
ASPRS 10 Year Industry Forecast Phase V

Initial Draft
ACCRES Review
March 2008

10 Year Industry Forecast Mission

Determine Future (next ten years) of the Commercial Remote Sensing Industry Sectors, Supporting Technologies, and Integration Advancing Industry Practices

Collect and Analyze the data necessary for Industry Partners and ASPRS members to develop more effective investment strategies and program plans



10 Year Industry Forecast Focus Areas

- Commercial Market Projections
- Projected Educational and Workforce Demands
- R&D Trends and Opportunities
- Policy, Standards and Certification Issues Affecting Market Growth
- Potential Influence of New Business Models (internet, e-commerce, etc.)

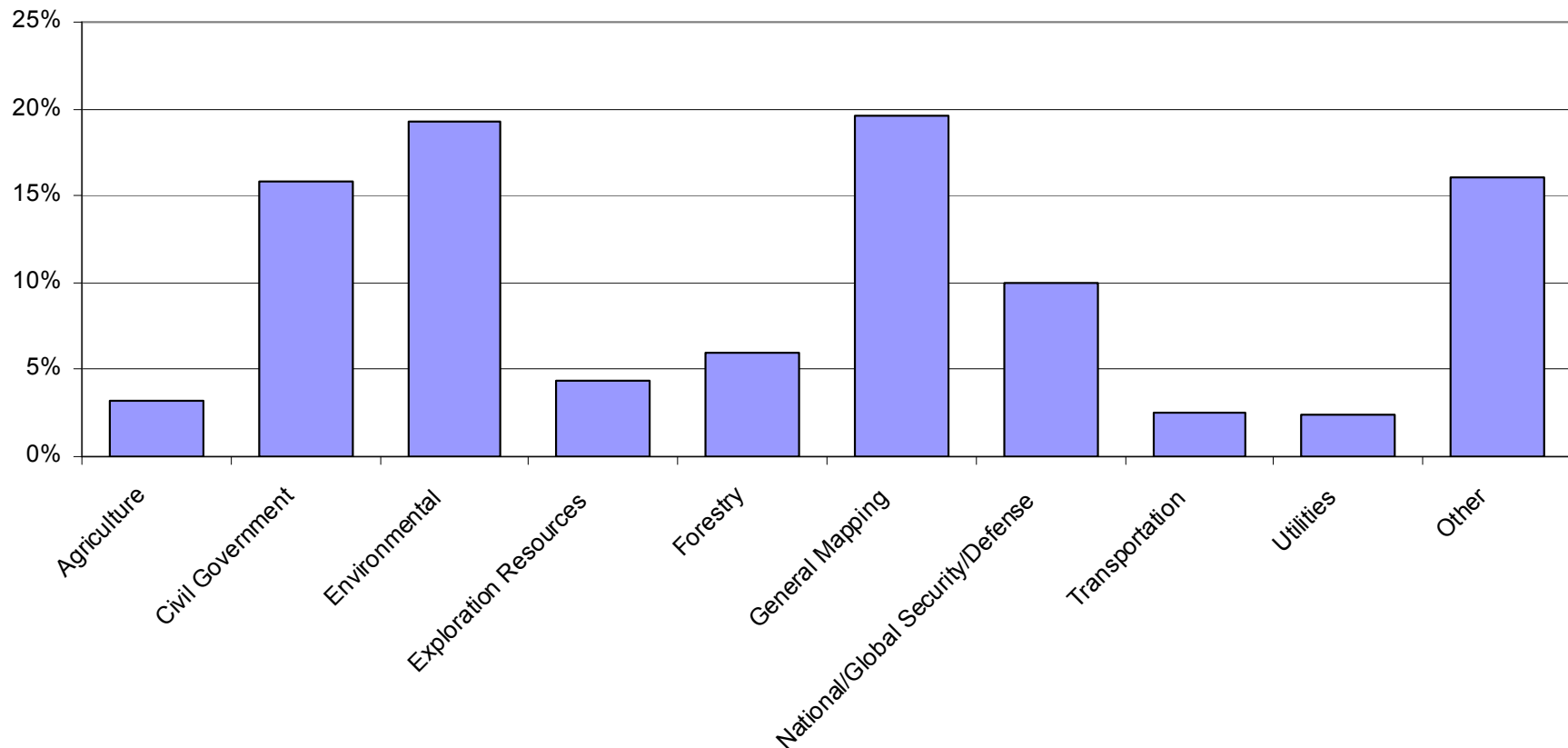
Phase V Goals and Population

- Phase V of the ASPRS 10-year Industry Forecast of the remote sensing and geospatial industry
 - Extend the results of the first four survey
 - First Forecast review of the international community
 - Population participated in an online survey
 - ASPRS 6000 members
 - ISPRS 5000 members



