ROLE OF GEOGRAPHY
IN THE LOCATION OF BUDDHIST SITES
FROM ANDHRA PRADESH
A GIS PERSPECTIVE

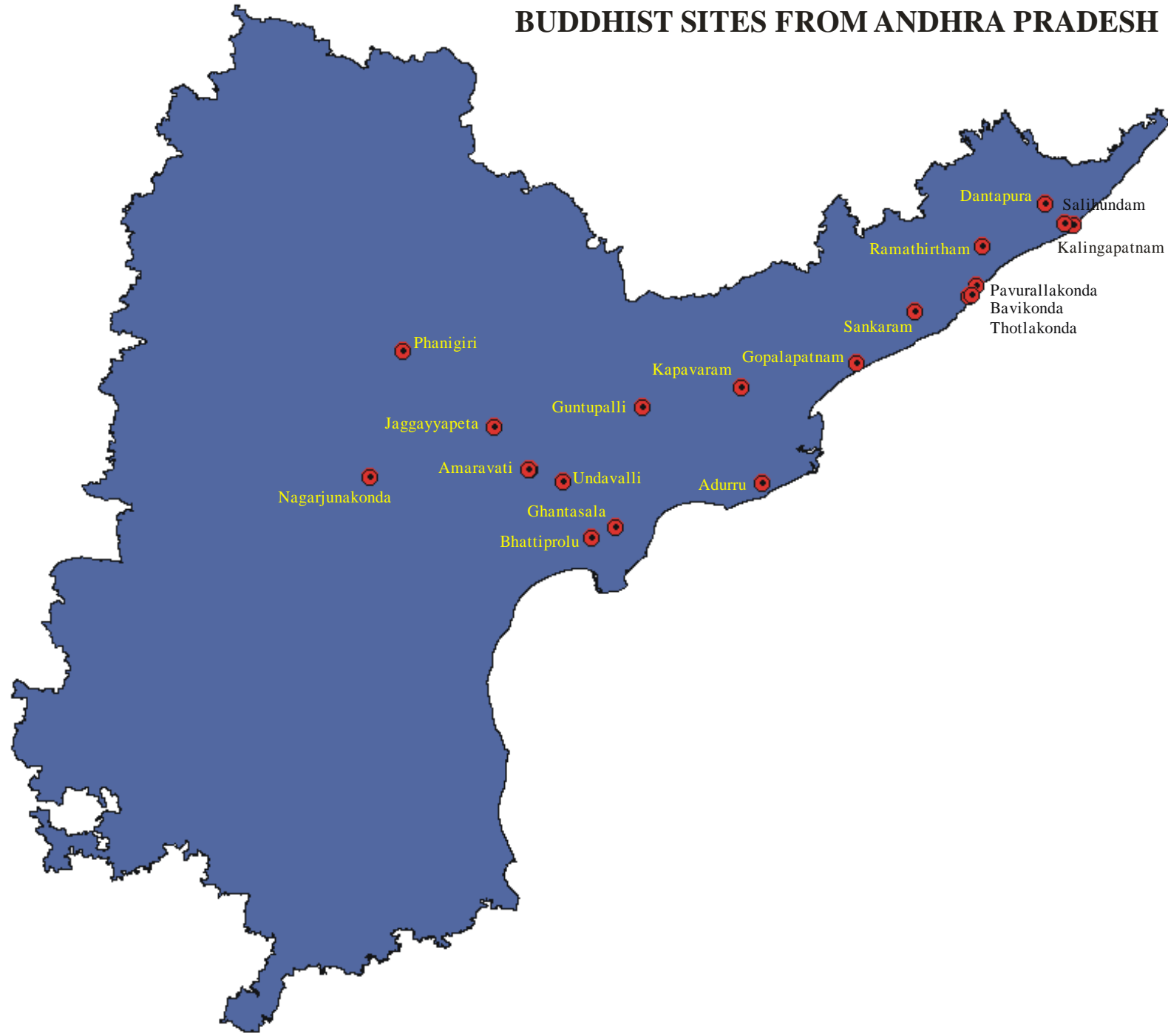**Dr. K.P.RAO**

Professor

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University of Hyderabad

HYDERABAD – 50006

INDIA

drkprao@gmail.com

BUDDHIST SITES FROM ANDHRA PRADESH

Dantapura
Salihundam
Ramathirtham
Kalingapatnam
Pavurallakonda
Bavikonda
Thotlakonda
Sankaram
Gopalapatnam
Phanigiri
Kapavaram
Guntupalli
Jaggayyapeta
Amaravati
Undavalli
Adurru
Nagarjunakonda
Ghantasala
Bhattiprolu

