.5" Lc12m >= 3.0" Lc12m >		Hp03m statistics(S)	
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and convective) Mp12m statistics(S) Mp12m >= .01" Mp12m >= .00" Mp12m >= .25" Lp12m >= .50" Lp12m >= .50" Lp12m >= 3.0" Mc12m >= .01" Mc12m >= .01" Mc12m >= .01" Mc12m >= .01" Mc12m >= .50" Lc12m >= .30" W 24 HOUR TOTAL PRECIPITATION (stratiform and convective) Mp24m statistics	W		
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$\begin{array}{c} Mp12m >= .01" \\ Mp12m >= .10" \\ Mp12m >= .25" \\ Lp12m >= .50" \\ Lp12m >= .50" \\ Lp12m >= 2.0" \\ Lp12m >= 3.0" \\ Mc12m statistics \\ Mc12m >= .01" \\ Mc12m >= .01" \\ Mc12m >= .10" \\ Mc12m >= .10" \\ Mc12m >= .25" \\ Lc12m >= .50" \\ Lc12m >= 1.0" \\ Lc12m >= 2.0" \\ Lc12m >= 3.0" \\ \\ W \\ \\ Delta \\ \\ $			
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$\begin{array}{c} Mp12m>=.25"\\ Lp12m>=.50"\\ Lp12m>=1.0"\\ Lp12m>=2.0"\\ Lp12m>=3.0"\\ Mc12m>=3.0"\\ Mc12m>=.01"\\ Mc12m>=.01"\\ Mc12m>=.10"\\ Mc12m>=.50"\\ Lc12m>=.50"\\ Lc12m>=3.0"\\ \\ \end{array}$			
Lp12m >= .50" Lp12m >= 1.0" Lp12m >= 2.0" Lp12m >= 3.0" Mc12m statistics Mc12m >= .01" Mc12m >= .10" Mc12m >= .10" Mc12m >= .25" Lc12m >= .50" Lc12m >= .50" Lc12m >= 3.0" W 24 HOUR TOTAL PRECIPITATION (stratiform and convective) Mp24m statistics			
$ \begin{array}{c} \text{Lp12m} >= 1.0^{\text{"}} \\ \text{Lp12m} >= 2.0^{\text{"}} \\ \text{Lp12m} >= 3.0^{\text{"}} \\ \text{Mc12m statistics} \\ \text{Mc12m} >= .01^{\text{"}} \\ \text{Mc12m} >= .10^{\text{"}} \\ \text{Mc12m} >= .25^{\text{"}} \\ \text{Lc12m} >= .25^{\text{"}} \\ \text{Lc12m} >= 1.0^{\text{"}} \\ \text{Lc12m} >= 2.0^{\text{"}} \\ \text{Lc12m} >= 3.0^{\text{"}} \\ \end{array} $			
Lp12m >= 2.0" Lp12m >= 3.0" Mc12m statistics Mc12m >= .01" Mc12m >= .10" Mc12m >= .25" Lc12m >= .50" Lc12m >= 1.0" Lc12m >= 2.0" Lc12m >= 3.0" W 24 HOUR TOTAL PRECIPITATION (stratiform and convective) Mp24m statistics			
Lp12m >= 3.0" Mc12m statistics Mc12m >= .01" Mc12m >= .10" Mc12m >= .25" Lc12m >= .50" Lc12m >= 1.0" Lc12m >= 2.0" Lc12m >= 3.0" W 24 HOUR TOTAL PRECIPITATION (stratiform and convective) Mp24m statistics			
Mc12m statistics Mc12m >= .01" Mc12m >= .10" Mc12m >= .10" Mc12m >= .25" Lc12m >= .50" Lc12m >= 1.0" Lc12m >= 2.0" Lc12m >= 3.0" W 24 HOUR TOTAL PRECIPITATION (stratiform and convective) Mp24m statistics		Lp12m >= 2.0"	
Mc12m statistics Mc12m >= .01" Mc12m >= .10" Mc12m >= .10" Mc12m >= .25" Lc12m >= .50" Lc12m >= 1.0" Lc12m >= 2.0" Lc12m >= 3.0" W 24 HOUR TOTAL PRECIPITATION (stratiform and convective) Mp24m statistics		Lp12m >= 3.0"	
Mc12m >= .01" Mc12m >= .10" Mc12m >= .25" Lc12m >= .50" Lc12m >= 1.0" Lc12m >= 2.0" Lc12m >= 3.0" W 24 HOUR TOTAL PRECIPITATION (stratiform and convective) Mp24m statistics			
Mc12m >= .25" Lc12m >= .50" Lc12m >= 1.0" Lc12m >= 2.0" Lc12m >= 3.0" W 24 HOUR TOTAL PRECIPITATION (stratiform and convective) Mp24m statistics			
Mc12m >= .25" Lc12m >= .50" Lc12m >= 1.0" Lc12m >= 2.0" Lc12m >= 3.0" W 24 HOUR TOTAL PRECIPITATION (stratiform and convective) Mp24m statistics			
Lc12m >= .50" Lc12m >= 1.0" Lc12m >= 2.0" Lc12m >= 3.0" W 24 HOUR TOTAL PRECIPITATION (stratiform and convective) Mp24m statistics			
Lc12m >= 1.0" Lc12m >= 2.0" Lc12m >= 3.0" W 24 HOUR TOTAL PRECIPITATION (stratiform and convective) Mp24m statistics			
Lc12m >= 2.0" Lc12m >= 3.0" W 24 HOUR TOTAL PRECIPITATION (stratiform and convective) Mp24m statistics			
Lc12m >= 3.0" W 24 HOUR TOTAL PRECIPITATION (stratiform and convective) Mp24m statistics			
W 24 HOUR TOTAL PRECIPITATION (stratiform and convective) Mp24m statistics			
PRECIPITATION (stratiform and convective) Mp24m statistics			
and convective) Mp24m statistics	W		
Mp24m statistics			
Mp24m >= .01"	1		
	L	Mp24m >= .01"	

