GOES R REQ ID #	Observational Requirement	User & Priority (LO-#) (Note 1)	LEVEL	Geographic Coverage (Note 2)	Sensing Depth or Vert Cov.	Horizontal Res.	Mapping Accuracy	Msmnt. Range	Msmnt. Accuracy	Refresh Rate	Data Latency	Long-term stability
3.5.10.1	**Currents:** Global	GOES R P3I	T	G	Sfc	2 km	0.5 km	0 - 5 m/s	1 km/hr	6 hr	60 min	tbs
			O	H	Sfc	2 km	0.5 km	0 - 5 m/s	1 km/hr	60 min	15 min	tbs
3.5.10.2	**Currents**: **Offshore /** Global	GOES R P3I	T	G	Sfc	2 km	0.5 km	0 - 5 m/s	1 km/hr	6 hr	60 min	tbs
			O	G	Sfc	2 km	0.5 km	0 - 5 m/s	1 km/hr	60 min	15 min	tbs
3.5.10.3	**Ocean Color: Global (Turbidity / Visibility / Reflectance)**	GOES R P3I	T	G	N/A	100 km	tbs	tbs	tbs	60 min	tbs	tbs
			O	G	N/A	25 km	tbs	tbs	5%	15 min	tbs	1%
3.5.10.4	**Ocean Turbidity: Global (Turbidity / Visibility)**	GOES R P3I	T	G	0 to -10 m	5 km	5 km	0 to 100 mg/m3	10 mg/m3	180 min	60 min	tbs
			O	G	0 to -100 m	2 km	tbs	tbs	3 mg/m3	tbs	tbs	tbs
3.5.10.5	**Sea & Lake Ice: Age Global**	GOES R P3I	T	tbs	tbs	tbs	tbs	tbs	tbs	tbs	tbs	tbs
			O	G	Ice Surface	1 km	1 km	Distinguish between Ice free, Nilas, Grey White, First Year Medium, First Year Thick, Second Year, and Multiyear Smooth and Deformed Ice	95% (90% for sea Ice)	180 min	15 min	tbs
3.5.10.6	**Sea & Lake Ice/Concentration: Global**	GOES R P3I	T	G	tbs	10 km	< = 5.0 km	Ice concentration - 0/10 to 10/10	Ice extent 1km Ice concentration - 10%	6 hr	180 min	tbs
			O	G	tbs	5 km	< = 2.5 km	Ice concentration - 0/10 to 10/10	Ice extent 1km Ice concentration - 10%	180 min	30 min	tbs
3.5.10.7	**Sea & Lake Ice: Displacement and Direction Global**	GOES R P3I	T	tbs	n/a	tbs	tbs	tbs	tbs	tbs	tbs	N/A
			O	G	n/a	1 km	1 km	0 - 75 km/day	0.1 km/day	180 min	15 min	N/A

GOES R REQ ID #	Observational Requirement	User & Priority (LO-#) (Note 1)	LEVEL	Geographic Coverage (Note 2)	Sensing Depth or Vert Cov.	Horizontal Res.	Mapping Accuracy	Msmnt. Range	Msmnt. Accuracy	Refresh Rate	Data Latency	Long-term stability
3.5.10.8	**Sea & Lake Ice: Extent and Edge Global**	**GOES R P3I**	**T**	H - Sea ice covered waters in N. & S. Hemispheres	n/a	Day: 400 m Nite: 800 m	Day: < = 400 m Nite: < = 800 m	Presence of Ice (day): Reflectance at 420-750 nm Presence of Ice (night): 10 - 12 microns	10%	12 hrs	180 min	tbs
			O	G - Sea ice covered waters in N. & S. Hemispheres	n/a	Day: 250 m Nite: 250 m	Day: < = 250 m Nite: < = 250m	Presence of Ice (day): Reflectance at 420-750 nm Presence of Ice (night): 10 - 12 microns	5%	180 min	30 min	tbs
3.5.10.9	**Sea & Lake Ice: Extent and Characterization Global**	**GOES R P3I**	**T**	tbs	tbs	tbs	tbs	tbs	tbs	tbs	tbs	tbs
			O	G: Arctic, Antarctic	surface	tbs	tbs	tbs	tbs	60 min	15 min	tbs
3.5.10.10	**Sea & Lake Ice: Motion Global**	**GOES R P3I**	**T**	G - Sea ice covered waters in N. & S. Hemispheres	n/a	15 km	< = 7.5 km	Direction: 0 - 360 Degrees Displacement: 0 m/s to 0.6 m/s	Direction: +/- 15 Degs	6 hr	180 min	tbs
			O	G - Sea ice covered waters in N. & S. Hemispheres	n/a	10 km	< = 5.0 km	Direction: 0 - 360 Degrees Displacement: 0 m/s to 0.6 m/s	Direction: +/- 10 Degs	180 min	30 min	tbs
3.5.10.11	**Sea & Lake Ice/Surface Temp: Global**	**GOES R P3I**	**T**	G - Sea ice covered waters in N. & S. Hemispheres	n/a	0.5 km	< = 0.5 km	213 - 280 K	0.5 K	6 hr	180 min	tbs
			O	G - Sea ice covered waters in N. & S. Hemispheres	n/a	0.25 km	< = 0.25 km	213 - 280 K	0.5 K	180 min	30 min	tbs
3.5.10.12	**Sea & Lake Ice:Thickness Global**	**GOES R P3I**	**T**	FD* - Sea ice covered waters in the Northern and Southern Hemispheres	Ice Surface	10 km	< = 5.0 km	Age: 0-3 yrs Thickness: 0 - 6 m	Ice Stage: ± 30 cm	6 hr	6 hr	180 min
			O	G - Sea ice covered waters in the Northern and Southern Hemispheres	Ice Surface	5 km	< = 2.5 km	Age: 0-3 yrs Thickness: 0 - 6 m	Ice Stage: ± 30 cm	180 min	180 min	30 min
3.4.13.13	**Sea and Lake Surface Wind: CONUS**	**GOES R P3I**	**T**	**C**	**0 - 10 m**	**5 km**	**< = 2.5 km**	**3 - 40 m/s 0 - 360°**	**10%**	**180 min**	**60 min**	**tbd**
			O	**C**	**0 - 10 m**	**1 km**	**< = 1.0 km**	**3 - 40 m/s 0 - 360°**	**5%**	**60 min**	**30 min**	**tbd**
3.4.13.14	**Sea and Lake Surface Wind: HEMISPHERIC**	**GOES R P3I**	T	H	0 - 10 m	10 km	< = 5.0 km	3 - 40 m/s 0 - 360°	10%	6 hr	60 min	tbs
			O	H	0 - 10 m	5 km	< = 2.5 km	3 - 40 m/s 0 - 360°	5%	180 min	30 min	tbs