AMARAVATI

GUNTUPALLI

KAPAVARAM

NAGARJUNAKONDA

NAGARJUNAKONDA

PHANIGIRI

SALIHUNDAM

BAVIKONDA

10 Mt.

16 28.717n 81 57.297e

Attributes of Geopnts.shp

Shape	Site	Y	X	Altitude	Land_alt	Difference	Beginning	BRange	End	ERange	Land_use	LULC	Grading
Point	Adurru	16.47849	81.95461	6M			2 BC	2	2CBC	2	100% agriculture	A	100 - 75
Point	Amaravati	16.57576	80.35654	37 M			3BC	1	13AD	8	No waste land	A	100 - 75
Point	Bavikaonda	17.81771	83.39073	135M	5M	130M	3 BC	1	2AD	4	Not much fertile land	D	25-0
Point	Bhattiprolu	16.09950	80.78091	8 M			2BC	2	2BC	2	No waste land	A	100 - 75
Point	Dantapura	18.47699	83.91714	34M	25M	9M	3 BC	1	9AD	8	90% usable	B	75-50
Point	Dharanikota	16.57563	80.34285	35M			3BC	1	4AD	6	No waste land	A	100 - 75
Point	Ghantasala	16.16979	80.94866	19M			2AD	4	2AD	4	100% ag. land	A	100 - 75
Point	Gopalapatnam	17.33525	82.61434	80MT	15M	65M	3 BC	1	2AD	4	80% ag. land	A	100 - 75
Point	Guntupalli	17.01990	81.13035	171M			3 BC	1	3BC	1	50% usable dry ag.	C	50-25
Point	Jaggayyapeta	16.88696	80.10649	75M	55M	20M	3BC	1	7AD	7	Majority of land not suitable	D	25-0
Point	Kalingapatnam	18.33057	84.11077	5MT			3BC	1	1AD	3	Most land usable	A	100 - 75
Point	Kapavaram	17.16768	81.81294	123M	30M	93M	2 AD	4	4AD	6	More than 95% ag. land	A	100 - 75
Point	Nagarjunakonda	16.52292	79.24879	183M	80M	103M	3AD	5	3AD	5	60% usble, dry.	B	75-50
Point	Pavurallakonda	17.88927	83.43756	162M	25M	137M	3BC	1	2AD	4	Not much fertile land	D	25-0
Point	Phanigiri	17.42733	79.47235	290m	240M	50M	1 AD	3	2AD	4	More than 90% ag.	A	100 - 75
Point	Salihundam	18.33379	84.04304	49M	8M	41M	3 BC	1	12AD	8	Mostly usable	A	100 - 75
Point	Sankaram	17.71017	83.01567	46M			2AD	4	9AD	8	75% usable	B	75-50
Point	Thotlakonda	17.82821	83.40882	115M	5M	110M	3 BC	1	2AD	4	No usable land	D	25-0
Point	Undavalli	16.49689	80.58167	31.39M	21M	10M	4 AD	6	5AD	6	90% usable	A	100 - 75
Point	Ramatirtham	18.17701	83.47557	75M	64M	11M	3 BC	1	9AD	8	Not much fertile land	D	25-0

ArcView GIS 3.2

File   Edit   Table   Field   Window   Help

12 of   20 selected

Attributes of Geopnts.shp

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Bhattiprolu	16.09950	80.78091	8 M			2BC	2	2BC	2	No waste land	A	100 - 75
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Ghantasala	16.16979	80.94866	19M			2AD	4	2AD	4	100% ag. land	A	100 - 75
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Guntupalli	17.01990	81.13035	171M			3 BC	1	3BC	1	50% usable dry ag.	C	50-25
Jaggayyapeta	16.88696	80.10649	75M	55M	20M	3BC	1	7AD	7	Majority of land not suitable	D	25-0
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Ramatirtham	18.17701	83.47557	75M	64M	11M	3 BC	1	9AD	8	Not much fertile land	D	25-0

CHRONOLOGY
3rd BC - 1
2nd BC - 2
1st AD - 3
2nd AD - 4
3rd AD - 5
4th AD - 6
7th AD - 7
13th AD- 8