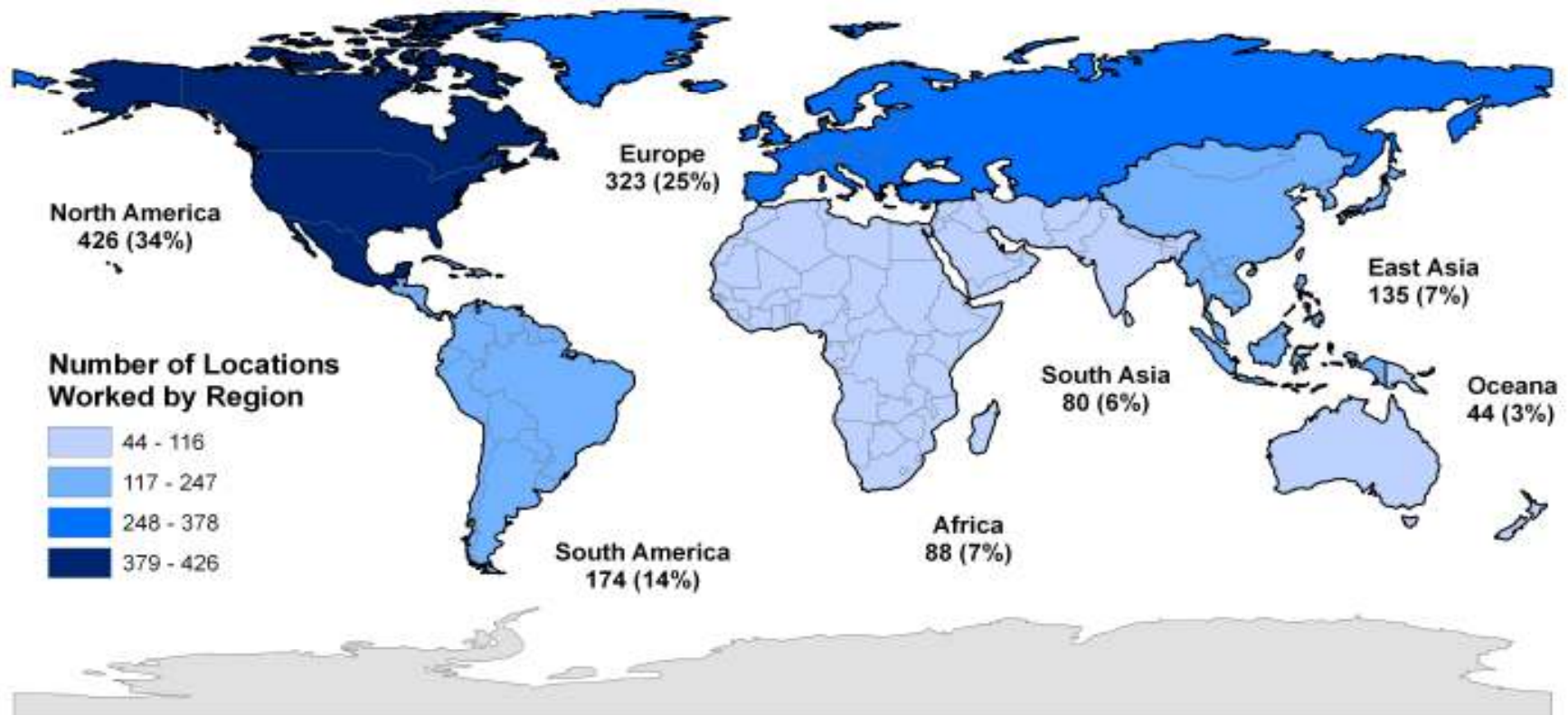
Respondent Profile

Respondents in Various Sectors of Employment (Number of Respondents)



- 512 individual respondents from 58 nations
- 295 (58%) end users of remote sensing data/information
- 217 (42%) managing remote sensing/geospatial organization

Regions in which we work



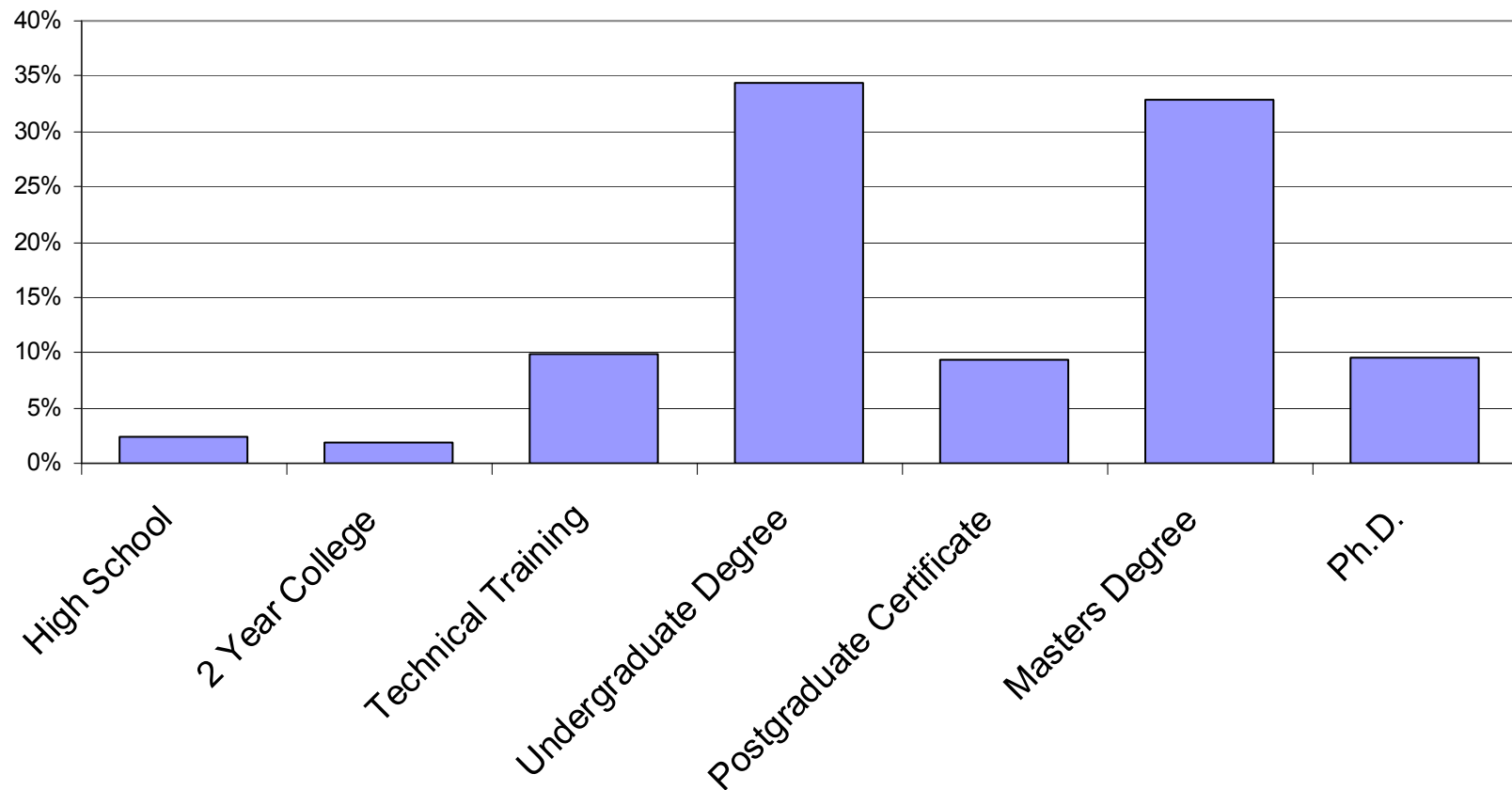
Question 5: In what country or countries do you work (please check all that apply)?

