## WeatherOptics 7-Day Storm Analysis July 31, 2020, 10am ET

## Storm 1: Hurricane Isaias

- Hurricane Isaias, located in the Caribbean 70 mi northeast of Cuba with maximum sustained winds of 81mph as of Friday morning, is barreling toward the Southeast US Coast and is expected to deliver strong winds, heavy rain, and destructive storm surge to much of the East Coast
- Isaias is expected to pass by Florida's East Coast this weekend en route towards North Carolina, where it will make landfall or pass just east of the Outer Banks before continuing towards the Northeast Coast, where another (or first) landfall is possible
- Sea surface temperatures warm enough to maintain or grow a tropical cyclone exist as far north as New Jersey, so Isaias could hold onto tropical storm or hurricane intensity as it approaches the heavily-populated Northeast
- The heaviest rain and winds are expected on the north and east flanks of the storm such that impacts to Florida's East Coast will be relatively spared but North Carolina and possibly the coastal Northeast could be confronted with life-threatening conditions
- Regardless of intensity, Isaias is expected to be a quick-hitting storm and is expected to gain momentum as it treks up the east coast, with heavy rain and wind only lasting 8-12 hours.
- Expect flash flooding, minor to moderate river flooding, brief sustained winds of 50 70 mph, and damaging storm surge in coastal areas from southeast Florida to southern New England. Rainfall totals of 3-6" or more are possible east of the Appalachians in the Carolinas, Mid-Atlantic, and southern New England.
- Precise impacts are uncertain and highly dependent on the eventual storm track.
  The heaviest rain and wind will be focused near the storm's center. There's a
  slight chance that the storm goes out-to-sea without making landfall and an even
  slighter chance that it enters the Gulf of Mexico before recurving northeast.
- Affected Routes:
  - Miami to Atlanta along I-95 between 12pm ET Saturday and 2am ET Monday. Use I-75 to avoid significant impacts.
  - Boston to Washington, D.C. along the entire route between 10pm Monday and 10pm ET Tuesday
  - New York to Chicago in NYC and along I-80 in New Jersey between 4am ET and 2pm ET
  - Los Angeles to New York in NYC and along I-80 in New Jersey between 4am ET and 2pm ET

## Storm 2: Ohio Valley and Northeast Flash Flooding and Severe Weather

- A robust upper-level low pressure system will draw a slog of rich tropical moisture that will overspread the Ohio Valley Saturday and then the Northeast Saturday night through at least Tuesday, generating scattered to widespread thunderstorms. Some of the storms will be severe Sunday afternoon in the Northeast.
- Low pressure will push a warm front that will spread torrential downpours from the Ohio Valley Saturday morning to the interior Northeast Saturday night while dragging a cold front that will spark brief but intense downpours across the Rust Belt Saturday night through Sunday morning
- Expect areas of flash flooding in the Ohio Valley and Rust Belt Saturday through Sunday morning
- The surface low will eject into Canada Sunday but its parent upper-level low will remain in place through at least midweek, keeping heavy rain chances in place in the Northeast through Tuesday and possibly Wednesday regardless of impacts from Hurricane Isaias.
- The focus of the showers and thunderstorms will be along and west of the Appalachians Sunday and expand toward the coast beginning Monday but heavy rain is possible *anywhere* in the Northeast each day.
- Sunday will be the wettest and most hazardous day for areas not impacted by Isaias.
- Sunday's storms will pop up early in the afternoon and could develop into robust supercell thunderstorms capable of producing damaging winds, nickel-sized hail, and a few tornadoes.
- By Sunday evening the storms could merge into strong bowing segments capable of producing powerful straight-line winds
- Tornado-generating supercells will be possible in NY, NJ, and PA but will be most likely in Upstate New York
- Affected Routes:
  - Houston to Detroit along I-55, I-57 and I-70 through Indianapolis between
     10am Saturday and 8am ET Sunday
  - New York to Chicago along I-80 east of Elkhart between 2am ET Sunday and 9pm ET Sunday
  - Los Angeles to New York along I-80 east of Elkhart between 2am ET Sunday and 9pm ET Sunday
  - Philadelphia to Buffalo along the entire route between 2am and 8am
     Sunday, and between 1pm ET and 8pm ET Sunday
  - Boston to Washington, D.C. north of Wilmington, DE between 3pm ET Sunday and 9pm ET Sunday