Attributes of Geopnts.shp

Fields

[Land_alt_]
[Difference]
[Beginning]
[BRange]
[End]
[ERange]
[Land_use]

=   <>   and
>   >=   or
<   <=   not
( )

Values

1
2
3
4
5
6

☑ Update Values

([BRange] = 1)

New Set
Add To Set
Select From Set

Start | Gmail - Buddhi... | arcview query ... | Arc View Tutor... | apstatebound... | new (F:) | buddhist-sites... | ArcView GIS ... | Google Earth | Document1 - ... | Document2 - ... | Microsoft Pow... | 1:30 AM

File   Edit   Table   Field   Window   Help

11 of   20 selected

Attributes of Geopnts.shp
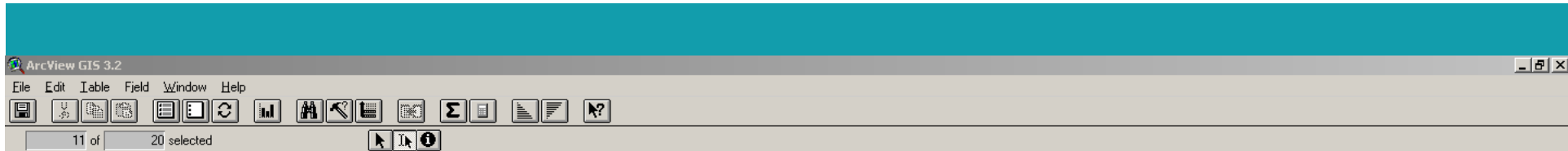
Shape	Site	Y	X	Altitude	Land_alt_	Difference	Beginning	End	Land_use	LULC	Grading
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Point	Bavikaonda	17.81771	83.39073	135M	5M	130M	3 BC	2AD	Not much fertile land	D	
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Point	Pavurallakonda	17.88927	83.43756	162M	25M	137M	3BC	2AD	Not much fertile land	D	
Point	Phanigiri	17.42733	79.47235	290m	240M	50M	1 AD	2AD	More than 90% ag.	A	100 - 75
Point	Salihundam	18.33379	84.04304	49M	8M	41M	3 BC	12AD	Mostly usable	A	100 - 75
Point	Sankaram	17.71017	83.01567	46M			2AD	9AD	75% usable	B	
Point	Thotlakonda	17.82821	83.40882	115M	5M	110M	3 BC	2AD	No usable land	D	
Point	Undavalli	16.49689	80.58167	31.39M	21M	10M	4 AD	5AD	90% usable	A	100 - 75
Point	Ramatirtham	18.17701	83.47557	75M	64M	11M	3 BC	9AD	Not much fertile land	D	

Attributes of Geopnts.shp

Fields
- [Difference]
- [Beginning]
- [End]
- [Land_use]
- [LULC]
- [Grading]

Operators: = <> and > >= or < <= not ( )

Values:
- "A"
- "B"
- "C"
- "D"