Number of respondents: 492

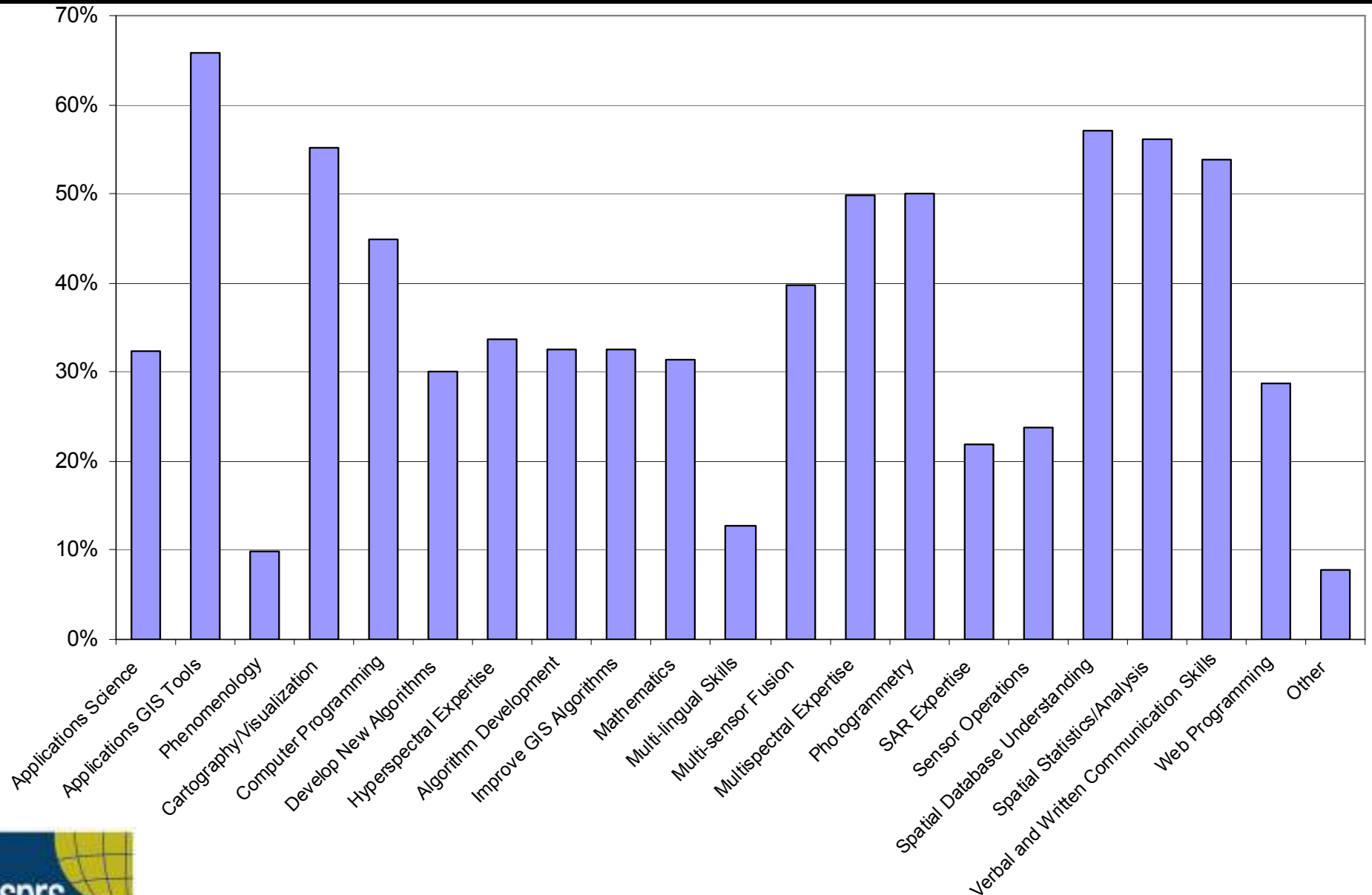
Total exceeds number of respondents since many work in more than one region.

Workforce educational needs

Appropriate Education for Needed for Majority of Respondents Workforce (Number)

