

Uncertainty estimation

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Example of uncertainty estimation by Tier 1 and Tier 2 - methods result in slight differences (higher estimates for Tier 2)

		U -	Average	U +	Stock change (t2-t1)				
		3%		3%	min(t2) - MAX(t1)	average	MAX(t2) - min(t1)	±U%	
		t d.m.			t d.m.			M-m m-M (~ Tier 2)	IPCC error propagation (t2-t1) (Tier 1)
Case A	Stock t1	97	100	103	91	100	109	9%	2,24%
	Stock t2	194	200	206				-9%	
Case B	Stock t1	97	100	103	188	200	212	6%	2,37%
	Stock t2	291	300	309				-6%	
Case C	Stock t1	97	100	103	42,5	50	57,5	15%	2,16%
	Stock t2	145,5	150	154,5				-15%	

EQUATION 3.2
COMBINING UNCERTAINTIES – APPROACH 1 – ADDITION AND SUBTRACTION

$$U_{total} = \frac{\sqrt{(U_1 \cdot x_1)^2 + (U_2 \cdot x_2)^2 + \dots + (U_n \cdot x_n)^2}}{|x_1 + x_2 + \dots + x_n|}$$