	T	1	
		Mp24m >= .10"	
		Mp24m >= .25"	
		Lp24m >= .50"	
		Lp24m >= 1.0"	
		Lp24m >= 2.0"	
		Lp24m >= 3.0"	
		Mc24m statistics	
		Mc24m >= .01"	
		Mc24m >= .10"	
		Mc24m >= .25"	
		Lc24m >= .50"	
		Lc24m >= 1.0"	
		Lc24m >= 2.0"	
		Lc24m >= 3.0"	
W		48 HOUR TOTAL	
, vv		PRECIPITATION (stratiform	
		and convective)	
		Lp48m statistics	
		Lp48m >= .10"	
		Lp48m >= .25"	
		Lp48m >= .50"	
		Lp48m >= 1.0"	
		Lp48m >= 2.0"	
		Lp48m >= 3.0"	
		Lp48m >= 5.0"	
		Lc48m statistics	
		Lc48m >= .10"	
		Lc48m >= .25"	
		Lc48m >= .50"	
		Lc48m >= 1.0"	
		Lc48m >= 2.0"	
		Lp48m >= 3.0"	
		Lc48m >= 5.0"	
144	THUNDER/SEVERE PROGRAM	LIFTED INDEX	
W		Hlift statistics(S)	
	Mean of selected members	Hlift <= 0 degC	
	Spread of selected members	Hlift <= -1 degC	
	Median of selected members	Hlift <= -2 degC	
	Lowest value in selected members	Hlift <= -4 degC	
		Hlift <= -6 degC	
	Highest value in selected members	Hlift <= -8 degC	
		K index	
		Mkind statistics(S)	
1		Mkind >= 25	
		Mkind >= 25	
		Mkind >= 35	
14/		SURFACE CAPE	
W		Hcape statistics(S)	
		Mcape >= 50 j/kg	
		Hcape >= 50 j/kg	
		Hcape >= 150 j/kg Hcape >= 250 j/kg	
		Hcape >= 500 j/kg	
		Hcape >= 1000 j/kg	
		Heape >= 1500 j/kg	
		Hcape >= 2000 j/kg	