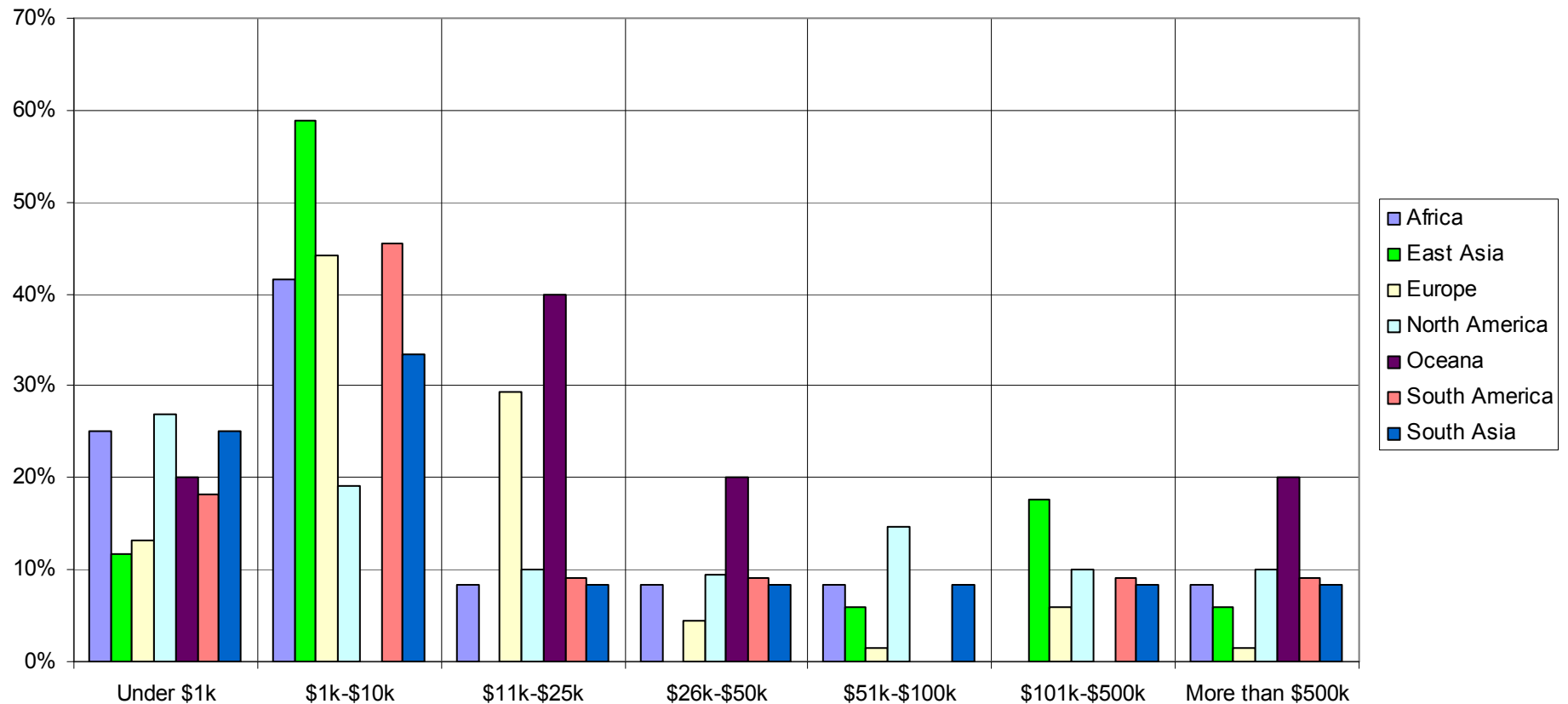


Needed technical skills



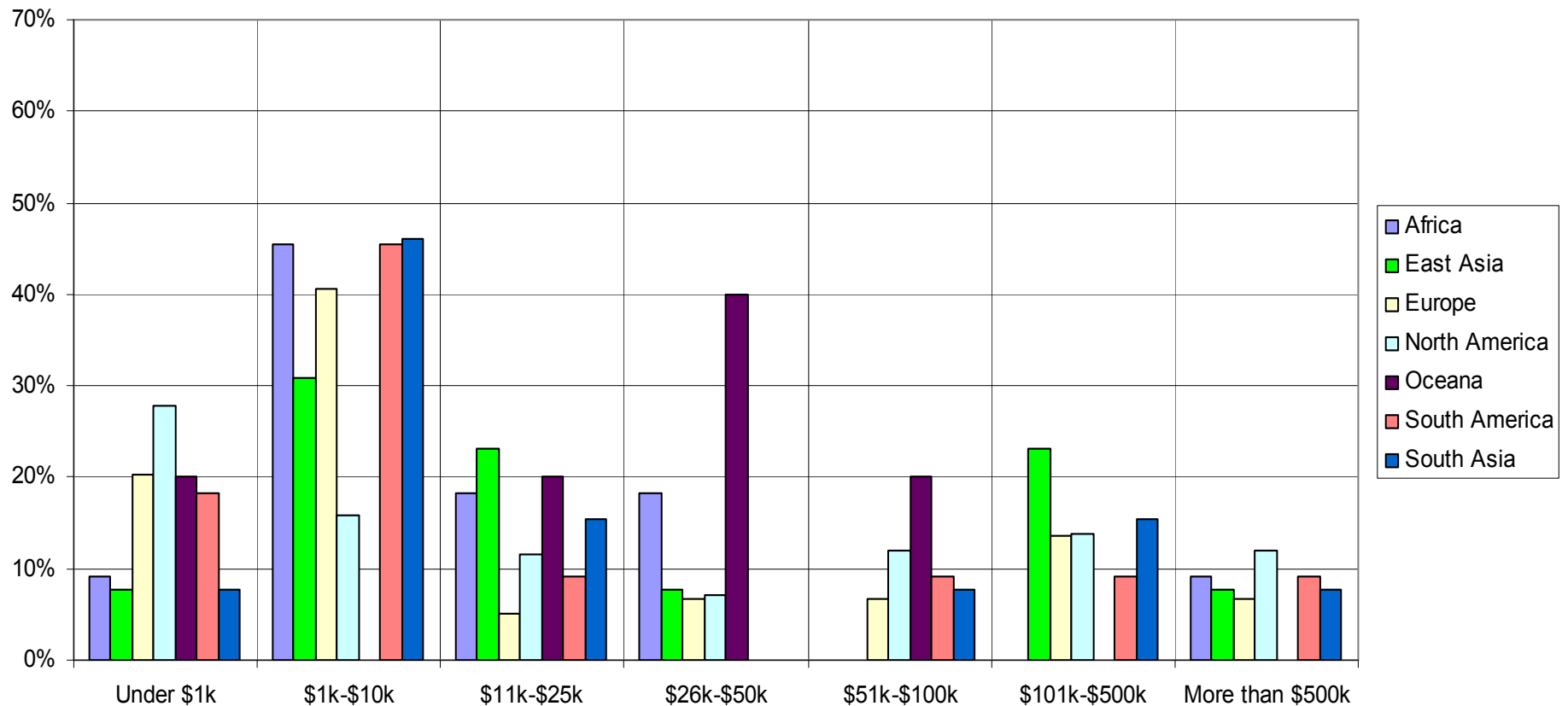
Spending Profile 2008

Estimates of Money to be Spent on Remote Sensing Data and Information in 2008



Spending Profile 2010

Estimates of Money to be Spent on Remote Sensing Data and Information in 2010



A general leveling of purchase size exists between 2008 and 2010

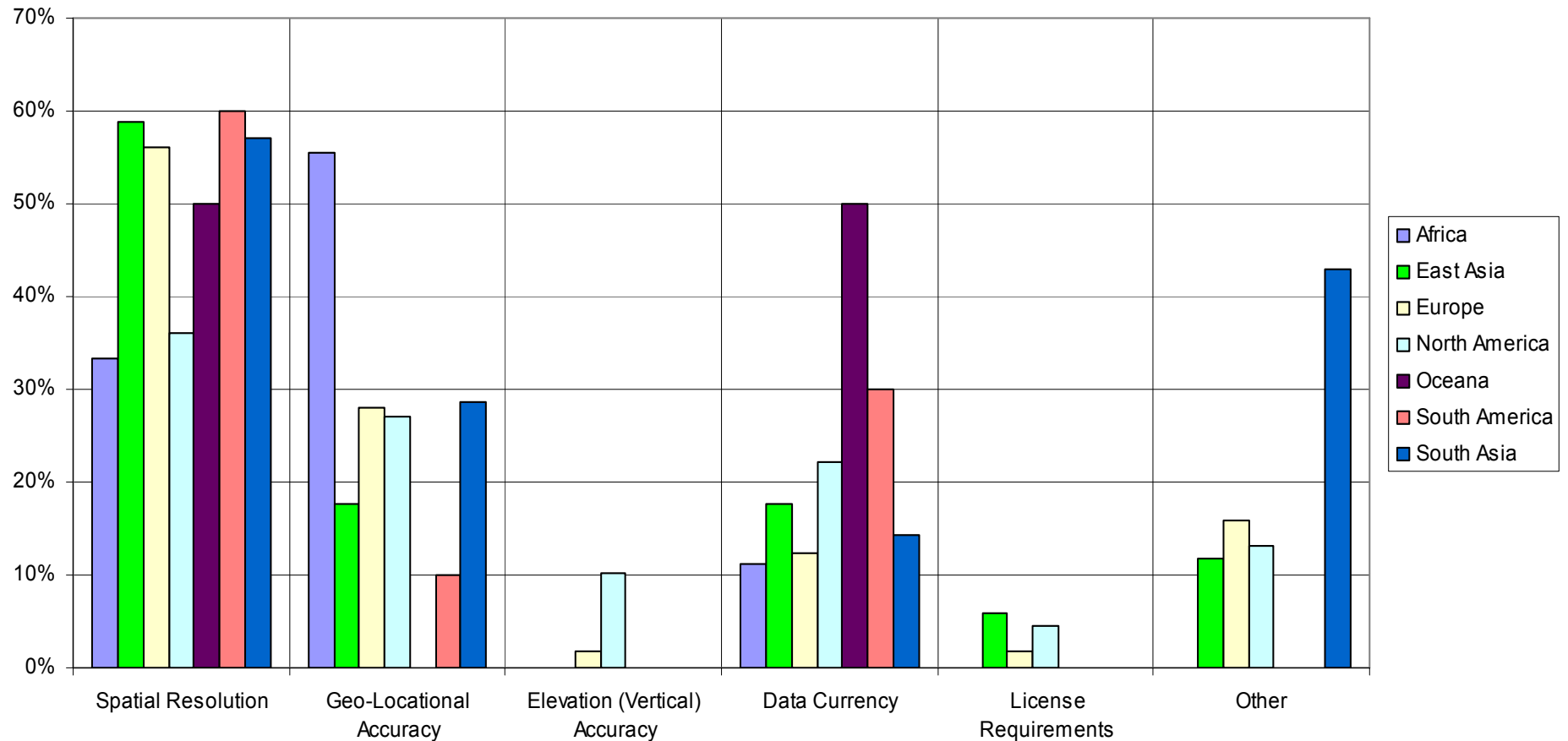


Technology Application Areas

- **Data Characteristics**
- Phase V continued this focus area internationally
