Dr Erica Thompson (LSE CATS) Prof Leonard Smith (LSE CATS) Sarah Klassen (Start Network)

### Aims

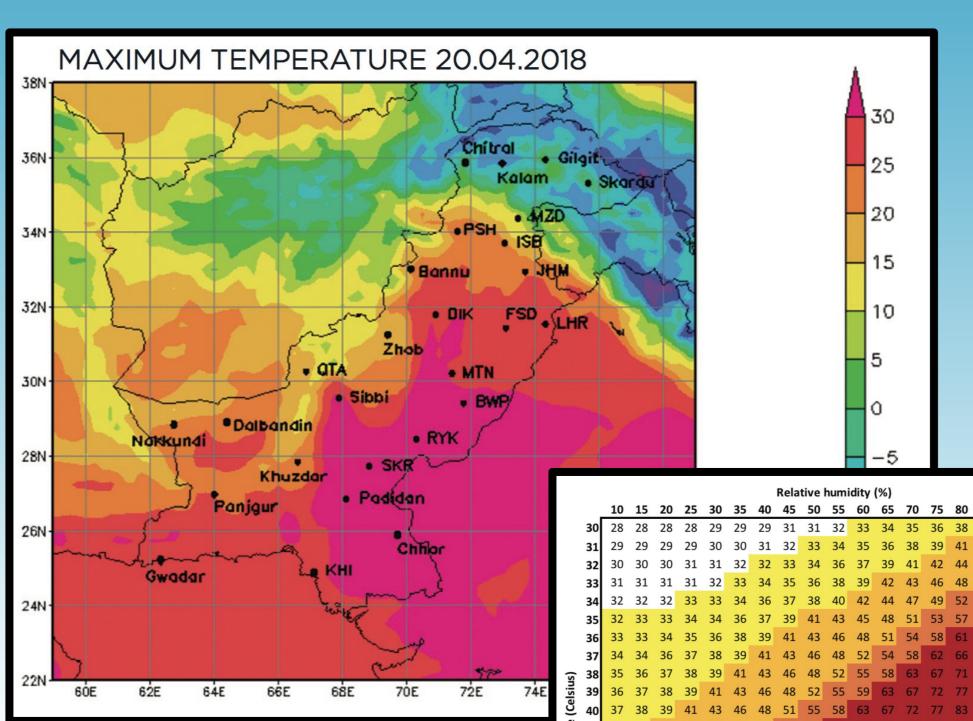
- Provide useful information to support decision-makers to take humanitarian action before a crisis occurs
- Support implementation of new procedures

# Solutions

- Evaluate forecast performance
- How far in advance is useful information available?
- Where can useful action be taken, on what timescales?
- Co-design the research to target genuinely helpful outputs
- Where information is not available, take forecast off the table

# Acting in advance of humanitarian crises: Using forecasts effectively

"It's a delicate balance between being close enough to the spike of the heatwave - when we've got a higher level of certainty about the forecast, but far enough away from the heatwave to actually implement anticipatory action. In the past, it's been difficult to get the balance right." - Sarah Klassen, Start Network Crisis Anticipation Officer



Our case studies: Heatwave in Pakistan (above and right) Cyclone in the Philippines (far right)



CATS CENTRE FOR THE ANALYSIS OF TIME SERIES



THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

# Research funded by NERC: NE/R006873/1 and NE/R01423X/1

													~						
		Relative humidity (%)																	
		10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	18°I
Temperature (Celsius)	30	28	28	28	28	29	29	29	31	31	32	33	34	35	36	38	39	41	
	31	29	29	29	29	30	30	31	32	33	34	35	36	38	39	41	43	44	16°I
	32	30	30	30	31	31	32	32	33	34	36	37	39	41	42	44	47	49	
	33	31	31	31	31	32	33	34	35	36	38	39	42	43	46	48	51	53	14°I
	34	32	32	32	33	33	34	36	37	38	40	42	44	47	49	52	55	58	
	35	32	33	33	34	34	36	37	39	41	43	45	48	51	53	57	60	64	12°I
	36	33	33	34	35	36	38	39	41	43	46	48	51	54	58	61	65	69	
	37	34	34	36	37	38	39	41	43	46	48	52	54	58	62	66	71	75	10°I
	38	35	36	37	38	39	41	43	46	48	52	55	58	63	67	71	76	81	101
	39	36	37	38	39	41	43	46	48	52	55	59	63	67	72	77	82	88	
	40	37	38	39	41	43	46	48	51	55	58	63	67	72	77	83	88	94	
	41	38	39	41	43	45	48	51	54	58	62	67	72	77	83	88	95		
	42	39	41	42	44	47	50	54	57	62	66	71	77	82	88	95			
ď	43	40	42	44	47	49	53	57	61	66	71	76	82	88	94				
Te	44	41	43	46	48	52	56	59	64	69	74	81	87	94					
	45	42	44	47	51	54	58	63	68	73	79	86	92	99			Feels lil		
	46	43	46	49	53	57	61	66	72	78	84	91	98				Modera		
	47	44	47	51	55	59	64	69	76	82	89	96					Warm		
	48	46	49	53	57	62	67	73	79	87	94						Hot		
	49	47	51	54	59	65	71	77	84	92	99						Very ho		
	50	48	48 52 57 62 68 74 81 88 96							Extreme he									
		Other	condit	ions i	ncludi	ng win	d spee	d and	physic	al acti	vity lev	els als	o cont	ribute	to the	e perce	ption	of extr	eme h

# Challenges

- Humanitarian impacts often not directly related to physical hazards
- Communication with local-level
   representatives needs to be
   framed and pitched appropriately
- For some events, a good forecast is
  not available on a timescale
  allowing for action then
  decisions must be taken based on
  other factors



#### Tell me more

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