	Lu 0500 W	1
	Hcape >= 2500 j/kg	
	Hcape >= 3000 j/kg	
	Hcape >= 4000 j/kg	
	SURFACE CIN	
	Hcin statistcs	
	Hcin >= -25 j/kg	
	Hcin >= -50 j/kg	
	Mcin >= -75 j/kg	
	Mcin >= -100 j/kg	
	SURFACE LCL	
	MIcI statistcs	
	MIcI <= 750 meters	
	MIcI <= 1000 meters	
	MIcl <= 1250 meters	
	MIcl <= 1500 meters	
	Who 1 1000 meters	
	OUDEAGE LEG	
	SURFACE LFC	
	Mlfc statistcs	
w	MOST UNSTABLE CAPE	
	(prefer to 300 or even 500	
	mb AGL)	
	Hmucape statistics(S)	
	Mmucape >= 50 j/kg	
	Hmucape >= 150 j/kg	
	Hmucape >= 250 j/kg	
	Hmucape >= 500 j/kg	
	Hmucape >= 1000 j/kg	
	Hmucape >= 1500 j/kg	
	Hmucape >= 2000 j/kg	
	Hmucape >= 2500 j/kg	
	Hmucape >= 3000 j/kg	
	Hmucape >= 4000 j/kg	
	MOST UNSTABLE CIN	
	Hmucin statistcs	
	Hmucin >= -25 j/kg	
	Hmucin >= -50 j/kg	
	Mmucin >= -75 j/kg	
	Mmucin >= -100 j/kg	
	MOST UNSTABLE LCL	
	Mmulcl statistics	
	Lmulcl <= 750 meters	
	Lmulcl <= 1000 meters	
	Lmulcl <= 1250 meters	
	Lmulcl <= 1500 meters	
	MOST UNSTABLE LFC	
	Mmulfc statistcs	
w	MIXED LAYER CAPE	
	Hmlcape statistics (S)	
	Hmlcape >= 500 j/kg	
	Hmlcape >= 1000 j/kg	
	Hmlcape >= 1500 j/kg	
	Hmlcape >= 2000 j/kg	
	Hmlcape >= 2500 j/kg	
	Hmlcape >= 3000 j/kg	
	1 1 1 1 1 1 1 1 1 1	

	MIXED LAYER CIN	
	Hmlcin statistics	
	Hmlcin >= -25 j/kg	
	Hmlcin >= -50 j/kg	
	Mmlcin >= -75 j/kg	
	Mmlcin >= -100 j/kg	
	MIXED LAYER ĹCĽ	
	Hmllcl statistics(S)	
	Mmllcl <= 750 meters	
	Mmllcl <= 1000 meters	
	Mmllcl <= 1250 meters	
	Mmllcl <= 1500 meters	
	MIXED LAYER LFC	
	Mmllfc statistcs	
	700-500 mb LAPSE RATE	
	M75Ir statistics	
	M75lr >= 7 degC	
	M75lr >= 7.5 degC	
	M75lr >= 8 degC	
	M75lr >= 8.5 degC	
	M75lr >= 9 degC	
	6 KM VERTICAL SHEAR	
	H6kvs statistcs(S)	
	M6kvs >= 20 kts	
	H6kvs >= 30 kts	
	H6kvs >= 40 kts	
	H6kvs >= 50 kts	
	EFFECTIVE SHEARLPL	
	to .5 EL	
	Meshr statistics(S)	
	Meshr >= 20 kts	
	Meshr >= 30 kts	
	Meshr >= 40 kts	
	Meshr >= 50 kts	
	Meshr u-component	
	statistics	
	Meshr v-component	
	statistics	
	BRN SHEAR	
	Lbrnshr statistics	
	L20 <= brnshr <= 140	
W	0 to 1 KM STORM	
*V	RELATIVE HELICITY	
	H1khl statistics(S)	
	H1khl >= 50 j/kg	
	H1khl >= 100 j/kg	
	H1khl >= 100 j/kg H1khl >= 150 j/kg	
	H1khl >= 200 j/kg	
W	0 to 3 KM STORM	
	RELATIVE HELICITY	
	H3khl statistics(S)	
	H3khl >= 100 j/kg	
	H3khl >= 150 j/kg	
	H3khl >= 200 j/kg	
	H3khl >= 250 j/kg	