- Key attributes in remotes sensing were sampled:
 - *Spatial Resolution*
 - *Geospatial Accuracy*
 - *Vertical Accuracy*
 - *Image Types*
 - *Currency*
 - *Air versus Space*
- Two points stand out in the relative importance of the attributes
 - Data currency is clearly continuing to increase in relative importance
 - The lack of international interest in data licensing is worthy of note

Data characteristic weighting

Most Important Characteristic of Remotely Sensed Data



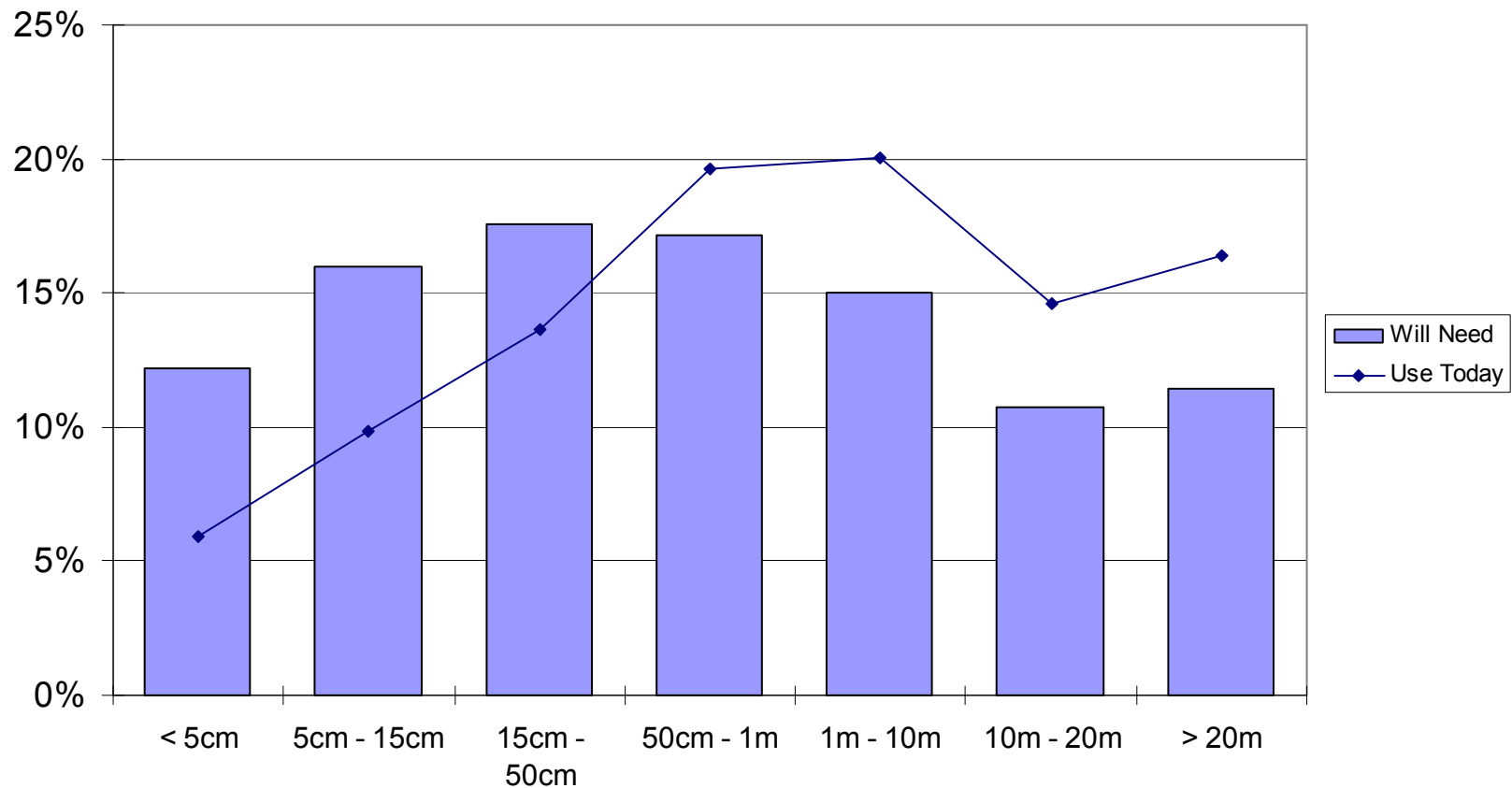
Data characteristic weighting

Sample of Responses from “Other”