Route		Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday
	RCI	·		5	5	7	·	•
Boston to Washington, DC	Possible Route Disruptions			Storm Affecting Route: 2  - Indiaded to scattered strong to severe thunderstorms could break out across the 16d control and reteors routhern New England in the across the 16d control and reteors routhern New England in the The primary severe hazard is damaging wind gast but burnadoes and routed be possible between Pladachjah and New York City - Blanding downpours will bear to bin driving visibility and closted urban Schodowns of 10 x-105 ways from urban centers and up to 20% near urban areas are possible	Storm Affecting Route: 1  - Humicane Isales could bring heavy wind-whipped rain showers to the Washington, D. C. area Monday right to the Washington, D. C. area Monday right divines conditions:  - Incident Management of the Company	<ul> <li>Conditions could clear south of New York City as soon as late afternoon</li> <li>Slowdowns of 15-25% are possible along the entire route, greatest near New York City and Boston</li> </ul>		
	RCI			6		5.5		
Philadelphia to Buffalo	Possible Route Disruptions			Storn Affeling Route: 2  - Scattered to positive discarged astrong to severe thunderstorms will overspread much of the route in the afferiroon after heavy early morning showers  - Damaging settled the existes, riside-sized hall, and formadoes are - Damaging settled by the W ofc.  - Blinding deepengers will make to hazardous driving conditions and could prompt utran flooding.  - Stoudowsm of 15-25% are possible, with the greatest slowdowns in western New York.		Storm Affecting Route: 1 - 6-8 hour period of breesy winds - Huntrame Isalas could bring a 6-8 hour period of breesy winds - 10-8 hours and 10-8 hours are soft later double dring conditions and could produce areas of flash flooding, especially near Philadelphia - Slowdowns of 10% to locally 20% are possible on 1476		
	RCI			5.5		7		
New York to Chicago	Possible Route Disruptions			Storn Microlog Route: 2  - Heavy showers and shunderstorms will sweeps cross northern Indiana and Ohio early Sunday morning - Showly is sweet shunderstorms could break out across PA in the Showly is sweet shunderstorms could break out across PA in the - Damaging wind guist, nickel-stace final, and located tomadoes will be possible.  - Damaging wind guist, nickel-stace final, and located tomadoes will be possible.  - Soundowns will make for hazorous during conditions at times. Soundowns of 10%-15% in rural areas to 20% in urban areas are		Storm Miffecting Route: 1 Hurticane Isaliae could bring a 6-8 hour period of strong winds and pensistent, torrential downpours to northeast NJ and NYC Pendid of Dressy, heavy and nould doesngered all of 1-90 in NJ - Expect flooding rear NYC, possibly storig 1-80  - Expect flooding rear NYC, possibly storig 1-80  - Expect flooding rear NYC, possibly storig 1-80  - Sized of the Storig NYC of the Storig 1-80  - Sized of the Storig NYC of the Storig 1-80  - Sized of the Storig NYC of the Storig 1-80  - Sized of the Storig NYC of the Storig 1-80  - Sized of the		
	RCI			5.5		7		
Los Angeles to New York	Possible Route Disruptions			Storm Affecting Route: 2  - Heavy showers and frundestorms will sweeps cross northern Indians and Oho early Standy morning could break out scross PA in the - Shong is beenet flundestead for could break out scross PA in the - Shong is beenet flundestead for Could break out scross PA in the - Shong is beenet flundestead for Could be seen to could be proceed to the country of the process PA in the scross PA in the possible - I sharing downpours will make for hazardous driving conditions at times possible.		Storm Affecting Route: 1 - Hurricans Islant could string a 6-8 hour period of atong winds and persistent, broatfal downpours to northeast NJ and NYC - Periods of breezy, heavy rain could overspected all of 3-00 in NJ - Expect flooding reads VFC, possibly along 1-960 to fact or size of the country of the PA border to 40% or more near NYC are possible		
	RCI							
Los Angeles to San Francisco	Possible Route Disruptions							
	RCI							
Dallas to Houston	Possible Route Disruptions							
_	RCI							
Houston to Laredo	Possible Route Disruptions							
	RCI		5	5.5				
Houston to Detroit	Possible Route Disruptions		Storm Affecting Route: 2 - Heavy thorses and thunderstems will break out early Saturday across the mid-Missipping and Onlo Valleys The obsergance of Onlo Valleys of Ended to provide the same areas The obsergance of Continuously repending in coverage through central ILL. N. and O'll Healing to areas of fash office Showers and bundrestorms will subside a bit in the evening Showers and bundrestorm will subside a bit in the evening Showers and bundrestorm will subside a bit in the evening Showers of 10°s, 15°s, and 17°0.	Storm Affecting Routs: 2  - Blief but intense showers and thunderstorms will sweep across IN and it also State Roy right for only Studied ymothing to the footing.  - Tomestid conveyant is disherse will make for hazardous driving consistence and 10-15% to 25% in urban areas are possible along 170, I-69, 175, and US-24				
	RCI		6	6				
Miami to Atlanta	Possible Route Disruptions RCI		Stem Microling Route: 1  Stem Microling Route: 1  Heavy microl was been stem from a period of strong winds and heavy rain to coastal Fourida.  Heavy wind-wrapped rain will make divining hazardous and difficult at 1  The blus of the precipitation and strongest winds are expected to remain off after, but the coal'd charge.  Slowdowns of 10-20% are possible along 1-95	Stem Microling Route: 1  Stem Microling Route: 1  In the Microling All the Microling a period of strong winds and heavy rain to coastal Florida.  Heavy wind-wampped rain will make driving hazardous and difficult at the microling and the microline				
	RCI							
Minneapolis to Fargo	Possible Route Disruptions							