	1	11014hl - 200 ://cm	1
		H3khl >= 300 j/kg	
		H3khl >= 400 j/kg	
		H3khl >= 500 j/kg	
w		CRAVEN BROOKS SIG	
		SVR (CAPE X SHEAR)	
		Hcbss statistics(S)	
		Mcbss >= 10000 m^3/s^3	
		Mcbss >= 20000 m^3/s^3	
		Mcbss >= 30000 m^3/s^3	
		Mcbss >= 50000 m^3/s^3	
		Mcbss >= 70000 m^3/s^3	
W		SPC SIGNIFICANT	
		TORNADO PARAMETER	
		Msigt statistics(S)	
		Msigt >= 0.5	
		Msigt >= 1	
		Msigt >= 2	
		Msigt >= 3	
		Msigt >= 5	
		Msigt >= 7	
		Msigt >= 9	
W		SPC SUPERCELL	
**		COMPOSITE PARAMETER	
		Msccp statistics(S)	
		Msccp >= 1	
		Msccp >= 2	
		Msccp >= 3	
		Msccp >= 5	
		Msccp >= 7	
		Msccp >= 9	
		DOWNDRAFT CAPE	
		Ldcape statistics	
		Ldcape statistics Ldcape >= 500 j/kg	
		Ldcape >= 500 j/kg Ldcape >= 1000 j/kg	
		Ldcape >= 1000 j/kg Ldcape >= 1500 j/kg	
		Ldcape >= 1000 j/kg	
		Ldcape >= 2500 j/kg Ldcape >= 2500 j/kg	
		SPC DERECHO	
		PARAMETER	
		Ldecho statistics	
		Ldecho >= 1	
		Ldecho >= 1 Ldecho >= 2	
		Ldecho >= 2 Ldecho >= 3	
		Ldecho >= 5	
		Ldecho >= 5 Ldecho >= 7	
		SPC CLOUD PHYSICS	
		THUNDER PARAMETER	
1		Mcptp statistics(S)	
	FIDE WEATHER PROCEASE	Mcptp >= 1 2 METER RELH	
W	FIRE WEATHER PROGRAM		
	Mean of selected members	Hrelh statistics(S)	
	Spread of selected members	Mrelh <= 40 pct	
	Median of selected members	Mrelh <= 35 pct	
	modian of colocida mombolo	Mrelh <= 30 pct	