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3.5.10.15	**Sea Surface Temps: Coastal**	GOES R P3I	T	US navigable waters thru EEZ	n/a	1 km	0.5 km	271-313 K	0.5 K	180 min	180 min	tbs
			O	US navigable waters thru EEZ	n/a	30 m	<30 m	270 - 313K	0.1 K	30 min	15 min	tbs
3.5.10.16	**Sea Surface Temps:** Global	GOES R P3I	T	G	Surface	2 km	1 km	271-313 K	1 K	60 min	180 mins	tbs
			O	G	Surface	0.5 km	0.2 km	270-313K	0.1 K	15 min	5 min	0.04 K
3.5.10.17	**Sea Surface Winds:** Coastal	GOES R P3I	T	US navigable waters thru EEZ	10m to surface	5 km	1 km	0 to 60 m/s, 0 to 360^0	1 m/s	60 min	15 min	tbs
			O	US navigable waters thru EEZ	10m to surface	300 m	<300m	0 to 50 m/s, 0 to 360^0	0.3 m/s	6 min	1 min	tbs
3.5.10.18	**Sea Surface Winds: CONUS/Offshore**	GOES R P3I	T	C	Sfc-10m	10 km	1 km	0 to 50 m/s, 0 to 360^0	1 m/s/10 deg	60 min	15 min	tbs
			O	C	Sfc-10m	1 km	<1 km	0 to 60 m/s, 0 to 360^0	1 m/s/10 deg	30 min	5 min	tbs
3.5.10.19	**Sea Surface Winds:** Global	GOES R P3I	T	G - Sea ice covered waters in the Northern and Southern Hemispheres	Sea Surface	25 km	< = 12.5 km	3-35 m/s 0-360 deg	Greater of 2 m/s or 10%, 20 deg for wind speed> 5 m/s, 25 deg for speeds 3-5 m/s	6 h	90 min	0.5 m/s/decade
			O	G - Sea ice covered waters in the Northern and Southern Hemispheres	Sfc-10m	1 km	0.5 km	0 to 60 m/s, 0 to 360^0	Greater of 1 m/s or 10%; 10 deg	30 min	15 min	0.5 m/s/decade
3.5.10.20	**Sea Surface Winds:** Hemispheric	GOES R P3I	T	FD	Sfc-10m	10 km	2 km	0 - 150 kts / 0 - 360º	1 m/s/10 deg	60 min	15 min	tbs
			O	FD	Sfc-10m	2 km	0.5 km	0 - 150 kts (0 - 77 m/s) / 0 - 360º	1 m/s/10 deg	15 min	1 min	tbs
3.5.10.21	**Sea Surface Winds:** Mesoscale	GOES R P3I	T	M	Sfc-10m	10 km	1 km	0 to 50 m/s, 0 to 360^0	1 m/s/10 deg	60 min	15 min	tbs
			O	M	Sfc-10m	5 km	1 km	0 to 60 m/s, 0 to 360^0	1 m/s/10 deg	30 min	5 min	tbs

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3.5.10.22	**True Color Imagery:** Global	GOES R P3I	T	G	tbs	tbs	tbs	tbs	tbs	tbs	tbs	tbs
			O	G	tbs	tbs	tbs	tbs	tbs	tbs	tbs	tbs

Note 1: For Priority Categories use:
"1" = Mission Critical / Cannot meet operational mission objectives without this data
"2" = Mission Optimal / Data not critical but would provide significant improvement to operational capability
"3" = Mission Enhancing / Needed to enhance state of knowledge / assess potential for operational capability
"UA" = Unassigned

Note 2: For Geographic Coverage use:
"C" = CONUS Coverage / Contiguous US / 3000 km N/S x approx 5000 km E/W Target Area (4000km northern boundary, 6000 km southern boundary) centered at 38.2 N Lat / 96 W Lon
"FD" = Full Disk Coverage / A region defined as the combined earth area viewed from the nominal GOES R system longitudinal positions
"G" = Global Coverage / Self-explanatory
"H" = Hemispheric Coverage / West Boundary of 150 deg E and an East Boundary of 0 deg Meridian
"M" = Mesoscale "Non-Routine" Coverage / 1000 km N/S x 1000 km E/W Relocatable Target Area within Hemispheric Coverage Area requested on an as needed basis

Note 3:
Underline = Threshold not expceted to be fully addressed
* = Requirement also carried in P3I section for further study

*NESDIS/ORA name change pending to NESDIS/STAR