Cost	Temporal -- right time
funding availability	access to raw data and products
Spectral resolution	Geo-location accuracy - Most; Data currency - Most; License requ
Spectral/radiometric resolution	On-line delivery
Quality	Data accessibility
spectral resolution	prefer 4-band digital to true color
Sensor Characterization/Calibration	Signal to Noise Ratio and Spectral Resolution
Data frequency	on Internet
Stereoscopic viewing	On-Demand
Ability to normalize-percent reflectance	Fitness for Use
multispectral	imagery type
radiometric accuracy	Signal-to-noise ratio
dataset size	NIR and MIR bands (spectral information for vegetation monitoring)
ease of use, access, relevancy to task	Scale
continuty/repear coverage	spectral resolution
radiometric quality/consistency	pan-sharpened MS color
availability of a historical archive	LIDAR classification ease
hyperspectral capability	cloud-free imagery

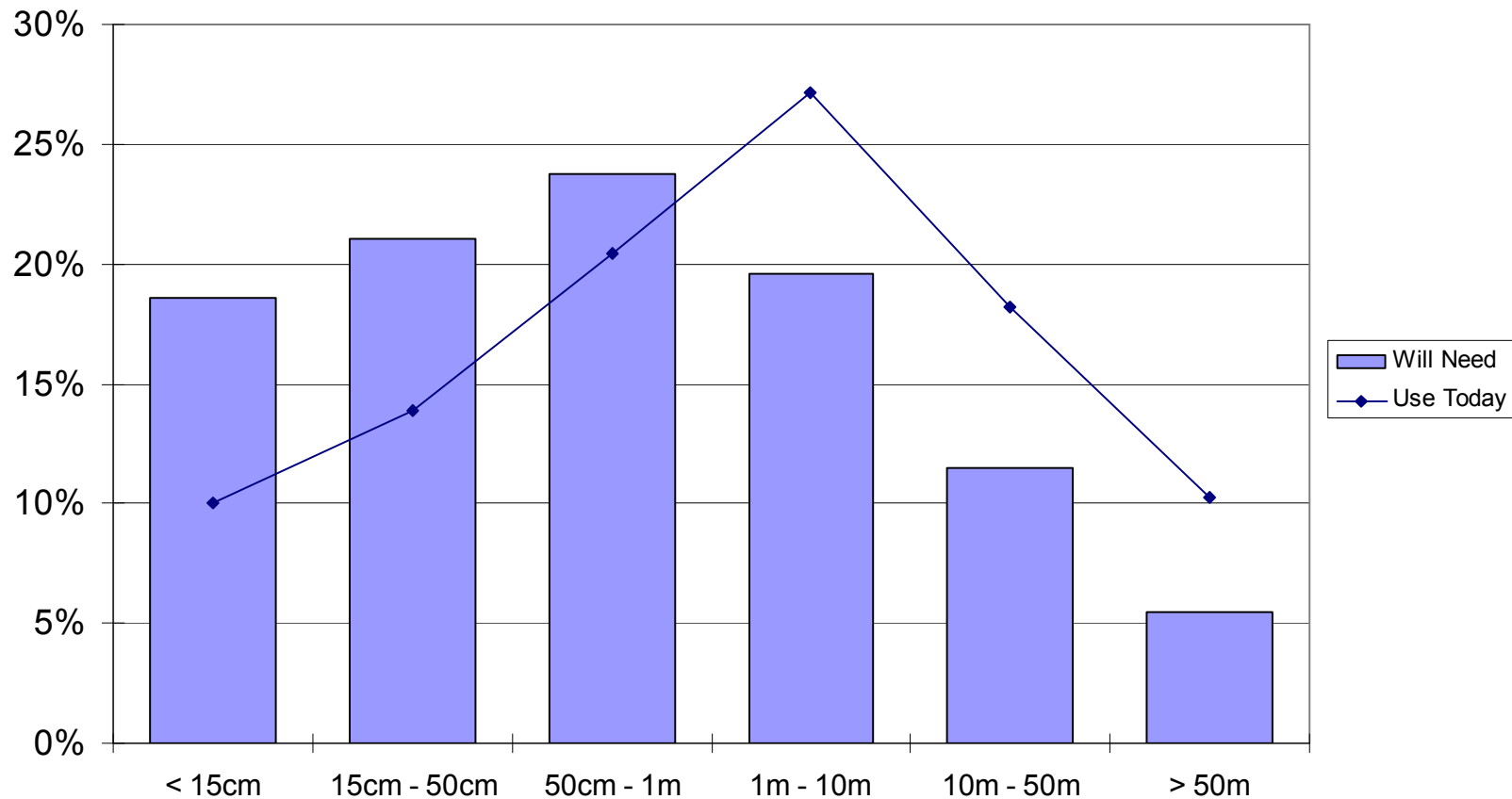
Spatial resolution

Spatial Resolution: Use Today Vs. Needed in the Future



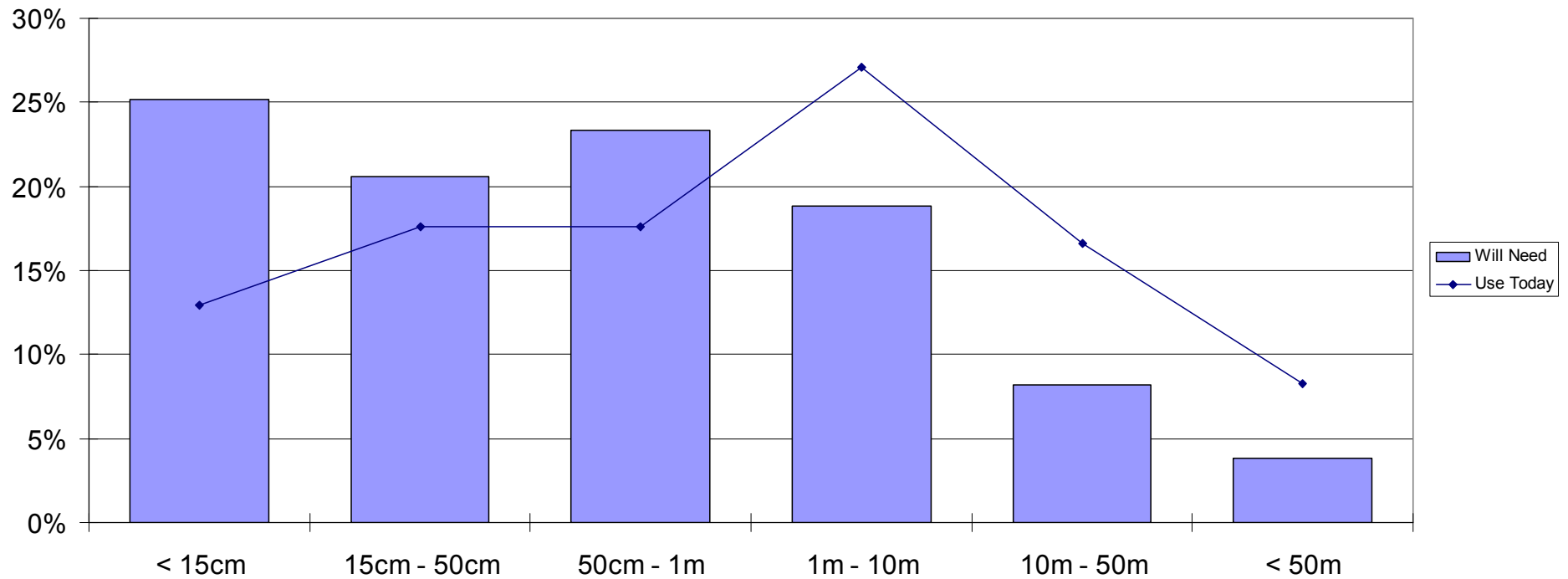
Geo-Locational accuracy

Geo-locational Accuracy: Use Today vs Needed in the Future