	<u> </u>	Livelle OF rest	
	Lowest value in selected members	Hrelh <= 25 pct	
	Highest value in selected members	Hrelh <= 20 pct	
	Tinginest value in estested members	Hrelh <= 15 pct	
		Hrelh <= 10 pct	
		L15 <= relh <= 30 pct	
		L30 <= relh <= 45 pct	
w		FOSBERG FIRE WX	
VV		Hfosb statistics(S)	
		Hfosb >= 50	
		Hfosb >= 60	
		Hfosb >= 70	
		Hfosb >= 75	
		Mfosb >= 80	
		Mfosb >= 85	
		Lfosb >= 90	
		SPC LOWER	
		ATMOSPHERIC FIRE WX	
		INDEX	
		Llasi statistics	
		Llasi >= 5	
		Llasi >= 7	
		Llasi >= 9	
W		HAINES FIRE WX INDEX	
		Mhain statistics	
		Lhain >= 5	
		Lhain >= 6	
		SPC DRY	
		THUNDERSTORM	
		PARAMETER	
		Ldryt statistics	
		Ldryt statistics Ldryt >= 1	
		_	
		Ldryt >= 2	
W	WINTER WEATHER PROGRAM	1000-500 MB THICKNESS	
	Mean of selected members	Hthck statistics(S)	
	Spread of selected members	Mthck <= 546 dm	
		Mthck <= 540 dm	
	Median of selected members	Mthck <= 534 dm	
	Lowest value in selected members	Mthck <= 528 dm	
	Highest value in selected members	Mthck <= 522 dm	
	Trightest value in selected members		
W			
		Hptype = 1 (rain)	
		Hptype = 2 (snow)	
		Lmistab statistics	
		I mistah probabilities	
		-	
		PV	
W	Highest value in selected members	Hptype = 2 (snow) Hptype = 3 (mix) Hptype = 4 (ice) MOIST POTENTIAL VORTICITY	

	Lfrontogenesis statistics Lfrontogenesis function >= 1	
	CLOUD TOP TEMPERATURE Ltsat statistics Ltsat >= -8 degC L-8 <= tsat <= -12 degC Ltsat <= -12 degC	
	DENDRITIC GROWTH LAYER DEPTH Ldend statistics Ldend >= 50 mb Ldend >= 100 mb Ldend >= 150 mb	
Fields in Distributed File to aid in assessing lity	M RMOP M Climatological mean 500 mb heights M Climatological variance in 500 mb heights	

TPC Ensemble Product Needs 28 May 2004

All of the following apply primarily to the global ensemble. However, we would be interested in seeing the same products from the regional ensemble.

Lead time: All available taus out to at least 132 hours from global output

Domain: global

	FUNCTIONALITY	CENTRALLY MADE PRODUCTS	LOCALLY GENERATED PRODUCTS
1	Mean of selected members	MSLP U and V at 10 m, 925 mb, 850 mb, 700 mb, 500 mb, 300 mb, 250 mb, 200 mb Z at 850 mb, 700 mb, 500 mb T at 925 mb, 850 mb, 700 mb, 500 mb, 300 mb, 250 mb, and 200 mb Significant wave height (if available)	
2	Spread of selected members	MSLP Wind speed at 10 m, 925 mb, 850 mb, 500 mb, and 200 mb Z at 850 mb, 700 mb, 500 mb	
3	Median of selected members	MSLP Z at 500 mb Wind speed at 10 m	
4	Lowest value in selected members	MSLP Z at 500 mb Wind speed at 10 m Visibility	
5	Highest value in selected members	MSLP Z at 500 mb Wind speed at 10 m Significant wave height	
6	Range between lowest and highest values in selected members	MSLP Wind speed at 10 m Significant wave height	
7	Univariate exceedance probabilities for a selectable threshold value	Wind speed at 10 m; thresholds 20, 34, 50, and 64 kt	
8	Multivariate (up to 5) exceedance probabilities for a		

	selectable	
	threshold value	
9	Forecast value associated	Wind speed at 10 m; approx. 25 th , 50 th , 75 th , and 90 th percentiles
	with selected univariate	and 90 percentiles
	percentile value	
10	Tracking center of maxima or	Minima and maxima in MSLP
	minima in a gridded field (eg -	Maxima in 850 mb relative vorticity
	low	
	pressure centers)	
11	Objective grouping of	By: lows/troughs/minima and
	members	highs/ridges/maxima in:
		MSLP
		850 mb relative vorticity Z at 500 mb
12	Plot Frequency / Fitted	2 at 500 mb
'-	probability density function at	
	selected	
	location and time (lower	
	·	
13	priority)	
13	Plot Frequency / Fitted	
	probability density function	
	plot as a	
	function of forecast lead	
	time, at selected location	
	(lower priority)	