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## Goal

Create a **Virtual Research Assistant** that

- Amplifies human research
- Is capable of **contextual dialogue**
- Interprets document-grounded **figures**
- Supports **conversational Q-A**

## Method

This work introduces a new dataset **CONVERSATIONAL FIGURES (cFIGS)**

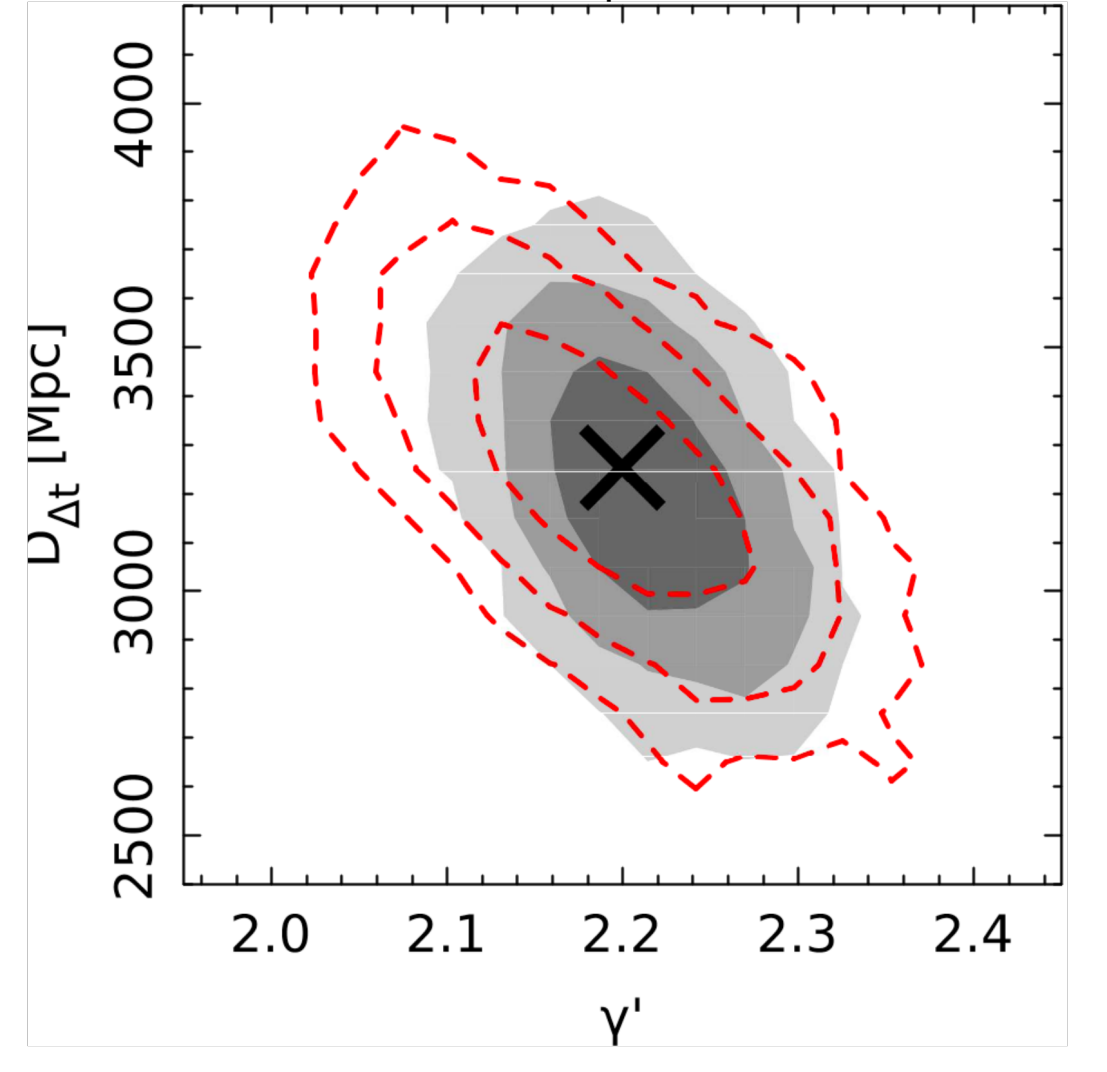
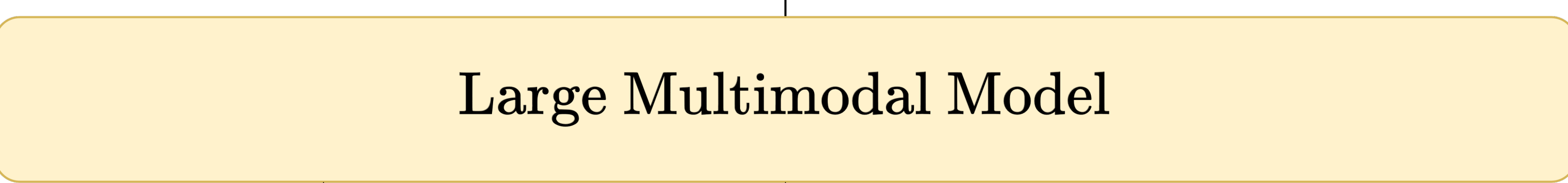
- Multi-turn
- Image-grounded
- Conversational question-answer pairs
- From scientific documents