☑ Update Values

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New Set
Add To Set
Select From Set
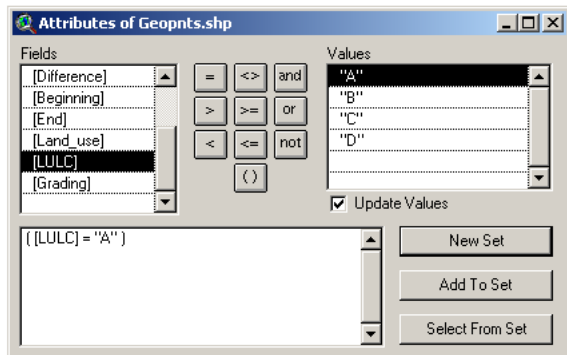
LAND GRADING
100-75% USABLE   A
75-50%   USABLE   B
50-25%   USABLE   C
25-0%   USABLE   D
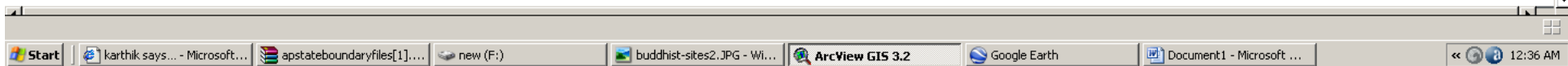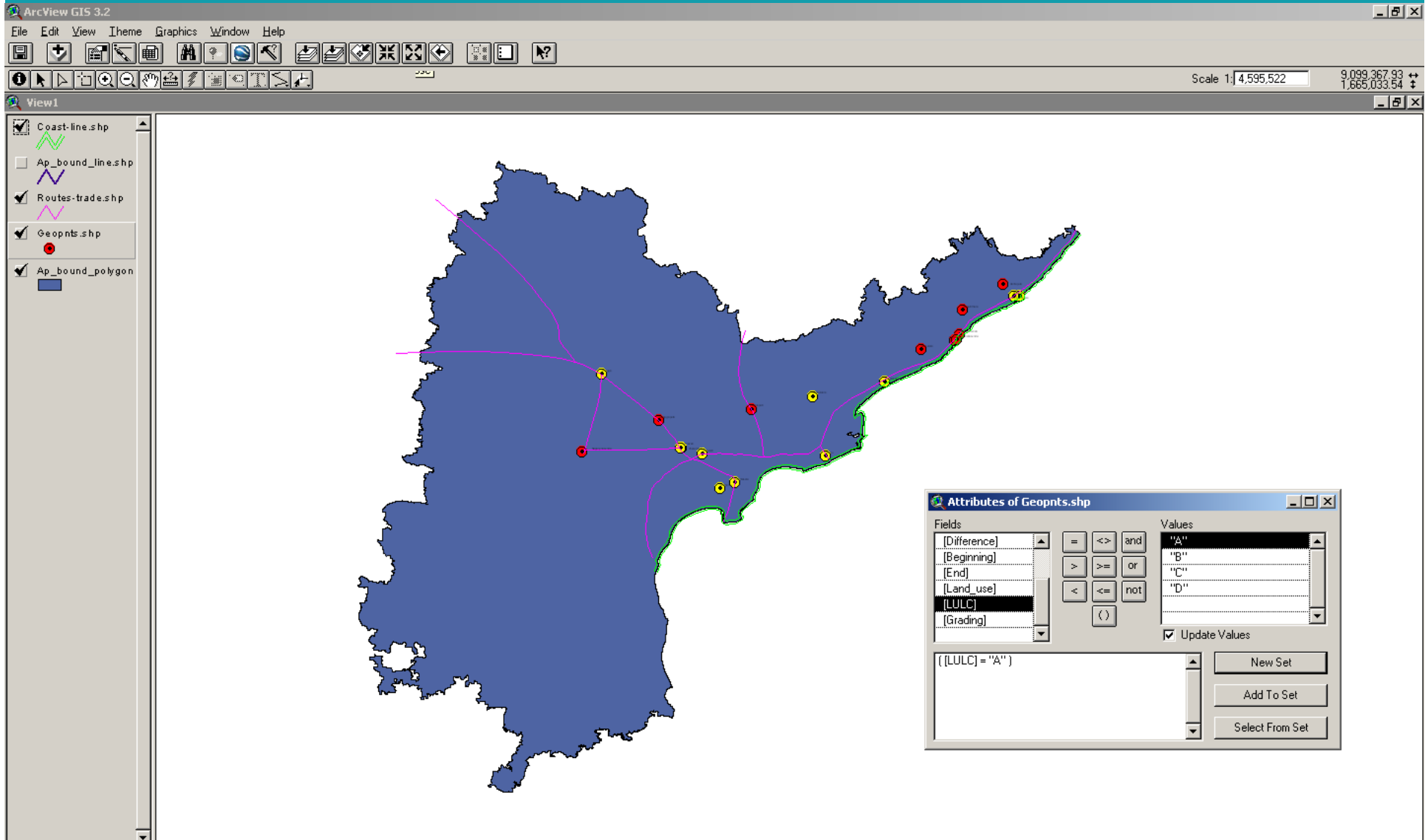
SITES FALLING ON THE TRADE ROUTE

SITES WITHIN 2 Km. FROM THE COAST

SOME CONCLUSIONS

- Buddhism was in its most flourishing state in Andhra Pradesh during 3rd Century BC and 3rd Century AD.

- Maximum number of sites came up in agriculturally fertile terrain.

- Trade route was a major factor in establishing Buddhist sites.

- Sites also came up near the major ports of the ancient period.

- Web 2.0 techniques were useful in land use and spatial analysis.

- Application of GIS techniques helped in developing better insight into the factors that influenced setting up of Buddhist sites in Andhra Pradesh.

PRESENTATION
DEDICATED TO
LORD BUDDHA
drkprao@gmail.com