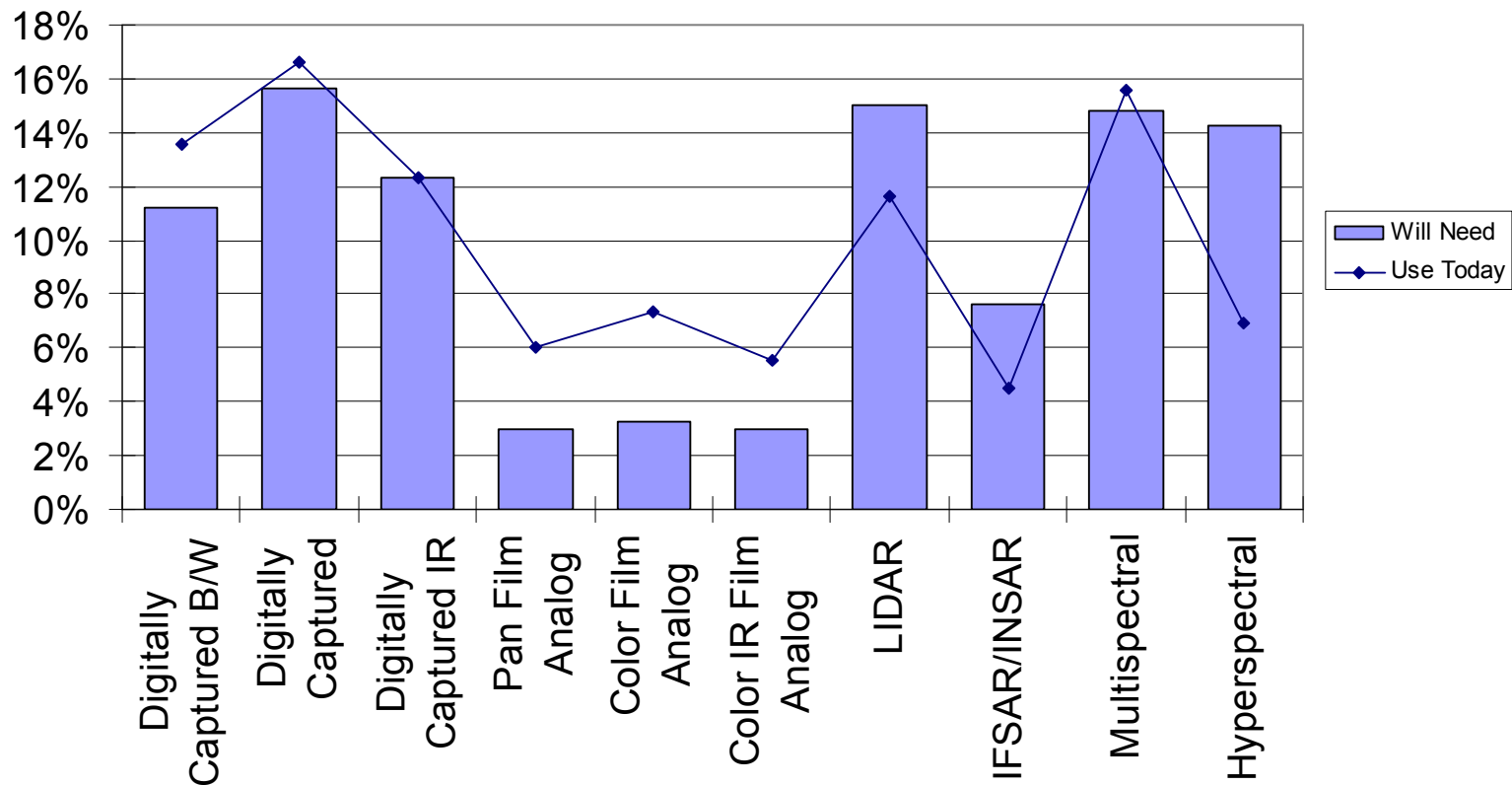
Elevation

Elevation Accuracy: Use Today vs Needed in the Future



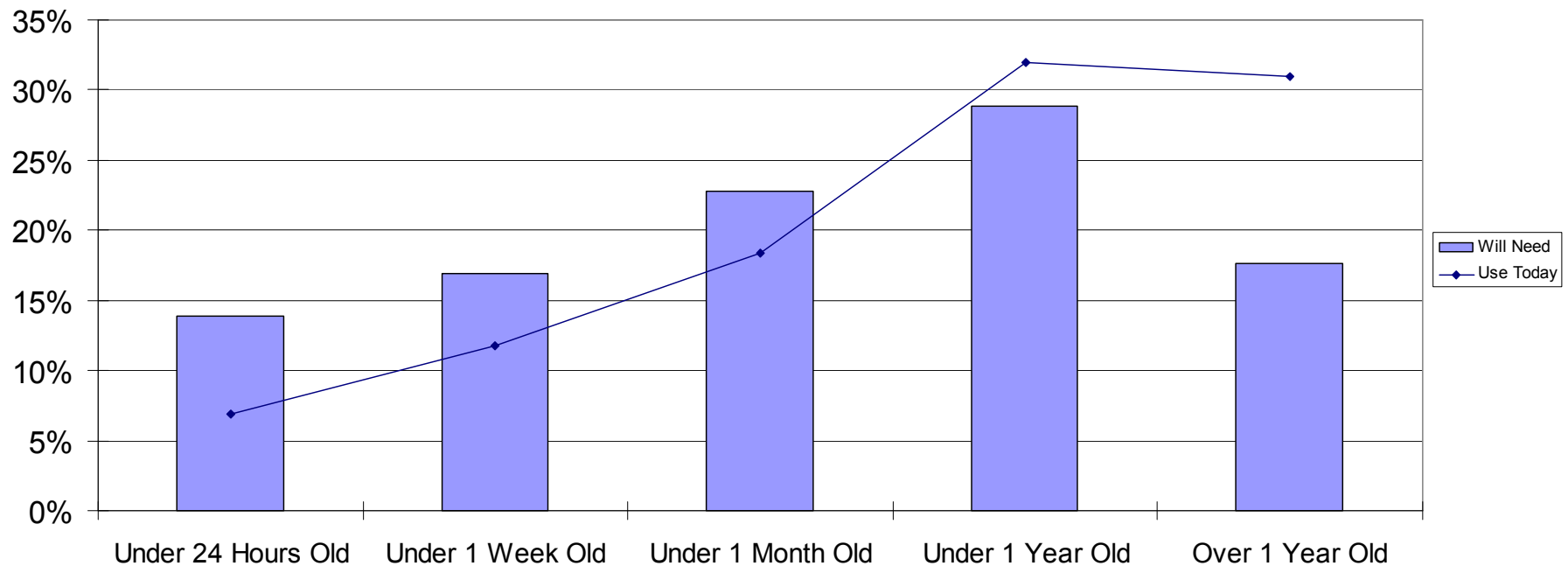
Sensor Technology

Image/Sensor Types: Use Today vs Needed in the Future



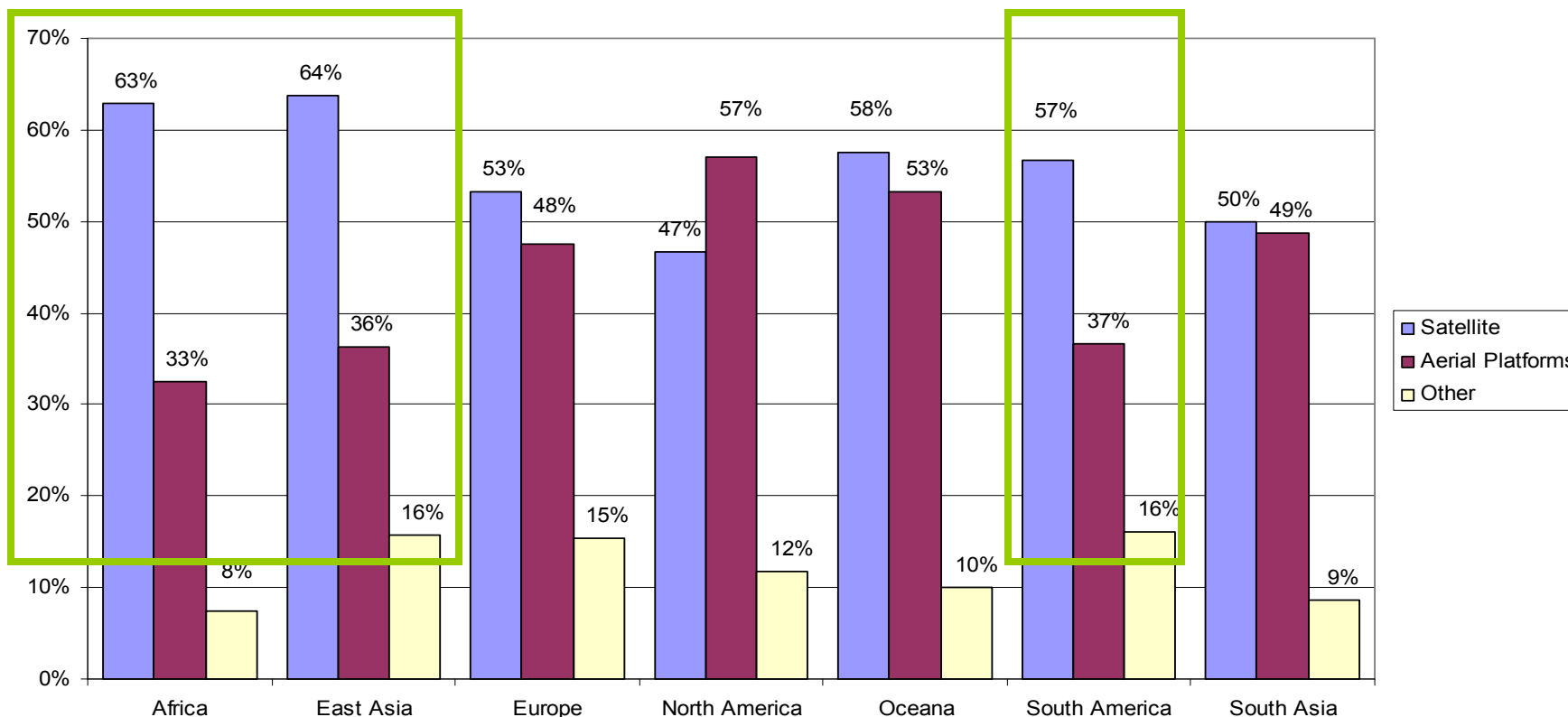
Data Currency

Data Currency: Use Today vs Needed in the Future



Air vs. Space by region

Average Proportion of Remote Sensing Data/Information Sources by Region



A clear difference exists in the ratio of air to space in some regions



Data Restrictions

Controls or Restrictions on Use or or Access to Data/Information