## Preliminary Results

	ROUGE 1	ROUGE 2	ROUGE L
Image + Dialogue	0.248	0.095	0.173
Image + Caption + Dialogue	0.233	0.113	0.175
Image + Caption + Paragraph + Dialogue	<b>0.280</b>	<b>0.124</b>	<b>0.199</b>

## System Architecture

The shaded area represents the credible intervals for the parameters when using the correct PSF in simulation. In contrast, the dashed area represents the credible intervals obtained when an offset PSF is used. These intervals show the 68.3%, 95.4%, and 99.7% confidence levels on the estimated parameters, indicating where the true values are most likely to be found.



Can you explain what the shaded and dashed areas represent in this graph?

Figure 9. The effect of the PSF. Marginalised PDF of  $\gamma'$  and  $D\delta t$  for Simulation 3 Realisation 3 modelled using the input TinyTim PSF (shaded) and a TinyTim PSF that is offset by  $\sim 45''$  from the input PSF (dashed). The three areas show the 68.3 %, 95.4% and 99.7% credible regions. The cross marks the input values. With the imperfect (offset) PSF and the scaled pixel uncertainty in equation (26), the precision of the recovered  $D\delta t$  is slightly degraded due to misfits near the bright AGN images.

## Dataset Collection

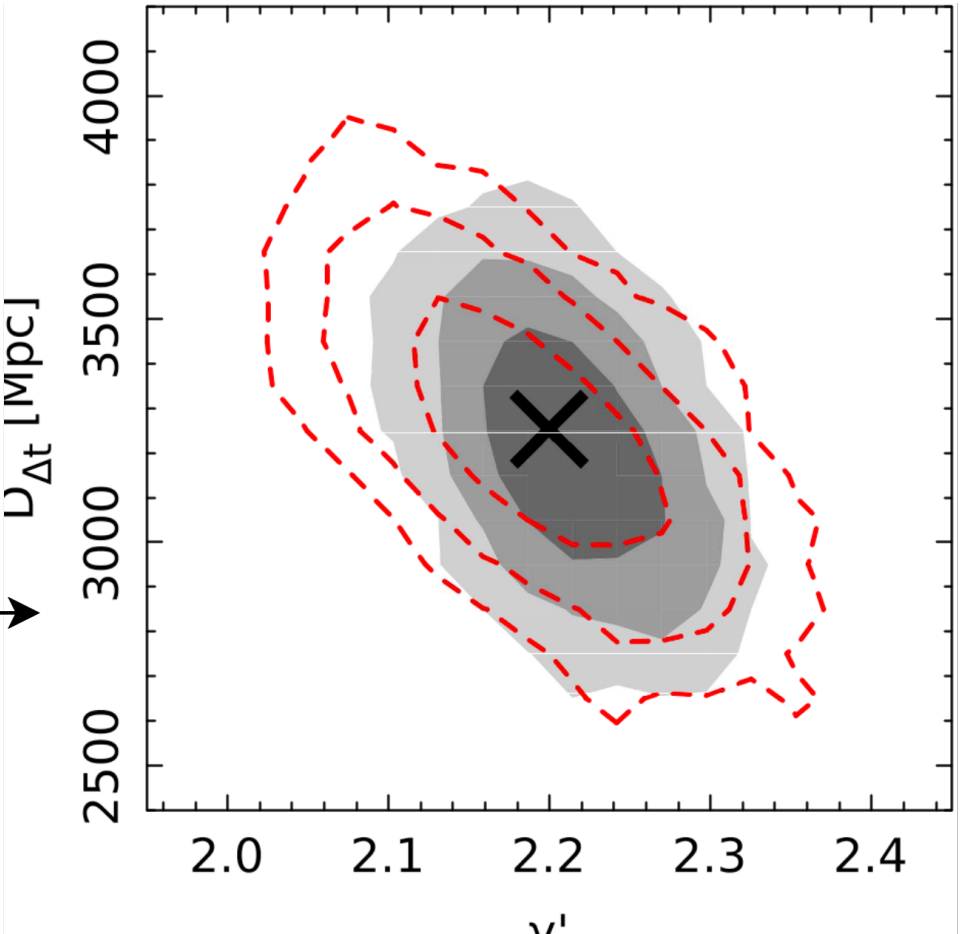
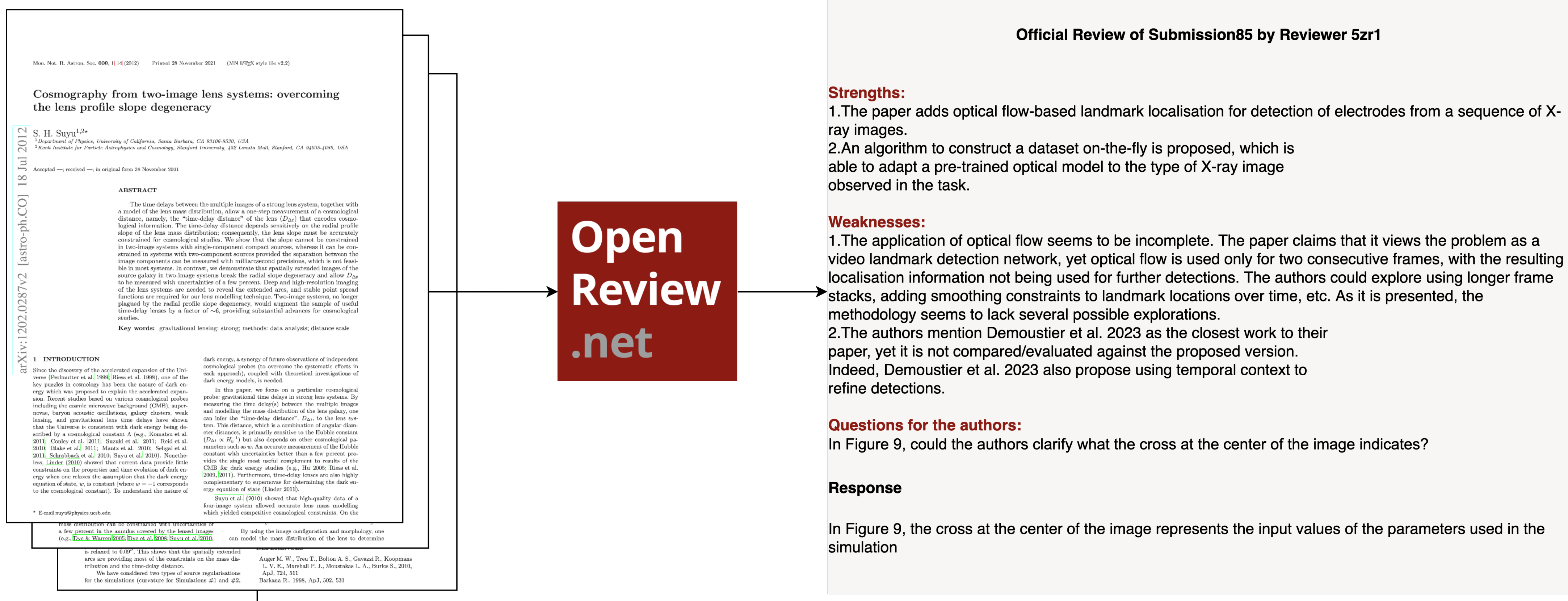


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## Scan to be in the loop

